FCC Test Report

FCC ID	:	**I88WX3310-B0**
Equipment	:	**Dual-Band Wireless AX Gigabit Access Point / Extender**
Model No.	:	**WX3310-B0**
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	:	**Feb. 03, 2020**
Tested Date	:	**Mar. 06 ~ May 18, 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: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR020306AN	Rev. 01	Initial issue	Jun. 02, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.830MHz 29.90 (Margin -16.10dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 53.69 (Margin -0.31dB) – AV [dBuV/m at 3m]: 5350.00MHz 53.69 (Margin -0.31dB) - AV	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: 29.08 5250~5350MHz: 23.09 5470~5725MHz: 22.54 5725~5850MHz: 29.26 ***Beamforming mode*** 5150~5250MHz: 28.73 5250~5350MHz: 22.74 5470~5725MHz: 22.09 5725~5850MHz: 27.71	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	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

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	ax (HE160)	5250 5570	50 [1] 114 [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.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)			
				5150~5250	5250~5350	5470~5725	5725~5850
1	Ant1(RFPCA242309IMLB901)	PIFA	ipex	0.5	1	1.5	1.75
2	Ant2 (RFPCA242311IMLB901)	PIFA	ipex	0.5	1	1.5	1.75
3	Ant3 (RFPCA221116IM5B901)	Dipole	ipex	0.5	1	1.5	1.75
4	Ant4 (RFPCA232007IMLB901)	Dipole	ipex	0.5	1	1.5	1.75

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: MNC Model: MAUS-1201501801 I/P: 100-240Vac, 50/60Hz, 0.5A O/P: 12Vdc, 1.5A Power Line: DC 1.5m non-shielded without core
2	RJ45 cable	1.5m non-shielded without core

1.1.5 Channel List

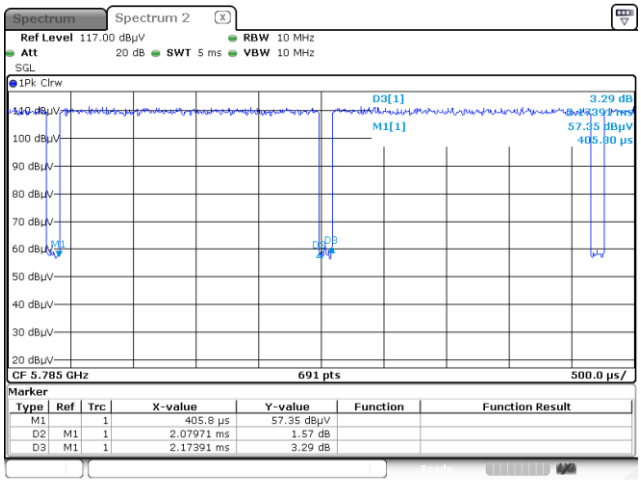
802.11a / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	118	5590
64	5320	126	5630
100	5500	134	5670
104	5520	142	5710
108	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	**ax HE160**	
153	5765	50	5250
157	5785	114	5570
161	5805	---	---
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

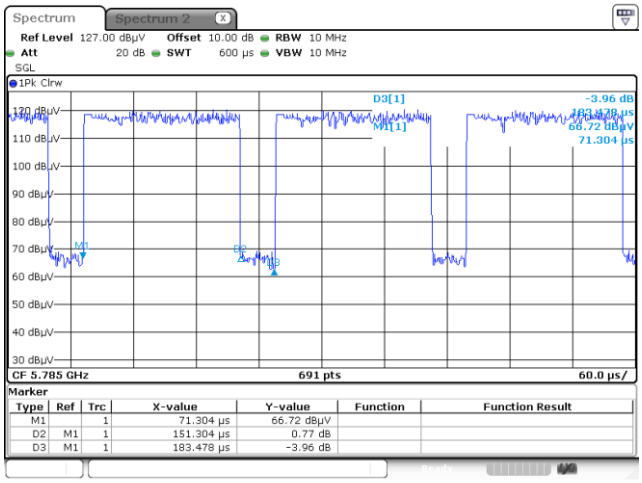
Non-beamforming mode

Test Tool	Mtool, Version: 3.1.0.4		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	95.67%	0.19
	ax (HE20)	82.46%	0.84
	ax (HE40)	78.85%	1.03
	ax (HE80)	77.25%	1.12
	ax (HE160)	97.85%	0.09

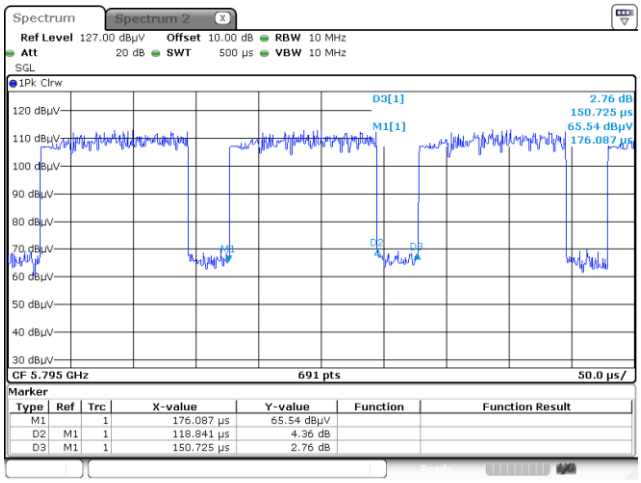
11a



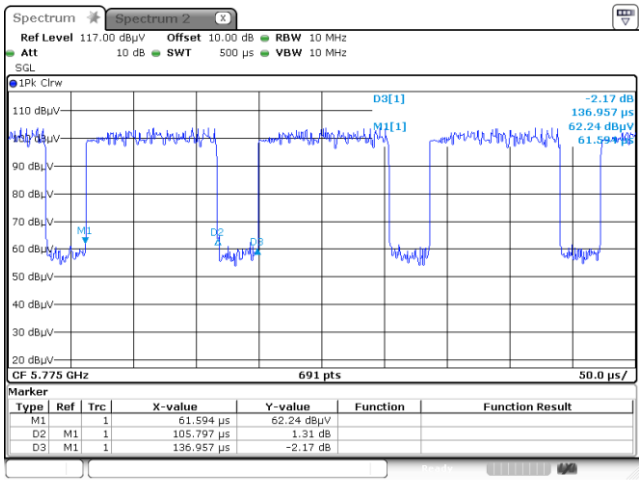
ax (HE20)

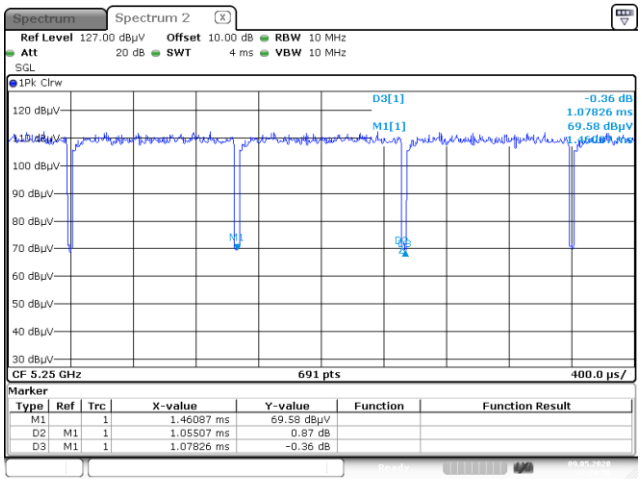


ax (HE40)



ax (HE80)

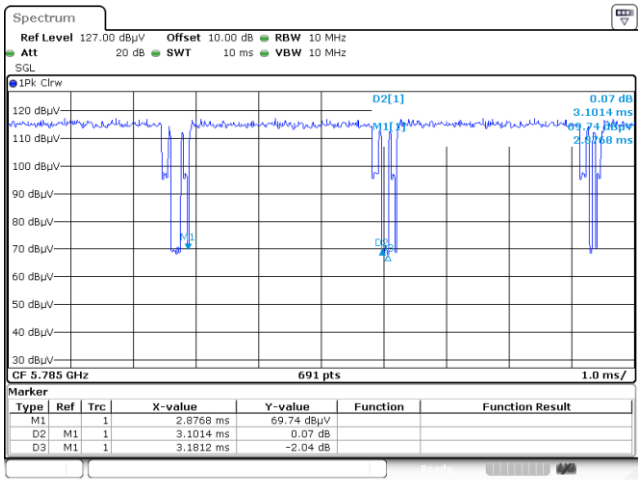


ax (HE160)	---
 Spectrum Spectrum 2 Ref Level 127.00 dBµV Offset 10.00 dB RBW 10 MHz Att 20 dB SWT 4 ms VBW 10 MHz SGL 1Pk Clrw D3[1] -0.36 dB 1.07826 ms M1[1] 69.58 dBµV 120 dBµV 110 dBµV 100 dBµV 90 dBµV 80 dBµV 70 dBµV 60 dBµV 50 dBµV 40 dBµV 30 dBµV CF 5.25 GHz 691 pts 400.0 µs/ Marker Type Ref Trc X-value Y-value Function Function Result M1 1 1.46087 ms 69.58 dBµV D2 M1 1 1.05507 ms 0.87 dB D3 M1 1 1.07826 ms -0.36 dB	---

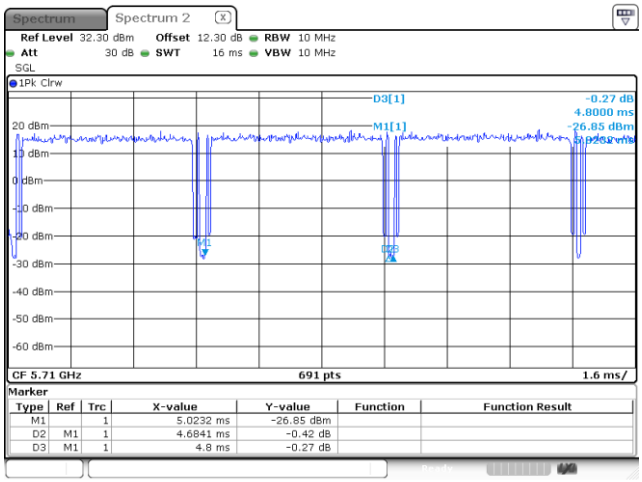
Beamforming mode

Test Tool	LanTest20, Version: 2.0.0.2		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	ax (HE20)	97.49%	0.11
	ax (HE40)	97.59%	0.11
	ax (HE80)	96.48%	0.16
	ax (HE160)	94.38%	0.25

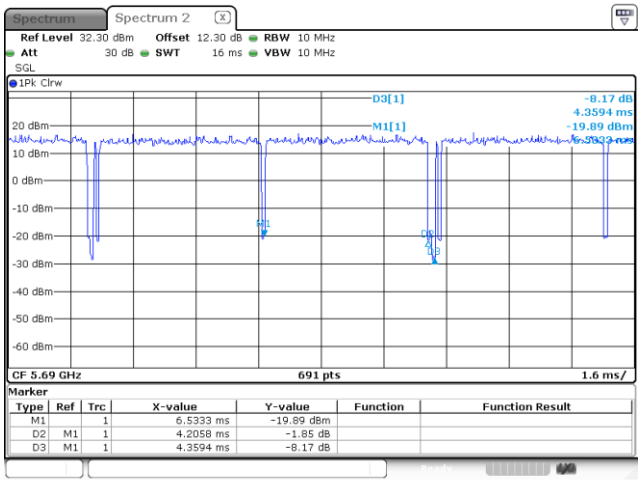
ax (HE20)



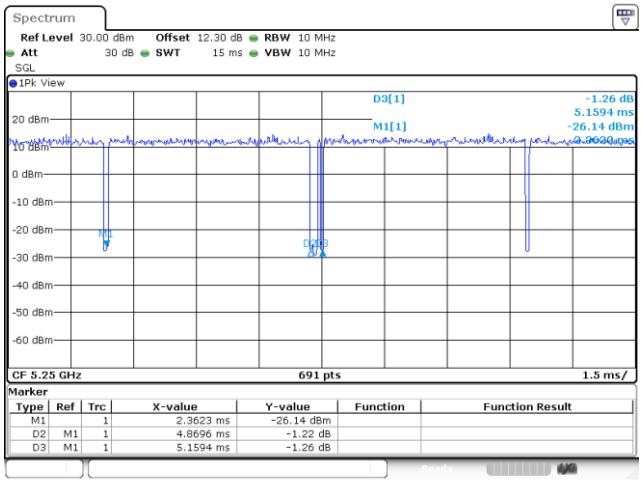
ax (HE40)



ax (HE80)



ax (HE160)



1.1.7 Power Index of Test Tool

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5180	82	---
11a	5200	94	---
11a	5240	94	---
ax (HE20)	5180	78	78
ax (HE20)	5200	94	94
ax (HE20)	5240	94	94
ax (HE40)	5190	66	66
ax (HE40)	5230	88	86
ax (HE80)	5210	58	58
ax (HE160)	5250	64	62

For Frequency band 5250~5350 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5260	72	---
11a	5300	72	---
11a	5320	70	---
ax (HE20)	5260	68	68
ax (HE20)	5300	68	68
ax (HE20)	5320	68	68
ax (HE40)	5270	68	68
ax (HE40)	5310	68	68
ax (HE80)	5290	64	64

For Frequency band 5470~5725 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5500	68	---
11a	5580	68	---
11a	5700	68	---
ax (HE20)	5500	64	64
ax (HE20)	5580	64	64
ax (HE20)	5700	64	64
ax (HE40)	5510	64	64
ax (HE40)	5590	64	64
ax (HE40)	5670	62	62
ax (HE80)	5530	64	66
ax (HE80)	5610	66	66
ax (HE160)	5570	66	48

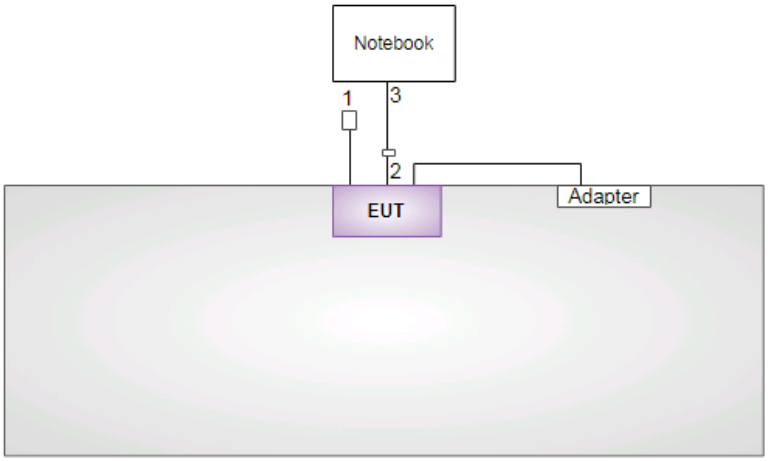
Channel that extends across the 5.725 GHz boundary

For Frequency band 5470~5725 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5720MHz	68	---
ax (HE20)	5720MHz	60	60
ax (HE40)	5710MHz	62	62
ax (HE80)	5690MHz	66	66

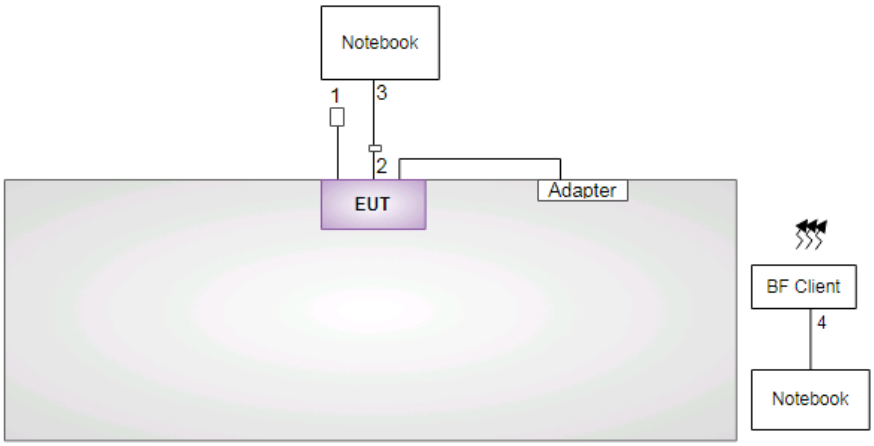
For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5745	96	---
11a	5785	96	---
11a	5825	96	---
ax (HE20)	5745	88	88
ax (HE20)	5785	88	88
ax (HE20)	5825	88	88
ax (HE40)	5755	88	88
ax (HE40)	5795	88	88
ax (HE80)	5775	86	86

1.2 Local Support Equipment List

Non-beamforming mode

Test Setup Diagram	
	
No.	**Signal cable / Length (m)**
1	RJ45, 1.3m non-shielded with load
2	RJ45, 1.5m non-shielded
3	RJ45, 10m non-shielded

Beamforming mode

Test Setup Diagram	
	
No.	**Signal cable / Length (m)**
1	RJ45, 1.3m non-shielded with load
2	RJ45, 1.5m non-shielded
3	RJ45, 10m non-shielded
4	RJ45, 1.3m non-shielded.

1.3 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Mar. 06, 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. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Apr. 27 ~ May 09, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 12, 2019	Dec. 11, 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	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 07, 2019	Oct. 06, 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	May 18, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Apr. 30, 2020	Apr. 29, 2021
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 12, 2019	Dec. 11, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Oct. 29, 2019	Oct. 28, 2020
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 02, 2019	Dec. 01, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.4 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

1.5 Deviation from Test Standard and Measurement Procedure

None

1.6 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB
Time	±0.1%
Temperature	±0.4 ^{o}C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	21°C / 59%	Alex Tsai
Radiated Emissions	03CH01-WS	23-24°C /65%	Akun Chung Roger Lu
RF Conducted	TH01-WS	24°C / 68%	Aska Huang

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

2.2 The Worst Test Modes and Channel Details

Non-Beamforming and Beamforming mode had been covered during the pretest of radiated emission. The worst mode is Non-beamforming thus Non-beamforming was tested in radiated emission test item and record in this test report.

Non-beamforming mode

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5200	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5200	6 Mbps	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	---
	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax (HE40)	5190 / 5230/ 5270 / 5310 / 5510/ 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE160)	5250	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	---
	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	ax (HE40)	5190 / 5230/ 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE160)	5250	MCS 0	
Frequency Stability	Un-modulation	5200	---	---

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5745	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5745	6 Mbps	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	ax (HE20)	5745 / 5785 / 5825	MCS 0	
	ax (HE40)	5755 / 5795	MCS 0	
	ax (HE80)	5775	MCS 0	
	ax (HE160)	5700	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	ax (HE20)	5745 / 5785 / 5825	MCS 0	
	ax (HE40)	5755 / 5795	MCS 0	
	ax (HE80)	5775	MCS 0	
	ax (HE160)	5700	MCS 0	
Frequency Stability	Un-modulation	5785	---	---

Beamforming mode

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
RF Output Power	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	---
	ax (HE40)	5190 / 5230/ 5270 / 5310 / 5510/ 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE160)	5250	MCS 0	
Peak Power Spectral Density	ax (HE20)	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	---
	ax (HE40)	5190 / 5230/ 5270 / 5310 / 5510 / 5590 / 5670 / 5710	MCS 0	
	ax (HE80)	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
	ax (HE160)	5250	MCS 0	

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
RF Output Power	ax (HE20)	5745 / 5785 / 5825	MCS 0	---
	ax (HE40)	5755 / 5795	MCS 0	
	ax (HE80)	5775	MCS 0	
	ax (HE160)	5700	MCS 0	
Peak Power Spectral Density	ax (HE20)	5745 / 5785 / 5825	MCS 0	---
	ax (HE40)	5755 / 5795	MCS 0	
	ax (HE80)	5775	MCS 0	
	ax (HE160)	5700	MCS 0	

3 Transmitter Test Results

3.1 Conducted Emissions

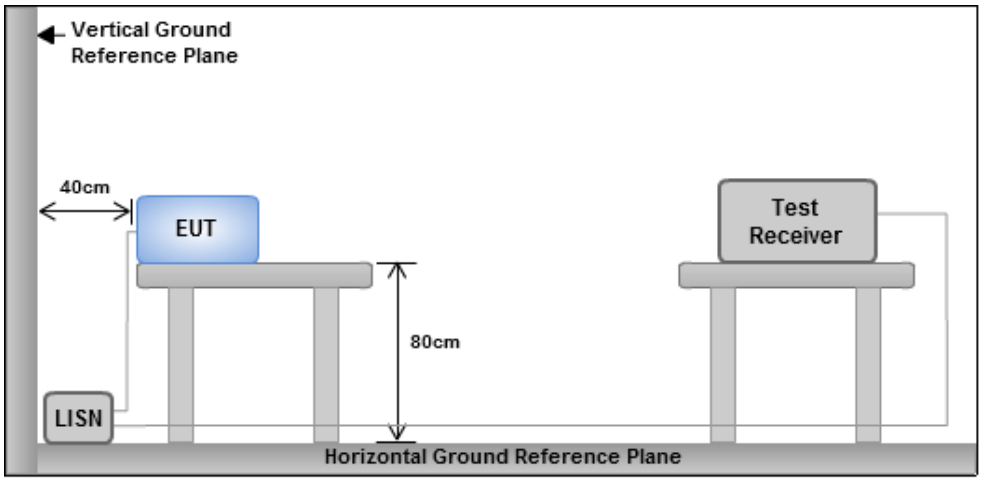
3.1.1 Limit of Conducted Emissions

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

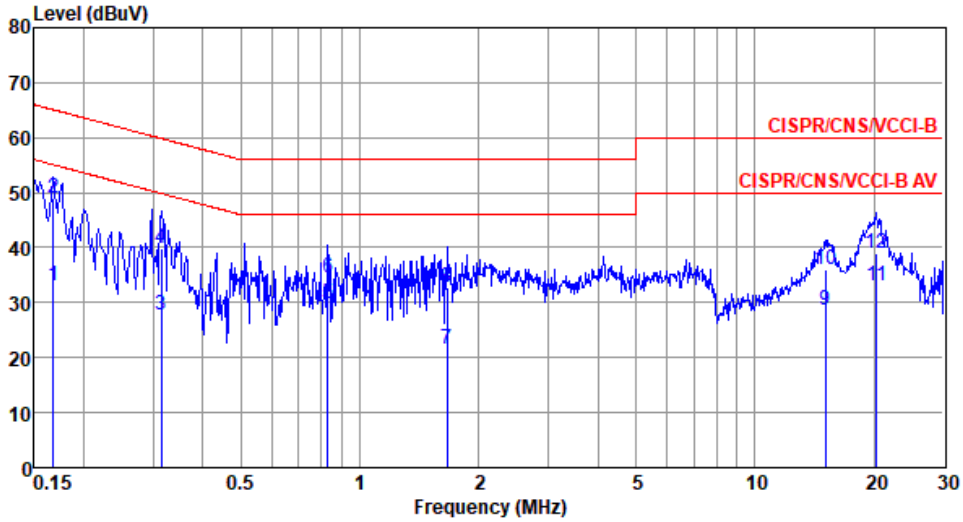
3.1.3 Test Setup



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

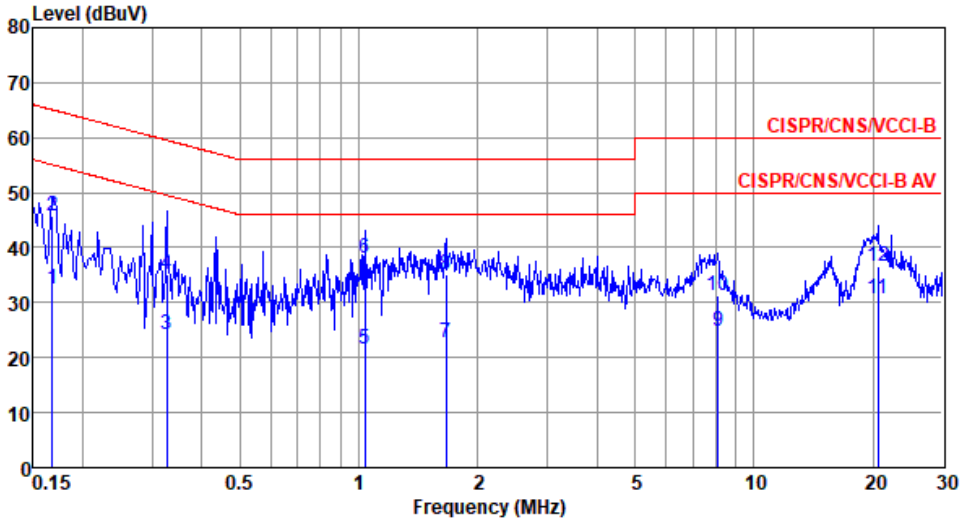
Modulation	11a	Test Freq. (MHz)	5200
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.168	33.10	55.08	-21.98	23.27	9.61	0.05	Average
2	0.168	48.92	65.08	-16.16	39.09	9.61	0.05	QP
3	0.315	27.68	49.84	-22.16	17.78	9.60	0.07	Average
4	0.315	39.92	59.84	-19.92	30.02	9.60	0.07	QP
5@	0.830	29.90	46.00	-16.10	19.87	9.61	0.11	Average
6	0.830	34.52	56.00	-21.48	24.49	9.61	0.11	QP
7	1.662	21.66	46.00	-24.34	11.55	9.62	0.16	Average
8	1.662	32.88	56.00	-23.12	22.77	9.62	0.16	QP
9	15.066	28.65	50.00	-21.35	17.84	9.73	0.60	Average
10	15.066	36.14	60.00	-23.86	25.33	9.73	0.60	QP
11	20.270	33.11	50.00	-16.89	22.11	9.73	0.66	Average
12	20.270	38.92	60.00	-21.08	27.92	9.73	0.66	QP

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

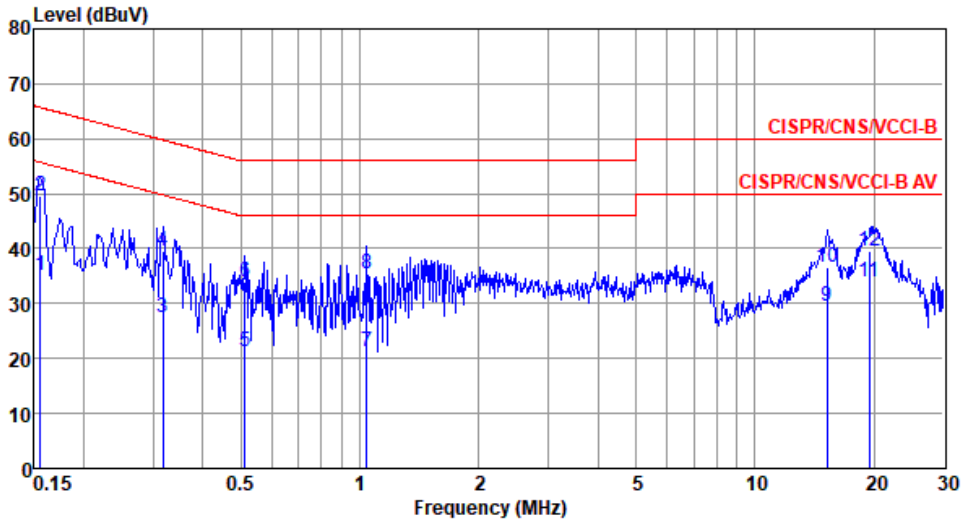
Modulation	11a	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.168	32.58	55.08	-22.50	22.82	9.58	0.05	Average
2	0.168	45.83	65.08	-19.25	36.07	9.58	0.05	QP
3	0.327	24.29	49.53	-25.24	14.49	9.57	0.07	Average
4	0.327	35.24	59.53	-24.29	25.44	9.57	0.07	QP
5	1.037	21.56	46.00	-24.44	11.66	9.58	0.12	Average
6@	1.037	38.15	56.00	-17.85	28.25	9.58	0.12	QP
7	1.662	22.60	46.00	-23.40	12.61	9.59	0.16	Average
8	1.662	35.15	56.00	-20.85	25.16	9.59	0.16	QP
9	8.105	24.77	50.00	-25.23	14.39	9.70	0.37	Average
10	8.105	31.34	60.00	-28.66	20.96	9.70	0.37	QP
11	20.594	30.70	50.00	-19.30	19.65	9.84	0.67	Average
12	20.594	36.61	60.00	-23.39	25.56	9.84	0.67	QP

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

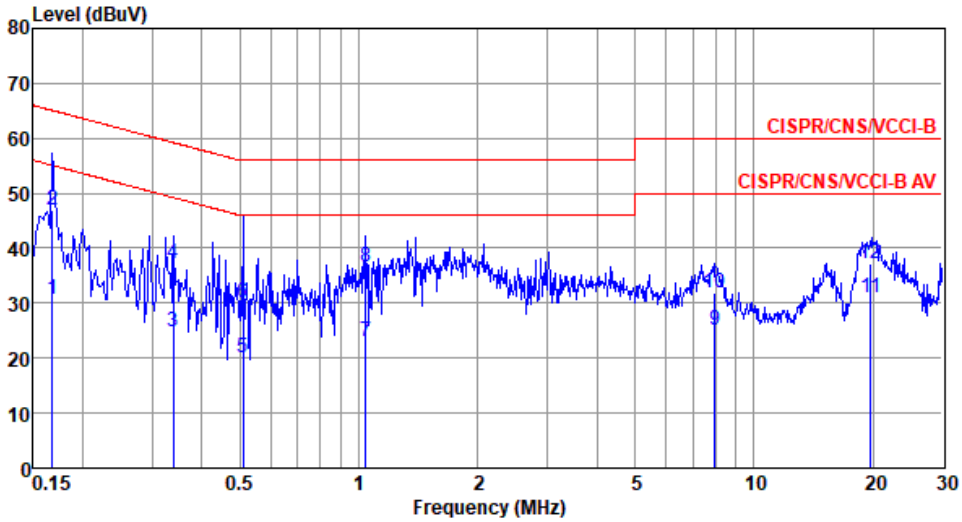
Modulation	11a	Test Freq. (MHz)	5745
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.155	35.22	55.70	-20.48	25.40	9.61	0.05	Average
2	0.155	49.50	65.70	-16.20	39.68	9.61	0.05	QP
3	0.317	27.48	49.77	-22.29	17.58	9.60	0.07	Average
4	0.317	39.62	59.77	-20.15	29.72	9.60	0.07	QP
5	0.512	21.29	46.00	-24.71	11.33	9.60	0.09	Average
6	0.512	33.88	56.00	-22.12	23.92	9.60	0.09	QP
7	1.042	21.33	46.00	-24.67	11.28	9.61	0.12	Average
8	1.042	35.44	56.00	-20.56	25.39	9.61	0.12	QP
9	15.220	29.47	50.00	-20.53	18.65	9.73	0.60	Average
10	15.220	36.74	60.00	-23.26	25.92	9.73	0.60	QP
11@	19.477	33.87	50.00	-16.13	22.89	9.73	0.65	Average
12	19.477	39.66	60.00	-20.34	28.68	9.73	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)	5745
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.168	30.66	55.08	-24.42	20.90	9.58	0.05	Average
2@	0.168	46.84	65.08	-18.24	37.08	9.58	0.05	QP
3	0.338	24.74	49.24	-24.50	14.92	9.57	0.08	Average
4	0.338	37.14	59.24	-22.10	27.32	9.57	0.08	QP
5	0.510	20.02	46.00	-25.98	10.18	9.57	0.09	Average
6	0.510	30.22	56.00	-25.78	20.38	9.57	0.09	QP
7	1.040	23.11	46.00	-22.89	13.21	9.58	0.12	Average
8	1.040	36.52	56.00	-19.48	26.62	9.58	0.12	QP
9	7.955	25.02	50.00	-24.98	14.65	9.70	0.36	Average
10	7.955	31.84	60.00	-28.16	21.47	9.70	0.36	QP
11	19.740	31.02	50.00	-18.98	20.02	9.83	0.66	Average
12	19.740	37.22	60.00	-22.78	26.22	9.83	0.66	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission Bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

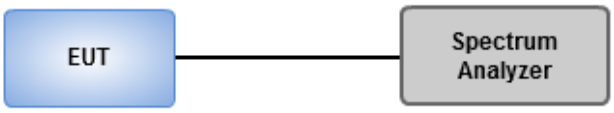
Occupied Bandwidth

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

6dB Bandwidth

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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

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	38.623M	17.077M	17M1D1D	21.232M	16.715M
802.11ax HEW20_Nss1,(MCS0)_4TX	30.58M	19.175M	19M2D1D	22.464M	18.886M
802.11ax HEW40_Nss1,(MCS0)_4TX	76.957M	37.771M	37M8D1D	39.71M	37.627M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.029M	76.99M	77M0D1D	81.449M	76.7M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.522M	16.787M	16M8D1D	21.087M	16.57M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.609M	19.03M	19M0D1D	21.522M	18.886M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.29M	37.627M	37M6D1D	39.71M	37.482M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.029M	76.99M	77M0D1D	81.739M	76.7M
5.15-5.35GHz	-	-	-	-	-
802.11ax HEW160_Nss1,(MCS0)_4TX	164.88M	155.322M	155MD1D	164.04M	154.842M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	21.667M	16.787M	16M8D1D	15.522M	13.329M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.174M	19.103M	19M1D1D	15.522M	14.457M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.29M	37.771M	37M8D1D	34.696M	33.632M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.029M	76.99M	77M0D1D	75.435M	72.938M
802.11ax HEW160_Nss1,(MCS0)_4TX	164.88M	155.442M	155MD1D	163.44M	154.867M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.304M	17.077M	17M1D1D	3.13M	3.936M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.478M	19.103M	19M1D1D	4.348M	4.457M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.681M	37.771M	37M8D1D	3.594M	3.994M
802.11ax HEW80_Nss1,(MCS0)_4TX	76.522M	76.99M	77M0D1D	3.478M	4.052M

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

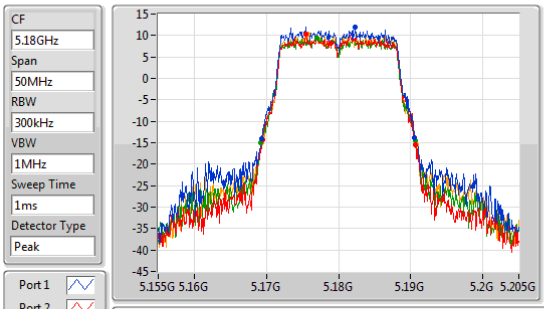
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.232M	16.715M	21.232M	16.715M	21.377M	16.715M	21.377M	16.715M
5200MHz	Pass	Inf	32.681M	17.004M	22.319M	16.715M	26.667M	16.86M	27.464M	16.787M
5240MHz	Pass	Inf	38.623M	17.077M	21.812M	16.715M	23.261M	16.787M	29.348M	16.932M
5260MHz	Pass	Inf	21.087M	16.715M	21.449M	16.787M	21.377M	16.643M	21.449M	16.715M
5300MHz	Pass	Inf	21.377M	16.643M	21.304M	16.715M	21.449M	16.643M	21.522M	16.57M
5320MHz	Pass	Inf	21.449M	16.715M	21.377M	16.787M	21.377M	16.643M	21.449M	16.643M
5500MHz	Pass	Inf	21.304M	16.643M	21.304M	16.715M	21.594M	16.643M	21.449M	16.57M
5580MHz	Pass	Inf	21.304M	16.643M	21.522M	16.787M	21.522M	16.715M	21.232M	16.643M
5700MHz	Pass	Inf	21.449M	16.715M	21.449M	16.643M	21.667M	16.787M	21.449M	16.643M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.522M	13.329M	15.696M	13.372M	15.609M	13.415M	15.522M	13.372M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.246M	3.994M	3.13M	4.052M	3.13M	3.994M	3.13M	3.936M
5745MHz	Pass	500k	16.304M	17.004M	16.304M	16.932M	16.304M	17.077M	16.304M	17.077M
5785MHz	Pass	500k	16.304M	16.932M	16.304M	16.932M	16.304M	17.077M	16.304M	16.932M
5825MHz	Pass	500k	16.304M	17.004M	16.304M	16.932M	16.304M	17.004M	16.304M	16.86M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	22.826M	19.103M	22.609M	18.886M	22.464M	18.958M	22.681M	18.886M
5200MHz	Pass	Inf	30.362M	19.175M	25M	19.03M	26.304M	19.03M	26.884M	18.958M
5240MHz	Pass	Inf	30.58M	19.175M	23.841M	19.03M	25.145M	19.03M	26.884M	18.958M
5260MHz	Pass	Inf	22.609M	19.03M	22.319M	18.958M	21.522M	19.03M	22.029M	18.886M
5300MHz	Pass	Inf	22.029M	19.03M	22.101M	19.03M	21.522M	19.03M	22.029M	18.886M
5320MHz	Pass	Inf	21.884M	19.03M	22.101M	18.958M	21.522M	18.886M	22.174M	18.886M
5500MHz	Pass	Inf	21.812M	19.103M	22.174M	18.958M	21.232M	18.886M	21.739M	18.886M
5580MHz	Pass	Inf	21.884M	19.03M	22.174M	18.958M	21.232M	18.886M	21.957M	18.958M
5700MHz	Pass	Inf	21.957M	19.03M	22.101M	18.958M	21.377M	18.958M	21.739M	18.886M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.652M	14.544M	15.913M	14.501M	15.522M	14.457M	15.826M	14.457M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.464M	4.573M	4.348M	4.573M	4.406M	4.515M	4.348M	4.457M
5745MHz	Pass	500k	18.478M	19.03M	18.188M	19.03M	18.333M	19.03M	17.971M	18.958M
5785MHz	Pass	500k	18.478M	19.103M	17.826M	19.03M	17.899M	19.03M	17.971M	18.958M
5825MHz	Pass	500k	18.333M	19.03M	17.826M	19.03M	17.899M	19.03M	17.971M	18.958M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.29M	37.627M	40.29M	37.627M	40.29M	37.627M	39.71M	37.627M
5230MHz	Pass	Inf	76.812M	37.771M	40.29M	37.627M	76.957M	37.771M	64.348M	37.771M
5270MHz	Pass	Inf	40.145M	37.482M	40.29M	37.627M	40.145M	37.482M	39.71M	37.627M
5310MHz	Pass	Inf	40.145M	37.482M	40.145M	37.627M	40.145M	37.627M	39.71M	37.627M
5510MHz	Pass	Inf	40.29M	37.627M	40.29M	37.627M	40.145M	37.627M	39.71M	37.627M

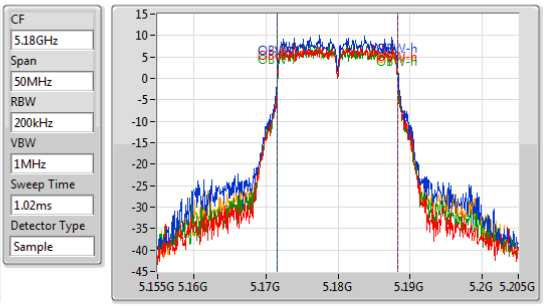
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5590MHz	Pass	Inf	40.29M	37.771M	40.29M	37.627M	40.145M	37.627M	39.71M	37.627M
5670MHz	Pass	Inf	40.145M	37.627M	40.145M	37.627M	40.145M	37.627M	39.71M	37.627M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.101M	33.632M	34.899M	33.632M	35M	33.734M	34.696M	33.632M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.768M	3.994M	3.768M	3.994M	3.768M	3.994M	3.594M	3.994M
5755MHz	Pass	500k	37.391M	37.771M	37.681M	37.771M	37.681M	37.627M	36.522M	37.627M
5795MHz	Pass	500k	37.681M	37.771M	37.681M	37.771M	37.681M	37.771M	36.522M	37.627M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.739M	76.7M	81.739M	76.7M	82.029M	76.7M	81.449M	76.99M
5290MHz	Pass	Inf	81.739M	76.7M	82.029M	76.99M	81.739M	76.7M	81.739M	76.99M
5530MHz	Pass	Inf	81.739M	76.99M	82.029M	76.99M	81.739M	76.7M	81.449M	76.99M
5610MHz	Pass	Inf	81.739M	76.99M	82.029M	76.99M	82.029M	76.99M	81.739M	76.99M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.435M	72.938M	75.435M	72.938M	75.87M	72.938M	75.652M	72.938M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.478M	4.052M	3.768M	4.052M	3.478M	4.052M	3.71M	4.052M
5775MHz	Pass	500k	75.942M	76.99M	76.522M	76.99M	76.232M	76.99M	75.362M	76.99M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.44M	77.481M	81.84M	77.601M	82.08M	77.481M	81.96M	77.721M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.32M	77.601M	82.2M	77.481M	82.08M	77.361M	82.92M	77.601M
5570MHz	Pass	Inf	164.88M	154.867M	163.68M	155.442M	163.44M	155.442M	163.68M	155.442M

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

5180MHz

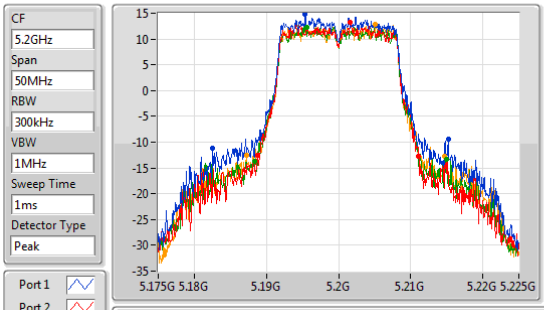


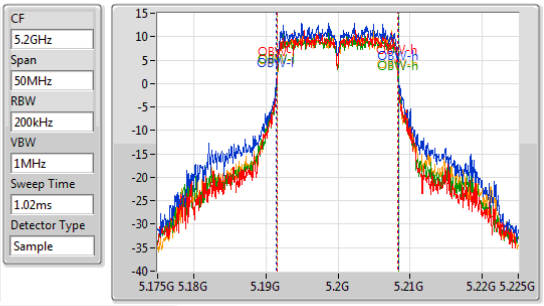


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.232M	5.169348G	5.19058G	16.715M	5.171606G	5.188321G	Inf	1
21.232M	5.16942G	5.190652G	16.715M	5.171606G	5.188321G	Inf	2
21.377M	5.169275G	5.190652G	16.715M	5.171606G	5.188321G	Inf	3
21.377M	5.169348G	5.190725G	16.715M	5.171606G	5.188321G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

5200MHz

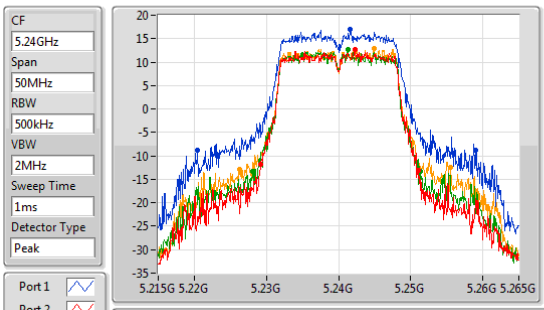


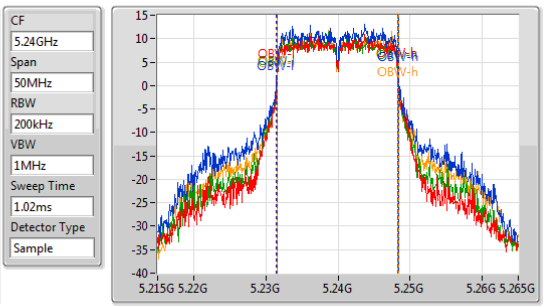


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.681M	5.182536G	5.215217G	17.004M	5.191462G	5.208466G	Inf	1
22.319M	5.188768G	5.211087G	16.715M	5.191606G	5.208321G	Inf	2
26.667M	5.188333G	5.215G	16.86M	5.191534G	5.208394G	Inf	3
27.464M	5.187246G	5.21471G	16.787M	5.191606G	5.208394G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

5240MHz

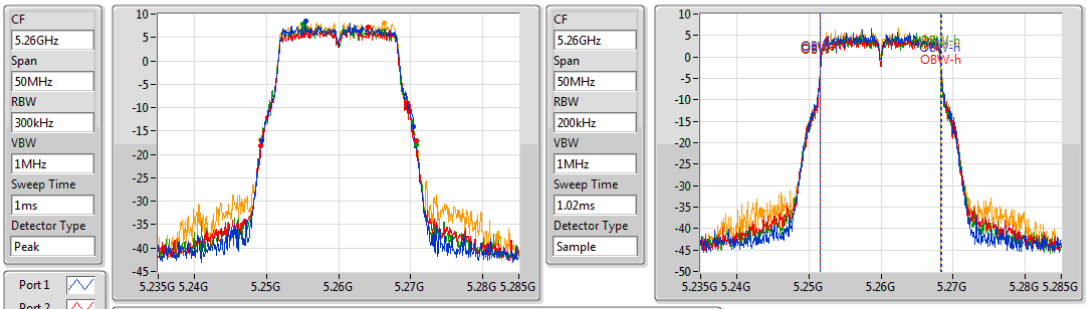




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.623M	5.220435G	5.259058G	17.077M	5.231389G	5.248466G	Inf	1
21.812M	5.229203G	5.251014G	16.715M	5.231606G	5.248321G	Inf	2
23.261M	5.228116G	5.251377G	16.787M	5.231534G	5.248321G	Inf	3
29.348M	5.226232G	5.25558G	16.932M	5.231534G	5.248466G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

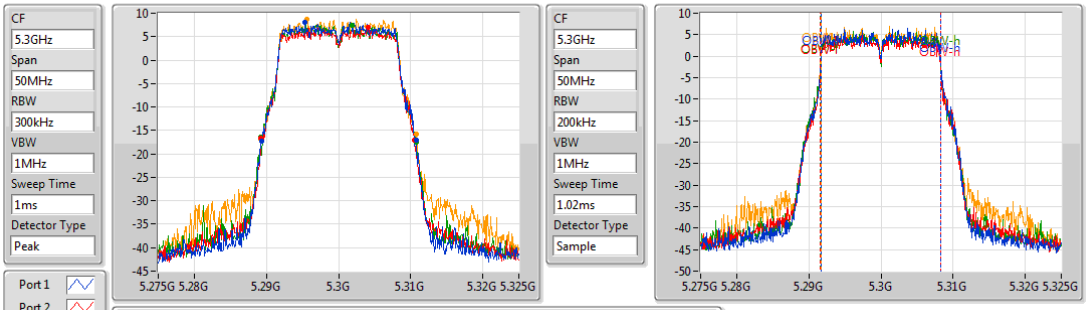
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.087M	5.249348G	5.270435G	16.715M	5.251606G	5.268321G	Inf	1
21.449M	5.249275G	5.270725G	16.787M	5.251606G	5.268394G	Inf	2
21.377M	5.249348G	5.270725G	16.643M	5.251606G	5.268249G	Inf	3
21.449M	5.249275G	5.270725G	16.715M	5.251606G	5.268321G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

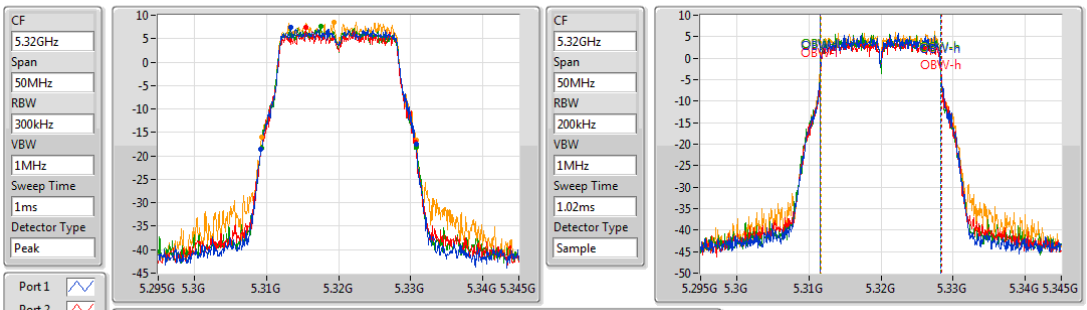
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.377M	5.289348G	5.310725G	16.643M	5.291679G	5.308321G	Inf	1
21.304M	5.289275G	5.31058G	16.715M	5.291606G	5.308321G	Inf	2
21.449M	5.289275G	5.310725G	16.643M	5.291606G	5.308249G	Inf	3
21.522M	5.289275G	5.310797G	16.57M	5.291679G	5.308249G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

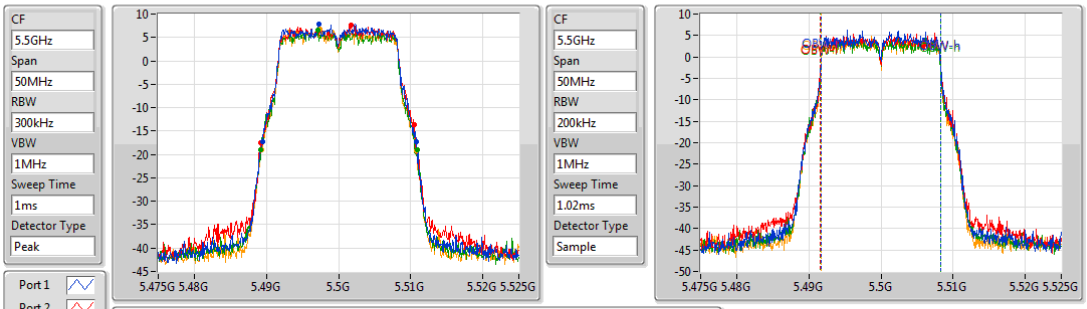
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.449M	5.309275G	5.330725G	16.715M	5.311606G	5.328321G	Inf	1
21.377M	5.309275G	5.330652G	16.787M	5.311606G	5.328394G	Inf	2
21.377M	5.309348G	5.330725G	16.643M	5.311606G	5.328249G	Inf	3
21.449M	5.309348G	5.330797G	16.643M	5.311679G	5.328321G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

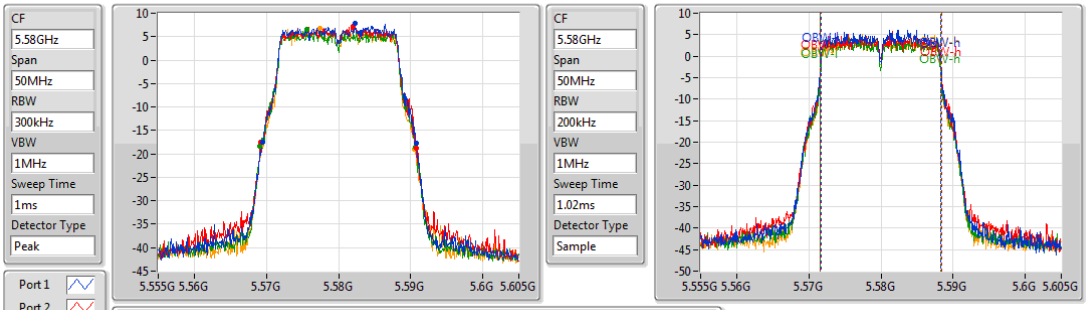
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.304M	5.48942G	5.510725G	16.643M	5.491679G	5.508321G	Inf	1
21.304M	5.489275G	5.51058G	16.715M	5.491606G	5.508321G	Inf	2
21.594M	5.489275G	5.51087G	16.643M	5.491606G	5.508249G	Inf	3
21.449M	5.489348G	5.510797G	16.57M	5.491679G	5.508249G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

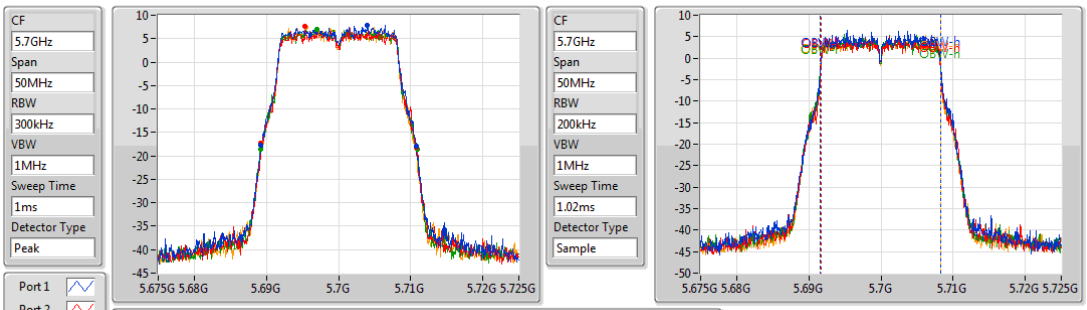
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.304M	5.56942G	5.590725G	16.643M	5.571679G	5.588321G	Inf	1
21.522M	5.569203G	5.590725G	16.787M	5.571606G	5.588394G	Inf	2
21.522M	5.56913G	5.590652G	16.715M	5.571606G	5.588321G	Inf	3
21.232M	5.569348G	5.59058G	16.643M	5.571606G	5.588249G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

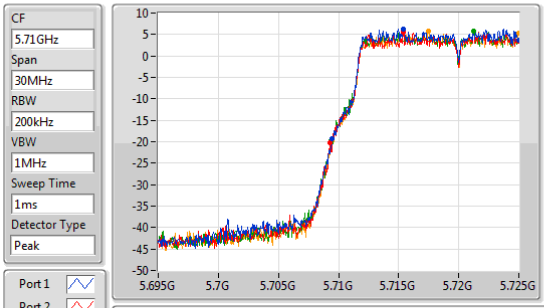
5700MHz

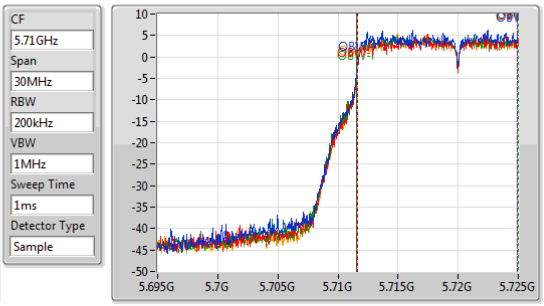


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.449M	5.689275G	5.710725G	16.715M	5.691606G	5.708321G	Inf	1
21.449M	5.689275G	5.710725G	16.643M	5.691679G	5.708321G	Inf	2
21.667M	5.689203G	5.71087G	16.787M	5.691534G	5.708321G	Inf	3
21.449M	5.689348G	5.710797G	16.643M	5.691606G	5.708249G	Inf	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5720MHz Straddle 5.47-5.725GHz

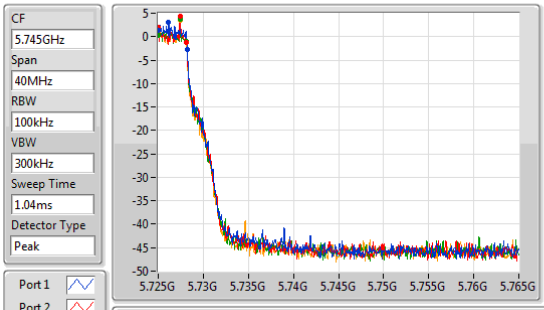


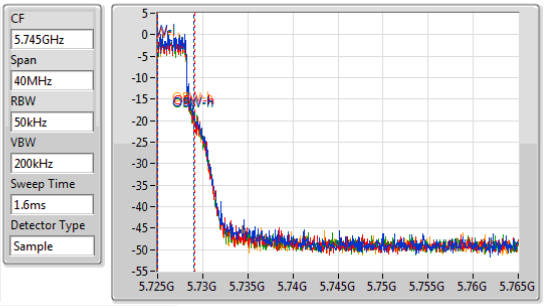


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.522M	5.709478G	5.725G	13.329M	5.711606G	5.724935G	Inf	1
15.696M	5.709304G	5.725G	13.372M	5.711563G	5.724935G	Inf	2
15.609M	5.709391G	5.725G	13.415M	5.711563G	5.724978G	Inf	3
15.522M	5.709478G	5.725G	13.372M	5.711606G	5.724978G	Inf	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5720MHz Straddle 5.725-5.85GHz

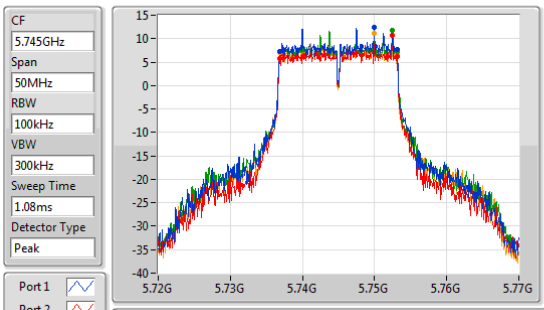


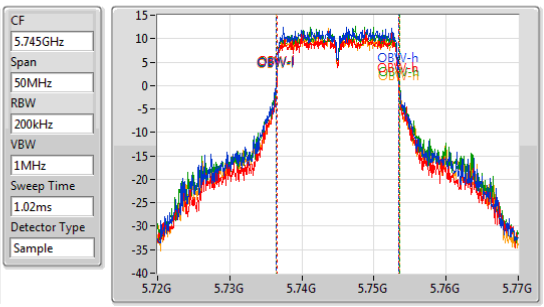


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.246M	5.725G	5.728246G	3.994M	5.725029G	5.729023G	500k	1
3.13M	5.725G	5.72813G	4.052M	5.725029G	5.729081G	500k	2
3.13M	5.725G	5.72813G	3.994M	5.725029G	5.729023G	500k	3
3.13M	5.725G	5.72813G	3.936M	5.725029G	5.728965G	500k	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5745MHz

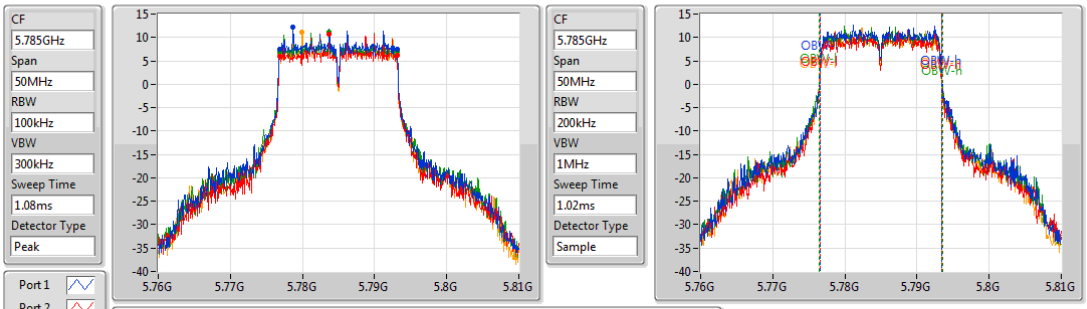




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.736812G	5.753116G	17.004M	5.736462G	5.753466G	500k	1
16.304M	5.736812G	5.753116G	16.932M	5.736534G	5.753466G	500k	2
16.304M	5.736812G	5.753116G	17.077M	5.736462G	5.753538G	500k	3
16.304M	5.736812G	5.753116G	17.077M	5.736462G	5.753538G	500k	4

802.11a_Nss1,(6Mbps)_4TX EBW

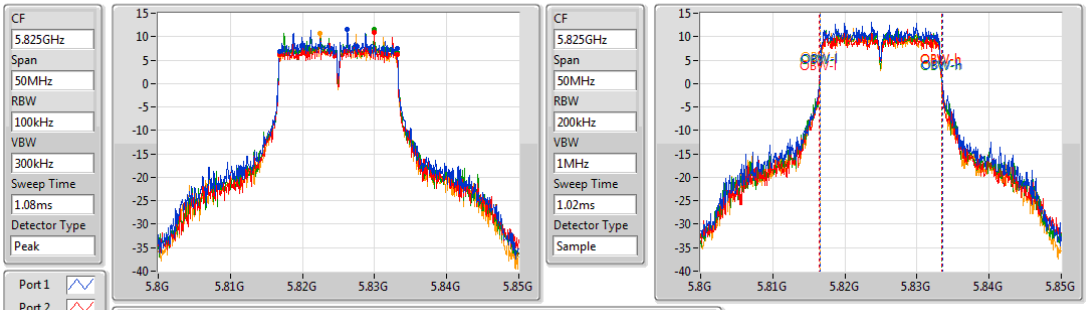
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.776812G	5.793116G	16.932M	5.776534G	5.793466G	500k	1
16.304M	5.776812G	5.793116G	16.932M	5.776534G	5.793466G	500k	2
16.304M	5.776812G	5.793116G	17.077M	5.776462G	5.793538G	500k	3
16.304M	5.776812G	5.793116G	16.932M	5.776462G	5.793394G	500k	4

