FCC C2PC Test Report

FCC ID	:	**MXF-C4500MG**
Equipment	:	**C4500 MG Multi-Dwelling Unit Gateway Product**
Model No.	:	**C4500MG**
Brand Name	:	**CenturyLink**
Applicant	:	**Gemtek Technology Co., Ltd.**
Address	:	**No. 15-1 Zhonghua Road, Hsinchu Industrial Park, Hukou, Hsinchu, Taiwan, 30352.**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Dec. 16, 2020**
Tested Date	:	**Dec. 21, 2020 ~ Jan. 19, 2021**

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 may be duplicated completely for legal use with the approval of the applicant. 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**

Testing Laboratory 2732

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR0D1601-01	Rev. 01	Initial issue	Mar. 18, 2021

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.484MHz 36.84 (Margin -9.43dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5350.00MHz 53.76 (Margin -0.24dB) - AV	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: 23.54 5470~5725MHz: 23.62 ***Beamforming mode*** 5250~5350MHz: 23.08 5470~5725MHz: 22.93	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).
This report is issued as a supplementary report to original ICC report no. FR0D1601AN. The modification is only concerned with adding 5150~5250MHz BW160MHz, 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 5500-5720	52-64 [4] 100-144 [12]	2	6-54 Mbps
5250-5350 5470-5725	n (HT20)	5260-5320 5500-5720	52-64 [4] 100-144 [12]	2	MCS 0-15
5250-5350 5470-5725	n (HT40)	5270-5310 5510-5710	54-62 [2] 102-142 [6]	2	MCS 0-15
5250-5350 5470-5725	ac (VHT20)	5260-5320 5500-5720	52-64 [4] 100-144 [12]	2	MCS 0-9
5250-5350 5470-5725	ac (VHT40)	5270-5310 5510-5710	54-62 [2] 102-142 [6]	2	MCS 0-9
5250-5350 5470-5725	ac (VHT80)	5290 5530-5690	58 [1] 106-138 [3]	2	MCS 0-9
5150-5350 5470-5725	ac (VHT160)	5250 5570	50 [1] 114 [1]	2	MCS 0-11
5250-5350 5470-5725	ax (HE20)	5260-5320 5500-5720	52-64 [4] 100-144 [12]	2	MCS 0-11
5250-5350 5470-5725	ax (HE40)	5270-5310 5510-5710	54-62 [2] 102-142 [6]	2	MCS 0-11
5250-5350 5470-5725	ax (HE80)	5290 5530-5690	58 [1] 106-138 [3]	2	MCS 0-11
5150-5350 5470-5725	ax (HE160)	5250 5570	50 [1] 114 [1]	2	MCS 0-11
Note 1: The device supports OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation. Note 2: 802.11an/ac/ax supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)			
				5150 ~ 5250	5250~5350	5470~5725	5725~5850
1	5G - 1	Dipole	UFL	3.8	4	3.6	4.5
2	5G - 2	Dipole	UFL	4	3.6	4.3	4.1

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: LEI Model: MU36B1120300-A1 Power Rating: I/P: 100-240Vac, 50/60Hz, 1.0A O/P: 12Vdc, 3A Power Line: 1.7m non-shielded without core
2	AC adapter	Brand: MOSO Model: MS-V3000R120-036H0-US Power Rating: I/P: 100-240Vac, 50/60Hz, 1.0A max. O/P: 12Vdc, 3A Power Line: 1.8m non-shielded without core
3	RJ45 (WAN) (White)	1.7m non-shielded without core
4	RJ 45 (LAN) (Yellow)	1.7m non-shielded without core

1.1.5 Channel List

802.11a / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
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	142	5710
116	5580	**802.11ac VHT80 / ax HE80**	
120	5600	58	5290
124	5620	106	5530
128	5640	122	5610
132	5660	138	5690
136	5680	**802.11ac VHT160 / ax HE160**	
140	5700	50	5250
144	5720	114	5570

1.1.6 Test Tool and Duty Cycle

Test Tool	Intel DUT GUI, V610.26		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	100.00%	0.00
	ax (HE20)	100.00%	0.00
	ax (HE40)	100.00%	0.00
	ax (HE80)	100.00%	0.00
	ax (HE160)	100.00%	0.00

1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5260	20	---
11a	5300	20	---
11a	5320	20	---
11a	5500	20	---
11a	5580	20	---
11a	5700	20.5	---
VHT20	5260	20	20
VHT20	5300	20	20
VHT20	5320	20	20
VHT20	5500	19.5	19.5
VHT20	5580	19.5	19.5
VHT20	5700	20	20
VHT40	5270	20.5	20
VHT40	5310	20.5	20
VHT40	5510	20	20
VHT40	5590	20.5	20
VHT40	5670	20.5	20
VHT80	5290	20	20
VHT80	5530	20	19.5
VHT80	5610	20.5	20
VHT160	5250	17	17
VHT160	5570	19	19

Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
ax (HE20)	5260	20	20
ax (HE20)	5300	20	20
ax (HE20)	5320	20	20
ax (HE20)	5500	19.5	19.5
ax (HE20)	5580	19.5	19.5
ax (HE20)	5700	20	20
ax (HE40)	5270	20.5	20
ax (HE40)	5310	20.5	20
ax (HE40)	5510	20	20
ax (HE40)	5590	20.5	20
ax (HE40)	5670	20.5	20
ax (HE80)	5290	20	20
ax (HE80)	5530	20	19.5
ax (HE80)	5610	20.5	20
ax (HE160)	5250	17	17
ax (HE160)	5570	19	19

Channel that extends across the 5.725 GHz boundary

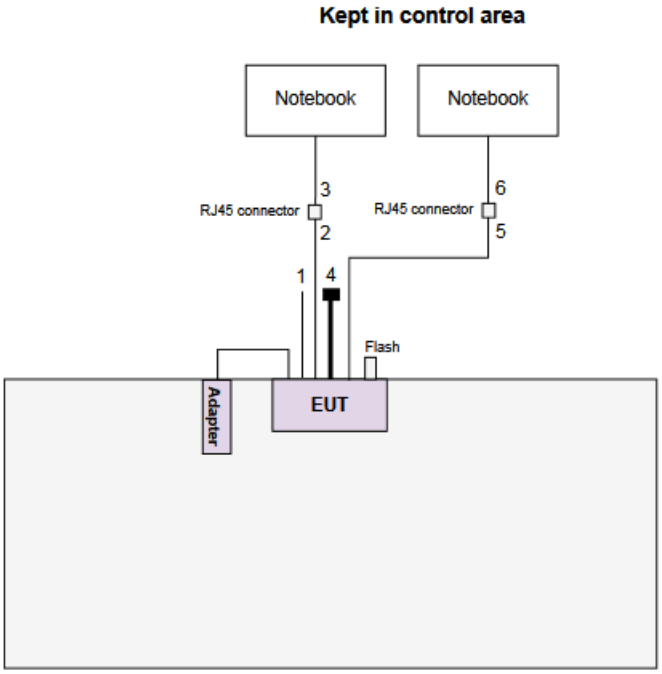
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5720	19.5	---
VHT20	5720	19.5	19
VHT40	5710	20.5	20
VHT80	5690	21	20
ax (HE20)	5720	19.5	19
ax (HE40)	5710	20.5	20
ax (HE80)	5690	21	20

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude E5470	DoC	---
3	USB 3.0 Flash	Transcend	JetFlash 700	---	---

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1	Fiber, 10m non-shielded.
2	RJ45, 1.7m non-shielded.
3	RJ45, 10m non-shielded.
4	RJ45, 1m (x3) non-shielded with load.
5	RJ45, 1.7m non-shielded.
6	RJ45, 10m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
LISN	R&S	ENV216	101579	Mar. 12, 2020	Mar. 11, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 21, 2020	Oct. 20, 2021
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)				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2020	Dec. 03, 2021
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 10, 2020	Jul. 09, 2021
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 11, 2020	Dec. 10, 2021
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 06, 2020	Nov. 05, 2021
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 17, 2020	Nov. 16, 2021
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 06, 2020	Oct. 05, 2021
Preamplifier	EMC	EMC02325	980225	Jul. 03, 2020	Jul. 02, 2021
Preamplifier	Agilent	83017A	MY39501308	Sep. 26, 2020	Sep. 25, 2021
Preamplifier	EMC	EMC184045B	980192	Jul. 21, 2020	Jul. 20, 2021
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 06, 2020	Oct. 05, 2021
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 06, 2020	Oct. 05, 2021
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 06, 2020	Oct. 05, 2021
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 06, 2020	Oct. 05, 2021
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 06, 2020	Oct. 05, 2021
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 06, 2020	Oct. 05, 2021
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)				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Apr. 30, 2020	Apr. 29, 2021
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	May 06, 2020	May 05, 2021
Power Meter	Anritsu	ML2495A	1241002	Nov. 04, 2020	Nov. 03, 2021
Power Sensor	Anritsu	MA2411B	1207366	Nov. 04, 2020	Nov. 03, 2021
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 04, 2020	Dec. 03, 2021
Measurement Software	--	SENSE-15407_NII	V5.10.7	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	Test Configuration
Conducted Emissions	ax HE40	5670	MCS 0	Non-beamforming
Radiated Emissions ≤1GHz	ax HE40	5670	MCS 0	Non-beamforming
RF Output Power	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	Non-beamforming
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5610 / 5690	MCS 0	
	VHT160	5250 / 5570		
	ax HE20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	ax HE40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	ax HE80	5290 / 5530 / 5610 / 5690	MCS 0	
	ax HE160	5250 / 5570	MCS 0	
RF Output Power	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	Beamforming
	VHT40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5610 / 5690	MCS 0	
	VHT160	5250 / 5570	MCS 0	
	ax HE20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	ax HE40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	ax HE80	5290 / 5530 / 5610 / 5690	MCS 0	
	ax HE160	5250 / 5570	MCS 0	

Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	Non-beamforming
	ax HE20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	ax HE40	5270 / 5310 5510 / 5590 / 5670 / 5710	MCS 0	
	ax HE80	5290 / 5530 / 5610 / 5690	MCS 0	
	ax HE160	5250 / 5570	MCS 0	
Frequency Stability	Un-modulation	5320	---	Non-beamforming

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.
2. Two adapters (LEI and MOSO) had been covered during the pretest and found that the worst adapter is **MOSO adapter** for conducted emissions test and **LEI adapter** for radiated emissions test.
3. Non-beamforming and beamforming mode had been covered during the pretest. The worst mode is Non-beamforming thus Non-beamforming is tested for all test items.

3 Transmitter Test Results

3.1 Conducted Emissions

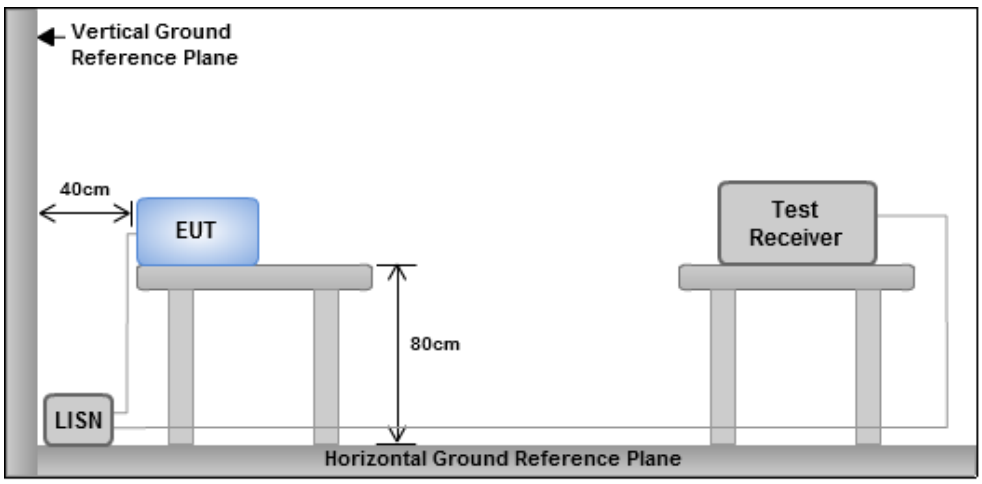
3.1.1 Limit of Conducted Emissions

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 120V/60Hz

3.1.3 Test Setup



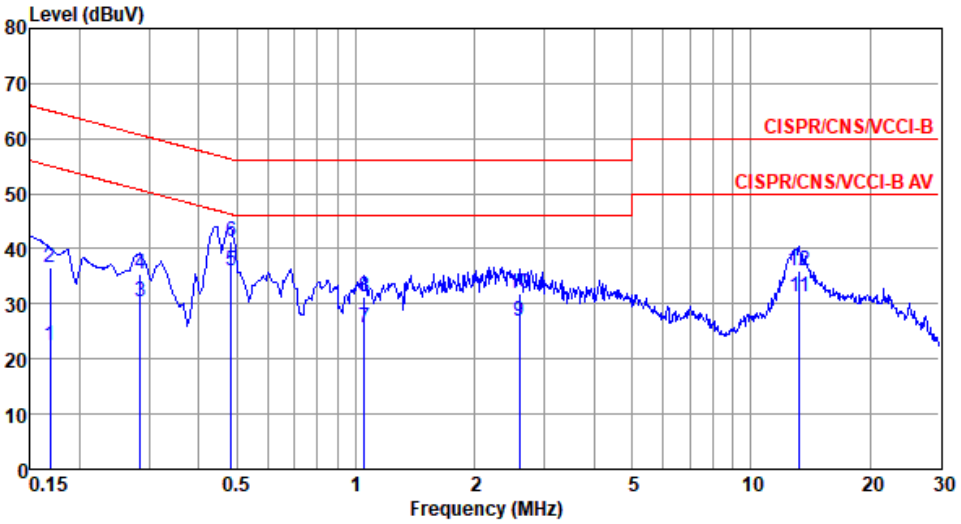
Note: 1. Support units were connected to second LISN.

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	ax HE40	Test Freq. (MHz)	5670
Power Phase	Line		

Test by : Alex Tsai Temperature: 20°C Humidity: 61%

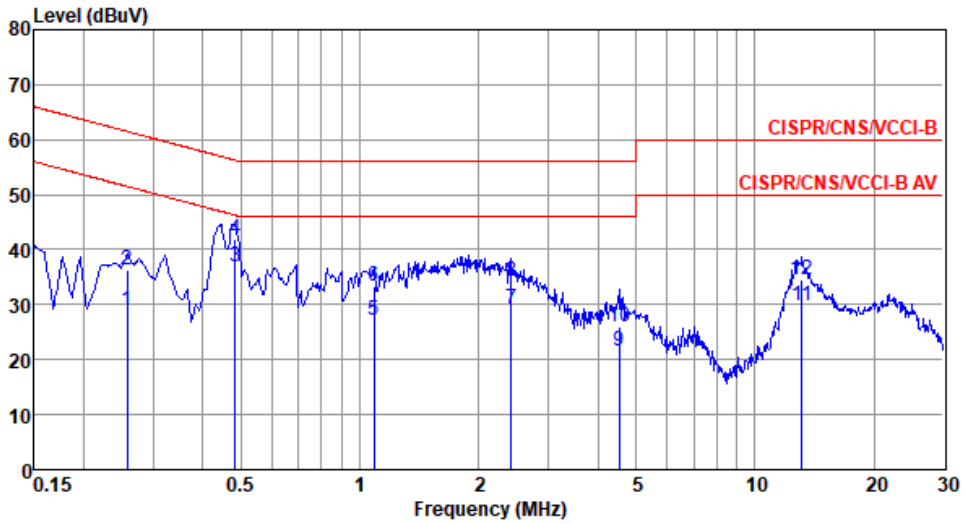


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.169	22.37	55.03	-32.66	12.51	9.81	0.05	Average
2	0.169	36.51	65.03	-28.52	26.65	9.81	0.05	QP
3	0.285	30.52	50.68	-20.16	20.60	9.85	0.07	Average
4	0.285	35.53	60.68	-25.15	25.61	9.85	0.07	QP
5*	0.484	36.15	46.27	-10.12	26.16	9.90	0.09	Average
6	0.484	41.37	56.27	-14.90	31.38	9.90	0.09	QP
7	1.049	25.81	46.00	-20.19	15.72	9.97	0.12	Average
8	1.049	31.36	56.00	-24.64	21.27	9.97	0.12	QP
9	2.594	26.80	46.00	-19.20	16.58	10.00	0.22	Average
10	2.594	31.93	56.00	-24.07	21.71	10.00	0.22	QP
11	13.267	31.16	50.00	-18.84	20.46	10.16	0.54	Average
12	13.267	36.12	60.00	-23.88	25.42	10.16	0.54	QP

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

Modulation	ax HE40	Test Freq. (MHz)	5670
Power Phase	Neutral		

Test by : Alex Tsai Temperature: 20°C Humidity: 61%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.258	28.81	51.51	-22.70	18.93	9.81	0.07	Average
2	0.258	36.22	61.51	-25.29	26.34	9.81	0.07	QP
3*	0.484	36.84	46.27	-9.43	26.92	9.83	0.09	Average
4	0.484	42.02	56.27	-14.25	32.10	9.83	0.09	QP
5	1.088	27.15	46.00	-18.85	17.16	9.86	0.13	Average
6	1.088	33.33	56.00	-22.67	23.34	9.86	0.13	QP
7	2.422	29.11	46.00	-16.89	18.98	9.92	0.21	Average
8	2.422	34.13	56.00	-21.87	24.00	9.92	0.21	QP
9	4.525	21.47	46.00	-24.53	11.22	9.95	0.30	Average
10	4.525	26.11	56.00	-29.89	15.86	9.95	0.30	QP
11	13.127	29.69	50.00	-20.31	19.03	10.13	0.53	Average
12	13.127	34.64	60.00	-25.36	23.98	10.13	0.53	QP

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

3.2 Emission Bandwidth

3.2.1 Test Procedures

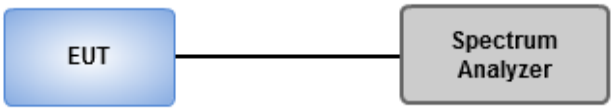
26dB Bandwidth

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	20-24°C / 64-66%	Tested By	Aska Huang

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	82.029M	77.858M	77M9D1D	80.87M	77.858M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	25.435M	16.671M	16M7D1D	22.609M	16.556M
802.11ax HEW20_Nss1,(MCS0)_2TX	24.42M	19.103M	19M1D1D	21.812M	18.987M
802.11ax HEW40_Nss1,(MCS0)_2TX	44.638M	38.321M	38M3D1D	42.029M	37.974M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.899M	77.106M	77M1D1D	82.029M	77.106M
802.11ax HEW160_Nss1,(MCS0)_2TX	84.348M	77.858M	77M9D1D	83.188M	77.569M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	25.362M	16.671M	16M7D1D	15.764M	13.301M
802.11ax HEW20_Nss1,(MCS0)_2TX	25M	19.334M	19M3D1D	15.902M	14.436M
802.11ax HEW40_Nss1,(MCS0)_2TX	44.058M	38.321M	38M3D1D	35.165M	33.754M
802.11ax HEW80_Nss1,(MCS0)_2TX	83.188M	77.569M	77M6D1D	76.69M	73.225M
802.11ax HEW160_Nss1,(MCS0)_2TX	165.797M	156.527M	157MD1D	164.058M	156.527M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.261M	4.038M	4M04D1D	3.261M	3.994M
802.11ax HEW20_Nss1,(MCS0)_2TX	4.565M	4.559M	4M56D1D	4.435M	4.515M
802.11ax HEW40_Nss1,(MCS0)_2TX	4.043M	4.776M	4M78D1D	4.043M	4.559M
802.11ax HEW80_Nss1,(MCS0)_2TX	4.043M	4.081M	4M08D1D	4.043M	4.081M

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

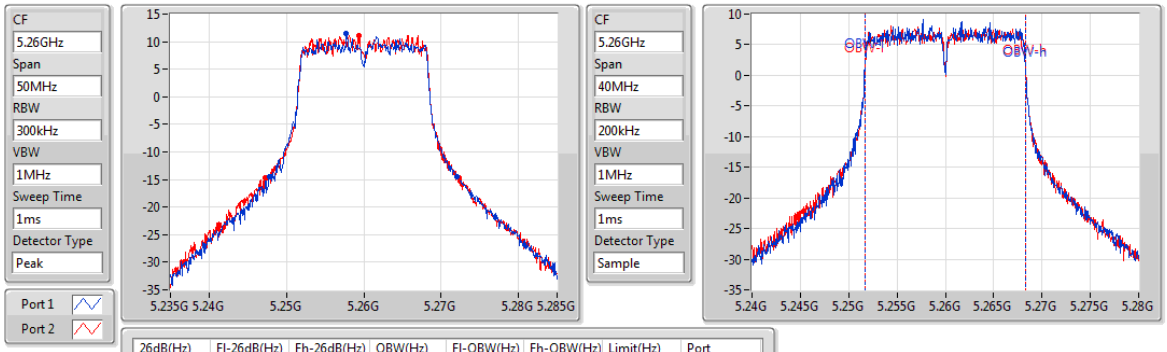
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	24.275M	16.671M	25.072M	16.671M
5300MHz	Pass	Inf	25M	16.671M	25.435M	16.671M
5320MHz	Pass	Inf	22.899M	16.614M	22.609M	16.556M
5500MHz	Pass	Inf	22.754M	16.614M	22.174M	16.556M
5580MHz	Pass	Inf	24.348M	16.671M	25.362M	16.614M
5700MHz	Pass	Inf	22.681M	16.614M	22.391M	16.556M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.902M	13.37M	15.764M	13.301M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.261M	4.038M	3.261M	3.994M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	22.754M	19.045M	22.754M	19.103M
5300MHz	Pass	Inf	21.812M	18.987M	22.319M	18.987M
5320MHz	Pass	Inf	24.42M	19.103M	24.13M	19.045M
5500MHz	Pass	Inf	25M	19.334M	23.478M	19.161M
5580MHz	Pass	Inf	23.913M	19.045M	21.812M	18.987M
5700MHz	Pass	Inf	23.333M	19.103M	21.667M	18.987M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.246M	14.436M	15.902M	14.47M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.435M	4.515M	4.565M	4.559M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	44.638M	38.321M	43.623M	37.974M
5310MHz	Pass	Inf	43.333M	37.974M	42.029M	37.974M
5510MHz	Pass	Inf	44.058M	38.205M	43.623M	38.321M
5590MHz	Pass	Inf	43.188M	38.09M	42.899M	37.974M
5670MHz	Pass	Inf	43.478M	38.09M	43.623M	38.09M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.165M	33.754M	35.165M	33.754M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.043M	4.776M	4.043M	4.559M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	82.029M	77.106M	82.899M	77.106M
5530MHz	Pass	Inf	81.739M	77.337M	82.319M	77.569M
5610MHz	Pass	Inf	82.029M	77.569M	83.188M	77.569M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	77.623M	73.225M	76.69M	73.225M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.043M	4.081M	4.043M	4.081M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.029M	77.858M	80.87M	77.858M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	84.348M	77.858M	83.188M	77.569M
5570MHz	Pass	Inf	165.797M	156.527M	164.058M	156.527M

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

802.11a_Nss1,(6Mbps)_2TX EBW

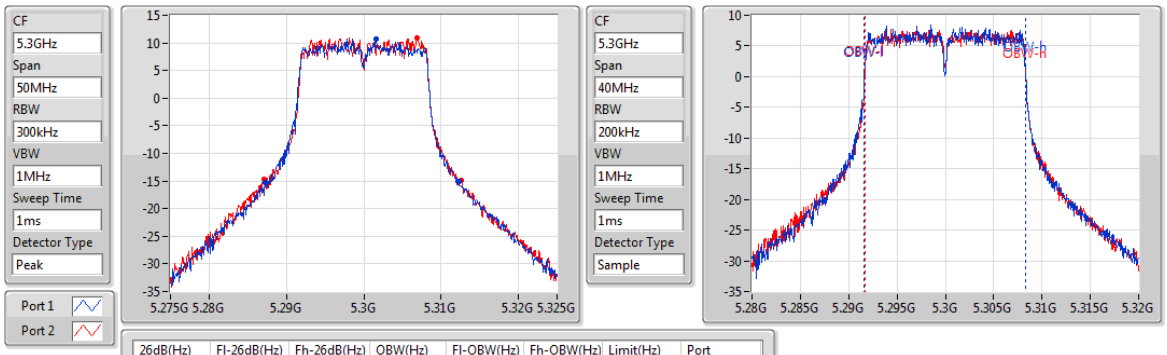
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.275M	5.247754G	5.272029G	16.671M	5.251664G	5.268336G	Inf	1
25.072M	5.247319G	5.272391G	16.671M	5.251664G	5.268336G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

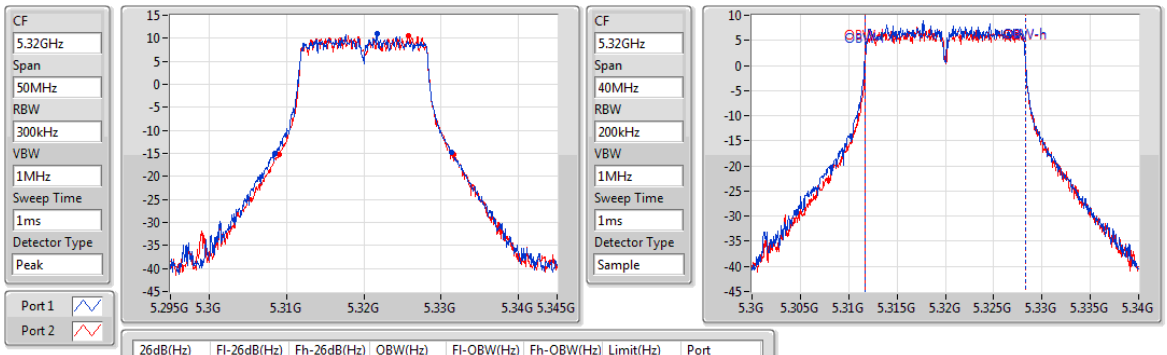
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25M	5.287319G	5.312319G	16.671M	5.291606G	5.308278G	Inf	1
25.435M	5.287174G	5.312609G	16.671M	5.291664G	5.308336G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

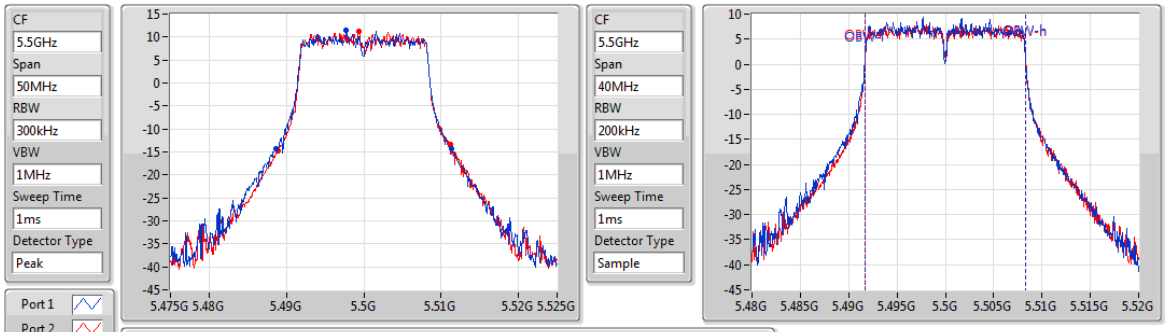
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.899M	5.308478G	5.331377G	16.614M	5.311664G	5.328278G	Inf	1
22.609M	5.309058G	5.331667G	16.556M	5.311722G	5.328278G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

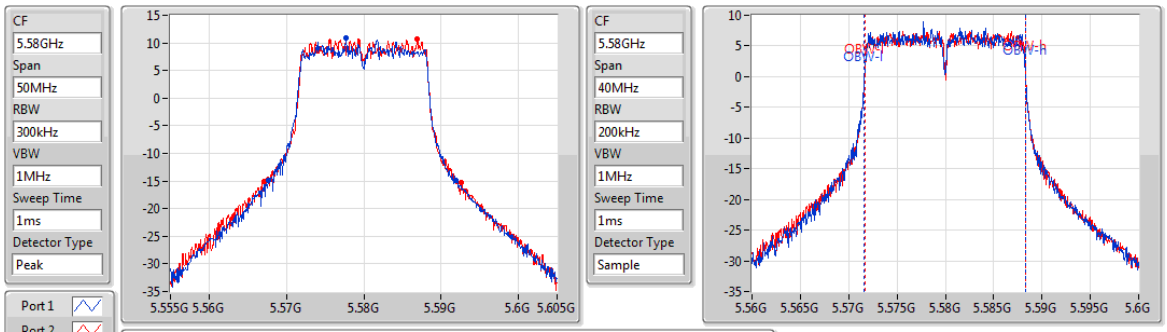
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.754M	5.488623G	5.511377G	16.614M	5.491664G	5.508278G	Inf	1
22.174M	5.488986G	5.511159G	16.556M	5.491722G	5.508278G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

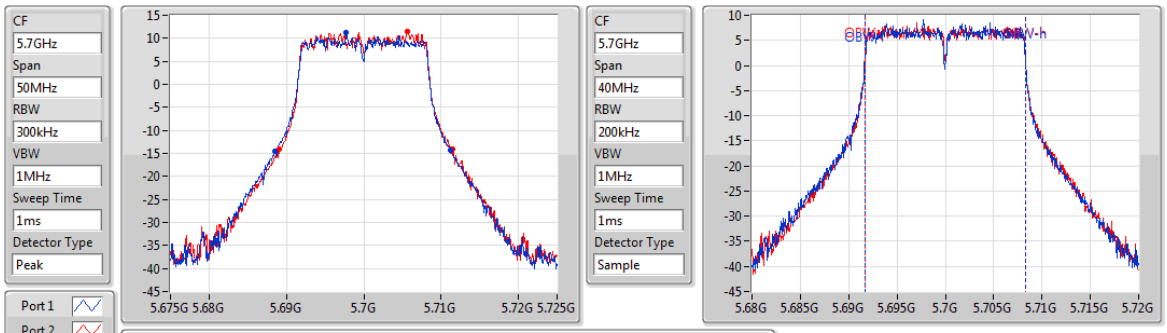
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.348M	5.567609G	5.591957G	16.671M	5.571606G	5.588278G	Inf	1
25.362M	5.567174G	5.592536G	16.614M	5.571664G	5.588278G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

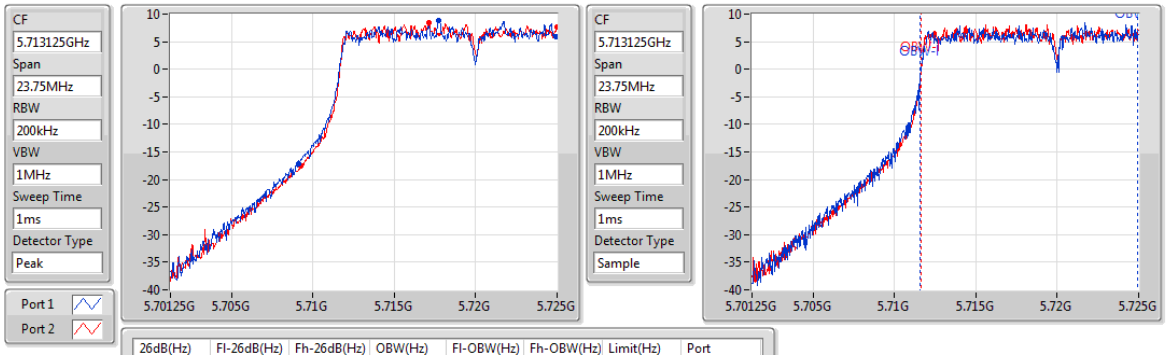
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.681M	5.688551G	5.711232G	16.614M	5.691664G	5.708278G	Inf	1
22.391M	5.68913G	5.711522G	16.556M	5.691722G	5.708278G	Inf	2

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

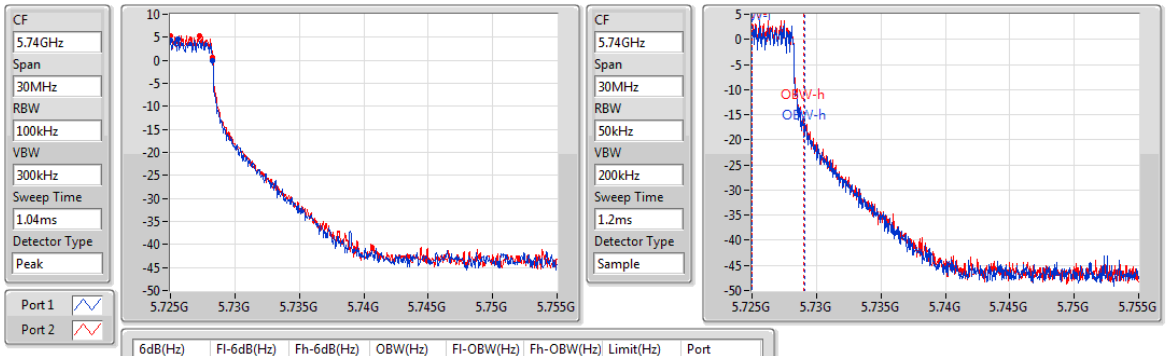
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.902M	5.709098G	5.725G	13.37M	5.711578G	5.724948G	Inf	1
15.764M	5.709236G	5.725G	13.301M	5.711647G	5.724948G	Inf	2

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

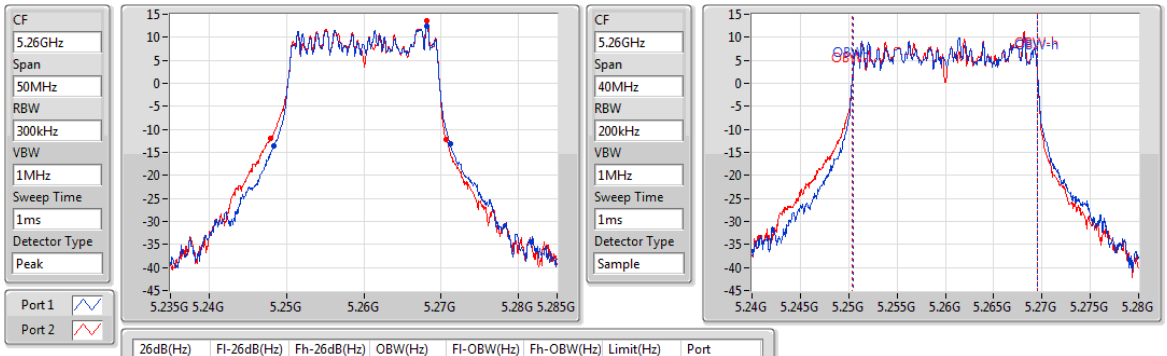
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.261M	5.725G	5.728261G	4.038M	5.725022G	5.729059G	500k	1
3.261M	5.725G	5.728261G	3.994M	5.725022G	5.729016G	500k	2

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

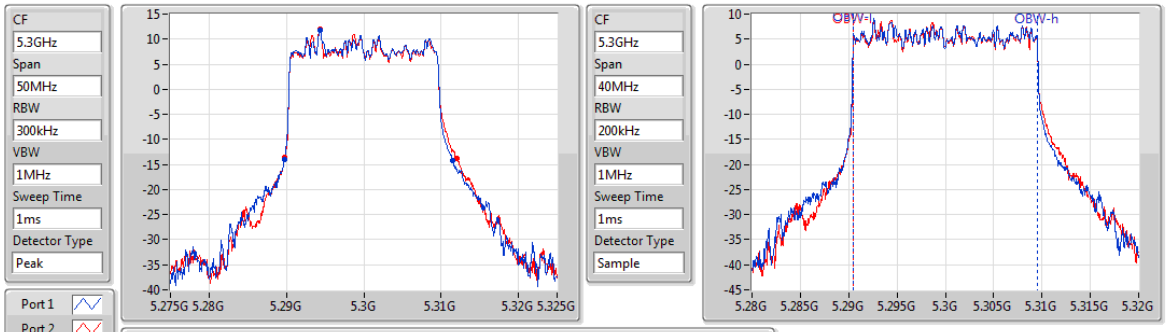
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.754M	5.248406G	5.271159G	19.045M	5.250449G	5.269493G	Inf	1
22.754M	5.247899G	5.270652G	19.103M	5.250391G	5.269493G	Inf	2

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

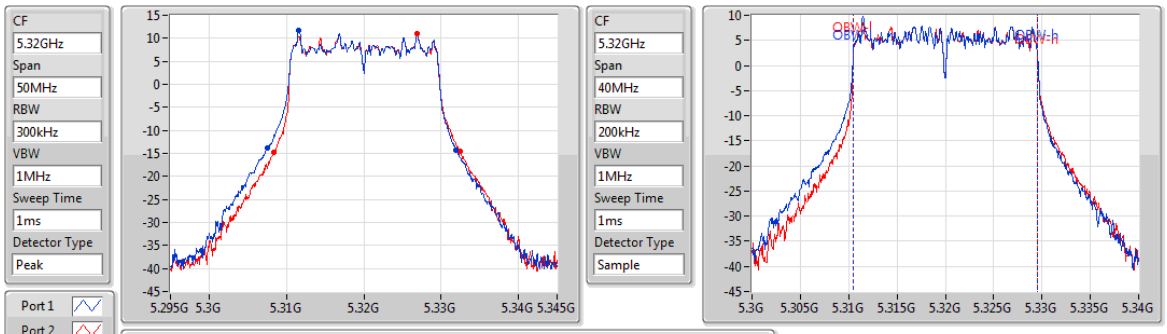
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.812M	5.28971G	5.311522G	18.987M	5.290507G	5.309493G	Inf	1
22.319M	5.289783G	5.312101G	18.987M	5.290507G	5.309493G	Inf	2

