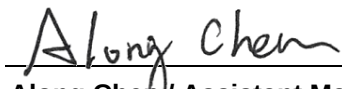


FCC Test Report

FCC ID : I88NBG7815
Equipment : AX6000 12-Stream Multi-Gigabit WiFi 6 Router
Model No. : NBG7815
Brand Name : ZYXEL
Applicant : Zyxel Communications Corporation
Address : No.2 Industry East RD. IX, Hsinchu Science
Park, Hsinchu 30075, Taiwan, R.O.C
Standard : 47 CFR FCC Part 15.407
Received Date : Jan. 08, 2020
Tested Date : Jan. 09 ~ Feb. 07, 2020

We, International Certification Corp., 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



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Release Record

Report No.	Version	Description	Issued Date
FR020307AN	Rev. 01	Initial issue	Mar. 25, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 9.156MHz 38.60 (Margin -11.40dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5650.00MHz 68.07 (Margin -0.13dB) - 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: 28.64 5250~5350MHz: 23.79 5470~5725MHz: 23.65 5725~5850MHz: 29.64 Beamforming mode 5150~5250MHz: 19.61 5250~5350MHz: 14.76 5470~5725MHz: 14.62 5725~5850MHz: 20.61	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]	8	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]	8	MCS 0-31
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]	8	MCS 0-31
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]	8	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]	8	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]	8	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]	8	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]	8	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]	8	MCS 0-11
Note 1: Hardware feature: OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024 QAM modulation. Note 2: Operating modes of this device are listed as above table. Note 3: 802.11ax supports beamforming function.					

Combination of channel list for 80+80MHz mode

Mode	Channels
1	CH42 (5210 MHz) + CH58 (5290 MHz)
2	CH106(5530 MHz) + CH122 (5610 MHz)

1.1.2 Radio Details

Radio	Function
1	Wi-Fi 2.4GHz, 4T4R
2	Wi-Fi 5GHz, 8T8R
3	Bluetooth LE only

1.1.3 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)			
				5150 ~ 5250	5250 ~ 5350	5470 ~ 5725	5725 ~ 5850
1	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
2	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
3	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
4	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
5	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
6	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
7	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5
8	ALX19M-126AA2-B	PIFA	IPEX	1	2	2.5	3.5

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter
-------------------	--------------------

1.1.5 Accessories

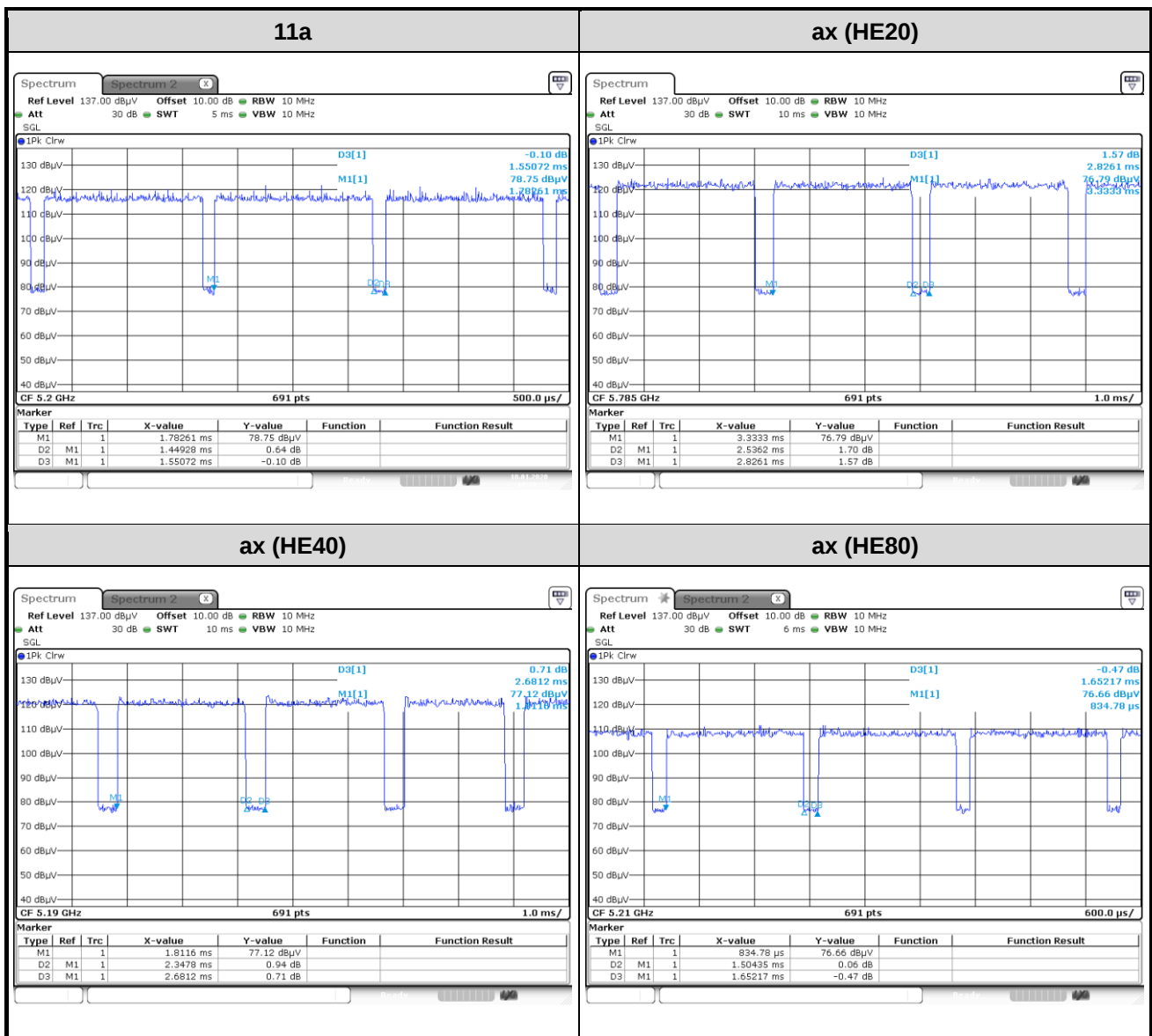
Accessories		
No.	Equipment	Description
1	Adapter	Brand: APD Model: WA-40E19R Power Rating: I/P: 100-240Vac, 50-60Hz, 1A Max O/P: 19Vdc, 2.1A Power Line: 1.5m non-shielded with one core
2	RJ45 cable	Brand: Nien-Yi Technology (Zhu Hai) CO., Model: NYS1315 Power Line: 1.5m non-shielded without core

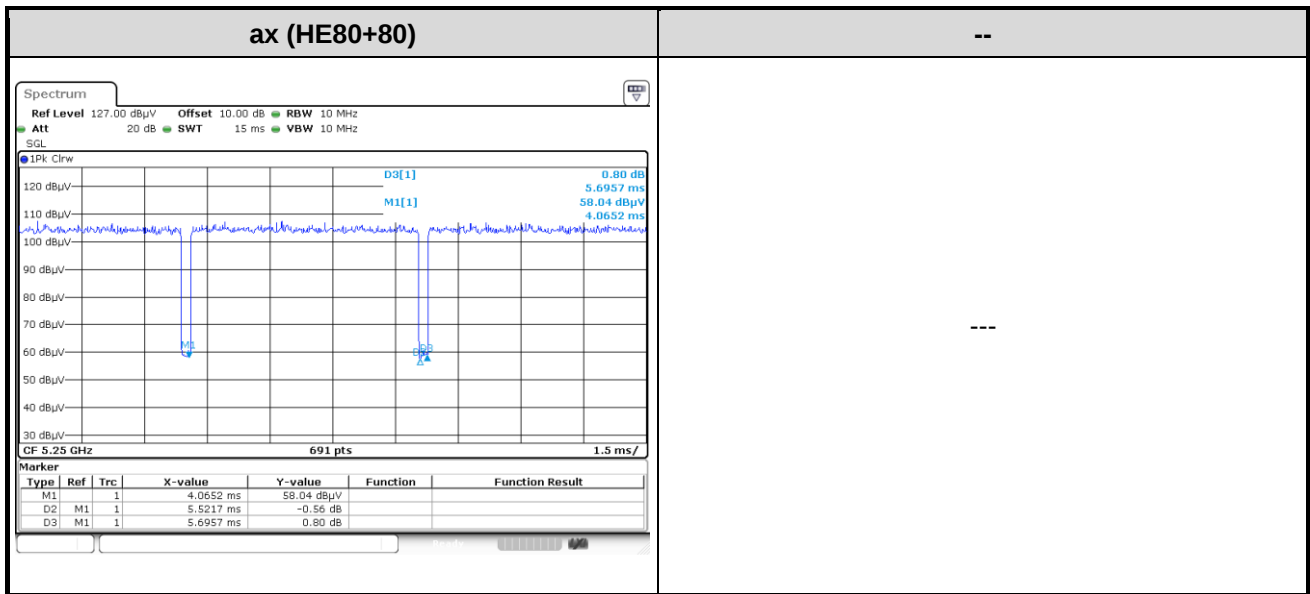
1.1.6 Channel List

802.11a / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
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	802.11 ax (HE80+80)	
149	5745	42	5210
153	5765	58	5290
157	5785	106	5530
161	5805	122	5610
165	5825	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	QSPR, V5.0-00188		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	93.46%	0.29
	ax (HE20)	89.74%	0.47
	ax (HE40)	87.57%	0.58
	ax (HE80)	91.05%	0.41
	ax (HE80+80)	96.95%	0.13





1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	16.5
11a	5200	16.5
11a	5240	16
11a	5260	9
11a	5300	8.5
11a	5320	8.5
11a	5500	8
11a	5580	8
11a	5700	8.5
11a	5745	20
11a	5785	20
11a	5825	20
ax (HE20)	5180	17
ax (HE20)	5200	17
ax (HE20)	5240	16.5
ax (HE20)	5260	9.5
ax (HE20)	5300	9
ax (HE20)	5320	9
ax (HE20)	5500	8.5
ax (HE20)	5580	8.5
ax (HE20)	5700	8.5
ax (HE20)	5745	20
ax (HE20)	5785	20
ax (HE20)	5825	20

Modulation Mode	Test Frequency (MHz)	Power Index
ax (HE40)	5190	15.5
ax (HE40)	5230	19.5
ax (HE40)	5270	12
ax (HE40)	5310	12
ax (HE40)	5510	11.5
ax (HE40)	5590	11.5
ax (HE40)	5670	11.5
ax (HE40)	5755	20
ax (HE40)	5795	20.5
ax (HE80)	5210	15
ax (HE80)	5290	13.5
ax (HE80)	5530	12.5
ax (HE80)	5610	13
ax (HE80)	5775	19.5
ax (HE80+80)	5210+5290	16
ax (HE80+80)	5530+5610	13

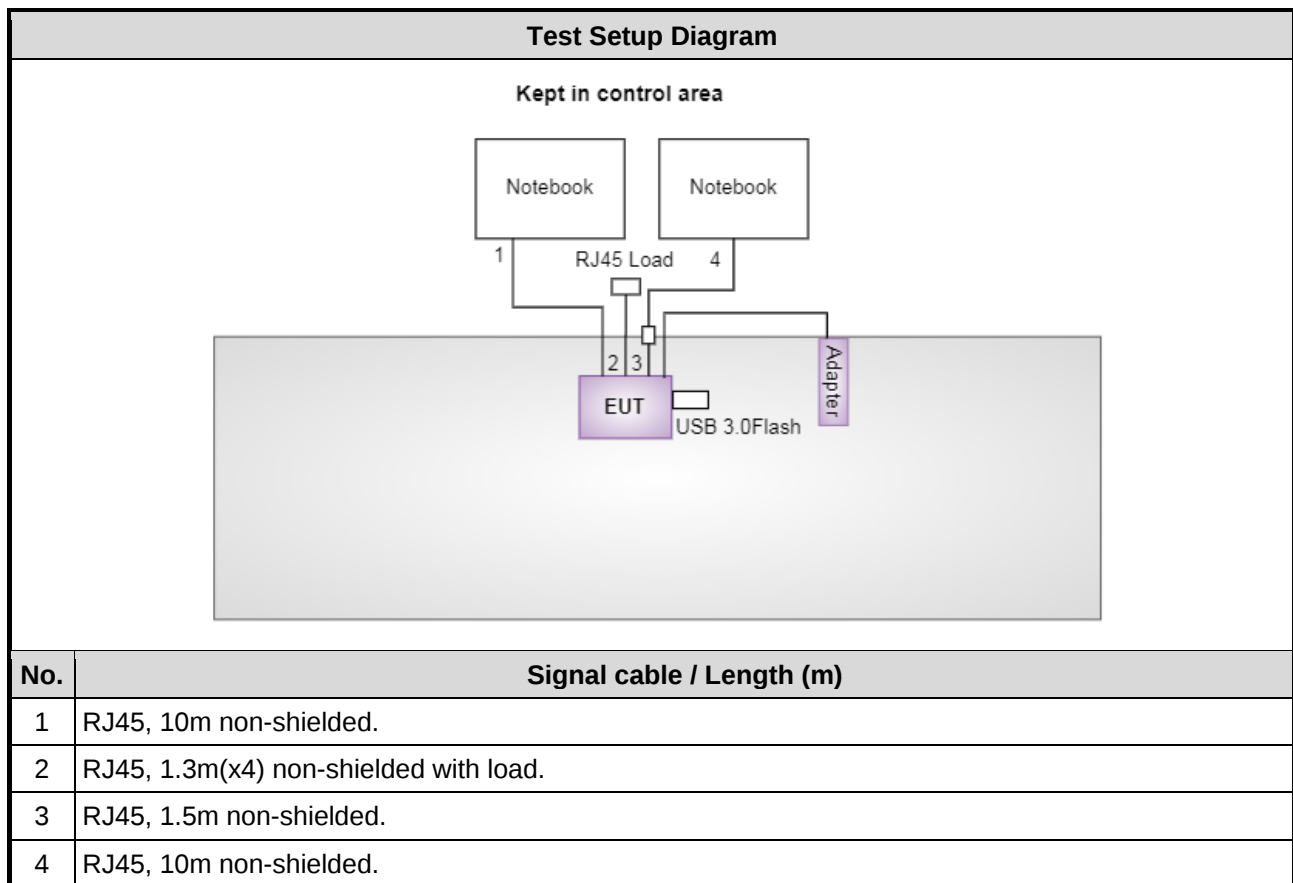
Channel that extends across the 5.725 GHz boundary

For Frequency band 5470~5725 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5720MHz	8.5
ax (HE20)	5720MHz	8.5
ax (HE40)	5710MHz	11.5
ax (HE80)	5690MHz	13

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	USB 3.0 Flash	Transcend	JetFlash 700	--	---
2	Notebook	DELL	Latitude E6440	DoC	---
3	Notebook	DELL	Latitude E6430	DoC	---
4	RJ45 Load	ICC	--	--	---

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Jan. 31, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
LISN	R&S	ENV216	101579	Mar. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
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 chamber 3 / (03CH03-WS)				
Tested Date	Jan. 09 ~ Jan. 31, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 10, 2020
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 17, 2019	Apr. 16, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 27, 2019	Dec. 26, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980187	Aug. 14, 2019	Aug. 13, 2020
Preamplifier	Agilent	83017A	MY53270014	Aug. 07, 2019	Aug. 06, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 27, 2019	Sep. 26, 2020
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 27, 2019	Sep. 26, 2020
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Sep. 27, 2019	Sep. 26, 2020
LF cable-0.8M	EMC	EMC8D-NM-NM-8000	EMC8D-NM-NM-800-001	Sep. 27, 2019	Sep. 26, 2020
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 27, 2019	Sep. 26, 2020
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 27, 2019	Sep. 26, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Feb. 07, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 02, 2019	Dec. 01, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.407

ANSI C63.10-2013

FCC KDB 789033 D02 General UNII Test Procedures New Rules

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. 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	±1x10 ⁻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 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 69%	Akun Chung
Radiated Emissions	03CH03-WS	20-23°C / 65-68%	Roger Lu Aska Huang
RF Conducted	TH01-WS	22°C / 64%	Roger Lu

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

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

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 (HE80+80)	5530 + 5610	MCS 0	---
Radiated Emissions ≤1GHz	ax (HE80+80)	5530 + 5610	MCS 0	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	---
	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax (HE40)	5190 / 5230 / 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE80+80)	5210 + 5290 / 5530 + 5610	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	---
	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax (HE40)	5190 / 5230 / 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE80+80)	5210 + 5290 / 5530 + 5610	MCS 0	
Frequency Stability	Un-modulation	5300	---	---
NOTE:				
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.				

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

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.

Beamforming mode

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
RF Output Power	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	---
	ax (HE40)	5190 / 5230 / 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE80+80)	5210 + 5290 / 5530 + 5610	MCS 0	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.

Frequency band 5725-5850 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
RF Output Power	ax (HE20)	5745 / 5785 / 5825	MCS 0	---
	ax (HE40)	5755 / 5795	MCS 0	
	ax (HE80)	5775	MCS 0	

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

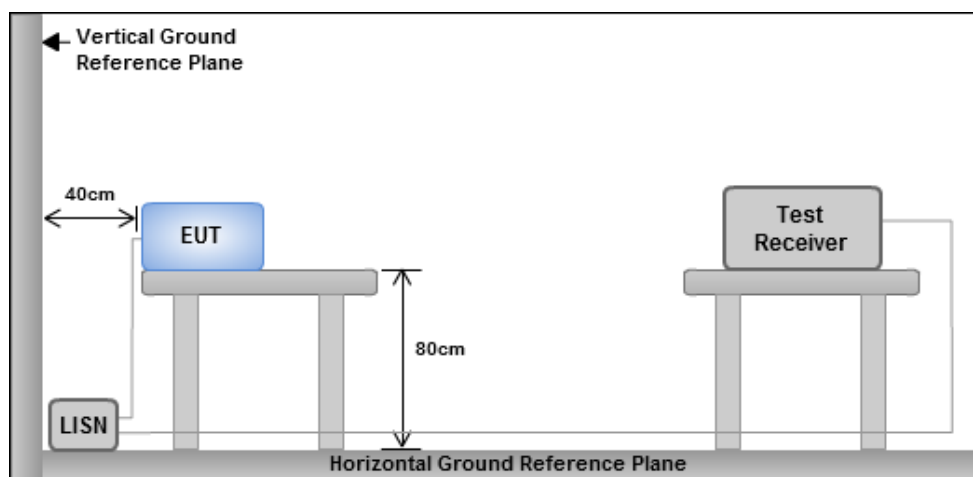
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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

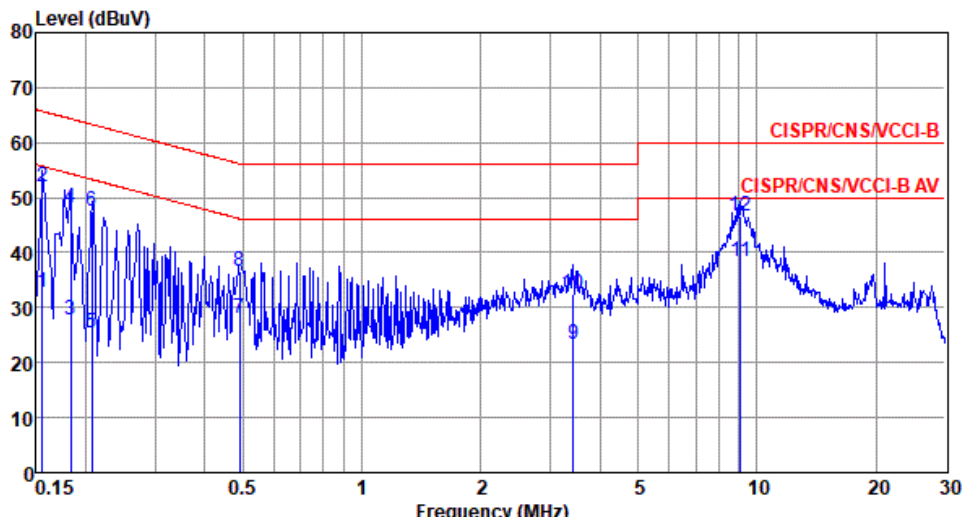
3.1.3 Test Setup



- 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 (HE80+80)	Test Freq. (MHz)	5530+5610
Power Phase	Line		

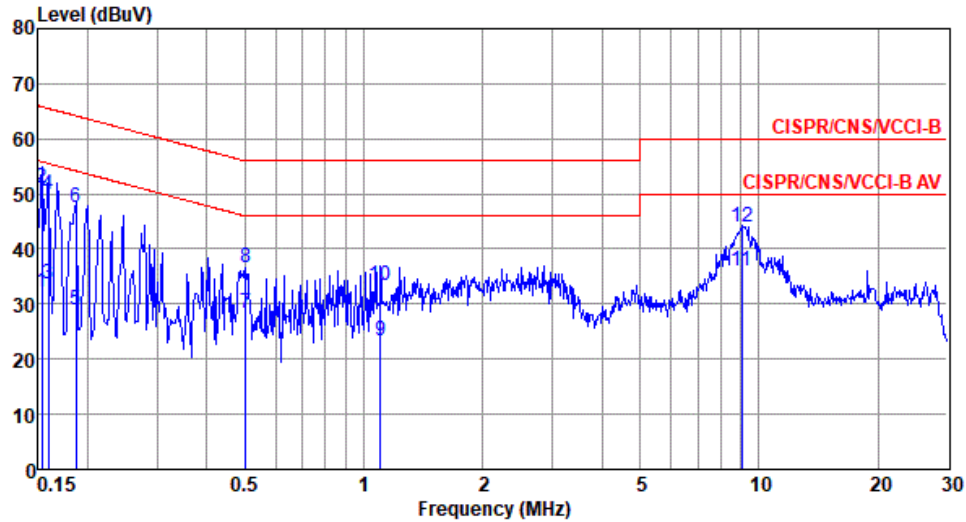


Freq	Level	Limit	Over	Read	LISN	cable		
MHz	dBuV	Line	Limit	Level	factor	loss	Remark	
		dBuV	dB	dBuV	dB	dB		
1	0.156	32.90	55.69	-22.79	23.16	9.53	0.05	Average
2	0.156	51.95	65.69	-13.74	42.21	9.53	0.05	QP
3	0.183	27.76	54.33	-26.57	17.98	9.54	0.06	Average
4	0.183	48.10	64.33	-16.23	38.32	9.54	0.06	QP
5	0.207	25.30	53.32	-28.02	15.51	9.54	0.06	Average
6	0.207	47.61	63.32	-15.71	37.82	9.54	0.06	QP
7	0.491	28.09	46.14	-18.05	18.15	9.58	0.09	Average
8	0.491	36.75	56.14	-19.39	26.81	9.58	0.09	QP
9	3.436	23.37	46.00	-22.63	13.13	9.61	0.27	Average
10	3.436	32.60	56.00	-23.40	22.36	9.61	0.27	QP
11*	9.107	38.52	50.00	-11.48	28.09	9.65	0.38	Average
12	9.107	46.50	60.00	-13.50	36.07	9.65	0.38	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

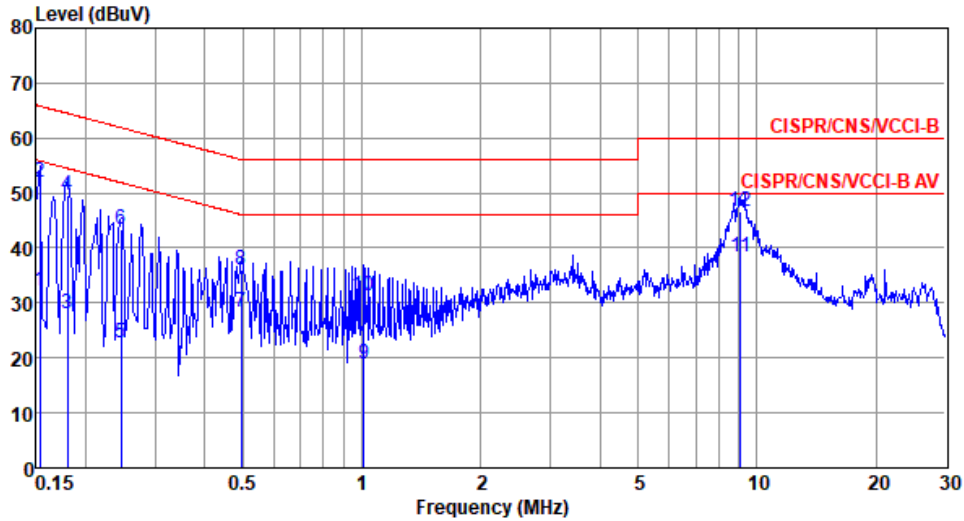
Modulation	ax (HE80+80)	Test Freq. (MHz)	5530+5610
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.153	32.09	55.82	-23.73	22.35	9.57	0.05	Average
2	0.153	50.99	65.82	-14.83	41.25	9.57	0.05	QP
3	0.159	33.52	55.52	-22.00	23.77	9.57	0.05	Average
4	0.159	49.92	65.52	-15.60	40.17	9.57	0.05	QP
5	0.186	28.92	54.20	-25.28	19.14	9.58	0.06	Average
6	0.186	47.43	64.20	-16.77	37.65	9.58	0.06	QP
7	0.502	28.23	46.00	-17.77	18.34	9.62	0.09	Average
8	0.502	36.46	56.00	-19.54	26.57	9.62	0.09	QP
9	1.100	23.26	46.00	-22.74	13.28	9.64	0.13	Average
10	1.100	33.25	56.00	-22.75	23.27	9.64	0.13	QP
11*	9.059	35.92	50.00	-14.08	25.52	9.70	0.38	Average
12	9.059	43.95	60.00	-16.05	33.55	9.70	0.38	QP

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

Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line		

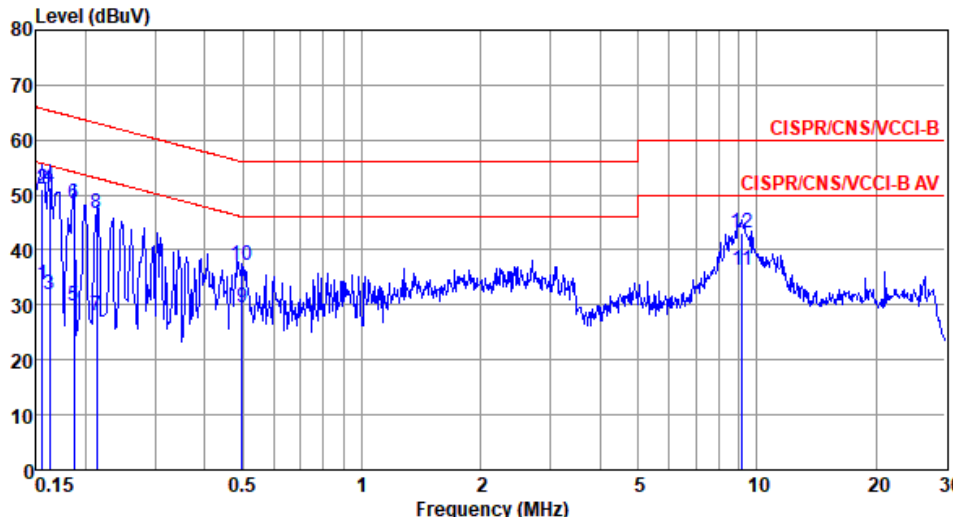


The graph displays the measured level in dBUV against frequency in MHz. The y-axis ranges from 0 to 80 dBUV, and the x-axis ranges from 0.15 to 30 MHz. Two red limit lines are shown: CISPR/CNS/VCCI-B (upper) and CISPR/CNS/VCCI-B AV (lower). The measured signal is a blue line with several peaks, some of which are labeled with numbers 1 through 12.

	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	0.153	32.10	55.82	-23.72	22.36	9.53	0.05	Average
2	0.153	52.06	65.82	-13.76	42.32	9.53	0.05	QP
3	0.180	28.09	54.50	-26.41	18.31	9.54	0.06	Average
4	0.180	49.50	64.50	-15.00	39.72	9.54	0.06	QP
5	0.246	22.81	51.91	-29.10	12.98	9.55	0.07	Average
6	0.246	43.43	61.91	-18.48	33.60	9.55	0.07	QP
7	0.494	28.34	46.10	-17.76	18.40	9.58	0.09	Average
8	0.494	35.94	56.10	-20.16	26.00	9.58	0.09	QP
9	1.010	18.90	46.00	-27.10	8.86	9.60	0.12	Average
10	1.010	31.20	56.00	-24.80	21.16	9.60	0.12	QP
11*	9.107	38.43	50.00	-11.57	28.00	9.65	0.38	Average
12	9.107	46.77	60.00	-13.23	36.34	9.65	0.38	QP

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

Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Neutral		



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	Remark
1	0.156	33.70	55.69	-21.99	23.96	9.57	0.05	Average
2	0.156	51.11	65.69	-14.58	41.37	9.57	0.05	QP
3	0.162	31.85	55.34	-23.49	22.10	9.57	0.05	Average
4	0.162	51.47	65.34	-13.87	41.72	9.57	0.05	QP
5	0.186	29.83	54.20	-24.37	20.05	9.58	0.06	Average
6	0.186	48.35	64.20	-15.85	38.57	9.58	0.06	QP
7	0.213	27.95	53.10	-25.15	18.16	9.58	0.06	Average
8	0.213	46.51	63.10	-16.59	36.72	9.58	0.06	QP
9	0.497	29.52	46.05	-16.53	19.63	9.62	0.09	Average
10	0.497	37.05	56.05	-19.00	27.16	9.62	0.09	QP
11*	9.156	36.19	50.00	-13.81	25.78	9.71	0.38	Average
12	9.156	43.12	60.00	-16.88	32.71	9.71	0.38	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.

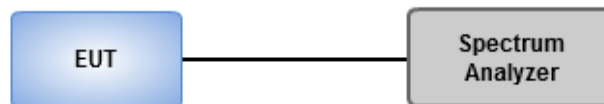
Occupied Bandwidth

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

6dB Bandwidth

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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

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)_8TX	18.986M	16.425M	16M4D1D	18.406M	16.281M
802.11ax HEW20_Nss1,(MCS0)_8TX	23.478M	18.958M	19M0D1D	21.594M	18.741M
802.11ax HEW40_Nss1,(MCS0)_8TX	46.667M	37.916M	37M9D1D	42.029M	37.627M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.029M	77.279M	77M3D1D	81.449M	76.99M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	82.319M	77.279M	77M3D1D	81.739M	76.99M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	19.203M	16.498M	16M5D1D	18.333M	16.208M
802.11ax HEW20_Nss1,(MCS0)_8TX	23.841M	19.03M	19M0D1D	21.594M	18.741M
802.11ax HEW40_Nss1,(MCS0)_8TX	44.638M	37.916M	37M9D1D	42.029M	37.482M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.319M	77.279M	77M3D1D	80.87M	76.122M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	82.319M	77.569M	77M6D1D	81.159M	76.411M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	19.203M	16.425M	16M4D1D	14.217M	13.111M
802.11ax HEW20_Nss1,(MCS0)_8TX	23.623M	18.958M	19M0D1D	15.913M	14.37M
802.11ax HEW40_Nss1,(MCS0)_8TX	45.652M	38.061M	38M1D1D	36.42M	33.734M
802.11ax HEW80_Nss1,(MCS0)_8TX	82.609M	77.569M	77M6D1D	75.435M	72.721M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	164.35M	154.56M	155MD1D	163.19M	153.98M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	16.377M	16.425M	16M4D1D	2.493M	3.415M
802.11ax HEW20_Nss1,(MCS0)_8TX	18.913M	19.03M	19M0D1D	4.348M	4.399M
802.11ax HEW40_Nss1,(MCS0)_8TX	37.971M	37.916M	37M9D1D	3.884M	3.994M
802.11ax HEW80_Nss1,(MCS0)_8TX	77.681M	77.279M	77M3D1D	3.884M	4.168M

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	Port 1 -N dB	Port 2 -N dB	Port 3 -N dB	Port 4 -N dB	Port 5 -N dB	Port 6 -N dB	Port 7 -N dB	Port 8 -N dB
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_8TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	18.696M	18.986M	18.913M	18.768M	18.478M	18.913M	18.623M	18.768M
5200MHz	Pass	Inf	18.696M	18.913M	18.623M	18.841M	18.478M	18.406M	18.986M	18.551M
5240MHz	Pass	Inf	18.768M	18.696M	18.623M	18.623M	18.696M	18.623M	18.696M	18.551M
5260MHz	Pass	Inf	18.551M	18.696M	18.406M	18.696M	18.551M	18.406M	18.551M	18.768M
5300MHz	Pass	Inf	18.768M	19.058M	18.986M	18.623M	18.913M	18.333M	18.841M	18.623M
5320MHz	Pass	Inf	18.551M	18.623M	18.406M	18.768M	19.203M	18.696M	18.913M	19.058M
5500MHz	Pass	Inf	18.913M	18.623M	18.913M	19.13M	19.203M	18.333M	18.406M	18.696M
5580MHz	Pass	Inf	18.841M	18.913M	18.551M	18.623M	18.913M	18.841M	18.188M	18.406M
5700MHz	Pass	Inf	18.696M	19.13M	18.841M	18.696M	18.623M	18.478M	19.13M	18.696M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.348M	14.652M	14.522M	14.565M	14.261M	14.217M	14.217M	14.261M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.13M	3.13M	2.493M	3.13M	2.551M	3.13M	3.13M	2.725M
5745MHz	Pass	500k	15.58M	15.797M	15.652M	16.304M	15.072M	15.58M	15.362M	15.58M
5785MHz	Pass	500k	16.377M	16.377M	16.087M	15.58M	14.783M	15.58M	15.29M	16.304M
5825MHz	Pass	500k	16.304M	16.304M	15.725M	16.304M	16.304M	15.942M	15.362M	15.725M
802.11ax HEW20_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	23.116M	22.319M	22.246M	22.971M	23.261M	22.971M	21.594M	22.754M
5200MHz	Pass	Inf	22.536M	23.043M	22.609M	23.478M	22.899M	23.188M	21.739M	23.333M
5240MHz	Pass	Inf	22.609M	22.174M	22.246M	23.333M	22.319M	22.536M	21.957M	22.391M
5260MHz	Pass	Inf	22.536M	22.101M	22.464M	23.841M	22.899M	21.884M	23.188M	22.899M
5300MHz	Pass	Inf	21.884M	22.754M	22.174M	23.043M	22.174M	22.536M	22.246M	23.043M
5320MHz	Pass	Inf	22.319M	22.319M	22.101M	23.478M	21.594M	22.464M	22.609M	22.391M
5500MHz	Pass	Inf	22.754M	22.536M	22.391M	23.623M	22.899M	22.536M	21.449M	22.754M
5580MHz	Pass	Inf	22.319M	22.464M	22.246M	23.406M	22.754M	22.971M	22.391M	22.319M
5700MHz	Pass	Inf	22.899M	22.319M	23.043M	23.116M	22.681M	22.246M	22.971M	22.971M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.391M	15.957M	16.435M	16.348M	16.217M	16.435M	15.913M	16.478M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.406M	4.406M	4.464M	4.406M	4.406M	4.464M	4.348M	4.406M
5745MHz	Pass	500k	18.913M	18.913M	18.841M	18.841M	18.913M	17.609M	18.551M	18.551M
5785MHz	Pass	500k	18.768M	18.913M	18.696M	18.841M	18.043M	18.768M	18.913M	18.913M
5825MHz	Pass	500k	18.841M	18.768M	18.841M	18.913M	18.841M	18.696M	18.913M	18.913M

Mode	Result	Limit	Port 1 -N dB	Port 2 -N dB	Port 3 -N dB	Port 4 -N dB	Port 5 -N dB	Port 6 -N dB	Port 7 -N dB	Port 8 -N dB
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	44.493M	43.478M	43.043M	44.348M	43.333M	44.493M	45.072M	43.913M
5230MHz	Pass	Inf	43.043M	42.609M	42.029M	43.188M	43.043M	43.333M	42.899M	46.667M
5270MHz	Pass	Inf	43.913M	43.188M	42.319M	43.623M	42.609M	42.029M	43.188M	43.333M
5310MHz	Pass	Inf	44.203M	44.638M	42.609M	43.333M	42.609M	43.188M	42.899M	43.043M
5510MHz	Pass	Inf	44.783M	43.043M	43.478M	44.493M	43.188M	44.058M	42.609M	42.754M
5590MHz	Pass	Inf	43.768M	45.652M	42.464M	45.507M	42.609M	43.768M	43.333M	43.478M
5670MHz	Pass	Inf	43.913M	43.333M	44.783M	44.348M	43.333M	44.058M	44.638M	42.899M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	37.13M	37.841M	36.725M	36.42M	36.42M	36.623M	37.435M	37.232M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.942M	3.942M	3.942M	3.942M	4M	3.884M	3.942M	4M
5755MHz	Pass	500k	37.971M	37.681M	37.101M	37.971M	37.101M	35.652M	37.536M	37.971M
5795MHz	Pass	500k	37.826M	37.826M	37.391M	37.826M	37.101M	36.377M	37.681M	37.971M
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.739M	81.739M	82.029M	81.449M	81.739M	82.029M	82.029M	81.739M
5290MHz	Pass	Inf	82.029M	82.319M	81.739M	82.029M	80.87M	82.319M	81.159M	81.449M
5530MHz	Pass	Inf	81.739M	81.449M	81.739M	81.739M	81.739M	81.159M	81.159M	81.159M
5610MHz	Pass	Inf	82.029M	81.449M	82.319M	81.449M	81.449M	81.449M	82.029M	82.609M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.087M	75.652M	75.435M	76.087M	76.304M	75.87M	76.304M	76.087M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4M	3.884M	4M	4M	4.058M	3.942M	3.884M	3.884M
5775MHz	Pass	500k	76.522M	76.522M	73.913M	75.072M	73.913M	71.304M	65.507M	77.681M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.319M	82.029M	81.739M	82.319M	-	-	-	-
5290MHz	Pass	Inf	-	-	-	-	82.319M	81.449M	81.159M	82.319M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	82.029M	82.319M	81.449M	81.739M	-	-	-	-
5610MHz	Pass	Inf	-	-	-	-	81.449M	82.029M	81.739M	82.029M

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;

Mode	Result	Limit	Port 1 -OBW	Port 2 -OBW	Port 3 -OBW	Port 4 -OBW	Port 5 -OBW	Port 6 -OBW	Port 7 -OBW	Port 8 -OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_8TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	16.425M	16.353M	16.353M	16.281M	16.353M	16.425M	16.425M	16.353M
5200MHz	Pass	Inf	16.425M	16.353M	16.353M	16.281M	16.353M	16.353M	16.353M	16.281M
5240MHz	Pass	Inf	16.281M	16.353M	16.281M	16.353M	16.353M	16.425M	16.425M	16.281M
5260MHz	Pass	Inf	16.281M	16.425M	16.281M	16.353M	16.353M	16.208M	16.425M	16.425M
5300MHz	Pass	Inf	16.425M	16.353M	16.281M	16.353M	16.425M	16.425M	16.498M	16.353M
5320MHz	Pass	Inf	16.353M	16.281M	16.353M	16.425M	16.425M	16.425M	16.498M	16.281M
5500MHz	Pass	Inf	16.281M	16.353M	16.425M	16.281M	16.425M	16.208M	16.353M	16.281M
5580MHz	Pass	Inf	16.353M	16.353M	16.281M	16.281M	16.425M	16.425M	16.208M	16.281M
5700MHz	Pass	Inf	16.281M	16.425M	16.425M	16.281M	16.425M	16.353M	16.425M	16.281M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	13.155M	13.198M	13.155M	13.242M	13.198M	13.155M	13.111M	13.155M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.415M	3.473M	3.473M	3.473M	3.473M	3.473M	3.821M	3.415M
5745MHz	Pass	500k	16.281M	16.353M	16.353M	16.425M	16.353M	16.425M	16.281M	16.353M
5785MHz	Pass	500k	16.353M	16.353M	16.353M	16.281M	16.281M	16.281M	16.281M	16.353M
5825MHz	Pass	500k	16.353M	16.353M	16.353M	16.425M	16.425M	16.281M	16.353M	16.281M
802.11ax HEW20_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	18.886M	18.886M	18.813M	18.886M	18.886M	18.813M	18.741M	18.886M
5200MHz	Pass	Inf	18.958M	18.886M	18.813M	18.886M	18.886M	18.886M	18.741M	18.886M
5240MHz	Pass	Inf	18.813M	18.886M	18.886M	18.886M	18.886M	18.813M	18.813M	18.886M
5260MHz	Pass	Inf	18.813M	18.886M	18.886M	19.03M	19.03M	18.886M	18.958M	18.886M
5300MHz	Pass	Inf	18.813M	18.886M	18.813M	18.886M	18.813M	18.813M	19.03M	18.886M
5320MHz	Pass	Inf	18.813M	18.886M	18.741M	18.886M	18.813M	18.813M	18.813M	18.886M
5500MHz	Pass	Inf	18.886M	18.886M	18.813M	18.886M	18.886M	18.958M	18.741M	18.886M
5580MHz	Pass	Inf	18.886M	18.813M	18.886M	18.886M	18.886M	18.958M	18.813M	18.886M
5700MHz	Pass	Inf	18.886M	18.886M	18.886M	18.886M	18.886M	18.741M	18.813M	18.958M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.457M	14.457M	14.457M	14.457M	14.457M	14.501M	14.37M	14.414M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.457M	4.457M	4.457M	4.457M	4.457M	4.457M	4.399M	4.457M
5745MHz	Pass	500k	18.886M	18.813M	18.813M	18.886M	18.886M	18.741M	18.886M	18.886M
5785MHz	Pass	500k	18.886M	18.886M	18.886M	18.886M	18.813M	18.886M	19.03M	18.886M
5825MHz	Pass	500k	18.886M	18.886M	18.886M	18.958M	18.813M	18.886M	18.886M	18.886M

Mode	Result	Limit	Port 1 -OBW	Port 2 -OBW	Port 3 -OBW	Port 4 -OBW	Port 5 -OBW	Port 6 -OBW	Port 7 -OBW	Port 8 -OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	37.771M	37.771M	37.916M	37.771M	37.916M	37.627M	37.916M	37.771M
5230MHz	Pass	Inf	37.771M	37.916M	37.627M	37.916M	37.771M	37.771M	37.771M	37.771M
5270MHz	Pass	Inf	37.771M	37.916M	37.916M	37.771M	37.771M	37.771M	37.916M	37.916M
5310MHz	Pass	Inf	37.771M	37.916M	37.771M	37.916M	37.771M	37.916M	37.482M	37.916M
5510MHz	Pass	Inf	37.916M	37.771M	37.771M	37.916M	37.771M	37.916M	37.771M	37.771M
5590MHz	Pass	Inf	37.916M	37.916M	37.916M	37.916M	37.771M	37.916M	37.916M	37.771M
5670MHz	Pass	Inf	37.771M	37.771M	37.916M	37.771M	37.771M	38.061M	38.061M	37.916M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	33.835M	33.835M	33.734M	33.936M	33.734M	33.734M	33.835M	33.936M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.11M	4.168M	4.052M	3.994M	4.052M	3.994M	3.994M	3.994M
5755MHz	Pass	500k	37.771M	37.916M	37.627M	37.916M	37.916M	37.482M	37.771M	37.771M
5795MHz	Pass	500k	37.916M	37.771M	37.916M	37.916M	37.771M	37.627M	37.771M	37.916M
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	76.99M	76.99M	76.99M	76.99M	76.99M	77.279M	76.99M	76.99M
5290MHz	Pass	Inf	77.279M	76.99M	76.7M	76.99M	76.7M	77.279M	76.122M	76.99M
5530MHz	Pass	Inf	77.279M	76.99M	77.279M	76.99M	76.99M	76.99M	76.411M	76.99M
5610MHz	Pass	Inf	76.99M	76.7M	77.279M	76.99M	76.99M	77.279M	77.569M	76.99M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	72.938M	72.721M	73.155M	72.938M	72.938M	73.155M	73.372M	73.155M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.226M	4.342M	4.168M	4.226M	4.342M	4.168M	4.226M	4.168M
5775MHz	Pass	500k	76.99M	77.279M	77.279M	77.279M	76.99M	76.7M	77.279M	77.279M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	77.279M	76.99M	76.99M	77.279M	-	-	-	-
5290MHz	Pass	Inf	-	-	-	-	76.99M	77.569M	76.411M	76.99M
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	76.99M	76.99M	76.99M	77.279M	-	-	-	-
5610MHz	Pass	Inf	-	-	-	-	76.99M	77.279M	77.569M	76.99M

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;

Mode	Result	Limit	Port 1 + Port 5 -N dB (Hz)	Port 1 + Port 5 -OBW (Hz)	Port 2 + Port 6 -N dB (Hz)	Port 2 + Port 6 -OBW (Hz)	Port 3 + Port 7 -N dB (Hz)	Port 3 + Port 7 -OBW (Hz)	Port 4 + Port 8 -N dB (Hz)	Port 4 + Port 8 -OBW (Hz)
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530 + 5610MHz	Pass	Inf	163.48M	153.98M	164.35M	154.27M	163.19M	154.56M	163.77M	154.27M

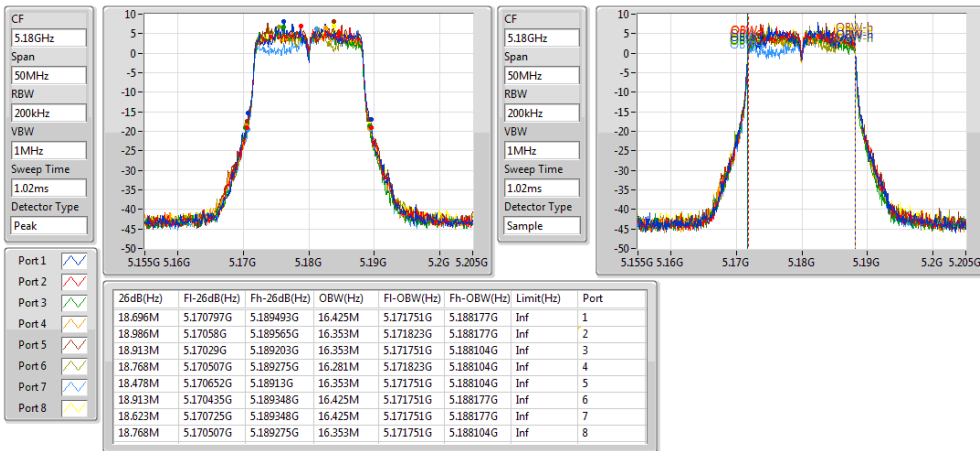
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_8TX

EBW

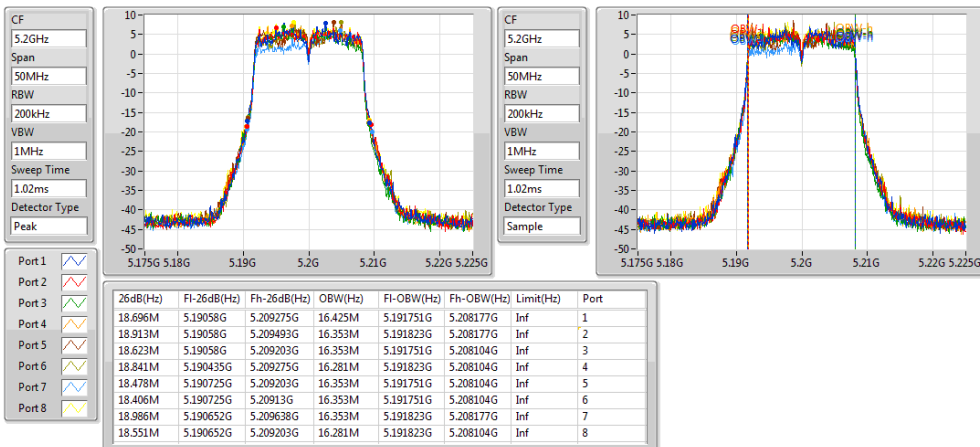
5180MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

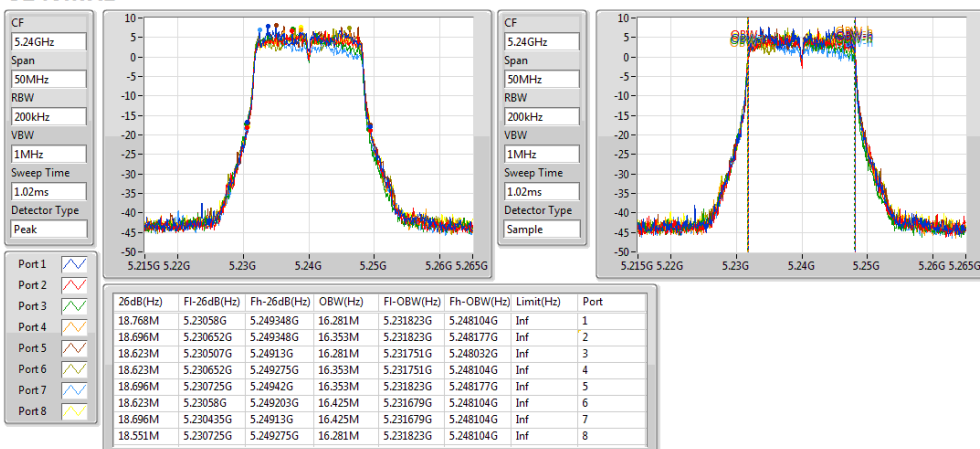
5200MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

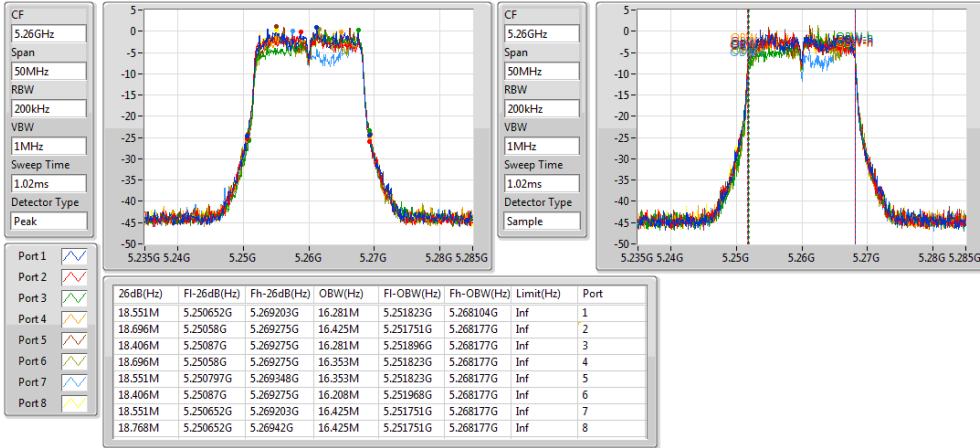
5240MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

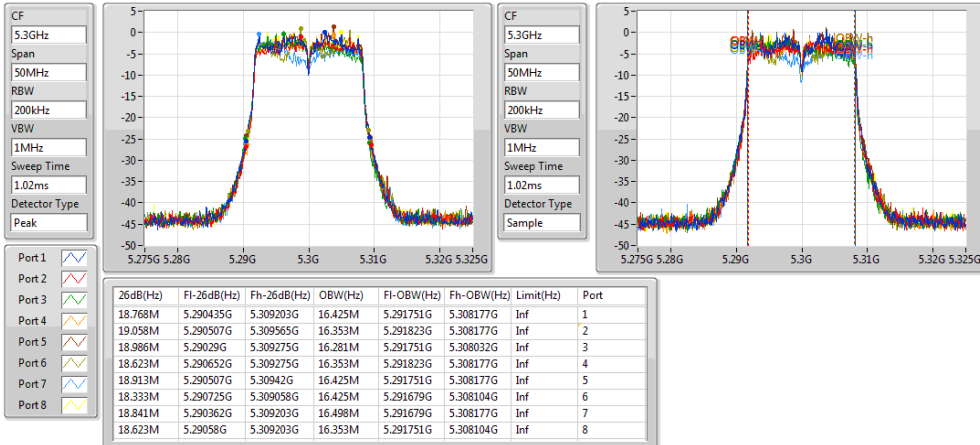
5260MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

