FCC Test Report

FCC ID	:	**ACQ-VIP7802**
Equipment	:	**WiFi Set Top Box**
Model No.	:	**VIP7802**
Brand Name	:	**ARRIS**
Applicant	:	**ARRIS Group, Inc.**
Address	:	**101 Tournament Drive, Horsham, Pennsylvania, United States 19044**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Feb. 03, 2021**
Tested Date	:	**Feb. 19 ~ Mar. 30, 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:

Along Chen / Assistant Manager

Approved by:

Gary Chang / Manager

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR120304AN	Rev. 01	Initial issue	May 04, 2021

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.582MHz 35.55 (Margin -10.45dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5470.00MHz 67.68(Margin -0.52dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: ***Non-beamforming mode*** 5150~5250MHz: 21.93 5250~5350MHz: 19.30 5470~5725MHz: 21.95 5725~5850MHz: 21.95 ***Beamforming mode*** 5150~5250MHz: 18.92 5250~5350MHz: 16.27 5470~5725MHz: 18.94 5725~5850MHz: 18.93	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

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530~5690 5775	42 [1] 58 [1] 106-138 [3] 155 [1]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ax (HE20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	MCS 0-11
5150-5250 5250-5350 5470-5725 5725-5850	ax (HE40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	2	MCS 0-11
5150-5250 5250-5350 5470-5725 5725-5850	ax (HE80)	5210 5290 5530~5690 5775	42 [1] 58 [1] 106-138 [3] 155 [1]	2	MCS 0-11
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: Chip feature: OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation Note 3: 802.11ax supports beamforming function. Note 4: 802.11ax supports full and partial loaded RU configuration.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	Ant 1	Dipole	U.FL	3	3	3.1	4.4	4.3
2	Ant 2	Dipole	U.FL	3.2	3.2	3.6	4.5	4.6

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	5Vdc from adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	Adapter	Brand: NeBit Model: NBS12F050200VU Power Rating: I/P: 100-240Vac, 50/60Hz, 0.3A O/P: 5Vdc, 2A Power Line: 0.75m non-shielded without core
2	Remote control	Brand: Bell Model: 2855-001
3	HDMI	1.83m shielded without core
4	SD card	Brand: SanDisk Model: SDSDQEC-008G Capacity: 8GB

1.1.5 Channel List

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

1.1.6 Test Tool and Duty Cycle

Test Tool	accessMTool, Version: 3.1.0.2		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	96.28%	0.16
	ax (HE20)	98.86%	0.05
	ax (HE40)	97.33%	0.12
	ax (HE80)	95.48%	0.20

1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	74
11a	5200	74
11a	5240	74
11a	5260	64
11a	5300	64
11a	5320	64
11a	5500	68
11a	5580	76
11a	5700	64
11a	5720	78
11a	5745	76
11a	5785	78
11a	5825	78
ax (HE20)	5180	72
ax (HE20)	5200	72
ax (HE20)	5240	72
ax (HE20)	5260	62
ax (HE20)	5300	62
ax (HE20)	5320	62
ax (HE20)	5500	64
ax (HE20)	5580	74
ax (HE20)	5700	56
ax (HE20)	5720	76
ax (HE20)	5745	74
ax (HE20)	5785	76
ax (HE20)	5825	76

Modulation Mode	Test Frequency (MHz)	Power Index
ax (HE40)	5190	58
ax (HE40)	5230	72
ax (HE40)	5270	62
ax (HE40)	5310	56
ax (HE40)	5510	50
ax (HE40)	5590	74
ax (HE40)	5670	70
ax (HE40)	5710	74
ax (HE40)	5755	74
ax (HE40)	5795	74
ax (HE80)	5210	52
ax (HE80)	5290	54
ax (HE80)	5530	50
ax (HE80)	5610	74
ax (HE80)	5690	74
ax (HE80)	5775	74

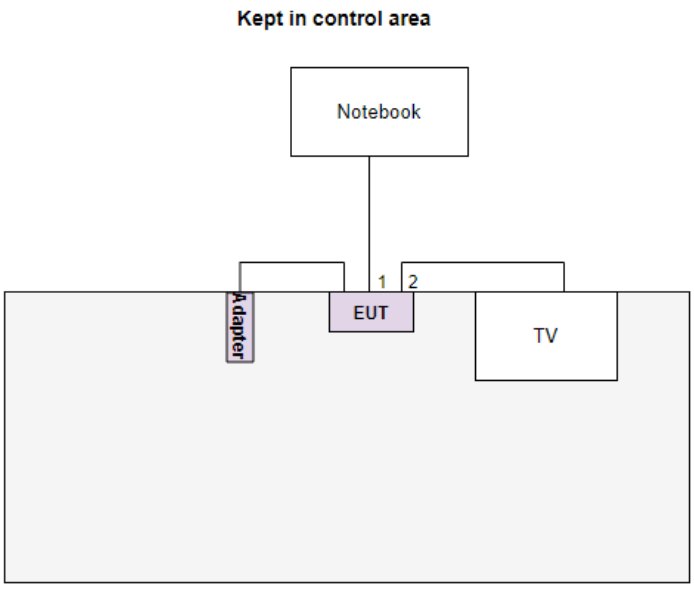
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---
2	RJ45	ICC	RJ45-10m	---	---
3	TV	CHIMEI	TL-24LF500D	---	---
4	Fixture	ARRIS	240684-125 REV:1	---	Provided by applicant.
5	RS232	---	---	---	Provided by applicant.
6	USB cable	---	---	---	Provided by applicant.
7	Notebook	DELL	Latitude E5470	DoC	---

Note: The fixture (No.4), RS232 (No.5), USB cable (No.6) and notebook (No.7) are disconnected from EUT and removed from test table when EUT is set to transmit continuously.

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1	RJ45, 10m non-shielded.
2	HDMI, 1.7m shielded

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Test Date	Mar. 08, 2021				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 08, 2021	Feb. 07, 2022
LISN	R&S	ENV216	100003	Dec. 15, 2020	Dec. 14, 2021
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 29, 2020	Dec. 28, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 21, 2020	Oct. 20, 2021
50 ohm terminal (Support Unit)	NA	50	04	Jun. 05, 2020	Jun. 04, 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 chamber3 / (03CH03-WS)				
Test Date	Feb. 19 ~ Feb. 25, 2021				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 08, 2021	Feb. 07, 2022
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2020	Dec. 03, 2021
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 17, 2020	Nov. 16, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 29, 2020	Apr. 28, 2021
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 22, 2020	Dec. 21, 2021
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 06, 2020	Nov. 05, 2021
Preamplifier	EMC	EMC02325	980187	Aug. 05, 2020	Aug. 04, 2021
Preamplifier	Agilent	83017A	MY39501309	Sep. 02, 2020	Sep. 01, 2021
Preamplifier	EMC	EMC184045B	980192	Jul. 21, 2020	Jul. 20, 2021
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 06, 2020	Oct. 05, 2021
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 26, 2020	Sep. 25, 2021
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 26, 2020	Sep. 25, 2021
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 26, 2020	Sep. 25, 2021
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 26, 2020	Sep. 25, 2021
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 26, 2020	Sep. 25, 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)				
Test Date	Mar. 29 ~ Mar. 30, 2021				
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
Measurement Software	-	SENSE-15247_FS	V5.10.7.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.407
ANSI C63.10-2013

1.6 Reference Guidance

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

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

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

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

2 Test Configuration

2.1 Testing Facility

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

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

2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	ax HE40	5590	MCS 0	Non-Beamforming
Radiated Emissions ≤1GHz	ax HE40	5590	MCS 0	Non-Beamforming
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	Non-Beamforming
	ax HE20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax HE40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	ax HE80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
RF Output Power	ax HE20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	Beamforming
	ax HE40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	ax HE80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	Non-Beamforming
	ax HE20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax HE40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	ax HE80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
Frequency Stability	Un-modulation	5320	---	Non-Beamforming

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	ax HE40	5785	MCS 0	Non-Beamforming
Radiated Emissions ≤1GHz	ax HE40	5785	MCS 0	Non-Beamforming
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	Non-Beamforming
	ax HE20	5745 / 5785 / 5825	MCS 0	
	ax HE40	5755 / 5795	MCS 0	
	ax HE80	5775	MCS 0	
RF Output Power	ax HE20	5745 / 5785 / 5825	MCS 0	Beamforming
	ax HE40	5755 / 5795	MCS 0	
	ax HE80	5775	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	Non-Beamforming
	ax HE20	5745 / 5785 / 5825	MCS 0	
	ax HE40	5755 / 5795	MCS 0	
	ax HE80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	Non-Beamforming

3 Transmitter Test Results

3.1 Conducted Emissions

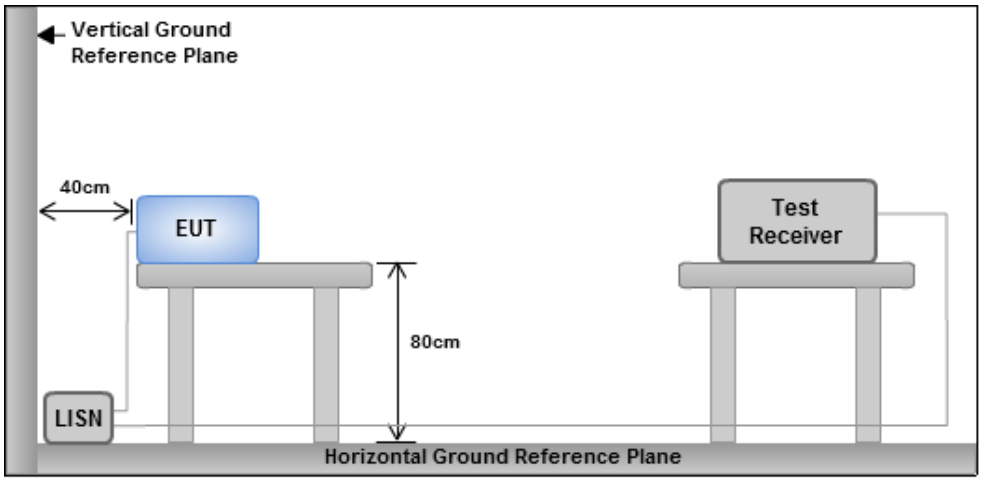
3.1.1 Limit of Conducted Emissions

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

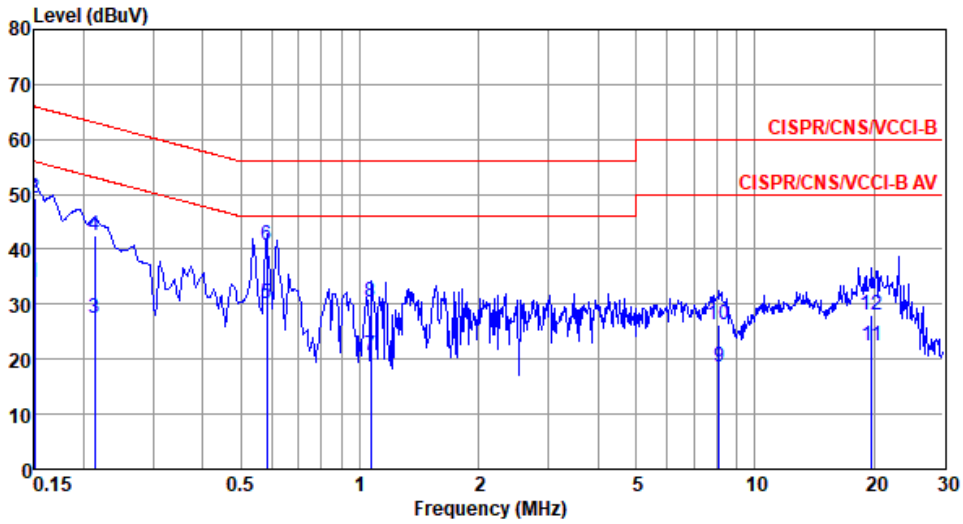


Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Modulation	ax HE40	Test Freq. (MHz)	5590
Power Phase	Line		

Test by : Alex Tsai Temperature: 23°C Humidity: 63%

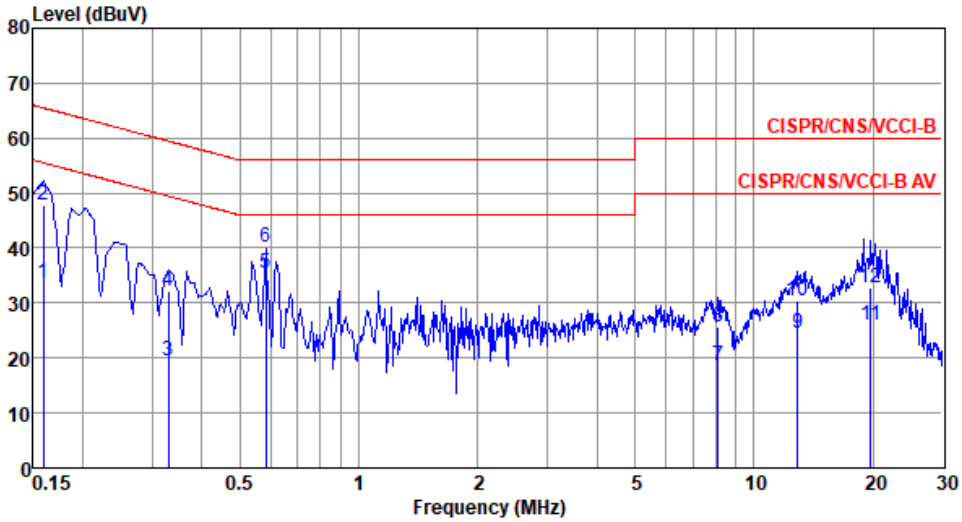


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Remark
1	0.150	33.95	56.00	-22.05	24.09	9.81	0.05	Average
2	0.150	49.23	66.00	-16.77	39.37	9.81	0.05	QP
3	0.213	27.54	53.10	-25.56	17.66	9.82	0.06	Average
4	0.213	42.42	63.10	-20.68	32.54	9.82	0.06	QP
5	0.582	29.96	46.00	-16.04	19.94	9.92	0.10	Average
6*	0.582	40.72	56.00	-15.28	30.70	9.92	0.10	QP
7	1.065	20.55	46.00	-25.45	10.45	9.97	0.13	Average
8	1.065	30.38	56.00	-25.62	20.28	9.97	0.13	QP
9	8.105	18.46	50.00	-31.54	8.02	10.07	0.37	Average
10	8.105	26.33	60.00	-33.67	15.89	10.07	0.37	QP
11	19.740	22.53	50.00	-27.47	11.56	10.30	0.67	Average
12	19.740	28.14	60.00	-31.86	17.17	10.30	0.67	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)	5590
Power Phase	Neutral		

Test by : Alex Tsai Temperature: 23°C Humidity: 63%

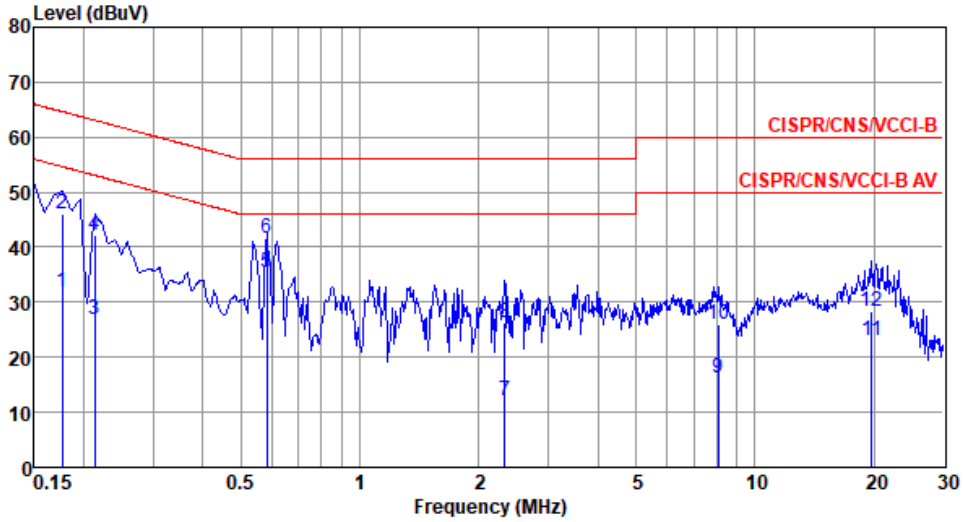


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Remark
1	0.159	33.76	55.52	-21.76	23.92	9.79	0.05	Average
2	0.159	47.97	65.52	-17.55	38.13	9.79	0.05	QP
3	0.330	19.34	49.44	-30.10	9.45	9.82	0.07	Average
4	0.330	32.31	59.44	-27.13	22.42	9.82	0.07	QP
5*	0.582	35.55	46.00	-10.45	25.61	9.84	0.10	Average
6	0.582	40.29	56.00	-15.71	30.35	9.84	0.10	QP
7	8.105	18.63	50.00	-31.37	8.23	10.03	0.37	Average
8	8.105	25.82	60.00	-34.18	15.42	10.03	0.37	QP
9	12.920	24.43	50.00	-25.57	13.78	10.12	0.53	Average
10	12.920	30.49	60.00	-29.51	19.84	10.12	0.53	QP
11	19.740	25.95	50.00	-24.05	14.97	10.31	0.67	Average
12	19.740	32.87	60.00	-27.13	21.89	10.31	0.67	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)	5785
Power Phase	Line		

Test by : Alex Tsai Temperature: 23°C Humidity: 63%

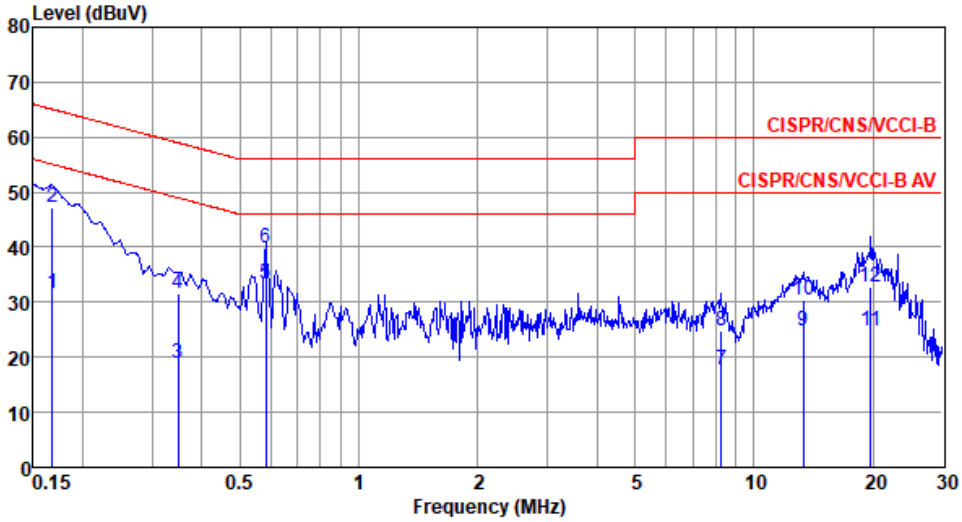


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Remark
1	0.177	31.76	54.64	-22.88	21.88	9.82	0.06	Average
2	0.177	46.01	64.64	-18.63	36.13	9.82	0.06	QP
3	0.213	26.96	53.10	-26.14	17.08	9.82	0.06	Average
4	0.213	42.19	63.10	-20.91	32.31	9.82	0.06	QP
5*	0.582	35.37	46.00	-10.63	25.35	9.92	0.10	Average
6	0.582	41.56	56.00	-14.44	31.54	9.92	0.10	QP
7	2.321	12.07	46.00	-33.93	1.88	9.99	0.20	Average
8	2.321	26.30	56.00	-29.70	16.11	9.99	0.20	QP
9	8.062	16.18	50.00	-33.82	5.74	10.07	0.37	Average
10	8.062	26.07	60.00	-33.93	15.63	10.07	0.37	QP
11	19.740	22.88	50.00	-27.12	11.91	10.30	0.67	Average
12	19.740	28.41	60.00	-31.59	17.44	10.30	0.67	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)	5785
Power Phase	Neutral		

Test by : Alex Tsai Temperature: 23°C Humidity: 63%



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Remark
1	0.168	31.55	55.08	-23.53	21.71	9.79	0.05	Average
2	0.168	47.10	65.08	-17.98	37.26	9.79	0.05	QP
3	0.348	18.89	49.00	-30.11	8.99	9.82	0.08	Average
4	0.348	31.55	59.00	-27.45	21.65	9.82	0.08	QP
5*	0.582	33.33	46.00	-12.67	23.39	9.84	0.10	Average
6	0.582	39.95	56.00	-16.05	30.01	9.84	0.10	QP
7	8.279	17.67	50.00	-32.33	7.26	10.03	0.38	Average
8	8.279	24.80	60.00	-35.20	14.39	10.03	0.38	QP
9	13.337	24.68	50.00	-25.32	14.01	10.13	0.54	Average
10	13.337	30.33	60.00	-29.67	19.66	10.13	0.54	QP
11	19.740	24.76	50.00	-25.24	13.78	10.31	0.67	Average
12	19.740	32.70	60.00	-27.30	21.72	10.31	0.67	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 Limit of Emission Bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

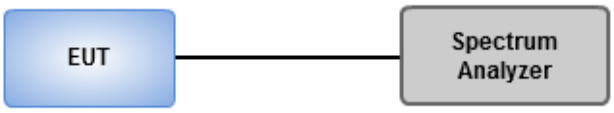
Occupied Bandwidth

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

6dB Bandwidth

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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

Ambient Condition	24~25°C / 65~66%	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	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	33.841M	17.366M	17M4D1D	21.594M	16.715M
802.11ax HEW20_Nss1,(MCS0)_2TX	34.203M	19.32M	19M3D1D	21.957M	19.03M
802.11ax HEW40_Nss1,(MCS0)_2TX	77.536M	37.916M	37M9D1D	40M	37.627M
802.11ax HEW80_Nss1,(MCS0)_2TX	81.449M	77.279M	77M3D1D	81.449M	77.279M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	21.812M	16.715M	16M7D1D	21.304M	16.57M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.957M	19.103M	19M1D1D	21.449M	19.03M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.725M	37.771M	37M8D1D	39.71M	37.482M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.029M	76.99M	77M0D1D	81.159M	76.99M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	30.725M	17.077M	17M1D1D	18.739M	13.589M
802.11ax HEW20_Nss1,(MCS0)_2TX	38.043M	19.175M	19M2D1D	16.478M	14.588M
802.11ax HEW40_Nss1,(MCS0)_2TX	74.638M	37.916M	37M9D1D	39.71M	33.734M
802.11ax HEW80_Nss1,(MCS0)_2TX	121.159M	77.569M	77M6D1D	76.087M	73.155M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.377M	17.656M	17M7D1D	3.13M	6.252M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.841M	19.247M	19M2D1D	4.406M	5.499M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.681M	37.916M	37M9D1D	3.826M	15.051M
802.11ax HEW80_Nss1,(MCS0)_2TX	76.232M	77.569M	77M6D1D	3.71M	26.744M

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

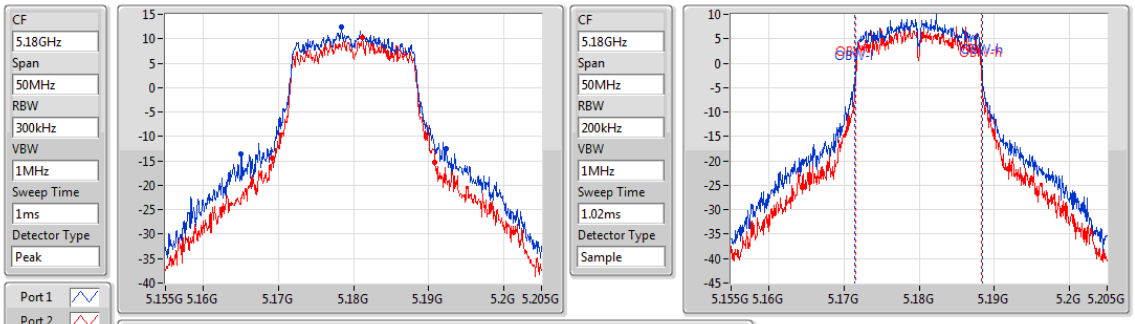
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	27.319M	16.932M	21.594M	16.715M
5200MHz	Pass	Inf	33.841M	17.366M	30.58M	16.932M
5240MHz	Pass	Inf	29.493M	17.294M	24.565M	16.86M
5260MHz	Pass	Inf	21.739M	16.715M	21.377M	16.715M
5300MHz	Pass	Inf	21.812M	16.715M	21.377M	16.643M
5320MHz	Pass	Inf	21.377M	16.643M	21.304M	16.57M
5500MHz	Pass	Inf	21.739M	16.643M	21.304M	16.57M
5580MHz	Pass	Inf	30.725M	17.077M	26.739M	16.932M
5700MHz	Pass	Inf	21.739M	16.715M	21.522M	16.715M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	21.565M	14.11M	18.739M	13.589M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.13M	8.973M	3.188M	6.252M
5745MHz	Pass	500k	16.304M	17.149M	16.304M	16.86M
5785MHz	Pass	500k	16.377M	17.656M	16.377M	16.932M
5825MHz	Pass	500k	16.377M	17.366M	16.377M	16.932M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	33.188M	19.32M	23.841M	19.03M
5200MHz	Pass	Inf	27.174M	19.175M	25.29M	19.03M
5240MHz	Pass	Inf	34.203M	19.175M	21.957M	19.175M
5260MHz	Pass	Inf	21.594M	19.103M	21.449M	19.103M
5300MHz	Pass	Inf	21.739M	19.03M	21.957M	19.103M
5320MHz	Pass	Inf	21.594M	19.103M	21.812M	19.03M
5500MHz	Pass	Inf	21.522M	19.03M	21.449M	19.03M
5580MHz	Pass	Inf	38.043M	19.175M	22.754M	19.103M
5700MHz	Pass	Inf	21.522M	19.103M	21.522M	19.03M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	25.696M	14.631M	16.478M	14.588M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.406M	8.915M	4.464M	5.499M
5745MHz	Pass	500k	18.696M	19.175M	18.696M	19.175M
5785MHz	Pass	500k	18.841M	19.247M	18.696M	19.175M
5825MHz	Pass	500k	18.841M	19.175M	18.841M	19.103M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.29M	37.627M	40M	37.627M
5230MHz	Pass	Inf	77.536M	37.916M	47.971M	37.627M
5270MHz	Pass	Inf	40.725M	37.627M	39.855M	37.771M
5310MHz	Pass	Inf	40.145M	37.482M	39.71M	37.627M
5510MHz	Pass	Inf	40M	37.482M	39.71M	37.482M
5590MHz	Pass	Inf	74.638M	37.916M	58.116M	37.771M

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5670MHz	Pass	Inf	56.087M	37.771M	44.348M	37.771M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	45.043M	33.835M	40.986M	33.734M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.884M	20.434M	3.826M	15.051M
5755MHz	Pass	500k	37.681M	37.916M	37.536M	37.771M
5795MHz	Pass	500k	37.246M	37.916M	37.101M	37.771M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.449M	77.279M	81.449M	77.279M
5290MHz	Pass	Inf	81.159M	76.99M	82.029M	76.99M
5530MHz	Pass	Inf	82.029M	76.99M	81.739M	76.99M
5610MHz	Pass	Inf	121.159M	77.569M	81.739M	77.279M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	91.087M	73.372M	76.087M	73.155M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.768M	31.491M	3.71M	26.744M
5775MHz	Pass	500k	75.652M	77.569M	76.232M	77.279M

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

802.11a_Nss1,(6Mbps)_2TX EBW

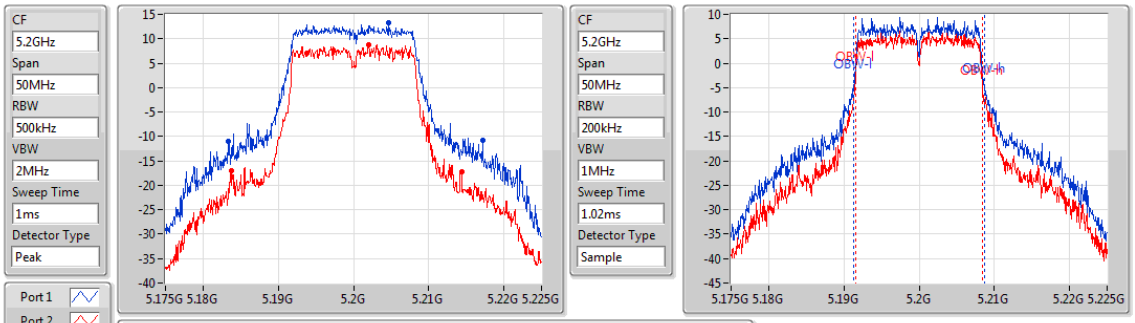
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
27.319M	5.165072G	5.192391G	16.932M	5.171462G	5.188394G	Inf	1
21.594M	5.169203G	5.190797G	16.715M	5.171606G	5.188321G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

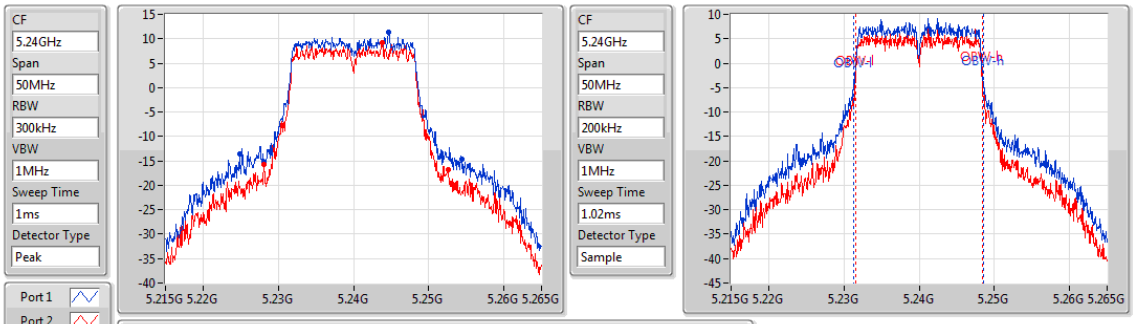
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.841M	5.183333G	5.217174G	17.366M	5.191317G	5.208683G	Inf	1
30.58M	5.183768G	5.214348G	16.932M	5.191534G	5.208466G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

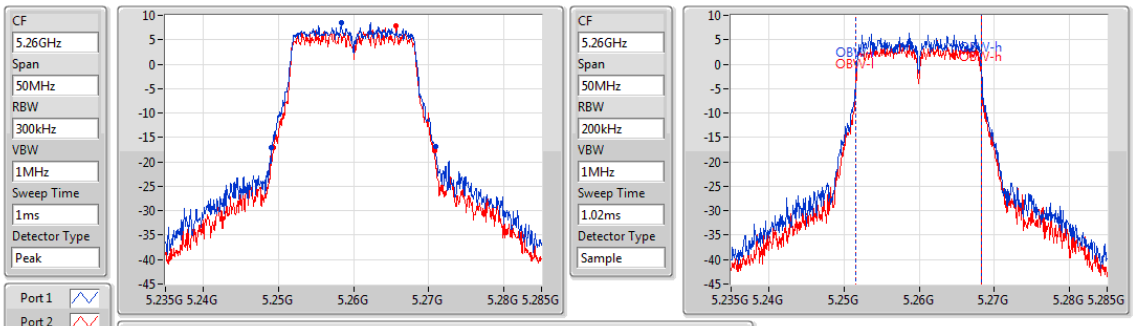
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
29.493M	5.224855G	5.254348G	17.294M	5.231317G	5.248611G	Inf	1
24.565M	5.228043G	5.252609G	16.86M	5.231534G	5.248394G	Inf	2

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

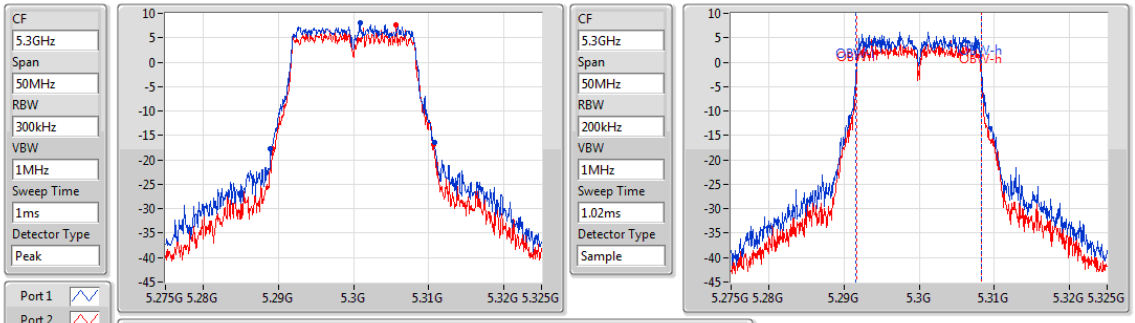
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.739M	5.24913G	5.27087G	16.715M	5.251606G	5.268321G	Inf	1
21.377M	5.249348G	5.270725G	16.715M	5.251606G	5.268321G	Inf	2

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

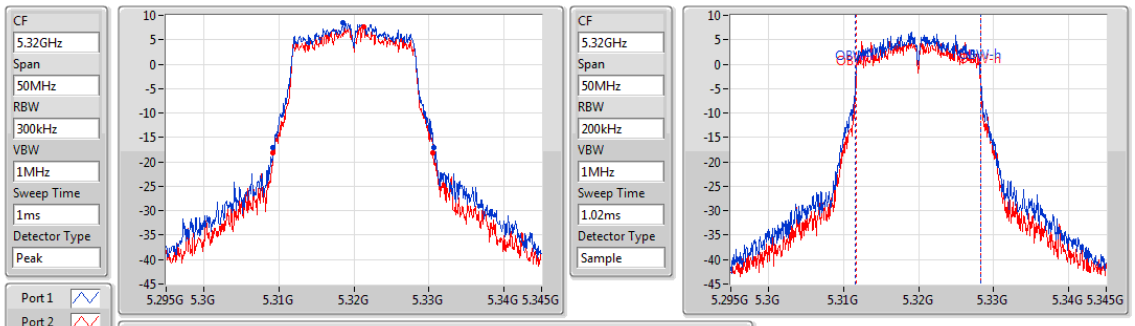
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.812M	5.288986G	5.310797G	16.715M	5.291606G	5.308321G	Inf	1
21.377M	5.289275G	5.310652G	16.643M	5.291679G	5.308321G	Inf	2

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

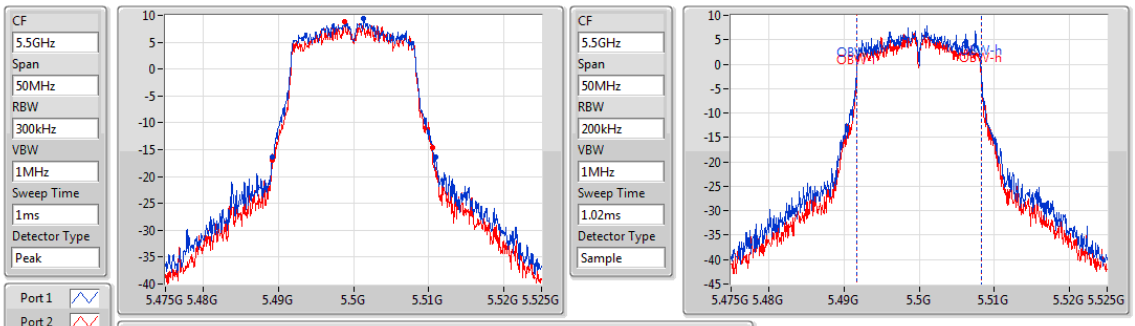
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.377M	5.309275G	5.330652G	16.643M	5.311606G	5.328249G	Inf	1
21.304M	5.309275G	5.33058G	16.57M	5.311679G	5.328249G	Inf	2

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

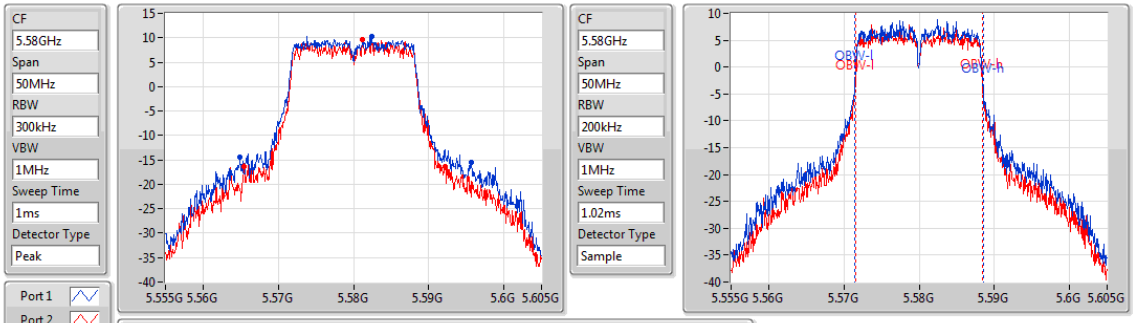
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.739M	5.489203G	5.510942G	16.643M	5.491679G	5.508321G	Inf	1
21.304M	5.489203G	5.510507G	16.57M	5.491679G	5.508249G	Inf	2

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

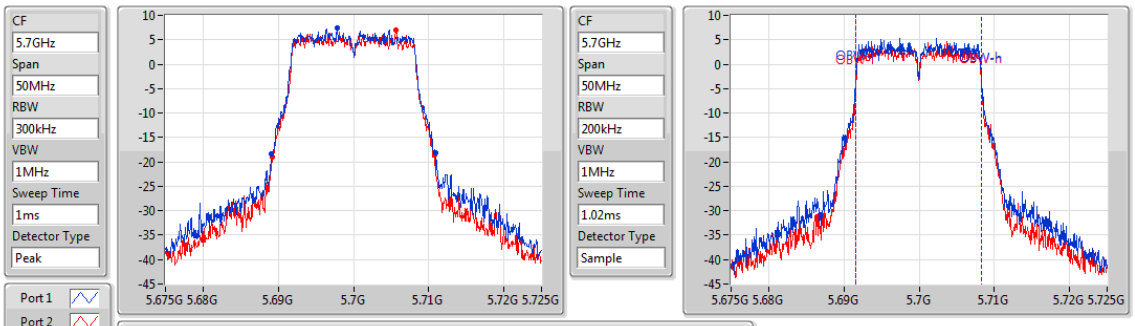
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.725M	5.564928G	5.595652G	17.077M	5.571462G	5.588538G	Inf	1
26.739M	5.565435G	5.592174G	16.932M	5.571534G	5.588466G	Inf	2

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

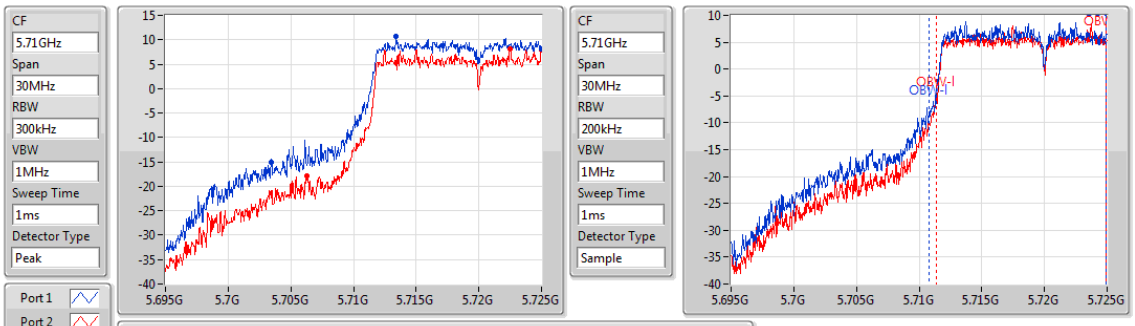
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.739M	5.68913G	5.71087G	16.715M	5.691606G	5.708321G	Inf	1
21.522M	5.689203G	5.710725G	16.715M	5.691606G	5.708321G	Inf	2

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

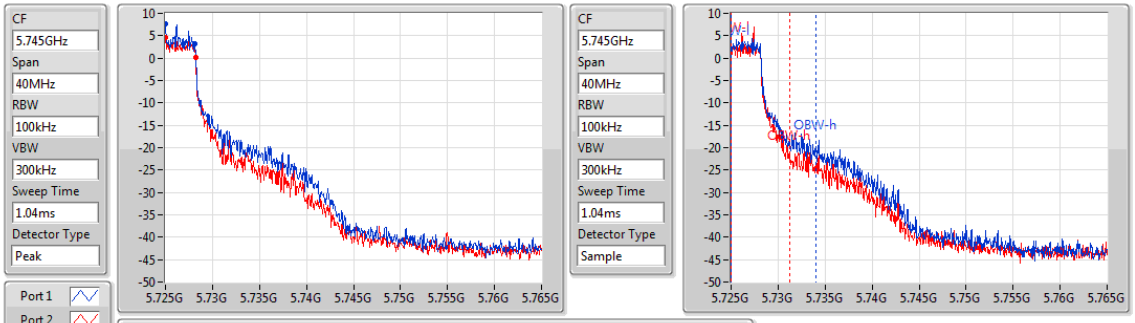
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.565M	5.703435G	5.725G	14.11M	5.710825G	5.724935G	Inf	1
18.739M	5.706261G	5.725G	13.589M	5.711346G	5.724935G	Inf	2

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

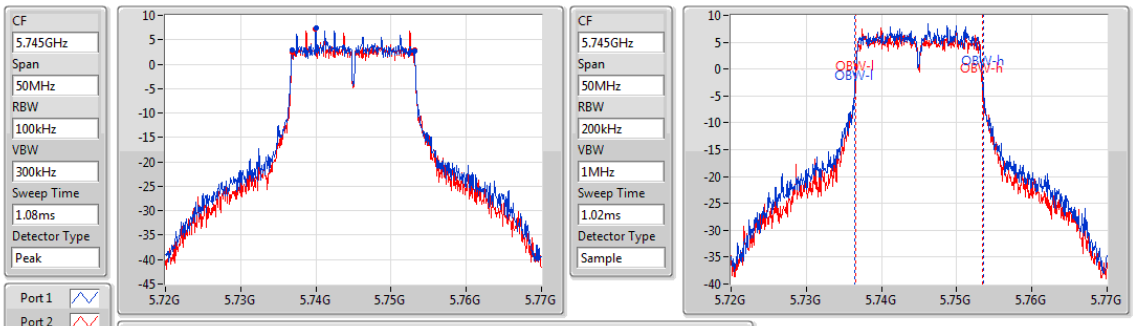
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.13M	5.725G	5.72813G	8.973M	5.725029G	5.734001G	500k	1
3.188M	5.725G	5.728188G	6.252M	5.725029G	5.731281G	500k	2

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

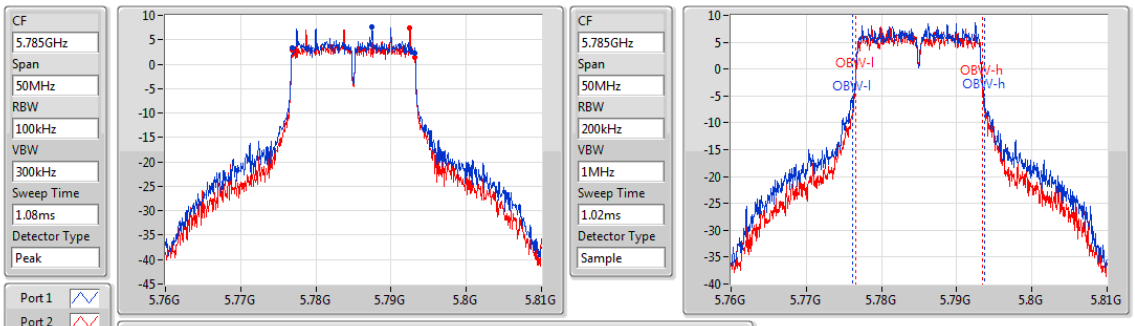
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.736812G	5.753116G	17.149M	5.736389G	5.753538G	500k	1
16.304M	5.736812G	5.753116G	16.86M	5.736534G	5.753394G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

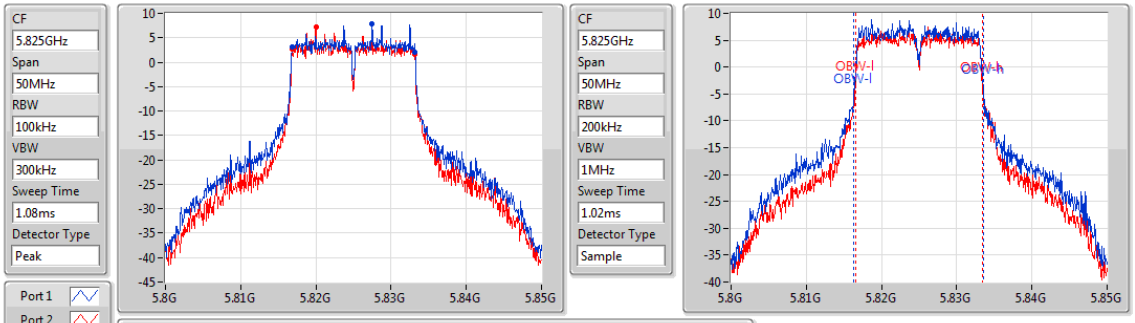
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.377M	5.776812G	5.793188G	17.656M	5.7761G	5.793755G	500k	1
16.377M	5.776812G	5.793188G	16.932M	5.776534G	5.793466G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

