FCC Test Report

FCC ID	:	**AK8DHURSY63**
Equipment	:	**802.11 abgn(ac)+ BT 4.2 combo module**
Model No.	:	**DHUR-SY63**
Brand Name	:	**Wistron NeWeb Corporation**
Applicant	:	**Sony Corporation**
Address	:	**1-7-1 Konan Minato-ku,Tokyo ,108-0075 Japan**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**May 13, 2019**
Tested Date	:	**May 17 ~ Jun. 28, 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

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Release Record

Report No.	Version	Description	Issued Date
FR950701AN	Rev. 01	Initial issue	Jul. 22, 2019

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.153MHz 52.90 (Margin -12.92dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 11490.00MHz 53.59 (Margin -0.41dB) - 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: 11.36 5250~5350MHz: 20.60 5470~5725MHz: 20.17 5725~5850MHz: 20.06	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**
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	2	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [5] 151-159 [2]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [5] 151-159 [2]	2	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530-5610 5775	42 [1] 58 [1] 106-122 [2] 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

Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
			2412-2472	5150~5250	5250~5350	5500~5700	5725~5850
Wi-Fi ANT-0	Printed	No	1.58	2.43	3.4	4.35	4.26
Wi-Fi ANT-1	Printed	No	1.55	2.58	2.55	2.51	2.65

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc from host

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	151	5755
108	5540	159	5795
112	5560	**VHT80**	
116	5580	42	5210
120	5600	58	5290
124	5620	106	5530
128	5640	122	5610
132	5660	155	5775
136	5680	---	---
140	5700	---	---
149	5745	---	---
153	5765	---	---
157	5785	---	---
161	5805	---	---
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	MT7663 QA, v0.0.2.6		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	98.39%	0.07
	VHT20	98.84%	0.05
	VHT40	97.34%	0.12
	VHT80	94.83%	0.23

1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	0D
11a	5200	0D
11a	5240	0D
11a	5260	20
11a	5300	20
11a	5320	1F
11a	5500	1B
11a	5580	1F
11a	5700	19
11a	5745	1D
11a	5785	1D
11a	5825	1D
VHT20	5180	0F
VHT20	5200	0F
VHT20	5240	0F
VHT20	5260	22
VHT20	5300	22
VHT20	5320	21
VHT20	5500	1C
VHT20	5580	21
VHT20	5700	1B
VHT20	5745	1F
VHT20	5785	1F
VHT20	5825	1F

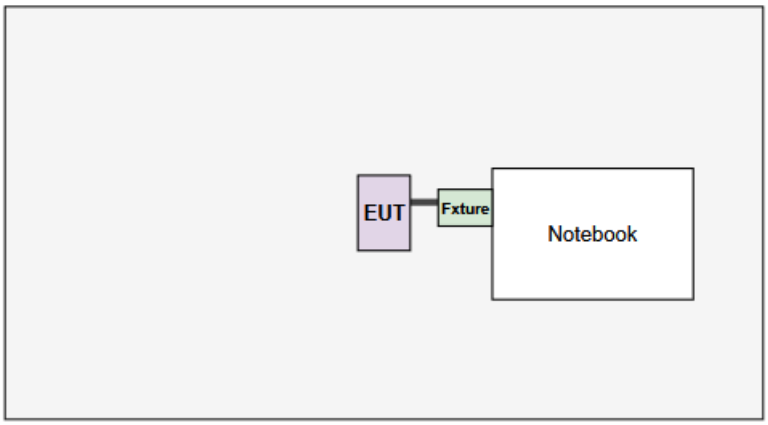
Modulation Mode	Test Frequency (MHz)	Power Index
VHT40	5190	0F
VHT40	5230	0F
VHT40	5270	22
VHT40	5310	1C
VHT40	5510	1B
VHT40	5590	21
VHT40	5670	1D
VHT40	5755	21
VHT40	5795	21
VHT80	5210	0F
VHT80	5290	19
VHT80	5530	14
VHT80	5610	21
VHT80	5775	21

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E5470	DoC	---
2	Fixture	---	---	---	Provided by applicant.

1.3 Test Setup Chart

Test Setup Diagram



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Jan. 08, 2019	Jan. 07, 2020
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 05, 2018	Nov. 04, 2019
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 23, 2018	Oct. 23, 2019
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
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. 18, 2018	Jul. 17, 2019
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. 08, 2018	Oct. 07, 2019
Preamplifier	EMC	EMC02325	980225	Jul. 20, 2018	Jul. 19, 2019
Preamplifier	Agilent	83017A	MY39501308	Oct. 04, 2018	Oct. 03, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 09, 2018	Aug. 08, 2019
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 08, 2018	Oct. 07, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 08, 2018	Oct. 07, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 08, 2018	Oct. 07, 2019
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 08, 2018	Oct. 07, 2019
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 08, 2018	Oct. 07, 2019
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 08, 2018	Oct. 07, 2019
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 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. 09, 2018	Oct. 08, 2019
Power Sensor	Anritsu	MA2411B	1207366	Oct. 09, 2018	Oct. 08, 2019
DC POWER SOURCE	GW INSTEK	GPC-6030D	EM892433	Oct. 25, 2018	Oct. 24, 2019
Measurement Software	--	SENSE-15407_NII	V5.10	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 ^{o}C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 59%	Alex Tsai
Radiated Emissions	03CH01-WS	24-26°C / 68-69%	Akun Chung
RF Conducted	TH01-WS	22°C / 63%	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 5150~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Emissions	VHT40	5590	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5590	MCS 0	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	HT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670	MCS 0	
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530 / 5610	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5590 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530 / 5610	MCS 0	
Frequency Stability	Un-modulation	5200	---	---

NOTE:

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

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Emissions	VHT40	5795	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5795	MCS 0	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
	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 **X-plane** results were found as the worst case and were shown in this report.

3 Transmitter Test Results

3.1 Conducted Emissions

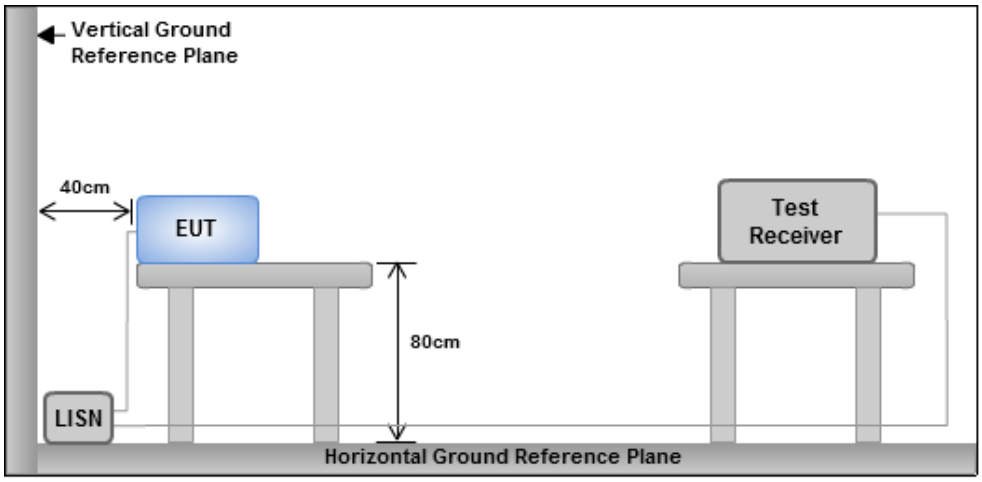
3.1.1 Limit of Conducted Emissions

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

3.1.2 Test Procedures

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

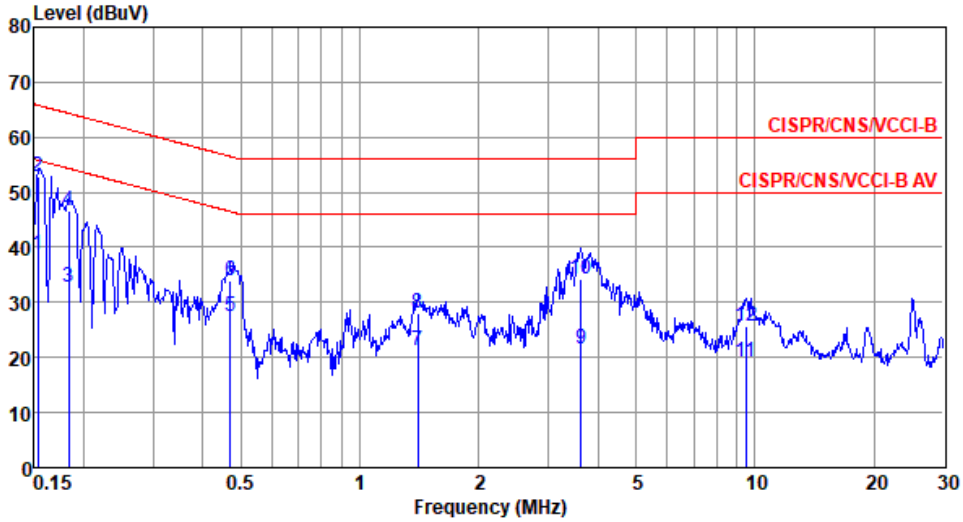
3.1.3 Test Setup



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

3.1.4 Test Result of Conducted Emissions

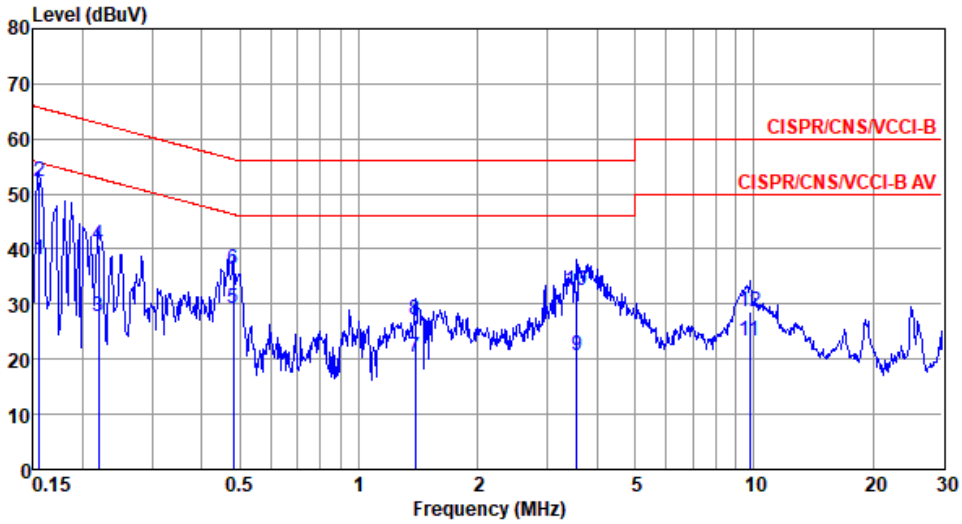
Modulation	VHT40	Test Freq. (MHz)	5590
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.153	38.66	55.82	-17.16	29.08	9.53	0.05	Average
2*	0.153	52.90	65.82	-12.92	43.32	9.53	0.05	QP
3	0.183	32.70	54.33	-21.63	23.10	9.54	0.06	Average
4	0.183	46.53	64.33	-17.80	36.93	9.54	0.06	QP
5	0.471	27.59	46.49	-18.90	17.93	9.58	0.08	Average
6	0.471	33.84	56.49	-22.65	24.18	9.58	0.08	QP
7	1.403	21.40	46.00	-24.60	11.67	9.60	0.13	Average
8	1.403	27.92	56.00	-28.08	18.19	9.60	0.13	QP
9	3.623	21.61	46.00	-24.39	11.74	9.61	0.26	Average
10	3.623	34.29	56.00	-21.71	24.42	9.61	0.26	QP
11	9.502	19.25	50.00	-30.75	9.17	9.65	0.43	Average
12	9.502	25.61	60.00	-34.39	15.53	9.65	0.43	QP

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

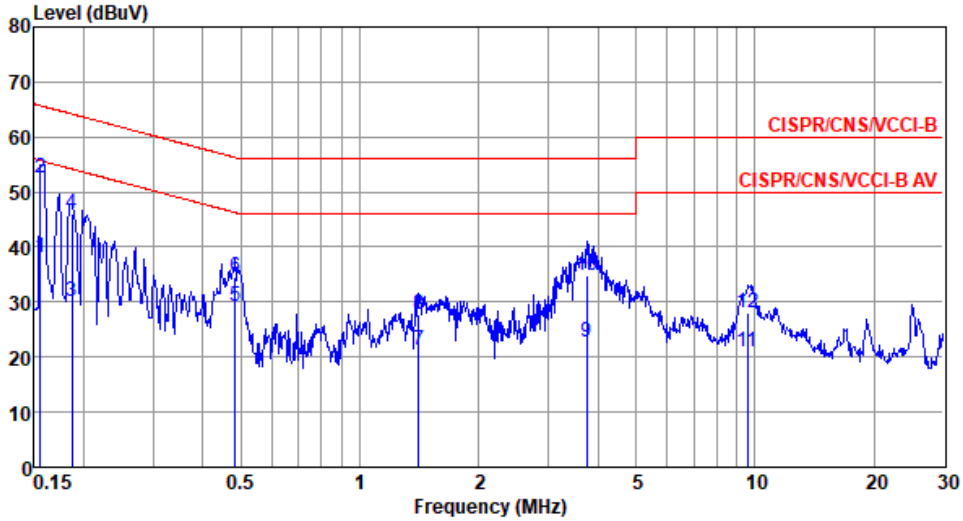
Modulation	VHT40	Test Freq. (MHz)	5590
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.156	38.04	55.69	-17.65	28.42	9.57	0.05	Average
2*	0.156	52.32	65.69	-13.37	42.70	9.57	0.05	QP
3	0.220	27.66	52.83	-25.17	18.01	9.58	0.07	Average
4	0.220	40.63	62.83	-22.20	30.98	9.58	0.07	QP
5	0.481	29.14	46.32	-17.18	19.44	9.62	0.08	Average
6	0.481	36.19	56.32	-20.13	26.49	9.62	0.08	QP
7	1.388	20.24	46.00	-25.76	10.47	9.64	0.13	Average
8	1.388	27.11	56.00	-28.89	17.34	9.64	0.13	QP
9	3.565	20.56	46.00	-25.44	10.64	9.66	0.26	Average
10	3.565	32.37	56.00	-23.63	22.45	9.66	0.26	QP
11	9.757	23.22	50.00	-26.78	13.07	9.71	0.44	Average
12	9.757	28.57	60.00	-31.43	18.42	9.71	0.44	QP

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

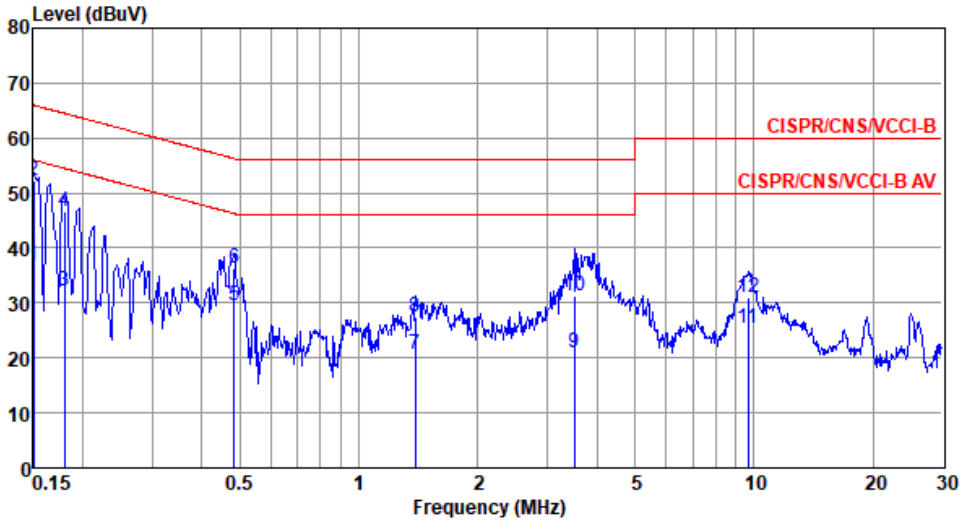
Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.156	38.14	55.69	-17.55	28.56	9.53	0.05	Average
2*	0.156	52.64	65.69	-13.05	43.06	9.53	0.05	QP
3	0.186	30.14	54.20	-24.06	20.53	9.54	0.07	Average
4	0.186	46.02	64.20	-18.18	36.41	9.54	0.07	QP
5	0.484	29.37	46.27	-16.90	19.71	9.58	0.08	Average
6	0.484	34.67	56.27	-21.60	25.01	9.58	0.08	QP
7	1.411	21.17	46.00	-24.83	11.44	9.60	0.13	Average
8	1.411	27.73	56.00	-28.27	18.00	9.60	0.13	QP
9	3.759	22.65	46.00	-23.35	12.77	9.61	0.27	Average
10	3.759	34.91	56.00	-21.09	25.03	9.61	0.27	QP
11	9.552	21.10	50.00	-28.90	11.02	9.65	0.43	Average
12	9.552	28.00	60.00	-32.00	17.92	9.65	0.43	QP

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

Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.150	36.96	56.00	-19.04	27.34	9.57	0.05	Average
2*	0.150	52.20	66.00	-13.80	42.58	9.57	0.05	QP
3	0.180	32.14	54.50	-22.36	22.50	9.58	0.06	Average
4	0.180	46.66	64.50	-17.84	37.02	9.58	0.06	QP
5	0.484	29.58	46.27	-16.69	19.88	9.62	0.08	Average
6	0.484	36.24	56.27	-20.03	26.54	9.62	0.08	QP
7	1.388	20.63	46.00	-25.37	10.86	9.64	0.13	Average
8	1.388	27.45	56.00	-28.55	17.68	9.64	0.13	QP
9	3.509	20.82	46.00	-25.18	10.90	9.66	0.26	Average
10	3.509	31.40	56.00	-24.60	21.48	9.66	0.26	QP
11	9.654	25.38	50.00	-24.62	15.24	9.71	0.43	Average
12	9.654	31.06	60.00	-28.94	20.92	9.71	0.43	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.

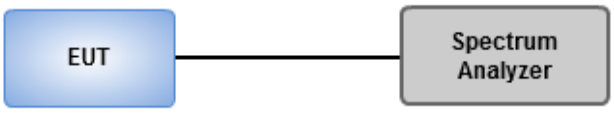
Occupied Bandwidth

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	19.928M	16.498M	16M5D1D	19.42M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.29M	17.583M	17M6D1D	19.928M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.87M	36.179M	36M2D1D	39.71M	35.89M
802.11ac VHT80_Nss1,(MCS0)_2TX	80.87M	75.253M	75M3D1D	80.87M	75.253M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.754M	16.643M	16M6D1D	19.71M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	24.928M	17.728M	17M7D1D	20.362M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	51.594M	36.324M	36M3D1D	40.58M	36.035M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.449M	75.253M	75M3D1D	80.87M	75.253M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.072M	16.57M	16M6D1D	19.783M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.652M	17.583M	17M6D1D	20.29M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	44.638M	36.179M	36M2D1D	39.71M	35.89M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.449M	75.253M	75M3D1D	80.29M	75.253M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.652M	16.498M	16M5D1D	13.768M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.246M	17.583M	17M6D1D	15.072M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.072M	36.179M	36M2D1D	31.449M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	75.362M	75.253M	75M3D1D	75.362M	75.253M

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

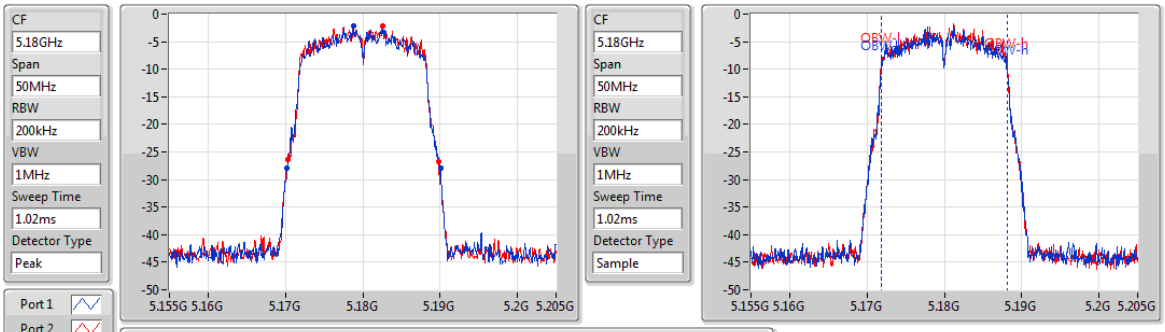
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.928M	16.353M	19.493M	16.353M
5200MHz	Pass	Inf	19.565M	16.353M	19.42M	16.353M
5240MHz	Pass	Inf	19.928M	16.498M	19.493M	16.353M
5260MHz	Pass	Inf	22.754M	16.643M	20.362M	16.498M
5300MHz	Pass	Inf	22.246M	16.57M	20M	16.498M
5320MHz	Pass	Inf	19.71M	16.425M	19.783M	16.353M
5500MHz	Pass	Inf	19.783M	16.425M	20M	16.353M
5580MHz	Pass	Inf	19.928M	16.57M	19.928M	16.425M
5700MHz	Pass	Inf	20M	16.425M	20.072M	16.425M
5745MHz	Pass	500k	13.768M	16.498M	15.652M	16.425M
5785MHz	Pass	500k	14.71M	16.498M	15.072M	16.498M
5825MHz	Pass	500k	15.072M	16.353M	15.652M	16.425M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	19.928M	17.583M	20M	17.583M
5200MHz	Pass	Inf	20.29M	17.583M	20.145M	17.583M
5240MHz	Pass	Inf	20.217M	17.583M	19.928M	17.583M
5260MHz	Pass	Inf	24.928M	17.728M	20.58M	17.656M
5300MHz	Pass	Inf	20.725M	17.656M	20.652M	17.656M
5320MHz	Pass	Inf	20.58M	17.656M	20.362M	17.583M
5500MHz	Pass	Inf	20.362M	17.583M	20.435M	17.583M
5580MHz	Pass	Inf	20.652M	17.583M	20.29M	17.583M
5700MHz	Pass	Inf	20.58M	17.583M	20.29M	17.583M
5745MHz	Pass	500k	15.072M	17.583M	15.652M	17.583M
5785MHz	Pass	500k	17.246M	17.583M	17.246M	17.583M
5825MHz	Pass	500k	15.072M	17.583M	15.652M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.87M	36.179M	39.71M	35.89M
5230MHz	Pass	Inf	40.58M	36.035M	40.145M	35.89M
5270MHz	Pass	Inf	51.594M	36.324M	40.58M	36.179M
5310MHz	Pass	Inf	40.725M	36.035M	40.58M	36.035M
5510MHz	Pass	Inf	41.014M	36.035M	39.71M	36.179M
5590MHz	Pass	Inf	44.638M	36.179M	40.435M	36.035M
5670MHz	Pass	Inf	40.87M	36.035M	39.855M	35.89M
5755MHz	Pass	500k	31.449M	36.179M	35.072M	36.179M
5795MHz	Pass	500k	35.072M	36.179M	35.072M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5210MHz	Pass	Inf	80.87M	75.253M	80.87M	75.253M
5290MHz	Pass	Inf	81.449M	75.253M	80.87M	75.253M
5530MHz	Pass	Inf	80.58M	75.253M	80.29M	75.253M
5610MHz	Pass	Inf	81.449M	75.253M	80.87M	75.253M
5775MHz	Pass	500k	75.362M	75.253M	75.362M	75.253M

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

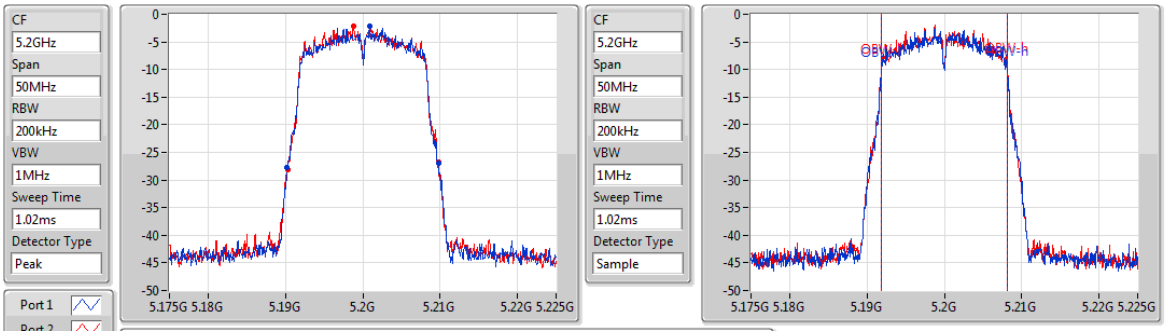
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.170145G	5.190072G	16.353M	5.171823G	5.188177G	Inf	1
19.493M	5.17029G	5.189783G	16.353M	5.171823G	5.188177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

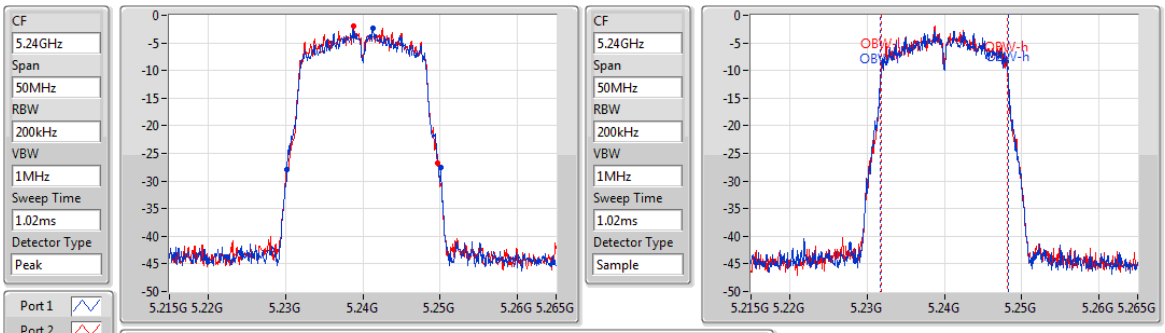
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.190217G	5.209783G	16.353M	5.191823G	5.208177G	Inf	1
19.42M	5.190362G	5.209783G	16.353M	5.191823G	5.208177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

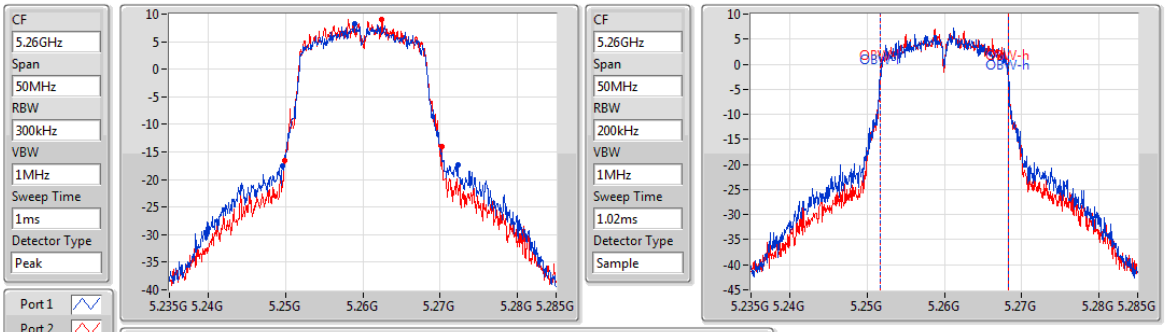
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.230217G	5.250145G	16.498M	5.231751G	5.248249G	Inf	1
19.493M	5.230217G	5.24971G	16.353M	5.231823G	5.248177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

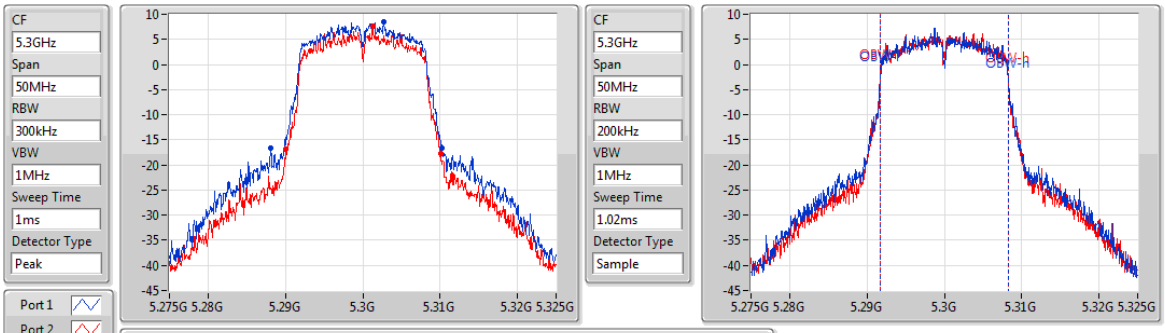
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.754M	5.249565G	5.272319G	16.643M	5.251679G	5.268321G	Inf	1
20.362M	5.249855G	5.270217G	16.498M	5.251751G	5.268249G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

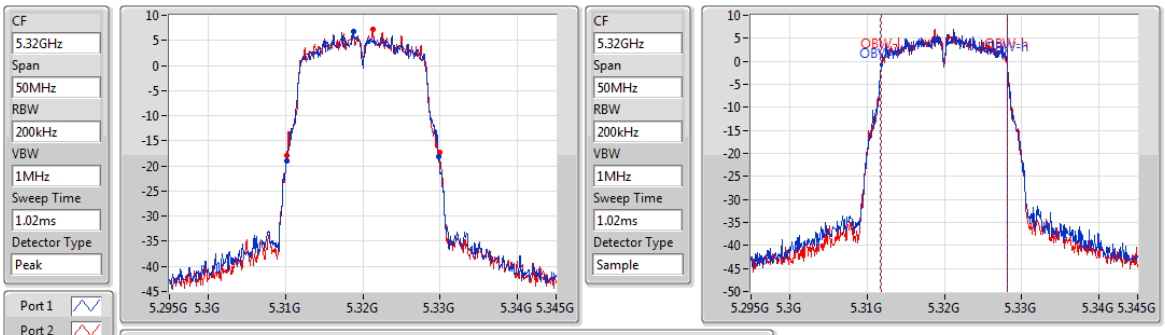
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.246M	5.288043G	5.31029G	16.57M	5.291751G	5.308321G	Inf	1
20M	5.290072G	5.310072G	16.498M	5.291751G	5.308249G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

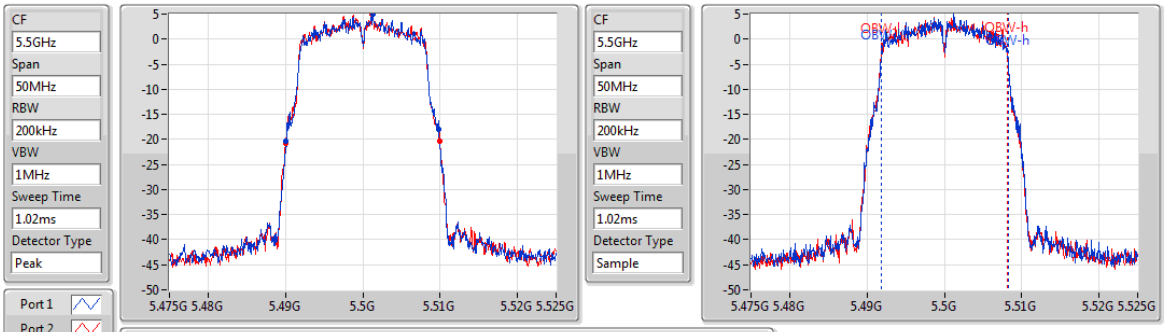
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.71M	5.310145G	5.329855G	16.425M	5.311751G	5.328177G	Inf	1
19.783M	5.310145G	5.329928G	16.353M	5.311823G	5.328177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

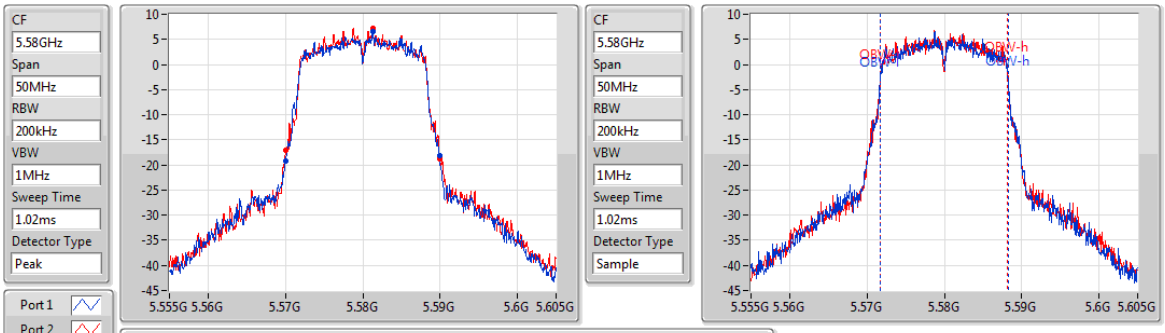
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.783M	5.490072G	5.509855G	16.425M	5.491823G	5.508249G	Inf	1
20M	5.49G	5.51G	16.353M	5.491823G	5.508177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

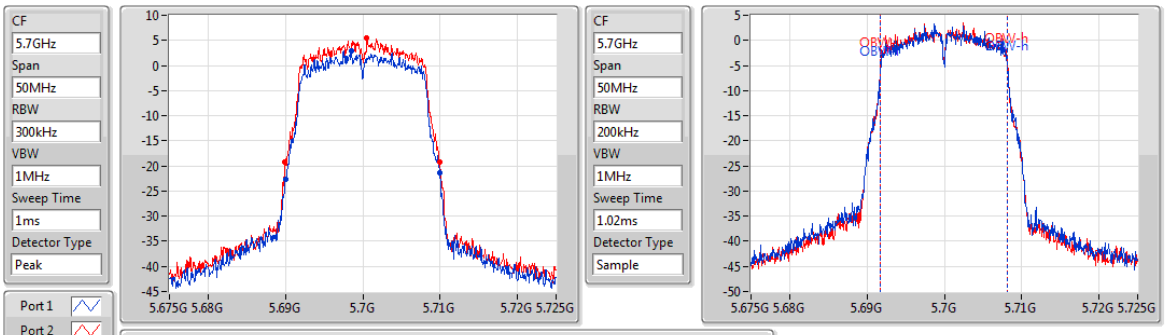
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.57G	5.589928G	16.57M	5.571679G	5.588249G	Inf	1
19.928M	5.57G	5.589928G	16.425M	5.571751G	5.588177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

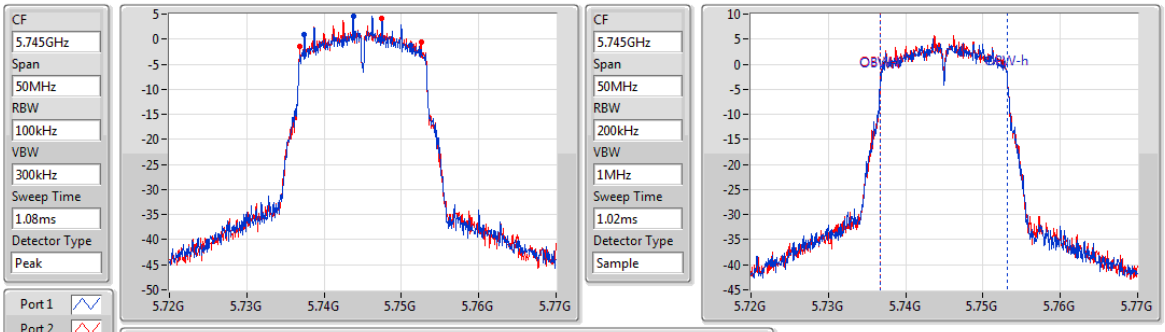
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.69G	5.71G	16.425M	5.691751G	5.708177G	Inf	1
20.072M	5.689928G	5.71G	16.425M	5.691751G	5.708177G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

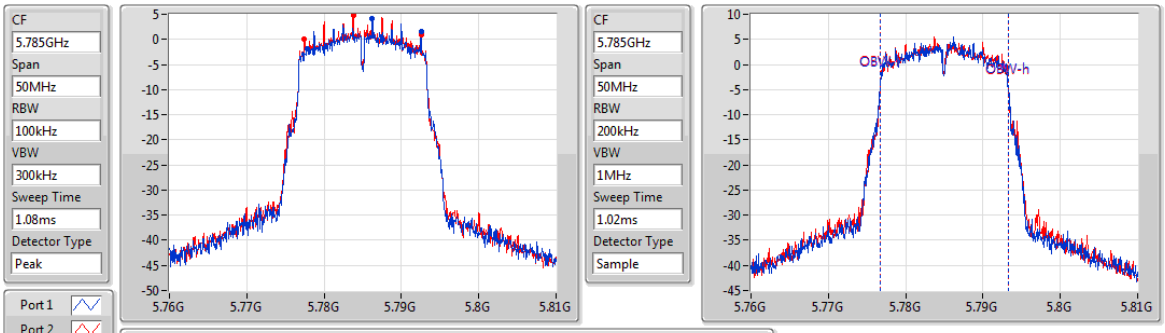
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.768M	5.737464G	5.751232G	16.498M	5.736679G	5.753177G	500k	1
15.652M	5.736884G	5.752536G	16.425M	5.736751G	5.753177G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

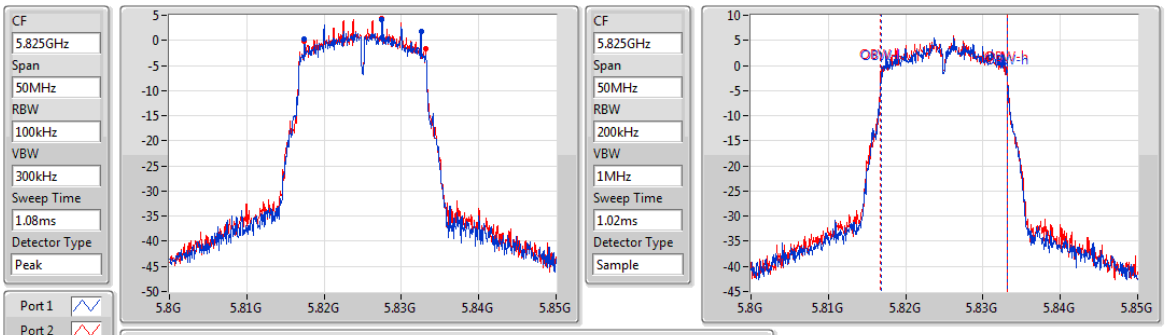
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.71M	5.777826G	5.792536G	16.498M	5.776751G	5.793249G	500k	1
15.072M	5.777464G	5.792536G	16.498M	5.776751G	5.793249G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