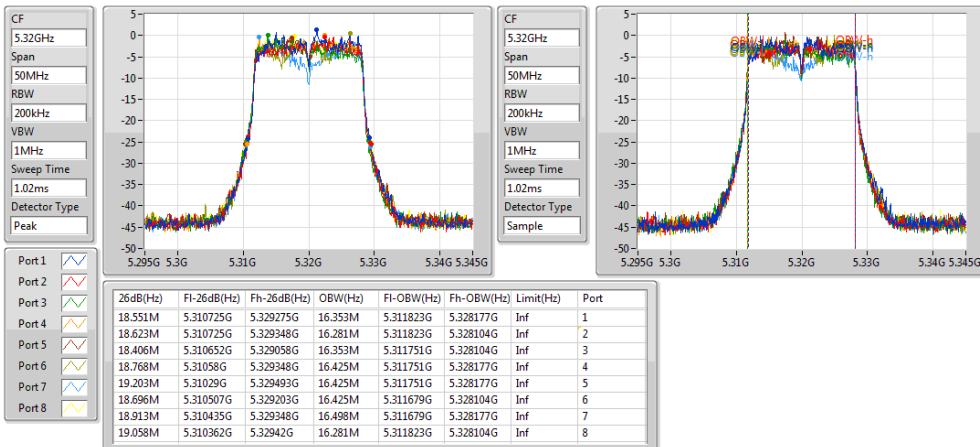
5300MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

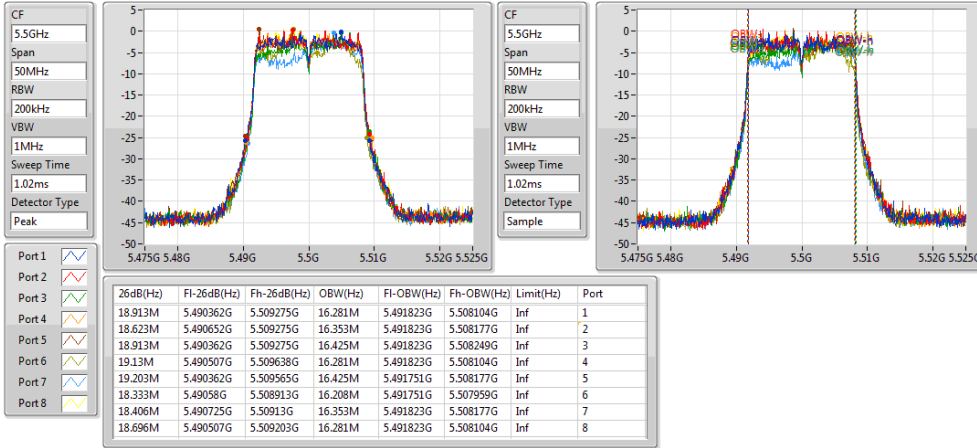
5320MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

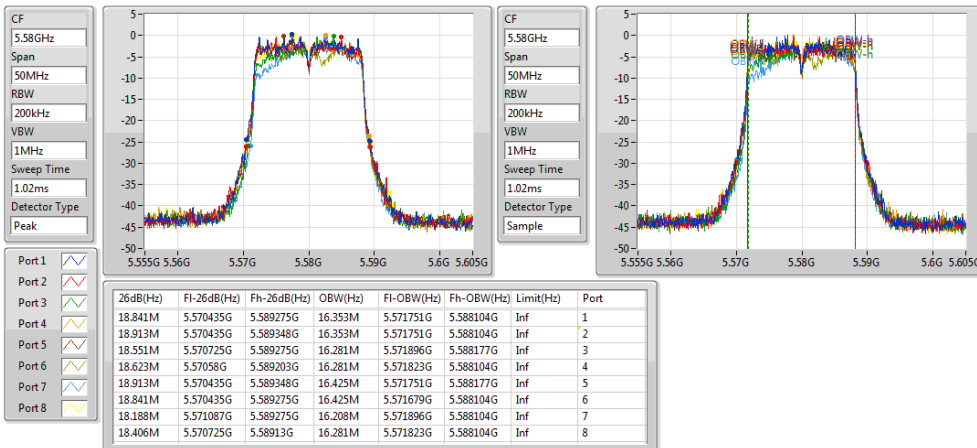
5500MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

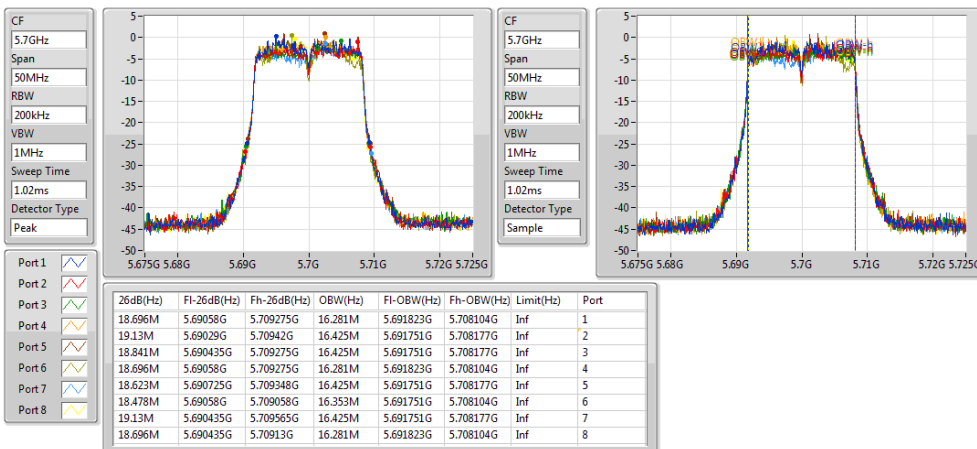
5580MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

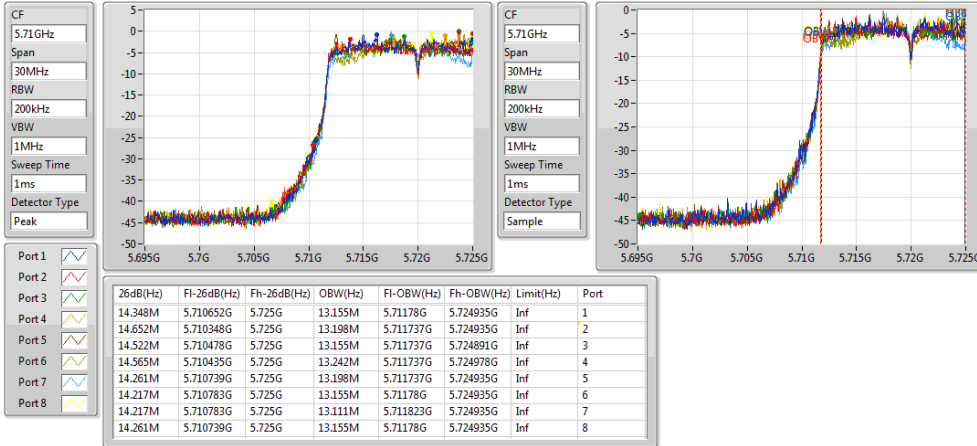
5700MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

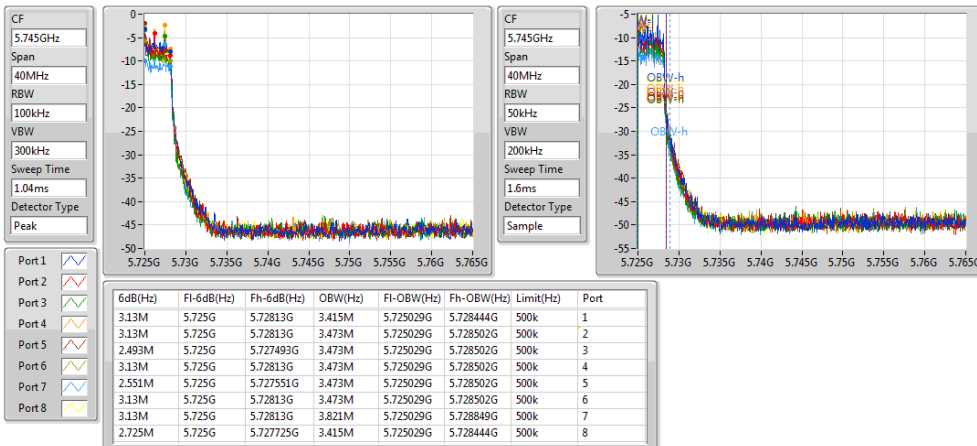
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_8TX

EBW

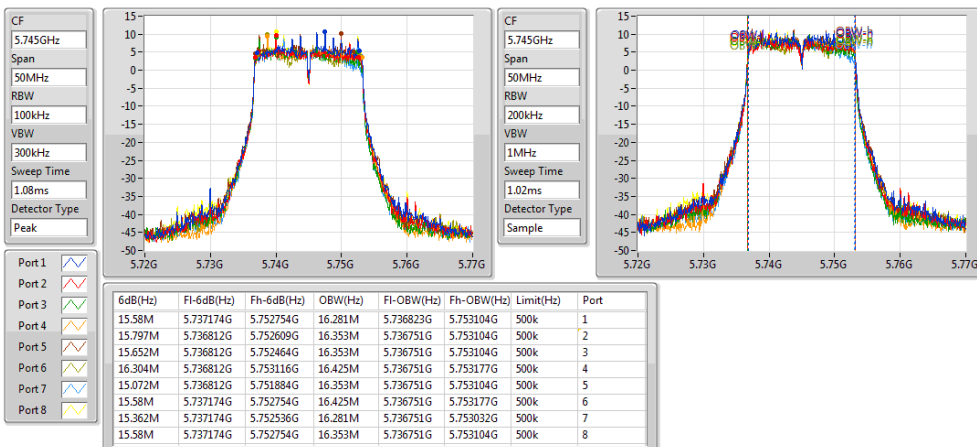
5720MHz Straddle 5.725-5.85GHz



802.11a_Nss1,(6Mbps)_8TX

EBW

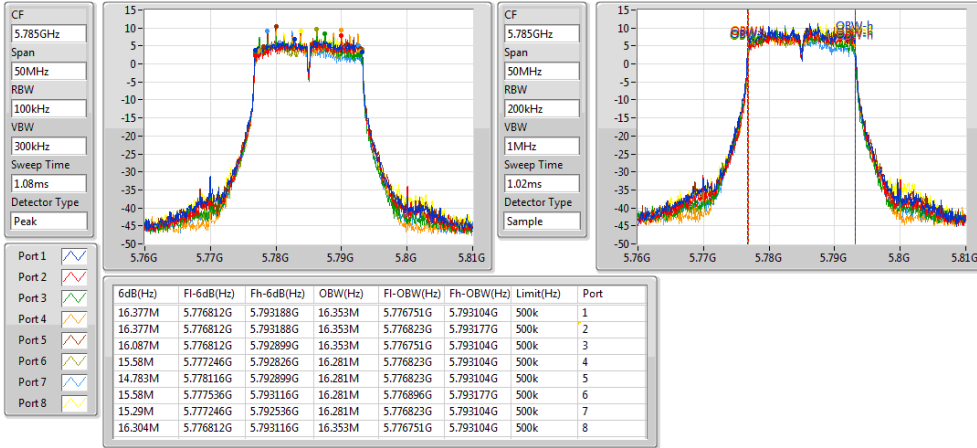
5745MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

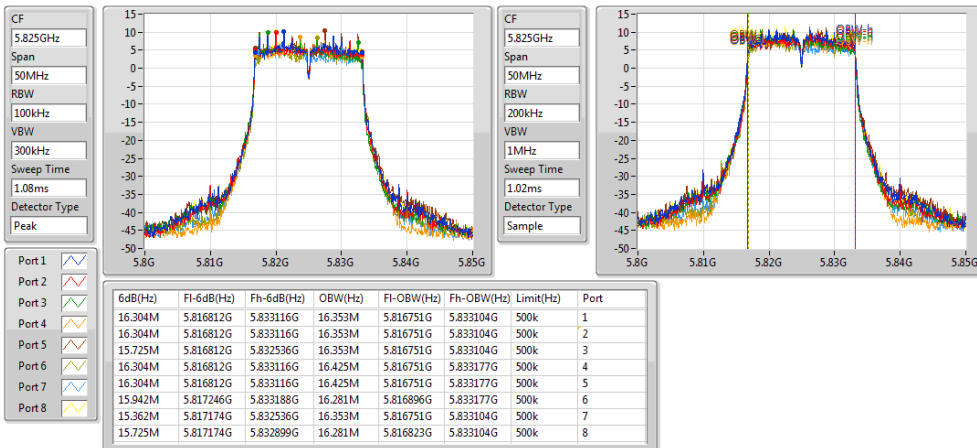
5785MHz



802.11a_Nss1,(6Mbps)_8TX

EBW

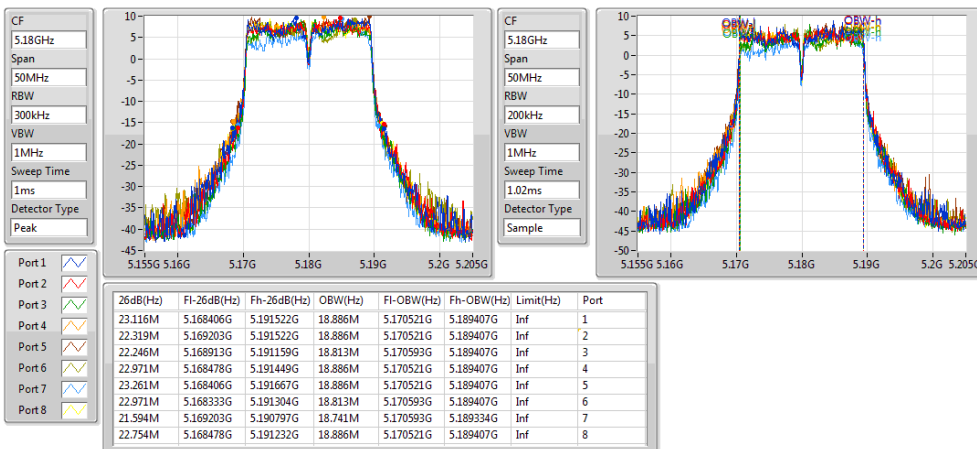
5825MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

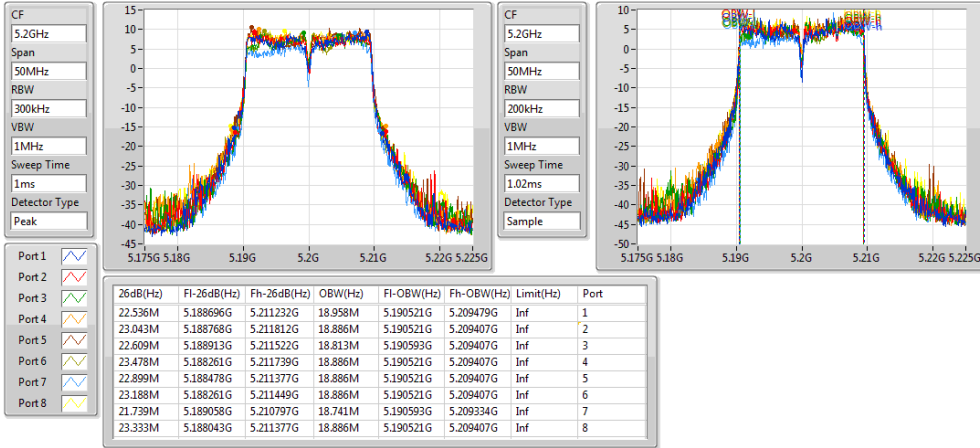
5180MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

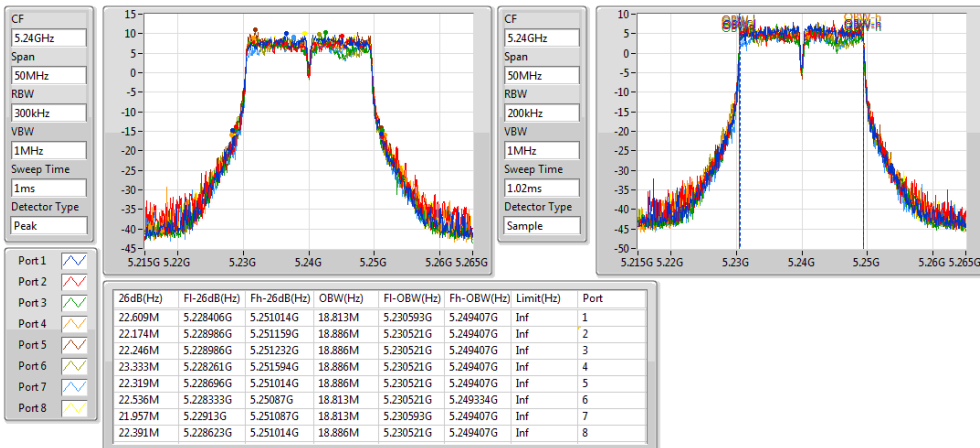
5200MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

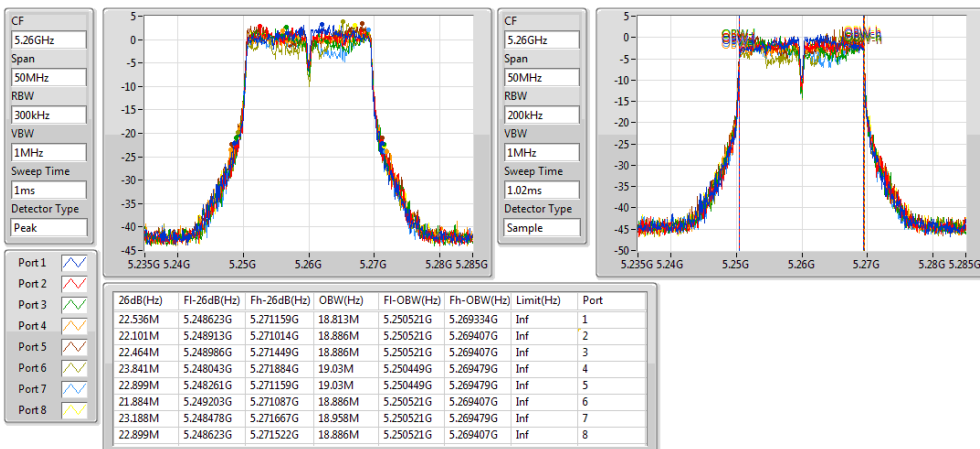
5240MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

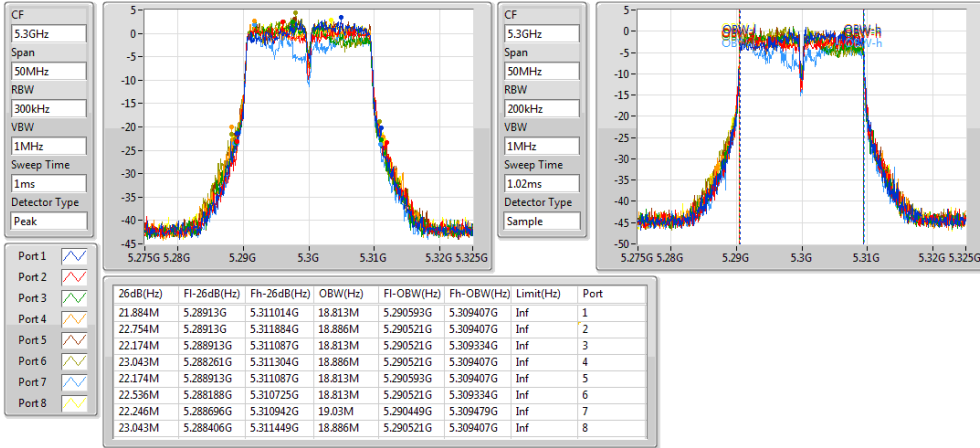
5260MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

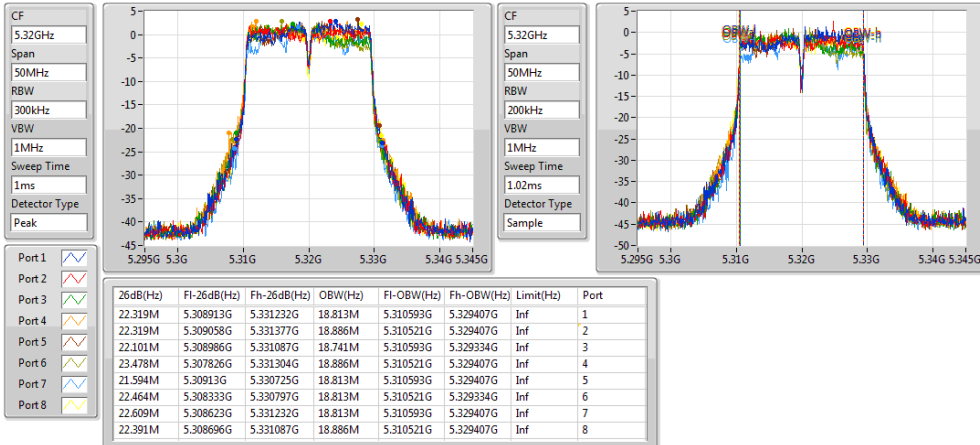
5300MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

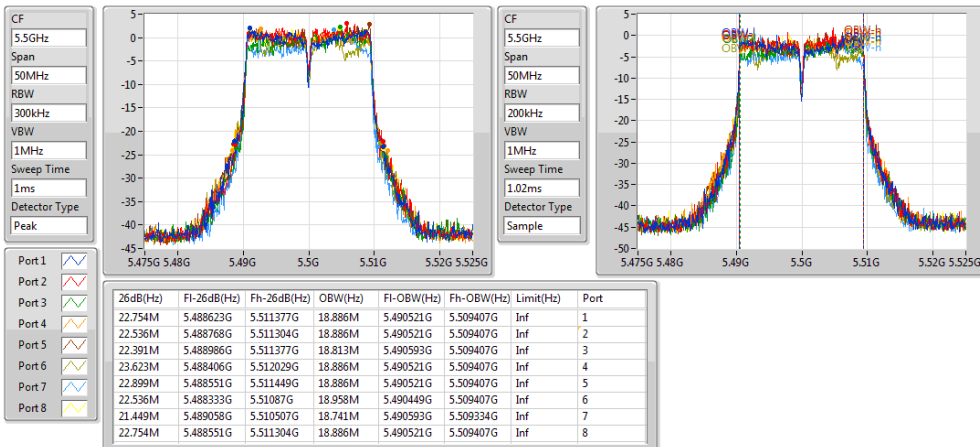
5320MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

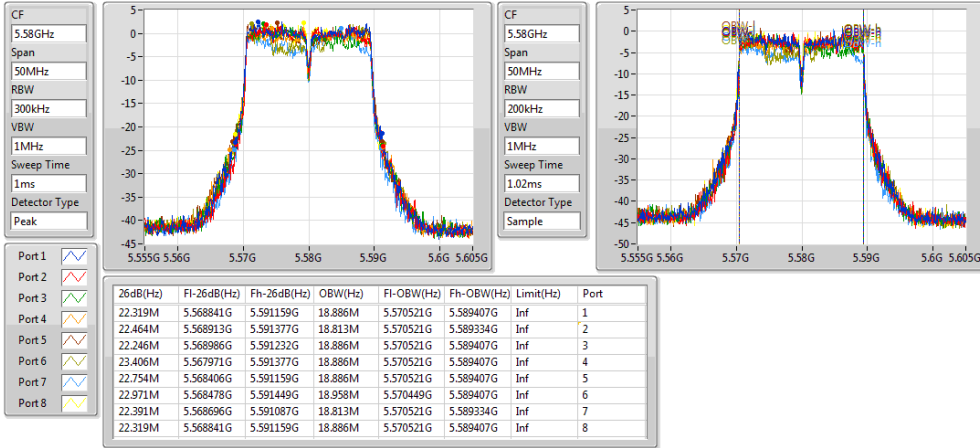
5500MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

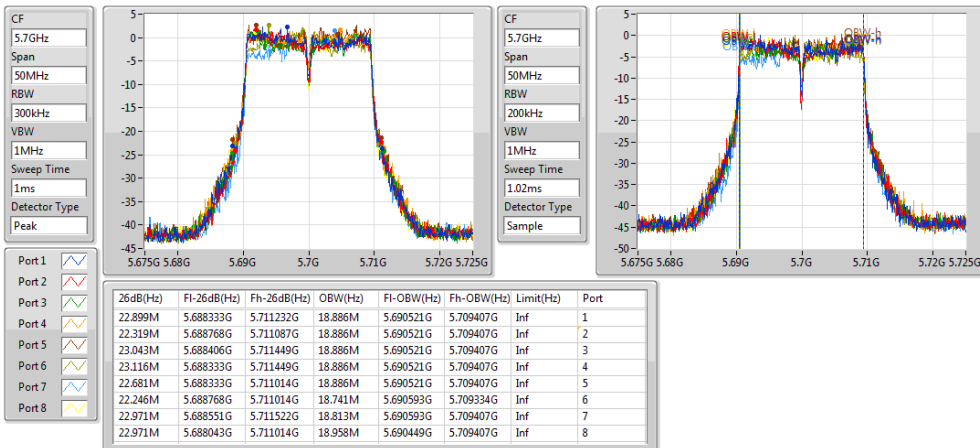
5580MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

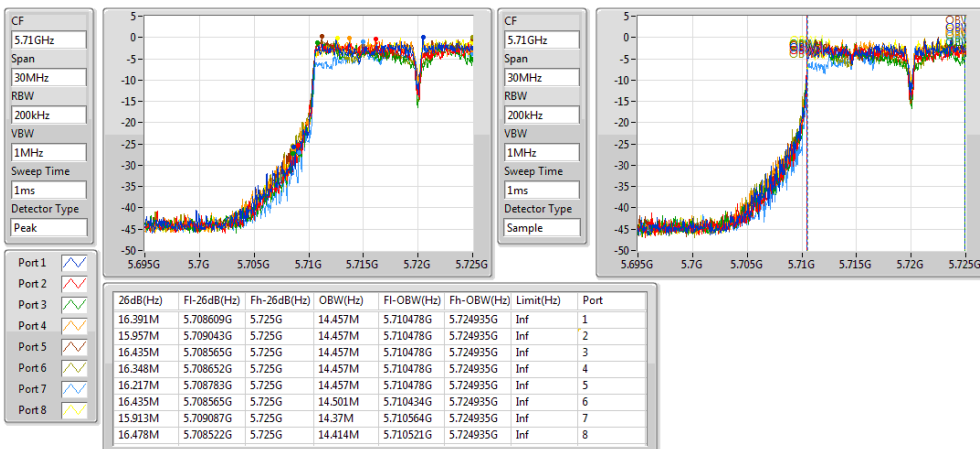
5700MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

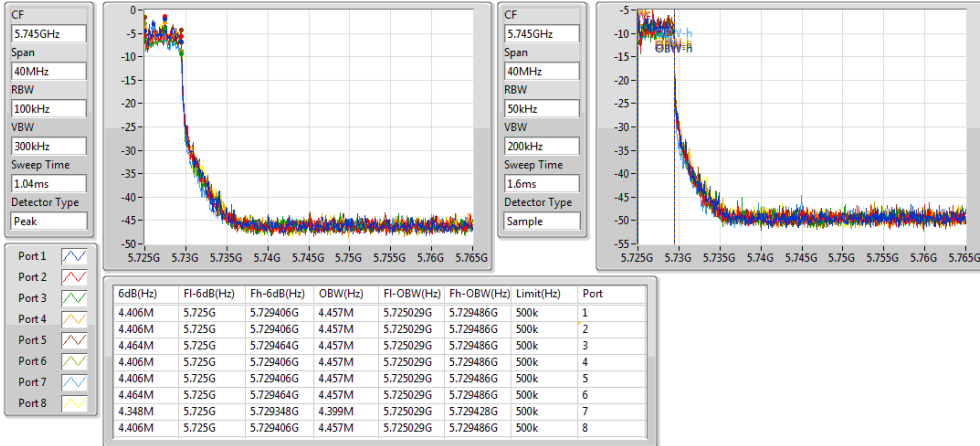
5720MHz Straddle 5.47-5.725GHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

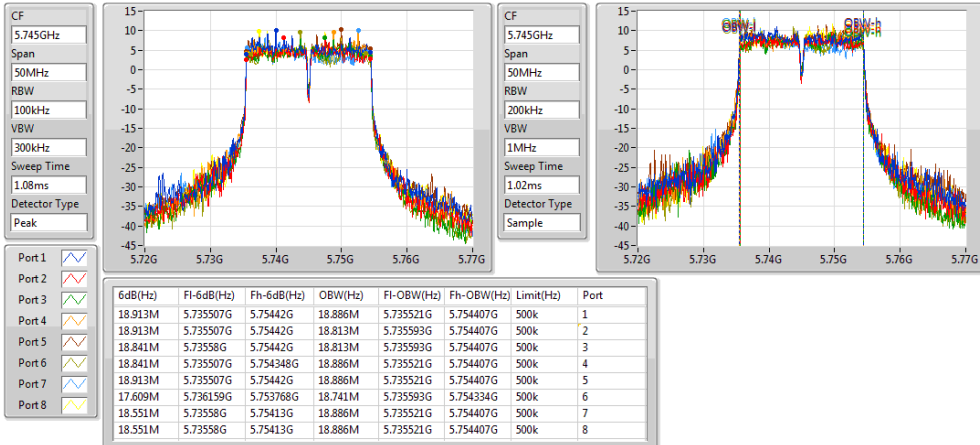
5720MHz Straddle 5.725-5.85GHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

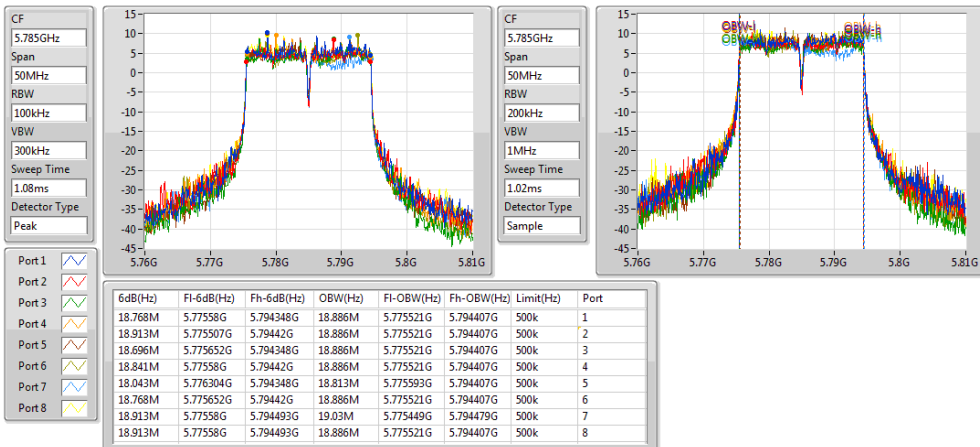
5745MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

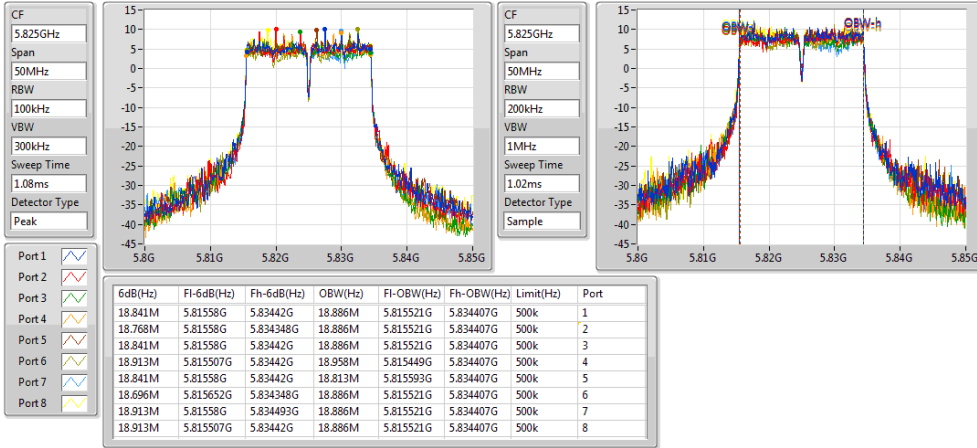
5785MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

EBW

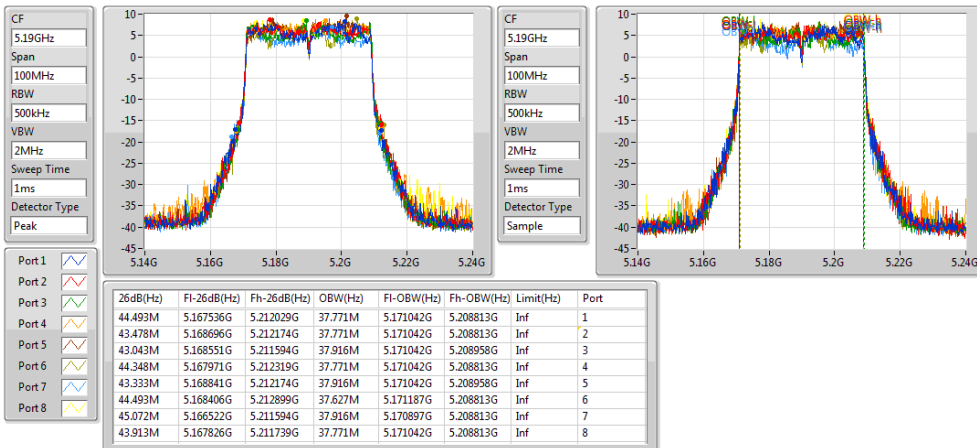
5825MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

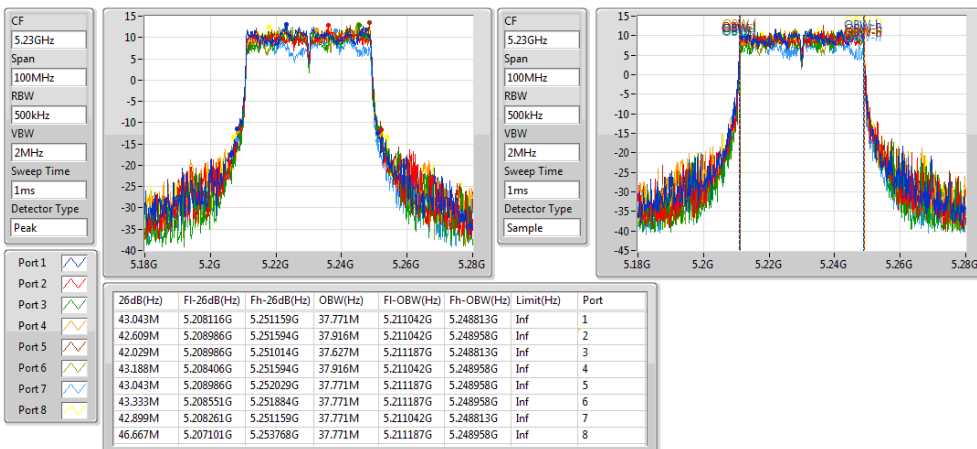
5190MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

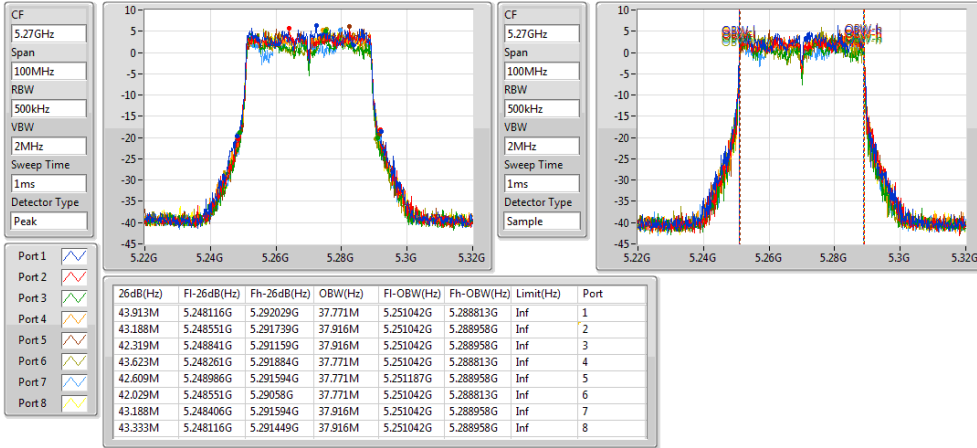
5230MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

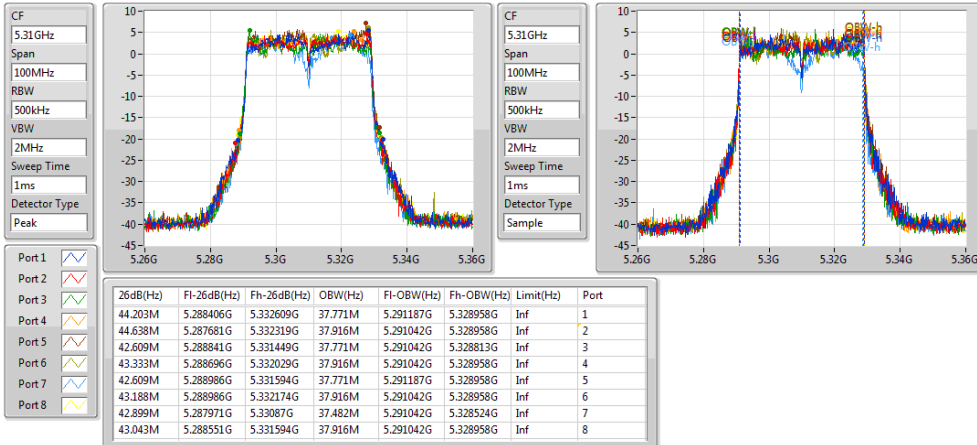
5270MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

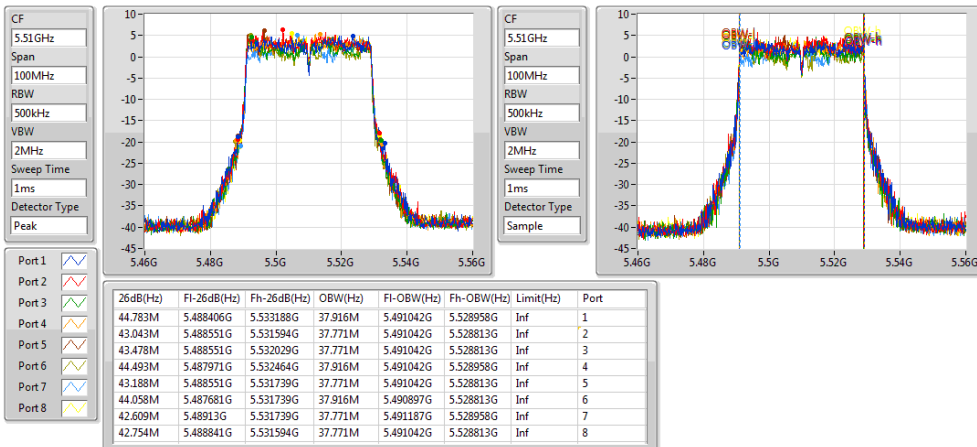
5310MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

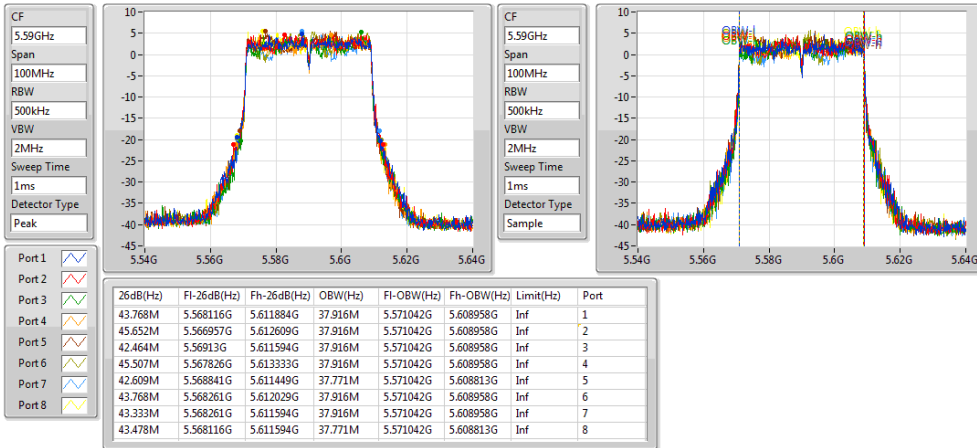
5510MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

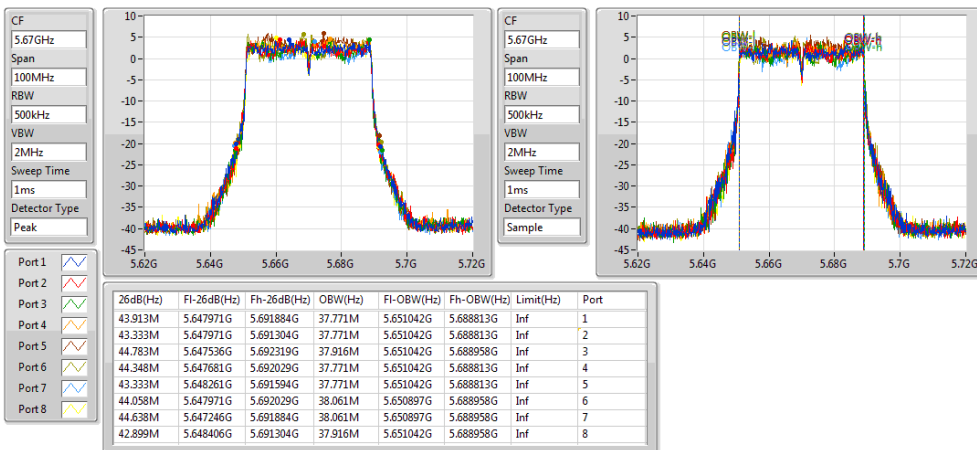
5590MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

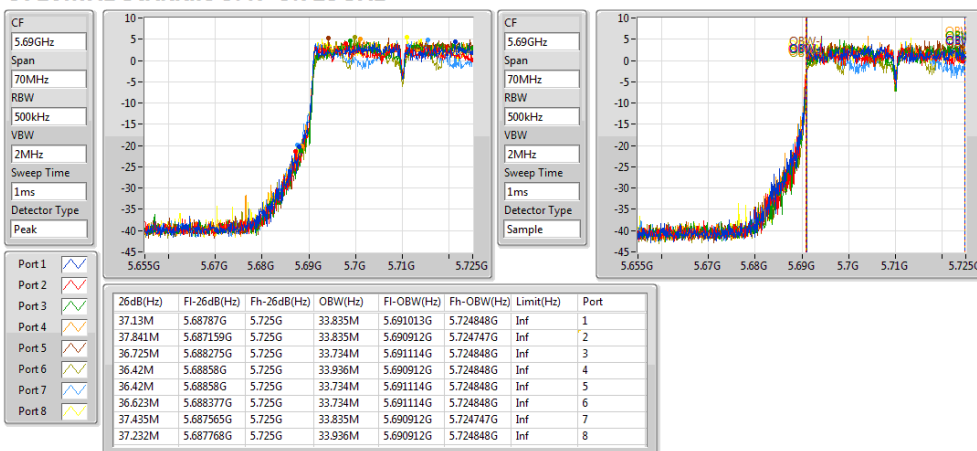
5670MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

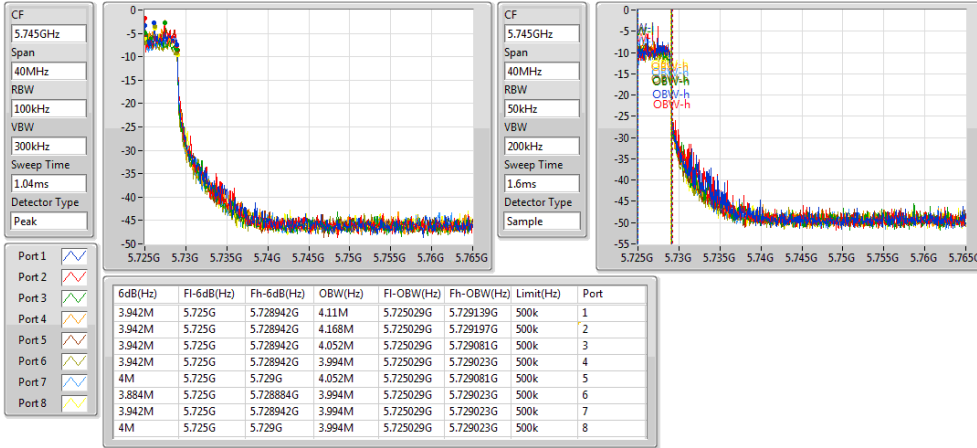
5710MHz Straddle 5.47-5.725GHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

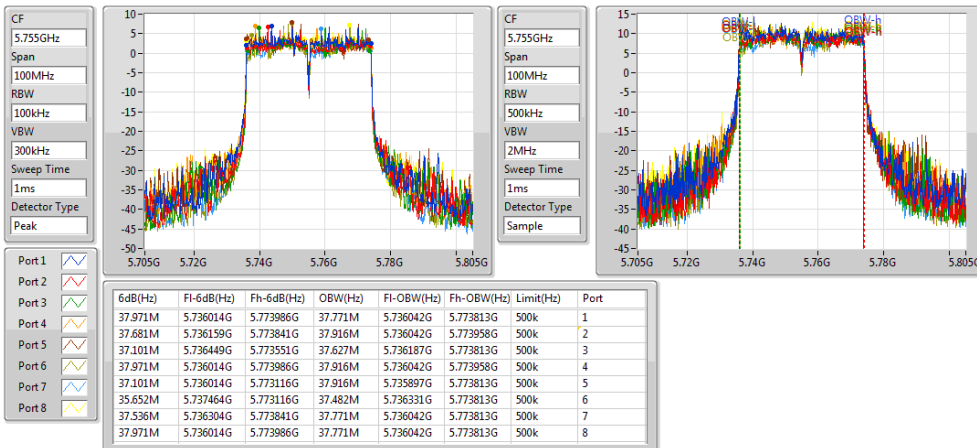
5710MHz Straddle 5.725-5.85GHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

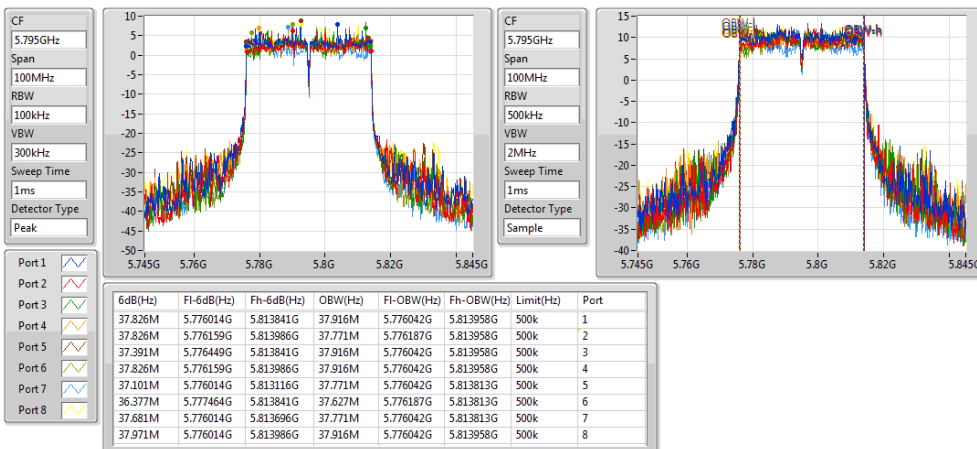
5755MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

EBW

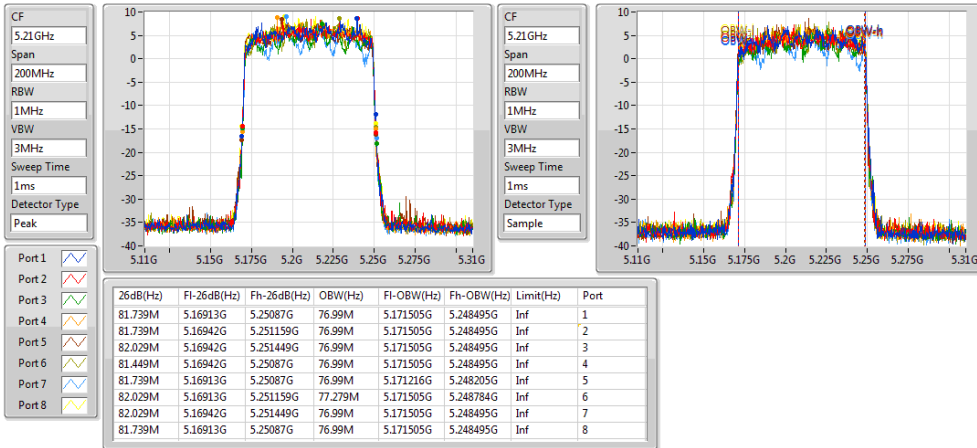
5795MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

EBW

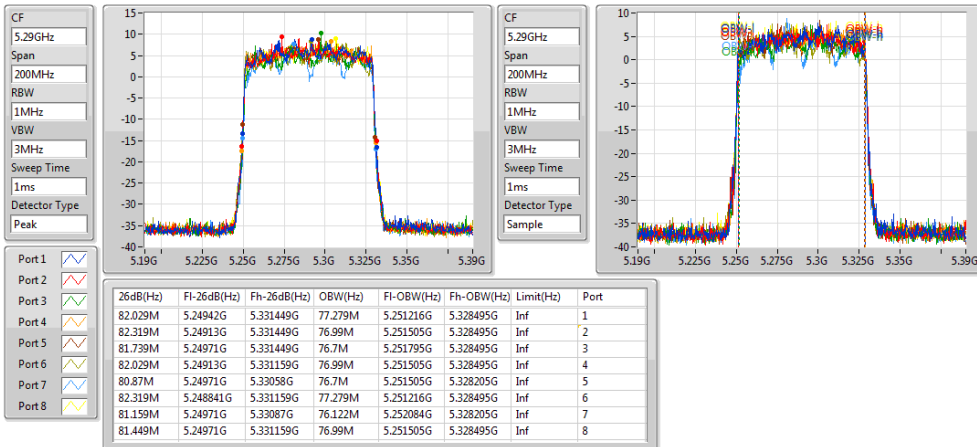
5210MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

