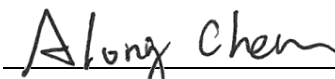


FCC Test Report

FCC ID : I8811AXAP24
Equipment : 802.11ax (WiFi 6) Dual-Radio Unified Access Point
Model No. : WAX610D, NWA210AX
Multiple Listing : Refer to item 1.1.1 for more details.
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 : Apr. 06, 2020
Tested Date : Apr. 23 ~ May 11, 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:

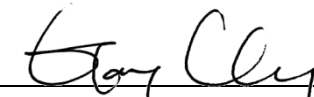

Gary Chang / Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	13
1.3	Test Setup Chart	13
1.4	The Equipment List	15
1.5	Testing Applied Standards	17
1.6	Deviation from Test Standard and Measurement Procedure.....	17
1.7	Measurement Uncertainty	17
2	TEST CONFIGURATION	18
2.1	Testing Condition	18
2.2	The Worst Test Modes and Channel Details	19
3	TRANSMITTER TEST RESULTS.....	21
3.1	Conducted Emissions.....	21
3.2	Emission Bandwidth	30
3.3	RF Output Power.....	51
3.4	Peak Power Spectral Density.....	62
3.5	Transmitter Radiated and Band Edge Emissions	85
3.6	Frequency Stability.....	184
4	TEST LABORATORY INFORMATION	186

Release Record

Report No.	Version	Description	Issued Date
FR040603AN	Rev. 01	Initial issue	May 28, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 2.961MHz 42.88 (Margin -3.12dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 17475.00MHz 68.02 (Margin -0.18dB) - 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: 26.80 5250~5350MHz: 22.64 5470~5725MHz: 23.22 5725~5850MHz: 29.11 Beamforming mode 5150~5250MHz: 20.78 5250~5350MHz: 16.62 5470~5725MHz: 17.20 5725~5850MHz: 22.68	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 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
ZYXEL	WAX610D	802.11ax (WiFi 6) Dual-Radio Unified Access Point	Difference between two models is software.
	NWA210AX	802.11ax (WiFi 6) Dual-Radio PoE Access Point	
✦ The above models, model WAX610D was selected as a representative one for the final test and only its data was recorded in this report.			

1.1.2 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]	4	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]	4	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]	4	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]	4	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]	4	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]	4	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]	4	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]	4	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]	4	MCS 0-11

Note 1: Chip 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)

1.1.3 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)			
				5150~5250	5250~5350	5470~5725	5725~5850
1	AP886-V3	Dipole	IPEX	3.2	4.2	4.3	5
2	AP886-V3	PIFA	IPEX	3.2	4.2	4.3	5
3	AP886-V3	Dipole	IPEX	3.2	4.2	4.3	5
4	AP886-V3	Dipole	IPEX	3.2	4.2	4.3	5
5	AP886-V3	Dipole	IPEX	3.2	4.2	4.3	5

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter 30~57Vdc from POE
--------------------------	---

Note: The above power supply for POE is not bundled in market.

1.1.5 Accessories

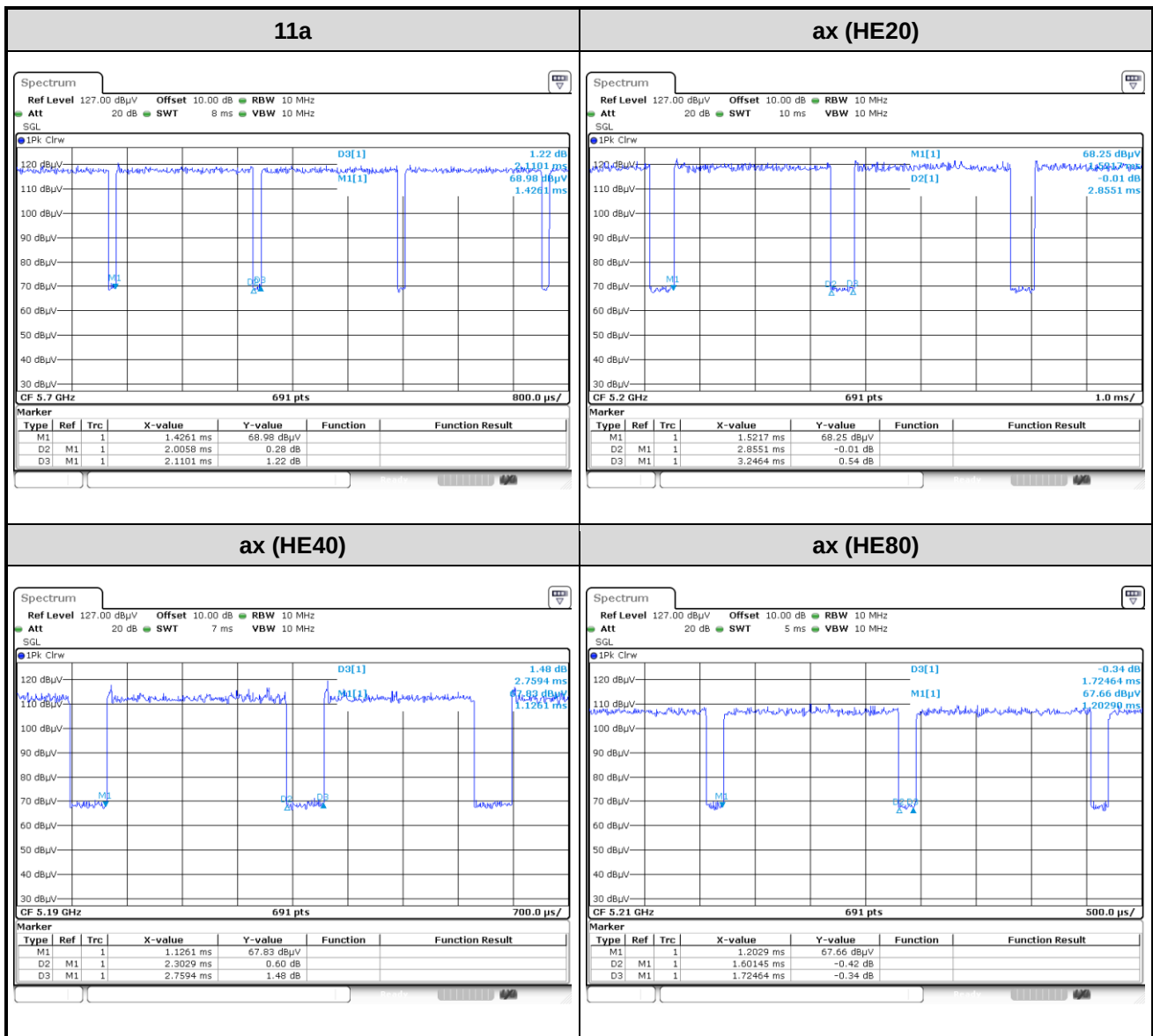
Accessories		
No.	Equipment	Description
1	AC adapter (Only for model: NWA210AX)	Brand: APD Model: WA-24Q12R I/P: 100-240Vac, 50-60Hz, 0.7A Max O/P: 12Vdc, 2A Power Line: DC 1.45m non-shielded without core

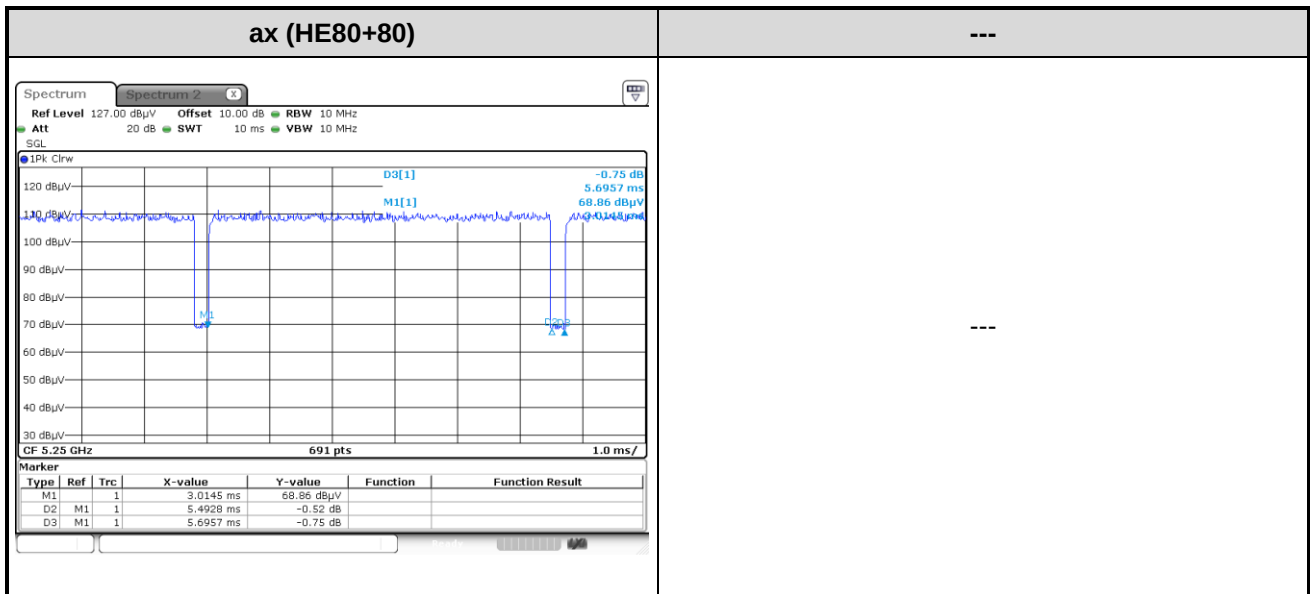
1.1.6 Channel List

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	---	---
149	5745	802.11 ax (HE80+80)	
153	5765	42	5210
157	5785	58	5290
161	5805	106	5530
165	5825	122	5610

1.1.7 Test Tool and Duty Cycle

Test Tool	QSPR, v5.0-00170		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	95.06%	0.22
	ax (HE20)	87.95%	0.56
	ax (HE40)	83.46%	0.79
	ax (HE80)	92.86%	0.32
	ax (HE80+80)	96.44%	0.16





1.1.8 Power Index of Test Tool

For Frequency band 5150-5250 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	20.5
11a	5200	20.5
11a	5240	20.5
ax (HE20)	5180	21.5
ax (HE20)	5200	25
ax (HE20)	5240	25
ax (HE40)	5190	14.5
ax (HE40)	5230	20.5
ax (HE80)	5210	13.5
ax (HE80+80)	5210	10

For Frequency band 5250~5350 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5260	13.5
11a	5300	13.5
11a	5320	13.5
ax (HE20)	5260	18
ax (HE20)	5300	18
ax (HE20)	5320	18
ax (HE40)	5270	16.5
ax (HE40)	5310	15
ax (HE80)	5290	16
ax (HE80+80)	5290	10

For Frequency band 5470~5725 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5500	13.5
11a	5580	13.5
11a	5700	13.5
ax (HE20)	5500	18
ax (HE20)	5580	18
ax (HE20)	5700	18
ax (HE40)	5510	14
ax (HE40)	5590	16.5
ax (HE40)	5670	13.5
ax (HE80)	5530	15
ax (HE80)	5610	17
ax (HE80+80)	5530 + 5610 MHz	13

Channel that extends across the 5.725 GHz boundary

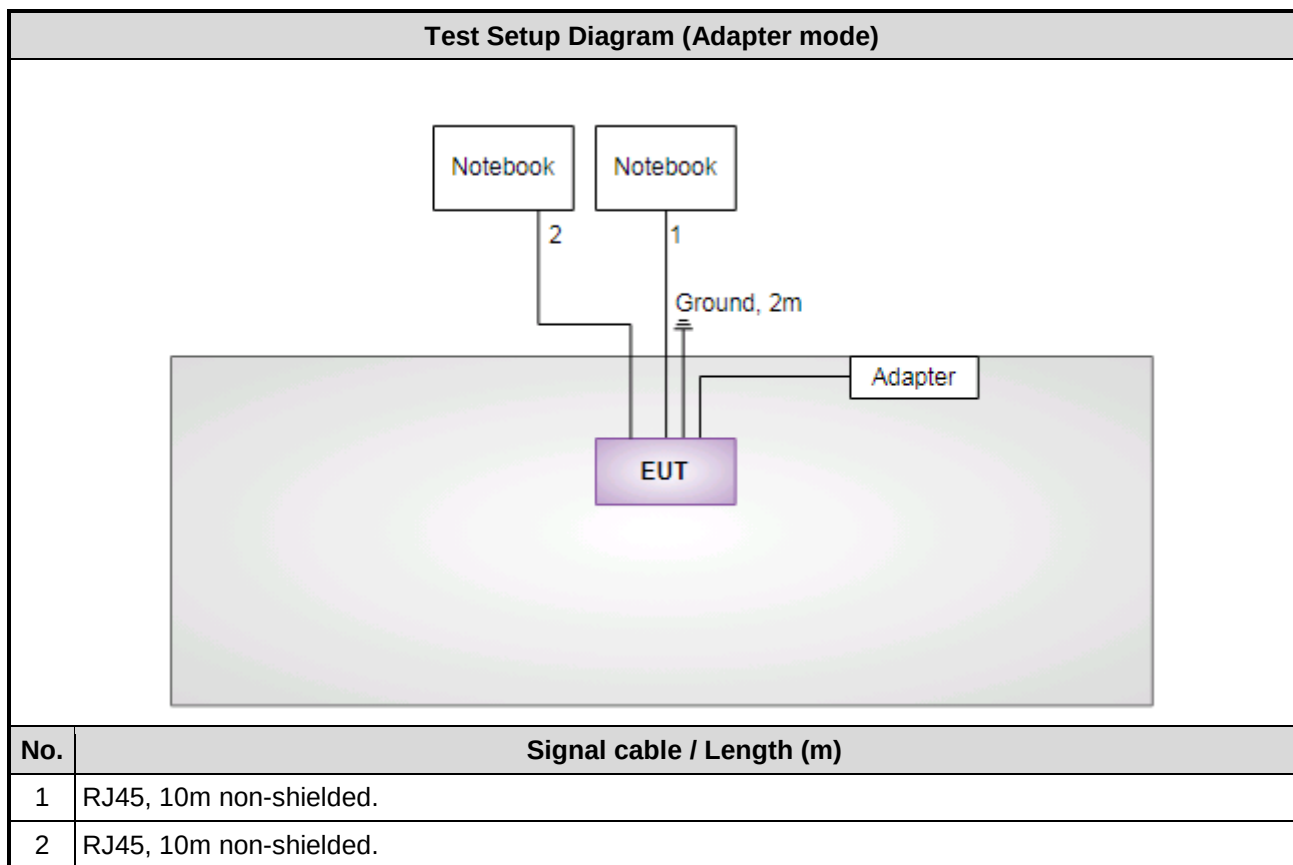
For Frequency band 5470~5725 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5720MHz	13.5
ax (HE20)	5720MHz	18
ax (HE40)	5710MHz	16.5
ax (HE80)	5690MHz	17

For Frequency band 5725~5850 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5745	23.5
11a	5785	23.5
11a	5825	23.5
ax (HE20)	5745	26
ax (HE20)	5785	27.5
ax (HE20)	5825	27.5
ax (HE40)	5755	17.5
ax (HE40)	5795	22
ax (HE80)	5775	20.5

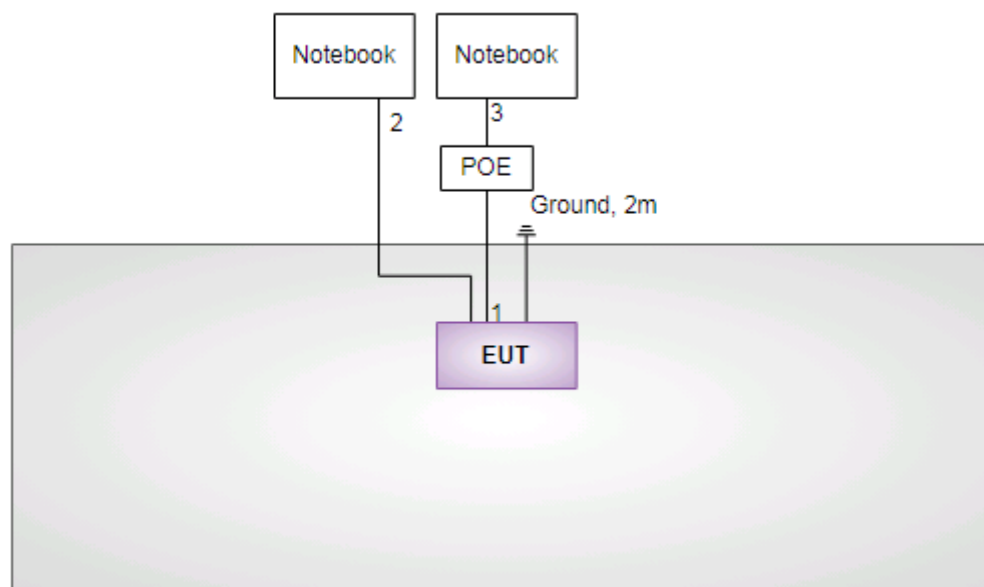
1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Notebook	DELL	Latitude E5420	DoC	---
3	Ground Cable	ICC	GC-2m	---	---
4	RJ45	ICC	RJ45-10m	---	---
5	RJ45	ICC	RJ45-10m	---	---
6	RJ45	ICC	RJ45-1.3m	---	---
7	POE Switch	ZYXEL	XS1930-12HP	---	Provided by applicant.

1.3 Test Setup Chart



Test Setup Diagram (POE mode)



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

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	May 06 ~ May 11, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
LISN	R&S	ENV216	101579	Mar. 12, 2020	Mar. 11, 2021
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	Apr. 23 ~ May 09, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 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	Apr. 30, 2020				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 30, 2020	Apr. 29, 2021
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	SENSE-15247_DTS	V5.9	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

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

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

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	25°C / 57%	Alex Tsai
Radiated Emissions	03CH03-WS	23-24°C / 60-65%	Brad Wu Roger Lu
RF Conducted	TH01-WS	25°C / 66%	Aska Huang

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

2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz					
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Mode	Test Configuration
Conducted Emissions	ax (HE20)	5240	MCS 0	TX	1, 2
Radiated Emissions ≤1GHz	ax (HE20)	5240	MCS 0	TX	1, 2
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	TX	1
	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	TX	
	ax (HE40)	5190 / 5230 / 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	TX	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	TX	
	ax (HE80+80)	5210 + 5290 / 5530 + 5610	MCS 0	TX	
RF Output Power	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	TX	3
	ax (HE40)	5190 / 5230 / 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	TX	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	TX	
	ax (HE80+80)	5210 + 5290 / 5530 + 5610	MCS 0	TX	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	TX	1
	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	TX	
	ax (HE40)	5190 / 5230 / 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	TX	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	TX	
	ax (HE80+80)	5210 + 5290 / 5530 + 5610	MCS 0	TX	
Frequency Stability	Un-modulation	5320	---	TX	1
NOTE: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The Z-plane results were found as the worst case and were shown in this report. 2. The EUT had been tested by following test configurations. 1) Configuration 1: Adapter mode, Non-Beamforming 2) Configuration 2: POE mode, Non-Beamforming 3) Configuration 3: Adapter mode, Beamforming					

Frequency band 5725-5850 MHz					
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Mode	Test Configuration
Conducted Emissions	11a	5785	6 Mbps	TX	1, 2
Radiated Emissions ≤1GHz	11a	5785	6 Mbps	TX	1, 2
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	TX	1
	ax (HE20)	5745 / 5785 / 5825	MCS 0		
	ax (HE40)	5755 / 5795	MCS 0		
	ax (HE80)	5775	MCS 0		
RF Output Power	ax (HE20)	5745 / 5785 / 5825	MCS 0	TX	3
	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	TX	1
	ax (HE20)	5745 / 5785 / 5825	MCS 0		
	ax (HE40)	5755 / 5795	MCS 0		
	ax (HE80)	5775	MCS 0		
Frequency Stability	Un-modulation	5785	---	TX	1
NOTE: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The Z-plane results were found as the worst case and were shown in this report. 2. The EUT had been tested by following test configurations. 1) Configuration 1: Adapter mode, Non-Beamforming 2) Configuration 2: POE mode, Non-Beamforming 3) Configuration 3: Adapter mode, Beamforming					

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

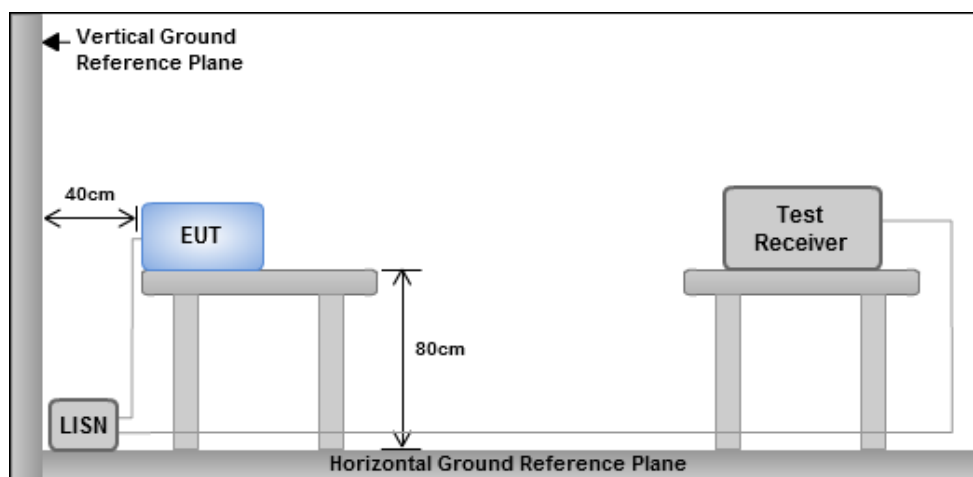
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

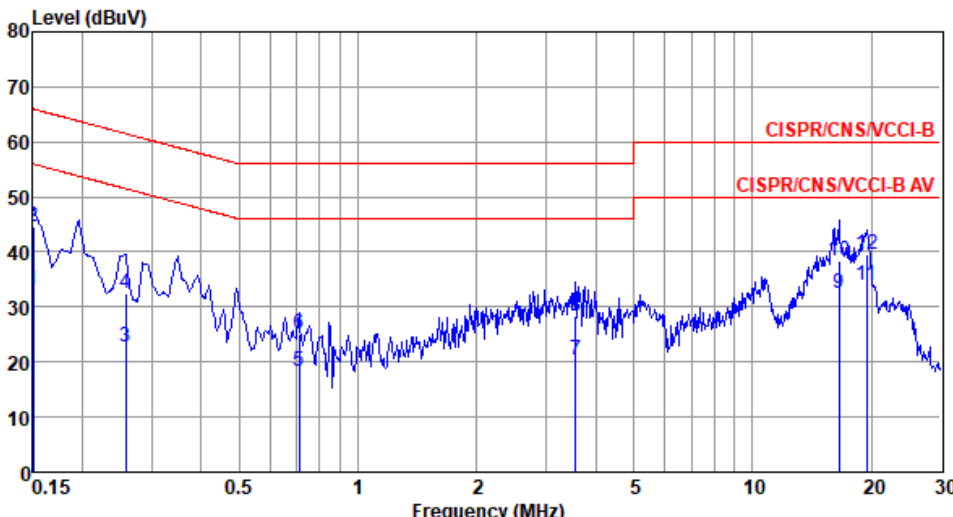
3.1.3 Test Setup



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

3.1.4 Test Result of Conducted Emissions

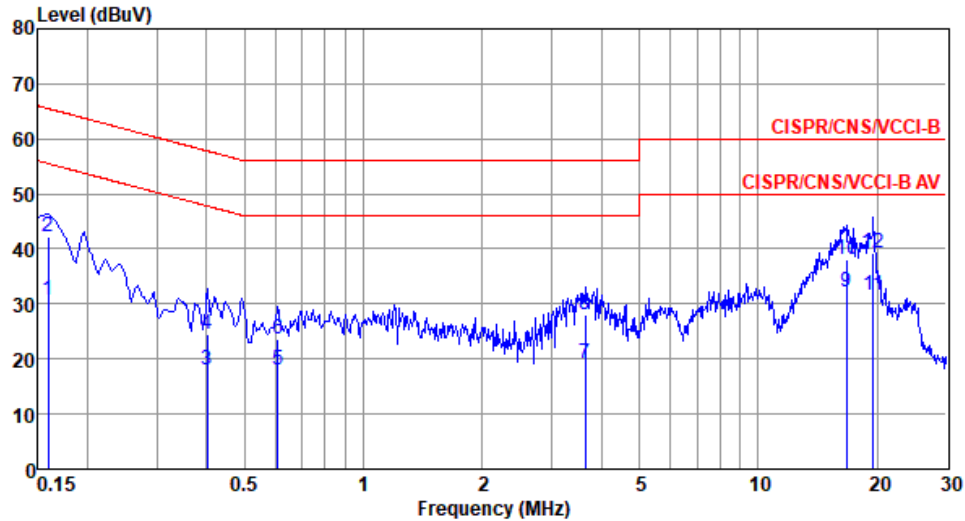
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Power Phase	Line	Test Configuration	1



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	0.150	33.09	56.00	-22.91	23.24	9.64	0.05	Average
2	0.150	44.49	66.00	-21.51	34.64	9.64	0.05	QP
3	0.258	22.86	51.51	-28.65	12.95	9.63	0.07	Average
4	0.258	32.37	61.51	-29.14	22.46	9.63	0.07	QP
5	0.708	18.44	46.00	-27.56	8.42	9.63	0.10	Average
6	0.708	25.17	56.00	-30.83	15.15	9.63	0.10	QP
7	3.565	20.50	46.00	-25.50	10.21	9.65	0.27	Average
8	3.565	28.42	56.00	-27.58	18.13	9.65	0.27	QP
9	16.573	32.42	50.00	-17.58	21.56	9.71	0.62	Average
10	16.573	38.32	60.00	-21.68	27.46	9.71	0.62	QP
11*	19.428	33.94	50.00	-16.06	22.97	9.72	0.65	Average
12	19.428	39.52	60.00	-20.48	28.55	9.72	0.65	QP

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

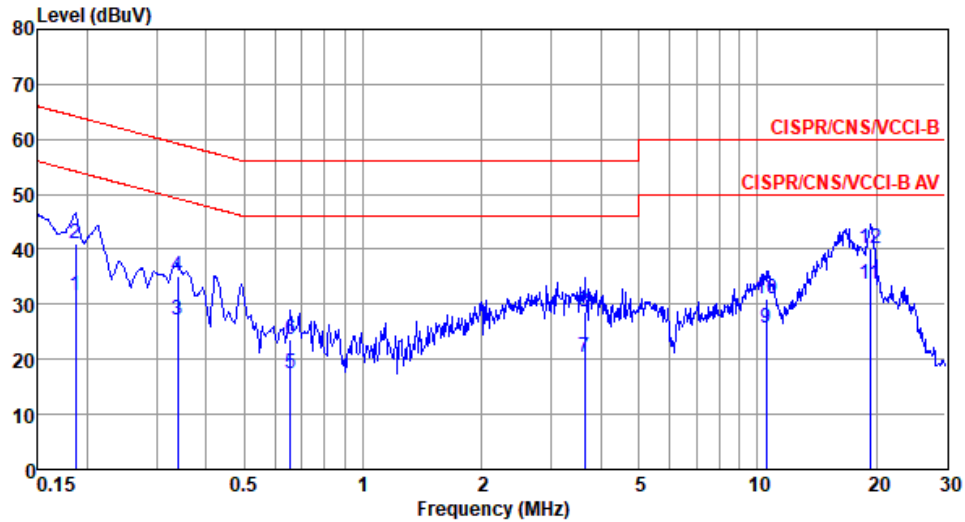
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Power Phase	Neutral	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	30.78	55.52	-24.74	20.94	9.66	0.05	Average
2	0.159	42.12	65.52	-23.40	32.28	9.66	0.05	QP
3	0.402	18.15	47.81	-29.66	8.25	9.65	0.08	Average
4	0.402	24.59	57.81	-33.22	14.69	9.65	0.08	QP
5	0.608	17.90	46.00	-28.10	7.97	9.65	0.10	Average
6	0.608	23.61	56.00	-32.39	13.68	9.65	0.10	QP
7	3.642	19.23	46.00	-26.77	9.03	9.67	0.27	Average
8	3.642	27.93	56.00	-28.07	17.73	9.67	0.27	QP
9*	16.750	32.26	50.00	-17.74	21.40	9.81	0.62	Average
10	16.750	38.04	60.00	-21.96	27.18	9.81	0.62	QP
11	19.532	31.59	50.00	-18.41	20.59	9.84	0.65	Average
12	19.532	39.19	60.00	-20.81	28.19	9.84	0.65	QP

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

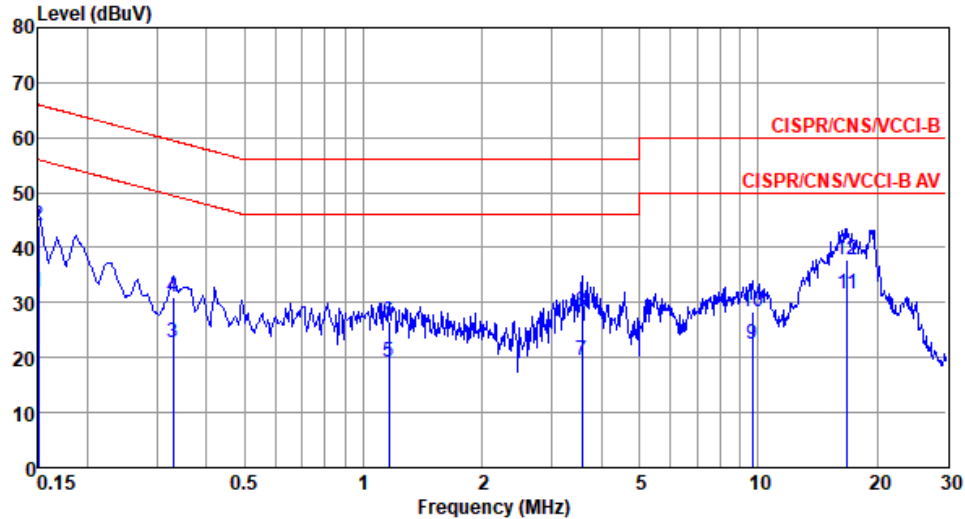
Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Line	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.186	31.49	54.20	-22.71	21.62	9.63	0.06	Average
2	0.186	41.01	64.20	-23.19	31.14	9.63	0.06	QP
3	0.339	27.16	49.22	-22.06	17.21	9.63	0.08	Average
4	0.339	35.14	59.22	-24.08	25.19	9.63	0.08	QP
5	0.654	17.45	46.00	-28.55	7.43	9.63	0.10	Average
6	0.654	23.66	56.00	-32.34	13.64	9.63	0.10	QP
7	3.642	20.28	46.00	-25.72	9.99	9.65	0.27	Average
8	3.642	28.63	56.00	-27.37	18.34	9.65	0.27	QP
9	10.508	25.64	50.00	-24.36	15.12	9.69	0.42	Average
10	10.508	30.96	60.00	-29.04	20.44	9.69	0.42	QP
11*	19.326	33.67	50.00	-16.33	22.71	9.72	0.65	Average
12	19.326	40.28	60.00	-19.72	29.32	9.72	0.65	QP

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

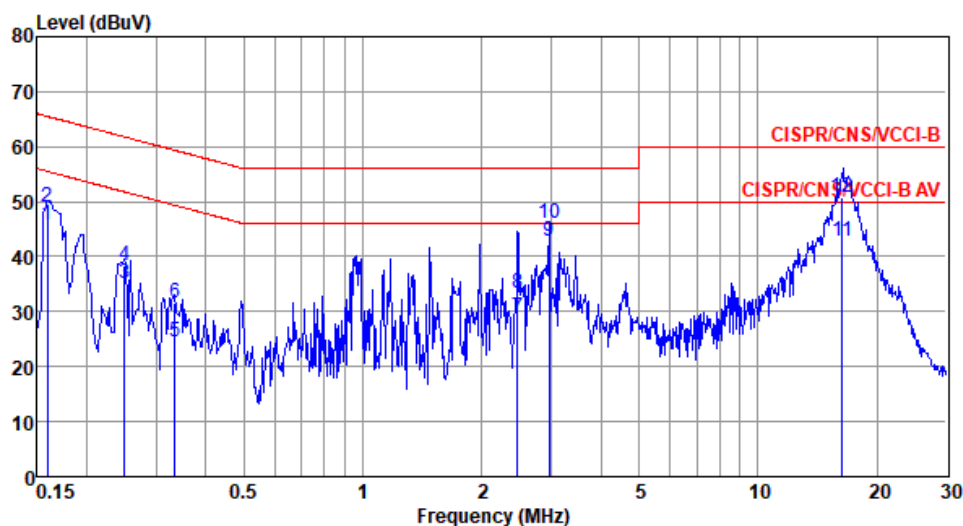
Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Neutral	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.150	31.91	56.00	-24.09	22.08	9.66	0.05	Average
2	0.150	43.96	66.00	-22.04	34.13	9.66	0.05	QP
3	0.330	22.62	49.44	-26.82	12.74	9.65	0.07	Average
4	0.330	30.86	59.44	-28.58	20.98	9.65	0.07	QP
5	1.160	19.27	46.00	-26.73	9.28	9.65	0.13	Average
6	1.160	26.58	56.00	-29.42	16.59	9.65	0.13	QP
7	3.584	19.39	46.00	-26.61	9.19	9.67	0.27	Average
8	3.584	28.24	56.00	-27.76	18.04	9.67	0.27	QP
9	9.654	22.49	50.00	-27.51	12.04	9.73	0.39	Average
10	9.654	28.23	60.00	-31.77	17.78	9.73	0.39	QP
11*	16.839	31.59	50.00	-18.41	20.73	9.81	0.62	Average
12	16.839	37.74	60.00	-22.26	26.88	9.81	0.62	QP

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

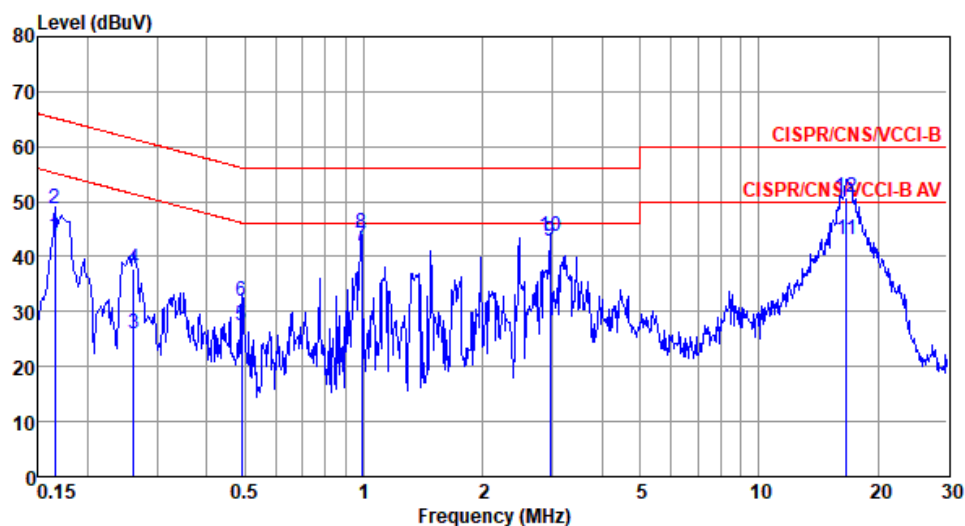
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Power Phase	Line	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	45.90	55.52	-9.62	36.21	9.64	0.05	Average
2	0.159	49.11	65.52	-16.41	39.42	9.64	0.05	QP
3	0.249	35.11	51.78	-16.67	25.41	9.63	0.07	Average
4	0.249	38.34	61.78	-23.44	28.64	9.63	0.07	QP
5	0.334	24.56	49.35	-24.79	14.86	9.63	0.07	Average
6	0.334	31.46	59.35	-27.89	21.76	9.63	0.07	QP
7	2.461	29.02	46.00	-16.98	19.17	9.64	0.21	Average
8	2.461	33.39	56.00	-22.61	23.54	9.64	0.21	QP
9*	2.961	42.80	46.00	-3.20	32.91	9.65	0.24	Average
10	2.961	45.93	56.00	-10.07	36.04	9.65	0.24	QP
11	16.357	42.84	50.00	-7.16	32.51	9.71	0.62	Average
12	16.357	50.73	60.00	-9.27	40.40	9.71	0.62	QP

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

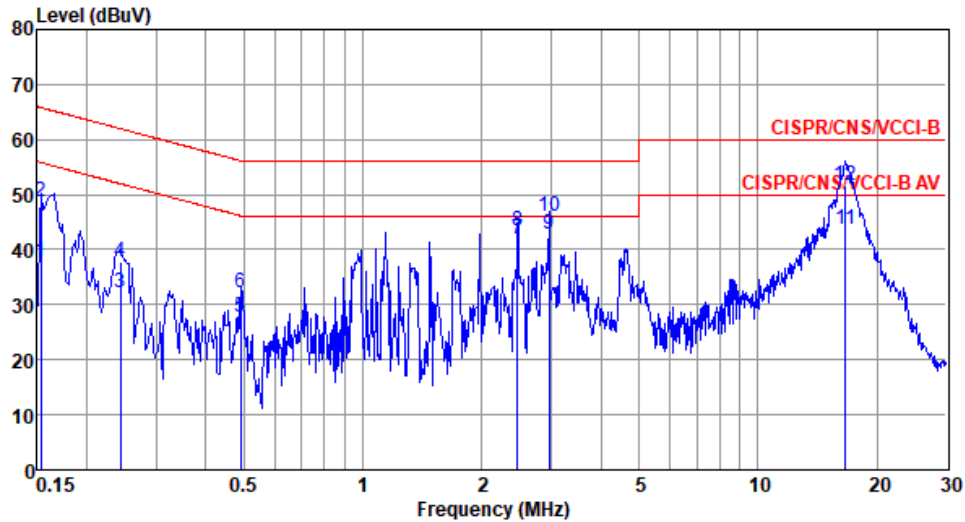
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Power Phase	Neutral	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.165	43.68	55.21	-11.53	33.97	9.66	0.05	Average
2	0.165	48.60	65.21	-16.61	38.89	9.66	0.05	QP
3	0.262	25.94	51.38	-25.44	16.22	9.65	0.07	Average
4	0.262	37.87	61.38	-23.51	28.15	9.65	0.07	QP
5	0.491	27.34	46.14	-18.80	17.60	9.65	0.09	Average
6	0.491	31.88	56.14	-24.26	22.14	9.65	0.09	QP
7	0.988	41.84	46.00	-4.16	32.07	9.65	0.12	Average
8	0.988	44.35	56.00	-11.65	34.58	9.65	0.12	QP
9*	2.962	42.87	46.00	-3.13	32.96	9.67	0.24	Average
10	2.962	43.62	56.00	-12.38	33.71	9.67	0.24	QP
11	16.689	42.97	50.00	-7.03	32.54	9.81	0.62	Average
12	16.689	50.77	60.00	-9.23	40.34	9.81	0.62	QP

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

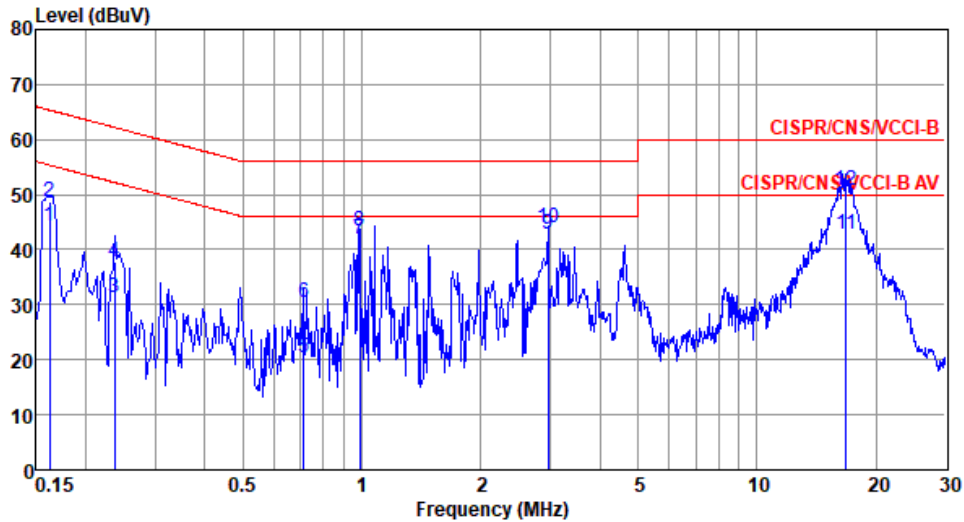
Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Line	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.153	37.76	55.82	-18.06	28.07	9.64	0.05	Average
2	0.153	48.60	65.82	-17.22	38.91	9.64	0.05	QP
3	0.243	32.10	52.00	-19.90	22.40	9.63	0.07	Average
4	0.243	37.88	62.00	-24.12	28.18	9.63	0.07	QP
5	0.491	27.70	46.14	-18.44	17.98	9.63	0.09	Average
6	0.491	32.18	56.14	-23.96	22.46	9.63	0.09	QP
7	2.467	42.05	46.00	-3.95	32.20	9.64	0.21	Average
8	2.467	43.46	56.00	-12.54	33.61	9.64	0.21	QP
9*	2.962	42.81	46.00	-3.19	32.92	9.65	0.24	Average
10	2.962	45.91	56.00	-10.09	36.02	9.65	0.24	QP
11	16.618	43.75	50.00	-6.25	33.42	9.71	0.62	Average
12	16.618	51.66	60.00	-8.34	41.33	9.71	0.62	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)	5785
Power Phase	Neutral	Test Configuration	2



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.162	44.27	55.34	-11.07	34.56	9.66	0.05	Average
2	0.162	48.57	65.34	-16.77	38.86	9.66	0.05	QP
3	0.237	31.20	52.22	-21.02	21.49	9.65	0.06	Average
4	0.237	37.75	62.22	-24.47	28.04	9.65	0.06	QP
5	0.712	20.38	46.00	-25.62	10.62	9.65	0.11	Average
6	0.712	30.49	56.00	-25.51	20.73	9.65	0.11	QP
7	0.987	41.93	46.00	-4.07	32.16	9.65	0.12	Average
8	0.987	43.48	56.00	-12.52	33.71	9.65	0.12	QP
9*	2.961	42.88	46.00	-3.12	32.97	9.67	0.24	Average
10	2.961	43.85	56.00	-12.15	33.94	9.67	0.24	QP
11	16.819	42.67	50.00	-7.33	32.24	9.81	0.62	Average
12	16.819	50.74	60.00	-9.26	40.31	9.81	0.62	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.

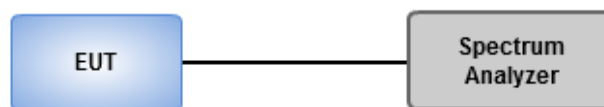
Occupied Bandwidth

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)_4TX	21.377M	16.498M	16M5D1D	18.551M	16.281M
802.11ax HEW20_Nss1,(MCS0)_4TX	33.116M	18.958M	19M0D1D	19.928M	18.596M
802.11ax HEW40_Nss1,(MCS0)_4TX	69.855M	37.916M	37M9D1D	43.188M	37.771M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.319M	77.279M	77M3D1D	82.029M	76.99M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	141.739M	77.337M	77M3D1D	82.319M	76.874M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.203M	16.353M	16M4D1D	18.406M	16.208M
802.11ax HEW20_Nss1,(MCS0)_4TX	20.942M	18.813M	18M8D1D	19.855M	18.596M
802.11ax HEW40_Nss1,(MCS0)_4TX	44.928M	37.916M	37M9D1D	43.623M	37.771M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.609M	76.99M	77M0D1D	81.449M	76.7M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	106.957M	77.337M	77M3D1D	82.609M	77.337M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.058M	16.425M	16M4D1D	14.13M	13.025M
802.11ax HEW20_Nss1,(MCS0)_4TX	20.87M	18.741M	18M7D1D	14.87M	14.327M
802.11ax HEW40_Nss1,(MCS0)_4TX	45.507M	37.916M	37M9D1D	36.42M	33.632M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.609M	77.279M	77M3D1D	75.435M	72.938M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	275.942M	155.369M	155M4D1D	163.188M	154.443M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.377M	21.201M	21M2D1D	2.725M	3.357M
802.11ax HEW20_Nss1,(MCS0)_4TX	17.971M	26.7M	26M7D1D	2.609M	4.399M
802.11ax HEW40_Nss1,(MCS0)_4TX	38.116M	38.929M	38M9D1D	3.884M	3.994M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.101M	77.569M	77M6D1D	3.768M	4.11M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	18.768M	16.281M	18.913M	16.353M	18.913M	16.353M	21.232M	16.425M
5200MHz	Pass	Inf	18.551M	16.281M	19.058M	16.353M	18.986M	16.425M	21.304M	16.425M
5240MHz	Pass	Inf	19.203M	16.498M	18.696M	16.425M	18.768M	16.353M	21.377M	16.425M
5260MHz	Pass	Inf	18.768M	16.281M	19.058M	16.353M	18.986M	16.353M	18.768M	16.353M
5300MHz	Pass	Inf	18.406M	16.208M	18.913M	16.353M	19.058M	16.281M	19.058M	16.353M
5320MHz	Pass	Inf	18.696M	16.281M	18.986M	16.281M	18.623M	16.281M	19.203M	16.353M
5500MHz	Pass	Inf	18.406M	16.353M	19.058M	16.425M	18.986M	16.425M	18.841M	16.425M
5580MHz	Pass	Inf	18.696M	16.208M	19.058M	16.425M	18.478M	16.353M	18.623M	16.353M
5700MHz	Pass	Inf	18.116M	16.064M	18.913M	16.353M	18.768M	16.425M	18.986M	16.425M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.13M	13.025M	14.435M	13.198M	14.217M	13.111M	14.565M	13.198M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	2.725M	3.357M	3.13M	3.357M	3.13M	3.415M	3.13M	3.415M
5745MHz	Pass	500k	15.29M	16.281M	16.232M	16.425M	14.71M	16.425M	16.377M	21.056M
5785MHz	Pass	500k	13.478M	16.281M	16.014M	16.498M	16.087M	16.425M	15.435M	19.103M
5825MHz	Pass	500k	13.261M	16.425M	16.377M	16.498M	16.377M	16.643M	16.014M	21.201M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.928M	18.596M	20M	18.741M	20.217M	18.741M	22.681M	18.813M
5200MHz	Pass	Inf	22.174M	18.741M	21.667M	18.741M	27.464M	18.741M	30.87M	18.958M
5240MHz	Pass	Inf	25.29M	18.741M	22.464M	18.741M	28.913M	18.813M	33.116M	18.886M
5260MHz	Pass	Inf	19.855M	18.596M	20.435M	18.741M	20.435M	18.741M	20.797M	18.813M
5300MHz	Pass	Inf	20M	18.669M	20.362M	18.741M	19.855M	18.669M	20.725M	18.741M
5320MHz	Pass	Inf	20M	18.741M	20.725M	18.813M	20.362M	18.669M	20.942M	18.741M
5500MHz	Pass	Inf	20M	18.669M	19.928M	18.669M	20.435M	18.741M	19.928M	18.741M
5580MHz	Pass	Inf	19.71M	18.596M	20.87M	18.669M	19.928M	18.669M	20.507M	18.741M
5700MHz	Pass	Inf	19.71M	18.524M	20M	18.741M	20.29M	18.741M	20M	18.741M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.87M	14.327M	15M	14.327M	15M	14.37M	15.087M	14.37M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.768M	4.399M	2.609M	4.399M	4.406M	4.399M	4.174M	4.399M
5745MHz	Pass	500k	15.942M	18.741M	15.797M	18.741M	13.913M	18.813M	16.594M	24.457M
5785MHz	Pass	500k	13.913M	18.886M	15.145M	18.886M	13.841M	18.958M	17.971M	24.891M
5825MHz	Pass	500k	14.13M	18.886M	17.174M	18.958M	14.058M	19.103M	16.377M	26.7M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	45.507M	37.771M	45.217M	37.916M	43.188M	37.771M	43.623M	37.916M
5230MHz	Pass	Inf	44.348M	37.771M	44.783M	37.916M	44.928M	37.916M	69.855M	37.916M
5270MHz	Pass	Inf	44.493M	37.771M	43.913M	37.771M	43.623M	37.916M	43.768M	37.916M
5310MHz	Pass	Inf	43.768M	37.771M	44.928M	37.771M	43.768M	37.916M	44.348M	37.916M
5510MHz	Pass	Inf	43.478M	37.771M	45.217M	37.916M	42.609M	37.771M	43.623M	37.916M
5590MHz	Pass	Inf	43.623M	37.771M	44.203M	37.916M	44.058M	37.771M	43.478M	37.916M
5670MHz	Pass	Inf	44.348M	37.771M	43.333M	37.771M	44.058M	37.771M	45.507M	37.771M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	37.029M	33.632M	36.42M	33.835M	37.029M	33.835M	37.232M	33.835M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4M	4.457M	4M	4.052M	3.942M	3.994M	3.884M	6.252M
5755MHz	Pass	500k	37.391M	37.771M	37.971M	37.771M	38.116M	37.916M	37.971M	37.771M
5795MHz	Pass	500k	35.942M	37.916M	37.971M	37.916M	37.971M	38.061M	37.826M	38.929M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5210MHz	Pass	Inf	82.319M	77.279M	82.029M	76.99M	82.029M	77.279M	82.319M	77.279M
5290MHz	Pass	Inf	81.449M	76.7M	81.449M	76.99M	82.609M	76.99M	81.449M	76.99M
5530MHz	Pass	Inf	82.609M	76.99M	82.029M	76.99M	81.449M	77.279M	81.159M	76.99M
5610MHz	Pass	Inf	81.159M	77.279M	82.029M	76.99M	81.739M	76.99M	81.739M	76.99M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.652M	73.155M	75.652M	72.938M	75.435M	73.155M	75.652M	72.938M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.768M	4.11M	4M	4.168M	3.942M	4.168M	4M	6.831M
5775MHz	Pass	500k	74.203M	76.99M	76.522M	76.99M	73.913M	76.99M	77.101M	77.569M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	82.319M	76.874M	141.739M	77.337M	-	-	-	-
5290MHz	Pass	Inf	-	-	-	-	106.957M	77.337M	82.609M	77.337M
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	81.449M	77.106M	134.783M	77.337M	-	-	-	-
5610MHz	Pass	Inf	-	-	-	-	81.739M	77.337M	141.159M	78.032M

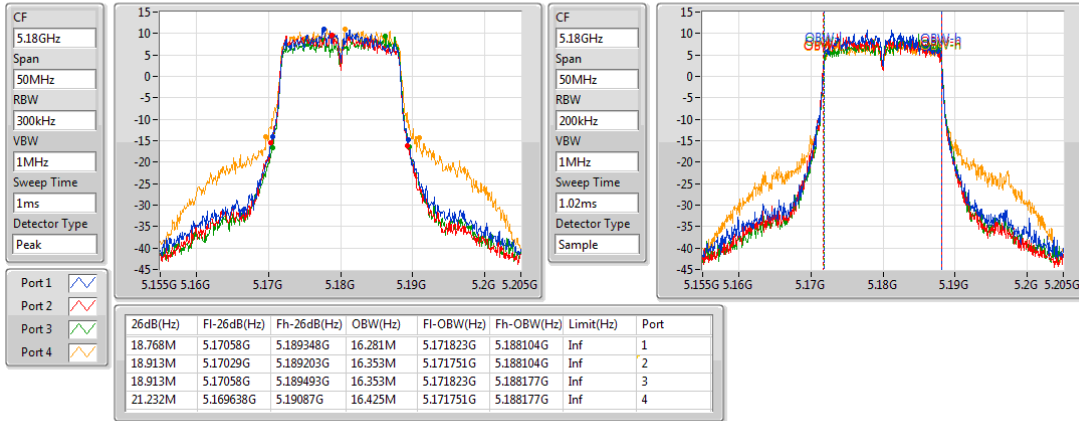
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

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

802.11a_Nss1,(6Mbps)_4TX

EBW

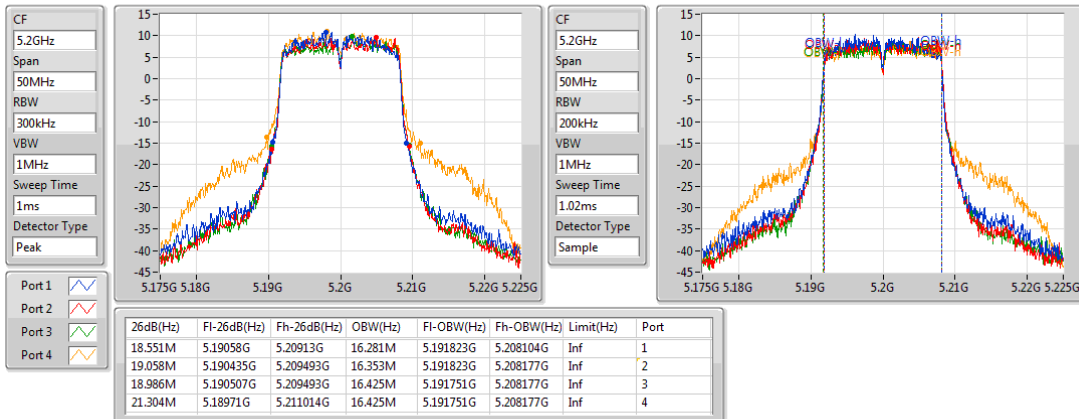
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802.11a_Nss1,(6Mbps)_4TX

EBW

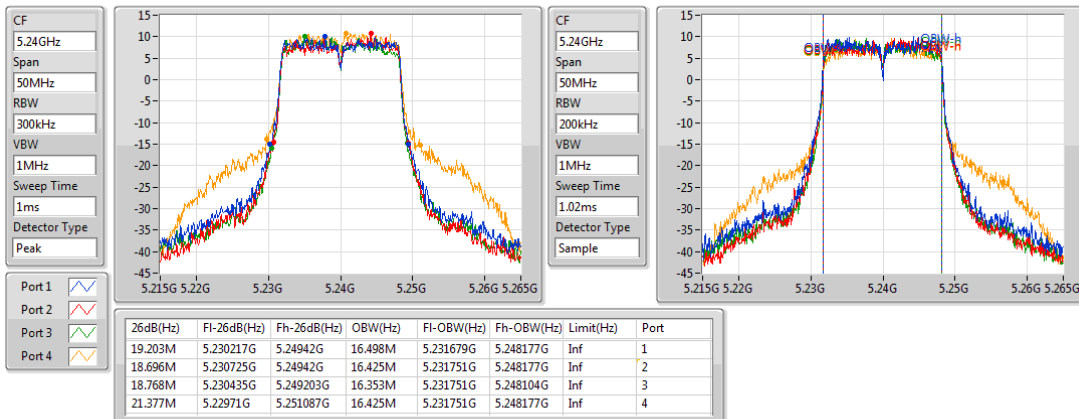
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802.11a_Nss1,(6Mbps)_4TX

EBW

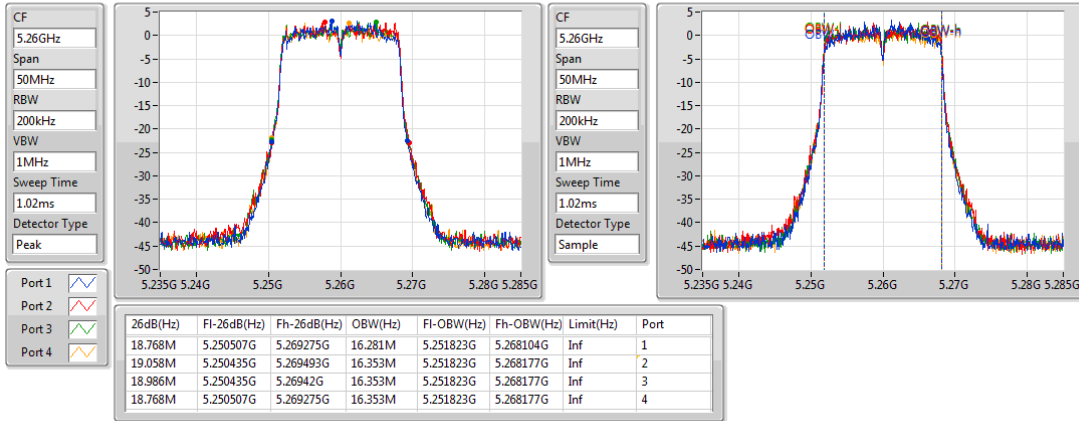
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802.11a_Nss1,(6Mbps)_4TX