802.11a_Nss1,(6Mbps)_4TX EBW

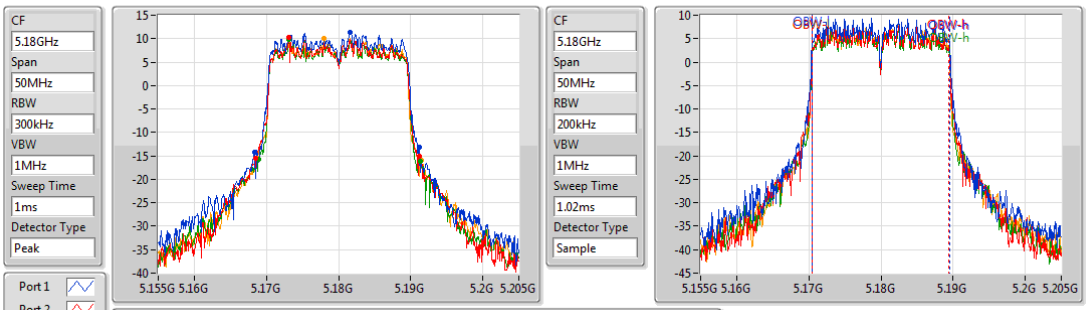
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.816812G	5.833116G	17.004M	5.816534G	5.833538G	500k	1
16.304M	5.816812G	5.833116G	16.932M	5.816462G	5.833394G	500k	2
16.304M	5.816812G	5.833116G	17.004M	5.816462G	5.833466G	500k	3
16.304M	5.816812G	5.833116G	16.86M	5.816534G	5.833394G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

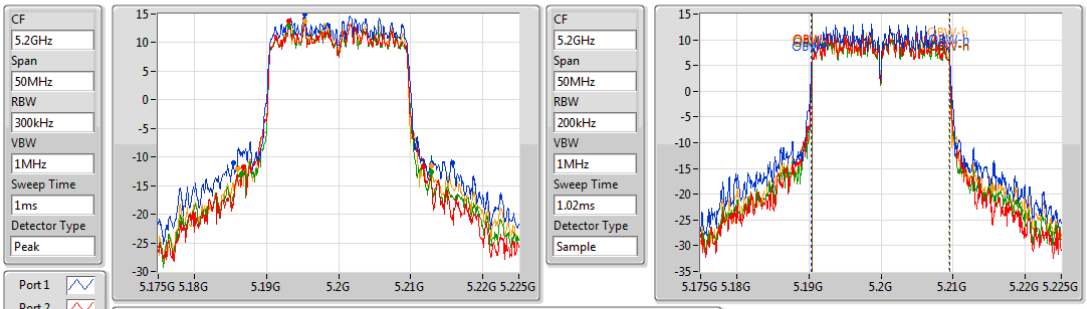
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.826M	5.168333G	5.191159G	19.103M	5.170449G	5.189551G	Inf	1
22.609M	5.168551G	5.191159G	18.886M	5.170521G	5.189407G	Inf	2
22.464M	5.168913G	5.191377G	18.958M	5.170521G	5.189479G	Inf	3
22.681M	5.168841G	5.191522G	18.886M	5.170521G	5.189407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

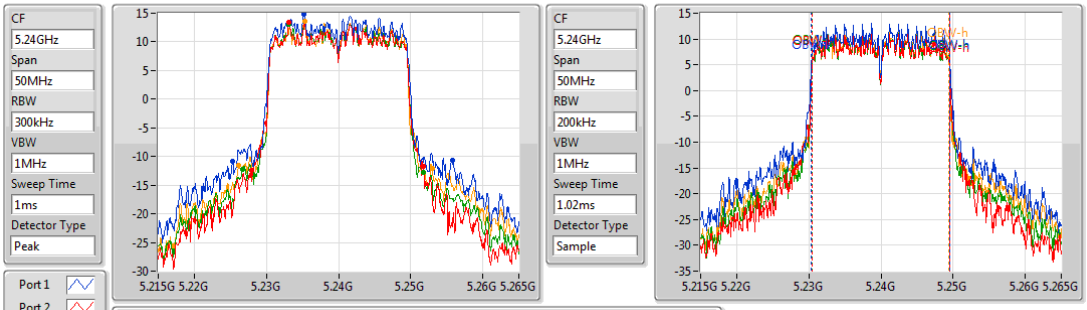
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.362M	5.185435G	5.215797G	19.175M	5.190376G	5.209551G	Inf	1
25M	5.186812G	5.211812G	19.03M	5.190449G	5.209479G	Inf	2
26.304M	5.186522G	5.212826G	19.03M	5.190449G	5.209479G	Inf	3
26.884M	5.186014G	5.212899G	18.958M	5.190449G	5.209407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

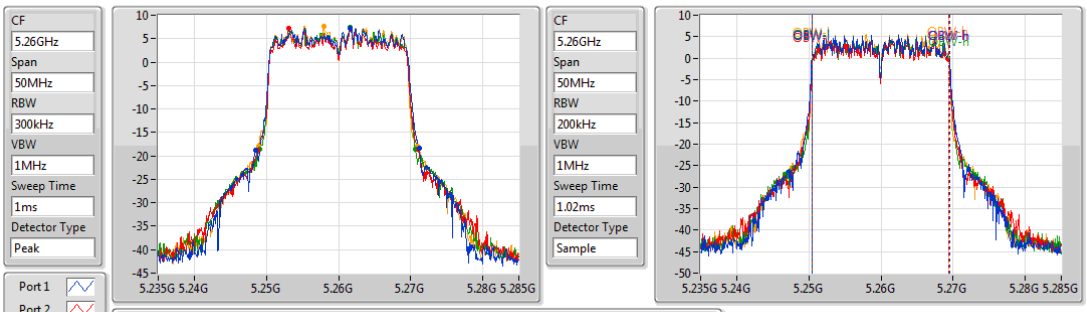
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.58M	5.22529G	5.25587G	19.175M	5.230376G	5.249551G	Inf	1
23.841M	5.227971G	5.251812G	19.03M	5.230449G	5.249479G	Inf	2
25.145M	5.226667G	5.251812G	19.03M	5.230449G	5.249479G	Inf	3
26.884M	5.226087G	5.252971G	18.958M	5.230449G	5.249407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

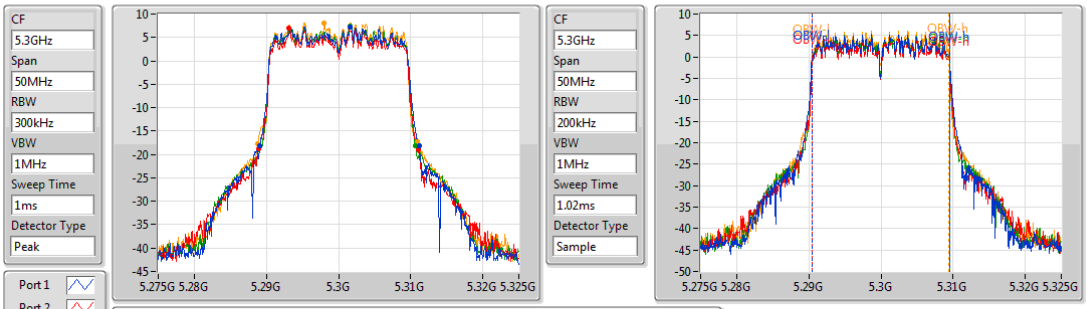
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.609M	5.248551G	5.271159G	19.03M	5.250449G	5.269479G	Inf	1
22.319M	5.248768G	5.271087G	18.958M	5.250449G	5.269407G	Inf	2
21.522M	5.24913G	5.270652G	19.03M	5.250449G	5.269479G	Inf	3
22.029M	5.248913G	5.270942G	18.886M	5.250521G	5.269407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

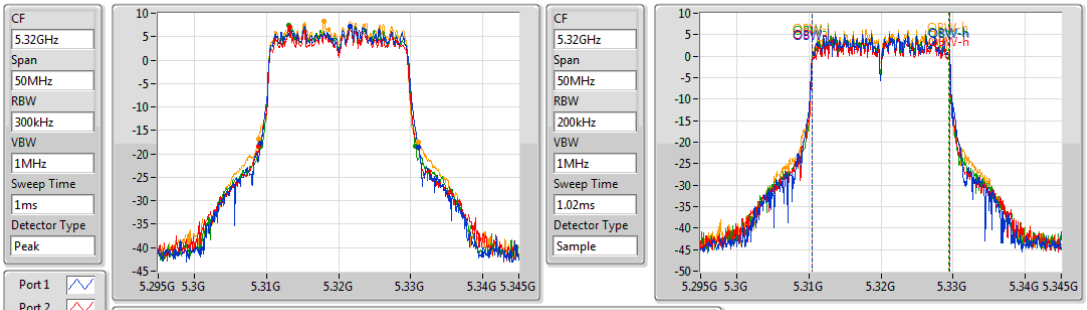
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.029M	5.28913G	5.311159G	19.03M	5.290449G	5.309479G	Inf	1
22.101M	5.288913G	5.311014G	19.03M	5.290449G	5.309479G	Inf	2
21.522M	5.28913G	5.310652G	19.03M	5.290449G	5.309479G	Inf	3
22.029M	5.288841G	5.31087G	18.886M	5.290521G	5.309407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

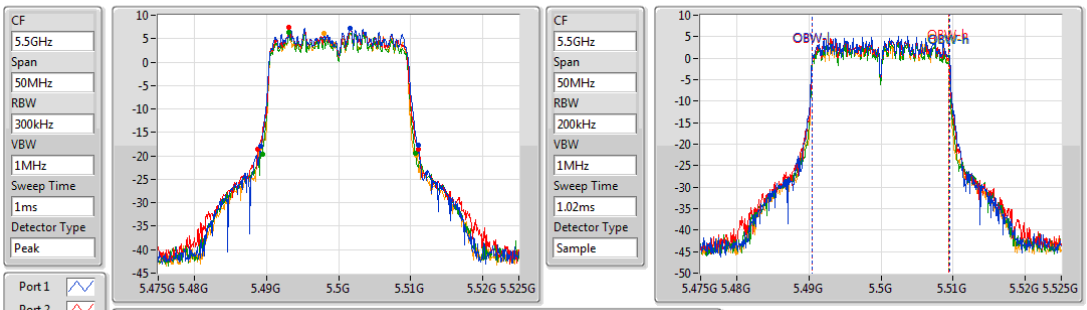
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.884M	5.309203G	5.331087G	19.03M	5.310449G	5.329479G	Inf	1
22.101M	5.308913G	5.331014G	18.958M	5.310521G	5.329479G	Inf	2
21.522M	5.30913G	5.330652G	18.886M	5.310521G	5.329407G	Inf	3
22.174M	5.308913G	5.331087G	18.886M	5.310521G	5.329407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

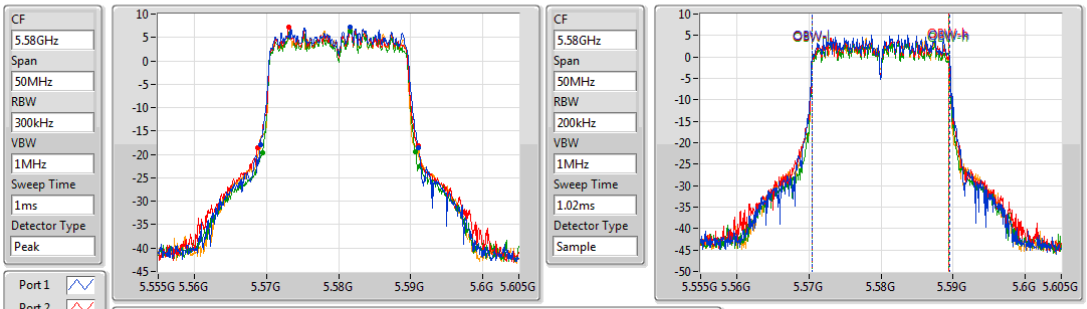
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.812M	5.489203G	5.511014G	19.103M	5.490449G	5.509551G	Inf	1
22.174M	5.488841G	5.511014G	18.958M	5.490449G	5.509407G	Inf	2
21.232M	5.48942G	5.510652G	18.886M	5.490521G	5.509407G	Inf	3
21.739M	5.489058G	5.510797G	18.886M	5.490521G	5.509407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

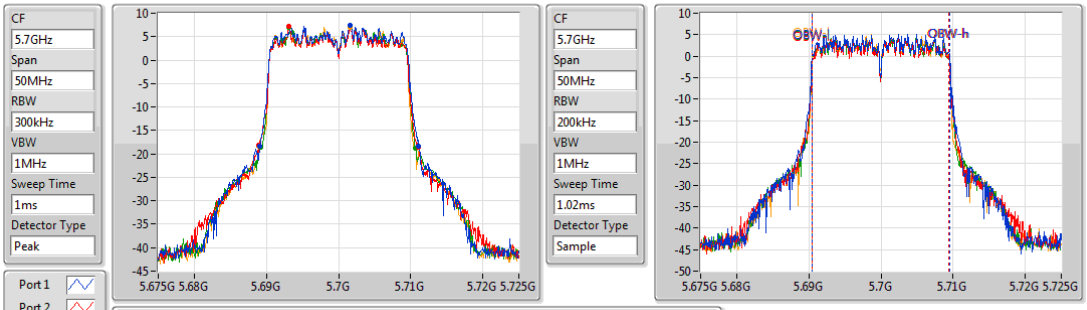
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.884M	5.569203G	5.591087G	19.03M	5.570449G	5.589479G	Inf	1
22.174M	5.568841G	5.591014G	18.958M	5.570449G	5.589407G	Inf	2
21.232M	5.56942G	5.590652G	18.886M	5.570521G	5.589407G	Inf	3
21.957M	5.568986G	5.590942G	18.958M	5.570449G	5.589407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

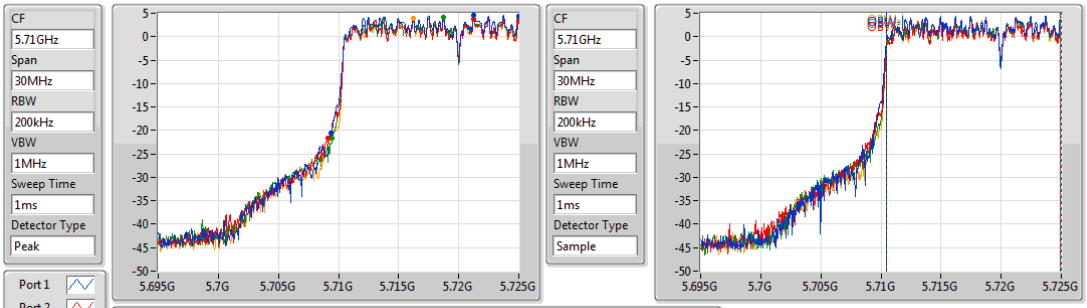
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.957M	5.68913G	5.711087G	19.03M	5.690449G	5.709479G	Inf	1
22.101M	5.688986G	5.711087G	18.958M	5.690449G	5.709407G	Inf	2
21.377M	5.689275G	5.710652G	18.958M	5.690449G	5.709407G	Inf	3
21.739M	5.688986G	5.710725G	18.886M	5.690521G	5.709407G	Inf	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

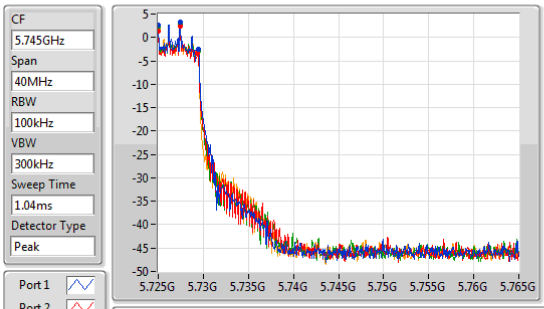
5720MHz Straddle 5.47-5.725GHz

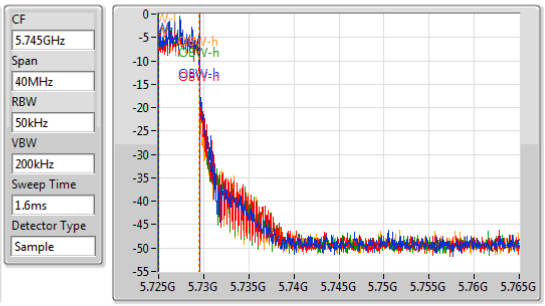


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.652M	5.709348G	5.725G	14.544M	5.710434G	5.724978G	Inf	1
15.913M	5.709087G	5.725G	14.501M	5.710434G	5.724935G	Inf	2
15.522M	5.709478G	5.725G	14.457M	5.710478G	5.724935G	Inf	3
15.826M	5.709174G	5.725G	14.457M	5.710478G	5.724935G	Inf	4

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

5720MHz Straddle 5.725-5.85GHz

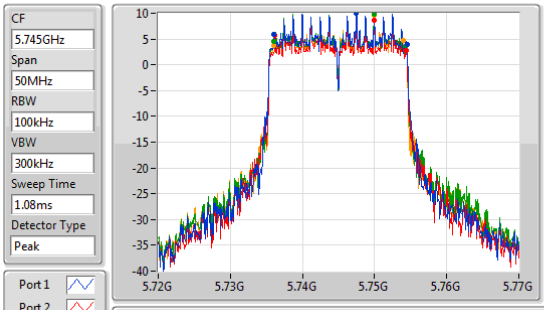


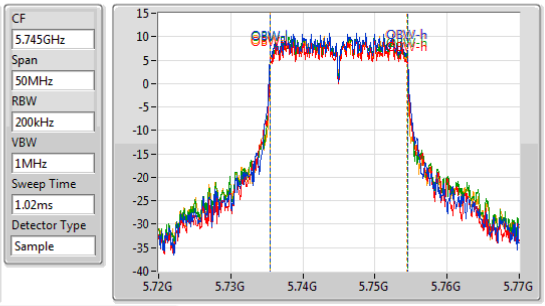


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.464M	5.725G	5.729464G	4.573M	5.725029G	5.729602G	500k	1
4.348M	5.725G	5.729348G	4.573M	5.725029G	5.729602G	500k	2
4.406M	5.725G	5.729406G	4.515M	5.725029G	5.729544G	500k	3
4.348M	5.725G	5.729348G	4.457M	5.725029G	5.729486G	500k	4

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

5745MHz

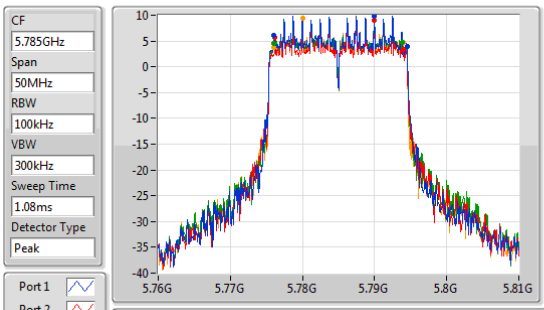


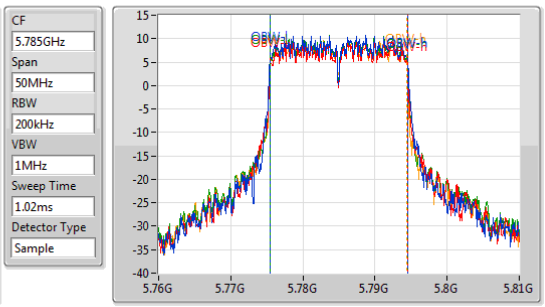


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.478M	5.736014G	5.754493G	19.03M	5.735449G	5.754479G	500k	1
18.188M	5.736159G	5.754348G	19.03M	5.735449G	5.754479G	500k	2
18.333M	5.736014G	5.754348G	19.03M	5.735449G	5.754479G	500k	3
17.971M	5.736014G	5.753986G	18.958M	5.735449G	5.754407G	500k	4

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

5785MHz

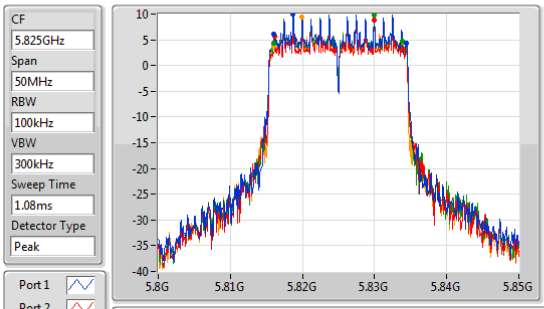


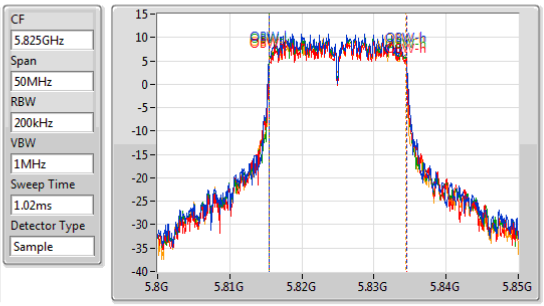


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.478M	5.776014G	5.794493G	19.103M	5.775449G	5.794551G	500k	1
17.826M	5.776159G	5.793986G	19.03M	5.775449G	5.794479G	500k	2
17.899M	5.776014G	5.793913G	19.03M	5.775449G	5.794479G	500k	3
17.971M	5.776014G	5.793986G	18.958M	5.775449G	5.794407G	500k	4

802.11ax HEW20_Nss1,(MCS0)_4TX EBW

5825MHz

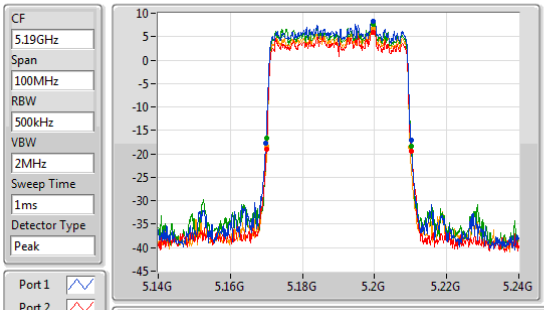


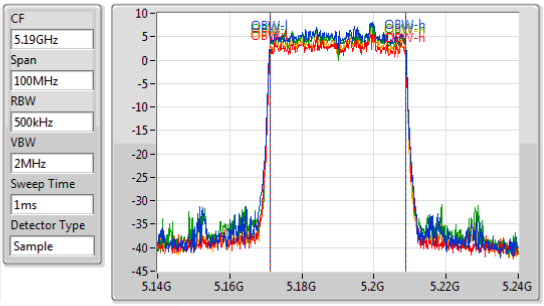


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.333M	5.816014G	5.834348G	19.03M	5.815449G	5.834479G	500k	1
17.826M	5.816159G	5.833986G	19.03M	5.815449G	5.834479G	500k	2
17.899M	5.816014G	5.833913G	19.03M	5.815449G	5.834479G	500k	3
17.971M	5.816014G	5.833986G	18.958M	5.815449G	5.834407G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

5190MHz

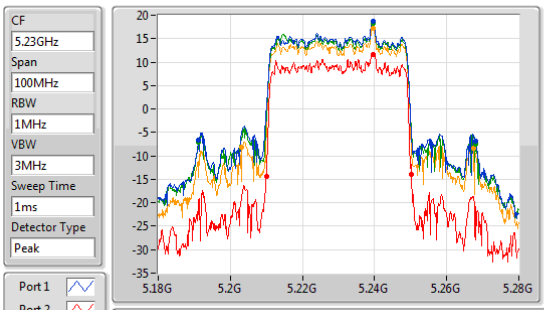


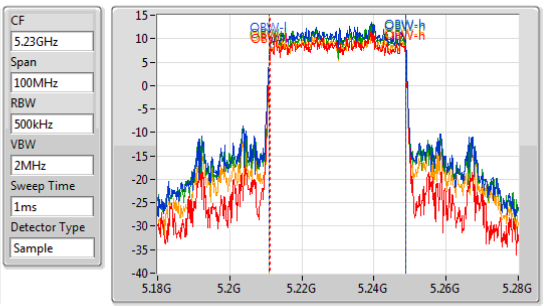


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.29M	5.169855G	5.210145G	37.627M	5.171187G	5.208813G	Inf	1
40.29M	5.17G	5.21029G	37.627M	5.171187G	5.208813G	Inf	2
40.29M	5.17G	5.21029G	37.627M	5.171187G	5.208813G	Inf	3
39.71M	5.170145G	5.209855G	37.627M	5.171187G	5.208813G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

5230MHz

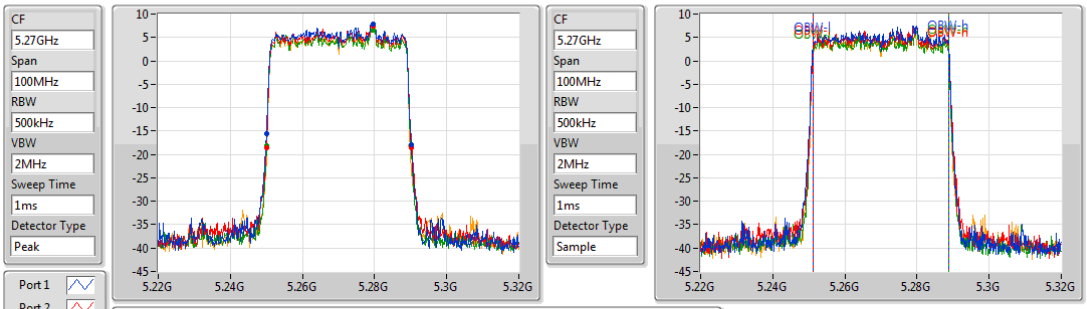




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.812M	5.191159G	5.267971G	37.771M	5.211042G	5.248813G	Inf	1
40.29M	5.21G	5.25029G	37.627M	5.211187G	5.248813G	Inf	2
76.957M	5.191159G	5.268116G	37.771M	5.211042G	5.248813G	Inf	3
64.348M	5.203188G	5.267536G	37.771M	5.211042G	5.248813G	Inf	4

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

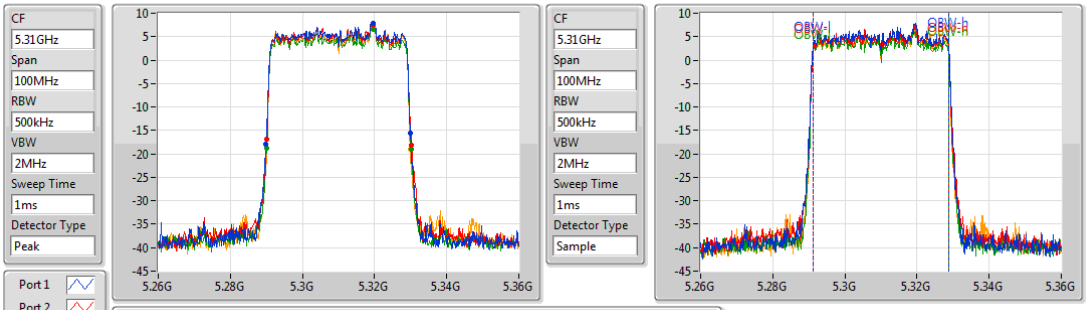
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.145M	5.25G	5.290145G	37.482M	5.251187G	5.288669G	Inf	1
40.29M	5.25G	5.29029G	37.627M	5.251187G	5.288813G	Inf	2
40.145M	5.25G	5.290145G	37.482M	5.251187G	5.288669G	Inf	3
39.71M	5.250145G	5.289855G	37.627M	5.251187G	5.288813G	Inf	4

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

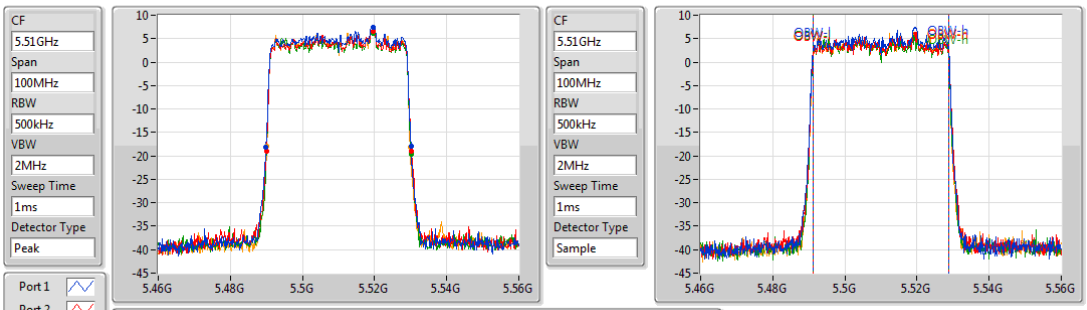
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.145M	5.289855G	5.33G	37.482M	5.291187G	5.328669G	Inf	1
40.145M	5.290145G	5.33029G	37.627M	5.291187G	5.328813G	Inf	2
40.145M	5.29G	5.330145G	37.627M	5.291187G	5.328813G	Inf	3
39.71M	5.290145G	5.329855G	37.627M	5.291187G	5.328813G	Inf	4

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

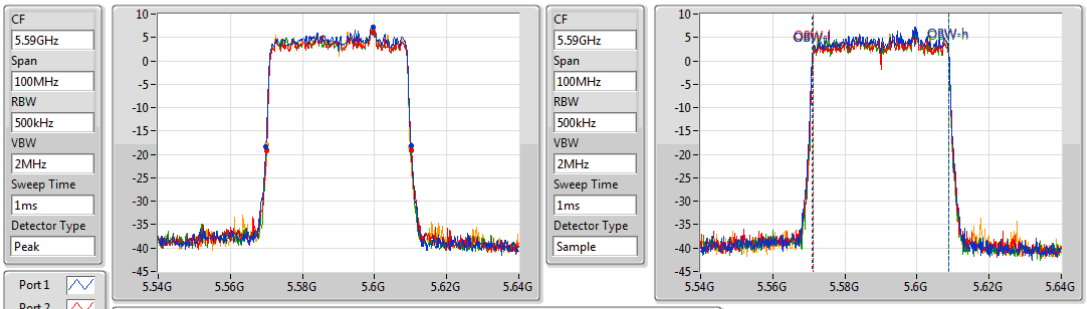
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.29M	5.489855G	5.530145G	37.627M	5.491187G	5.528813G	Inf	1
40.29M	5.49G	5.53029G	37.627M	5.491187G	5.528813G	Inf	2
40.145M	5.49G	5.530145G	37.627M	5.491187G	5.528813G	Inf	3
39.71M	5.490145G	5.529855G	37.627M	5.491187G	5.528813G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

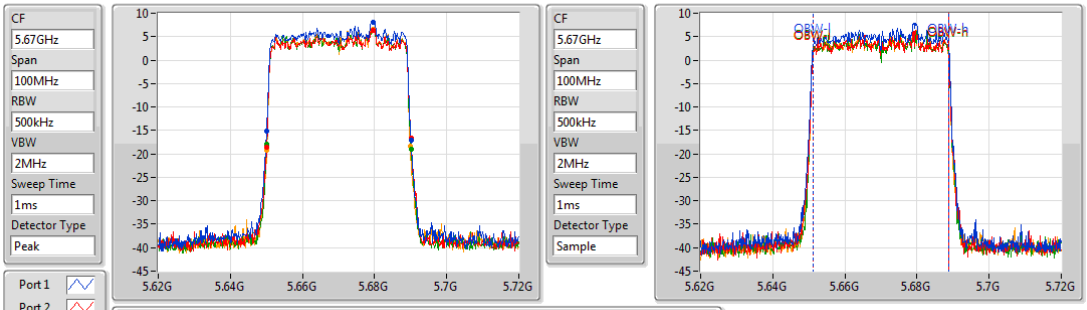
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.29M	5.569855G	5.610145G	37.771M	5.571042G	5.608813G	Inf	1
40.29M	5.57G	5.61029G	37.627M	5.571187G	5.608813G	Inf	2
40.145M	5.57G	5.610145G	37.627M	5.571187G	5.608813G	Inf	3
39.71M	5.570145G	5.609855G	37.627M	5.571187G	5.608813G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

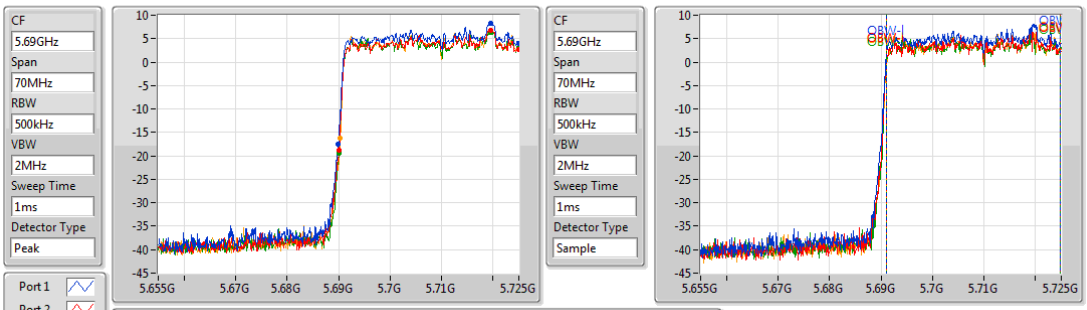
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.145M	5.65G	5.690145G	37.627M	5.651187G	5.688813G	Inf	1
40.145M	5.65G	5.690145G	37.627M	5.651187G	5.688813G	Inf	2
40.145M	5.65G	5.690145G	37.627M	5.651187G	5.688813G	Inf	3
39.71M	5.650145G	5.689855G	37.627M	5.651187G	5.688813G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

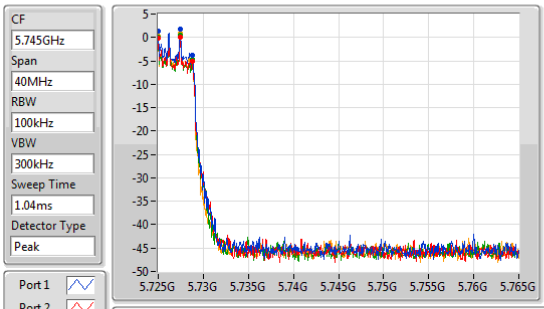
5710MHz Straddle 5.47-5.725GHz

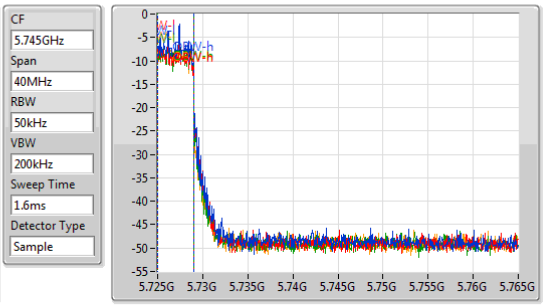


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.101M	5.689899G	5.725G	33.632M	5.691114G	5.724747G	Inf	1
34.899M	5.690101G	5.725G	33.632M	5.691114G	5.724747G	Inf	2
35M	5.69G	5.725G	33.734M	5.691114G	5.724848G	Inf	3
34.696M	5.690304G	5.725G	33.632M	5.691114G	5.724747G	Inf	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

5710MHz Straddle 5.725-5.85GHz

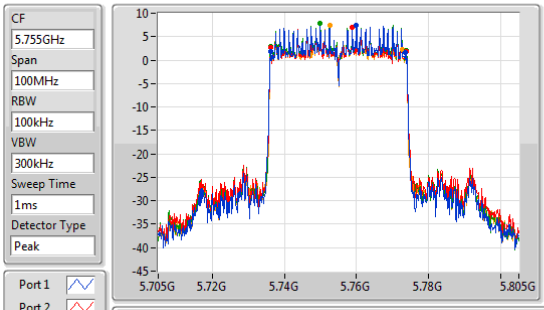


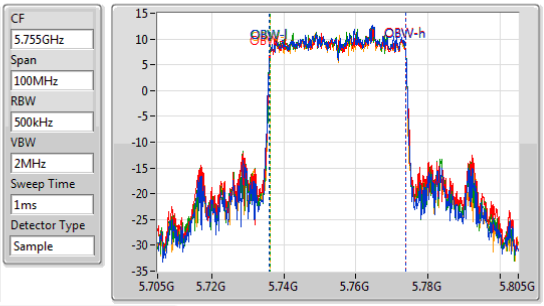


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.768M	5.725G	5.728768G	3.994M	5.725029G	5.729023G	500k	1
3.768M	5.725G	5.728768G	3.994M	5.725029G	5.729023G	500k	2
3.768M	5.725G	5.728768G	3.994M	5.725029G	5.729023G	500k	3
3.594M	5.725G	5.728594G	3.994M	5.725029G	5.729023G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

5755MHz

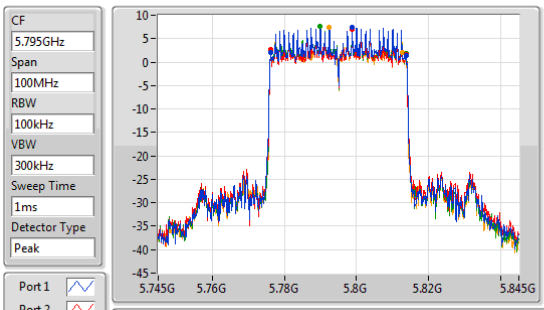


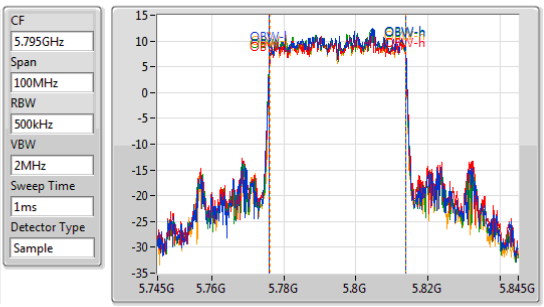


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.391M	5.736159G	5.773551G	37.771M	5.736042G	5.773813G	500k	1
37.681M	5.736159G	5.773841G	37.771M	5.736042G	5.773813G	500k	2
37.681M	5.736159G	5.773841G	37.627M	5.736187G	5.773813G	500k	3
36.522M	5.736159G	5.772681G	37.627M	5.736187G	5.773813G	500k	4

802.11ax HEW40_Nss1,(MCS0)_4TX EBW

5795MHz

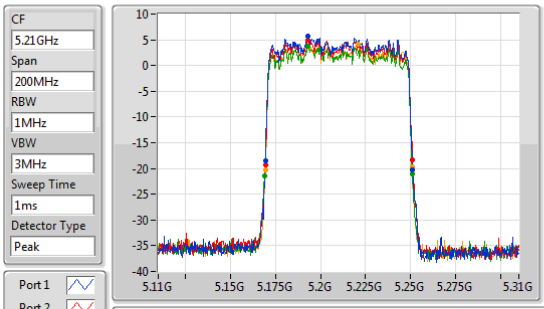


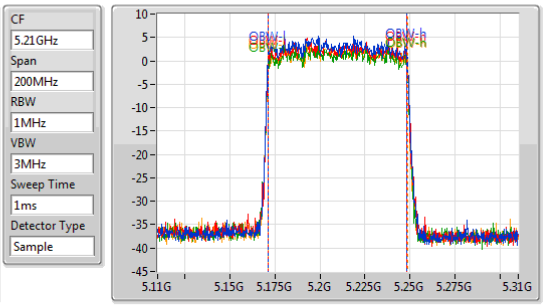


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.681M	5.776159G	5.813841G	37.771M	5.776042G	5.813813G	500k	1
37.681M	5.776159G	5.813841G	37.771M	5.776042G	5.813813G	500k	2
37.681M	5.776159G	5.813841G	37.771M	5.776042G	5.813813G	500k	3
36.522M	5.776159G	5.812681G	37.627M	5.776187G	5.813813G	500k	4

802.11ax HEW80_Nss1,(MCS0)_4TX EBW

5210MHz

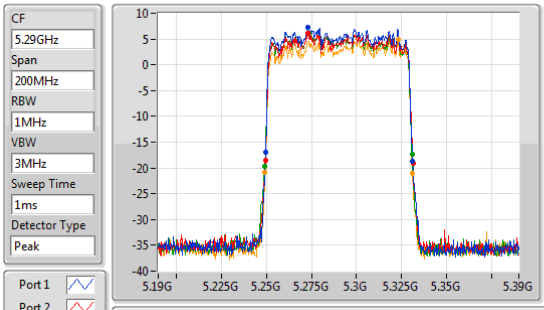


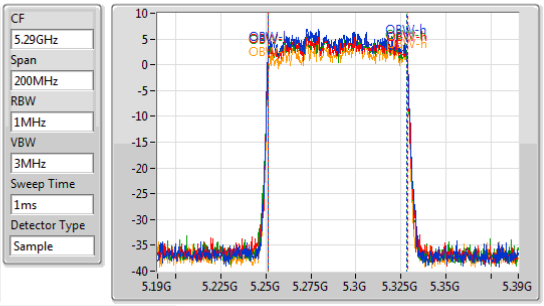


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.16942G	5.251159G	76.7M	5.171505G	5.248205G	Inf	1
81.739M	5.16942G	5.251159G	76.7M	5.171505G	5.248205G	Inf	2
82.029M	5.168841G	5.25087G	76.7M	5.171505G	5.248205G	Inf	3
81.449M	5.16942G	5.25087G	76.99M	5.171505G	5.248495G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX EBW

5290MHz

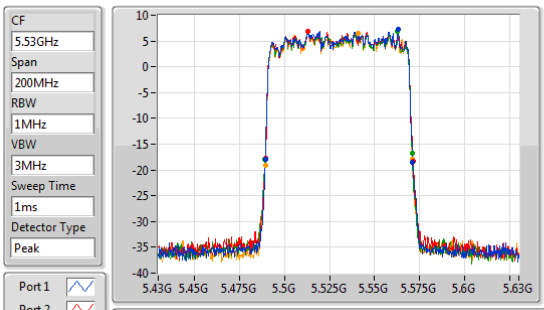


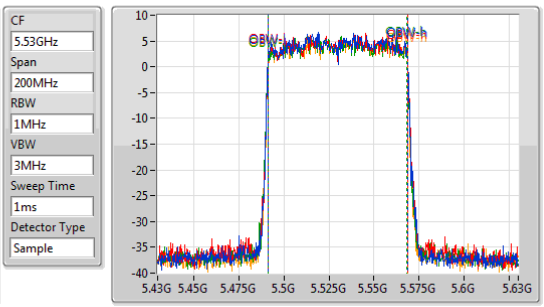


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.24942G	5.331159G	76.7M	5.251505G	5.328205G	Inf	1
82.029M	5.24942G	5.331449G	76.99M	5.251505G	5.328495G	Inf	2
81.739M	5.24913G	5.33087G	76.7M	5.251505G	5.328205G	Inf	3
81.739M	5.24913G	5.33087G	76.99M	5.251505G	5.328495G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX EBW

5530MHz

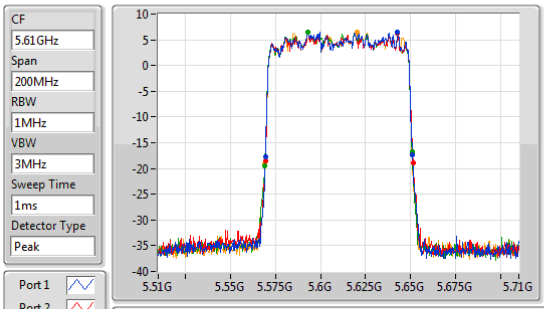


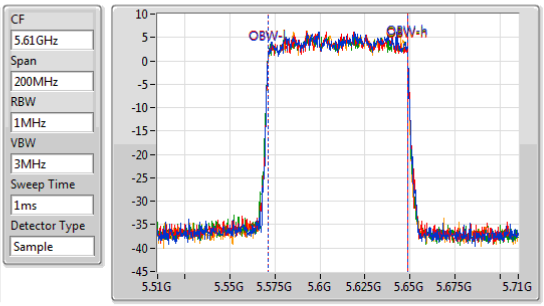


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.48942G	5.571159G	76.99M	5.491505G	5.568495G	Inf	1
82.029M	5.48942G	5.571449G	76.99M	5.491505G	5.568495G	Inf	2
81.739M	5.48913G	5.57087G	76.7M	5.491505G	5.568205G	Inf	3
81.449M	5.48942G	5.57087G	76.99M	5.491505G	5.568495G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX EBW

5610MHz

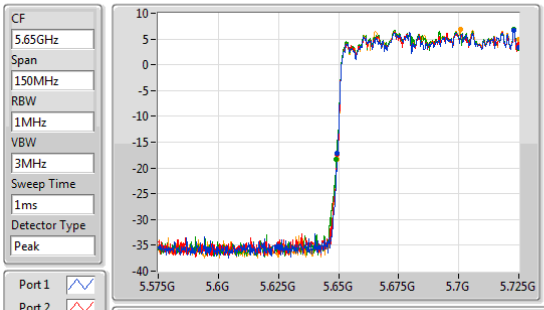


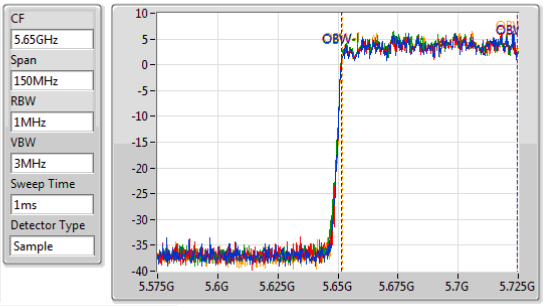


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.56942G	5.651159G	76.99M	5.571505G	5.648495G	Inf	1
82.029M	5.56942G	5.651449G	76.99M	5.571505G	5.648495G	Inf	2
82.029M	5.568841G	5.65087G	76.99M	5.571505G	5.648495G	Inf	3
81.739M	5.56913G	5.65087G	76.99M	5.571505G	5.648495G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX EBW

5690MHz Straddle 5.47-5.725GHz

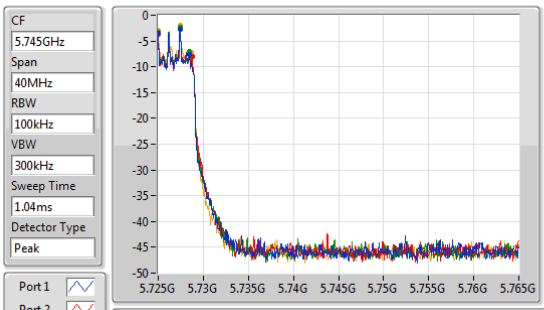


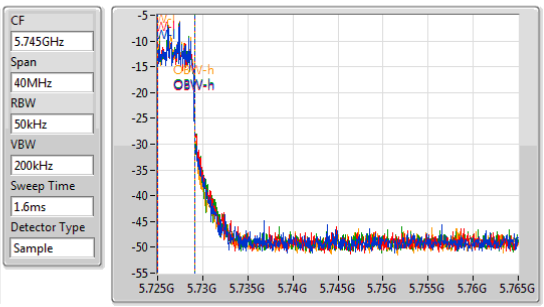


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.435M	5.649565G	5.725G	72.938M	5.65152G	5.724457G	Inf	1
75.435M	5.649565G	5.725G	72.938M	5.65152G	5.724457G	Inf	2
75.87M	5.64913G	5.725G	72.938M	5.65152G	5.724457G	Inf	3
75.652M	5.649348G	5.725G	72.938M	5.651737G	5.724674G	Inf	4

802.11ax HEW80_Nss1,(MCS0)_4TX EBW

5690MHz Straddle 5.725-5.85GHz

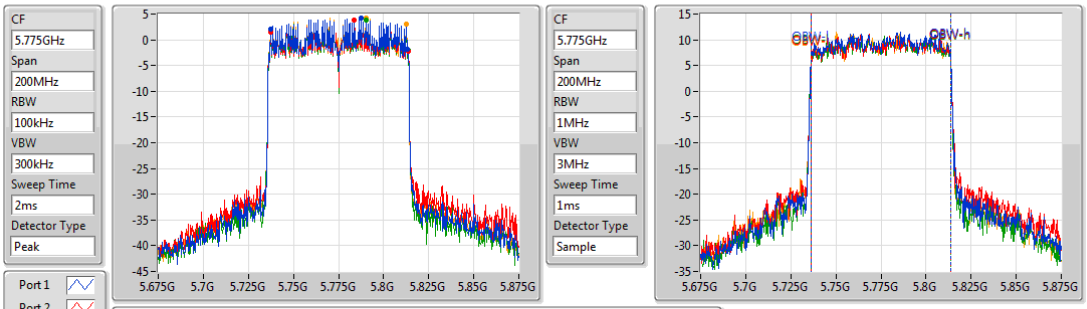




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.478M	5.725G	5.728478G	4.052M	5.725029G	5.729081G	500k	1
3.768M	5.725G	5.728768G	4.052M	5.725029G	5.729081G	500k	2
3.478M	5.725G	5.728478G	4.052M	5.725029G	5.729081G	500k	3
3.71M	5.725G	5.72871G	4.052M	5.725029G	5.729081G	500k	4

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

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.942M	5.737319G	5.813261G	76.99M	5.736505G	5.813495G	500k	1
76.522M	5.737319G	5.813841G	76.99M	5.736505G	5.813495G	500k	2
76.232M	5.737319G	5.813551G	76.99M	5.736505G	5.813495G	500k	3
75.362M	5.737319G	5.812681G	76.99M	5.736505G	5.813495G	500k	4

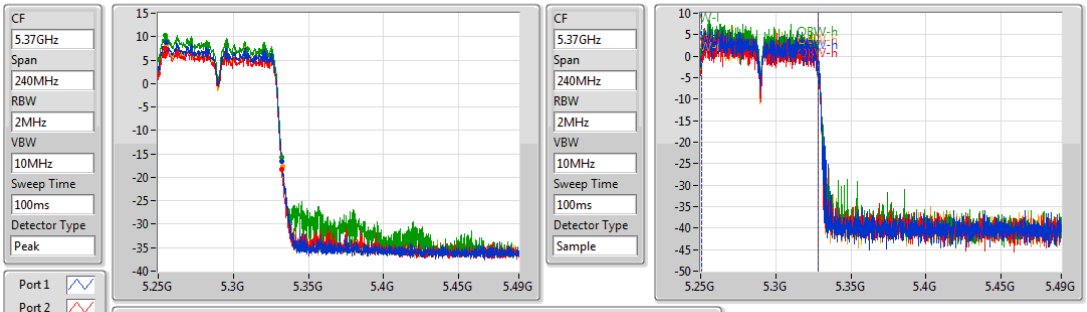
802.11ax HEW160_Nss1,(MCS0)_4TX **EBW**

5250MHz Straddle 5.15-5.25GHz

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.44M	5.16756G	5.25G	77.481M	5.171499G	5.248981G	Inf	1
81.84M	5.16816G	5.25G	77.601M	5.171379G	5.248981G	Inf	2
82.08M	5.16792G	5.25G	77.481M	5.171499G	5.248981G	Inf	3
81.96M	5.16804G	5.25G	77.721M	5.171379G	5.2491G	Inf	4

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

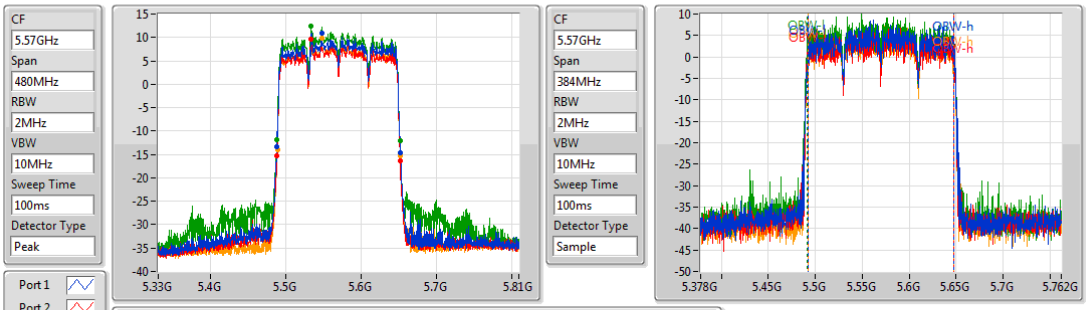
5250MHz Straddle 5.25-5.35GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.32M	5.25G	5.33232G	77.601M	5.25078G	5.328381G	Inf	1
82.2M	5.25G	5.3322G	77.481M	5.2509G	5.328381G	Inf	2
82.08M	5.25G	5.33208G	77.361M	5.25078G	5.328141G	Inf	3
82.92M	5.25G	5.33292G	77.601M	5.2509G	5.328501G	Inf	4

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

5570MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
164.88M	5.48768G	5.65256G	154.867M	5.492663G	5.647529G	Inf	1
163.68M	5.4884G	5.65208G	155.442M	5.492087G	5.647529G	Inf	2
163.44M	5.48816G	5.6516G	155.442M	5.491895G	5.647337G	Inf	3
163.68M	5.48864G	5.65232G	155.442M	5.492279G	5.647721G	Inf	4

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

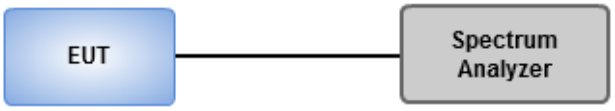
Method PM-G (Measurement using a gated RF average power meter)

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	29.08	0.80910	29.58	0.90782
802.11ax HEW20_Nss1,(MCS0)_4TX	28.90	0.77625	29.40	0.87096
802.11ax HEW40_Nss1,(MCS0)_4TX	27.51	0.56364	28.01	0.63241
802.11ax HEW80_Nss1,(MCS0)_4TX	20.36	0.10864	20.86	0.12190
802.11ax HEW160_Nss1,(MCS0)_4TX	18.71	0.07430	19.21	0.08337
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	23.09	0.20370	24.09	0.25645
802.11ax HEW20_Nss1,(MCS0)_4TX	22.86	0.19320	23.86	0.24322
802.11ax HEW40_Nss1,(MCS0)_4TX	22.80	0.19055	23.80	0.23988
802.11ax HEW80_Nss1,(MCS0)_4TX	21.74	0.14928	22.74	0.18793
802.11ax HEW160_Nss1,(MCS0)_4TX	18.50	0.07079	19.50	0.08913
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	22.54	0.17947	24.04	0.25351
802.11ax HEW20_Nss1,(MCS0)_4TX	21.88	0.15417	23.38	0.21777
802.11ax HEW40_Nss1,(MCS0)_4TX	22.36	0.17219	23.86	0.24322
802.11ax HEW80_Nss1,(MCS0)_4TX	22.34	0.17140	23.84	0.24210
802.11ax HEW160_Nss1,(MCS0)_4TX	22.23	0.16711	23.73	0.23605
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	29.26	0.84333	31.01	1.26183
802.11ax HEW20_Nss1,(MCS0)_4TX	27.93	0.62087	29.68	0.92897
802.11ax HEW40_Nss1,(MCS0)_4TX	27.88	0.61376	29.63	0.91833
802.11ax HEW80_Nss1,(MCS0)_4TX	27.31	0.53827	29.06	0.80538

Result

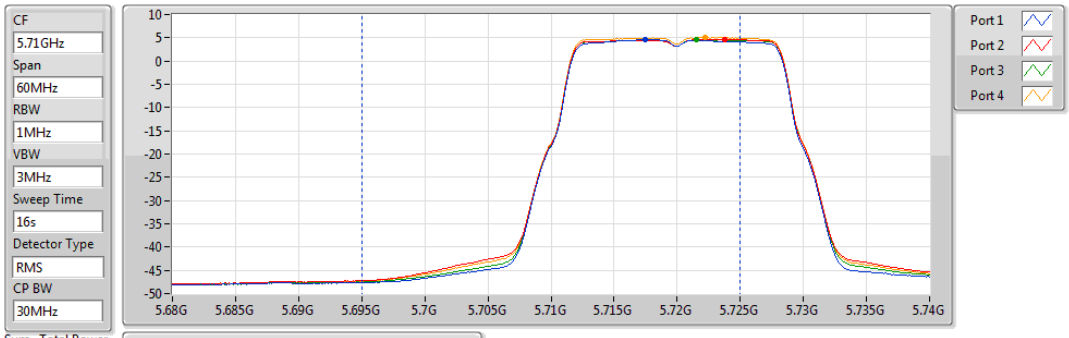
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	0.50	20.81	19.36	19.59	19.62	25.90	30.00	26.40	36.00
5200MHz	Pass	0.50	23.81	22.63	22.83	22.85	29.08	30.00	29.58	36.00
5240MHz	Pass	0.50	23.54	22.79	22.84	22.78	29.02	30.00	29.52	36.00
5260MHz	Pass	1.00	17.11	16.45	17.22	17.39	23.08	24.00	24.08	30.00
5300MHz	Pass	1.00	17.12	16.35	17.26	17.48	23.09	24.00	24.09	30.00
5320MHz	Pass	1.00	16.69	16.08	17.04	17.51	22.88	24.00	23.88	30.00
5500MHz	Pass	1.50	17.02	16.76	16.01	16.15	22.53	24.00	24.03	30.00
5580MHz	Pass	1.50	17.06	16.75	15.92	16.24	22.54	24.00	24.04	30.00
5700MHz	Pass	1.50	17.02	16.36	16.32	16.21	22.51	24.00	24.01	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.50	15.14	15.25	15.23	15.72	21.36	22.91	22.86	28.91
5720MHz Straddle 5.725-5.85GHz	Pass	1.75	8.58	9.18	8.89	9.49	15.07	30.00	16.82	36.00
5745MHz	Pass	1.75	23.73	22.79	23.57	22.79	29.26	30.00	31.01	36.00
5785MHz	Pass	1.75	23.56	22.88	23.51	22.86	29.24	30.00	30.99	36.00
5825MHz	Pass	1.75	23.53	22.82	23.42	22.81	29.18	30.00	30.93	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	0.50	20.12	18.96	19.14	19.15	25.39	30.00	25.89	36.00
5200MHz	Pass	0.50	23.65	22.54	22.46	22.55	28.85	30.00	29.35	36.00
5240MHz	Pass	0.50	23.75	22.36	22.54	22.74	28.90	30.00	29.40	36.00
5260MHz	Pass	1.00	16.64	16.15	17.04	17.22	22.80	24.00	23.80	30.00
5300MHz	Pass	1.00	16.81	16.02	17.05	17.35	22.86	24.00	23.86	30.00
5320MHz	Pass	1.00	16.56	16.01	17.04	17.46	22.82	24.00	23.82	30.00
5500MHz	Pass	1.50	15.71	16.34	15.68	15.32	21.80	24.00	23.30	30.00
5580MHz	Pass	1.50	16.22	16.15	15.39	15.62	21.88	24.00	23.38	30.00
5700MHz	Pass	1.50	15.95	15.82	15.84	15.75	21.86	24.00	23.36	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.50	13.53	13.76	13.56	13.81	19.69	22.91	21.19	28.91
5720MHz Straddle 5.725-5.85GHz	Pass	1.75	8.16	8.48	8.28	8.53	14.39	30.00	16.14	36.00
5745MHz	Pass	1.75	22.31	21.35	22.16	21.3	27.82	30.00	29.57	36.00
5785MHz	Pass	1.75	22.37	21.33	22.19	21.36	27.86	30.00	29.61	36.00
5825MHz	Pass	1.75	22.41	21.63	22.16	21.38	27.93	30.00	29.68	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	0.50	17.63	15.82	17.52	16.21	22.89	30.00	23.39	36.00
5230MHz	Pass	0.50	22.05	20.36	22.13	21.18	27.51	30.00	28.01	36.00
5270MHz	Pass	1.00	17.24	16.95	16.35	16.51	22.80	24.00	23.80	30.00
5310MHz	Pass	1.00	17.29	16.81	16.59	16.35	22.79	24.00	23.79	30.00
5510MHz	Pass	1.50	16.55	15.79	15.85	15.92	22.06	24.00	23.56	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	1.50	16.67	15.81	15.92	16.06	22.15	24.00	23.65	30.00
5670MHz	Pass	1.50	17.25	16.14	16.02	15.81	22.36	24.00	23.86	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	1.50	15.37	15.42	15.51	16.49	21.74	24.00	23.24	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	1.75	5.56	5.59	5.95	6.96	12.07	30.00	13.82	36.00
5755MHz	Pass	1.75	22.31	21.75	21.88	21.32	27.85	30.00	29.60	36.00
5795MHz	Pass	1.75	22.16	21.73	22.01	21.49	27.88	30.00	29.63	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	0.50	15.25	14.45	13.86	13.62	20.36	30.00	20.86	36.00
5290MHz	Pass	1.00	16.36	15.61	16.11	14.58	21.74	24.00	22.74	30.00
5530MHz	Pass	1.50	16.64	16.49	16.35	15.74	22.34	24.00	23.84	30.00
5610MHz	Pass	1.50	15.98	16.02	16.41	16.06	22.14	24.00	23.64	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	1.50	15.61	16.05	15.67	15.34	21.70	24.00	23.20	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	1.75	2.53	2.64	2.47	2.15	8.47	30.00	10.22	36.00
5775MHz	Pass	1.75	21.65	21.22	21.03	21.22	27.31	30.00	29.06	36.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	0.50	12.89	11.34	14.23	11.69	18.71	30.00	19.21	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	1.00	12.40	11.23	13.81	12.08	18.50	24.00	19.50	30.00
5570MHz	Pass	1.50	16.58	14.89	17.54	15.31	22.23	24.00	23.73	30.00

