FCC Test Report

FCC ID	:	**NKR-P68**
Equipment	:	**Wireless module**
Model No.	:	**DHUR-P68**
Brand Name	:	**Panasonic**
Applicant	:	**Wistron NeWeb Corporation**
Address	:	**20 Park Avenue II, Hsinchu Science Park, Hsinchu 308,Taiwan,R.O.C.**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Oct. 22, 2019**
Tested Date	:	**Oct. 26 ~ Oct. 31, 2019**

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

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR9O2201AN	Rev. 01	Initial issue	Nov. 28, 2019

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.641MHz 46.91 (Margin -9.09dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5350.00MHz 53.49 (Margin -0.51dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: 5150~5250MHz: 13.10 5250~5350MHz: 15.54 5470~5725MHz: 15.65 5725~5850MHz: 15.66	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

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

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5720 5745-5825	36-48 [4] 52-64 [4] 100-144 [12] 149-165 [5]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5710 5755-5795	38-46 [2] 54-62 [2] 102-142 [6] 151-159 [2]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530~5690 5775	42 [1] 58 [1] 106-138 [3] 155 [1]	2	MCS 0-9
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.					

1.1.2 Antenna Details

Ant. No.	**Model**	**Type**	**Connector**	**Operating Frequencies (MHz) / Antenna Gain (dBi)**				
				2400~2483.5	**5150~5250**	**5250~5350**	**5470~5725**	**5725~5850**
1	ANT0	PIFA	NA	-0.20	3.51	4.05	3.90	3.52
2	ANT1	PIFA	NA	0.28	3.68	4.23	4.22	4.13

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	5Vdc from host
Hardware Version	v1.0
Software Version	v1.0

1.1.4 Accessories

N/A

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	MT7668 QA, Version: 0.0.1.98		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	98.48	0.07
	VHT20	98.39	0.07
	VHT40	95.79	0.19
	VHT80	90.82	0.42

1.1.7 Power Index of Test Tool

For Frequency band 5150-5250 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	11
11a	5200	11
11a	5240	11
VHT20	5180	13
VHT20	5200	13
VHT20	5240	13
VHT40	5190	13
VHT40	5230	13
VHT80	5210	14

For Frequency band 5250~5350 MHz		
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5260	17
11a	5300	17
11a	5320	17
VHT20	5260	19
VHT20	5300	19
VHT20	5320	19
VHT40	5270	19
VHT40	5310	19
VHT80	5290	18

For Frequency band 5470~5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Index**
11a	5500	17
11a	5580	16
11a	5700	19
VHT20	5500	19
VHT20	5580	18
VHT20	5700	1B
VHT40	5510	19
VHT40	5590	1A
VHT40	5670	1A
VHT80	5530	18
VHT80	5610	1B

Channel that extends across the 5.725 GHz boundary

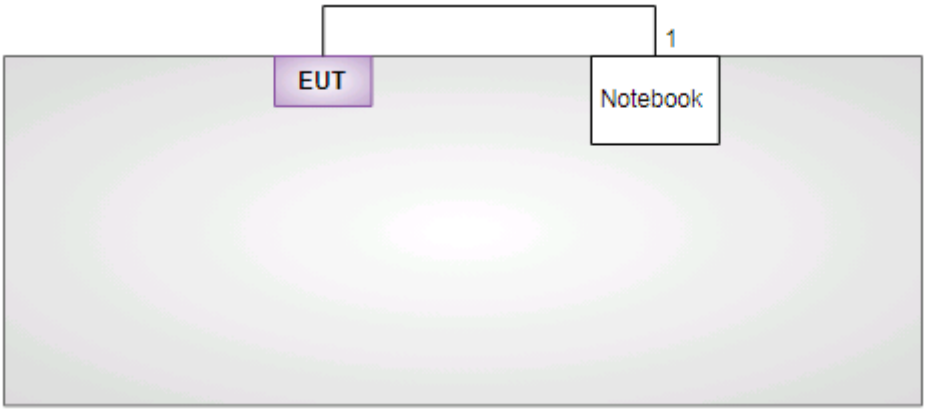
For Frequency band 5470~5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Index**
11a	5720	19
VHT20	5720	1B
VHT40	5710	1C
VHT80	5690	1C

For Frequency band 5725~5850 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Index**
11a	5745	19
11a	5785	1A
11a	5825	1A
VHT20	5745	1B
VHT20	5785	1C
VHT20	5825	1C
VHT40	5755	1C
VHT40	5795	1C
VHT80	5775	1D

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---

1.3 Test Setup Chart

Test Setup Diagram	
	
No.	**Signal cable / Length (m)**
1	USB, 1m shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Oct. 31, 2019				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Jan. 08, 2019	Jan. 07, 2020
LISN	R&S	ENV216	101579	Mar. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Oct. 26 ~ Oct. 28, 2019				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 27, 2018	Dec. 26, 2019
Receiver	R&S	ESR3	101658	Dec. 11, 2018	Dec. 10, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 18, 2018	Dec. 17, 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. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 07, 2019	Oct. 06, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Oct. 31, 2019				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
Spectrum Analyzer	R&**S**	FSV40	101499	Jan. 07, 2019	Jan. 06, 2020
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 05, 2018	Dec. 04, 2019
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Oct. 29, 2019	Oct. 28, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules 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	±34.130 Hz
Conducted power	±0.808 dB
Frequency error	$\pm 1 \times 10^{-9}$
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.41 dB
Radiated emission > 1GHz	±4.59 dB
Time	±0.1%
Temperature	±0.4 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 58%	Akun Chung
Radiated Emissions	03CH01-WS	24°C / 63%	Mike Shu
RF Conducted	TH01-WS	22°C / 64%	Brad Wu

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

2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5250 MHz / 5250~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT20	5500	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5500	MCS 0	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	VHT80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670 / 5710	MCS 0	
	VHT80	5210 / 5290 / 5530 / 5610 / 5690	MCS 0	
Frequency Stability	Un-modulation	5320	---	---

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.

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5785	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5785	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.

3 Transmitter Test Results

3.1 Conducted Emissions

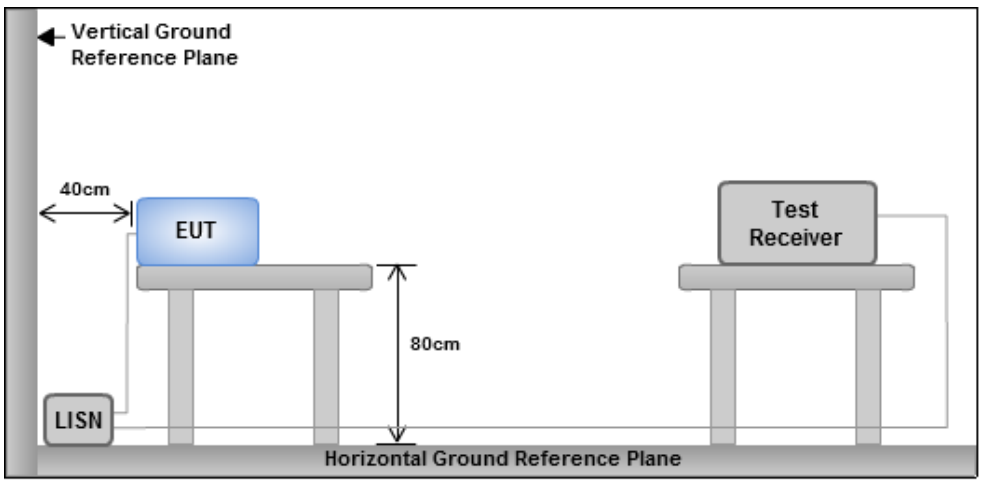
3.1.1 Limit of Conducted Emissions

Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Test Procedures

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

3.1.3 Test Setup

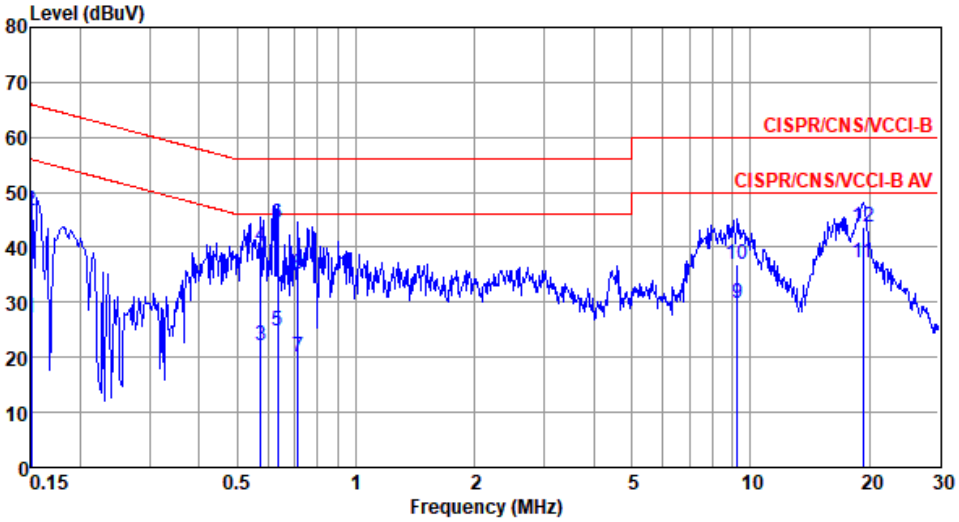


Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

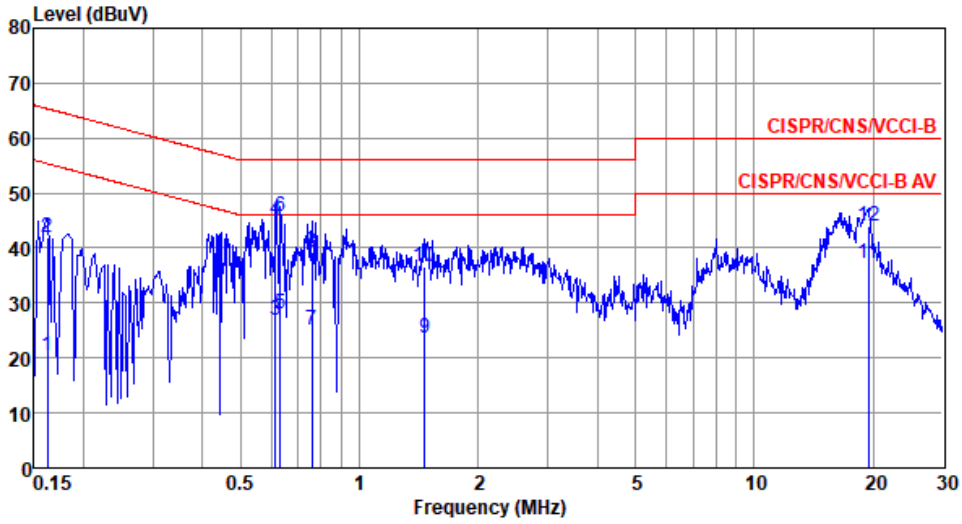
Modulation	VHT20	Test Freq. (MHz)	5500
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	27.29	56.00	-28.71	17.71	9.53	0.05	Average
2	0.150	46.54	66.00	-19.46	36.96	9.53	0.05	QP
3	0.573	22.16	46.00	-23.84	12.48	9.58	0.10	Average
4	0.573	40.24	56.00	-15.76	30.56	9.58	0.10	QP
5	0.634	24.90	46.00	-21.10	15.22	9.58	0.10	Average
6*	0.634	44.15	56.00	-11.85	34.47	9.58	0.10	QP
7	0.712	20.22	46.00	-25.78	10.52	9.59	0.11	Average
8	0.712	35.04	56.00	-20.96	25.34	9.59	0.11	QP
9	9.253	29.74	50.00	-20.26	19.71	9.65	0.38	Average
10	9.253	36.96	60.00	-23.04	26.93	9.65	0.38	QP
11	19.326	37.08	50.00	-12.92	26.77	9.66	0.65	Average
12	19.326	43.58	60.00	-16.42	33.27	9.66	0.65	QP

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

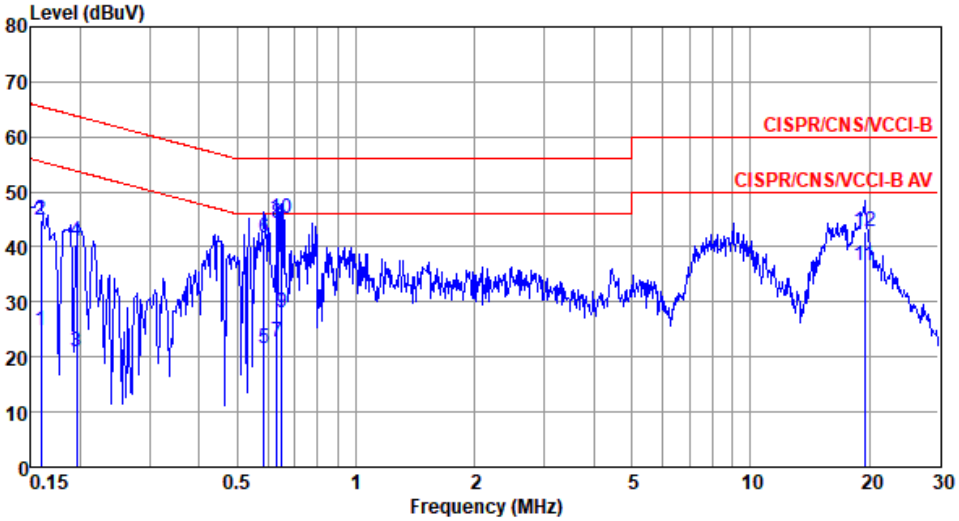
Modulation	VHT20	**Test Freq. (MHz)**	5500
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.162	20.25	55.34	-35.09	10.63	9.57	0.05	Average
2	0.162	42.00	65.34	-23.34	32.38	9.57	0.05	QP
3	0.614	26.92	46.00	-19.08	17.20	9.62	0.10	Average
4	0.614	45.24	56.00	-10.76	35.52	9.62	0.10	QP
5	0.630	27.91	46.00	-18.09	18.19	9.62	0.10	Average
6*	0.630	45.77	56.00	-10.23	36.05	9.62	0.10	QP
7	0.759	25.07	46.00	-20.93	15.33	9.63	0.11	Average
8	0.759	39.15	56.00	-16.85	29.41	9.63	0.11	QP
9	1.464	23.75	46.00	-22.25	13.95	9.65	0.15	Average
10	1.464	36.65	56.00	-19.35	26.85	9.65	0.15	QP
11	19.428	37.10	50.00	-12.90	26.64	9.81	0.65	Average
12	19.428	43.85	60.00	-16.15	33.39	9.81	0.65	QP

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

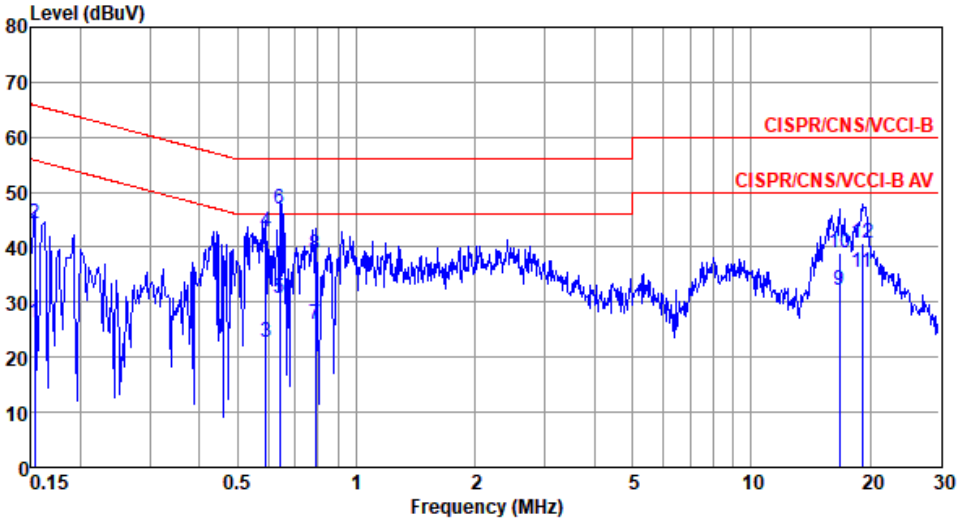
Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	24.93	55.52	-30.59	15.35	9.53	0.05	Average
2	0.159	44.94	65.52	-20.58	35.36	9.53	0.05	QP
3	0.195	21.03	53.80	-32.77	11.43	9.54	0.06	Average
4	0.195	41.10	63.80	-22.70	31.50	9.54	0.06	QP
5	0.585	21.51	46.00	-24.49	11.83	9.58	0.10	Average
6	0.585	41.74	56.00	-14.26	32.06	9.58	0.10	QP
7	0.630	22.68	46.00	-23.32	13.00	9.58	0.10	Average
8	0.630	44.24	56.00	-11.76	34.56	9.58	0.10	QP
9	0.647	28.15	46.00	-17.85	18.46	9.59	0.10	Average
10*	0.647	45.07	56.00	-10.93	35.38	9.59	0.10	QP
11	19.428	36.74	50.00	-13.26	26.43	9.66	0.65	Average
12	19.428	42.72	60.00	-17.28	32.41	9.66	0.65	QP

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

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



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	26.15	55.82	-29.67	16.53	9.57	0.05	Average
2	0.153	44.35	65.82	-21.47	34.73	9.57	0.05	QP
3	0.589	22.60	46.00	-23.40	12.88	9.62	0.10	Average
4	0.589	42.80	56.00	-13.20	33.08	9.62	0.10	QP
5	0.641	30.59	46.00	-15.41	20.86	9.63	0.10	Average
6*	0.641	46.91	56.00	-9.09	37.18	9.63	0.10	QP
7	0.788	25.91	46.00	-20.09	16.17	9.63	0.11	Average
8	0.788	38.73	56.00	-17.27	28.99	9.63	0.11	QP
9	16.750	32.22	50.00	-17.78	21.82	9.78	0.62	Average
10	16.750	39.09	60.00	-20.91	28.69	9.78	0.62	QP
11	19.122	35.29	50.00	-14.71	24.84	9.80	0.65	Average
12	19.122	40.82	60.00	-19.18	30.37	9.80	0.65	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission Bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

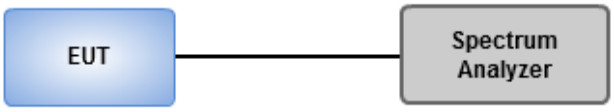
Occupied Bandwidth

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

6dB Bandwidth

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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.71M	16.498M	16M5D1D	19.203M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.29M	17.583M	17M6D1D	19.71M	17.438M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.725M	36.179M	36M2D1D	39.855M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.739M	75.832M	75M8D1D	80M	75.543M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.928M	16.498M	16M5D1D	19.348M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.435M	17.583M	17M6D1D	19.783M	17.511M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.58M	36.324M	36M3D1D	39.855M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	82.029M	75.832M	75M8D1D	80.29M	75.543M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.71M	16.498M	16M5D1D	14.826M	13.242M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.362M	17.583M	17M6D1D	15.174M	13.849M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.58M	36.179M	36M2D1D	35M	33.025M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.739M	76.122M	76M1D1D	75.217M	72.504M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.304M	16.498M	16M5D1D	3.014M	3.705M
802.11ac VHT20_Nss1,(MCS0)_2TX	16.522M	17.583M	17M6D1D	3.652M	3.994M
802.11ac VHT40_Nss1,(MCS0)_2TX	36.377M	36.179M	36M2D1D	3.014M	4.515M
802.11ac VHT80_Nss1,(MCS0)_2TX	75.942M	76.122M	76M1D1D	3.014M	20.434M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Min-OBW = Minimum 99% occupied bandwidth;

Result

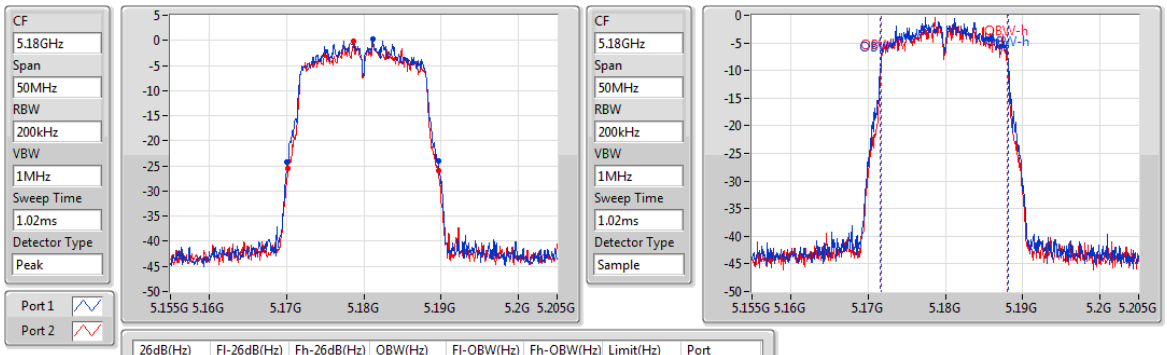
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.565M	16.498M	19.493M	16.353M
5200MHz	Pass	Inf	19.71M	16.498M	19.275M	16.353M
5240MHz	Pass	Inf	19.638M	16.498M	19.203M	16.353M
5260MHz	Pass	Inf	19.928M	16.498M	19.42M	16.353M
5300MHz	Pass	Inf	19.493M	16.498M	19.348M	16.353M
5320MHz	Pass	Inf	19.493M	16.498M	19.348M	16.353M
5500MHz	Pass	Inf	19.565M	16.498M	19.203M	16.353M
5580MHz	Pass	Inf	19.493M	16.498M	19.42M	16.353M
5700MHz	Pass	Inf	19.71M	16.498M	19.203M	16.353M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.87M	13.372M	14.826M	13.242M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.014M	3.821M	3.072M	3.705M
5745MHz	Pass	500k	15.29M	16.498M	15.362M	16.353M
5785MHz	Pass	500k	16.304M	16.425M	16.087M	16.353M
5825MHz	Pass	500k	14.42M	16.498M	16.304M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.29M	17.583M	19.928M	17.438M
5200MHz	Pass	Inf	20.29M	17.583M	19.928M	17.511M
5240MHz	Pass	Inf	20M	17.583M	19.71M	17.511M
5260MHz	Pass	Inf	20.29M	17.583M	19.855M	17.511M
5300MHz	Pass	Inf	20.29M	17.583M	20M	17.511M
5320MHz	Pass	Inf	20.435M	17.583M	19.783M	17.511M
5500MHz	Pass	Inf	20.362M	17.583M	19.928M	17.438M
5580MHz	Pass	Inf	20.362M	17.583M	20M	17.511M
5700MHz	Pass	Inf	19.928M	17.511M	19.783M	17.511M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.174M	13.849M	15.174M	13.849M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.652M	4.11M	3.652M	3.994M
5745MHz	Pass	500k	14.13M	17.583M	16.522M	17.511M
5785MHz	Pass	500k	15.435M	17.583M	16.522M	17.511M
5825MHz	Pass	500k	15.072M	17.583M	15.725M	17.511M

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.435M	36.179M	40.145M	36.179M
5230MHz	Pass	Inf	40.725M	36.179M	39.855M	36.179M
5270MHz	Pass	Inf	40.58M	36.179M	40M	36.324M
5310MHz	Pass	Inf	40.58M	36.179M	39.855M	36.324M
5510MHz	Pass	Inf	40.435M	36.179M	40M	36.179M
5590MHz	Pass	Inf	40.58M	36.179M	40.145M	36.179M
5670MHz	Pass	Inf	40.58M	36.179M	40.29M	36.179M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.406M	33.025M	35M	33.025M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.014M	4.631M	3.014M	4.515M
5755MHz	Pass	500k	35.217M	36.179M	36.377M	36.179M
5795MHz	Pass	500k	34.058M	36.179M	35.217M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.739M	75.832M	80M	75.543M
5290MHz	Pass	Inf	82.029M	75.832M	80.29M	75.543M
5530MHz	Pass	Inf	81.739M	75.832M	80M	75.543M
5610MHz	Pass	Inf	81.739M	76.122M	80M	75.543M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.652M	72.938M	75.217M	72.504M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.072M	20.55M	3.014M	20.434M
5775MHz	Pass	500k	75.942M	76.122M	75.652M	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**

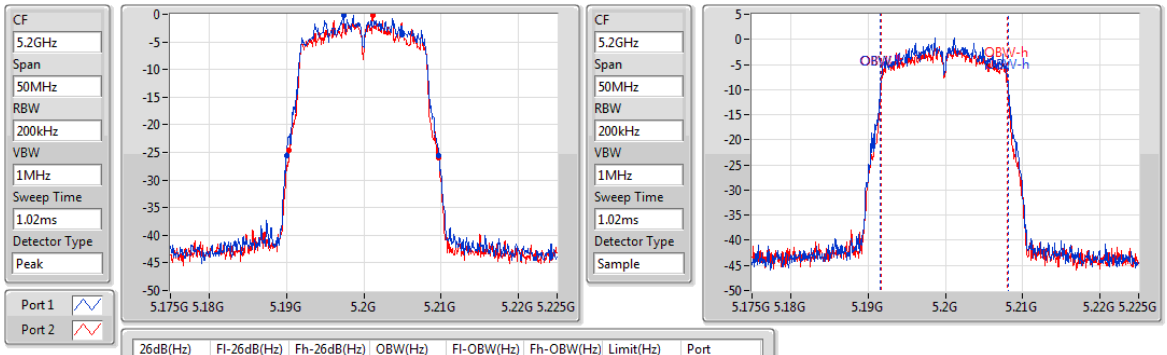
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.170072G	5.189638G	16.498M	5.171606G	5.188104G	Inf	1
19.493M	5.170217G	5.18971G	16.353M	5.171679G	5.188032G	Inf	2

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

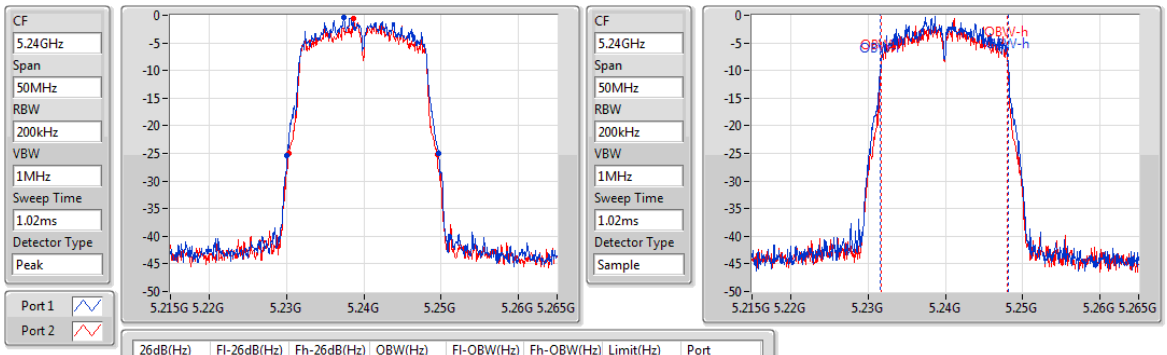
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.71M	5.19G	5.20971G	16.498M	5.191606G	5.208104G	Inf	1
19.275M	5.190362G	5.209638G	16.353M	5.191679G	5.208032G	Inf	2

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

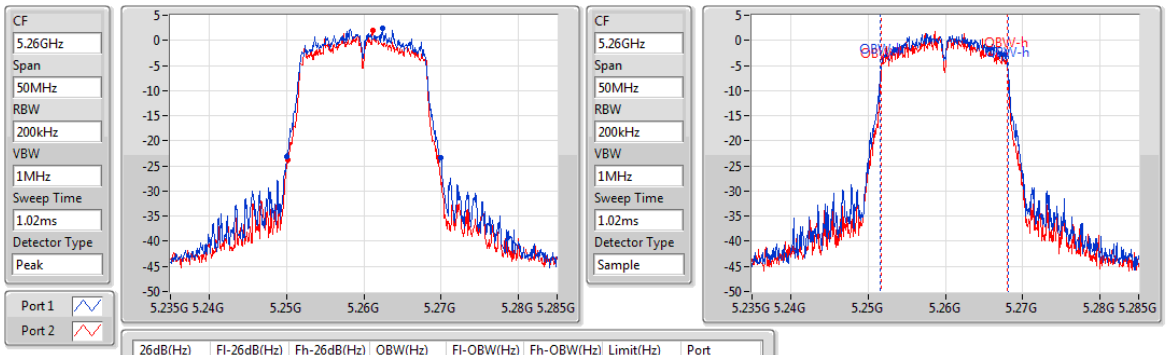
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.638M	5.230072G	5.24971G	16.498M	5.231606G	5.248104G	Inf	1
19.203M	5.23029G	5.249493G	16.353M	5.231679G	5.248032G	Inf	2

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

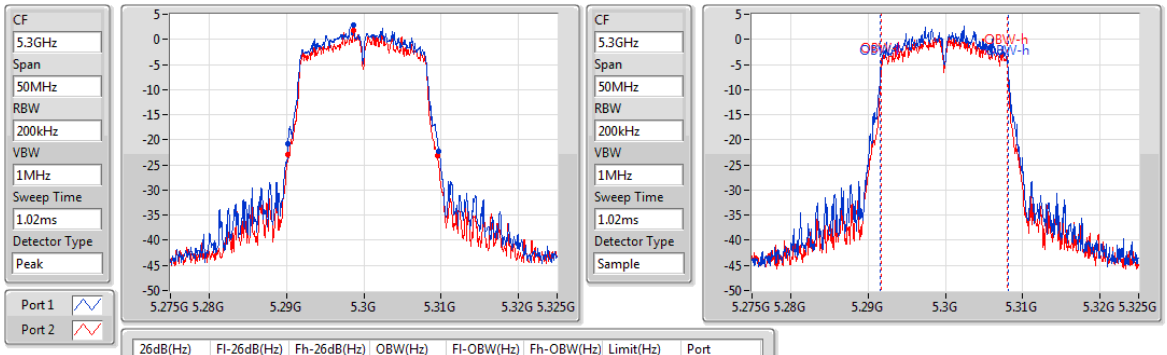
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.250072G	5.27G	16.498M	5.251606G	5.268104G	Inf	1
19.42M	5.250217G	5.269638G	16.353M	5.251679G	5.268032G	Inf	2

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

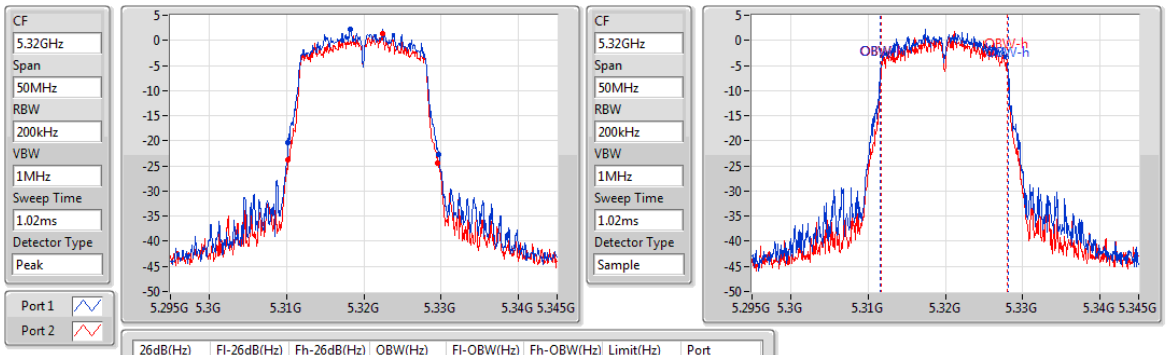
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.493M	5.290217G	5.30971G	16.498M	5.291606G	5.308104G	Inf	1
19.348M	5.290217G	5.309565G	16.353M	5.291679G	5.308032G	Inf	2

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

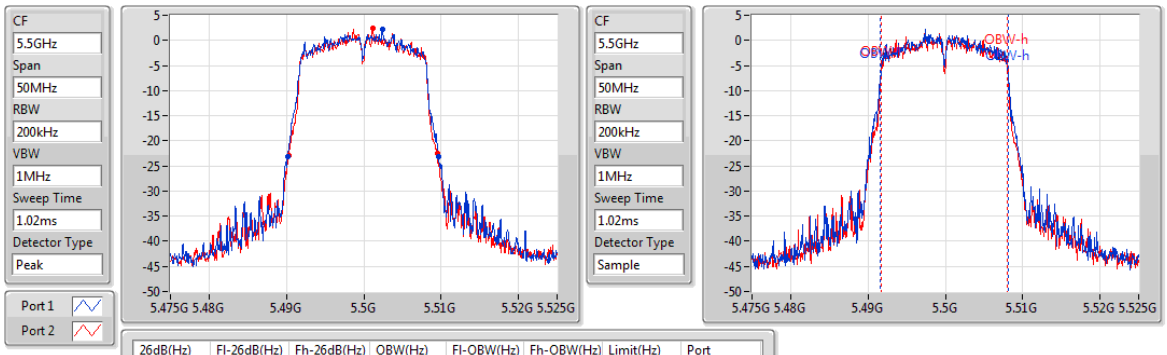
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.493M	5.310217G	5.32971G	16.498M	5.311606G	5.328104G	Inf	1
19.348M	5.310217G	5.329565G	16.353M	5.311679G	5.328032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

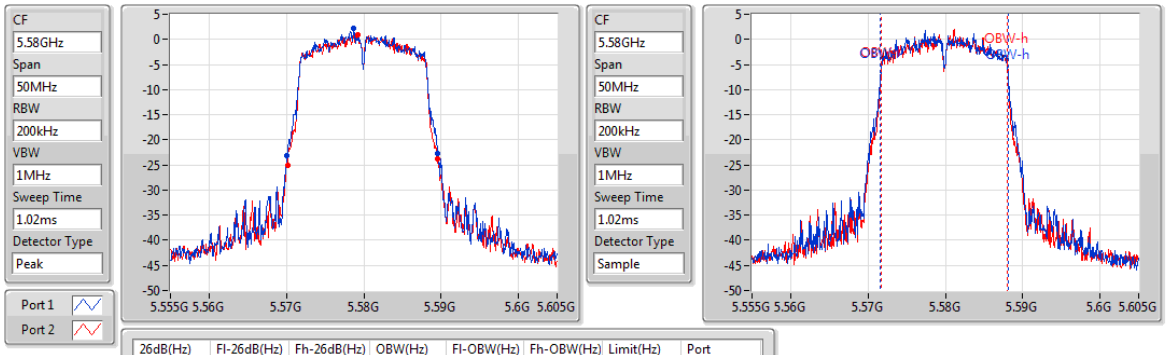
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.490145G	5.50971G	16.498M	5.491606G	5.508104G	Inf	1
19.203M	5.49029G	5.509493G	16.353M	5.491679G	5.508032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

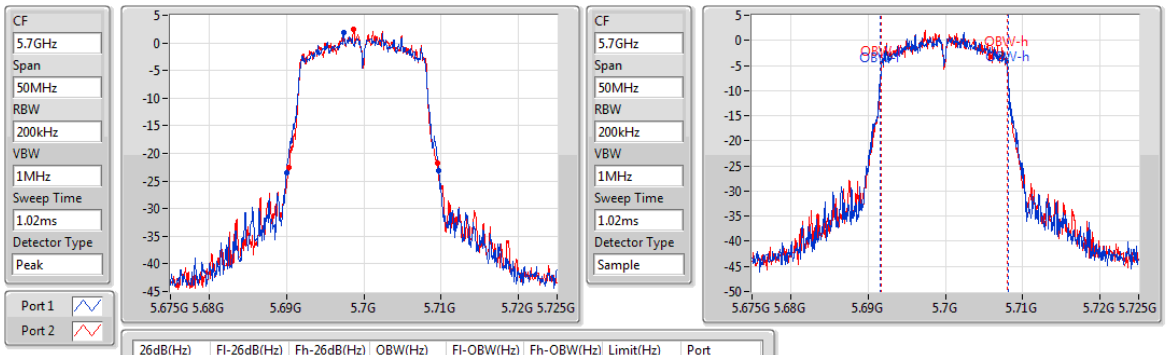
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.493M	5.570072G	5.589565G	16.498M	5.571606G	5.588104G	Inf	1
19.42M	5.570145G	5.589565G	16.353M	5.571679G	5.588032G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

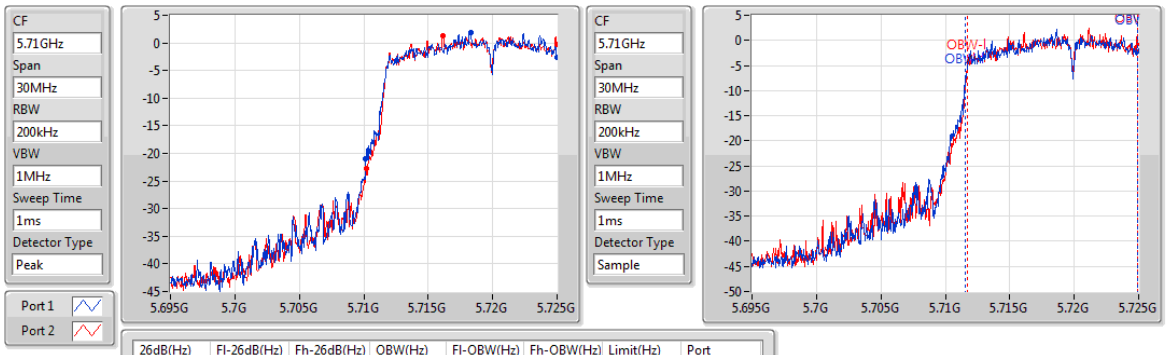
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.71M	5.69G	5.70971G	16.498M	5.691606G	5.708104G	Inf	1
19.203M	5.69029G	5.709493G	16.353M	5.691679G	5.708032G	Inf	2

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

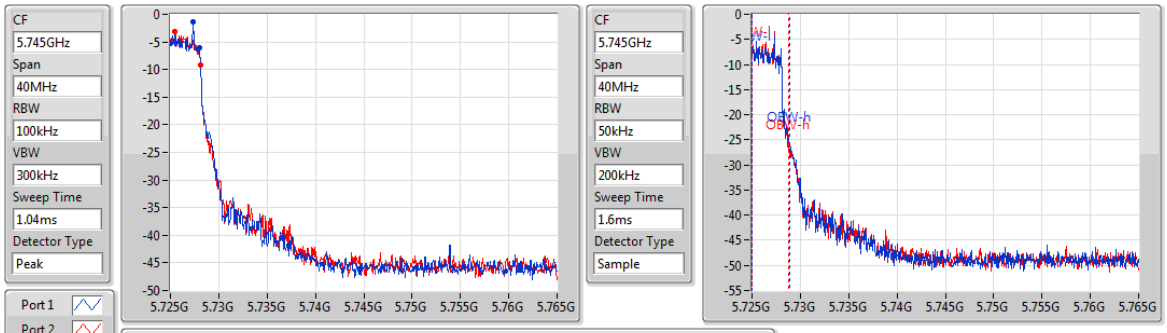
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.87M	5.71013G	5.725G	13.372M	5.711563G	5.724935G	Inf	1
14.826M	5.710174G	5.725G	13.242M	5.711693G	5.724935G	Inf	2

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

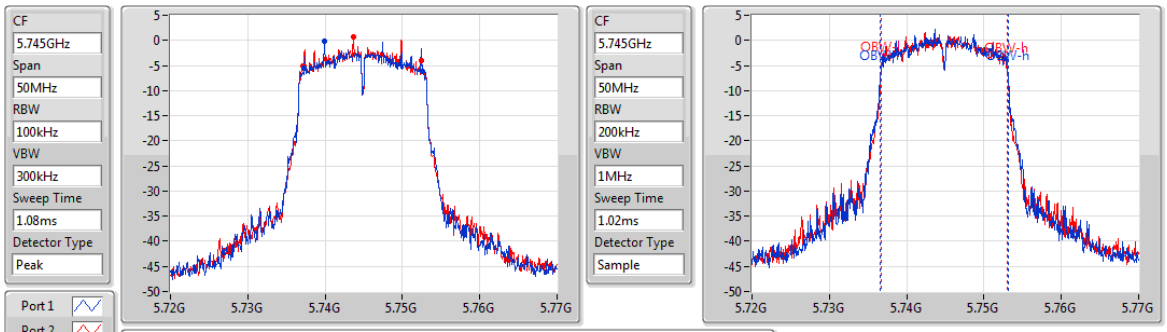
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.014M	5.725G	5.728014G	3.821M	5.725029G	5.728849G	500k	1
3.072M	5.725G	5.728072G	3.705M	5.725029G	5.728734G	500k	2

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

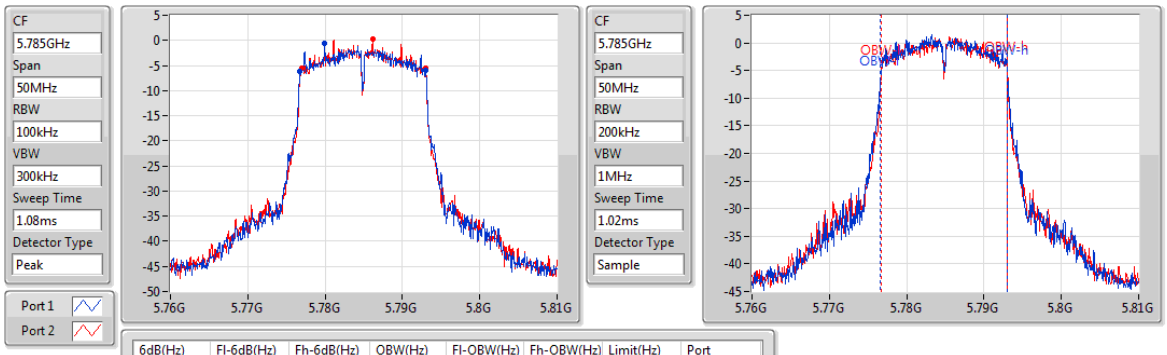
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.29M	5.737319G	5.752609G	16.498M	5.736606G	5.753104G	500k	1
15.362M	5.737101G	5.752464G	16.353M	5.736679G	5.753032G	500k	2

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

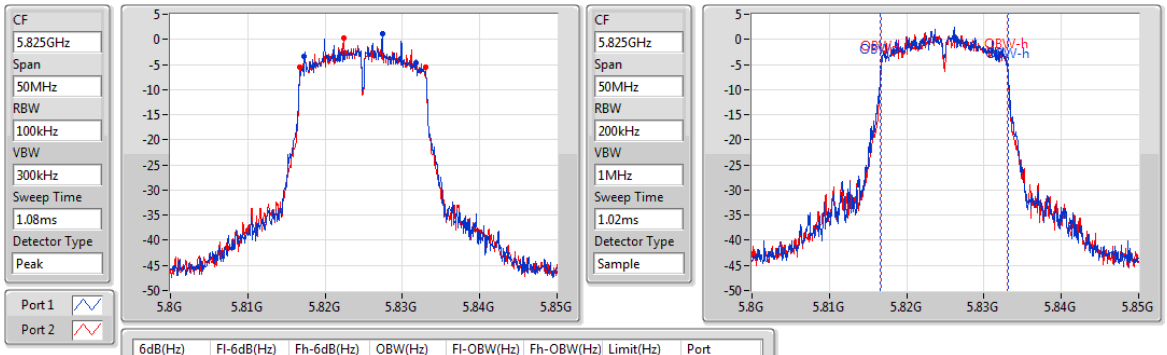
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.304M	5.776739G	5.793043G	16.425M	5.776606G	5.793032G	500k	1
16.087M	5.776957G	5.793043G	16.353M	5.776679G	5.793032G	500k	2

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

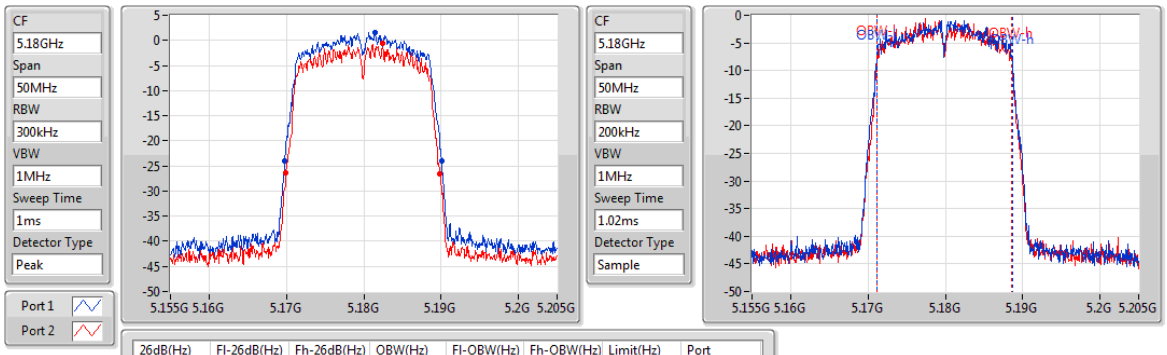
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.42M	5.817319G	5.831739G	16.498M	5.816606G	5.833104G	500k	1
16.304M	5.816739G	5.833043G	16.353M	5.816679G	5.833032G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

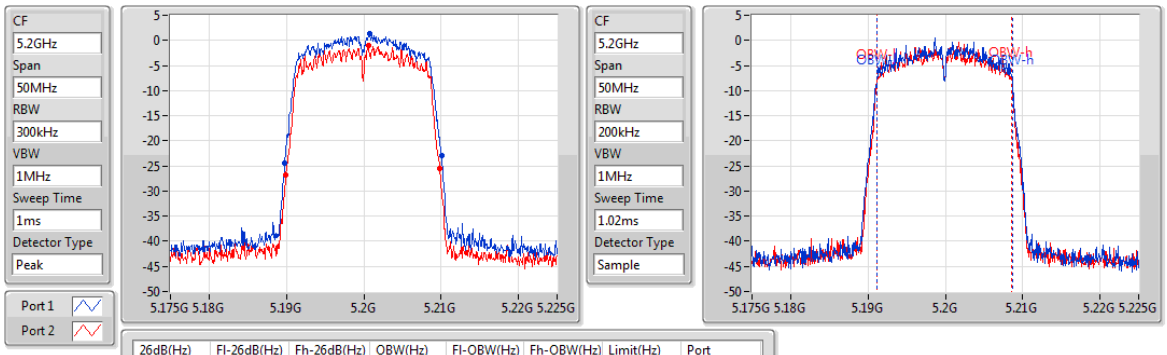
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.29M	5.169783G	5.190072G	17.583M	5.1711G	5.188683G	Inf	1
19.928M	5.169928G	5.189855G	17.438M	5.171172G	5.188611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