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

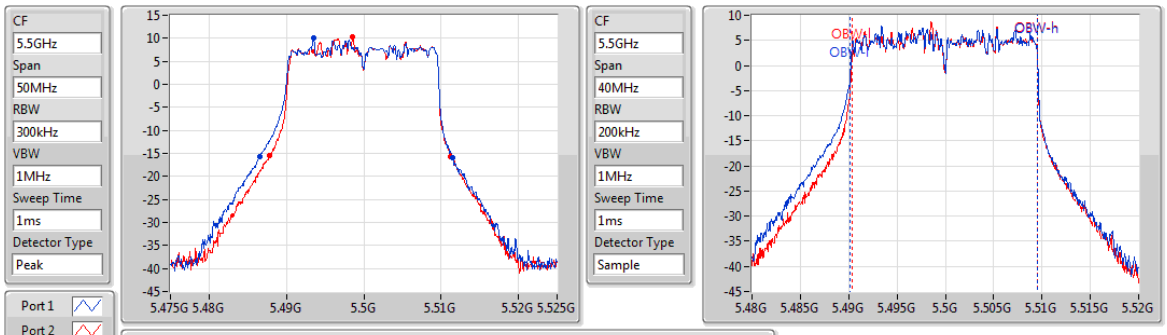
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.42M	5.307536G	5.331957G	19.103M	5.310449G	5.329551G	Inf	1
24.13M	5.308333G	5.332464G	19.045M	5.310507G	5.329551G	Inf	2

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

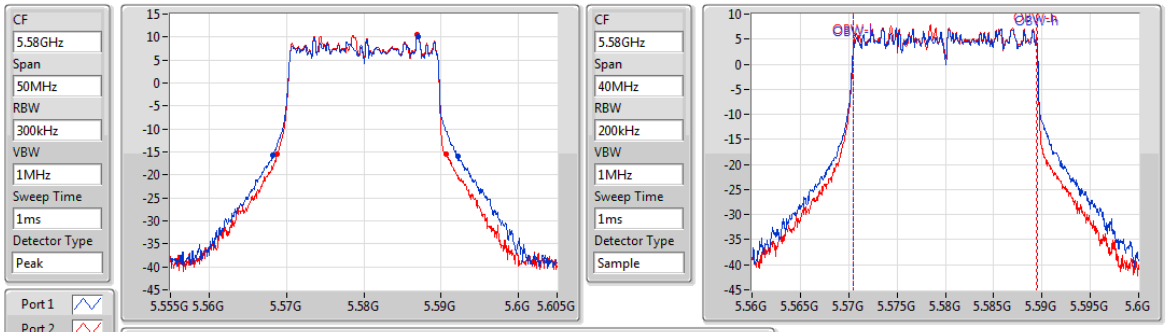
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25M	5.486522G	5.511522G	19.334M	5.490159G	5.509493G	Inf	1
23.478M	5.487754G	5.511232G	19.161M	5.490333G	5.509493G	Inf	2

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

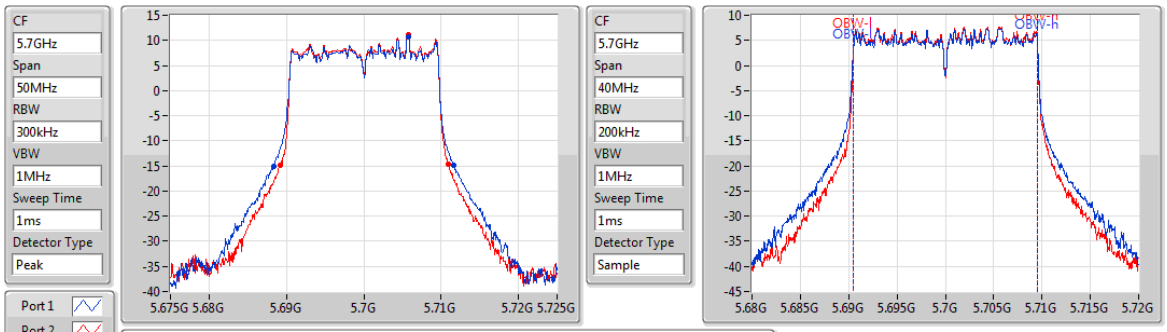
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.913M	5.568261G	5.592174G	19.045M	5.570449G	5.589493G	Inf	1
21.812M	5.568841G	5.590652G	18.987M	5.570449G	5.589436G	Inf	2

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

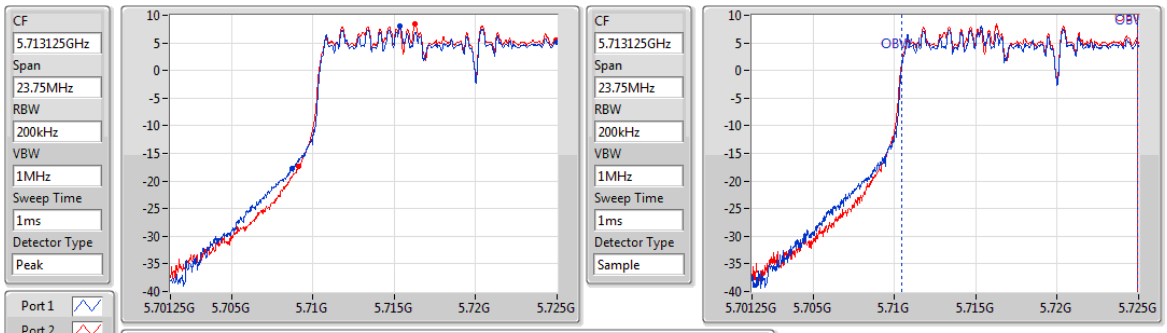
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.333M	5.688333G	5.711667G	19.103M	5.690449G	5.709551G	Inf	1
21.667M	5.689275G	5.710942G	18.987M	5.690507G	5.709493G	Inf	2

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

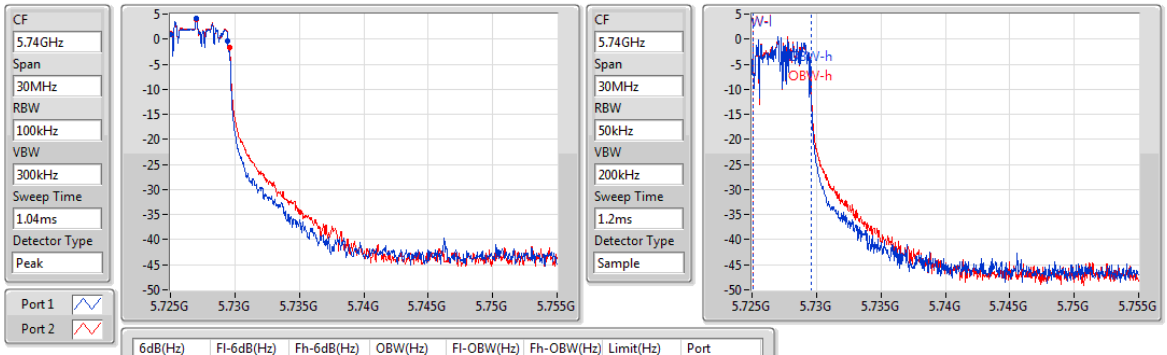
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.246M	5.708754G	5.725G	14.436M	5.710478G	5.724914G	Inf	1
15.902M	5.709098G	5.725G	14.47M	5.710444G	5.724914G	Inf	2

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

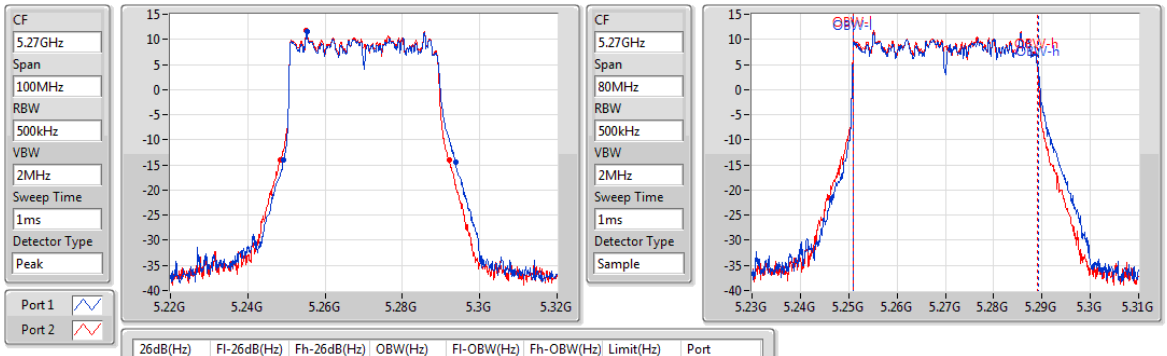
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.435M	5.725G	5.729435G	4.515M	5.725065G	5.72958G	500k	1
4.565M	5.725G	5.729565G	4.559M	5.725065G	5.729624G	500k	2

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

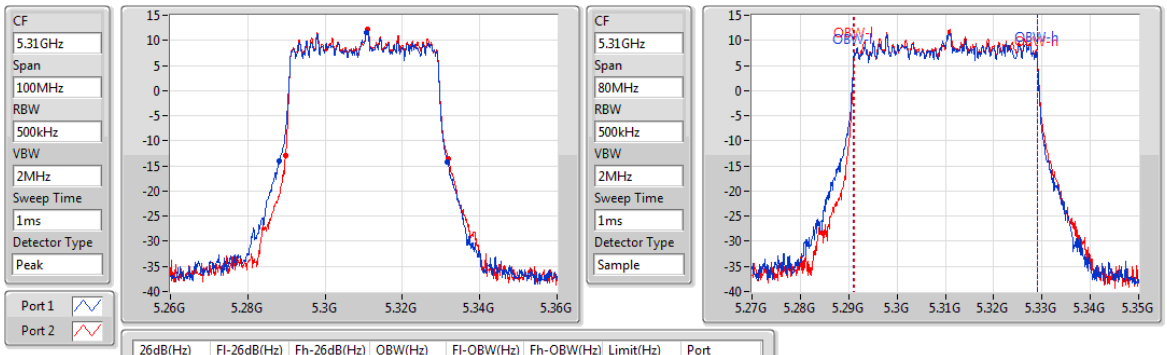
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.638M	5.24913G	5.293768G	38.321M	5.251013G	5.289334G	Inf	1
43.623M	5.248406G	5.292029G	37.974M	5.251013G	5.288987G	Inf	2

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

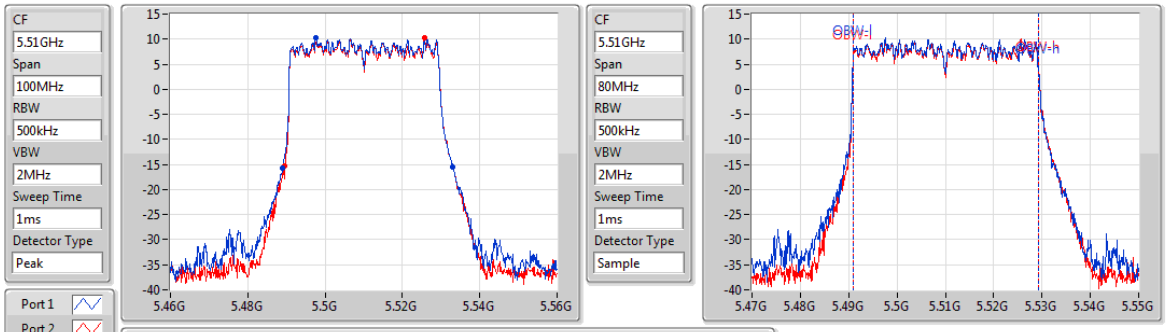
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.333M	5.288261G	5.331594G	37.974M	5.291013G	5.328987G	Inf	1
42.029M	5.28971G	5.331739G	37.974M	5.291129G	5.329103G	Inf	2

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

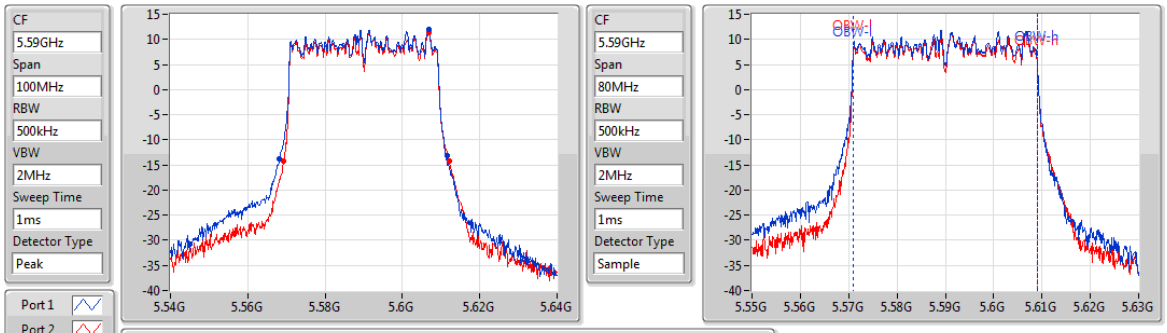
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.058M	5.488986G	5.533043G	38.205M	5.491013G	5.529219G	Inf	1
43.623M	5.48942G	5.533043G	38.321M	5.491013G	5.529334G	Inf	2

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

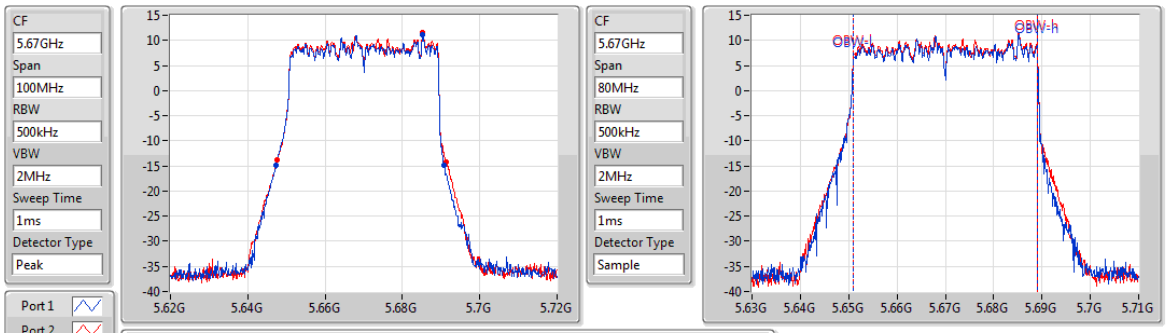
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.188M	5.568261G	5.611449G	38.09M	5.570897G	5.608987G	Inf	1
42.899M	5.569275G	5.612174G	37.974M	5.571013G	5.608987G	Inf	2

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

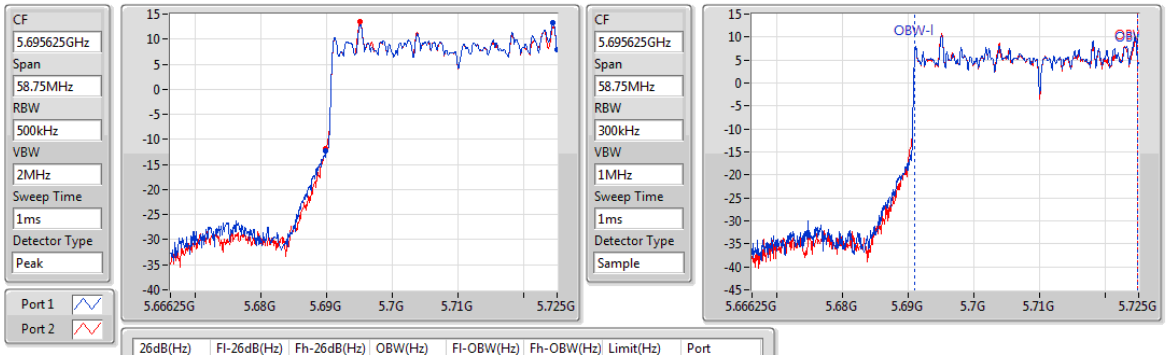
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.478M	5.647391G	5.69087G	38.09M	5.650897G	5.688987G	Inf	1
43.623M	5.647681G	5.691304G	38.09M	5.650897G	5.688987G	Inf	2

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

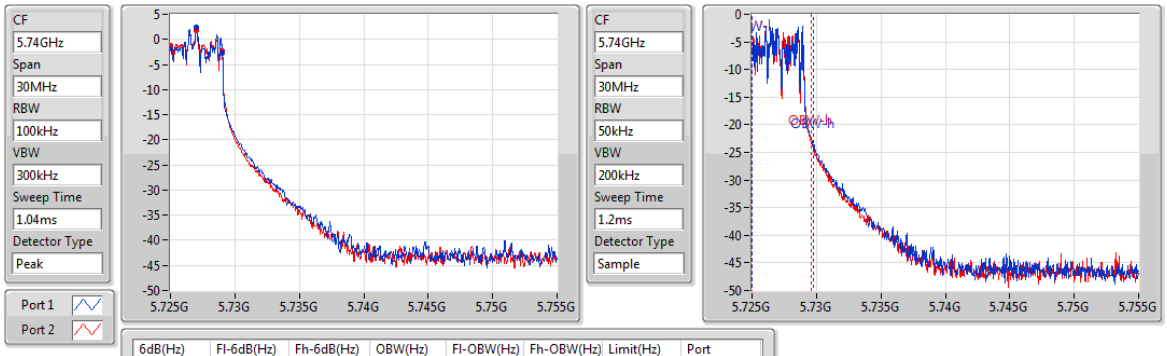
5710MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.165M	5.689835G	5.725G	33.754M	5.691034G	5.724787G	Inf	1
35.165M	5.689835G	5.725G	33.754M	5.691034G	5.724787G	Inf	2

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

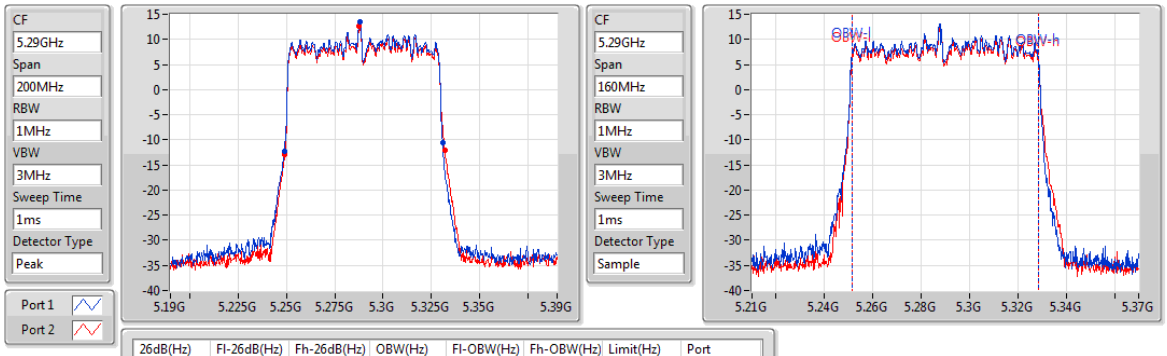
5710MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.043M	5.725G	5.729043G	4.776M	5.725022G	5.729797G	500k	1
4.043M	5.725G	5.729043G	4.559M	5.725022G	5.72958G	500k	2

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

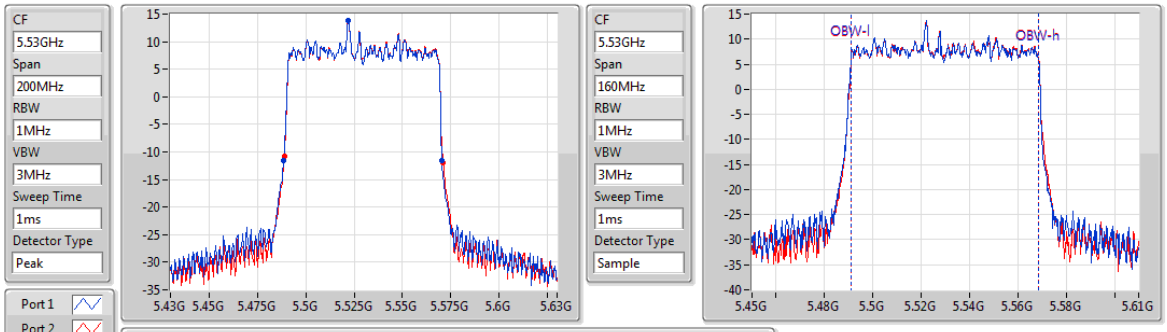
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.248841G	5.33087G	77.106M	5.251331G	5.328437G	Inf	1
82.899M	5.24913G	5.332029G	77.106M	5.251331G	5.328437G	Inf	2

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

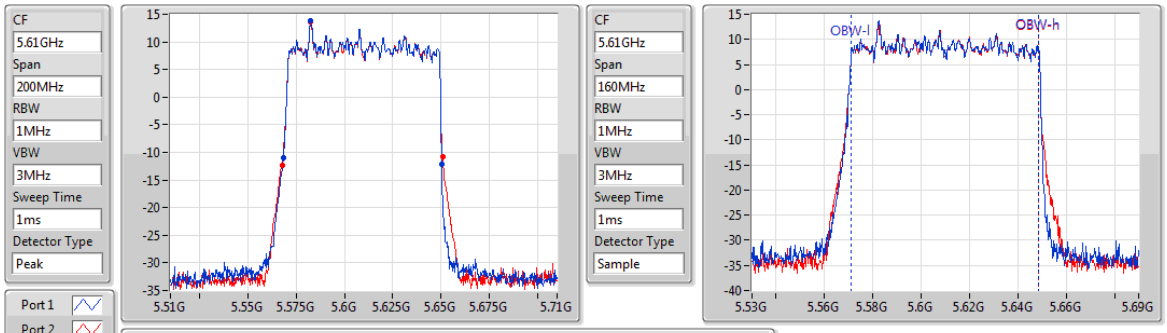
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.488551G	5.57029G	77.337M	5.4911G	5.568437G	Inf	1
82.319M	5.488841G	5.571159G	77.569M	5.4911G	5.568669G	Inf	2

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

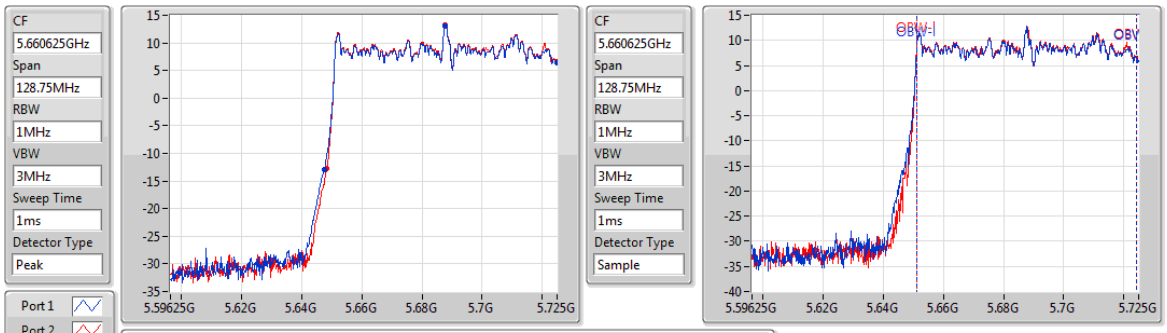
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.568261G	5.65029G	77.569M	5.5711G	5.648669G	Inf	1
83.188M	5.567681G	5.65087G	77.569M	5.5711G	5.648669G	Inf	2

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

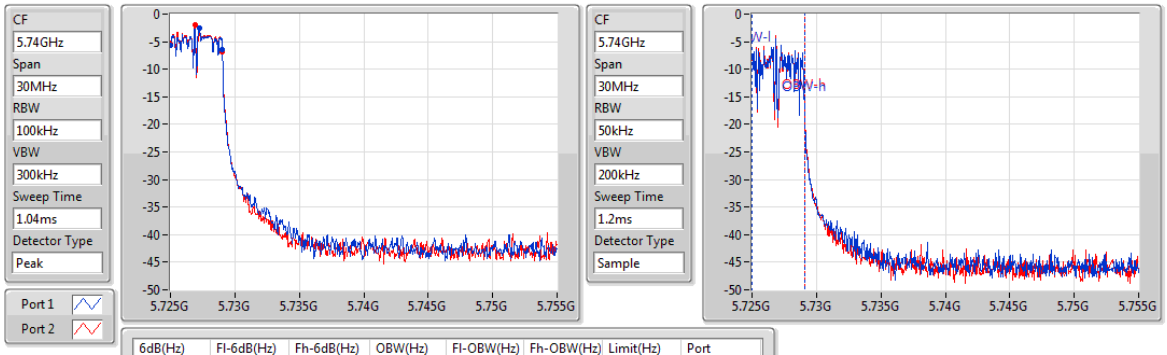
5690MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.623M	5.647377G	5.725G	73.225M	5.651122G	5.724348G	Inf	1
76.69M	5.64831G	5.725G	73.225M	5.651122G	5.724348G	Inf	2

802.11ax HEW80_Nss1,(MCS0)_2TX EBW

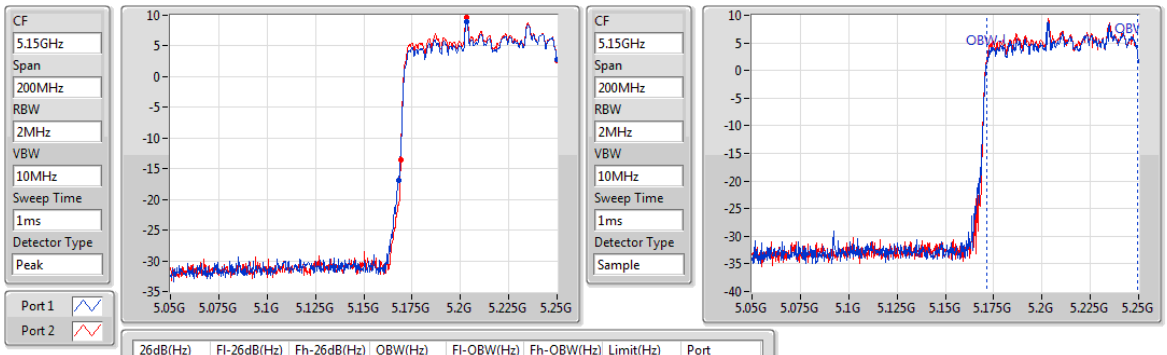
5690MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.043M	5.725G	5.729043G	4.081M	5.725022G	5.729103G	500k	1
4.043M	5.725G	5.729043G	4.081M	5.725022G	5.729103G	500k	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

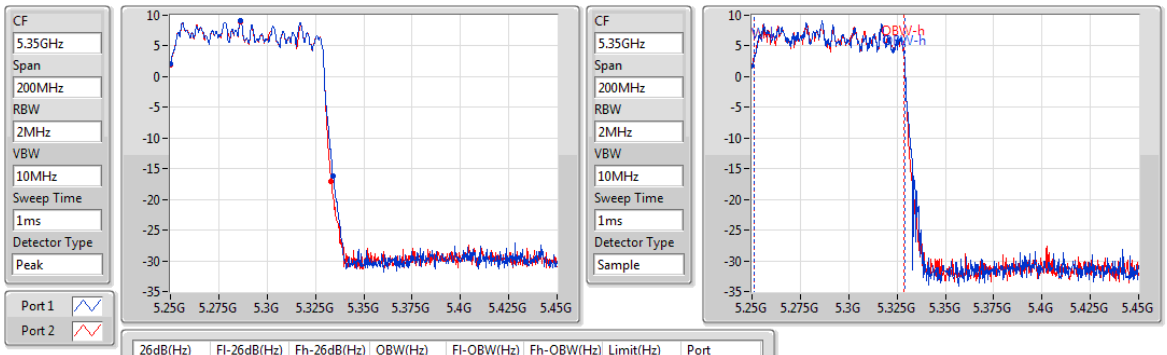
5250MHz Straddle 5.15-5.25GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.167971G	5.25G	77.858M	5.171418G	5.249276G	Inf	1
80.87M	5.16913G	5.25G	77.858M	5.171418G	5.249276G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX EBW

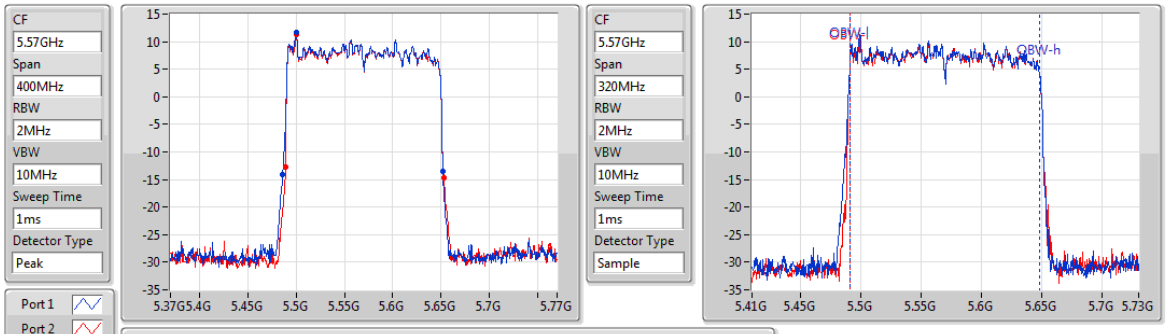
5250MHz Straddle 5.25-5.35GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.348M	5.25G	5.334348G	77.858M	5.251013G	5.328871G	Inf	1
83.188M	5.25G	5.333188G	77.569M	5.251013G	5.328582G	Inf	2

802.11ax HEW160_Nss1,(MCS0)_2TX **EBW**

5570MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
165.797M	5.485942G	5.651739G	156.527M	5.491274G	5.6478G	Inf	1
164.058M	5.488841G	5.652899G	156.527M	5.491274G	5.6478G	Inf	2

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

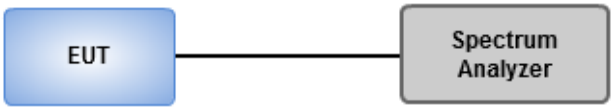
Method PM-G (Measurement using a gated RF average power meter)

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.

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

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

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Ambient Condition	20-24°C / 64-66%	Tested By	Aska Huang

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT160_Nss1,(MCS0)_2TX	16.93	0.04932	20.93	0.12388
802.11ax HEW160_Nss1,(MCS0)_2TX	17.39	0.05483	21.39	0.13772
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.94	0.19679	26.94	0.49431
802.11ac VHT20_Nss1,(MCS0)_2TX	23.07	0.20277	27.07	0.50933
802.11ac VHT40_Nss1,(MCS0)_2TX	23.48	0.22284	27.48	0.55976
802.11ac VHT80_Nss1,(MCS0)_2TX	22.91	0.19543	26.91	0.49091
802.11ac VHT160_Nss1,(MCS0)_2TX	17.77	0.05984	21.77	0.15031
802.11ax HEW20_Nss1,(MCS0)_2TX	23.17	0.20749	27.17	0.52119
802.11ax HEW40_Nss1,(MCS0)_2TX	23.54	0.22594	27.54	0.56754
802.11ax HEW80_Nss1,(MCS0)_2TX	22.97	0.19815	26.97	0.49774
802.11ax HEW160_Nss1,(MCS0)_2TX	18.24	0.06668	22.24	0.16749
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.94	0.19679	27.24	0.52966
802.11ac VHT20_Nss1,(MCS0)_2TX	22.61	0.18239	26.91	0.49091
802.11ac VHT40_Nss1,(MCS0)_2TX	23.52	0.22491	27.82	0.60534
802.11ac VHT80_Nss1,(MCS0)_2TX	23.34	0.21577	27.64	0.58076
802.11ac VHT160_Nss1,(MCS0)_2TX	21.77	0.15031	26.07	0.40458
802.11ax HEW20_Nss1,(MCS0)_2TX	22.71	0.18664	27.01	0.50234
802.11ax HEW40_Nss1,(MCS0)_2TX	23.62	0.23014	27.92	0.61944
802.11ax HEW80_Nss1,(MCS0)_2TX	23.43	0.22029	27.73	0.59293
802.11ax HEW160_Nss1,(MCS0)_2TX	21.91	0.15524	26.21	0.41783
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.14	0.04111	20.64	0.11588
802.11ac VHT20_Nss1,(MCS0)_2TX	16.27	0.04236	20.77	0.11940
802.11ac VHT40_Nss1,(MCS0)_2TX	12.64	0.01837	17.14	0.05176
802.11ac VHT80_Nss1,(MCS0)_2TX	9.79	0.00953	14.29	0.02685
802.11ax HEW20_Nss1,(MCS0)_2TX	17.05	0.05070	21.55	0.14289
802.11ax HEW40_Nss1,(MCS0)_2TX	13.78	0.02388	18.28	0.06730
802.11ax HEW80_Nss1,(MCS0)_2TX	10.51	0.01125	15.01	0.03170

＊Highlight value is the maximum power.