EBW

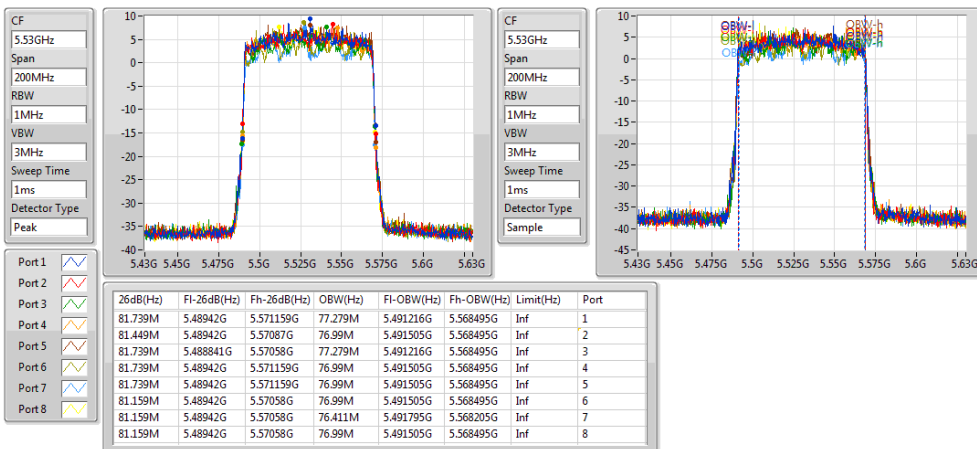
5290MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

EBW

5530MHz

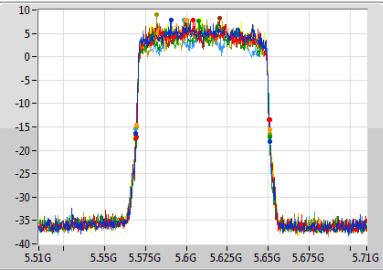


802.11ax HEW80_Nss1,(MCS0)_8TX

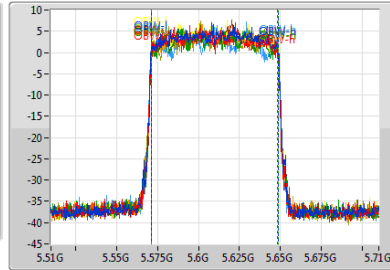
EBW

5610MHz

CF
5.61GHz
Span
200MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1ms
Detector Type
Peak



CF
5.61GHz
Span
200MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8

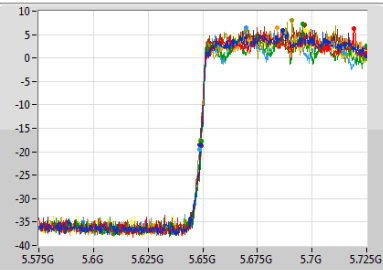
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.568841G	5.65087G	76.99M	5.571505G	5.648495G	Inf	1
81.449M	5.56942G	5.65087G	76.7M	5.571505G	5.648205G	Inf	2
82.319M	5.568841G	5.651159G	77.279M	5.571216G	5.648495G	Inf	3
81.449M	5.56942G	5.65087G	76.99M	5.571505G	5.648495G	Inf	4
81.449M	5.56913G	5.65058G	76.99M	5.571505G	5.648495G	Inf	5
81.449M	5.56942G	5.65087G	77.279M	5.571216G	5.648495G	Inf	6
82.029M	5.56913G	5.651159G	77.569M	5.571216G	5.648784G	Inf	7
82.609M	5.568551G	5.651159G	76.99M	5.571505G	5.648495G	Inf	8

802.11ax HEW80_Nss1,(MCS0)_8TX

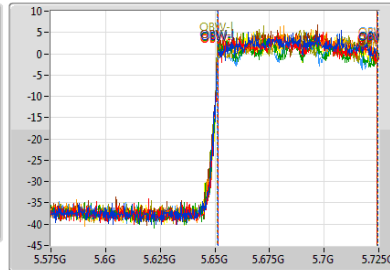
EBW

5690MHz Straddle 5.47-5.725GHz

CF
5.65GHz
Span
150MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1ms
Detector Type
Peak



CF
5.65GHz
Span
150MHz
RBW
1MHz
VBW
3MHz
Sweep Time
1ms
Detector Type
Sample



Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8

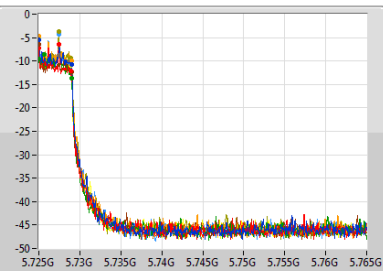
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.087M	5.648913G	5.725G	72.938M	5.65152G	5.724457G	Inf	1
75.652M	5.649348G	5.725G	72.721M	5.65152G	5.72424G	Inf	2
75.435M	5.649565G	5.725G	73.155M	5.651302G	5.724457G	Inf	3
76.087M	5.648913G	5.725G	72.938M	5.65152G	5.724457G	Inf	4
76.304M	5.648696G	5.725G	72.938M	5.651302G	5.72424G	Inf	5
75.87M	5.64913G	5.725G	73.155M	5.651085G	5.72424G	Inf	6
76.304M	5.648696G	5.725G	73.372M	5.651085G	5.724457G	Inf	7
76.087M	5.648913G	5.725G	73.155M	5.651302G	5.724457G	Inf	8

802.11ax HEW80_Nss1,(MCS0)_8TX

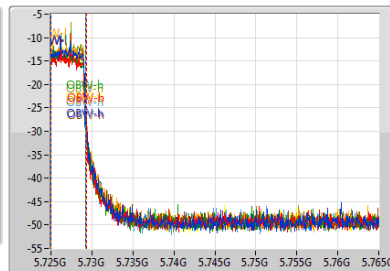
EBW

5690MHz Straddle 5.725-5.85GHz

CF
5.745GHz
Span
40MHz
RBW
100kHz
VBW
300kHz
Sweep Time
1.04ms
Detector Type
Peak



CF
5.745GHz
Span
40MHz
RBW
50kHz
VBW
200kHz
Sweep Time
1.6ms
Detector Type
Sample



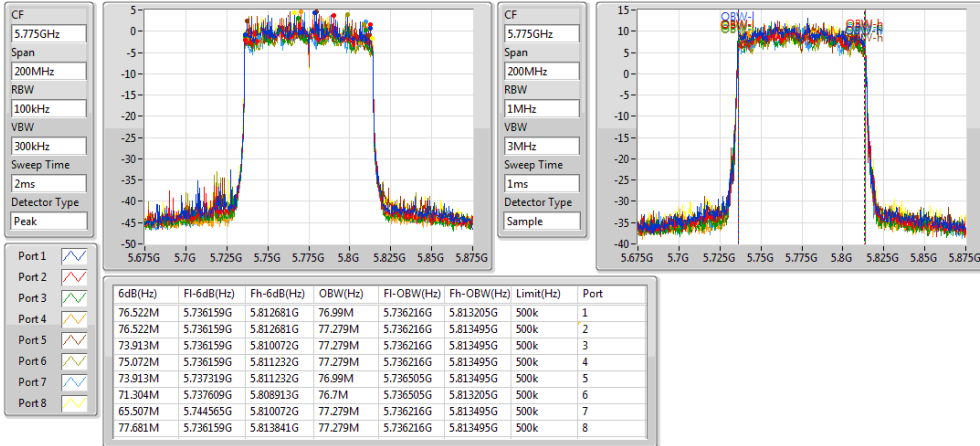
Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4M	5.725G	5.729G	4.226M	5.725029G	5.729255G	500k	1
3.884M	5.725G	5.728884G	4.342M	5.725029G	5.72937G	500k	2
4M	5.725G	5.729G	4.168M	5.725029G	5.729197G	500k	3
4M	5.725G	5.729G	4.226M	5.725029G	5.729255G	500k	4
4.058M	5.725G	5.729058G	4.342M	5.725029G	5.72937G	500k	5
3.942M	5.725G	5.728942G	4.168M	5.725029G	5.729197G	500k	6
3.884M	5.725G	5.728884G	4.226M	5.725029G	5.729255G	500k	7
3.884M	5.725G	5.728884G	4.168M	5.725029G	5.729197G	500k	8

802.11ax HEW80_Nss1,(MCS0)_8TX

EBW

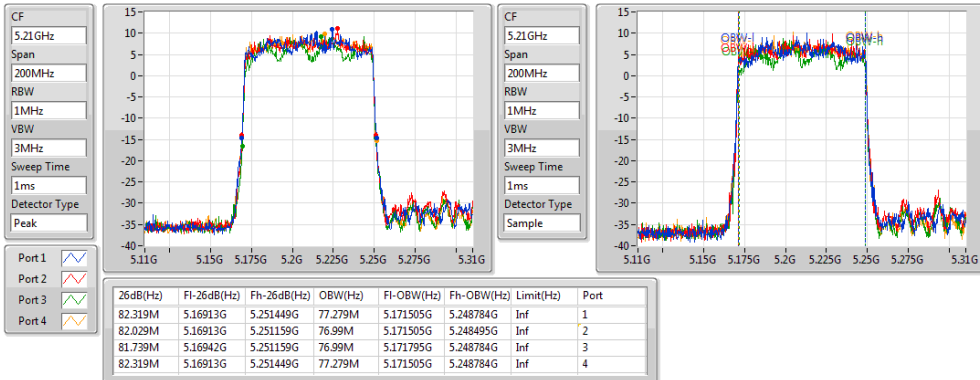
5775MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

EBW

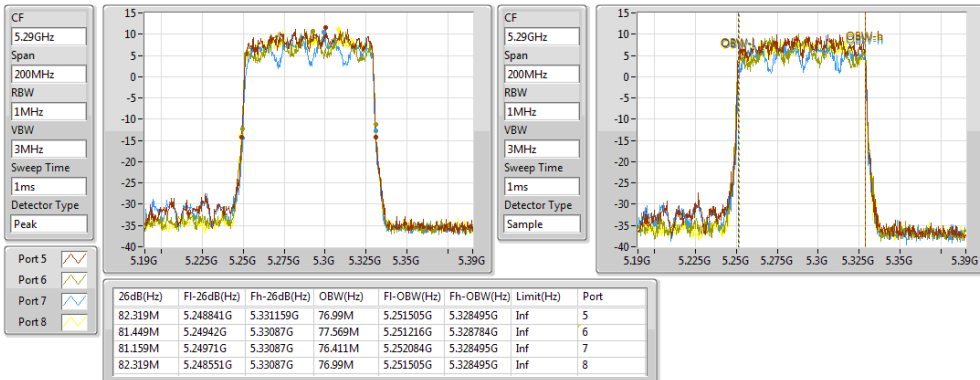
5210MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

EBW

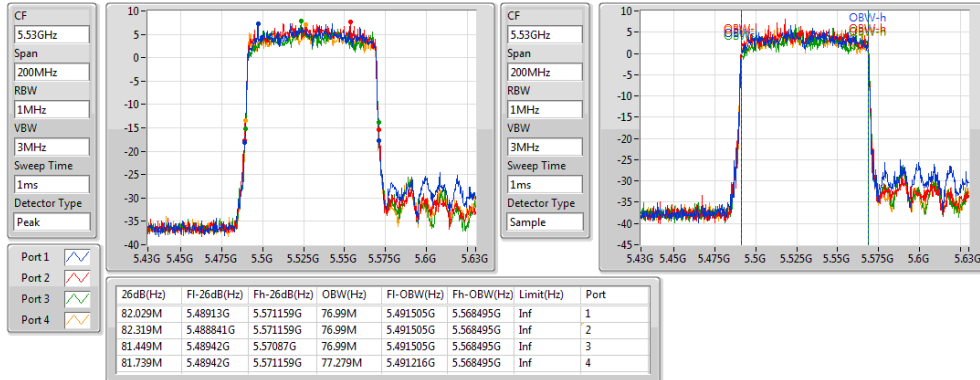
5290MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

EBW

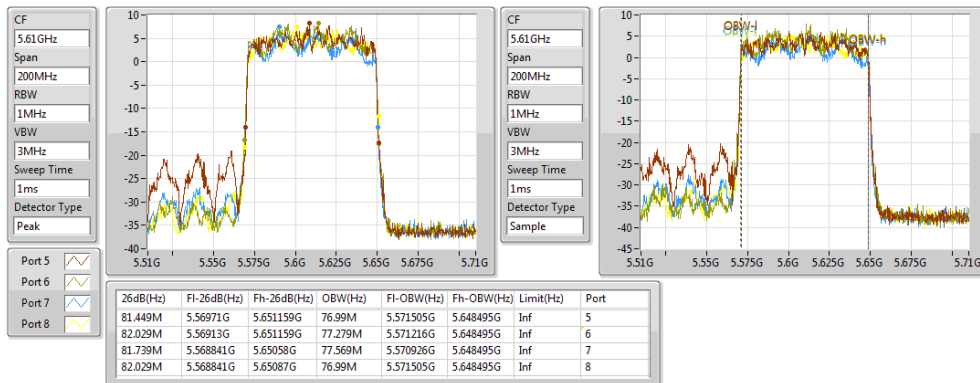
5530MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

EBW

5610MHz



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

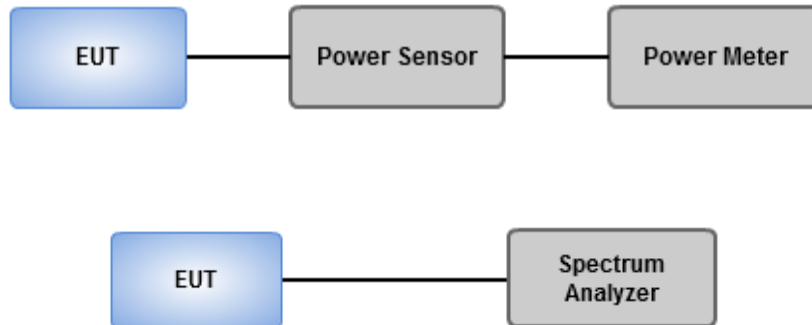
Method PM-G (Measurement using a gated RF average power meter)

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

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	25.66	0.36813	29.66	0.92470
802.11ax HEW20_Nss1,(MCS0)_8TX	26.22	0.41879	30.22	1.05196
802.11ax HEW40_Nss1,(MCS0)_8TX	28.64	0.73114	29.64	0.92045
802.11ax HEW80_Nss1,(MCS0)_8TX	25.04	0.31915	26.04	0.40179
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	18.69	0.07396	23.69	0.23388
802.11ax HEW20_Nss1,(MCS0)_8TX	19.25	0.08414	24.25	0.26607
802.11ax HEW40_Nss1,(MCS0)_8TX	21.93	0.15596	23.93	0.24717
802.11ax HEW80_Nss1,(MCS0)_8TX	23.79	0.23933	25.79	0.37931
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	18.53	0.07129	24.03	0.25293
802.11ax HEW20_Nss1,(MCS0)_8TX	18.74	0.07482	24.24	0.26546
802.11ax HEW40_Nss1,(MCS0)_8TX	21.94	0.15631	24.44	0.27797
802.11ax HEW80_Nss1,(MCS0)_8TX	23.08	0.20324	25.58	0.36141
802.11ax HEW80+80_Nss1,(MCS0)_4TX	23.65	0.23174	26.15	0.41210
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_8TX	29.44	0.87902	35.94	3.92645
802.11ax HEW20_Nss1,(MCS0)_8TX	29.22	0.83560	35.72	3.73250
802.11ax HEW40_Nss1,(MCS0)_8TX	29.64	0.92045	33.14	2.06063
802.11ax HEW80_Nss1,(MCS0)_8TX	28.85	0.76736	32.35	1.71791

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a Nss1,(6Mbps)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	16.56	15.65	16.02	16.34	16.54	16.08	16.42	17.04	25.38	30.00	29.38	36.00
5200MHz	Pass	4.00	16.61	15.46	16.02	17.28	16.84	16.42	16.65	17.24	25.63	30.00	29.63	36.00
5240MHz	Pass	4.00	17.12	15.64	16.15	16.64	16.99	16.38	16.61	17.25	25.66	30.00	29.66	36.00
5260MHz	Pass	5.00	10.02	9.66	9.04	9.55	10.02	9.38	9.25	10.24	18.69	23.65	23.69	29.65
5300MHz	Pass	5.00	9.61	9.01	9.16	9.25	9.96	9.15	8.94	10.21	18.46	23.63	23.46	29.63
5320MHz	Pass	5.00	10.01	9.51	8.92	9.71	9.92	9.24	9.22	10.03	18.62	23.65	23.62	29.65
5500MHz	Pass	5.50	9.81	9.82	9.34	9.82	9.7	8.71	8.77	9.86	18.53	23.63	24.03	29.63
5580MHz	Pass	5.50	9.82	9.64	9.14	9.55	9.52	8.62	8.7	9.82	18.40	23.60	23.90	29.60
5700MHz	Pass	5.50	9.77	9.28	8.91	9.65	9.55	8.54	9.51	10.21	18.49	23.67	23.99	29.67
5720MHz Straddle 5.47-5.725GHz	Pass	5.50	8.46	8.07	7.95	8.66	8.8	8.2	7.66	8.49	17.33	22.53	22.83	28.53
5720MHz Straddle 5.725-5.85GHz	Pass	6.50	2.23	1.3	0.41	2.02	1.67	1	-1.7	1.68	10.25	29.50	16.75	36.00
5745MHz	Pass	6.50	20.74	19.93	19.31	20.41	20.78	19.46	19.61	20.92	29.22	29.50	35.72	36.00
5785MHz	Pass	6.50	20.58	19.95	18.92	20.54	20.81	19.29	19.99	20.75	29.18	29.50	35.68	36.00
5825MHz	Pass	6.50	20.91	20.25	19.92	19.63	21.22	19.75	20.16	21.11	29.44	29.50	35.94	36.00
802.11ax HEW20 Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	17.92	17.04	16.32	17.21	16.82	16.34	16.55	17.92	26.09	30.00	30.09	36.00
5200MHz	Pass	4.00	17.21	17.06	16.45	17.26	17.41	16.98	17.02	17.94	26.22	30.00	30.22	36.00
5240MHz	Pass	4.00	17.69	17.12	16.21	17.15	17.66	16.15	17.04	17.58	26.14	30.00	30.14	36.00
5260MHz	Pass	5.00	10.31	10.22	9.83	10.14	10.46	9.52	10.13	10.98	19.25	24.00	24.25	30.00
5300MHz	Pass	5.00	10.51	9.92	9.79	10.02	10.32	8.83	10.31	10.65	19.11	24.00	24.11	30.00
5320MHz	Pass	5.00	10.66	9.75	9.76	10.02	10.04	8.93	10.11	10.55	19.04	24.00	24.04	30.00
5500MHz	Pass	5.50	10.21	10.25	8.96	9.41	10.22	8.68	9.31	10.29	18.74	24.00	24.24	30.00
5580MHz	Pass	5.50	10.01	9.72	8.69	9.35	10.15	8.43	9.42	10.04	18.55	24.00	24.05	30.00
5700MHz	Pass	5.50	9.61	9.24	8.72	9.41	9.26	8.49	9.08	10.11	18.30	24.00	23.80	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	5.50	8.69	8.17	7.36	8.87	8.57	8.13	7.51	8.79	17.32	23.02	22.82	29.02
5720MHz Straddle 5.725-5.85GHz	Pass	6.50	4.06	3.34	2.45	3.7	4.62	3.55	2.56	3.83	12.60	29.50	19.10	36.00
5745MHz	Pass	6.50	20.81	19.68	19.39	20.18	20.61	19.42	19.05	20.45	29.02	29.50	35.52	36.00
5785MHz	Pass	6.50	20.42	20.02	19.25	19.95	20.55	19.26	19.25	20.22	28.93	29.50	35.43	36.00
5825MHz	Pass	6.50	20.56	19.82	19.54	20.02	21.12	19.38	19.69	21.02	29.22	29.50	35.72	36.00

802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	1.00	15.88	15.46	15.35	16.01	16.31	15.59	16.02	16.34	24.91	30.00	25.91	36.00
5230MHz	Pass	1.00	19.56	19.85	18.56	20.06	20.12	19.14	19.31	20.02	28.64	30.00	29.64	36.00
5270MHz	Pass	2.00	12.69	12.81	12.06	12.91	13.22	12.49	13.02	13.81	21.93	24.00	23.93	30.00
5310MHz	Pass	2.00	12.85	12.56	12.15	12.81	13.52	12.35	12.02	13.64	21.80	24.00	23.80	30.00
5510MHz	Pass	2.50	13.41	13.22	12.45	12.74	13.21	12.48	12.26	13.32	21.94	24.00	24.44	30.00
5590MHz	Pass	2.50	13.31	12.85	12.72	12.26	12.98	12.4	12.74	13.31	21.87	24.00	24.37	30.00
5670MHz	Pass	2.50	13.01	12.52	11.75	12.88	12.52	11.99	12.63	12.81	21.56	24.00	24.06	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	2.50	11.94	11.72	12.23	12.28	12.77	11.49	11.2	12.37	21.06	24.00	23.56	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.50	2.45	2.32	2.01	2.87	3.25	1.35	2.03	2.49	11.41	30.00	14.91	36.00
5755MHz	Pass	3.50	20.42	19.68	19.41	19.84	21.02	19.26	19.39	20.21	28.97	30.00	32.47	36.00
5795MHz	Pass	3.50	21.06	20.34	20.19	20.54	21.22	19.98	20.45	20.96	29.64	30.00	33.14	36.00
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	1.00	15.58	15.24	15.69	16.31	16.42	15.69	16.25	16.69	25.04	30.00	26.04	36.00
5290MHz	Pass	2.00	15.16	14.23	14.51	14.81	15.21	14.36	14.42	15.21	23.79	24.00	25.79	30.00
5530MHz	Pass	2.50	14.15	14.31	14.02	14.03	14.32	13.52	13.71	14.26	23.08	24.00	25.58	30.00
5610MHz	Pass	2.50	14.35	14.19	13.78	13.95	14.21	13.65	13.54	14.58	23.08	24.00	25.58	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	2.50	13.75	13.28	12.54	13.75	14.14	13.88	12.93	13.25	22.50	24.00	25.00	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.50	-0.49	-1.99	-1.46	0.03	-1.39	0.05	-0.29	-0.55	8.33	30.00	11.83	36.00
5775MHz	Pass	3.50	20.2	19.76	18.98	19.75	20.59	19.14	19.38	20.45	28.85	30.00	32.35	36.00
802.11ax HEW80+80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	1.00	17.05	17.12	16.66	17.57	-	-	-	-	23.13	30.00	24.13	36.00
5290MHz	Pass	2.00	-	-	-	-	17.68	17.66	16.55	17.93	23.51	24.00	25.51	30.00
5530MHz	Pass	2.5	14.95	14.98	14.43	14.96	-	-	-	-	23.65	24.00	26.15	30.00
5610MHz	Pass	2.5	-	-	-	-	14.78	14.18	13.88	14.65				

DG = Directional Gain = G_{ant} + Array Gain

For 20 MHz bandwidth

Array gain = $5 * \log(8/1) = 4.52$ dB or 3 dB , which is less

5.15 ~ 5.25 GHz

Directional gain = 1 dBi + 3 dB = 4 dBi

5.25 ~ 5.35 GHz

Directional gain = 2 dBi + 3 dB = 5 dBi

5.47 ~ 5.72 GHz

Directional gain = 2.5 dBi + 3 dB = 5.5 dBi

5.725 ~ 5.85 GHz

Directional gain = 3.5 dBi + 3 dB = 6.5 dBi > 6dBi, power limit shall be reduced to 30 dBm – (6.5 dBi – 6 dBi) = 29.5 dBm

Port X = Port X output power

For 40 / 80 MHz

Array gain = 0 dB

5.15 ~ 5.25 GHz

Directional gain = 1 dBi + 0 dB = 1 dBi

5.25 ~ 5.35 GHz

Directional gain = 2 dBi + 0 dB = 2 dBi

5.47 ~ 5.72 GHz

Directional gain = 2.5 dBi + 0 dB = 2.5 dBi

5.725 ~ 5.85 GHz

Directional gain = 3.5 dBi + 0 dB = 3.5 dBi

Port X = Port X output power

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	17.19	0.05236	27.22	0.52723
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	19.61	0.09141	29.64	0.92045
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	16.01	0.03990	26.04	0.40179
5.25-5.35GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	10.22	0.01052	21.25	0.13335
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	12.90	0.01950	23.93	0.24717
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	14.76	0.02992	25.79	0.37931
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	9.71	0.00935	21.24	0.13305
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	12.91	0.01954	24.44	0.27797
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	14.05	0.02541	25.58	0.36141
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	14.62	0.02897	23.14	0.20606
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_8TX	20.19	0.10447	32.72	1.87068
802.11ax HEW40-BF_Nss1,(MCS0)_8TX	20.61	0.11508	33.14	2.06063
802.11ax HEW80-BF_Nss1,(MCS0)_8TX	19.82	0.09594	32.35	1.71791

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Port 5 (dBm)	Port 6 (dBm)	Port 7 (dBm)	Port 8 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_ Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.03	8.89	8.01	7.29	8.18	7.79	7.31	7.52	8.89	17.06	25.97	27.09	36.00
5200MHz	Pass	10.03	8.18	8.03	7.42	8.23	8.38	7.95	7.99	8.91	17.19	25.97	27.22	36.00
5240MHz	Pass	10.03	8.66	8.09	7.18	8.12	8.63	7.12	8.01	8.55	17.11	25.97	27.14	36.00
5260MHz	Pass	11.03	1.28	1.19	0.8	1.11	1.43	0.49	1.1	1.95	10.22	18.97	21.25	30.00
5300MHz	Pass	11.03	1.48	0.89	0.76	0.99	1.29	-0.2	1.28	1.62	10.08	18.97	21.11	30.00
5320MHz	Pass	11.03	1.63	0.72	0.73	0.99	1.01	-0.1	1.08	1.52	10.01	18.97	21.04	30.00
5500MHz	Pass	11.53	1.18	1.22	-0.07	0.38	1.19	-0.35	0.28	1.26	9.71	18.47	21.24	30.00
5580MHz	Pass	11.53	0.98	0.69	-0.34	0.32	1.12	-0.6	0.39	1.01	9.52	18.47	21.05	30.00
5700MHz	Pass	11.53	0.58	0.21	-0.31	0.38	0.23	-0.54	0.05	1.08	9.27	18.47	20.80	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	11.53	-0.34	-0.86	-1.67	-0.16	-0.46	-0.9	-1.52	-0.24	8.29	18.47	19.82	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	12.53	-4.97	-5.69	-6.58	-5.33	-4.41	-5.48	-6.47	-5.2	3.57	23.47	16.10	36.00
5745MHz	Pass	12.53	11.78	10.65	10.36	11.15	11.58	10.39	10.02	11.42	19.99	23.47	32.52	36.00
5785MHz	Pass	12.53	11.39	10.99	10.22	10.92	11.52	10.23	10.22	11.19	19.90	23.47	32.43	36.00
5825MHz	Pass	12.53	11.53	10.79	10.51	10.99	12.09	10.35	10.66	11.99	20.19	23.47	32.72	36.00
802.11ax HEW40-BF_ Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.03	6.85	6.43	6.32	6.98	7.28	6.56	6.99	7.31	15.88	25.97	25.91	36.00
5230MHz	Pass	10.03	10.53	10.82	9.53	11.03	11.09	10.11	10.28	10.99	19.61	25.97	29.64	36.00
5270MHz	Pass	11.03	3.66	3.78	3.03	3.88	4.19	3.46	3.99	4.78	12.90	18.97	23.93	30.00
5310MHz	Pass	11.03	3.82	3.53	3.12	3.78	4.49	3.32	2.99	4.61	12.77	18.97	23.80	30.00
5510MHz	Pass	11.53	4.38	4.19	3.42	3.71	4.18	3.45	3.23	4.29	12.91	18.47	24.44	30.00
5590MHz	Pass	11.53	4.28	3.82	3.69	3.23	3.95	3.37	3.71	4.28	12.84	18.47	24.37	30.00
5670MHz	Pass	11.53	3.98	3.49	2.72	3.85	3.49	2.96	3.6	3.78	12.53	18.47	24.06	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	11.53	2.91	2.69	3.2	3.25	3.74	2.46	2.17	3.34	12.03	18.47	23.56	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	12.53	-6.58	-6.71	-7.02	-6.16	-5.78	-7.68	-7	-6.54	2.38	23.47	14.91	36.00
5755MHz	Pass	12.53	11.39	10.65	10.38	10.81	11.99	10.23	10.36	11.18	19.94	23.47	32.47	36.00
5795MHz	Pass	12.53	12.03	11.31	11.16	11.51	12.19	10.95	11.42	11.93	20.61	23.47	33.14	36.00

802.11ax HEW80-BF_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.03	6.55	6.21	6.66	7.28	7.39	6.66	7.22	7.66	16.01	25.97	26.04	36.00
5290MHz	Pass	11.03	6.13	5.2	5.48	5.78	6.18	5.33	5.39	6.18	14.76	18.97	25.79	30.00
5530MHz	Pass	11.53	5.12	5.28	4.99	5	5.29	4.49	4.68	5.23	14.05	18.47	25.58	30.00
5610MHz	Pass	11.53	5.32	5.16	4.75	4.92	5.18	4.62	4.51	5.55	14.05	18.47	25.58	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	11.53	4.72	4.25	3.51	4.72	5.11	4.85	3.9	4.22	13.47	18.47	25.00	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	12.53	-9.52	-11.02	-10.49	-9	-10.42	-8.98	-9.32	-9.58	-0.70	23.47	11.83	36.00
5775MHz	Pass	12.53	11.17	10.73	9.95	10.72	11.56	10.11	10.35	11.42	19.82	23.47	32.35	36.00
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	7.02	8.02	8.09	7.63	8.54	-	-	-	-	14.10	28.98	21.12	36.00
5290MHz	Pass	8.02	-	-	-	-	8.65	8.63	7.52	8.9	14.48	21.98	22.50	30.00
802.11ax HEW80+80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	8.52	5.92	5.95	5.4	5.93	-	-	-	-	14.62	21.48	23.14	30
5610MHz	Pass	8.52	-	-	-	-	5.75	5.15	4.85	5.62				

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

5.15 ~ 5.25 GHz

4 TX

Directional gain = $1 + 10 * \log(4/1) = 7.02 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to 30 dBm – (7.02 dBi – 6 dBi) = 28.98 dBm

8 TX

Directional gain = $1 + 10 * \log(8/1) = 10.03 \text{ dBi} > 6 \text{ dBi}$,

Limit shall be reduced to 30 dBm – (10.03 dBi – 6 dBi) = 25.97 dBm

5250-5350 MHz

4TX

Directional gain = $2 + 10 * \log(4/1) = 8.02 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to 24 dBm – (8.02 dBi – 6 dBi) = 21.98 dBm.

8TX

Directional gain = $2 + 10 * \log(8/1) = 11.03 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to 24 dBm – (11.03 dBi – 6 dBi) = 18.97 dBm.

5470-5750 MHz

4TX

Directional gain = $2.5 + 10 * \log(4/1) = 8.52 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to 24 dBm – (8.52 dBi – 6 dBi) = 21.48 dBm.

8TX

Directional gain = $2.5 + 10 * \log(8/1) = 11.53 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to 24 dBm – (11.53 dBi – 6 dBi) = 18.47 dBm.

5725-5850 MHz

Directional gain = $3.5 + 10 * \log(8/1) = 12.53 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to 30 dBm – (12.53 dBi – 6 dBi) = 23.47 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 $\geq 98\%$

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

Duty cycle $< 98\%$

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

For 5725 ~ 5850 MHz

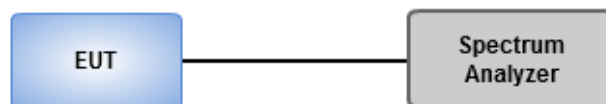
Duty cycle $\geq 98\%$

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

Duty cycle $< 98\%$

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

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	12.74	22.77
802.11ax HEW20_Nss1,(MCS0)_8TX	12.88	22.91
802.11ax HEW40_Nss1,(MCS0)_8TX	12.71	22.74
802.11ax HEW80_Nss1,(MCS0)_8TX	6.53	16.56
802.11ax HEW80+80_Nss1,(MCS0)_4TX	4.37	11.39
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	5.76	16.79
802.11ax HEW20_Nss1,(MCS0)_8TX	5.81	16.84
802.11ax HEW40_Nss1,(MCS0)_8TX	5.47	16.50
802.11ax HEW80_Nss1,(MCS0)_8TX	4.94	15.97
802.11ax HEW80+80_Nss1,(MCS0)_4TX	4.79	12.81
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	5.39	16.92
802.11ax HEW20_Nss1,(MCS0)_8TX	5.27	16.80
802.11ax HEW40_Nss1,(MCS0)_8TX	5.39	16.92
802.11ax HEW80_Nss1,(MCS0)_8TX	4.16	15.69
802.11ax HEW80+80_Nss1,(MCS0)_4TX	1.08	9.60
802.11ax HEW80+80_Nss1,(MCS0)_4TX	1.67	10.19
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_8TX	15.02	27.55
802.11ax HEW20_Nss1,(MCS0)_8TX	14.74	27.27
802.11ax HEW40_Nss1,(MCS0)_8TX	12	24.53
802.11ax HEW80_Nss1,(MCS0)_8TX	8.44	20.97

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/ RBW)	Port 2 (dBm/ RBW)	Port 3 (dBm/ RBW)	Port 4 (dBm/ RBW)	Port 5 (dBm/ RBW)	Port 6 (dBm/ RBW)	Port 7 (dBm/ RBW)	Port 8 (dBm/ RBW)	PD (dBm/ RBW)	PD Limit (dBm/ RBW)	EIRP PD (dBm/ RBW)	EIRP PD Limit (dBm/ RBW)
802.11a_Nss1,(6 Mbps)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.03	4.8	3.64	3.45	3	4.29	4.64	4.26	5.4	12.62	12.97	22.65	23.00
5200MHz	Pass	10.03	4.41	2.58	3.54	4.28	3.99	3.91	4.66	5.63	12.74	12.97	22.77	23.00
5240MHz	Pass	10.03	4.56	2.42	3.56	3.48	4.24	4.84	4.91	5.61	12.73	12.97	22.76	23.00
5260MHz	Pass	11.03	-2.34	-4.4	-3.3	-3.64	-2.8	-2.37	-2.24	-1.82	5.62	5.97	16.65	17.00
5300MHz	Pass	11.03	-2.74	-4.11	-3.14	-3.93	-2.58	-2.72	-2.78	-1.82	5.76	5.97	16.79	17.00
5320MHz	Pass	11.03	-2.22	-3.67	-3.75	-3.51	-3.26	-2.38	-2.77	-2.31	5.65	5.97	16.68	17.00
5500MHz	Pass	11.53	-3.28	-3.31	-3.76	-3.48	-2.83	-3.41	-2.88	-2.44	5.39	5.47	16.92	17.00
5580MHz	Pass	11.53	-3.31	-3.69	-3.78	-4.21	-3.53	-3.74	-3.24	-3.03	5.07	5.47	16.60	17.00
5700MHz	Pass	11.53	-3.35	-3.97	-4.48	-3.55	-3.67	-3.75	-3.32	-2.43	4.94	5.47	16.47	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	11.53	-3.82	-4.18	-4.42	-3.85	-3.18	-3.02	-3.57	-3.5	5.01	5.47	16.54	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	12.53	-5.97	-6.81	-7.36	-6.23	-5.15	-5.36	-9.77	-5.91	2.59	23.47	15.12	36.00
5745MHz	Pass	12.53	6.76	5.76	5.72	5.8	6.92	6.41	5.54	6.59	14.80	23.47	27.33	36.00
5785MHz	Pass	12.53	5.96	5.24	4.63	6	6.28	5.52	6.04	6.57	14.57	23.47	27.10	36.00
5825MHz	Pass	12.53	6.74	5.98	5.98	5.69	7.16	6.74	5.98	6.82	15.02	23.47	27.55	36.00
802.11ax HEW20_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.03	4.53	4	3.51	3.52	3.43	4.59	3.97	5.72	12.73	12.97	22.76	23.00
5200MHz	Pass	10.03	4.2	3.7	3.67	3.73	4.24	4.21	4.79	5.44	12.88	12.97	22.91	23.00
5240MHz	Pass	10.03	4.76	3.71	3.53	3.67	4.25	4.09	5.01	5.4	12.80	12.97	22.83	23.00
5260MHz	Pass	11.03	-2.64	-3.23	-2.82	-3.59	-2.78	-3.08	-2.45	-1.72	5.81	5.97	16.84	17.00
5300MHz	Pass	11.03	-2.68	-3.8	-3.23	-4.15	-3.22	-3.33	-2.09	-1.94	5.34	5.97	16.37	17.00
5320MHz	Pass	11.03	-2.42	-3.7	-2.92	-3.75	-3.25	-2.93	-2.28	-2.17	5.45	5.97	16.48	17.00
5500MHz	Pass	11.53	-3.22	-2.95	-3.87	-4.09	-2.86	-3.39	-3.12	-2.45	5.15	5.47	16.68	17.00
5580MHz	Pass	11.53	-3.15	-3.71	-3.71	-4.03	-2.94	-4.19	-2.92	-3.18	5.02	5.47	16.55	17.00
5700MHz	Pass	11.53	-3.84	-3.95	-4.12	-4.12	-3.52	-3.31	-3.51	-2.68	5.24	5.47	16.77	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	11.53	-3.38	-3.64	-4.06	-3.37	-2.8	-3	-3.68	-3.1	5.27	5.47	16.80	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	12.53	-4.87	-5.49	-6.41	-5.22	-4.37	-4.95	-5.99	-5.05	3.62	23.47	16.15	36.00
5745MHz	Pass	12.53	5.93	4.87	5.61	5.75	6.57	6.14	5.99	5.75	14.30	23.47	26.83	36.00
5785MHz	Pass	12.53	5.8	5.59	5.23	5.56	6.04	6.32	5.19	6.33	14.21	23.47	26.74	36.00
5825MHz	Pass	12.53	6.27	6.02	5.61	5.87	6.47	6.48	5.77	7	14.74	23.47	27.27	36.00

Mode	Result	DG (dBi)	Port 1 (dBm/ RBW)	Port 2 (dBm/ RBW)	Port 3 (dBm/ RBW)	Port 4 (dBm/ RBW)	Port 5 (dBm/ RBW)	Port 6 (dBm/ RBW)	Port 7 (dBm/ RBW)	Port 8 (dBm/ RBW)	PD (dBm/ RBW)	PD Limit (dBm/ RBW)	EIRP PD (dBm/ RBW)	EIRP PD Limit (dBm/ RBW)
802.11ax HEW40_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.03	0.45	0.23	0.6	0.15	0.84	0.81	-0.48	0.61	8.89	12.97	18.92	23.00
5230MHz	Pass	10.03	4.84	3.61	3.87	3.54	3.98	4.62	4.42	4.82	12.71	12.97	22.74	23.00
5270MHz	Pass	11.03	-2.96	-3.53	-3.26	-3.59	-2.68	-2.48	-2.43	-2.12	5.47	5.97	16.50	17.00
5310MHz	Pass	11.03	-2.74	-3.91	-3.38	-4.03	-2.58	-2.75	-3.06	-2.36	5.22	5.97	16.25	17.00
5510MHz	Pass	11.53	-2.75	-2.92	-3.3	-3.86	-2.8	-3.1	-2.85	-1.99	5.39	5.47	16.92	17.00
5590MHz	Pass	11.53	-3.29	-3.42	-3.33	-4.43	-3.35	-3.38	-2.6	-2.6	5.22	5.47	16.75	17.00
5670MHz	Pass	11.53	-3.56	-3.9	-4.18	-3.75	-3.38	-3.37	-3.13	-2.74	5.11	5.47	16.64	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	11.53	-3.76	-4.04	-3.1	-3.66	-3.05	-3.24	-3.45	-2.84	5.19	5.47	16.72	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	12.53	-5.9	-5.81	-5.97	-5.47	-5.09	-6.52	-6.25	-5.47	2.83	23.47	15.36	36.00
5755MHz	Pass	12.53	2.95	2.47	2.06	2.53	3.38	2.87	2.66	3.49	11.57	23.47	24.10	36.00
5795MHz	Pass	12.53	3.89	3.23	3.1	3.25	4.05	3.83	3.09	3.78	12.00	23.47	24.53	36.00
802.11ax HEW80_Nss1,(MCS0)_8TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.03	-1.85	-2.81	-2.45	-2.5	-1.58	-1.3	-2.18	-1.62	6.53	12.97	16.56	23.00
5290MHz	Pass	11.03	-3.52	-4.64	-4.23	-4.79	-3.64	-3.15	-3.4	-2.79	4.94	5.97	15.97	17.00
5530MHz	Pass	11.53	-4.14	-4.62	-4.44	-4.59	-3.57	-3.71	-4.84	-4.35	4.16	5.47	15.69	17.00
5610MHz	Pass	11.53	-4.52	-4.78	-4.43	-5.18	-4.39	-4.33	-4.42	-3.85	3.97	5.47	15.50	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	11.53	-4.91	-4.81	-5.11	-4.75	-4.02	-3.56	-4.51	-4.69	3.91	5.47	15.44	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	12.53	-9.17	-10.39	-9.68	-8.61	-9.93	-8.1	-8.91	-8.94	-0.37	23.47	12.16	36.00
5775MHz	Pass	12.53	0.06	-0.44	-0.38	-0.3	0.08	0.25	-0.32	0.28	8.44	23.47	20.97	36.00
802.11ax HEW80+80_Nss 1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	7.02	-0.85	-1.25	-1.9	-1.66					4.37	15.98	11.39	23.00
5290MHz	Pass	8.02					-0.03	-0.23	-2.15	-1.28	4.79	8.98	12.81	17.00
802.11ax HEW80+80_Nss 1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	8.52	-4.55	-4.22	-4.74	-5.12					1.08	8.48	9.60	17.00
5610MHz	Pass	8.52					-4.06	-2.95	-4.55	-4.45	1.67	8.48	10.19	17.00

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 X power density;

DG = Directional Gain;

1. 5150 ~ 5250 MHz

4TX

Directional gain = $1 + 10 * \log(4/1) = 7.02 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $17 \text{ dBm} - (7.02 \text{ dBi} - 6 \text{ dBi}) = 15.98 \text{ dBm}$.

8TX

For 5150~5250MHz:

Directional gain = $1 \text{ dBi} + 10 * \log(8/1) = 10.03 \text{ dB}$

Limit shall be reduced to $17 \text{ dBm} - (10.03 \text{ dBi} - 6 \text{ dBi}) = 12.97 \text{ dBm}$

2. 5250-5350 MHz

4TX

Directional gain = $2 + 10 * \log(4/1) = 8.02 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (8.02 \text{ dBi} - 6 \text{ dBi}) = 8.98 \text{ dBm}$.

8TX

Directional gain = $2 + 10 * \log(8/1) = 11.03 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (11.03 \text{ dBi} - 6 \text{ dBi}) = 5.97 \text{ dBm}$.

3. 5470-5750 MHz

4TX

Directional gain = $2.5 + 10 * \log(4/1) = 8.52 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (8.52 \text{ dBi} - 6 \text{ dBi}) = 8.48 \text{ dBm}$.

8TX

Directional gain = $2.5 + 10 * \log(8/1) = 11.53 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (11.53 \text{ dBi} - 6 \text{ dBi}) = 5.47 \text{ dBm}$.

4. 5725-5850 MHz

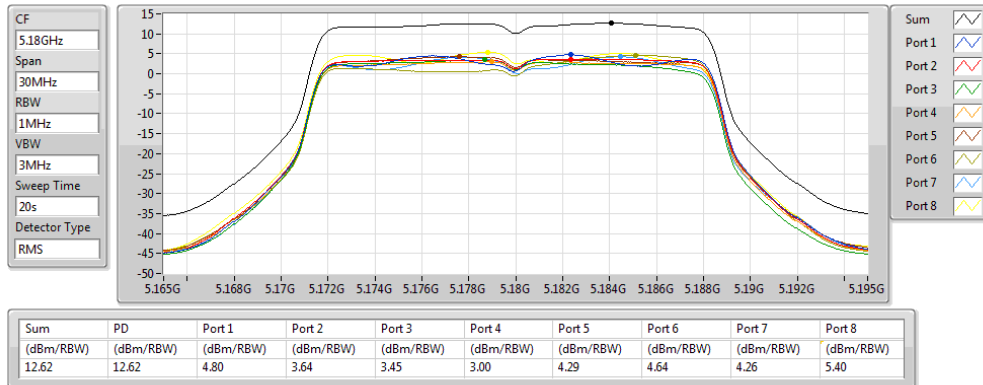
Directional gain = $3.5 + 10 * \log(8/1) = 12.53 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $30 \text{ dBm} - (12.53 \text{ dBi} - 6 \text{ dBi}) = 23.47 \text{ dBm}$.