EBW

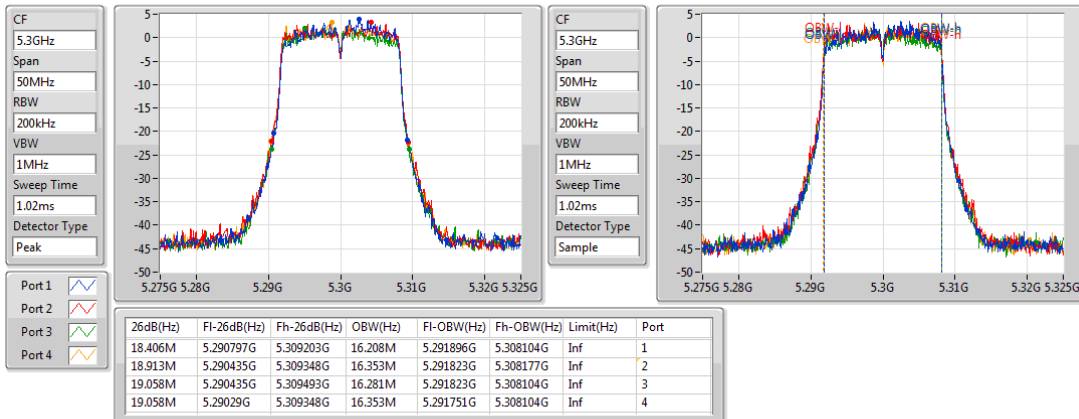
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802.11a_Nss1,(6Mbps)_4TX

EBW

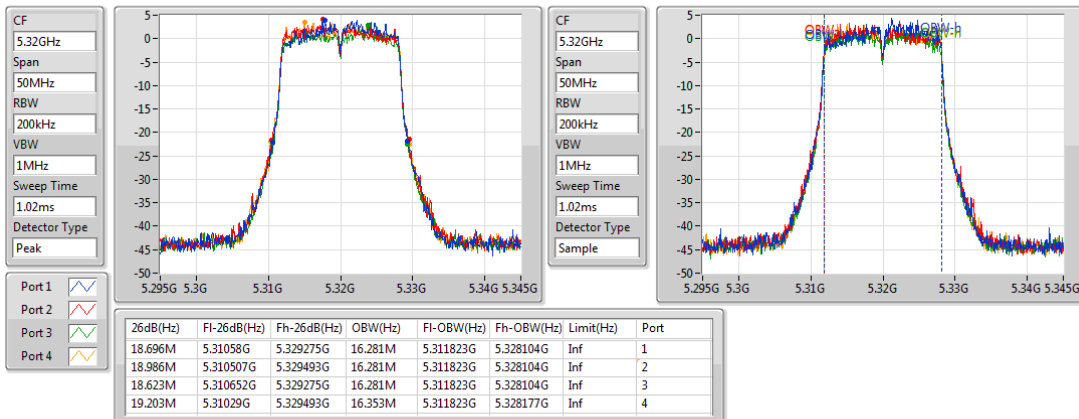
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802.11a_Nss1,(6Mbps)_4TX

EBW

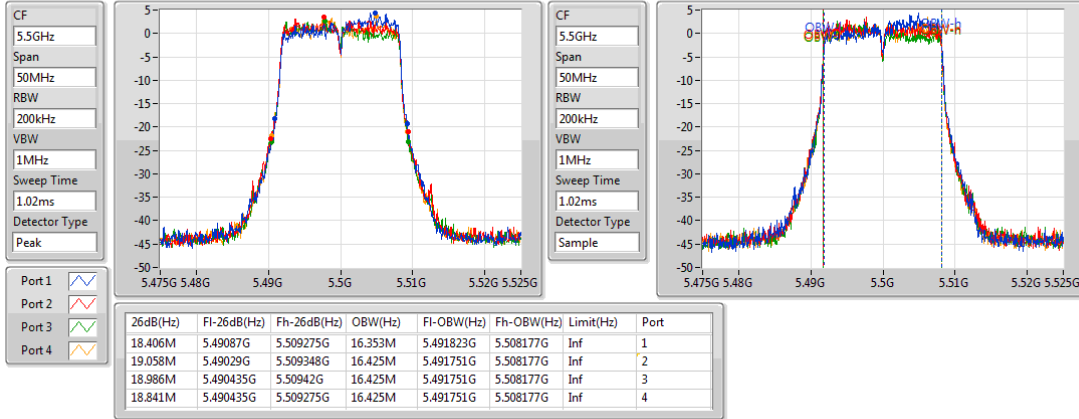
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802.11a_Nss1,(6Mbps)_4TX

EBW

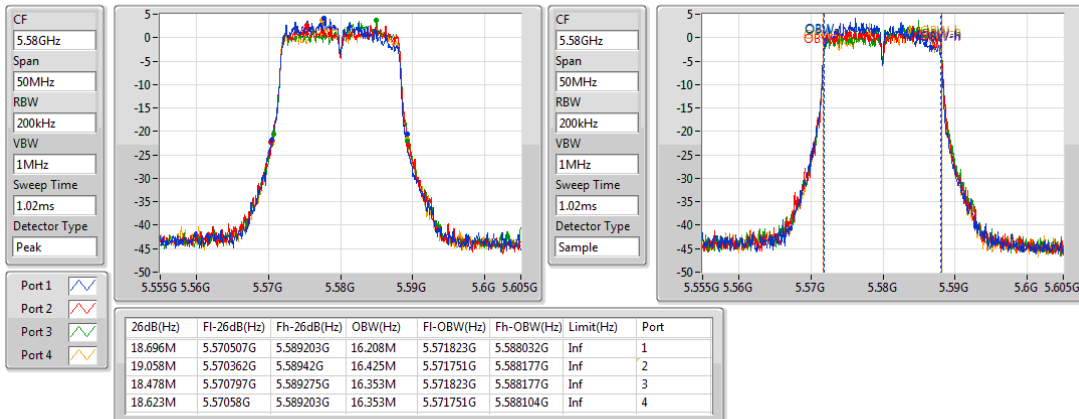
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802.11a_Nss1,(6Mbps)_4TX

EBW

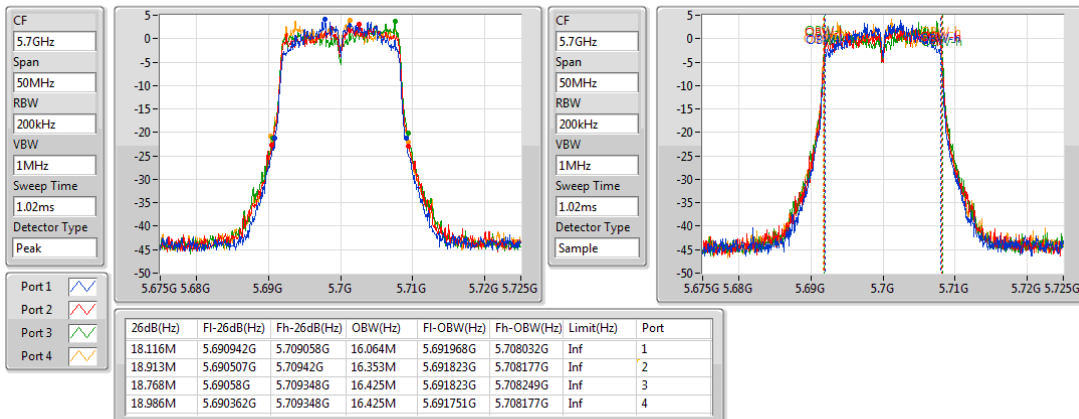
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802.11a_Nss1,(6Mbps)_4TX

EBW

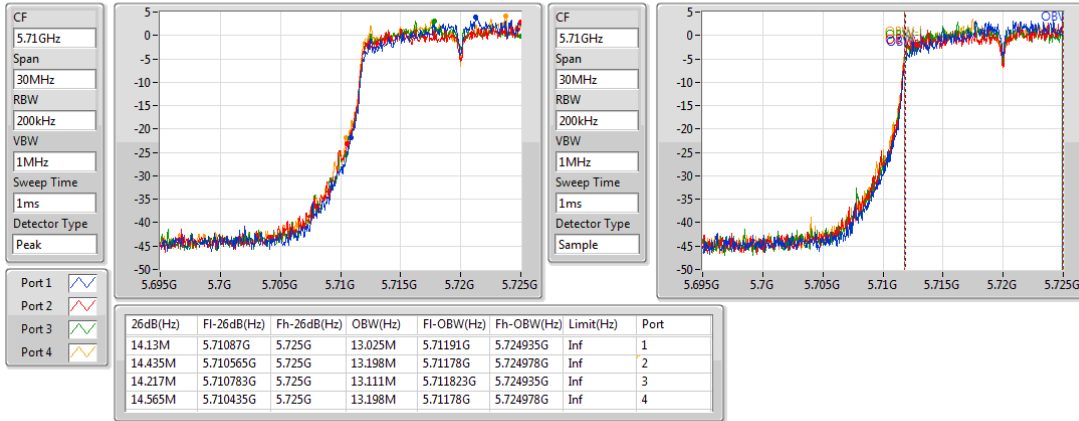
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802.11a_Nss1,(6Mbps)_4TX

EBW

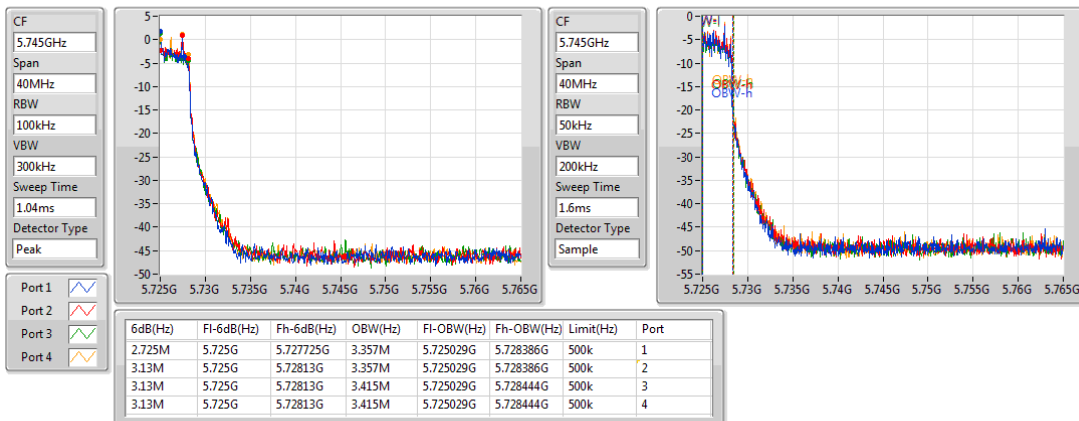
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_4TX

EBW

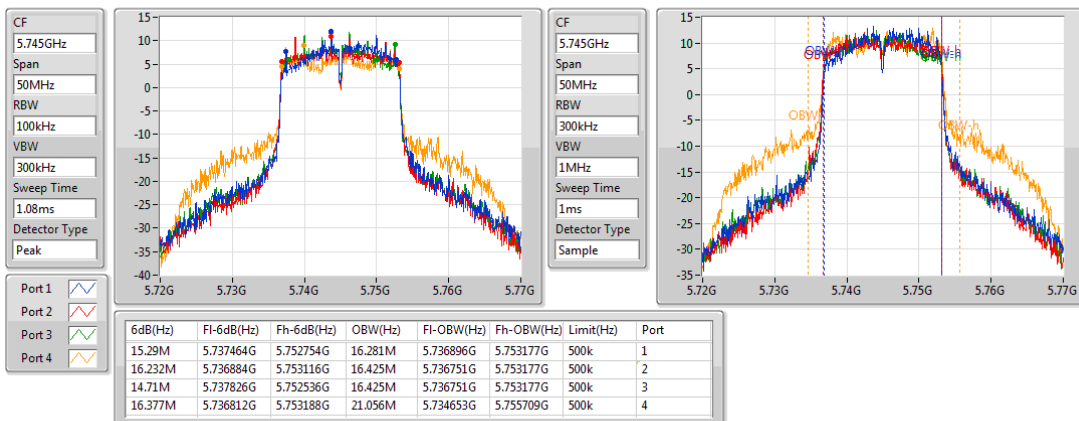
5720MHz Straddle 5.725-5.85GHz



802.11a_Nss1,(6Mbps)_4TX

EBW

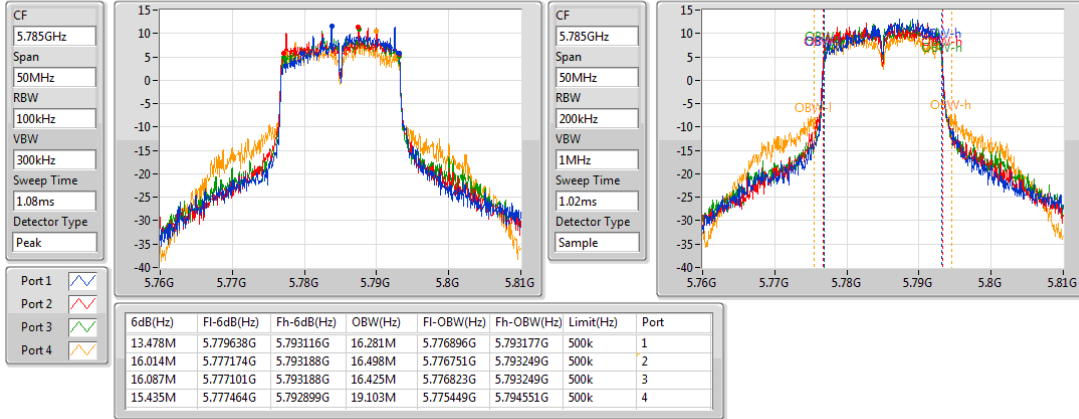
5745MHz



802.11a_Nss1,(6Mbps)_4TX

EBW

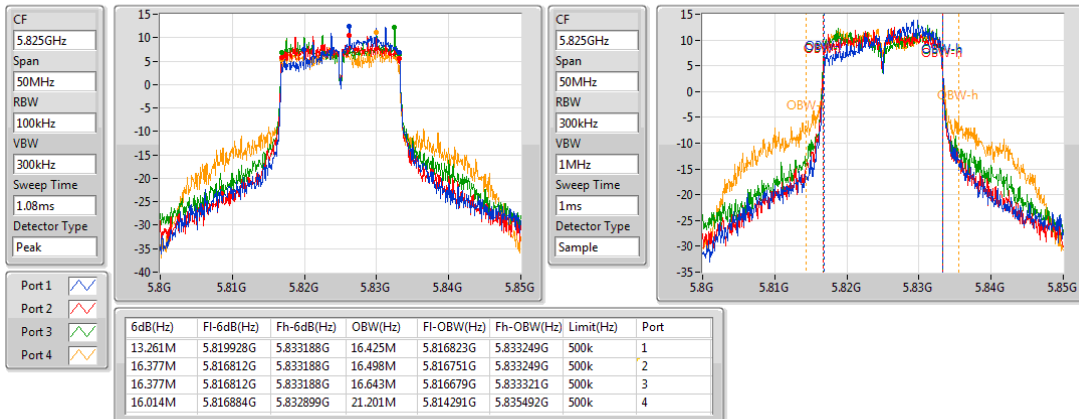
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802.11a_Nss1,(6Mbps)_4TX

EBW

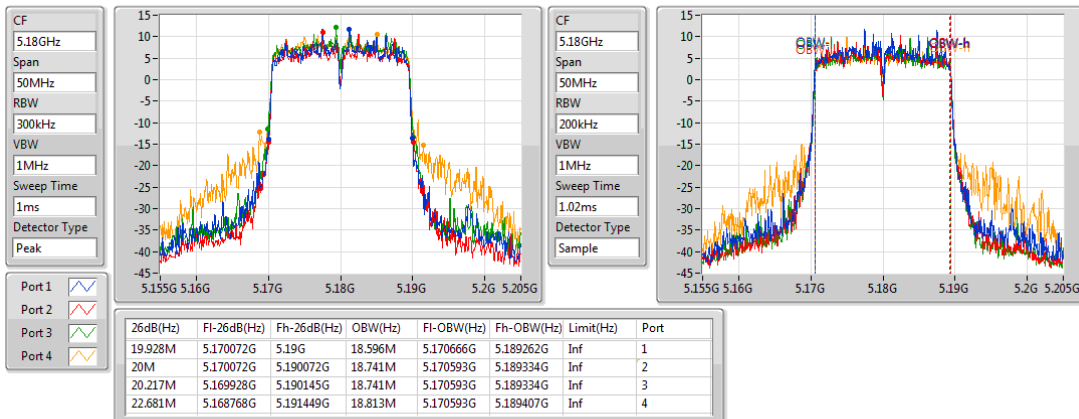
5825MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

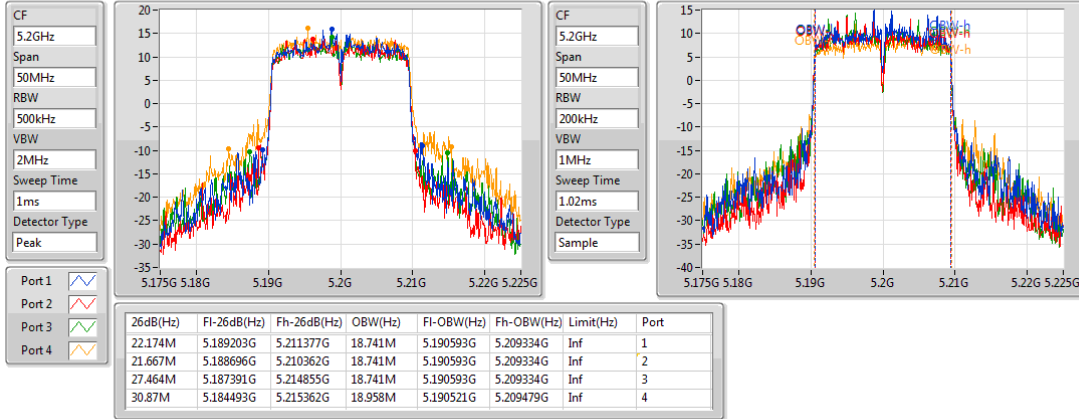
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

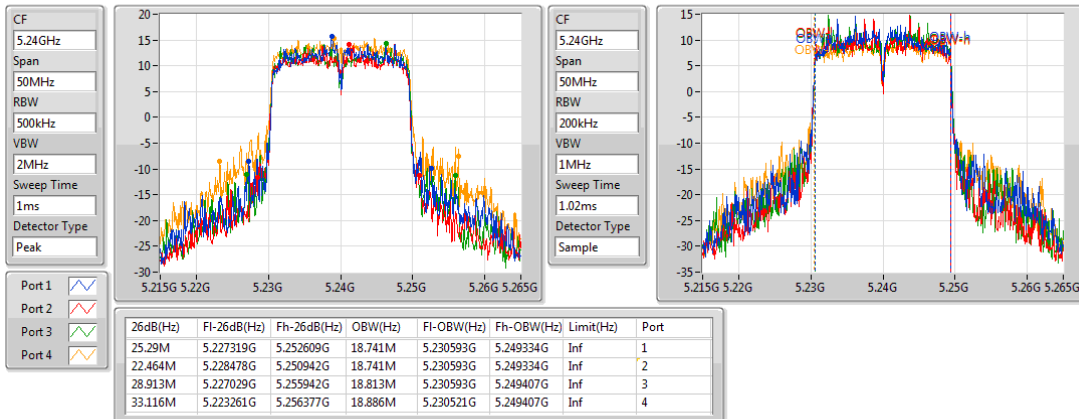
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

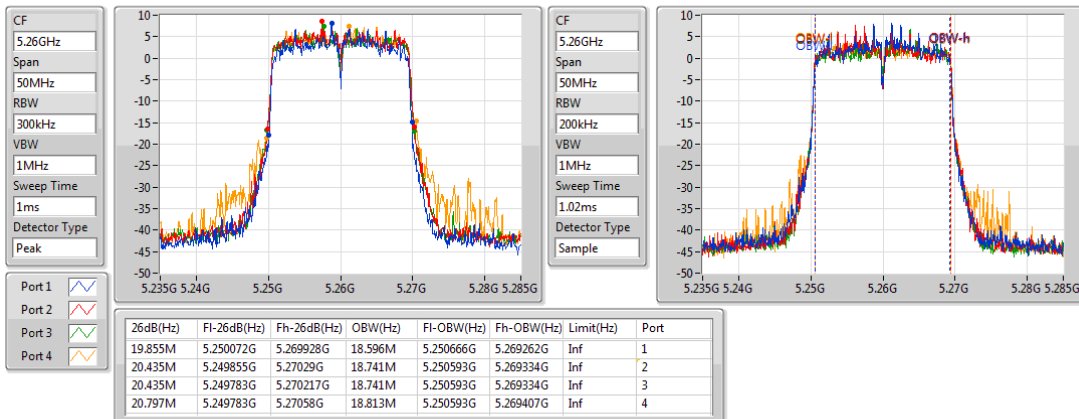
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

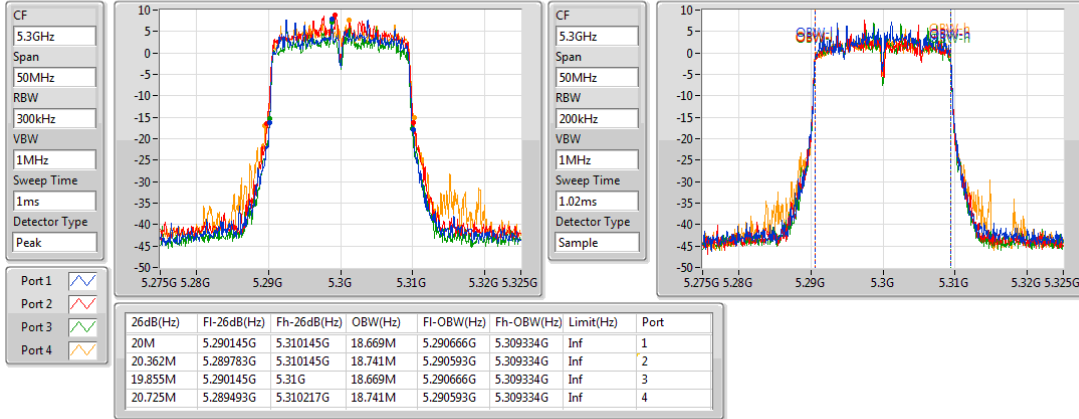
5260MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

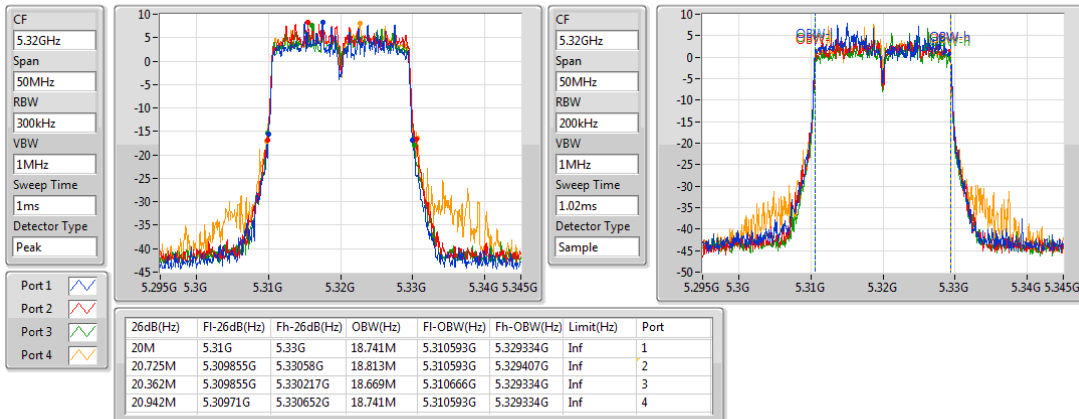
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802.11ax HEW20_Nss1,(MCS0)_4TX

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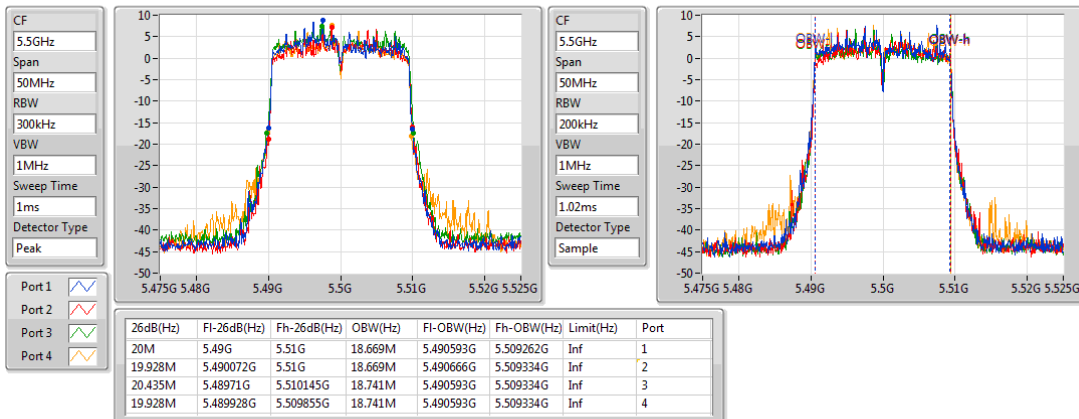
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

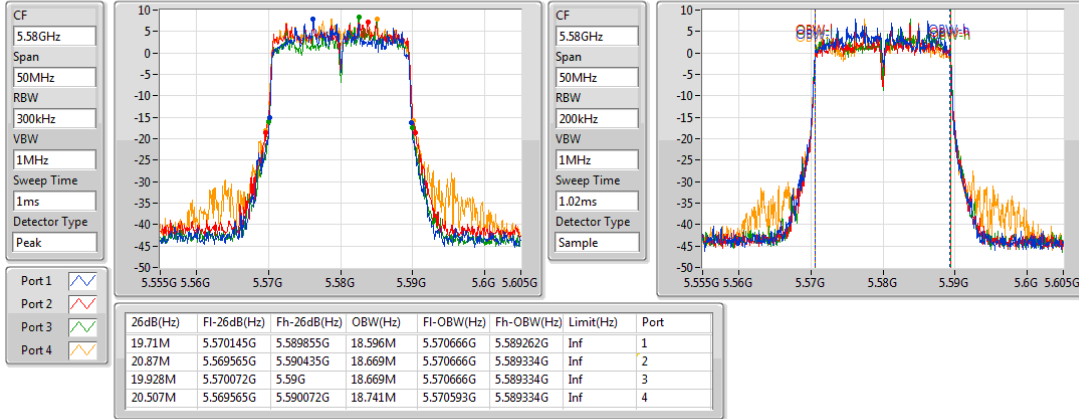
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

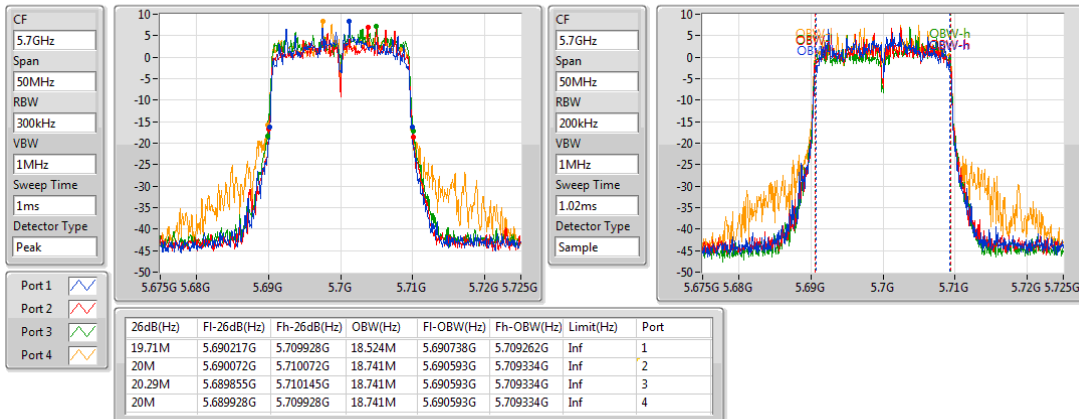
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802.11ax HEW20_Nss1,(MCS0)_4TX

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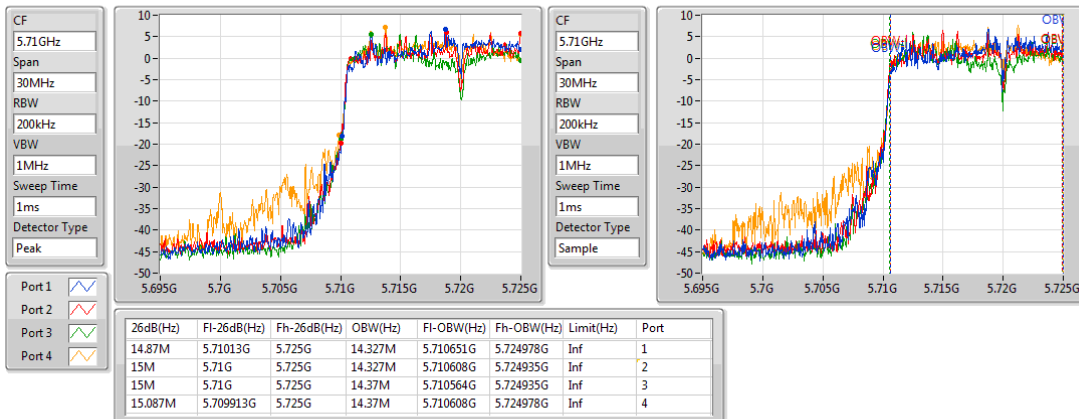
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802.11ax HEW20_Nss1,(MCS0)_4TX

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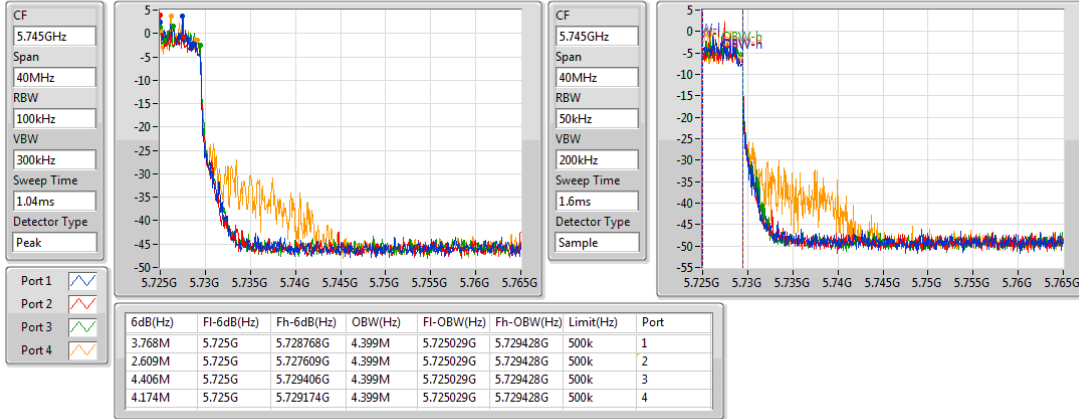
5720MHz Straddle 5.47-5.725GHz



802.11ax HEW20_Nss1,(MCS0)_4TX

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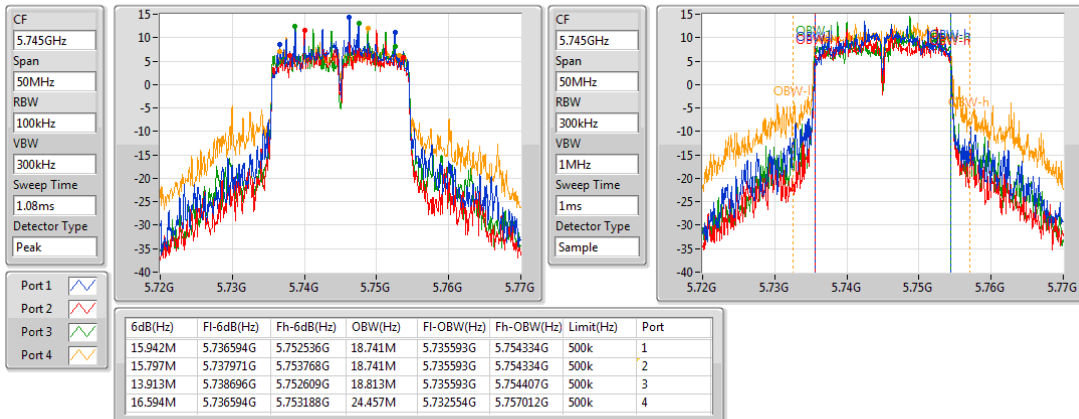
5720MHz Straddle 5.725-5.85GHz



802.11ax HEW20_Nss1,(MCS0)_4TX

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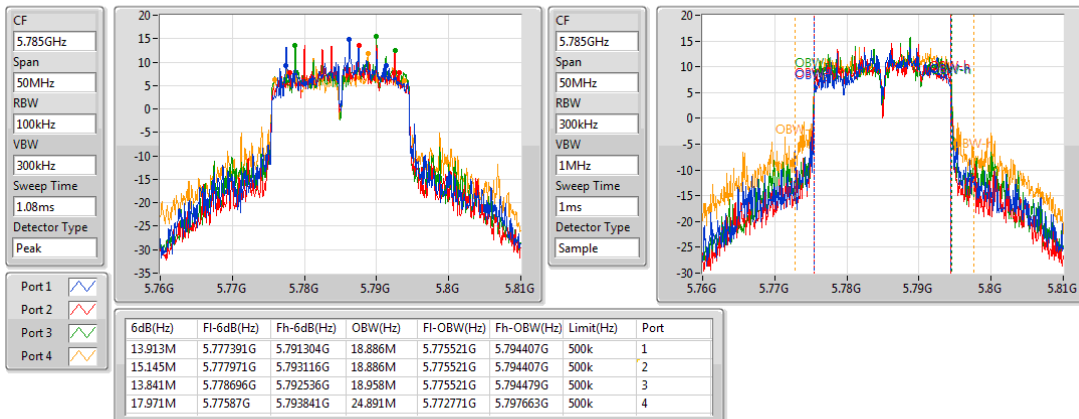
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

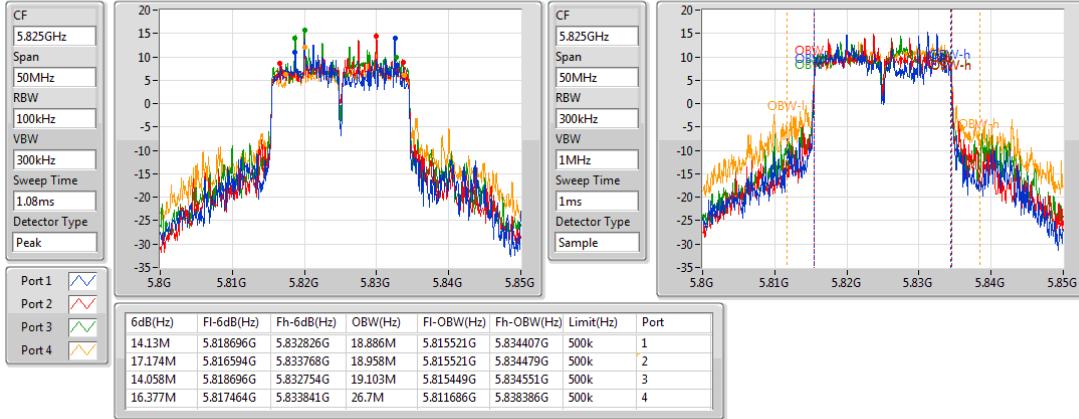
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

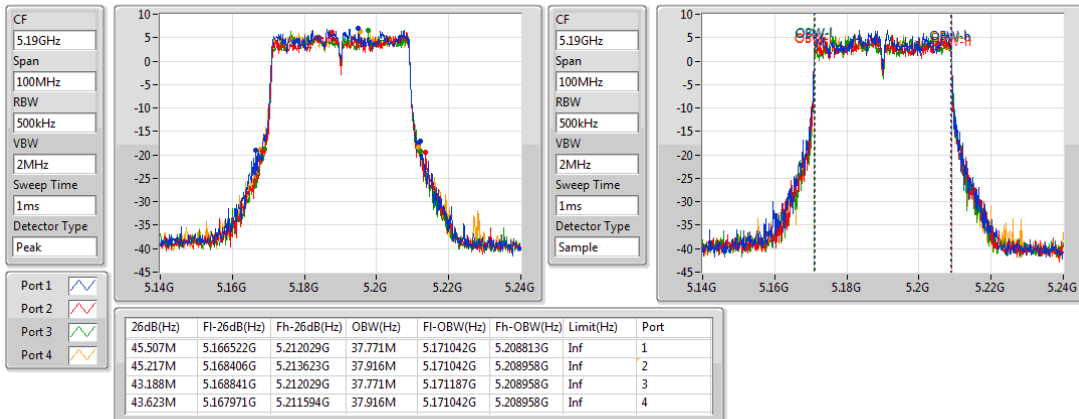
5825MHz



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

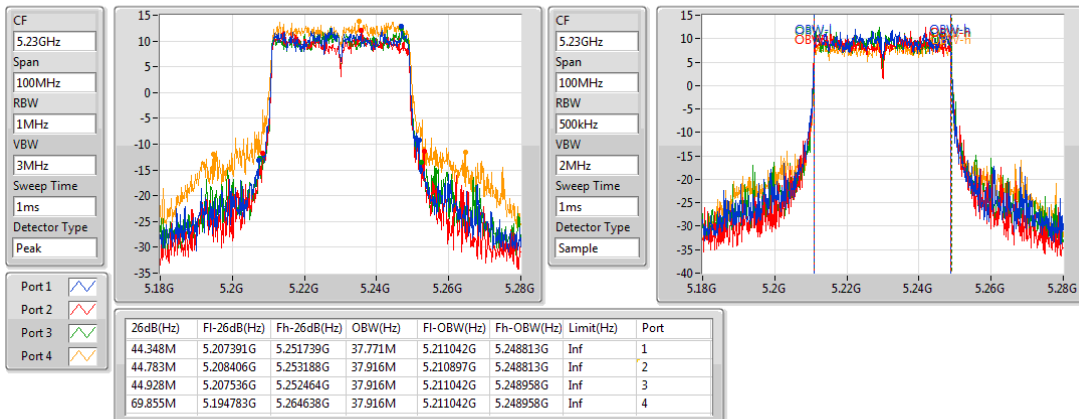
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802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

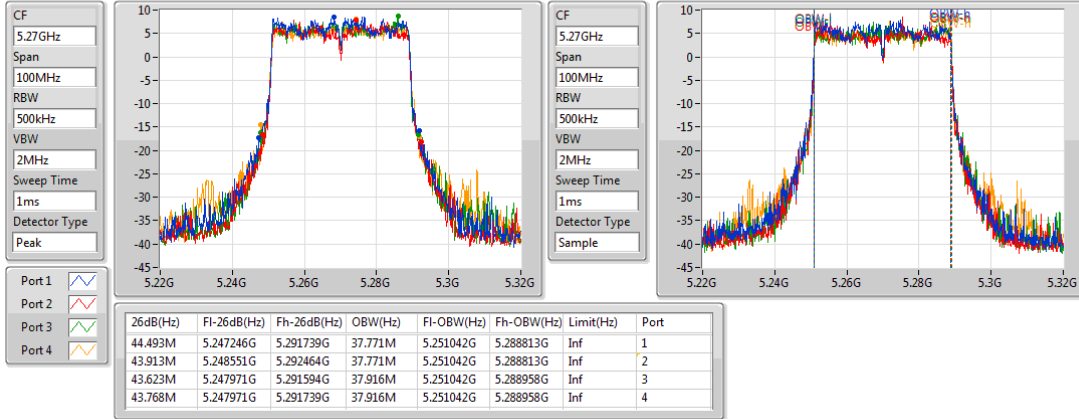
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802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

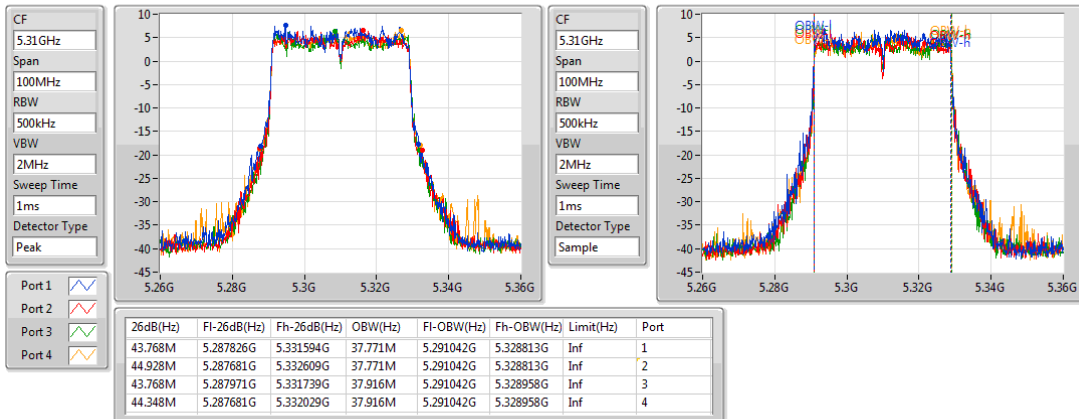
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802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

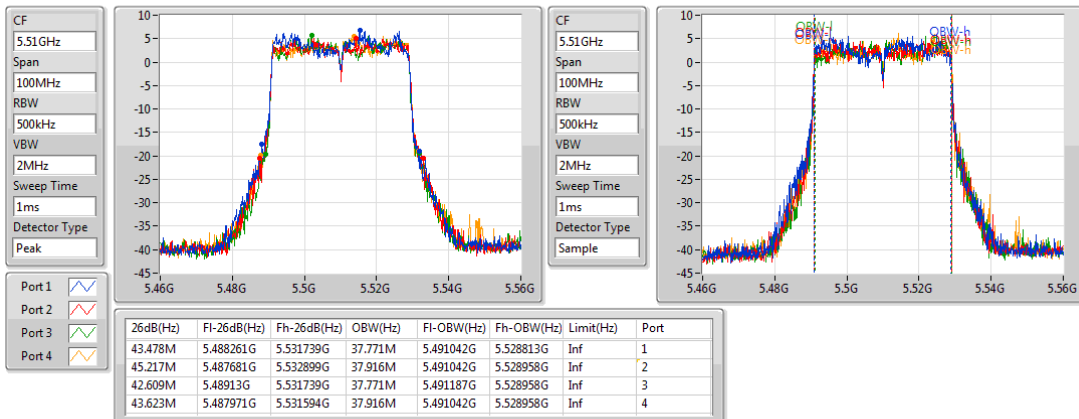
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802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

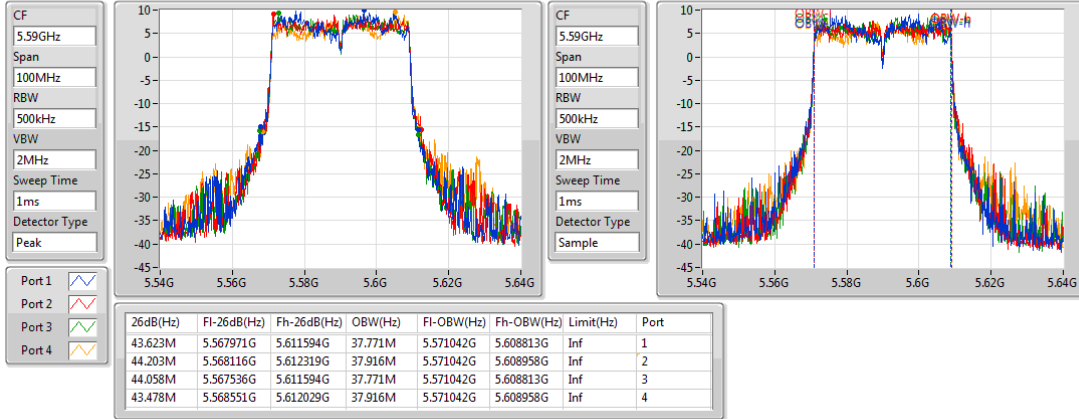
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802.11ax HEW40_Nss1,(MCS0)_4TX

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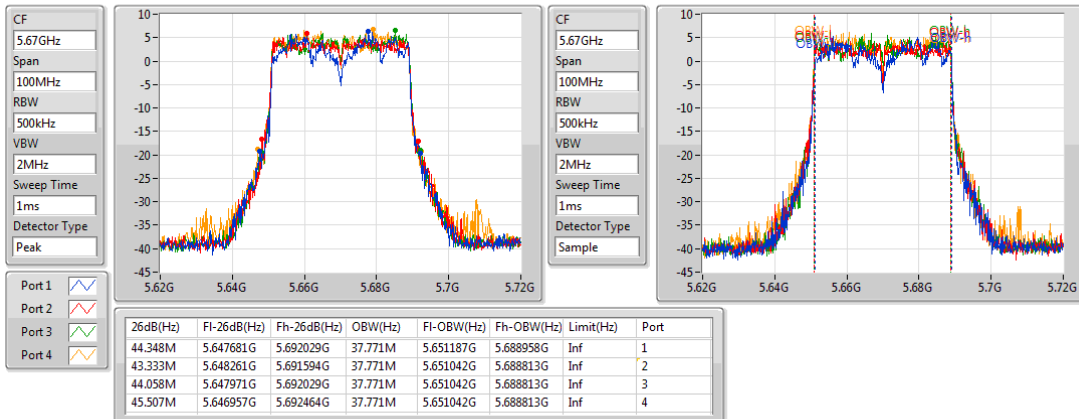
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802.11ax HEW40_Nss1,(MCS0)_4TX

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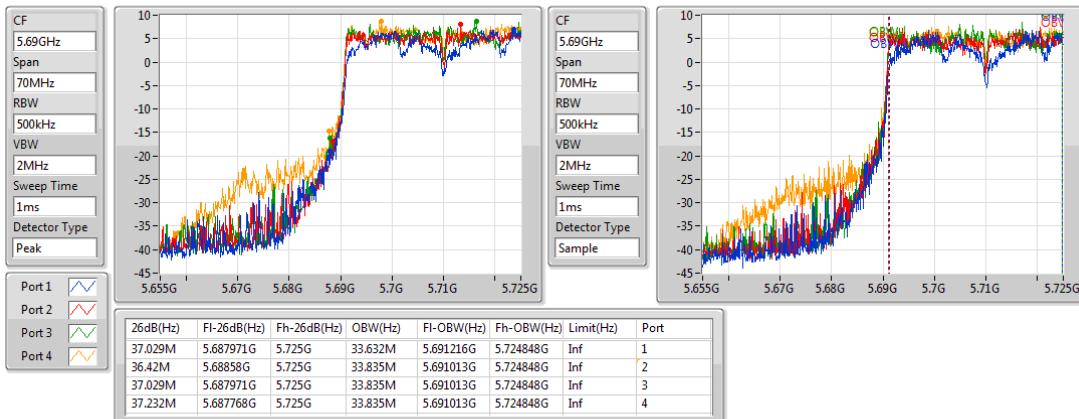
5670MHz



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

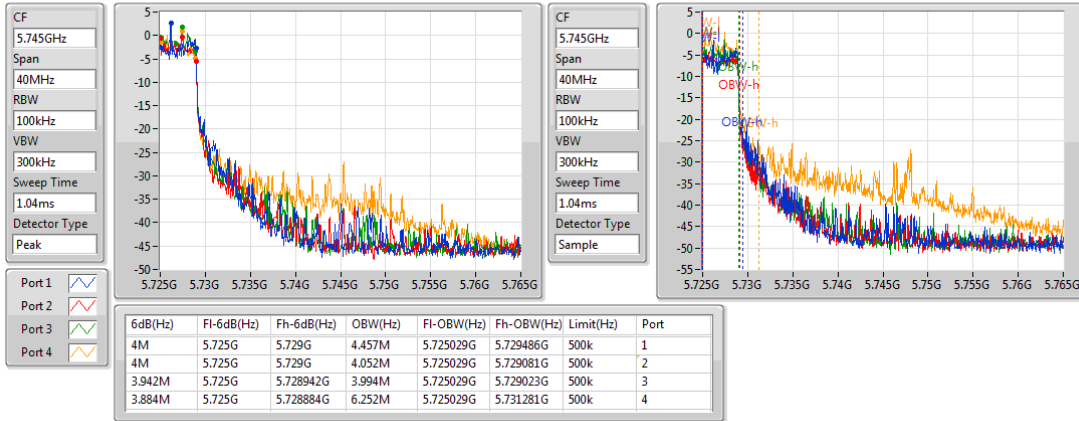
5710MHz Straddle 5.47-5.725GHz



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

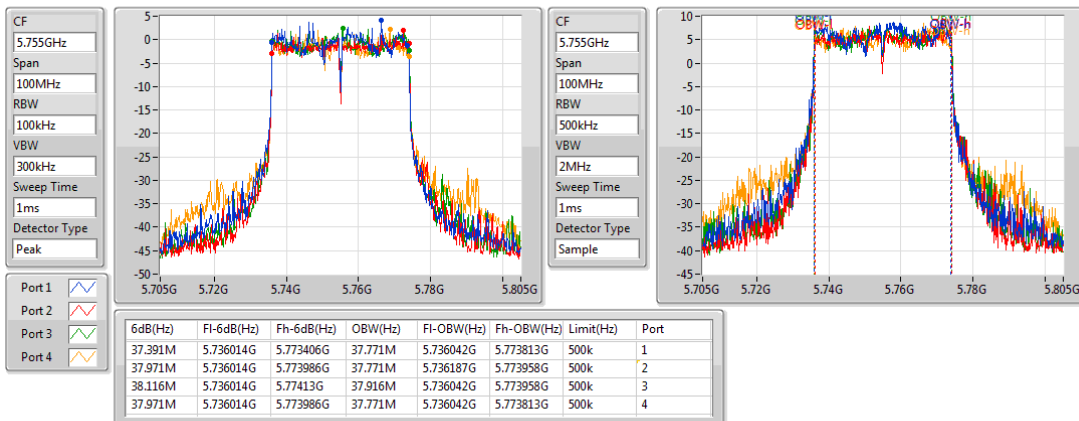
5710MHz Straddle 5.725-5.85GHz



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

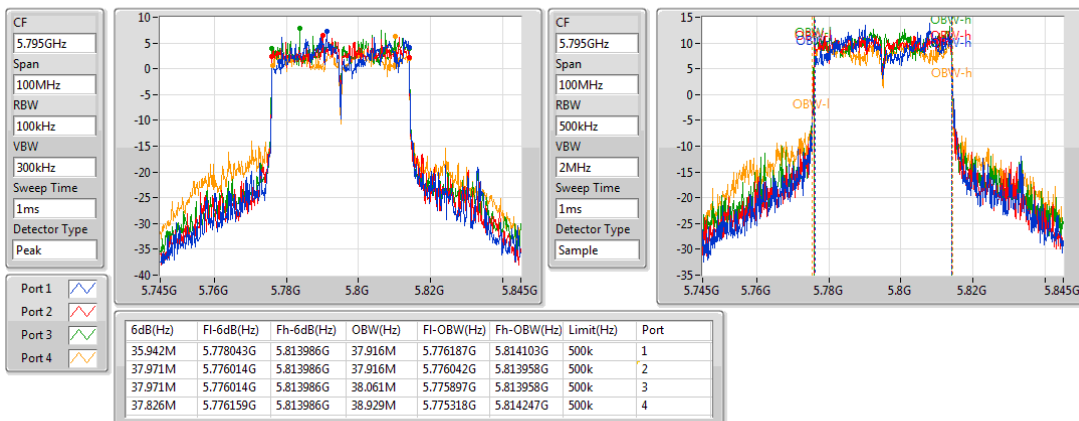
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802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

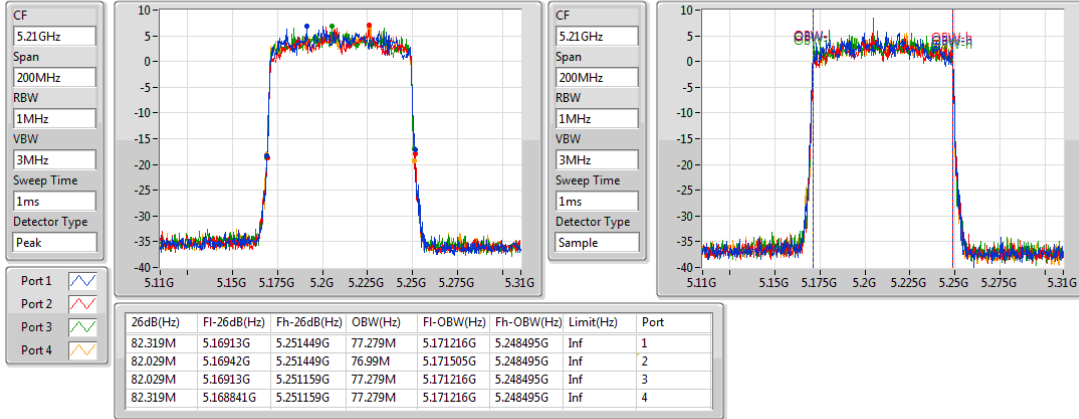
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802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

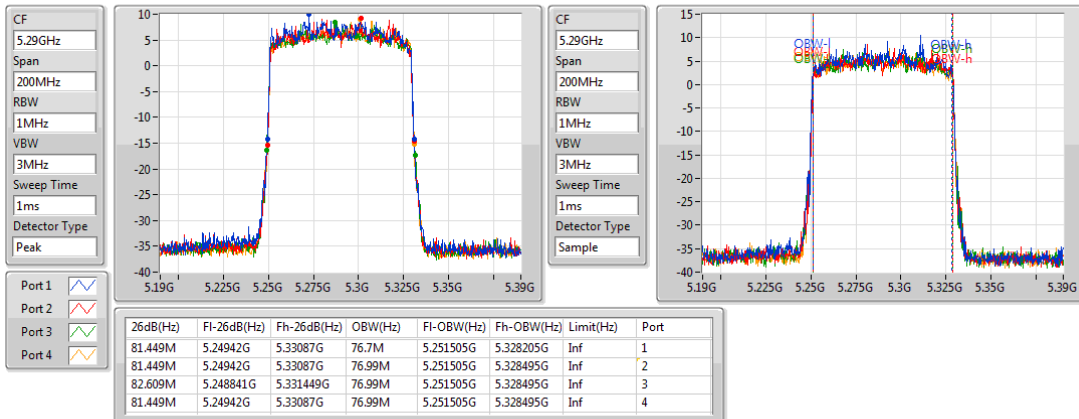
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802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

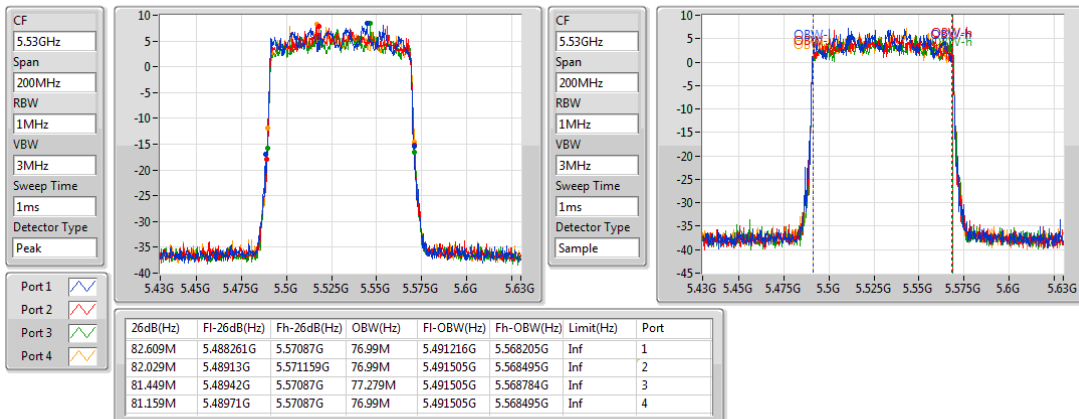
5290MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

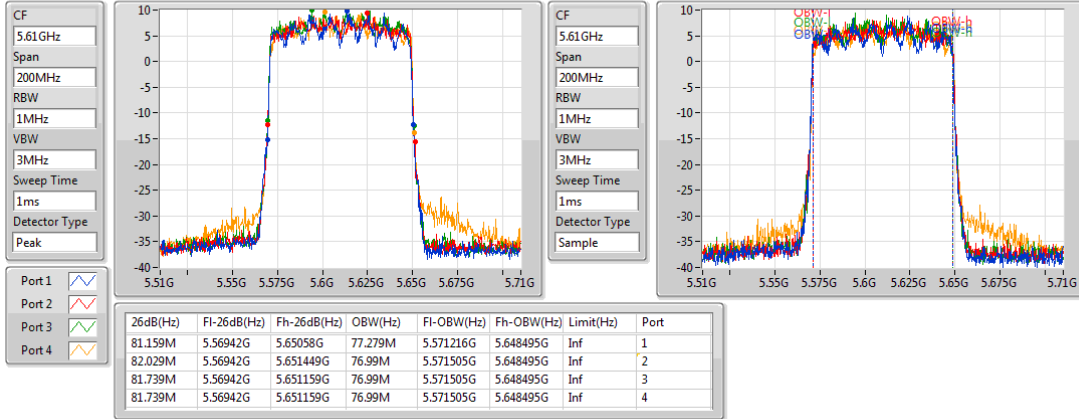
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802.11ax HEW80_Nss1,(MCS0)_4TX