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

802.11a_Nss1,(6Mbps)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

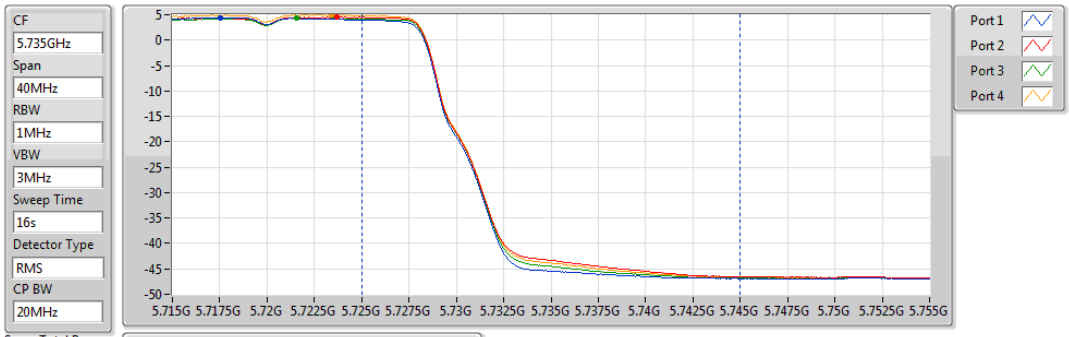


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.36	15.14	15.25	15.23	15.72

802.11a_Nss1,(6Mbps)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

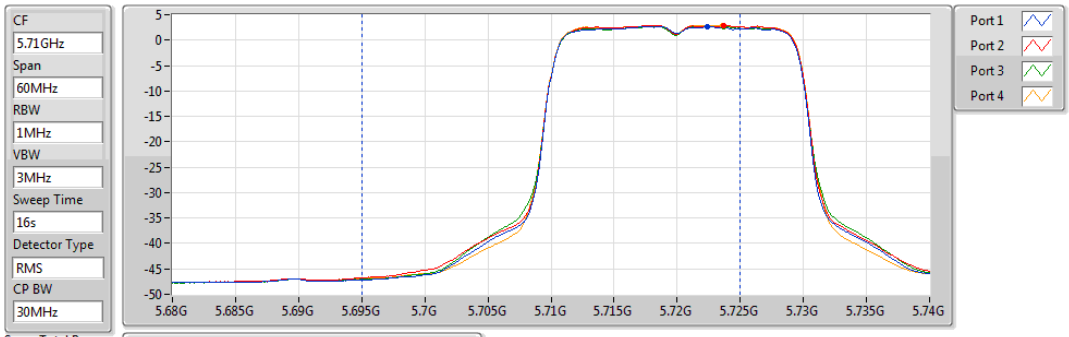


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
15.07	8.58	9.18	8.89	9.49

802.11ax HEW20_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

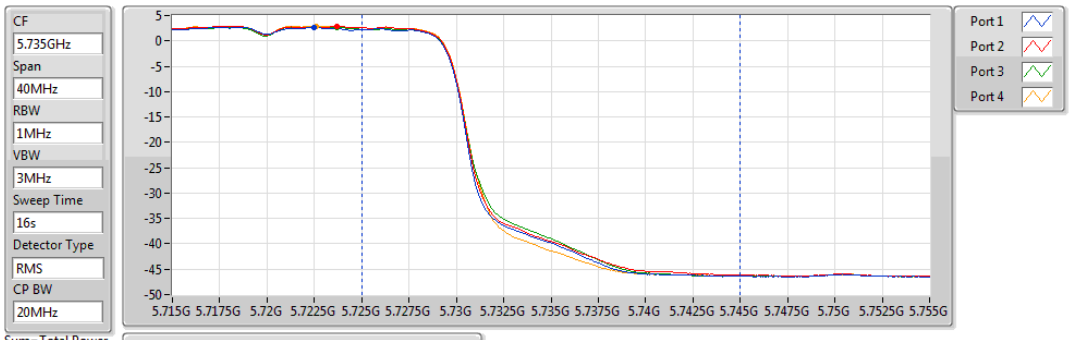


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
19.69	13.53	13.76	13.56	13.81

802.11ax HEW20_Nss1,(MCS0)_4TX **AV Power**

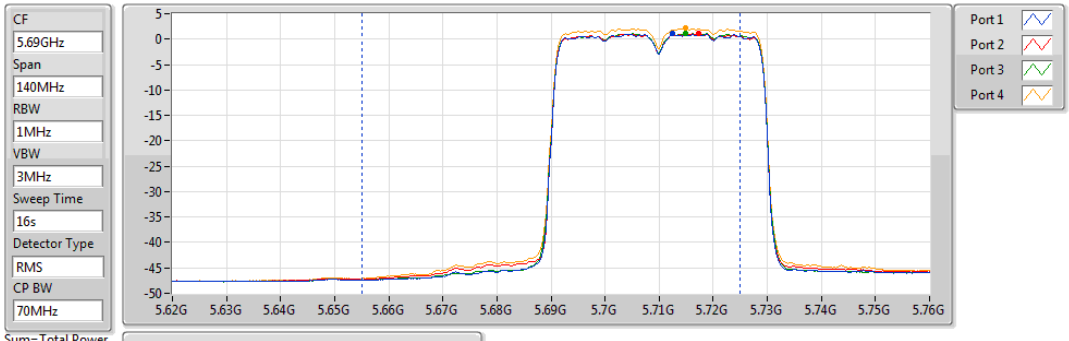
5720MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
14.39	8.16	8.48	8.28	8.53

802.11ax HEW40_Nss1,(MCS0)_4TX **AV Power**

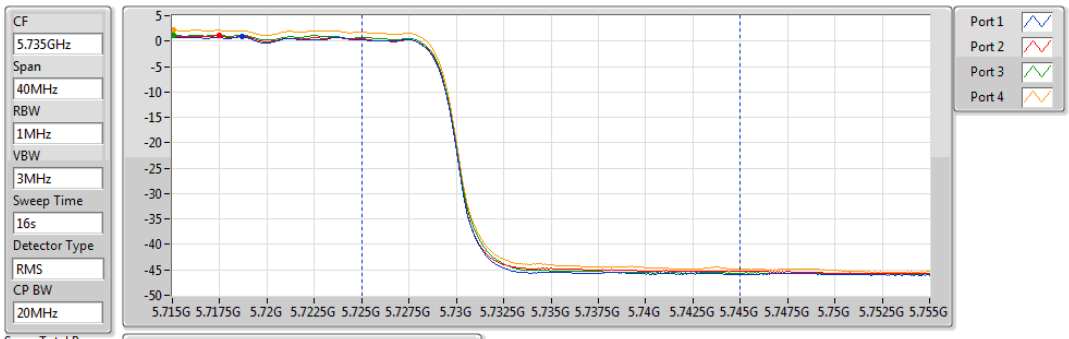
5710MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.74	15.37	15.42	15.51	16.49

802.11ax HEW40_Nss1,(MCS0)_4TX **AV Power**

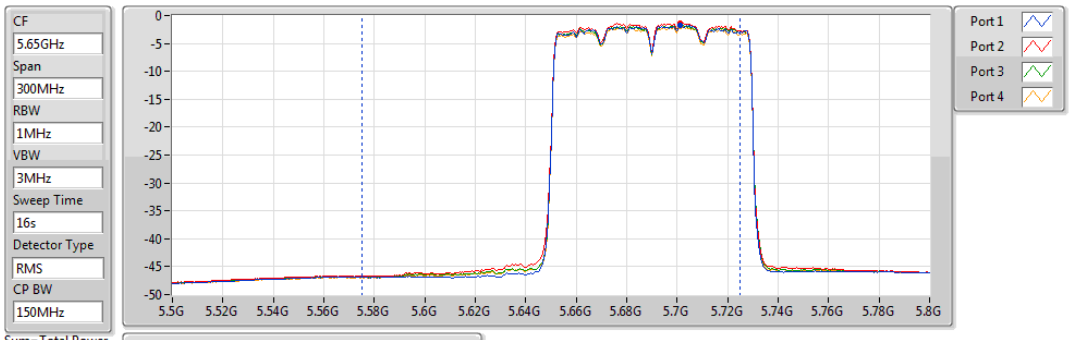
5710MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.07	5.56	5.59	5.95	6.96

802.11ax HEW80_Nss1,(MCS0)_4TX — AV Power

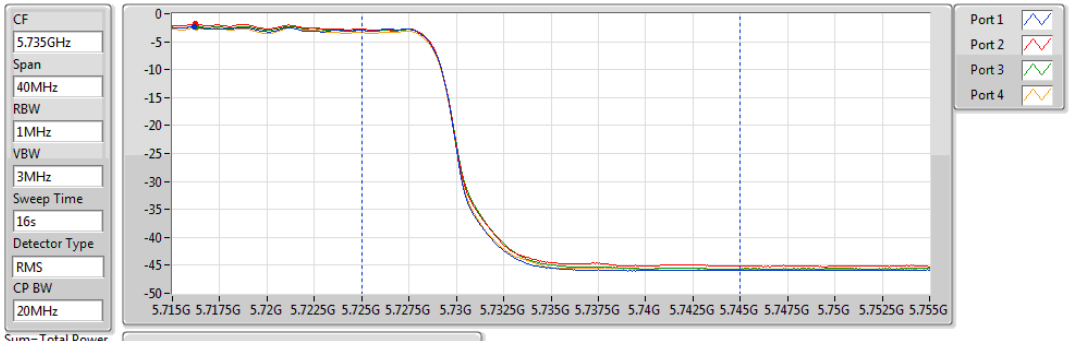
5690MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.70	15.61	16.05	15.67	15.34

802.11ax HEW80_Nss1,(MCS0)_4TX — AV Power

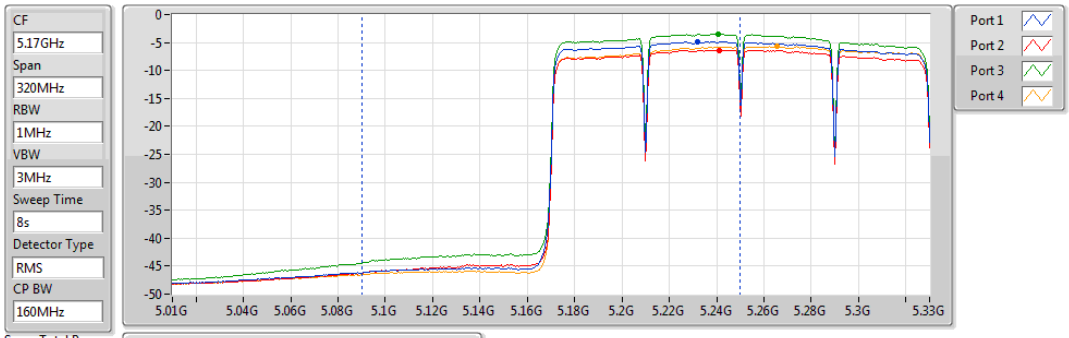
5690MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
8.47	2.53	2.64	2.47	2.15

802.11ax HEW160_Nss1,(MCS0)_4TX — AV Power

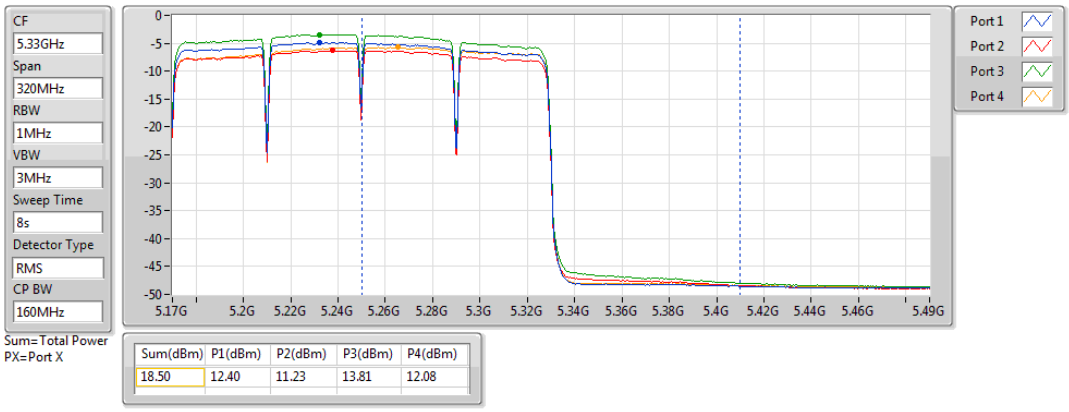
5250MHz Straddle 5.15-5.25GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
18.71	12.89	11.34	14.23	11.69

802.11ax HEW160_Nss1,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.25-5.35GHz_TnomVnom



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
18.50	12.40	11.23	13.81	12.08

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
ax20,bf_Nss1,(MCS0)_4TX	28.73	0.74645	35.25	3.34965
ax40,bf_Nss1,(MCS0)_4TX	27.38	0.54702	33.90	2.45471
ax80,bf_Nss1,(MCS0)_4TX	20.18	0.10423	26.70	0.46774
ax160,bf_Nss1,(MCS0)_4TX	17.55	0.05689	24.07	0.25527
5.25-5.35GHz	-	-	-	-
ax20,bf_Nss1,(MCS0)_4TX	22.74	0.18793	29.76	0.94624
ax40,bf_Nss1,(MCS0)_4TX	22.68	0.18535	29.70	0.93325
ax80,bf_Nss1,(MCS0)_4TX	21.62	0.14521	28.64	0.73114
ax160,bf_Nss1,(MCS0)_4TX	17.76	0.05970	24.78	0.30061
5.47-5.725GHz	-	-	-	-
ax20,bf_Nss1,(MCS0)_4TX	21.76	0.14997	29.28	0.84723
ax40,bf_Nss1,(MCS0)_4TX	22.09	0.16181	29.61	0.91411
ax80,bf_Nss1,(MCS0)_4TX	22.08	0.16144	29.60	0.91201
ax160,bf_Nss1,(MCS0)_4TX	18.05	0.06383	25.57	0.36058
5.725-5.85GHz	-	-	-	-
ax20,bf_Nss1,(MCS0)_4TX	27.53	0.56624	35.30	3.38844
ax40,bf_Nss1,(MCS0)_4TX	27.71	0.59020	35.48	3.53183
ax80,bf_Nss1,(MCS0)_4TX	27.01	0.50234	34.78	3.00608

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)
ax20,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.52	20.08	18.72	18.96	18.84	25.21	29.48	31.73	36.00
5200MHz	Pass	6.52	23.53	22.38	22.41	22.26	28.70	29.48	35.22	36.00
5240MHz	Pass	6.52	23.69	21.95	22.46	22.54	28.73	29.48	35.25	36.00
5260MHz	Pass	7.02	16.36	15.89	17.02	16.96	22.60	22.98	29.62	30.00
5300MHz	Pass	7.02	16.52	15.82	17.08	17.14	22.69	22.98	29.71	30.00
5320MHz	Pass	7.02	16.42	15.96	17.12	17.24	22.74	22.98	29.76	30.00
5500MHz	Pass	7.52	15.68	16.02	15.63	15.26	21.68	22.48	29.20	30.00
5580MHz	Pass	7.52	16.34	15.84	15.32	15.38	21.76	22.48	29.28	30.00
5700MHz	Pass	7.52	16.02	15.65	15.82	15.24	21.71	22.48	29.23	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.52	13.59	12.81	13.15	12.58	19.07	22.48	26.59	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.77	8.66	7.28	8.01	8.06	14.05	28.23	21.82	36.00
5745MHz	Pass	7.77	21.98	21.21	21.83	20.89	27.52	28.23	35.29	36.00
5785MHz	Pass	7.77	21.96	20.96	21.85	21.19	27.53	28.23	35.30	36.00
5825MHz	Pass	7.77	21.86	21.08	21.94	20.92	27.49	28.23	35.26	36.00
ax40,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	6.52	17.51	15.62	17.46	16.04	22.76	29.48	29.28	36.00
5230MHz	Pass	6.52	22.18	20.28	22.08	20.54	27.38	29.48	33.90	36.00
5270MHz	Pass	7.02	17.08	16.72	16.65	15.81	22.61	22.98	29.63	30.00
5310MHz	Pass	7.02	16.95	16.88	16.54	16.25	22.68	22.98	29.70	30.00
5510MHz	Pass	7.52	16.51	15.71	15.96	15.68	22.00	22.48	29.52	30.00
5590MHz	Pass	7.52	16.43	15.69	16.08	15.76	22.02	22.48	29.54	30.00
5670MHz	Pass	7.52	16.91	16.02	15.86	15.35	22.09	22.48	29.61	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.52	16.6	15.62	15.23	15.08	21.69	22.48	29.21	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.77	5.25	5.5	6.02	5.28	11.54	28.23	19.31	36.00
5755MHz	Pass	7.77	22.15	21.66	21.84	21.05	27.71	28.23	35.48	36.00
5795MHz	Pass	7.77	21.95	21.52	21.69	21.02	27.58	28.23	35.35	36.00
ax80,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.52	15.06	14.42	13.65	13.29	20.18	29.48	26.70	36.00
5290MHz	Pass	7.02	16.15	15.39	16.22	14.39	21.62	22.98	28.64	30.00
5530MHz	Pass	7.52	16.25	16.18	16.31	15.45	22.08	22.48	29.60	30.00
5610MHz	Pass	7.52	15.61	15.98	16.32	15.68	21.93	22.48	29.45	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.52	15.2	15.57	15.83	15.46	21.54	22.48	29.06	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.77	1.48	0.94	4.19	1.74	8.30	28.23	16.07	36.00
5775MHz	Pass	7.77	21.42	21.09	20.86	20.56	27.01	28.23	34.78	36.00

Mode	Result	DG	Port 1	Port 2	Port 3	Port 4	Total Power	Power Limit	EIRP	EIRP Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
ax160,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.52	11.31	10.58	13.02	10.75	17.55	29.48	24.07	36.00
5250MHz Straddle 5.25-5.35GHz	Pass	7.02	11.69	10.27	12.77	11.86	17.76	22.98	24.78	30.00
5570MHz	Pass	7.52	11.91	10.59	13.54	11.53	18.05	22.48	25.57	30.00

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
   Directional gain = 0.5 + 10 * log(4/1) =6.52 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (6.52 dBi – 6 dBi) = 29.48 dBm.

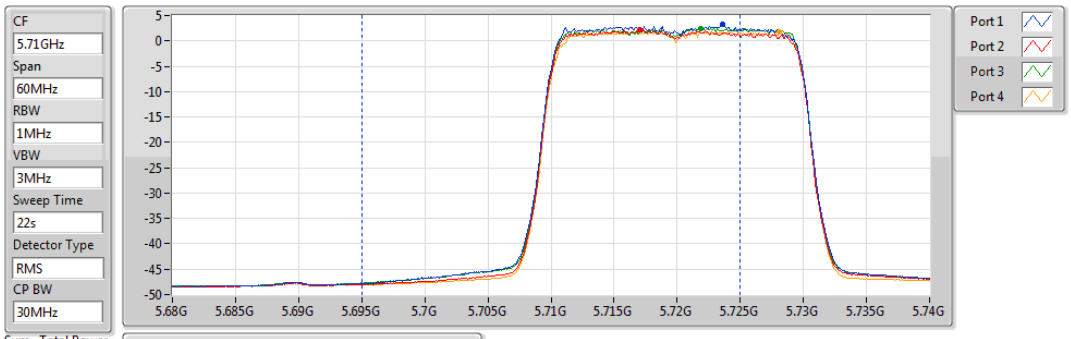
   5250-5350 MHz
   Directional gain = 1+ 10 * log(4/1) =7.02 dBi > 6 dBi.
   Limit shall be reduced to 24 dBm – (7.02 dBi – 6 dBi) =22.98 dBm.

   5470-5750 MHz
   Directional gain = 1.5 + 10 * log(4/1) =7.52 dBi > 6 dBi.
   Limit shall be reduced to 24 dBm – (7.52dBi – 6 dBi) =22.48 dBm.

   5725-5850 MHz
   Directional gain = 1.75 + 10 * log(4/1) =7.77 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (7.77 dBi – 6 dBi) = 28.23 dBm.

ax20,bf_Nss1,(MCS0)_4TX **AV Power**

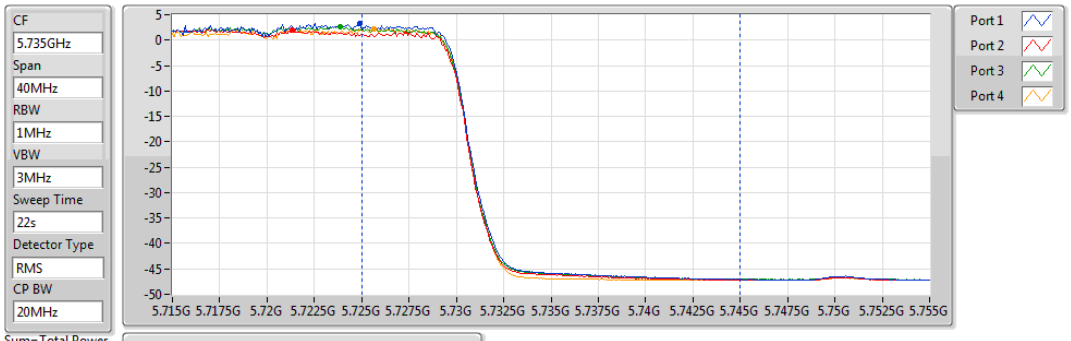
5720MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
19.07	13.59	12.81	13.15	12.58

ax20,bf_Nss1,(MCS0)_4TX **AV Power**

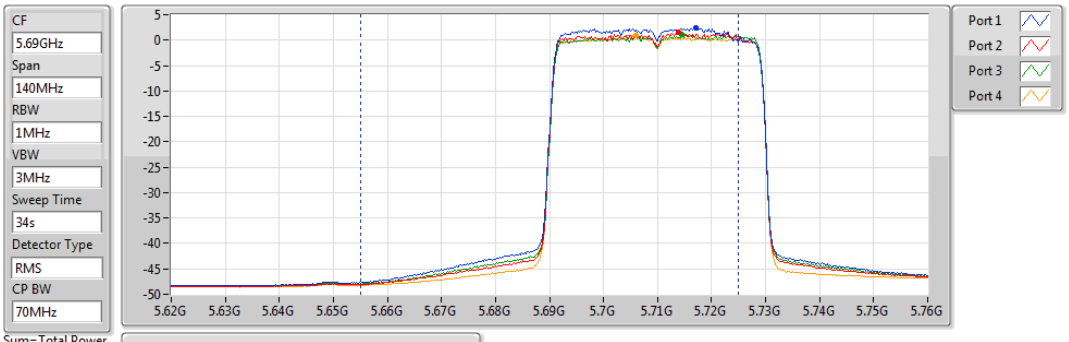
5720MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
14.05	8.66	7.28	8.01	8.06

ax40,bf_Nss1,(MCS0)_4TX **AV Power**

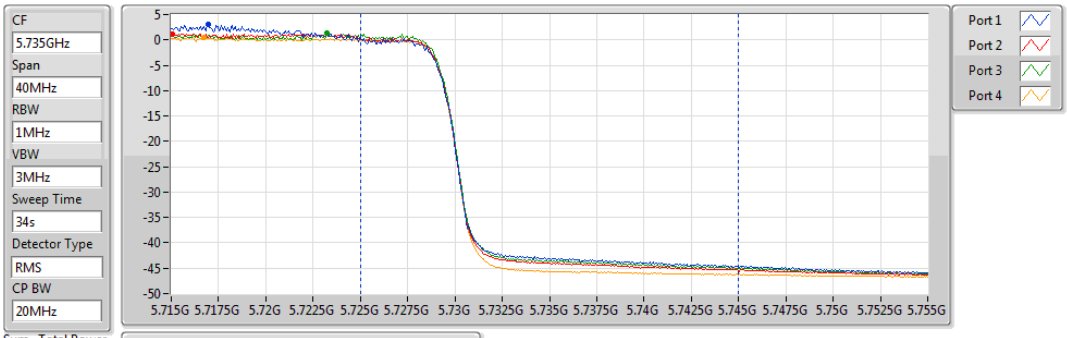
5710MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.69	16.60	15.62	15.23	15.08

ax40,bf_Nss1,(MCS0)_4TX **AV Power**

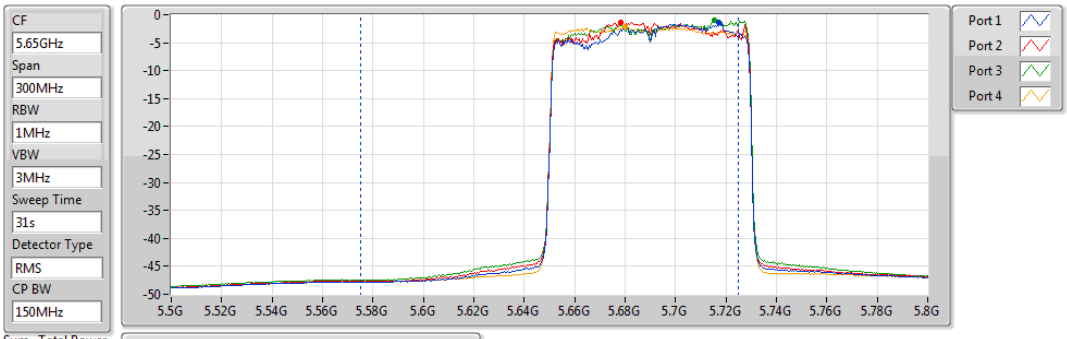
5710MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
11.54	5.25	5.50	6.02	5.28

ax80,bf_Nss1,(MCS0)_4TX **AV Power**

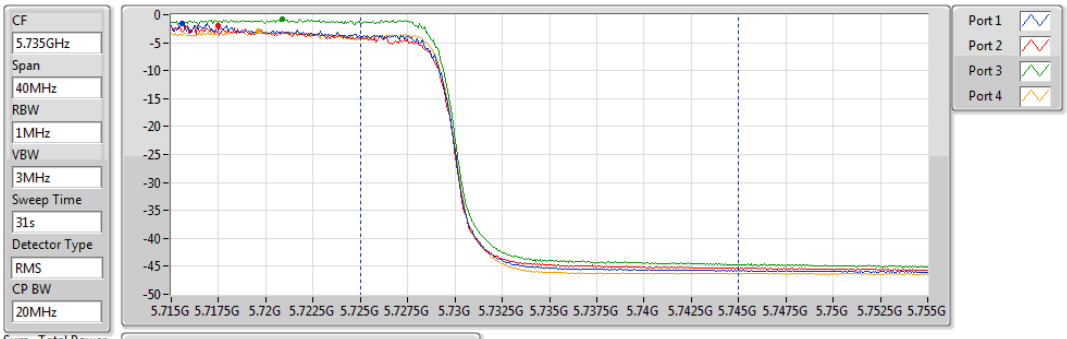
5690MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.54	15.20	15.57	15.83	15.46

ax80,bf_Nss1,(MCS0)_4TX **AV Power**

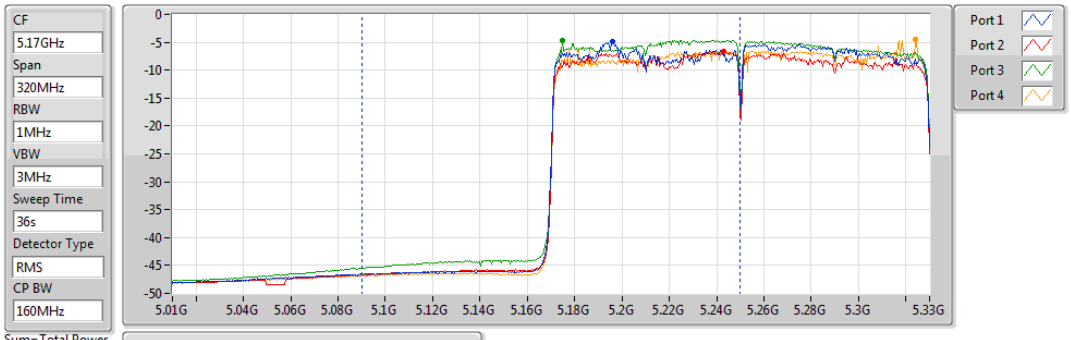
5690MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
8.30	1.48	0.94	4.19	1.74

ax160,bf_Nss1,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.15-5.25GHz_TnomVnom

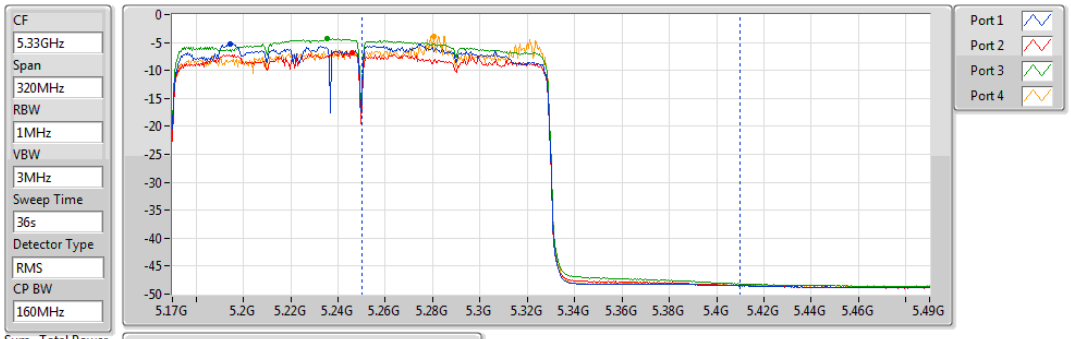


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.55	11.31	10.58	13.02	10.75

ax160,bf_Nss1,(MCS0)_4TX **AV Power**

5250MHz Straddle 5.25-5.35GHz_TnomVnom

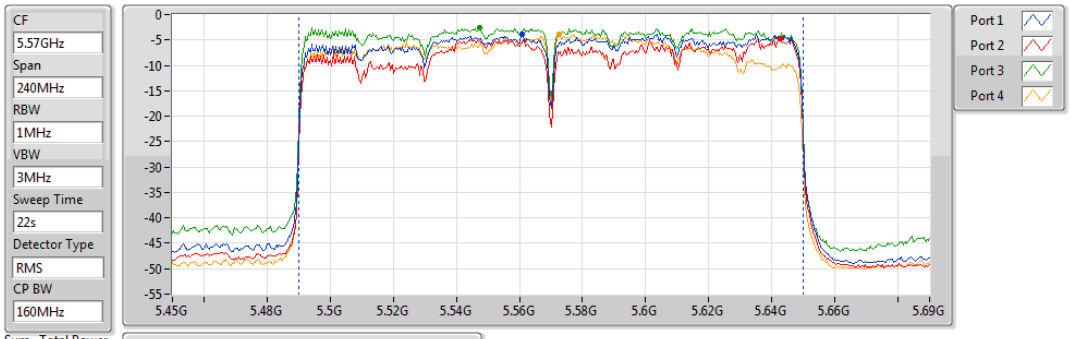


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
17.76	11.69	10.27	12.77	11.86

ax160,bf_Nss1,(MCS0)_4TX **AV Power**

5570MHz_TnomVnom



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.97	15.96	14.33	17.66	15.10

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

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

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

3.4.2 Test Procedures

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

Duty cycle ≥ 98 %

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

Duty cycle < 98 %

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

For 5725 ~ 5850 MHz

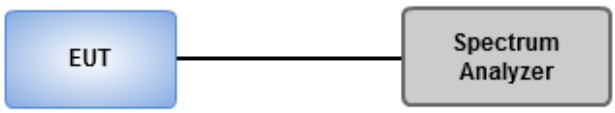
Duty cycle ≥ 98 %

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

Duty cycle < 98 %

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

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	15.99	22.51
802.11ax HEW20_Nss1,(MCS0)_4TX	15.52	22.04
802.11ax HEW40_Nss1,(MCS0)_4TX	11.78	18.30
802.11ax HEW80_Nss1,(MCS0)_4TX	1.02	7.54
802.11ax HEW160_Nss1,(MCS0)_4TX	-0.61	5.91
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	9.81	16.83
802.11ax HEW20_Nss1,(MCS0)_4TX	9.49	16.51
802.11ax HEW40_Nss1,(MCS0)_4TX	6.34	13.36
802.11ax HEW80_Nss1,(MCS0)_4TX	2.49	9.51
802.11ax HEW160_Nss1,(MCS0)_4TX	-0.65	6.37
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	9.32	16.84
802.11ax HEW20_Nss1,(MCS0)_4TX	8.73	16.25
802.11ax HEW40_Nss1,(MCS0)_4TX	5.93	13.45
802.11ax HEW80_Nss1,(MCS0)_4TX	3.23	10.75
802.11ax HEW160_Nss1,(MCS0)_4TX	0.16	7.68
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	14.16	21.93
802.11ax HEW20_Nss1,(MCS0)_4TX	12.58	20.35
802.11ax HEW40_Nss1,(MCS0)_4TX	10.10	17.87
802.11ax HEW80_Nss1,(MCS0)_4TX	6.77	14.54

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.52	7.41	6.25	6.43	6.45	12.62	16.48	19.14	23.00
5200MHz	Pass	6.52	10.79	9.69	9.57	9.84	15.99	16.48	22.51	23.00
5240MHz	Pass	6.52	10.75	9.40	9.56	9.81	15.90	16.48	22.42	23.00
5260MHz	Pass	7.02	3.81	3.16	3.91	4.18	9.78	9.98	16.80	17.00
5300MHz	Pass	7.02	3.65	3.10	3.89	4.50	9.81	9.98	16.83	17.00
5320MHz	Pass	7.02	3.42	2.83	3.71	4.33	9.60	9.98	16.62	17.00
5500MHz	Pass	7.52	3.85	3.67	2.89	2.79	9.32	9.48	16.84	17.00
5580MHz	Pass	7.52	3.90	3.61	2.74	2.92	9.30	9.48	16.82	17.00
5700MHz	Pass	7.52	3.80	3.12	3.12	3.03	9.25	9.48	16.77	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.52	3.57	3.07	2.98	2.91	9.12	9.48	16.64	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.77	2.25	1.21	1.27	1.22	7.52	28.23	15.29	36.00
5745MHz	Pass	7.77	8.86	7.49	8.34	8.02	14.16	28.23	21.93	36.00
5785MHz	Pass	7.77	8.69	7.44	8.26	7.93	14.06	28.23	21.83	36.00
5825MHz	Pass	7.77	8.61	7.53	8.18	7.95	14.06	28.23	21.83	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.52	6.90	5.62	5.28	5.76	11.86	16.48	18.38	23.00
5200MHz	Pass	6.52	10.38	8.83	9.11	9.02	15.38	16.48	21.90	23.00
5240MHz	Pass	6.52	10.23	9.02	9.16	9.53	15.52	16.48	22.04	23.00
5260MHz	Pass	7.02	3.29	2.65	3.48	3.72	9.24	9.98	16.26	17.00
5300MHz	Pass	7.02	3.31	2.75	3.55	4.04	9.40	9.98	16.42	17.00
5320MHz	Pass	7.02	3.32	2.79	3.61	4.26	9.49	9.98	16.51	17.00
5500MHz	Pass	7.52	2.95	3.19	2.21	2.21	8.65	9.48	16.17	17.00
5580MHz	Pass	7.52	2.91	2.87	2.08	2.18	8.51	9.48	16.03	17.00
5700MHz	Pass	7.52	3.17	2.54	2.76	2.54	8.73	9.48	16.25	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.52	1.30	1.75	1.39	1.67	7.49	9.48	15.01	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.77	0.40	-0.57	-0.03	-0.33	5.88	28.23	13.65	36.00
5745MHz	Pass	7.77	6.96	6.00	6.90	6.51	12.58	28.23	20.35	36.00
5785MHz	Pass	7.77	7.09	5.90	6.81	6.49	12.53	28.23	20.30	36.00
5825MHz	Pass	7.77	6.90	5.99	6.69	6.38	12.42	28.23	20.19	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	6.52	1.23	-0.96	0.72	-0.30	6.24	16.48	12.76	23.00
5230MHz	Pass	6.52	6.89	4.43	6.26	5.10	11.78	16.48	18.30	23.00
5270MHz	Pass	7.02	1.03	0.48	-0.30	-0.20	6.26	9.98	13.28	17.00
5310MHz	Pass	7.02	0.91	0.59	-0.25	0.10	6.34	9.98	13.36	17.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5510MHz	Pass	7.52	0.17	-0.52	-0.48	-0.21	5.74	9.48	13.26	17.00
5590MHz	Pass	7.52	0.04	-0.83	-0.66	-0.29	5.56	9.48	13.08	17.00
5670MHz	Pass	7.52	0.81	-0.56	-0.61	-0.42	5.81	9.48	13.33	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.52	0.89	-0.44	-0.48	-0.25	5.93	9.48	13.45	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.77	-1.01	-2.45	-2.59	-2.33	3.93	28.23	11.70	36.00
5755MHz	Pass	7.77	4.38	3.92	4.33	3.84	10.10	28.23	17.87	36.00
5795MHz	Pass	7.77	4.34	3.95	4.12	3.87	10.08	28.23	17.85	36.00
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.52	-3.90	-4.79	-5.93	-5.63	1.02	16.48	7.54	23.00
5290MHz	Pass	7.02	-2.35	-3.56	-3.52	-4.72	2.49	9.98	9.51	17.00
5530MHz	Pass	7.52	-2.50	-2.59	-2.85	-3.24	3.23	9.48	10.75	17.00
5610MHz	Pass	7.52	-3.10	-3.10	-3.05	-2.98	2.93	9.48	10.45	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.52	-3.20	-3.25	-2.93	-2.89	2.96	9.48	10.48	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.77	-5.49	-5.79	-5.67	-5.32	0.44	28.23	8.21	36.00
5775MHz	Pass	7.77	1.04	0.68	0.64	0.75	6.77	28.23	14.54	36.00
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.52	-6.53	-7.93	-5.06	-7.37	-0.61	16.48	5.91	23.00
5250MHz Straddle 5.25-5.35GHz	Pass	7.02	-6.65	-7.96	-5.17	-7.32	-0.65	9.98	6.37	17.00
5570MHz	Pass	7.52	-5.62	-7.10	-4.41	-6.53	0.16	9.48	7.68	17.00

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;
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
   Directional gain = 0.5 + 10 * log(4/1) =6.52 dBi > 6 dBi.
   Limit shall be reduced to 17 dBm – (6.52 dBi – 6 dBi) = 16.48 dBm.

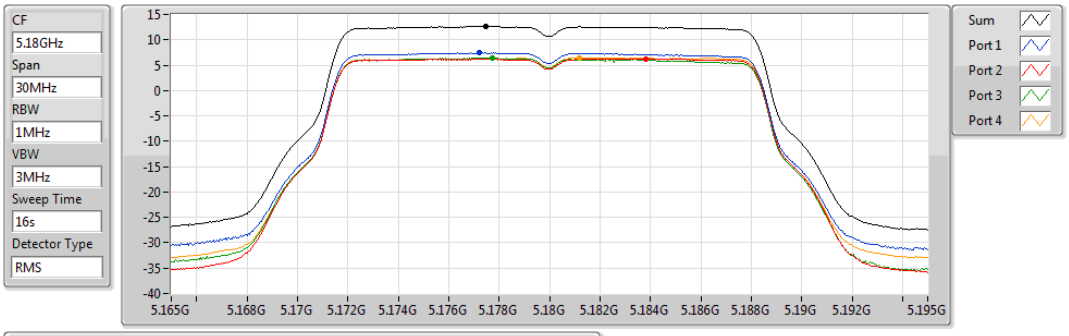
   5250-5350 MHz
   Directional gain = 1+ 10 * log(4/1) =7.02 dBi > 6 dBi.
   Limit shall be reduced to 11 dBm – (7.02 dBi – 6 dBi) =9.98 dBm.

   5470-5750 MHz
   Directional gain = 1.5 + 10 * log(4/1) =7.52 dBi > 6 dBi.
   Limit shall be reduced to 11 dBm – (7.52dBi – 6 dBi) =9.48 dBm.

   5725-5850 MHz
   Directional gain = 1.75 + 10 * log(4/1) =7.77 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (7.77 dBi – 6 dBi) = 28.23 dBm.

802.11a_Nss1,(6Mbps)_4TX PSD

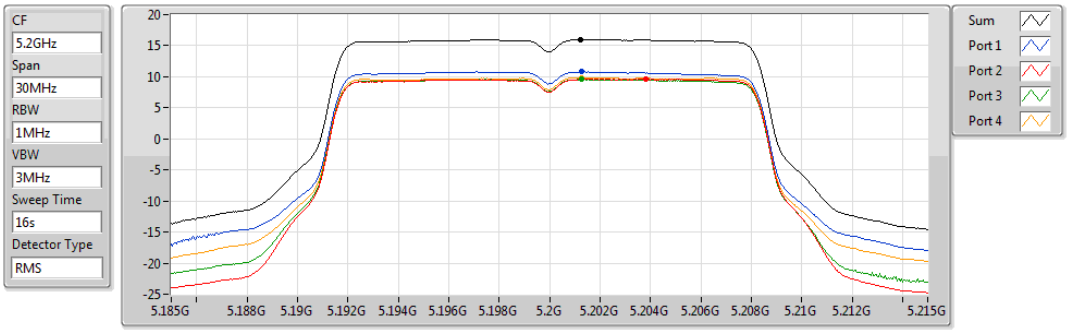
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.62	12.62	7.41	6.25	6.43	6.45

802.11a_Nss1,(6Mbps)_4TX PSD

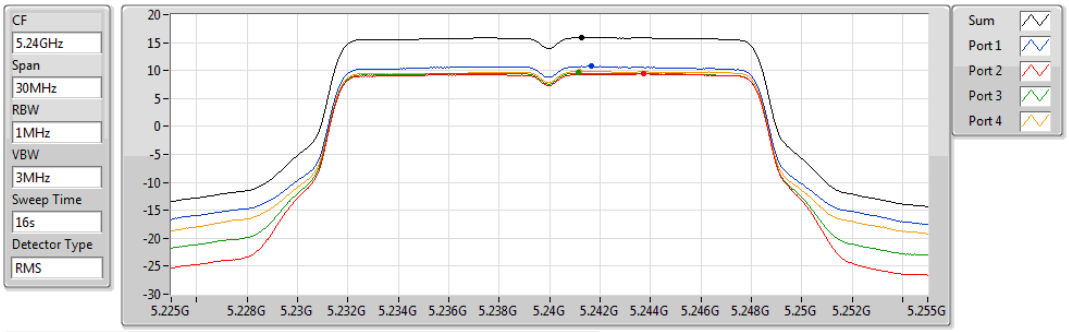
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.99	15.99	10.79	9.69	9.57	9.84

802.11a_Nss1,(6Mbps)_4TX PSD

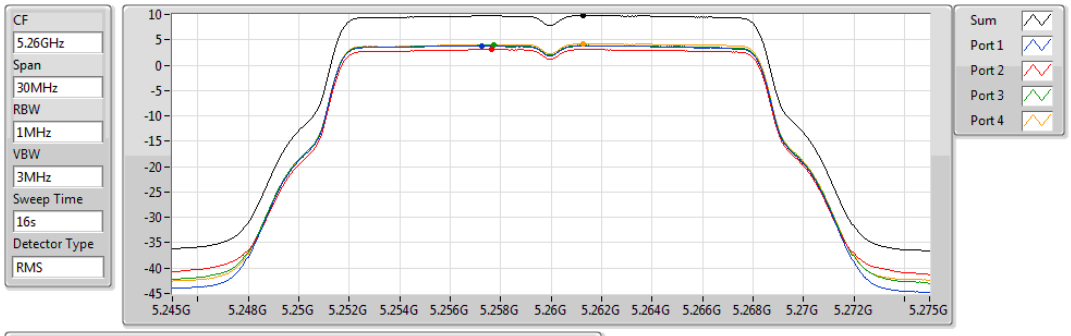
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.90	15.90	10.75	9.40	9.56	9.81

802.11a_Nss1,(6Mbps)_4TX PSD

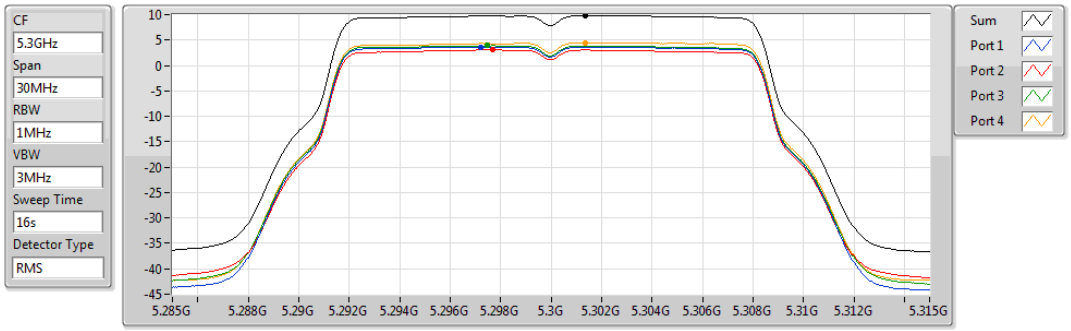
5260MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.78	9.78	3.81	3.16	3.91	4.18

802.11a_Nss1,(6Mbps)_4TX PSD

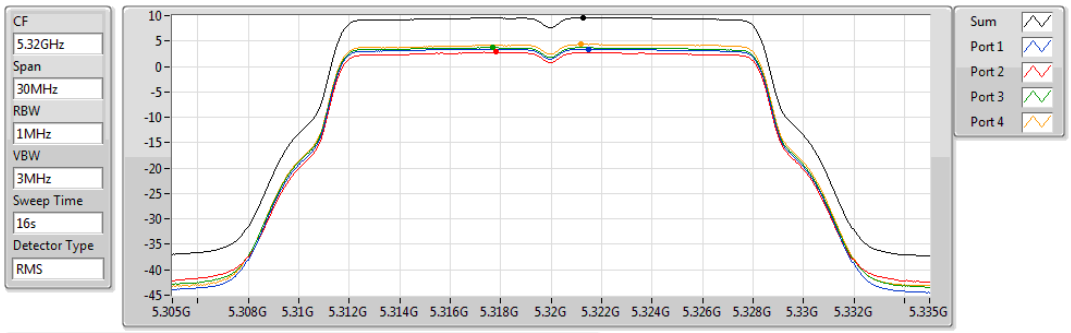
5300MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.81	9.81	3.65	3.10	3.89	4.50

802.11a_Nss1,(6Mbps)_4TX PSD

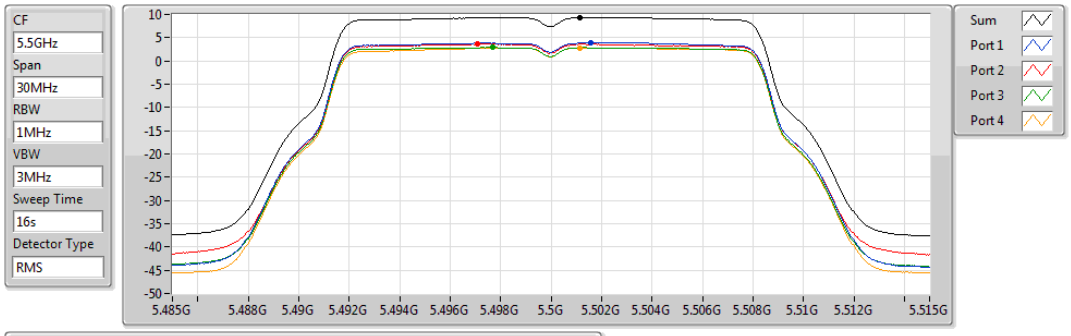
5320MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.60	9.60	3.42	2.83	3.71	4.33

802.11a_Nss1,(6Mbps)_4TX PSD

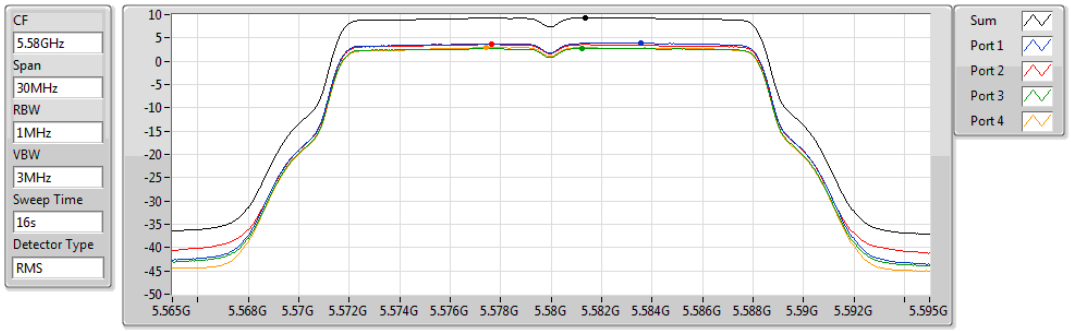
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.32	9.32	3.85	3.67	2.89	2.79

802.11a_Nss1,(6Mbps)_4TX PSD

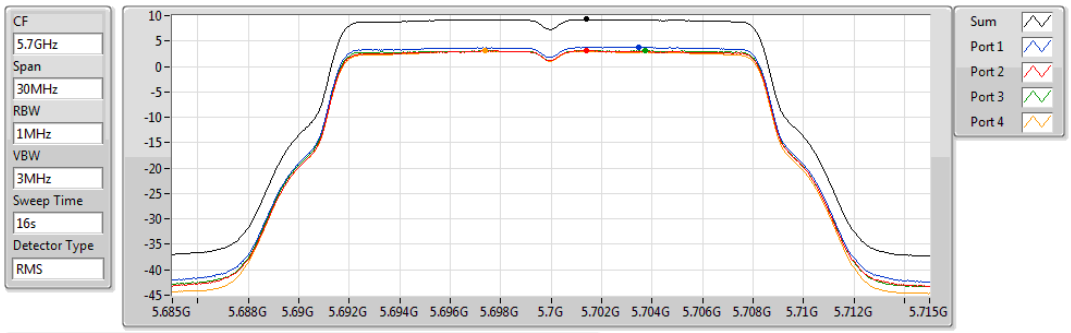
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.30	9.30	3.90	3.61	2.74	2.92

802.11a_Nss1,(6Mbps)_4TX PSD

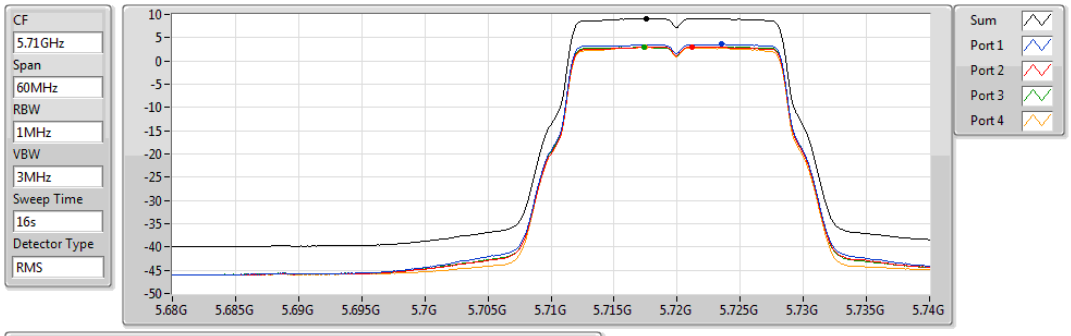
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.25	9.25	3.80	3.12	3.12	3.03

802.11a_Nss1,(6Mbps)_4TX PSD

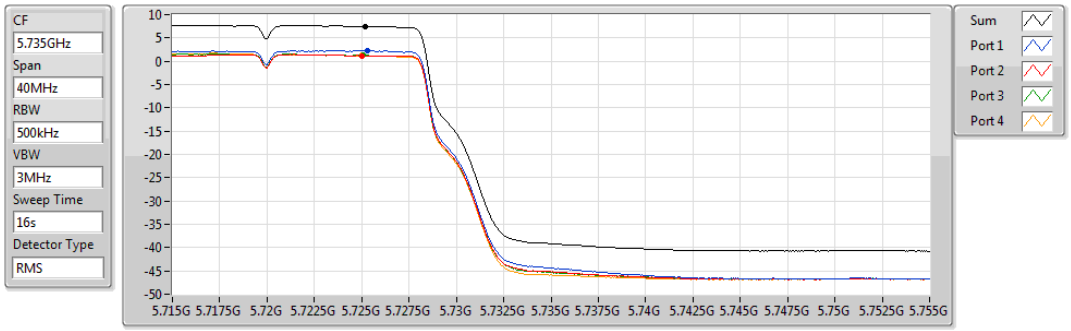
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.12	9.12	3.57	3.07	2.98	2.91

802.11a_Nss1,(6Mbps)_4TX PSD

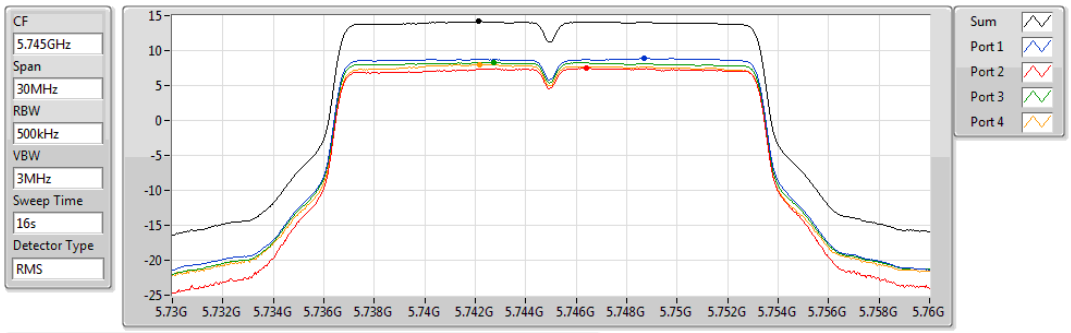
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.52	7.52	2.25	1.21	1.27	1.22

802.11a_Nss1,(6Mbps)_4TX PSD

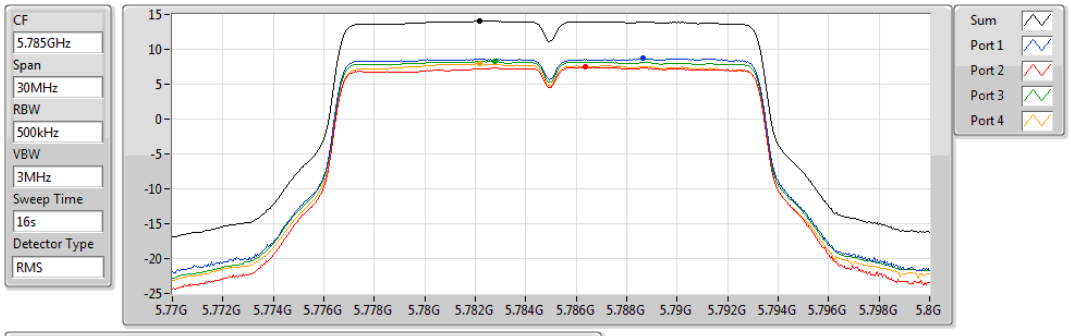
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.16	14.16	8.86	7.49	8.34	8.02

802.11a_Nss1,(6Mbps)_4TX PSD

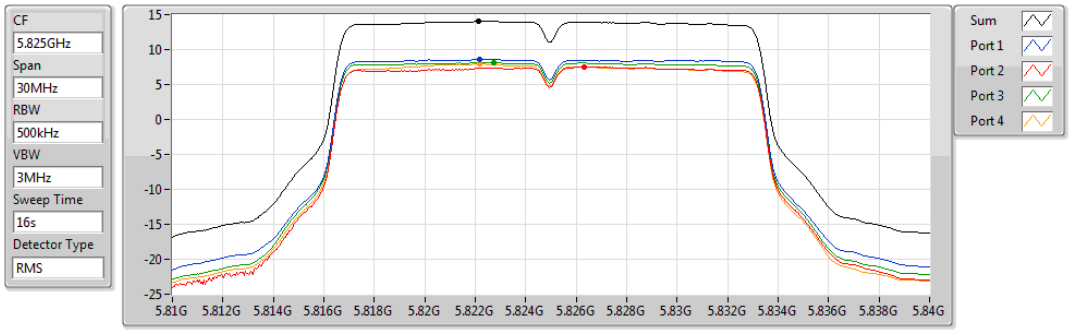
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.06	14.06	8.69	7.44	8.26	7.93

802.11a_Nss1,(6Mbps)_4TX PSD

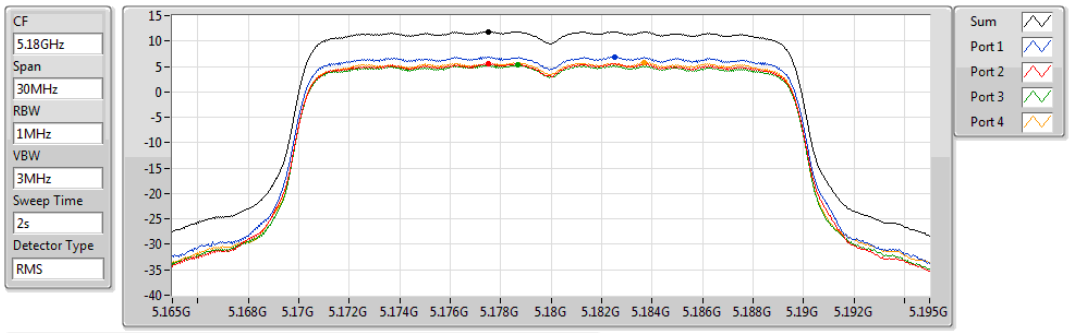
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.06	14.06	8.61	7.53	8.18	7.95

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

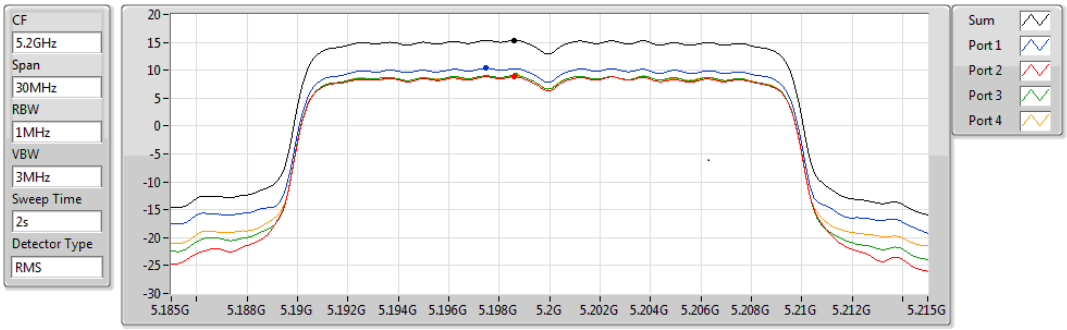
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.86	11.86	6.90	5.62	5.28	5.76

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

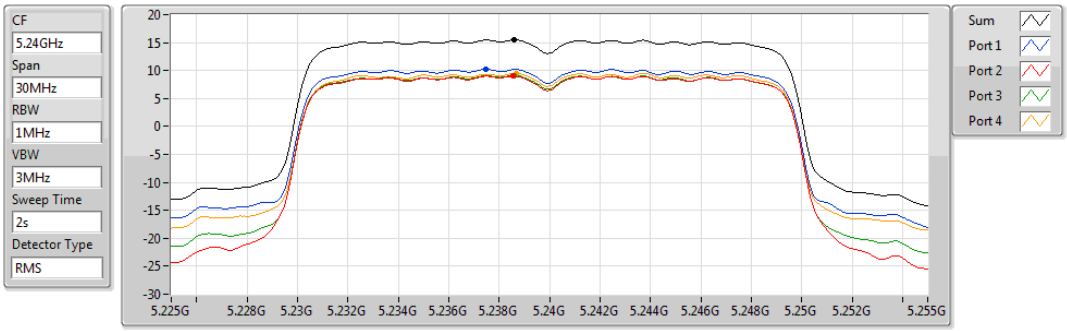
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.38	15.38	10.38	8.83	9.11	9.02

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

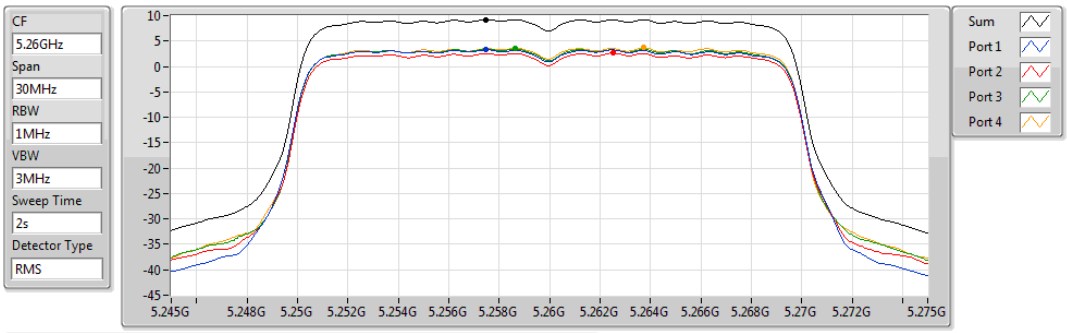
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.52	15.52	10.23	9.02	9.16	9.53