Result

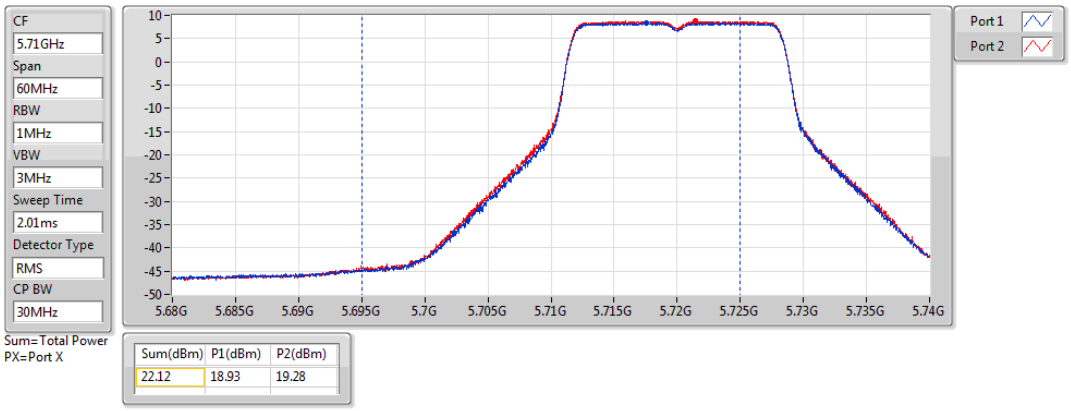
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	4.00	19.75	20.11	22.94	24.00	26.94	30.00
5300MHz	Pass	4.00	19.72	20.03	22.89	24.00	26.89	30.00
5320MHz	Pass	4.00	19.73	20.05	22.90	24.00	26.90	30.00
5500MHz	Pass	4.30	19.77	19.82	22.81	24.00	27.11	30.00
5580MHz	Pass	4.30	19.71	19.85	22.79	24.00	27.09	30.00
5700MHz	Pass	4.30	19.75	20.11	22.94	24.00	27.24	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.30	18.93	19.28	22.12	22.98	26.42	28.98
5720MHz Straddle 5.725-5.85GHz	Pass	4.50	13.05	13.21	16.14	30.00	20.64	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	4.00	19.92	20.19	23.07	24.00	27.07	30.00
5300MHz	Pass	4.00	19.88	20.18	23.04	24.00	27.04	30.00
5320MHz	Pass	4.00	19.82	20.21	23.03	24.00	27.03	30.00
5500MHz	Pass	4.30	19.53	19.66	22.61	24.00	26.91	30.00
5580MHz	Pass	4.30	19.65	19.52	22.60	24.00	26.90	30.00
5700MHz	Pass	4.30	19.35	19.76	22.57	24.00	26.87	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.30	18.62	18.96	21.80	24.00	26.10	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.50	13.04	13.46	16.27	30.00	20.77	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	4.00	20.39	20.54	23.48	24.00	27.48	30.00
5310MHz	Pass	4.00	20.28	20.59	23.45	24.00	27.45	30.00
5510MHz	Pass	4.30	20.06	19.81	22.95	24.00	27.25	30.00
5590MHz	Pass	4.30	20.54	20.43	23.50	24.00	27.80	30.00
5670MHz	Pass	4.30	20.44	20.58	23.52	24.00	27.82	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.30	19.62	19.93	22.79	24.00	27.09	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.50	9.43	9.82	12.64	30.00	17.14	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	4.00	19.77	20.03	22.91	24.00	26.91	30.00
5530MHz	Pass	4.30	20.01	20.26	23.15	24.00	27.45	30.00
5610MHz	Pass	4.30	20.29	20.32	23.32	24.00	27.62	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.30	20.22	20.44	23.34	24.00	27.64	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.50	6.69	6.86	9.79	30.00	14.29	36.00
802.11ac VHT160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.00	13.72	14.12	16.93	30.00	20.93	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.00	14.77	14.75	17.77	24.00	21.77	30.00
5570MHz	Pass	4.30	18.66	18.85	21.77	24.00	26.07	30.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	4.00	20.01	20.31	23.17	24.00	27.17	30.00
5300MHz	Pass	4.00	19.93	20.29	23.12	24.00	27.12	30.00
5320MHz	Pass	4.00	19.95	20.31	23.14	24.00	27.14	30.00
5500MHz	Pass	4.30	19.65	19.71	22.69	24.00	26.99	30.00
5580MHz	Pass	4.30	19.77	19.62	22.71	24.00	27.01	30.00
5700MHz	Pass	4.30	19.41	19.81	22.62	24.00	26.92	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.30	18.77	19.19	22.00	23.01	26.30	29.01
5720MHz Straddle 5.725-5.85GHz	Pass	4.50	13.95	14.13	17.05	30.00	21.55	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	4.00	20.45	20.61	23.54	24.00	27.54	30.00
5310MHz	Pass	4.00	20.39	20.62	23.52	24.00	27.52	30.00
5510MHz	Pass	4.30	20.1	19.89	23.01	24.00	27.31	30.00
5590MHz	Pass	4.30	20.61	20.52	23.58	24.00	27.88	30.00
5670MHz	Pass	4.30	20.55	20.67	23.62	24.00	27.92	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.30	20.5	20.45	23.49	24.00	27.79	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.50	10.54	10.98	13.78	30.00	18.28	36.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	4.00	19.87	20.05	22.97	24.00	26.97	30.00
5530MHz	Pass	4.30	20.07	20.32	23.21	24.00	27.51	30.00
5610MHz	Pass	4.30	20.34	20.45	23.41	24.00	27.71	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.30	20.29	20.54	23.43	24.00	27.73	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.50	7.44	7.56	10.51	30.00	15.01	36.00
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.00	14.15	14.59	17.39	30.00	21.39	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.00	15.25	15.21	18.24	24.00	22.24	30.00
5570MHz	Pass	4.30	18.7	19.1	21.91	24.00	26.21	30.00

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

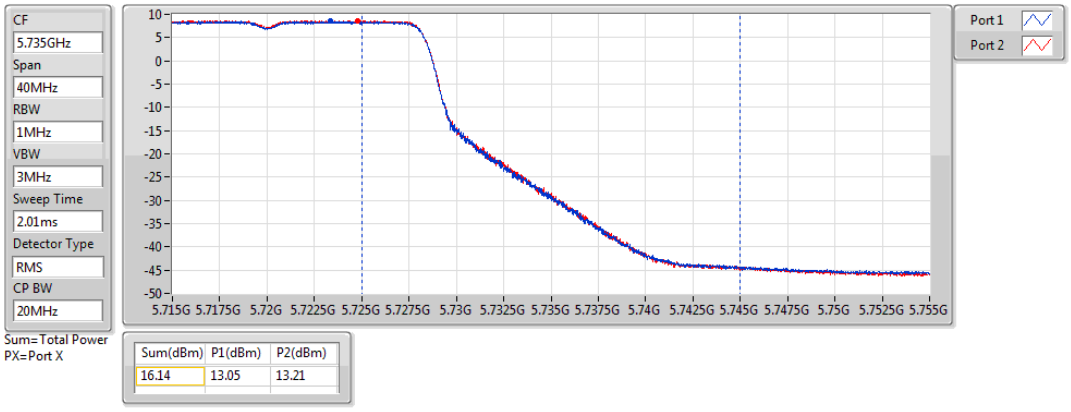
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz_TnomVnom



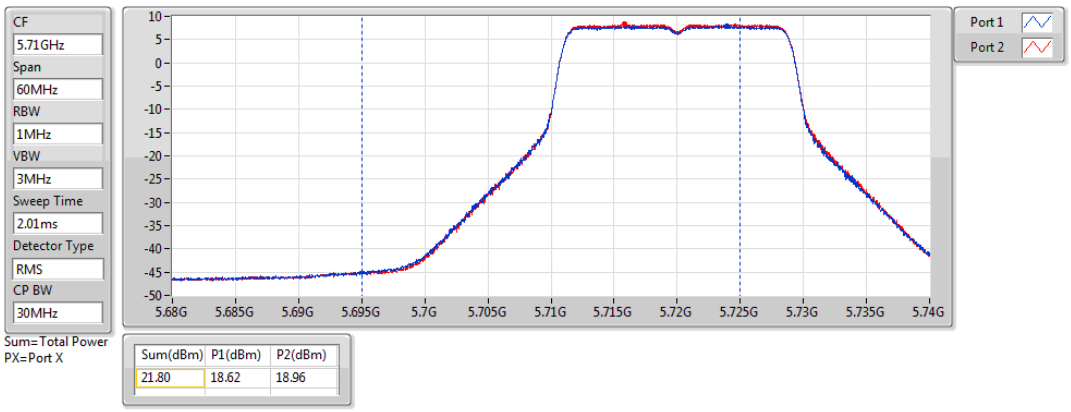
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz_TnomVnom



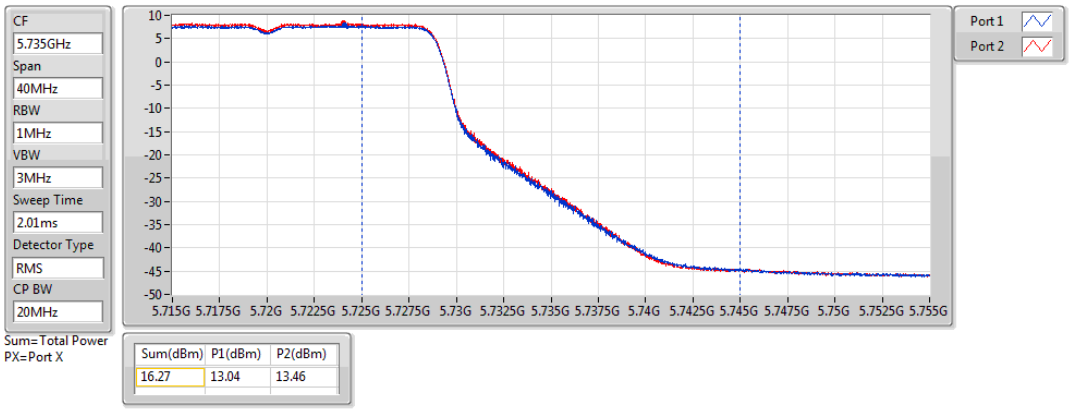
802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz_TnomVnom



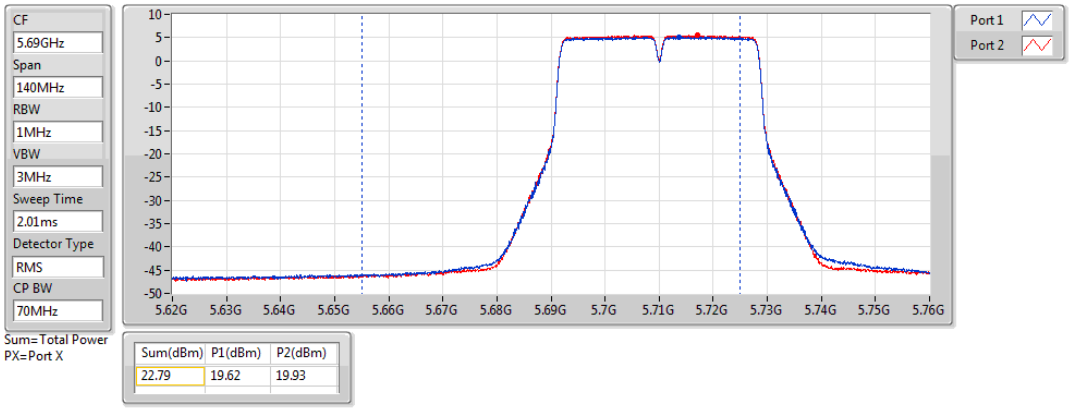
802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz_TnomVnom



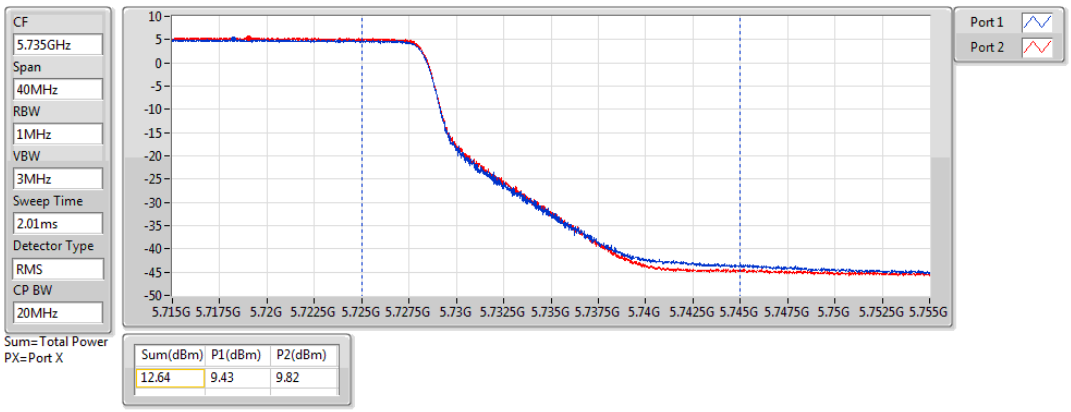
802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz_TnomVnom



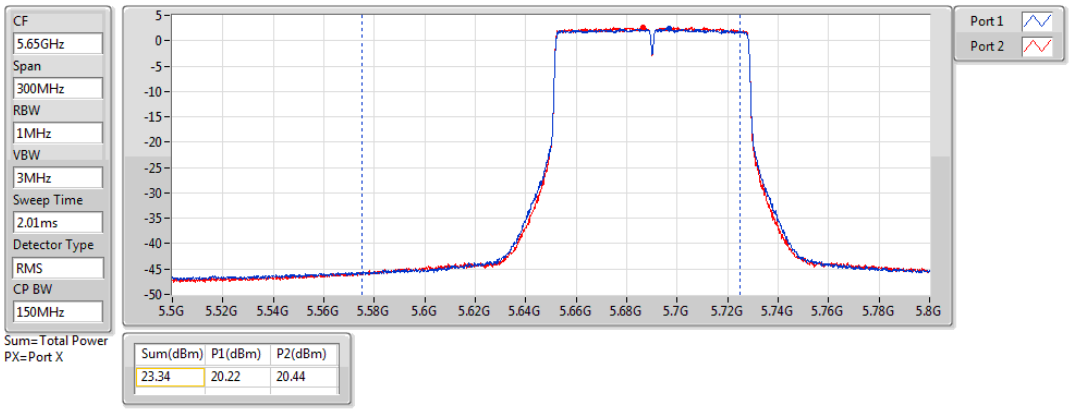
802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz_TnomVnom



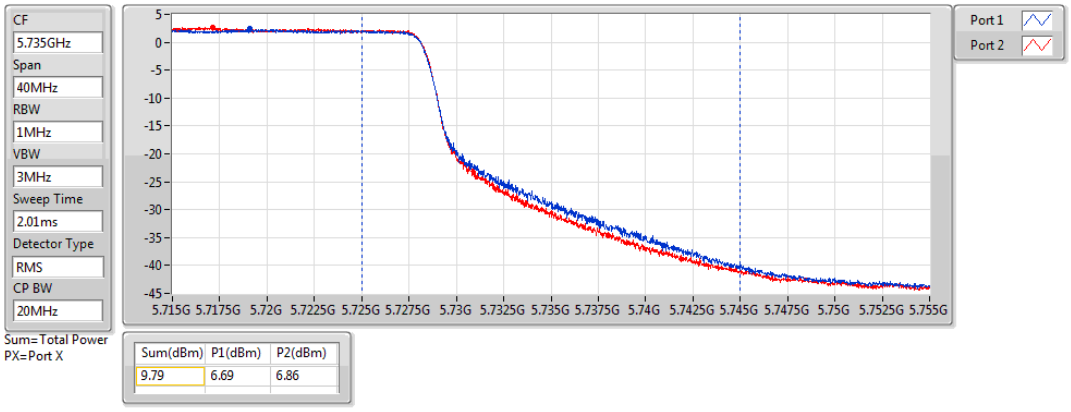
802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz_TnomVnom



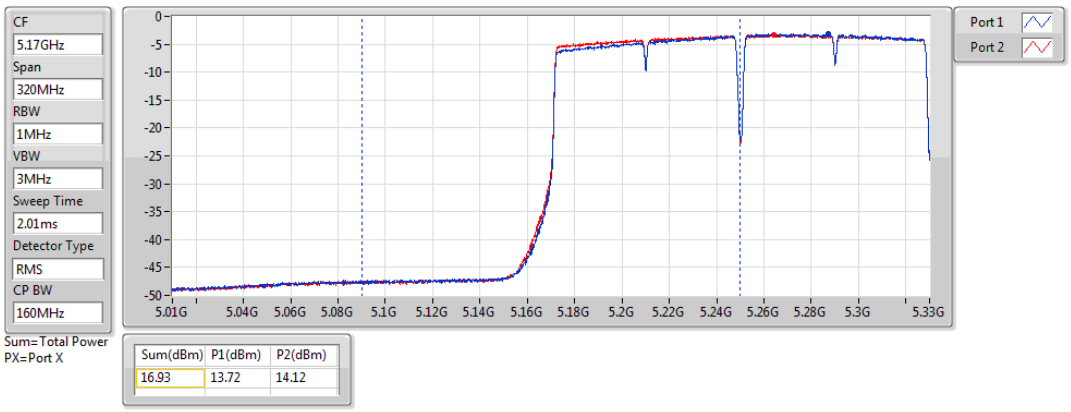
802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz_TnomVnom



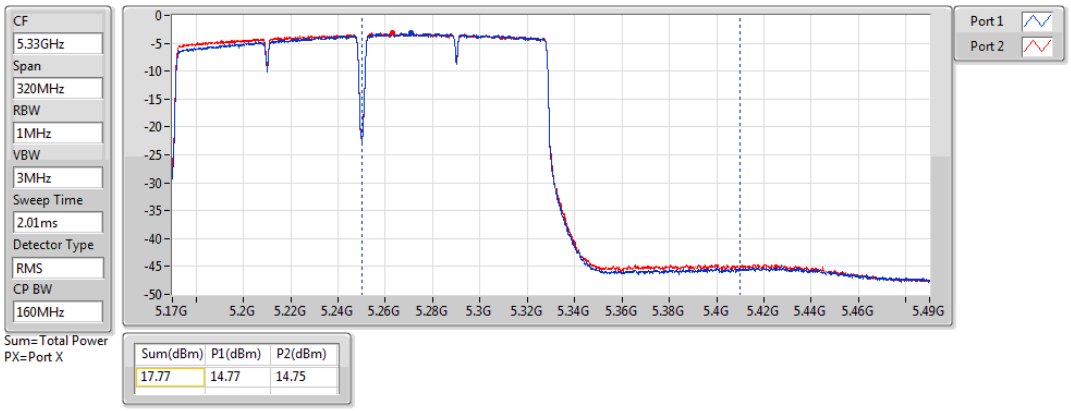
802.11ac VHT160_Nss1,(MCS0)_2TX **AV Power**

5250MHz Straddle 5.15-5.25GHz_TnomVnom



802.11ac VHT160_Nss1,(MCS0)_2TX **AV Power**

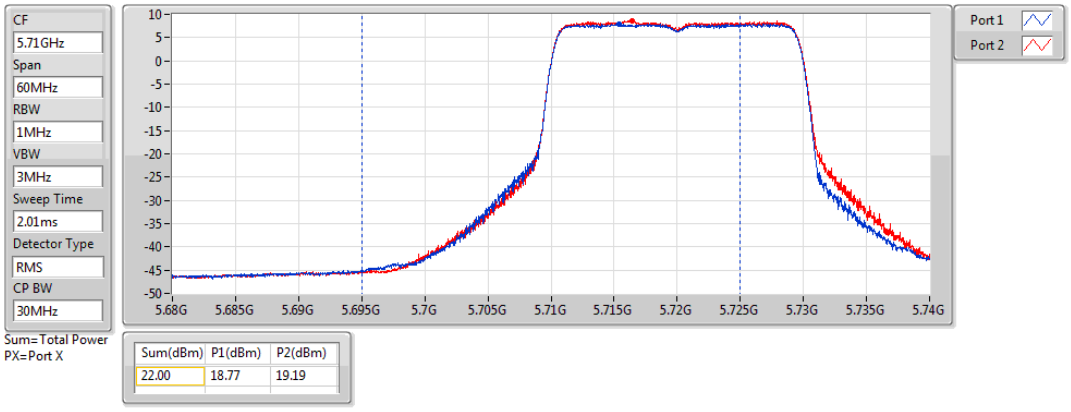
5250MHz Straddle 5.25-5.35GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
17.77	14.77	14.75

802.11ax HEW20_Nss1,(MCS0)_2TX **AV Power**

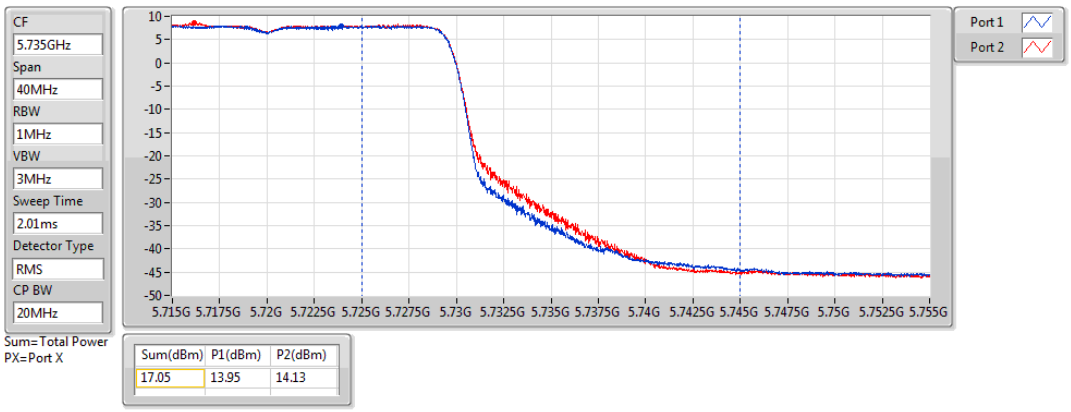
5720MHz Straddle 5.47-5.725GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
22.00	18.77	19.19

802.11ax HEW20_Nss1,(MCS0)_2TX **AV Power**

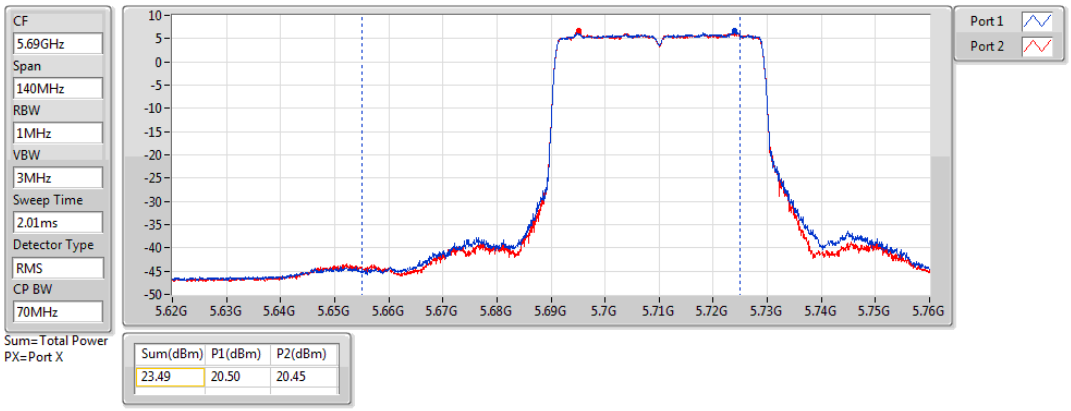
5720MHz Straddle 5.725-5.85GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
17.05	13.95	14.13

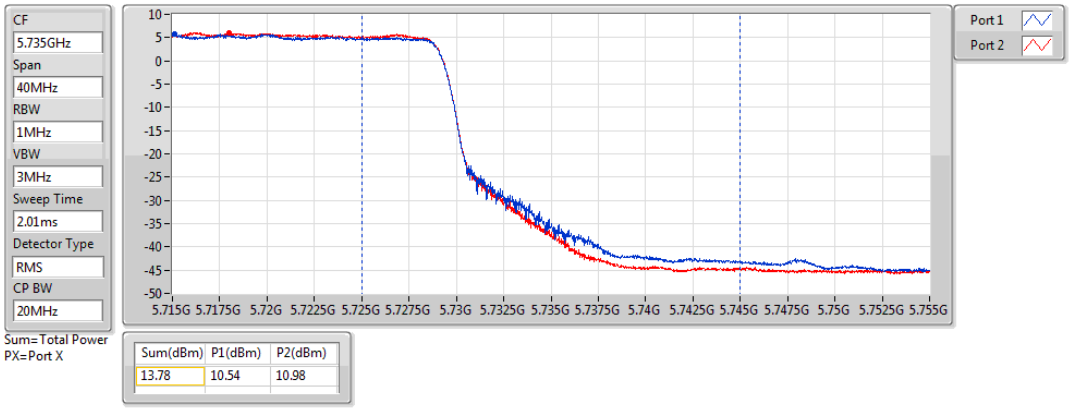
802.11ax HEW40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz_TnomVnom



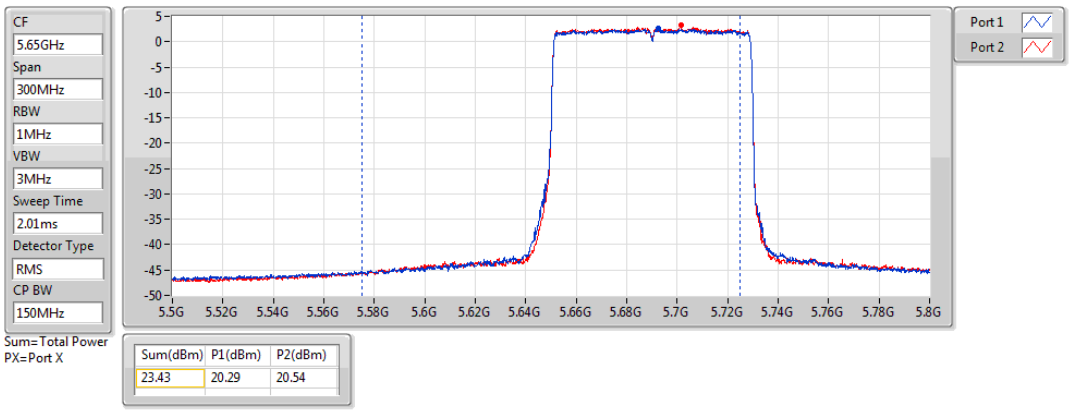
802.11ax HEW40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz_TnomVnom



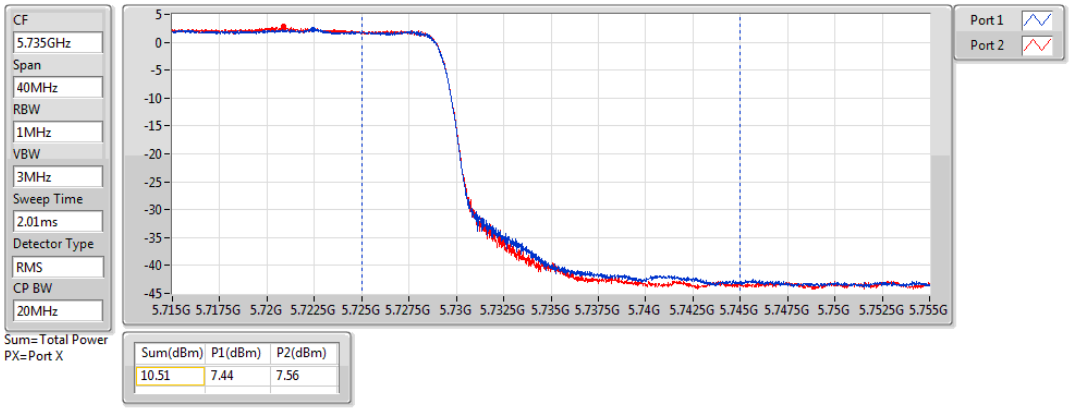
802.11ax HEW80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz_TnomVnom



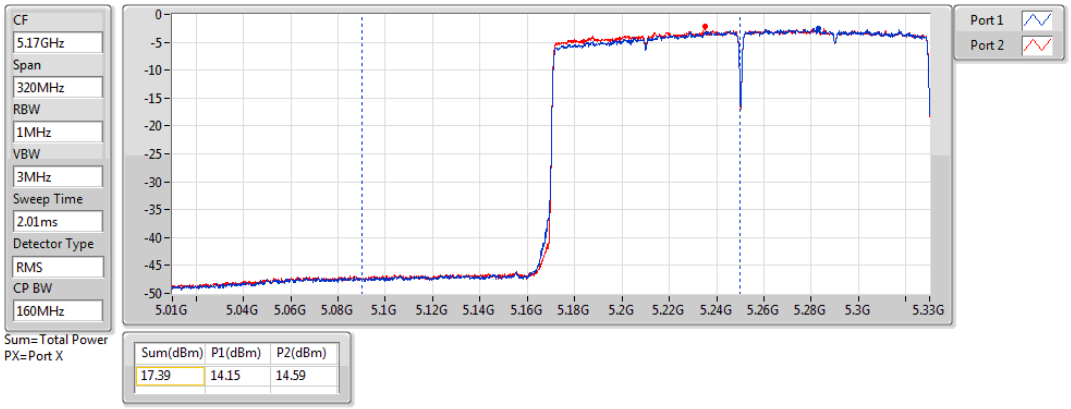
802.11ax HEW80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz_TnomVnom



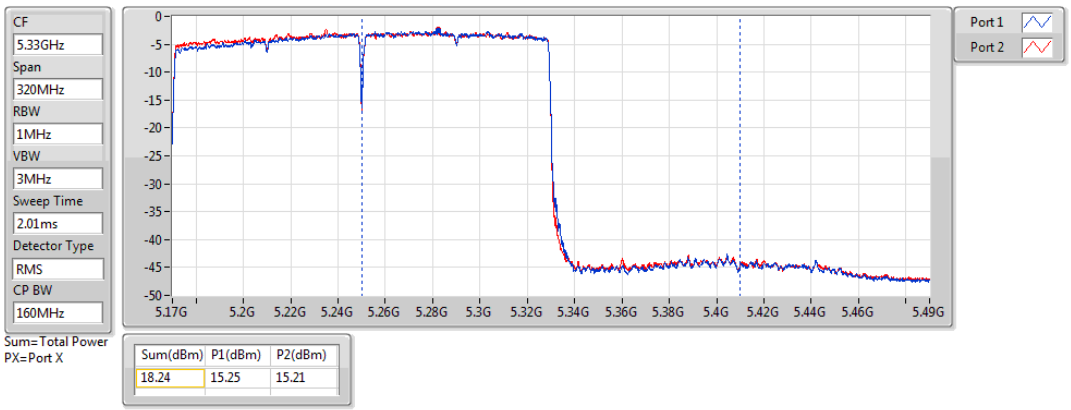
802.11ax HEW160_Nss1,(MCS0)_2TX **AV Power**

5250MHz Straddle 5.15-5.25GHz_TnomVnom



802.11ax HEW160_Nss1,(MCS0)_2TX **AV Power**

5250MHz Straddle 5.25-5.35GHz_TnomVnom



Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT160-BF_Nss1,(MCS0)_2TX	16.77	0.04753	23.68	0.23335
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	17.30	0.05370	24.21	0.26363
5.25-5.35GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	22.94	0.19679	29.75	0.94406
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	22.83	0.19187	29.64	0.92045
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	22.75	0.18836	29.56	0.90365
802.11ac VHT160-BF_Nss1,(MCS0)_2TX	17.52	0.05649	24.33	0.27102
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.08	0.20324	29.89	0.97499
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.96	0.19770	29.77	0.94842
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	22.84	0.19231	29.65	0.92257
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	18.07	0.06412	24.88	0.30761
5.47-5.725GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	22.51	0.17824	29.48	0.88716
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	22.86	0.19320	29.83	0.96161
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	22.73	0.18750	29.70	0.93325
802.11ac VHT160-BF_Nss1,(MCS0)_2TX	21.64	0.14588	28.61	0.72611
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.63	0.18323	29.60	0.91201
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.93	0.19634	29.90	0.97724
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	22.93	0.19634	29.90	0.97724
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	21.78	0.15066	28.75	0.74989
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	15.43	0.03491	22.74	0.18793
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	12.11	0.01626	19.42	0.08750
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	8.61	0.00726	15.92	0.03908
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.27	0.04236	23.58	0.22803
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	13.35	0.02163	20.66	0.11641
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	9.91	0.00979	17.22	0.05272

＊Highlight value is the maximum power.

Result

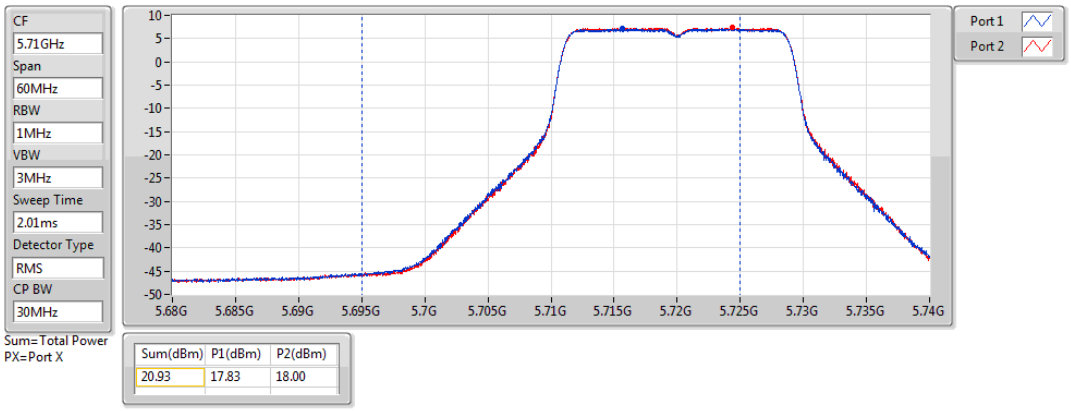
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	6.81	19.83	20.02	22.94	23.19	29.75	30.00
5300MHz	Pass	6.81	19.81	20.05	22.94	23.19	29.75	30.00
5320MHz	Pass	6.81	19.75	19.96	22.87	23.19	29.68	30.00
5500MHz	Pass	6.97	19.48	19.51	22.51	23.03	29.48	30.00
5580MHz	Pass	6.97	19.51	19.48	22.51	23.03	29.48	30.00
5700MHz	Pass	6.97	19.27	19.62	22.46	23.03	29.43	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.97	17.83	18	20.93	23.03	27.90	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.31	12.36	12.48	15.43	28.69	22.74	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	6.81	19.71	19.93	22.83	23.19	29.64	30.00
5310MHz	Pass	6.81	19.65	19.85	22.76	23.19	29.57	30.00
5510MHz	Pass	6.97	19.95	19.75	22.86	23.03	29.83	30.00
5590MHz	Pass	6.97	19.91	19.68	22.81	23.03	29.78	30.00
5670MHz	Pass	6.97	19.83	19.64	22.75	23.03	29.72	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	6.97	18.96	19.35	22.17	23.03	29.14	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.31	8.9	9.29	12.11	28.69	19.42	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	6.81	19.65	19.83	22.75	23.19	29.56	30.00
5530MHz	Pass	6.97	19.31	19.63	22.48	23.03	29.45	30.00
5610MHz	Pass	6.97	19.68	19.75	22.73	23.03	29.70	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	6.97	19.2	19.51	22.37	23.03	29.34	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.31	5.49	5.71	8.61	28.69	15.92	36.00
802.11ac VHT160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.91	13.61	13.91	16.77	29.09	23.68	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	6.81	14.5	14.51	17.52	23.19	24.33	30.00
5570MHz	Pass	6.97	18.45	18.81	21.64	23.03	28.61	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	6.81	19.95	20.13	23.05	23.19	29.86	30.00
5300MHz	Pass	6.81	19.91	20.22	23.08	23.19	29.89	30.00
5320MHz	Pass	6.81	19.86	20.17	23.03	23.19	29.84	30.00
5500MHz	Pass	6.97	19.58	19.65	22.63	23.03	29.60	30.00
5580MHz	Pass	6.97	19.63	19.58	22.62	23.03	29.59	30.00
5700MHz	Pass	6.97	19.38	19.75	22.58	23.03	29.55	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.97	18.05	18.22	21.15	23.03	28.12	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.31	13.15	13.37	16.27	28.69	23.58	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	6.81	19.86	20.03	22.96	23.19	29.77	30.00
5310MHz	Pass	6.81	19.81	20.01	22.92	23.19	29.73	30.00
5510MHz	Pass	6.97	20.03	19.81	22.93	23.03	29.90	30.00
5590MHz	Pass	6.97	20.02	19.8	22.92	23.03	29.89	30.00
5670MHz	Pass	6.97	19.96	19.75	22.87	23.03	29.84	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	6.97	19.47	19.73	22.61	23.03	29.58	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.31	10.23	10.44	13.35	28.69	20.66	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	6.81	19.73	19.92	22.84	23.19	29.65	30.00
5530MHz	Pass	6.97	19.43	19.72	22.59	23.03	29.56	30.00
5610MHz	Pass	6.97	19.75	19.83	22.80	23.03	29.77	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	6.97	19.74	20.09	22.93	23.03	29.90	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.31	6.78	7.02	9.91	28.69	17.22	36.00
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.91	14.13	14.44	17.30	29.09	24.21	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	6.81	15.05	15.07	18.07	23.19	24.88	30.00
5570MHz	Pass	6.97	18.58	18.96	21.78	23.03	28.75	30.00

DG = Directional Gain;
For 5.15 ~ 5.25 GHz
Directional Gain =$10 * \log((10^{3.8/20}+10^{4/20})^2/2)$ = 6.91 dBi > 6dBi , limit shall be reduced to 30 dBm – (6.91 dBi – 6 dBi) = 29.09 dBm
For 5.25 ~ 5.35 GHz
Directional Gain =$10 * \log((10^{4/20}+10^{3.6/20})^2/2)$ = 6.81 dBi > 6dBi , limit shall be reduced to 24 dBm – (6.81 dBi – 6 dBi) = 23.19 dBm
For 5.47 ~ 5.75 GHz
Directional Gain =$10 * \log((10^{3.6/20}+10^{4.3/20})^2/2)$ = 6.97 dBi > 6dBi , limit shall be reduced to 24 dBm – (6.97 dBi – 6 dBi) = 23.03 dBm
For 5.725 ~ 5.85 GHz
Directional Gain =$10 * \log((10^{4.5/20}+10^{4.1/20})^2/2)$ =7.31 dBi > 6dBi , limit shall be reduced to 30 dBm – (7.81 dBi – 6 dBi) = 28.69 dBm
Port X = Port X output power

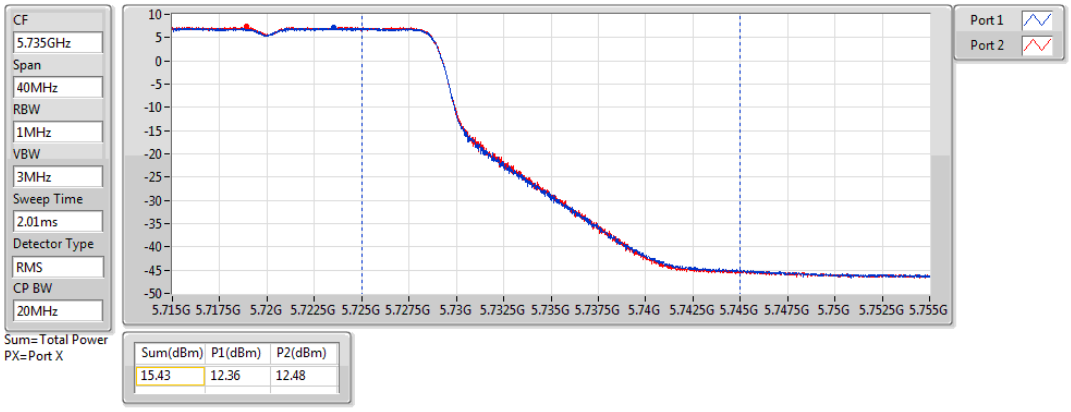
802.11ac VHT20-BF_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz_TnomVnom



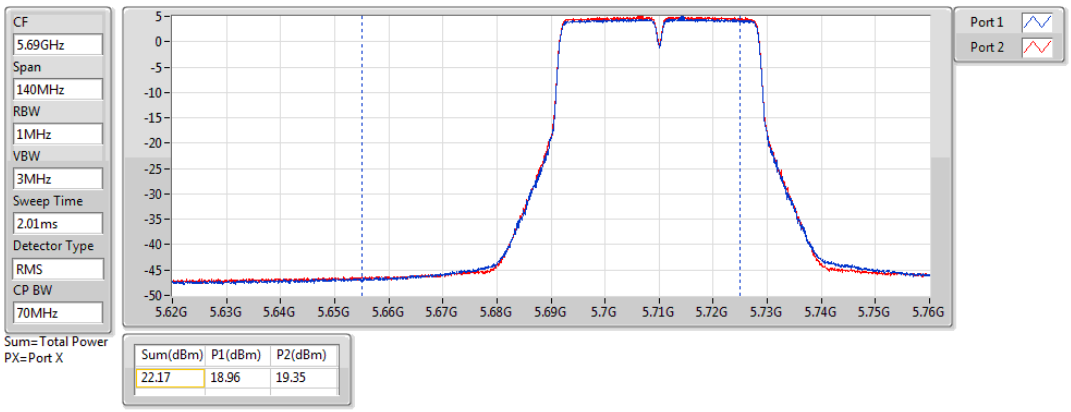
802.11ac VHT20-BF_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz_TnomVnom



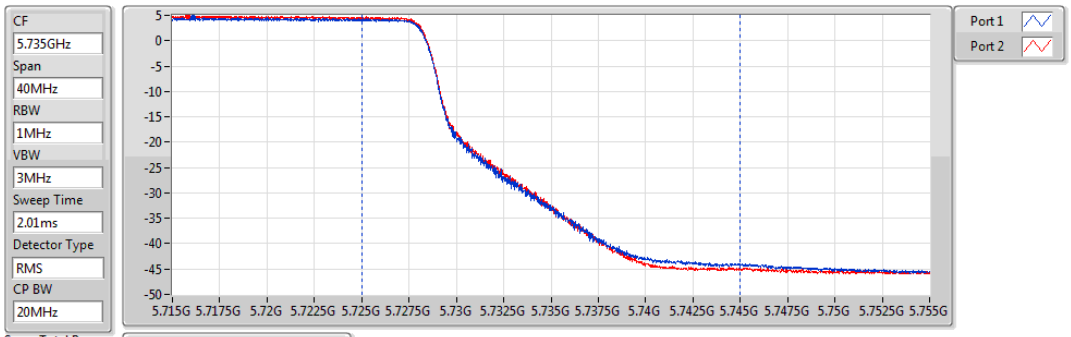
802.11ac VHT40-BF_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz_TnomVnom



