FCC Test Report

FCC ID	:	**2ARU9NEPHUBL001**
Equipment	:	**Neptune IoT Hub Lite**
Model No.	:	**HM-HUB-120**
Brand Name	:	**HOMA**
Applicant	:	**HOMA Technologies JSC**
Address	:	**Building 5, 13th Street, QTSC Tan Chanh Hiep Ward, District 12, Ho Chi Minh city, 729226, Vietnam.**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Nov. 09, 2018**
Tested Date	:	**Nov. 27 ~ Dec. 27, 2018**

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
FR8N0901AN	Rev. 01	Initial issue	Feb. 15, 2019

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 21.373MHz 28.18 (Margin -21.82dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 17475.00MHz 67.19 (Margin -1.01dB) – PK [dBuV/m at 3m]: 5150.00MHz 52.99 (Margin -1.01dB) - 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	***Non-beamforming mode*** Max Power [dBm]: 5150~5250MHz: 27.38 5250~5350MHz: 23.59 5470~5725MHz: 23.46 5725~5850MHz: 27.24 ***Beamforming mode*** Max Power [dBm]: 5150~5250MHz: 26.92 5250~5350MHz: 23.56 5470~5725MHz: 19.36 5725~5850MHz: 25.64	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 values of gain for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of the gain.

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	a	5180-5240 5260-5320	36-48 [4] 52-64 [4]	2	6-54 Mbps
5150-5250 5250-5350	n (HT20)	5180-5240 5260-5320	36-48 [4] 52-64 [4]	2	MCS 0-15
5150-5250 5250-5350	n (HT40)	5190-5230 5270-5310	38-46 [2] 54-62 [2]	2	MCS 0-15
5150-5250 5250-5350	ac (VHT20)	5180-5240 5260-5320	36-48 [4] 52-64 [4]	2	MCS 0-9
5150-5250 5250-5350	ac (VHT40)	5190-5230 5270-5310	38-46 [2] 54-62 [2]	2	MCS 0-9
5150-5250 5250-5350	ac (VHT80)	5210 5290	42 [1] 58 [1]	2	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: 802.11ac supports beamforming function.					

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5470-5725 5725-5850	a	5500-5720 5745-5825	100-144 [12] 149-165 [5]	4	6-54 Mbps
5470-5725 5725-5850	n (HT20)	5500-5720 5745-5825	100-144 [12] 149-165 [5]	4	MCS 0-31
5470-5725 5725-5850	n (HT40)	5510-5710 5755-5795	102-142 [6] 151-159 [2]	4	MCS 0-31
5470-5725 5725-5850	ac (VHT20)	5500-5720 5745-5825	100-144 [12] 149-165 [5]	4	MCS 0-9
5470-5725 5725-5850	ac (VHT40)	5510-5710 5755-5795	102-142 [6] 151-159 [2]	4	MCS 0-9
5470-5725 5725-5850	ac (VHT80)	5530~5690 5775	106-138 [3] 155 [1]	4	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: 802.11ac supports beamforming function.					

1.1.2 Antenna Details

Model	Type	Connector	Operating Frequency (MHz) / Gain (dBi)				
			2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
2.4GHz,G1	PIFA	IPEX	1.75	---	---	---	---
2.4GHz,G2	PIFA	IPEX	2.22	---	---	---	---
5GHz, Low Band,A1	PIFA	IPEX	---	3.01	3.01	---	---
5GHz, Low Band,A2	PIFA	IPEX	---	1.89	1.89	---	---
5GHz, high Band,A3	PIFA	IPEX	---	---	---	3.23	3.23
5GHz, high Band,A4	PIFA	IPEX	---	---	---	4.2	4.2
5GHz, high Band,A5	PIFA	IPEX	---	---	---	6.07	6.07
5GHz, high Band,A6	PIFA	IPEX	---	---	---	3.5	3.5

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC Adapter	Brand: APD Model: WA-36A12R Power Rating: I/P: 100-240Vac, 50/60Hz, 0.9A Max O/P: 12Vdc, 3.0A Power Line: DC 1.8m non-shielded w/o core

1.1.5 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
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	**VHT80**	
120	5600	42	5210
124	5620	58	5290
128	5640	106	5530
132	5660	122	5610
136	5680	138	5690
140	5700	155	5775
144	5720	---	---
149	5745	---	---
153	5765	---	---
157	5785	---	---
161	5805	---	---
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	Non-beamforming: QDART, Version: V3.0.250.0 Beamforming: Putty, Version: 0.60.0.0				
Duty Cycle and Duty Factor	**Mode**	**Non-beamforming**		**Beamforming**	
		Duty cycle (%)	**Duty factor (dB)**	**Duty cycle (%)**	**Duty factor (dB)**
	11a	97.18%	0.12	---	---
	VHT20	99.15%	0.04	95.33%	0.21
	VHT40	97.58%	0.11	88.35%	0.54
	VHT80	93.99%	0.27	93.18%	0.31

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	19.00	---
11a	5200	23.50	---
11a	5240	23.00	---
VHT20	5180	19.00	22.00
VHT20	5200	23.50	26.00
VHT20	5240	23.00	25.00
VHT40	5190	16.50	20.00
VHT40	5230	21.50	25.00
VHT80	5210	15.00	19.00

For Frequency band 5250~5350 MHz			
Modulation Mode	**Test Frequency (MHz)**	**Power Index**	
		Non-Beamforming	**Beamforming**
11a	5260	19.00	---
11a	5300	18.50	---
11a	5320	19.00	---
VHT20	5260	19.00	22.00
VHT20	5300	18.50	22.00
VHT20	5320	19.00	22.00
VHT40	5270	19.00	23.00
VHT40	5310	18.50	22.00
VHT80	5290	17.50	21.00

For Frequency band 5470~5725 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5500	10.50	---
11a	5580	11.00	---
11a	5700	11.00	---
VHT20	5500	11.00	17.00
VHT20	5580	11.00	17.00
VHT20	5700	11.00	17.00
VHT40	5510	13.50	18.00
VHT40	5590	14.00	18.00
VHT40	5670	14.00	18.00
VHT80	5530	14.50	18.00
VHT80	5610	15.00	18.00

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	5720	12.00	---
VHT20	5720	11.00	17.00
VHT40	5710	14.00	18.00
VHT80	5690	15.50	18.00

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-Beamforming	Beamforming
11a	5745	18.00	---
11a	5785	18.00	---
11a	5825	17.50	---
VHT20	5745	18.50	24.00
VHT20	5785	18.50	23.00
VHT20	5825	17.50	23.00
VHT40	5755	19.00	24.00
VHT40	5795	19.00	23.00
VHT80	5775	15.50	21.00

1.2 Local Support Equipment List

Non-beamforming mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	3J5JVF2	---
2	Notebook	DELL	Latitude E6430	9ZFB4X1	---
3	USB Flash	Kingston	DTSE9	NXPAB	---

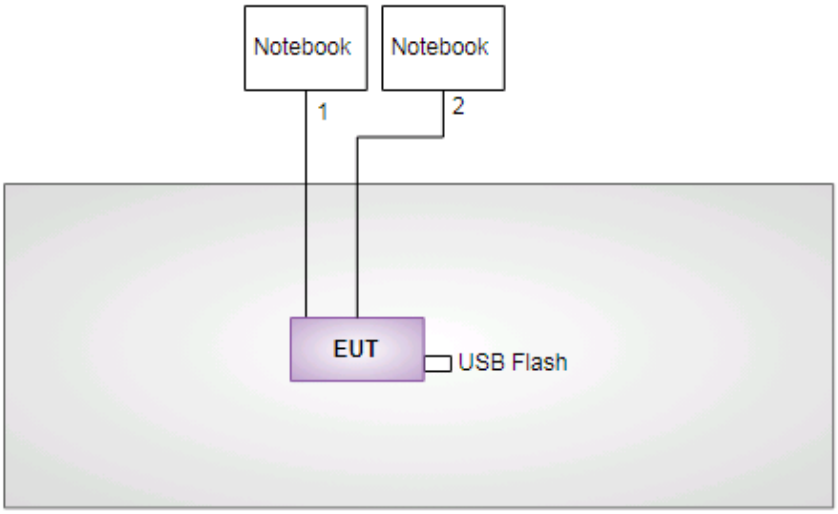
Beamforming mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	3J5JVF2	---
2	Notebook	DELL	Latitude E6430	9ZFB4X1	---
3	Notebook	DELL	Latitude E6430	G3GB4X1	---
4	USB Flash	Kingston	DTSE9	NXPAB	---
5	BF Client	---	---	---	Provided by applicant.

1.3 Test Setup Chart

Non-beamforming mode

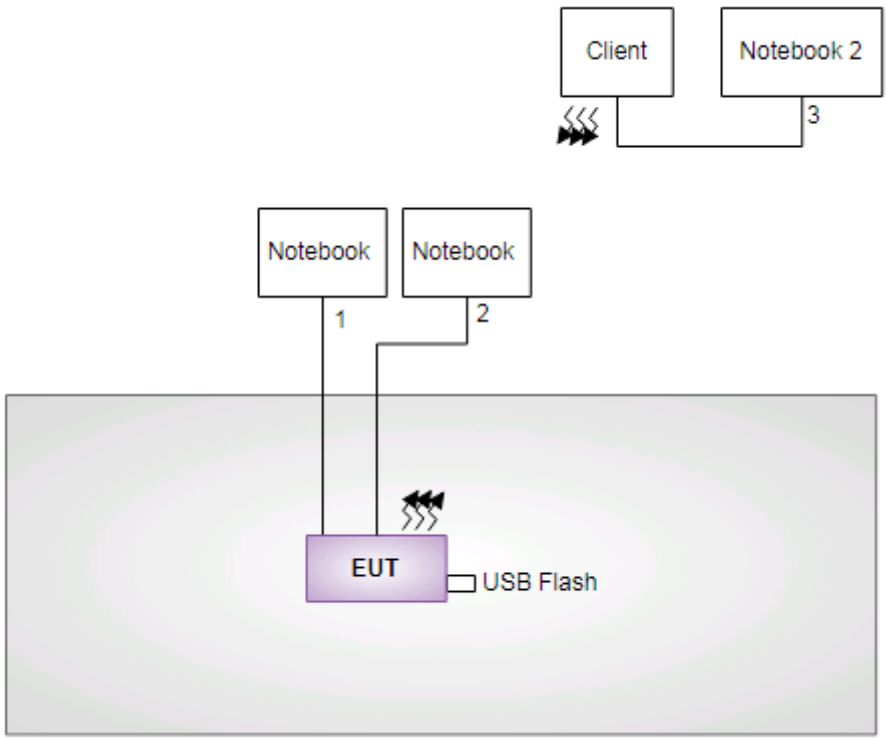
Test Setup Diagram



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

Beamforming mode

Test Setup Diagram



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

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Jan. 05, 2018	Jan. 04, 2019
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 05, 2018	Nov. 04, 2019
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 23, 2018	Oct. 23, 2019
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber 1/ (03CH01WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Jan. 02, 2018	Jan. 01, 2019
Receiver	R&S	ESR3	101657	Jan. 05, 2018	Jan. 04, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 18, 2018	Jul. 17, 2019
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1094	Oct. 26, 2018	Oct. 25, 2019
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2018	Nov. 14, 2019
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 09, 2018	Nov. 08, 2019
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 08, 2018	Oct. 07, 2019
Preamplifier	EMC	EMC02325	980225	Jul. 20, 2018	Jul. 19, 2019
Preamplifier	Agilent	83017A	MY39501308	Oct. 04, 2018	Oct. 03, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 09, 2018	Aug. 08, 2019
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 08, 2018	Oct. 07, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 08, 2018	Oct. 07, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 08, 2018	Oct. 07, 2019
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 08, 2018	Oct. 07, 2019
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 08, 2018	Oct. 07, 2019
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 08, 2018	Oct. 07, 2019
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Apr. 16, 2018	Apr. 15, 2019
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GTH-150-40-CP-AR-T	MAA1407-012	Aug. 10, 2018	Aug. 09, 2019
Power Meter	Anritsu	ML2495A	1241002	Oct. 09, 2018	Oct. 08, 2019
Power Sensor	Anritsu	MA2411B	1207366	Oct. 09, 2018	Oct. 08, 2019
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.139 Hz
Conducted power	±0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Power density	±0.557 dB
Conducted emission	±2.680 dB
AC conducted emission	±2.9 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB
Time	±0.1%
Temperature	±0.8°C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 57%	Alex Tsai
Radiated Emissions	03CH01-WS	24°C / 65-66%	Aska Huang Akun Chung
RF Conducted	TH01-WS	20°C / 65%	Aska Huang

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Emissions	VHT20	5180	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5180	MCS 0	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530 / 5610	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530 / 5610	MCS 0	
Frequency Stability	Un-modulation	5320	---	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Emissions	VHT40	5755	6 Mbps	---
Radiated Emissions ≤1GHz	VHT40	5755	6 Mbps	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	---
NOTE: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

Beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT20	5200	MCS 8	---
Radiated Emissions ≤1GHz	VHT20	5200	MCS 8	---
RF Output Power	VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT40	5755	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5755	MCS 0	---
RF Output Power	VHT20 VHT40 VHT80	5745 / 5785 / 5825 5755 / 5795 5775	MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80	5745 / 5785 / 5825 5755 / 5795 5775	MCS 0 MCS 0 MCS 0	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

3 Transmitter Test Results

3.1 Conducted Emissions

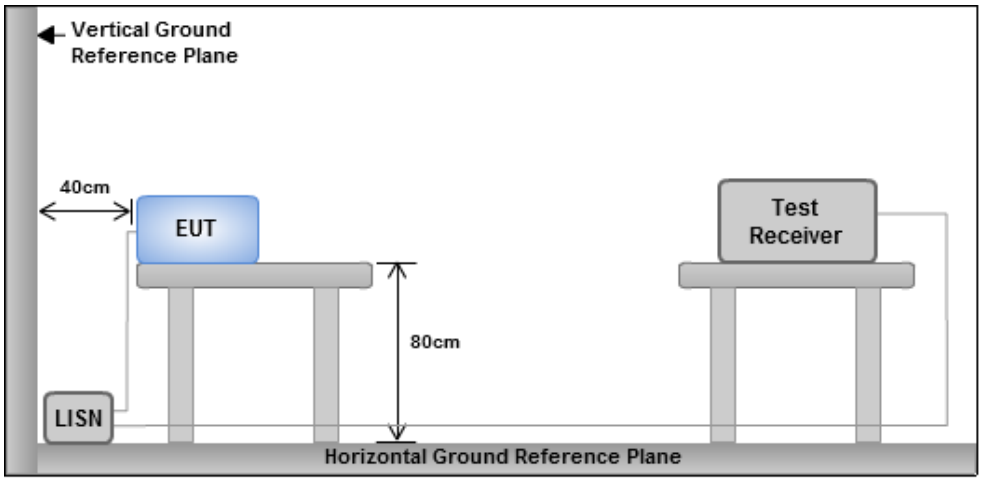
3.1.1 Limit of Conducted Emissions

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

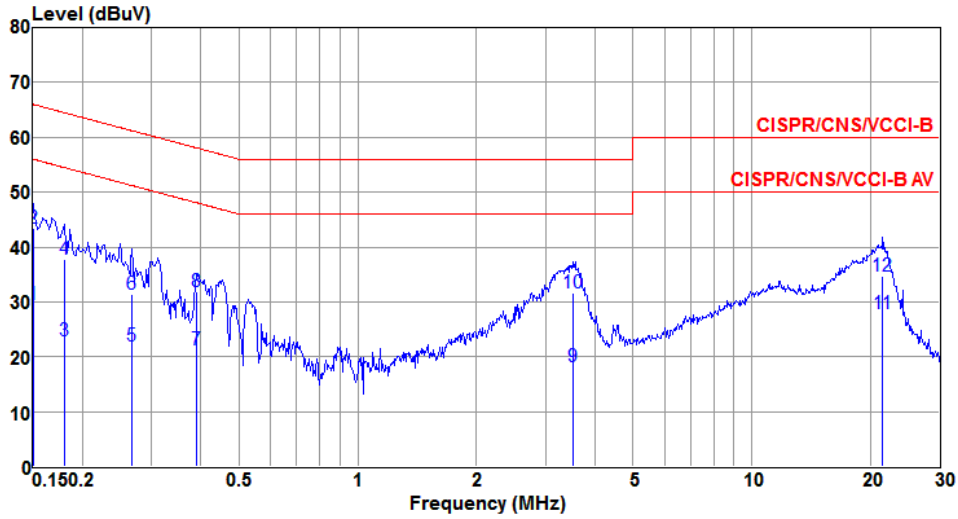


Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Non-beamforming mode

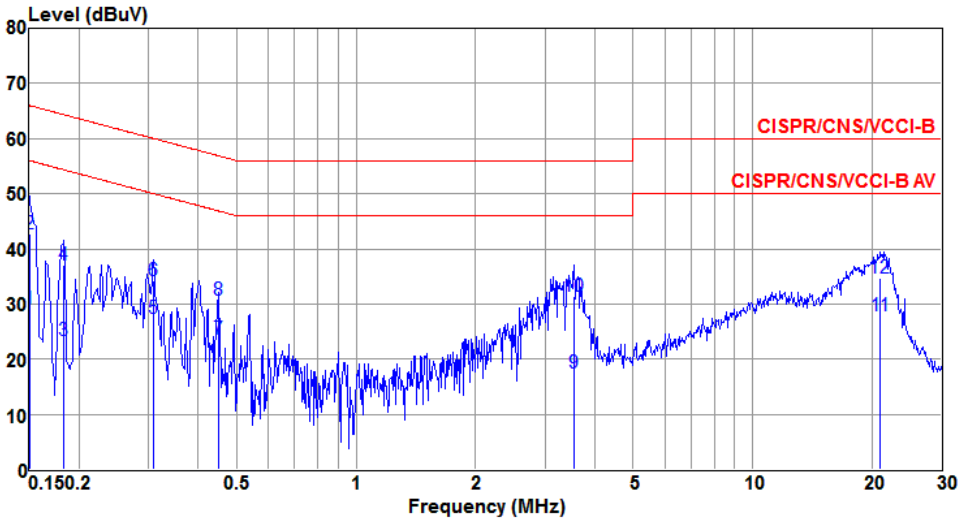
Modulation	VHT20	**Test Freq. (MHz)**	5180
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.150	29.62	56.00	-26.38	29.44	0.07	0.01	Average
2	0.150	43.53	66.00	-22.47	43.35	0.07	0.01	QP
3	0.180	22.92	54.50	-31.58	22.73	0.06	0.02	Average
4	0.180	37.70	64.50	-26.80	37.51	0.06	0.02	QP
5	0.267	21.94	51.20	-29.26	21.72	0.06	0.03	Average
6	0.267	31.39	61.20	-29.81	31.17	0.06	0.03	QP
7	0.389	21.31	48.08	-26.77	21.08	0.06	0.02	Average
8	0.389	31.88	58.08	-26.20	31.65	0.06	0.02	QP
9	3.509	18.28	46.00	-27.72	17.71	0.11	0.20	Average
10	3.509	31.63	56.00	-24.37	31.06	0.11	0.20	QP
11*	21.486	27.97	50.00	-22.03	26.86	0.25	0.36	Average
12	21.486	34.73	60.00	-25.27	33.62	0.25	0.36	QP

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

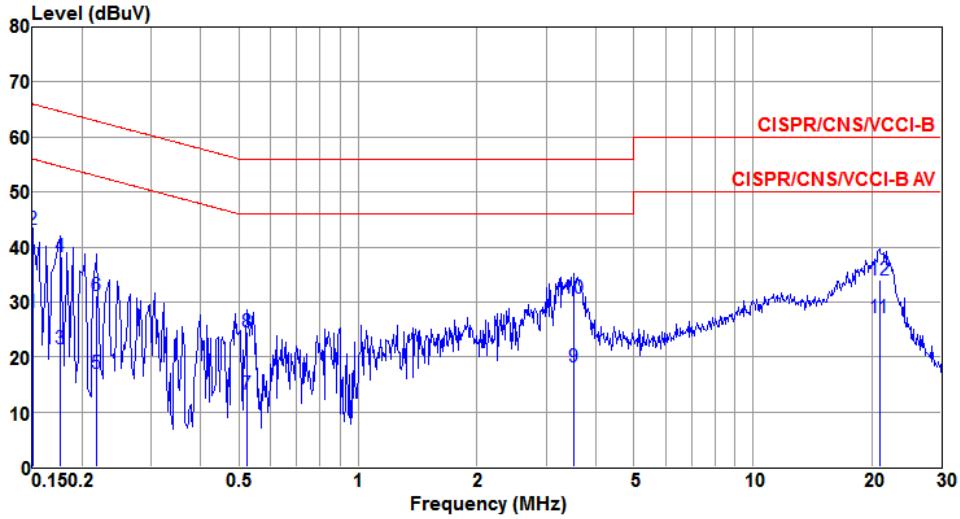
Modulation	VHT20	Test Freq. (MHz)	5180
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.151	29.06	55.96	-26.90	28.80	0.05	0.01	Average
2	0.151	42.73	65.96	-23.23	42.47	0.05	0.01	QP
3	0.183	23.32	54.33	-31.01	23.05	0.04	0.02	Average
4	0.183	36.99	64.33	-27.34	36.72	0.04	0.02	QP
5	0.308	27.48	50.02	-22.54	27.17	0.05	0.02	Average
6	0.308	34.35	60.02	-25.67	34.04	0.05	0.02	QP
7	0.449	23.61	46.89	-23.28	23.28	0.05	0.02	Average
8	0.449	30.59	56.89	-26.30	30.26	0.05	0.02	QP
9	3.547	17.54	46.00	-28.46	16.91	0.09	0.20	Average
10	3.547	31.31	56.00	-24.69	30.68	0.09	0.20	QP
11*	21.035	27.96	50.00	-22.04	26.73	0.27	0.35	Average
12	21.035	34.75	60.00	-25.25	33.52	0.27	0.35	QP

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

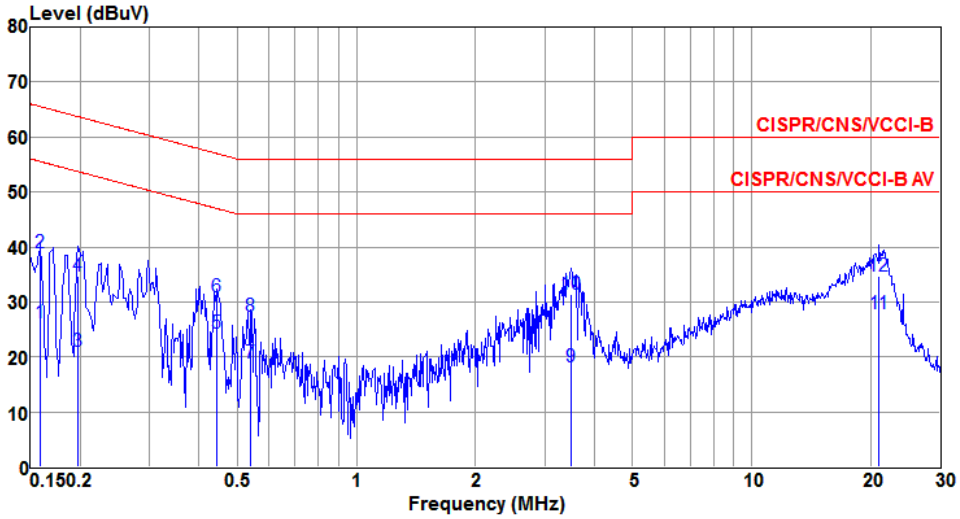
Modulation	VHT40	Test Freq. (MHz)	5755
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.150	28.02	56.00	-27.98	27.84	0.07	0.01	Average
2*	0.150	43.30	66.00	-22.70	43.12	0.07	0.01	QP
3	0.177	21.59	54.64	-33.05	21.40	0.06	0.02	Average
4	0.177	38.17	64.64	-26.47	37.98	0.06	0.02	QP
5	0.219	17.02	52.88	-35.86	16.82	0.06	0.03	Average
6	0.219	31.23	62.88	-31.65	31.03	0.06	0.03	QP
7	0.524	13.27	46.00	-32.73	13.01	0.07	0.02	Average
8	0.524	24.46	56.00	-31.54	24.20	0.07	0.02	QP
9	3.528	18.15	46.00	-27.85	17.58	0.11	0.20	Average
10	3.528	30.76	56.00	-25.24	30.19	0.11	0.20	QP
11	20.924	27.22	50.00	-22.78	26.13	0.24	0.35	Average
12	20.924	34.05	60.00	-25.95	32.96	0.24	0.35	QP

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

Modulation	VHT40	Test Freq. (MHz)	5755
Power Phase	Neutral		

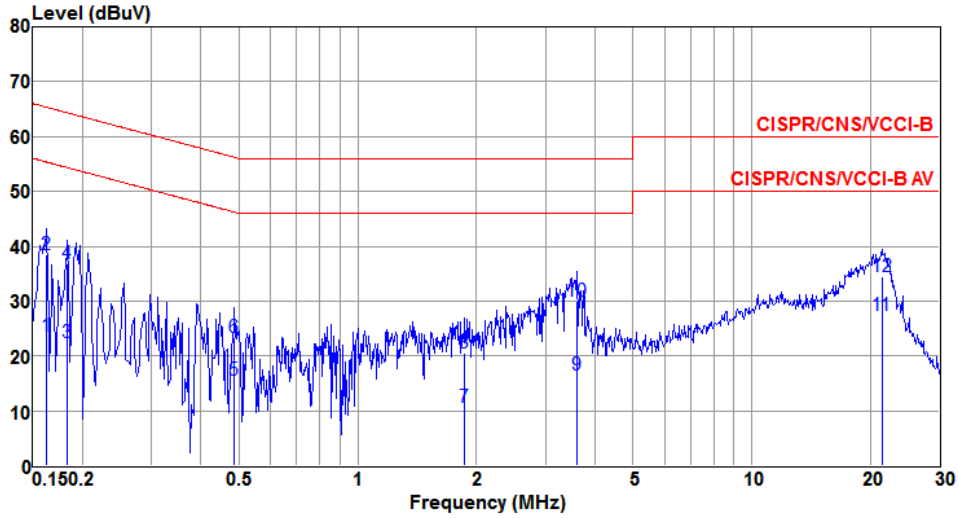


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	26.12	55.52	-29.40	25.86	0.05	0.01	Average
2	0.159	38.87	65.52	-26.65	38.61	0.05	0.01	QP
3	0.198	21.07	53.71	-32.64	20.79	0.04	0.03	Average
4	0.198	34.69	63.71	-29.02	34.41	0.04	0.03	QP
5	0.444	24.35	46.98	-22.63	24.02	0.05	0.02	Average
6	0.444	30.83	56.98	-26.15	30.50	0.05	0.02	QP
7	0.541	18.81	46.00	-27.19	18.47	0.05	0.02	Average
8	0.541	27.27	56.00	-28.73	26.93	0.05	0.02	QP
9	3.491	18.08	46.00	-27.92	17.45	0.09	0.20	Average
10	3.491	31.29	56.00	-24.71	30.66	0.09	0.20	QP
11*	21.035	27.96	50.00	-22.04	26.73	0.27	0.35	Average
12	21.035	34.62	60.00	-25.38	33.39	0.27	0.35	QP

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

Beamforming mode

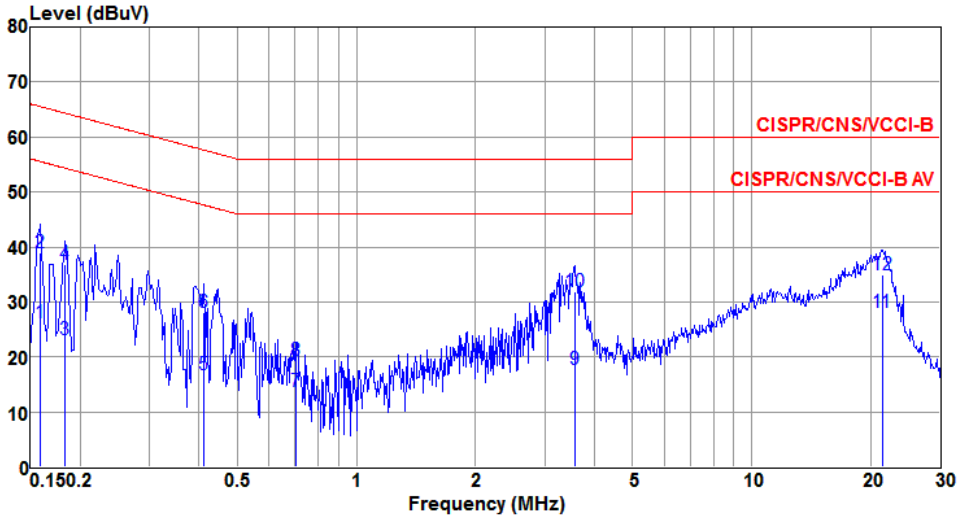
Modulation	VHT20	**Test Freq. (MHz)**	5200
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.162	23.64	55.34	-31.70	23.45	0.07	0.02	Average
2	0.162	38.36	65.34	-26.98	38.17	0.07	0.02	QP
3	0.183	22.46	54.33	-31.87	22.27	0.06	0.02	Average
4	0.183	36.89	64.33	-27.44	36.70	0.06	0.02	QP
5	0.486	15.55	46.23	-30.68	15.31	0.06	0.02	Average
6	0.486	23.42	56.23	-32.81	23.18	0.06	0.02	QP
7	1.868	10.59	46.00	-35.41	10.17	0.09	0.09	Average
8	1.868	20.66	56.00	-35.34	20.24	0.09	0.09	QP
9	3.603	16.62	46.00	-29.38	16.05	0.11	0.20	Average
10	3.603	30.00	56.00	-26.00	29.43	0.11	0.20	QP
11*	21.373	27.48	50.00	-22.52	26.38	0.25	0.35	Average
12	21.373	34.54	60.00	-25.46	33.44	0.25	0.35	QP

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

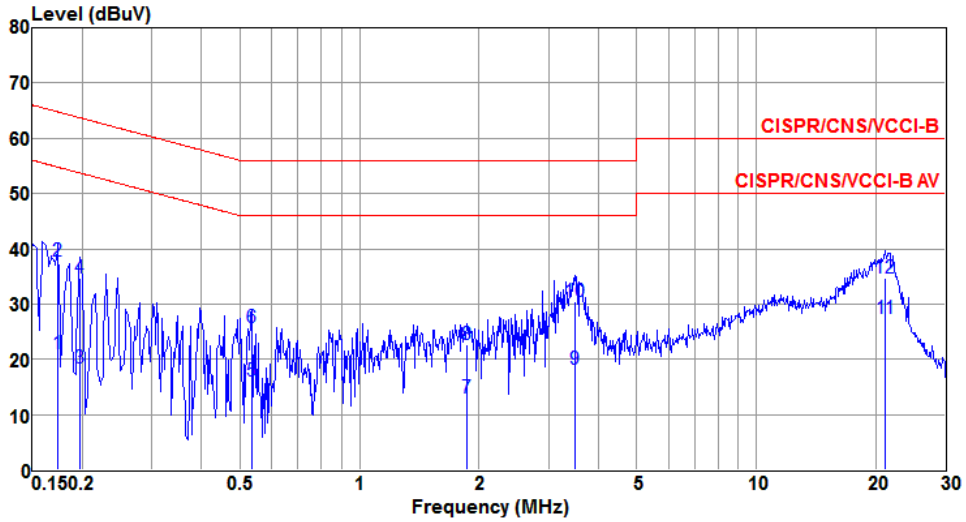
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	26.16	55.52	-29.36	25.90	0.05	0.01	Average
2	0.159	38.95	65.52	-26.57	38.69	0.05	0.01	QP
3	0.183	23.16	54.33	-31.17	22.89	0.04	0.02	Average
4	0.183	36.85	64.33	-27.48	36.58	0.04	0.02	QP
5	0.410	16.69	47.64	-30.95	16.36	0.05	0.02	Average
6	0.410	28.08	57.64	-29.56	27.75	0.05	0.02	QP
7	0.705	13.81	46.00	-32.19	13.44	0.06	0.03	Average
8	0.705	19.37	56.00	-36.63	19.00	0.06	0.03	QP
9	3.565	17.61	46.00	-28.39	16.98	0.09	0.20	Average
10	3.565	31.87	56.00	-24.13	31.24	0.09	0.20	QP
11*	21.373	28.18	50.00	-21.82	26.94	0.27	0.35	Average
12	21.373	34.96	60.00	-25.04	33.72	0.27	0.35	QP

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

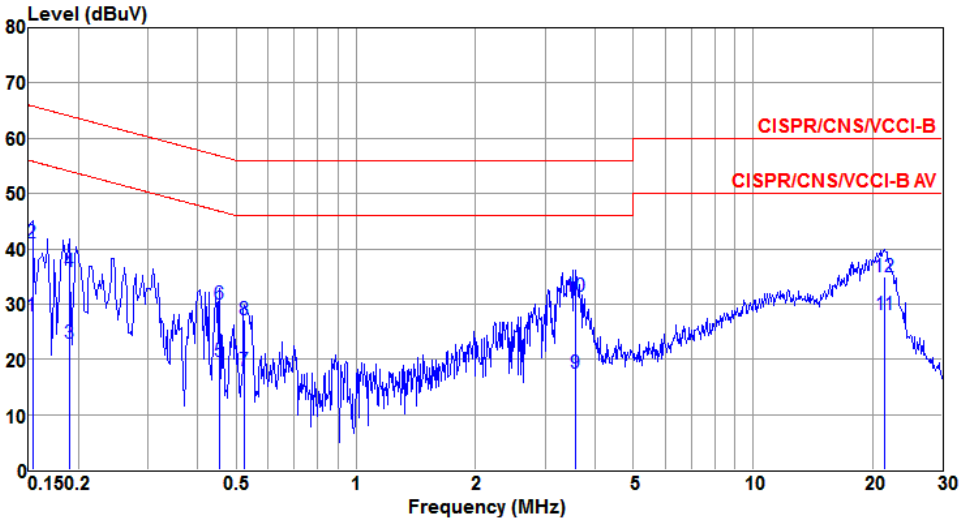
Modulation	VHT40	Test Freq. (MHz)	5755
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.174	21.11	54.77	-33.66	20.92	0.06	0.02	Average
2	0.174	37.74	64.77	-27.03	37.55	0.06	0.02	QP
3	0.198	18.46	53.71	-35.25	18.26	0.06	0.03	Average
4	0.198	34.72	63.71	-28.99	34.52	0.06	0.03	QP
5	0.535	16.16	46.00	-29.84	15.90	0.07	0.02	Average
6	0.535	25.69	56.00	-30.31	25.43	0.07	0.02	QP
7	1.858	12.95	46.00	-33.05	12.53	0.09	0.09	Average
8	1.858	22.69	56.00	-33.31	22.27	0.09	0.09	QP
9	3.491	18.17	46.00	-27.83	17.60	0.11	0.20	Average
10	3.491	30.45	56.00	-25.55	29.88	0.11	0.20	QP
11*	21.147	27.43	50.00	-22.57	26.33	0.25	0.35	Average
12	21.147	34.80	60.00	-25.20	33.70	0.25	0.35	QP

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

Modulation	VHT40	Test Freq. (MHz)	5755
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.153	27.90	55.82	-27.92	27.64	0.05	0.01	Average
2	0.153	41.16	65.82	-24.66	40.90	0.05	0.01	QP
3	0.189	22.97	54.06	-31.09	22.69	0.04	0.03	Average
4	0.189	35.79	64.06	-28.27	35.51	0.04	0.03	QP
5	0.454	19.60	46.80	-27.20	19.26	0.05	0.02	Average
6	0.454	30.09	56.80	-26.71	29.75	0.05	0.02	QP
7	0.524	17.93	46.00	-28.07	17.59	0.05	0.02	Average
8	0.524	27.12	56.00	-28.88	26.78	0.05	0.02	QP
9	3.584	17.38	46.00	-28.62	16.75	0.09	0.20	Average
10	3.584	31.43	56.00	-24.57	30.80	0.09	0.20	QP
11*	21.486	28.17	50.00	-21.83	26.92	0.27	0.36	Average
12	21.486	34.90	60.00	-25.10	33.65	0.27	0.36	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.

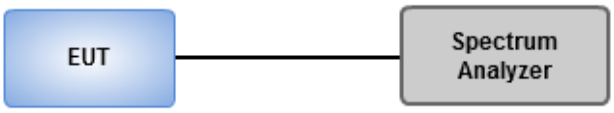
Occupied Bandwidth

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

Non-beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	36.957M	19.103M	19M1D1D	18.986M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	40.58M	19.392M	19M4D1D	19.855M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	74.783M	36.903M	36M9D1D	39.42M	35.89M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.188M	75.832M	75M8D1D	82.899M	75.543M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.058M	16.425M	16M4D1D	18.696M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	19.928M	17.583M	17M6D1D	19.71M	17.511M
802.11ac VHT40_Nss1,(MCS0)_2TX	39.565M	35.89M	35M9D1D	39.275M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	83.188M	75.543M	75M5D1D	82.899M	75.543M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.71M	16.425M	16M4D1D	14.957M	13.242M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.87M	17.656M	17M7D1D	14.957M	13.893M
802.11ac VHT40_Nss1,(MCS0)_4TX	40M	36.035M	36M0D1D	34.696M	32.822M
802.11ac VHT80_Nss1,(MCS0)_4TX	83.478M	76.122M	76M1D1D	76.522M	72.504M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.377M	16.425M	16M4D1D	3.014M	3.473M
802.11ac VHT20_Nss1,(MCS0)_4TX	17.681M	17.656M	17M7D1D	3.652M	3.936M
802.11ac VHT40_Nss1,(MCS0)_4TX	35.217M	36.035M	36M0D1D	3.014M	3.589M
802.11ac VHT80_Nss1,(MCS0)_4TX	75.942M	75.832M	75M8D1D	3.014M	4.342M

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

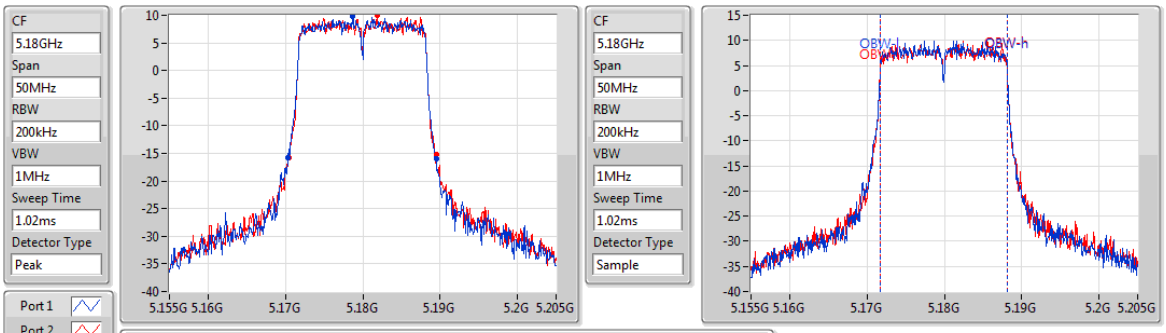
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.13M	16.353M	18.986M	16.425M				
5200MHz	Pass	Inf	36.957M	18.017M	36.449M	18.958M				
5240MHz	Pass	Inf	36.594M	17.656M	36.594M	19.103M				
5260MHz	Pass	Inf	19.058M	16.425M	18.913M	16.353M				
5300MHz	Pass	Inf	18.913M	16.353M	18.768M	16.353M				
5320MHz	Pass	Inf	19.058M	16.425M	18.696M	16.353M				
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	19.565M	16.425M	19.13M	16.353M	19.058M	16.425M	19.203M	16.281M
5580MHz	Pass	Inf	19.638M	16.425M	19.203M	16.425M	19.42M	16.425M	19.058M	16.353M
5700MHz	Pass	Inf	19.42M	16.425M	19.275M	16.425M	19.493M	16.425M	19.71M	16.425M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15M	13.285M	14.957M	13.285M	14.957M	13.242M	15M	13.329M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.014M	3.531M	3.014M	3.531M	3.014M	3.473M	3.13M	3.589M
5745MHz	Pass	500k	16.304M	16.425M	16.304M	16.425M	16.304M	16.425M	16.377M	16.425M
5785MHz	Pass	500k	16.304M	16.425M	16.304M	16.425M	16.304M	16.425M	16.304M	16.425M
5825MHz	Pass	500k	16.304M	16.425M	16.304M	16.425M	16.304M	16.353M	16.304M	16.425M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.855M	17.583M	19.855M	17.583M				
5200MHz	Pass	Inf	40.58M	18.886M	40.072M	19.392M				
5240MHz	Pass	Inf	37.754M	18.379M	40.435M	19.247M				
5260MHz	Pass	Inf	19.71M	17.511M	19.855M	17.511M				
5300MHz	Pass	Inf	19.928M	17.511M	19.783M	17.511M				
5320MHz	Pass	Inf	19.855M	17.583M	19.783M	17.511M				
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	20.725M	17.583M	20.507M	17.583M	20.507M	17.583M	19.638M	17.511M
5580MHz	Pass	Inf	20.87M	17.583M	20.145M	17.583M	20.217M	17.583M	20.217M	17.511M
5700MHz	Pass	Inf	20.507M	17.583M	20.507M	17.583M	20.507M	17.583M	20.362M	17.656M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.957M	13.893M	15.174M	13.893M	15M	13.893M	15.174M	13.936M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.768M	3.994M	3.71M	3.994M	3.652M	3.936M	3.768M	3.936M
5745MHz	Pass	500k	17.609M	17.583M	17.609M	17.583M	17.536M	17.583M	16.884M	17.583M
5785MHz	Pass	500k	17.609M	17.583M	17.536M	17.583M	17.609M	17.583M	17.681M	17.583M
5825MHz	Pass	500k	17.609M	17.583M	17.609M	17.583M	16.522M	17.583M	17.536M	17.656M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.565M	35.89M	39.42M	35.89M				
5230MHz	Pass	Inf	72.319M	36.469M	74.783M	36.903M				

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)
5270MHz	Pass	Inf	39.565M	35.745M	39.565M	35.745M				
5310MHz	Pass	Inf	39.275M	35.89M	39.42M	35.89M				
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	39.71M	35.89M	40M	35.89M	39.13M	35.745M	39.42M	36.035M
5590MHz	Pass	Inf	39.565M	36.035M	39.565M	36.035M	39.855M	35.89M	38.986M	35.89M
5670MHz	Pass	Inf	39.565M	36.035M	39.71M	35.745M	39.13M	35.89M	39.13M	35.745M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.797M	32.923M	34.899M	32.822M	34.797M	32.923M	34.696M	32.822M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.072M	3.705M	3.014M	3.589M	3.014M	3.647M	3.072M	3.589M
5755MHz	Pass	500k	35.072M	36.035M	30.145M	35.89M	34.493M	36.035M	33.913M	35.745M
5795MHz	Pass	500k	32.029M	36.035M	30.87M	35.89M	35.217M	36.035M	30.725M	35.745M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	83.188M	75.832M	82.899M	75.543M				
5290MHz	Pass	Inf	82.899M	75.543M	83.188M	75.543M				
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	83.188M	76.122M	83.478M	75.832M	83.478M	75.543M	83.478M	75.832M
5610MHz	Pass	Inf	83.478M	75.832M	83.188M	75.832M	83.188M	75.832M	82.899M	75.832M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.739M	72.721M	76.522M	72.721M	76.522M	72.721M	76.739M	72.504M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.014M	4.515M	3.014M	4.399M	3.014M	4.342M	3.014M	4.342M
5775MHz	Pass	500k	75.942M	75.832M	75.652M	75.543M	75.652M	75.832M	75.072M	75.543M

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

802.11a_Nss1,(6Mbps)_2TX EBW

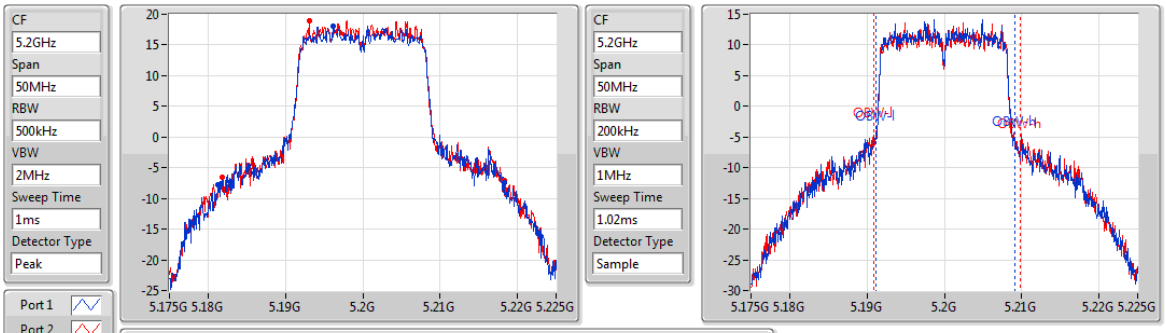
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.13M	5.170362G	5.189493G	16.353M	5.171751G	5.188104G	Inf	1
18.986M	5.170507G	5.189493G	16.425M	5.171679G	5.188104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

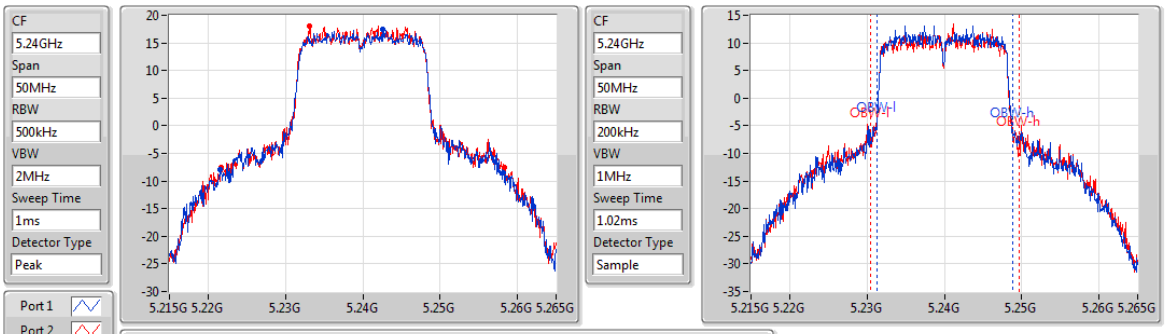
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.957M	5.181304G	5.218261G	18.017M	5.191172G	5.20919G	Inf	1
36.449M	5.181812G	5.218261G	18.958M	5.190883G	5.209841G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

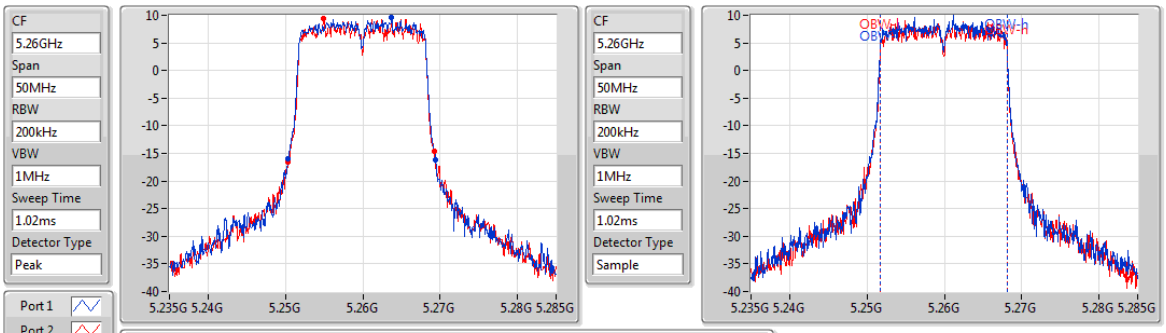
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.594M	5.221594G	5.258188G	17.656M	5.231245G	5.2489G	Inf	1
36.594M	5.221667G	5.258261G	19.103M	5.230521G	5.249624G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

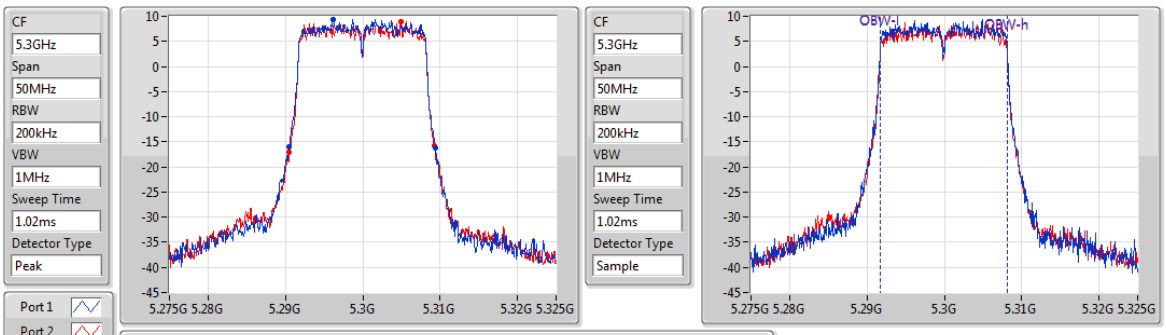
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.058M	5.250362G	5.26942G	16.425M	5.251679G	5.268104G	Inf	1
18.913M	5.250362G	5.269275G	16.353M	5.251751G	5.268104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

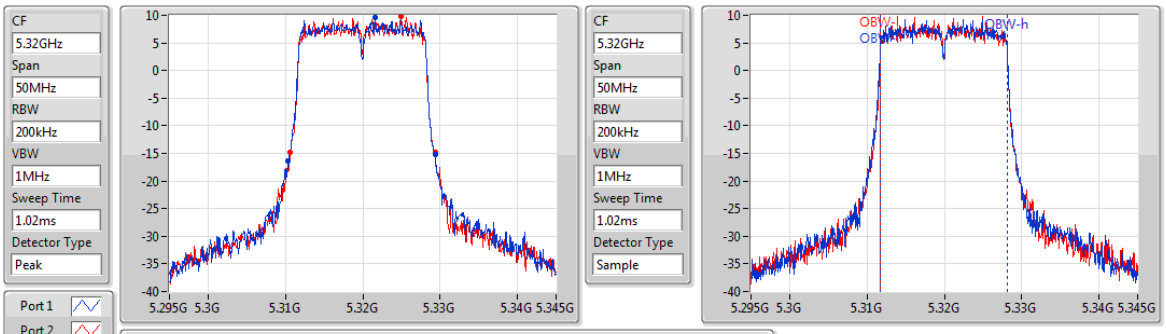
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.913M	5.290435G	5.309348G	16.353M	5.291751G	5.308104G	Inf	1
18.768M	5.290507G	5.309275G	16.353M	5.291751G	5.308104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

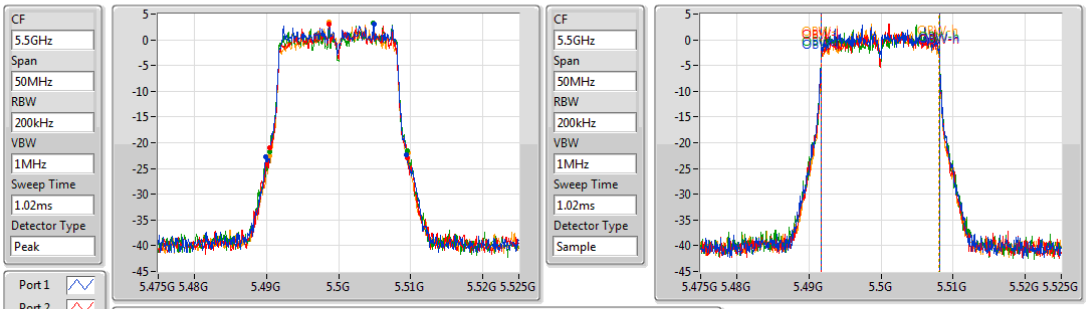
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.058M	5.31029G	5.329348G	16.425M	5.311679G	5.328104G	Inf	1
18.696M	5.310652G	5.329348G	16.353M	5.311751G	5.328104G	Inf	2

802.11a_Nss1,(6Mbps)_4TX EBW

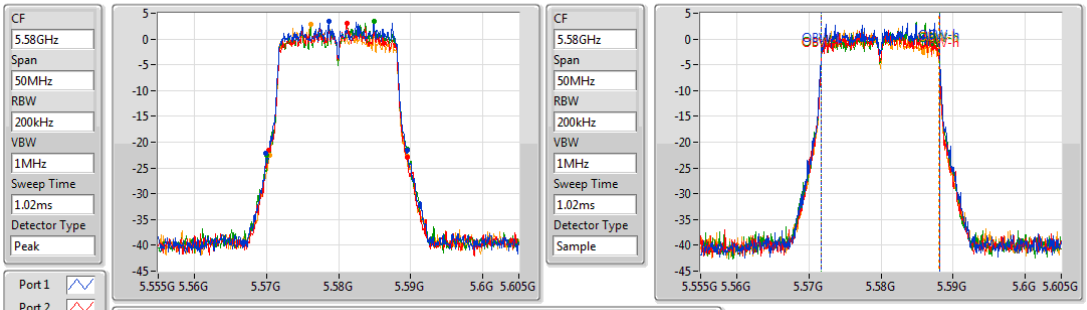
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.489855G	5.50942G	16.425M	5.491679G	5.508104G	Inf	1
19.13M	5.490435G	5.509565G	16.353M	5.491751G	5.508104G	Inf	2
19.058M	5.490435G	5.509493G	16.425M	5.491679G	5.508104G	Inf	3
19.203M	5.490507G	5.50971G	16.281M	5.491751G	5.508032G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

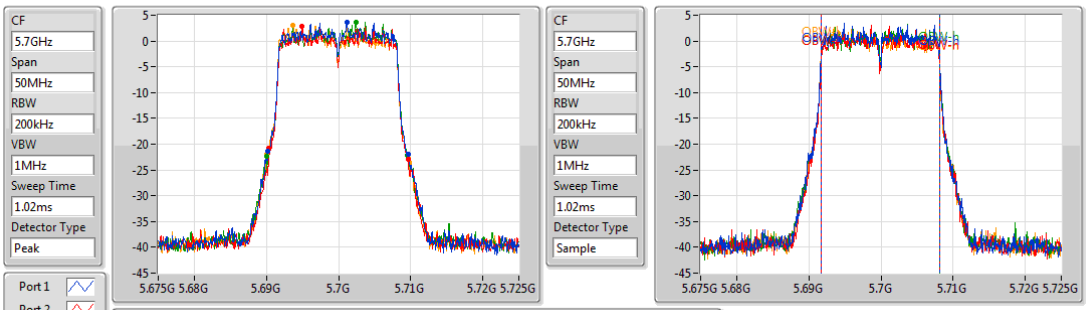
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.638M	5.569928G	5.589565G	16.425M	5.571679G	5.588104G	Inf	1
19.203M	5.57029G	5.589493G	16.425M	5.571679G	5.588104G	Inf	2
19.42M	5.570072G	5.589493G	16.425M	5.571679G	5.588104G	Inf	3
19.058M	5.570435G	5.589493G	16.353M	5.571679G	5.588032G	Inf	4

802.11a_Nss1,(6Mbps)_4TX EBW

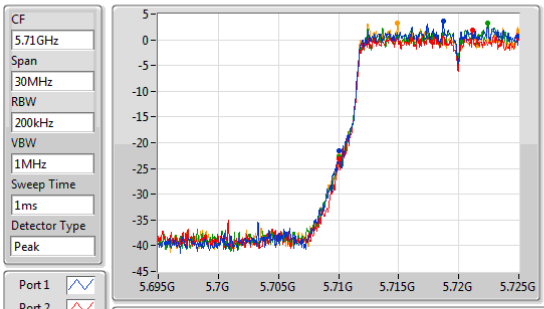
5700MHz

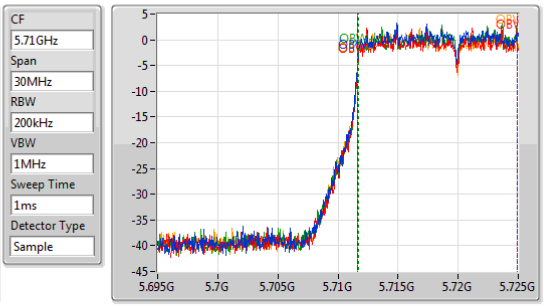


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.42M	5.690217G	5.709638G	16.425M	5.691679G	5.708104G	Inf	1
19.275M	5.690362G	5.709638G	16.425M	5.691679G	5.708104G	Inf	2
19.493M	5.690072G	5.709565G	16.425M	5.691679G	5.708104G	Inf	3
19.71M	5.69G	5.70971G	16.425M	5.691679G	5.708104G	Inf	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5720MHz Straddle 5.47-5.725GHz

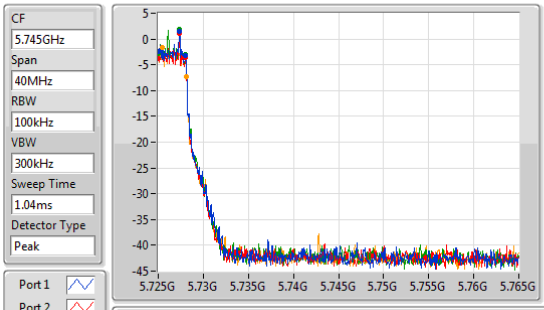


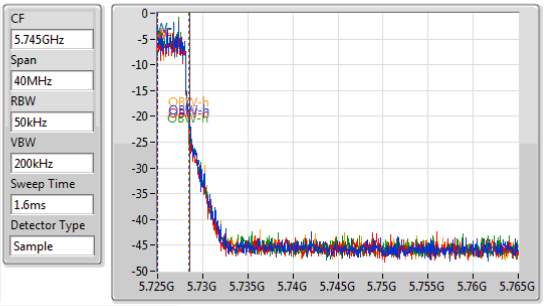


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	5.71G	5.725G	13.285M	5.71165G	5.724935G	Inf	1
14.957M	5.710043G	5.725G	13.285M	5.71165G	5.724935G	Inf	2
14.957M	5.710043G	5.725G	13.242M	5.711693G	5.724935G	Inf	3
15M	5.71G	5.725G	13.329M	5.711606G	5.724935G	Inf	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5720MHz Straddle 5.725-5.85GHz

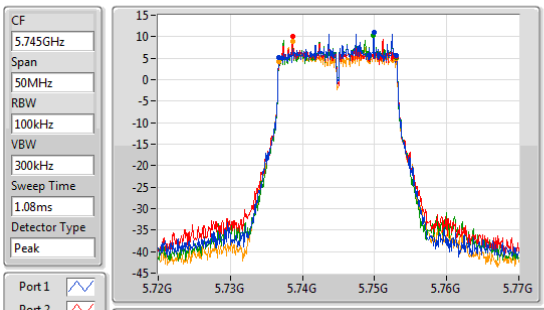


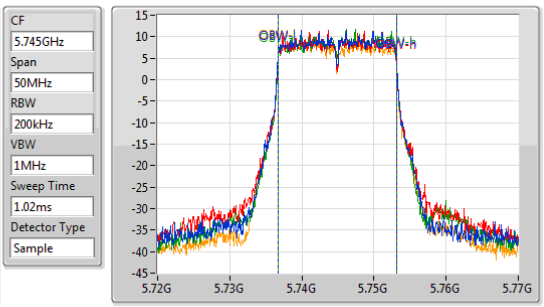


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.014M	5.725G	5.728014G	3.531M	5.725029G	5.72856G	500k	1
3.014M	5.725G	5.728014G	3.531M	5.725029G	5.72856G	500k	2
3.014M	5.725G	5.728014G	3.473M	5.725029G	5.728502G	500k	3
3.13M	5.725G	5.72813G	3.589M	5.725029G	5.728618G	500k	4

802.11a_Nss1,(6Mbps)_4TX — EBW

5745MHz

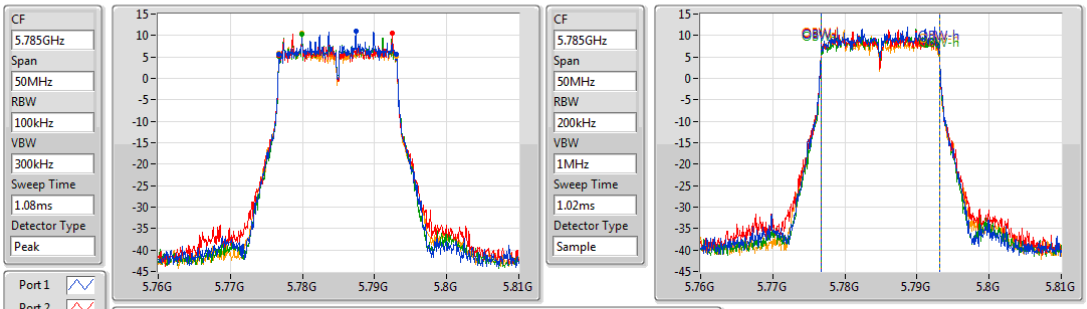




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.736739G	5.753043G	16.425M	5.736679G	5.753104G	500k	1
16.304M	5.736739G	5.753043G	16.425M	5.736679G	5.753104G	500k	2
16.304M	5.736739G	5.753043G	16.425M	5.736679G	5.753104G	500k	3
16.377M	5.736667G	5.753043G	16.425M	5.736679G	5.753104G	500k	4

802.11a_Nss1,(6Mbps)_4TX EBW

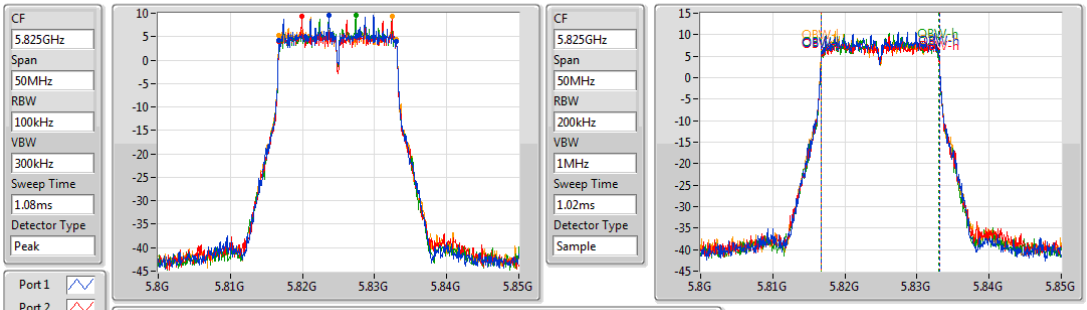
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.776739G	5.793043G	16.425M	5.776679G	5.793104G	500k	1
16.304M	5.776739G	5.793043G	16.425M	5.776679G	5.793104G	500k	2
16.304M	5.776739G	5.793043G	16.425M	5.776679G	5.793104G	500k	3
16.304M	5.776739G	5.793043G	16.425M	5.776679G	5.793104G	500k	4