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

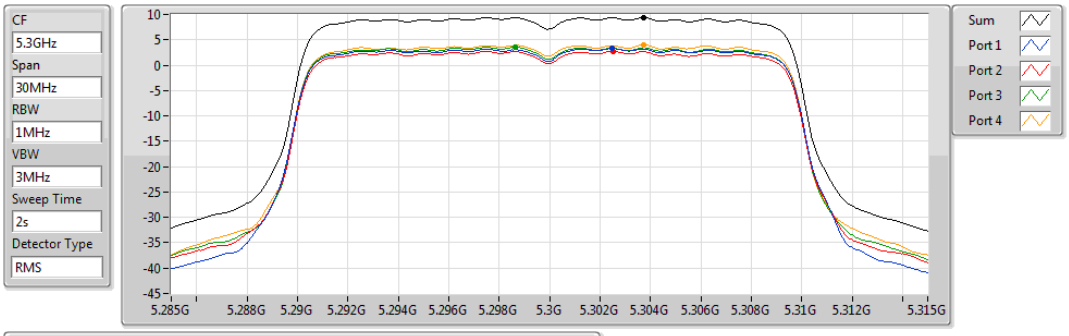
5260MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.24	9.24	3.29	2.65	3.48	3.72

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

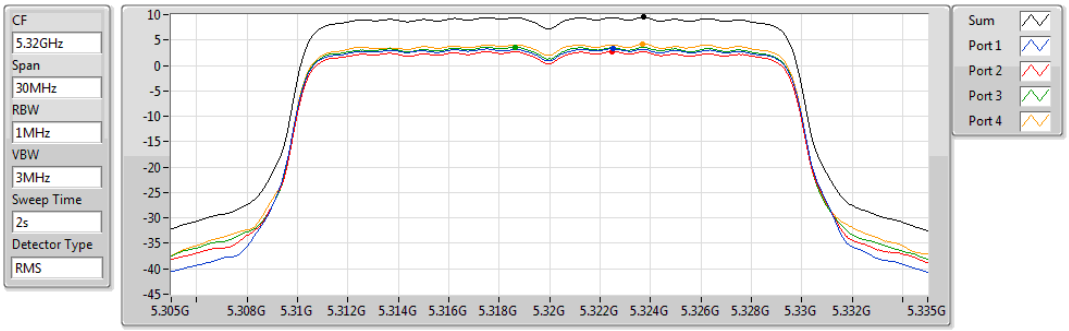
5300MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.40	9.40	3.31	2.75	3.55	4.04

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

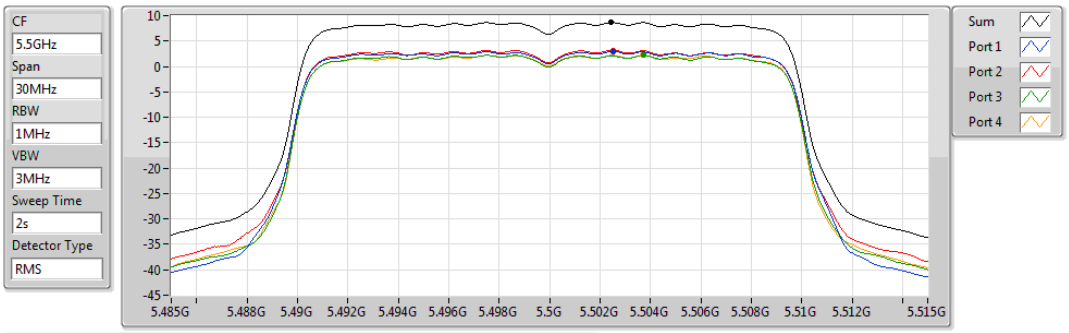
5320MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.49	9.49	3.32	2.79	3.61	4.26

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

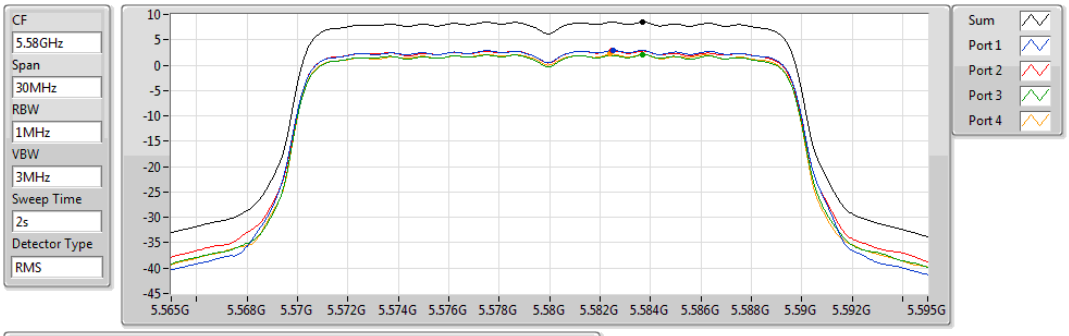
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.65	8.65	2.95	3.19	2.21	2.21

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

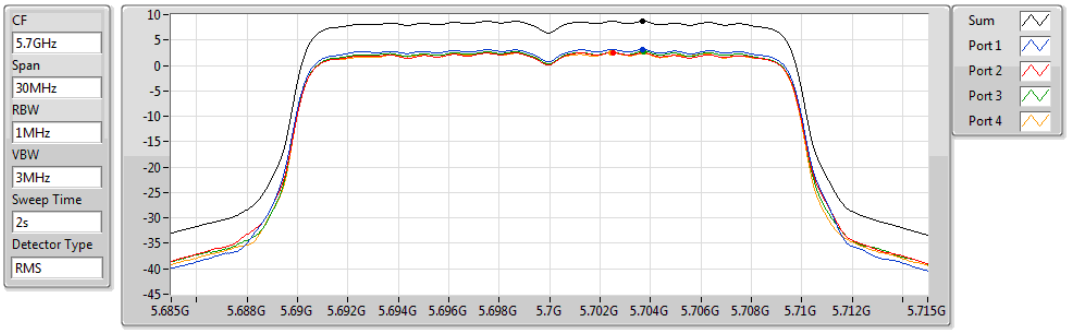
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.51	8.51	2.91	2.87	2.08	2.18

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

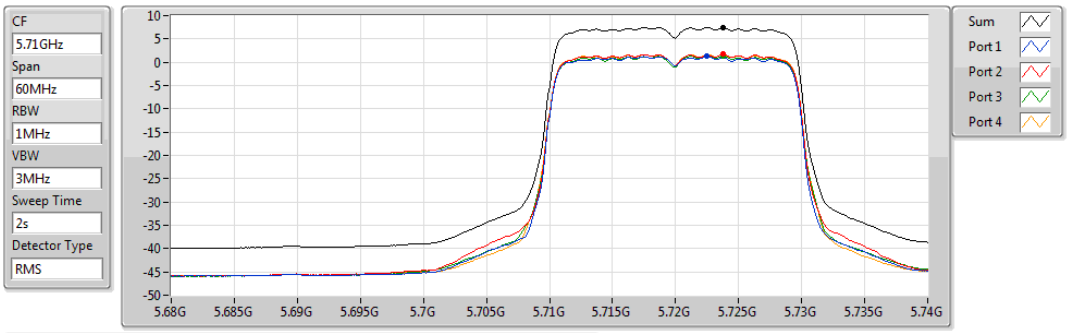
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.73	8.73	3.17	2.54	2.76	2.54

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

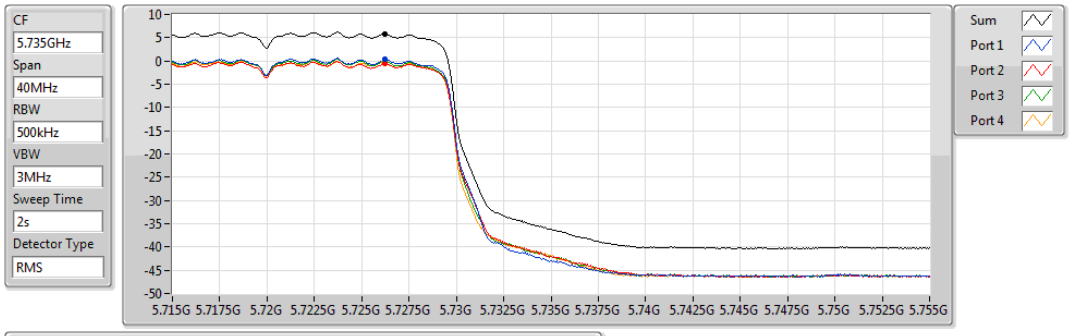
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.49	7.49	1.30	1.75	1.39	1.67

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

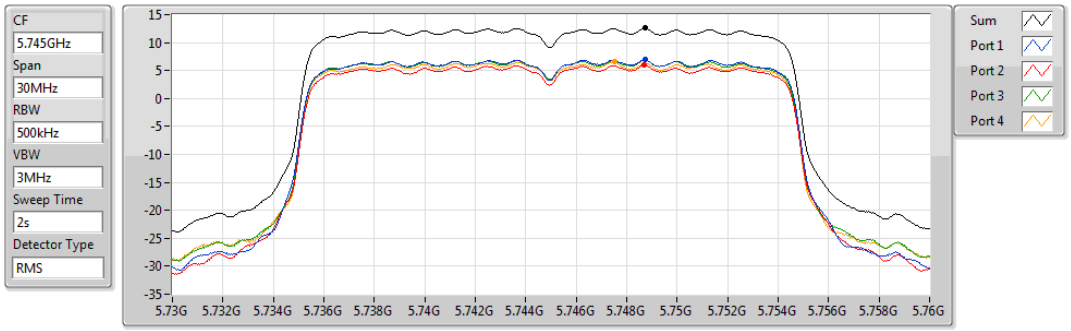
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.88	5.88	0.40	-0.57	-0.03	-0.33

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

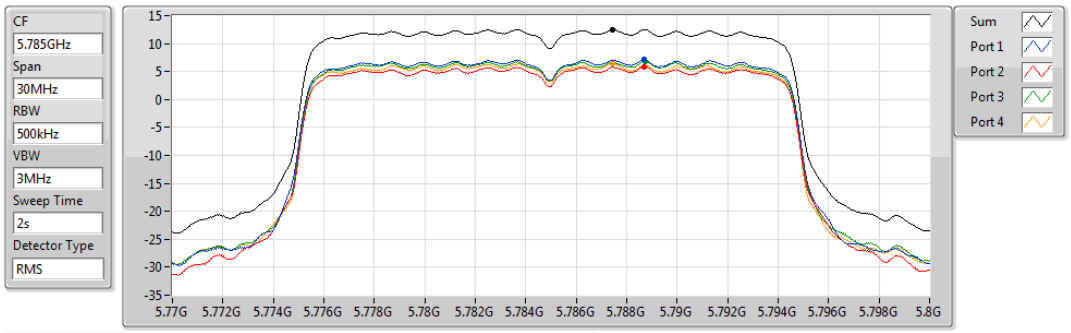
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.58	12.58	6.96	6.00	6.90	6.51

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

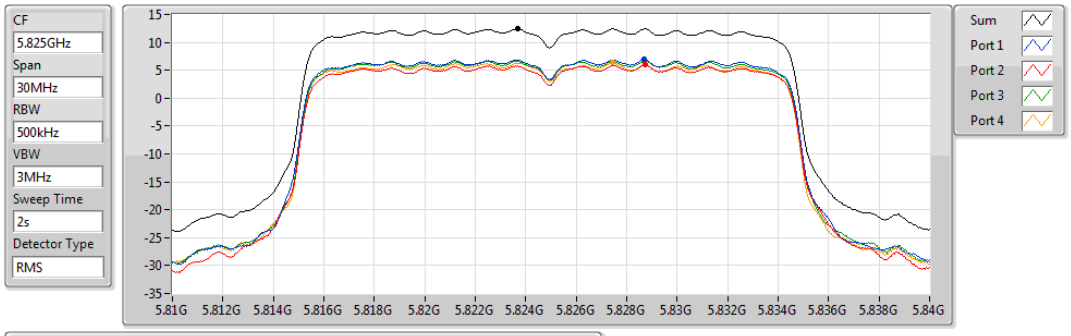
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.53	12.53	7.09	5.90	6.81	6.49

802.11ax HEW20_Nss1,(MCS0)_4TX PSD

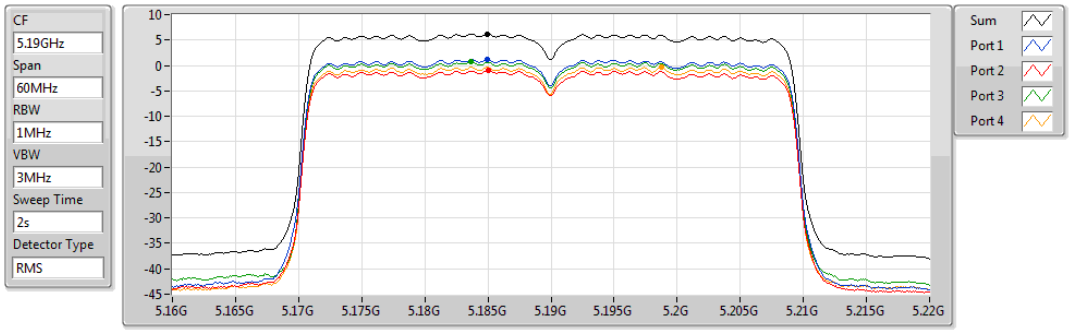
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.42	12.42	6.90	5.99	6.69	6.38

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

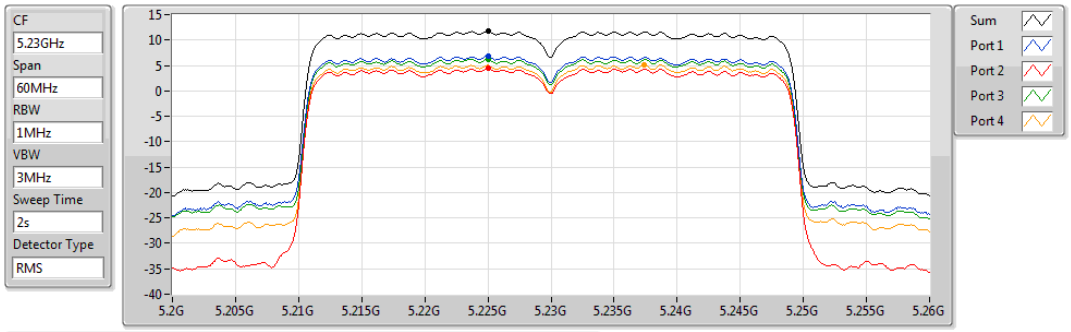
5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.24	6.24	1.23	-0.96	0.72	-0.30

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

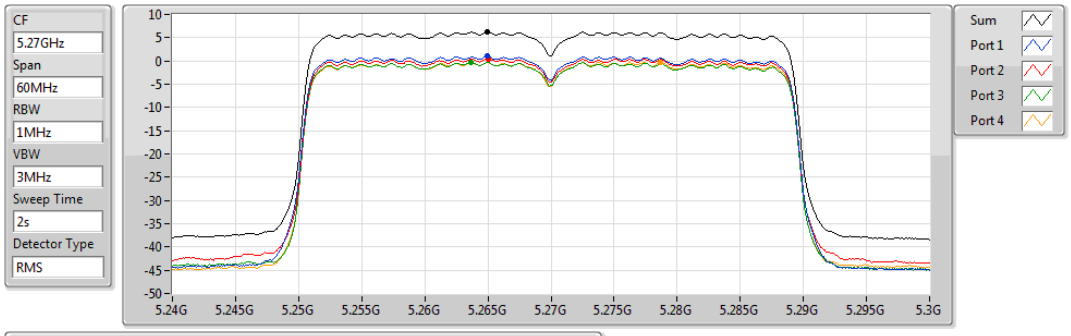
5230MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.78	11.78	6.89	4.43	6.26	5.10

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

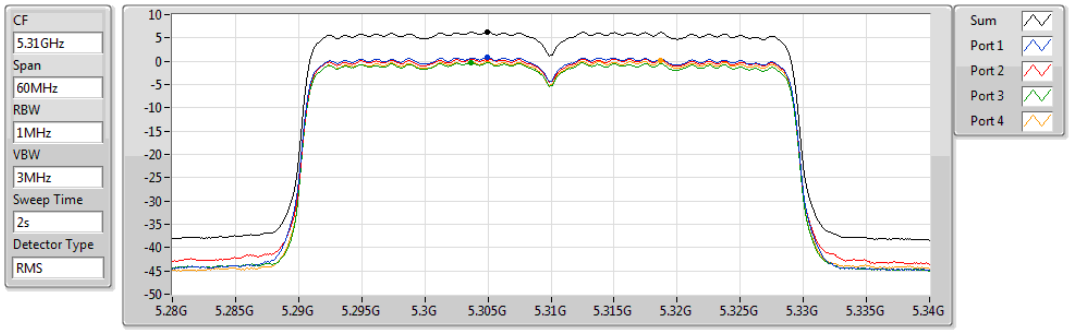
5270MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.26	6.26	1.03	0.48	-0.30	-0.20

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

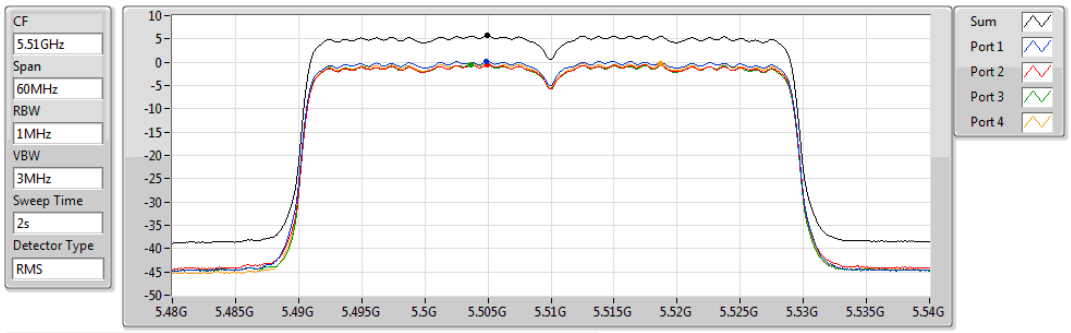
5310MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.34	6.34	0.91	0.59	-0.25	0.10

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

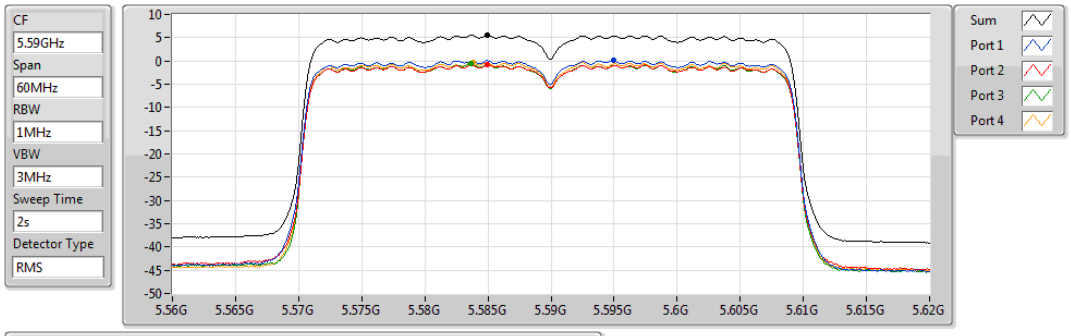
5510MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.74	5.74	0.17	-0.52	-0.48	-0.21

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

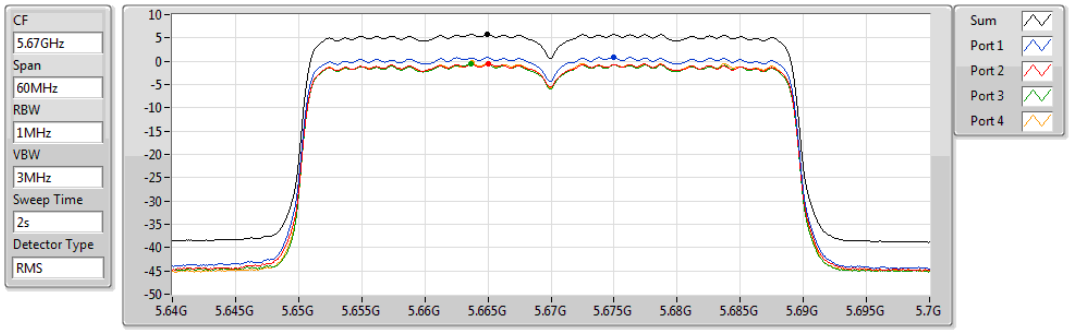
5590MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.56	5.56	0.04	-0.83	-0.66	-0.29

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

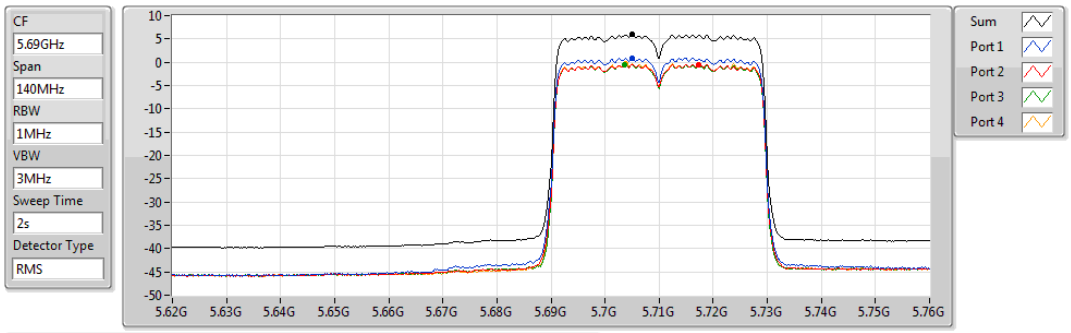
5670MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.81	5.81	0.81	-0.56	-0.61	-0.42

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

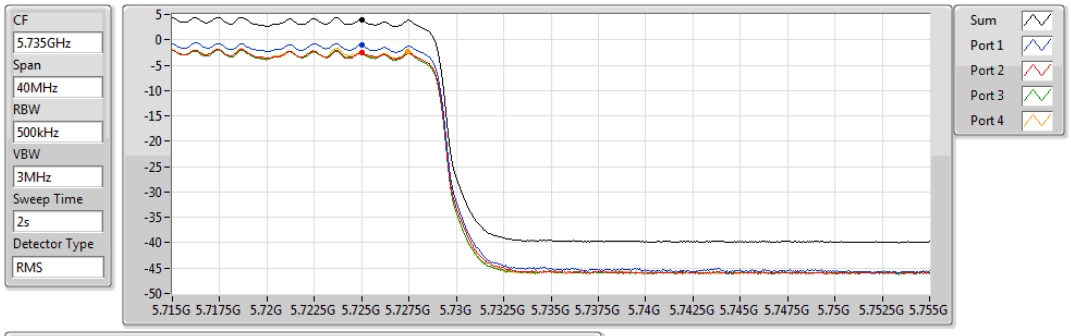
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.93	5.93	0.89	-0.44	-0.48	-0.25

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

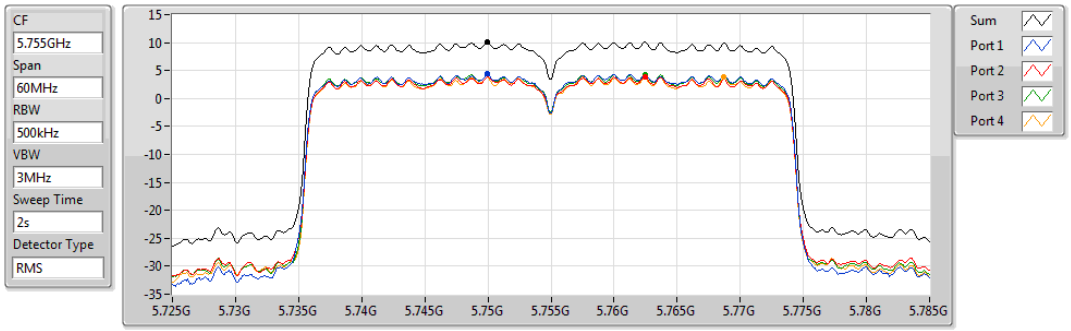
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.93	3.93	-1.01	-2.45	-2.59	-2.33

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

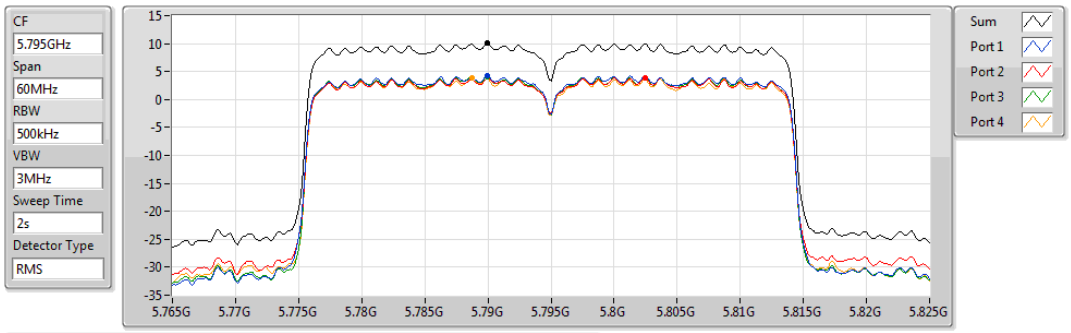
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.10	10.10	4.38	3.92	4.33	3.84

802.11ax HEW40_Nss1,(MCS0)_4TX PSD

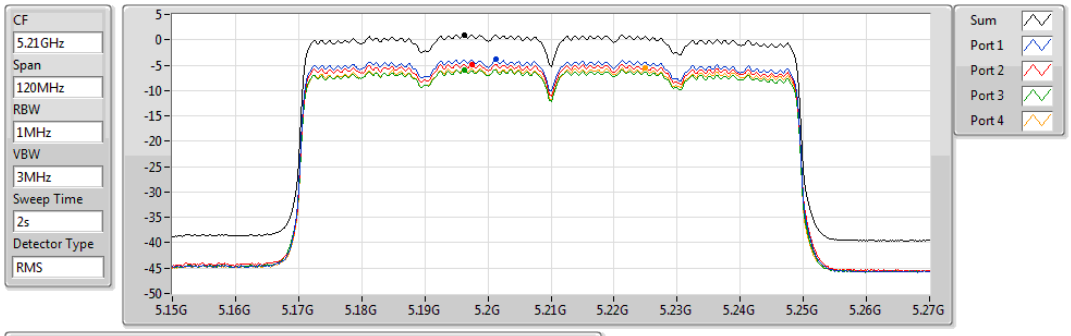
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.08	10.08	4.34	3.95	4.12	3.87

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

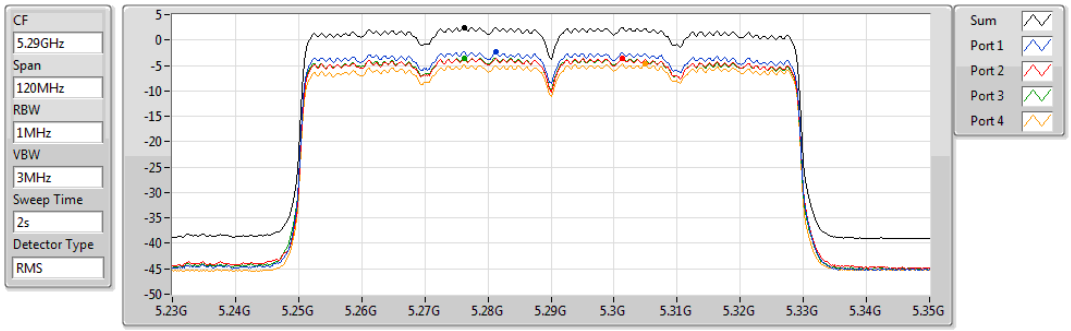
5210MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.02	1.02	-3.90	-4.79	-5.93	-5.63

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

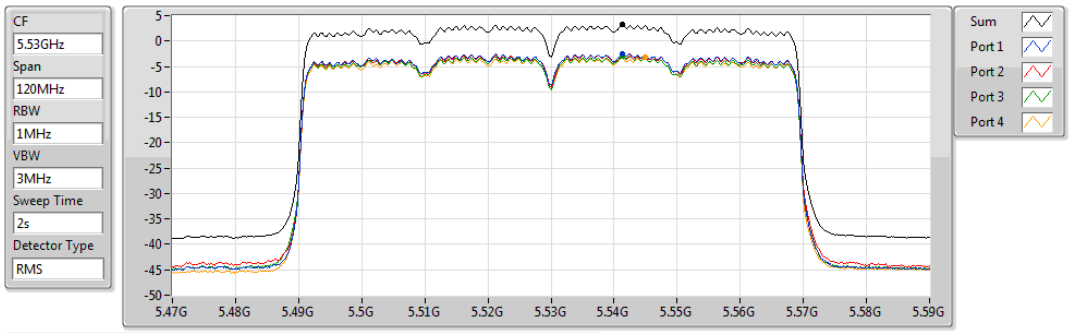
5290MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.49	2.49	-2.35	-3.56	-3.52	-4.72

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

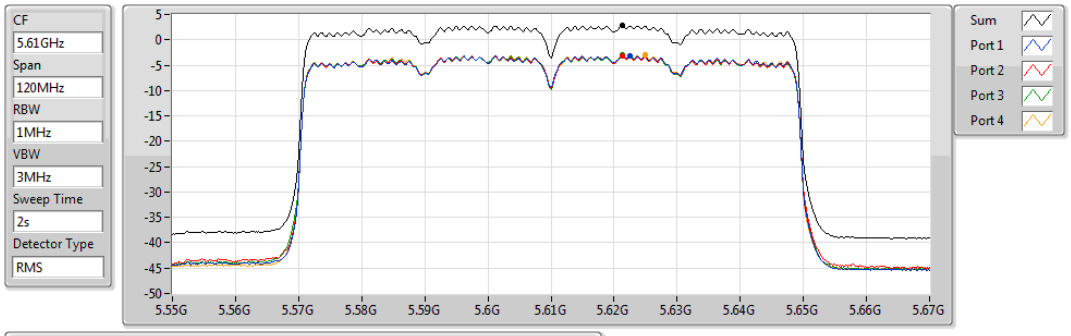
5530MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.23	3.23	-2.50	-2.59	-2.85	-3.24

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

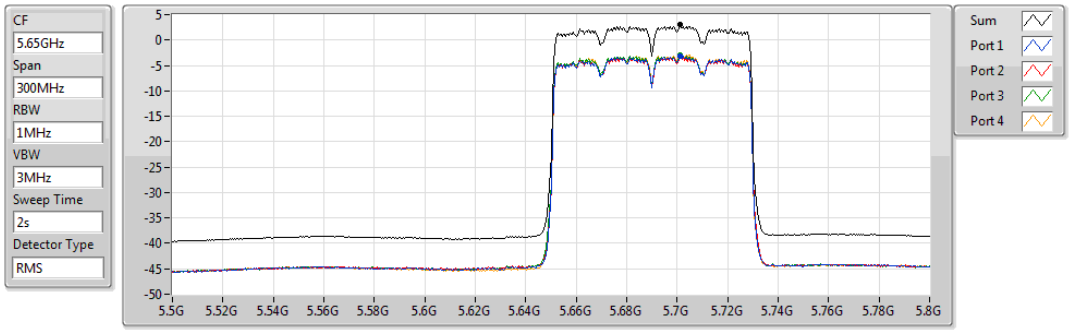
5610MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.93	2.93	-3.10	-3.10	-3.05	-2.98

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

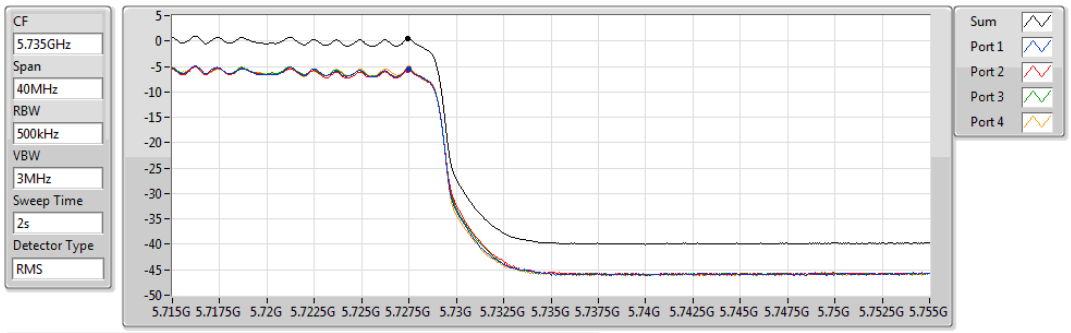
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.96	2.96	-3.20	-3.25	-2.93	-2.89

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

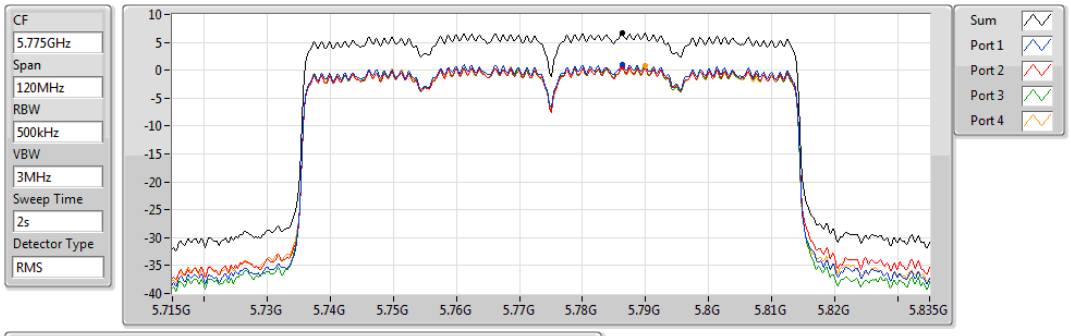
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.44	0.44	-5.49	-5.79	-5.67	-5.32

802.11ax HEW80_Nss1,(MCS0)_4TX PSD

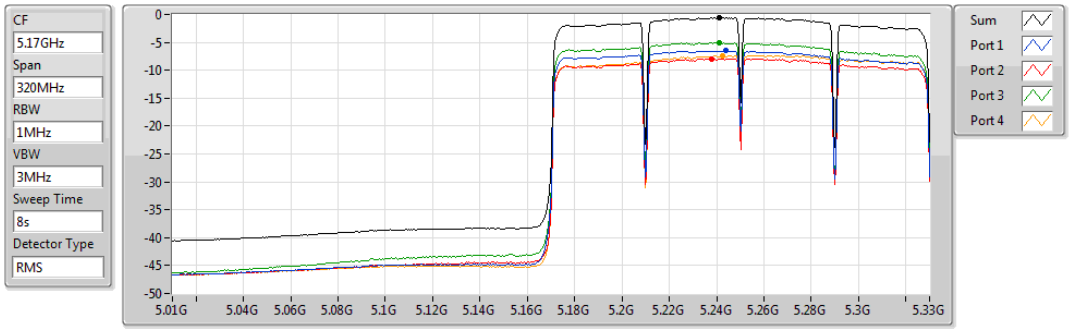
5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.77	6.77	1.04	0.68	0.64	0.75

802.11ax HEW160_Nss1,(MCS0)_4TX PSD

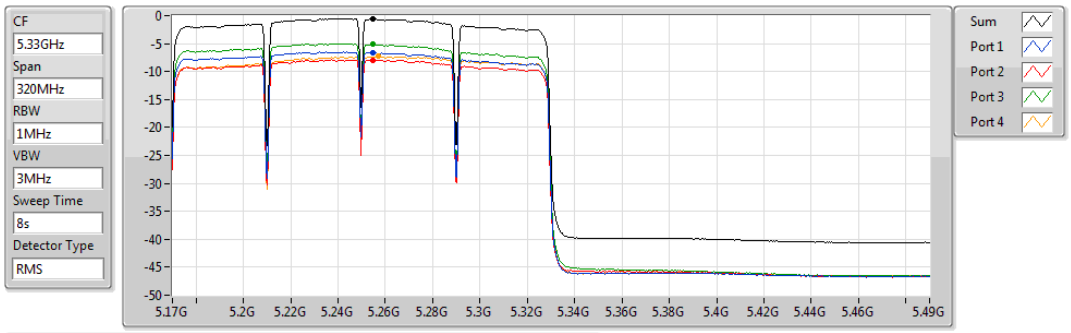
5250MHz Straddle 5.15-5.25GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.61	-0.61	-6.53	-7.93	-5.06	-7.37

802.11ax HEW160_Nss1,(MCS0)_4TX PSD

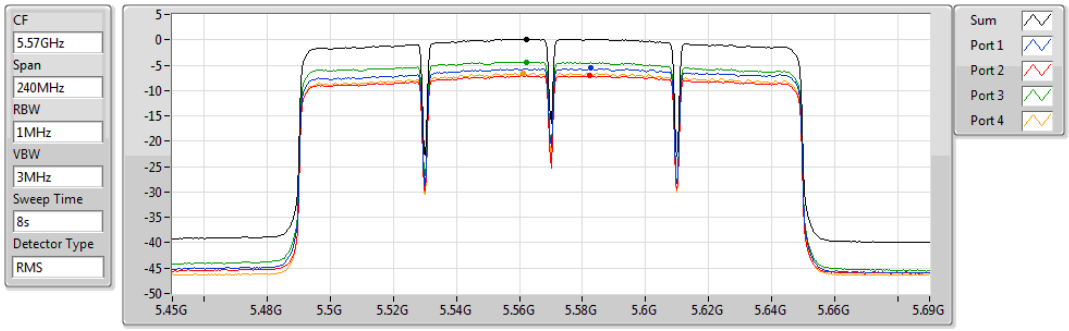
5250MHz Straddle 5.25-5.35GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.65	-0.65	-6.65	-7.96	-5.17	-7.32

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

5570MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.16	0.16	-5.62	-7.10	-4.41	-6.53

Beamforming mode

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
ax20,bf_Nss1,(MCS0)_4TX	15.12	21.64
ax40,bf_Nss1,(MCS0)_4TX	11.15	17.67
ax80,bf_Nss1,(MCS0)_4TX	0.68	7.20
ax160,bf_Nss1,(MCS0)_4TX	-1.86	4.66
5.25-5.35GHz	-	-
ax20,bf_Nss1,(MCS0)_4TX	8.92	15.94
ax40,bf_Nss1,(MCS0)_4TX	5.96	12.98
ax80,bf_Nss1,(MCS0)_4TX	2.12	9.14
ax160,bf_Nss1,(MCS0)_4TX	-1.06	5.96
5.47-5.725GHz	-	-
ax20,bf_Nss1,(MCS0)_4TX	8.00	15.52
ax40,bf_Nss1,(MCS0)_4TX	5.76	13.28
ax80,bf_Nss1,(MCS0)_4TX	3.15	10.67
ax160,bf_Nss1,(MCS0)_4TX	-4.22	3.30
5.725-5.85GHz	-	-
ax20,bf_Nss1,(MCS0)_4TX	12.24	20.01
ax40,bf_Nss1,(MCS0)_4TX	9.50	17.27
ax80,bf_Nss1,(MCS0)_4TX	6.21	13.98

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
ax20,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	6.52	7.32	5.22	4.62	6.07	11.52	16.48	18.04	23.00
5200MHz	Pass	6.52	11.17	9.37	8.32	8.97	15.12	16.48	21.64	23.00
5240MHz	Pass	6.52	10.62	8.21	9.21	8.32	14.87	16.48	21.39	23.00
5260MHz	Pass	7.02	3.02	2.25	2.95	3.12	8.50	9.98	15.52	17.00
5300MHz	Pass	7.02	3.72	2.05	3.11	4.08	8.92	9.98	15.94	17.00
5320MHz	Pass	7.02	2.68	2.40	3.68	3.33	8.70	9.98	15.72	17.00
5500MHz	Pass	7.52	3.31	3.27	2.11	2.30	8.00	9.48	15.52	17.00
5580MHz	Pass	7.52	3.07	2.32	1.83	1.69	7.91	9.48	15.43	17.00
5700MHz	Pass	7.52	3.16	2.01	2.27	1.75	7.85	9.48	15.37	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.52	2.31	1.79	1.60	0.98	7.42	9.48	14.94	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	7.77	-0.11	-1.05	-0.04	-1.45	5.11	28.23	12.88	36.00
5745MHz	Pass	7.77	7.09	6.01	6.86	6.36	12.24	28.23	20.01	36.00
5785MHz	Pass	7.77	7.39	6.07	6.85	6.90	12.19	28.23	19.96	36.00
5825MHz	Pass	7.77	7.28	7.08	6.72	5.78	12.13	28.23	19.90	36.00
ax40,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	6.52	2.84	-0.79	0.75	0.40	6.67	16.48	13.19	23.00
5230MHz	Pass	6.52	7.39	4.59	5.35	4.80	11.15	16.48	17.67	23.00
5270MHz	Pass	7.02	0.98	0.29	-0.28	-0.17	5.82	9.98	12.84	17.00
5310MHz	Pass	7.02	1.34	1.02	-0.74	0.09	5.96	9.98	12.98	17.00
5510MHz	Pass	7.52	1.53	0.02	-0.88	0.23	5.76	9.48	13.28	17.00
5590MHz	Pass	7.52	1.11	0.15	-0.02	-0.90	5.65	9.48	13.17	17.00
5670MHz	Pass	7.52	1.41	-0.18	-0.26	-1.07	5.58	9.48	13.10	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.52	1.18	-0.34	-0.53	-0.61	5.48	9.48	13.00	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	7.77	-1.59	-2.15	-2.89	-3.87	3.37	28.23	11.14	36.00
5755MHz	Pass	7.77	4.21	3.21	3.96	2.66	9.25	28.23	17.02	36.00
5795MHz	Pass	7.77	4.54	3.33	3.97	2.67	9.50	28.23	17.27	36.00
ax80,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	6.52	-3.19	-4.26	-5.45	-5.47	0.68	16.48	7.20	23.00
5290MHz	Pass	7.02	-2.04	-4.14	-2.73	-4.13	2.12	9.98	9.14	17.00
5530MHz	Pass	7.52	-1.41	-1.98	-2.71	-3.35	3.15	9.48	10.67	17.00
5610MHz	Pass	7.52	-1.50	-2.67	-3.36	-3.65	2.52	9.48	10.04	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.52	-2.48	-2.41	-3.22	-3.38	2.59	9.48	10.11	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	7.77	-5.20	-6.64	-6.14	-5.65	-0.05	28.23	7.72	36.00
5775MHz	Pass	7.77	2.09	2.18	0.12	-0.34	6.21	28.23	13.98	36.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
ax160,bf_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.52	-6.59	-8.33	-6.02	-8.65	-1.86	16.48	4.66	23.00
5250MHz Straddle 5.25-5.35GHz	Pass	7.02	-6.55	-8.52	-6.19	-5.01	-1.06	9.98	5.96	17.00
5570MHz	Pass	7.52	-9.01	-10.66	-8.11	-10.50	-4.22	9.48	3.30	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;
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
   Directional gain = 0.5 + 10 * log(4/1) =6.52 dBi > 6 dBi.
   Limit shall be reduced to 17 dBm – (6.52 dBi – 6 dBi) = 16.48 dBm.

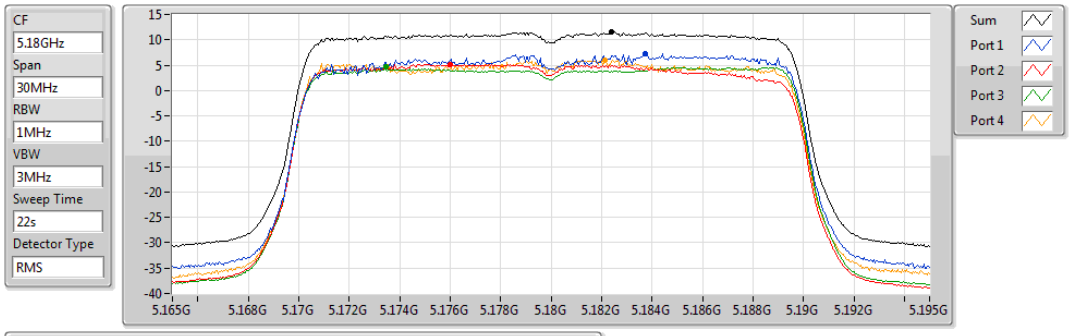
   5250-5350 MHz
   Directional gain = 1+ 10 * log(4/1) =7.02 dBi > 6 dBi.
   Limit shall be reduced to 11 dBm – (7.02 dBi – 6 dBi) =9.98 dBm.

   5470-5750 MHz
   Directional gain = 1.5 + 10 * log(4/1) =7.52 dBi > 6 dBi.
   Limit shall be reduced to 11 dBm – (7.52dBi – 6 dBi) =9.48 dBm.

   5725-5850 MHz
   Directional gain = 1.75 + 10 * log(4/1) =7.77 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (7.77 dBi – 6 dBi) = 28.23 dBm.

ax20,bf_Nss1,(MCS0)_4TX **PSD**

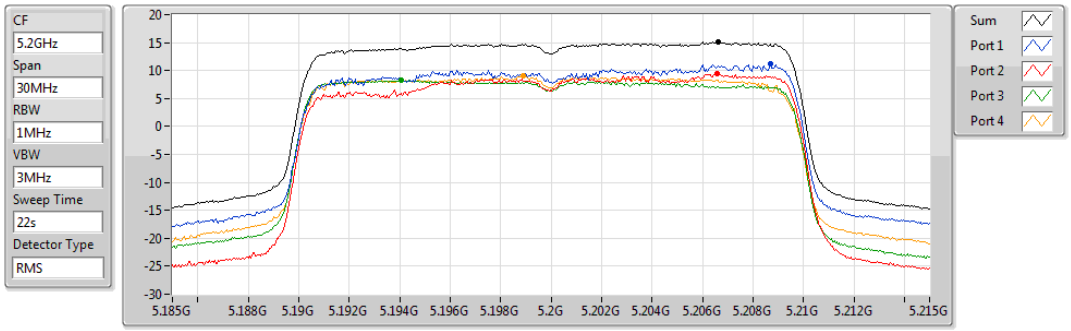
5180MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.52	11.52	7.32	5.22	4.62	6.07

ax20,bf_Nss1,(MCS0)_4TX **PSD**

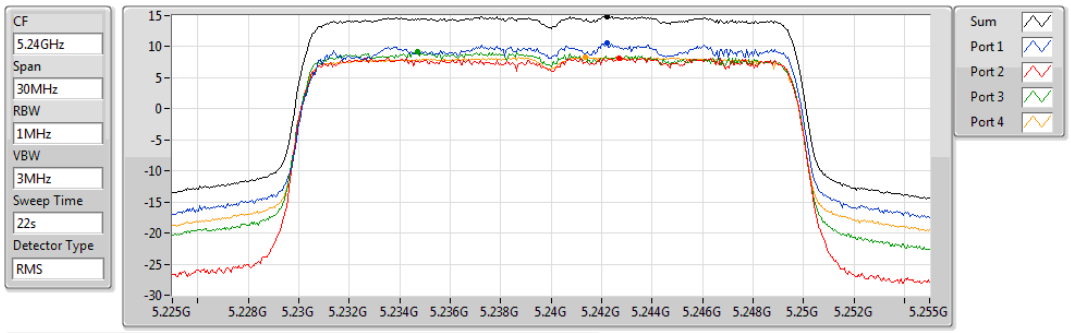
5200MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
15.12	15.12	11.17	9.37	8.32	8.97

ax20,bf_Nss1,(MCS0)_4TX **PSD**

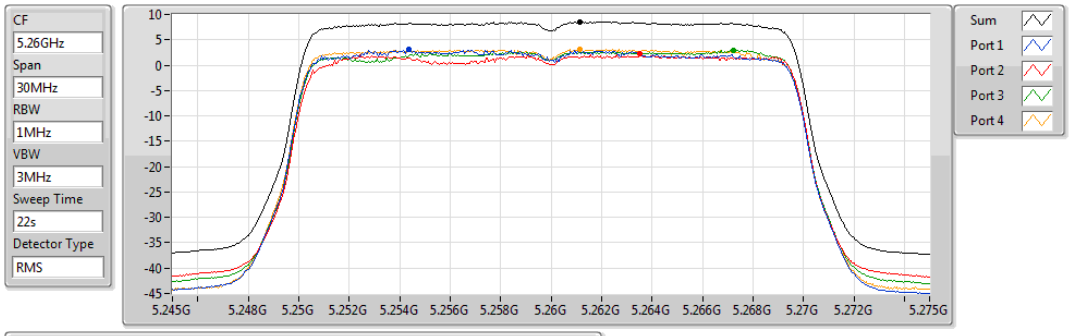
5240MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.87	14.87	10.62	8.21	9.21	8.32

ax20,bf_Nss1,(MCS0)_4TX **PSD**

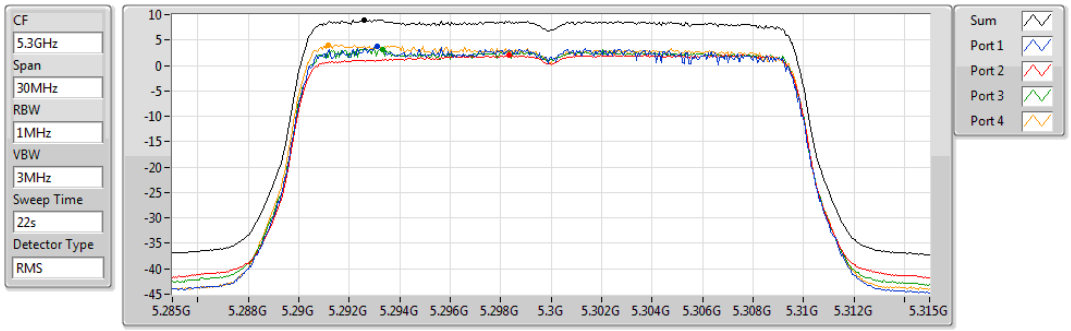
5260MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.50	8.50	3.02	2.25	2.95	3.12

ax20,bf_Nss1,(MCS0)_4TX **PSD**

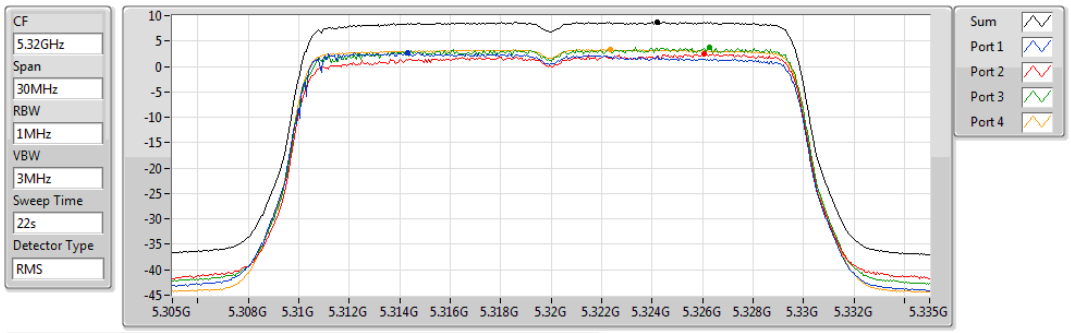
5300MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.92	8.92	3.72	2.05	3.11	4.08

ax20,bf_Nss1,(MCS0)_4TX **PSD**

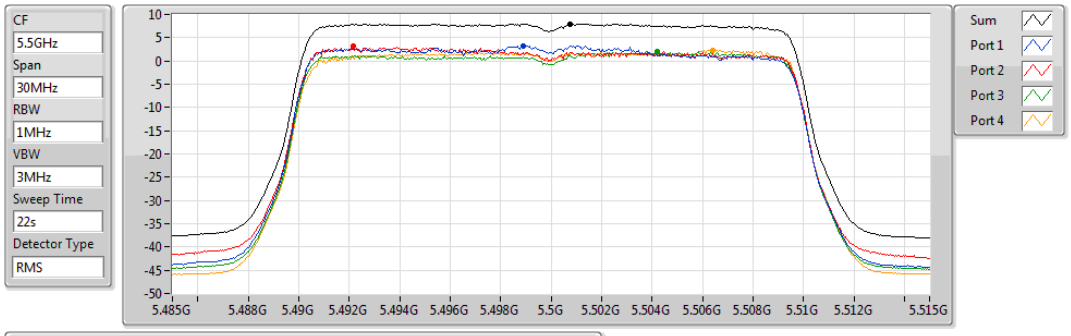
5320MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.70	8.70	2.68	2.40	3.68	3.33

ax20,bf_Nss1,(MCS0)_4TX **PSD**

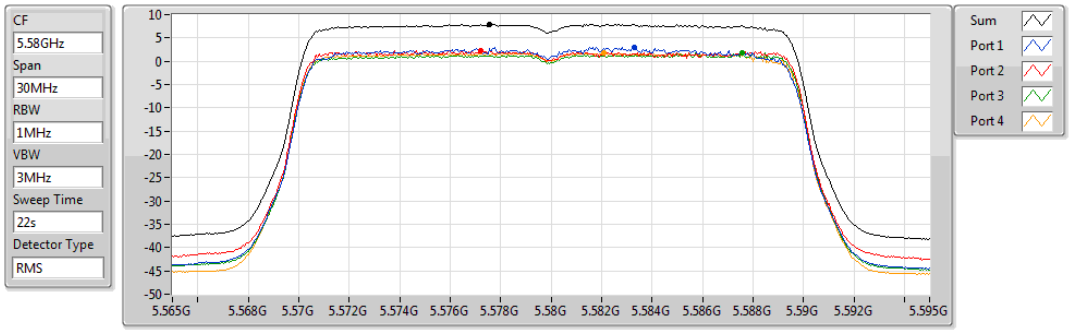
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.00	8.00	3.31	3.27	2.11	2.30

ax20,bf_Nss1,(MCS0)_4TX **PSD**

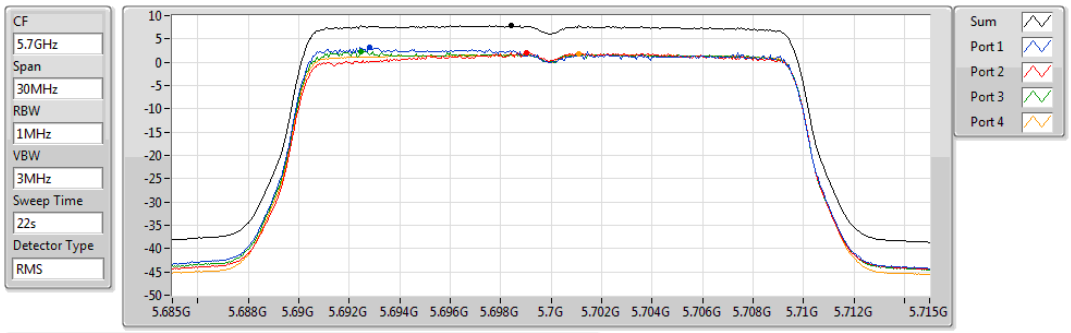
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.91	7.91	3.07	2.32	1.83	1.69

ax20,bf_Nss1,(MCS0)_4TX **PSD**

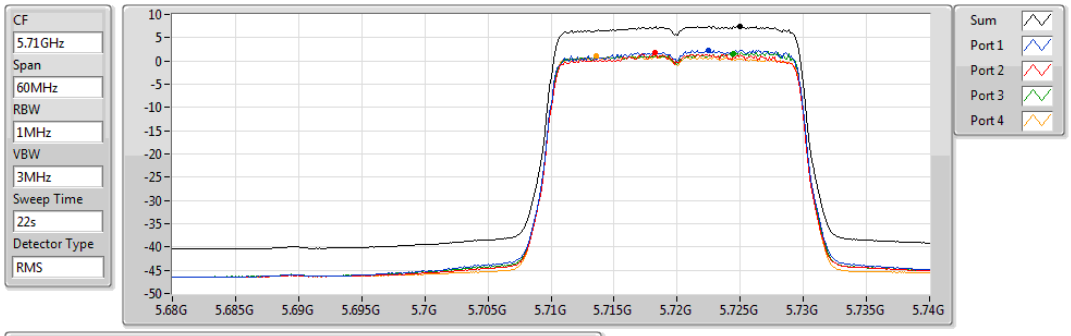
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.85	7.85	3.16	2.01	2.27	1.75

ax20,bf_Nss1,(MCS0)_4TX **PSD**

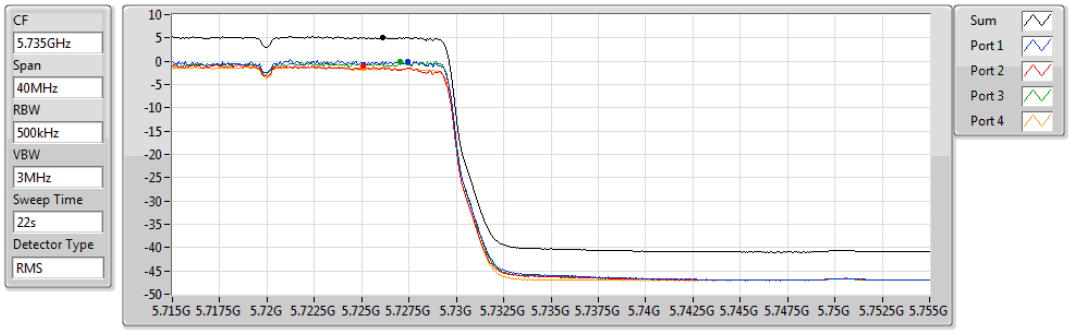
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.42	7.42	2.31	1.79	1.60	0.98

ax20,bf_Nss1,(MCS0)_4TX **PSD**

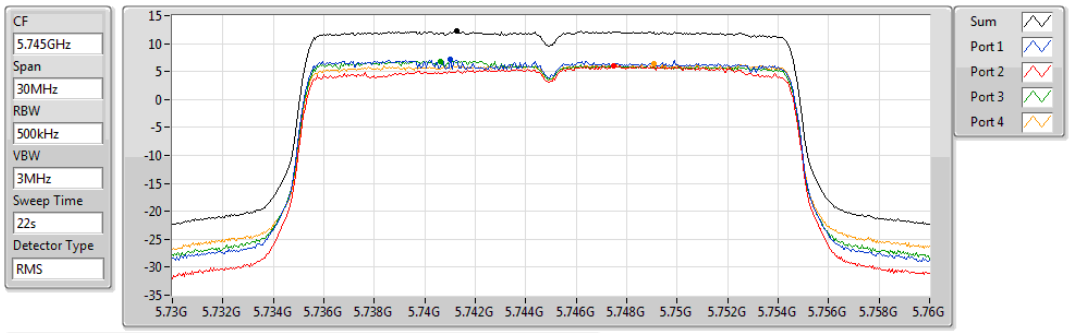
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.11	5.11	-0.11	-1.05	-0.04	-1.45

ax20,bf_Nss1,(MCS0)_4TX **PSD**

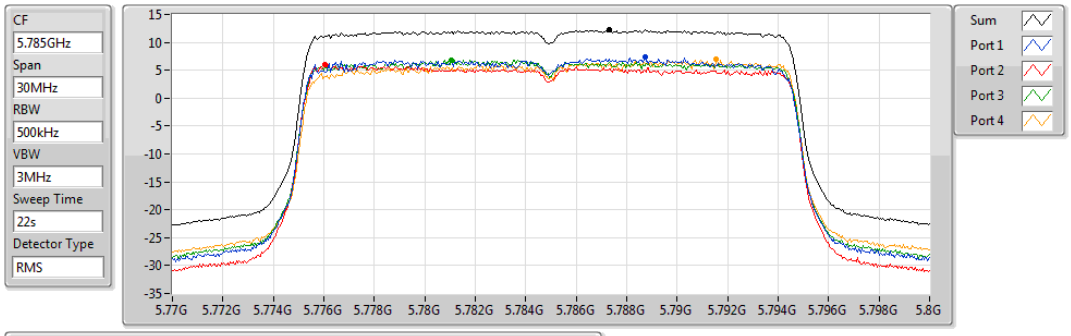
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.24	12.24	7.09	6.01	6.86	6.36

ax20,bf_Nss1,(MCS0)_4TX PSD

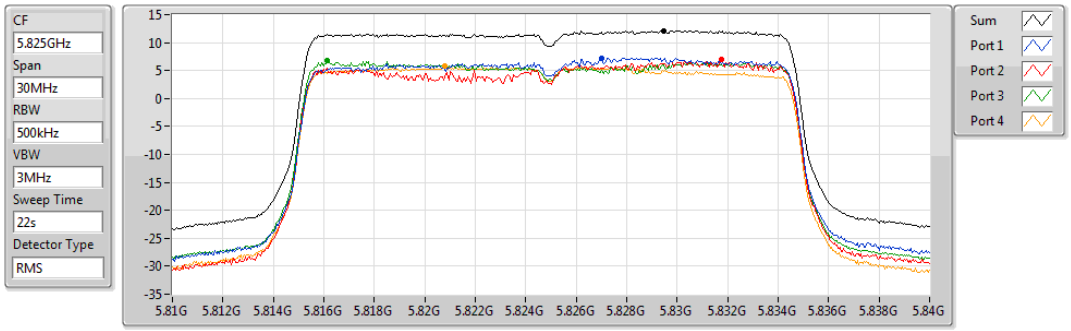
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.19	12.19	7.39	6.07	6.85	6.90