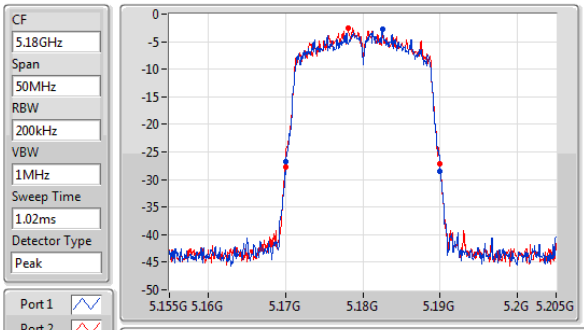
5825MHz

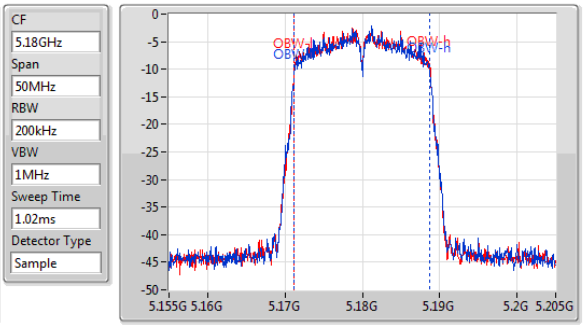


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.817464G	5.832536G	16.353M	5.816823G	5.833177G	500k	1
15.652M	5.817464G	5.833116G	16.425M	5.816751G	5.833177G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5180MHz

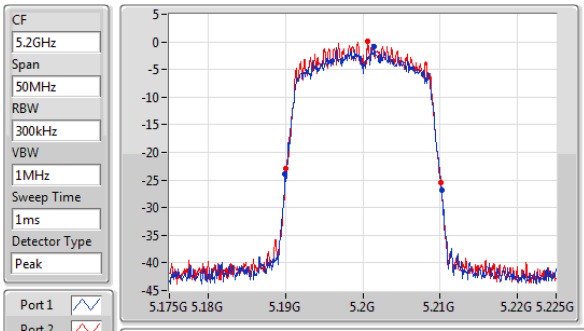


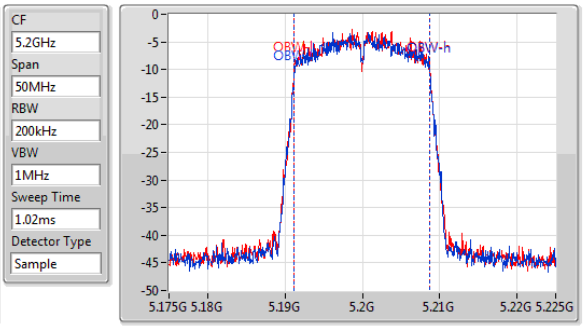


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.170072G	5.19G	17.583M	5.171172G	5.188755G	Inf	1
20M	5.17G	5.19G	17.583M	5.171172G	5.188755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5200MHz

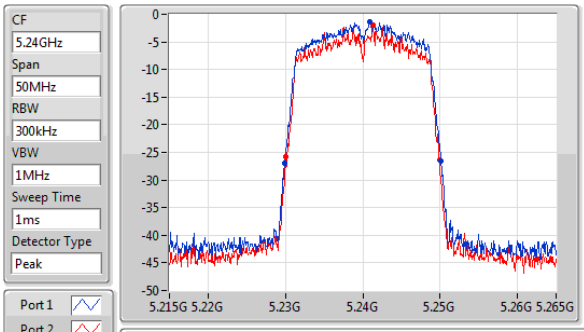


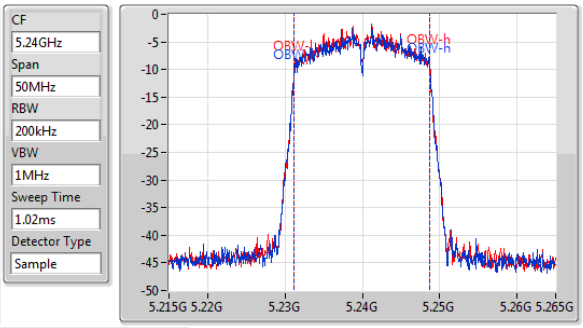


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.29M	5.189928G	5.210217G	17.583M	5.191172G	5.208755G	Inf	1
20.145M	5.19G	5.210145G	17.583M	5.191172G	5.208755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5240MHz

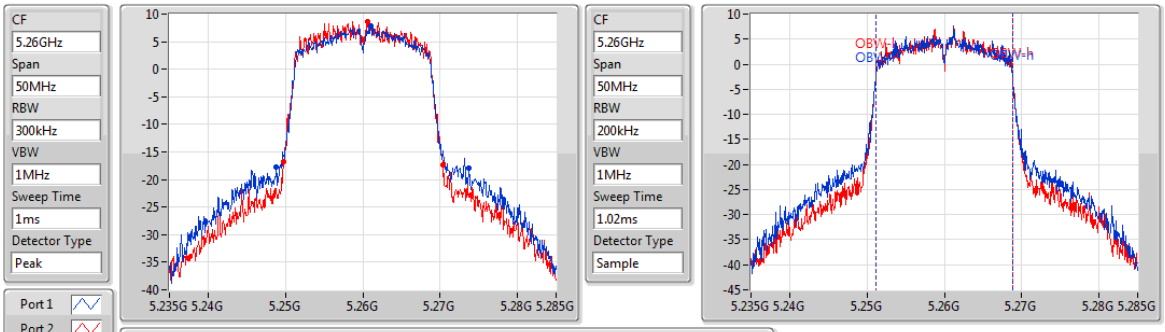




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.217M	5.229928G	5.250145G	17.583M	5.231172G	5.248755G	Inf	1
19.928M	5.23G	5.249928G	17.583M	5.231172G	5.248755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

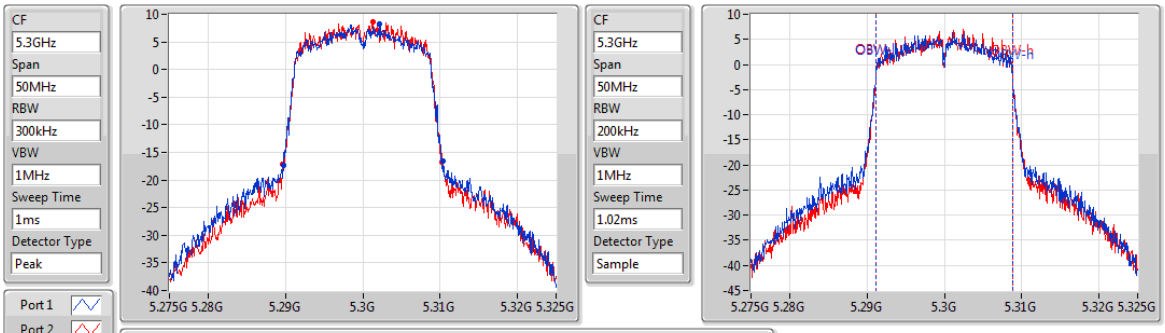
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.928M	5.248841G	5.273768G	17.728M	5.2511G	5.268828G	Inf	1
20.58M	5.249783G	5.270362G	17.656M	5.251172G	5.268828G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

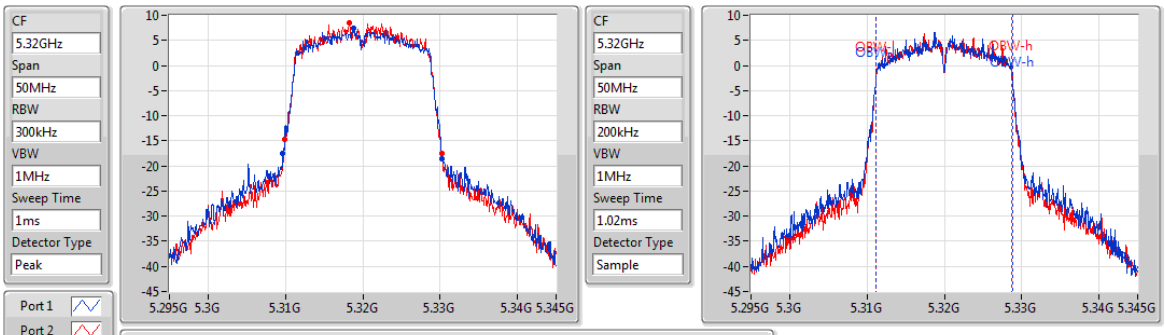
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.725M	5.28971G	5.310435G	17.656M	5.291172G	5.308828G	Inf	1
20.652M	5.289638G	5.31029G	17.656M	5.291172G	5.308828G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

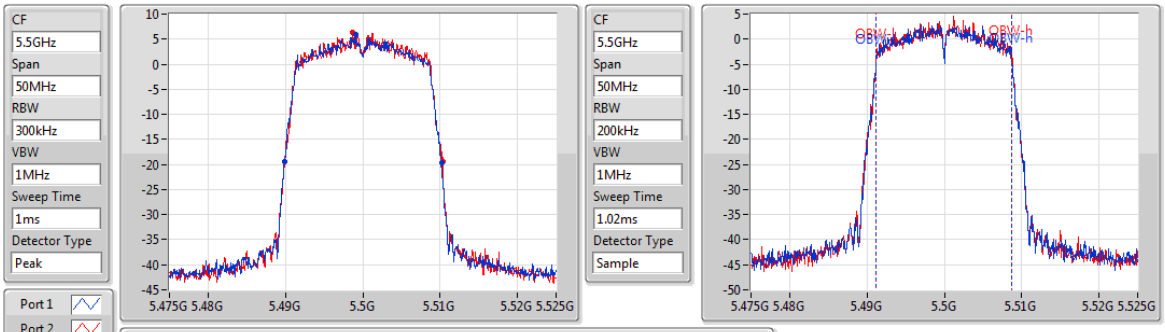
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.58M	5.309638G	5.330217G	17.656M	5.311172G	5.328828G	Inf	1
20.362M	5.309855G	5.330217G	17.583M	5.311172G	5.328755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

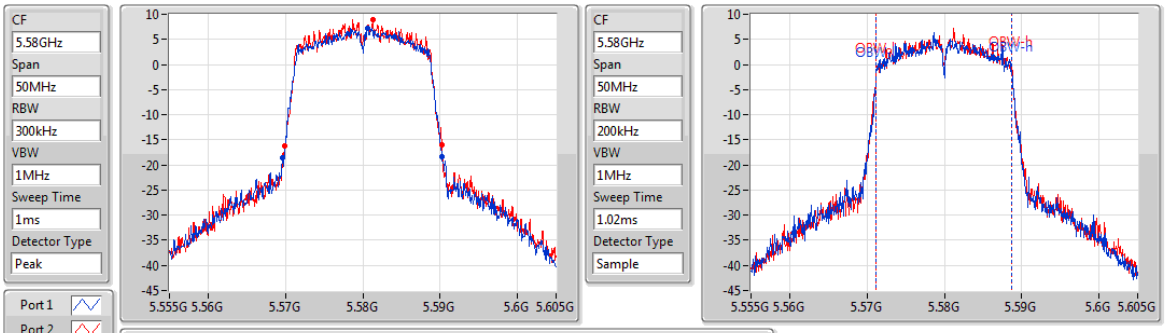
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.362M	5.489855G	5.510217G	17.583M	5.491172G	5.508755G	Inf	1
20.435M	5.489928G	5.510362G	17.583M	5.491172G	5.508755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

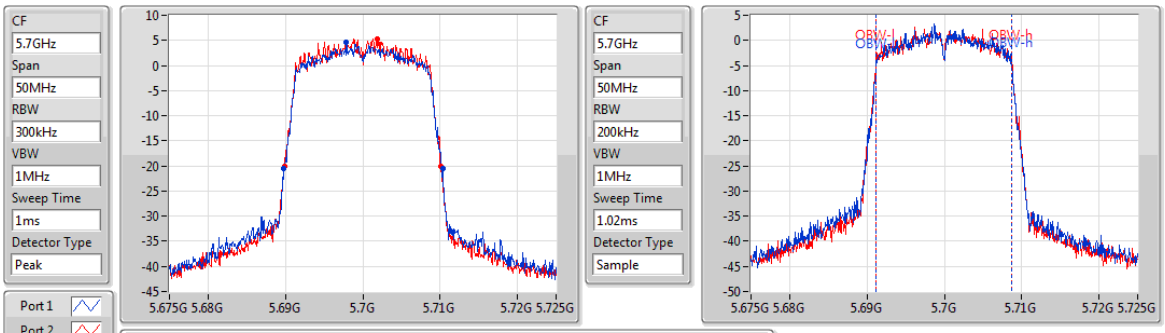
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.652M	5.569565G	5.590217G	17.583M	5.571172G	5.588755G	Inf	1
20.29M	5.569928G	5.590217G	17.583M	5.571172G	5.588755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

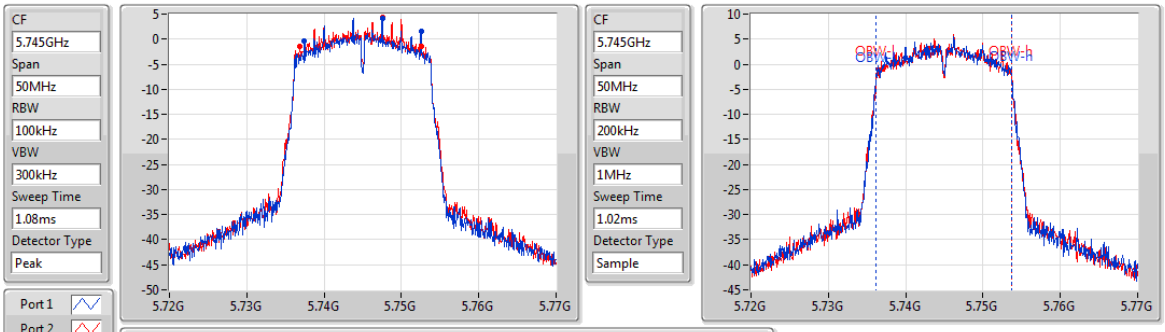
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.58M	5.689783G	5.710362G	17.583M	5.691172G	5.708755G	Inf	1
20.29M	5.689855G	5.710145G	17.583M	5.691172G	5.708755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

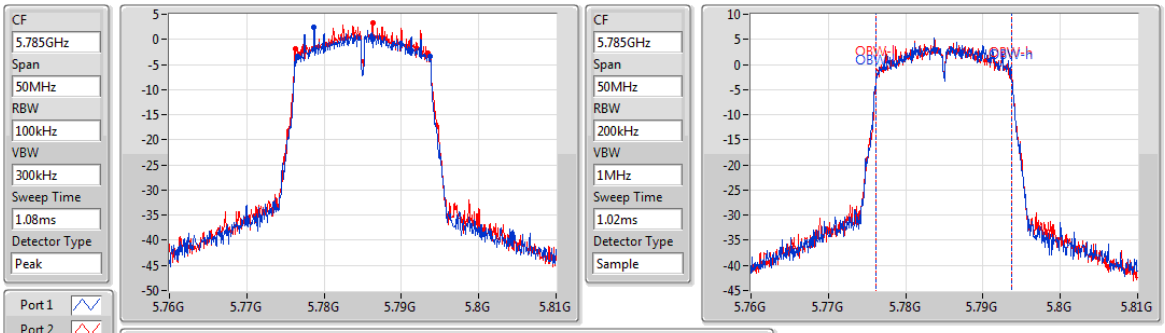
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.737464G	5.752536G	17.583M	5.736172G	5.753755G	500k	1
15.652M	5.736884G	5.752536G	17.583M	5.736172G	5.753755G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

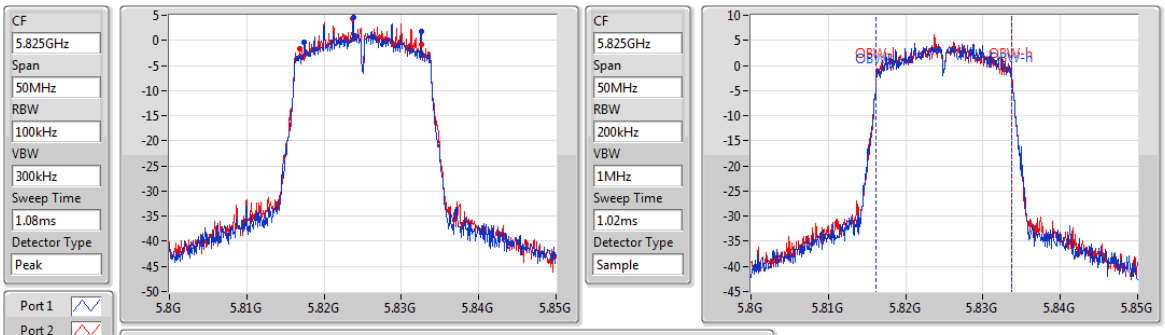
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.246M	5.776522G	5.793768G	17.583M	5.776172G	5.793755G	500k	1
17.246M	5.776232G	5.793478G	17.583M	5.776172G	5.793755G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

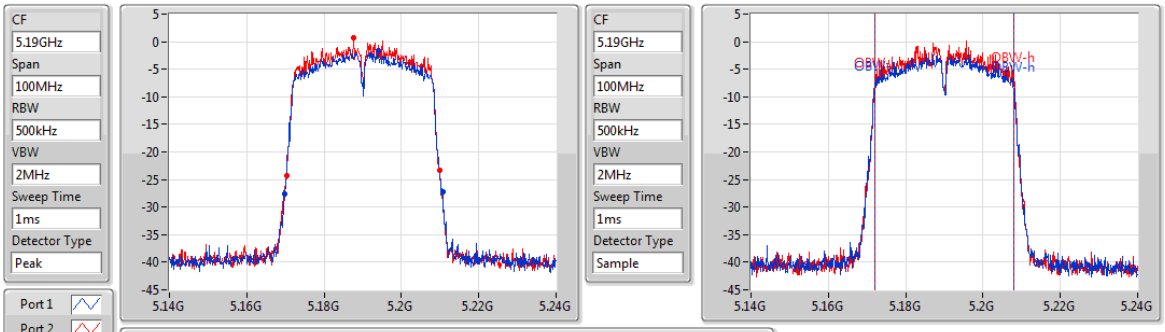
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.817464G	5.832536G	17.583M	5.816172G	5.833755G	500k	1
15.652M	5.816884G	5.832536G	17.583M	5.816172G	5.833755G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

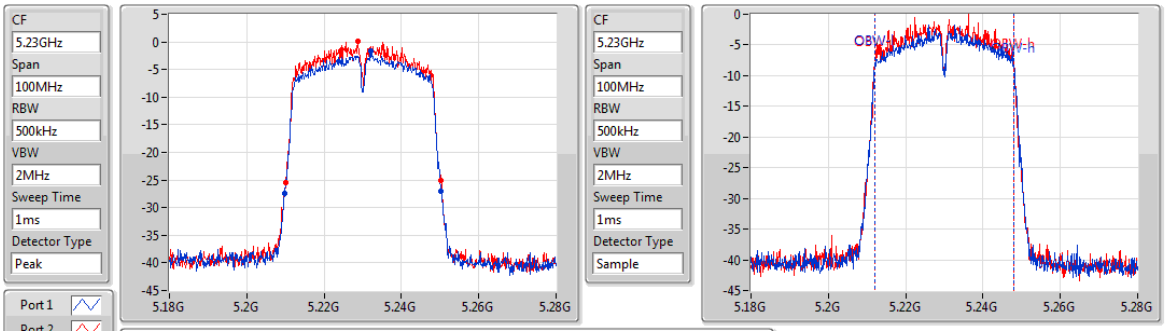
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.87M	5.169855G	5.210725G	36.179M	5.17191G	5.20809G	Inf	1
39.71M	5.17029G	5.21G	35.89M	5.172055G	5.207945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

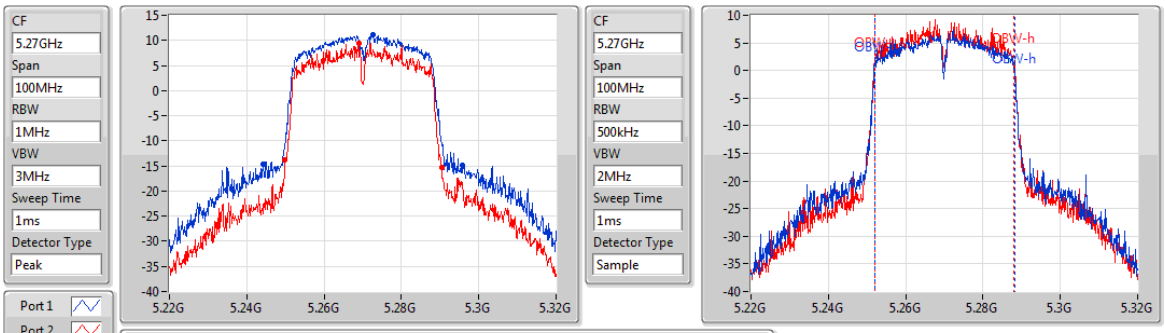
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.20971G	5.25029G	36.035M	5.212055G	5.24809G	Inf	1
40.145M	5.210145G	5.25029G	35.89M	5.212055G	5.247945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

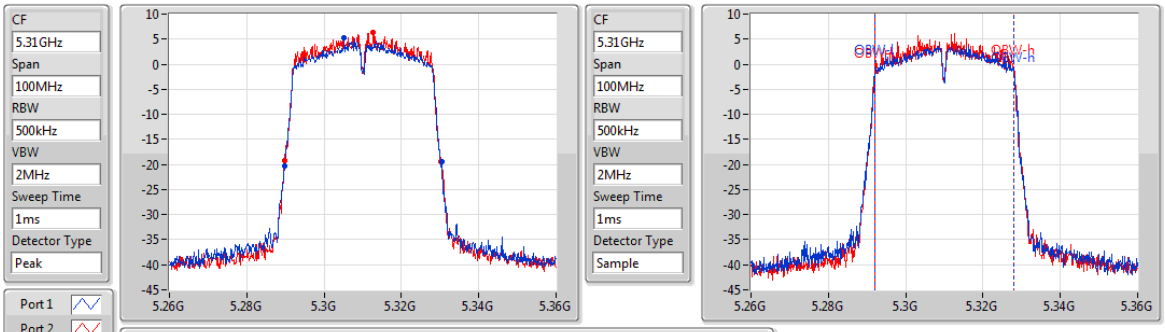
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
51.594M	5.244203G	5.295797G	36.324M	5.25191G	5.288234G	Inf	1
40.58M	5.249855G	5.290435G	36.179M	5.25191G	5.28809G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

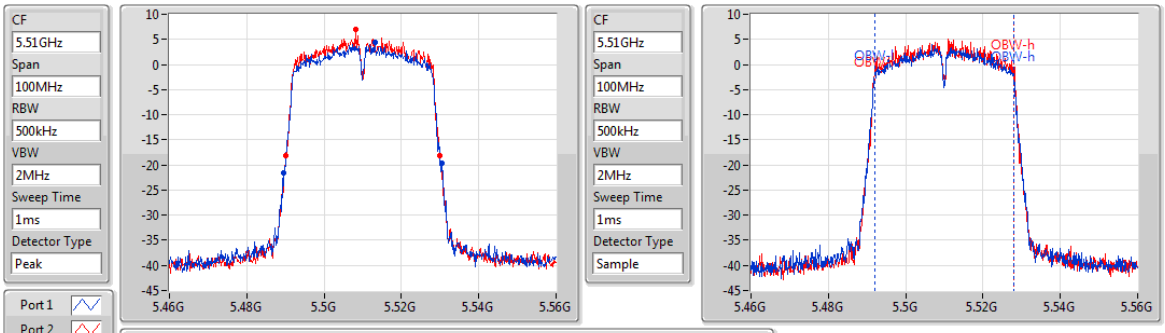
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.725M	5.28971G	5.330435G	36.035M	5.292055G	5.32809G	Inf	1
40.58M	5.28971G	5.33029G	36.035M	5.292055G	5.32809G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

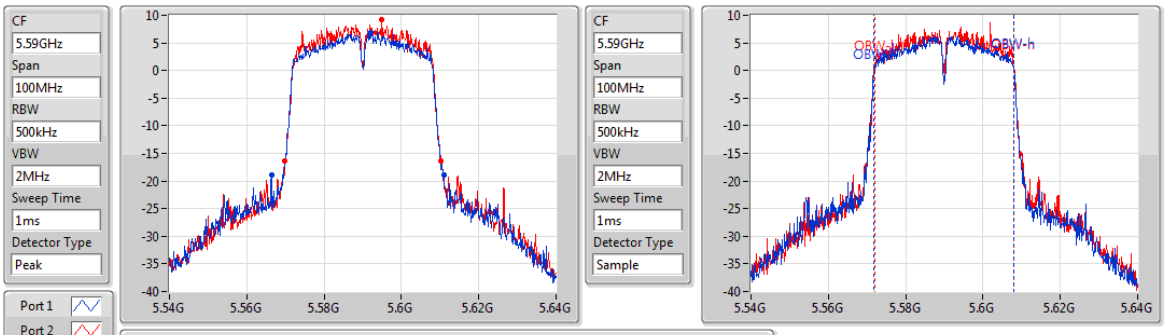
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.014M	5.489565G	5.53058G	36.035M	5.49191G	5.527945G	Inf	1
39.71M	5.490145G	5.529855G	36.179M	5.49191G	5.52809G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

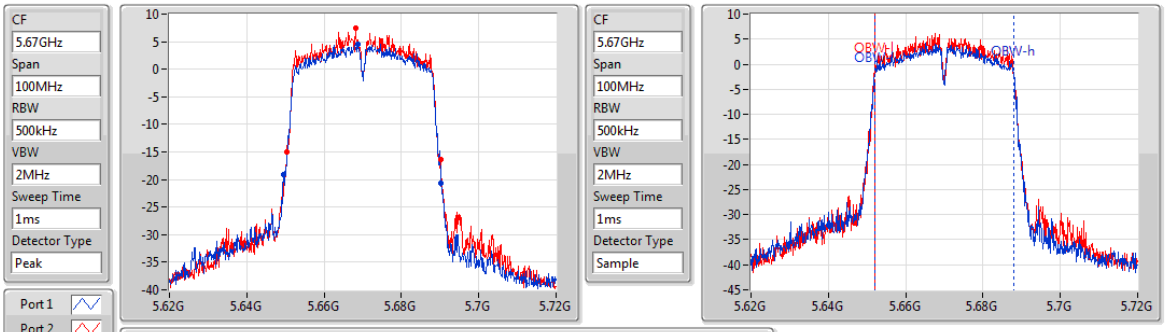
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.638M	5.566377G	5.611014G	36.179M	5.571766G	5.607945G	Inf	1
40.435M	5.569855G	5.61029G	36.035M	5.57191G	5.607945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

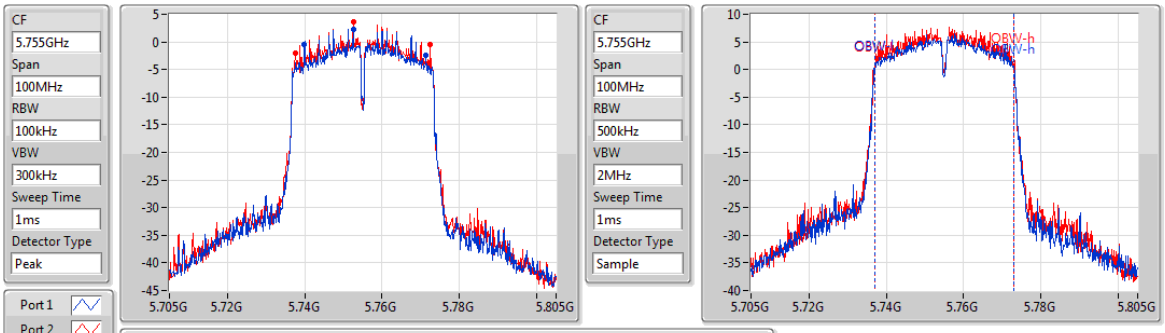
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.87M	5.64942G	5.69029G	36.035M	5.65191G	5.687945G	Inf	1
39.855M	5.65029G	5.690145G	35.89M	5.652055G	5.687945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

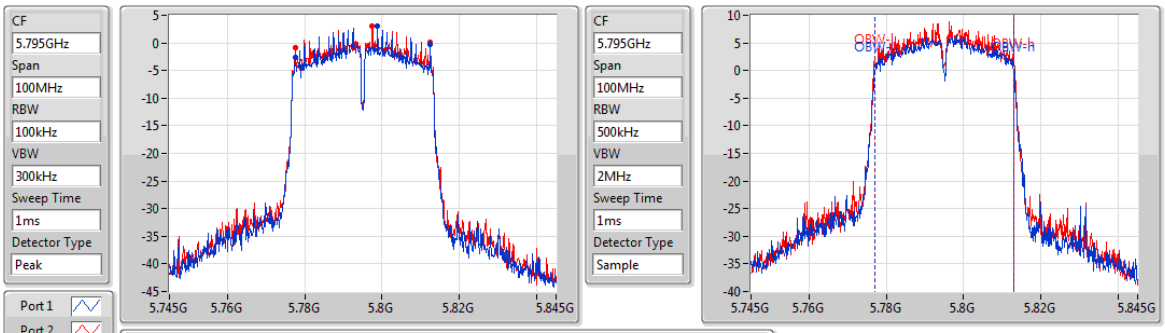
5755MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.449M	5.739928G	5.771377G	36.179M	5.73691G	5.77309G	500k	1
35.072M	5.737464G	5.772536G	36.179M	5.73691G	5.77309G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

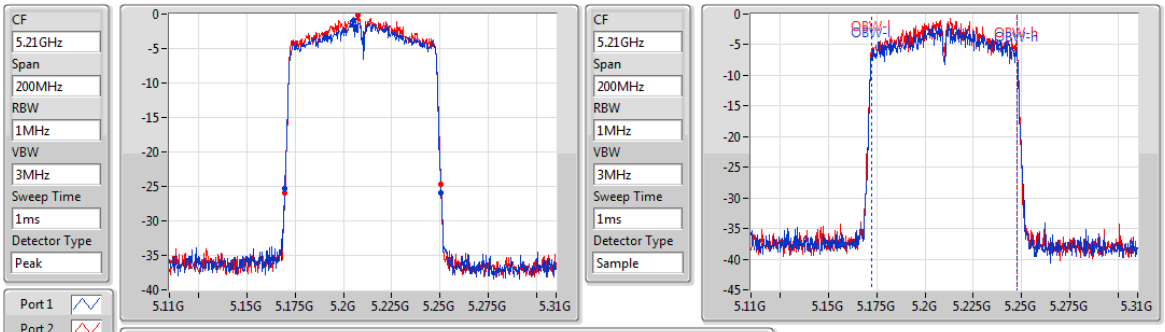
5795MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.072M	5.777464G	5.812536G	36.179M	5.77691G	5.81309G	500k	1
35.072M	5.777464G	5.812536G	36.179M	5.77691G	5.81309G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

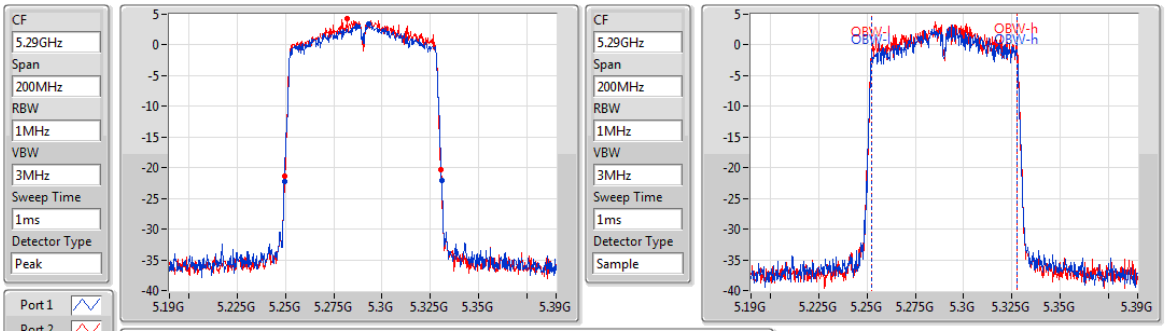
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.87M	5.16971G	5.25058G	75.253M	5.172373G	5.247627G	Inf	1
80.87M	5.16971G	5.25058G	75.253M	5.172373G	5.247627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

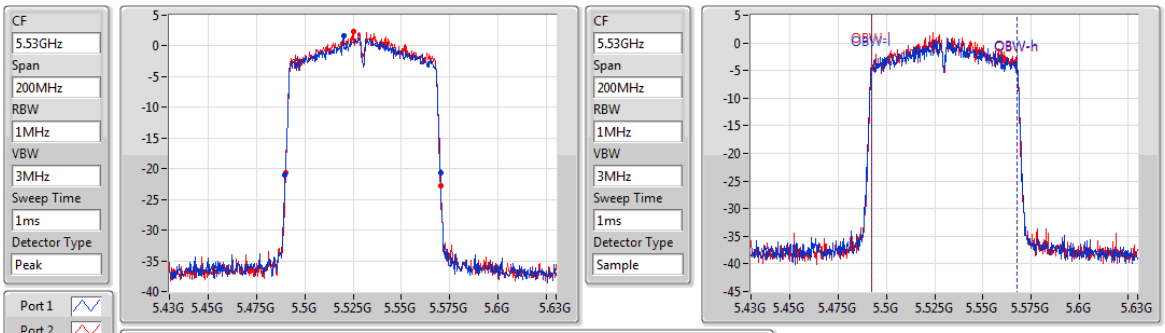
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.449M	5.24942G	5.33087G	75.253M	5.252373G	5.327627G	Inf	1
80.87M	5.24971G	5.33058G	75.253M	5.252373G	5.327627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

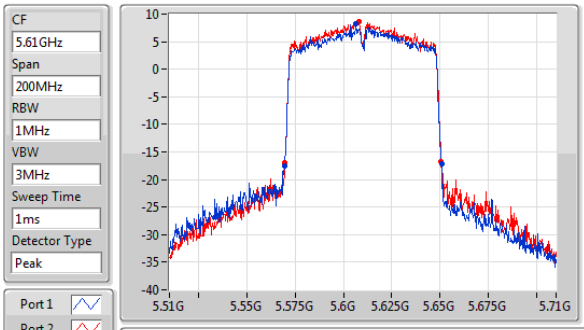
5530MHz

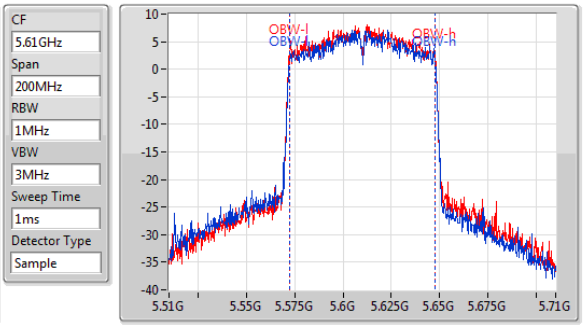


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
80.58M	5.48971G	5.57029G	75.253M	5.492373G	5.567627G	Inf	1
80.29M	5.49G	5.57029G	75.253M	5.492373G	5.567627G	Inf	2

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

5610MHz

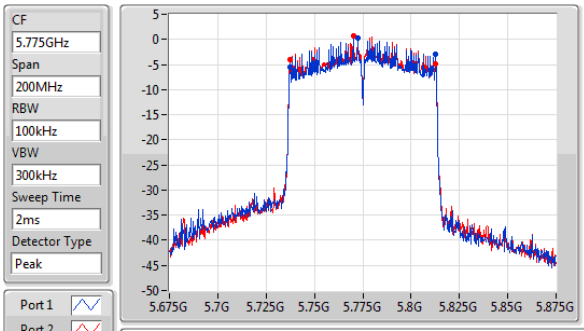


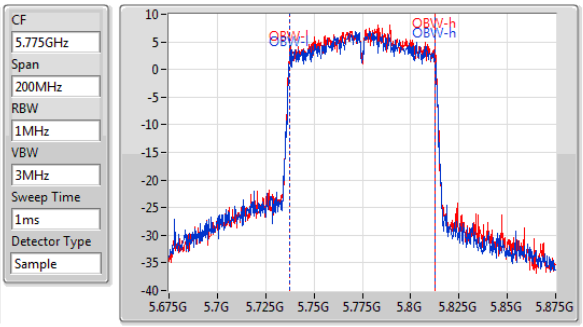


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.449M	5.56942G	5.65087G	75.253M	5.572373G	5.647627G	Inf	1
80.87M	5.56971G	5.65058G	75.253M	5.572373G	5.647627G	Inf	2

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
75.362M	5.737319G	5.812681G	75.253M	5.737373G	5.812627G	500k	1
75.362M	5.737319G	5.812681G	75.253M	5.737373G	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.