802.11a_Nss1,(6Mbps)_4TX EBW

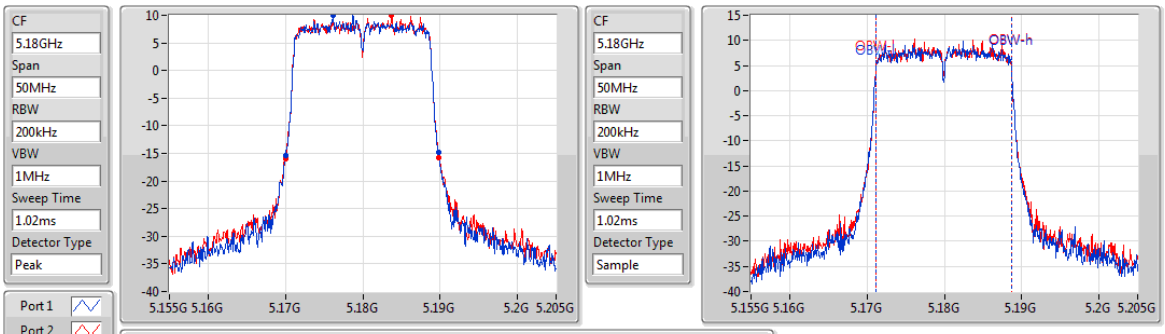
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.816739G	5.833043G	16.425M	5.816679G	5.833104G	500k	1
16.304M	5.816739G	5.833043G	16.425M	5.816679G	5.833104G	500k	2
16.304M	5.816739G	5.833043G	16.353M	5.816679G	5.833032G	500k	3
16.304M	5.816739G	5.833043G	16.425M	5.816679G	5.833104G	500k	4

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

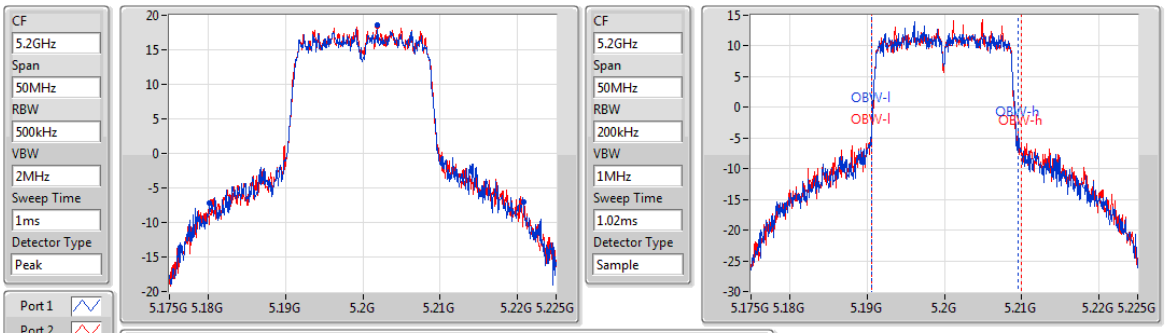
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.855M	5.17G	5.189855G	17.583M	5.1711G	5.188683G	Inf	1
19.855M	5.17G	5.189855G	17.583M	5.1711G	5.188683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

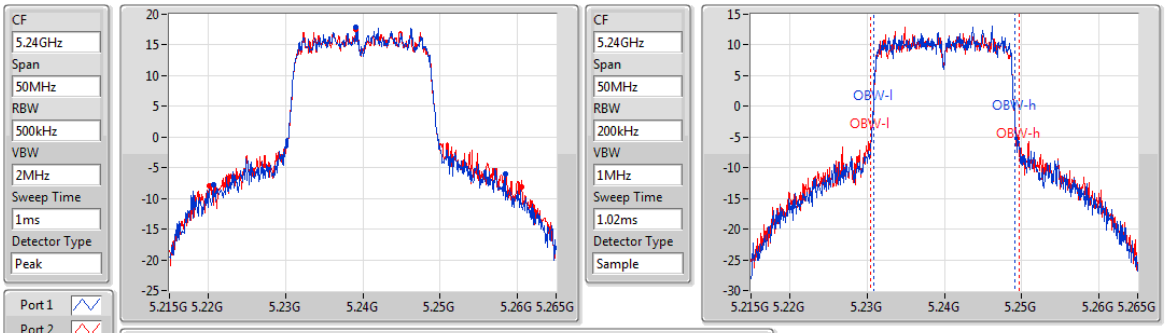
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.180217G	5.220797G	18.886M	5.190666G	5.209551G	Inf	1
40.072M	5.180435G	5.220507G	19.392M	5.190593G	5.209986G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

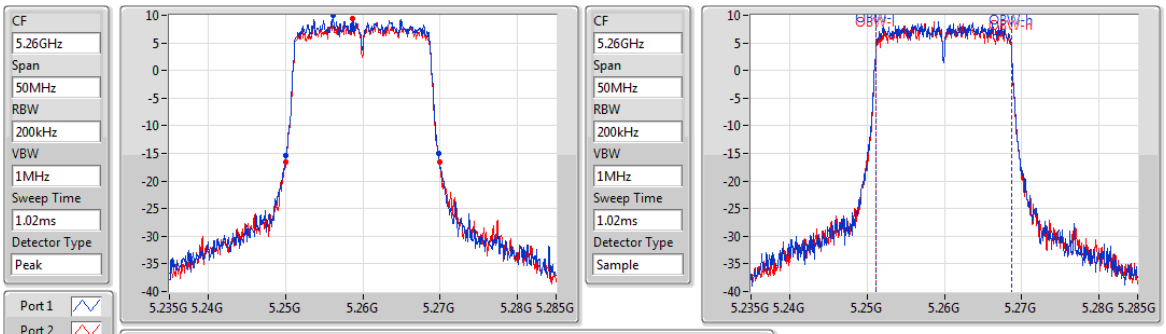
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.754M	5.220652G	5.258406G	18.379M	5.23081G	5.24919G	Inf	1
40.435M	5.220145G	5.26058G	19.247M	5.230449G	5.249696G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

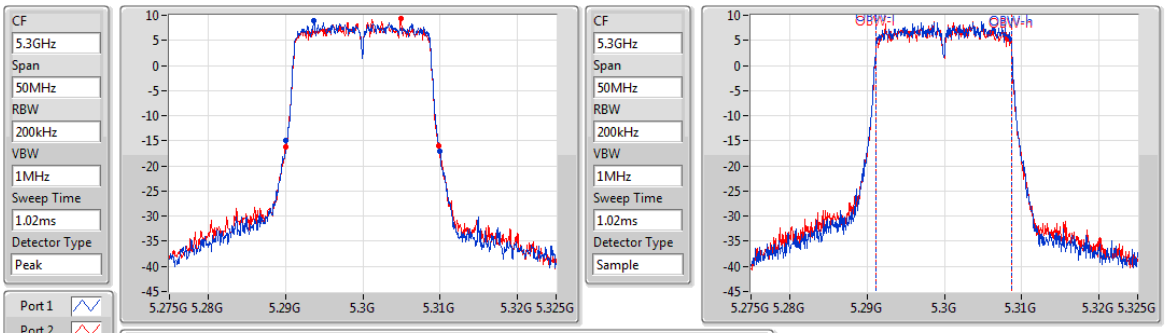
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.71M	5.250072G	5.269783G	17.511M	5.251172G	5.268683G	Inf	1
19.855M	5.250072G	5.269928G	17.511M	5.251172G	5.268683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

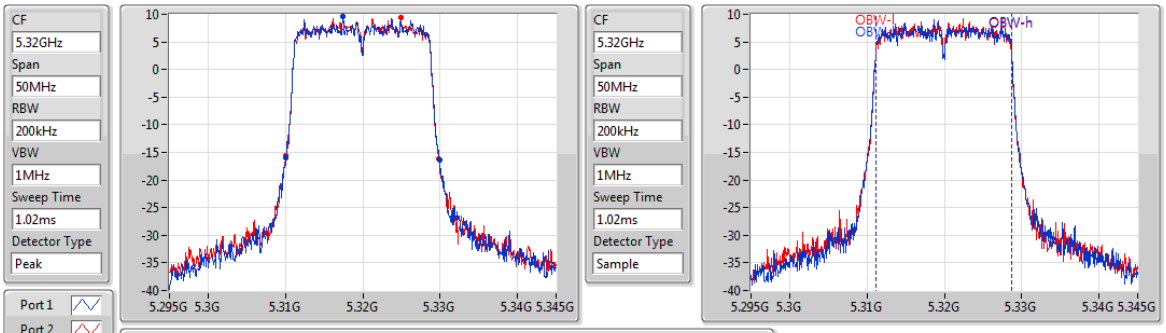
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.290072G	5.31G	17.511M	5.291172G	5.308683G	Inf	1
19.783M	5.29G	5.309783G	17.511M	5.291172G	5.308683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

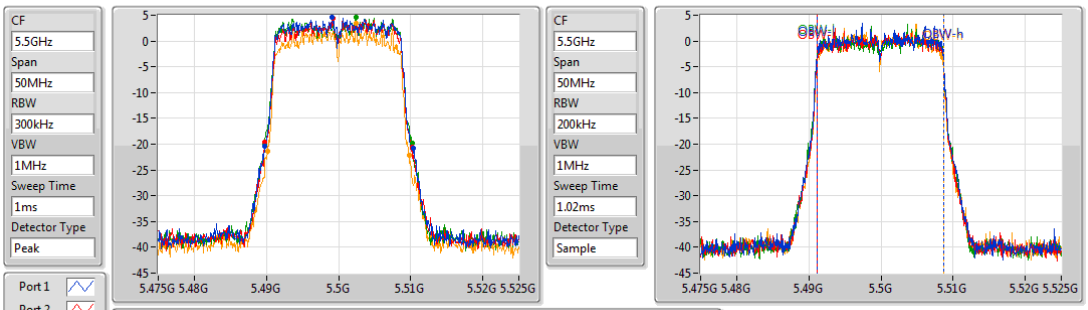
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.855M	5.310072G	5.329928G	17.583M	5.3111G	5.328683G	Inf	1
19.783M	5.310072G	5.329855G	17.511M	5.311172G	5.328683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

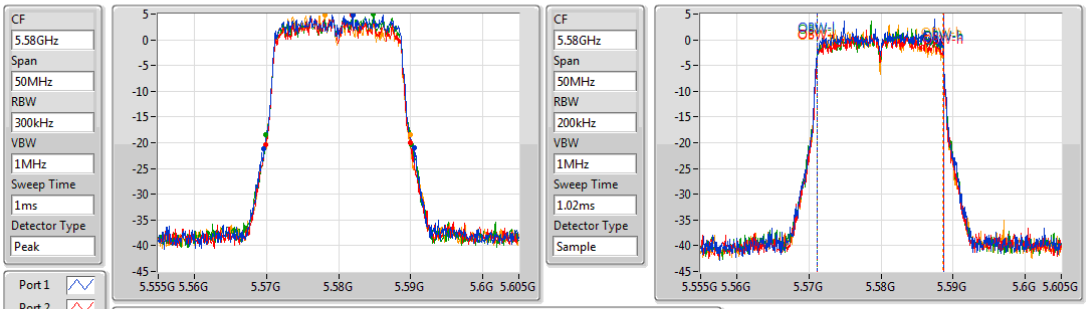
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.725M	5.48971G	5.510435G	17.583M	5.4911G	5.508683G	Inf	1
20.507M	5.48971G	5.510217G	17.583M	5.4911G	5.508683G	Inf	2
20.507M	5.48971G	5.510217G	17.583M	5.4911G	5.508683G	Inf	3
19.638M	5.490145G	5.509783G	17.511M	5.491172G	5.508683G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

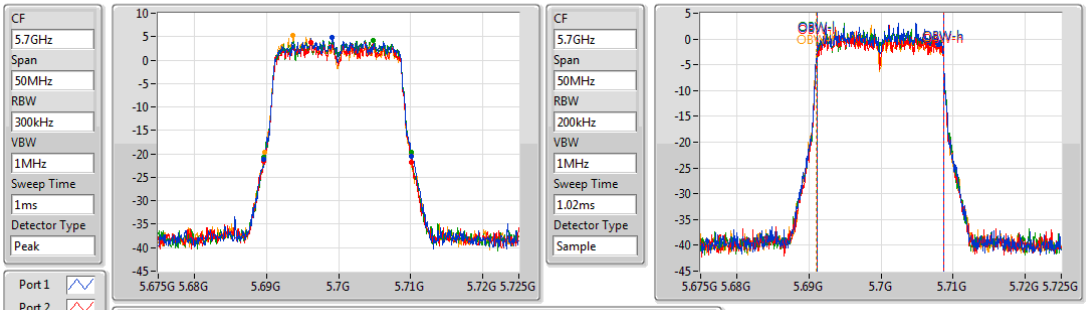
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.87M	5.569638G	5.590507G	17.583M	5.5711G	5.588683G	Inf	1
20.145M	5.569855G	5.59G	17.583M	5.5711G	5.588683G	Inf	2
20.217M	5.569928G	5.590145G	17.583M	5.5711G	5.588683G	Inf	3
20.217M	5.56971G	5.589928G	17.511M	5.5711G	5.588611G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

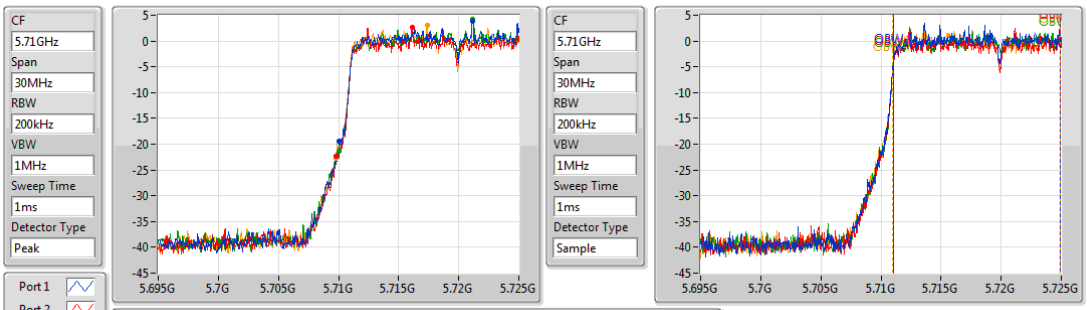
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.507M	5.689638G	5.710145G	17.583M	5.6911G	5.708683G	Inf	1
20.507M	5.689638G	5.710145G	17.583M	5.6911G	5.708683G	Inf	2
20.507M	5.689638G	5.710145G	17.583M	5.6911G	5.708683G	Inf	3
20.362M	5.68971G	5.710072G	17.656M	5.691027G	5.708683G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

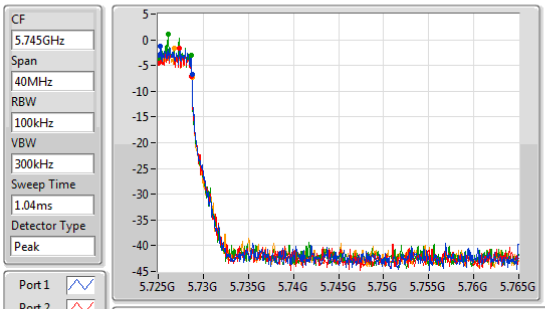
5720MHz Straddle 5.47-5.725GHz

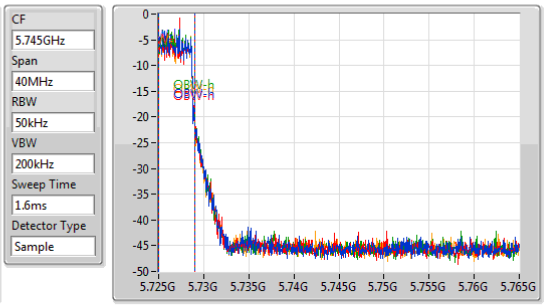


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.957M	5.710043G	5.725G	13.893M	5.711042G	5.724935G	Inf	1
15.174M	5.709826G	5.725G	13.893M	5.711042G	5.724935G	Inf	2
15M	5.71G	5.725G	13.893M	5.711042G	5.724935G	Inf	3
15.174M	5.709826G	5.725G	13.936M	5.710999G	5.724935G	Inf	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5720MHz Straddle 5.725-5.85GHz

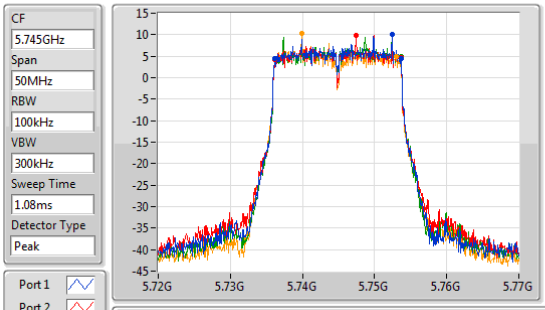


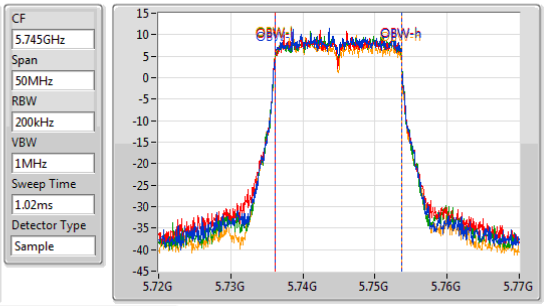


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.768M	5.725G	5.728768G	3.994M	5.725029G	5.729023G	500k	1
3.71M	5.725G	5.72871G	3.994M	5.725029G	5.729023G	500k	2
3.652M	5.725G	5.728652G	3.936M	5.725029G	5.728965G	500k	3
3.768M	5.725G	5.728768G	3.936M	5.725029G	5.728965G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5745MHz

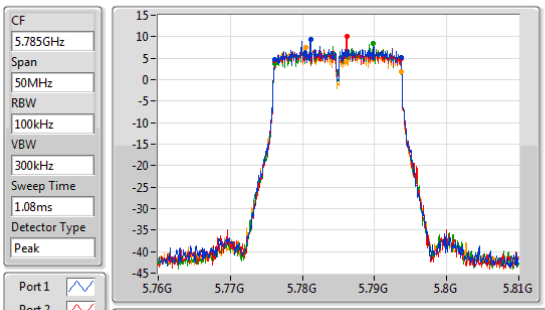


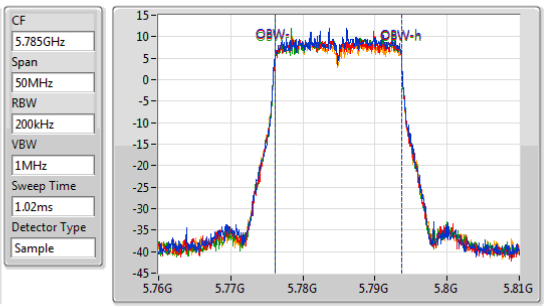


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.609M	5.736087G	5.753696G	17.583M	5.7361G	5.753683G	500k	1
17.609M	5.736087G	5.753696G	17.583M	5.7361G	5.753683G	500k	2
17.536M	5.736159G	5.753696G	17.583M	5.7361G	5.753683G	500k	3
16.884M	5.736159G	5.753043G	17.583M	5.7361G	5.753683G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

5785MHz

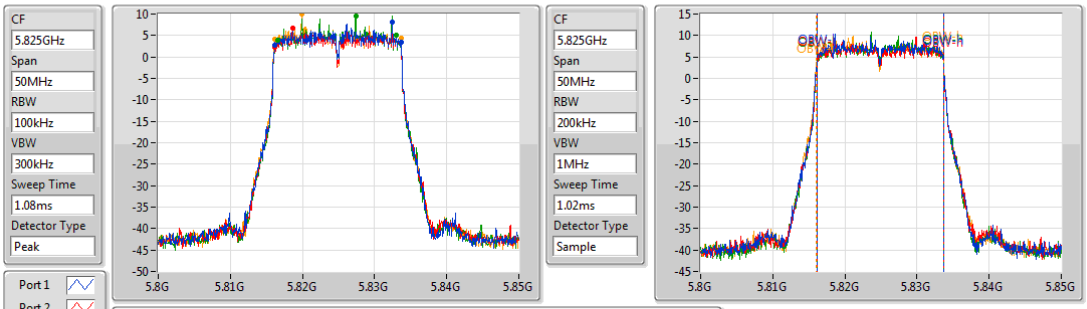




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.609M	5.776087G	5.793696G	17.583M	5.7761G	5.793683G	500k	1
17.536M	5.776159G	5.793696G	17.583M	5.7761G	5.793683G	500k	2
17.609M	5.776087G	5.793696G	17.583M	5.7761G	5.793683G	500k	3
17.681M	5.776087G	5.793768G	17.583M	5.7761G	5.793683G	500k	4

802.11ac VHT20_Nss1,(MCS0)_4TX EBW

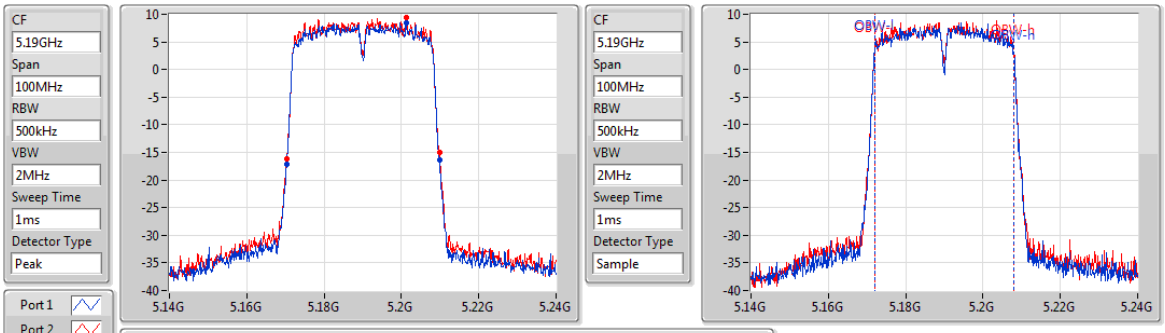
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.609M	5.816087G	5.833696G	17.583M	5.8161G	5.833683G	500k	1
17.609M	5.816087G	5.833696G	17.583M	5.8161G	5.833683G	500k	2
16.522M	5.816522G	5.833043G	17.583M	5.8161G	5.833683G	500k	3
17.536M	5.816159G	5.833696G	17.656M	5.816027G	5.833683G	500k	4

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

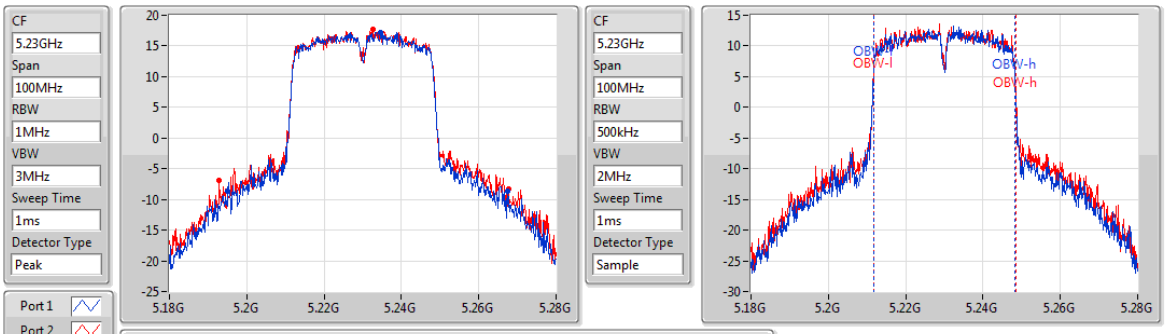
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.565M	5.17029G	5.209855G	35.89M	5.172055G	5.207945G	Inf	1
39.42M	5.170435G	5.209855G	35.89M	5.172055G	5.207945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

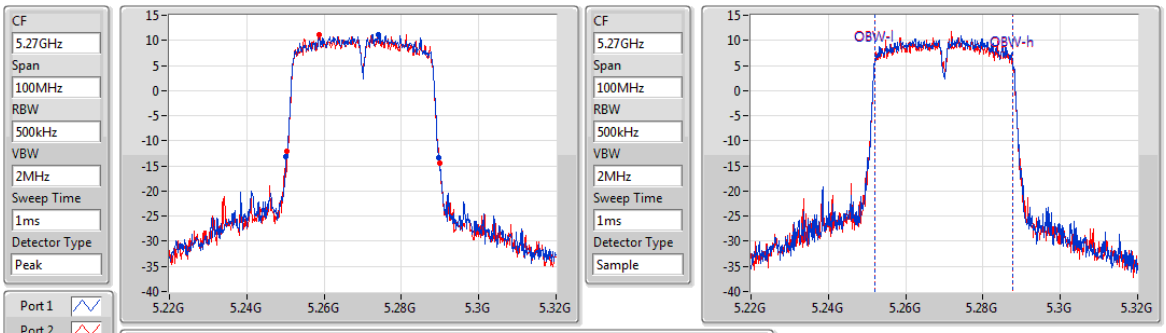
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
72.319M	5.195072G	5.267391G	36.469M	5.211766G	5.248234G	Inf	1
74.783M	5.192899G	5.267681G	36.903M	5.211621G	5.248524G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

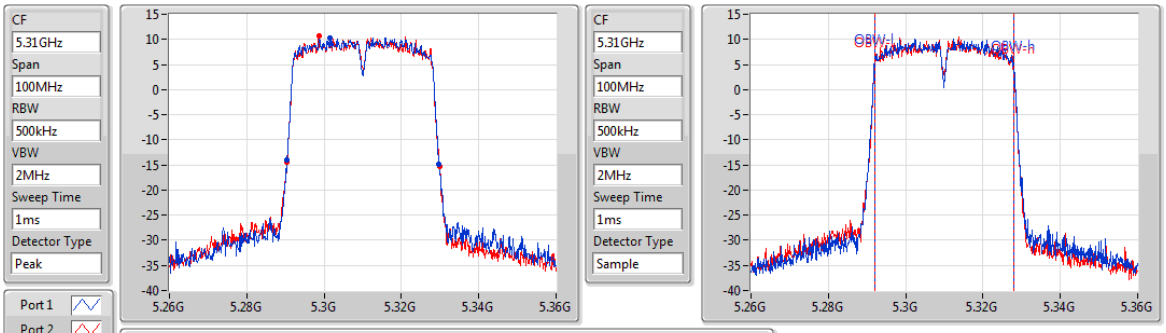
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.565M	5.250145G	5.28971G	35.745M	5.252055G	5.2878G	Inf	1
39.565M	5.250435G	5.29G	35.745M	5.252055G	5.2878G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

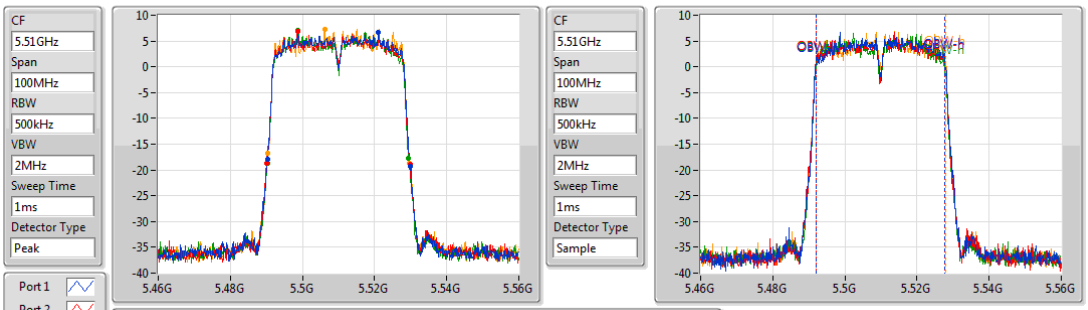
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.275M	5.290435G	5.32971G	35.89M	5.292055G	5.327945G	Inf	1
39.42M	5.290435G	5.329855G	35.89M	5.292055G	5.327945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

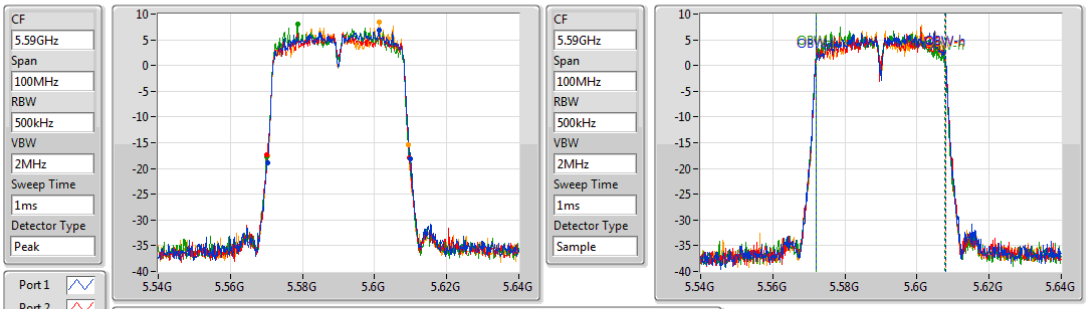
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.71M	5.49029G	5.53G	35.89M	5.49191G	5.5278G	Inf	1
40M	5.49G	5.53G	35.89M	5.49191G	5.5278G	Inf	2
39.13M	5.49029G	5.52942G	35.745M	5.492055G	5.5278G	Inf	3
39.42M	5.49029G	5.52971G	36.035M	5.49191G	5.527945G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

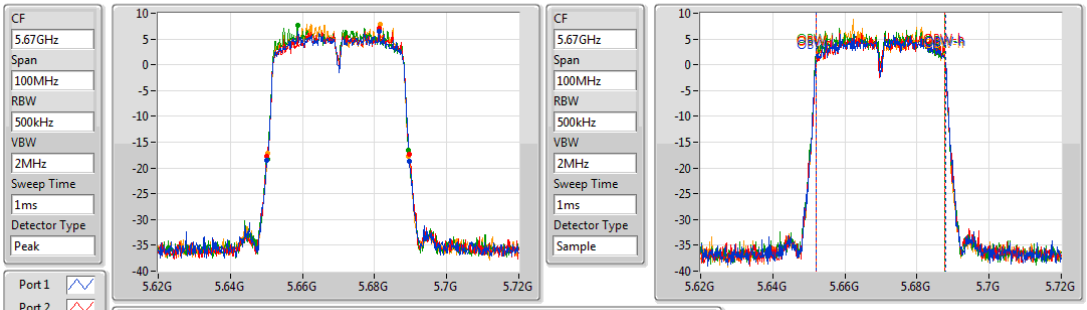
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.565M	5.570435G	5.61G	36.035M	5.57191G	5.607945G	Inf	1
39.565M	5.570145G	5.60971G	36.035M	5.57191G	5.607945G	Inf	2
39.855M	5.57G	5.609855G	35.89M	5.57191G	5.6078G	Inf	3
38.986M	5.570435G	5.60942G	35.89M	5.572055G	5.607945G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

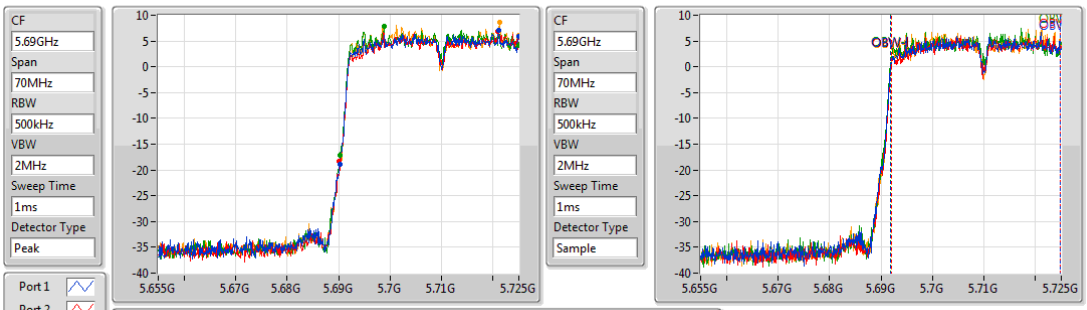
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.565M	5.650145G	5.68971G	36.035M	5.65191G	5.687945G	Inf	1
39.71M	5.65G	5.68971G	35.745M	5.652055G	5.6878G	Inf	2
39.13M	5.65029G	5.68942G	35.89M	5.65191G	5.6878G	Inf	3
39.13M	5.65029G	5.68942G	35.745M	5.652055G	5.6878G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX EBW

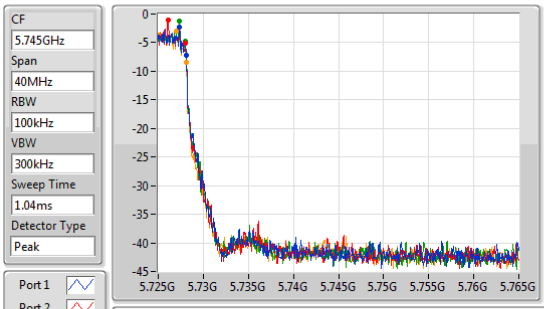
5710MHz Straddle 5.47-5.725GHz

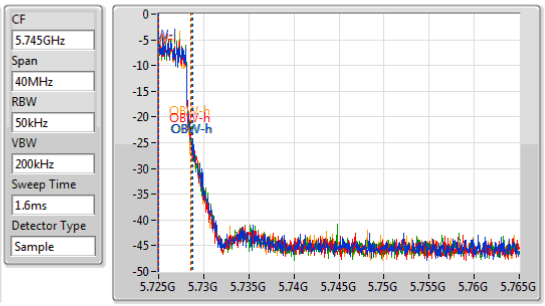


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.797M	5.690203G	5.725G	32.923M	5.691925G	5.724848G	Inf	1
34.899M	5.690101G	5.725G	32.822M	5.692026G	5.724848G	Inf	2
34.797M	5.690203G	5.725G	32.923M	5.691925G	5.724848G	Inf	3
34.696M	5.690304G	5.725G	32.822M	5.692026G	5.724848G	Inf	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5710MHz Straddle 5.725-5.85GHz

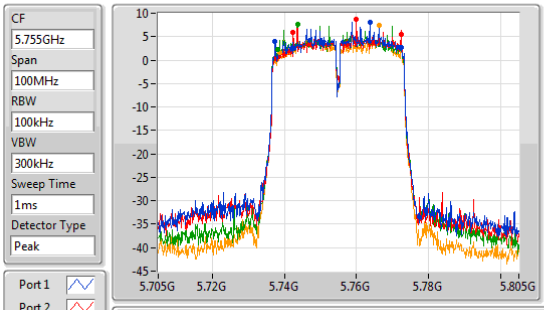


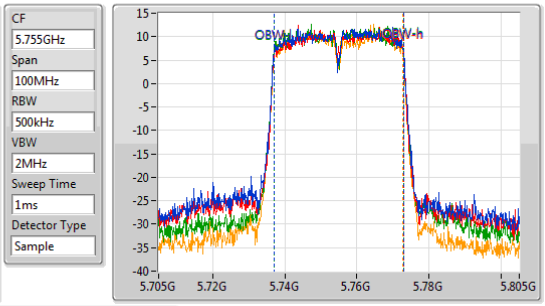


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.072M	5.725G	5.728072G	3.705M	5.725029G	5.728734G	500k	1
3.014M	5.725G	5.728014G	3.589M	5.725029G	5.728618G	500k	2
3.014M	5.725G	5.728014G	3.647M	5.725029G	5.728676G	500k	3
3.072M	5.725G	5.728072G	3.589M	5.725029G	5.728618G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5755MHz

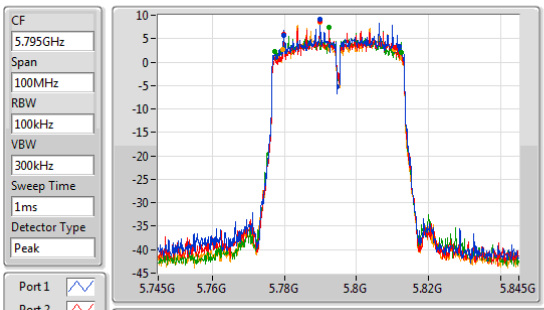


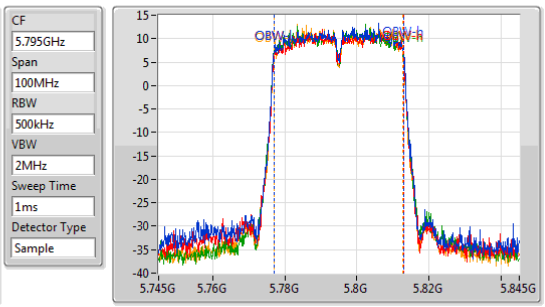


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.072M	5.737319G	5.772391G	36.035M	5.73691G	5.772945G	500k	1
30.145M	5.742391G	5.772536G	35.89M	5.737055G	5.772945G	500k	2
34.493M	5.738043G	5.772536G	36.035M	5.73691G	5.772945G	500k	3
33.913M	5.738623G	5.772536G	35.745M	5.737055G	5.7728G	500k	4

802.11ac VHT40_Nss1,(MCS0)_4TX — EBW

5795MHz

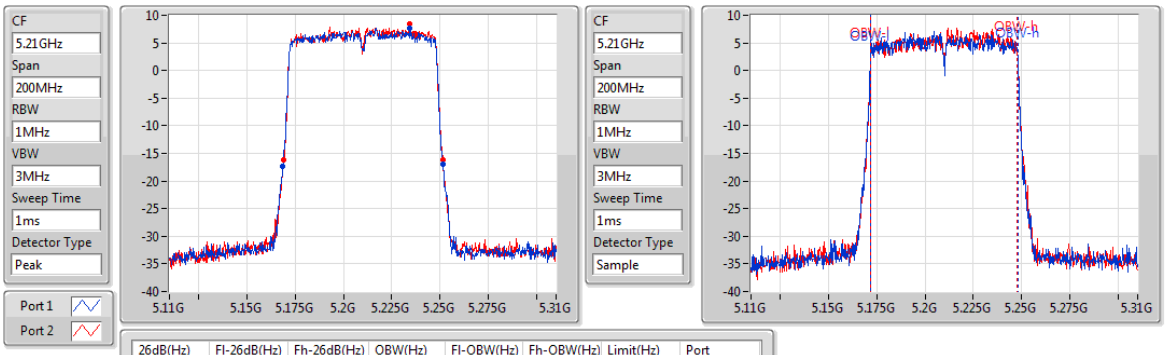




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.029M	5.779783G	5.811812G	36.035M	5.77691G	5.812945G	500k	1
30.87M	5.779783G	5.810652G	35.89M	5.777055G	5.812945G	500k	2
35.217M	5.777319G	5.812536G	36.035M	5.77691G	5.812945G	500k	3
30.725M	5.779638G	5.810362G	35.745M	5.777055G	5.8128G	500k	4

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

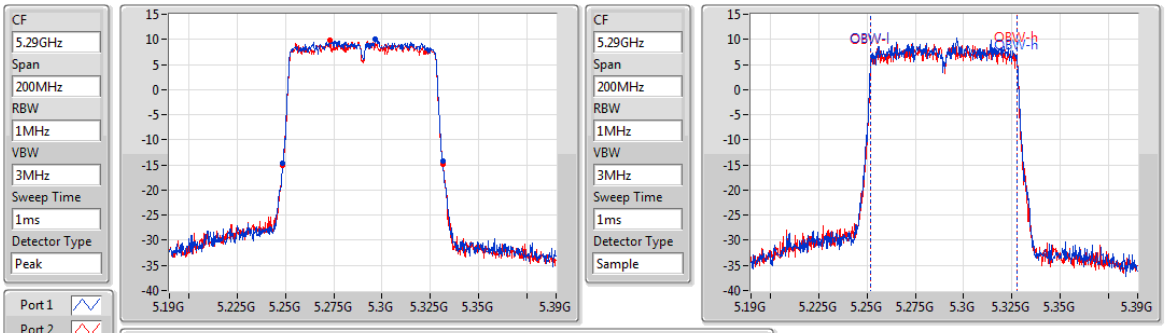
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.188M	5.168551G	5.251739G	75.832M	5.172084G	5.247916G	Inf	1
82.899M	5.168841G	5.251739G	75.543M	5.172084G	5.247627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

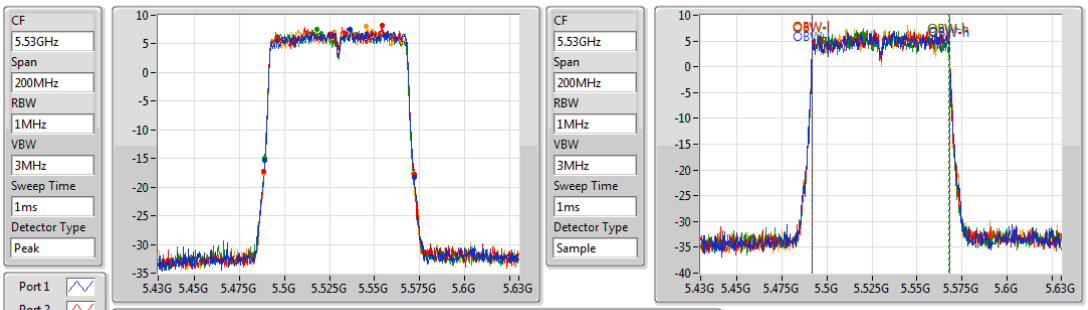
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.899M	5.248551G	5.331449G	75.543M	5.252084G	5.327627G	Inf	1
83.188M	5.248551G	5.331739G	75.543M	5.252084G	5.327627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_4TX EBW

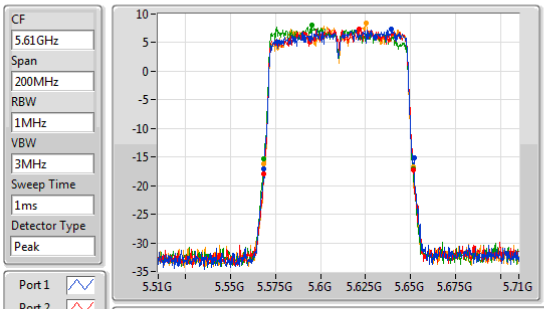
5530MHz

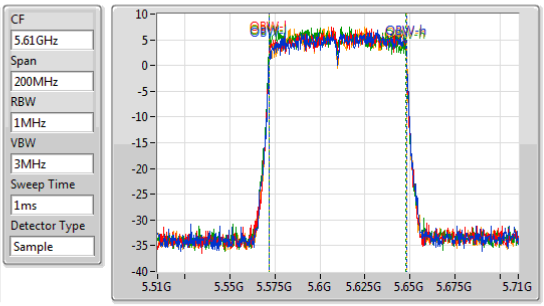


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.188M	5.488841G	5.572029G	76.122M	5.491795G	5.567916G	Inf	1
83.478M	5.488551G	5.572029G	75.832M	5.492084G	5.567916G	Inf	2
83.478M	5.488841G	5.572319G	75.543M	5.492084G	5.567627G	Inf	3
83.478M	5.488261G	5.571739G	75.832M	5.492084G	5.567916G	Inf	4

802.11ac VHT80_Nss1,(MCS0)_4TX EBW

5610MHz

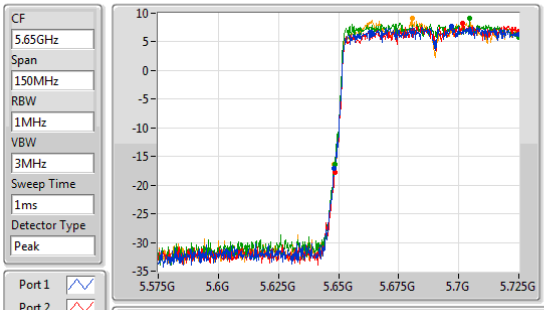


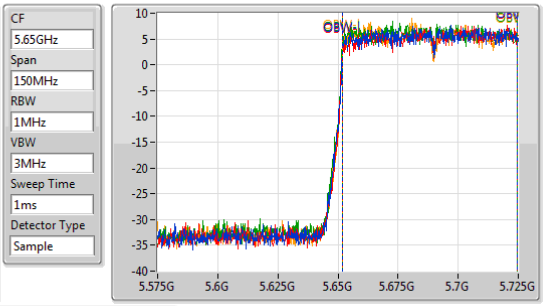


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.478M	5.568551G	5.652029G	75.832M	5.572084G	5.647916G	Inf	1
83.188M	5.568551G	5.651739G	75.832M	5.572084G	5.647916G	Inf	2
83.188M	5.568261G	5.651449G	75.832M	5.571795G	5.647627G	Inf	3
82.899M	5.568551G	5.651449G	75.832M	5.572084G	5.647916G	Inf	4

802.11ac VHT80_Nss1,(MCS0)_4TX EBW

5690MHz Straddle 5.47-5.725GHz

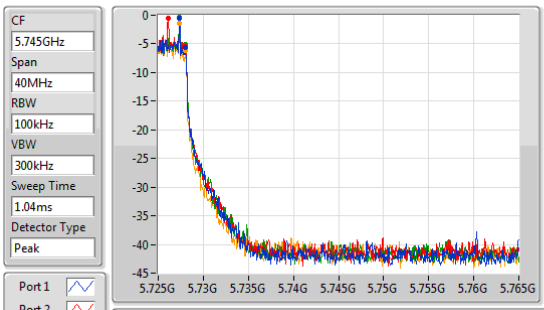


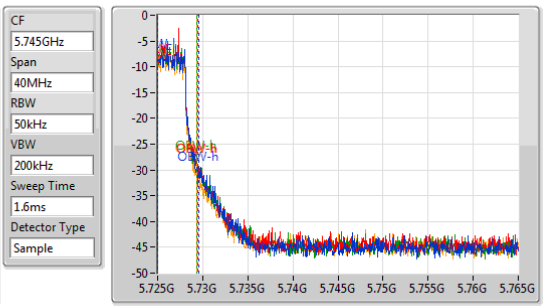


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.739M	5.648261G	5.725G	72.721M	5.651954G	5.724674G	Inf	1
76.522M	5.648478G	5.725G	72.721M	5.651954G	5.724674G	Inf	2
76.522M	5.648478G	5.725G	72.721M	5.651737G	5.724457G	Inf	3
76.739M	5.648261G	5.725G	72.504M	5.651954G	5.724457G	Inf	4

802.11ac VHT80_Nss1,(MCS0)_4TX EBW

5690MHz Straddle 5.725-5.85GHz

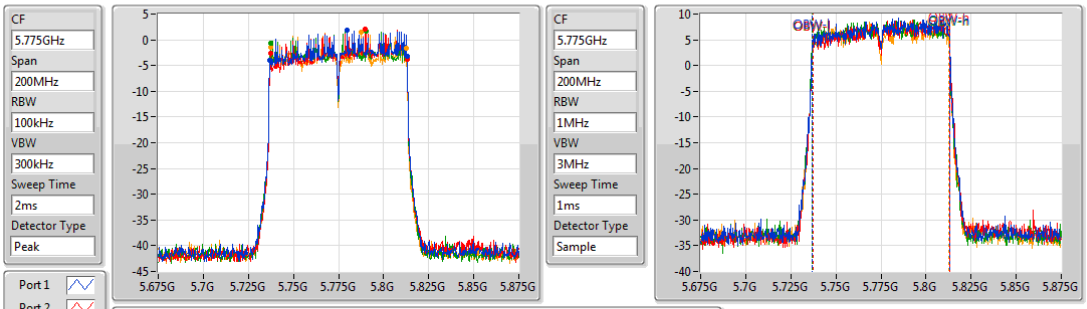




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.014M	5.725G	5.728014G	4.515M	5.725029G	5.729544G	500k	1
3.014M	5.725G	5.728014G	4.399M	5.725029G	5.729428G	500k	2
3.014M	5.725G	5.728014G	4.342M	5.725029G	5.72937G	500k	3
3.014M	5.725G	5.728014G	4.342M	5.725029G	5.72937G	500k	4

802.11ac VHT80_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	5.737029G	5.812971G	75.832M	5.737084G	5.812916G	500k	1
75.652M	5.737319G	5.812971G	75.543M	5.737373G	5.812916G	500k	2
75.652M	5.737319G	5.812971G	75.832M	5.737084G	5.812916G	500k	3
75.072M	5.737319G	5.812391G	75.543M	5.737084G	5.812627G	500k	4

Beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	36.159M	18.09M	18M1D1D	19.855M	17.656M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	51.449M	36.179M	36M2D1D	38.841M	36.035M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	83.188M	75.832M	75M8D1D	82.029M	75.543M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.29M	17.656M	17M7D1D	19.783M	17.583M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	39.42M	36.035M	36M0D1D	38.696M	35.89M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	82.609M	75.832M	75M8D1D	82.319M	75.543M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.797M	17.656M	17M7D1D	15.087M	13.849M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	39.565M	36.179M	36M2D1D	34.391M	33.025M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	82.899M	76.411M	76M4D1D	74.783M	72.287M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	17.609M	17.656M	17M7D1D	3.594M	3.821M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	35.797M	36.179M	36M2D1D	2.899M	3.647M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	75.652M	75.832M	75M8D1D	2.783M	5.557M

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

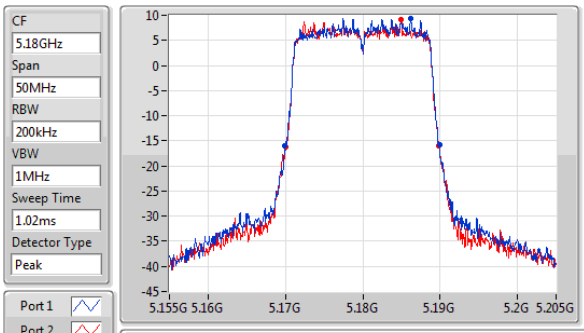
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20M	17.656M	19.855M	17.656M				
5200MHz	Pass	Inf	33.188M	17.945M	36.159M	18.09M				
5240MHz	Pass	Inf	27.536M	17.728M	26.087M	17.728M				
5260MHz	Pass	Inf	20M	17.583M	19.783M	17.583M				
5300MHz	Pass	Inf	19.783M	17.656M	20M	17.583M				
5320MHz	Pass	Inf	20.29M	17.583M	19.928M	17.583M				
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	Inf	20.797M	17.583M	20.58M	17.583M	19.638M	17.583M	20M	17.583M
5580MHz	Pass	Inf	19.855M	17.511M	20.507M	17.583M	19.855M	17.583M	20.797M	17.656M
5700MHz	Pass	Inf	20.507M	17.583M	20.725M	17.583M	20.58M	17.583M	20.145M	17.583M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.522M	13.893M	15.13M	13.849M	15.478M	13.893M	15.087M	13.849M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.652M	3.936M	3.71M	3.936M	3.768M	3.994M	3.594M	3.821M
5745MHz	Pass	500k	17.029M	17.583M	17.174M	17.656M	17.609M	17.656M	17.101M	17.583M
5785MHz	Pass	500k	17.174M	17.583M	16.957M	17.656M	16.812M	17.583M	16.667M	17.656M
5825MHz	Pass	500k	17.536M	17.656M	16.594M	17.583M	16.884M	17.583M	17.609M	17.656M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.275M	36.035M	38.841M	36.035M				
5230MHz	Pass	Inf	51.449M	36.179M	38.841M	36.179M				
5270MHz	Pass	Inf	38.841M	35.89M	39.42M	36.035M				
5310MHz	Pass	Inf	39.275M	36.035M	38.696M	36.035M				
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	Inf	39.275M	36.035M	39.13M	36.035M	39.42M	36.179M	39.565M	36.179M
5590MHz	Pass	Inf	39.42M	35.745M	39.275M	35.89M	38.696M	36.179M	38.696M	36.035M
5670MHz	Pass	Inf	39.275M	36.035M	38.116M	36.035M	39.565M	36.035M	39.42M	36.035M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.391M	33.126M	35.101M	33.025M	34.594M	33.126M	34.594M	33.025M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.072M	3.763M	3.13M	3.647M	2.899M	4.11M	3.13M	3.647M
5755MHz	Pass	500k	35.652M	36.035M	34.783M	36.035M	35.652M	35.89M	35.652M	36.179M
5795MHz	Pass	500k	33.913M	36.035M	34.493M	36.035M	35.797M	36.035M	33.913M	36.035M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	83.188M	75.832M	82.029M	75.543M				
5290MHz	Pass	Inf	82.609M	75.832M	82.319M	75.543M				
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	Inf	81.739M	75.253M	82.899M	76.411M	81.739M	75.832M	80.87M	75.253M
5610MHz	Pass	Inf	80.87M	76.122M	81.159M	75.543M	80.58M	75.832M	82.319M	75.543M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.87M	72.504M	74.783M	73.155M	76.087M	72.504M	74.783M	72.287M

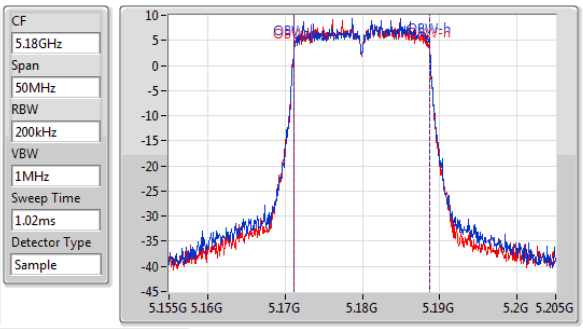
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
	Pass	500k	2.783M	8.452M	3.014M	15.166M	3.072M	5.557M	3.072M	8.22M
5775MHz	Pass	500k	75.362M	75.543M	73.913M	75.832M	75.652M	75.543M	75.362M	75.543M

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;

802.11ac VHT20-BF_Nss1,(MCS0)_2TX EBW

5180MHz

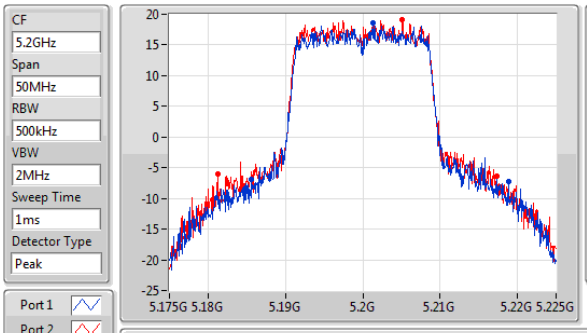


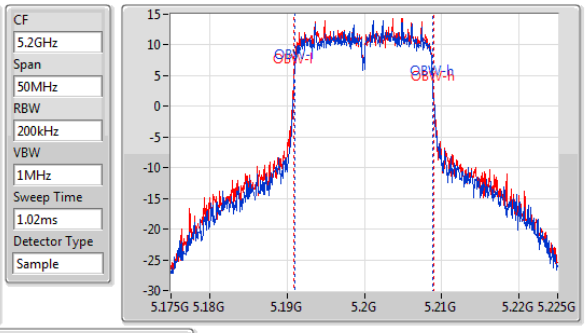


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.169928G	5.189928G	17.656M	5.1711G	5.188755G	Inf	1
19.855M	5.17G	5.189855G	17.656M	5.1711G	5.188755G	Inf	2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX EBW

5200MHz

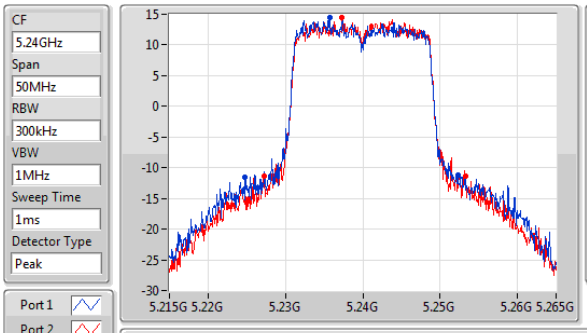


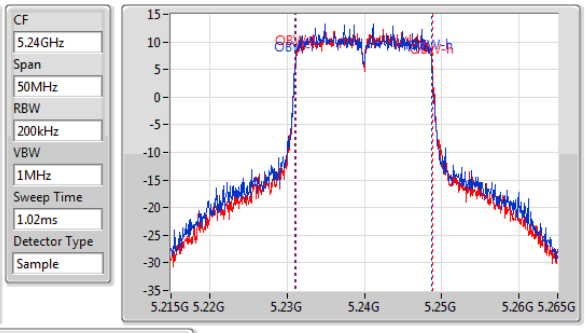


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.188M	5.185652G	5.218841G	17.945M	5.190955G	5.2089G	Inf	1
36.159M	5.181232G	5.217391G	18.09M	5.190883G	5.208973G	Inf	2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX EBW

5240MHz

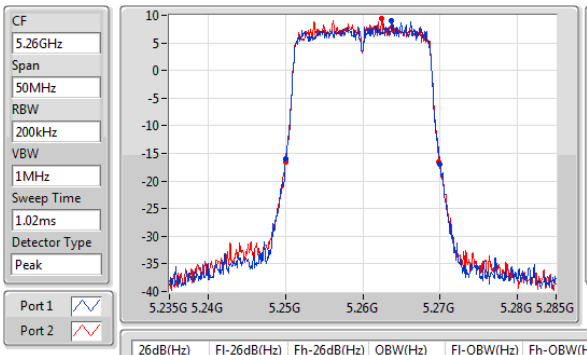


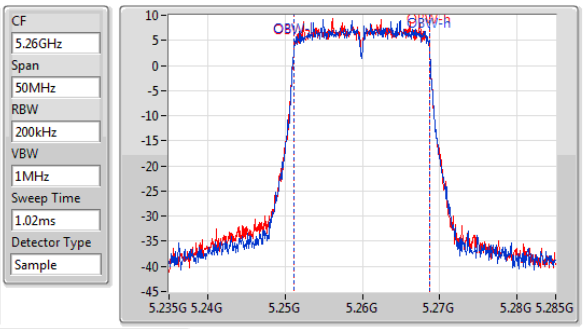


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
27.536M	5.224783G	5.252319G	17.728M	5.231027G	5.248755G	Inf	1
26.087M	5.227246G	5.253333G	17.728M	5.2311G	5.248828G	Inf	2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX EBW

5260MHz

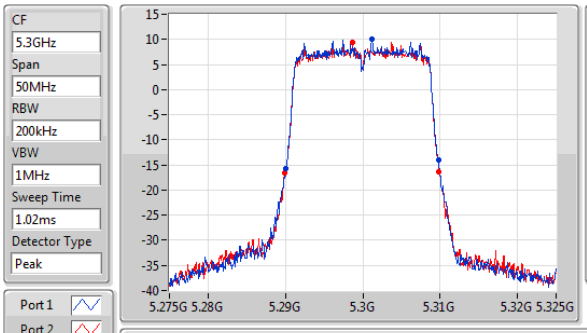


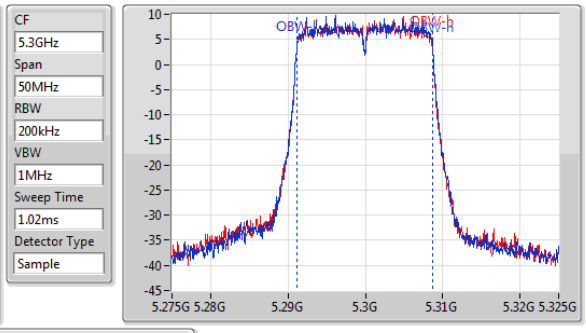


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.25G	5.27G	17.583M	5.2511G	5.268683G	Inf	1
19.783M	5.25G	5.269783G	17.583M	5.2511G	5.268683G	Inf	2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX EBW

5300MHz

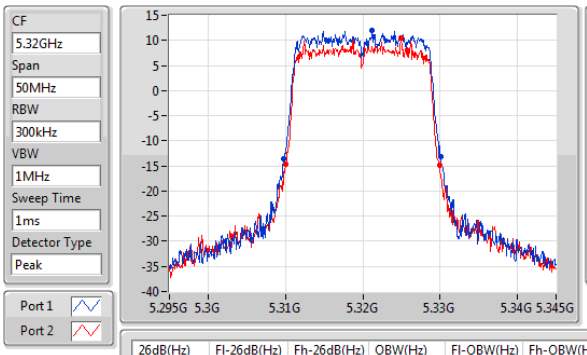


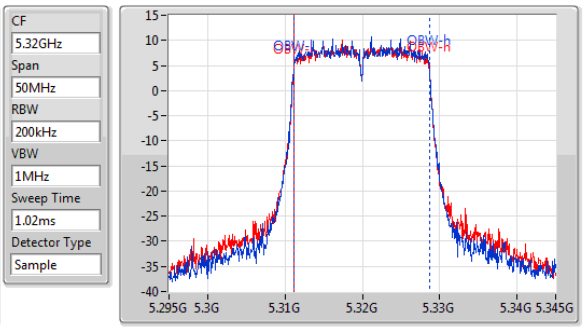


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.783M	5.290072G	5.309855G	17.656M	5.2911G	5.308755G	Inf	1
20M	5.289855G	5.309855G	17.583M	5.2911G	5.308683G	Inf	2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX EBW

5320MHz

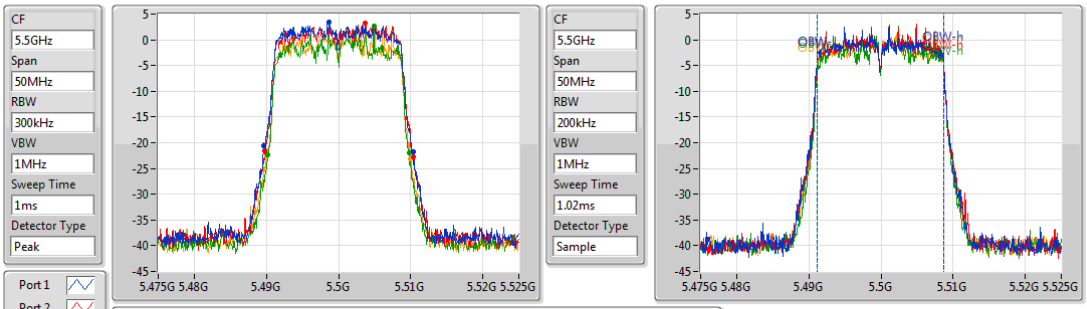




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.29M	5.309783G	5.330072G	17.583M	5.3111G	5.328683G	Inf	1
19.928M	5.31G	5.329928G	17.583M	5.3111G	5.328683G	Inf	2

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

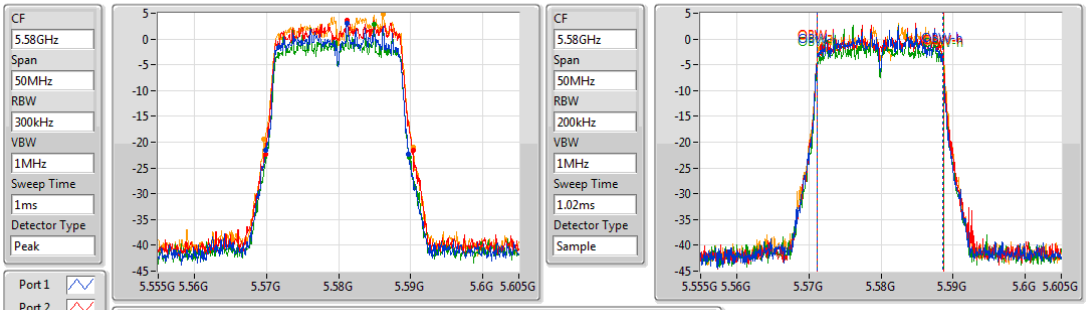
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.797M	5.489565G	5.510362G	17.583M	5.4911G	5.508683G	Inf	1
20.58M	5.489783G	5.510362G	17.583M	5.491172G	5.508755G	Inf	2
19.638M	5.490145G	5.509783G	17.583M	5.491172G	5.508755G	Inf	3
20M	5.49G	5.51G	17.583M	5.4911G	5.508683G	Inf	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