ax20,bf_Nss1,(MCS0)_4TX PSD

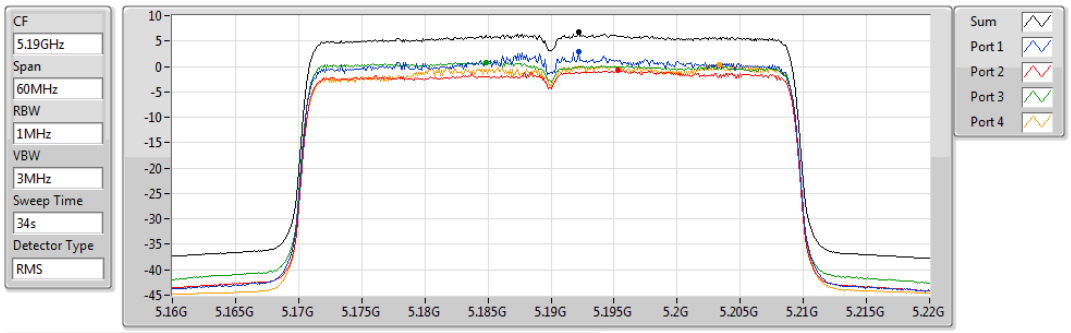
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.13	12.13	7.28	7.08	6.72	5.78

ax40,bf_Nss1,(MCS0)_4TX PSD

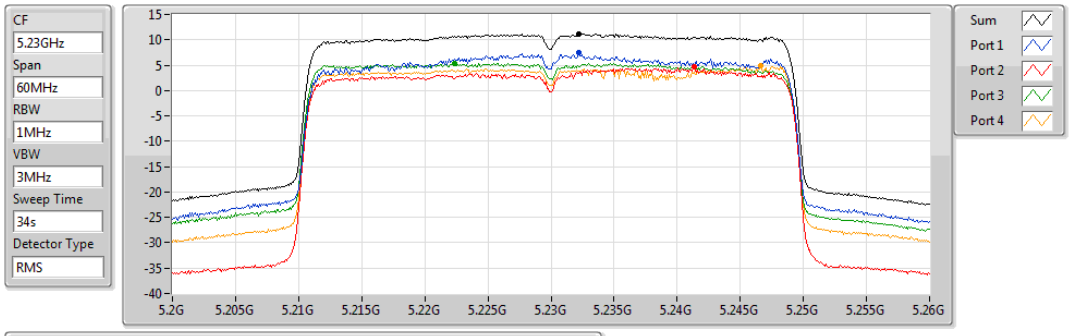
5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.67	6.67	2.84	-0.79	0.75	0.40

ax40,bf_Nss1,(MCS0)_4TX **PSD**

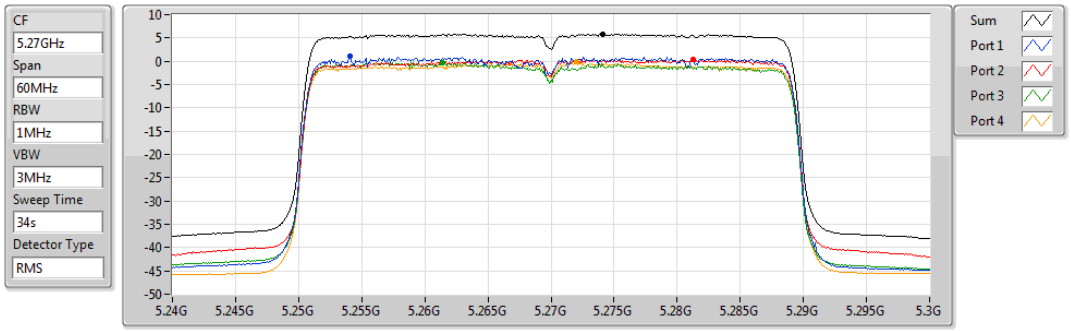
5230MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.15	11.15	7.39	4.59	5.35	4.80

ax40,bf_Nss1,(MCS0)_4TX **PSD**

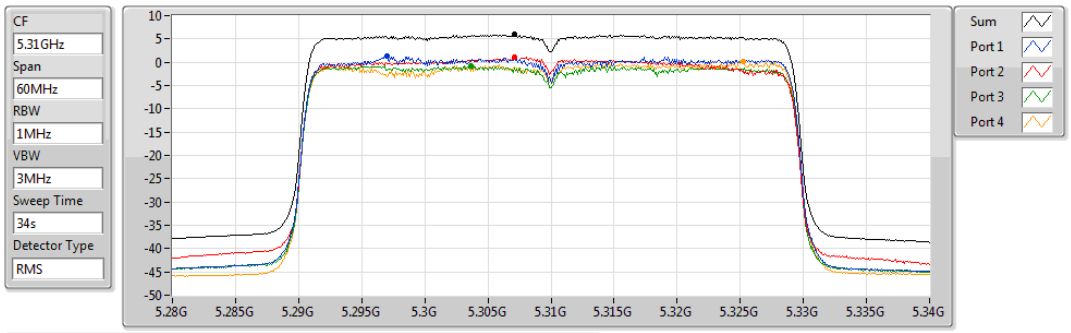
5270MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.82	5.82	0.98	0.29	-0.28	-0.17

ax40,bf_Nss1,(MCS0)_4TX **PSD**

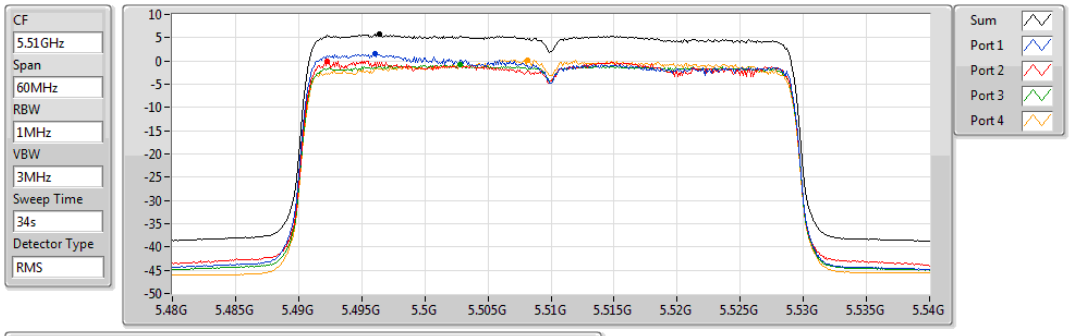
5310MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.96	5.96	1.34	1.02	-0.74	0.09

ax40,bf_Nss1,(MCS0)_4TX **PSD**

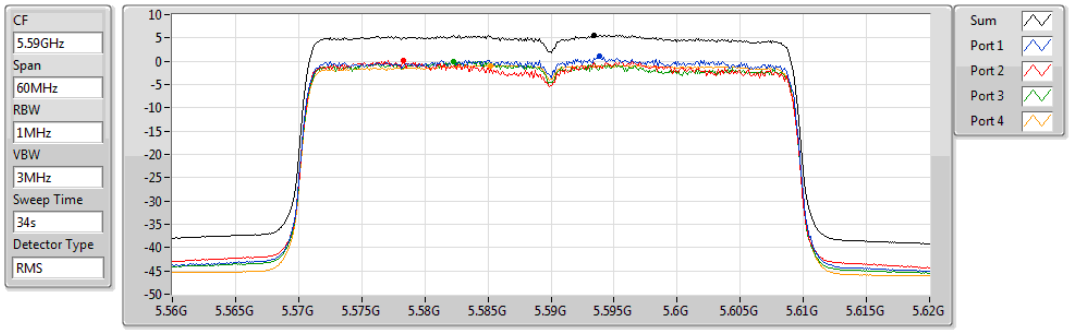
5510MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.76	5.76	1.53	0.02	-0.88	0.23

ax40,bf_Nss1,(MCS0)_4TX **PSD**

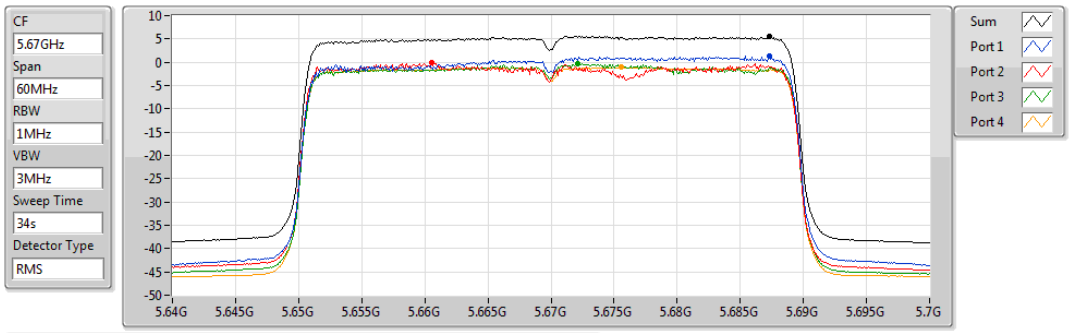
5590MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.65	5.65	1.11	0.15	-0.02	-0.90

ax40,bf_Nss1,(MCS0)_4TX **PSD**

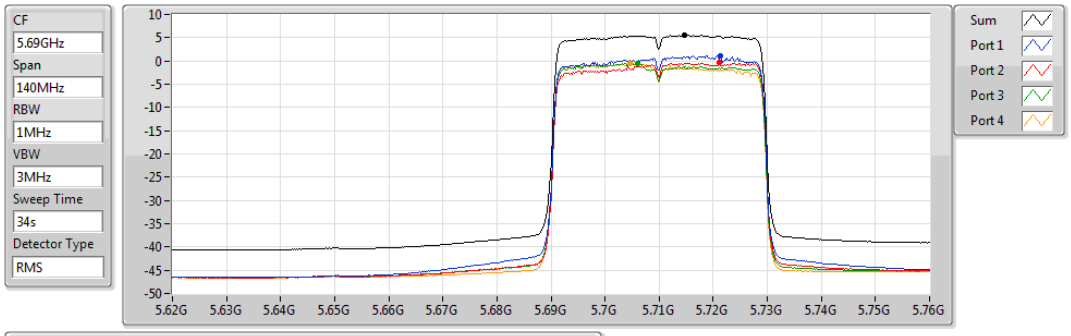
5670MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.58	5.58	1.41	-0.18	-0.26	-1.07

ax40,bf_Nss1,(MCS0)_4TX **PSD**

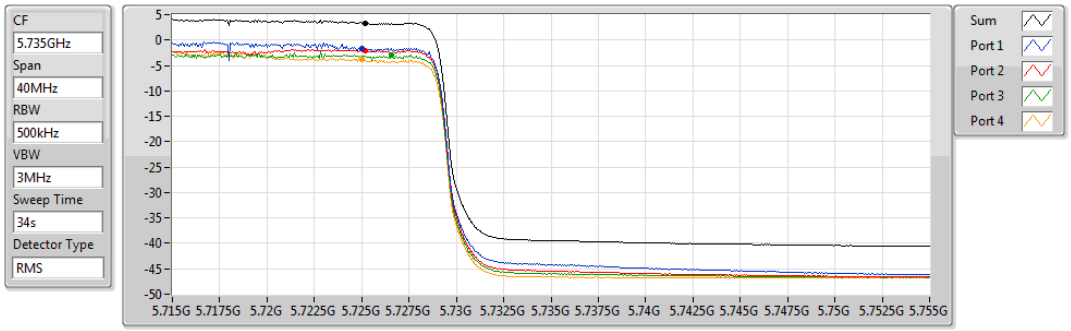
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.48	5.48	1.18	-0.34	-0.53	-0.61

ax40,bf_Nss1,(MCS0)_4TX **PSD**

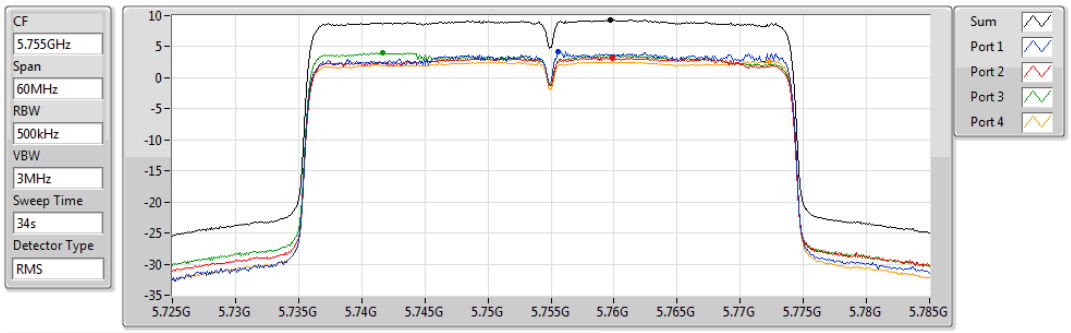
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.37	3.37	-1.59	-2.15	-2.89	-3.87

ax40,bf_Nss1,(MCS0)_4TX **PSD**

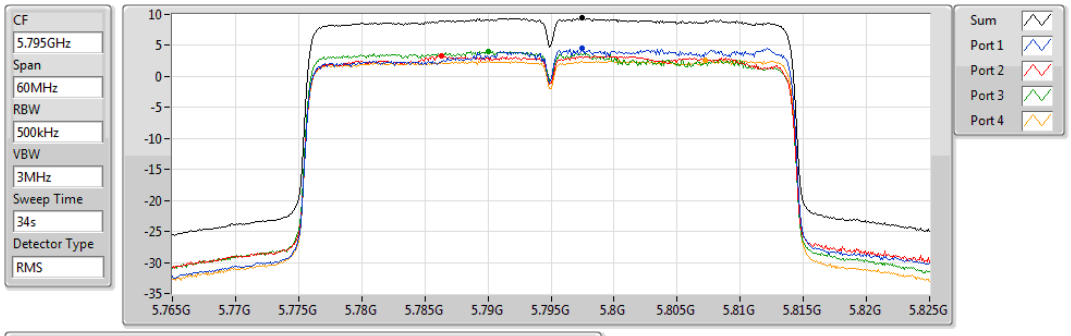
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.25	9.25	4.21	3.21	3.96	2.66

ax40,bf_Nss1,(MCS0)_4TX **PSD**

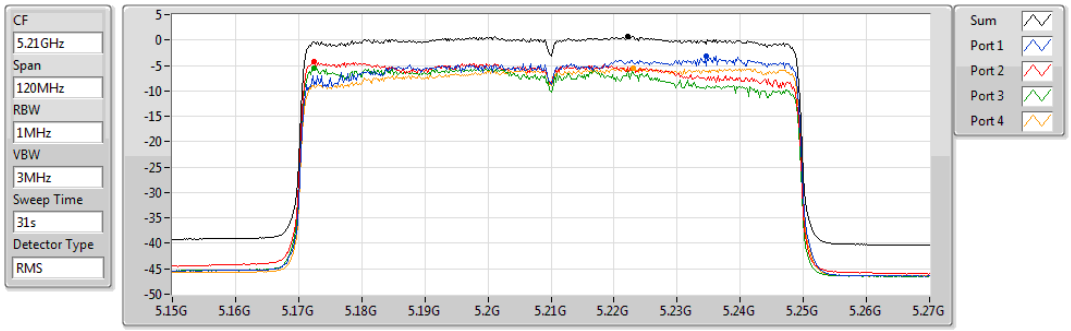
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.50	9.50	4.54	3.33	3.97	2.67

ax80,bf_Nss1,(MCS0)_4TX **PSD**

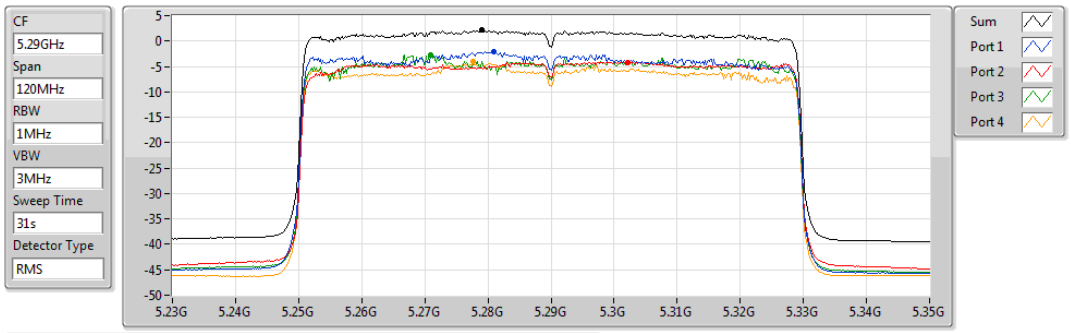
5210MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.68	0.68	-3.19	-4.26	-5.45	-5.47

ax80,bf_Nss1,(MCS0)_4TX **PSD**

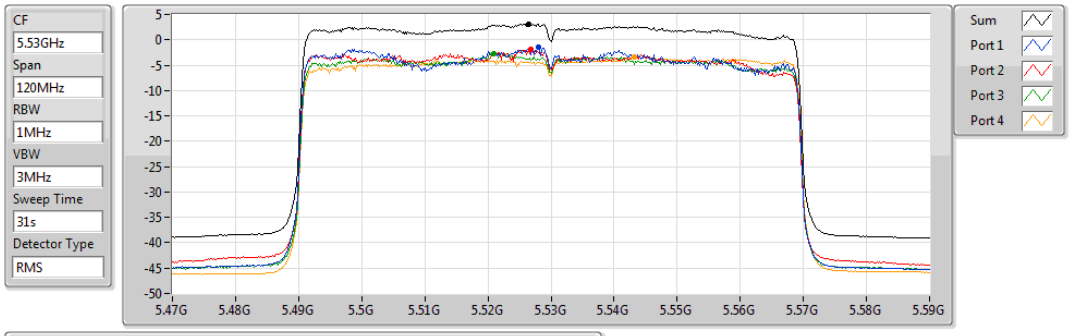
5290MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.12	2.12	-2.04	-4.14	-2.73	-4.13

ax80,bf_Nss1,(MCS0)_4TX **PSD**

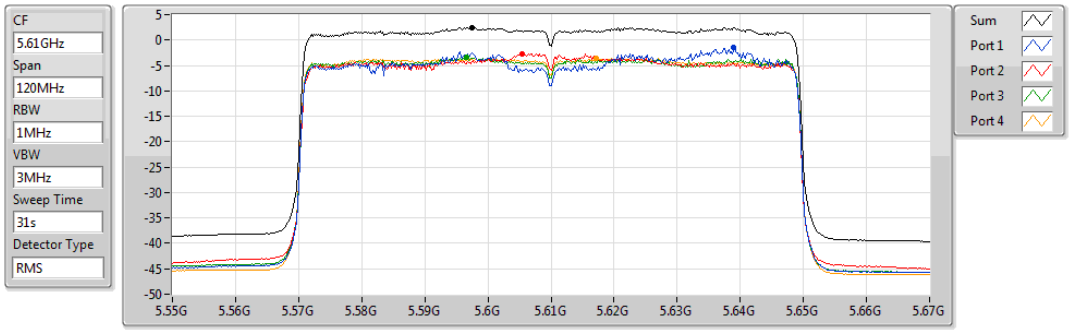
5530MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.15	3.15	-1.41	-1.98	-2.71	-3.35

ax80,bf_Nss1,(MCS0)_4TX **PSD**

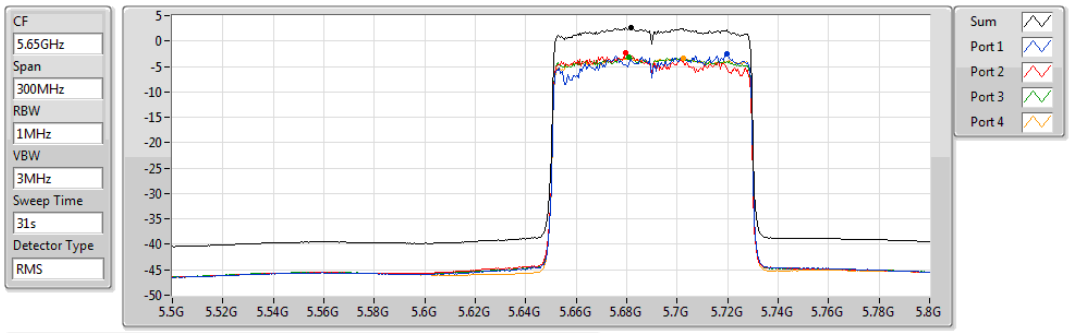
5610MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.52	2.52	-1.50	-2.67	-3.36	-3.65

ax80,bf_Nss1,(MCS0)_4TX **PSD**

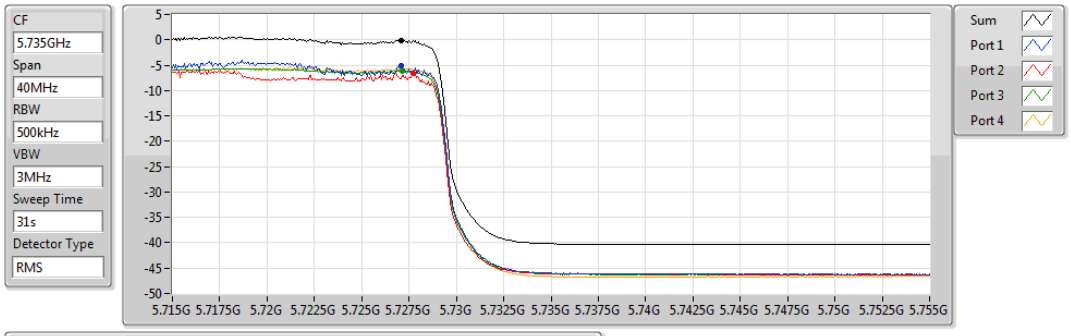
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.59	2.59	-2.48	-2.41	-3.22	-3.38

ax80,bf_Nss1,(MCS0)_4TX **PSD**

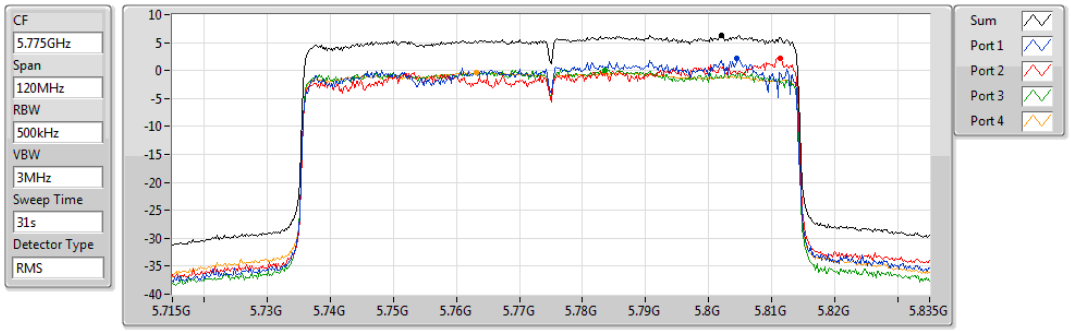
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.05	-0.05	-5.20	-6.64	-6.14	-5.65

ax80,bf_Nss1,(MCS0)_4TX **PSD**

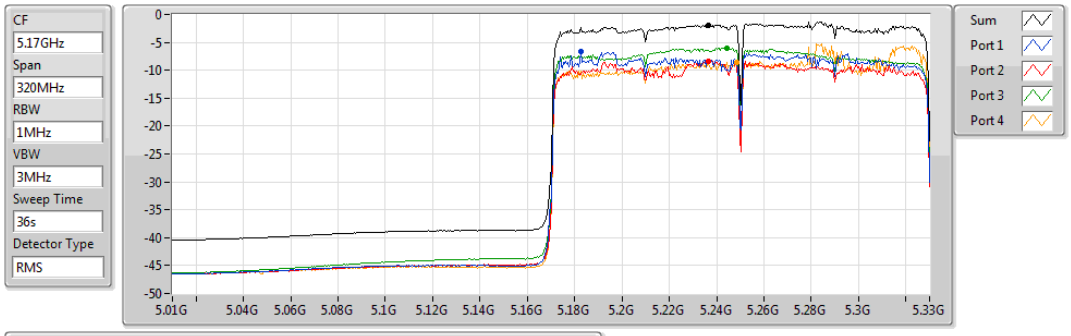
5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.21	6.21	2.09	2.18	0.12	-0.34

ax160,bf_Nss1,(MCS0)_4TX **PSD**

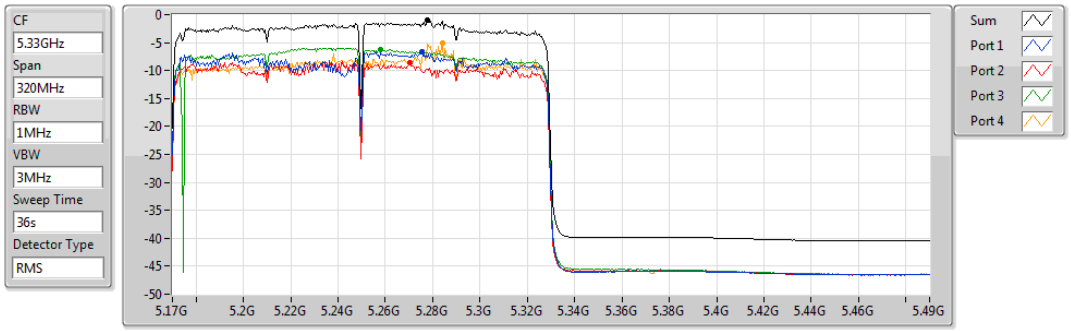
5250MHz Straddle 5.15-5.25GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.86	-1.86	-6.59	-8.33	-6.02	-8.65

ax160,bf_Nss1,(MCS0)_4TX **PSD**

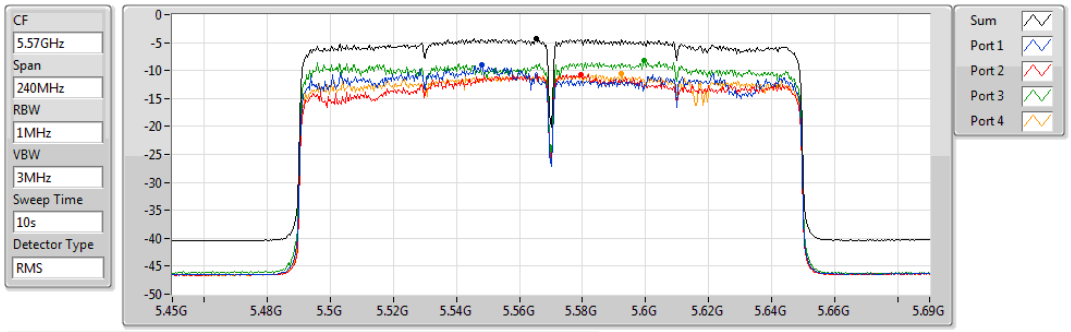
5250MHz Straddle 5.25-5.35GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.06	-1.06	-6.55	-8.52	-6.19	-5.01

ax160,bf_Nss1,(MCS0)_4TX **PSD**

5570MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.22	-4.22	-9.01	-10.66	-8.11	-10.50

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

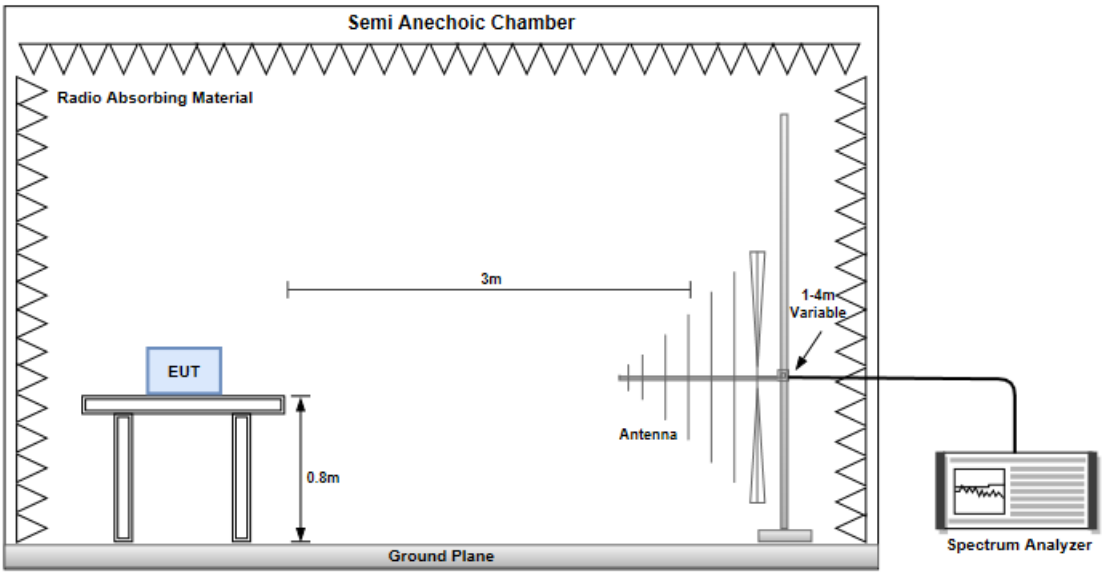
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

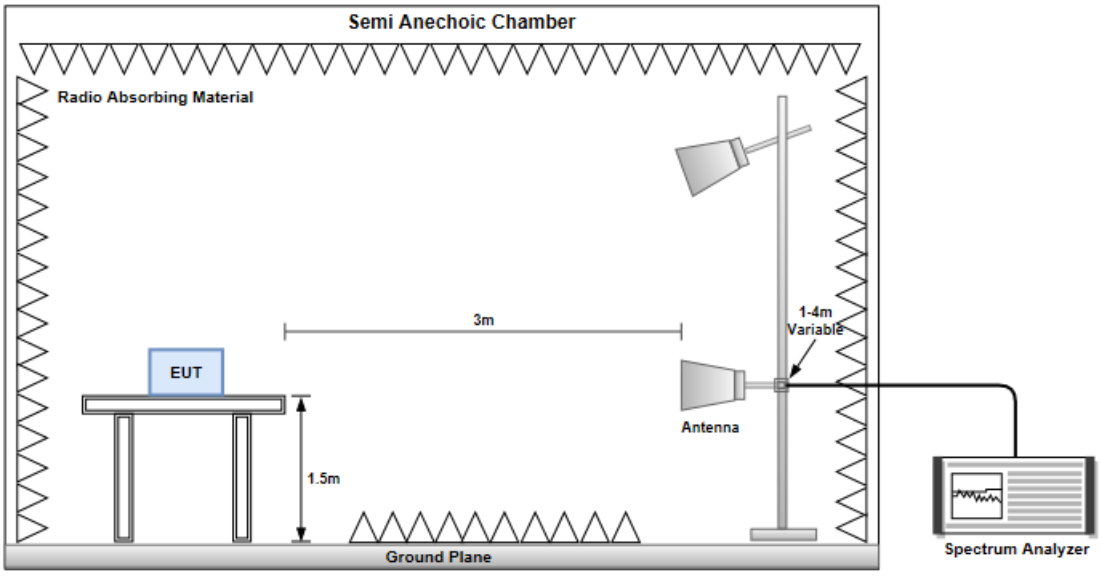
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

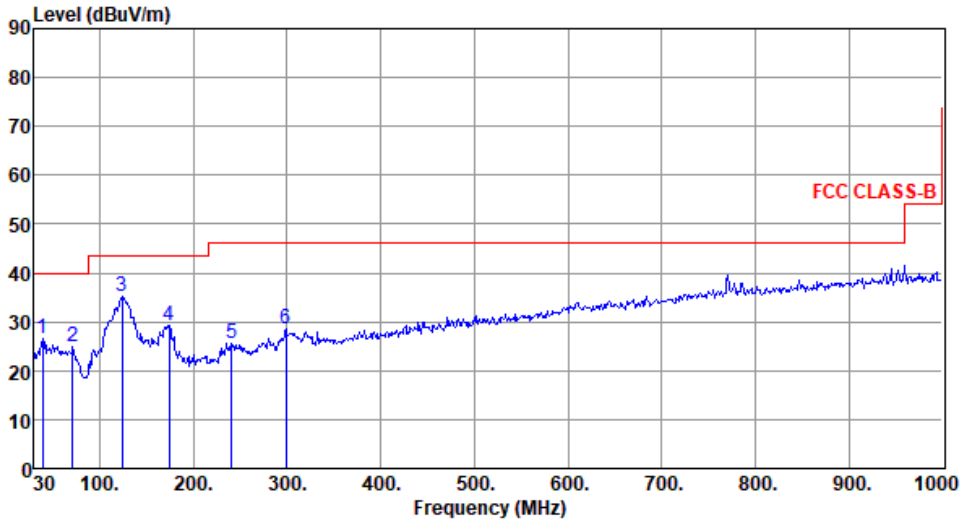


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

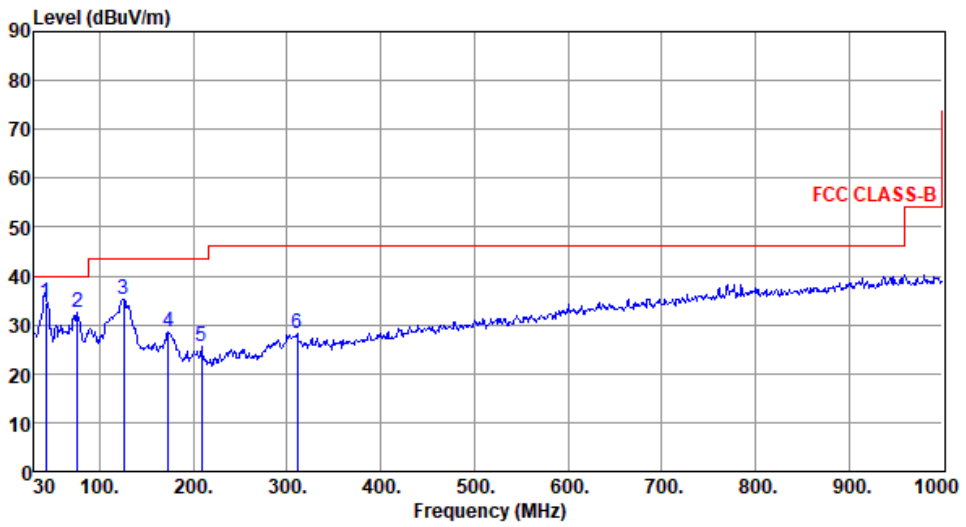
Modulation	11a	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	38.73	26.44	40.00	-13.56	35.20	-8.76	Peak	---	---
2	70.74	24.95	40.00	-15.05	35.67	-10.72	Peak	---	---
3	124.09	35.27	43.50	-8.23	45.54	-10.27	Peak	---	---
4	174.53	29.34	43.50	-14.16	38.62	-9.28	Peak	---	---
5	240.49	25.55	46.00	-20.45	35.72	-10.17	Peak	---	---
6	298.69	28.63	46.00	-17.37	36.75	-8.12	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.

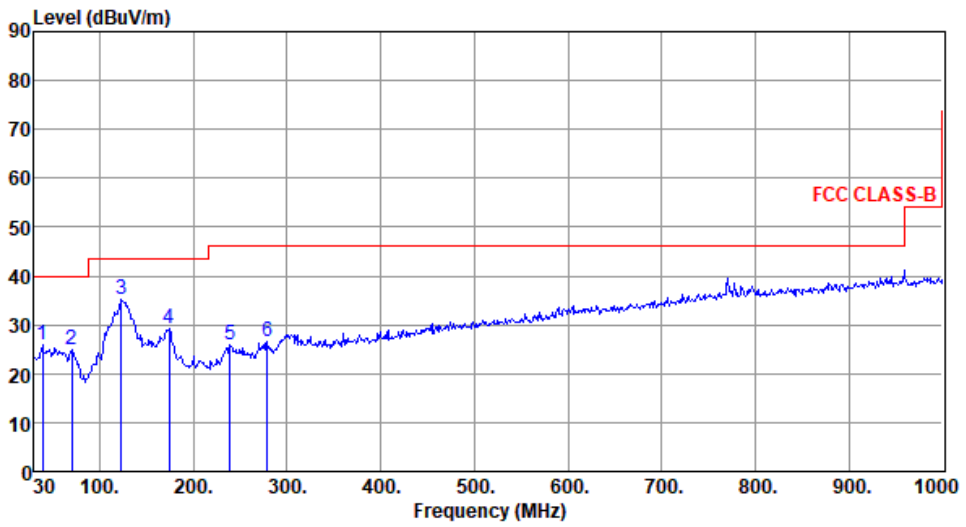
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	34.53	40.00	-5.47	42.79	-8.26	QP	109	183
2	76.56	32.49	40.00	-7.51	44.64	-12.15	Peak	---	---
3	126.03	35.36	43.50	-8.14	45.43	-10.07	Peak	---	---
4	173.56	28.48	43.50	-15.02	37.68	-9.20	Peak	---	---
5	208.48	25.46	43.50	-18.04	37.53	-12.07	Peak	---	---
6	311.30	28.30	46.00	-17.70	35.99	-7.69	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.

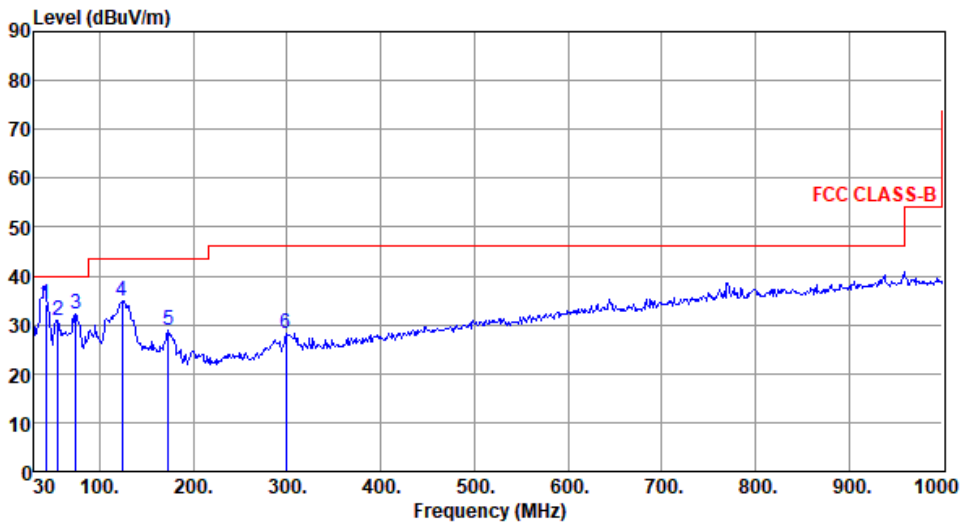
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	38.73	25.77	40.00	-14.23	34.53	-8.76	Peak	---	---
2	69.77	24.90	40.00	-15.10	35.50	-10.60	Peak	---	---
3	123.12	35.15	43.50	-8.35	45.52	-10.37	Peak	---	---
4	174.53	29.10	43.50	-14.40	38.38	-9.28	Peak	---	---
5	239.52	25.84	46.00	-20.16	36.09	-10.25	Peak	---	---
6	279.29	26.68	46.00	-19.32	35.35	-8.67	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)	5745
Polarization	Vertical		

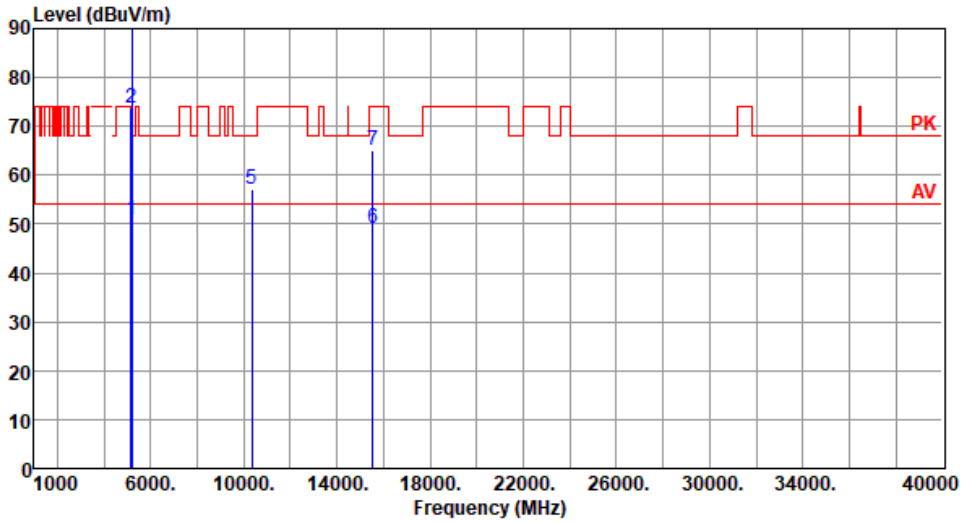


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	34.32	40.00	-5.68	42.58	-8.26	QP	109	189
2	55.22	31.05	40.00	-8.95	39.72	-8.67	Peak	---	---
3	74.62	32.33	40.00	-7.67	43.89	-11.56	Peak	---	---
4	124.09	34.94	43.50	-8.56	45.21	-10.27	Peak	---	---
5	173.56	28.96	43.50	-14.54	38.16	-9.20	Peak	---	---
6	298.69	28.19	46.00	-17.81	36.31	-8.12	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

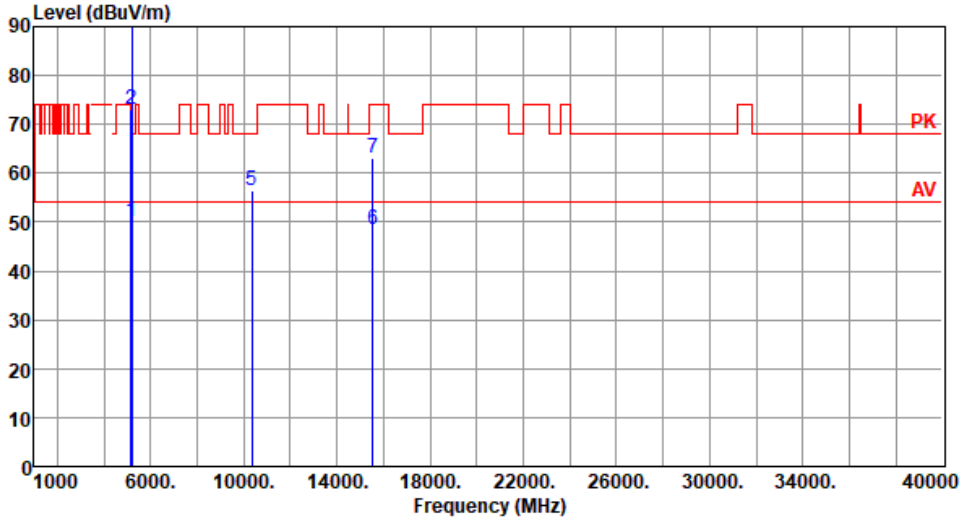
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



		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	50.85	54.00	-3.15	46.21	4.64	Average	219	235
2		5150.00	73.56	74.00	-0.44	68.92	4.64	Peak	219	235
3	*	5180.00	107.34			102.88	4.46	Average	219	235
4	*	5180.00	117.21			112.75	4.46	Peak	219	235
5		10360.00	57.14	68.20	-11.06	42.95	14.19	Peak	100	161
6		15540.00	49.28	54.00	-4.72	34.37	14.91	Average	271	110
7		15540.00	65.02	74.00	-8.98	50.11	14.91	Peak	271	110

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

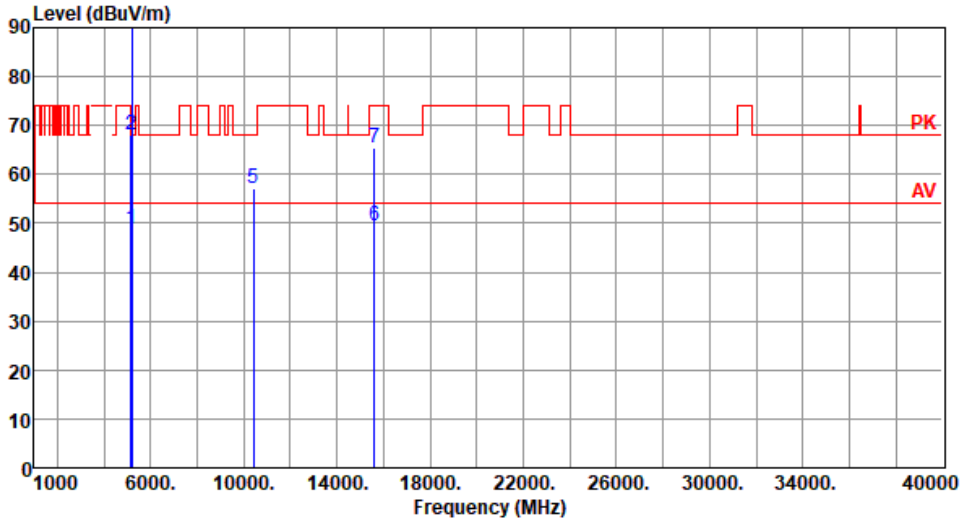
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



		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	50.10	54.00	-3.90	45.46	4.64	Average	132	204
2		5150.00	72.90	74.00	-1.10	68.26	4.64	Peak	132	204
3	*	5180.00	104.92			100.46	4.46	Average	132	204
4	*	5180.00	115.03			110.57	4.46	Peak	132	204
5		10360.00	56.61	68.20	-11.59	42.42	14.19	Peak	100	62
6		15540.00	48.65	54.00	-5.35	33.74	14.91	Average	211	94
7		15540.00	63.21	74.00	-10.79	48.30	14.91	Peak	211	94

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

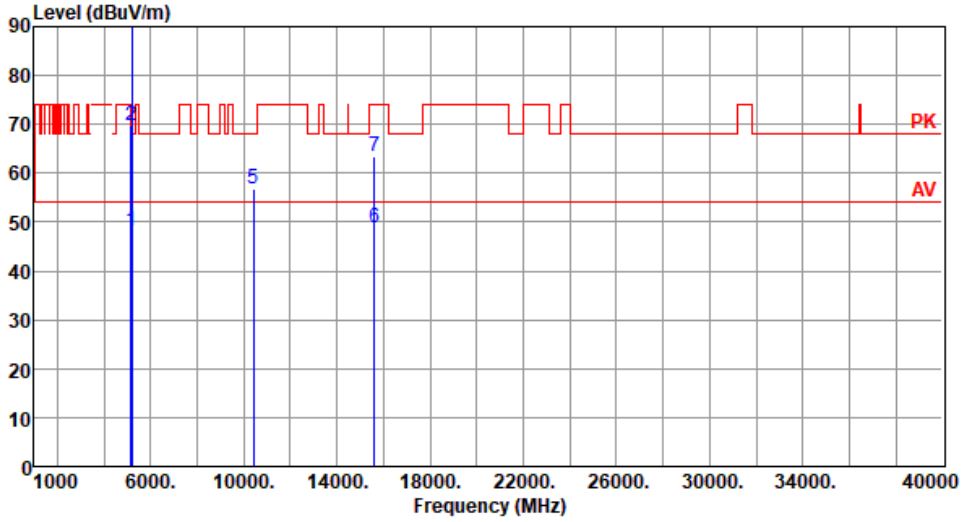
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.83	54.00	-5.17	44.19	4.64	Average	220	232
2		5150.00	68.00	74.00	-6.00	63.36	4.64	Peak	220	232
3	*	5200.00	110.11			105.76	4.35	Average	220	232
4	*	5200.00	119.24			114.89	4.35	Peak	220	232
5		10400.00	57.19	68.20	-11.01	42.89	14.30	Peak	100	158
6		15600.00	49.43	54.00	-4.57	34.79	14.64	Average	274	108
7		15600.00	65.31	74.00	-8.69	50.67	14.64	Peak	274	108

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

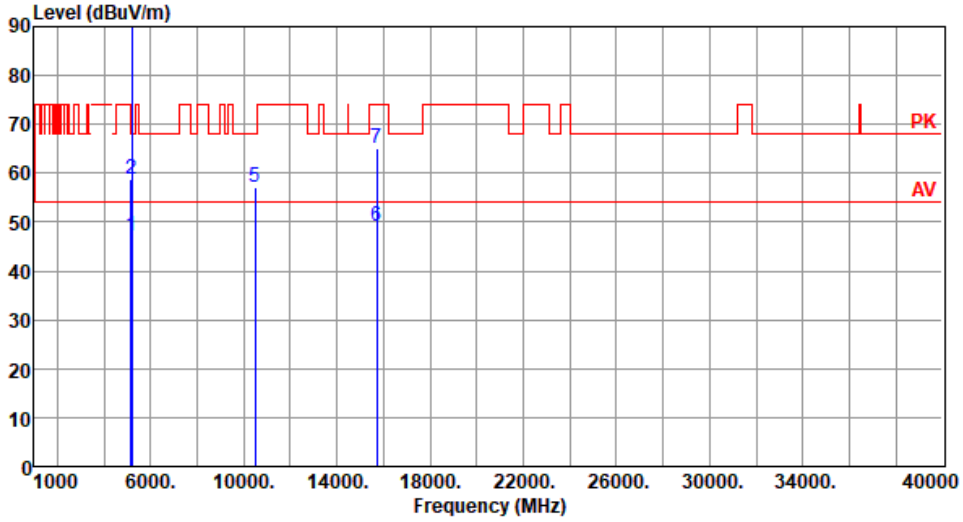
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.06	54.00	-5.94	43.42	4.64	Average	131	205
2		5150.00	69.84	74.00	-4.16	65.20	4.64	Peak	131	205
3	*	5200.00	107.96			103.61	4.35	Average	131	205
4	*	5200.00	118.14			113.79	4.35	Peak	131	205
5		10400.00	56.89	68.20	-11.31	42.59	14.30	Peak	100	75
6		15600.00	48.73	54.00	-5.27	34.09	14.64	Average	213	95
7		15600.00	63.38	74.00	-10.62	48.74	14.64	Peak	213	95

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

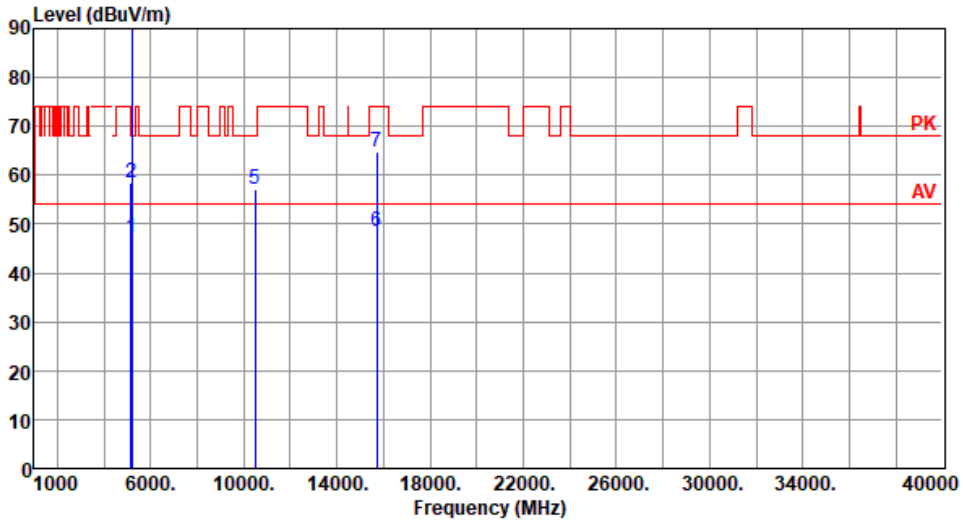
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	47.29	54.00	-6.71	42.65	4.64	Average	221	234
2		5150.00	58.83	74.00	-15.17	54.19	4.64	Peak	221	234
3	*	5240.00	110.13			105.92	4.21	Average	221	234
4	*	5240.00	118.90			114.69	4.21	Peak	221	234
5		10480.00	57.11	68.20	-11.09	42.65	14.46	Peak	100	162
6		15720.00	49.09	54.00	-4.91	34.88	14.21	Average	280	99
7		15720.00	65.17	74.00	-8.83	50.96	14.21	Peak	280	99

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

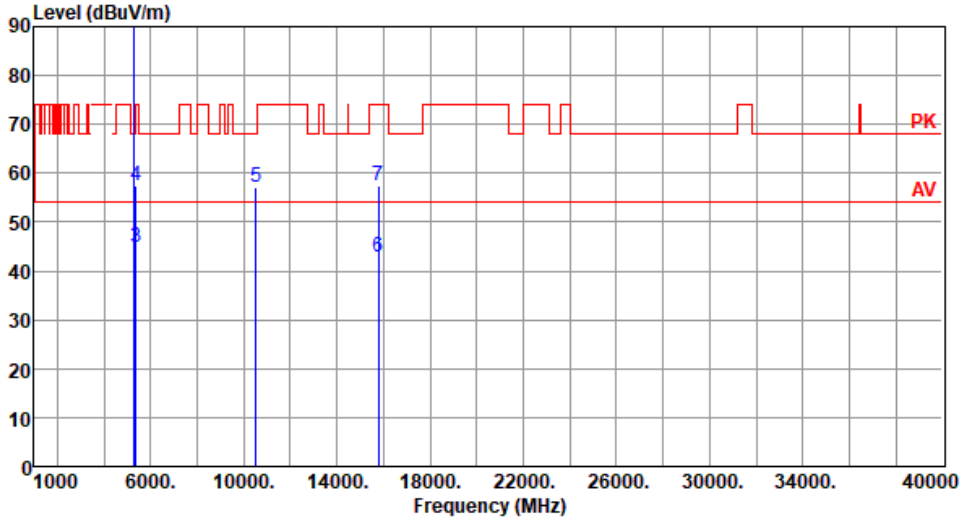
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	47.04	54.00	-6.96	42.40	4.64	Average	130	206
2		5150.00	58.61	74.00	-15.39	53.97	4.64	Peak	130	206
3	*	5240.00	107.85			103.64	4.21	Average	130	206
4	*	5240.00	118.09			113.88	4.21	Peak	130	206
5		10480.00	57.04	68.20	-11.16	42.58	14.46	Peak	106	62
6		15720.00	48.61	54.00	-5.39	34.40	14.21	Average	211	98
7		15720.00	64.69	74.00	-9.31	50.48	14.21	Peak	211	98

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

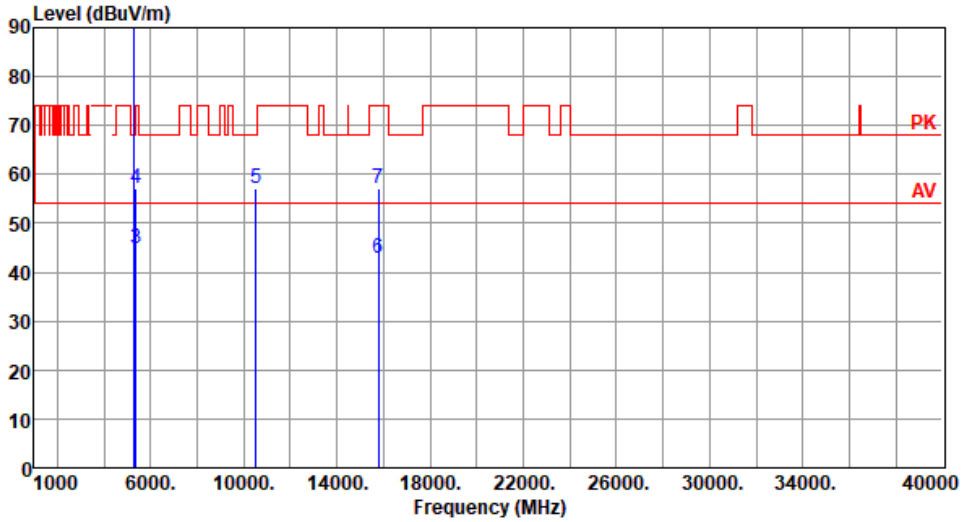
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	103.33			99.18	4.15	Average	177	20
2	*	5260.00	112.24			108.09	4.15	Peak	177	20
3		5350.00	44.81	54.00	-9.19	40.87	3.94	Average	177	20
4		5350.00	57.48	74.00	-16.52	53.54	3.94	Peak	177	20
5		10520.00	57.14	68.20	-11.06	42.68	14.46	Peak	100	69
6		15780.00	42.93	54.00	-11.07	28.75	14.18	Average	100	80
7		15780.00	57.33	74.00	-16.67	43.15	14.18	Peak	100	80

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

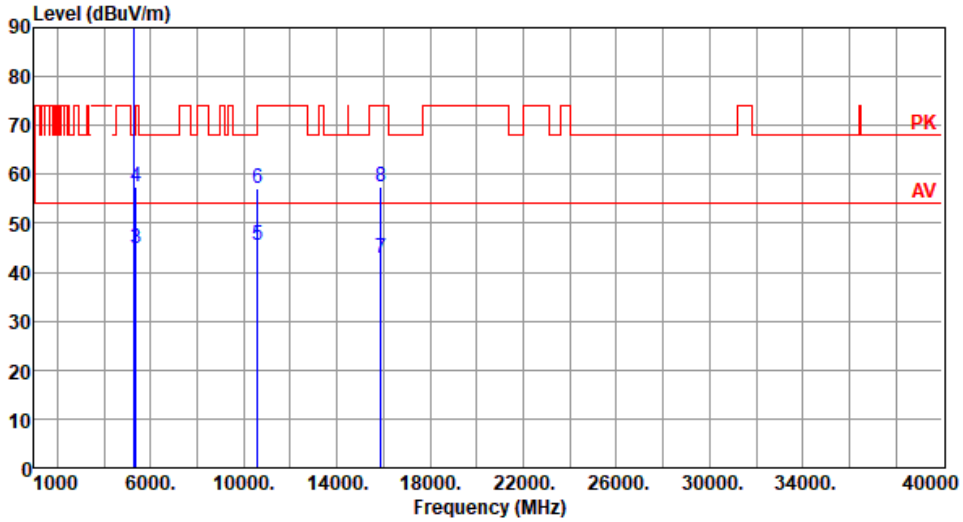
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	101.19			97.04	4.15	Average	135	204
2	*	5260.00	110.08			105.93	4.15	Peak	135	204
3		5350.00	44.68	54.00	-9.32	40.74	3.94	Average	135	204
4		5350.00	57.14	74.00	-16.86	53.20	3.94	Peak	135	204
5		10520.00	57.04	68.20	-11.16	42.58	14.46	Peak	100	26
6		15780.00	42.81	54.00	-11.19	28.63	14.18	Average	211	96
7		15780.00	57.26	74.00	-16.74	43.08	14.18	Peak	211	96

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

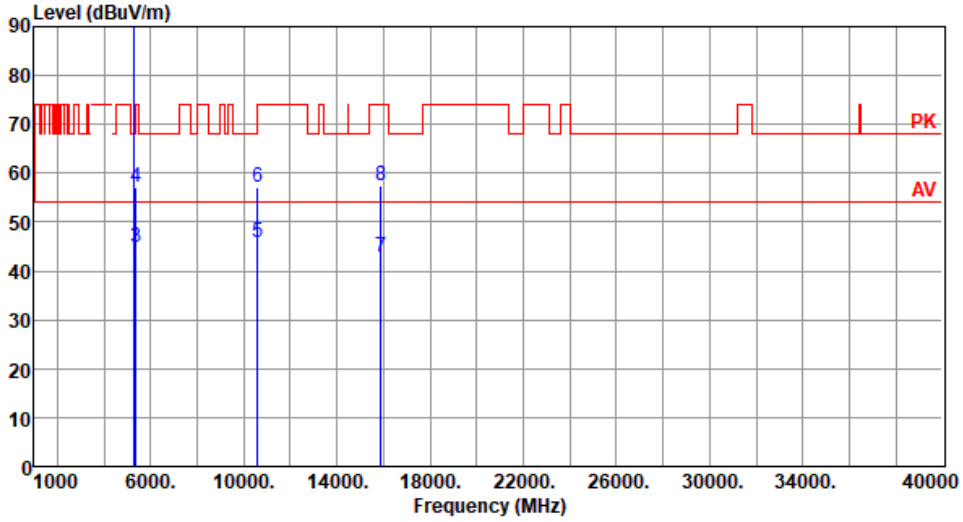
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	103.28			99.27	4.01	Average	173	25
2	*	5300.00	112.21			108.20	4.01	Peak	173	25
3		5350.00	44.80	54.00	-9.20	40.86	3.94	Average	173	25
4		5350.00	57.41	74.00	-16.59	53.47	3.94	Peak	173	25
5		10600.00	45.54	54.00	-8.46	31.26	14.28	Average	100	71
6		10600.00	57.14	74.00	-16.86	42.86	14.28	Peak	100	71
7		15900.00	42.87	54.00	-11.13	28.62	14.25	Average	100	85
8		15900.00	57.49	74.00	-16.51	43.24	14.25	Peak	100	85