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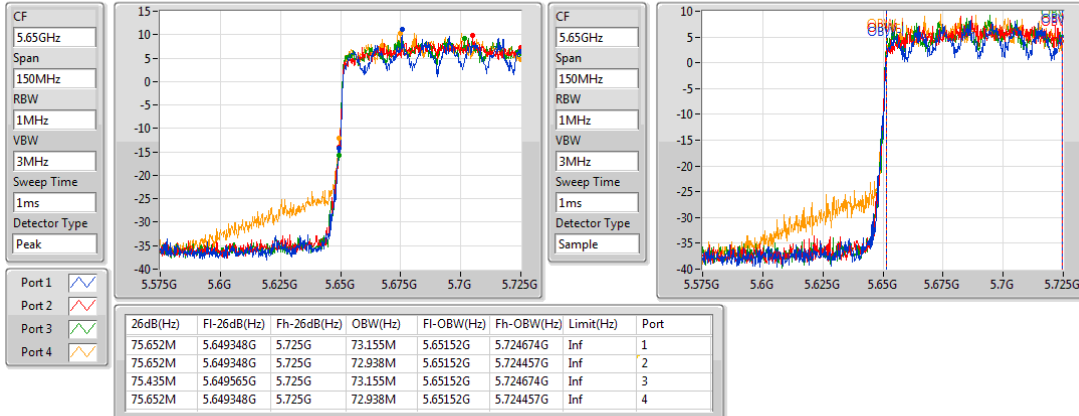
5610MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

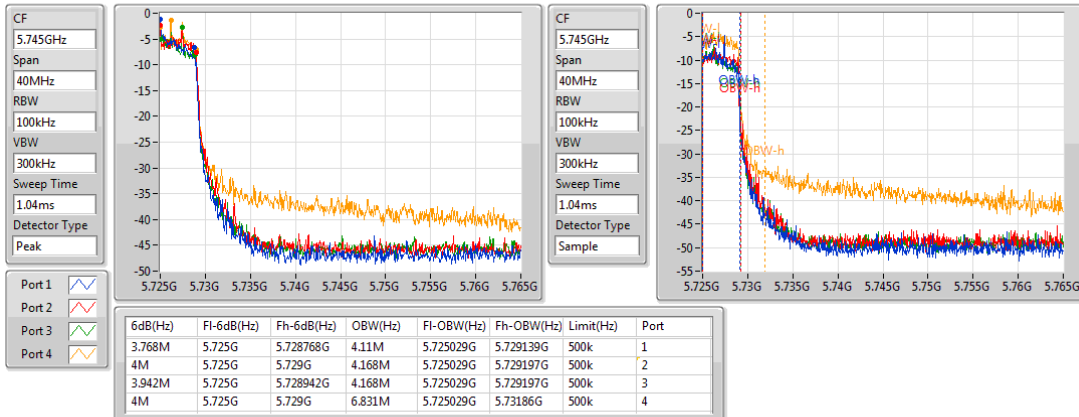
5690MHz Straddle 5.47-5.725GHz



802.11ax HEW80_Nss1,(MCS0)_4TX

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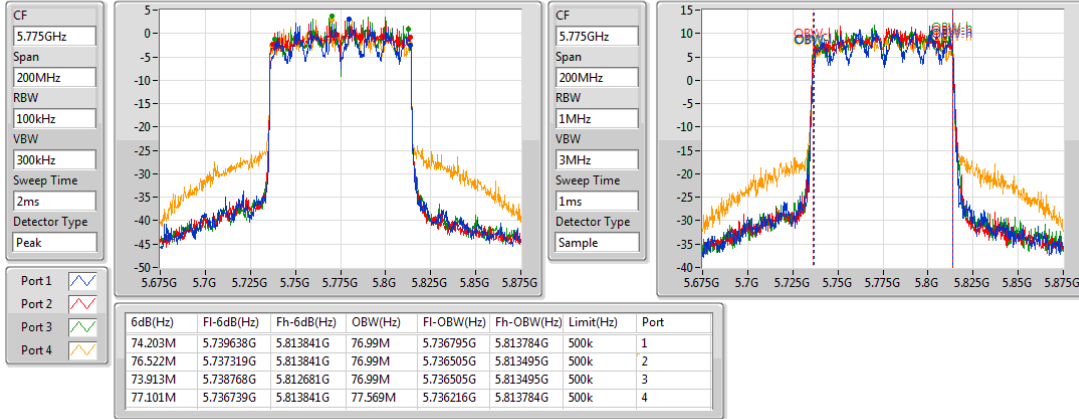
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802.11ax HEW80_Nss1,(MCS0)_4TX

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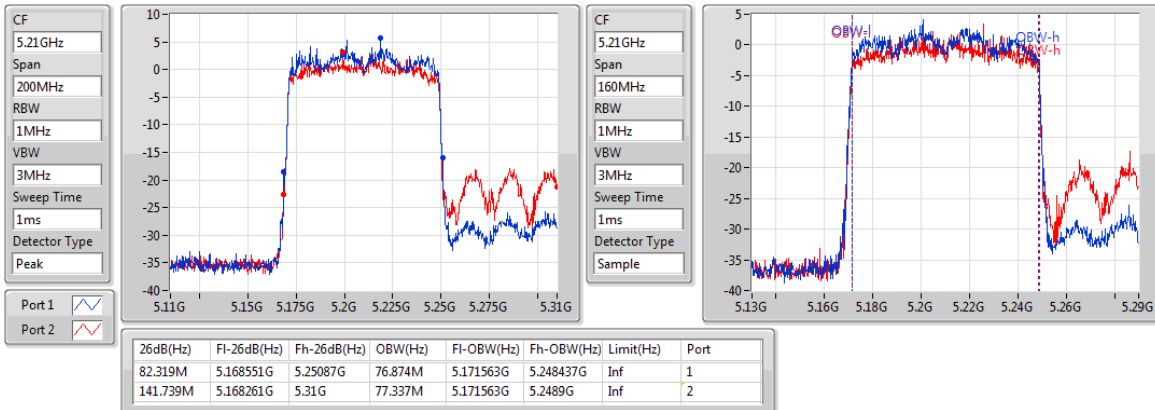
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11ax80+80_Nss1,(MCS0)_2TX(Port1&Port2)

EBW

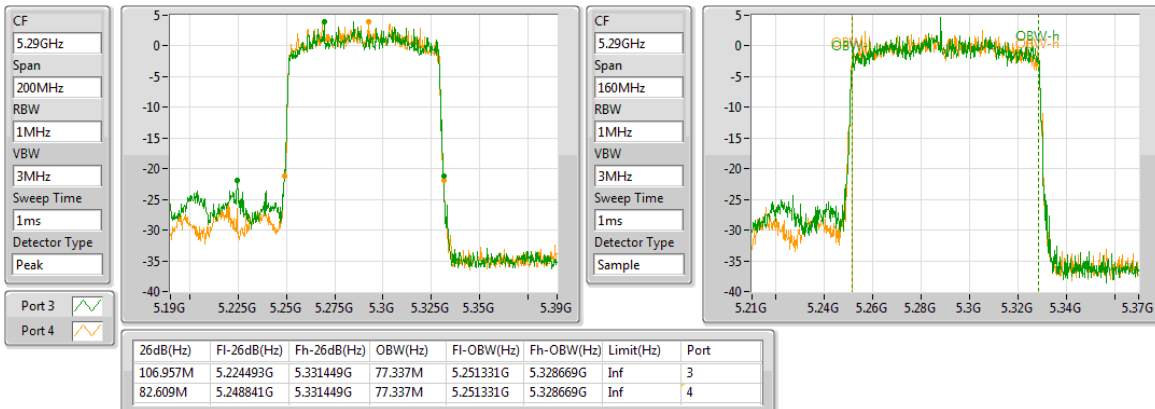
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11ax80+80_Nss1,(MCS0)_2TX(Port3&Port4)

EBW

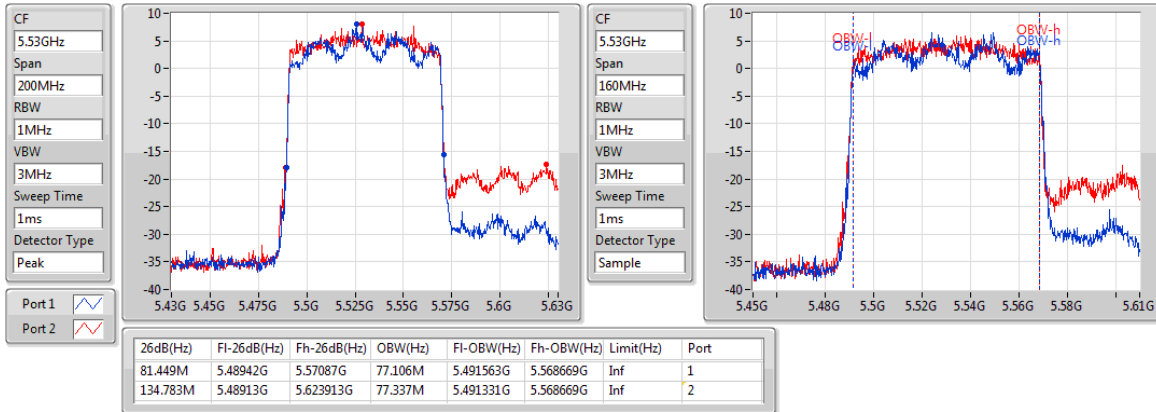
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11ax80+80_Nss1,(MCS0)_2TX(Port1&Port2)

EBW

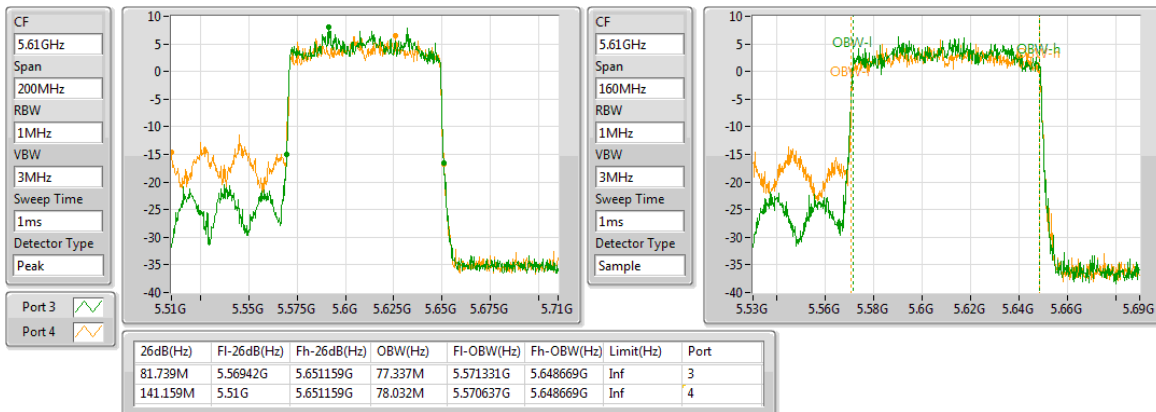
5530MHz



11ax80+80_Nss1,(MCS0)_2TX(Port3&Port4)

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

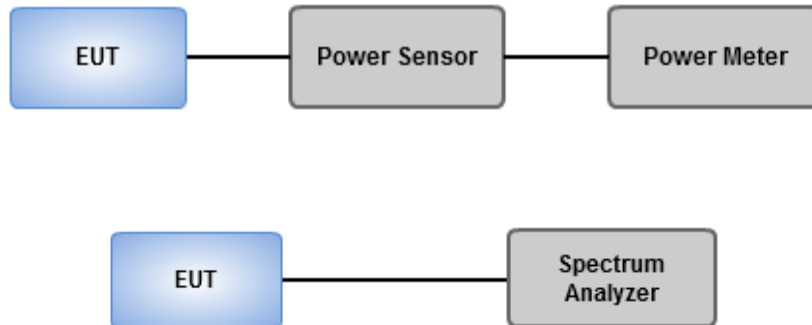
Method PM-G (Measurement using a gated RF average power meter)

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)_4TX	26.19	0.41591	29.39	0.86896
802.11ax HEW20_Nss1,(MCS0)_4TX	26.80	0.47863	30.00	1.00000
802.11ax HEW40_Nss1,(MCS0)_4TX	26.35	0.43152	29.55	0.90157
802.11ax HEW80_Nss1,(MCS0)_4TX	19.70	0.09333	22.90	0.19498
802.11ax HEW80+80_Nss1,(MCS0)_2TX	13.70	0.02344	16.90	0.04898
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.83	0.09616	24.03	0.25293
802.11ax HEW20_Nss1,(MCS0)_4TX	20.09	0.10209	24.29	0.26853
802.11ax HEW40_Nss1,(MCS0)_4TX	22.64	0.18365	26.84	0.48306
802.11ax HEW80_Nss1,(MCS0)_4TX	22.13	0.16331	26.33	0.42954
802.11ax HEW80+80_Nss1,(MCS0)_2TX	13.27	0.02123	17.47	0.05585
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.72	0.09376	24.02	0.25235
802.11ax HEW20_Nss1,(MCS0)_4TX	20.18	0.10423	24.48	0.28054
802.11ax HEW40_Nss1,(MCS0)_4TX	22.65	0.18408	26.95	0.49545
802.11ax HEW80_Nss1,(MCS0)_4TX	23.22	0.20989	27.52	0.56494
802.11ax HEW80+80_Nss1,(MCS0)_2TX	19.67	0.09268	23.97	0.24774
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	29.11	0.81470	34.11	2.57632
802.11ax HEW20_Nss1,(MCS0)_4TX	28.70	0.74131	33.70	2.34423
802.11ax HEW40_Nss1,(MCS0)_4TX	27.43	0.55335	32.43	1.74985
802.11ax HEW80_Nss1,(MCS0)_4TX	26.05	0.40272	31.05	1.27350

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	3.20	20.55	20.08	20.18	19.85	26.19	30.00	29.39	36.00
5200MHz	Pass	3.20	20.46	20.02	20.1	20.06	26.18	30.00	29.38	36.00
5240MHz	Pass	3.20	20.51	20.01	20.23	19.81	26.17	30.00	29.37	36.00
5260MHz	Pass	4.20	13.41	13.19	13.86	13.64	19.55	23.73	23.75	29.73
5300MHz	Pass	4.20	13.81	13.83	12.95	13.68	19.60	23.65	23.80	29.65
5320MHz	Pass	4.20	14.02	13.68	13.39	14.11	19.83	23.70	24.03	29.70
5500MHz	Pass	4.30	13.92	13.55	13.62	13.68	19.72	23.65	24.02	29.65
5580MHz	Pass	4.30	13.79	13.55	13.42	13.69	19.64	23.67	23.94	29.67
5700MHz	Pass	4.30	13.53	13.26	13.45	14.14	19.63	23.58	23.93	29.58
5720MHz Straddle 5.47-5.725GHz	Pass	4.30	12.51	11.73	12.21	12.67	18.32	22.50	22.62	28.50
5720MHz Straddle 5.725-5.85GHz	Pass	5.00	5.82	6.28	5.46	6.17	11.96	30.00	16.96	36.00
5745MHz	Pass	5.00	23.46	22.81	23.25	22.46	29.03	30.00	34.03	36.00
5785MHz	Pass	5.00	23.45	22.99	22.96	22.94	29.11	30.00	34.11	36.00
5825MHz	Pass	5.00	23.34	22.71	23.35	22.48	29.01	30.00	34.01	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	3.20	18.06	17.21	17.28	17.46	23.54	30.00	26.74	36.00
5200MHz	Pass	3.20	21.38	20.48	20.19	20.75	26.74	30.00	29.94	36.00
5240MHz	Pass	3.20	20.91	20.75	21.26	20.12	26.80	30.00	30.00	36.00
5260MHz	Pass	4.20	14.58	14.01	13.6	14.02	20.09	23.98	24.29	29.98
5300MHz	Pass	4.20	14.51	13.68	13.39	14.05	19.95	23.98	24.15	29.98
5320MHz	Pass	4.20	14.09	13.92	13.61	14.04	19.94	24.00	24.14	30.00
5500MHz	Pass	4.30	14.64	14.24	13.66	14.04	20.18	23.99	24.48	29.99
5580MHz	Pass	4.30	14.31	13.62	14.34	13.85	20.06	23.95	24.36	29.95
5700MHz	Pass	4.30	14.44	13.32	13.64	14.54	20.04	23.95	24.34	29.95
5720MHz Straddle 5.47-5.725GHz	Pass	4.30	12.75	12.08	12.05	13.13	18.55	22.72	22.85	28.72
5720MHz Straddle 5.725-5.85GHz	Pass	5.00	7.8	7.11	7.8	6.87	13.44	30.00	18.44	36.00
5745MHz	Pass	5.00	20.51	20.16	20.91	21.39	26.79	30.00	31.79	36.00
5785MHz	Pass	5.00	22.43	22.63	22.68	22.96	28.70	30.00	33.70	36.00
5825MHz	Pass	5.00	22.89	21.72	22.98	21.69	28.38	30.00	33.38	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	3.20	15.02	14.39	15.01	14.78	20.83	30.00	24.03	36.00
5230MHz	Pass	3.20	20.72	20.04	20.69	19.81	26.35	30.00	29.55	36.00
5270MHz	Pass	4.20	17.21	16.36	16.45	16.41	22.64	24.00	26.84	30.00
5310MHz	Pass	4.20	16.02	15.14	15.16	15.34	21.45	24.00	25.65	30.00
5510MHz	Pass	4.30	14.65	14.08	14.41	14.42	20.42	24.00	24.72	30.00

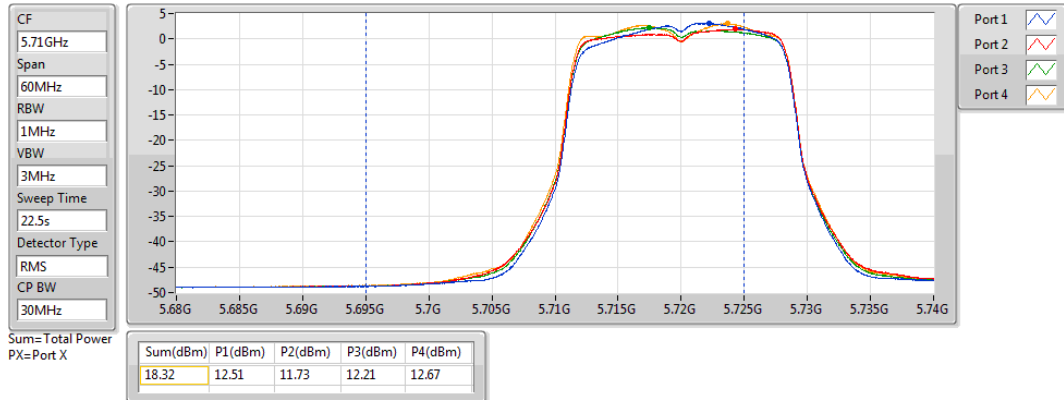
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5590MHz	Pass	4.30	16.58	16.53	16.62	16.78	22.65	24.00	26.95	30.00
5670MHz	Pass	4.30	13.12	13.45	13.83	14.41	19.75	24.00	24.05	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.30	15.28	15.37	15.84	16.16	21.70	24.00	26.00	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	5.00	6.25	6.42	7.7	6.65	12.81	30.00	17.81	36.00
5755MHz	Pass	5.00	18.12	16.94	17.16	17.21	23.40	30.00	28.40	36.00
5795MHz	Pass	5.00	21.29	21.43	21.82	21.06	27.43	30.00	32.43	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	3.20	13.82	13.45	13.81	13.64	19.70	30.00	22.90	36.00
5290MHz	Pass	4.20	16.21	16.04	16.06	16.12	22.13	24.00	26.33	30.00
5530MHz	Pass	4.30	15.41	15.26	15.06	15.14	21.24	24.00	25.54	30.00
5610MHz	Pass	4.30	17.06	16.95	17.38	17.39	23.22	24.00	27.52	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.30	16.22	16.48	16.52	16.87	22.55	24.00	26.85	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	5.00	3.07	3.57	2.88	3.96	9.41	30.00	14.41	36.00
5775MHz	Pass	5.00	19.96	20.15	19.96	20.04	26.05	30.00	31.05	36.00
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	3.20	11.25	10.05	-	-	13.70	30.00	16.90	36.00
5290MHz	Pass	4.20	-	-	10.11	10.40	13.27	24.00	17.47	30.00
802.11ax HEW80+80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	4.30	13.18	13.85	-	-	19.67	24.00	23.97	30.00
5610MHz	Pass		-	-	13.95	13.56				

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

802.11a_Nss1,(6Mbps)_4TX

AV Power

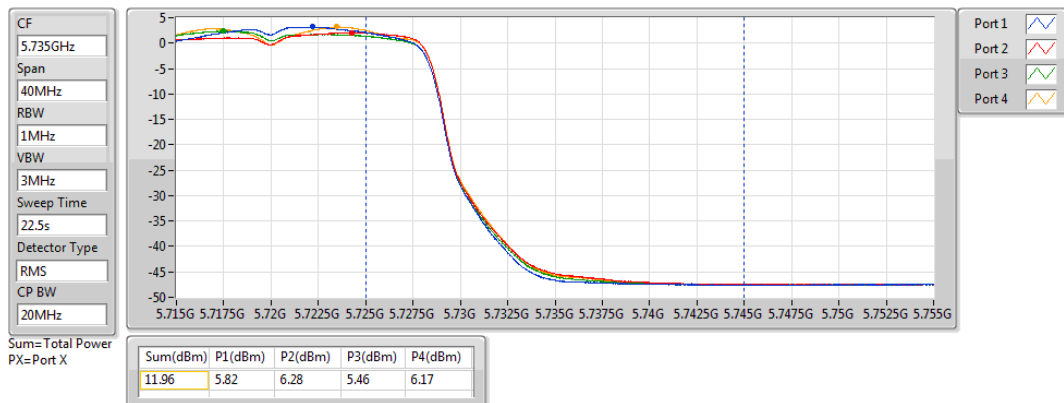
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_4TX

AV Power

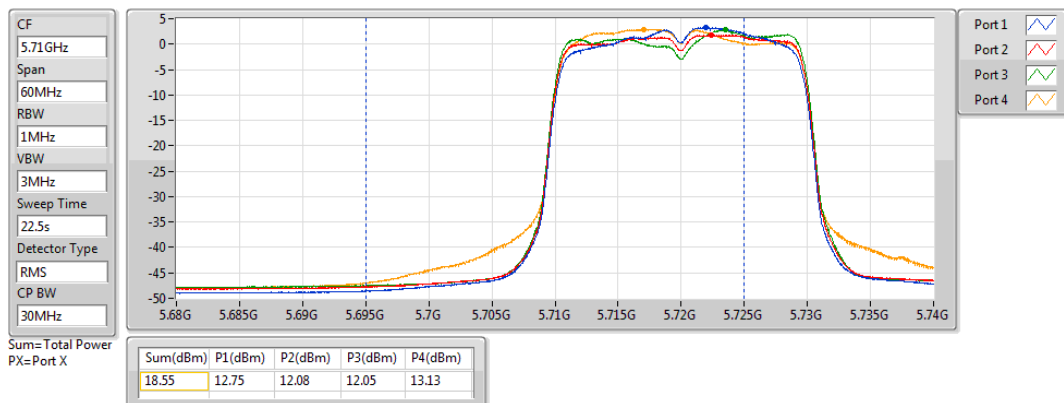
5720MHz Straddle 5.725-5.85GHz



802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

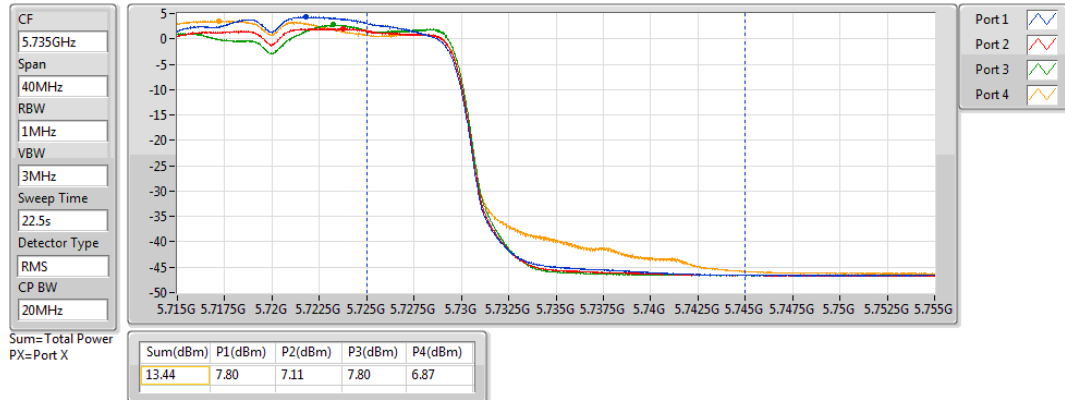
5720MHz Straddle 5.47-5.725GHz



802.11ax HEW20_Nss1,(MCS0)_4TX

AV Power

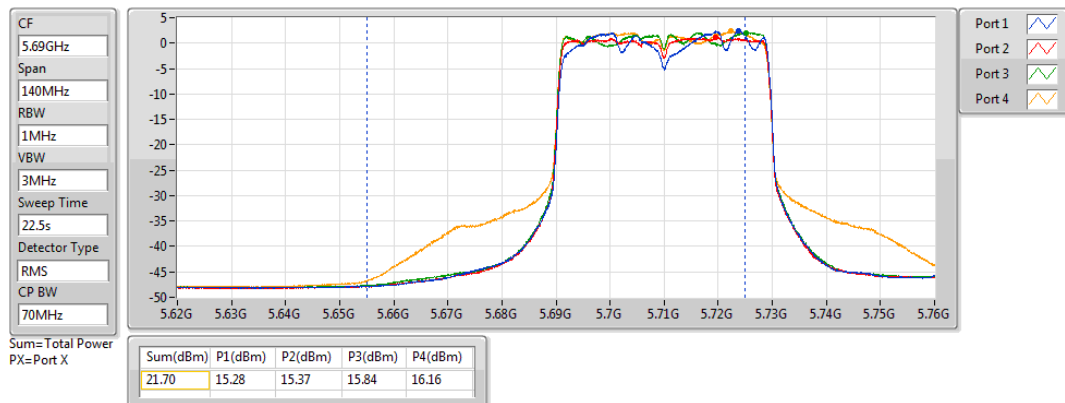
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802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

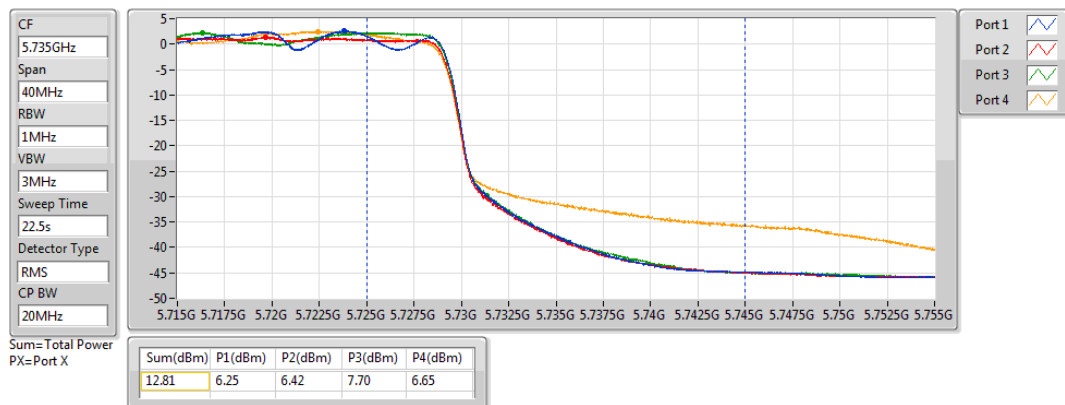
5710MHz Straddle 5.47-5.725GHz



802.11ax HEW40_Nss1,(MCS0)_4TX

AV Power

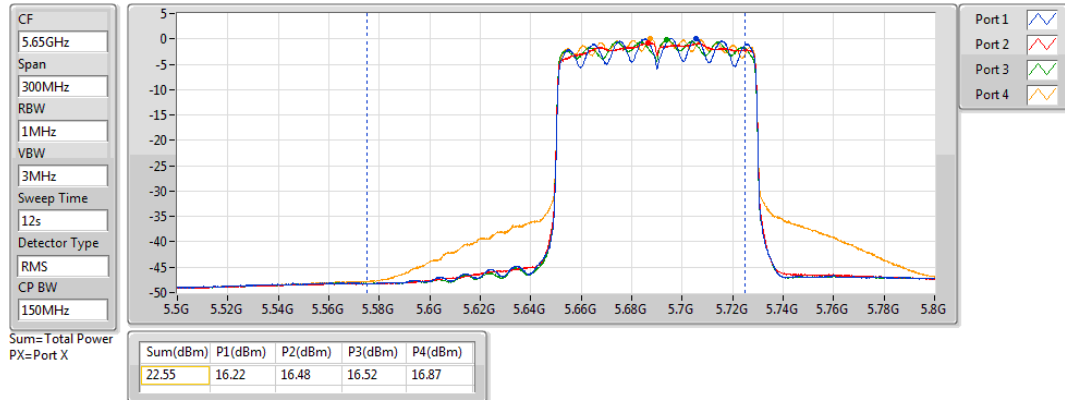
5710MHz Straddle 5.725-5.85GHz



802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

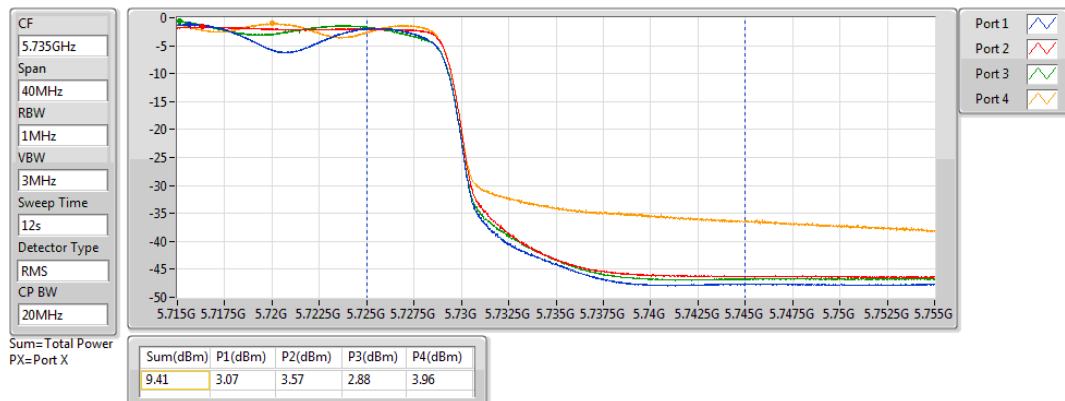
5690MHz Straddle 5.47-5.725GHz



802.11ax HEW80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz



Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	20.78	0.11967	30.00	1.00000
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	20.33	0.10789	29.55	0.90157
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	13.68	0.02333	22.90	0.19498
802.11ax HEW80+80-BF_Nss1,(MCS0)_2 TX	7.68	0.00586	13.89	0.02449
5.25-5.35GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.07	0.02553	24.29	0.26853
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	16.62	0.04592	26.84	0.48306
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	16.11	0.04083	26.33	0.42954
802.11ax HEW80+80-BF_Nss1,(MCS0)_2 TX	7.25	0.00531	14.46	0.02793
5.47-5.725GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	14.16	0.02606	24.48	0.28054
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	16.63	0.04603	26.95	0.49545
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	17.20	0.05248	27.52	0.56494
802.11ax HEW80+80-BF_Nss1,(MCS0)_2 TX	13.65	0.0023	20.96	0.12474
5.725-5.85GHz	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.68	0.18535	33.70	2.34423
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	21.41	0.13836	32.43	1.74985
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	20.03	0.10069	31.05	1.27350

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_ 4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.22	12.04	11.19	11.26	11.44	17.52	26.78	26.74	36.00
5200MHz	Pass	9.22	15.36	14.46	14.17	14.73	20.72	26.78	29.94	36.00
5240MHz	Pass	9.22	14.89	14.73	15.24	14.1	20.78	26.78	30.00	36.00
5260MHz	Pass	10.22	8.56	7.99	7.58	8	14.07	19.78	24.29	30.00
5300MHz	Pass	10.22	8.49	7.66	7.37	8.03	13.93	19.78	24.15	30.00
5320MHz	Pass	10.22	8.07	7.9	7.59	8.02	13.92	19.78	24.14	30.00
5500MHz	Pass	10.32	8.62	8.22	7.64	8.02	14.16	19.68	24.48	30.00
5580MHz	Pass	10.32	8.29	7.6	8.32	7.83	14.04	19.68	24.36	30.00
5700MHz	Pass	10.32	8.42	7.3	7.62	8.52	14.02	19.68	24.34	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.32	6.73	6.06	6.03	7.11	12.53	19.68	22.85	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	11.02	1.78	1.09	1.78	0.85	7.42	24.98	18.44	36.00
5745MHz	Pass	11.02	14.49	14.14	14.89	15.37	20.77	24.98	31.79	36.00
5785MHz	Pass	11.02	16.41	16.61	16.66	16.94	22.68	24.98	33.70	36.00
5825MHz	Pass	11.02	16.87	15.7	16.96	15.67	22.36	24.98	33.38	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_ 4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	9.22	9	8.37	8.99	8.76	14.81	26.78	24.03	36.00
5230MHz	Pass	9.22	14.7	14.02	14.67	13.79	20.33	26.78	29.55	36.00
5270MHz	Pass	10.22	11.19	10.34	10.43	10.39	16.62	19.78	26.84	30.00
5310MHz	Pass	10.22	10	9.12	9.14	9.32	15.43	19.78	25.65	30.00
5510MHz	Pass	10.32	8.63	8.06	8.39	8.4	14.40	19.68	24.72	30.00
5590MHz	Pass	10.32	10.56	10.51	10.6	10.76	16.63	19.68	26.95	30.00
5670MHz	Pass	10.32	7.1	7.43	7.81	8.39	13.73	19.68	24.05	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	10.32	9.26	9.35	9.82	10.14	15.68	19.68	26.00	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	11.02	0.23	0.4	1.68	0.63	6.79	24.98	17.81	36.00
5755MHz	Pass	11.02	12.1	10.92	11.14	11.19	17.38	24.98	28.40	36.00
5795MHz	Pass	11.02	15.27	15.41	15.8	15.04	21.41	24.98	32.43	36.00
802.11ax HEW80-BF_Nss1,(MCS0)_ 4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	9.22	7.8	7.43	7.79	7.62	13.68	26.78	22.90	36.00
5290MHz	Pass	10.22	10.19	10.02	10.04	10.1	16.11	19.78	26.33	30.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5530MHz	Pass	10.32	9.39	9.24	9.04	9.12	15.22	19.68	25.54	30.00
5610MHz	Pass	10.32	11.04	10.93	11.36	11.37	17.20	19.68	27.52	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	10.32	10.2	10.46	10.5	10.85	16.53	19.68	26.85	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	11.02	-2.95	-2.45	-3.14	-2.06	3.39	24.98	14.41	36.00
5775MHz	Pass	11.02	13.94	14.13	13.94	14.02	20.03	24.98	31.05	36.00
802.11ax HEW80+80-BF_Nss1,(MC S0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.21	5.23	4.03	-	-	7.68	29.79	13.89	36.00
5290MHz	Pass	7.21	-	-	4.09	4.38	7.25	22.79	14.46	30.00
802.11ax HEW80+80-BF_Nss1,(MC S0)_2TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	7.31	7.16	7.83	-	-	13.65	22.69	20.96	30.00
5610MHz	Pass		-	-	7.93	7.54				

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

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. 5150-5250 MHz
2TX
Directional gain = $3.2 + 10 * \log(2/1) = 6.21 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $30 \text{ dBm} - (6.21 \text{ dBi} - 6 \text{ dBi}) = 29.79 \text{ dBm}$.

4TX
Directional gain = $3.2 + 10 * \log(4/1) = 9.22 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $30 \text{ dBm} - (9.22 \text{ dBi} - 6 \text{ dBi}) = 26.78 \text{ dBm}$.

5250-5350 MHz
2TX
Directional gain = $4.2 + 10 * \log(2/1) = 7.21 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $24 \text{ dBm} - (7.21 \text{ dBi} - 6 \text{ dBi}) = 22.79 \text{ dBm}$.

4TX
Directional gain = $4.2 + 10 * \log(4/1) = 10.22 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $24 \text{ dBm} - (10.22 \text{ dBi} - 6 \text{ dBi}) = 19.78 \text{ dBm}$.

5470-5750 MHz
2TX
Directional gain = $4.3 + 10 * \log(2/1) = 7.31 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $24 \text{ dBm} - (7.31 \text{ dBi} - 6 \text{ dBi}) = 22.69 \text{ dBm}$.

4TX
Directional gain = $4.3 + 10 * \log(4/1) = 10.32 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $24 \text{ dBm} - (10.32 \text{ dBi} - 6 \text{ dBi}) = 19.68 \text{ dBm}$.

5725-5850 MHz / 4TX
Directional gain = $5 + 10 * \log(4/1) = 11.02 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $30 \text{ dBm} - (11.02 \text{ dBi} - 6 \text{ dBi}) = 24.98 \text{ dBm}$.

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 $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
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

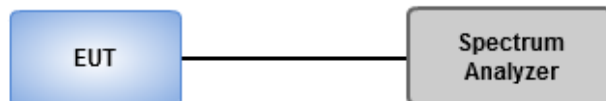
Duty cycle $\geq 98\%$

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 $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
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)_4TX	13.39	22.61
802.11ax HEW20_Nss1,(MCS0)_4TX	13.66	22.88
802.11ax HEW40_Nss1,(MCS0)_4TX	9.51	18.73
802.11ax HEW80_Nss1,(MCS0)_4TX	0.38	9.60
11ax80+80_Nss1,(MCS0)_2TX	-5.19	1.02
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	6.76	16.98
802.11ax HEW20_Nss1,(MCS0)_4TX	6.51	16.73
802.11ax HEW40_Nss1,(MCS0)_4TX	6.62	16.84
802.11ax HEW80_Nss1,(MCS0)_4TX	2.80	13.02
11ax80+80_Nss1,(MCS0)_2TX	-5.42	1.79
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	6.61	16.93
802.11ax HEW20_Nss1,(MCS0)_4TX	6.59	16.91
802.11ax HEW40_Nss1,(MCS0)_4TX	6.42	16.74
802.11ax HEW80_Nss1,(MCS0)_4TX	3.88	14.20
11ax80+80_Nss1,(MCS0)_2TX	-1.60	5.71
11ax80+80_Nss1,(MCS0)_2TX	-1.97	5.34
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	14.46	25.48
802.11ax HEW20_Nss1,(MCS0)_4TX	13.19	24.21
802.11ax HEW40_Nss1,(MCS0)_4TX	9.70	20.72
802.11ax HEW80_Nss1,(MCS0)_4TX	5.37	16.39

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/R BW)	Port 2 (dBm/R BW)	Port 3 (dBm/R BW)	Port 4 (dBm/R BW)	PD (dBm/R BW)	PD Limit (dBm/R BW)	EIRP PD (dBm/R BW)	EIRP PD Limit (dBm/R BW)
802.11a_Nss1,(6Mbps)_4T X	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.22	8.17	7.73	7.78	7.06	13.39	13.78	22.61	23.00
5200MHz	Pass	9.22	8.10	7.37	7.33	6.60	13.29	13.78	22.51	23.00
5240MHz	Pass	9.22	7.63	7.94	7.63	6.82	13.22	13.78	22.44	23.00
5260MHz	Pass	10.22	0.86	0.29	0.25	0.21	6.36	6.78	16.58	17.00
5300MHz	Pass	10.22	1.24	0.63	0.33	0.63	6.47	6.78	16.69	17.00
5320MHz	Pass	10.22	1.50	1.01	0.22	1.18	6.76	6.78	16.98	17.00
5500MHz	Pass	10.32	1.03	-0.01	0.33	0.55	6.23	6.68	16.55	17.00
5580MHz	Pass	10.32	1.56	0.20	0.99	0.87	6.55	6.68	16.87	17.00
5700MHz	Pass	10.32	1.33	0.48	1.15	1.42	6.61	6.68	16.93	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.32	1.29	0.10	0.45	1.28	6.57	6.68	16.89	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	11.02	-1.22	-1.29	-1.90	-0.81	4.73	24.98	15.75	36.00
5745MHz	Pass	11.02	9.31	7.85	8.94	7.01	14.28	24.98	25.30	36.00
5785MHz	Pass	11.02	9.50	8.09	8.63	7.48	14.46	24.98	25.48	36.00
5825MHz	Pass	11.02	9.89	8.19	8.50	7.42	14.43	24.98	25.45	36.00
802.11ax HEW20_Nss1,(MCS0)_4T X	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.22	5.33	4.33	4.31	3.92	10.42	13.78	19.64	23.00
5200MHz	Pass	9.22	8.86	7.73	7.66	6.45	13.56	13.78	22.78	23.00
5240MHz	Pass	9.22	8.86	7.47	8.34	7.19	13.66	13.78	22.88	23.00
5260MHz	Pass	10.22	1.4	0.32	0.81	0.07	6.51	6.78	16.73	17.00
5300MHz	Pass	10.22	1.65	0.45	0.48	0.12	6.47	6.78	16.69	17.00
5320MHz	Pass	10.22	1.19	0.78	0.28	1.13	6.48	6.78	16.70	17.00
5500MHz	Pass	10.32	1.56	0.73	0.45	1.12	6.59	6.68	16.91	17.00
5580MHz	Pass	10.32	1.69	0.49	0.64	1.12	6.54	6.68	16.86	17.00
5700MHz	Pass	10.32	1.62	0.26	0.26	1.04	6.53	6.68	16.85	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.32	1.51	-0.07	-0.20	1.17	6.34	6.68	16.66	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	11.02	-0.20	-1.58	-1.39	-2.43	4.59	24.98	15.61	36.00
5745MHz	Pass	11.02	6.61	5.16	6.47	6.73	11.96	24.98	22.98	36.00
5785MHz	Pass	11.02	7.98	6.84	7.94	6.79	13.19	24.98	24.21	36.00
5825MHz	Pass	11.02	7.37	7.18	8.58	6.55	12.83	24.98	23.85	36.00
802.11ax HEW40_Nss1,(MCS0)_4T X	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	9.22	-0.89	-1.63	-1.73	-2.19	4.23	13.78	13.45	23.00
5230MHz	Pass	9.22	4.75	3.73	4.17	2.69	9.51	13.78	18.73	23.00
5270MHz	Pass	10.22	1.75	0.41	1.20	0.54	6.62	6.78	16.84	17.00

Mode	Result	DG (dBi)	Port 1 (dBm/R BW)	Port 2 (dBm/R BW)	Port 3 (dBm/R BW)	Port 4 (dBm/R BW)	PD (dBm/R BW)	PD Limit (dBm/R BW)	EIRP PD (dBm/R BW)	EIRP PD Limit (dBm/R BW)
5310MHz	Pass	10.22	0.49	-0.60	-0.58	-0.65	5.40	6.78	15.62	17.00
5510MHz	Pass	10.32	-0.78	-1.66	-1.70	-1.33	4.45	6.68	14.77	17.00
5590MHz	Pass	10.32	0.94	-0.11	1.08	0.74	6.42	6.68	16.74	17.00
5670MHz	Pass	10.32	-1.89	-2.78	-1.86	-1.46	3.80	6.68	14.12	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	10.32	0.62	-0.59	0.27	0.52	6.07	6.68	16.39	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	11.02	-1.41	-2.46	-1.11	-1.37	4.37	24.98	15.39	36.00
5755MHz	Pass	11.02	0.77	-1.24	-0.01	-0.81	5.53	24.98	16.55	36.00
5795MHz	Pass	11.02	4.48	3.36	4.62	2.38	9.70	24.98	20.72	36.00
802.11ax HEW80_Nss1,(MCS0)_4T X	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	9.22	-4.64	-5.39	-4.91	-5.56	0.38	13.78	9.60	23.00
5290MHz	Pass	10.22	-2.11	-3.04	-3.03	-3.38	2.80	6.78	13.02	17.00
5530MHz	Pass	10.32	-3.44	-4.08	-4.02	-3.62	1.77	6.68	12.09	17.00
5610MHz	Pass	10.32	-1.73	-2.30	-1.36	-2.04	3.88	6.68	14.20	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	10.32	-2.03	-2.34	-1.68	-1.49	3.85	6.68	14.17	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	11.02	-5.21	-5.30	-4.95	-4.67	0.75	24.98	11.77	36.00
5775MHz	Pass	11.02	-0.44	-0.80	-0.18	-0.63	5.37	24.98	16.39	36.00
802.11ax HEW80+80_Nss1,(MCS0) _2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.21	-7.24	-9.21	-	-	-5.19	16.79	1.02	23.00
5290MHz	Pass	7.21	-	-	-8.21	-8.61	-5.42	9.79	1.79	17.00
802.11ax HEW80+80_Nss1,(MCS0) _2TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	7.31	-4.19	-4.77	-	-	-1.60	9.69	5.71	17.00
5610MHz	Pass	7.31	-	-	-4.20	-5.62	-1.97	9.69	5.34	17.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

Directional gain

5150-5250 MHz

2TX

Directional gain = $3.2 + 10 * \log(2/1) = 6.21 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $17 \text{ dBm} - (6.21 \text{ dBi} - 6 \text{ dBi}) = 16.79 \text{ dBm}$.

4TX

Directional gain = $3.2 + 10 * \log(4/1) = 9.22 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $17 \text{ dBm} - (9.22 \text{ dBi} - 6 \text{ dBi}) = 13.78 \text{ dBm}$.

5250-5350 MHz

2TX

Directional gain = $4.2 + 10 * \log(2/1) = 7.21 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (7.21 \text{ dBi} - 6 \text{ dBi}) = 9.79 \text{ dBm}$.

4TX

Directional gain = $4.2 + 10 * \log(4/1) = 10.22 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (10.22 \text{ dBi} - 6 \text{ dBi}) = 6.78 \text{ dBm}$.

5470-5750 MHz

2TX

Directional gain = $4.3 + 10 * \log(2/1) = 7.31 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (7.31 \text{ dBi} - 6 \text{ dBi}) = 9.69 \text{ dBm}$.

4TX

Directional gain = $4.3 + 10 * \log(4/1) = 10.32 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $11 \text{ dBm} - (10.32 \text{ dBi} - 6 \text{ dBi}) = 6.68 \text{ dBm}$.

5725-5850 MHz / 4TX

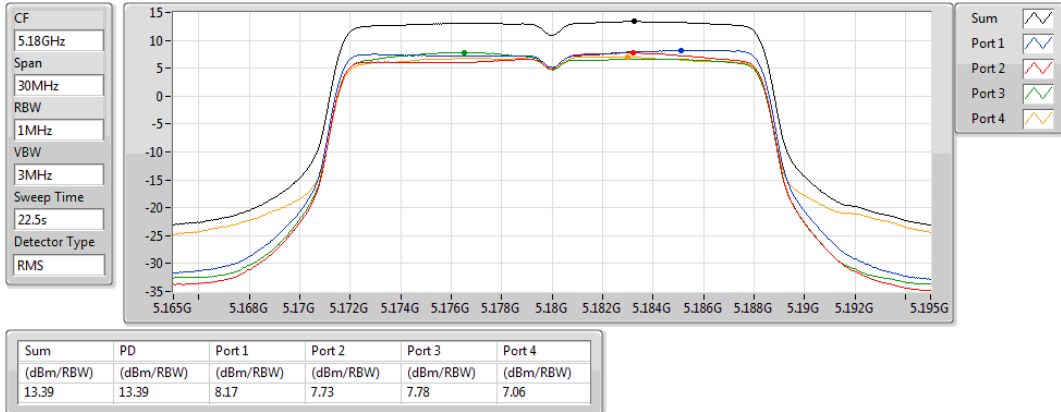
Directional gain = $5 + 10 * \log(4/1) = 11.02 \text{ dBi} > 6 \text{ dBi}$.

Limit shall be reduced to $30 \text{ dBm} - (11.02 \text{ dBi} - 6 \text{ dBi}) = 24.98 \text{ dBm}$.

802.11a_Nss1,(6Mbps)_4TX

PSD

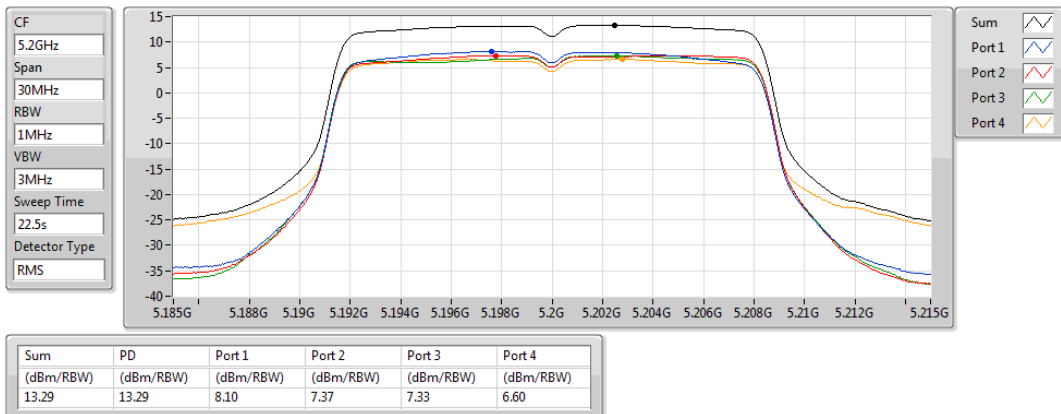
5180MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

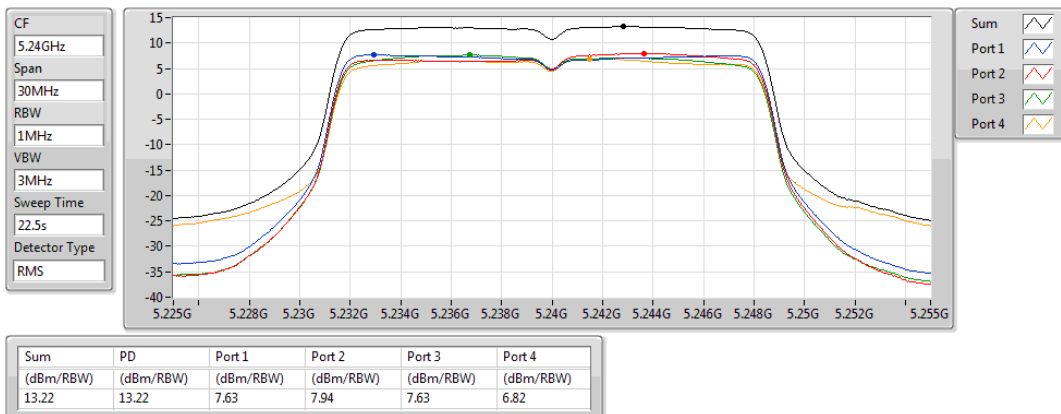
5200MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

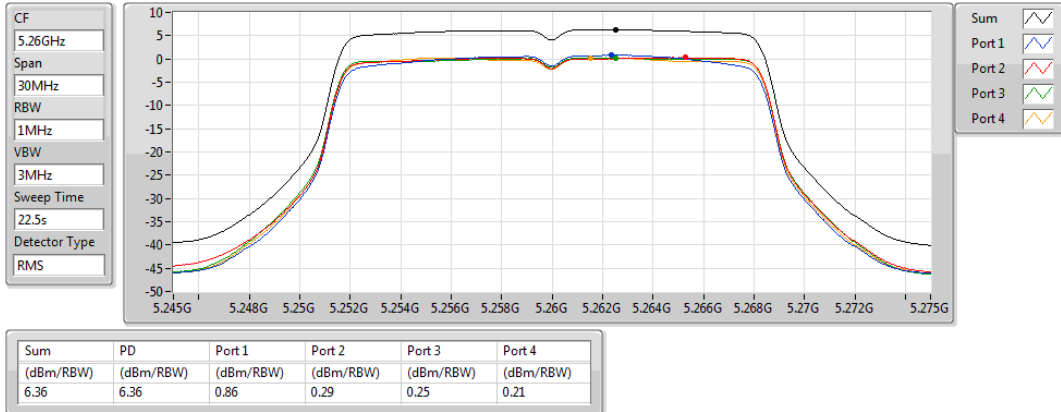
5240MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

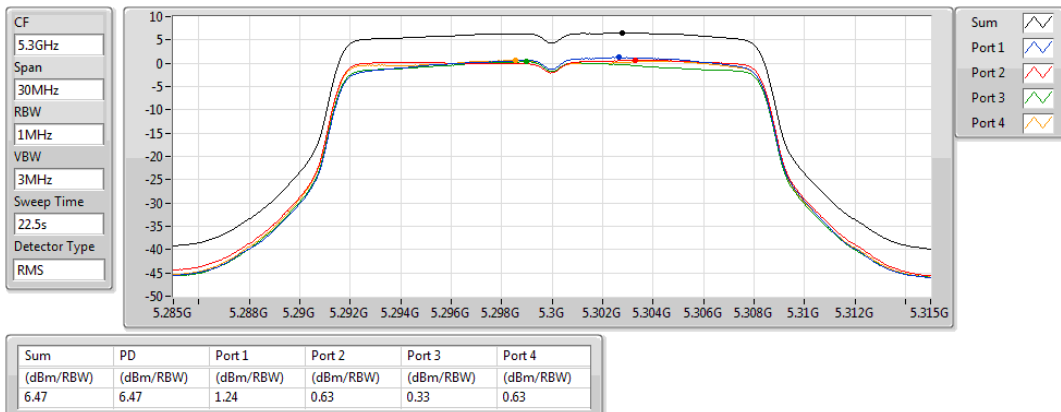
5260MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

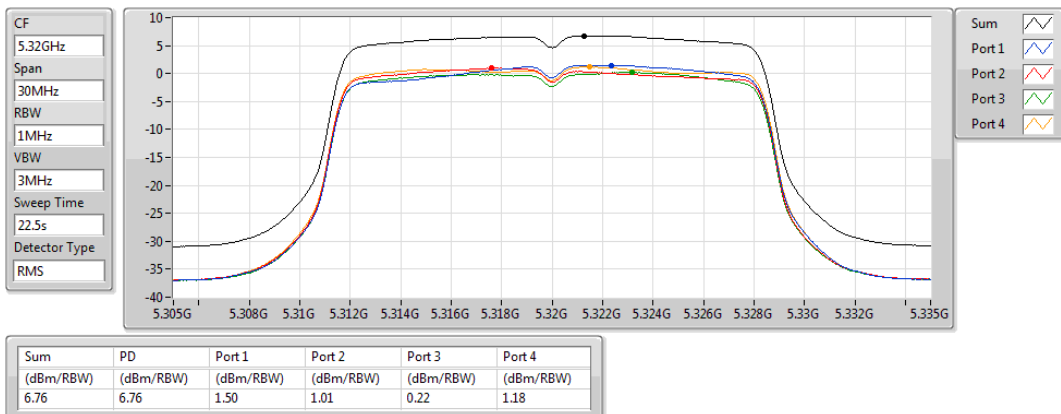
5300MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

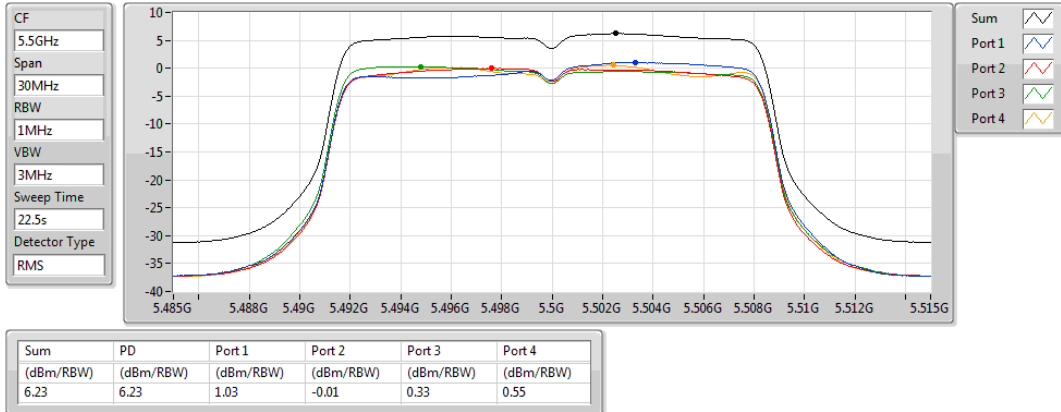
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802.11a_Nss1,(6Mbps)_4TX

PSD

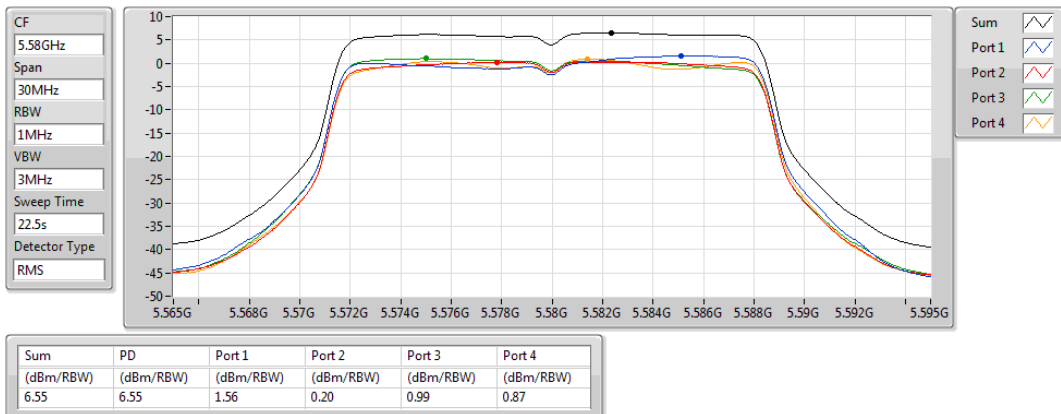
5500MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