802.11ac VHT40-BF_Nss1,(MCS0)_2TX **AV Power**

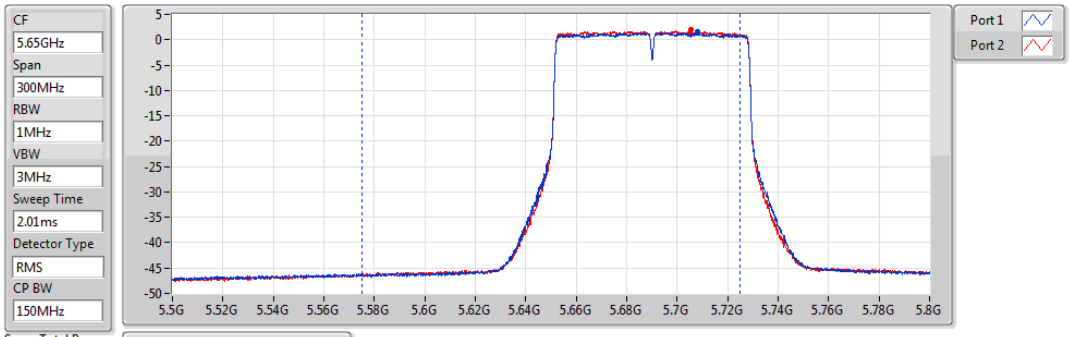
5710MHz Straddle 5.725-5.85GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
12.11	8.90	9.29

802.11ac VHT80-BF_Nss1,(MCS0)_2TX **AV Power**

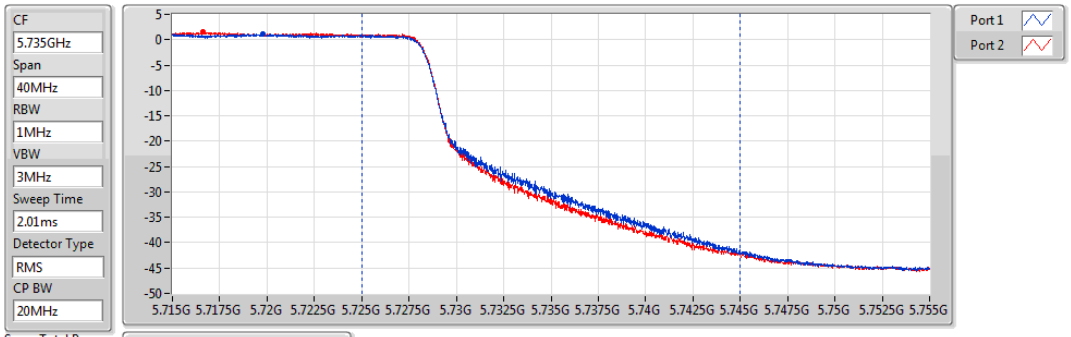
5690MHz Straddle 5.47-5.725GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
22.37	19.20	19.51

802.11ac VHT80-BF_Nss1,(MCS0)_2TX **AV Power**

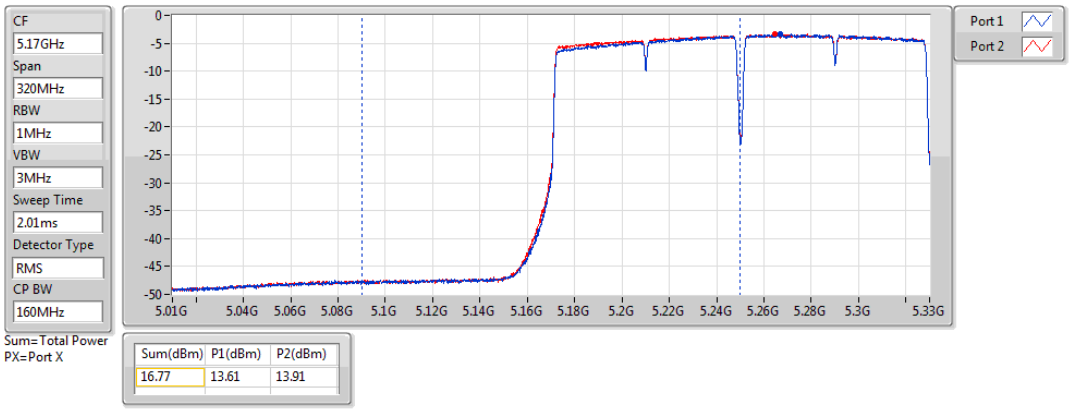
5690MHz Straddle 5.725-5.85GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
8.61	5.49	5.71

802.11ac VHT160-BF_Nss1,(MCS0)_2TX **AV Power**

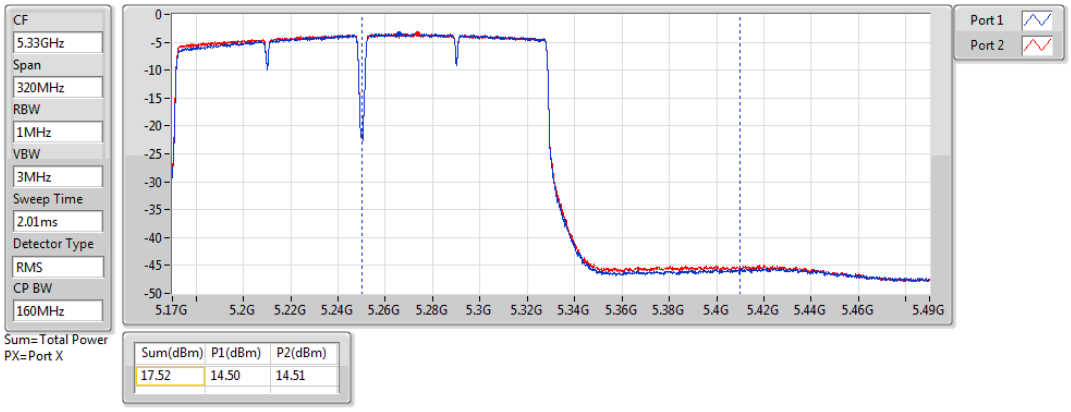
5250MHz Straddle 5.15-5.25GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
16.77	13.61	13.91

802.11ac VHT160-BF_Nss1,(MCS0)_2TX **AV Power**

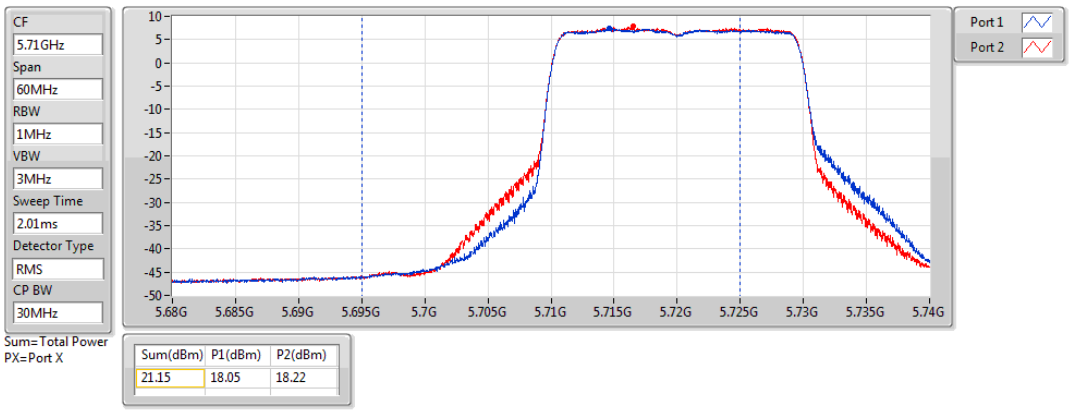
5250MHz Straddle 5.25-5.35GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
17.52	14.50	14.51

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **AV Power**

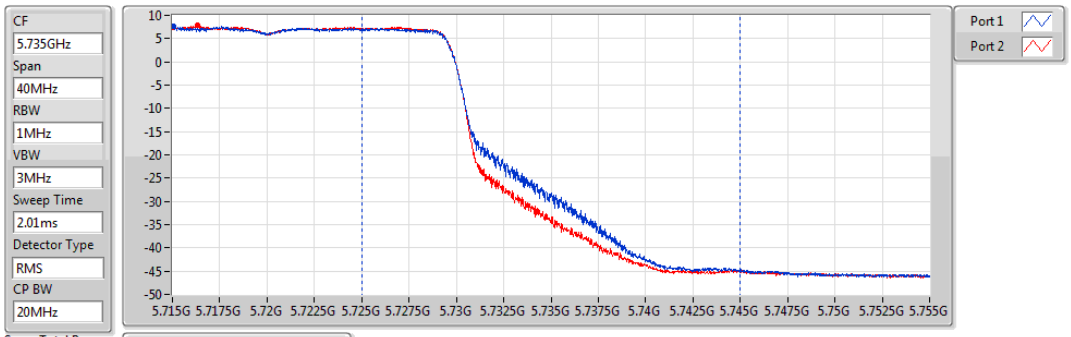
5720MHz Straddle 5.47-5.725GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
21.15	18.05	18.22

802.11ax HEW20-BF_Nss1,(MCS0)_2TX **AV Power**

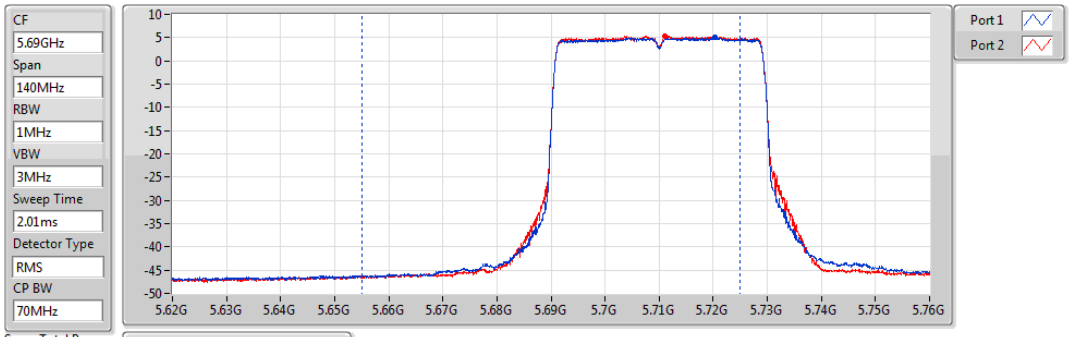
5720MHz Straddle 5.725-5.85GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
16.27	13.15	13.37

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **AV Power**

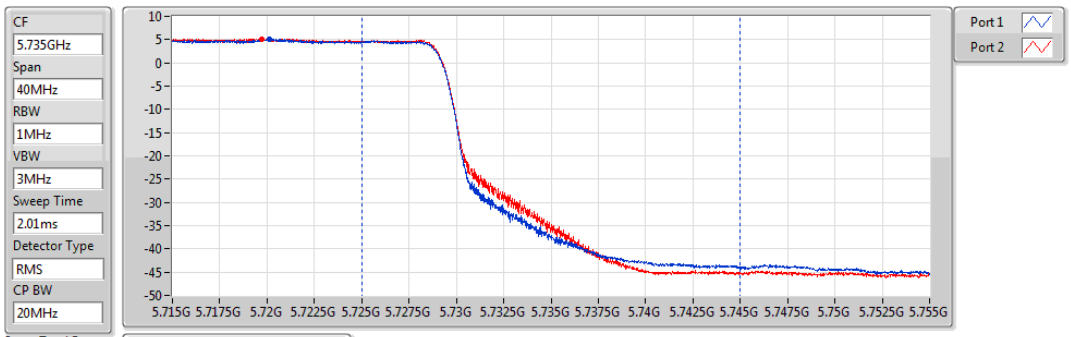
5710MHz Straddle 5.47-5.725GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
22.61	19.47	19.73

802.11ax HEW40-BF_Nss1,(MCS0)_2TX **AV Power**

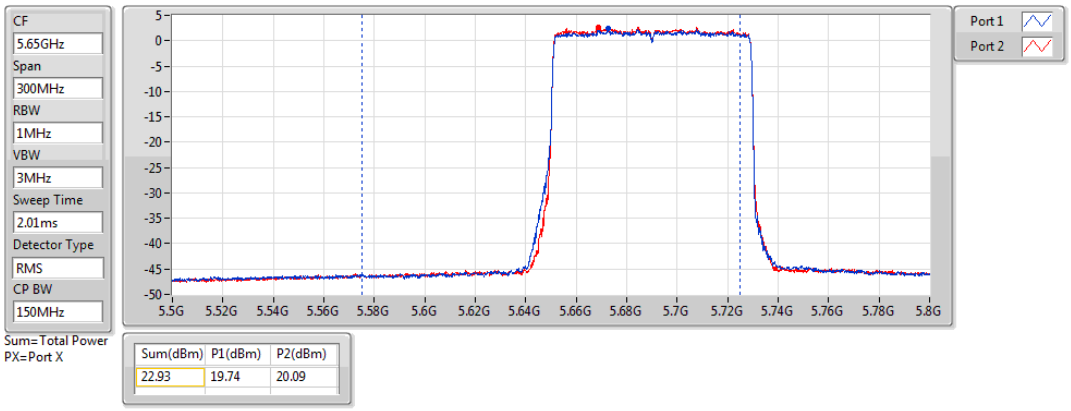
5710MHz Straddle 5.725-5.85GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)
13.35	10.23	10.44

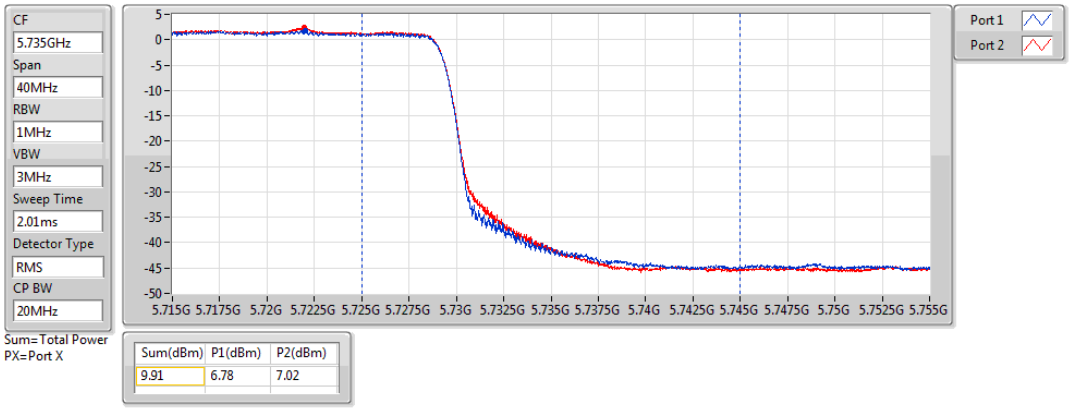
802.11ax HEW80-BF_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz_TnomVnom



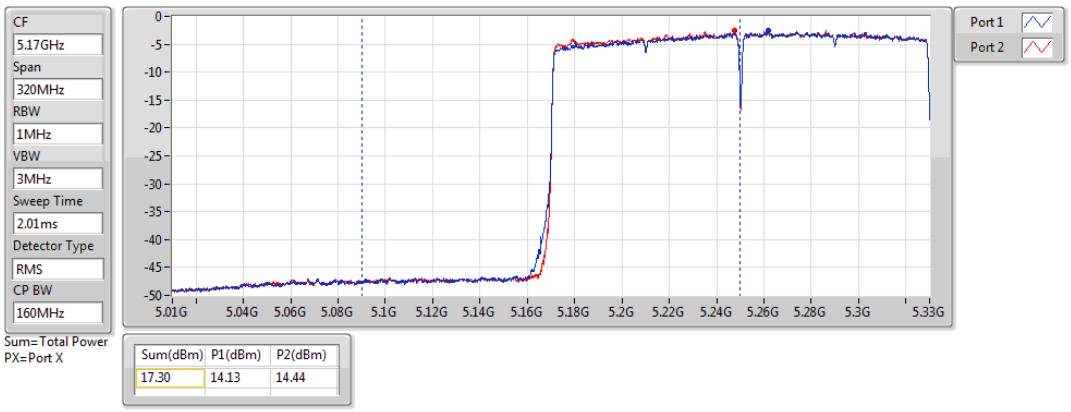
802.11ax HEW80-BF_Nss1,(MCS0)_2TX **AV Power**

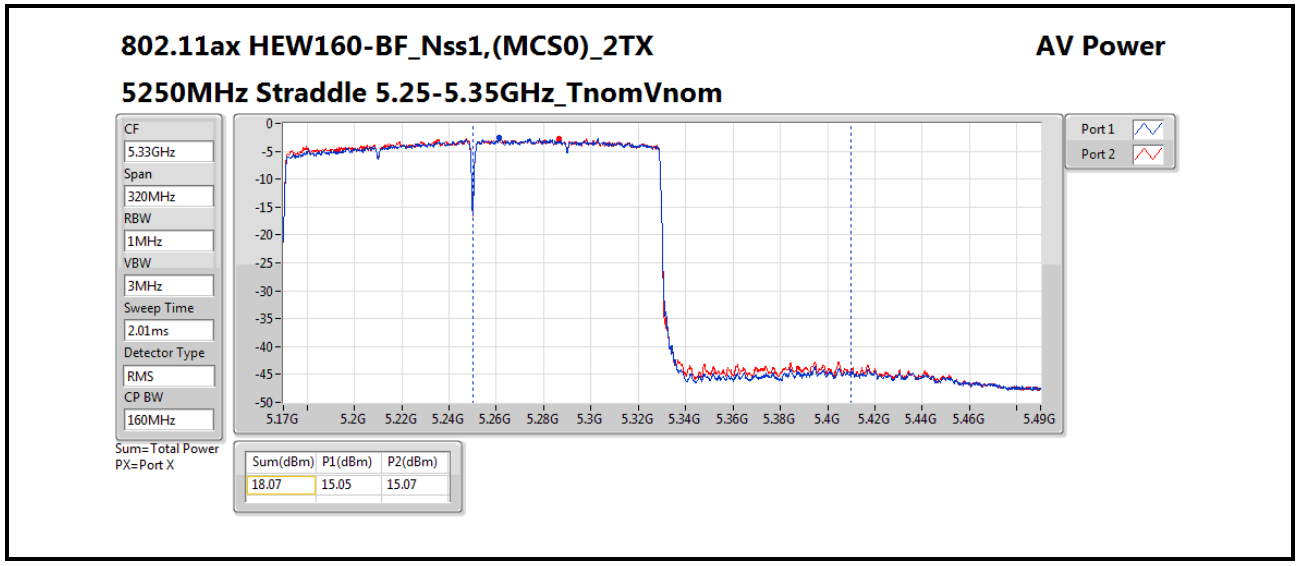
5690MHz Straddle 5.725-5.85GHz_TnomVnom



802.11ax HEW160-BF_Nss1,(MCS0)_2TX **AV Power**

5250MHz Straddle 5.15-5.25GHz_TnomVnom




802.11ax HEW160-BF_Nss1,(MCS0)_2TX
AV Power
5250MHz Straddle 5.25-5.35GHz_TnomVnom
CF
5.33GHz
Span
320MHz
RBW
1MHz
VBW
3MHz
Sweep Time
2.01ms
Detector Type
RMS
CP BW
160MHz
Sum=Total Power
PX=Port X
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
5.17G
5.2G
5.22G
5.24G
5.26G
5.28G
5.3G
5.32G
5.34G
5.36G
5.38G
5.4G
5.42G
5.44G
5.46G
5.49G
Port 1
Port 2
Sum(dBm)
P1(dBm)
P2(dBm)
18.07
15.05
15.07

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

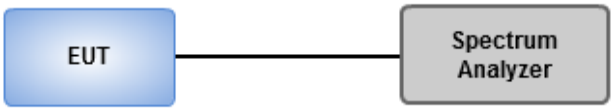
For 5150 ~ 5250 MHz / 5250 ~ 5350 MHz / 5470 ~ 5725 MHz

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.

For 5725 ~ 5850 MHz

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

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Ambient Condition	20-24°C / 64-66%	Tested By	Aska Huang

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11ax HEW160_Nss1,(MCS0)_2TX	-1.39	5.52
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	9.77	16.58
802.11ax HEW20_Nss1,(MCS0)_2TX	9.90	16.71
802.11ax HEW40_Nss1,(MCS0)_2TX	7.58	14.39
802.11ax HEW80_Nss1,(MCS0)_2TX	3.90	10.71
802.11ax HEW160_Nss1,(MCS0)_2TX	-1.33	5.48
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	9.82	16.79
802.11ax HEW20_Nss1,(MCS0)_2TX	9.79	16.76
802.11ax HEW40_Nss1,(MCS0)_2TX	8.02	14.99
802.11ax HEW80_Nss1,(MCS0)_2TX	4.25	11.22
802.11ax HEW160_Nss1,(MCS0)_2TX	0.13	7.10
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	8.31	15.62
802.11ax HEW20_Nss1,(MCS0)_2TX	7.98	15.29
802.11ax HEW40_Nss1,(MCS0)_2TX	5.49	12.80
802.11ax HEW80_Nss1,(MCS0)_2TX	1.91	9.22

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

Result

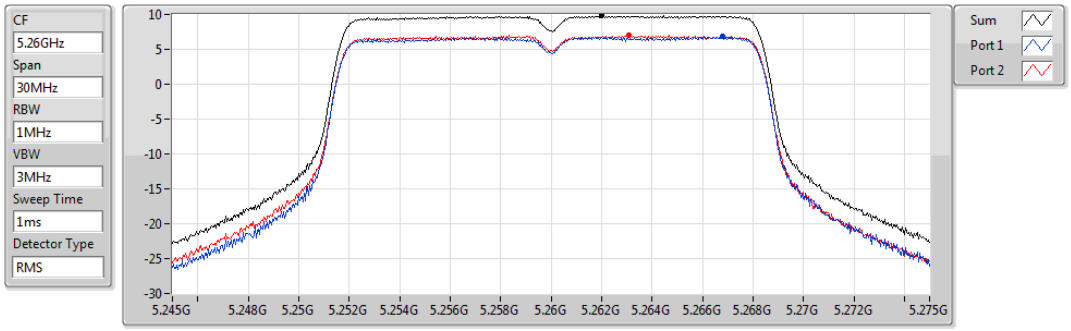
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	6.81	6.86	7.02	9.77	10.19	16.58	17.00
5300MHz	Pass	6.81	6.70	6.84	9.71	10.19	16.52	17.00
5320MHz	Pass	6.81	6.61	7.02	9.72	10.19	16.53	17.00
5500MHz	Pass	6.97	6.79	6.83	9.66	10.03	16.63	17.00
5580MHz	Pass	6.97	6.57	6.85	9.63	10.03	16.60	17.00
5700MHz	Pass	6.97	6.67	7.06	9.81	10.03	16.78	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.97	6.71	7.00	9.82	10.03	16.79	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.31	5.24	5.45	8.31	28.69	15.62	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	6.81	6.97	7.12	9.88	10.19	16.69	17.00
5300MHz	Pass	6.81	7.02	7.14	9.90	10.19	16.71	17.00
5320MHz	Pass	6.81	6.72	7.04	9.79	10.19	16.60	17.00
5500MHz	Pass	6.97	6.83	7.11	9.62	10.03	16.59	17.00
5580MHz	Pass	6.97	6.36	7.36	9.67	10.03	16.64	17.00
5700MHz	Pass	6.97	6.80	7.30	9.79	10.03	16.76	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.97	6.26	7.17	9.54	10.03	16.51	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.31	5.12	5.06	7.98	28.69	15.29	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	6.81	4.53	4.84	7.54	10.19	14.35	17.00
5310MHz	Pass	6.81	4.46	4.87	7.58	10.19	14.39	17.00
5510MHz	Pass	6.97	3.93	4.00	6.89	10.03	13.86	17.00
5590MHz	Pass	6.97	4.69	4.22	7.39	10.03	14.36	17.00
5670MHz	Pass	6.97	3.99	4.45	7.21	10.03	14.18	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	6.97	4.82	5.34	8.02	10.03	14.99	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.31	2.52	2.50	5.49	28.69	12.80	36.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	6.81	1.19	0.83	3.90	10.19	10.71	17.00
5530MHz	Pass	6.97	0.79	0.79	3.70	10.03	10.67	17.00
5610MHz	Pass	6.97	1.32	1.38	4.25	10.03	11.22	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	6.97	0.83	1.55	4.14	10.03	11.11	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.31	-0.96	-1.07	1.91	28.69	9.22	36.00
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.91	-4.76	-3.82	-1.39	16.09	5.52	23.00
5250MHz Straddle 5.25-5.35GHz	Pass	6.81	-4.37	-4.31	-1.33	10.19	5.48	17.00
5570MHz	Pass	6.97	-2.65	-2.78	0.13	10.03	7.10	17.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
For 5.15 ~ 5.25 GHz
Directional Gain =$10 * \log((10^{3.8/20}+10^{4/20})^2/2)$ = 6.91 dBi > 6dBi , limit shall be reduced to 17 dBm – (6.91 dBi – 6 dBi) = 16.09 dBm
For 5.25 ~ 5.35 GHz
Directional Gain =$10 * \log((10^{4/20}+10^{3.6/20})^2/2)$ = 6.81 dBi > 6dBi , limit shall be reduced to 11 dBm – (6.81 dBi – 6 dBi) = 10.19 dBm

For 5.47 ~ 5.75 GHz
Directional Gain =10 * log((10$^{3.6/20}$+10$^{4.3/20}$)^2/2) = 6.97 dBi > 6dBi , limit shall be reduced to 11 dBm – (6.97 dBi – 6 dBi) = 10.03 dBm
For 5.725 ~ 5.85 GHz
Directional Gain =10 * log((10$^{4.5/20}$+10$^{4.1/20}$)^2/2) =7.31 dBi > 6dBi , limit shall be reduced to 30 dBm – (7.81 dBi – 6 dBi) = 28.69 dBm
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

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

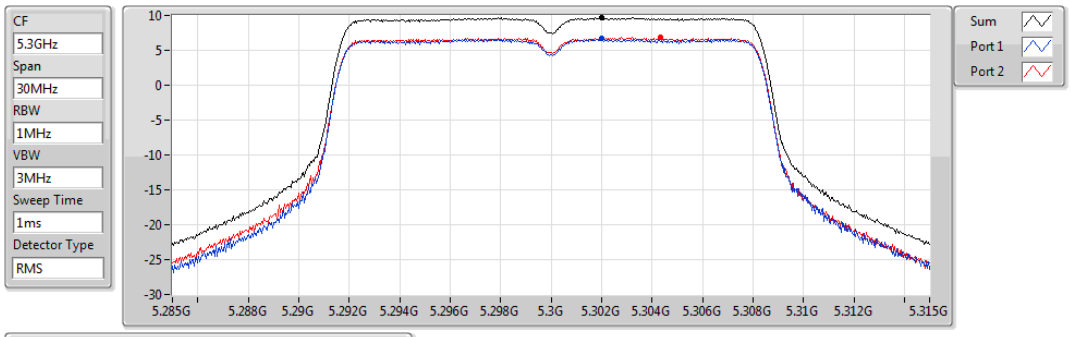
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.77	9.77	6.86	7.02

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

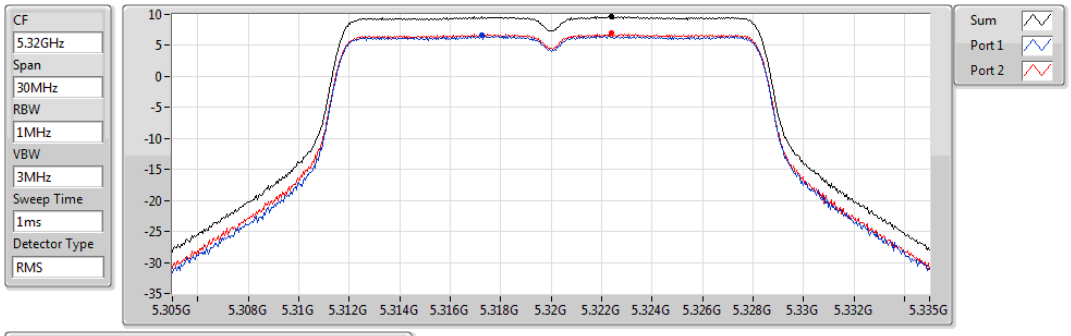
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.71	9.71	6.70	6.84

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

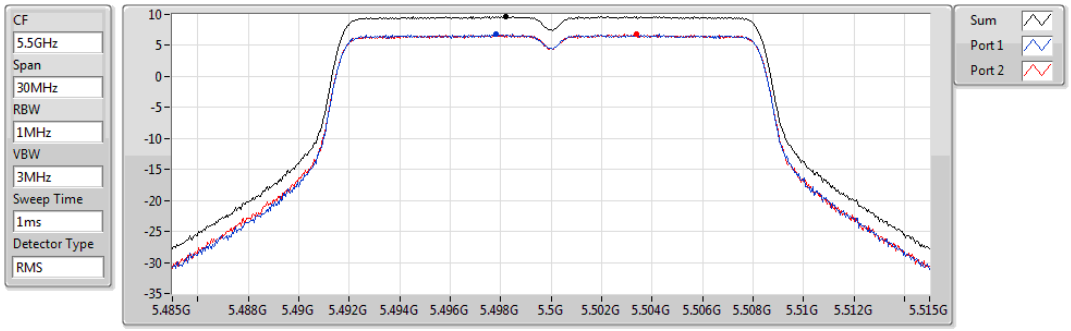
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.72	9.72	6.61	7.02

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

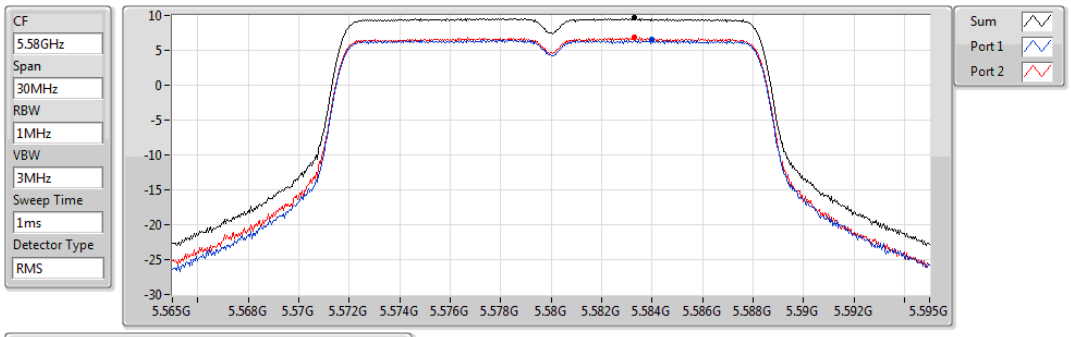
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.66	9.66	6.79	6.83

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

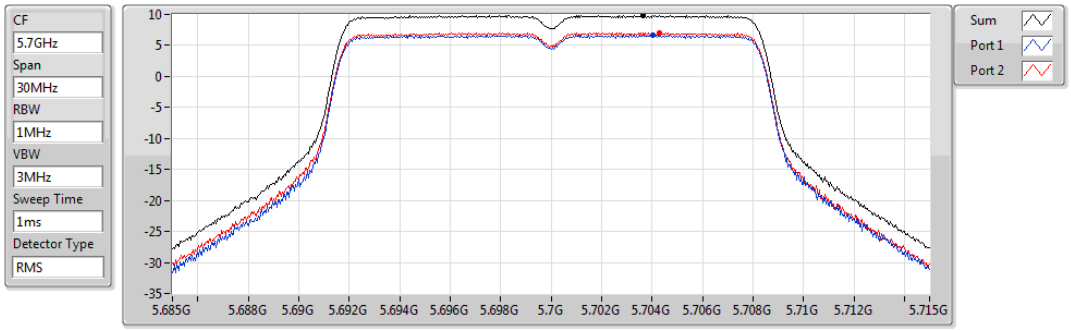
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.63	9.63	6.57	6.85

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

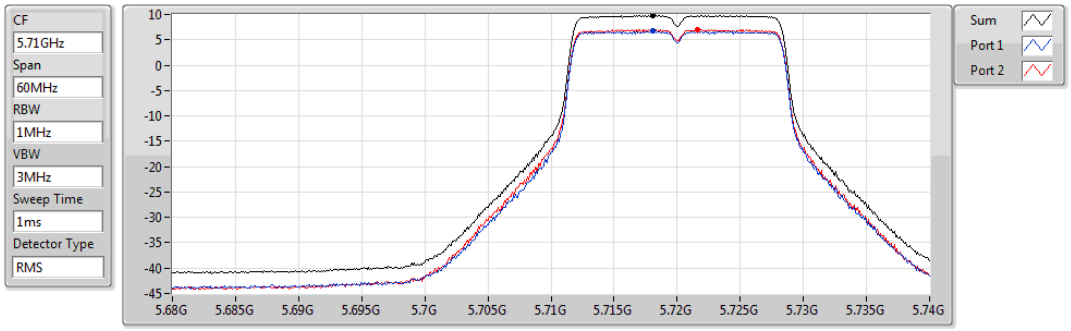
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.81	9.81	6.67	7.06

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

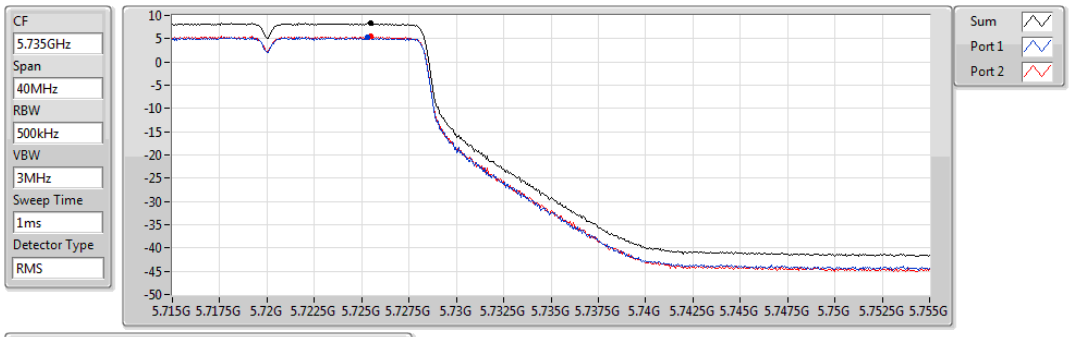
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.82	9.82	6.71	7.00

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

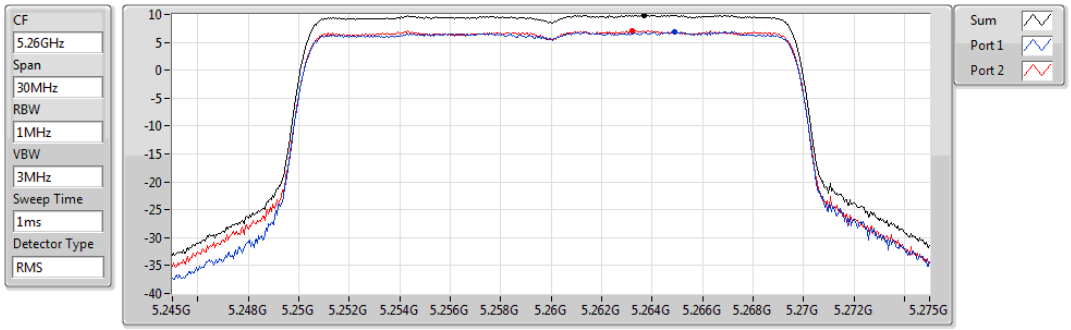
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.31	8.31	5.24	5.45

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

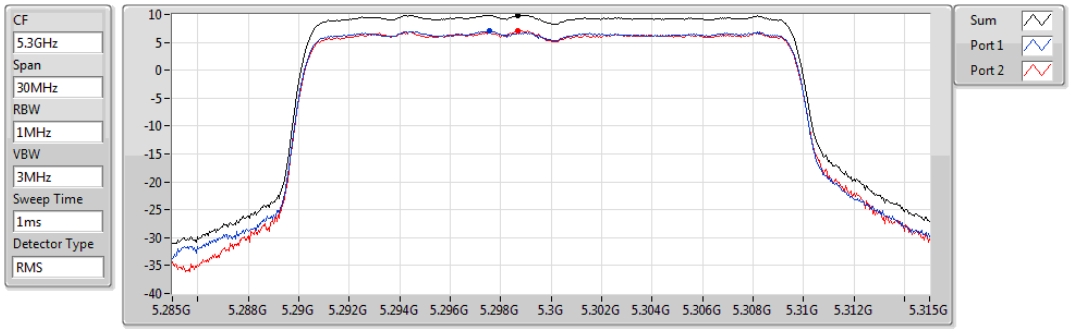
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.88	9.88	6.97	7.12