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

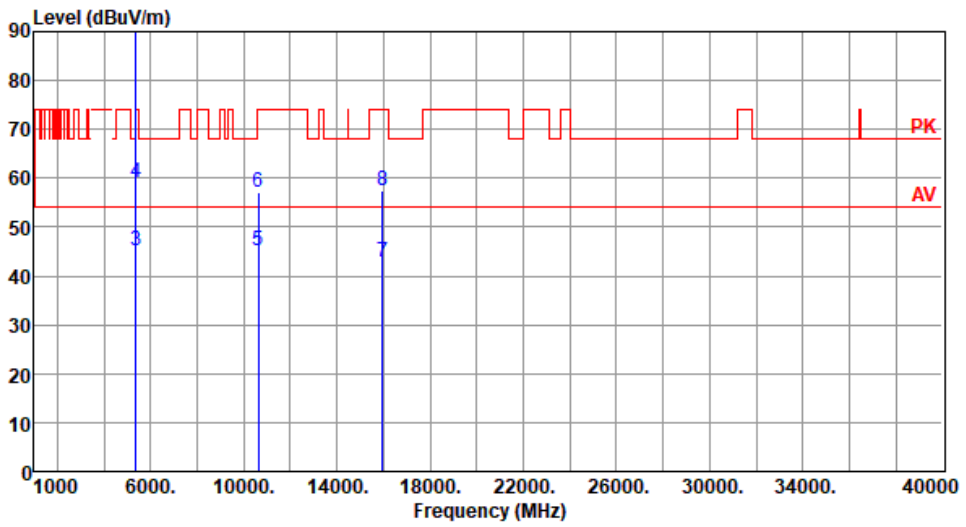
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	101.15			97.14	4.01	Average	134	211
2	*	5300.00	110.04			106.03	4.01	Peak	134	211
3		5350.00	44.69	54.00	-9.31	40.75	3.94	Average	134	211
4		5350.00	57.25	74.00	-16.75	53.31	3.94	Peak	134	211
5		10600.00	45.85	54.00	-8.15	31.57	14.28	Average	100	75
6		10600.00	57.03	74.00	-16.97	42.75	14.28	Peak	100	75
7		15900.00	42.98	54.00	-11.02	28.73	14.25	Average	100	95
8		15900.00	57.45	74.00	-16.55	43.20	14.25	Peak	100	95

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

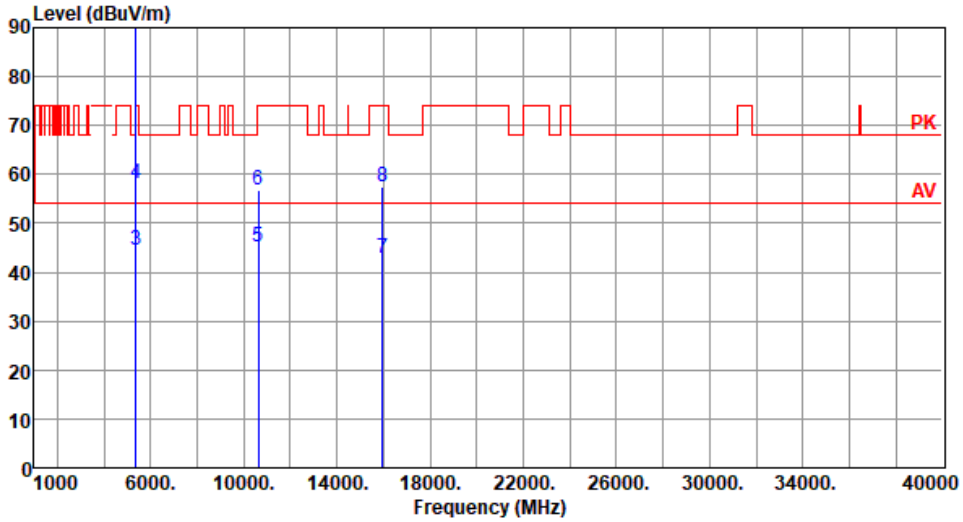
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	103.32			99.34	3.98	Average	180	22
2	*	5320.00	112.35			108.37	3.98	Peak	180	22
3		5350.00	45.17	54.00	-8.83	41.23	3.94	Average	180	22
4		5350.00	59.10	74.00	-14.90	55.16	3.94	Peak	180	22
5		10640.00	45.32	54.00	-8.68	30.94	14.38	Average	100	68
6		10640.00	57.04	74.00	-16.96	42.66	14.38	Peak	100	68
7		15960.00	42.81	54.00	-11.19	28.59	14.22	Average	100	91
8		15960.00	57.42	74.00	-16.58	43.20	14.22	Peak	100	91

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

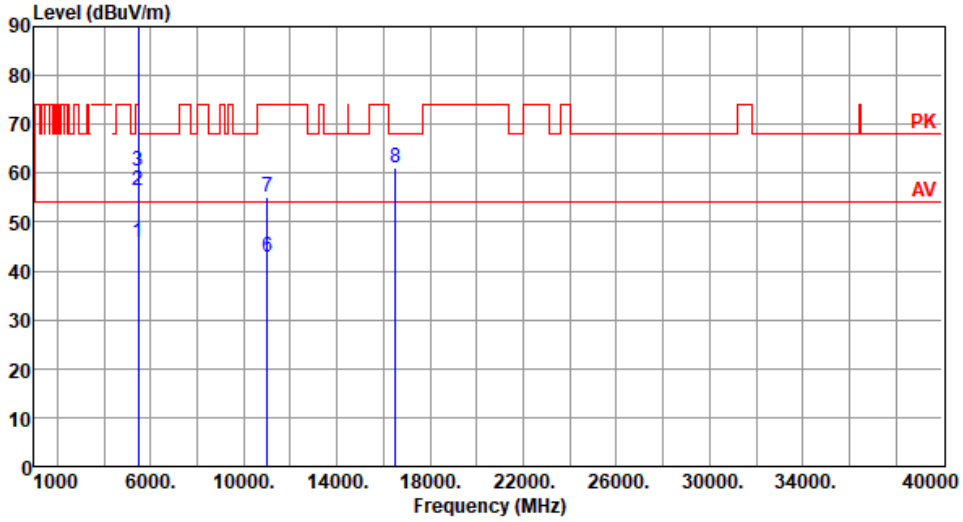
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	101.16			97.18	3.98	Average	129	208
2	*	5320.00	110.12			106.14	3.98	Peak	129	208
3		5350.00	44.35	54.00	-9.65	40.41	3.94	Average	129	208
4		5350.00	58.24	74.00	-15.76	54.30	3.94	Peak	129	208
5		10640.00	45.29	54.00	-8.71	30.91	14.38	Average	100	55
6		10640.00	56.95	74.00	-17.05	42.57	14.38	Peak	100	55
7		15960.00	42.76	54.00	-11.24	28.54	14.22	Average	100	44
8		15960.00	57.29	74.00	-16.71	43.07	14.22	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

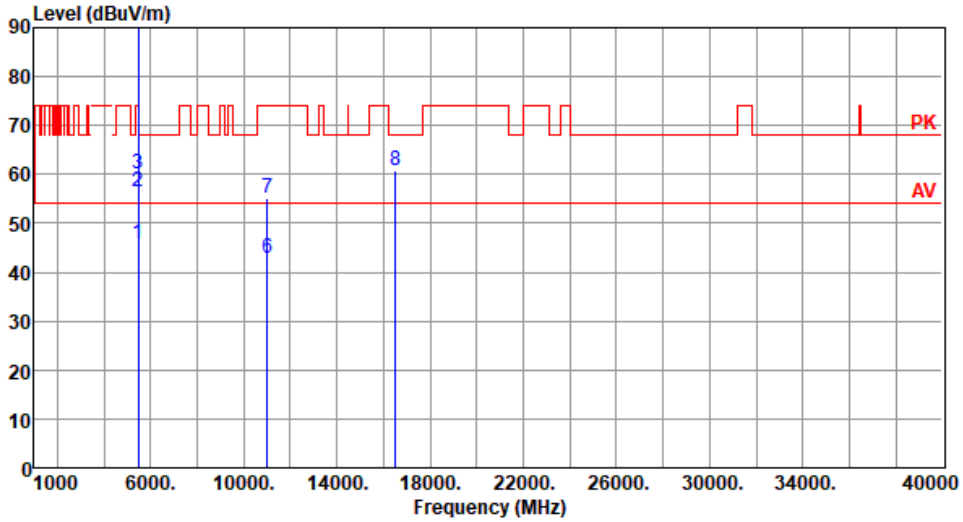
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.92	54.00	-8.08	41.47	4.45	Average	180	24
2		5460.00	56.60	74.00	-17.40	52.15	4.45	Peak	180	24
3		5470.00	60.36	68.20	-7.84	55.86	4.50	Peak	180	24
4	*	5500.00	103.16			98.51	4.65	Average	180	24
5	*	5500.00	112.35			107.70	4.65	Peak	180	24
6		11000.00	42.86	54.00	-11.14	27.98	14.88	Average	100	91
7		11000.00	55.14	74.00	-18.86	40.26	14.88	Peak	100	91
8		16500.00	61.02	68.20	-7.18	44.83	16.19	Peak	129	81

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

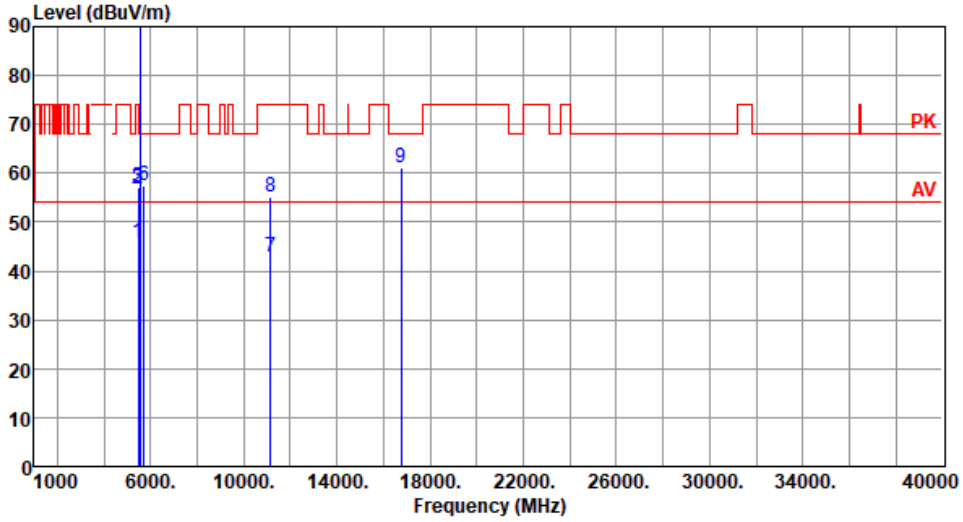
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.88	54.00	-8.12	41.43	4.45	Average	132	204
2		5460.00	56.52	74.00	-17.48	52.07	4.45	Peak	132	204
3		5470.00	60.25	68.20	-7.95	55.75	4.50	Peak	132	204
4	*	5500.00	101.04			96.39	4.65	Average	132	204
5	*	5500.00	110.26			105.61	4.65	Peak	132	204
6		11000.00	42.81	54.00	-11.19	27.93	14.88	Average	100	65
7		11000.00	55.06	74.00	-18.94	40.18	14.88	Peak	100	65
8		16500.00	60.92	68.20	-7.28	44.73	16.19	Peak	110	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

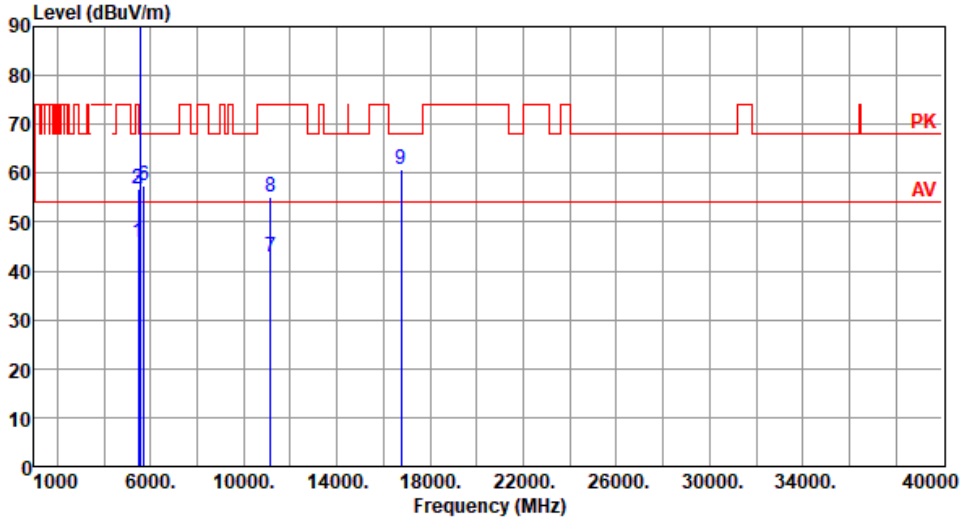
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.91	54.00	-8.09	41.46	4.45	Average	169	22
2		5460.00	56.92	74.00	-17.08	52.47	4.45	Peak	169	22
3		5470.00	57.06	68.20	-11.14	52.56	4.50	Peak	169	22
4	*	5580.00	102.70			98.16	4.54	Average	169	22
5	*	5580.00	111.93			107.39	4.54	Peak	169	22
6		5725.00	57.62	68.20	-10.58	52.77	4.85	Peak	169	22
7		11160.00	42.93	54.00	-11.07	28.55	14.38	Average	100	90
8		11160.00	55.26	74.00	-18.74	40.88	14.38	Peak	100	90
9		16740.00	61.08	68.20	-7.12	43.61	17.47	Peak	150	84

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

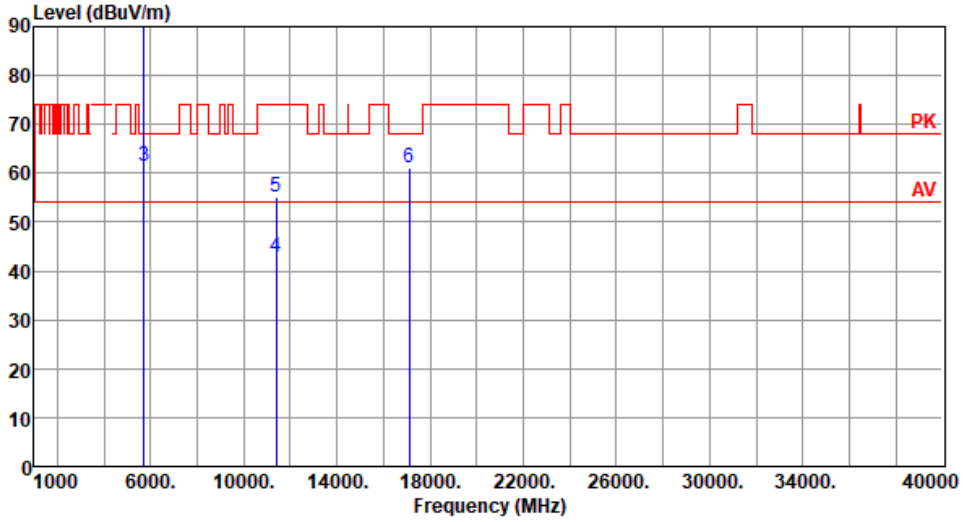
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.76	54.00	-8.24	41.31	4.45	Average	134	202
2		5460.00	56.84	74.00	-17.16	52.39	4.45	Peak	134	202
3		5470.00	56.95	68.20	-11.25	52.45	4.50	Peak	134	202
4	*	5580.00	100.64			96.10	4.54	Average	134	202
5	*	5580.00	109.81			105.27	4.54	Peak	134	202
6		5725.00	57.54	68.20	-10.66	52.69	4.85	Peak	134	202
7		11160.00	42.82	54.00	-11.18	28.44	14.38	Average	100	74
8		11160.00	55.16	74.00	-18.84	40.78	14.38	Peak	100	74
9		16740.00	60.69	68.20	-7.51	43.22	17.47	Peak	100	93

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

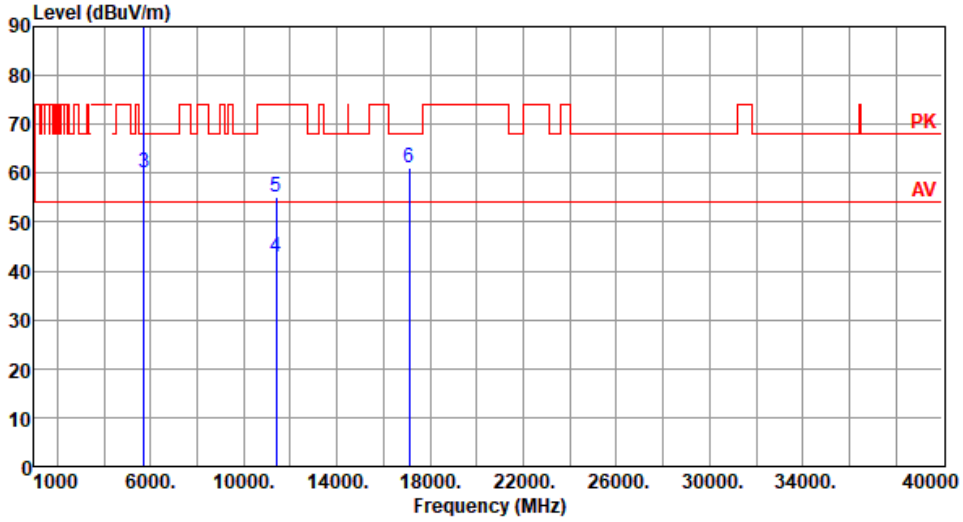
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	102.56			97.88	4.68	Average	149	20
2	*	5700.00	111.81			107.13	4.68	Peak	149	20
3		5725.00	61.43	68.20	-6.77	56.58	4.85	Peak	149	20
4		11400.00	42.85	54.00	-11.15	28.17	14.68	Average	100	82
5		11400.00	55.14	74.00	-18.86	40.46	14.68	Peak	100	82
6		17100.00	61.15	68.20	-7.05	43.47	17.68	Peak	124	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

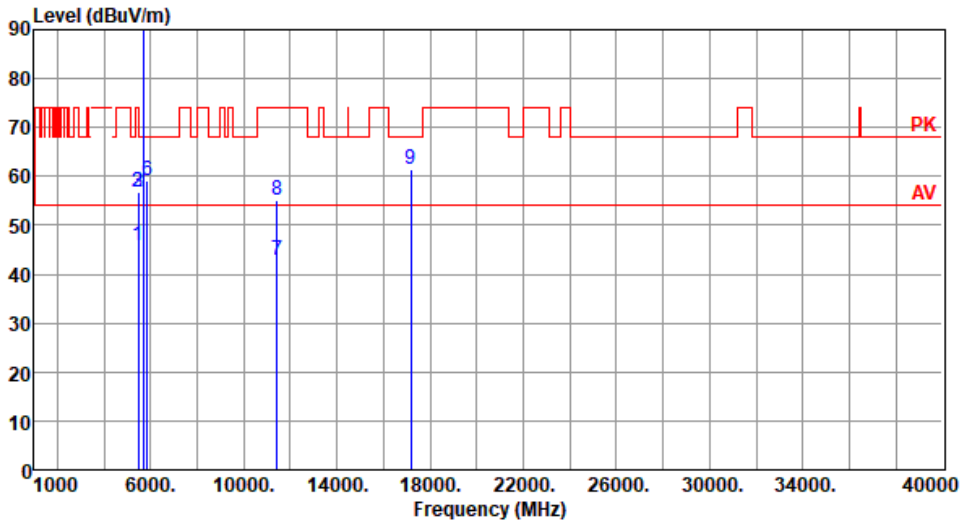
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	100.28			95.60	4.68	Average	133	199
2	*	5700.00	109.65			104.97	4.68	Peak	133	199
3		5725.00	60.21	68.20	-7.99	55.36	4.85	Peak	133	199
4		11400.00	42.76	54.00	-11.24	28.08	14.68	Average	100	35
5		11400.00	55.08	74.00	-18.92	40.40	14.68	Peak	100	35
6		17100.00	61.26	68.20	-6.94	43.58	17.68	Peak	100	58

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

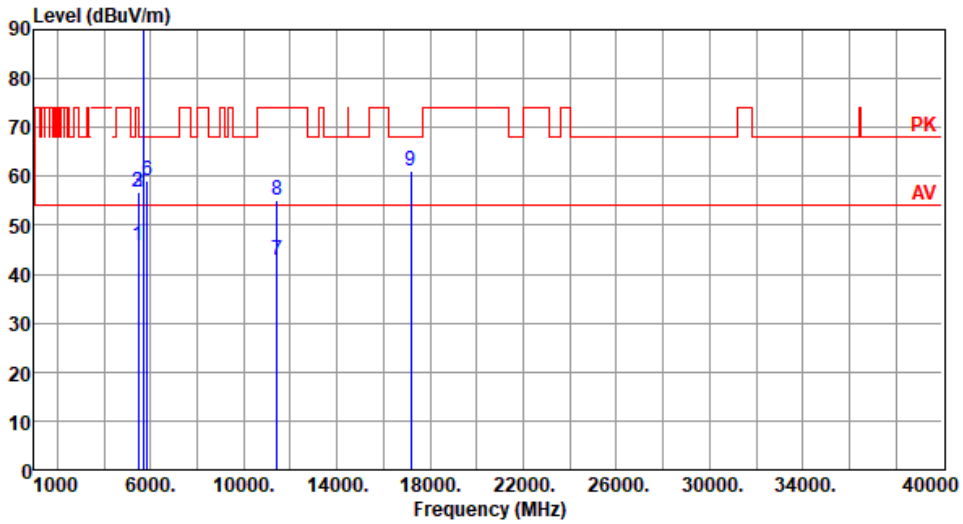
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		



		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	45.88	54.00	-8.12	41.43	4.45	Average	150	22
2		5460.00	56.85	74.00	-17.15	52.40	4.45	Peak	150	22
3		5470.00	56.92	68.20	-11.28	52.42	4.50	Peak	150	22
4	*	5720.00	102.32			97.51	4.81	Average	150	22
5	*	5720.00	111.78			106.97	4.81	Peak	150	22
6		5850.00	59.03	68.20	-9.17	53.58	5.45	Peak	150	22
7		11440.00	42.92	54.00	-11.08	28.26	14.66	Average	100	59
8		11440.00	55.26	74.00	-18.74	40.60	14.66	Peak	100	59
9		17160.00	61.28	68.20	-6.92	43.63	17.65	Peak	100	68

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

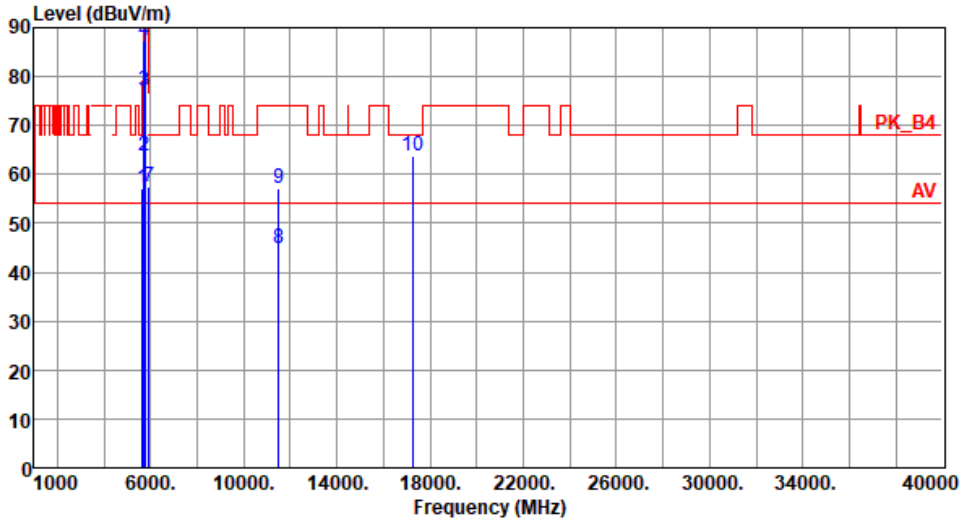
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		



		Freq. 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	45.82	54.00	-8.18	41.37	4.45	Average	133	206
2		5460.00	56.81	74.00	-17.19	52.36	4.45	Peak	133	206
3		5470.00	56.81	68.20	-11.39	52.31	4.50	Peak	133	206
4	*	5720.00	100.24			95.43	4.81	Average	133	206
5	*	5720.00	109.76			104.95	4.81	Peak	133	206
6		5850.00	58.96	68.20	-9.24	53.51	5.45	Peak	133	206
7		11440.00	42.85	54.00	-11.15	28.19	14.66	Average	100	94
8		11440.00	55.19	74.00	-18.81	40.53	14.66	Peak	100	94
9		17160.00	61.21	68.20	-6.99	43.56	17.65	Peak	100	27

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

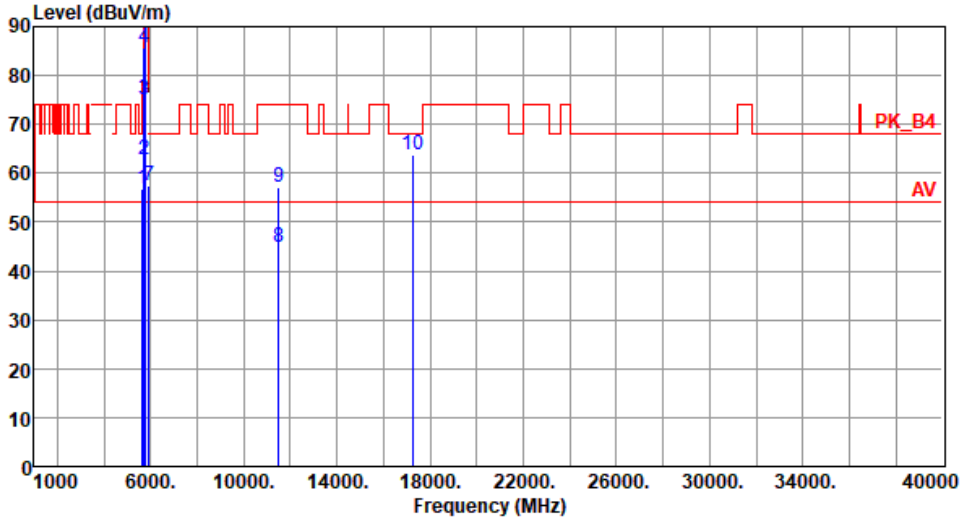
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.01	68.20	-11.19	52.47	4.54	Peak	100	22
2		5700.00	63.88	105.20	-41.32	59.20	4.68	Peak	100	22
3		5720.00	76.88	110.80	-33.92	72.07	4.81	Peak	100	22
4		5725.00	87.20	122.20	-35.00	82.35	4.85	Peak	100	22
5	*	5745.00	109.62			104.63	4.99	Average	100	22
6	*	5745.00	118.50			113.51	4.99	Peak	100	22
7		5925.00	57.59	68.20	-10.61	52.16	5.43	Peak	100	22
8		11490.00	44.99	54.00	-9.01	30.36	14.63	Average	100	145
9		11490.00	57.28	74.00	-16.72	42.65	14.63	Peak	100	145
10		17235.00	63.71	68.20	-4.49	45.95	17.76	Peak	200	75

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

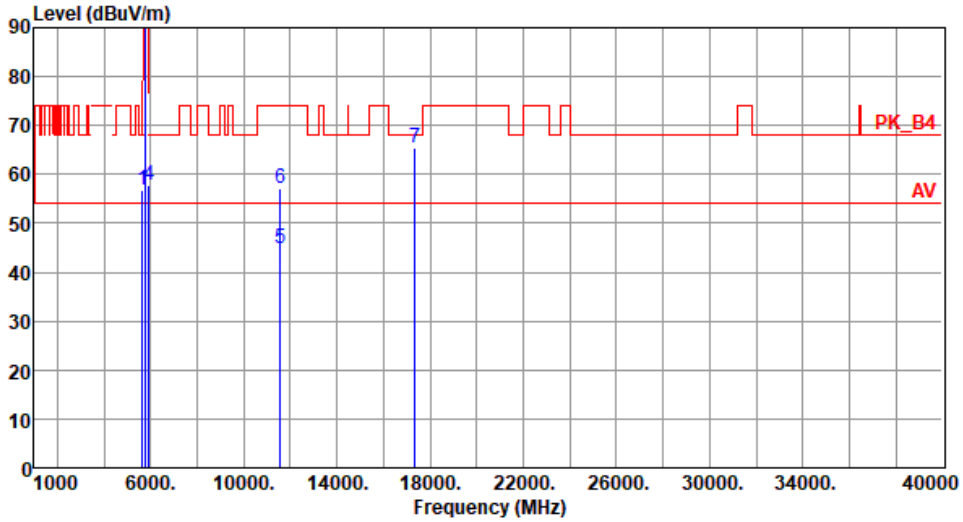
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.94	68.20	-11.26	52.40	4.54	Peak	130	202
2		5700.00	62.65	105.20	-42.55	57.97	4.68	Peak	130	202
3		5720.00	74.91	110.80	-35.89	70.10	4.81	Peak	130	202
4		5725.00	85.69	122.20	-36.51	80.84	4.85	Peak	130	202
5	*	5745.00	107.54			102.55	4.99	Average	130	202
6	*	5745.00	116.41			111.42	4.99	Peak	130	202
7		5925.00	57.48	68.20	-10.72	52.05	5.43	Peak	130	202
8		11490.00	44.86	54.00	-9.14	30.23	14.63	Average	100	32
9		11490.00	57.15	74.00	-16.85	42.52	14.63	Peak	100	32
10		17235.00	63.66	68.20	-4.54	45.90	17.76	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

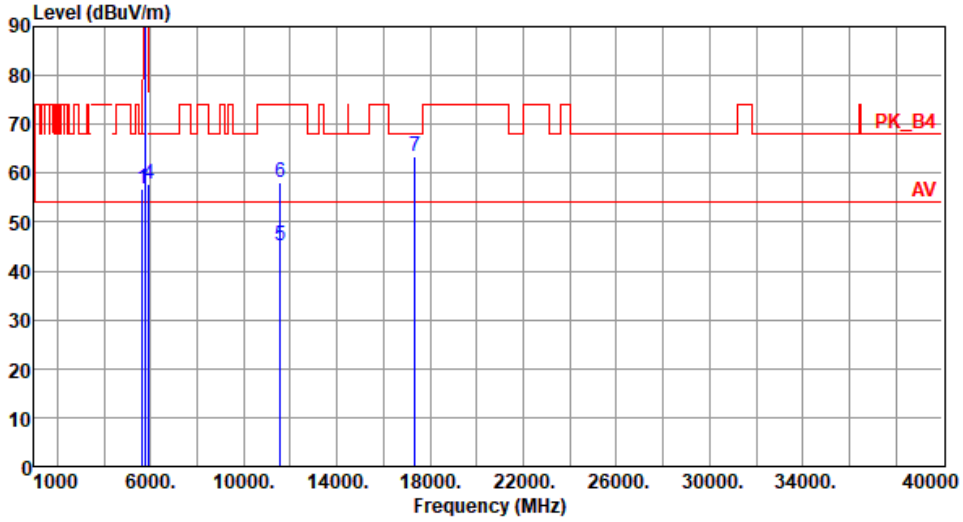
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.88	68.20	-11.32	52.34	4.54	Peak	100	9
2	*	5785.00	109.97			104.86	5.11	Average	100	9
3	*	5785.00	118.90			113.79	5.11	Peak	100	9
4		5925.00	57.86	68.20	-10.34	52.43	5.43	Peak	100	9
5		11570.00	44.76	54.00	-9.24	30.26	14.50	Average	100	150
6		11570.00	57.28	74.00	-16.72	42.78	14.50	Peak	100	150
7		17355.00	65.34	68.20	-2.86	46.98	18.36	Peak	185	106

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

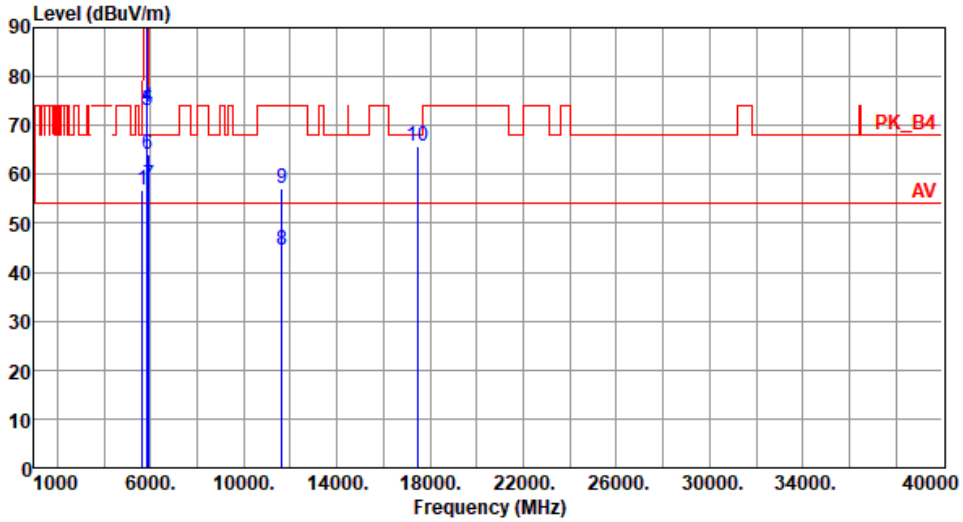
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



		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	56.74	68.20	-11.46	52.20	4.54	Peak	133	201
2	*	5785.00	107.82			102.71	5.11	Average	133	201
3	*	5785.00	116.79			111.68	5.11	Peak	133	201
4		5925.00	57.79	68.20	-10.41	52.36	5.43	Peak	133	201
5		11570.00	45.27	54.00	-8.73	30.77	14.50	Average	127	139
6		11570.00	58.22	74.00	-15.78	43.72	14.50	Peak	127	139
7		17355.00	63.27	68.20	-4.93	44.91	18.36	Peak	175	213

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

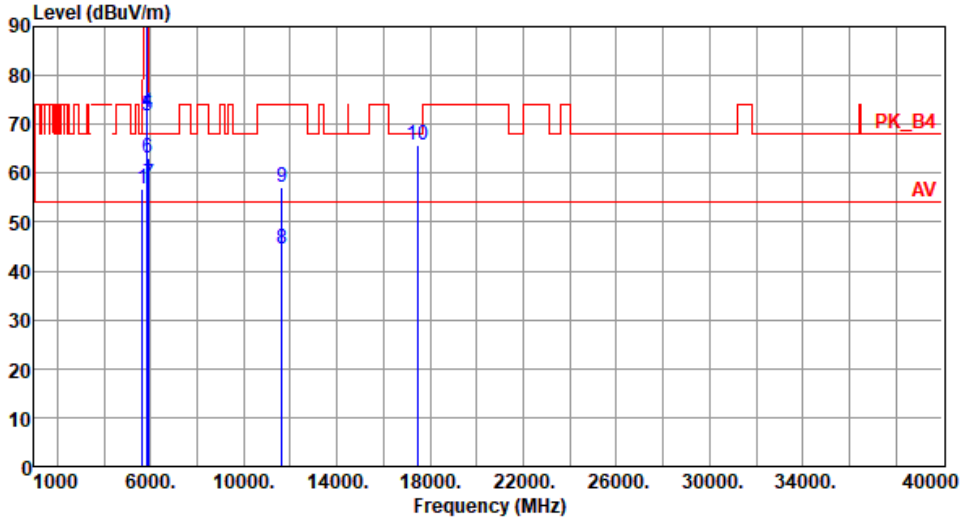
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



		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	56.78	68.20	-11.42	52.24	4.54	Peak	100	21
2	*	5825.00	109.84			104.55	5.29	Average	100	21
3	*	5825.00	118.88			113.59	5.29	Peak	100	21
4		5850.00	73.88	122.20	-48.32	68.43	5.45	Peak	100	21
5		5855.00	72.95	110.80	-37.85	67.51	5.44	Peak	100	21
6		5875.00	64.16	105.20	-41.04	58.72	5.44	Peak	100	21
7		5925.00	57.89	68.20	-10.31	52.46	5.43	Peak	100	21
8		11650.00	44.65	54.00	-9.35	30.44	14.21	Average	100	146
9		11650.00	57.16	74.00	-16.84	42.95	14.21	Peak	100	146
10		17475.00	65.74	68.20	-2.46	46.88	18.86	Peak	255	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	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

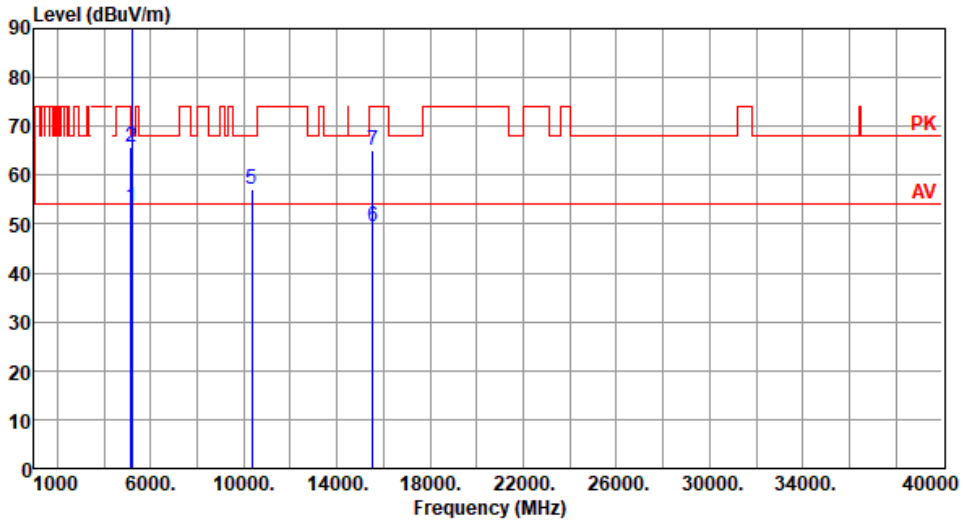


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.65	68.20	-11.55	52.11	4.54	Peak	119	194
2	*	5825.00	107.68			102.39	5.29	Average	119	194
3	*	5825.00	116.71			111.42	5.29	Peak	119	194
4		5850.00	72.54	122.20	-49.66	67.09	5.45	Peak	119	194
5		5855.00	71.62	110.80	-39.18	66.18	5.44	Peak	119	194
6		5875.00	63.15	105.20	-42.05	57.71	5.44	Peak	119	194
7		5925.00	57.84	68.20	-10.36	52.41	5.43	Peak	119	194
8		11650.00	44.58	54.00	-9.42	30.37	14.21	Average	100	102
9		11650.00	57.11	74.00	-16.89	42.90	14.21	Peak	100	102
10		17475.00	65.68	68.20	-2.52	46.82	18.86	Peak	100	34

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

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

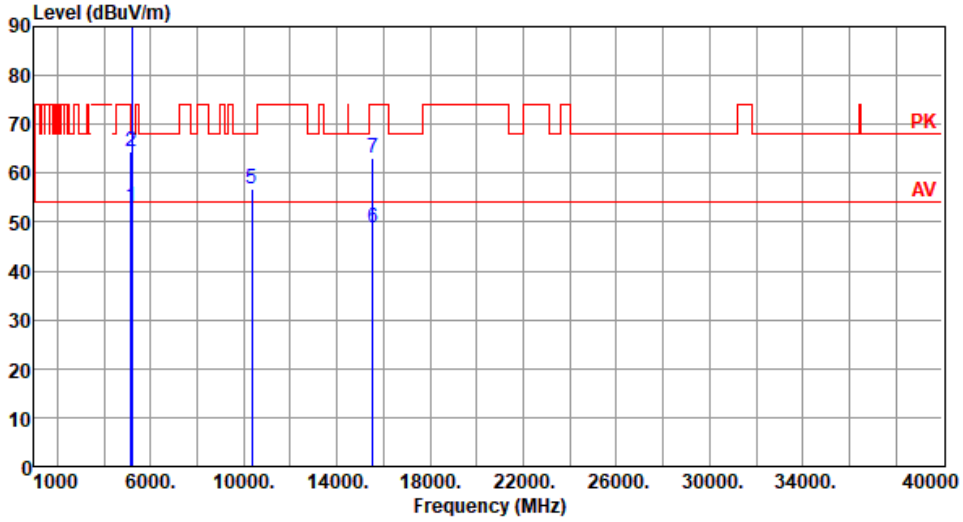
Modulation	ax (HE20)	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



		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	53.59	54.00	-0.41	48.95	4.64	Average	194	241
2		5150.00	65.60	74.00	-8.40	60.96	4.64	Peak	194	241
3	*	5180.00	105.42			100.96	4.46	Average	194	241
4	*	5180.00	114.80			110.34	4.46	Peak	194	241
5		10360.00	57.26	68.20	-10.94	43.07	14.19	Peak	100	155
6		15540.00	49.35	54.00	-4.65	34.44	14.91	Average	155	104
7		15540.00	65.21	74.00	-8.79	50.30	14.91	Peak	155	104

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

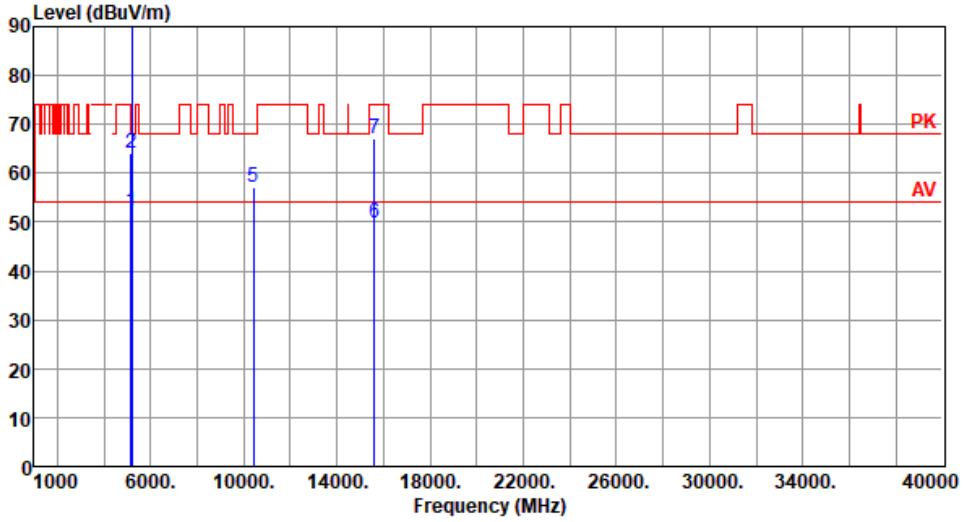
Modulation	ax (HE20)	Test Freq. (MHz)	5180
Polarization	Vertical		



		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	53.17	54.00	-0.83	48.53	4.64	Average	133	204
2		5150.00	64.33	74.00	-9.67	59.69	4.64	Peak	133	204
3	*	5180.00	103.13			98.67	4.46	Average	133	204
4	*	5180.00	113.14			108.68	4.46	Peak	133	204
5		10360.00	56.65	68.20	-11.55	42.46	14.19	Peak	104	58
6		15540.00	48.74	54.00	-5.26	33.83	14.91	Average	195	81
7		15540.00	63.25	74.00	-10.75	48.34	14.91	Peak	195	81

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

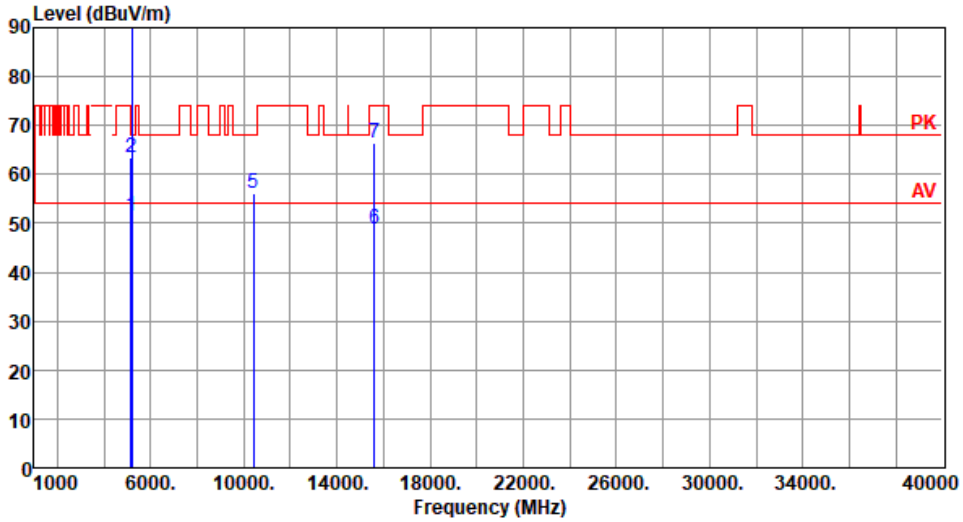
Modulation	ax (HE20)	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	52.16	54.00	-1.84	47.52	4.64	Average	195	243
2		5150.00	64.23	74.00	-9.77	59.59	4.64	Peak	195	243
3	*	5200.00	109.69			105.34	4.35	Average	195	243
4	*	5200.00	118.61			114.26	4.35	Peak	195	243
5		10400.00	57.16	68.20	-11.04	42.86	14.30	Peak	100	158
6		15600.00	49.89	54.00	-4.11	35.25	14.64	Average	179	165
7		15600.00	67.05	74.00	-6.95	52.41	14.64	Peak	179	165

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

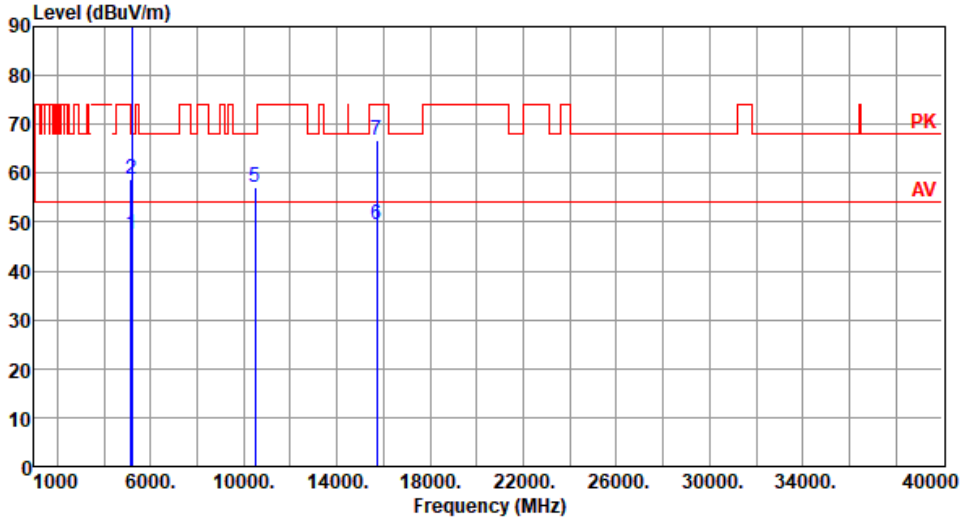
Modulation	ax (HE20)	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	51.39	54.00	-2.61	46.75	4.64	Average	134	206
2		5150.00	63.29	74.00	-10.71	58.65	4.64	Peak	134	206
3	*	5200.00	107.56			103.21	4.35	Average	134	206
4	*	5200.00	117.46			113.11	4.35	Peak	134	206
5		10400.00	56.19	68.20	-12.01	41.89	14.30	Peak	100	253
6		15600.00	48.85	54.00	-5.15	34.21	14.64	Average	221	142
7		15600.00	66.52	74.00	-7.48	51.88	14.64	Peak	221	142

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

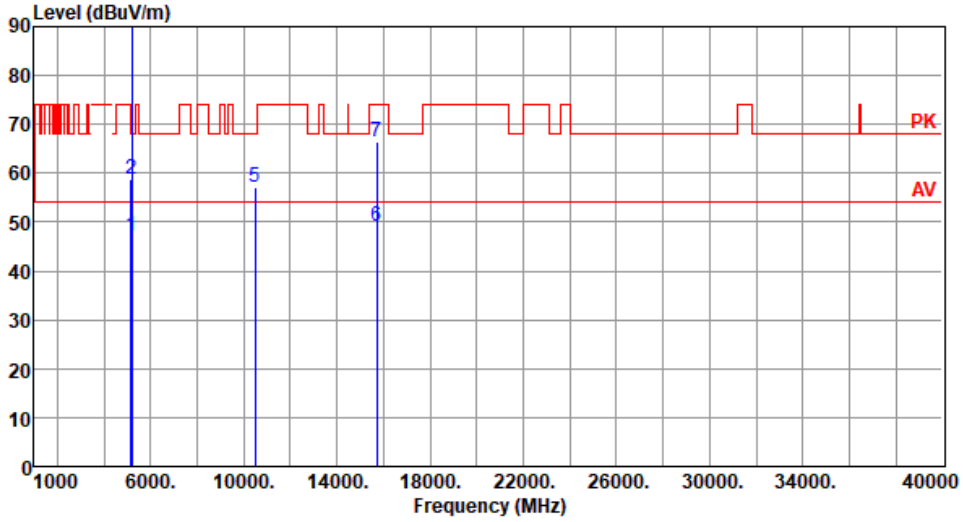
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	47.46	54.00	-6.54	42.82	4.64	Average	195	244
2		5150.00	58.90	74.00	-15.10	54.26	4.64	Peak	195	244
3	*	5240.00	109.44			105.23	4.21	Average	195	244
4	*	5240.00	118.67			114.46	4.21	Peak	195	244
5		10480.00	57.22	68.20	-10.98	42.76	14.46	Peak	100	160
6		15720.00	49.34	54.00	-4.66	35.13	14.21	Average	175	166
7		15720.00	66.77	74.00	-7.23	52.56	14.21	Peak	175	166

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

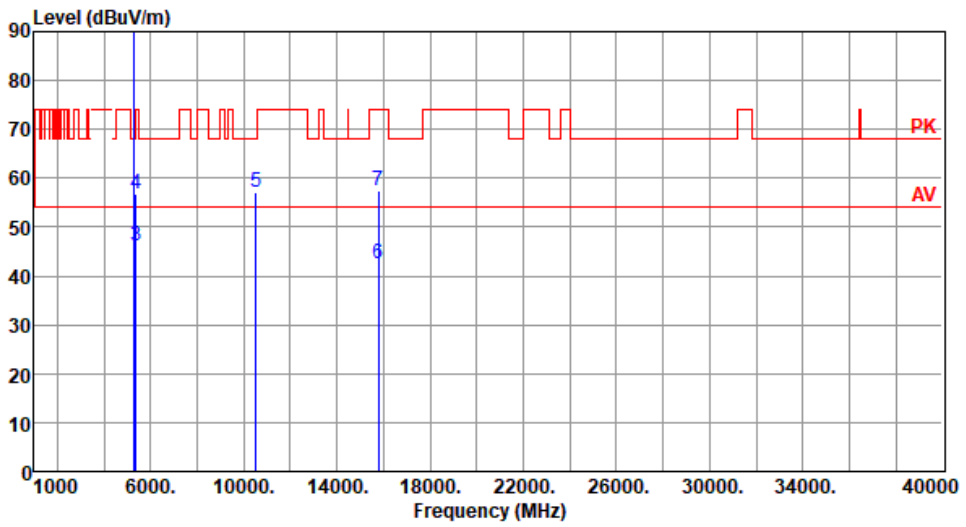
Modulation	ax (HE20)	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	47.21	54.00	-6.79	42.57	4.64	Average	125	206
2		5150.00	58.65	74.00	-15.35	54.01	4.64	Peak	125	206
3	*	5240.00	107.28			103.07	4.21	Average	125	206
4	*	5240.00	116.59			112.38	4.21	Peak	125	206
5		10480.00	57.14	68.20	-11.06	42.68	14.46	Peak	100	56
6		15720.00	49.21	54.00	-4.79	35.00	14.21	Average	114	28
7		15720.00	66.52	74.00	-7.48	52.31	14.21	Peak	114	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

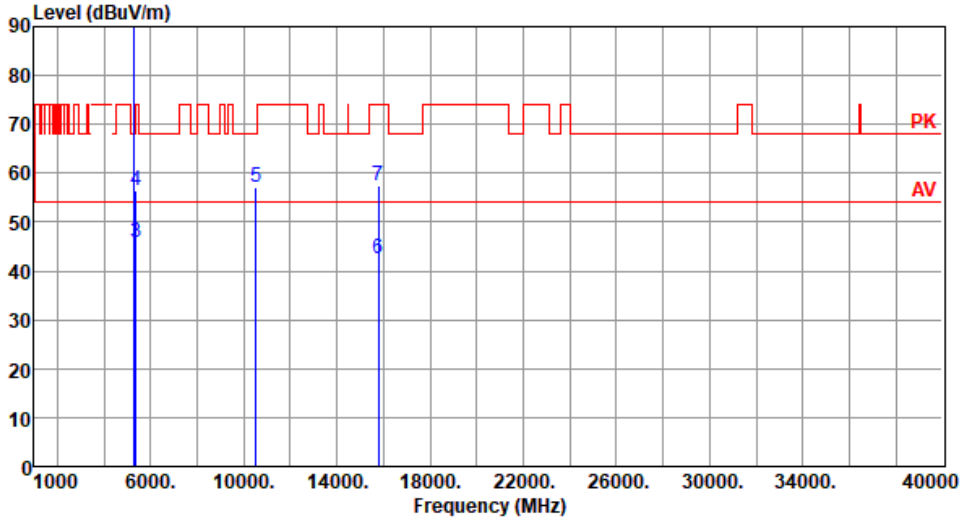
Modulation	ax (HE20)	Test Freq. (MHz)	5260
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	103.25			99.10	4.15	Average	179	16
2	*	5260.00	112.32			108.17	4.15	Peak	179	16
3		5350.00	46.09	54.00	-7.91	42.15	3.94	Average	179	16
4		5350.00	56.63	74.00	-17.37	52.69	3.94	Peak	179	16
5		10520.00	57.11	68.20	-11.09	42.65	14.46	Peak	100	69
6		15780.00	42.63	54.00	-11.37	28.45	14.18	Average	100	85
7		15780.00	57.33	74.00	-16.67	43.15	14.18	Peak	100	85

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

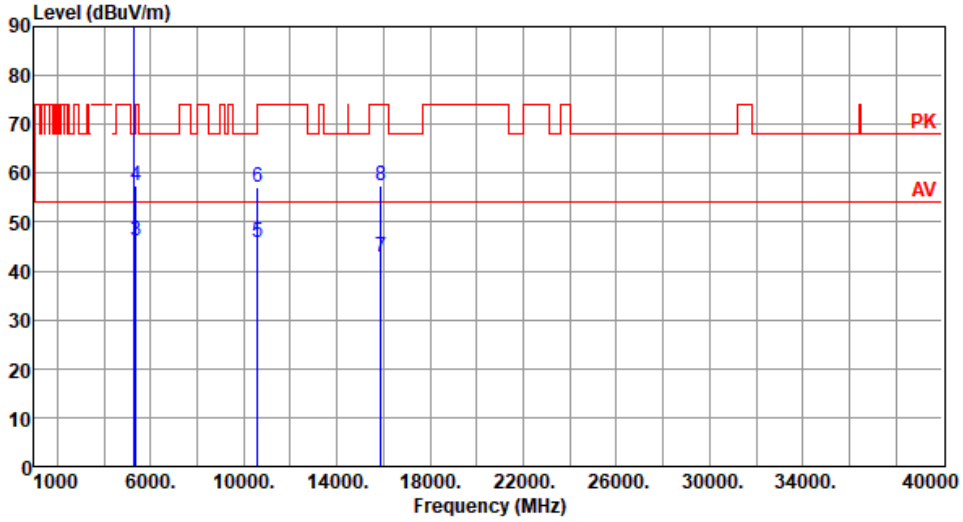
Modulation	ax (HE20)	Test Freq. (MHz)	5260
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5260.00	101.15			97.00	4.15	Average	129	208
2	*	5260.00	110.24			106.09	4.15	Peak	129	208
3		5350.00	45.94	54.00	-8.06	42.00	3.94	Average	129	208
4		5350.00	56.52	74.00	-17.48	52.58	3.94	Peak	129	208
5		10520.00	57.06	68.20	-11.14	42.60	14.46	Peak	100	44
6		15780.00	42.51	54.00	-11.49	28.33	14.18	Average	100	47
7		15780.00	57.29	74.00	-16.71	43.11	14.18	Peak	100	47

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

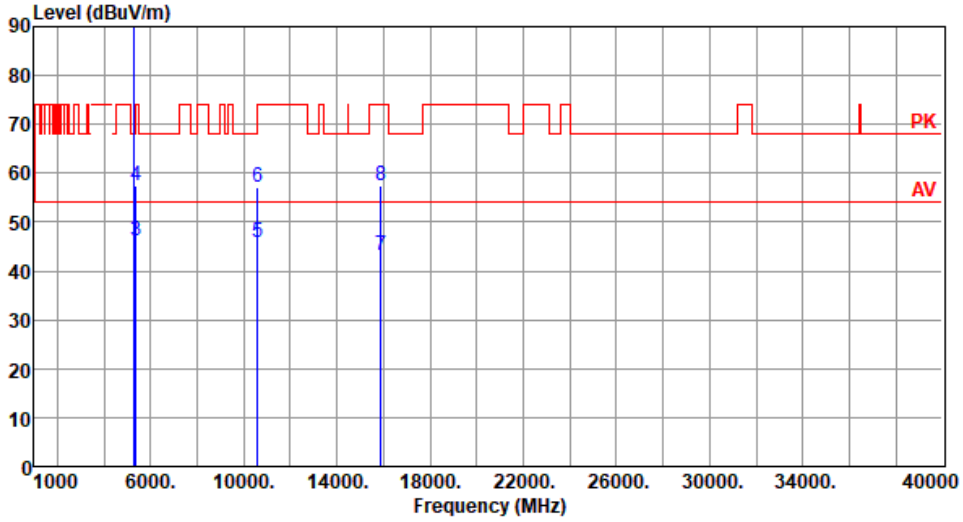
Modulation	ax (HE20)	Test Freq. (MHz)	5300
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	102.98			98.97	4.01	Average	177	20
2	*	5300.00	112.34			108.33	4.01	Peak	177	20
3		5350.00	46.14	54.00	-7.86	42.20	3.94	Average	177	20
4		5350.00	57.40	74.00	-16.60	53.46	3.94	Peak	177	20
5		10600.00	45.84	54.00	-8.16	31.56	14.28	Average	100	72
6		10600.00	57.03	74.00	-16.97	42.75	14.28	Peak	100	72
7		15900.00	42.95	54.00	-11.05	28.70	14.25	Average	100	87
8		15900.00	57.57	74.00	-16.43	43.32	14.25	Peak	100	87

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

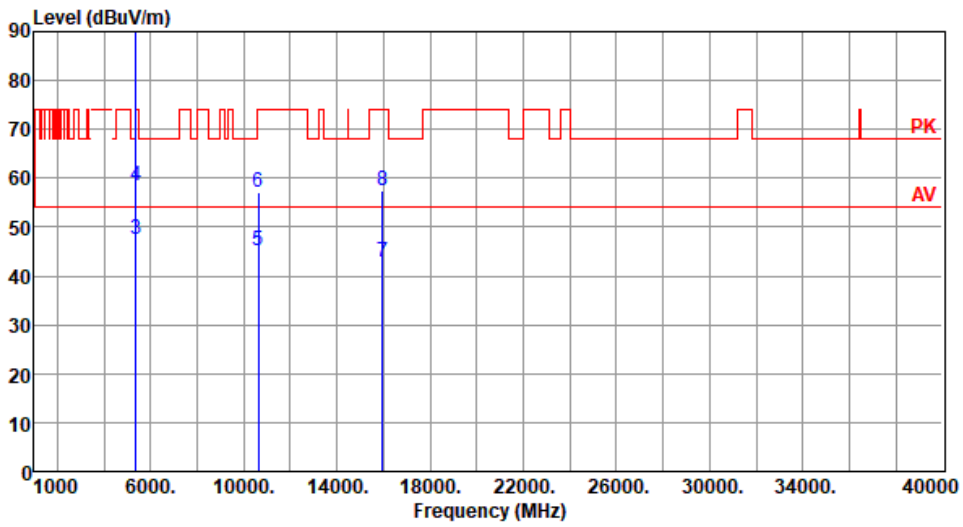
Modulation	ax (HE20)	Test Freq. (MHz)	5300
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5300.00	100.85			96.84	4.01	Average	133	201
2	*	5300.00	110.26			106.25	4.01	Peak	133	201
3		5350.00	46.08	54.00	-7.92	42.14	3.94	Average	133	201
4		5350.00	57.29	74.00	-16.71	53.35	3.94	Peak	133	201
5		10600.00	45.73	54.00	-8.27	31.45	14.28	Average	100	71
6		10600.00	57.11	74.00	-16.89	42.83	14.28	Peak	100	71
7		15900.00	43.10	54.00	-10.90	28.85	14.25	Average	100	91
8		15900.00	57.35	74.00	-16.65	43.10	14.25	Peak	100	91