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	11.36	0.01368	13.94	0.02477
802.11ac VHT20_Nss1,(MCS0)_2TX	11.11	0.01291	13.69	0.02339
802.11ac VHT40_Nss1,(MCS0)_2TX	11.29	0.01346	13.87	0.02438
802.11ac VHT80_Nss1,(MCS0)_2TX	11.25	0.01334	13.83	0.02415
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.44	0.11066	23.84	0.24210
802.11ac VHT20_Nss1,(MCS0)_2TX	20.45	0.11092	23.85	0.24266
802.11ac VHT40_Nss1,(MCS0)_2TX	20.60	0.11482	24.00	0.25119
802.11ac VHT80_Nss1,(MCS0)_2TX	16.10	0.04074	19.50	0.08913
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.92	0.09817	24.27	0.26730
802.11ac VHT20_Nss1,(MCS0)_2TX	19.92	0.09817	24.27	0.26730
802.11ac VHT40_Nss1,(MCS0)_2TX	20.17	0.10399	24.52	0.28314
802.11ac VHT80_Nss1,(MCS0)_2TX	20.09	0.10209	24.44	0.27797
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.02	0.07980	23.28	0.21281
802.11ac VHT20_Nss1,(MCS0)_2TX	19.02	0.07980	23.28	0.21281
802.11ac VHT40_Nss1,(MCS0)_2TX	20.06	0.10139	24.32	0.27040
802.11ac VHT80_Nss1,(MCS0)_2TX	19.94	0.09863	24.20	0.26303

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	2.58	8.02	8.61	11.34	24.00	13.92	30.00
5200MHz	Pass	2.58	8.04	8.64	11.36	24.00	13.94	30.00
5240MHz	Pass	2.58	8.03	8.59	11.33	24.00	13.91	30.00
5260MHz	Pass	3.40	17.21	17.59	20.41	24.00	23.81	30.00
5300MHz	Pass	3.40	17.23	17.62	20.44	24.00	23.84	30.00
5320MHz	Pass	3.40	16.94	17.35	20.16	23.95	23.56	29.95
5500MHz	Pass	4.35	15.22	15.58	18.41	23.96	22.76	29.96
5580MHz	Pass	4.35	16.62	17.18	19.92	23.99	24.27	29.99
5700MHz	Pass	4.35	14.08	14.26	17.18	24.00	21.53	30.00
5745MHz	Pass	4.26	15.92	16.05	19.00	30.00	23.26	36.00
5785MHz	Pass	4.26	15.81	16.20	19.02	30.00	23.28	36.00
5825MHz	Pass	4.26	15.93	16.06	19.01	30.00	23.27	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	2.58	7.81	8.32	11.08	24.00	13.66	30.00
5200MHz	Pass	2.58	7.83	8.35	11.11	24.00	13.69	30.00
5240MHz	Pass	2.58	7.82	8.29	11.07	24.00	13.65	30.00
5260MHz	Pass	3.40	17.15	17.69	20.44	24.00	23.84	30.00
5300MHz	Pass	3.40	17.17	17.70	20.45	24.00	23.85	30.00
5320MHz	Pass	3.40	16.69	17.09	19.90	24.00	23.30	30.00
5500MHz	Pass	4.35	14.55	14.91	17.74	24.00	22.09	30.00
5580MHz	Pass	4.35	16.56	17.24	19.92	24.00	24.27	30.00
5700MHz	Pass	4.35	14.01	14.19	17.11	24.00	21.46	30.00
5745MHz	Pass	4.26	15.82	16.17	19.01	30.00	23.27	36.00
5785MHz	Pass	4.26	15.88	16.14	19.02	30.00	23.28	36.00
5825MHz	Pass	4.26	15.91	16.07	19.00	30.00	23.26	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	2.58	8.12	8.39	11.27	24.00	13.85	30.00
5230MHz	Pass	2.58	8.14	8.41	11.29	24.00	13.87	30.00
5270MHz	Pass	3.40	17.43	17.75	20.60	24.00	24.00	30.00
5310MHz	Pass	3.40	14.52	14.83	17.69	24.00	21.09	30.00
5510MHz	Pass	4.35	14.17	14.49	17.34	24.00	21.69	30.00
5590MHz	Pass	4.35	16.87	17.43	20.17	24.00	24.52	30.00
5670MHz	Pass	4.35	14.86	15.28	18.09	24.00	22.44	30.00
5755MHz	Pass	4.26	16.70	17.35	20.05	30.00	24.31	36.00
5795MHz	Pass	4.26	16.71	17.37	20.06	30.00	24.32	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	2.58	8.11	8.37	11.25	24.00	13.83	30.00
5290MHz	Pass	3.40	12.87	13.29	16.10	24.00	19.50	30.00
5530MHz	Pass	4.35	10.42	10.84	13.65	24.00	18.00	30.00
5610MHz	Pass	4.35	16.78	17.36	20.09	24.00	24.44	30.00
5775MHz	Pass	4.26	16.65	17.20	19.94	30.00	24.20	36.00

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

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

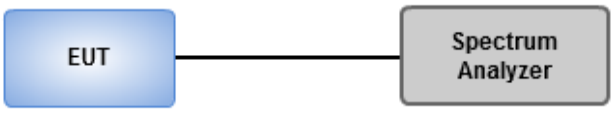
Duty cycle ≥ 98 %

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	-1.22	4.30
802.11ac VHT20_Nss1,(MCS0)_2TX	-1.19	4.33
802.11ac VHT40_Nss1,(MCS0)_2TX	-4.44	1.08
802.11ac VHT80_Nss1,(MCS0)_2TX	-7.75	-2.23
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	8.01	14.01
802.11ac VHT20_Nss1,(MCS0)_2TX	7.82	13.82
802.11ac VHT40_Nss1,(MCS0)_2TX	4.48	10.48
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.22	2.78
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	7.34	13.83
802.11ac VHT20_Nss1,(MCS0)_2TX	7.21	13.70
802.11ac VHT40_Nss1,(MCS0)_2TX	4.14	10.63
802.11ac VHT80_Nss1,(MCS0)_2TX	1.03	7.52
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	4.97	11.47
802.11ac VHT20_Nss1,(MCS0)_2TX	4.51	11.01
802.11ac VHT40_Nss1,(MCS0)_2TX	2.51	9.01
802.11ac VHT80_Nss1,(MCS0)_2TX	-0.58	5.92

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	5.52	-4.39	-3.83	-1.25	11.00	4.27	17.00
5200MHz	Pass	5.52	-4.32	-3.74	-1.22	11.00	4.30	17.00
5240MHz	Pass	5.52	-4.35	-3.82	-1.35	11.00	4.17	17.00
5260MHz	Pass	6.00	4.84	5.32	8.01	11.00	14.01	17.00
5300MHz	Pass	6.00	4.86	5.31	7.98	11.00	13.98	17.00
5320MHz	Pass	6.00	4.88	5.06	7.92	11.00	13.92	17.00
5500MHz	Pass	6.49	2.54	3.10	5.78	10.51	12.27	17.00
5580MHz	Pass	6.49	4.17	4.77	7.34	10.51	13.83	17.00
5700MHz	Pass	6.49	1.26	1.60	4.37	10.51	10.86	17.00
5745MHz	Pass	6.50	1.74	2.28	4.97	29.50	11.47	36.00
5785MHz	Pass	6.50	1.80	2.10	4.75	29.50	11.25	36.00
5825MHz	Pass	6.50	1.74	2.33	4.87	29.50	11.37	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	5.52	-4.36	-3.80	-1.19	11.00	4.33	17.00
5200MHz	Pass	5.52	-4.49	-3.96	-1.45	11.00	4.07	17.00
5240MHz	Pass	5.52	-4.57	-4.08	-1.58	11.00	3.94	17.00
5260MHz	Pass	6.00	4.46	4.81	7.56	11.00	13.56	17.00
5300MHz	Pass	6.00	4.91	4.87	7.82	11.00	13.82	17.00
5320MHz	Pass	6.00	4.18	4.57	7.36	11.00	13.36	17.00
5500MHz	Pass	6.49	1.90	2.01	4.93	10.51	11.42	17.00
5580MHz	Pass	6.49	4.06	4.68	7.21	10.51	13.70	17.00
5700MHz	Pass	6.49	0.90	1.41	4.13	10.51	10.62	17.00
5745MHz	Pass	6.50	1.46	1.64	4.46	29.50	10.96	36.00
5785MHz	Pass	6.50	1.26	1.75	4.44	29.50	10.94	36.00
5825MHz	Pass	6.50	1.47	2.09	4.51	29.50	11.01	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	5.52	-7.64	-7.23	-4.44	11.00	1.08	17.00
5230MHz	Pass	5.52	-7.75	-7.43	-4.59	11.00	0.93	17.00
5270MHz	Pass	6.00	1.25	1.73	4.48	11.00	10.48	17.00
5310MHz	Pass	6.00	-1.46	-1.31	1.61	11.00	7.61	17.00
5510MHz	Pass	6.49	-1.94	-1.71	1.15	10.51	7.64	17.00
5590MHz	Pass	6.49	0.90	1.41	4.14	10.51	10.63	17.00
5670MHz	Pass	6.49	-1.39	-0.91	1.83	10.51	8.32	17.00
5755MHz	Pass	6.50	-0.73	-0.26	2.50	29.50	9.00	36.00
5795MHz	Pass	6.50	-0.68	-0.29	2.51	29.50	9.01	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-

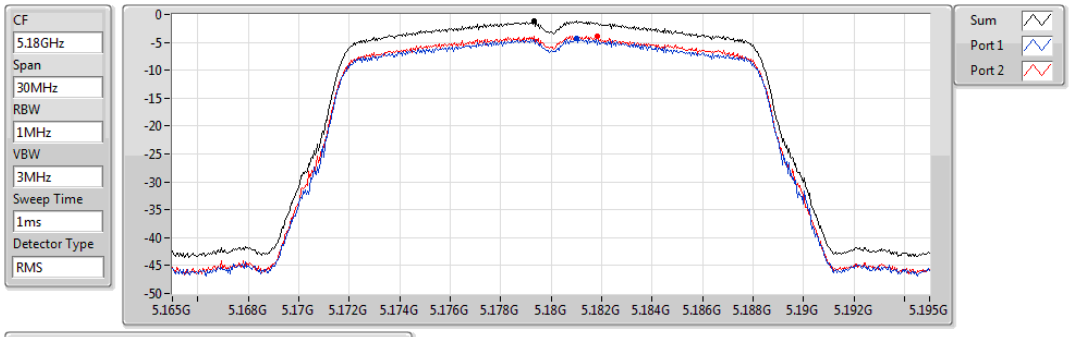
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5210MHz	Pass	5.52	-10.98	-10.52	-7.75	11.00	-2.23	17.00
5290MHz	Pass	6.00	-6.34	-6.12	-3.22	11.00	2.78	17.00
5530MHz	Pass	6.49	-8.70	-8.32	-5.51	10.51	0.98	17.00
5610MHz	Pass	6.49	-2.25	-1.72	1.03	10.51	7.52	17.00
5775MHz	Pass	6.50	-3.86	-3.33	-0.58	29.50	5.92	36.00

DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;

Note:
For 5150~5250MHz:
Directional gain = 10 x log($(10^{2.43/20}+10^{2.58/20})^2/2$) = 5.52 dBi.
For 5250~5350MHz:
Directional gain = 10 x log($(10^{3.4/20}+10^{2.55/20})^2/2$) = 6.00 dBi.
For 5470~5725MHz:
Directional gain = 10 x log($(10^{4.35/20}+10^{2.51/20})^2/2$) = 6.49 dBi.
For 5725~5850MHz:
Directional gain = 10 x log($(10^{4.26/20}+10^{2.65/20})^2/2$) = 6.50 dBi.

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

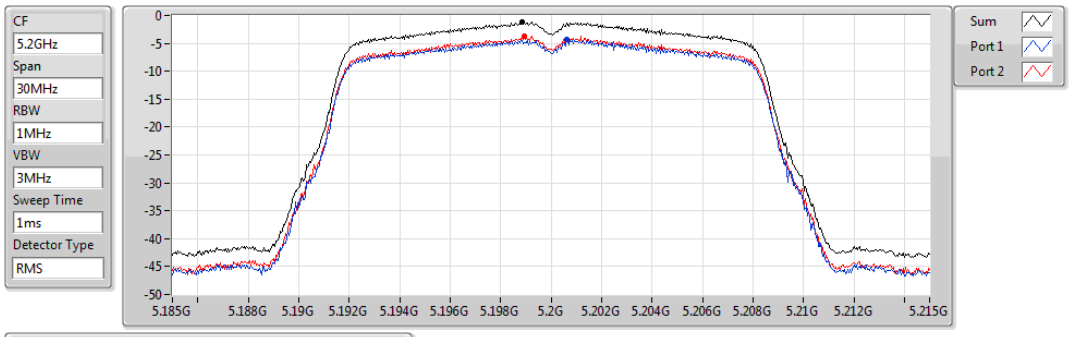
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.25	-1.25	-4.39	-3.83

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

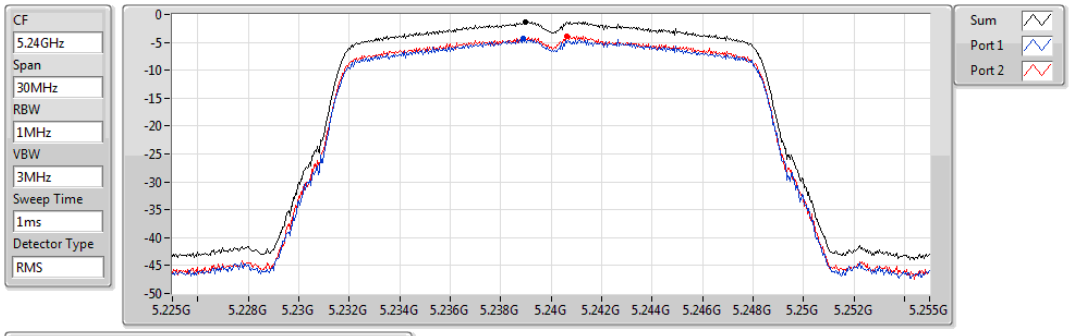
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.22	-1.22	-4.32	-3.74

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

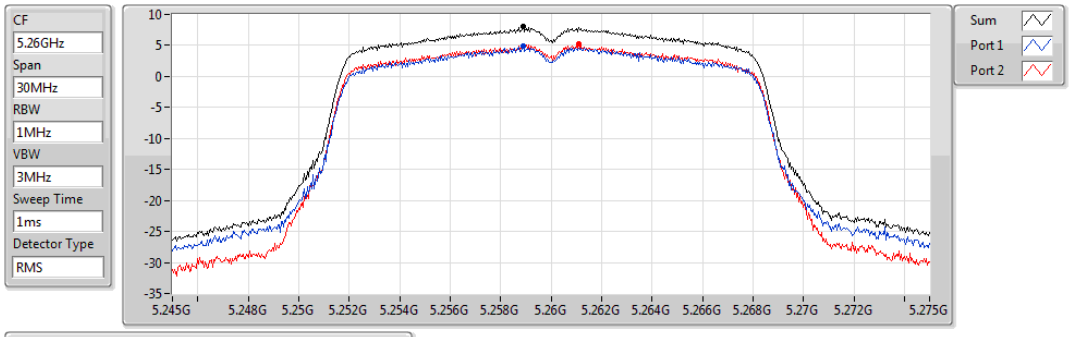
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.35	-1.35	-4.35	-3.82

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

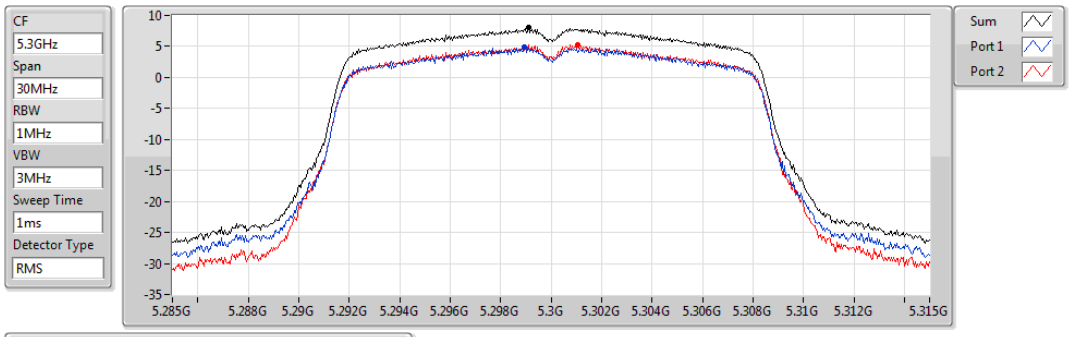
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.01	8.01	4.84	5.32

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

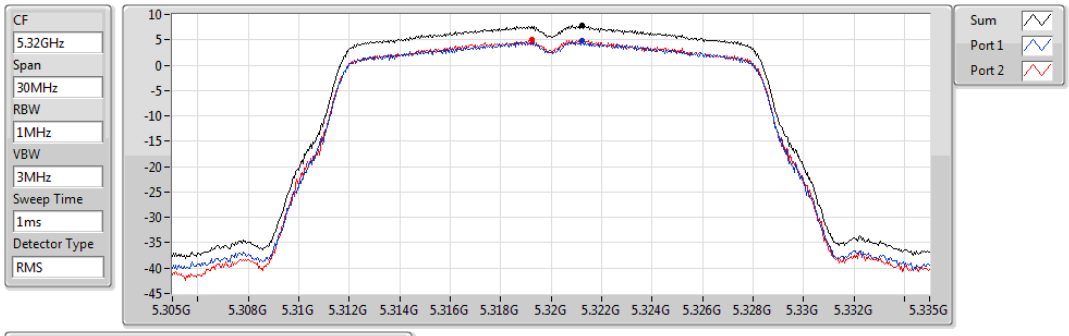
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.98	7.98	4.86	5.31

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

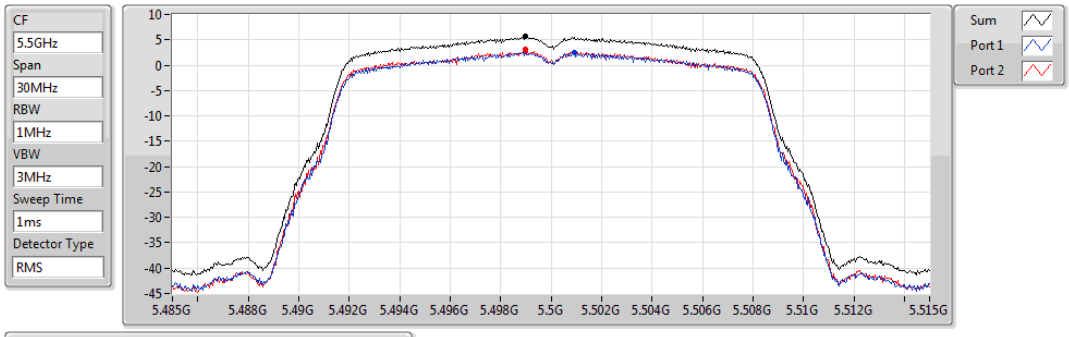
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.92	7.92	4.88	5.06

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

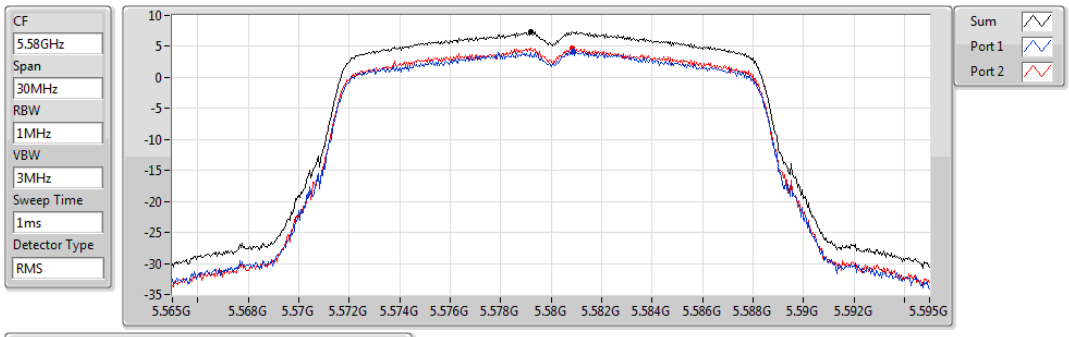
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.78	5.78	2.54	3.10

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

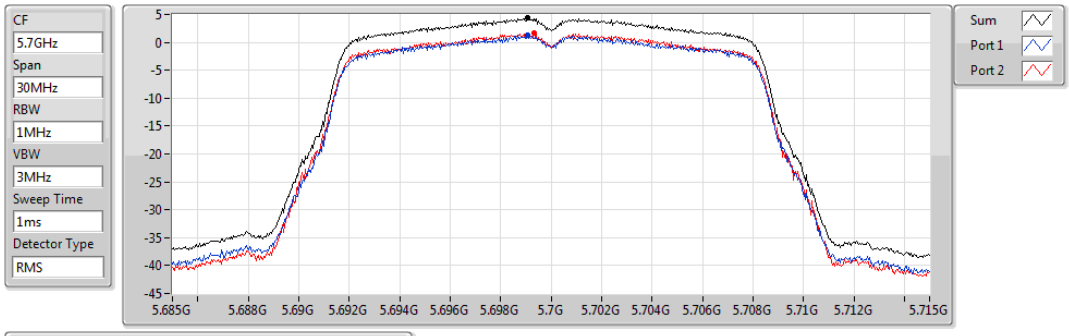
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.34	7.34	4.17	4.77

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

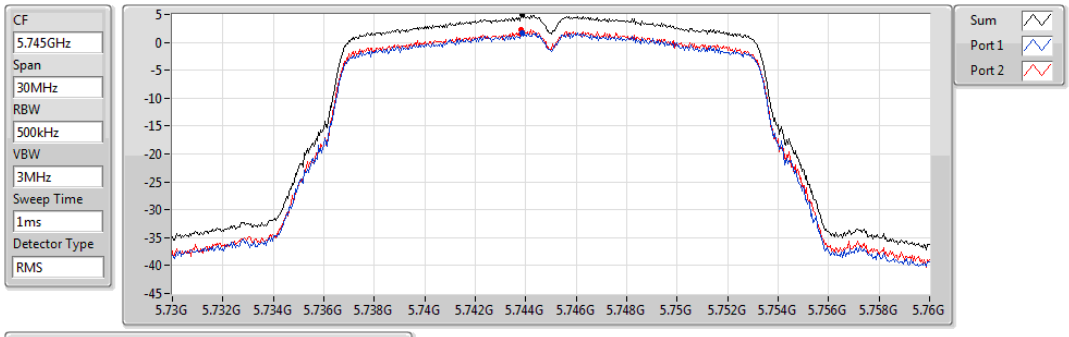
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.37	4.37	1.26	1.60

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

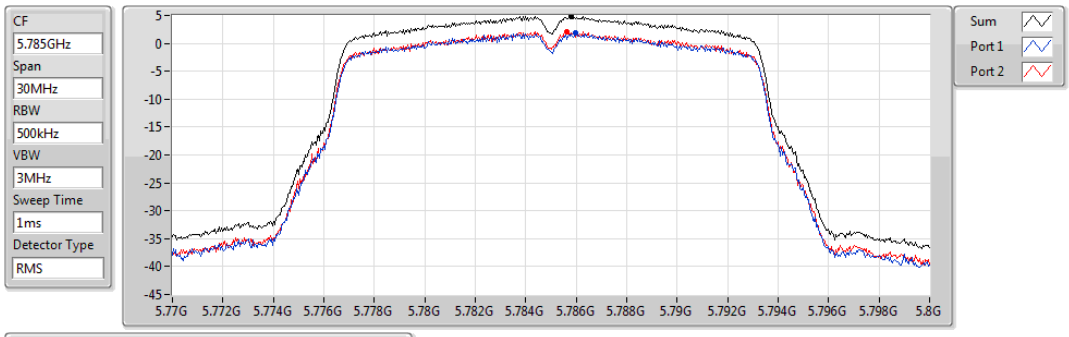
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.97	4.97	1.74	2.28

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

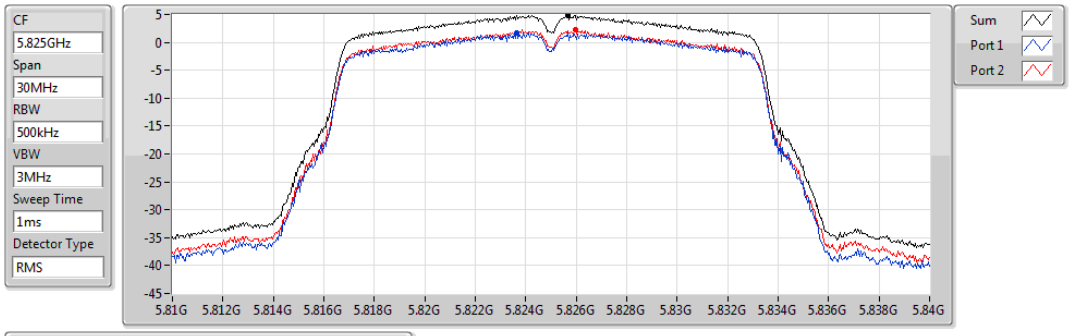
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.75	4.75	1.80	2.10

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

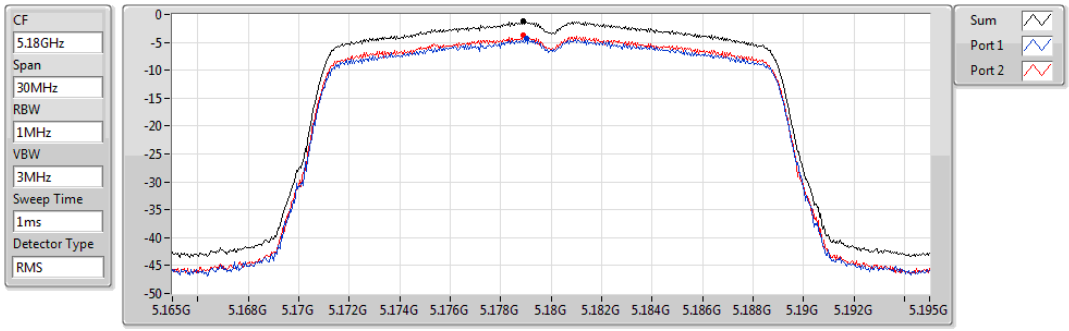
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.87	4.87	1.74	2.33

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

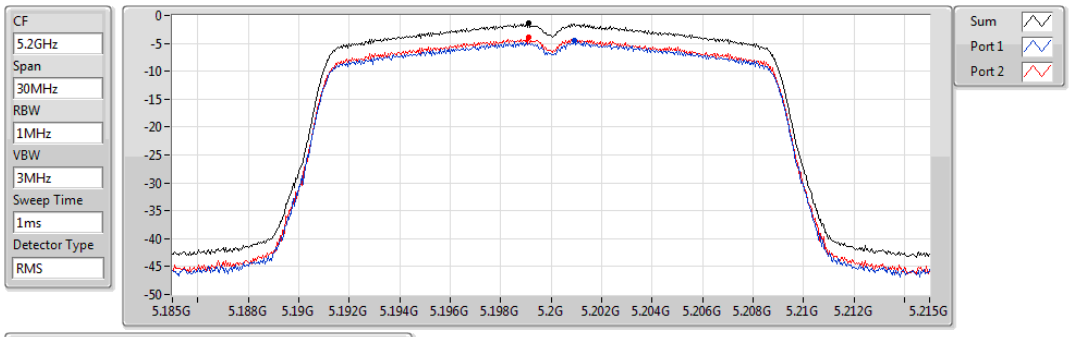
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.19	-1.19	-4.36	-3.80

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

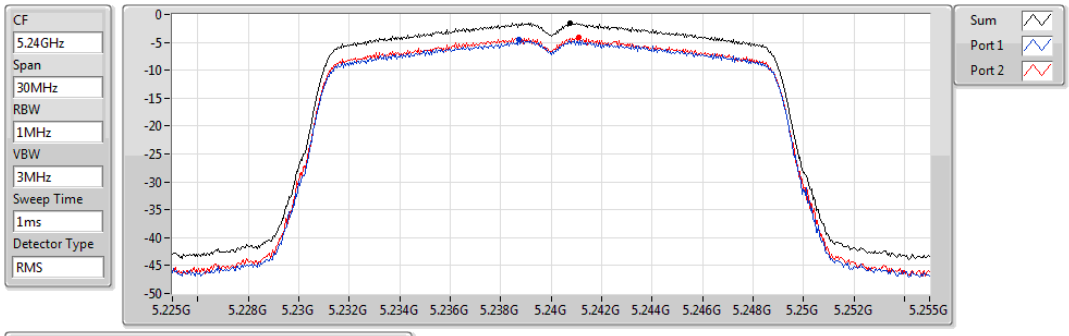
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.45	-1.45	-4.49	-3.96

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

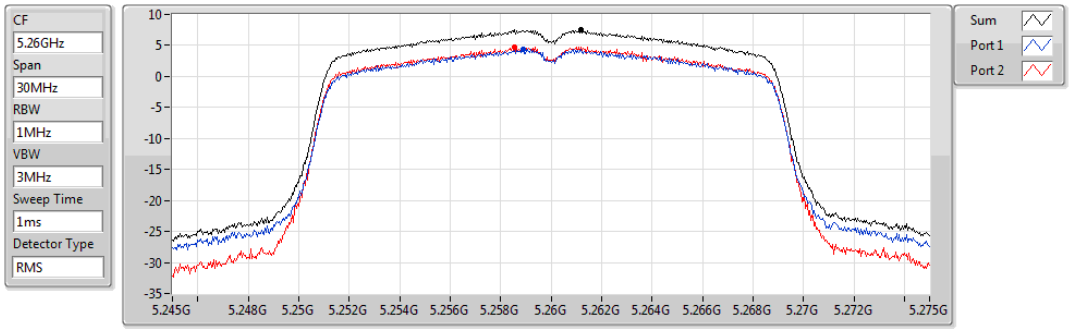
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.58	-1.58	-4.57	-4.08

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

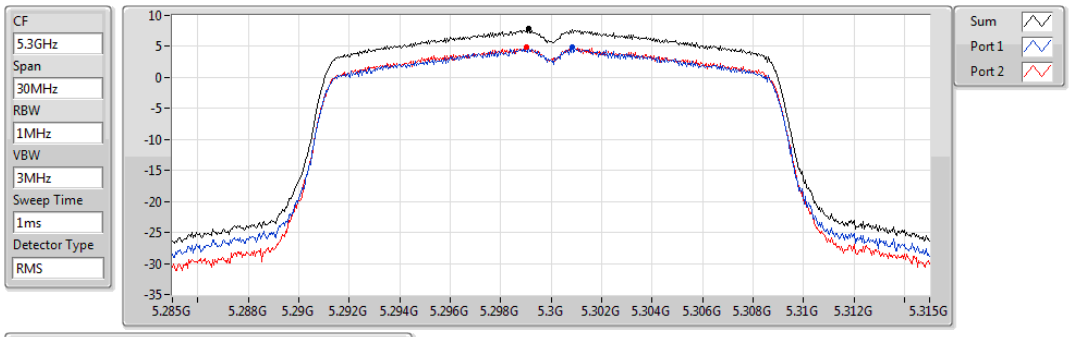
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.56	7.56	4.46	4.81

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

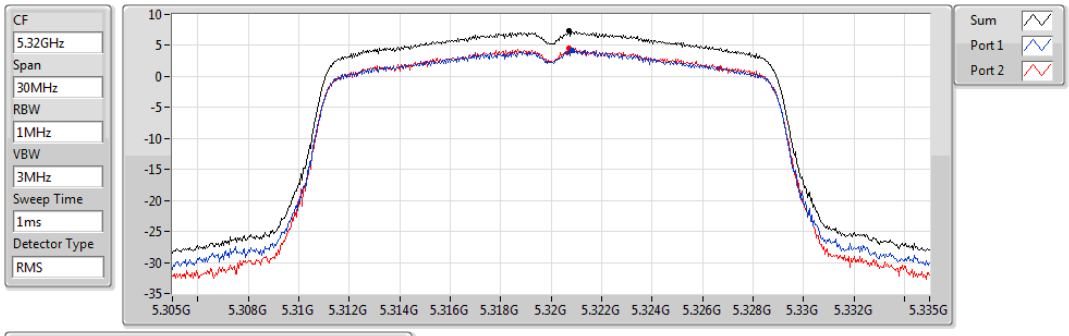
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.82	7.82	4.91	4.87

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

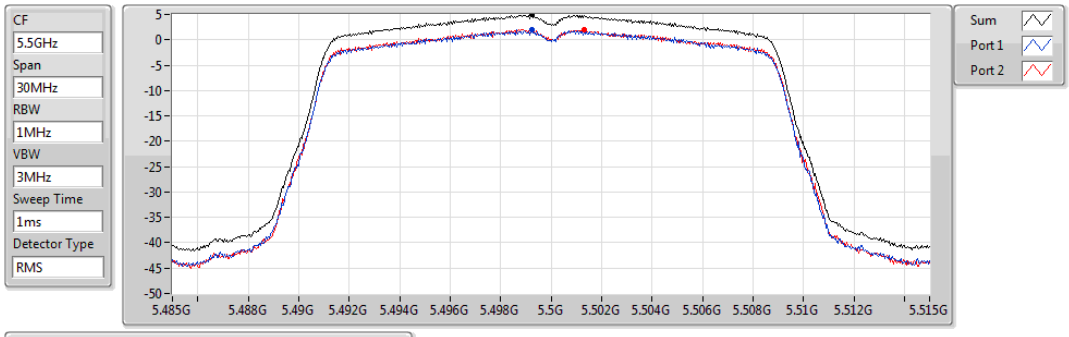
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.36	7.36	4.18	4.57

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

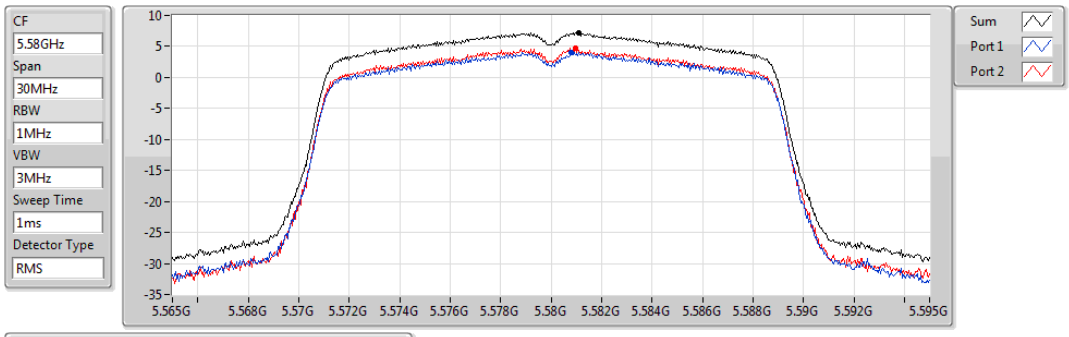
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.93	4.93	1.90	2.01

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

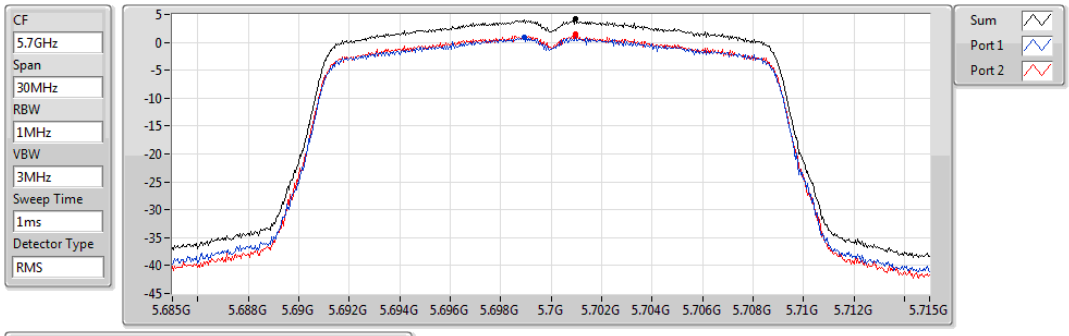
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.21	7.21	4.06	4.68

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

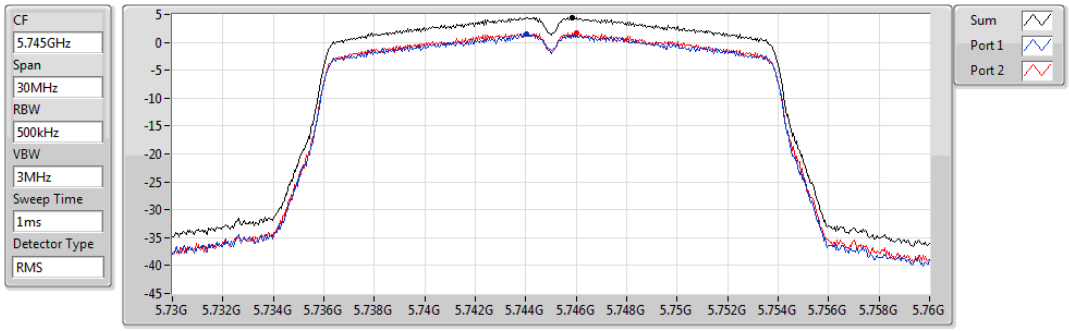
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.13	4.13	0.90	1.41

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

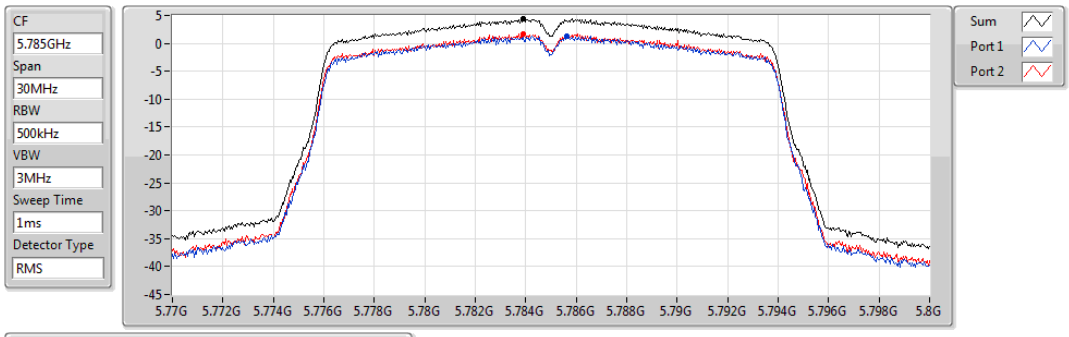
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.46	4.46	1.46	1.64

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

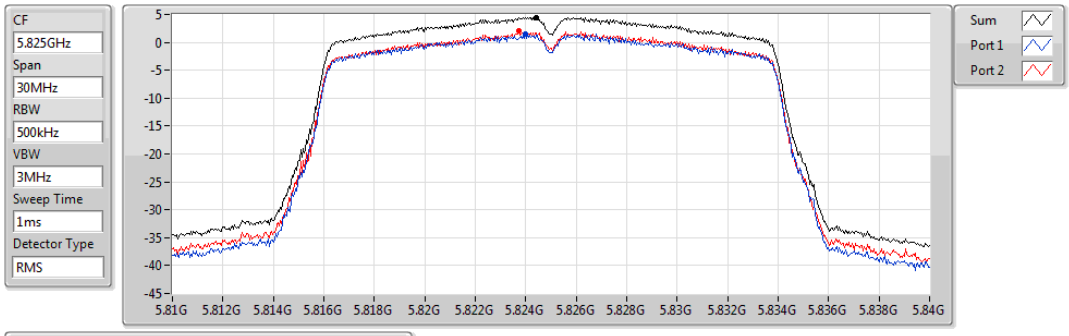
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.44	4.44	1.26	1.75

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

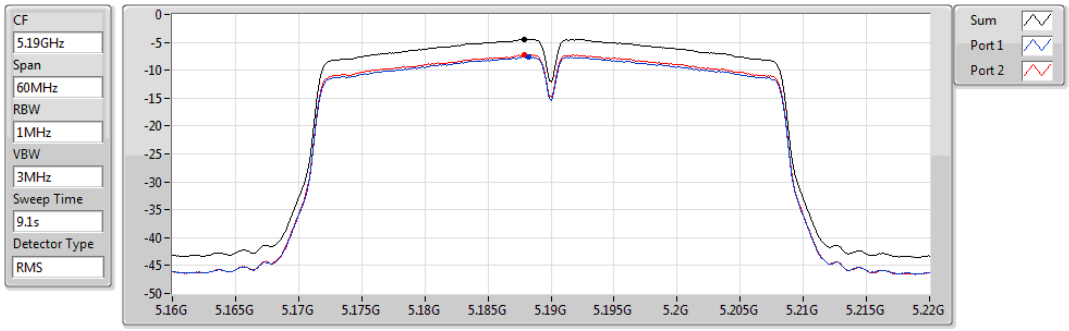
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.51	4.51	1.47	2.09

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

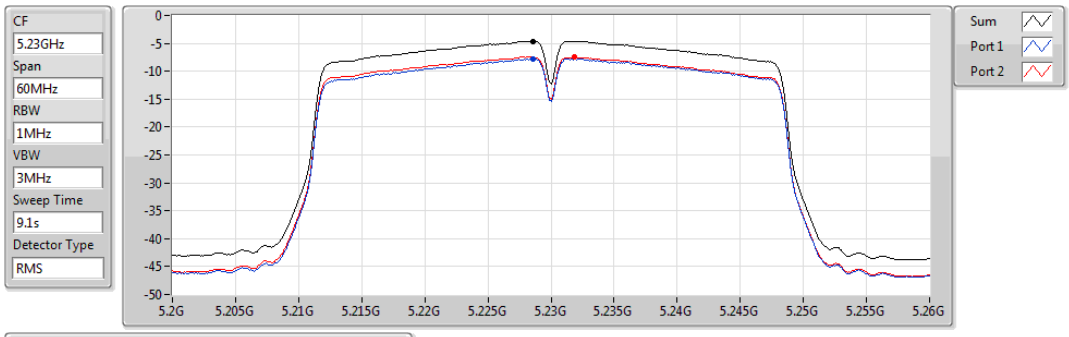
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.44	-4.44	-7.64	-7.23