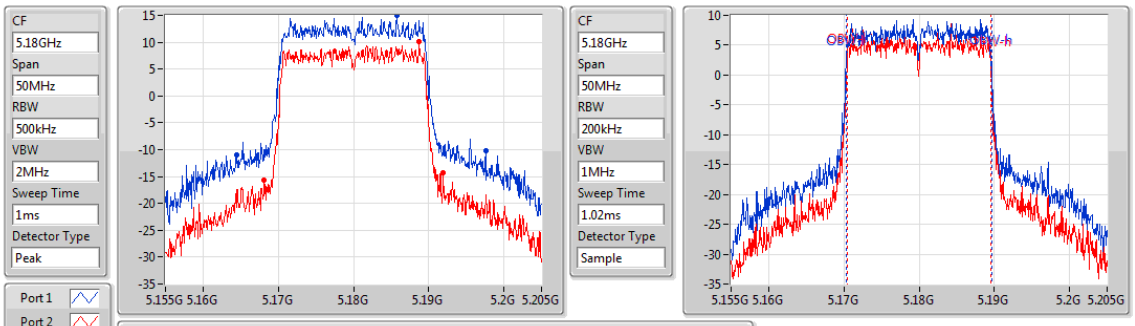
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.377M	5.816812G	5.833188G	17.366M	5.816245G	5.833611G	500k	1
16.377M	5.816812G	5.833188G	16.932M	5.816534G	5.833466G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

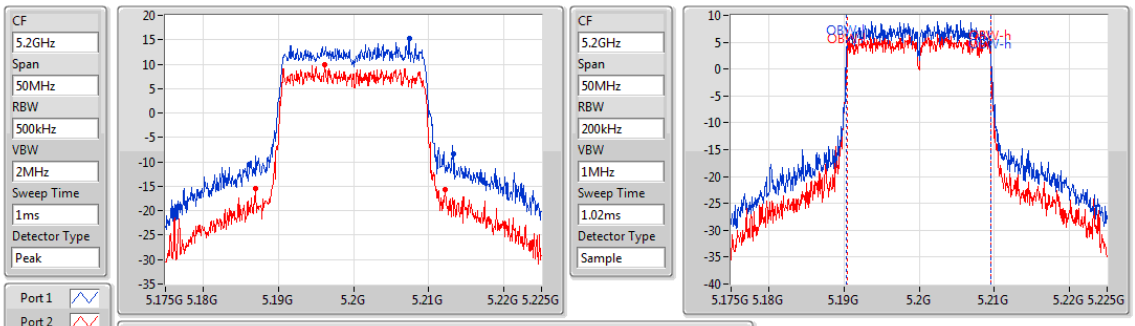
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.188M	5.16442G	5.197609G	19.32M	5.170304G	5.189624G	Inf	1
23.841M	5.168116G	5.191957G	19.03M	5.170449G	5.189479G	Inf	2

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

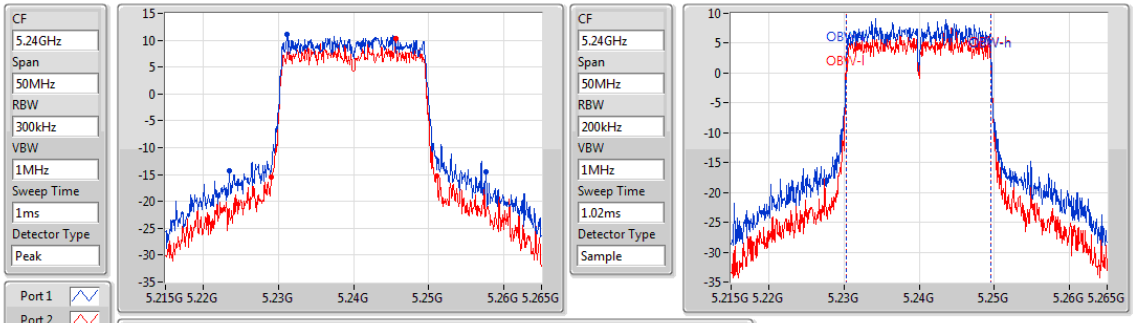
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
27.174M	5.186159G	5.213333G	19.175M	5.190376G	5.209551G	Inf	1
25.29M	5.186957G	5.212246G	19.03M	5.190449G	5.209479G	Inf	2

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

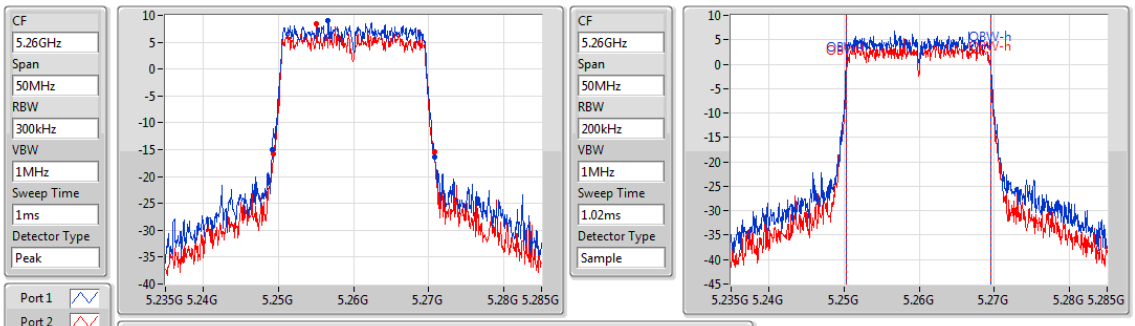
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.203M	5.223478G	5.257681G	19.175M	5.230376G	5.249551G	Inf	1
21.957M	5.229058G	5.251014G	19.175M	5.230376G	5.249551G	Inf	2

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

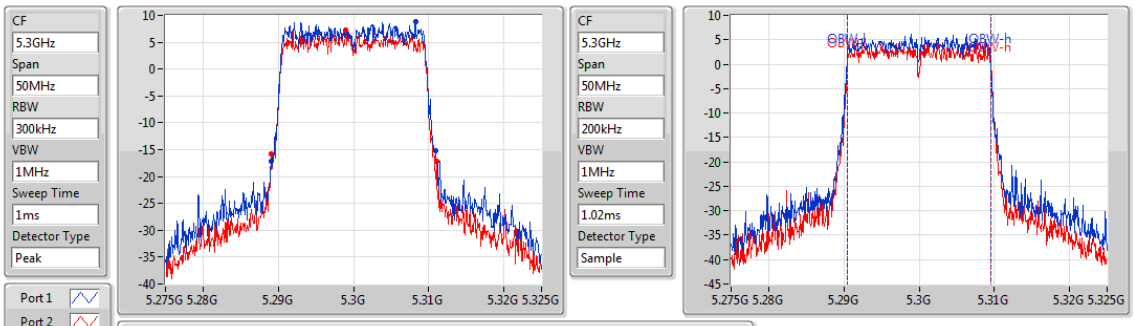
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.594M	5.249203G	5.270797G	19.103M	5.250376G	5.269479G	Inf	1
21.449M	5.249348G	5.270797G	19.103M	5.250376G	5.269479G	Inf	2

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

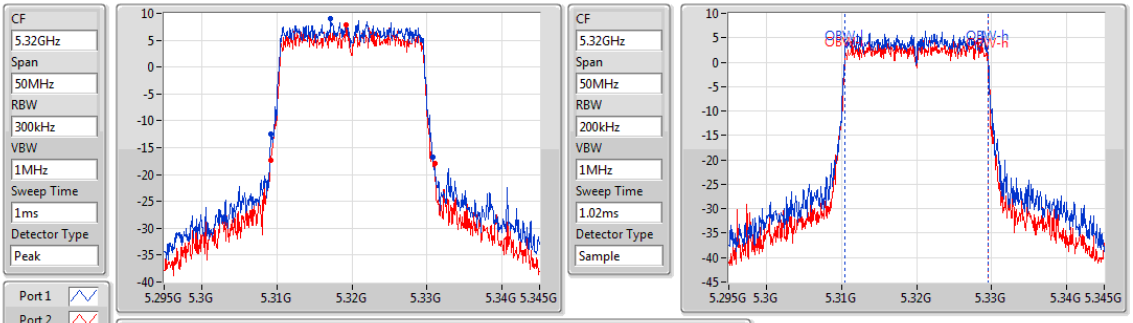
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.739M	5.28913G	5.31087G	19.03M	5.290449G	5.309479G	Inf	1
21.957M	5.289058G	5.311014G	19.103M	5.290449G	5.309551G	Inf	2

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

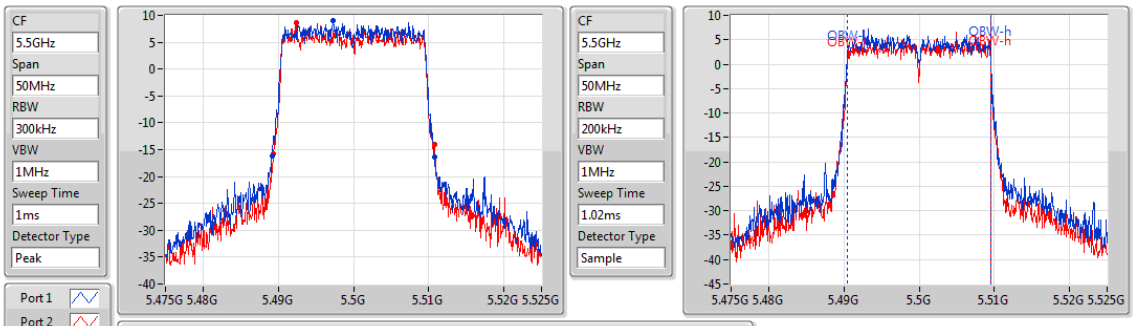
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.594M	5.309203G	5.330797G	19.103M	5.310449G	5.329551G	Inf	1
21.812M	5.309203G	5.331014G	19.03M	5.310449G	5.329479G	Inf	2

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

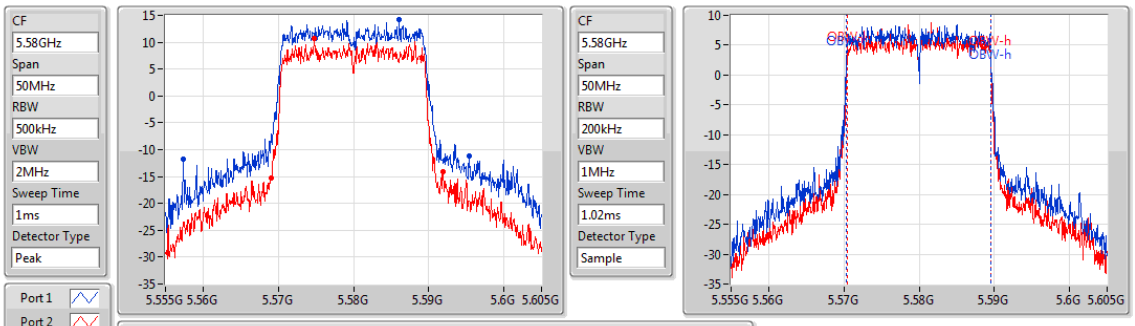
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.522M	5.489203G	5.510725G	19.03M	5.490449G	5.509479G	Inf	1
21.449M	5.489348G	5.510797G	19.03M	5.490449G	5.509479G	Inf	2

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

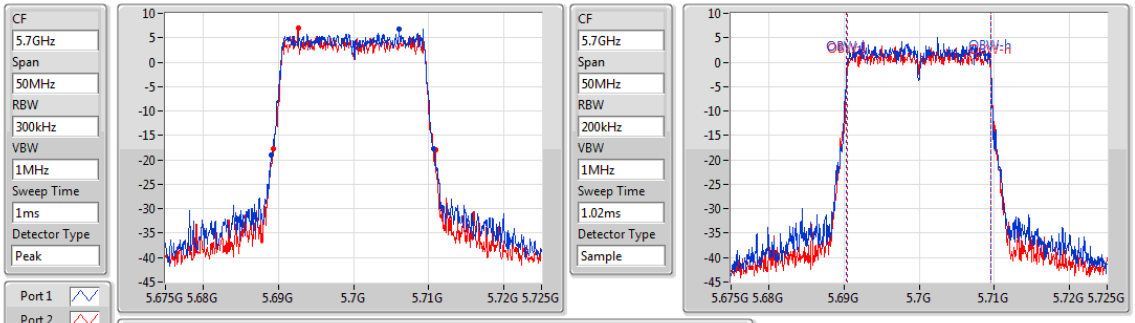
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.043M	5.557319G	5.595362G	19.175M	5.570376G	5.589551G	Inf	1
22.754M	5.56913G	5.591884G	19.103M	5.570449G	5.589551G	Inf	2

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

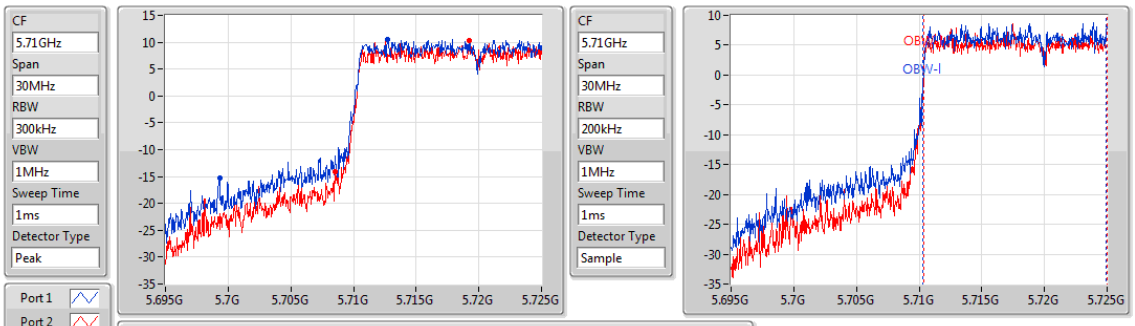
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.522M	5.68913G	5.710652G	19.103M	5.690376G	5.709479G	Inf	1
21.522M	5.689348G	5.71087G	19.03M	5.690449G	5.709479G	Inf	2

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

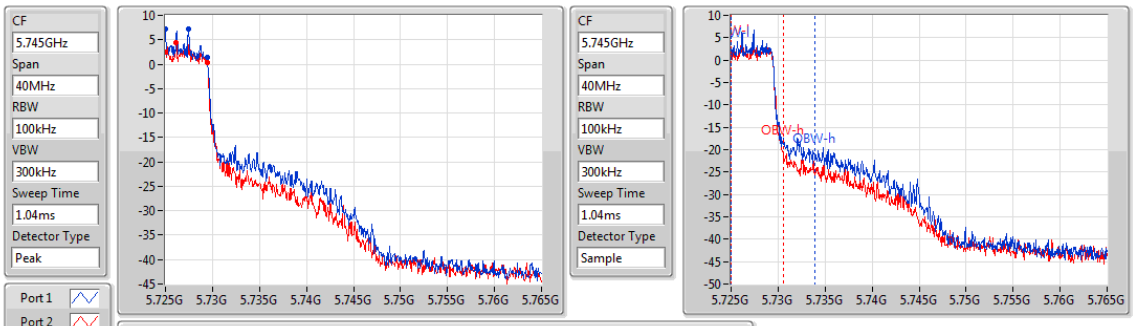
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.696M	5.699304G	5.725G	14.631M	5.710304G	5.724935G	Inf	1
16.478M	5.708522G	5.725G	14.588M	5.710391G	5.724978G	Inf	2

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

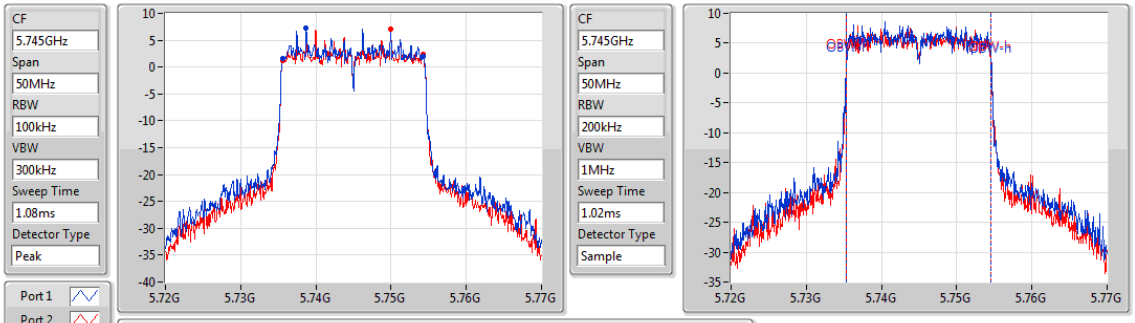
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.406M	5.725G	5.729406G	8.915M	5.725029G	5.733944G	500k	1
4.464M	5.725G	5.729464G	5.499M	5.725029G	5.730528G	500k	2

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

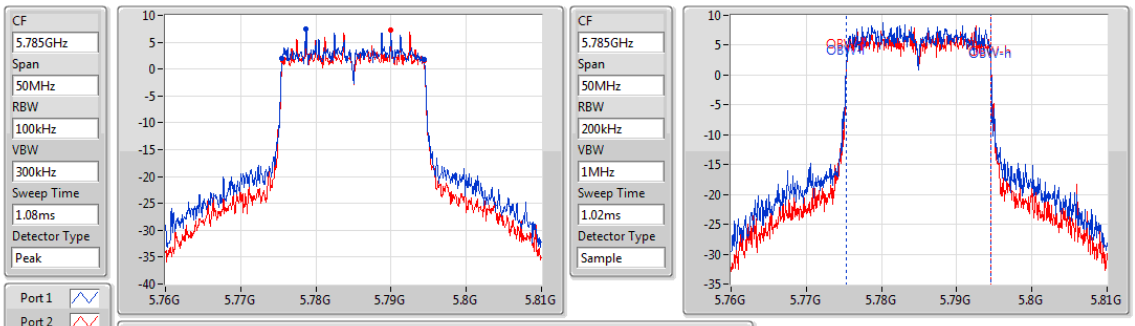
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.696M	5.73558G	5.754275G	19.175M	5.735376G	5.754551G	500k	1
18.696M	5.73558G	5.754275G	19.175M	5.735376G	5.754551G	500k	2

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

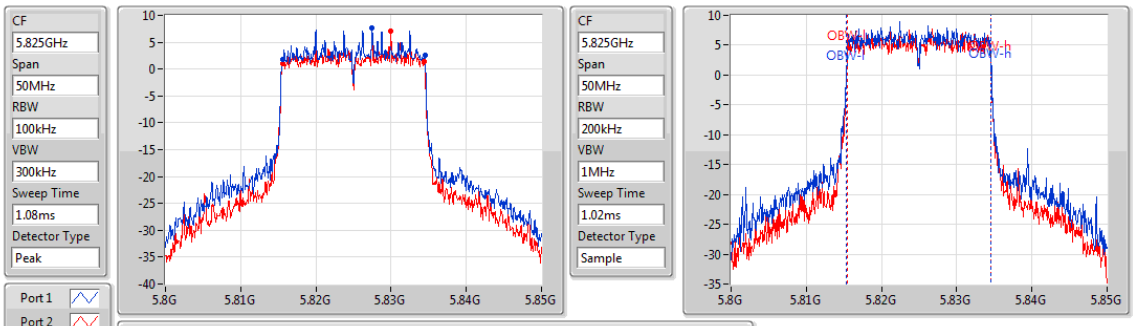
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.841M	5.775507G	5.794348G	19.247M	5.775304G	5.794551G	500k	1
18.696M	5.775652G	5.794348G	19.175M	5.775376G	5.794551G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

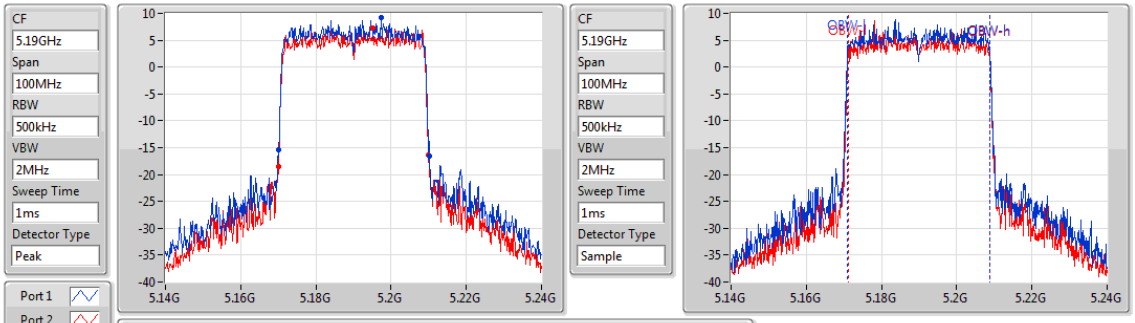
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.841M	5.815652G	5.834493G	19.175M	5.815376G	5.834551G	500k	1
18.841M	5.81558G	5.83442G	19.103M	5.815449G	5.834551G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

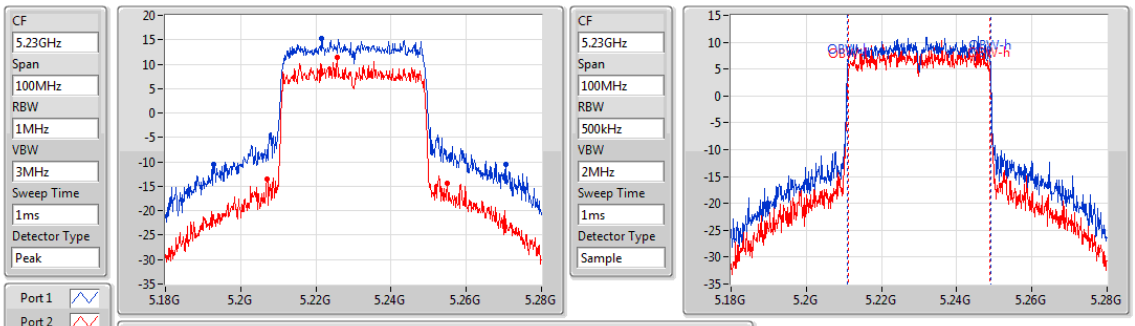
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.29M	5.17G	5.21029G	37.627M	5.171042G	5.208669G	Inf	1
40M	5.17G	5.21G	37.627M	5.171187G	5.208813G	Inf	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

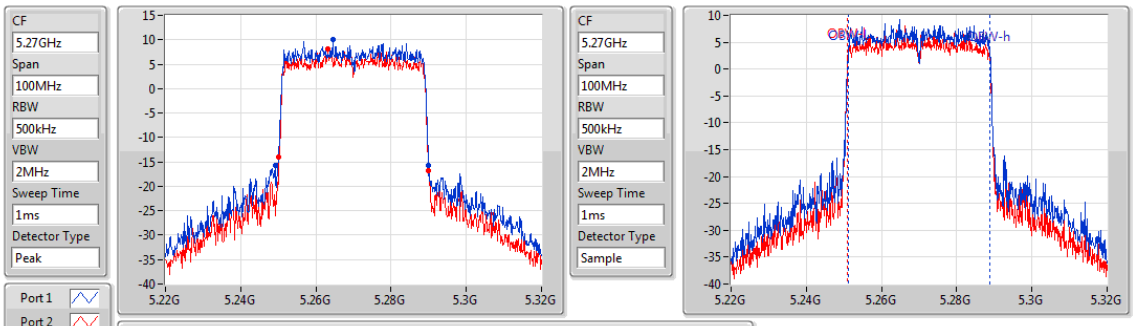
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
77.536M	5.192899G	5.270435G	37.916M	5.211042G	5.248958G	Inf	1
47.971M	5.206957G	5.254928G	37.627M	5.211187G	5.248813G	Inf	2

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

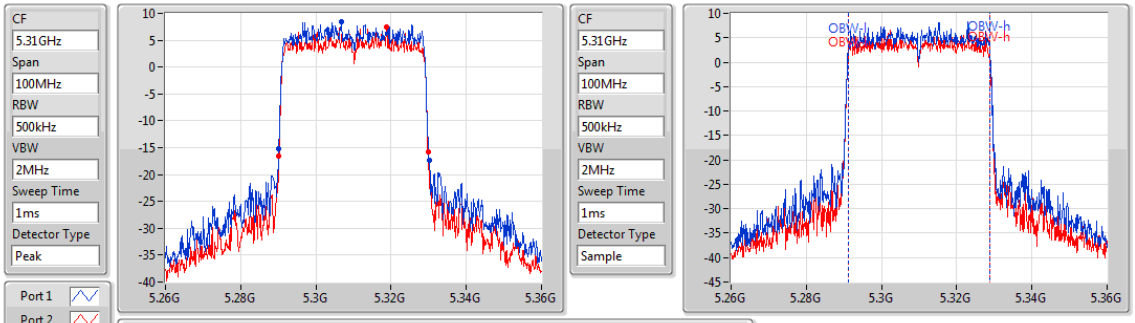
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.725M	5.24913G	5.289855G	37.627M	5.251187G	5.288813G	Inf	1
39.855M	5.250145G	5.29G	37.771M	5.251042G	5.288813G	Inf	2

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

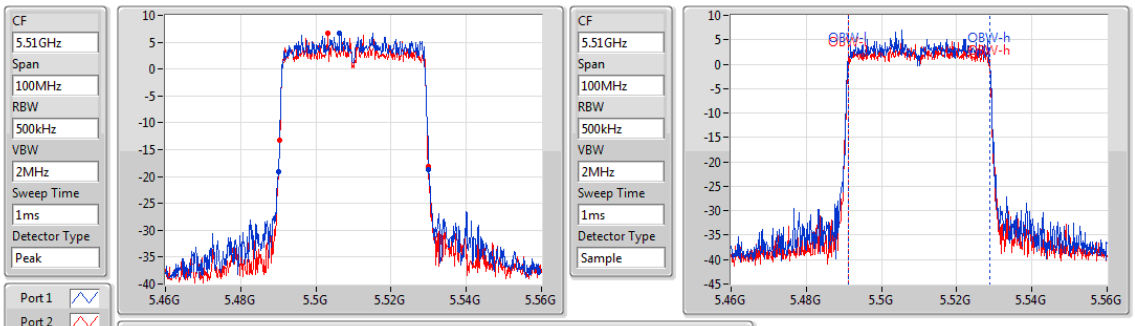
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.145M	5.290145G	5.33029G	37.482M	5.291187G	5.328669G	Inf	1
39.71M	5.290145G	5.329855G	37.627M	5.291187G	5.328813G	Inf	2

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

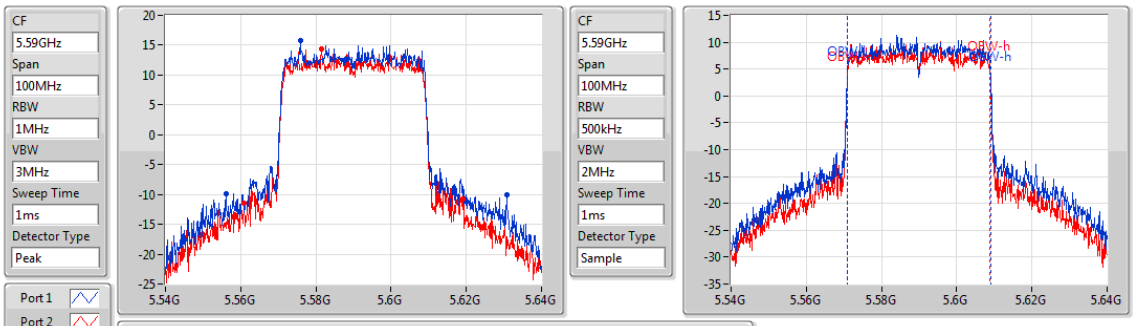
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40M	5.49G	5.53G	37.482M	5.491187G	5.528669G	Inf	1
39.71M	5.49029G	5.53G	37.482M	5.491187G	5.528669G	Inf	2

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

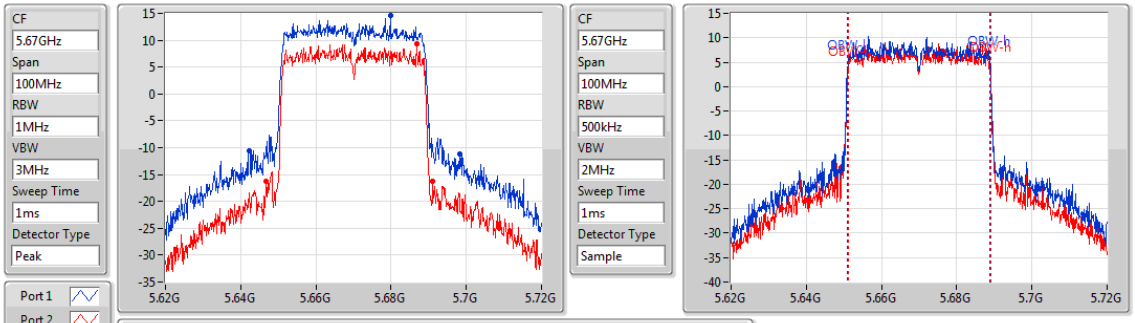
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
74.638M	5.556087G	5.630725G	37.916M	5.571042G	5.608958G	Inf	1
58.116M	5.561014G	5.61913G	37.771M	5.571042G	5.608813G	Inf	2

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

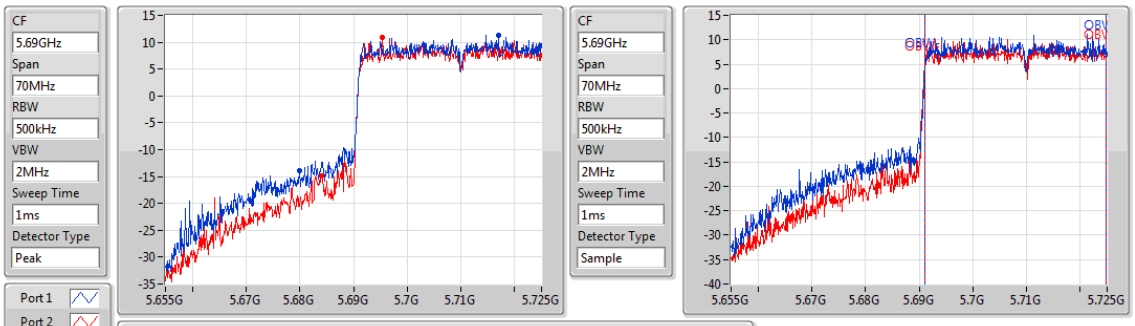
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
56.087M	5.642174G	5.698261G	37.771M	5.651042G	5.688813G	Inf	1
44.348M	5.646812G	5.691159G	37.771M	5.651187G	5.688958G	Inf	2

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

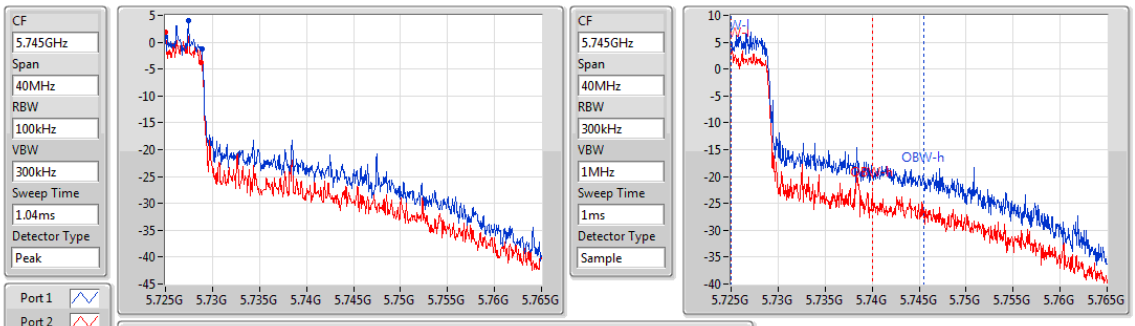
5710MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
45.043M	5.679957G	5.725G	33.835M	5.691013G	5.724848G	Inf	1
40.986M	5.684014G	5.725G	33.734M	5.691114G	5.724848G	Inf	2

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

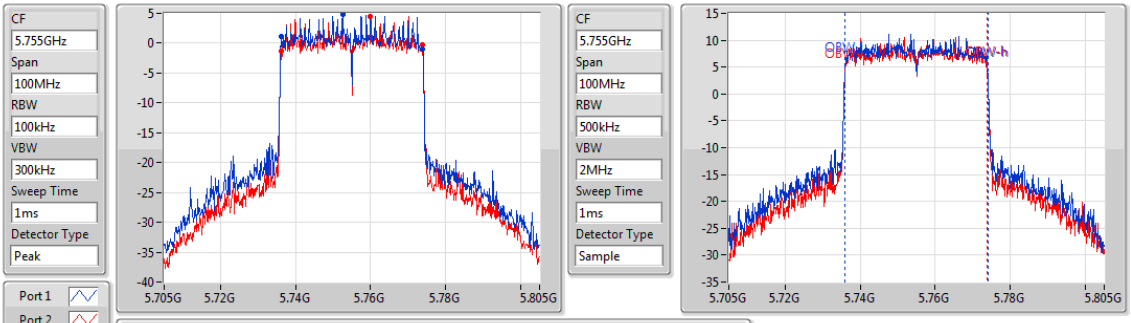
5710MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.884M	5.725G	5.728884G	20.434M	5.725029G	5.745463G	500k	1
3.826M	5.725G	5.728826G	15.051M	5.725029G	5.74008G	500k	2

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

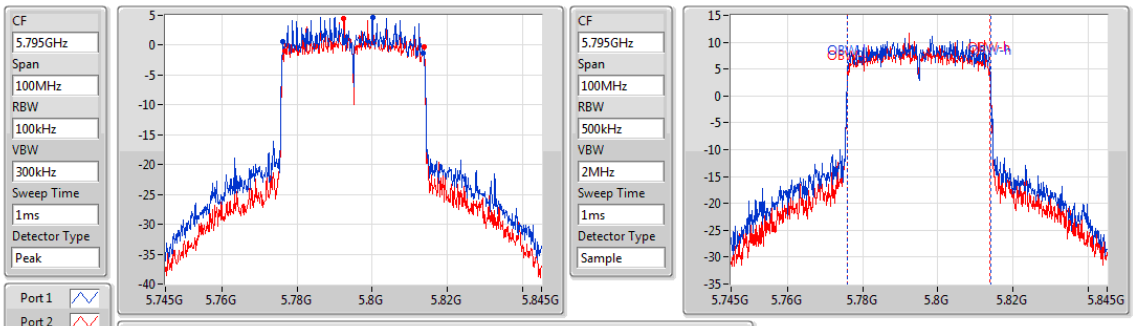
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.681M	5.736159G	5.773841G	37.916M	5.736042G	5.773958G	500k	1
37.536M	5.736304G	5.773841G	37.771M	5.736042G	5.773813G	500k	2

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

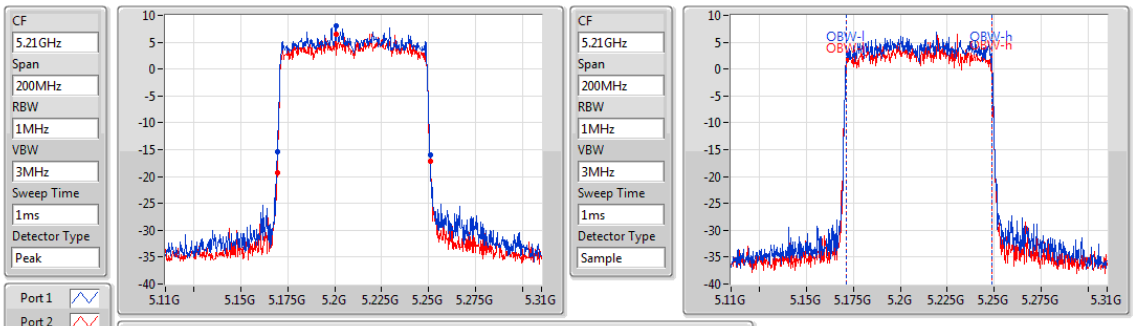
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.246M	5.776159G	5.813406G	37.916M	5.776042G	5.813958G	500k	1
37.101M	5.776739G	5.813841G	37.771M	5.776042G	5.813813G	500k	2

802.11ax HEW80_Nss1,(MCS0)_2TX EBW

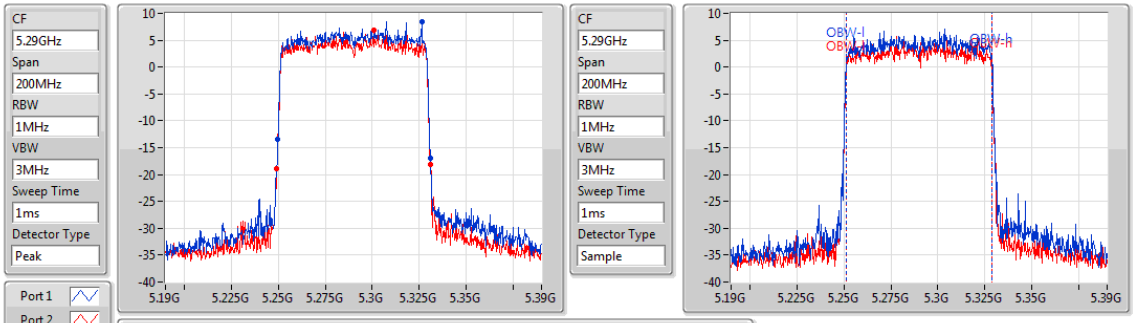
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.449M	5.16942G	5.25087G	77.279M	5.171216G	5.248495G	Inf	1
81.449M	5.16942G	5.25087G	77.279M	5.171216G	5.248495G	Inf	2

802.11ax HEW80_Nss1,(MCS0)_2TX EBW

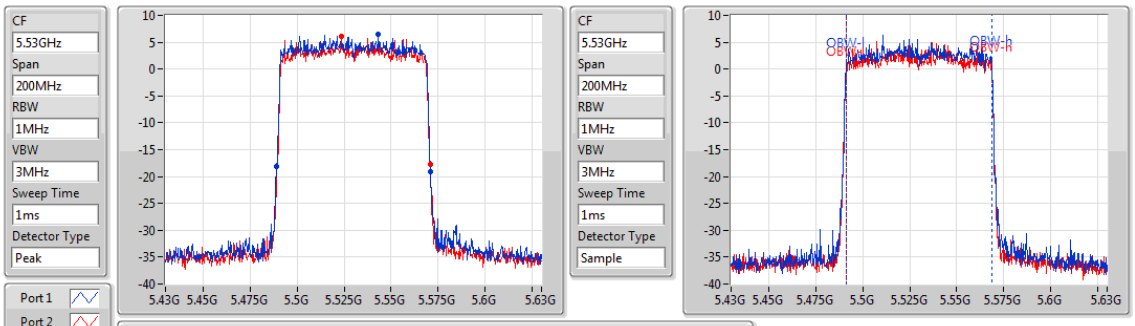
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.159M	5.24971G	5.33087G	76.99M	5.251505G	5.328495G	Inf	1
82.029M	5.24913G	5.331159G	76.99M	5.251505G	5.328495G	Inf	2

802.11ax HEW80_Nss1,(MCS0)_2TX EBW

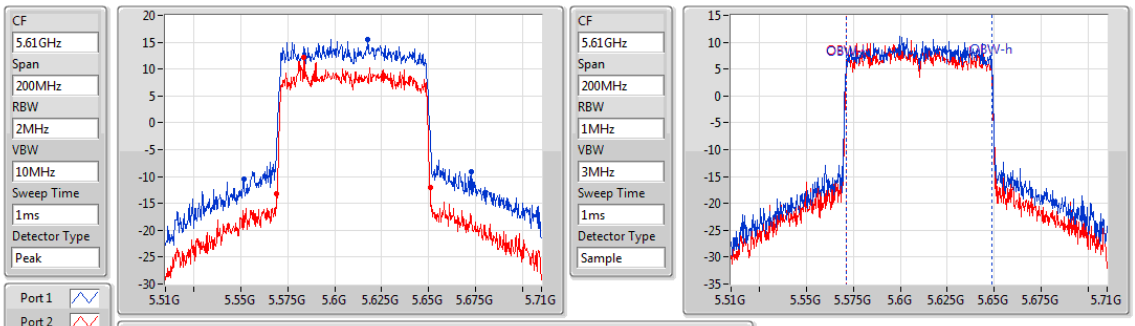
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.48913G	5.571159G	76.99M	5.491505G	5.568495G	Inf	1
81.739M	5.48913G	5.57087G	76.99M	5.491505G	5.568495G	Inf	2

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

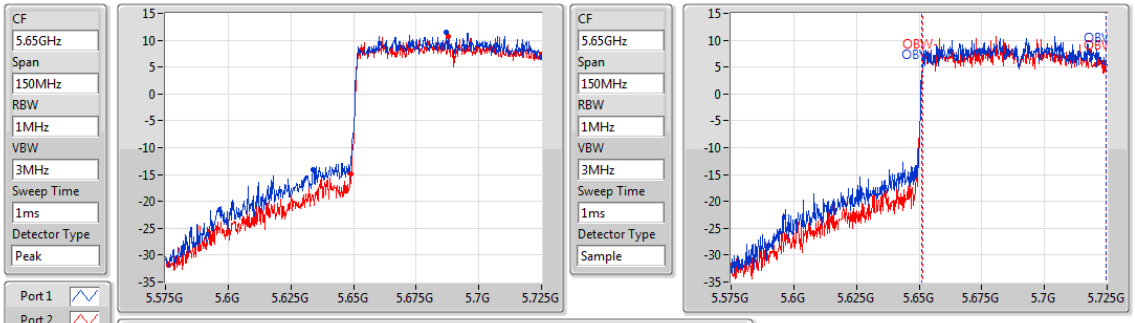
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
121.159M	5.551739G	5.672899G	77.569M	5.571216G	5.648784G	Inf	1
81.739M	5.56913G	5.65087G	77.279M	5.571216G	5.648495G	Inf	2

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

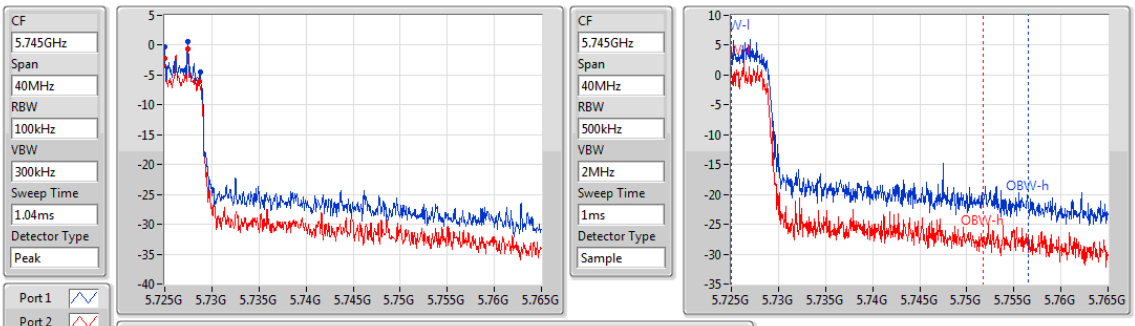
5690MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
91.087M	5.633913G	5.725G	73.372M	5.651085G	5.724457G	Inf	1
76.087M	5.648913G	5.725G	73.155M	5.651302G	5.724457G	Inf	2

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

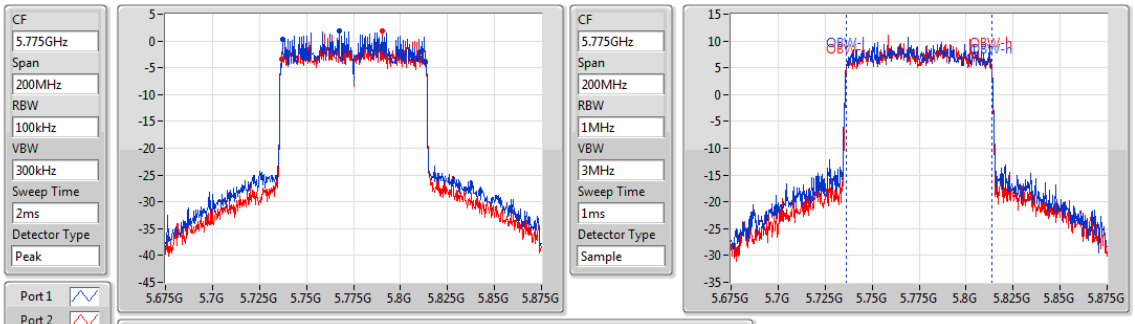
5690MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.768M	5.725G	5.728768G	31.491M	5.725029G	5.75652G	500k	1
3.71M	5.725G	5.72871G	26.744M	5.725029G	5.751773G	500k	2

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

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.652M	5.737319G	5.812971G	77.569M	5.736216G	5.813784G	500k	1
76.232M	5.737029G	5.813261G	77.279M	5.736216G	5.813495G	500k	2

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

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

3.3.2 Test Procedures

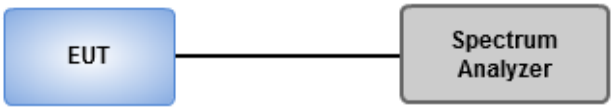
Method PM-G (Measurement using a gated RF average power meter)

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	24~25°C / 65~66%	Tested By	Aska Huang