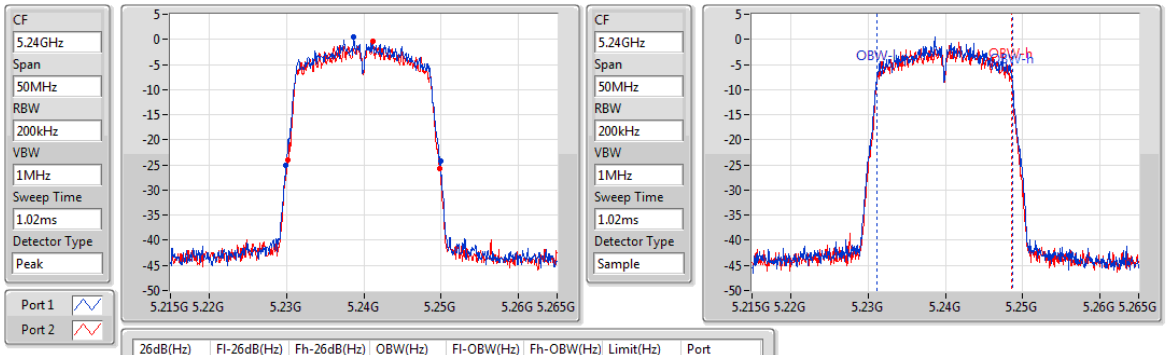
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.29M	5.189783G	5.210072G	17.583M	5.1911G	5.208683G	Inf	1
19.928M	5.189928G	5.209855G	17.511M	5.1911G	5.208611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

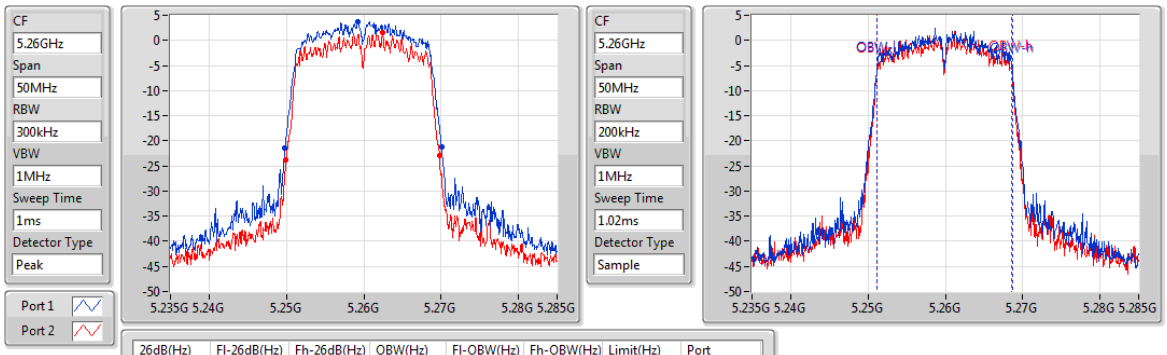
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.229928G	5.249928G	17.583M	5.2311G	5.248683G	Inf	1
19.71M	5.230145G	5.249855G	17.511M	5.2311G	5.248611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

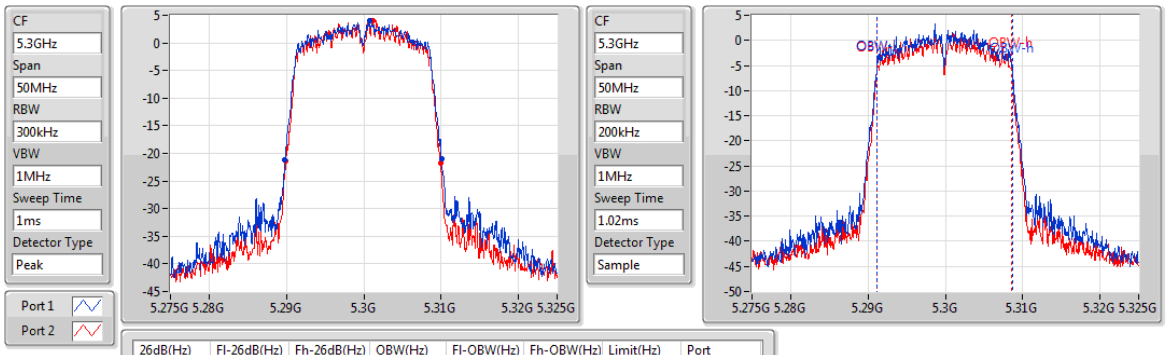
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.29M	5.249783G	5.270072G	17.583M	5.2511G	5.268683G	Inf	1
19.855M	5.249928G	5.269783G	17.511M	5.2511G	5.268611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

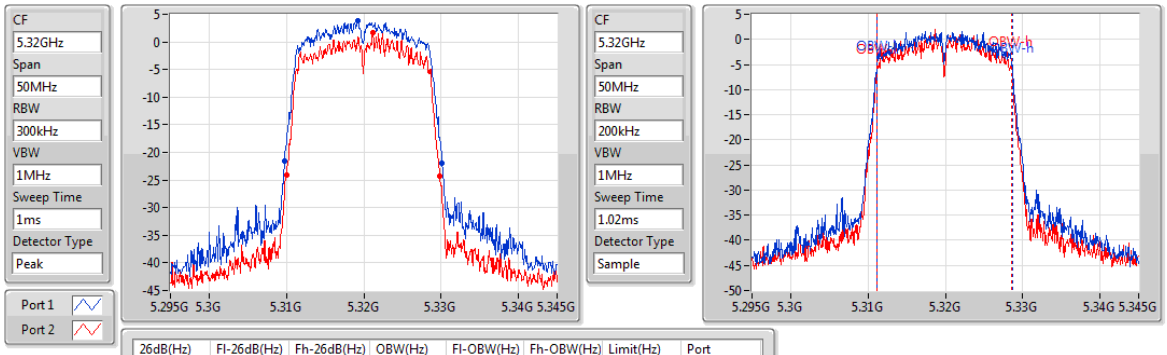
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.29M	5.289783G	5.310072G	17.583M	5.2911G	5.308683G	Inf	1
20M	5.289928G	5.309928G	17.511M	5.2911G	5.308611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

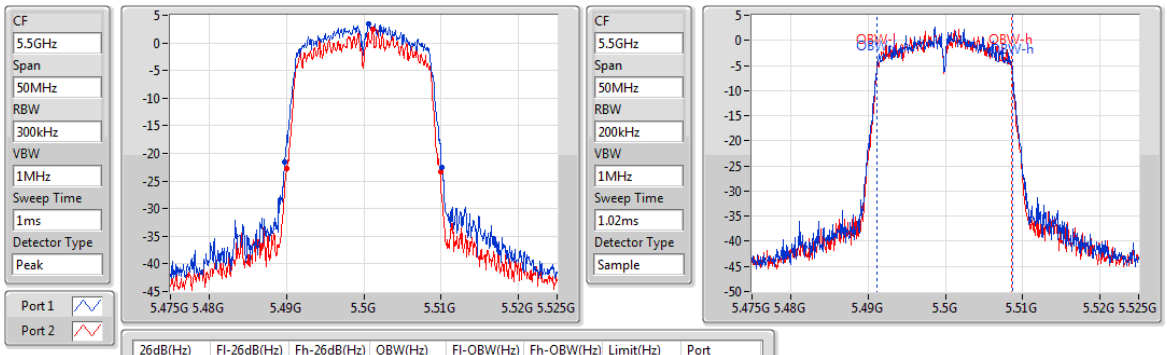
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.435M	5.30971G	5.330145G	17.583M	5.3111G	5.328683G	Inf	1
19.783M	5.31G	5.329783G	17.511M	5.3111G	5.328611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

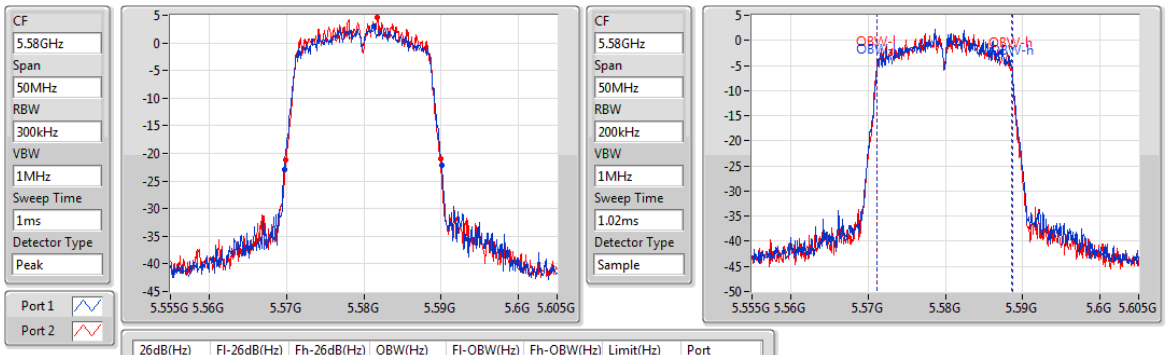
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.362M	5.489783G	5.510145G	17.583M	5.4911G	5.508683G	Inf	1
19.928M	5.49G	5.509928G	17.438M	5.491172G	5.508611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

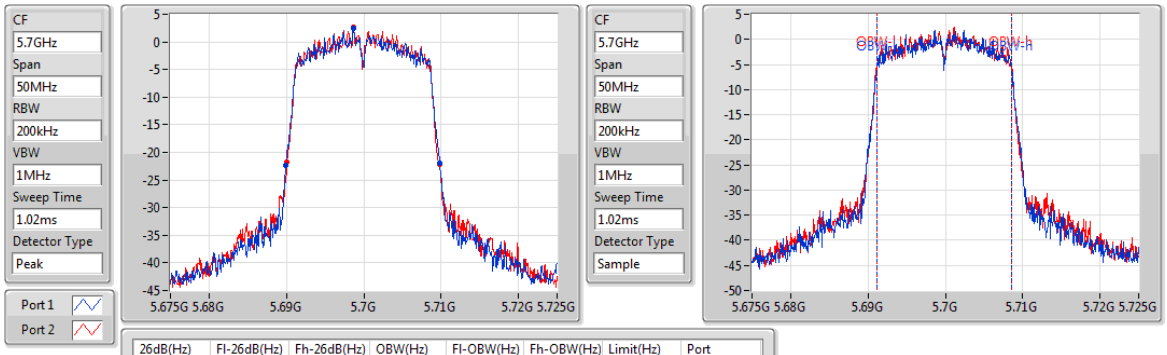
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.362M	5.56971G	5.590072G	17.583M	5.5711G	5.588683G	Inf	1
20M	5.569928G	5.589928G	17.511M	5.5711G	5.588611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

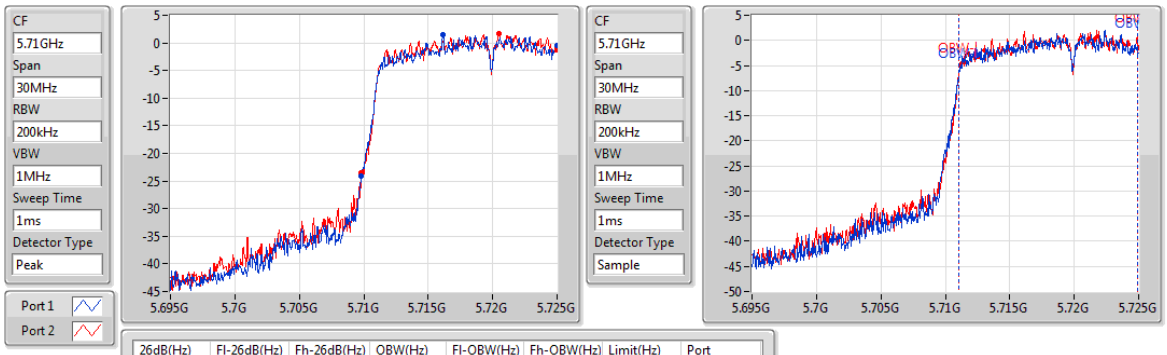
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.689928G	5.709855G	17.511M	5.6911G	5.708611G	Inf	1
19.783M	5.690072G	5.709855G	17.511M	5.6911G	5.708611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

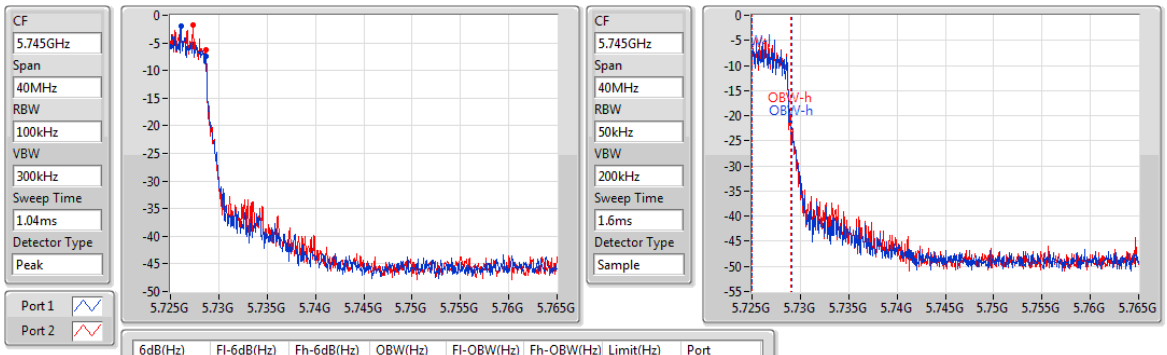
5720MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.174M	5.709826G	5.725G	13.849M	5.711042G	5.724891G	Inf	1
15.174M	5.709826G	5.725G	13.849M	5.711085G	5.724935G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

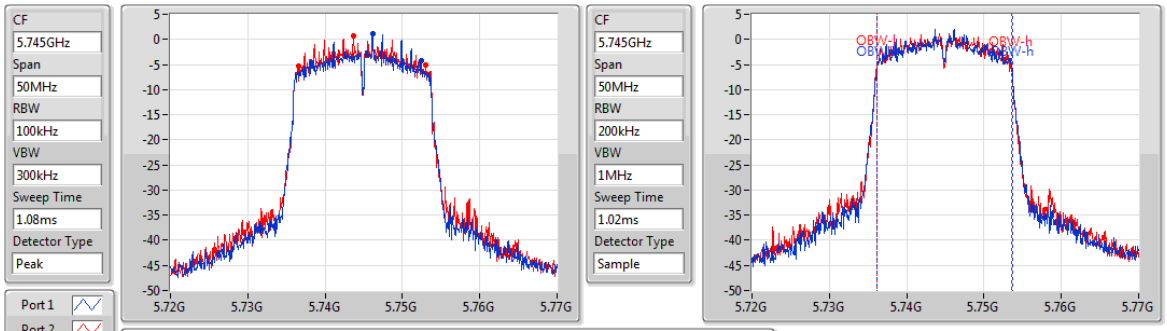
5720MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.652M	5.725G	5.728652G	4.11M	5.725029G	5.729139G	500k	1
3.652M	5.725G	5.728652G	3.994M	5.725029G	5.729023G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

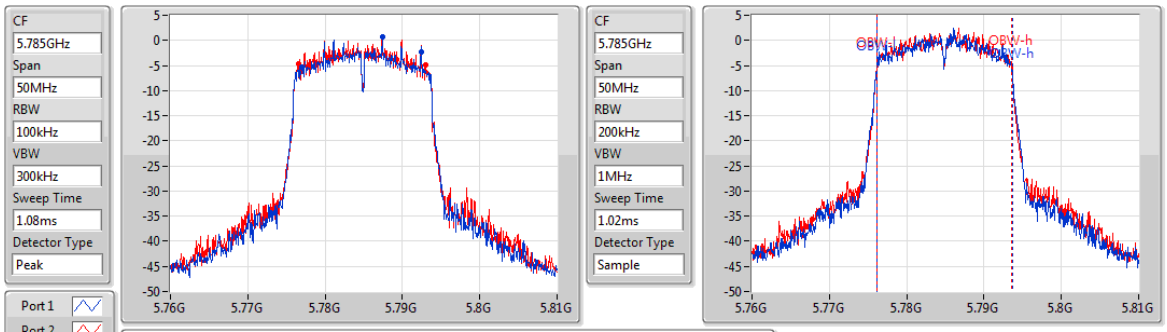
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.13M	5.738261G	5.752391G	17.583M	5.7361G	5.753683G	500k	1
16.522M	5.736522G	5.753043G	17.511M	5.7361G	5.753611G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX **EBW**

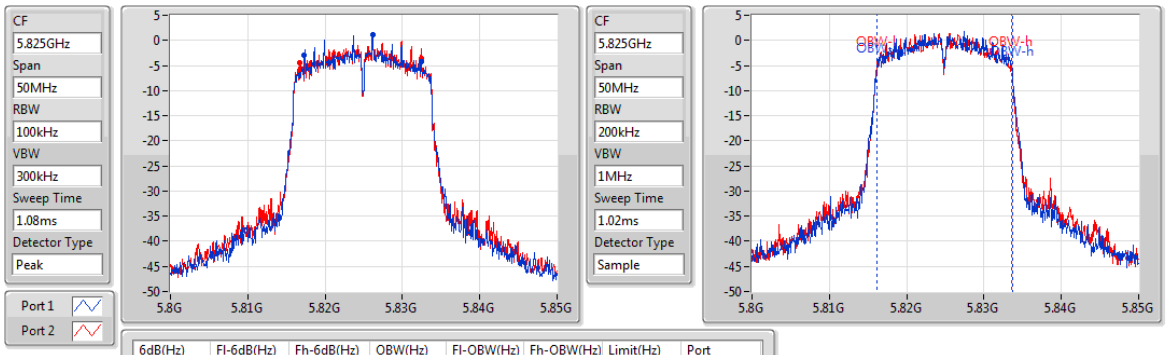
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.435M	5.777029G	5.792464G	17.583M	5.7761G	5.793683G	500k	1
16.522M	5.776522G	5.793043G	17.511M	5.7761G	5.793611G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

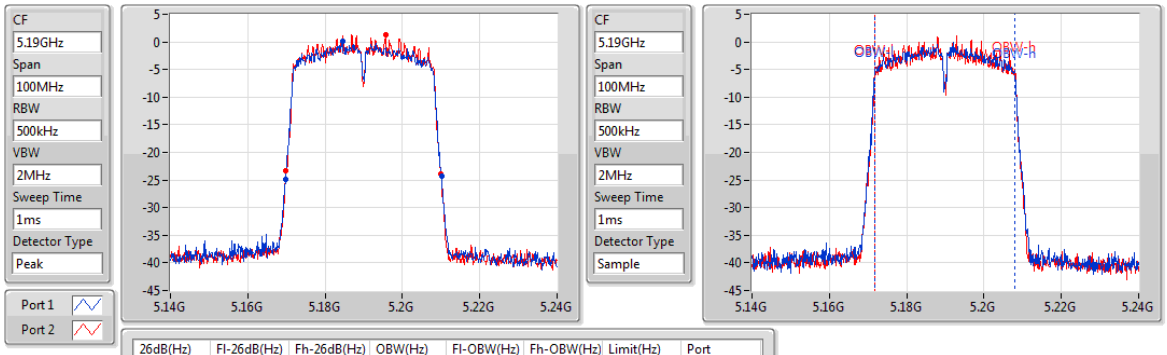
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.817319G	5.832391G	17.583M	5.8161G	5.833683G	500k	1
15.725M	5.816739G	5.832464G	17.511M	5.8161G	5.833611G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

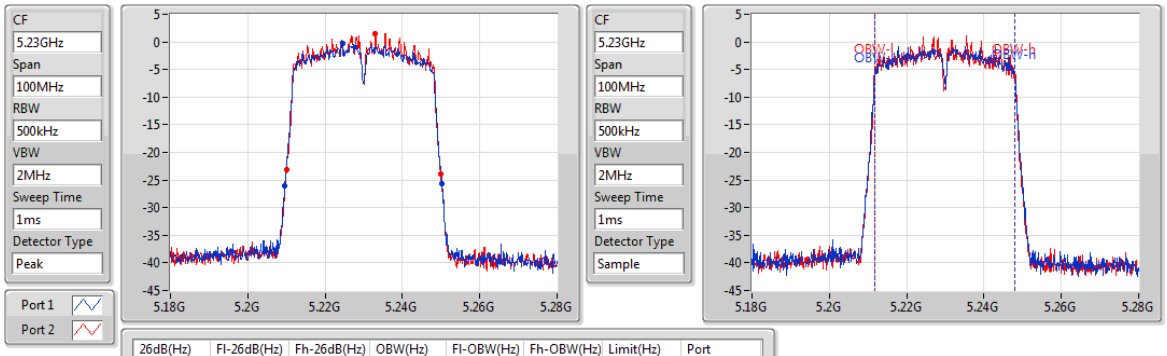
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.435M	5.16971G	5.210145G	36.179M	5.171766G	5.207945G	Inf	1
40.145M	5.169855G	5.21G	36.179M	5.171766G	5.207945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

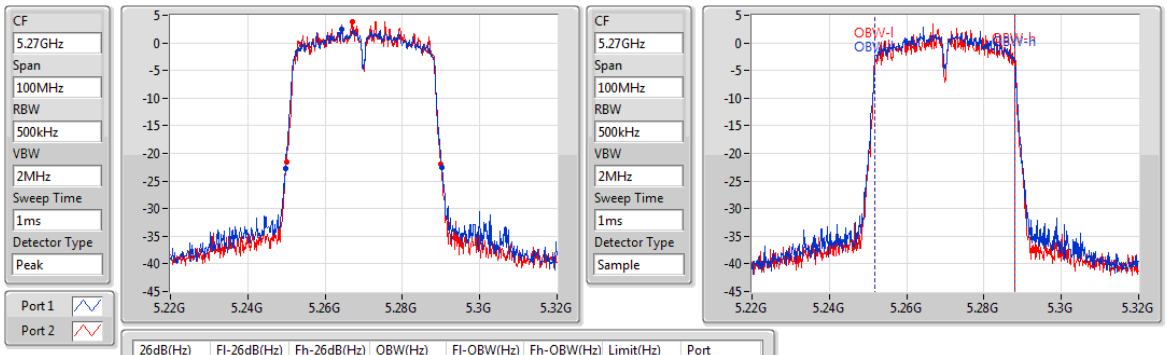
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.725M	5.209565G	5.25029G	36.179M	5.211766G	5.247945G	Inf	1
39.855M	5.21G	5.249855G	36.179M	5.211766G	5.247945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX **EBW**

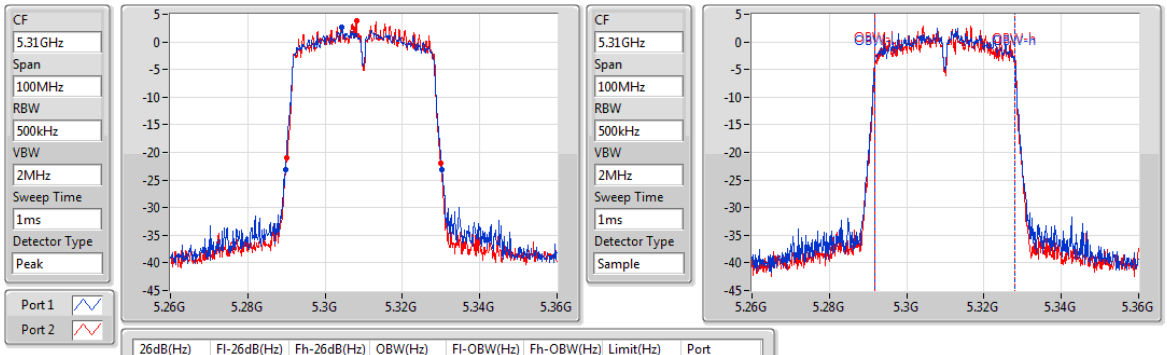
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.24971G	5.29029G	36.179M	5.251766G	5.287945G	Inf	1
40M	5.25G	5.29G	36.324M	5.251766G	5.28809G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX **EBW**

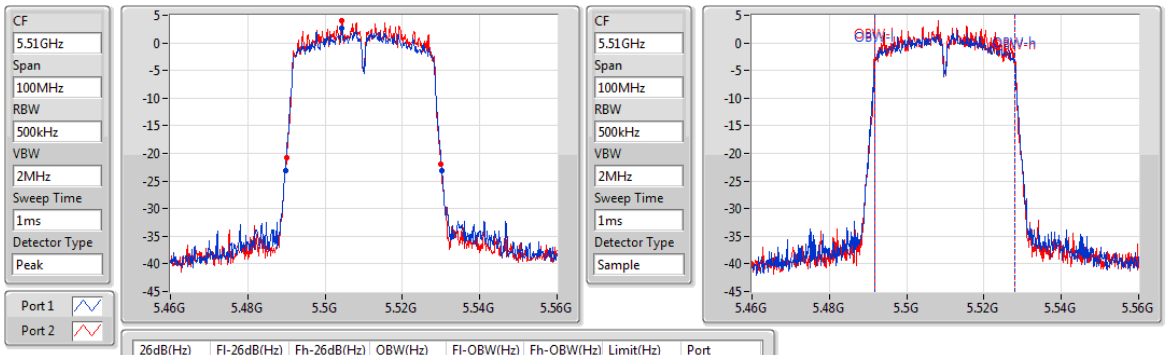
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.28971G	5.33029G	36.179M	5.291766G	5.327945G	Inf	1
39.855M	5.29G	5.329855G	36.324M	5.291766G	5.32809G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX **EBW**

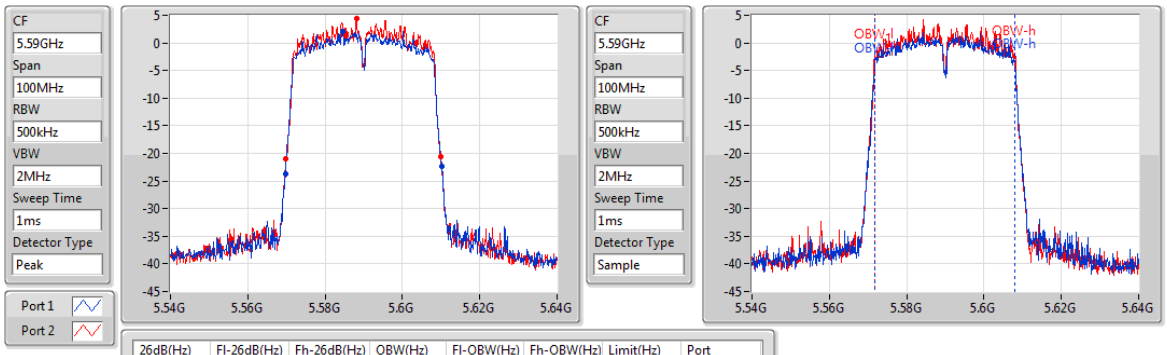
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.435M	5.48971G	5.530145G	36.179M	5.491766G	5.527945G	Inf	1
40M	5.49G	5.53G	36.179M	5.491766G	5.527945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

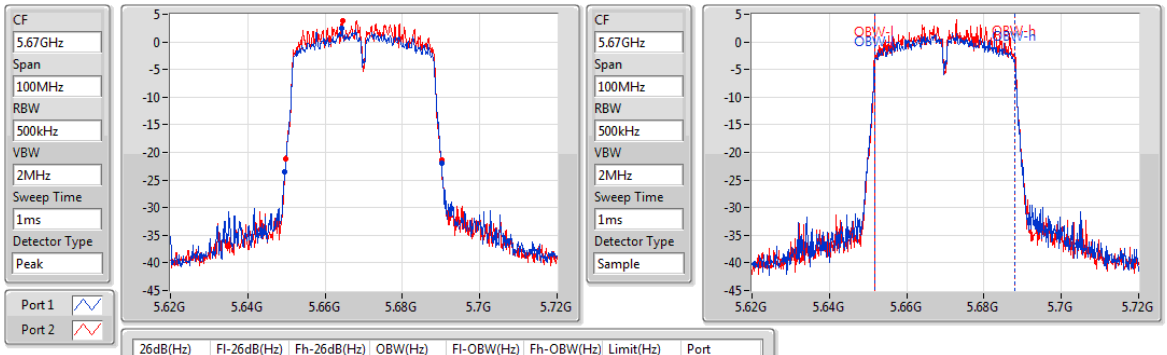
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.56971G	5.61029G	36.179M	5.571766G	5.607945G	Inf	1
40.145M	5.569855G	5.61G	36.179M	5.571766G	5.607945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

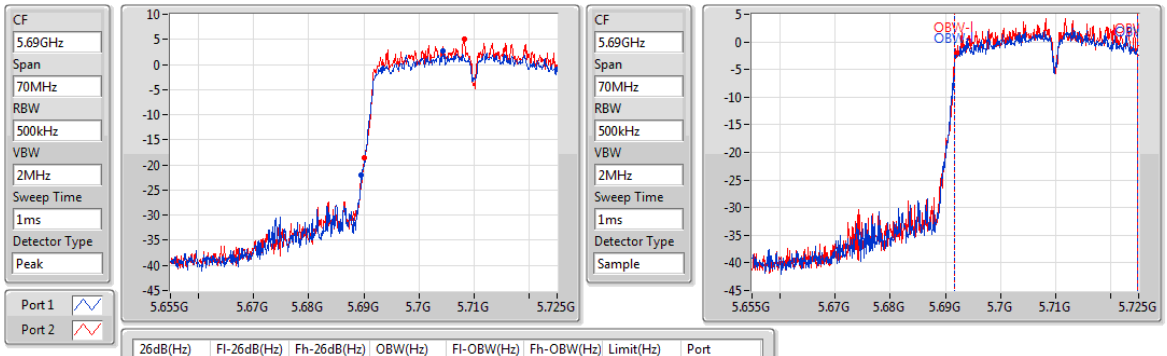
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.649565G	5.690145G	36.179M	5.651766G	5.687945G	Inf	1
40.29M	5.649855G	5.690145G	36.179M	5.651766G	5.687945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

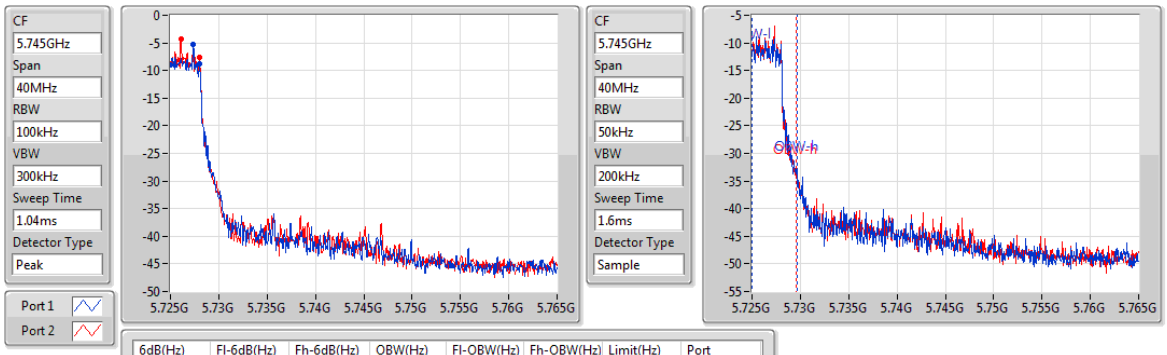
5710MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.406M	5.689594G	5.725G	33.025M	5.691722G	5.724747G	Inf	1
35M	5.69G	5.725G	33.025M	5.691722G	5.724747G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

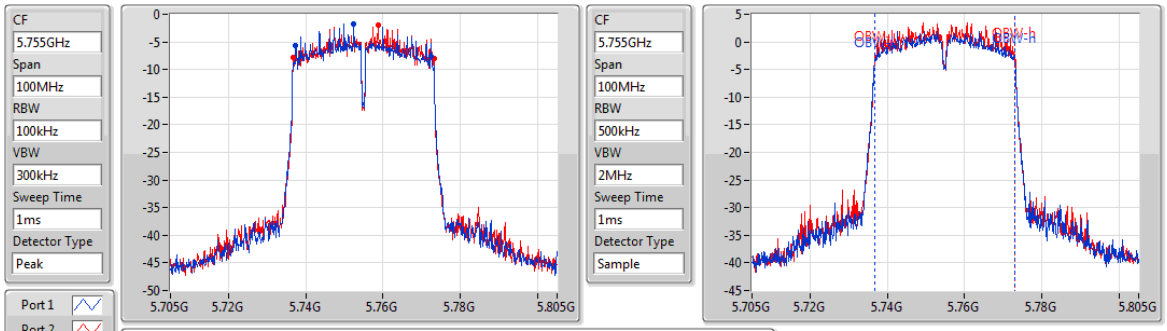
5710MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.014M	5.725G	5.728014G	4.631M	5.725029G	5.72966G	500k	1
3.014M	5.725G	5.728014G	4.515M	5.725029G	5.729544G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

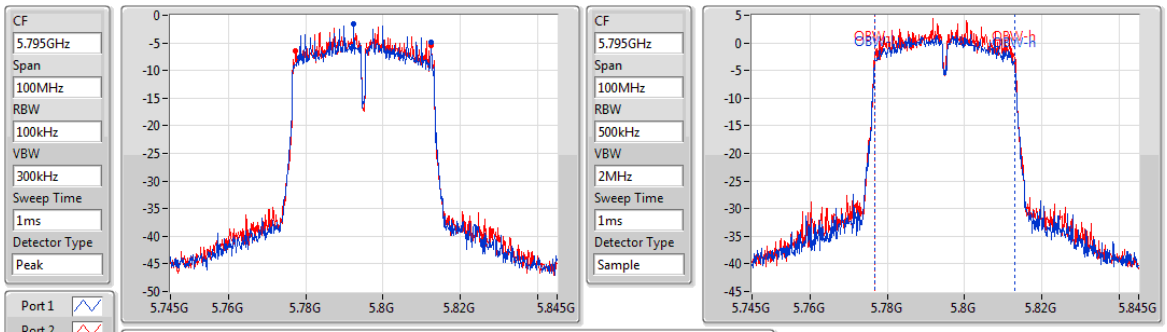
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.217M	5.737319G	5.772536G	36.179M	5.736766G	5.772945G	500k	1
36.377M	5.736739G	5.773116G	36.179M	5.736766G	5.772945G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

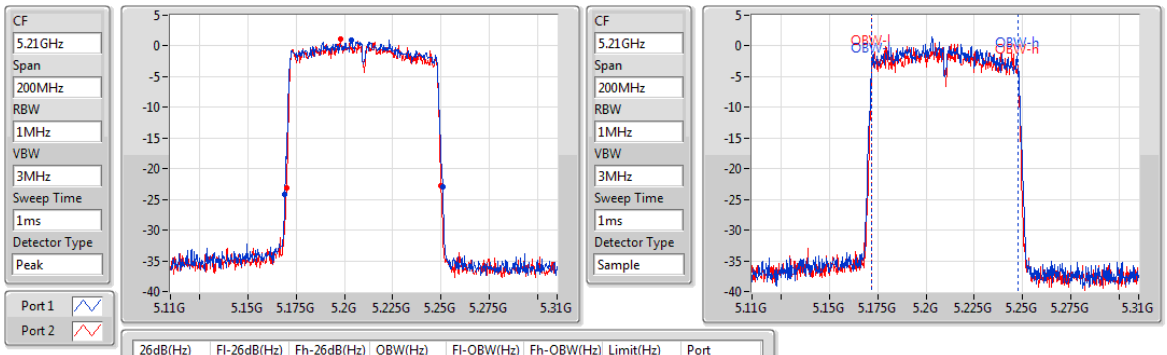
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.058M	5.778478G	5.812536G	36.179M	5.776766G	5.812945G	500k	1
35.217M	5.777319G	5.812536G	36.179M	5.776766G	5.812945G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

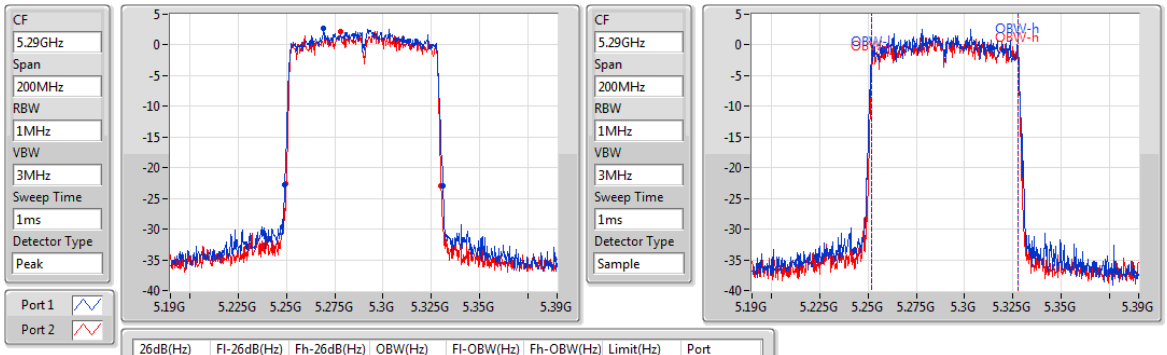
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.16913G	5.25087G	75.832M	5.171795G	5.247627G	Inf	1
80M	5.17G	5.25G	75.543M	5.172084G	5.247627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

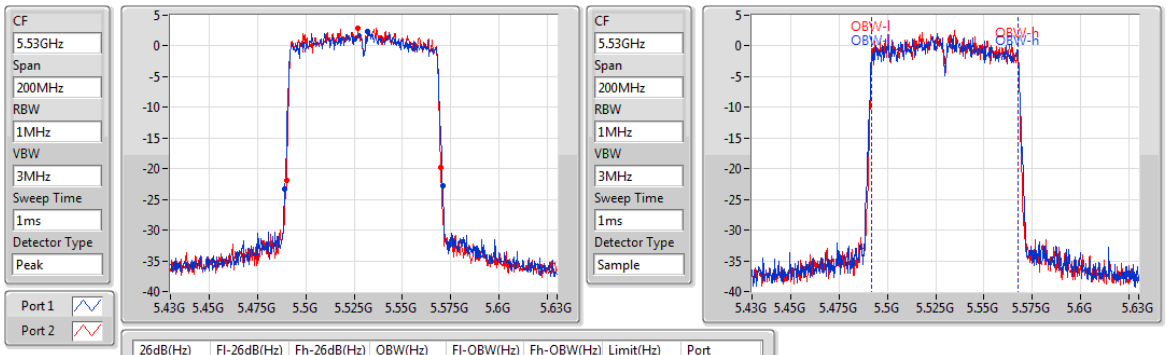
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.029M	5.24913G	5.331159G	75.832M	5.251795G	5.327627G	Inf	1
80.29M	5.24971G	5.33G	75.543M	5.252084G	5.327627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

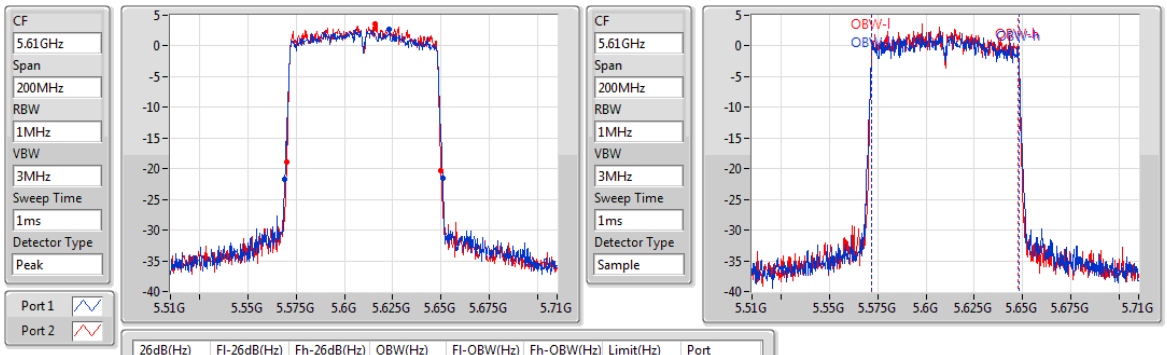
5530MHz



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	75.832M	5.491795G	5.567627G	Inf	1
80M	5.49G	5.57G	75.543M	5.492084G	5.567627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

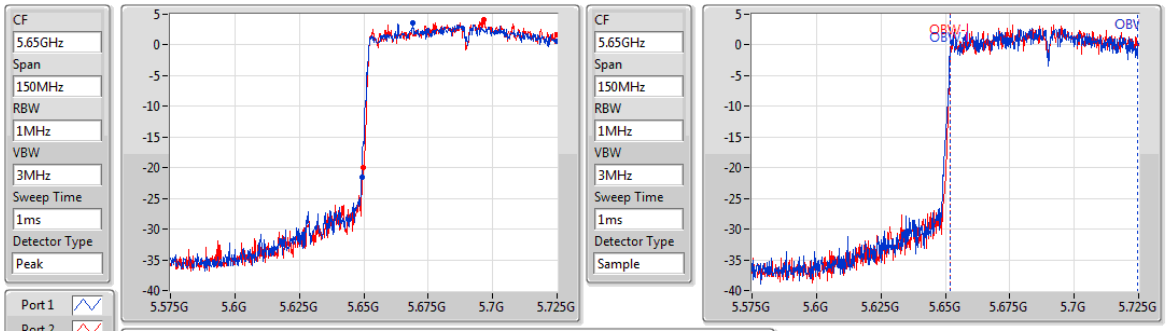
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.56913G	5.65087G	76.122M	5.571795G	5.647916G	Inf	1
80M	5.57G	5.65G	75.543M	5.572084G	5.647627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

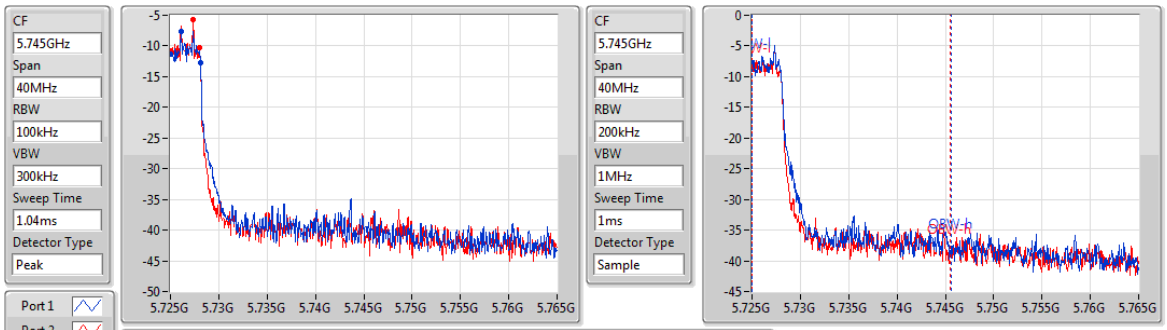
5690MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.652M	5.649348G	5.725G	72.938M	5.651737G	5.724674G	Inf	1
75.217M	5.649783G	5.725G	72.504M	5.651954G	5.724457G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

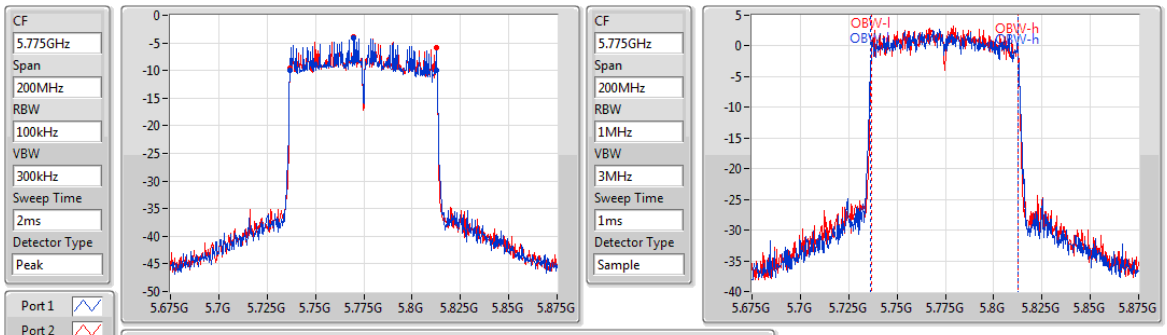
5690MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.072M	5.725G	5.728072G	20.55M	5.725029G	5.745579G	500k	1
3.014M	5.725G	5.728014G	20.434M	5.725029G	5.745463G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX **EBW**

5775MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.942M	5.736739G	5.812681G	76.122M	5.736505G	5.812627G	500k	1
75.652M	5.736739G	5.812391G	75.543M	5.737084G	5.812627G	500k	2

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

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

3.3.2 Test Procedures

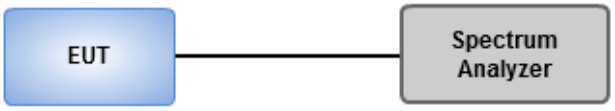
Method PM-G (Measurement using a gated RF average power meter)

Measurements is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Spectrum analyzer (For channel that extends across the 5.725 GHz boundary)

1. Set RBW = 1MHz, VBW = 3MHz, Sweep time = Auto, Detector = RMS.
2. Trace average at least 100 traces in power averaging mode.
3. Compute power by integrating the spectrum across the 26 dB EBW.
4. Add 10 log(1/X, X:duty cycle) if duty cycle is <98%).