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

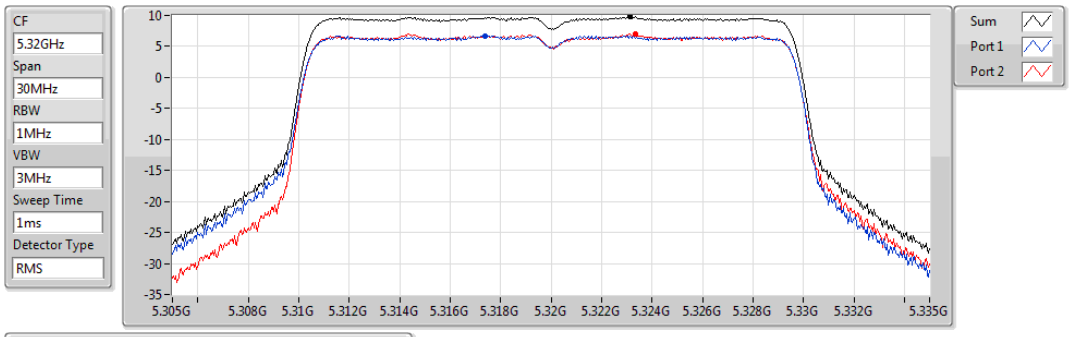
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.90	9.90	7.02	7.14

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

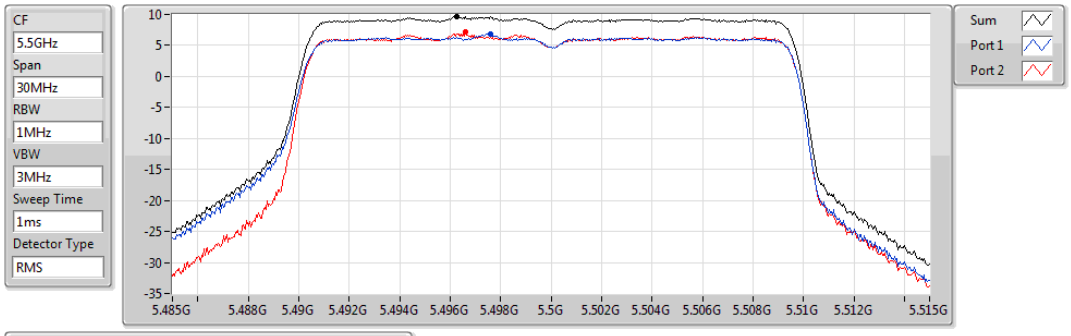
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.79	9.79	6.72	7.04

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

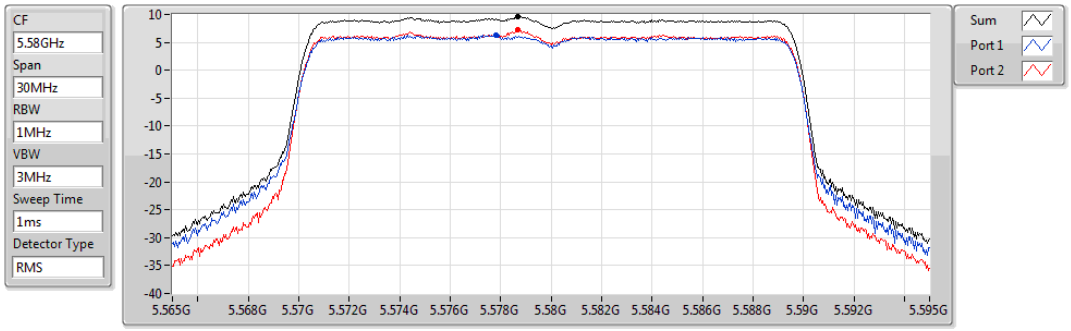
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.62	9.62	6.83	7.11

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

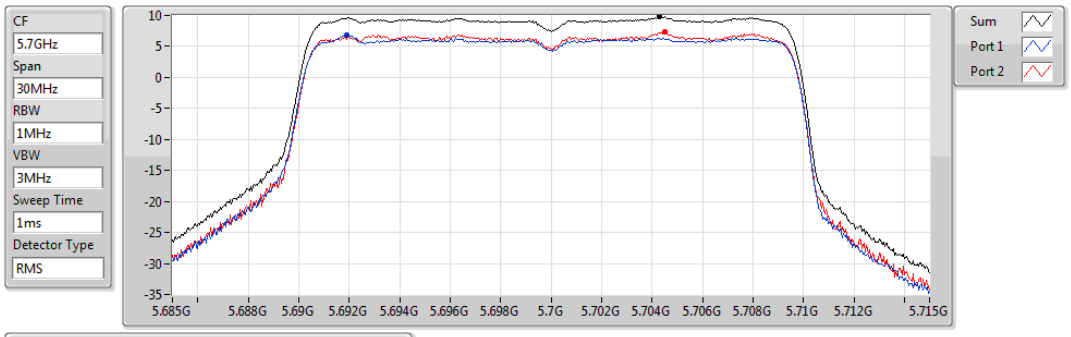
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.67	9.67	6.36	7.36

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

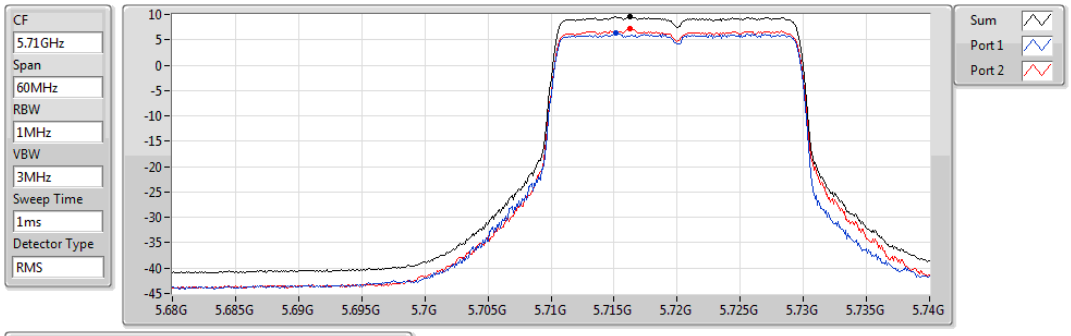
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.79	9.79	6.80	7.30

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

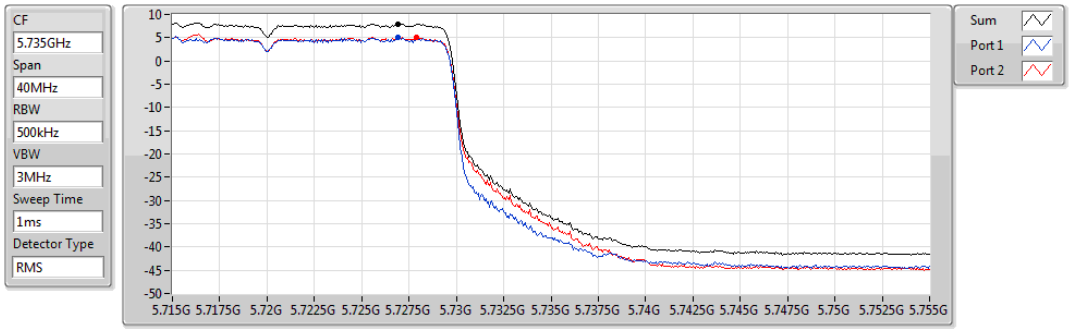
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.54	9.54	6.26	7.17

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

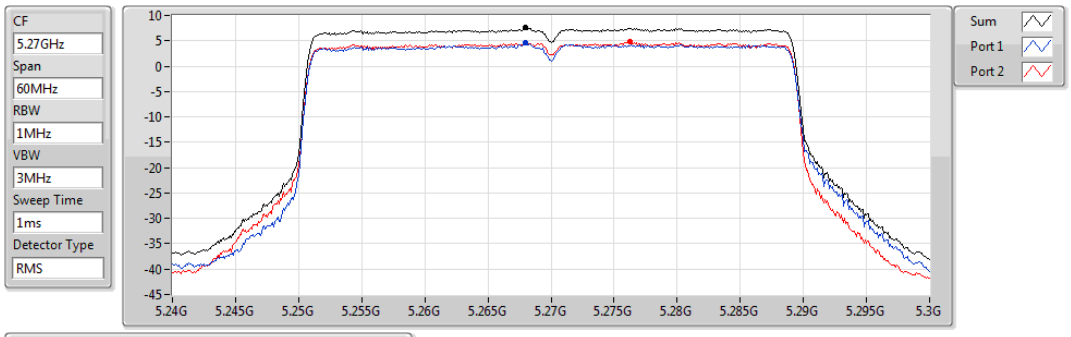
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.98	7.98	5.12	5.06

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

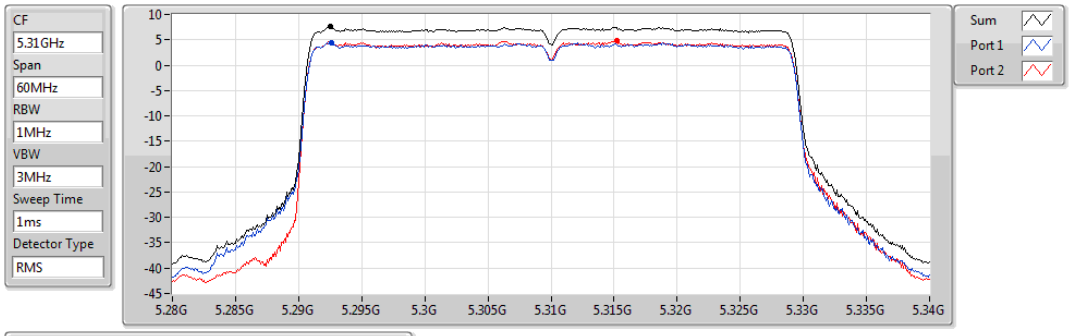
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.54	7.54	4.53	4.84

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

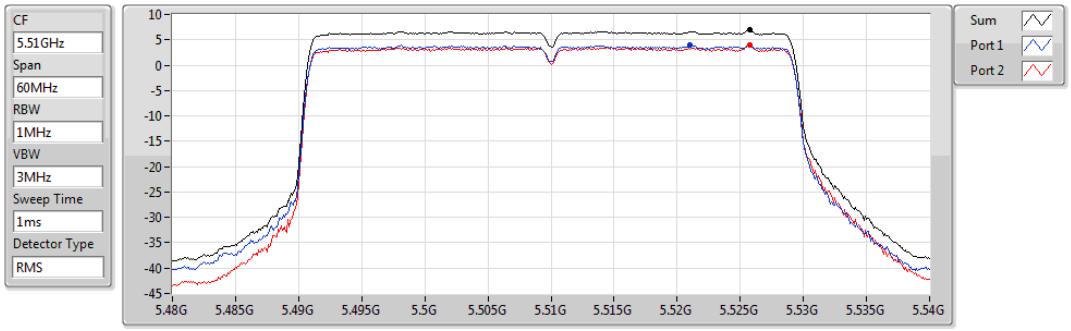
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.58	7.58	4.46	4.87

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

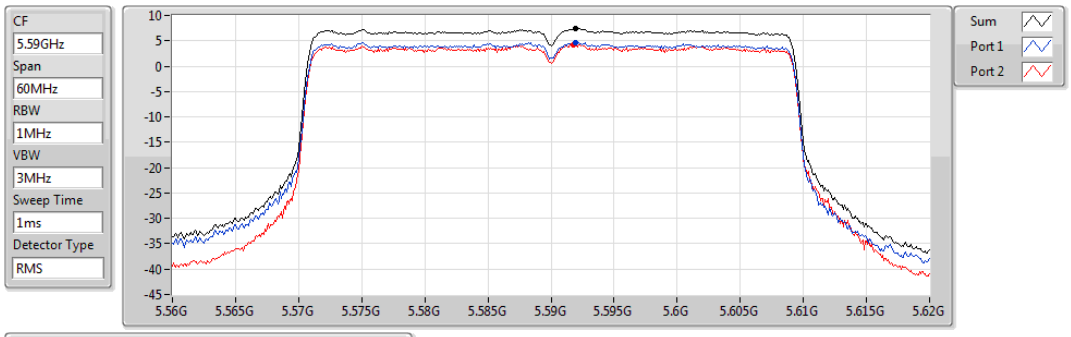
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.89	6.89	3.93	4.00

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

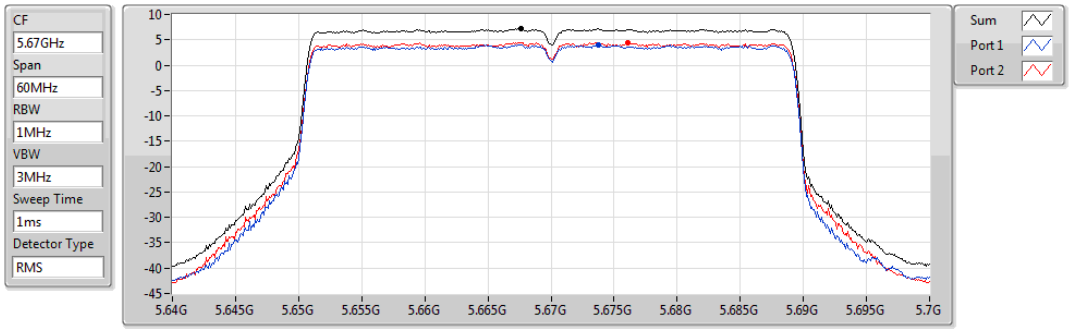
5590MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.39	7.39	4.69	4.22

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

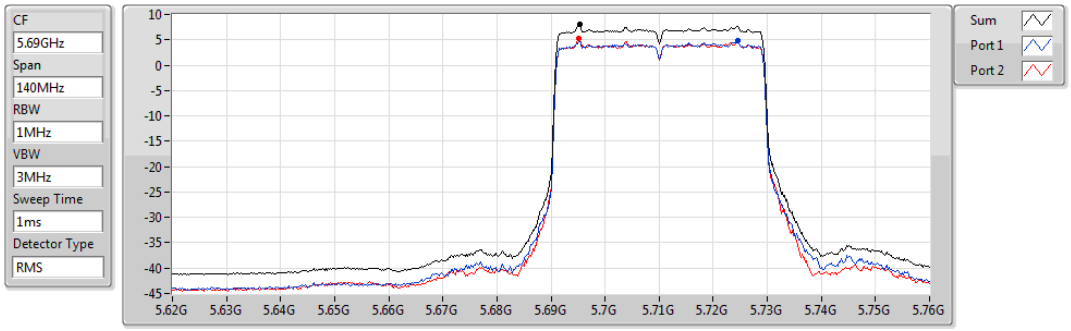
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.21	7.21	3.99	4.45

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

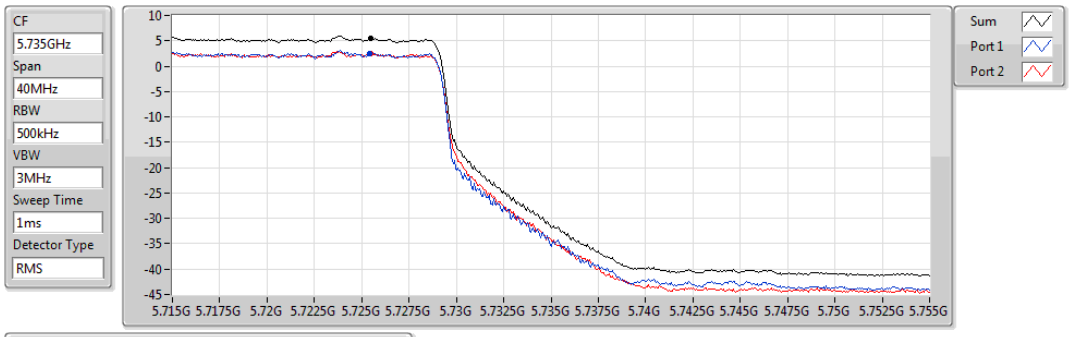
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.02	8.02	4.82	5.34

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

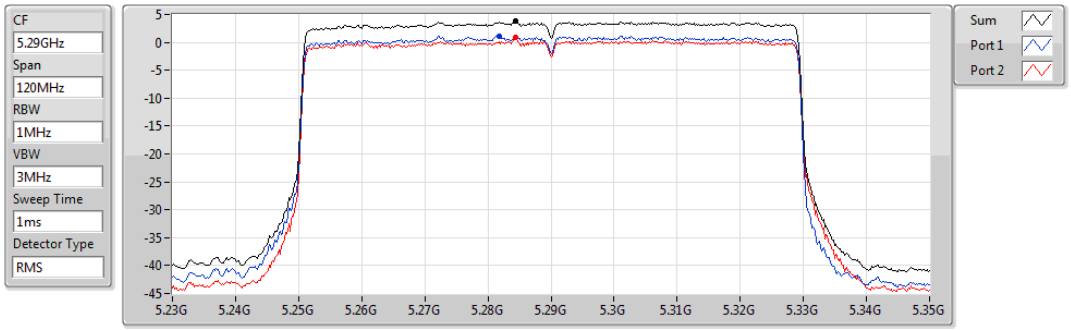
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.49	5.49	2.52	2.50

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

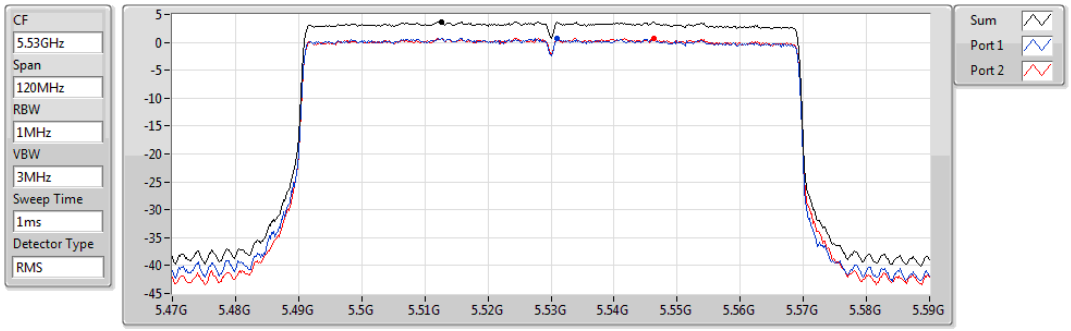
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.90	3.90	1.19	0.83

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

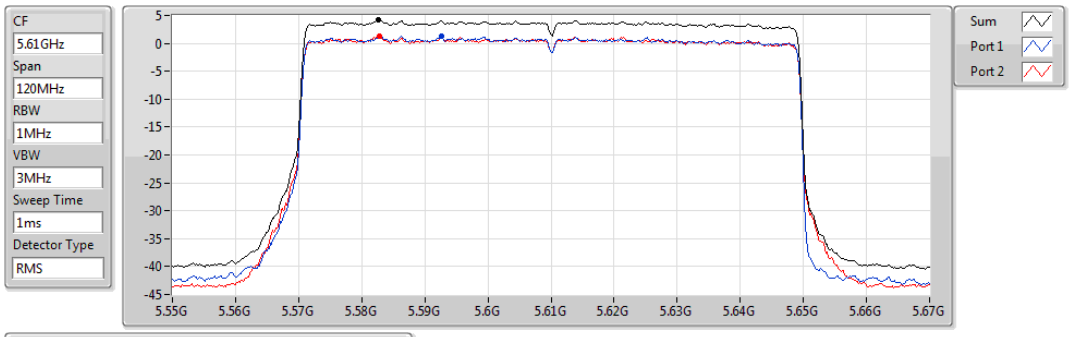
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.70	3.70	0.79	0.79

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

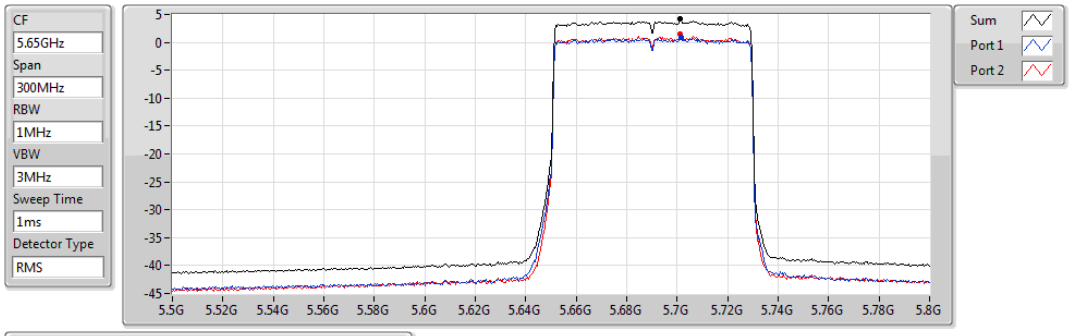
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.25	4.25	1.32	1.38

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

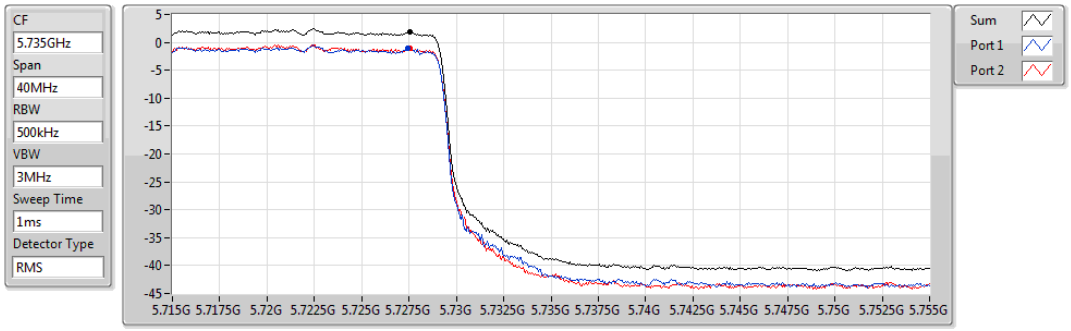
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.14	4.14	0.83	1.55

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

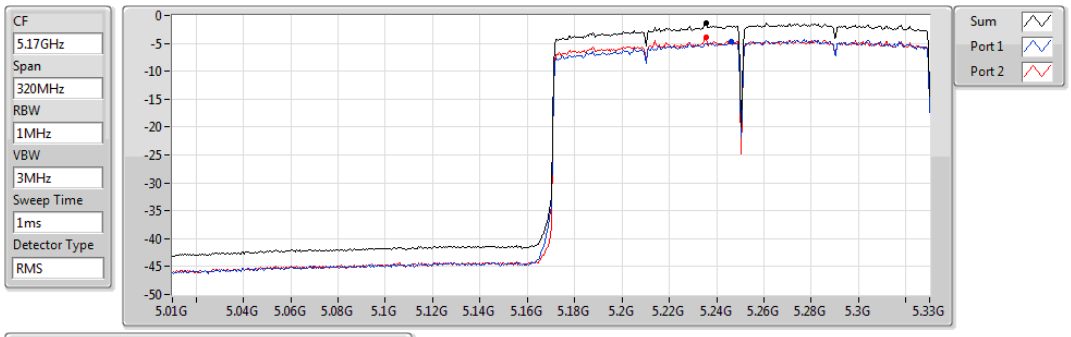
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.91	1.91	-0.96	-1.07

802.11ax HEW160_Nss1,(MCS0)_2TX **PSD**

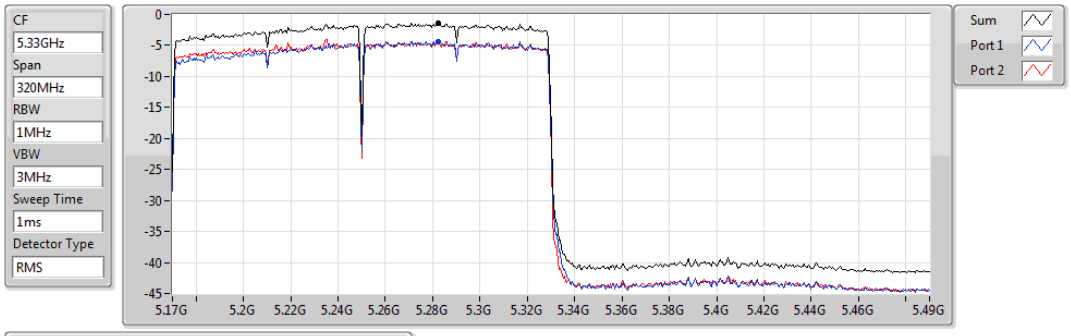
5250MHz Straddle 5.15-5.25GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.39	-1.39	-4.76	-3.82

802.11ax HEW160_Nss1,(MCS0)_2TX **PSD**

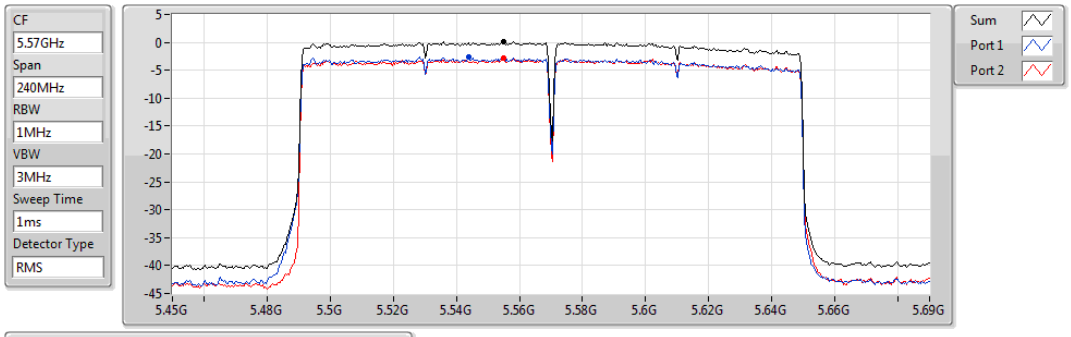
5250MHz Straddle 5.25-5.35GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.33	-1.33	-4.37	-4.31

802.11ax HEW160_Nss1,(MCS0)_2TX **PSD**

5570MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.13	0.13	-2.65	-2.78

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**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

3.5.2 Test Procedures

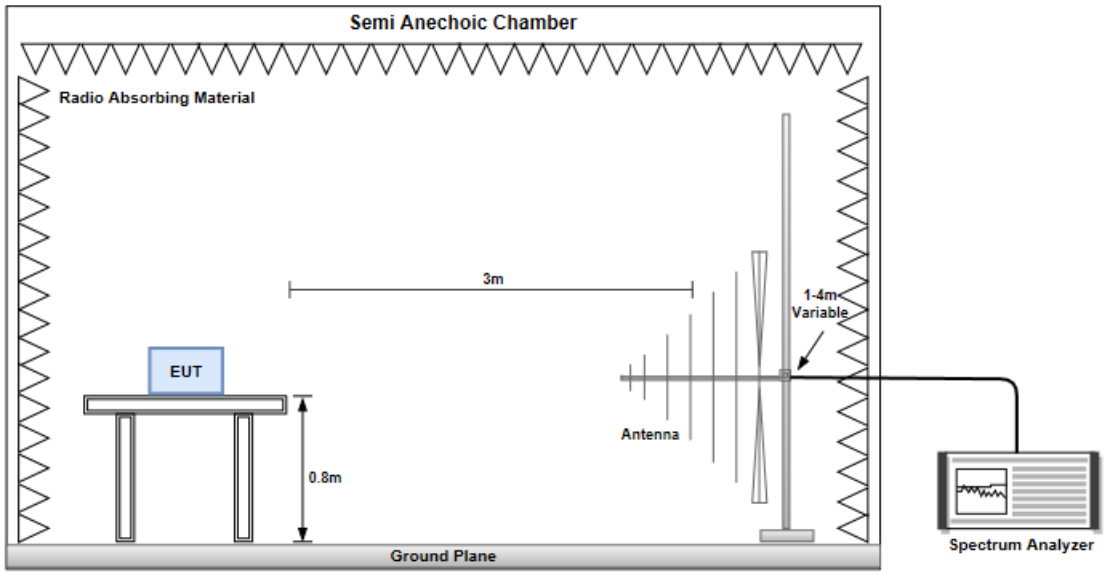
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

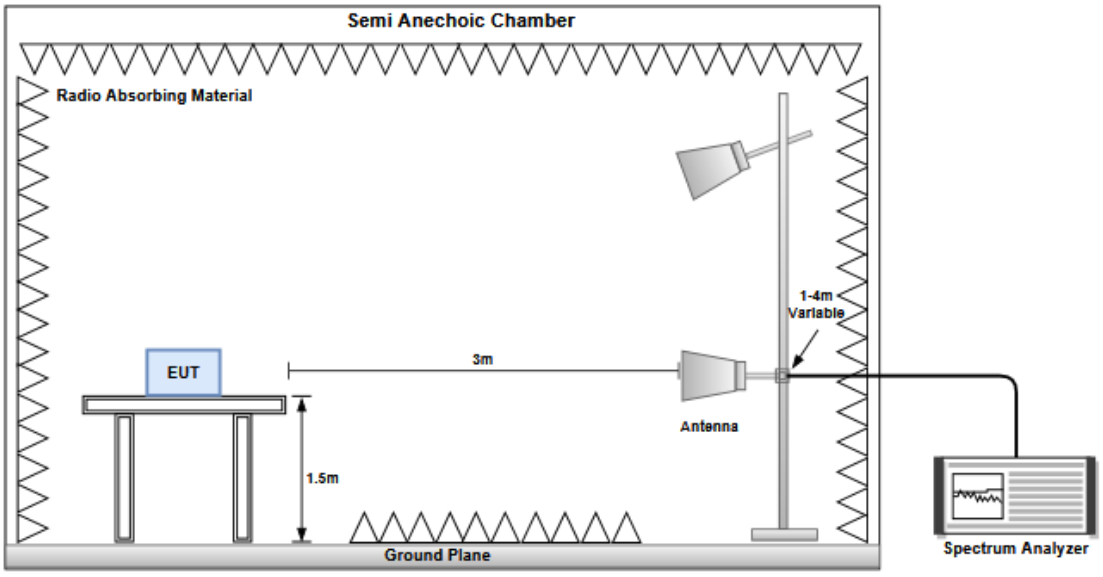
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



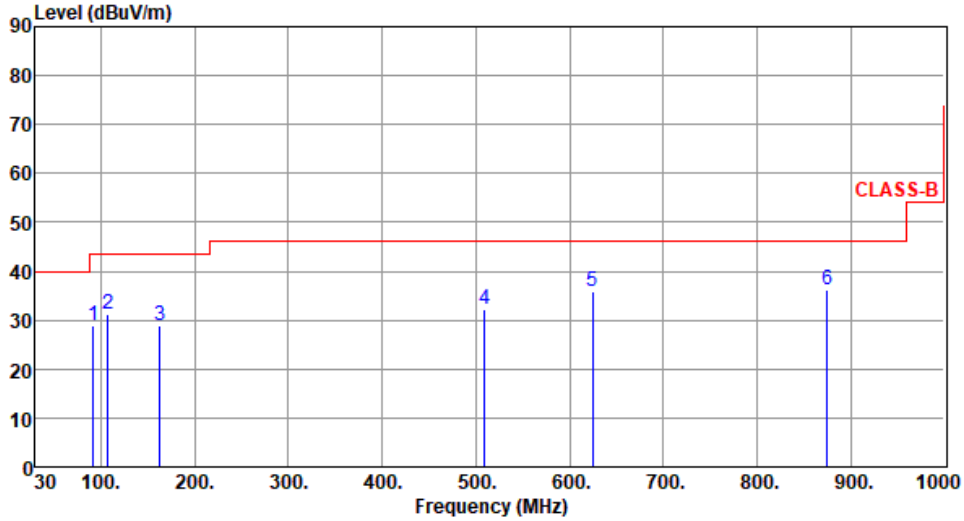
Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

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

Test By :Akun Chung Temperature(℃):20 Humidity(%):69

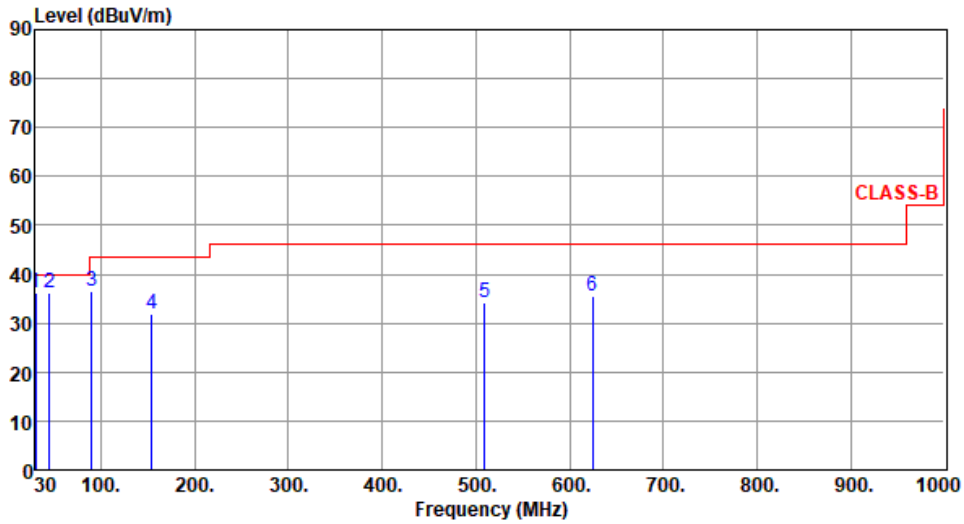


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	92.11	28.98	43.50	-14.52	43.46	-14.48	Peak	---	---
2	107.54	31.16	43.50	-12.34	43.38	-12.22	Peak	---	---
3	162.96	28.87	43.50	-14.63	37.80	-8.93	Peak	---	---
4	509.23	32.13	46.00	-13.87	35.14	-3.01	Peak	---	---
5	624.85	35.98	46.00	-10.02	36.50	-0.52	Peak	---	---
6	874.95	36.29	46.00	-9.71	32.86	3.43	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 HE40	Test Freq. (MHz)	5670
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):20 Humidity(%):69



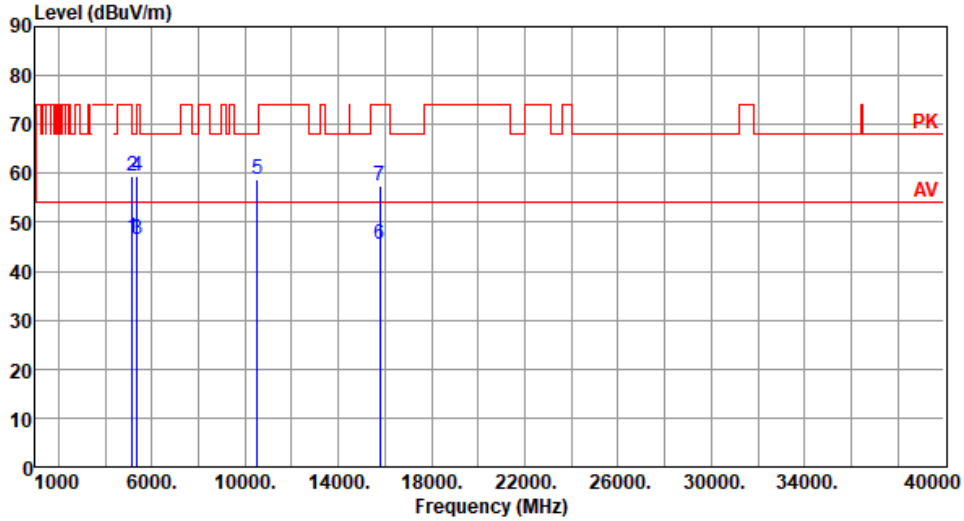
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	30.23	36.18	40.00	-3.82	45.73	-9.55	QP	100	127
2	45.42	36.28	40.00	-3.72	44.56	-8.28	QP	100	195
3	90.23	36.58	43.50	-6.92	51.17	-14.59	Peak	---	---
4	154.23	31.82	43.50	-11.68	40.71	-8.89	Peak	---	---
5	509.33	34.11	46.00	-11.89	37.11	-3.00	Peak	---	---
6	624.52	35.42	46.00	-10.58	35.94	-0.52	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 :Akun Chung Temperature(°C):22 Humidity(%):69

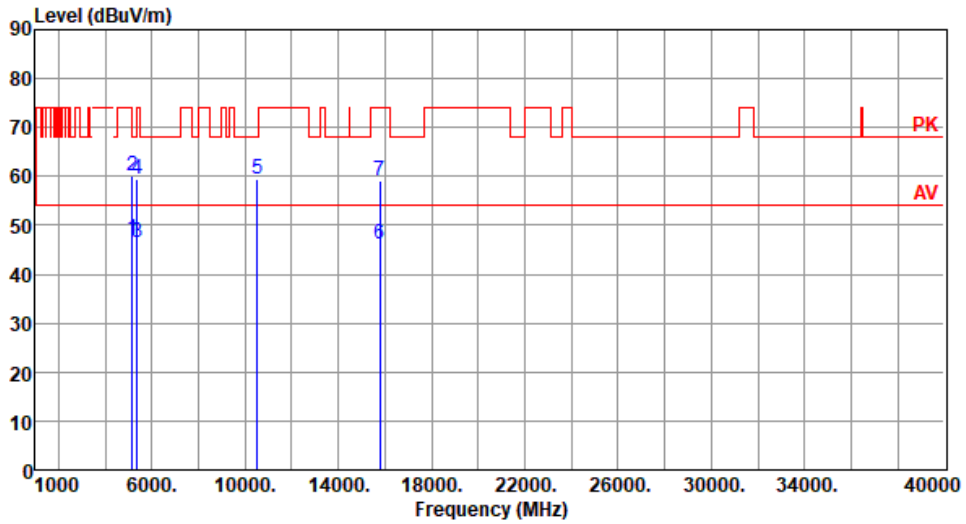


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.83	54.00	-7.17	42.45	4.38	Average	100	205
2	5150.00	59.61	74.00	-14.39	55.23	4.38	Peak	100	205
3	5350.00	46.36	54.00	-7.64	42.39	3.97	Average	100	205
4	5350.00	59.40	74.00	-14.60	55.43	3.97	Peak	100	205
5	10520.00	58.83	68.20	-9.37	44.26	14.57	Peak	100	207
6	15780.00	45.46	54.00	-8.54	31.27	14.19	Average	100	209
7	15780.00	57.47	74.00	-16.53	43.28	14.19	Peak	100	209