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	21.76	0.14997	24.96	0.31333
802.11ax HEW20_Nss1,(MCS0)_2TX	21.62	0.14521	24.82	0.30339
802.11ax HEW40_Nss1,(MCS0)_2TX	21.93	0.15596	25.13	0.32584
802.11ax HEW80_Nss1,(MCS0)_2TX	17.16	0.05200	20.36	0.10864
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.30	0.08511	22.90	0.19498
802.11ax HEW20_Nss1,(MCS0)_2TX	19.13	0.08185	22.73	0.18750
802.11ax HEW40_Nss1,(MCS0)_2TX	19.28	0.08472	22.88	0.19409
802.11ax HEW80_Nss1,(MCS0)_2TX	17.53	0.05662	21.13	0.12972
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	21.76	0.14997	26.26	0.42267
802.11ax HEW20_Nss1,(MCS0)_2TX	21.54	0.14256	26.04	0.40179
802.11ax HEW40_Nss1,(MCS0)_2TX	21.95	0.15668	26.45	0.44157
802.11ax HEW80_Nss1,(MCS0)_2TX	21.50	0.14125	26.00	0.39811
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	21.95	0.15668	26.55	0.45186
802.11ax HEW20_Nss1,(MCS0)_2TX	21.64	0.14588	26.24	0.42073
802.11ax HEW40_Nss1,(MCS0)_2TX	21.94	0.15631	26.54	0.45082
802.11ax HEW80_Nss1,(MCS0)_2TX	21.65	0.14622	26.25	0.42170

Result

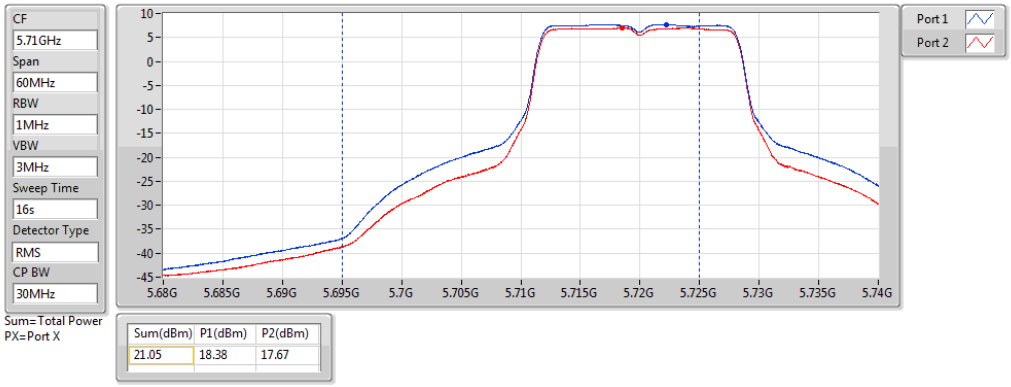
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.20	19.46	17.91	21.76	24.00	24.96	30.00
5200MHz	Pass	3.20	19.43	17.92	21.75	24.00	24.95	30.00
5240MHz	Pass	3.20	19.41	17.88	21.72	24.00	24.92	30.00
5260MHz	Pass	3.60	16.74	15.78	19.30	24.00	22.90	30.00
5300MHz	Pass	3.60	16.68	15.61	19.19	24.00	22.79	30.00
5320MHz	Pass	3.60	16.66	15.58	19.16	24.00	22.76	30.00
5500MHz	Pass	4.50	17.42	16.67	20.07	24.00	24.57	30.00
5580MHz	Pass	4.50	19.13	18.33	21.76	24.00	26.26	30.00
5700MHz	Pass	4.50	16.02	15.58	18.82	24.00	23.32	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.50	18.38	17.67	21.05	23.73	25.55	29.73
5720MHz Straddle 5.725-5.85GHz	Pass	4.60	12.31	11.50	14.93	30.00	19.53	36.00
5745MHz	Pass	4.60	18.82	18.35	21.60	30.00	26.20	36.00
5785MHz	Pass	4.60	19.16	18.71	21.95	30.00	26.55	36.00
5825MHz	Pass	4.60	19.12	18.67	21.91	30.00	26.51	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.20	19.26	17.85	21.62	24.00	24.82	30.00
5200MHz	Pass	3.20	19.28	17.67	21.56	24.00	24.76	30.00
5240MHz	Pass	3.20	19.32	17.77	21.62	24.00	24.82	30.00
5260MHz	Pass	3.60	16.7	15.45	19.13	24.00	22.73	30.00
5300MHz	Pass	3.60	16.61	15.51	19.11	24.00	22.71	30.00
5320MHz	Pass	3.60	16.49	15.53	19.05	24.00	22.65	30.00
5500MHz	Pass	4.50	16.65	16.05	19.37	24.00	23.87	30.00
5580MHz	Pass	4.50	18.96	18.06	21.54	24.00	26.04	30.00
5700MHz	Pass	4.50	14.22	13.73	16.99	24.00	21.49	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.50	17.92	17.20	20.59	23.17	25.09	29.17
5720MHz Straddle 5.725-5.85GHz	Pass	4.60	12.78	12.15	15.49	30.00	20.09	36.00
5745MHz	Pass	4.60	18.71	18.43	21.58	30.00	26.18	36.00
5785MHz	Pass	4.60	18.79	18.46	21.64	30.00	26.24	36.00
5825MHz	Pass	4.60	18.79	18.26	21.54	30.00	26.14	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.20	16.19	15.25	18.76	24.00	21.96	30.00
5230MHz	Pass	3.20	19.65	18.04	21.93	24.00	25.13	30.00
5270MHz	Pass	3.60	16.72	15.76	19.28	24.00	22.88	30.00
5310MHz	Pass	3.60	15.82	14.57	18.25	24.00	21.85	30.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5510MHz	Pass	4.50	14.15	13.33	16.77	24.00	21.27	30.00
5590MHz	Pass	4.50	19.41	18.41	21.95	24.00	26.45	30.00
5670MHz	Pass	4.50	18.39	17.62	21.03	24.00	25.53	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.50	18.97	18.03	21.54	24.00	26.04	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.60	9.09	8.17	11.66	30.00	16.26	36.00
5755MHz	Pass	4.60	19.03	18.83	21.94	30.00	26.54	36.00
5795MHz	Pass	4.60	18.93	18.69	21.82	30.00	26.42	36.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.20	14.63	13.62	17.16	24.00	20.36	30.00
5290MHz	Pass	3.60	15.01	13.97	17.53	24.00	21.13	30.00
5530MHz	Pass	4.50	13.74	13.08	16.43	24.00	20.93	30.00
5610MHz	Pass	4.50	18.91	18.02	21.50	24.00	26.00	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.50	18.85	17.98	21.45	24.00	25.95	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.60	5.05	4.00	7.57	30.00	12.17	36.00
5775MHz	Pass	4.60	19.08	18.14	21.65	30.00	26.25	36.00

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

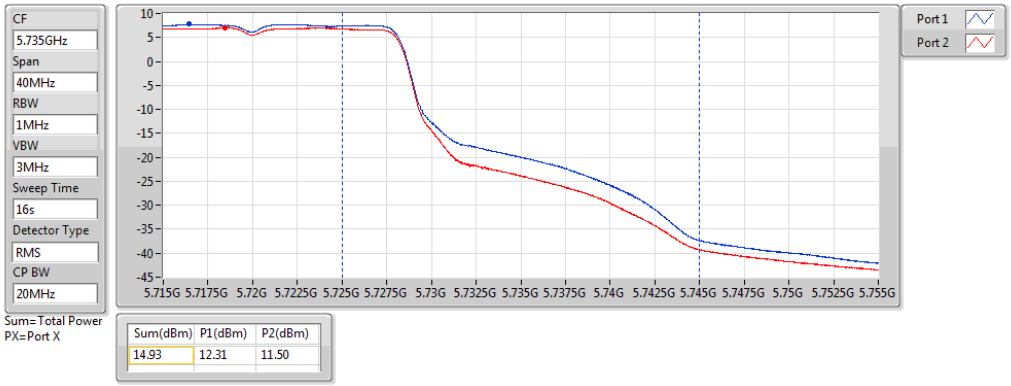
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



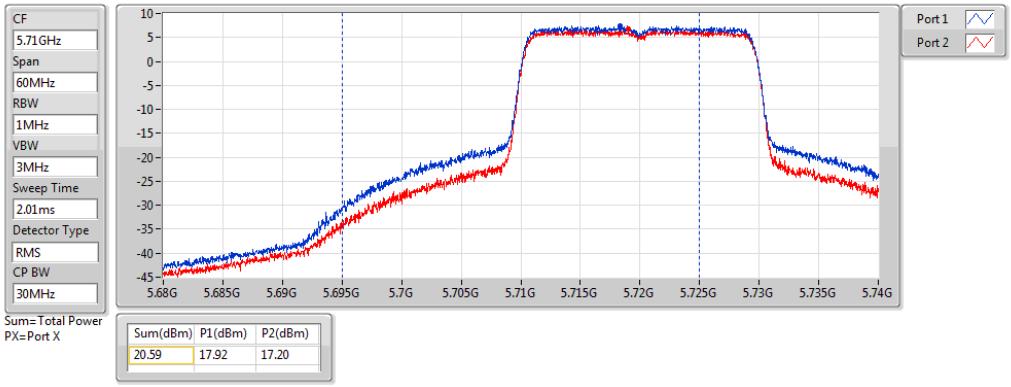
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



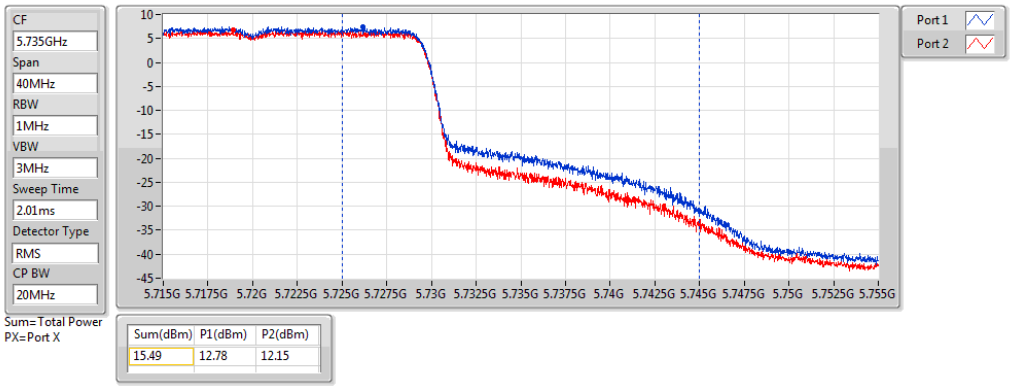
802.11ax HEW20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



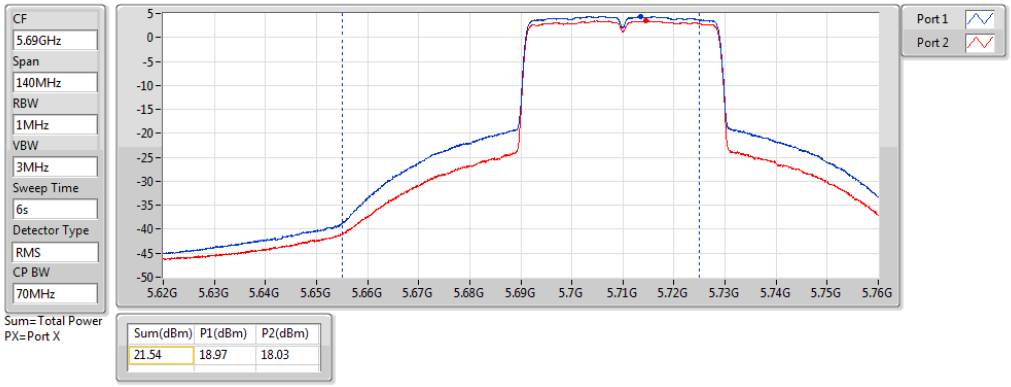
802.11ax HEW20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



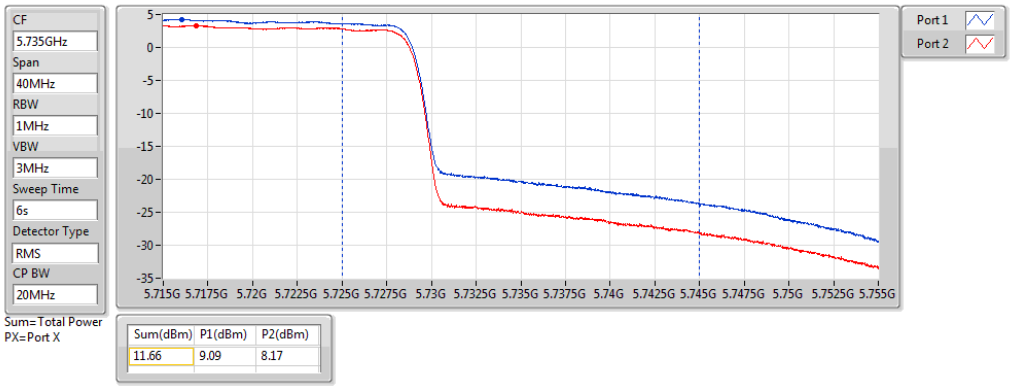
802.11ax HEW40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.47-5.725GHz



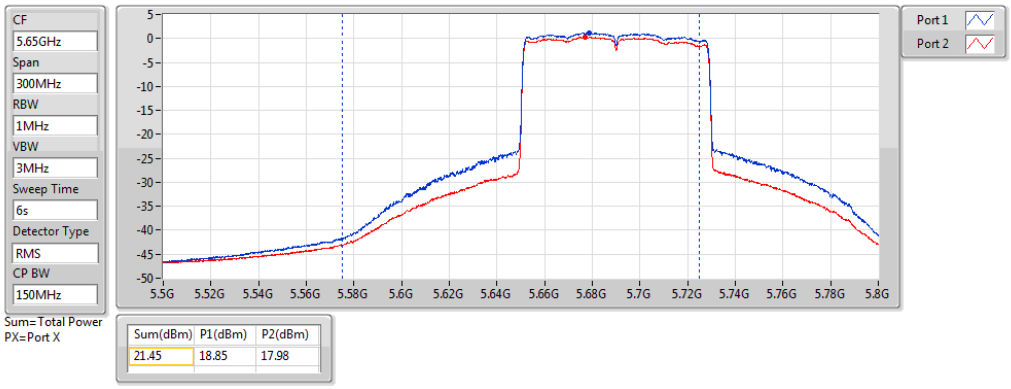
802.11ax HEW40_Nss1,(MCS0)_2TX **AV Power**

5710MHz Straddle 5.725-5.85GHz



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

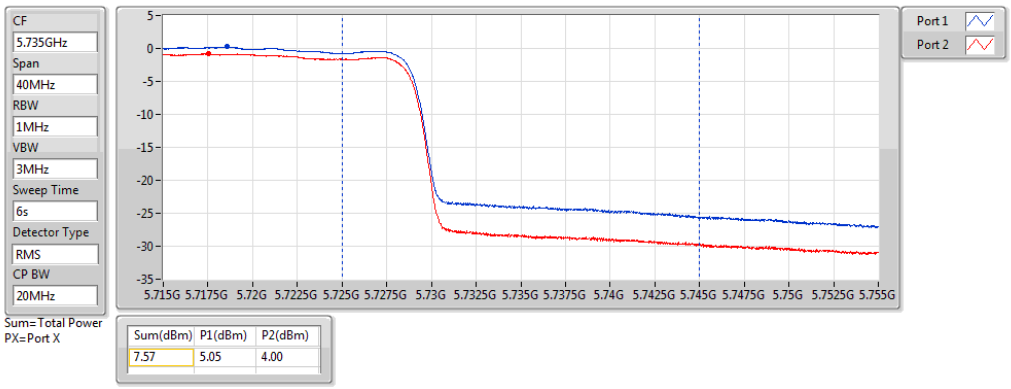
5690MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)
21.45	18.85	17.98

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

5690MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)
7.57	5.05	4.00

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.61	0.07261	24.72	0.29648
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	18.92	0.07798	25.03	0.31842
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	14.15	0.02600	20.26	0.10617
5.25-5.35GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.12	0.04093	22.48	0.17701
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	16.27	0.04236	22.63	0.18323
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	14.52	0.02831	20.88	0.12246
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.53	0.07129	25.99	0.39719
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	18.94	0.07834	26.40	0.43652
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	18.49	0.07063	25.95	0.39355
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.63	0.07295	26.09	0.40644
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	18.93	0.07816	26.39	0.43551
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	18.64	0.07311	26.10	0.40738

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.11	16.25	14.84	18.61	23.89	24.72	30.00
5200MHz	Pass	6.11	16.27	14.66	18.55	23.89	24.66	30.00
5240MHz	Pass	6.11	16.31	14.76	18.61	23.89	24.72	30.00
5260MHz	Pass	6.36	13.69	12.44	16.12	23.64	22.48	30.00
5300MHz	Pass	6.36	13.6	12.5	16.10	23.64	22.46	30.00
5320MHz	Pass	6.36	13.48	12.52	16.04	23.64	22.40	30.00
5500MHz	Pass	7.46	13.64	13.04	16.36	22.54	23.82	30.00
5580MHz	Pass	7.46	15.95	15.05	18.53	22.54	25.99	30.00
5700MHz	Pass	7.46	11.21	10.72	13.98	22.54	21.44	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.46	14.91	14.19	17.58	22.54	25.04	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.46	9.77	9.14	12.48	28.54	19.94	36.00
5745MHz	Pass	7.46	15.7	15.42	18.57	28.54	26.03	36.00
5785MHz	Pass	7.46	15.78	15.45	18.63	28.54	26.09	36.00
5825MHz	Pass	7.46	15.78	15.25	18.53	28.54	25.99	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.11	13.18	12.24	15.75	23.89	21.86	30.00
5230MHz	Pass	6.11	16.64	15.03	18.92	23.89	25.03	30.00
5270MHz	Pass	6.36	13.71	12.75	16.27	23.64	22.63	30.00
5310MHz	Pass	6.36	12.81	11.56	15.24	23.64	21.60	30.00
5510MHz	Pass	7.46	11.14	10.32	13.76	22.54	21.22	30.00
5590MHz	Pass	7.46	16.4	15.4	18.94	22.54	26.40	30.00
5670MHz	Pass	7.46	15.38	14.61	18.02	22.54	25.48	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.46	15.96	15.02	18.53	22.54	25.99	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.46	6.08	5.16	8.65	28.54	16.11	36.00
5755MHz	Pass	7.46	16.02	15.82	18.93	28.54	26.39	36.00
5795MHz	Pass	7.46	15.92	15.68	18.81	28.54	26.27	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.11	11.62	10.61	14.15	23.89	20.26	30.00
5290MHz	Pass	6.36	12	10.96	14.52	23.64	20.88	30.00
5530MHz	Pass	7.46	10.73	10.07	13.42	22.54	20.88	30.00
5610MHz	Pass	7.46	15.9	15.01	18.49	22.54	25.95	30.00

5690MHz Straddle 5.47-5.725GHz	Pass	7.46	15.84	14.97	18.44	22.54	25.90	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.46	2.04	0.99	4.56	28.54	12.02	36.00
5775MHz	Pass	7.46	16.07	15.13	18.64	28.54	26.10	36.00

Port X = Port X output power
DG = Directional Gain

Directional gain of 5150-5250MHz:
= 10 * log((10$^{3/20}$+10$^{3.2/20}$/2) = 6.11 dBi >6dBi, limit shall be reduced to 24 dBm – (6.11 dBi – 6 dBi) = 23.89 dBm

Directional gain of 5250-5350MHz:
= 10 * log((10$^{3.1/20}$+10$^{3.6/20}$/2) = 6.36 dBi >6dBi, limit shall be reduced to 24 dBm – (6.36 dBi – 6 dBi) = 23.64 dBm

Directional gain of 5470-5725MHz:
= 10 * log((10$^{4.4/20}$+10$^{4.5/20}$/2) = 7.46 dBi >6dBi, limit shall be reduced to 24 dBm – (7.46 dBi – 6 dBi) = 22.54 dBm

Directional gain of 5725-5850MHz:
= 10 * log((10$^{4.3/20}$+10$^{4.6/20}$/2) = 7.46 dBi >6dBi, limit shall be reduced to 30 dBm – (7.46 dBi – 6 dBi) = 28.54 dBm

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

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

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

3.4.2 Test Procedures

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

Duty cycle ≥ 98 %

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

Duty cycle < 98 %

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

For 5725 ~ 5850 MHz

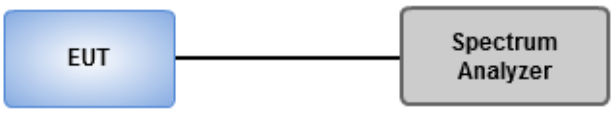
Duty cycle ≥ 98 %

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

Duty cycle < 98 %

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

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Ambient Condition	24~25°C / 65~66%	Tested By	Aska Huang

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	9.98	16.09
802.11ax HEW20_Nss1,(MCS0)_2TX	8.29	14.40
802.11ax HEW40_Nss1,(MCS0)_2TX	5.61	11.72
802.11ax HEW80_Nss1,(MCS0)_2TX	-1.97	4.14
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	7.37	13.73
802.11ax HEW20_Nss1,(MCS0)_2TX	5.81	12.17
802.11ax HEW40_Nss1,(MCS0)_2TX	3.1	9.46
802.11ax HEW80_Nss1,(MCS0)_2TX	-1.69	4.67
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	8.71	16.17
802.11ax HEW20_Nss1,(MCS0)_2TX	8.21	15.67
802.11ax HEW40_Nss1,(MCS0)_2TX	5.69	13.15
802.11ax HEW80_Nss1,(MCS0)_2TX	2.44	9.90
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	7.22	14.68
802.11ax HEW20_Nss1,(MCS0)_2TX	6.75	14.21
802.11ax HEW40_Nss1,(MCS0)_2TX	3.91	11.37
802.11ax HEW80_Nss1,(MCS0)_2TX	0.65	8.11

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.11	7.69	6.11	9.98	10.89	16.09	17.00
5200MHz	Pass	6.11	6.37	4.73	8.62	10.89	14.73	17.00
5240MHz	Pass	6.11	6.48	4.49	8.58	10.89	14.69	17.00
5260MHz	Pass	6.36	3.74	2.28	6.06	10.64	12.42	17.00
5300MHz	Pass	6.36	3.6	2.22	5.95	10.64	12.31	17.00
5320MHz	Pass	6.36	4.97	3.66	7.37	10.64	13.73	17.00
5500MHz	Pass	7.46	5.78	4.71	8.25	9.54	15.71	17.00
5580MHz	Pass	7.46	6.09	5.13	8.56	9.54	16.02	17.00
5700MHz	Pass	7.46	2.88	2.02	5.41	9.54	12.87	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.46	6.1	5.45	8.71	9.54	16.17	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.46	4.35	3.55	6.91	28.54	14.37	36.00
5745MHz	Pass	7.46	4.08	3.69	6.81	28.54	14.27	36.00
5785MHz	Pass	7.46	4.6	3.95	7.22	28.54	14.68	36.00
5825MHz	Pass	7.46	4.48	3.79	7.10	28.54	14.56	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.11	6.12	4.92	8.29	10.89	14.40	17.00
5200MHz	Pass	6.11	6.23	4.38	8.22	10.89	14.33	17.00
5240MHz	Pass	6.11	6.21	4.19	8.17	10.89	14.28	17.00
5260MHz	Pass	6.36	3.61	2.1	5.81	10.64	12.17	17.00
5300MHz	Pass	6.36	3.57	2.08	5.62	10.64	11.98	17.00
5320MHz	Pass	6.36	3.64	2.01	5.76	10.64	12.12	17.00
5500MHz	Pass	7.46	3.76	2.91	6.11	9.54	13.57	17.00
5580MHz	Pass	7.46	5.63	5.08	8.21	9.54	15.67	17.00
5700MHz	Pass	7.46	1.44	0.75	3.78	9.54	11.24	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.46	5.7	5.02	8.16	9.54	15.62	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.46	3.89	3.42	6.42	28.54	13.88	36.00
5745MHz	Pass	7.46	4.32	3.63	6.68	28.54	14.14	36.00
5785MHz	Pass	7.46	4.14	3.79	6.69	28.54	14.15	36.00
5825MHz	Pass	7.46	4.16	3.57	6.75	28.54	14.21	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.11	-0.06	-1.18	2.42	10.89	8.53	17.00
5230MHz	Pass	6.11	3.47	1.53	5.61	10.89	11.72	17.00
5270MHz	Pass	6.36	0.79	-0.65	3.10	10.64	9.46	17.00
5310MHz	Pass	6.36	-0.35	-1.88	1.93	10.64	8.29	17.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5510MHz	Pass	7.46	-2.26	-3.02	0.34	9.54	7.80	17.00
5590MHz	Pass	7.46	3.25	2.12	5.69	9.54	13.15	17.00
5670MHz	Pass	7.46	2	0.93	4.43	9.54	11.89	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.46	2.69	1.76	5.20	9.54	12.66	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.46	0.41	-0.31	3.08	28.54	10.54	36.00
5755MHz	Pass	7.46	1.23	0.66	3.90	28.54	11.36	36.00
5795MHz	Pass	7.46	1.25	0.58	3.91	28.54	11.37	36.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.11	-4.4	-5.64	-1.97	10.89	4.14	17.00
5290MHz	Pass	6.36	-4	-5.52	-1.69	10.64	4.67	17.00
5530MHz	Pass	7.46	-5.44	-6.28	-2.86	9.54	4.60	17.00
5610MHz	Pass	7.46	0.04	-1.17	2.44	9.54	9.90	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.46	-0.37	-1.35	2.15	9.54	9.61	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.46	-3.52	-4.39	-0.92	28.54	6.54	36.00
5775MHz	Pass	7.46	-2.02	-2.66	0.65	28.54	8.11	36.00

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

Directional gain of 5150-5250MHz:
= 10 * log((10$^{3/20}$+10$^{3.2/20}$/2) = 6.11 dBi >6dBi, limit shall be reduced to 11 dBm – (6.11 dBi – 6 dBi) = 10.89 dBm

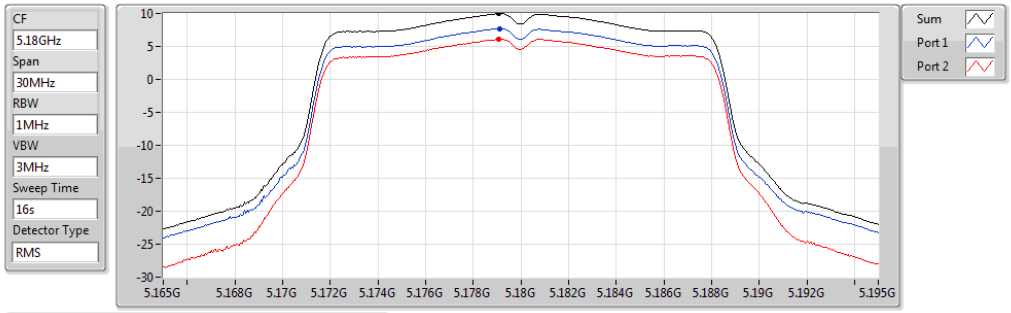
Directional gain of 5250-5350MHz:
= 10 * log((10$^{3.1/20}$+10$^{3.6/20}$/2) = 6.36 dBi >6dBi, limit shall be reduced to 11 dBm – (6.36 dBi – 6 dBi) = 10.64 dBm

Directional gain of 5470-5725MHz:
= 10 * log((10$^{4.4/20}$+10$^{4.5/20}$/2) = 7.46 dBi >6dBi, limit shall be reduced to 11 dBm – (7.46 dBi – 6 dBi) = 9.54 dBm

Directional gain of 5725-5850MHz:
= 10 * log((10$^{4.3/20}$+10$^{4.6/20}$/2) = 7.46 dBi >6dBi, limit shall be reduced to 30 dBm – (7.46 dBi – 6 dBi) = 28.54 dBm

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

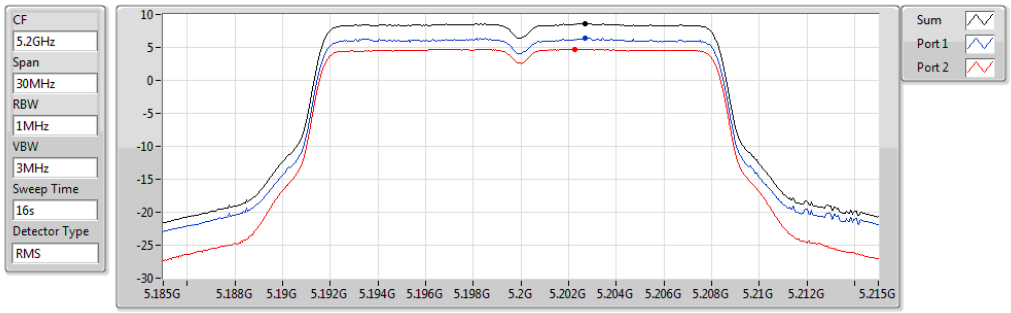
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.98	9.98	7.69	6.11

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

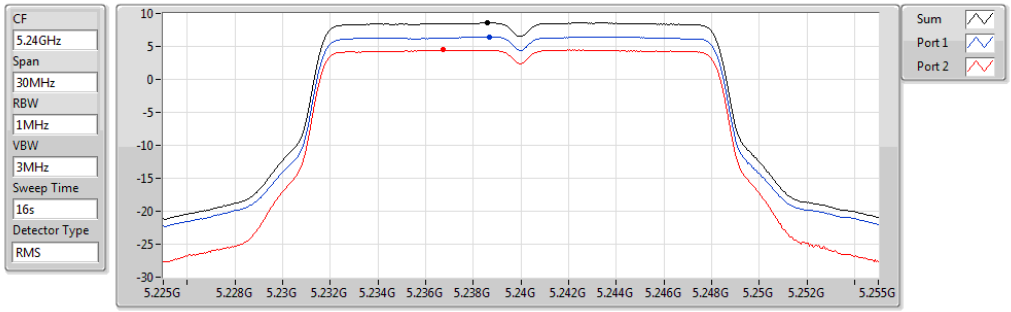
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.62	8.62	6.37	4.73

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

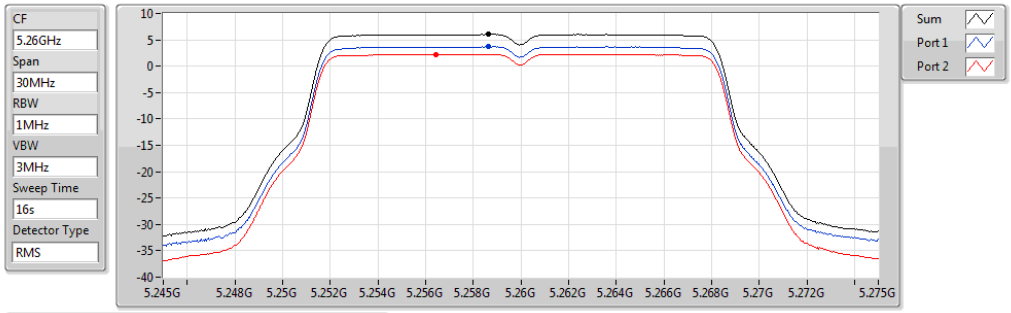
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.58	8.58	6.48	4.49

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

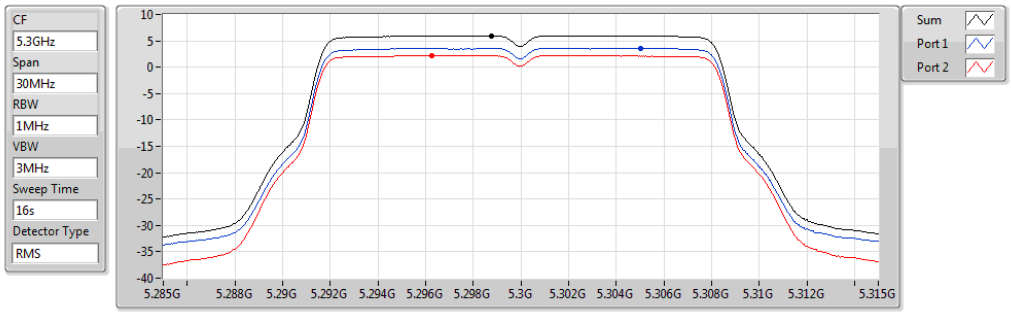
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.06	6.06	3.74	2.28

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

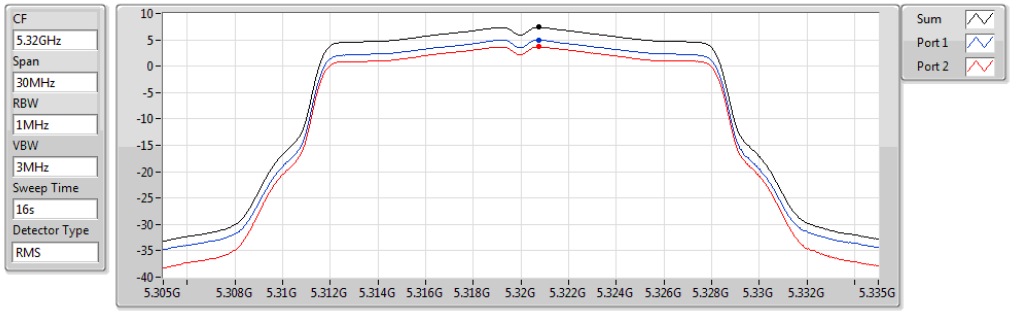
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.95	5.95	3.60	2.22

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

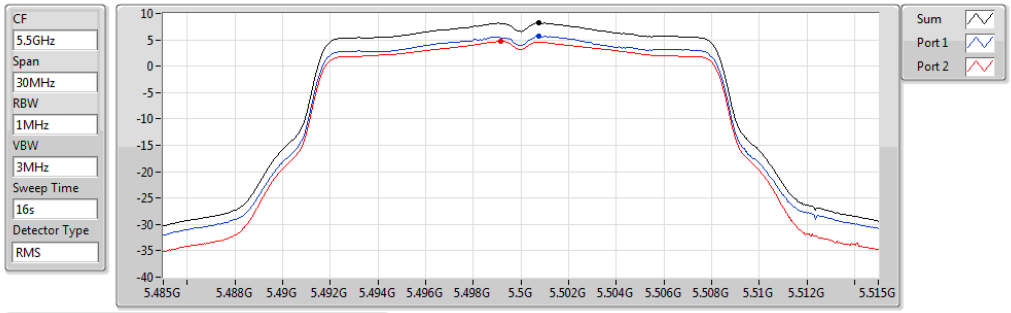
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.37	7.37	4.97	3.66

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

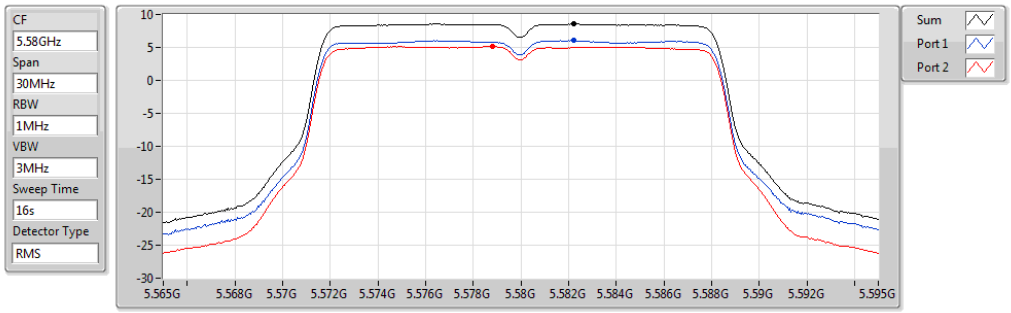
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.25	8.25	5.78	4.71

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

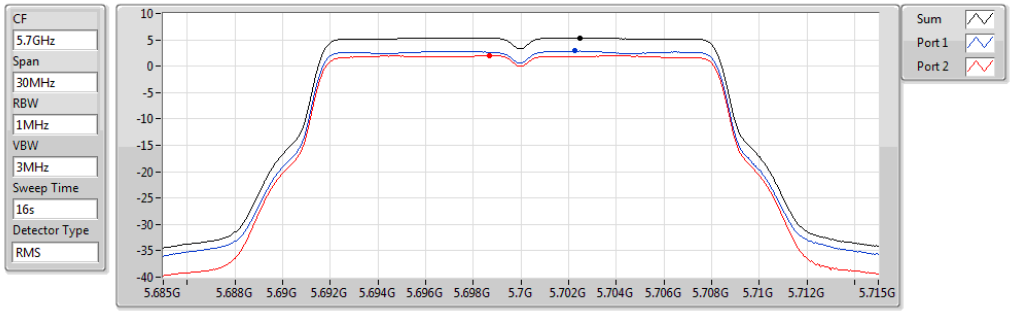
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.56	8.56	6.09	5.13

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

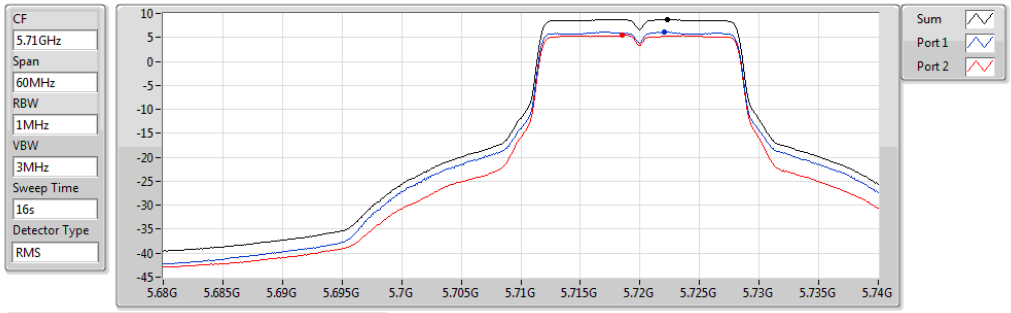
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.41	5.41	2.88	2.02

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

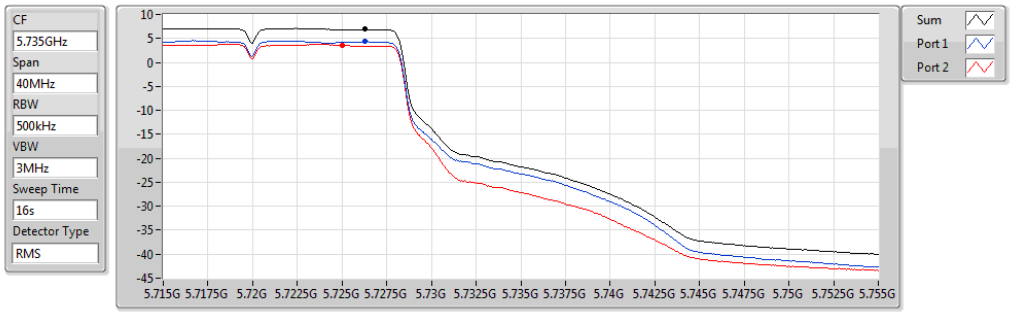
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.71	8.71	6.10	5.45

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

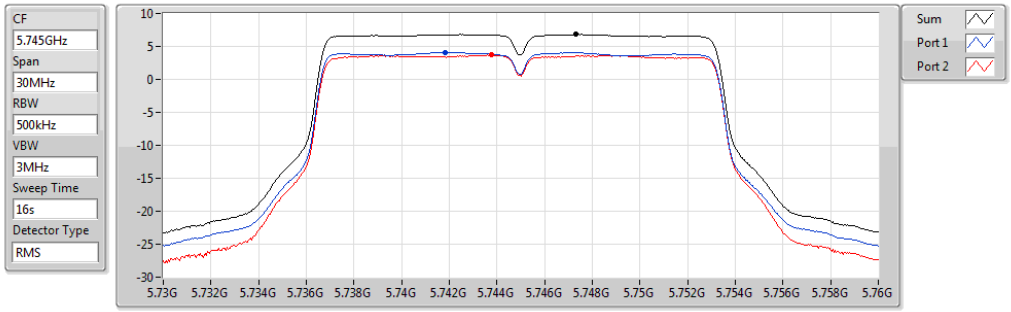
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.91	6.91	4.35	3.55

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

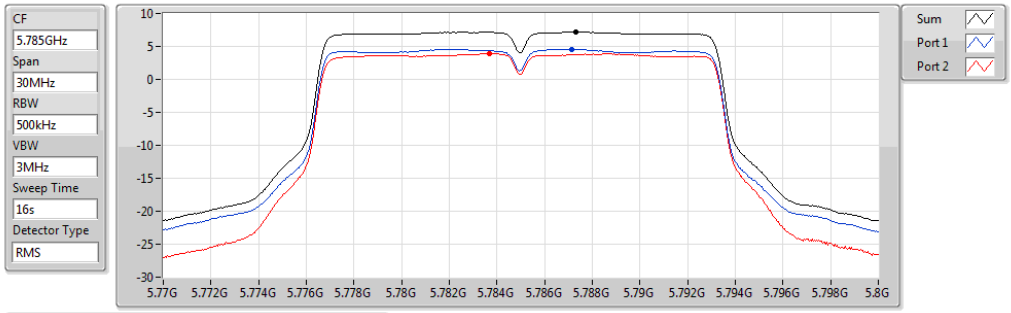
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.81	6.81	4.08	3.69

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

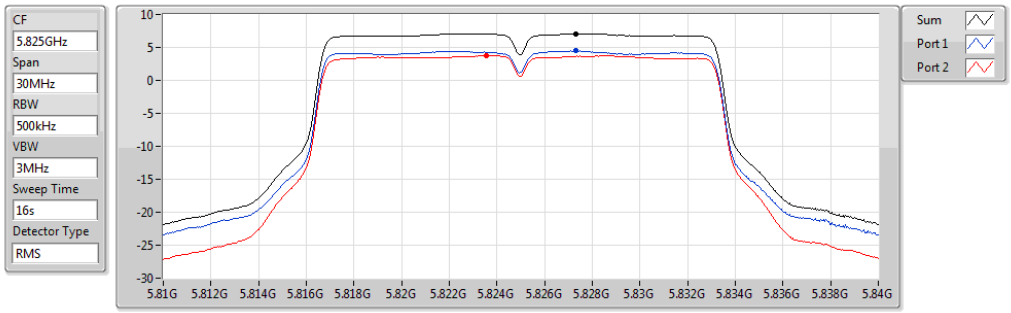
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.22	7.22	4.60	3.95

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

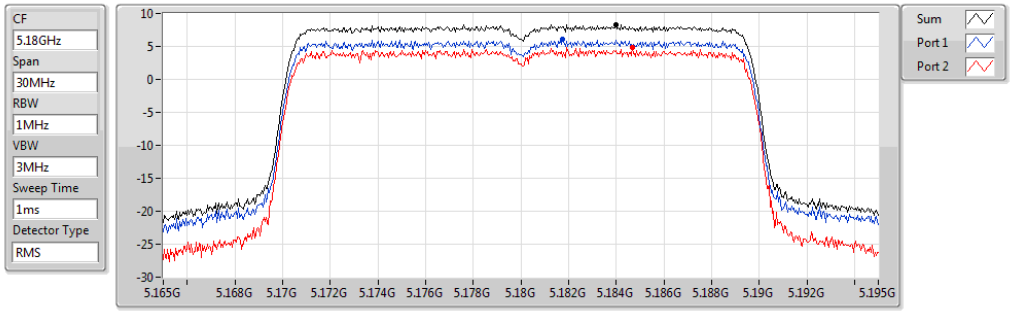
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.10	7.10	4.48	3.79

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

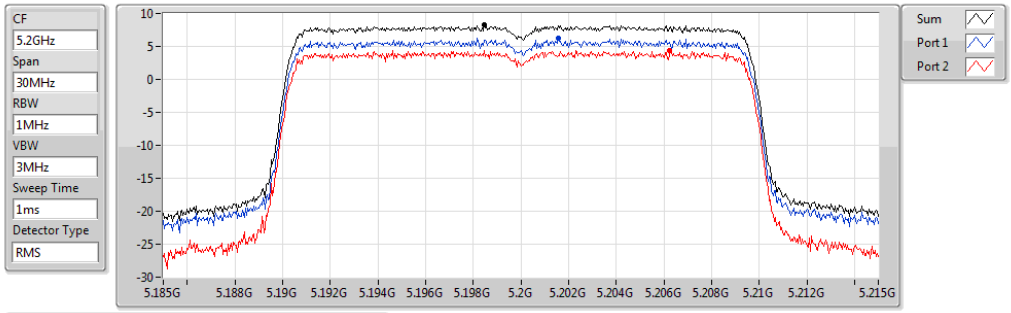
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.29	8.29	6.12	4.92

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

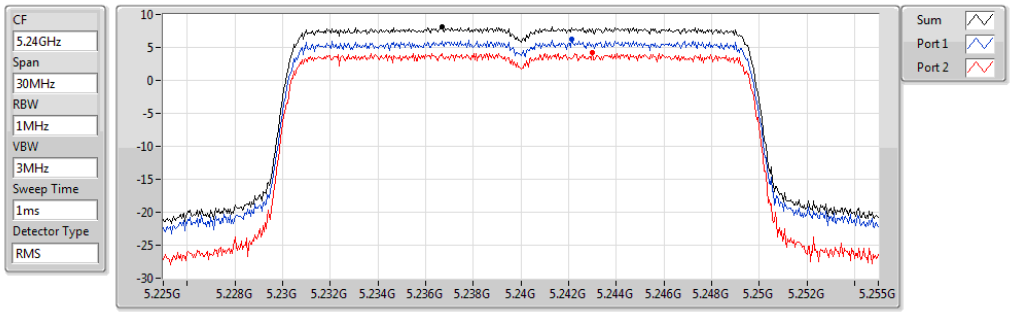
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.22	8.22	6.23	4.38