802.11a_Nss1,(6Mbps)_8TX

PSD

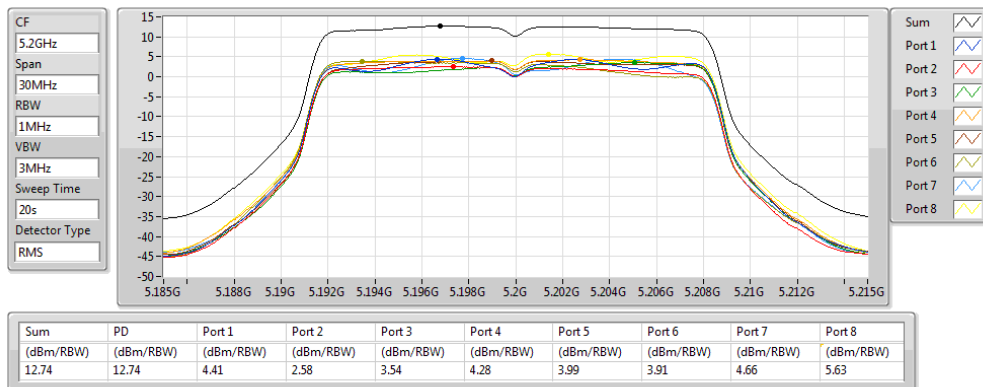
5180MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

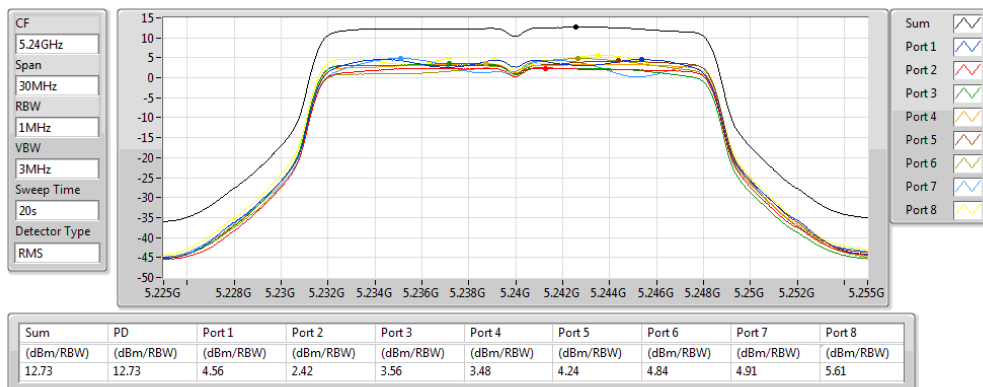
5200MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

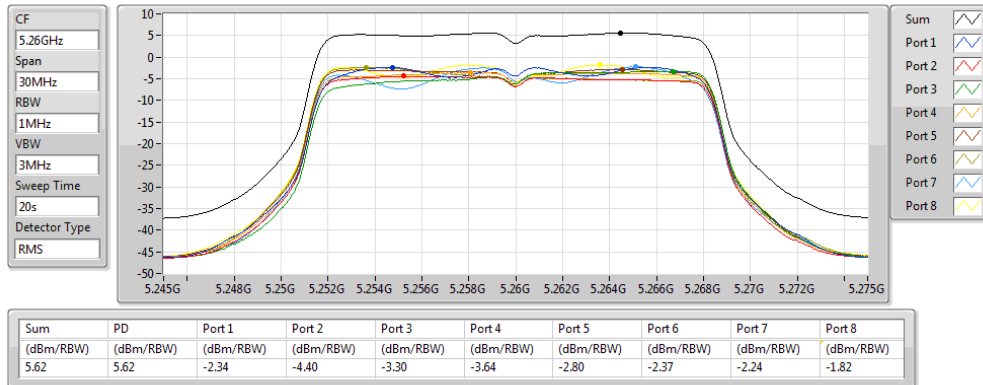
5240MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

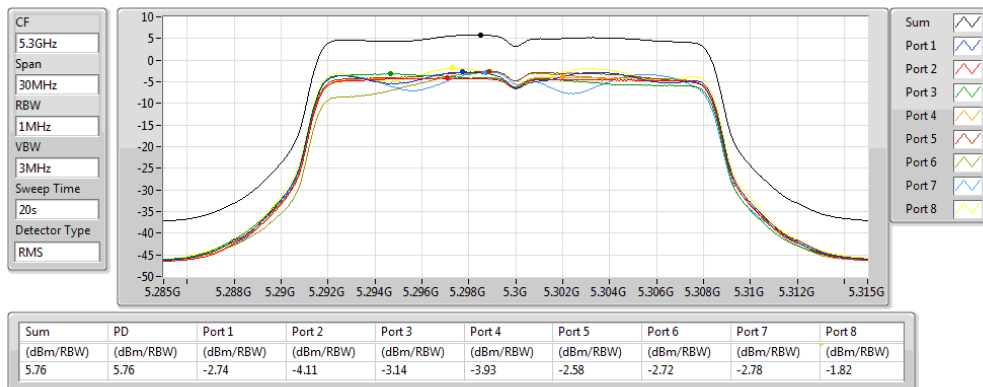
5260MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

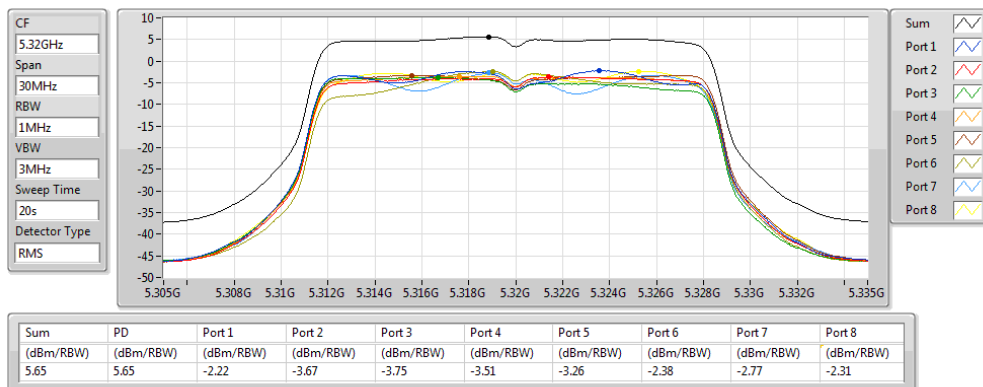
5300MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

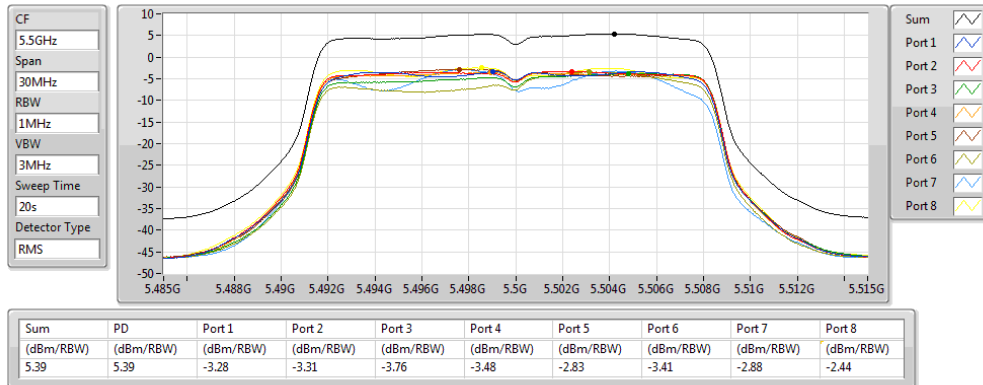
5320MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

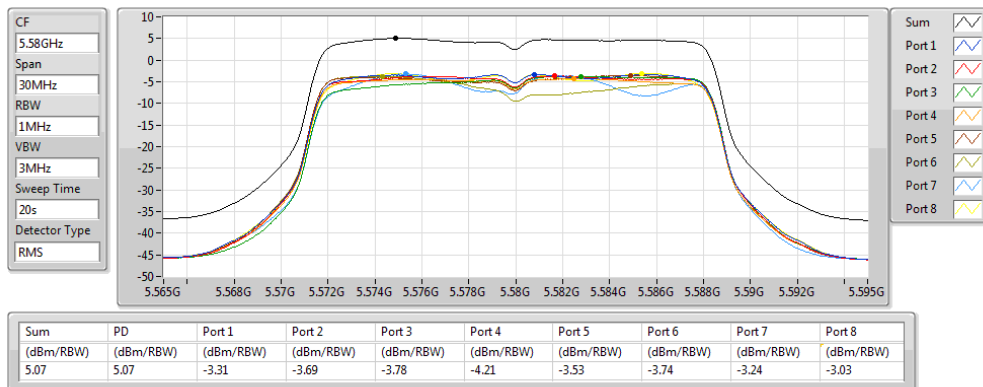
5500MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

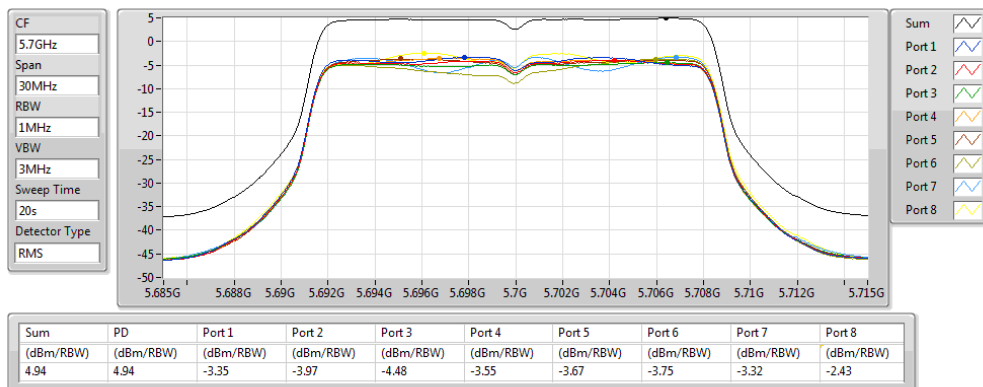
5580MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

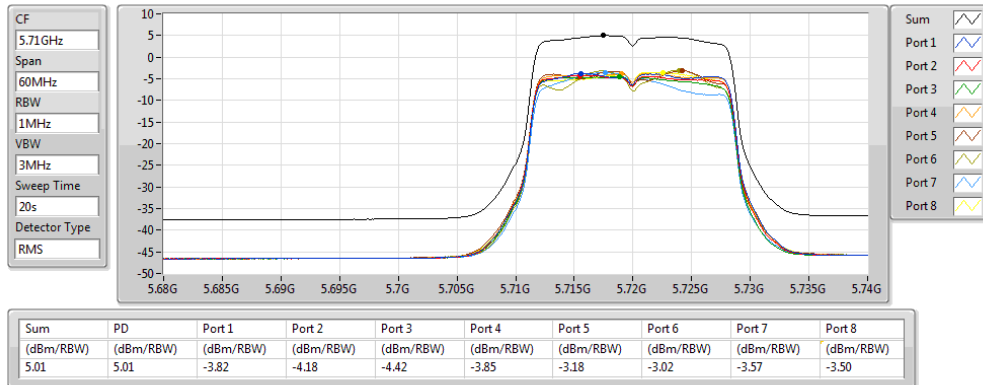
5700MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

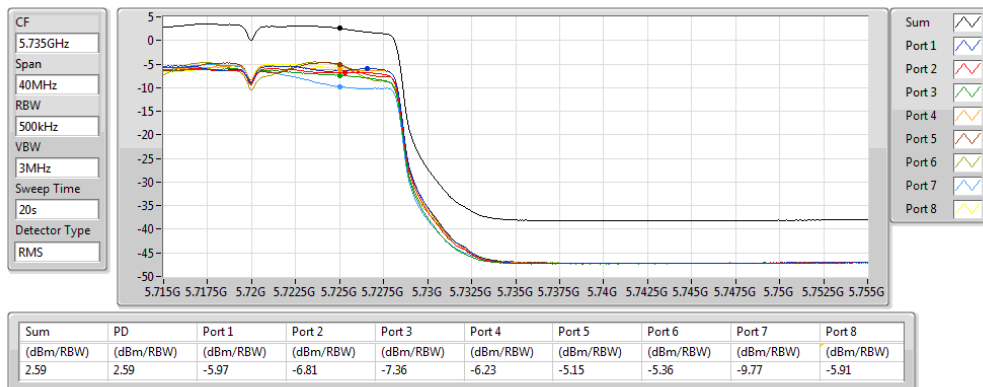
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_8TX

PSD

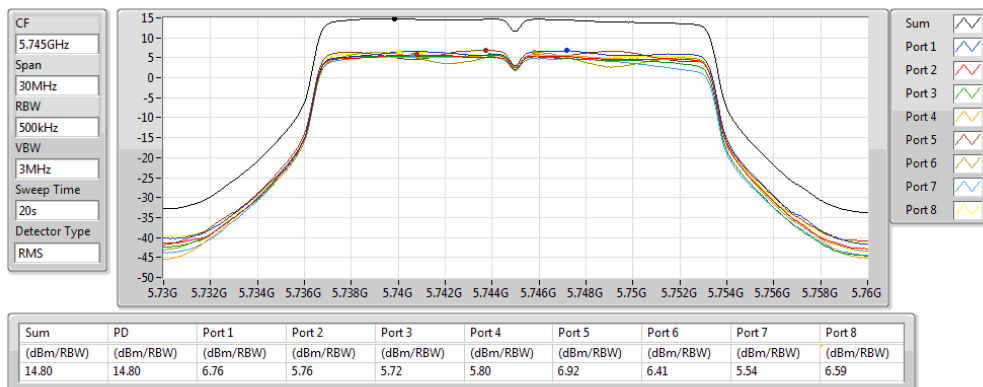
5720MHz Straddle 5.725-5.85GHz



802.11a_Nss1,(6Mbps)_8TX

PSD

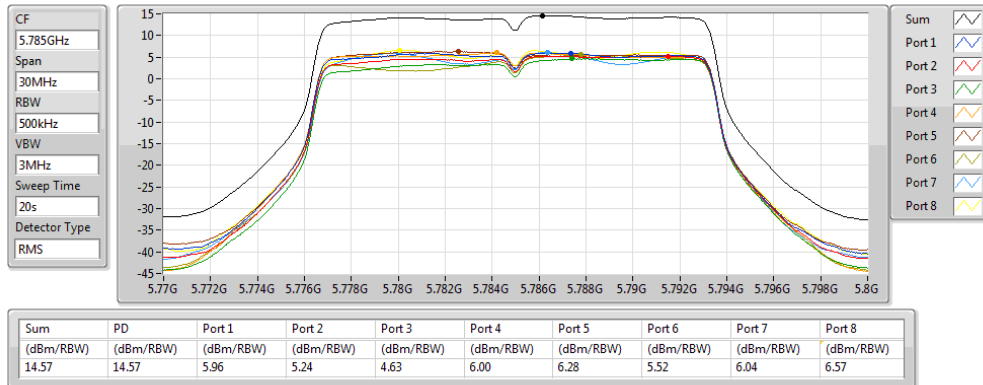
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802.11a_Nss1,(6Mbps)_8TX

PSD

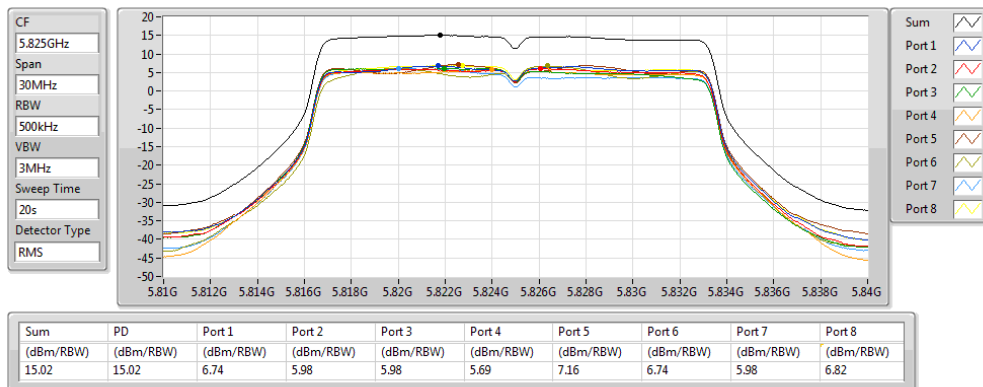
5785MHz



802.11a_Nss1,(6Mbps)_8TX

PSD

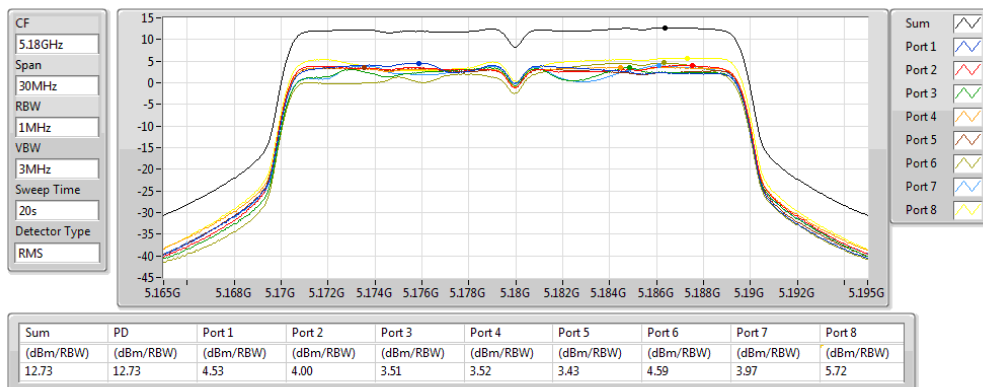
5825MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

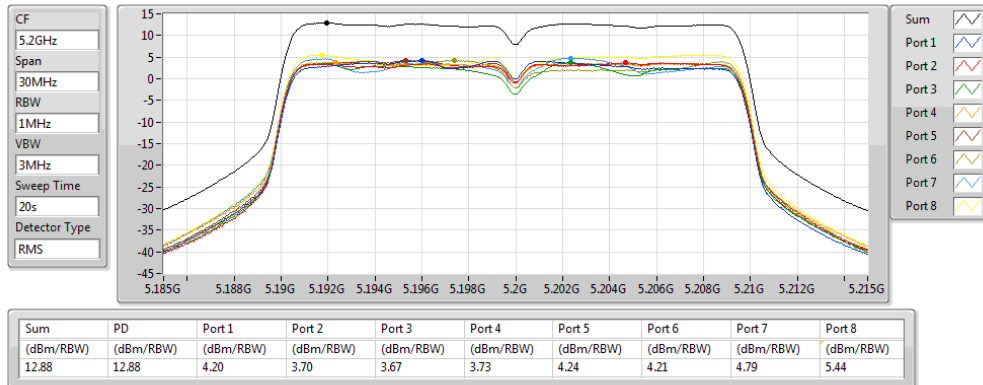
5180MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

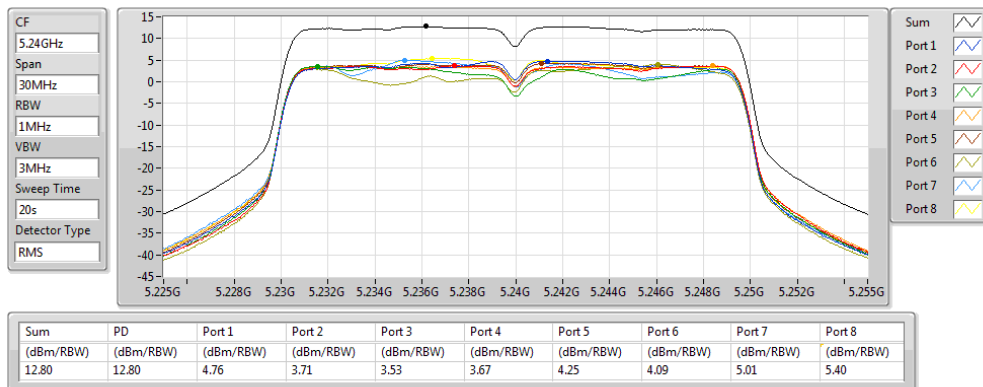
5200MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

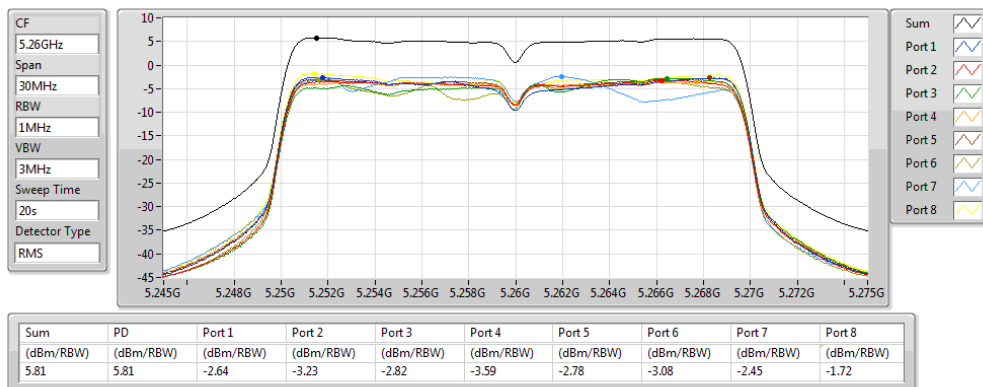
5240MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

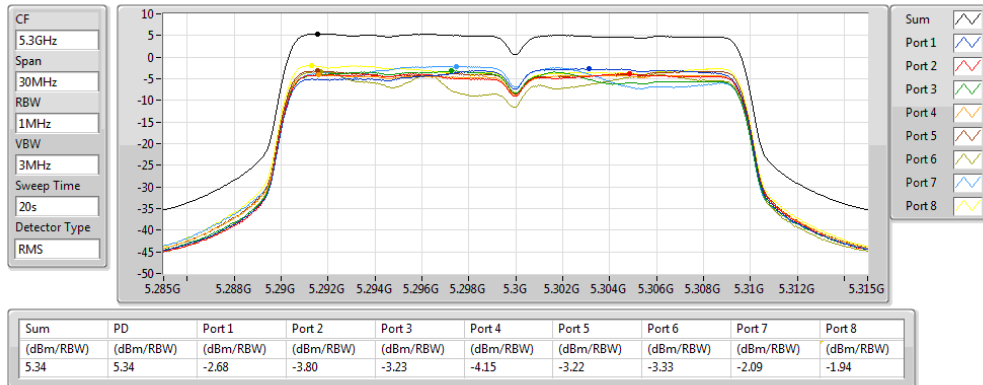
5260MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

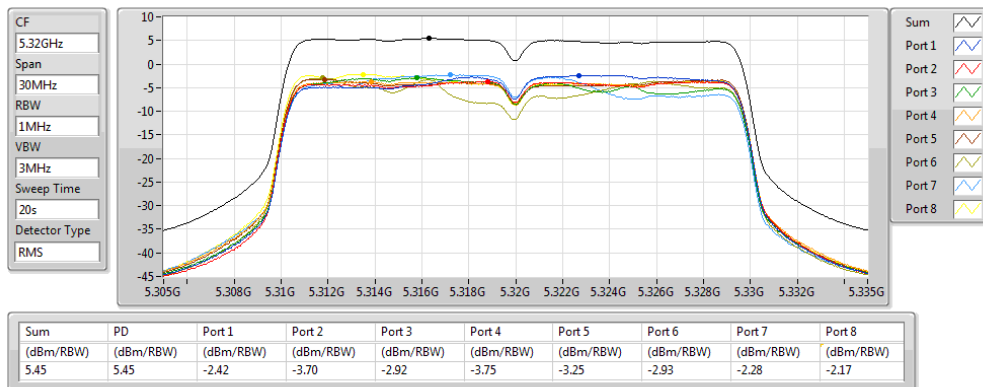
5300MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

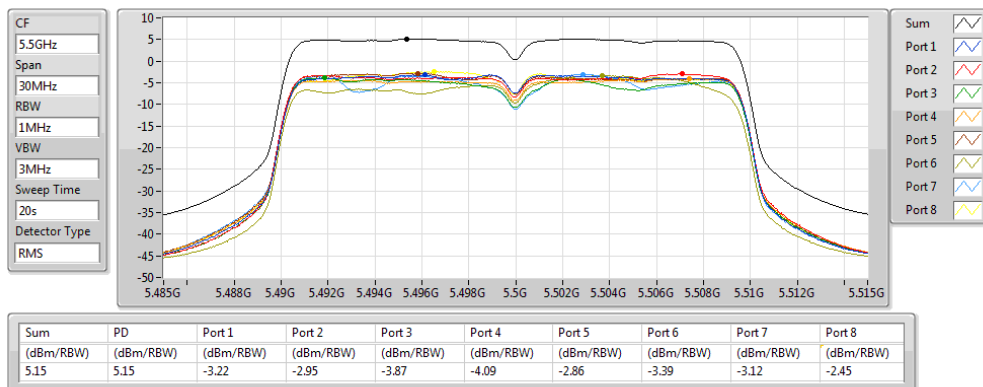
5320MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

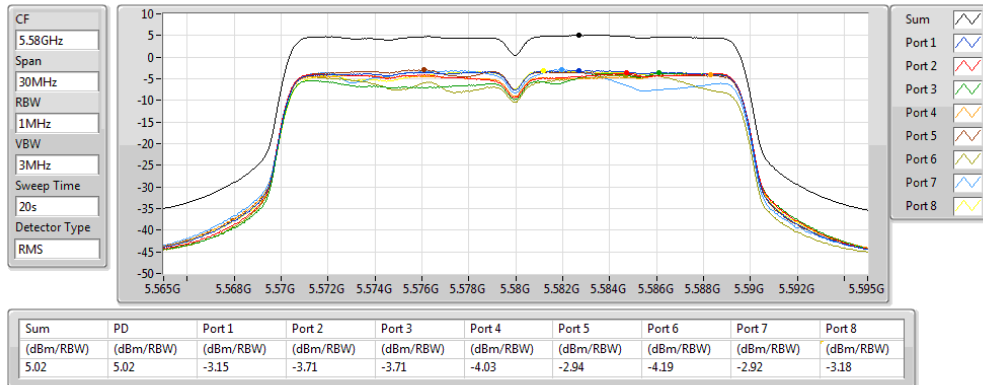
5500MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

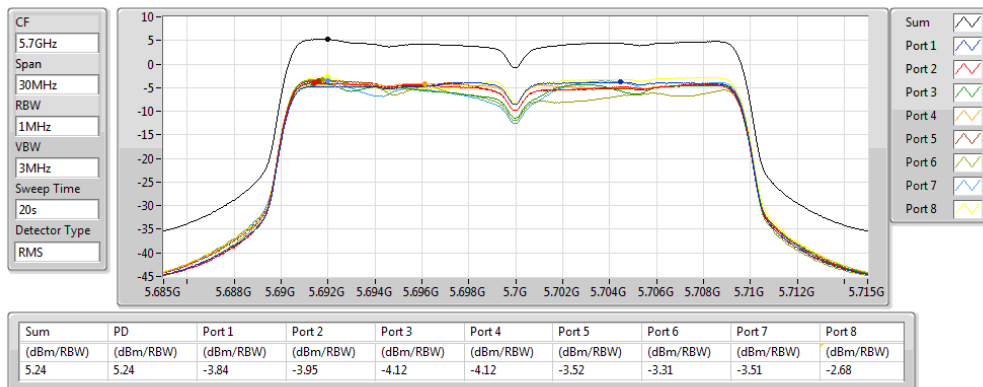
5580MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

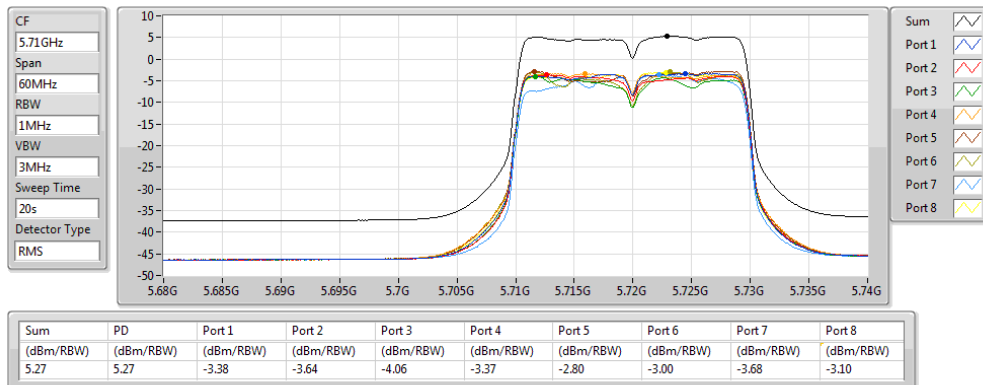
5700MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

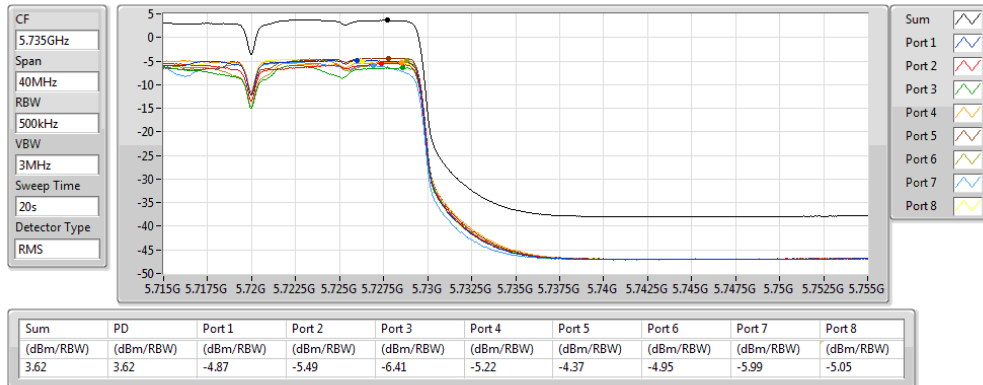
5720MHz Straddle 5.47-5.725GHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

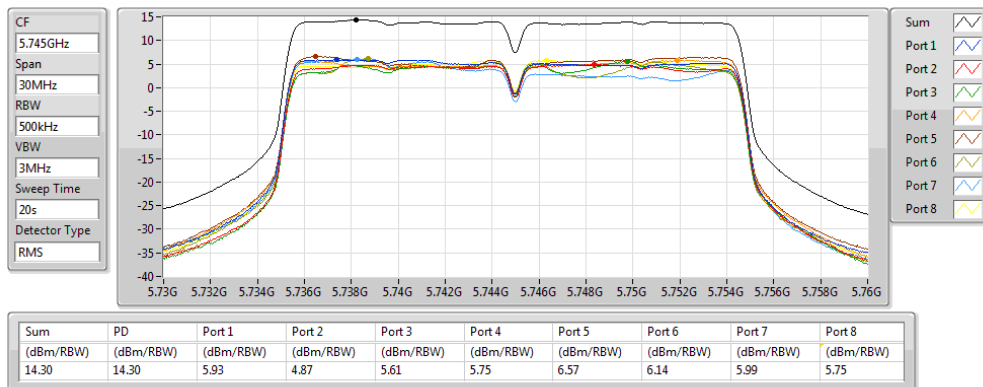
5720MHz Straddle 5.725-5.85GHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

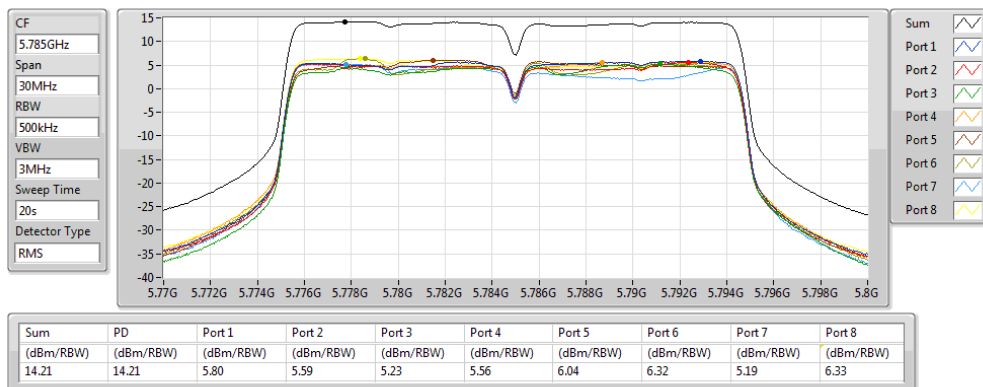
5745MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

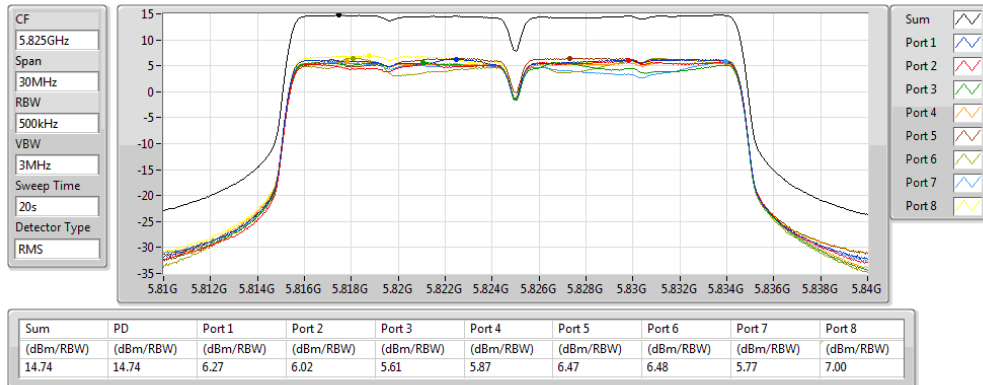
5785MHz



802.11ax HEW20_Nss1,(MCS0)_8TX

PSD

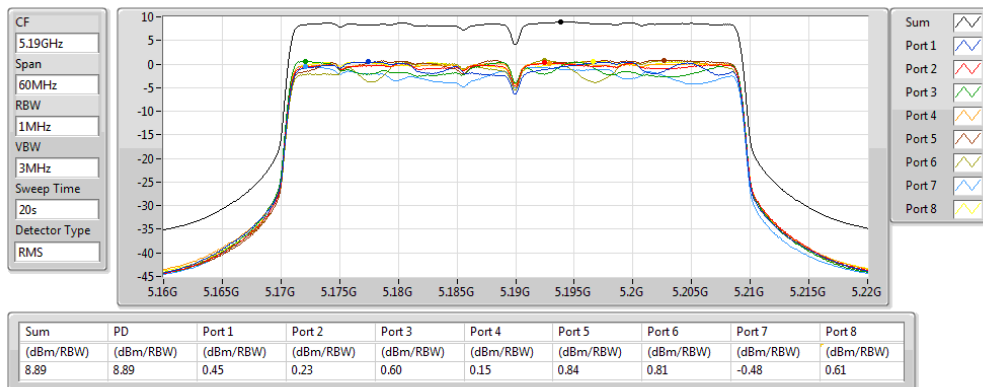
5825MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

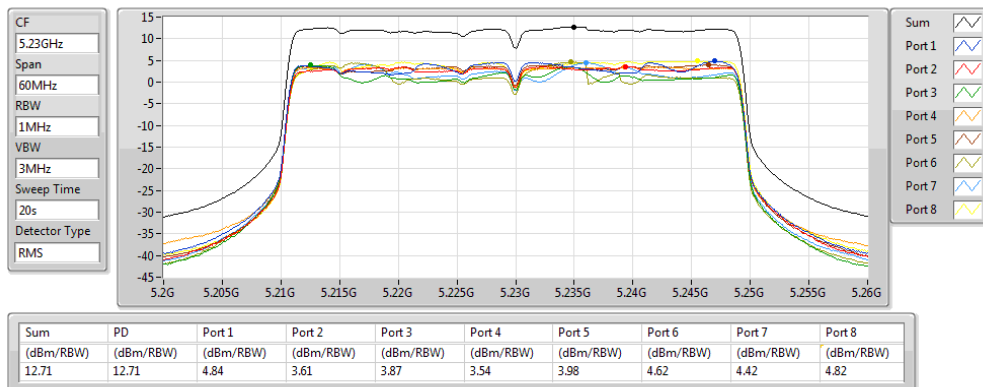
5190MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

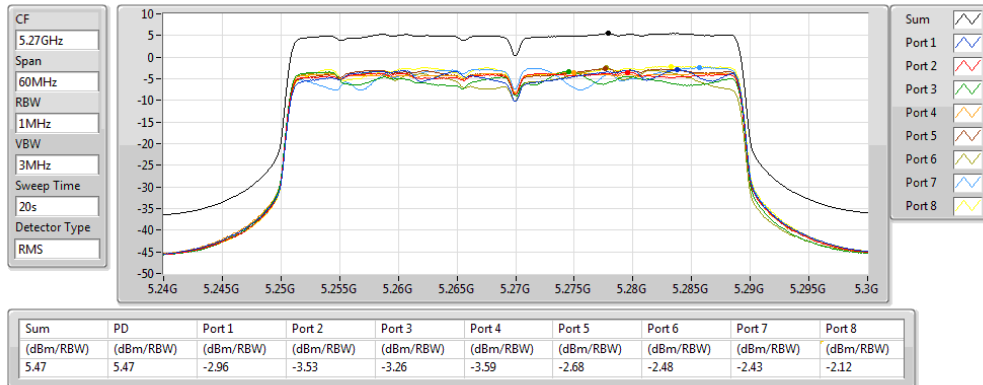
5230MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

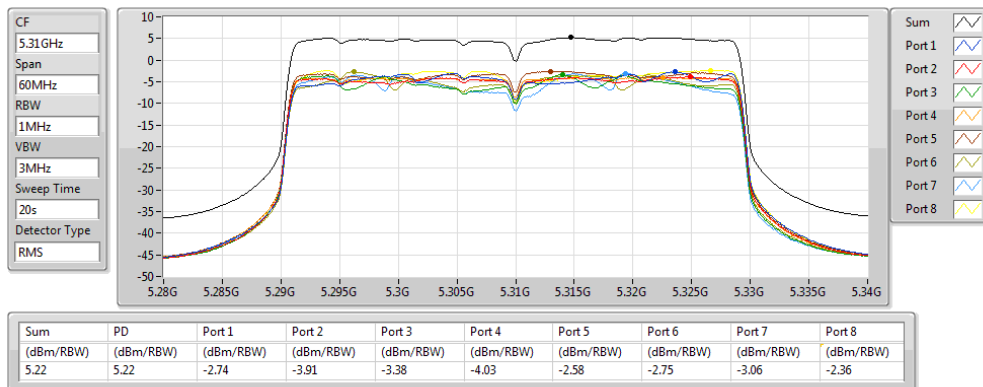
5270MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

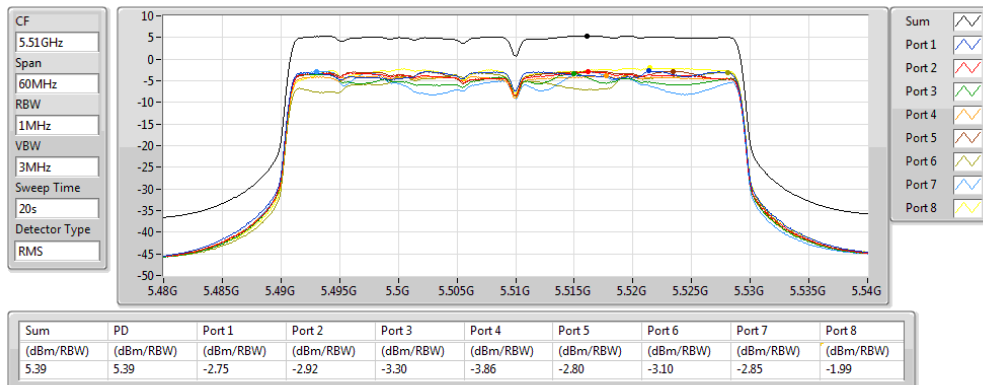
5310MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

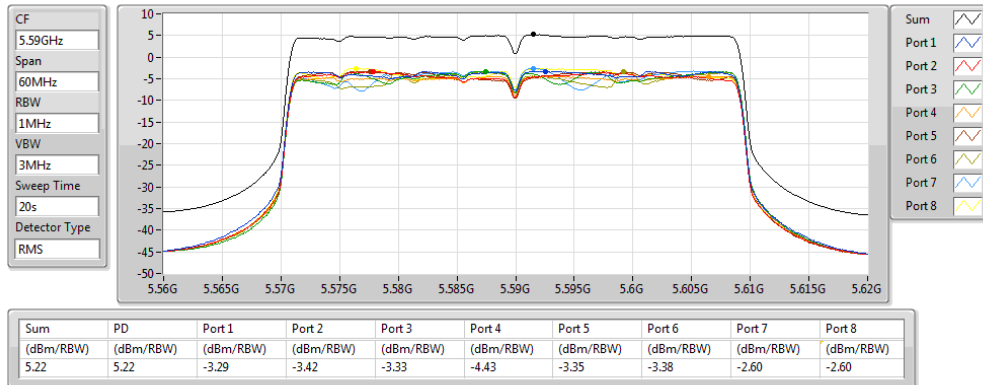
5510MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

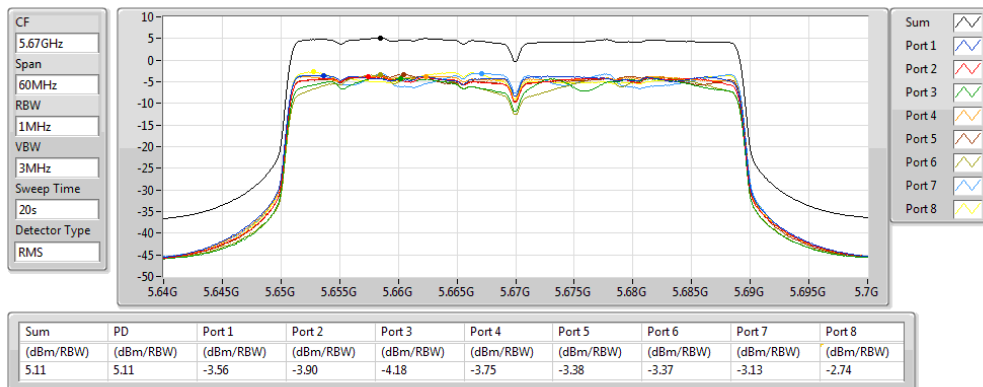
5590MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

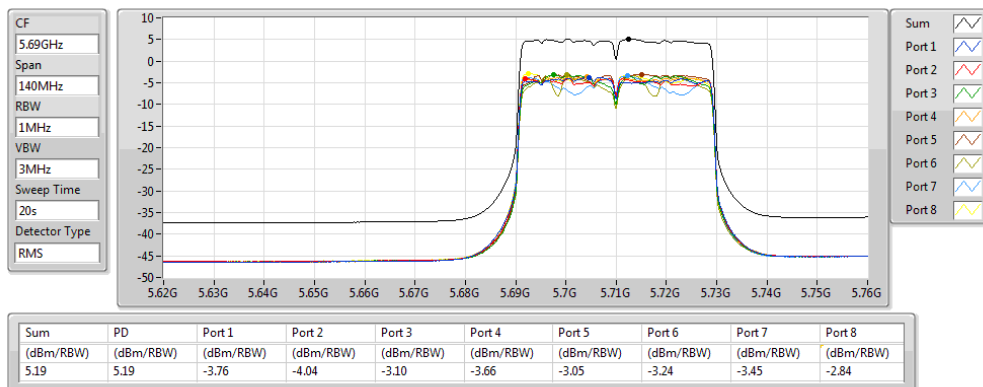
5670MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

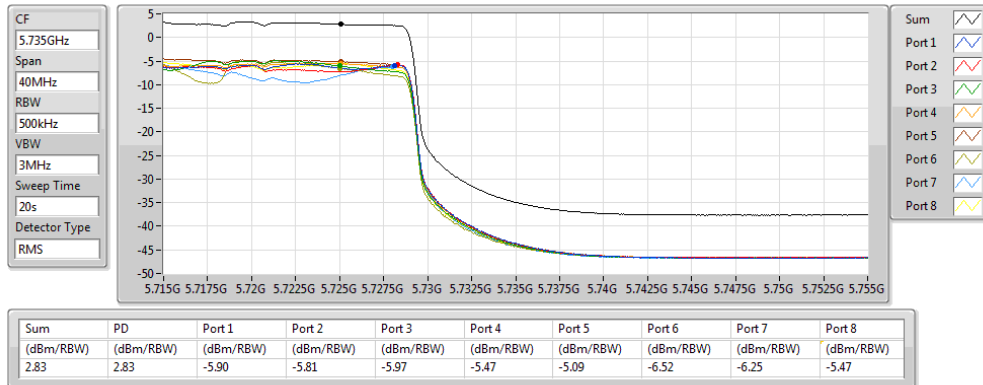
5710MHz Straddle 5.47-5.725GHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

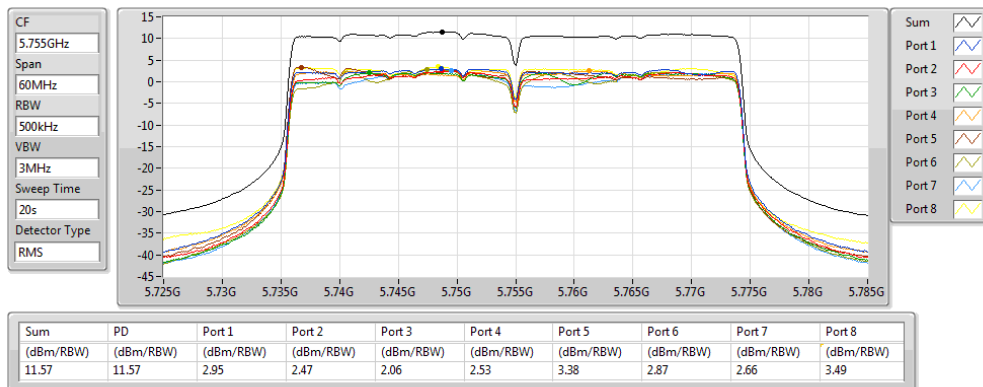
5710MHz Straddle 5.725-5.85GHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

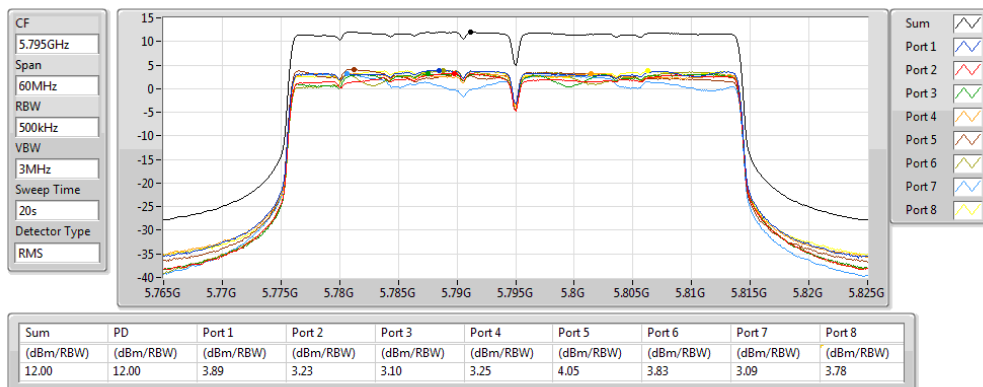
5755MHz



802.11ax HEW40_Nss1,(MCS0)_8TX

PSD

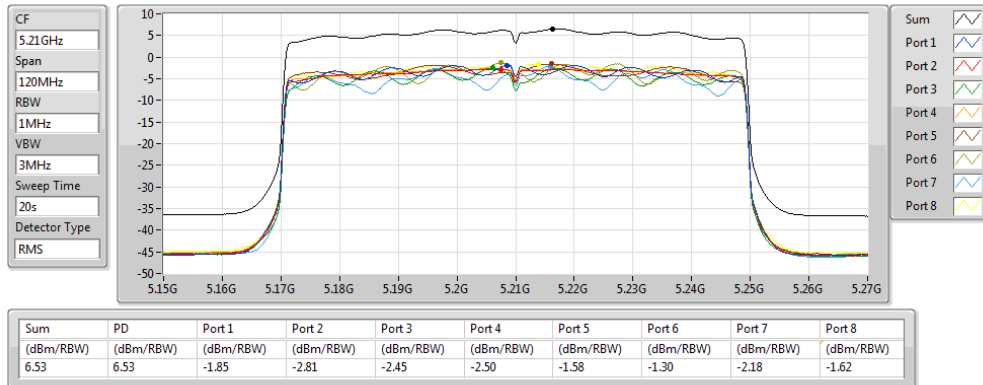
5795MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

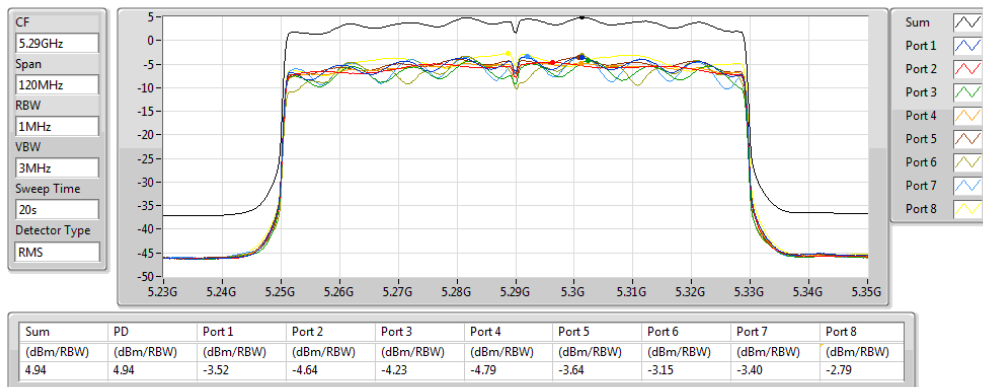
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802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

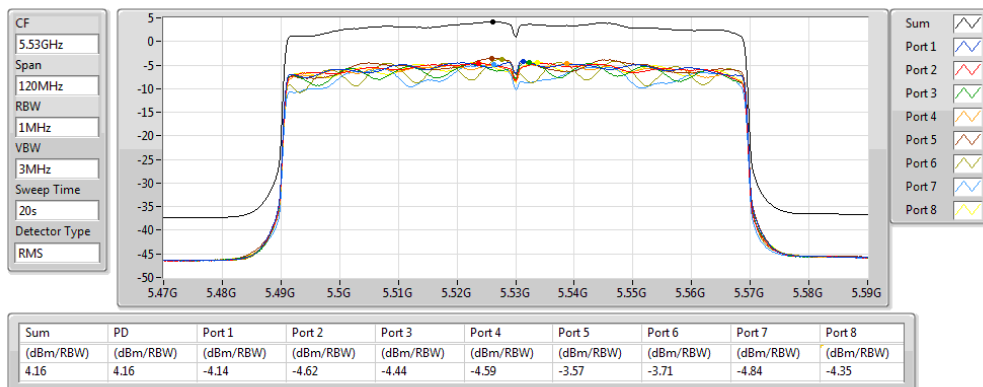
5290MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

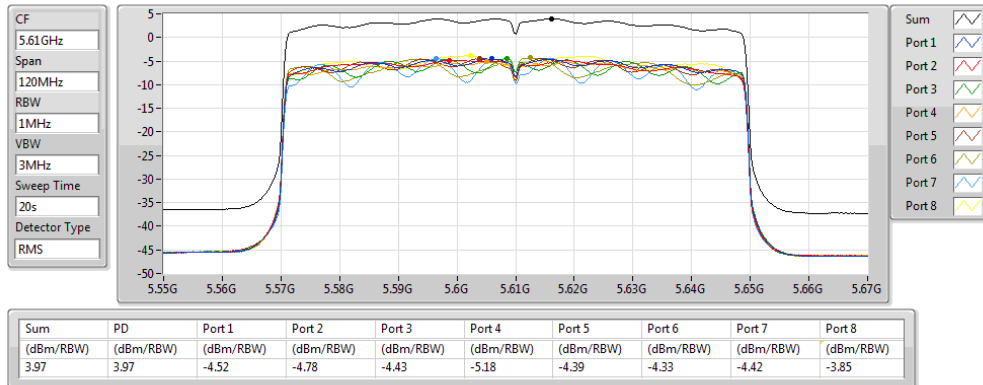
5530MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

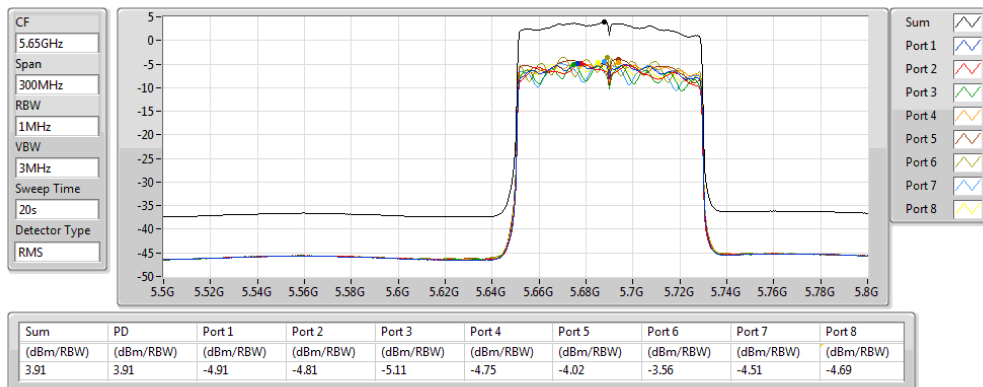
5610MHz



802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

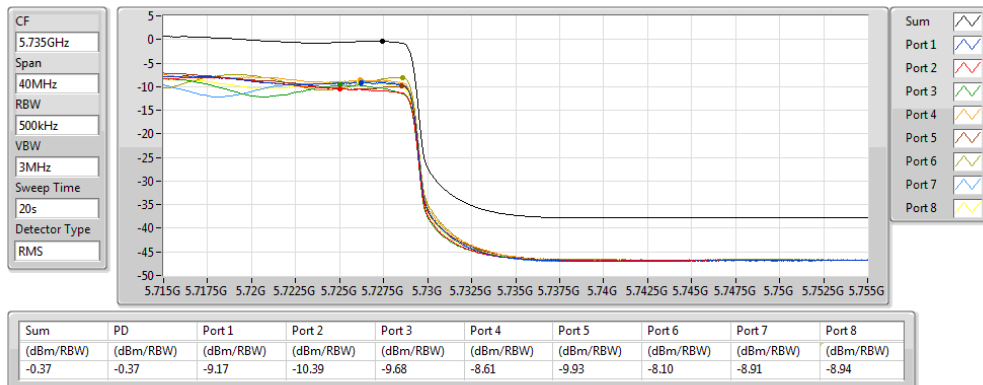
5690MHz Straddle 5.47-5.725GHz



802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

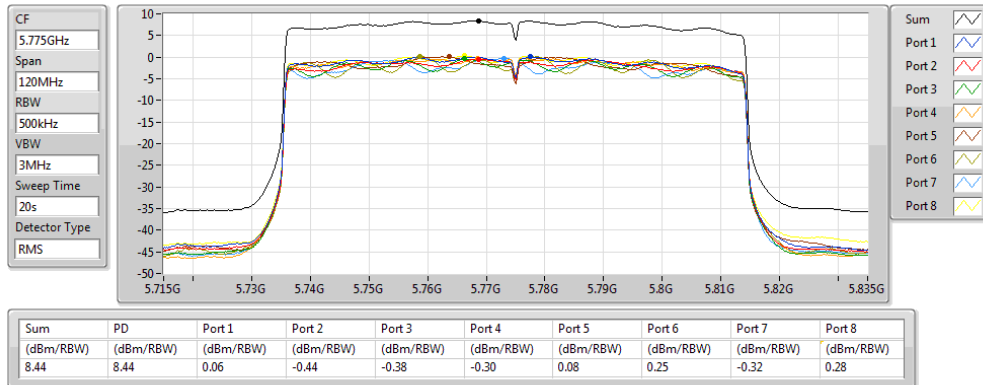
5690MHz Straddle 5.725-5.85GHz



802.11ax HEW80_Nss1,(MCS0)_8TX

PSD

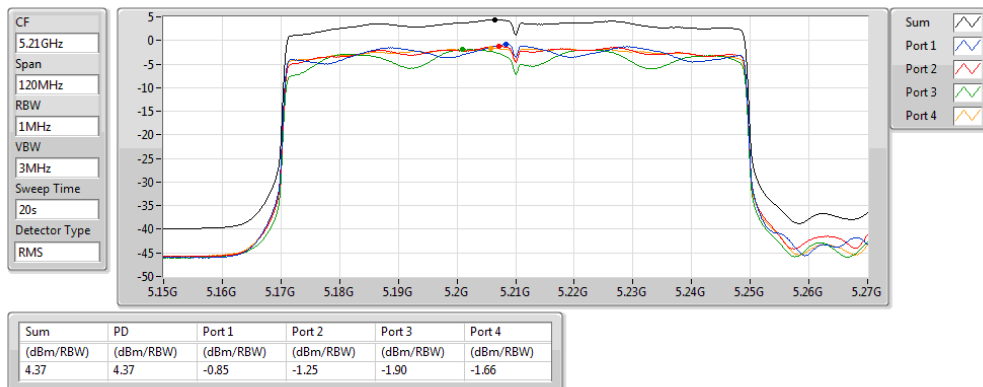
5775MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

PSD

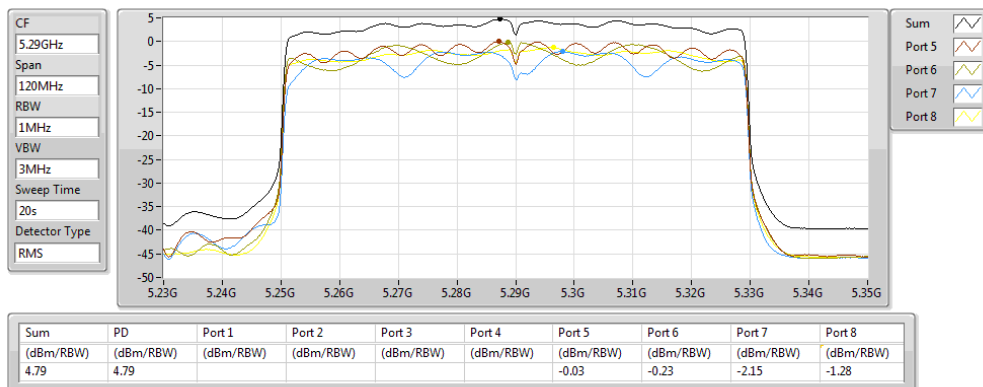
5210MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