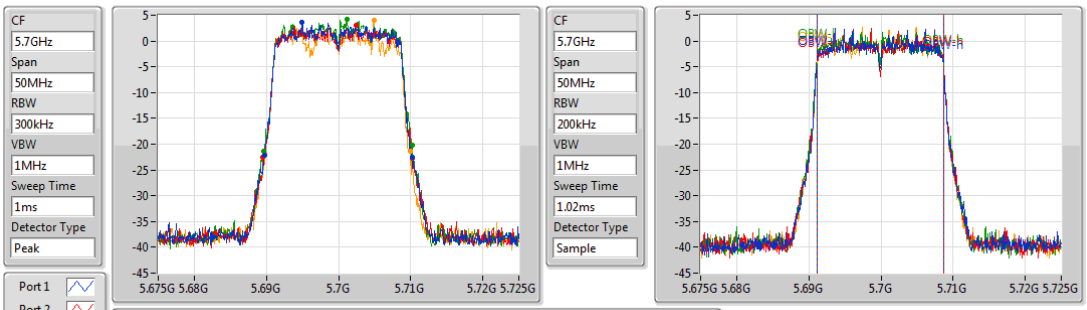
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.855M	5.569855G	5.58971G	17.511M	5.5711G	5.588611G	Inf	1
20.507M	5.569855G	5.590362G	17.583M	5.5711G	5.588683G	Inf	2
19.855M	5.569928G	5.589783G	17.583M	5.5711G	5.588683G	Inf	3
20.797M	5.569565G	5.590362G	17.656M	5.5711G	5.588755G	Inf	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

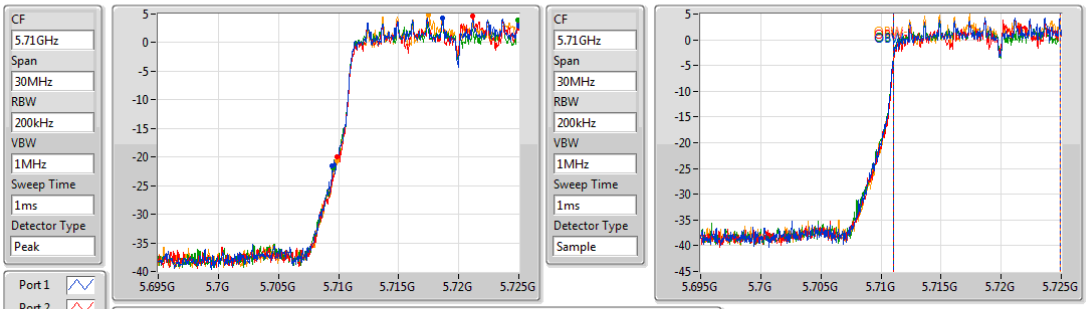
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.507M	5.68971G	5.710217G	17.583M	5.6911G	5.708683G	Inf	1
20.725M	5.689493G	5.710217G	17.583M	5.6911G	5.708683G	Inf	2
20.58M	5.689638G	5.710217G	17.583M	5.6911G	5.708683G	Inf	3
20.145M	5.689783G	5.709928G	17.583M	5.6911G	5.708683G	Inf	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

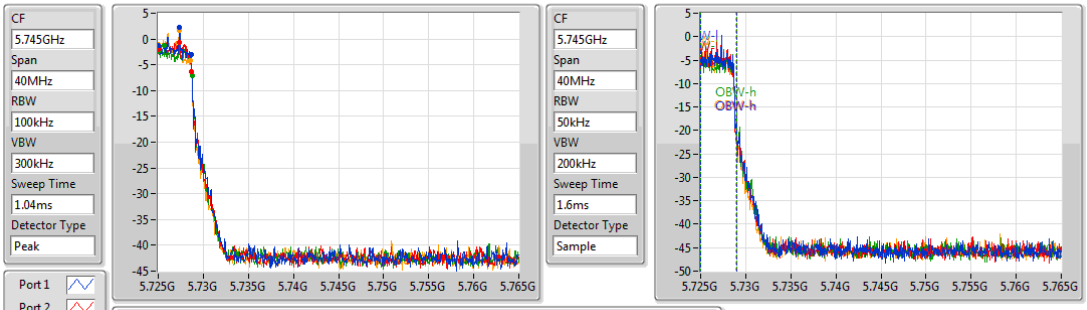
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.522M	5.709478G	5.725G	13.893M	5.711042G	5.724935G	Inf	1
15.13M	5.70987G	5.725G	13.849M	5.711085G	5.724935G	Inf	2
15.478M	5.709522G	5.725G	13.893M	5.711042G	5.724935G	Inf	3
15.087M	5.709913G	5.725G	13.849M	5.711085G	5.724935G	Inf	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

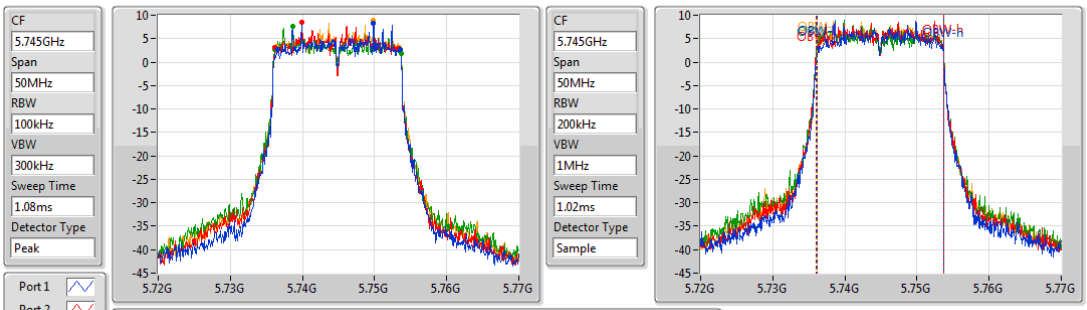
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.652M	5.725G	5.728652G	3.936M	5.725029G	5.728965G	500k	1
3.71M	5.725G	5.72871G	3.936M	5.725029G	5.728965G	500k	2
3.768M	5.725G	5.728768G	3.994M	5.725029G	5.729023G	500k	3
3.594M	5.725G	5.728594G	3.821M	5.725029G	5.728849G	500k	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

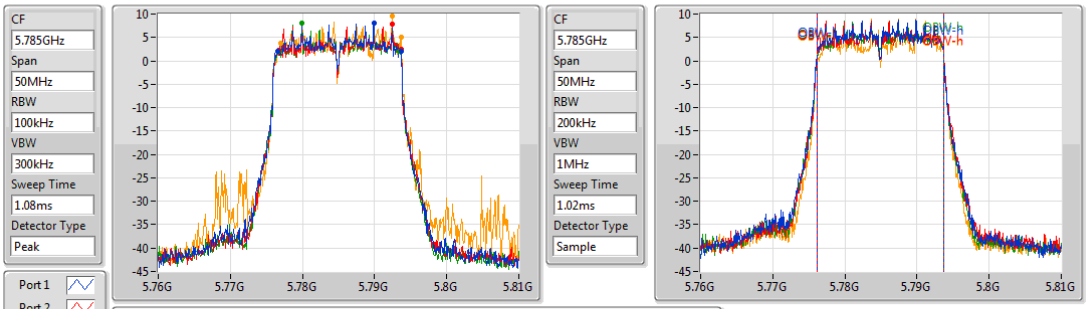
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.029M	5.736522G	5.753551G	17.583M	5.7361G	5.753683G	500k	1
17.174M	5.736087G	5.753261G	17.656M	5.736027G	5.753683G	500k	2
17.609M	5.736087G	5.753696G	17.656M	5.736027G	5.753683G	500k	3
17.101M	5.736377G	5.753478G	17.583M	5.7361G	5.753683G	500k	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

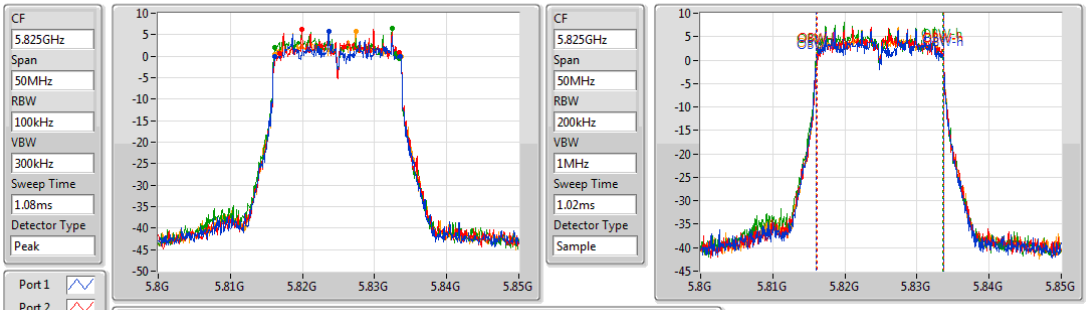
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.174M	5.776522G	5.793696G	17.583M	5.7761G	5.793683G	500k	1
16.957M	5.776739G	5.793696G	17.656M	5.7761G	5.793755G	500k	2
16.812M	5.776667G	5.793478G	17.583M	5.7761G	5.793683G	500k	3
16.667M	5.777029G	5.793696G	17.656M	5.7761G	5.793755G	500k	4

802.11ac VHT20-BF_Nss1,(MCS0)_4TX EBW

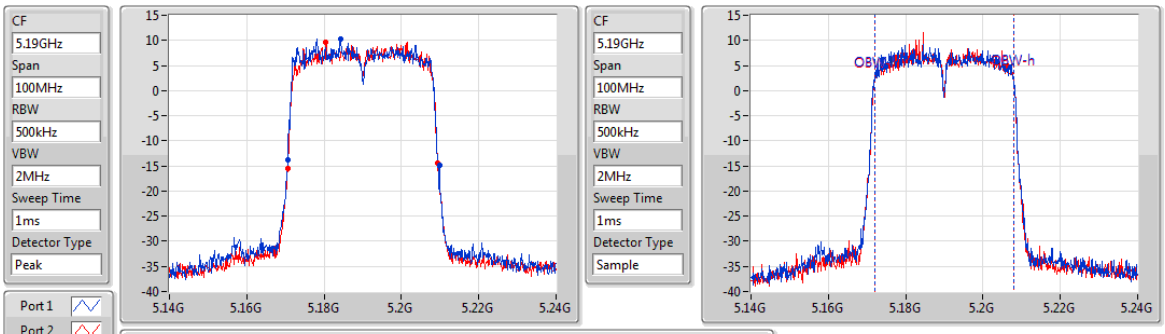
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.536M	5.816087G	5.833623G	17.656M	5.816027G	5.833683G	500k	1
16.594M	5.816812G	5.833406G	17.583M	5.8161G	5.833683G	500k	2
16.884M	5.816087G	5.832971G	17.583M	5.816027G	5.833611G	500k	3
17.609M	5.816087G	5.833696G	17.656M	5.816027G	5.833683G	500k	4

802.11ac VHT40-BF_Nss1,(MCS0)_2TX EBW

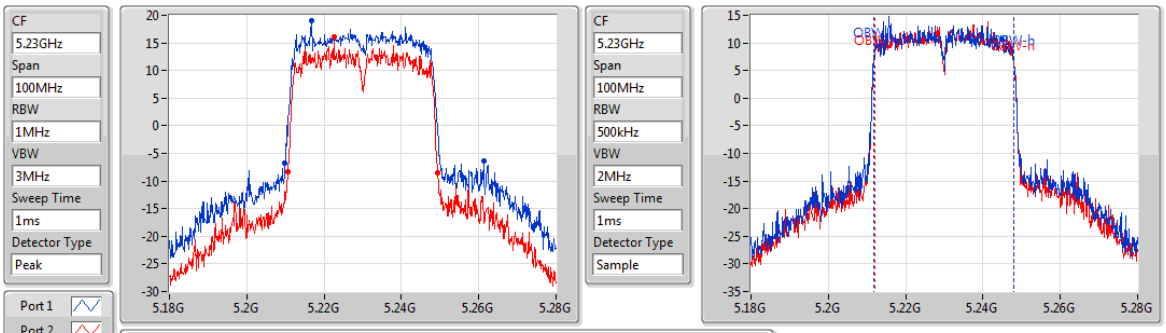
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.275M	5.17058G	5.209855G	36.035M	5.17191G	5.207945G	Inf	1
38.841M	5.17058G	5.20942G	36.035M	5.17191G	5.207945G	Inf	2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX EBW

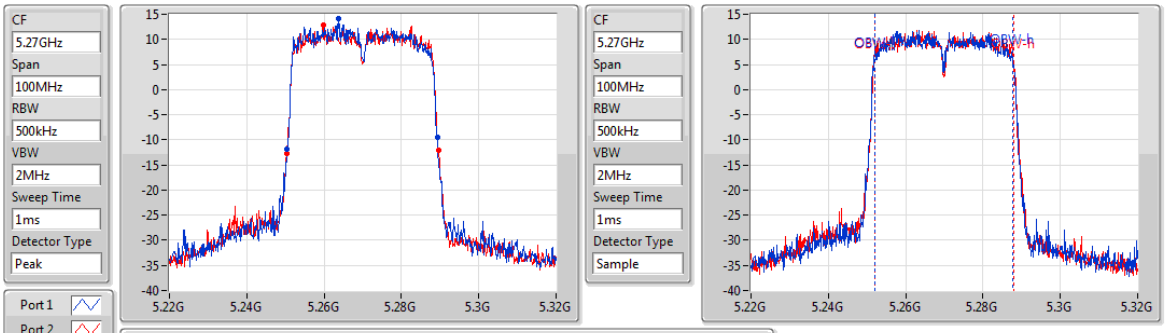
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
51.449M	5.209855G	5.261304G	36.179M	5.211766G	5.247945G	Inf	1
38.841M	5.21058G	5.24942G	36.179M	5.21191G	5.24809G	Inf	2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX EBW

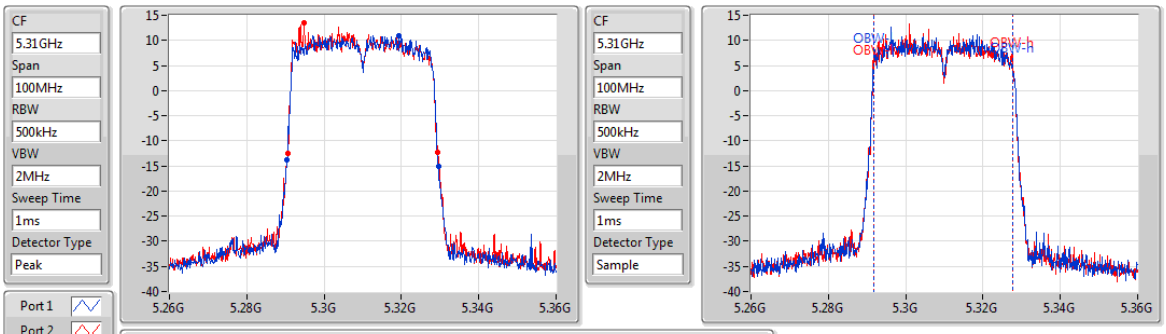
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
38.841M	5.250435G	5.289275G	35.89M	5.25191G	5.2878G	Inf	1
39.42M	5.25029G	5.28971G	36.035M	5.25191G	5.287945G	Inf	2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX EBW

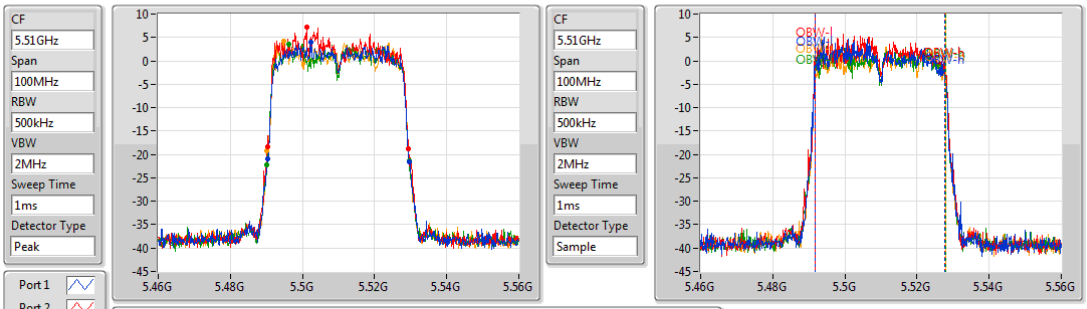
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.275M	5.29029G	5.329565G	36.035M	5.291766G	5.3278G	Inf	1
38.696M	5.290725G	5.32942G	36.035M	5.291766G	5.3278G	Inf	2

802.11ac VHT40-BF_Nss1,(MCS0)_4TX EBW

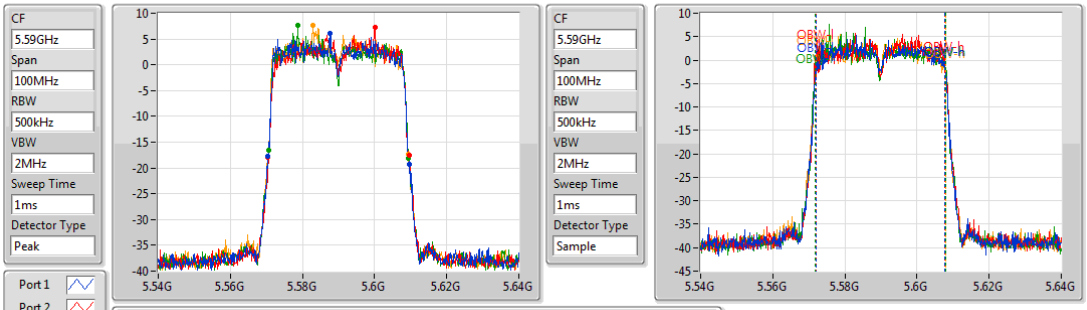
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.275M	5.490435G	5.52971G	36.035M	5.491766G	5.5278G	Inf	1
39.13M	5.49029G	5.52942G	36.035M	5.491766G	5.5278G	Inf	2
39.42M	5.490145G	5.529565G	36.179M	5.491766G	5.527945G	Inf	3
39.565M	5.490145G	5.52971G	36.179M	5.491766G	5.527945G	Inf	4

802.11ac VHT40-BF_Nss1,(MCS0)_4TX EBW

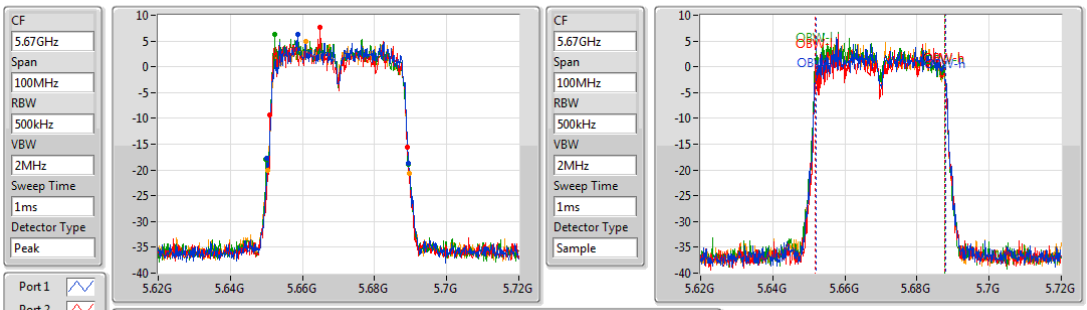
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.42M	5.57029G	5.60971G	35.745M	5.572055G	5.6078G	Inf	1
39.275M	5.570435G	5.60971G	35.89M	5.57191G	5.6078G	Inf	2
38.696M	5.570725G	5.60942G	36.179M	5.571766G	5.607945G	Inf	3
38.696M	5.570725G	5.60942G	36.035M	5.57191G	5.607945G	Inf	4

802.11ac VHT40-BF_Nss1,(MCS0)_4TX EBW

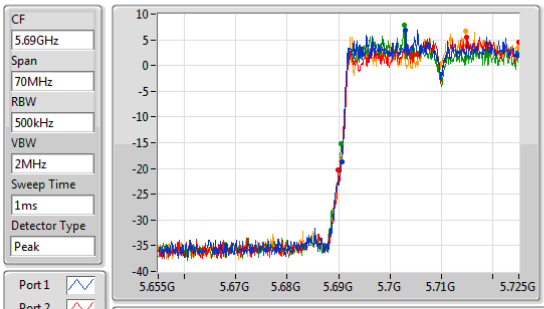
5670MHz

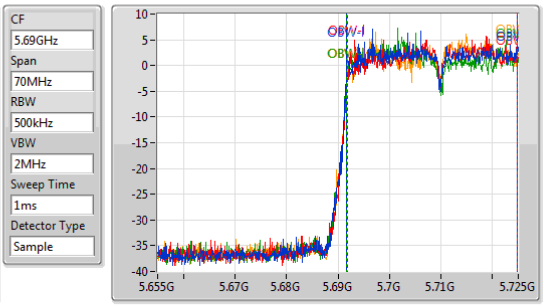


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.275M	5.650145G	5.68942G	36.035M	5.65191G	5.687945G	Inf	1
38.116M	5.651014G	5.68913G	36.035M	5.651766G	5.6878G	Inf	2
39.565M	5.649855G	5.68942G	36.035M	5.651766G	5.6878G	Inf	3
39.42M	5.65029G	5.68971G	36.035M	5.651766G	5.6878G	Inf	4

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **EBW**

5710MHz Straddle 5.47-5.725GHz

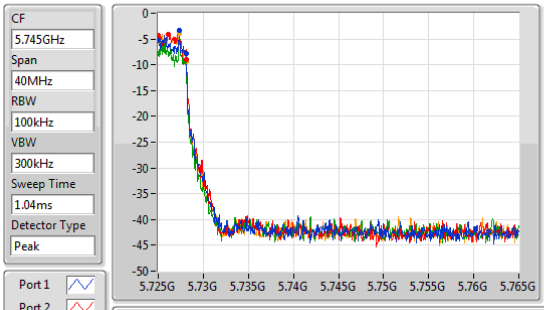


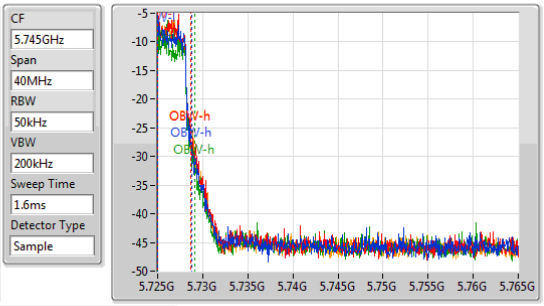


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.391M	5.690609G	5.725G	33.126M	5.691722G	5.724848G	Inf	1
35.101M	5.689899G	5.725G	33.025M	5.691823G	5.724848G	Inf	2
34.594M	5.690406G	5.725G	33.126M	5.691722G	5.724848G	Inf	3
34.594M	5.690406G	5.725G	33.025M	5.691823G	5.724848G	Inf	4

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **EBW**

5710MHz Straddle 5.725-5.85GHz

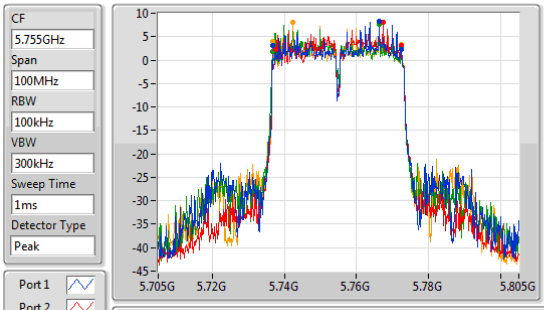


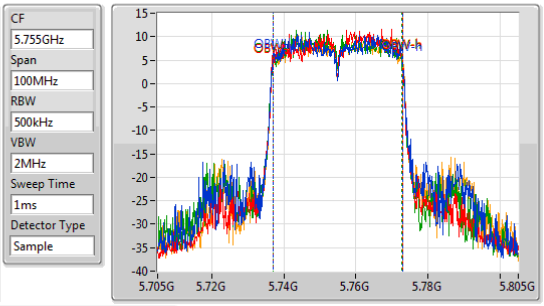


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.072M	5.725G	5.728072G	3.763M	5.725029G	5.728792G	500k	1
3.13M	5.725G	5.72813G	3.647M	5.725029G	5.728676G	500k	2
2.899M	5.725G	5.727899G	4.11M	5.725029G	5.729139G	500k	3
3.13M	5.725G	5.72813G	3.647M	5.725029G	5.728676G	500k	4

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **EBW**

5755MHz

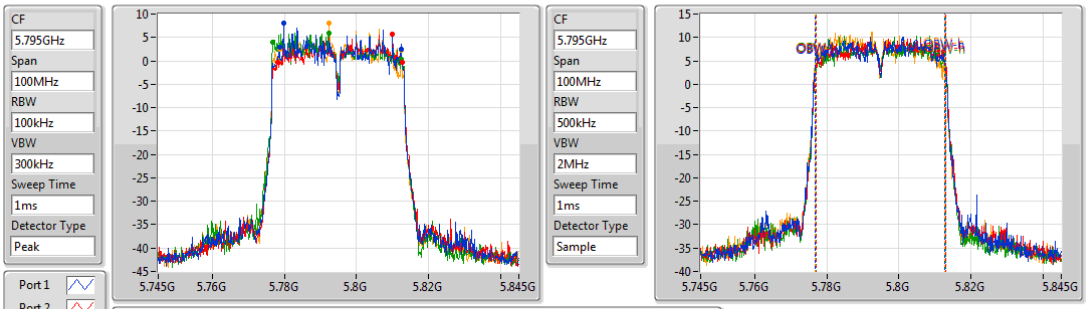




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.652M	5.736884G	5.772536G	36.035M	5.73691G	5.772945G	500k	1
34.783M	5.737609G	5.772391G	36.035M	5.73691G	5.772945G	500k	2
35.652M	5.736739G	5.772391G	35.89M	5.73691G	5.7728G	500k	3
35.652M	5.736739G	5.772391G	36.179M	5.73691G	5.77309G	500k	4

802.11ac VHT40-BF_Nss1,(MCS0)_4TX EBW

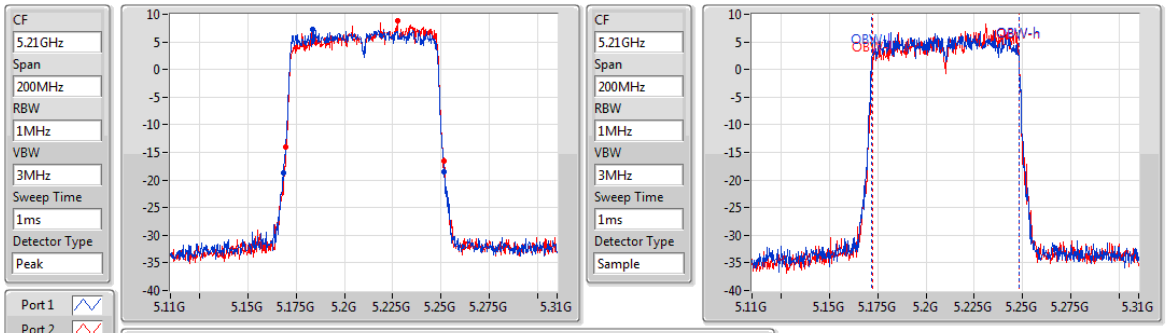
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.913M	5.778623G	5.812536G	36.035M	5.776766G	5.8128G	500k	1
34.493M	5.778188G	5.812681G	36.035M	5.77691G	5.812945G	500k	2
35.797M	5.776739G	5.812536G	36.035M	5.77691G	5.812945G	500k	3
33.913M	5.778623G	5.812536G	36.035M	5.776766G	5.8128G	500k	4

802.11ac VHT80-BF_Nss1,(MCS0)_2TX EBW

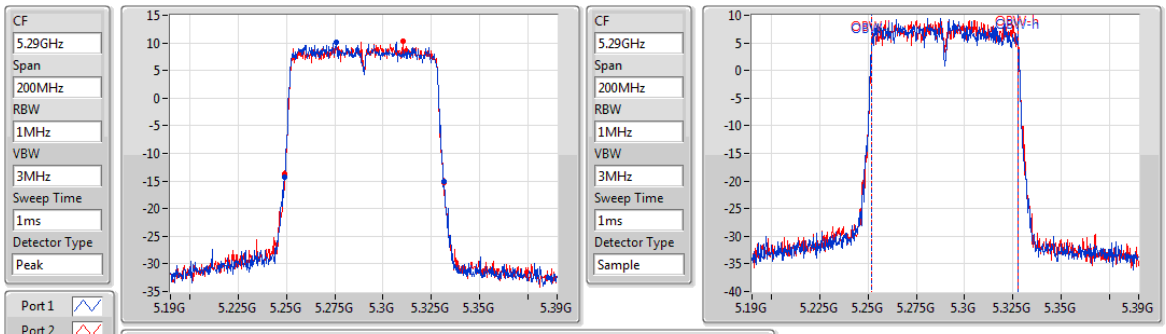
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.188M	5.168551G	5.251739G	75.832M	5.172084G	5.247916G	Inf	1
82.029M	5.16971G	5.251739G	75.543M	5.172373G	5.247916G	Inf	2

802.11ac VHT80-BF_Nss1,(MCS0)_2TX EBW

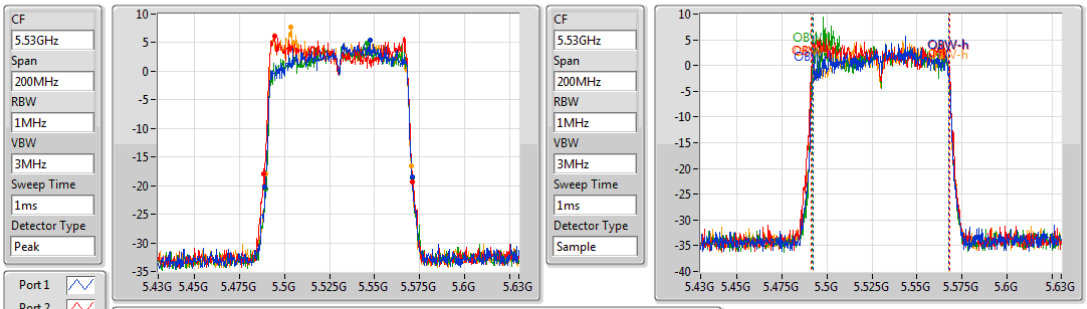
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.609M	5.248841G	5.331449G	75.832M	5.251795G	5.327627G	Inf	1
82.319M	5.24913G	5.331449G	75.543M	5.252084G	5.327627G	Inf	2

802.11ac VHT80-BF_Nss1,(MCS0)_4TX EBW

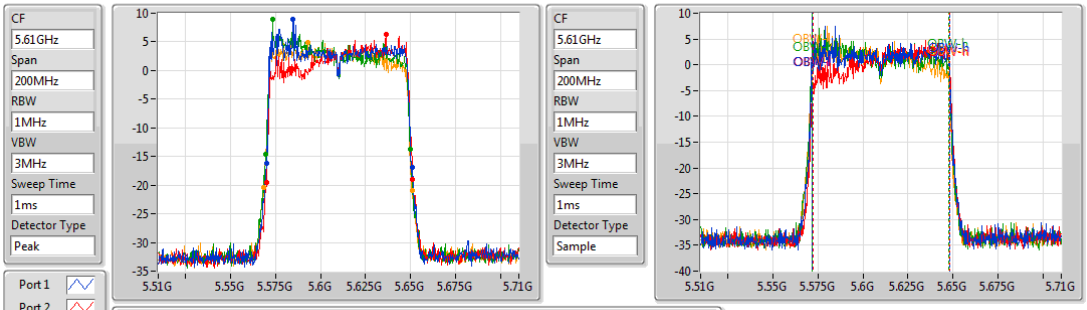
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.48913G	5.57087G	75.253M	5.492373G	5.567627G	Inf	1
82.899M	5.488261G	5.571159G	76.411M	5.491505G	5.567916G	Inf	2
81.739M	5.48942G	5.571159G	75.832M	5.491795G	5.567627G	Inf	3
80.87M	5.48971G	5.57058G	75.253M	5.492373G	5.567627G	Inf	4

802.11ac VHT80-BF_Nss1,(MCS0)_4TX EBW

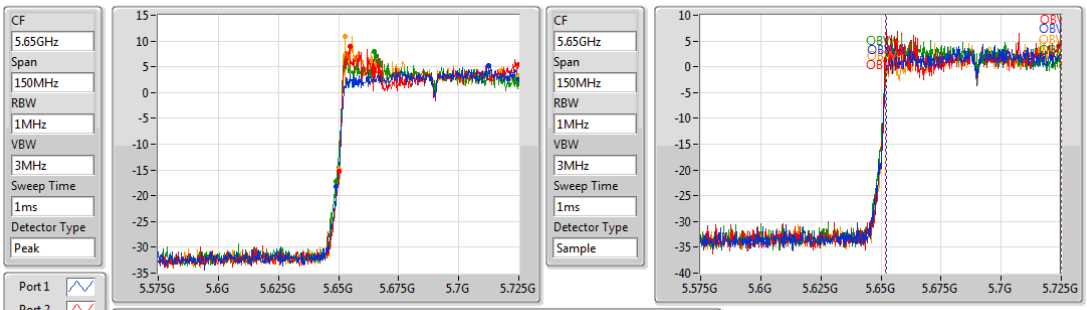
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.87M	5.57G	5.65087G	76.122M	5.571795G	5.647916G	Inf	1
81.159M	5.57G	5.651159G	75.543M	5.572663G	5.648205G	Inf	2
80.58M	5.56942G	5.65G	75.832M	5.571795G	5.647627G	Inf	3
82.319M	5.568551G	5.65087G	75.543M	5.571795G	5.647337G	Inf	4

802.11ac VHT80-BF_Nss1,(MCS0)_4TX EBW

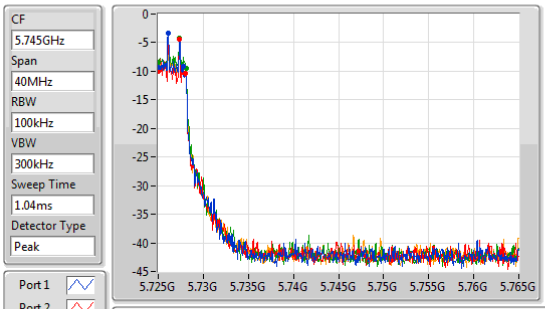
5690MHz Straddle 5.47-5.725GHz

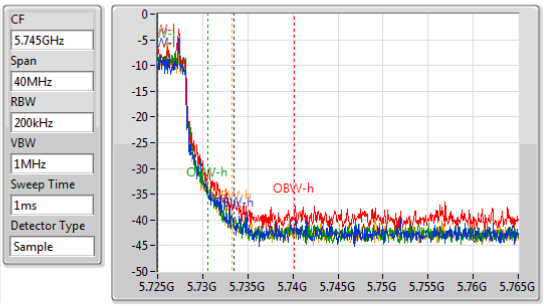


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.87M	5.64913G	5.725G	72.504M	5.652171G	5.724674G	Inf	1
74.783M	5.650217G	5.725G	73.155M	5.651737G	5.724891G	Inf	2
76.087M	5.648913G	5.725G	72.504M	5.651954G	5.724457G	Inf	3
74.783M	5.650217G	5.725G	72.287M	5.652171G	5.724457G	Inf	4

802.11ac VHT80-BF_Nss1,(MCS0)_4TX **EBW**

5690MHz Straddle 5.725-5.85GHz

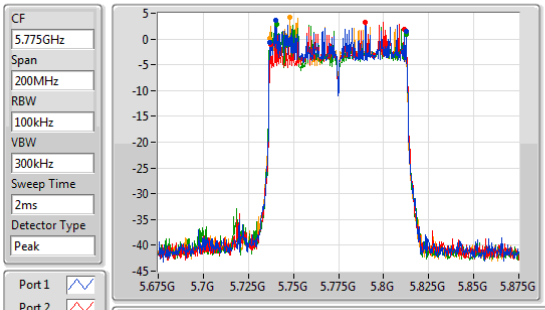


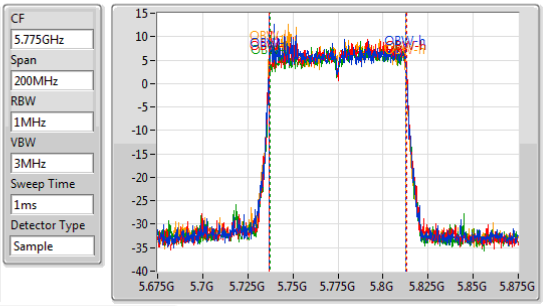


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
2.783M	5.725G	5.727783G	8.452M	5.725029G	5.73348G	500k	1
3.014M	5.725G	5.728014G	15.166M	5.725029G	5.740195G	500k	2
3.072M	5.725G	5.728072G	5.557M	5.725029G	5.730586G	500k	3
3.072M	5.725G	5.728072G	8.22M	5.725029G	5.733249G	500k	4

802.11ac VHT80-BF_Nss1,(MCS0)_4TX **EBW**

5775MHz





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.362M	5.737029G	5.812391G	75.543M	5.737084G	5.812627G	500k	1
73.913M	5.737319G	5.811232G	75.832M	5.737084G	5.812916G	500k	2
75.652M	5.736739G	5.812391G	75.543M	5.737373G	5.812916G	500k	3
75.362M	5.737029G	5.812391G	75.543M	5.736795G	5.812337G	500k	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	250mW or 11dBm+10 log B
☒	5470 ~ 5725	250mW or 11dBm+10 log B
☒	5725 ~ 5850	1 W
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

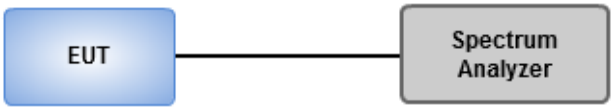
Method PM-G (Measurement using a gated RF average power meter)

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)_2TX	27.33	0.54075	30.34	1.08143
802.11ac VHT20_Nss1,(MCS0)_2TX	27.38	0.54702	30.39	1.09396
802.11ac VHT40_Nss1,(MCS0)_2TX	25.68	0.36983	28.69	0.73961
802.11ac VHT80_Nss1,(MCS0)_2TX	19.25	0.08414	22.26	0.16827
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	23.27	0.21232	26.28	0.42462
802.11ac VHT20_Nss1,(MCS0)_2TX	23.33	0.21528	26.34	0.43053
802.11ac VHT40_Nss1,(MCS0)_2TX	23.59	0.22856	26.60	0.45709
802.11ac VHT80_Nss1,(MCS0)_2TX	21.68	0.14723	24.69	0.29444
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.25	0.08414	25.32	0.34041
802.11ac VHT20_Nss1,(MCS0)_4TX	19.35	0.08610	25.42	0.34834
802.11ac VHT40_Nss1,(MCS0)_4TX	22.10	0.16218	28.17	0.65615
802.11ac VHT80_Nss1,(MCS0)_4TX	23.46	0.22182	29.53	0.89743
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.61	0.45814	32.68	1.85353
802.11ac VHT20_Nss1,(MCS0)_4TX	26.74	0.47206	32.81	1.90985
802.11ac VHT40_Nss1,(MCS0)_4TX	27.24	0.52966	33.31	2.14289
802.11ac VHT80_Nss1,(MCS0)_4TX	23.78	0.23878	29.85	0.96605

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)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	3.01	20.81	20.47			23.65	30.00	26.66	36.00
5200MHz	Pass	3.01	24.35	24.29			27.33	30.00	30.34	36.00
5240MHz	Pass	3.01	23.52	23.43			26.49	30.00	29.50	36.00
5260MHz	Pass	3.01	20.3	20.21			23.27	23.77	26.28	29.77
5300MHz	Pass	3.01	20.13	20.02			23.09	23.73	26.10	29.73
5320MHz	Pass	3.01	20.11	20.03			23.08	23.72	26.09	29.72
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	6.07	13.34	13.05	13.21	13.1	19.20	23.73	25.27	29.80
5580MHz	Pass	6.07	13.3	13.1	13.2	13.05	19.18	23.73	25.25	29.80
5700MHz	Pass	6.07	13.42	13.2	13.25	13.05	19.25	23.78	25.32	29.85
5720MHz Straddle 5.47-5.725GHz	Pass	6.07	12.54	11.44	12.29	12.03	18.11	22.68	24.18	28.75
5720MHz Straddle 5.725-5.85GHz	Pass	6.07	5.96	5.12	5.99	5.19	11.61	29.93	17.68	36.00
5745MHz	Pass	6.07	20.85	20.71	20.59	20.16	26.61	29.93	32.68	36.00
5785MHz	Pass	6.07	20.71	20.59	20.43	20.22	26.51	29.93	32.58	36.00
5825MHz	Pass	6.07	19.89	19.56	19.62	19.96	25.78	29.93	31.85	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	3.01	20.86	20.51			23.70	30.00	26.71	36.00
5200MHz	Pass	3.01	24.42	24.31			27.38	30.00	30.39	36.00
5240MHz	Pass	3.01	23.62	23.48			26.56	30.00	29.57	36.00
5260MHz	Pass	3.01	20.35	20.29			23.33	23.95	26.34	29.95
5300MHz	Pass	3.01	20.15	20.12			23.15	23.96	26.16	29.96
5320MHz	Pass	3.01	20.12	20.07			23.11	23.96	26.12	29.96
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	6.07	13.36	13.16	13.52	13.25	19.35	23.86	25.42	29.93
5580MHz	Pass	6.07	13.27	13.02	13.11	12.95	19.11	23.93	25.18	30.00
5700MHz	Pass	6.07	13.19	12.82	13.03	12.75	18.97	23.93	25.04	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.07	12.61	11.6	12.44	12.32	18.28	22.68	24.35	28.75
5720MHz Straddle 5.725-5.85GHz	Pass	6.07	6.45	5.82	6.64	5.92	12.24	29.93	18.31	36.00
5745MHz	Pass	6.07	20.74	20.53	20.52	20.29	26.54	29.93	32.61	36.00
5785MHz	Pass	6.07	21.01	20.72	20.61	20.53	26.74	29.93	32.81	36.00
5825MHz	Pass	6.07	19.7	19.38	19.45	19.77	25.60	29.93	31.67	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	3.01	18.25	18.12			21.20	30.00	24.21	36.00
5230MHz	Pass	3.01	22.71	22.63			25.68	30.00	28.69	36.00

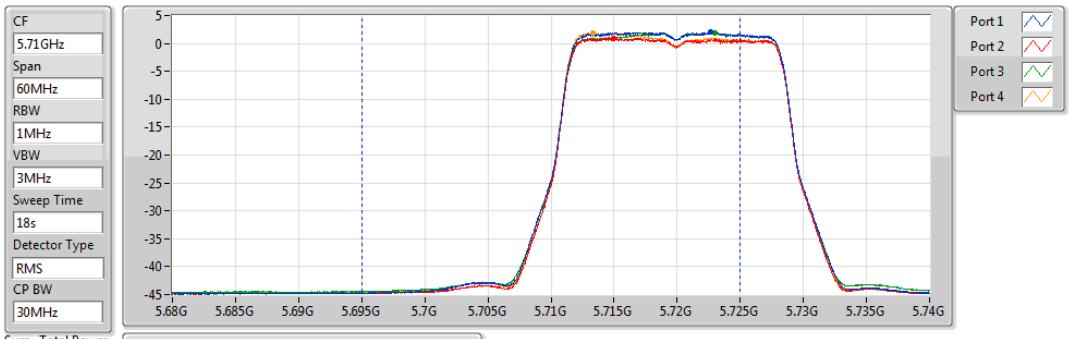
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5270MHz	Pass	3.01	20.61	20.54			23.59	24.00	26.60	30.00
5310MHz	Pass	3.01	20.1	20.07			23.10	24.00	26.11	30.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	6.07	15.94	15.66	15.83	15.99	21.88	23.93	27.95	30.00
5590MHz	Pass	6.07	16.12	16.05	16.02	16.13	22.10	23.93	28.17	30.00
5670MHz	Pass	6.07	15.88	15.98	15.82	16.03	21.95	23.93	28.02	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	6.07	15.86	15.63	16.11	15.94	21.91	23.93	27.98	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	6.07	4.43	4.36	4.38	4.09	10.34	29.93	16.41	36.00
5755MHz	Pass	6.07	21.43	21.27	21.14	21.04	27.24	29.93	33.31	36.00
5795MHz	Pass	6.07	21.11	21.22	21.05	21.16	27.16	29.93	33.23	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	3.01	16.32	16.15			19.25	30.00	22.26	36.00
5290MHz	Pass	3.01	18.71	18.62			21.68	24.00	24.69	30.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	6.07	16.82	16.54	16.65	16.96	22.77	23.93	28.84	30.00
5610MHz	Pass	6.07	17.09	17.05	17.08	17.24	23.14	23.93	29.21	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	6.07	17.24	17.18	17.83	17.49	23.46	23.93	29.53	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	6.07	3.46	3.77	3.56	2.83	9.44	29.93	15.51	36.00
5775MHz	Pass	6.07	17.96	17.82	17.67	17.56	23.78	29.93	29.85	36.00

Note:

1. DG = Directional Gain;Port X = Port X output power
2. Max Antenna gain of 5.47 ~ 5.85 GHz is 6.07 dBi > 6dBi, thus conducted power limit shall be reduced 0.07 dB (6.07 dBi – 6 dBi)

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

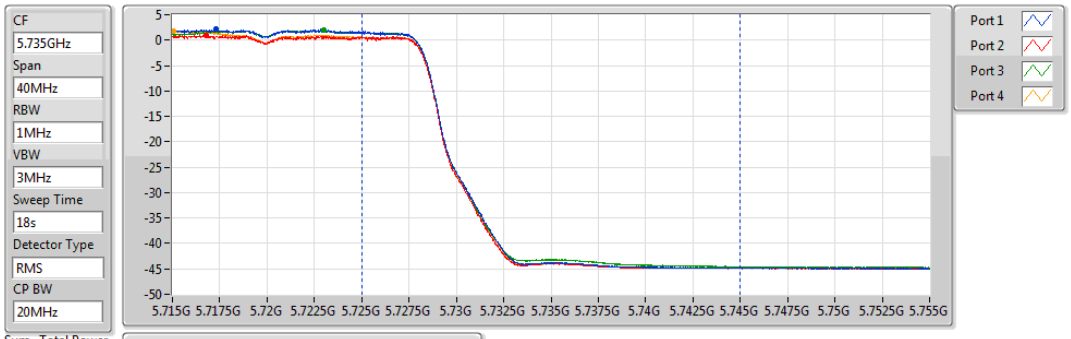
5720MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
18.11	12.54	11.44	12.29	12.03

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

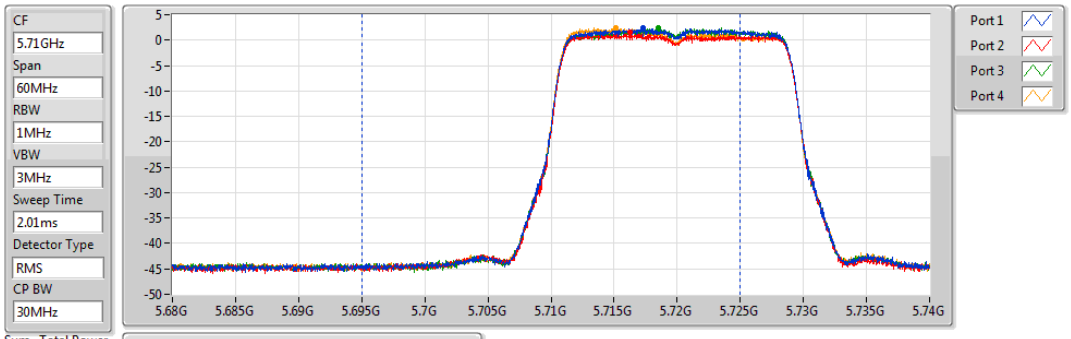
5720MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
11.61	5.96	5.12	5.99	5.19

802.11ac VHT20_Nss1,(MCS0)_4TX **AV Power**

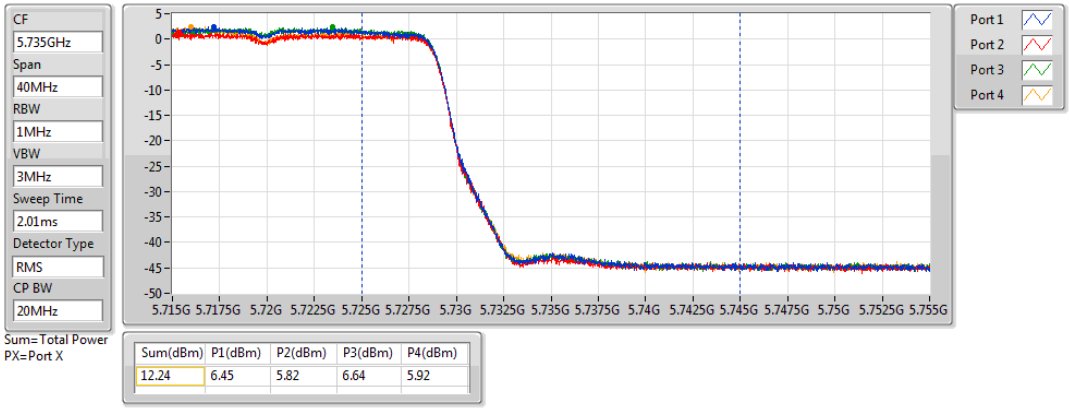
5720MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
18.28	12.61	11.60	12.44	12.32

802.11ac VHT20_Nss1,(MCS0)_4TX **AV Power**

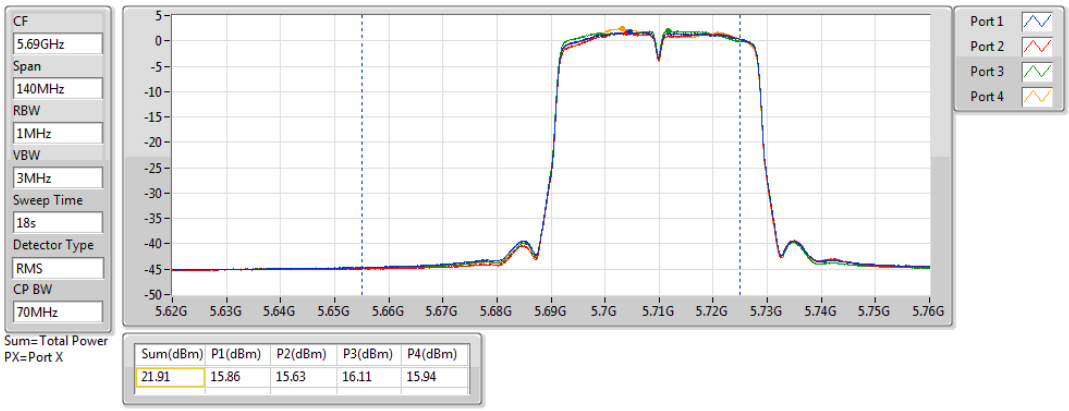
5720MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.24	6.45	5.82	6.64	5.92

802.11ac VHT40_Nss1,(MCS0)_4TX **AV Power**

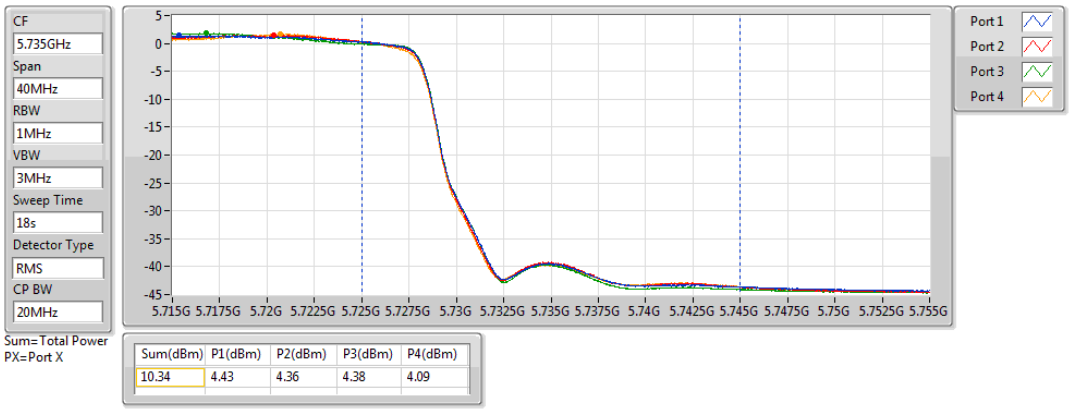
5710MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
21.91	15.86	15.63	16.11	15.94

802.11ac VHT40_Nss1,(MCS0)_4TX **AV Power**

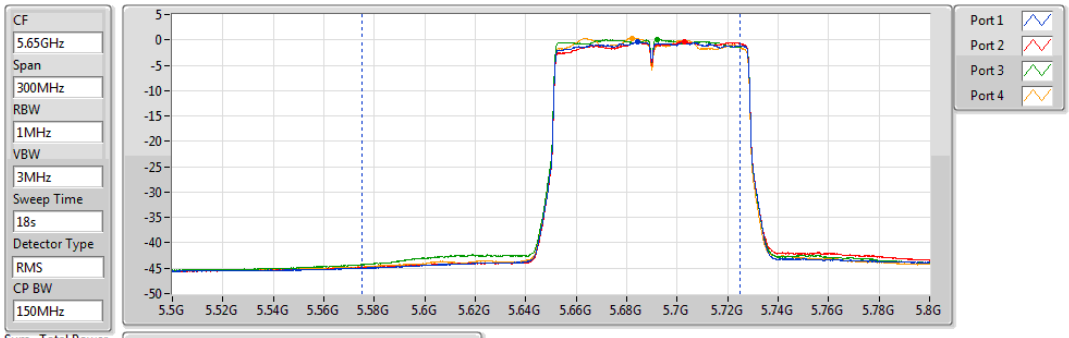
5710MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
10.34	4.43	4.36	4.38	4.09

802.11ac VHT80_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

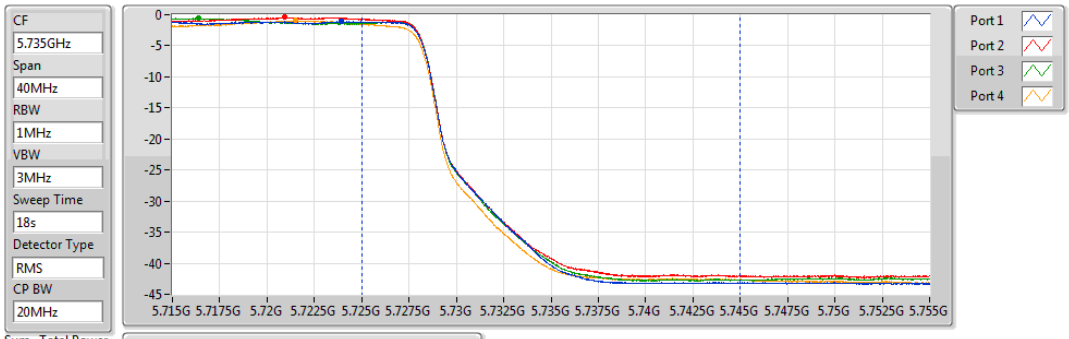


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
23.46	17.24	17.18	17.83	17.49

802.11ac VHT80_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
9.44	3.46	3.77	3.56	2.83

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	26.92	0.49204	32.40	1.73780
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	25.46	0.35156	30.94	1.24165
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	19.26	0.08433	24.74	0.29785
5.25-5.35GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.09	0.20370	28.57	0.71945
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	23.56	0.22699	29.04	0.80168
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	21.33	0.13583	26.81	0.47973
5.47-5.725GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	18.58	0.07211	28.92	0.77983
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	19.36	0.08630	29.70	0.93325
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	19.36	0.08630	29.70	0.93325
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	25.45	0.35075	35.79	3.79315
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	25.64	0.36644	35.98	3.96278
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	22.90	0.19498	33.24	2.10863

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)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.48	20.21	20.45			23.34	30.00	28.82	36.00
5200MHz	Pass	5.48	23.68	24.12			26.92	30.00	32.40	36.00
5240MHz	Pass	5.48	22.92	23.32			26.13	30.00	31.61	36.00
5260MHz	Pass	5.48	20.09	20.06			23.09	23.96	28.57	29.96
5300MHz	Pass	5.48	20.05	20.01			23.04	23.96	28.52	29.96
5320MHz	Pass	5.48	20.06	20.03			23.06	23.99	28.54	29.99
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	10.34	12.53	12.11	12.66	12.15	18.39	19.59	28.73	29.93
5580MHz	Pass	10.34	12.51	12.59	12.63	12.05	18.47	19.64	28.81	29.98
5700MHz	Pass	10.34	12.62	12.69	12.88	12.01	18.58	19.66	28.92	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.34	12.24	12.09	12.1	12.34	18.21	18.45	28.55	28.79
5720MHz Straddle 5.725-5.85GHz	Pass	10.34	6.52	6.7	5.74	6.56	12.42	25.66	22.76	36.00
5745MHz	Pass	10.34	19.85	19.38	19.42	19.01	25.45	25.66	35.79	36.00
5785MHz	Pass	10.34	19.15	18.69	18.95	18.51	24.85	25.66	35.19	36.00
5825MHz	Pass	10.34	19.14	18.76	19.06	18.98	25.01	25.66	35.35	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	5.48	17.59	17.94			20.78	30.00	26.26	36.00
5230MHz	Pass	5.48	22.41	22.49			25.46	30.00	30.94	36.00
5270MHz	Pass	5.48	20.59	20.51			23.56	24.00	29.04	30.00
5310MHz	Pass	5.48	19.69	19.6			22.66	24.00	28.14	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	10.34	13.11	13.01	13.12	13.21	19.13	19.66	29.47	30.00
5590MHz	Pass	10.34	13.13	13.45	13.22	13.34	19.31	19.66	29.65	30.00
5670MHz	Pass	10.34	13.16	13.43	13.62	13.12	19.36	19.66	29.70	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	10.34	13.43	13.49	12.7	13.55	19.33	19.66	29.67	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	10.34	1.34	2.48	0.83	0.8	7.44	25.66	17.78	36.00
5755MHz	Pass	10.34	19.98	19.62	19.52	19.33	25.64	25.66	35.98	36.00
5795MHz	Pass	10.34	19.12	19.08	19.06	19.33	25.17	25.66	35.51	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	5.48	16.22	16.28			19.26	30.00	24.74	36.00
5290MHz	Pass	5.48	18.24	18.39			21.33	24.00	26.81	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-

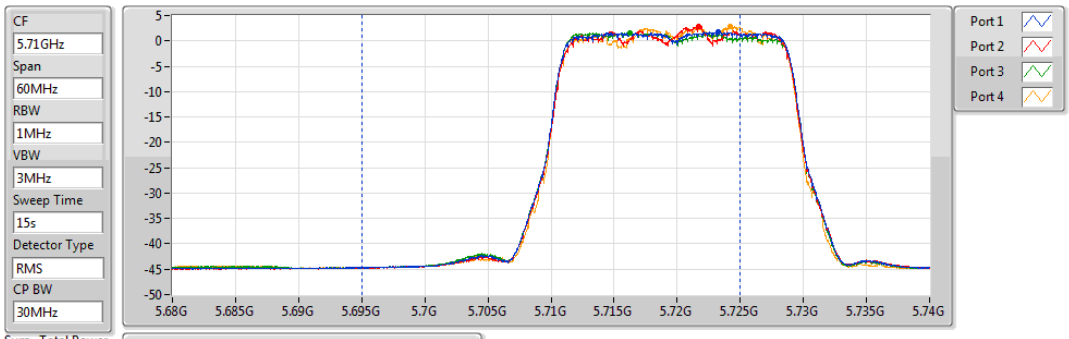
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5530MHz	Pass	10.34	13.13	13.22	13.65	13.32	19.36	19.66	29.70	30.00
5610MHz	Pass	10.34	13.33	13.25	13.41	13.31	19.35	19.66	29.69	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	10.34	13.23	12.89	13.72	12.89	19.22	19.66	29.56	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	10.34	-0.99	-2.36	-0.71	-1.12	4.77	25.66	15.11	36.00
5775MHz	Pass	10.34	17.12	16.92	16.72	16.76	22.90	25.66	33.24	36.00

Note:

1. DG = Directional Gain;Port X = Port X output power
2. Directional gain of 5.15 ~ 5.35 GHz
   Directional gain = $10 * \log((10^{3.01/20}+10^{1.89/20})^2/2) = 5.48$ dBi
   Directional gain of 5.47 ~ 5.85 GHz
   Directional gain = $10 * \log((10^{3.23/20}+10^{4.2/20}+10^{6.07/20}+10^{3.5/20})^2/4) = 10.34$ dBi > 6 dBi
   Limit shall be reduced to 4.34 dB (10.34 dBi – 6 dBi)

802.11ac VHT20-BF_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.47-5.725GHz

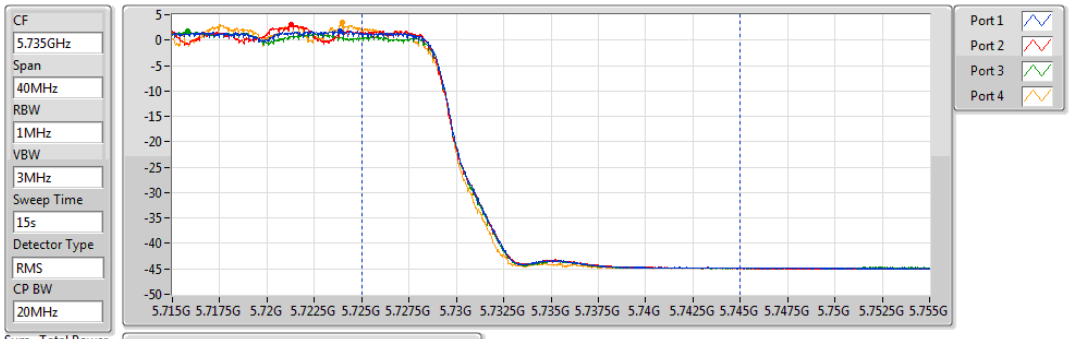


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
18.21	12.24	12.09	12.10	12.34