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

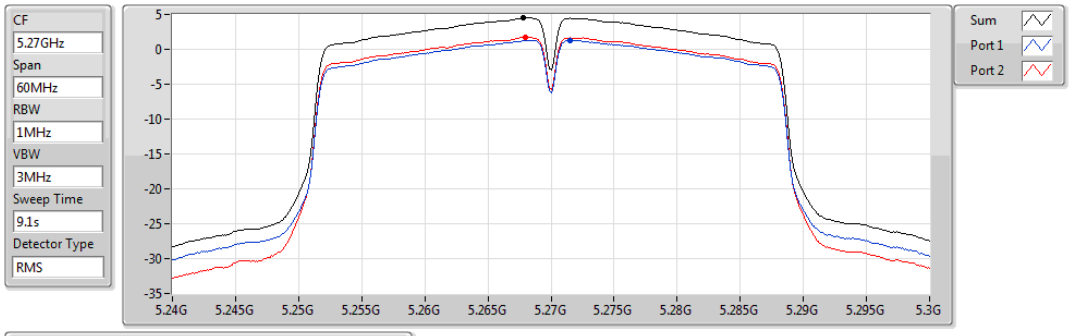
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.59	-4.59	-7.75	-7.43

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

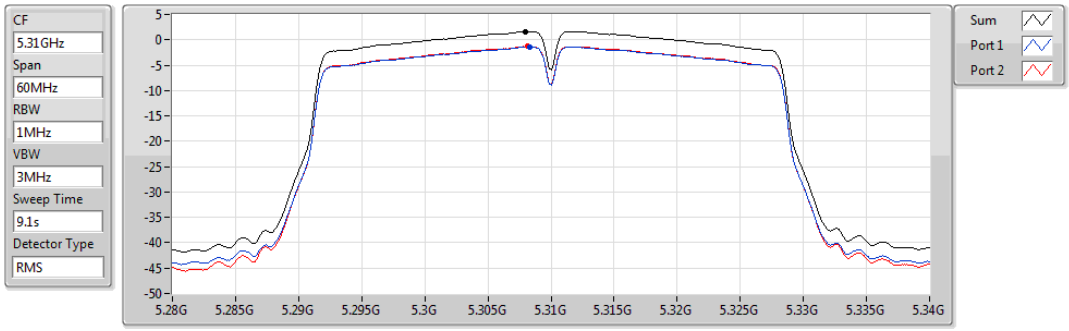
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.48	4.48	1.25	1.73

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

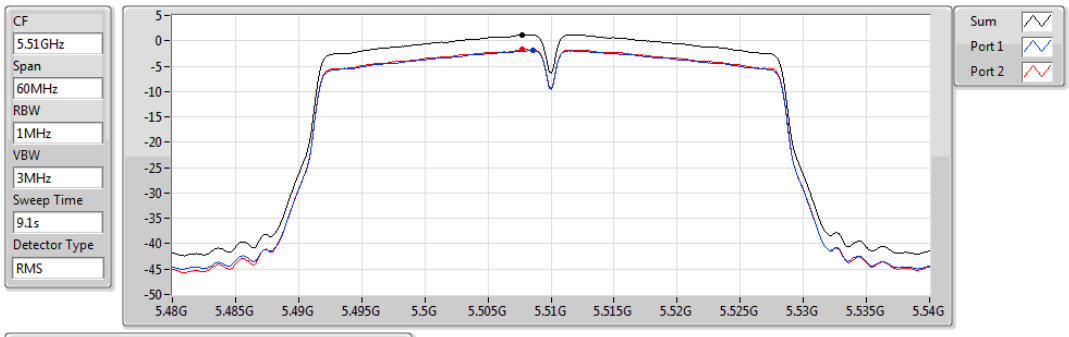
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.61	1.61	-1.46	-1.31

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

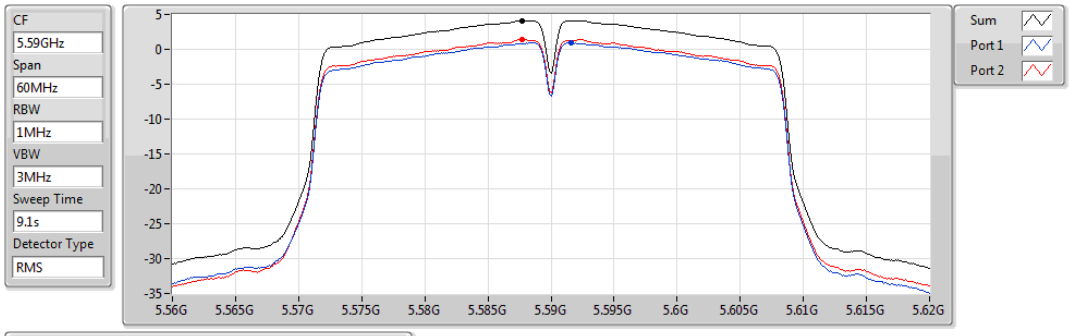
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.15	1.15	-1.94	-1.71

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

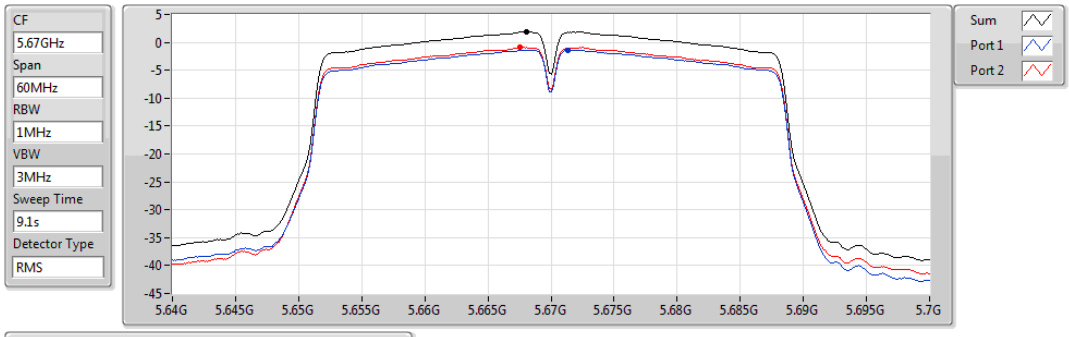
5590MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.14	4.14	0.90	1.41

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

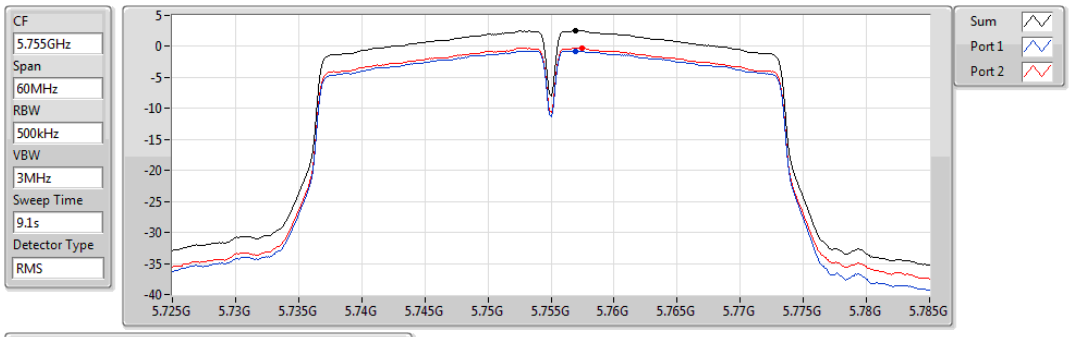
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.83	1.83	-1.39	-0.91

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

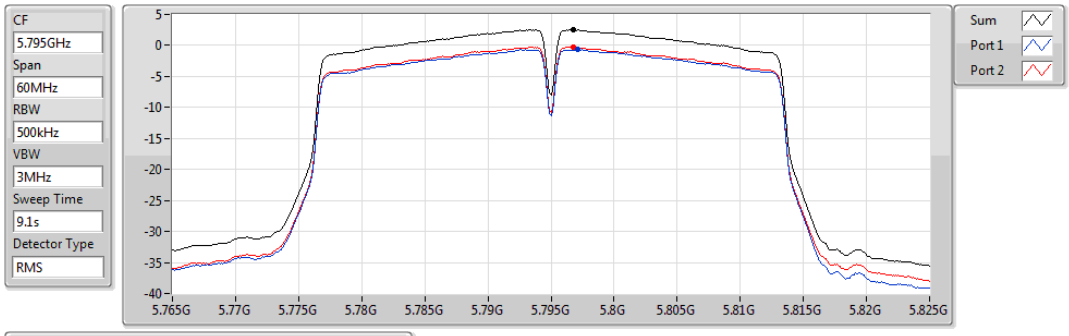
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.50	2.50	-0.73	-0.26

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

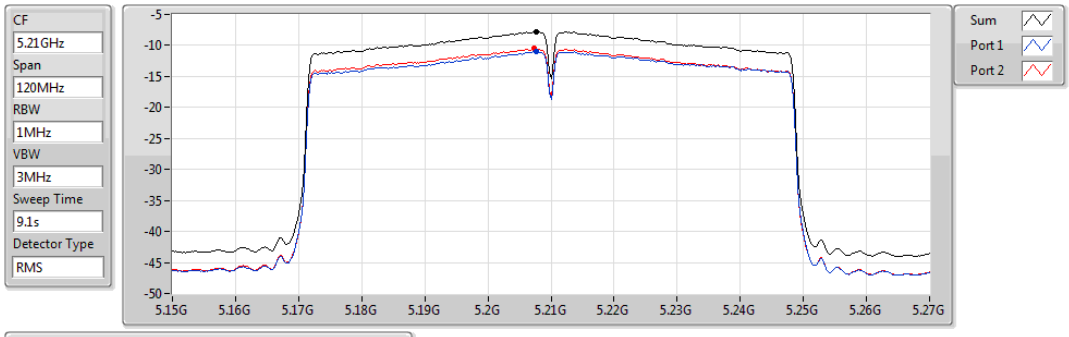
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.51	2.51	-0.68	-0.29

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

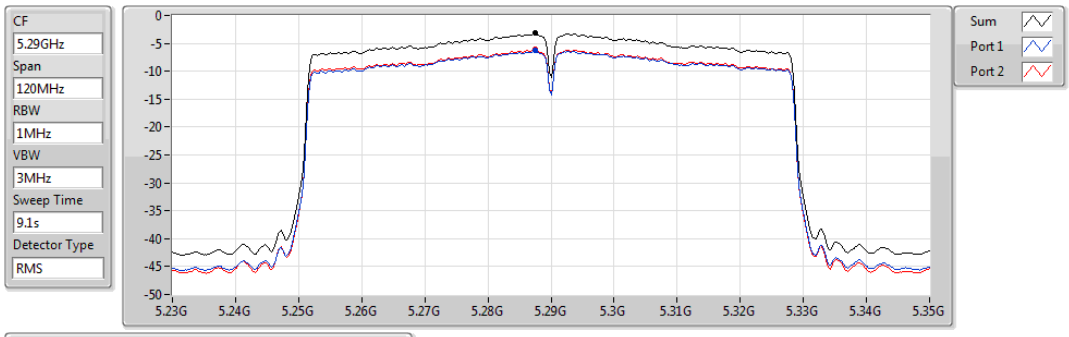
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.75	-7.75	-10.98	-10.52

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

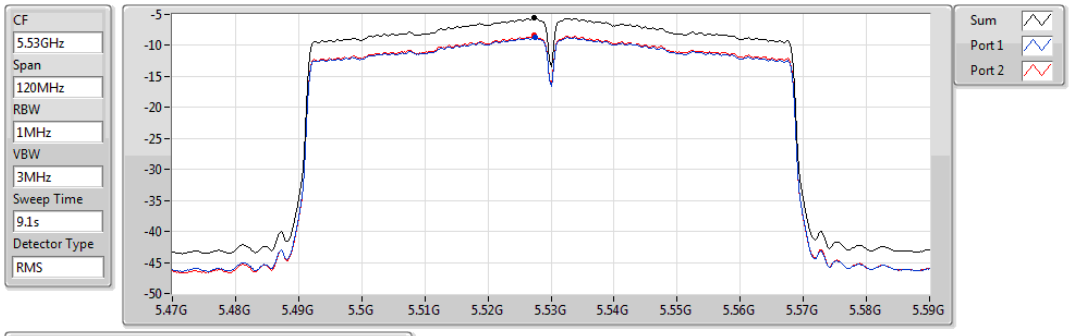
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.22	-3.22	-6.34	-6.12

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

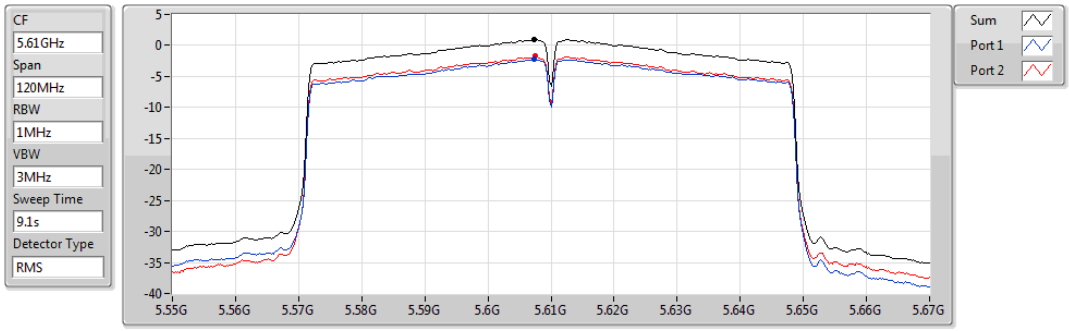
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.51	-5.51	-8.70	-8.32

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

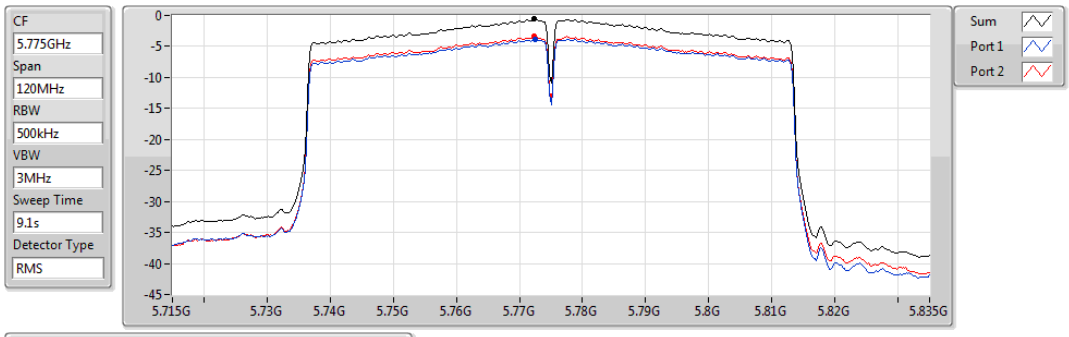
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.03	1.03	-2.25	-1.72

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

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.58	-0.58	-3.86	-3.33

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Test Procedures

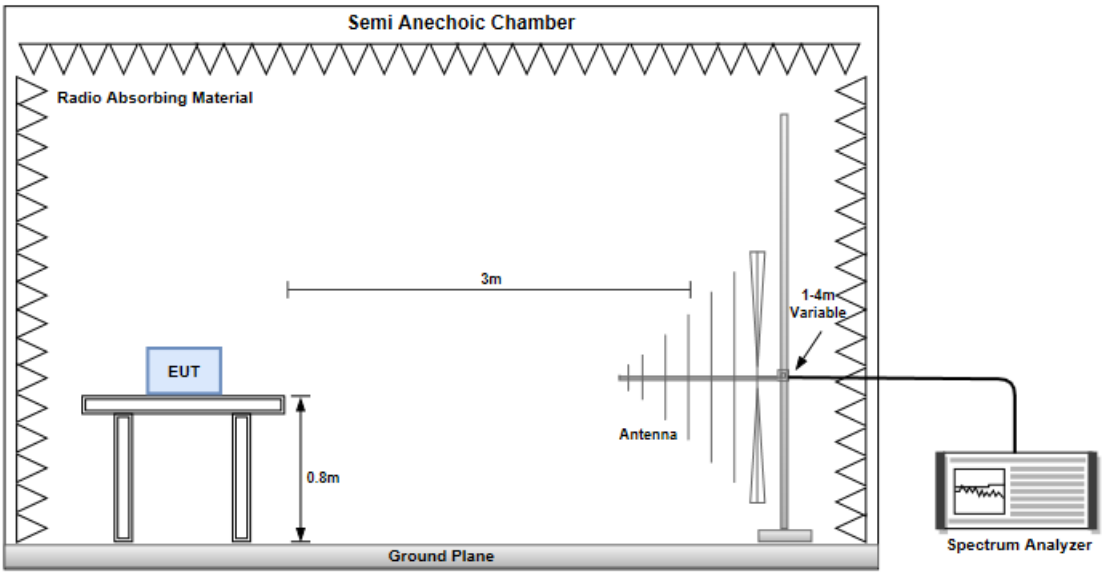
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

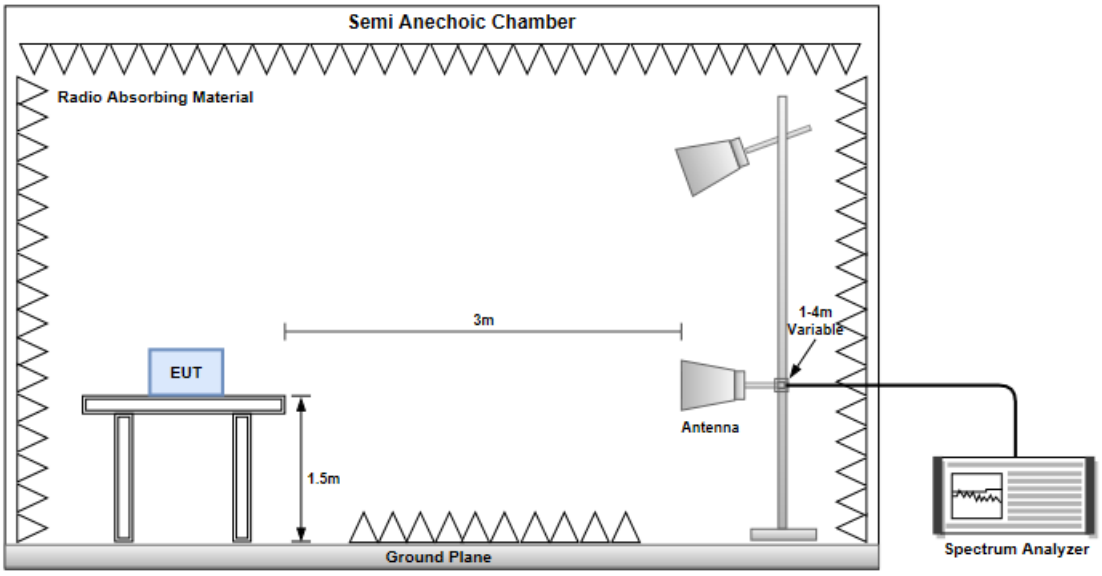
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

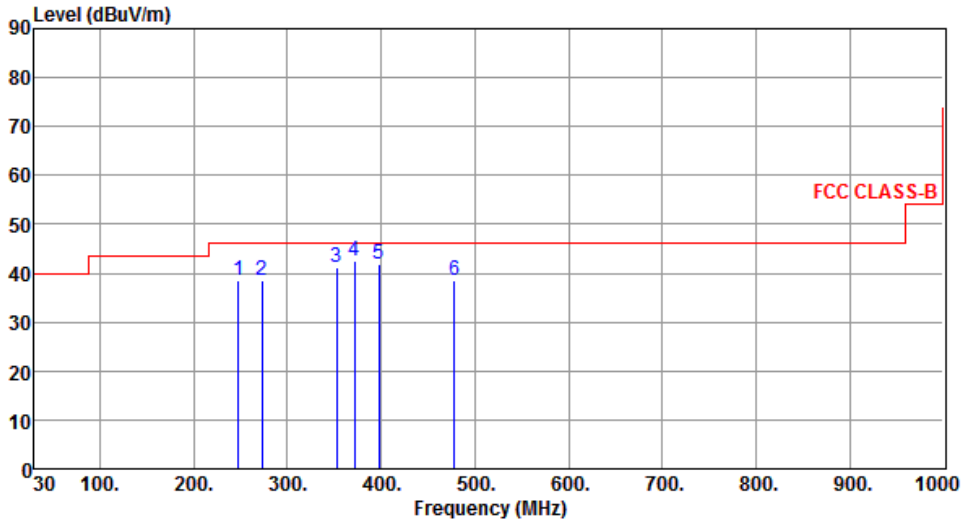


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

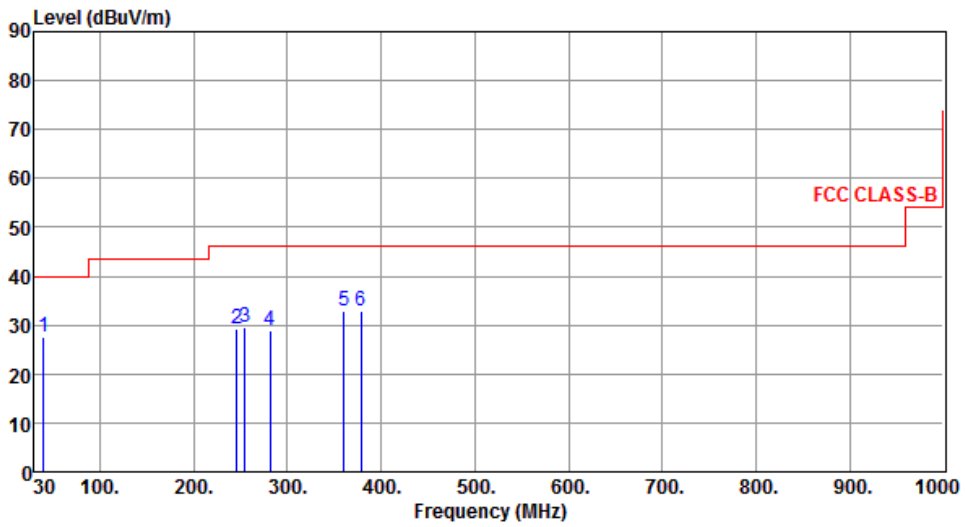
Modulation	VHT40	**Test Freq. (MHz)**	5590
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	247.67	38.56	46.00	-7.44	47.99	-9.43	Peak	---	---
2	272.65	38.56	46.00	-7.44	46.99	-8.43	Peak	---	---
3	352.89	41.23	46.00	-4.77	47.62	-6.39	Peak	---	---
4	371.54	42.57	46.00	-3.43	48.33	-5.76	Peak	---	---
5	397.65	41.85	46.00	-4.15	47.00	-5.15	Peak	---	---
6	478.22	38.65	46.00	-7.35	42.00	-3.35	Peak	---	---

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

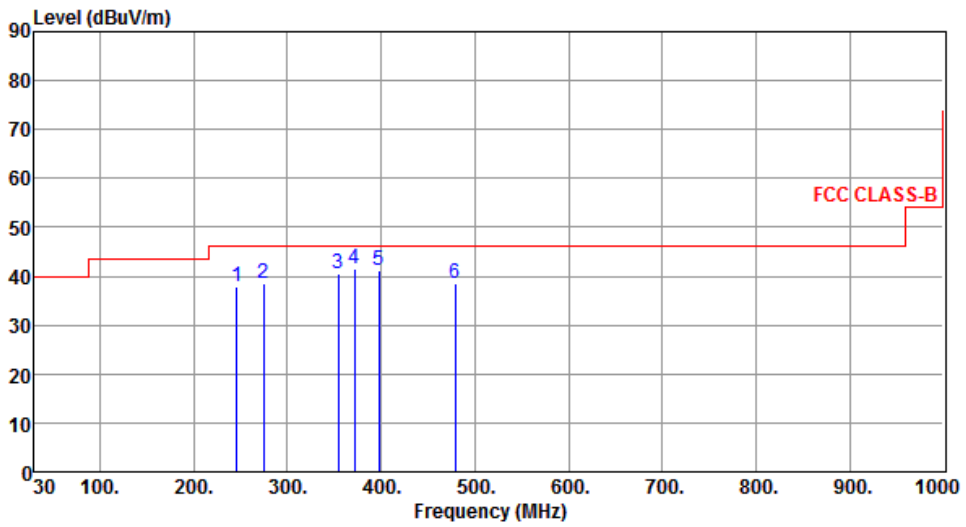
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.65	27.56	40.00	-12.44	35.71	-8.15	Peak	---	---
2	245.90	29.26	46.00	-16.74	38.72	-9.46	Peak	---	---
3	254.56	29.56	46.00	-16.44	38.73	-9.17	Peak	---	---
4	281.62	28.99	46.00	-17.01	37.12	-8.13	Peak	---	---
5	359.99	32.98	46.00	-13.02	39.11	-6.13	Peak	---	---
6	378.90	32.92	46.00	-13.08	38.50	-5.58	Peak	---	---

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

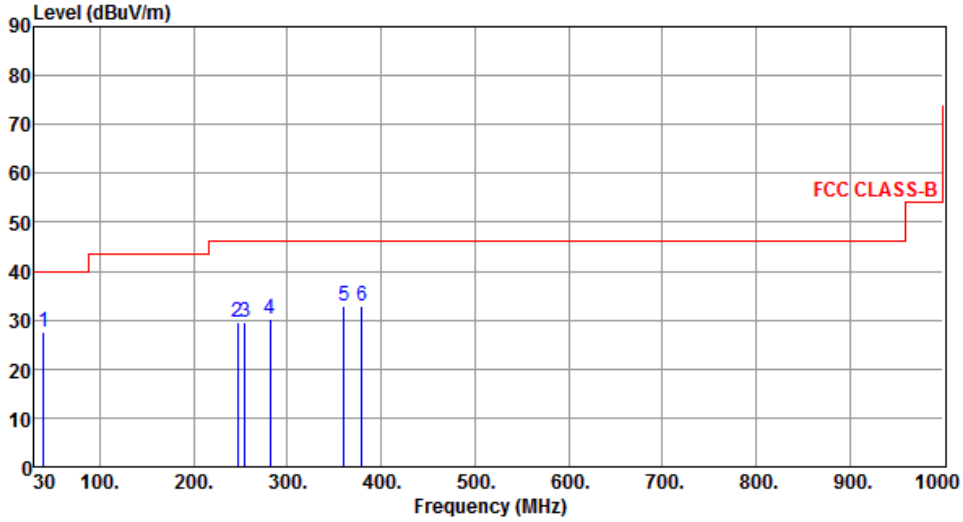
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	245.87	37.90	46.00	-8.10	47.36	-9.46	Peak	---	---
2	274.56	38.56	46.00	-7.44	46.87	-8.31	Peak	---	---
3	354.56	40.45	46.00	-5.55	46.81	-6.36	Peak	---	---
4	371.56	41.66	46.00	-4.34	47.42	-5.76	Peak	---	---
5	397.65	41.23	46.00	-4.77	46.38	-5.15	Peak	---	---
6	479.31	38.56	46.00	-7.44	41.88	-3.32	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

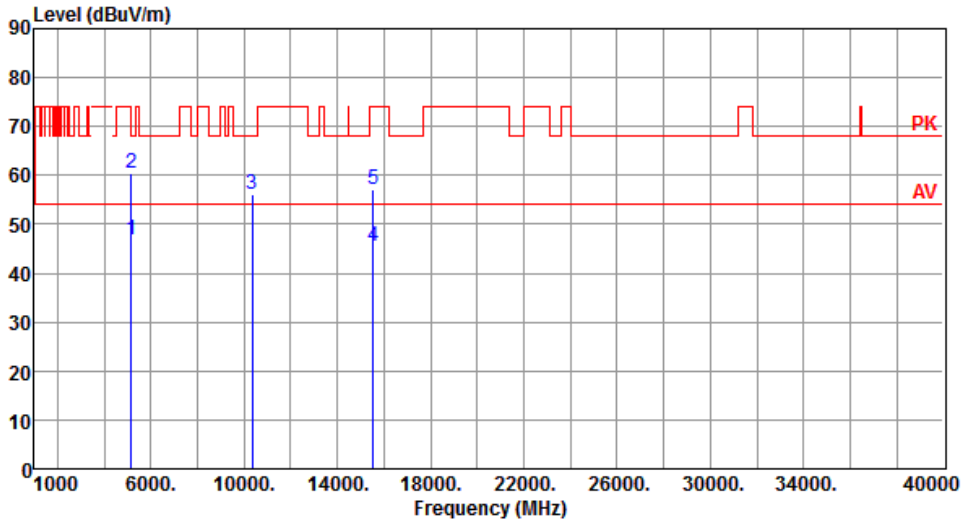


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.52	27.65	40.00	-12.35	35.82	-8.17	Peak	---	---
2	246.56	29.56	46.00	-16.44	39.01	-9.45	Peak	---	---
3	254.56	29.56	46.00	-16.44	38.73	-9.17	Peak	---	---
4	281.53	30.32	46.00	-15.68	38.45	-8.13	Peak	---	---
5	360.66	32.89	46.00	-13.11	38.99	-6.10	Peak	---	---
6	379.52	32.81	46.00	-13.19	38.38	-5.57	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

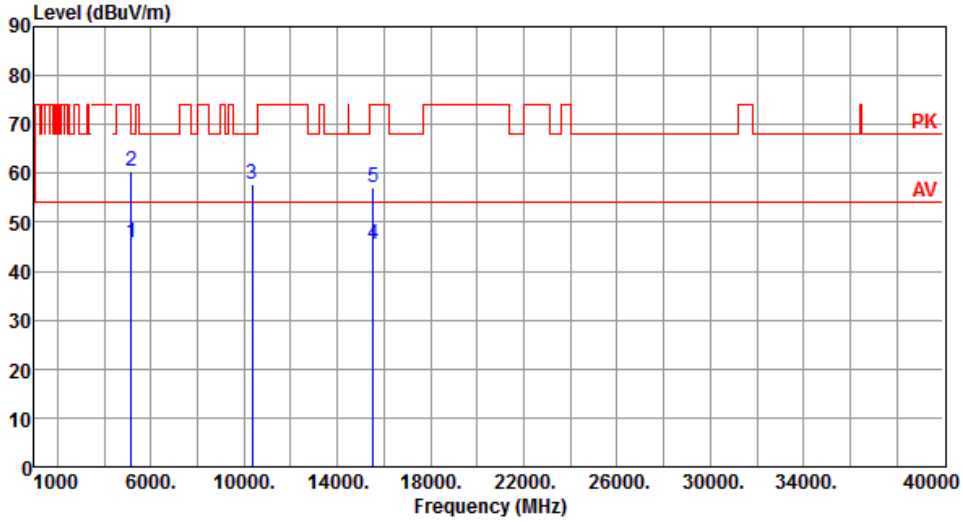
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	46.68	54.00	-7.32	42.14	4.54	Average	175	153
2	5150.00	60.37	74.00	-13.63	55.83	4.54	Peak	175	153
3	10360.00	56.02	68.20	-12.18	42.24	13.78	Peak	100	108
4	15540.00	45.38	54.00	-8.62	31.10	14.28	Average	100	112
5	15540.00	57.13	74.00	-16.87	42.85	14.28	Peak	100	112

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

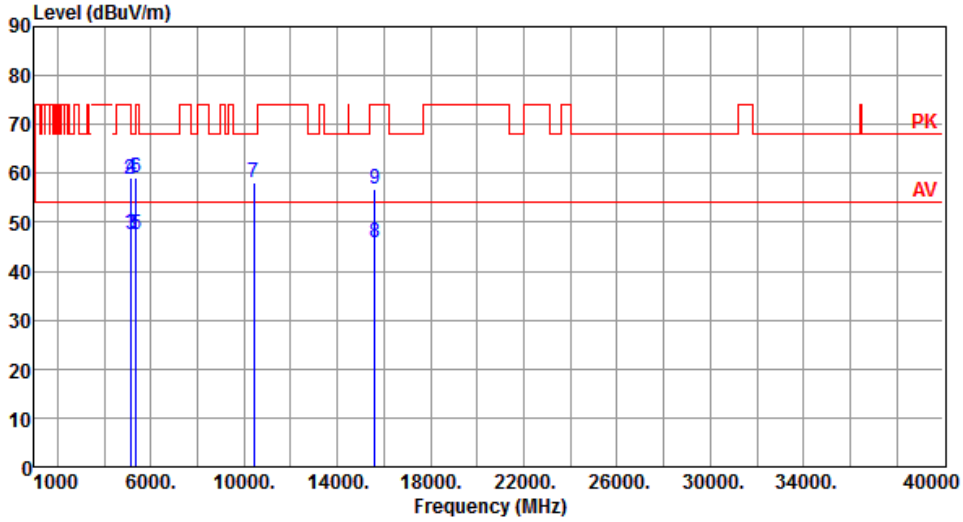
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	45.78	54.00	-8.22	41.24	4.54	Average	289	116
2	5150.00	60.52	74.00	-13.48	55.98	4.54	Peak	289	116
3	10360.00	57.67	68.20	-10.53	43.89	13.78	Peak	355	94
4	15540.00	45.49	54.00	-8.51	31.21	14.28	Average	100	96
5	15540.00	57.17	74.00	-16.83	42.89	14.28	Peak	100	96

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

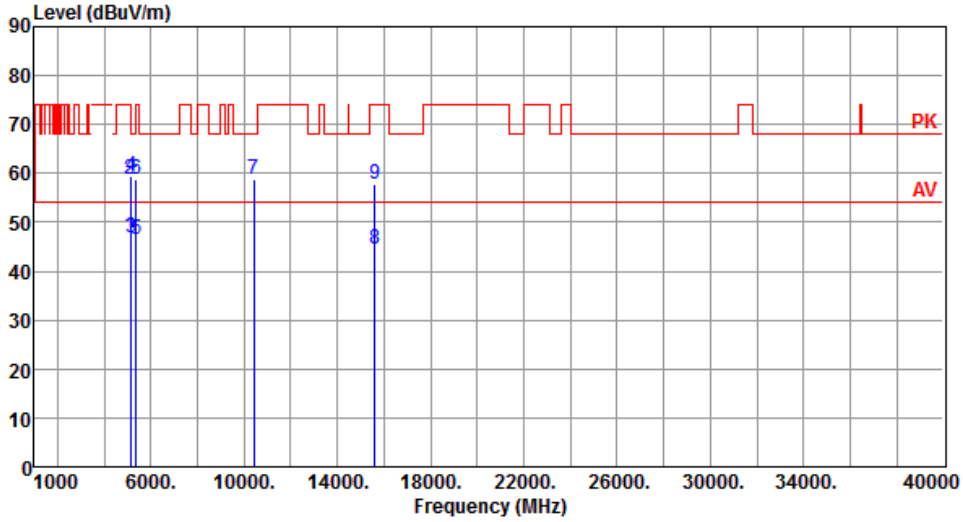
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5120.00	47.72	54.00	-6.28	43.13	4.59	Average	191	156
2	5120.00	58.83	74.00	-15.17	54.24	4.59	Peak	191	156
3	5150.00	47.36	54.00	-6.64	42.82	4.54	Average	176	151
4	5150.00	59.12	74.00	-14.88	54.58	4.54	Peak	176	151
5	5350.00	47.33	54.00	-6.67	43.20	4.13	Average	176	151
6	5350.00	59.01	74.00	-14.99	54.88	4.13	Peak	176	151
7	10400.00	58.17	68.20	-10.03	44.28	13.89	Peak	359	99
8	15600.00	45.67	54.00	-8.33	31.57	14.10	Average	100	102
9	15600.00	56.95	74.00	-17.05	42.85	14.10	Peak	100	102

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

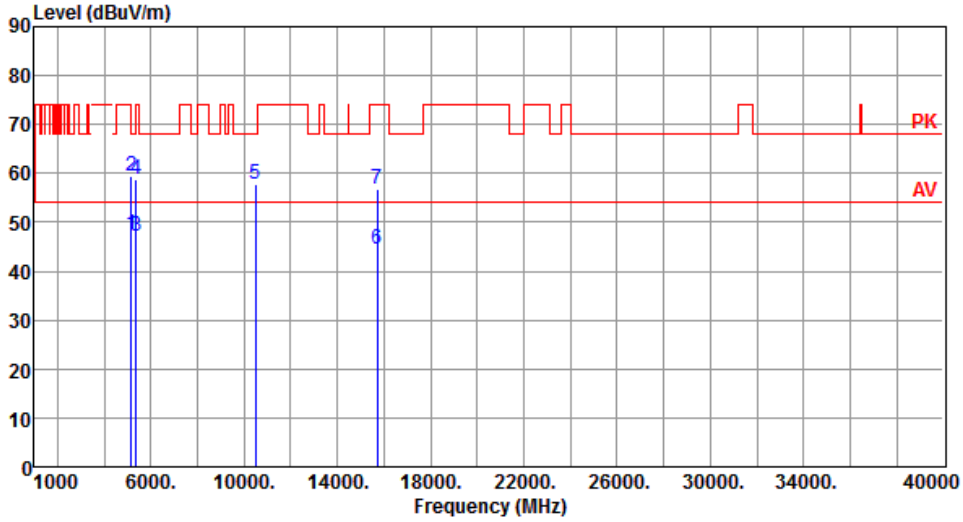
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5120.00	47.16	54.00	-6.84	42.57	4.59	Average	200	121
2	5120.00	58.93	74.00	-15.07	54.34	4.59	Peak	200	121
3	5150.00	46.76	54.00	-7.24	42.22	4.54	Average	287	117
4	5150.00	59.43	74.00	-14.57	54.89	4.54	Peak	287	117
5	5350.00	46.34	54.00	-7.66	42.21	4.13	Average	287	117
6	5350.00	58.70	74.00	-15.30	54.57	4.13	Peak	287	117
7	10400.00	58.78	68.20	-9.42	44.89	13.89	Peak	356	92
8	15600.00	44.59	54.00	-9.41	30.49	14.10	Average	100	95
9	15600.00	57.94	74.00	-16.06	43.84	14.10	Peak	100	95

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

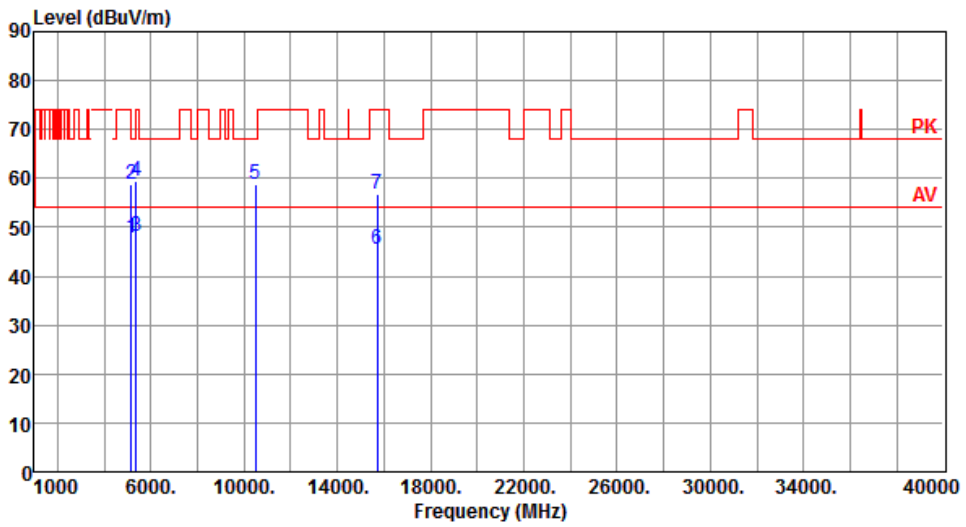
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.43	54.00	-6.57	42.89	4.54	Average	188	149
2	5150.00	59.40	74.00	-14.60	54.86	4.54	Peak	188	149
3	5350.00	47.32	54.00	-6.68	43.19	4.13	Average	188	149
4	5350.00	58.81	74.00	-15.19	54.68	4.13	Peak	188	149
5	10480.00	57.77	68.20	-10.43	43.89	13.88	Peak	358	99
6	15720.00	44.47	54.00	-9.53	30.58	13.89	Average	100	105
7	15720.00	56.85	74.00	-17.15	42.96	13.89	Peak	100	105