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	13.06	0.02023	16.74	0.04721
802.11ac VHT20_Nss1,(MCS0)_2TX	13.10	0.02042	16.78	0.04764
802.11ac VHT40_Nss1,(MCS0)_2TX	12.82	0.01914	16.50	0.04467
802.11ac VHT80_Nss1,(MCS0)_2TX	12.70	0.01862	16.38	0.04345
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.49	0.03540	19.72	0.09376
802.11ac VHT20_Nss1,(MCS0)_2TX	15.54	0.03581	19.77	0.09484
802.11ac VHT40_Nss1,(MCS0)_2TX	15.25	0.03350	19.48	0.08872
802.11ac VHT80_Nss1,(MCS0)_2TX	14.03	0.02529	18.26	0.06699
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.55	0.03589	19.77	0.09484
802.11ac VHT20_Nss1,(MCS0)_2TX	15.65	0.03673	19.87	0.09705
802.11ac VHT40_Nss1,(MCS0)_2TX	15.44	0.03499	19.66	0.09247
802.11ac VHT80_Nss1,(MCS0)_2TX	15.25	0.03350	19.47	0.08851
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.66	0.03681	19.79	0.09528
802.11ac VHT20_Nss1,(MCS0)_2TX	15.60	0.03631	19.73	0.09397
802.11ac VHT40_Nss1,(MCS0)_2TX	15.49	0.03540	19.62	0.09162
802.11ac VHT80_Nss1,(MCS0)_2TX	15.36	0.03436	19.49	0.08892

Result

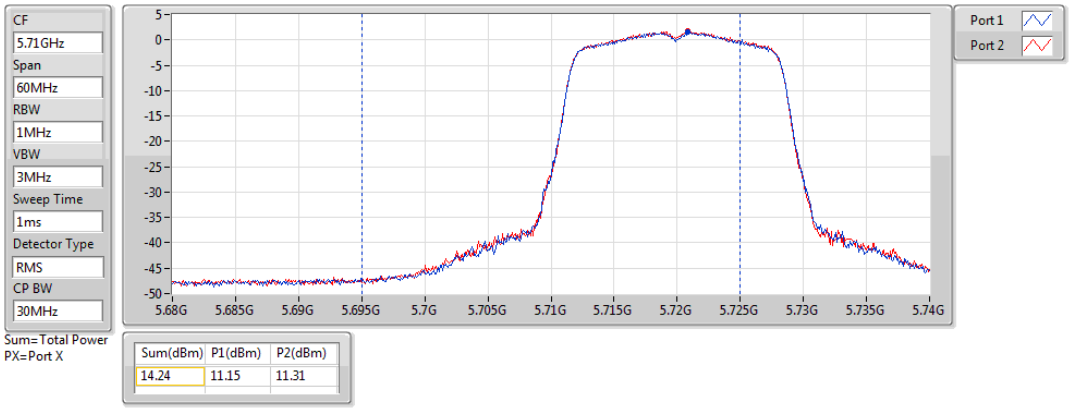
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.68	10.41	9.65	13.06	24.00	16.74	30.00
5200MHz	Pass	3.68	10.35	9.64	13.02	24.00	16.70	30.00
5240MHz	Pass	3.68	10.22	9.46	12.87	24.00	16.55	30.00
5260MHz	Pass	4.23	12.81	12.01	15.44	23.88	19.67	26.99
5300MHz	Pass	4.23	12.83	12.05	15.47	23.87	19.70	26.99
5320MHz	Pass	4.23	12.88	12.04	15.49	23.87	19.72	26.99
5500MHz	Pass	4.22	12.65	12.31	15.49	23.83	19.71	26.99
5580MHz	Pass	4.22	12.39	12.16	15.29	23.88	19.51	26.99
5700MHz	Pass	4.22	12.38	12.69	15.55	23.83	19.77	26.99
5720MHz Straddle 5.47-5.725GHz	Pass	4.22	11.15	11.31	14.24	22.71	18.46	26.99
5720MHz Straddle 5.725-5.85GHz	Pass	4.13	3.8	3.87	6.85	30.00	10.98	36.00
5745MHz	Pass	4.13	12.24	12.65	15.46	30.00	19.59	36.00
5785MHz	Pass	4.13	12.53	12.76	15.66	30.00	19.79	36.00
5825MHz	Pass	4.13	12.29	12.54	15.43	30.00	19.56	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.68	10.26	9.91	13.10	24.00	16.78	30.00
5200MHz	Pass	3.68	10.28	9.74	13.03	24.00	16.71	30.00
5240MHz	Pass	3.68	10.15	9.69	12.94	24.00	16.62	30.00
5260MHz	Pass	4.23	12.81	12.19	15.52	23.98	19.75	26.99
5300MHz	Pass	4.23	12.88	12.14	15.54	24.00	19.77	26.99
5320MHz	Pass	4.23	12.83	12.09	15.49	23.96	19.72	26.99
5500MHz	Pass	4.22	12.64	12.63	15.65	23.99	19.87	26.99
5580MHz	Pass	4.22	12.28	12.41	15.36	24.00	19.58	26.99
5700MHz	Pass	4.22	12.16	12.74	15.47	23.96	19.69	26.99
5720MHz Straddle 5.47-5.725GHz	Pass	4.22	11.44	11.81	14.64	22.81	18.86	26.99
5720MHz Straddle 5.725-5.85GHz	Pass	4.13	4.01	4.4	7.22	30.00	11.35	36.00
5745MHz	Pass	4.13	12.19	12.78	15.51	30.00	19.64	36.00
5785MHz	Pass	4.13	12.35	12.81	15.60	30.00	19.73	36.00
5825MHz	Pass	4.13	12.19	12.62	15.42	30.00	19.55	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.68	10.11	9.49	12.82	24.00	16.50	30.00
5230MHz	Pass	3.68	10.02	9.46	12.76	24.00	16.44	30.00
5270MHz	Pass	4.23	12.55	11.86	15.23	24.00	19.46	26.99
5310MHz	Pass	4.23	12.62	11.83	15.25	24.00	19.48	26.99

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5510MHz	Pass	4.22	12.46	12.14	15.31	24.00	19.53	26.99
5590MHz	Pass	4.22	12.44	12.41	15.44	24.00	19.66	26.99
5670MHz	Pass	4.22	12.28	12.26	15.28	24.00	19.50	26.99
5710MHz Straddle 5.47-5.725GHz	Pass	4.22	11.78	11.8	14.80	24.00	19.02	26.99
5710MHz Straddle 5.725-5.85GHz	Pass	4.13	0.41	0.57	3.50	30.00	7.63	36.00
5755MHz	Pass	4.13	12.36	12.59	15.49	30.00	19.62	36.00
5795MHz	Pass	4.13	12.24	12.52	15.39	30.00	19.52	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.68	10.02	9.33	12.70	24.00	16.38	30.00
5290MHz	Pass	4.23	11.36	10.66	14.03	24.00	18.26	26.99
5530MHz	Pass	4.22	10.68	10.65	13.68	24.00	17.90	26.99
5610MHz	Pass	4.22	12.04	12.36	15.21	24.00	19.43	26.99
5690MHz Straddle 5.47-5.725GHz	Pass	4.22	12.35	12.13	15.25	24.00	19.47	26.99
5690MHz Straddle 5.725-5.85GHz	Pass	4.13	-1.54	-1.69	1.40	30.00	5.53	36.00
5775MHz	Pass	4.13	12.22	12.48	15.36	30.00	19.49	36.00

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

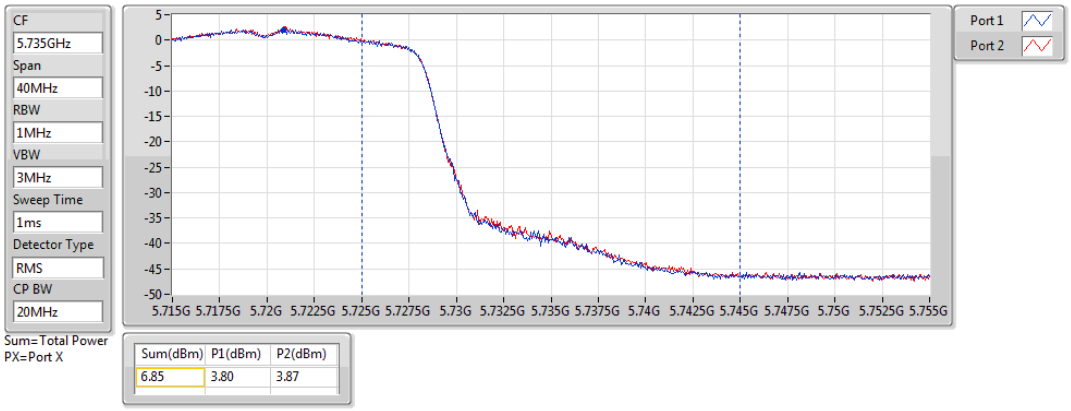
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



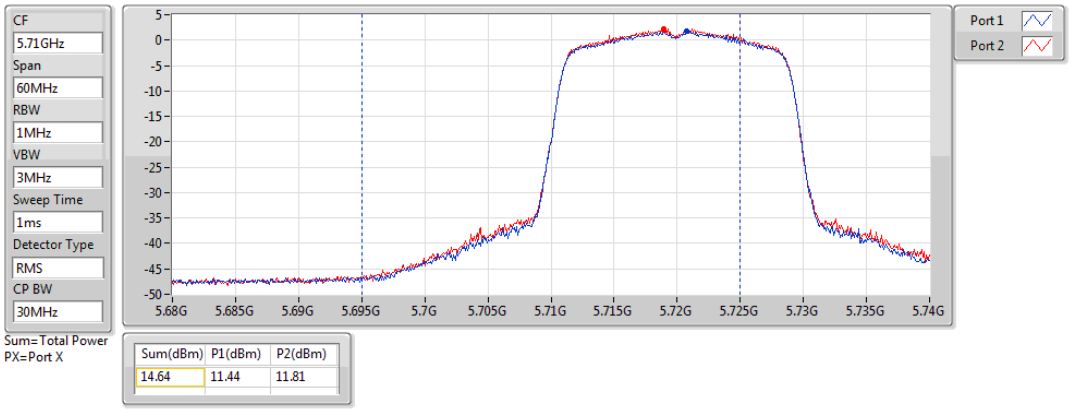
802.11a_Nss1,(6Mbps)_2TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



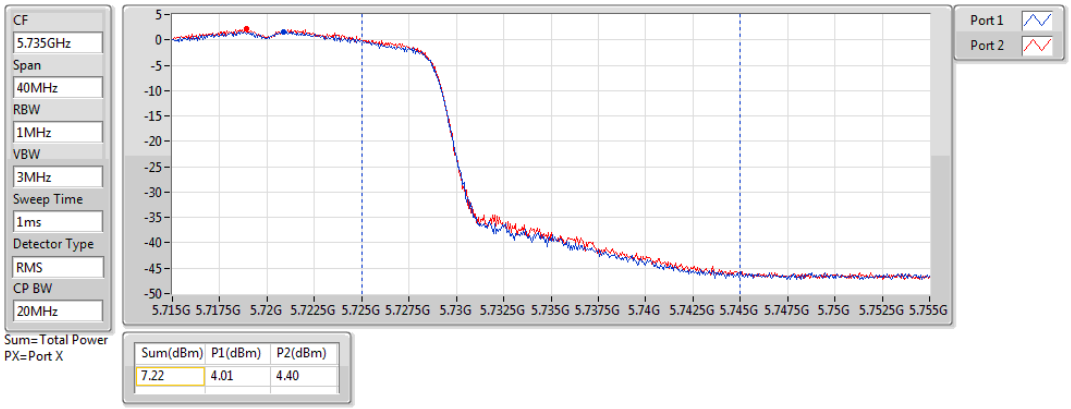
802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20_Nss1,(MCS0)_2TX **AV Power**

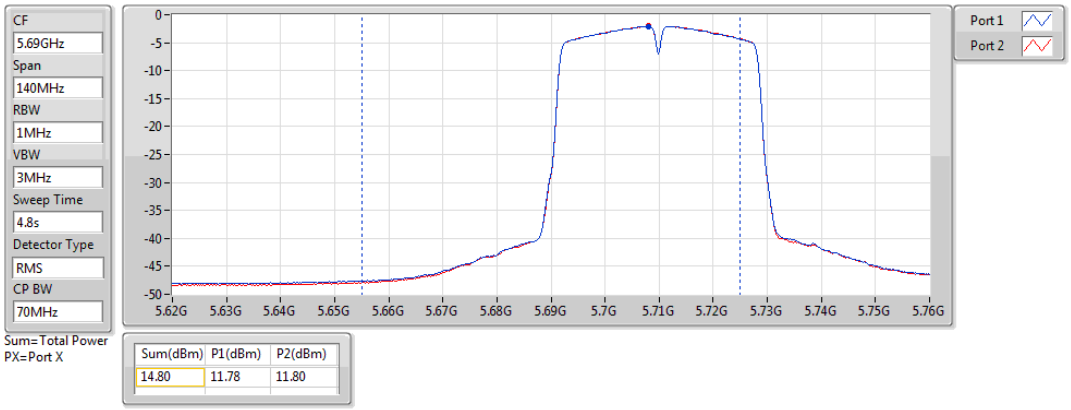
5720MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)
7.22	4.01	4.40

802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

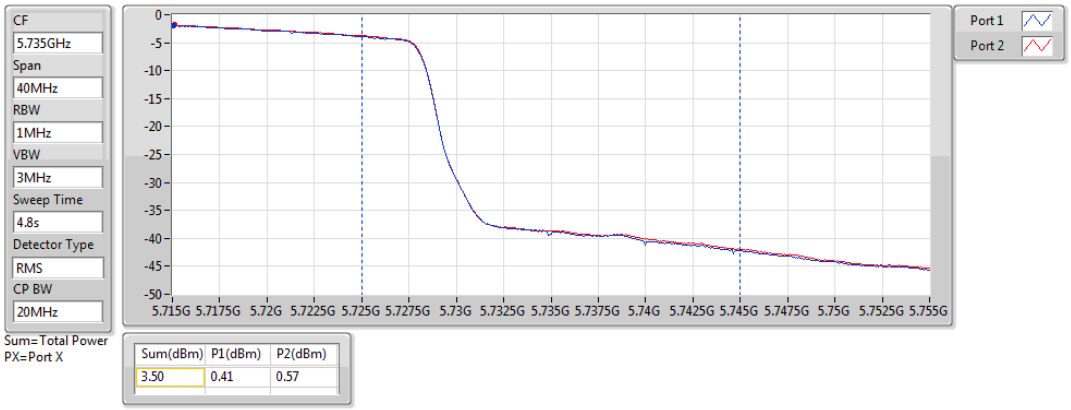
5710MHz Straddle 5.47-5.725GHz



Sum(dBm)	P1(dBm)	P2(dBm)
14.80	11.78	11.80

802.11ac VHT40_Nss1,(MCS0)_2TX **AV Power**

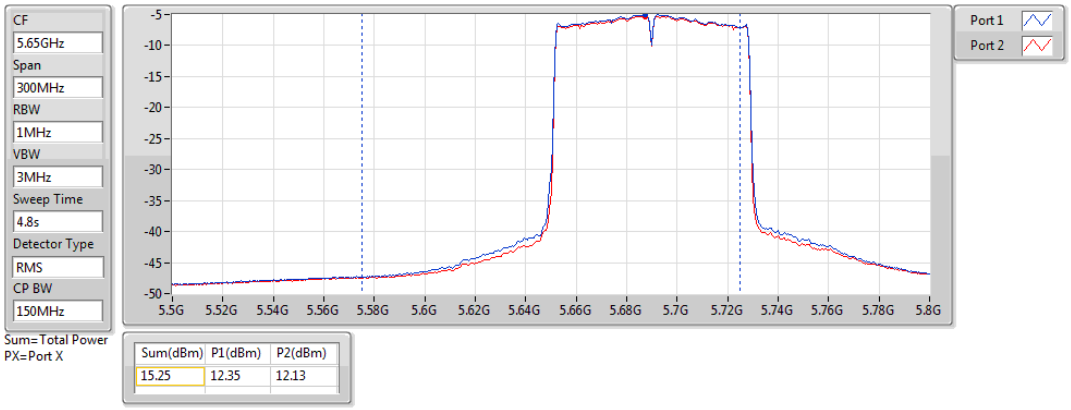
5710MHz Straddle 5.725-5.85GHz



Sum(dBm)	P1(dBm)	P2(dBm)
3.50	0.41	0.57

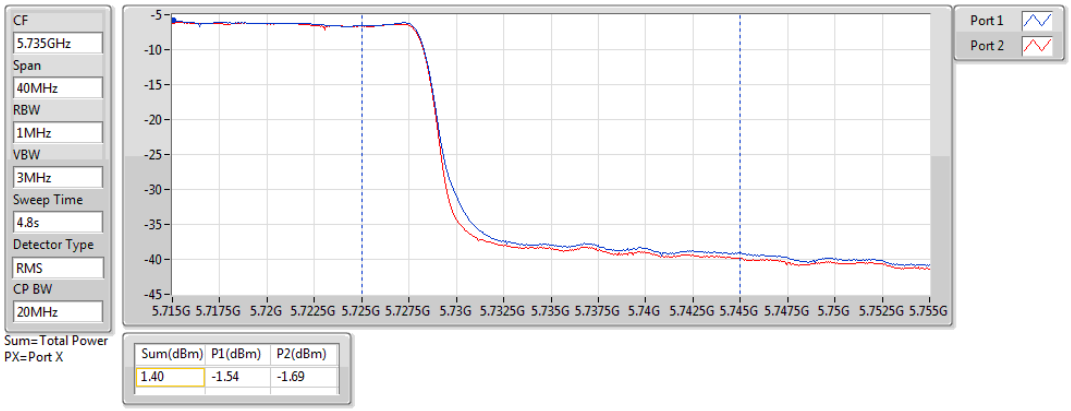
802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_2TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



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

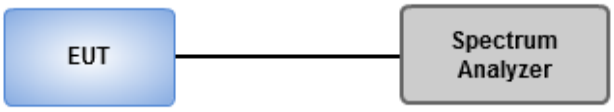
Duty cycle ≥ 98 %

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

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	1.28	7.89
802.11ac VHT20_Nss1,(MCS0)_2TX	0.95	7.56
802.11ac VHT40_Nss1,(MCS0)_2TX	-3.11	3.50
802.11ac VHT80_Nss1,(MCS0)_2TX	-5.97	0.64
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	3.39	10.54
802.11ac VHT20_Nss1,(MCS0)_2TX	3.25	10.40
802.11ac VHT40_Nss1,(MCS0)_2TX	-0.77	6.38
802.11ac VHT80_Nss1,(MCS0)_2TX	-4.51	2.64
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	3.61	10.68
802.11ac VHT20_Nss1,(MCS0)_2TX	3.22	10.29
802.11ac VHT40_Nss1,(MCS0)_2TX	-0.26	6.81
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.09	3.98
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	2.11	8.95
802.11ac VHT20_Nss1,(MCS0)_2TX	2.11	8.95
802.11ac VHT40_Nss1,(MCS0)_2TX	-2.02	4.82
802.11ac VHT80_Nss1,(MCS0)_2TX	-4.86	1.98

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.61	-1.39	-1.95	1.28	10.39	7.89	17.00
5200MHz	Pass	6.61	-1.59	-2.25	0.96	10.39	7.57	17.00
5240MHz	Pass	6.61	-1.59	-1.87	1.15	10.39	7.76	17.00
5260MHz	Pass	7.15	0.87	-0.03	3.27	9.85	10.42	17.00
5300MHz	Pass	7.15	0.81	-0.19	3.21	9.85	10.36	17.00
5320MHz	Pass	7.15	1.10	-0.13	3.39	9.85	10.54	17.00
5500MHz	Pass	7.07	0.79	0.40	3.61	9.93	10.68	17.00
5580MHz	Pass	7.07	0.20	0.07	3.05	9.93	10.12	17.00
5700MHz	Pass	7.07	0.20	0.58	3.31	9.93	10.38	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.07	0.26	0.48	3.29	9.93	10.36	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	6.84	-3.45	-3.03	-0.27	29.16	6.57	36.00
5745MHz	Pass	6.84	-1.01	-1.17	1.71	29.16	8.55	36.00
5785MHz	Pass	6.84	-0.94	-0.44	2.11	29.16	8.95	36.00
5825MHz	Pass	6.84	-1.11	-1.30	1.67	29.16	8.51	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.61	-1.65	-2.16	0.90	10.39	7.51	17.00
5200MHz	Pass	6.61	-1.91	-2.18	0.95	10.39	7.56	17.00
5240MHz	Pass	6.61	-1.92	-2.36	0.80	10.39	7.41	17.00
5260MHz	Pass	7.15	0.84	-0.14	3.25	9.85	10.40	17.00
5300MHz	Pass	7.15	0.81	-0.22	3.19	9.85	10.34	17.00
5320MHz	Pass	7.15	0.95	-0.28	3.14	9.85	10.29	17.00
5500MHz	Pass	7.07	0.64	0.43	3.22	9.93	10.29	17.00
5580MHz	Pass	7.07	0.10	0.14	3.02	9.93	10.09	17.00
5700MHz	Pass	7.07	0.15	0.40	3.20	9.93	10.27	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	7.07	-0.06	0.64	3.13	9.93	10.20	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	6.84	-3.06	-3.43	-0.42	29.16	6.42	36.00
5745MHz	Pass	6.84	-1.38	-1.27	1.69	29.16	8.53	36.00
5785MHz	Pass	6.84	-0.92	-0.77	2.11	29.16	8.95	36.00
5825MHz	Pass	6.84	-1.16	-1.18	1.84	29.16	8.68	36.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.61	-5.89	-6.35	-3.11	10.39	3.50	17.00
5230MHz	Pass	6.61	-5.89	-6.65	-3.28	10.39	3.33	17.00
5270MHz	Pass	7.15	-3.30	-4.39	-0.82	9.85	6.33	17.00
5310MHz	Pass	7.15	-3.17	-4.46	-0.77	9.85	6.38	17.00
5510MHz	Pass	7.07	-3.60	-3.92	-0.76	9.93	6.31	17.00
5590MHz	Pass	7.07	-3.65	-3.60	-0.69	9.93	6.38	17.00
5670MHz	Pass	7.07	-3.70	-3.85	-0.78	9.93	6.29	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	7.07	-3.36	-3.18	-0.26	9.93	6.81	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	6.84	-7.21	-6.99	-4.09	29.16	2.75	36.00
5755MHz	Pass	6.84	-5.00	-5.06	-2.02	29.16	4.82	36.00
5795MHz	Pass	6.84	-5.03	-5.12	-2.12	29.16	4.72	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.61	-8.64	-9.36	-5.97	10.39	0.64	17.00
5290MHz	Pass	7.15	-7.07	-8.03	-4.51	9.85	2.64	17.00
5530MHz	Pass	7.07	-7.38	-7.49	-4.42	9.93	2.65	17.00
5610MHz	Pass	7.07	-6.95	-6.83	-3.88	9.93	3.19	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	7.07	-5.95	-6.16	-3.09	9.93	3.98	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	6.84	-9.17	-9.40	-6.27	29.16	0.57	36.00
5775MHz	Pass	6.84	-7.94	-7.77	-4.86	29.16	1.98	36.00

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;
For 5.15 ~ 5.25 GHz
Directional gain = 10 * log((10$^{3.51/20}$+10$^{3.68/20}$)^2/2) = 6.61 dBi > 6 dBi
Limit shall be reduced to 11 dBm – (6.61 dBi – 6 dBi) = 10.39 dBm

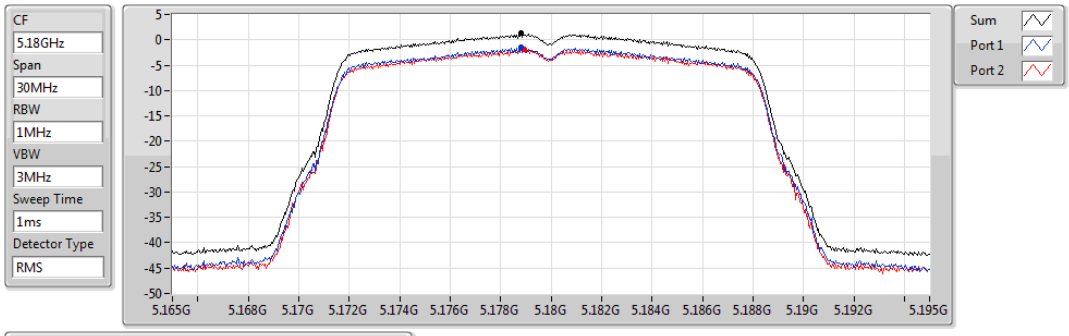
For 5.25 ~ 5.35 GHz
Directional gain = 10 * log((10$^{4.05/20}$+10$^{4.23/20}$)^2/2) = 7.15 dBi > 6 dBi
Limit shall be reduced to 11 dBm – (7.15dBi – 6 dBi) = 9.85dBm

For 5.47 ~ 5.725 GHz
Directional gain = 10 * log((10$^{3.9/20}$+10$^{4.22/20}$)^2/2) =7.07 dBi > 6 dBi
Limit shall be reduced to 11 dBm – (7.07 dBi – 6 dBi) = 9.93 dBm

For 5.725 ~ 5.85 GHz
Directional gain = 10 * log((10$^{3.52/20}$+10$^{4.13/20}$)^2/2) = 6.84 dBi > 6 dBi
Limit shall be reduced to 30 dBm – (6.84 dBi – 6 dBi) = 29.16 dBm

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

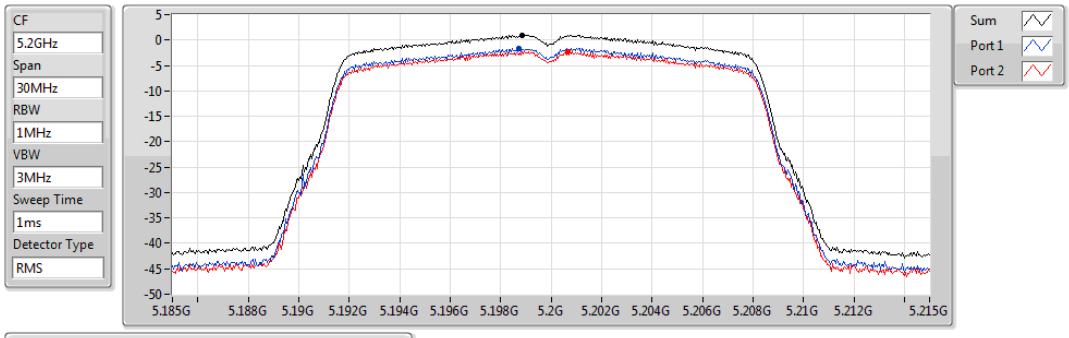
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.28	1.28	-1.39	-1.95

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

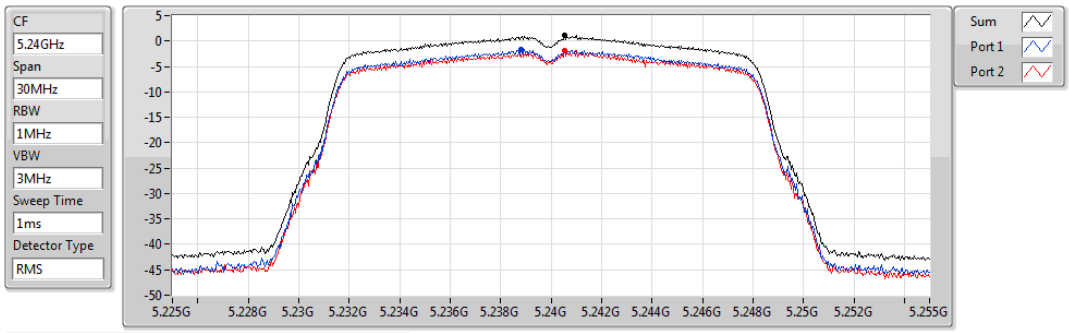
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.96	0.96	-1.59	-2.25

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

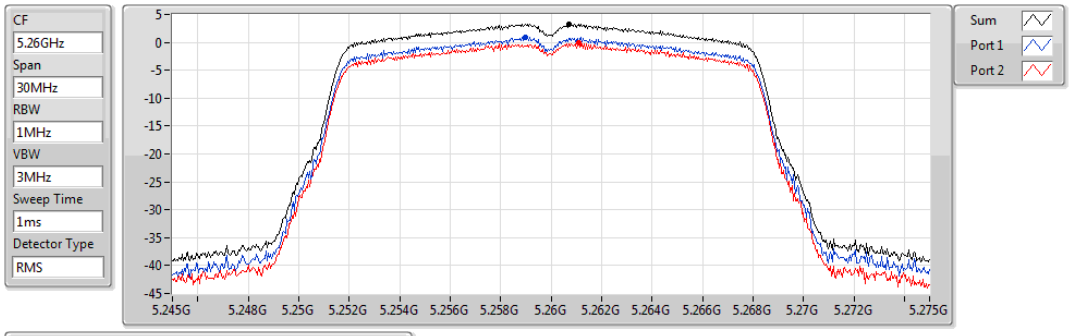
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.15	1.15	-1.59	-1.87

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

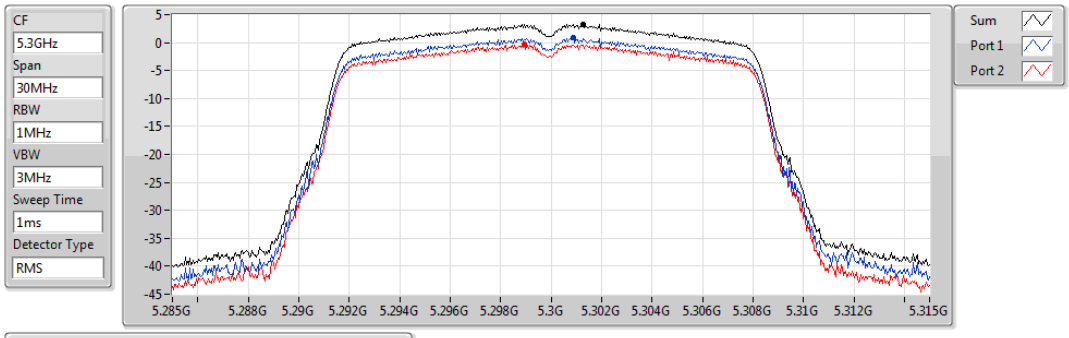
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.27	3.27	0.87	-0.03

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

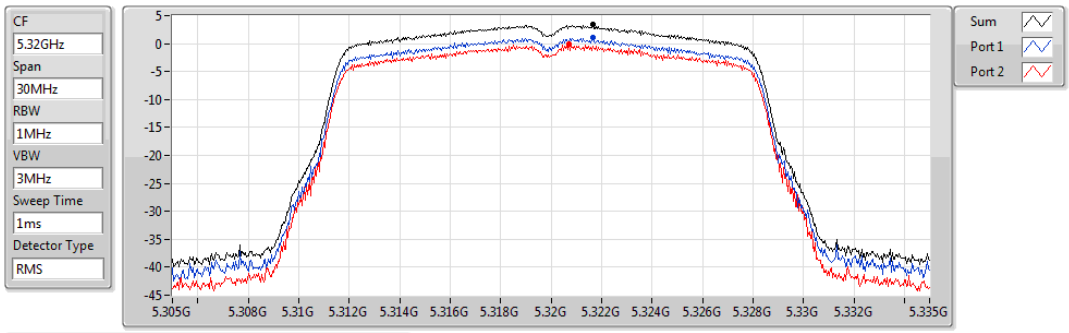
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.21	3.21	0.81	-0.19

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

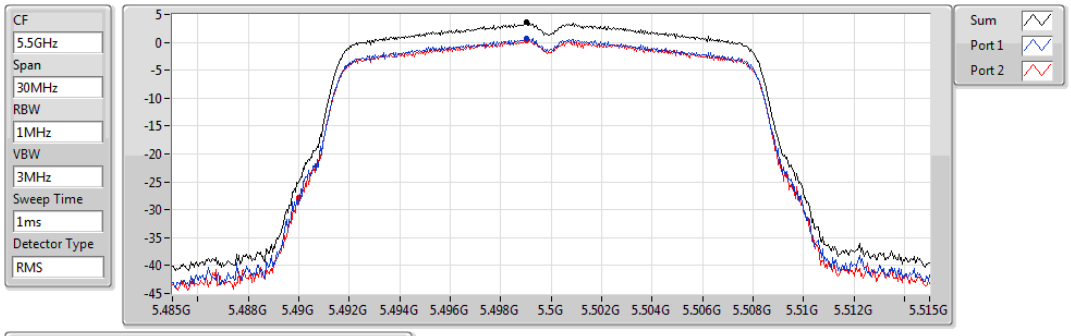
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.39	3.39	1.10	-0.13

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

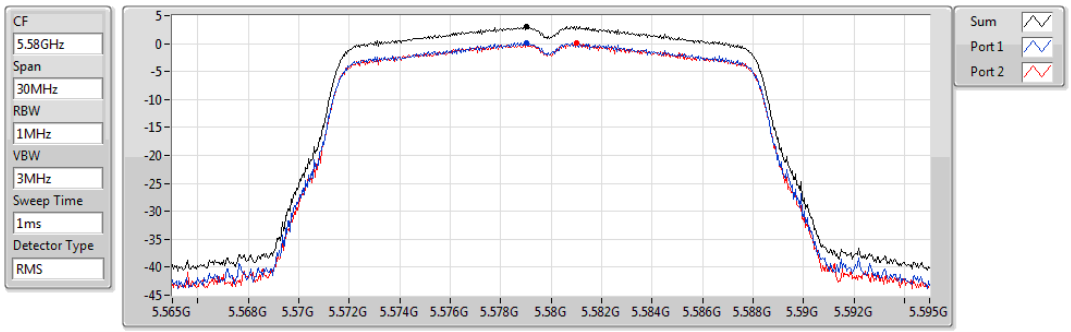
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.61	3.61	0.79	0.40

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

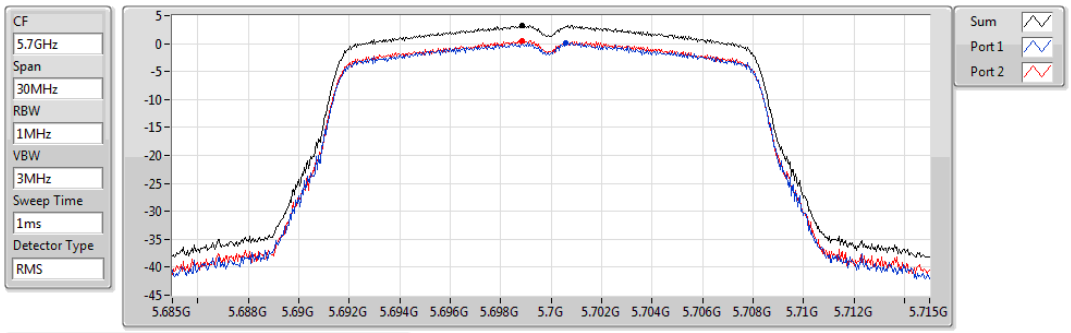
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.05	3.05	0.20	0.07

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

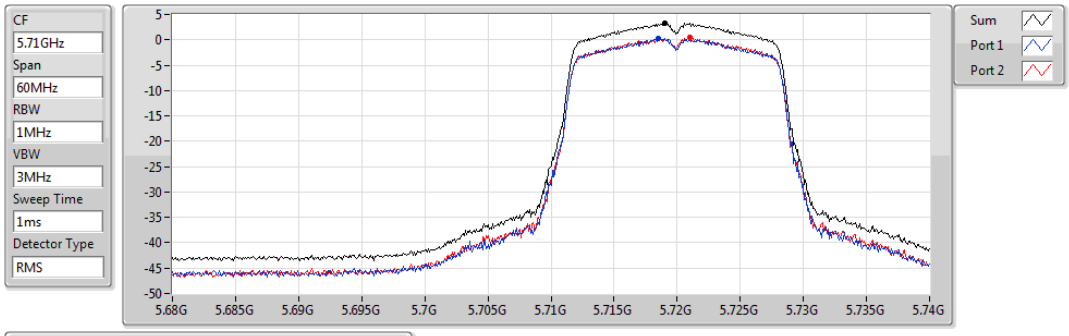
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.31	3.31	0.20	0.58

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

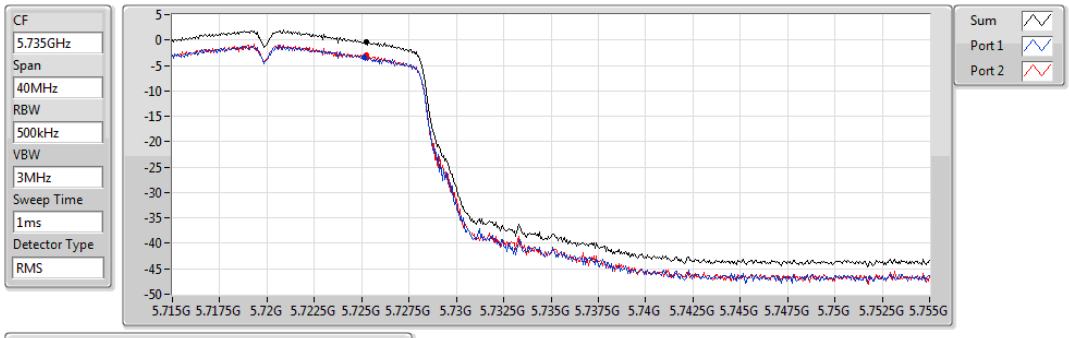
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.29	3.29	0.26	0.48

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

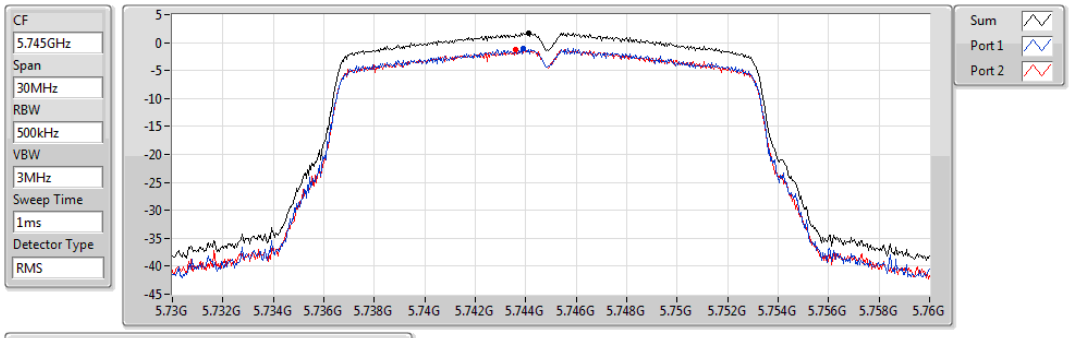
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.27	-0.27	-3.45	-3.03

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

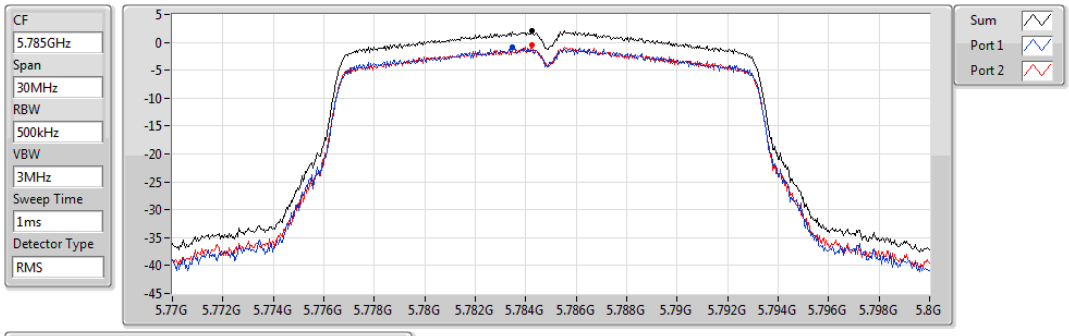
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.71	1.71	-1.01	-1.17

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

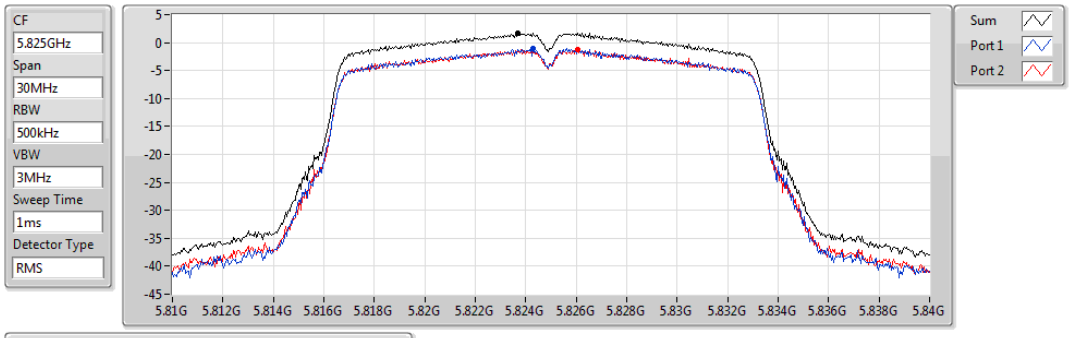
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.11	2.11	-0.94	-0.44

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

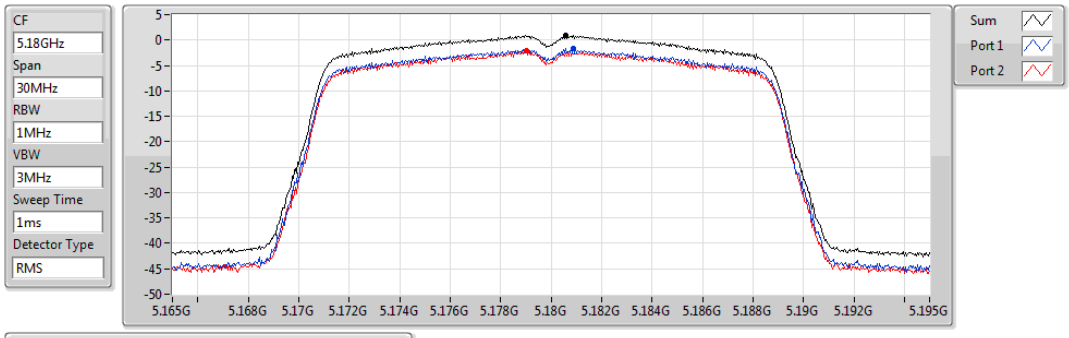
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.67	1.67	-1.11	-1.30

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

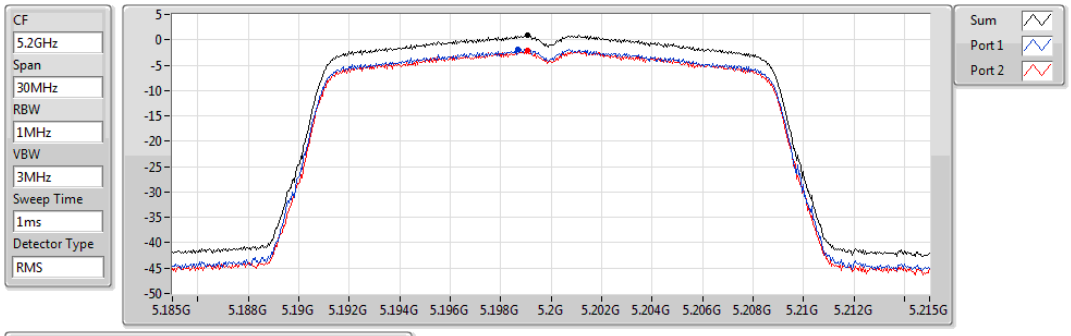
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.90	0.90	-1.65	-2.16

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

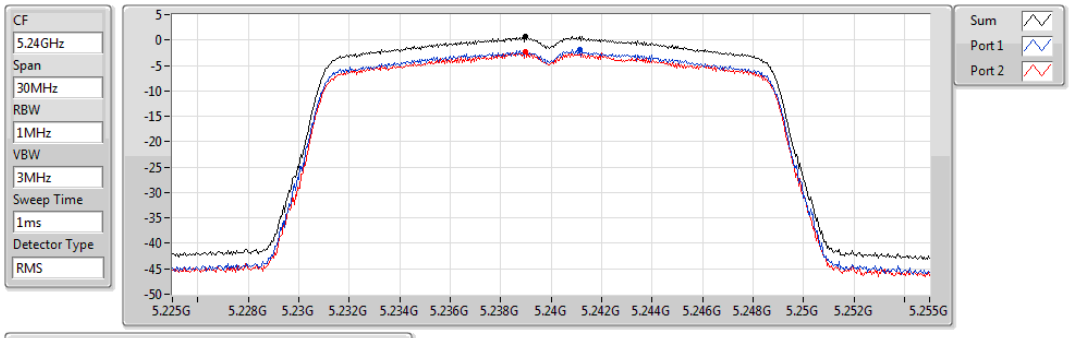
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.95	0.95	-1.91	-2.18

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

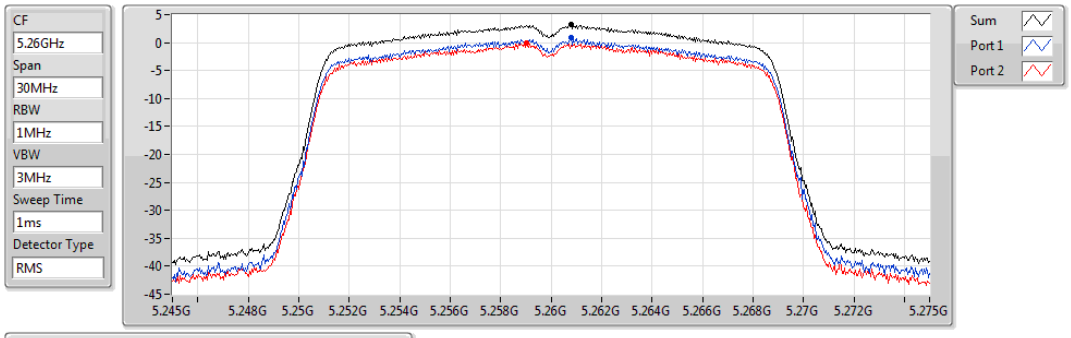
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.80	0.80	-1.92	-2.36

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

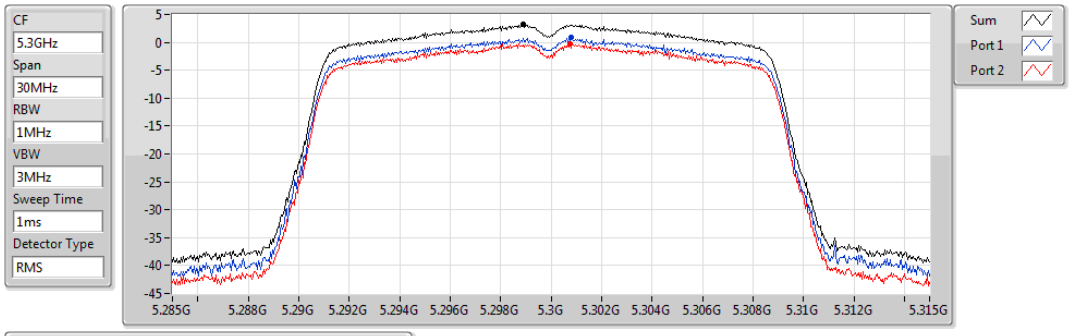
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.25	3.25	0.84	-0.14