802.11ac VHT20-BF_Nss1,(MCS0)_4TX **AV Power**

5720MHz Straddle 5.725-5.85GHz

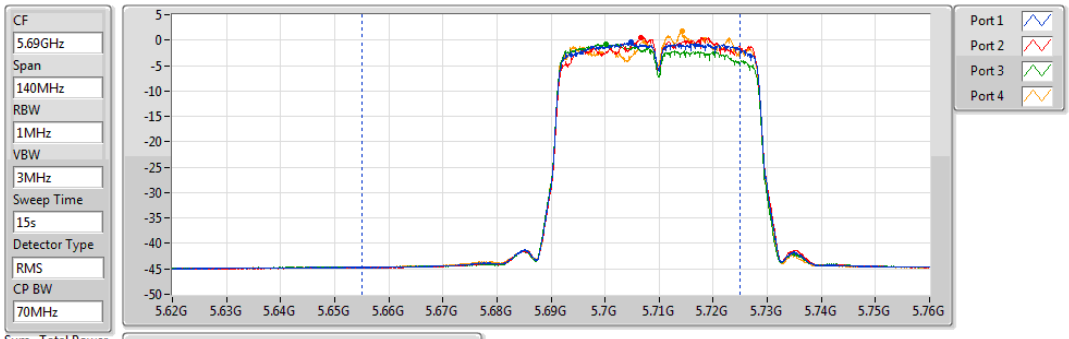


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
12.42	6.52	6.70	5.74	6.56

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.47-5.725GHz

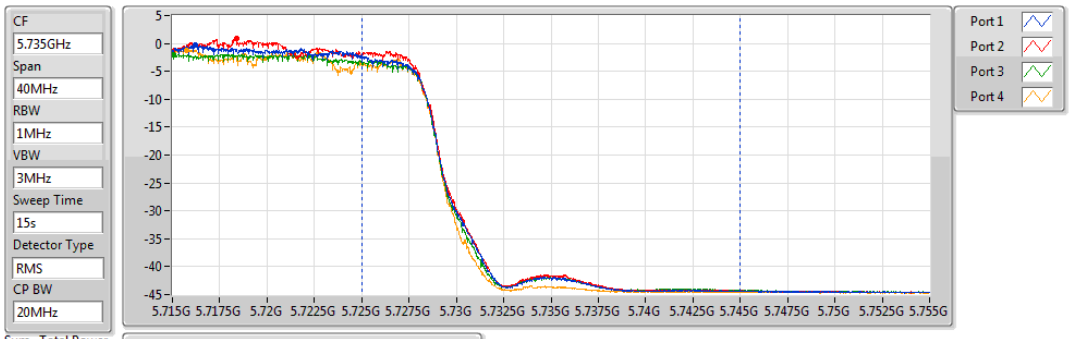


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
19.33	13.43	13.49	12.70	13.55

802.11ac VHT40-BF_Nss1,(MCS0)_4TX **AV Power**

5710MHz Straddle 5.725-5.85GHz

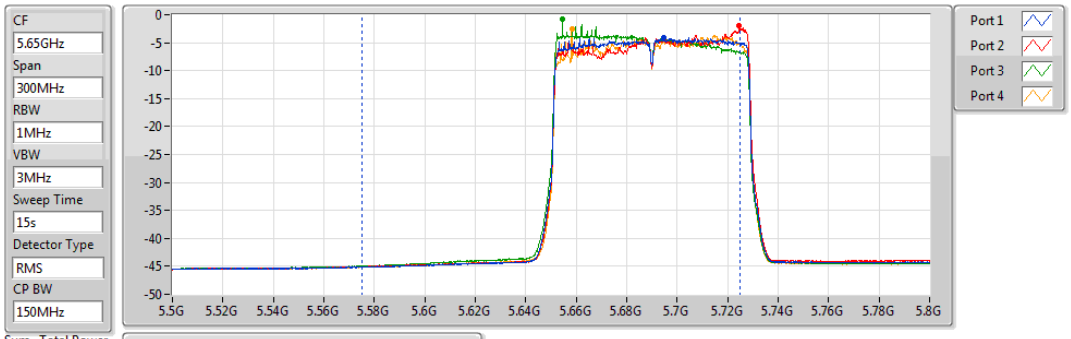


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
7.44	1.34	2.48	0.83	0.80

802.11ac VHT80-BF_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.47-5.725GHz

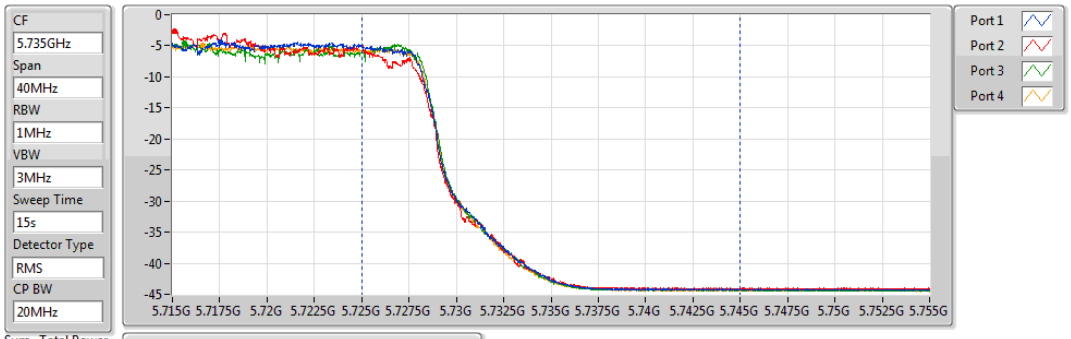


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
19.22	13.23	12.89	13.72	12.89

802.11ac VHT80-BF_Nss1,(MCS0)_4TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)	P3(dBm)	P4(dBm)
4.77	-0.99	-2.36	-0.71	-1.12

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

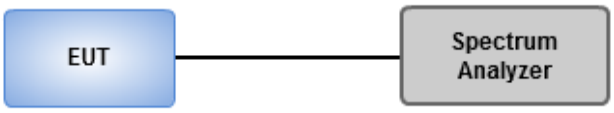
Duty cycle ≥ 98 %

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)_2TX	14.20	19.68
802.11ac VHT20_Nss1,(MCS0)_2TX	14.37	19.85
802.11ac VHT40_Nss1,(MCS0)_2TX	10.41	15.89
802.11ac VHT80_Nss1,(MCS0)_2TX	0.54	6.02
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	10.53	16.01
802.11ac VHT20_Nss1,(MCS0)_2TX	10.77	16.25
802.11ac VHT40_Nss1,(MCS0)_2TX	7.88	13.36
802.11ac VHT80_Nss1,(MCS0)_2TX	2.64	8.12
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	6.51	16.85
802.11ac VHT20_Nss1,(MCS0)_4TX	6.46	16.80
802.11ac VHT40_Nss1,(MCS0)_4TX	6.41	16.75
802.11ac VHT80_Nss1,(MCS0)_4TX	3.95	14.29
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	13.00	23.34
802.11ac VHT20_Nss1,(MCS0)_4TX	12.65	22.99
802.11ac VHT40_Nss1,(MCS0)_4TX	10.36	20.70
802.11ac VHT80_Nss1,(MCS0)_4TX	3.62	13.96

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

Result

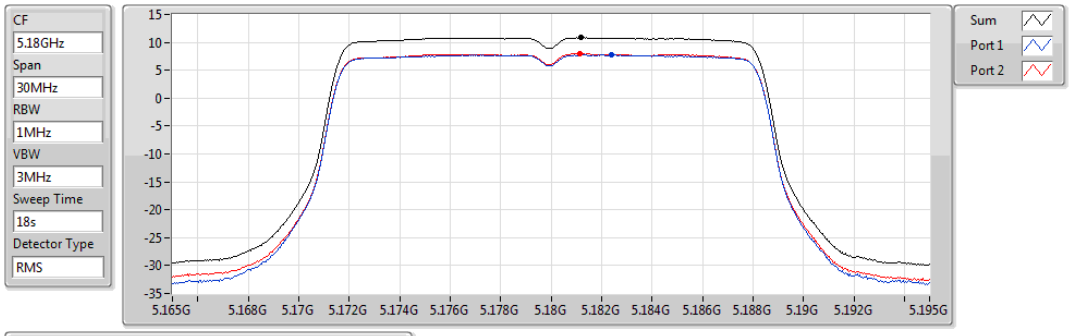
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.48	7.75	7.95			10.83	17.00	16.31	23.00
5200MHz	Pass	5.48	11.15	11.27			14.20	17.00	19.68	23.00
5240MHz	Pass	5.48	10.52	10.46			13.50	17.00	18.98	23.00
5260MHz	Pass	5.48	7.97	7.04			10.53	11.00	16.01	17.00
5300MHz	Pass	5.48	7.90	6.92			10.42	11.00	15.90	17.00
5320MHz	Pass	5.48	8.04	6.59			10.36	11.00	15.84	17.00
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	10.34	0.44	0.45	0.36	0.44	6.33	6.66	16.67	17.00
5580MHz	Pass	10.34	0.79	0.17	0.80	0.31	6.20	6.66	16.54	17.00
5700MHz	Pass	10.34	0.86	0.30	1.26	0.86	6.51	6.66	16.85	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.34	0.60	-0.25	0.76	0.25	6.09	6.66	16.43	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	10.34	-1.37	-2.39	-1.43	-2.50	4.10	25.66	14.44	36.00
5745MHz	Pass	10.34	7.15	6.65	7.17	6.34	12.71	25.66	23.05	36.00
5785MHz	Pass	10.34	7.51	6.92	7.26	6.65	13.00	25.66	23.34	36.00
5825MHz	Pass	10.34	5.98	5.43	6.12	6.10	11.72	25.66	22.06	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.48	8.06	8.28			11.00	17.00	16.48	23.00
5200MHz	Pass	5.48	11.37	11.60			14.37	17.00	19.85	23.00
5240MHz	Pass	5.48	10.84	10.91			13.60	17.00	19.08	23.00
5260MHz	Pass	5.48	8.48	7.31			10.77	11.00	16.25	17.00
5300MHz	Pass	5.48	8.27	7.19			10.58	11.00	16.06	17.00
5320MHz	Pass	5.48	8.29	6.96			10.44	11.00	15.92	17.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	10.34	0.58	0.83	0.79	0.93	6.46	6.66	16.80	17.00
5580MHz	Pass	10.34	1.28	0.63	1.20	0.85	6.32	6.66	16.66	17.00
5700MHz	Pass	10.34	0.64	0.19	1.00	0.55	6.16	6.66	16.50	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.34	0.77	-0.09	0.94	0.47	6.19	6.66	16.53	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	10.34	-1.04	-2.36	-1.21	-2.35	4.10	25.66	14.44	36.00
5745MHz	Pass	10.34	7.13	6.62	7.18	6.37	12.34	25.66	22.68	36.00
5785MHz	Pass	10.34	7.47	6.97	7.13	6.70	12.65	25.66	22.99	36.00
5825MHz	Pass	10.34	5.79	5.34	6.34	6.22	11.41	25.66	21.75	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	5.48	2.43	2.82			5.63	17.00	11.11	23.00
5230MHz	Pass	5.48	7.29	7.51			10.41	17.00	15.89	23.00

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)
5270MHz	Pass	5.48	5.05	4.69			7.88	11.00	13.36	17.00
5310MHz	Pass	5.48	4.29	4.12			7.17	11.00	12.65	17.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	10.34	0.12	0.25	0.26	0.53	6.05	6.66	16.39	17.00
5590MHz	Pass	10.34	0.51	0.53	0.92	0.71	6.41	6.66	16.75	17.00
5670MHz	Pass	10.34	-0.12	0.22	0.84	0.93	6.25	6.66	16.59	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	10.34	0.20	0.32	0.76	0.59	6.23	6.66	16.57	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	10.34	-2.85	-2.64	-3.11	-2.98	3.12	25.66	13.46	36.00
5755MHz	Pass	10.34	4.50	4.22	4.33	3.99	10.13	25.66	20.47	36.00
5795MHz	Pass	10.34	4.64	4.22	4.40	4.44	10.36	25.66	20.70	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	5.48	-2.60	-2.33			0.54	17.00	6.02	23.00
5290MHz	Pass	5.48	-0.05	-0.69			2.64	11.00	8.12	17.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5530MHz	Pass	10.34	-2.70	-2.23	-2.59	-2.07	3.42	6.66	13.76	17.00
5610MHz	Pass	10.34	-2.51	-2.41	-2.08	-1.95	3.43	6.66	13.77	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	10.34	-2.34	-1.98	-1.75	-1.30	3.95	6.66	14.29	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	10.34	-4.41	-3.74	-4.22	-4.78	1.67	25.66	12.01	36.00
5775MHz	Pass	10.34	-1.93	-1.85	-2.45	-2.41	3.62	25.66	13.96	36.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;
Directional gain of 5.15 ~ 5.35 GHz
Directional gain = $10 * \log((10^{3.01/20}+10^{1.89/20})^2/2) = 5.48$ dBi
Directional gain of 5.47 ~ 5.85 GHz
Directional gain = $10 * \log((10^{3.23/20}+10^{4.2/20}+10^{6.07/20}+10^{3.5/20})^2/4) = 10.34$ dBi > 6 dBi
Limit shall be reduced to 4.34 dB (10.34 dBi – 6 dBi)

802.11a_Nss1,(6Mbps)_2TX PSD

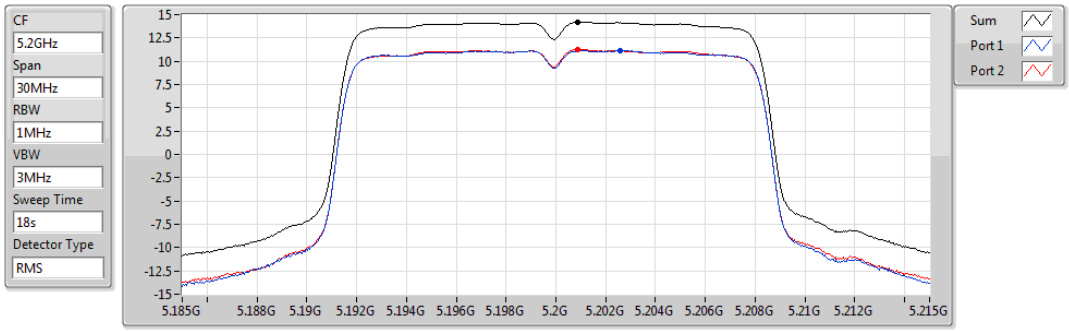
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.83	10.83	7.75	7.95

802.11a_Nss1,(6Mbps)_2TX PSD

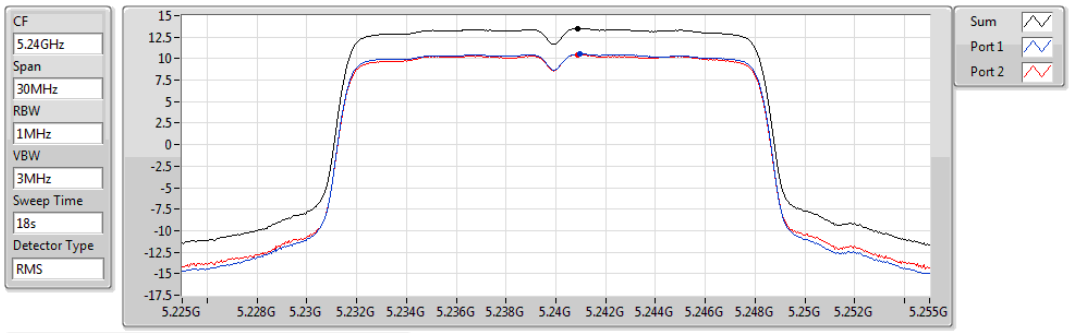
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.20	14.20	11.15	11.27

802.11a_Nss1,(6Mbps)_2TX PSD

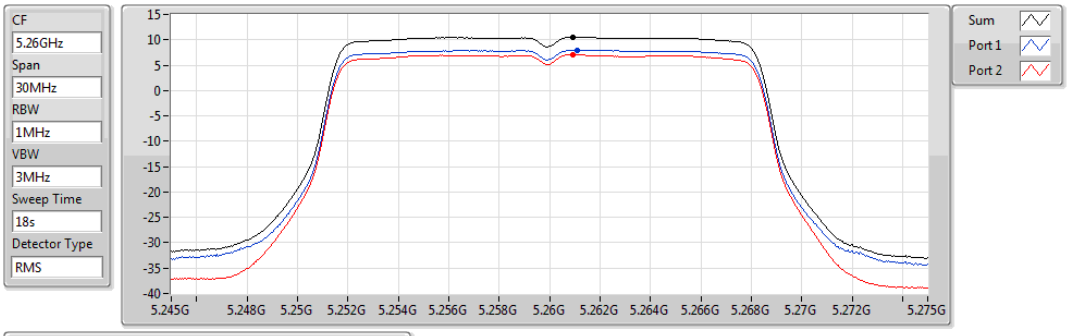
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.50	13.50	10.52	10.46

802.11a_Nss1,(6Mbps)_2TX PSD

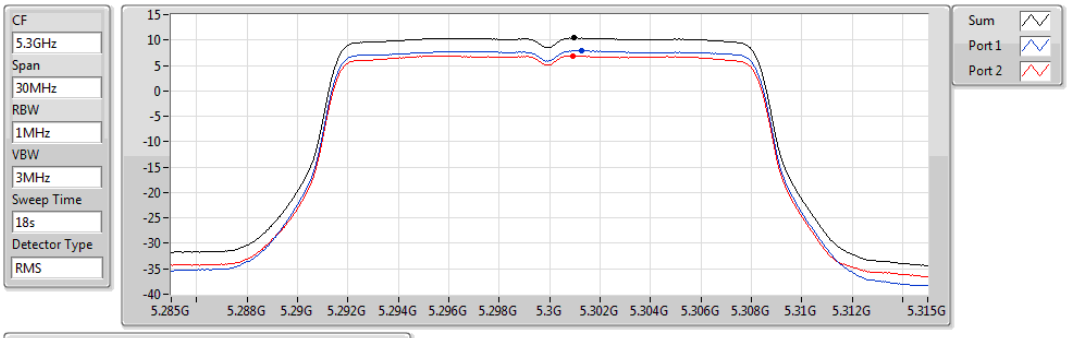
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.53	10.53	7.97	7.04

802.11a_Nss1,(6Mbps)_2TX PSD

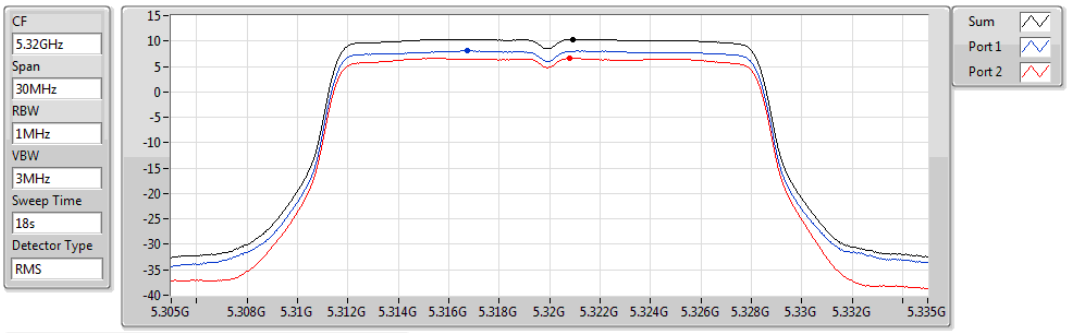
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.42	10.42	7.90	6.92

802.11a_Nss1,(6Mbps)_2TX PSD

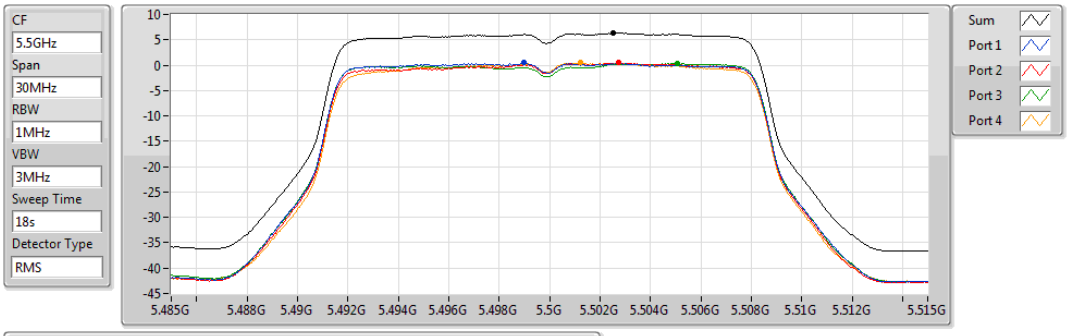
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.36	10.36	8.04	6.59

802.11a_Nss1,(6Mbps)_4TX PSD

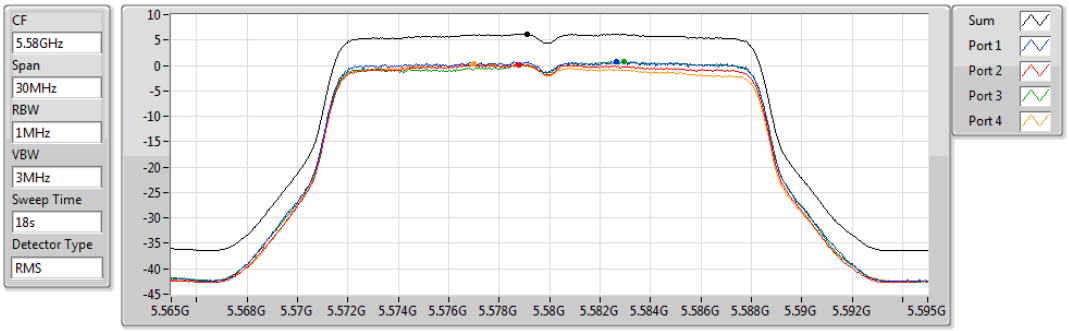
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.33	6.33	0.44	0.45	0.36	0.44

802.11a_Nss1,(6Mbps)_4TX PSD

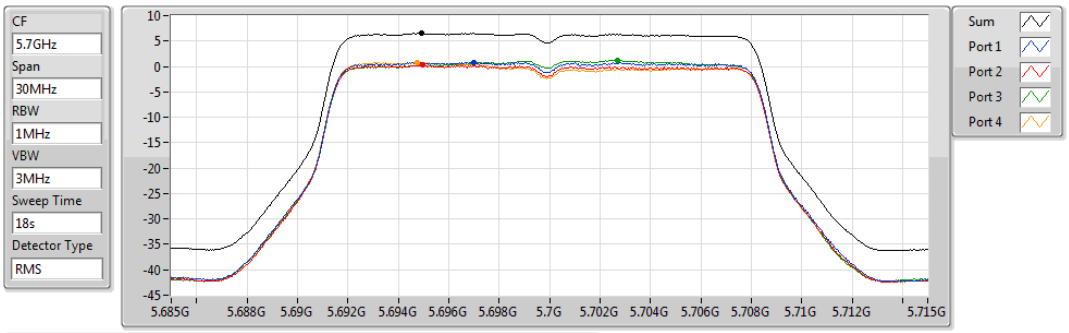
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.20	6.20	0.79	0.17	0.80	0.31

802.11a_Nss1,(6Mbps)_4TX PSD

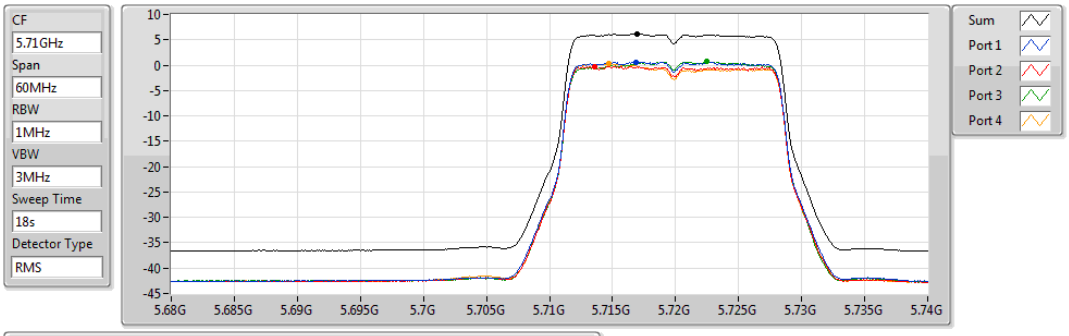
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.51	6.51	0.86	0.30	1.26	0.86

802.11a_Nss1,(6Mbps)_4TX PSD

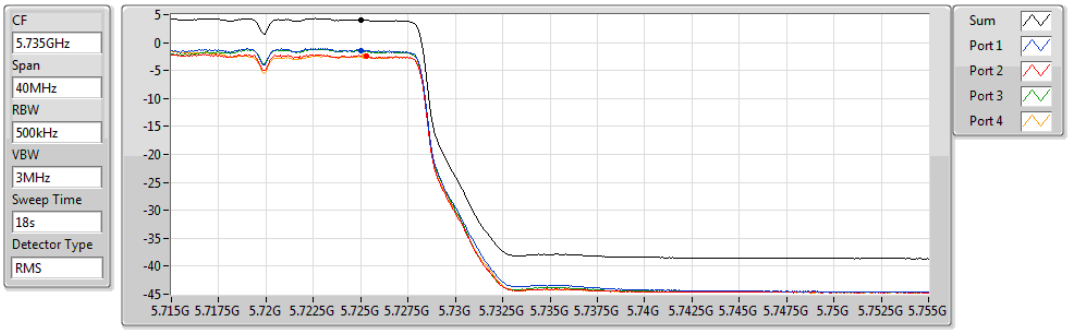
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.09	6.09	0.60	-0.25	0.76	0.25

802.11a_Nss1,(6Mbps)_4TX PSD

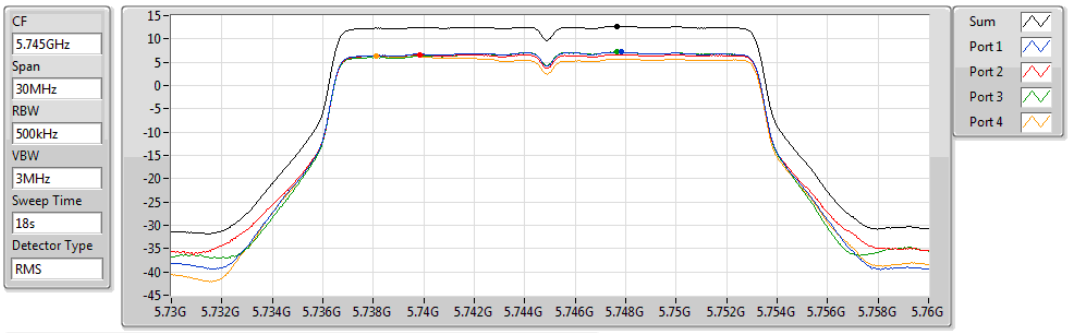
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.10	4.10	-1.37	-2.39	-1.43	-2.50

802.11a_Nss1,(6Mbps)_4TX PSD

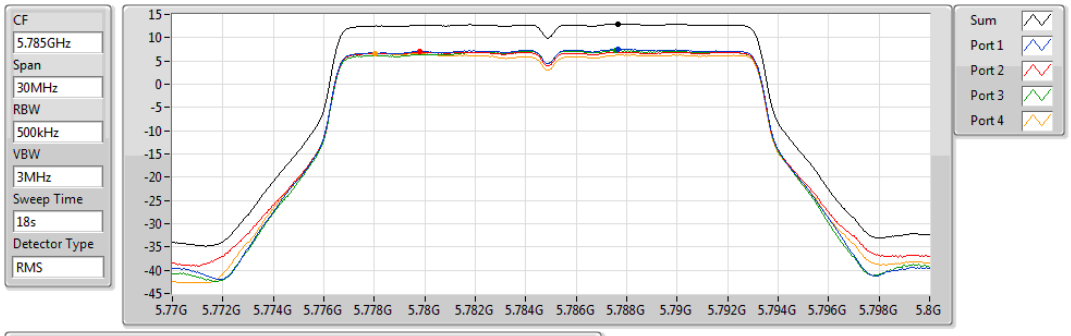
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.71	12.71	7.15	6.65	7.17	6.34

802.11a_Nss1,(6Mbps)_4TX PSD

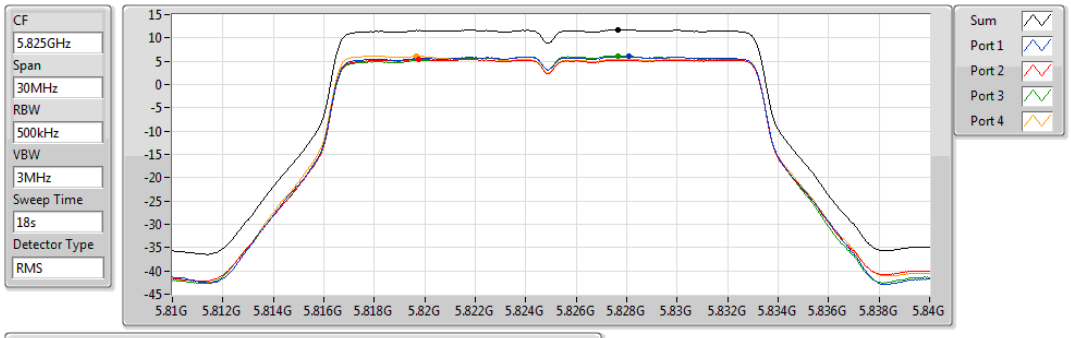
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.00	13.00	7.51	6.92	7.26	6.65

802.11a_Nss1,(6Mbps)_4TX PSD

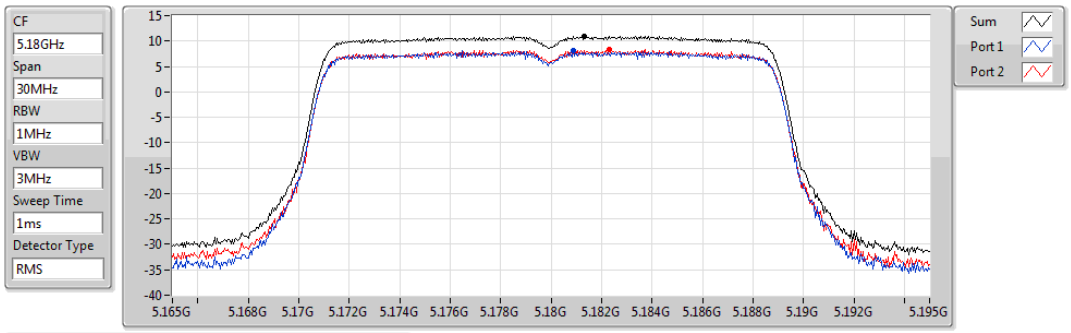
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.72	11.72	5.98	5.43	6.12	6.10

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

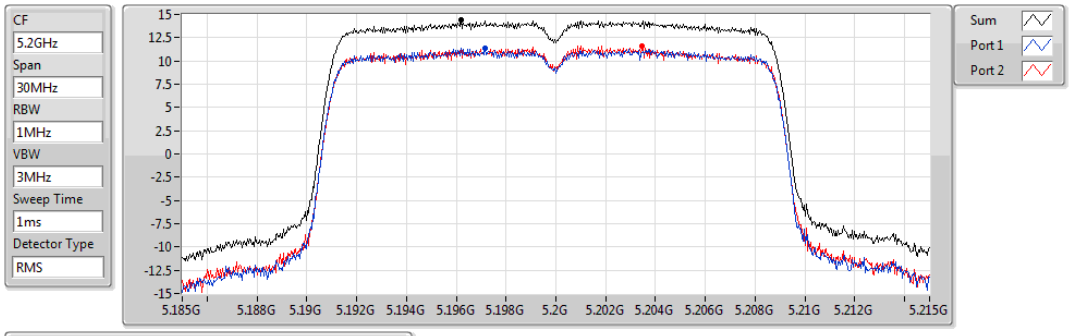
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.00	11.00	8.06	8.28

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

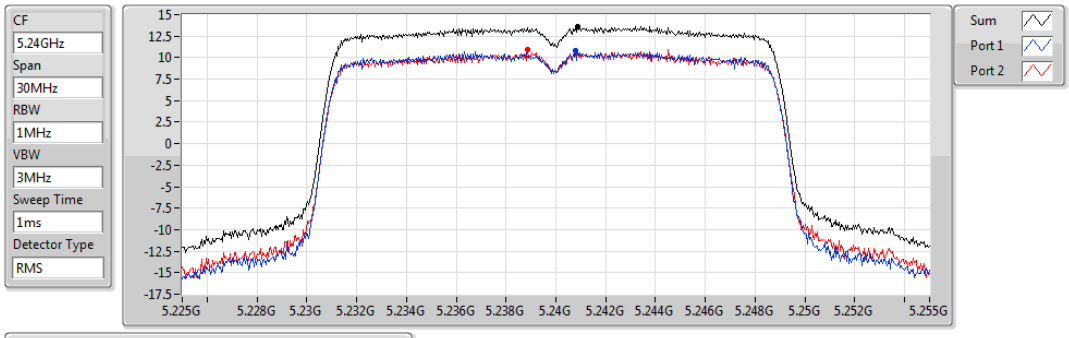
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.37	14.37	11.37	11.60

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

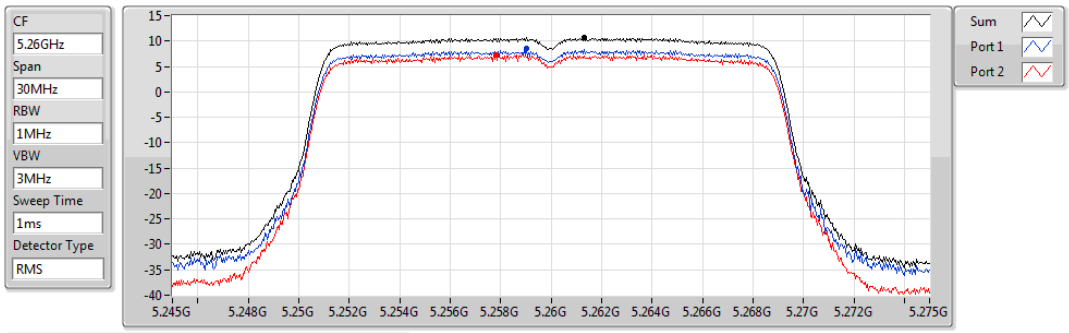
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.60	13.60	10.84	10.91

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

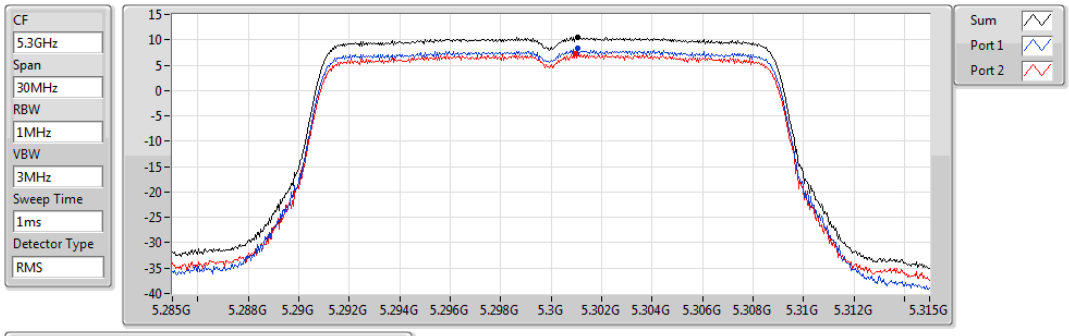
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.77	10.77	8.48	7.31

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

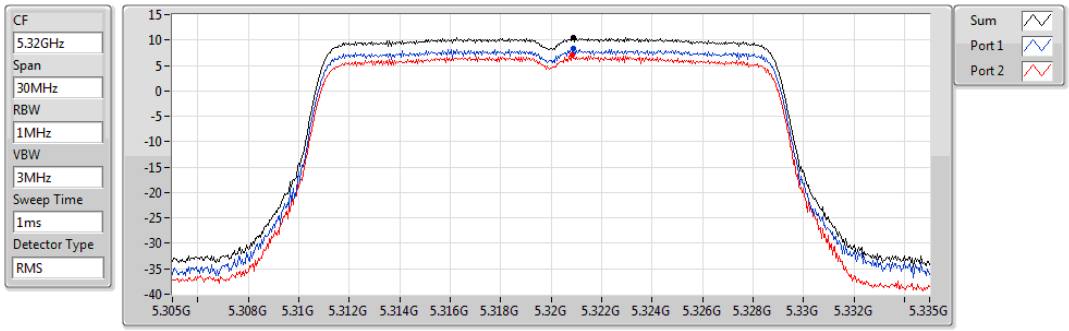
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.58	10.58	8.27	7.19

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

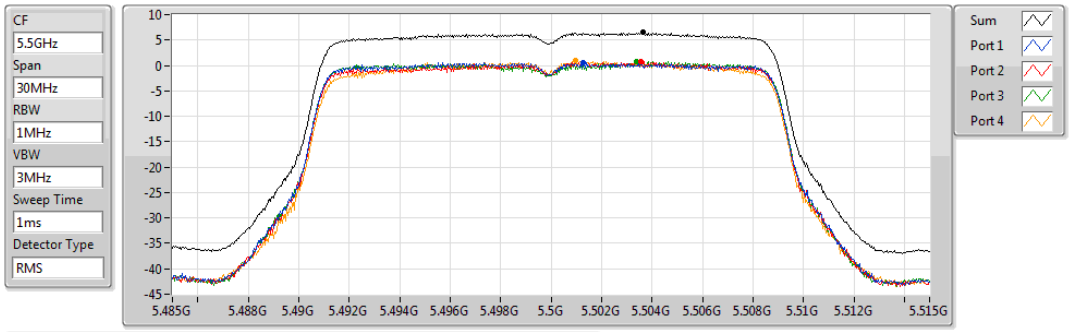
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.44	10.44	8.29	6.96

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

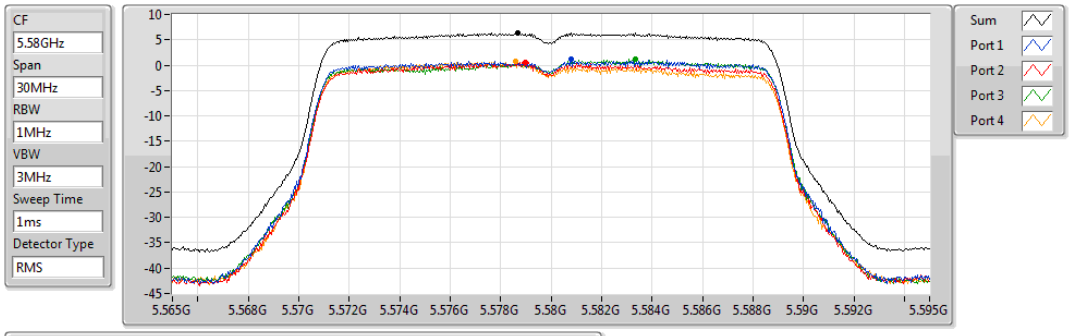
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.46	6.46	0.58	0.83	0.79	0.93

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

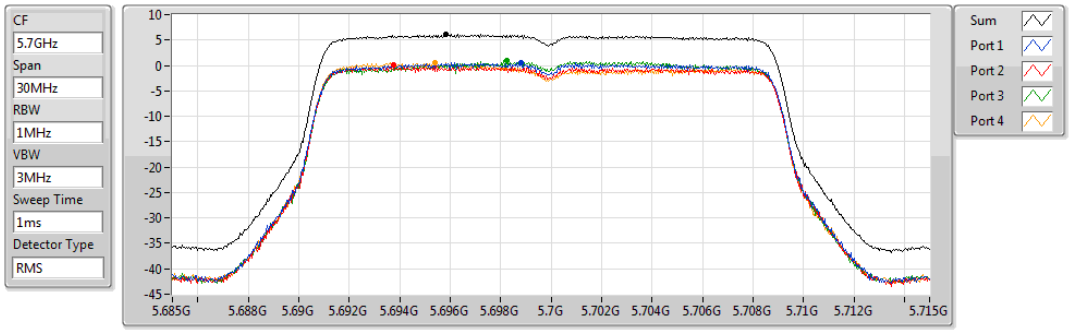
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.32	6.32	1.28	0.63	1.20	0.85

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

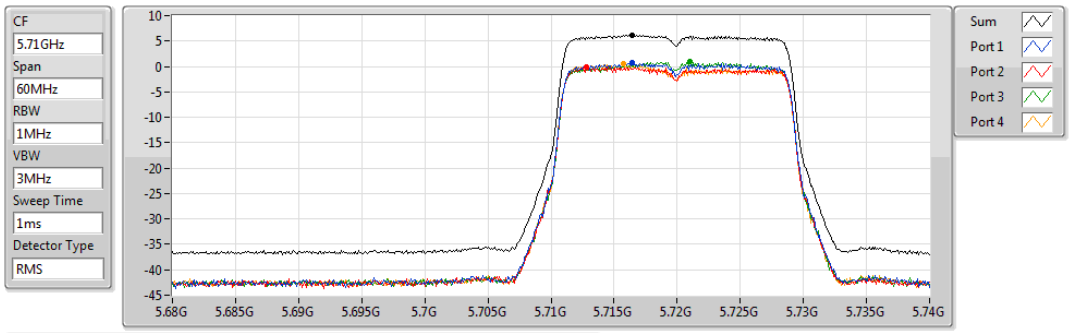
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.16	6.16	0.64	0.19	1.00	0.55

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

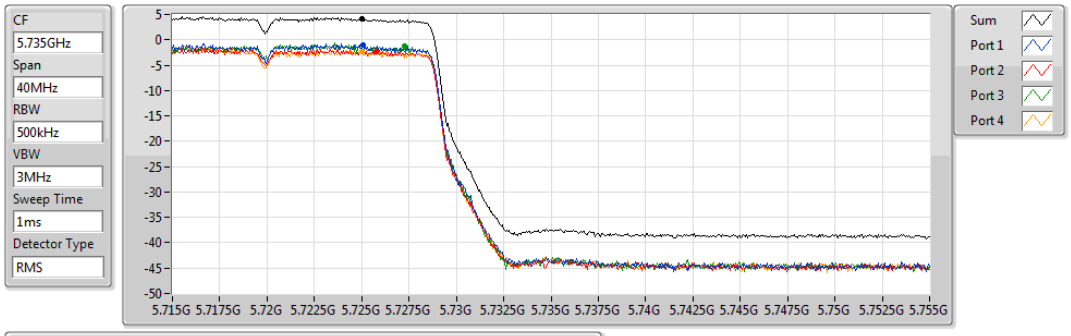
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.19	6.19	0.77	-0.09	0.94	0.47

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

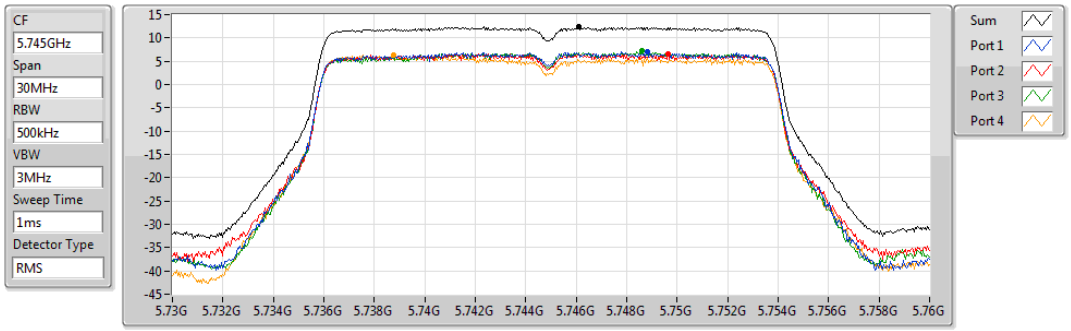
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.10	4.10	-1.04	-2.36	-1.21	-2.35

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

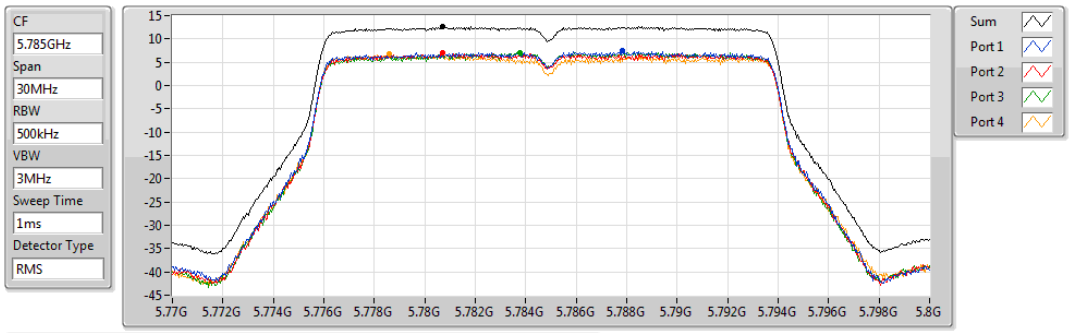
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.34	12.34	7.13	6.62	7.18	6.37

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

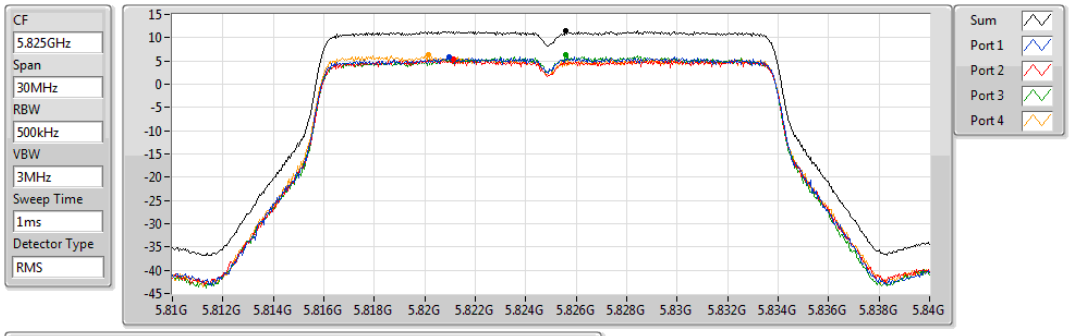
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.65	12.65	7.47	6.97	7.13	6.70

802.11ac VHT20_Nss1,(MCS0)_4TX PSD

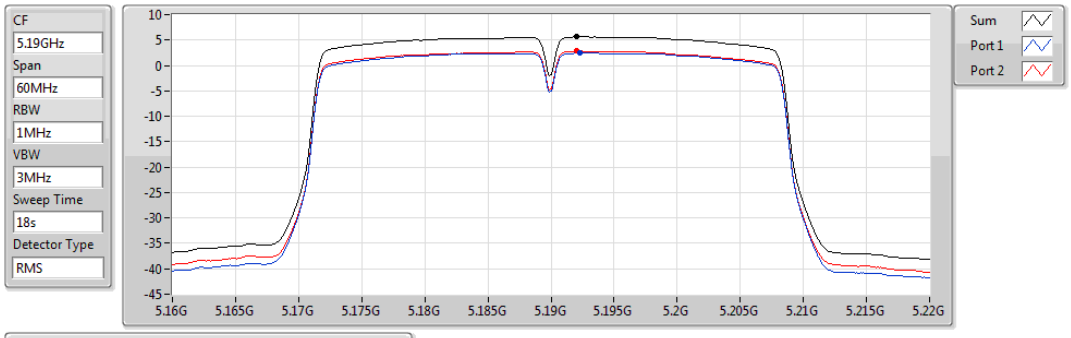
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.41	11.41	5.79	5.34	6.34	6.22

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

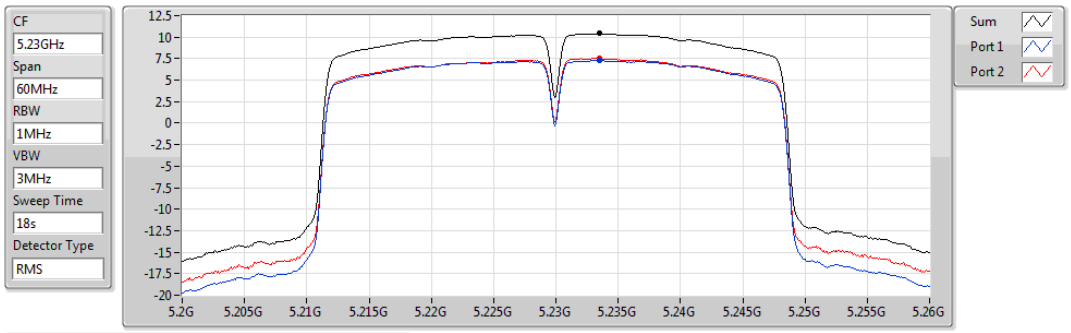
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.63	5.63	2.43	2.82

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

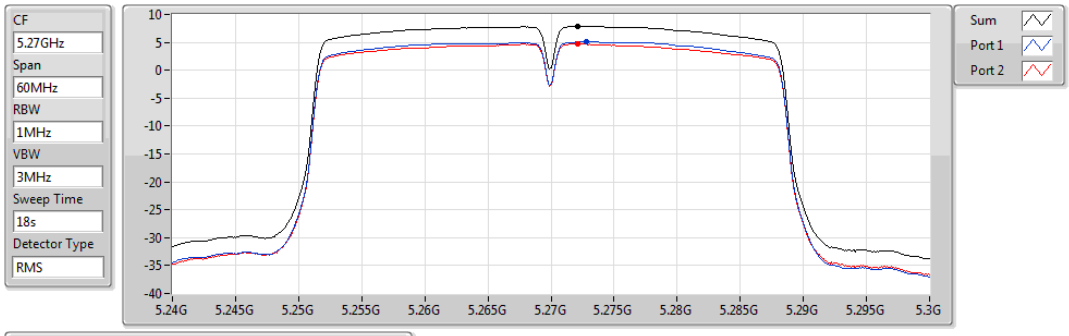
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.41	10.41	7.29	7.51

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

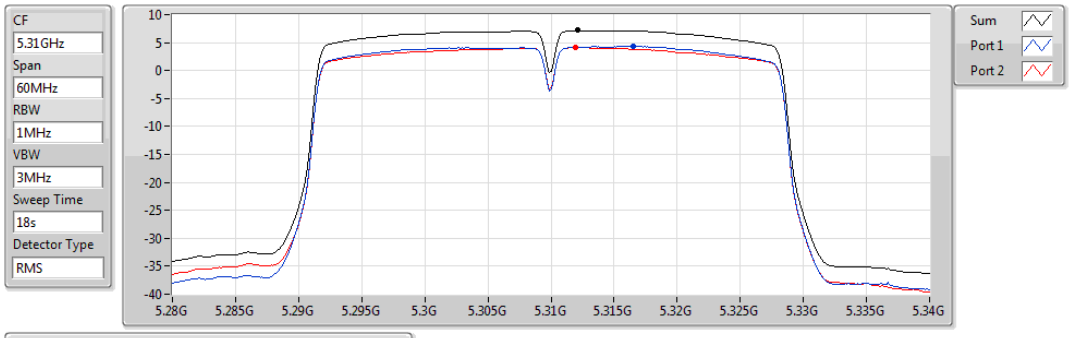
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.88	7.88	5.05	4.69

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

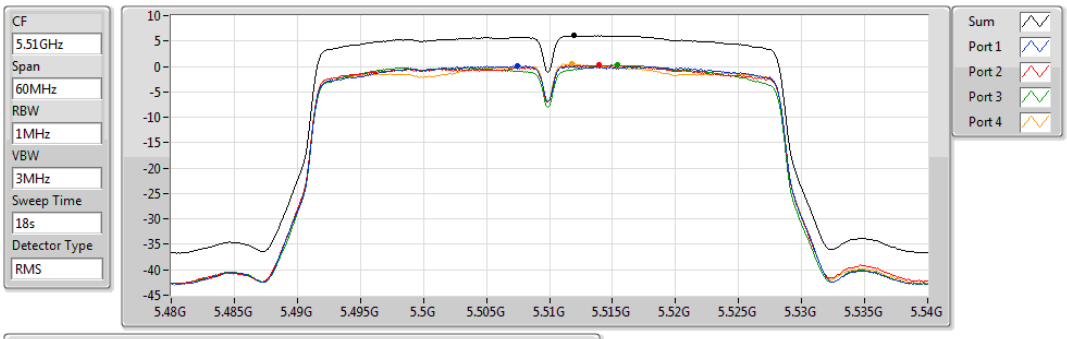
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.17	7.17	4.29	4.12

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

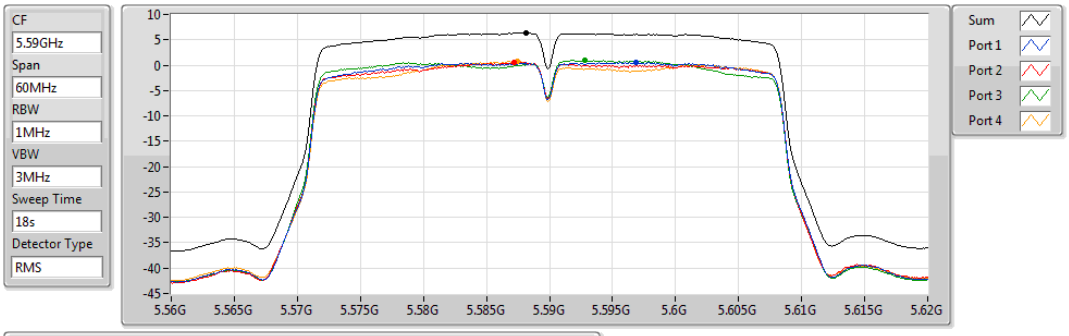
5510MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.05	6.05	0.12	0.25	0.26	0.53

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

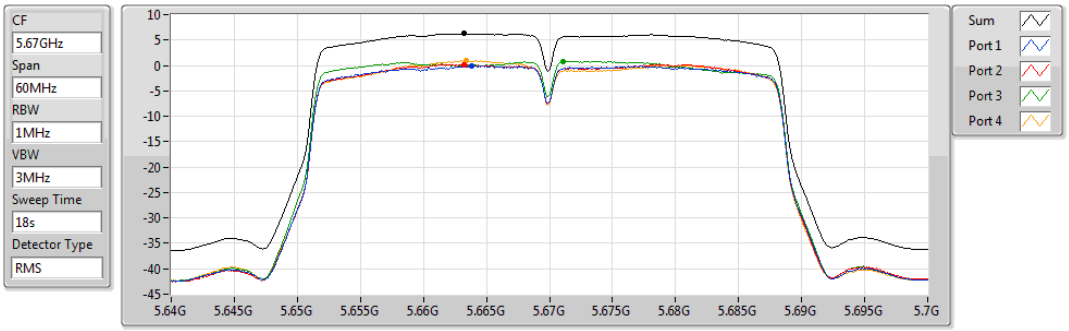
5590MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.41	6.41	0.51	0.53	0.92	0.71

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

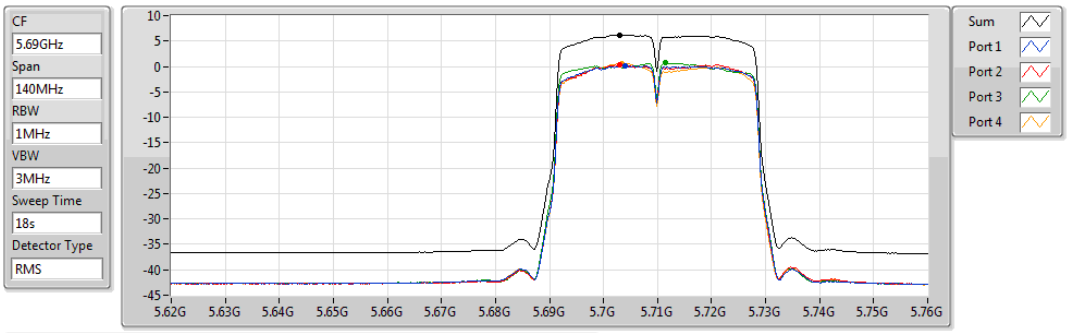
5670MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.25	6.25	-0.12	0.22	0.84	0.93

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

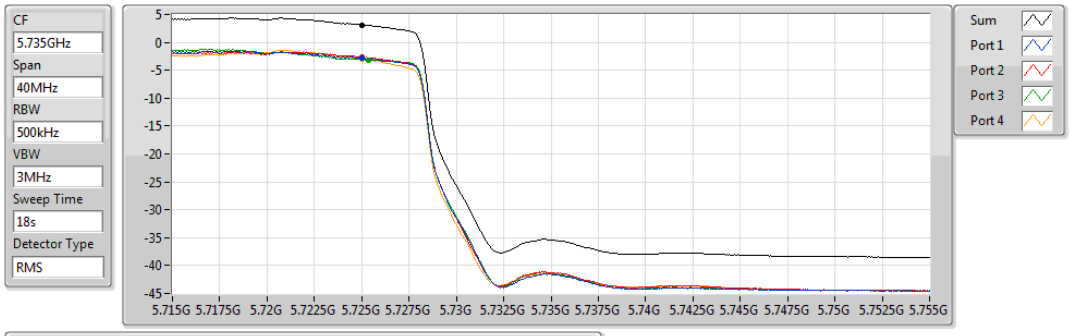
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.23	6.23	0.20	0.32	0.76	0.59

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

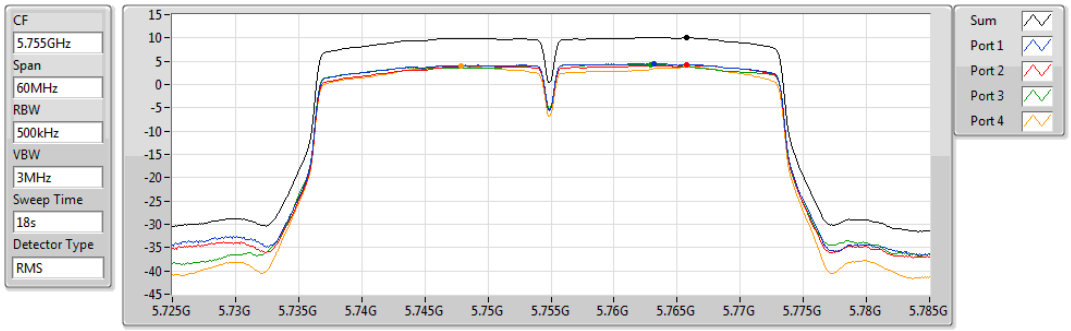
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.12	3.12	-2.85	-2.64	-3.11	-2.98

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

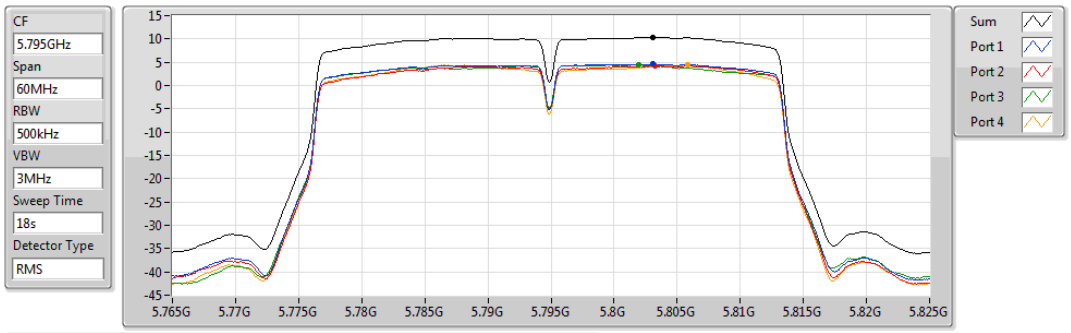
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.13	10.13	4.50	4.22	4.33	3.99

802.11ac VHT40_Nss1,(MCS0)_4TX PSD

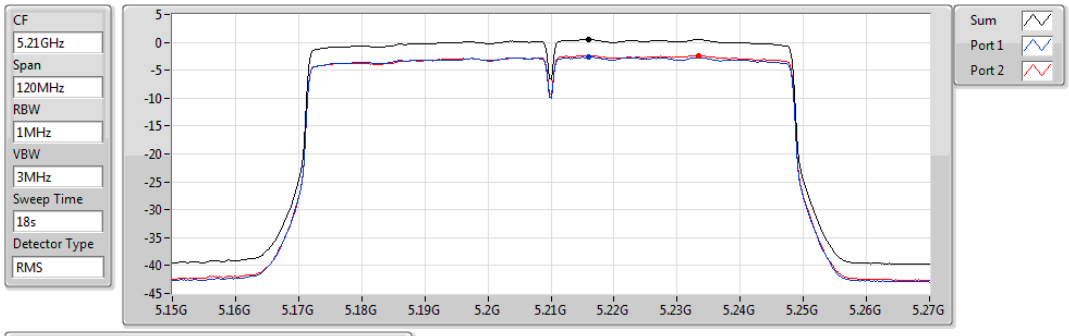
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.36	10.36	4.64	4.22	4.40	4.44

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

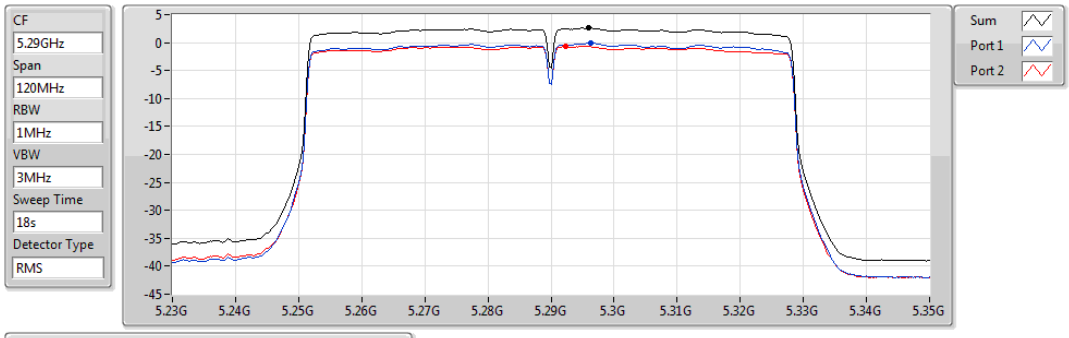
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.54	0.54	-2.60	-2.33

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

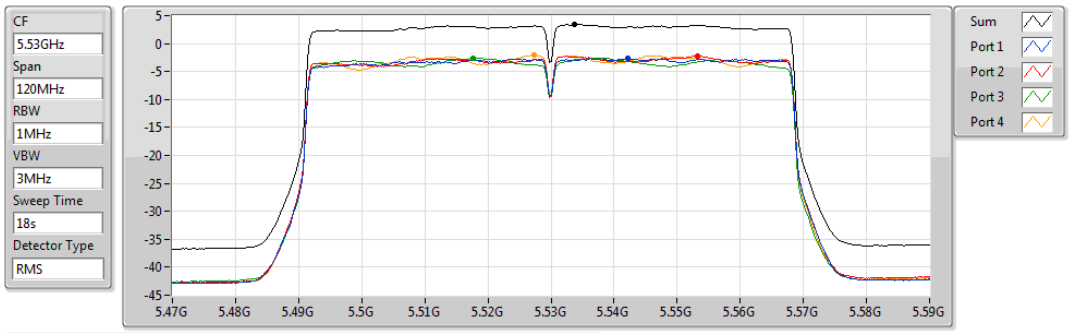
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.64	2.64	-0.05	-0.69