PSD

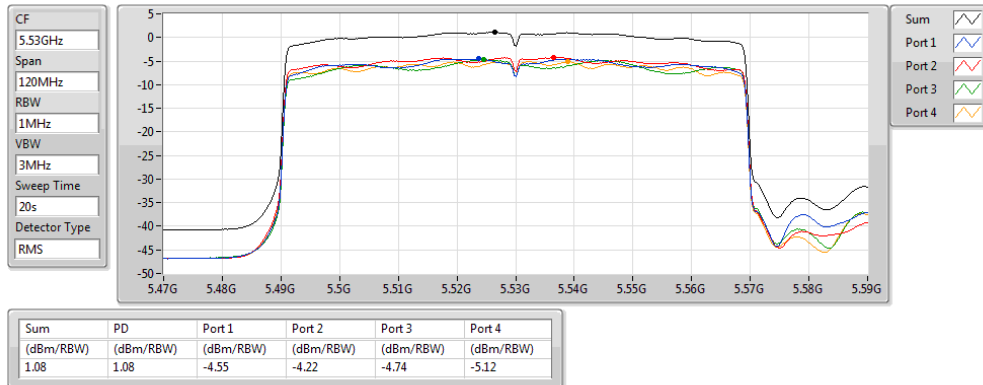
5290MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

PSD

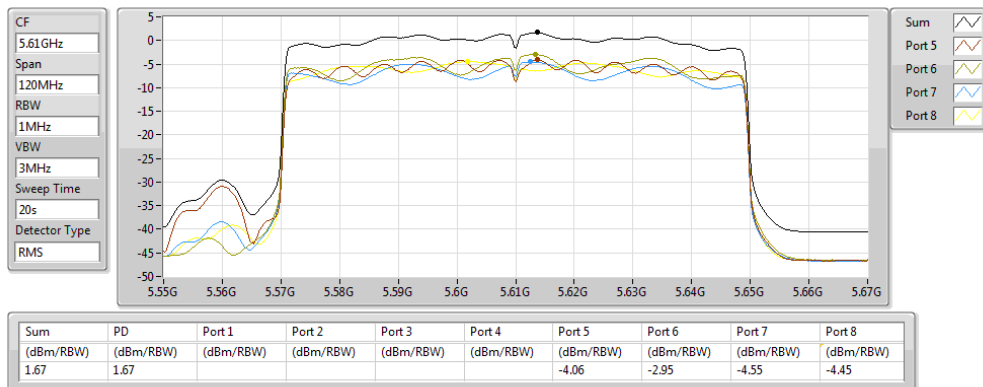
5530MHz



802.11ax HEW80+80_Nss1,(MCS0)_4TX

PSD

5610MHz



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

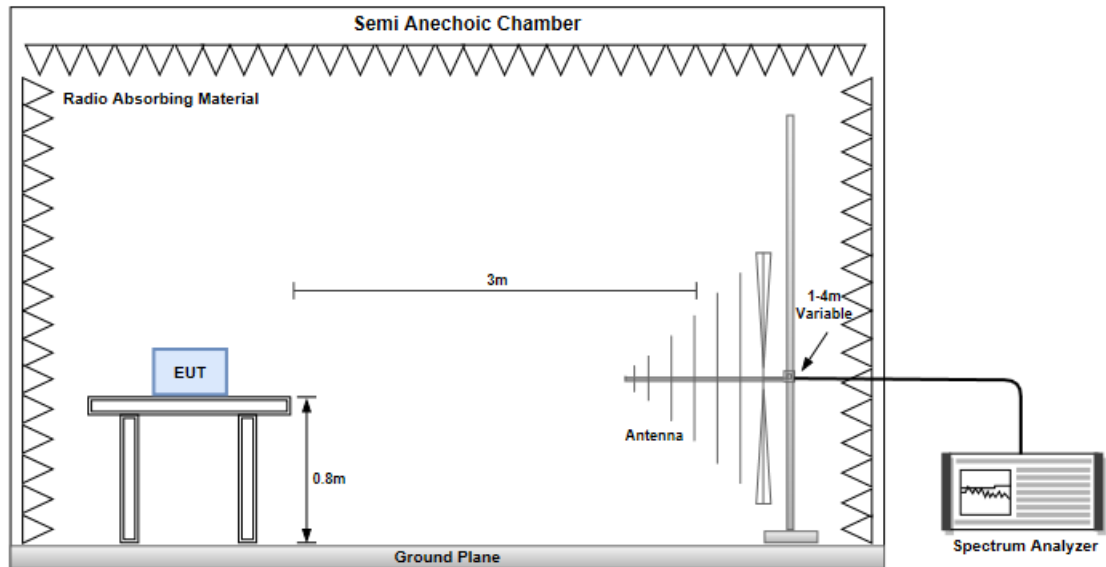
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

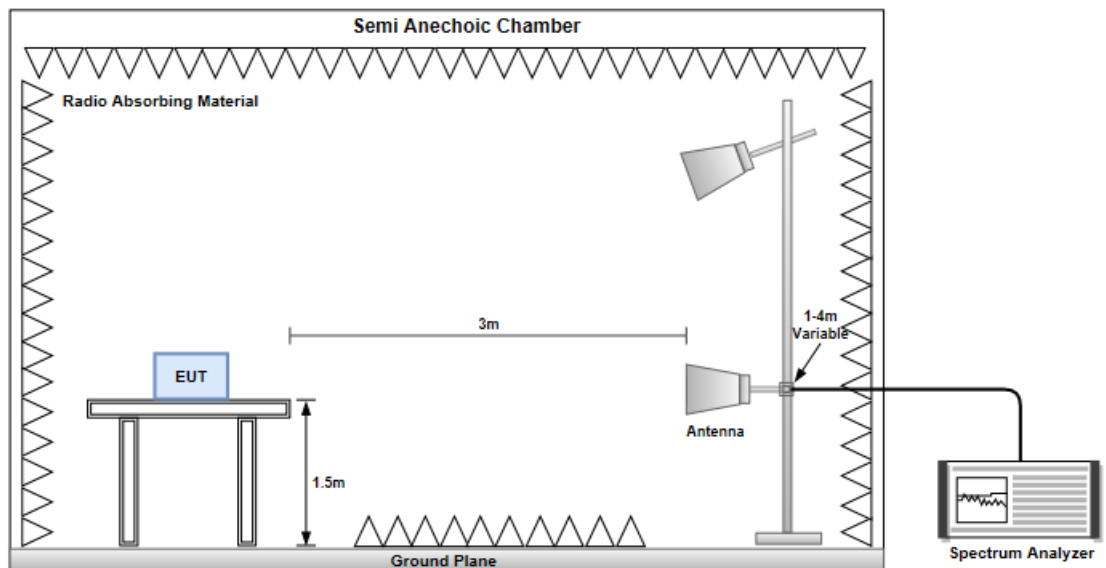
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

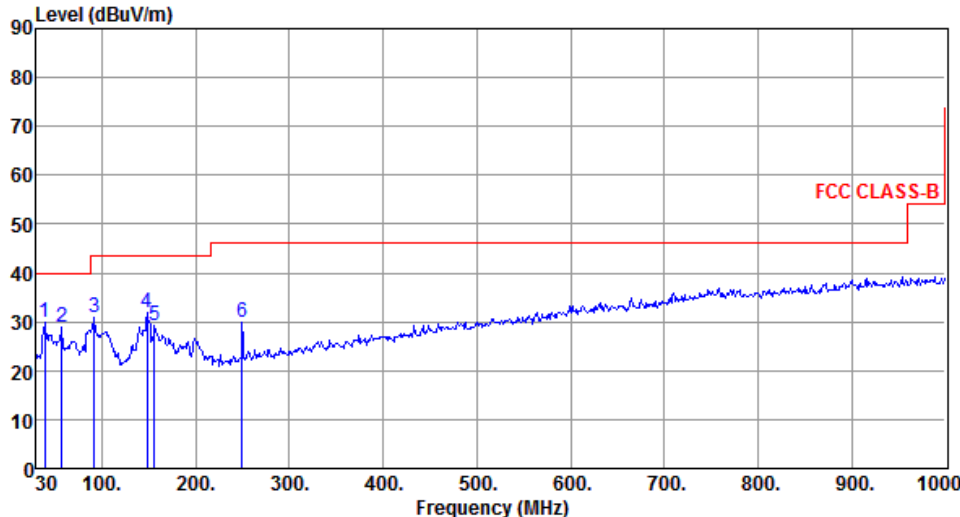


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

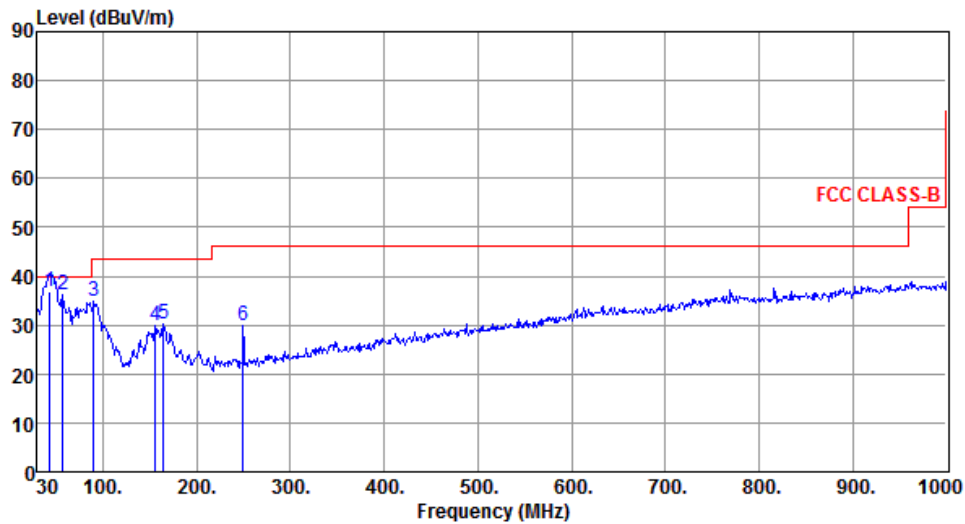
Modulation	ax (HE80+80)	Test Freq. (MHz)	5530 + 5610
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	38.73	29.75	40.00	-10.25	39.08	-9.33	Peak	---	---
2	57.16	28.81	40.00	-11.19	37.77	-8.96	Peak	---	---
3	92.08	30.92	43.50	-12.58	45.55	-14.63	Peak	---	---
4	148.34	31.95	43.50	-11.55	40.70	-8.75	Peak	---	---
5	156.10	29.11	43.50	-14.39	37.65	-8.54	Peak	---	---
6	249.22	29.89	46.00	-16.11	39.86	-9.97	Peak	---	---

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

Modulation	ax (HE80+80)	Test Freq. (MHz)	5530 + 5610
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	43.62	36.74	40.00	-3.26	45.62	-8.88	QP	100	246
2	57.16	36.06	40.00	-3.94	45.02	-8.96	Peak	---	---
3	90.14	34.89	43.50	-8.61	49.63	-14.74	Peak	---	---
4	156.10	29.94	43.50	-13.56	38.48	-8.54	Peak	---	---
5	164.83	30.10	43.50	-13.40	38.97	-8.87	Peak	---	---
6	249.22	29.99	46.00	-16.01	39.96	-9.97	Peak	---	---

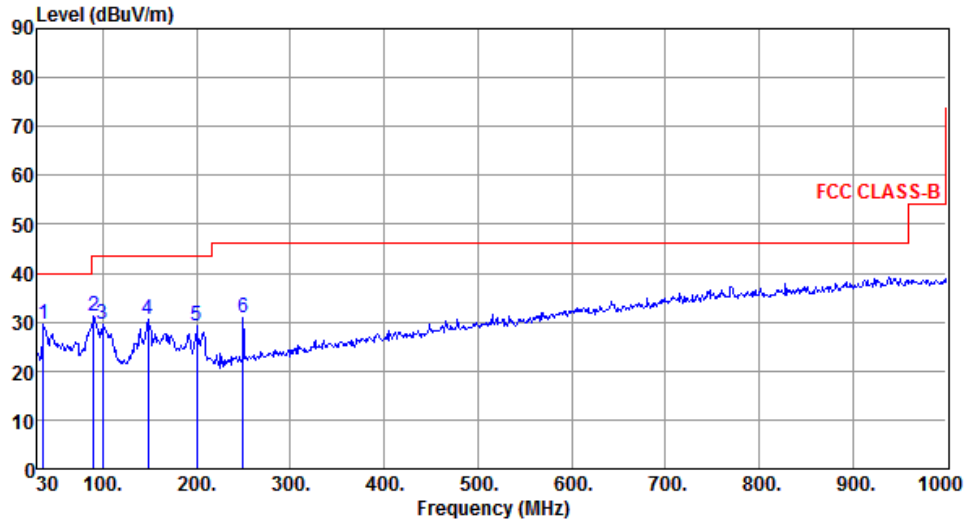
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	36.79	29.54	40.00	-10.46	39.26	-9.72	Peak	---	---
2	90.14	31.16	43.50	-12.34	45.90	-14.74	Peak	---	---
3	99.84	29.55	43.50	-13.95	43.14	-13.59	Peak	---	---
4	148.34	30.48	43.50	-13.02	39.23	-8.75	Peak	---	---
5	199.75	29.18	43.50	-14.32	41.15	-11.97	Peak	---	---
6	249.22	30.89	46.00	-15.11	40.86	-9.97	Peak	---	---

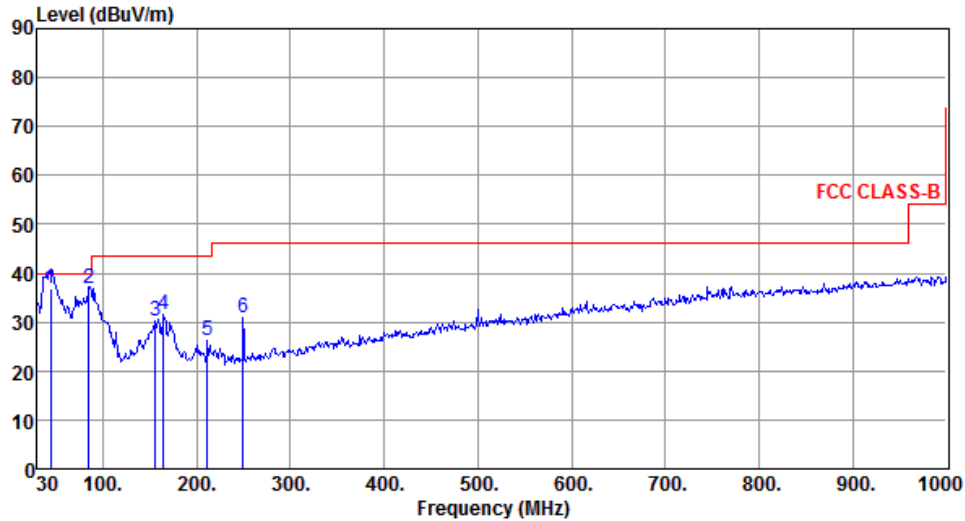
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	44.35	36.73	40.00	-3.27	45.57	-8.84	QP	100	248
2	85.29	36.95	40.00	-3.05	51.41	-14.46	Peak	---	---
3	156.10	30.28	43.50	-13.22	38.82	-8.54	Peak	---	---
4	164.83	31.70	43.50	-11.80	40.57	-8.87	Peak	---	---
5	211.39	26.32	43.50	-17.18	38.39	-12.07	Peak	---	---
6	249.22	31.00	46.00	-15.00	40.97	-9.97	Peak	---	---

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

*Factor includes antenna factor , cable loss and amplifier gain

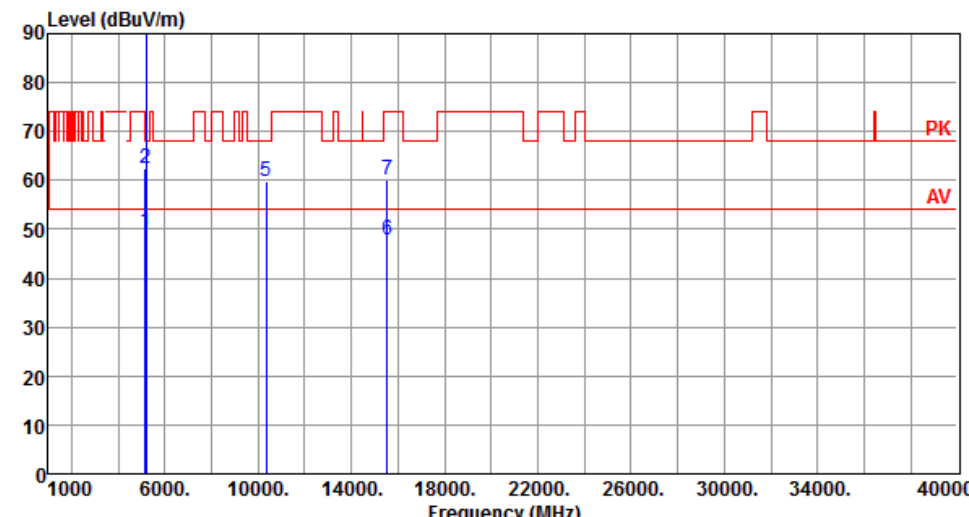
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

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

Modulation	11a		Test Freq. (MHz)		5180				
Polarization	Horizontal								
Level (dBuV/m) <									

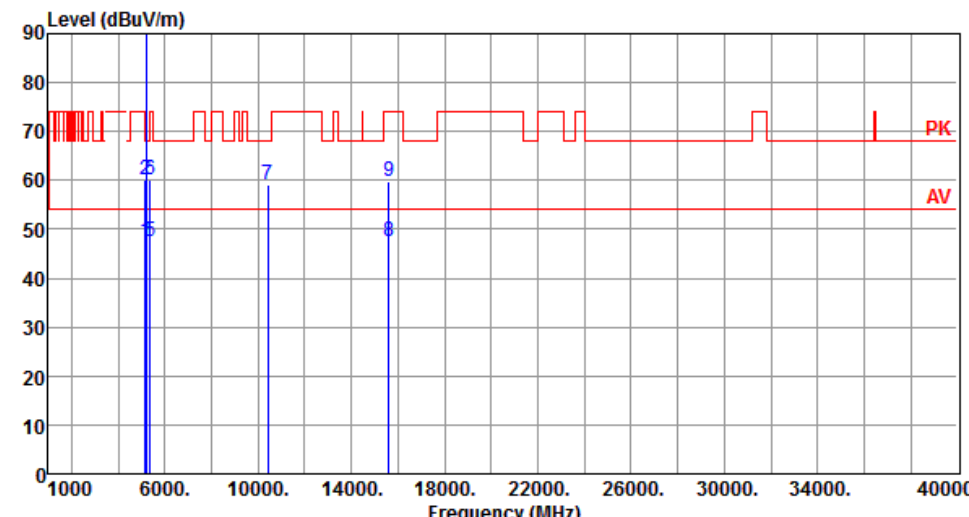
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	49.33	54.00	-4.67	42.01	7.32	Average	308	181
2	5150.00	62.31	74.00	-11.69	54.99	7.32	Peak	308	181
3 *	5180.00	111.11			103.97	7.14	Average	308	192
4 *	5180.00	121.58			114.44	7.14	Peak	308	192
5	10360.00	59.86	68.20	-8.34	43.77	16.09	Peak	338	14
6	15540.00	47.90	54.00	-6.10	30.53	17.37	Average	100	15
7	15540.00	60.15	74.00	-13.85	42.78	17.37	Peak	100	15

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

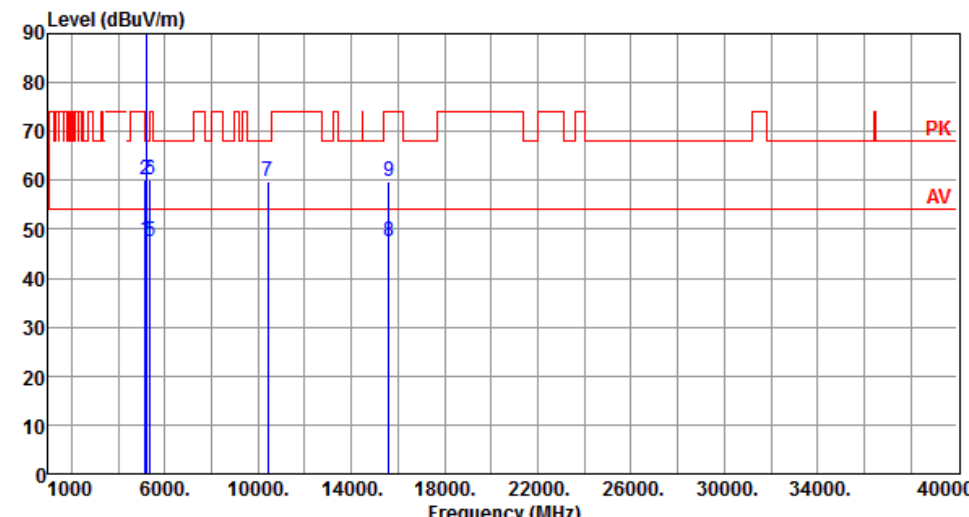
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	47.62	54.00	-6.38	40.30	7.32	Average	250	347
2	5150.00	60.10	74.00	-13.90	52.78	7.32	Peak	250	347
3 *	5200.00	108.16			101.13	7.03	Average	250	347
4 *	5200.00	118.46			111.43	7.03	Peak	250	347
5	5350.00	47.48	54.00	-6.52	40.63	6.85	Average	250	347
6	5350.00	60.07	74.00	-13.93	53.22	6.85	Peak	250	347
7	10400.00	59.06	68.20	-9.14	42.78	16.28	Peak	100	155
8	15600.00	47.58	54.00	-6.42	30.31	17.27	Average	100	132
9	15600.00	59.85	74.00	-14.15	42.58	17.27	Peak	100	132

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

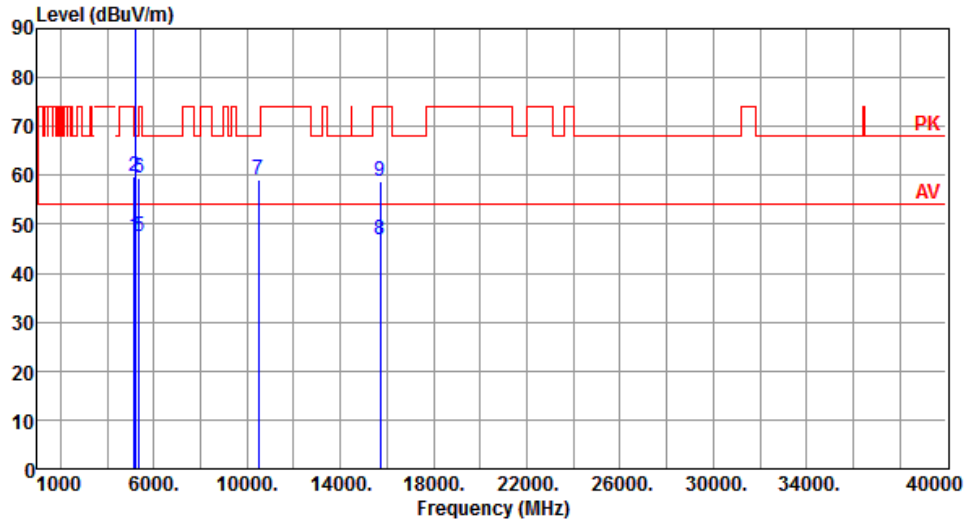
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	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	47.76	54.00	-6.24	40.44	7.32	Average	295	182
2	5150.00	59.99	74.00	-14.01	52.67	7.32	Peak	295	182
3 *	5200.00	111.26			104.23	7.03	Average	295	182
4 *	5200.00	121.69			114.66	7.03	Peak	295	182
5	5350.00	47.58	54.00	-6.42	40.73	6.85	Average	295	182
6	5350.00	60.00	74.00	-14.00	53.15	6.85	Peak	295	182
7	10400.00	59.63	68.20	-8.57	43.35	16.28	Peak	332	15
8	15600.00	47.51	54.00	-6.49	30.24	17.27	Average	100	13
9	15600.00	59.74	74.00	-14.26	42.47	17.27	Peak	100	13

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

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



	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	47.62	54.00	-6.38	40.30	7.32	Average	253	349
2	5150.00	59.69	74.00	-14.31	52.37	7.32	Peak	253	349
3 *	5240.00	107.75			100.85	6.90	Average	253	349
4 *	5240.00	118.02			111.12	6.90	Peak	253	349
5	5350.00	47.48	54.00	-6.52	40.63	6.85	Average	253	349
6	5350.00	59.36	74.00	-14.64	52.51	6.85	Peak	253	349
7	10480.00	58.98	68.20	-9.22	42.57	16.41	Peak	100	166
8	15720.00	46.87	54.00	-7.13	30.27	16.60	Average	100	152
9	15720.00	58.91	74.00	-15.09	42.31	16.60	Peak	100	152

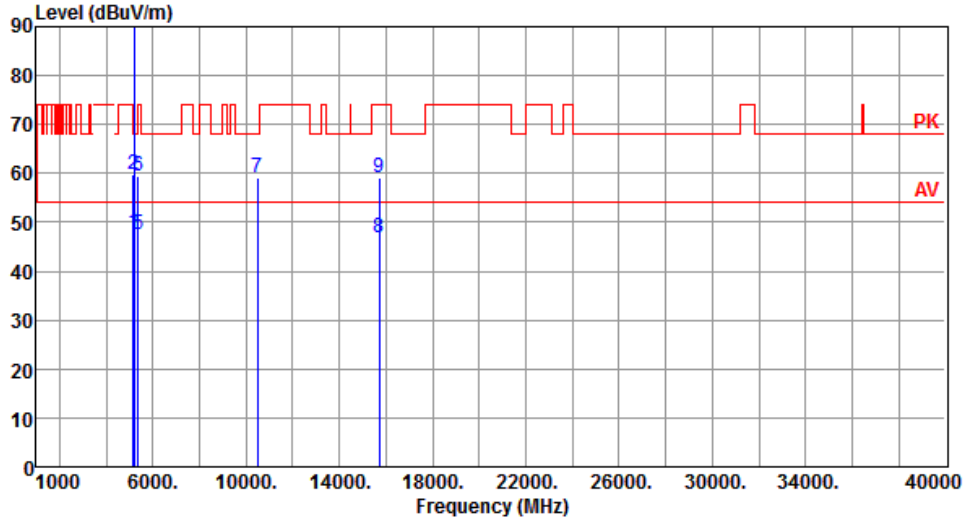
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

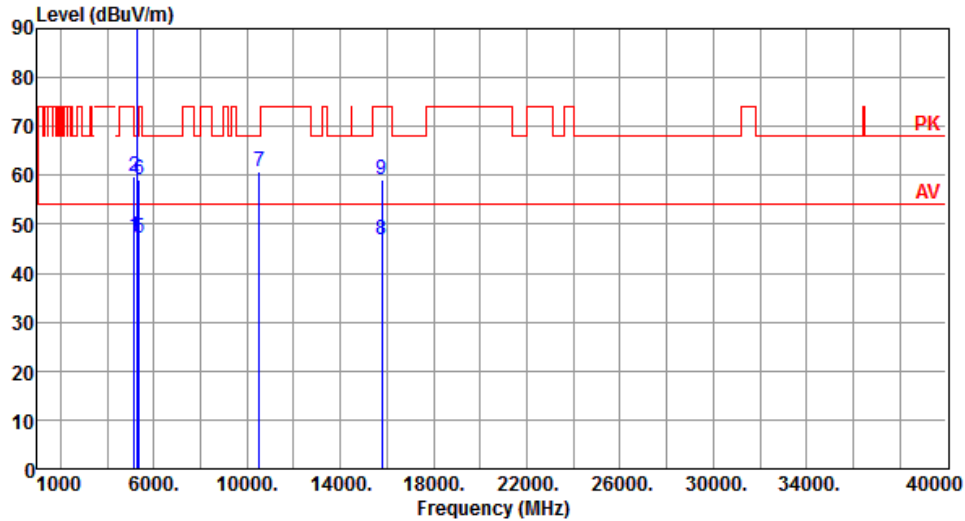
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	47.85	54.00	-6.15	40.53	7.32	Average	287	186
2	5150.00	59.81	74.00	-14.19	52.49	7.32	Peak	287	186
3 *	5240.00	111.03			104.13	6.90	Average	287	186
4 *	5240.00	121.46			114.56	6.90	Peak	287	186
5	5350.00	47.57	54.00	-6.43	40.72	6.85	Average	287	186
6	5350.00	59.53	74.00	-14.47	52.68	6.85	Peak	287	186
7	10480.00	59.08	68.20	-9.12	42.67	16.41	Peak	325	17
8	15720.00	46.91	54.00	-7.09	30.31	16.60	Average	100	22
9	15720.00	59.13	74.00	-14.87	42.53	16.60	Peak	100	22

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

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



	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	47.56	54.00	-6.44	40.24	7.32	Average	242	349
2	5150.00	59.72	74.00	-14.28	52.40	7.32	Peak	242	349
3 *	5260.00	101.21			94.33	6.88	Average	242	349
4 *	5260.00	111.44			104.56	6.88	Peak	242	349
5	5350.00	47.21	54.00	-6.79	40.36	6.85	Average	242	349
6	5350.00	59.26	74.00	-14.74	52.41	6.85	Peak	242	349
7	10520.00	60.63	68.20	-7.57	44.21	16.42	Peak	100	152
8	15780.00	46.92	54.00	-7.08	30.36	16.56	Average	100	151
9	15780.00	59.01	74.00	-14.99	42.45	16.56	Peak	100	151

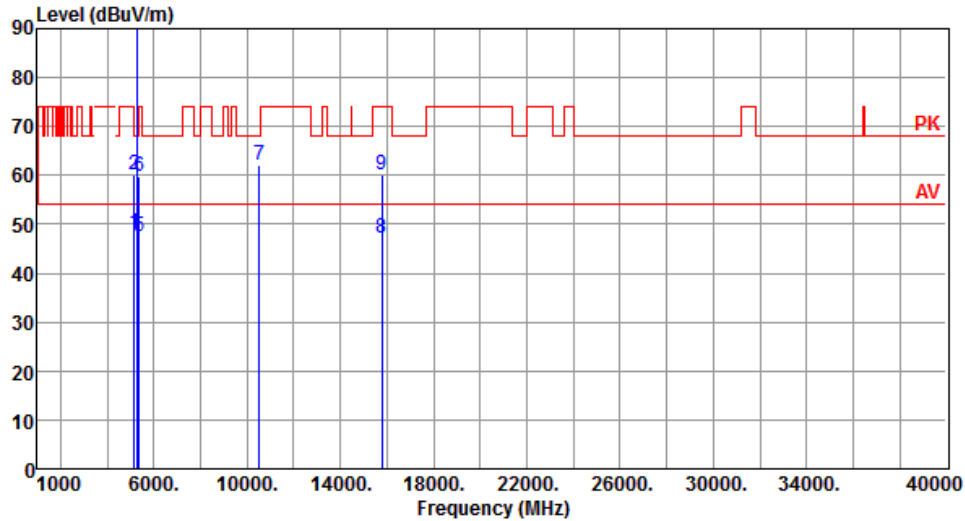
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	48.19	54.00	-5.81	40.87	7.32	Average	177	162
2	5150.00	60.27	74.00	-13.73	52.95	7.32	Peak	177	162
3 *	5260.00	105.31			98.43	6.88	Average	177	162
4 *	5260.00	115.83			108.95	6.88	Peak	177	162
5	5350.00	47.62	54.00	-6.38	40.77	6.85	Average	177	162
6	5350.00	59.72	74.00	-14.28	52.87	6.85	Peak	177	162
7	10520.00	62.05	68.20	-6.15	45.63	16.42	Peak	296	12
8	15780.00	47.18	54.00	-6.82	30.62	16.56	Average	100	14
9	15780.00	60.18	74.00	-13.82	43.62	16.56	Peak	100	14

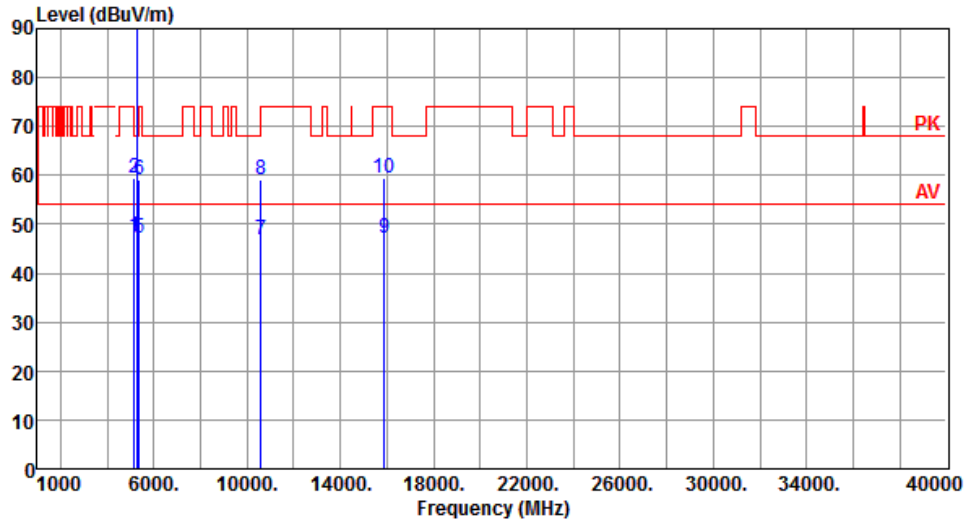
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	47.41	54.00	-6.59	40.09	7.32	Average	262	350
2	5150.00	59.53	74.00	-14.47	52.21	7.32	Peak	262	350
3 *	5300.00	100.91			94.00	6.91	Average	262	350
4 *	5300.00	111.30			104.39	6.91	Peak	262	350
5	5350.00	47.10	54.00	-6.90	40.25	6.85	Average	262	350
6	5350.00	59.18	74.00	-14.82	52.33	6.85	Peak	262	350
7	10600.00	46.78	54.00	-7.22	30.42	16.36	Average	100	153
8	10600.00	59.20	74.00	-14.80	42.84	16.36	Peak	100	153
9	15900.00	47.10	54.00	-6.90	30.41	16.69	Average	100	157
10	15900.00	59.34	74.00	-14.66	42.65	16.69	Peak	100	157

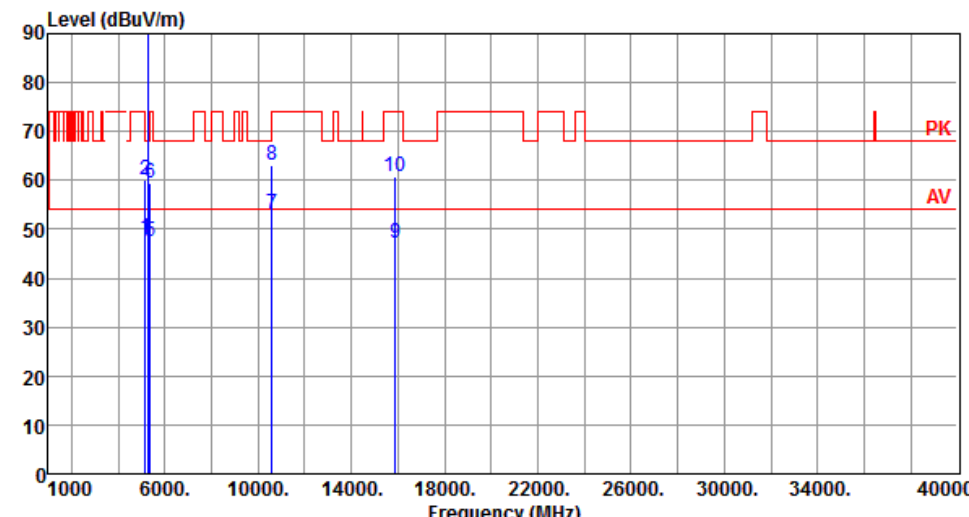
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

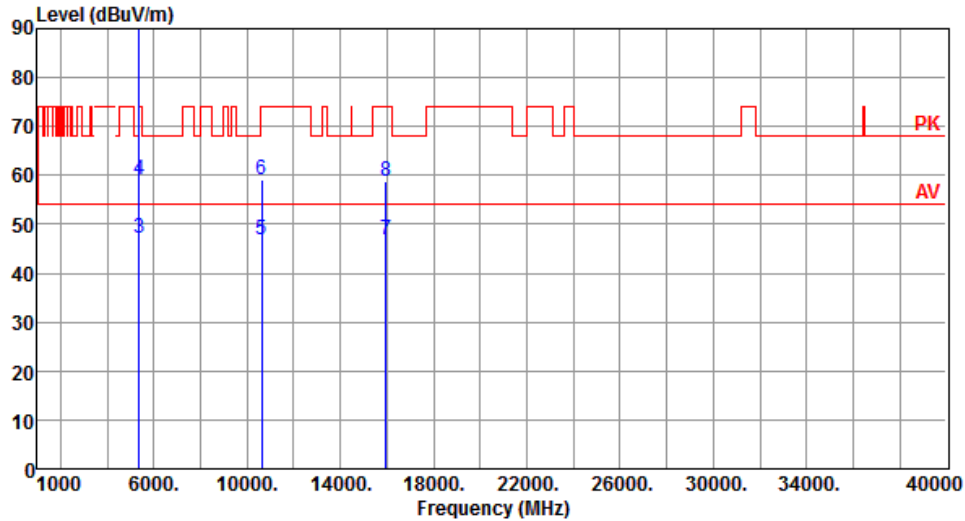
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	48.19	54.00	-5.81	40.87	7.32	Average	186	166
2	5150.00	59.97	74.00	-14.03	52.65	7.32	Peak	186	166
3 *	5300.00	104.93			98.02	6.91	Average	186	166
4 *	5300.00	115.43			108.52	6.91	Peak	186	166
5	5350.00	47.63	54.00	-6.37	40.78	6.85	Average	186	166
6	5350.00	59.54	74.00	-14.46	52.69	6.85	Peak	186	166
7	10600.00	53.28	54.00	-0.72	36.92	16.36	Average	300	14
8	10600.00	63.05	74.00	-10.95	46.69	16.36	Peak	300	14
9	15900.00	47.32	54.00	-6.68	30.63	16.69	Average	100	17
10	15900.00	60.65	74.00	-13.35	43.96	16.69	Peak	100	17

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

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



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	101.21			94.32	6.89	Average	249	345
2	*	5320.00	111.30			104.41	6.89	Peak	249	345
3		5350.00	47.13	54.00	-6.87	40.28	6.85	Average	249	345
4		5350.00	59.18	74.00	-14.82	52.33	6.85	Peak	249	345
5		10640.00	46.88	54.00	-7.12	30.51	16.37	Average	100	158
6		10640.00	59.00	74.00	-15.00	42.63	16.37	Peak	100	158
7		15960.00	46.70	54.00	-7.30	30.17	16.53	Average	100	153
8		15960.00	58.94	74.00	-15.06	42.41	16.53	Peak	100	153

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

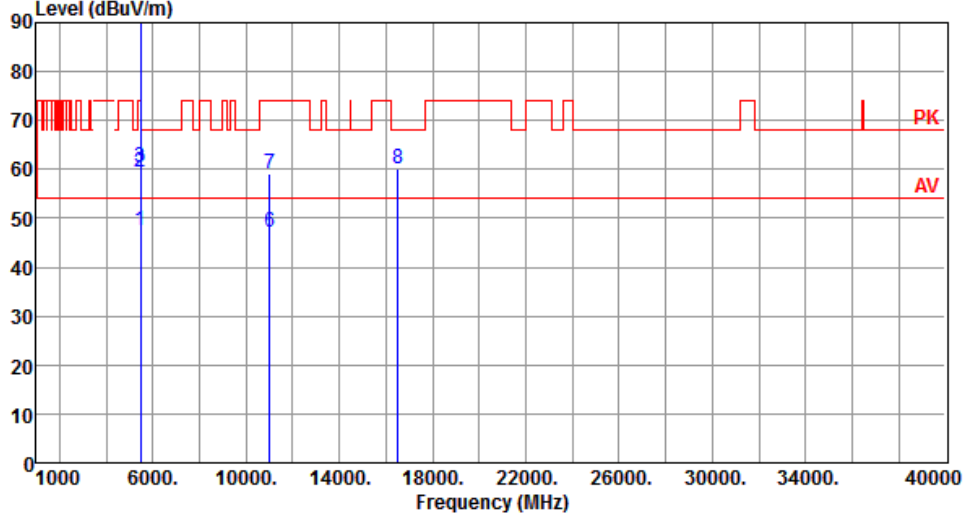
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation		11a		Test Freq. (MHz)		5320			
Polarization		Vertical							
Level (dBuV/m) </									

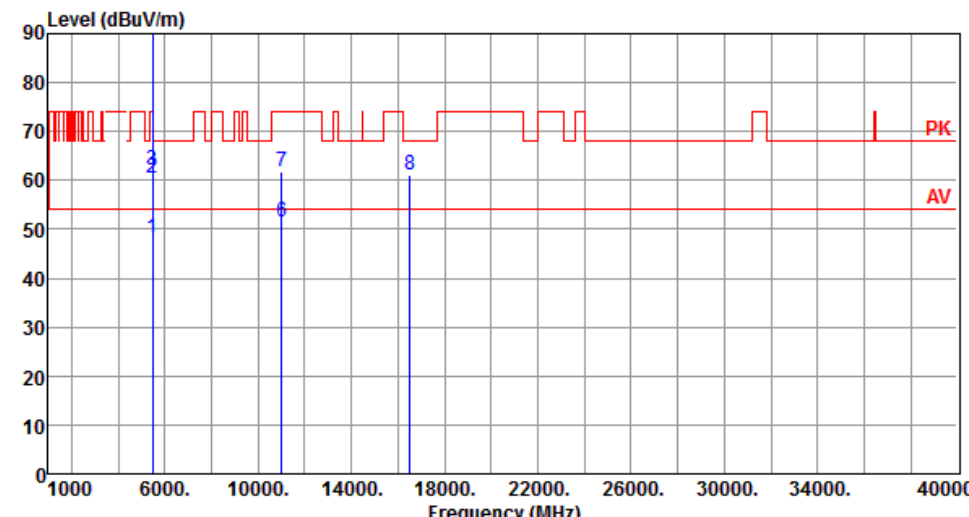
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	47.47	54.00	-6.53	40.22	7.25	Average	247	352
2	5460.00	59.49	74.00	-14.51	52.24	7.25	Peak	247	352
3	5470.00	60.53	68.20	-7.67	53.25	7.28	Peak	247	352
4 *	5500.00	101.02			93.66	7.36	Average	247	352
5 *	5500.00	111.59			104.23	7.36	Peak	247	352
6	11000.00	47.11	54.00	-6.89	30.27	16.84	Average	100	149
7	11000.00	59.05	74.00	-14.95	42.21	16.84	Peak	100	149
8	16500.00	60.16	68.20	-8.04	42.52	17.64	Peak	100	150

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

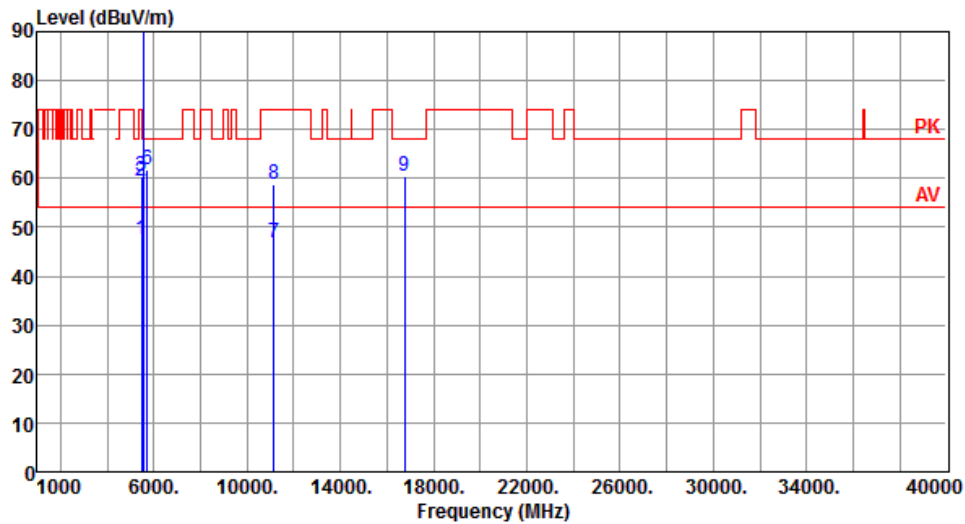
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	47.99	54.00	-6.01	40.74	7.25	Average	300	181
2	5460.00	60.42	74.00	-13.58	53.17	7.25	Peak	300	181
3	5470.00	62.16	68.20	-6.04	54.88	7.28	Peak	300	181
4 *	5500.00	104.88			97.52	7.36	Average	300	181
5 *	5500.00	115.37			108.01	7.36	Peak	300	181
6	11000.00	51.40	54.00	-2.60	34.56	16.84	Average	225	286
7	11000.00	61.69	74.00	-12.31	44.85	16.84	Peak	225	286
8	16500.00	61.27	68.20	-6.93	43.63	17.64	Peak	100	274

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

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



	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	47.42	54.00	-6.58	40.17	7.25	Average	248	356
2	5460.00	59.42	74.00	-14.58	52.17	7.25	Peak	248	356
3	5470.00	60.48	68.20	-7.72	53.20	7.28	Peak	248	356
4 *	5580.00	101.11			93.63	7.48	Average	248	356
5 *	5580.00	111.47			103.99	7.48	Peak	248	356
6	5725.00	61.76	68.20	-6.44	54.10	7.66	Peak	248	356
7	11160.00	46.81	54.00	-7.19	30.22	16.59	Average	100	159
8	11160.00	58.80	74.00	-15.20	42.21	16.59	Peak	100	159
9	16740.00	60.47	68.20	-7.73	42.24	18.23	Peak	100	158

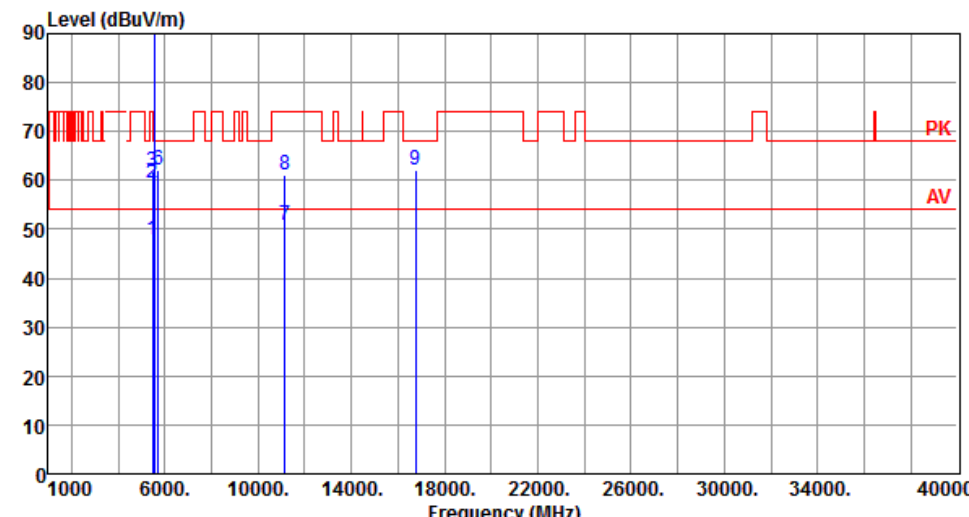
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

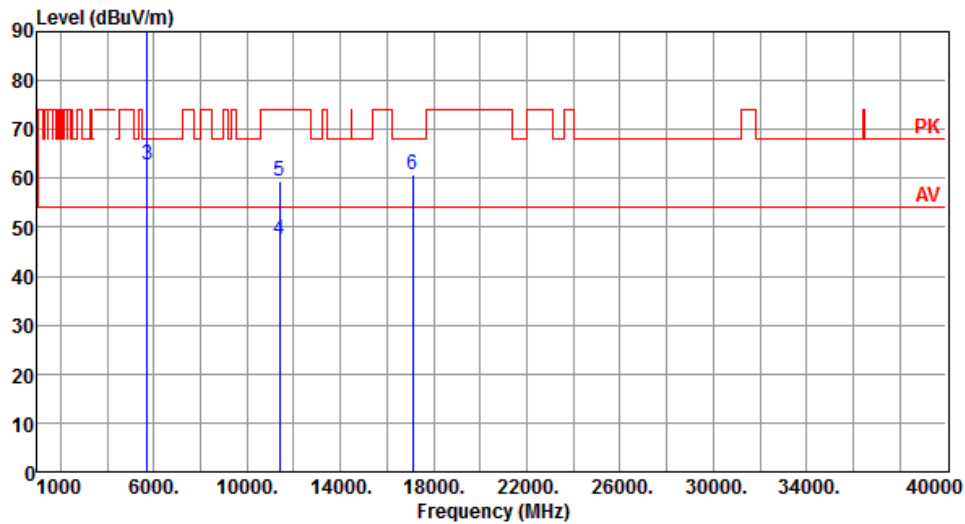
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	47.69	54.00	-6.31	40.44	7.25	Average	306	177
2	5460.00	59.58	74.00	-14.42	52.33	7.25	Peak	306	177
3	5470.00	61.77	68.20	-6.43	54.49	7.28	Peak	306	177
4 *	5580.00	104.70			97.22	7.48	Average	306	177
5 *	5580.00	115.44			107.96	7.48	Peak	306	177
6	5725.00	62.17	68.20	-6.03	54.51	7.66	Peak	306	177
7	11160.00	50.77	54.00	-3.23	34.18	16.59	Average	211	288
8	11160.00	61.17	74.00	-12.83	44.58	16.59	Peak	211	288
9	16740.00	62.02	68.20	-6.18	43.79	18.23	Peak	100	280

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	101.46			93.96	7.50	Average	256	348
2	*	5700.00	112.38			104.88	7.50	Peak	256	348
3		5725.00	62.87	68.20	-5.33	55.21	7.66	Peak	256	348
4		11400.00	47.60	54.00	-6.40	30.87	16.73	Average	100	155
5		11400.00	59.28	74.00	-14.72	42.55	16.73	Peak	100	155
6		17100.00	60.73	68.20	-7.47	42.49	18.24	Peak	100	159

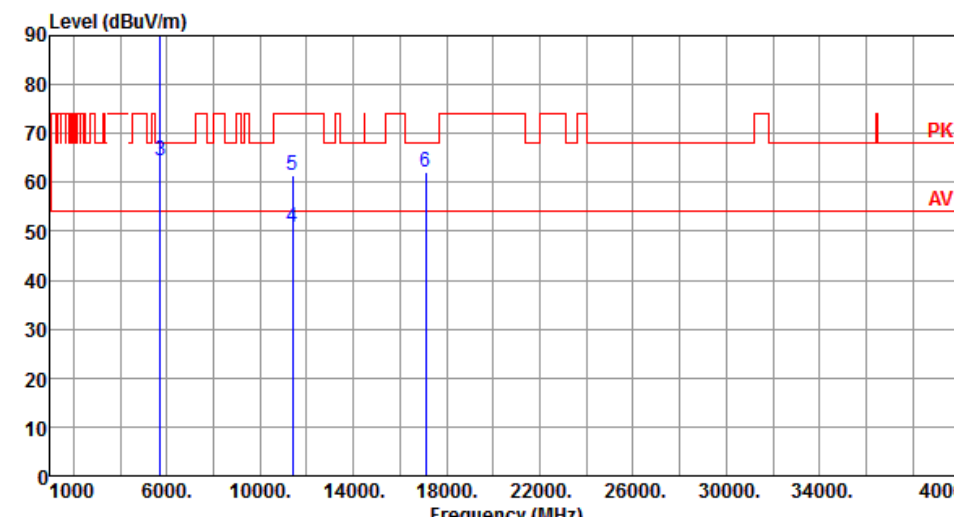
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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