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

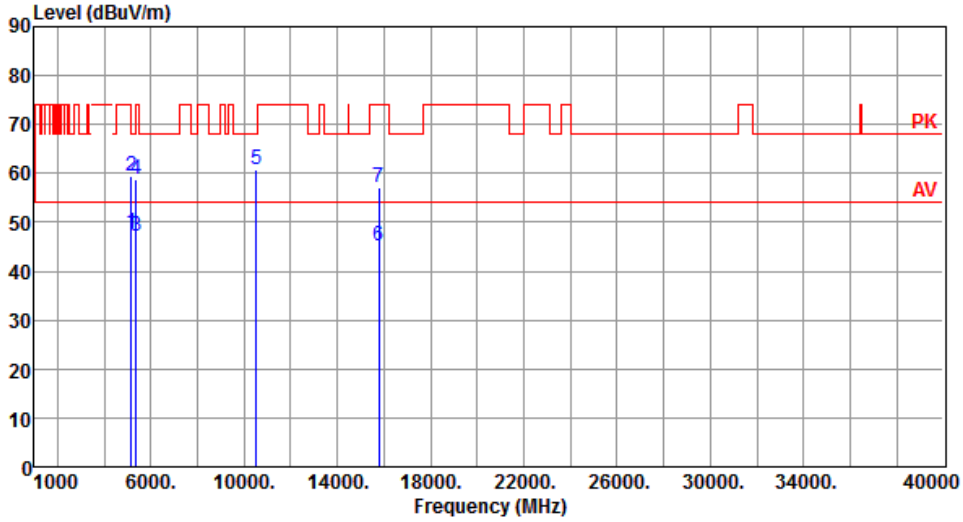
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	47.84	54.00	-6.16	43.30	4.54	Average	292	115
2	5150.00	58.77	74.00	-15.23	54.23	4.54	Peak	292	115
3	5350.00	48.04	54.00	-5.96	43.91	4.13	Average	292	115
4	5350.00	59.29	74.00	-14.71	55.16	4.13	Peak	292	115
5	10480.00	58.75	68.20	-9.45	44.87	13.88	Peak	350	100
6	15720.00	45.48	54.00	-8.52	31.59	13.89	Average	100	104
7	15720.00	56.82	74.00	-17.18	42.93	13.89	Peak	100	104

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

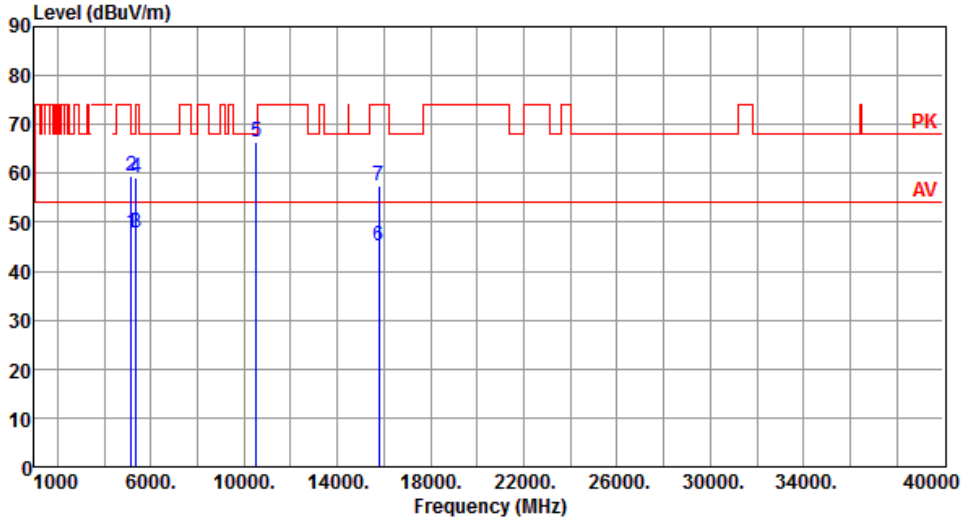
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.79	54.00	-6.21	43.25	4.54	Average	224	155
2	5150.00	59.30	74.00	-14.70	54.76	4.54	Peak	224	155
3	5350.00	47.02	54.00	-6.98	42.89	4.13	Average	224	155
4	5350.00	58.76	74.00	-15.24	54.63	4.13	Peak	224	155
5	10520.00	60.79	68.20	-7.41	46.91	13.88	Peak	367	95
6	15780.00	45.33	54.00	-8.67	31.50	13.83	Average	100	100
7	15780.00	57.10	74.00	-16.90	43.27	13.83	Peak	100	100

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

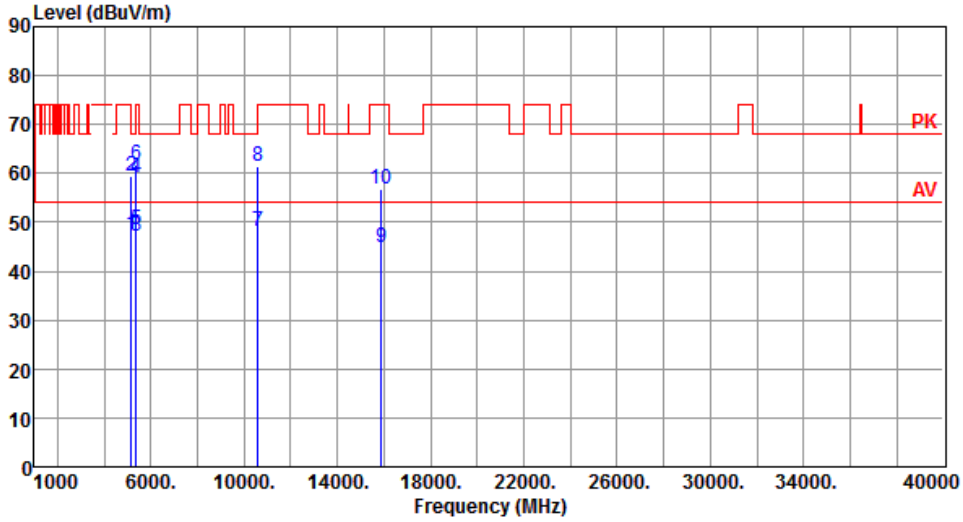
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	47.79	54.00	-6.21	43.25	4.54	Average	277	118
2	5150.00	59.38	74.00	-14.62	54.84	4.54	Peak	277	118
3	5350.00	47.96	54.00	-6.04	43.83	4.13	Average	277	118
4	5350.00	59.04	74.00	-14.96	54.91	4.13	Peak	277	118
5	10520.00	66.41	68.20	-1.79	52.53	13.88	Peak	349	102
6	15780.00	45.32	54.00	-8.68	31.49	13.83	Average	100	100
7	15780.00	57.34	74.00	-16.66	43.51	13.83	Peak	100	100

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

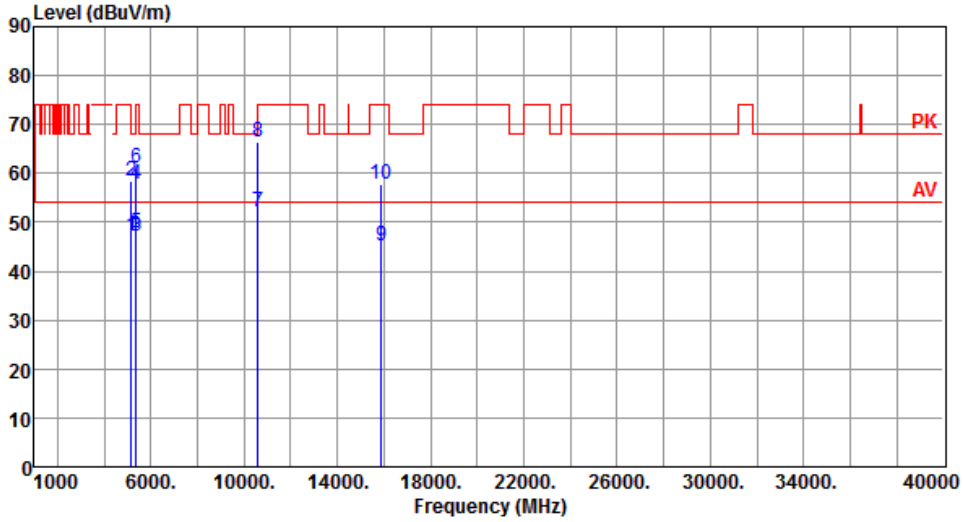
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.41	54.00	-6.59	42.87	4.54	Average	202	154
2	5150.00	59.41	74.00	-14.59	54.87	4.54	Peak	202	154
3	5350.00	47.11	54.00	-6.89	42.98	4.13	Average	202	154
4	5350.00	59.04	74.00	-14.96	54.91	4.13	Peak	202	154
5	5380.00	48.48	54.00	-5.52	44.20	4.28	Average	202	150
6	5380.00	61.85	74.00	-12.15	57.57	4.28	Peak	202	150
7	10600.00	48.06	54.00	-5.94	34.21	13.85	Average	371	99
8	10600.00	61.45	74.00	-12.55	47.60	13.85	Peak	371	99
9	15900.00	44.95	54.00	-9.05	31.13	13.82	Average	100	97
10	15900.00	56.78	74.00	-17.22	42.96	13.82	Peak	100	97

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

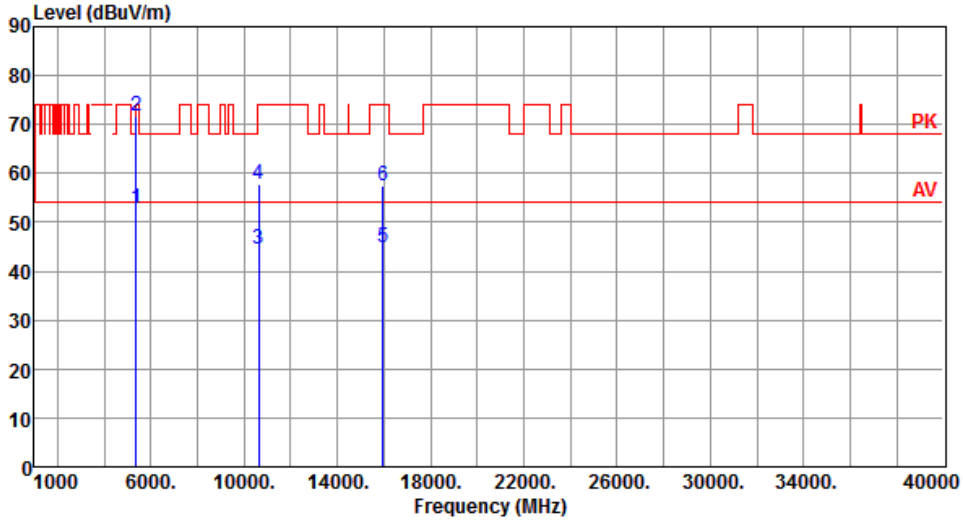
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	47.29	54.00	-6.71	42.75	4.54	Average	287	116
2	5150.00	58.40	74.00	-15.60	53.86	4.54	Peak	287	116
3	5350.00	47.08	54.00	-6.92	42.95	4.13	Average	287	116
4	5350.00	57.90	74.00	-16.10	53.77	4.13	Peak	287	116
5	5380.00	47.98	54.00	-6.02	43.70	4.28	Average	302	121
6	5380.00	61.07	74.00	-12.93	56.79	4.28	Peak	302	121
7	10600.00	52.25	54.00	-1.75	38.40	13.85	Average	361	96
8	10600.00	66.36	74.00	-7.64	52.51	13.85	Peak	361	96
9	15900.00	45.06	54.00	-8.94	31.24	13.82	Average	361	96
10	15900.00	57.67	74.00	-16.33	43.85	13.82	Peak	361	96

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

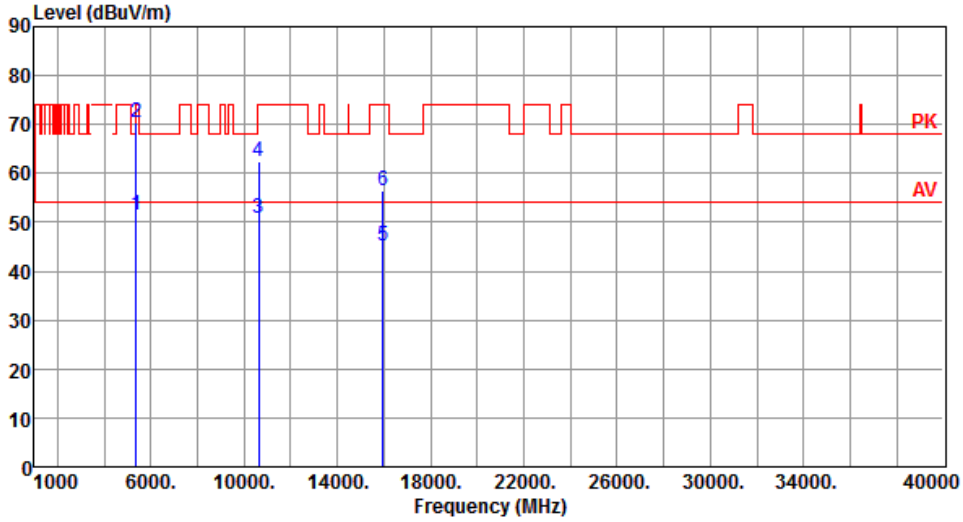
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	52.71	54.00	-1.29	48.58	4.13	Average	204	154
2	5350.00	71.59	74.00	-2.41	67.46	4.13	Peak	204	154
3	10640.00	44.42	54.00	-9.58	30.57	13.85	Average	100	94
4	10640.00	57.69	74.00	-16.31	43.84	13.85	Peak	100	94
5	15960.00	44.75	54.00	-9.25	30.99	13.76	Average	100	98
6	15960.00	57.51	74.00	-16.49	43.75	13.76	Peak	100	98

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

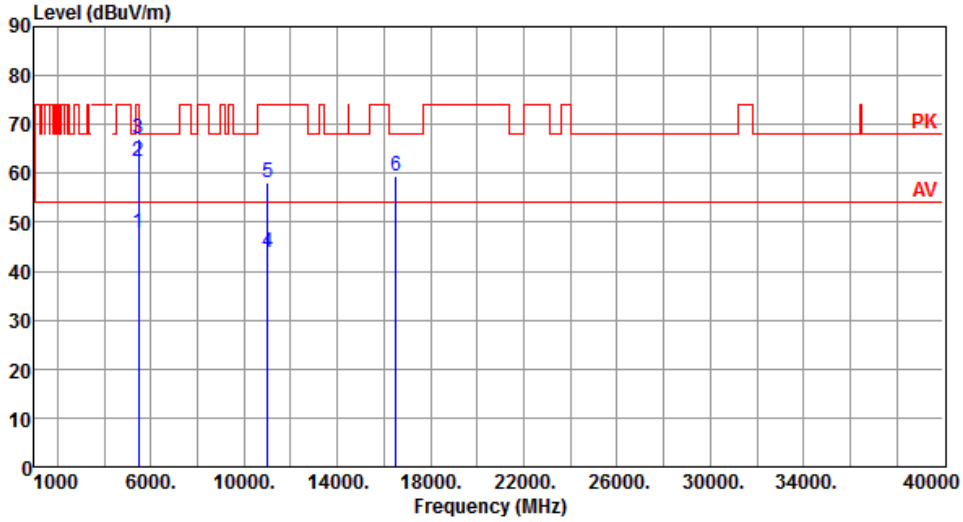
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	51.35	54.00	-2.65	47.22	4.13	Average	188	118
2	5350.00	70.37	74.00	-3.63	66.24	4.13	Peak	188	118
3	10640.00	50.69	54.00	-3.31	36.84	13.85	Average	362	97
4	10640.00	62.35	74.00	-11.65	48.50	13.85	Peak	362	97
5	15960.00	45.30	54.00	-8.70	31.54	13.76	Average	100	101
6	15960.00	56.62	74.00	-17.38	42.86	13.76	Peak	100	101

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

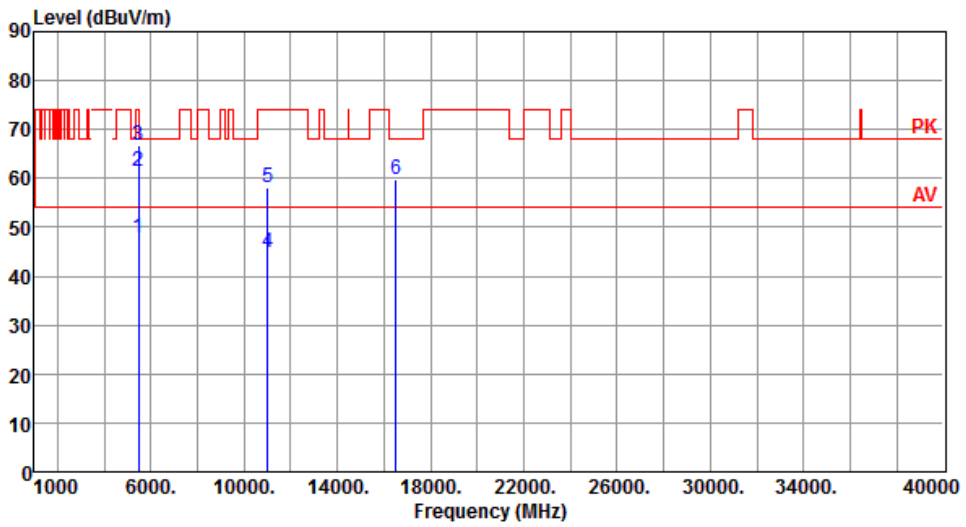
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.91	54.00	-6.09	43.27	4.64	Average	100	150
2	5460.00	62.49	74.00	-11.51	57.85	4.64	Peak	100	150
3	5470.00	67.12	68.20	-1.08	62.47	4.65	Peak	100	150
4	11000.00	43.82	54.00	-10.18	29.57	14.25	Average	374	100
5	11000.00	58.09	74.00	-15.91	43.84	14.25	Peak	374	100
6	16500.00	59.54	68.20	-8.66	43.81	15.73	Peak	100	104

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

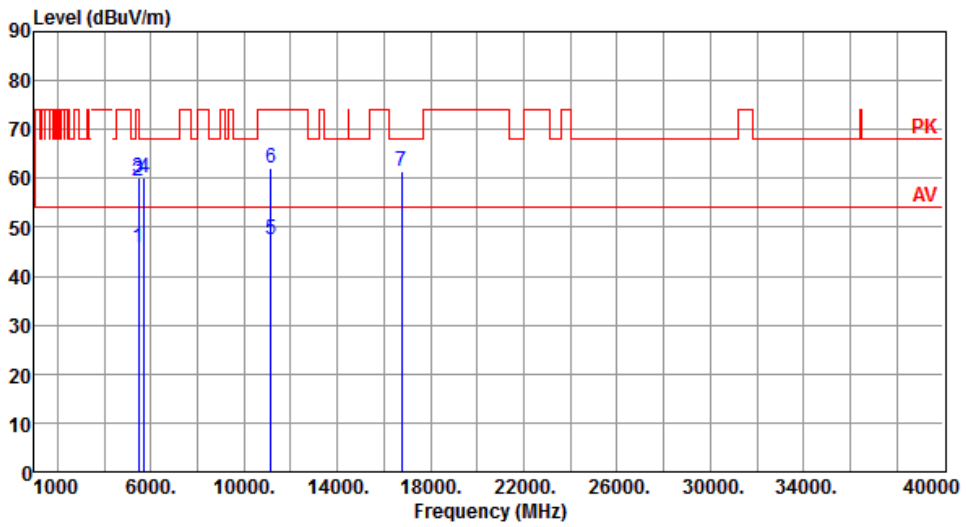
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.75	54.00	-6.25	43.11	4.64	Average	288	119
2	5460.00	61.51	74.00	-12.49	56.87	4.64	Peak	288	119
3	5470.00	66.72	68.20	-1.48	62.07	4.65	Peak	288	119
4	11000.00	44.82	54.00	-9.18	30.57	14.25	Average	340	101
5	11000.00	58.23	74.00	-15.77	43.98	14.25	Peak	340	101
6	16500.00	59.85	68.20	-8.35	44.12	15.73	Peak	100	3

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

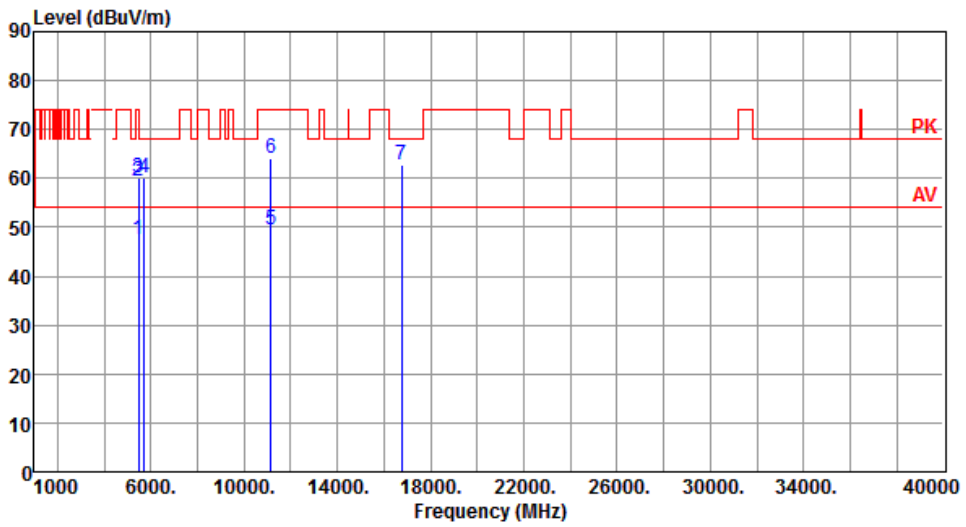
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.81	54.00	-8.19	41.17	4.64	Average	296	154
2	5460.00	59.46	74.00	-14.54	54.82	4.64	Peak	296	154
3	5470.00	60.06	68.20	-8.14	55.41	4.65	Peak	296	154
4	5725.00	60.17	68.20	-8.03	54.92	5.25	Peak	296	154
5	11160.00	47.54	54.00	-6.46	33.65	13.89	Average	382	99
6	11160.00	61.97	74.00	-12.03	48.08	13.89	Peak	382	99
7	16740.00	61.28	68.20	-6.92	44.20	17.08	Peak	100	103

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

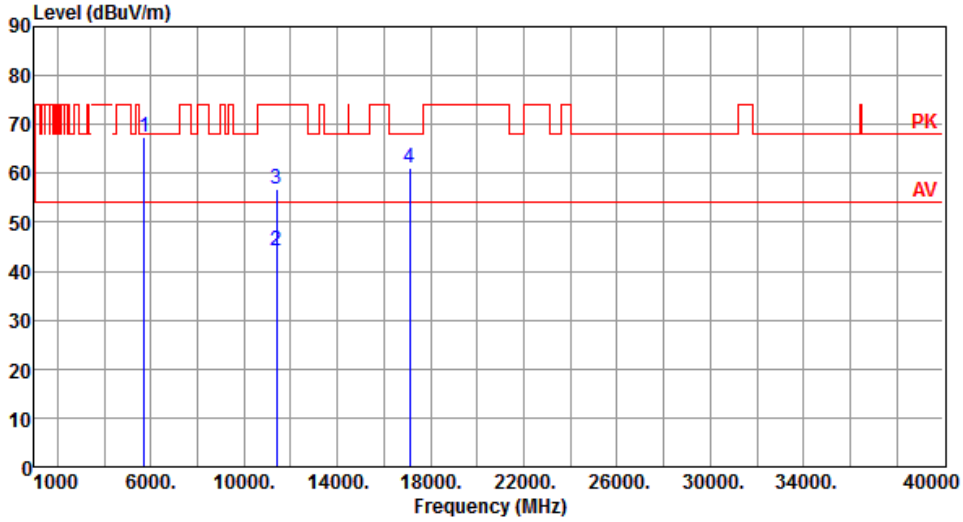
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.50	54.00	-6.50	42.86	4.64	Average	301	121
2	5460.00	59.49	74.00	-14.51	54.85	4.64	Peak	301	121
3	5470.00	60.19	68.20	-8.01	55.54	4.65	Peak	301	121
4	5725.00	60.14	68.20	-8.06	54.89	5.25	Peak	301	121
5	11160.00	49.57	54.00	-4.43	35.68	13.89	Average	339	99
6	11160.00	64.06	74.00	-9.94	50.17	13.89	Peak	339	99
7	16740.00	62.70	68.20	-5.50	45.62	17.08	Peak	265	5

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

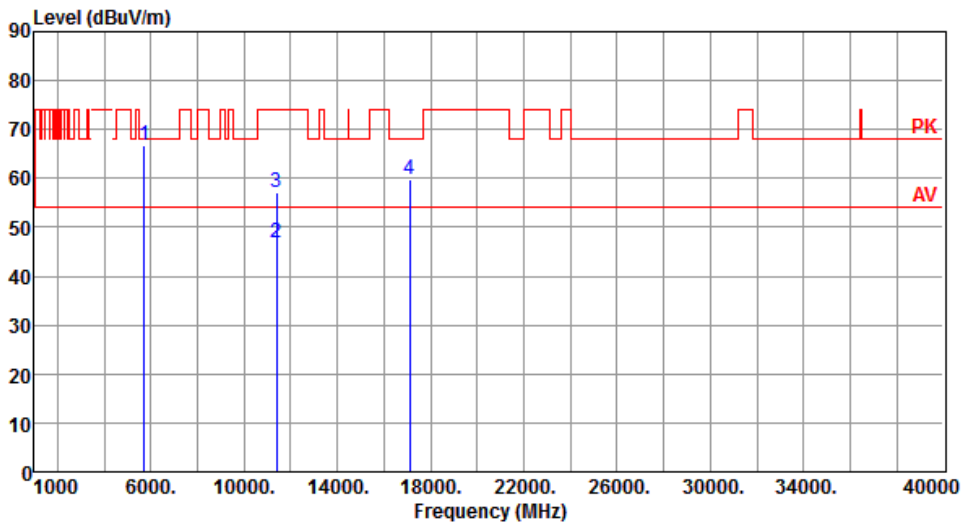
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	67.52	68.20	-0.68	62.27	5.25	Peak	275	146
2	11400.00	44.30	54.00	-9.70	30.30	14.00	Average	354	101
3	11400.00	56.88	74.00	-17.12	42.88	14.00	Peak	354	101
4	17100.00	61.20	68.20	-7.00	44.27	16.93	Peak	100	102

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

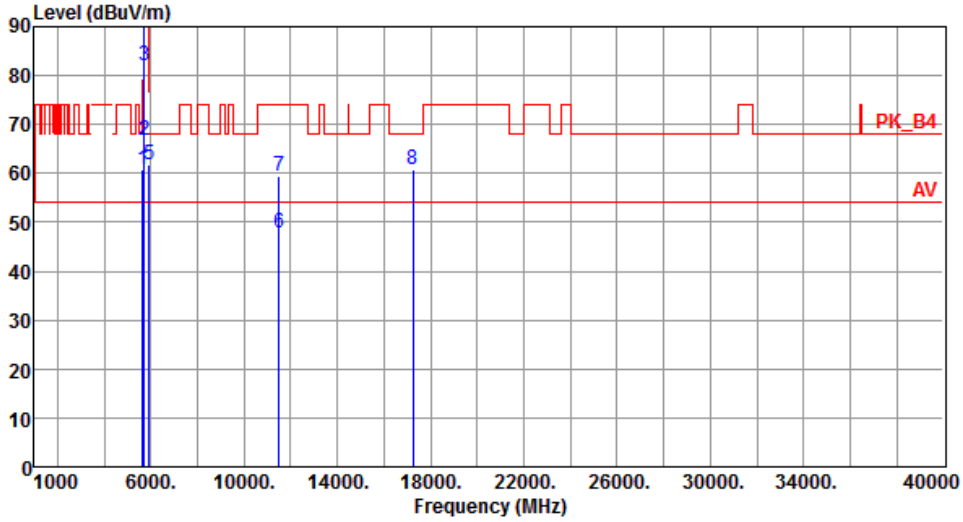
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	66.83	68.20	-1.37	61.58	5.25	Peak	299	121
2	11400.00	46.85	54.00	-7.15	32.85	14.00	Average	357	95
3	11400.00	56.96	74.00	-17.04	42.96	14.00	Peak	357	95
4	17100.00	59.82	68.20	-8.38	42.89	16.93	Peak	100	6

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

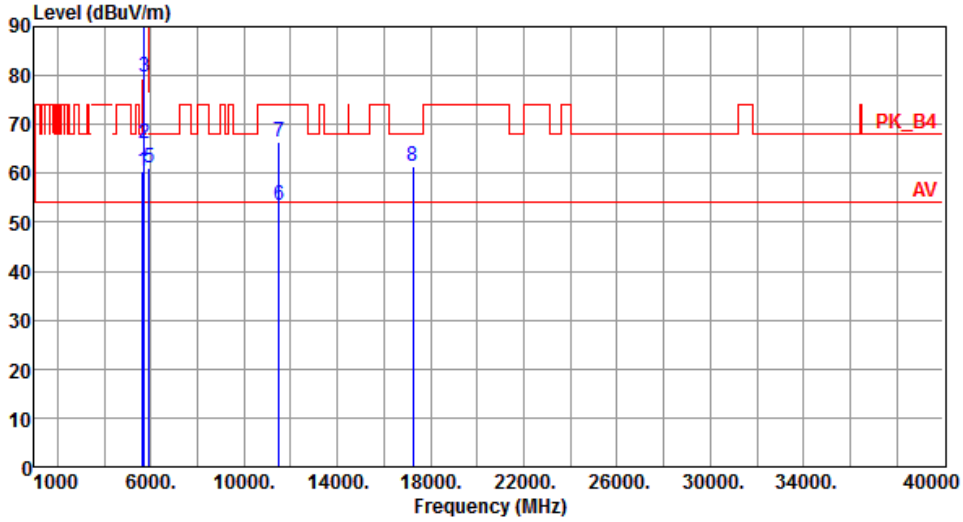
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	60.93	68.20	-7.27	55.96	4.97	Peak	211	147
2	5700.00	66.77	105.20	-38.43	61.61	5.16	Peak	211	147
3	5720.00	81.95	110.80	-28.85	76.72	5.23	Peak	211	147
4	5725.00	91.39	122.20	-30.81	86.14	5.25	Peak	211	147
5	5925.00	61.77	68.20	-6.43	55.68	6.09	Peak	211	147
6	11490.00	47.70	54.00	-6.30	33.58	14.12	Average	365	95
7	11490.00	59.38	74.00	-14.62	45.26	14.12	Peak	365	95
8	17235.00	60.93	68.20	-7.27	43.70	17.23	Peak	100	101

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

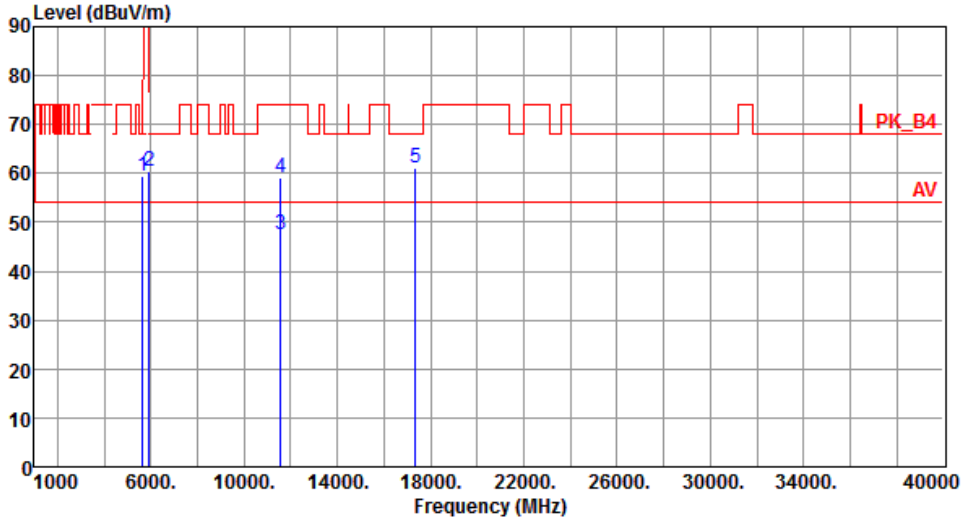
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	60.38	68.20	-7.82	55.41	4.97	Peak	291	119
2	5700.00	66.05	105.20	-39.15	60.89	5.16	Peak	291	119
3	5720.00	79.81	110.80	-30.99	74.58	5.23	Peak	291	119
4	5725.00	90.14	122.20	-32.06	84.89	5.25	Peak	291	119
5	5925.00	61.23	68.20	-6.97	55.14	6.09	Peak	291	119
6	11490.00	53.45	54.00	-0.55	39.33	14.12	Average	366	102
7	11490.00	66.34	74.00	-7.66	52.22	14.12	Peak	366	102
8	17235.00	61.49	68.20	-6.71	44.26	17.23	Peak	100	105

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

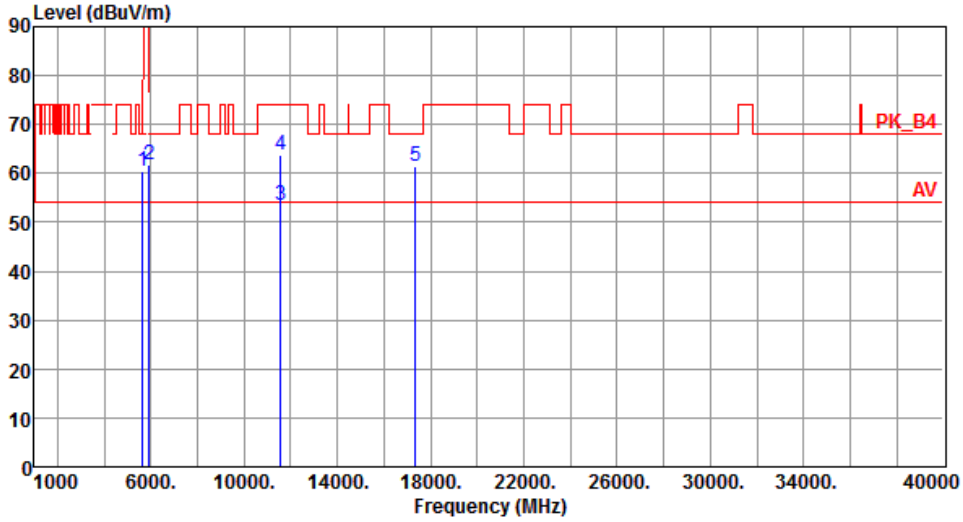
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.55	68.20	-8.65	54.58	4.97	Peak	244	149
2	5925.00	60.50	68.20	-7.70	54.41	6.09	Peak	244	149
3	11570.00	47.35	54.00	-6.65	33.40	13.95	Average	367	97
4	11570.00	58.96	74.00	-15.04	45.01	13.95	Peak	367	97
5	17355.00	61.23	68.20	-6.97	43.61	17.62	Peak	100	98

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

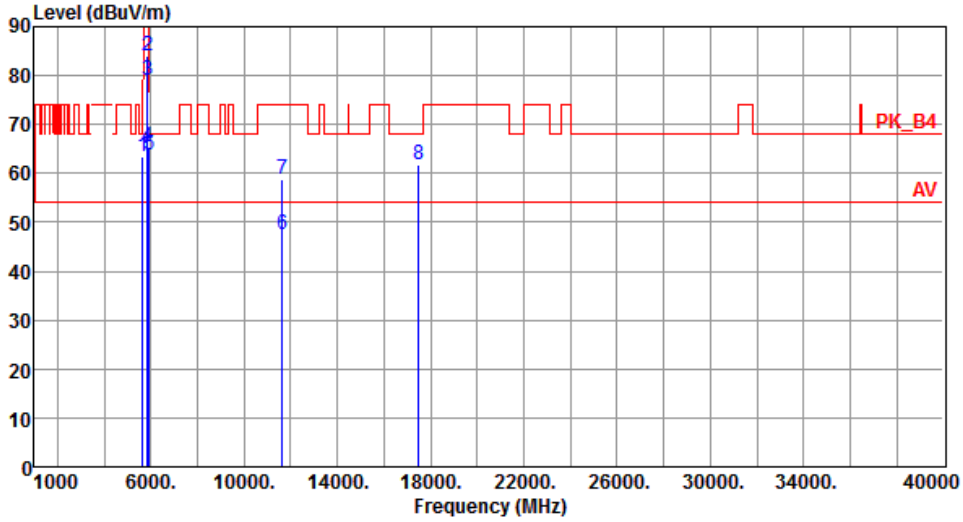
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	60.45	68.20	-7.75	55.48	4.97	Peak	301	124
2	5925.00	61.83	68.20	-6.37	55.74	6.09	Peak	301	124
3	11570.00	53.41	54.00	-0.59	39.46	13.95	Average	365	102
4	11570.00	63.91	74.00	-10.09	49.96	13.95	Peak	365	102
5	17355.00	61.29	68.20	-6.91	43.67	17.62	Peak	100	108

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

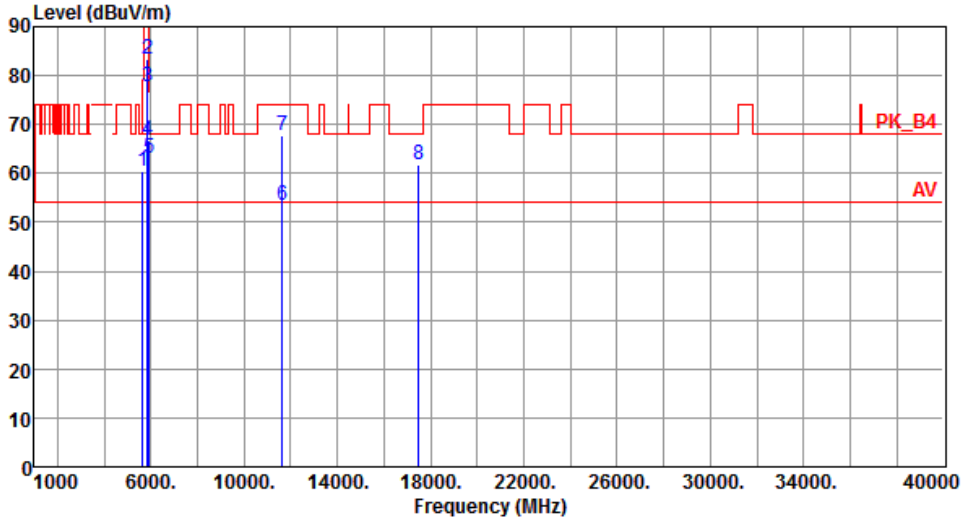
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	63.31	68.20	-4.89	58.34	4.97	Peak	242	141
2	5850.00	84.05	122.20	-38.15	78.24	5.81	Peak	242	141
3	5855.00	79.02	110.80	-31.78	73.19	5.83	Peak	242	141
4	5875.00	65.32	105.20	-39.88	59.42	5.90	Peak	242	141
5	5925.00	63.78	68.20	-4.42	57.69	6.09	Peak	242	141
6	11650.00	47.55	54.00	-6.45	33.93	13.62	Average	365	98
7	11650.00	58.84	74.00	-15.16	45.22	13.62	Peak	365	98
8	17475.00	61.72	68.20	-6.48	43.82	17.90	Peak	100	99