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

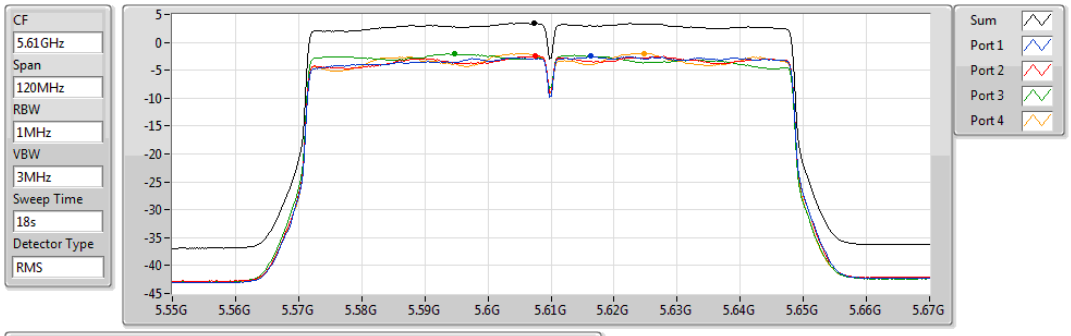
5530MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.42	3.42	-2.70	-2.23	-2.59	-2.07

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

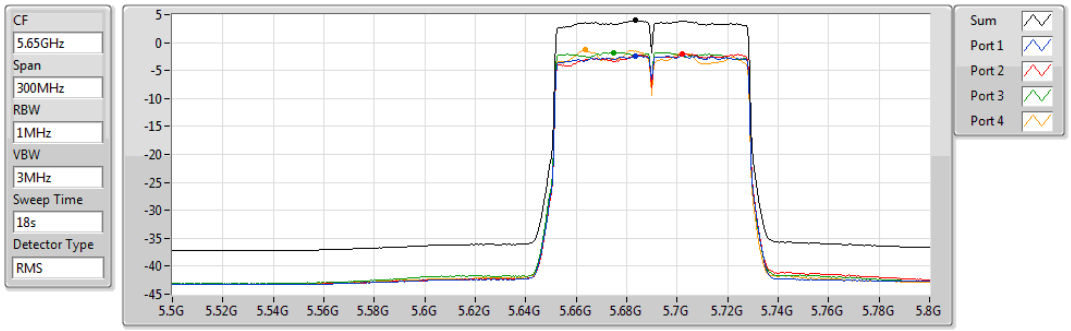
5610MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.43	3.43	-2.51	-2.41	-2.08	-1.95

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

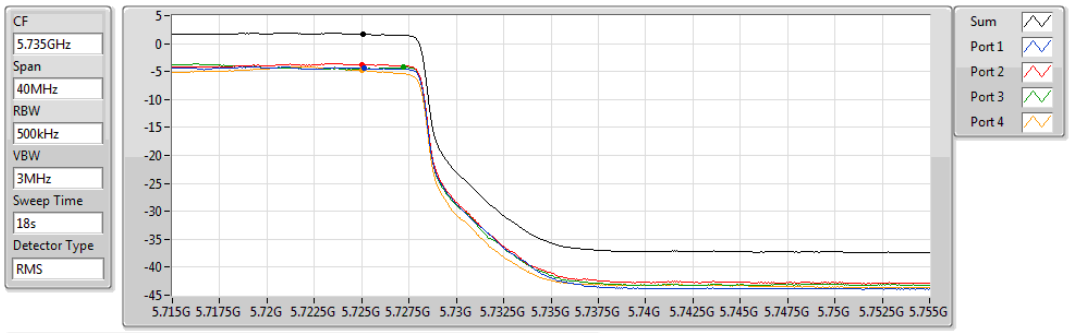
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.95	3.95	-2.34	-1.98	-1.75	-1.30

802.11ac VHT80_Nss1,(MCS0)_4TX PSD

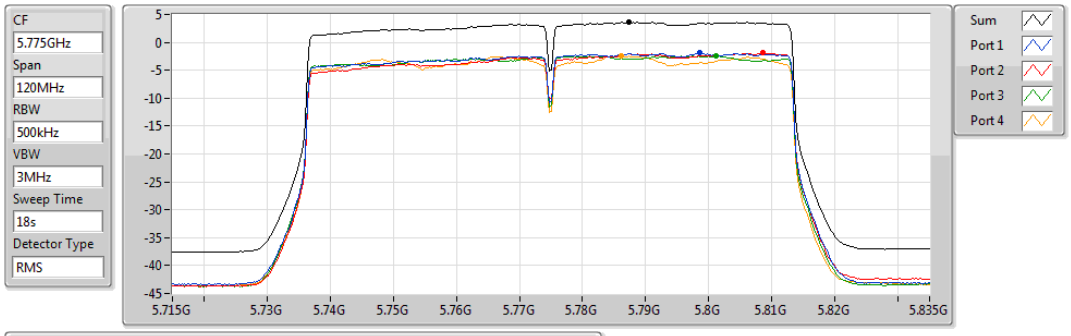
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.67	1.67	-4.41	-3.74	-4.22	-4.78

802.11ac VHT80_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)
3.62	3.62	-1.93	-1.85	-2.45	-2.41

Beamforming mode

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	14.42	19.90
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	9.85	15.33
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.02	5.46
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	10.33	15.81
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	7.93	13.41
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	2.04	7.52
5.47-5.725GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	6.38	16.72
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	3.68	14.02
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-0.38	9.96
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	9.91	20.25
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	7.25	17.59
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	2.87	13.21

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

Result

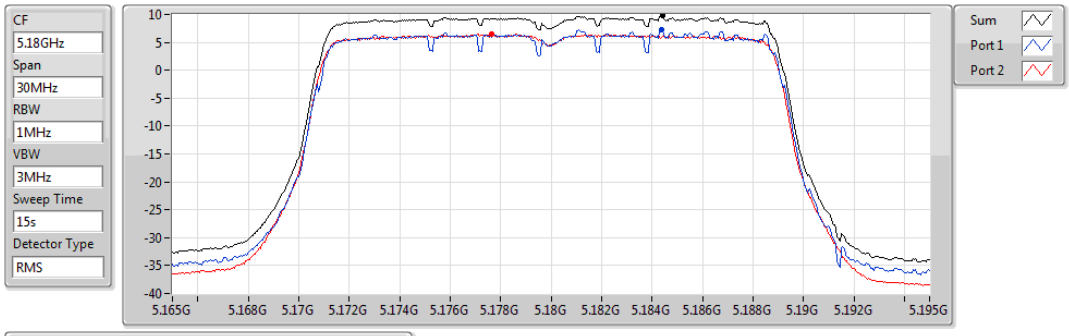
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	5.48	7.33	6.43			9.72	17.00	15.20	23.00
5200MHz	Pass	5.48	11.34	11.67			14.42	17.00	19.90	23.00
5240MHz	Pass	5.48	10.56	10.41			13.36	17.00	18.84	23.00
5260MHz	Pass	5.48	6.91	7.36			10.14	11.00	15.62	17.00
5300MHz	Pass	5.48	7.29	7.33			10.30	11.00	15.78	17.00
5320MHz	Pass	5.48	7.32	7.37			10.33	11.00	15.81	17.00
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	10.34	0.13	0.55	0.71	0.12	5.95	6.66	16.29	17.00
5580MHz	Pass	10.34	0.18	0.56	1.36	-0.01	5.99	6.66	16.33	17.00
5700MHz	Pass	10.34	1.05	-0.19	0.22	1.66	6.22	6.66	16.56	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.34	0.79	0.65	1.29	0.66	6.38	6.66	16.72	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	10.34	-2.75	-2.73	-2.52	-2.59	3.08	25.66	13.42	36.00
5745MHz	Pass	10.34	4.66	4.40	4.29	4.02	9.91	25.66	20.25	36.00
5785MHz	Pass	10.34	4.13	3.45	3.69	2.92	8.92	25.66	19.26	36.00
5825MHz	Pass	10.34	2.28	2.79	3.77	2.19	8.46	25.66	18.80	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	5.48	2.25	2.21			5.07	17.00	10.55	23.00
5230MHz	Pass	5.48	6.70	6.98			9.85	17.00	15.33	23.00
5270MHz	Pass	5.48	5.11	5.19			7.93	11.00	13.41	17.00
5310MHz	Pass	5.48	4.14	4.15			7.13	11.00	12.61	17.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5510MHz	Pass	10.34	-3.65	-2.40	-2.35	-2.15	2.81	6.66	13.15	17.00
5590MHz	Pass	10.34	-2.23	-1.04	-1.62	-2.01	3.65	6.66	13.99	17.00
5670MHz	Pass	10.34	-2.32	-2.06	-1.40	-3.03	3.23	6.66	13.57	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	10.34	-1.97	-0.80	-3.18	-1.29	3.68	6.66	14.02	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	10.34	-5.70	-4.86	-5.35	-5.64	0.57	25.66	10.91	36.00
5755MHz	Pass	10.34	2.45	1.57	1.54	3.02	7.25	25.66	17.59	36.00
5795MHz	Pass	10.34	1.62	1.08	0.83	2.34	6.75	25.66	17.09	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	5.48	-2.89	-2.80			-0.02	17.00	5.46	23.00
5290MHz	Pass	5.48	-0.53	-0.29			2.04	11.00	7.52	17.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-

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)
5530MHz	Pass	10.34	-5.32	-4.54	-5.40	-6.05	-0.38	6.66	9.96	17.00
5610MHz	Pass	10.34	-5.72	-5.61	-5.36	-5.47	-0.46	6.66	9.88	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	10.34	-6.09	-6.05	-5.23	-6.08	-0.48	6.66	9.86	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	10.34	-8.53	-8.87	-8.81	-9.19	-2.96	25.66	7.38	36.00
5775MHz	Pass	10.34	-2.94	-2.89	-2.54	-2.33	2.87	25.66	13.21	36.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;
Directional gain of 5.15 ~ 5.35 GHz
Directional gain = $10 * \log((10^{3.01/20}+10^{1.89/20})^2/2) = 5.48$ dBi
Directional gain of 5.47 ~ 5.85 GHz
Directional gain = $10 * \log((10^{3.23/20}+10^{4.2/20}+10^{6.07/20}+10^{3.5/20})^2/4) = 10.34$ dBi > 6 dBi
Limit shall be reduced to 4.34 dB (10.34 dBi – 6 dBi)

802.11ac VHT20-BF_Nss1,(MCS0)_2TX PSD

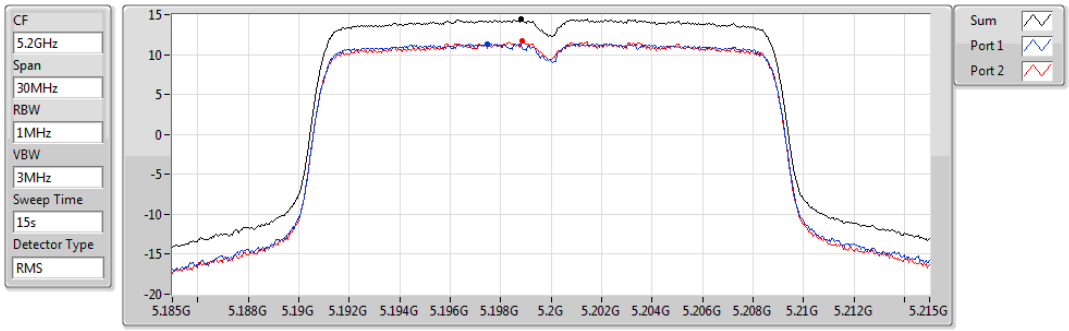
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.72	9.72	7.33	6.43

802.11ac VHT20-BF_Nss1,(MCS0)_2TX PSD

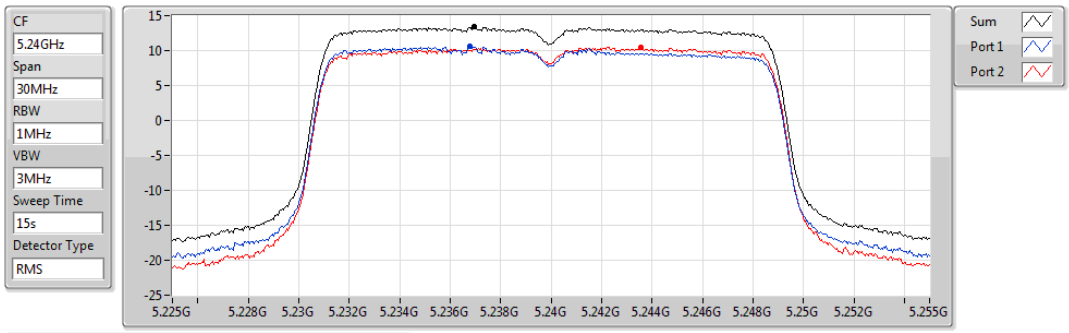
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.42	14.42	11.34	11.67

802.11ac VHT20-BF_Nss1,(MCS0)_2TX PSD

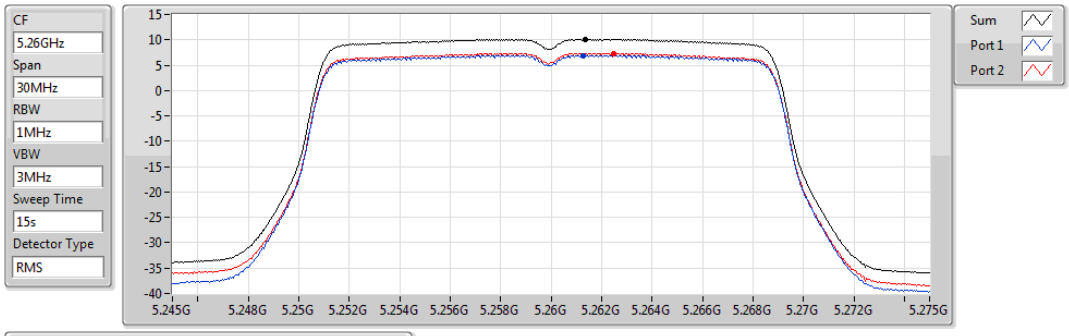
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.36	13.36	10.56	10.41

802.11ac VHT20-BF_Nss1,(MCS0)_2TX PSD

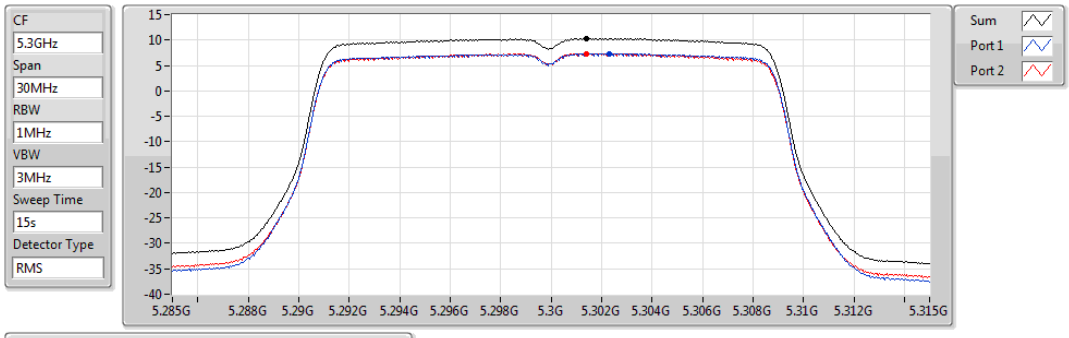
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.14	10.14	6.91	7.36

802.11ac VHT20-BF_Nss1,(MCS0)_2TX PSD

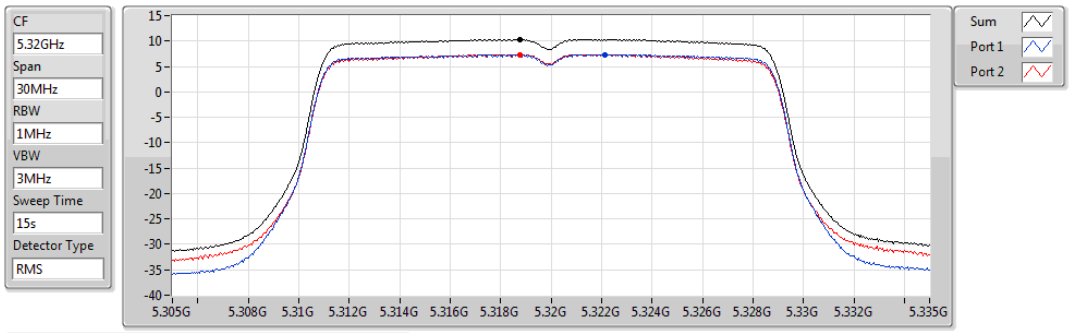
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.30	10.30	7.29	7.33

802.11ac VHT20-BF_Nss1,(MCS0)_2TX PSD

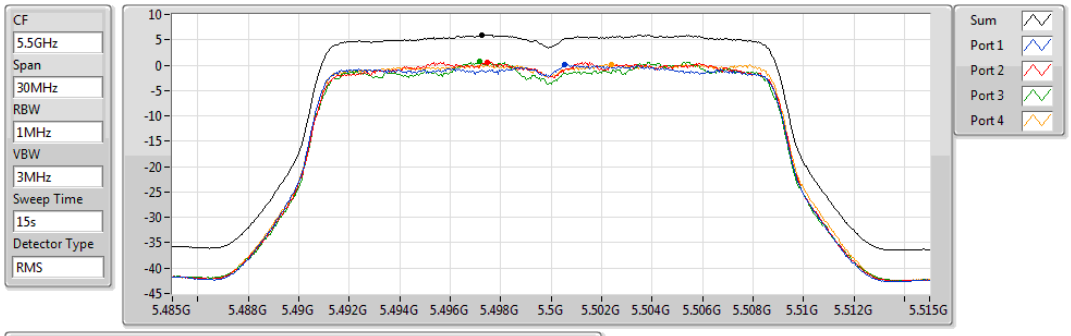
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.33	10.33	7.32	7.37

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

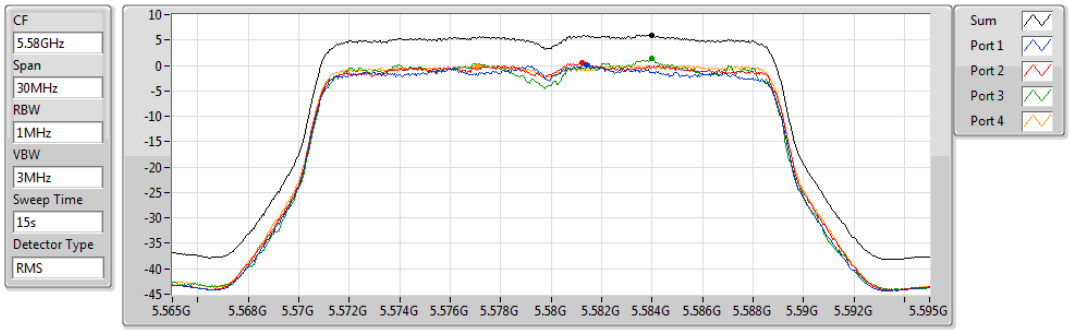
5500MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.95	5.95	0.13	0.55	0.71	0.12

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

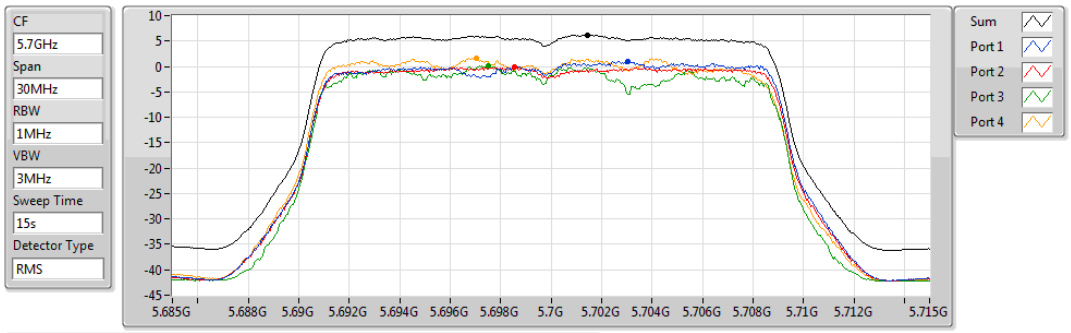
5580MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.99	5.99	0.18	0.56	1.36	-0.01

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

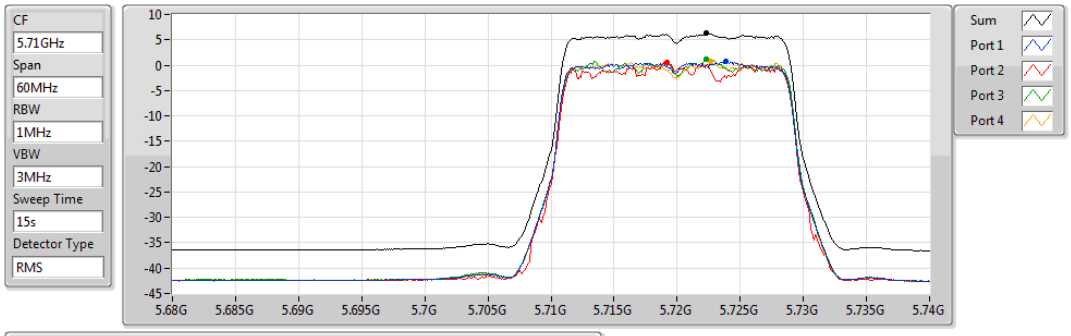
5700MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.22	6.22	1.05	-0.19	0.22	1.66

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

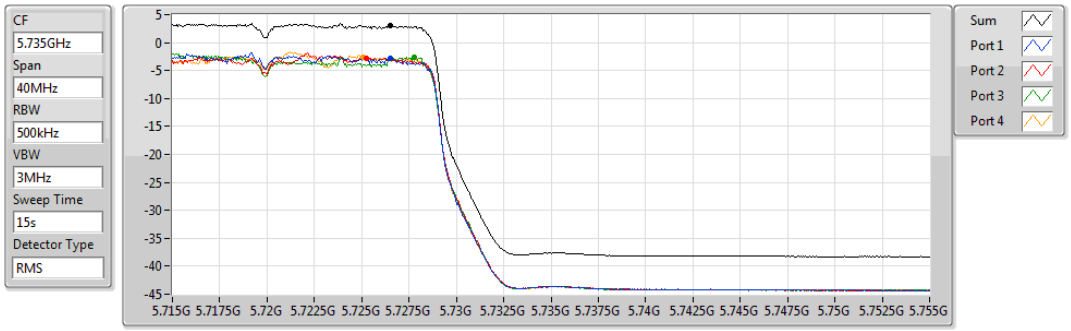
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.38	6.38	0.79	0.65	1.29	0.66

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

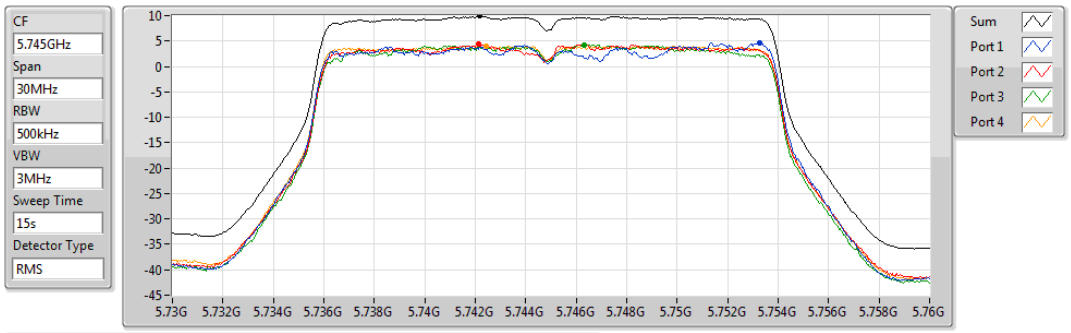
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.08	3.08	-2.75	-2.73	-2.52	-2.59

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

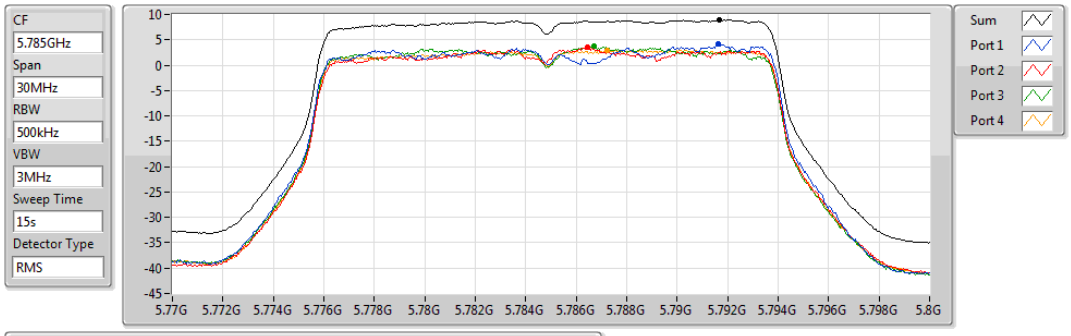
5745MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.91	9.91	4.66	4.40	4.29	4.02

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

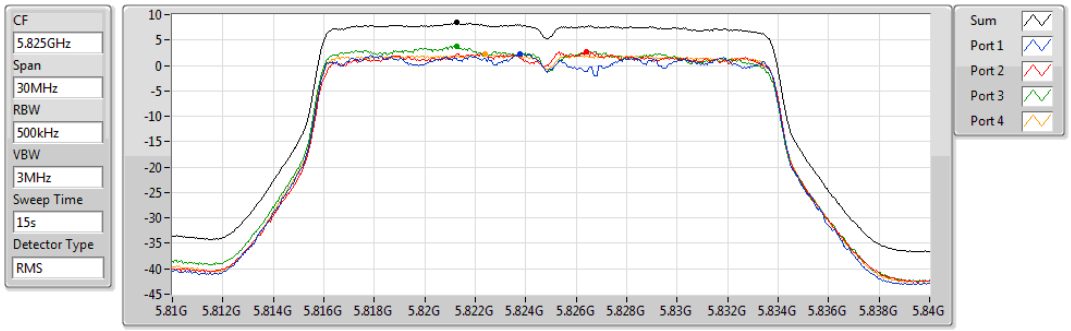
5785MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.92	8.92	4.13	3.45	3.69	2.92

802.11ac VHT20-BF_Nss1,(MCS0)_4TX PSD

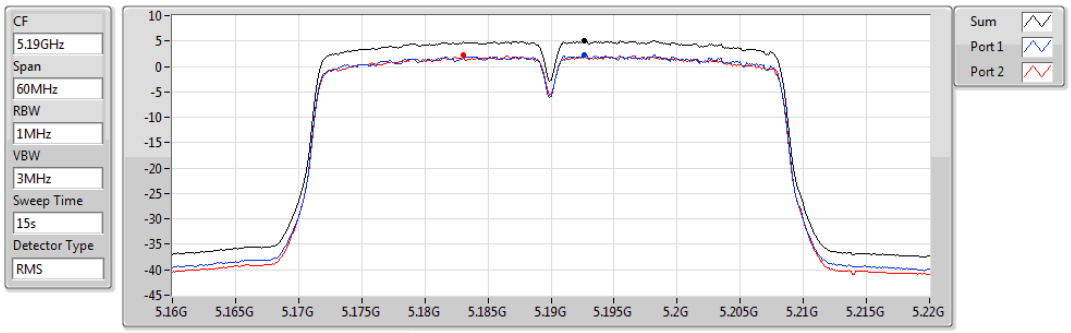
5825MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.46	8.46	2.28	2.79	3.77	2.19

802.11ac VHT40-BF_Nss1,(MCS0)_2TX PSD

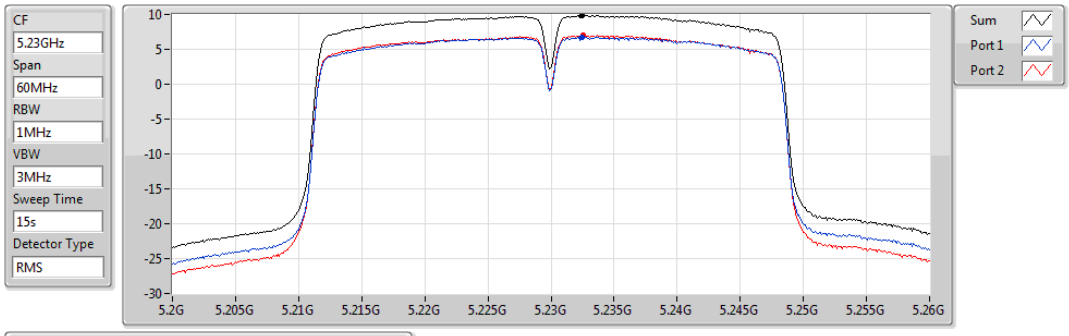
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.07	5.07	2.25	2.21

802.11ac VHT40-BF_Nss1,(MCS0)_2TX PSD

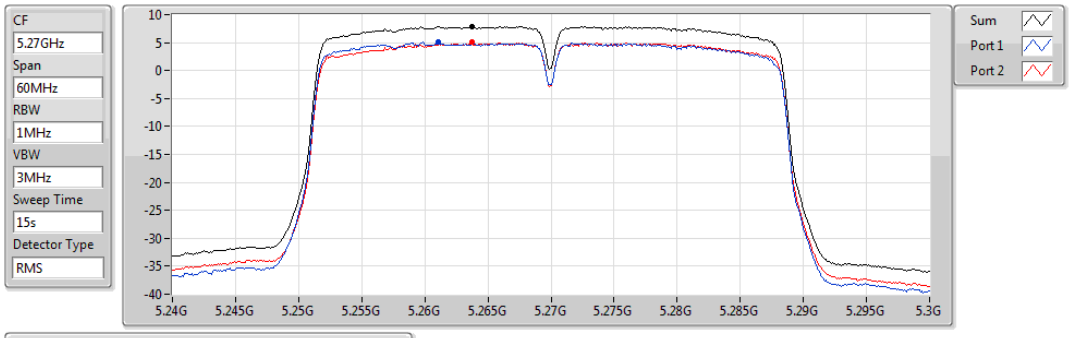
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.85	9.85	6.70	6.98

802.11ac VHT40-BF_Nss1,(MCS0)_2TX PSD

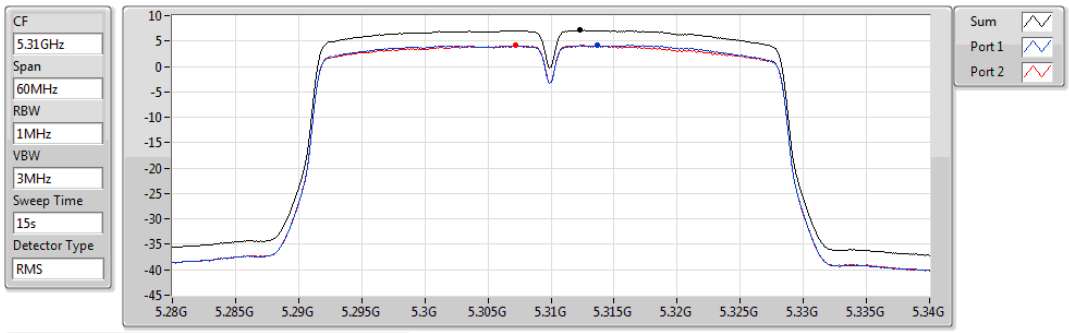
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.93	7.93	5.11	5.19

802.11ac VHT40-BF_Nss1,(MCS0)_2TX PSD

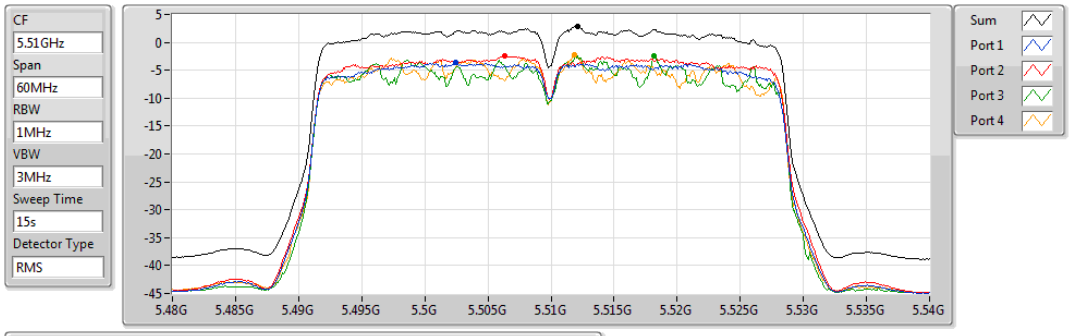
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.13	7.13	4.14	4.15

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

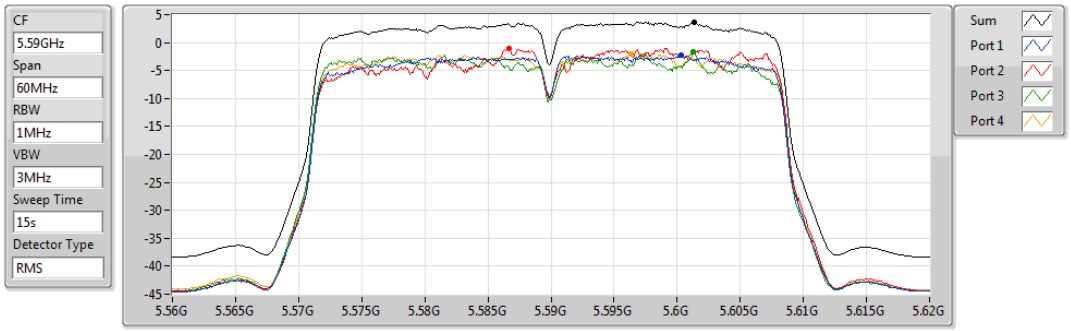
5510MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.81	2.81	-3.65	-2.40	-2.35	-2.15

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

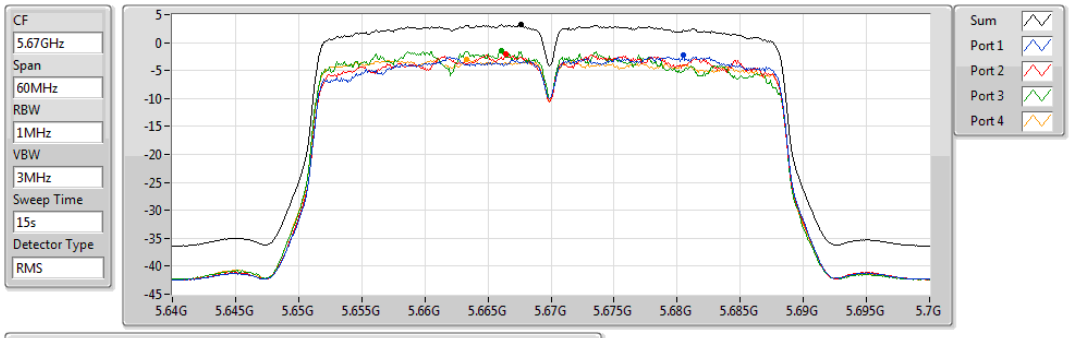
5590MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.65	3.65	-2.23	-1.04	-1.62	-2.01

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

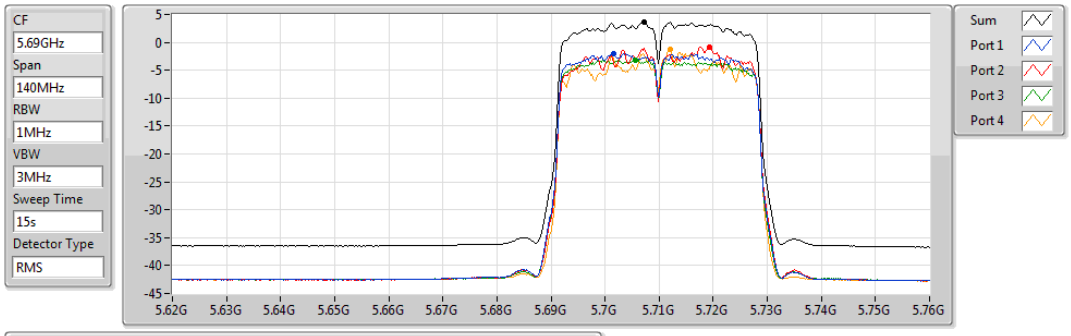
5670MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.23	3.23	-2.32	-2.06	-1.40	-3.03

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

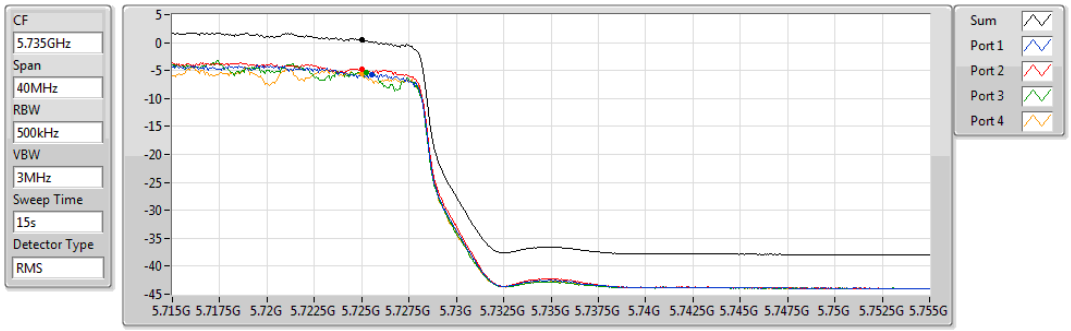
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.68	3.68	-1.97	-0.80	-3.18	-1.29

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

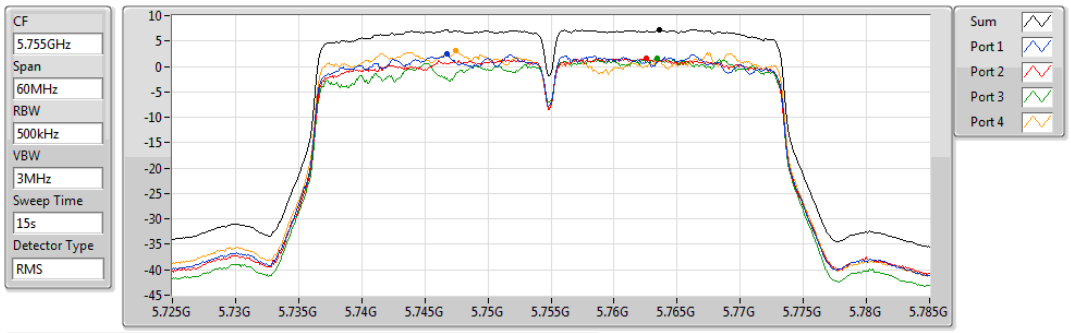
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.57	0.57	-5.70	-4.86	-5.35	-5.64

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

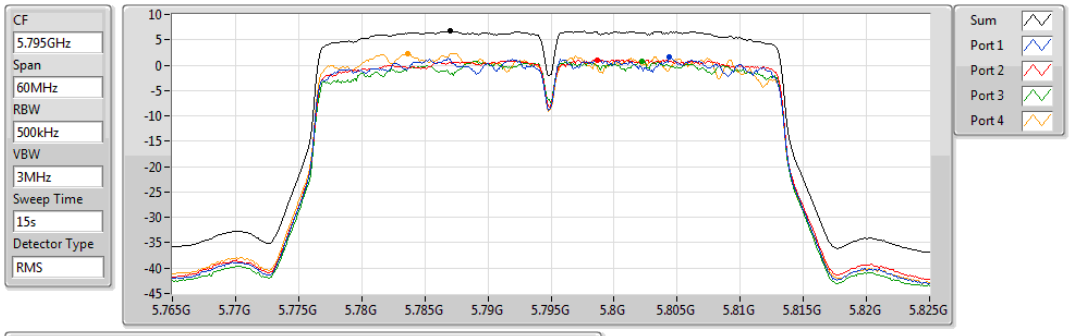
5755MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.25	7.25	2.45	1.57	1.54	3.02

802.11ac VHT40-BF_Nss1,(MCS0)_4TX PSD

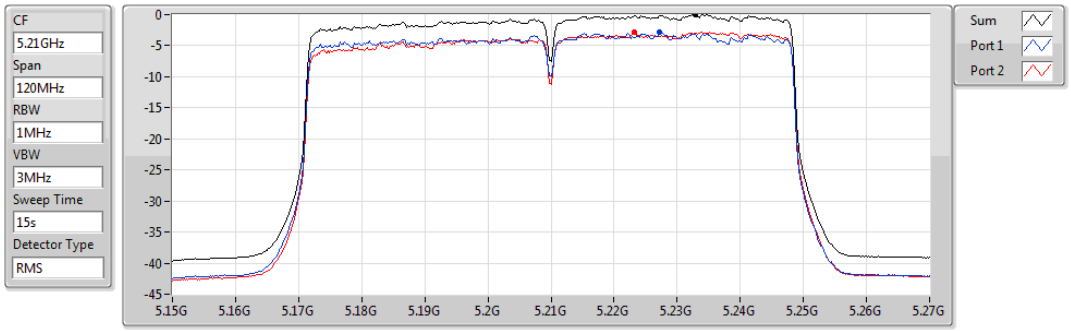
5795MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.75	6.75	1.62	1.08	0.83	2.34

802.11ac VHT80-BF_Nss1,(MCS0)_2TX PSD

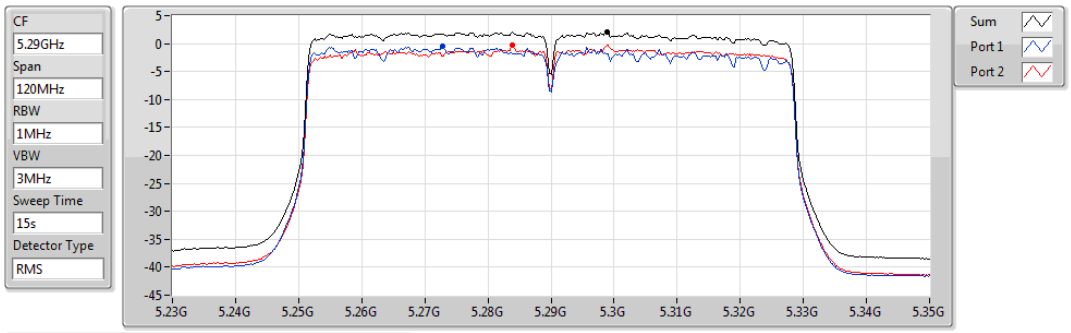
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.02	-0.02	-2.89	-2.80

802.11ac VHT80-BF_Nss1,(MCS0)_2TX PSD

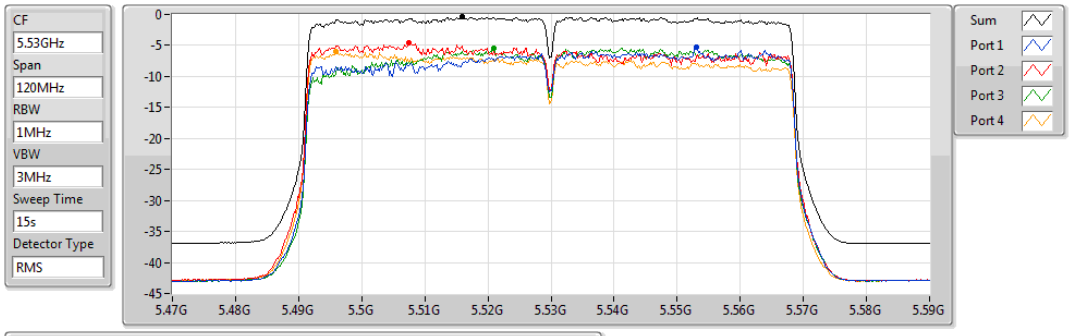
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.04	2.04	-0.53	-0.29

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

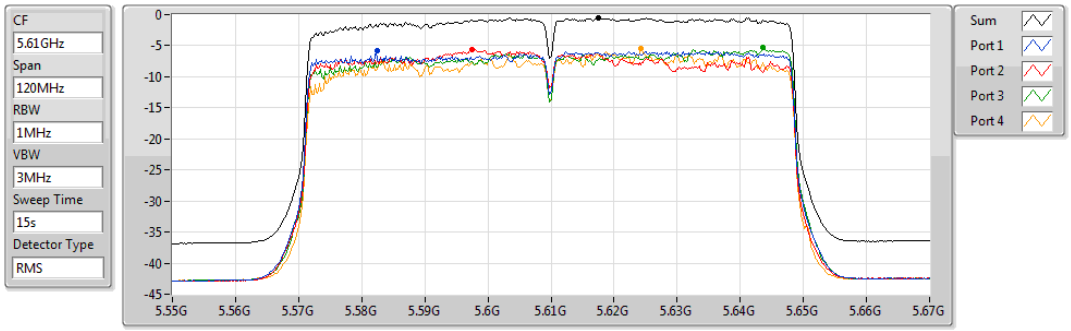
5530MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.38	-0.38	-5.32	-4.54	-5.40	-6.05

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

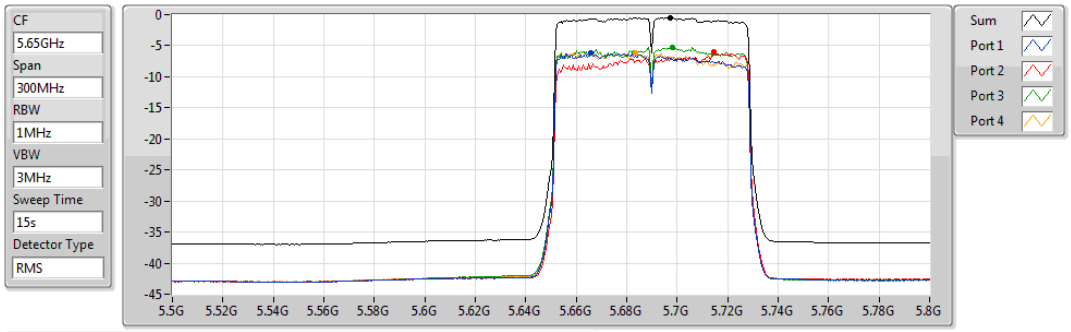
5610MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.46	-0.46	-5.72	-5.61	-5.36	-5.47

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

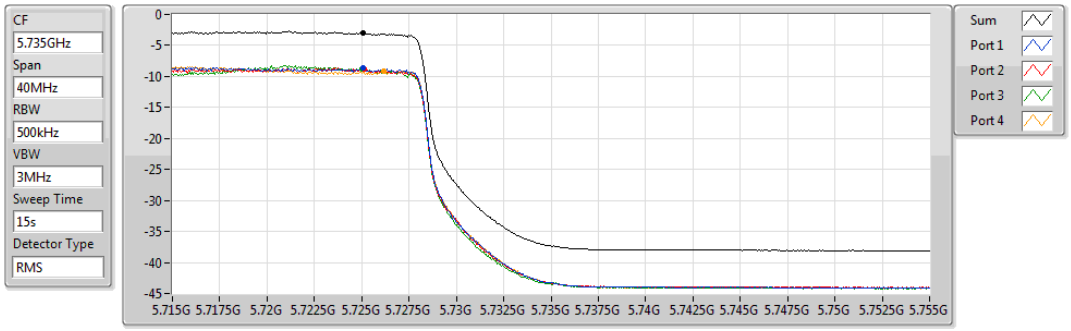
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.48	-0.48	-6.09	-6.05	-5.23	-6.08

802.11ac VHT80-BF_Nss1,(MCS0)_4TX PSD

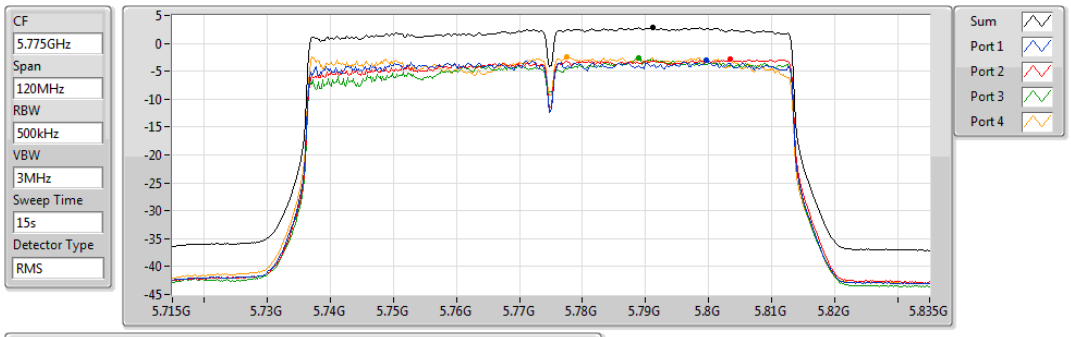
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.96	-2.96	-8.53	-8.87	-8.81	-9.19

802.11ac VHT80-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)
2.87	2.87	-2.94	-2.89	-2.54	-2.33

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

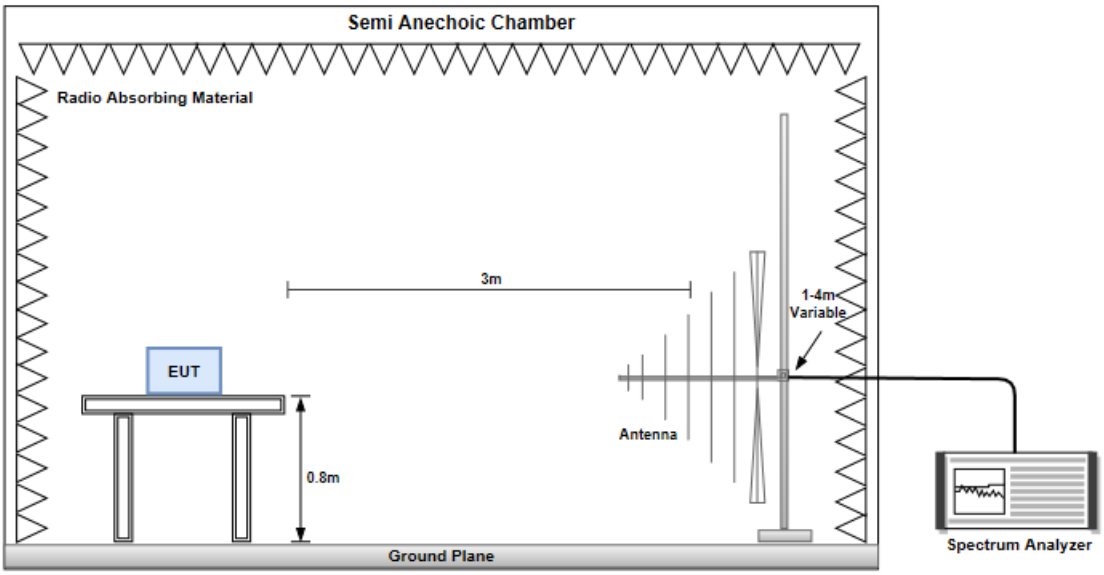
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

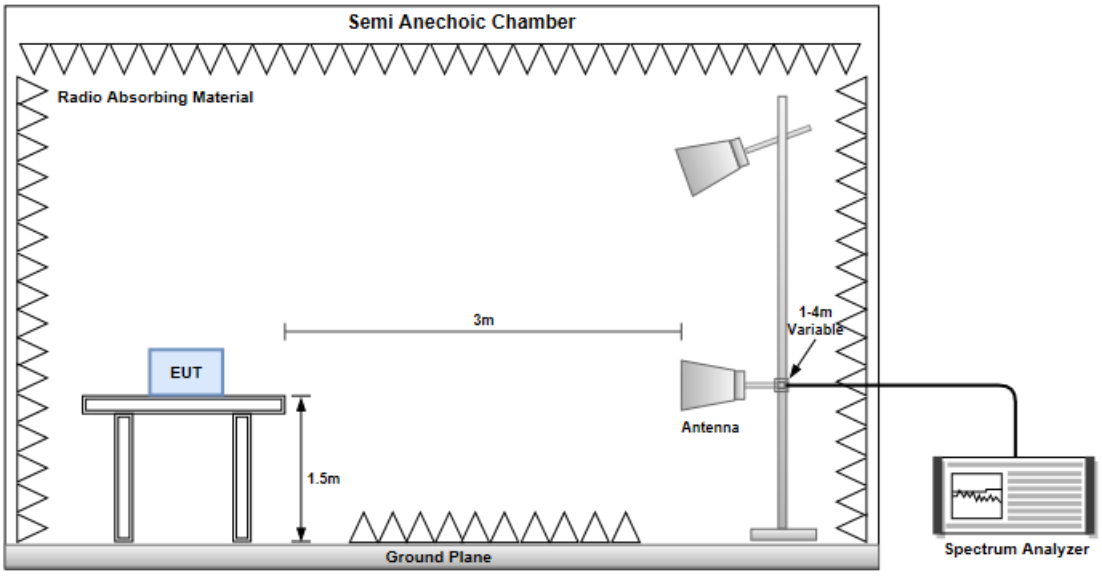
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



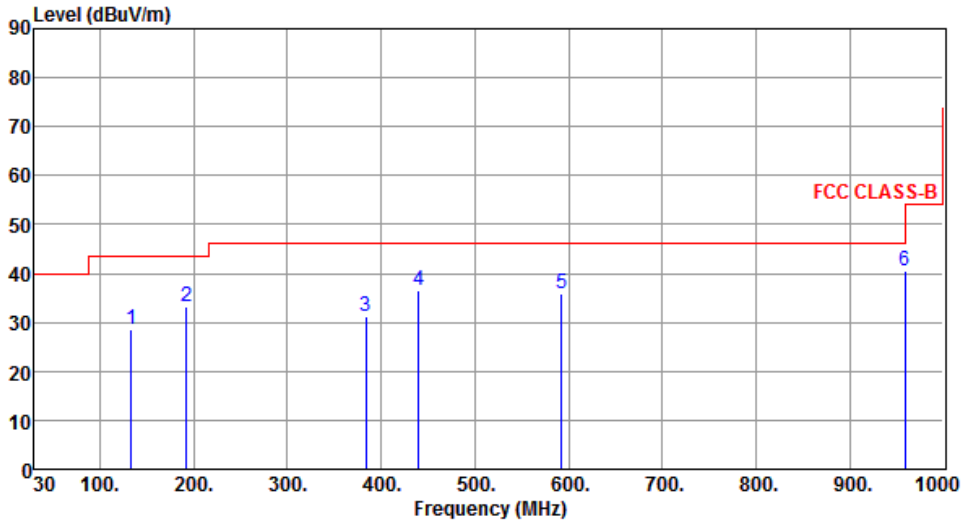
Radiated Emissions above 1 GHz



Non-beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

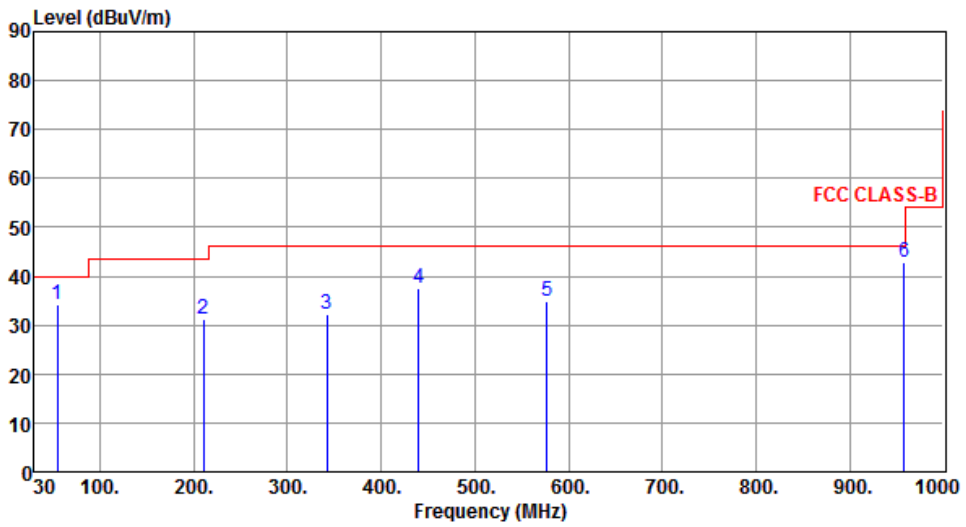
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	133.79	28.61	43.50	-14.89	37.91	-9.30	Peak	---	---
2	191.99	33.26	43.50	-10.24	43.84	-10.58	Peak	---	---
3	384.05	31.31	46.00	-14.69	36.92	-5.61	Peak	---	---
4	440.31	36.66	46.00	-9.34	41.06	-4.40	Peak	---	---
5	592.60	35.95	46.00	-10.05	37.07	-1.12	Peak	---	---
6	959.26	40.64	46.00	-5.36	36.44	4.20	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.