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

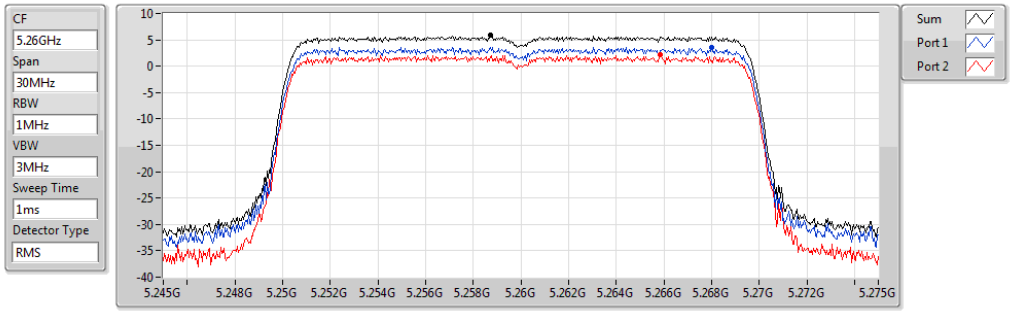
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.17	8.17	6.21	4.19

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

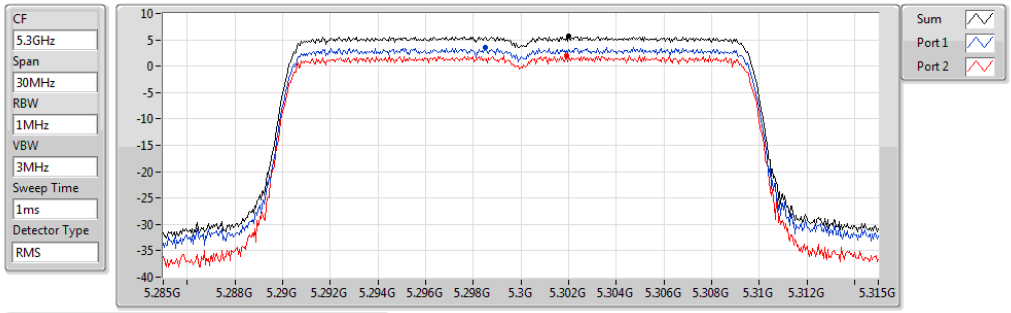
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.81	5.81	3.61	2.10

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

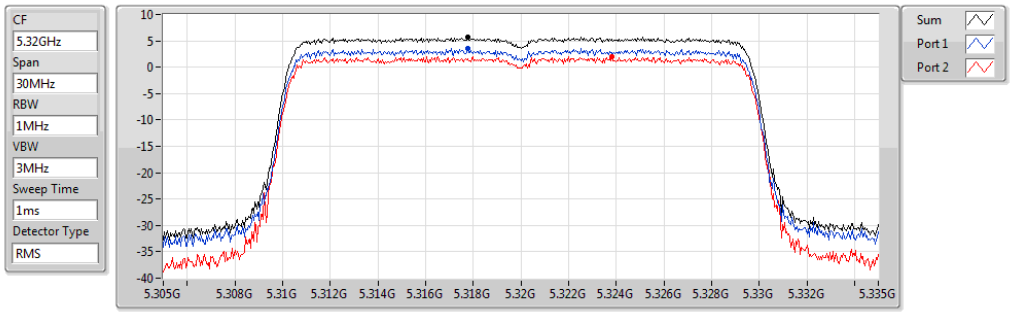
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.62	5.62	3.57	2.08

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

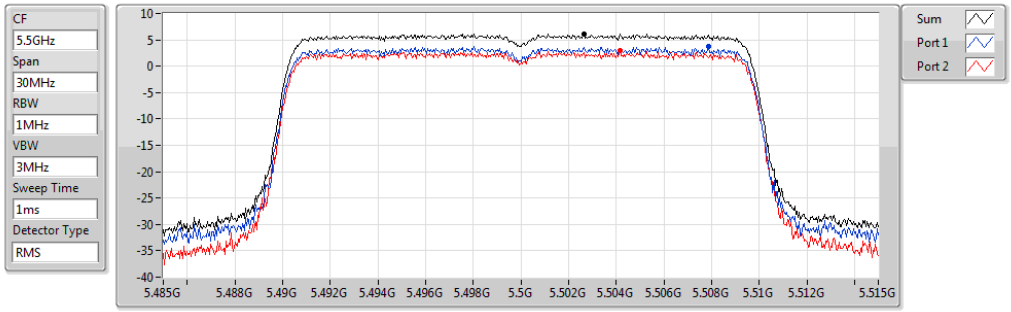
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.76	5.76	3.64	2.01

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

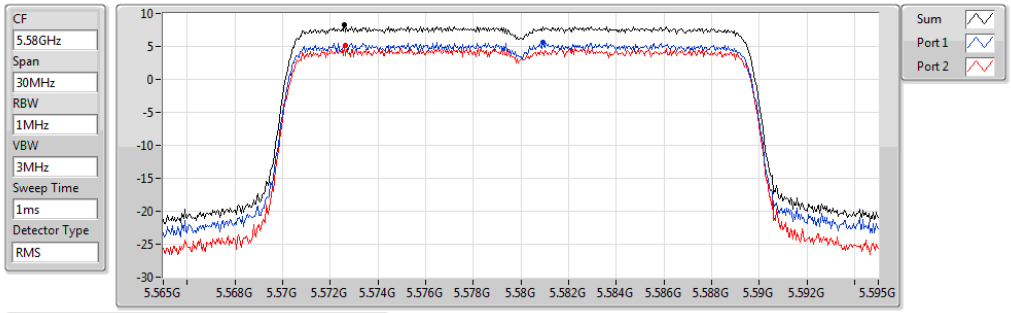
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.11	6.11	3.76	2.91

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

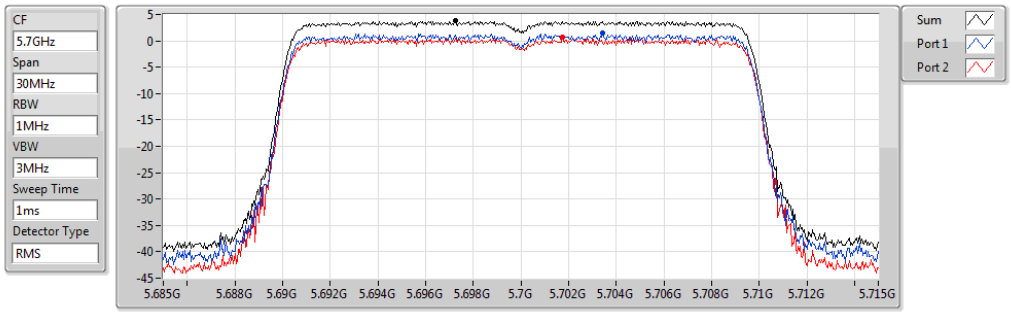
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.21	8.21	5.63	5.08

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

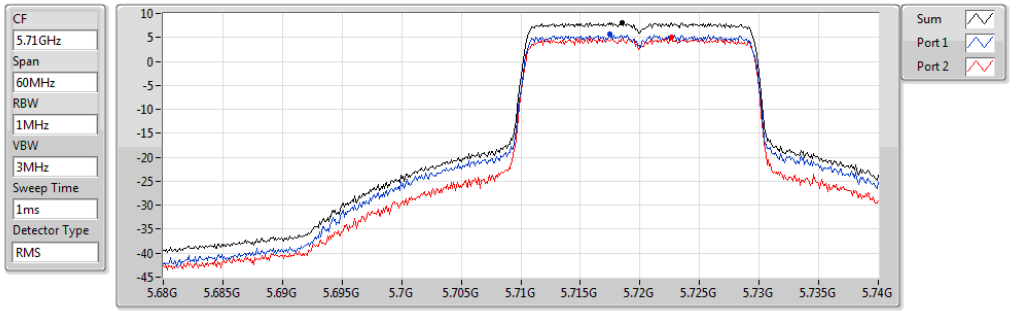
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.78	3.78	1.44	0.75

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

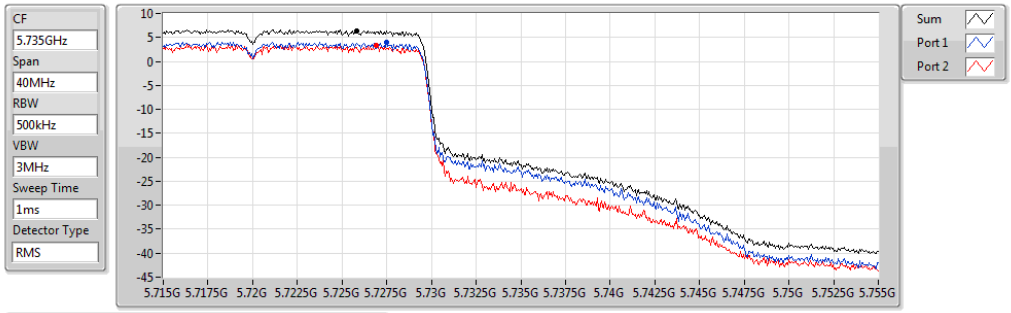
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.16	8.16	5.70	5.02

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

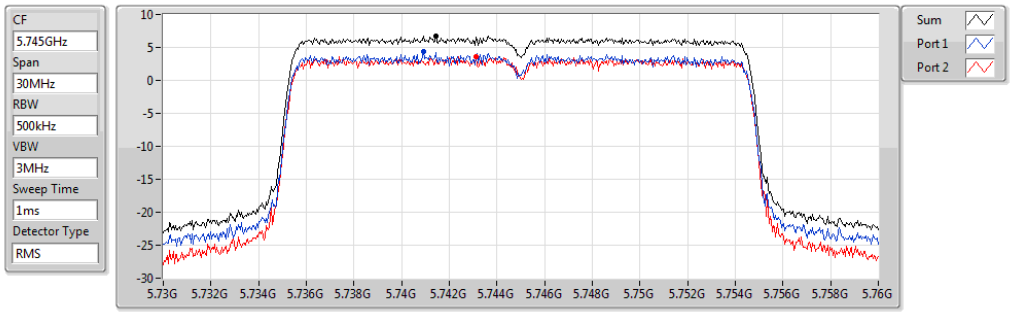
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.42	6.42	3.89	3.42

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

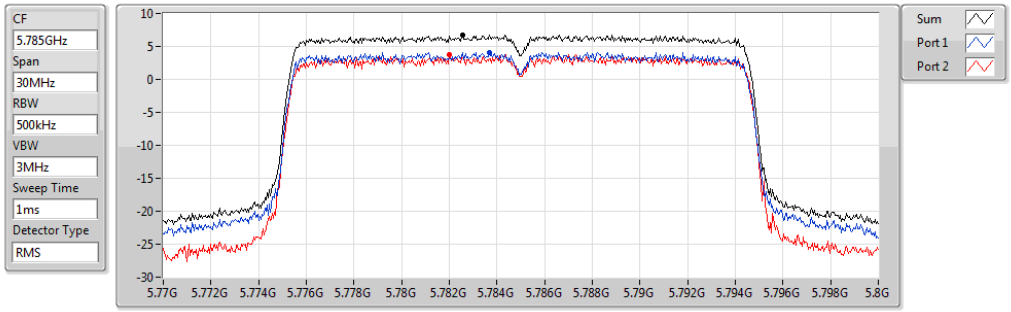
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.68	6.68	4.32	3.63

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

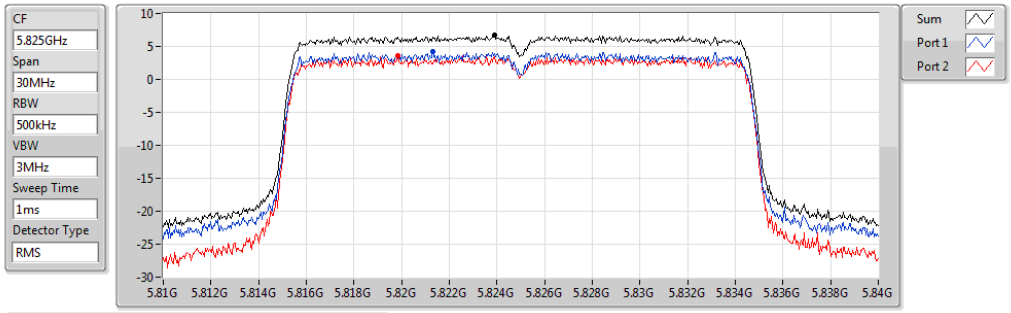
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.69	6.69	4.14	3.79

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

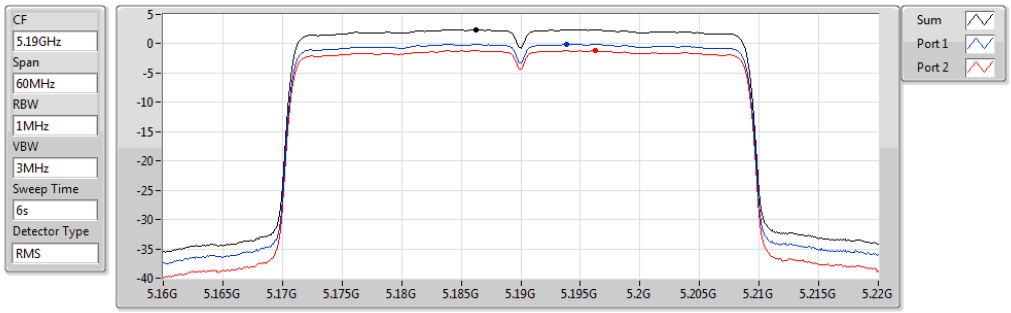
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.75	6.75	4.16	3.57

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

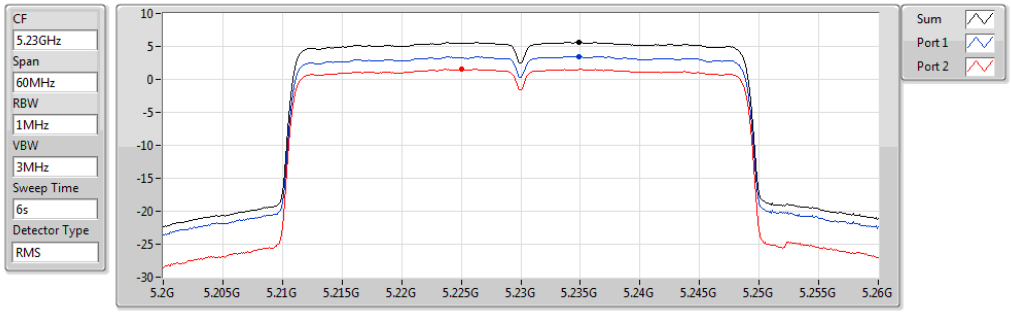
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.42	2.42	-0.06	-1.18

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

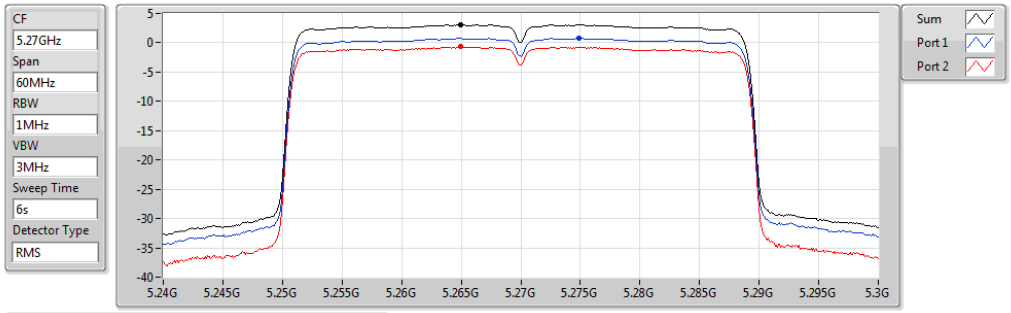
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.61	5.61	3.47	1.53

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

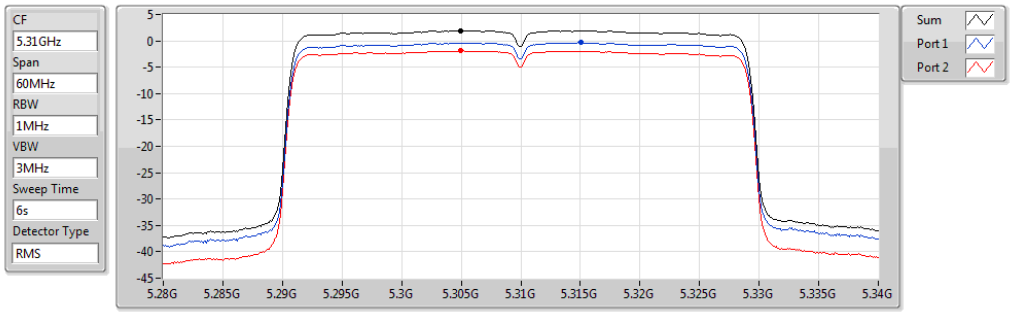
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.10	3.10	0.79	-0.65

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

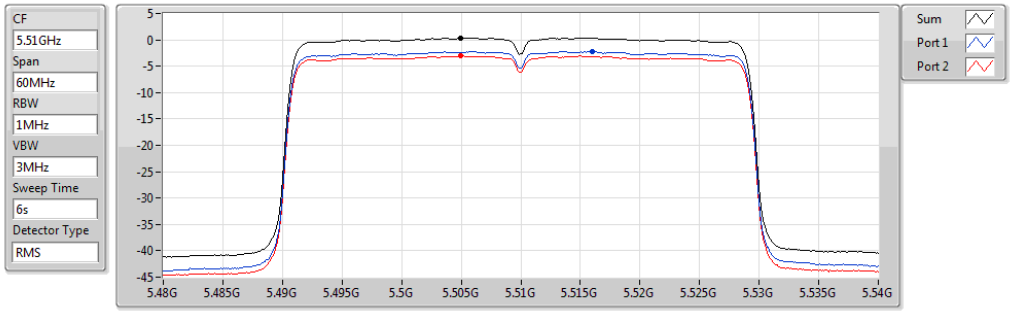
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.93	1.93	-0.35	-1.88

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

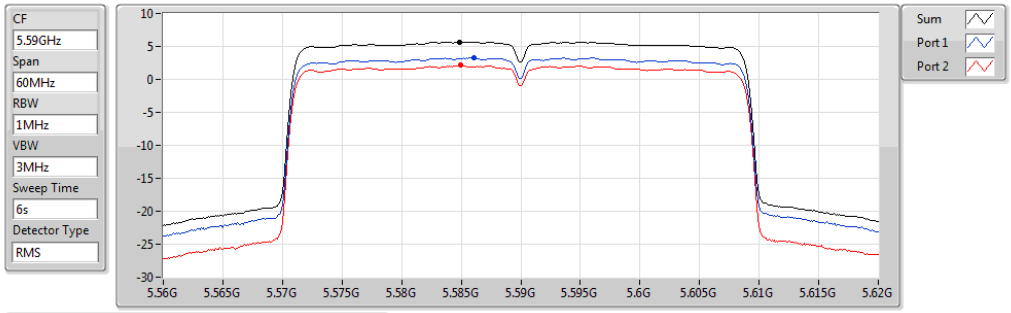
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.34	0.34	-2.26	-3.02

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

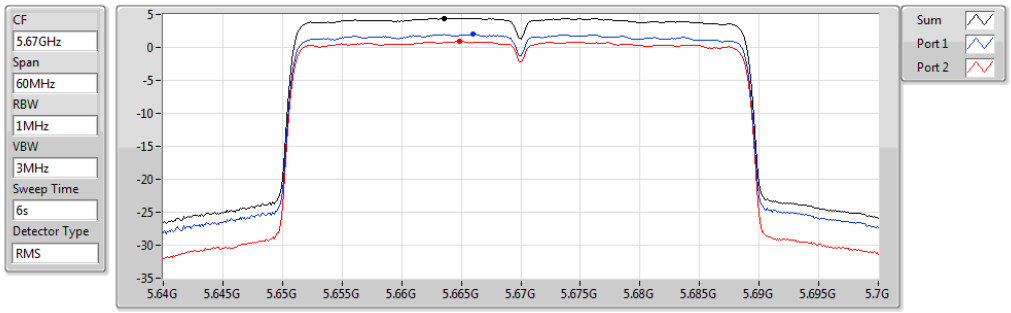
5590MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.69	5.69	3.25	2.12

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

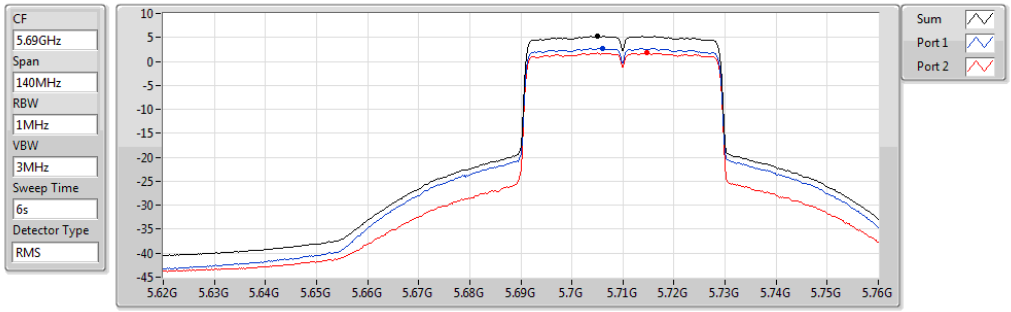
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.43	4.43	2.00	0.93

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

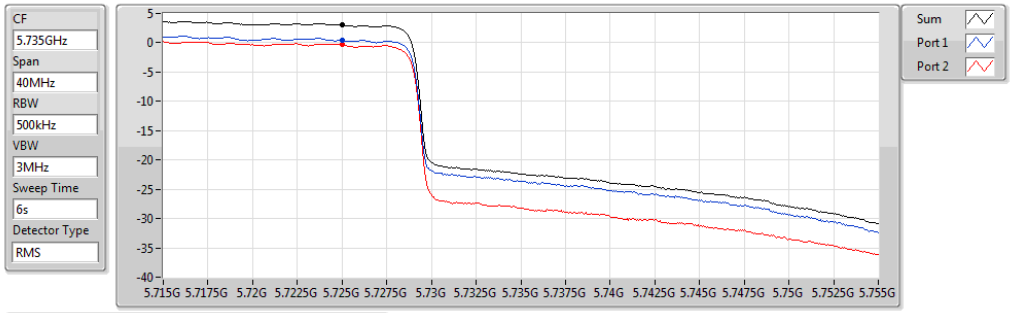
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.20	5.20	2.69	1.76

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

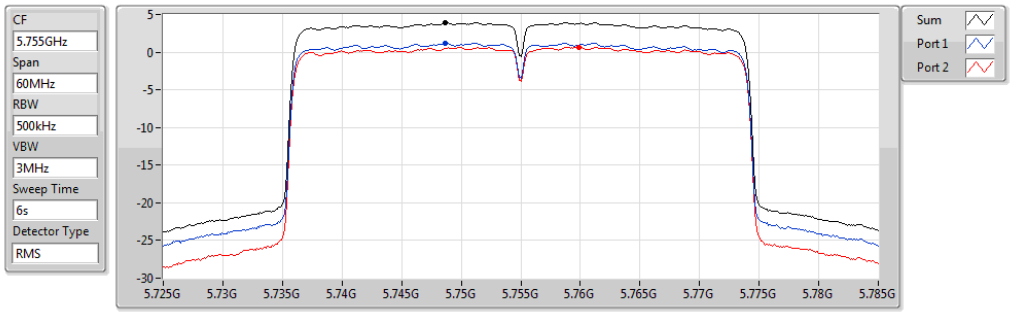
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.08	3.08	0.41	-0.31

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

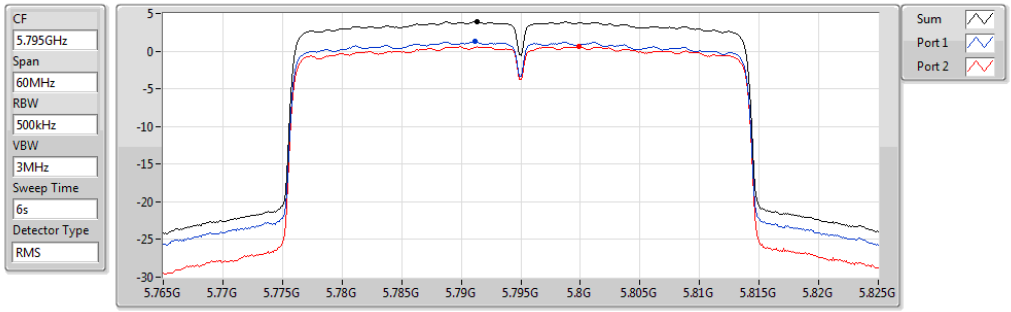
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.90	3.90	1.23	0.66

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

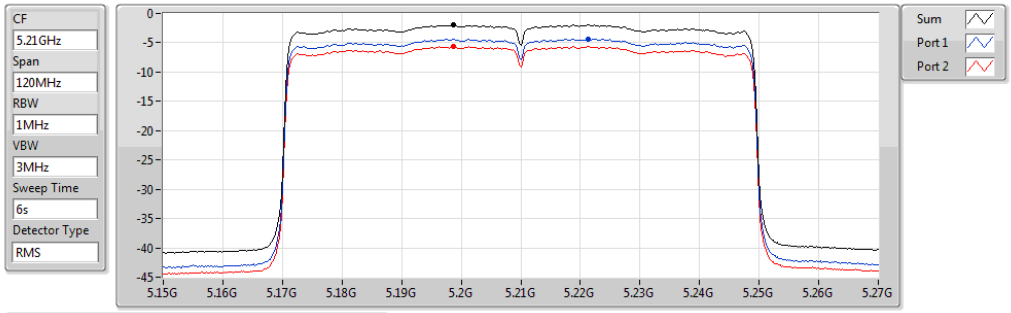
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.91	3.91	1.25	0.58

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

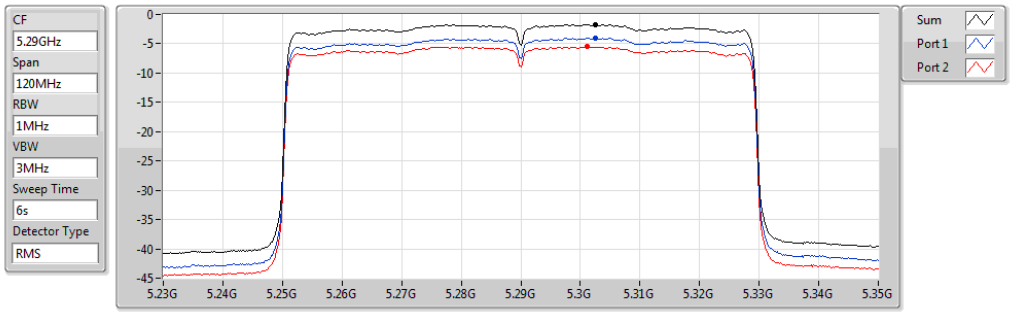
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.97	-1.97	-4.40	-5.64

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

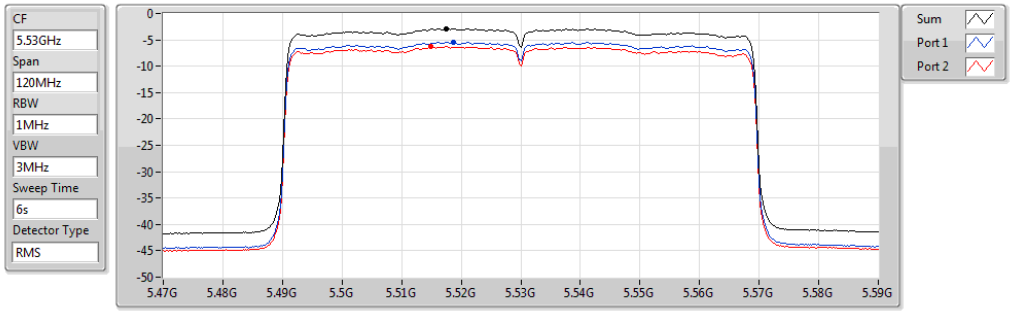
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.69	-1.69	-4.00	-5.52

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

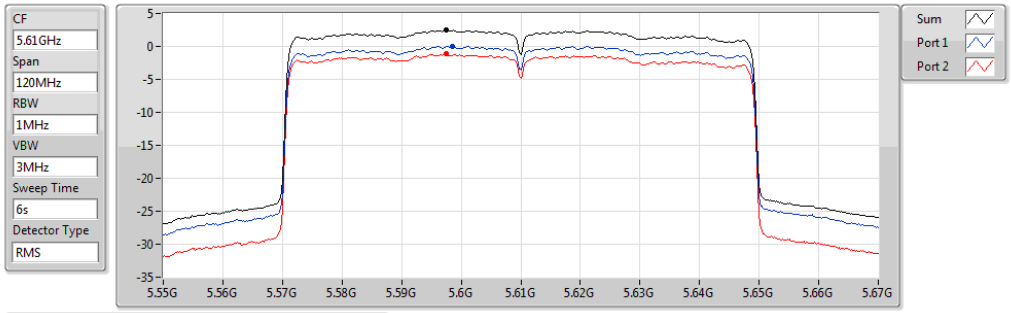
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.86	-2.86	-5.44	-6.28

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

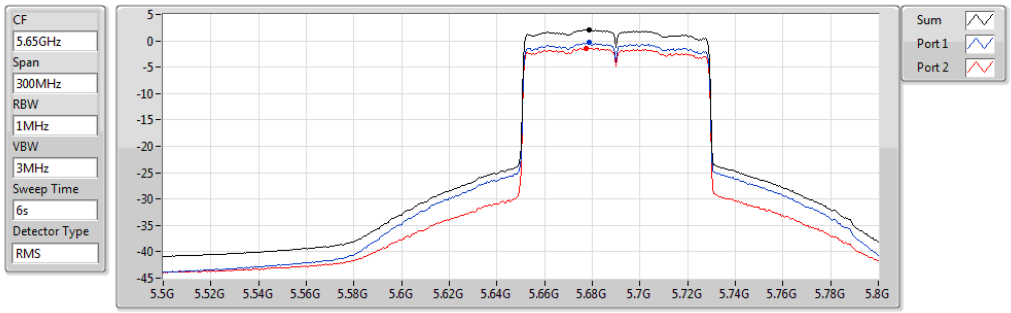
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.44	2.44	0.04	-1.17

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

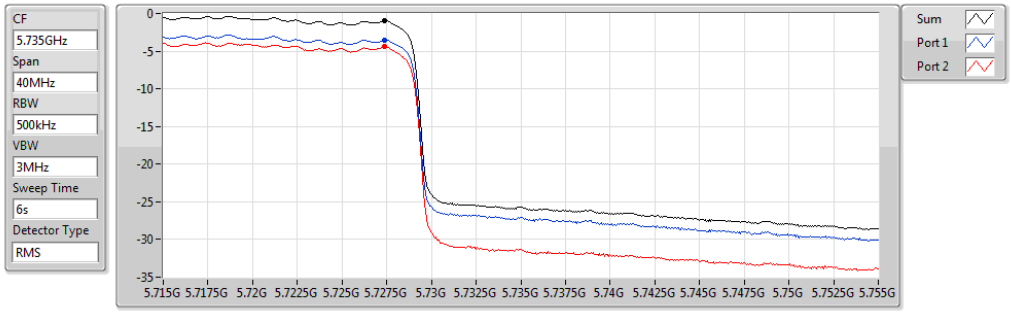
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.15	2.15	-0.37	-1.35

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

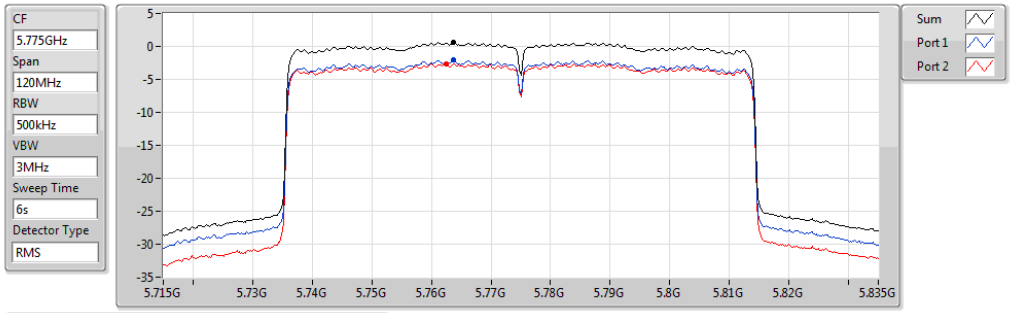
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.92	-0.92	-3.52	-4.39

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

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.65	0.65	-2.02	-2.66

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

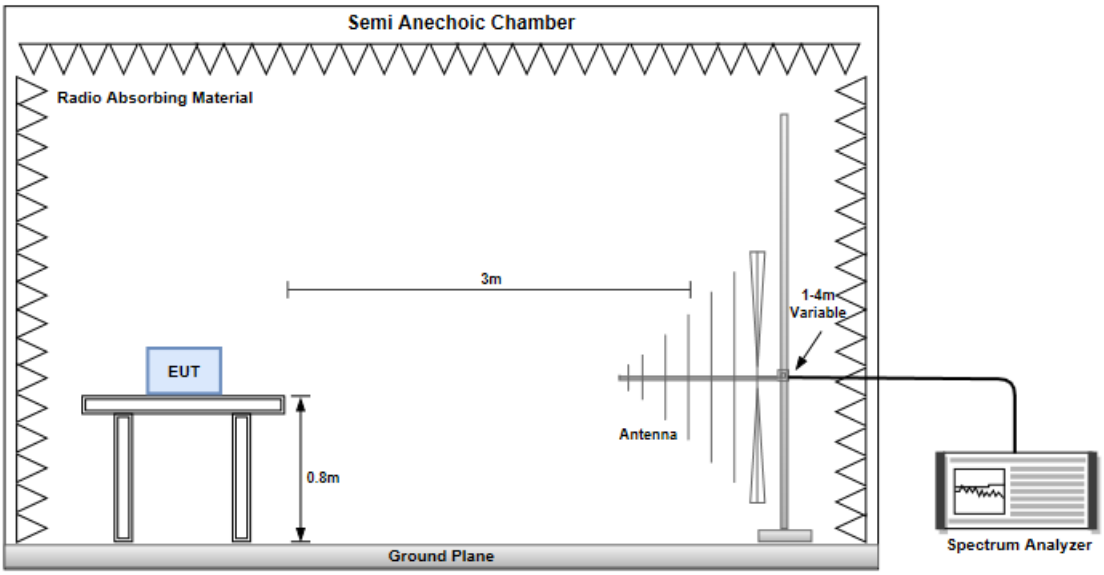
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

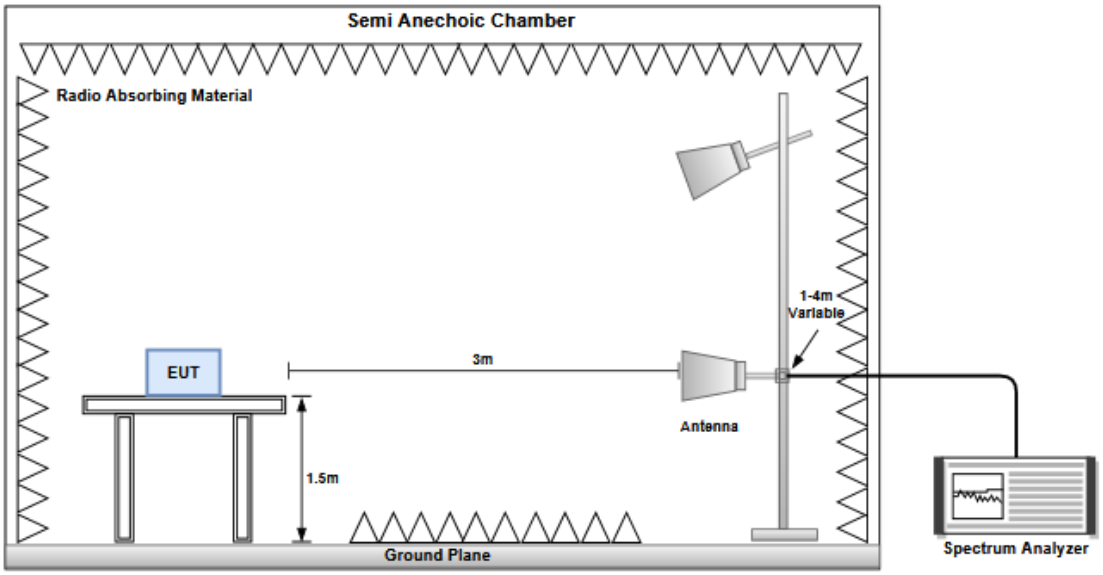
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



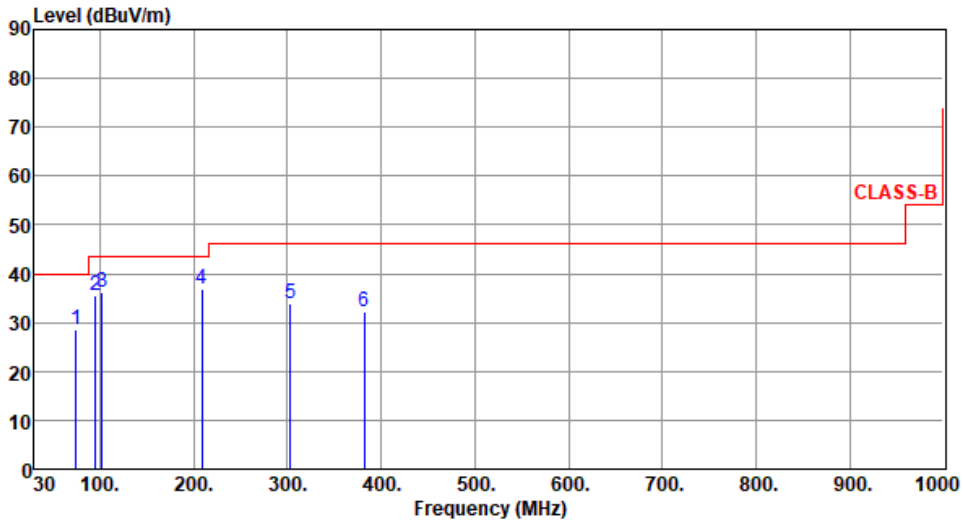
Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

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

Test By :Roger Lu Temperature(℃):23 Humidity(%):65

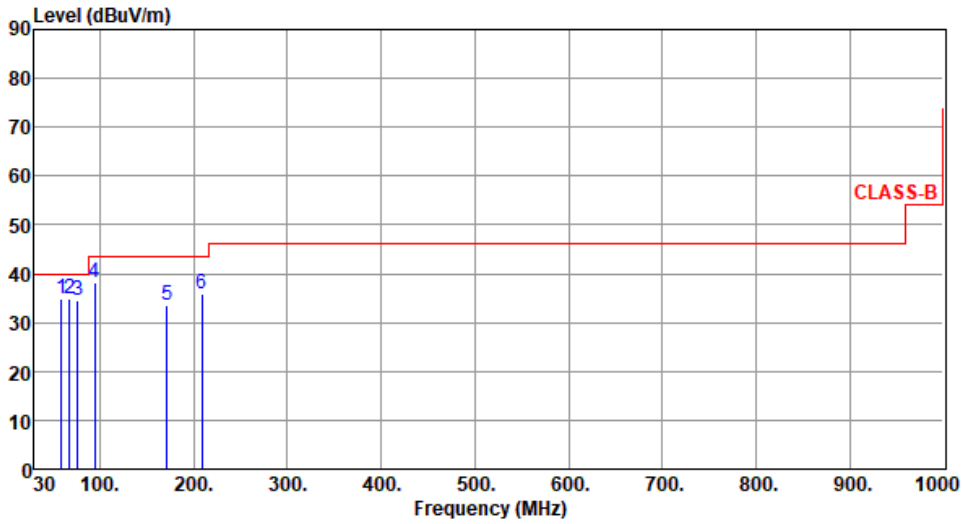


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	74.82	28.54	40.00	-11.46	40.61	-12.07	Peak	---	---
2	95.36	35.48	43.50	-8.02	49.99	-14.51	Peak	---	---
3	102.14	36.25	43.50	-7.25	49.58	-13.33	Peak	---	---
4	209.15	36.92	43.50	-6.58	49.11	-12.19	QP	128	244
5	303.25	33.98	46.00	-12.02	42.49	-8.51	Peak	---	---
6	381.86	32.06	46.00	-13.94	38.30	-6.24	Peak	---	---

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

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

Test By :Roger Lu Temperature(℃):23 Humidity(%):65

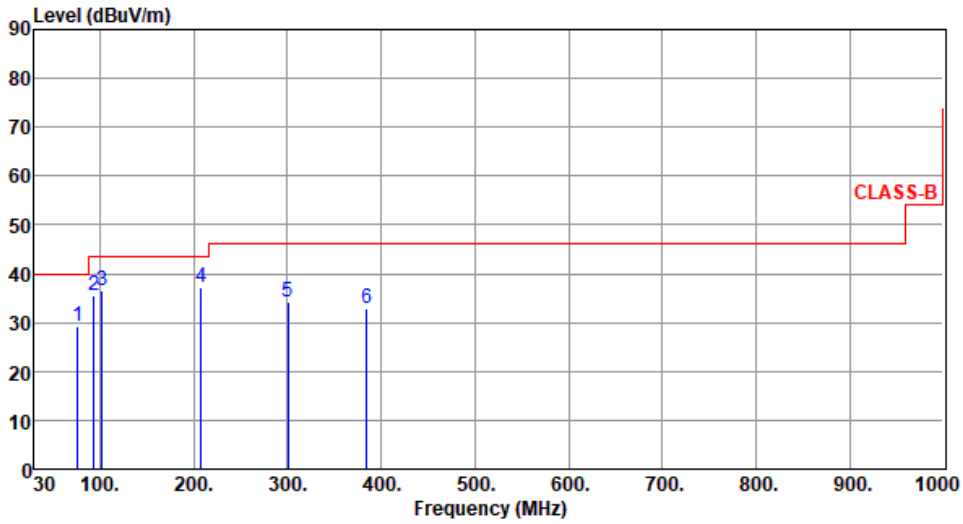


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	58.62	34.87	40.00	-5.13	44.06	-9.19	Peak	---	---
2	67.41	34.79	40.00	-5.21	45.18	-10.39	Peak	---	---
3	76.55	34.62	40.00	-5.38	47.25	-12.63	Peak	---	---
4	94.27	38.16	43.50	-5.34	52.78	-14.62	Peak	---	---
5	171.45	33.64	43.50	-9.86	42.97	-9.33	Peak	---	---
6	208.48	35.81	43.50	-7.69	48.00	-12.19	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)	5785
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):23 Humidity(%):65

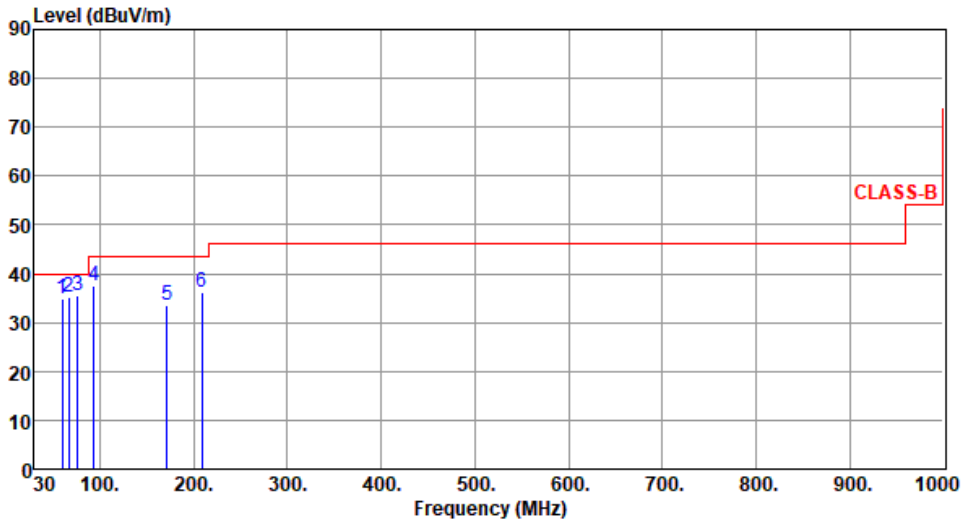


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	76.44	29.31	40.00	-10.69	41.90	-12.59	Peak	---	---
2	93.21	35.46	43.50	-8.04	50.11	-14.65	Peak	---	---
3	102.33	36.48	43.50	-7.02	49.79	-13.31	Peak	---	---
4	208.25	37.14	43.50	-6.36	49.34	-12.20	QP	122	253
5	300.58	34.36	46.00	-11.64	42.96	-8.60	Peak	---	---
6	384.59	32.78	46.00	-13.22	38.95	-6.17	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)	5785
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):23 Humidity(%):65



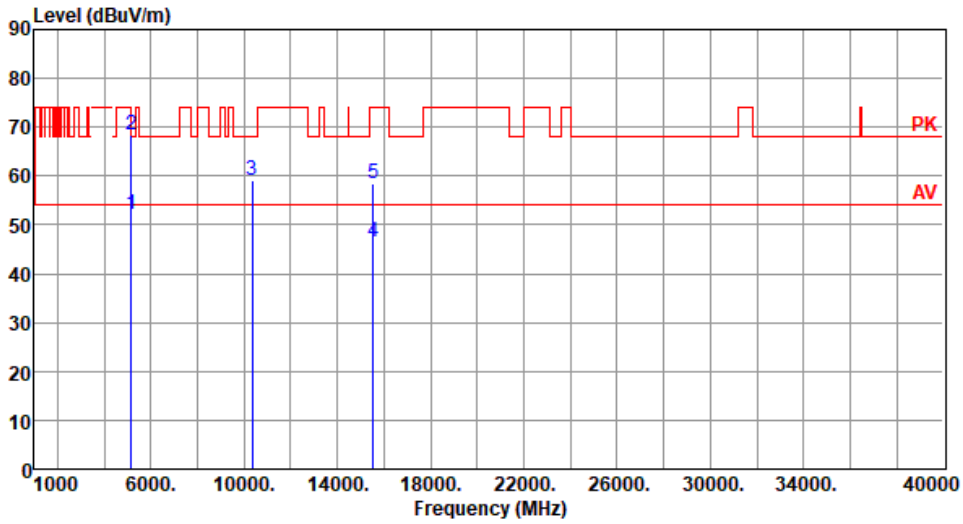
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	59.42	34.81	40.00	-5.19	44.00	-9.19	Peak	---	---
2	66.94	35.16	40.00	-4.84	45.53	-10.37	Peak	---	---
3	76.13	35.52	40.00	-4.48	47.94	-12.42	Peak	---	---
4	93.22	37.49	43.50	-6.01	52.14	-14.65	Peak	---	---
5	171.44	33.63	43.50	-9.87	42.96	-9.33	Peak	---	---
6	208.44	36.22	43.50	-7.28	48.41	-12.19	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.