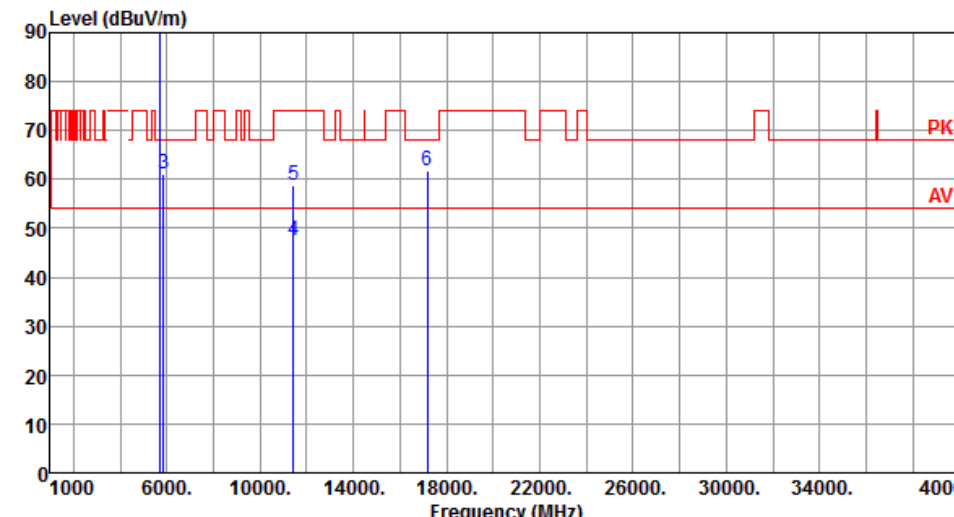


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	105.08			97.58	7.50	Average	302	181
2	*	5700.00	115.82			108.32	7.50	Peak	302	181
3		5725.00	64.54	68.20	-3.66	56.88	7.66	Peak	302	181
4		11400.00	50.68	54.00	-3.32	33.95	16.73	Average	220	289
5		11400.00	61.30	74.00	-12.70	44.57	16.73	Peak	220	289
6		17100.00	62.13	68.20	-6.07	43.89	18.24	Peak	100	291

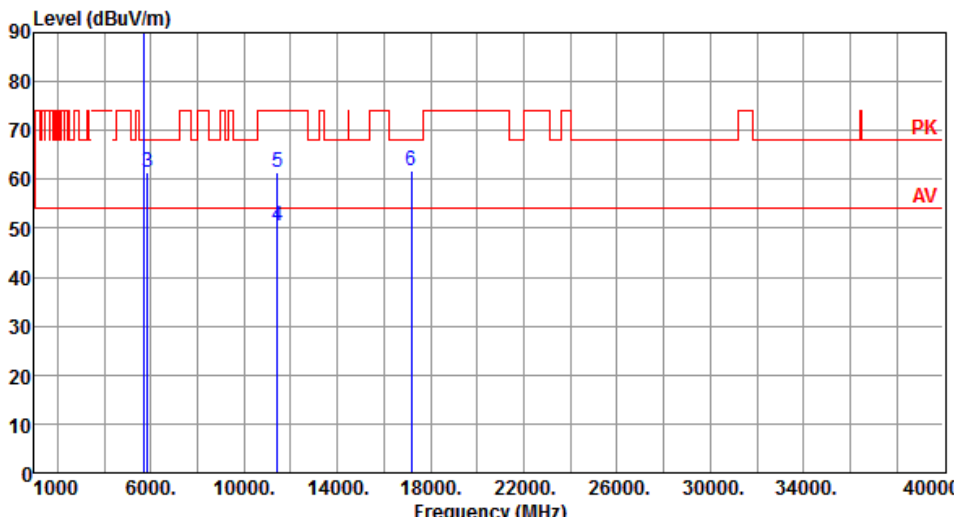
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	11a	Test Freq. (MHz)	5720																																																																																														
Polarization	Horizontal																																																																																																
Level (dBUV/m)  <table><tr><th></th><th>Freq.</th><th>Emission</th><th>Limit</th><th>Margin</th><th>SA</th><th>Factor</th><th>Remark</th><th>ANT</th><th>Turn</th></tr><tr><th></th><th>MHz</th><th>level</th><th>dBuV/m</th><th>dB</th><th>reading</th><th>dB</th><th></th><th>High</th><th>Table</th></tr><tr><th></th><th></th><th>dBuV/m</th><th></th><th></th><th>dBuV</th><th></th><th></th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>*</td><td>5720.00</td><td>101.77</td><td></td><td>94.15</td><td>7.62</td><td>Average</td><td>254</td><td>343</td></tr><tr><td>2</td><td>*</td><td>5720.00</td><td>112.64</td><td></td><td>105.02</td><td>7.62</td><td>Peak</td><td>254</td><td>343</td></tr><tr><td>3</td><td></td><td>5850.00</td><td>61.27</td><td>68.20</td><td>-6.93</td><td>53.25</td><td>8.02</td><td>Peak</td><td>254</td><td>343</td></tr><tr><td>4</td><td></td><td>11440.00</td><td>47.42</td><td>54.00</td><td>-6.58</td><td>30.68</td><td>16.74</td><td>Average</td><td>100</td><td>150</td></tr><tr><td>5</td><td></td><td>11440.00</td><td>58.86</td><td>74.00</td><td>-15.14</td><td>42.12</td><td>16.74</td><td>Peak</td><td>100</td><td>150</td></tr><tr><td>6</td><td></td><td>17160.00</td><td>61.66</td><td>68.20</td><td>-6.54</td><td>43.28</td><td>18.38</td><td>Peak</td><td>100</td><td>100</td></tr></table>					Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn		MHz	level	dBuV/m	dB	reading	dB		High	Table			dBuV/m			dBuV			cm	deg	1	*	5720.00	101.77		94.15	7.62	Average	254	343	2	*	5720.00	112.64		105.02	7.62	Peak	254	343	3		5850.00	61.27	68.20	-6.93	53.25	8.02	Peak	254	343	4		11440.00	47.42	54.00	-6.58	30.68	16.74	Average	100	150	5		11440.00	58.86	74.00	-15.14	42.12	16.74	Peak	100	150	6		17160.00	61.66	68.20	-6.54	43.28	18.38	Peak	100	100
	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn																																																																																								
	MHz	level	dBuV/m	dB	reading	dB		High	Table																																																																																								
		dBuV/m			dBuV			cm	deg																																																																																								
1	*	5720.00	101.77		94.15	7.62	Average	254	343																																																																																								
2	*	5720.00	112.64		105.02	7.62	Peak	254	343																																																																																								
3		5850.00	61.27	68.20	-6.93	53.25	8.02	Peak	254	343																																																																																							
4		11440.00	47.42	54.00	-6.58	30.68	16.74	Average	100	150																																																																																							
5		11440.00	58.86	74.00	-15.14	42.12	16.74	Peak	100	150																																																																																							
6		17160.00	61.66	68.20	-6.54	43.28	18.38	Peak	100	100																																																																																							
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: "*" is Peak / Average value of fundamental frequency																																																																																																	

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



		Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		MHz	level	dBuV/m		reading			High	Table
			dBuV/m		dB	dBuV	dB		cm	deg
1	*	5720.00	105.88			98.26	7.62	Average	295	192
2	*	5720.00	116.74			109.12	7.62	Peak	295	192
3		5850.00	61.44	68.20	-6.76	53.42	8.02	Peak	295	192
4		11440.00	50.59	54.00	-3.41	33.85	16.74	Average	215	287
5		11440.00	61.34	74.00	-12.66	44.60	16.74	Peak	215	287
6		17160.00	61.92	68.20	-6.28	43.54	18.38	Peak	100	290

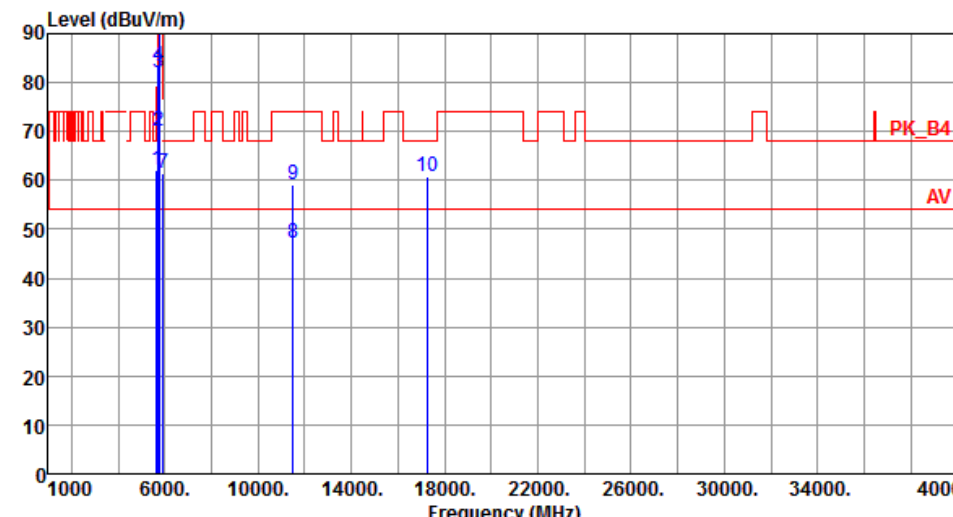
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

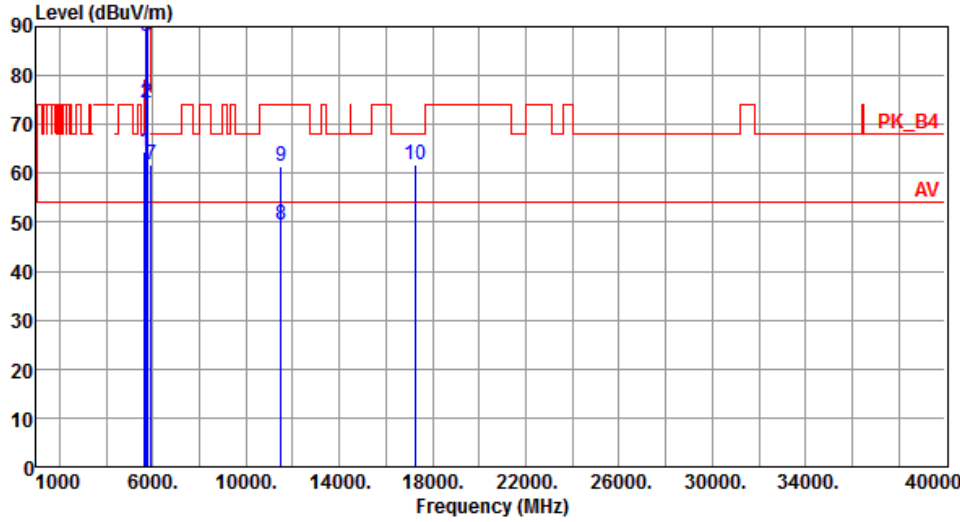
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	61.97	68.20	-6.23	54.58	7.39	Peak	254	344
2	5700.00	70.02	105.20	-35.18	62.52	7.50	Peak	254	344
3	5720.00	82.14	110.80	-28.66	74.52	7.62	Peak	254	344
4	5725.00	83.23	122.20	-38.97	75.57	7.66	Peak	254	344
5 *	5745.00	111.75			103.97	7.78	Average	254	344
6 *	5745.00	122.56			114.78	7.78	Peak	254	344
7	5925.00	61.60	68.20	-6.60	53.53	8.07	Peak	254	344
8	11490.00	47.29	54.00	-6.71	30.53	16.76	Average	100	155
9	11490.00	59.02	74.00	-14.98	42.26	16.76	Peak	100	155
10	17235.00	60.90	68.20	-7.30	42.26	18.64	Peak	100	158

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

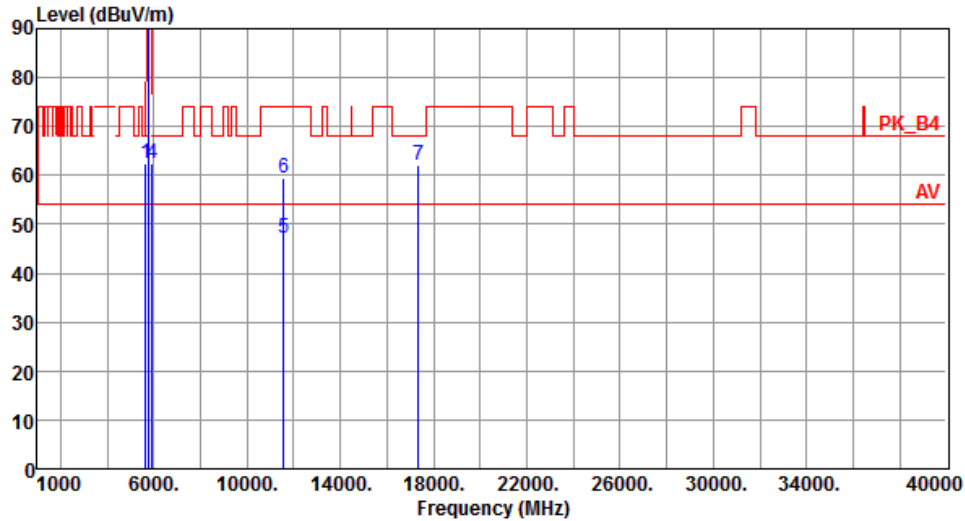
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	64.50	68.20	-3.70	57.11	7.39	Peak	225	253
2	5700.00	74.39	105.20	-30.81	66.89	7.50	Peak	225	253
3	5720.00	88.06	110.80	-22.74	80.44	7.62	Peak	225	253
4	5725.00	89.53	122.20	-32.67	81.87	7.66	Peak	225	253
5 *	5745.00	115.58			107.80	7.78	Average	225	253
6 *	5745.00	126.26			118.48	7.78	Peak	225	253
7	5925.00	61.79	68.20	-6.41	53.72	8.07	Peak	225	253
8	11490.00	49.46	54.00	-4.54	32.70	16.76	Average	350	209
9	11490.00	61.51	74.00	-12.49	44.75	16.76	Peak	350	209
10	17235.00	61.76	68.20	-6.44	43.12	18.64	Peak	100	220

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

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



	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	62.60	68.20	-5.60	55.21	7.39	Peak	247	349
2	*	5785.00	111.47		103.59	7.88	Average	247	349
3	*	5785.00	122.17		114.29	7.88	Peak	247	349
4	5925.00	62.36	68.20	-5.84	54.29	8.07	Peak	247	349
5	11570.00	47.13	54.00	-6.87	30.52	16.61	Average	100	153
6	11570.00	59.49	74.00	-14.51	42.88	16.61	Peak	100	153
7	17355.00	62.17	68.20	-6.03	42.94	19.23	Peak	100	157

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

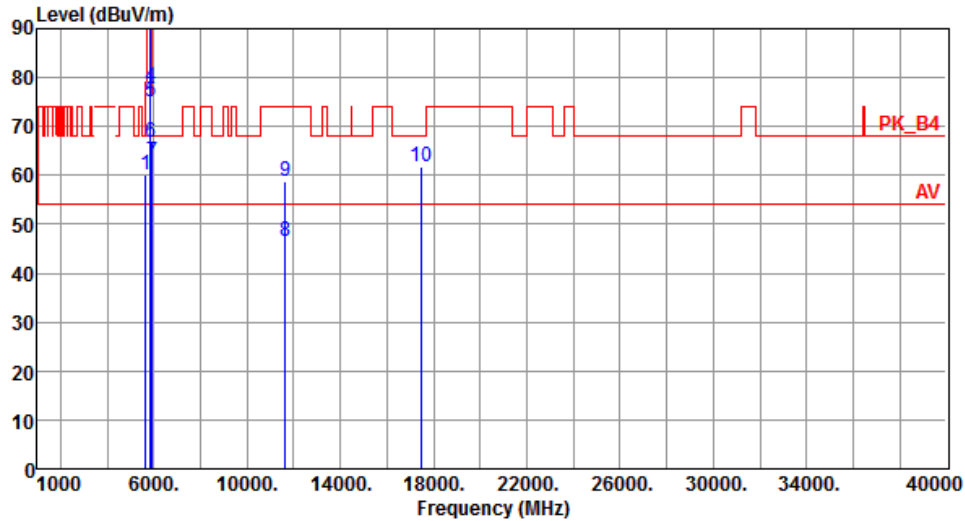
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		
Level (dBuV/m) </			

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



	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	60.10	68.20	-8.10	52.71	7.39	Peak	252	344
2 *	5825.00	111.95			103.99	7.96	Average	252	344
3 *	5825.00	122.55			114.59	7.96	Peak	252	344
4	5850.00	77.90	122.20	-44.30	69.88	8.02	Peak	252	344
5	5855.00	74.90	110.80	-35.90	66.88	8.02	Peak	252	344
6	5875.00	66.87	105.20	-38.33	58.84	8.03	Peak	252	344
7	5925.00	62.93	68.20	-5.27	54.86	8.07	Peak	252	344
8	11650.00	46.61	54.00	-7.39	30.23	16.38	Average	100	154
9	11650.00	58.66	74.00	-15.34	42.28	16.38	Peak	100	154
10	17475.00	61.90	68.20	-6.30	42.16	19.74	Peak	100	158

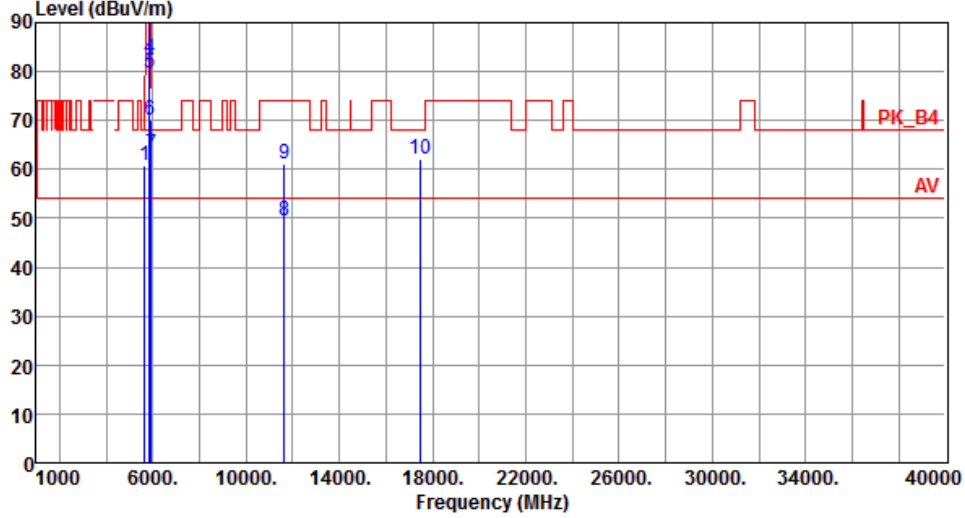
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



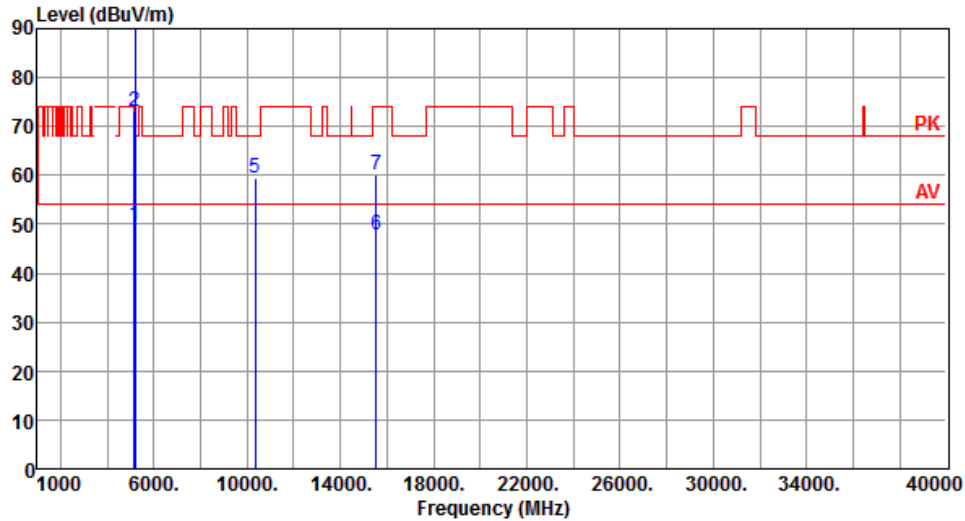
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.64	68.20	-7.56	53.25	7.39	Peak	271	214
2	* 5825.00	115.58			107.62	7.96	Average	271	214
3	* 5825.00	126.32			118.36	7.96	Peak	271	214
4	5850.00	82.57	122.20	-39.63	74.55	8.02	Peak	271	184
5	5855.00	79.57	110.80	-31.23	71.55	8.02	Peak	271	184
6	5875.00	70.23	105.20	-34.97	62.20	8.03	Peak	271	184
7	5925.00	63.19	68.20	-5.01	55.12	8.07	Peak	271	184
8	11650.00	49.55	54.00	-4.45	33.17	16.38	Average	345	220
9	11650.00	61.01	74.00	-12.99	44.63	16.38	Peak	345	220
10	17475.00	62.17	68.20	-6.03	42.43	19.74	Peak	100	206

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5180
Polarization	Horizontal		
Level (dBuV/m)			

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



	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	49.83	54.00	-4.17	42.51	7.32	Average	238	154
2	5150.00	73.08	74.00	-0.92	65.76	7.32	Peak	238	154
3 *	5180.00	111.19	---	---	104.05	7.14	Average	238	154
4 *	5180.00	122.93	---	---	115.79	7.14	Peak	238	154
5	10360.00	59.34	68.20	-8.86	43.25	16.09	Peak	335	14
6	15540.00	47.88	54.00	-6.12	30.51	17.37	Average	100	12
7	15540.00	59.95	74.00	-14.05	42.58	17.37	Peak	100	12

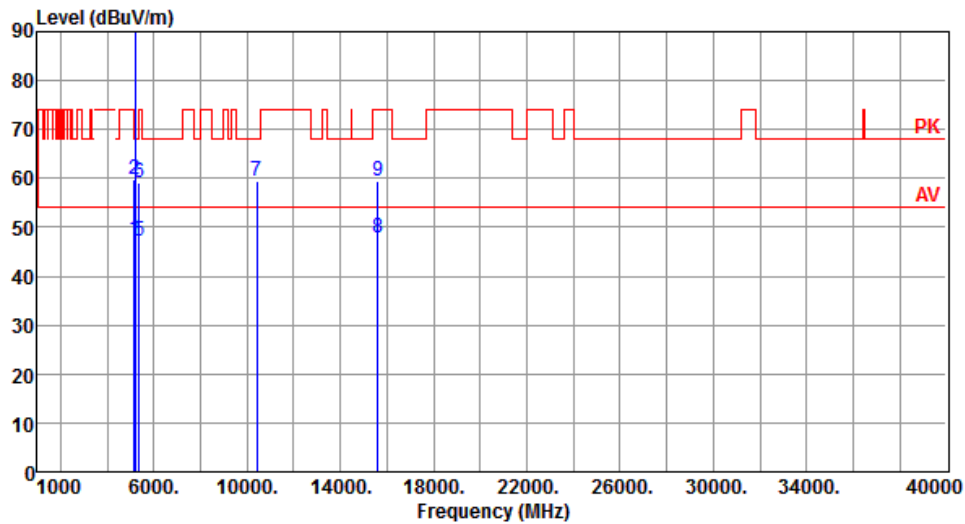
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	47.49	54.00	-6.51	40.17	7.32	Average	248	346
2	5150.00	59.64	74.00	-14.36	52.32	7.32	Peak	248	346
3 *	5200.00	106.77			99.74	7.03	Average	248	346
4 *	5200.00	118.61			111.58	7.03	Peak	248	346
5	5350.00	47.05	54.00	-6.95	40.20	6.85	Average	248	346
6	5350.00	59.03	74.00	-14.97	52.18	6.85	Peak	248	346
7	10400.00	59.53	68.20	-8.67	43.25	16.28	Peak	100	155
8	15600.00	47.68	54.00	-6.32	30.41	17.27	Average	100	159
9	15600.00	59.44	74.00	-14.56	42.17	17.27	Peak	100	159

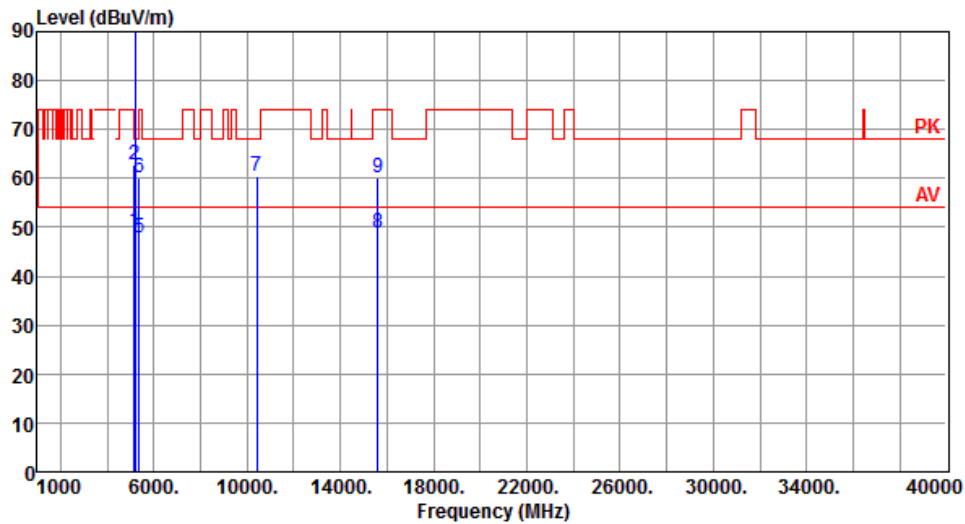
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	49.02	54.00	-4.98	41.70	7.32	Average	238	160
2	5150.00	62.70	74.00	-11.30	55.38	7.32	Peak	238	160
3 *	5200.00	110.93			103.90	7.03	Average	238	160
4 *	5200.00	122.44			115.41	7.03	Peak	238	160
5	5350.00	47.87	54.00	-6.13	41.02	6.85	Average	238	160
6	5350.00	60.01	74.00	-13.99	53.16	6.85	Peak	238	160
7	10400.00	60.43	68.20	-7.77	44.15	16.28	Peak	330	10
8	15600.00	48.79	54.00	-5.21	31.52	17.27	Average	100	11
9	15600.00	60.13	74.00	-13.87	42.86	17.27	Peak	100	11

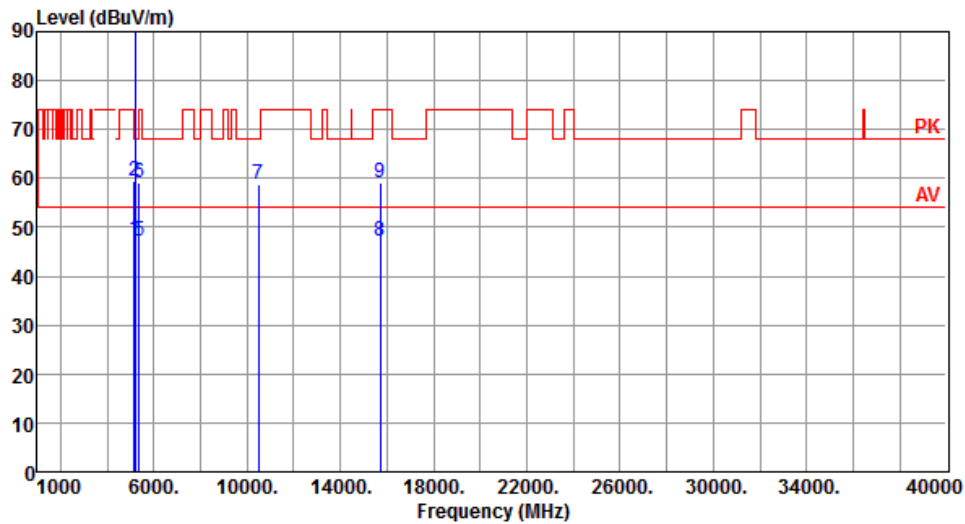
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	47.33	54.00	-6.67	40.01	7.32	Average	247	341
2	5150.00	59.51	74.00	-14.49	52.19	7.32	Peak	247	341
3 *	5240.00	106.55			99.65	6.90	Average	247	341
4 *	5240.00	117.42			110.52	6.90	Peak	247	341
5	5350.00	47.15	54.00	-6.85	40.30	6.85	Average	247	341
6	5350.00	59.13	74.00	-14.87	52.28	6.85	Peak	247	341
7	10480.00	58.69	68.20	-9.51	42.28	16.41	Peak	100	153
8	15720.00	47.07	54.00	-6.93	30.47	16.60	Average	100	154
9	15720.00	59.01	74.00	-14.99	42.41	16.60	Peak	100	154

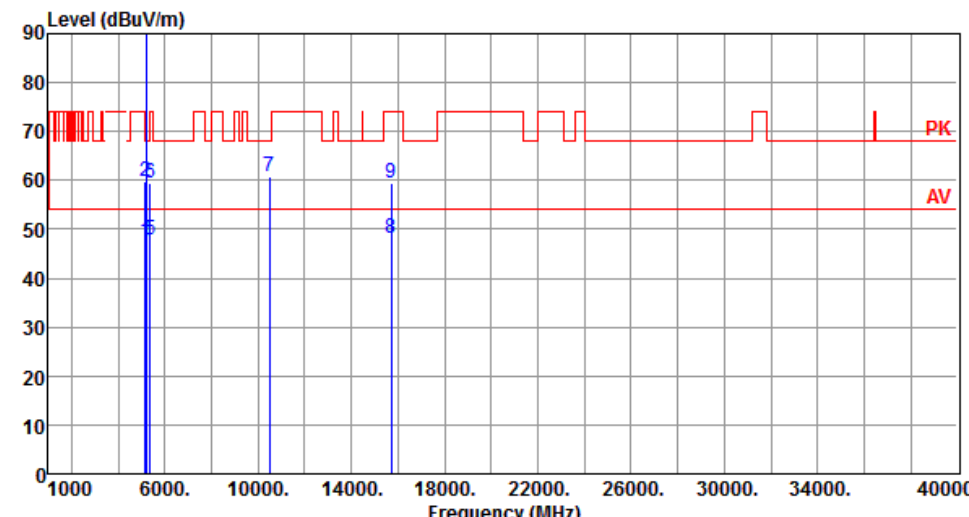
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

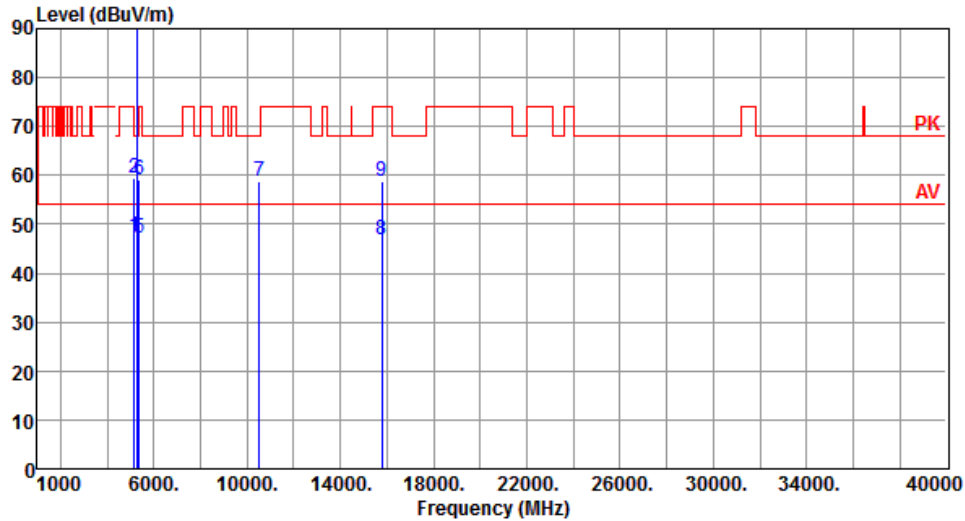
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	47.49	54.00	-6.51	40.17	7.32	Average	240	166
2	5150.00	59.67	74.00	-14.33	52.35	7.32	Peak	240	166
3 *	5240.00	110.38			103.48	6.90	Average	240	166
4 *	5240.00	121.88			114.98	6.90	Peak	240	166
5	5350.00	47.73	54.00	-6.27	40.88	6.85	Average	240	166
6	5350.00	59.48	74.00	-14.52	52.63	6.85	Peak	240	166
7	10480.00	60.66	68.20	-7.54	44.25	16.41	Peak	333	15
8	15720.00	48.23	54.00	-5.77	31.63	16.60	Average	100	18
9	15720.00	59.34	74.00	-14.66	42.74	16.60	Peak	100	18

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

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



	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	47.41	54.00	-6.59	40.09	7.32	Average	238	352
2	5150.00	59.58	74.00	-14.42	52.26	7.32	Peak	238	352
3 *	5260.00	101.43			94.55	6.88	Average	238	352
4 *	5260.00	112.13			105.25	6.88	Peak	238	352
5	5350.00	47.10	54.00	-6.90	40.25	6.85	Average	238	352
6	5350.00	59.18	74.00	-14.82	52.33	6.85	Peak	238	352
7	10520.00	58.66	68.20	-9.54	42.24	16.42	Peak	100	157
8	15780.00	46.97	54.00	-7.03	30.41	16.56	Average	100	152
9	15780.00	58.81	74.00	-15.19	42.25	16.56	Peak	100	152

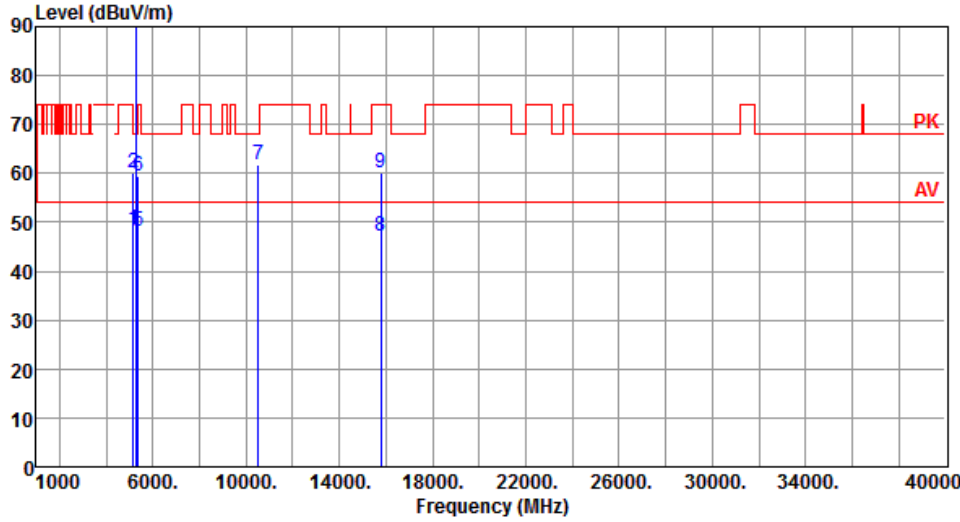
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

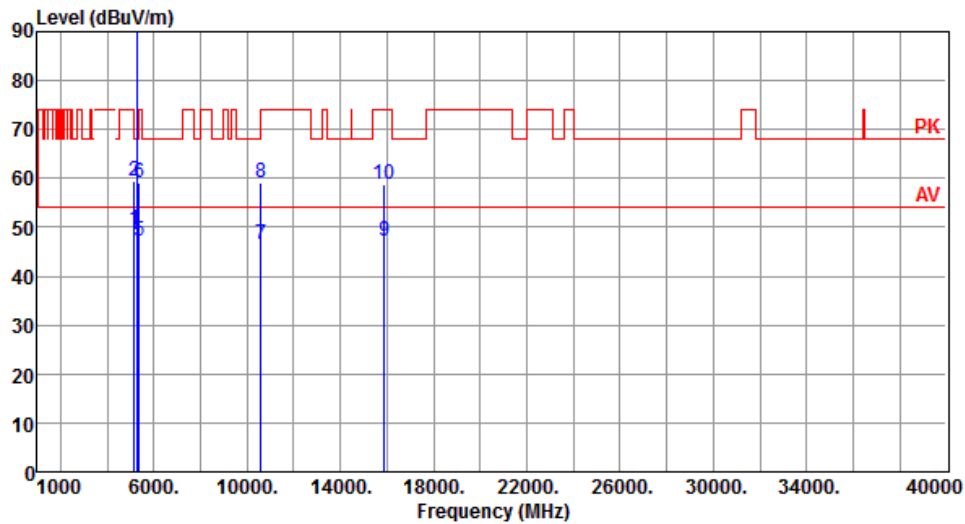
Modulation	ax (HE20)	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	48.42	54.00	-5.58	41.10	7.32	Average	174	155
2	5150.00	60.17	74.00	-13.83	52.85	7.32	Peak	174	155
3 *	5260.00	105.25			98.37	6.88	Average	174	155
4 *	5260.00	116.14			109.26	6.88	Peak	174	155
5	5350.00	48.03	54.00	-5.97	41.18	6.85	Average	174	155
6	5350.00	59.54	74.00	-14.46	52.69	6.85	Peak	174	155
7	10520.00	61.64	68.20	-6.56	45.22	16.42	Peak	289	15
8	15780.00	47.19	54.00	-6.81	30.63	16.56	Average	100	12
9	15780.00	60.14	74.00	-13.86	43.58	16.56	Peak	100	12

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

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



	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	49.56	54.00	-4.44	42.24	7.32	Average	241	350
2	5150.00	59.54	74.00	-14.46	52.22	7.32	Peak	241	350
3 *	5300.00	100.80			93.89	6.91	Average	241	350
4 *	5300.00	111.76			104.85	6.91	Peak	241	350
5	5350.00	47.26	54.00	-6.74	40.41	6.85	Average	241	350
6	5350.00	59.25	74.00	-14.75	52.40	6.85	Peak	241	350
7	10600.00	46.64	54.00	-7.36	30.28	16.36	Average	100	158
8	10600.00	59.23	74.00	-14.77	42.87	16.36	Peak	100	158
9	15900.00	47.10	54.00	-6.90	30.41	16.69	Average	100	159
10	15900.00	58.94	74.00	-15.06	42.25	16.69	Peak	100	159

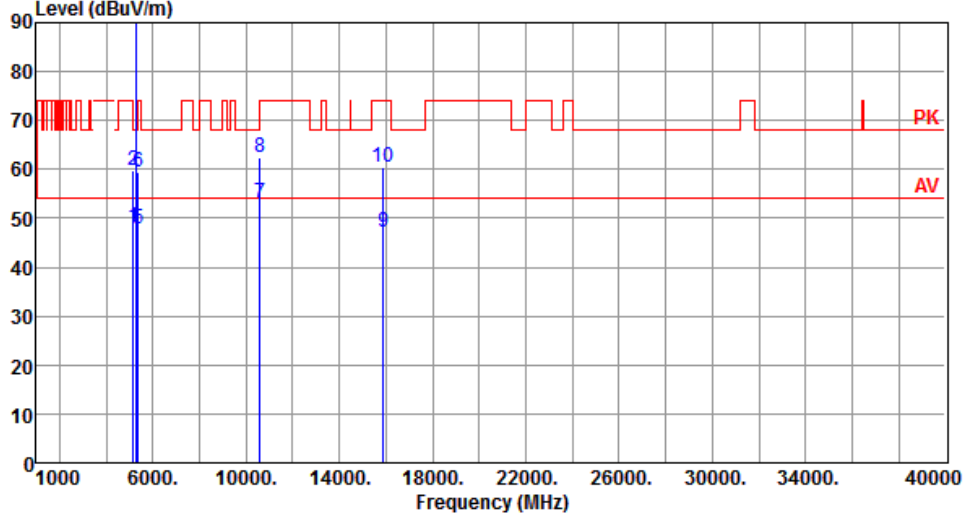
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

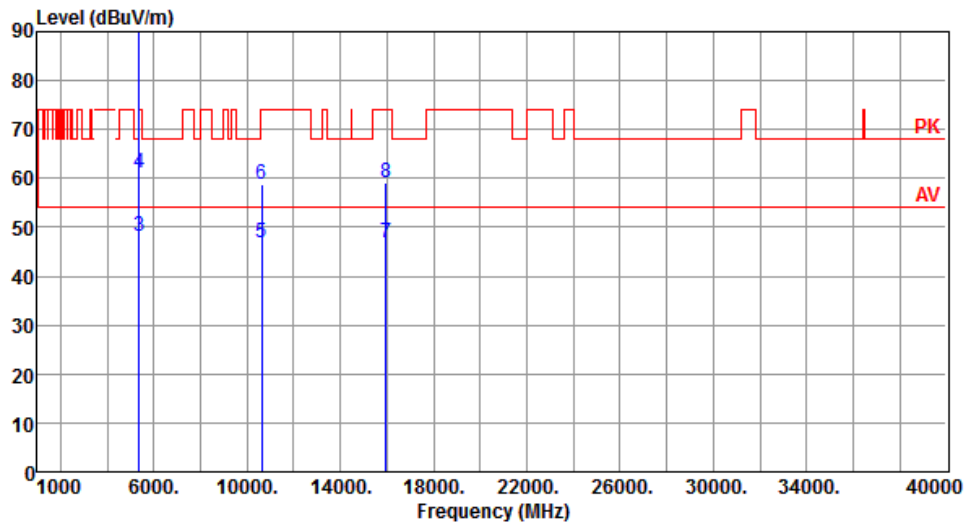
Modulation	ax (HE20)	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	48.20	54.00	-5.80	40.88	7.32	Average	175	152
2	5150.00	59.63	74.00	-14.37	52.31	7.32	Peak	175	152
3 *	5300.00	104.67			97.76	6.91	Average	175	152
4 *	5300.00	115.52			108.61	6.91	Peak	175	152
5	5350.00	47.72	54.00	-6.28	40.87	6.85	Average	175	152
6	5350.00	59.51	74.00	-14.49	52.66	6.85	Peak	175	152
7	10600.00	53.09	54.00	-0.91	36.73	16.36	Average	298	12
8	10600.00	62.55	74.00	-11.45	46.19	16.36	Peak	298	12
9	15900.00	47.21	54.00	-6.79	30.52	16.69	Average	100	11
10	15900.00	60.38	74.00	-13.62	43.69	16.69	Peak	100	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).
 Note 3: "*" is Peak / Average value of fundamental frequency

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	101.47			94.58	6.89	Average	244	341
2	*	5320.00	113.17			106.28	6.89	Peak	244	341
3		5350.00	48.07	54.00	-5.93	41.22	6.85	Average	244	341
4		5350.00	61.21	74.00	-12.79	54.36	6.85	Peak	244	341
5		10640.00	46.89	54.00	-7.11	30.52	16.37	Average	100	156
6		10640.00	58.62	74.00	-15.38	42.25	16.37	Peak	100	156
7		15960.00	46.78	54.00	-7.22	30.25	16.53	Average	100	161
8		15960.00	59.05	74.00	-14.95	42.52	16.53	Peak	100	161

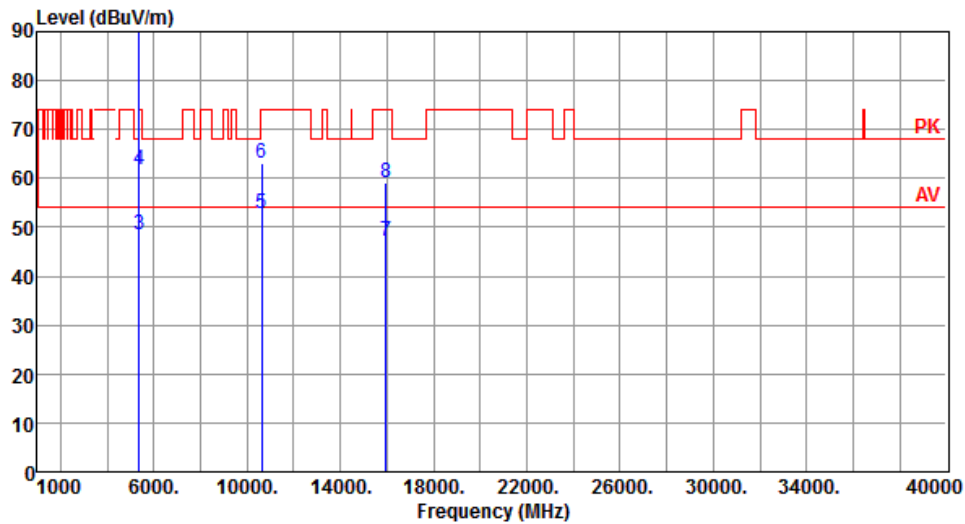
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	105.32			98.43	6.89	Average	238	306
2	*	5320.00	117.73			110.84	6.89	Peak	238	306
3		5350.00	48.50	54.00	-5.50	41.65	6.85	Average	238	306
4		5350.00	61.70	74.00	-12.30	54.85	6.85	Peak	238	306
5		10640.00	52.91	54.00	-1.09	36.54	16.37	Average	288	11
6		10640.00	63.14	74.00	-10.86	46.77	16.37	Peak	288	11
7		15960.00	47.08	54.00	-6.92	30.55	16.53	Average	100	17
8		15960.00	59.16	74.00	-14.84	42.63	16.53	Peak	100	17

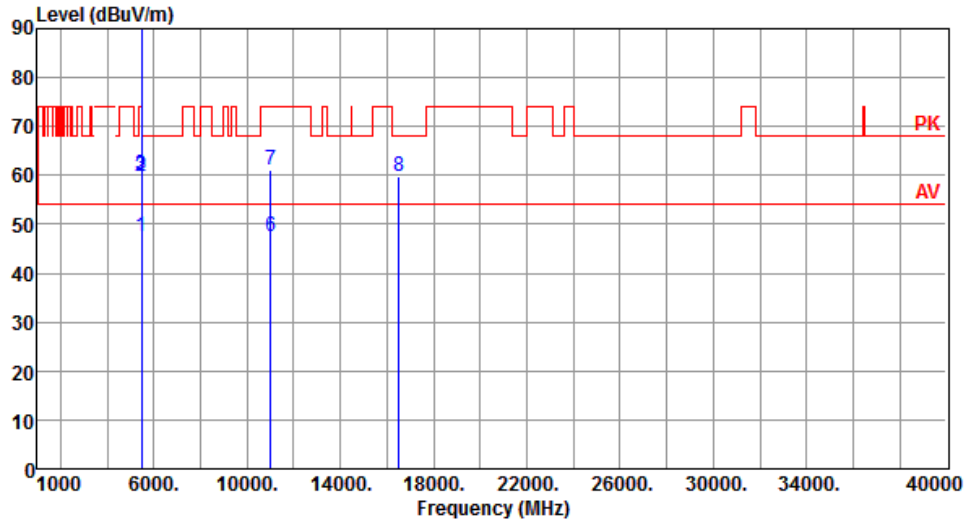
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	47.53	54.00	-6.47	40.28	7.25	Average	247	349
2	5460.00	59.64	74.00	-14.36	52.39	7.25	Peak	247	349
3	5470.00	59.98	68.20	-8.22	52.70	7.28	Peak	247	349
4 *	5500.00	100.88			93.52	7.36	Average	247	349
5 *	5500.00	111.88			104.52	7.36	Peak	247	349
6	11000.00	47.36	54.00	-6.64	30.52	16.84	Average	100	154
7	11000.00	61.05	74.00	-12.95	44.21	16.84	Peak	100	154
8	16500.00	59.89	68.20	-8.31	42.25	17.64	Peak	100	159

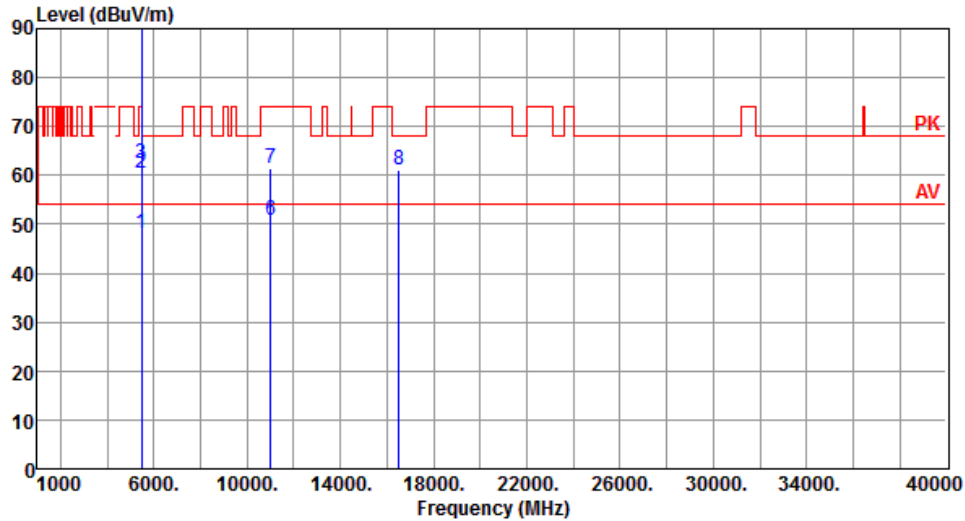
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	48.13	54.00	-5.87	40.88	7.25	Average	303	172
2	5460.00	60.45	74.00	-13.55	53.20	7.25	Peak	303	172
3	5470.00	62.48	68.20	-5.72	55.20	7.28	Peak	303	172
4 *	5500.00	104.51			97.15	7.36	Average	303	172
5 *	5500.00	115.57			108.21	7.36	Peak	303	172
6	11000.00	50.86	54.00	-3.14	34.02	16.84	Average	221	284
7	11000.00	61.36	74.00	-12.64	44.52	16.84	Peak	221	284
8	16500.00	61.16	68.20	-7.04	43.52	17.64	Peak	100	277

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

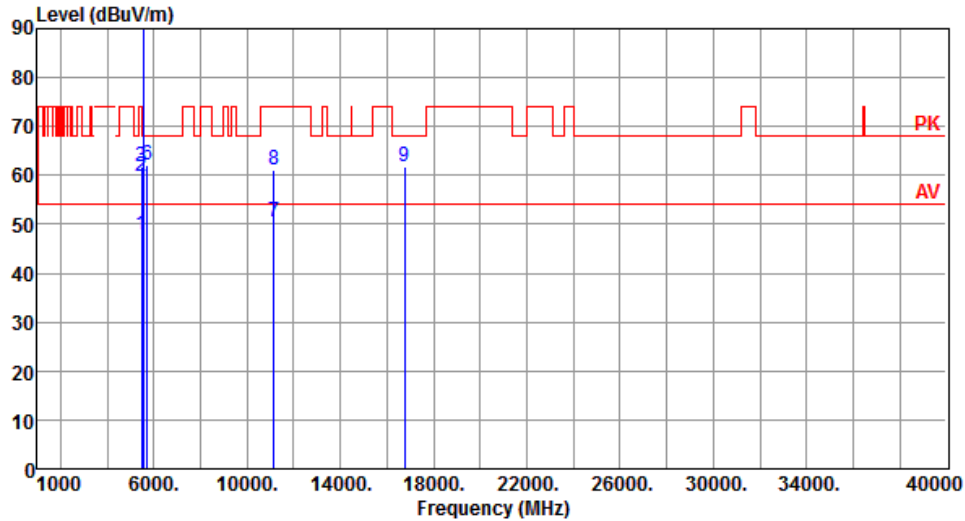
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5580
Polarization	Horizontal		
Level (dBuV/m) </			