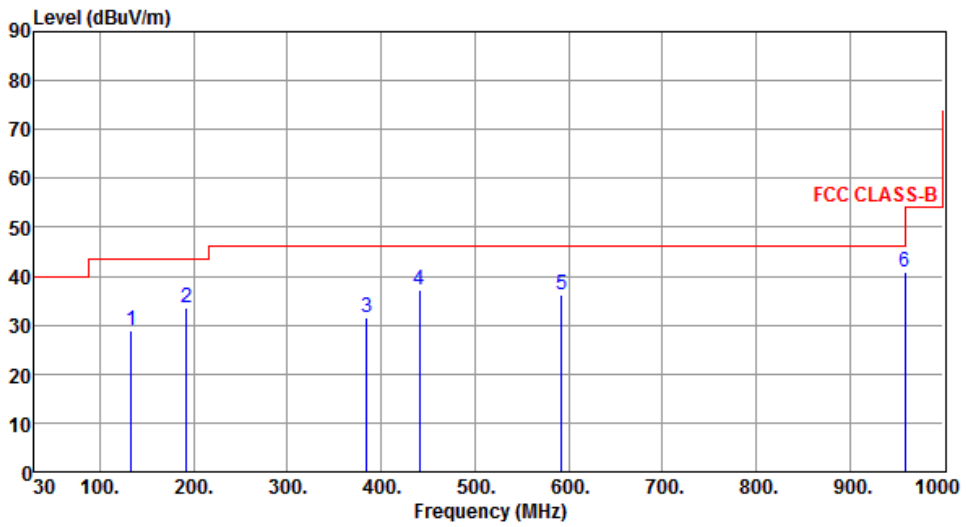
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	54.25	34.05	40.00	-5.95	42.18	-8.13	Peak	---	---
2	210.42	31.08	43.50	-12.42	42.12	-11.04	Peak	---	---
3	342.34	32.17	46.00	-13.83	38.98	-6.81	Peak	---	---
4	440.31	37.53	46.00	-8.47	41.93	-4.40	Peak	---	---
5	577.08	34.89	46.00	-11.11	36.37	-1.48	Peak	---	---
6	958.29	42.75	46.00	-3.25	38.58	4.17	Peak	---	---

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

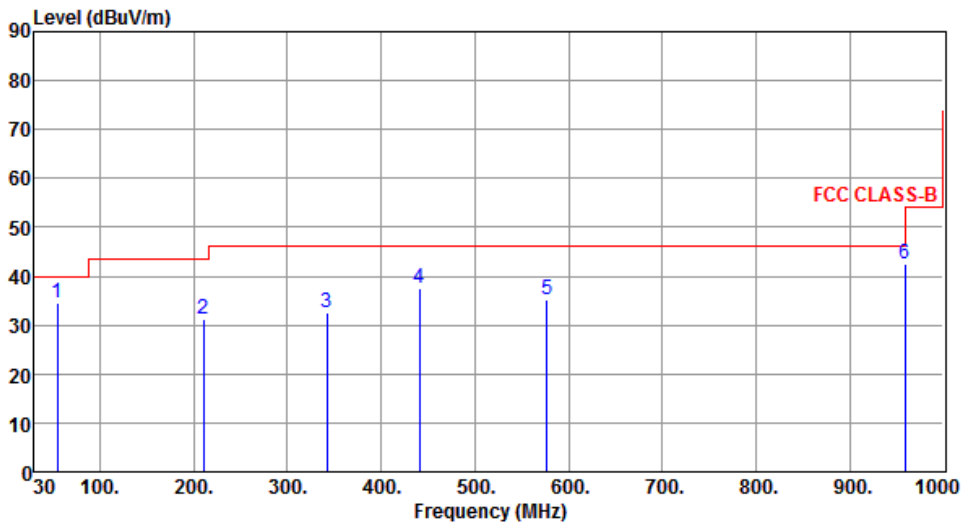
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	133.58	28.93	43.50	-14.57	38.26	-9.33	Peak	---	---
2	191.96	33.48	43.50	-10.02	44.06	-10.58	Peak	---	---
3	384.31	31.51	46.00	-14.49	37.10	-5.59	Peak	---	---
4	440.58	37.15	46.00	-8.85	41.55	-4.40	Peak	---	---
5	592.43	36.16	46.00	-9.84	37.28	-1.12	Peak	---	---
6	959.26	40.91	46.00	-5.09	36.71	4.20	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	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		

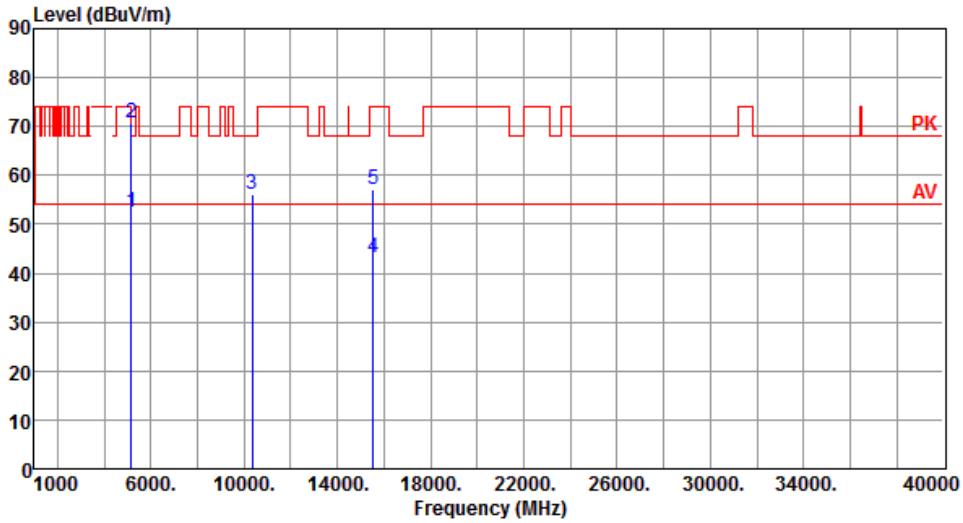


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	54.27	34.38	40.00	-5.62	42.51	-8.13	Peak	---	---
2	210.38	31.28	43.50	-12.22	42.32	-11.04	Peak	---	---
3	341.96	32.55	46.00	-13.45	39.37	-6.82	Peak	---	---
4	440.52	37.68	46.00	-8.32	42.08	-4.40	Peak	---	---
5	577.26	35.16	46.00	-10.84	36.62	-1.46	Peak	---	---
6	959.26	42.51	46.00	-3.49	38.31	4.20	Peak	---	---

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

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

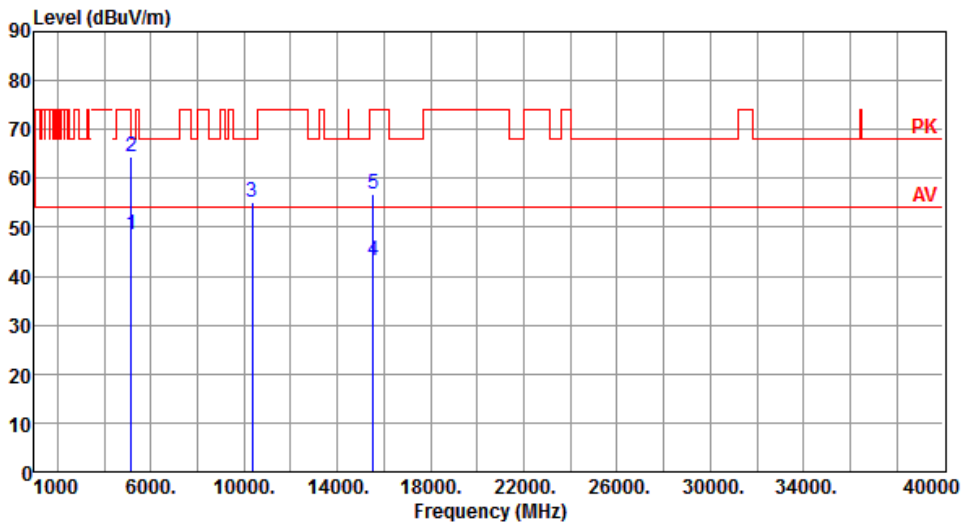
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	52.63	54.00	-1.37	48.09	4.54	Average	118	51
2	5150.00	70.60	74.00	-3.40	66.06	4.54	Peak	118	51
3	10360.00	56.05	68.20	-12.15	42.27	13.78	Peak	100	251
4	15540.00	43.22	54.00	-10.78	28.94	14.28	Average	100	201
5	15540.00	57.09	74.00	-16.91	42.81	14.28	Peak	100	201

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

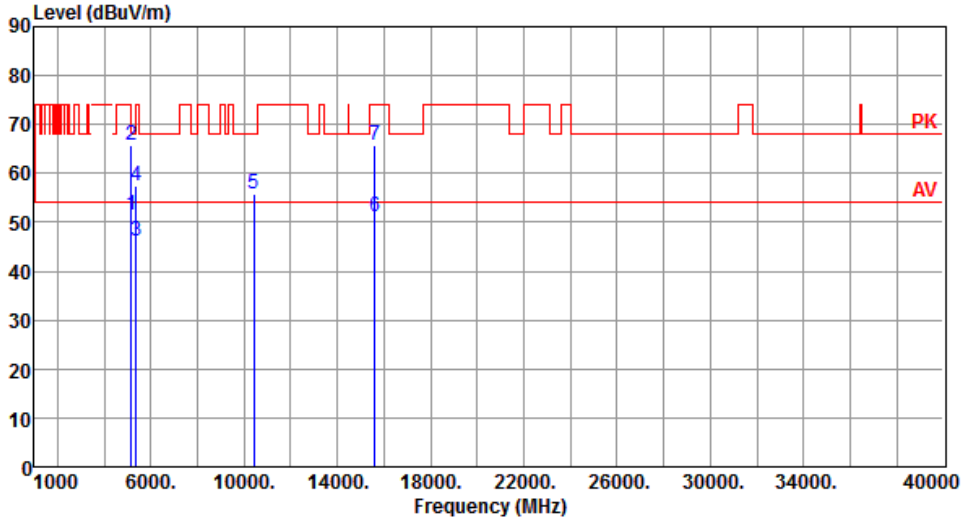
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	48.60	54.00	-5.40	44.06	4.54	Average	274	44
2	5150.00	64.58	74.00	-9.42	60.04	4.54	Peak	274	44
3	10360.00	55.24	68.20	-12.96	41.46	13.78	Peak	100	151
4	15540.00	43.04	54.00	-10.96	28.76	14.28	Average	100	224
5	15540.00	56.88	74.00	-17.12	42.60	14.28	Peak	100	224

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

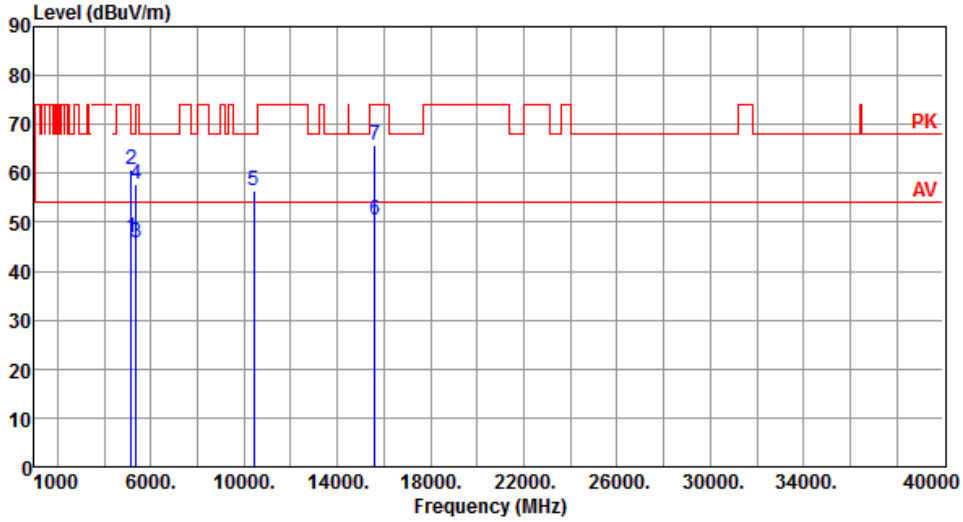
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	51.40	54.00	-2.60	46.86	4.54	Average	111	45
2	5150.00	65.75	74.00	-8.25	61.21	4.54	Peak	111	45
3	5350.00	46.15	54.00	-7.85	42.02	4.13	Average	100	56
4	5350.00	57.50	74.00	-16.50	53.37	4.13	Peak	100	56
5	10400.00	55.76	68.20	-12.44	41.87	13.89	Peak	100	260
6	15600.00	51.24	54.00	-2.76	37.14	14.10	Average	113	174
7	15600.00	65.80	74.00	-8.20	51.70	14.10	Peak	113	174

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

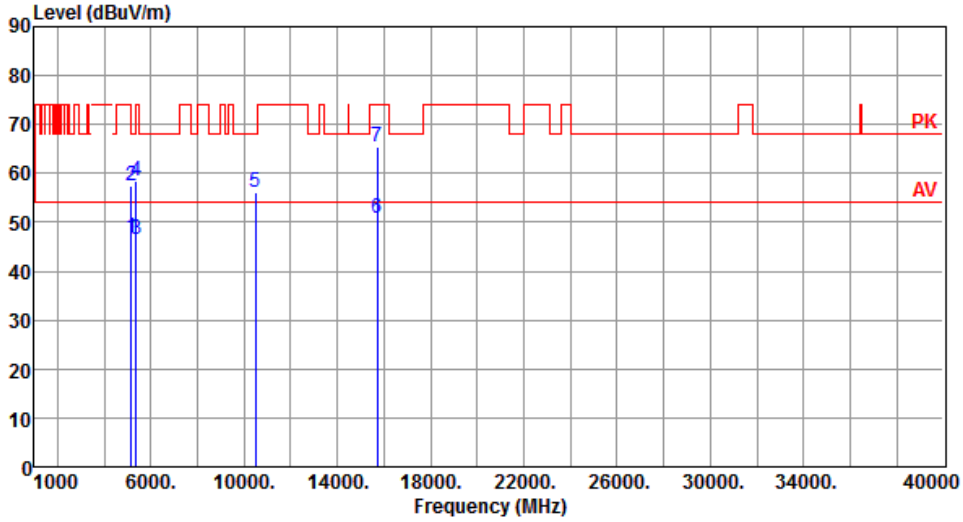
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.93	54.00	-7.07	42.39	4.54	Average	100	51
2	5150.00	60.88	74.00	-13.12	56.34	4.54	Peak	100	51
3	5350.00	45.86	54.00	-8.14	41.73	4.13	Average	100	51
4	5350.00	57.91	74.00	-16.09	53.78	4.13	Peak	100	51
5	10400.00	56.38	68.20	-11.82	42.49	13.89	Peak	175	163
6	15600.00	50.53	54.00	-3.47	36.43	14.10	Average	100	217
7	15600.00	65.62	74.00	-8.38	51.52	14.10	Peak	100	217

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

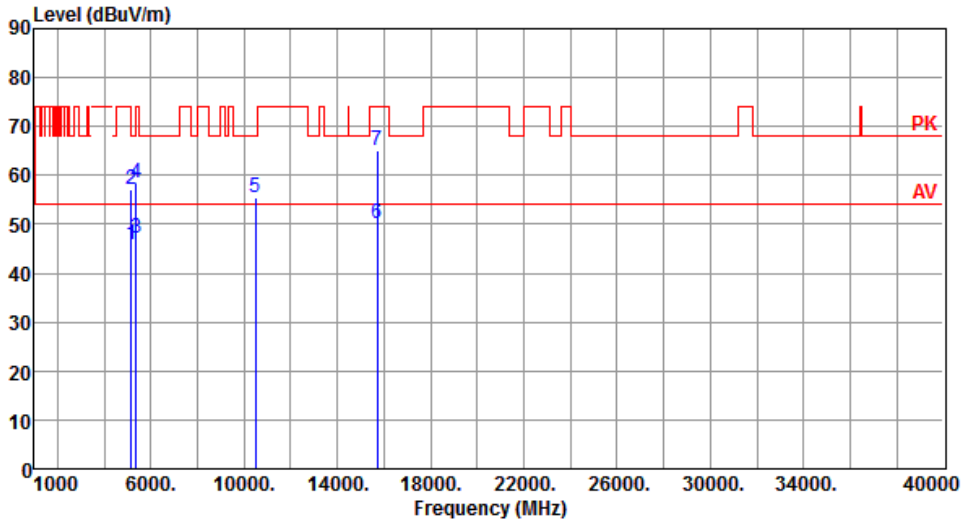
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.89	54.00	-7.11	42.35	4.54	Average	100	50
2	5150.00	57.37	74.00	-16.63	52.83	4.54	Peak	100	50
3	5350.00	46.63	54.00	-7.37	42.50	4.13	Average	100	50
4	5350.00	58.33	74.00	-15.67	54.20	4.13	Peak	100	50
5	10480.00	56.29	68.20	-11.91	42.41	13.88	Peak	100	266
6	15720.00	50.86	54.00	-3.14	36.97	13.89	Average	140	188
7	15720.00	65.32	74.00	-8.68	51.43	13.89	Peak	140	188

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

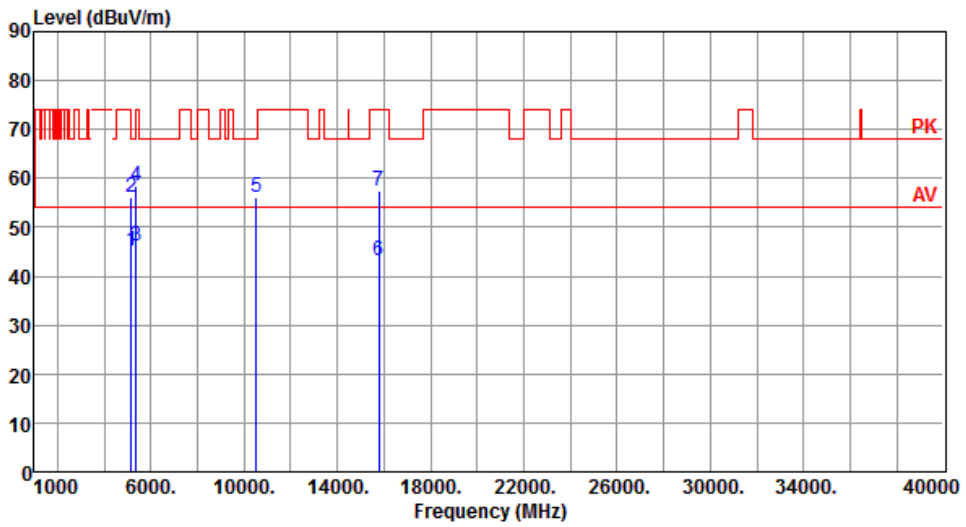
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.92	54.00	-8.08	41.38	4.54	Average	100	52
2	5150.00	57.07	74.00	-16.93	52.53	4.54	Peak	100	52
3	5350.00	47.22	54.00	-6.78	43.09	4.13	Average	100	52
4	5350.00	58.42	74.00	-15.58	54.29	4.13	Peak	100	52
5	10480.00	55.32	68.20	-12.88	41.44	13.88	Peak	100	154
6	15720.00	49.99	54.00	-4.01	36.10	13.89	Average	231	217
7	15720.00	64.95	74.00	-9.05	51.06	13.89	Peak	231	217

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

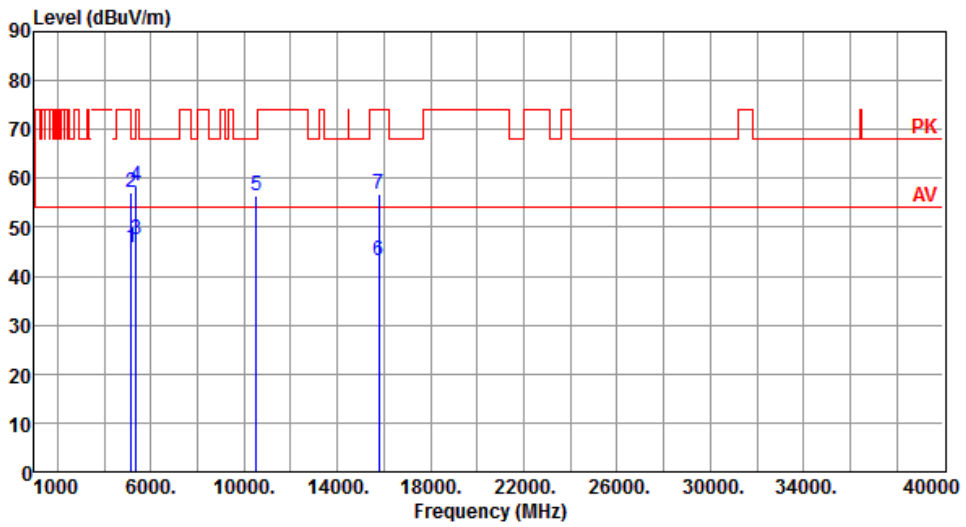
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.22	54.00	-8.78	40.68	4.54	Average	100	58
2	5150.00	56.07	74.00	-17.93	51.53	4.54	Peak	100	58
3	5350.00	46.17	54.00	-7.83	42.04	4.13	Average	100	58
4	5350.00	58.32	74.00	-15.68	54.19	4.13	Peak	100	58
5	10520.00	56.18	68.20	-12.02	42.30	13.88	Peak	100	263
6	15780.00	43.17	54.00	-10.83	29.34	13.83	Average	100	205
7	15780.00	57.36	74.00	-16.64	43.53	13.83	Peak	100	205

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

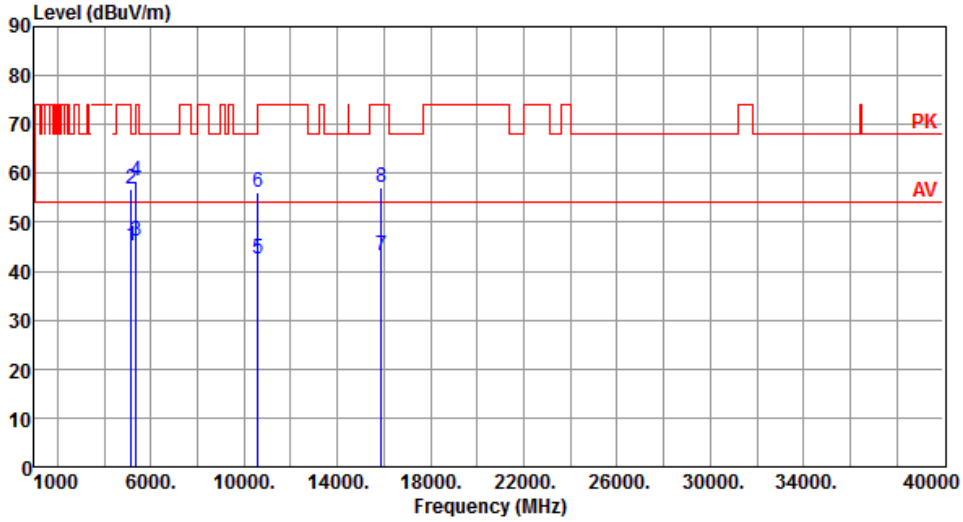
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.89	54.00	-8.11	41.35	4.54	Average	100	330
2	5150.00	56.99	74.00	-17.01	52.45	4.54	Peak	100	330
3	5350.00	47.52	54.00	-6.48	43.39	4.13	Average	100	330
4	5350.00	58.47	74.00	-15.53	54.34	4.13	Peak	100	330
5	10520.00	56.30	68.20	-11.90	42.42	13.88	Peak	100	152
6	15780.00	43.19	54.00	-10.81	29.36	13.83	Average	100	225
7	15780.00	56.84	74.00	-17.16	43.01	13.83	Peak	100	225

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

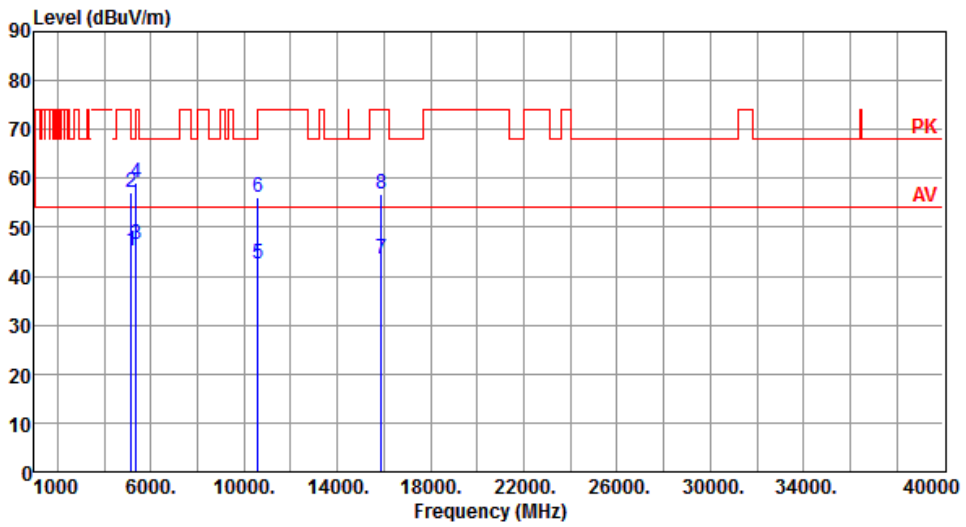
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.26	54.00	-8.74	40.72	4.54	Average	100	53
2	5150.00	56.93	74.00	-17.07	52.39	4.54	Peak	100	53
3	5350.00	46.17	54.00	-7.83	42.04	4.13	Average	100	53
4	5350.00	58.47	74.00	-15.53	54.34	4.13	Peak	100	53
5	10600.00	42.40	54.00	-11.60	28.55	13.85	Average	100	252
6	10600.00	56.03	74.00	-17.97	42.18	13.85	Peak	100	252
7	15900.00	43.05	54.00	-10.95	29.23	13.82	Average	100	208
8	15900.00	57.03	74.00	-16.97	43.21	13.82	Peak	100	208

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

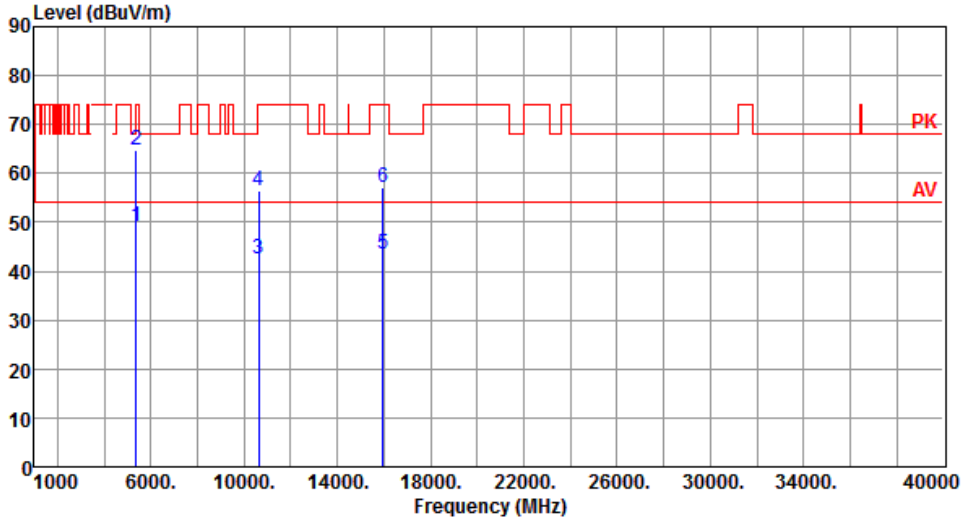
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.26	54.00	-8.74	40.72	4.54	Average	100	328
2	5150.00	57.04	74.00	-16.96	52.50	4.54	Peak	100	328
3	5350.00	46.47	54.00	-7.53	42.34	4.13	Average	100	328
4	5350.00	59.13	74.00	-14.87	55.00	4.13	Peak	100	328
5	10600.00	42.58	54.00	-11.42	28.73	13.85	Average	100	154
6	10600.00	56.25	74.00	-17.75	42.40	13.85	Peak	100	154
7	15900.00	43.37	54.00	-10.63	29.55	13.82	Average	100	217
8	15900.00	56.94	74.00	-17.06	43.12	13.82	Peak	100	217

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

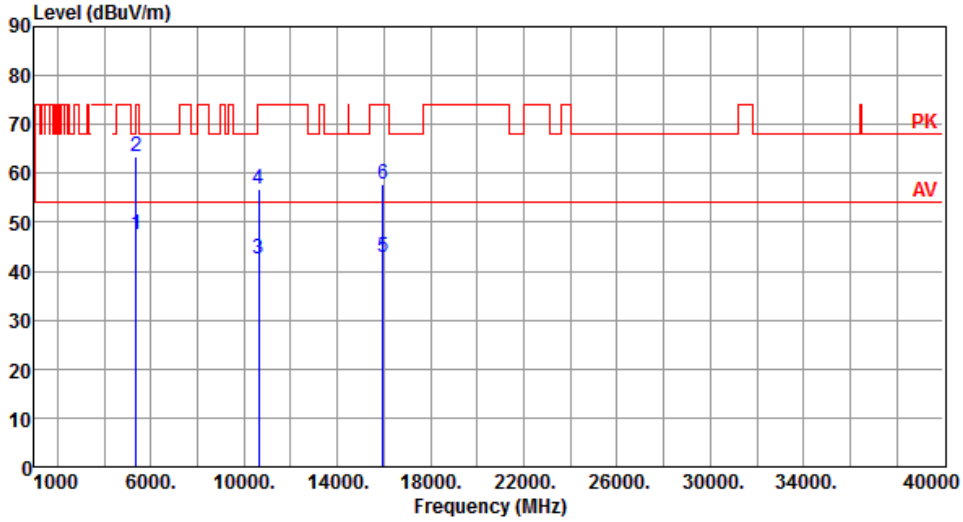
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.17	54.00	-4.83	45.04	4.13	Average	102	52
2	5350.00	64.77	74.00	-9.23	60.64	4.13	Peak	102	52
3	10640.00	42.51	54.00	-11.49	28.66	13.85	Average	100	254
4	10640.00	56.52	74.00	-17.48	42.67	13.85	Peak	100	254
5	15960.00	43.56	54.00	-10.44	29.80	13.76	Average	100	210
6	15960.00	57.26	74.00	-16.74	43.50	13.76	Peak	100	210

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

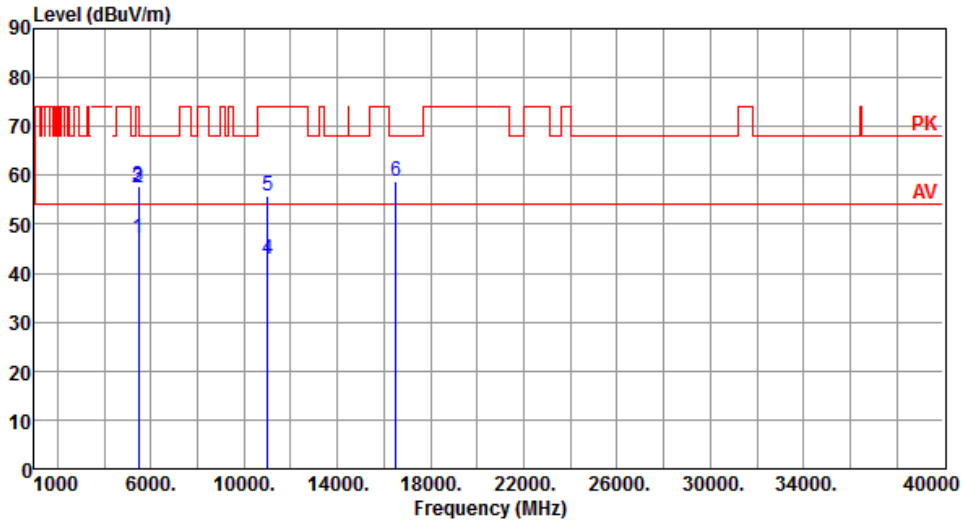
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.49	54.00	-6.51	43.36	4.13	Average	100	322
2	5350.00	63.51	74.00	-10.49	59.38	4.13	Peak	100	322
3	10640.00	42.52	54.00	-11.48	28.67	13.85	Average	100	149
4	10640.00	56.64	74.00	-17.36	42.79	13.85	Peak	100	149
5	15960.00	42.92	54.00	-11.08	29.16	13.76	Average	100	227
6	15960.00	57.69	74.00	-16.31	43.93	13.76	Peak	100	227

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

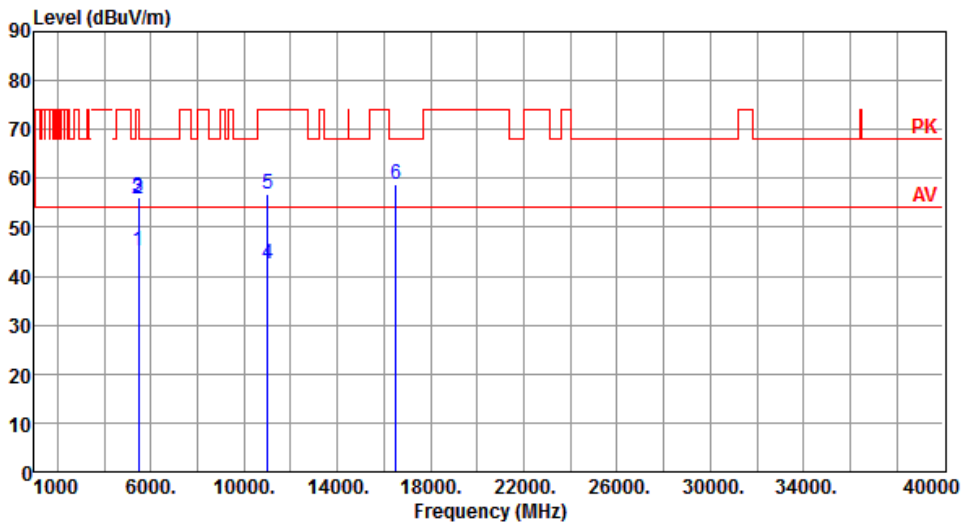
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.14	54.00	-6.86	42.50	4.64	Average	138	63
2	5460.00	57.34	74.00	-16.66	52.70	4.64	Peak	138	63
3	5470.00	57.64	68.20	-10.56	52.99	4.65	Peak	138	63
4	11000.00	42.83	54.00	-11.17	28.58	14.25	Average	100	102
5	11000.00	55.68	74.00	-18.32	41.43	14.25	Peak	100	102
6	16500.00	58.78	68.20	-9.42	43.05	15.73	Peak	100	102

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

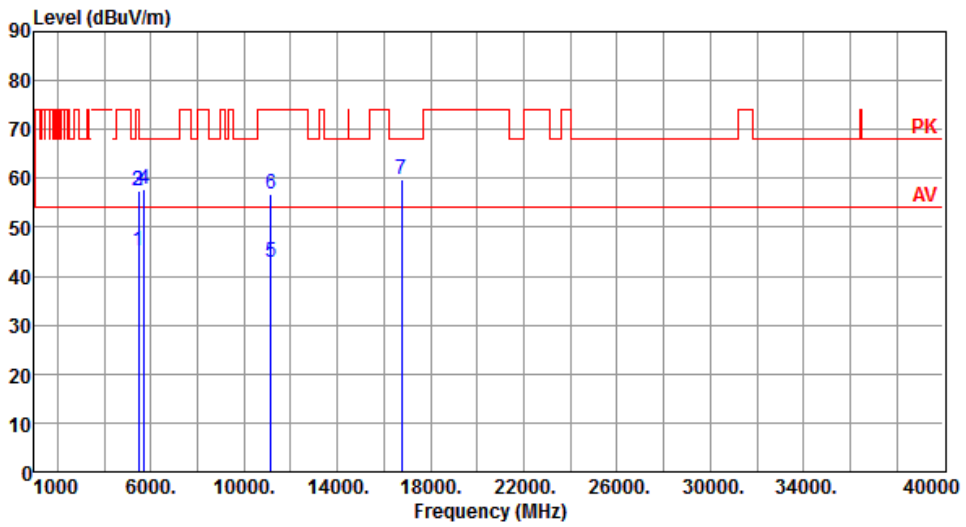
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	45.19	54.00	-8.81	40.55	4.64	Average	100	13
2	5460.00	55.92	74.00	-18.08	51.28	4.64	Peak	100	13
3	5470.00	56.25	68.20	-11.95	51.60	4.65	Peak	100	13
4	11000.00	42.54	54.00	-11.46	28.29	14.25	Average	100	302
5	11000.00	56.79	74.00	-17.21	42.54	14.25	Peak	100	302
6	16500.00	58.76	68.20	-9.44	43.03	15.73	Peak	100	305

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

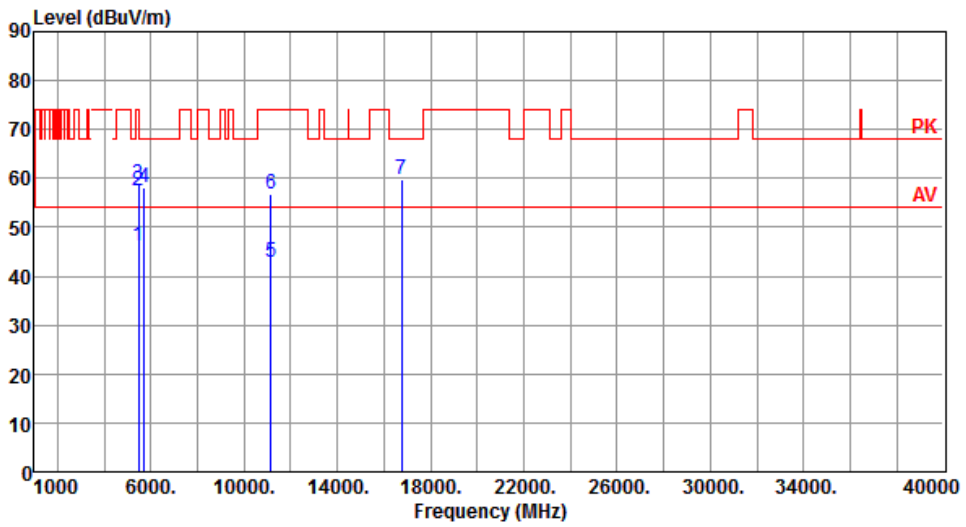
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	45.24	54.00	-8.76	40.60	4.64	Average	171	50
2	5460.00	57.39	74.00	-16.61	52.75	4.64	Peak	171	50
3	5470.00	57.53	68.20	-10.67	52.88	4.65	Peak	171	50
4	5725.00	57.90	68.20	-10.30	52.65	5.25	Peak	171	50
5	11160.00	42.99	54.00	-11.01	29.10	13.89	Average	100	96
6	11160.00	56.79	74.00	-17.21	42.90	13.89	Peak	100	96
7	16740.00	59.82	68.20	-8.38	42.74	17.08	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).

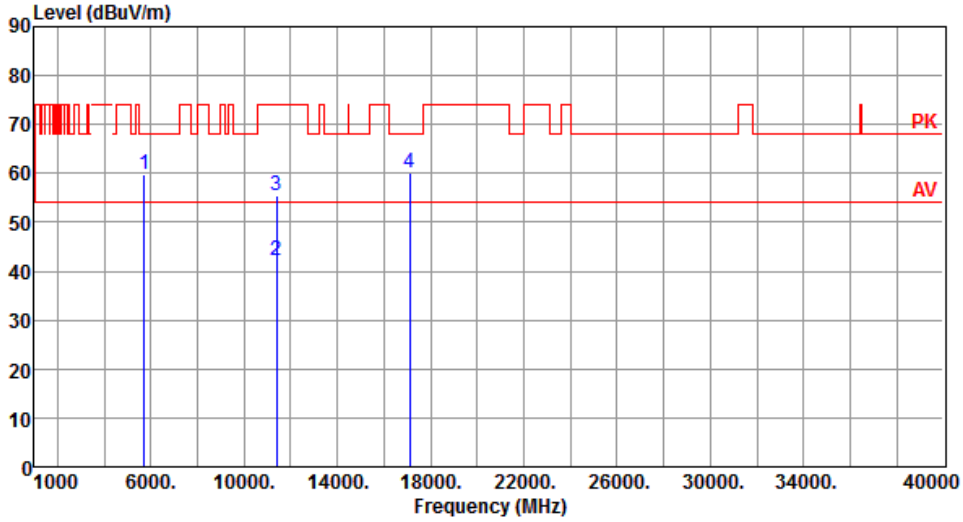
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	46.28	54.00	-7.72	41.64	4.64	Average	101	49
2	5460.00	57.35	74.00	-16.65	52.71	4.64	Peak	101	49
3	5470.00	58.64	68.20	-9.56	53.99	4.65	Peak	101	49
4	5725.00	58.23	68.20	-9.97	52.98	5.25	Peak	101	49
5	11160.00	42.70	54.00	-11.30	28.81	13.89	Average	100	300
6	11160.00	56.68	74.00	-17.32	42.79	13.89	Peak	100	300
7	16740.00	59.74	68.20	-8.46	42.66	17.08	Peak	100	305

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

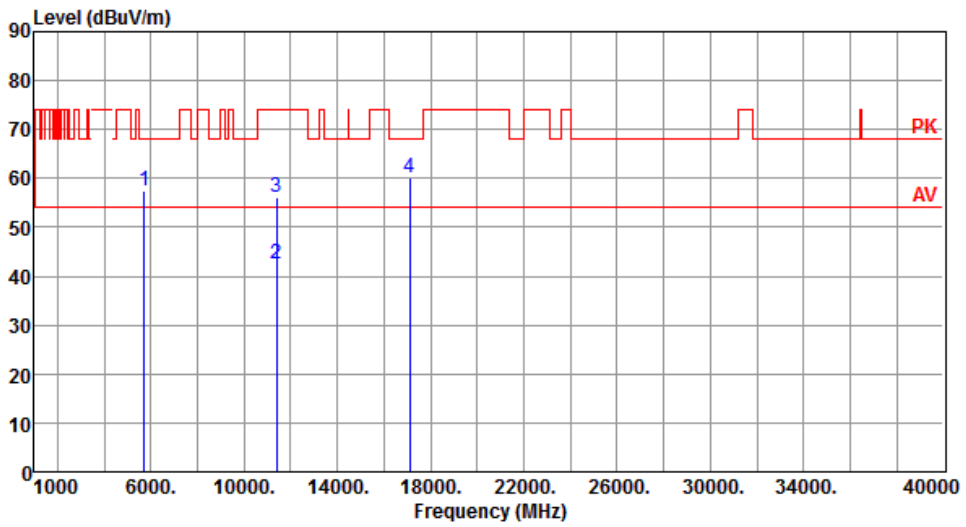
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.85	68.20	-8.35	54.60	5.25	Peak	165	305
2	11400.00	42.21	54.00	-11.79	28.21	14.00	Average	100	95
3	11400.00	55.62	74.00	-18.38	41.62	14.00	Peak	100	95
4	17100.00	60.10	68.20	-8.10	43.17	16.93	Peak	100	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).

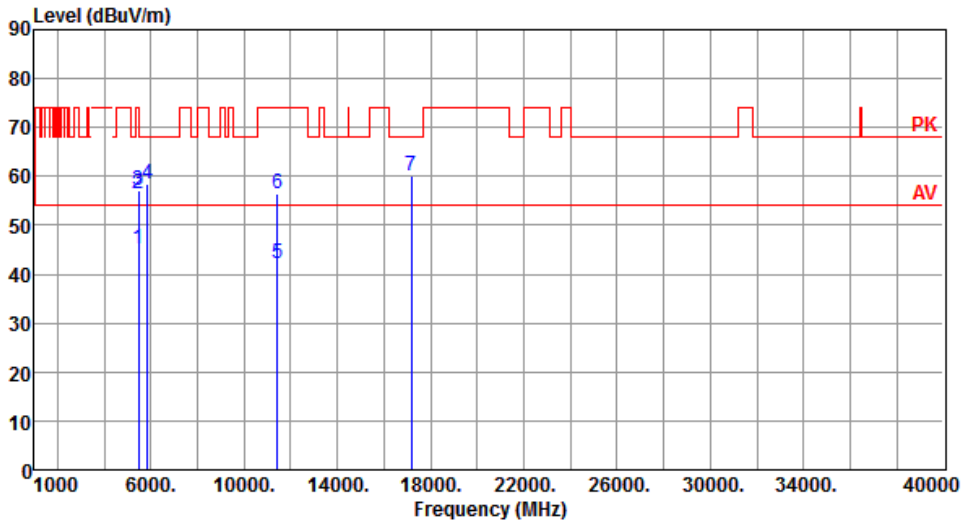
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	57.36	68.20	-10.84	52.11	5.25	Peak	149	16
2	11400.00	42.48	54.00	-11.52	28.48	14.00	Average	100	304
3	11400.00	56.21	74.00	-17.79	42.21	14.00	Peak	100	304
4	17100.00	59.97	68.20	-8.23	43.04	16.93	Peak	100	301

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

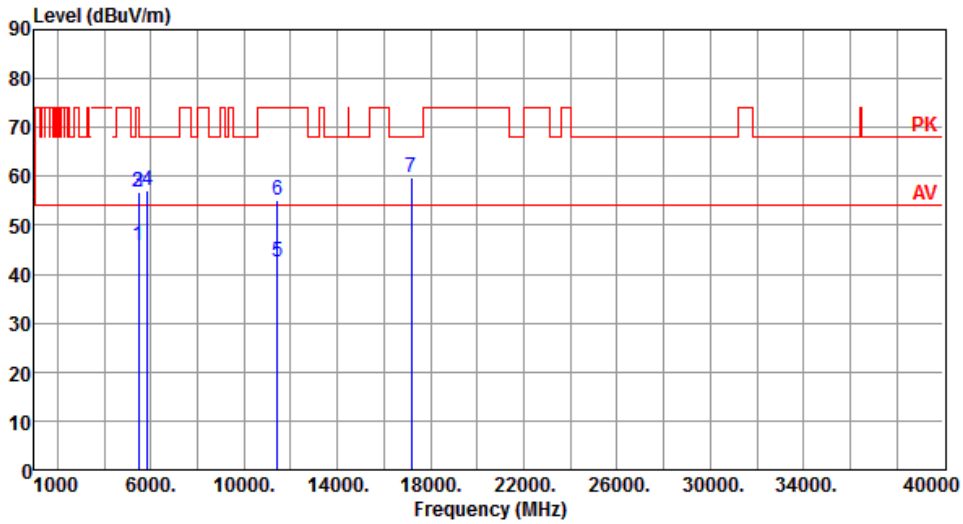
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		



	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	45.28	54.00	-8.72	40.64	4.64	Average	162	304
2	5460.00	56.39	74.00	-17.61	51.75	4.64	Peak	162	304
3	5470.00	57.18	68.20	-11.02	52.53	4.65	Peak	162	304
4	5850.00	58.49	68.20	-9.71	52.68	5.81	Peak	162	304
5	11440.00	42.17	54.00	-11.83	28.11	14.06	Average	100	92
6	11440.00	56.34	74.00	-17.66	42.28	14.06	Peak	100	92
7	17160.00	60.18	68.20	-8.02	43.12	17.06	Peak	100	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).

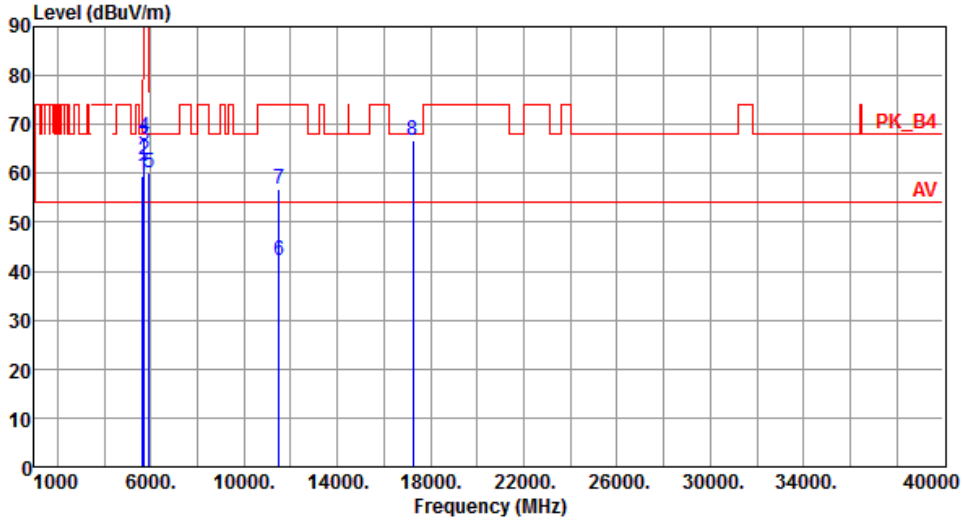
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		



	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	45.69	54.00	-8.31	41.05	4.64	Average	182	17
2	5460.00	56.67	74.00	-17.33	52.03	4.64	Peak	182	17
3	5470.00	56.93	68.20	-11.27	52.28	4.65	Peak	182	17
4	5850.00	57.23	68.20	-10.97	51.42	5.81	Peak	182	17
5	11440.00	42.44	54.00	-11.56	28.38	14.06	Average	100	298
6	11440.00	55.26	74.00	-18.74	41.20	14.06	Peak	100	298
7	17160.00	59.77	68.20	-8.43	42.71	17.06	Peak	100	300

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

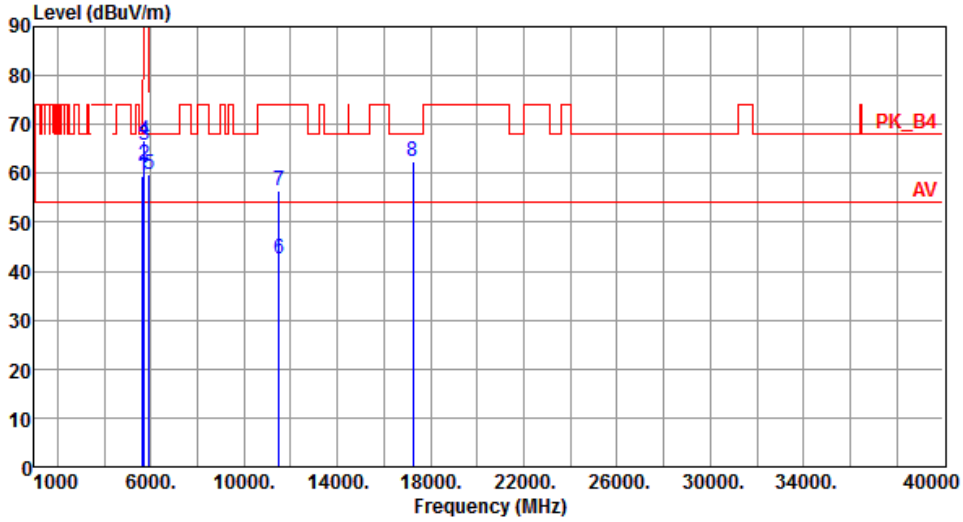
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	59.34	68.20	-8.86	54.37	4.97	Peak	167	311
2	5700.00	62.93	105.20	-42.27	57.77	5.16	Peak	167	311
3	5720.00	65.68	110.80	-45.12	60.45	5.23	Peak	167	311
4	5725.00	67.44	122.20	-54.76	62.19	5.25	Peak	167	311
5	5925.00	60.24	68.20	-7.96	54.15	6.09	Peak	167	311
6	11490.00	42.06	54.00	-11.94	27.94	14.12	Average	100	159
7	11490.00	56.68	74.00	-17.32	42.56	14.12	Peak	100	159
8	17235.00	66.89	68.20	-1.31	49.66	17.23	Peak	225	315

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

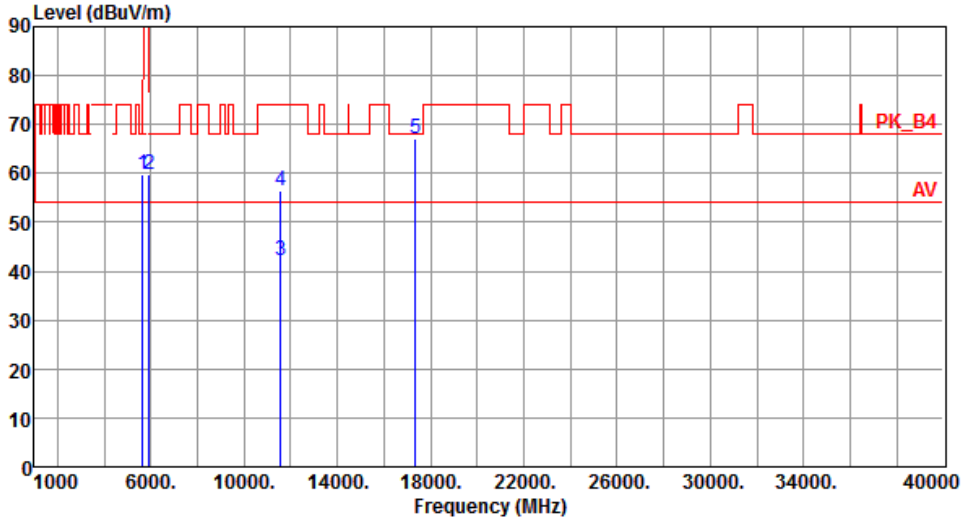
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	59.42	68.20	-8.78	54.45	4.97	Peak	307	17
2	5700.00	61.72	105.20	-43.48	56.56	5.16	Peak	307	17
3	5720.00	65.72	110.80	-45.08	60.49	5.23	Peak	307	17
4	5725.00	66.79	122.20	-55.41	61.54	5.25	Peak	307	17
5	5925.00	59.92	68.20	-8.28	53.83	6.09	Peak	307	17
6	11490.00	42.63	54.00	-11.37	28.51	14.12	Average	100	262
7	11490.00	56.56	74.00	-17.44	42.44	14.12	Peak	100	262
8	17235.00	62.55	68.20	-5.65	45.32	17.23	Peak	321	8

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

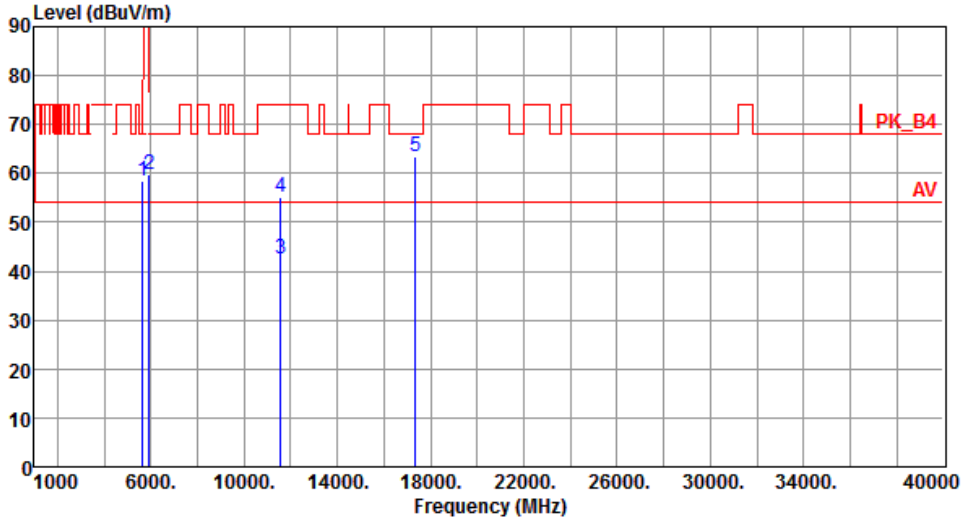
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	59.73	68.20	-8.47	54.76	4.97	Peak	165	304
2	5925.00	59.75	68.20	-8.45	53.66	6.09	Peak	165	304
3	11570.00	42.21	54.00	-11.79	28.26	13.95	Average	100	155
4	11570.00	56.46	74.00	-17.54	42.51	13.95	Peak	100	155
5	17355.00	66.97	68.20	-1.23	49.35	17.62	Peak	215	316

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

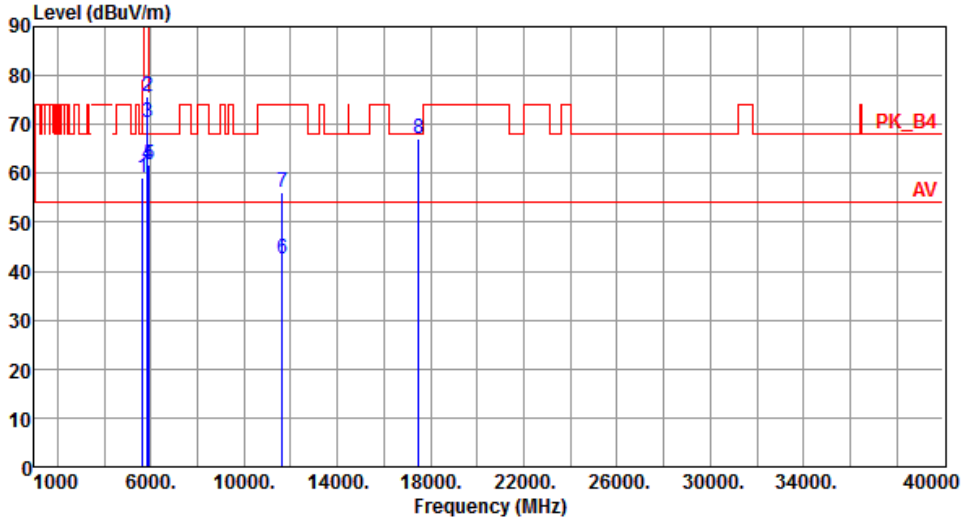
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	58.53	68.20	-9.67	53.56	4.97	Peak	334	18
2	5925.00	59.89	68.20	-8.31	53.80	6.09	Peak	334	18
3	11570.00	42.49	54.00	-11.51	28.54	13.95	Average	100	254
4	11570.00	55.29	74.00	-18.71	41.34	13.95	Peak	100	254
5	17355.00	63.37	68.20	-4.83	45.75	17.62	Peak	323	7

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

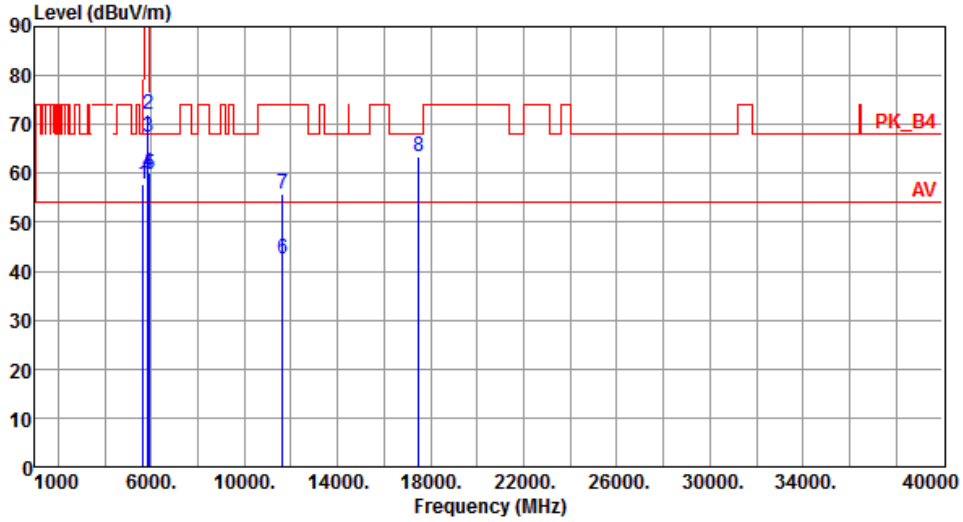
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	59.23	68.20	-8.97	54.26	4.97	Peak	170	304
2	5850.00	75.57	122.20	-46.63	69.76	5.81	Peak	170	304
3	5855.00	70.56	110.80	-40.24	64.73	5.83	Peak	170	304
4	5875.00	61.92	105.20	-43.28	56.02	5.90	Peak	170	304
5	5925.00	61.66	68.20	-6.54	55.57	6.09	Peak	170	304
6	11650.00	42.55	54.00	-11.45	28.93	13.62	Average	100	159
7	11650.00	56.28	74.00	-17.72	42.66	13.62	Peak	100	159
8	17475.00	67.19	68.20	-1.01	49.29	17.90	Peak	202	300

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

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

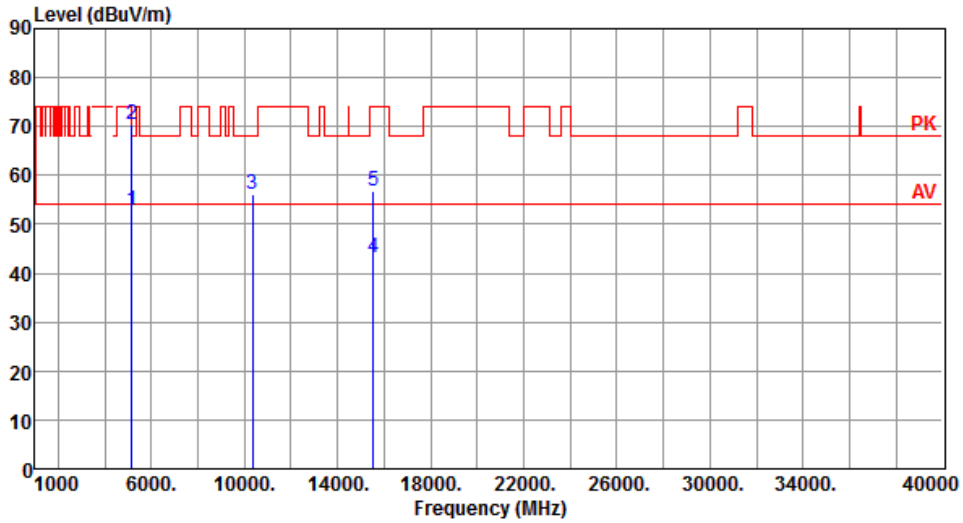


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.89	68.20	-10.31	52.92	4.97	Peak	346	16
2	5850.00	72.11	122.20	-50.09	66.30	5.81	Peak	346	16
3	5855.00	67.50	110.80	-43.30	61.67	5.83	Peak	346	16
4	5875.00	60.17	105.20	-45.03	54.27	5.90	Peak	346	16
5	5925.00	59.65	68.20	-8.55	53.56	6.09	Peak	346	16
6	11650.00	42.49	54.00	-11.51	28.87	13.62	Average	100	254
7	11650.00	55.68	74.00	-18.32	42.06	13.62	Peak	100	254
8	17475.00	63.59	68.20	-4.61	45.69	17.90	Peak	315	5

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

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT20

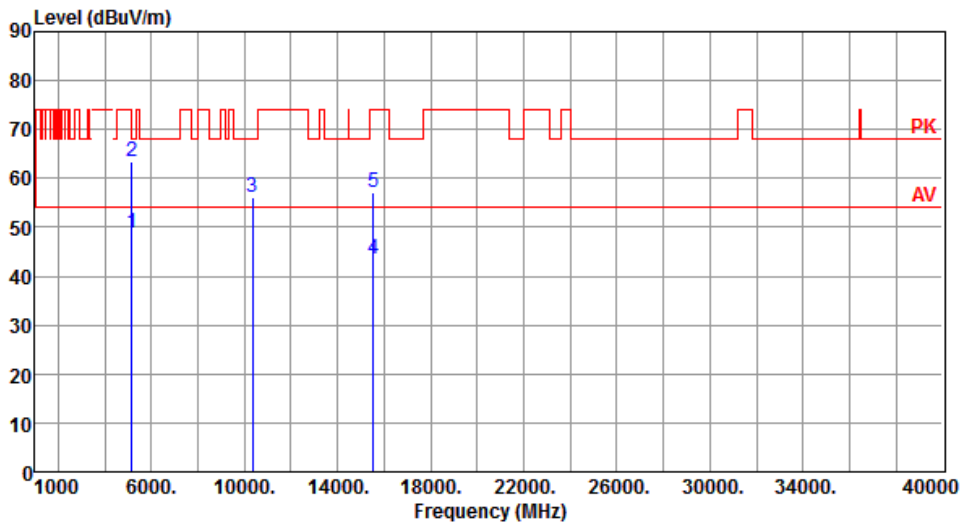
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	52.65	54.00	-1.35	48.11	4.54	Average	176	42
2	5150.00	70.25	74.00	-3.75	65.71	4.54	Peak	176	42
3	10360.00	56.16	68.20	-12.04	42.38	13.78	Peak	100	269
4	15540.00	43.23	54.00	-10.77	28.95	14.28	Average	100	216
5	15540.00	56.90	74.00	-17.10	42.62	14.28	Peak	100	216

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

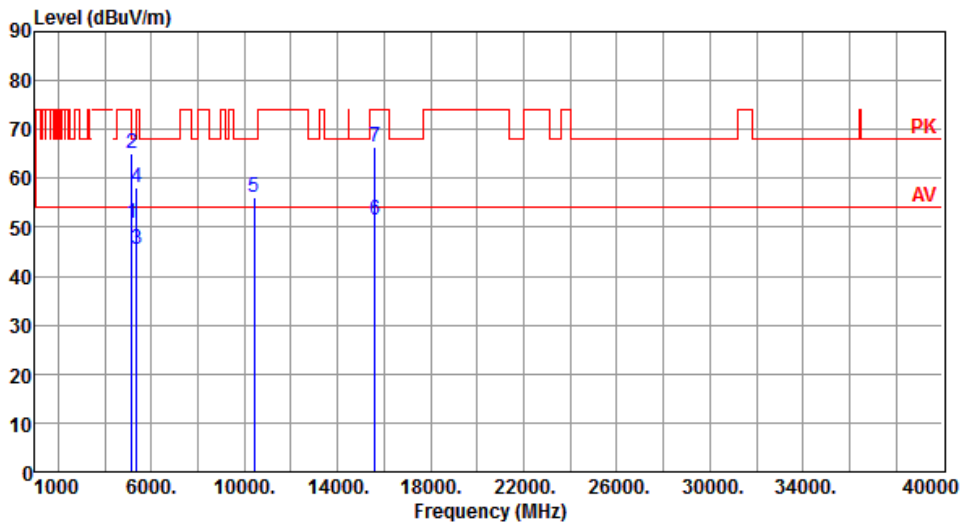
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	48.93	54.00	-5.07	44.39	4.54	Average	100	325
2	5150.00	63.37	74.00	-10.63	58.83	4.54	Peak	100	325
3	10360.00	55.97	68.20	-12.23	42.19	13.78	Peak	100	158
4	15540.00	43.54	54.00	-10.46	29.26	14.28	Average	100	224
5	15540.00	57.06	74.00	-16.94	42.78	14.28	Peak	100	224

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

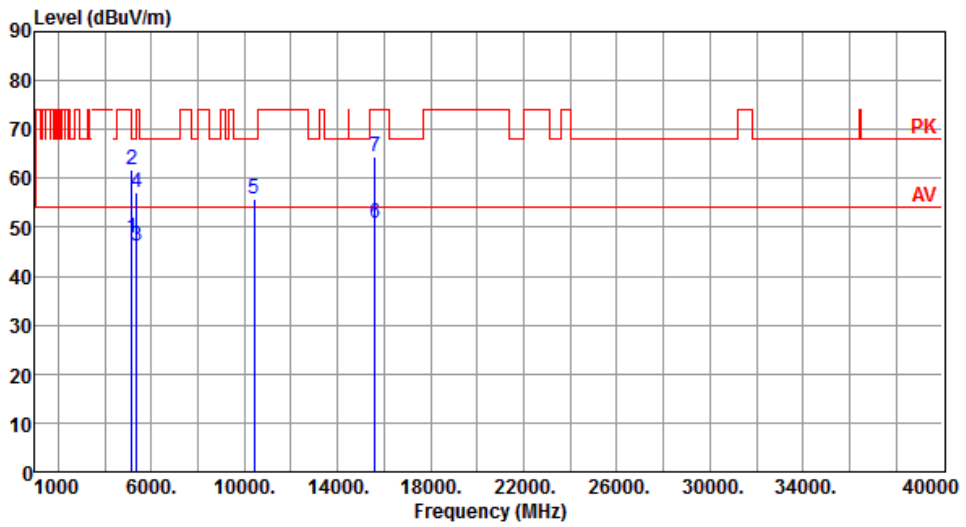
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	50.76	54.00	-3.24	46.22	4.54	Average	100	55
2	5150.00	64.98	74.00	-9.02	60.44	4.54	Peak	100	55
3	5350.00	45.49	54.00	-8.51	41.36	4.13	Average	100	50
4	5350.00	58.03	74.00	-15.97	53.90	4.13	Peak	100	50
5	10400.00	56.26	68.20	-11.94	42.37	13.89	Peak	100	261
6	15600.00	51.53	54.00	-2.47	37.43	14.10	Average	111	167
7	15600.00	66.55	74.00	-7.45	52.45	14.10	Peak	111	167

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

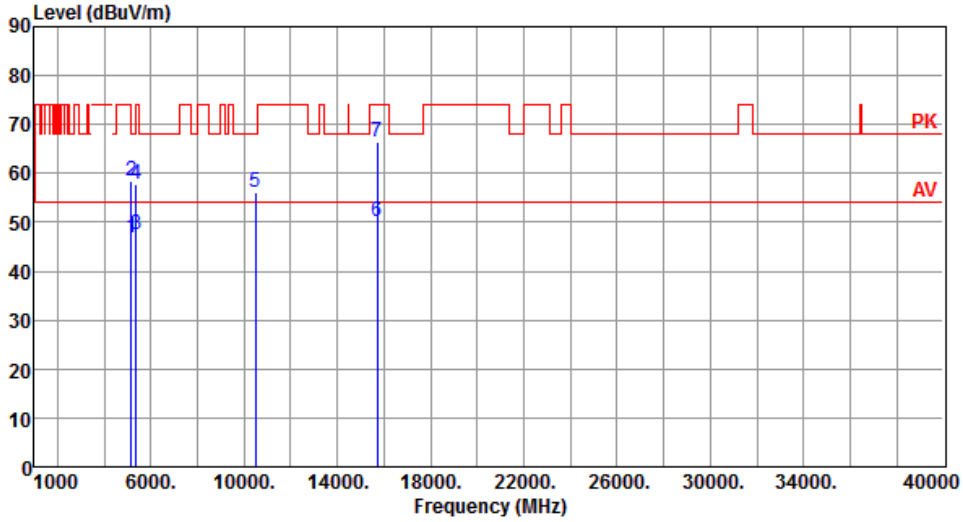
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.93	54.00	-6.07	43.39	4.54	Average	100	321
2	5150.00	61.89	74.00	-12.11	57.35	4.54	Peak	100	321
3	5350.00	46.24	54.00	-7.76	42.11	4.13	Average	100	321
4	5350.00	57.13	74.00	-16.87	53.00	4.13	Peak	100	321
5	10400.00	55.87	68.20	-12.33	41.98	13.89	Peak	100	170
6	15600.00	50.72	54.00	-3.28	36.62	14.10	Average	248	223
7	15600.00	64.47	74.00	-9.53	50.37	14.10	Peak	248	223