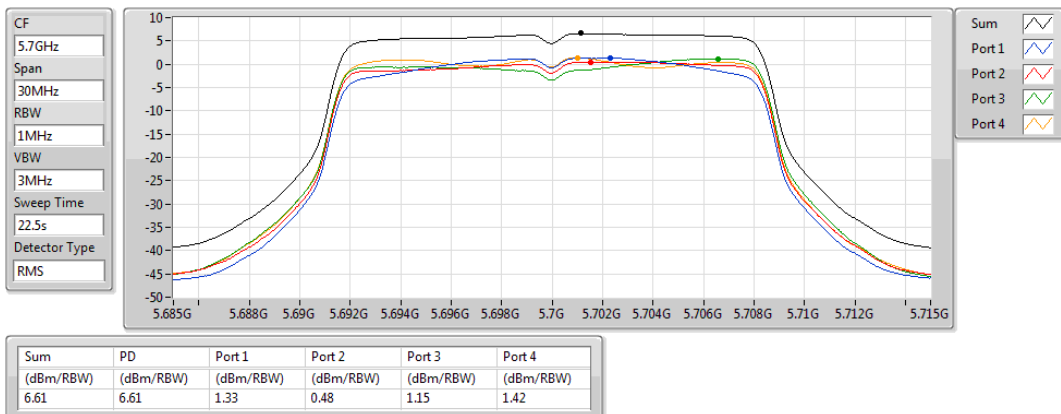
5580MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

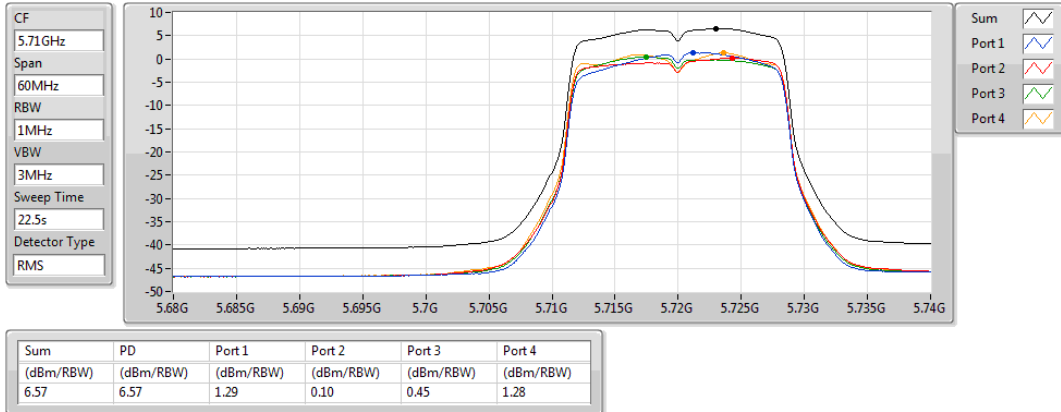
5700MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

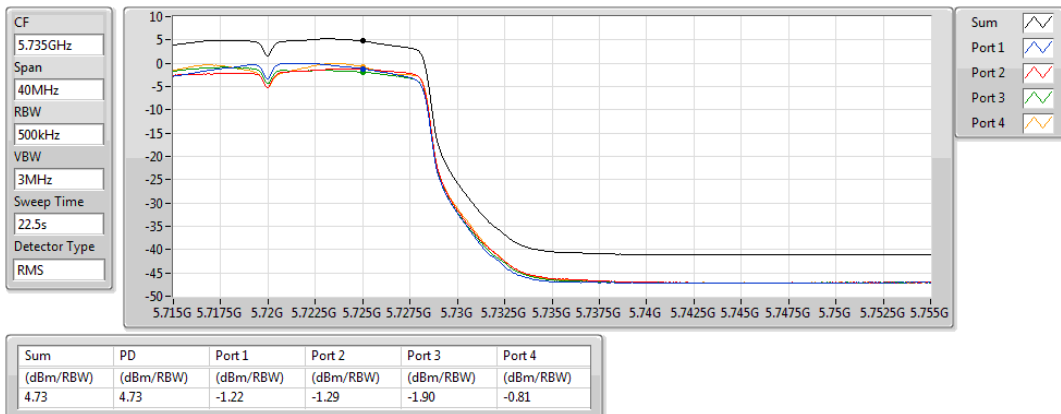
5720MHz Straddle 5.47-5.725GHz



802.11a_Nss1,(6Mbps)_4TX

PSD

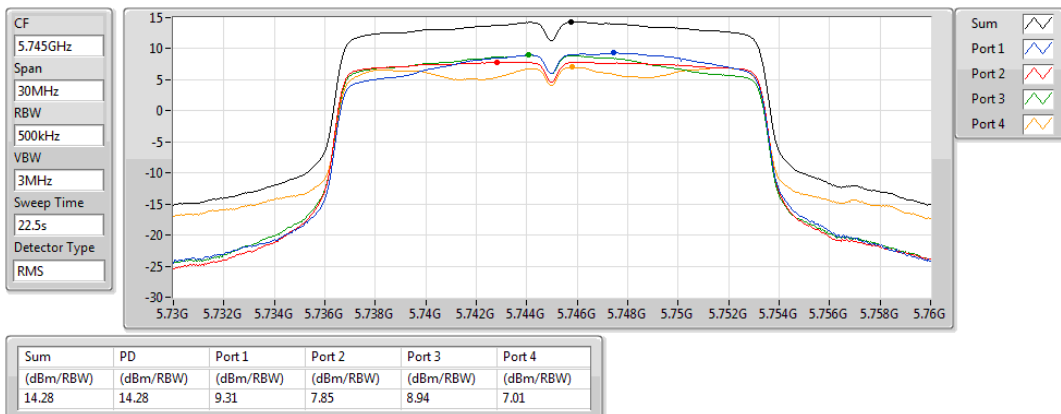
5720MHz Straddle 5.725-5.85GHz



802.11a_Nss1,(6Mbps)_4TX

PSD

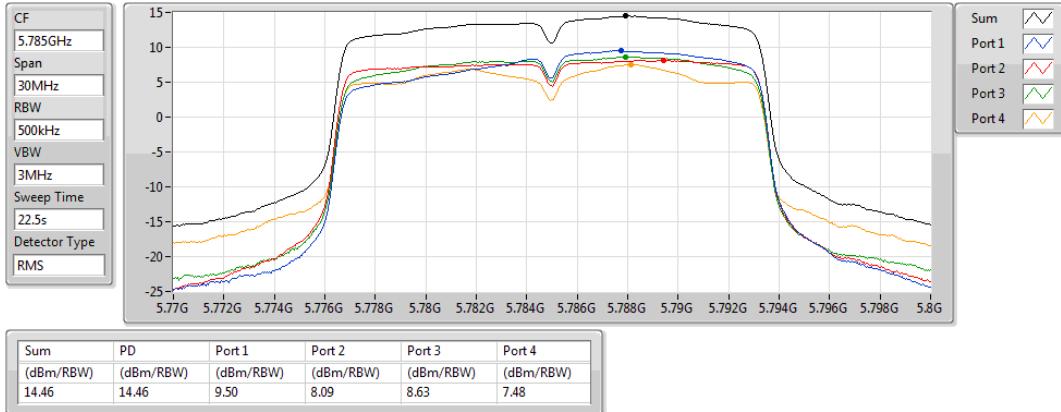
5745MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

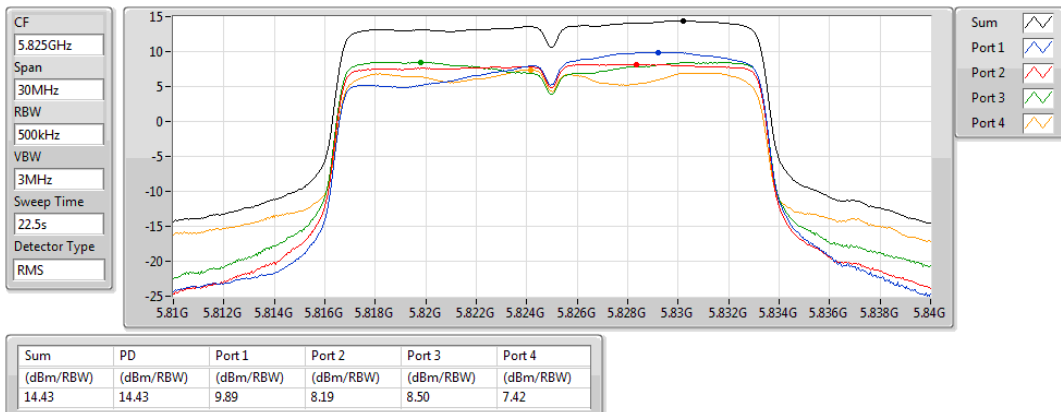
5785MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

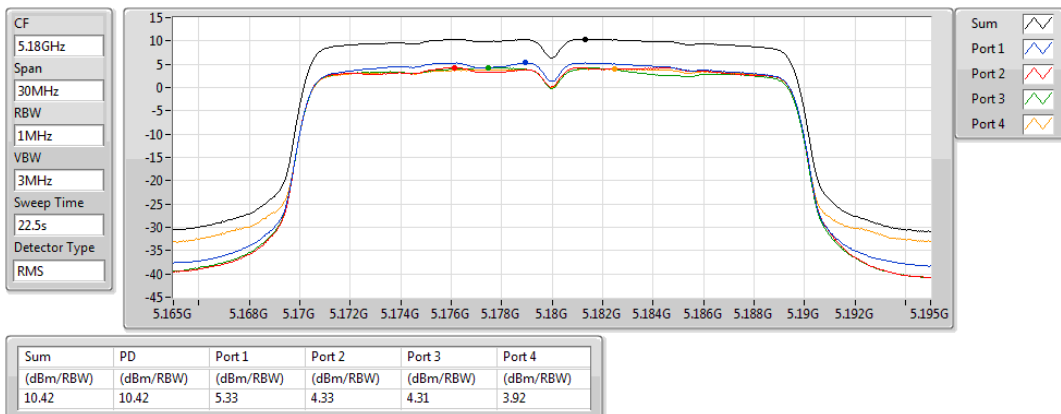
5825MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

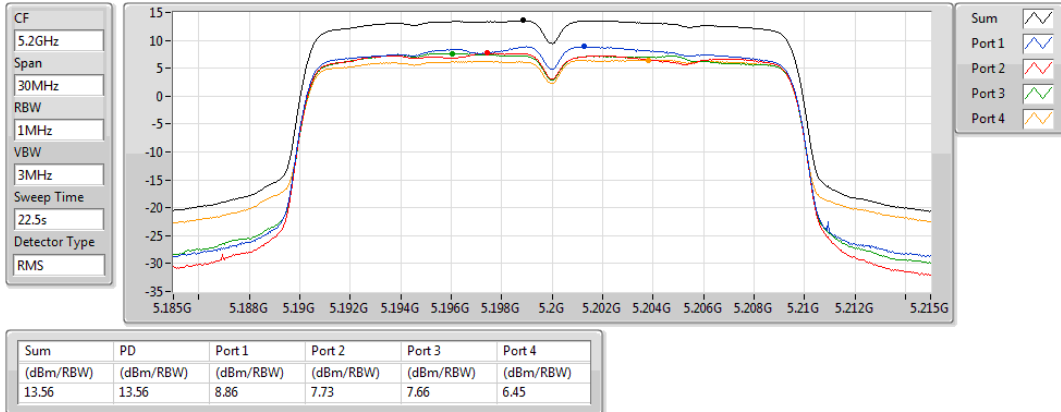
5180MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

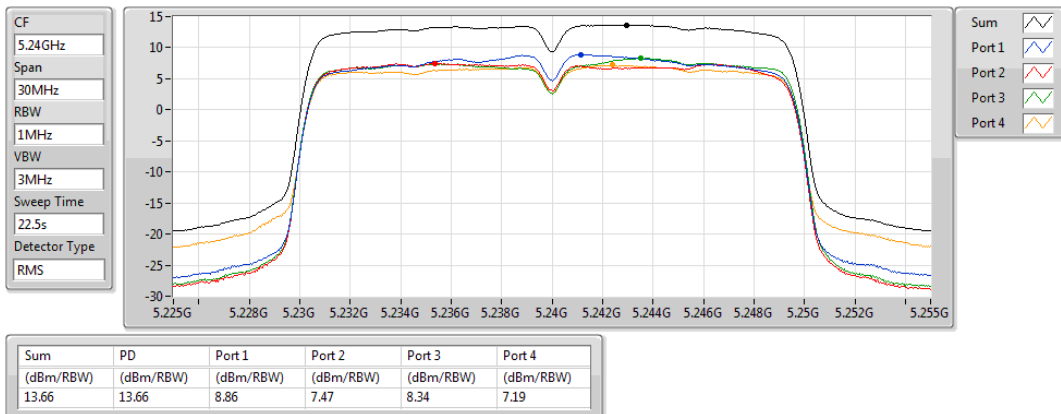
5200MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

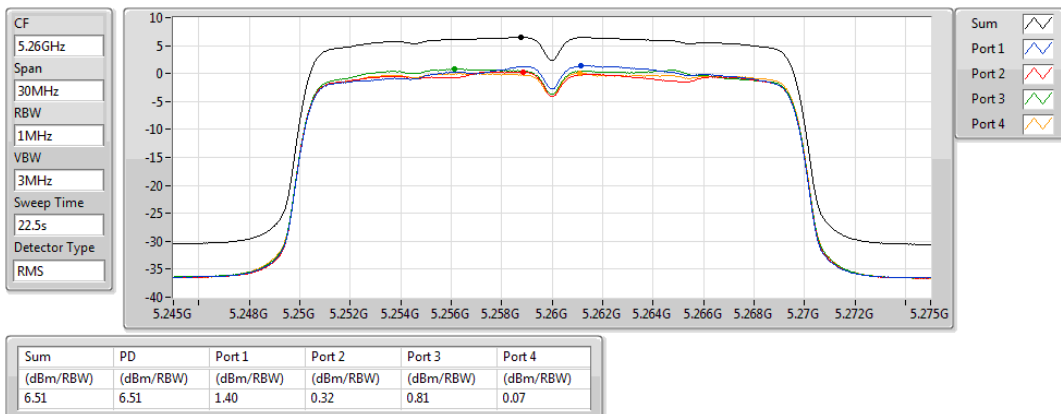
5240MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

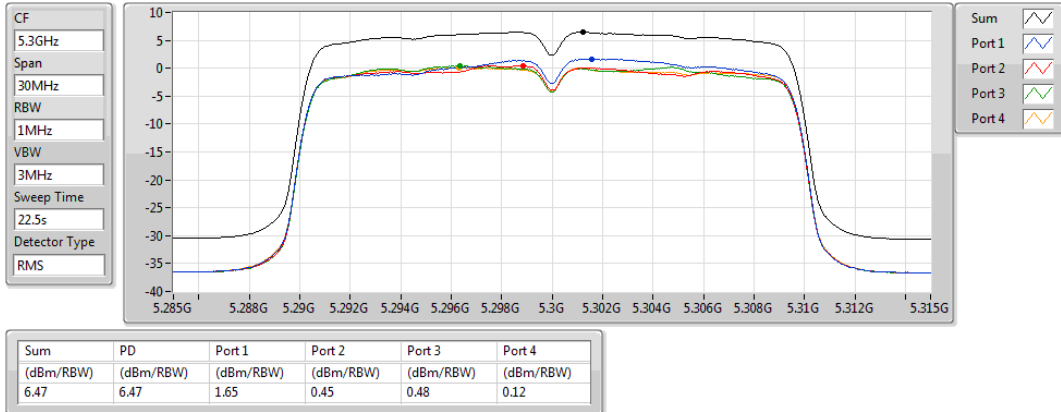
5260MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

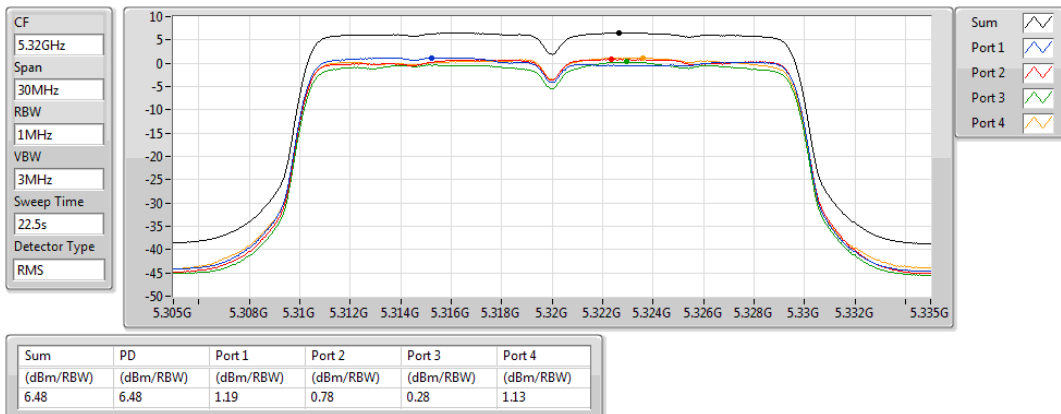
5300MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

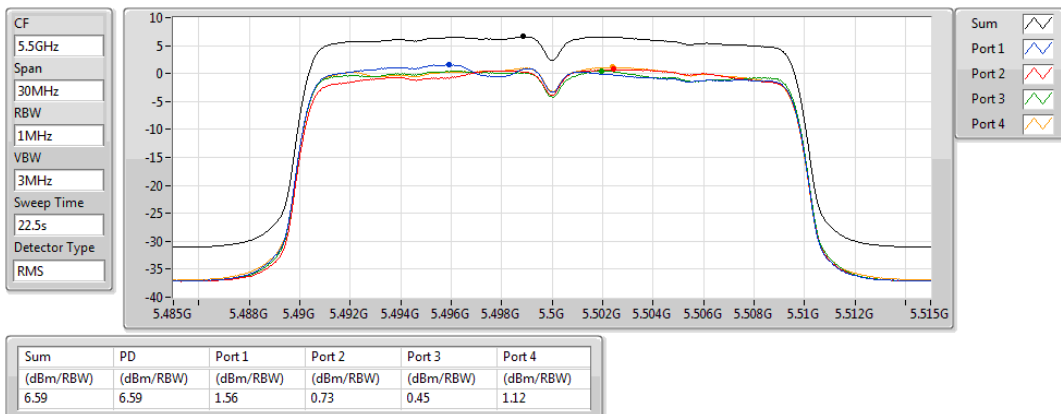
5320MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

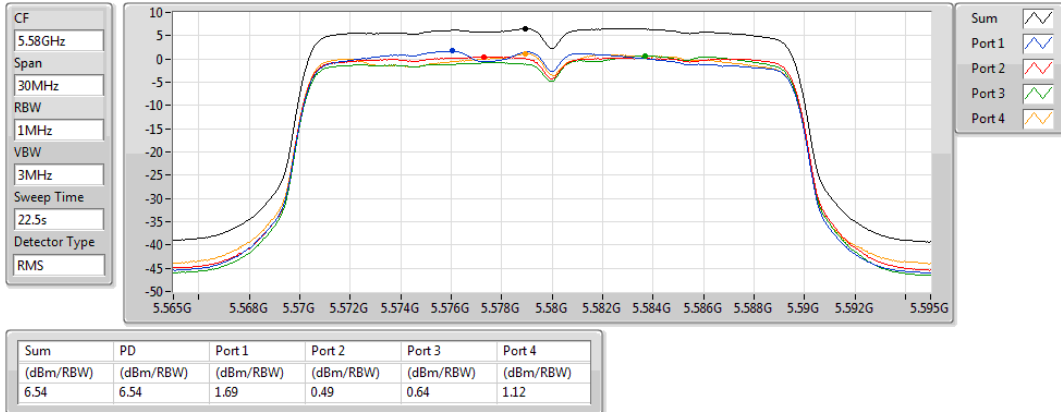
5500MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

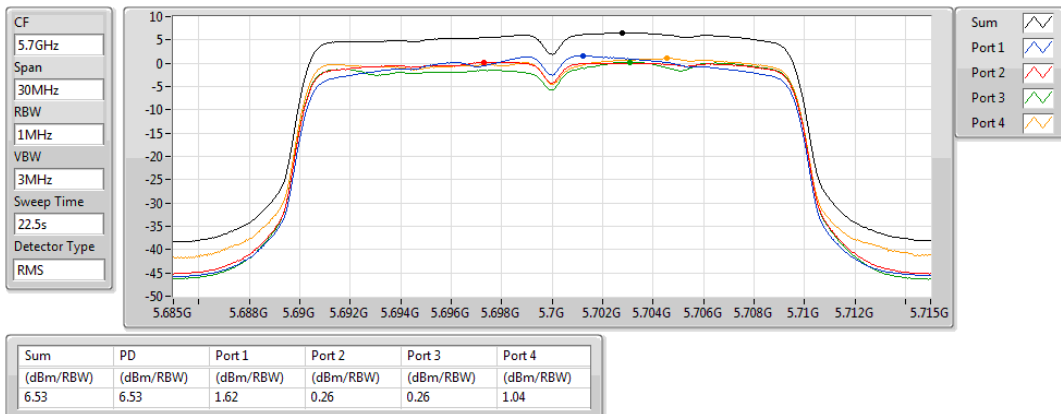
5580MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

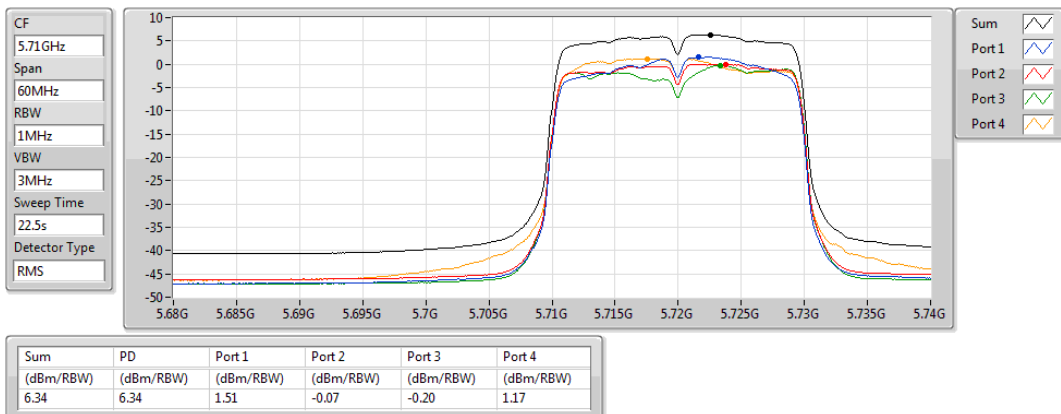
5700MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

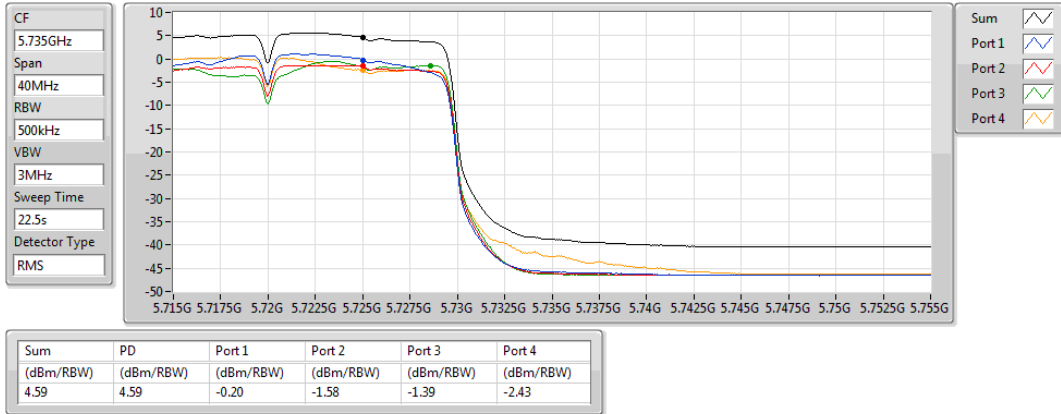
5720MHz Straddle 5.47-5.725GHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

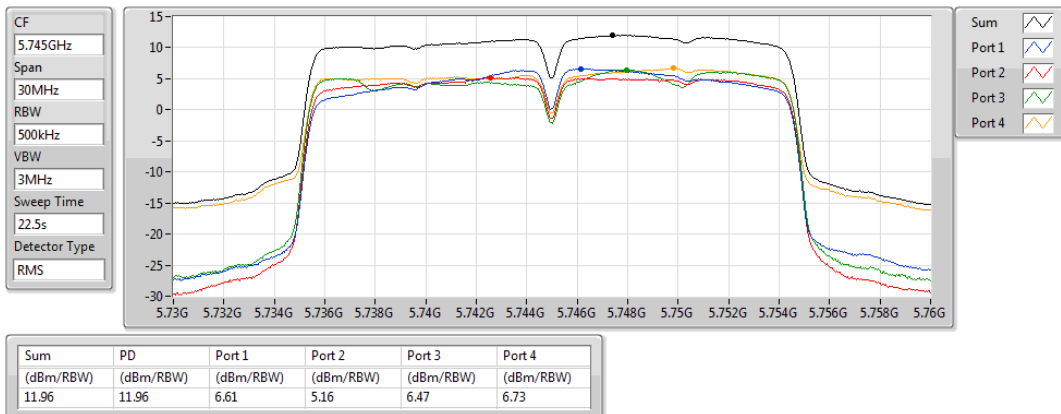
5720MHz Straddle 5.725-5.85GHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

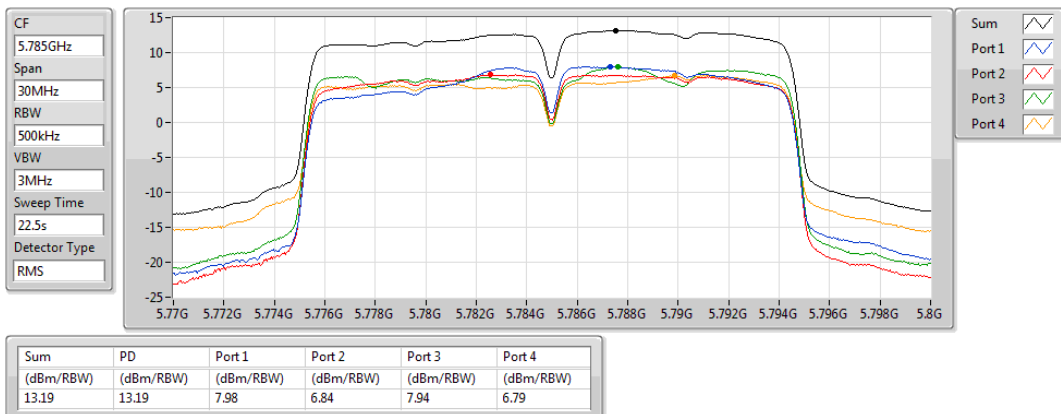
5745MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

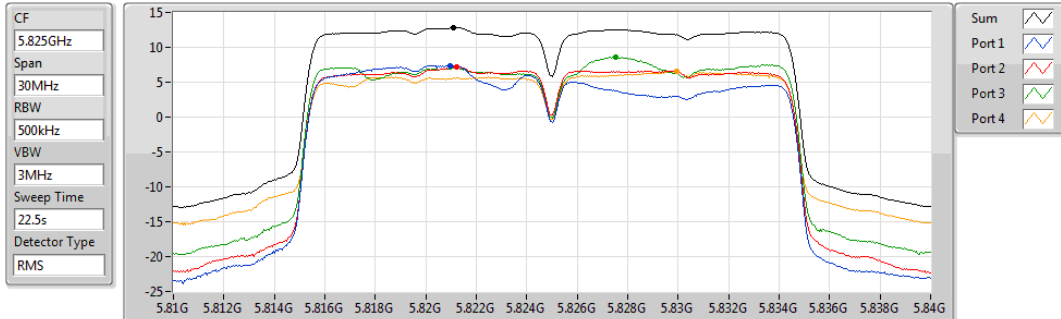
5785MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

5825MHz

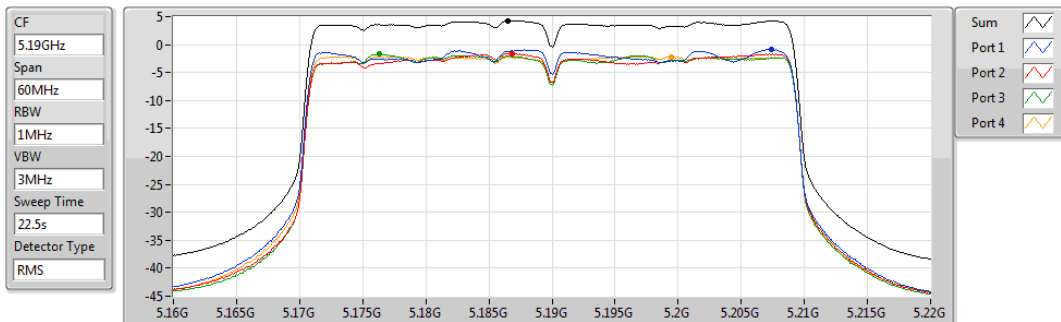


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.83	12.83	7.37	7.18	8.58	6.55

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5190MHz

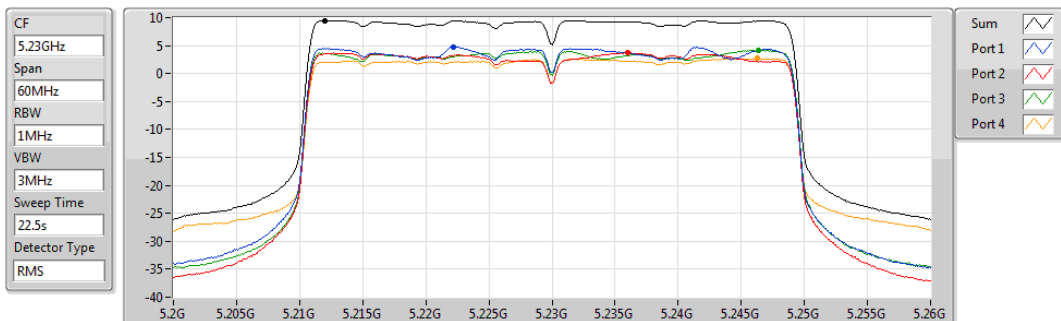


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.23	4.23	-0.89	-1.63	-1.73	-2.19

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5230MHz

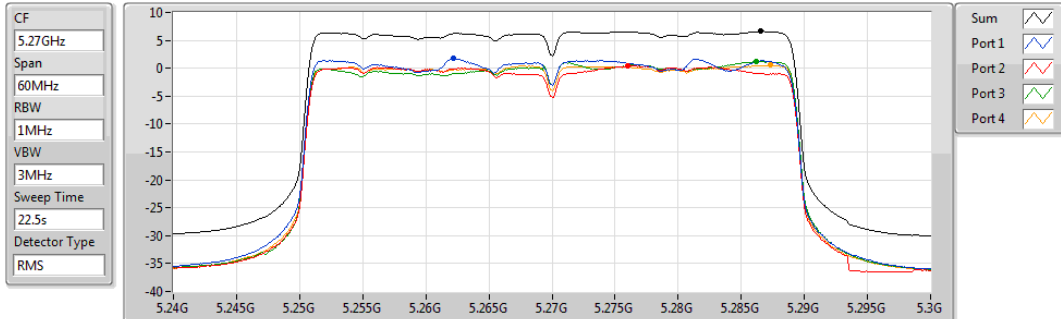


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.51	9.51	4.75	3.73	4.17	2.69

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5270MHz

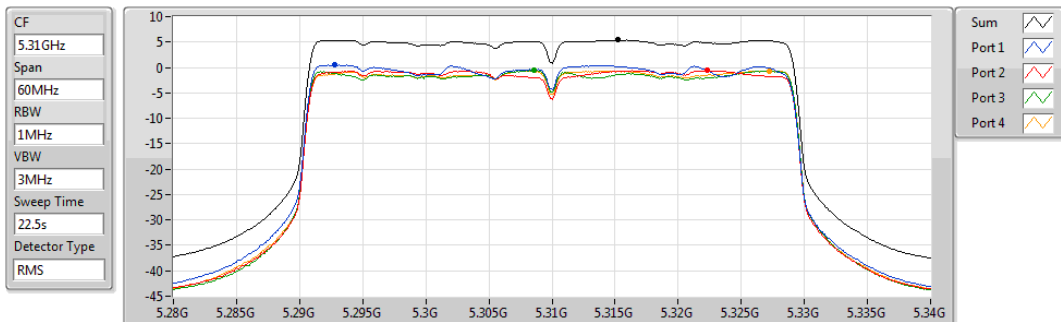


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.62	6.62	1.75	0.41	1.20	0.54

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5310MHz

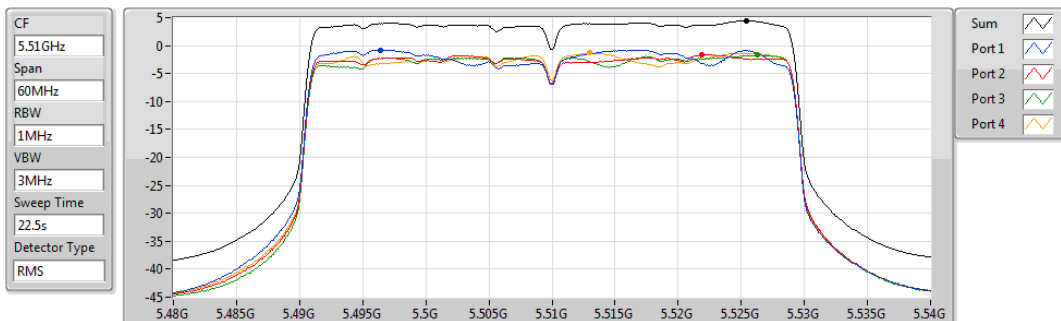


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.40	5.40	0.49	-0.60	-0.58	-0.65

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5510MHz

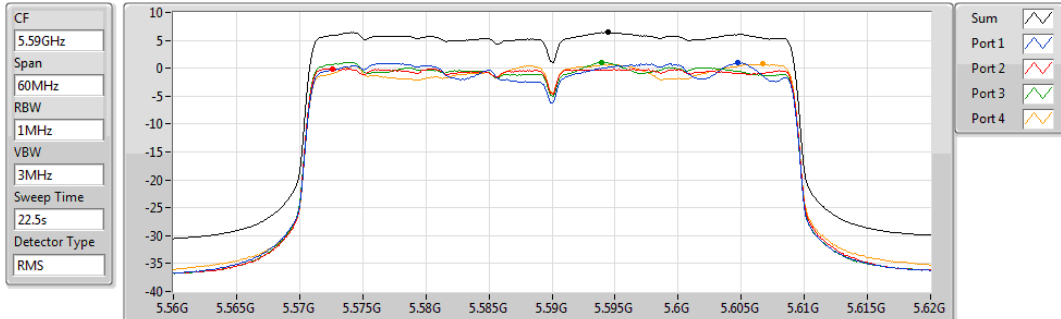


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.45	4.45	-0.78	-1.66	-1.70	-1.33

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5590MHz

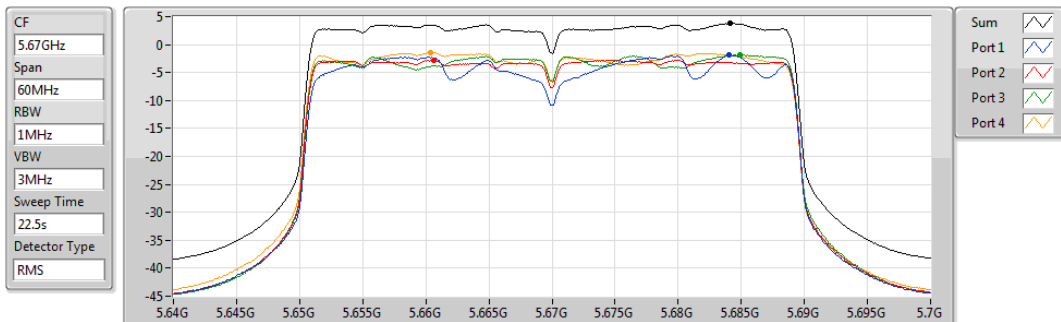


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
6.42	6.42	0.94	-0.11	1.08	0.74

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5670MHz

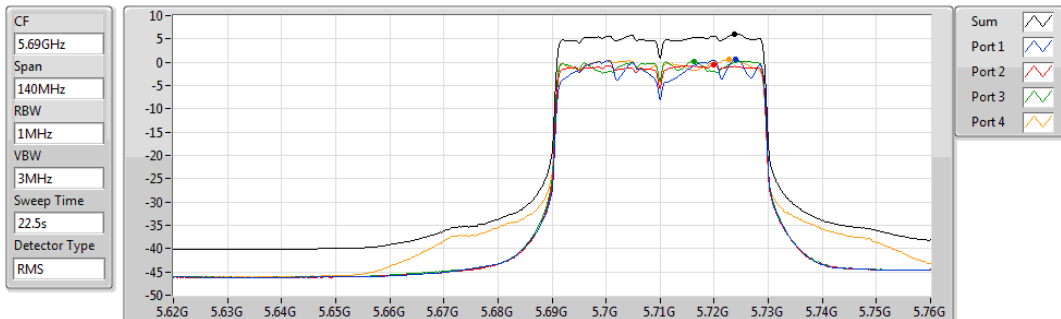


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
3.80	3.80	-1.89	-2.78	-1.86	-1.46

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

5710MHz Straddle 5.47-5.725GHz

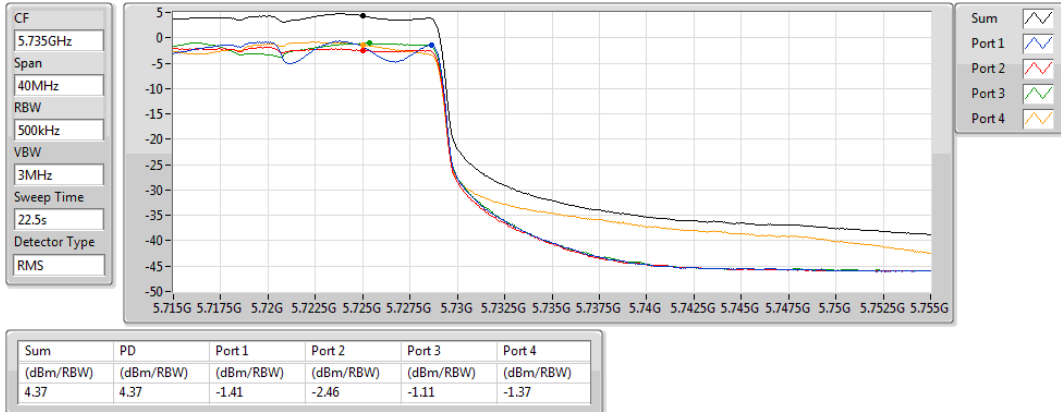


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
6.07	6.07	0.62	-0.59	0.27	0.52

802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

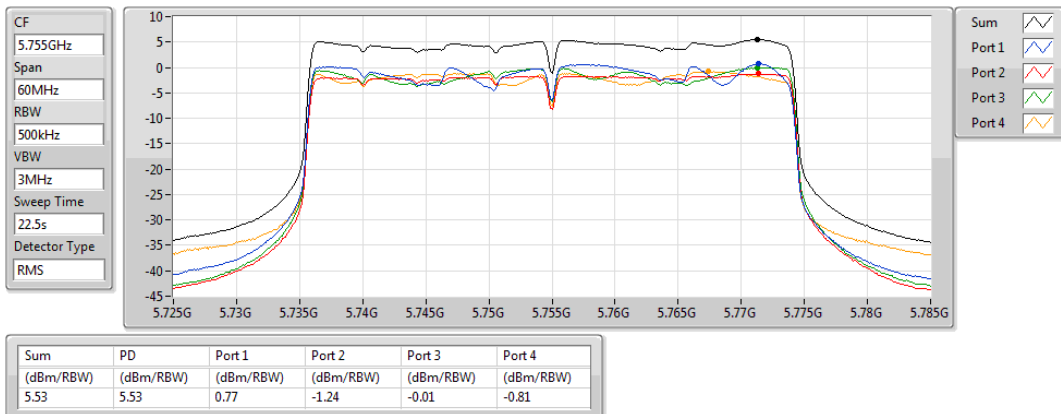
5710MHz Straddle 5.725-5.85GHz



802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

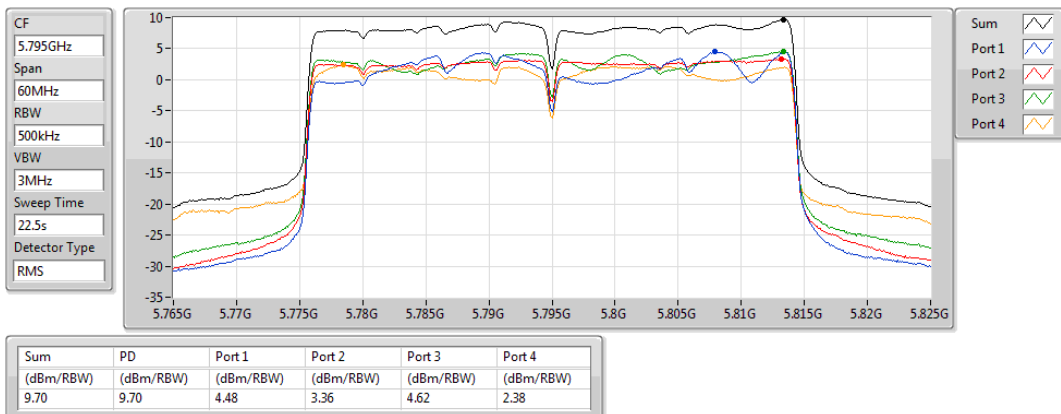
5755MHz



802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

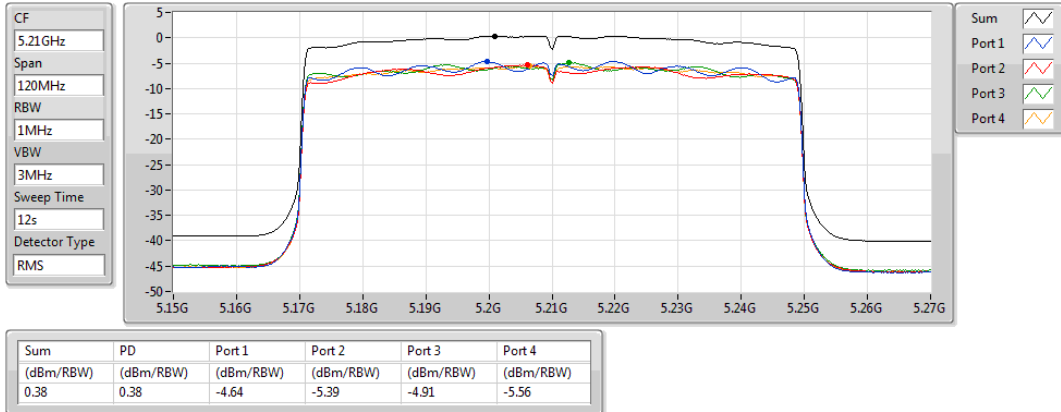
5795MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

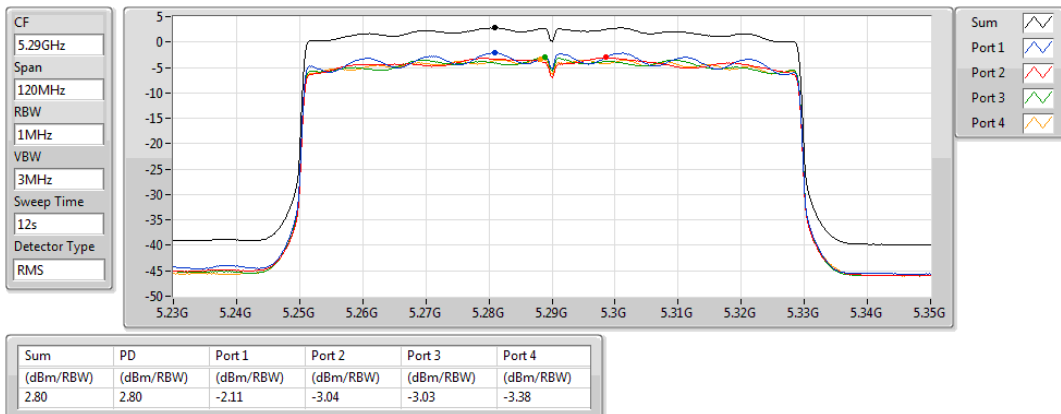
5210MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

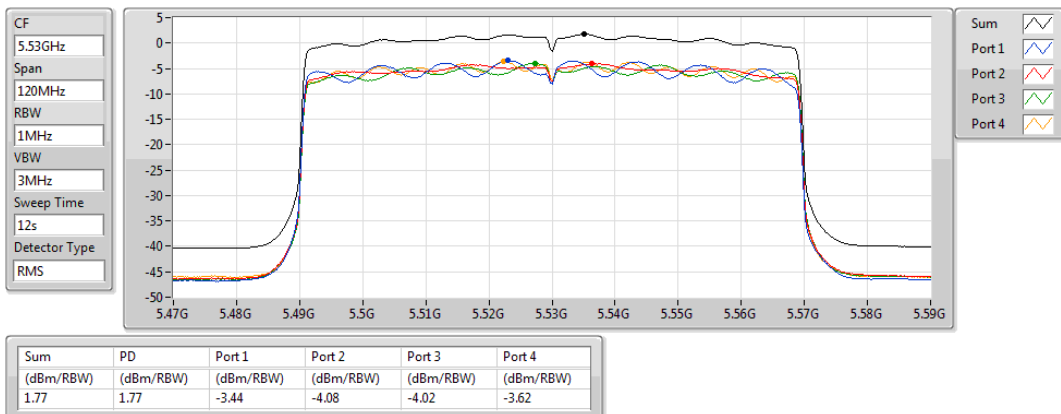
5290MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

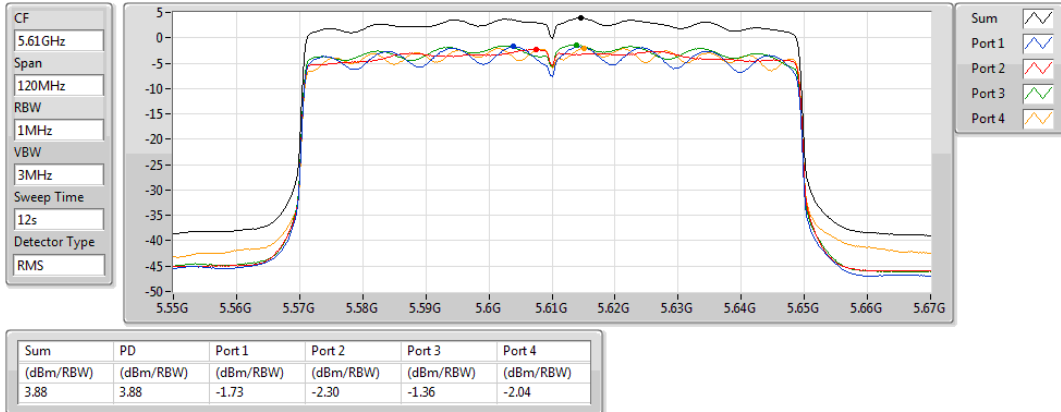
5530MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

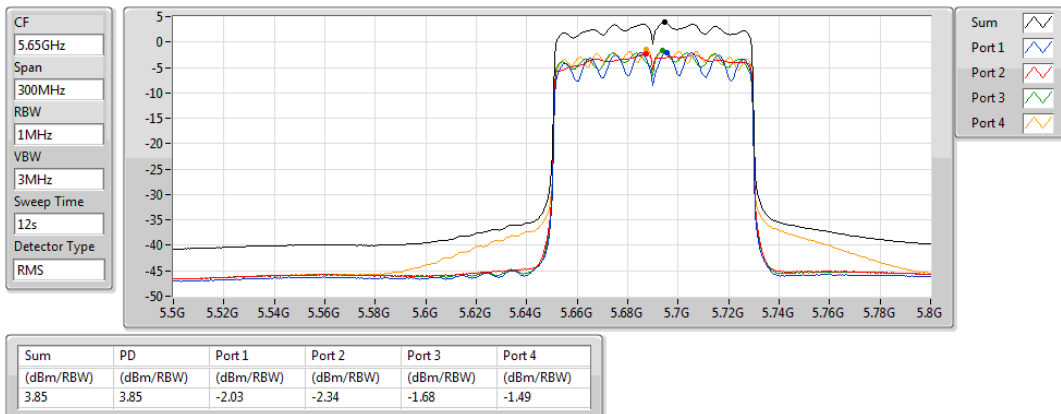
5610MHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

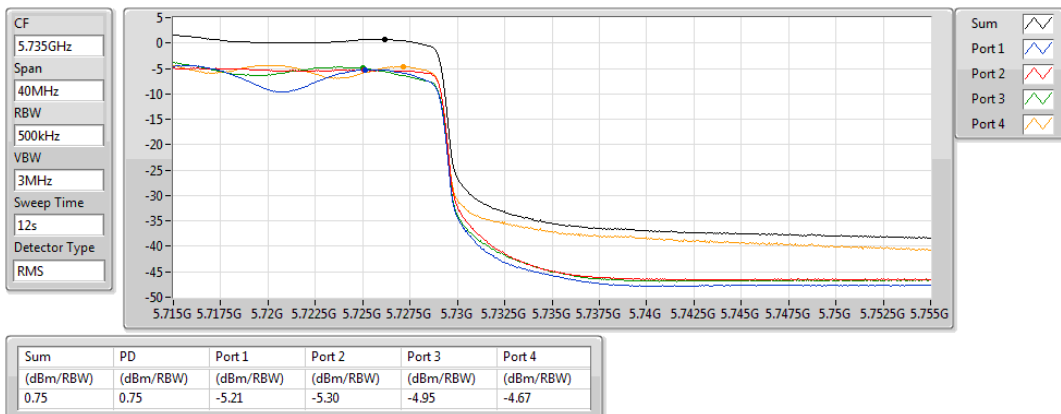
5690MHz Straddle 5.47-5.725GHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

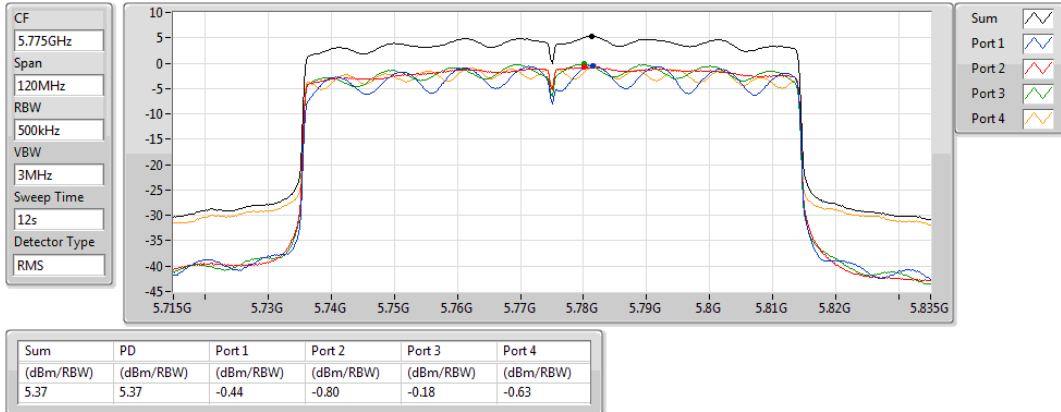
5690MHz Straddle 5.725-5.85GHz



802.11ax HEW80_Nss1,(MCS0)_4TX

PSD

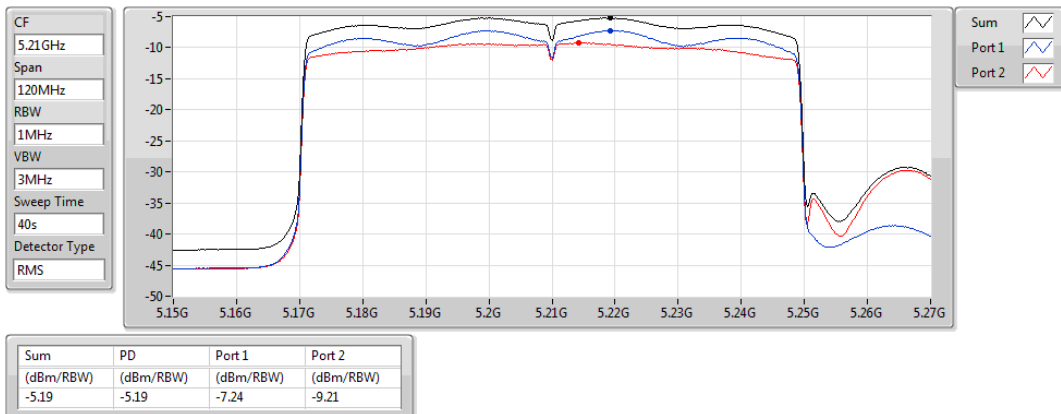
5775MHz



11ax80+80_Nss1,(MCS0)_2TX(Port1&Port2)

PSD

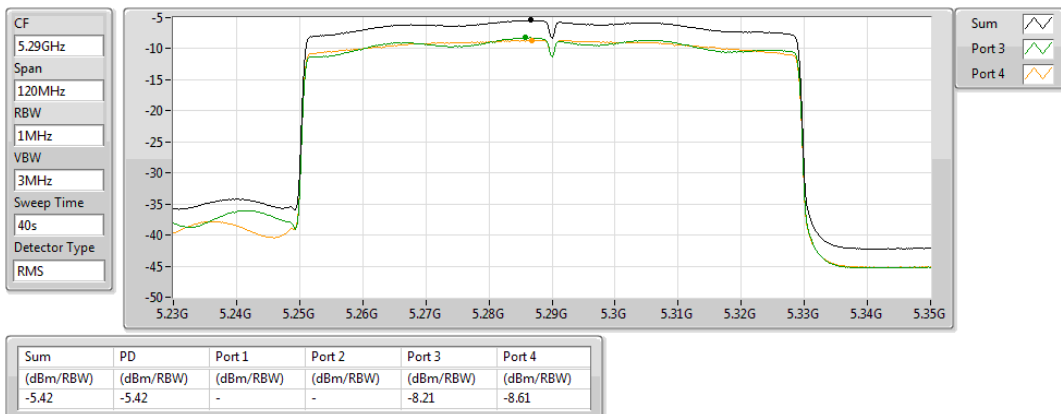
5210MHz



11ax80+80_Nss1,(MCS0)_2TX(Port3&Port4)

PSD

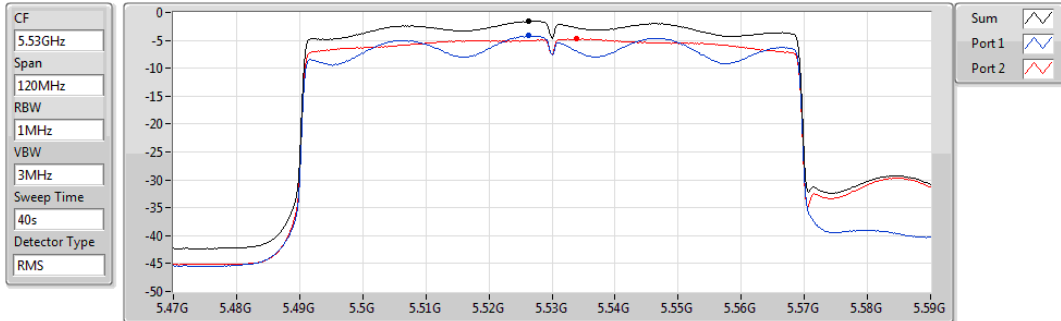
5290MHz



11ax80+80_Nss1,(MCS0)_2TX(Port1&Port2)

PSD

5530MHz

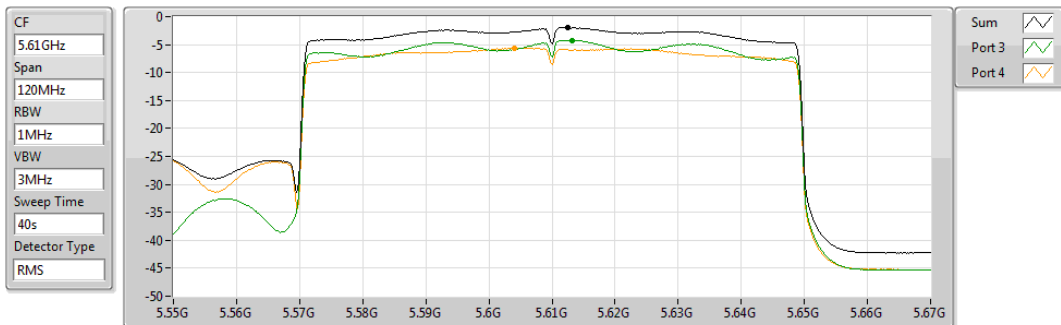


Sum	PD	Port 1	Port 2
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-1.60	-1.60	-4.19	-4.77