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

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

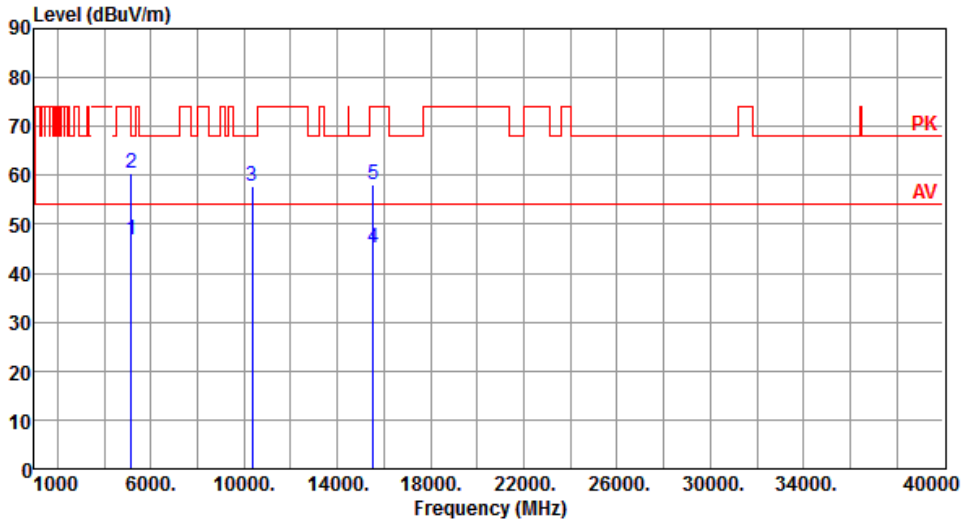


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.51	68.20	-7.69	55.54	4.97	Peak	305	112
2	5850.00	83.36	122.20	-38.84	77.55	5.81	Peak	305	122
3	5855.00	77.72	110.80	-33.08	71.89	5.83	Peak	305	122
4	5875.00	66.76	105.20	-38.44	60.86	5.90	Peak	305	122
5	5925.00	63.20	68.20	-5.00	57.11	6.09	Peak	305	112
6	11650.00	53.50	54.00	-0.50	39.88	13.62	Average	366	99
7	11650.00	67.60	74.00	-6.40	53.98	13.62	Peak	366	99
8	17475.00	61.69	68.20	-6.51	43.79	17.90	Peak	100	101

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

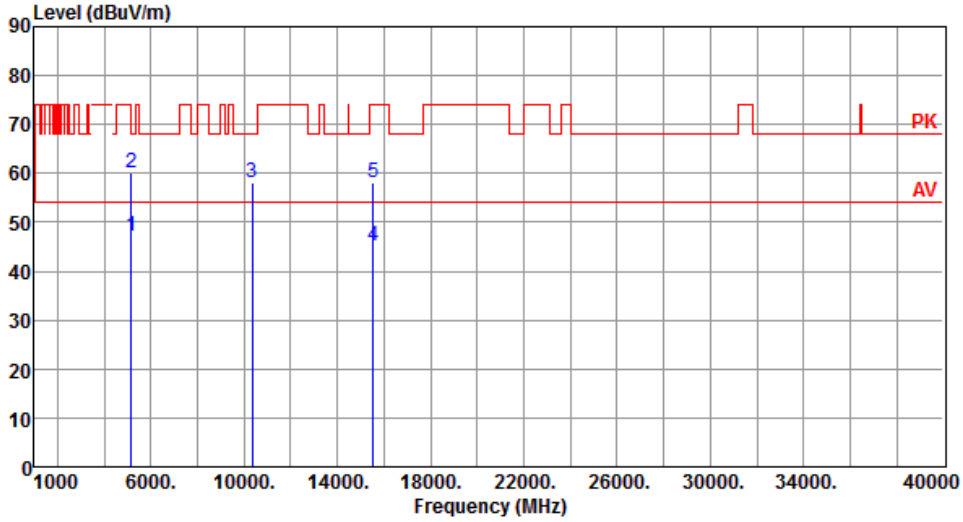
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	46.79	54.00	-7.21	42.25	4.54	Average	236	140
2	5150.00	60.49	74.00	-13.51	55.95	4.54	Peak	236	140
3	10360.00	57.73	68.20	-10.47	43.95	13.78	Peak	301	95
4	15540.00	45.17	54.00	-8.83	30.89	14.28	Average	100	94
5	15540.00	58.13	74.00	-15.87	43.85	14.28	Peak	100	94

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

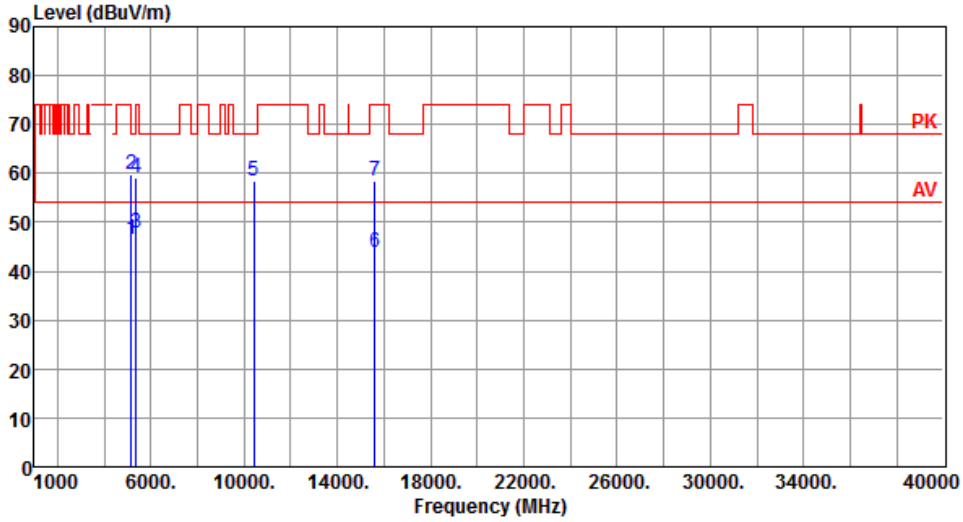
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	47.05	54.00	-6.95	42.51	4.54	Average	295	125
2	5150.00	60.22	74.00	-13.78	55.68	4.54	Peak	295	125
3	10360.00	58.21	68.20	-9.99	44.43	13.78	Peak	358	99
4	15540.00	45.20	54.00	-8.80	30.92	14.28	Average	100	107
5	15540.00	58.26	74.00	-15.74	43.98	14.28	Peak	100	107

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

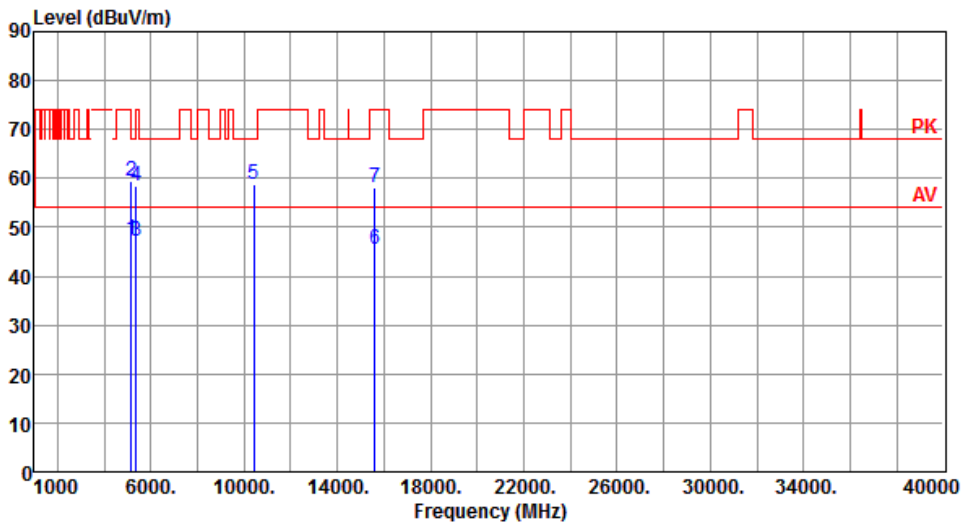
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	46.59	54.00	-7.41	42.05	4.54	Average	211	161
2	5150.00	59.69	74.00	-14.31	55.15	4.54	Peak	211	161
3	5350.00	47.69	54.00	-6.31	43.56	4.13	Average	211	161
4	5350.00	59.01	74.00	-14.99	54.88	4.13	Peak	211	161
5	10400.00	58.44	68.20	-9.76	44.55	13.89	Peak	308	97
6	15600.00	43.67	54.00	-10.33	29.57	14.10	Average	100	98
7	15600.00	58.37	74.00	-15.63	44.27	14.10	Peak	100	98

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

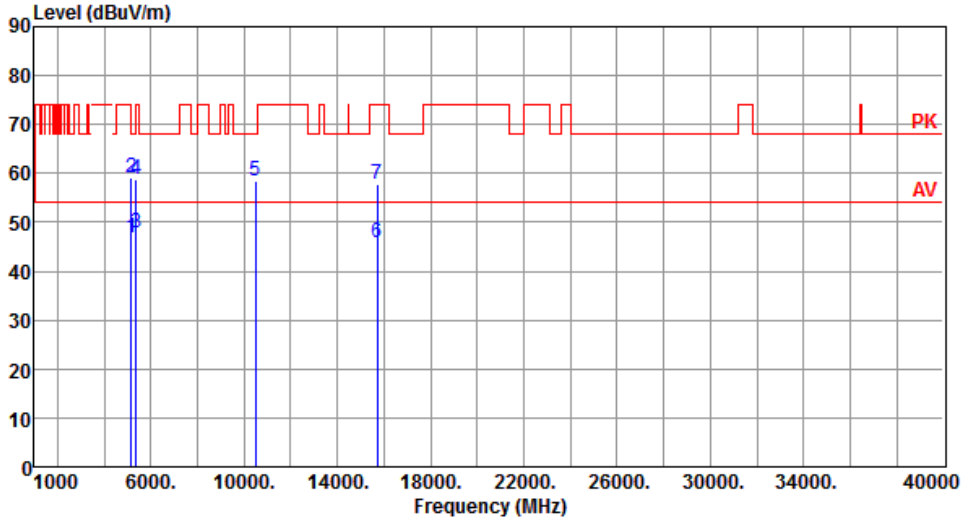
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.53	54.00	-6.47	42.99	4.54	Average	285	121
2	5150.00	59.59	74.00	-14.41	55.05	4.54	Peak	285	121
3	5350.00	47.00	54.00	-7.00	42.87	4.13	Average	285	121
4	5350.00	58.59	74.00	-15.41	54.46	4.13	Peak	285	121
5	10400.00	58.90	68.20	-9.30	45.01	13.89	Peak	353	96
6	15600.00	45.41	54.00	-8.59	31.31	14.10	Average	100	102
7	15600.00	58.04	74.00	-15.96	43.94	14.10	Peak	100	102

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

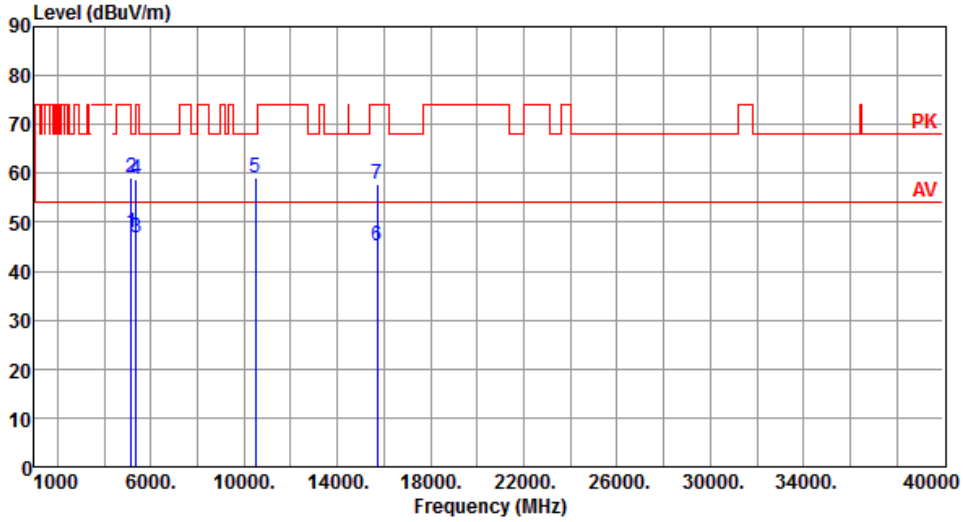
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.73	54.00	-7.27	42.19	4.54	Average	204	155
2	5150.00	59.24	74.00	-14.76	54.70	4.54	Peak	204	155
3	5350.00	47.67	54.00	-6.33	43.54	4.13	Average	204	155
4	5350.00	58.83	74.00	-15.17	54.70	4.13	Peak	204	155
5	10480.00	58.45	68.20	-9.75	44.57	13.88	Peak	318	98
6	15720.00	45.69	54.00	-8.31	31.80	13.89	Average	100	101
7	15720.00	57.69	74.00	-16.31	43.80	13.89	Peak	100	101

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

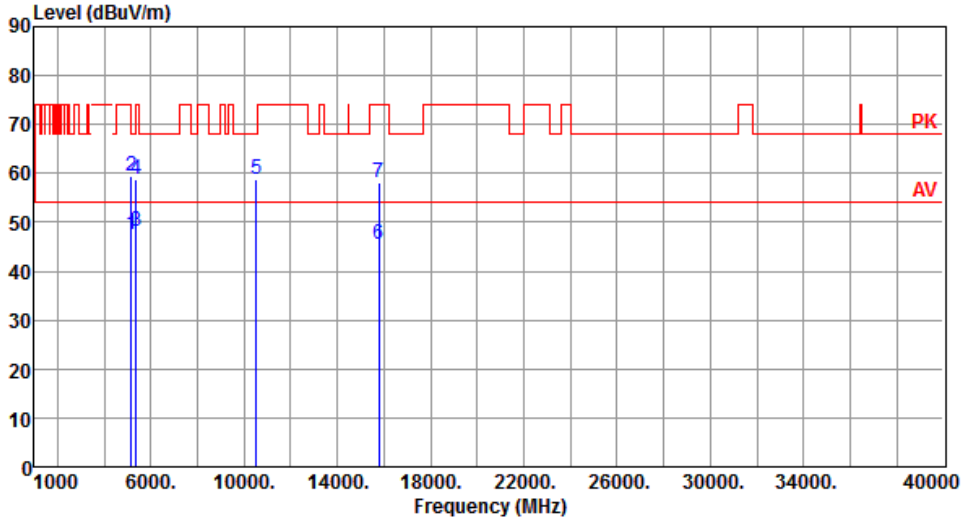
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	47.75	54.00	-6.25	43.21	4.54	Average	296	191
2	5150.00	59.13	74.00	-14.87	54.59	4.54	Peak	296	191
3	5350.00	46.83	54.00	-7.17	42.70	4.13	Average	296	191
4	5350.00	58.78	74.00	-15.22	54.65	4.13	Peak	296	191
5	10480.00	58.96	68.20	-9.24	45.08	13.88	Peak	365	99
6	15720.00	45.16	54.00	-8.84	31.27	13.89	Average	100	102
7	15720.00	57.70	74.00	-16.30	43.81	13.89	Peak	100	102

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

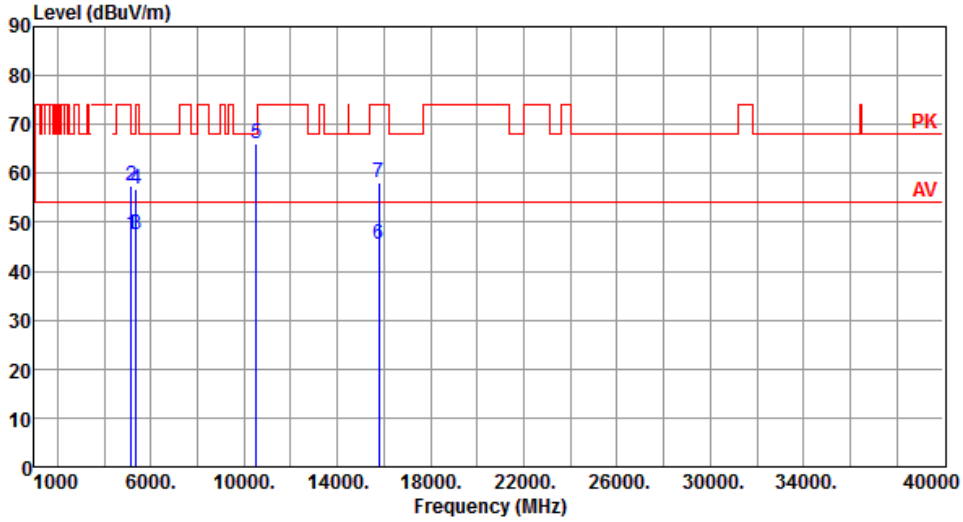
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	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	47.40	54.00	-6.60	42.86	4.54	Average	210	155
2	5150.00	59.39	74.00	-14.61	54.85	4.54	Peak	210	155
3	5350.00	48.07	54.00	-5.93	43.94	4.13	Average	210	155
4	5350.00	58.87	74.00	-15.13	54.74	4.13	Peak	210	155
5	10520.00	58.77	68.20	-9.43	44.89	13.88	Peak	311	97
6	15780.00	45.58	54.00	-8.42	31.75	13.83	Average	100	99
7	15780.00	58.07	74.00	-15.93	44.24	13.83	Peak	100	99

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

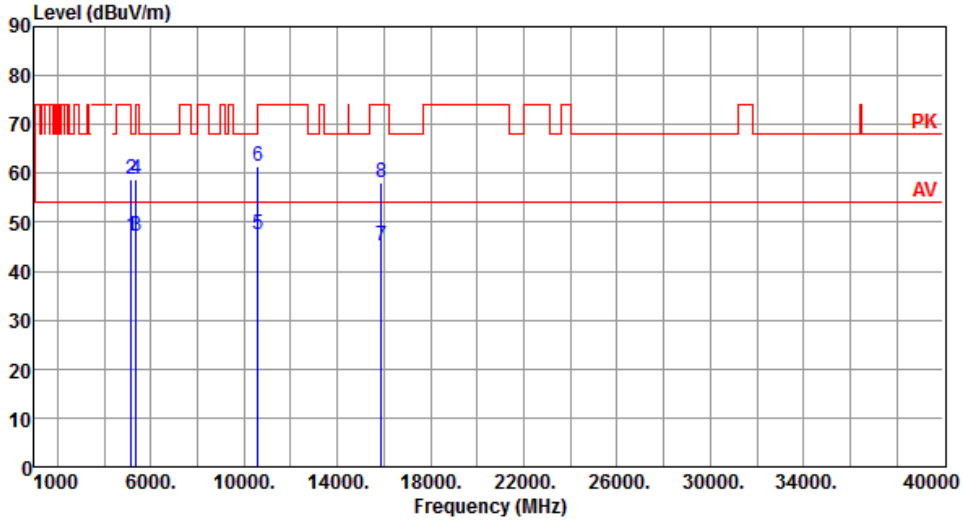
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	47.39	54.00	-6.61	42.85	4.54	Average	277	120
2	5150.00	57.41	74.00	-16.59	52.87	4.54	Peak	277	120
3	5350.00	47.36	54.00	-6.64	43.23	4.13	Average	277	120
4	5350.00	56.83	74.00	-17.17	52.70	4.13	Peak	277	120
5	10520.00	66.14	68.20	-2.06	52.26	13.88	Peak	357	103
6	15780.00	45.40	54.00	-8.60	31.57	13.83	Average	100	102
7	15780.00	58.11	74.00	-15.89	44.28	13.83	Peak	100	102

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

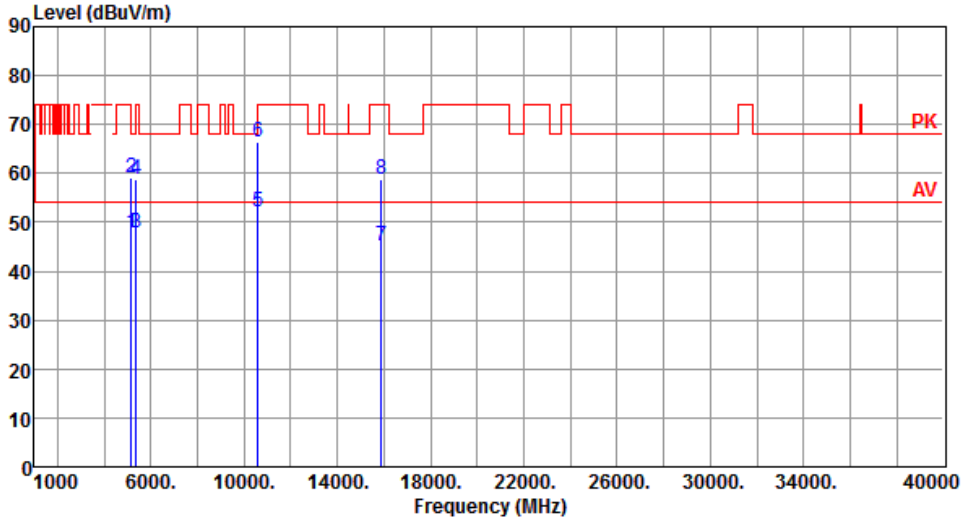
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	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	47.24	54.00	-6.76	42.70	4.54	Average	201	149
2	5150.00	58.83	74.00	-15.17	54.29	4.54	Peak	201	149
3	5350.00	47.17	54.00	-6.83	43.04	4.13	Average	201	149
4	5350.00	58.83	74.00	-15.17	54.70	4.13	Peak	201	149
5	10600.00	47.58	54.00	-6.42	33.73	13.85	Average	357	99
6	10600.00	61.54	74.00	-12.46	47.69	13.85	Peak	357	99
7	15900.00	45.29	54.00	-8.71	31.47	13.82	Average	100	100
8	15900.00	58.10	74.00	-15.90	44.28	13.82	Peak	100	100

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

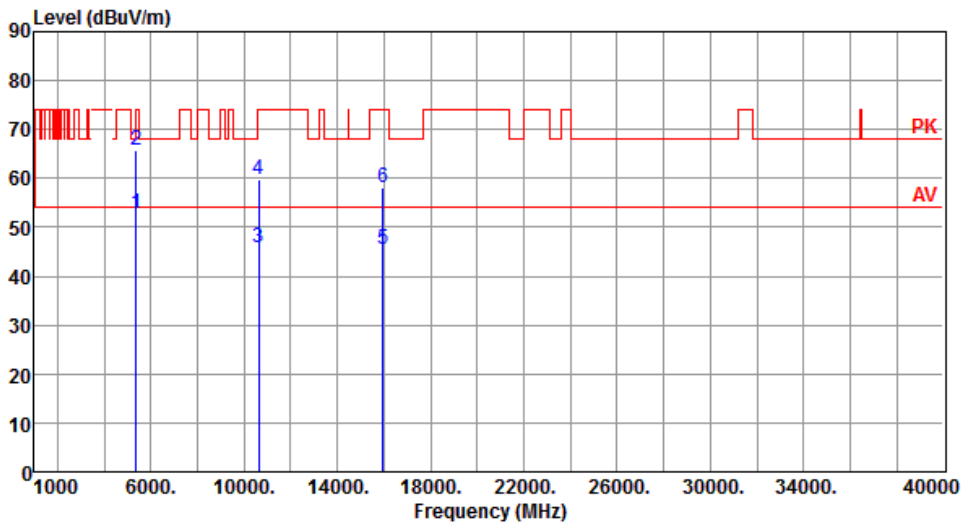
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	47.89	54.00	-6.11	43.35	4.54	Average	282	117
2	5150.00	59.13	74.00	-14.87	54.59	4.54	Peak	282	117
3	5350.00	47.70	54.00	-6.30	43.57	4.13	Average	282	117
4	5350.00	58.75	74.00	-15.25	54.62	4.13	Peak	282	117
5	10600.00	52.25	54.00	-1.75	38.40	13.85	Average	360	98
6	10600.00	66.45	74.00	-7.55	52.60	13.85	Peak	360	98
7	15900.00	45.27	54.00	-8.73	31.45	13.82	Average	100	99
8	15900.00	58.71	74.00	-15.29	44.89	13.82	Peak	100	99

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

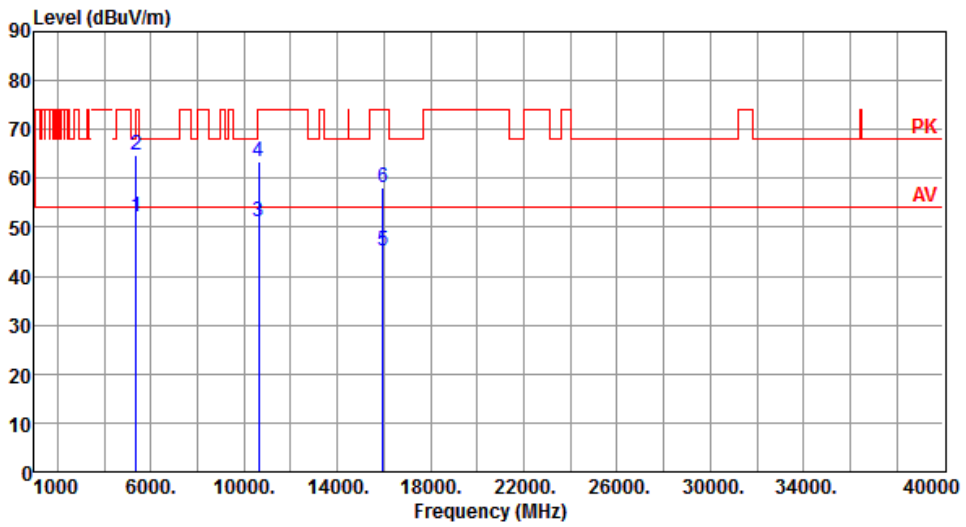
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	52.85	54.00	-1.15	48.72	4.13	Average	216	151
2	5350.00	65.77	74.00	-8.23	61.64	4.13	Peak	216	151
3	10640.00	45.72	54.00	-8.28	31.87	13.85	Average	351	97
4	10640.00	59.72	74.00	-14.28	45.87	13.85	Peak	351	97
5	15960.00	45.57	54.00	-8.43	31.81	13.76	Average	100	98
6	15960.00	58.07	74.00	-15.93	44.31	13.76	Peak	100	98

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

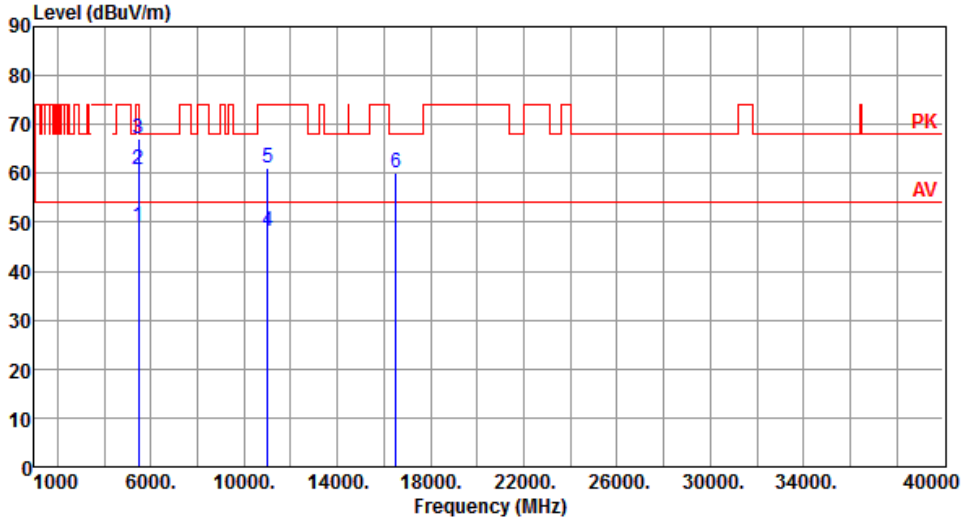
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	52.29	54.00	-1.71	48.16	4.13	Average	287	118
2	5350.00	64.86	74.00	-9.14	60.73	4.13	Peak	287	118
3	10640.00	51.05	54.00	-2.95	37.20	13.85	Average	362	97
4	10640.00	63.41	74.00	-10.59	49.56	13.85	Peak	362	97
5	15960.00	45.21	54.00	-8.79	31.45	13.76	Average	100	95
6	15960.00	57.97	74.00	-16.03	44.21	13.76	Peak	100	95

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

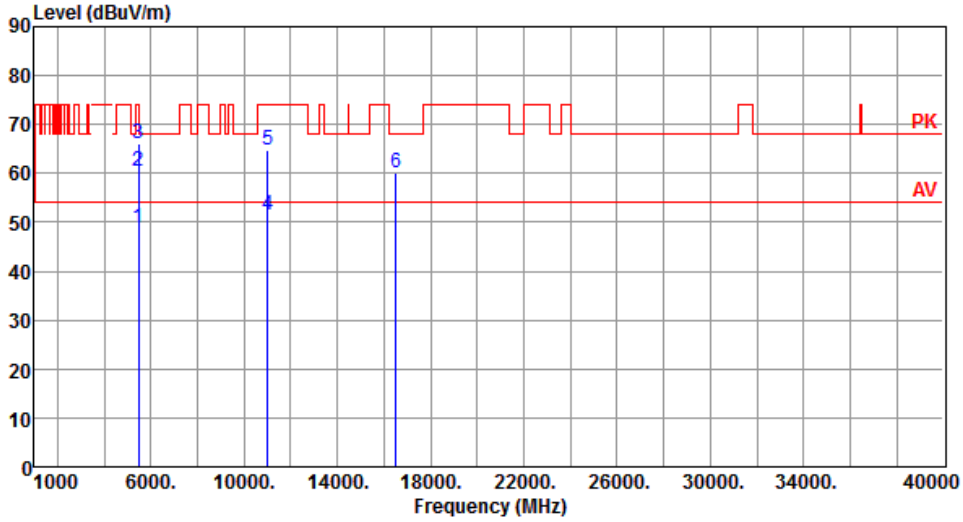
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	49.17	54.00	-4.83	44.53	4.64	Average	158	153
2	5460.00	60.72	74.00	-13.28	56.08	4.64	Peak	158	153
3	5470.00	67.14	68.20	-1.06	62.49	4.65	Peak	158	153
4	11000.00	48.21	54.00	-5.79	33.96	14.25	Average	382	94
5	11000.00	61.21	74.00	-12.79	46.96	14.25	Peak	382	94
6	16500.00	60.11	68.20	-8.09	44.38	15.73	Peak	100	96

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

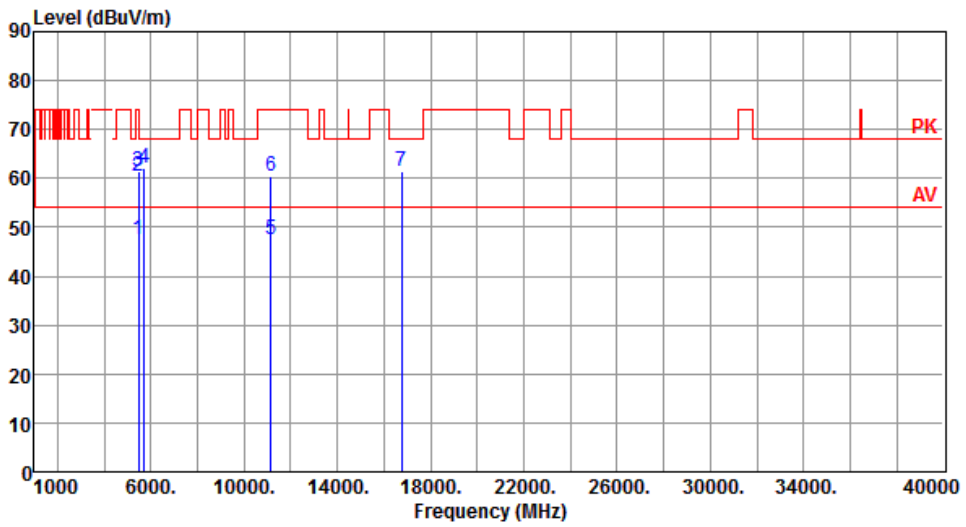
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	48.86	54.00	-5.14	44.22	4.64	Average	284	116
2	5460.00	60.53	74.00	-13.47	55.89	4.64	Peak	284	116
3	5470.00	66.23	68.20	-1.97	61.58	4.65	Peak	284	116
4	11000.00	51.57	54.00	-2.43	37.32	14.25	Average	390	101
5	11000.00	64.67	74.00	-9.33	50.42	14.25	Peak	390	101
6	16500.00	60.11	68.20	-8.09	44.38	15.73	Peak	100	102

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

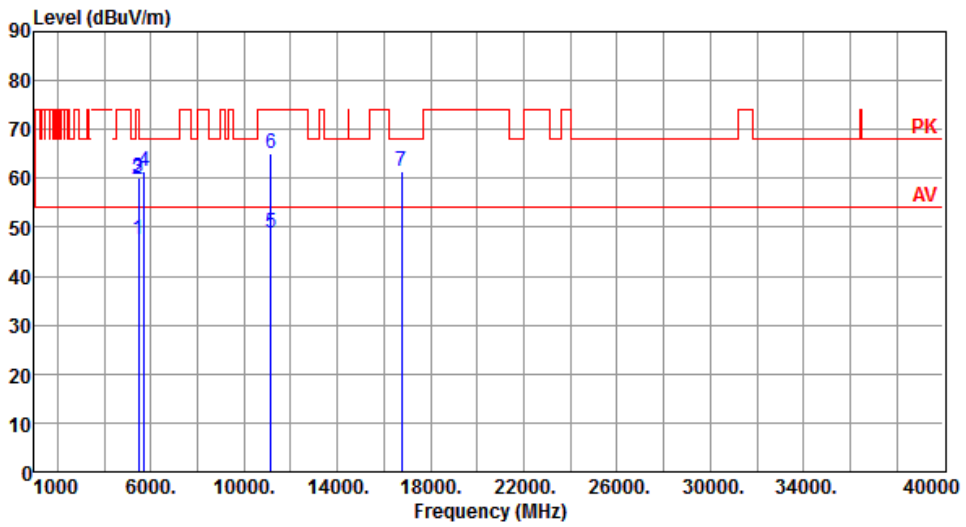
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	47.55	54.00	-6.45	42.91	4.64	Average	251	143
2	5460.00	60.57	74.00	-13.43	55.93	4.64	Peak	251	143
3	5470.00	61.50	68.20	-6.70	56.85	4.65	Peak	251	143
4	5725.00	62.17	68.20	-6.03	56.92	5.25	Peak	251	143
5	11160.00	47.57	54.00	-6.43	33.68	13.89	Average	379	95
6	11160.00	60.58	74.00	-13.42	46.69	13.89	Peak	379	95
7	16740.00	61.46	68.20	-6.74	44.38	17.08	Peak	100	101

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

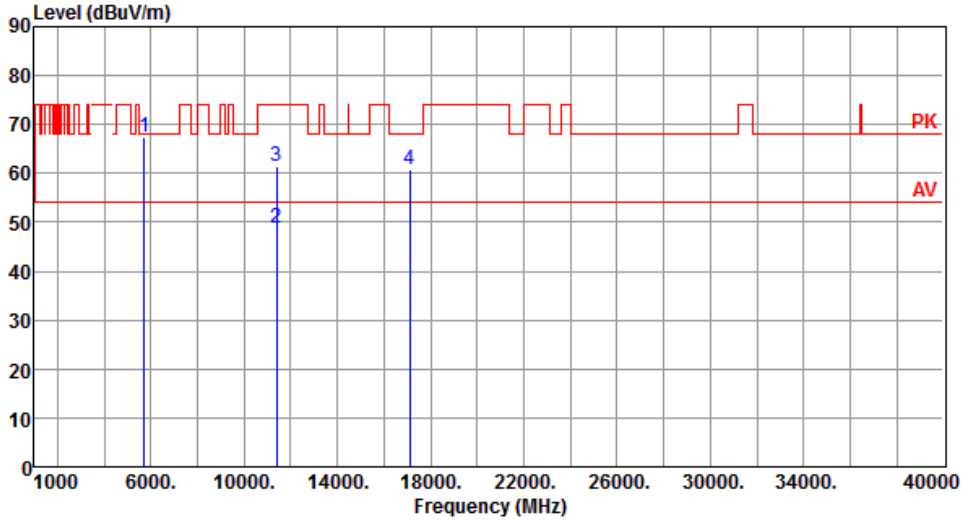
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	47.49	54.00	-6.51	42.85	4.64	Average	291	119
2	5460.00	59.81	74.00	-14.19	55.17	4.64	Peak	291	119
3	5470.00	60.09	68.20	-8.11	55.44	4.65	Peak	291	119
4	5725.00	61.58	68.20	-6.62	56.33	5.25	Peak	291	119
5	11160.00	48.94	54.00	-5.06	35.05	13.89	Average	337	96
6	11160.00	65.22	74.00	-8.78	51.33	13.89	Peak	337	96
7	16740.00	61.47	68.20	-6.73	44.39	17.08	Peak	100	98

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

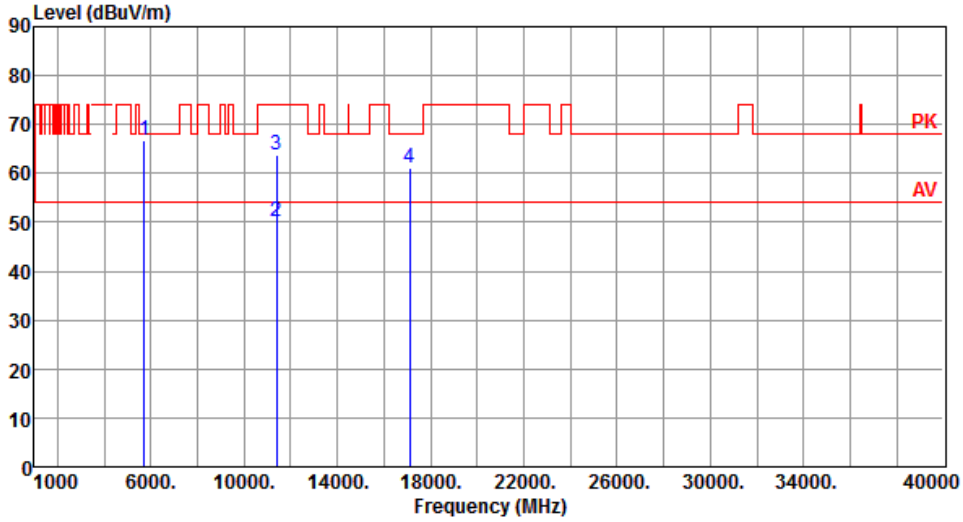
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	67.43	68.20	-0.77	62.18	5.25	Peak	251	158
2	11400.00	48.77	54.00	-5.23	34.77	14.00	Average	373	99
3	11400.00	61.50	74.00	-12.50	47.50	14.00	Peak	373	99
4	17100.00	60.82	68.20	-7.38	43.89	16.93	Peak	100	95

