FCC Test Report

FCC ID	:	**YAISB52**
Equipment	:	**Wireless SOM Module**
Model No.	:	**SB52**
Brand Name	:	**InnoComm**
Applicant	:	**InnoComm Mobile Technology Corp**
Address	:	**3F,No. 6, Hsin Ann Rd., Hsinchu Science Park, Hsinchu 30078, Taiwan**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Mar. 17, 2020**
Tested Date	:	**Apr. 30 ~ May 20, 2020**

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: **Approved by:**

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

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR031702AN	Rev. 01	Initial issue	May 27, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.234MHz 60.76 (Margin -1.54dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5650.00MHz 67.99 (Margin -0.21dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: 5150~5250MHz: 23.09 5250~5350MHz: 22.43 5470~5725MHz: 21.01 5725~5850MHz: 20.72	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

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	**5150~5250**	**5250~5350**	**5470~5725**	**5725~5850**
1	Wi-Fi ANT-1	Monopole	ipex	1.87	1.22	2.19	2.39	3.14
2	Wi-Fi ANT-2	Monopole	ipex	1.87	1.22	2.19	2.39	3.14

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.8 Vdc

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	adb, Version: 1.0.40		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	94.63%	0.24
	VHT20	94.42%	0.25
	VHT40	91.23%	0.40
	VHT80	79.08%	1.02

1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	15
11a	5200	17
11a	5240	15
11a	5260	15
11a	5300	15
11a	5320	15
11a	5500	11.5
11a	5580	11.5
11a	5700	13
11a	5745	14
11a	5785	13.5
11a	5825	13
VHT20	5180	16
VHT20	5200	18.5
VHT20	5240	16.5
VHT20	5260	16.5
VHT20	5300	16
VHT20	5320	16
VHT20	5500	13.5
VHT20	5580	13.5
VHT20	5700	13.5
VHT20	5745	15
VHT20	5785	14.5
VHT20	5825	14

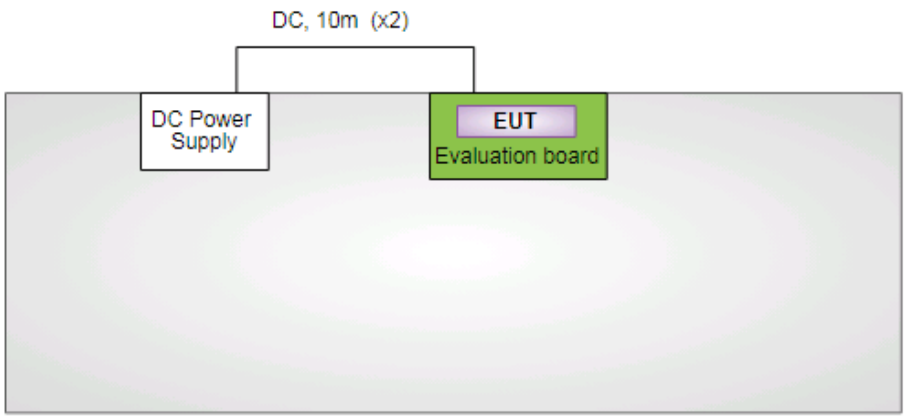
Modulation Mode	Test Frequency (MHz)	Power Index
VHT40	5190	11
VHT40	5230	17
VHT40	5270	18
VHT40	5310	12
VHT40	5510	11
VHT40	5590	15
VHT40	5670	15.5
VHT40	5755	15.5
VHT40	5795	15
VHT80	5210	9
VHT80	5290	10
VHT80	5530	10
VHT80	5610	18.5
VHT80	5775	18

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---
2	DC Cable	ICC	DCC-10m-R	---	---
3	DC Cable	ICC	DCC-10m-B	---	---
4	DC Power Supply	GWINSTEK	GPC-60300	---	---
5	Evaluation board	---	---	---	Provided by applicant.

1.3 Test Setup Chart

Test Setup Diagram



Note: The notebook is disconnected from EUT and removed from test table when EUT is set to transmit continuously.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Test Date	May 20, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
LISN	R&S	ENV216	101579	Mar. 12, 2020	Mar. 11, 2021
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Test Date	Apr. 30 ~ May 11, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
Receiver	R&S	ESR3	101657	Feb. 14, 2020	Feb. 13, 2021
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 29, 2020	Apr. 28, 2021
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 27, 2019	Dec. 26, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980187	Aug. 14, 2019	Aug. 13, 2020
Preamplifier	Agilent	83017A	MY53270014	Aug. 07, 2019	Aug. 06, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 27, 2019	Sep. 26, 2020
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 27, 2019	Sep. 26, 2020
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Sep. 27, 2019	Sep. 26, 2020
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 27, 2019	Sep. 26, 2020
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 27, 2019	Sep. 26, 2020
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 27, 2019	Sep. 26, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Test Date	May 20, 2020				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Apr. 30, 2020	Apr. 29, 2021
Spectrum Analyzer	R&**S**	FSV40	101499	Jan. 09, 2020	Jan. 08, 2021
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 12, 2019	Dec. 11, 2020
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Oct. 29, 2019	Oct. 28, 2020
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 02, 2019	Dec. 01, 2020
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 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