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 :Akun Chung Temperature(℃):22 Humidity(%):69

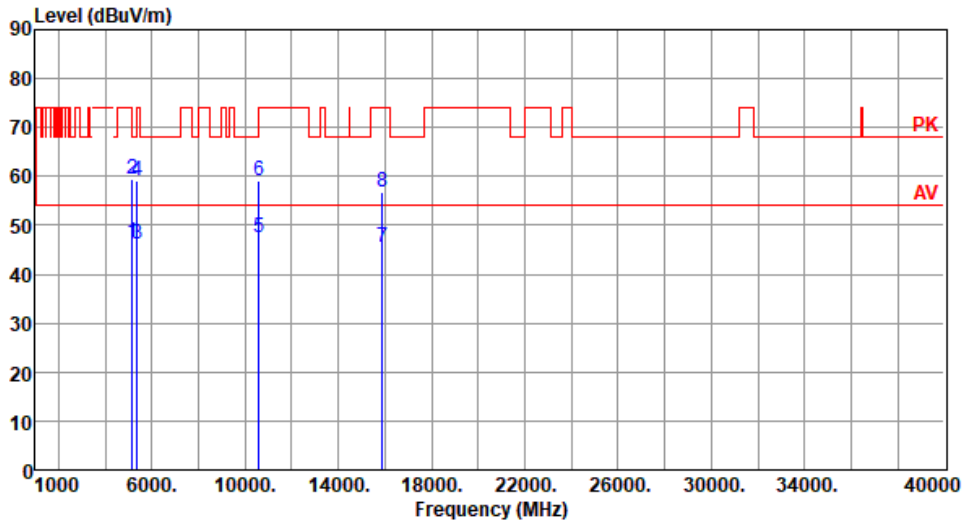


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.05	54.00	-6.95	42.67	4.38	Average	102	157
2	5150.00	59.98	74.00	-14.02	55.60	4.38	Peak	102	157
3	5350.00	46.54	54.00	-7.46	42.57	3.97	Average	102	157
4	5350.00	59.55	74.00	-14.45	55.58	3.97	Peak	102	157
5	10520.00	59.46	68.20	-8.74	44.89	14.57	Peak	100	357
6	15780.00	46.13	54.00	-7.87	31.94	14.19	Average	100	355
7	15780.00	59.07	74.00	-14.93	44.88	14.19	Peak	100	355

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

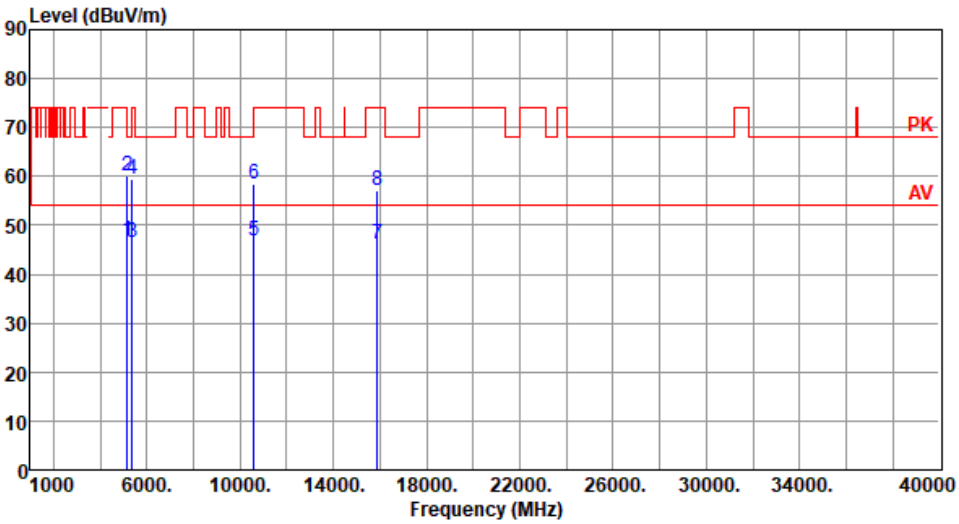


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.64	54.00	-7.36	42.26	4.38	Average	100	207
2	5150.00	59.61	74.00	-14.39	55.23	4.38	Peak	100	207
3	5350.00	46.25	54.00	-7.75	42.28	3.97	Average	100	207
4	5350.00	59.20	74.00	-14.80	55.23	3.97	Peak	100	207
5	10600.00	47.54	54.00	-6.46	32.97	14.57	Average	156	208
6	10600.00	59.17	74.00	-14.83	44.60	14.57	Peak	156	208
7	15900.00	45.50	54.00	-8.50	31.27	14.23	Average	100	205
8	15900.00	56.69	74.00	-17.31	42.46	14.23	Peak	100	205

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

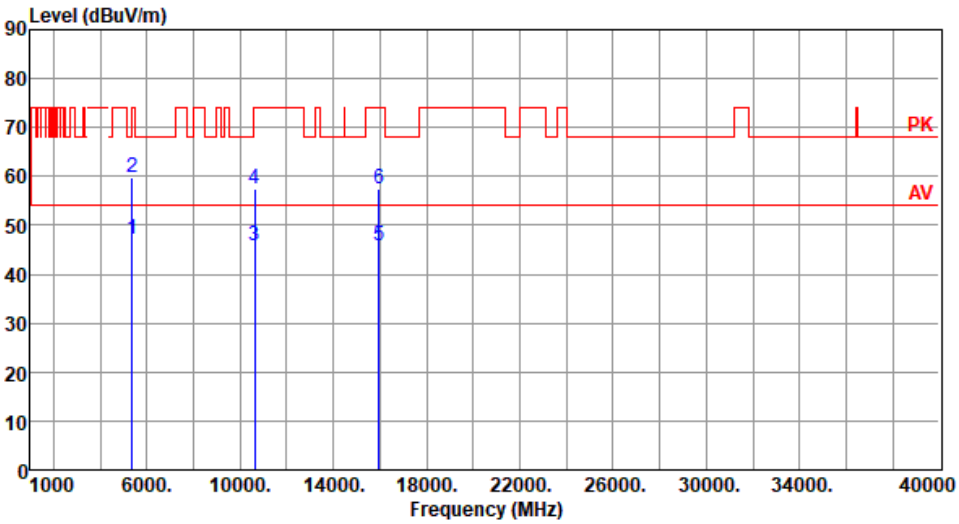


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.97	54.00	-7.03	42.59	4.38	Average	103	151
2	5150.00	59.97	74.00	-14.03	55.59	4.38	Peak	103	151
3	5350.00	46.53	54.00	-7.47	42.56	3.97	Average	103	151
4	5350.00	59.53	74.00	-14.47	55.56	3.97	Peak	103	151
5	10600.00	46.85	54.00	-7.15	32.28	14.57	Average	100	357
6	10600.00	58.57	74.00	-15.43	44.00	14.57	Peak	100	357
7	15900.00	46.10	54.00	-7.90	31.87	14.23	Average	100	354
8	15900.00	57.09	74.00	-16.91	42.86	14.23	Peak	100	354

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 :Akun Chung Temperature(℃):22 Humidity(%):69

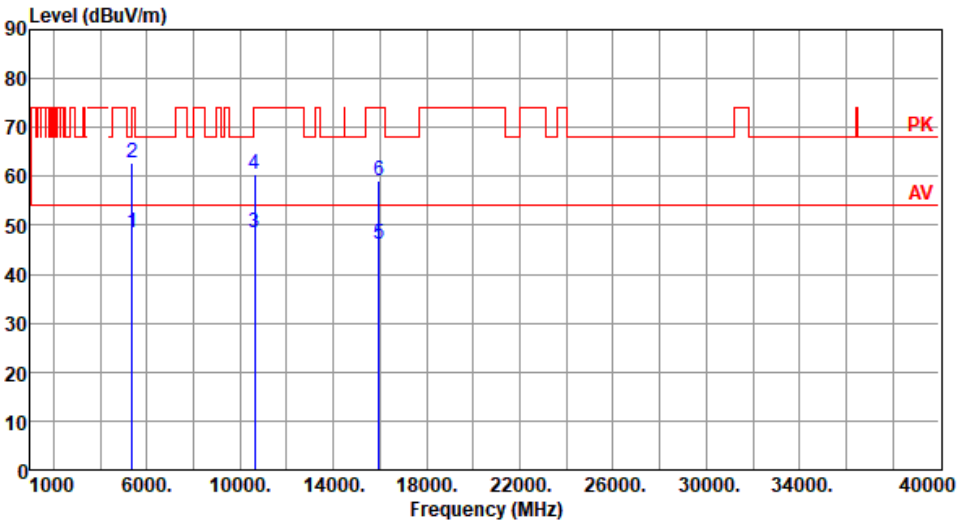


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.25	54.00	-6.75	43.28	3.97	Average	100	204
2	5350.00	59.79	74.00	-14.21	55.82	3.97	Peak	100	204
3	10640.00	45.83	54.00	-8.17	31.27	14.56	Average	100	207
4	10640.00	57.46	74.00	-16.54	42.90	14.56	Peak	100	207
5	15960.00	45.71	54.00	-8.29	31.43	14.28	Average	100	203
6	15960.00	57.57	74.00	-16.43	43.29	14.28	Peak	100	203

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 :Akun Chung Temperature(℃):22 Humidity(%):69

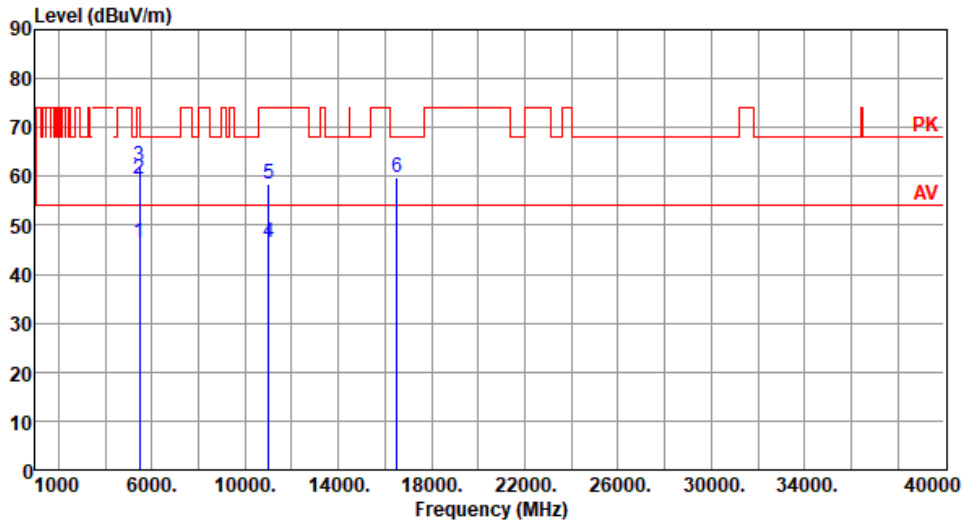


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	48.56	54.00	-5.44	44.59	3.97	Average	100	155
2	5350.00	62.63	74.00	-11.37	58.66	3.97	Peak	100	155
3	10640.00	48.44	54.00	-5.56	33.88	14.56	Average	100	348
4	10640.00	60.45	74.00	-13.55	45.89	14.56	Peak	100	348
5	15960.00	46.17	54.00	-7.83	31.89	14.28	Average	100	350
6	15960.00	59.16	74.00	-14.84	44.88	14.28	Peak	100	350

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 :Akun Chung Temperature(℃):22 Humidity(%):69

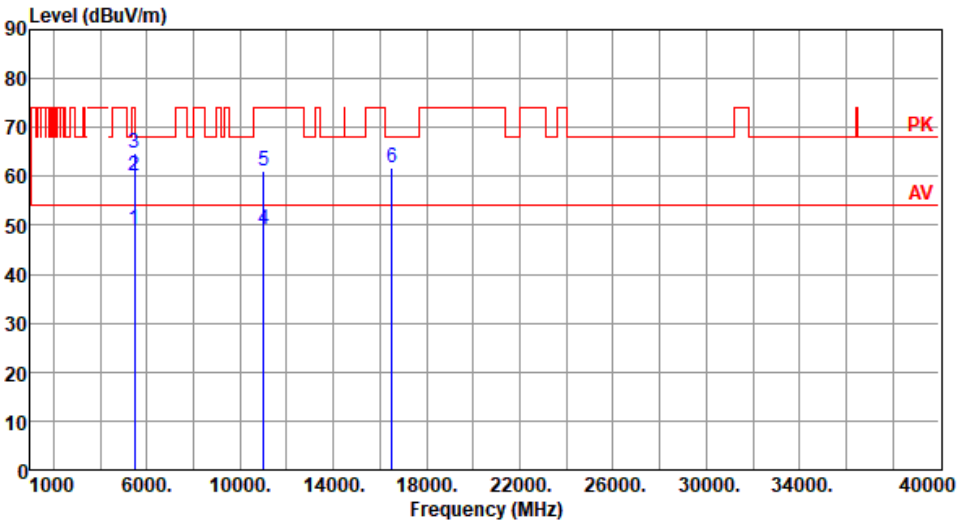


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.65	54.00	-7.35	42.28	4.37	Average	100	209
2	5460.00	59.61	74.00	-14.39	55.24	4.37	Peak	100	209
3	5470.00	61.97	68.20	-6.23	57.58	4.39	Peak	100	209
4	11000.00	46.44	54.00	-7.56	31.28	15.16	Average	100	208
5	11000.00	58.55	74.00	-15.45	43.39	15.16	Peak	100	208
6	16500.00	59.63	68.20	-8.57	43.28	16.35	Peak	100	201

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 :Akun Chung Temperature(℃):22 Humidity(%):69

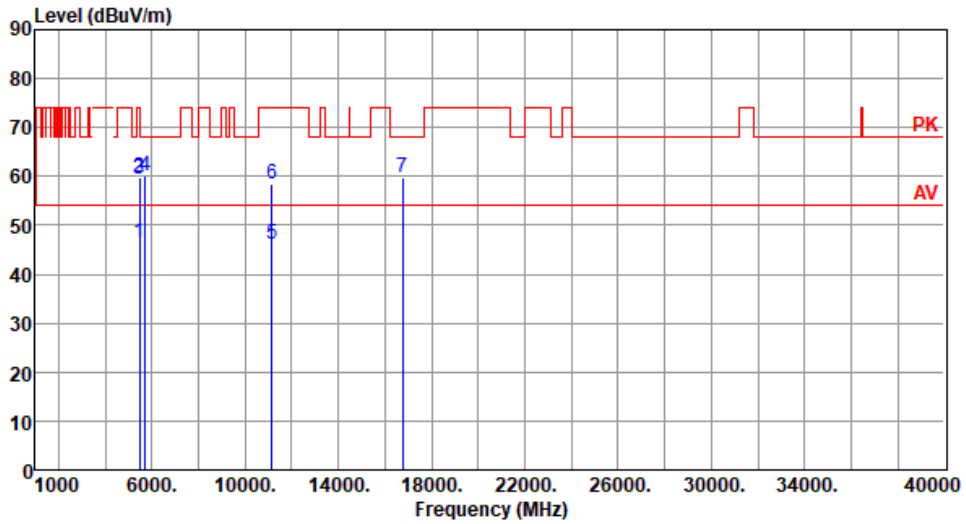


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.03	54.00	-4.97	44.66	4.37	Average	101	131
2	5460.00	60.25	74.00	-13.75	55.88	4.37	Peak	101	131
3	5470.00	64.80	68.20	-3.40	60.41	4.39	Peak	101	131
4	11000.00	49.01	54.00	-4.99	33.85	15.16	Average	100	349
5	11000.00	61.01	74.00	-12.99	45.85	15.16	Peak	100	349
6	16500.00	61.93	68.20	-6.27	45.58	16.35	Peak	100	352

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

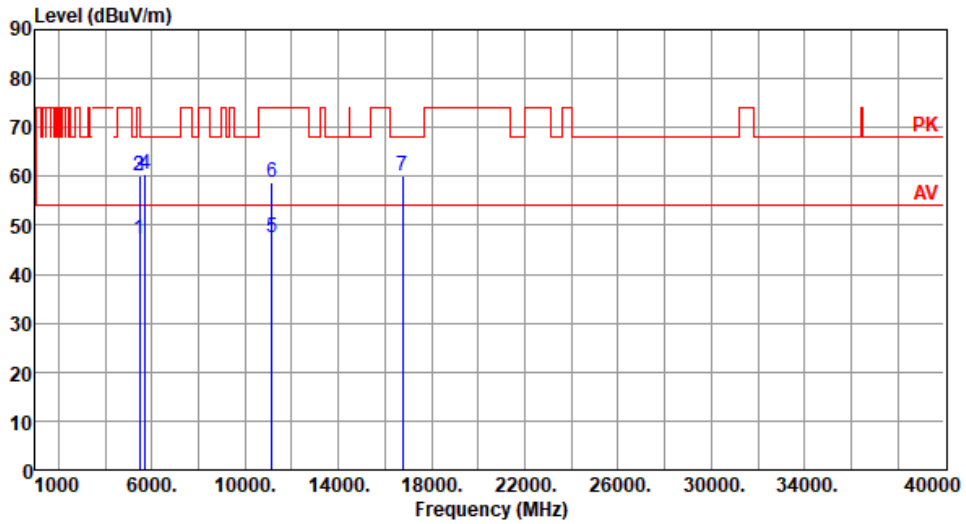


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.49	54.00	-7.51	42.12	4.37	Average	100	206
2	5460.00	59.70	74.00	-14.30	55.33	4.37	Peak	100	206
3	5470.00	59.59	68.20	-8.61	55.20	4.39	Peak	100	206
4	5725.00	60.14	68.20	-8.06	55.33	4.81	Peak	100	206
5	11160.00	46.25	54.00	-7.75	31.63	14.62	Average	100	27
6	11160.00	58.43	74.00	-15.57	43.81	14.62	Peak	100	27
7	16740.00	59.92	68.20	-8.28	42.84	17.08	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	11a	Test Freq. (MHz)	5580
Polarization	Vertical		

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

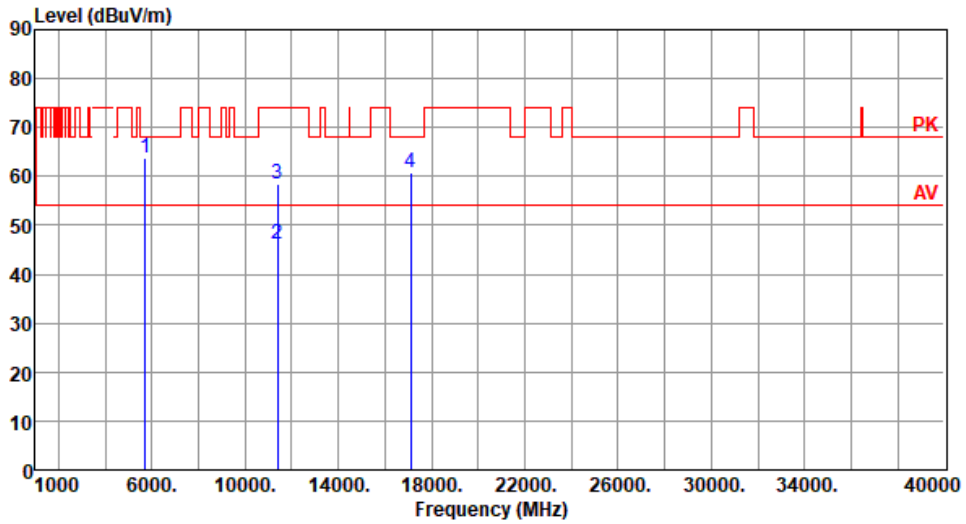


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.14	54.00	-6.86	42.77	4.37	Average	105	137
2	5460.00	60.06	74.00	-13.94	55.69	4.37	Peak	105	137
3	5470.00	60.09	68.20	-8.11	55.70	4.39	Peak	105	137
4	5725.00	60.41	68.20	-7.79	55.60	4.81	Peak	105	137
5	11160.00	47.52	54.00	-6.48	32.90	14.62	Average	100	345
6	11160.00	58.67	74.00	-15.33	44.05	14.62	Peak	100	345
7	16740.00	59.96	68.20	-8.24	42.88	17.08	Peak	100	350

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 :Akun Chung Temperature(℃):22 Humidity(%):69

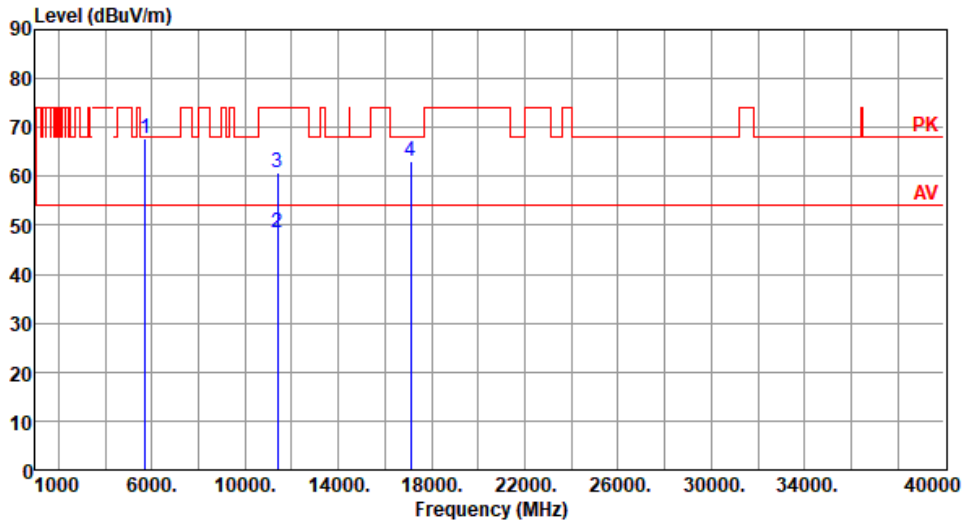


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	63.74	68.20	-4.46	58.93	4.81	Peak	137	85
2	11400.00	46.14	54.00	-7.86	31.29	14.85	Average	100	207
3	11400.00	58.45	74.00	-15.55	43.60	14.85	Peak	100	207
4	17100.00	60.66	68.20	-7.54	43.29	17.37	Peak	100	208

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 :Akun Chung Temperature(℃):22 Humidity(%):69

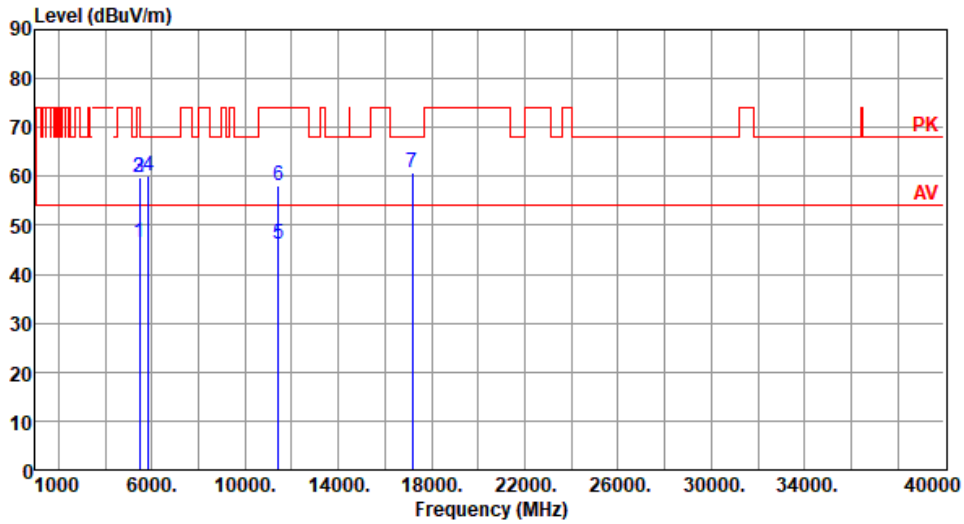


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.83	68.20	-0.37	63.02	4.81	Peak	199	159
2	11400.00	48.60	54.00	-5.40	33.75	14.85	Average	100	347
3	11400.00	60.67	74.00	-13.33	45.82	14.85	Peak	100	347
4	17100.00	63.24	68.20	-4.96	45.87	17.37	Peak	100	353

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)	5720
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

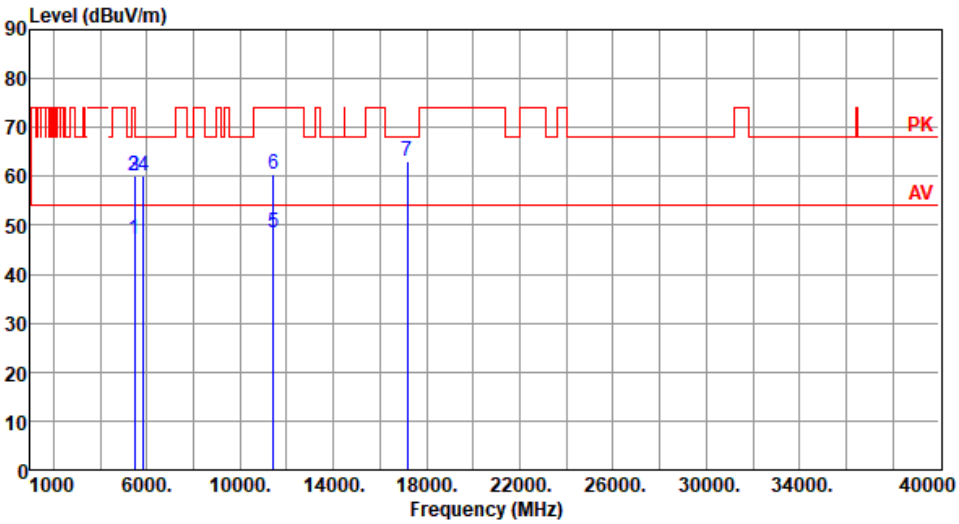


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.51	54.00	-7.49	42.14	4.37	Average	100	207
2	5460.00	59.70	74.00	-14.30	55.33	4.37	Peak	100	207
3	5470.00	59.75	68.20	-8.45	55.36	4.39	Peak	100	207
4	5850.00	59.98	68.20	-8.22	54.80	5.18	Peak	100	207
5	11440.00	46.10	54.00	-7.90	31.29	14.81	Average	100	204
6	11440.00	58.09	74.00	-15.91	43.28	14.81	Peak	100	204
7	17160.00	60.70	68.20	-7.50	43.28	17.42	Peak	100	205

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)	5720
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69



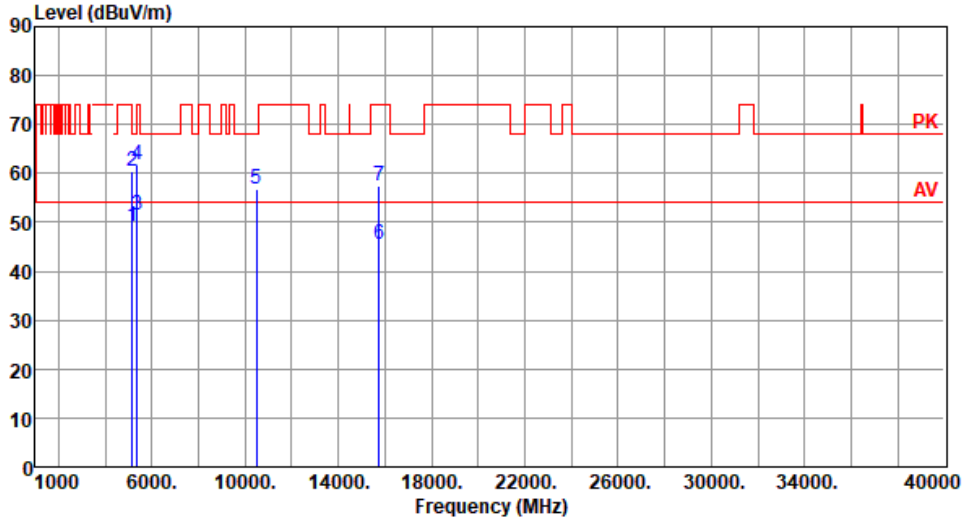
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.04	54.00	-6.96	42.67	4.37	Average	102	133
2	5460.00	60.06	74.00	-13.94	55.69	4.37	Peak	102	133
3	5470.00	60.11	68.20	-8.09	55.72	4.39	Peak	102	133
4	5850.00	60.20	68.20	-8.00	55.02	5.18	Peak	102	133
5	11440.00	48.56	54.00	-5.44	33.75	14.81	Average	100	356
6	11440.00	60.53	74.00	-13.47	45.72	14.81	Peak	100	356
7	17160.00	63.18	68.20	-5.02	45.76	17.42	Peak	100	352

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

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

Test By :Roger Lu Temperature(°C):21 Humidity(%):69

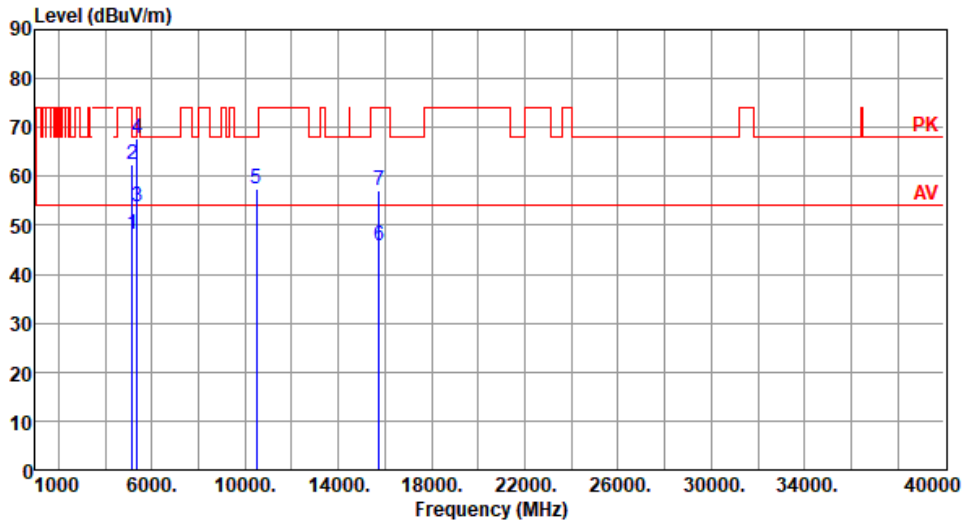


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.15	54.00	-4.85	44.77	4.38	Average	125	193
2	5150.00	60.36	74.00	-13.64	55.98	4.38	Peak	125	193
3	5350.00	51.51	54.00	-2.49	47.54	3.97	Average	125	193
4	5350.00	61.72	74.00	-12.28	57.75	3.97	Peak	125	193
5	10500.00	56.76	68.20	-11.44	42.19	14.57	Peak	100	208
6	15750.00	45.38	54.00	-8.62	31.11	14.27	Average	100	205
7	15750.00	57.46	74.00	-16.54	43.19	14.27	Peak	100	205

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	Test Freq. (MHz)	5260
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):21 Humidity(%):69

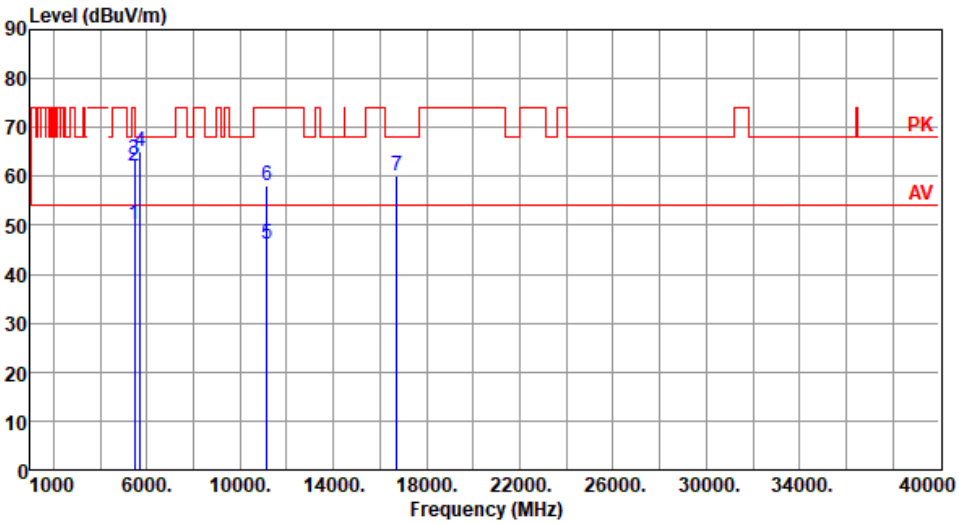


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.25	54.00	-5.75	43.87	4.38	Average	127	158
2	5150.00	62.27	74.00	-11.73	57.89	4.38	Peak	127	158
3	5350.00	53.76	54.00	-0.24	49.79	3.97	Average	127	158
4	5350.00	67.71	74.00	-6.29	63.74	3.97	Peak	127	158
5	10500.00	57.42	68.20	-10.78	42.85	14.57	Peak	100	348
6	15750.00	45.97	54.00	-8.03	31.70	14.27	Average	100	344
7	15750.00	56.97	74.00	-17.03	42.70	14.27	Peak	100	344

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	Test Freq. (MHz)	5300
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):21 Humidity(%):69

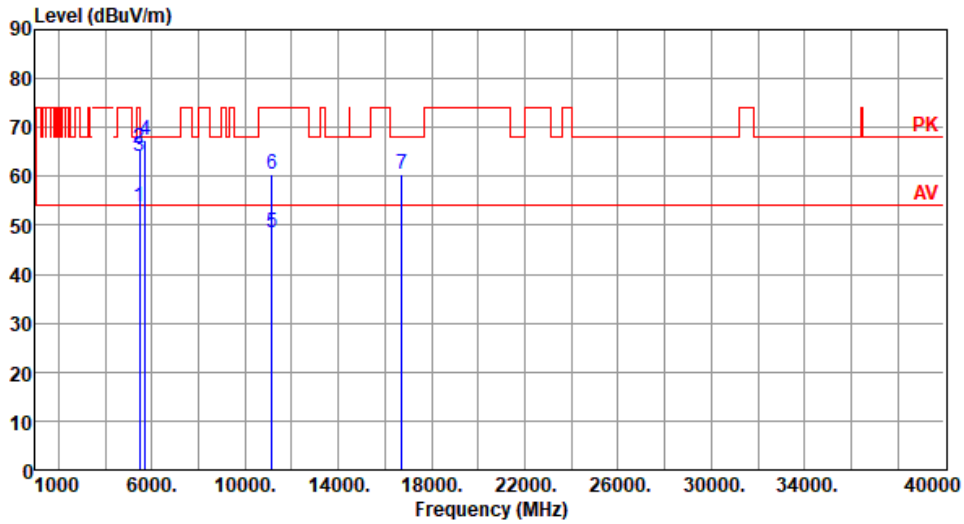


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.19	54.00	-3.81	45.82	4.37	Average	155	84
2	5460.00	62.26	74.00	-11.74	57.89	4.37	Peak	155	84
3	5470.00	63.28	68.20	-4.92	58.89	4.39	Peak	155	84
4	5725.00	65.14	68.20	-3.06	60.33	4.81	Peak	155	84
5	11140.00	46.05	54.00	-7.95	31.35	14.70	Average	100	208
6	11140.00	58.10	74.00	-15.90	43.40	14.70	Peak	100	208
7	16710.00	60.15	68.20	-8.05	43.21	16.94	Peak	100	202

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	Test Freq. (MHz)	5300
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):21 Humidity(%):69

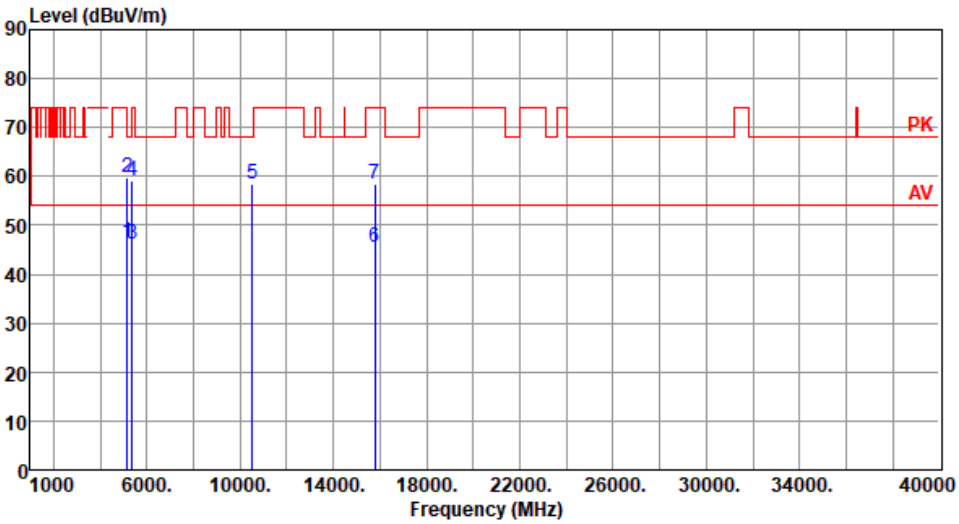


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.71	54.00	-0.29	49.34	4.37	Average	102	127
2	5460.00	65.76	74.00	-8.24	61.39	4.37	Peak	102	127
3	5470.00	64.11	68.20	-4.09	59.72	4.39	Peak	102	127
4	5725.00	67.38	68.20	-0.82	62.57	4.81	Peak	102	163
5	11140.00	48.33	54.00	-5.67	33.63	14.70	Average	100	337
6	11140.00	60.33	74.00	-13.67	45.63	14.70	Peak	100	337
7	16710.00	60.46	68.20	-7.74	43.52	16.94	Peak	100	332