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

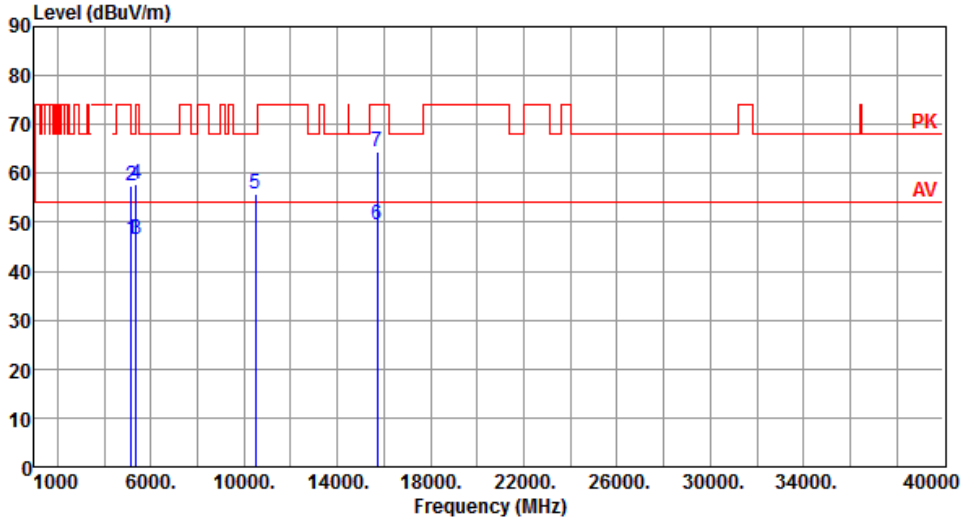
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	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	46.67	54.00	-7.33	42.13	4.54	Average	100	57
2	5150.00	58.58	74.00	-15.42	54.04	4.54	Peak	100	57
3	5350.00	47.44	54.00	-6.56	43.31	4.13	Average	100	57
4	5350.00	57.81	74.00	-16.19	53.68	4.13	Peak	100	57
5	10480.00	56.22	68.20	-11.98	42.34	13.88	Peak	100	258
6	15720.00	50.28	54.00	-3.72	36.39	13.89	Average	145	198
7	15720.00	66.53	74.00	-7.47	52.64	13.89	Peak	145	198

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

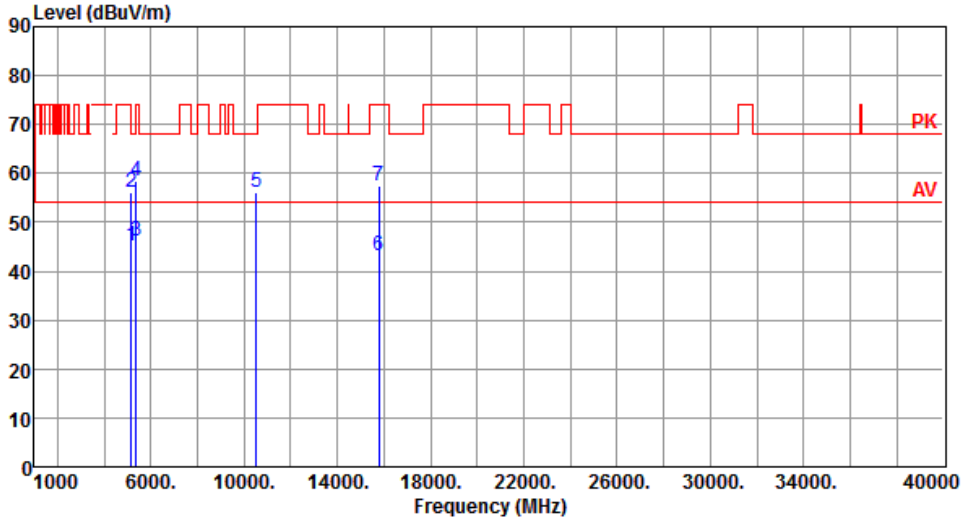
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	46.38	54.00	-7.62	41.84	4.54	Average	100	323
2	5150.00	57.43	74.00	-16.57	52.89	4.54	Peak	100	323
3	5350.00	46.50	54.00	-7.50	42.37	4.13	Average	100	323
4	5350.00	57.74	74.00	-16.26	53.61	4.13	Peak	100	323
5	10480.00	55.86	68.20	-12.34	41.98	13.88	Peak	100	156
6	15720.00	49.45	54.00	-4.55	35.56	13.89	Average	240	220
7	15720.00	64.45	74.00	-9.55	50.56	13.89	Peak	240	220

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

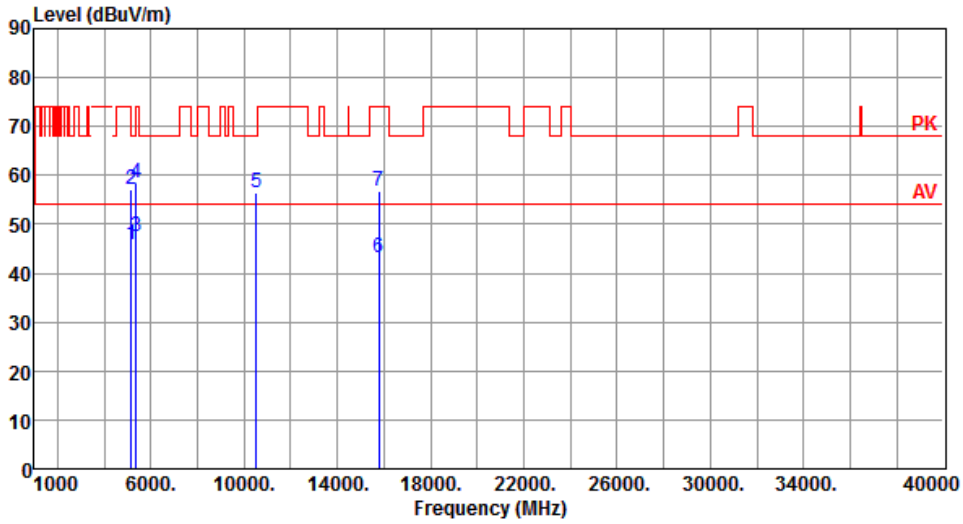
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.22	54.00	-8.78	40.68	4.54	Average	100	58
2	5150.00	56.07	74.00	-17.93	51.53	4.54	Peak	100	58
3	5350.00	46.17	54.00	-7.83	42.04	4.13	Average	100	58
4	5350.00	58.32	74.00	-15.68	54.19	4.13	Peak	100	58
5	10520.00	56.18	68.20	-12.02	42.30	13.88	Peak	100	263
6	15780.00	43.17	54.00	-10.83	29.34	13.83	Average	100	205
7	15780.00	57.36	74.00	-16.64	43.53	13.83	Peak	100	205

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

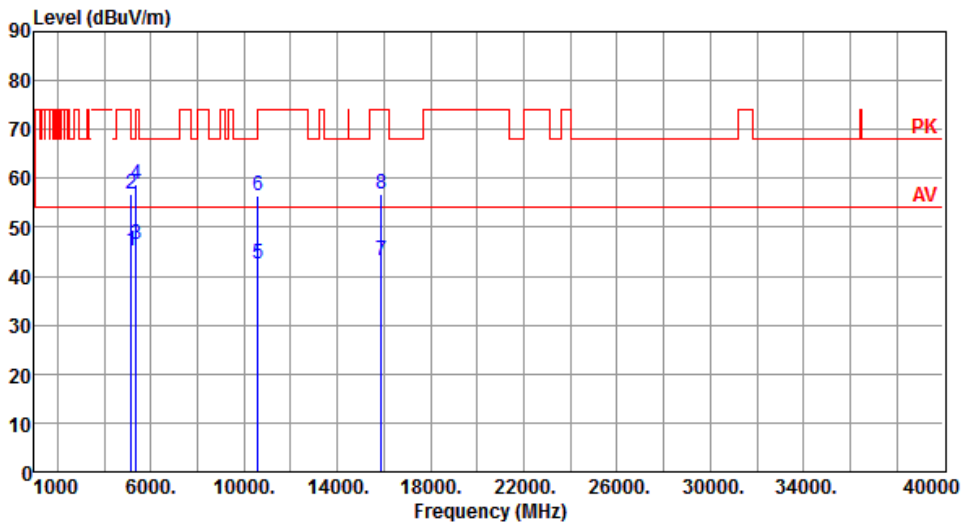
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.89	54.00	-8.11	41.35	4.54	Average	100	330
2	5150.00	56.99	74.00	-17.01	52.45	4.54	Peak	100	330
3	5350.00	47.52	54.00	-6.48	43.39	4.13	Average	100	330
4	5350.00	58.47	74.00	-15.53	54.34	4.13	Peak	100	330
5	10520.00	56.30	68.20	-11.90	42.42	13.88	Peak	100	152
6	15780.00	43.19	54.00	-10.81	29.36	13.83	Average	100	225
7	15780.00	56.84	74.00	-17.16	43.01	13.83	Peak	100	225

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

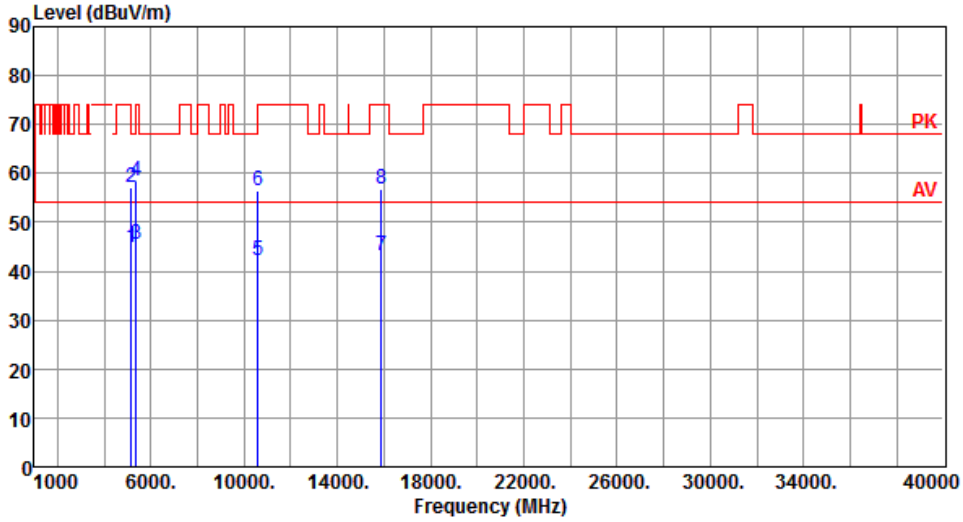
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.18	54.00	-8.82	40.64	4.54	Average	100	54
2	5150.00	56.93	74.00	-17.07	52.39	4.54	Peak	100	54
3	5350.00	46.51	54.00	-7.49	42.38	4.13	Average	100	54
4	5350.00	58.76	74.00	-15.24	54.63	4.13	Peak	100	54
5	10600.00	42.53	54.00	-11.47	28.68	13.85	Average	100	259
6	10600.00	56.53	74.00	-17.47	42.68	13.85	Peak	100	259
7	15900.00	43.22	54.00	-10.78	29.40	13.82	Average	100	199
8	15900.00	56.88	74.00	-17.12	43.06	13.82	Peak	100	199

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

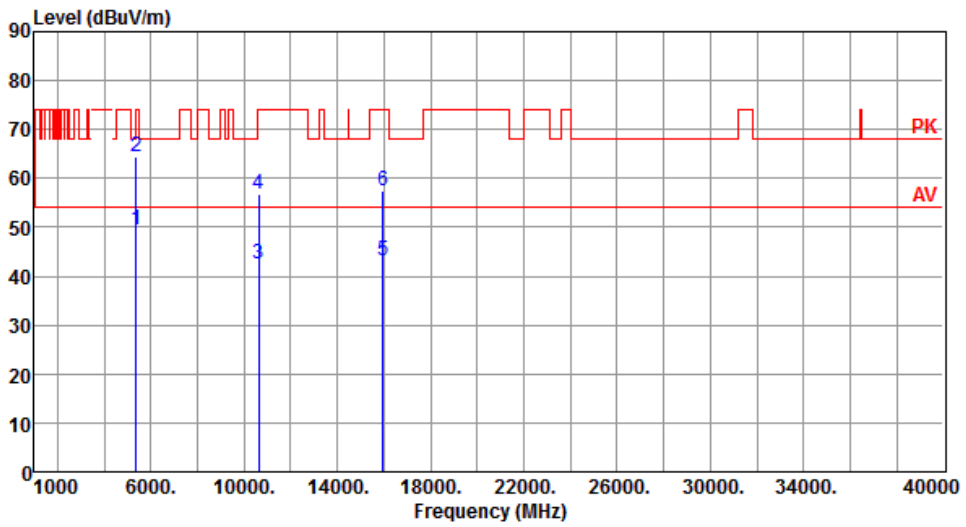
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	44.89	54.00	-9.11	40.35	4.54	Average	103	330
2	5150.00	56.99	74.00	-17.01	52.45	4.54	Peak	103	330
3	5350.00	45.51	54.00	-8.49	41.38	4.13	Average	103	330
4	5350.00	58.42	74.00	-15.58	54.29	4.13	Peak	103	330
5	10600.00	42.31	54.00	-11.69	28.46	13.85	Average	100	157
6	10600.00	56.37	74.00	-17.63	42.52	13.85	Peak	100	157
7	15900.00	43.23	54.00	-10.77	29.41	13.82	Average	100	223
8	15900.00	56.94	74.00	-17.06	43.12	13.82	Peak	100	223

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

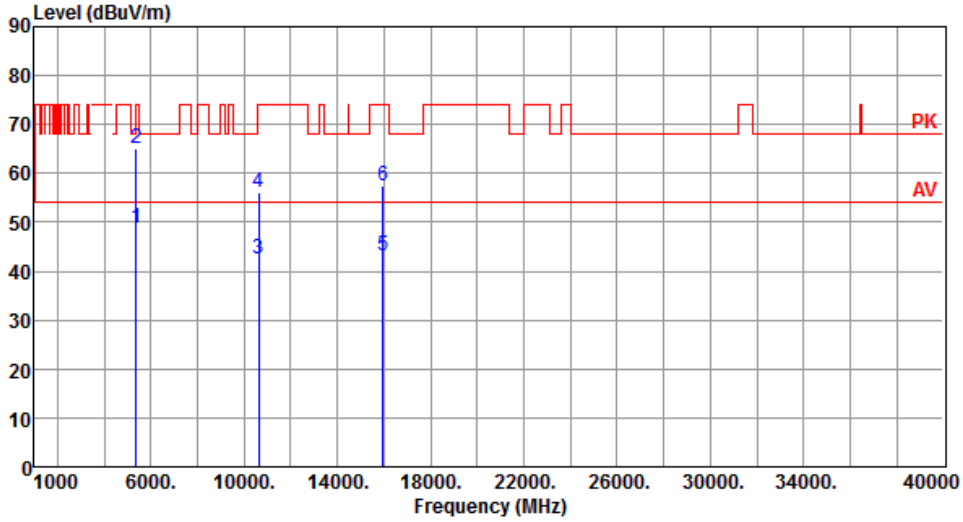
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	49.41	54.00	-4.59	45.28	4.13	Average	333	41
2	5350.00	64.35	74.00	-9.65	60.22	4.13	Peak	333	41
3	10640.00	42.42	54.00	-11.58	28.57	13.85	Average	100	265
4	10640.00	56.70	74.00	-17.30	42.85	13.85	Peak	100	265
5	15960.00	43.24	54.00	-10.76	29.48	13.76	Average	100	201
6	15960.00	57.41	74.00	-16.59	43.65	13.76	Peak	100	201

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

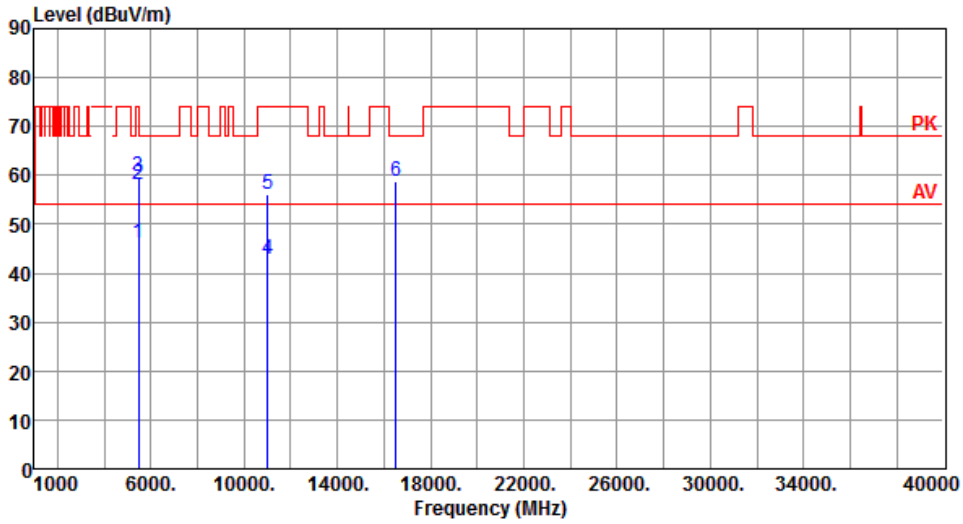
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	48.69	54.00	-5.31	44.56	4.13	Average	101	327
2	5350.00	65.01	74.00	-8.99	60.88	4.13	Peak	101	327
3	10640.00	42.59	54.00	-11.41	28.74	13.85	Average	100	155
4	10640.00	56.20	74.00	-17.80	42.35	13.85	Peak	100	155
5	15960.00	43.22	54.00	-10.78	29.46	13.76	Average	100	228
6	15960.00	57.30	74.00	-16.70	43.54	13.76	Peak	100	228

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

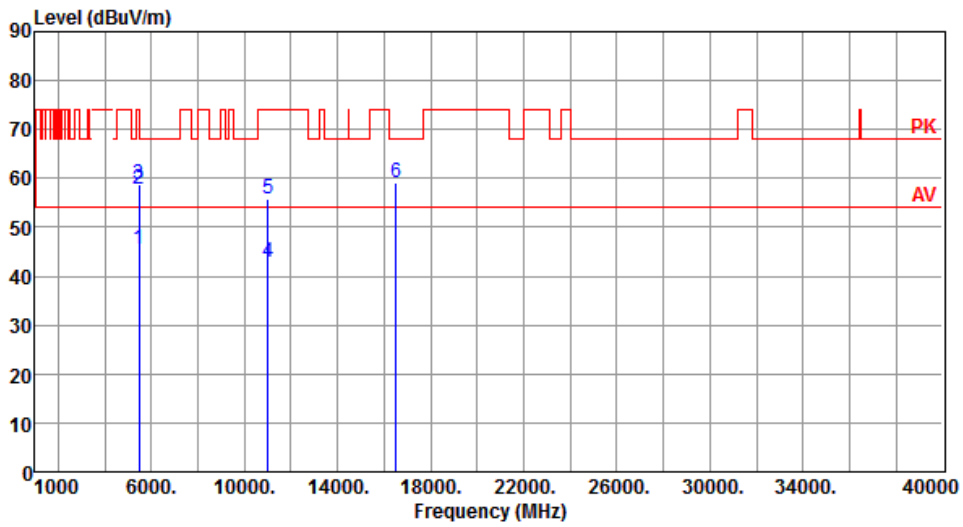
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	46.08	54.00	-7.92	41.44	4.64	Average	126	59
2	5460.00	58.27	74.00	-15.73	53.63	4.64	Peak	126	59
3	5470.00	59.64	68.20	-8.56	54.99	4.65	Peak	126	59
4	11000.00	42.83	54.00	-11.17	28.58	14.25	Average	100	99
5	11000.00	56.12	74.00	-17.88	41.87	14.25	Peak	100	99
6	16500.00	58.71	68.20	-9.49	42.98	15.73	Peak	100	100

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

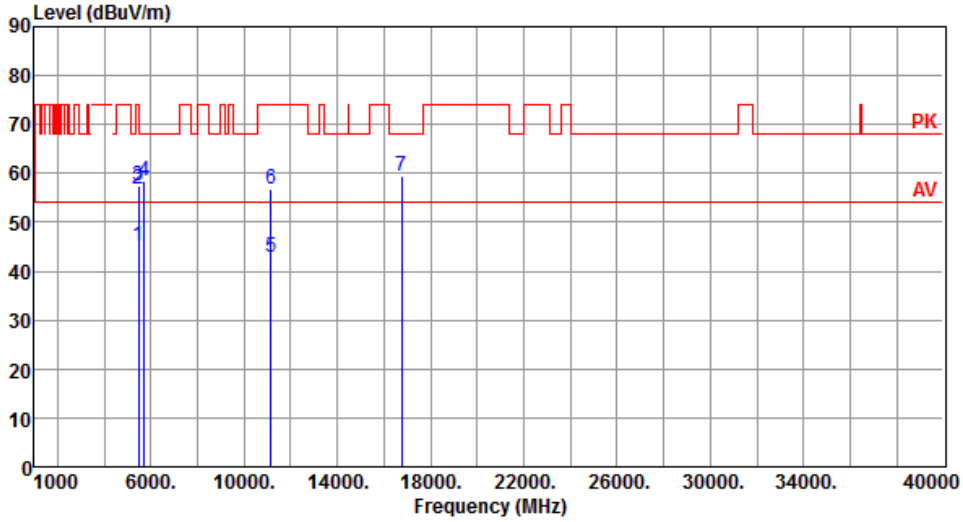
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	45.59	54.00	-8.41	40.95	4.64	Average	223	9
2	5460.00	57.91	74.00	-16.09	53.27	4.64	Peak	223	9
3	5470.00	58.62	68.20	-9.58	53.97	4.65	Peak	223	9
4	11000.00	42.83	54.00	-11.17	28.58	14.25	Average	100	311
5	11000.00	55.71	74.00	-18.29	41.46	14.25	Peak	100	311
6	16500.00	58.99	68.20	-9.21	43.26	15.73	Peak	100	305

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

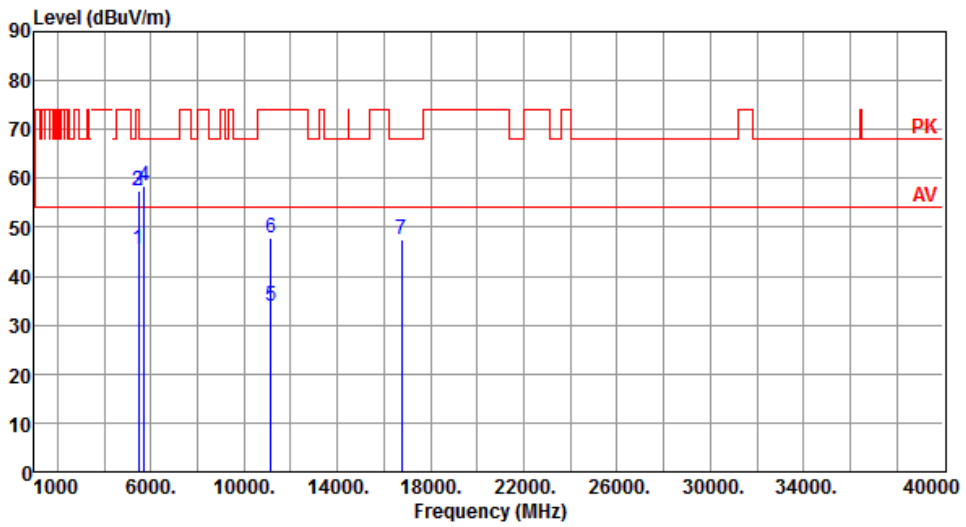
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	45.33	54.00	-8.67	40.69	4.64	Average	171	53
2	5460.00	56.63	74.00	-17.37	51.99	4.64	Peak	171	53
3	5470.00	57.40	68.20	-10.80	52.75	4.65	Peak	171	53
4	5725.00	58.48	68.20	-9.72	53.23	5.25	Peak	171	53
5	11160.00	42.79	54.00	-11.21	28.90	13.89	Average	100	99
6	11160.00	56.87	74.00	-17.13	42.98	13.89	Peak	100	99
7	16740.00	59.28	68.20	-8.92	42.20	17.08	Peak	100	103

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

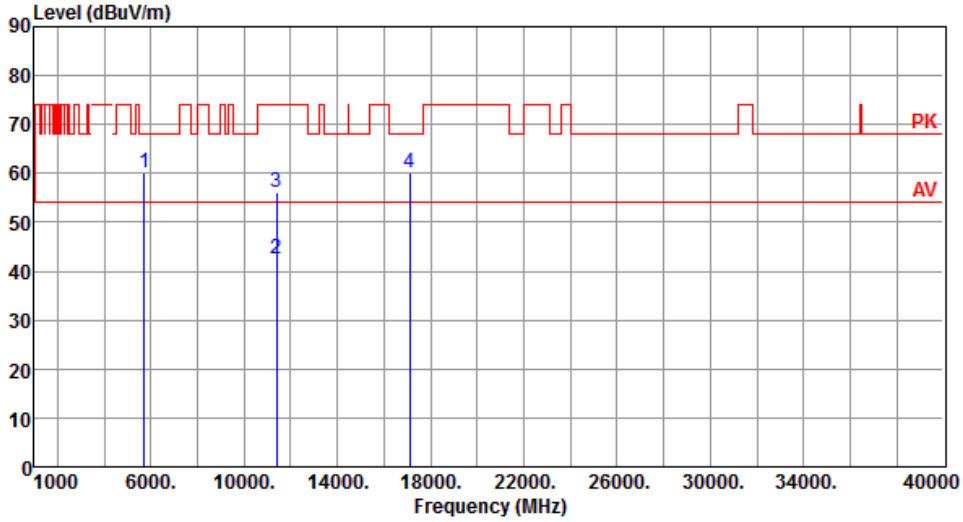
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	45.53	54.00	-8.47	40.89	4.64	Average	113	49
2	5460.00	57.31	74.00	-16.69	52.67	4.64	Peak	113	49
3	5470.00	57.51	68.20	-10.69	52.86	4.65	Peak	113	49
4	5725.00	58.43	68.20	-9.77	53.18	5.25	Peak	113	49
5	11160.00	33.75	54.00	-20.25	19.86	13.89	Average	100	302
6	11160.00	47.81	74.00	-26.19	33.92	13.89	Peak	100	302
7	16740.00	47.61	68.20	-20.59	30.53	17.08	Peak	100	305

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

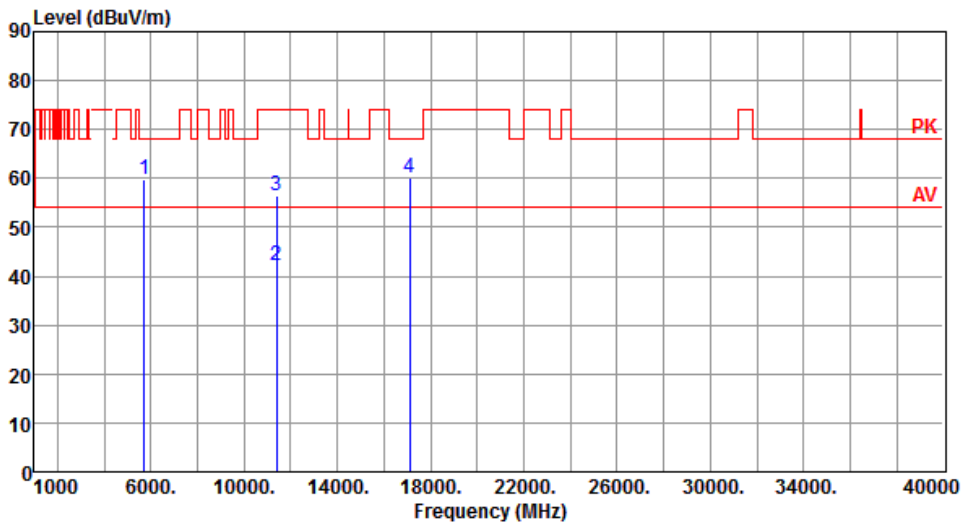
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	60.14	68.20	-8.06	54.89	5.25	Peak	183	307
2	11400.00	42.44	54.00	-11.56	28.44	14.00	Average	100	88
3	11400.00	55.96	74.00	-18.04	41.96	14.00	Peak	100	88
4	17100.00	60.00	68.20	-8.20	43.07	16.93	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).

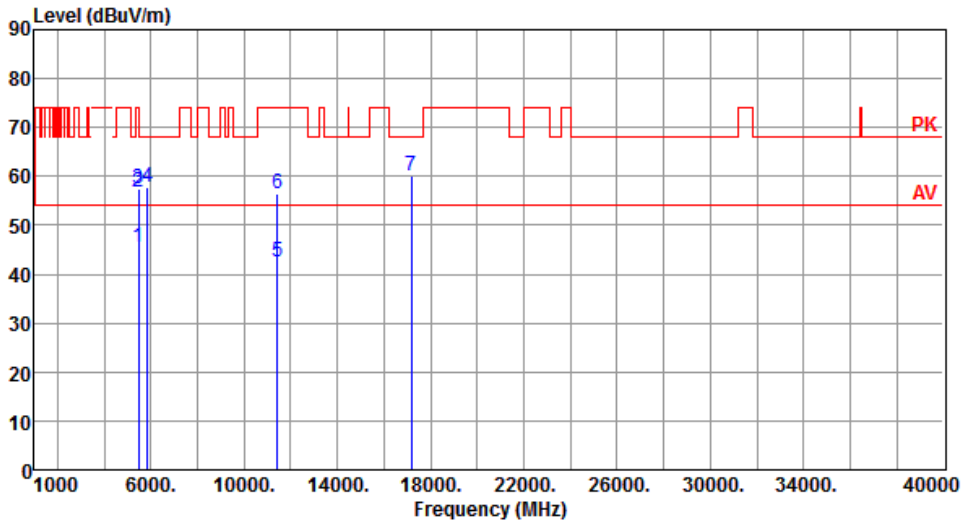
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.67	68.20	-8.53	54.42	5.25	Peak	174	17
2	11400.00	42.21	54.00	-11.79	28.21	14.00	Average	100	310
3	11400.00	56.47	74.00	-17.53	42.47	14.00	Peak	100	310
4	17100.00	60.03	68.20	-8.17	43.10	16.93	Peak	100	303

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

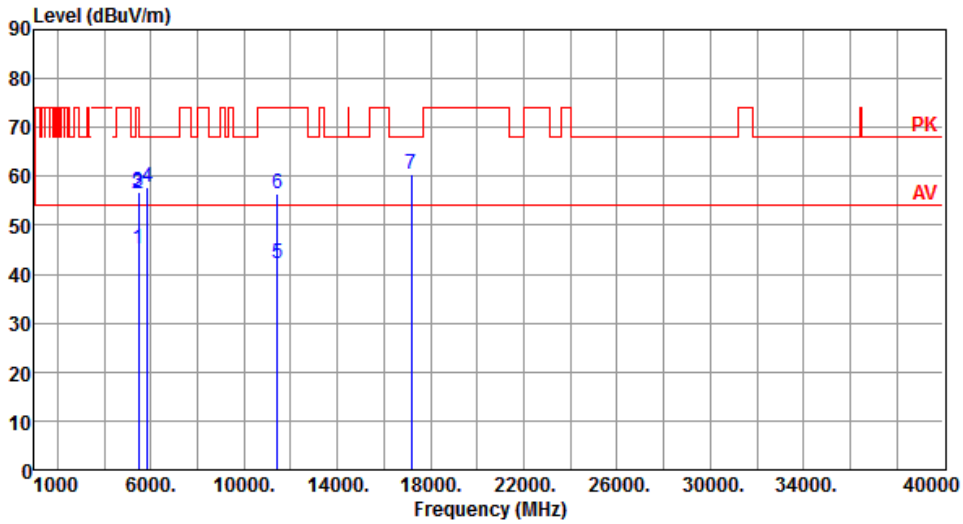
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		



	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	45.53	54.00	-8.47	40.89	4.64	Average	162	306
2	5460.00	56.92	74.00	-17.08	52.28	4.64	Peak	162	306
3	5470.00	57.34	68.20	-10.86	52.69	4.65	Peak	162	306
4	5850.00	57.76	68.20	-10.44	51.95	5.81	Peak	162	306
5	11440.00	42.51	54.00	-11.49	28.45	14.06	Average	100	95
6	11440.00	56.34	74.00	-17.66	42.28	14.06	Peak	100	95
7	17160.00	60.27	68.20	-7.93	43.21	17.06	Peak	100	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).

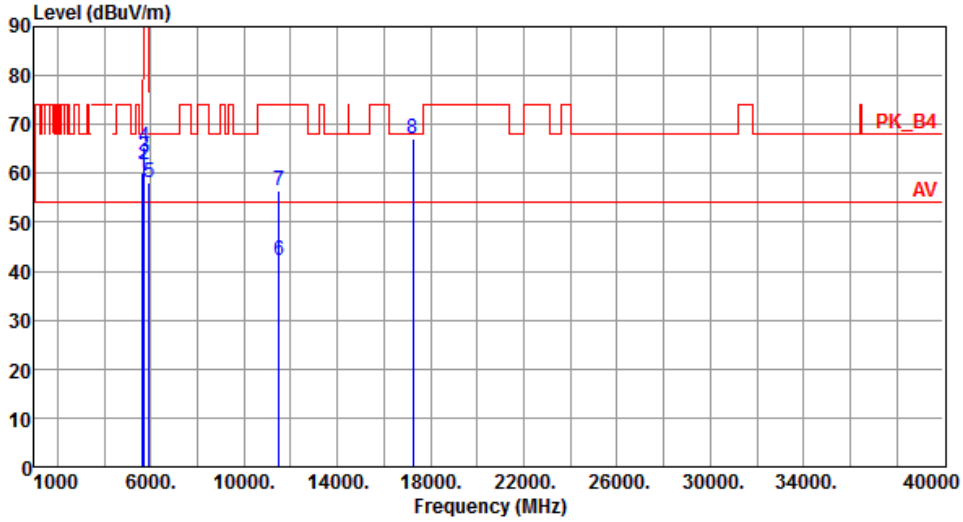
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Vertical		



	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	45.26	54.00	-8.74	40.62	4.64	Average	134	16
2	5460.00	56.34	74.00	-17.66	51.70	4.64	Peak	134	16
3	5470.00	56.68	68.20	-11.52	52.03	4.65	Peak	134	16
4	5850.00	57.68	68.20	-10.52	51.87	5.81	Peak	134	16
5	11440.00	42.17	54.00	-11.83	28.11	14.06	Average	100	305
6	11440.00	56.34	74.00	-17.66	42.28	14.06	Peak	100	305
7	17160.00	60.33	68.20	-7.87	43.27	17.06	Peak	100	302

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

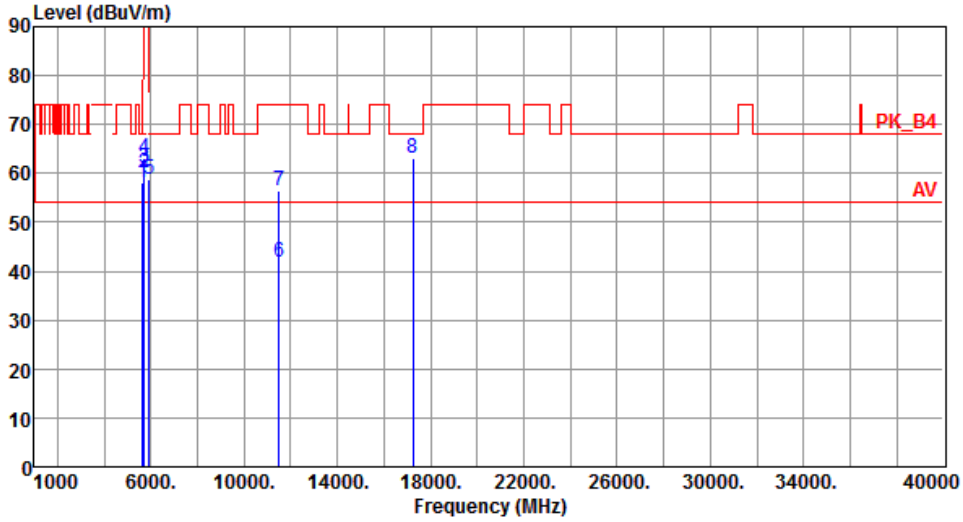
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	59.95	68.20	-8.25	54.98	4.97	Peak	173	307
2	5700.00	61.80	105.20	-43.40	56.64	5.16	Peak	173	307
3	5720.00	63.40	110.80	-47.40	58.17	5.23	Peak	173	307
4	5725.00	65.58	122.20	-56.62	60.33	5.25	Peak	173	307
5	5925.00	57.99	68.20	-10.21	51.90	6.09	Peak	173	307
6	11490.00	42.03	54.00	-11.97	27.91	14.12	Average	100	152
7	11490.00	56.38	74.00	-17.62	42.26	14.12	Peak	100	152
8	17235.00	66.98	68.20	-1.22	49.75	17.23	Peak	154	319

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

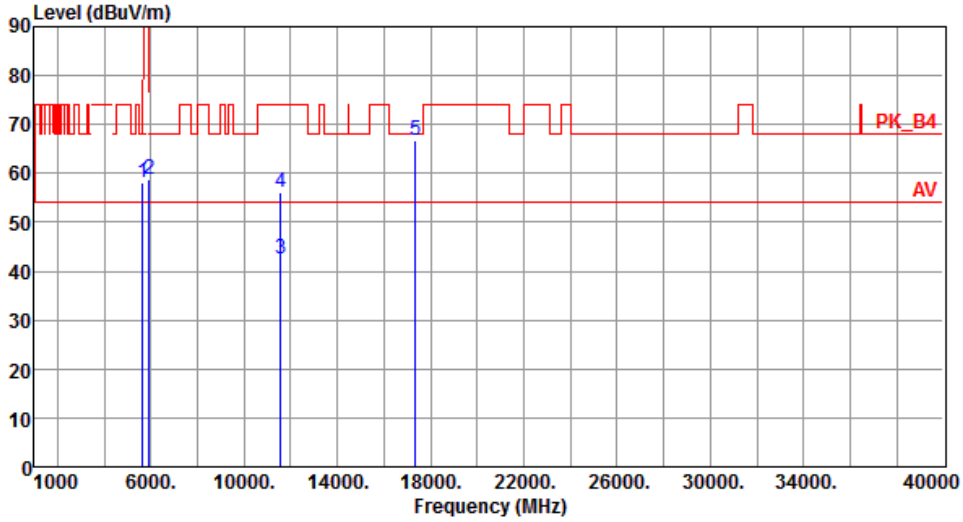
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	58.16	68.20	-10.04	53.19	4.97	Peak	293	17
2	5700.00	60.13	105.20	-45.07	54.97	5.16	Peak	293	17
3	5720.00	61.04	110.80	-49.76	55.81	5.23	Peak	293	17
4	5725.00	63.06	122.20	-59.14	57.81	5.25	Peak	293	17
5	5925.00	58.72	68.20	-9.48	52.63	6.09	Peak	293	17
6	11490.00	41.98	54.00	-12.02	27.86	14.12	Average	100	244
7	11490.00	56.35	74.00	-17.65	42.23	14.12	Peak	100	244
8	17235.00	63.19	68.20	-5.01	45.96	17.23	Peak	100	7

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

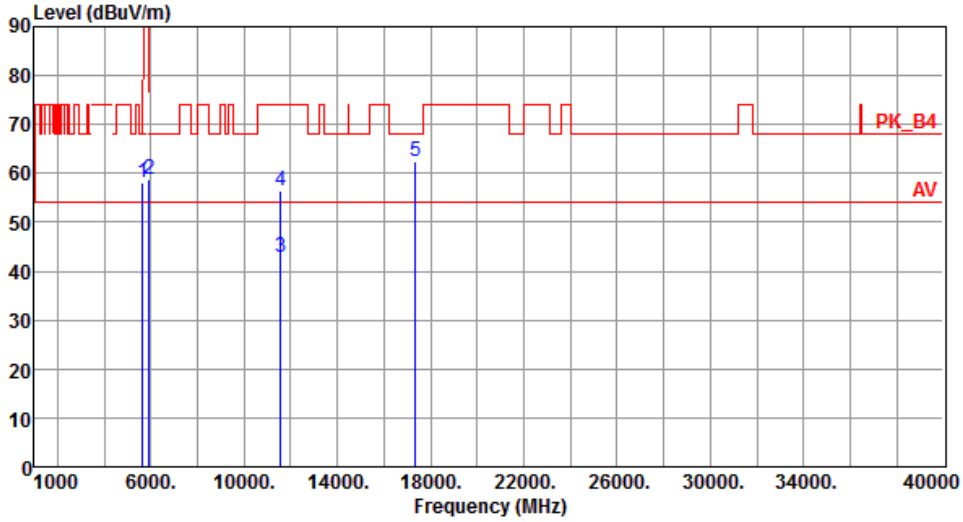
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	58.22	68.20	-9.98	53.25	4.97	Peak	176	308
2	5925.00	58.88	68.20	-9.32	52.79	6.09	Peak	176	308
3	11570.00	42.38	54.00	-11.62	28.43	13.95	Average	100	148
4	11570.00	56.15	74.00	-17.85	42.20	13.95	Peak	100	148
5	17355.00	66.75	68.20	-1.45	49.13	17.62	Peak	174	316

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

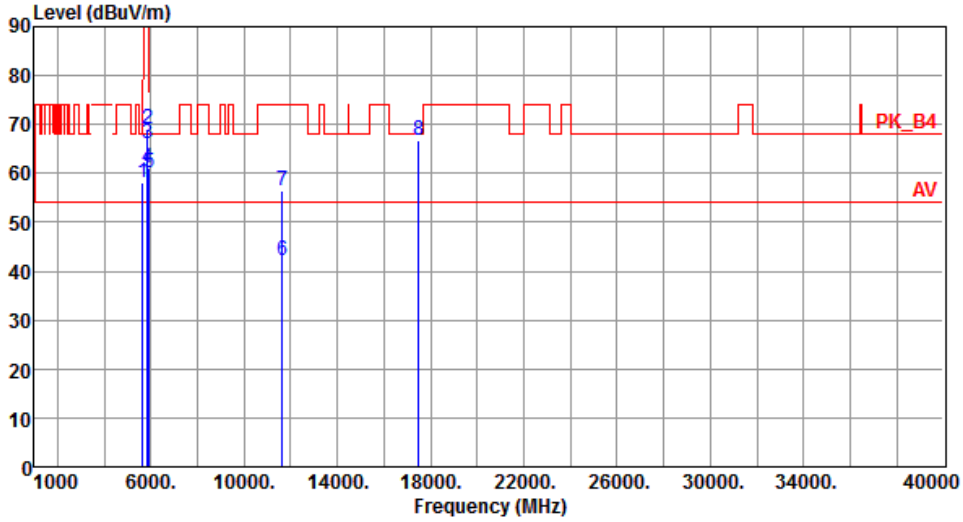
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	58.13	68.20	-10.07	53.16	4.97	Peak	175	18
2	5925.00	58.85	68.20	-9.35	52.76	6.09	Peak	175	18
3	11570.00	42.75	54.00	-11.25	28.80	13.95	Average	100	256
4	11570.00	56.54	74.00	-17.46	42.59	13.95	Peak	100	256
5	17355.00	62.29	68.20	-5.91	44.67	17.62	Peak	100	4

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

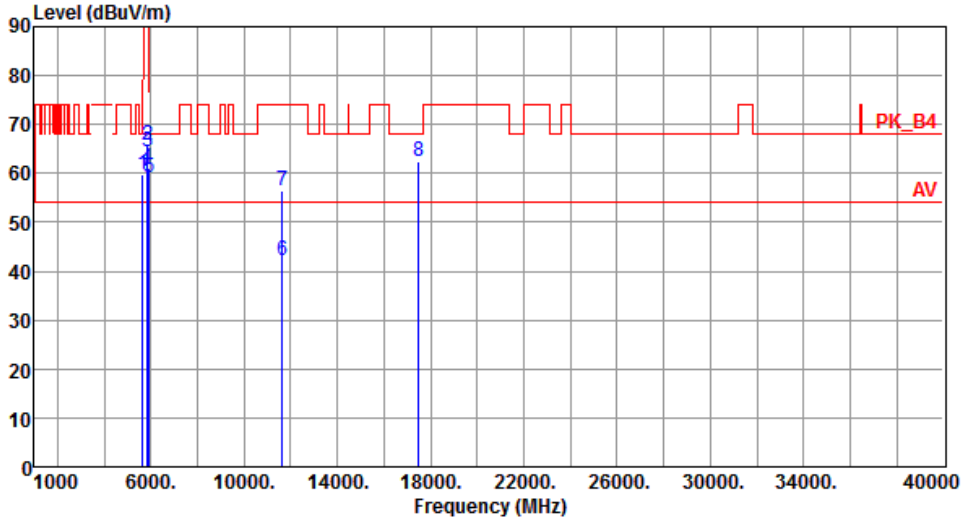
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	58.22	68.20	-9.98	53.25	4.97	Peak	156	308
2	5850.00	69.17	122.20	-53.03	63.36	5.81	Peak	156	308
3	5855.00	66.07	110.80	-44.73	60.24	5.83	Peak	156	308
4	5875.00	61.08	105.20	-44.12	55.18	5.90	Peak	156	308
5	5925.00	60.27	68.20	-7.93	54.18	6.09	Peak	156	308
6	11650.00	42.21	54.00	-11.79	28.59	13.62	Average	100	156
7	11650.00	56.50	74.00	-17.50	42.88	13.62	Peak	100	156
8	17475.00	66.81	68.20	-1.39	48.91	17.90	Peak	297	346

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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

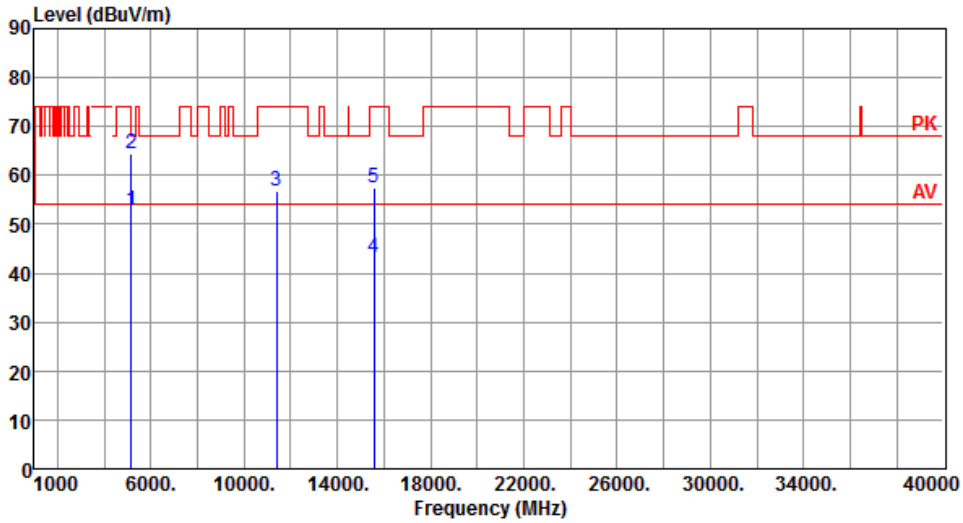


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.73	68.20	-8.47	54.76	4.97	Peak	299	18
2	5850.00	65.83	122.20	-56.37	60.02	5.81	Peak	299	18
3	5855.00	64.37	110.80	-46.43	58.54	5.83	Peak	299	18
4	5875.00	61.10	105.20	-44.10	55.20	5.90	Peak	299	18
5	5925.00	59.23	68.20	-8.97	53.14	6.09	Peak	299	18
6	11650.00	42.21	54.00	-11.79	28.59	13.62	Average	100	263
7	11650.00	56.60	74.00	-17.40	42.98	13.62	Peak	100	263
8	17475.00	62.29	68.20	-5.91	44.39	17.90	Peak	100	3

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

3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT40

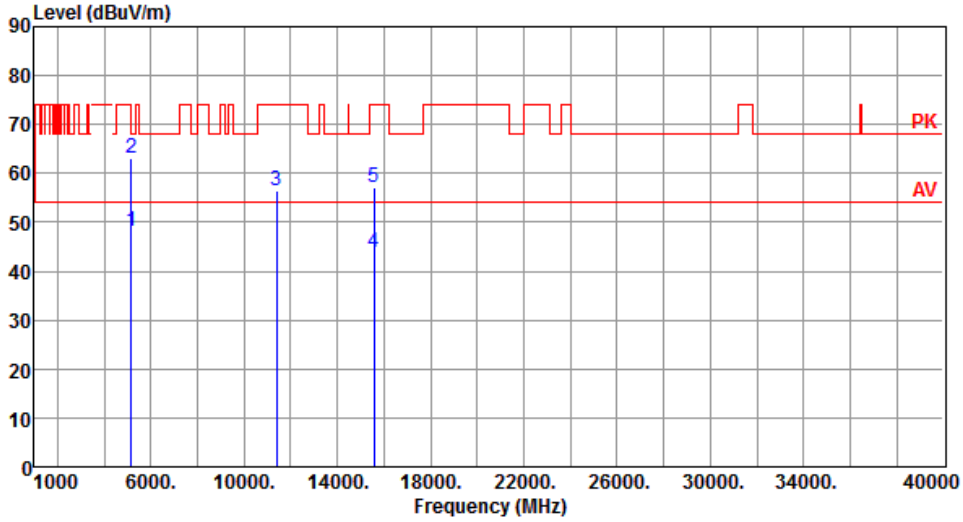
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	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	52.68	54.00	-1.32	48.14	4.54	Average	119	51
2	5150.00	64.45	74.00	-9.55	59.91	4.54	Peak	119	51
3	11380.00	56.75	74.00	-17.25	42.78	13.97	Peak	100	265
4	15570.00	43.27	54.00	-10.73	29.08	14.19	Average	100	201
5	15570.00	57.32	74.00	-16.68	43.13	14.19	Peak	100	201

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

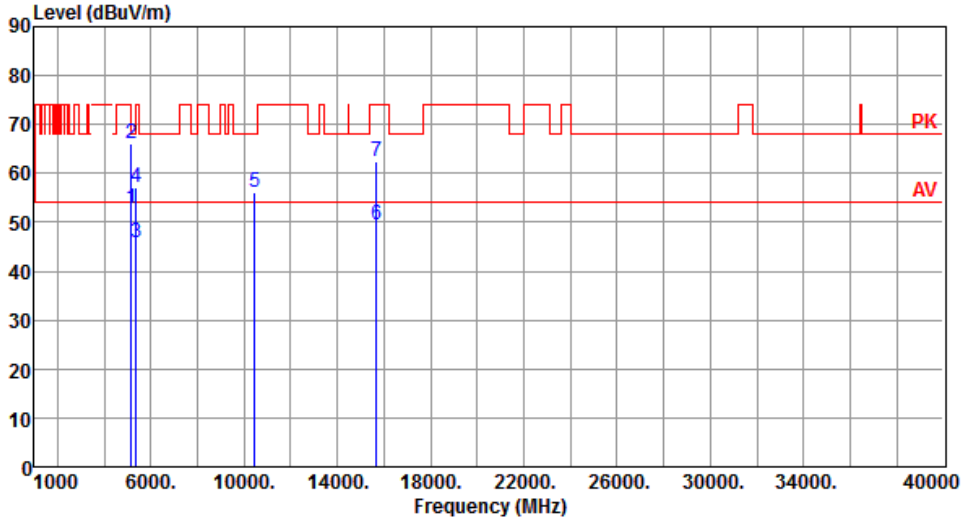
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	48.26	54.00	-5.74	43.72	4.54	Average	100	319
2	5150.00	63.09	74.00	-10.91	58.55	4.54	Peak	100	319
3	11380.00	56.59	74.00	-17.41	42.62	13.97	Peak	100	161
4	15570.00	43.81	54.00	-10.19	29.62	14.19	Average	100	218
5	15570.00	56.99	74.00	-17.01	42.80	14.19	Peak	100	218

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

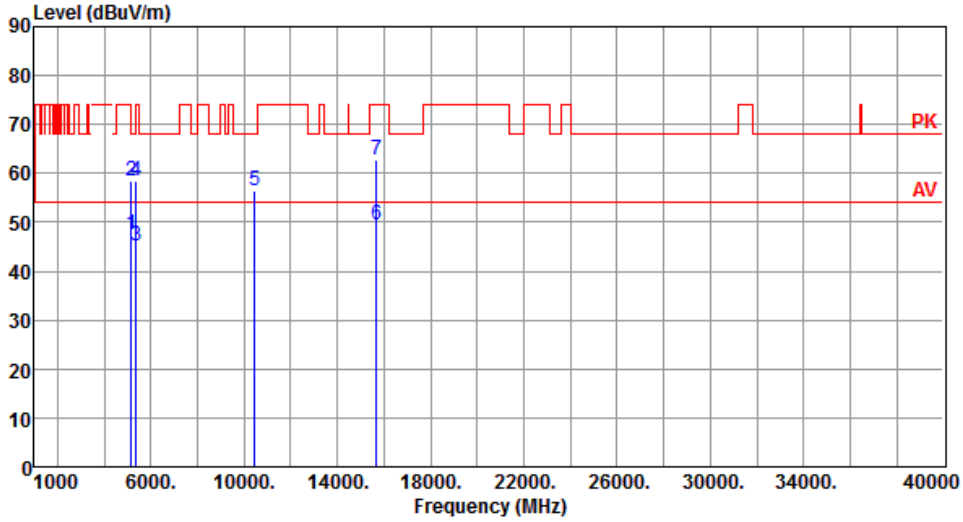
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	52.69	54.00	-1.31	48.15	4.54	Average	123	47
2	5150.00	66.06	74.00	-7.94	61.52	4.54	Peak	123	47
3	5350.00	45.80	54.00	-8.20	41.67	4.13	Average	100	57
4	5350.00	57.28	74.00	-16.72	53.15	4.13	Peak	100	57
5	10460.00	56.25	68.20	-11.95	42.36	13.89	Peak	100	263
6	15690.00	49.35	54.00	-4.65	35.42	13.93	Average	184	211
7	15690.00	62.54	74.00	-11.46	48.61	13.93	Peak	184	211

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

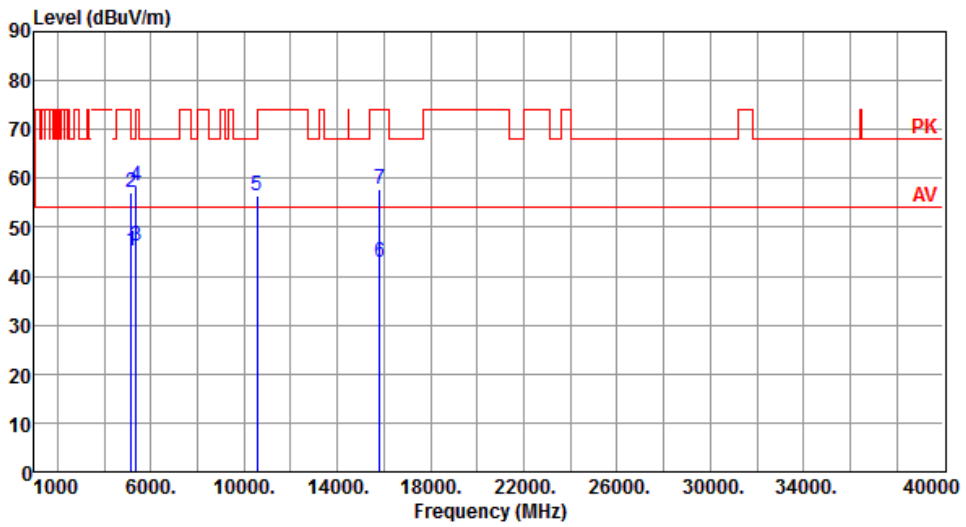
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	47.58	54.00	-6.42	43.04	4.54	Average	100	331
2	5150.00	58.58	74.00	-15.42	54.04	4.54	Peak	100	331
3	5350.00	45.17	54.00	-8.83	41.04	4.13	Average	100	331
4	5350.00	58.46	74.00	-15.54	54.33	4.13	Peak	100	331
5	10460.00	56.44	68.20	-11.76	42.55	13.89	Peak	100	166
6	15690.00	49.53	54.00	-4.47	35.60	13.93	Average	231	226
7	15690.00	62.92	74.00	-11.08	48.99	13.93	Peak	231	226

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

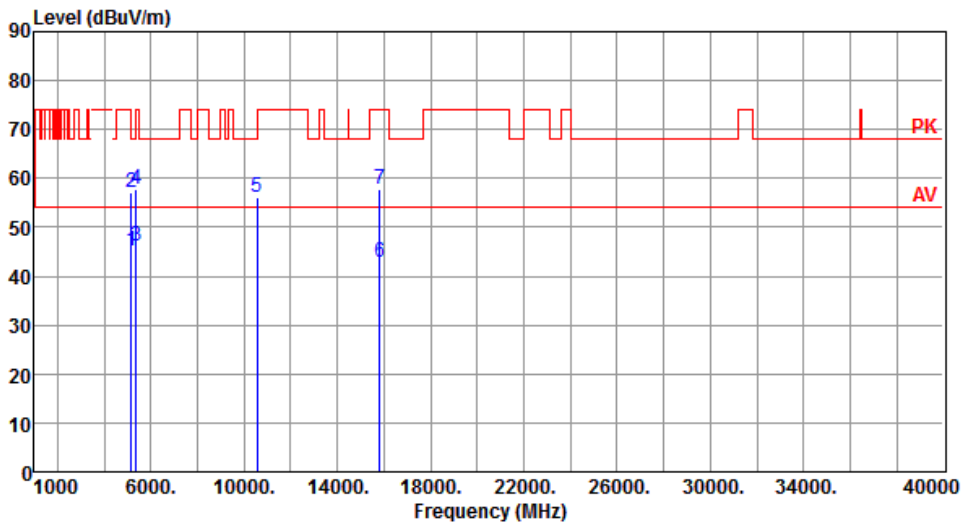
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.09	54.00	-8.91	40.55	4.54	Average	100	54
2	5150.00	56.96	74.00	-17.04	52.42	4.54	Peak	100	54
3	5350.00	46.12	54.00	-7.88	41.99	4.13	Average	100	54
4	5350.00	58.59	74.00	-15.41	54.46	4.13	Peak	100	54
5	10540.00	56.51	68.20	-11.69	42.64	13.87	Peak	100	256
6	15810.00	42.92	54.00	-11.08	29.11	13.81	Average	100	203
7	15810.00	57.72	74.00	-16.28	43.91	13.81	Peak	100	203

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

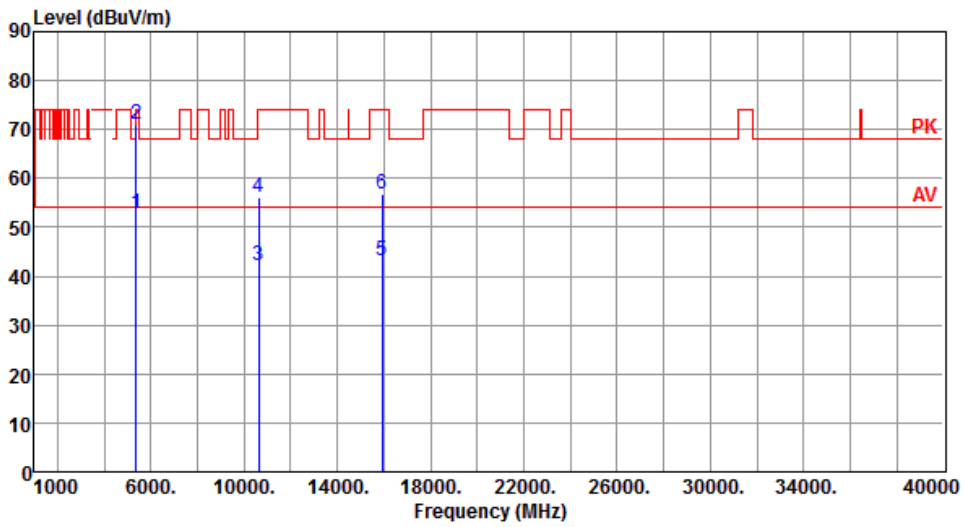
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.15	54.00	-8.85	40.61	4.54	Average	102	325
2	5150.00	57.04	74.00	-16.96	52.50	4.54	Peak	102	325
3	5350.00	46.17	54.00	-7.83	42.04	4.13	Average	102	325
4	5350.00	57.80	74.00	-16.20	53.67	4.13	Peak	102	325
5	10540.00	56.17	68.20	-12.03	42.30	13.87	Peak	100	155
6	15810.00	42.99	54.00	-11.01	29.18	13.81	Average	100	223
7	15810.00	57.72	74.00	-16.28	43.91	13.81	Peak	100	223

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

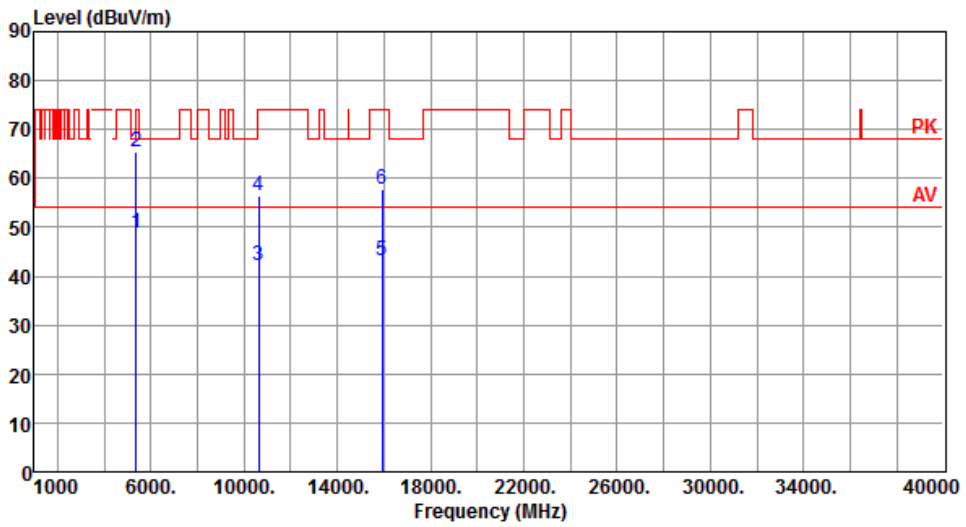
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.66	54.00	-1.34	48.53	4.13	Average	112	59
2	5350.00	71.18	74.00	-2.82	67.05	4.13	Peak	112	59
3	10620.00	42.33	54.00	-11.67	28.48	13.85	Average	100	257
4	10620.00	56.28	74.00	-17.72	42.43	13.85	Peak	100	257
5	15930.00	43.15	54.00	-10.85	29.36	13.79	Average	100	201
6	15930.00	56.93	74.00	-17.07	43.14	13.79	Peak	100	201

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

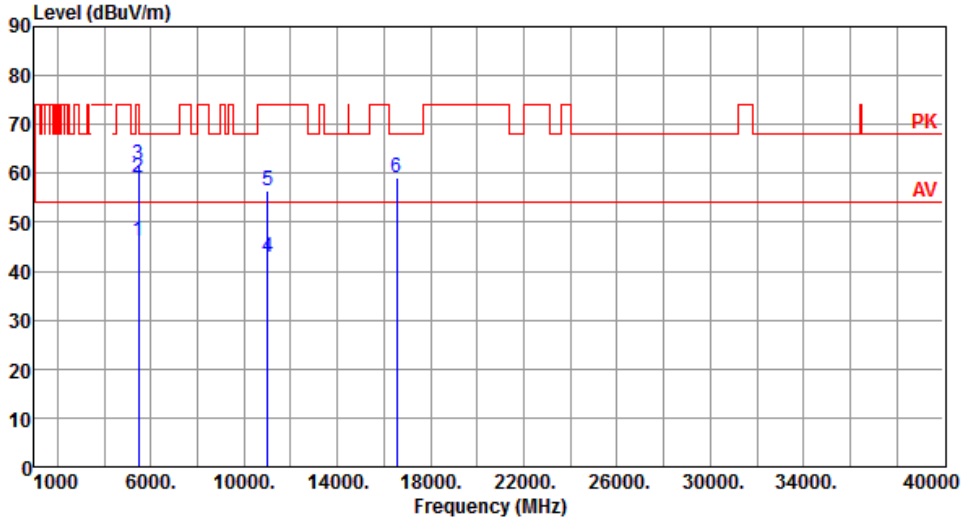
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	48.96	54.00	-5.04	44.83	4.13	Average	100	327
2	5350.00	65.58	74.00	-8.42	61.45	4.13	Peak	100	327
3	10620.00	42.06	54.00	-11.94	28.21	13.85	Average	100	154
4	10620.00	56.40	74.00	-17.60	42.55	13.85	Peak	100	154
5	15930.00	43.14	54.00	-10.86	29.35	13.79	Average	100	222
6	15930.00	57.64	74.00	-16.36	43.85	13.79	Peak	100	222

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

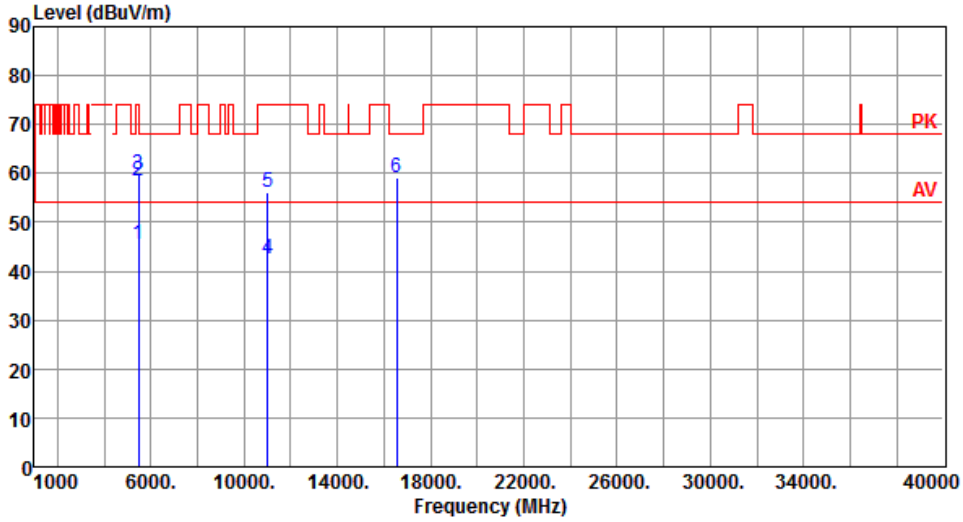
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.25	54.00	-7.75	41.61	4.64	Average	158	59
2	5460.00	59.03	74.00	-14.97	54.39	4.64	Peak	158	59
3	5470.00	61.76	68.20	-6.44	57.11	4.65	Peak	158	59
4	11020.00	42.71	54.00	-11.29	28.51	14.20	Average	100	101
5	11020.00	56.46	74.00	-17.54	42.26	14.20	Peak	100	101
6	16530.00	58.99	68.20	-9.21	43.16	15.83	Peak	100	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).