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

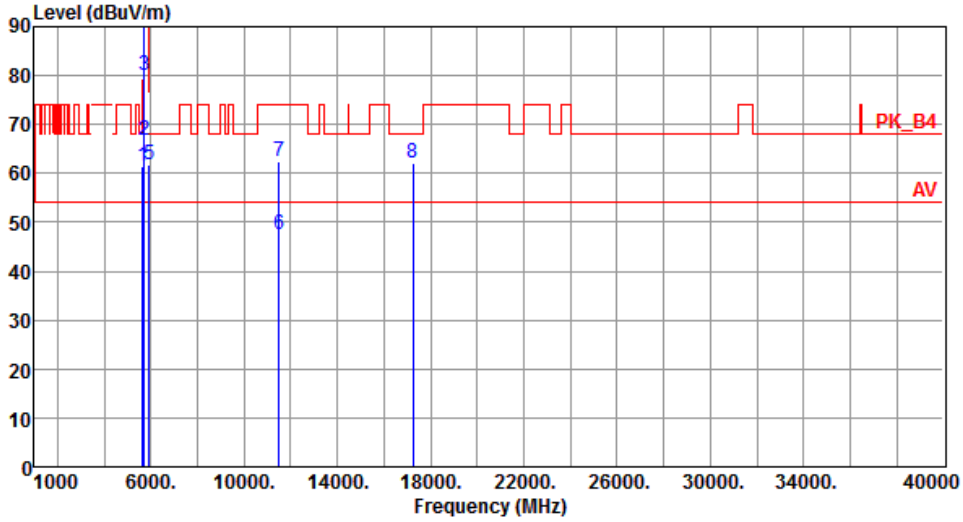
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	66.72	68.20	-1.48	61.47	5.25	Peak	299	117
2	11400.00	49.98	54.00	-4.02	35.98	14.00	Average	369	100
3	11400.00	63.67	74.00	-10.33	49.67	14.00	Peak	369	100
4	17100.00	61.21	68.20	-6.99	44.28	16.93	Peak	100	105

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

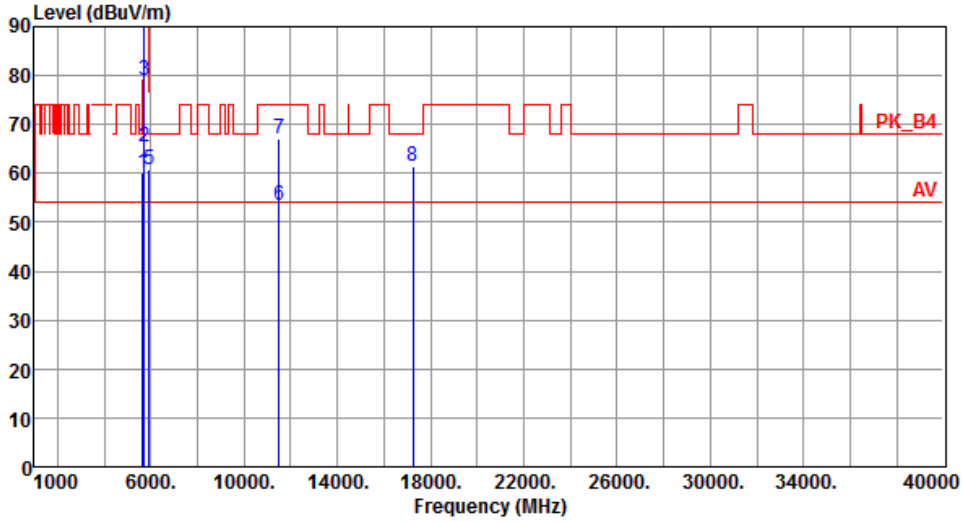
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	61.33	68.20	-6.87	56.36	4.97	Peak	245	141
2	5700.00	66.74	105.20	-38.46	61.58	5.16	Peak	245	141
3	5720.00	79.99	110.80	-30.81	74.76	5.23	Peak	245	141
4	5725.00	91.15	122.20	-31.05	85.90	5.25	Peak	245	141
5	5925.00	61.68	68.20	-6.52	55.59	6.09	Peak	245	141
6	11490.00	47.51	54.00	-6.49	33.39	14.12	Average	363	99
7	11490.00	62.42	74.00	-11.58	48.30	14.12	Peak	363	99
8	17235.00	62.06	68.20	-6.14	44.83	17.23	Peak	100	103

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

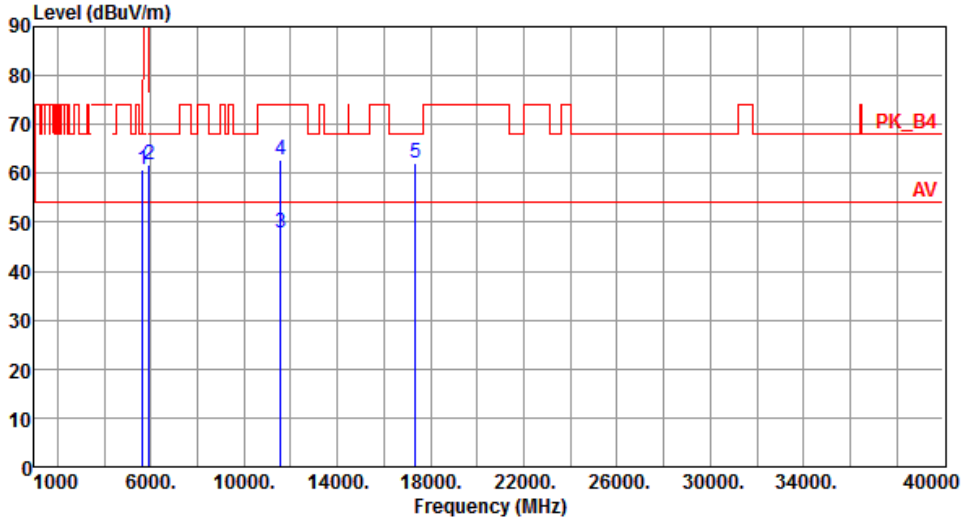
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	60.20	68.20	-8.00	55.23	4.97	Peak	302	114
2	5700.00	65.44	105.20	-39.76	60.28	5.16	Peak	302	114
3	5720.00	79.09	110.80	-31.71	73.86	5.23	Peak	302	114
4	5725.00	90.13	122.20	-32.07	84.88	5.25	Peak	302	114
5	5925.00	60.63	68.20	-7.57	54.54	6.09	Peak	302	114
6	11490.00	53.59	54.00	-0.41	39.47	14.12	Average	375	102
7	11490.00	66.98	74.00	-7.02	52.86	14.12	Peak	375	102
8	17235.00	61.51	68.20	-6.69	44.28	17.23	Peak	100	99

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

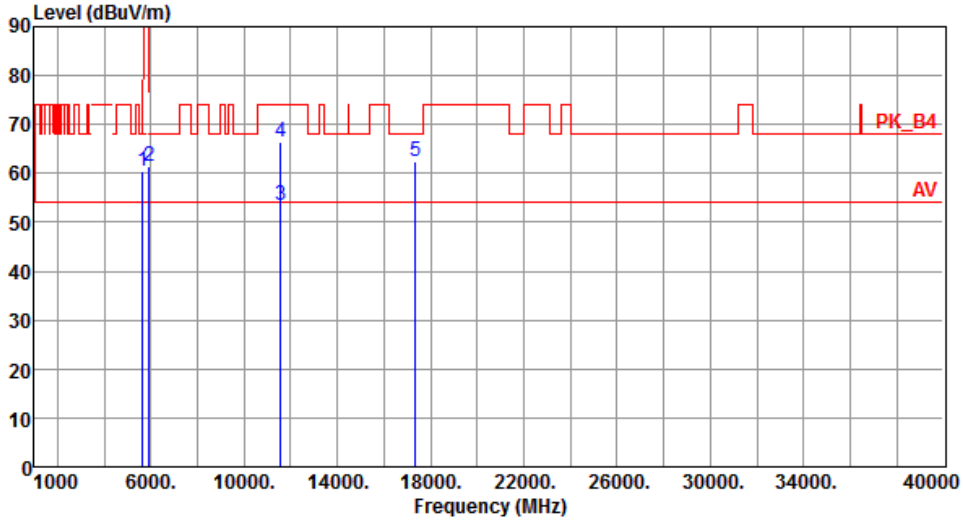
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	60.82	68.20	-7.38	55.85	4.97	Peak	246	144
2	5925.00	61.88	68.20	-6.32	55.79	6.09	Peak	246	144
3	11570.00	47.86	54.00	-6.14	33.91	13.95	Average	362	100
4	11570.00	62.75	74.00	-11.25	48.80	13.95	Peak	362	100
5	17355.00	62.14	68.20	-6.06	44.52	17.62	Peak	100	104

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

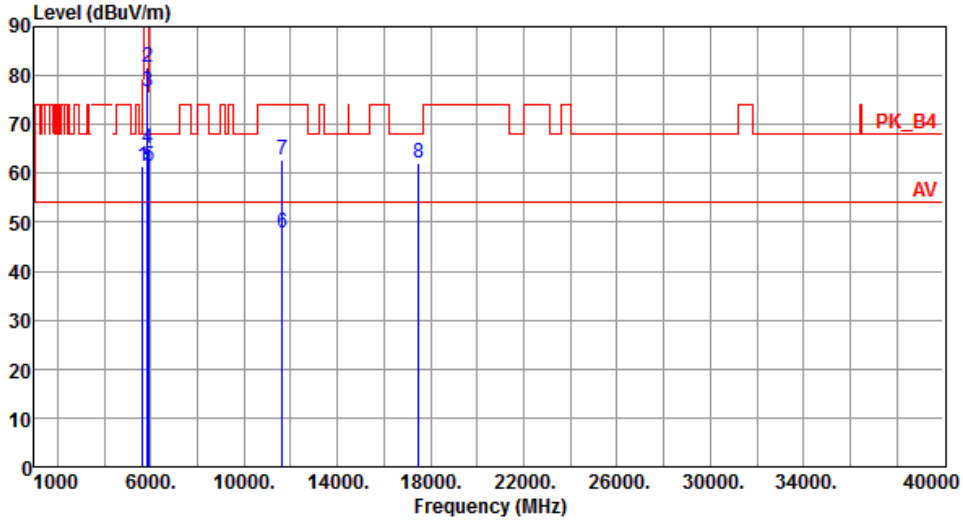
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	60.44	68.20	-7.76	55.47	4.97	Peak	297	115
2	5925.00	61.32	68.20	-6.88	55.23	6.09	Peak	297	115
3	11570.00	53.53	54.00	-0.47	39.58	13.95	Average	360	94
4	11570.00	66.33	74.00	-7.67	52.38	13.95	Peak	360	94
5	17355.00	62.43	68.20	-5.77	44.81	17.62	Peak	100	98

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

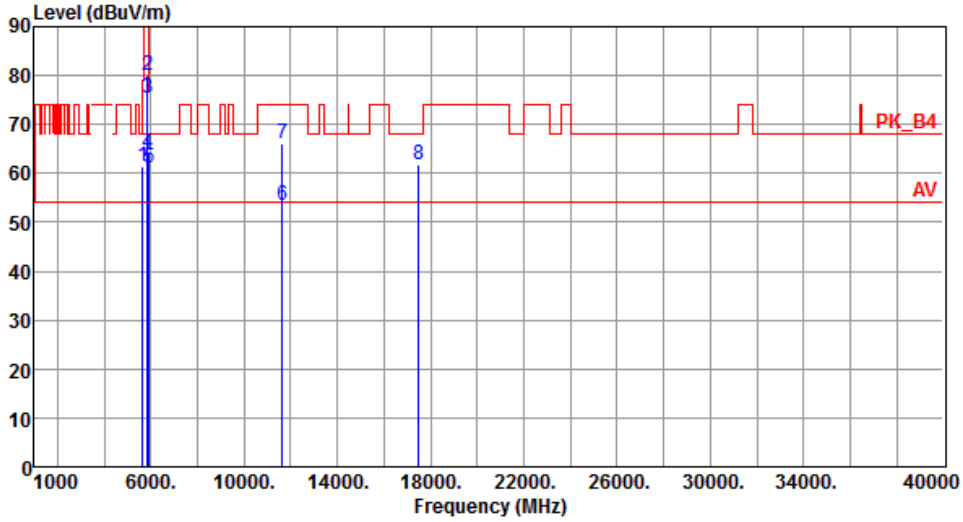
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.56	68.20	-6.64	56.59	4.97	Peak	253	131
2	5850.00	81.71	122.20	-40.49	75.90	5.81	Peak	253	131
3	5855.00	76.78	110.80	-34.02	70.95	5.83	Peak	253	131
4	5875.00	65.00	105.20	-40.20	59.10	5.90	Peak	253	131
5	5925.00	61.50	68.20	-6.70	55.41	6.09	Peak	253	131
6	11650.00	47.90	54.00	-6.10	34.28	13.62	Average	363	102
7	11650.00	62.88	74.00	-11.12	49.26	13.62	Peak	363	102
8	17475.00	62.18	68.20	-6.02	44.28	17.90	Peak	100	101

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

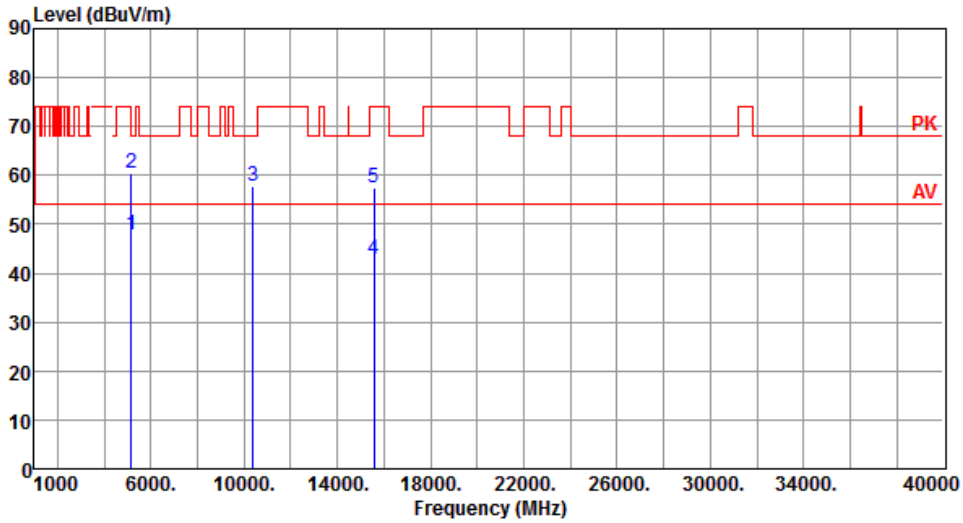


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.45	68.20	-6.75	56.48	4.97	Peak	292	113
2	5850.00	80.07	122.20	-42.13	74.26	5.81	Peak	292	113
3	5855.00	75.34	110.80	-35.46	69.51	5.83	Peak	292	113
4	5875.00	64.16	105.20	-41.04	58.26	5.90	Peak	292	113
5	5925.00	61.18	68.20	-7.02	55.09	6.09	Peak	292	113
6	11650.00	53.57	54.00	-0.43	39.95	13.62	Average	365	108
7	11650.00	66.24	74.00	-7.76	52.62	13.62	Peak	365	108
8	17475.00	61.73	68.20	-6.47	43.83	17.90	Peak	100	102

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

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

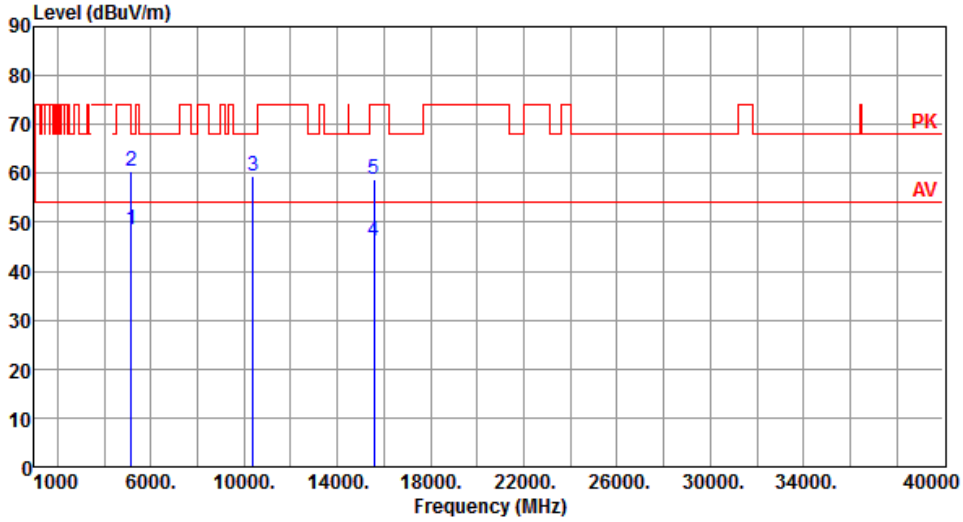
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	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	47.95	54.00	-6.05	43.41	4.54	Average	203	152
2	5150.00	60.43	74.00	-13.57	55.89	4.54	Peak	203	152
3	10380.00	57.73	68.20	-10.47	43.89	13.84	Peak	357	96
4	15570.00	42.93	54.00	-11.07	28.74	14.19	Average	385	93
5	15570.00	57.45	74.00	-16.55	43.26	14.19	Peak	385	93

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

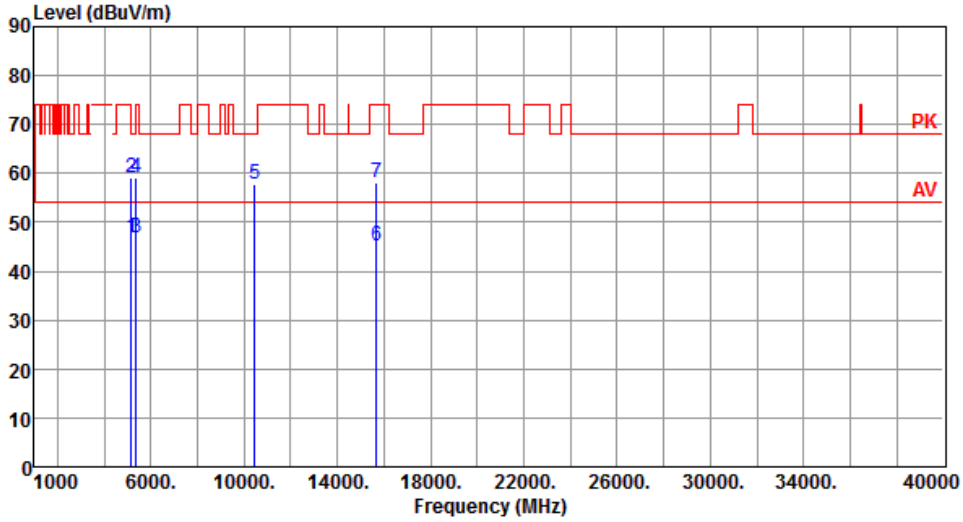
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.43	54.00	-5.57	43.89	4.54	Average	295	121
2	5150.00	60.53	74.00	-13.47	55.99	4.54	Peak	295	121
3	10380.00	59.29	68.20	-8.91	45.45	13.84	Peak	365	97
4	15570.00	46.04	54.00	-7.96	31.85	14.19	Average	328	95
5	15570.00	58.90	74.00	-15.10	44.71	14.19	Peak	328	95

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

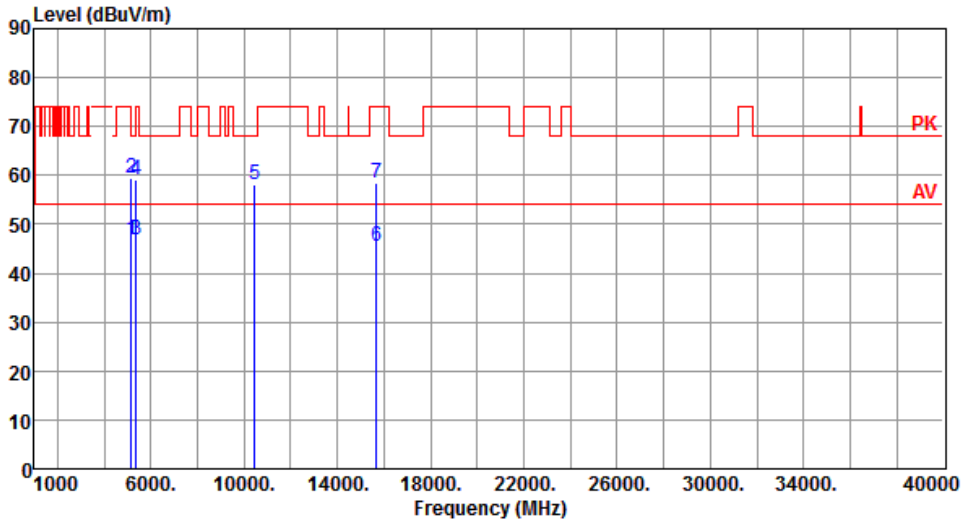
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	46.84	54.00	-7.16	42.30	4.54	Average	184	149
2	5150.00	59.05	74.00	-14.95	54.51	4.54	Peak	184	149
3	5350.00	46.98	54.00	-7.02	42.85	4.13	Average	184	149
4	5350.00	58.97	74.00	-15.03	54.84	4.13	Peak	184	149
5	10460.00	57.74	68.20	-10.46	43.85	13.89	Peak	358	94
6	15690.00	45.14	54.00	-8.86	31.21	13.93	Average	354	96
7	15690.00	58.28	74.00	-15.72	44.35	13.93	Peak	354	96

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

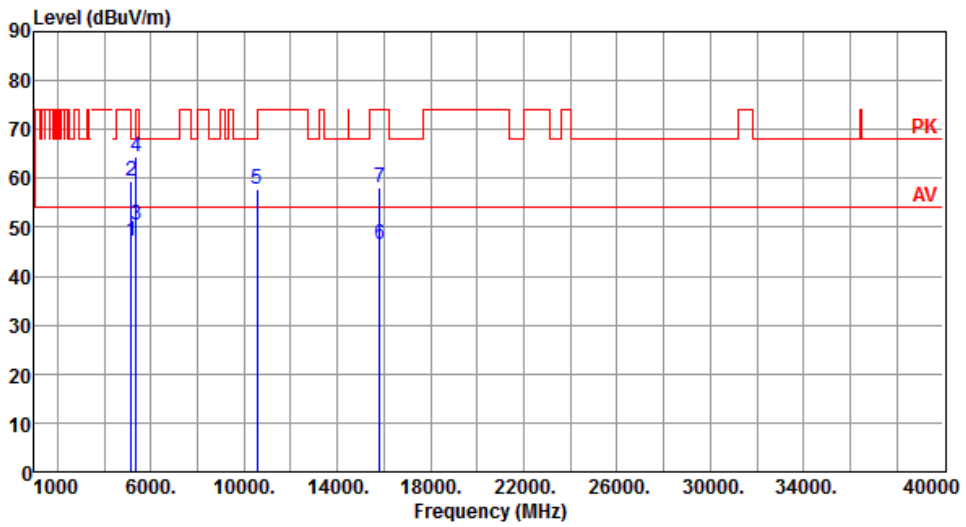
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	46.91	54.00	-7.09	42.37	4.54	Average	274	118
2	5150.00	59.40	74.00	-14.60	54.86	4.54	Peak	274	118
3	5350.00	46.83	54.00	-7.17	42.70	4.13	Average	274	118
4	5350.00	59.01	74.00	-14.99	54.88	4.13	Peak	274	118
5	10460.00	58.15	68.20	-10.05	44.26	13.89	Peak	363	96
6	15690.00	45.37	54.00	-8.63	31.44	13.93	Average	362	97
7	15690.00	58.35	74.00	-15.65	44.42	13.93	Peak	362	97

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

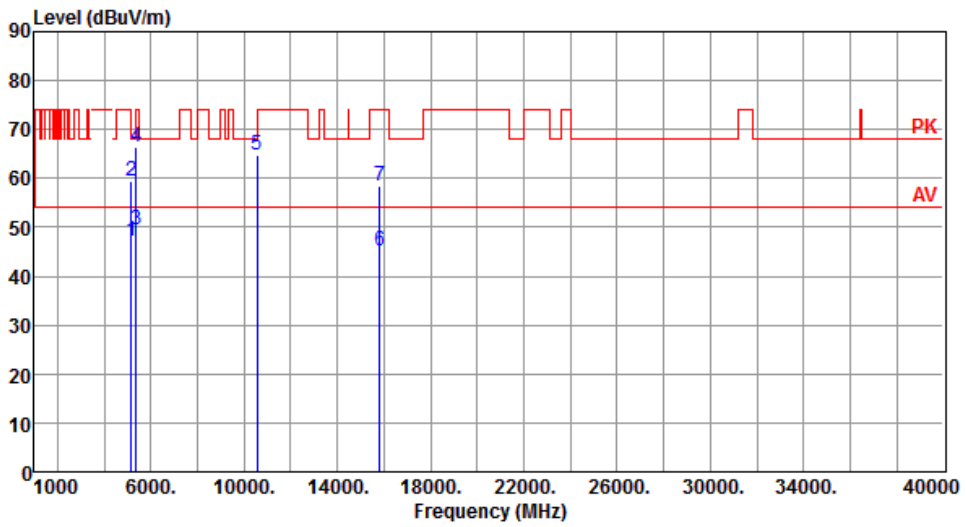
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.22	54.00	-6.78	42.68	4.54	Average	201	150
2	5150.00	59.40	74.00	-14.60	54.86	4.54	Peak	201	150
3	5350.00	50.42	54.00	-3.58	46.29	4.13	Average	201	150
4	5350.00	64.41	74.00	-9.59	60.28	4.13	Peak	201	150
5	10540.00	57.65	68.20	-10.55	43.78	13.87	Peak	354	96
6	15810.00	46.65	54.00	-7.35	32.84	13.81	Average	100	97
7	15810.00	58.09	74.00	-15.91	44.28	13.81	Peak	100	97

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

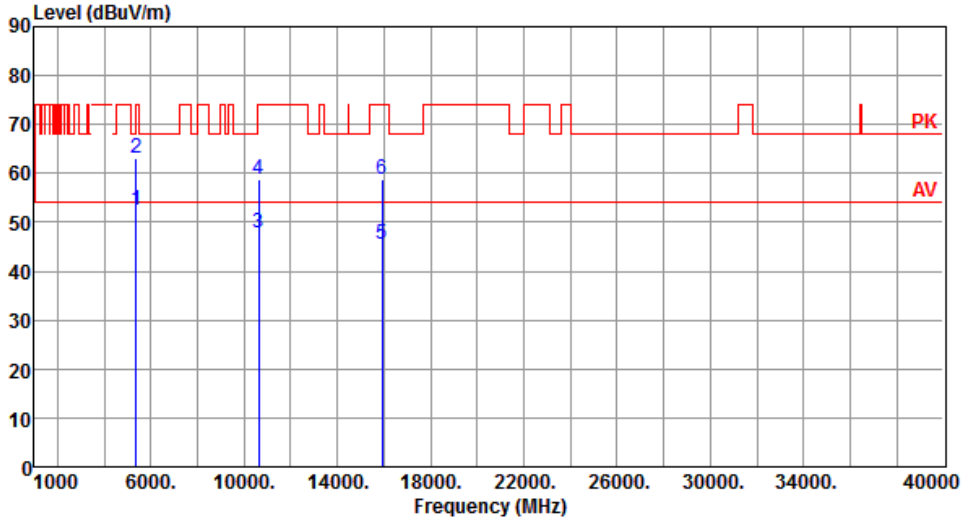
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.29	54.00	-6.71	42.75	4.54	Average	295	119
2	5150.00	59.38	74.00	-14.62	54.84	4.54	Peak	295	119
3	5350.00	49.47	54.00	-4.53	45.34	4.13	Average	295	119
4	5350.00	66.55	74.00	-7.45	62.42	4.13	Peak	295	119
5	10540.00	64.72	68.20	-3.48	50.85	13.87	Peak	358	104
6	15810.00	45.08	54.00	-8.92	31.27	13.81	Average	371	91
7	15810.00	58.52	74.00	-15.48	44.71	13.81	Peak	371	91

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

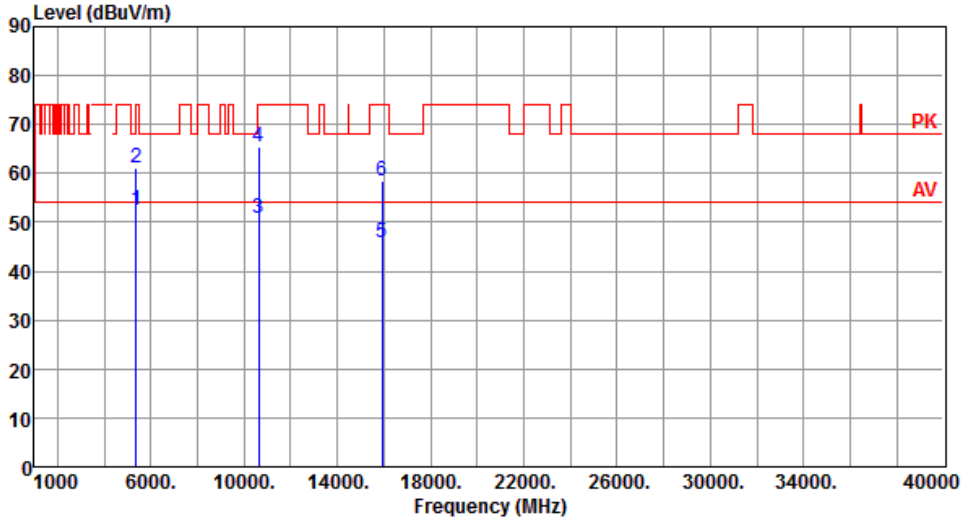
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.61	54.00	-1.39	48.48	4.13	Average	193	157
2	5350.00	63.07	74.00	-10.93	58.94	4.13	Peak	193	157
3	10620.00	47.69	54.00	-6.31	33.84	13.85	Average	381	95
4	10620.00	58.70	74.00	-15.30	44.85	13.85	Peak	381	95
5	15930.00	45.63	54.00	-8.37	31.84	13.79	Average	374	97
6	15930.00	58.64	74.00	-15.36	44.85	13.79	Peak	374	97

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

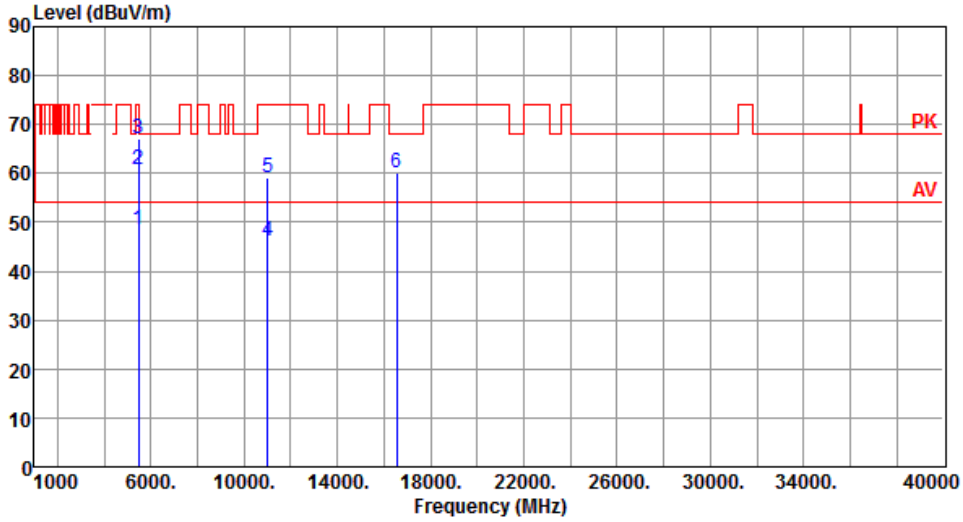
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	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	52.47	54.00	-1.53	48.34	4.13	Average	293	119
2	5350.00	60.97	74.00	-13.03	56.84	4.13	Peak	293	119
3	10620.00	50.89	54.00	-3.11	37.04	13.85	Average	315	100
4	10620.00	65.41	74.00	-8.59	51.56	13.85	Peak	315	100
5	15930.00	45.68	54.00	-8.32	31.89	13.79	Average	328	96
6	15930.00	58.37	74.00	-15.63	44.58	13.79	Peak	328	96

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

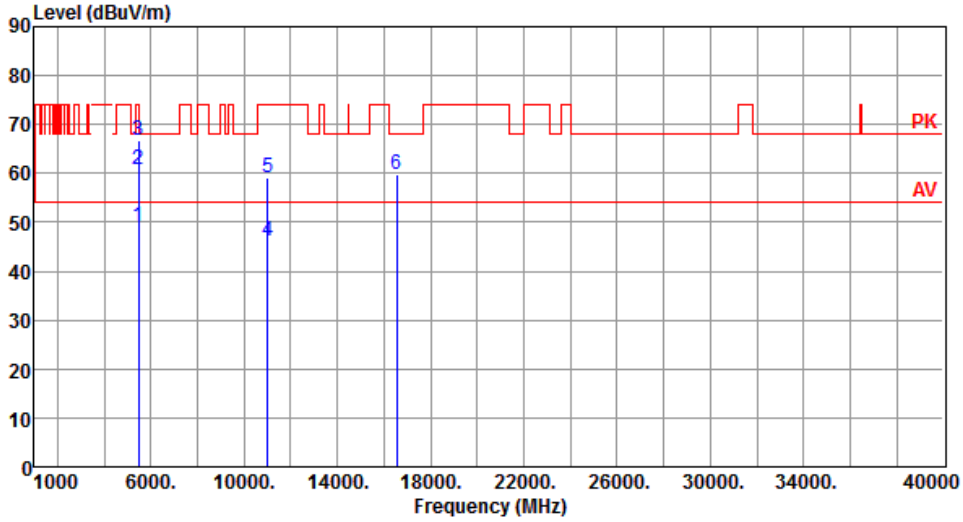
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	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	48.53	54.00	-5.47	43.89	4.64	Average	100	153
2	5460.00	60.76	74.00	-13.24	56.12	4.64	Peak	100	153
3	5470.00	67.19	68.20	-1.01	62.54	4.65	Peak	197	153
4	11020.00	46.02	54.00	-7.98	31.82	14.20	Average	357	98
5	11020.00	59.09	74.00	-14.91	44.89	14.20	Peak	357	98
6	16530.00	60.05	68.20	-8.15	44.22	15.83	Peak	354	94

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

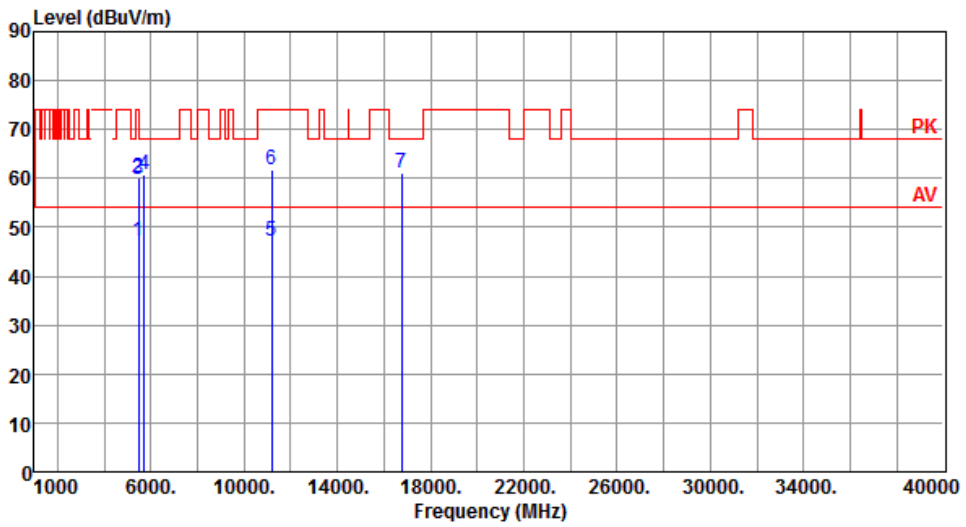
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	49.22	54.00	-4.78	44.58	4.64	Average	285	119
2	5460.00	60.77	74.00	-13.23	56.13	4.64	Peak	285	119
3	5470.00	66.75	68.20	-1.45	62.10	4.65	Peak	285	119
4	11020.00	46.05	54.00	-7.95	31.85	14.20	Average	384	101
5	11020.00	59.05	74.00	-14.95	44.85	14.20	Peak	384	101
6	16530.00	59.66	68.20	-8.54	43.83	15.83	Peak	374	102

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

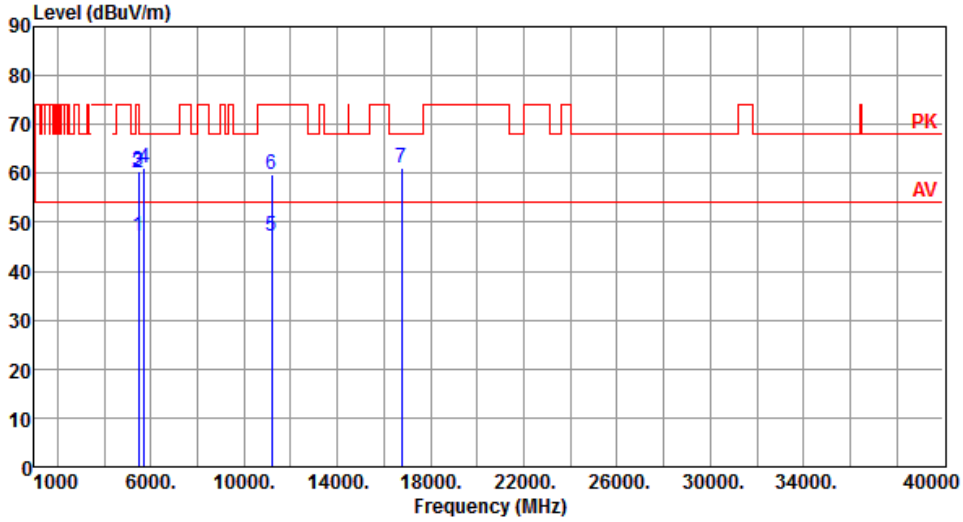
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Horizontal		