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	Test Freq. (MHz)	5320
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

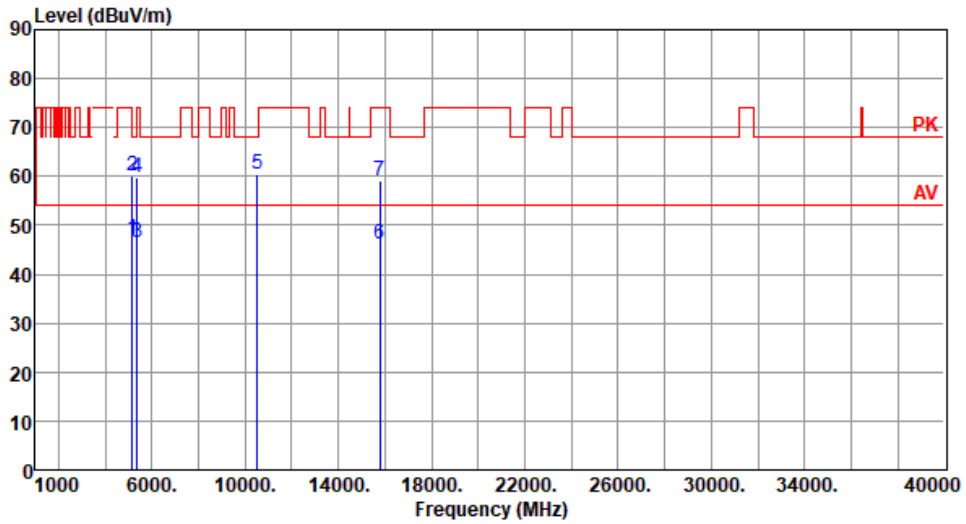


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.64	54.00	-7.36	42.26	4.38	Average	100	206
2	5150.00	59.66	74.00	-14.34	55.28	4.38	Peak	100	206
3	5350.00	46.25	54.00	-7.75	42.28	3.97	Average	100	206
4	5350.00	59.25	74.00	-14.75	55.28	3.97	Peak	100	206
5	10520.00	58.37	68.20	-9.83	43.80	14.57	Peak	100	201
6	15780.00	45.46	54.00	-8.54	31.27	14.19	Average	100	209
7	15780.00	58.46	74.00	-15.54	44.27	14.19	Peak	100	209

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	Test Freq. (MHz)	5320
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

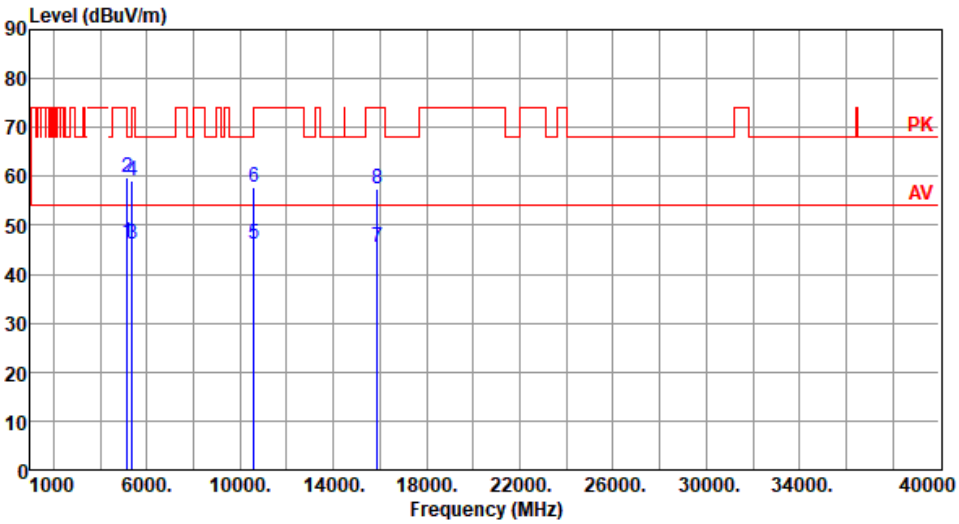


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.07	54.00	-6.93	42.69	4.38	Average	115	159
2	5150.00	60.07	74.00	-13.93	55.69	4.38	Peak	115	159
3	5350.00	46.62	54.00	-7.38	42.65	3.97	Average	115	159
4	5350.00	59.64	74.00	-14.36	55.67	3.97	Peak	115	159
5	10520.00	60.42	68.20	-7.78	45.85	14.57	Peak	100	357
6	15780.00	46.07	54.00	-7.93	31.88	14.19	Average	100	352
7	15780.00	59.03	74.00	-14.97	44.84	14.19	Peak	100	352

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	Test Freq. (MHz)	5500
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

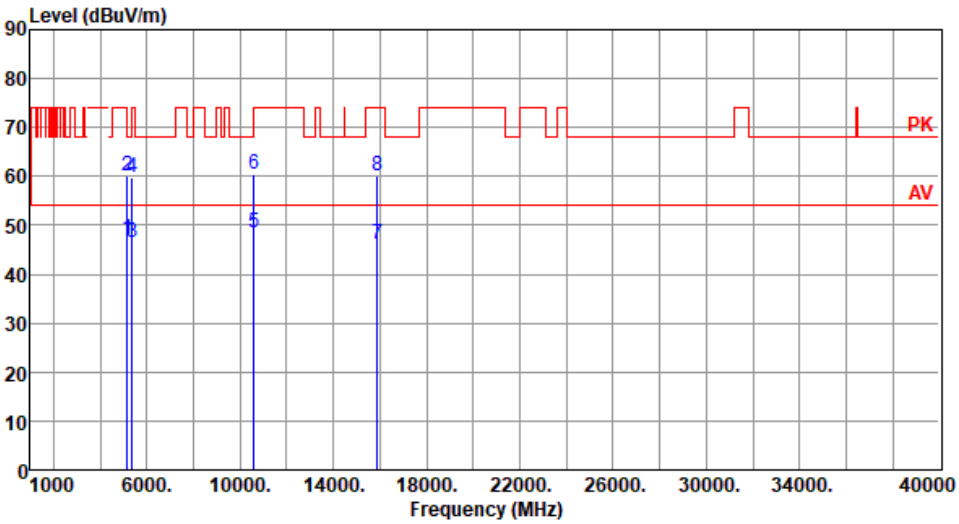


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.66	54.00	-7.34	42.28	4.38	Average	100	207
2	5150.00	59.66	74.00	-14.34	55.28	4.38	Peak	100	207
3	5350.00	46.25	54.00	-7.75	42.28	3.97	Average	100	207
4	5350.00	59.25	74.00	-14.75	55.28	3.97	Peak	100	207
5	10600.00	46.16	54.00	-7.84	31.59	14.57	Average	100	202
6	10600.00	57.85	74.00	-16.15	43.28	14.57	Peak	100	202
7	15900.00	45.50	54.00	-8.50	31.27	14.23	Average	100	204
8	15900.00	57.46	74.00	-16.54	43.23	14.23	Peak	100	204

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	Test Freq. (MHz)	5500
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

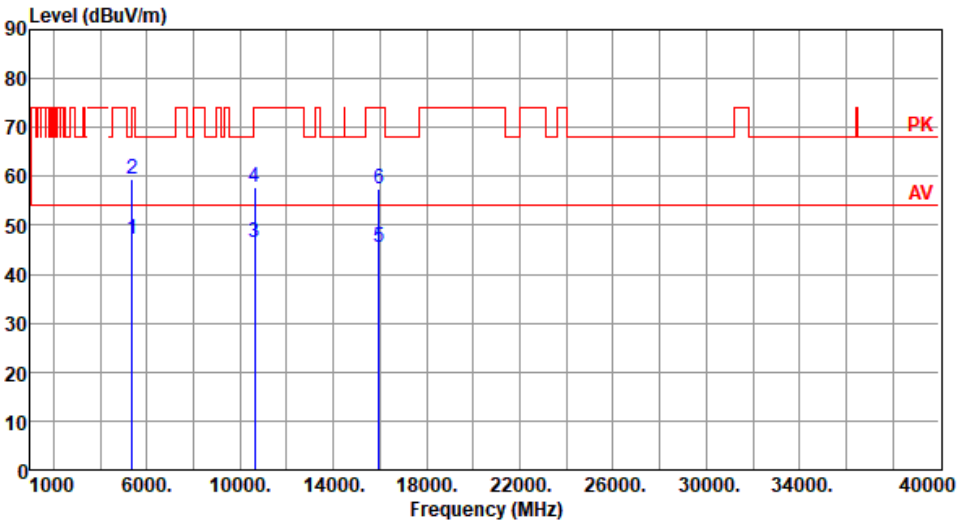


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.05	54.00	-6.95	42.67	4.38	Average	117	154
2	5150.00	60.01	74.00	-13.99	55.63	4.38	Peak	117	154
3	5350.00	46.61	54.00	-7.39	42.64	3.97	Average	117	154
4	5350.00	59.66	74.00	-14.34	55.69	3.97	Peak	117	154
5	10600.00	48.44	54.00	-5.56	33.87	14.57	Average	100	355
6	10600.00	60.42	74.00	-13.58	45.85	14.57	Peak	100	355
7	15900.00	46.07	54.00	-7.93	31.84	14.23	Average	100	359
8	15900.00	60.00	74.00	-14.00	45.77	14.23	Peak	100	359

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	Test Freq. (MHz)	5580
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

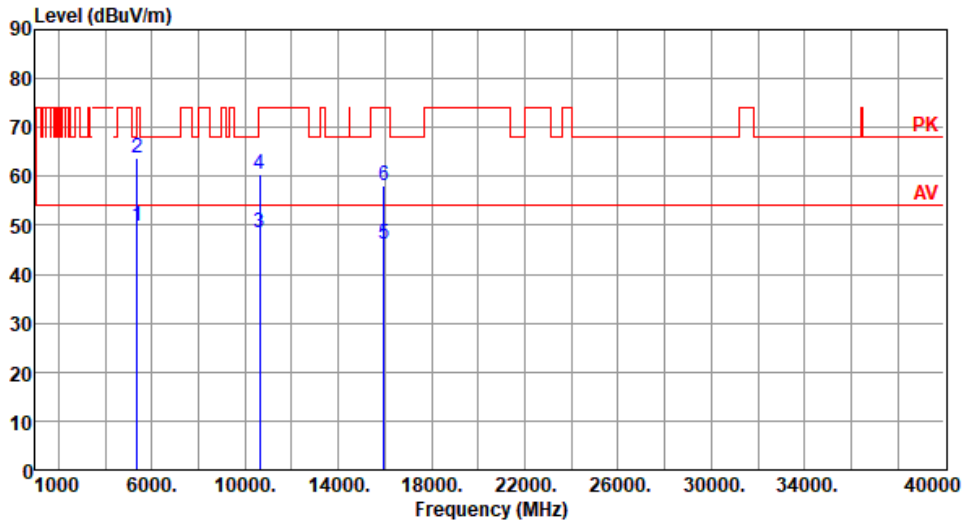


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.25	54.00	-6.75	43.28	3.97	Average	100	208
2	5350.00	59.44	74.00	-14.56	55.47	3.97	Peak	100	208
3	10640.00	46.41	54.00	-7.59	31.85	14.56	Average	100	206
4	10640.00	57.85	74.00	-16.15	43.29	14.56	Peak	100	206
5	15960.00	45.56	54.00	-8.44	31.28	14.28	Average	100	204
6	15960.00	57.56	74.00	-16.44	43.28	14.28	Peak	100	204

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	Test Freq. (MHz)	5580
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

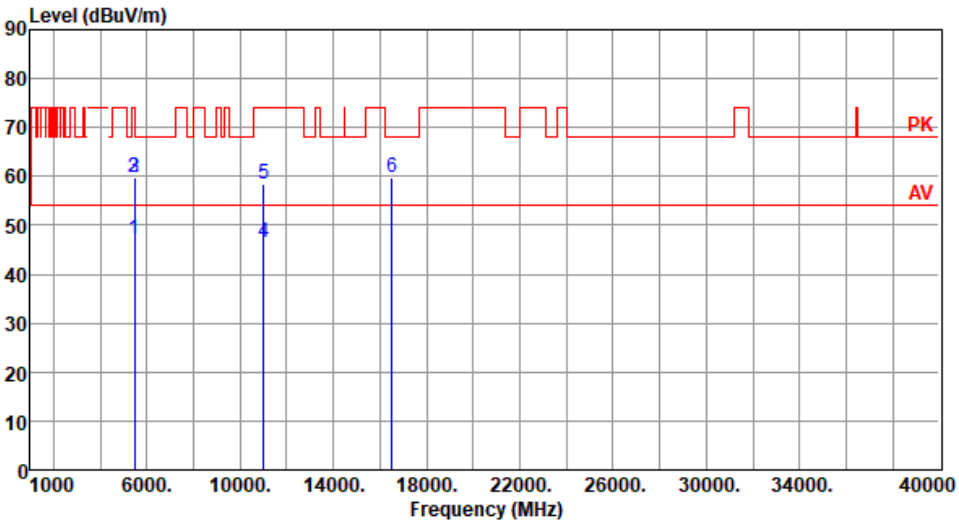


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.88	54.00	-4.12	45.91	3.97	Average	112	156
2	5350.00	63.76	74.00	-10.24	59.79	3.97	Peak	112	156
3	10640.00	48.41	54.00	-5.59	33.85	14.56	Average	100	349
4	10640.00	60.39	74.00	-13.61	45.83	14.56	Peak	100	349
5	15960.00	46.17	54.00	-7.83	31.89	14.28	Average	100	354
6	15960.00	58.17	74.00	-15.83	43.89	14.28	Peak	100	354

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	Test Freq. (MHz)	5700
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

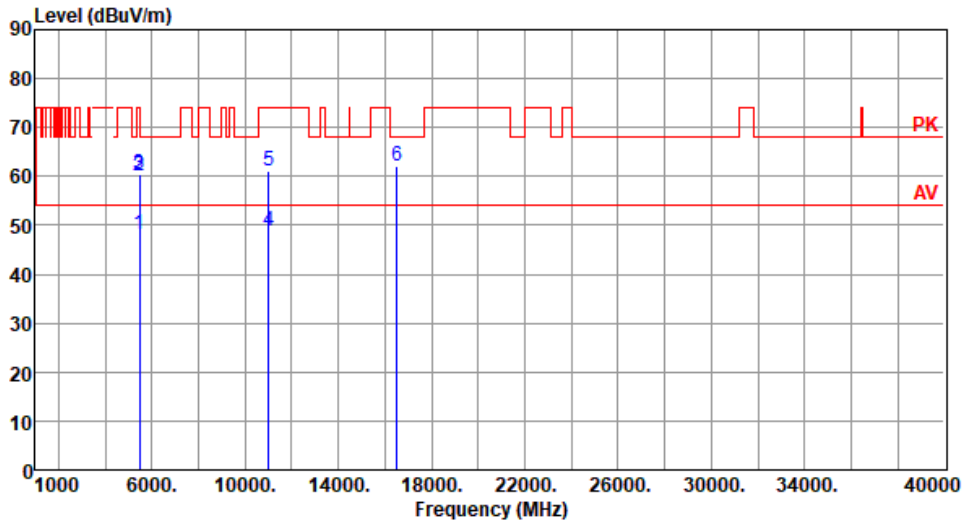


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.24	54.00	-6.76	42.87	4.37	Average	100	200
2	5460.00	59.65	74.00	-14.35	55.28	4.37	Peak	100	200
3	5470.00	59.72	68.20	-8.48	55.33	4.39	Peak	100	200
4	11000.00	46.55	54.00	-7.45	31.39	15.16	Average	100	206
5	11000.00	58.38	74.00	-15.62	43.22	15.16	Peak	100	206
6	16500.00	59.63	68.20	-8.57	43.28	16.35	Peak	100	202

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	Test Freq. (MHz)	5700
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

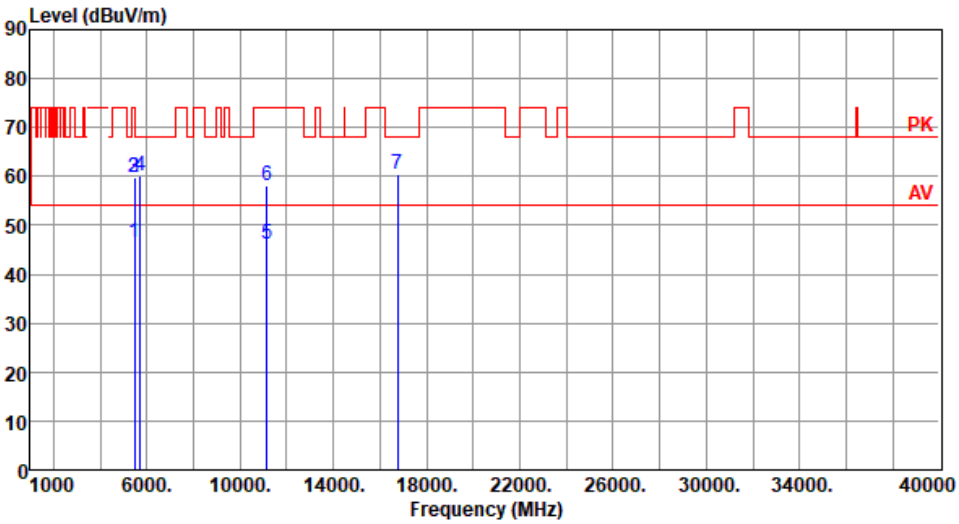


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.22	54.00	-5.78	43.85	4.37	Average	143	149
2	5460.00	60.06	74.00	-13.94	55.69	4.37	Peak	143	149
3	5470.00	60.28	68.20	-7.92	55.89	4.39	Peak	143	149
4	11000.00	48.93	54.00	-5.07	33.77	15.16	Average	100	358
5	11000.00	61.01	74.00	-12.99	45.85	15.16	Peak	100	358
6	16500.00	62.14	68.20	-6.06	45.79	16.35	Peak	100	352

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	Test Freq. (MHz)	5720
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

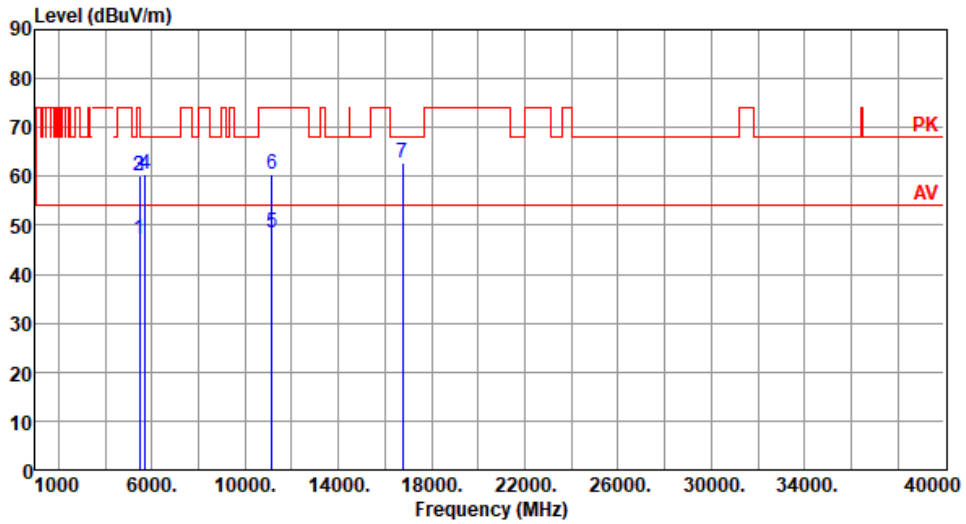


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.54	54.00	-7.46	42.17	4.37	Average	100	208
2	5460.00	59.65	74.00	-14.35	55.28	4.37	Peak	100	208
3	5470.00	59.72	68.20	-8.48	55.33	4.39	Peak	100	208
4	5725.00	60.10	68.20	-8.10	55.29	4.81	Peak	100	208
5	11160.00	46.20	54.00	-7.80	31.58	14.62	Average	100	204
6	11160.00	58.28	74.00	-15.72	43.66	14.62	Peak	100	204
7	16740.00	60.35	68.20	-7.85	43.27	17.08	Peak	100	203

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	Test Freq. (MHz)	5720
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69



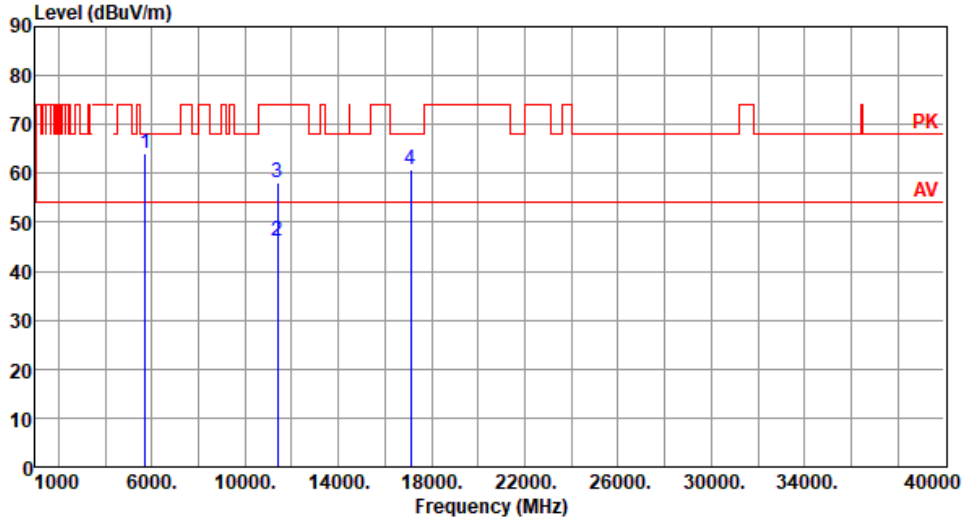
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.08	54.00	-6.92	42.71	4.37	Average	148	150
2	5460.00	60.13	74.00	-13.87	55.76	4.37	Peak	148	150
3	5470.00	60.12	68.20	-8.08	55.73	4.39	Peak	148	150
4	5725.00	60.55	68.20	-7.65	55.74	4.81	Peak	148	150
5	11160.00	48.35	54.00	-5.65	33.73	14.62	Average	388	349
6	11160.00	60.38	74.00	-13.62	45.76	14.62	Peak	388	349
7	16740.00	62.87	68.20	-5.33	45.79	17.08	Peak	100	352

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

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

Test By :Akun Chung Temperature(°C):22 Humidity(%):69

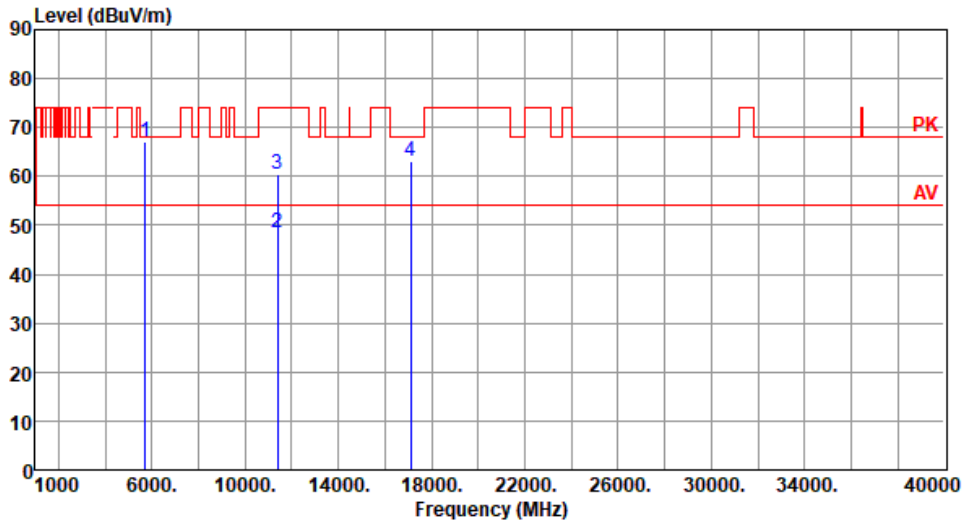


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.07	68.20	-4.13	59.26	4.81	Peak	100	201
2	11400.00	46.12	54.00	-7.88	31.27	14.85	Average	100	202
3	11400.00	58.07	74.00	-15.93	43.22	14.85	Peak	100	202
4	17100.00	60.66	68.20	-7.54	43.29	17.37	Peak	100	208

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	Test Freq. (MHz)	5270
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

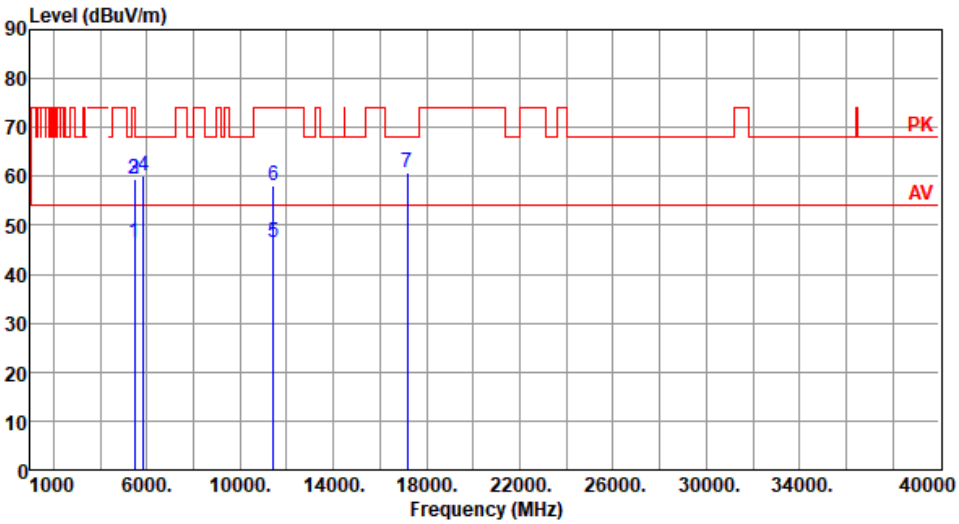


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.06	68.20	-1.14	62.25	4.81	Peak	134	159
2	11400.00	48.63	54.00	-5.37	33.78	14.85	Average	100	352
3	11400.00	60.58	74.00	-13.42	45.73	14.85	Peak	100	352
4	17100.00	63.13	68.20	-5.07	45.76	17.37	Peak	100	356

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	Test Freq. (MHz)	5310
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

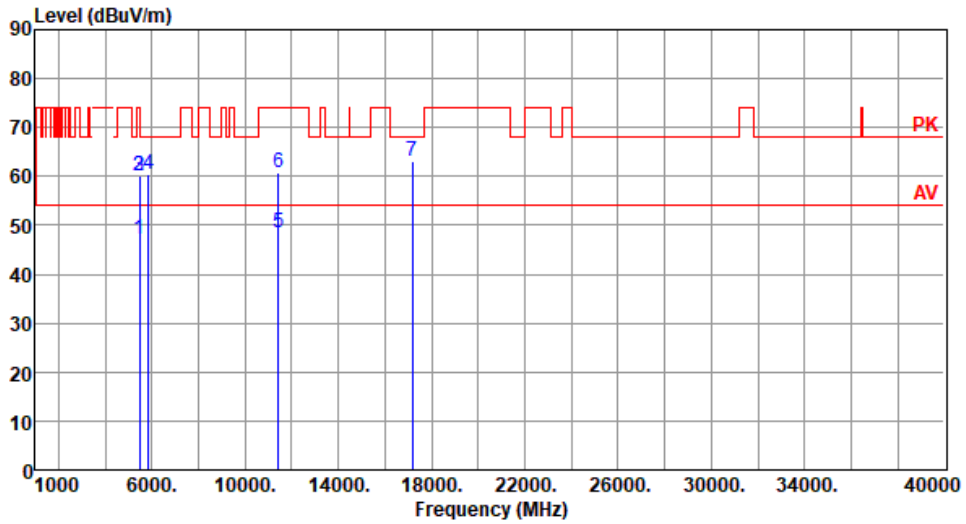


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.65	54.00	-7.35	42.28	4.37	Average	100	205
2	5460.00	59.59	74.00	-14.41	55.22	4.37	Peak	100	205
3	5470.00	59.61	68.20	-8.59	55.22	4.39	Peak	100	205
4	5850.00	60.14	68.20	-8.06	54.96	5.18	Peak	100	205
5	11440.00	46.39	54.00	-7.61	31.58	14.81	Average	100	204
6	11440.00	58.05	74.00	-15.95	43.24	14.81	Peak	100	204
7	17160.00	60.70	68.20	-7.50	43.28	17.42	Peak	100	207

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	Test Freq. (MHz)	5310
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

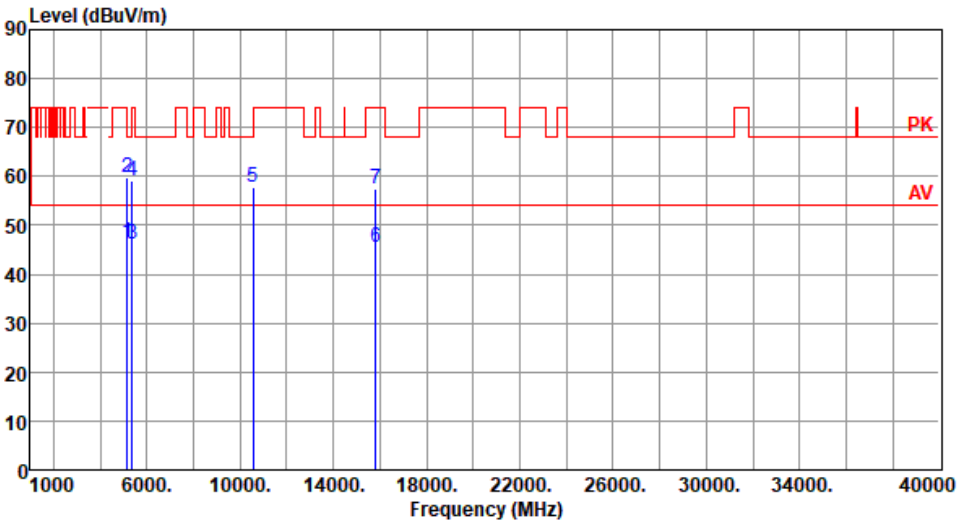


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.06	54.00	-6.94	42.69	4.37	Average	143	144
2	5460.00	60.04	74.00	-13.96	55.67	4.37	Peak	143	144
3	5470.00	60.04	68.20	-8.16	55.65	4.39	Peak	143	144
4	5850.00	60.47	68.20	-7.73	55.29	5.18	Peak	143	144
5	11440.00	48.53	54.00	-5.47	33.72	14.81	Average	100	359
6	11440.00	60.63	74.00	-13.37	45.82	14.81	Peak	100	359
7	17160.00	63.17	68.20	-5.03	45.75	17.42	Peak	100	352

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	Test Freq. (MHz)	5510
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

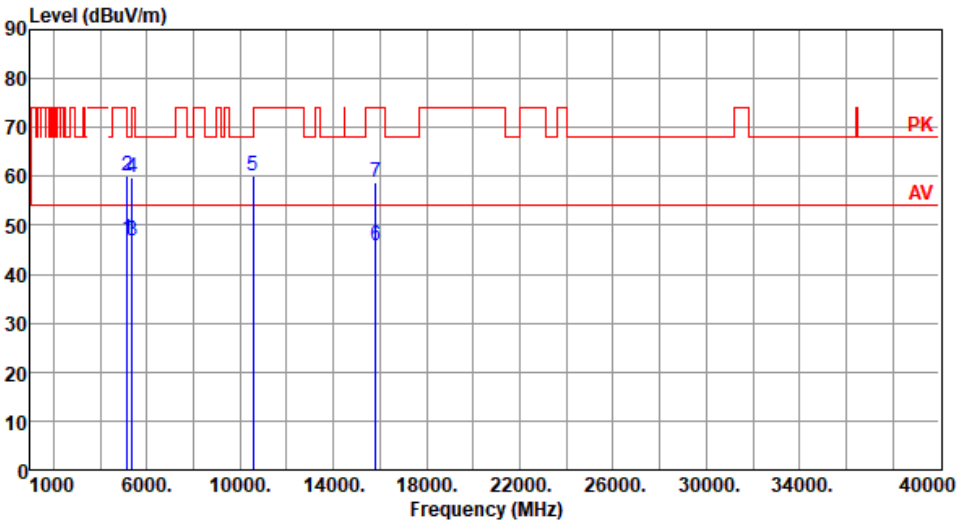


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.66	54.00	-7.34	42.28	4.38	Average	100	207
2	5150.00	59.66	74.00	-14.34	55.28	4.38	Peak	100	207
3	5350.00	46.23	54.00	-7.77	42.26	3.97	Average	100	207
4	5350.00	59.25	74.00	-14.75	55.28	3.97	Peak	100	207
5	10540.00	57.85	68.20	-10.35	43.28	14.57	Peak	100	209
6	15810.00	45.41	54.00	-8.59	31.28	14.13	Average	100	202
7	15810.00	57.41	74.00	-16.59	43.28	14.13	Peak	100	202

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	Test Freq. (MHz)	5510
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

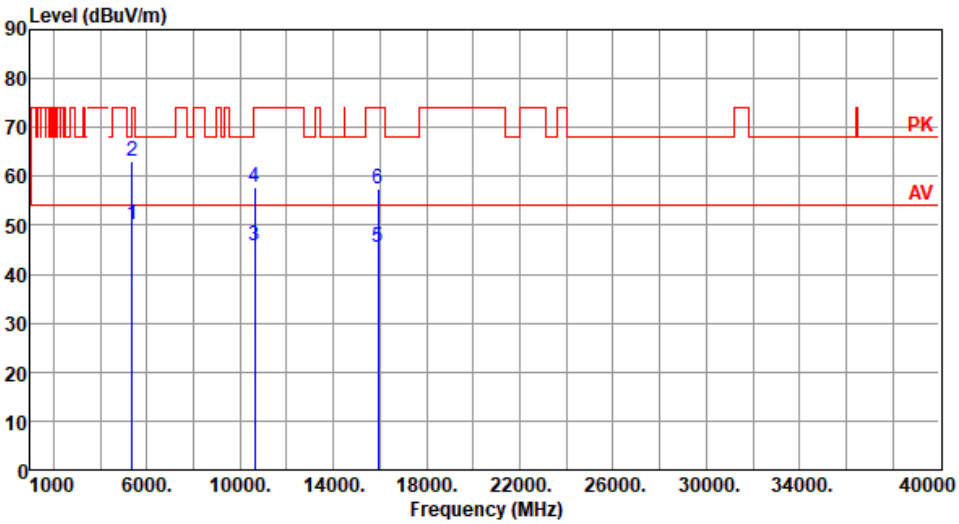


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.18	54.00	-6.82	42.80	4.38	Average	115	143
2	5150.00	60.16	74.00	-13.84	55.78	4.38	Peak	115	143
3	5350.00	46.73	54.00	-7.27	42.76	3.97	Average	115	143
4	5350.00	59.76	74.00	-14.24	55.79	3.97	Peak	115	143
5	10540.00	59.95	68.20	-8.25	45.38	14.57	Peak	100	348
6	15810.00	45.89	54.00	-8.11	31.76	14.13	Average	100	352
7	15810.00	58.90	74.00	-15.10	44.77	14.13	Peak	100	352

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	Test Freq. (MHz)	5590
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

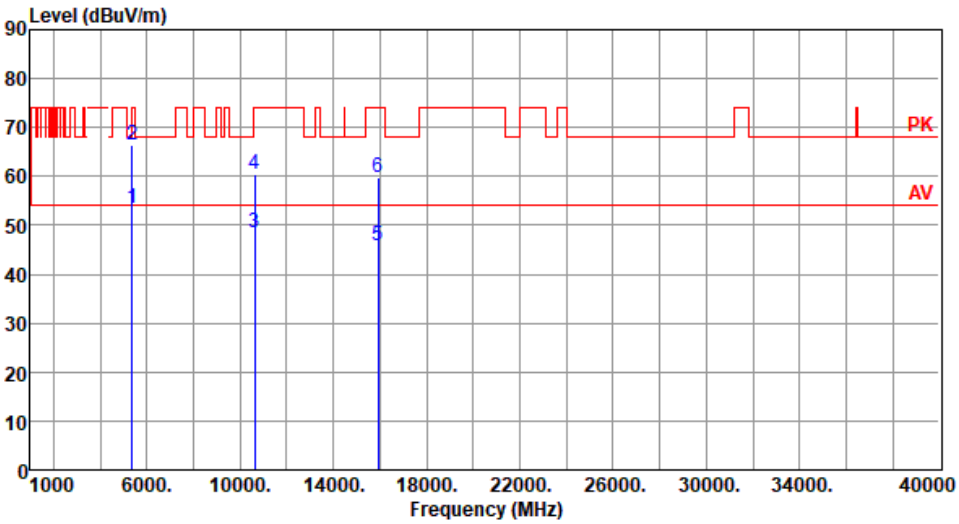


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.25	54.00	-3.75	46.28	3.97	Average	100	211
2	5350.00	63.18	74.00	-10.82	59.21	3.97	Peak	100	211
3	10620.00	45.85	54.00	-8.15	31.28	14.57	Average	100	210
4	10620.00	57.85	74.00	-16.15	43.28	14.57	Peak	100	210
5	15930.00	45.53	54.00	-8.47	31.28	14.25	Average	100	201
6	15930.00	57.53	74.00	-16.47	43.28	14.25	Peak	100	201