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

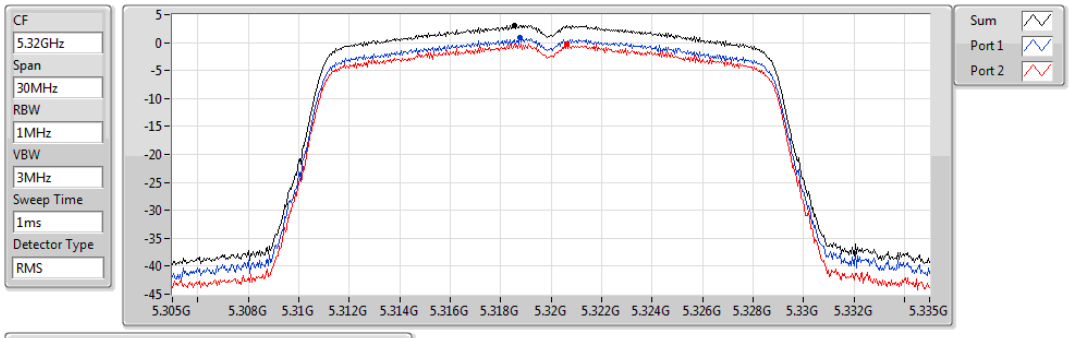
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.19	3.19	0.81	-0.22

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

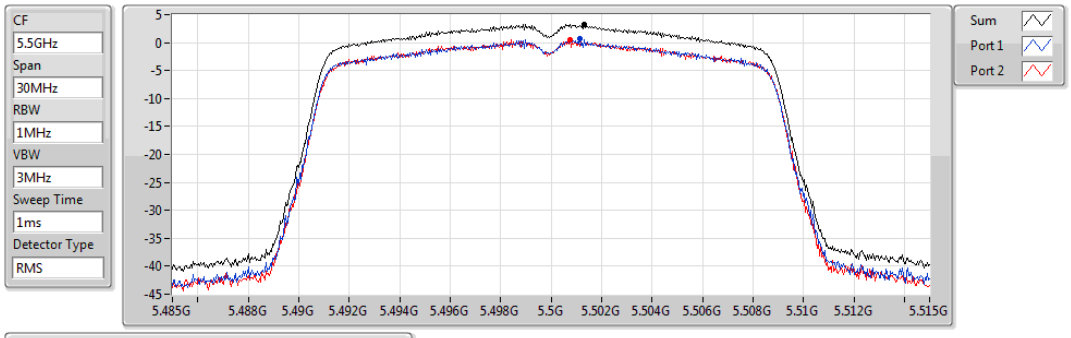
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.14	3.14	0.95	-0.28

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

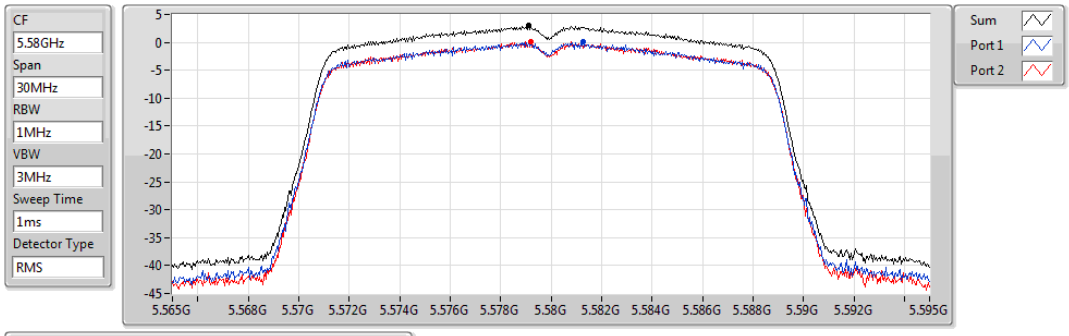
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.22	3.22	0.64	0.43

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

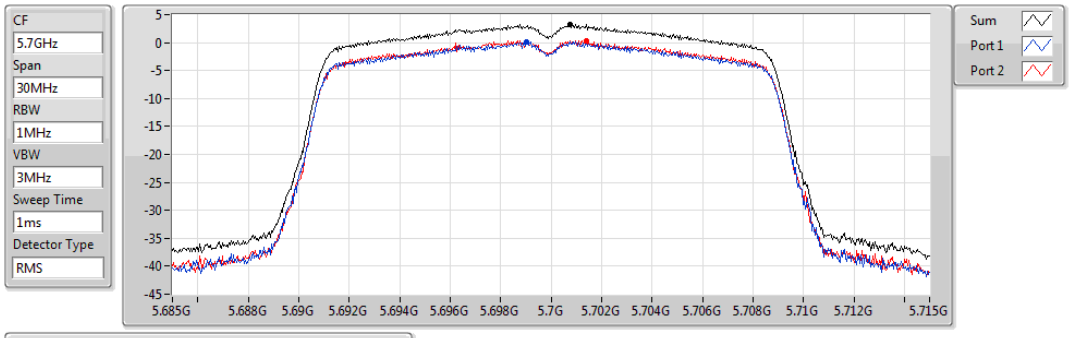
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.02	3.02	0.10	0.14

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

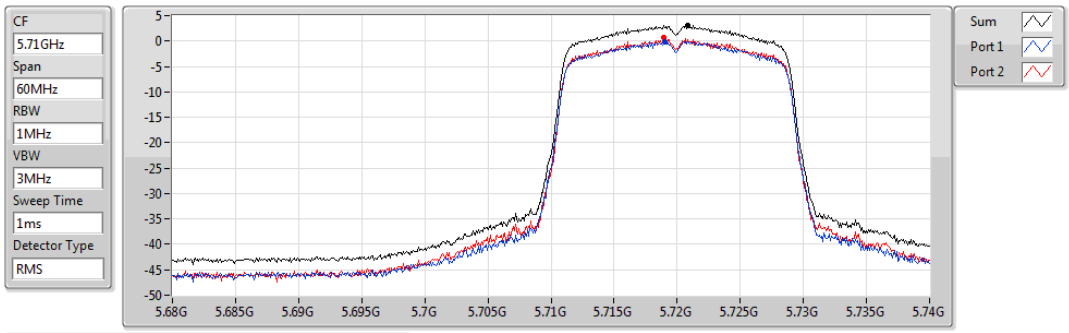
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.20	3.20	0.15	0.40

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

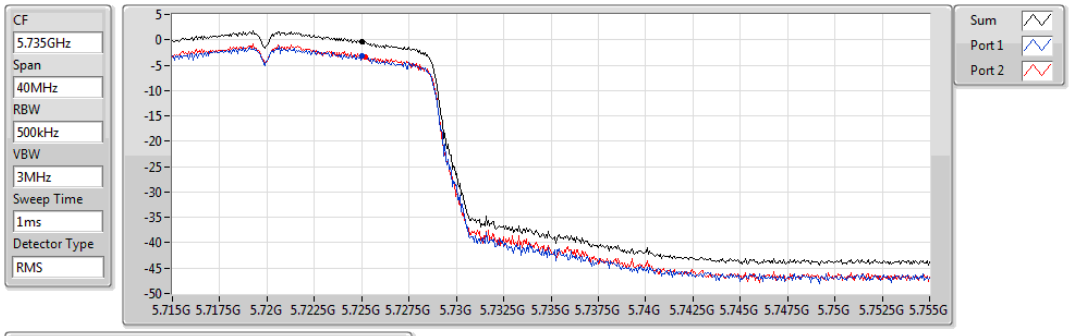
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.13	3.13	-0.06	0.64

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

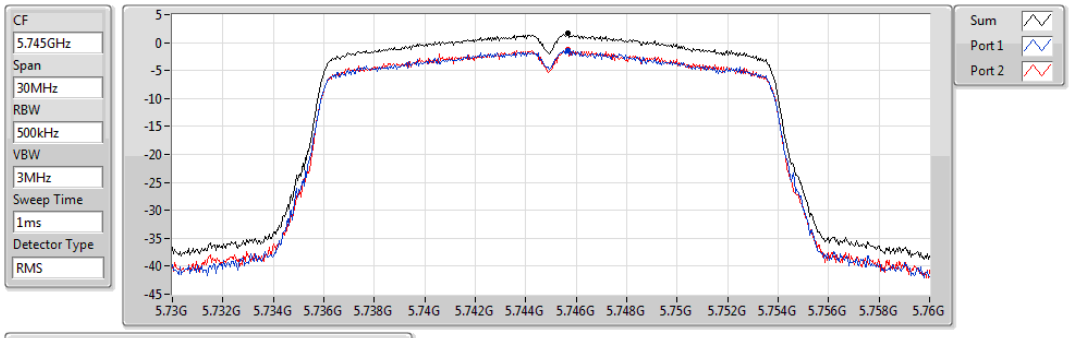
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.42	-0.42	-3.06	-3.43

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

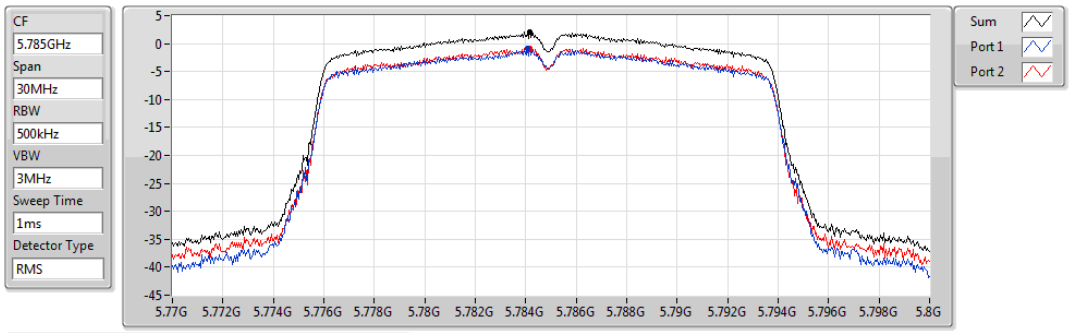
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.69	1.69	-1.38	-1.27

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

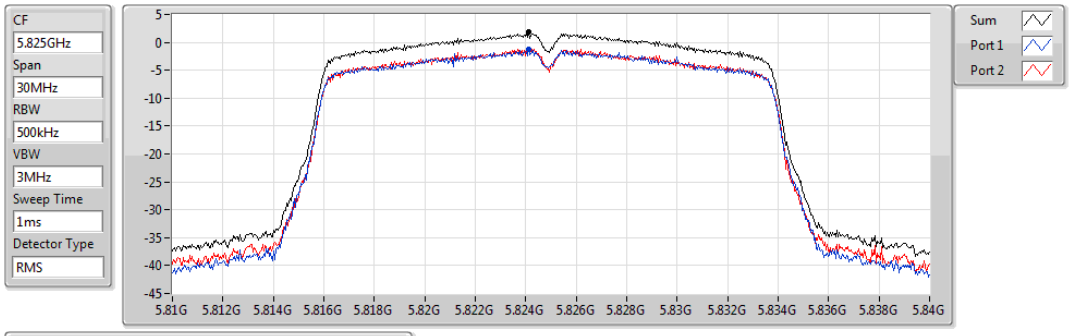
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.11	2.11	-0.92	-0.77

802.11ac VHT20_Nss1,(MCS0)_2TX **PSD**

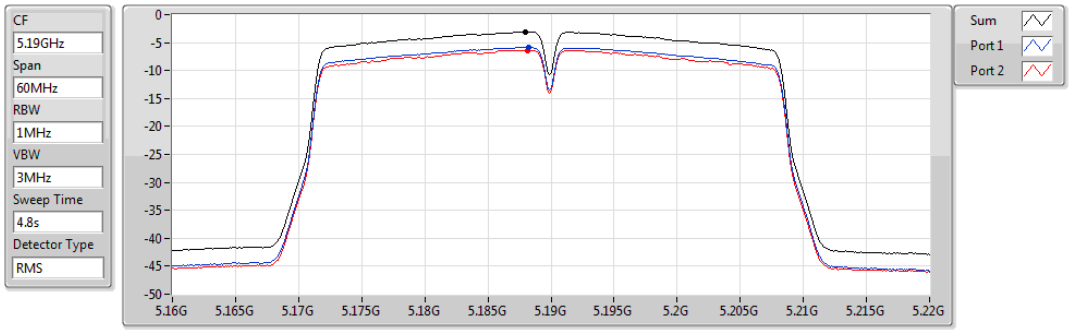
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.84	1.84	-1.16	-1.18

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

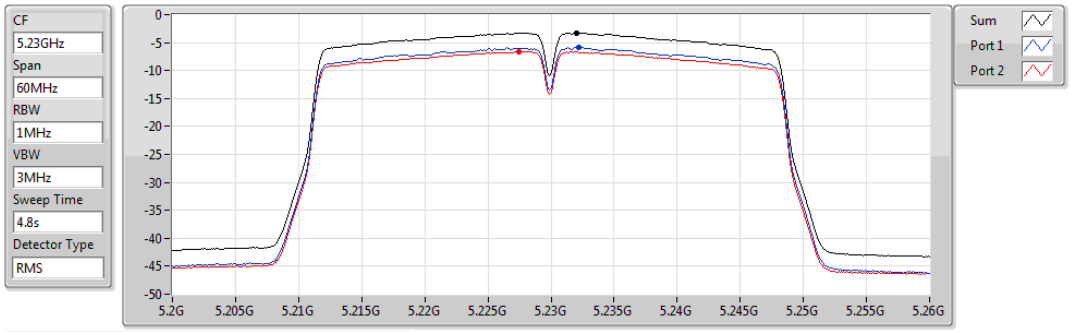
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.11	-3.11	-5.89	-6.35

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

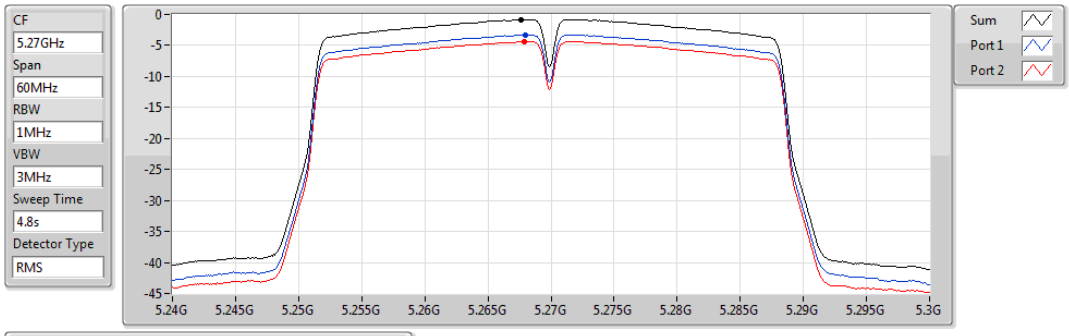
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.28	-3.28	-5.89	-6.65

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

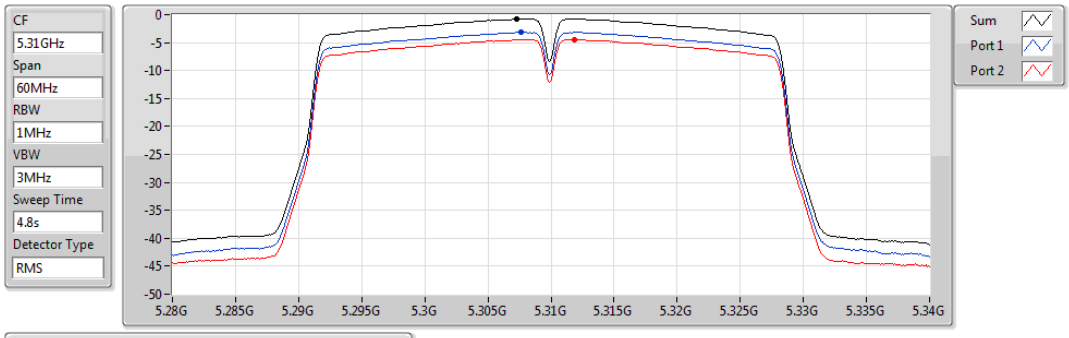
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.82	-0.82	-3.30	-4.39

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

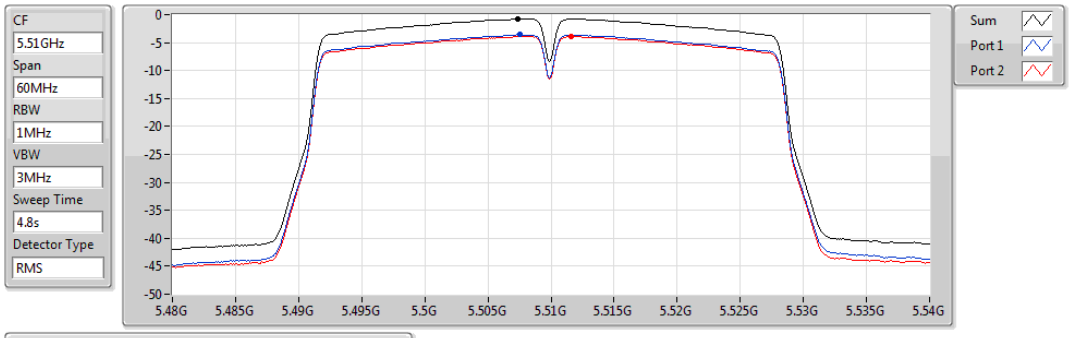
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.77	-0.77	-3.17	-4.46

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

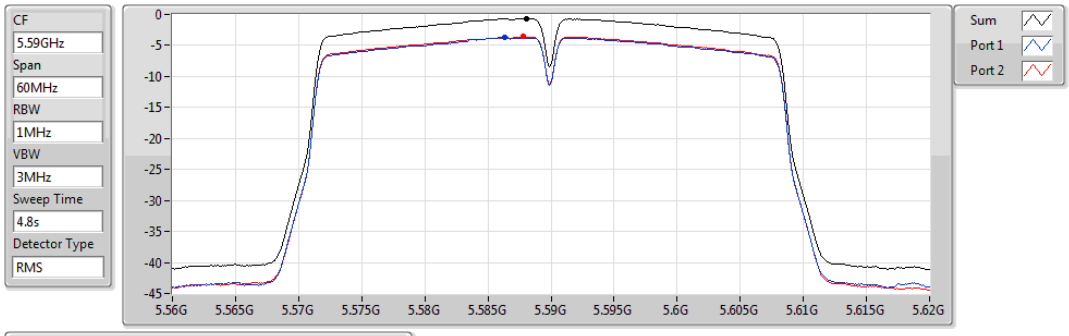
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.76	-0.76	-3.60	-3.92

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

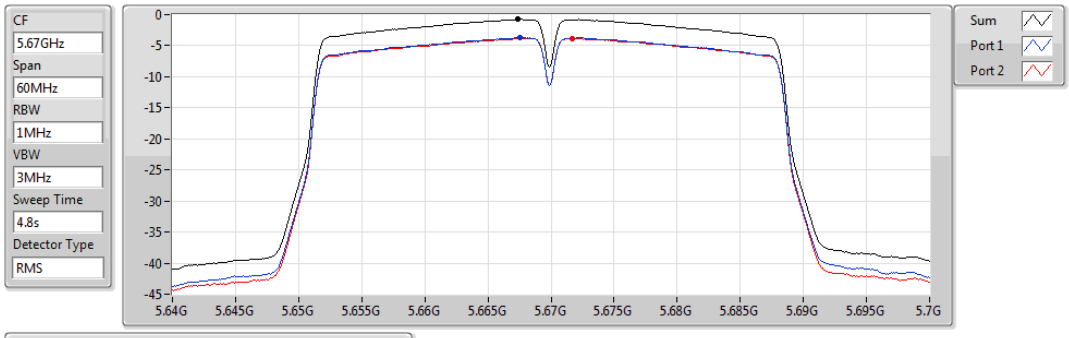
5590MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.69	-0.69	-3.65	-3.60

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

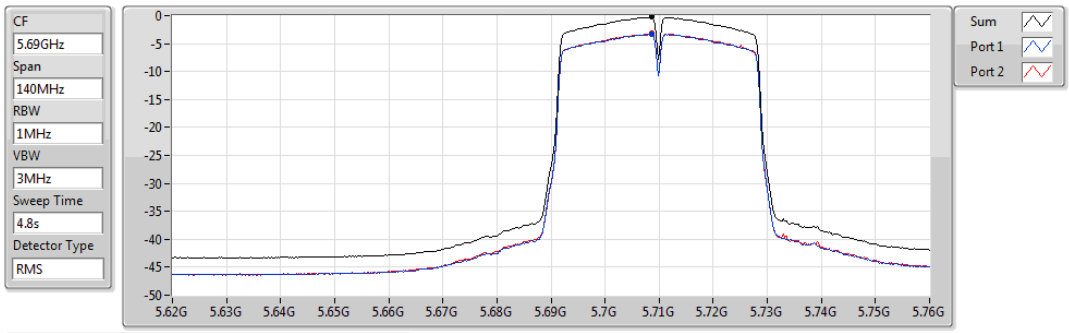
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.78	-0.78	-3.70	-3.85

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

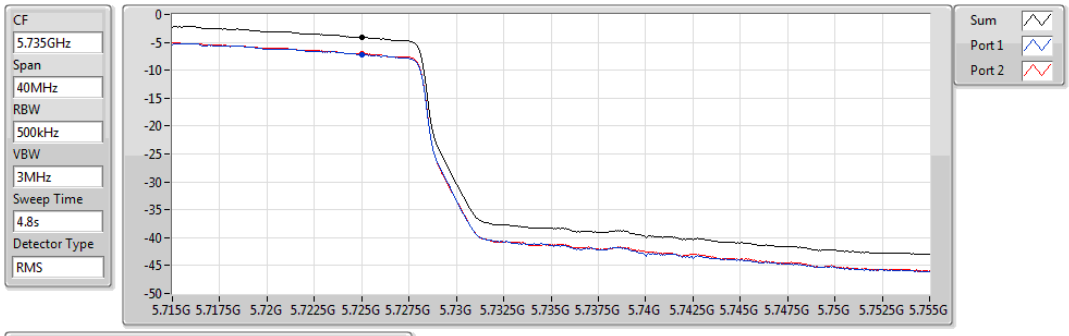
5710MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.26	-0.26	-3.36	-3.18

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

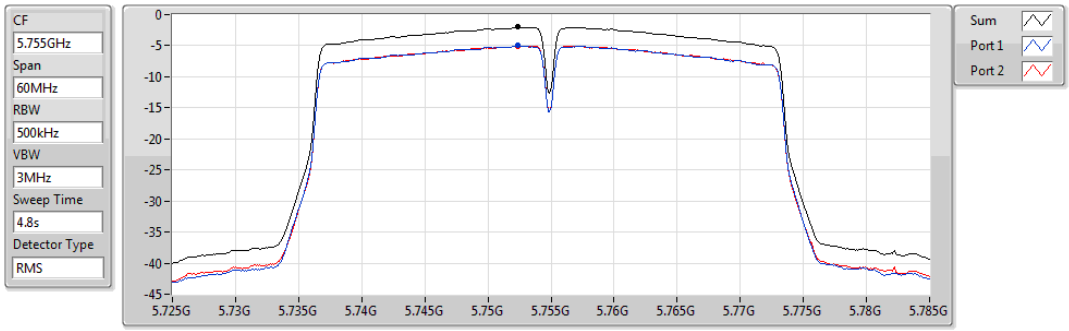
5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.09	-4.09	-7.21	-6.99

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

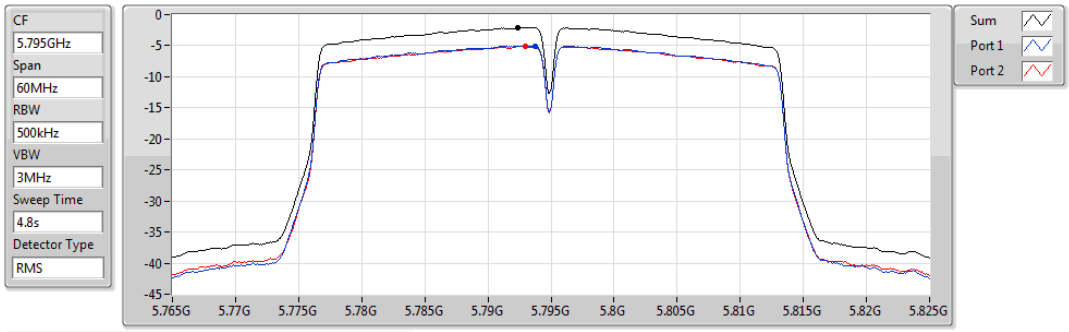
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.02	-2.02	-5.00	-5.06

802.11ac VHT40_Nss1,(MCS0)_2TX **PSD**

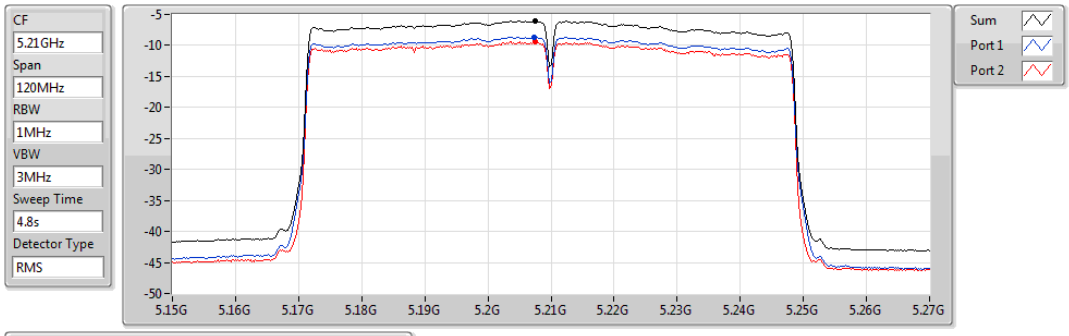
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.12	-2.12	-5.03	-5.12

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

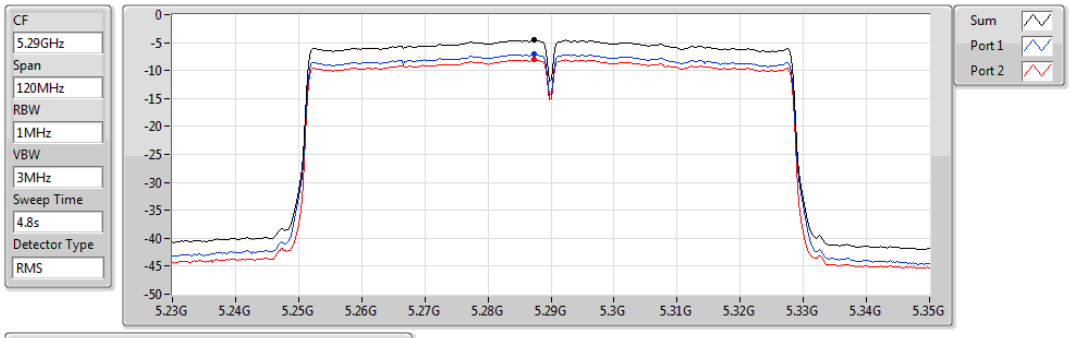
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.97	-5.97	-8.64	-9.36

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

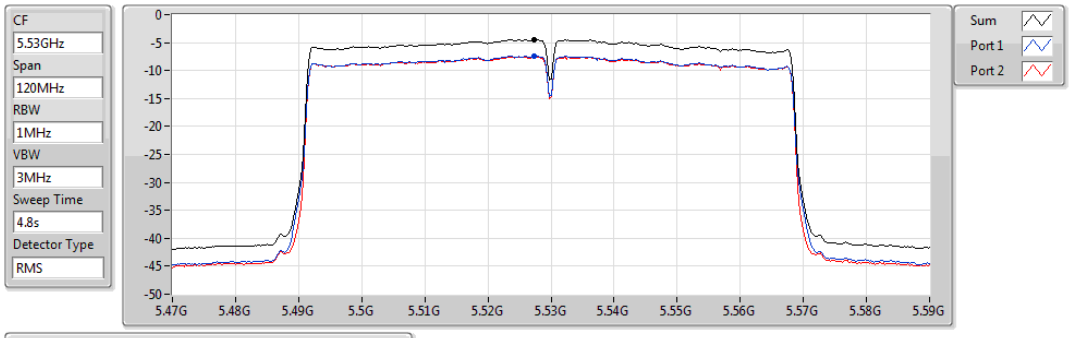
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.51	-4.51	-7.07	-8.03

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

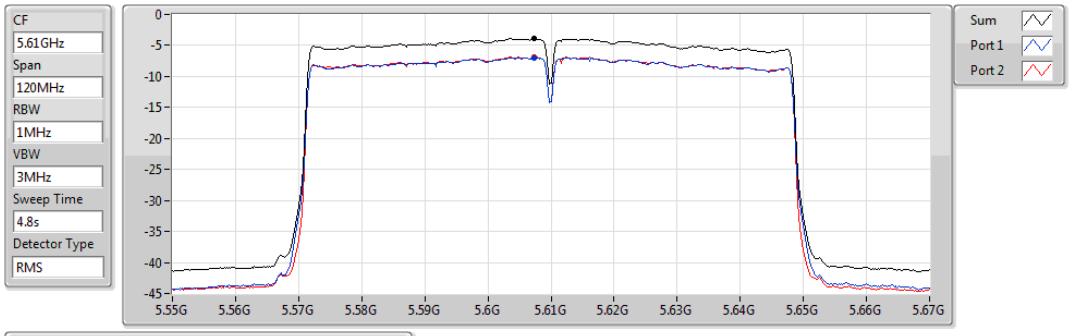
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.42	-4.42	-7.38	-7.49

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

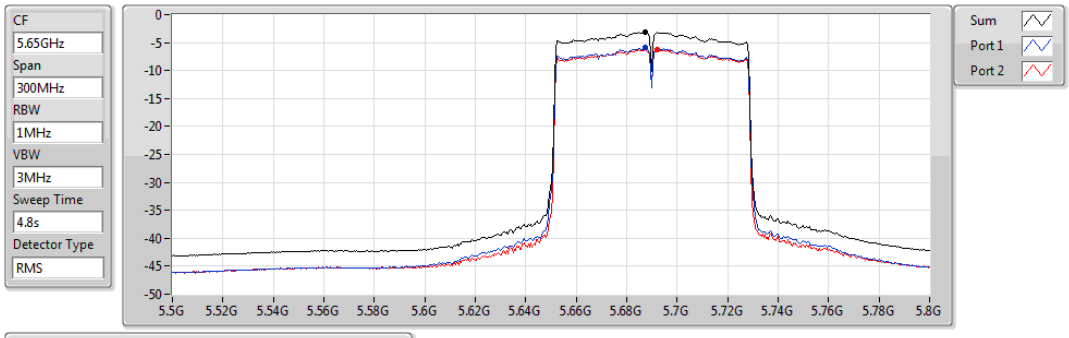
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.88	-3.88	-6.95	-6.83

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

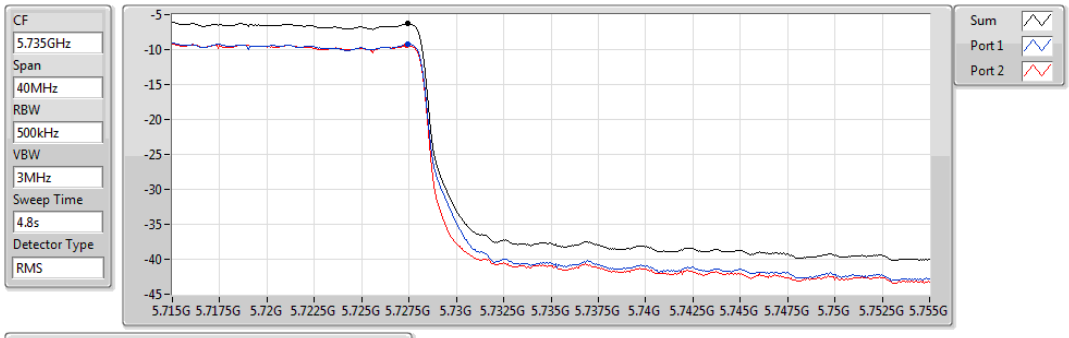
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.09	-3.09	-5.95	-6.16

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

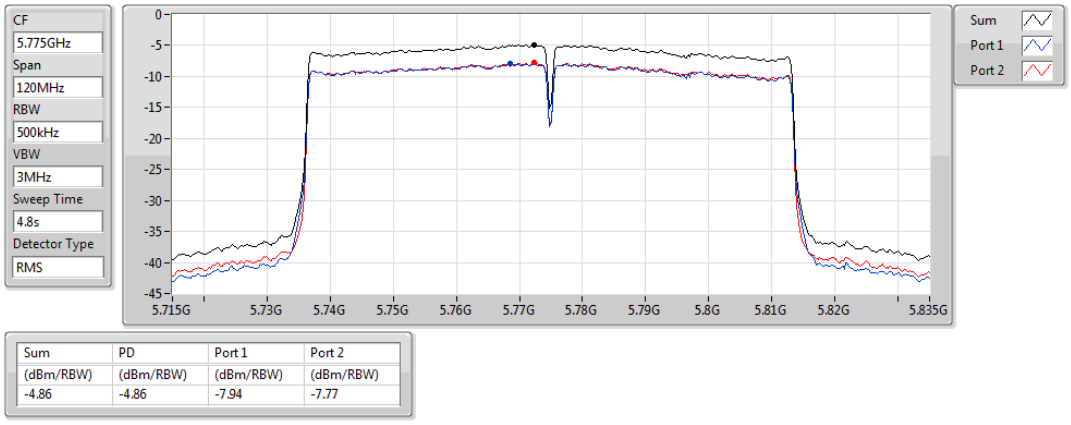
5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.27	-6.27	-9.17	-9.40

802.11ac VHT80_Nss1,(MCS0)_2TX **PSD**

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.86	-4.86	-7.94	-7.77

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

3.5.2 Test Procedures

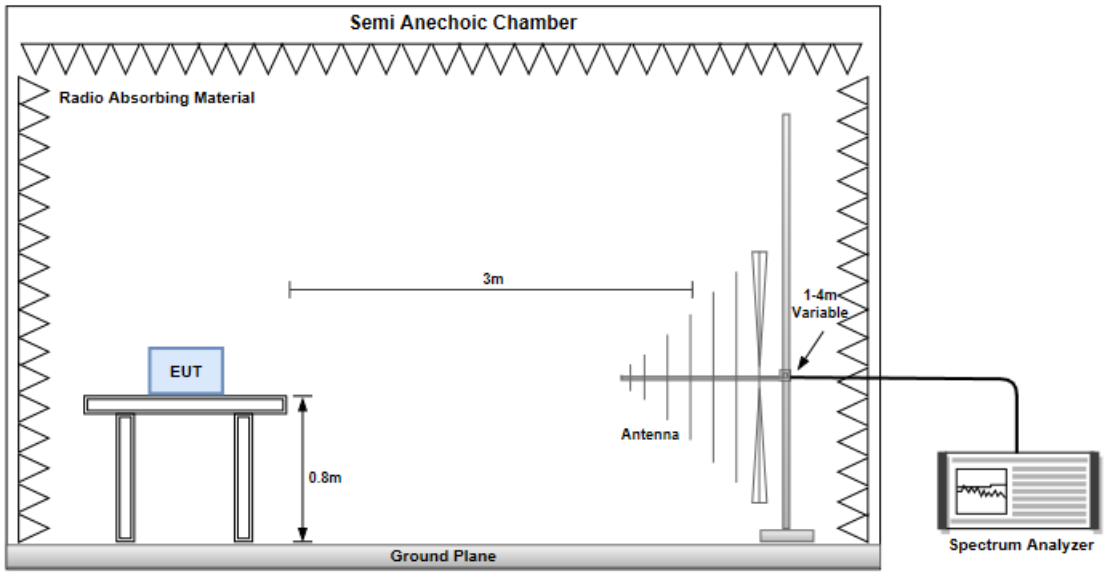
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

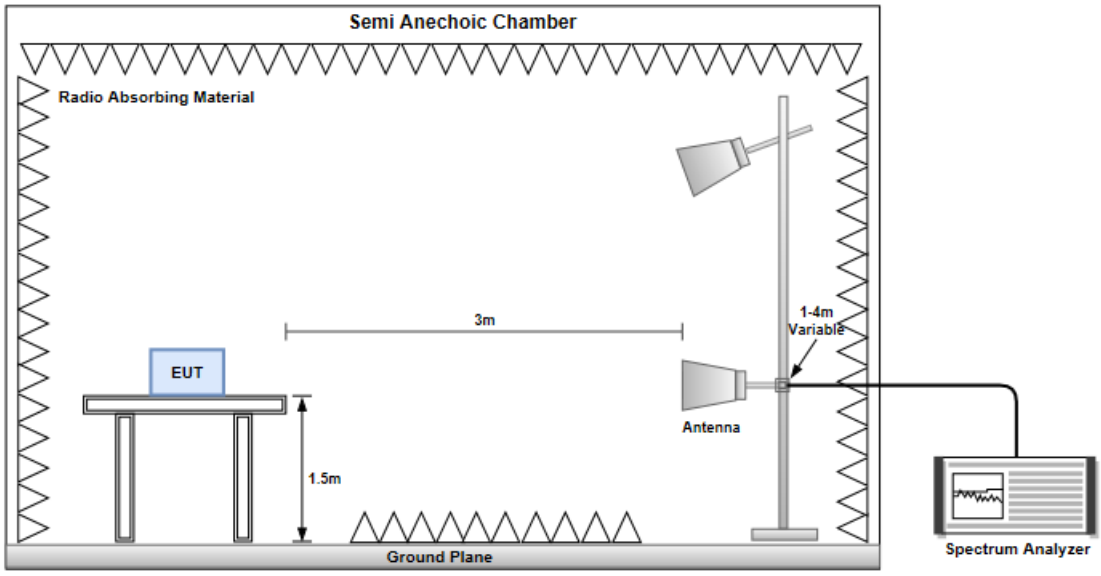
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

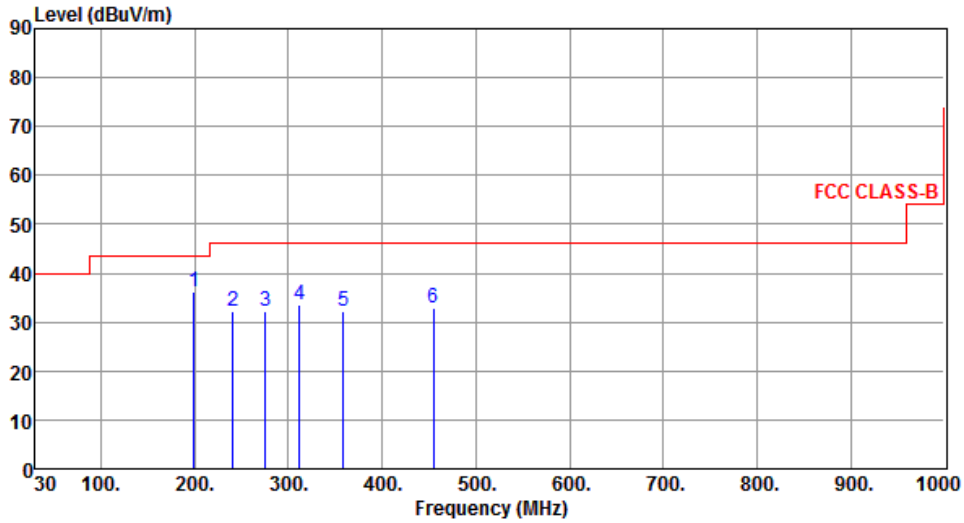


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

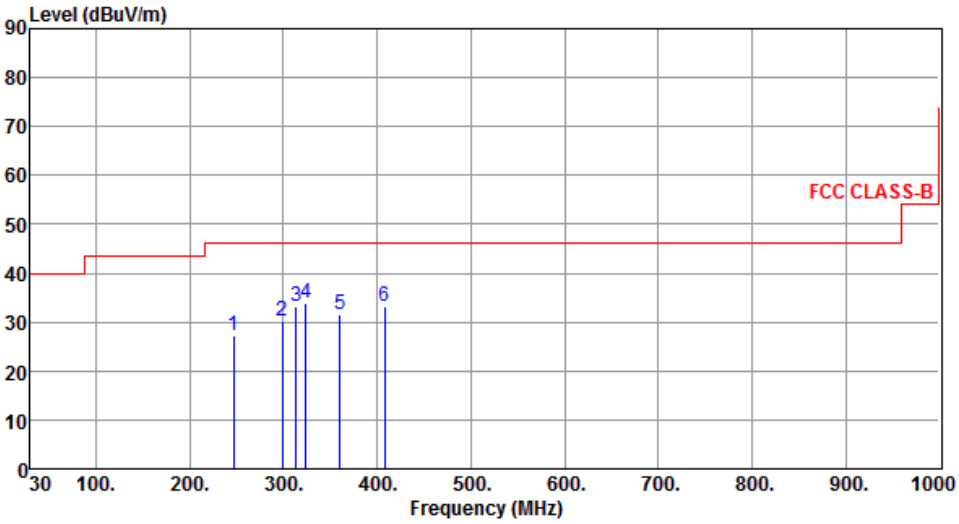
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	199.52	36.15	43.50	-7.35	48.04	-11.89	Peak	---	---
2	240.52	32.20	46.00	-13.80	42.37	-10.17	Peak	---	---
3	275.25	32.14	46.00	-13.86	40.91	-8.77	Peak	---	---
4	312.25	33.63	46.00	-12.37	41.27	-7.64	Peak	---	---
5	358.69	32.05	46.00	-13.95	38.71	-6.66	Peak	---	---
6	454.86	32.95	46.00	-13.05	36.93	-3.98	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.