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

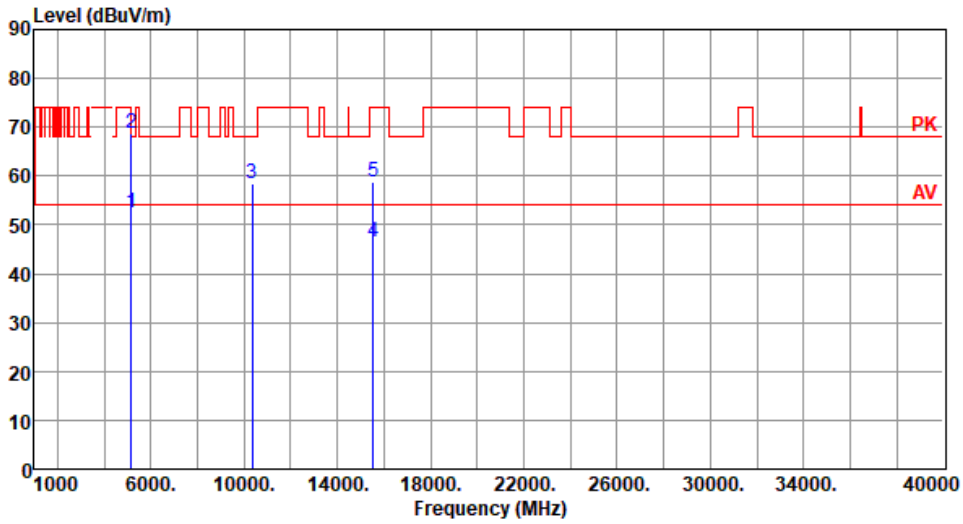


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.13	54.00	-1.87	46.02	6.11	Average	305	143
2	5150.00	68.45	74.00	-5.55	62.34	6.11	Peak	305	143
3	10360.00	59.25	68.20	-8.95	45.04	14.21	Peak	118	36
4	15540.00	46.45	54.00	-7.55	30.40	16.05	Average	100	302
5	15540.00	58.29	74.00	-15.71	42.24	16.05	Peak	100	302

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

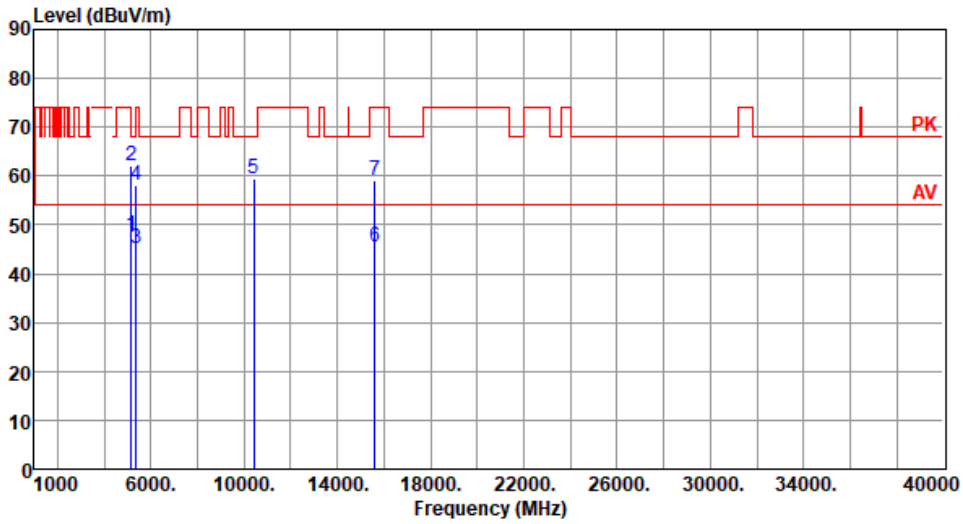


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.52	54.00	-1.48	46.41	6.11	Average	100	220
2	5150.00	68.66	74.00	-5.34	62.55	6.11	Peak	100	220
3	10360.00	58.51	68.20	-9.69	44.30	14.21	Peak	105	281
4	15540.00	46.41	54.00	-7.59	30.36	16.05	Average	108	9
5	15540.00	58.84	74.00	-15.16	42.79	16.05	Peak	108	9

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)	5200
Polarization	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

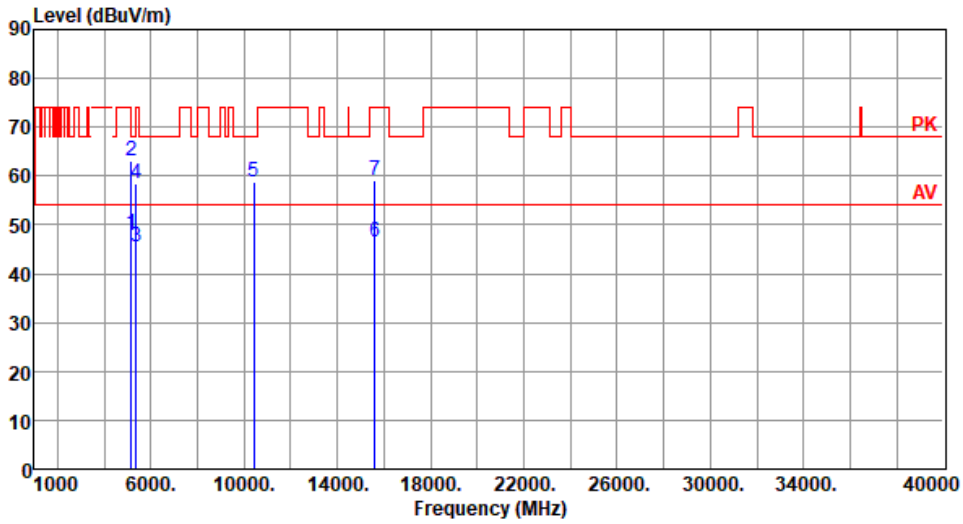


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.95	54.00	-6.05	41.84	6.11	Average	304	149
2	5150.00	62.12	74.00	-11.88	56.01	6.11	Peak	304	149
3	5350.00	45.22	54.00	-8.78	39.64	5.58	Average	304	149
4	5350.00	58.16	74.00	-15.84	52.58	5.58	Peak	304	149
5	10400.00	59.41	68.20	-8.79	44.95	14.46	Peak	115	29
6	15600.00	45.61	54.00	-8.39	29.86	15.75	Average	108	288
7	15600.00	59.02	74.00	-14.98	43.27	15.75	Peak	108	288

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)	5200
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

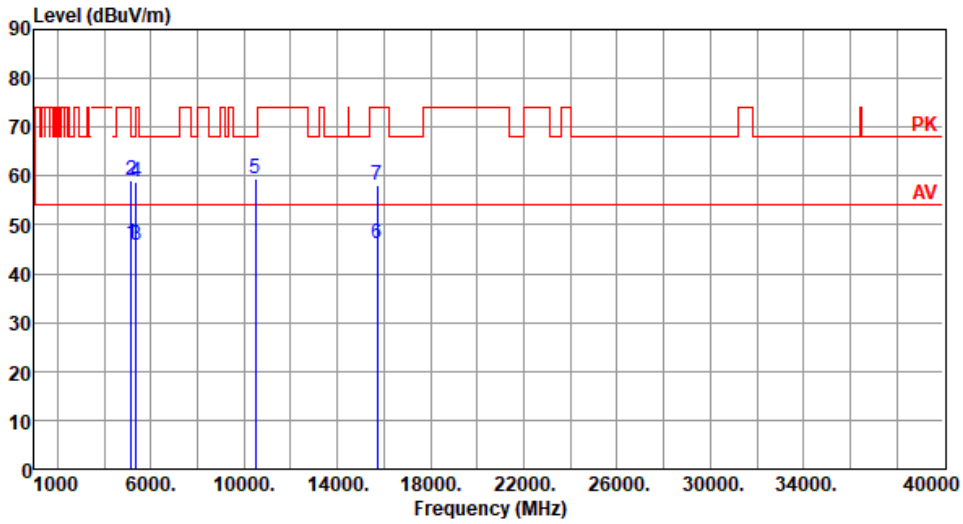


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.13	54.00	-5.87	42.02	6.11	Average	100	221
2	5150.00	63.08	74.00	-10.92	56.97	6.11	Peak	100	221
3	5350.00	45.48	54.00	-8.52	39.90	5.58	Average	100	221
4	5350.00	58.33	74.00	-15.67	52.75	5.58	Peak	100	221
5	10400.00	58.77	68.20	-9.43	44.31	14.46	Peak	100	278
6	15600.00	46.58	54.00	-7.42	30.83	15.75	Average	110	5
7	15600.00	59.02	74.00	-14.98	43.27	15.75	Peak	110	5

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)	5240
Polarization	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

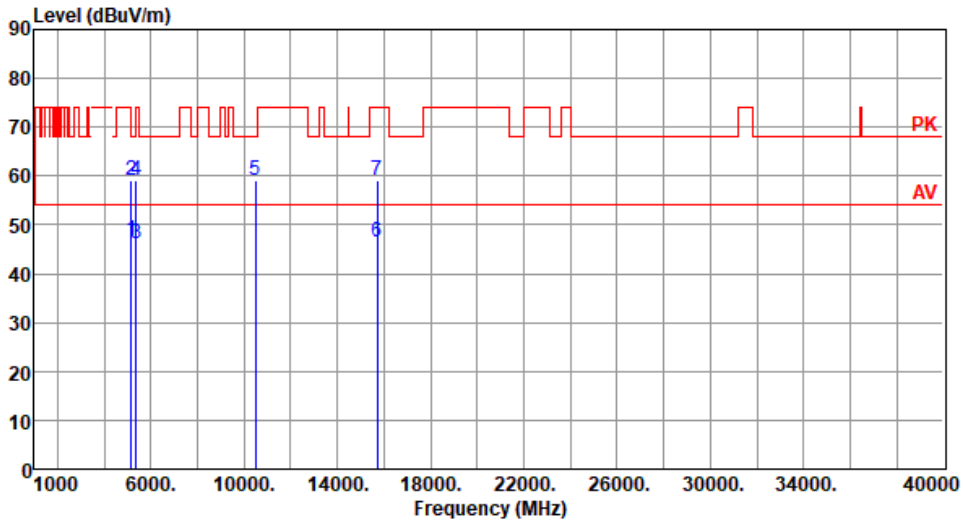


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.33	54.00	-7.67	40.22	6.11	Average	100	352
2	5150.00	59.11	74.00	-14.89	53.00	6.11	Peak	100	352
3	5350.00	45.86	54.00	-8.14	40.28	5.58	Average	100	352
4	5350.00	58.80	74.00	-15.20	53.22	5.58	Peak	100	352
5	10480.00	59.56	68.20	-8.64	45.16	14.40	Peak	113	34
6	15720.00	46.07	54.00	-7.93	30.36	15.71	Average	100	306
7	15720.00	57.96	74.00	-16.04	42.25	15.71	Peak	100	306

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)	5240
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

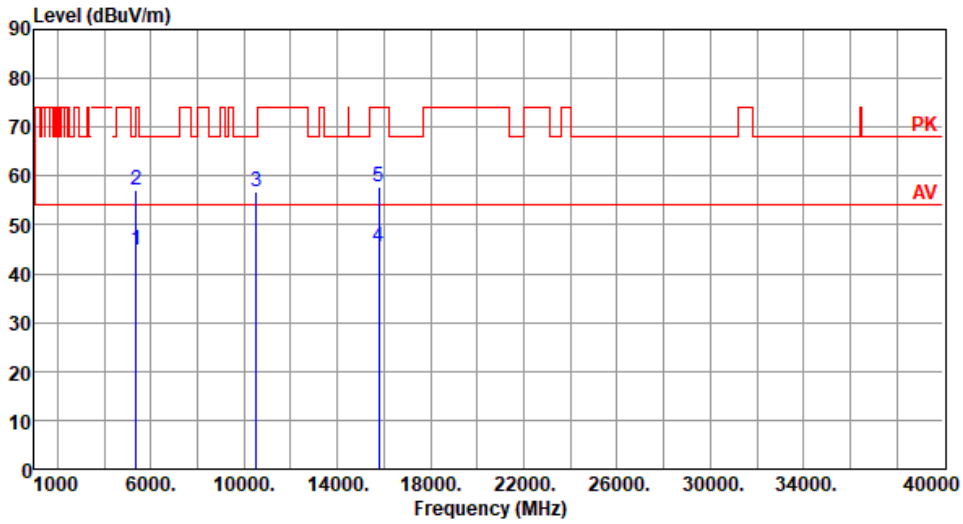


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.82	54.00	-7.18	40.71	6.11	Average	101	219
2	5150.00	59.16	74.00	-14.84	53.05	6.11	Peak	101	219
3	5350.00	46.30	54.00	-7.70	40.72	5.58	Average	101	219
4	5350.00	59.26	74.00	-14.74	53.68	5.58	Peak	101	219
5	10480.00	58.96	68.20	-9.24	44.56	14.40	Peak	103	281
6	15720.00	46.64	54.00	-7.36	30.93	15.71	Average	108	9
7	15720.00	59.16	74.00	-14.84	43.45	15.71	Peak	108	9

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	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

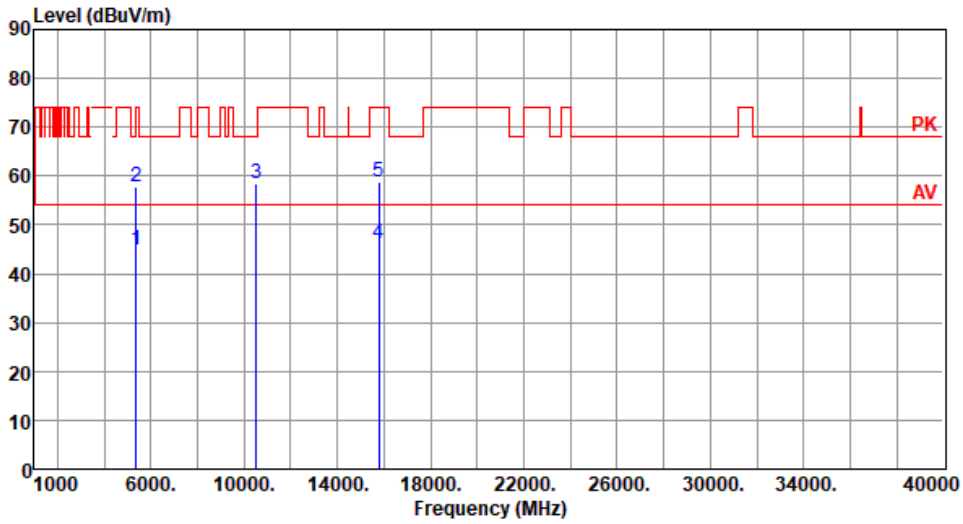


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	44.83	54.00	-9.17	39.25	5.58	Average	303	153
2	5350.00	57.27	74.00	-16.73	51.69	5.58	Peak	303	153
3	10520.00	56.69	68.20	-11.51	42.25	14.44	Peak	100	309
4	15780.00	45.63	54.00	-8.37	30.15	15.48	Average	100	311
5	15780.00	57.78	74.00	-16.22	42.30	15.48	Peak	100	311

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

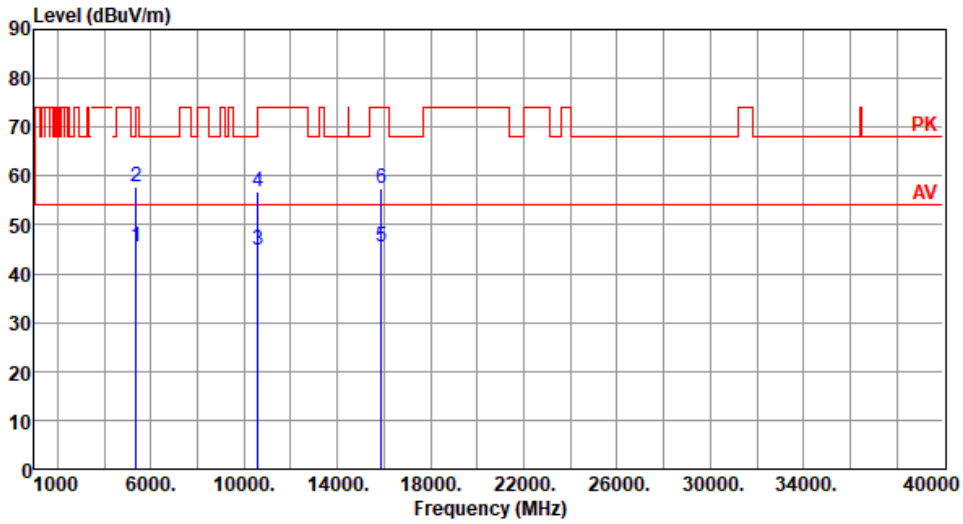


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	44.91	54.00	-9.09	39.33	5.58	Average	104	225
2	5350.00	57.64	74.00	-16.36	52.06	5.58	Peak	104	225
3	10520.00	58.45	68.20	-9.75	44.01	14.44	Peak	100	285
4	15780.00	46.25	54.00	-7.75	30.77	15.48	Average	102	16
5	15780.00	58.84	74.00	-15.16	43.36	15.48	Peak	102	16

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

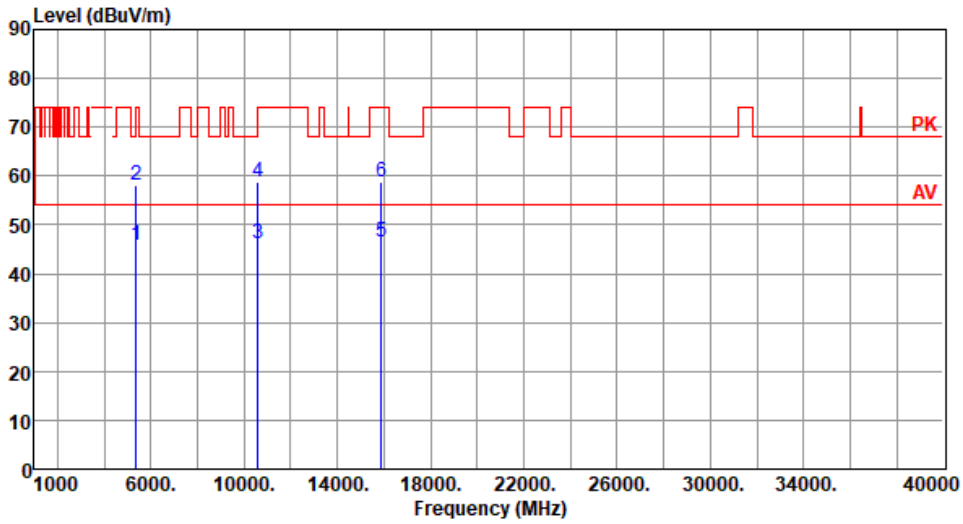


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.46	54.00	-8.54	39.88	5.58	Average	307	159
2	5350.00	57.80	74.00	-16.20	52.22	5.58	Peak	307	159
3	10600.00	44.91	54.00	-9.09	30.27	14.64	Average	100	309
4	10600.00	56.90	74.00	-17.10	42.26	14.64	Peak	100	309
5	15900.00	45.62	54.00	-8.38	30.39	15.23	Average	100	308
6	15900.00	57.62	74.00	-16.38	42.39	15.23	Peak	100	308

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

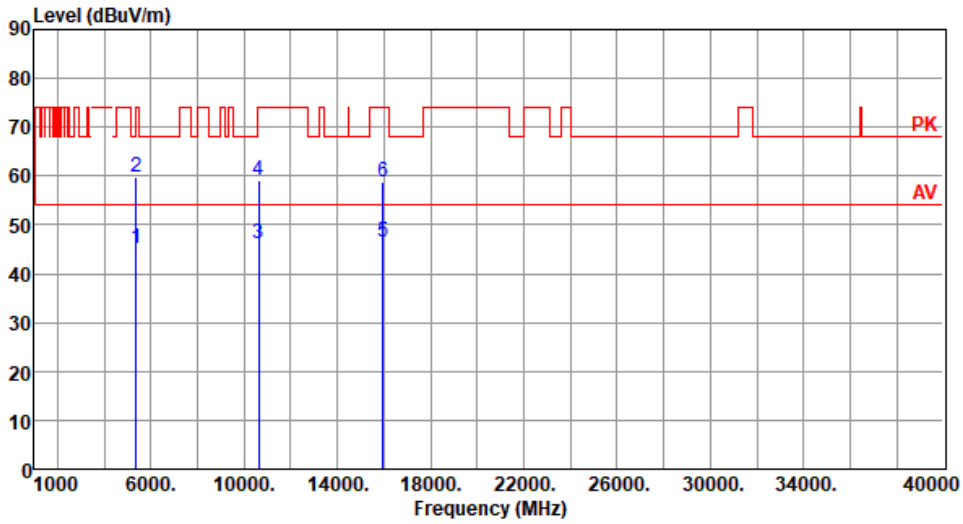


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.72	54.00	-8.28	40.14	5.58	Average	101	221
2	5350.00	58.14	74.00	-15.86	52.56	5.58	Peak	101	221
3	10600.00	46.21	54.00	-7.79	31.57	14.64	Average	100	284
4	10600.00	58.82	74.00	-15.18	44.18	14.64	Peak	100	284
5	15900.00	46.42	54.00	-7.58	31.19	15.23	Average	102	19
6	15900.00	58.85	74.00	-15.15	43.62	15.23	Peak	102	19

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

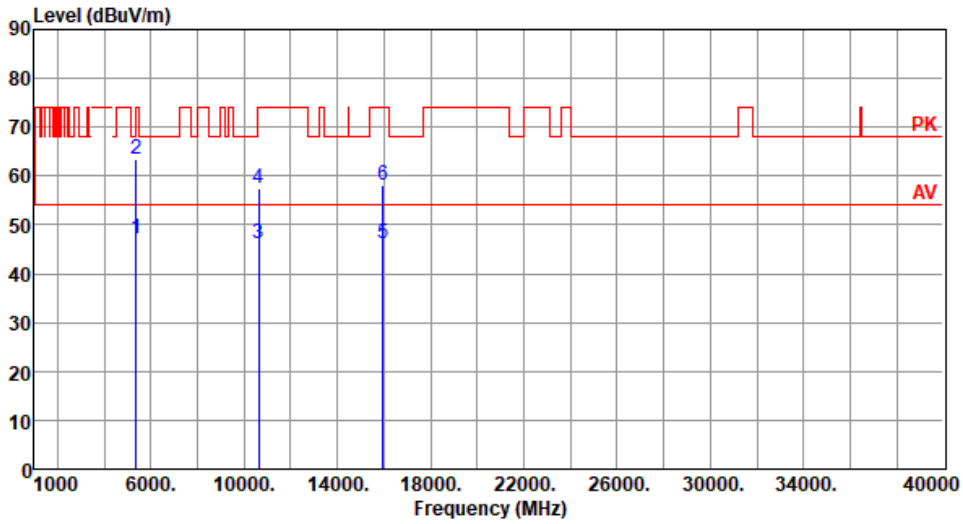


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.24	54.00	-8.76	39.66	5.58	Average	305	148
2	5350.00	59.64	74.00	-14.36	54.06	5.58	Peak	305	148
3	10640.00	46.17	54.00	-7.83	31.54	14.63	Average	113	35
4	10640.00	59.25	74.00	-14.75	44.62	14.63	Peak	113	35
5	15960.00	46.45	54.00	-7.55	31.09	15.36	Average	106	28
6	15960.00	58.93	74.00	-15.07	43.57	15.36	Peak	106	28

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

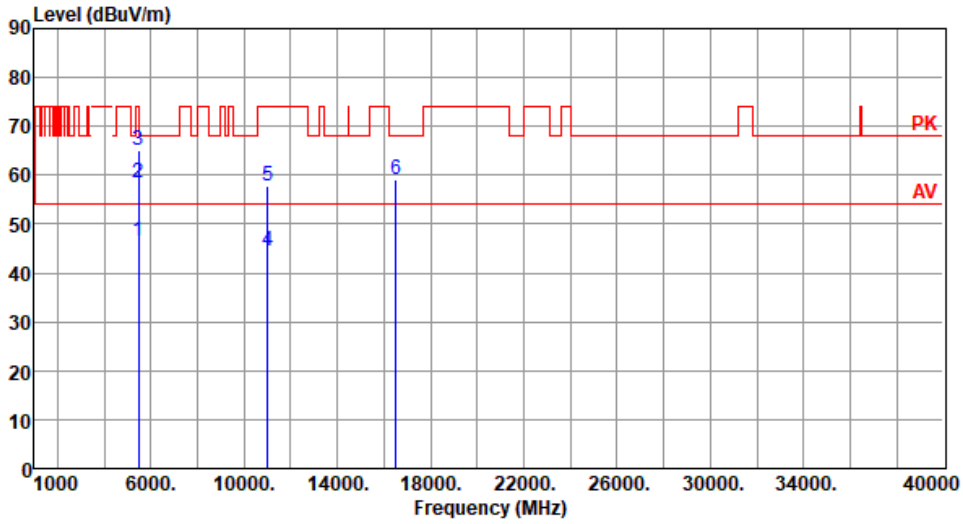


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.16	54.00	-6.84	41.58	5.58	Average	106	218
2	5350.00	63.59	74.00	-10.41	58.01	5.58	Peak	106	218
3	10640.00	46.23	54.00	-7.77	31.60	14.63	Average	100	282
4	10640.00	57.31	74.00	-16.69	42.68	14.63	Peak	100	282
5	15960.00	46.16	54.00	-7.84	30.80	15.36	Average	100	285
6	15960.00	58.02	74.00	-15.98	42.66	15.36	Peak	100	285

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

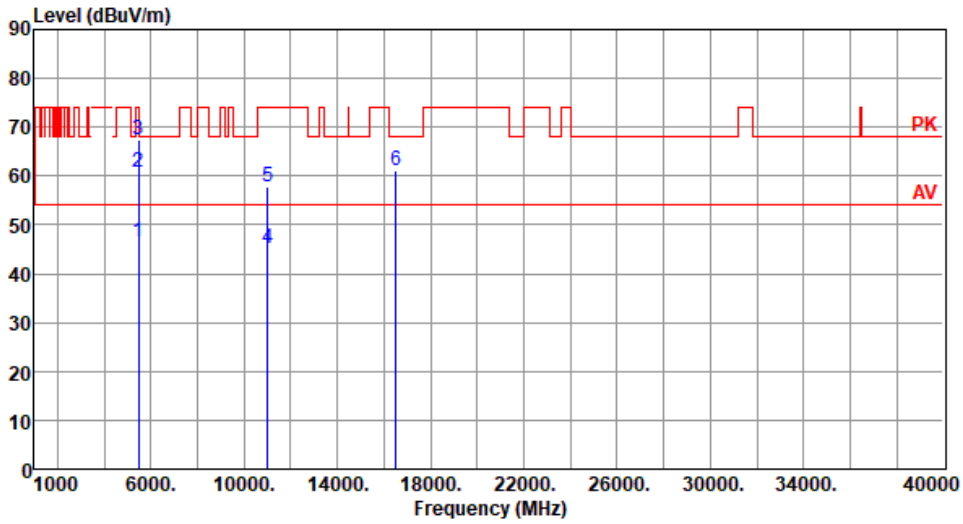


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.33	54.00	-7.67	40.11	6.22	Average	309	147
2	5460.00	58.44	74.00	-15.56	52.22	6.22	Peak	309	147
3	5470.00	65.20	68.20	-3.00	58.94	6.26	Peak	309	147
4	11000.00	44.64	54.00	-9.36	29.25	15.39	Average	100	300
5	11000.00	57.64	74.00	-16.36	42.25	15.39	Peak	100	300
6	16500.00	59.27	68.20	-8.93	42.25	17.02	Peak	100	306

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

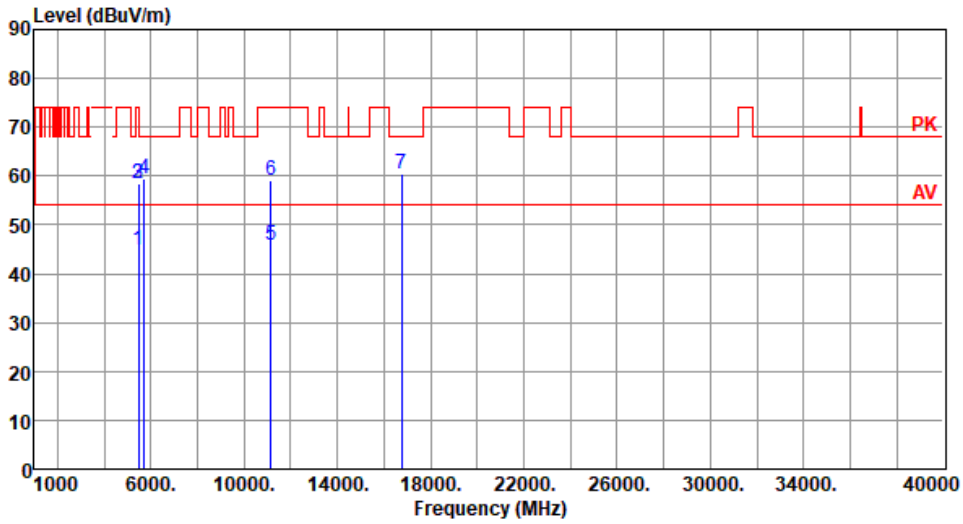


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.40	54.00	-7.60	40.18	6.22	Average	100	220
2	5460.00	60.69	74.00	-13.31	54.47	6.22	Peak	100	220
3	5470.00	67.32	68.20	-0.88	61.06	6.26	Peak	100	220
4	11000.00	45.04	54.00	-8.96	29.65	15.39	Average	101	34
5	11000.00	57.92	74.00	-16.08	42.53	15.39	Peak	101	34
6	16500.00	61.08	68.20	-7.12	44.06	17.02	Peak	100	255

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

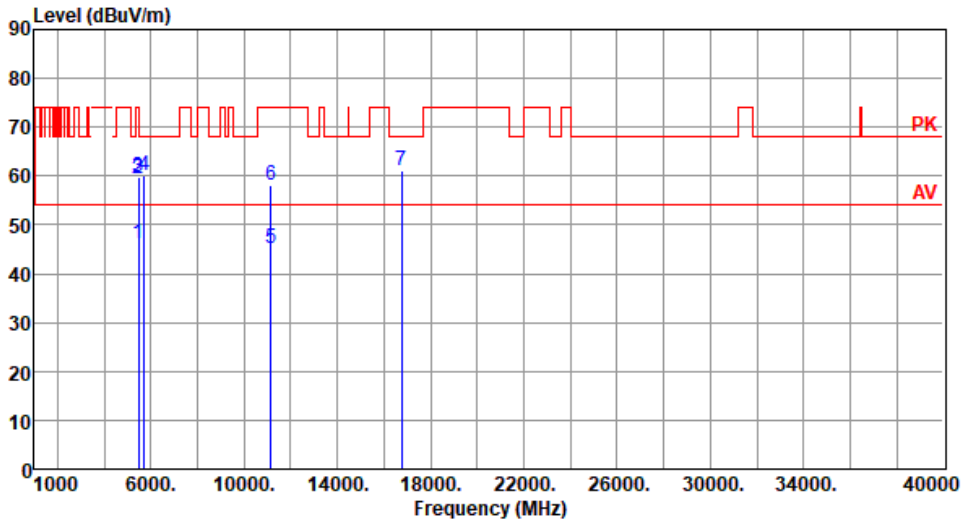


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.84	54.00	-9.16	38.62	6.22	Average	302	146
2	5460.00	58.34	74.00	-15.66	52.12	6.22	Peak	302	146
3	5470.00	58.51	68.20	-9.69	52.25	6.26	Peak	302	146
4	5725.00	59.34	68.20	-8.86	52.81	6.53	Peak	302	146
5	11160.00	45.86	54.00	-8.14	31.02	14.84	Average	100	305
6	11160.00	59.18	74.00	-14.82	44.34	14.84	Peak	100	305
7	16740.00	60.43	68.20	-7.77	42.88	17.55	Peak	100	29

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

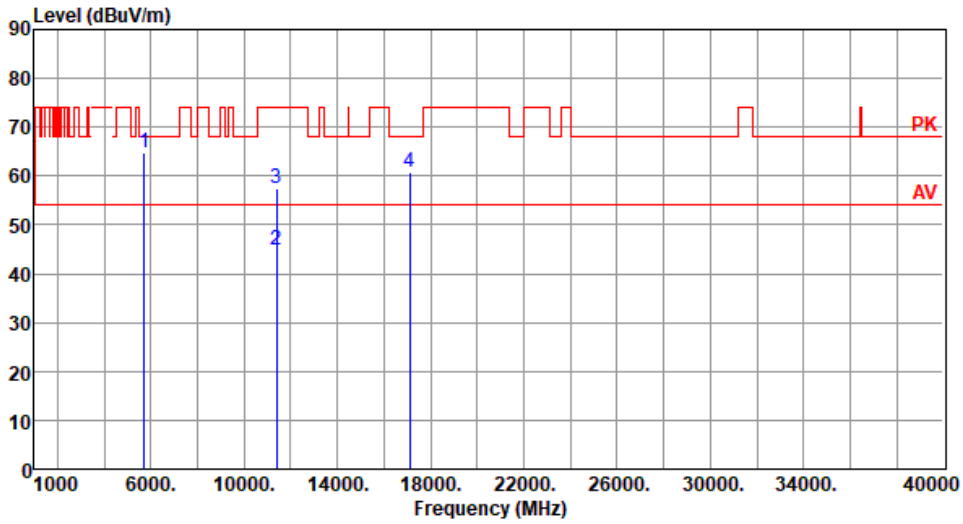


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.14	54.00	-7.86	39.92	6.22	Average	100	219
2	5460.00	59.54	74.00	-14.46	53.32	6.22	Peak	100	219
3	5470.00	59.80	68.20	-8.40	53.54	6.26	Peak	100	219
4	5725.00	60.21	68.20	-7.99	53.68	6.53	Peak	100	219
5	11160.00	45.18	54.00	-8.82	30.34	14.84	Average	102	47
6	11160.00	58.10	74.00	-15.90	43.26	14.84	Peak	102	47
7	16740.00	61.20	68.20	-7.00	43.65	17.55	Peak	100	258

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

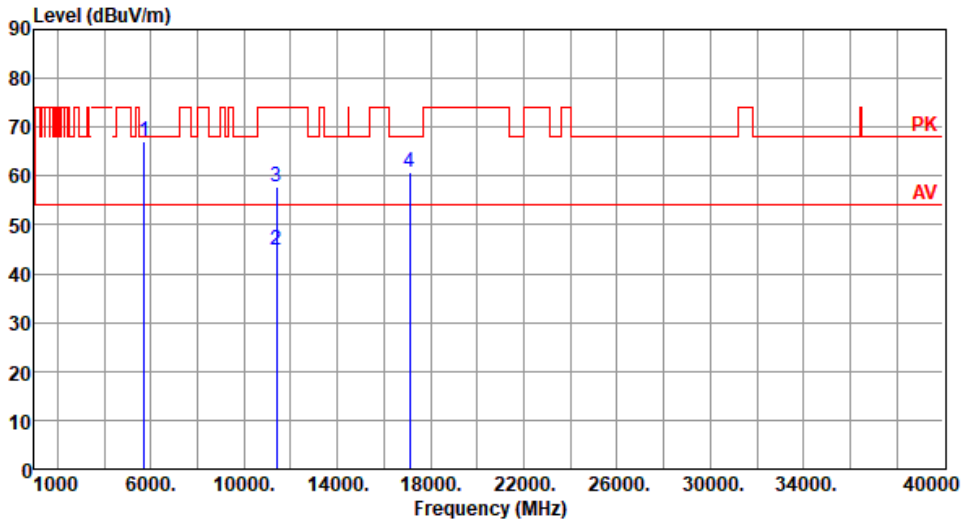


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.78	68.20	-3.42	58.25	6.53	Peak	309	162
2	11400.00	44.85	54.00	-9.15	29.88	14.97	Average	100	302
3	11400.00	57.51	74.00	-16.49	42.54	14.97	Peak	100	302
4	17100.00	60.79	68.20	-7.41	43.10	17.69	Peak	100	309

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):65

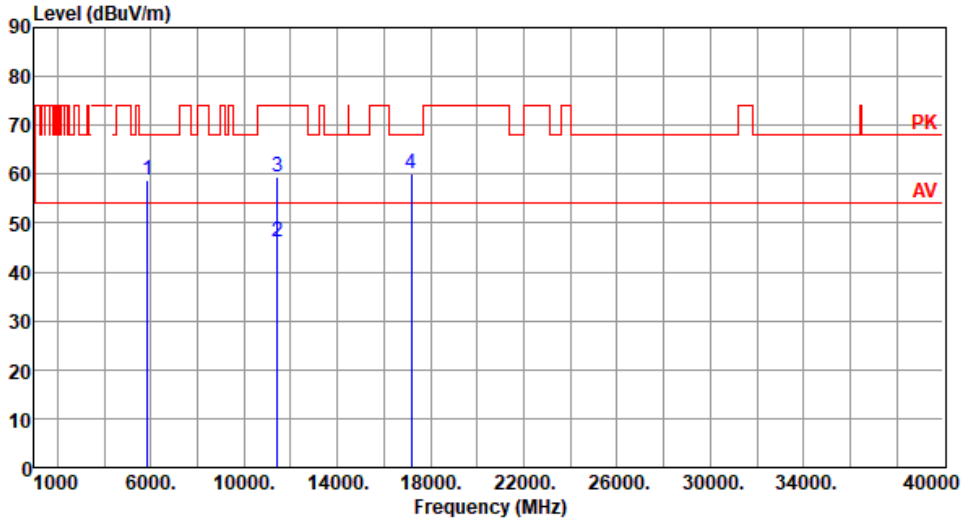


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.12	68.20	-1.08	60.59	6.53	Peak	125	217
2	11400.00	44.96	54.00	-9.04	29.99	14.97	Average	109	38
3	11400.00	57.82	74.00	-16.18	42.85	14.97	Peak	109	38
4	17100.00	60.94	68.20	-7.26	43.25	17.69	Peak	100	261

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 :Roger Lu Temperature(℃):24 Humidity(%):68

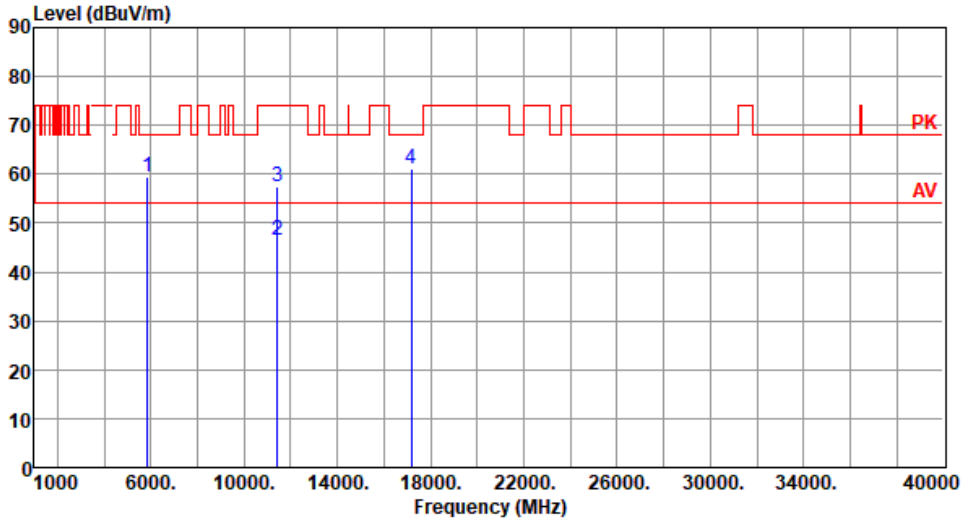


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	58.89	68.20	-9.31	52.00	6.89	Peak	358	148
2	11440.00	46.17	54.00	-7.83	31.14	15.03	Average	100	303
3	11440.00	59.30	74.00	-14.70	44.27	15.03	Peak	100	303
4	17160.00	60.19	68.20	-8.01	42.51	17.68	Peak	100	305

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):68

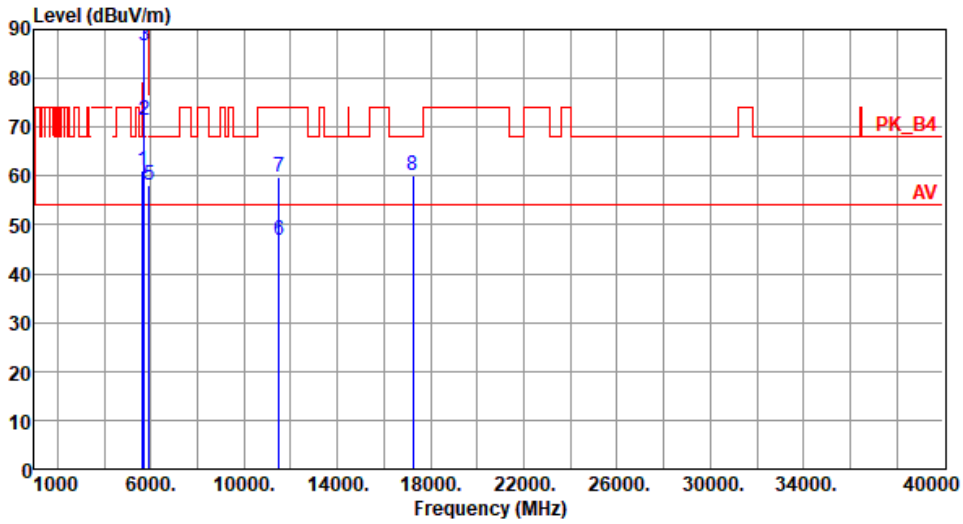


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	59.35	68.20	-8.85	52.46	6.89	Peak	100	209
2	11440.00	46.65	54.00	-7.35	31.62	15.03	Average	100	266
3	11440.00	57.60	74.00	-16.40	42.57	15.03	Peak	100	266
4	17160.00	61.22	68.20	-6.98	43.54	17.68	Peak	100	256

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)	5745
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):68

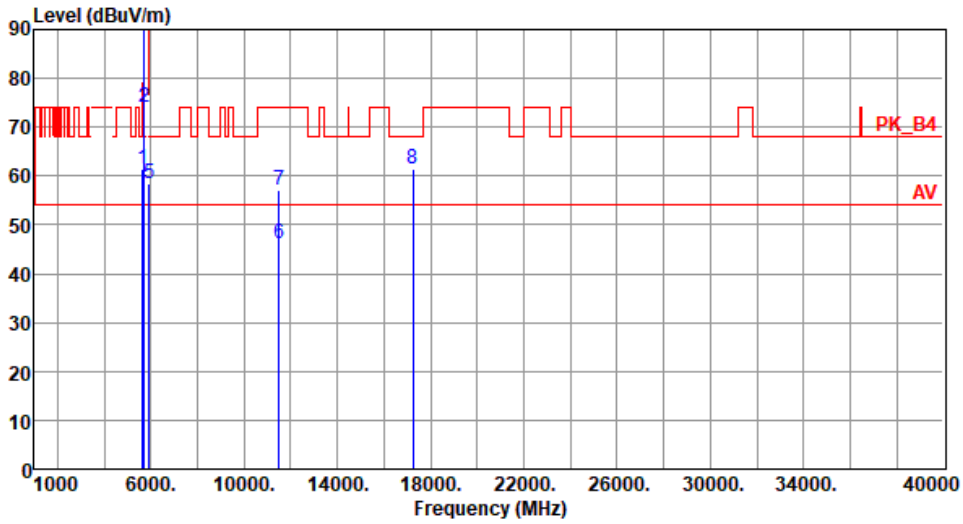


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.27	68.20	-6.93	55.00	6.27	Peak	352	156
2	5700.00	71.48	105.20	-33.72	65.01	6.47	Peak	352	156
3	5720.00	86.54	110.80	-24.26	80.02	6.52	Peak	352	156
4	5725.00	92.53	122.20	-29.67	86.00	6.53	Peak	352	156
5	5925.00	58.05	68.20	-10.15	51.02	7.03	Peak	352	156
6	11490.00	46.96	54.00	-7.04	31.88	15.08	Average	265	15
7	11490.00	59.67	74.00	-14.33	44.59	15.08	Peak	265	15
8	17235.00	60.08	68.20	-8.12	42.28	17.80	Peak	100	306

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)	5745
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):68