11ax80+80_Nss1,(MCS0)_2TX(Port3&Port4)

PSD

5610MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-1.97	-1.97	-	-	-4.20	-5.62

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

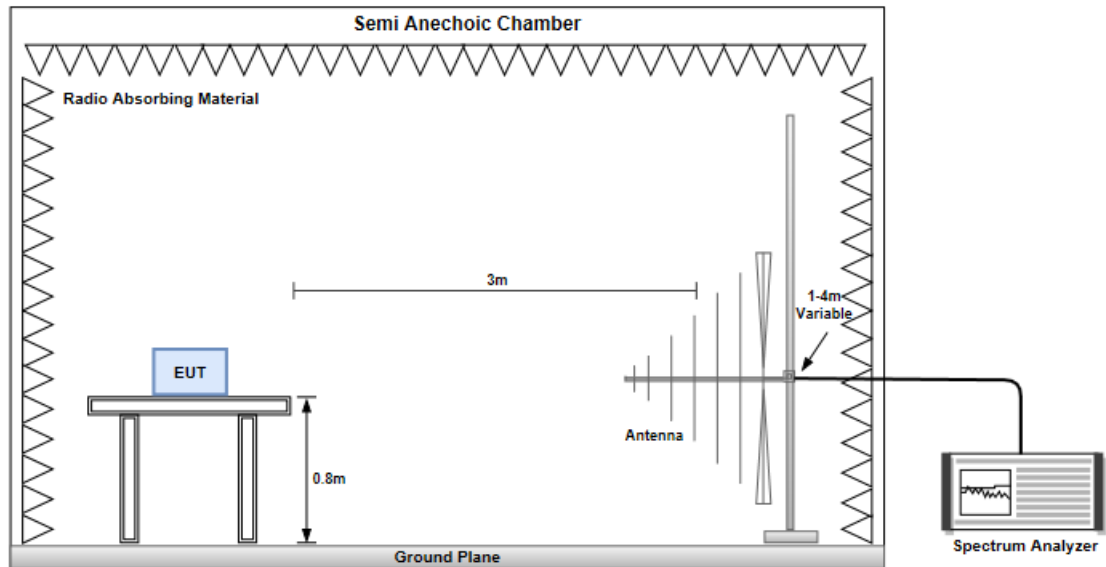
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

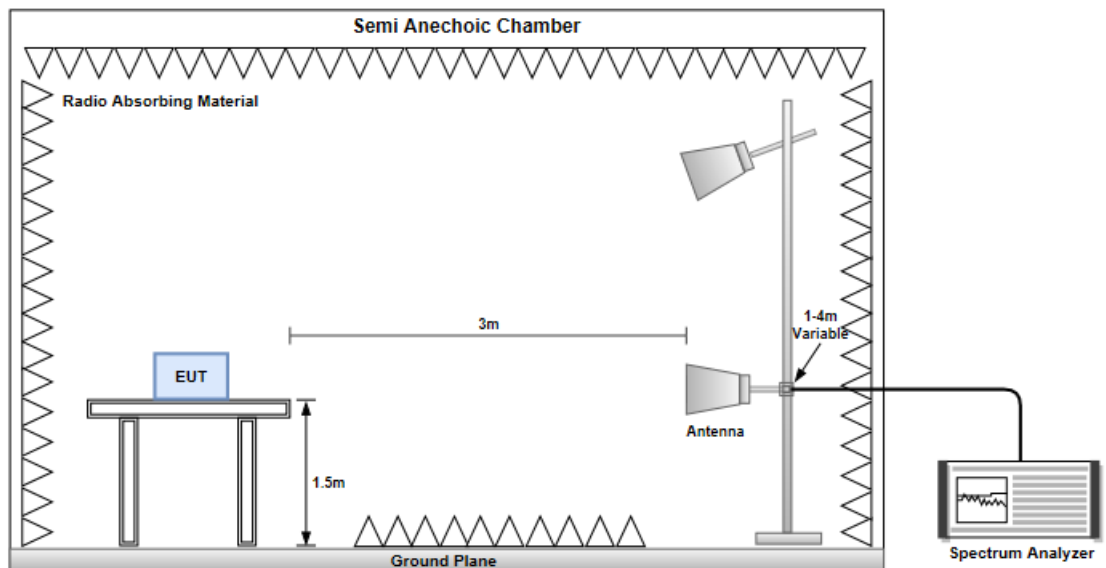
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

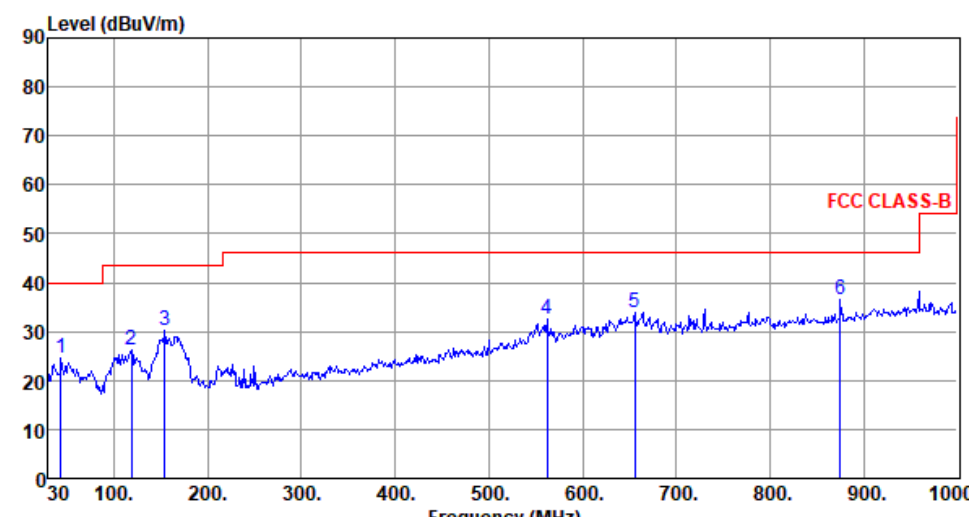


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

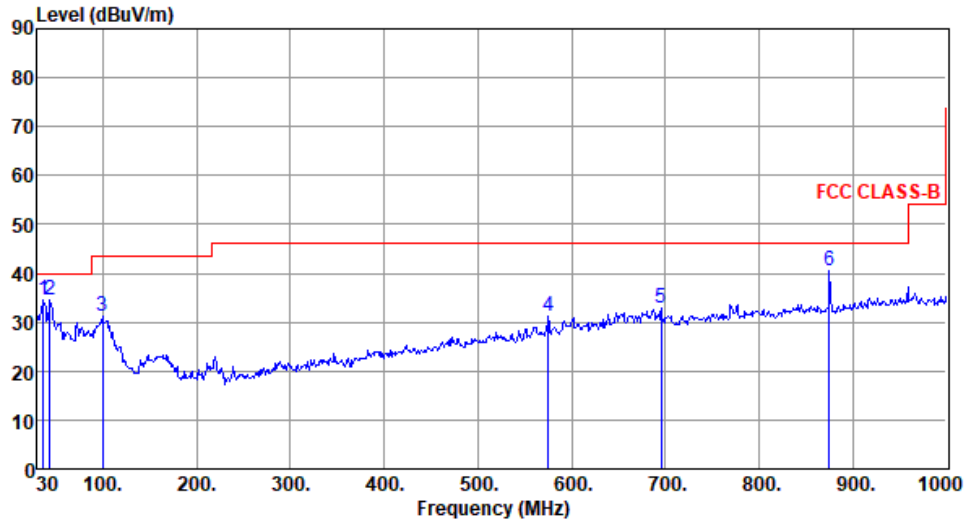
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	43.58	24.61	40.00	-15.39	32.89	-8.28	Peak	---	---
2	118.27	26.13	43.50	-17.37	36.91	-10.78	Peak	---	---
3	154.16	30.21	43.50	-13.29	38.54	-8.33	Peak	---	---
4	562.53	32.66	46.00	-13.34	34.08	-1.42	Peak	---	---
5	655.65	33.84	46.00	-12.16	33.10	0.74	Peak	---	---
6	874.87	36.56	46.00	-9.44	32.00	4.56	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 (HE20)	Test Freq. (MHz)	5240
Polarization	Vertical	Test Configuration	1



	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	34.63	40.00	-5.37	43.77	-9.14	Peak	---	---
2	43.58	34.40	40.00	-5.60	42.68	-8.28	Peak	---	---
3	99.84	31.14	43.50	-12.36	44.23	-13.09	Peak	---	---
4	575.14	31.29	46.00	-14.71	32.26	-0.97	Peak	---	---
5	695.42	33.01	46.00	-12.99	31.82	1.19	Peak	---	---
6	874.87	40.60	46.00	-5.40	36.04	4.56	Peak	---	---

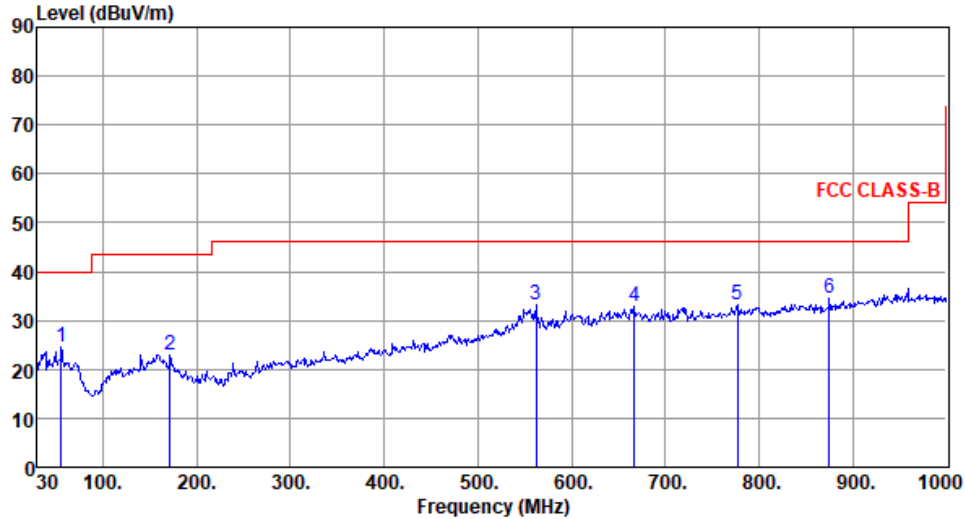
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5785
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	55.22	24.50	40.00	-15.50	33.21	-8.71	Peak	---	---
2	171.62	22.95	43.50	-20.55	31.90	-8.95	Peak	---	---
3	562.53	33.07	46.00	-12.93	34.49	-1.42	Peak	---	---
4	667.29	32.90	46.00	-13.10	32.02	0.88	Peak	---	---
5	776.90	33.22	46.00	-12.78	30.01	3.21	Peak	---	---
6	874.87	34.65	46.00	-11.35	30.09	4.56	Peak	---	---

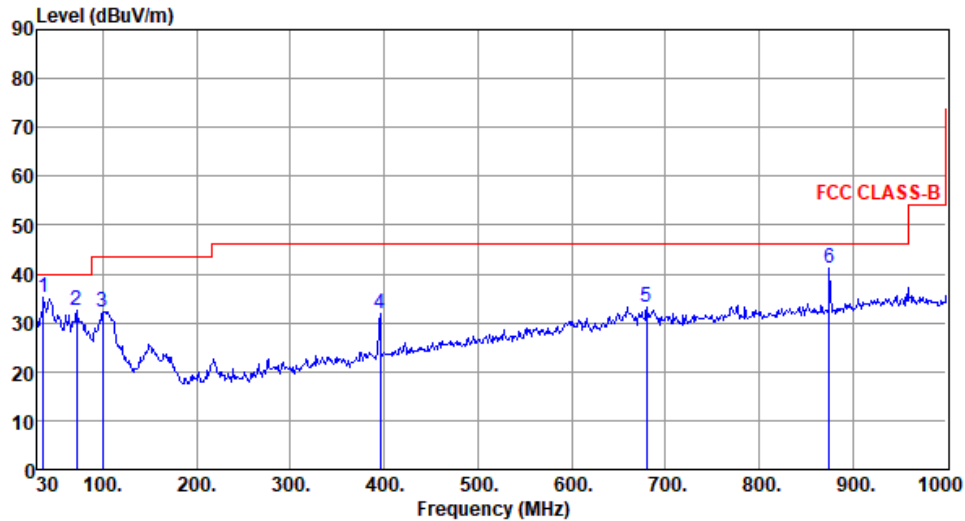
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5785
Polarization	Vertical	Test Configuration	1



	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	35.10	40.00	-4.90	44.24	-9.14	Peak	---	---
2	71.71	32.62	40.00	-7.38	43.47	-10.85	Peak	---	---
3	99.84	32.29	43.50	-11.21	45.38	-13.09	Peak	---	---
4	395.69	31.72	46.00	-14.28	36.98	-5.26	Peak	---	---
5	679.90	33.18	46.00	-12.82	32.06	1.12	Peak	---	---
6	874.87	41.28	46.00	-4.72	36.72	4.56	Peak	---	---

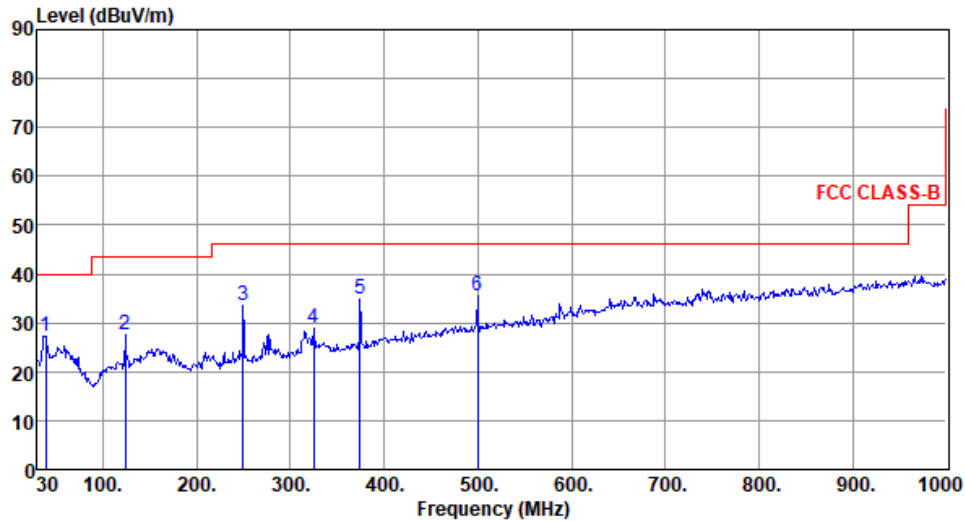
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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 (HE20)	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	2



	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	27.34	40.00	-12.66	36.17	-8.83	Peak	---	---
2	124.09	27.44	43.50	-16.06	37.73	-10.29	Peak	---	---
3	249.22	33.49	46.00	-12.51	43.24	-9.75	Peak	---	---
4	324.88	28.98	46.00	-17.02	35.97	-6.99	Peak	---	---
5	374.35	34.83	46.00	-11.17	40.58	-5.75	Peak	---	---
6	499.48	35.61	46.00	-10.39	38.25	-2.64	Peak	---	---

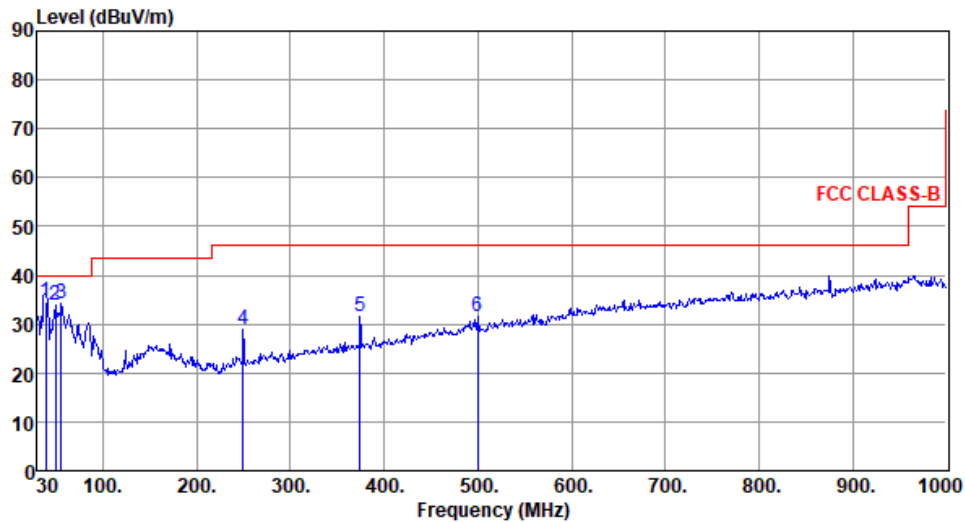
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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 (HE20)	Test Freq. (MHz)	5240
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	38.66	34.39	40.00	-5.61	43.22	-8.83	QP	100	345
2	49.40	33.74	40.00	-6.26	42.12	-8.38	Peak	---	---
3	55.22	34.10	40.00	-5.90	42.81	-8.71	Peak	---	---
4	249.22	28.97	46.00	-17.03	38.72	-9.75	Peak	---	---
5	374.35	31.70	46.00	-14.30	37.45	-5.75	Peak	---	---
6	499.48	31.57	46.00	-14.43	34.21	-2.64	Peak	---	---

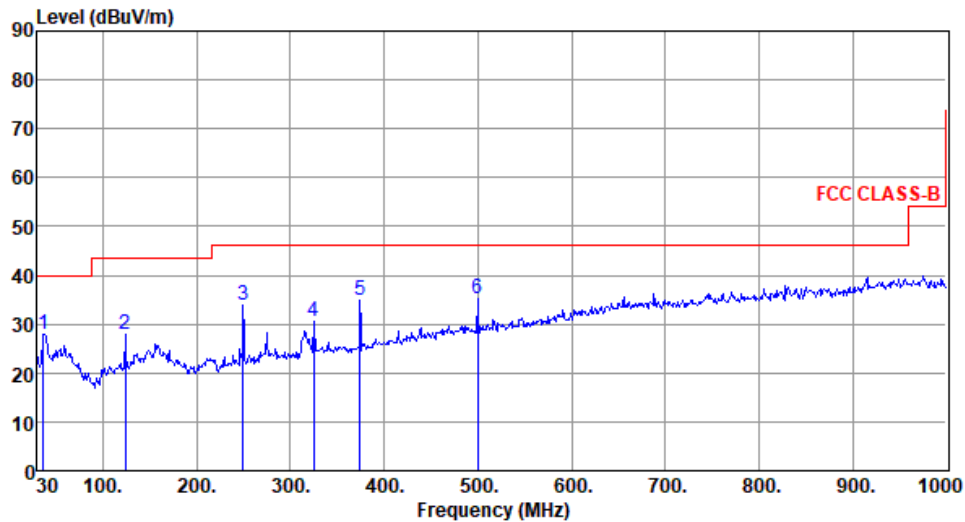
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5785
Polarization	Horizontal	Test Configuration	2



	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	27.94	40.00	-12.06	37.08	-9.14	Peak	---	---
2	124.09	27.84	43.50	-15.66	38.13	-10.29	Peak	---	---
3	249.22	33.82	46.00	-12.18	43.57	-9.75	Peak	---	---
4	324.88	30.48	46.00	-15.52	37.47	-6.99	Peak	---	---
5	374.35	34.91	46.00	-11.09	40.66	-5.75	Peak	---	---
6	499.48	35.34	46.00	-10.66	37.98	-2.64	Peak	---	---

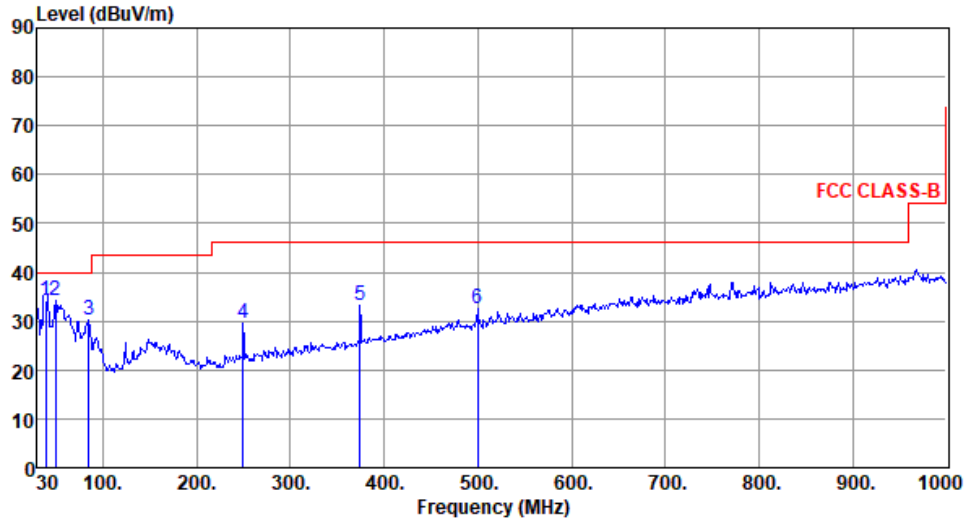
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5785
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.26	34.31	40.00	-5.69	43.11	-8.80	QP	100	348
2	49.40	34.05	40.00	-5.95	42.43	-8.38	Peak	---	---
3	85.29	30.34	40.00	-9.66	44.43	-14.09	Peak	---	---
4	249.22	29.40	46.00	-16.60	39.15	-9.75	Peak	---	---
5	374.35	33.32	46.00	-12.68	39.07	-5.75	Peak	---	---
6	499.48	32.38	46.00	-13.62	35.02	-2.64	Peak	---	---

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

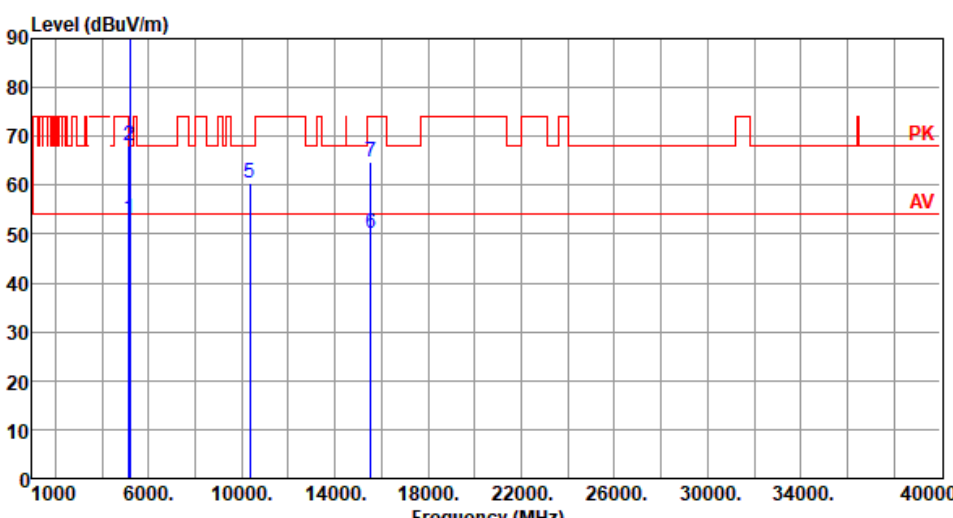
*Factor includes antenna factor , cable loss and amplifier gain

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

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

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

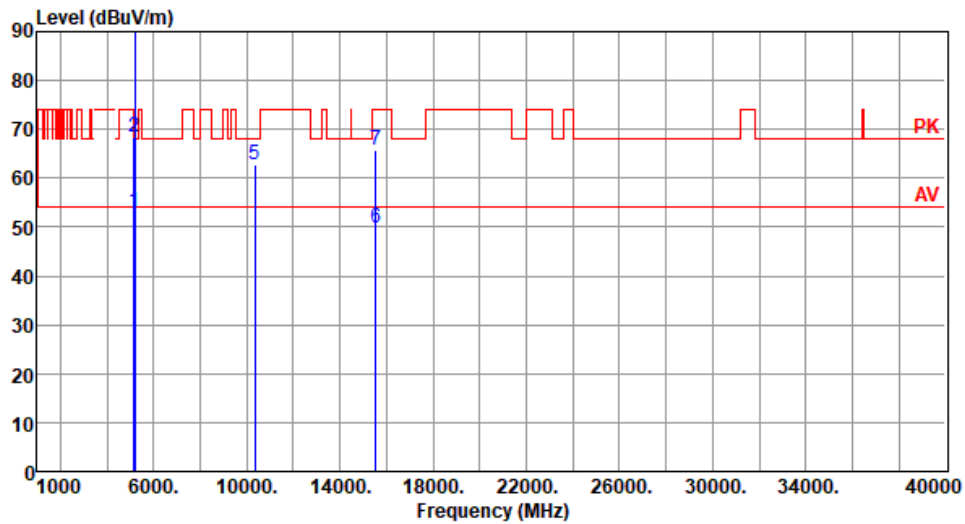
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal	Test Configuration	1



	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	53.03	54.00	-0.97	45.71	7.32	Average	192	18
2	5150.00	68.14	74.00	-5.86	60.82	7.32	Peak	192	18
3 *	5180.00	113.29			106.15	7.14	Average	192	18
4 *	5180.00	122.83			115.69	7.14	Peak	192	18
5	10360.00	60.48	68.20	-7.72	44.39	16.09	Peak	125	221
6	15540.00	50.22	54.00	-3.78	32.85	17.37	Average	110	236
7	15540.00	64.81	74.00	-9.19	47.44	17.37	Peak	110	236

Note 1: Emission Level (dBUV/m) = SA Reading (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)	5180
Polarization	Vertical	Test Configuration	1



	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	53.24	54.00	-0.76	45.92	7.32	Average	230	348
2	5150.00	68.57	74.00	-5.43	61.25	7.32	Peak	230	348
3 *	5180.00	112.92			105.78	7.14	Average	230	348
4 *	5180.00	122.66			115.52	7.14	Peak	230	348
5	10360.00	62.85	68.20	-5.35	46.76	16.09	Peak	100	346
6	15540.00	49.85	54.00	-4.15	32.48	17.37	Average	100	19
7	15540.00	65.64	74.00	-8.36	48.27	17.37	Peak	100	19

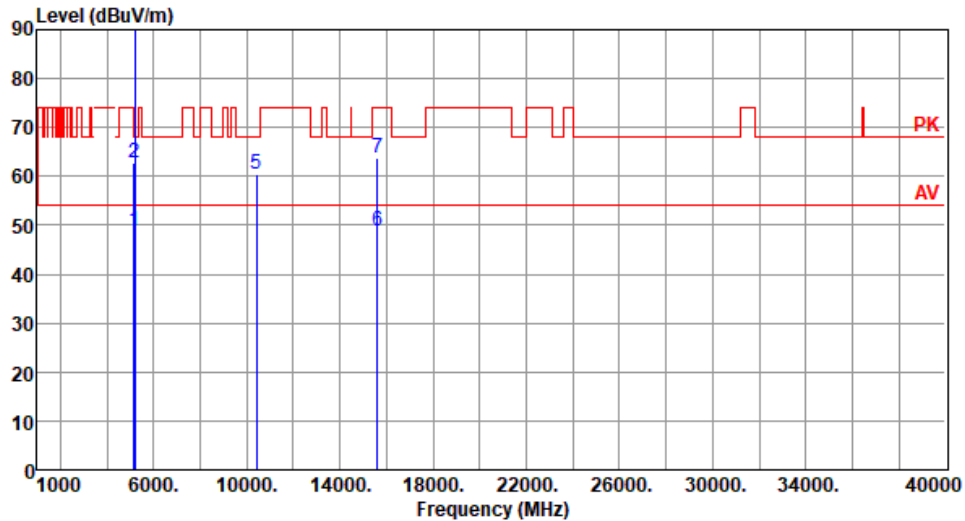
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	11a	Test Freq. (MHz)	5200
Polarization	Horizontal	Test Configuration	1



	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	48.81	54.00	-5.19	41.49	7.32	Average	197	21
2	5150.00	62.77	74.00	-11.23	55.45	7.32	Peak	197	21
3 *	5200.00	113.66			106.63	7.03	Average	197	21
4 *	5200.00	123.13			116.10	7.03	Peak	197	21
5	10400.00	60.57	68.20	-7.63	44.29	16.28	Peak	118	222
6	15600.00	48.83	54.00	-5.17	31.56	17.27	Average	100	220
7	15600.00	63.72	74.00	-10.28	46.45	17.27	Peak	100	220

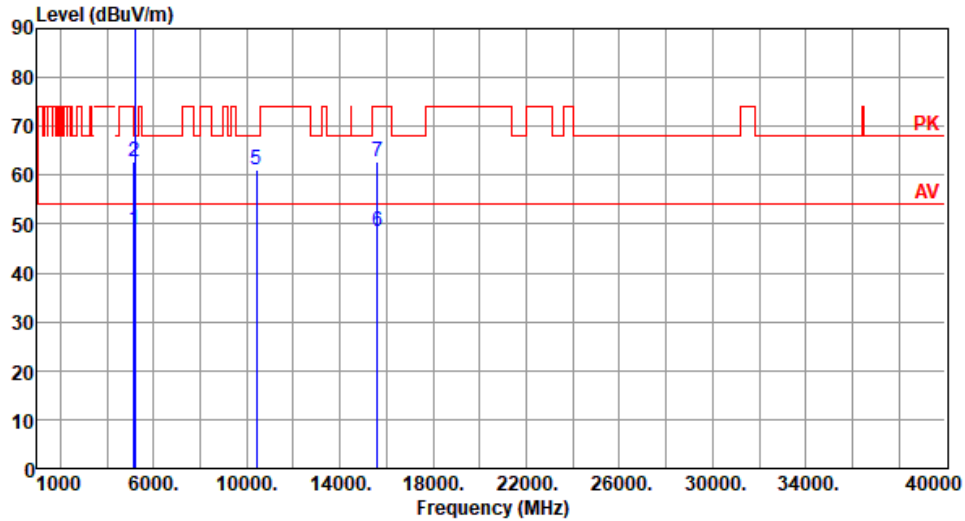
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5200
Polarization	Vertical	Test Configuration	1



	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	48.75	54.00	-5.25	41.43	7.32	Average	231	349
2	5150.00	62.71	74.00	-11.29	55.39	7.32	Peak	231	349
3 *	5200.00	113.54			106.51	7.03	Average	231	349
4 *	5200.00	123.08			116.05	7.03	Peak	231	349
5	10400.00	61.03	68.20	-7.17	44.75	16.28	Peak	100	346
6	15600.00	48.54	54.00	-5.46	31.27	17.27	Average	100	30
7	15600.00	62.80	74.00	-11.20	45.53	17.27	Peak	100	30

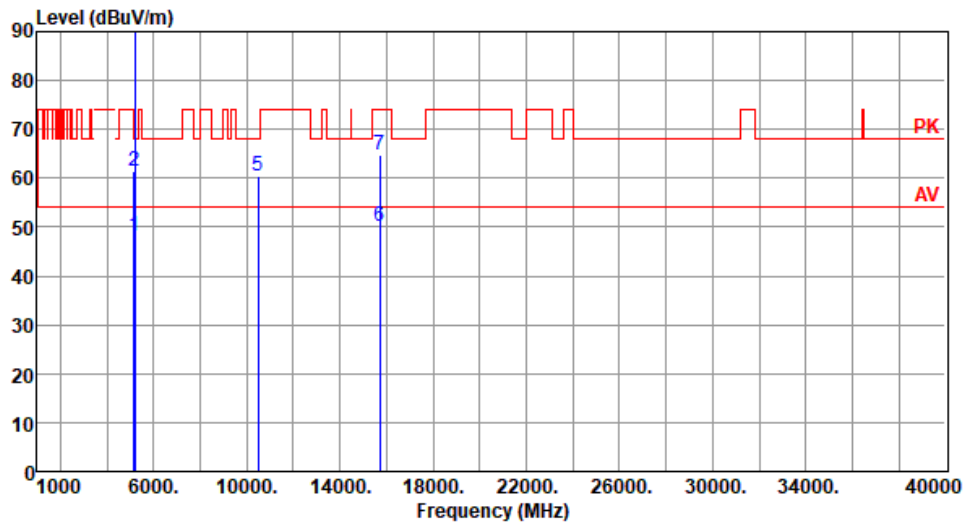
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	11a	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	1



	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	48.29	54.00	-5.71	40.97	7.32	Average	194	12
2	5150.00	61.52	74.00	-12.48	54.20	7.32	Peak	194	12
3 *	5240.00	114.16			107.26	6.90	Average	194	12
4 *	5240.00	124.00			117.10	6.90	Peak	194	12
5	10480.00	60.35	68.20	-7.85	43.94	16.41	Peak	121	226
6	15720.00	50.13	54.00	-3.87	33.53	16.60	Average	114	239
7	15720.00	64.69	74.00	-9.31	48.09	16.60	Peak	114	239

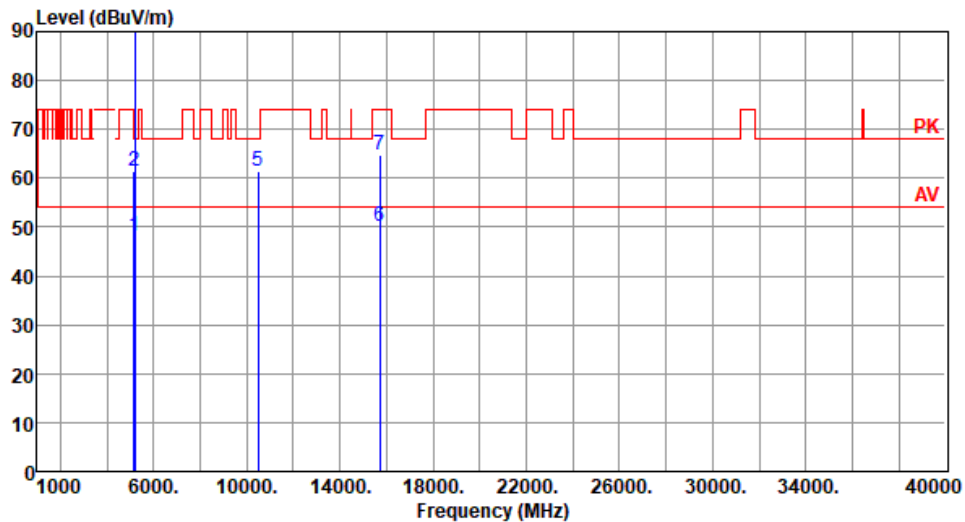
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	48.22	54.00	-5.78	40.90	7.32	Average	225	341
2	5150.00	61.45	74.00	-12.55	54.13	7.32	Peak	225	341
3 *	5240.00	113.95			107.05	6.90	Average	225	341
4 *	5240.00	123.86			116.96	6.90	Peak	225	341
5	10480.00	61.46	68.20	-6.74	45.05	16.41	Peak	100	344
6	15720.00	50.26	54.00	-3.74	33.66	16.60	Average	100	35
7	15720.00	64.81	74.00	-9.19	48.21	16.60	Peak	100	35

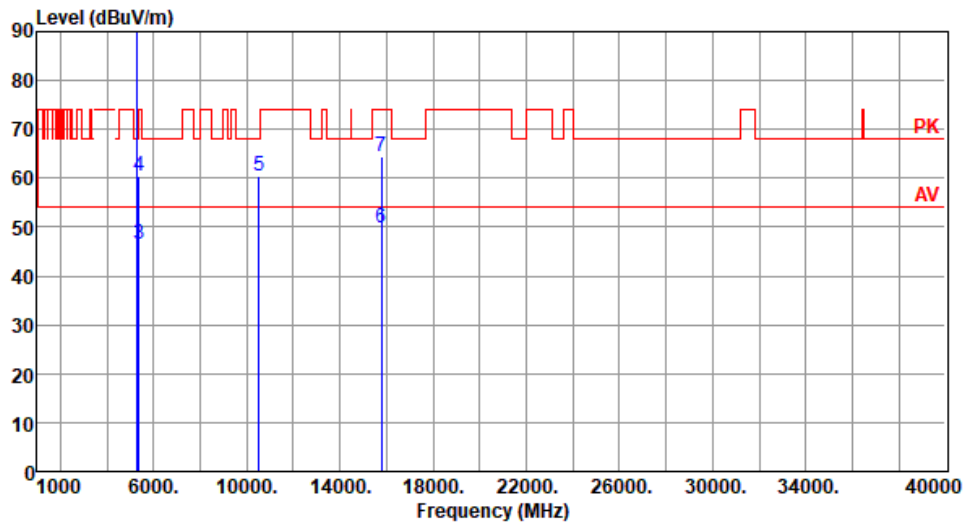
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	106.80			99.92	6.88	Average	192	12
2	*	5260.00	117.42			110.54	6.88	Peak	192	12
3		5350.00	46.50	54.00	-7.50	39.65	6.85	Average	192	12
4		5350.00	60.46	74.00	-13.54	53.61	6.85	Peak	192	12
5		10520.00	60.48	68.20	-7.72	44.06	16.42	Peak	125	236
6		15780.00	49.86	54.00	-4.14	33.30	16.56	Average	114	211
7		15780.00	64.52	74.00	-9.48	47.96	16.56	Peak	114	211

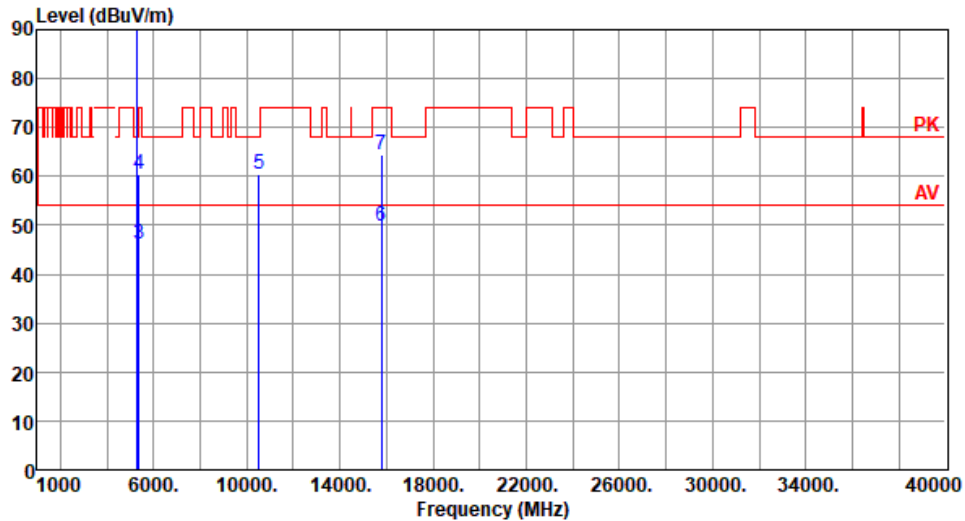
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	106.52			99.64	6.88	Average	225	351
2	*	5260.00	117.14			110.26	6.88	Peak	225	351
3		5350.00	46.28	54.00	-7.72	39.43	6.85	Average	225	351
4		5350.00	60.35	74.00	-13.65	53.50	6.85	Peak	225	351
5		10520.00	60.32	68.20	-7.88	43.90	16.42	Peak	100	311
6		15780.00	49.74	54.00	-4.26	33.18	16.56	Average	100	25
7		15780.00	64.38	74.00	-9.62	47.82	16.56	Peak	100	25

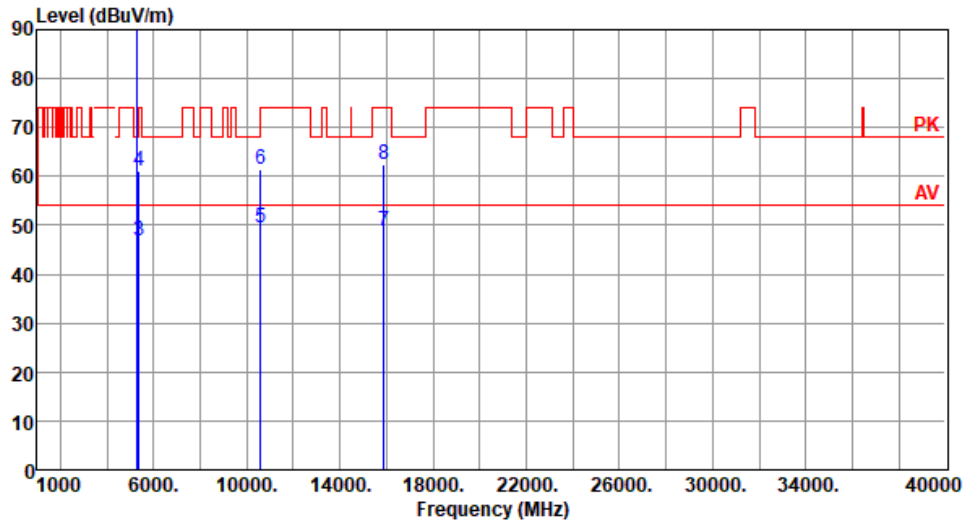
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	106.97			100.06	6.91	Average	176	13
2	*	5300.00	117.40			110.49	6.91	Peak	176	13
3		5350.00	46.96	54.00	-7.04	40.11	6.85	Average	176	13
4		5350.00	60.96	74.00	-13.04	54.11	6.85	Peak	176	13
5		10600.00	49.38	54.00	-4.62	33.02	16.36	Average	138	226
6		10600.00	61.42	74.00	-12.58	45.06	16.36	Peak	138	226
7		15900.00	48.70	54.00	-5.30	32.01	16.69	Average	100	224
8		15900.00	62.38	74.00	-11.62	45.69	16.69	Peak	100	224

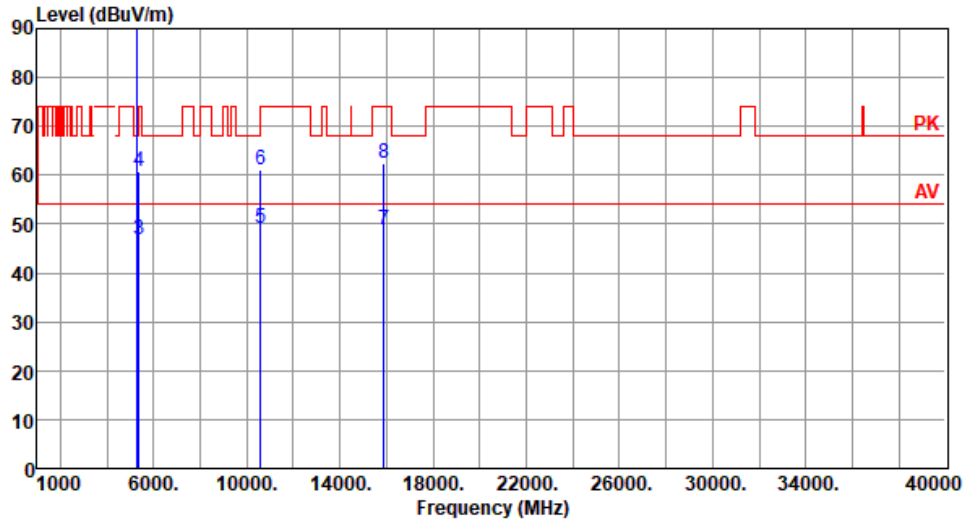
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	106.45			99.54	6.91	Average	208	325
2	*	5300.00	116.92			110.01	6.91	Peak	208	325
3		5350.00	46.82	54.00	-7.18	39.97	6.85	Average	208	325
4		5350.00	60.85	74.00	-13.15	54.00	6.85	Peak	208	325
5		10600.00	49.17	54.00	-4.83	32.81	16.36	Average	100	345
6		10600.00	61.21	74.00	-12.79	44.85	16.36	Peak	100	345
7		15900.00	48.69	54.00	-5.31	32.00	16.69	Average	100	49
8		15900.00	62.34	74.00	-11.66	45.65	16.69	Peak	100	49

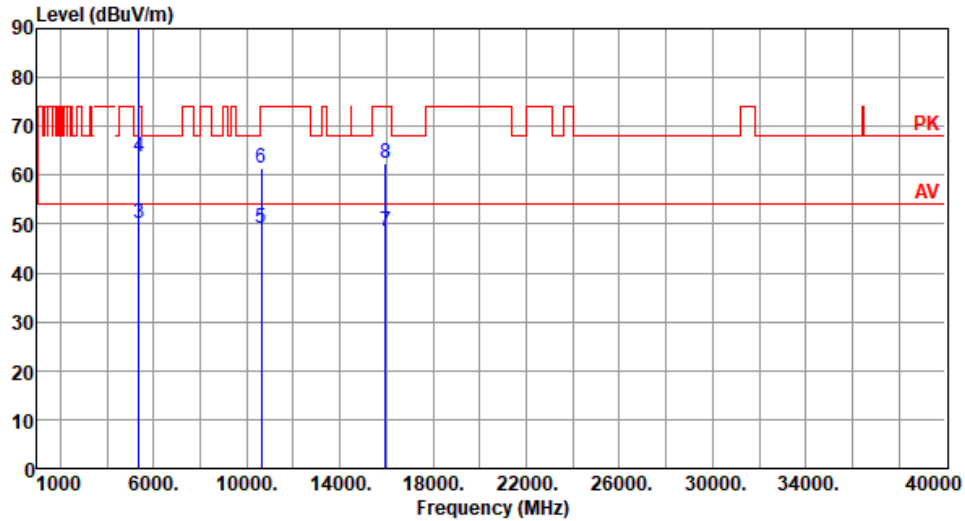
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		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	106.18			99.29	6.89	Average	183	348
2	*	5320.00	115.93			109.04	6.89	Peak	183	348
3		5350.00	50.31	54.00	-3.69	43.46	6.85	Average	183	348
4		5350.00	63.68	74.00	-10.32	56.83	6.85	Peak	183	348
5		10640.00	49.28	54.00	-4.72	32.91	16.37	Average	122	236
6		10640.00	61.35	74.00	-12.65	44.98	16.37	Peak	122	236
7		15960.00	48.61	54.00	-5.39	32.08	16.53	Average	110	221
8		15960.00	62.35	74.00	-11.65	45.82	16.53	Peak	110	221

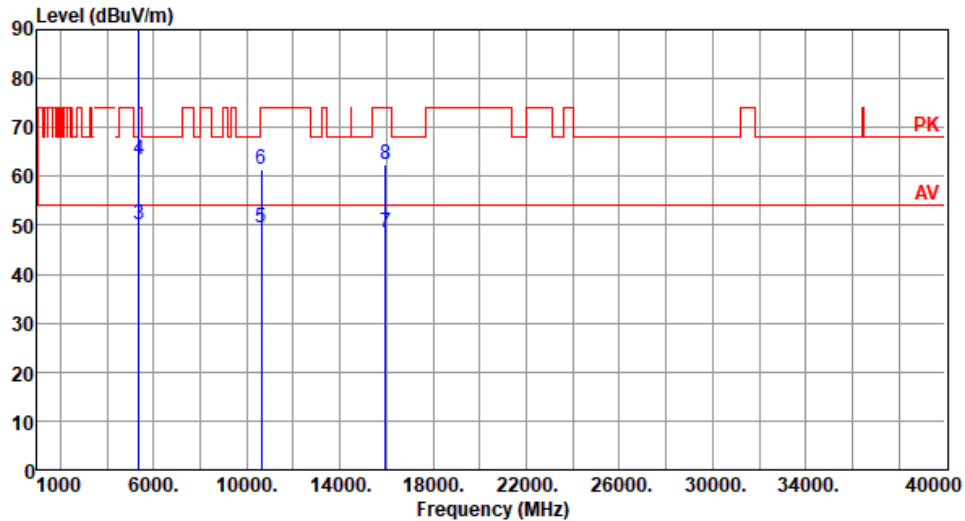
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		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	105.69			98.80	6.89	Average	126	324
2	*	5320.00	115.42			108.53	6.89	Peak	126	324
3		5350.00	50.26	54.00	-3.74	43.41	6.85	Average	126	324
4		5350.00	63.52	74.00	-10.48	56.67	6.85	Peak	126	324
5		10640.00	49.33	54.00	-4.67	32.96	16.37	Average	109	346
6		10640.00	61.42	74.00	-12.58	45.05	16.37	Peak	109	346
7		15960.00	48.65	54.00	-5.35	32.12	16.53	Average	104	25
8		15960.00	62.39	74.00	-11.61	45.86	16.53	Peak	104	25

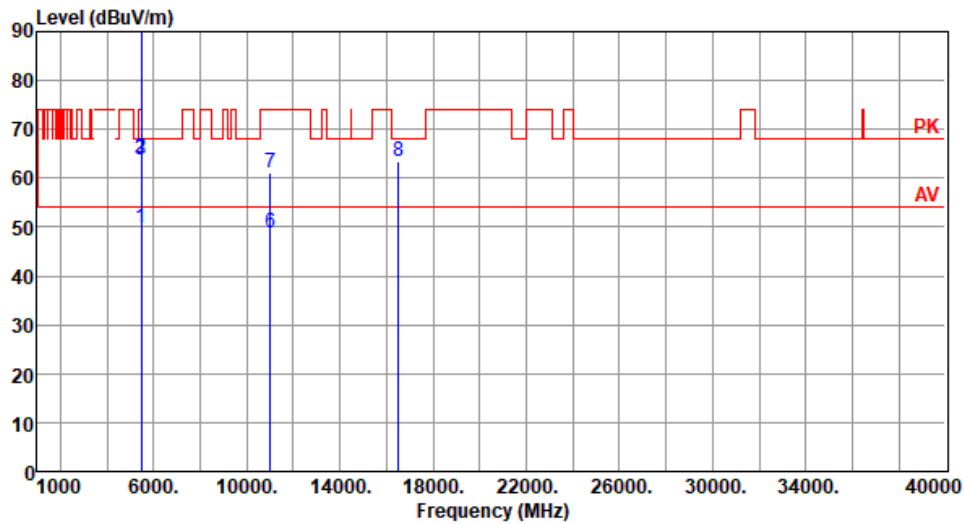
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.89	54.00	-4.11	42.64	7.25	Average	187	346
2	5460.00	64.04	74.00	-9.96	56.79	7.25	Peak	187	346
3	5470.00	63.72	68.20	-4.48	56.44	7.28	Peak	187	346
4 *	5500.00	107.38			100.02	7.36	Average	187	346
5 *	5500.00	118.05			110.69	7.36	Peak	187	346
6	11000.00	48.84	54.00	-5.16	32.00	16.84	Average	116	239
7	11000.00	61.05	74.00	-12.95	44.21	16.84	Peak	116	239
8	16500.00	63.58	68.20	-4.62	45.94	17.64	Peak	100	235

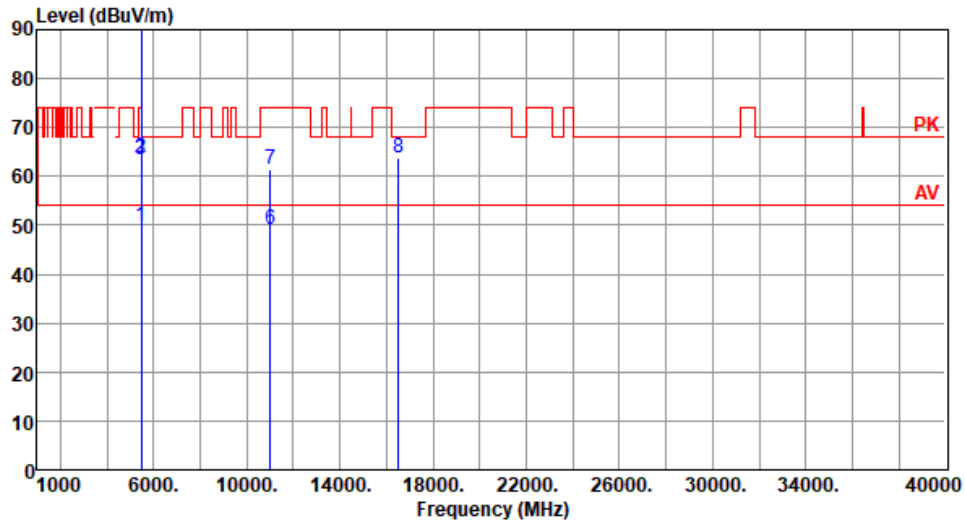
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.74	54.00	-4.26	42.49	7.25	Average	128	316
2	5460.00	63.82	74.00	-10.18	56.57	7.25	Peak	128	316
3	5470.00	63.39	68.20	-4.81	56.11	7.28	Peak	128	316
4 *	5500.00	106.51			99.15	7.36	Average	128	316
5 *	5500.00	116.48			109.12	7.36	Peak	128	316
6	11000.00	49.15	54.00	-4.85	32.31	16.84	Average	100	342
7	11000.00	61.28	74.00	-12.72	44.44	16.84	Peak	100	342
8	16500.00	63.69	68.20	-4.51	46.05	17.64	Peak	100	18

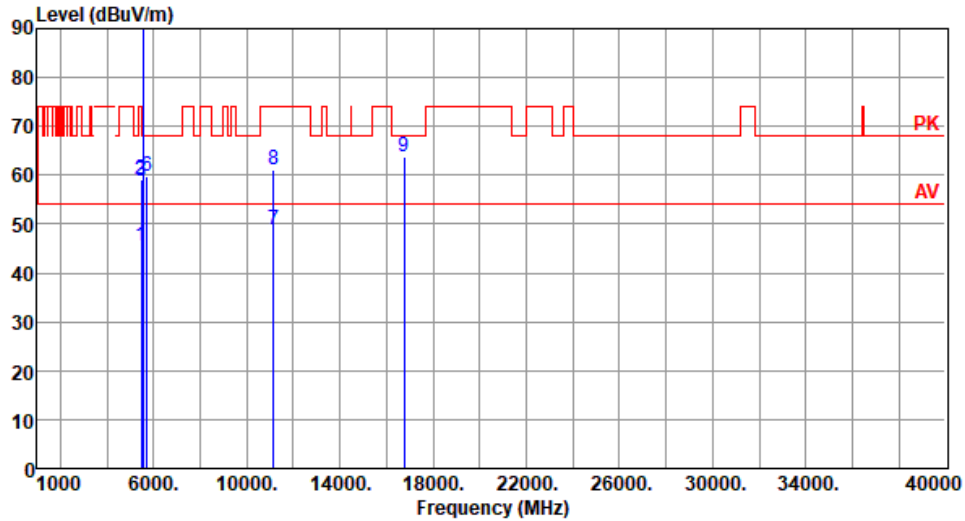
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	11a	Test Freq. (MHz)	5580
Polarization	Horizontal	Test Configuration	1



	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	45.54	54.00	-8.46	38.29	7.25	Average	186	9
2	5460.00	59.26	74.00	-14.74	52.01	7.25	Peak	186	9
3	5470.00	58.84	68.20	-9.36	51.56	7.28	Peak	186	9
4 *	5580.00	107.26			99.78	7.48	Average	186	9
5 *	5580.00	117.50			110.02	7.48	Peak	186	9
6	5725.00	59.91	68.20	-8.29	52.25	7.66	Peak	186	9
7	11160.00	48.92	54.00	-5.08	32.33	16.59	Average	125	231
8	11160.00	61.13	74.00	-12.87	44.54	16.59	Peak	125	231
9	16740.00	63.62	68.20	-4.58	45.39	18.23	Peak	100	229

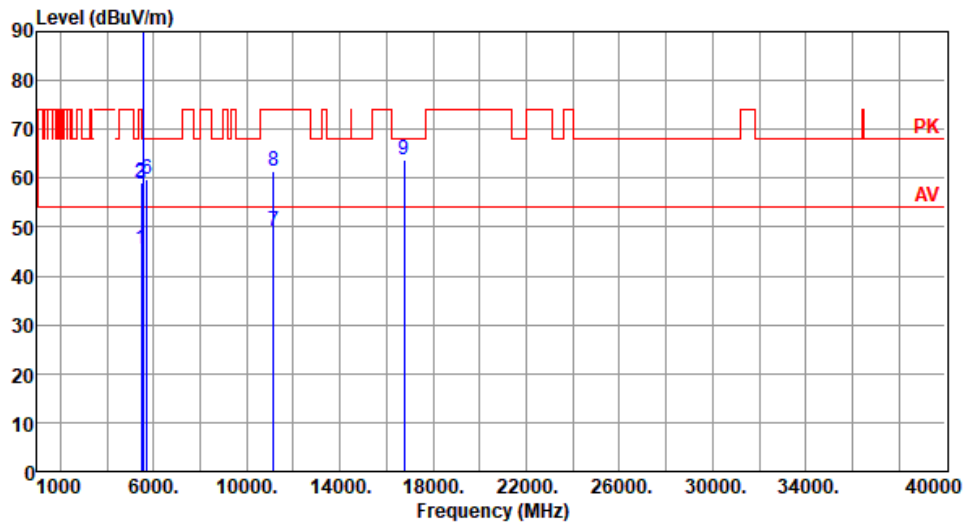
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	45.46	54.00	-8.54	38.21	7.25	Average	125	321
2	5460.00	59.14	74.00	-14.86	51.89	7.25	Peak	125	321
3	5470.00	58.65	68.20	-9.55	51.37	7.28	Peak	125	321
4 *	5580.00	106.65			99.17	7.48	Average	125	321
5 *	5580.00	116.92			109.44	7.48	Peak	125	321
6	5725.00	59.88	68.20	-8.32	52.22	7.66	Peak	125	321
7	11160.00	49.23	54.00	-4.77	32.64	16.59	Average	100	338
8	11160.00	61.39	74.00	-12.61	44.80	16.59	Peak	100	338
9	16740.00	63.84	68.20	-4.36	45.61	18.23	Peak	100	2