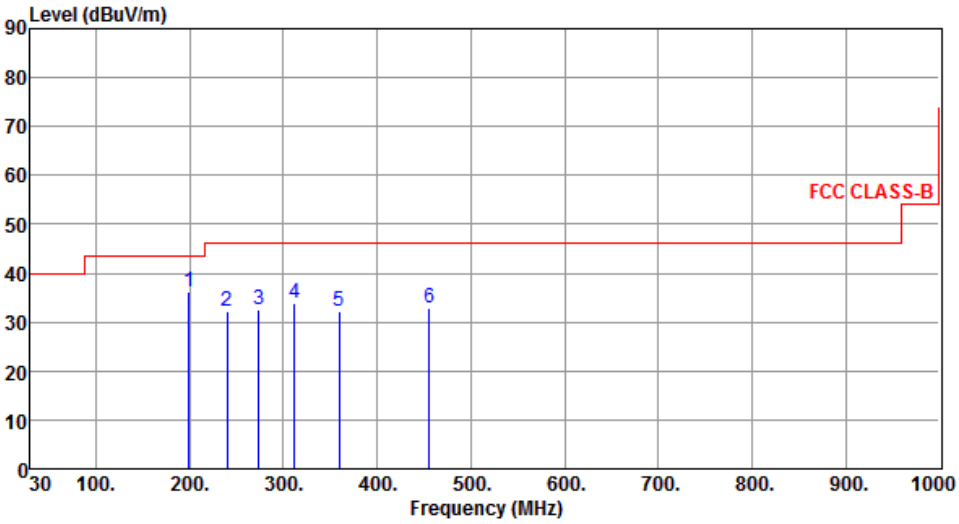
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	246.88	27.15	46.00	-18.85	37.11	-9.96	Peak	---	---
2	298.96	30.30	46.00	-15.70	38.41	-8.11	Peak	---	---
3	313.86	33.25	46.00	-12.75	40.83	-7.58	Peak	---	---
4	324.21	33.71	46.00	-12.29	41.01	-7.30	Peak	---	---
5	359.95	31.52	46.00	-14.48	38.14	-6.62	Peak	---	---
6	407.96	33.15	46.00	-12.85	38.52	-5.37	Peak	---	---

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

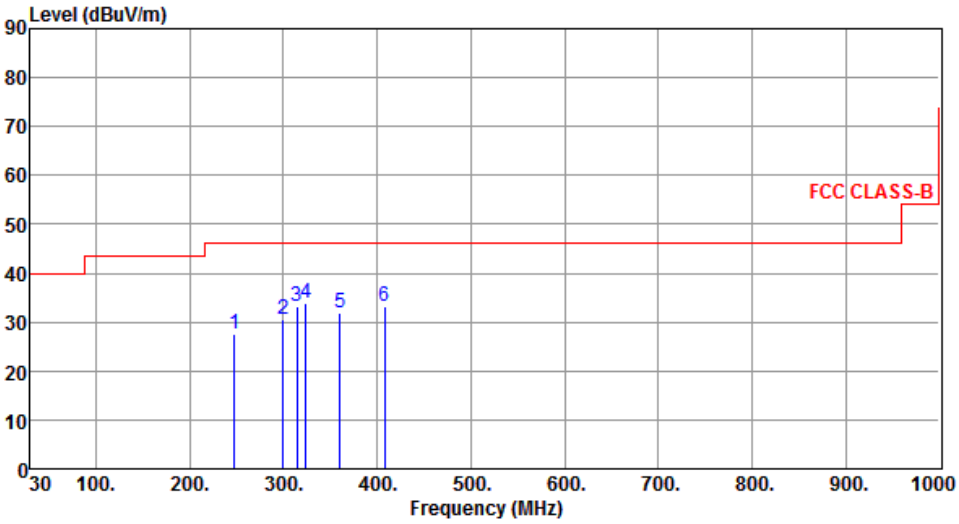
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	199.52	36.05	43.50	-7.45	47.94	-11.89	Peak	---	---
2	240.25	32.36	46.00	-13.64	42.54	-10.18	Peak	---	---
3	274.16	32.40	46.00	-13.60	41.23	-8.83	Peak	---	---
4	311.50	33.87	46.00	-12.13	41.55	-7.68	Peak	---	---
5	359.25	32.17	46.00	-13.83	38.81	-6.64	Peak	---	---
6	455.75	33.01	46.00	-12.99	36.97	-3.96	Peak	---	---

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

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

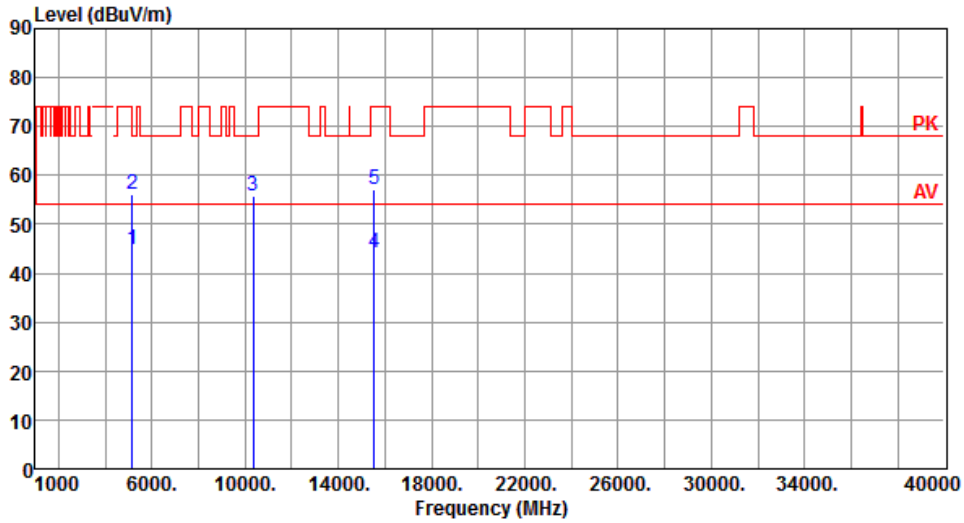


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	247.85	27.42	46.00	-18.58	37.38	-9.96	Peak	---	---
2	299.52	30.42	46.00	-15.58	38.52	-8.10	Peak	---	---
3	314.36	33.35	46.00	-12.65	40.91	-7.56	Peak	---	---
4	323.85	33.84	46.00	-12.16	41.14	-7.30	Peak	---	---
5	360.58	31.85	46.00	-14.15	38.44	-6.59	Peak	---	---
6	408.20	33.30	46.00	-12.70	38.67	-5.37	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

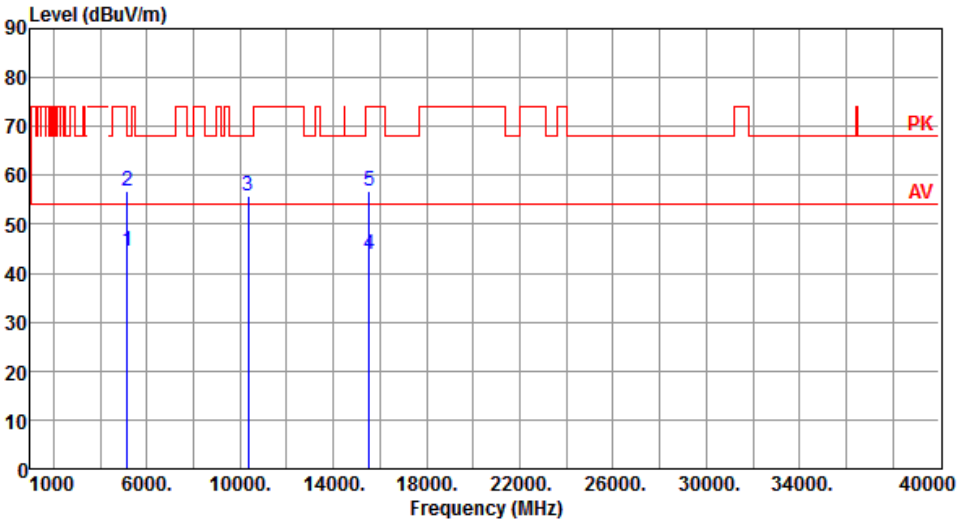
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	44.85	54.00	-9.15	40.41	4.44	Average	172	46
2	5150.00	56.08	74.00	-17.92	51.64	4.44	Peak	172	46
3	10360.00	55.70	68.20	-12.50	41.41	14.29	Peak	100	59
4	15540.00	44.32	54.00	-9.68	29.77	14.55	Average	100	66
5	15540.00	57.23	74.00	-16.77	42.68	14.55	Peak	100	66

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

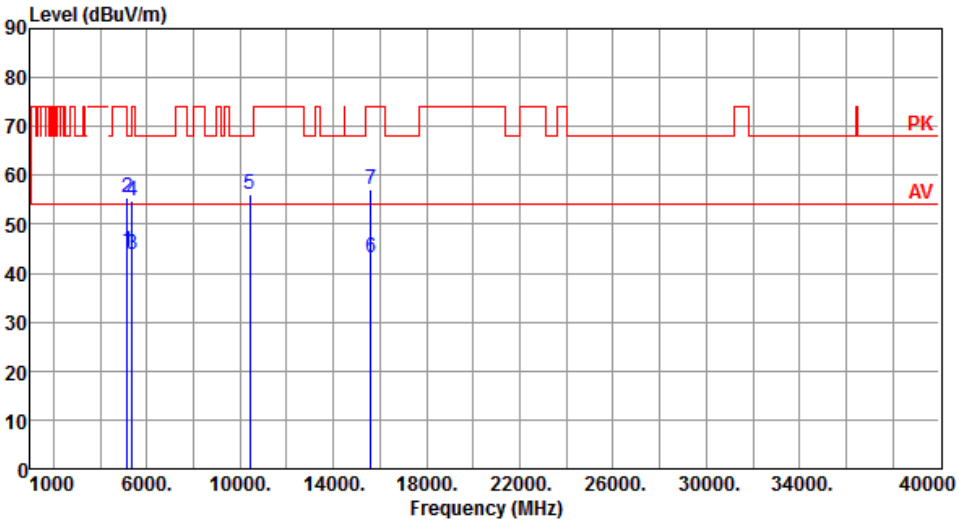
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	44.46	54.00	-9.54	40.02	4.44	Average	201	342
2	5150.00	56.78	74.00	-17.22	52.34	4.44	Peak	201	342
3	10360.00	55.85	68.20	-12.35	41.56	14.29	Peak	174	31
4	15540.00	43.84	54.00	-10.16	29.29	14.55	Average	100	40
5	15540.00	56.95	74.00	-17.05	42.40	14.55	Peak	100	40

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

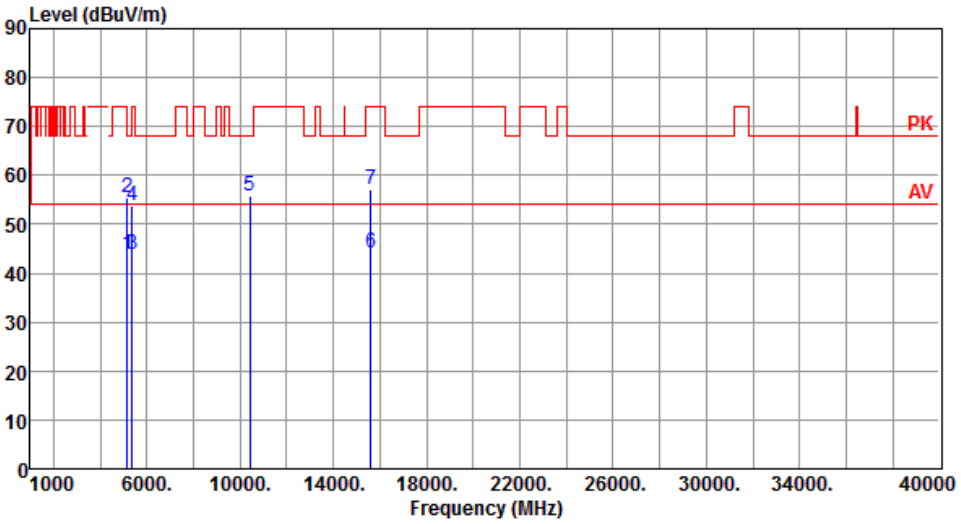
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	44.46	54.00	-9.54	40.02	4.44	Average	181	46
2	5150.00	55.45	74.00	-18.55	51.01	4.44	Peak	181	46
3	5350.00	43.72	54.00	-10.28	39.78	3.94	Average	181	46
4	5350.00	54.71	74.00	-19.29	50.77	3.94	Peak	181	46
5	10400.00	56.07	68.20	-12.13	41.67	14.40	Peak	100	60
6	15600.00	43.05	54.00	-10.95	28.71	14.34	Average	100	67
7	15600.00	57.22	74.00	-16.78	42.88	14.34	Peak	100	67

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

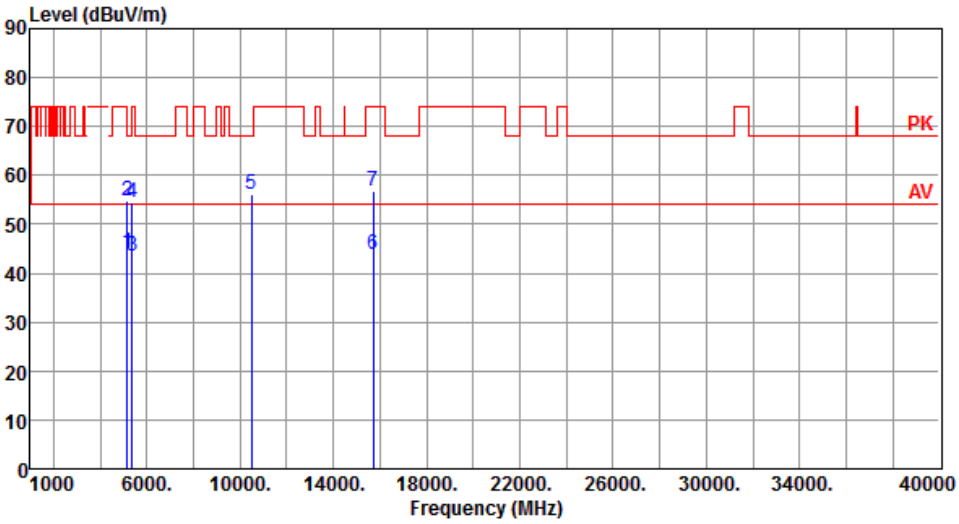
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	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	43.79	54.00	-10.21	39.35	4.44	Average	210	338
2	5150.00	55.46	74.00	-18.54	51.02	4.44	Peak	210	338
3	5350.00	43.68	54.00	-10.32	39.74	3.94	Average	210	338
4	5350.00	53.72	74.00	-20.28	49.78	3.94	Peak	210	338
5	10400.00	55.96	68.20	-12.24	41.56	14.40	Peak	175	36
6	15600.00	44.10	54.00	-9.90	29.76	14.34	Average	100	42
7	15600.00	57.11	74.00	-16.89	42.77	14.34	Peak	100	42

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

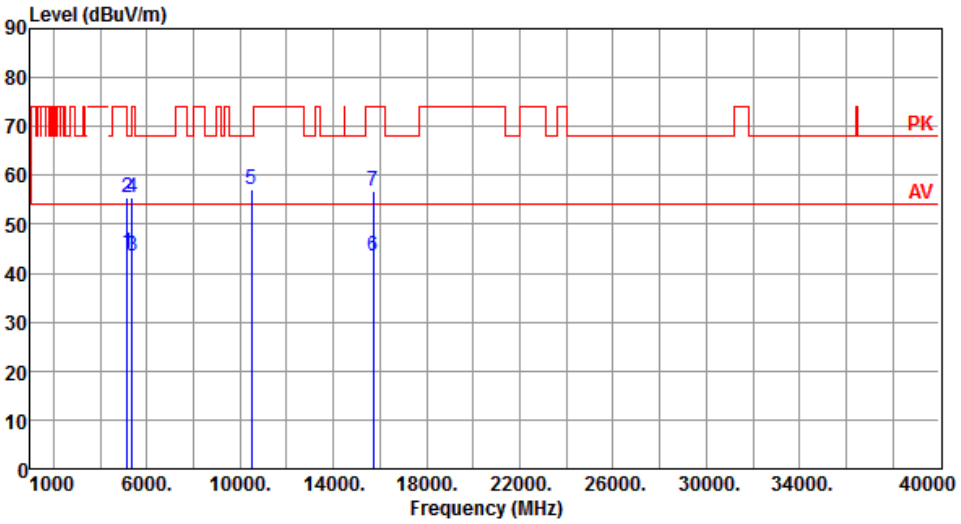
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	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	44.13	54.00	-9.87	39.69	4.44	Average	177	42
2	5150.00	54.86	74.00	-19.14	50.42	4.44	Peak	177	42
3	5350.00	43.51	54.00	-10.49	39.57	3.94	Average	177	42
4	5350.00	54.36	74.00	-19.64	50.42	3.94	Peak	177	42
5	10480.00	56.11	68.20	-12.09	41.71	14.40	Peak	100	52
6	15720.00	43.94	54.00	-10.06	29.85	14.09	Average	100	59
7	15720.00	56.94	74.00	-17.06	42.85	14.09	Peak	100	59

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

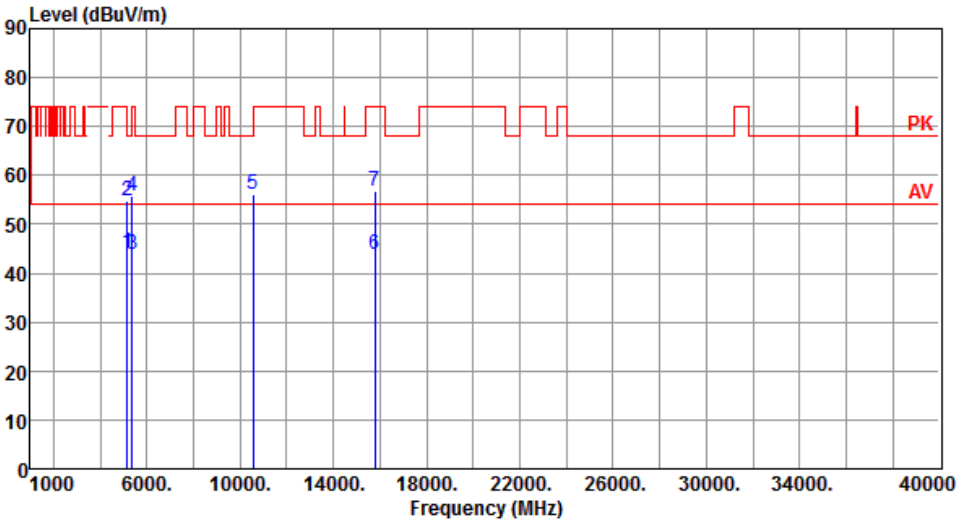
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	44.14	54.00	-9.86	39.70	4.44	Average	201	342
2	5150.00	55.45	74.00	-18.55	51.01	4.44	Peak	201	342
3	5350.00	43.44	54.00	-10.56	39.50	3.94	Average	201	342
4	5350.00	55.43	74.00	-18.57	51.49	3.94	Peak	201	342
5	10480.00	57.01	68.20	-11.19	42.61	14.40	Peak	173	38
6	15720.00	43.52	54.00	-10.48	29.43	14.09	Average	100	45
7	15720.00	56.91	74.00	-17.09	42.82	14.09	Peak	100	45

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

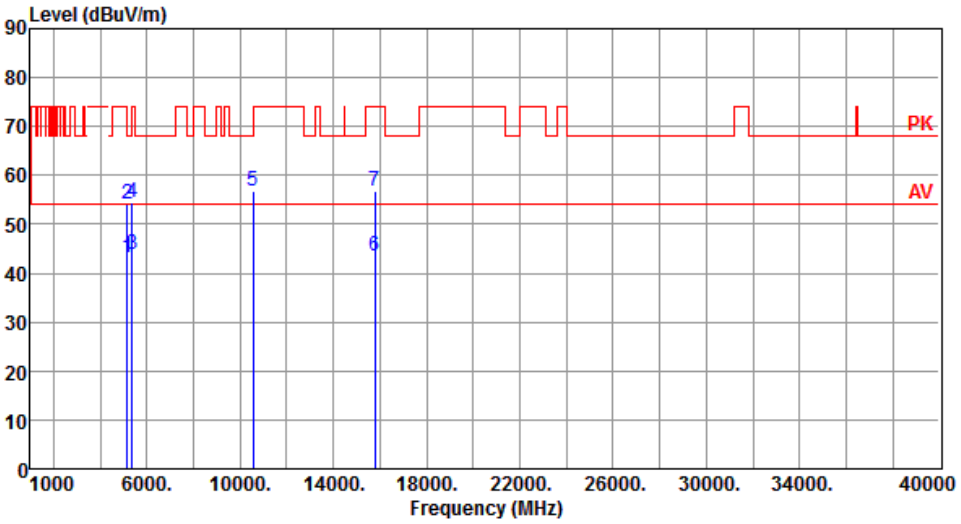
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	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	44.13	54.00	-9.87	39.69	4.44	Average	175	46
2	5150.00	54.86	74.00	-19.14	50.42	4.44	Peak	176	46
3	5350.00	43.74	54.00	-10.26	39.80	3.94	Average	176	46
4	5350.00	55.74	74.00	-18.26	51.80	3.94	Peak	176	46
5	10540.00	56.04	68.20	-12.16	41.64	14.40	Peak	100	69
6	15780.00	43.75	54.00	-10.25	29.75	14.00	Average	100	68
7	15780.00	56.85	74.00	-17.15	42.85	14.00	Peak	100	68

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

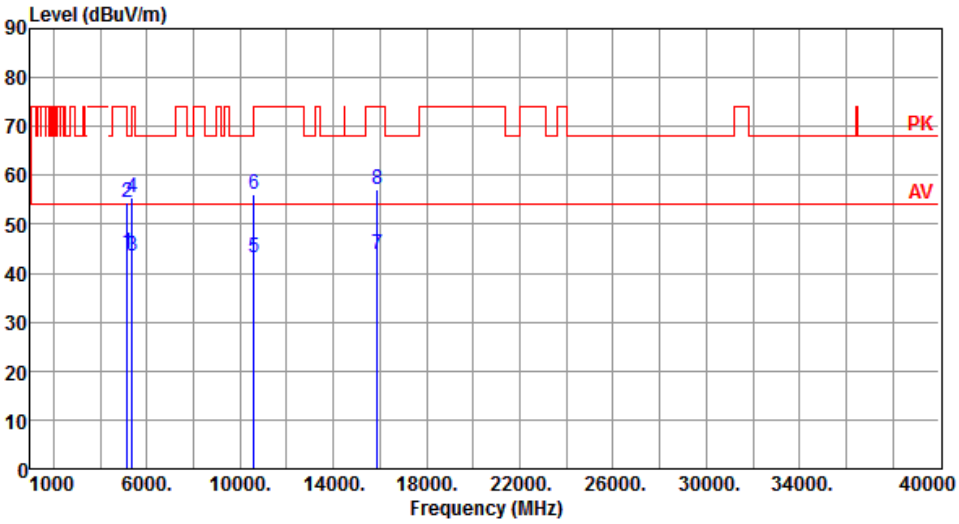
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	43.16	54.00	-10.84	38.72	4.44	Average	205	344
2	5150.00	54.03	74.00	-19.97	49.59	4.44	Peak	205	344
3	5350.00	43.68	54.00	-10.32	39.74	3.94	Average	205	344
4	5350.00	54.41	74.00	-19.59	50.47	3.94	Peak	205	344
5	10540.00	56.88	68.20	-11.32	42.48	14.40	Peak	178	33
6	15780.00	43.63	54.00	-10.37	29.63	14.00	Average	100	33
7	15780.00	56.85	74.00	-17.15	42.85	14.00	Peak	100	33

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

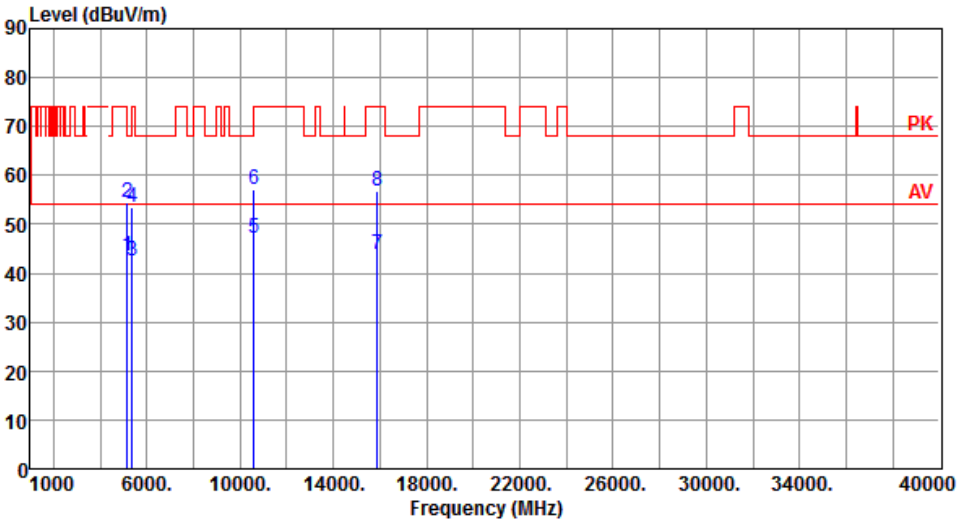
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	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	44.13	54.00	-9.87	39.69	4.44	Average	188	46
2	5150.00	54.47	74.00	-19.53	50.03	4.44	Peak	188	46
3	5350.00	43.63	54.00	-10.37	39.69	3.94	Average	100	46
4	5350.00	55.45	74.00	-18.55	51.51	3.94	Peak	188	46
5	10600.00	43.17	54.00	-10.83	28.79	14.38	Average	100	63
6	10600.00	56.08	74.00	-17.92	41.70	14.38	Peak	100	63
7	15900.00	43.88	54.00	-10.12	29.93	13.95	Average	100	60
8	15900.00	57.24	74.00	-16.76	43.29	13.95	Peak	100	60

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

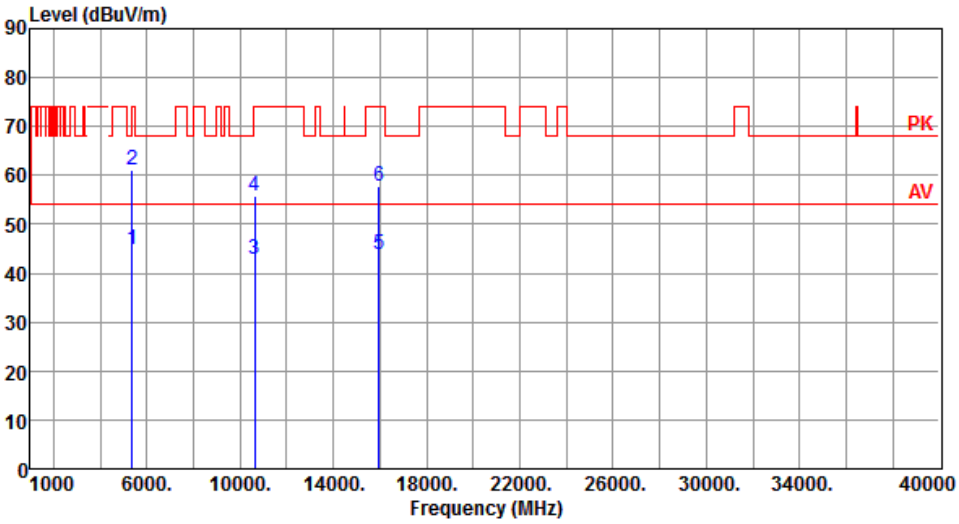
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	43.46	54.00	-10.54	39.02	4.44	Average	215	339
2	5150.00	54.36	74.00	-19.64	49.92	4.44	Peak	218	339
3	5350.00	42.41	54.00	-11.59	38.47	3.94	Average	218	339
4	5350.00	53.63	74.00	-20.37	49.69	3.94	Peak	218	339
5	10600.00	47.07	54.00	-6.93	32.69	14.38	Average	177	40
6	10600.00	57.07	74.00	-16.93	42.69	14.38	Peak	177	40
7	15900.00	43.84	54.00	-10.16	29.89	13.95	Average	100	36
8	15900.00	56.84	74.00	-17.16	42.89	13.95	Peak	100	36

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

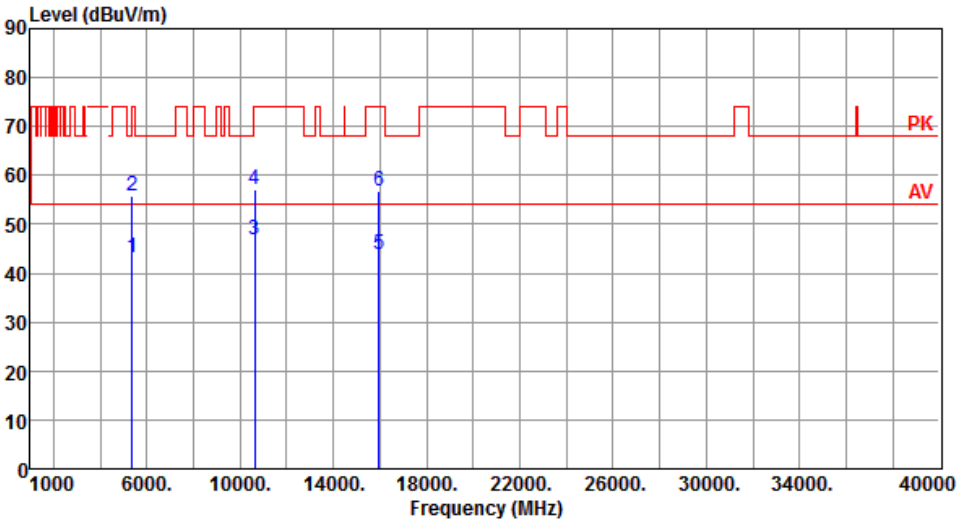
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	44.96	54.00	-9.04	41.02	3.94	Average	189	42
2	5350.00	61.11	74.00	-12.89	57.17	3.94	Peak	189	42
3	10640.00	42.76	54.00	-11.24	28.40	14.36	Average	100	60
4	10640.00	55.76	74.00	-18.24	41.40	14.36	Peak	100	60
5	15960.00	43.90	54.00	-10.10	30.04	13.86	Average	100	67
6	15960.00	57.79	74.00	-16.21	43.93	13.86	Peak	100	67

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

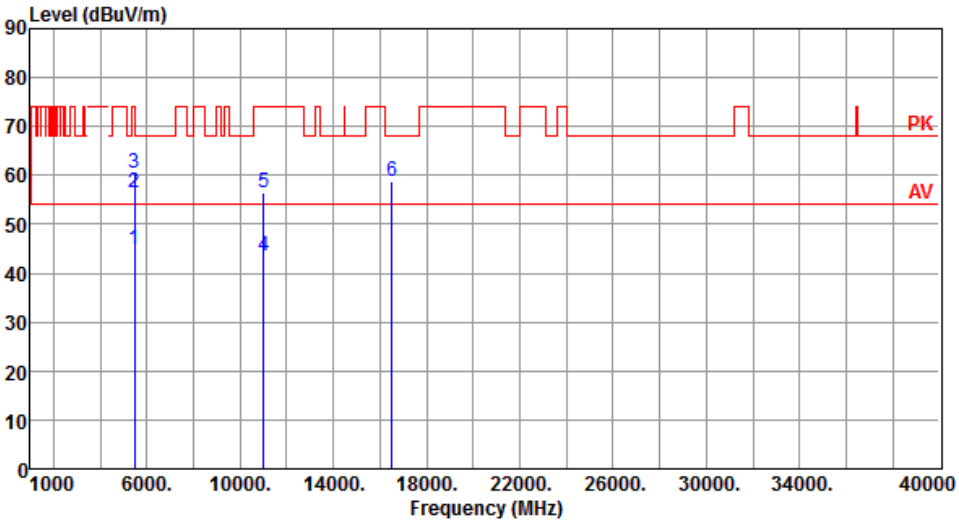
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	43.11	54.00	-10.89	39.17	3.94	Average	200	348
2	5350.00	55.68	74.00	-18.32	51.74	3.94	Peak	200	348
3	10640.00	46.82	54.00	-7.18	32.46	14.36	Average	175	36
4	10640.00	57.01	74.00	-16.99	42.65	14.36	Peak	175	36
5	15960.00	43.79	54.00	-10.21	29.93	13.86	Average	100	33
6	15960.00	56.80	74.00	-17.20	42.94	13.86	Peak	100	33

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

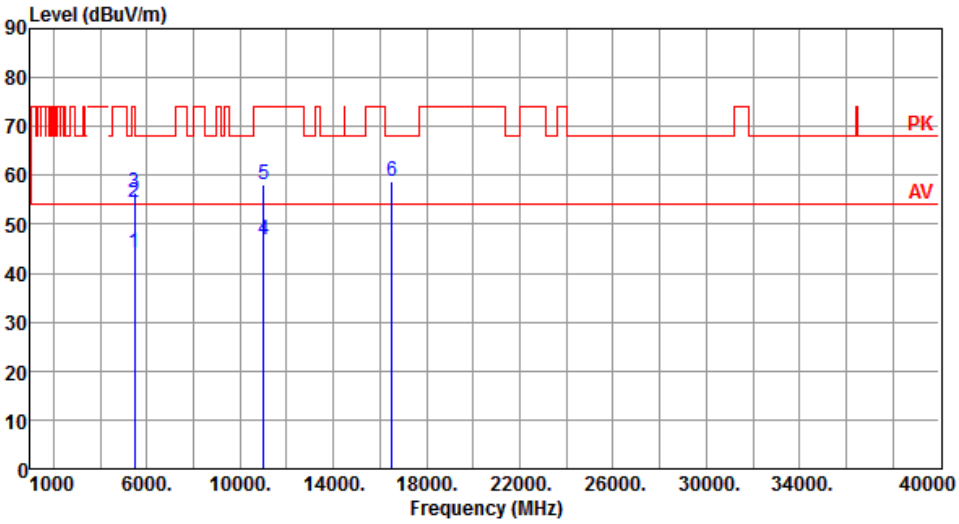
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	44.92	54.00	-9.08	40.51	4.41	Average	198	29
2	5460.00	56.47	74.00	-17.53	52.06	4.41	Peak	198	29
3	5470.00	60.57	68.20	-7.63	56.15	4.42	Peak	198	29
4	11000.00	43.50	54.00	-10.50	28.72	14.78	Average	100	70
5	11000.00	56.49	74.00	-17.51	41.71	14.78	Peak	100	70
6	16500.00	58.80	68.20	-9.40	42.91	15.89	Peak	100	66

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

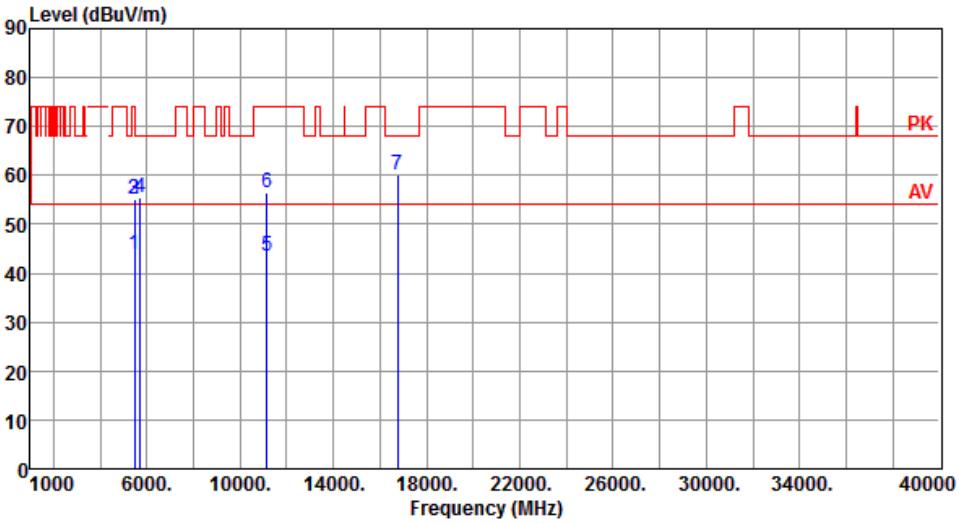
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	44.14	54.00	-9.86	39.73	4.41	Average	223	341
2	5460.00	54.52	74.00	-19.48	50.11	4.41	Peak	223	341
3	5470.00	56.57	68.20	-11.63	52.15	4.42	Peak	223	341
4	11000.00	46.96	54.00	-7.04	32.18	14.78	Average	177	42
5	11000.00	57.99	74.00	-16.01	43.21	14.78	Peak	177	42
6	16500.00	58.91	68.20	-9.29	43.02	15.89	Peak	100	39

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

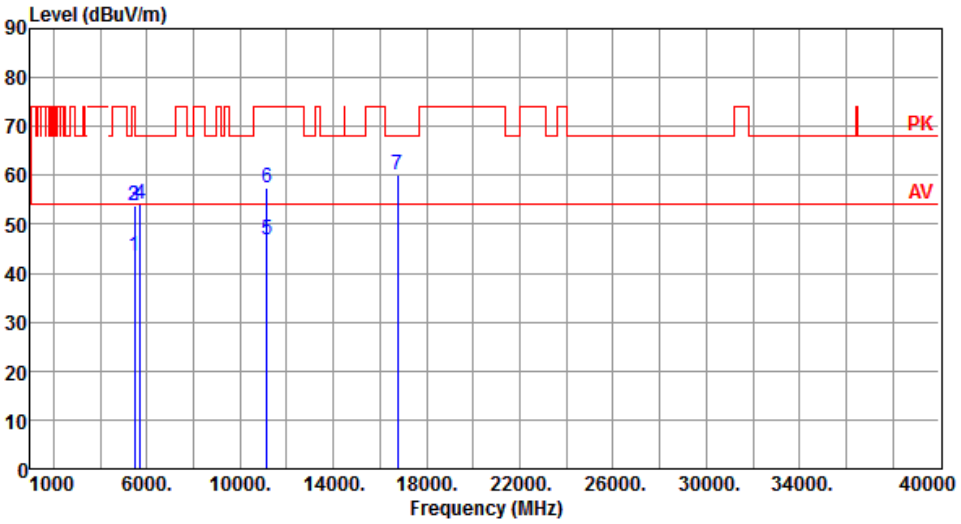
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	43.84	54.00	-10.16	39.43	4.41	Average	203	26
2	5460.00	55.24	74.00	-18.76	50.83	4.41	Peak	203	26
3	5470.00	55.16	68.20	-13.04	50.74	4.42	Peak	203	26
4	5725.00	55.30	68.20	-12.90	50.55	4.75	Peak	203	26
5	11160.00	43.50	54.00	-10.50	29.06	14.44	Average	100	62
6	11160.00	56.61	74.00	-17.39	42.17	14.44	Peak	100	62
7	16740.00	60.05	68.20	-8.15	42.78	17.27	Peak	100	60

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

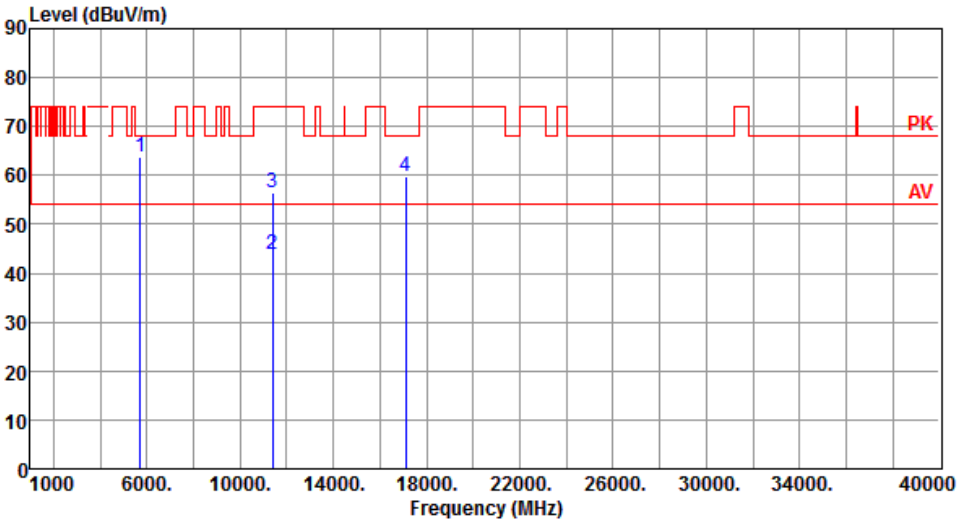
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	43.51	54.00	-10.49	39.10	4.41	Average	213	342
2	5460.00	53.72	74.00	-20.28	49.31	4.41	Peak	213	342
3	5470.00	53.88	68.20	-14.32	49.46	4.42	Peak	213	342
4	5725.00	54.09	68.20	-14.11	49.34	4.75	Peak	213	342
5	11160.00	46.90	54.00	-7.10	32.46	14.44	Average	175	39
6	11160.00	57.60	74.00	-16.40	43.16	14.44	Peak	175	39
7	16740.00	60.21	68.20	-7.99	42.94	17.27	Peak	100	36

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

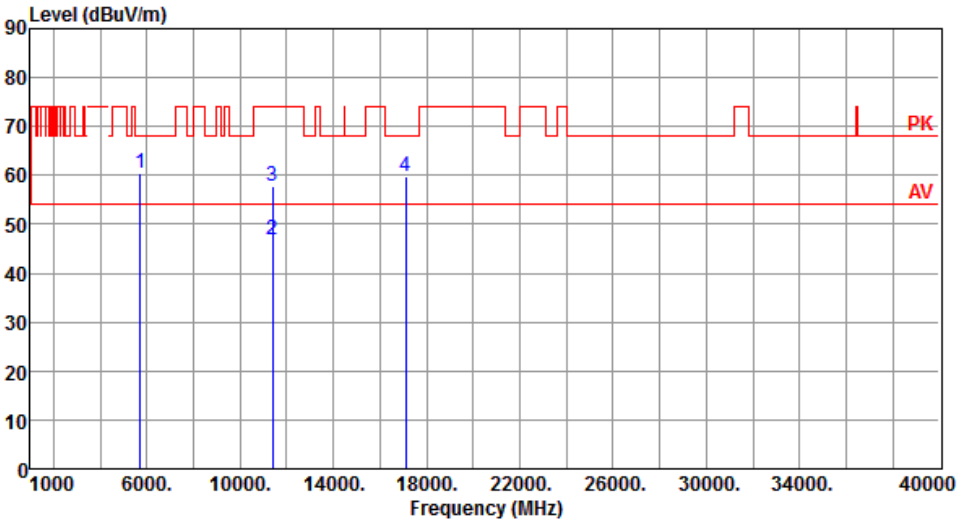
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	63.60	68.20	-4.60	58.85	4.75	Peak	196	20
2	11400.00	43.70	54.00	-10.30	29.12	14.58	Average	100	71
3	11400.00	56.37	74.00	-17.63	41.79	14.58	Peak	100	71
4	17100.00	59.71	68.20	-8.49	42.53	17.18	Peak	100	68

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

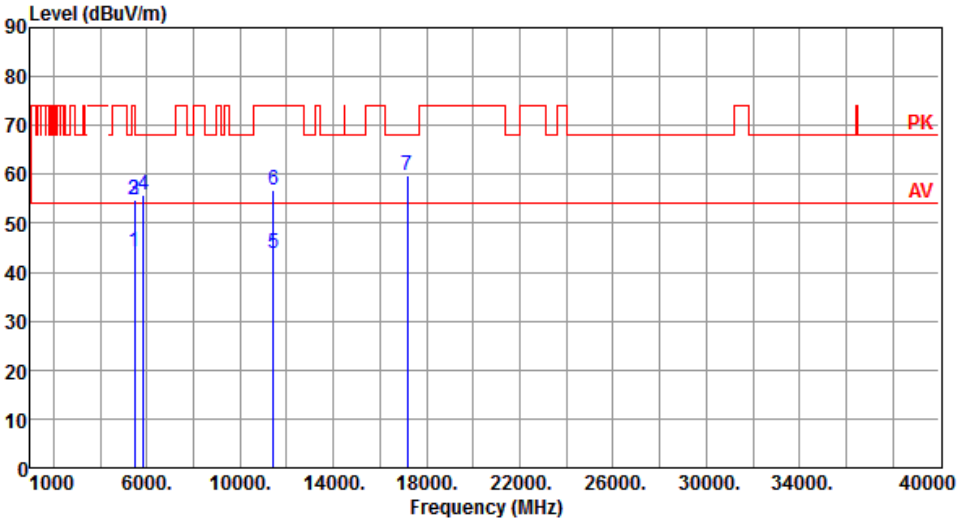
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	60.29	68.20	-7.91	55.54	4.75	Peak	220	340
2	11400.00	46.86	54.00	-7.14	32.28	14.58	Average	180	43
3	11400.00	57.85	74.00	-16.15	43.27	14.58	Peak	180	43
4	17100.00	59.93	68.20	-8.27	42.75	17.18	Peak	100	40

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

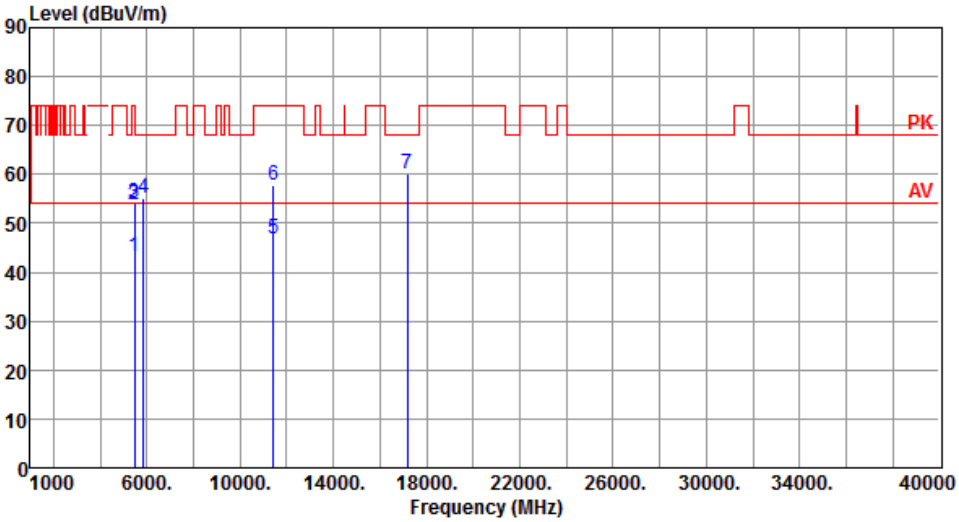
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		



	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	44.07	54.00	-9.93	39.66	4.41	Average	189	18
2	5460.00	54.87	74.00	-19.13	50.46	4.41	Peak	189	18
3	5470.00	54.78	68.20	-13.42	50.36	4.42	Peak	189	18
4	5850.00	55.78	68.20	-12.42	50.63	5.15	Peak	189	18
5	11420.00	43.79	54.00	-10.21	29.18	14.61	Average	100	62
6	11420.00	56.79	74.00	-17.21	42.18	14.61	Peak	100	62
7	17160.00	59.92	68.20	-8.28	42.59	17.33	Peak	100	61

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

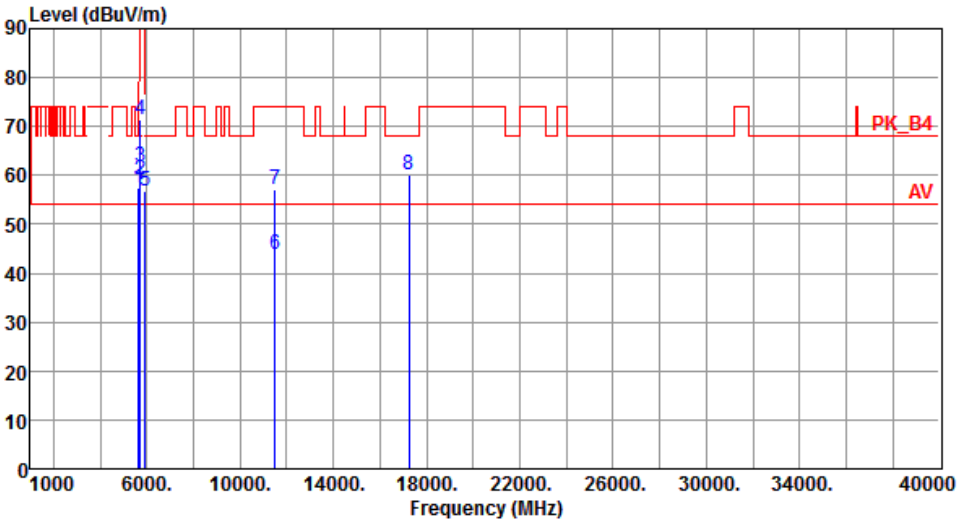
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		



	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	43.19	54.00	-10.81	38.78	4.41	Average	211	333
2	5460.00	53.84	74.00	-20.16	49.43	4.41	Peak	211	333
3	5470.00	54.20	68.20	-14.00	49.78	4.42	Peak	211	333
4	5850.00	55.02	68.20	-13.18	49.87	5.15	Peak	211	333
5	11420.00	46.80	54.00	-7.20	32.19	14.61	Average	185	41
6	11420.00	57.80	74.00	-16.20	43.19	14.61	Peak	185	41
7	17160.00	60.08	68.20	-8.12	42.75	17.33	Peak	100	42

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

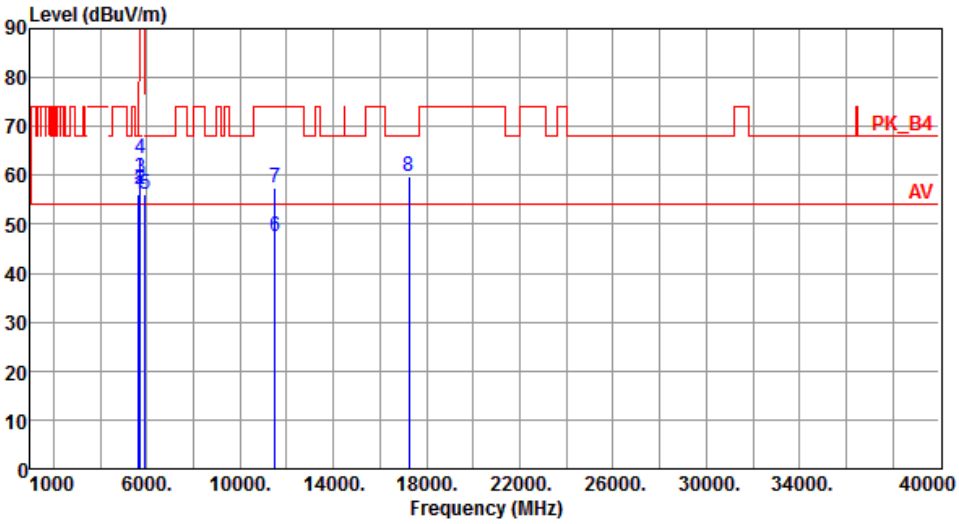
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	57.58	68.20	-10.62	53.04	4.54	Peak	202	28
2	5700.00	59.12	105.20	-46.08	54.44	4.68	Peak	202	28
3	5720.00	61.88	110.80	-48.92	57.15	4.73	Peak	202	28
4	5725.00	71.45	122.20	-50.75	66.70	4.75	Peak	202	28
5	5925.00	56.87	68.20	-11.33	51.59	5.28	Peak	202	28
6	11490.00	43.93	54.00	-10.07	29.22	14.71	Average	100	63
7	11490.00	57.04	74.00	-16.96	42.33	14.71	Peak	100	63
8	17235.00	60.13	68.20	-8.07	42.60	17.53	Peak	100	65