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

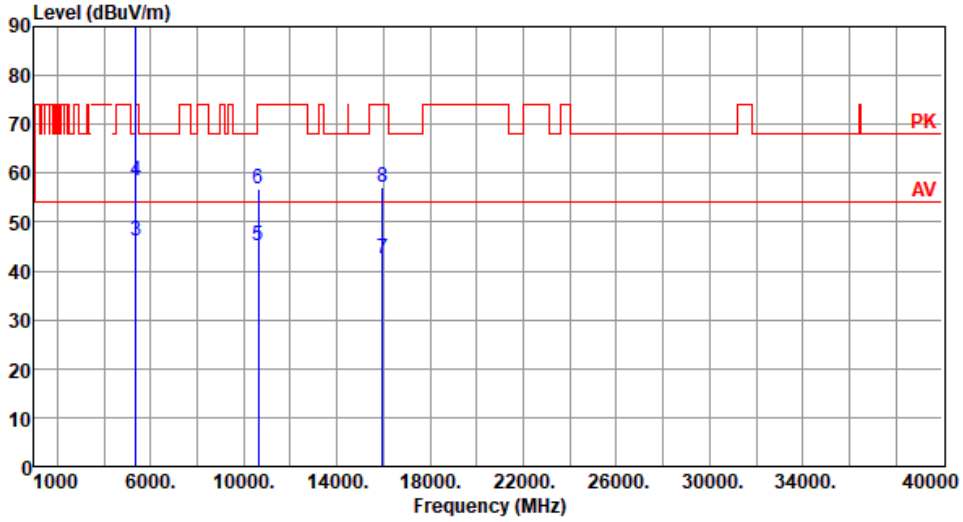
Modulation	ax (HE20)	Test Freq. (MHz)	5320
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	102.99			99.01	3.98	Average	176	21
2	*	5320.00	111.97			107.99	3.98	Peak	176	21
3		5350.00	47.40	54.00	-6.60	43.46	3.94	Average	176	21
4		5350.00	58.53	74.00	-15.47	54.59	3.94	Peak	176	21
5		10640.00	45.21	54.00	-8.79	30.83	14.38	Average	105	29
6		10640.00	56.97	74.00	-17.03	42.59	14.38	Peak	105	29
7		15960.00	42.76	54.00	-11.24	28.54	14.22	Average	100	88
8		15960.00	57.29	74.00	-16.71	43.07	14.22	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

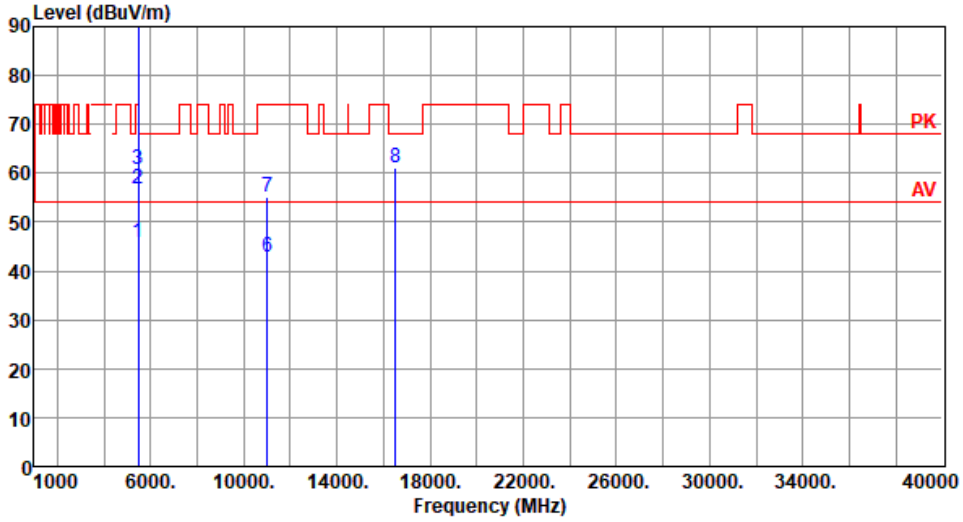
Modulation	ax (HE20)	Test Freq. (MHz)	5320
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5320.00	100.85			96.87	3.98	Average	131	206
2	*	5320.00	109.88			105.90	3.98	Peak	131	206
3		5350.00	46.29	54.00	-7.71	42.35	3.94	Average	131	206
4		5350.00	58.41	74.00	-15.59	54.47	3.94	Peak	131	206
5		10640.00	45.17	54.00	-8.83	30.79	14.38	Average	100	62
6		10640.00	56.88	74.00	-17.12	42.50	14.38	Peak	100	62
7		15960.00	42.66	54.00	-11.34	28.44	14.22	Average	100	35
8		15960.00	57.21	74.00	-16.79	42.99	14.22	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

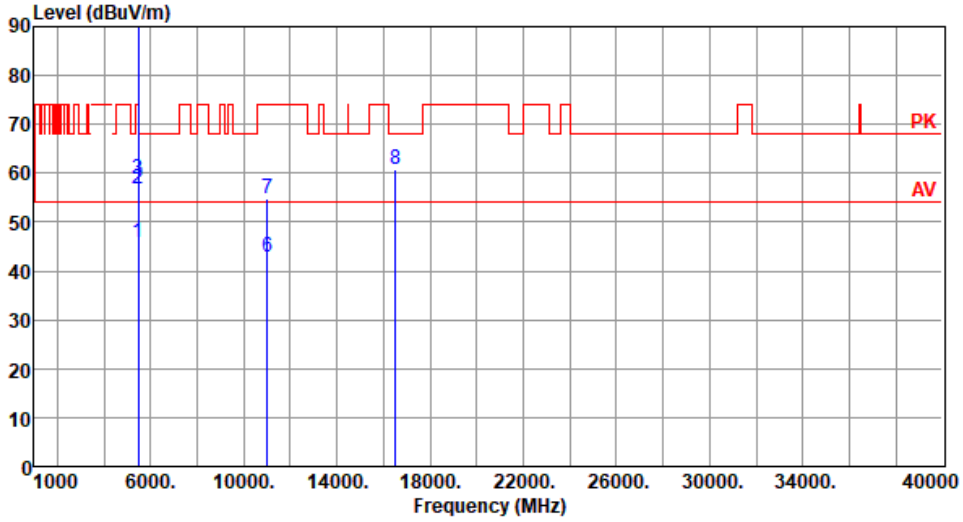
Modulation	ax (HE20)	Test Freq. (MHz)	5500
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.99	54.00	-8.01	41.54	4.45	Average	156	19
2		5460.00	56.72	74.00	-17.28	52.27	4.45	Peak	156	19
3		5470.00	60.77	68.20	-7.43	56.27	4.50	Peak	156	19
4	*	5500.00	102.23			97.58	4.65	Average	156	19
5	*	5500.00	111.25			106.60	4.65	Peak	156	19
6		11000.00	42.76	54.00	-11.24	27.88	14.88	Average	100	84
7		11000.00	55.09	74.00	-18.91	40.21	14.88	Peak	100	84
8		16500.00	60.95	68.20	-7.25	44.76	16.19	Peak	122	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

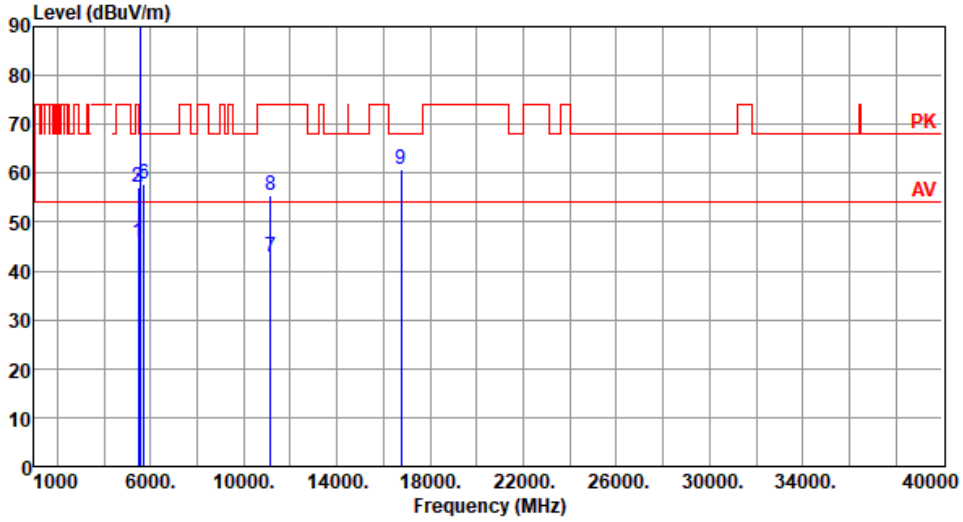
Modulation	ax (HE20)	Test Freq. (MHz)	5500
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.82	54.00	-8.18	41.37	4.45	Average	134	196
2		5460.00	56.69	74.00	-17.31	52.24	4.45	Peak	134	196
3		5470.00	58.81	68.20	-9.39	54.31	4.50	Peak	134	196
4	*	5500.00	100.15			95.50	4.65	Average	134	196
5	*	5500.00	109.08			104.43	4.65	Peak	134	196
6		11000.00	42.76	54.00	-11.24	27.88	14.88	Average	100	55
7		11000.00	54.93	74.00	-19.07	40.05	14.88	Peak	100	55
8		16500.00	60.88	68.20	-7.32	44.69	16.19	Peak	100	42

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

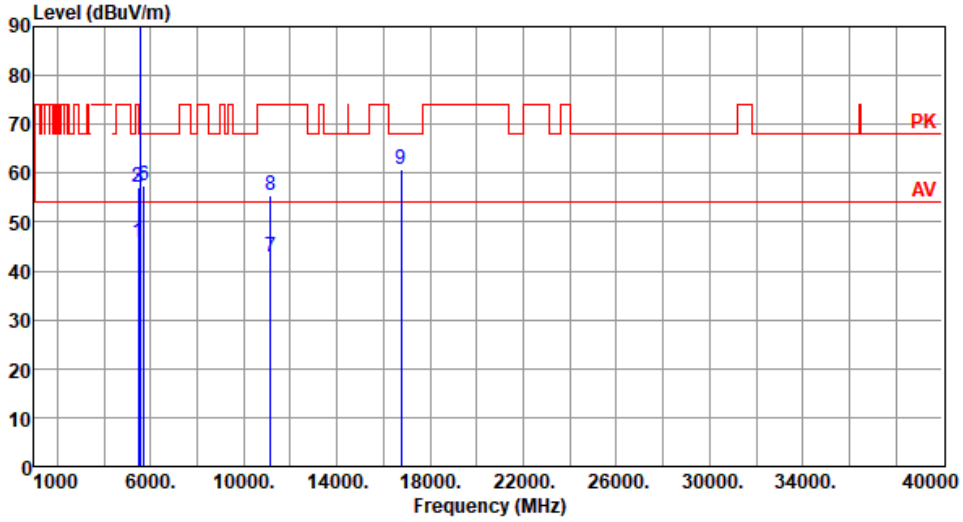
Modulation	ax (HE20)	Test Freq. (MHz)	5580
Polarization	Horizontal		



		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	45.84	54.00	-8.16	41.39	4.45	Average	158	20
2		5460.00	57.02	74.00	-16.98	52.57	4.45	Peak	158	20
3		5470.00	57.18	68.20	-11.02	52.68	4.50	Peak	158	20
4	*	5580.00	102.79			98.25	4.54	Average	158	20
5	*	5580.00	112.12			107.58	4.54	Peak	158	20
6		5725.00	57.69	68.20	-10.51	52.84	4.85	Peak	158	20
7		11160.00	42.80	54.00	-11.20	28.42	14.38	Average	100	92
8		11160.00	55.60	74.00	-18.40	41.22	14.38	Peak	100	92
9		16740.00	60.72	68.20	-7.48	43.25	17.47	Peak	151	86

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

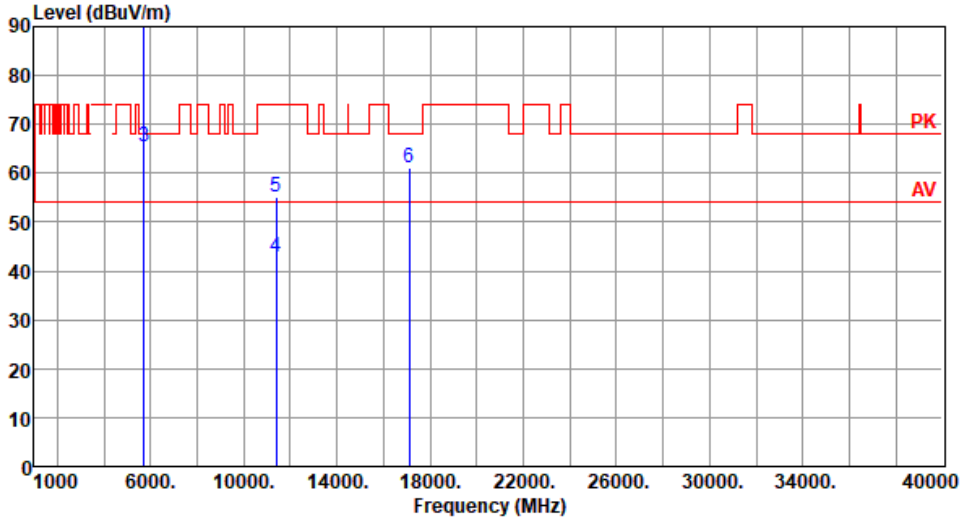
Modulation	ax (HE20)	Test Freq. (MHz)	5580
Polarization	Vertical		



		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	45.77	54.00	-8.23	41.32	4.45	Average	136	202
2		5460.00	56.98	74.00	-17.02	52.53	4.45	Peak	136	202
3		5470.00	57.09	68.20	-11.11	52.59	4.50	Peak	136	202
4	*	5580.00	100.65			96.11	4.54	Average	136	202
5	*	5580.00	110.04			105.50	4.54	Peak	136	202
6		5725.00	57.56	68.20	-10.64	52.71	4.85	Peak	136	202
7		11160.00	42.77	54.00	-11.23	28.39	14.38	Average	100	75
8		11160.00	55.30	74.00	-18.70	40.92	14.38	Peak	100	80
9		16740.00	60.70	68.20	-7.50	43.23	17.47	Peak	100	95

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

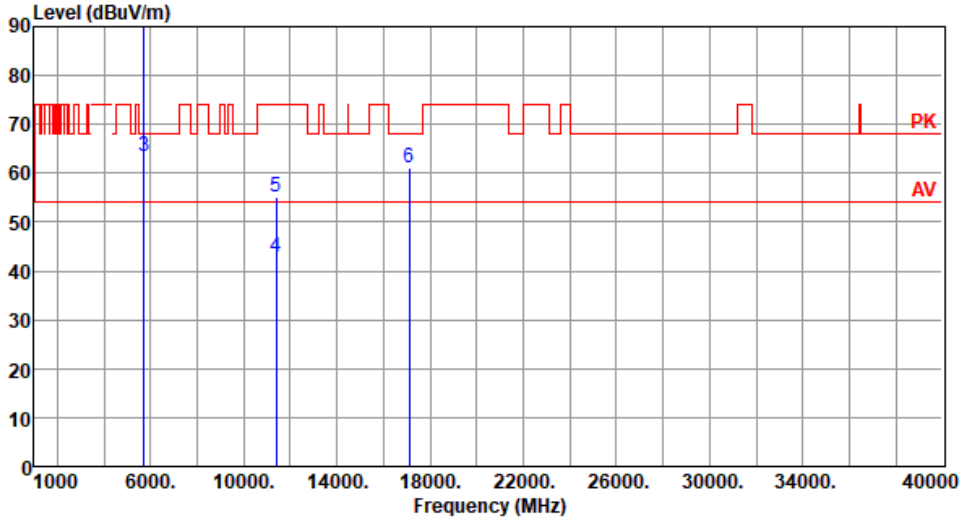
Modulation	ax (HE20)	Test Freq. (MHz)	5700
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	102.36			97.68	4.68	Average	174	18
2	*	5700.00	111.66			106.98	4.68	Peak	174	18
3		5725.00	65.40	68.20	-2.80	60.55	4.85	Peak	174	18
4		11400.00	42.79	54.00	-11.21	28.11	14.68	Average	105	86
5		11400.00	55.11	74.00	-18.89	40.43	14.68	Peak	105	86
6		17100.00	61.04	68.20	-7.16	43.36	17.68	Peak	121	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

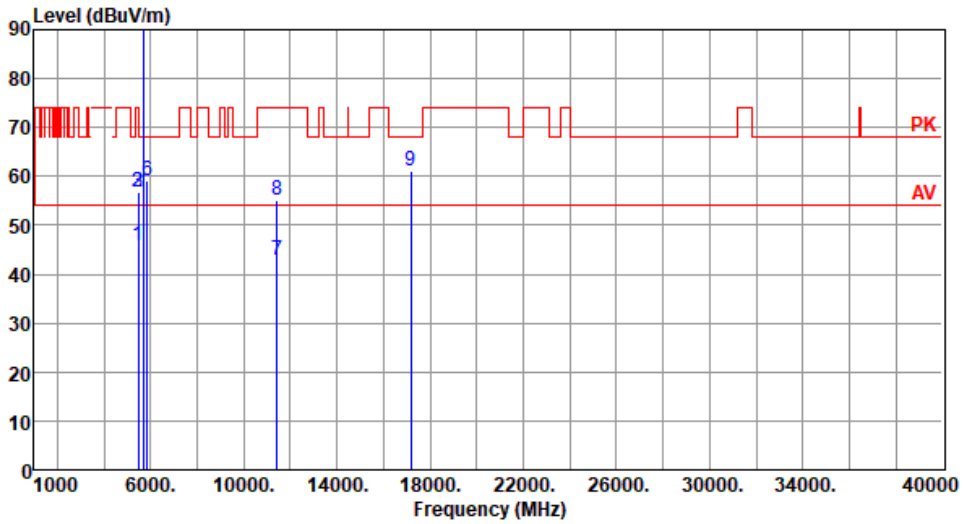
Modulation	ax (HE20)	Test Freq. (MHz)	5700
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5700.00	100.25			95.57	4.68	Average	135	208
2	*	5700.00	109.58			104.90	4.68	Peak	135	208
3		5725.00	63.45	68.20	-4.75	58.60	4.85	Peak	135	208
4		11400.00	42.68	54.00	-11.32	28.00	14.68	Average	100	43
5		11400.00	55.05	74.00	-18.95	40.37	14.68	Peak	100	43
6		17100.00	61.15	68.20	-7.05	43.47	17.68	Peak	114	83

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

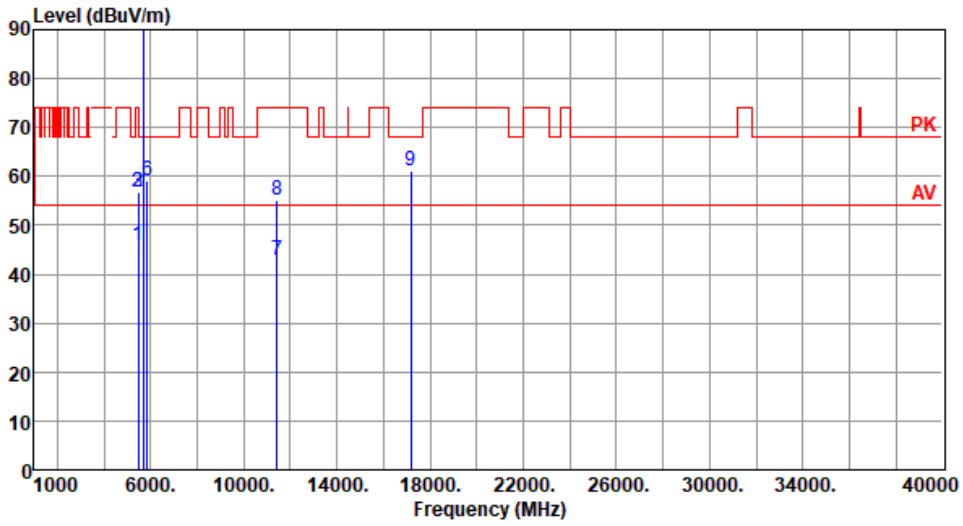
Modulation	ax (HE20)	Test Freq. (MHz)	5720
Polarization	Horizontal		



		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	45.91	54.00	-8.09	41.46	4.45	Average	175	19
2		5460.00	56.89	74.00	-17.11	52.44	4.45	Peak	175	19
3		5470.00	56.95	68.20	-11.25	52.45	4.50	Peak	175	19
4	*	5720.00	101.28			96.47	4.81	Average	175	19
5	*	5720.00	110.59			105.78	4.81	Peak	175	19
6		5850.00	59.08	68.20	-9.12	53.63	5.45	Peak	175	19
7		11440.00	42.83	54.00	-11.17	28.17	14.66	Average	100	39
8		11440.00	55.24	74.00	-18.76	40.58	14.66	Peak	100	39
9		17160.00	61.24	68.20	-6.96	43.59	17.65	Peak	100	51

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

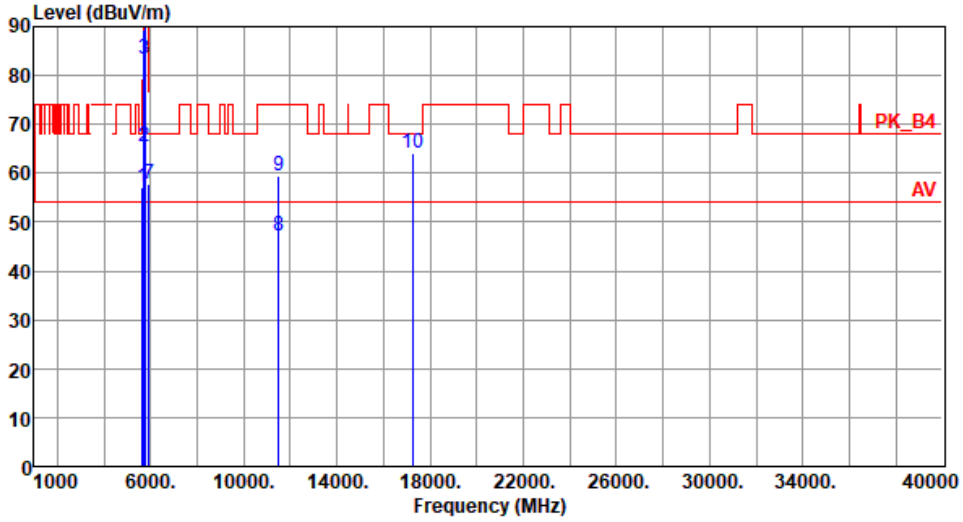
Modulation	ax (HE20)	Test Freq. (MHz)	5720
Polarization	Vertical		



		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	45.89	54.00	-8.11	41.44	4.45	Average	130	202
2		5460.00	56.84	74.00	-17.16	52.39	4.45	Peak	130	202
3		5470.00	56.92	68.20	-11.28	52.42	4.50	Peak	130	202
4	*	5720.00	99.16			94.35	4.81	Average	130	202
5	*	5720.00	108.58			103.77	4.81	Peak	130	202
6		5850.00	59.02	68.20	-9.18	53.57	5.45	Peak	130	202
7		11440.00	42.76	54.00	-11.24	28.10	14.66	Average	100	55
8		11440.00	55.15	74.00	-18.85	40.49	14.66	Peak	100	55
9		17160.00	61.18	68.20	-7.02	43.53	17.65	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

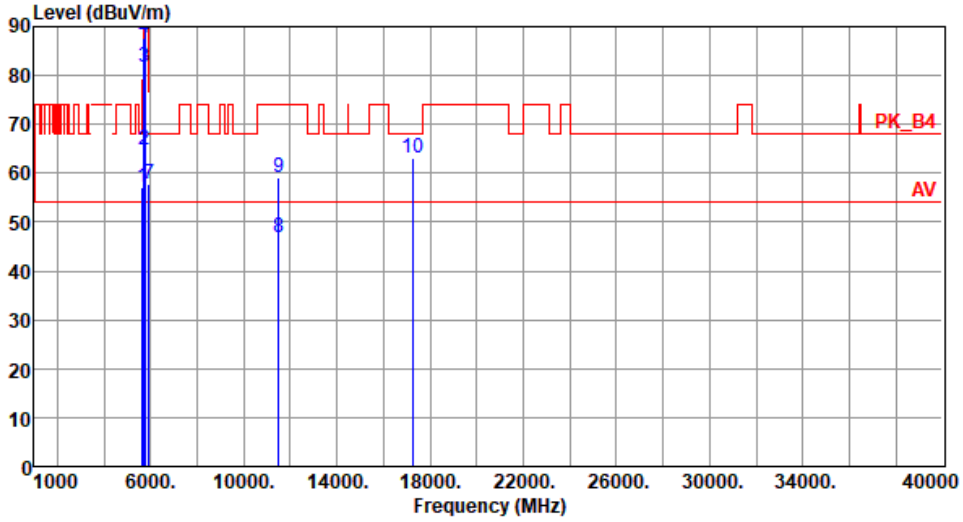
Modulation	ax (HE20)	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.03	68.20	-11.17	52.49	4.54	Peak	100	18
2		5700.00	65.34	105.20	-39.86	60.66	4.68	Peak	100	18
3		5720.00	83.20	110.80	-27.60	78.39	4.81	Peak	100	18
4		5725.00	89.40	122.20	-32.80	84.55	4.85	Peak	100	18
5	*	5745.00	108.26			103.27	4.99	Average	100	18
6	*	5745.00	117.04			112.05	4.99	Peak	100	18
7		5925.00	57.80	68.20	-10.40	52.37	5.43	Peak	100	18
8		11490.00	47.10	54.00	-6.90	32.47	14.63	Average	125	143
9		11490.00	59.33	74.00	-14.67	44.70	14.63	Peak	125	143
10		17235.00	64.00	68.20	-4.20	46.24	17.76	Peak	205	72

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

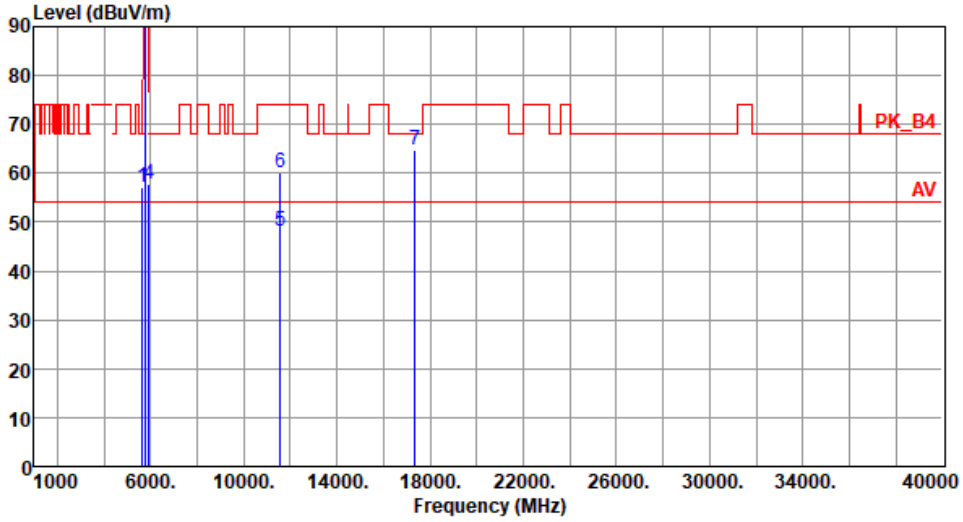
Modulation	ax (HE20)	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.98	68.20	-11.22	52.44	4.54	Peak	133	205
2		5700.00	64.82	105.20	-40.38	60.14	4.68	Peak	133	205
3		5720.00	81.69	110.80	-29.11	76.88	4.81	Peak	133	205
4		5725.00	87.59	122.20	-34.61	82.74	4.85	Peak	133	205
5	*	5745.00	106.19			101.20	4.99	Average	133	205
6	*	5745.00	115.02			110.03	4.99	Peak	133	205
7		5925.00	57.64	68.20	-10.56	52.21	5.43	Peak	133	205
8		11490.00	46.98	54.00	-7.02	32.35	14.63	Average	121	145
9		11490.00	59.21	74.00	-14.79	44.58	14.63	Peak	121	145
10		17235.00	63.16	68.20	-5.04	45.40	17.76	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

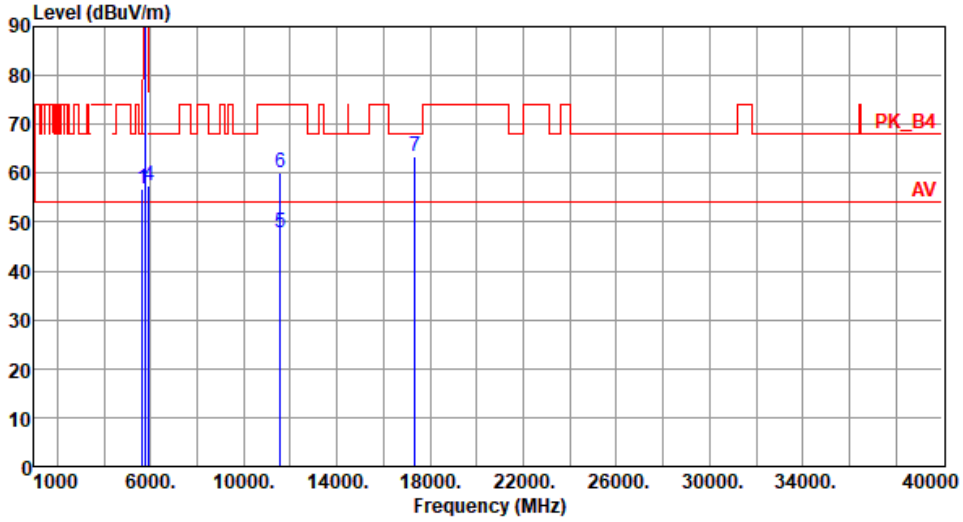
Modulation	ax (HE20)	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.01	68.20	-11.19	52.47	4.54	Peak	100	7
2	*	5785.00	108.85			103.74	5.11	Average	100	7
3	*	5785.00	117.96			112.85	5.11	Peak	100	7
4		5925.00	57.77	68.20	-10.43	52.34	5.43	Peak	100	7
5		11570.00	48.25	54.00	-5.75	33.75	14.50	Average	100	122
6		11570.00	60.27	74.00	-13.73	45.77	14.50	Peak	100	122
7		17355.00	64.68	68.20	-3.52	46.32	18.36	Peak	229	111

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

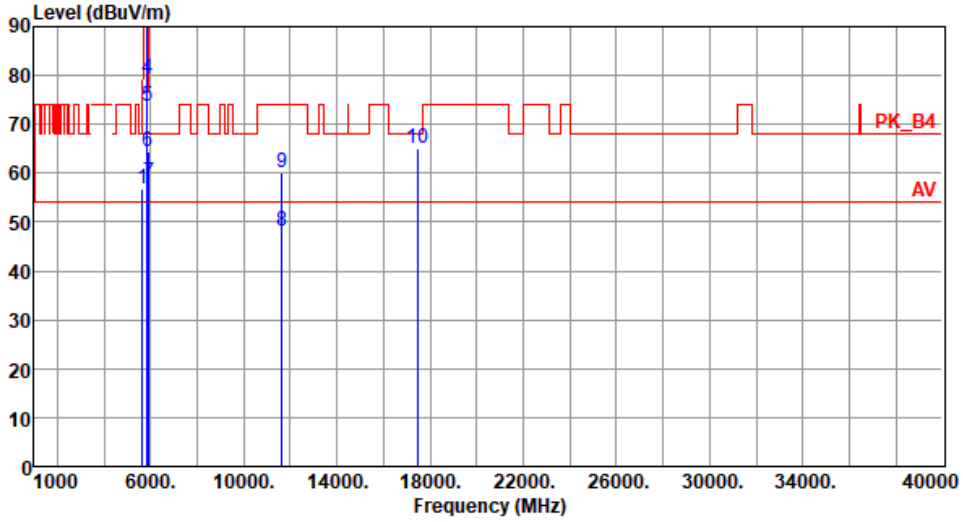
Modulation	ax (HE20)	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.87	68.20	-11.33	52.33	4.54	Peak	100	25
2	*	5785.00	106.92			101.81	5.11	Average	100	25
3	*	5785.00	116.20			111.09	5.11	Peak	100	25
4		5925.00	57.54	68.20	-10.66	52.11	5.43	Peak	100	25
5		11570.00	47.75	54.00	-6.25	33.25	14.50	Average	131	142
6		11570.00	60.27	74.00	-13.73	45.77	14.50	Peak	131	142
7		17355.00	63.47	68.20	-4.73	45.11	18.36	Peak	100	321

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

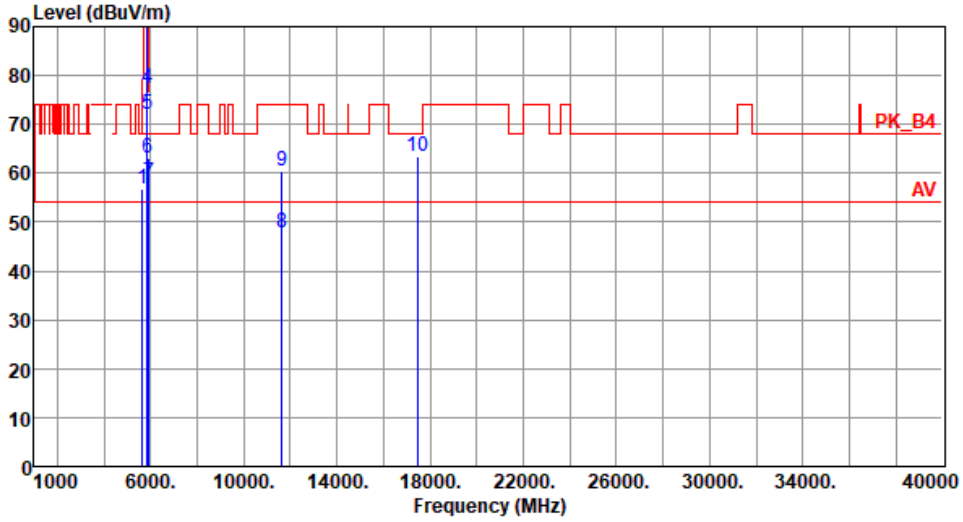
Modulation	ax (HE20)	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.89	68.20	-11.31	52.35	4.54	Peak	100	3
2	*	5825.00	108.62			103.33	5.29	Average	100	3
3	*	5825.00	117.68			112.39	5.29	Peak	100	3
4		5850.00	79.28	122.20	-42.92	73.83	5.45	Peak	100	3
5		5855.00	73.58	110.80	-37.22	68.14	5.44	Peak	100	3
6		5875.00	64.50	105.20	-40.70	59.06	5.44	Peak	100	3
7		5925.00	58.12	68.20	-10.08	52.69	5.43	Peak	100	3
8		11650.00	48.06	54.00	-5.94	33.85	14.21	Average	100	123
9		11650.00	60.09	74.00	-13.91	45.88	14.21	Peak	100	123
10		17475.00	64.97	68.20	-3.23	46.11	18.86	Peak	246	85

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

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

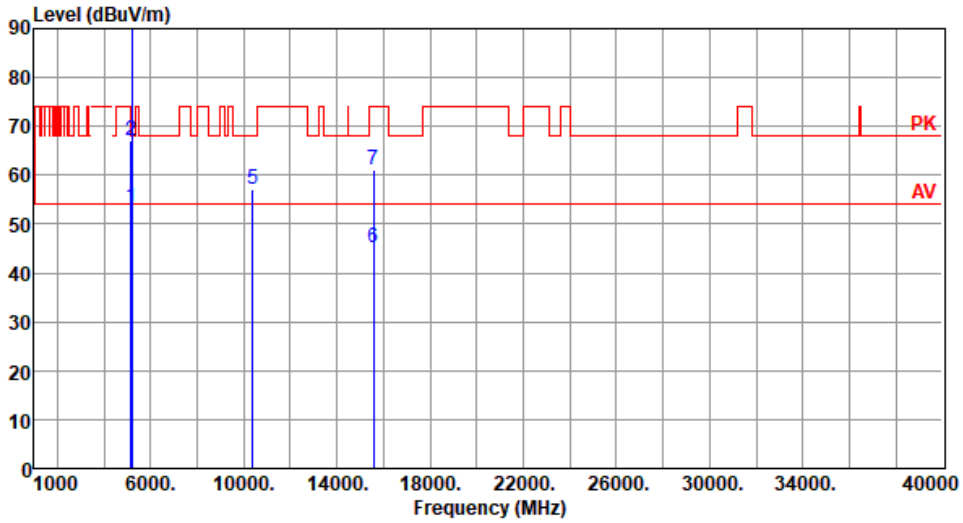


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.82	68.20	-11.38	52.28	4.54	Peak	128	211
2	*	5825.00	106.52			101.23	5.29	Average	128	211
3	*	5825.00	115.56			110.27	5.29	Peak	128	211
4		5850.00	77.46	122.20	-44.74	72.01	5.45	Peak	128	211
5		5855.00	72.06	110.80	-38.74	66.62	5.44	Peak	128	211
6		5875.00	63.26	105.20	-41.94	57.82	5.44	Peak	128	211
7		5925.00	58.07	68.20	-10.13	52.64	5.43	Peak	128	211
8		11650.00	47.81	54.00	-6.19	33.60	14.21	Average	133	145
9		11650.00	60.32	74.00	-13.68	46.11	14.21	Peak	133	145
10		17475.00	63.54	68.20	-4.66	44.68	18.86	Peak	100	325

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

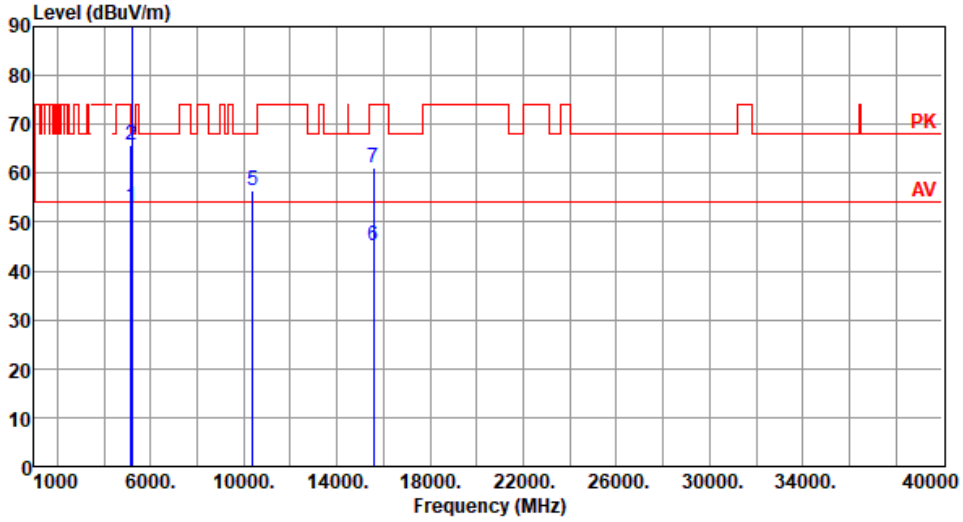
Modulation	ax (HE40)	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



		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	53.59	54.00	-0.41	48.95	4.64	Average	192	240
2		5150.00	67.02	74.00	-6.98	62.38	4.64	Peak	192	240
3	*	5190.00	101.81			97.40	4.41	Average	192	240
4	*	5190.00	111.25			106.84	4.41	Peak	192	240
5		10380.00	57.06	68.20	-11.14	42.82	14.24	Peak	105	134
6		15570.00	45.15	54.00	-8.85	30.37	14.78	Average	265	113
7		15570.00	61.04	74.00	-12.96	46.26	14.78	Peak	265	113

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

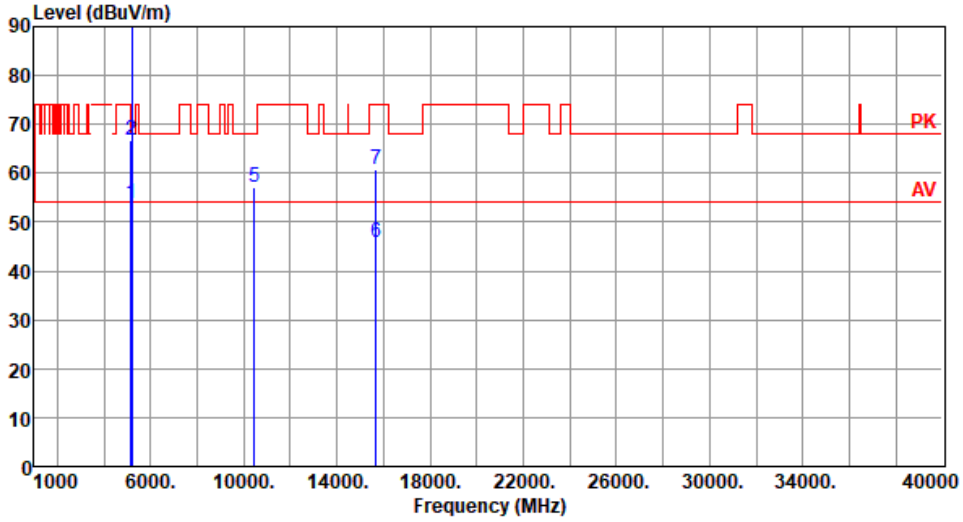
Modulation	ax (HE40)	Test Freq. (MHz)	5190
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.27	54.00	-0.73	48.63	4.64	Average	138	208
2		5150.00	65.69	74.00	-8.31	61.05	4.64	Peak	138	208
3	*	5190.00	99.96			95.55	4.41	Average	138	208
4	*	5190.00	109.08			104.67	4.41	Peak	138	208
5		10380.00	56.42	68.20	-11.78	42.18	14.24	Peak	104	53
6		15570.00	45.22	54.00	-8.78	30.44	14.78	Average	194	88
7		15570.00	61.15	74.00	-12.85	46.37	14.78	Peak	194	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

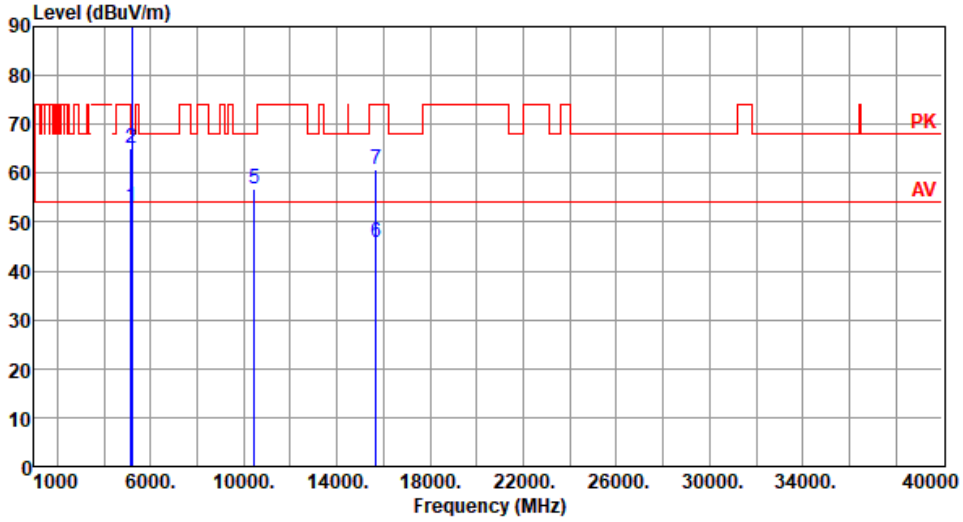
Modulation	ax (HE40)	Test Freq. (MHz)	5230
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.69	54.00	-0.31	49.05	4.64	Average	176	246
2		5150.00	66.59	74.00	-7.41	61.95	4.64	Peak	176	246
3	*	5230.00	106.77			102.52	4.25	Average	176	246
4	*	5230.00	115.37			111.12	4.25	Peak	176	246
5		10460.00	56.96	68.20	-11.24	42.54	14.42	Peak	100	60
6		15690.00	45.82	54.00	-8.18	31.56	14.26	Average	108	96
7		15690.00	60.92	74.00	-13.08	46.66	14.26	Peak	108	96

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

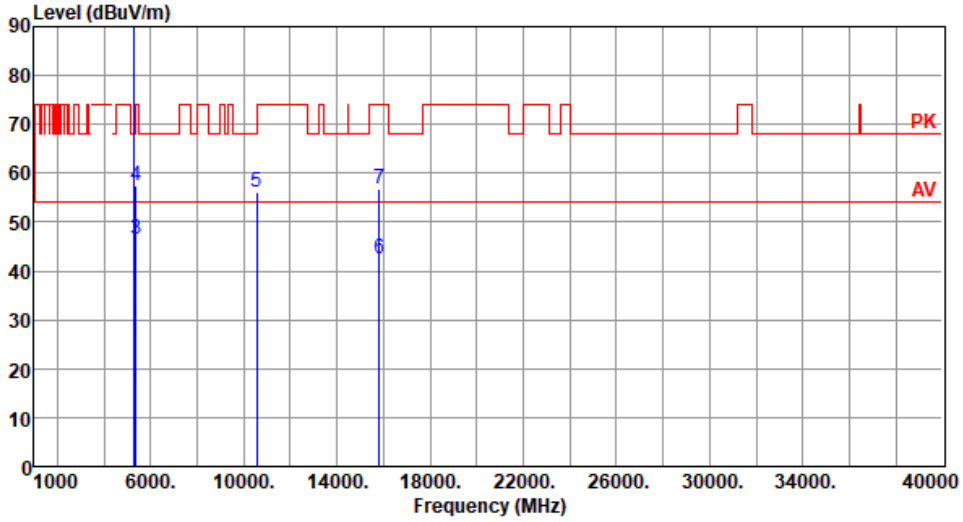
Modulation	ax (HE40)	Test Freq. (MHz)	5230
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.09	54.00	-0.91	48.45	4.64	Average	135	205
2		5150.00	65.06	74.00	-8.94	60.42	4.64	Peak	135	205
3	*	5230.00	104.74			100.49	4.25	Average	135	205
4	*	5230.00	113.83			109.58	4.25	Peak	135	205
5		10460.00	56.84	68.20	-11.36	42.42	14.42	Peak	100	52
6		15690.00	45.77	54.00	-8.23	31.51	14.26	Average	110	24
7		15690.00	60.89	74.00	-13.11	46.63	14.26	Peak	110	24

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

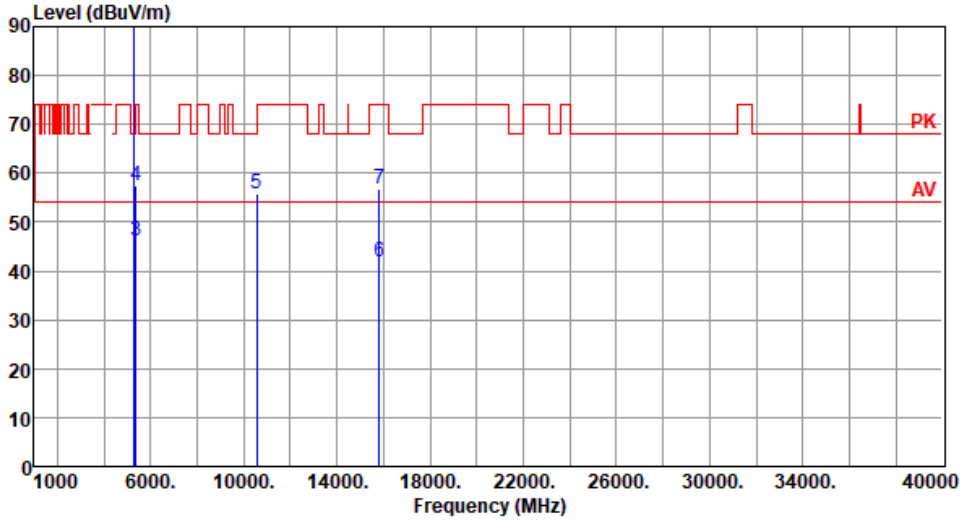
Modulation	ax (HE40)	Test Freq. (MHz)	5270
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5270.00	101.07			96.96	4.11	Average	179	20
2	*	5270.00	109.56			105.45	4.11	Peak	179	20
3		5350.00	46.39	54.00	-7.61	42.45	3.94	Average	179	20
4		5350.00	57.43	74.00	-16.57	53.49	3.94	Peak	179	20
5		10540.00	56.06	68.20	-12.14	41.64	14.42	Peak	100	70
6		15810.00	42.63	54.00	-11.37	28.45	14.18	Average	100	20
7		15810.00	56.74	74.00	-17.26	42.56	14.18	Peak	100	20

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

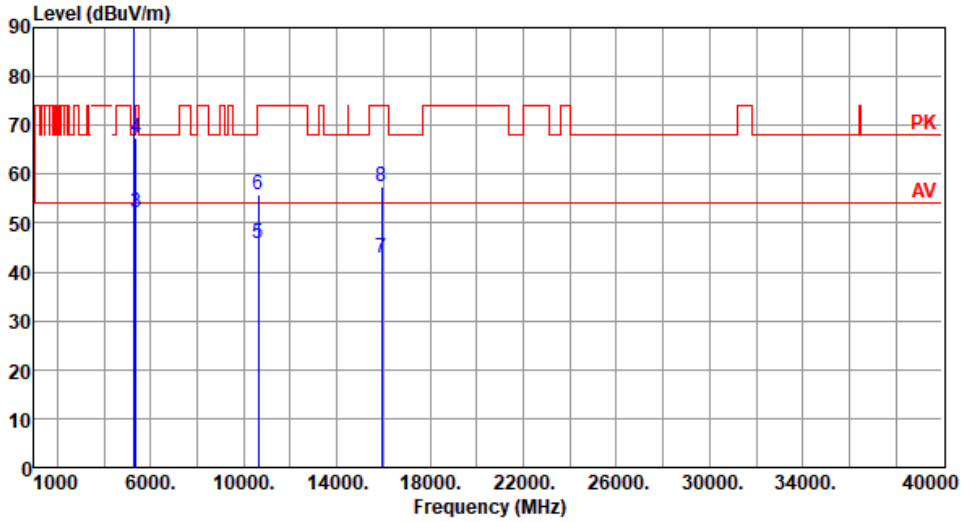
Modulation	ax (HE40)	Test Freq. (MHz)	5270
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5270.00	98.98			94.87	4.11	Average	131	220
2	*	5270.00	107.45			103.34	4.11	Peak	131	220
3		5350.00	46.28	54.00	-7.72	42.34	3.94	Average	131	220
4		5350.00	57.35	74.00	-16.65	53.41	3.94	Peak	131	220
5		10540.00	55.89	68.20	-12.31	41.47	14.42	Peak	100	44
6		15810.00	42.00	54.00	-12.00	27.82	14.18	Average	100	91
7		15810.00	56.68	74.00	-17.32	42.50	14.18	Peak	100	91

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

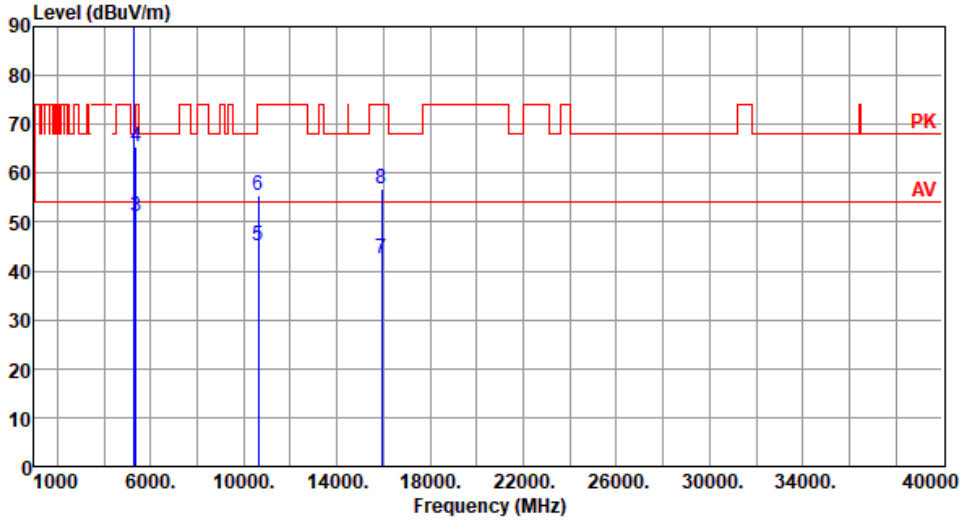
Modulation	ax (HE40)	Test Freq. (MHz)	5310
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5310.00	101.20			97.20	4.00	Average	183	19
2	*	5310.00	109.51			105.51	4.00	Peak	183	19
3		5350.00	52.22	54.00	-1.78	48.28	3.94	Average	183	19
4		5350.00	67.54	74.00	-6.46	63.60	3.94	Peak	183	19
5		10620.00	45.68	54.00	-8.32	31.34	14.34	Average	100	63
6		10620.00	55.95	74.00	-18.05	41.61	14.34	Peak	100	63
7		15930.00	42.69	54.00	-11.31	28.46	14.23	Average	100	51
8		15930.00	57.44	74.00	-16.56	43.21	14.23	Peak	100	51

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

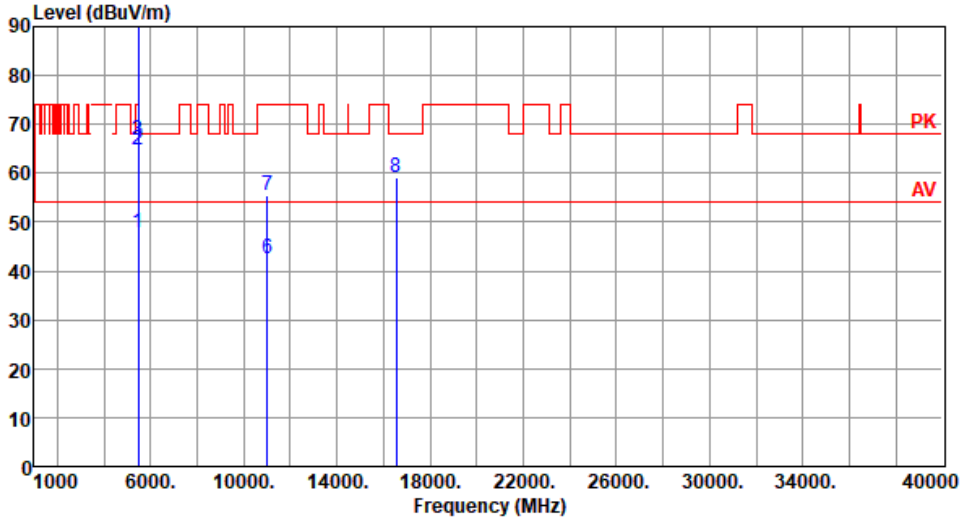
Modulation	ax (HE40)	Test Freq. (MHz)	5310
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5310.00	99.23			95.23	4.00	Average	182	306
2	*	5310.00	107.46			103.46	4.00	Peak	182	306
3		5350.00	51.09	54.00	-2.91	47.15	3.94	Average	182	306
4		5350.00	65.48	74.00	-8.52	61.54	3.94	Peak	182	306
5		10620.00	45.29	54.00	-8.71	30.95	14.34	Average	100	43
6		10620.00	55.38	74.00	-18.62	41.04	14.34	Peak	100	43
7		15930.00	42.57	54.00	-11.43	28.34	14.23	Average	100	86
8		15930.00	56.92	74.00	-17.08	42.69	14.23	Peak	100	86

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

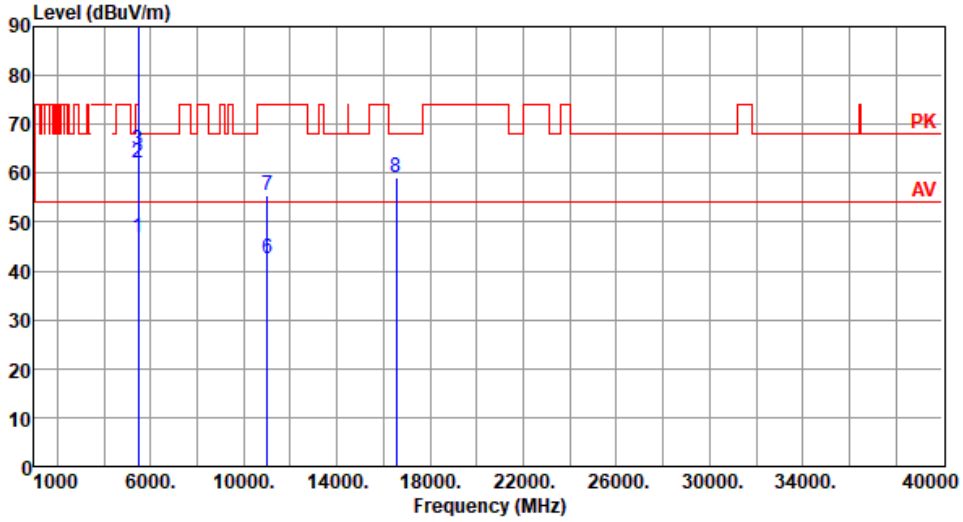
Modulation	ax (HE40)	Test Freq. (MHz)	5510
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	47.79	54.00	-6.21	43.34	4.45	Average	169	20
2		5460.00	64.61	74.00	-9.39	60.16	4.45	Peak	169	20
3		5470.00	66.89	68.20	-1.31	62.39	4.50	Peak	169	20
4	*	5510.00	100.73			96.09	4.64	Average	169	20
5	*	5510.00	109.14			104.50	4.64	Peak	169	20
6		11020.00	42.46	54.00	-11.54	27.65	14.81	Average	100	48
7		11020.00	55.58	74.00	-18.42	40.77	14.81	Peak	100	48
8		16530.00	59.14	68.20	-9.06	42.81	16.33	Peak	100	87

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

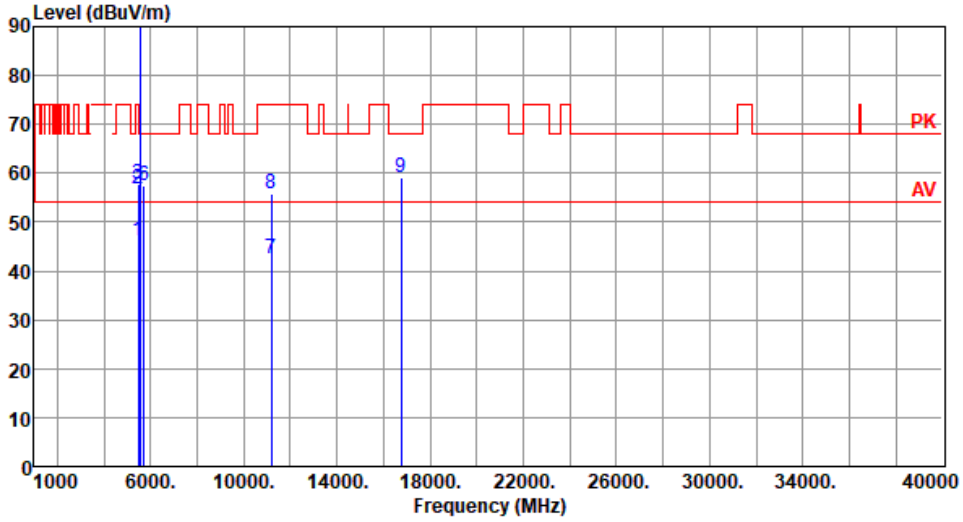
Modulation	ax (HE40)	Test Freq. (MHz)	5510
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	46.67	54.00	-7.33	42.22	4.45	Average	105	10
2		5460.00	62.05	74.00	-11.95	57.60	4.45	Peak	105	10
3		5470.00	64.71	68.20	-3.49	60.21	4.50	Peak	105	10
4	*	5510.00	98.90			94.26	4.64	Average	105	10
5	*	5510.00	107.13			102.49	4.64	Peak	105	10
6		11020.00	42.41	54.00	-11.59	27.60	14.81	Average	100	47
7		11020.00	55.36	74.00	-18.64	40.55	14.81	Peak	100	47
8		16530.00	59.04	68.20	-9.16	42.71	16.33	Peak	100	22