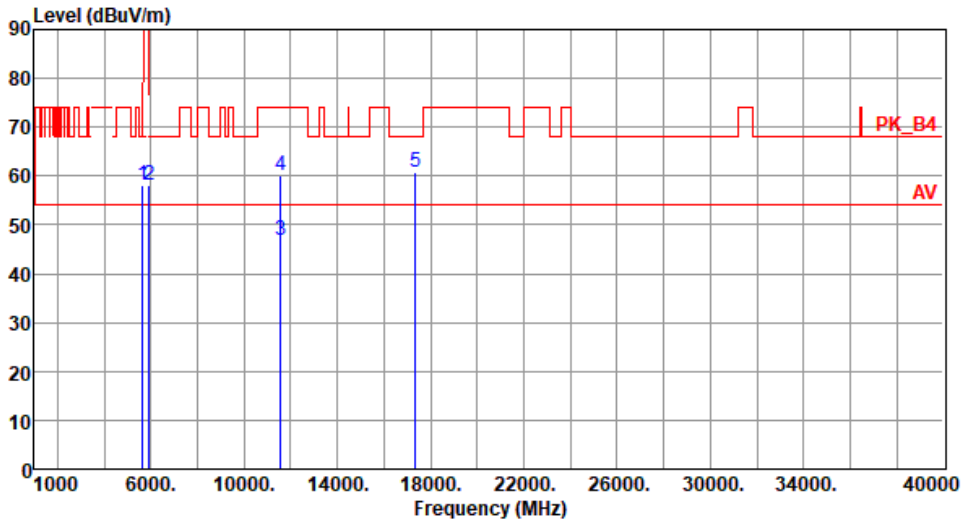


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.45	68.20	-6.75	55.18	6.27	Peak	100	311
2	5700.00	74.10	105.20	-31.10	67.63	6.47	Peak	100	311
3	5720.00	88.94	110.80	-21.86	82.42	6.52	Peak	100	311
4	5725.00	95.40	122.20	-26.80	88.87	6.53	Peak	100	311
5	5925.00	58.35	68.20	-9.85	51.32	7.03	Peak	100	311
6	11490.00	46.06	54.00	-7.94	30.98	15.08	Average	100	288
7	11490.00	56.96	74.00	-17.04	41.88	15.08	Peak	100	288
8	17235.00	61.41	68.20	-6.79	43.61	17.80	Peak	105	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	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):68

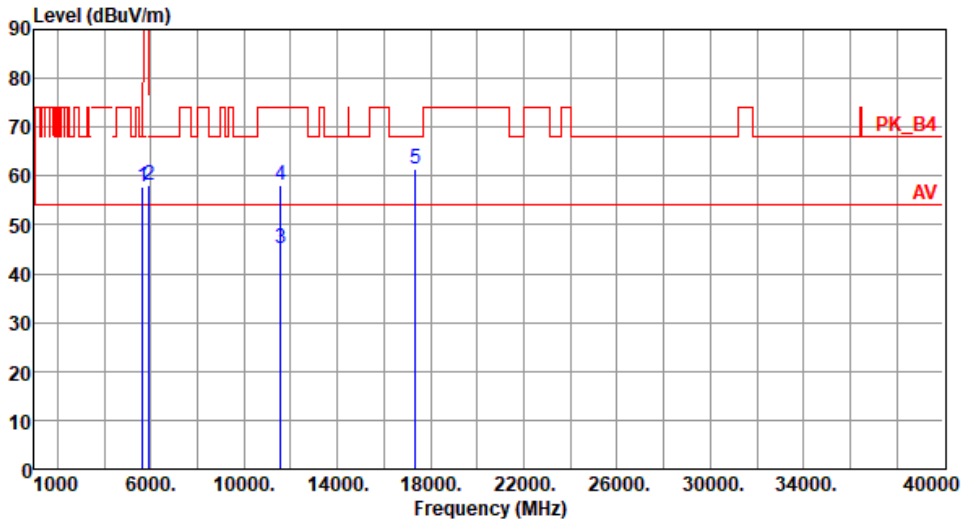


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.99	68.20	-10.21	51.72	6.27	Peak	334	145
2	5925.00	58.26	68.20	-9.94	51.23	7.03	Peak	334	145
3	11570.00	46.88	54.00	-7.12	31.85	15.03	Average	268	18
4	11570.00	60.26	74.00	-13.74	45.23	15.03	Peak	268	18
5	17355.00	60.64	68.20	-7.56	42.10	18.54	Peak	103	133

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)	5785
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):68

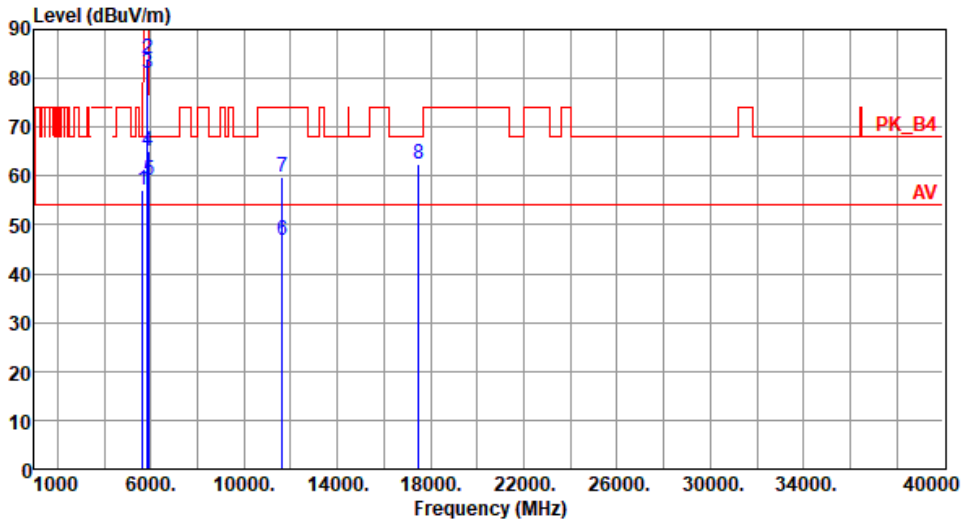


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.72	68.20	-10.48	51.45	6.27	Peak	101	310
2	5925.00	58.14	68.20	-10.06	51.11	7.03	Peak	101	310
3	11570.00	45.11	54.00	-8.89	30.08	15.03	Average	100	45
4	11570.00	58.06	74.00	-15.94	43.03	15.03	Peak	100	45
5	17355.00	61.40	68.20	-6.80	42.86	18.54	Peak	101	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)	5825
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):68

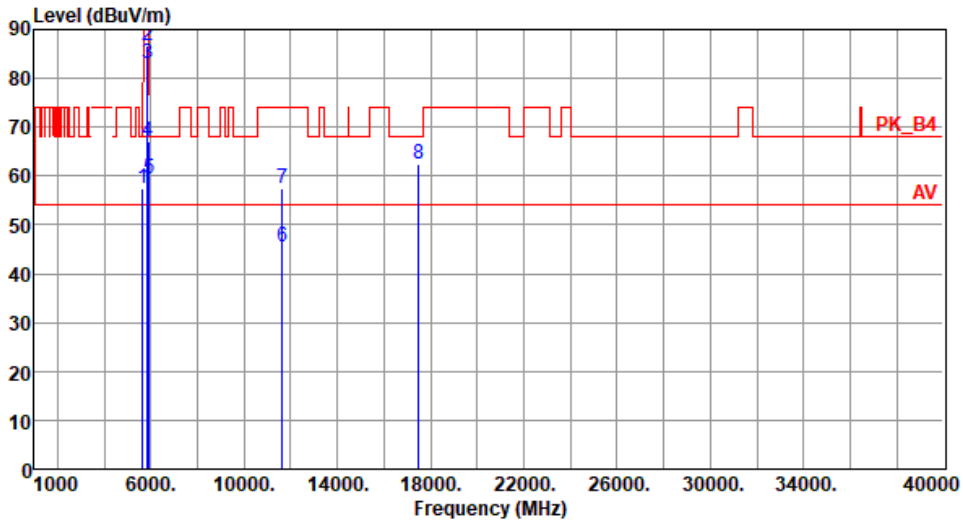


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.27	68.20	-10.93	51.00	6.27	Peak	359	152
2	5850.00	84.11	122.20	-38.09	77.22	6.89	Peak	359	152
3	5855.00	80.90	110.80	-29.90	74.00	6.90	Peak	359	152
4	5875.00	64.94	105.20	-40.26	58.01	6.93	Peak	359	152
5	5925.00	59.03	68.20	-9.17	52.00	7.03	Peak	359	152
6	11650.00	46.96	54.00	-7.04	32.25	14.71	Average	262	21
7	11650.00	59.83	74.00	-14.17	45.12	14.71	Peak	262	21
8	17475.00	62.43	68.20	-5.77	42.98	19.45	Peak	100	309

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):68



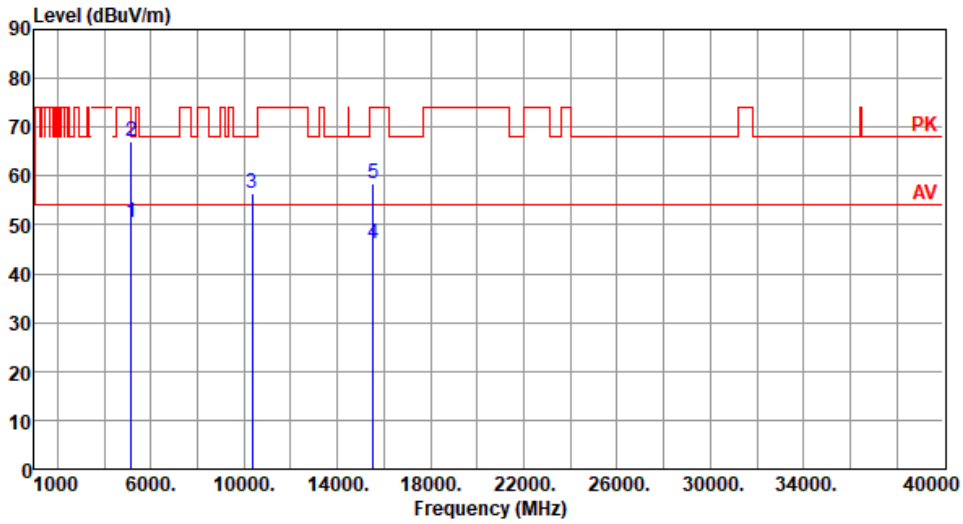
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.42	68.20	-10.78	51.15	6.27	Peak	105	312
2	5850.00	86.75	122.20	-35.45	79.86	6.89	Peak	105	312
3	5855.00	82.99	110.80	-27.81	76.09	6.90	Peak	105	312
4	5875.00	67.23	105.20	-37.97	60.30	6.93	Peak	105	312
5	5925.00	59.51	68.20	-8.69	52.48	7.03	Peak	105	312
6	11650.00	45.60	54.00	-8.40	30.89	14.71	Average	100	284
7	11650.00	57.59	74.00	-16.41	42.88	14.71	Peak	100	284
8	17475.00	62.30	68.20	-5.90	42.85	19.45	Peak	106	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).

3.5.2 Transmitter Radiated Unwanted Emissions (Above 1GHz) for ax HE20

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

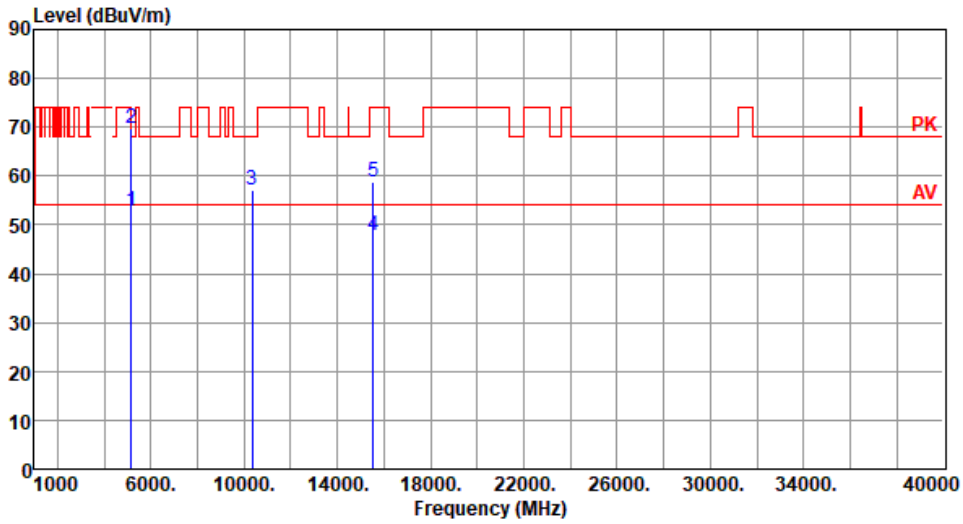


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	50.33	54.00	-3.67	44.22	6.11	Average	311	154
2	5150.00	67.22	74.00	-6.78	61.11	6.11	Peak	311	154
3	10360.00	56.57	68.20	-11.63	42.36	14.21	Peak	100	305
4	15540.00	46.32	54.00	-7.68	30.27	16.05	Average	100	303
5	15540.00	58.43	74.00	-15.57	42.38	16.05	Peak	100	303

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)	5180
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

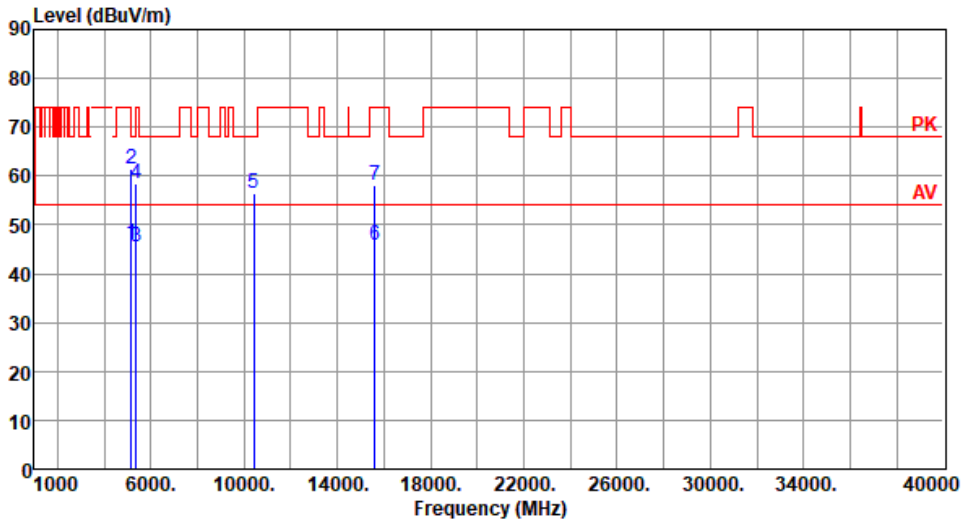


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.65	54.00	-1.35	46.54	6.11	Average	100	222
2	5150.00	69.59	74.00	-4.41	63.48	6.11	Peak	100	222
3	10360.00	57.08	68.20	-11.12	42.87	14.21	Peak	100	281
4	15540.00	47.90	54.00	-6.10	31.85	16.05	Average	100	282
5	15540.00	58.94	74.00	-15.06	42.89	16.05	Peak	100	282

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)	5200
Polarization	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

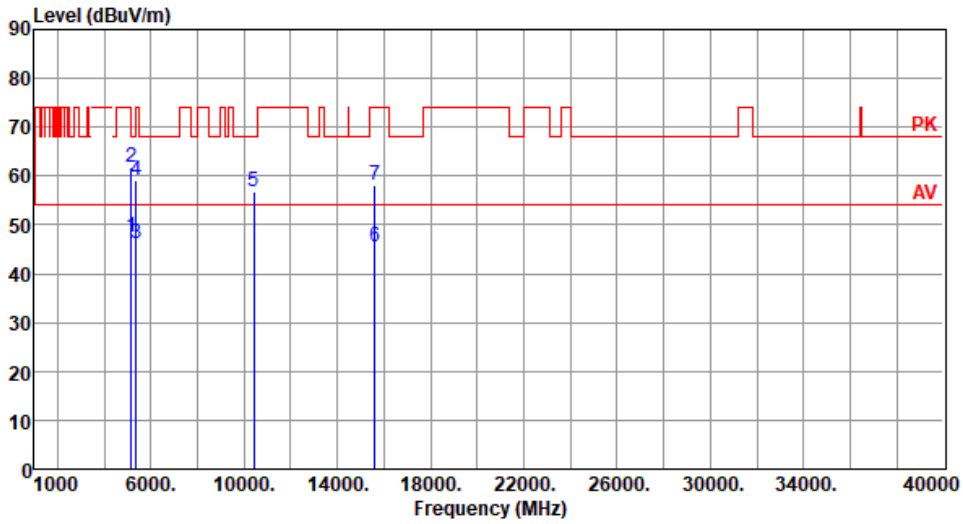


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.11	54.00	-7.89	40.00	6.11	Average	306	144
2	5150.00	61.38	74.00	-12.62	55.27	6.11	Peak	306	144
3	5350.00	45.34	54.00	-8.66	39.76	5.58	Average	306	144
4	5350.00	58.29	74.00	-15.71	52.71	5.58	Peak	306	144
5	10400.00	56.55	68.20	-11.65	42.09	14.46	Peak	118	24
6	15600.00	45.72	54.00	-8.28	29.97	15.75	Average	100	294
7	15600.00	58.15	74.00	-15.85	42.40	15.75	Peak	100	294

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)	5200
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

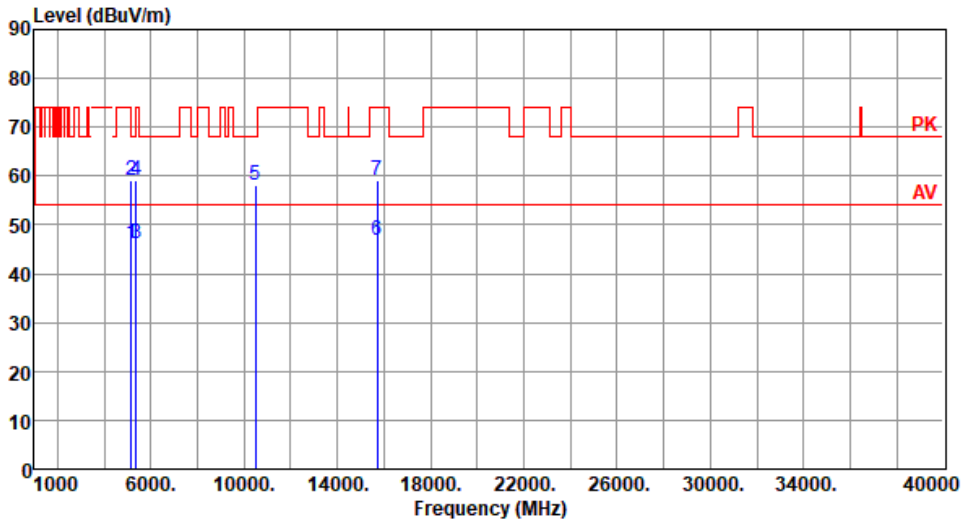


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.64	54.00	-6.36	41.53	6.11	Average	105	222
2	5150.00	61.85	74.00	-12.15	55.74	6.11	Peak	105	222
3	5350.00	46.07	54.00	-7.93	40.49	5.58	Average	105	222
4	5350.00	59.16	74.00	-14.84	53.58	5.58	Peak	105	222
5	10400.00	56.86	68.20	-11.34	42.40	14.46	Peak	100	291
6	15600.00	45.65	54.00	-8.35	29.90	15.75	Average	108	6
7	15600.00	58.13	74.00	-15.87	42.38	15.75	Peak	108	6

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)	5240
Polarization	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

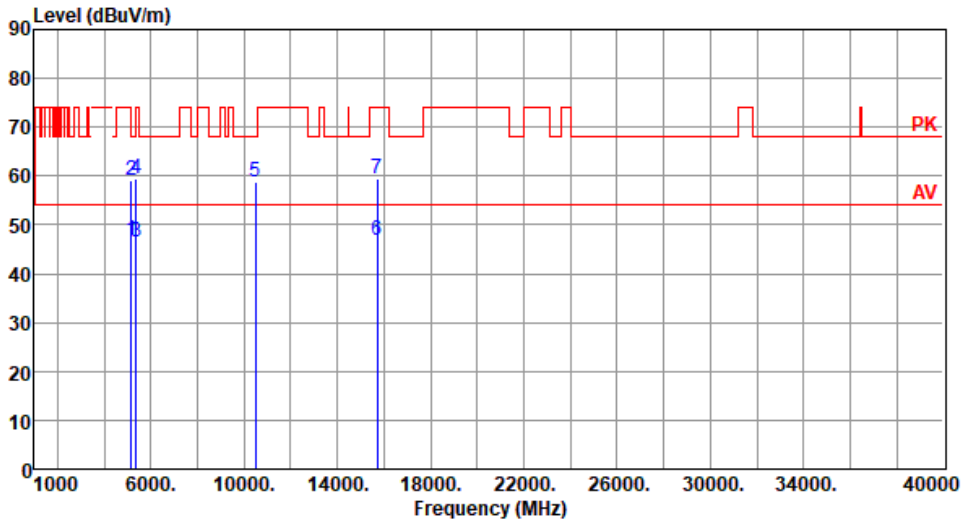


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.33	54.00	-7.67	40.22	6.11	Average	316	158
2	5150.00	58.98	74.00	-15.02	52.87	6.11	Peak	316	158
3	5350.00	46.15	54.00	-7.85	40.57	5.58	Average	316	158
4	5350.00	59.12	74.00	-14.88	53.54	5.58	Peak	316	158
5	10480.00	58.03	68.20	-10.17	43.63	14.40	Peak	100	309
6	15720.00	46.73	54.00	-7.27	31.02	15.71	Average	100	305
7	15720.00	58.96	74.00	-15.04	43.25	15.71	Peak	100	302

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

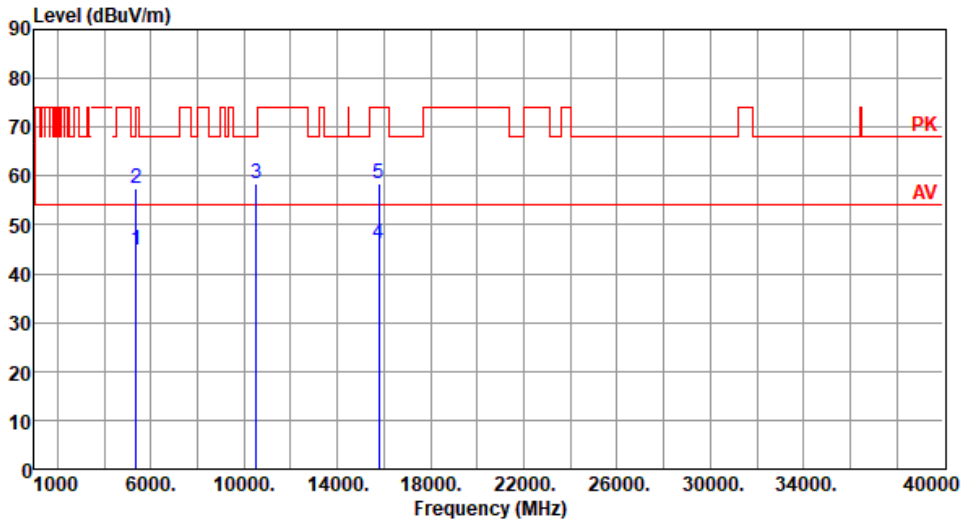


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.75	54.00	-7.25	40.64	6.11	Average	102	216
2	5150.00	59.12	74.00	-14.88	53.01	6.11	Peak	102	216
3	5350.00	46.41	54.00	-7.59	40.83	5.58	Average	102	216
4	5350.00	59.38	74.00	-14.62	53.80	5.58	Peak	102	216
5	10480.00	58.81	68.20	-9.39	44.41	14.40	Peak	105	288
6	15720.00	46.82	54.00	-7.18	31.11	15.71	Average	104	11
7	15720.00	59.31	74.00	-14.69	43.60	15.71	Peak	104	11

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	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

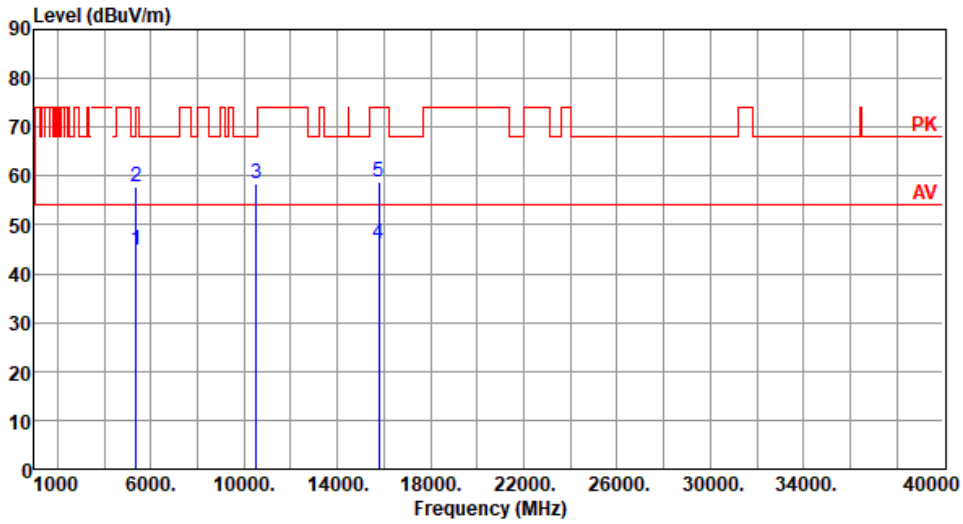


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	44.83	54.00	-9.17	39.25	5.58	Average	300	152
2	5350.00	57.60	74.00	-16.40	52.02	5.58	Peak	300	152
3	10520.00	58.54	68.20	-9.66	44.10	14.44	Peak	100	309
4	15780.00	46.00	54.00	-8.00	30.52	15.48	Average	100	302
5	15780.00	58.59	74.00	-15.41	43.11	15.48	Peak	100	302

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

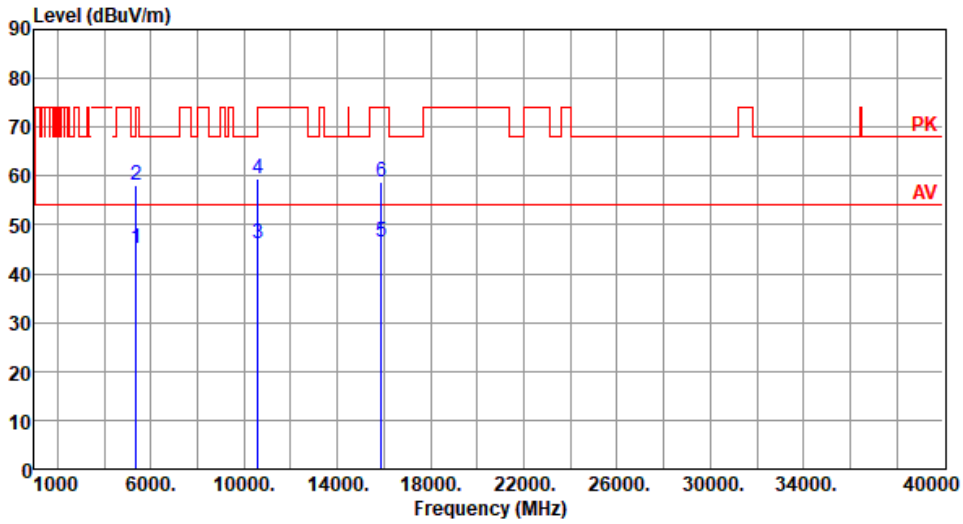


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	44.98	54.00	-9.02	39.40	5.58	Average	102	221
2	5350.00	57.75	74.00	-16.25	52.17	5.58	Peak	102	221
3	10520.00	58.61	68.20	-9.59	44.17	14.44	Peak	103	294
4	15780.00	46.11	54.00	-7.89	30.63	15.48	Average	101	19
5	15780.00	58.72	74.00	-15.28	43.24	15.48	Peak	101	19

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

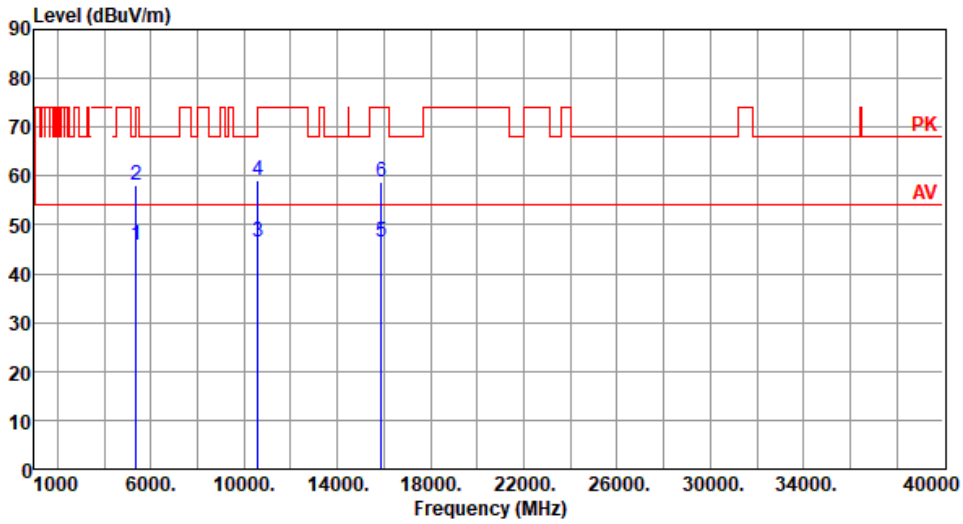


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.14	54.00	-8.86	39.56	5.58	Average	303	151
2	5350.00	58.22	74.00	-15.78	52.64	5.58	Peak	303	151
3	10600.00	46.25	54.00	-7.75	31.61	14.64	Average	115	38
4	10600.00	59.34	74.00	-14.66	44.70	14.64	Peak	115	38
5	15900.00	46.39	54.00	-7.61	31.16	15.23	Average	103	21
6	15900.00	58.84	74.00	-15.16	43.61	15.23	Peak	103	21

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

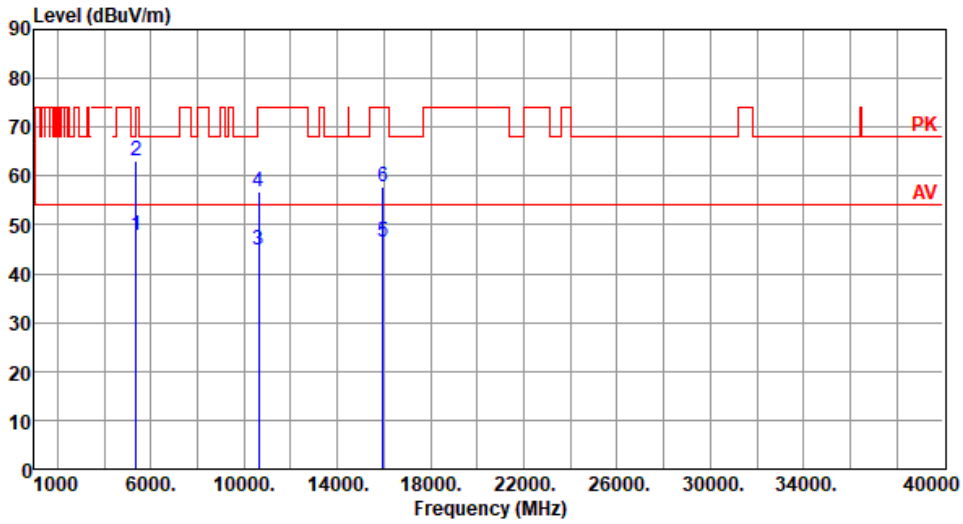


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.81	54.00	-8.19	40.23	5.58	Average	102	218
2	5350.00	58.26	74.00	-15.74	52.68	5.58	Peak	102	218
3	10600.00	46.33	54.00	-7.67	31.69	14.64	Average	100	269
4	10600.00	58.95	74.00	-15.05	44.31	14.64	Peak	100	269
5	15900.00	46.38	54.00	-7.62	31.15	15.23	Average	101	24
6	15900.00	58.76	74.00	-15.24	43.53	15.23	Peak	101	24

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 :BRAD WU Temperature(℃):23 Humidity(%):63

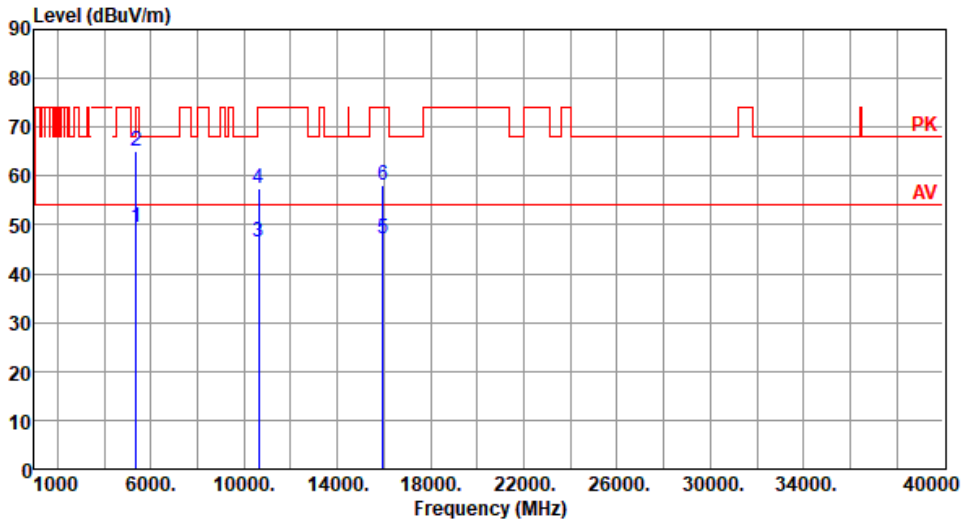


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.94	54.00	-6.06	42.36	5.58	Average	309	159
2	5350.00	63.13	74.00	-10.87	57.55	5.58	Peak	309	159
3	10640.00	44.84	54.00	-9.16	30.21	14.63	Average	100	300
4	10640.00	56.88	74.00	-17.12	42.25	14.63	Peak	100	300
5	15960.00	46.59	54.00	-7.41	31.23	15.36	Average	100	303
6	15960.00	57.66	74.00	-16.34	42.30	15.36	Peak	100	303

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 :BRAD WU Temperature(℃):23 Humidity(%):63

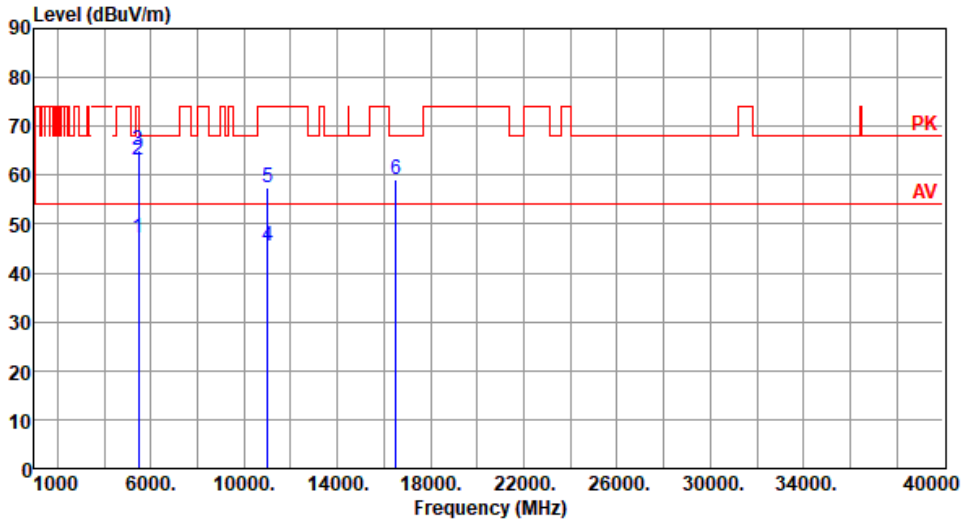


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.39	54.00	-4.61	43.81	5.58	Average	100	219
2	5350.00	65.23	74.00	-8.77	59.65	5.58	Peak	100	219
3	10640.00	46.41	54.00	-7.59	31.78	14.63	Average	100	286
4	10640.00	57.50	74.00	-16.50	42.87	14.63	Peak	100	286
5	15960.00	47.18	54.00	-6.82	31.82	15.36	Average	100	290
6	15960.00	58.16	74.00	-15.84	42.80	15.36	Peak	100	290

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 :BRAD WU Temperature(℃):23 Humidity(%):63

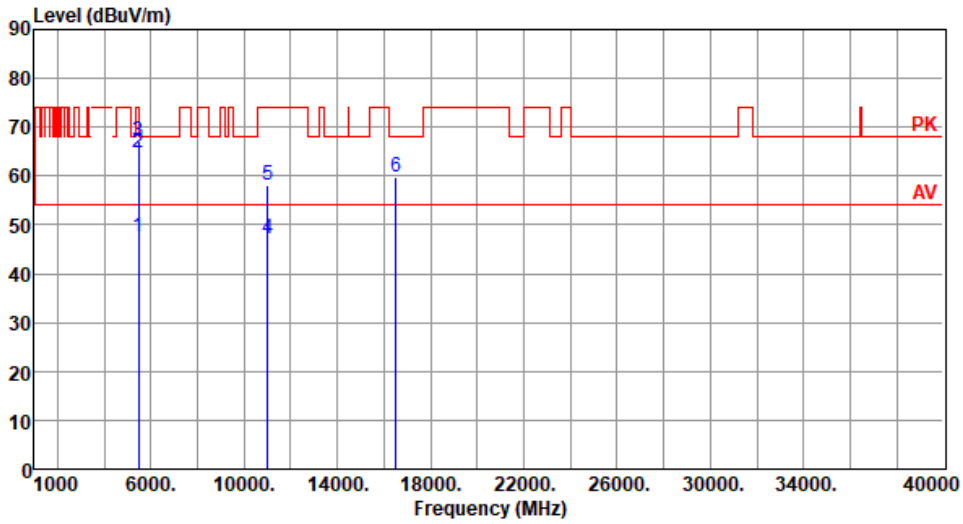


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.22	54.00	-6.78	41.00	6.22	Average	354	154
2	5460.00	63.22	74.00	-10.78	57.00	6.22	Peak	354	154
3	5470.00	65.13	68.20	-3.07	58.87	6.26	Peak	354	154
4	11000.00	45.49	54.00	-8.51	30.10	15.39	Average	100	305
5	11000.00	57.59	74.00	-16.41	42.20	15.39	Peak	100	305
6	16500.00	59.25	68.20	-8.95	42.23	17.02	Peak	100	304

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 :BRAD WU Temperature(℃):23 Humidity(%):63

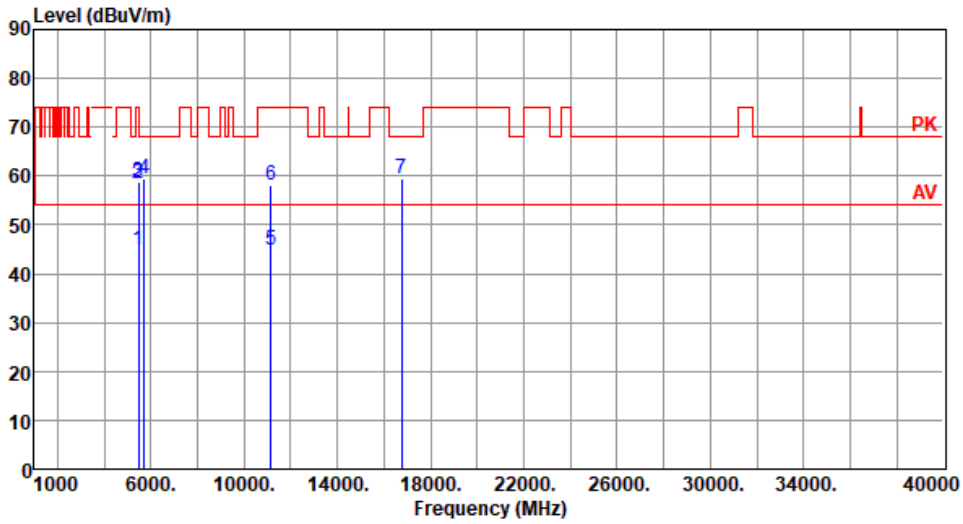


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.37	54.00	-6.63	41.15	6.22	Average	102	218
2	5460.00	64.73	74.00	-9.27	58.51	6.22	Peak	102	218
3	5470.00	67.18	68.20	-1.02	60.92	6.26	Peak	102	218
4	11000.00	47.19	54.00	-6.81	31.80	15.39	Average	100	281
5	11000.00	58.24	74.00	-15.76	42.85	15.39	Peak	100	281
6	16500.00	59.79	68.20	-8.41	42.77	17.02	Peak	100	285

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 :BRAD WU Temperature(℃):23 Humidity(%):63

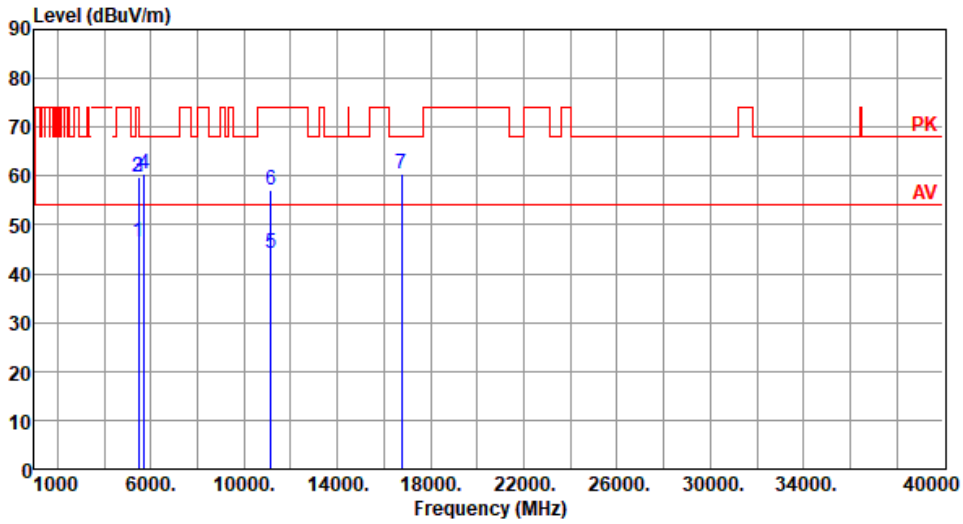


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.96	54.00	-9.04	38.74	6.22	Average	305	149
2	5460.00	58.41	74.00	-15.59	52.19	6.22	Peak	305	149
3	5470.00	58.62	68.20	-9.58	52.36	6.26	Peak	305	149
4	5725.00	59.49	68.20	-8.71	52.96	6.53	Peak	305	149
5	11160.00	44.92	54.00	-9.08	30.08	14.84	Average	100	301
6	11160.00	58.24	74.00	-15.76	43.40	14.84	Peak	100	301
7	16740.00	59.55	68.20	-8.65	42.00	17.55	Peak	100	34

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 :BRAD WU Temperature(℃):23 Humidity(%):63

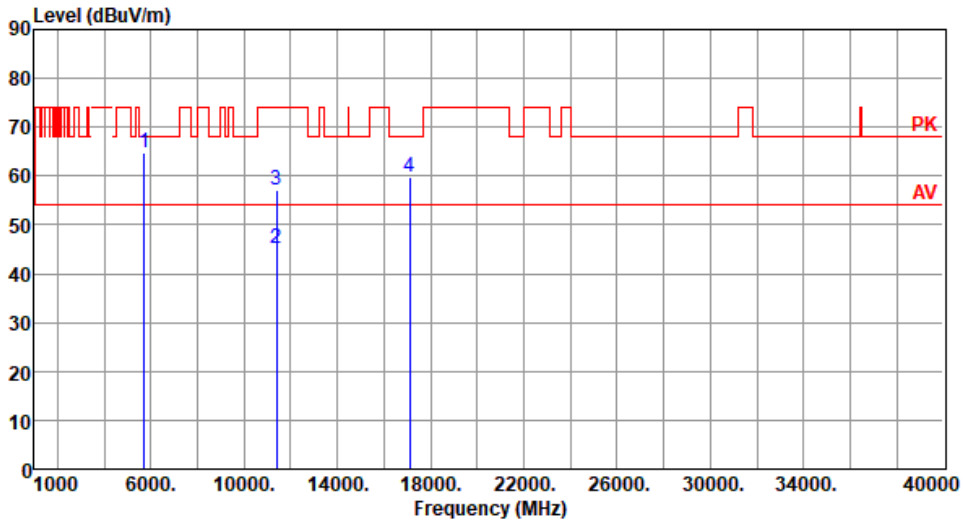


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.35	54.00	-7.65	40.13	6.22	Average	100	222
2	5460.00	59.68	74.00	-14.32	53.46	6.22	Peak	100	222
3	5470.00	59.92	68.20	-8.28	53.66	6.26	Peak	100	222
4	5725.00	60.36	68.20	-7.84	53.83	6.53	Peak	100	222
5	11160.00	44.31	54.00	-9.69	29.47	14.84	Average	104	51
6	11160.00	57.22	74.00	-16.78	42.38	14.84	Peak	104	51
7	16740.00	60.45	68.20	-7.75	42.90	17.55	Peak	100	261

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 :BRAD WU Temperature(℃):23 Humidity(%):63