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

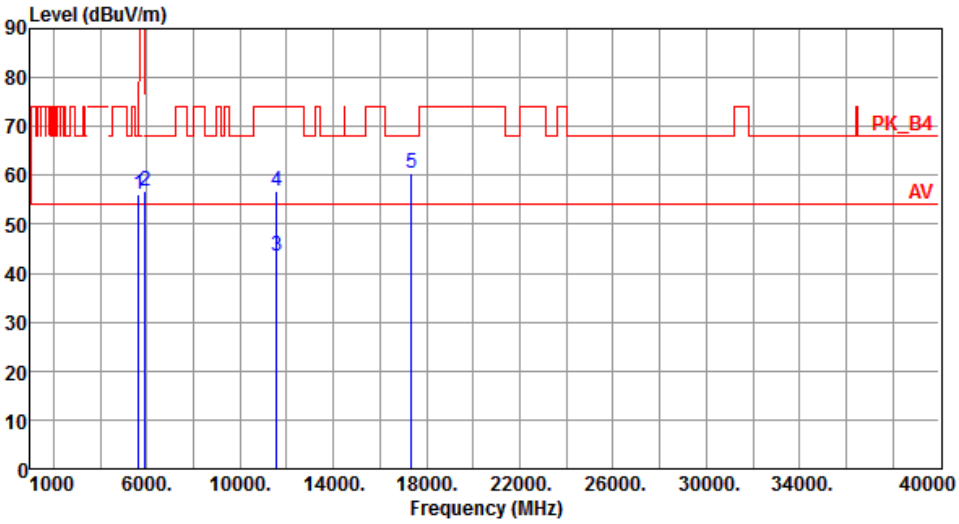
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	56.12	68.20	-12.08	51.58	4.54	Peak	205	347
2	5700.00	57.23	105.20	-47.97	52.55	4.68	Peak	205	347
3	5720.00	59.56	110.80	-51.24	54.83	4.73	Peak	205	347
4	5725.00	63.30	122.20	-58.90	58.55	4.75	Peak	205	341
5	5925.00	55.98	68.20	-12.22	50.70	5.28	Peak	205	341
6	11490.00	47.37	54.00	-6.63	32.66	14.71	Average	176	41
7	11490.00	57.33	74.00	-16.67	42.62	14.71	Peak	176	41
8	17235.00	59.87	68.20	-8.33	42.34	17.53	Peak	100	40

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

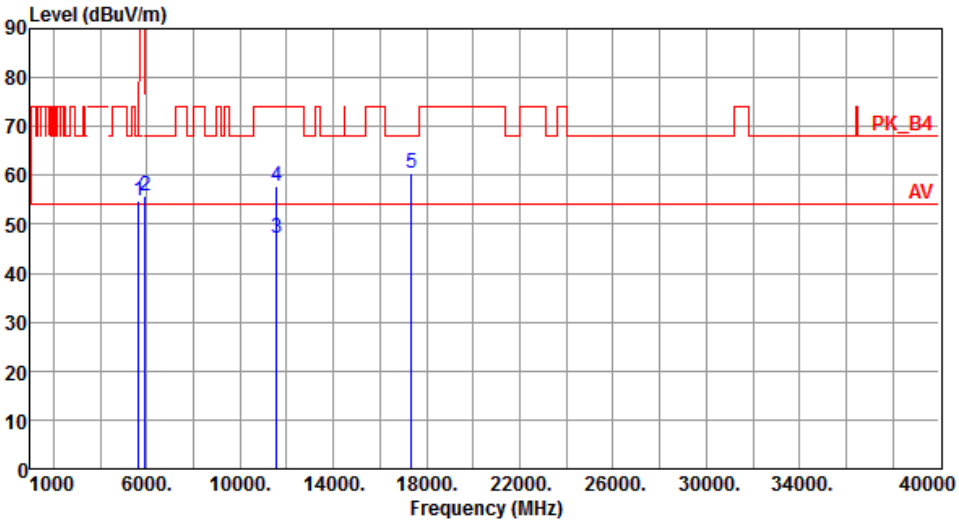
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	56.25	68.20	-11.95	51.71	4.54	Peak	220	25
2	5925.00	56.95	68.20	-11.25	51.67	5.28	Peak	220	25
3	11570.00	43.63	54.00	-10.37	29.10	14.53	Average	100	62
4	11570.00	56.81	74.00	-17.19	42.28	14.53	Peak	100	62
5	17355.00	60.46	68.20	-7.74	42.51	17.95	Peak	100	72

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

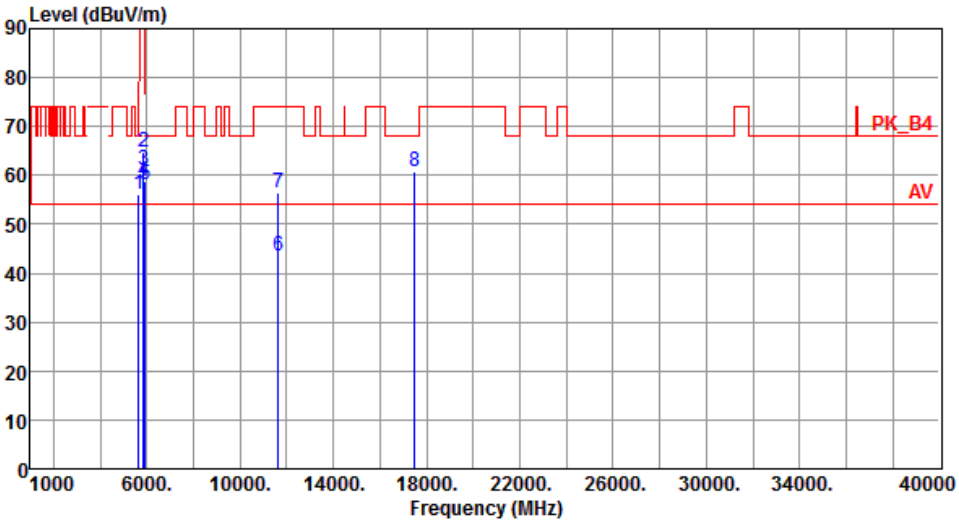
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	54.94	68.20	-13.26	50.40	4.54	Peak	225	338
2	5925.00	55.90	68.20	-12.30	50.62	5.28	Peak	225	338
3	11570.00	46.99	54.00	-7.01	32.46	14.53	Average	175	45
4	11570.00	57.75	74.00	-16.25	43.22	14.53	Peak	175	45
5	17355.00	60.49	68.20	-7.71	42.54	17.95	Peak	100	32

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

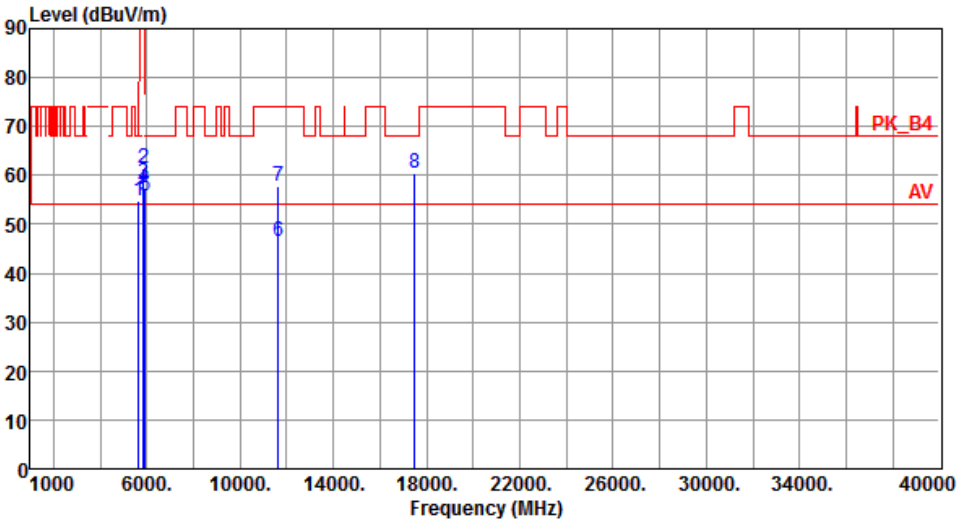
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	56.05	68.20	-12.15	51.51	4.54	Peak	210	23
2	5850.00	64.74	122.20	-57.46	59.59	5.15	Peak	210	23
3	5855.00	61.02	110.80	-49.78	55.87	5.15	Peak	210	23
4	5875.00	58.82	105.20	-46.38	53.63	5.19	Peak	210	23
5	5925.00	58.22	68.20	-9.98	52.94	5.28	Peak	210	23
6	11650.00	43.54	54.00	-10.46	29.33	14.21	Average	100	61
7	11650.00	56.45	74.00	-17.55	42.24	14.21	Peak	100	61
8	17475.00	60.66	68.20	-7.54	42.38	18.28	Peak	100	64

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

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

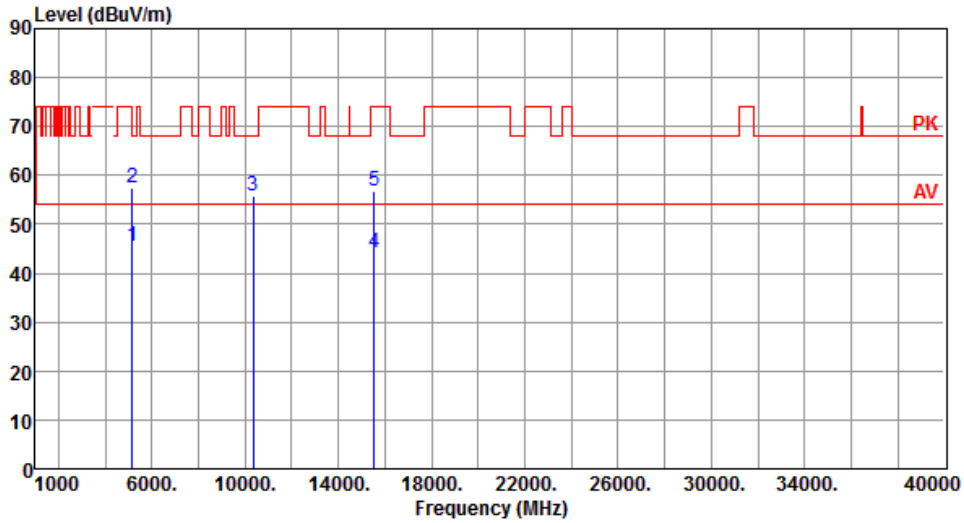


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	54.82	68.20	-13.38	50.28	4.54	Peak	210	336
2	5850.00	61.36	122.20	-60.84	56.21	5.15	Peak	210	336
3	5855.00	58.53	110.80	-52.27	53.38	5.15	Peak	210	336
4	5875.00	57.37	105.20	-47.83	52.18	5.19	Peak	210	336
5	5925.00	55.90	68.20	-12.30	50.62	5.28	Peak	210	336
6	11650.00	46.51	54.00	-7.49	32.30	14.21	Average	180	41
7	11650.00	57.80	74.00	-16.20	43.59	14.21	Peak	180	41
8	17475.00	60.44	68.20	-7.76	42.16	18.28	Peak	112	49

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

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

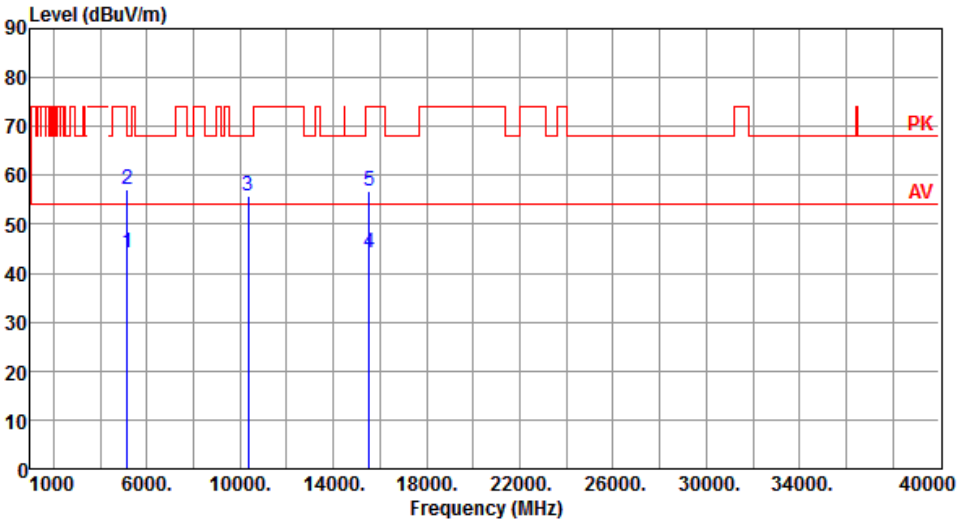
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	45.50	54.00	-8.50	41.06	4.44	Average	165	41
2	5150.00	57.48	74.00	-16.52	53.04	4.44	Peak	165	41
3	10360.00	55.82	68.20	-12.38	41.53	14.29	Peak	100	52
4	15540.00	44.07	54.00	-9.93	29.52	14.55	Average	100	69
5	15540.00	56.90	74.00	-17.10	42.35	14.55	Peak	100	69

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

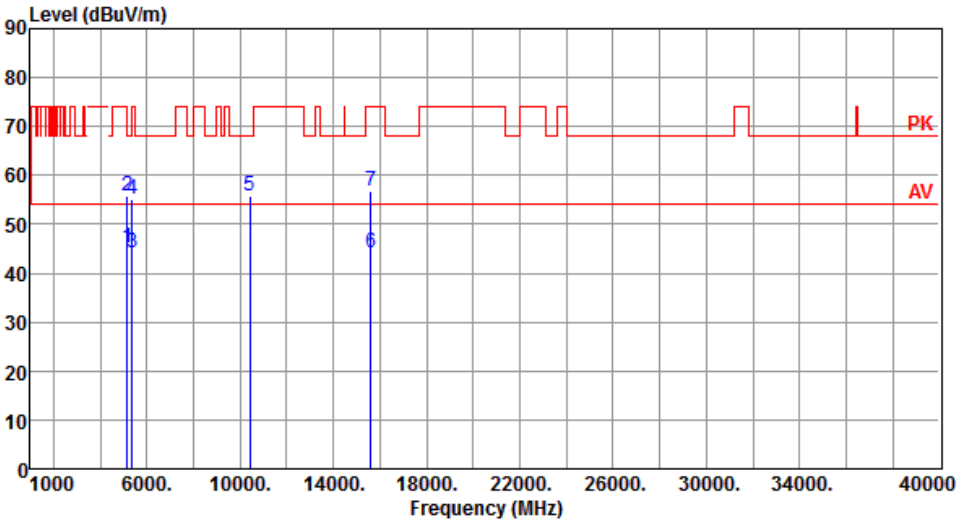
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	44.19	54.00	-9.81	39.75	4.44	Average	206	343
2	5150.00	57.03	74.00	-16.97	52.59	4.44	Peak	206	343
3	10360.00	55.84	68.20	-12.36	41.55	14.29	Peak	175	32
4	15540.00	44.31	54.00	-9.69	29.76	14.55	Average	100	39
5	15540.00	56.71	74.00	-17.29	42.16	14.55	Peak	100	39

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

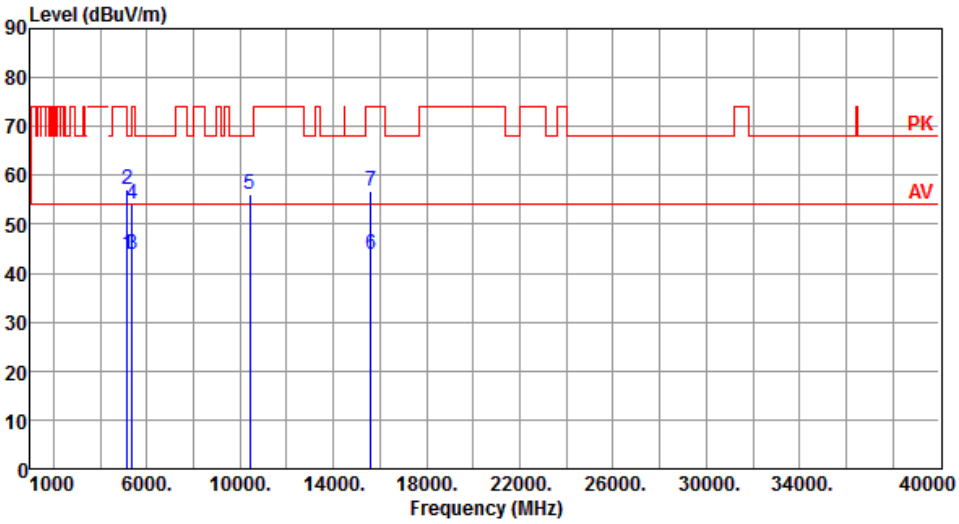
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	45.15	54.00	-8.85	40.71	4.44	Average	178	42
2	5150.00	55.86	74.00	-18.14	51.42	4.44	Peak	178	42
3	5350.00	44.03	54.00	-9.97	40.09	3.94	Average	178	42
4	5350.00	55.05	74.00	-18.95	51.11	3.94	Peak	178	42
5	10400.00	55.85	68.20	-12.35	41.45	14.40	Peak	100	56
6	15600.00	44.04	54.00	-9.96	29.70	14.34	Average	100	71
7	15600.00	56.91	74.00	-17.09	42.57	14.34	Peak	100	71

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

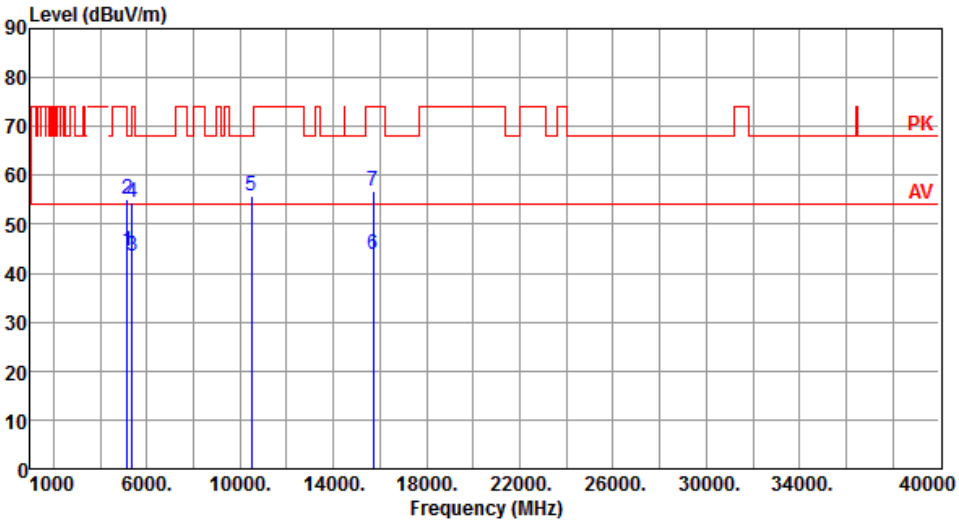
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	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	43.78	54.00	-10.22	39.34	4.44	Average	207	345
2	5150.00	57.02	74.00	-16.98	52.58	4.44	Peak	207	345
3	5350.00	43.87	54.00	-10.13	39.93	3.94	Average	207	345
4	5350.00	54.04	74.00	-19.96	50.10	3.94	Peak	207	345
5	10400.00	56.03	68.20	-12.17	41.63	14.40	Peak	176	33
6	15600.00	43.77	54.00	-10.23	29.43	14.34	Average	100	35
7	15600.00	56.78	74.00	-17.22	42.44	14.34	Peak	100	35

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

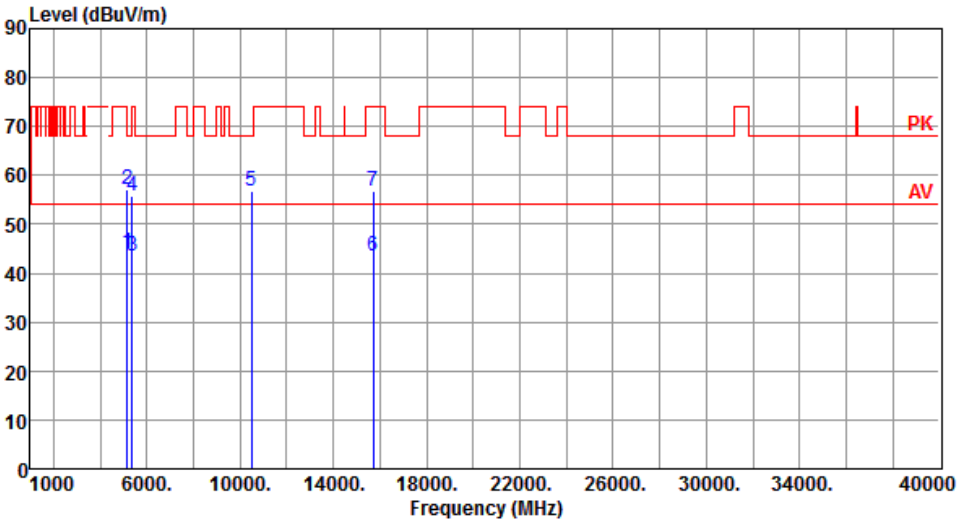
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	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	44.45	54.00	-9.55	40.01	4.44	Average	178	43
2	5150.00	55.15	74.00	-18.85	50.71	4.44	Peak	178	43
3	5350.00	43.63	54.00	-10.37	39.69	3.94	Average	178	43
4	5350.00	54.41	74.00	-19.59	50.47	3.94	Peak	178	43
5	10480.00	55.91	68.20	-12.29	41.51	14.40	Peak	100	51
6	15720.00	43.90	54.00	-10.10	29.81	14.09	Average	100	62
7	15720.00	56.70	74.00	-17.30	42.61	14.09	Peak	100	62

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

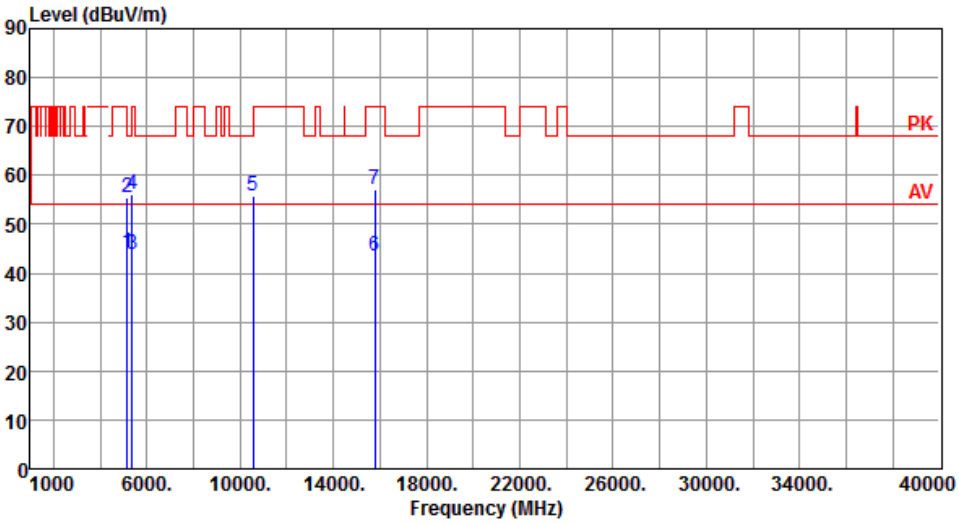
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	44.03	54.00	-9.97	39.59	4.44	Average	207	341
2	5150.00	57.02	74.00	-16.98	52.58	4.44	Peak	207	341
3	5350.00	43.63	54.00	-10.37	39.69	3.94	Average	207	341
4	5350.00	55.68	74.00	-18.32	51.74	3.94	Peak	207	341
5	10480.00	56.63	68.20	-11.57	42.23	14.40	Peak	171	33
6	15720.00	43.46	54.00	-10.54	29.37	14.09	Average	100	40
7	15720.00	56.65	74.00	-17.35	42.56	14.09	Peak	100	40

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

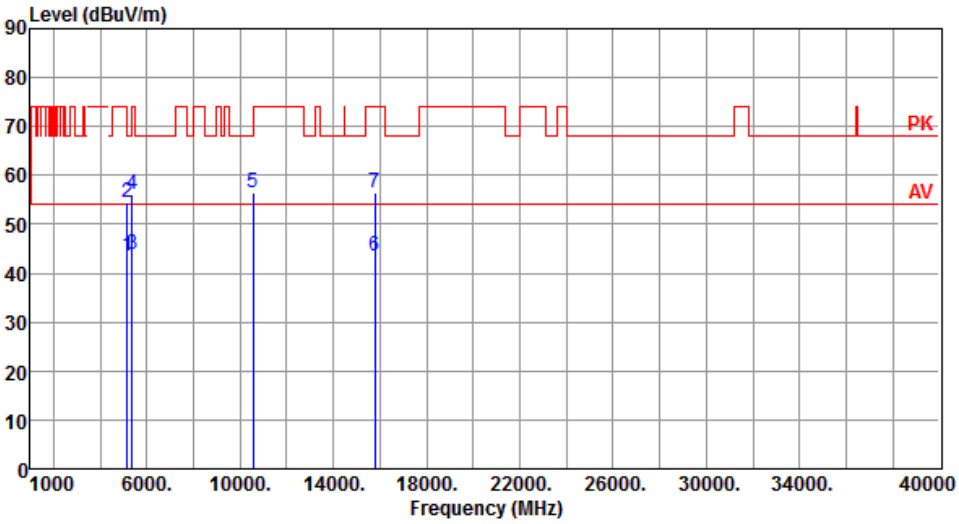
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	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	44.32	54.00	-9.68	39.88	4.44	Average	186	41
2	5150.00	55.45	74.00	-18.55	51.01	4.44	Peak	186	41
3	5350.00	44.00	54.00	-10.00	40.06	3.94	Average	186	41
4	5350.00	56.02	74.00	-17.98	52.08	3.94	Peak	186	41
5	10540.00	55.84	68.20	-12.36	41.44	14.40	Peak	100	66
6	15780.00	43.58	54.00	-10.42	29.58	14.00	Average	100	63
7	15780.00	57.21	74.00	-16.79	43.21	14.00	Peak	100	63

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

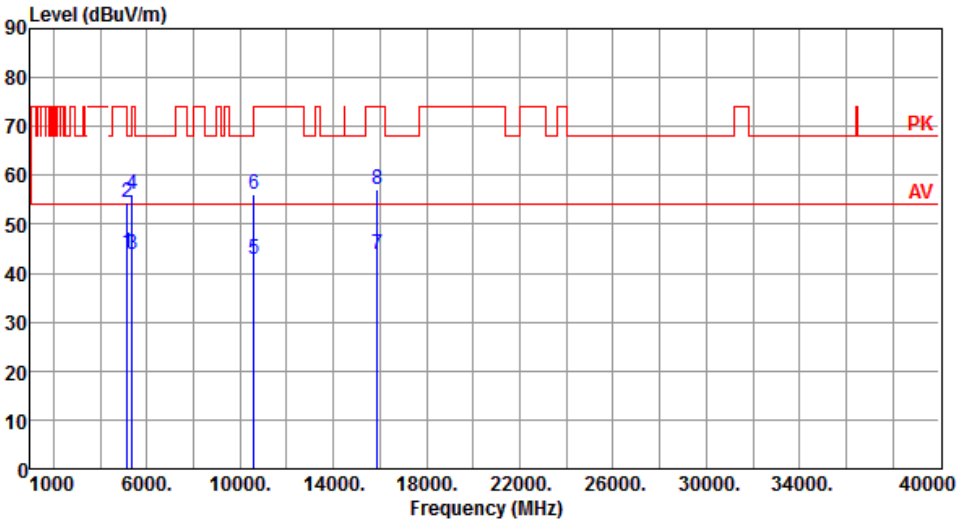
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	43.56	54.00	-10.44	39.12	4.44	Average	208	341
2	5150.00	54.41	74.00	-19.59	49.97	4.44	Peak	208	341
3	5350.00	43.87	54.00	-10.13	39.93	3.94	Average	208	341
4	5350.00	56.01	74.00	-17.99	52.07	3.94	Peak	207	344
5	10540.00	56.44	68.20	-11.76	42.04	14.40	Peak	176	31
6	15780.00	43.58	54.00	-10.42	29.58	14.00	Average	100	32
7	15780.00	56.57	74.00	-17.43	42.57	14.00	Peak	100	32

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

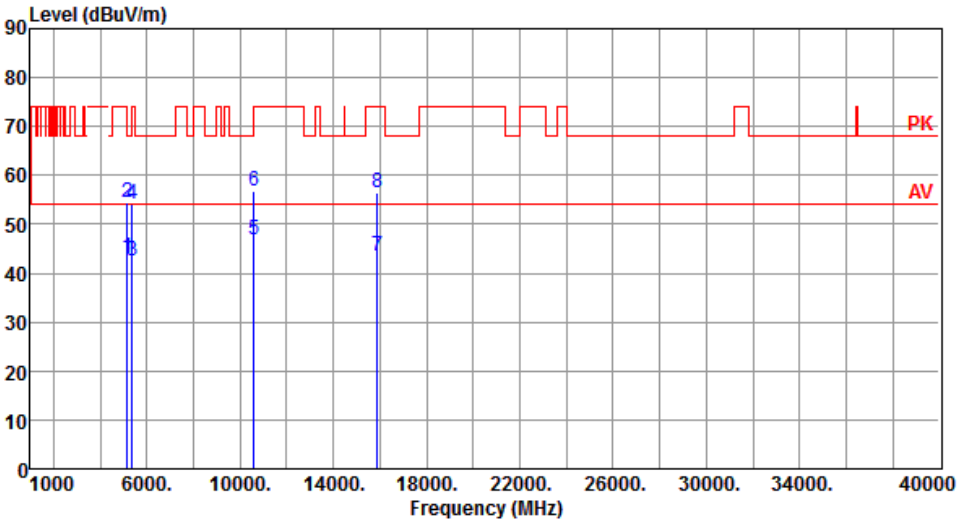
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	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	44.24	54.00	-9.76	39.80	4.44	Average	182	41
2	5150.00	54.39	74.00	-19.61	49.95	4.44	Peak	182	41
3	5350.00	43.77	54.00	-10.23	39.83	3.94	Average	182	41
4	5350.00	56.04	74.00	-17.96	52.10	3.94	Peak	182	41
5	10600.00	42.80	54.00	-11.20	28.42	14.38	Average	100	62
6	10600.00	55.97	74.00	-18.03	41.59	14.38	Peak	100	62
7	15900.00	43.84	54.00	-10.16	29.89	13.95	Average	100	64
8	15900.00	57.19	74.00	-16.81	43.24	13.95	Peak	100	64

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

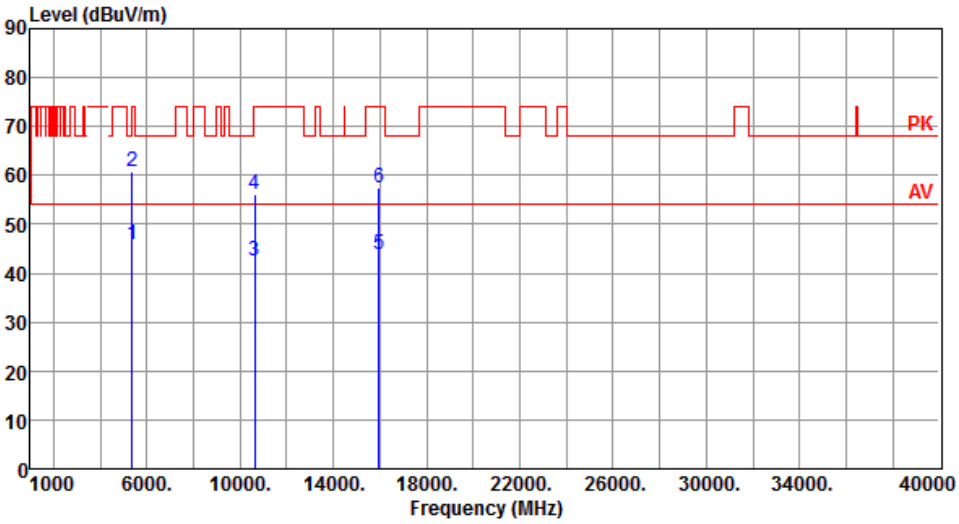
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	43.30	54.00	-10.70	38.86	4.44	Average	204	342
2	5150.00	54.38	74.00	-19.62	49.94	4.44	Peak	204	342
3	5350.00	42.63	54.00	-11.37	38.69	3.94	Average	204	342
4	5350.00	54.00	74.00	-20.00	50.06	3.94	Peak	204	342
5	10600.00	46.74	54.00	-7.26	32.36	14.38	Average	176	39
6	10600.00	56.74	74.00	-17.26	42.36	14.38	Peak	176	39
7	15900.00	43.51	54.00	-10.49	29.56	13.95	Average	100	30
8	15900.00	56.57	74.00	-17.43	42.62	13.95	Peak	100	30

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

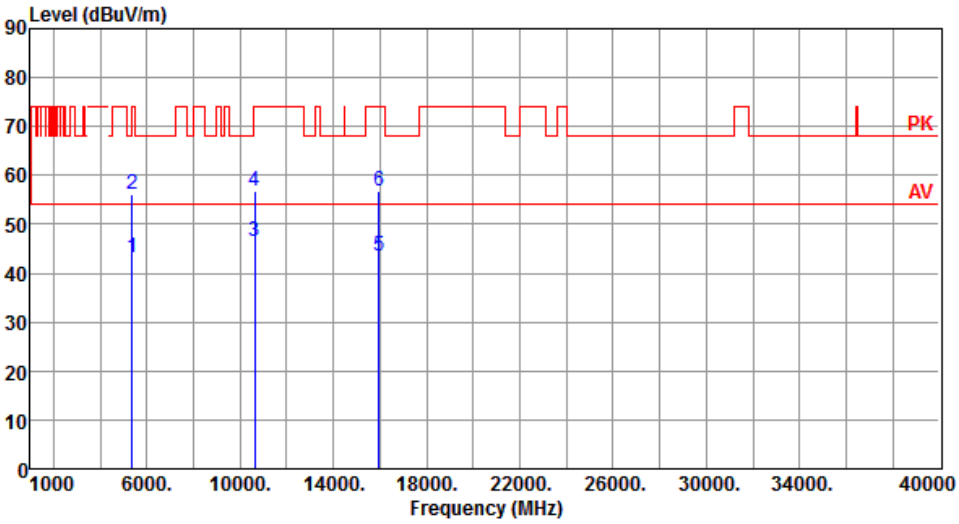
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	45.90	54.00	-8.10	41.96	3.94	Average	184	39
2	5350.00	60.86	74.00	-13.14	56.92	3.94	Peak	184	39
3	10640.00	42.41	54.00	-11.59	28.05	14.36	Average	100	65
4	10640.00	56.08	74.00	-17.92	41.72	14.36	Peak	100	65
5	15960.00	43.78	54.00	-10.22	29.92	13.86	Average	100	66
6	15960.00	57.52	74.00	-16.48	43.66	13.86	Peak	100	66

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

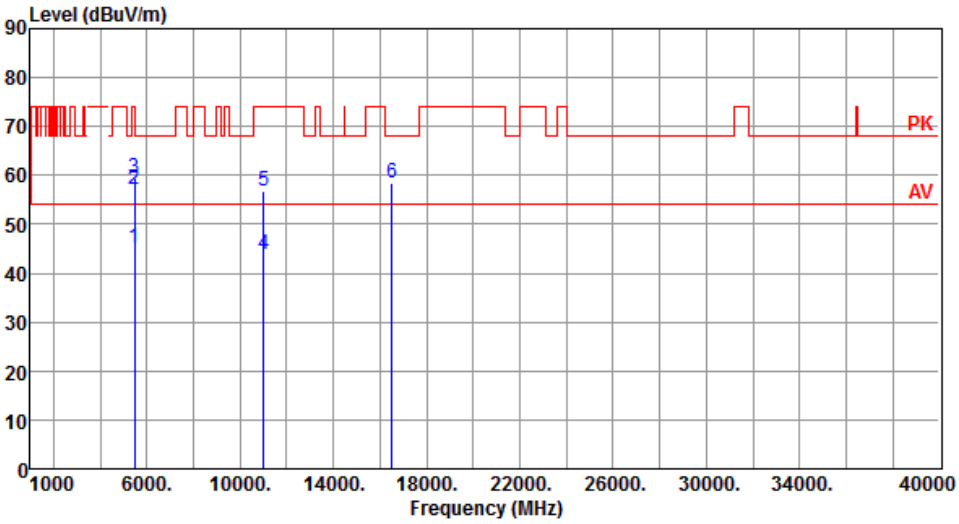
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	43.01	54.00	-10.99	39.07	3.94	Average	207	344
2	5350.00	56.01	74.00	-17.99	52.07	3.94	Peak	207	344
3	10640.00	46.48	54.00	-7.52	32.12	14.36	Average	171	35
4	10640.00	56.82	74.00	-17.18	42.46	14.36	Peak	171	35
5	15960.00	43.64	54.00	-10.36	29.78	13.86	Average	100	31
6	15960.00	56.78	74.00	-17.22	42.92	13.86	Peak	100	31

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

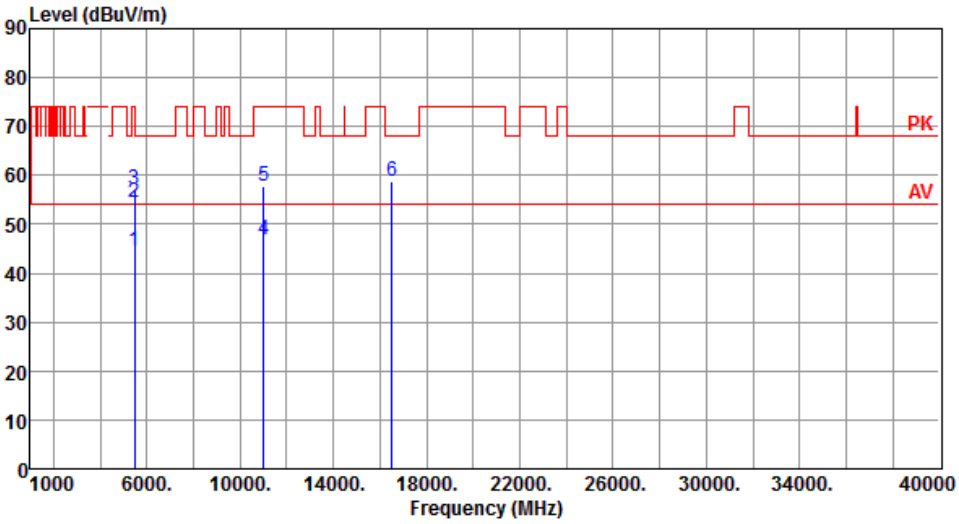
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	45.25	54.00	-8.75	40.84	4.41	Average	196	26
2	5460.00	57.25	74.00	-16.75	52.84	4.41	Peak	196	26
3	5470.00	59.54	68.20	-8.66	55.12	4.42	Peak	196	26
4	11000.00	43.76	54.00	-10.24	28.98	14.78	Average	100	62
5	11000.00	56.76	74.00	-17.24	41.98	14.78	Peak	100	62
6	16500.00	58.42	68.20	-9.78	42.53	15.89	Peak	100	63

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

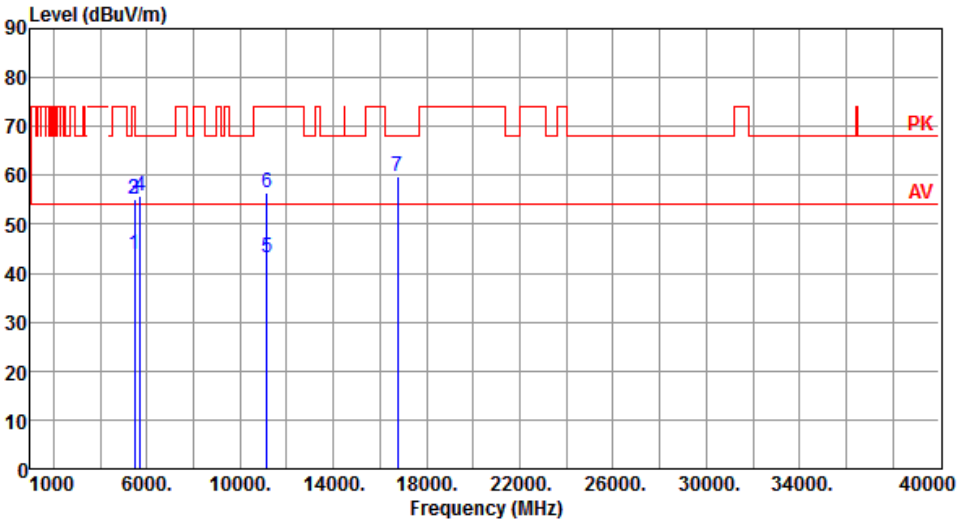
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	44.51	54.00	-9.49	40.10	4.41	Average	207	352
2	5460.00	54.57	74.00	-19.43	50.16	4.41	Peak	207	352
3	5470.00	57.22	68.20	-10.98	52.80	4.42	Peak	207	352
4	11000.00	46.68	54.00	-7.32	31.90	14.78	Average	174	39
5	11000.00	57.81	74.00	-16.19	43.03	14.78	Peak	174	39
6	16500.00	58.79	68.20	-9.41	42.90	15.89	Peak	100	40

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

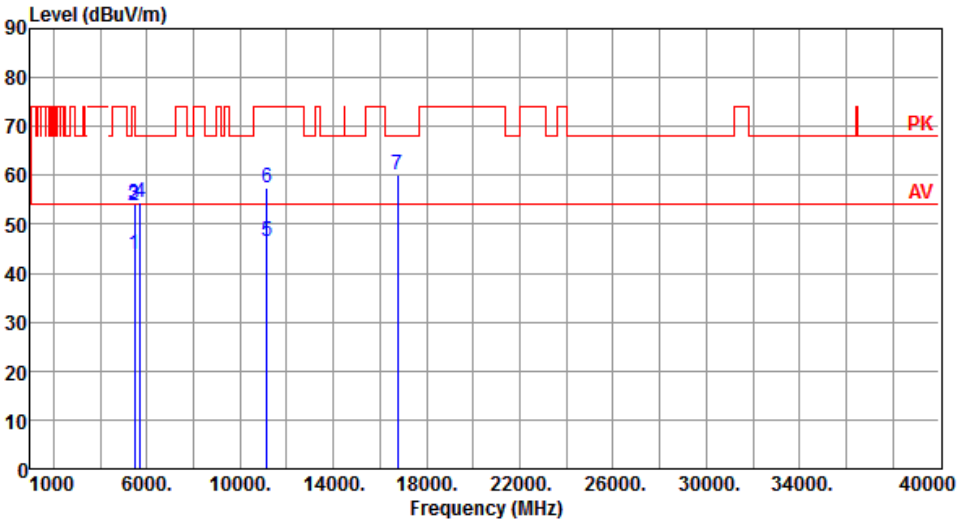
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	43.92	54.00	-10.08	39.51	4.41	Average	199	22
2	5460.00	55.14	74.00	-18.86	50.73	4.41	Peak	199	22
3	5470.00	55.24	68.20	-12.96	50.82	4.42	Peak	199	22
4	5725.00	55.93	68.20	-12.27	51.18	4.75	Peak	199	22
5	11160.00	43.16	54.00	-10.84	28.72	14.44	Average	100	58
6	11160.00	56.49	74.00	-17.51	42.05	14.44	Peak	100	58
7	16740.00	59.76	68.20	-8.44	42.49	17.27	Peak	100	59

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

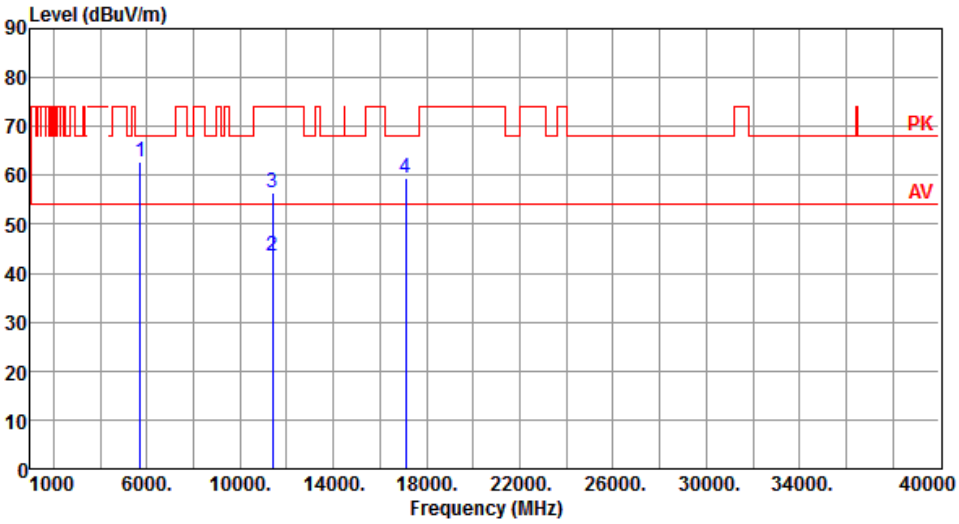
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	43.71	54.00	-10.29	39.30	4.41	Average	217	346
2	5460.00	53.84	74.00	-20.16	49.43	4.41	Peak	217	346
3	5470.00	54.00	68.20	-14.20	49.58	4.42	Peak	217	346
4	5725.00	54.30	68.20	-13.90	49.55	4.75	Peak	217	346
5	11160.00	46.49	54.00	-7.51	32.05	14.44	Average	172	29
6	11160.00	57.51	74.00	-16.49	43.07	14.44	Peak	172	29
7	16740.00	60.09	68.20	-8.11	42.82	17.27	Peak	100	35