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



	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	47.82	54.00	-6.18	40.57	7.25	Average	307	175
2	5460.00	59.72	74.00	-14.28	52.47	7.25	Peak	307	175
3	5470.00	61.78	68.20	-6.42	54.50	7.28	Peak	307	175
4 *	5580.00	104.73			97.25	7.48	Average	307	175
5 *	5580.00	117.00			109.52	7.48	Peak	307	175
6	5725.00	62.25	68.20	-5.95	54.59	7.66	Peak	307	175
7	11160.00	50.50	54.00	-3.50	33.91	16.59	Average	209	283
8	11160.00	60.97	74.00	-13.03	44.38	16.59	Peak	209	283
9	16740.00	61.91	68.20	-6.29	43.68	18.23	Peak	100	278

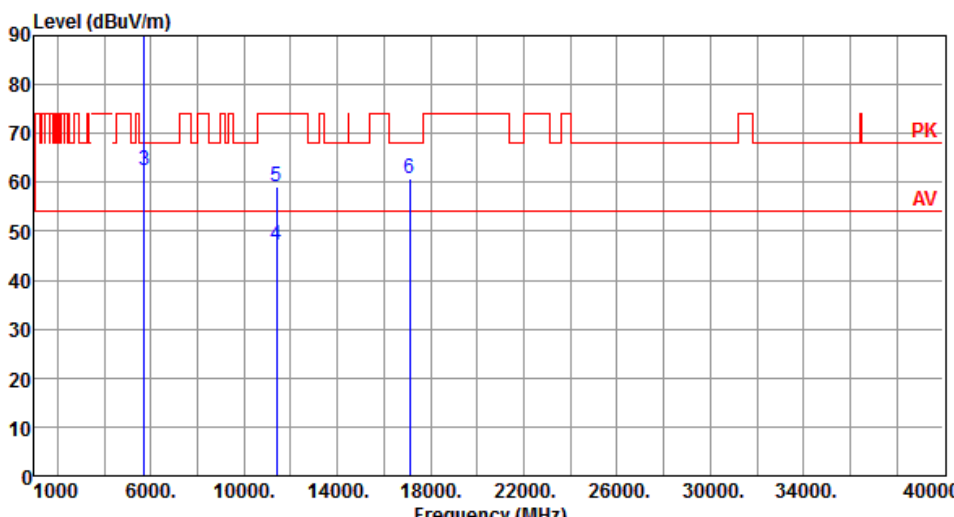
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	101.13	---	---	93.63	7.50	Average	249	338
2	*	5700.00	112.05	---	---	104.55	7.50	Peak	249	338
3		5725.00	62.52	68.20	-5.68	54.86	7.66	Peak	249	338
4		11400.00	47.29	54.00	-6.71	30.56	16.73	Average	100	150
5		11400.00	59.00	74.00	-15.00	42.27	16.73	Peak	100	150
6		17100.00	60.63	68.20	-7.57	42.39	18.24	Peak	100	157

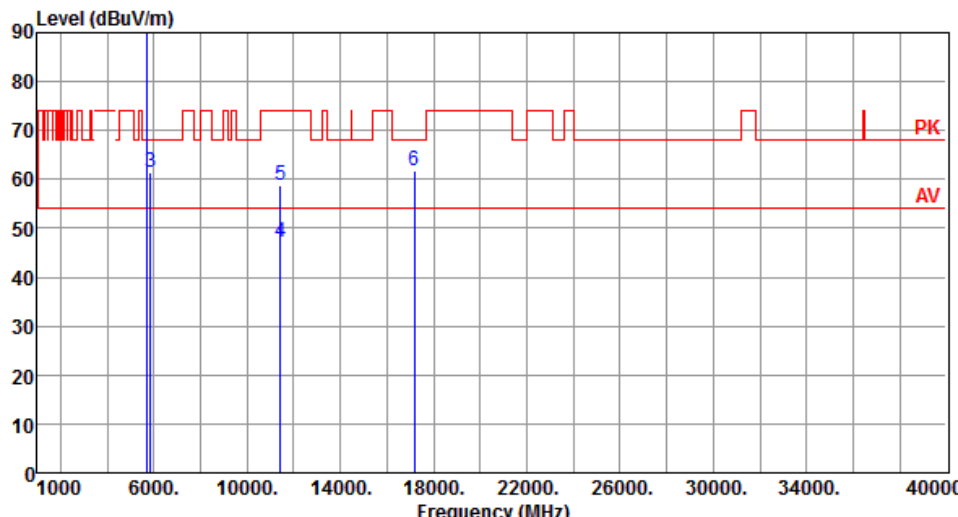
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation		ax (HE20)			Test Freq. (MHz)		5700			
Polarization		Vertical								
Level (dBuV/m)										

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



		Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		MHz	level			reading			High	Table
			dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	*	5720.00	101.67			94.05	7.62	Average	253	341
2	*	5720.00	112.88			105.26	7.62	Peak	253	341
3		5850.00	61.34	68.20	-6.86	53.32	8.02	Peak	253	341
4		11440.00	47.22	54.00	-6.78	30.48	16.74	Average	100	100
5		11440.00	58.89	74.00	-15.11	42.15	16.74	Peak	100	100
6		17160.00	61.70	68.20	-6.50	43.32	18.38	Peak	100	160

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

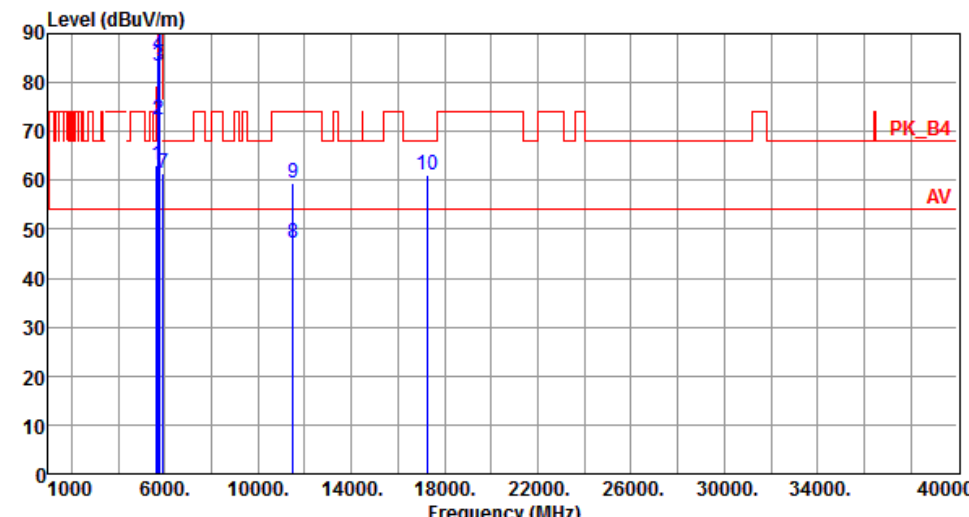
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5720
Polarization	Vertical		
Level (dBuV/m)			

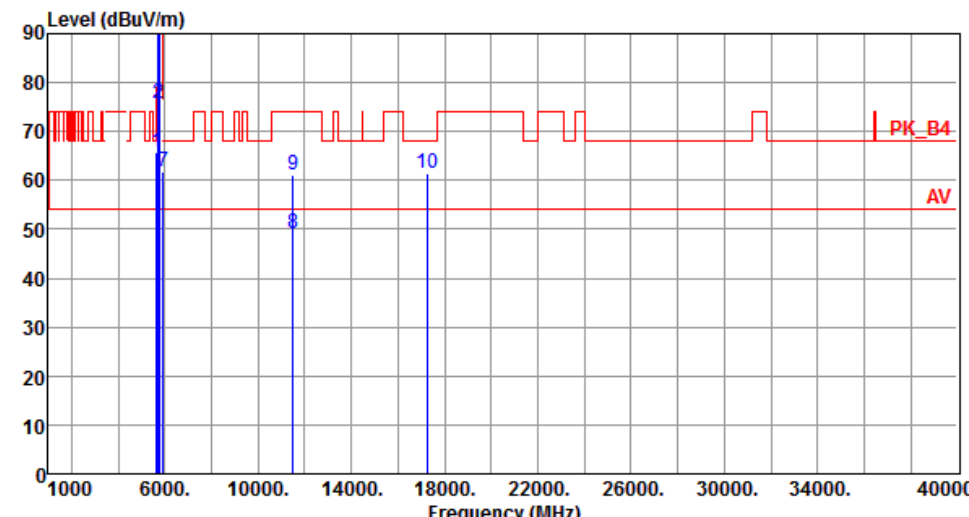
Modulation	ax (HE20)	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	62.94	68.20	-5.26	55.55	7.39	Peak	259	350
2	5700.00	72.36	105.20	-32.84	64.86	7.50	Peak	259	350
3	5720.00	83.48	110.80	-27.32	75.86	7.62	Peak	259	350
4	5725.00	85.54	122.20	-36.66	77.88	7.66	Peak	259	350
5 *	5745.00	111.35			103.57	7.78	Average	259	350
6 *	5745.00	122.06			114.28	7.78	Peak	259	350
7	5925.00	61.29	68.20	-6.91	53.22	8.07	Peak	259	350
8	11490.00	47.24	54.00	-6.76	30.48	16.76	Average	100	156
9	11490.00	59.35	74.00	-14.65	42.59	16.76	Peak	100	156
10	17235.00	61.12	68.20	-7.08	42.48	18.64	Peak	100	159

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

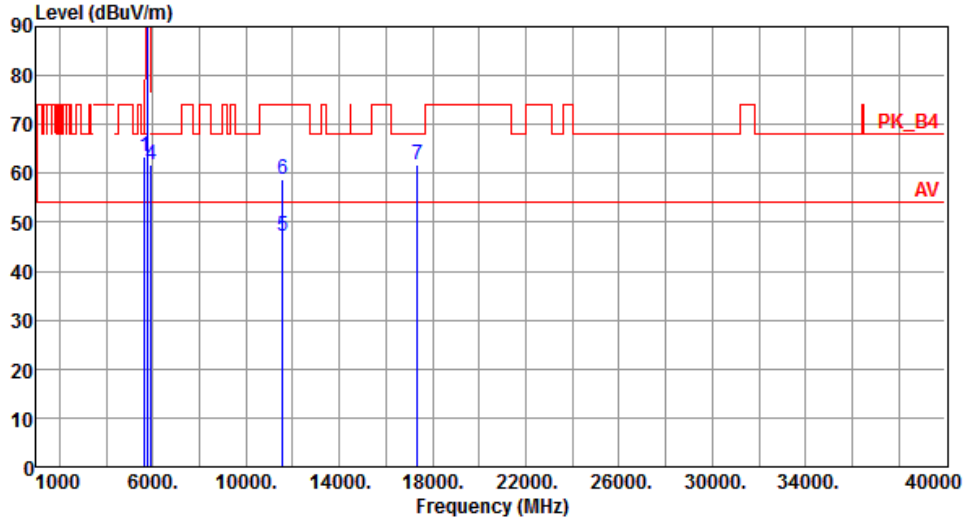
Modulation	ax (HE20)	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	65.91	68.20	-2.29	58.52	7.39	Peak	220	253
2	5700.00	75.76	105.20	-29.44	68.26	7.50	Peak	220	253
3	5720.00	90.81	110.80	-19.99	83.19	7.62	Peak	220	253
4	5725.00	93.74	122.20	-28.46	86.08	7.66	Peak	220	253
5 *	5745.00	115.12			107.34	7.78	Average	220	253
6 *	5745.00	125.83			118.05	7.78	Peak	220	253
7	5925.00	61.74	68.20	-6.46	53.67	8.07	Peak	220	253
8	11490.00	49.13	54.00	-4.87	32.37	16.76	Average	348	207
9	11490.00	61.19	74.00	-12.81	44.43	16.76	Peak	348	207
10	17235.00	61.53	68.20	-6.67	42.89	18.64	Peak	100	212

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

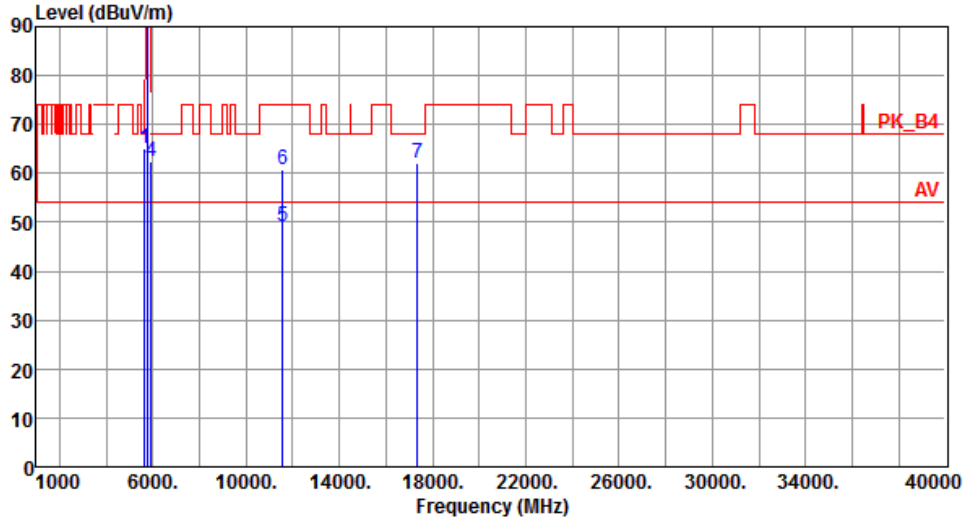
Modulation	ax (HE20)	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	63.27	68.20	-4.93	55.88	7.39	Peak	255	351
2	* 5785.00	111.38			103.50	7.88	Average	255	351
3	* 5785.00	122.40			114.52	7.88	Peak	255	351
4	5925.00	61.66	68.20	-6.54	53.59	8.07	Peak	255	351
5	11570.00	47.19	54.00	-6.81	30.58	16.61	Average	100	152
6	11570.00	58.86	74.00	-15.14	42.25	16.61	Peak	100	152
7	17355.00	61.82	68.20	-6.38	42.59	19.23	Peak	100	150

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

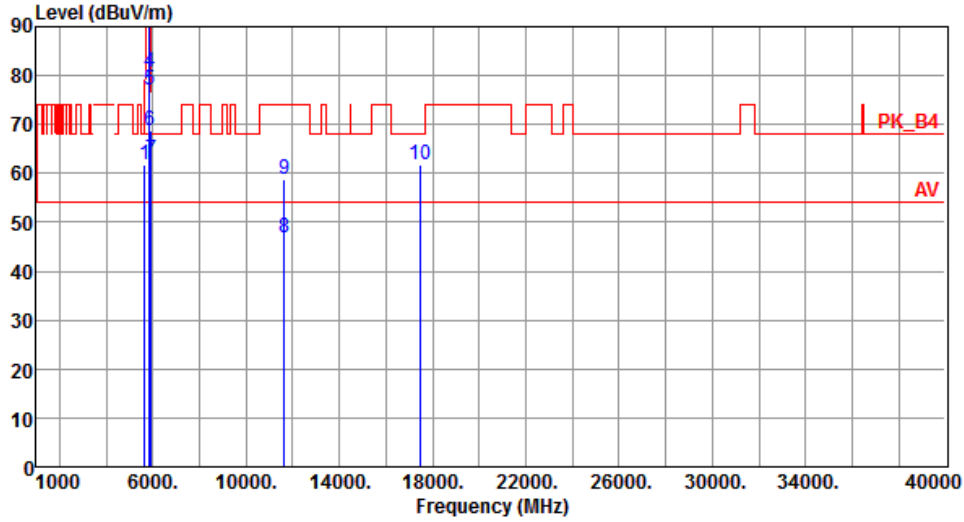
Modulation	ax (HE20)	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	64.94	68.20	-3.26	57.55	7.39	Peak	214	242
2	* 5785.00	114.96			107.08	7.88	Average	214	242
3	* 5785.00	125.71			117.83	7.88	Peak	214	242
4	5925.00	62.33	68.20	-5.87	54.26	8.07	Peak	214	242
5	11570.00	49.16	54.00	-4.84	32.55	16.61	Average	344	209
6	11570.00	60.94	74.00	-13.06	44.33	16.61	Peak	344	209
7	17355.00	62.18	68.20	-6.02	42.95	19.23	Peak	100	210

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

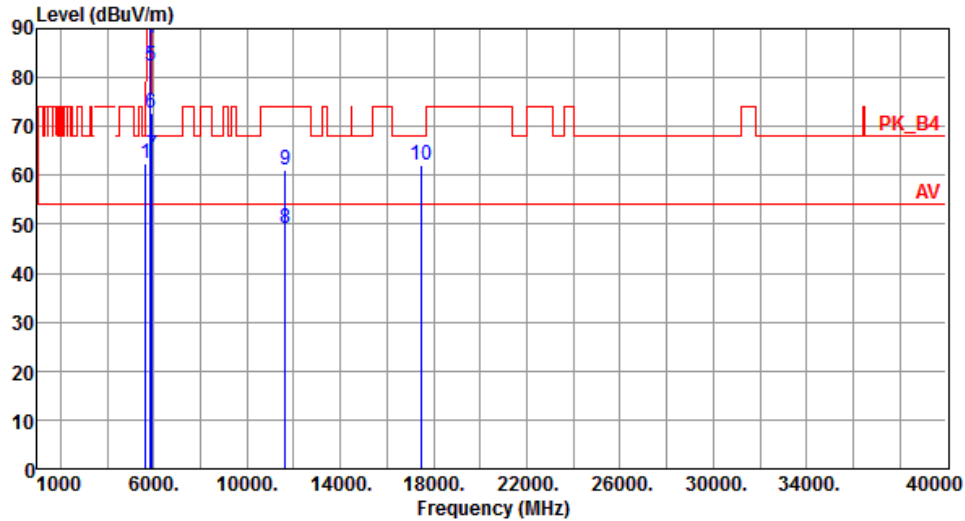
Modulation	ax (HE20)	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	61.64	68.20	-6.56	54.25	7.39	Peak	262	353
2	* 5825.00	112.17			104.21	7.96	Average	262	353
3	* 5825.00	122.22			114.26	7.96	Peak	262	353
4	5850.00	80.57	122.20	-41.63	72.55	8.02	Peak	262	353
5	5855.00	76.91	110.80	-33.89	68.89	8.02	Peak	262	353
6	5875.00	68.90	105.20	-36.30	60.87	8.03	Peak	262	353
7	5925.00	62.64	68.20	-5.56	54.57	8.07	Peak	262	353
8	11650.00	46.79	54.00	-7.21	30.41	16.38	Average	100	154
9	11650.00	58.66	74.00	-15.34	42.28	16.38	Peak	100	154
10	17475.00	61.93	68.20	-6.27	42.19	19.74	Peak	100	153

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

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



	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	62.27	68.20	-5.93	54.88	7.39	Peak	275	217
2 *	5825.00	115.16			107.20	7.96	Average	275	217
3 *	5825.00	126.62			118.66	7.96	Peak	275	217
4	5850.00	87.96	122.20	-34.24	79.94	8.02	Peak	275	217
5	5855.00	82.24	110.80	-28.56	74.22	8.02	Peak	275	217
6	5875.00	72.63	105.20	-32.57	64.60	8.03	Peak	275	217
7	5925.00	63.96	68.20	-4.24	55.89	8.07	Peak	275	217
8	11650.00	49.04	54.00	-4.96	32.66	16.38	Average	341	214
9	11650.00	60.96	74.00	-13.04	44.58	16.38	Peak	341	214
10	17475.00	62.09	68.20	-6.11	42.35	19.74	Peak	100	208

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

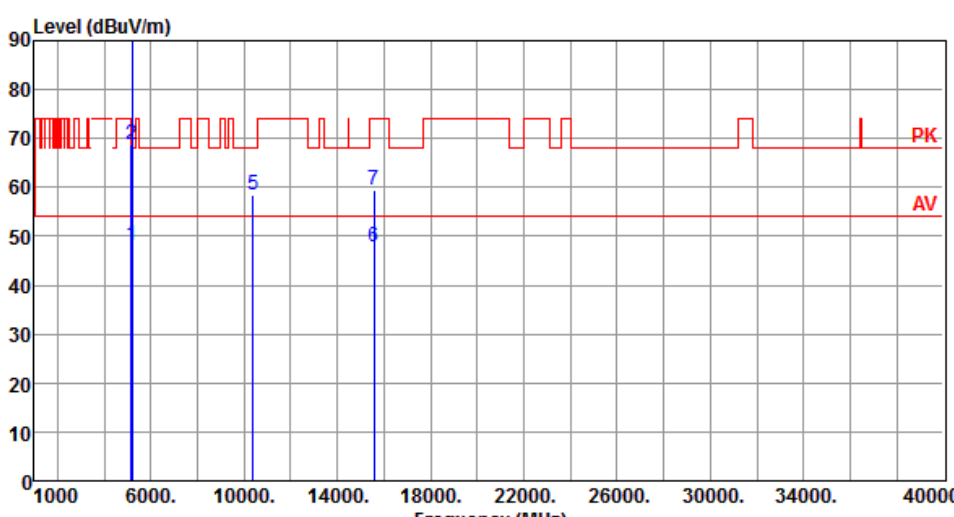
*Factor includes antenna factor , cable loss and amplifier gain

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

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

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

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



	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	48.16	54.00	-5.84	40.84	7.32	Average	252	347
2	5150.00	68.89	74.00	-5.11	61.57	7.32	Peak	252	347
3 *	5190.00	104.33			97.24	7.09	Average	252	347
4 *	5190.00	116.98			109.89	7.09	Peak	252	347
5	10380.00	58.47	68.20	-9.73	42.29	16.18	Peak	100	150
6	15570.00	47.74	54.00	-6.26	30.42	17.32	Average	100	149
7	15570.00	59.49	74.00	-14.51	42.17	17.32	Peak	100	149

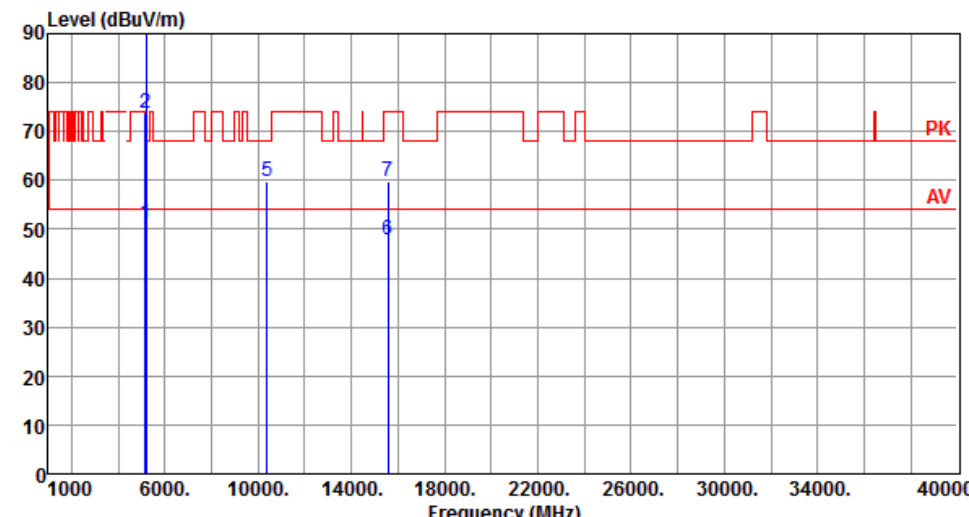
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

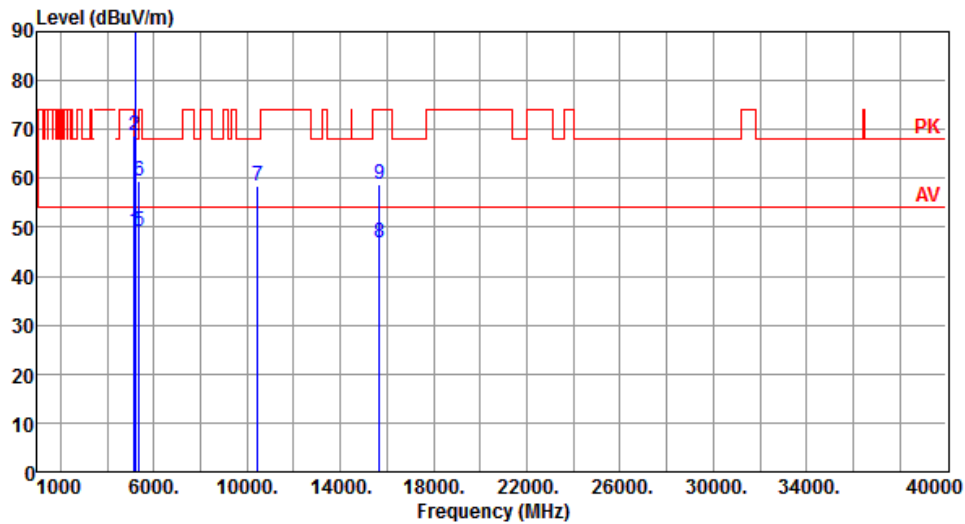
Modulation	ax (HE40)	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	51.26	54.00	-2.74	43.94	7.32	Average	258	143
2	5150.00	73.61	74.00	-0.39	66.29	7.32	Peak	258	143
3 *	5190.00	108.20			101.11	7.09	Average	258	143
4 *	5190.00	121.52			114.43	7.09	Peak	258	143
5	10380.00	59.77	68.20	-8.43	43.59	16.18	Peak	277	15
6	15570.00	47.98	54.00	-6.02	30.66	17.32	Average	100	17
7	15570.00	59.90	74.00	-14.10	42.58	17.32	Peak	100	17

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

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



	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	49.19	54.00	-4.81	41.87	7.32	Average	254	345
2	5150.00	68.83	74.00	-5.17	61.51	7.32	Peak	254	345
3 *	5230.00	107.13	---	---	100.20	6.93	Average	254	345
4 *	5230.00	117.95	---	---	111.02	6.93	Peak	254	345
5	5350.00	49.05	54.00	-4.95	42.20	6.85	Average	254	345
6	5350.00	59.35	74.00	-14.65	52.50	6.85	Peak	254	345
7	10460.00	58.59	68.20	-9.61	42.22	16.37	Peak	100	155
8	15690.00	46.97	54.00	-7.03	30.29	16.68	Average	100	148
9	15690.00	58.93	74.00	-15.07	42.25	16.68	Peak	100	148

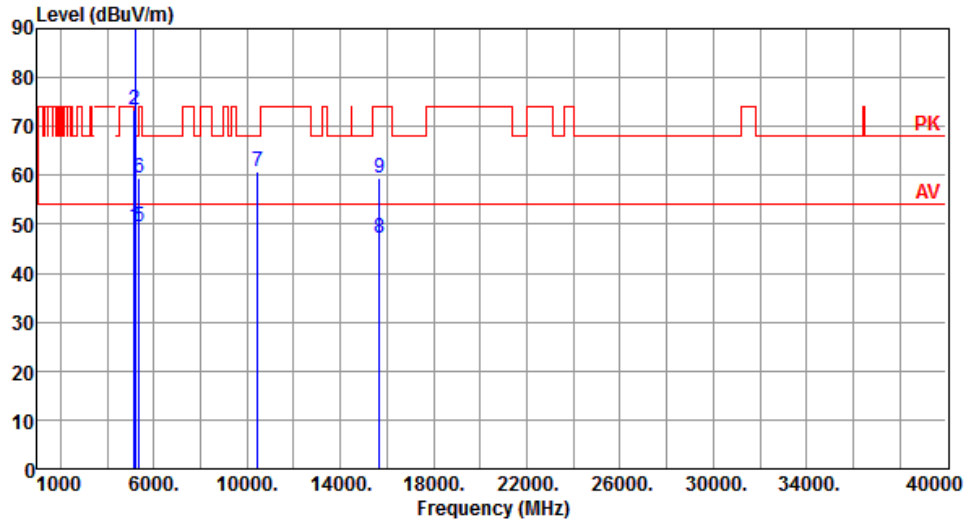
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	49.59	54.00	-4.41	42.27	7.32	Average	276	147
2	5150.00	73.36	74.00	-0.64	66.04	7.32	Peak	276	147
3 *	5230.00	111.54			104.61	6.93	Average	276	147
4 *	5230.00	122.69			115.76	6.93	Peak	276	147
5	5350.00	49.36	54.00	-4.64	42.51	6.85	Average	276	147
6	5350.00	59.51	74.00	-14.49	52.66	6.85	Peak	276	147
7	10460.00	60.63	68.20	-7.57	44.26	16.37	Peak	337	12
8	15690.00	47.21	54.00	-6.79	30.53	16.68	Average	100	14
9	15690.00	59.31	74.00	-14.69	42.63	16.68	Peak	100	14

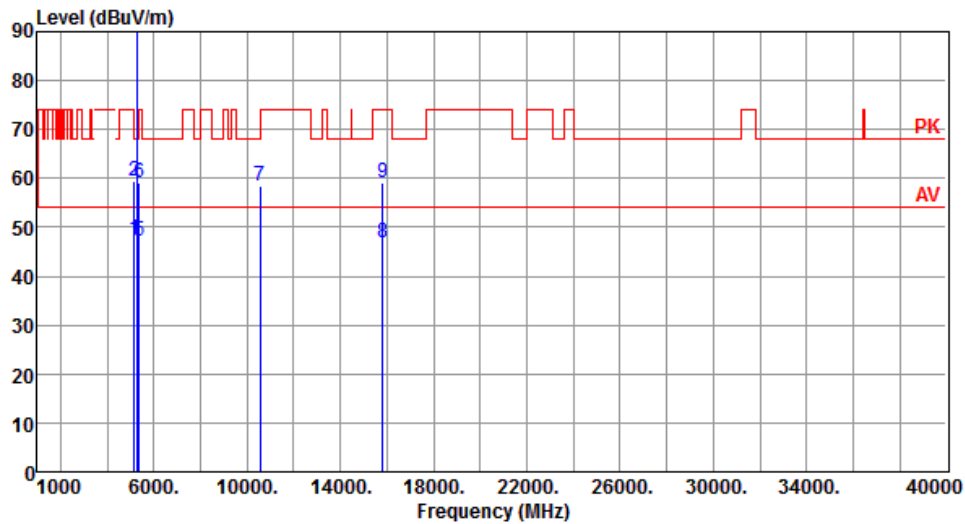
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	47.56	54.00	-6.44	40.24	7.32	Average	259	342
2	5150.00	59.56	74.00	-14.44	52.24	7.32	Peak	259	342
3 *	5270.00	100.47			93.58	6.89	Average	259	342
4 *	5270.00	110.41			103.52	6.89	Peak	259	342
5	5350.00	47.02	54.00	-6.98	40.17	6.85	Average	259	342
6	5350.00	59.02	74.00	-14.98	52.17	6.85	Peak	259	342
7	10540.00	58.61	68.20	-9.59	42.20	16.41	Peak	100	150
8	15810.00	46.99	54.00	-7.01	30.43	16.56	Average	100	148
9	15810.00	59.03	74.00	-14.97	42.47	16.56	Peak	100	148

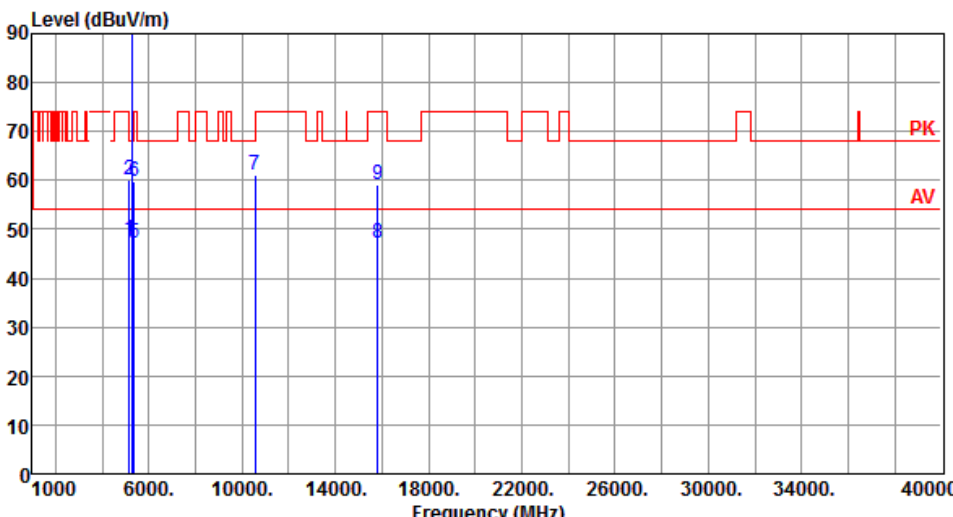
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

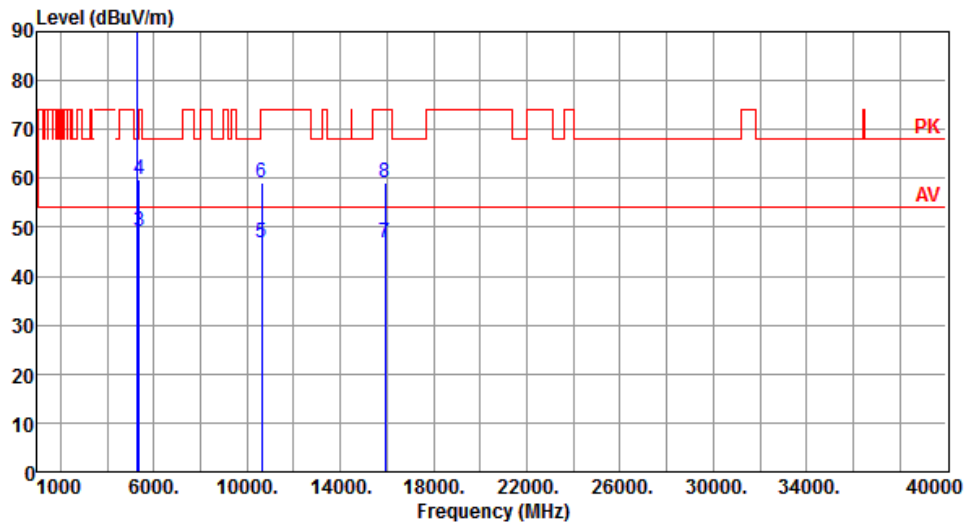
Modulation	ax (HE40)	Test Freq. (MHz)	5270
Polarization	Vertical		



	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	47.94	54.00	-6.06	40.62	7.32	Average	252	166
2	5150.00	60.02	74.00	-13.98	52.70	7.32	Peak	252	166
3 *	5270.00	104.07			97.18	6.89	Average	252	166
4 *	5270.00	114.64			107.75	6.89	Peak	252	166
5	5350.00	47.07	54.00	-6.93	40.22	6.85	Average	252	166
6	5350.00	59.71	74.00	-14.29	52.86	6.85	Peak	252	166
7	10540.00	61.15	68.20	-7.05	44.74	16.41	Peak	334	15
8	15810.00	47.27	54.00	-6.73	30.71	16.56	Average	100	12
9	15810.00	59.25	74.00	-14.75	42.69	16.56	Peak	100	12

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

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



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5310.00	100.12	---	---	93.22	6.90	Average	248	352
2	*	5310.00	110.75	---	---	103.85	6.90	Peak	248	352
3		5350.00	49.10	54.00	-4.90	42.25	6.85	Average	248	352
4		5350.00	59.81	74.00	-14.19	52.96	6.85	Peak	248	352
5		10620.00	46.90	54.00	-7.10	30.53	16.37	Average	100	158
6		10620.00	58.99	74.00	-15.01	42.62	16.37	Peak	100	158
7		15930.00	46.97	54.00	-7.03	30.36	16.61	Average	100	154
8		15930.00	59.02	74.00	-14.98	42.41	16.61	Peak	100	154

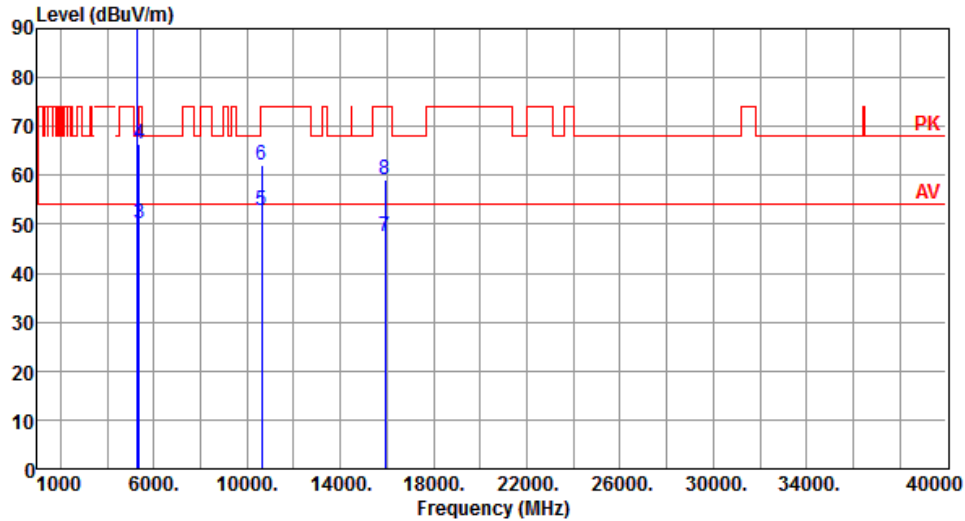
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5310.00	103.92	---	---	97.02	6.90	Average	227	199
2	*	5310.00	114.53	---	---	107.63	6.90	Peak	227	199
3		5350.00	50.04	54.00	-3.96	43.19	6.85	Average	227	146
4		5350.00	66.44	74.00	-7.56	59.59	6.85	Peak	227	146
5		10620.00	52.95	54.00	-1.05	36.58	16.37	Average	307	11
6		10620.00	62.25	74.00	-11.75	45.88	16.37	Peak	307	11
7		15930.00	47.35	54.00	-6.65	30.74	16.61	Average	100	15
8		15930.00	59.24	74.00	-14.76	42.63	16.61	Peak	100	15

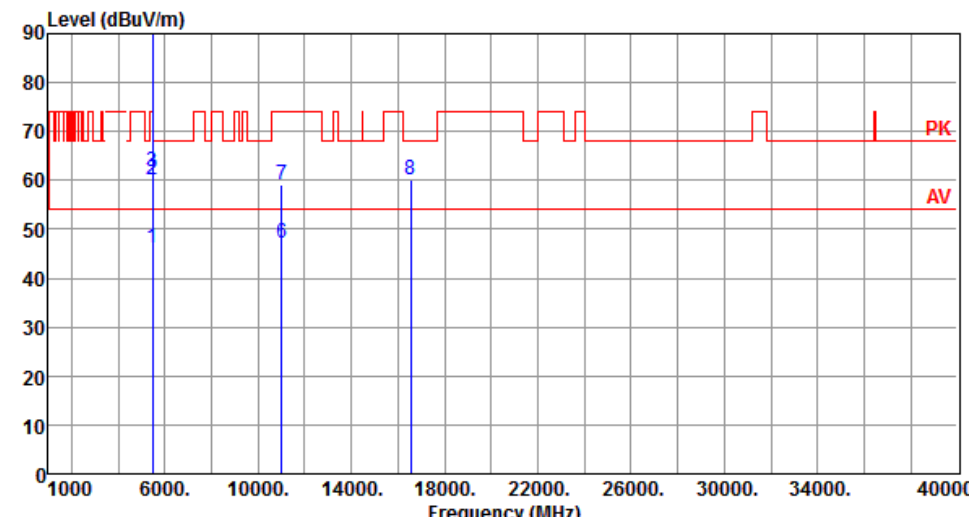
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

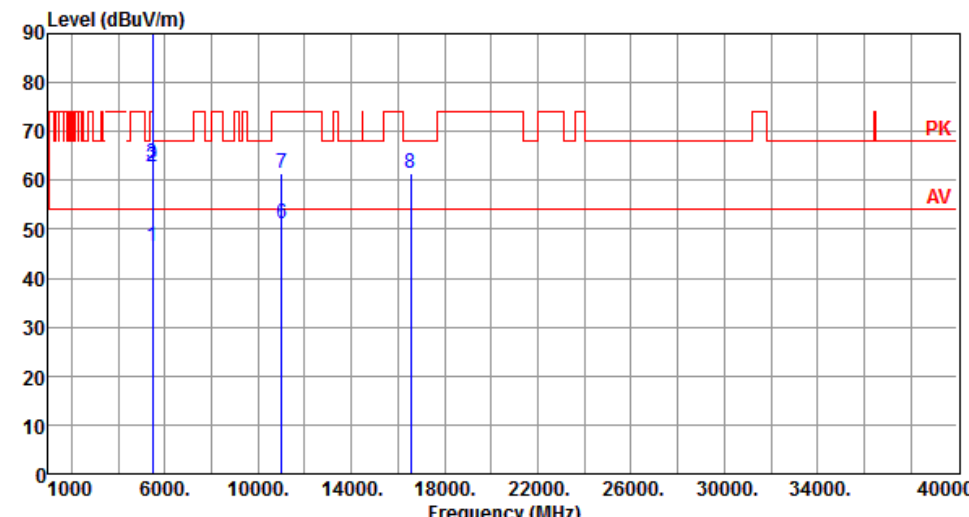
Modulation	ax (HE40)	Test Freq. (MHz)	5510
Polarization	Horizontal		



	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	46.30	54.00	-7.70	39.05	7.25	Average	252	345
2	5460.00	60.21	74.00	-13.79	52.96	7.25	Peak	252	345
3	5470.00	61.84	68.20	-6.36	54.56	7.28	Peak	252	345
4 *	5510.00	101.63			94.24	7.39	Average	252	345
5 *	5510.00	112.74			105.35	7.39	Peak	252	345
6	11020.00	47.06	54.00	-6.94	30.25	16.81	Average	100	151
7	11020.00	59.04	74.00	-14.96	42.23	16.81	Peak	100	151
8	16530.00	60.05	68.20	-8.15	42.22	17.83	Peak	100	153

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

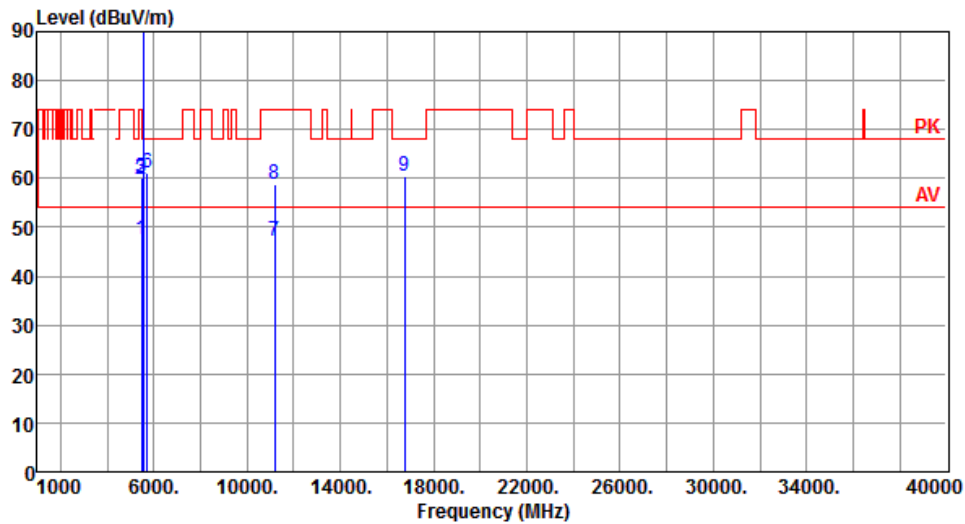
Modulation	ax (HE40)	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	46.56	54.00	-7.44	39.31	7.25	Average	246	192
2	5460.00	62.89	74.00	-11.11	55.64	7.25	Peak	246	192
3	5470.00	63.51	68.20	-4.69	56.23	7.28	Peak	246	192
4 *	5510.00	105.39			98.00	7.39	Average	246	192
5 *	5510.00	116.50			109.11	7.39	Peak	246	192
6	11020.00	50.98	54.00	-3.02	34.17	16.81	Average	224	277
7	11020.00	61.39	74.00	-12.61	44.58	16.81	Peak	224	277
8	16530.00	61.41	68.20	-6.79	43.58	17.83	Peak	100	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).
Note 3: "*" is Peak / Average value of fundamental frequency

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



	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	47.58	54.00	-6.42	40.33	7.25	Average	259	340
2	5460.00	59.66	74.00	-14.34	52.41	7.25	Peak	259	340
3	5470.00	60.16	68.20	-8.04	52.88	7.28	Peak	259	340
4 *	5590.00	102.00			94.52	7.48	Average	259	340
5 *	5590.00	113.71			106.23	7.48	Peak	259	340
6	5725.00	61.06	68.20	-7.14	53.40	7.66	Peak	259	340
7	11180.00	47.14	54.00	-6.86	30.58	16.56	Average	100	146
8	11180.00	58.84	74.00	-15.16	42.28	16.56	Peak	100	146
9	16770.00	60.46	68.20	-7.74	42.23	18.23	Peak	100	150

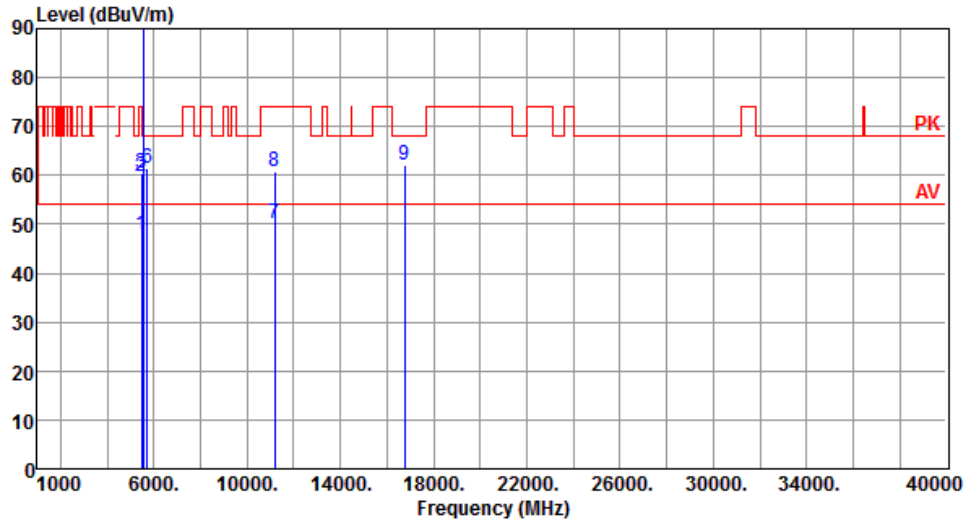
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	47.95	54.00	-6.05	40.70	7.25	Average	288	175
2	5460.00	59.94	74.00	-14.06	52.69	7.25	Peak	288	175
3	5470.00	60.45	68.20	-7.75	53.17	7.28	Peak	288	175
4 *	5590.00	106.08			98.60	7.48	Average	288	175
5 *	5590.00	117.65			110.17	7.48	Peak	288	175
6	5725.00	61.28	68.20	-6.92	53.62	7.66	Peak	288	175
7	11180.00	50.26	54.00	-3.74	33.70	16.56	Average	225	296
8	11180.00	60.85	74.00	-13.15	44.29	16.56	Peak	225	296
9	16770.00	61.97	68.20	-6.23	43.74	18.23	Peak	100	278

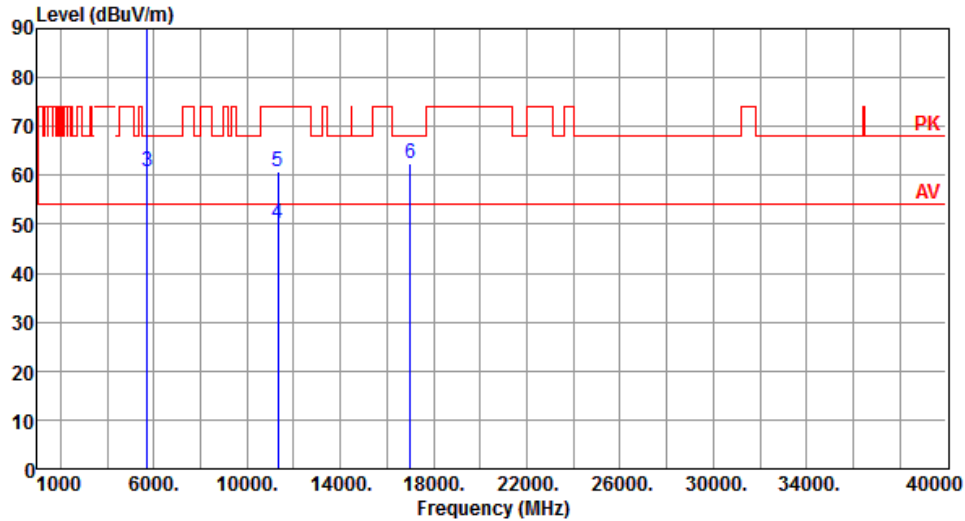
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5670.00	105.90			98.47	7.43	Average	299	182
2	*	5670.00	116.43			109.00	7.43	Peak	299	182
3		5725.00	60.61	68.20	-7.59	52.95	7.66	Peak	299	182
4		11340.00	50.16	54.00	-3.84	33.58	16.58	Average	221	293
5		11340.00	60.75	74.00	-13.25	44.17	16.58	Peak	221	293
6		17010.00	62.53	68.20	-5.67	43.87	18.66	Peak	100	288

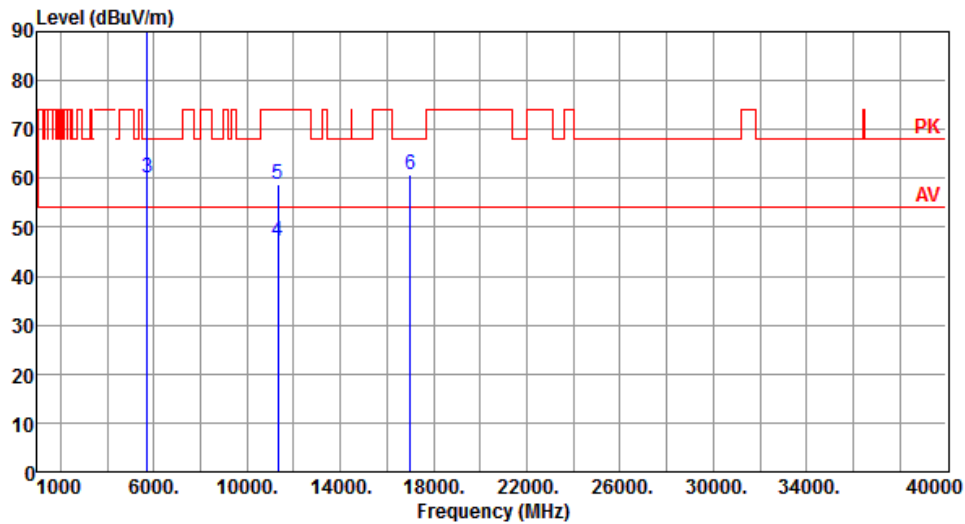
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5670.00	101.95	---	---	94.52	7.43	Average	248	352
2	*	5670.00	112.66	---	---	105.23	7.43	Peak	248	352
3		5725.00	60.15	68.20	-8.05	52.49	7.66	Peak	248	352
4		11340.00	47.10	54.00	-6.90	30.52	16.58	Average	100	157
5		11340.00	58.78	74.00	-15.22	42.20	16.58	Peak	100	157
6		17010.00	60.89	68.20	-7.31	42.23	18.66	Peak	100	155