	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	47.29	54.00	-6.71	42.65	4.64	Average	198	150
2	5460.00	60.12	74.00	-13.88	55.48	4.64	Peak	198	150
3	5470.00	59.69	68.20	-8.51	55.04	4.65	Peak	198	150
4	5725.00	60.62	68.20	-7.58	55.37	5.25	Peak	198	150
5	11180.00	47.07	54.00	-6.93	33.21	13.86	Average	381	100
6	11180.00	61.71	74.00	-12.29	47.85	13.86	Peak	381	100
7	16770.00	61.02	68.20	-7.18	43.84	17.18	Peak	349	101

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

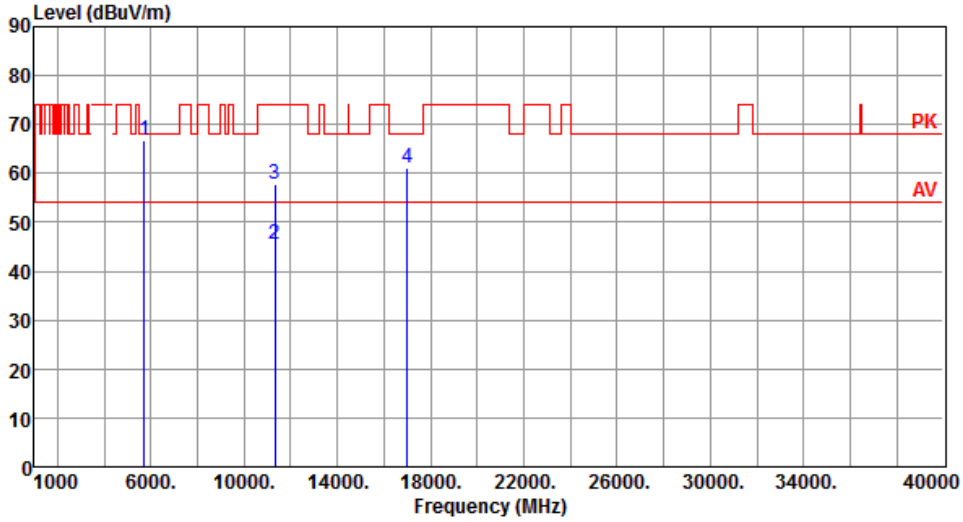
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Vertical		



	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	47.22	54.00	-6.78	42.58	4.64	Average	278	118
2	5460.00	59.96	74.00	-14.04	55.32	4.64	Peak	278	118
3	5470.00	60.33	68.20	-7.87	55.68	4.65	Peak	278	118
4	5725.00	61.14	68.20	-7.06	55.89	5.25	Peak	278	118
5	11180.00	47.13	54.00	-6.87	33.27	13.86	Average	345	100
6	11180.00	59.71	74.00	-14.29	45.85	13.86	Peak	345	100
7	16770.00	60.97	68.20	-7.23	43.79	17.18	Peak	278	118

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

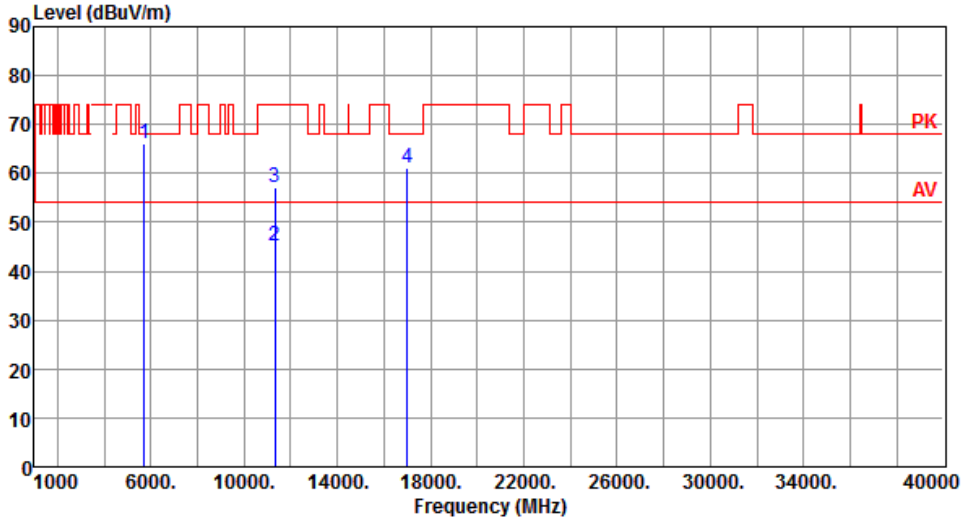
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	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	66.81	68.20	-1.39	61.56	5.25	Peak	209	158
2	11340.00	45.49	54.00	-8.51	31.57	13.92	Average	354	98
3	11340.00	57.80	74.00	-16.20	43.88	13.92	Peak	354	98
4	17010.00	61.11	68.20	-7.09	43.85	17.26	Peak	348	101

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

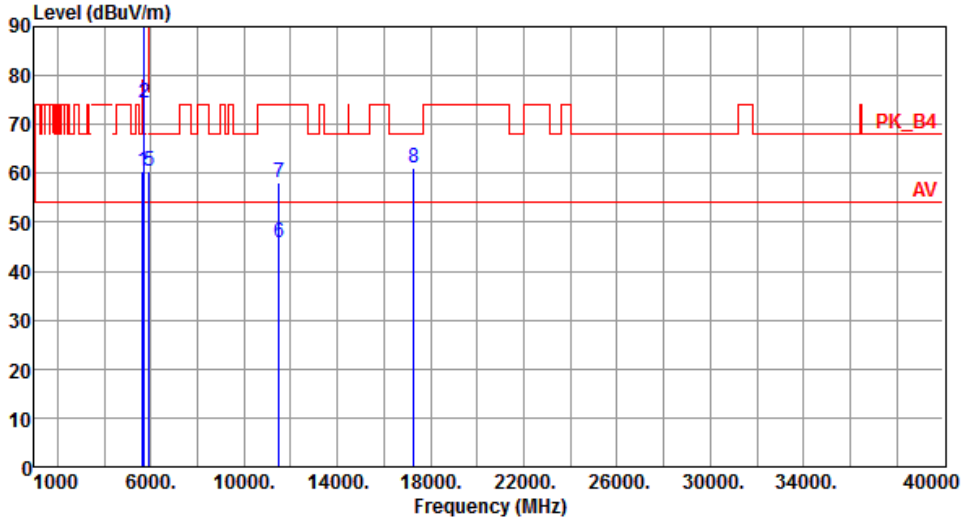
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	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	66.05	68.20	-2.15	60.80	5.25	Peak	275	121
2	11340.00	45.19	54.00	-8.81	31.27	13.92	Average	374	101
3	11340.00	57.19	74.00	-16.81	43.27	13.92	Peak	374	101
4	17010.00	61.15	68.20	-7.05	43.89	17.26	Peak	348	93

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

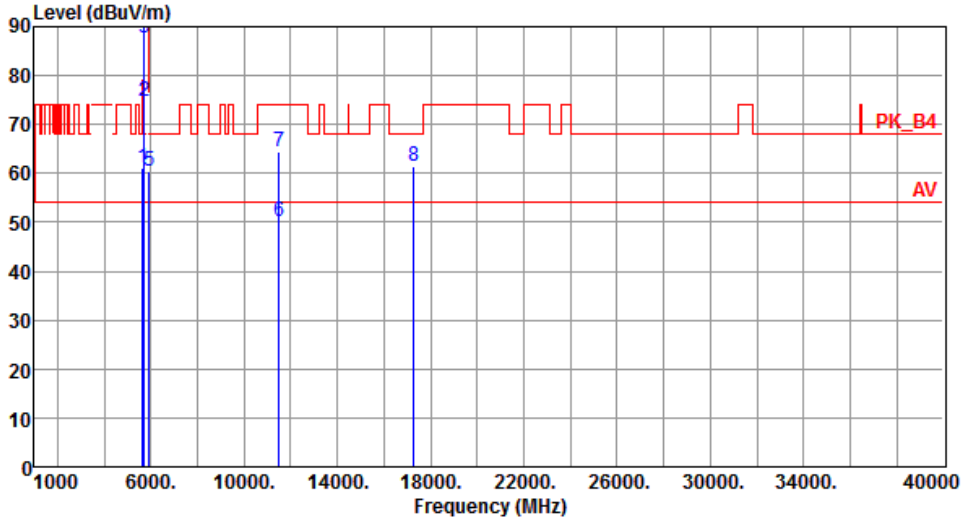
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	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	60.44	68.20	-7.76	55.47	4.97	Peak	100	157
2	5700.00	74.41	105.20	-30.79	69.25	5.16	Peak	100	157
3	5720.00	89.12	110.80	-21.68	83.89	5.23	Peak	100	157
4	5725.00	90.66	122.20	-31.54	85.41	5.25	Peak	100	157
5	5925.00	60.29	68.20	-7.91	54.20	6.09	Peak	100	157
6	11510.00	45.96	54.00	-8.04	31.85	14.11	Average	354	102
7	11510.00	57.96	74.00	-16.04	43.85	14.11	Peak	354	102
8	17265.00	61.19	68.20	-7.01	43.88	17.31	Peak	348	99

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

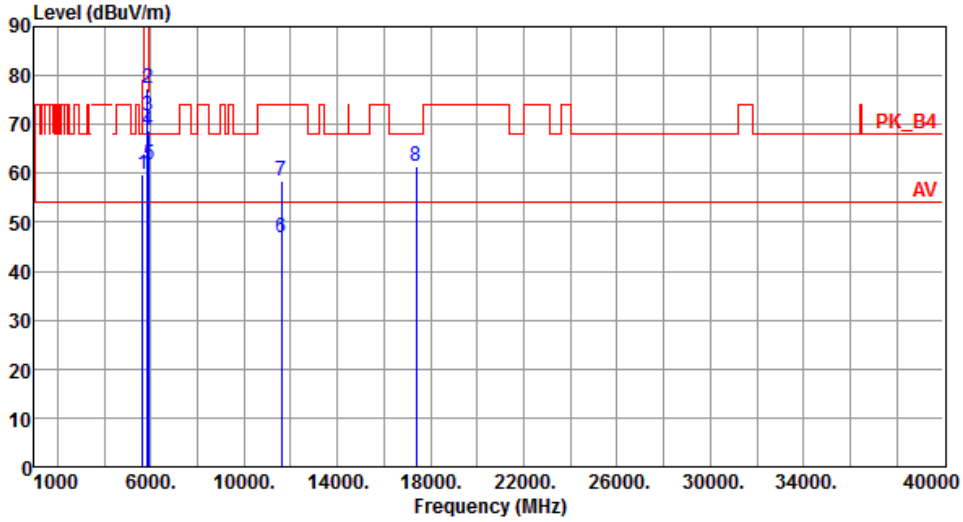
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	61.10	68.20	-7.10	56.13	4.97	Peak	273	119
2	5700.00	74.82	105.20	-30.38	69.66	5.16	Peak	273	119
3	5720.00	87.63	110.80	-23.17	82.40	5.23	Peak	273	119
4	5725.00	92.02	122.20	-30.18	86.77	5.25	Peak	273	119
5	5925.00	60.32	68.20	-7.88	54.23	6.09	Peak	273	119
6	11510.00	50.24	54.00	-3.76	36.13	14.11	Average	369	101
7	11510.00	64.53	74.00	-9.47	50.42	14.11	Peak	369	101
8	17265.00	61.58	68.20	-6.62	44.27	17.31	Peak	348	95

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

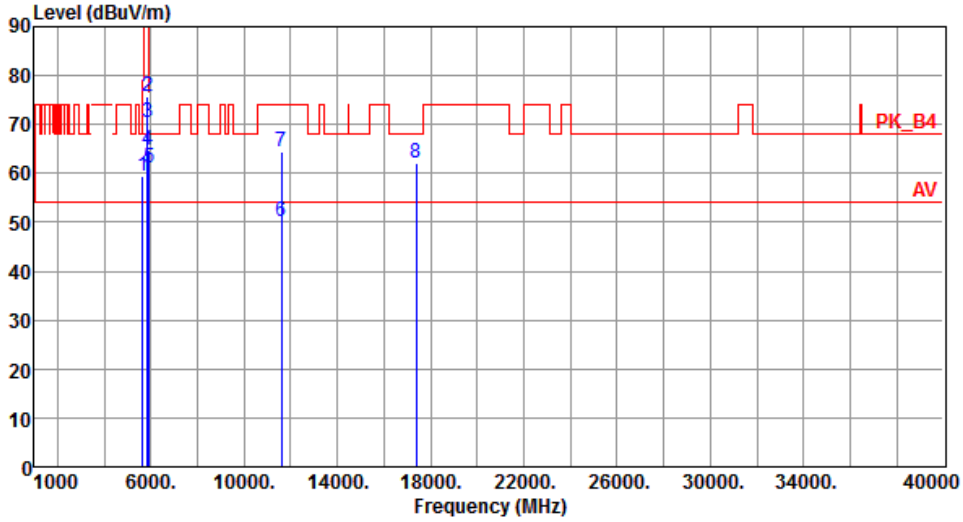
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	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	59.82	68.20	-8.38	54.85	4.97	Peak	100	150
2	5850.00	77.32	122.20	-44.88	71.51	5.81	Peak	100	150
3	5855.00	71.65	110.80	-39.15	65.82	5.83	Peak	100	150
4	5875.00	68.65	105.20	-36.55	62.75	5.90	Peak	100	150
5	5925.00	61.66	68.20	-6.54	55.57	6.09	Peak	100	150
6	11590.00	46.69	54.00	-7.31	32.80	13.89	Average	325	98
7	11590.00	58.41	74.00	-15.59	44.52	13.89	Peak	325	98
8	17385.00	61.57	68.20	-6.63	43.82	17.75	Peak	332	99

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

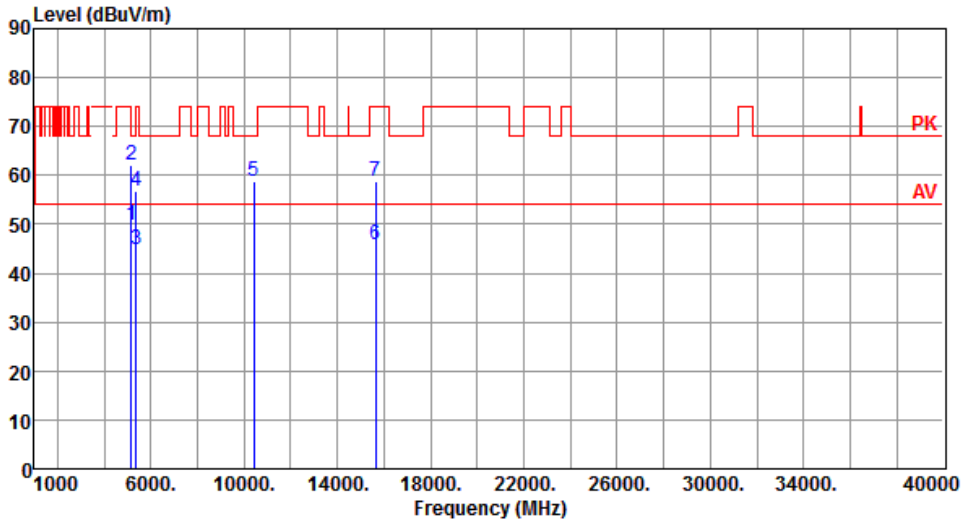


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.33	68.20	-8.87	54.36	4.97	Peak	275	120
2	5850.00	75.59	122.20	-46.61	69.78	5.81	Peak	275	120
3	5855.00	70.38	110.80	-40.42	64.55	5.83	Peak	275	120
4	5875.00	64.80	105.20	-40.40	58.90	5.90	Peak	275	120
5	5925.00	61.13	68.20	-7.07	55.04	6.09	Peak	275	120
6	11590.00	50.24	54.00	-3.76	36.35	13.89	Average	367	102
7	11590.00	64.42	74.00	-9.58	50.53	13.89	Peak	367	102
8	17385.00	62.03	68.20	-6.17	44.28	17.75	Peak	351	101

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

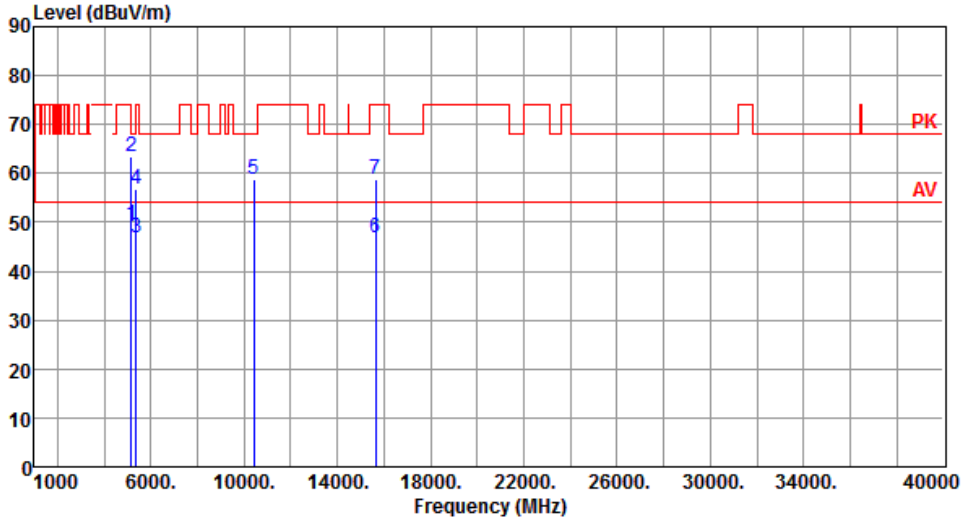
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



	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	49.80	54.00	-4.20	45.26	4.54	Average	202	149
2	5150.00	62.17	74.00	-11.83	57.63	4.54	Peak	202	149
3	5350.00	44.78	54.00	-9.22	40.65	4.13	Average	202	149
4	5350.00	56.94	74.00	-17.06	52.81	4.13	Peak	202	149
5	10420.00	58.78	68.20	-9.42	44.89	13.89	Peak	354	94
6	15630.00	45.83	54.00	-8.17	31.79	14.04	Average	344	96
7	15630.00	58.89	74.00	-15.11	44.85	14.04	Peak	344	96

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

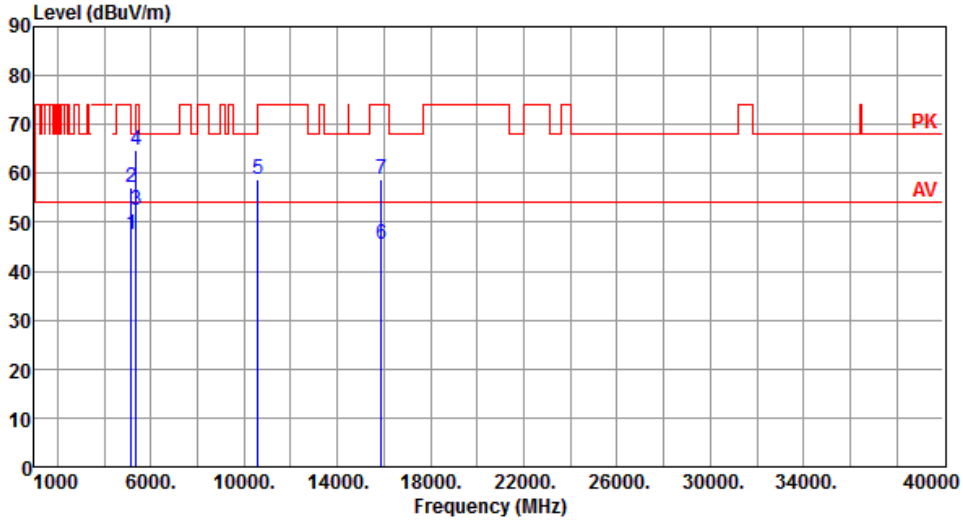
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	49.54	54.00	-4.46	45.00	4.54	Average	295	122
2	5150.00	63.46	74.00	-10.54	58.92	4.54	Peak	295	122
3	5350.00	46.83	54.00	-7.17	42.70	4.13	Average	295	122
4	5350.00	56.81	74.00	-17.19	52.68	4.13	Peak	295	122
5	10420.00	58.78	68.20	-9.42	44.89	13.89	Peak	387	96
6	15630.00	46.89	54.00	-7.11	32.85	14.04	Average	365	94
7	15630.00	58.94	74.00	-15.06	44.90	14.04	Peak	365	94

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

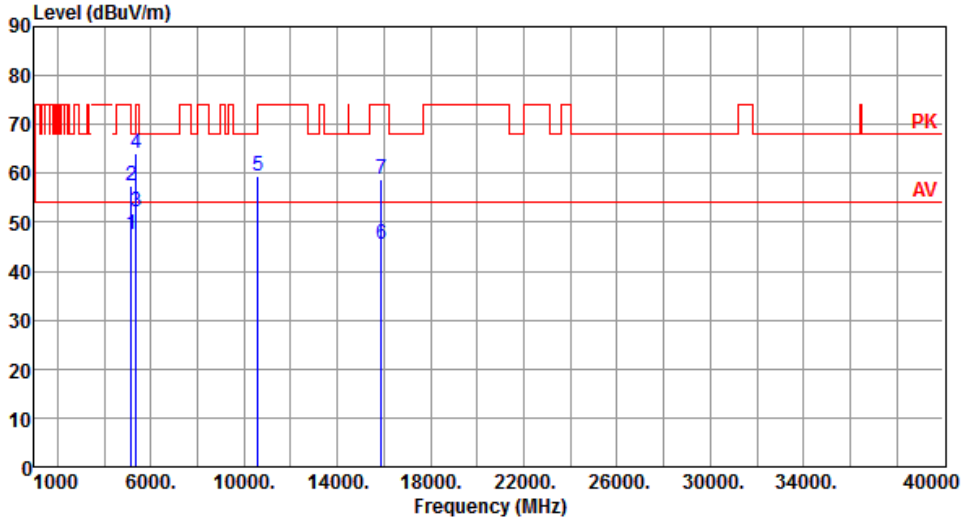
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	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	47.37	54.00	-6.63	42.83	4.54	Average	201	153
2	5150.00	57.11	74.00	-16.89	52.57	4.54	Peak	201	153
3	5350.00	52.60	54.00	-1.40	48.47	4.13	Average	201	153
4	5350.00	64.71	74.00	-9.29	60.58	4.13	Peak	201	153
5	10580.00	58.75	68.20	-9.45	44.89	13.86	Peak	347	95
6	15870.00	45.65	54.00	-8.35	31.83	13.82	Average	341	85
7	15870.00	58.70	74.00	-15.30	44.88	13.82	Peak	341	85

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

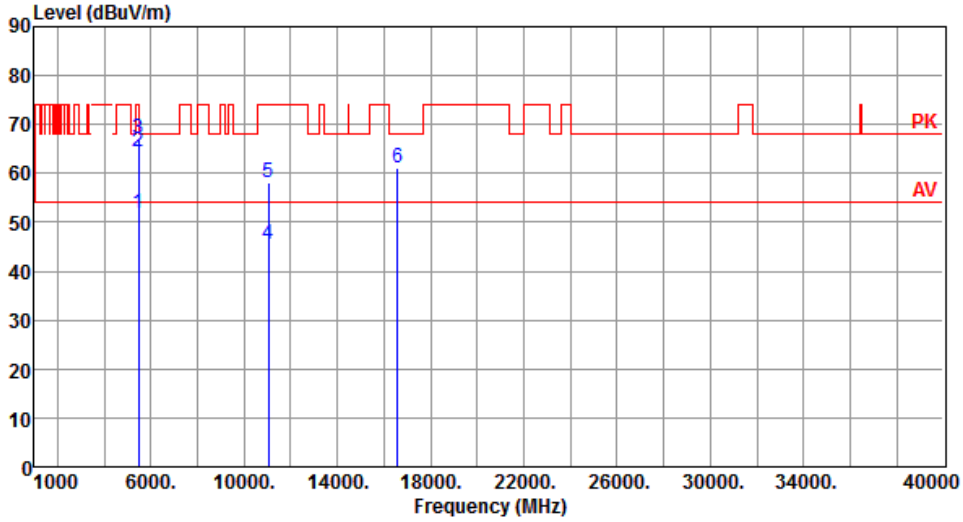
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	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	47.44	54.00	-6.56	42.90	4.54	Average	289	117
2	5150.00	57.44	74.00	-16.56	52.90	4.54	Peak	289	117
3	5350.00	52.30	54.00	-1.70	48.17	4.13	Average	289	117
4	5350.00	64.00	74.00	-10.00	59.87	4.13	Peak	289	117
5	10580.00	59.44	68.20	-8.76	45.58	13.86	Peak	342	96
6	15870.00	45.62	54.00	-8.38	31.80	13.82	Average	349	92
7	15870.00	58.67	74.00	-15.33	44.85	13.82	Peak	349	92

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

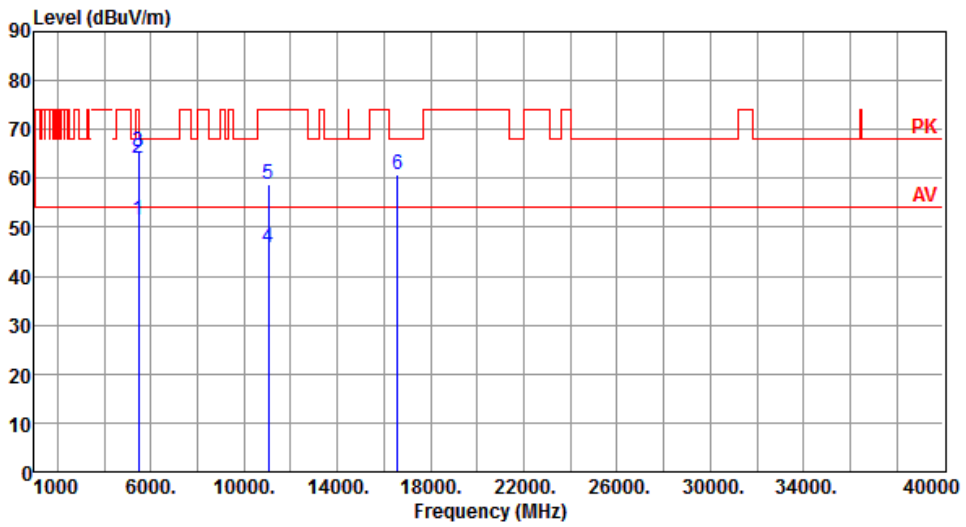
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	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	51.84	54.00	-2.16	47.20	4.64	Average	201	150
2	5460.00	64.35	74.00	-9.65	59.71	4.64	Peak	201	150
3	5470.00	66.99	68.20	-1.21	62.34	4.65	Peak	201	150
4	11060.00	45.38	54.00	-8.62	31.29	14.09	Average	100	96
5	11060.00	58.23	74.00	-15.77	44.14	14.09	Peak	100	96
6	16590.00	61.04	68.20	-7.16	44.99	16.05	Peak	100	95

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

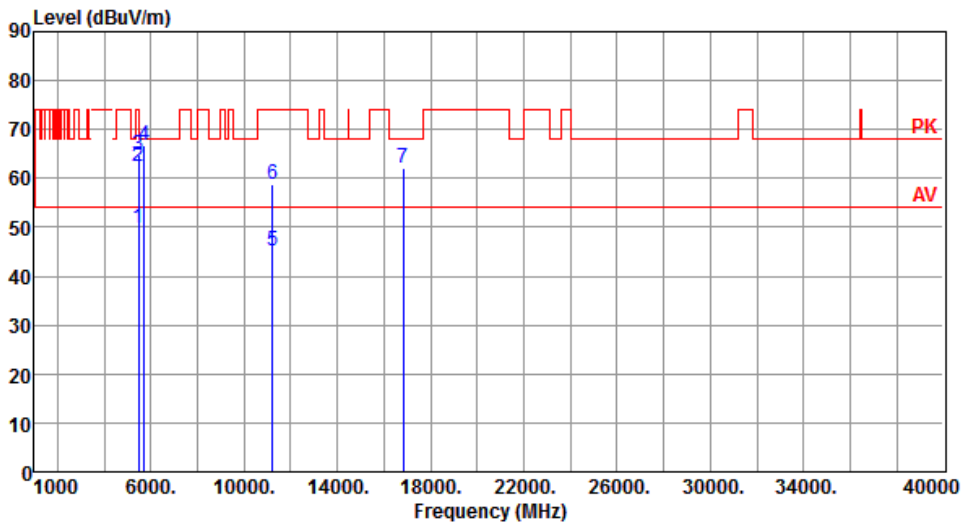
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	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	51.56	54.00	-2.44	46.92	4.64	Average	287	119
2	5460.00	64.04	74.00	-9.96	59.40	4.64	Peak	287	119
3	5470.00	65.55	68.20	-2.65	60.90	4.65	Peak	287	119
4	11060.00	45.94	54.00	-8.06	31.85	14.09	Average	100	93
5	11060.00	58.78	74.00	-15.22	44.69	14.09	Peak	100	93
6	16590.00	60.79	68.20	-7.41	44.74	16.05	Peak	100	92

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

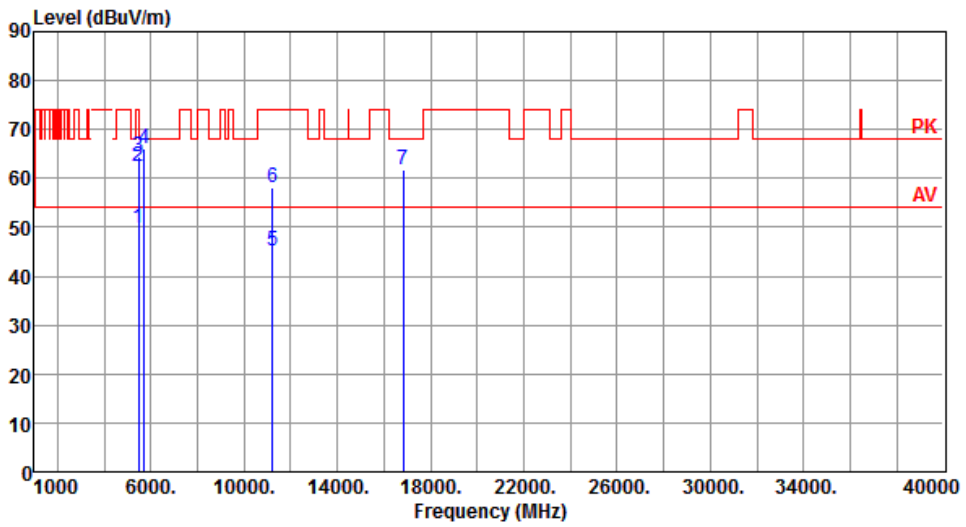
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Horizontal		



	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	49.66	54.00	-4.34	45.02	4.64	Average	187	154
2	5460.00	62.43	74.00	-11.57	57.79	4.64	Peak	187	154
3	5470.00	64.86	68.20	-3.34	60.21	4.65	Peak	187	154
4	5725.00	66.61	68.20	-1.59	61.36	5.25	Peak	187	154
5	11220.00	45.17	54.00	-8.83	31.34	13.83	Average	318	96
6	11220.00	58.68	74.00	-15.32	44.85	13.83	Peak	318	96
7	16830.00	62.00	68.20	-6.20	44.75	17.25	Peak	326	94

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

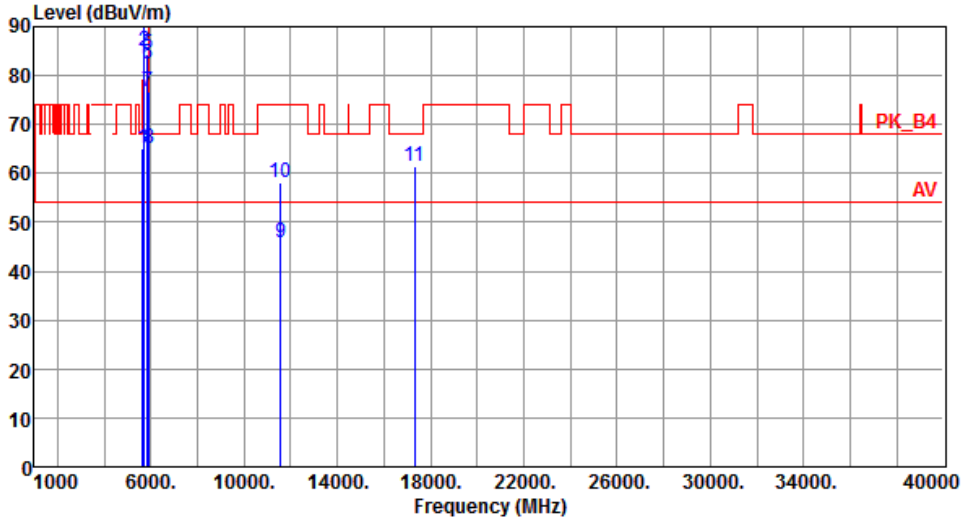
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Vertical		



	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	49.85	54.00	-4.15	45.21	4.64	Average	284	122
2	5460.00	62.53	74.00	-11.47	57.89	4.64	Peak	284	122
3	5470.00	64.28	68.20	-3.92	59.63	4.65	Peak	284	122
4	5725.00	66.04	68.20	-2.16	60.79	5.25	Peak	284	122
5	11220.00	45.24	54.00	-8.76	31.41	13.83	Average	341	92
6	11220.00	58.11	74.00	-15.89	44.28	13.83	Peak	341	92
7	16830.00	61.87	68.20	-6.33	44.62	17.25	Peak	352	91

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

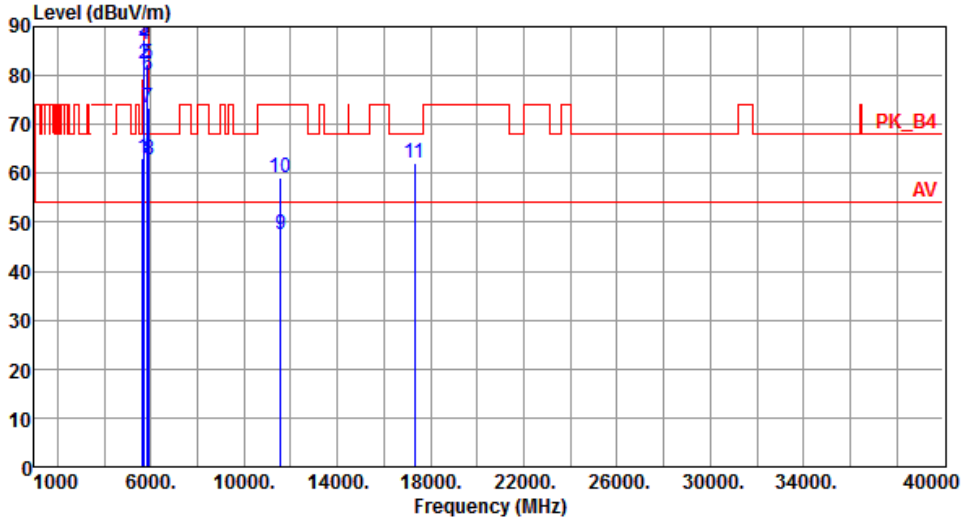
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	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	65.04	68.20	-3.16	60.07	4.97	Peak	231	152
2	5700.00	85.06	105.20	-20.14	79.90	5.16	Peak	231	152
3	5720.00	89.16	110.80	-21.64	83.93	5.23	Peak	231	152
4	5725.00	90.04	122.20	-32.16	84.79	5.25	Peak	231	152
5	5850.00	84.52	122.20	-37.68	78.71	5.81	Peak	231	152
6	5855.00	82.45	110.80	-28.35	76.62	5.83	Peak	231	152
7	5875.00	76.78	105.20	-28.42	70.88	5.90	Peak	231	152
8	5925.00	65.11	68.20	-3.09	59.02	6.09	Peak	231	152
9	11550.00	45.89	54.00	-8.11	31.89	14.00	Average	352	98
10	11550.00	58.28	74.00	-15.72	44.28	14.00	Peak	352	98
11	17325.00	61.35	68.20	-6.85	43.86	17.49	Peak	347	96

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

Modulation	VHT80	Test Freq. (MHz)	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	63.10	68.20	-5.10	58.13	4.97	Peak	305	118
2	5700.00	82.23	105.20	-22.97	77.07	5.16	Peak	305	118
3	5720.00	87.18	110.80	-23.62	81.95	5.23	Peak	305	118
4	5725.00	86.24	122.20	-35.96	80.99	5.25	Peak	305	118
5	5850.00	82.29	122.20	-39.91	76.48	5.81	Peak	305	118
6	5855.00	79.93	110.80	-30.87	74.10	5.83	Peak	305	118
7	5875.00	73.32	105.20	-31.88	67.42	5.90	Peak	305	118
8	5925.00	62.68	68.20	-5.52	56.59	6.09	Peak	305	118
9	11550.00	47.51	54.00	-6.49	33.51	14.00	Average	370	115
10	11550.00	59.21	74.00	-14.79	45.21	14.00	Peak	370	115
11	17325.00	61.97	68.20	-6.23	44.48	17.49	Peak	356	102

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

3.6 Frequency Stability

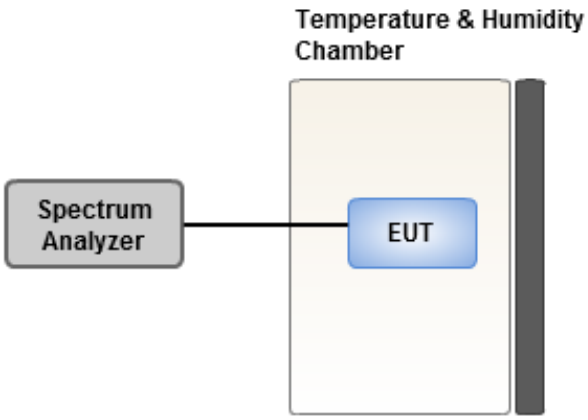
3.6.1 Limit of Frequency Stability

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

3.6.2 Test Procedures

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

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5200 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	6.33	6.57	6.48	7.08
T20°CVmin	4.64	4.81	4.64	4.95
T60CVnom	3.89	4.18	4.06	4.12
T50CVnom	4.53	4.47	5.39	4.73
T40°CVnom	2.97	3.38	3.04	2.72
T30°CVnom	4.08	4.51	4.01	4.26
T20°CVnom	3.92	3.49	3.96	4.28
T10°CVnom	3.83	4.31	3.57	3.86
T0°CVnom	3.03	2.92	3.79	3.00
T-10°CVnom	1.58	1.57	1.64	1.57
T-20°CVnom	0.79	0.79	0.53	0.71
T-30°CVnom	1.33	1.28	2.14	1.51
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	5.96	5.85	6.06	6.42
T20°CVmin	4.42	4.72	4.38	4.55
T60CVnom	3.03	3.54	2.97	3.05
T50CVnom	4.50	4.80	4.92	5.21
T40°CVnom	3.45	3.75	3.49	3.67
T30°CVnom	4.25	4.81	4.79	4.48
T20°CVnom	3.49	3.59	4.33	4.15
T10°CVnom	3.57	3.98	3.60	3.44
T0°CVnom	2.95	3.39	2.95	3.49
T-10°CVnom	1.50	2.05	1.54	1.36
T-20°CVnom	0.62	0.43	1.20	1.15
T-30°CVnom	1.62	1.91	1.96	2.39
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
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Email: ICC_Service@icertifi.com.tw

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