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

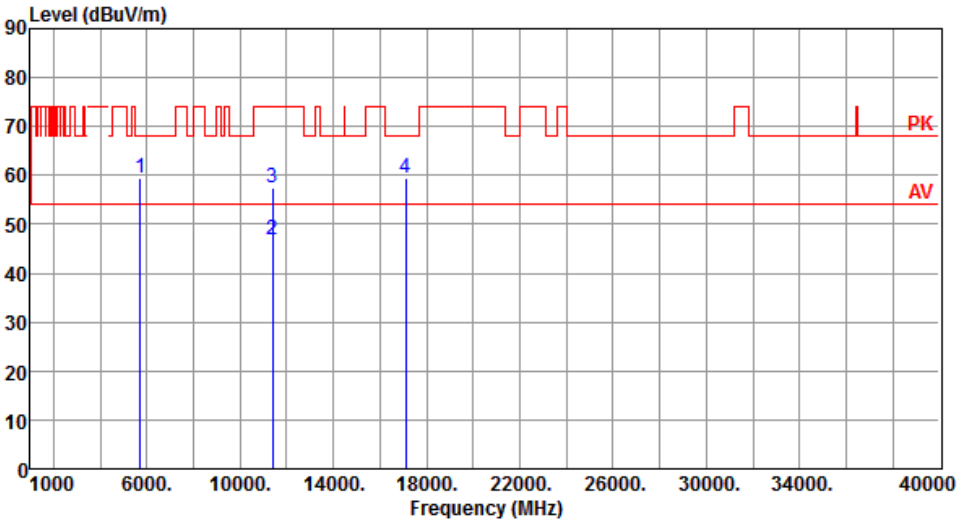
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	62.63	68.20	-5.57	57.88	4.75	Peak	194	15
2	11400.00	43.42	54.00	-10.58	28.84	14.58	Average	100	66
3	11400.00	56.48	74.00	-17.52	41.90	14.58	Peak	100	66
4	17100.00	59.44	68.20	-8.76	42.26	17.18	Peak	100	62

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

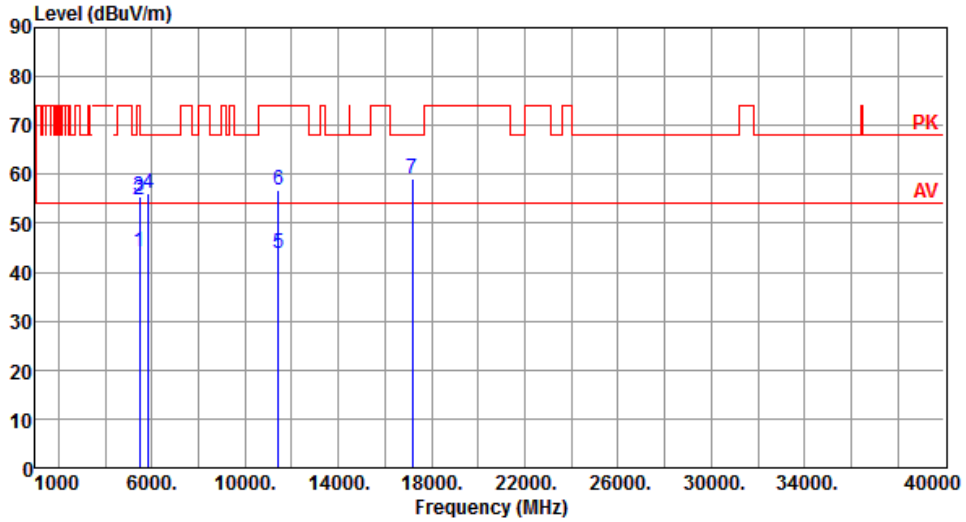
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	59.59	68.20	-8.61	54.84	4.75	Peak	218	338
2	11400.00	46.75	54.00	-7.25	32.17	14.58	Average	176	41
3	11400.00	57.44	74.00	-16.56	42.86	14.58	Peak	176	41
4	17100.00	59.53	68.20	-8.67	42.35	17.18	Peak	100	36

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

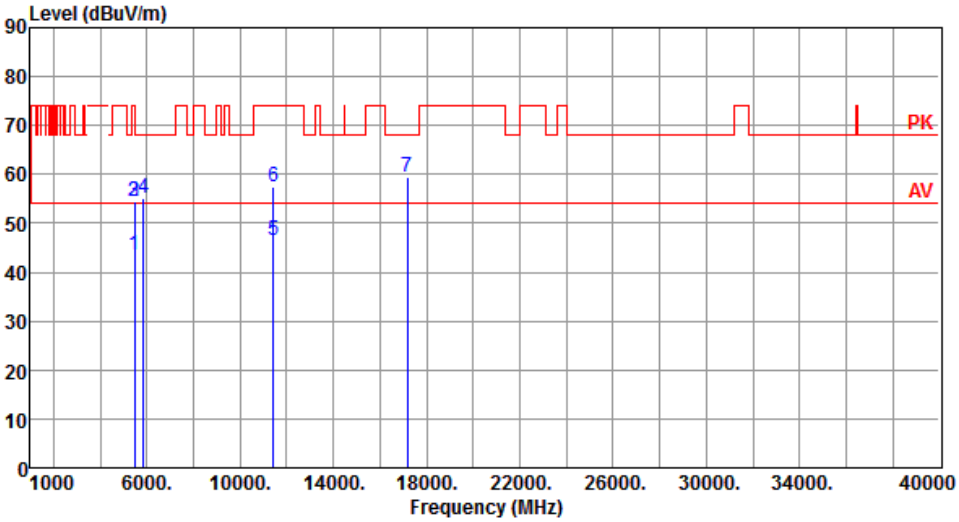
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		



	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	44.25	54.00	-9.75	39.84	4.41	Average	196	19
2	5460.00	54.95	74.00	-19.05	50.54	4.41	Peak	196	19
3	5470.00	55.30	68.20	-12.90	50.88	4.42	Peak	196	19
4	5850.00	56.02	68.20	-12.18	50.87	5.15	Peak	196	19
5	11420.00	43.72	54.00	-10.28	29.11	14.61	Average	100	59
6	11420.00	56.63	74.00	-17.37	42.02	14.61	Peak	100	59
7	17160.00	59.26	68.20	-8.94	41.93	17.33	Peak	100	63

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

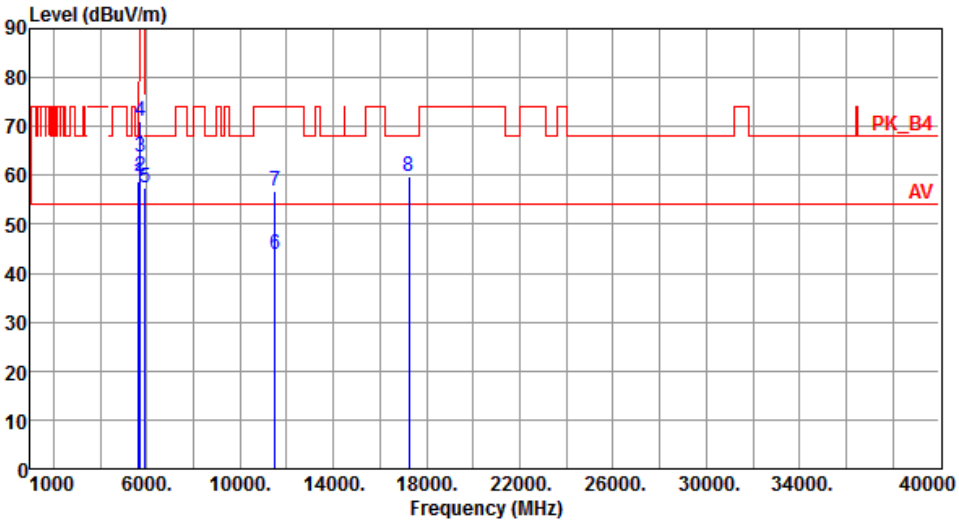
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Vertical		



	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	43.53	54.00	-10.47	39.12	4.41	Average	219	339
2	5460.00	54.53	74.00	-19.47	50.12	4.41	Peak	219	339
3	5470.00	54.32	68.20	-13.88	49.90	4.42	Peak	219	339
4	5850.00	55.10	68.20	-13.10	49.95	5.15	Peak	219	339
5	11420.00	46.36	54.00	-7.64	31.75	14.61	Average	172	43
6	11420.00	57.48	74.00	-16.52	42.87	14.61	Peak	172	43
7	17160.00	59.40	68.20	-8.80	42.07	17.33	Peak	100	37

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

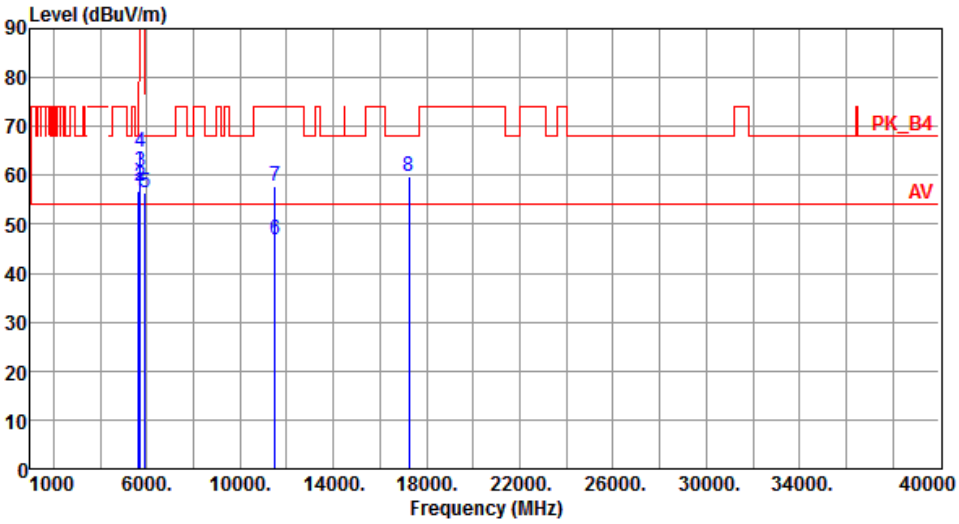
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	58.70	68.20	-9.50	54.16	4.54	Peak	206	23
2	5700.00	59.86	105.20	-45.34	55.18	4.68	Peak	206	23
3	5720.00	63.90	110.80	-46.90	59.17	4.73	Peak	206	23
4	5725.00	71.02	122.20	-51.18	66.27	4.75	Peak	206	23
5	5925.00	57.58	68.20	-10.62	52.30	5.28	Peak	206	23
6	11490.00	43.70	54.00	-10.30	28.99	14.71	Average	100	60
7	11490.00	56.93	74.00	-17.07	42.22	14.71	Peak	100	60
8	17235.00	59.79	68.20	-8.41	42.26	17.53	Peak	100	67

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

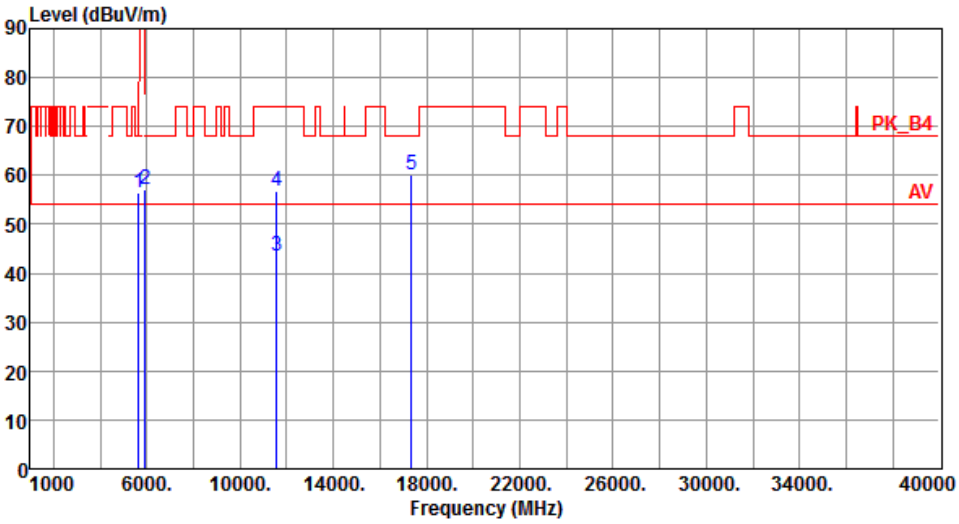
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	56.68	68.20	-11.52	52.14	4.54	Peak	213	341
2	5700.00	57.94	105.20	-47.26	53.26	4.68	Peak	213	341
3	5720.00	60.92	110.80	-49.88	56.19	4.73	Peak	213	341
4	5725.00	64.91	122.20	-57.29	60.16	4.75	Peak	213	341
5	5925.00	56.54	68.20	-11.66	51.26	5.28	Peak	213	341
6	11490.00	46.95	54.00	-7.05	32.24	14.71	Average	175	46
7	11490.00	57.86	74.00	-16.14	43.15	14.71	Peak	175	46
8	17235.00	59.85	68.20	-8.35	42.32	17.53	Peak	100	38

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

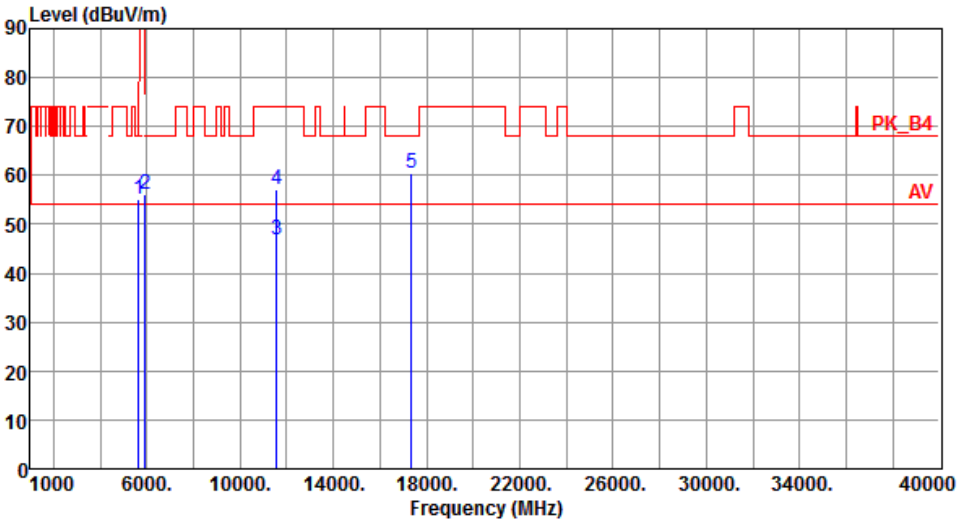
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	56.42	68.20	-11.78	51.88	4.54	Peak	223	24
2	5925.00	57.24	68.20	-10.96	51.96	5.28	Peak	223	24
3	11570.00	43.49	54.00	-10.51	28.96	14.53	Average	100	62
4	11570.00	56.66	74.00	-17.34	42.13	14.53	Peak	100	62
5	17355.00	60.08	68.20	-8.12	42.13	17.95	Peak	100	69

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

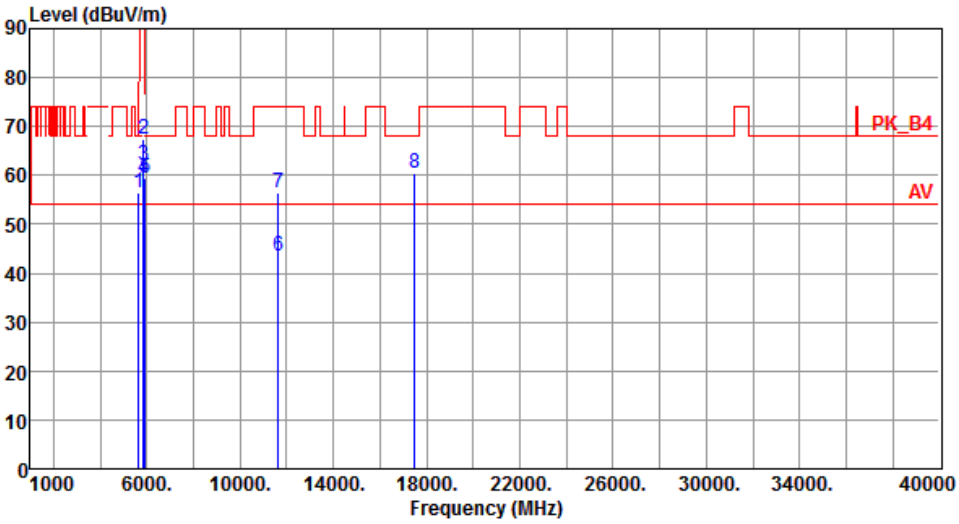
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	55.13	68.20	-13.07	50.59	4.54	Peak	211	342
2	5925.00	55.98	68.20	-12.22	50.70	5.28	Peak	211	342
3	11570.00	46.75	54.00	-7.25	32.22	14.53	Average	173	40
4	11570.00	57.16	74.00	-16.84	42.63	14.53	Peak	173	40
5	17355.00	60.28	68.20	-7.92	42.33	17.95	Peak	100	31

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

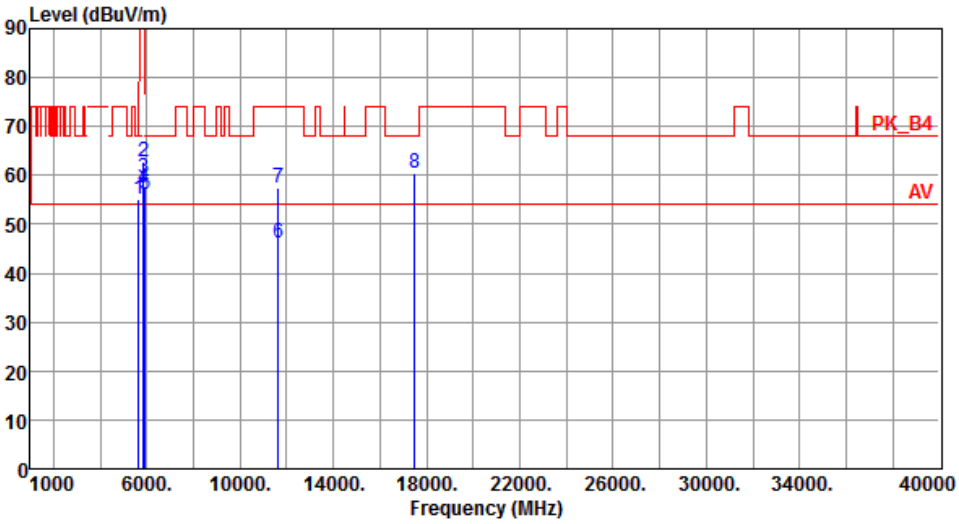
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	56.41	68.20	-11.79	51.87	4.54	Peak	207	27
2	5850.00	67.35	122.20	-54.85	62.20	5.15	Peak	207	27
3	5855.00	62.26	110.80	-48.54	57.11	5.15	Peak	207	27
4	5875.00	59.57	105.20	-45.63	54.38	5.19	Peak	207	27
5	5925.00	59.54	68.20	-8.66	54.26	5.28	Peak	207	27
6	11650.00	43.44	54.00	-10.56	29.23	14.21	Average	100	65
7	11650.00	56.56	74.00	-17.44	42.35	14.21	Peak	100	65
8	17475.00	60.60	68.20	-7.60	42.32	18.28	Peak	100	62

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

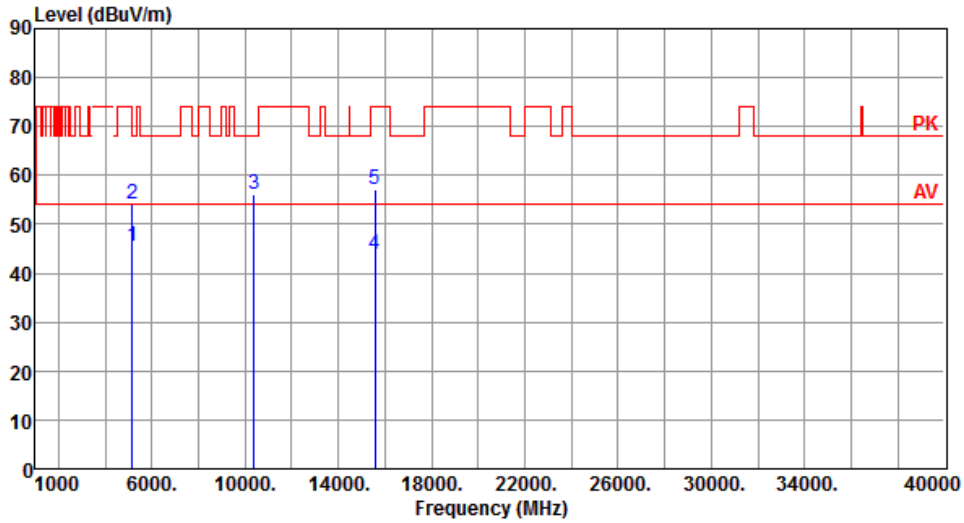


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	55.04	68.20	-13.16	50.50	4.54	Peak	200	335
2	5850.00	62.70	122.20	-59.50	57.55	5.15	Peak	200	335
3	5855.00	59.46	110.80	-51.34	54.31	5.15	Peak	200	335
4	5875.00	57.42	105.20	-47.78	52.23	5.19	Peak	200	335
5	5925.00	56.28	68.20	-11.92	51.00	5.28	Peak	200	335
6	11650.00	46.07	54.00	-7.93	31.86	14.21	Average	172	42
7	11650.00	57.40	74.00	-16.60	43.19	14.21	Peak	172	42
8	17475.00	60.46	68.20	-7.74	42.18	18.28	Peak	100	42

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

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

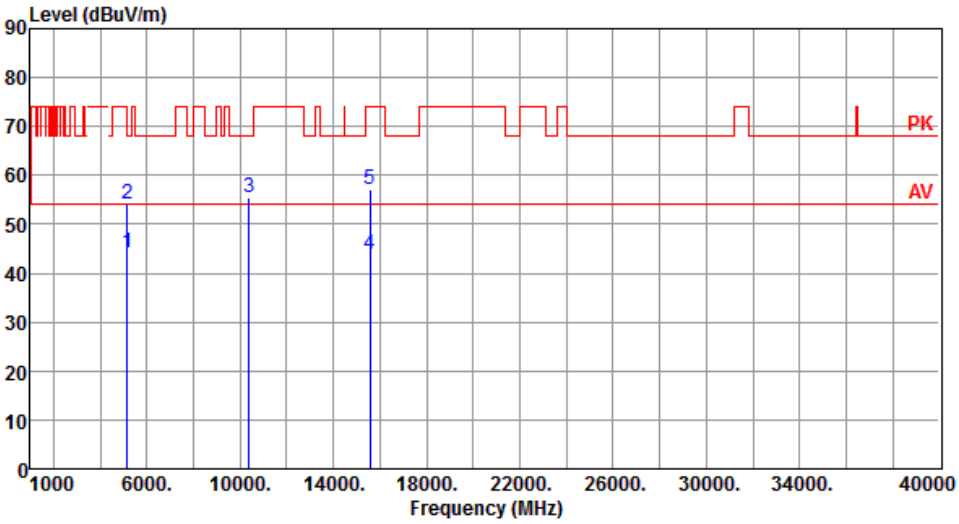
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	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	45.45	54.00	-8.55	41.01	4.44	Average	189	42
2	5150.00	54.18	74.00	-19.82	49.74	4.44	Peak	189	42
3	10380.00	55.98	68.20	-12.22	41.64	14.34	Peak	100	62
4	15570.00	43.99	54.00	-10.01	29.54	14.45	Average	100	63
5	15570.00	57.10	74.00	-16.90	42.65	14.45	Peak	100	63

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

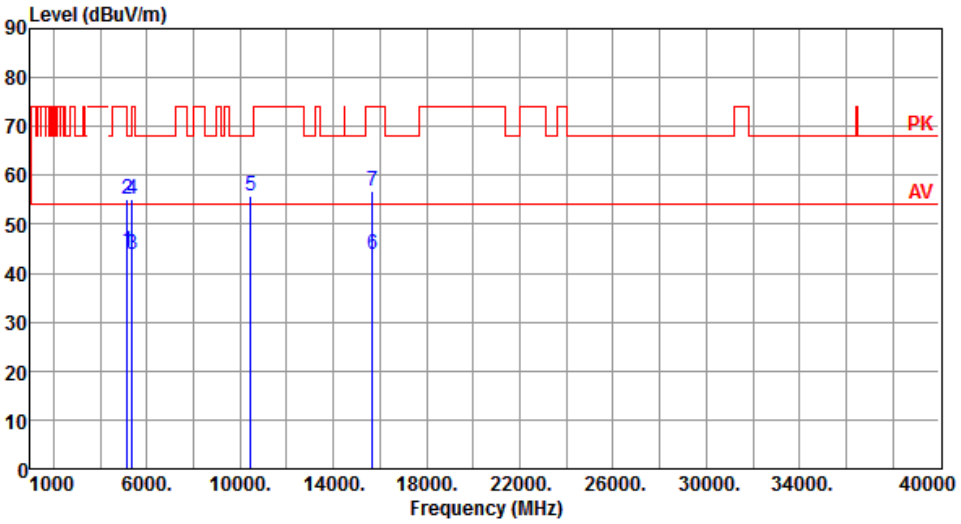
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	44.15	54.00	-9.85	39.71	4.44	Average	207	344
2	5150.00	54.02	74.00	-19.98	49.58	4.44	Peak	207	344
3	10380.00	55.58	68.20	-12.62	41.24	14.34	Peak	100	36
4	15570.00	43.96	54.00	-10.04	29.51	14.45	Average	100	36
5	15570.00	57.09	74.00	-16.91	42.64	14.45	Peak	100	36

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

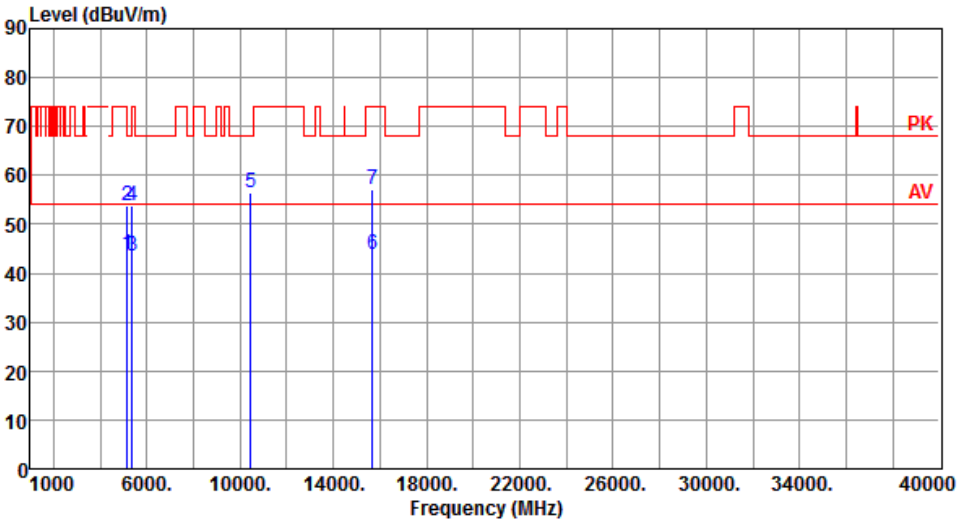
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	44.48	54.00	-9.52	40.04	4.44	Average	195	46
2	5150.00	55.19	74.00	-18.81	50.75	4.44	Peak	195	46
3	5350.00	44.00	54.00	-10.00	40.06	3.94	Average	195	46
4	5350.00	55.03	74.00	-18.97	51.09	3.94	Peak	195	46
5	10460.00	55.93	68.20	-12.27	41.53	14.40	Peak	100	69
6	15690.00	43.97	54.00	-10.03	29.83	14.14	Average	100	62
7	15690.00	56.80	74.00	-17.20	42.66	14.14	Peak	100	62

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

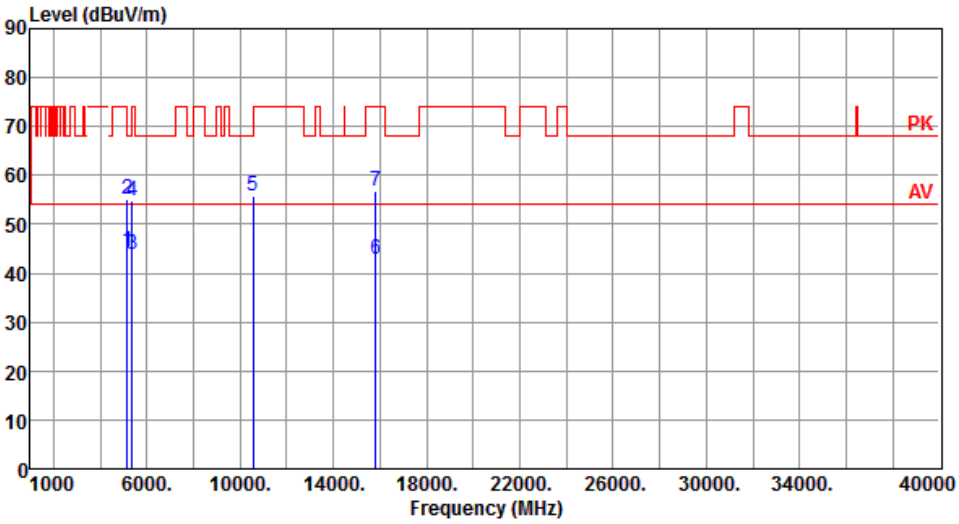
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	43.69	54.00	-10.31	39.25	4.44	Average	199	348
2	5150.00	53.75	74.00	-20.25	49.31	4.44	Peak	199	348
3	5350.00	43.41	54.00	-10.59	39.47	3.94	Average	199	348
4	5350.00	53.86	74.00	-20.14	49.92	3.94	Peak	199	348
5	10460.00	56.43	68.20	-11.77	42.03	14.40	Peak	100	32
6	15690.00	43.73	54.00	-10.27	29.59	14.14	Average	100	36
7	15690.00	57.03	74.00	-16.97	42.89	14.14	Peak	100	36

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

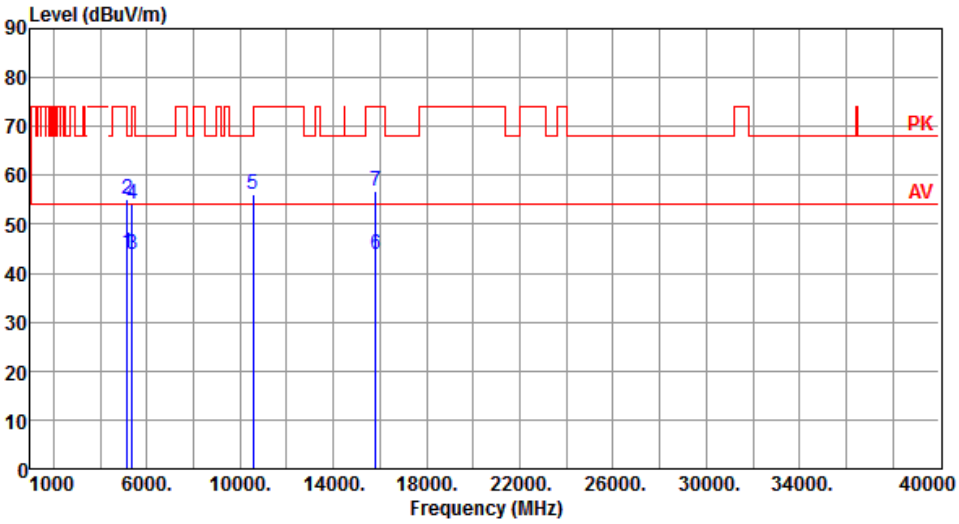
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	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	44.45	54.00	-9.55	40.01	4.44	Average	203	45
2	5150.00	55.00	74.00	-19.00	50.56	4.44	Peak	203	45
3	5350.00	43.90	54.00	-10.10	39.96	3.94	Average	203	45
4	5350.00	54.86	74.00	-19.14	50.92	3.94	Peak	203	45
5	10540.00	55.90	68.20	-12.30	41.50	14.40	Peak	100	70
6	15810.00	42.98	54.00	-11.02	29.01	13.97	Average	100	60
7	15810.00	56.72	74.00	-17.28	42.75	13.97	Peak	100	60

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

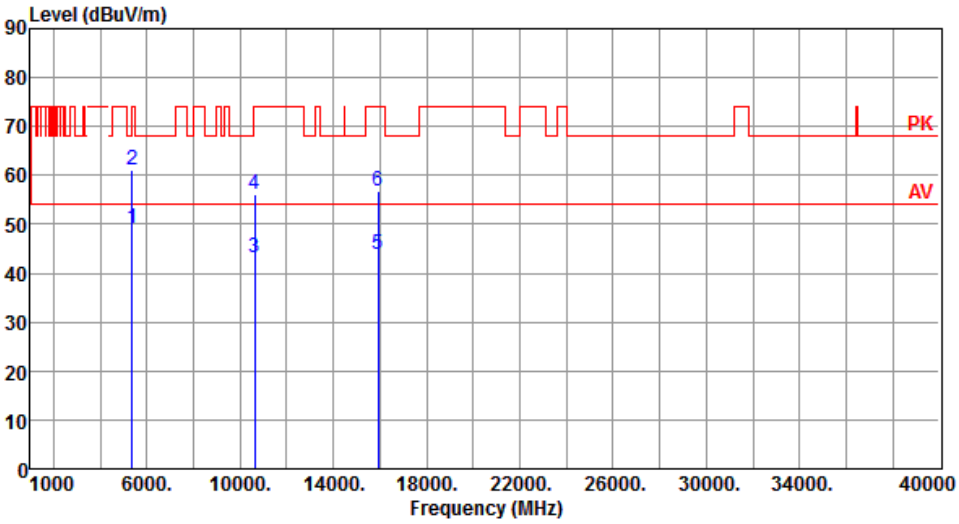
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	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	44.32	54.00	-9.68	39.88	4.44	Average	202	344
2	5150.00	55.19	74.00	-18.81	50.75	4.44	Peak	202	344
3	5350.00	44.00	54.00	-10.00	40.06	3.94	Average	202	344
4	5350.00	54.03	74.00	-19.97	50.09	3.94	Peak	202	344
5	10540.00	56.06	68.20	-12.14	41.66	14.40	Peak	100	38
6	15810.00	43.92	54.00	-10.08	29.95	13.97	Average	100	42
7	15810.00	56.91	74.00	-17.09	42.94	13.97	Peak	100	42

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

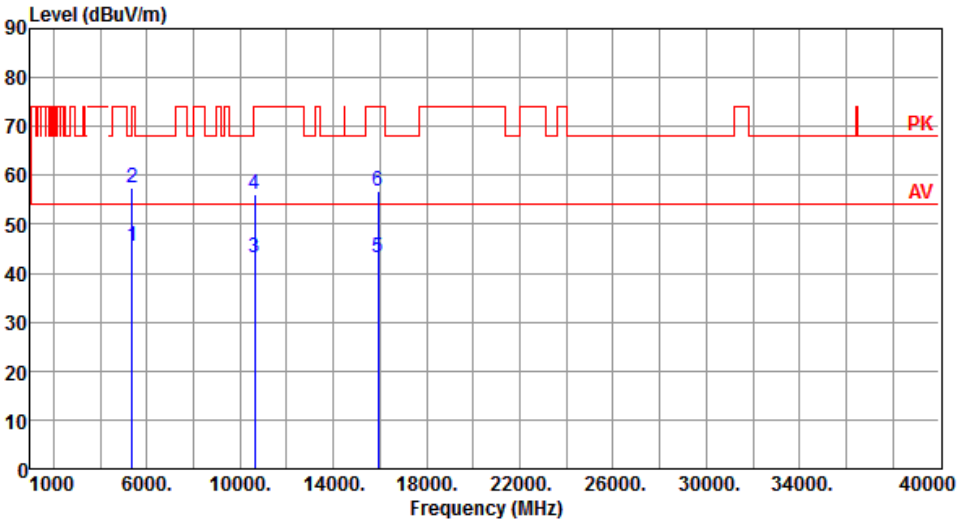
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	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	49.01	54.00	-4.99	45.07	3.94	Average	202	42
2	5350.00	61.11	74.00	-12.89	57.17	3.94	Peak	202	42
3	10620.00	43.04	54.00	-10.96	28.66	14.38	Average	100	59
4	10620.00	56.17	74.00	-17.83	41.79	14.38	Peak	100	59
5	15930.00	43.67	54.00	-10.33	29.77	13.90	Average	100	60
6	15930.00	56.80	74.00	-17.20	42.90	13.90	Peak	100	60

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

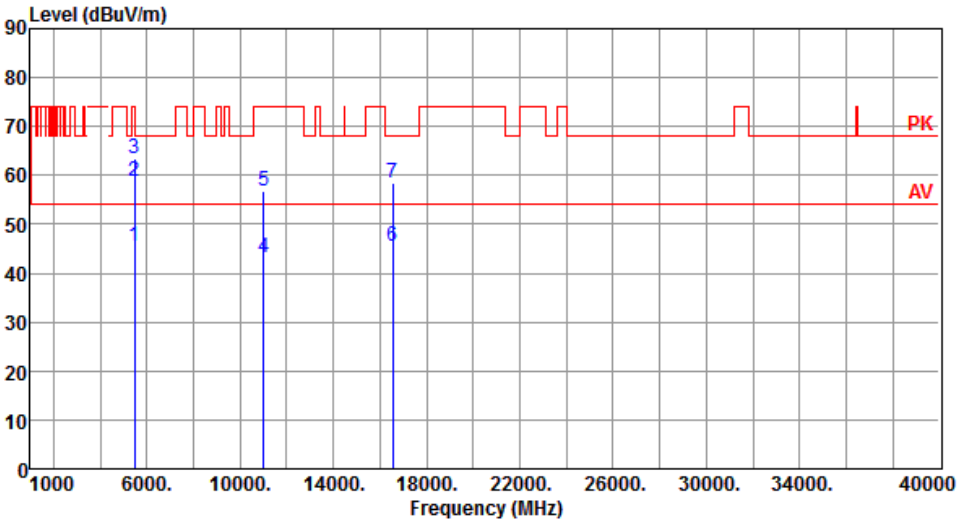
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	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	45.64	54.00	-8.36	41.70	3.94	Average	206	342
2	5350.00	57.41	74.00	-16.59	53.47	3.94	Peak	206	342
3	10620.00	43.24	54.00	-10.76	28.86	14.38	Average	100	32
4	10620.00	56.07	74.00	-17.93	41.69	14.38	Peak	100	32
5	15930.00	43.07	54.00	-10.93	29.17	13.90	Average	100	33
6	15930.00	56.67	74.00	-17.33	42.77	13.90	Peak	100	33

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

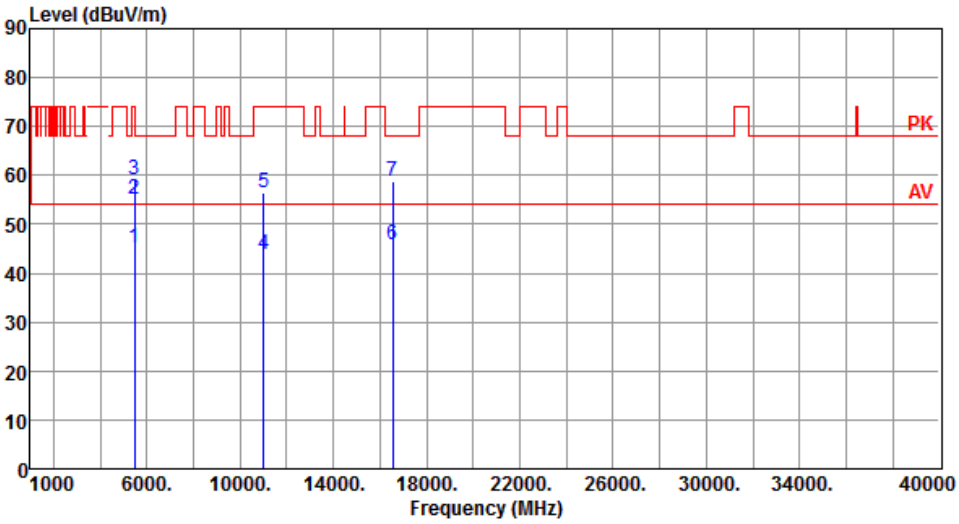
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	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	45.52	54.00	-8.48	41.11	4.41	Average	205	28
2	5460.00	58.69	74.00	-15.31	54.28	4.41	Peak	205	28
3	5470.00	63.30	68.20	-4.90	58.88	4.42	Peak	205	28
4	11020.00	43.29	54.00	-10.71	28.56	14.73	Average	100	72
5	11020.00	56.72	74.00	-17.28	41.99	14.73	Peak	100	72
6	16530.00	45.45	54.00	-8.55	29.45	16.00	Average	100	63
7	16530.00	58.52	68.20	-9.68	42.52	16.00	Peak	100	63

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

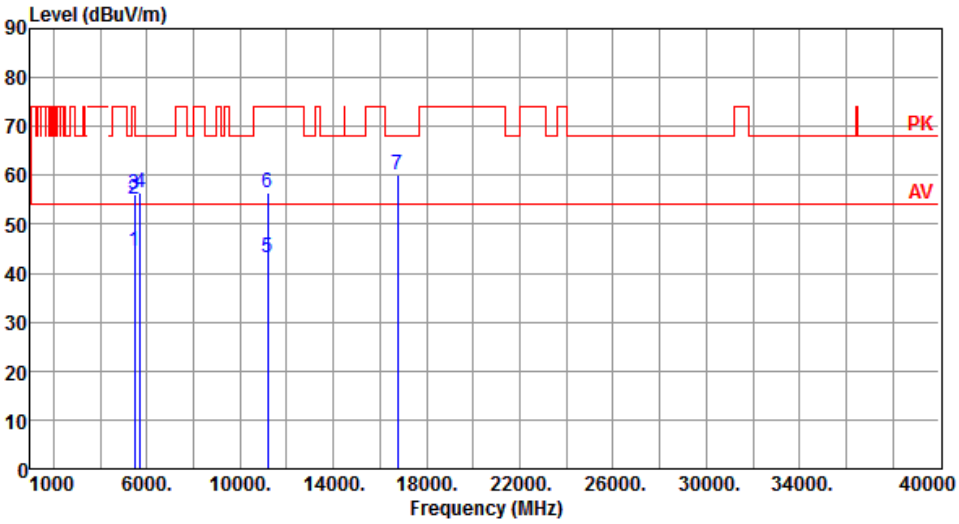
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	45.22	54.00	-8.78	40.81	4.41	Average	207	339
2	5460.00	55.25	74.00	-18.75	50.84	4.41	Peak	207	339
3	5470.00	59.23	68.20	-8.97	54.81	4.42	Peak	207	339
4	11020.00	43.82	54.00	-10.18	29.09	14.73	Average	100	31
5	11020.00	56.57	74.00	-17.43	41.84	14.73	Peak	100	31
6	16530.00	45.68	54.00	-8.32	29.68	16.00	Average	100	33
7	16530.00	58.89	68.20	-9.31	42.89	16.00	Peak	100	33

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

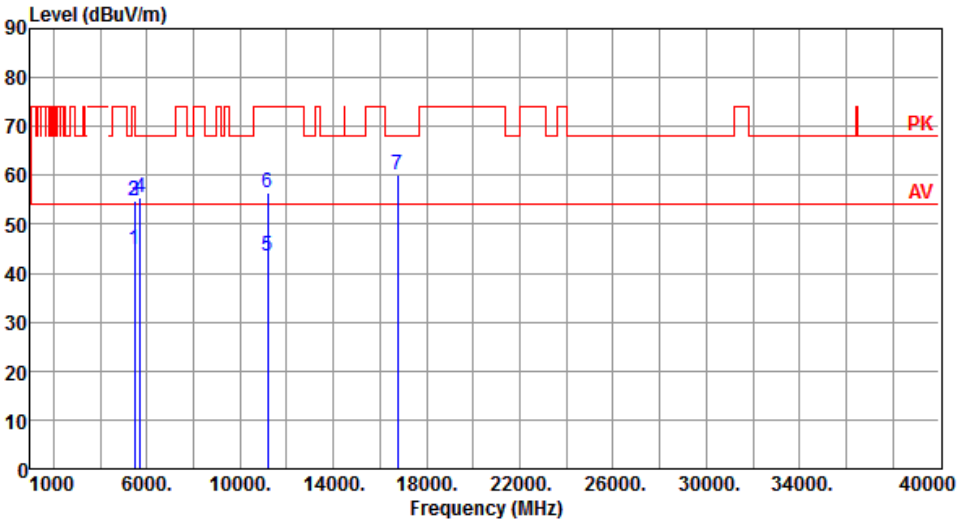
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Horizontal		



	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	44.61	54.00	-9.39	40.20	4.41	Average	207	33
2	5460.00	55.25	74.00	-18.75	50.84	4.41	Peak	207	33
3	5470.00	56.24	68.20	-11.96	51.82	4.42	Peak	207	33
4	5725.00	56.38	68.20	-11.82	51.63	4.75	Peak	207	33
5	11180.00	43.08	54.00	-10.92	28.67	14.41	Average	100	63
6	11180.00	56.47	74.00	-17.53	42.06	14.41	Peak	100	63
7	16770.00	60.06	68.20	-8.14	42.68	17.38	Peak	100	62

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

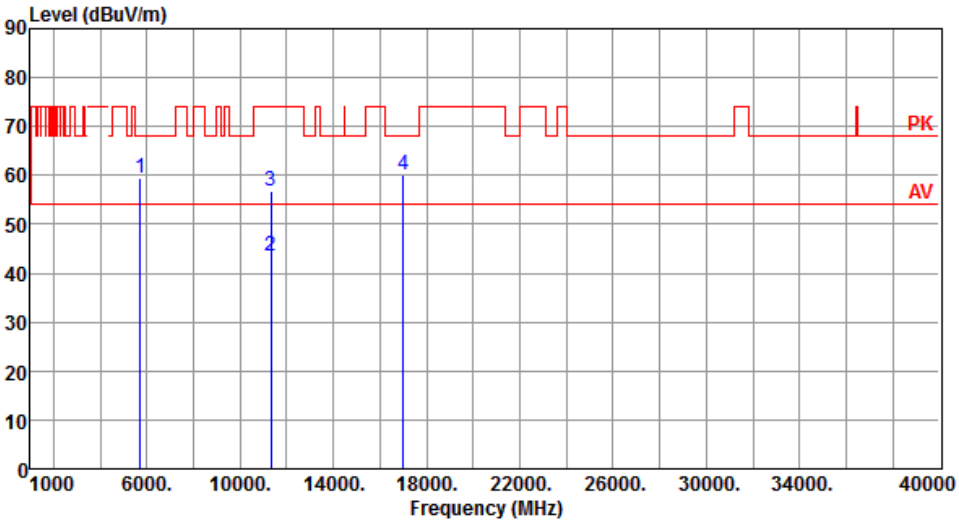
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Vertical		