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	±3.96 dB
Radiated emission > 1GHz	±4.51 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	22°C / 67%	Alex Tsai
Radiated Emissions	03CH03-WS	24-25°C / 60-63%	Roger Lu Brad Wu
RF Conducted	TH01-WS	22°C / 63%	Brad Wu

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

2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Emissions	VHT20	5200	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5200	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	VHT80	5775	MCS 0	---
Radiated Emissions ≤1GHz	VHT80	5775	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

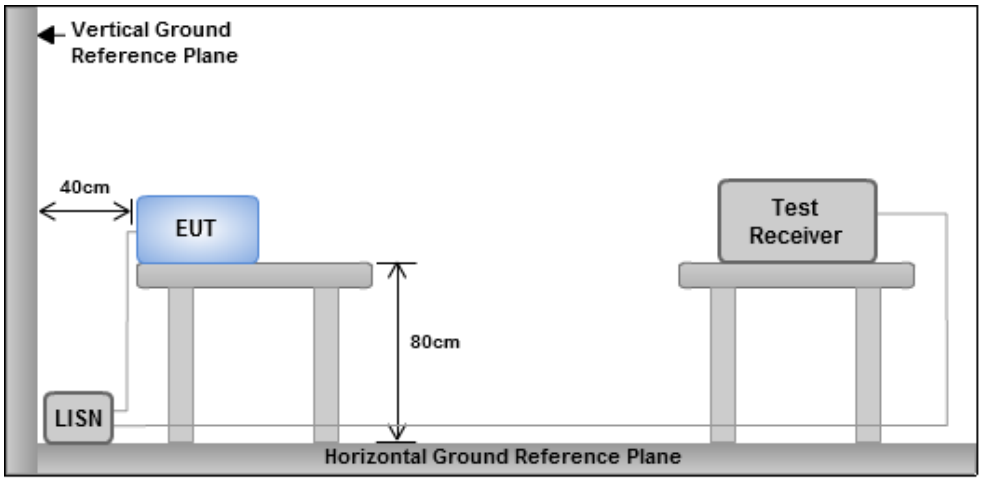
3.1.1 Limit of Conducted Emissions

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

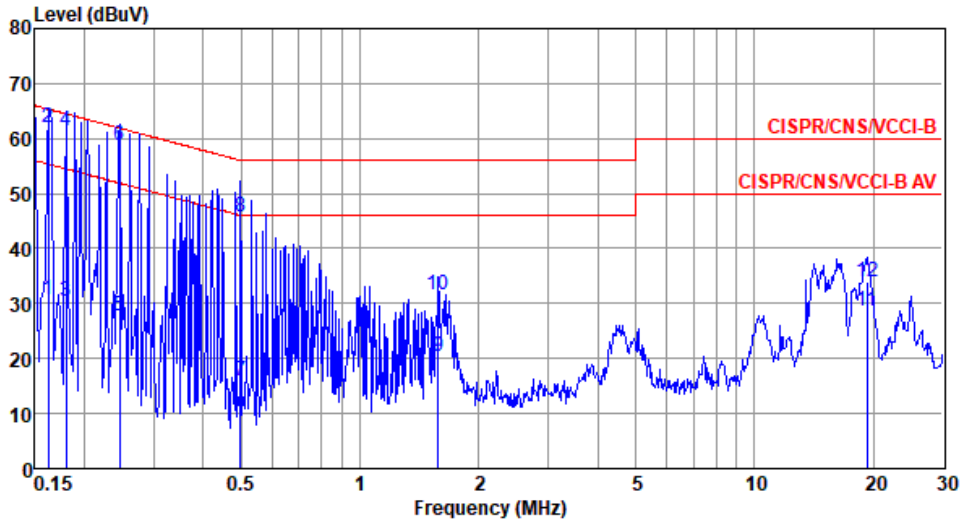
3.1.3 Test Setup



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

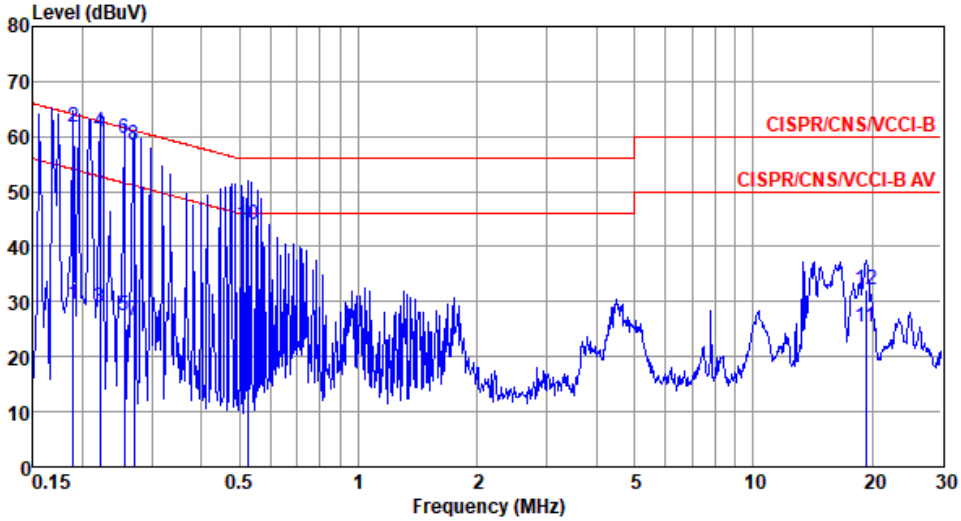
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.162	30.58	55.34	-24.76	20.89	9.64	0.05	Average
2	0.162	61.89	65.34	-3.45	52.20	9.64	0.05	QP