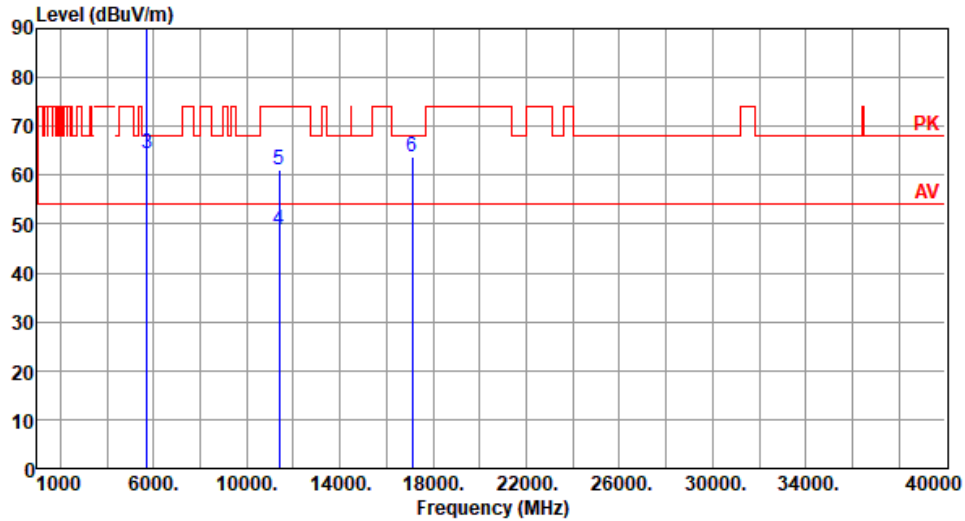
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		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	108.08			100.58	7.50	Average	175	8
2	*	5700.00	118.06			110.56	7.50	Peak	175	8
3		5725.00	64.46	68.20	-3.74	56.80	7.66	Peak	175	8
4		11400.00	48.96	54.00	-5.04	32.23	16.73	Average	119	236
5		11400.00	61.25	74.00	-12.75	44.52	16.73	Peak	119	236
6		17100.00	63.68	68.20	-4.52	45.44	18.24	Peak	100	205

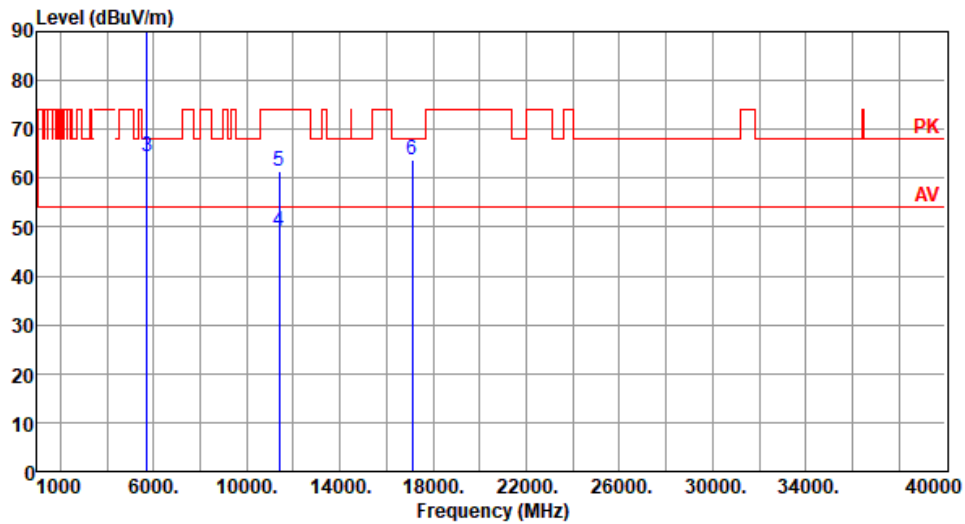
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical	Test Configuration	1



		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	107.08			99.58	7.50	Average	125	313
2	*	5700.00	117.15			109.65	7.50	Peak	125	313
3		5725.00	64.33	68.20	-3.87	56.67	7.66	Peak	125	313
4		11400.00	49.31	54.00	-4.69	32.58	16.73	Average	100	356
5		11400.00	61.45	74.00	-12.55	44.72	16.73	Peak	100	356
6		17100.00	63.82	68.20	-4.38	45.58	18.24	Peak	100	9

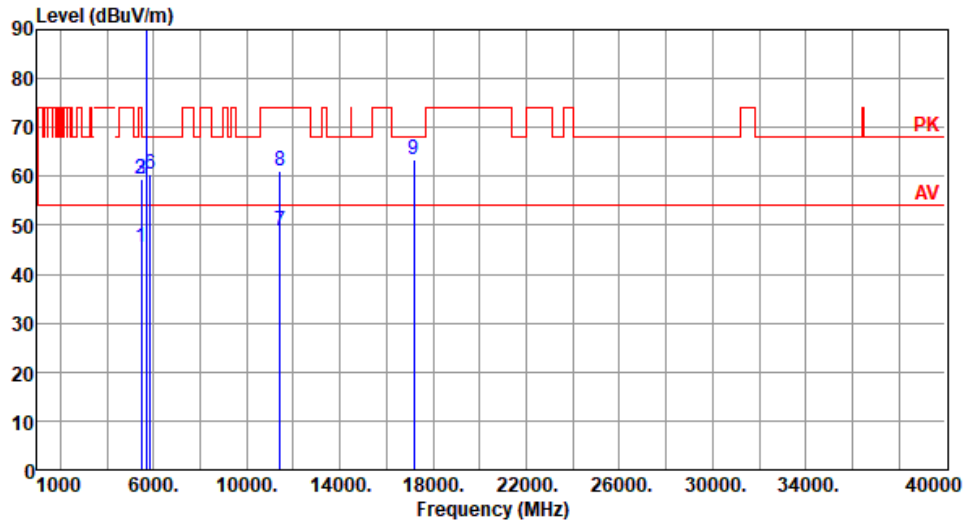
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal	Test Configuration	1



	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	45.49	54.00	-8.51	38.24	7.25	Average	182	2
2	5460.00	59.39	74.00	-14.61	52.14	7.25	Peak	182	2
3	5470.00	59.37	68.20	-8.83	52.09	7.28	Peak	182	2
4 *	5720.00	107.13			99.51	7.62	Average	182	2
5 *	5720.00	117.05			109.43	7.62	Peak	182	2
6	5850.00	60.49	68.20	-7.71	52.47	8.02	Peak	182	2
7	11440.00	48.92	54.00	-5.08	32.18	16.74	Average	113	220
8	11440.00	61.14	74.00	-12.86	44.40	16.74	Peak	113	220
9	17160.00	63.59	68.20	-4.61	45.21	18.38	Peak	100	245

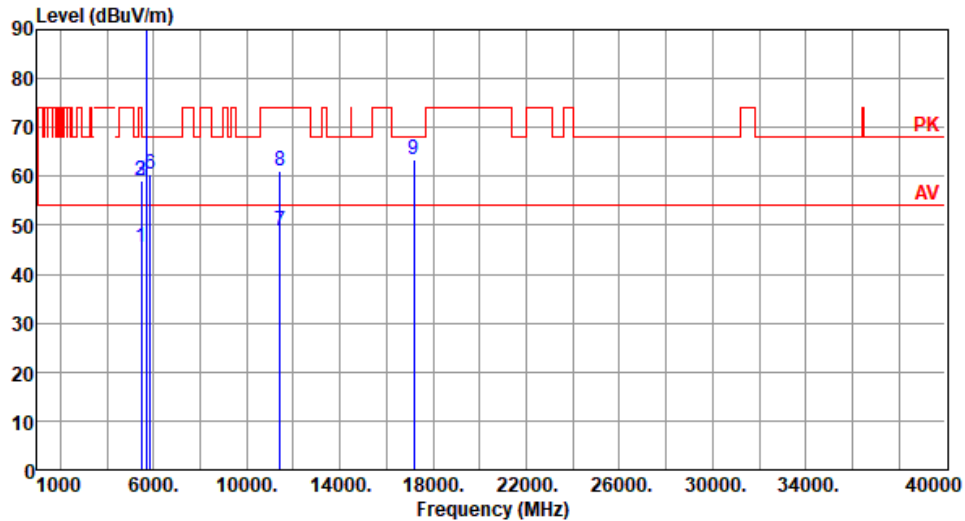
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	45.42	54.00	-8.58	38.17	7.25	Average	128	323
2	5460.00	59.28	74.00	-14.72	52.03	7.25	Peak	128	323
3	5470.00	59.21	68.20	-8.99	51.93	7.28	Peak	128	323
4 *	5720.00	106.24			98.62	7.62	Average	128	323
5 *	5720.00	116.35			108.73	7.62	Peak	128	323
6	5850.00	60.35	68.20	-7.85	52.33	8.02	Peak	128	323
7	11440.00	48.85	54.00	-5.15	32.11	16.74	Average	100	306
8	11440.00	61.06	74.00	-12.94	44.32	16.74	Peak	100	306
9	17160.00	63.42	68.20	-4.78	45.04	18.38	Peak	100	19

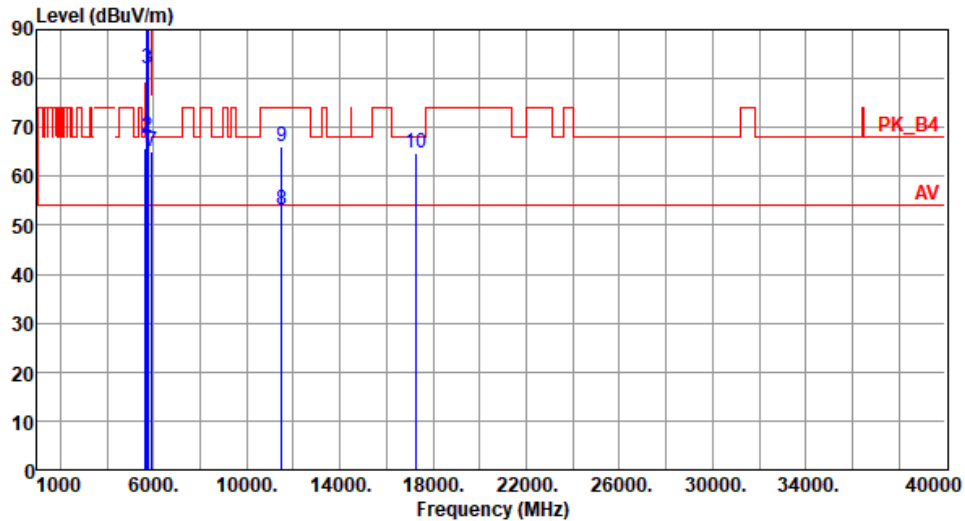
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	11a	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	1



	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	65.77	68.20	-2.43	58.38	7.39	Peak	182	352
2	5700.00	68.03	105.20	-37.17	60.53	7.50	Peak	182	352
3	5720.00	82.14	110.80	-28.66	74.52	7.62	Peak	182	352
4	5725.00	94.47	122.20	-27.73	86.81	7.66	Peak	182	352
5 *	5745.00	117.58			109.80	7.78	Average	182	352
6 *	5745.00	127.38			119.60	7.78	Peak	182	352
7	5925.00	65.12	68.20	-3.08	57.05	8.07	Peak	182	352
8	11490.00	53.28	54.00	-0.72	36.52	16.76	Average	102	301
9	11490.00	66.05	74.00	-7.95	49.29	16.76	Peak	102	301
10	17235.00	64.69	68.20	-3.51	46.05	18.64	Peak	168	223

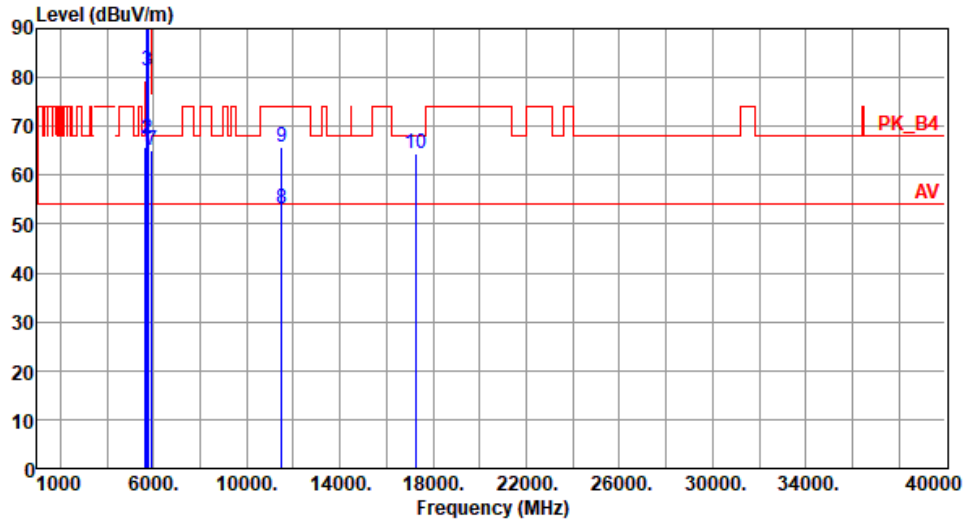
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	65.62	68.20	-2.58	58.23	7.39	Peak	125	334
2	5700.00	67.54	105.20	-37.66	60.04	7.50	Peak	125	334
3	5720.00	81.46	110.80	-29.34	73.84	7.62	Peak	125	334
4	5725.00	93.25	122.20	-28.95	85.59	7.66	Peak	125	334
5 *	5745.00	116.65			108.87	7.78	Average	125	334
6 *	5745.00	126.46			118.68	7.78	Peak	125	334
7	5925.00	65.04	68.20	-3.16	56.97	8.07	Peak	125	334
8	11490.00	53.18	54.00	-0.82	36.42	16.76	Average	100	351
9	11490.00	65.82	74.00	-8.18	49.06	16.76	Peak	100	351
10	17235.00	64.53	68.20	-3.67	45.89	18.64	Peak	141	169

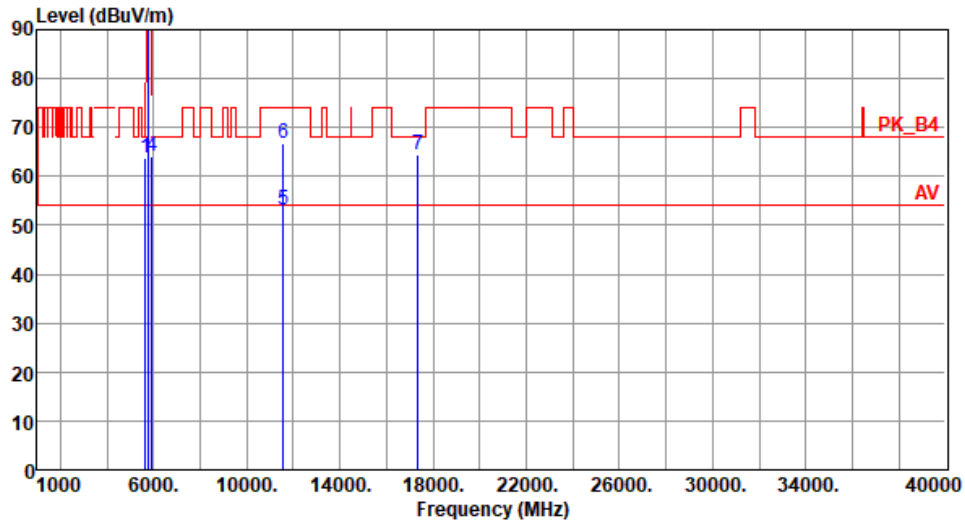
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	63.80	68.20	-4.40	56.41	7.39	Peak	172	11
2	* 5785.00	116.43			108.55	7.88	Average	172	11
3	* 5785.00	126.90			119.02	7.88	Peak	172	11
4	5925.00	64.01	68.20	-4.19	55.94	8.07	Peak	172	11
5	11570.00	53.14	54.00	-0.86	36.53	16.61	Average	100	305
6	11570.00	66.81	74.00	-7.19	50.20	16.61	Peak	100	305
7	17355.00	64.57	68.20	-3.63	45.34	19.23	Peak	166	226

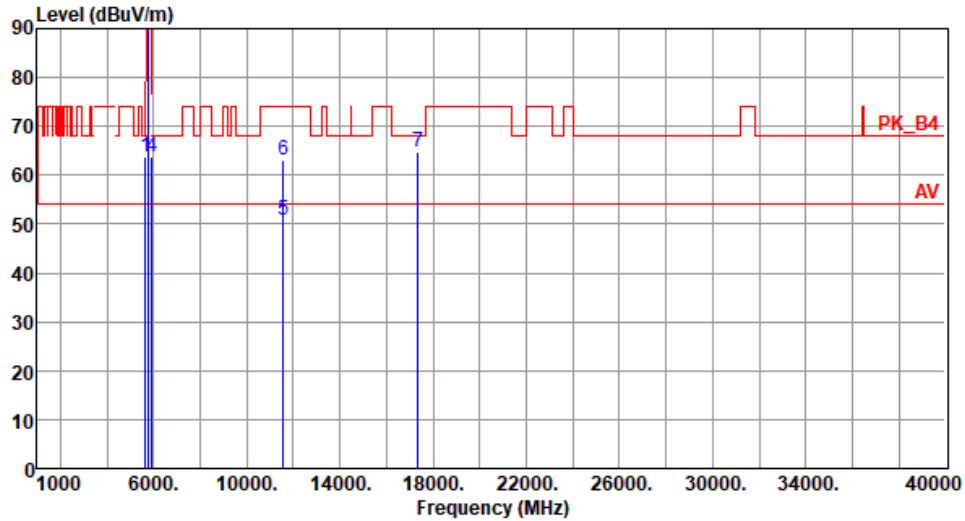
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	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	63.65	68.20	-4.55	56.26	7.39	Peak	124	319
2 *	5785.00	115.62			107.74	7.88	Average	124	319
3 *	5785.00	126.14			118.26	7.88	Peak	124	319
4	5925.00	63.84	68.20	-4.36	55.77	8.07	Peak	124	319
5	11570.00	50.67	54.00	-3.33	34.06	16.61	Average	100	342
6	11570.00	63.10	74.00	-10.90	46.49	16.61	Peak	100	342
7	17355.00	64.62	68.20	-3.58	45.39	19.23	Peak	155	181

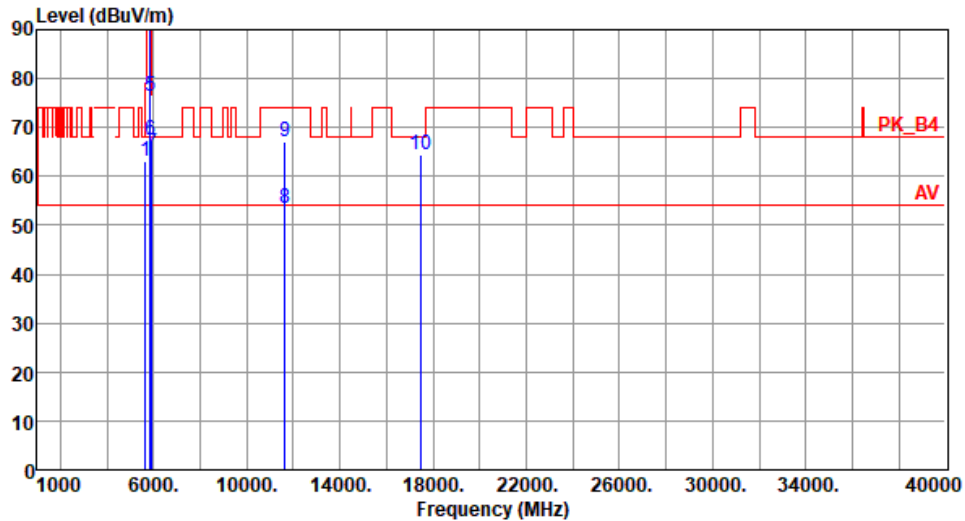
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Horizontal	Test Configuration	1



	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	63.26	68.20	-4.94	55.87	7.39	Peak	180	1
2 *	5825.00	116.86			108.90	7.96	Average	180	1
3 *	5825.00	126.52			118.56	7.96	Peak	180	1
4	5850.00	88.57	122.20	-33.63	80.55	8.02	Peak	180	1
5	5855.00	76.36	110.80	-34.44	68.34	8.02	Peak	180	1
6	5875.00	67.38	105.20	-37.82	59.35	8.03	Peak	180	1
7	5925.00	64.82	68.20	-3.38	56.75	8.07	Peak	180	1
8	11650.00	53.46	54.00	-0.54	37.08	16.38	Average	102	311
9	11650.00	66.92	74.00	-7.08	50.54	16.38	Peak	102	311
10	17475.00	64.51	68.20	-3.69	44.77	19.74	Peak	100	224

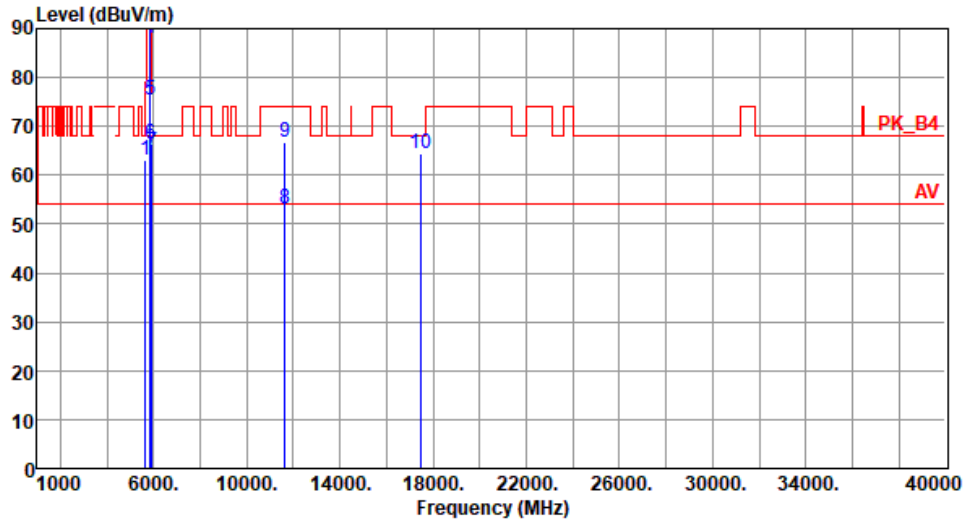
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	63.14	68.20	-5.06	55.75	7.39	Peak	124	331
2 *	5825.00	116.04			108.08	7.96	Average	124	331
3 *	5825.00	125.71			117.75	7.96	Peak	124	331
4	5850.00	87.86	122.20	-34.34	79.84	8.02	Peak	124	331
5	5855.00	75.41	110.80	-35.39	67.39	8.02	Peak	124	331
6	5875.00	66.43	105.20	-38.77	58.40	8.03	Peak	124	331
7	5925.00	64.77	68.20	-3.43	56.70	8.07	Peak	124	331
8	11650.00	53.28	54.00	-0.72	36.90	16.38	Average	100	345
9	11650.00	66.81	74.00	-7.19	50.43	16.38	Peak	100	345
10	17475.00	64.38	68.20	-3.82	44.64	19.74	Peak	151	162

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

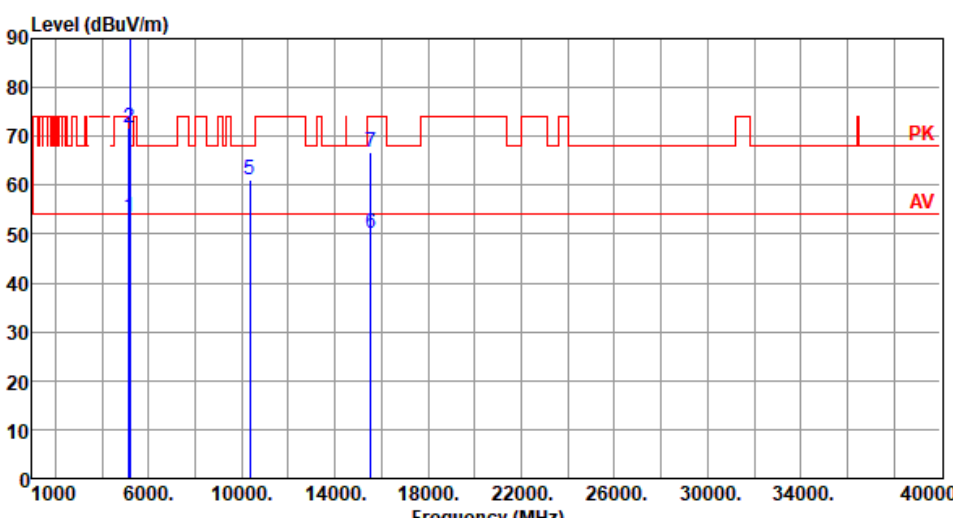
*Factor includes antenna factor, cable loss and amplifier gain

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

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

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

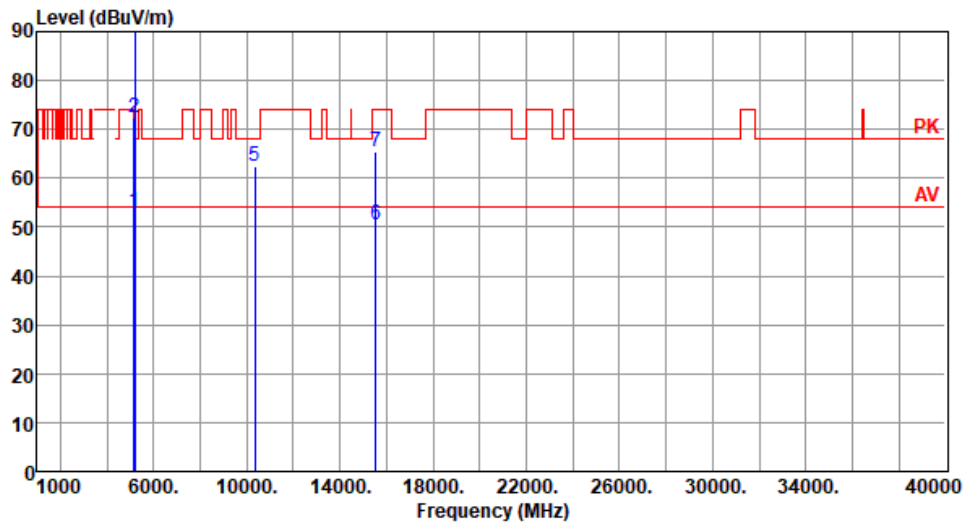
Modulation	ax (HE20)	Test Freq. (MHz)	5180
Polarization	Horizontal	Test Configuration	1



	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	53.51	54.00	-0.49	46.19	7.32	Average	209	351
2	5150.00	71.61	74.00	-2.39	64.29	7.32	Peak	209	351
3 *	5180.00	110.35			103.21	7.14	Average	209	351
4 *	5180.00	123.86			116.72	7.14	Peak	209	351
5	10360.00	61.22	68.20	-6.98	45.13	16.09	Peak	125	224
6	15540.00	50.29	54.00	-3.71	32.92	17.37	Average	114	236
7	15540.00	66.84	74.00	-7.16	49.47	17.37	Peak	114	236

Note 1: Emission Level (dBUV/m) = SA Reading (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)	5180
Polarization	Vertical	Test Configuration	1



	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	53.22	54.00	-0.78	45.90	7.32	Average	204	18
2	5150.00	72.51	74.00	-1.49	65.19	7.32	Peak	204	18
3 *	5180.00	110.05			102.91	7.14	Average	204	18
4 *	5180.00	123.45			116.31	7.14	Peak	204	18
5	10360.00	62.45	68.20	-5.75	46.36	16.09	Peak	101	326
6	15540.00	50.36	54.00	-3.64	32.99	17.37	Average	100	21
7	15540.00	65.48	74.00	-8.52	48.11	17.37	Peak	100	21

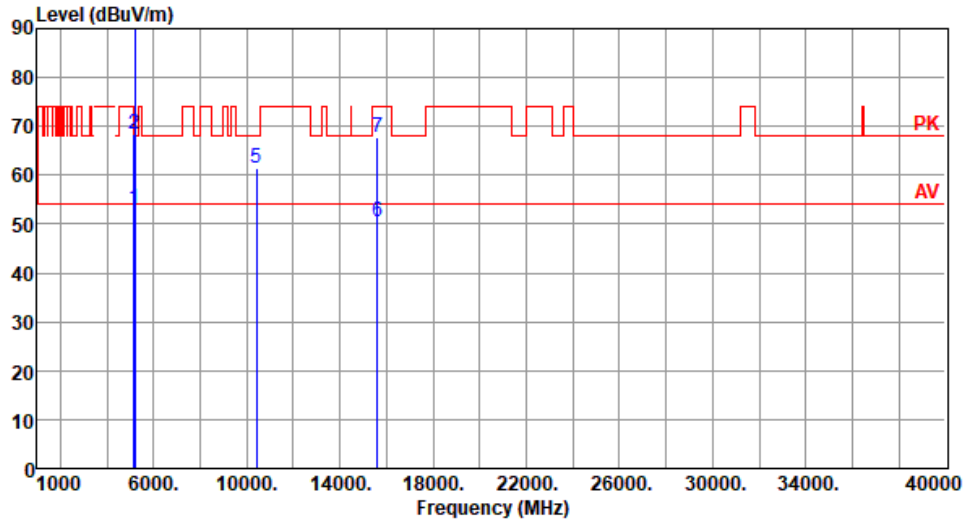
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5200
Polarization	Horizontal	Test Configuration	1



	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	53.25	54.00	-0.75	45.93	7.32	Average	198	343
2	5150.00	68.26	74.00	-5.74	60.94	7.32	Peak	198	343
3 *	5200.00	114.64			107.61	7.03	Average	198	343
4 *	5200.00	126.89			119.86	7.03	Peak	198	343
5	10400.00	61.54	68.20	-6.66	45.26	16.28	Peak	129	222
6	15600.00	50.34	54.00	-3.66	33.07	17.27	Average	111	230
7	15600.00	67.86	74.00	-6.14	50.59	17.27	Peak	111	230

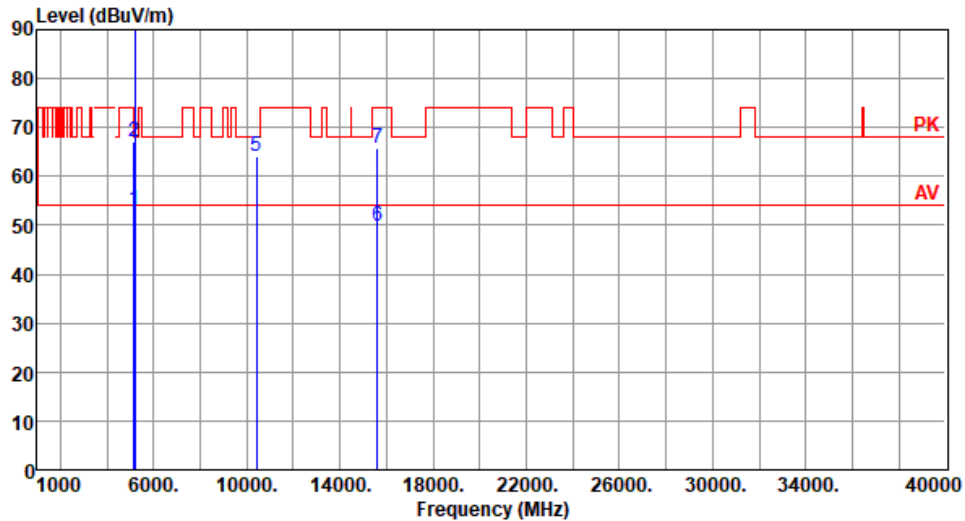
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	53.01	54.00	-0.99	45.69	7.32	Average	195	342
2	5150.00	67.18	74.00	-6.82	59.86	7.32	Peak	195	342
3 *	5200.00	114.50			107.47	7.03	Average	195	342
4 *	5200.00	126.61			119.58	7.03	Peak	195	342
5	10400.00	63.98	68.20	-4.22	47.70	16.28	Peak	100	347
6	15600.00	49.91	54.00	-4.09	32.64	17.27	Average	100	16
7	15600.00	65.72	74.00	-8.28	48.45	17.27	Peak	100	16

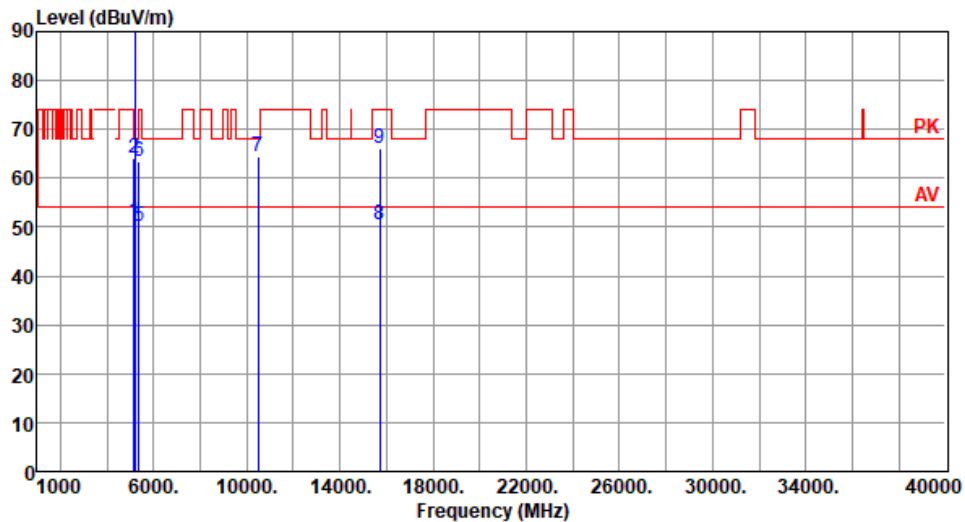
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	1



	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	51.24	54.00	-2.76	43.92	7.32	Average	186	11
2	5150.00	64.15	74.00	-9.85	56.83	7.32	Peak	186	11
3 *	5240.00	114.44			107.54	6.90	Average	186	11
4 *	5240.00	127.52			120.62	6.90	Peak	186	11
5	5350.00	50.31	54.00	-3.69	43.46	6.85	Average	186	11
6	5350.00	63.40	74.00	-10.60	56.55	6.85	Peak	186	11
7	10480.00	64.45	68.20	-3.75	48.04	16.41	Peak	100	329
8	15720.00	50.41	54.00	-3.59	33.81	16.60	Average	100	345
9	15720.00	66.24	74.00	-7.76	49.64	16.60	Peak	100	345

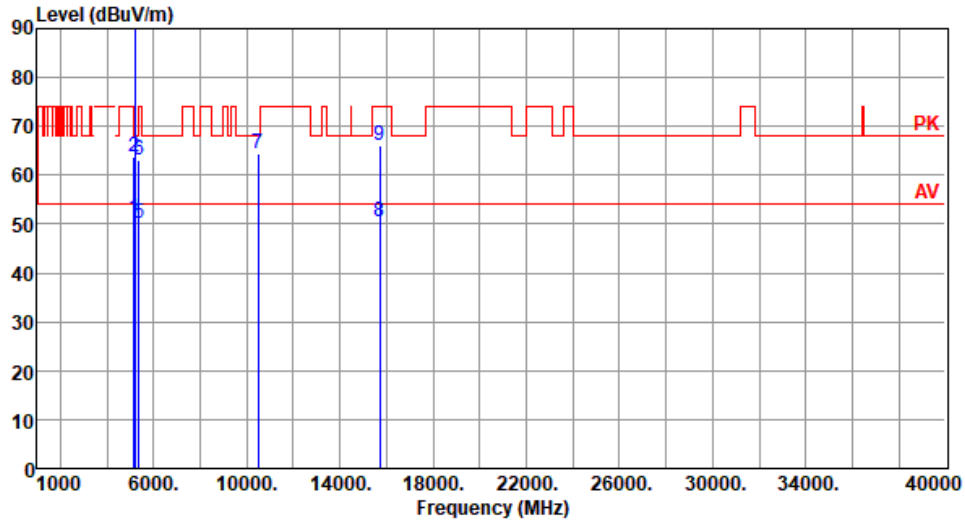
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	51.06	54.00	-2.94	43.74	7.32	Average	196	343
2	5150.00	63.92	74.00	-10.08	56.60	7.32	Peak	196	343
3 *	5240.00	114.03			107.13	6.90	Average	196	343
4 *	5240.00	127.16			120.26	6.90	Peak	196	343
5	5350.00	50.04	54.00	-3.96	43.19	6.85	Average	196	343
6	5350.00	63.11	74.00	-10.89	56.26	6.85	Peak	196	343
7	10480.00	64.32	68.20	-3.88	47.91	16.41	Peak	100	341
8	15720.00	50.32	54.00	-3.68	33.72	16.60	Average	100	15
9	15720.00	66.02	74.00	-7.98	49.42	16.60	Peak	100	15

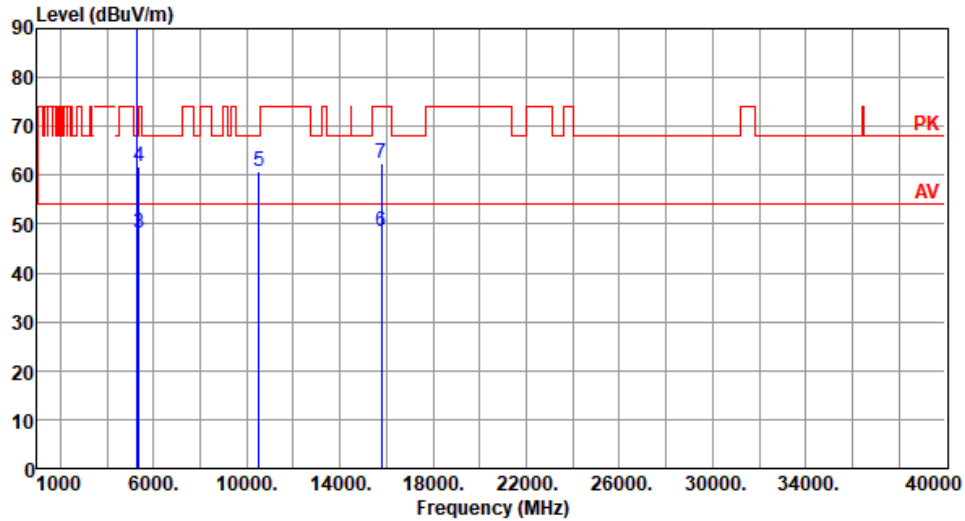
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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 (HE20)	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	107.90			101.02	6.88	Average	186	355
2	*	5260.00	121.69			114.81	6.88	Peak	186	355
3		5350.00	48.01	54.00	-5.99	41.16	6.85	Average	186	355
4		5350.00	61.66	74.00	-12.34	54.81	6.85	Peak	186	355
5		10520.00	60.81	68.20	-7.39	44.39	16.42	Peak	100	344
6		15780.00	48.41	54.00	-5.59	31.85	16.56	Average	100	352
7		15780.00	62.35	74.00	-11.65	45.79	16.56	Peak	100	352

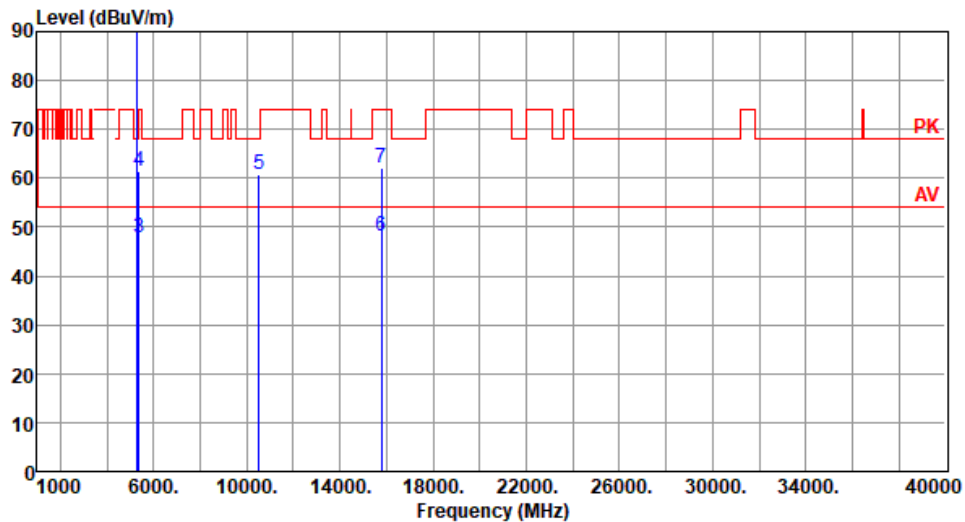
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5260
Polarization	Vertical	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	107.24			100.36	6.88	Average	191	326
2	*	5260.00	121.08			114.20	6.88	Peak	191	326
3		5350.00	47.95	54.00	-6.05	41.10	6.85	Average	191	326
4		5350.00	61.52	74.00	-12.48	54.67	6.85	Peak	191	326
5		10520.00	60.68	68.20	-7.52	44.26	16.42	Peak	101	355
6		15780.00	48.32	54.00	-5.68	31.76	16.56	Average	100	344
7		15780.00	62.25	74.00	-11.75	45.69	16.56	Peak	100	344

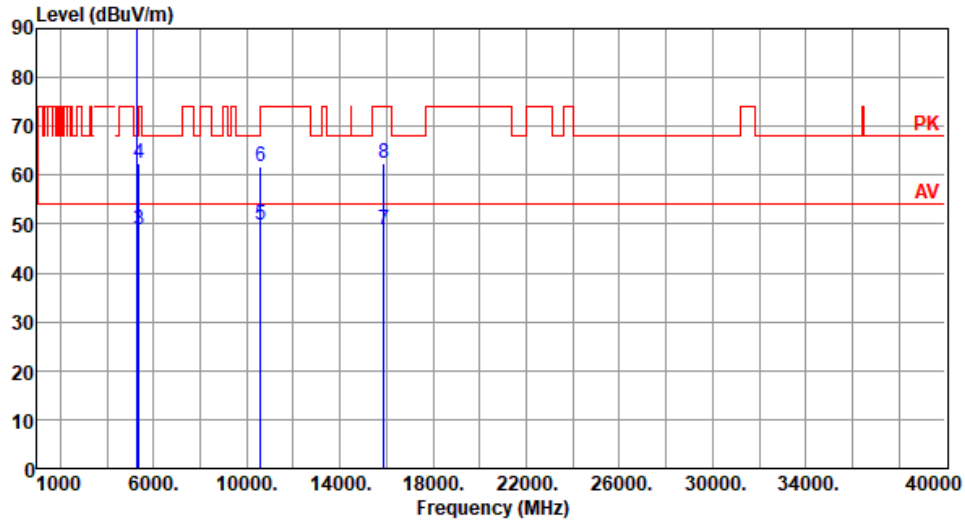
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	108.26			101.35	6.91	Average	182	345
2	*	5300.00	121.35			114.44	6.91	Peak	182	345
3		5350.00	48.74	54.00	-5.26	41.89	6.85	Average	182	345
4		5350.00	62.35	74.00	-11.65	55.50	6.85	Peak	182	345
5		10600.00	49.72	54.00	-4.28	33.36	16.36	Average	133	255
6		10600.00	61.62	74.00	-12.38	45.26	16.36	Peak	133	255
7		15900.00	48.75	54.00	-5.25	32.06	16.69	Average	100	221
8		15900.00	62.34	74.00	-11.66	45.65	16.69	Peak	100	221

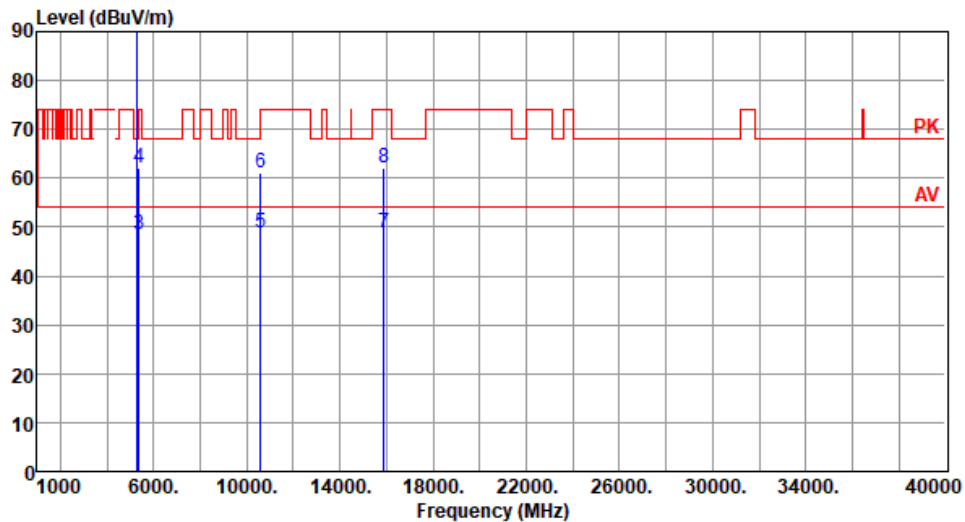
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	107.52			100.61	6.91	Average	191	346
2	*	5300.00	120.61			113.70	6.91	Peak	191	346
3		5350.00	48.41	54.00	-5.59	41.56	6.85	Average	191	346
4		5350.00	62.08	74.00	-11.92	55.23	6.85	Peak	191	346
5		10600.00	48.70	54.00	-5.30	32.34	16.36	Average	100	344
6		10600.00	61.12	74.00	-12.88	44.76	16.36	Peak	100	344
7		15900.00	48.71	54.00	-5.29	32.02	16.69	Average	100	55
8		15900.00	61.97	74.00	-12.03	45.28	16.69	Peak	100	55

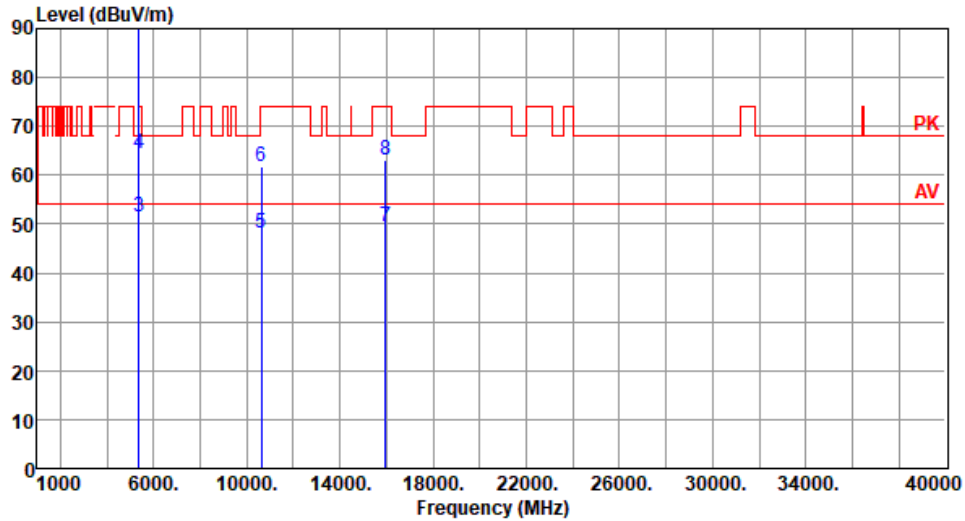
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5320
Polarization	Horizontal	Test Configuration	1



		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	108.02			101.13	6.89	Average	181	354
2	*	5320.00	122.80			115.91	6.89	Peak	181	354
3		5350.00	51.50	54.00	-2.50	44.65	6.85	Average	181	354
4		5350.00	64.54	74.00	-9.46	57.69	6.85	Peak	181	354
5		10640.00	48.25	54.00	-5.75	31.88	16.37	Average	100	356
6		10640.00	61.82	74.00	-12.18	45.45	16.37	Peak	100	356
7		15960.00	49.58	54.00	-4.42	33.05	16.53	Average	100	344
8		15960.00	62.94	74.00	-11.06	46.41	16.53	Peak	100	344

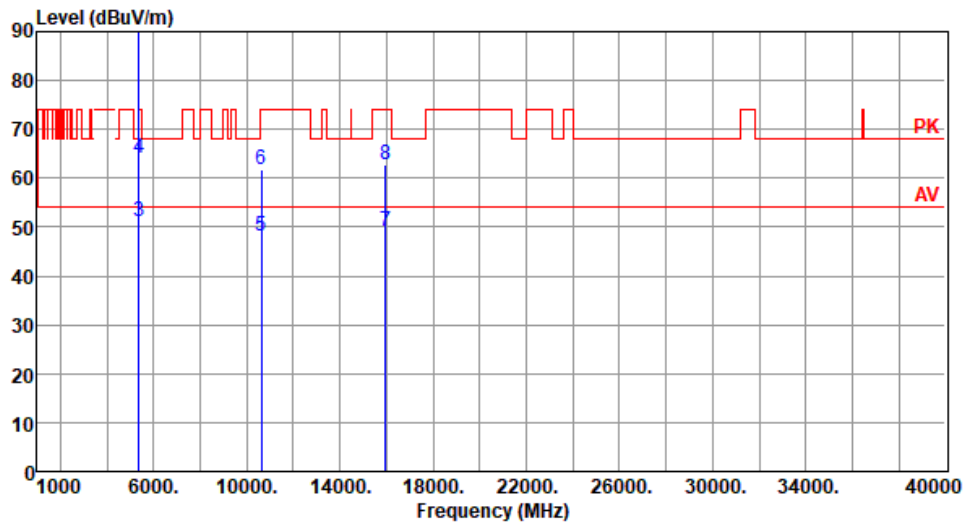
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5320
Polarization	Vertical	Test Configuration	1



		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	107.46			100.57	6.89	Average	195	344
2	*	5320.00	122.38			115.49	6.89	Peak	195	344
3		5350.00	51.12	54.00	-2.88	44.27	6.85	Average	195	344
4		5350.00	64.08	74.00	-9.92	57.23	6.85	Peak	195	344
5		10640.00	48.09	54.00	-5.91	31.72	16.37	Average	100	352
6		10640.00	61.77	74.00	-12.23	45.40	16.37	Peak	100	352
7		15960.00	49.24	54.00	-4.76	32.71	16.53	Average	100	356
8		15960.00	62.78	74.00	-11.22	46.25	16.53	Peak	100	356

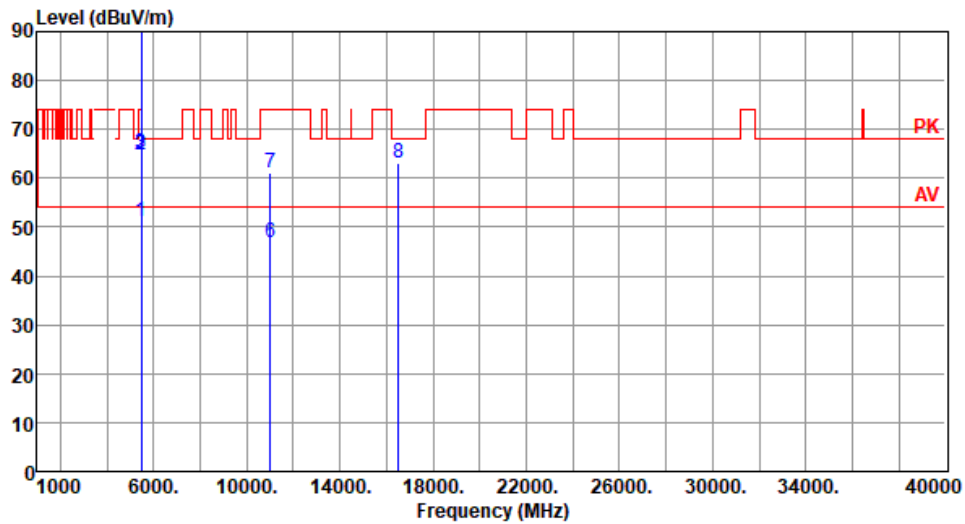
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5500
Polarization	Horizontal	Test Configuration	1



	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	51.05	54.00	-2.95	43.80	7.25	Average	182	352
2	5460.00	64.66	74.00	-9.34	57.41	7.25	Peak	182	352
3	5470.00	65.14	68.20	-3.06	57.86	7.28	Peak	182	352
4 *	5500.00	107.24			99.88	7.36	Average	182	352
5 *	5500.00	120.94			113.58	7.36	Peak	182	352
6	11000.00	46.85	54.00	-7.15	30.01	16.84	Average	100	336
7	11000.00	61.12	74.00	-12.88	44.28	16.84	Peak	100	336
8	16500.00	63.14	68.20	-5.06	45.50	17.64	Peak	100	356

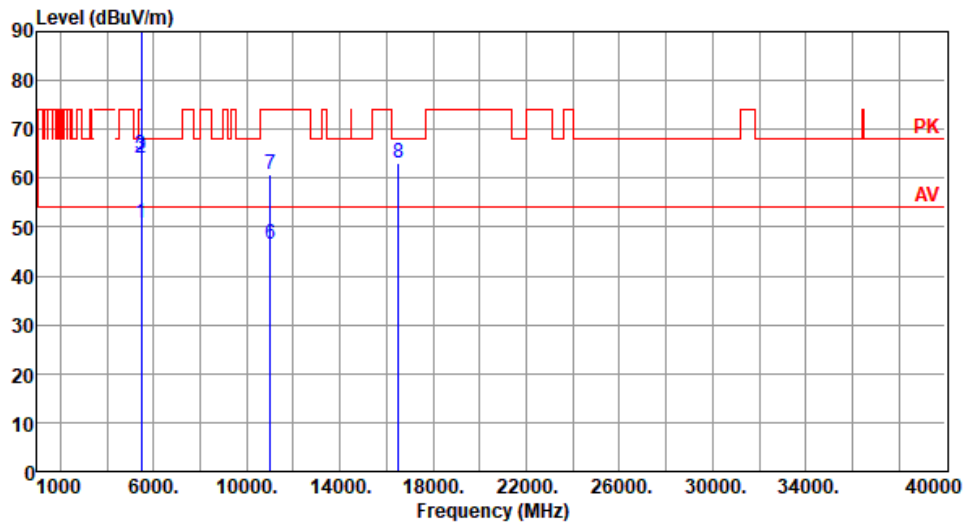
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.95	54.00	-3.05	43.70	7.25	Average	191	338
2	5460.00	64.23	74.00	-9.77	56.98	7.25	Peak	191	338
3	5470.00	64.86	68.20	-3.34	57.58	7.28	Peak	191	338
4 *	5500.00	106.65			99.29	7.36	Average	191	338
5 *	5500.00	120.31			112.95	7.36	Peak	191	338
6	11000.00	46.59	54.00	-7.41	29.75	16.84	Average	100	355
7	11000.00	60.86	74.00	-13.14	44.02	16.84	Peak	100	355
8	16500.00	63.02	68.20	-5.18	45.38	17.64	Peak	100	324

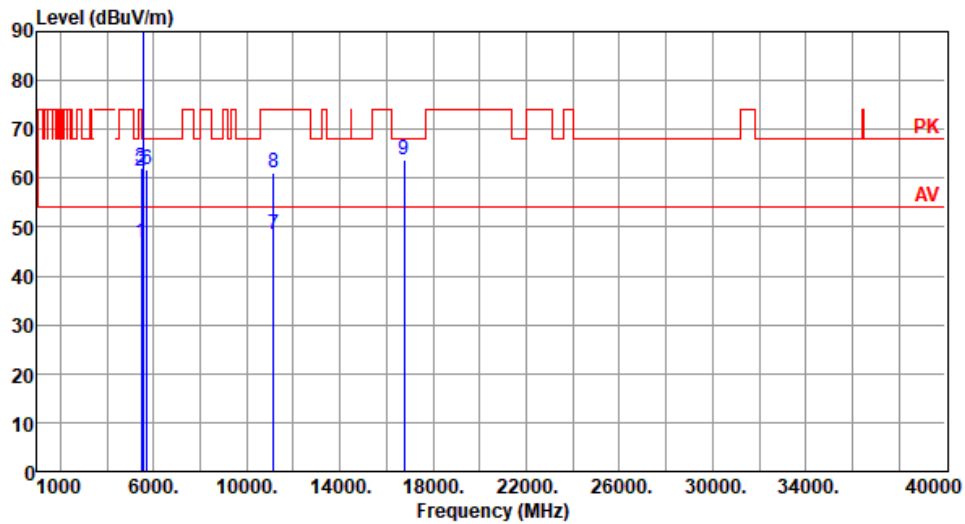
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	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	46.96	54.00	-7.04	39.71	7.25	Average	180	349
2	5460.00	61.51	74.00	-12.49	54.26	7.25	Peak	180	349
3	5470.00	62.19	68.20	-6.01	54.91	7.28	Peak	180	349
4 *	5580.00	107.66			100.18	7.48	Average	180	349
5 *	5580.00	121.74			114.26	7.48	Peak	180	349
6	5725.00	61.81	68.20	-6.39	54.15	7.66	Peak	180	349
7	11160.00	48.45	54.00	-5.55	31.86	16.59	Average	128	232
8	11160.00	61.04	74.00	-12.96	44.45	16.59	Peak	128	232
9	16740.00	63.68	68.20	-4.52	45.45	18.23	Peak	100	231