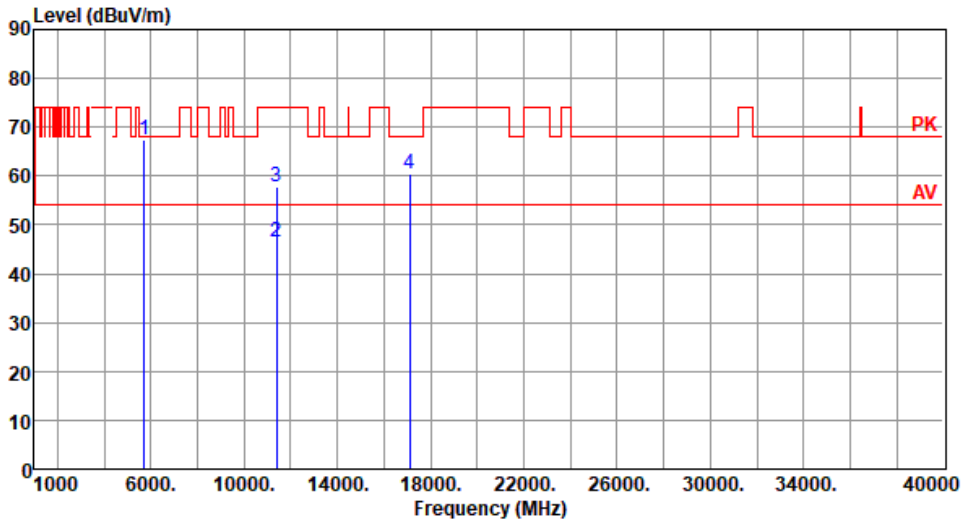


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.67	68.20	-3.53	58.14	6.53	Peak	361	153
2	11400.00	45.26	54.00	-8.74	30.29	14.97	Average	100	301
3	11400.00	57.22	74.00	-16.78	42.25	14.97	Peak	100	301
4	17100.00	59.71	68.20	-8.49	42.02	17.69	Peak	100	303

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 :BRAD WU Temperature(℃):23 Humidity(%):63

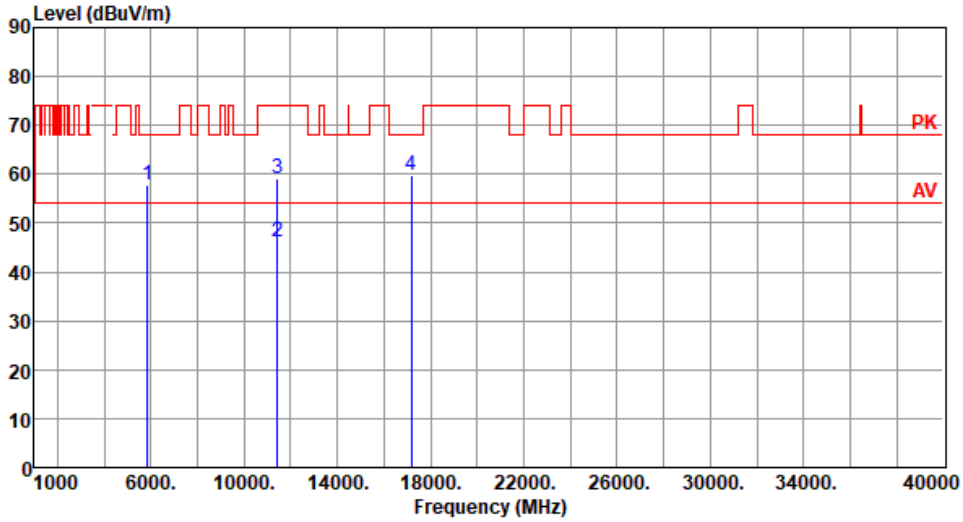


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.48	68.20	-0.72	60.95	6.53	Peak	117	218
2	11400.00	46.65	54.00	-7.35	31.68	14.97	Average	100	275
3	11400.00	57.82	74.00	-16.18	42.85	14.97	Peak	100	275
4	17100.00	60.34	68.20	-7.86	42.65	17.69	Peak	100	277

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 :Roger Lu Temperature(℃):24 Humidity(%):65

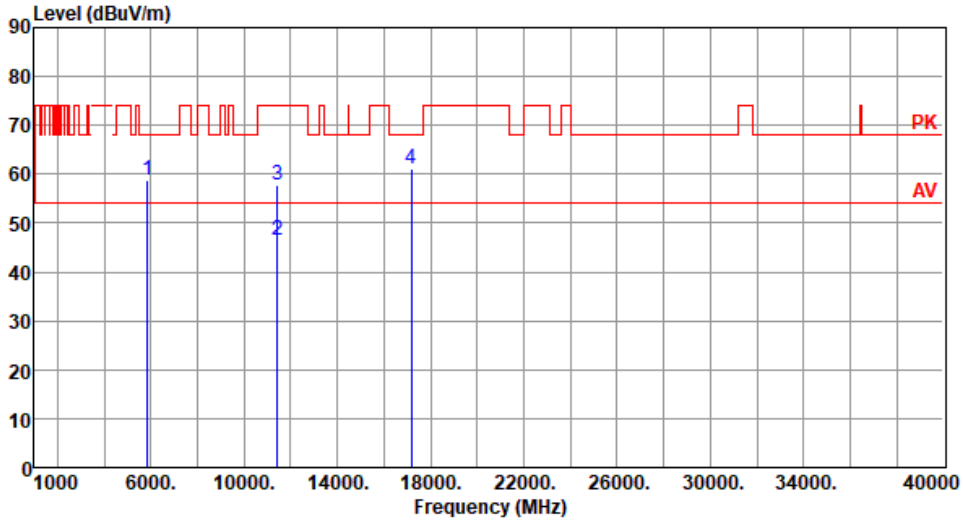


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	57.89	68.20	-10.31	51.00	6.89	Peak	358	152
2	11440.00	46.14	54.00	-7.86	31.11	15.03	Average	100	305
3	11440.00	59.17	74.00	-14.83	44.14	15.03	Peak	100	305
4	17160.00	59.87	68.20	-8.33	42.19	17.68	Peak	100	302

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

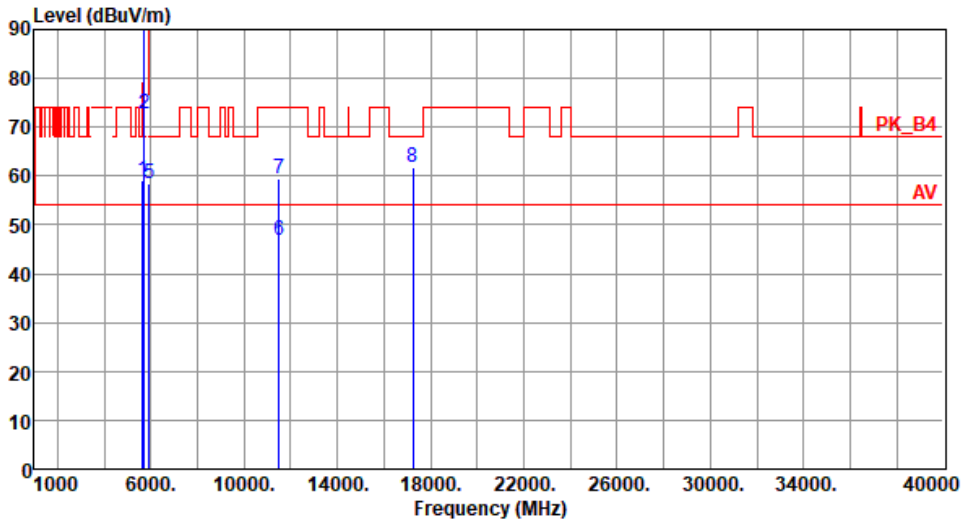


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	58.80	68.20	-9.40	51.91	6.89	Peak	100	210
2	11440.00	46.65	54.00	-7.35	31.62	15.03	Average	100	285
3	11440.00	57.87	74.00	-16.13	42.84	15.03	Peak	100	285
4	17160.00	61.13	68.20	-7.07	43.45	17.68	Peak	100	255

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

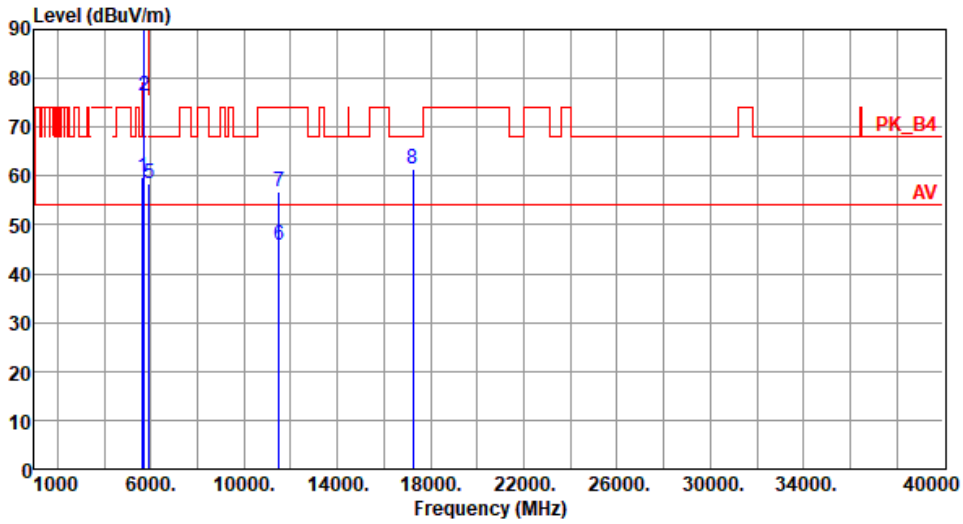


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.27	68.20	-8.93	53.00	6.27	Peak	356	153
2	5700.00	72.81	105.20	-32.39	66.34	6.47	Peak	356	153
3	5720.00	92.88	110.80	-17.92	86.36	6.52	Peak	356	153
4	5725.00	95.41	122.20	-26.79	88.88	6.53	Peak	356	153
5	5925.00	58.36	68.20	-9.84	51.33	7.03	Peak	356	153
6	11490.00	46.70	54.00	-7.30	31.62	15.08	Average	266	19
7	11490.00	59.54	74.00	-14.46	44.46	15.08	Peak	266	19
8	17235.00	61.68	68.20	-6.52	43.88	17.80	Peak	100	305

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

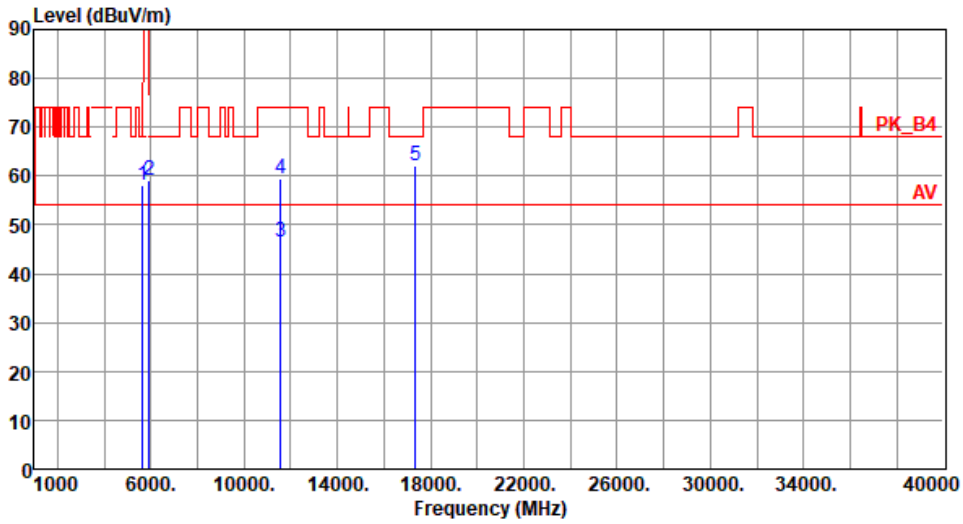


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.74	68.20	-8.46	53.47	6.27	Peak	100	308
2	5700.00	76.26	105.20	-28.94	69.79	6.47	Peak	100	308
3	5720.00	96.28	110.80	-14.52	89.76	6.52	Peak	100	308
4	5725.00	97.61	122.20	-24.59	91.08	6.53	Peak	100	308
5	5925.00	58.49	68.20	-9.71	51.46	7.03	Peak	100	308
6	11490.00	45.74	54.00	-8.26	30.66	15.08	Average	100	285
7	11490.00	56.88	74.00	-17.12	41.80	15.08	Peak	100	285
8	17235.00	61.38	68.20	-6.82	43.58	17.80	Peak	102	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)	5785
Polarization	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

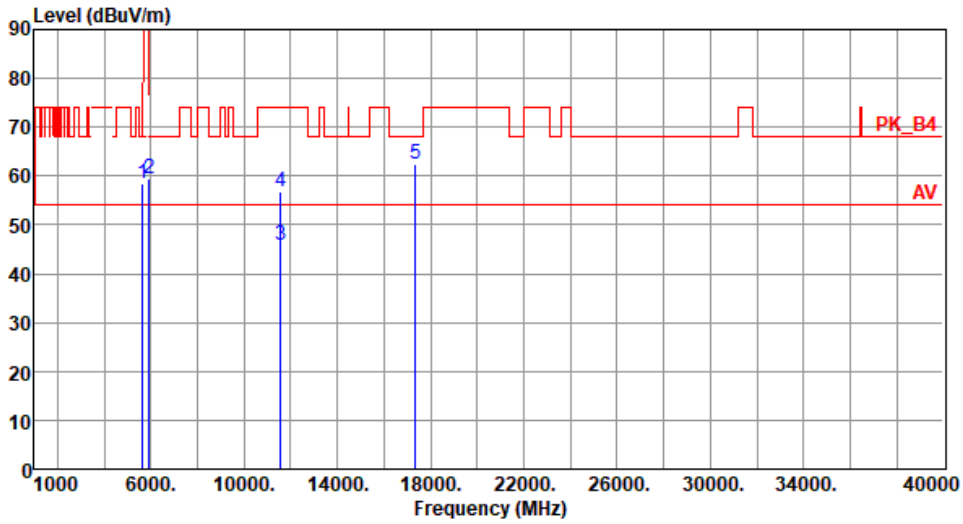


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	58.12	68.20	-10.08	51.85	6.27	Peak	357	159
2	5925.00	59.02	68.20	-9.18	51.99	7.03	Peak	357	159
3	11570.00	46.59	54.00	-7.41	31.56	15.03	Average	262	18
4	11570.00	59.57	74.00	-14.43	44.54	15.03	Peak	262	18
5	17355.00	62.23	68.20	-5.97	43.69	18.54	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 HE20	Test Freq. (MHz)	5785
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

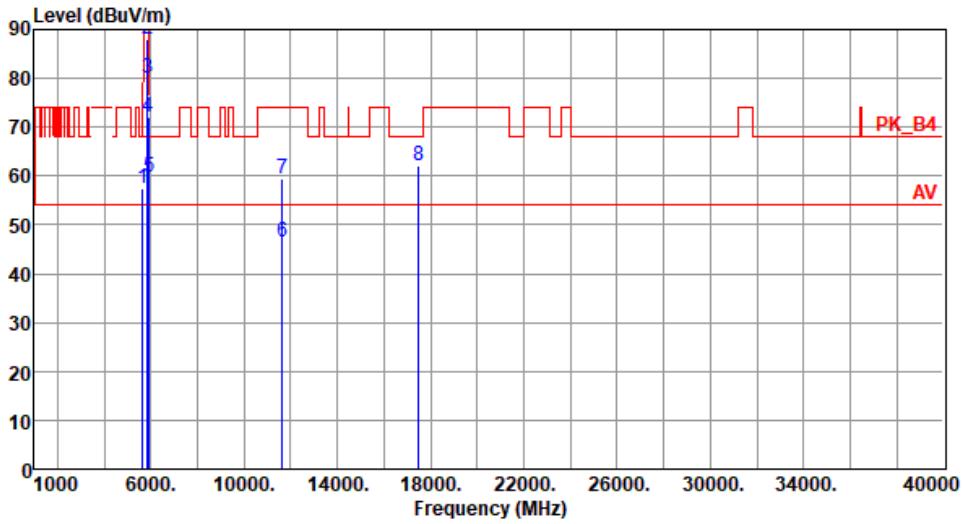


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	58.39	68.20	-9.81	52.12	6.27	Peak	100	306
2	5925.00	59.49	68.20	-8.71	52.46	7.03	Peak	100	306
3	11570.00	45.71	54.00	-8.29	30.68	15.03	Average	100	286
4	11570.00	56.71	74.00	-17.29	41.68	15.03	Peak	100	286
5	17355.00	62.39	68.20	-5.81	43.85	18.54	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)	5825
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

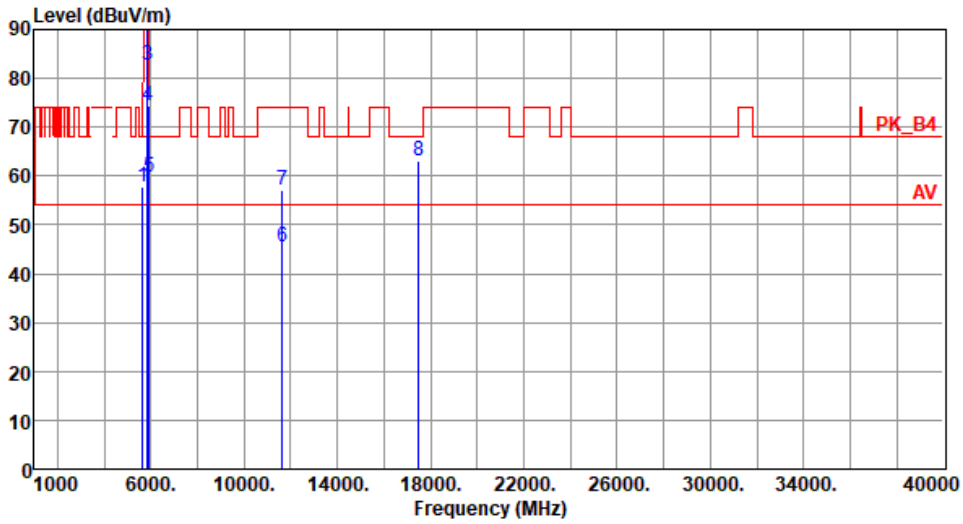


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.47	68.20	-10.73	51.20	6.27	Peak	359	159
2	5850.00	87.89	122.20	-34.31	81.00	6.89	Peak	359	159
3	5855.00	79.90	110.80	-30.90	73.00	6.90	Peak	359	159
4	5875.00	72.14	105.20	-33.06	65.21	6.93	Peak	359	159
5	5925.00	59.68	68.20	-8.52	52.65	7.03	Peak	359	159
6	11650.00	46.53	54.00	-7.47	31.82	14.71	Average	253	5
7	11650.00	59.59	74.00	-14.41	44.88	14.71	Peak	253	5
8	17475.00	62.14	68.20	-6.06	42.69	19.45	Peak	100	306

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)	5825
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65



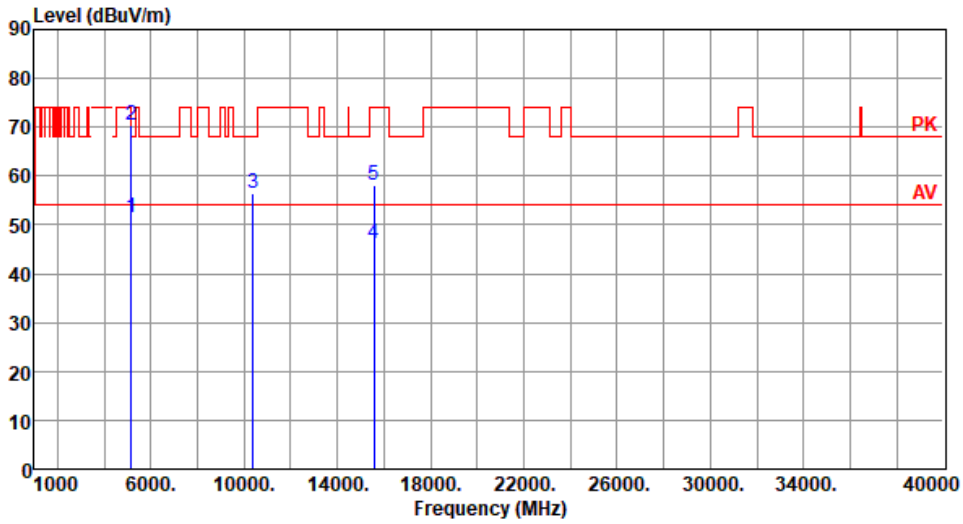
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.73	68.20	-10.47	51.46	6.27	Peak	100	307
2	5850.00	90.33	122.20	-31.87	83.44	6.89	Peak	100	307
3	5855.00	82.61	110.80	-28.19	75.71	6.90	Peak	100	307
4	5875.00	74.23	105.20	-30.97	67.30	6.93	Peak	100	307
5	5925.00	59.81	68.20	-8.39	52.78	7.03	Peak	100	307
6	11650.00	45.40	54.00	-8.60	30.69	14.71	Average	100	284
7	11650.00	57.23	74.00	-16.77	42.52	14.71	Peak	100	284
8	17475.00	63.06	68.20	-5.14	43.61	19.45	Peak	105	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).

3.5.3 Transmitter Radiated Unwanted Emissions (Above 1GHz) for ax HE40

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

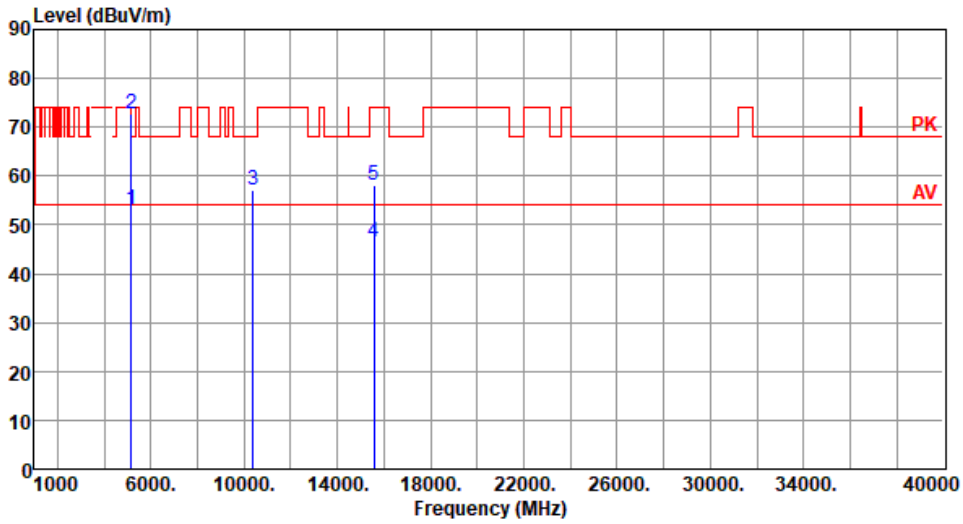


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.33	54.00	-2.67	45.22	6.11	Average	358	152
2	5150.00	70.32	74.00	-3.68	64.21	6.11	Peak	358	152
3	10380.00	56.49	68.20	-11.71	42.15	14.34	Peak	100	309
4	15570.00	46.11	54.00	-7.89	30.21	15.90	Average	100	310
5	15570.00	58.10	74.00	-15.90	42.20	15.90	Peak	100	310

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)	5190
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

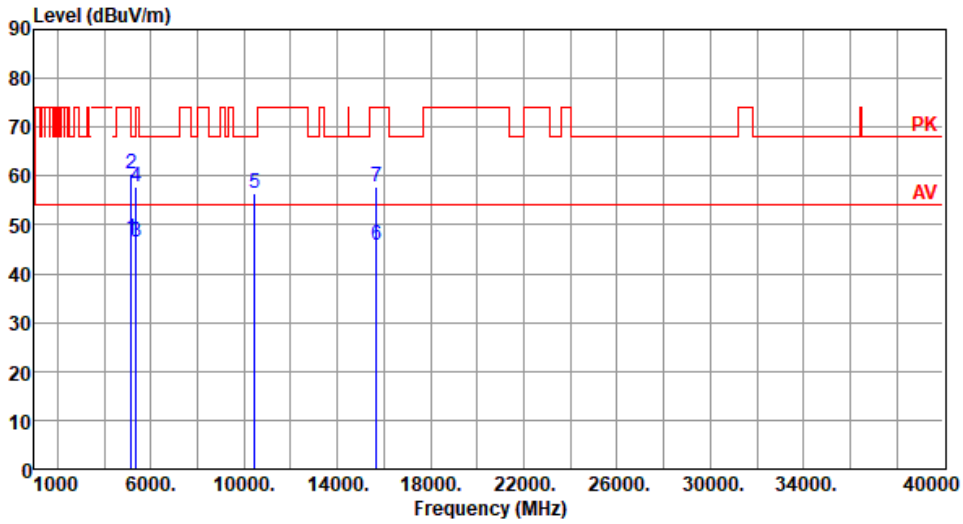


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.23	54.00	-0.77	47.12	6.11	Average	101	220
2	5150.00	72.75	74.00	-1.25	66.64	6.11	Peak	101	220
3	10380.00	57.03	68.20	-11.17	42.69	14.34	Peak	100	28
4	15570.00	46.56	54.00	-7.44	30.66	15.90	Average	100	26
5	15570.00	58.22	74.00	-15.78	42.32	15.90	Peak	100	26

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)	5230
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

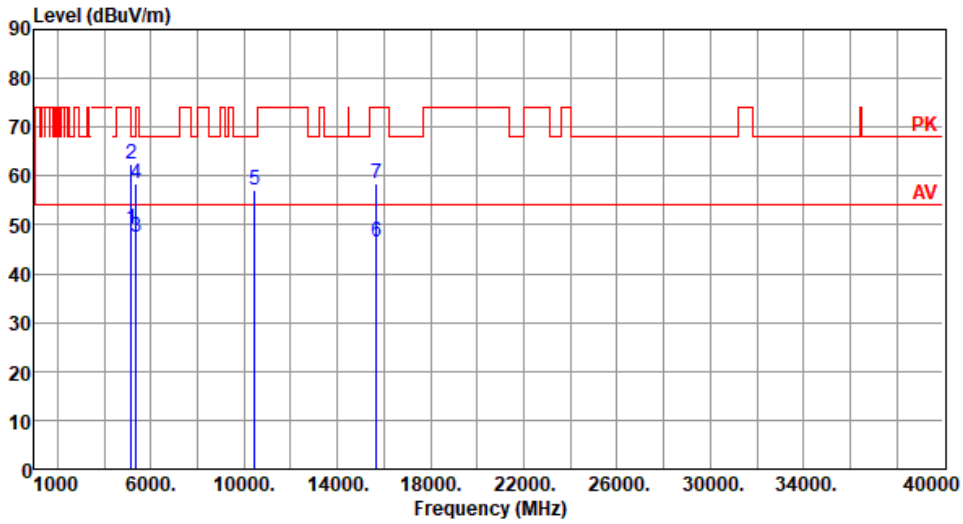


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.31	54.00	-6.69	41.20	6.11	Average	309	158
2	5150.00	60.33	74.00	-13.67	54.22	6.11	Peak	309	158
3	5350.00	46.54	54.00	-7.46	40.96	5.58	Average	309	158
4	5350.00	57.83	74.00	-16.17	52.25	5.58	Peak	309	158
5	10460.00	56.53	68.20	-11.67	42.11	14.42	Peak	100	309
6	15690.00	45.98	54.00	-8.02	30.20	15.78	Average	100	302
7	15690.00	57.95	74.00	-16.05	42.17	15.78	Peak	100	302

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

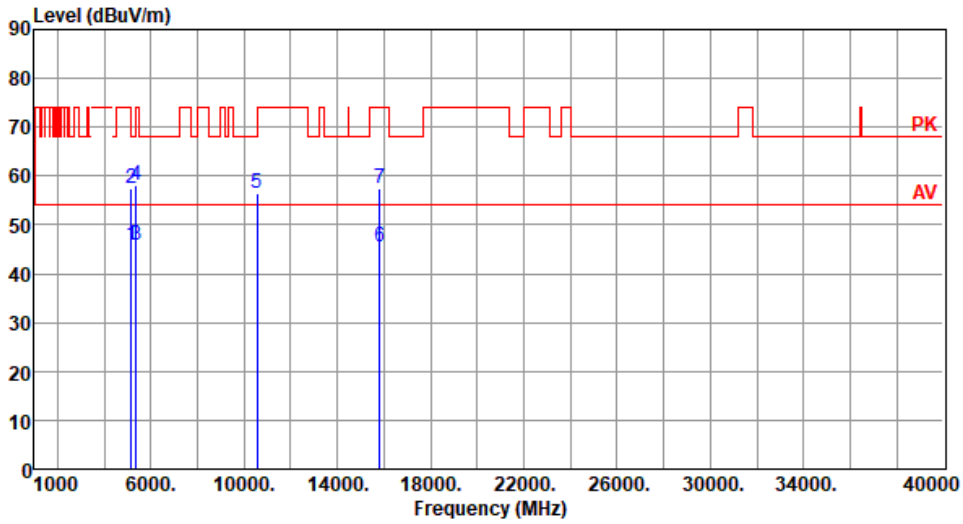


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.17	54.00	-4.83	43.06	6.11	Average	100	230
2	5150.00	62.49	74.00	-11.51	56.38	6.11	Peak	100	230
3	5350.00	47.41	54.00	-6.59	41.83	5.58	Average	100	230
4	5350.00	58.44	74.00	-15.56	52.86	5.58	Peak	100	230
5	10460.00	57.29	68.20	-10.91	42.87	14.42	Peak	100	25
6	15690.00	46.47	54.00	-7.53	30.69	15.78	Average	100	29
7	15690.00	58.42	74.00	-15.58	42.64	15.78	Peak	100	29

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	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

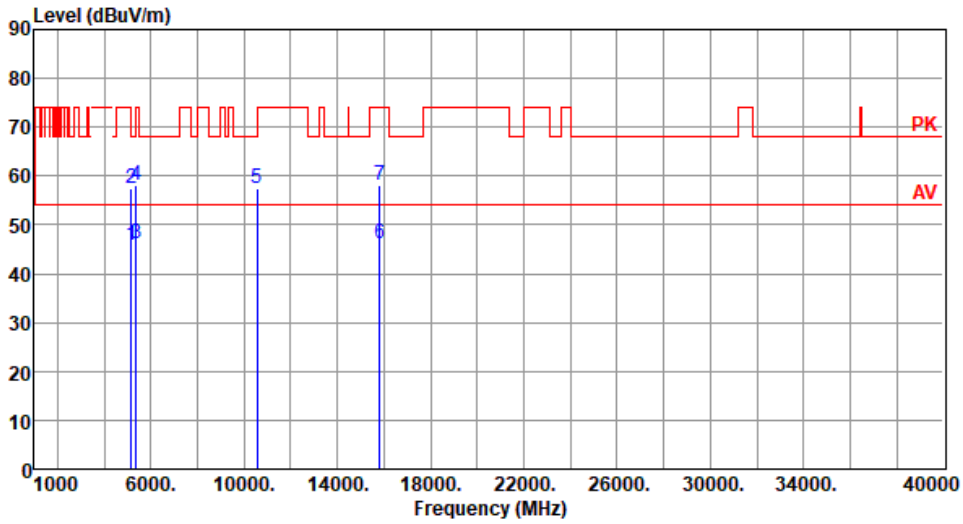


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.88	54.00	-8.12	39.77	6.11	Average	362	152
2	5150.00	57.36	74.00	-16.64	51.25	6.11	Peak	362	152
3	5350.00	45.83	54.00	-8.17	40.25	5.58	Average	362	152
4	5350.00	58.03	74.00	-15.97	52.45	5.58	Peak	362	152
5	10540.00	56.60	68.20	-11.60	42.11	14.49	Peak	100	309
6	15810.00	45.63	54.00	-8.37	30.24	15.39	Average	100	303
7	15810.00	57.53	74.00	-16.47	42.14	15.39	Peak	100	303

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 :Roger Lu Temperature(℃):24 Humidity(%):65

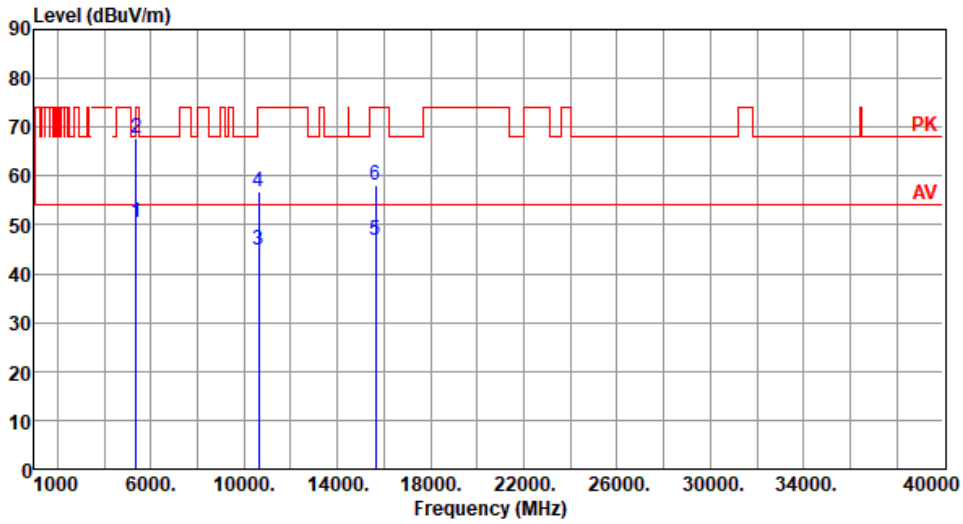


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.97	54.00	-8.03	39.86	6.11	Average	104	228
2	5150.00	57.57	74.00	-16.43	51.46	6.11	Peak	104	228
3	5350.00	46.07	54.00	-7.93	40.49	5.58	Average	104	228
4	5350.00	58.16	74.00	-15.84	52.58	5.58	Peak	104	228
5	10540.00	57.34	68.20	-10.86	42.85	14.49	Peak	100	27
6	15810.00	46.19	54.00	-7.81	30.80	15.39	Average	100	29
7	15810.00	58.14	74.00	-15.86	42.75	15.39	Peak	100	29

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 :BRAD WU Temperature(℃):23 Humidity(%):63

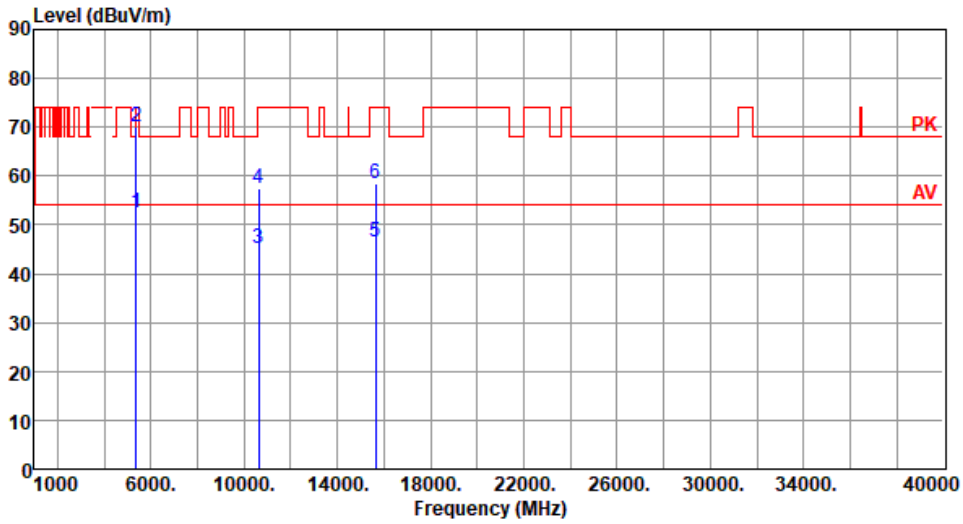


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.53	54.00	-3.47	44.95	5.58	Average	355	151
2	5350.00	67.83	74.00	-6.17	62.25	5.58	Peak	355	151
3	10620.00	44.89	54.00	-9.11	30.25	14.64	Average	100	302
4	10620.00	56.84	74.00	-17.16	42.20	14.64	Peak	100	302
5	15630.00	46.97	54.00	-7.03	31.21	15.76	Average	100	303
6	15630.00	58.06	74.00	-15.94	42.30	15.76	Peak	100	303

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 :BRAD WU Temperature(℃):23 Humidity(%):63

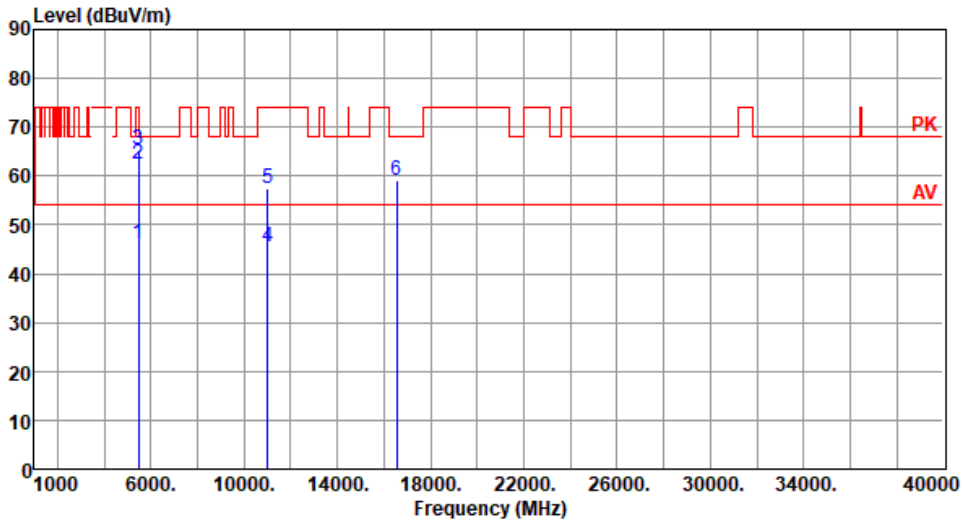


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.50	54.00	-1.50	46.92	5.58	Average	104	216
2	5350.00	70.21	74.00	-3.79	64.63	5.58	Peak	104	216
3	10620.00	45.29	54.00	-8.71	30.65	14.64	Average	100	22
4	10620.00	57.32	74.00	-16.68	42.68	14.64	Peak	100	22
5	15630.00	46.48	54.00	-7.52	30.72	15.76	Average	100	27
6	15630.00	58.46	74.00	-15.54	42.70	15.76	Peak	100	27

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 :BRAD WU Temperature(℃):23 Humidity(%):63

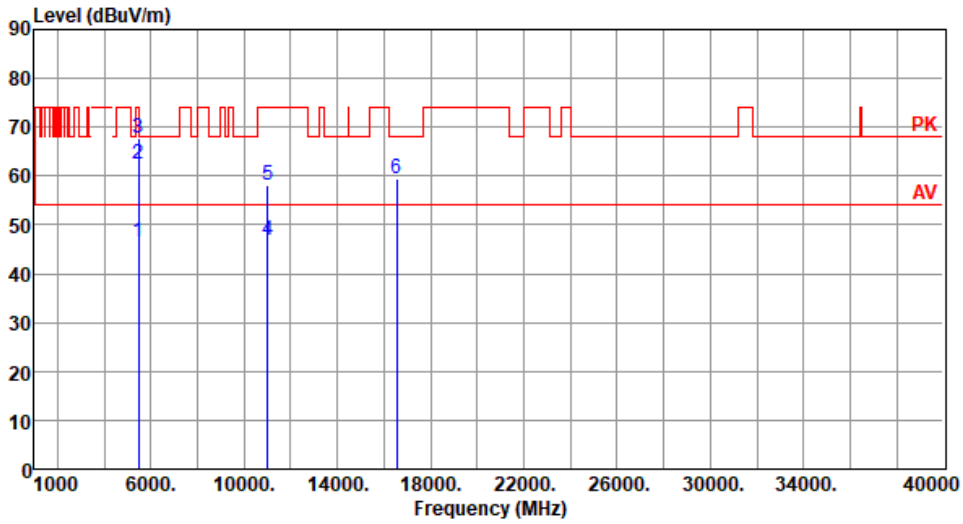


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.27	54.00	-7.73	40.05	6.22	Average	358	155
2	5460.00	62.27	74.00	-11.73	56.05	6.22	Peak	358	158
3	5470.00	65.48	68.20	-2.72	59.22	6.26	Peak	358	158
4	11020.00	45.53	54.00	-8.47	30.22	15.31	Average	100	308
5	11020.00	57.59	74.00	-16.41	42.28	15.31	Peak	100	308
6	16530.00	59.06	68.20	-9.14	42.11	16.95	Peak	100	310

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 :BRAD WU Temperature(℃):23 Humidity(%):63

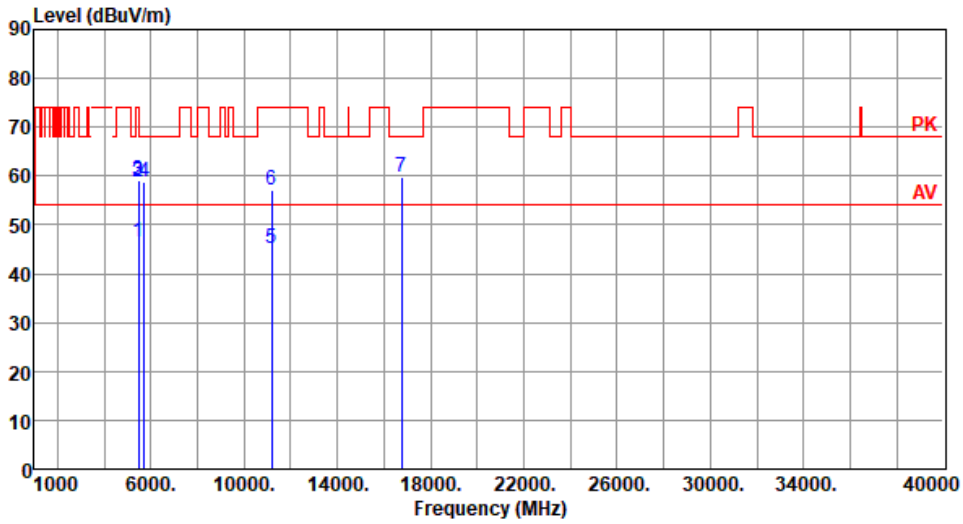


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.34	54.00	-7.66	40.12	6.22	Average	115	212
2	5460.00	62.43	74.00	-11.57	56.21	6.22	Peak	115	212
3	5470.00	67.68	68.20	-0.52	61.42	6.26	Peak	115	212
4	11020.00	46.96	54.00	-7.04	31.65	15.31	Average	100	27
5	11020.00	57.99	74.00	-16.01	42.68	15.31	Peak	100	27
6	16530.00	59.56	68.20	-8.64	42.61	16.95	Peak	100	25

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 :Roger Lu Temperature(℃):24 Humidity(%):65

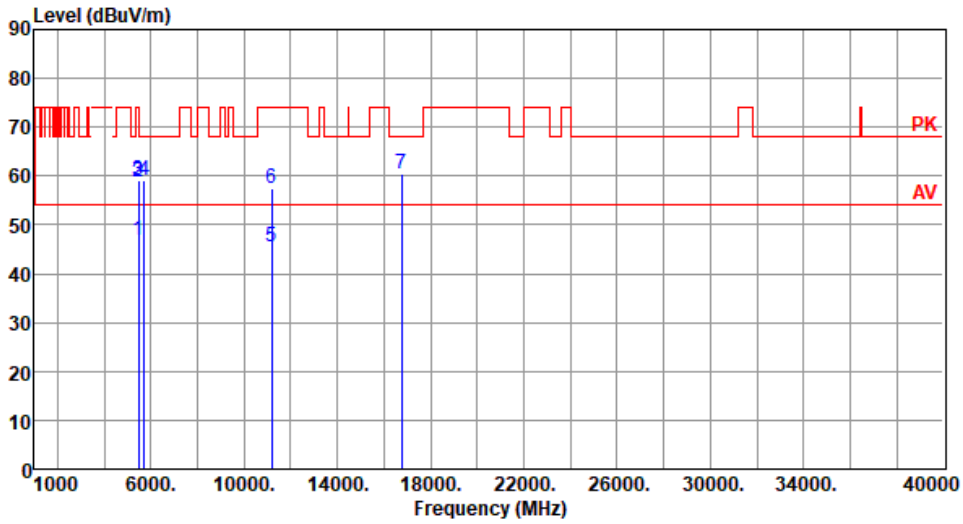


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.55	54.00	-7.45	40.33	6.22	Average	311	151
2	5460.00	58.76	74.00	-15.24	52.54	6.22	Peak	311	151
3	5470.00	59.10	68.20	-9.10	52.84	6.26	Peak	311	151
4	5725.00	58.86	68.20	-9.34	52.33	6.53	Peak	311	151
5	11180.00	45.03	54.00	-8.97	30.24	14.79	Average	100	307
6	11180.00	57.03	74.00	-16.97	42.24	14.79	Peak	100	307
7	16770.00	59.82	68.20	-8.38	42.25	17.57	Peak	100	302