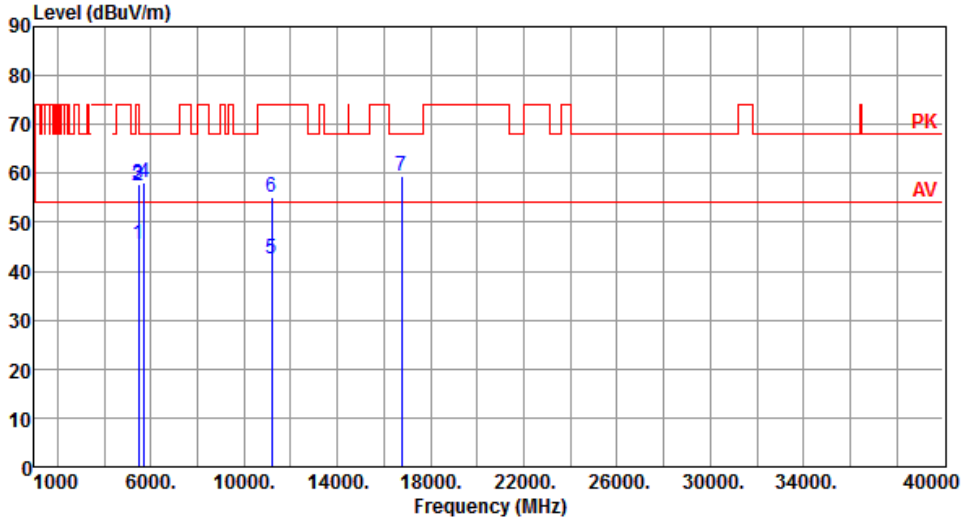
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	45.55	54.00	-8.45	40.91	4.64	Average	142	8
2	5460.00	58.60	74.00	-15.40	53.96	4.64	Peak	142	8
3	5470.00	59.84	68.20	-8.36	55.19	4.65	Peak	142	8
4	11020.00	42.59	54.00	-11.41	28.39	14.20	Average	100	302
5	11020.00	55.99	74.00	-18.01	41.79	14.20	Peak	100	302
6	16530.00	59.24	68.20	-8.96	43.41	15.83	Peak	100	301

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

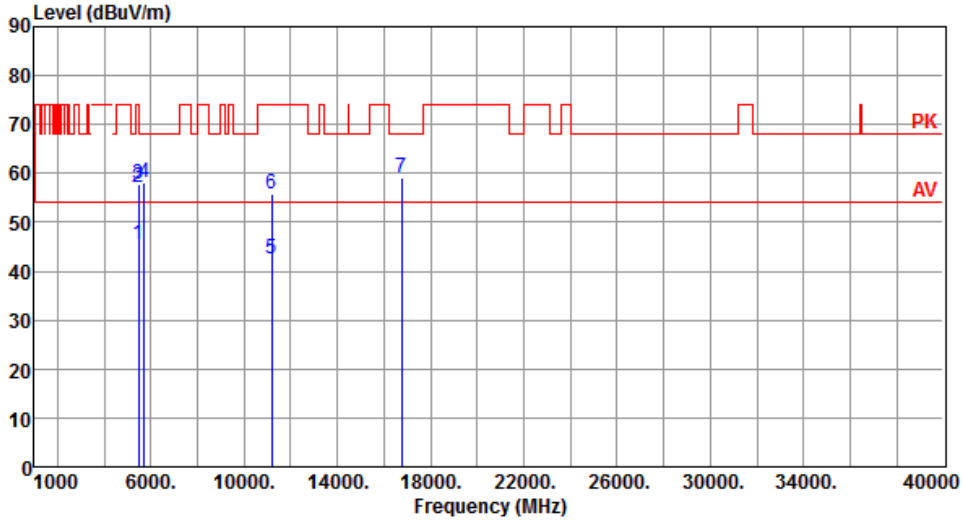
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Horizontal		



	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	45.50	54.00	-8.50	40.86	4.64	Average	180	46
2	5460.00	57.43	74.00	-16.57	52.79	4.64	Peak	180	46
3	5470.00	57.71	68.20	-10.49	53.06	4.65	Peak	180	46
4	5725.00	58.14	68.20	-10.06	52.89	5.25	Peak	180	46
5	11180.00	42.57	54.00	-11.43	28.71	13.86	Average	100	92
6	11180.00	55.16	74.00	-18.84	41.30	13.86	Peak	100	92
7	16740.00	59.34	68.20	-8.86	42.26	17.08	Peak	100	97

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

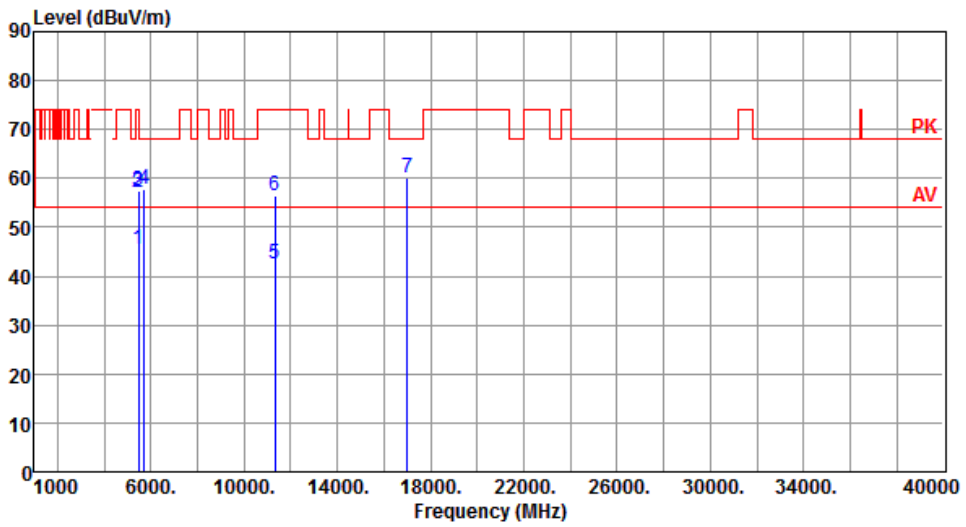
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Vertical		



	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	45.38	54.00	-8.62	40.74	4.64	Average	100	7
2	5460.00	57.20	74.00	-16.80	52.56	4.64	Peak	100	7
3	5470.00	57.62	68.20	-10.58	52.97	4.65	Peak	100	7
4	5725.00	58.17	68.20	-10.03	52.92	5.25	Peak	100	7
5	11180.00	42.41	54.00	-11.59	28.55	13.86	Average	100	304
6	11180.00	55.77	74.00	-18.23	41.91	13.86	Peak	100	304
7	16740.00	59.09	68.20	-9.11	42.01	17.08	Peak	100	305

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

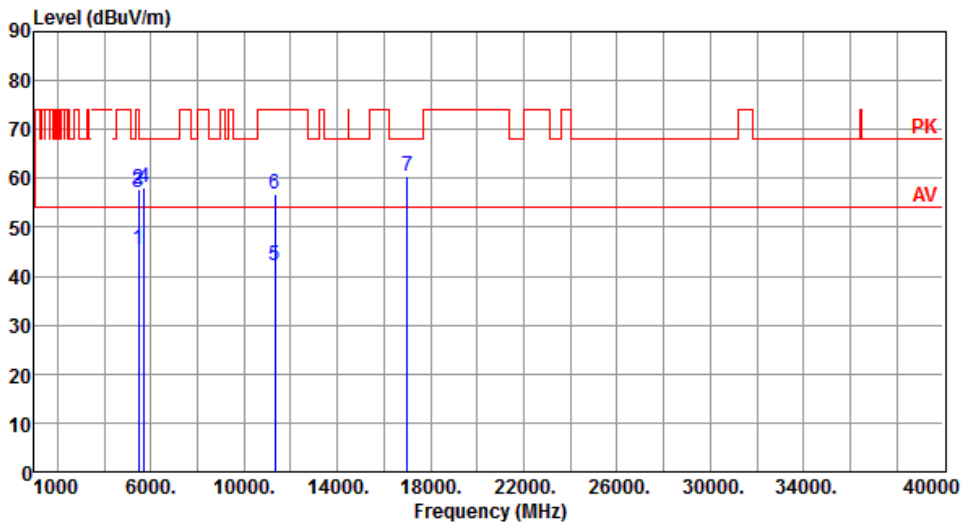
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.63	54.00	-8.37	40.99	4.64	Average	158	66
2	5460.00	57.22	74.00	-16.78	52.58	4.64	Peak	158	66
3	5470.00	57.40	68.20	-10.80	52.75	4.65	Peak	158	66
4	5725.00	57.66	68.20	-10.54	52.41	5.25	Peak	158	66
5	11340.00	42.43	54.00	-11.57	28.51	13.92	Average	100	95
6	11340.00	56.48	74.00	-17.52	42.56	13.92	Peak	100	95
7	17010.00	60.07	68.20	-8.13	42.81	17.26	Peak	100	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).

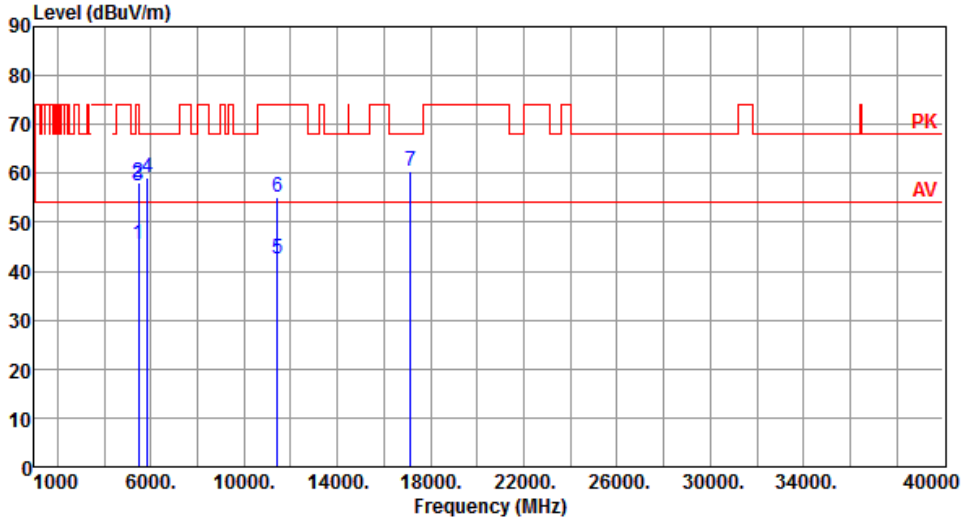
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.39	54.00	-8.61	40.75	4.64	Average	147	16
2	5460.00	57.72	74.00	-16.28	53.08	4.64	Peak	147	16
3	5470.00	57.18	68.20	-11.02	52.53	4.65	Peak	147	16
4	5725.00	58.16	68.20	-10.04	52.91	5.25	Peak	147	16
5	11340.00	42.26	54.00	-11.74	28.34	13.92	Average	100	310
6	11340.00	56.70	74.00	-17.30	42.78	13.92	Peak	100	310
7	17010.00	60.37	68.20	-7.83	43.11	17.26	Peak	100	302

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

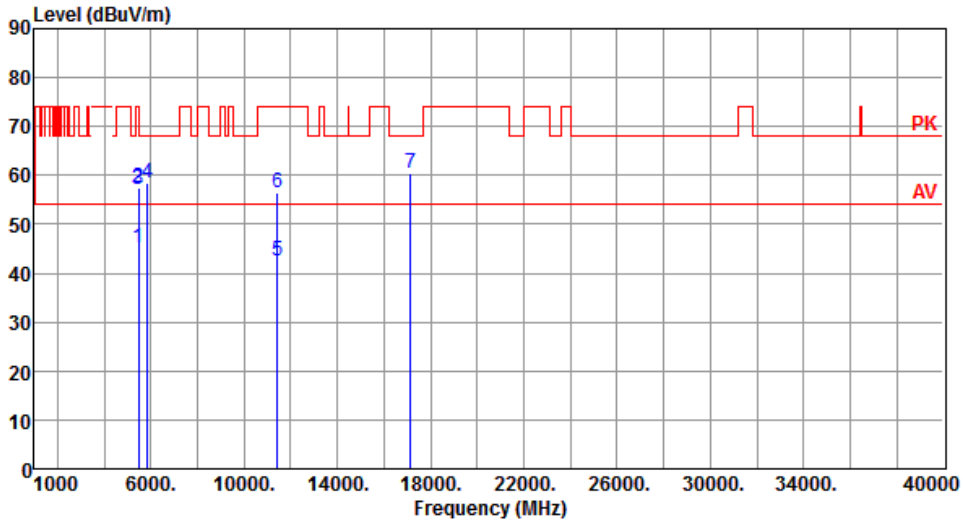
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		



	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	45.59	54.00	-8.41	40.95	4.64	Average	166	309
2	5460.00	57.98	74.00	-16.02	53.34	4.64	Peak	166	309
3	5470.00	57.51	68.20	-10.69	52.86	4.65	Peak	166	309
4	5850.00	59.15	68.20	-9.05	53.34	5.81	Peak	166	309
5	11420.00	42.66	54.00	-11.34	28.63	14.03	Average	100	95
6	11420.00	55.23	74.00	-18.77	41.20	14.03	Peak	100	95
7	17130.00	60.60	68.20	-7.60	43.61	16.99	Peak	100	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).

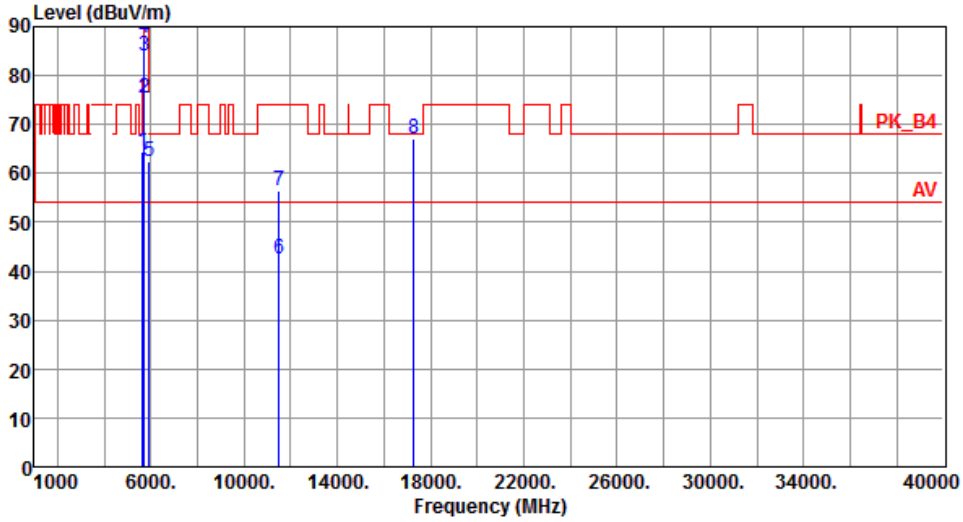
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Vertical		



	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	45.28	54.00	-8.72	40.64	4.64	Average	186	18
2	5460.00	57.40	74.00	-16.60	52.76	4.64	Peak	186	18
3	5470.00	57.21	68.20	-10.99	52.56	4.65	Peak	186	18
4	5850.00	58.54	68.20	-9.66	52.73	5.81	Peak	186	18
5	11420.00	42.39	54.00	-11.61	28.36	14.03	Average	100	302
6	11420.00	56.36	74.00	-17.64	42.33	14.03	Peak	100	302
7	17130.00	60.30	68.20	-7.90	43.31	16.99	Peak	100	303

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

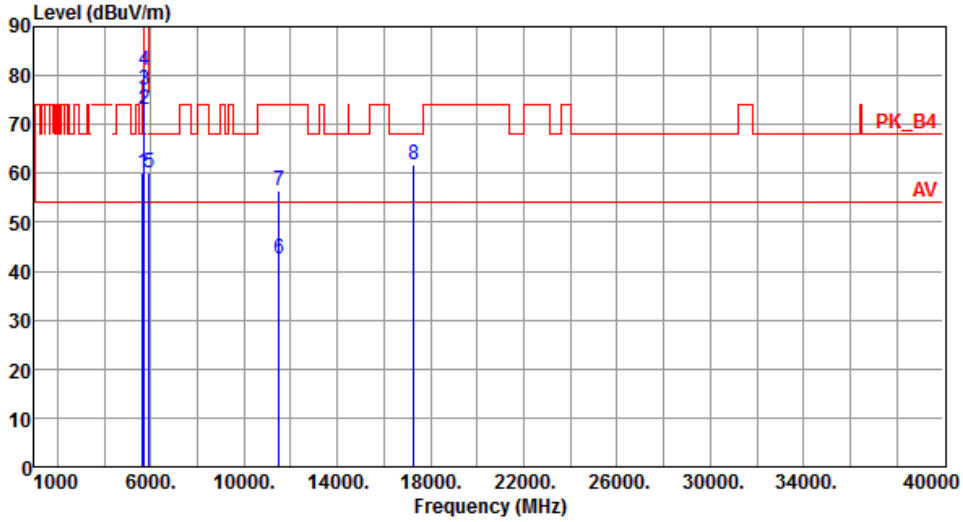
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	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	64.58	68.20	-3.62	59.61	4.97	Peak	166	308
2	5700.00	75.33	105.20	-29.87	70.17	5.16	Peak	166	308
3	5720.00	83.92	110.80	-26.88	78.69	5.23	Peak	166	308
4	5725.00	87.70	122.20	-34.50	82.45	5.25	Peak	166	308
5	5925.00	62.48	68.20	-5.72	56.39	6.09	Peak	166	308
6	11510.00	42.56	54.00	-11.44	28.45	14.11	Average	100	157
7	11510.00	56.53	74.00	-17.47	42.42	14.11	Peak	100	157
8	17265.00	66.92	68.20	-1.28	49.61	17.31	Peak	172	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).

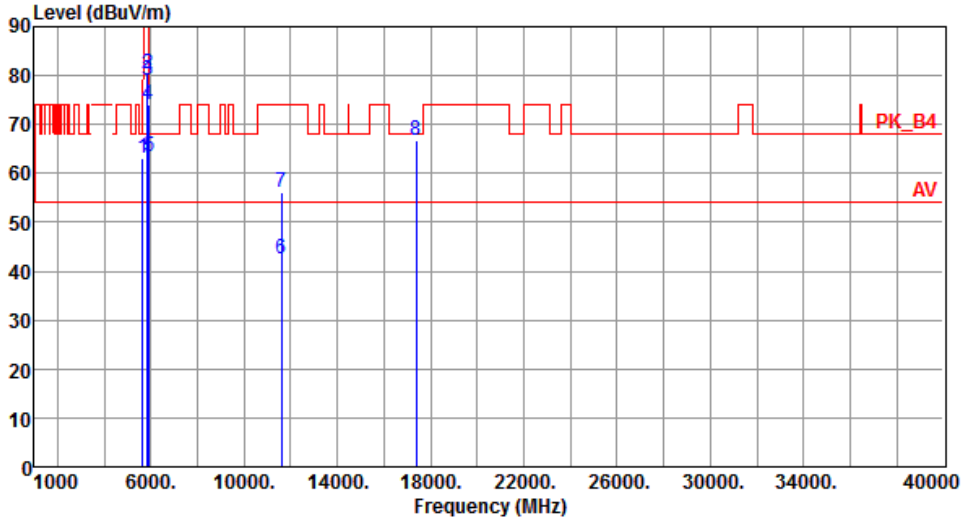
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	60.18	68.20	-8.02	55.21	4.97	Peak	170	16
2	5700.00	73.03	105.20	-32.17	67.87	5.16	Peak	170	16
3	5720.00	76.92	110.80	-33.88	71.69	5.23	Peak	170	16
4	5725.00	80.99	122.20	-41.21	75.74	5.25	Peak	170	16
5	5925.00	59.99	68.20	-8.21	53.90	6.09	Peak	170	16
6	11510.00	42.62	54.00	-11.38	28.51	14.11	Average	100	254
7	11510.00	56.57	74.00	-17.43	42.46	14.11	Peak	100	254
8	17265.00	61.71	68.20	-6.49	44.40	17.31	Peak	302	5

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

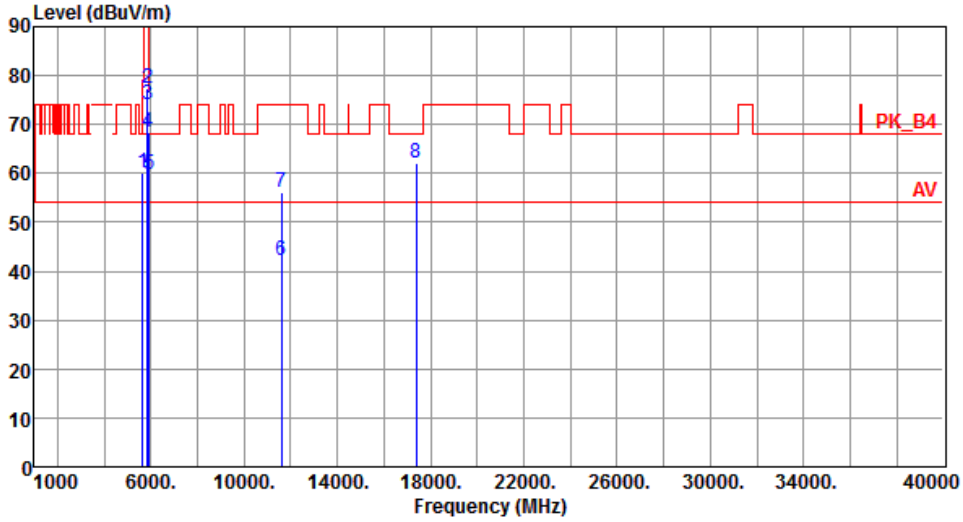
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	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	63.13	68.20	-5.07	58.16	4.97	Peak	163	308
2	5850.00	80.26	122.20	-41.94	74.45	5.81	Peak	163	308
3	5855.00	79.16	110.80	-31.64	73.33	5.83	Peak	163	308
4	5875.00	74.13	105.20	-31.07	68.23	5.90	Peak	163	308
5	5925.00	63.54	68.20	-4.66	57.45	6.09	Peak	163	308
6	11590.00	42.51	54.00	-11.49	28.62	13.89	Average	100	154
7	11590.00	56.23	74.00	-17.77	42.34	13.89	Peak	100	154
8	17385.00	66.86	68.20	-1.34	49.11	17.75	Peak	167	322

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

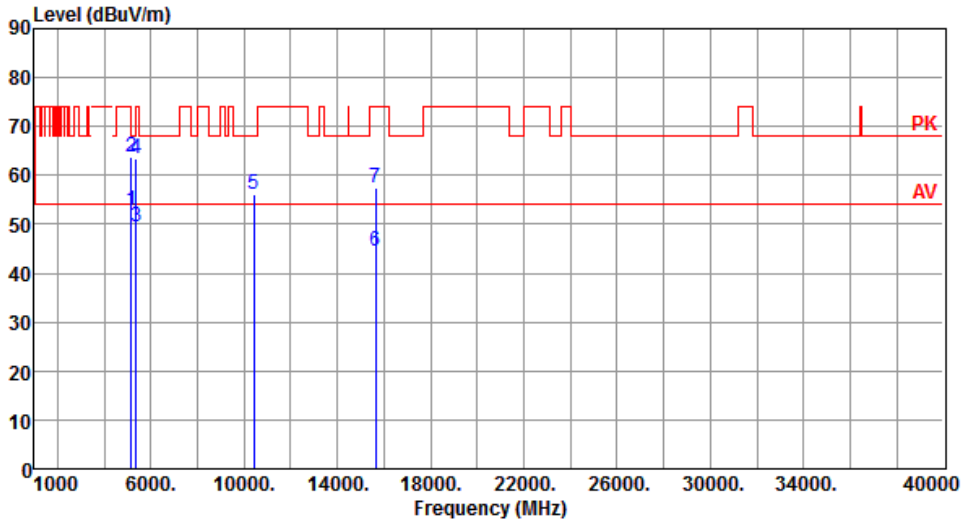


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.01	68.20	-8.19	55.04	4.97	Peak	173	18
2	5850.00	77.40	122.20	-44.80	71.59	5.81	Peak	173	18
3	5855.00	74.11	110.80	-36.69	68.28	5.83	Peak	173	18
4	5875.00	68.32	105.20	-36.88	62.42	5.90	Peak	173	18
5	5925.00	59.85	68.20	-8.35	53.76	6.09	Peak	173	18
6	11590.00	42.34	54.00	-11.66	28.45	13.89	Average	100	241
7	11590.00	56.21	74.00	-17.79	42.32	13.89	Peak	100	241
8	17385.00	62.06	68.20	-6.14	44.31	17.75	Peak	301	1

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

3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT80

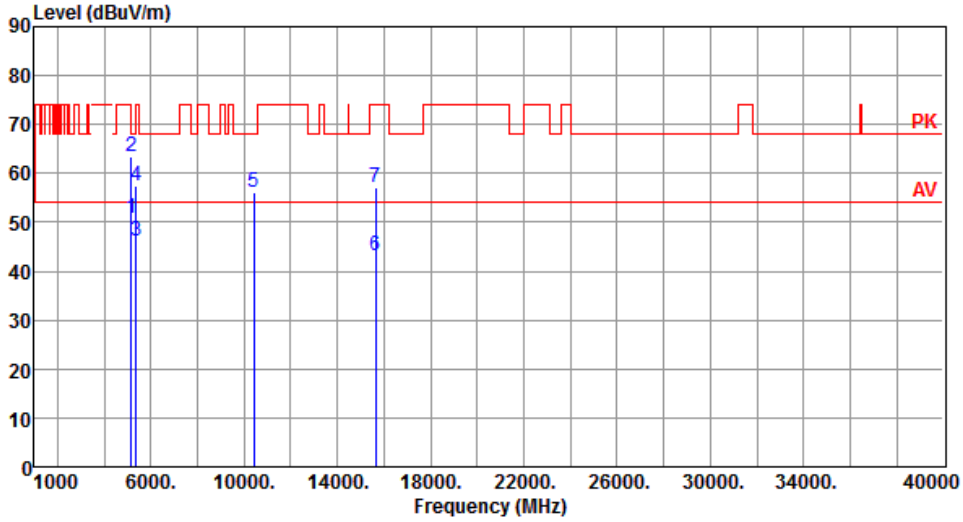
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



	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	52.95	54.00	-1.05	48.41	4.54	Average	131	49
2	5150.00	63.89	74.00	-10.11	59.35	4.54	Peak	131	49
3	5350.00	49.46	54.00	-4.54	45.33	4.13	Average	100	60
4	5350.00	63.58	74.00	-10.42	59.45	4.13	Peak	100	60
5	10420.00	56.21	68.20	-11.99	42.32	13.89	Peak	100	267
6	15630.00	44.38	54.00	-9.62	30.34	14.04	Average	100	202
7	15630.00	57.40	74.00	-16.60	43.36	14.04	Peak	100	202

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

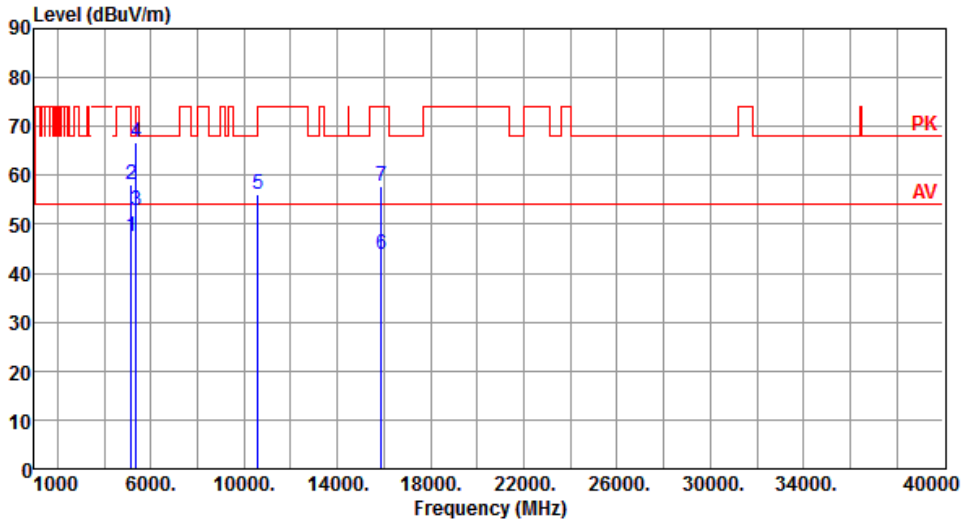
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	50.72	54.00	-3.28	46.18	4.54	Average	100	318
2	5150.00	63.35	74.00	-10.65	58.81	4.54	Peak	100	318
3	5350.00	46.02	54.00	-7.98	41.89	4.13	Average	100	332
4	5350.00	57.50	74.00	-16.50	53.37	4.13	Peak	100	332
5	10420.00	56.06	68.20	-12.14	42.17	13.89	Peak	100	158
6	15630.00	43.29	54.00	-10.71	29.25	14.04	Average	100	222
7	15630.00	57.18	74.00	-16.82	43.14	14.04	Peak	100	222

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

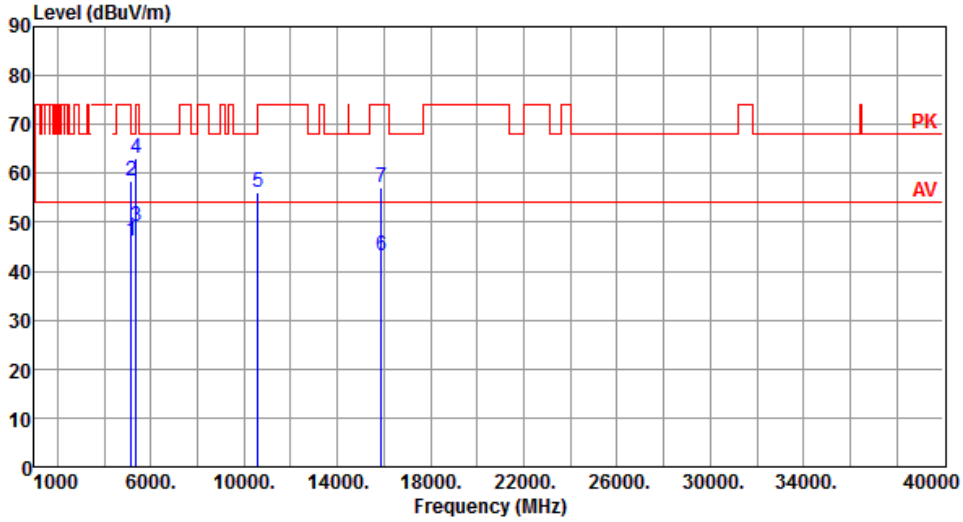
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.48	54.00	-6.52	42.94	4.54	Average	100	55
2	5150.00	58.24	74.00	-15.76	53.70	4.54	Peak	100	55
3	5350.00	52.74	54.00	-1.26	48.61	4.13	Average	100	55
4	5350.00	66.60	74.00	-7.40	62.47	4.13	Peak	100	55
5	10580.00	56.23	68.20	-11.97	42.37	13.86	Peak	100	260
6	15870.00	43.67	54.00	-10.33	29.85	13.82	Average	100	206
7	15870.00	57.62	74.00	-16.38	43.80	13.82	Peak	100	206

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

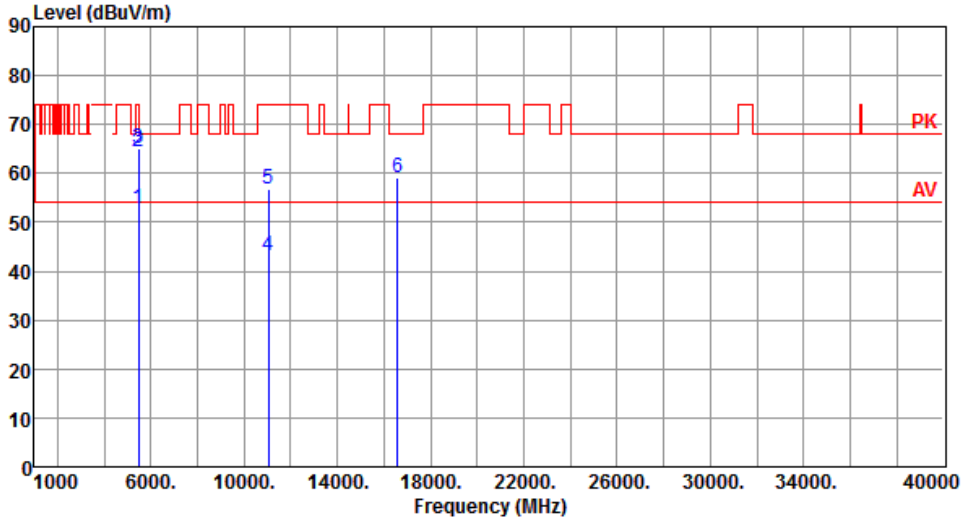
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.20	54.00	-7.80	41.66	4.54	Average	100	326
2	5150.00	58.36	74.00	-15.64	53.82	4.54	Peak	100	326
3	5350.00	48.99	54.00	-5.01	44.86	4.13	Average	100	326
4	5350.00	63.18	74.00	-10.82	59.05	4.13	Peak	100	326
5	10580.00	56.12	68.20	-12.08	42.26	13.86	Peak	100	156
6	15870.00	43.33	54.00	-10.67	29.51	13.82	Average	100	224
7	15870.00	57.19	74.00	-16.81	43.37	13.82	Peak	100	224

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

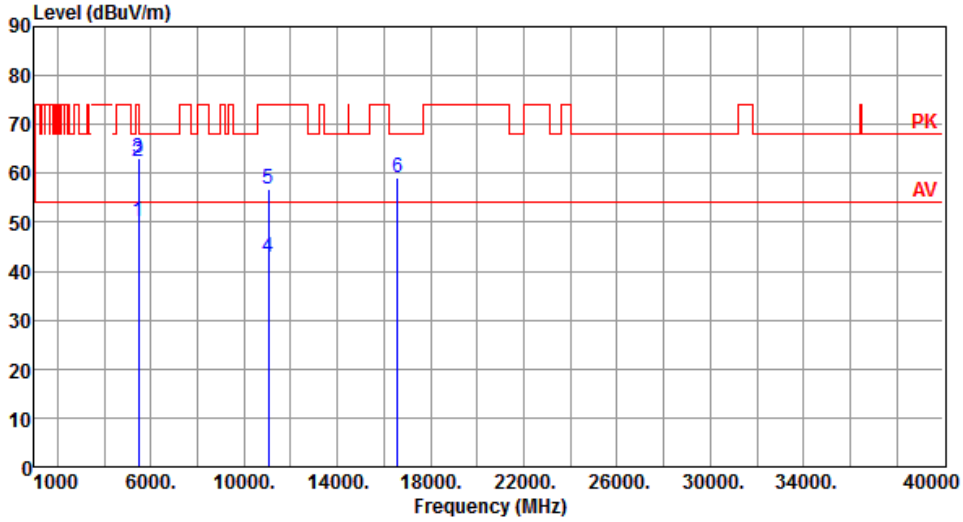
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	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	52.69	54.00	-1.31	48.05	4.64	Average	253	68
2	5460.00	64.50	74.00	-9.50	59.86	4.64	Peak	253	68
3	5470.00	65.16	68.20	-3.04	60.51	4.65	Peak	102	63
4	11060.00	43.02	54.00	-10.98	28.93	14.09	Average	100	96
5	11060.00	56.69	74.00	-17.31	42.60	14.09	Peak	100	96
6	16590.00	59.20	68.20	-9.00	43.15	16.05	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).

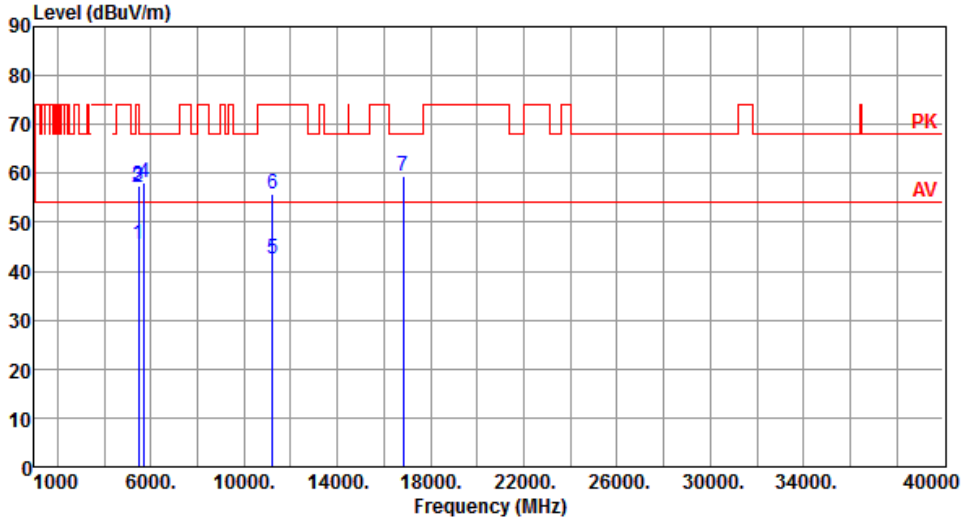
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	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	50.24	54.00	-3.76	45.60	4.64	Average	128	350
2	5460.00	62.37	74.00	-11.63	57.73	4.64	Peak	128	350
3	5470.00	63.04	68.20	-5.16	58.39	4.65	Peak	132	344
4	11060.00	42.82	54.00	-11.18	28.73	14.09	Average	100	302
5	11060.00	56.87	74.00	-17.13	42.78	14.09	Peak	100	302
6	16590.00	59.23	68.20	-8.97	43.18	16.05	Peak	100	306

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

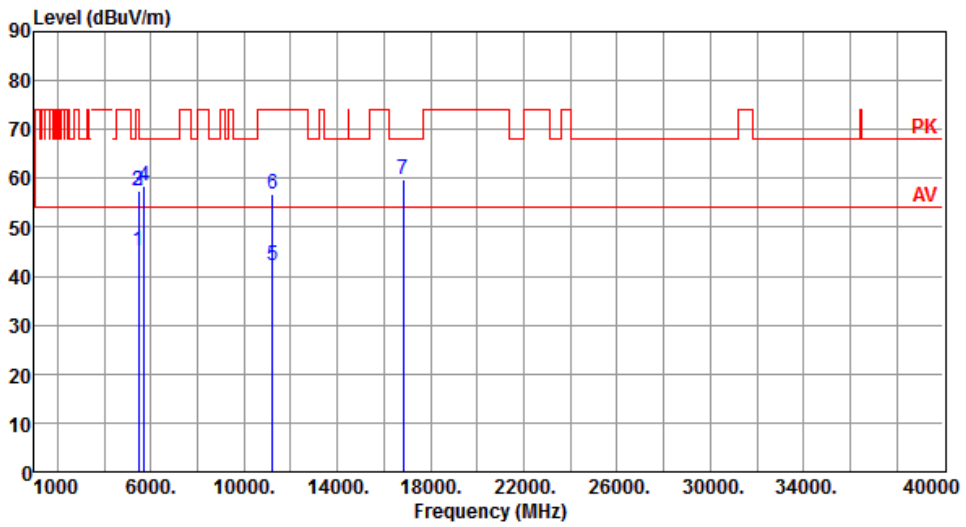
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.53	54.00	-8.47	40.89	4.64	Average	174	43
2	5460.00	57.16	74.00	-16.84	52.52	4.64	Peak	174	43
3	5470.00	57.45	68.20	-10.75	52.80	4.65	Peak	174	43
4	5725.00	58.17	68.20	-10.03	52.92	5.25	Peak	174	43
5	11220.00	42.64	54.00	-11.36	28.81	13.83	Average	100	93
6	11220.00	55.93	74.00	-18.07	42.10	13.83	Peak	100	93
7	16830.00	59.49	68.20	-8.71	42.24	17.25	Peak	100	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).

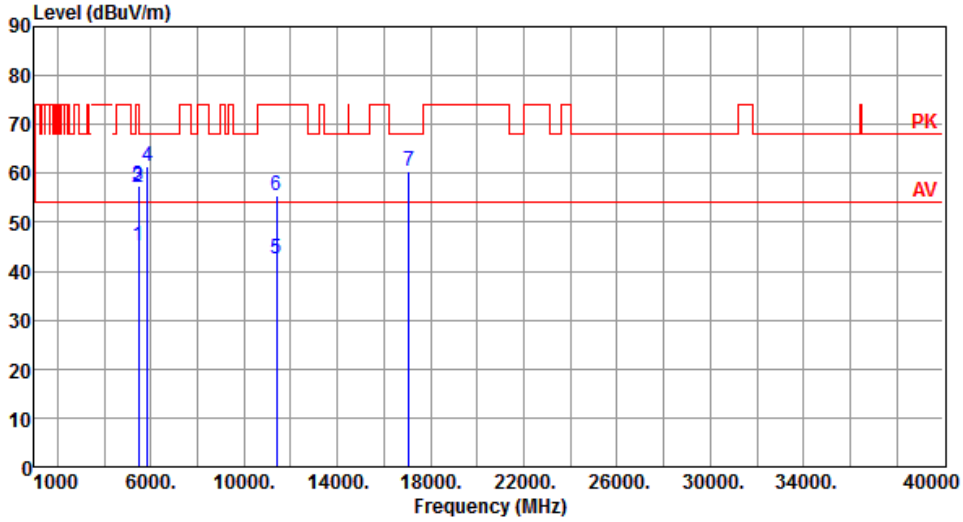
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.31	54.00	-8.69	40.67	4.64	Average	108	11
2	5460.00	57.47	74.00	-16.53	52.83	4.64	Peak	108	11
3	5470.00	57.40	68.20	-10.80	52.75	4.65	Peak	108	11
4	5725.00	58.38	68.20	-9.82	53.13	5.25	Peak	108	11
5	11220.00	42.34	54.00	-11.66	28.51	13.83	Average	100	301
6	11220.00	56.72	74.00	-17.28	42.89	13.83	Peak	100	301
7	16830.00	59.68	68.20	-8.52	42.43	17.25	Peak	100	304

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

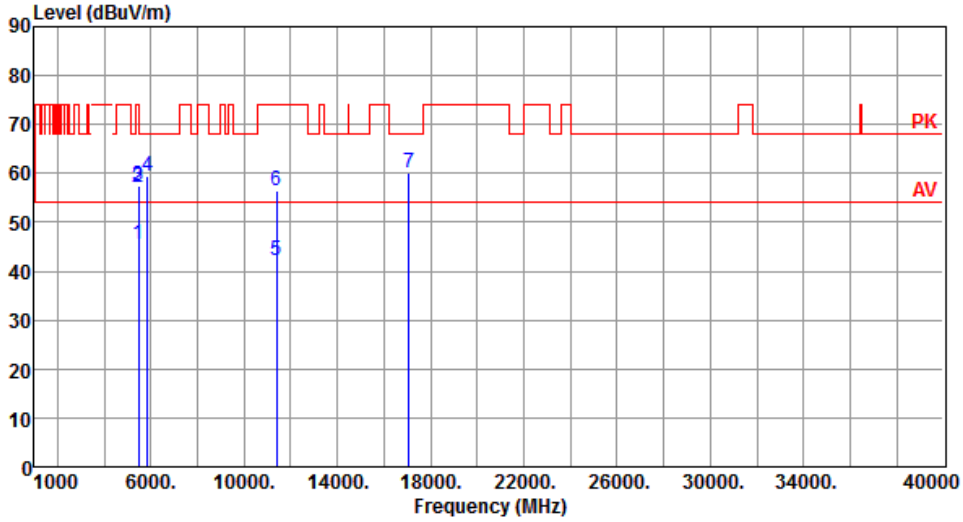
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal		



	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	45.28	54.00	-8.72	40.64	4.64	Average	167	306
2	5460.00	57.02	74.00	-16.98	52.38	4.64	Peak	167	306
3	5470.00	57.44	68.20	-10.76	52.79	4.65	Peak	167	306
4	5850.00	61.43	68.20	-6.77	55.62	5.81	Peak	167	306
5	11380.00	42.63	54.00	-11.37	28.66	13.97	Average	100	95
6	11380.00	55.34	74.00	-18.66	41.37	13.97	Peak	100	95
7	17070.00	60.51	68.20	-7.69	43.47	17.04	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).

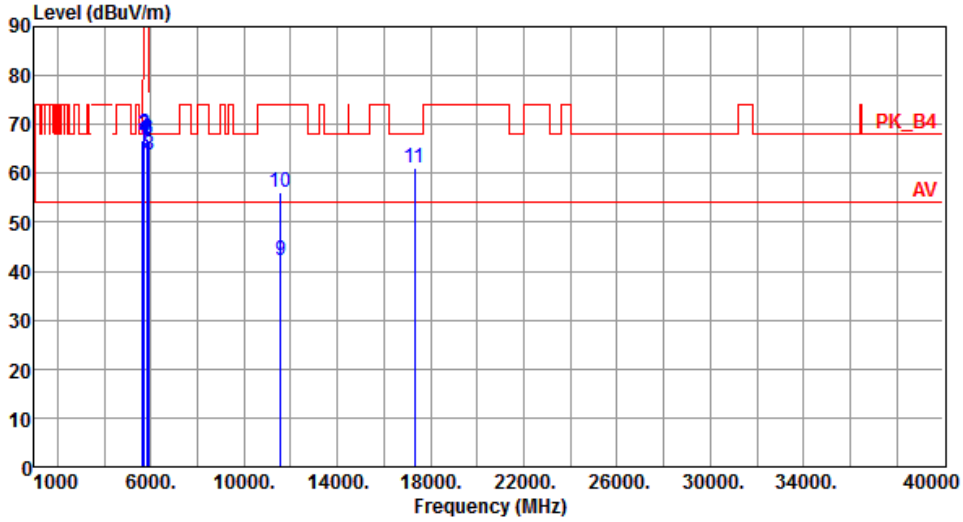
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Vertical		



	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	45.63	54.00	-8.37	40.99	4.64	Average	145	17
2	5460.00	57.15	74.00	-16.85	52.51	4.64	Peak	145	17
3	5470.00	57.52	68.20	-10.68	52.87	4.65	Peak	145	17
4	5850.00	59.43	68.20	-8.77	53.62	5.81	Peak	145	17
5	11380.00	42.30	54.00	-11.70	28.33	13.97	Average	100	304
6	11380.00	56.34	74.00	-17.66	42.37	13.97	Peak	100	304
7	17070.00	60.03	68.20	-8.17	42.99	17.04	Peak	100	307

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

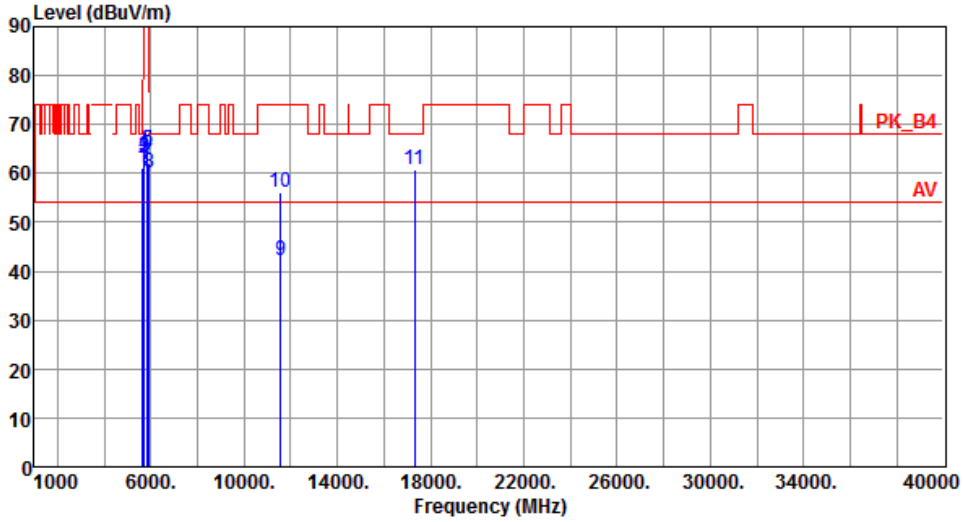
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	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	66.87	68.20	-1.33	61.90	4.97	Peak	178	309
2	5700.00	68.00	105.20	-37.20	62.84	5.16	Peak	178	309
3	5720.00	67.63	110.80	-43.17	62.40	5.23	Peak	178	309
4	5725.00	67.12	122.20	-55.08	61.87	5.25	Peak	178	309
5	5850.00	66.87	122.20	-55.33	61.06	5.81	Peak	178	309
6	5855.00	67.16	110.80	-43.64	61.33	5.83	Peak	178	309
7	5875.00	66.45	105.20	-38.75	60.55	5.90	Peak	178	309
8	5925.00	63.79	68.20	-4.41	57.70	6.09	Peak	178	309
9	11550.00	42.23	54.00	-11.77	28.23	14.00	Average	100	159
10	11550.00	56.28	74.00	-17.72	42.28	14.00	Peak	100	159
11	17325.00	61.21	68.20	-6.99	43.72	17.49	Peak	300	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).

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



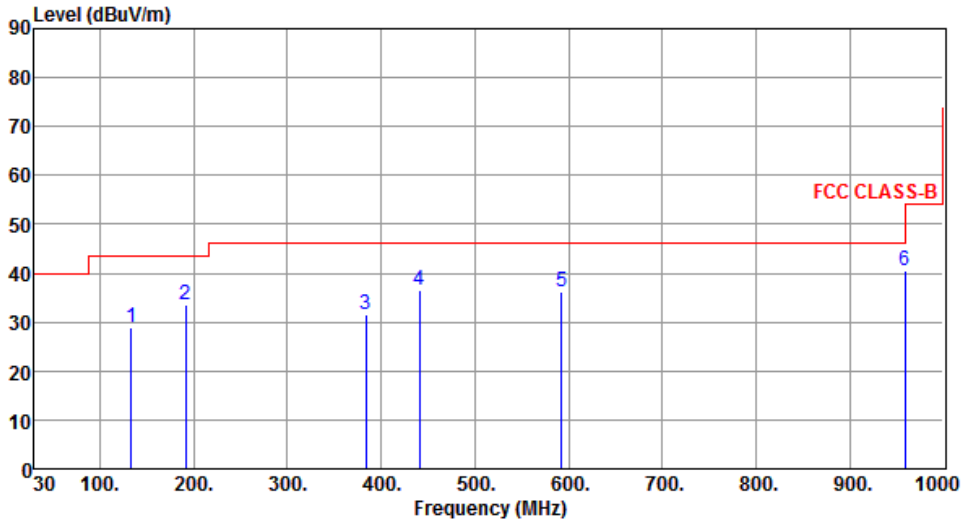
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.16	68.20	-7.04	56.19	4.97	Peak	172	17
2	5700.00	63.04	105.20	-42.16	57.88	5.16	Peak	172	17
3	5720.00	63.59	110.80	-47.21	58.36	5.23	Peak	172	17
4	5725.00	63.76	122.20	-58.44	58.51	5.25	Peak	172	17
5	5850.00	64.61	122.20	-57.59	58.80	5.81	Peak	172	17
6	5855.00	64.79	110.80	-46.01	58.96	5.83	Peak	172	17
7	5875.00	62.10	105.20	-43.10	56.20	5.90	Peak	172	17
8	5925.00	60.09	68.20	-8.11	54.00	6.09	Peak	172	17
9	11550.00	42.23	54.00	-11.77	28.23	14.00	Average	100	157
10	11550.00	56.28	74.00	-17.72	42.28	14.00	Peak	100	157
11	17325.00	60.90	68.20	-7.30	43.41	17.49	Peak	100	8

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

Beamforming mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

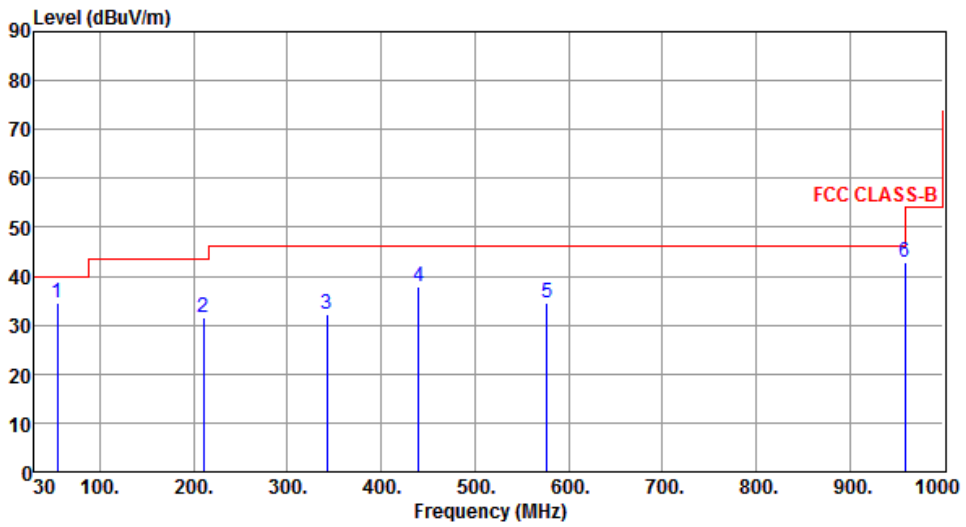
Modulation	VHT20	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	133.52	28.75	43.50	-14.75	38.09	-9.34	Peak	---	---
2	191.53	33.41	43.50	-10.09	43.99	-10.58	Peak	---	---
3	383.96	31.58	46.00	-14.42	37.19	-5.61	Peak	---	---
4	440.52	36.47	46.00	-9.53	40.87	-4.40	Peak	---	---
5	592.52	36.21	46.00	-9.79	37.33	-1.12	Peak	---	---
6	959.26	40.45	46.00	-5.55	36.25	4.20	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.

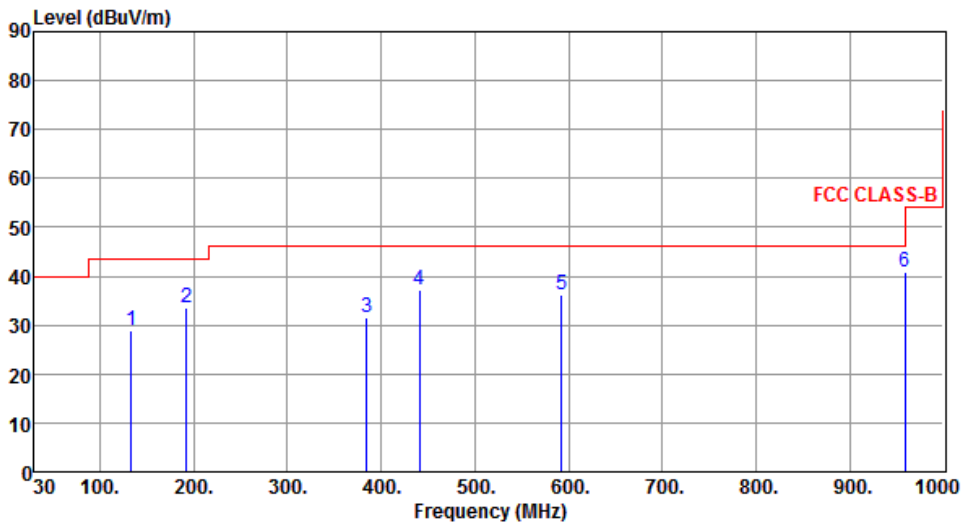
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	54.36	34.38	40.00	-5.62	42.51	-8.13	Peak	---	---
2	210.52	31.66	43.50	-11.84	42.70	-11.04	Peak	---	---
3	342.53	32.38	46.00	-13.62	39.19	-6.81	Peak	---	---
4	440.27	37.96	46.00	-8.04	42.36	-4.40	Peak	---	---
5	577.16	34.67	46.00	-11.33	36.14	-1.47	Peak	---	---
6	959.26	42.85	46.00	-3.15	38.65	4.20	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.

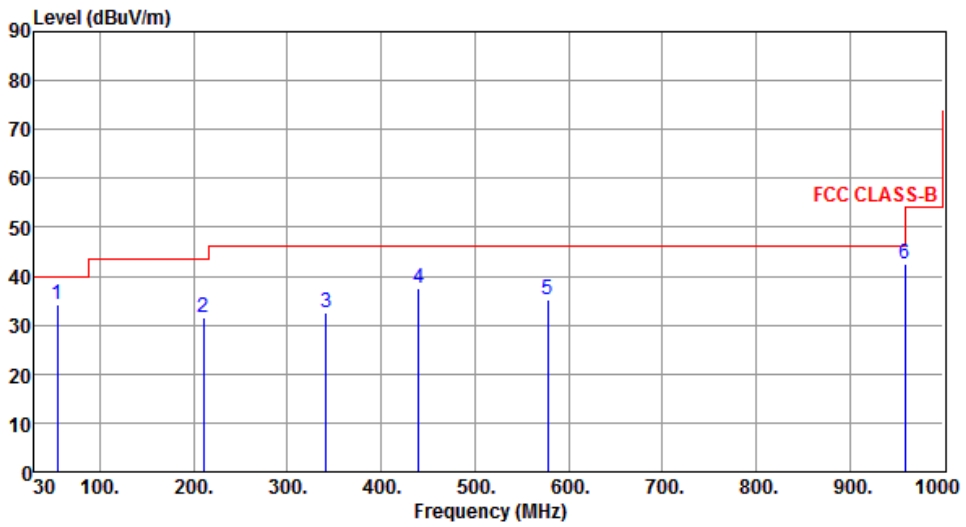
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	133.48	28.86	43.50	-14.64	38.20	-9.34	Peak	---	---
2	191.98	33.53	43.50	-9.97	44.11	-10.58	Peak	---	---
3	384.52	31.62	46.00	-14.38	37.20	-5.58	Peak	---	---
4	440.51	37.26	46.00	-8.74	41.66	-4.40	Peak	---	---
5	592.71	36.31	46.00	-9.69	37.43	-1.12	Peak	---	---
6	959.26	40.85	46.00	-5.15	36.65	4.20	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	VHT40	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	54.53	34.31	40.00	-5.69	42.44	-8.13	Peak	---	---
2	210.42	31.44	43.50	-12.06	42.48	-11.04	Peak	---	---
3	341.58	32.65	46.00	-13.35	39.48	-6.83	Peak	---	---
4	440.48	37.37	46.00	-8.63	41.77	-4.40	Peak	---	---
5	577.41	35.05	46.00	-10.95	36.51	-1.46	Peak	---	---
6	959.26	42.55	46.00	-3.45	38.35	4.20	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.