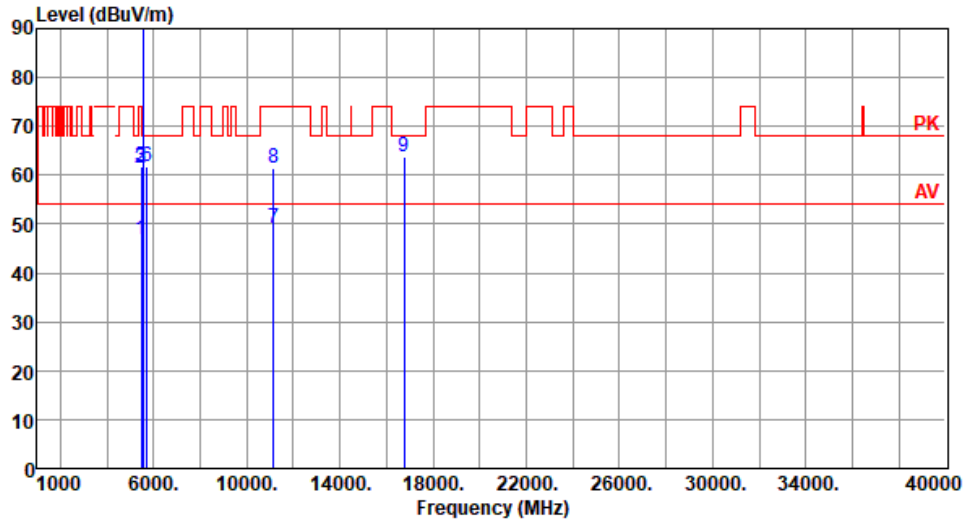
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Vertical	Test Configuration	1



	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	46.82	54.00	-7.18	39.57	7.25	Average	193	351
2	5460.00	61.34	74.00	-12.66	54.09	7.25	Peak	193	351
3	5470.00	61.88	68.20	-6.32	54.60	7.28	Peak	193	351
4 *	5580.00	107.04			99.56	7.48	Average	193	351
5 *	5580.00	121.15			113.67	7.48	Peak	193	351
6	5725.00	61.65	68.20	-6.55	53.99	7.66	Peak	193	351
7	11160.00	49.25	54.00	-4.75	32.66	16.59	Average	100	333
8	11160.00	61.40	74.00	-12.60	44.81	16.59	Peak	100	333
9	16740.00	63.71	68.20	-4.49	45.48	18.23	Peak	100	5

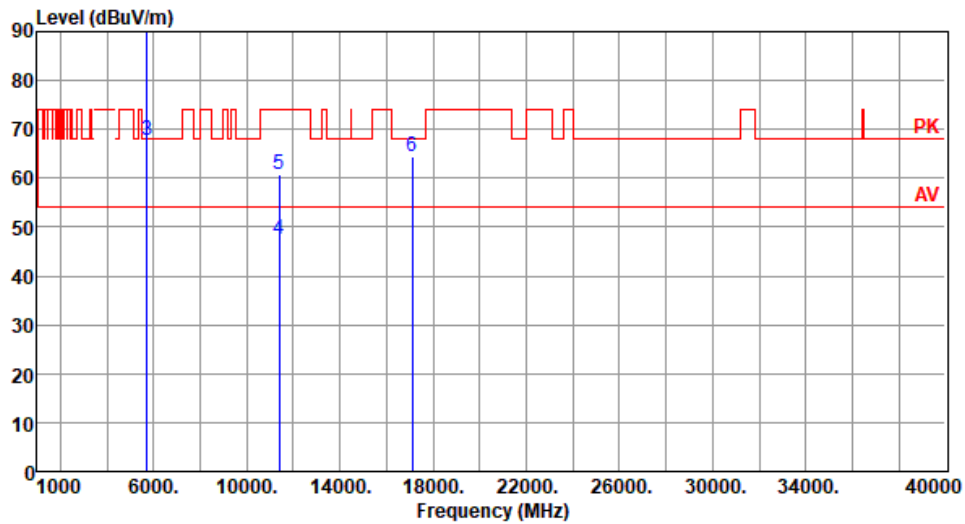
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5700
Polarization	Horizontal	Test Configuration	1



		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	108.30			100.80	7.50	Average	153	359
2	*	5700.00	121.94			114.44	7.50	Peak	153	359
3		5725.00	67.77	68.20	-0.43	60.11	7.66	Peak	153	359
4		11400.00	47.49	54.00	-6.51	30.76	16.73	Average	100	314
5		11400.00	60.85	74.00	-13.15	44.12	16.73	Peak	100	314
6		17100.00	64.36	68.20	-3.84	46.12	18.24	Peak	100	326

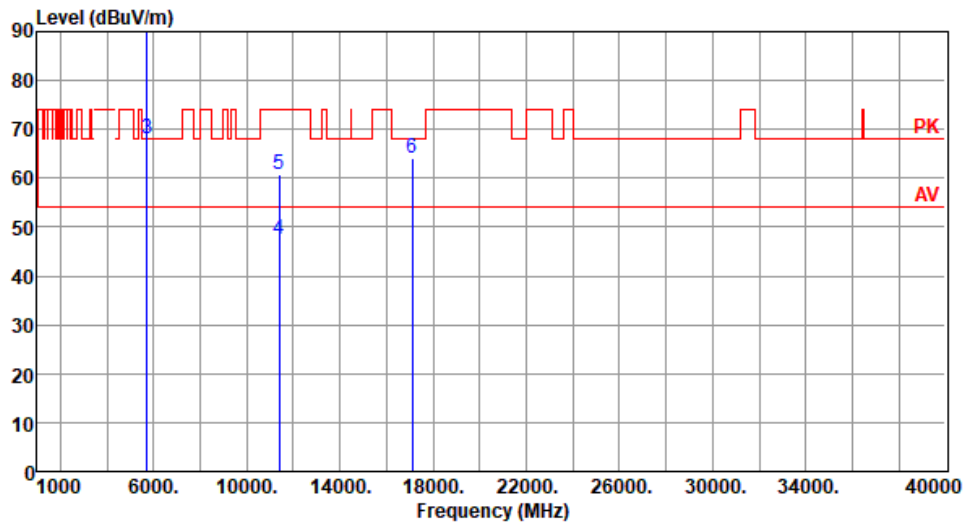
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		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	107.41			99.91	7.50	Average	190	346
2	*	5700.00	120.85			113.35	7.50	Peak	190	346
3		5725.00	67.94	68.20	-0.26	60.28	7.66	Peak	190	346
4		11400.00	47.61	54.00	-6.39	30.88	16.73	Average	105	298
5		11400.00	60.92	74.00	-13.08	44.19	16.73	Peak	105	298
6		17100.00	64.25	68.20	-3.95	46.01	18.24	Peak	103	19

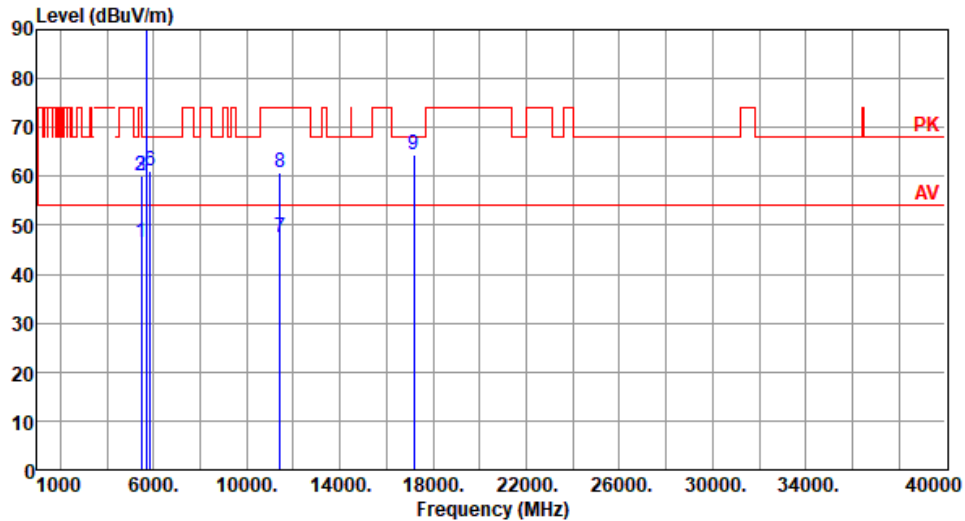
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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 (HE20)	Test Freq. (MHz)	5720
Polarization	Horizontal	Test Configuration	1



	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	46.46	54.00	-7.54	39.21	7.25	Average	190	3
2	5460.00	60.01	74.00	-13.99	52.76	7.25	Peak	190	3
3	5470.00	60.06	68.20	-8.14	52.78	7.28	Peak	190	3
4 *	5720.00	106.86			99.24	7.62	Average	190	3
5 *	5720.00	120.81			113.19	7.62	Peak	190	3
6	5850.00	61.26	68.20	-6.94	53.24	8.02	Peak	190	3
7	11440.00	47.59	54.00	-6.41	30.85	16.74	Average	115	342
8	11440.00	60.92	74.00	-13.08	44.18	16.74	Peak	115	342
9	17160.00	64.28	68.20	-3.92	45.90	18.38	Peak	103	28

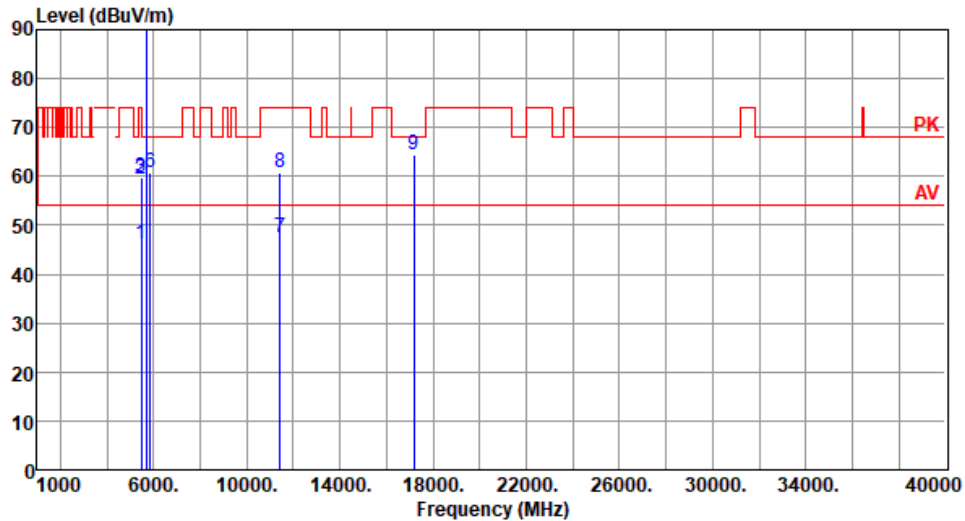
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5720
Polarization	Vertical	Test Configuration	1



	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	46.12	54.00	-7.88	38.87	7.25	Average	193	352
2	5460.00	59.51	74.00	-14.49	52.26	7.25	Peak	193	352
3	5470.00	59.64	68.20	-8.56	52.36	7.28	Peak	193	352
4 *	5720.00	106.34			98.72	7.62	Average	193	352
5 *	5720.00	120.28			112.66	7.62	Peak	193	352
6	5850.00	60.93	68.20	-7.27	52.91	8.02	Peak	193	352
7	11440.00	47.59	54.00	-6.41	30.85	16.74	Average	115	342
8	11440.00	60.92	74.00	-13.08	44.18	16.74	Peak	115	342
9	17160.00	64.28	68.20	-3.92	45.90	18.38	Peak	103	28

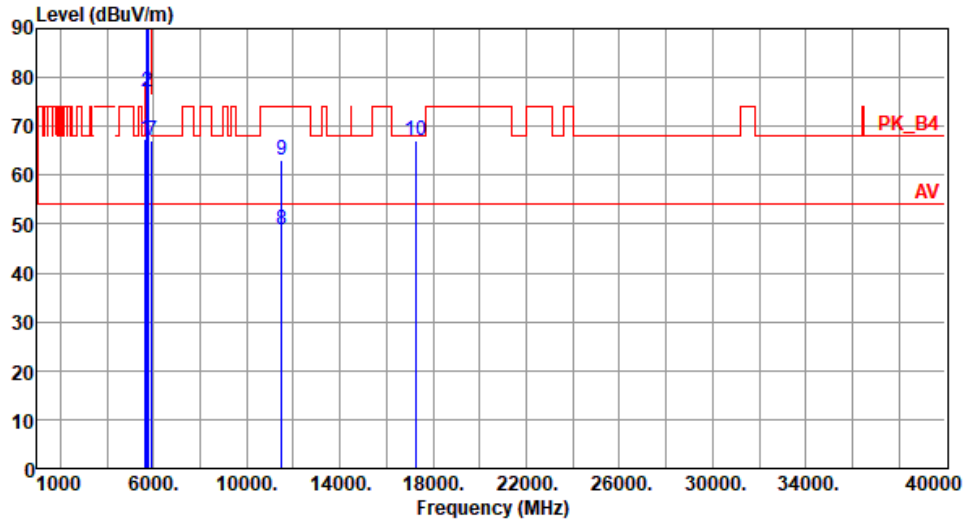
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	1



	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	67.55	68.20	-0.65	60.16	7.39	Peak	181	342
2	5700.00	77.11	105.20	-28.09	69.61	7.50	Peak	181	342
3	5720.00	90.16	110.80	-20.64	82.54	7.62	Peak	181	342
4	5725.00	98.69	122.20	-23.51	91.03	7.66	Peak	181	342
5 *	5745.00	114.05			106.27	7.78	Average	181	342
6 *	5745.00	126.41			118.63	7.78	Peak	181	342
7	5925.00	66.96	68.20	-1.24	58.89	8.07	Peak	181	342
8	11490.00	48.97	54.00	-5.03	32.21	16.76	Average	100	305
9	11490.00	63.23	74.00	-10.77	46.47	16.76	Peak	100	305
10	17235.00	67.14	68.20	-1.06	48.50	18.64	Peak	102	271

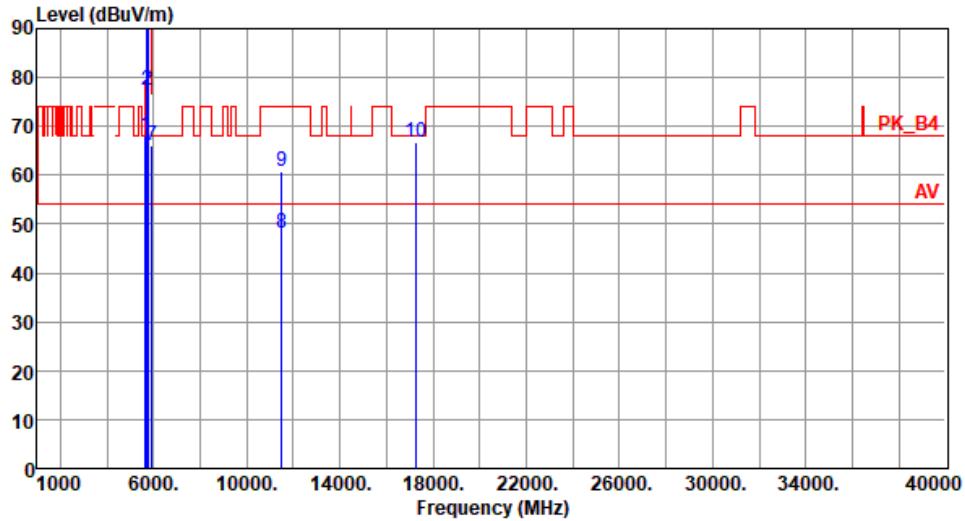
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE20)	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	1



	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	67.93	68.20	-0.27	60.54	7.39	Peak	188	346
2	5700.00	77.25	105.20	-27.95	69.75	7.50	Peak	188	346
3	5720.00	93.78	110.80	-17.02	86.16	7.62	Peak	188	346
4	5725.00	99.84	122.20	-22.36	92.18	7.66	Peak	188	346
5 *	5745.00	113.13			105.35	7.78	Average	188	346
6 *	5745.00	124.90			117.12	7.78	Peak	188	346
7	5925.00	65.98	68.20	-2.22	57.91	8.07	Peak	188	346
8	11490.00	48.01	54.00	-5.99	31.25	16.76	Average	131	341
9	11490.00	60.66	74.00	-13.34	43.90	16.76	Peak	131	341
10	17235.00	66.69	68.20	-1.51	48.05	18.64	Peak	173	235

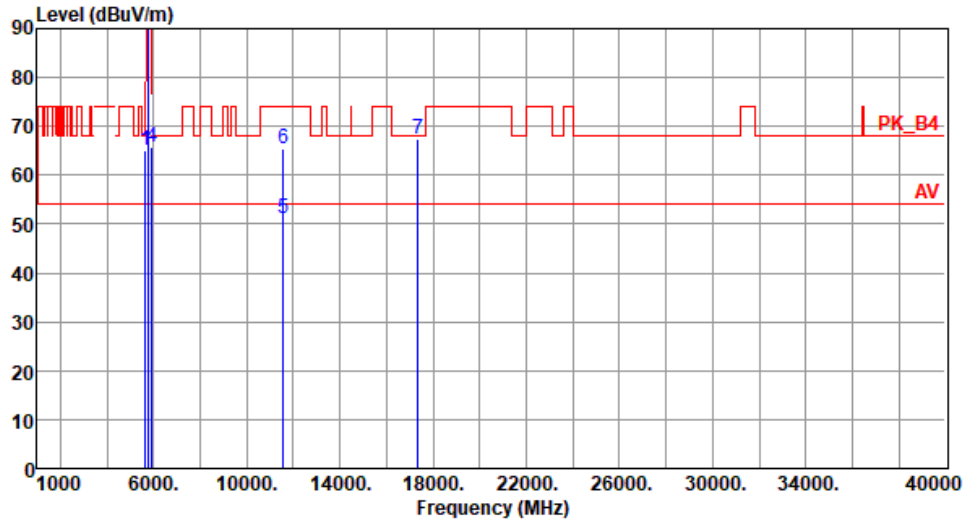
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	65.24	68.20	-2.96	57.85	7.39	Peak	184	354
2 *	5785.00	115.45			107.57	7.88	Average	184	354
3 *	5785.00	127.60			119.72	7.88	Peak	184	354
4	5925.00	65.76	68.20	-2.44	57.69	8.07	Peak	184	354
5	11570.00	51.25	54.00	-2.75	34.64	16.61	Average	100	306
6	11570.00	65.57	74.00	-8.43	48.96	16.61	Peak	100	306
7	17355.00	67.31	68.20	-0.89	48.08	19.23	Peak	145	246

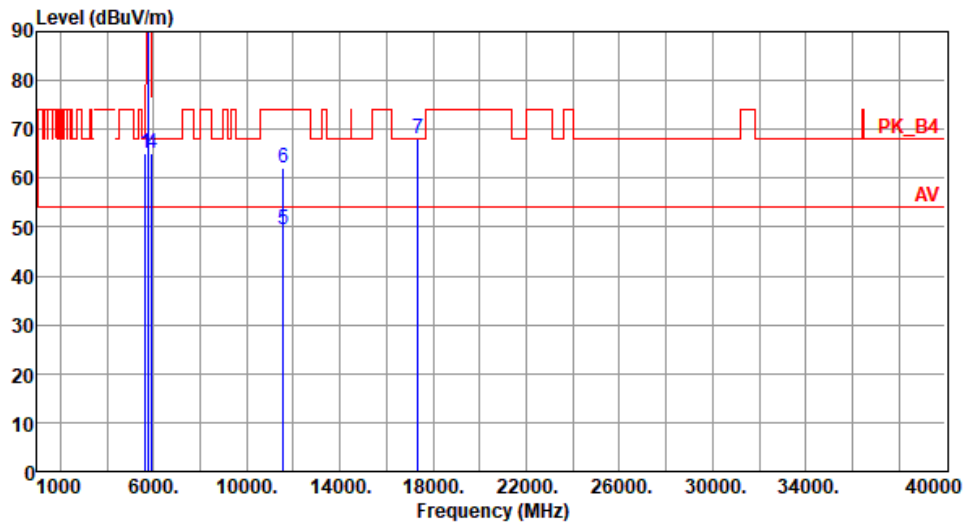
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	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	64.95	68.20	-3.25	57.56	7.39	Peak	196	353
2 *	5785.00	114.82			106.94	7.88	Average	196	353
3 *	5785.00	126.95			119.07	7.88	Peak	196	353
4	5925.00	65.21	68.20	-2.99	57.14	8.07	Peak	196	353
5	11570.00	49.51	54.00	-4.49	32.90	16.61	Average	100	341
6	11570.00	62.26	74.00	-11.74	45.65	16.61	Peak	100	341
7	17355.00	67.96	68.20	-0.24	48.73	19.23	Peak	146	180

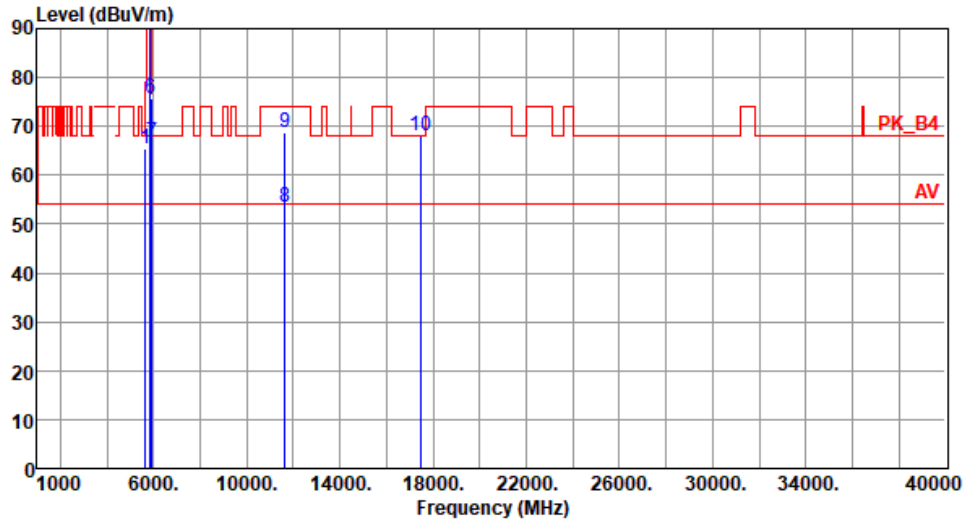
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	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	65.48	68.20	-2.72	58.09	7.39	Peak	173	351
2 *	5825.00	116.03			108.07	7.96	Average	173	351
3 *	5825.00	127.99			120.03	7.96	Peak	173	351
4	5850.00	95.93	122.20	-26.27	87.91	8.02	Peak	173	351
5	5855.00	88.66	110.80	-22.14	80.64	8.02	Peak	173	351
6	5875.00	75.66	105.20	-29.54	67.63	8.03	Peak	173	351
7	5925.00	66.69	68.20	-1.51	58.62	8.07	Peak	173	351
8	11650.00	53.62	54.00	-0.38	37.24	16.38	Average	151	340
9	11650.00	68.77	74.00	-5.23	52.39	16.38	Peak	151	340
10	17475.00	68.02	68.20	-0.18	48.28	19.74	Peak	231	64

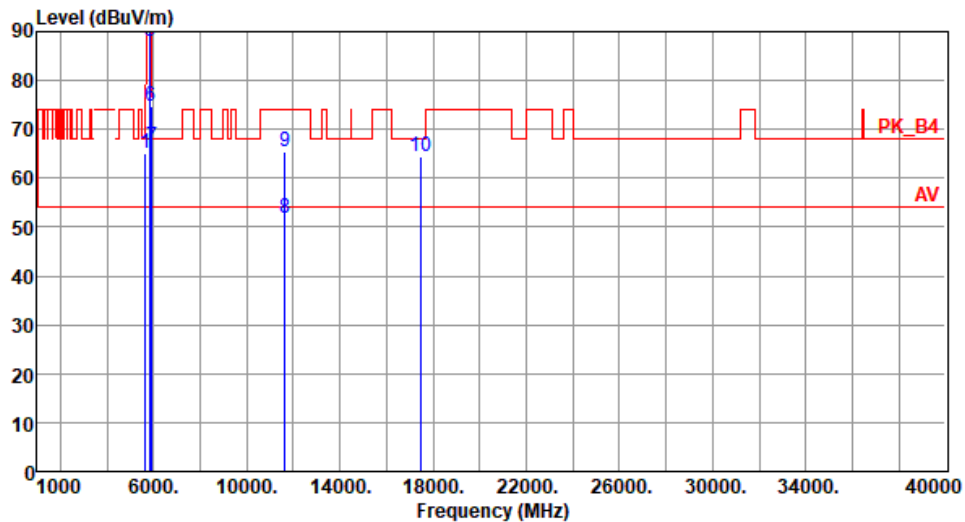
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	65.22	68.20	-2.98	57.83	7.39	Peak	186	355
2 *	5825.00	115.34			107.38	7.96	Average	186	355
3 *	5825.00	127.26			119.30	7.96	Peak	186	355
4	5850.00	95.21	122.20	-26.99	87.19	8.02	Peak	186	355
5	5855.00	87.94	110.80	-22.86	79.92	8.02	Peak	186	355
6	5875.00	74.82	105.20	-30.38	66.79	8.03	Peak	186	355
7	5925.00	66.45	68.20	-1.75	58.38	8.07	Peak	186	355
8	11650.00	51.73	54.00	-2.27	35.35	16.38	Average	100	341
9	11650.00	65.53	74.00	-8.47	49.15	16.38	Peak	100	341
10	17475.00	64.54	68.20	-3.66	44.80	19.74	Peak	103	346

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

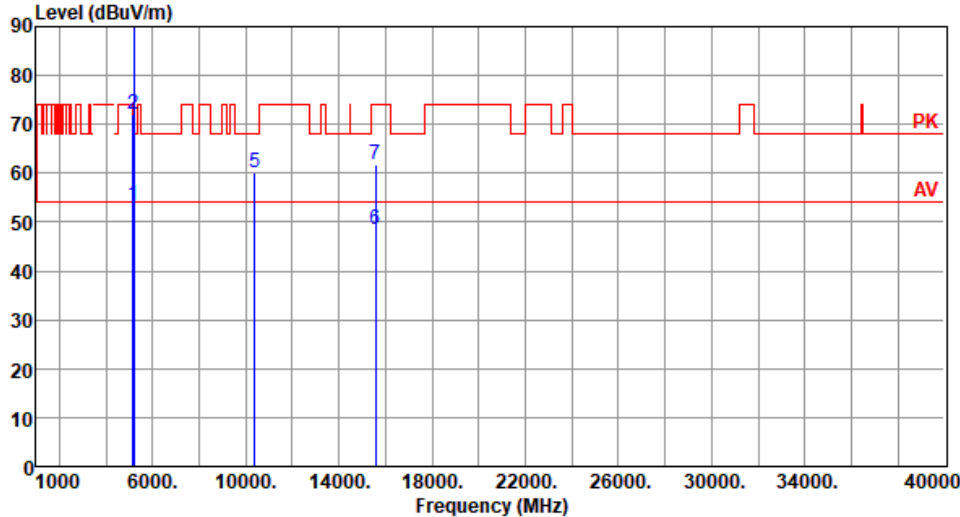
*Factor includes antenna factor , cable loss and amplifier gain

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

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

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

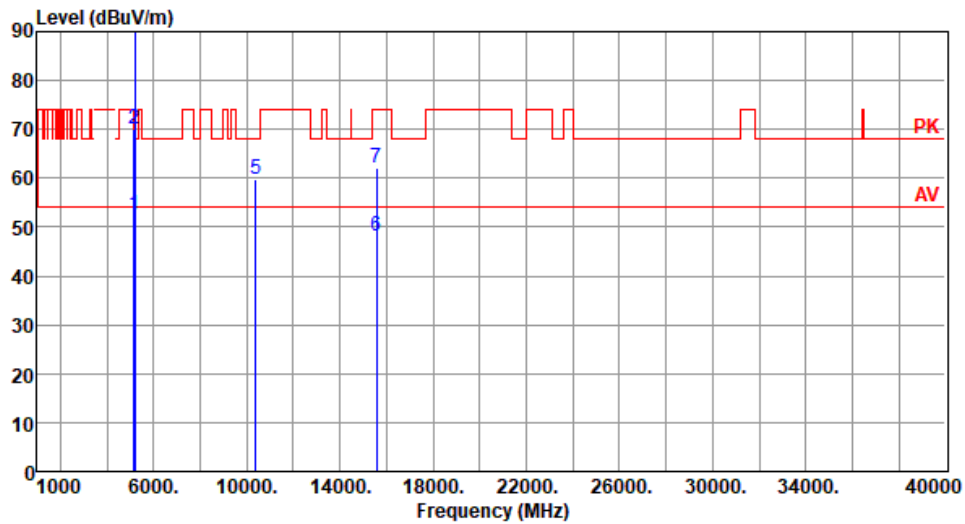
Modulation	ax (HE40)	Test Freq. (MHz)	5190
Polarization	Horizontal	Test Configuration	1



	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	53.50	54.00	-0.50	46.18	7.32	Average	192	3
2	5150.00	71.92	74.00	-2.08	64.60	7.32	Peak	192	3
3 *	5190.00	105.84			98.75	7.09	Average	198	6
4 *	5190.00	118.63			111.54	7.09	Peak	198	6
5	10380.00	60.21	68.20	-7.99	44.03	16.18	Peak	181	15
6	15570.00	48.52	54.00	-5.48	31.20	17.32	Average	100	44
7	15570.00	61.75	74.00	-12.25	44.43	17.32	Peak	100	44

Note 1: Emission Level (dBUV/m) = SA Reading (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	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.33	54.00	-1.67	45.01	7.32	Average	108	338
2	5150.00	69.92	74.00	-4.08	62.60	7.32	Peak	108	338
3 *	5190.00	103.59			96.50	7.09	Average	108	11
4 *	5190.00	116.38			109.29	7.09	Peak	108	11
5	10380.00	59.85	68.20	-8.35	43.67	16.18	Peak	134	26
6	15570.00	48.07	54.00	-5.93	30.75	17.32	Average	100	344
7	15570.00	61.95	74.00	-12.05	44.63	17.32	Peak	100	344

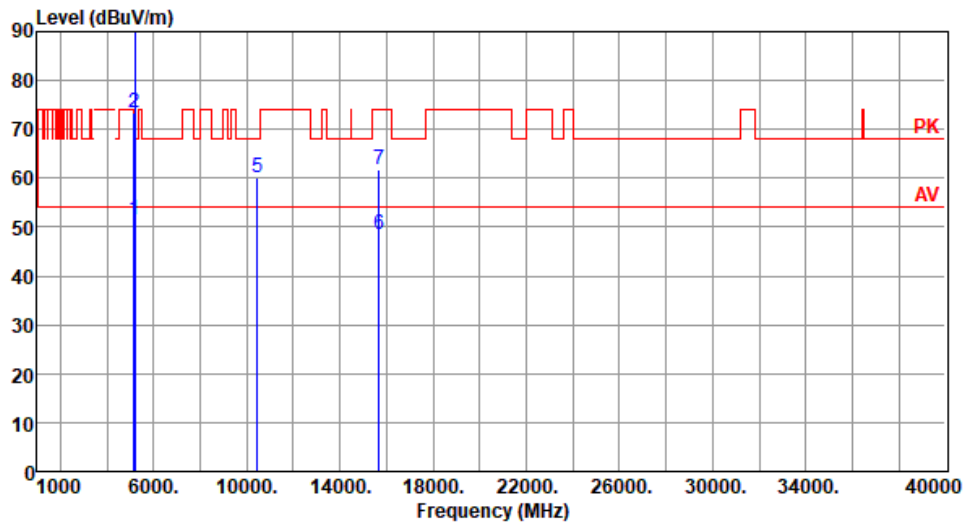
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	1



	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	51.56	54.00	-2.44	44.24	7.32	Average	185	356
2	5150.00	73.45	74.00	-0.55	66.13	7.32	Peak	185	356
3 *	5230.00	111.03			104.10	6.93	Average	205	353
4 *	5230.00	123.46			116.53	6.93	Peak	205	353
5	10460.00	60.01	68.20	-8.19	43.64	16.37	Peak	185	356
6	15690.00	48.64	54.00	-5.36	31.96	16.68	Average	100	323
7	15690.00	61.81	74.00	-12.19	45.13	16.68	Peak	100	323

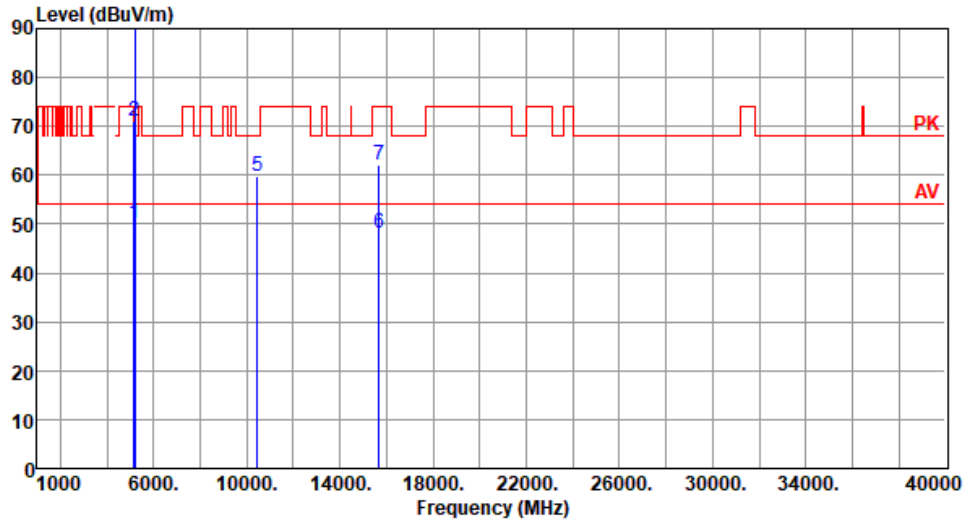
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	50.26	54.00	-3.74	42.94	7.32	Average	166	359
2	5150.00	71.18	74.00	-2.82	63.86	7.32	Peak	166	359
3 *	5230.00	109.11			102.18	6.93	Average	166	359
4 *	5230.00	121.14			114.21	6.93	Peak	166	359
5	10460.00	59.94	68.20	-8.26	43.57	16.37	Peak	100	315
6	15690.00	48.12	54.00	-5.88	31.44	16.68	Average	100	326
7	15690.00	62.04	74.00	-11.96	45.36	16.68	Peak	100	326

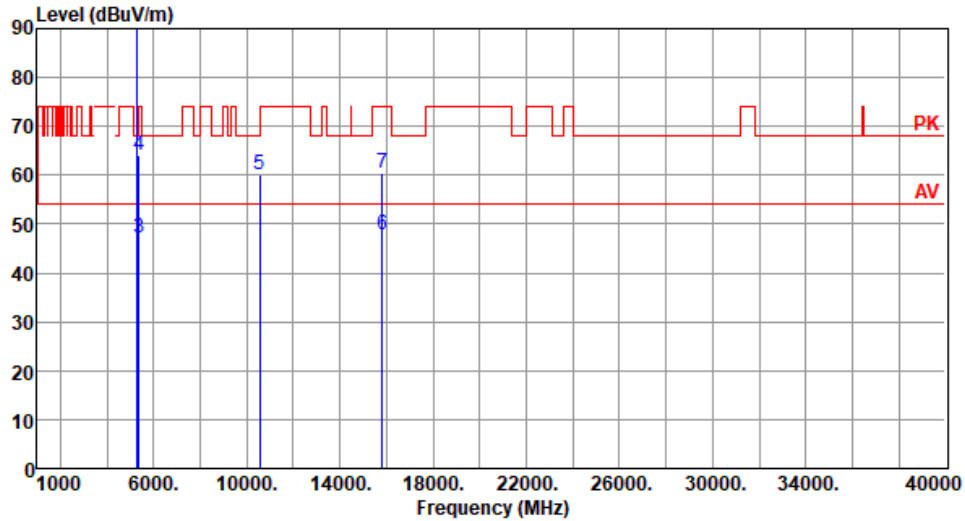
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5270.00	107.36			100.47	6.89	Average	192	353
2	*	5270.00	119.54			112.65	6.89	Peak	192	353
3		5350.00	47.00	54.00	-7.00	40.15	6.85	Average	192	353
4		5350.00	64.26	74.00	-9.74	57.41	6.85	Peak	192	353
5		10540.00	60.05	68.20	-8.15	43.64	16.41	Peak	100	316
6		15810.00	47.68	54.00	-6.32	31.12	16.56	Average	100	345
7		15810.00	60.40	74.00	-13.60	43.84	16.56	Peak	100	345

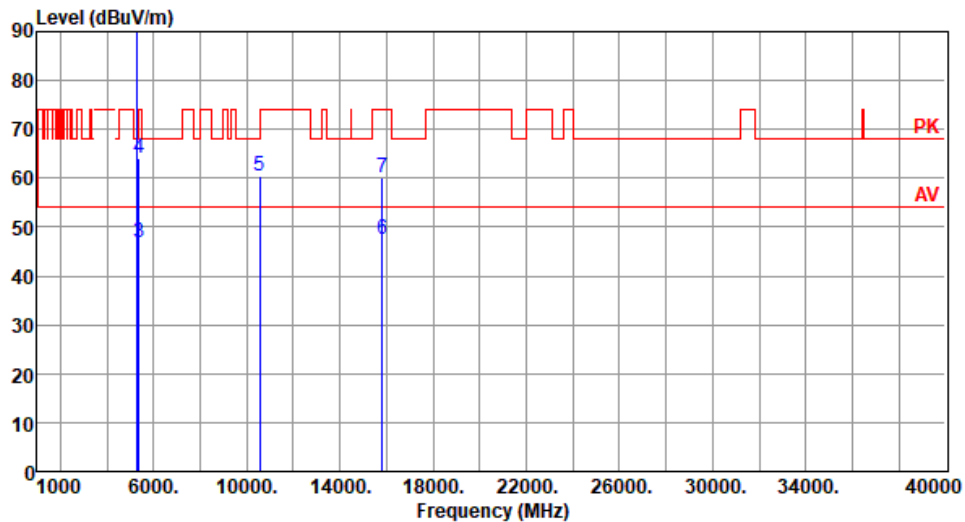
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5270.00	106.42			99.53	6.89	Average	194	356
2	*	5270.00	118.49			111.60	6.89	Peak	194	356
3		5350.00	46.92	54.00	-7.08	40.07	6.85	Average	194	356
4		5350.00	64.13	74.00	-9.87	57.28	6.85	Peak	194	356
5		10540.00	60.29	68.20	-7.91	43.88	16.41	Peak	159	48
6		15810.00	47.42	54.00	-6.58	30.86	16.56	Average	100	349
7		15810.00	60.25	74.00	-13.75	43.69	16.56	Peak	100	349

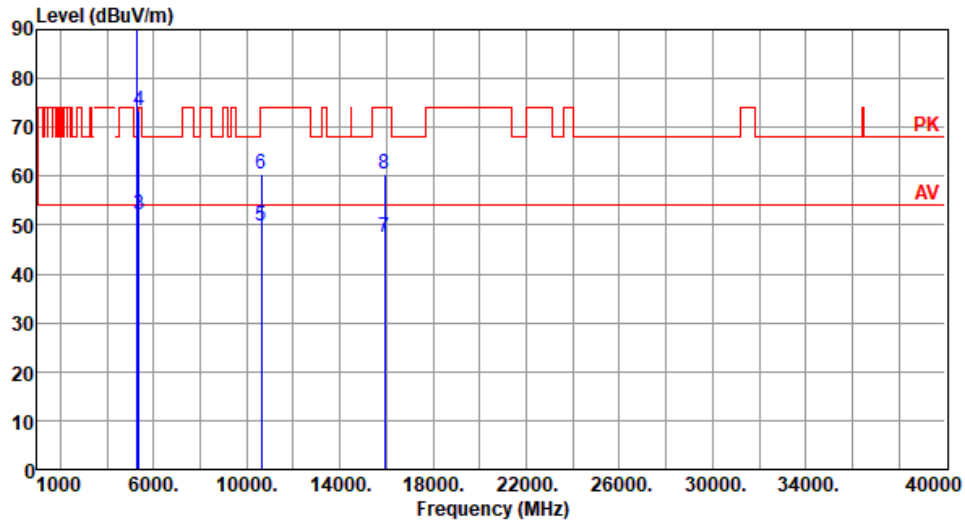
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5310
Polarization	Horizontal	Test Configuration	1



		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	106.55			99.65	6.90	Average	199	356
2	*	5310.00	119.35			112.45	6.90	Peak	199	356
3		5350.00	52.11	54.00	-1.89	45.26	6.85	Average	199	356
4		5350.00	73.50	74.00	-0.50	66.65	6.85	Peak	199	356
5		10620.00	49.85	54.00	-4.15	33.48	16.37	Average	181	26
6		10620.00	60.58	74.00	-13.42	44.21	16.37	Peak	181	26
7		15930.00	47.56	54.00	-6.44	30.95	16.61	Average	116	129
8		15930.00	60.29	74.00	-13.71	43.68	16.61	Peak	116	129

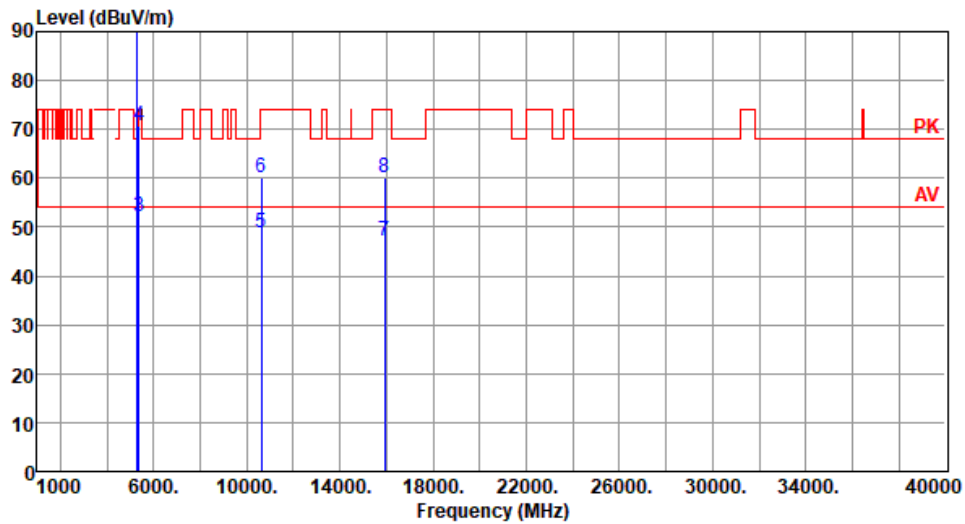
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		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	104.93			98.03	6.90	Average	100	9
2	*	5310.00	116.93			110.03	6.90	Peak	100	9
3		5350.00	52.06	54.00	-1.94	45.21	6.85	Average	100	9
4		5350.00	70.83	74.00	-3.17	63.98	6.85	Peak	100	9
5		10620.00	48.66	54.00	-5.34	32.29	16.37	Average	103	259
6		10620.00	60.24	74.00	-13.76	43.87	16.37	Peak	103	259
7		15930.00	47.29	54.00	-6.71	30.68	16.61	Average	100	55
8		15930.00	60.13	74.00	-13.87	43.52	16.61	Peak	100	55

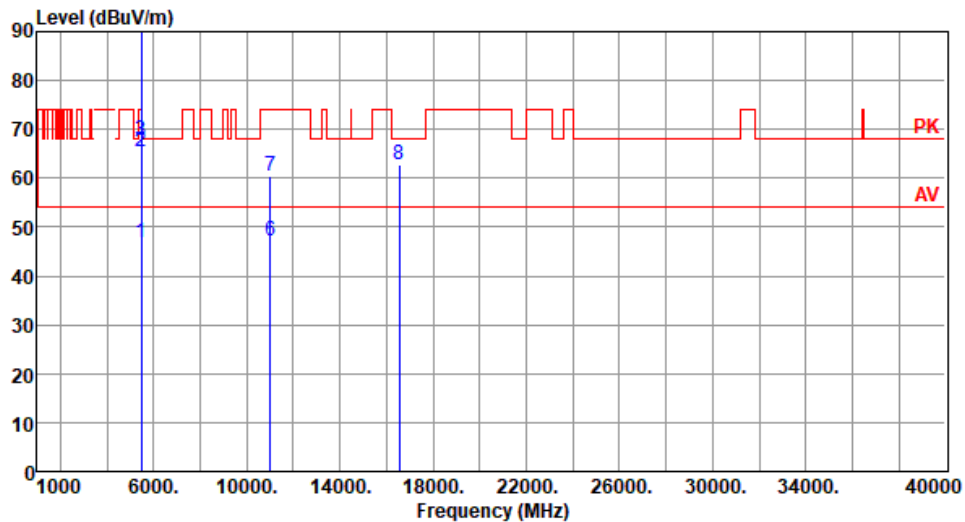
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5510
Polarization	Horizontal	Test Configuration	1



	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	46.83	54.00	-7.17	39.58	7.25	Average	188	356
2	5460.00	65.55	74.00	-8.45	58.30	7.25	Peak	188	356
3	5470.00	67.74	68.20	-0.46	60.46	7.28	Peak	188	356
4 *	5510.00	104.50			97.11	7.39	Average	188	356
5 *	5510.00	117.01			109.62	7.39	Peak	188	356
6	11020.00	47.24	54.00	-6.76	30.43	16.81	Average	100	351
7	11020.00	60.35	74.00	-13.65	43.54	16.81	Peak	100	351
8	16530.00	62.91	68.20	-5.29	45.08	17.83	Peak	100	344

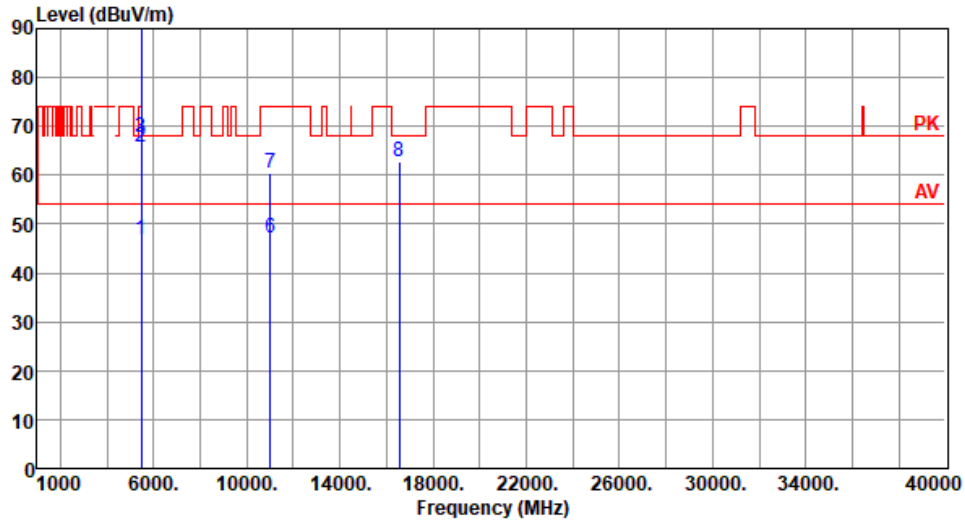
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5510
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.73	54.00	-7.27	39.48	7.25	Average	100	342
2	5460.00	65.71	74.00	-8.29	58.46	7.25	Peak	100	342
3	5470.00	67.80	68.20	-0.40	60.52	7.28	Peak	100	342
4 *	5510.00	104.40			97.01	7.39	Average	100	342
5 *	5510.00	116.44			109.05	7.39	Peak	100	342
6	11020.00	47.13	54.00	-6.87	30.32	16.81	Average	100	345
7	11020.00	60.28	74.00	-13.72	43.47	16.81	Peak	100	345
8	16530.00	62.84	68.20	-5.36	45.01	17.83	Peak	100	25

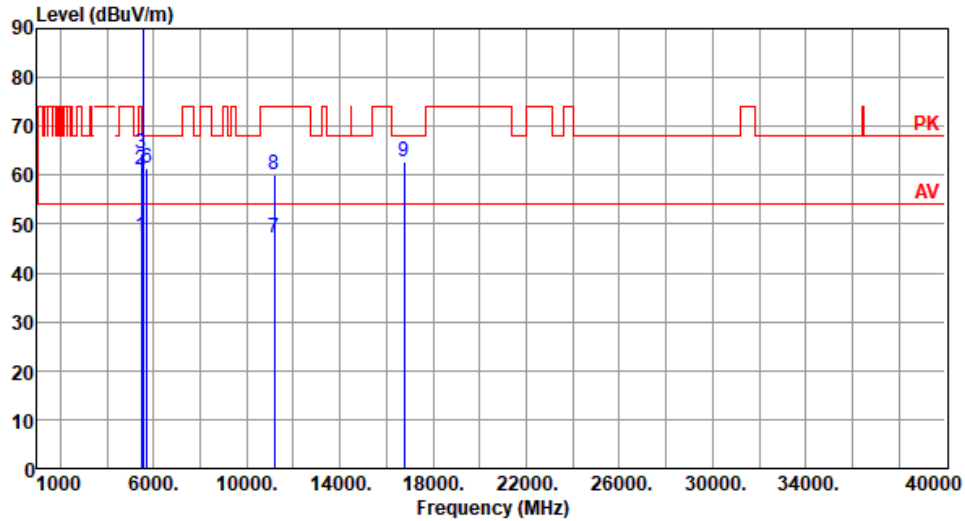
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5590
Polarization	Horizontal	Test Configuration	1



	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	47.44	54.00	-6.56	40.19	7.25	Average	183	350
2	5460.00	61.15	74.00	-12.85	53.90	7.25	Peak	183	350
3	5470.00	64.52	68.20	-3.68	57.24	7.28	Peak	183	350
4 *	5590.00	106.14			98.66	7.48	Average	183	350
5 *	5590.00	118.64			111.16	7.48	Peak	183	350
6	5725.00	61.50	68.20	-6.70	53.84	7.66	Peak	183	350
7	11180.00	47.01	54.00	-6.99	30.45	16.56	Average	100	356
8	11180.00	60.22	74.00	-13.78	43.66	16.56	Peak	100	356
9	16770.00	62.87	68.20	-5.33	44.64	18.23	Peak	100	341

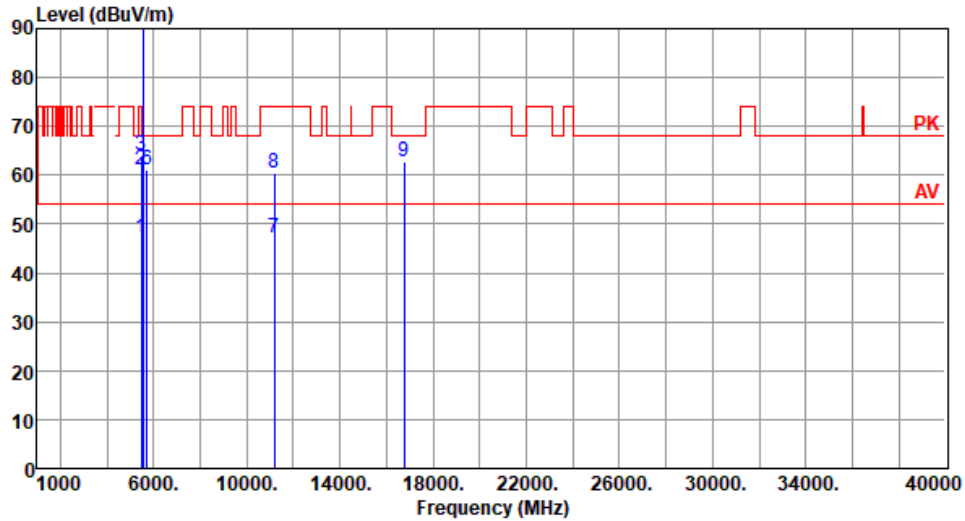
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	47.21	54.00	-6.79	39.96	7.25	Average	124	321
2	5460.00	61.03	74.00	-12.97	53.78	7.25	Peak	124	321
3	5470.00	64.05	68.20	-4.15	56.77	7.28	Peak	124	321
4 *	5590.00	105.38			97.90	7.48	Average	124	321
5 *	5590.00	118.06			110.58	7.48	Peak	124	321
6	5725.00	61.22	68.20	-6.98	53.56	7.66	Peak	124	321
7	11180.00	47.26	54.00	-6.74	30.70	16.56	Average	100	355
8	11180.00	60.31	74.00	-13.69	43.75	16.56	Peak	100	355
9	16770.00	62.74	68.20	-5.46	44.51	18.23	Peak	100	35

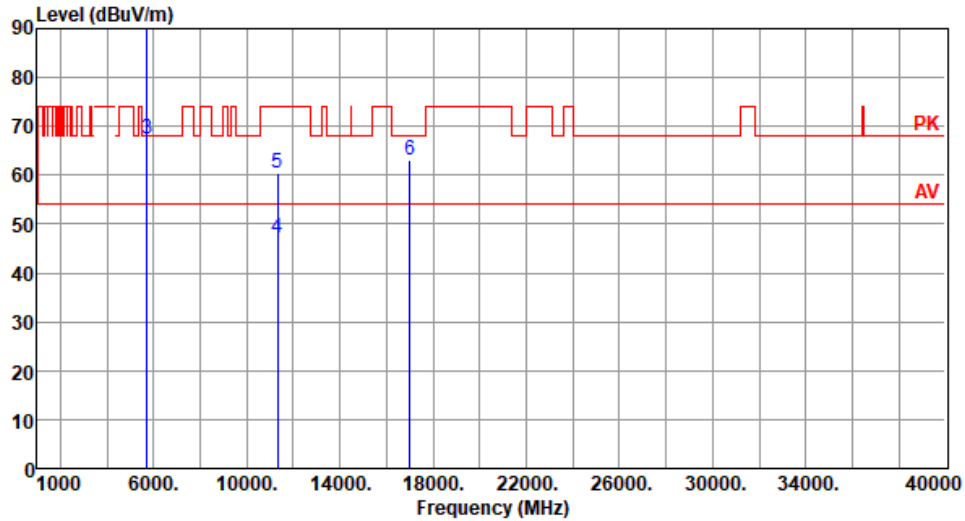
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		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	104.01			96.58	7.43	Average	115	6
2	*	5670.00	116.84			109.41	7.43	Peak	115	6
3		5725.00	67.39	68.20	-0.81	59.73	7.66	Peak	115	6
4		11340.00	47.25	54.00	-6.75	30.67	16.58	Average	100	349
5		11340.00	60.38	74.00	-13.62	43.80	16.58	Peak	100	349
6		17010.00	62.95	68.20	-5.25	44.29	18.66	Peak	100	344

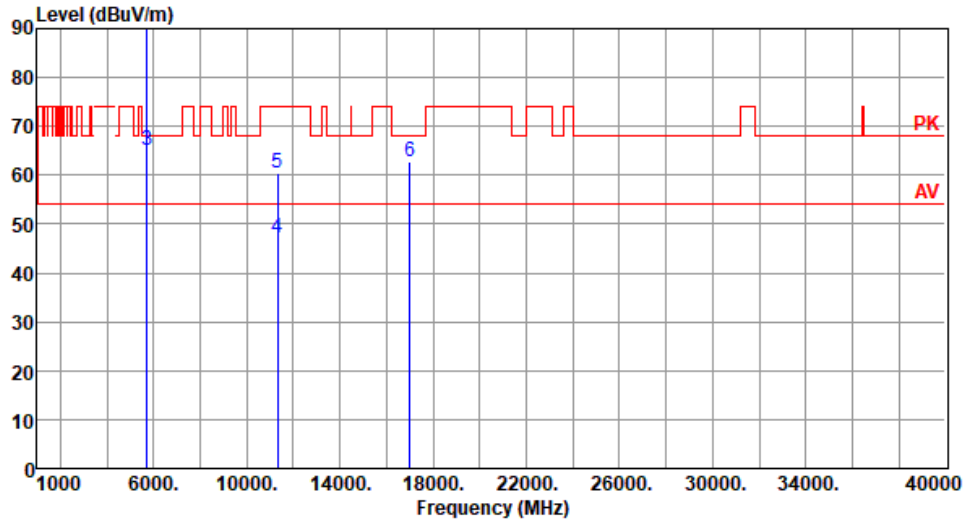
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5670
Polarization	Vertical	Test Configuration	1



		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	103.44			96.01	7.43	Average	133	314
2	*	5670.00	115.88			108.45	7.43	Peak	133	314
3		5725.00	65.16	68.20	-3.04	57.50	7.66	Peak	133	314
4		11340.00	47.22	54.00	-6.78	30.64	16.58	Average	100	352
5		11340.00	60.35	74.00	-13.65	43.77	16.58	Peak	100	352
6		17010.00	62.91	68.20	-5.29	44.25	18.66	Peak	100	44