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

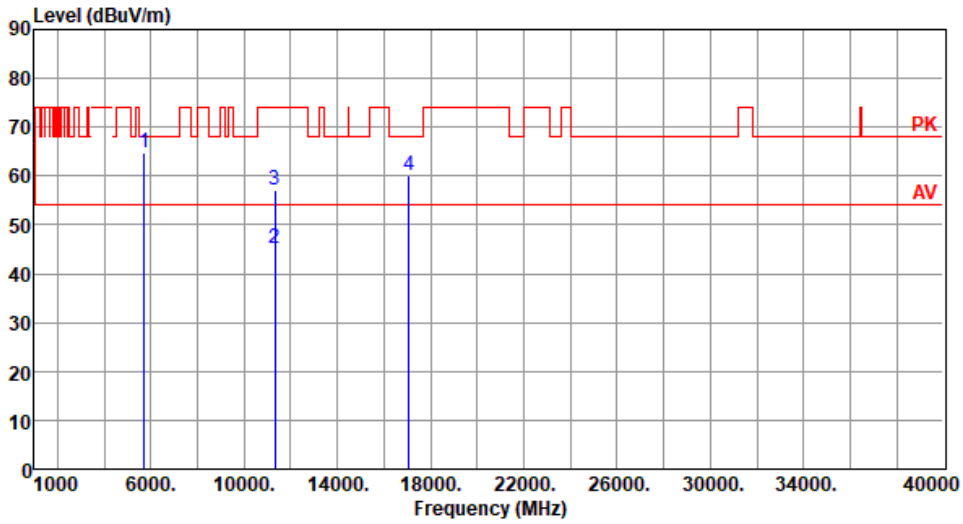


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.73	54.00	-7.27	40.51	6.22	Average	104	210
2	5460.00	58.82	74.00	-15.18	52.60	6.22	Peak	104	210
3	5470.00	59.25	68.20	-8.95	52.99	6.26	Peak	104	210
4	5725.00	58.99	68.20	-9.21	52.46	6.53	Peak	104	210
5	11180.00	45.53	54.00	-8.47	30.74	14.79	Average	100	26
6	11180.00	57.57	74.00	-16.43	42.78	14.79	Peak	100	26
7	16770.00	60.42	68.20	-7.78	42.85	17.57	Peak	100	29

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 :BRAD WU Temperature(℃):23 Humidity(%):63

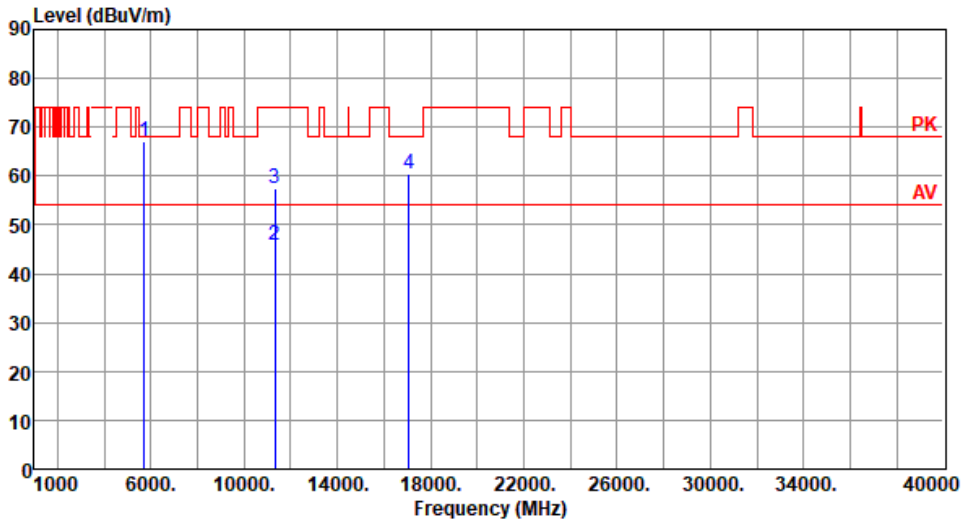


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.78	68.20	-3.42	58.25	6.53	Peak	315	155
2	11340.00	45.15	54.00	-8.85	30.25	14.90	Average	100	303
3	11340.00	57.15	74.00	-16.85	42.25	14.90	Peak	100	303
4	17070.00	59.99	68.20	-8.21	42.30	17.69	Peak	100	309

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

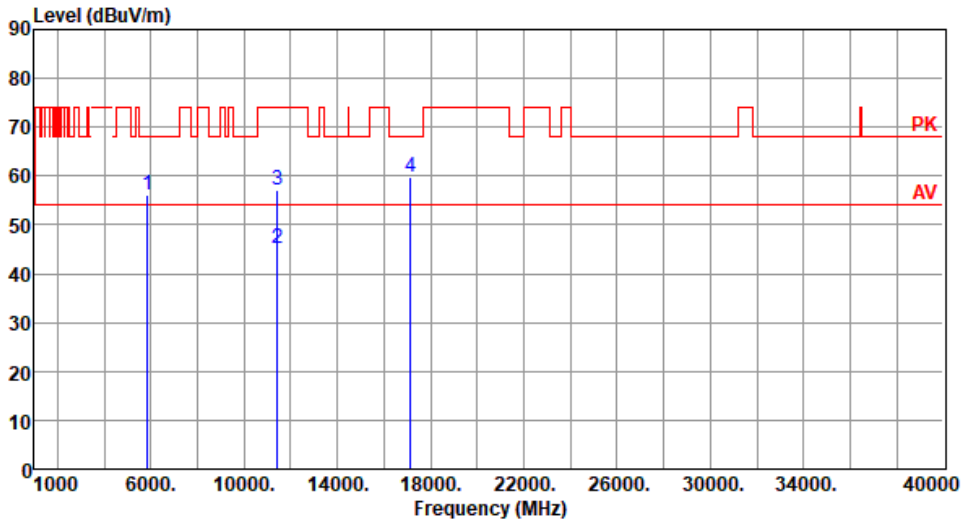


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.24	68.20	-0.96	60.71	6.53	Peak	110	209
2	11340.00	45.70	54.00	-8.30	30.80	14.90	Average	100	27
3	11340.00	57.58	74.00	-16.42	42.68	14.90	Peak	100	27
4	17070.00	60.39	68.20	-7.81	42.70	17.69	Peak	100	28

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

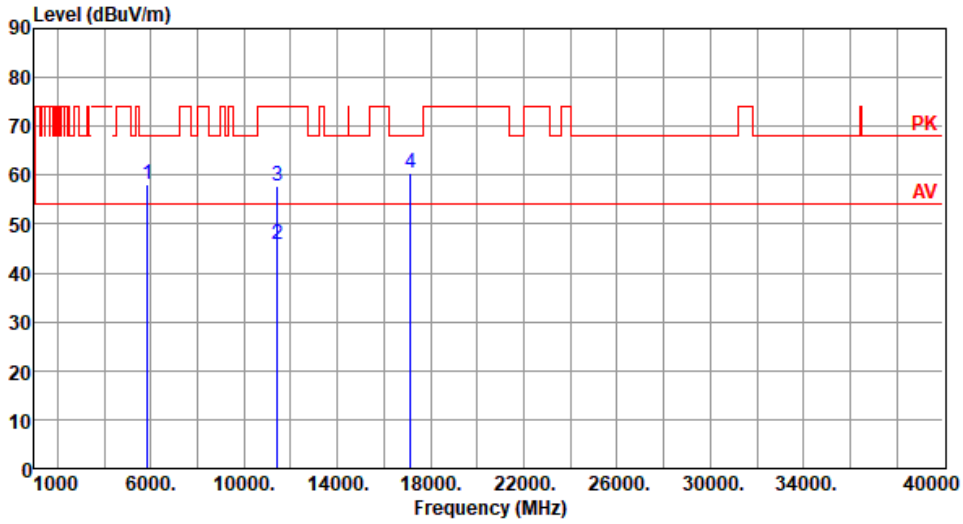


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	56.14	68.20	-12.06	49.25	6.89	Peak	315	152
2	11420.00	45.24	54.00	-8.76	30.24	15.00	Average	100	303
3	11420.00	57.21	74.00	-16.79	42.21	15.00	Peak	100	303
4	17130.00	59.91	68.20	-8.29	42.23	17.68	Peak	100	305

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

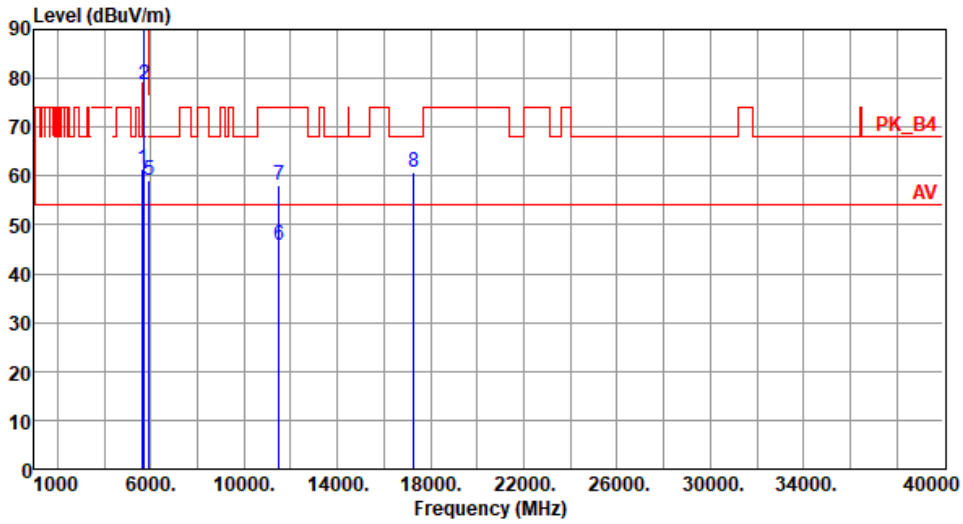


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	58.23	68.20	-9.97	51.34	6.89	Peak	100	207
2	11420.00	45.85	54.00	-8.15	30.85	15.00	Average	100	29
3	11420.00	57.88	74.00	-16.12	42.88	15.00	Peak	100	29
4	17130.00	60.58	68.20	-7.62	42.90	17.68	Peak	100	30

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)	5755
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

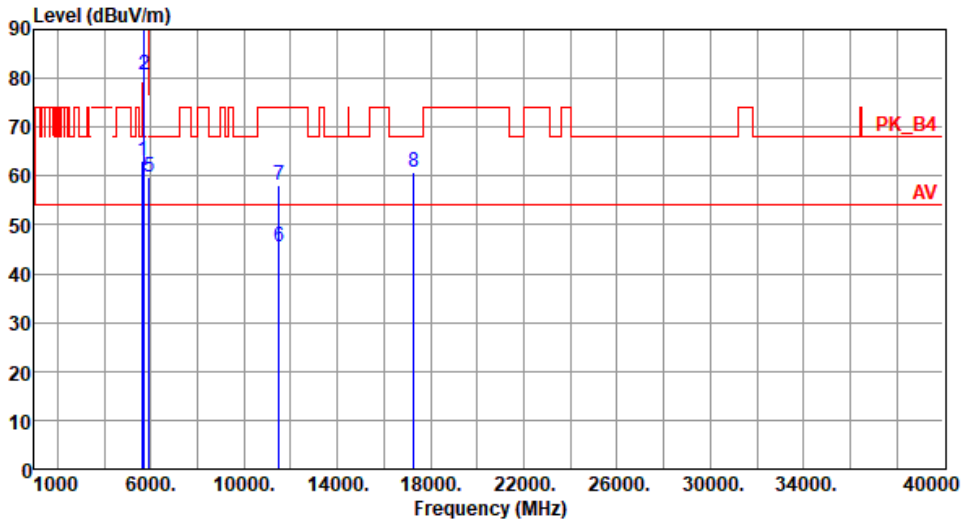


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.42	68.20	-6.78	55.15	6.27	Peak	335	146
2	5700.00	78.74	105.20	-26.46	72.27	6.47	Peak	335	146
3	5720.00	89.98	110.80	-20.82	83.46	6.52	Peak	335	146
4	5725.00	91.01	122.20	-31.19	84.48	6.53	Peak	335	146
5	5925.00	59.18	68.20	-9.02	52.15	7.03	Peak	335	146
6	11510.00	45.95	54.00	-8.05	30.87	15.08	Average	100	25
7	11510.00	58.04	74.00	-15.96	42.96	15.08	Peak	100	25
8	17265.00	60.90	68.20	-7.30	42.99	17.91	Peak	100	308

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

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

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

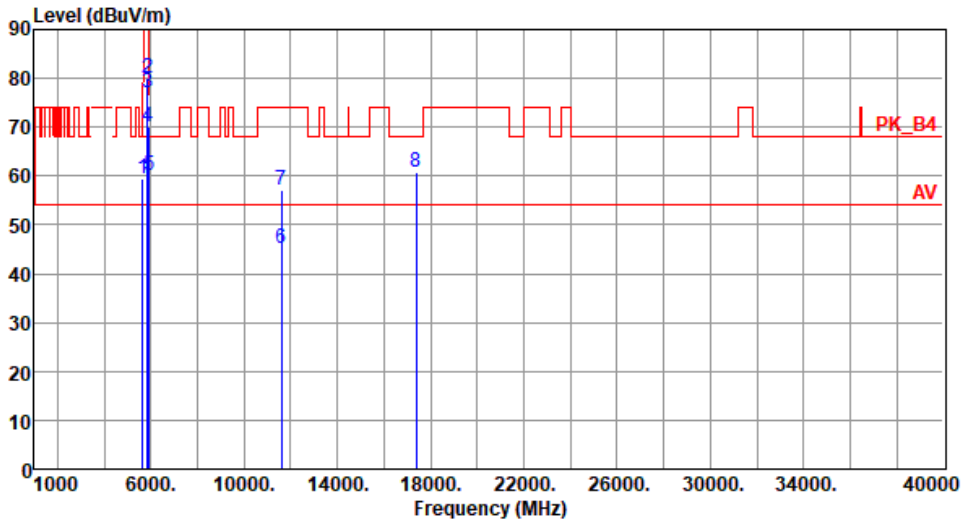


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	63.09	68.20	-5.11	56.82	6.27	Peak	100	308
2	5700.00	80.61	105.20	-24.59	74.14	6.47	Peak	100	308
3	5720.00	91.54	110.80	-19.26	85.02	6.52	Peak	100	308
4	5725.00	93.30	122.20	-28.90	86.77	6.53	Peak	100	308
5	5925.00	59.66	68.20	-8.54	52.63	7.03	Peak	100	308
6	11510.00	45.56	54.00	-8.44	30.48	15.08	Average	100	287
7	11510.00	57.98	74.00	-16.02	42.90	15.08	Peak	100	287
8	17265.00	60.80	68.20	-7.40	42.89	17.91	Peak	100	285

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)	5795
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

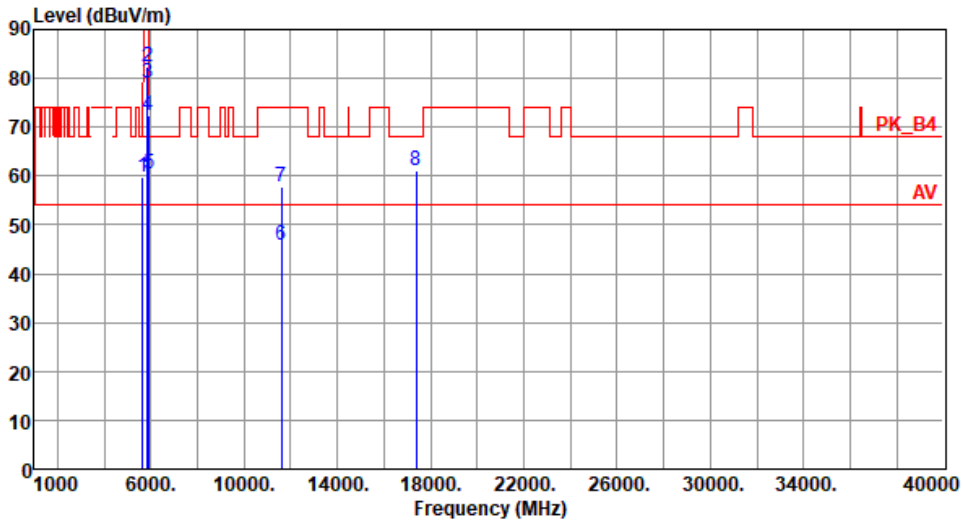


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.51	68.20	-8.69	53.24	6.27	Peak	305	154
2	5850.00	80.11	122.20	-42.09	73.22	6.89	Peak	305	154
3	5855.00	77.15	110.80	-33.65	70.25	6.90	Peak	305	154
4	5875.00	69.94	105.20	-35.26	63.01	6.93	Peak	305	154
5	5925.00	60.03	68.20	-8.17	53.00	7.03	Peak	305	154
6	11590.00	45.30	54.00	-8.70	30.28	15.02	Average	100	305
7	11590.00	57.27	74.00	-16.73	42.25	15.02	Peak	100	305
8	17385.00	60.93	68.20	-7.27	42.13	18.80	Peak	100	303

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)	5795
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65



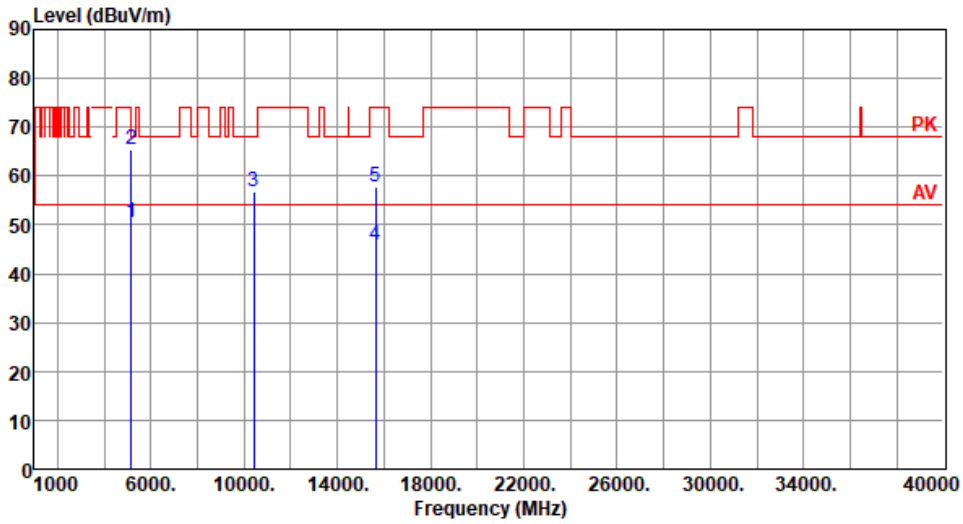
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.92	68.20	-8.28	53.65	6.27	Peak	100	308
2	5850.00	82.35	122.20	-39.85	75.46	6.89	Peak	100	308
3	5855.00	78.95	110.80	-31.85	72.05	6.90	Peak	100	308
4	5875.00	72.25	105.20	-32.95	65.32	6.93	Peak	100	308
5	5925.00	60.37	68.20	-7.83	53.34	7.03	Peak	100	308
6	11590.00	45.90	54.00	-8.10	30.88	15.02	Average	100	285
7	11590.00	57.89	74.00	-16.11	42.87	15.02	Peak	100	285
8	17385.00	61.07	68.20	-7.13	42.27	18.80	Peak	100	269

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).

3.5.4 Transmitter Radiated Unwanted Emissions (Above 1GHz) for ax HE80

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

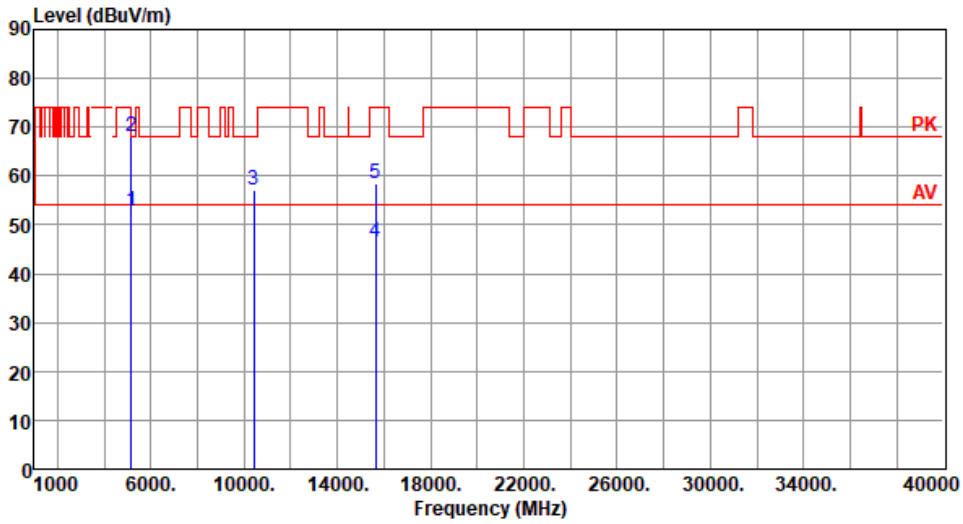


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	50.33	54.00	-3.67	44.22	6.11	Average	300	150
2	5150.00	65.31	74.00	-8.69	59.20	6.11	Peak	300	150
3	10420.00	56.65	68.20	-11.55	42.20	14.45	Peak	100	309
4	15630.00	45.86	54.00	-8.14	30.10	15.76	Average	100	310
5	15630.00	57.94	74.00	-16.06	42.18	15.76	Peak	100	310

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)	5210
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

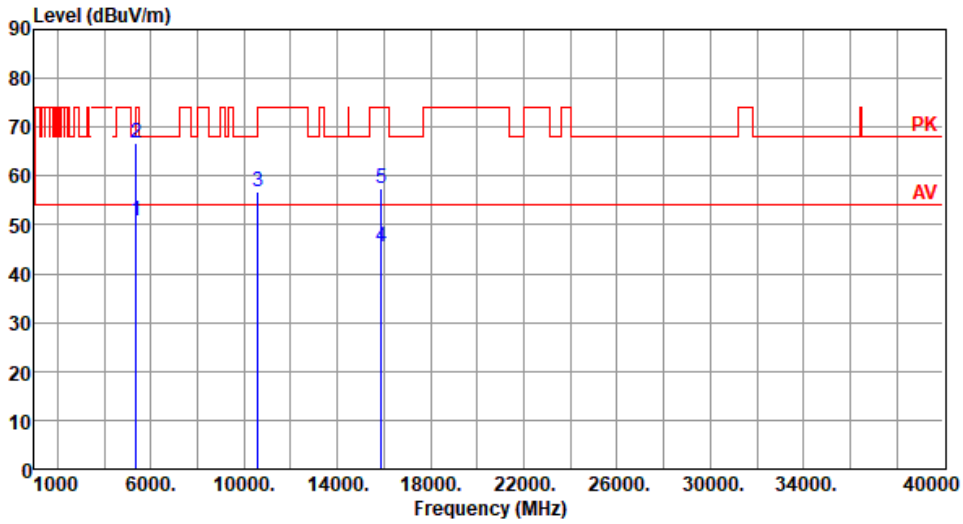


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.64	54.00	-1.36	46.53	6.11	Average	103	219
2	5150.00	68.05	74.00	-5.95	61.94	6.11	Peak	103	219
3	10420.00	57.11	68.20	-11.09	42.66	14.45	Peak	100	275
4	15630.00	46.36	54.00	-7.64	30.60	15.76	Average	100	277
5	15630.00	58.46	74.00	-15.54	42.70	15.76	Peak	100	277

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	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

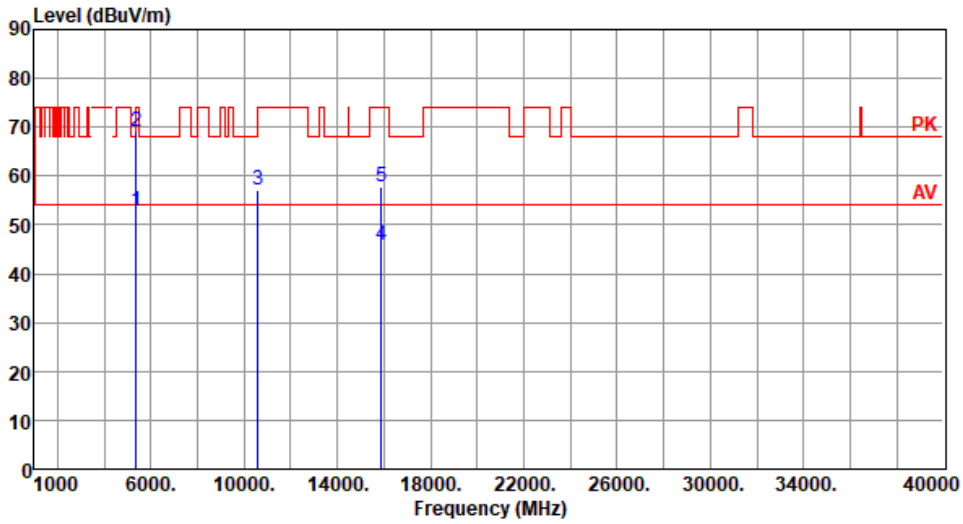


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.79	54.00	-3.21	45.21	5.58	Average	366	158
2	5350.00	66.83	74.00	-7.17	61.25	5.58	Peak	366	158
3	10580.00	56.83	68.20	-11.37	42.23	14.60	Peak	100	302
4	15870.00	45.39	54.00	-8.61	30.11	15.28	Average	100	309
5	15870.00	57.40	74.00	-16.60	42.12	15.28	Peak	100	309

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

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

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

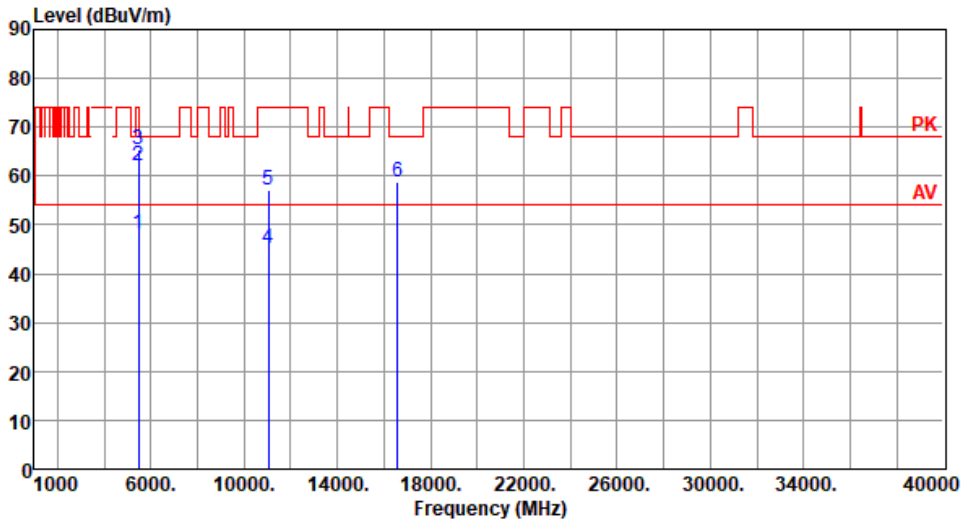


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.90	54.00	-1.10	47.32	5.58	Average	104	219
2	5350.00	69.04	74.00	-4.96	63.46	5.58	Peak	104	219
3	10580.00	57.19	68.20	-11.01	42.59	14.60	Peak	100	173
4	15870.00	45.88	54.00	-8.12	30.60	15.28	Average	100	171
5	15870.00	57.88	74.00	-16.12	42.60	15.28	Peak	100	171

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 :BRAD WU Temperature(℃):23 Humidity(%):63

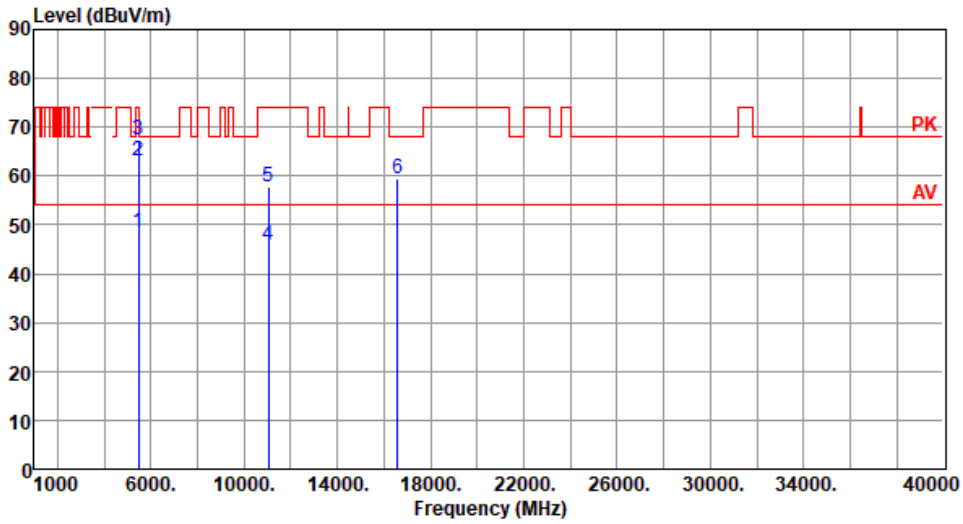


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.27	54.00	-5.73	42.05	6.22	Average	359	154
2	5460.00	62.02	74.00	-11.98	55.80	6.22	Peak	359	154
3	5470.00	65.51	68.20	-2.69	59.25	6.26	Peak	359	154
4	11060.00	45.26	54.00	-8.74	30.10	15.16	Average	100	302
5	11060.00	57.21	74.00	-16.79	42.05	15.16	Peak	100	302
6	16590.00	58.88	68.20	-9.32	42.08	16.80	Peak	100	301

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

Modulation	ax HE80	Test Freq. (MHz)	5530
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

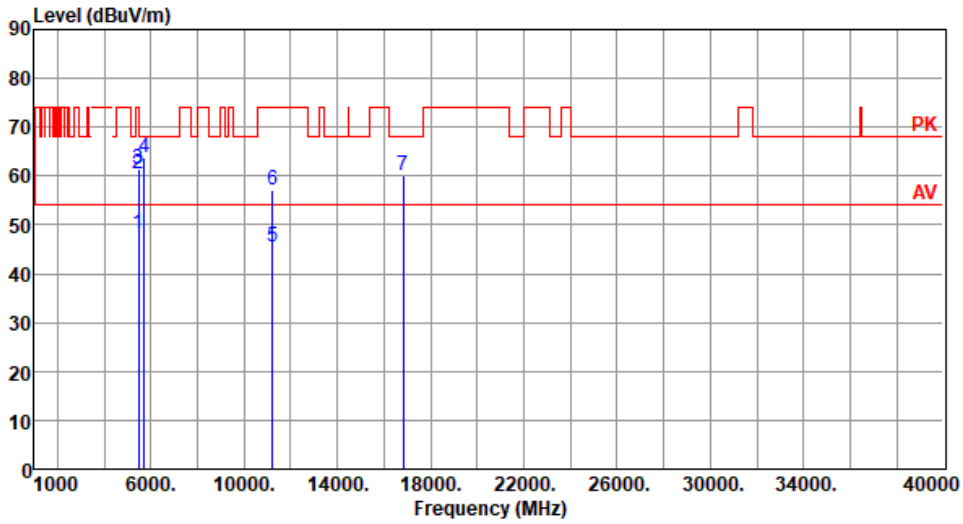


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.38	54.00	-5.62	42.16	6.22	Average	104	219
2	5460.00	62.96	74.00	-11.04	56.74	6.22	Peak	104	219
3	5470.00	67.54	68.20	-0.66	61.28	6.26	Peak	104	219
4	11060.00	45.78	54.00	-8.22	30.62	15.16	Average	100	277
5	11060.00	57.76	74.00	-16.24	42.60	15.16	Peak	100	277
6	16590.00	59.38	68.20	-8.82	42.58	16.80	Peak	100	279

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 :Roger Lu Temperature(℃):24 Humidity(%):65

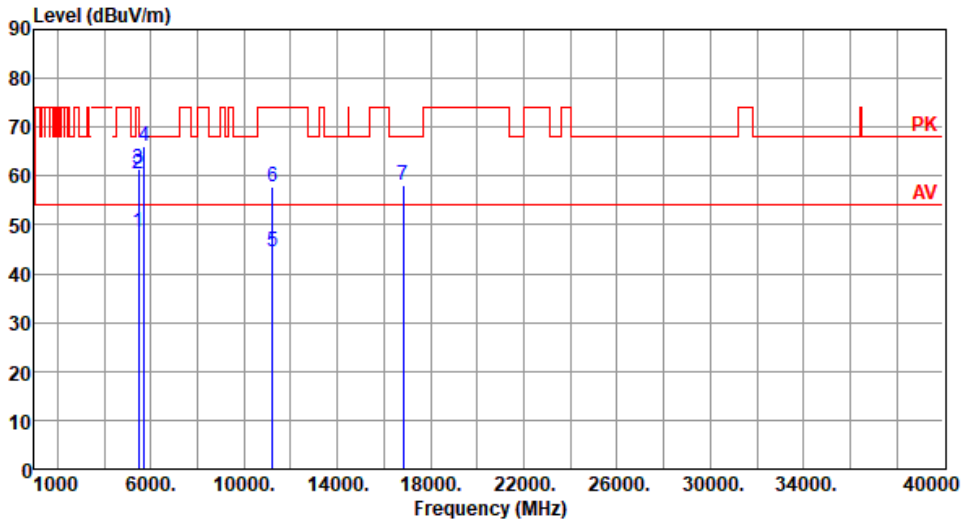


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.22	54.00	-5.78	42.00	6.22	Average	347	147
2	5460.00	60.34	74.00	-13.66	54.12	6.22	Peak	347	147
3	5470.00	61.31	68.20	-6.89	55.05	6.26	Peak	347	147
4	5725.00	63.73	68.20	-4.47	57.20	6.53	Peak	347	147
5	11220.00	45.44	54.00	-8.56	30.69	14.75	Average	100	305
6	11220.00	57.26	74.00	-16.74	42.51	14.75	Peak	100	305
7	16830.00	60.21	68.20	-7.99	42.70	17.51	Peak	100	309

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

Modulation	ax HE80	Test Freq. (MHz)	5610
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

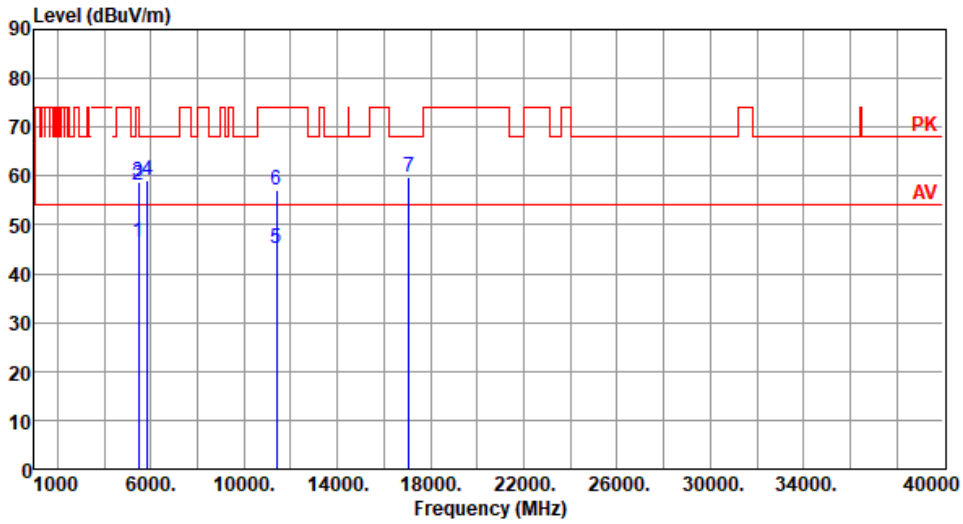


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	5460.00	48.34	54.00	-5.66	42.12	6.22	Average	100	210
2	5460.00	60.50	74.00	-13.50	54.28	6.22	Peak	100	210
3	5470.00	61.41	68.20	-6.79	55.15	6.26	Peak	100	210
4	5725.00	65.99	68.20	-2.21	59.46	6.53	Peak	100	210
5	11220.00	44.64	54.00	-9.36	29.89	14.75	Average	100	271
6	11220.00	57.66	74.00	-16.34	42.91	14.75	Peak	100	271
7	16830.00	58.20	68.20	-10.00	40.69	17.51	Peak	100	283

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 :Roger Lu Temperature(℃):24 Humidity(%):65

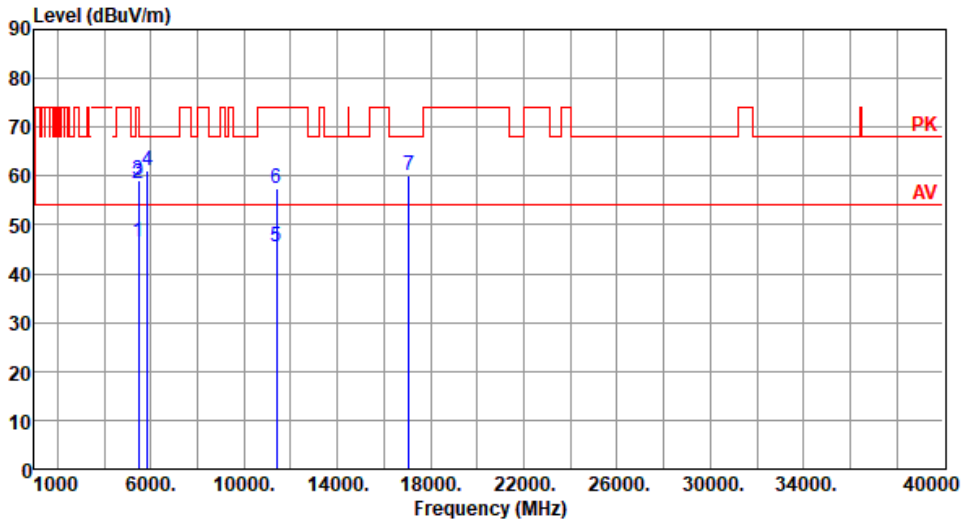


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.37	54.00	-7.63	40.15	6.22	Average	360	145
2	5460.00	58.27	74.00	-15.73	52.05	6.22	Peak	360	145
3	5470.00	58.91	68.20	-9.29	52.65	6.26	Peak	360	145
4	5850.00	59.25	68.20	-8.95	52.36	6.89	Peak	360	145
5	11380.00	45.10	54.00	-8.90	30.15	14.95	Average	100	303
6	11380.00	57.15	74.00	-16.85	42.20	14.95	Peak	100	303
7	17070.00	59.77	68.20	-8.43	42.08	17.69	Peak	100	302

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

Modulation	ax HE80	Test Freq. (MHz)	5690
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):65

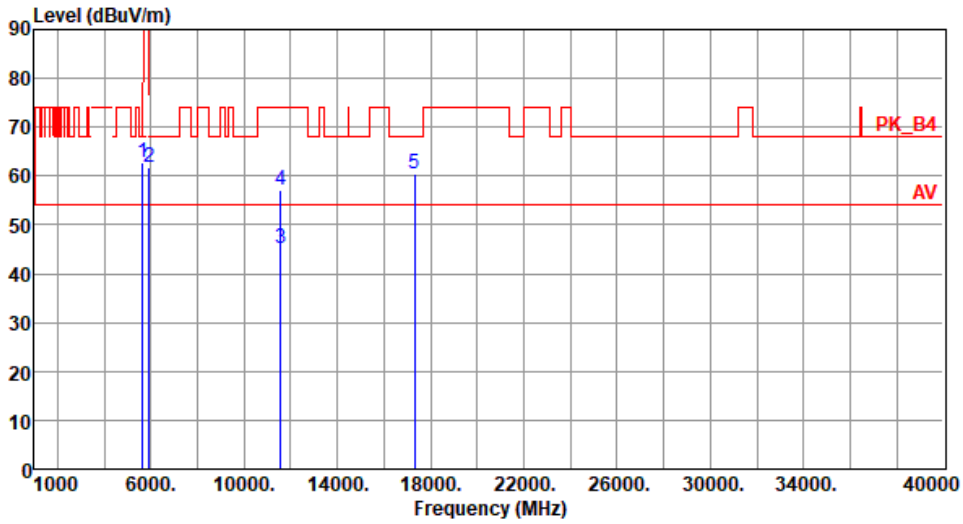


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.51	54.00	-7.49	40.29	6.22	Average	100	208
2	5460.00	58.37	74.00	-15.63	52.15	6.22	Peak	100	208
3	5470.00	59.13	68.20	-9.07	52.87	6.26	Peak	100	208
4	5850.00	61.27	68.20	-6.93	54.38	6.89	Peak	100	208
5	11380.00	45.61	54.00	-8.39	30.66	14.95	Average	100	278
6	11380.00	57.55	74.00	-16.45	42.60	14.95	Peak	100	278
7	17070.00	60.24	68.20	-7.96	42.55	17.69	Peak	100	273

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)	5775
Polarization	Horizontal		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63

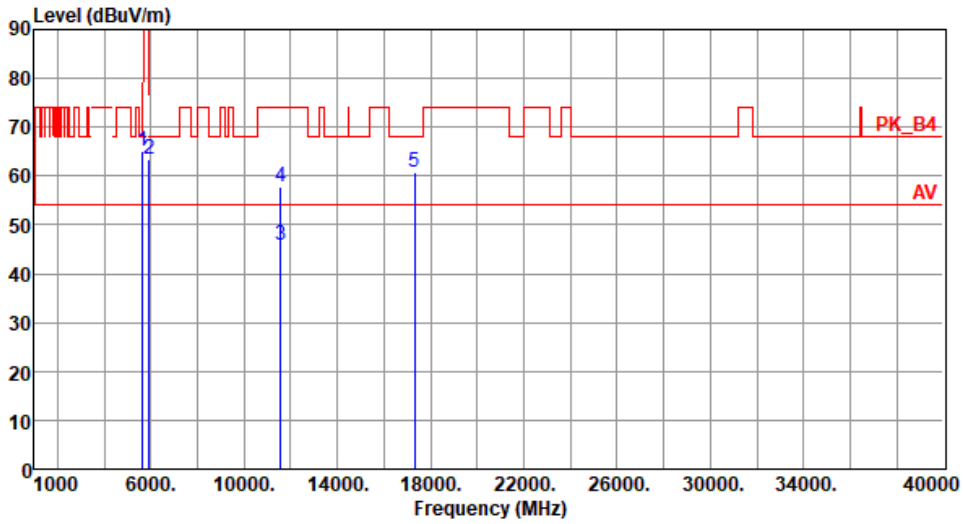


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.87	68.20	-5.33	56.60	6.27	Peak	352	152
2	5925.00	61.80	68.20	-6.40	54.77	7.03	Peak	352	152
3	11550.00	45.10	54.00	-8.90	30.04	15.06	Average	100	309
4	11550.00	57.13	74.00	-16.87	42.07	15.06	Peak	100	309
5	17325.00	60.53	68.20	-7.67	42.26	18.27	Peak	100	315

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)	5775
Polarization	Vertical		

Test By :BRAD WU Temperature(℃):23 Humidity(%):63



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	64.96	68.20	-3.24	58.69	6.27	Peak	175	204
2	5925.00	63.43	68.20	-4.77	56.40	7.03	Peak	175	204
3	11550.00	45.68	54.00	-8.32	30.62	15.06	Average	100	272
4	11550.00	57.70	74.00	-16.30	42.64	15.06	Peak	100	272
5	17325.00	60.86	68.20	-7.34	42.59	18.27	Peak	100	271

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

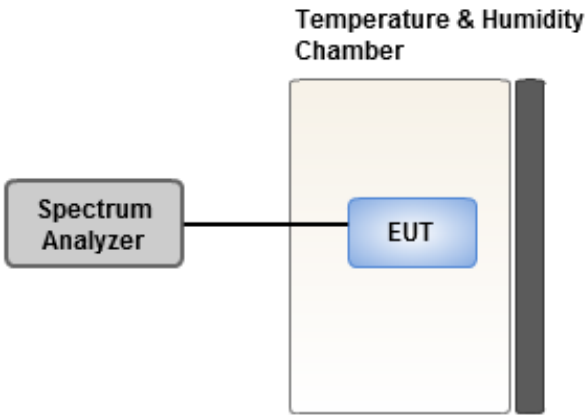
3.6.1 Limit of Frequency Stability

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	24~25°C / 65~66%	Tested By	Aska Huang

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (ºC)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-2.06	-1.94	-1.53	-1.62
T20°CVmin	-2.17	-2.41	-1.57	-1.55
T50°CVnom	-8.67	-7.85	-8.08	-8.55
T40°CVnom	-5.40	-5.35	-5.66	-5.66
T30°CVnom	-3.57	-3.59	-3.91	-4.00
T20°CVnom	-1.57	-1.49	-1.78	-1.90
T10°CVnom	0.80	0.56	-0.21	0.88
T0°CVnom	0.97	1.49	1.17	1.12
T-10°CVnom	2.45	2.86	1.94	2.07
T-20°CVnom	6.30	6.23	6.21	5.75
T-30°CVnom	10.17	9.31	9.33	8.95
Vnom [V]: 120		Vmax [V]: 138		Vmin [V]: 102
Tnom [˚C]: 20		Tmax [˚C]: 50		Tmin [˚C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (ºC)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-1.59	-1.07	-1.71	-1.57
T20°CVmin	-1.65	-1.20	-1.45	-1.39
T50CVnom	-7.80	-7.07	-7.37	-7.43
T40°CVnom	-4.50	-4.72	-4.77	-4.80
T30°CVnom	-2.60	-2.77	-2.53	-2.69
T20°CVnom	-1.00	-1.87	-1.13	-1.04
T10°CVnom	0.94	0.83	0.67	1.57
T0°CVnom	0.91	1.13	0.54	0.68
T-10°CVnom	2.98	3.03	2.56	3.16
T-20°CVnom	6.49	6.23	6.28	5.77
T-30°CVnom	9.53	9.88	9.51	9.90
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
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If you have any suggestion, please feel free to contact us as below information

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