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

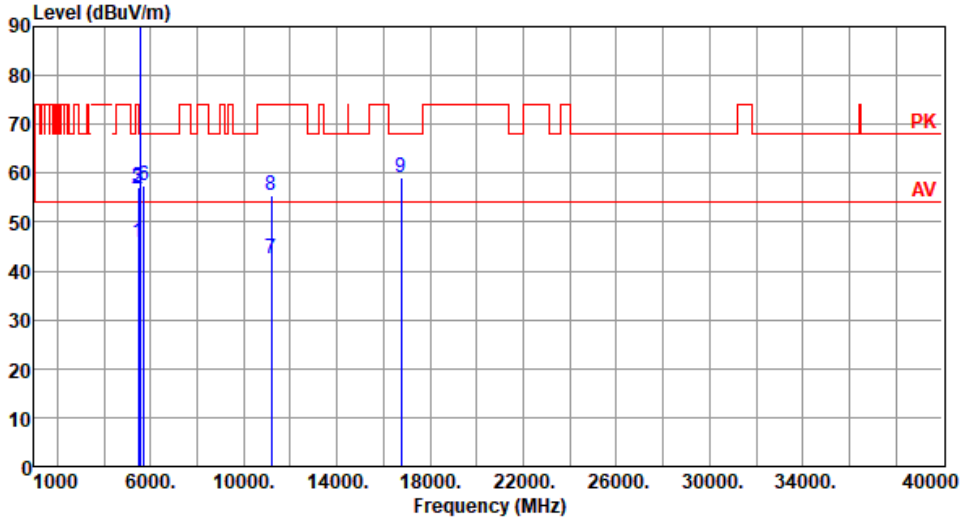
Modulation	ax (HE40)	Test Freq. (MHz)	5590
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	46.02	54.00	-7.98	41.57	4.45	Average	167	15
2		5460.00	56.92	74.00	-17.08	52.47	4.45	Peak	167	15
3		5470.00	57.73	68.20	-10.47	53.23	4.50	Peak	167	15
4	*	5590.00	100.68			96.16	4.52	Average	167	15
5	*	5590.00	109.06			104.54	4.52	Peak	167	15
6		5725.00	57.54	68.20	-10.66	52.69	4.85	Peak	167	15
7		11180.00	42.59	54.00	-11.41	28.26	14.33	Average	100	50
8		11180.00	55.64	74.00	-18.36	41.31	14.33	Peak	100	50
9		16770.00	59.17	68.20	-9.03	41.59	17.58	Peak	100	90

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

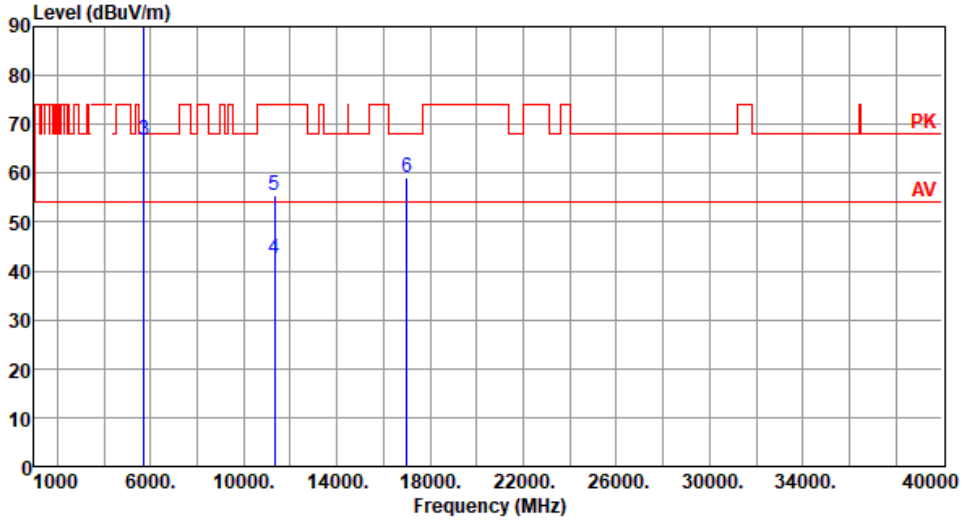
Modulation	ax (HE40)	Test Freq. (MHz)	5590
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.98	54.00	-8.02	41.53	4.45	Average	125	206
2		5460.00	56.89	74.00	-17.11	52.44	4.45	Peak	125	206
3		5470.00	57.22	68.20	-10.98	52.72	4.50	Peak	125	206
4	*	5590.00	98.54			94.02	4.52	Average	125	206
5	*	5590.00	106.95			102.43	4.52	Peak	125	206
6		5725.00	57.41	68.20	-10.79	52.56	4.85	Peak	125	206
7		11180.00	42.46	54.00	-11.54	28.13	14.33	Average	100	31
8		11180.00	55.58	74.00	-18.42	41.25	14.33	Peak	100	31
9		16770.00	59.04	68.20	-9.16	41.46	17.58	Peak	100	78

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

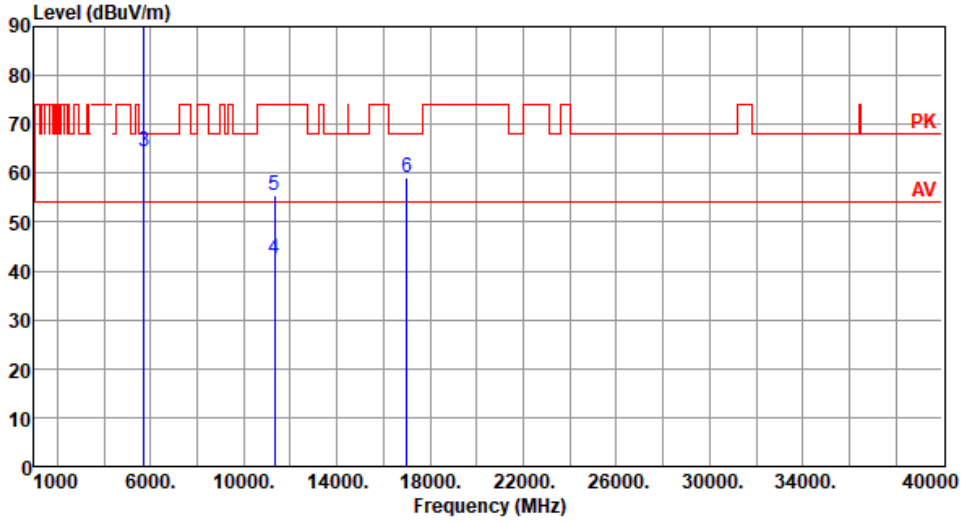
Modulation	ax (HE40)	Test Freq. (MHz)	5670
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5670.00	100.61			96.01	4.60	Average	165	16
2	*	5670.00	108.94			104.34	4.60	Peak	165	16
3		5725.00	66.71	68.20	-1.49	61.86	4.85	Peak	165	16
4		11340.00	42.46	54.00	-11.54	27.99	14.47	Average	100	63
5		11340.00	55.51	74.00	-18.49	41.04	14.47	Peak	100	63
6		17010.00	59.22	68.20	-8.98	41.33	17.89	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

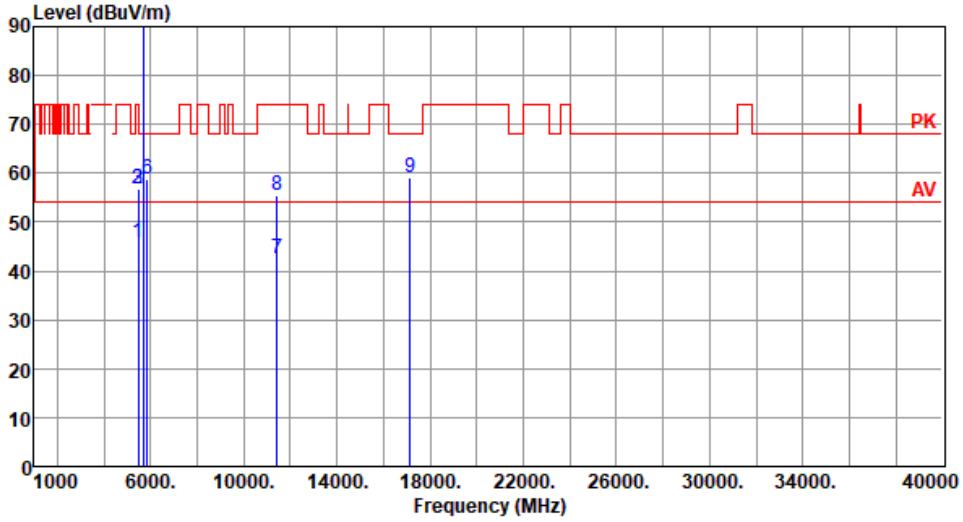
Modulation	ax (HE40)	Test Freq. (MHz)	5670
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5670.00	98.55			93.95	4.60	Average	105	4
2	*	5670.00	106.81			102.21	4.60	Peak	105	4
3		5725.00	64.34	68.20	-3.86	59.49	4.85	Peak	105	4
4		11340.00	42.35	54.00	-11.65	27.88	14.47	Average	100	61
5		11340.00	55.48	74.00	-18.52	41.01	14.47	Peak	100	61
6		17010.00	59.14	68.20	-9.06	41.25	17.89	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

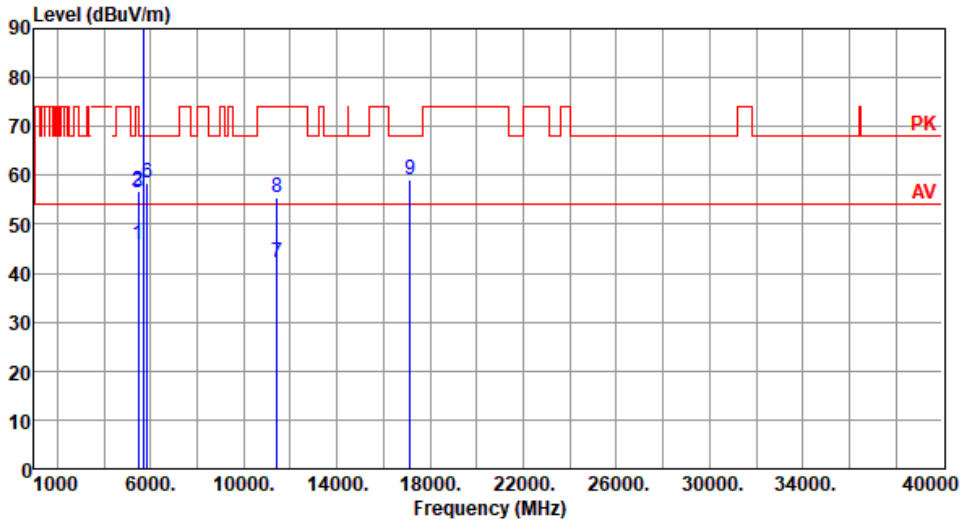
Modulation	ax (HE40)	Test Freq. (MHz)	5710
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.82	54.00	-8.18	41.37	4.45	Average	163	19
2		5460.00	56.71	74.00	-17.29	52.26	4.45	Peak	163	19
3		5470.00	56.88	68.20	-11.32	52.38	4.50	Peak	163	19
4	*	5710.00	100.54			95.79	4.75	Average	163	19
5	*	5710.00	108.82			104.07	4.75	Peak	163	19
6		5850.00	58.84	68.20	-9.36	53.39	5.45	Peak	163	19
7		11420.00	42.35	54.00	-11.65	27.68	14.67	Average	100	58
8		11420.00	55.48	74.00	-18.52	40.81	14.67	Peak	100	58
9		17130.00	59.16	68.20	-9.04	41.49	17.67	Peak	100	53

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

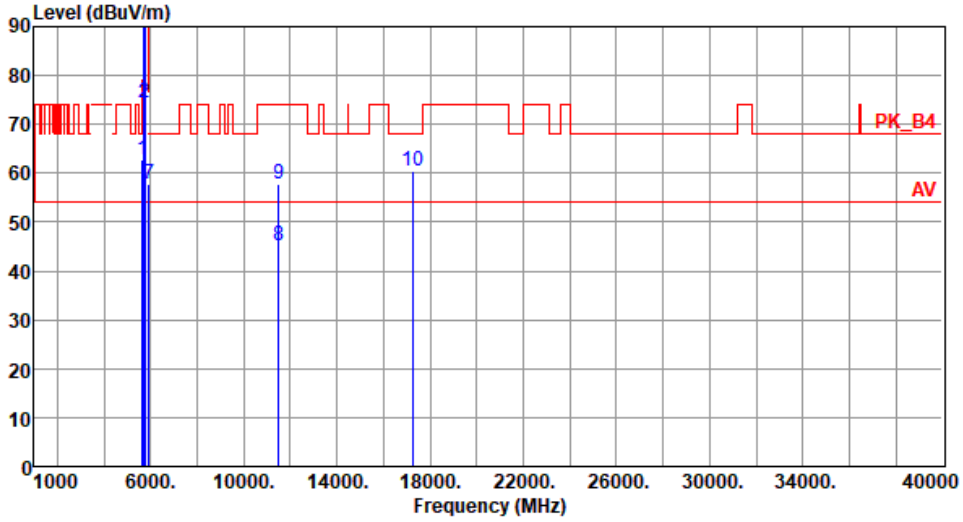
Modulation	ax (HE40)	Test Freq. (MHz)	5710
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.77	54.00	-8.23	41.32	4.45	Average	133	196
2		5460.00	56.68	74.00	-17.32	52.23	4.45	Peak	133	196
3		5470.00	56.62	68.20	-11.58	52.12	4.50	Peak	133	196
4	*	5710.00	98.45			93.70	4.75	Average	133	196
5	*	5710.00	106.91			102.16	4.75	Peak	133	196
6		5850.00	58.52	68.20	-9.68	53.07	5.45	Peak	133	196
7		11420.00	42.26	54.00	-11.74	27.59	14.67	Average	100	53
8		11420.00	55.39	74.00	-18.61	40.72	14.67	Peak	100	53
9		17130.00	59.28	68.20	-8.92	41.61	17.67	Peak	100	41

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

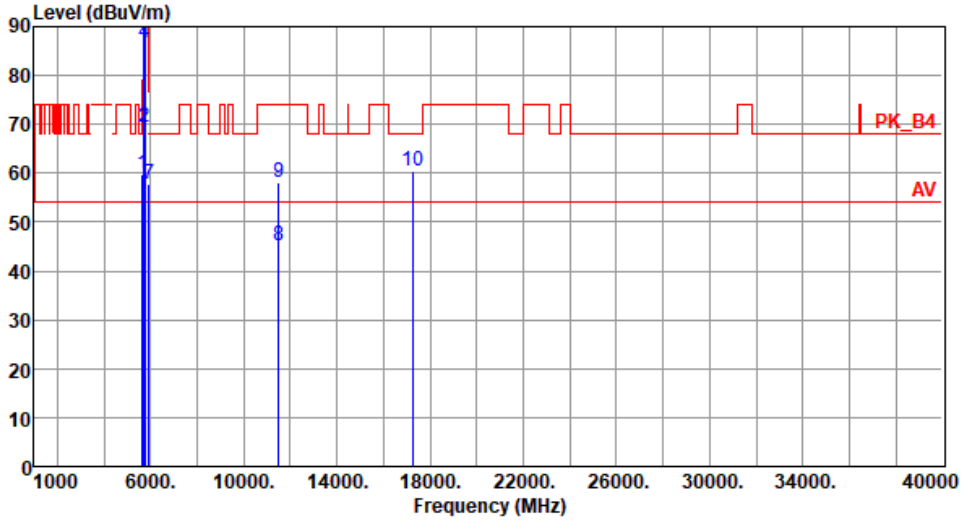
Modulation	ax (HE40)	Test Freq. (MHz)	5755
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	62.78	68.20	-5.42	58.24	4.54	Peak	100	4
2		5700.00	74.39	105.20	-30.81	69.71	4.68	Peak	100	4
3		5720.00	89.75	110.80	-21.05	84.94	4.81	Peak	100	4
4		5725.00	91.98	122.20	-30.22	87.13	4.85	Peak	100	4
5	*	5755.00	106.59			101.57	5.02	Average	100	4
6	*	5755.00	116.22			111.20	5.02	Peak	100	4
7		5925.00	57.89	68.20	-10.31	52.46	5.43	Peak	100	4
8		11510.00	45.06	54.00	-8.94	30.45	14.61	Average	100	128
9		11510.00	57.92	74.00	-16.08	43.31	14.61	Peak	100	128
10		17265.00	60.56	68.20	-7.64	42.69	17.87	Peak	100	95

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

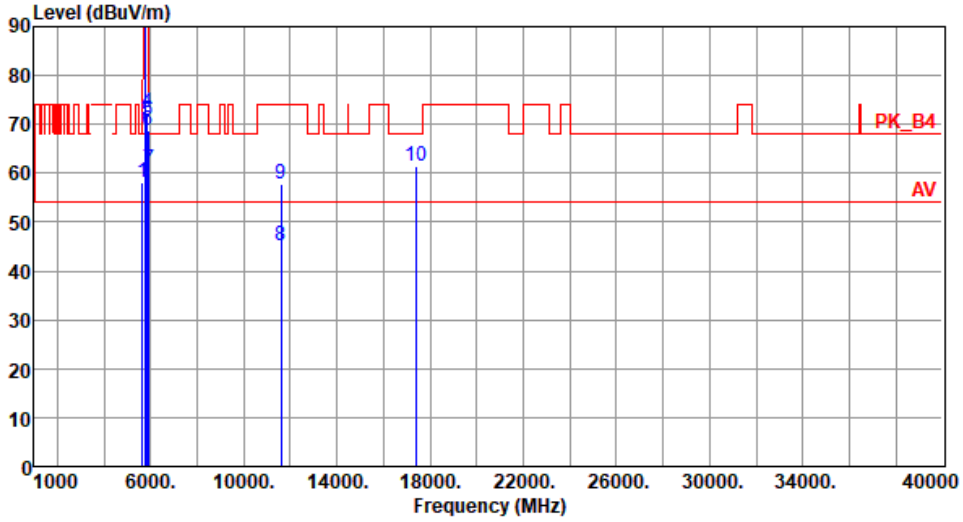
Modulation	ax (HE40)	Test Freq. (MHz)	5755
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	59.74	68.20	-8.46	55.20	4.54	Peak	100	29
2		5700.00	69.34	105.20	-35.86	64.66	4.68	Peak	100	29
3		5720.00	90.01	110.80	-20.79	85.20	4.81	Peak	100	29
4		5725.00	86.75	122.20	-35.45	81.90	4.85	Peak	100	29
5	*	5755.00	104.18			99.16	5.02	Average	100	29
6	*	5755.00	114.57			109.55	5.02	Peak	100	29
7		5925.00	57.74	68.20	-10.46	52.31	5.43	Peak	100	29
8		11510.00	45.15	54.00	-8.85	30.54	14.61	Average	100	35
9		11510.00	57.96	74.00	-16.04	43.35	14.61	Peak	100	35
10		17265.00	60.48	68.20	-7.72	42.61	17.87	Peak	100	61

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

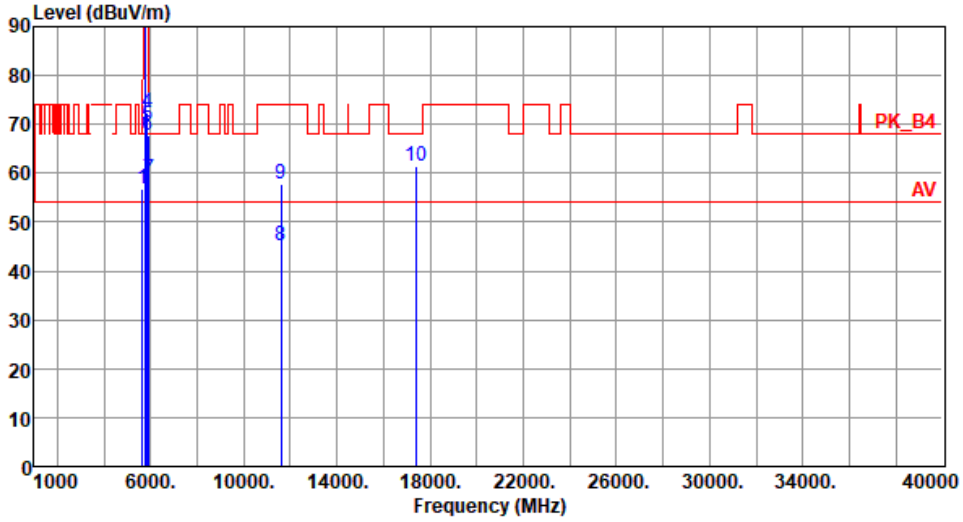
Modulation	ax (HE40)	Test Freq. (MHz)	5795
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.99	68.20	-10.21	53.45	4.54	Peak	100	3
2	*	5795.00	106.17			101.04	5.13	Average	100	3
3	*	5795.00	116.64			111.51	5.13	Peak	100	3
4		5850.00	72.52	122.20	-49.68	67.07	5.45	Peak	100	3
5		5855.00	70.76	110.80	-40.04	65.32	5.44	Peak	100	3
6		5875.00	68.81	105.20	-36.39	63.37	5.44	Peak	100	3
7		5925.00	60.69	68.20	-7.51	55.26	5.43	Peak	100	3
8		11590.00	45.15	54.00	-8.85	30.69	14.46	Average	100	125
9		11590.00	57.72	74.00	-16.28	43.26	14.46	Peak	100	125
10		17385.00	61.41	68.20	-6.79	42.85	18.56	Peak	100	92

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

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

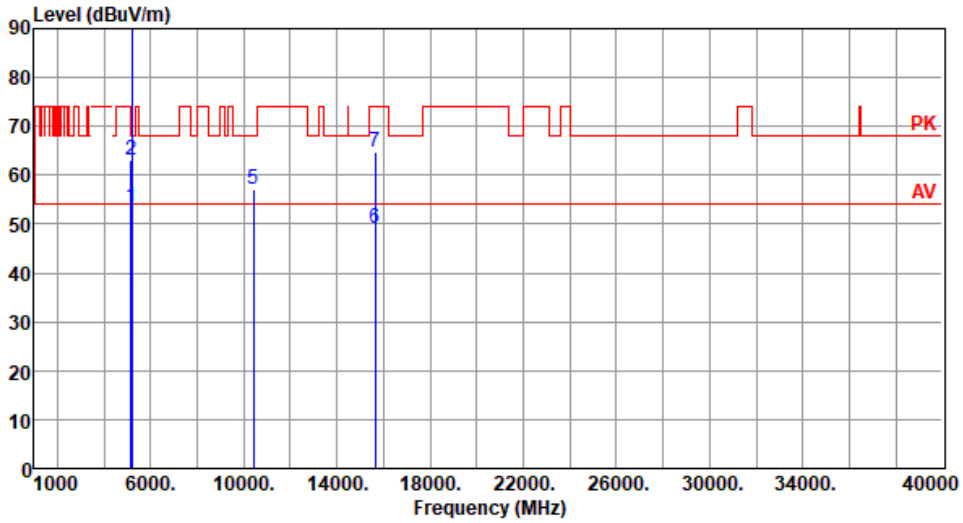


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	56.81	68.20	-11.39	52.27	4.54	Peak	100	30
2	*	5795.00	104.25			99.12	5.13	Average	100	30
3	*	5795.00	114.59			109.46	5.13	Peak	100	30
4		5850.00	72.30	122.20	-49.90	66.85	5.45	Peak	100	30
5		5855.00	69.73	110.80	-41.07	64.29	5.44	Peak	100	30
6		5875.00	67.83	105.20	-37.37	62.39	5.44	Peak	100	30
7		5925.00	58.89	68.20	-9.31	53.46	5.43	Peak	100	30
8		11590.00	45.08	54.00	-8.92	30.62	14.46	Average	100	64
9		11590.00	57.65	74.00	-16.35	43.19	14.46	Peak	100	64
10		17385.00	61.39	68.20	-6.81	42.83	18.56	Peak	100	53

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

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

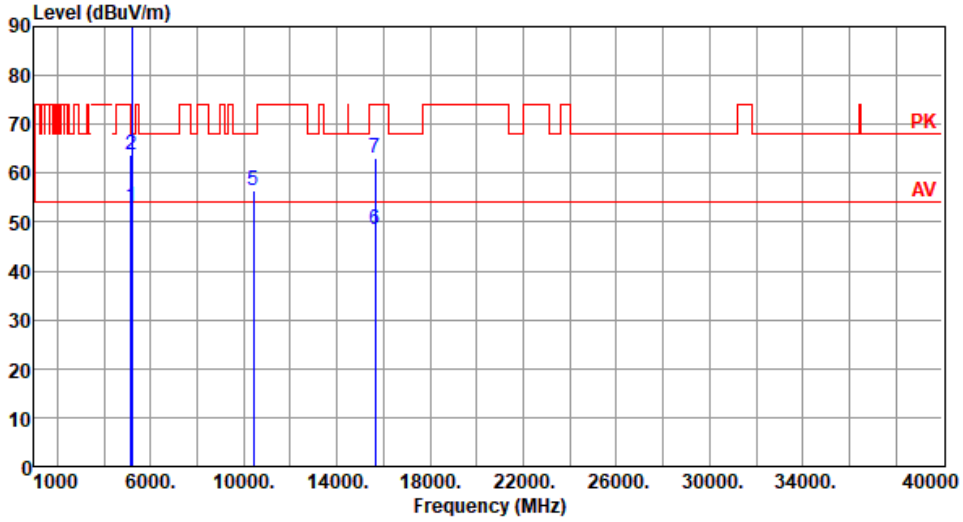
Modulation	ax (HE80)	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



		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	53.52	54.00	-0.48	48.88	4.64	Average	105	89
2		5150.00	63.04	74.00	-10.96	58.40	4.64	Peak	105	89
3	*	5210.00	97.33			93.01	4.32	Average	105	89
4	*	5210.00	106.53			102.21	4.32	Peak	105	89
5		10420.00	57.08	68.20	-11.12	42.74	14.34	Peak	100	106
6		15630.00	49.15	54.00	-4.85	34.64	14.51	Average	158	124
7		15630.00	64.89	74.00	-9.11	50.38	14.51	Peak	158	124

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

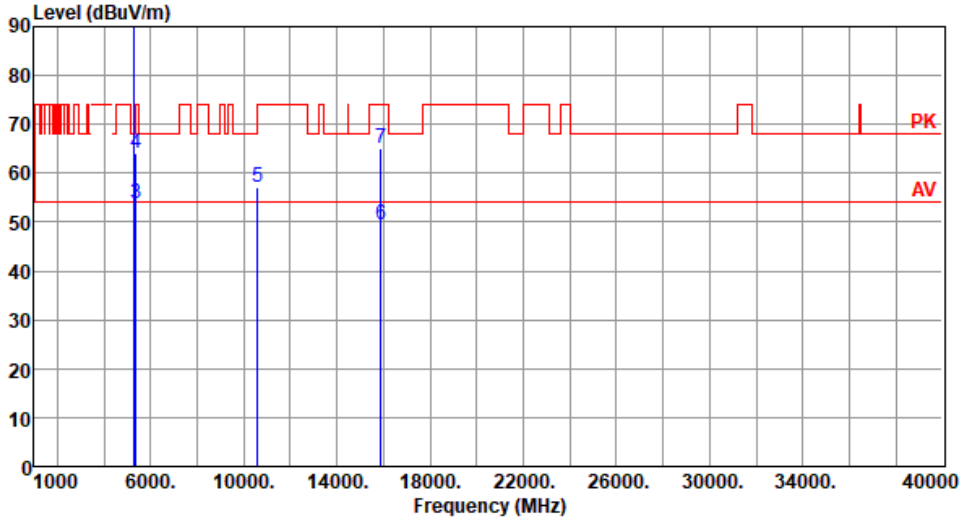
Modulation	ax (HE80)	Test Freq. (MHz)	5210
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.30	54.00	-0.70	48.66	4.64	Average	116	200
2		5150.00	63.85	74.00	-10.15	59.21	4.64	Peak	116	200
3	*	5210.00	95.52			91.20	4.32	Average	116	200
4	*	5210.00	104.54			100.22	4.32	Peak	116	200
5		10420.00	56.55	68.20	-11.65	42.21	14.34	Peak	100	55
6		15630.00	48.59	54.00	-5.41	34.08	14.51	Average	200	76
7		15630.00	63.14	74.00	-10.86	48.63	14.51	Peak	200	76

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

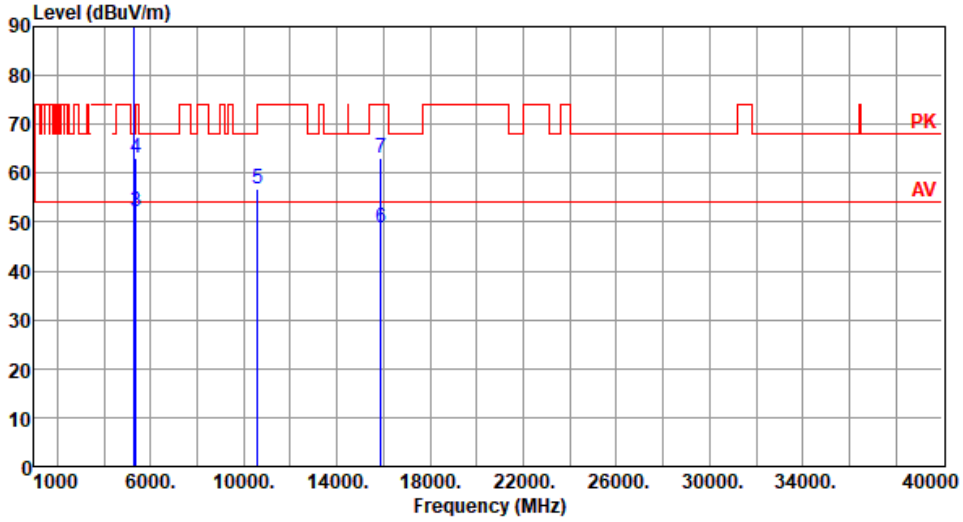
Modulation	ax (HE80)	Test Freq. (MHz)	5290
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5290.00	98.99			94.95	4.04	Average	168	15
2	*	5290.00	107.82			103.78	4.04	Peak	168	15
3		5350.00	53.69	54.00	-0.31	49.75	3.94	Average	168	15
4		5350.00	63.94	74.00	-10.06	60.00	3.94	Peak	168	15
5		10580.00	57.15	68.20	-11.05	42.83	14.32	Peak	100	96
6		15870.00	49.36	54.00	-4.64	35.13	14.23	Average	211	85
7		15870.00	65.24	74.00	-8.76	51.01	14.23	Peak	211	85

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

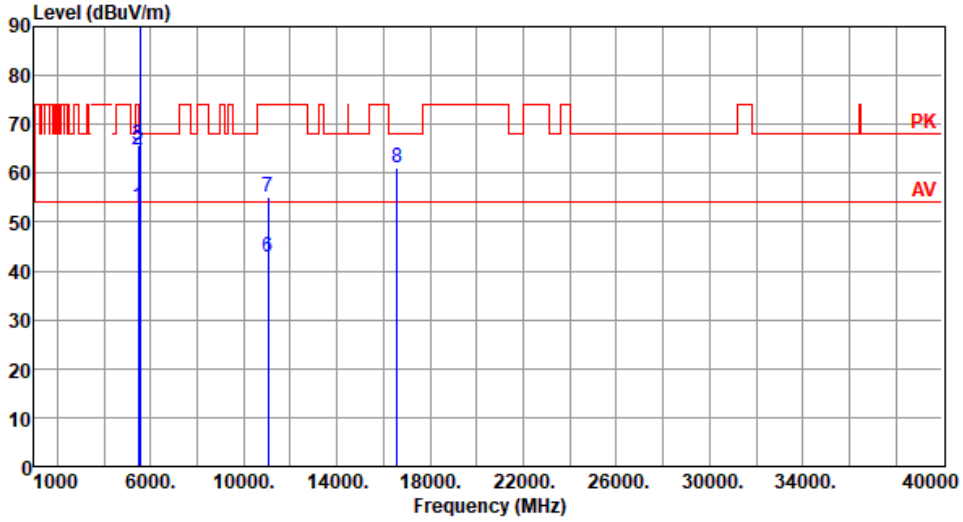
Modulation	ax (HE80)	Test Freq. (MHz)	5290
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5290.00	97.20			93.16	4.04	Average	212	309
2	*	5290.00	105.87			101.83	4.04	Peak	212	309
3		5350.00	52.08	54.00	-1.92	48.14	3.94	Average	212	309
4		5350.00	63.16	74.00	-10.84	59.22	3.94	Peak	212	309
5		10580.00	56.72	68.20	-11.48	42.40	14.32	Peak	100	66
6		15870.00	48.69	54.00	-5.31	34.46	14.23	Average	211	88
7		15870.00	63.21	74.00	-10.79	48.98	14.23	Peak	211	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

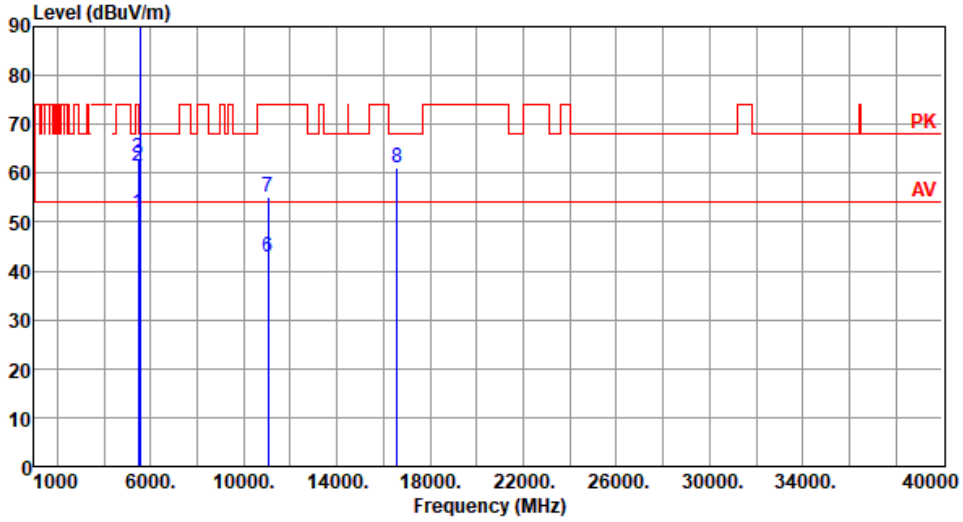
Modulation	ax (HE80)	Test Freq. (MHz)	5530
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	53.26	54.00	-0.74	48.81	4.45	Average	158	13
2		5460.00	64.89	74.00	-9.11	60.44	4.45	Peak	158	13
3		5470.00	65.83	68.20	-2.37	61.33	4.50	Peak	158	13
4	*	5530.00	99.16			94.55	4.61	Average	158	13
5	*	5530.00	108.21			103.60	4.61	Peak	158	13
6		11060.00	42.75	54.00	-11.25	28.08	14.67	Average	100	87
7		11060.00	55.04	74.00	-18.96	40.37	14.67	Peak	100	87
8		16590.00	61.15	68.20	-7.05	44.54	16.61	Peak	100	34

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

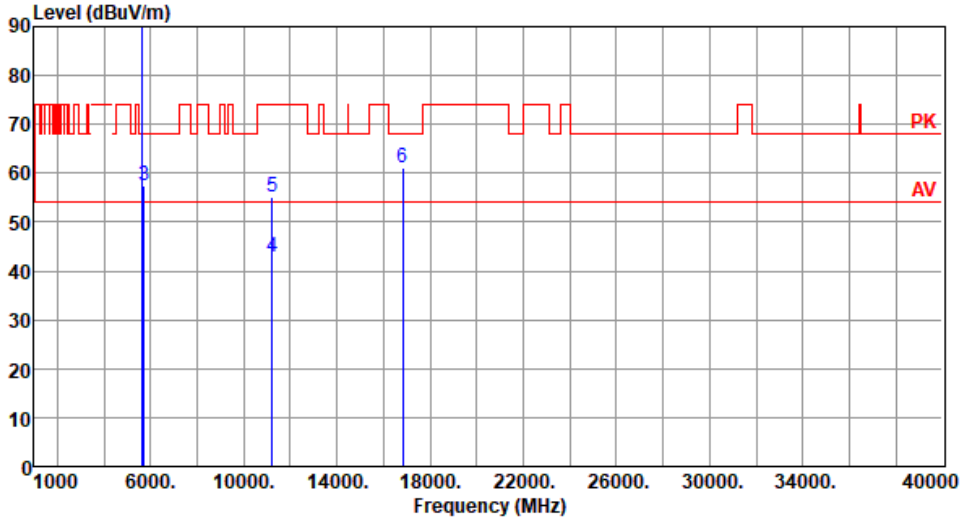
Modulation	ax (HE80)	Test Freq. (MHz)	5530
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	51.74	54.00	-2.26	47.29	4.45	Average	100	8
2		5460.00	61.54	74.00	-12.46	57.09	4.45	Peak	100	8
3		5470.00	63.12	68.20	-5.08	58.62	4.50	Peak	100	8
4	*	5530.00	96.85			92.24	4.61	Average	100	8
5	*	5530.00	106.28			101.67	4.61	Peak	100	8
6		11060.00	42.86	54.00	-11.14	28.19	14.67	Average	100	45
7		11060.00	55.14	74.00	-18.86	40.47	14.67	Peak	100	45
8		16590.00	61.04	68.20	-7.16	44.43	16.61	Peak	100	23

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

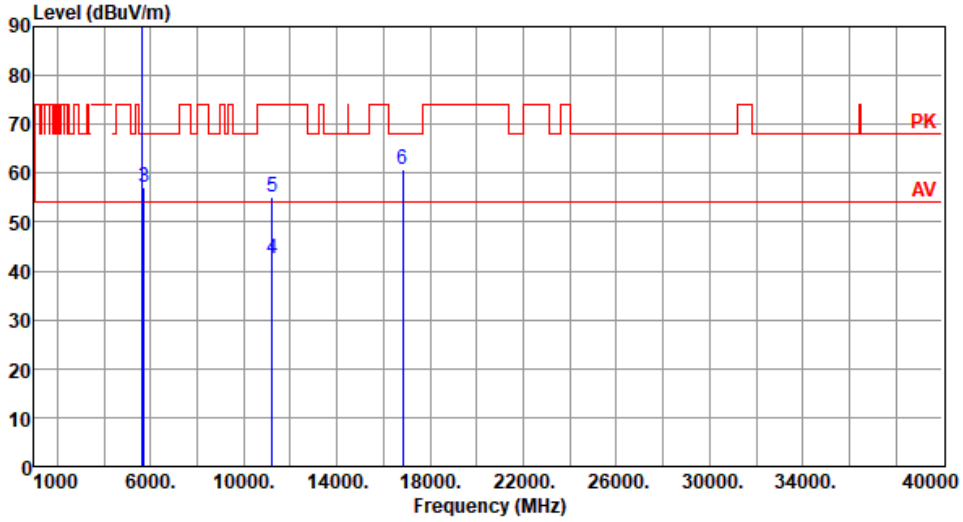
Modulation	ax (HE80)	Test Freq. (MHz)	5610
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5610.00	99.53			95.01	4.52	Average	176	15
2	*	5610.00	108.76			104.24	4.52	Peak	176	15
3		5725.00	57.34	68.20	-10.86	52.49	4.85	Peak	176	15
4		11220.00	42.74	54.00	-11.26	28.45	14.29	Average	100	33
5		11220.00	55.12	74.00	-18.88	40.83	14.29	Peak	100	33
6		16830.00	61.08	68.20	-7.12	43.43	17.65	Peak	100	59

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

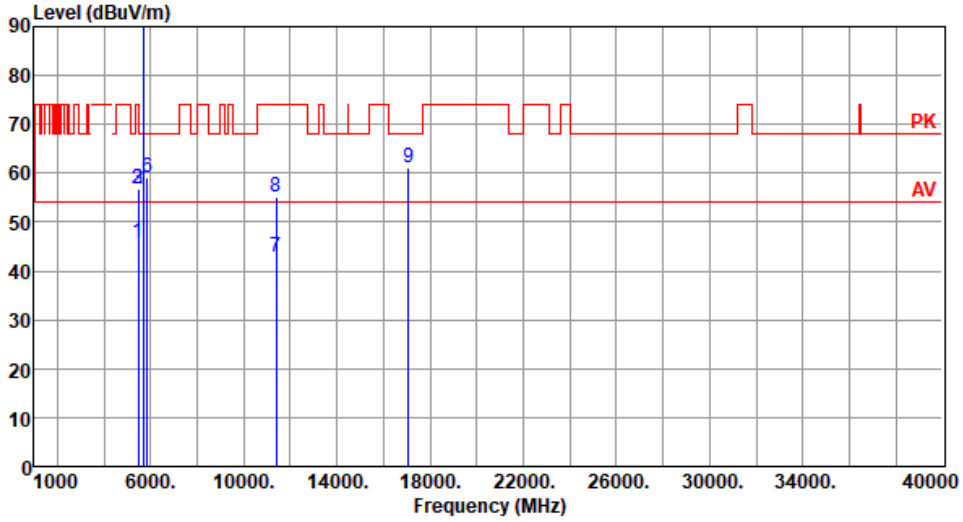
Modulation	ax (HE80)	Test Freq. (MHz)	5610
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5610.00	97.46			92.94	4.52	Average	135	204
2	*	5610.00	106.65			102.13	4.52	Peak	135	204
3		5725.00	56.99	68.20	-11.21	52.14	4.85	Peak	135	204
4		11220.00	42.61	54.00	-11.39	28.32	14.29	Average	100	55
5		11220.00	55.07	74.00	-18.93	40.78	14.29	Peak	100	55
6		16830.00	60.92	68.20	-7.28	43.27	17.65	Peak	100	78

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

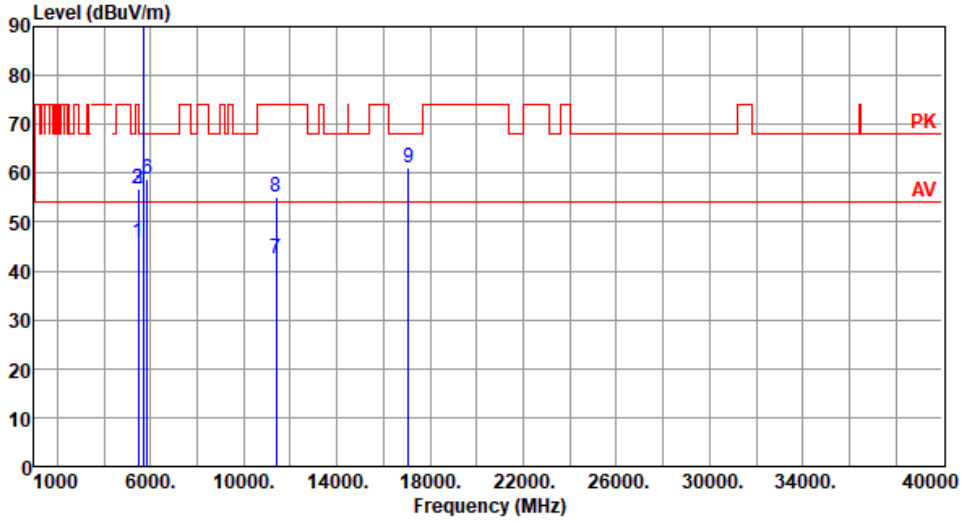
Modulation	ax (HE80)	Test Freq. (MHz)	5690
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.85	54.00	-8.15	41.40	4.45	Average	129	196
2		5460.00	56.82	74.00	-17.18	52.37	4.45	Peak	129	196
3		5470.00	56.94	68.20	-11.26	52.44	4.50	Peak	129	196
4	*	5690.00	99.38			94.73	4.65	Average	129	196
5	*	5690.00	108.65			104.00	4.65	Peak	129	196
6		5850.00	58.95	68.20	-9.25	53.50	5.45	Peak	129	196
7		11380.00	42.69	54.00	-11.31	28.08	14.61	Average	100	51
8		11380.00	55.13	74.00	-18.87	40.52	14.61	Peak	100	51
9		17070.00	61.02	68.20	-7.18	43.27	17.75	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

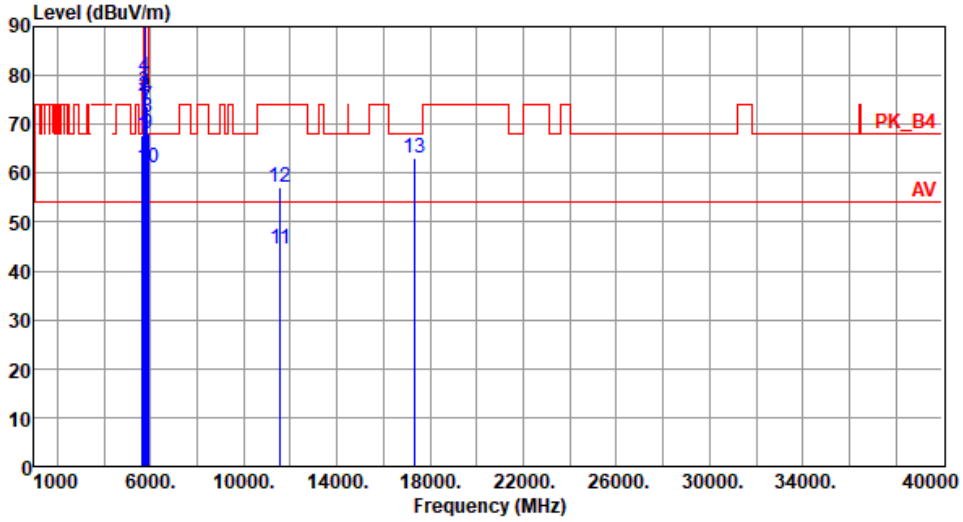
Modulation	ax (HE80)	Test Freq. (MHz)	5690
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	45.79	54.00	-8.21	41.34	4.45	Average	134	212
2		5460.00	56.78	74.00	-17.22	52.33	4.45	Peak	134	212
3		5470.00	56.79	68.20	-11.41	52.29	4.50	Peak	134	212
4	*	5690.00	97.25			92.60	4.65	Average	134	212
5	*	5690.00	106.58			101.93	4.65	Peak	134	212
6		5850.00	58.91	68.20	-9.29	53.46	5.45	Peak	134	212
7		11380.00	42.58	54.00	-11.42	27.97	14.61	Average	100	114
8		11380.00	55.02	74.00	-18.98	40.41	14.61	Peak	100	114
9		17070.00	61.19	68.20	-7.01	43.44	17.75	Peak	100	22

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

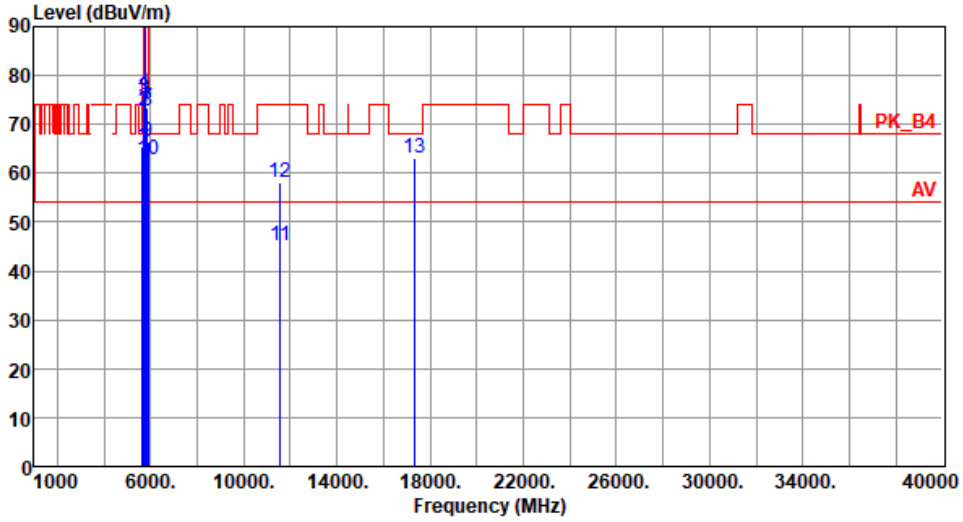
Modulation	ax (HE80)	Test Freq. (MHz)	5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	67.79	68.20	-0.41	63.25	4.54	Peak	112	92
2		5700.00	75.64	105.20	-29.56	70.96	4.68	Peak	112	92
3		5720.00	76.64	110.80	-34.16	71.83	4.81	Peak	112	92
4		5725.00	79.69	122.20	-42.51	74.84	4.85	Peak	112	92
5	*	5775.00	103.04			97.96	5.08	Average	112	92
6	*	5775.00	112.81			107.73	5.08	Peak	112	92
7		5850.00	73.71	122.20	-48.49	68.26	5.45	Peak	112	92
8		5855.00	71.33	110.80	-39.47	65.89	5.44	Peak	112	92
9		5875.00	68.07	105.20	-37.13	62.63	5.44	Peak	112	92
10		5925.00	61.23	68.20	-6.97	55.80	5.43	Peak	112	92
11		11550.00	44.58	54.00	-9.42	30.05	14.53	Average	100	124
12		11550.00	57.13	74.00	-16.87	42.60	14.53	Peak	100	124
13		17325.00	63.19	68.20	-5.01	45.02	18.17	Peak	100	46

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

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

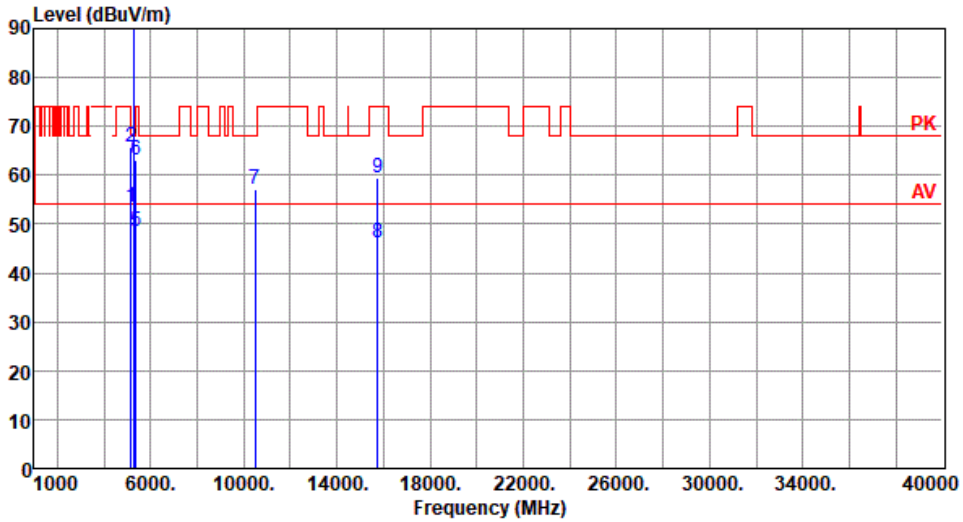


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	65.39	68.20	-2.81	60.85	4.54	Peak	208	63
2		5700.00	72.69	105.20	-32.51	68.01	4.68	Peak	208	63
3		5720.00	75.38	110.80	-35.42	70.57	4.81	Peak	208	63
4		5725.00	76.39	122.20	-45.81	71.54	4.85	Peak	208	63
5	*	5775.00	102.61			97.53	5.08	Average	208	63
6	*	5775.00	111.93			106.85	5.08	Peak	208	63
7		5850.00	73.44	122.20	-48.76	67.99	5.45	Peak	208	63
8		5855.00	72.65	110.80	-38.15	67.21	5.44	Peak	208	63
9		5875.00	66.58	105.20	-38.62	61.14	5.44	Peak	208	63
10		5925.00	62.79	68.20	-5.41	57.36	5.43	Peak	208	63
11		11550.00	45.15	54.00	-8.85	30.62	14.53	Average	116	133
12		11550.00	58.06	74.00	-15.94	43.53	14.53	Peak	116	133
13		17325.00	62.98	68.20	-5.22	44.81	18.17	Peak	125	194

Note 1: Emission Level (dBuV/m) = SA Reading (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 (HE160)

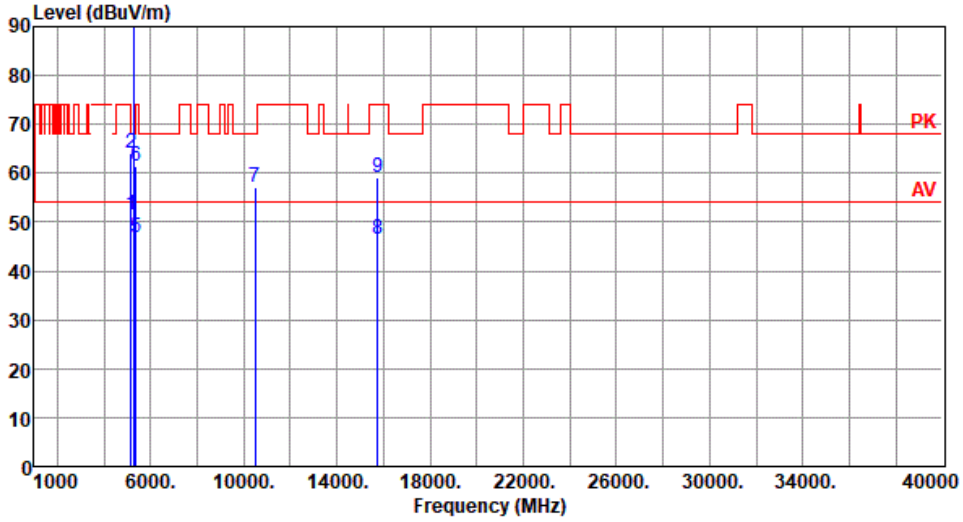
Modulation	ax (HE160)	**Test Freq. (MHz)**	5250
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.62	54.00	-0.38	48.98	4.64	Average	204	241
2		5150.00	65.67	74.00	-8.33	61.03	4.64	Peak	204	241
3	*	5250.00	94.73			90.55	4.18	Average	204	241
4	*	5250.00	106.84			102.66	4.18	Peak	204	241
5		5350.00	48.49	54.00	-5.51	44.55	3.94	Average	204	241
6		5350.00	63.06	74.00	-10.94	59.12	3.94	Peak	204	241
7		10500.00	57.18	68.20	-11.02	42.68	14.50	Peak	100	41
8		15750.00	46.05	54.00	-7.95	31.85	14.20	Average	100	19
9		15750.00	59.31	74.00	-14.69	45.11	14.20	Peak	100	19

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

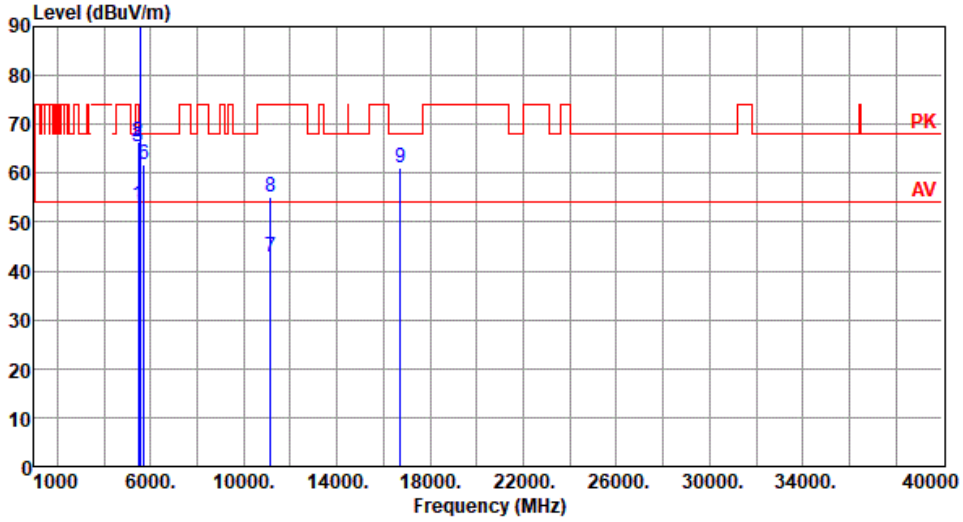
Modulation	ax (HE160)	Test Freq. (MHz)	5250
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	51.59	54.00	-2.41	46.95	4.64	Average	134	204
2		5150.00	64.25	74.00	-9.75	59.61	4.64	Peak	134	204
3	*	5250.00	92.58			88.40	4.18	Average	134	204
4	*	5250.00	104.65			100.47	4.18	Peak	134	204
5		5350.00	46.80	54.00	-7.20	42.86	3.94	Average	134	204
6		5350.00	61.39	74.00	-12.61	57.45	3.94	Peak	134	204
7		10500.00	57.06	68.20	-11.14	42.56	14.50	Peak	100	61
8		15750.00	46.65	54.00	-7.35	32.45	14.20	Average	100	58
9		15750.00	59.22	74.00	-14.78	45.02	14.20	Peak	100	58

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

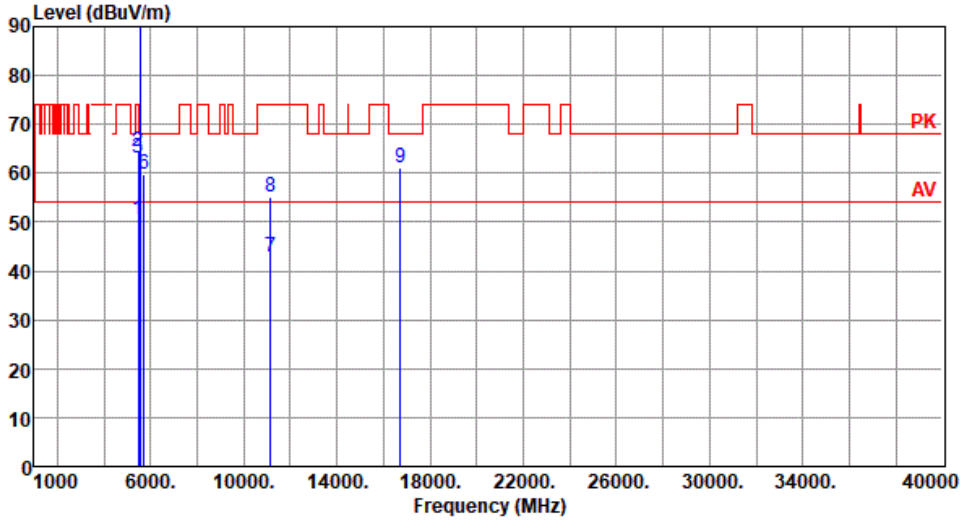
Modulation	ax (HE160)	Test Freq. (MHz)	5570
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	53.55	54.00	-0.45	49.10	4.45	Average	185	18
2		5460.00	66.56	74.00	-7.44	62.11	4.45	Peak	185	18
3		5470.00	65.44	68.20	-2.76	60.94	4.50	Peak	185	18
4	*	5570.00	95.09			90.54	4.55	Average	185	18
5	*	5570.00	106.85			102.30	4.55	Peak	185	18
6		5725.00	61.80	68.20	-6.40	56.95	4.85	Peak	185	18
7		11140.00	42.83	54.00	-11.17	28.40	14.43	Average	102	96
8		11140.00	55.12	74.00	-18.88	40.69	14.43	Peak	102	96
9		16710.00	61.05	68.20	-7.15	43.69	17.36	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 (HE160)	Test Freq. (MHz)	5570
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5460.00	50.36	54.00	-3.64	45.91	4.45	Average	135	203
2		5460.00	64.48	74.00	-9.52	60.03	4.45	Peak	135	203
3		5470.00	63.25	68.20	-4.95	58.75	4.50	Peak	135	203
4	*	5570.00	92.89			88.34	4.55	Average	135	203
5	*	5570.00	104.81			100.26	4.55	Peak	135	203
6		5725.00	59.68	68.20	-8.52	54.83	4.85	Peak	135	203
7		11140.00	42.75	54.00	-11.25	28.32	14.43	Average	100	53
8		11140.00	55.15	74.00	-18.85	40.72	14.43	Peak	100	53
9		16710.00	60.98	68.20	-7.22	43.62	17.36	Peak	100	94

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

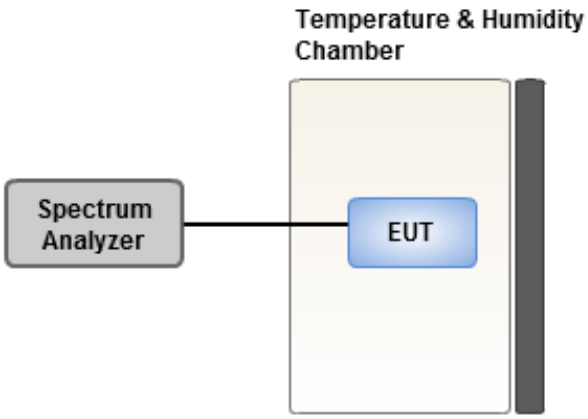
3.6.1 Limit of Frequency Stability

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: 5200 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	2.64	2.50	2.78	2.57
T20°CVmin	2.20	2.06	2.35	2.62
T50CVnom	4.10	4.40	3.82	4.10
T40°CVnom	4.10	3.99	4.14	4.39
T30°CVnom	3.10	3.33	3.09	2.93
T20°CVnom	2.76	2.38	3.59	2.50
T10°CVnom	2.81	2.83	3.48	2.76
T0°CVnom	4.03	4.19	3.62	4.67
T-10°CVnom	2.42	2.23	2.25	2.35
T-20°CVnom	1.92	2.44	2.16	1.94
T-30°CVnom	0.91	0.90	0.94	1.12
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°CVmax	3.26	2.67	2.78	2.89
T20°CVmin	2.26	2.56	2.67	2.20
T50CVnom	4.08	3.75	4.59	4.43
T40°CVnom	3.85	4.09	3.57	4.29
T30°CVnom	3.01	3.02	3.21	3.53
T20°CVnom	3.00	2.99	2.85	3.02
T10°CVnom	3.03	2.88	2.94	2.80
T0°CVnom	3.82	3.83	4.06	3.35
T-10°CVnom	2.46	3.10	2.87	2.40
T-20°CVnom	1.98	2.27	2.55	2.16
T-30°CVnom	0.99	1.61	0.96	1.58
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	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	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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