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	Test Freq. (MHz)	5590
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

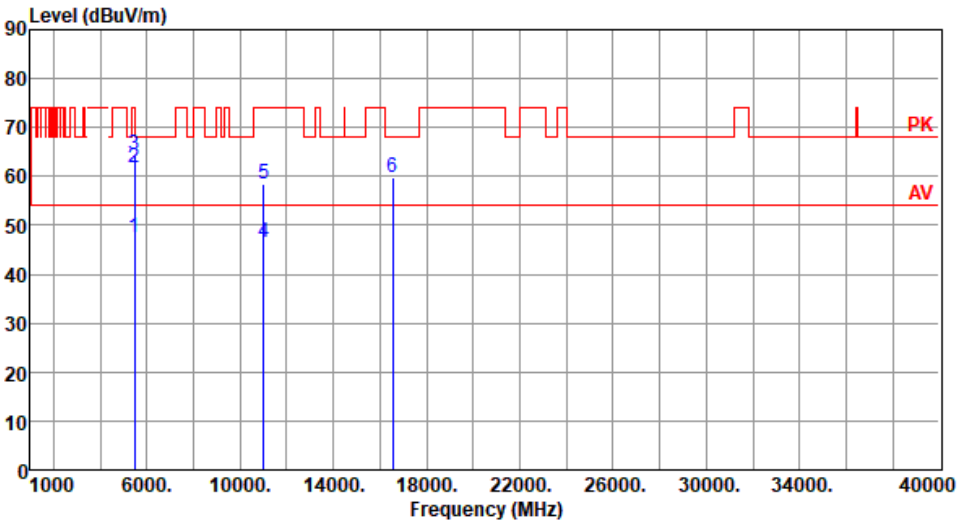


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	53.55	54.00	-0.45	49.58	3.97	Average	101	142
2	5350.00	66.45	74.00	-7.55	62.48	3.97	Peak	101	142
3	10620.00	48.33	54.00	-5.67	33.76	14.57	Average	100	332
4	10620.00	60.29	74.00	-13.71	45.72	14.57	Peak	100	332
5	15930.00	45.99	54.00	-8.01	31.74	14.25	Average	100	349
6	15930.00	59.91	74.00	-14.09	45.66	14.25	Peak	100	349

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	Test Freq. (MHz)	5670
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

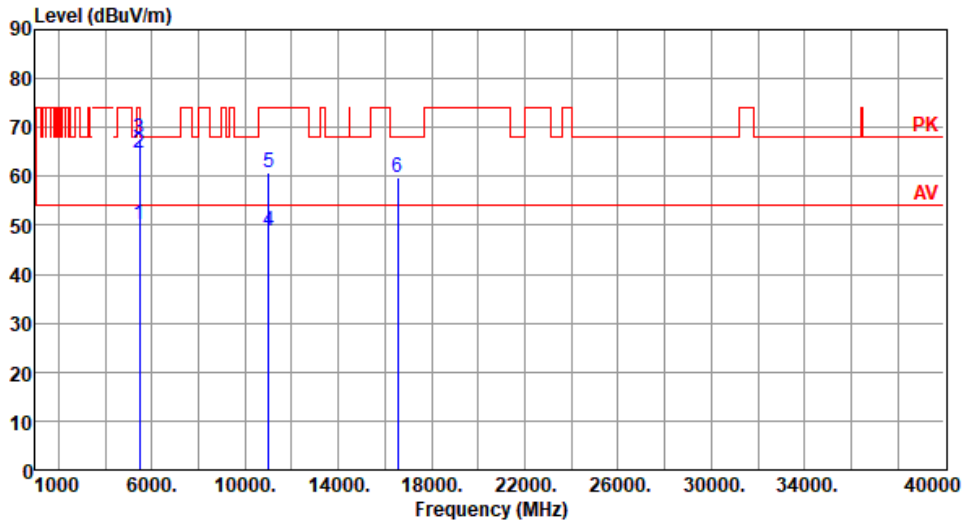


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.65	54.00	-6.35	43.28	4.37	Average	100	204
2	5460.00	61.65	74.00	-12.35	57.28	4.37	Peak	100	204
3	5470.00	64.49	68.20	-3.71	60.10	4.39	Peak	100	204
4	11020.00	46.38	54.00	-7.62	31.28	15.10	Average	100	205
5	11020.00	58.38	74.00	-15.62	43.28	15.10	Peak	100	205
6	16530.00	59.81	68.20	-8.39	43.50	16.31	Peak	100	209

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	Test Freq. (MHz)	5670
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

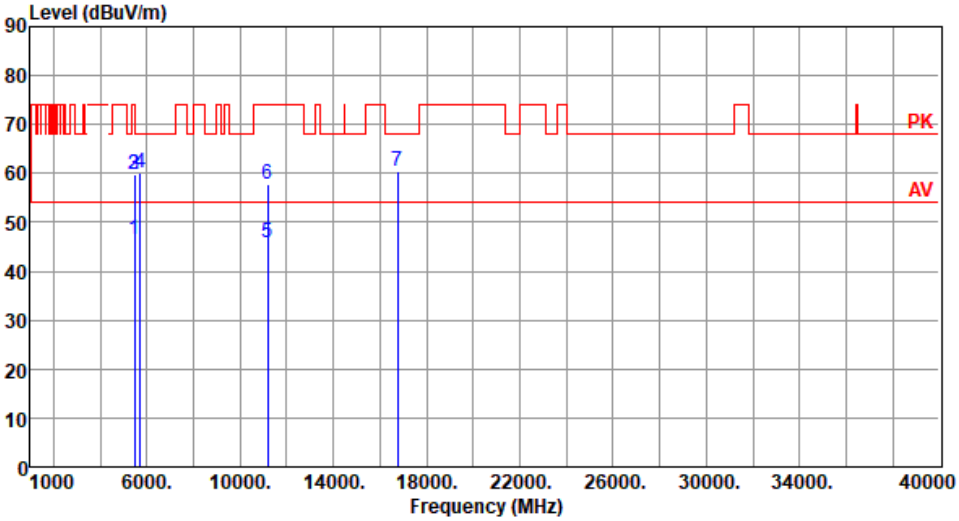


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.17	54.00	-3.83	45.80	4.37	Average	113	130
2	5460.00	64.62	74.00	-9.38	60.25	4.37	Peak	113	130
3	5470.00	67.80	68.20	-0.40	63.41	4.39	Peak	113	130
4	11020.00	48.79	54.00	-5.21	33.69	15.10	Average	100	352
5	11020.00	60.79	74.00	-13.21	45.69	15.10	Peak	100	352
6	16530.00	59.94	68.20	-8.26	43.63	16.31	Peak	100	353

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	Test Freq. (MHz)	5710
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

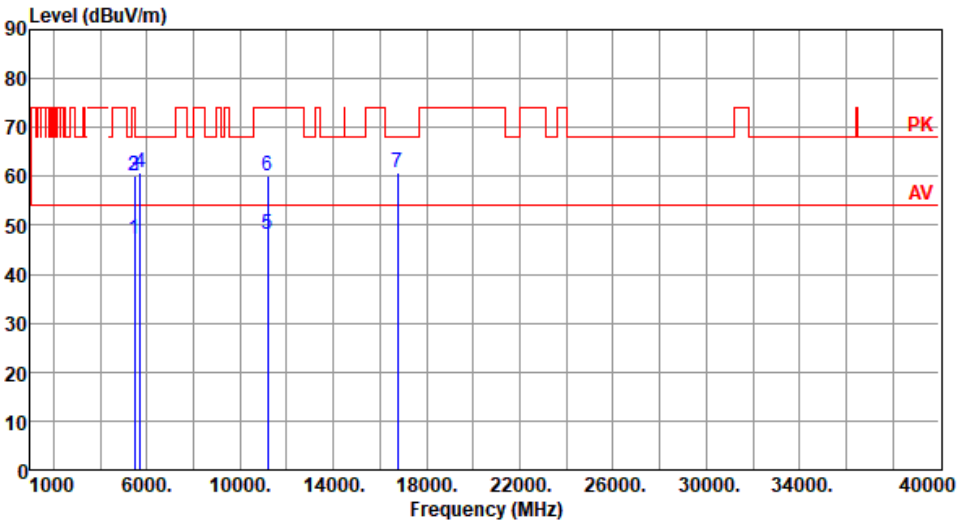


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.64	54.00	-7.36	42.27	4.37	Average	100	206
2	5460.00	59.65	74.00	-14.35	55.28	4.37	Peak	100	206
3	5470.00	59.62	68.20	-8.58	55.23	4.39	Peak	100	206
4	5725.00	60.04	68.20	-8.16	55.23	4.81	Peak	100	206
5	11180.00	45.82	54.00	-8.18	31.29	14.53	Average	100	205
6	11180.00	57.82	74.00	-16.18	43.29	14.53	Peak	100	205
7	16770.00	60.45	68.20	-7.75	43.23	17.22	Peak	100	209

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	Test Freq. (MHz)	5710
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69



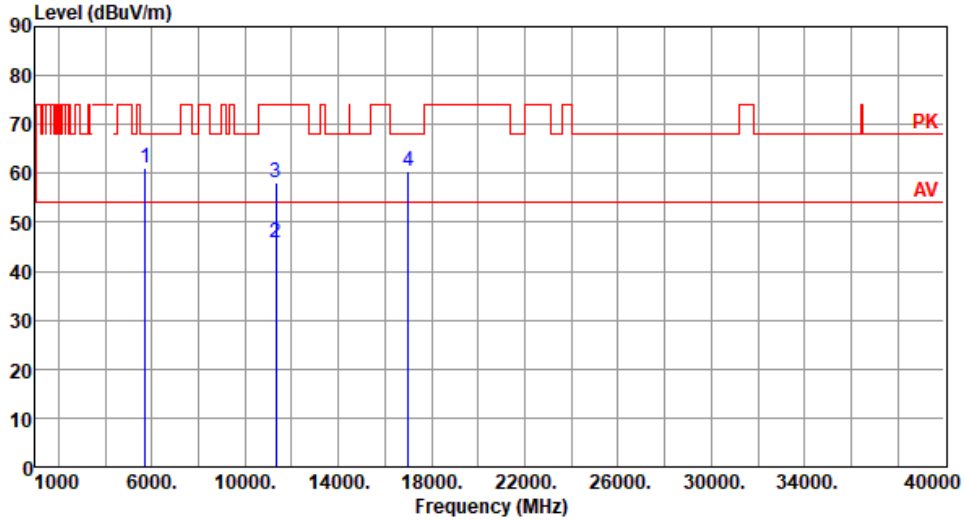
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.18	54.00	-6.82	42.81	4.37	Average	148	146
2	5460.00	60.15	74.00	-13.85	55.78	4.37	Peak	148	146
3	5470.00	60.15	68.20	-8.05	55.76	4.39	Peak	148	146
4	5725.00	60.61	68.20	-7.59	55.80	4.81	Peak	148	146
5	11180.00	48.16	54.00	-5.84	33.63	14.53	Average	100	345
6	11180.00	60.23	74.00	-13.77	45.70	14.53	Peak	100	345
7	16770.00	60.85	68.20	-7.35	43.63	17.22	Peak	100	342

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

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

Test By :Akun Chung Temperature(°C):22 Humidity(%):69

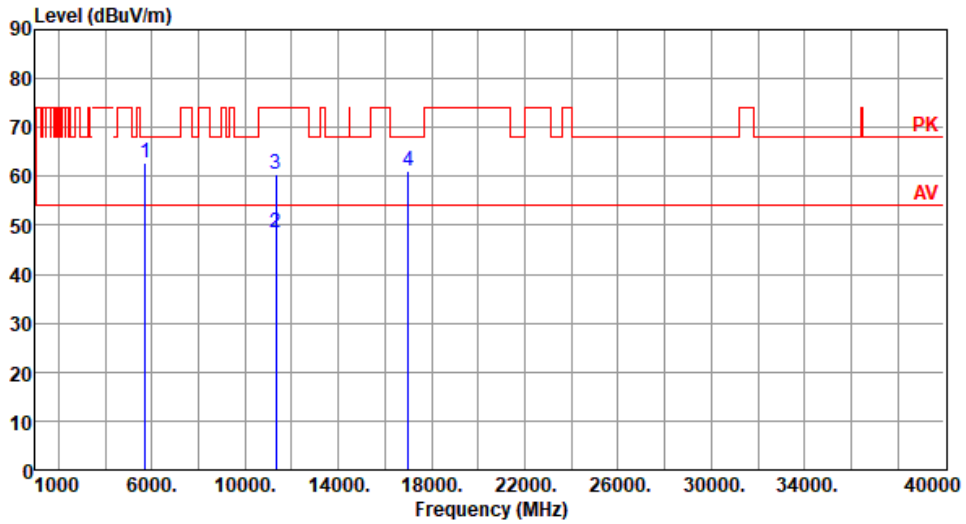


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	61.09	68.20	-7.11	56.28	4.81	Peak	100	207
2	11340.00	45.95	54.00	-8.05	31.28	14.67	Average	100	209
3	11340.00	57.95	74.00	-16.05	43.28	14.67	Peak	100	209
4	17010.00	60.59	68.20	-7.61	43.29	17.30	Peak	100	204

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	Test Freq. (MHz)	5290
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

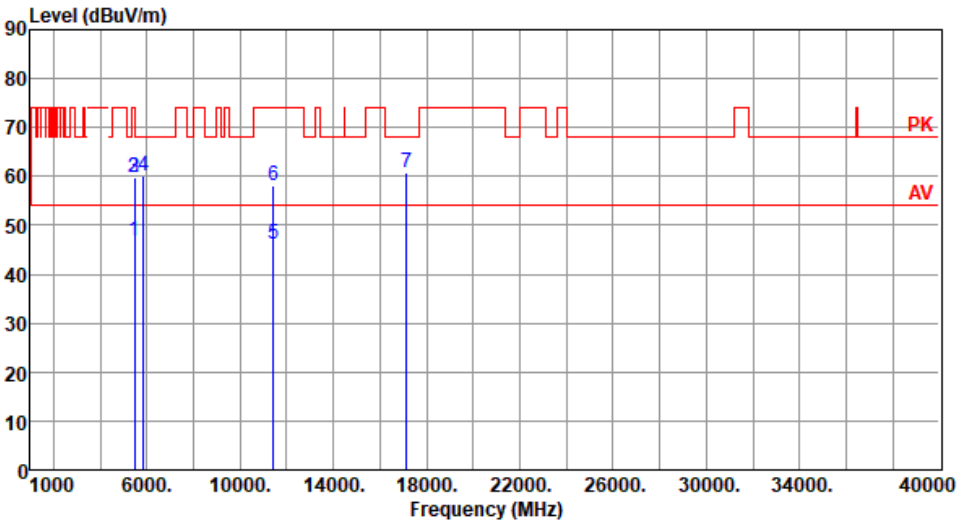


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	62.70	68.20	-5.50	57.89	4.81	Peak	147	141
2	11340.00	48.35	54.00	-5.65	33.68	14.67	Average	100	346
3	11340.00	60.30	74.00	-13.70	45.63	14.67	Peak	100	346
4	17010.00	60.99	68.20	-7.21	43.69	17.30	Peak	100	349

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	Test Freq. (MHz)	5530
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

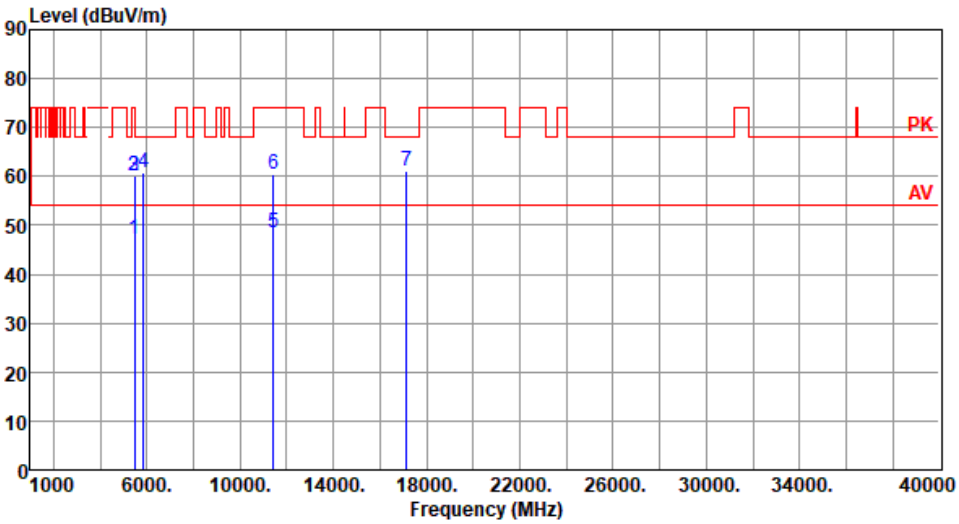


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.69	54.00	-7.31	42.32	4.37	Average	100	209
2	5460.00	59.80	74.00	-14.20	55.43	4.37	Peak	100	209
3	5470.00	59.67	68.20	-8.53	55.28	4.39	Peak	100	209
4	5850.00	60.09	68.20	-8.11	54.91	5.18	Peak	100	209
5	11420.00	46.13	54.00	-7.87	31.30	14.83	Average	100	207
6	11420.00	58.11	74.00	-15.89	43.28	14.83	Peak	100	207
7	17130.00	60.68	68.20	-7.52	43.28	17.40	Peak	100	208

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	Test Freq. (MHz)	5530
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

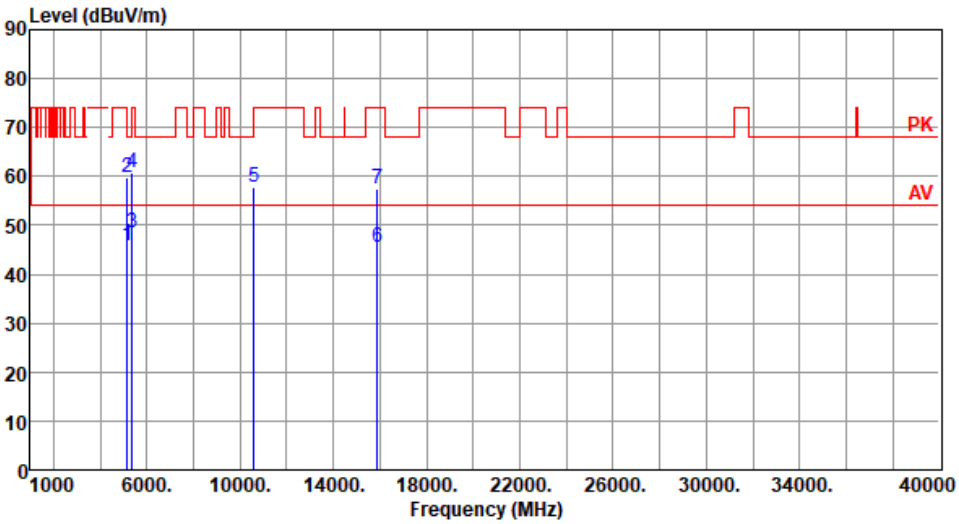


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.12	54.00	-6.88	42.75	4.37	Average	149	143
2	5460.00	60.12	74.00	-13.88	55.75	4.37	Peak	149	143
3	5470.00	60.21	68.20	-7.99	55.82	4.39	Peak	149	143
4	5850.00	60.67	68.20	-7.53	55.49	5.18	Peak	149	143
5	11420.00	48.51	54.00	-5.49	33.68	14.83	Average	100	348
6	11420.00	60.51	74.00	-13.49	45.68	14.83	Peak	100	348
7	17130.00	61.05	68.20	-7.15	43.65	17.40	Peak	100	342

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	Test Freq. (MHz)	5610
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

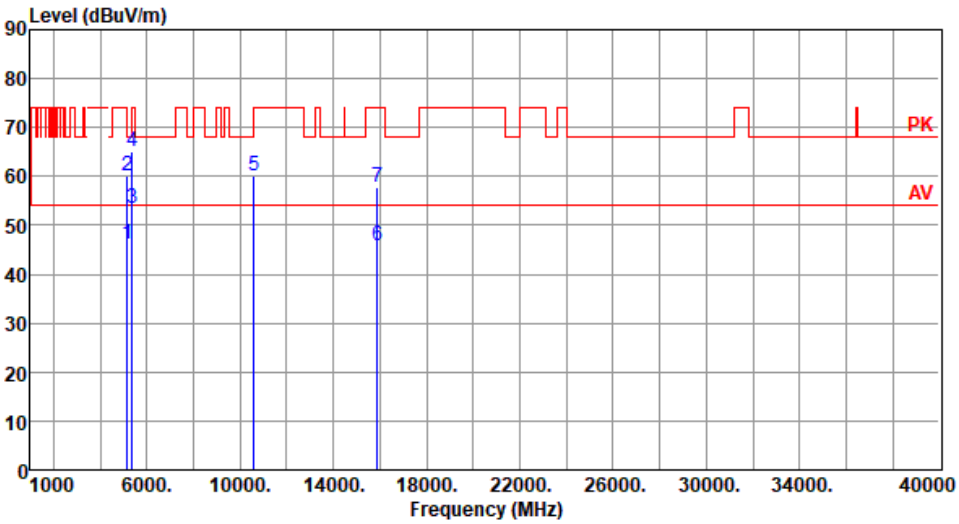


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.83	54.00	-8.17	41.45	4.38	Average	116	193
2	5150.00	59.82	74.00	-14.18	55.44	4.38	Peak	116	193
3	5350.00	48.46	54.00	-5.54	44.49	3.97	Average	116	193
4	5350.00	60.89	74.00	-13.11	56.92	3.97	Peak	116	193
5	10580.00	57.78	68.20	-10.42	43.21	14.57	Peak	100	207
6	15870.00	45.40	54.00	-8.60	31.21	14.19	Average	100	202
7	15870.00	57.41	74.00	-16.59	43.22	14.19	Peak	100	202

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	Test Freq. (MHz)	5610
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

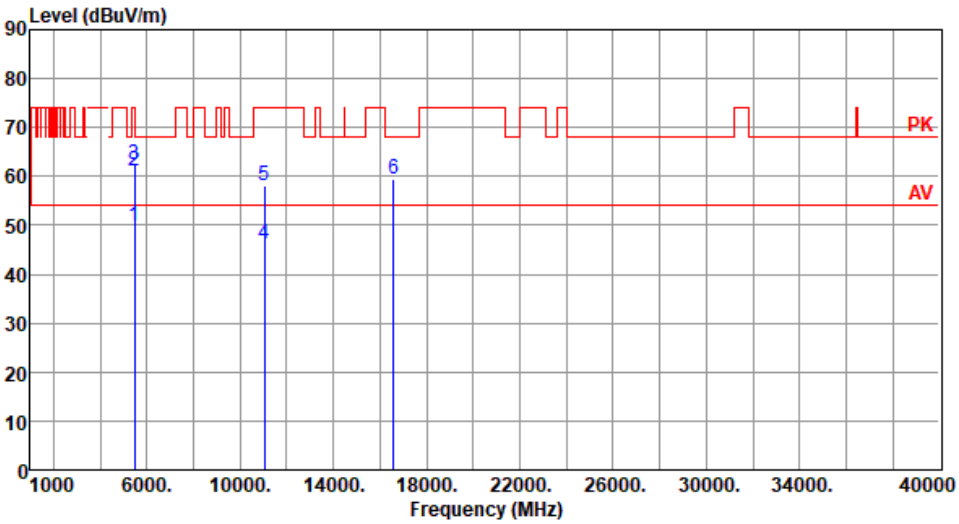


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.31	54.00	-7.69	41.93	4.38	Average	132	151
2	5150.00	60.27	74.00	-13.73	55.89	4.38	Peak	132	151
3	5350.00	53.49	54.00	-0.51	49.52	3.97	Average	132	151
4	5350.00	65.19	74.00	-8.81	61.22	3.97	Peak	132	151
5	10580.00	60.23	68.20	-7.97	45.66	14.57	Peak	100	354
6	15870.00	45.77	54.00	-8.23	31.58	14.19	Average	100	352
7	15870.00	57.85	74.00	-16.15	43.66	14.19	Peak	100	352

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	Test Freq. (MHz)	5690
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

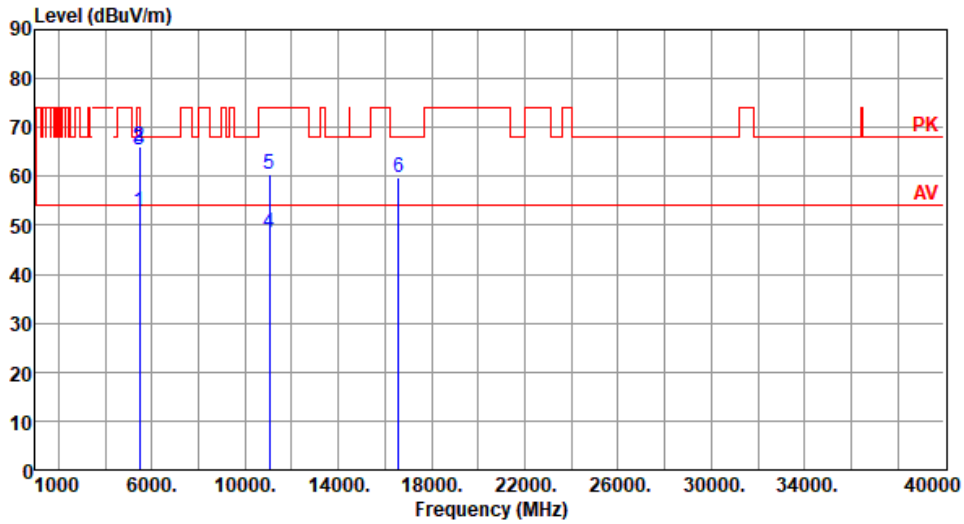


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.84	54.00	-4.16	45.47	4.37	Average	131	85
2	5460.00	61.00	74.00	-13.00	56.63	4.37	Peak	131	85
3	5470.00	62.27	68.20	-5.93	57.88	4.39	Peak	131	85
4	11060.00	46.26	54.00	-7.74	31.28	14.98	Average	100	207
5	11060.00	58.18	74.00	-15.82	43.20	14.98	Peak	100	207
6	16590.00	59.53	68.20	-8.67	43.30	16.23	Peak	100	204

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	Test Freq. (MHz)	5690
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69



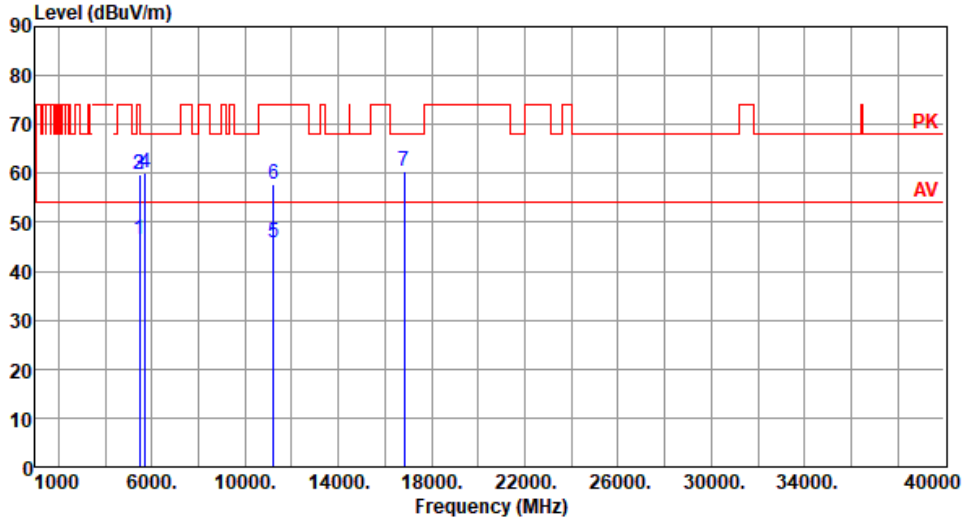
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.66	54.00	-1.34	48.29	4.37	Average	102	145
2	5460.00	66.18	74.00	-7.82	61.81	4.37	Peak	102	145
3	5470.00	65.39	68.20	-2.81	61.00	4.39	Peak	102	145
4	11060.00	48.51	54.00	-5.49	33.53	14.98	Average	100	353
5	11060.00	60.56	74.00	-13.44	45.58	14.98	Peak	100	353
6	16590.00	59.75	68.20	-8.45	43.52	16.23	Peak	100	357

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

Modulation	ax HE160	Test Freq. (MHz)	5250
Polarization	Horizontal		

Test By :Akun Chung Temperature(°C):22 Humidity(%):69

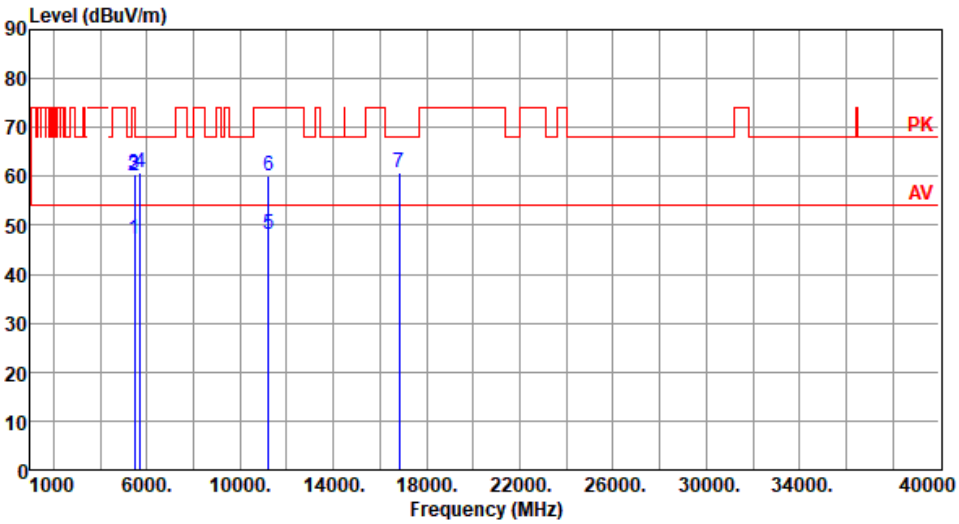


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.65	54.00	-7.35	42.28	4.37	Average	100	203
2	5460.00	59.65	74.00	-14.35	55.28	4.37	Peak	100	203
3	5470.00	59.72	68.20	-8.48	55.33	4.39	Peak	100	207
4	5725.00	60.09	68.20	-8.11	55.28	4.81	Peak	100	203
5	11220.00	45.76	54.00	-8.24	31.28	14.48	Average	100	204
6	11220.00	57.76	74.00	-16.24	43.28	14.48	Peak	100	204
7	16830.00	60.60	68.20	-7.60	43.28	17.32	Peak	100	208

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	Test Freq. (MHz)	5250
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

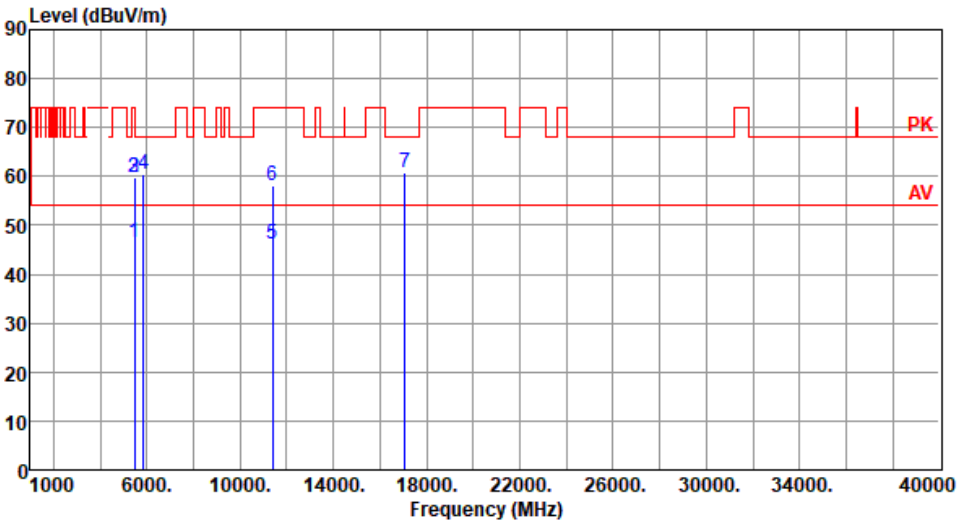


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.24	54.00	-6.76	42.87	4.37	Average	123	147
2	5460.00	60.22	74.00	-13.78	55.85	4.37	Peak	123	147
3	5470.00	60.28	68.20	-7.92	55.89	4.39	Peak	123	147
4	5725.00	60.69	68.20	-7.51	55.88	4.81	Peak	123	147
5	11220.00	48.01	54.00	-5.99	33.53	14.48	Average	100	351
6	11220.00	60.07	74.00	-13.93	45.59	14.48	Peak	100	351
7	16830.00	60.84	68.20	-7.36	43.52	17.32	Peak	100	350

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	Test Freq. (MHz)	5570
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69

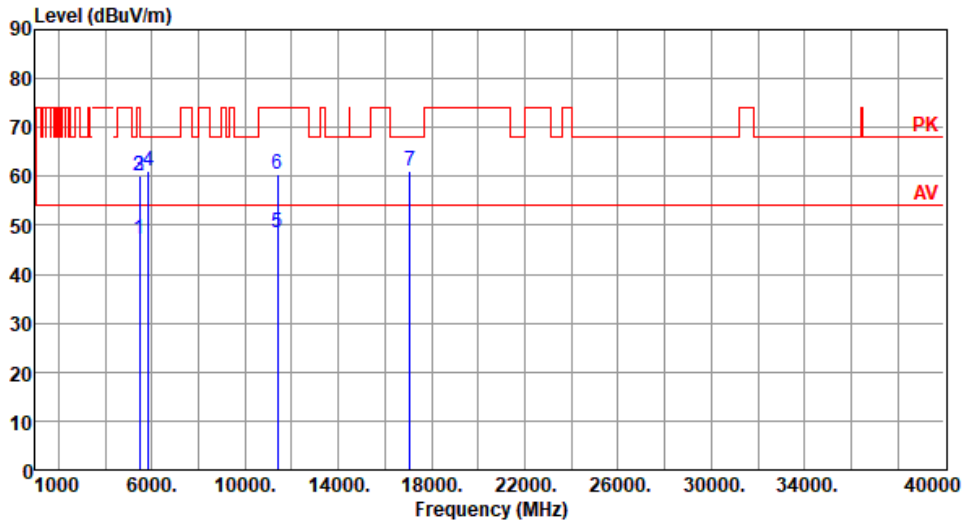


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.65	54.00	-7.35	42.28	4.37	Average	100	202
2	5460.00	59.65	74.00	-14.35	55.28	4.37	Peak	100	202
3	5470.00	59.72	68.20	-8.48	55.33	4.39	Peak	100	202
4	5850.00	60.46	68.20	-7.74	55.28	5.18	Peak	100	202
5	11380.00	46.08	54.00	-7.92	31.28	14.80	Average	100	207
6	11380.00	58.07	74.00	-15.93	43.27	14.80	Peak	100	207
7	17070.00	60.64	68.20	-7.56	43.29	17.35	Peak	100	209

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	Test Freq. (MHz)	5570
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):22 Humidity(%):69



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.22	54.00	-6.78	42.85	4.37	Average	125	148
2	5460.00	60.19	74.00	-13.81	55.82	4.37	Peak	125	148
3	5470.00	60.25	68.20	-7.95	55.86	4.39	Peak	125	148
4	5850.00	61.06	68.20	-7.14	55.88	5.18	Peak	125	148
5	11380.00	48.36	54.00	-5.64	33.56	14.80	Average	100	353
6	11380.00	60.36	74.00	-13.64	45.56	14.80	Peak	100	353
7	17070.00	60.98	68.20	-7.22	43.63	17.35	Peak	100	349

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

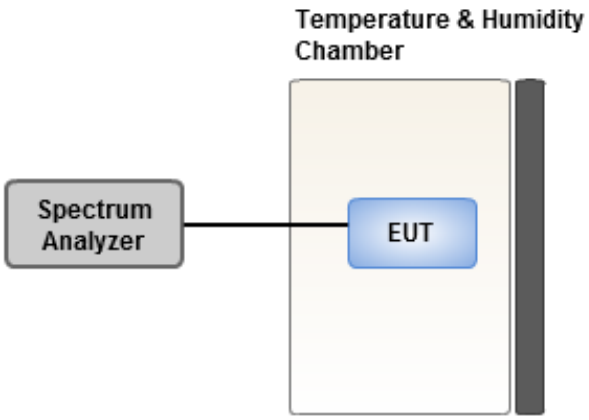
3.6.1 Limit of Frequency Stability

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	20-24°C / 64-66%	Tested By	Aska Huang

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-0.80	-0.56	-0.97	-0.95
T20°CVmin	-0.45	-0.68	-0.04	0.06
T50°CVnom	-7.51	-7.62	-7.59	-7.39
T40°CVnom	-6.27	-6.55	-5.89	-6.25
T30°CVnom	-1.83	-1.74	-1.73	-2.21
T20°CVnom	-0.05	0.21	-0.03	-0.34
T10°CVnom	-1.16	-1.09	-1.59	-1.18
T0°CVnom	3.03	3.26	2.96	3.08
T-10°CVnom	4.77	5.02	4.64	4.84
T-20°CVnom	9.63	10.45	10.16	9.54
T-30°CVnom	14.09	14.44	13.66	14.73
Vnom [V]: 120		Vmax [V]: 138		Vmin [V]: 102
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	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)	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.

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