	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	44.87	54.00	-9.13	40.46	4.41	Average	211	343
2	5460.00	54.88	74.00	-19.12	50.47	4.41	Peak	211	343
3	5470.00	54.93	68.20	-13.27	50.51	4.42	Peak	211	343
4	5725.00	55.41	68.20	-12.79	50.66	4.75	Peak	211	343
5	11180.00	43.34	54.00	-10.66	28.93	14.41	Average	100	69
6	11180.00	56.59	74.00	-17.41	42.18	14.41	Peak	100	69
7	16770.00	60.21	68.20	-7.99	42.83	17.38	Peak	100	62

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

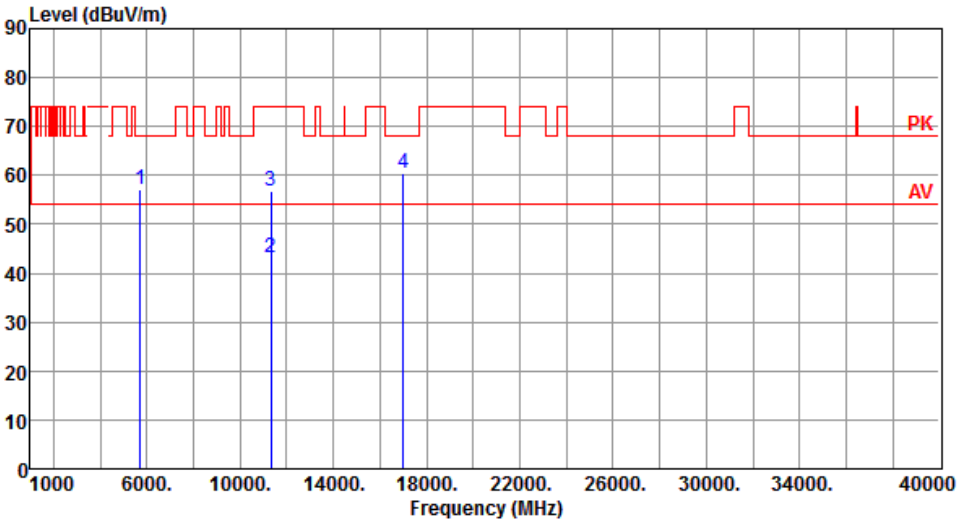
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.55	68.20	-8.65	54.80	4.75	Peak	213	29
2	11340.00	43.50	54.00	-10.50	29.01	14.49	Average	100	58
3	11340.00	56.63	74.00	-17.37	42.14	14.49	Peak	100	58
4	17010.00	60.08	68.20	-8.12	42.60	17.48	Peak	100	60

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

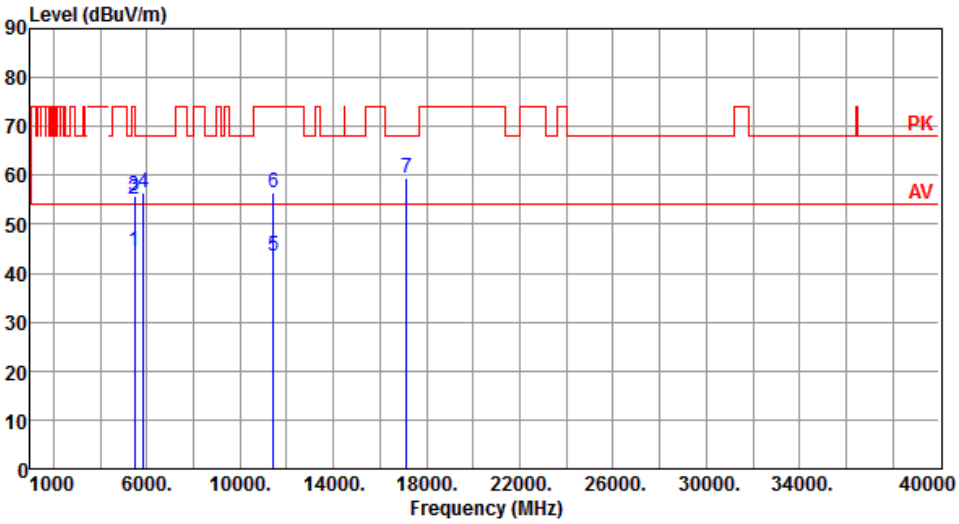
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	57.01	68.20	-11.19	52.26	4.75	Peak	218	342
2	11340.00	43.20	54.00	-10.80	28.71	14.49	Average	100	29
3	11340.00	56.73	74.00	-17.27	42.24	14.49	Peak	100	29
4	17010.00	60.31	68.20	-7.89	42.83	17.48	Peak	100	30

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

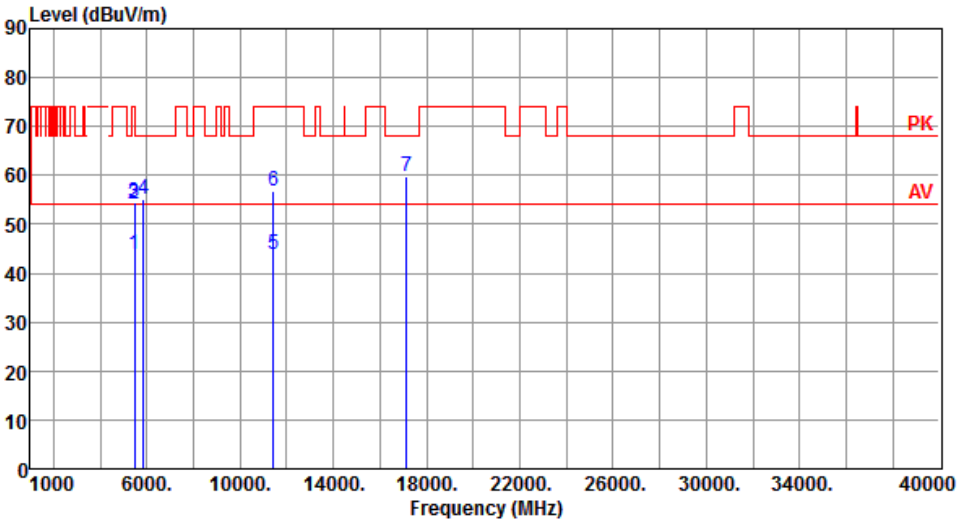
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		



	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	44.51	54.00	-9.49	40.10	4.41	Average	216	30
2	5460.00	55.25	74.00	-18.75	50.84	4.41	Peak	216	30
3	5470.00	55.64	68.20	-12.56	51.22	4.42	Peak	216	30
4	5850.00	56.34	68.20	-11.86	51.19	5.15	Peak	216	30
5	11420.00	43.36	54.00	-10.64	28.75	14.61	Average	100	62
6	11420.00	56.41	74.00	-17.59	41.80	14.61	Peak	100	62
7	17130.00	59.56	68.20	-8.64	42.30	17.26	Peak	100	63

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

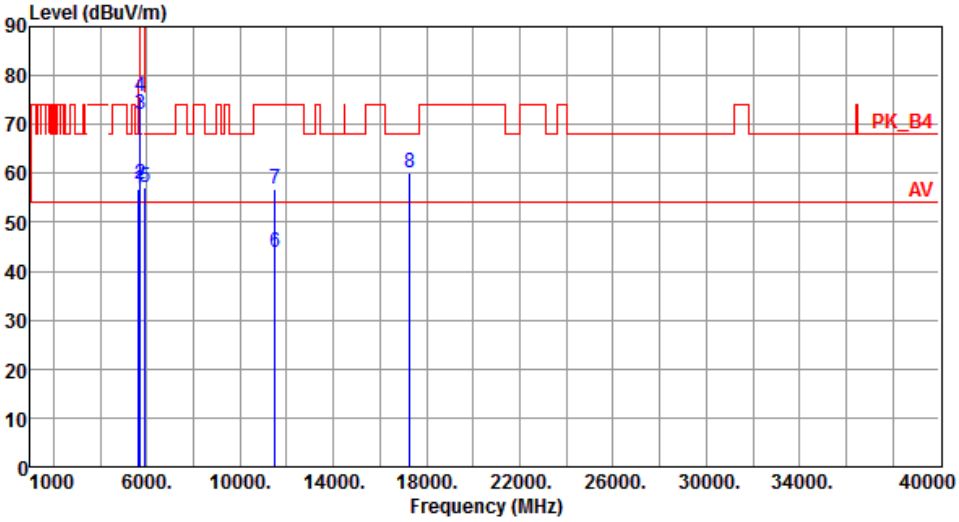
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Vertical		



	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	43.68	54.00	-10.32	39.27	4.41	Average	212	350
2	5460.00	54.14	74.00	-19.86	49.73	4.41	Peak	212	350
3	5470.00	54.63	68.20	-13.57	50.21	4.42	Peak	212	350
4	5850.00	55.19	68.20	-13.01	50.04	5.15	Peak	212	350
5	11420.00	43.88	54.00	-10.12	29.27	14.61	Average	100	38
6	11420.00	56.78	74.00	-17.22	42.17	14.61	Peak	100	38
7	17130.00	59.80	68.20	-8.40	42.54	17.26	Peak	100	40

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

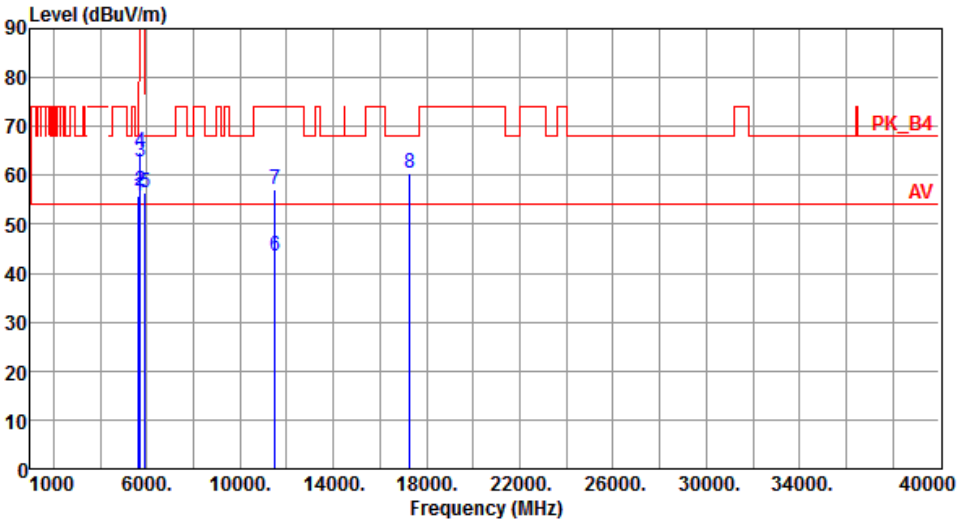
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	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	56.69	68.20	-11.51	52.15	4.54	Peak	210	29
2	5700.00	57.67	105.20	-47.53	52.99	4.68	Peak	210	29
3	5720.00	71.99	110.80	-38.81	67.26	4.73	Peak	210	29
4	5725.00	75.63	122.20	-46.57	70.88	4.75	Peak	210	29
5	5925.00	57.06	68.20	-11.14	51.78	5.28	Peak	210	29
6	11510.00	43.71	54.00	-10.29	29.01	14.70	Average	100	63
7	11510.00	56.91	74.00	-17.09	42.21	14.70	Peak	100	63
8	17265.00	60.02	68.20	-8.18	42.41	17.61	Peak	100	63

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

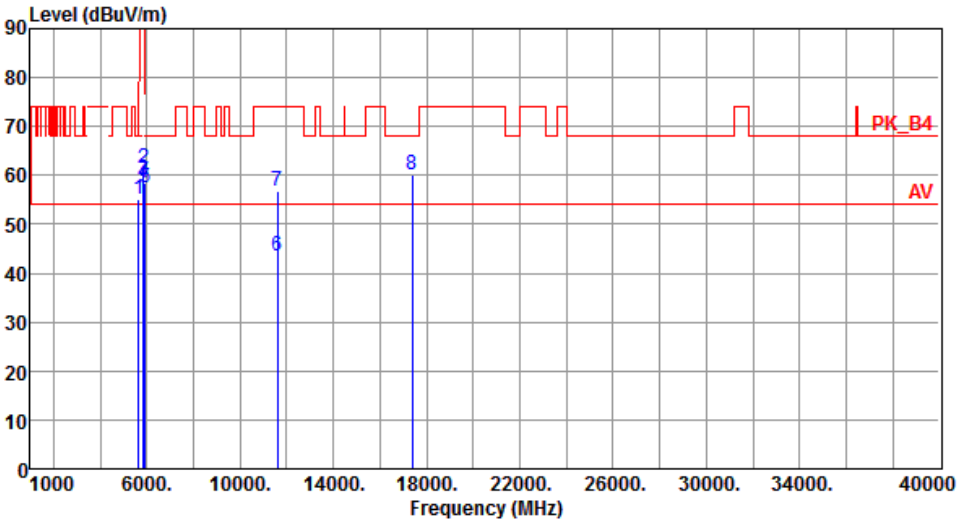
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	55.68	68.20	-12.52	51.14	4.54	Peak	215	355
2	5700.00	56.84	105.20	-48.36	52.16	4.68	Peak	215	355
3	5720.00	62.91	110.80	-47.89	58.18	4.73	Peak	215	355
4	5725.00	64.83	122.20	-57.37	60.08	4.75	Peak	215	355
5	5925.00	56.58	68.20	-11.62	51.30	5.28	Peak	215	355
6	11510.00	43.48	54.00	-10.52	28.78	14.70	Average	100	38
7	11510.00	56.96	74.00	-17.04	42.26	14.70	Peak	100	38
8	17265.00	60.31	68.20	-7.89	42.70	17.61	Peak	100	39

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

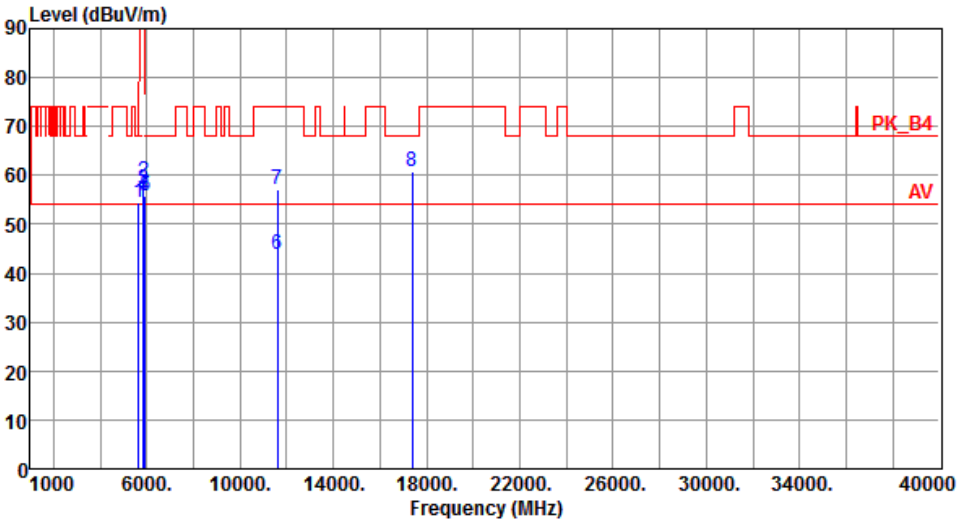
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	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	55.05	68.20	-13.15	50.51	4.54	Peak	211	32
2	5850.00	61.44	122.20	-60.76	56.29	5.15	Peak	211	32
3	5855.00	59.10	110.80	-51.70	53.95	5.15	Peak	211	32
4	5875.00	58.54	105.20	-46.66	53.35	5.19	Peak	211	32
5	5925.00	57.54	68.20	-10.66	52.26	5.28	Peak	211	32
6	11590.00	43.57	54.00	-10.43	29.10	14.47	Average	100	69
7	11590.00	56.70	74.00	-17.30	42.23	14.47	Peak	100	69
8	17385.00	60.17	68.20	-8.03	42.08	18.09	Peak	100	65

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

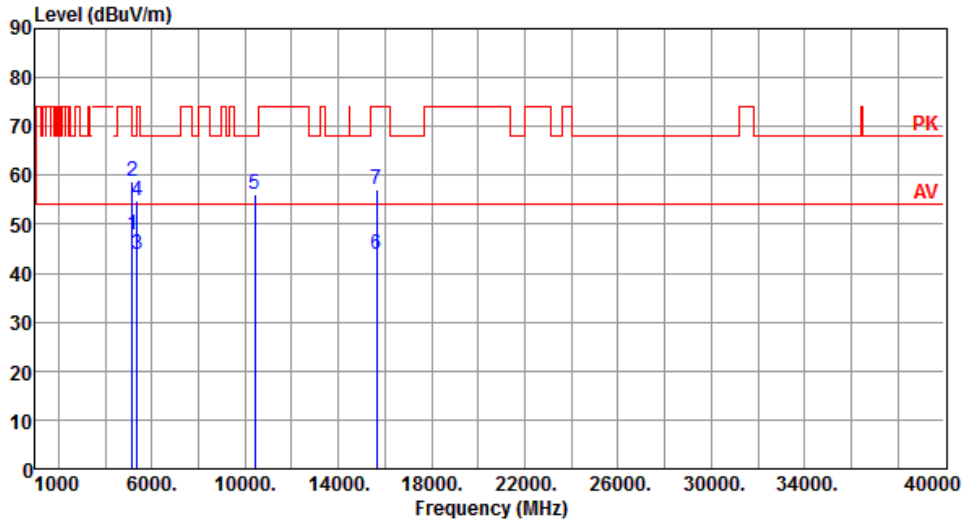


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	54.55	68.20	-13.65	50.01	4.54	Peak	204	348
2	5850.00	58.70	122.20	-63.50	53.55	5.15	Peak	204	348
3	5855.00	57.09	110.80	-53.71	51.94	5.15	Peak	204	348
4	5875.00	55.81	105.20	-49.39	50.62	5.19	Peak	204	348
5	5925.00	55.69	68.20	-12.51	50.41	5.28	Peak	204	348
6	11590.00	43.76	54.00	-10.24	29.29	14.47	Average	100	38
7	11590.00	57.06	74.00	-16.94	42.59	14.47	Peak	100	38
8	17385.00	60.93	68.20	-7.27	42.84	18.09	Peak	100	34

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

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

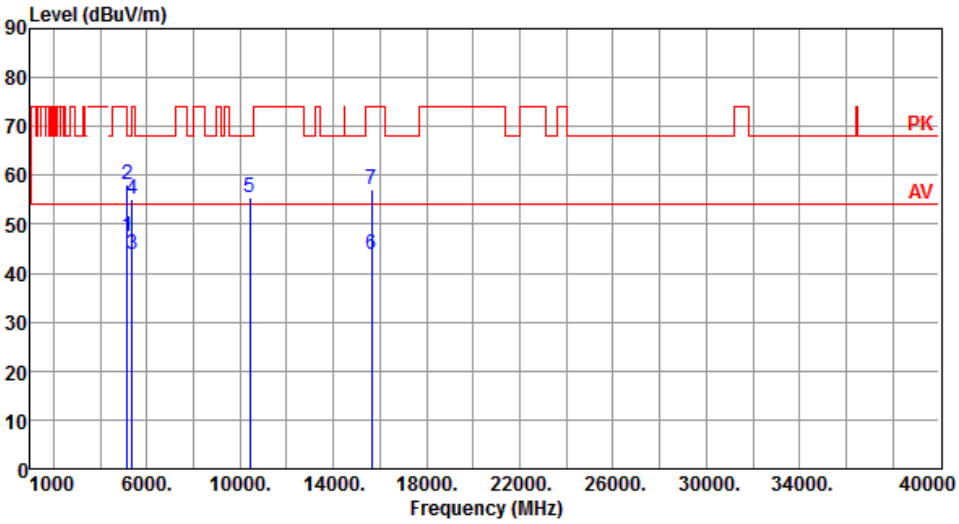
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	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	47.70	54.00	-6.30	43.26	4.44	Average	176	43
2	5150.00	58.67	74.00	-15.33	54.23	4.44	Peak	176	43
3	5350.00	44.00	54.00	-10.00	40.06	3.94	Average	176	43
4	5350.00	54.73	74.00	-19.27	50.79	3.94	Peak	176	43
5	10420.00	56.06	68.20	-12.14	41.66	14.40	Peak	100	62
6	15630.00	43.84	54.00	-10.16	29.57	14.27	Average	100	63
7	15630.00	57.05	74.00	-16.95	42.78	14.27	Peak	100	63

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

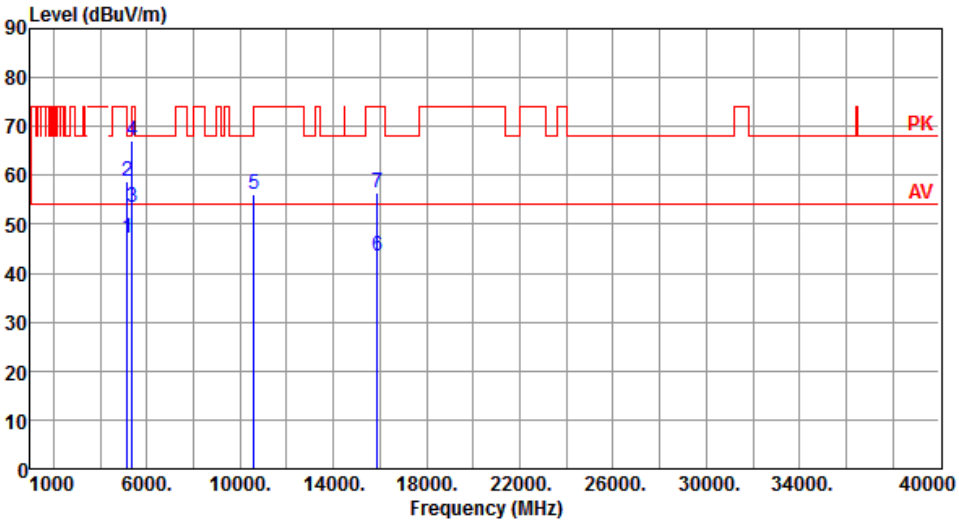
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	47.41	54.00	-6.59	42.97	4.44	Average	203	323
2	5150.00	58.25	74.00	-15.75	53.81	4.44	Peak	203	323
3	5350.00	43.87	54.00	-10.13	39.93	3.94	Average	203	323
4	5350.00	55.00	74.00	-19.00	51.06	3.94	Peak	203	323
5	10420.00	55.62	68.20	-12.58	41.22	14.40	Peak	100	29
6	15630.00	43.77	54.00	-10.23	29.50	14.27	Average	100	30
7	15630.00	57.15	74.00	-16.85	42.88	14.27	Peak	100	30

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

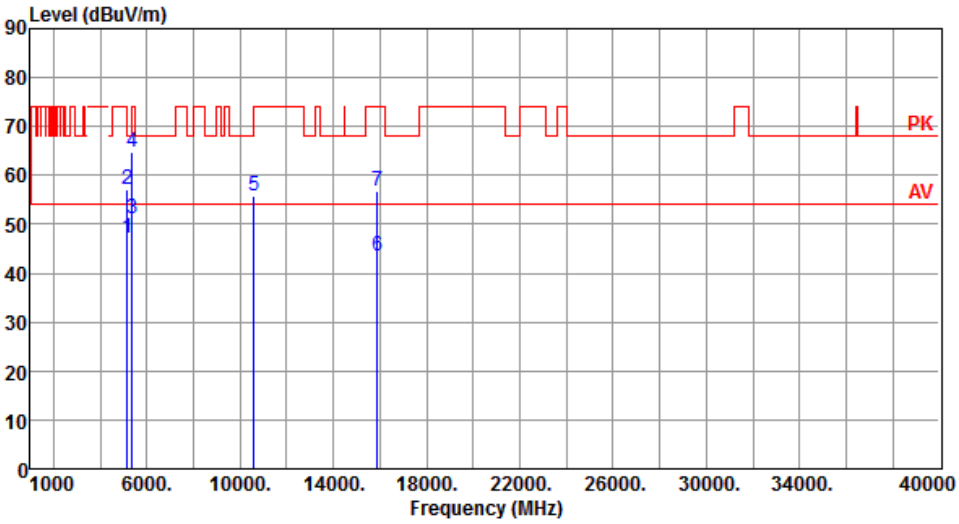
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	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	47.13	54.00	-6.87	42.69	4.44	Average	176	38
2	5150.00	58.69	74.00	-15.31	54.25	4.44	Peak	176	38
3	5350.00	53.49	54.00	-0.51	49.55	3.94	Average	176	42
4	5350.00	66.96	74.00	-7.04	63.02	3.94	Peak	176	42
5	10580.00	56.12	68.20	-12.08	41.74	14.38	Peak	100	68
6	15870.00	43.63	54.00	-10.37	29.67	13.96	Average	100	63
7	15870.00	56.57	74.00	-17.43	42.61	13.96	Peak	100	63

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

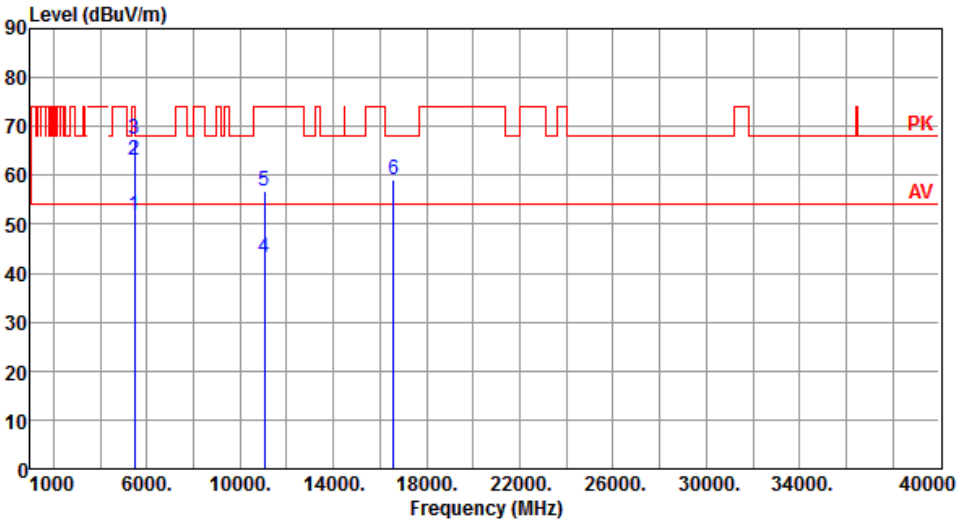
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	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	47.03	54.00	-6.97	42.59	4.44	Average	244	342
2	5150.00	56.98	74.00	-17.02	52.54	4.44	Peak	244	342
3	5350.00	51.25	54.00	-2.75	47.31	3.94	Average	214	342
4	5350.00	64.90	74.00	-9.10	60.96	3.94	Peak	214	342
5	10580.00	55.79	68.20	-12.41	41.41	14.38	Peak	100	36
6	15870.00	43.60	54.00	-10.40	29.64	13.96	Average	100	32
7	15870.00	56.93	74.00	-17.07	42.97	13.96	Peak	100	32

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

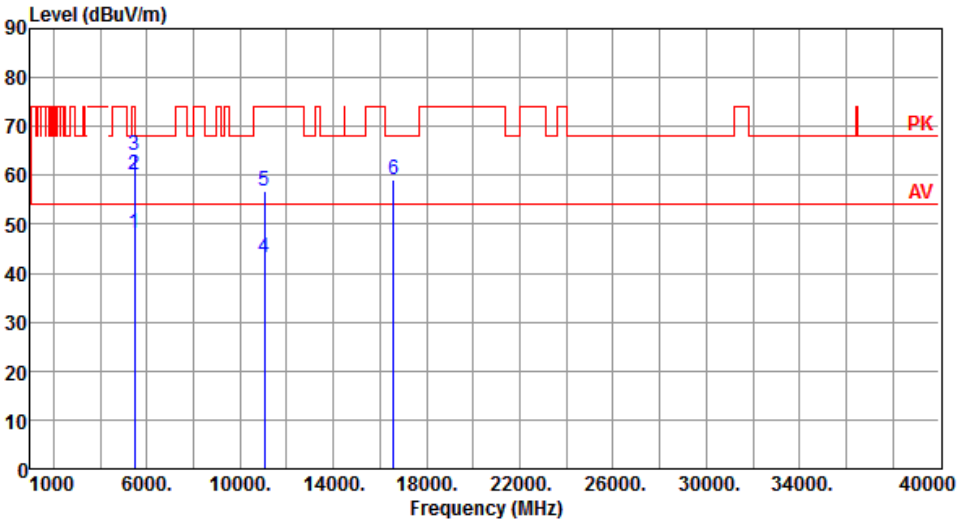
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	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	51.65	54.00	-2.35	47.24	4.41	Average	185	31
2	5460.00	63.24	74.00	-10.76	58.83	4.41	Peak	185	31
3	5470.00	67.30	68.20	-0.90	62.88	4.42	Peak	185	31
4	11060.00	43.20	54.00	-10.80	28.57	14.63	Average	100	66
5	11060.00	56.64	74.00	-17.36	42.01	14.63	Peak	100	66
6	16590.00	59.09	68.20	-9.11	42.87	16.22	Peak	100	63

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

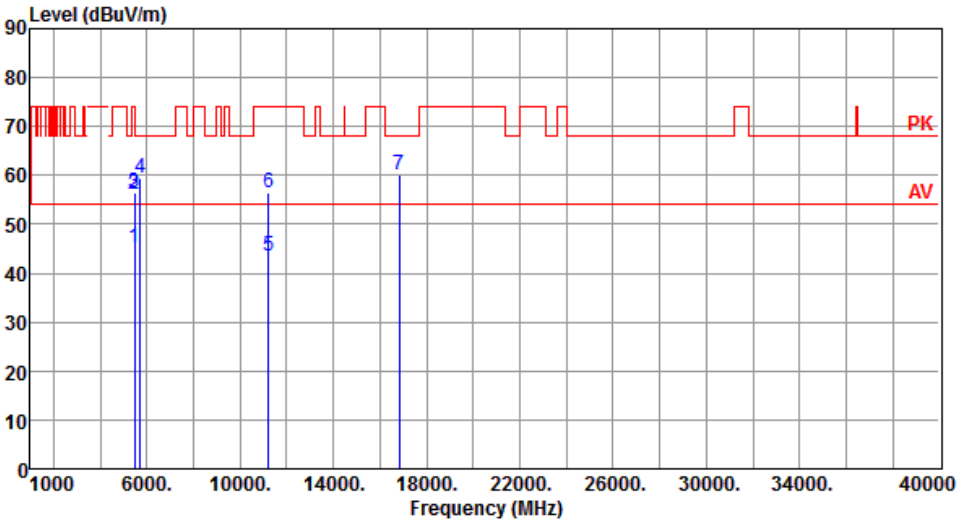
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	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	48.25	54.00	-5.75	43.84	4.41	Average	200	348
2	5460.00	60.14	74.00	-13.86	55.73	4.41	Peak	200	348
3	5470.00	64.20	68.20	-4.00	59.78	4.42	Peak	200	348
4	11060.00	43.24	54.00	-10.76	28.61	14.63	Average	100	39
5	11060.00	56.67	74.00	-17.33	42.04	14.63	Peak	100	39
6	16590.00	59.19	68.20	-9.01	42.97	16.22	Peak	100	35

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

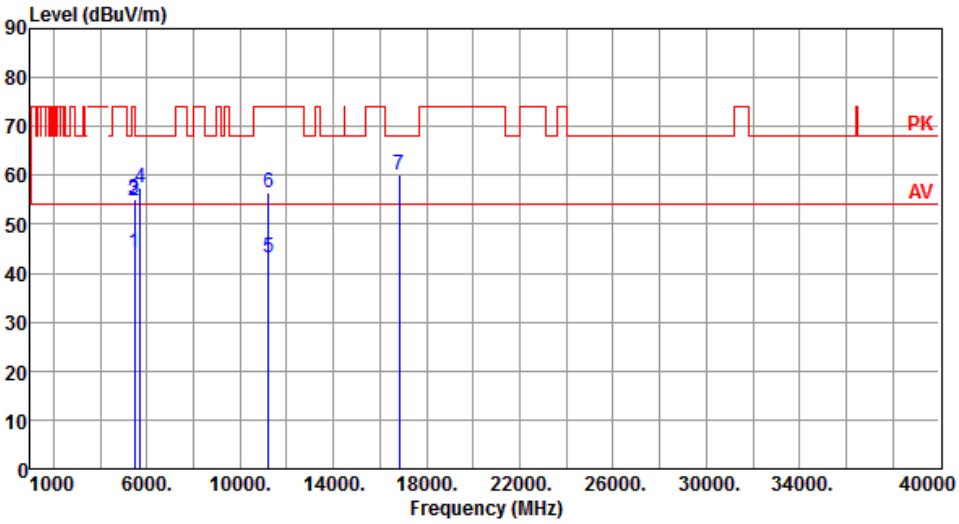
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Horizontal		



	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	45.25	54.00	-8.75	40.84	4.41	Average	190	23
2	5460.00	56.25	74.00	-17.75	51.84	4.41	Peak	190	23
3	5470.00	56.54	68.20	-11.66	52.12	4.42	Peak	190	23
4	5725.00	59.60	68.20	-8.60	54.85	4.75	Peak	190	23
5	11220.00	43.57	54.00	-10.43	29.18	14.39	Average	100	62
6	11220.00	56.54	74.00	-17.46	42.15	14.39	Peak	100	62
7	16830.00	60.24	68.20	-7.96	42.79	17.45	Peak	100	63

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

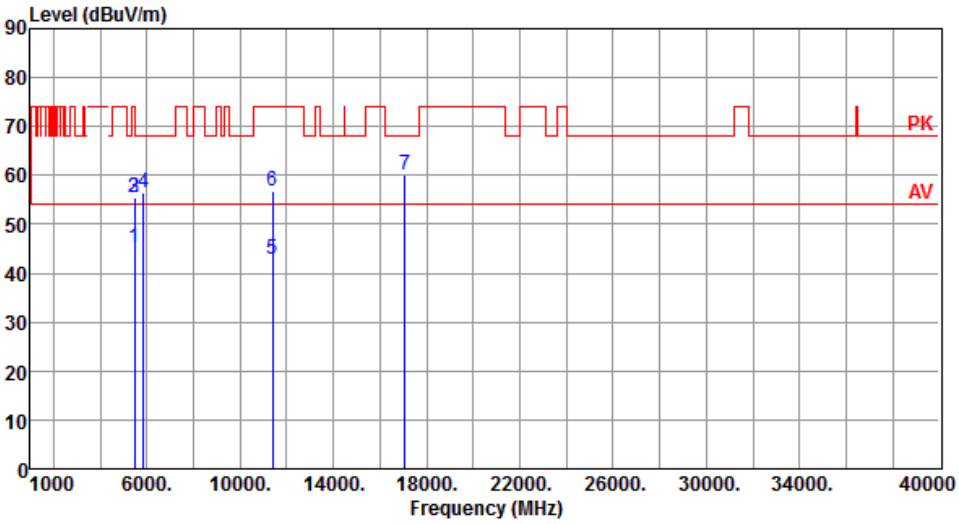
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Vertical		



	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	44.14	54.00	-9.86	39.73	4.41	Average	206	351
2	5460.00	54.92	74.00	-19.08	50.51	4.41	Peak	206	351
3	5470.00	55.26	68.20	-12.94	50.84	4.42	Peak	206	351
4	5725.00	57.29	68.20	-10.91	52.54	4.75	Peak	206	351
5	11220.00	43.27	54.00	-10.73	28.88	14.39	Average	100	32
6	11220.00	56.61	74.00	-17.39	42.22	14.39	Peak	100	32
7	16830.00	60.15	68.20	-8.05	42.70	17.45	Peak	100	39

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

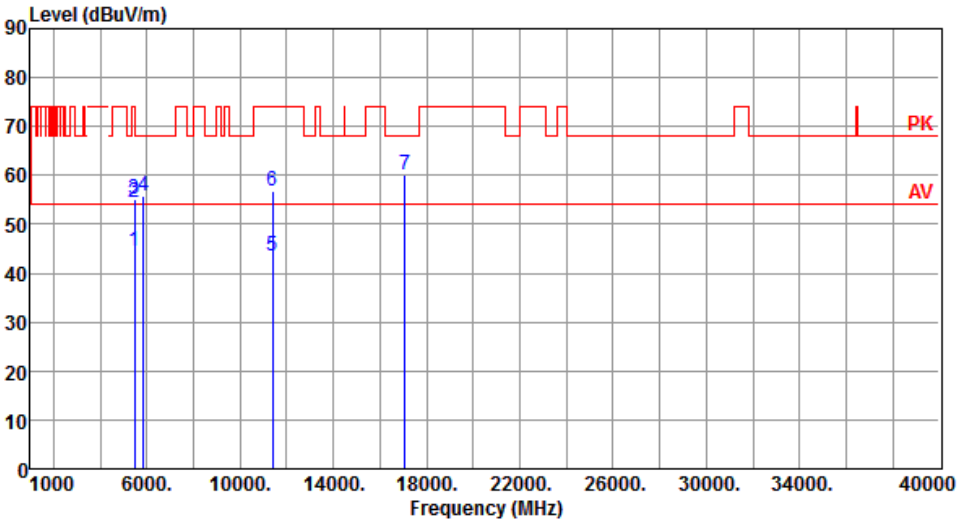
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal		



	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	45.21	54.00	-8.79	40.80	4.41	Average	195	32
2	5460.00	55.56	74.00	-18.44	51.15	4.41	Peak	195	32
3	5470.00	55.62	68.20	-12.58	51.20	4.42	Peak	195	32
4	5850.00	56.34	68.20	-11.86	51.19	5.15	Peak	195	32
5	11380.00	43.00	54.00	-11.00	28.45	14.55	Average	100	63
6	11380.00	56.76	74.00	-17.24	42.21	14.55	Peak	100	63
7	17070.00	59.97	68.20	-8.23	42.69	17.28	Peak	100	62

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

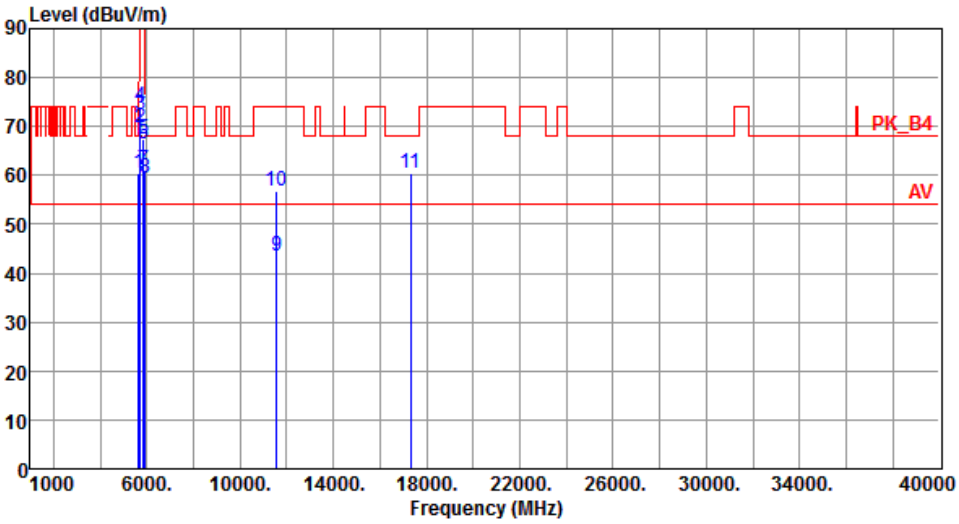
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Vertical		



	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	44.51	54.00	-9.49	40.10	4.41	Average	207	347
2	5460.00	54.63	74.00	-19.37	50.22	4.41	Peak	207	347
3	5470.00	55.22	68.20	-12.98	50.80	4.42	Peak	207	347
4	5850.00	55.94	68.20	-12.26	50.79	5.15	Peak	207	347
5	11380.00	43.57	54.00	-10.43	29.02	14.55	Average	100	32
6	11380.00	56.70	74.00	-17.30	42.15	14.55	Peak	100	32
7	17070.00	60.03	68.20	-8.17	42.75	17.28	Peak	100	30

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

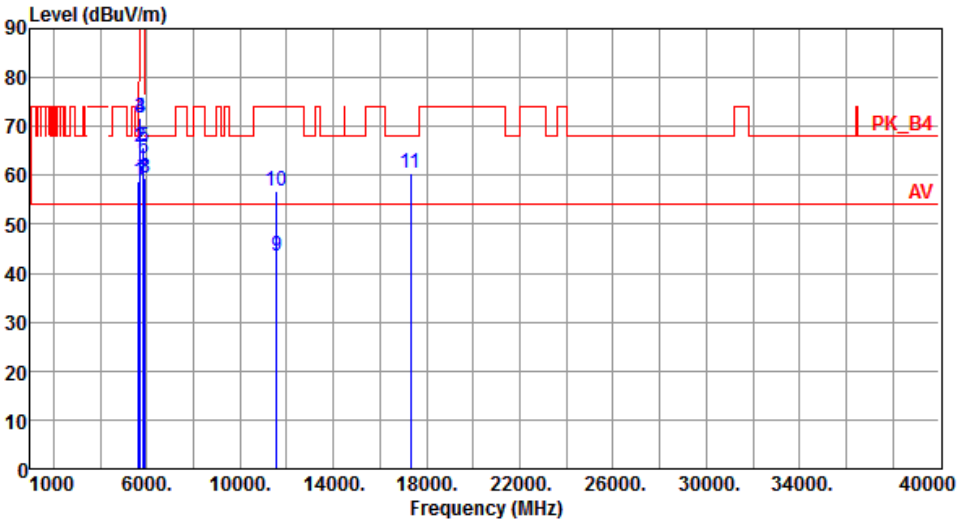
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	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	60.43	68.20	-7.77	55.89	4.54	Peak	168	18
2	5700.00	69.67	105.20	-35.53	64.99	4.68	Peak	168	18
3	5720.00	72.48	110.80	-38.32	67.75	4.73	Peak	168	18
4	5725.00	74.13	122.20	-48.07	69.38	4.75	Peak	168	18
5	5850.00	67.50	122.20	-54.70	62.35	5.15	Peak	168	18
6	5855.00	66.53	110.80	-44.27	61.38	5.15	Peak	168	18
7	5875.00	61.07	105.20	-44.13	55.88	5.19	Peak	168	18
8	5925.00	59.55	68.20	-8.65	54.27	5.28	Peak	168	18
9	11550.00	43.57	54.00	-10.43	28.99	14.58	Average	100	62
10	11550.00	56.84	74.00	-17.16	42.26	14.58	Peak	100	62
11	17325.00	60.33	68.20	-7.87	42.51	17.82	Peak	100	67

Note 1: Emission Level (dBuV/m) = SA Reading (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	58.64	68.20	-9.56	54.10	4.54	Peak	204	325
2	5700.00	65.65	105.20	-39.55	60.97	4.68	Peak	204	325
3	5720.00	71.58	110.80	-39.22	66.85	4.73	Peak	204	325
4	5725.00	71.81	122.20	-50.39	67.06	4.75	Peak	204	325
5	5850.00	65.86	122.20	-56.34	60.71	5.15	Peak	204	325
6	5855.00	63.42	110.80	-47.38	58.27	5.15	Peak	204	325
7	5875.00	59.11	105.20	-46.09	53.92	5.19	Peak	204	325
8	5925.00	59.40	68.20	-8.80	54.12	5.28	Peak	204	325
9	11550.00	43.61	54.00	-10.39	29.03	14.58	Average	100	39
10	11550.00	56.81	74.00	-17.19	42.23	14.58	Peak	100	39
11	17325.00	60.45	68.20	-7.75	42.63	17.82	Peak	100	40

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

3.6 Frequency Stability

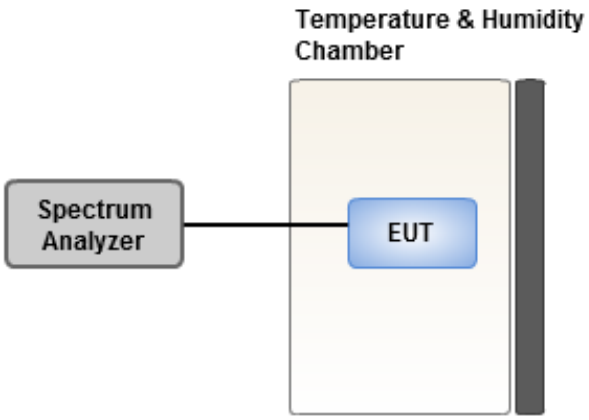
3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 20 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under normal and extreme condition for temperature and voltage.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-1.13	-1.08	-0.83	-1.51
T20°CVmin	-0.49	0.09	-0.10	-0.15
T60CVnom	-0.50	-0.76	-0.79	-0.54
T50CVnom	-0.95	-0.31	-0.42	-0.74
T40°CVnom	-0.91	-0.96	-0.07	-0.93
T30°CVnom	-1.09	-0.69	-0.76	-0.39
T20°CVnom	-1.08	-0.69	-0.94	-1.03
T10°CVnom	-4.40	-4.58	-4.27	-4.44
T0°CVnom	-4.37	-4.06	-3.98	-4.43
T-10°CVnom	-4.19	-3.52	-3.88	-4.05
T-20°CVnom	-7.14	-7.14	-6.85	-7.02
T-30°CVnom	-9.20	-8.63	-9.22	-9.40
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 60		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-0.07	0.14	-0.05	-0.37
T20°CVmin	-0.10	0.13	-0.08	-0.44
T60CVnom	0.40	0.04	0.23	0.89
T50CVnom	0.59	0.75	0.62	0.77
T40°CVnom	-0.03	0.31	0.22	0.75
T30°CVnom	0.03	-0.17	-0.04	-0.03
T20°CVnom	0.02	-0.46	0.35	0.19
T10°CVnom	-3.92	-3.26	-3.41	-3.38
T0°CVnom	-4.25	-3.92	-3.83	-4.35
T-10°CVnom	-3.43	-2.93	-3.60	-3.32
T-20°CVnom	-5.93	-5.82	-5.17	-5.86
T-30°CVnom	-8.12	-8.02	-8.23	-7.71
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 60		Tmin [°C]: -30

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

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

Tel: 886-3-271-8666
Fax: 886-3-318-0155
Email: ICC_Service@icertifi.com.tw

═END═