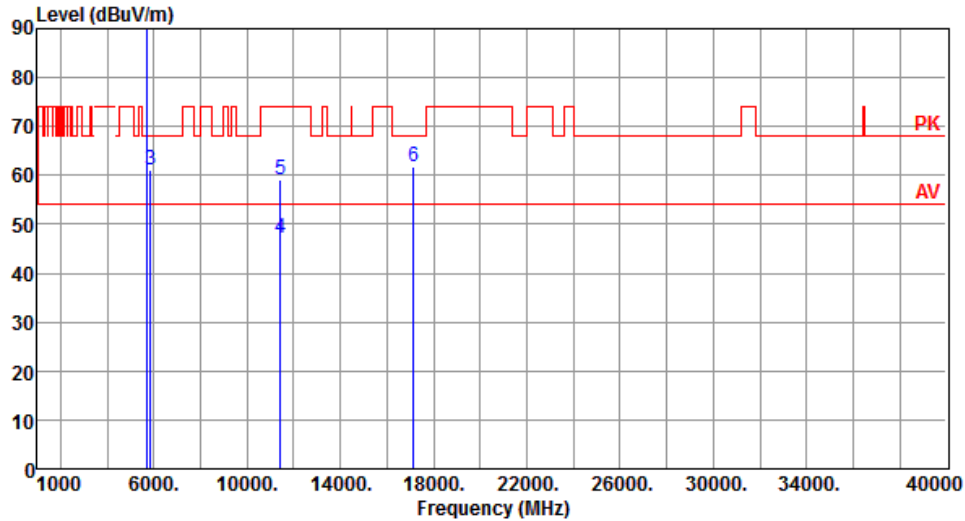
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5710.00	102.18	---	---	94.62	7.56	Average	254	342
2	*	5710.00	112.59	---	---	105.03	7.56	Peak	254	342
3		5850.00	61.23	68.20	-6.97	53.21	8.02	Peak	254	342
4		11420.00	46.99	54.00	-7.01	30.26	16.73	Average	100	145
5		11420.00	59.09	74.00	-14.91	42.36	16.73	Peak	100	145
6		17130.00	61.82	68.20	-6.38	43.52	18.30	Peak	100	60

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

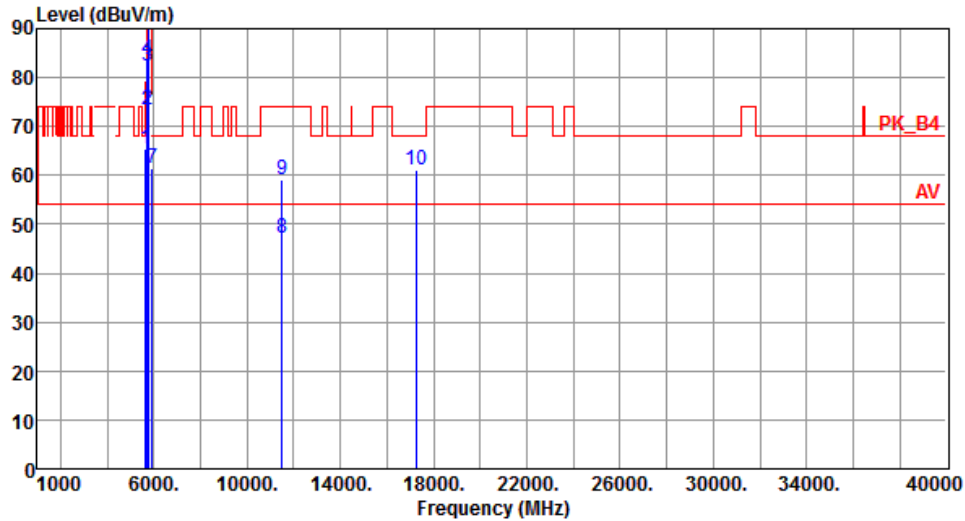
*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5710
Polarization	Vertical		
Level (dBuV/m)			

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



	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	65.26	68.20	-2.94	57.87	7.39	Peak	259	342
2	5700.00	73.39	105.20	-31.81	65.89	7.50	Peak	259	342
3	5720.00	82.49	110.80	-28.31	74.87	7.62	Peak	259	342
4	5725.00	83.61	122.20	-38.59	75.95	7.66	Peak	259	342
5 *	5755.00	108.11			100.30	7.81	Average	259	342
6 *	5755.00	120.10			112.29	7.81	Peak	259	342
7	5925.00	61.33	68.20	-6.87	53.26	8.07	Peak	259	342
8	11510.00	47.30	54.00	-6.70	30.55	16.75	Average	100	150
9	11510.00	59.00	74.00	-15.00	42.25	16.75	Peak	100	150
10	17265.00	61.19	68.20	-7.01	42.38	18.81	Peak	100	147

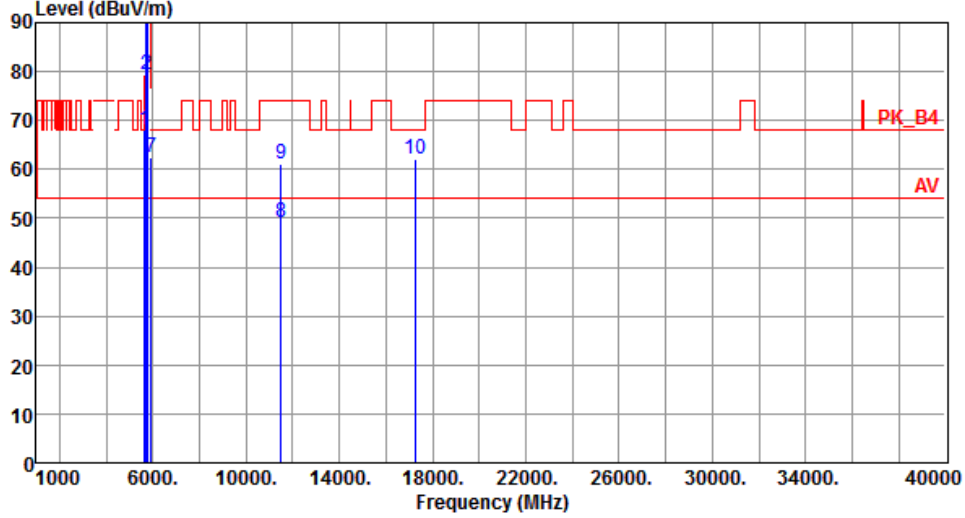
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

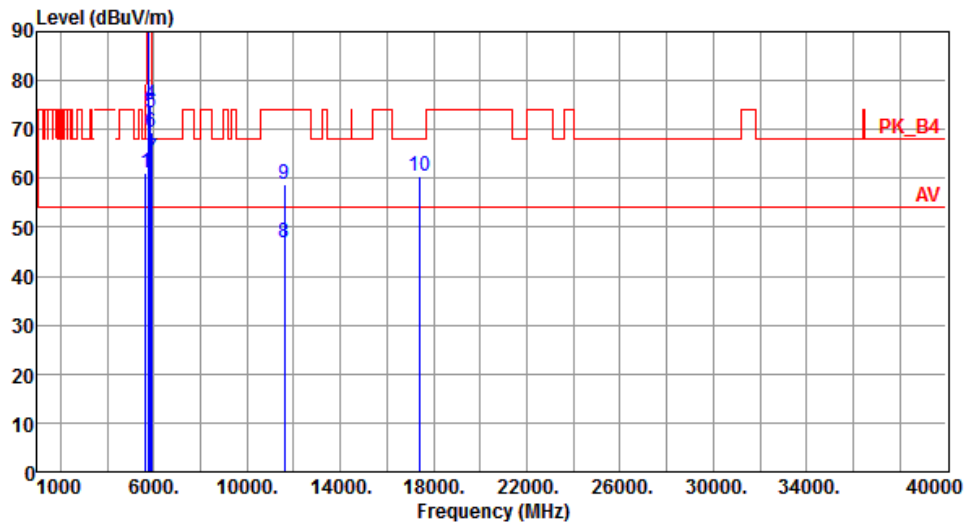
Modulation	ax (HE40)	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	68.07	68.20	-0.13	60.68	7.39	Peak	253	192
2	5700.00	79.36	105.20	-25.84	71.86	7.50	Peak	253	192
3	5720.00	91.18	110.80	-19.62	83.56	7.62	Peak	253	192
4	5725.00	94.23	122.20	-27.97	86.57	7.66	Peak	253	192
5 *	5755.00	112.26			104.45	7.81	Average	253	192
6 *	5755.00	124.47			116.66	7.81	Peak	253	192
7	5925.00	62.49	68.20	-5.71	54.42	8.07	Peak	253	192
8	11510.00	49.19	54.00	-4.81	32.44	16.75	Average	341	232
9	11510.00	61.03	74.00	-12.97	44.28	16.75	Peak	341	232
10	17265.00	62.05	68.20	-6.15	43.24	18.81	Peak	100	233

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

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



	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	61.26	68.20	-6.94	53.87	7.39	Peak	266	340
2	* 5795.00	108.88			100.98	7.90	Average	266	340
3	* 5795.00	121.42			113.52	7.90	Peak	266	340
4	5850.00	75.00	122.20	-47.20	66.98	8.02	Peak	266	340
5	5855.00	73.27	110.80	-37.53	65.25	8.02	Peak	266	340
6	5875.00	69.54	105.20	-35.66	61.51	8.03	Peak	266	340
7	5925.00	63.96	68.20	-4.24	55.89	8.07	Peak	266	340
8	11590.00	46.81	54.00	-7.19	30.24	16.57	Average	100	152
9	11590.00	58.76	74.00	-15.24	42.19	16.57	Peak	100	152
10	17385.00	60.53	68.20	-7.67	41.18	19.35	Peak	100	144

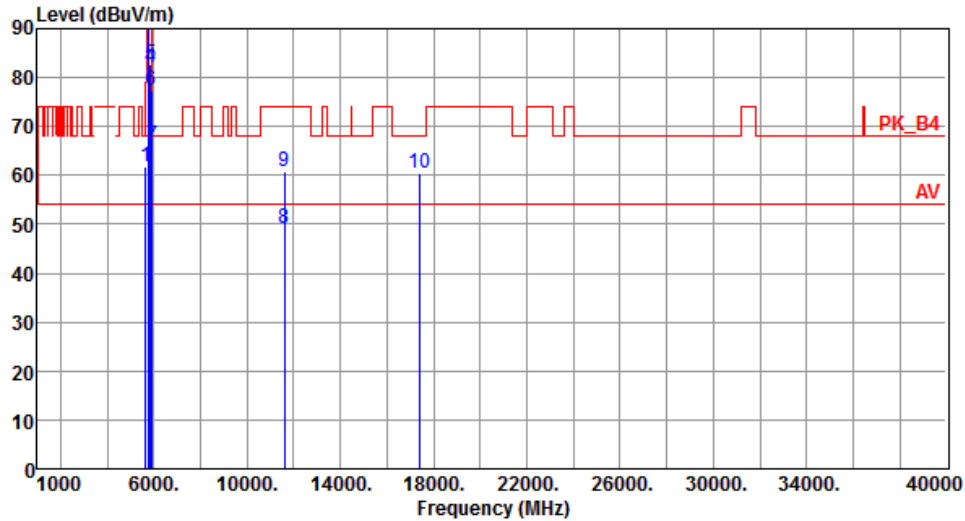
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	61.64	68.20	-6.56	54.25	7.39	Peak	248	199
2	* 5795.00	112.85			104.95	7.90	Average	248	199
3	* 5795.00	125.32			117.42	7.90	Peak	248	199
4	5850.00	81.89	122.20	-40.31	73.87	8.02	Peak	248	199
5	5855.00	82.85	110.80	-27.95	74.83	8.02	Peak	248	199
6	5875.00	77.33	105.20	-27.87	69.30	8.03	Peak	248	199
7	5925.00	65.97	68.20	-2.23	57.90	8.07	Peak	248	199
8	11590.00	49.06	54.00	-4.94	32.49	16.57	Average	341	204
9	11590.00	60.74	74.00	-13.26	44.17	16.57	Peak	341	204
10	17385.00	60.57	68.20	-7.63	41.22	19.35	Peak	248	199

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

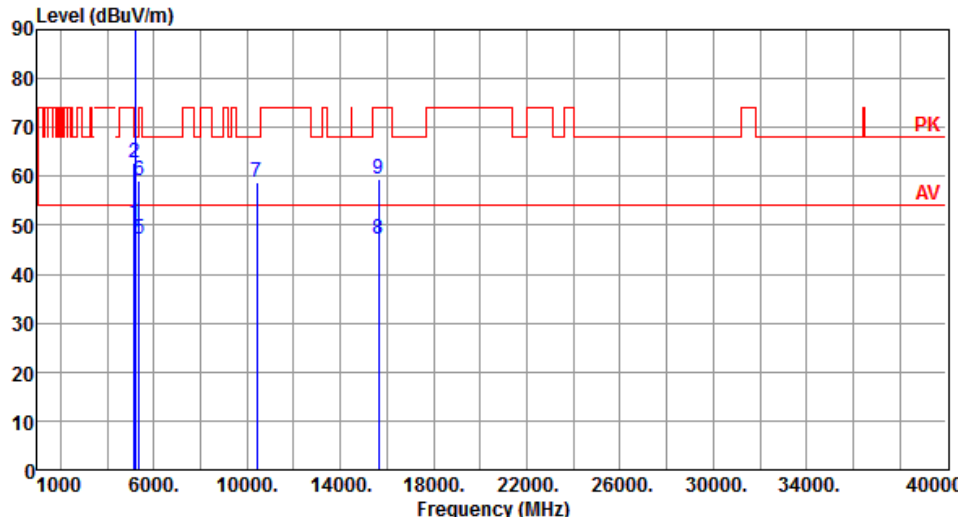
*Factor includes antenna factor , cable loss and amplifier gain

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

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

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

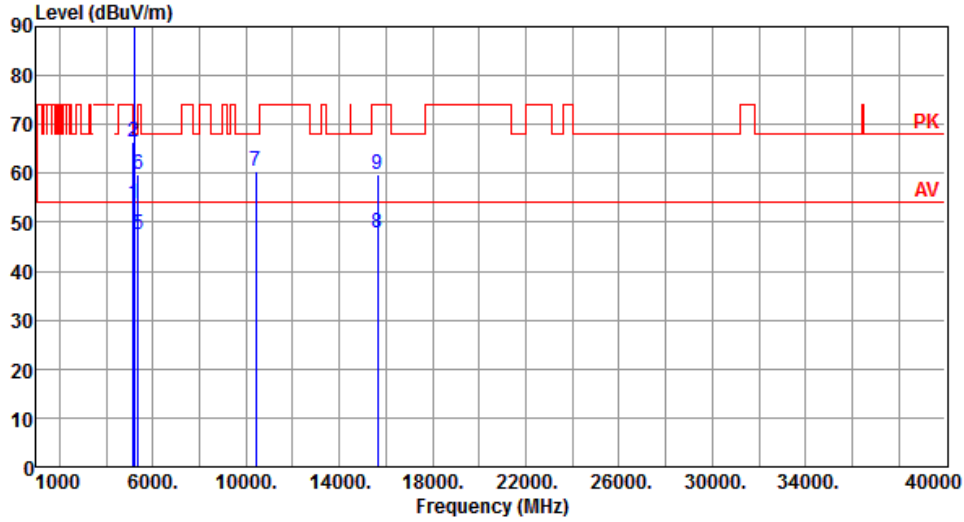
Modulation	ax (HE80)		Test Freq. (MHz)		5210				
Polarization	Horizontal								



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	dBuV/m	dBuV/m	dB	reading	dB		High	Table
					dBuV			cm	deg
1	5150.00	50.52	54.00	-3.48	43.20	7.32	Average	243	6
2	5150.00	62.85	74.00	-11.15	55.53	7.32	Peak	243	6
3 *	5210.00	102.66			95.66	7.00	Average	234	347
4 *	5210.00	113.72			106.72	7.00	Peak	234	347
5	5350.00	47.00	54.00	-7.00	40.15	6.85	Average	234	347
6	5350.00	59.07	74.00	-14.93	52.22	6.85	Peak	234	347
7	10420.00	58.70	68.20	-9.50	42.39	16.31	Peak	100	152
8	15630.00	47.31	54.00	-6.69	30.23	17.08	Average	100	155
9	15630.00	59.54	74.00	-14.46	42.46	17.08	Peak	100	155

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

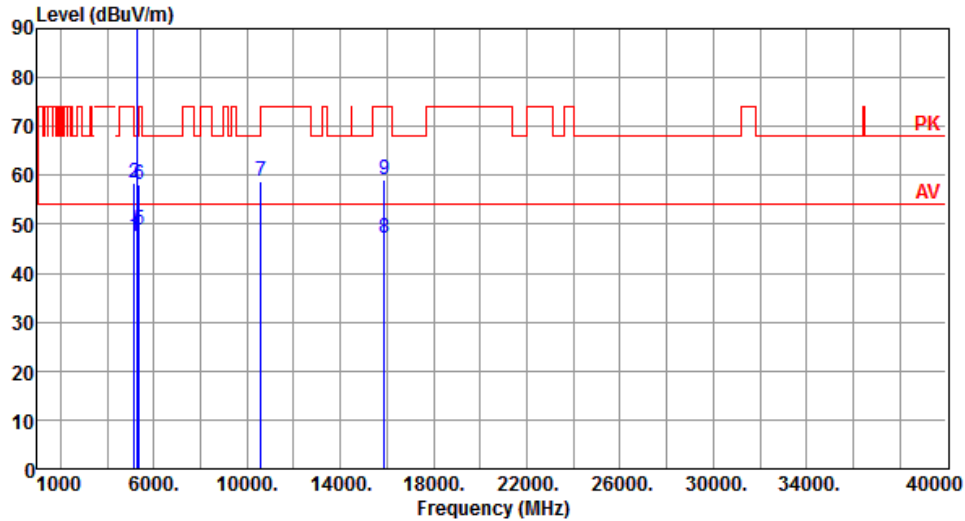
Modulation	ax (HE80)	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	53.65	54.00	-0.35	46.33	7.32	Average	226	143
2	5150.00	66.36	74.00	-7.64	59.04	7.32	Peak	226	143
3 *	5210.00	105.08			98.08	7.00	Average	291	184
4 *	5210.00	115.81			108.81	7.00	Peak	291	184
5	5350.00	47.37	54.00	-6.63	40.52	6.85	Average	291	184
6	5350.00	59.62	74.00	-14.38	52.77	6.85	Peak	291	184
7	10420.00	60.54	68.20	-7.66	44.23	16.31	Peak	333	14
8	15630.00	47.73	54.00	-6.27	30.65	17.08	Average	100	13
9	15630.00	59.91	74.00	-14.09	42.83	17.08	Peak	100	13

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

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



	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	47.52	54.00	-6.48	40.20	7.32	Average	265	359
2	5150.00	58.56	74.00	-15.44	51.24	7.32	Peak	265	359
3 *	5290.00	99.80	---	---	92.90	6.90	Average	265	359
4 *	5290.00	112.15	---	---	105.25	6.90	Peak	265	359
5	5350.00	48.80	54.00	-5.20	41.95	6.85	Average	265	359
6	5350.00	58.10	74.00	-15.90	51.25	6.85	Peak	265	359
7	10580.00	58.94	68.20	-9.26	42.57	16.37	Peak	100	149
8	15870.00	47.10	54.00	-6.90	30.46	16.64	Average	100	148
9	15870.00	59.04	74.00	-14.96	42.40	16.64	Peak	100	148

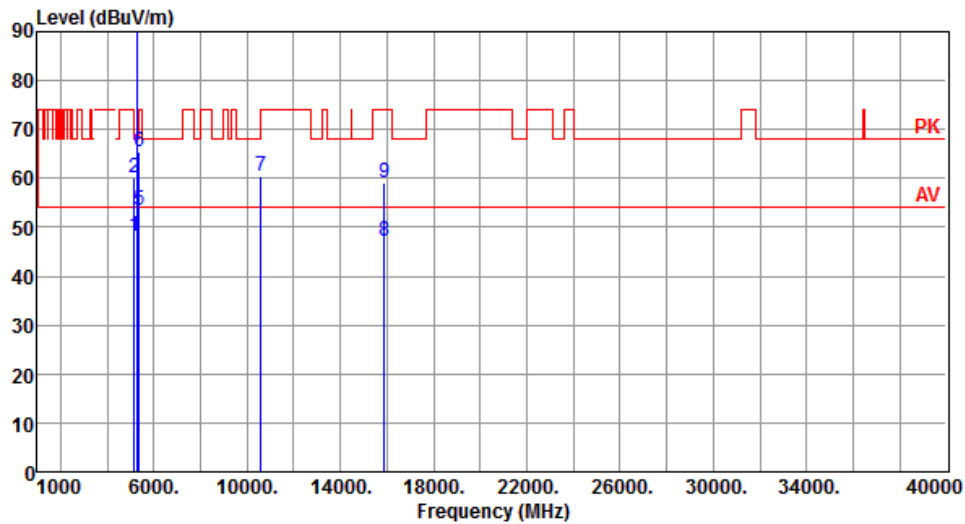
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	48.01	54.00	-5.99	40.69	7.32	Average	240	161
2	5150.00	60.03	74.00	-13.97	52.71	7.32	Peak	240	161
3 *	5290.00	103.39			96.49	6.90	Average	240	161
4 *	5290.00	113.44			106.54	6.90	Peak	240	161
5	5350.00	53.37	54.00	-0.63	46.52	6.85	Average	240	39
6	5350.00	65.31	74.00	-8.69	58.46	6.85	Peak	240	39
7	10580.00	60.46	68.20	-7.74	44.09	16.37	Peak	100	15
8	15870.00	47.25	54.00	-6.75	30.61	16.64	Average	100	13
9	15870.00	59.17	74.00	-14.83	42.53	16.64	Peak	100	13

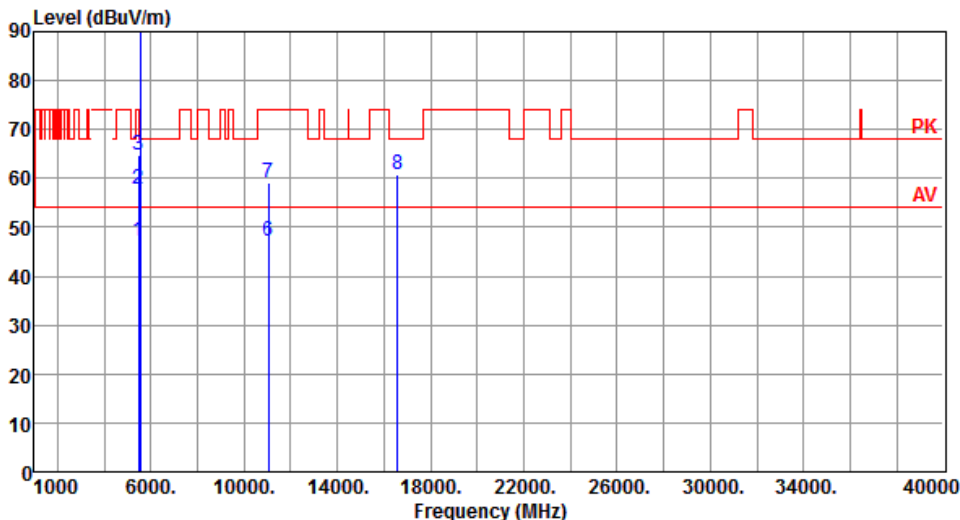
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

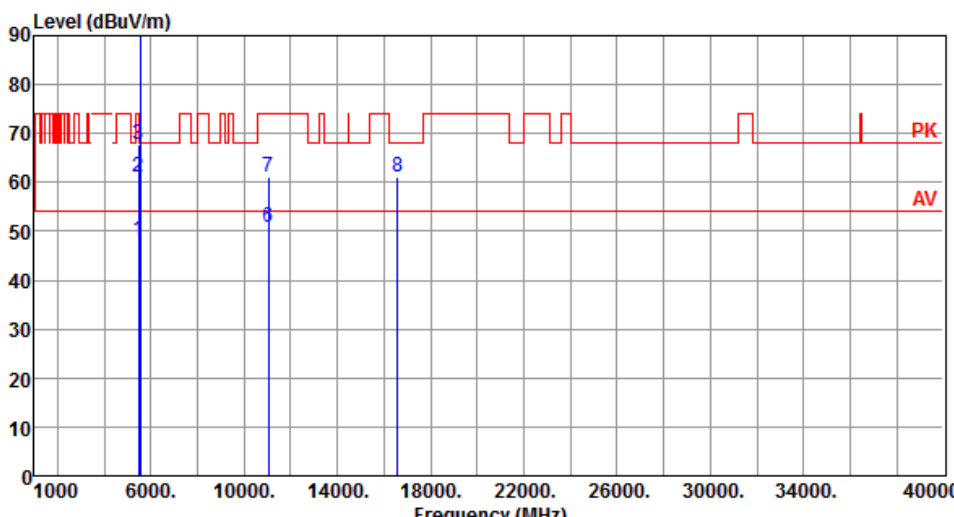
Modulation	ax (HE80)	Test Freq. (MHz)	5530
Polarization	Horizontal		



	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	47.25	54.00	-6.75	40.00	7.25	Average	252	351
2	5460.00	57.62	74.00	-16.38	50.37	7.25	Peak	252	351
3	5470.00	64.84	68.20	-3.36	57.56	7.28	Peak	252	351
4 *	5530.00	99.05			91.62	7.43	Average	252	351
5 *	5530.00	109.88			102.45	7.43	Peak	252	351
6	11060.00	47.08	54.00	-6.92	30.33	16.75	Average	100	147
7	11060.00	59.14	74.00	-14.86	42.39	16.75	Peak	100	147
8	16590.00	60.69	68.20	-7.51	42.48	18.21	Peak	100	144

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

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



	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	48.26	54.00	-5.74	41.01	7.25	Average	228	196
2	5460.00	61.19	74.00	-12.81	53.94	7.25	Peak	228	196
3	5470.00	67.74	68.20	-0.46	60.46	7.28	Peak	276	136
4 *	5530.00	102.45			95.02	7.43	Average	228	196
5 *	5530.00	114.88			107.45	7.43	Peak	228	196
6	11060.00	50.77	54.00	-3.23	34.02	16.75	Average	320	296
7	11060.00	61.22	74.00	-12.78	44.47	16.75	Peak	320	296
8	16590.00	61.06	68.20	-7.14	42.85	18.21	Peak	100	297

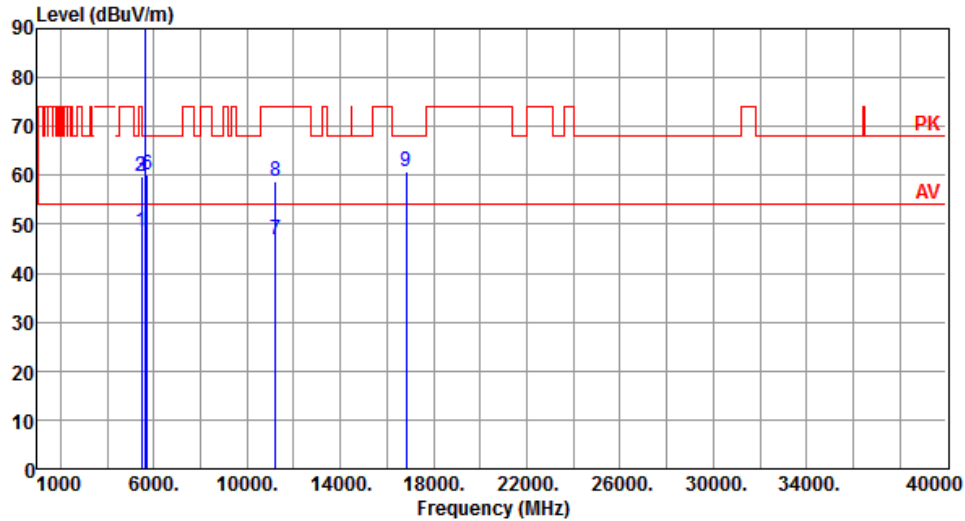
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	48.54	54.00	-5.46	41.29	7.25	Average	256	344
2	5460.00	59.66	74.00	-14.34	52.41	7.25	Peak	256	344
3	5470.00	59.75	68.20	-8.45	52.47	7.28	Peak	256	344
4 *	5610.00	99.37			91.90	7.47	Average	256	344
5 *	5610.00	110.92			103.45	7.47	Peak	256	344
6	5725.00	60.06	68.20	-8.14	52.40	7.66	Peak	256	344
7	11220.00	46.80	54.00	-7.20	30.28	16.52	Average	100	150
8	11220.00	58.91	74.00	-15.09	42.39	16.52	Peak	100	150
9	16830.00	60.74	68.20	-7.46	42.40	18.34	Peak	100	151

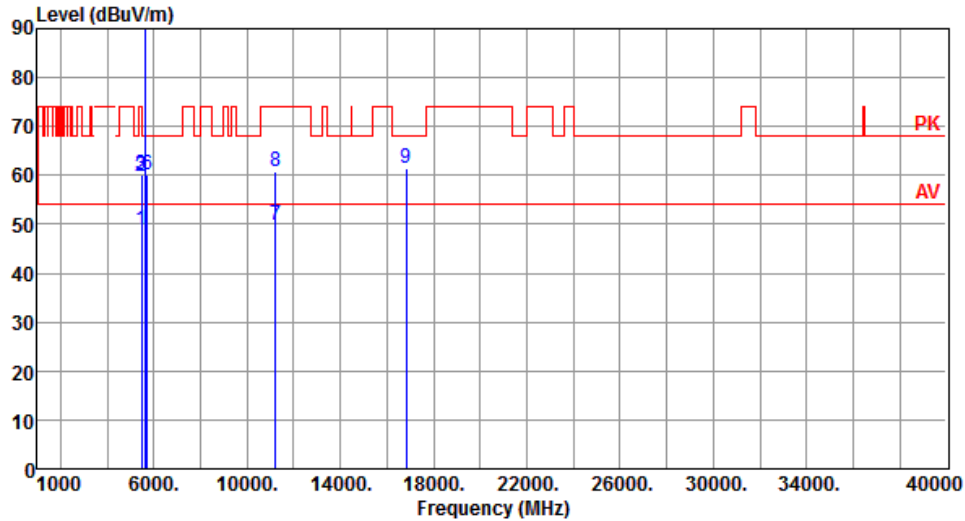
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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



	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	48.80	54.00	-5.20	41.55	7.25	Average	239	194
2	5460.00	59.88	74.00	-14.12	52.63	7.25	Peak	239	194
3	5470.00	60.01	68.20	-8.19	52.73	7.28	Peak	239	194
4 *	5610.00	103.21			95.74	7.47	Average	239	194
5 *	5610.00	114.85			107.38	7.47	Peak	239	194
6	5725.00	60.21	68.20	-7.99	52.55	7.66	Peak	239	194
7	11220.00	49.77	54.00	-4.23	33.25	16.52	Average	321	294
8	11220.00	60.73	74.00	-13.27	44.21	16.52	Peak	321	294
9	16830.00	61.59	68.20	-6.61	43.25	18.34	Peak	100	295

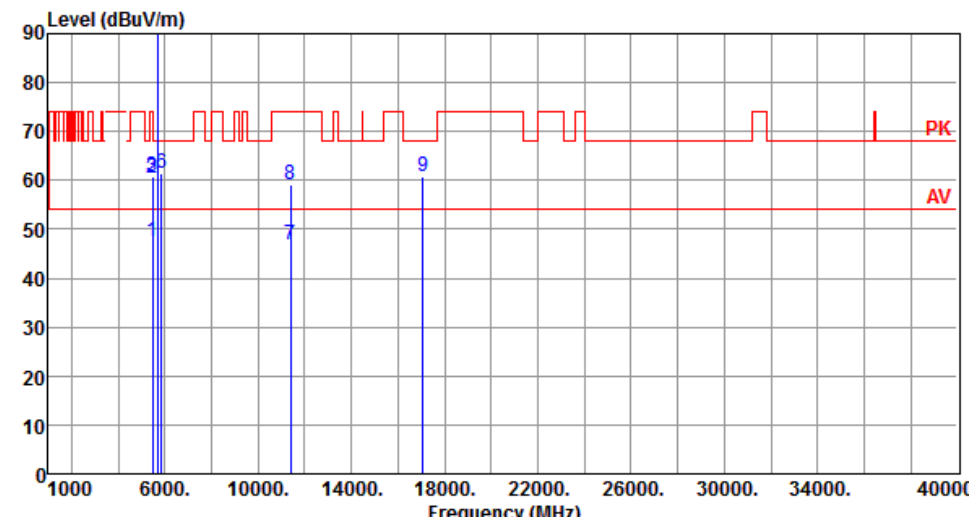
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

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

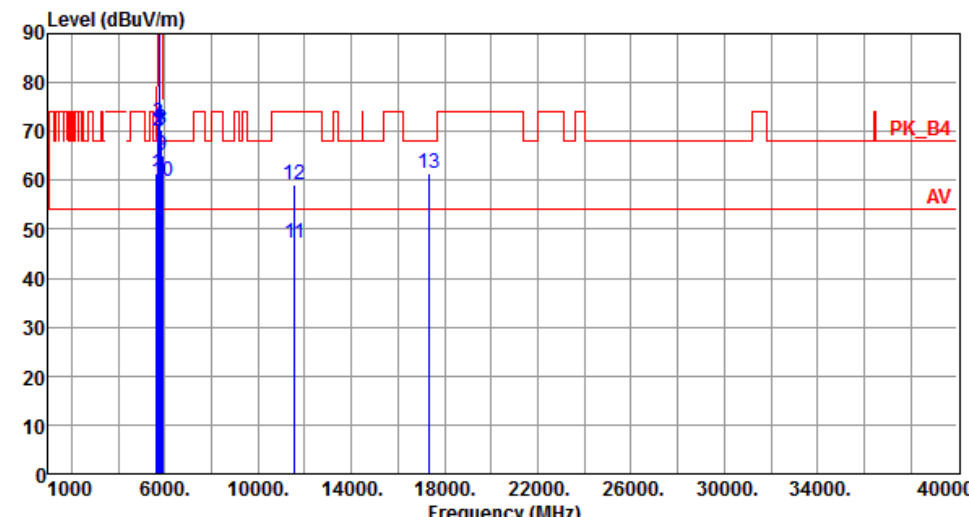


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.38	54.00	-6.62	40.13	7.25	Average	255	348
2	5460.00	60.46	74.00	-13.54	53.21	7.25	Peak	255	348
3	5470.00	60.70	68.20	-7.50	53.42	7.28	Peak	255	348
4 *	5690.00	100.06			92.59	7.47	Average	255	348
5 *	5690.00	111.04			103.57	7.47	Peak	255	348
6	5850.00	61.44	68.20	-6.76	53.42	8.02	Peak	255	348
7	11380.00	46.93	54.00	-7.07	30.25	16.68	Average	100	140
8	11380.00	59.20	74.00	-14.80	42.52	16.68	Peak	100	140
9	17070.00	60.93	68.20	-7.27	42.55	18.38	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).
 Note 3: "*" is Peak / Average value of fundamental frequency

Modulation	ax (HE80)	Test Freq. (MHz)	5690
Polarization	Vertical		
Level (dBuV/m) </			

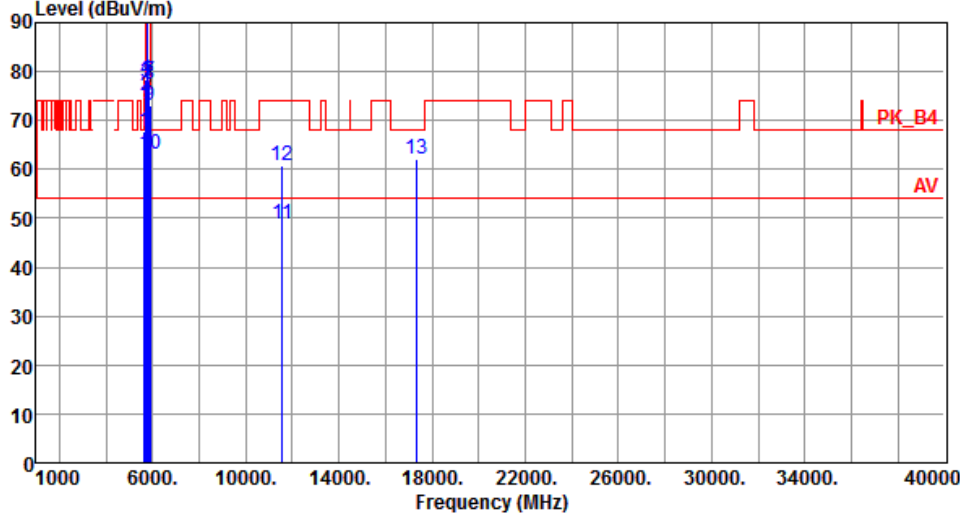
Modulation	ax (HE80)	Test Freq. (MHz)	5775
Polarization	Horizontal		



	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	61.38	68.20	-6.82	53.99	7.39	Peak	158	345
2	5700.00	70.16	105.20	-35.04	62.66	7.50	Peak	158	345
3	5720.00	71.88	110.80	-38.92	64.26	7.62	Peak	158	345
4	5725.00	71.33	122.20	-50.87	63.67	7.66	Peak	158	345
5	* 5775.00	104.74			96.88	7.86	Average	158	345
6	* 5775.00	116.72			108.86	7.86	Peak	158	345
7	5850.00	69.81	122.20	-52.39	61.79	8.02	Peak	158	345
8	5855.00	70.49	110.80	-40.31	62.47	8.02	Peak	158	345
9	5875.00	65.14	105.20	-40.06	57.11	8.03	Peak	158	345
10	5925.00	59.87	68.20	-8.33	51.80	8.07	Peak	158	345
11	11550.00	47.08	54.00	-6.92	30.42	16.66	Average	100	153
12	11550.00	59.08	74.00	-14.92	42.42	16.66	Peak	100	153
13	17325.00	61.58	68.20	-6.62	42.49	19.09	Peak	100	150

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

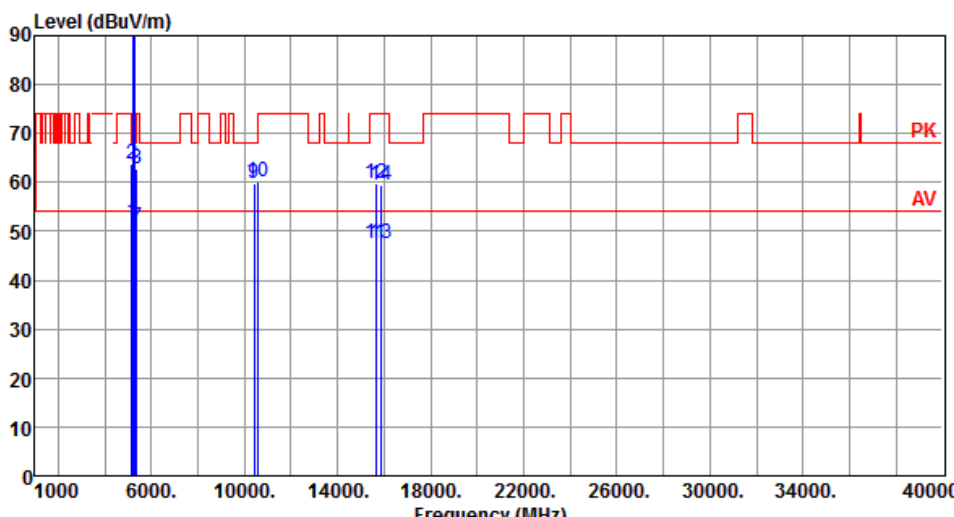
Modulation	ax (HE80)	Test Freq. (MHz)	5775
Polarization	Vertical		



	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	67.72	68.20	-0.48	60.33	7.39	Peak	228	158
2	5700.00	74.91	105.20	-30.29	67.41	7.50	Peak	228	158
3	5720.00	77.69	110.80	-33.11	70.07	7.62	Peak	228	158
4	5725.00	78.27	122.20	-43.93	70.61	7.66	Peak	228	158
5	* 5775.00	108.18			100.32	7.86	Average	228	158
6	* 5775.00	119.12			111.26	7.86	Peak	228	158
7	5850.00	78.12	122.20	-44.08	70.10	8.02	Peak	228	158
8	5855.00	77.40	110.80	-33.40	69.38	8.02	Peak	228	158
9	5875.00	72.92	105.20	-32.28	64.89	8.03	Peak	228	158
10	5925.00	63.13	68.20	-5.07	55.06	8.07	Peak	228	158
11	11550.00	48.76	54.00	-5.24	32.10	16.66	Average	302	235
12	11550.00	60.62	74.00	-13.38	43.96	16.66	Peak	302	235
13	17325.00	61.96	68.20	-6.24	42.87	19.09	Peak	100	240

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

Modulation	ax (HE80+80)	Test Freq. (MHz)	5210 + 5290
Polarization	Vertical		



The spectrum plot shows the emission level in dBuV/m across a frequency range from 1000 to 40000 MHz. The y-axis ranges from 0 to 90 dBuV/m. A red line represents the emission level, and a blue line represents the limit. The emission level is generally below the limit, with some peaks exceeding it. The plot is labeled with 'PK' and 'AV'.

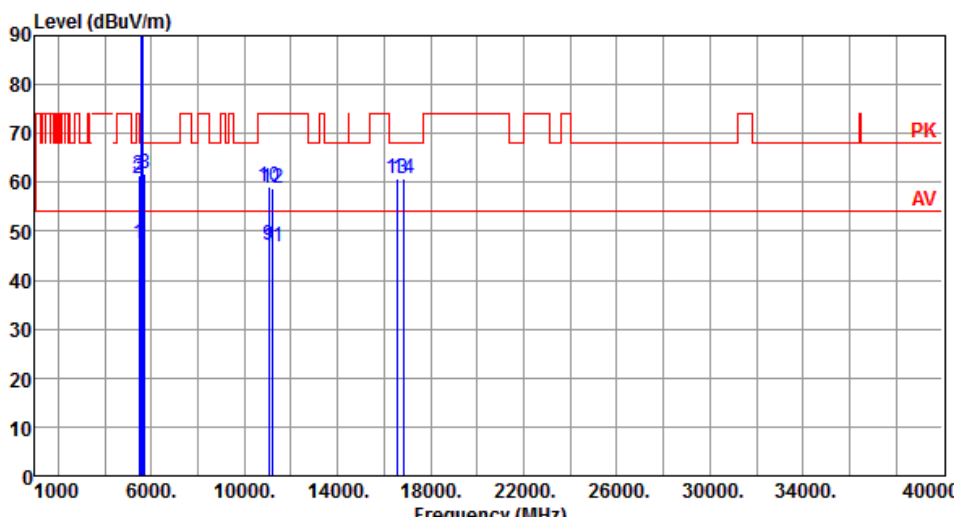
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.81	54.00	-2.19	44.49	7.32	Average	298	143
2	5150.00	63.85	74.00	-10.15	56.53	7.32	Peak	298	143
3 *	5210.00	102.58			95.58	7.00	Average	298	143
4 *	5210.00	114.71			107.71	7.00	Peak	298	143
5 *	5290.00	101.15			94.25	6.90	Average	319	209
6 *	5290.00	113.16			106.26	6.90	Peak	319	209
7	5350.00	50.97	54.00	-3.03	44.12	6.85	Average	319	209
8	5350.00	62.68	74.00	-11.32	55.83	6.85	Peak	319	209
9	10420.00	59.83	68.20	-8.37	43.52	16.31	Peak	258	16
10	10580.00	60.09	68.20	-8.11	43.72	16.37	Peak	266	14
11	15630.00	47.60	54.00	-6.40	30.52	17.08	Average	100	16
12	15630.00	59.63	74.00	-14.37	42.55	17.08	Peak	100	16
13	15870.00	47.43	54.00	-6.57	30.79	16.64	Average	100	19
14	15870.00	59.34	74.00	-14.66	42.70	16.64	Peak	100	19

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

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

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

Modulation	ax (HE80+80)		Test Freq. (MHz)	5530 + 5610	
Polarization	Horizontal				

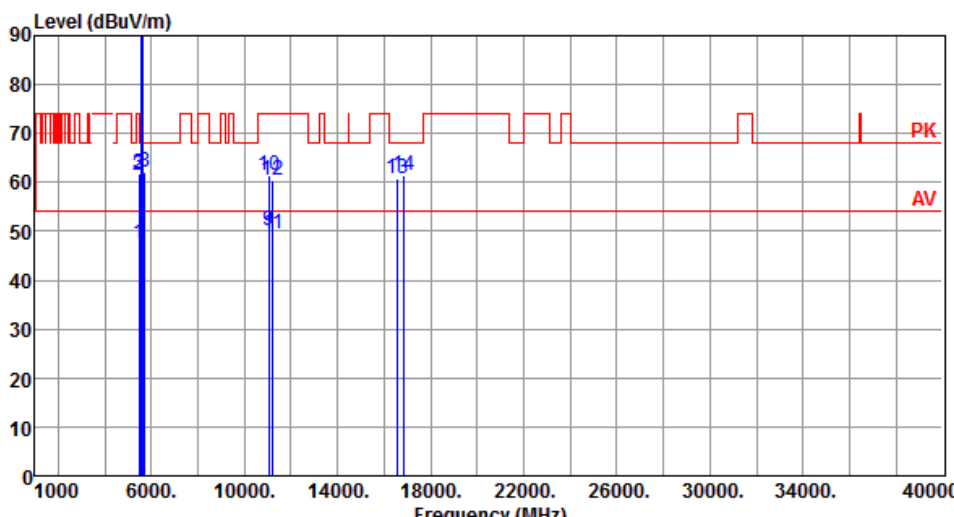


The spectrum plot shows the emission level in dBUV/m on the y-axis (0 to 90) against frequency in MHz on the x-axis (1000 to 40000). A red line represents the emission level, and a blue line represents the limit. The emission level is generally below the limit, with some peaks exceeding it. The plot is labeled with 'PK' for peak and 'AV' for average.

	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	47.50	54.00	-6.50	40.25	7.25	Average	201	324
2	5460.00	60.81	74.00	-13.19	53.56	7.25	Peak	201	324
3	5470.00	61.54	68.20	-6.66	54.26	7.28	Peak	201	324
4 *	5530.00	95.88			88.45	7.43	Average	201	324
5 *	5530.00	107.78			100.35	7.43	Peak	201	324
6 *	5610.00	94.06			86.59	7.47	Average	100	250
7 *	5610.00	105.17			97.70	7.47	Peak	100	250
8	5725.00	61.67	68.20	-6.53	54.01	7.66	Peak	100	250
9	11060.00	47.16	54.00	-6.84	30.41	16.75	Average	100	159
10	11060.00	59.14	74.00	-14.86	42.39	16.75	Peak	100	159
11	11220.00	46.81	54.00	-7.19	30.29	16.52	Average	100	153
12	11220.00	58.92	74.00	-15.08	42.40	16.52	Peak	100	153
13	16590.00	60.62	68.20	-7.58	42.41	18.21	Peak	100	155
14	16830.00	60.74	68.20	-7.46	42.40	18.34	Peak	100	159

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

Modulation	ax (HE80+80)	Test Freq. (MHz)	5530 + 5610
Polarization	Vertical		



	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	47.56	54.00	-6.44	40.31	7.25	Average	247	278
2	5460.00	61.37	74.00	-12.63	54.12	7.25	Peak	247	278
3	5470.00	61.84	68.20	-6.36	54.56	7.28	Peak	247	278
4 *	5530.00	99.26			91.83	7.43	Average	247	278
5 *	5530.00	110.55			103.12	7.43	Peak	247	278
6 *	5610.00	97.49			90.02	7.47	Average	319	38
7 *	5610.00	110.17			102.70	7.47	Peak	319	38
8	5725.00	62.21	68.20	-5.99	54.55	7.66	Peak	319	38
9	11060.00	50.22	54.00	-3.78	33.47	16.75	Average	259	293
10	11060.00	61.33	74.00	-12.67	44.58	16.75	Peak	259	293
11	11220.00	49.41	54.00	-4.59	32.89	16.52	Average	257	244
12	11220.00	60.37	74.00	-13.63	43.85	16.52	Peak	257	244
13	16590.00	60.92	68.20	-7.28	42.71	18.21	Peak	100	299
14	16830.00	61.32	68.20	-6.88	42.98	18.34	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).

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

3.6 Frequency Stability

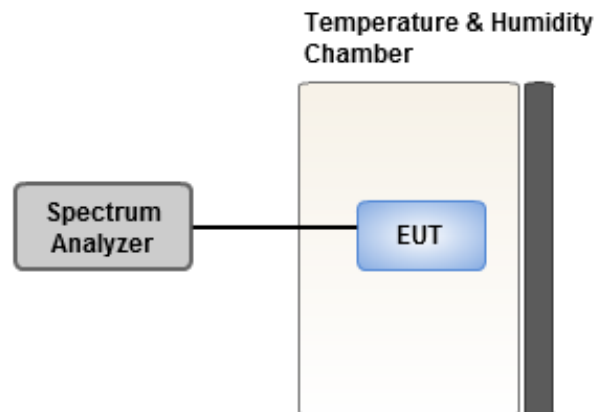
3.6.1 Limit of Frequency Stability

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

Frequency: 5300 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	7.39	7.88	7.92	7.52
T20°C Vmin	7.02	6.78	7.59	7.06
T55°C Vnom	10.64	10.42	10.40	10.88
T50°C Vnom	10.30	10.39	10.14	11.13
T40°C Vnom	7.85	8.59	8.25	8.02
T30°C Vnom	7.54	7.78	7.87	8.11
T20°C Vnom	5.02	5.37	4.96	5.00
T10°C Vnom	3.40	3.05	3.96	4.08
T0°C Vnom	1.31	2.05	1.62	0.93
T-10°C Vnom	-1.24	-1.46	-0.51	-1.39
T-20°C Vnom	-2.22	-2.27	-2.05	-2.07
T-30°C Vnom	-4.90	-4.84	-4.89	-4.62
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	7.72	7.99	8.39	7.44
T20°C Vmin	6.41	6.35	6.40	7.19
T55°C Vnom	9.52	9.51	9.96	9.26
T50°C Vnom	9.54	9.96	9.59	10.03
T40°C Vnom	7.11	6.96	6.78	7.81
T30°C Vnom	6.27	6.59	6.07	6.25
T20°C Vnom	4.91	5.03	5.52	5.47
T10°C Vnom	3.75	3.43	3.73	4.28
T0°C Vnom	1.19	1.82	1.11	0.80
T-10°C Vnom	-0.63	-0.83	-0.76	-1.07
T-20°C Vnom	-2.19	-2.09	-1.90	-2.09
T-30°C Vnom	-4.19	-3.81	-3.88	-3.87
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 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 Corp (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>.

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Kwei Shan

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Kwei Shan Site II

Tel: 886-3-271-8640

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City 333, Taiwan, R.O.C.

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

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