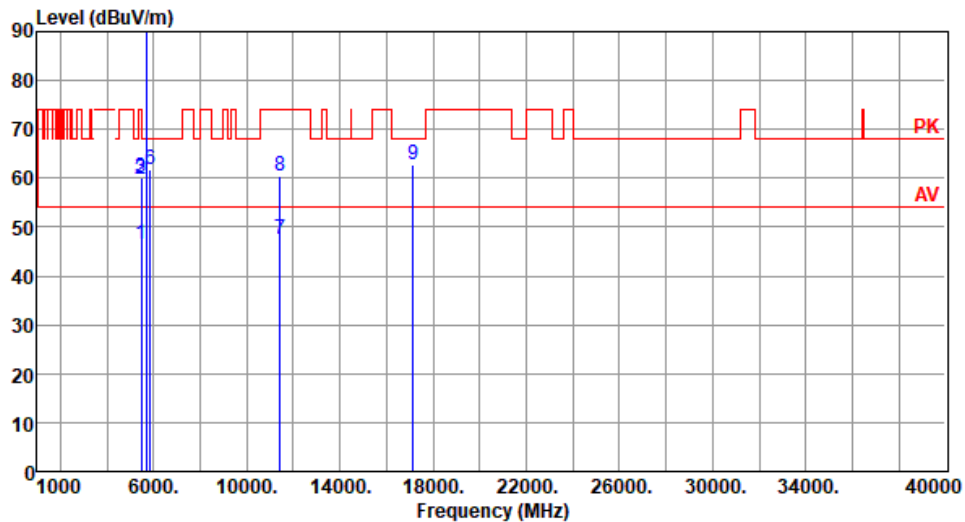
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.35	54.00	-7.65	39.10	7.25	Average	174	3
2	5460.00	59.93	74.00	-14.07	52.68	7.25	Peak	174	3
3	5470.00	60.18	68.20	-8.02	52.90	7.28	Peak	174	3
4 *	5710.00	107.81			100.25	7.56	Average	174	3
5 *	5710.00	120.91			113.35	7.56	Peak	174	3
6	5850.00	61.71	68.20	-6.49	53.69	8.02	Peak	174	3
7	11420.00	47.42	54.00	-6.58	30.69	16.73	Average	100	355
8	11420.00	60.45	74.00	-13.55	43.72	16.73	Peak	100	355
9	17130.00	62.88	68.20	-5.32	44.58	18.30	Peak	100	348

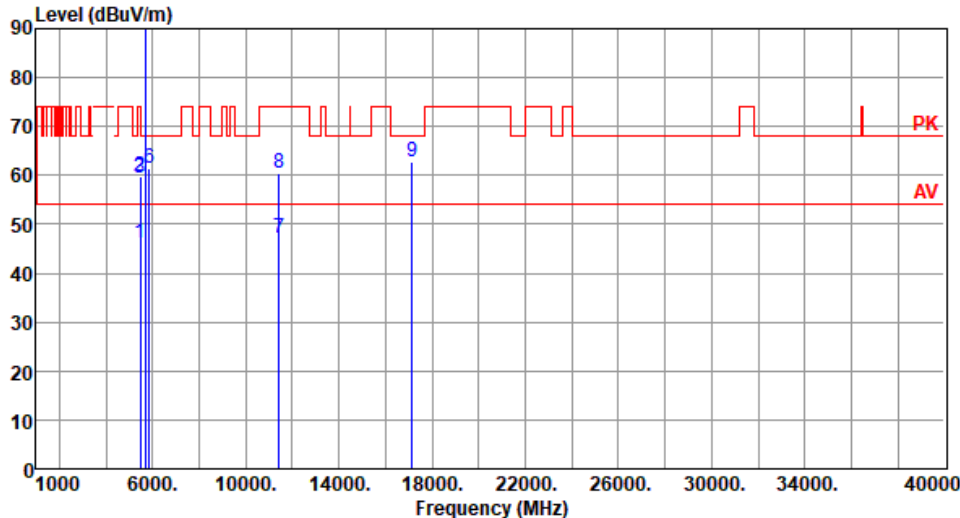
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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

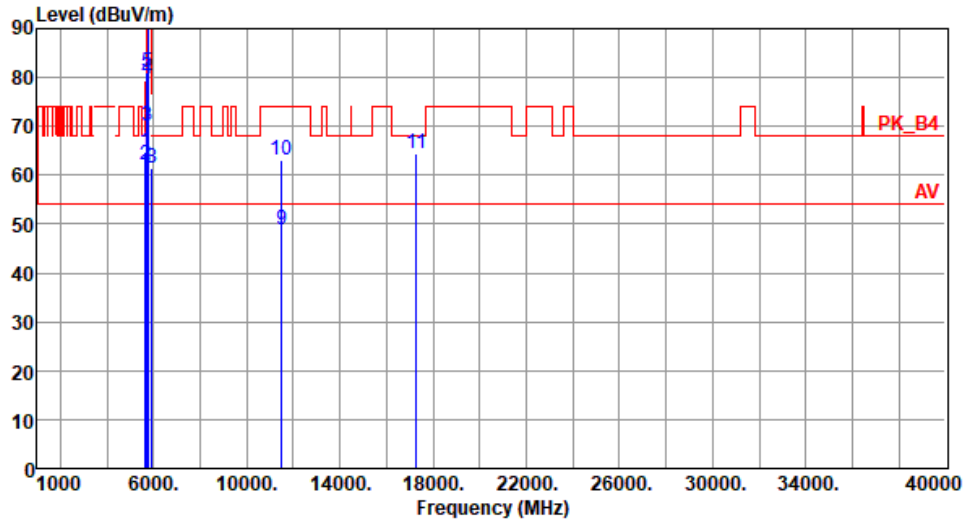
Modulation	ax (HE40)	Test Freq. (MHz)	5710
Polarization	Vertical	Test Configuration	1



	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	46.21	54.00	-7.79	38.96	7.25	Average	125	324
2	5460.00	59.84	74.00	-14.16	52.59	7.25	Peak	125	324
3	5470.00	59.52	68.20	-8.68	52.24	7.28	Peak	125	324
4 *	5710.00	107.05			99.49	7.56	Average	125	324
5 *	5710.00	120.14			112.58	7.56	Peak	125	324
6	5850.00	61.44	68.20	-6.76	53.42	8.02	Peak	125	324
7	11420.00	47.29	54.00	-6.71	30.56	16.73	Average	100	344
8	11420.00	60.34	74.00	-13.66	43.61	16.73	Peak	100	344
9	17130.00	62.65	68.20	-5.55	44.35	18.30	Peak	100	28

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
 Note 3: "*" is Peak / Average value of fundamental frequency

Modulation	ax (HE40)	Test Freq. (MHz)	5755
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5635.00	64.84	68.20	-3.36	57.42	7.42	Peak	173	1
2	5650.00	61.98	68.20	-6.22	54.59	7.39	Peak	173	1
3	5700.00	69.95	105.20	-35.25	62.45	7.50	Peak	173	1
4	5720.00	79.87	110.80	-30.93	72.25	7.62	Peak	173	1
5	5725.00	81.08	122.20	-41.12	73.42	7.66	Peak	173	1
6 *	5755.00	108.04			100.23	7.81	Average	173	1
7 *	5755.00	121.42			113.61	7.81	Peak	173	1
8	5925.00	61.36	68.20	-6.84	53.29	8.07	Peak	173	1
9	11510.00	48.86	54.00	-5.14	32.11	16.75	Average	100	348
10	11510.00	63.21	74.00	-10.79	46.46	16.75	Peak	100	348
11	17265.00	64.28	68.20	-3.92	45.47	18.81	Peak	100	339

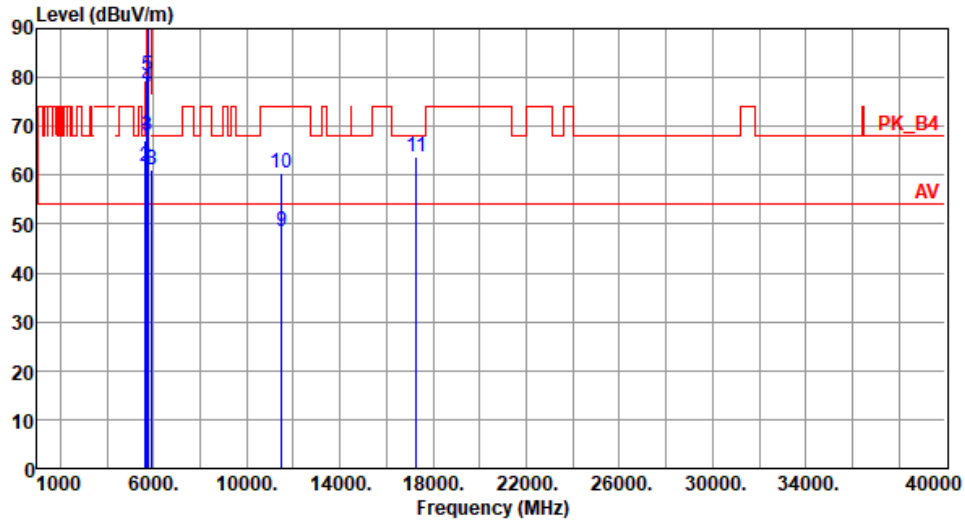
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5635.00	67.01	68.20	-1.19	59.59	7.42	Peak	167	343
2	5650.00	61.84	68.20	-6.36	54.45	7.39	Peak	167	343
3	5700.00	67.98	105.20	-37.22	60.48	7.50	Peak	167	343
4	5720.00	78.20	110.80	-32.60	70.58	7.62	Peak	167	343
5	5725.00	80.24	122.20	-41.96	72.58	7.66	Peak	167	343
6 *	5755.00	107.23			99.42	7.81	Average	167	343
7 *	5755.00	120.17			112.36	7.81	Peak	167	343
8	5925.00	61.26	68.20	-6.94	53.19	8.07	Peak	167	343
9	11510.00	48.64	54.00	-5.36	31.89	16.75	Average	100	352
10	11510.00	60.31	74.00	-13.69	43.56	16.75	Peak	100	352
11	17265.00	63.81	68.20	-4.39	45.00	18.81	Peak	100	32

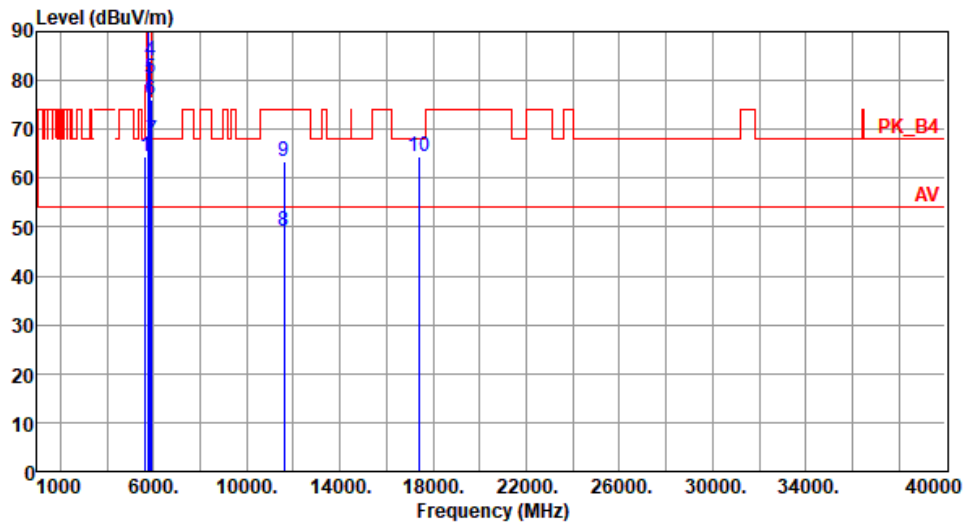
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	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	64.57	68.20	-3.63	57.18	7.39	Peak	171	2
2 *	5795.00	112.90			105.00	7.90	Average	171	2
3 *	5795.00	125.05			117.15	7.90	Peak	171	2
4	5850.00	84.12	122.20	-38.08	76.10	8.02	Peak	171	2
5	5855.00	80.50	110.80	-30.30	72.48	8.02	Peak	171	2
6	5875.00	76.21	105.20	-28.99	68.18	8.03	Peak	171	2
7	5925.00	67.66	68.20	-0.54	59.59	8.07	Peak	171	2
8	11590.00	49.05	54.00	-4.95	32.48	16.57	Average	105	306
9	11590.00	63.36	74.00	-10.64	46.79	16.57	Peak	105	306
10	17385.00	64.39	68.20	-3.81	45.04	19.35	Peak	100	349

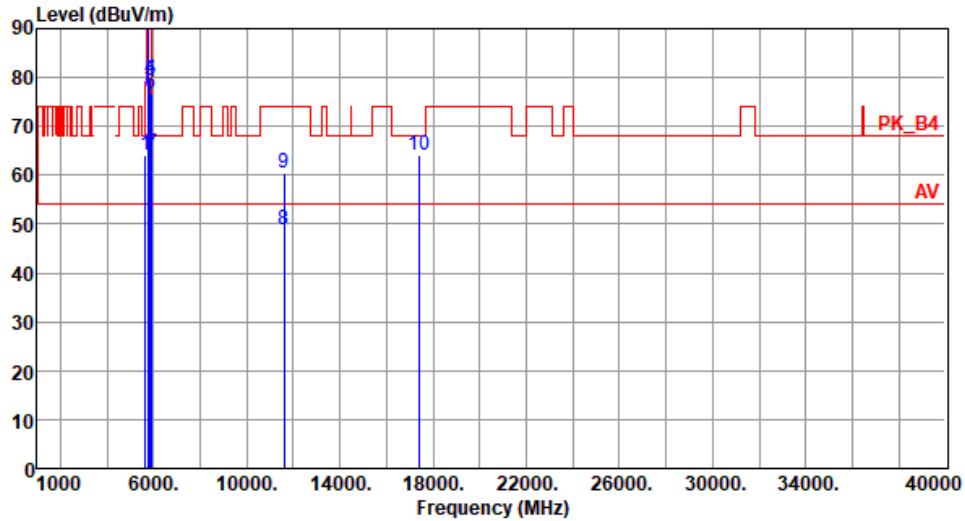
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

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

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

Modulation	ax (HE40)	Test Freq. (MHz)	5795
Polarization	Vertical	Test Configuration	1



	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	63.93	68.20	-4.27	56.54	7.39	Peak	100	348
2 *	5795.00	110.70			102.80	7.90	Average	100	348
3 *	5795.00	122.10			114.20	7.90	Peak	100	348
4	5850.00	79.84	122.20	-42.36	71.82	8.02	Peak	100	348
5	5855.00	79.31	110.80	-31.49	71.29	8.02	Peak	100	348
6	5875.00	76.76	105.20	-28.44	68.73	8.03	Peak	100	348
7	5925.00	64.39	68.20	-3.81	56.32	8.07	Peak	100	348
8	11590.00	48.78	54.00	-5.22	32.21	16.57	Average	118	345
9	11590.00	60.45	74.00	-13.55	43.88	16.57	Peak	118	345
10	17385.00	63.93	68.20	-4.27	44.58	19.35	Peak	100	328

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

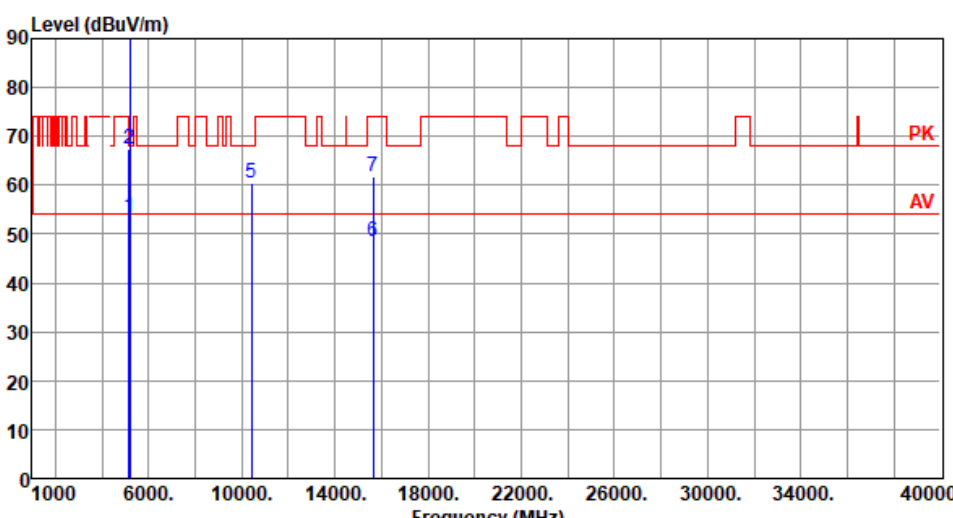
*Factor includes antenna factor, cable loss and amplifier gain

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

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

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

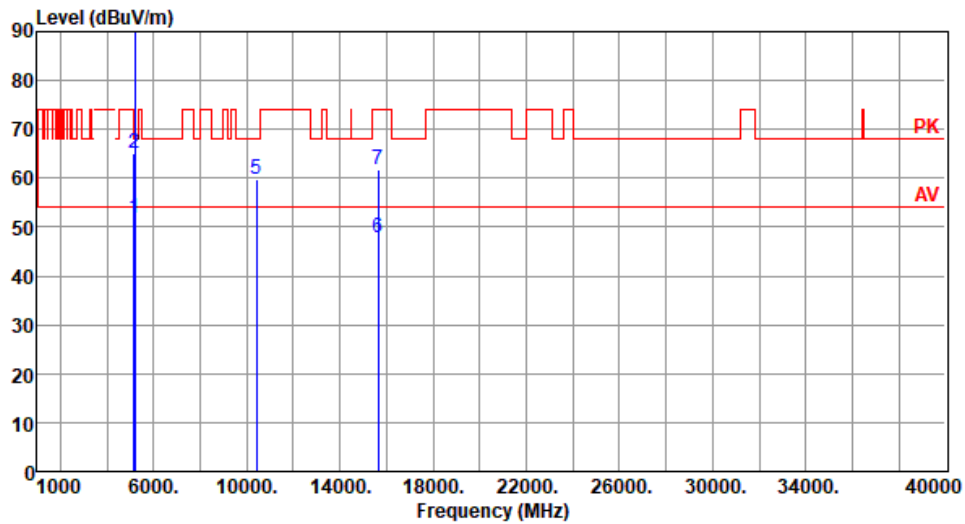
Modulation	ax (HE80)	Test Freq. (MHz)	5210
Polarization	Horizontal	Test Configuration	1



	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	53.31	54.00	-0.69	45.99	7.32	Average	176	12
2	5150.00	67.57	74.00	-6.43	60.25	7.32	Peak	176	12
3 *	5210.00	102.50			95.50	7.00	Average	176	12
4 *	5210.00	114.77			107.77	7.00	Peak	176	12
5	10420.00	60.32	68.20	-7.88	44.01	16.31	Peak	100	59
6	15630.00	48.49	54.00	-5.51	31.41	17.08	Average	100	88
7	15630.00	61.68	74.00	-12.32	44.60	17.08	Peak	100	88

Note 1: Emission Level (dBUV/m) = SA Reading (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	Test Configuration	1



	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	51.77	54.00	-2.23	44.45	7.32	Average	128	338
2	5150.00	64.96	74.00	-9.04	57.64	7.32	Peak	128	338
3 *	5210.00	100.19			93.19	7.00	Average	231	339
4 *	5210.00	112.60			105.60	7.00	Peak	231	339
5	10420.00	59.81	68.20	-8.39	43.50	16.31	Peak	105	334
6	15630.00	47.95	54.00	-6.05	30.87	17.08	Average	100	346
7	15630.00	61.84	74.00	-12.16	44.76	17.08	Peak	100	346

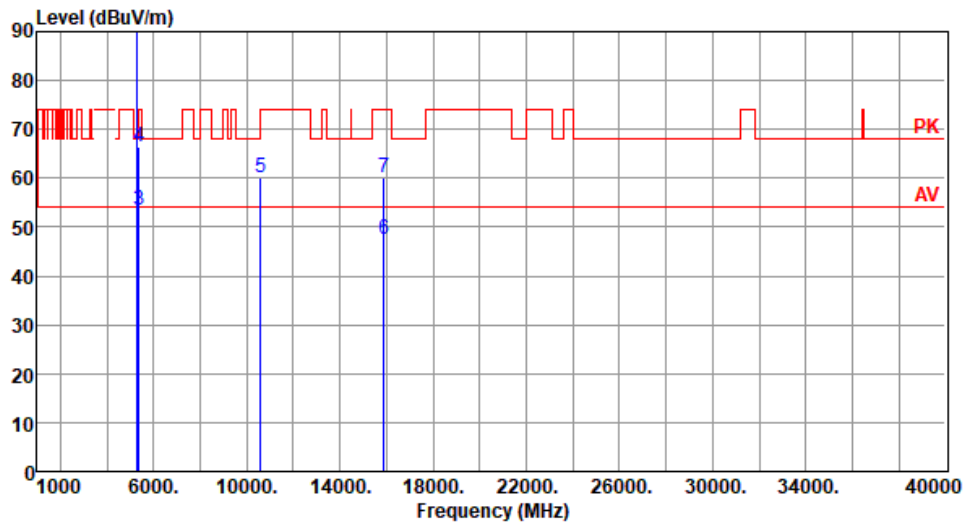
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5290.00	104.92			98.02	6.90	Average	179	345
2	*	5290.00	117.44			110.54	6.90	Peak	179	345
3		5350.00	53.51	54.00	-0.49	46.66	6.85	Average	179	345
4		5350.00	66.40	74.00	-7.60	59.55	6.85	Peak	179	345
5		10580.00	60.16	68.20	-8.04	43.79	16.37	Peak	100	326
6		15870.00	47.62	54.00	-6.38	30.98	16.64	Average	100	345
7		15870.00	60.25	74.00	-13.75	43.61	16.64	Peak	100	345

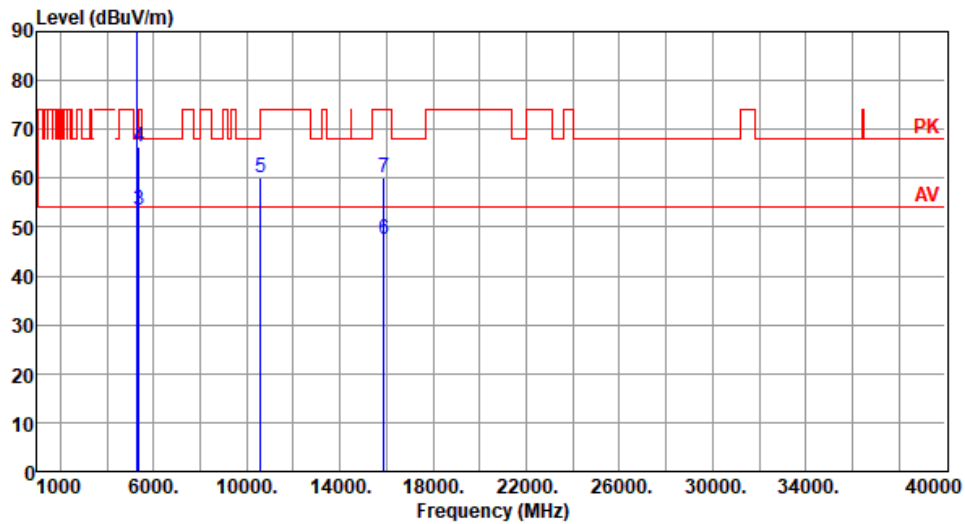
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5290.00	103.82			96.92	6.90	Average	221	345
2	*	5290.00	116.31			109.41	6.90	Peak	221	345
3		5350.00	53.63	54.00	-0.37	46.78	6.85	Average	220	343
4		5350.00	66.48	74.00	-7.52	59.63	6.85	Peak	220	343
5		10580.00	60.14	68.20	-8.06	43.77	16.37	Peak	100	356
6		15870.00	47.39	54.00	-6.61	30.75	16.64	Average	100	56
7		15870.00	60.18	74.00	-13.82	43.54	16.64	Peak	100	56

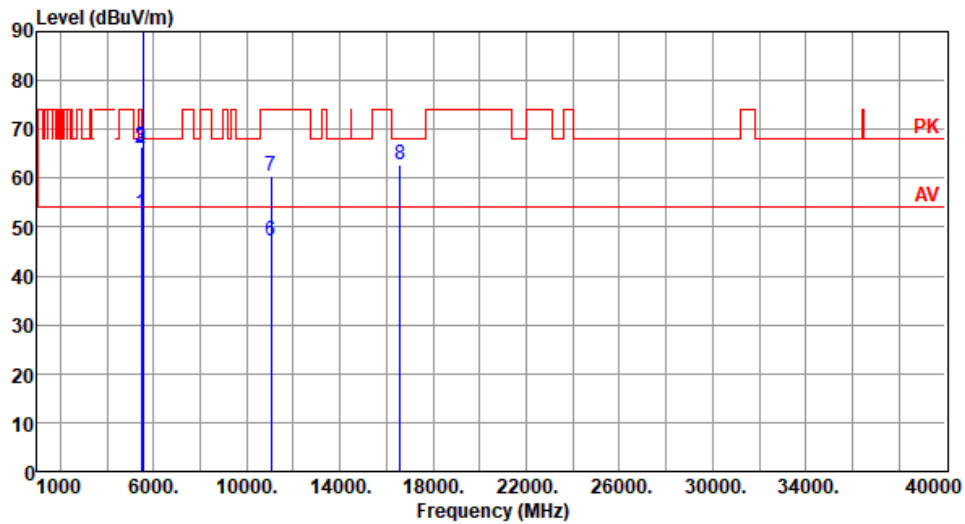
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80)	Test Freq. (MHz)	5530
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.70	54.00	-1.30	45.45	7.25	Average	174	345
2	5460.00	65.99	74.00	-8.01	58.74	7.25	Peak	174	345
3	5470.00	66.32	68.20	-1.88	59.04	7.28	Peak	174	345
4 *	5530.00	103.22			95.79	7.43	Average	174	345
5 *	5530.00	115.84			108.41	7.43	Peak	174	345
6	11060.00	47.19	74.00	-26.81	30.44	16.75	Peak	100	294
7	11060.00	60.28	74.00	-13.72	43.53	16.75	Peak	100	294
8	16590.00	62.85	68.20	-5.35	44.64	18.21	Peak	100	48

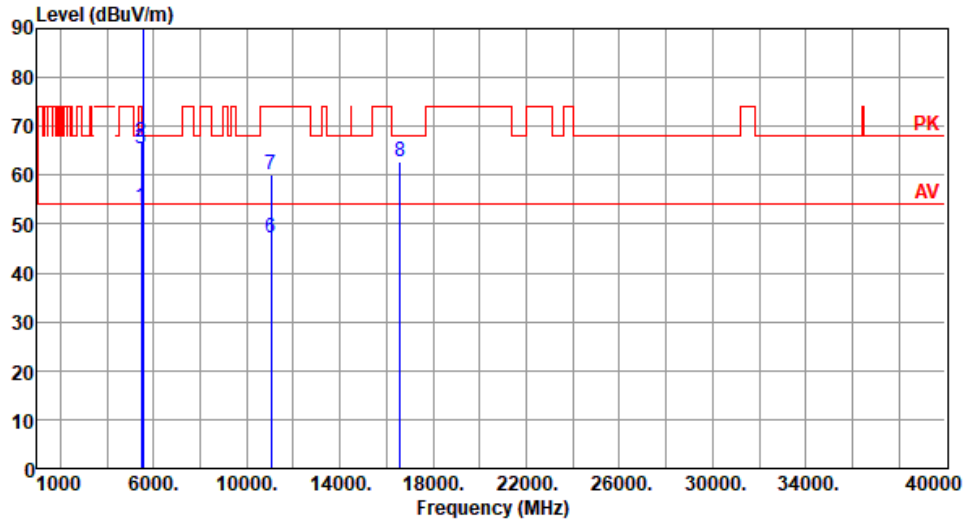
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	1



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.44	54.00	-0.56	46.19	7.25	Average	175	346
2	5460.00	66.84	74.00	-7.16	59.59	7.25	Peak	175	346
3	5470.00	65.40	68.20	-2.80	58.12	7.28	Peak	175	346
4 *	5530.00	102.71			95.28	7.43	Average	174	347
5 *	5530.00	114.94			107.51	7.43	Peak	174	347
6	11060.00	47.11	54.00	-6.89	30.36	16.75	Average	100	358
7	11060.00	60.24	74.00	-13.76	43.49	16.75	Peak	100	358
8	16590.00	62.81	68.20	-5.39	44.60	18.21	Peak	100	35

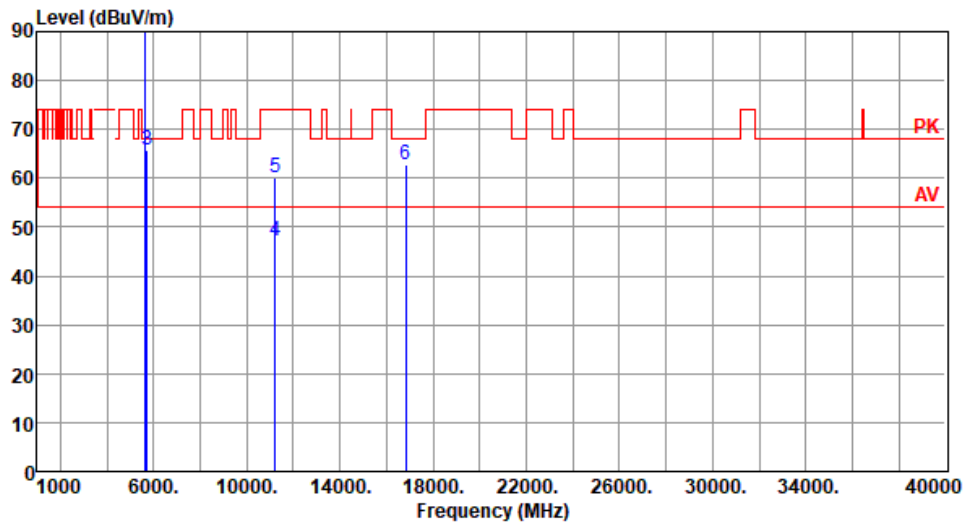
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5610.00	105.11			97.64	7.47	Average	173	348
2	*	5610.00	118.87			111.40	7.47	Peak	173	348
3		5725.00	65.64	68.20	-2.56	57.98	7.66	Peak	173	348
4		11220.00	47.12	54.00	-6.88	30.60	16.52	Average	100	341
5		11220.00	60.25	74.00	-13.75	43.73	16.52	Peak	100	341
6		16830.00	62.79	68.20	-5.41	44.45	18.34	Peak	100	344

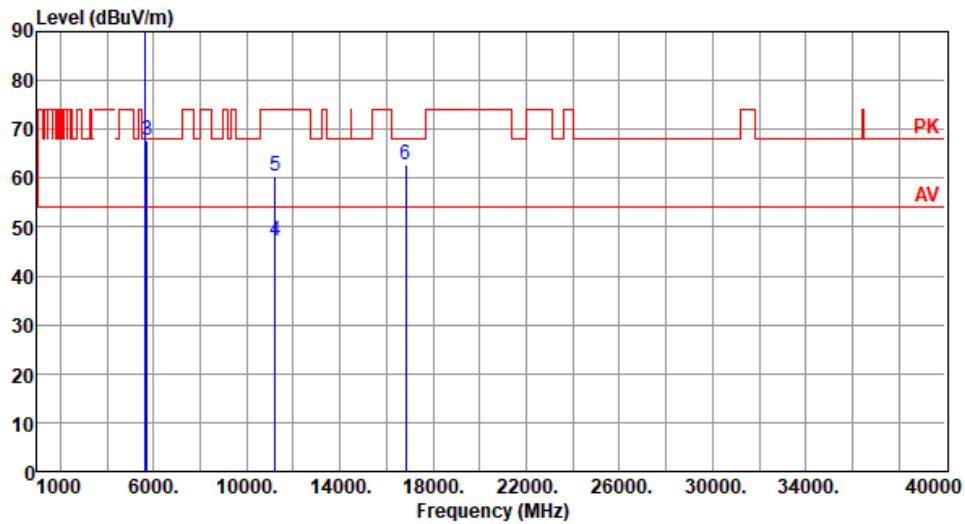
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80)	Test Freq. (MHz)	5610
Polarization	Vertical	Test Configuration	1



		Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5610.00	104.38			96.91	7.47	Average	175	345
2	*	5610.00	117.22			109.75	7.47	Peak	175	345
3		5725.00	67.67	68.20	-0.53	60.01	7.66	Peak	175	345
4		11220.00	47.28	54.00	-6.72	30.76	16.52	Average	100	324
5		11220.00	60.36	74.00	-13.64	43.84	16.52	Peak	100	324
6		16830.00	62.75	68.20	-5.45	44.41	18.34	Peak	101	31

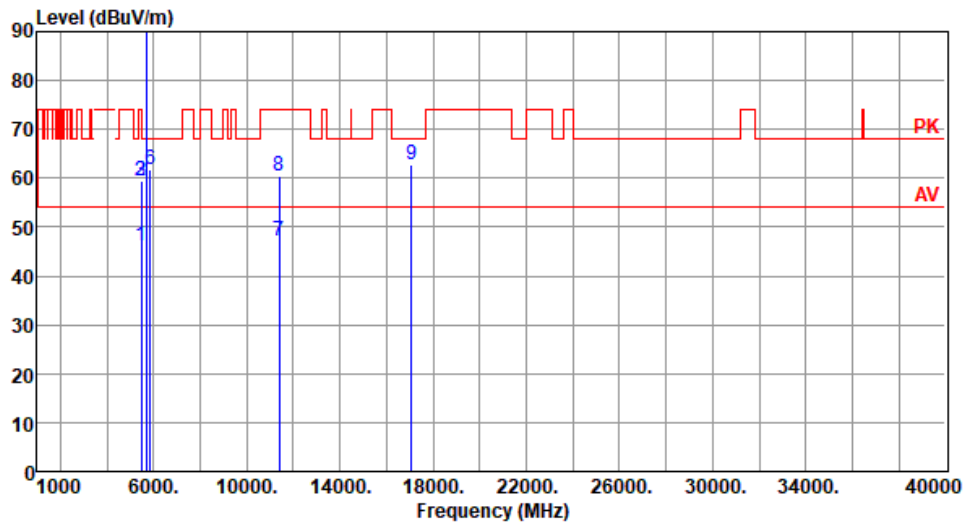
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	1



	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	46.21	54.00	-7.79	38.96	7.25	Average	181	4
2	5460.00	59.50	74.00	-14.50	52.25	7.25	Peak	181	4
3	5470.00	59.57	68.20	-8.63	52.29	7.28	Peak	181	4
4 *	5690.00	105.43			97.96	7.47	Average	181	4
5 *	5690.00	118.84			111.37	7.47	Peak	181	4
6	5850.00	61.86	68.20	-6.34	53.84	8.02	Peak	181	4
7	11380.00	47.19	54.00	-6.81	30.51	16.68	Average	100	351
8	11380.00	60.31	74.00	-13.69	43.63	16.68	Peak	100	351
9	17070.00	62.91	68.20	-5.29	44.53	18.38	Peak	100	352

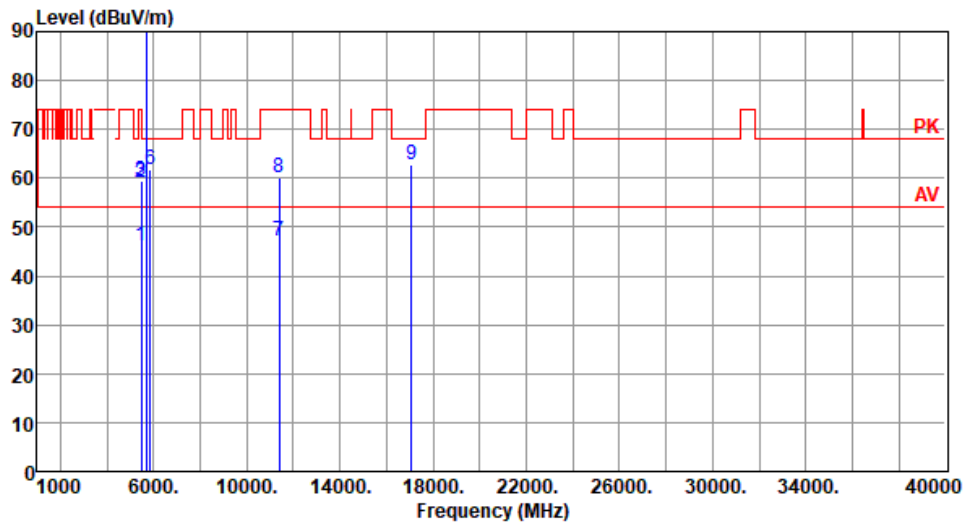
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80)	Test Freq. (MHz)	5690
Polarization	Vertical	Test Configuration	1



	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	46.03	54.00	-7.97	38.78	7.25	Average	176	349
2	5460.00	59.22	74.00	-14.78	51.97	7.25	Peak	176	349
3	5470.00	59.35	68.20	-8.85	52.07	7.28	Peak	176	349
4 *	5690.00	104.62			97.15	7.47	Average	176	349
5 *	5690.00	118.06			110.59	7.47	Peak	176	349
6	5850.00	61.69	68.20	-6.51	53.67	8.02	Peak	176	349
7	11380.00	47.02	54.00	-6.98	30.34	16.68	Average	106	339
8	11380.00	60.25	74.00	-13.75	43.57	16.68	Peak	106	339
9	17070.00	62.84	68.20	-5.36	44.46	18.38	Peak	100	21

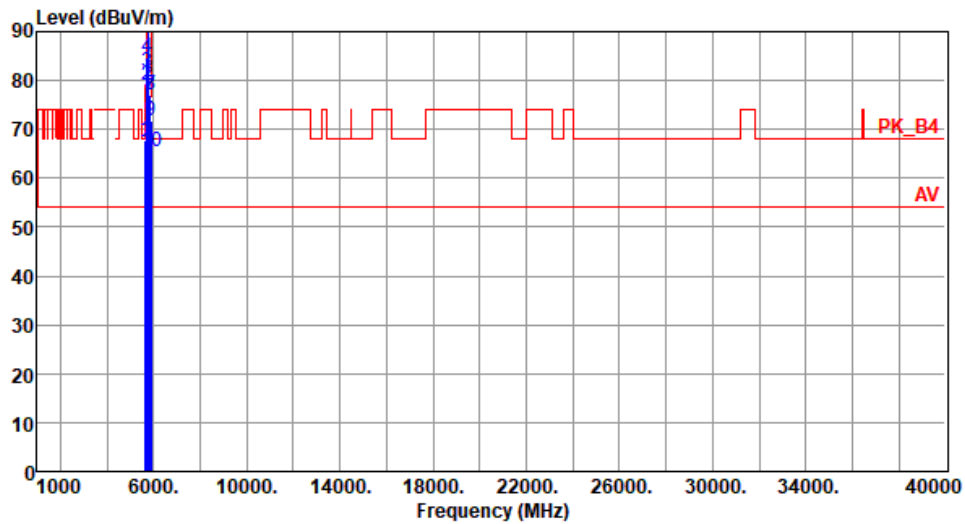
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80)	Test Freq. (MHz)	5775
Polarization	Horizontal	Test Configuration	1



	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	67.87	68.20	-0.33	60.48	7.39	Peak	176	344
2	5700.00	78.99	105.20	-26.21	71.49	7.50	Peak	176	344
3	5720.00	81.83	110.80	-28.97	74.21	7.62	Peak	176	344
4	5725.00	84.73	122.20	-37.47	77.07	7.66	Peak	176	344
5 *	5775.00	108.71			100.85	7.86	Average	176	344
6 *	5775.00	121.95			114.09	7.86	Peak	176	344
7	5850.00	77.06	122.20	-45.14	69.04	8.02	Peak	176	344
8	5855.00	76.92	110.80	-33.88	68.90	8.02	Peak	176	344
9	5875.00	71.84	105.20	-33.36	63.81	8.03	Peak	176	344
10	5925.00	65.49	68.20	-2.71	57.42	8.07	Peak	176	344

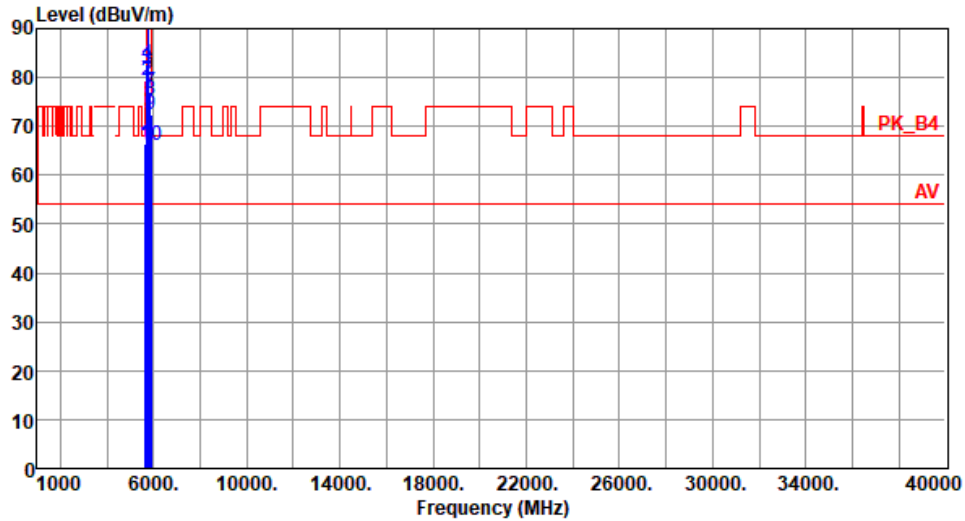
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80)	Test Freq. (MHz)	5775
Polarization	Vertical	Test Configuration	1



	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	66.58	68.20	-1.62	59.19	7.39	Peak	189	345
2	5700.00	79.51	105.20	-25.69	72.01	7.50	Peak	189	345
3	5720.00	81.78	110.80	-29.02	74.16	7.62	Peak	189	345
4	5725.00	82.54	122.20	-39.66	74.88	7.66	Peak	189	345
5 *	5775.00	108.12			100.26	7.86	Average	189	345
6 *	5775.00	120.82			112.96	7.86	Peak	189	345
7	5850.00	77.14	122.20	-45.06	69.12	8.02	Peak	189	345
8	5855.00	75.23	110.80	-35.57	67.21	8.02	Peak	189	345
9	5875.00	72.51	105.20	-32.69	64.48	8.03	Peak	189	345
10	5925.00	66.07	68.20	-2.13	58.00	8.07	Peak	189	345

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

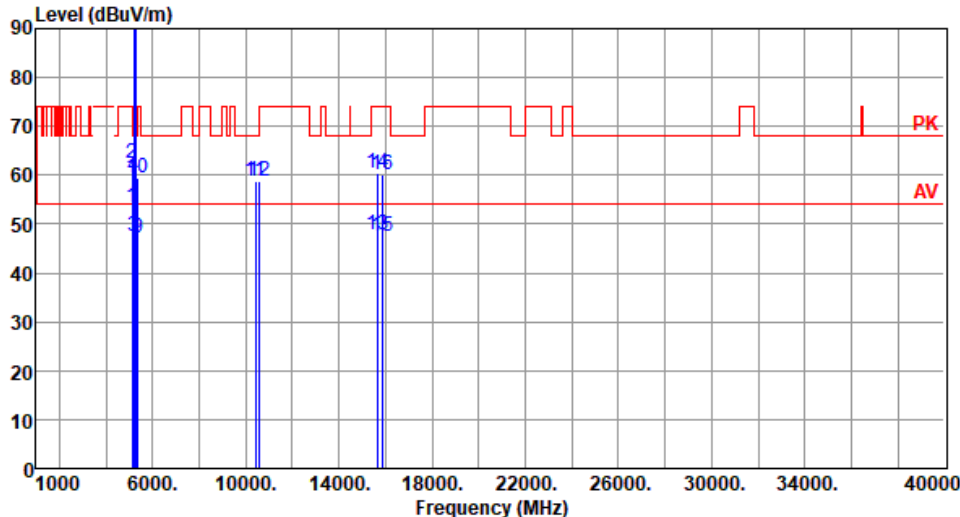
*Factor includes antenna factor , cable loss and amplifier gain

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

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

3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for ax (HE80+80)

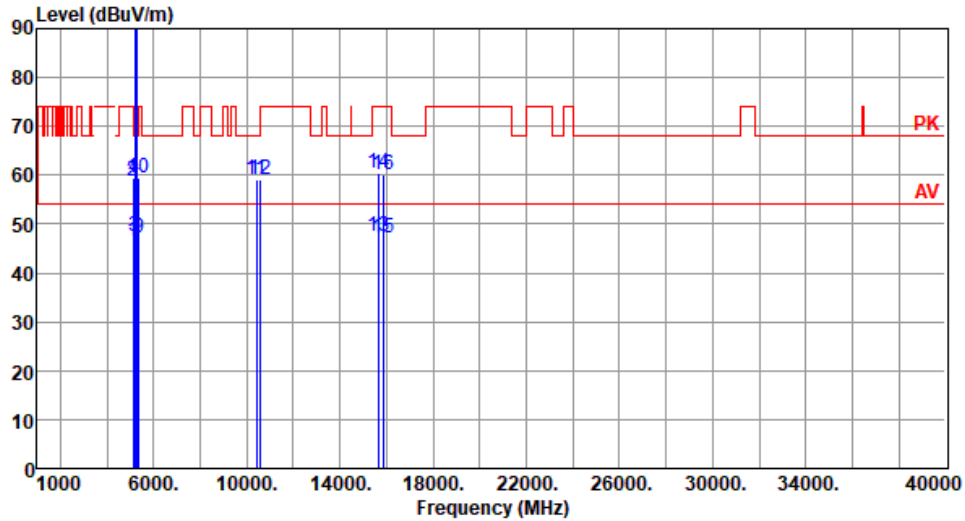
Modulation	ax (HE80+80)	Test Freq. (MHz)	5210 + 5290
Polarization	Horizontal	Test Configuration	1



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level	dBuV/m	dB	reading	dB		High	Table
								cm	deg
1	5130.00	53.55	54.00	-0.45	46.24	7.31	Average	188	5
2	5130.00	62.46	74.00	-11.54	55.15	7.31	Peak	188	5
3	5150.00	47.65	54.00	-6.35	40.33	7.32	Average	188	5
4	5150.00	59.77	74.00	-14.23	52.45	7.32	Peak	188	5
5 *	5210.00	93.56			86.56	7.00	Average	188	5
6 *	5210.00	106.19			99.19	7.00	Peak	188	5
7 *	5290.00	93.87			86.97	6.90	Average	111	348
8 *	5290.00	105.30			98.40	6.90	Peak	111	348
9	5350.00	47.14	54.00	-6.86	40.29	6.85	Average	111	348
10	5350.00	59.31	74.00	-14.69	52.46	6.85	Peak	111	348
11	10420.00	58.87	68.20	-9.33	42.56	16.31	Peak	100	30
12	10580.00	58.87	68.20	-9.33	42.50	16.37	Peak	100	60
13	15630.00	47.66	54.00	-6.34	30.58	17.08	Average	100	50
14	15630.00	60.55	74.00	-13.45	43.47	17.08	Peak	100	50
15	15870.00	47.34	54.00	-6.66	30.70	16.64	Average	100	60
16	15870.00	60.01	74.00	-13.99	43.37	16.64	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 (HE80+80)	Test Freq. (MHz)	5210 + 5290
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5130.00	46.37	54.00	-7.63	39.06	7.31	Average	136	16
2	5130.00	58.79	74.00	-15.21	51.48	7.31	Peak	136	16
3	5150.00	47.62	54.00	-6.38	40.30	7.32	Average	136	16
4	5150.00	59.54	74.00	-14.46	52.22	7.32	Peak	136	16
5 *	5210.00	93.82			86.82	7.00	Average	136	16
6 *	5210.00	105.44			98.44	7.00	Peak	136	16
7 *	5290.00	90.16			83.26	6.90	Average	115	334
8 *	5290.00	102.07			95.17	6.90	Peak	115	334
9	5350.00	47.10	54.00	-6.90	40.25	6.85	Average	115	334
10	5350.00	59.41	74.00	-14.59	52.56	6.85	Peak	115	334
11	10420.00	58.96	68.20	-9.24	42.65	16.31	Peak	100	20
12	10580.00	58.96	68.20	-9.24	42.59	16.37	Peak	100	90
13	15630.00	47.54	54.00	-6.46	30.46	17.08	Average	100	80
14	15630.00	60.60	74.00	-13.40	43.52	17.08	Peak	100	80
15	15870.00	47.30	54.00	-6.70	30.66	16.64	Average	100	55
16	15870.00	60.05	74.00	-13.95	43.41	16.64	Peak	100	55

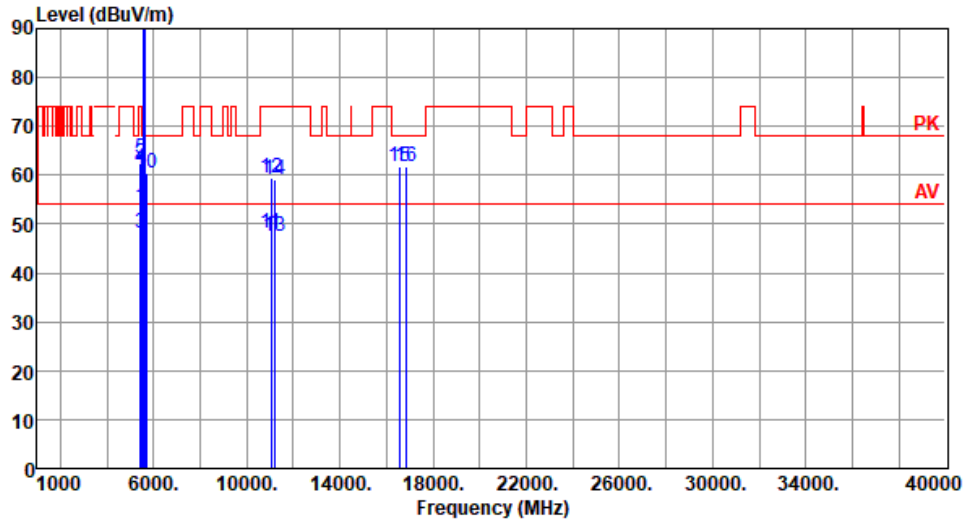
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80+80)	Test Freq. (MHz)	5530 + 5610
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5450.00	53.58	54.00	-0.42	46.36	7.22	Average	170	352
2	5450.00	62.49	74.00	-11.51	55.27	7.22	Peak	170	352
3	5460.00	48.09	54.00	-5.91	40.84	7.25	Average	170	352
4	5460.00	61.58	74.00	-12.42	54.33	7.25	Peak	170	352
5	5470.00	63.33	68.20	-4.87	56.05	7.28	Peak	170	352
6 *	5530.00	97.00			89.57	7.43	Average	170	352
7 *	5530.00	109.36			101.93	7.43	Peak	170	352
8 *	5610.00	96.38			88.91	7.47	Average	205	353
9 *	5610.00	107.71			100.24	7.47	Peak	205	353
10	5725.00	60.54	68.20	-7.66	52.88	7.66	Peak	205	353
11	11060.00	48.01	54.00	-5.99	31.26	16.75	Average	100	40
12	11060.00	59.34	74.00	-14.66	42.59	16.75	Peak	100	40
13	11220.00	47.38	54.00	-6.62	30.86	16.52	Average	100	50
14	11220.00	59.01	74.00	-14.99	42.49	16.52	Peak	100	50
15	16590.00	61.72	68.20	-6.48	43.51	18.21	Peak	100	55
16	16830.00	61.76	68.20	-6.44	43.42	18.34	Peak	100	70

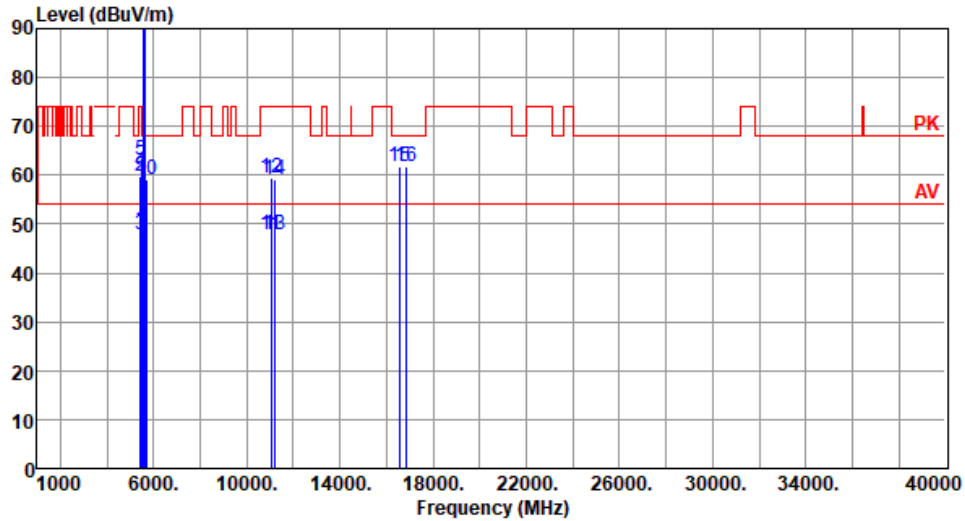
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

Modulation	ax (HE80+80)	Test Freq. (MHz)	5530 + 5610
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5450.00	48.83	54.00	-5.17	41.61	7.22	Average	136	20
2	5450.00	59.74	74.00	-14.26	52.52	7.22	Peak	136	20
3	5460.00	47.83	54.00	-6.17	40.58	7.25	Average	136	348
4	5460.00	60.72	74.00	-13.28	53.47	7.25	Peak	136	348
5	5470.00	63.01	68.20	-5.19	55.73	7.28	Peak	136	348
6 *	5530.00	96.64			89.21	7.43	Average	136	348
7 *	5530.00	108.84			101.41	7.43	Peak	136	348
8 *	5610.00	93.23			85.76	7.47	Average	100	314
9 *	5610.00	105.17			97.70	7.47	Peak	100	314
10	5725.00	59.24	68.20	-8.96	51.58	7.66	Peak	100	314
11	11060.00	47.98	54.00	-6.02	31.23	16.75	Average	100	70
12	11060.00	59.31	74.00	-14.69	42.56	16.75	Peak	100	70
13	11220.00	47.73	54.00	-6.27	31.21	16.52	Average	100	30
14	11220.00	59.20	74.00	-14.80	42.68	16.52	Peak	100	30
15	16590.00	61.69	68.20	-6.51	43.48	18.21	Peak	100	20
16	16830.00	61.90	68.20	-6.30	43.56	18.34	Peak	100	40

Note 1: Emission Level (dBuV/m) = SA Reading (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

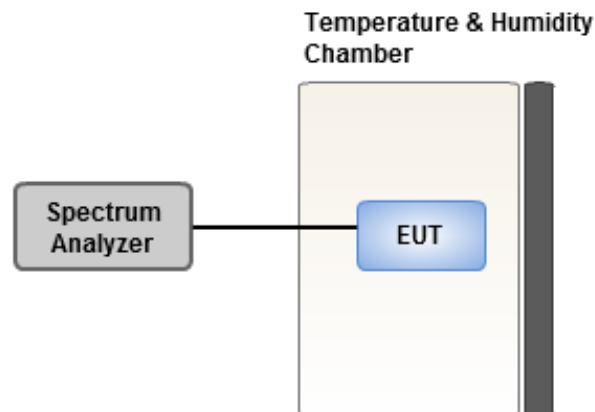
3.6.1 Limit of Frequency Stability

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: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	-1.93	-1.83	-2.24	-1.95
T20°C Vmin	-1.86	-1.70	-1.86	-1.05
T50°C Vnom	-3.12	-2.64	-3.07	-3.06
T40°C Vnom	-3.45	-3.77	-3.31	-3.13
T30°C Vnom	-2.53	-2.39	-2.20	-2.77
T20°C Vnom	-2.37	-2.12	-2.28	-2.32
T10°C Vnom	-1.76	-1.33	-1.50	-1.70
T0°C Vnom	-1.73	-1.48	-2.13	-1.46
T-10°C Vnom	-0.46	0.20	-0.04	-0.25
T-20°C Vnom	0.47	0.75	0.37	-0.05
T-30°C Vnom	2.83	3.30	3.25	3.04
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	-1.32	-1.14	-0.73	-1.64
T20°C Vmin	-1.82	-1.10	-2.00	-1.98
T50°C Vnom	-2.59	-1.94	-2.46	-2.14
T40°C Vnom	-3.12	-3.05	-2.85	-3.04
T30°C Vnom	-2.75	-2.16	-2.57	-2.46
T20°C Vnom	-2.43	-2.37	-2.32	-2.18
T10°C Vnom	-1.42	-1.24	-1.00	-1.07
T0°C Vnom	-1.09	-0.87	-0.91	-1.30
T-10°C Vnom	-0.18	0.56	0.18	-0.42
T-20°C Vnom	0.51	0.49	0.92	0.62
T-30°C Vnom	2.87	2.97	3.28	2.80
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>.

Linkou

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Kwei Shan

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No. 3-1, Lane 6, Wen San 3rd St.,
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333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

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

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

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

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