3	0.180	30.26	54.50	-24.24	20.57	9.63	0.06	Average
4*	0.180	61.30	64.50	-3.20	51.61	9.63	0.06	QP
5	0.246	27.82	51.91	-24.09	18.12	9.63	0.07	Average
6	0.246	58.67	61.91	-3.24	48.97	9.63	0.07	QP
7	0.497	15.92	46.05	-30.13	6.20	9.63	0.09	Average
8	0.497	45.74	56.05	-10.31	36.02	9.63	0.09	QP
9	1.577	20.30	46.00	-25.70	10.50	9.64	0.16	Average
10	1.577	31.62	56.00	-24.38	21.82	9.64	0.16	QP
11	19.326	28.77	50.00	-21.23	18.40	9.72	0.65	Average
12	19.326	33.85	60.00	-26.15	23.48	9.72	0.65	QP

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

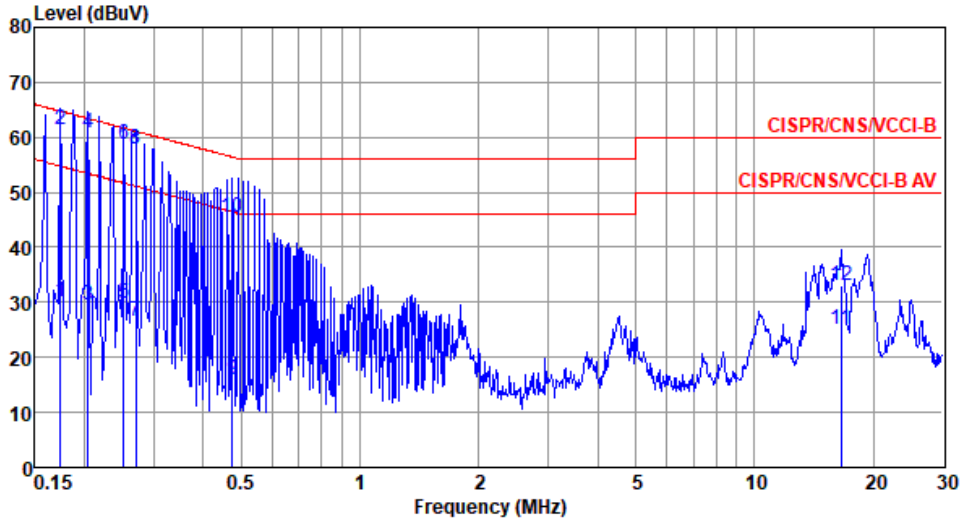
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.189	29.41	54.06	-24.65	19.70	9.65	0.06	Average
2	0.189	61.74	64.06	-2.32	52.03	9.65	0.06	QP
3	0.222	28.91	52.74	-23.83	19.20	9.65	0.06	Average
4*	0.222	60.77	62.74	-1.97	51.06	9.65	0.06	QP
5	0.255	27.39	51.60	-24.21	17.67	9.65	0.07	Average
6	0.255	59.54	61.60	-2.06	49.82	9.65	0.07	QP
7	0.270	26.57	51.12	-24.55	16.85	9.65	0.07	Average
8	0.270	58.31	61.12	-2.81	48.59	9.65	0.07	QP
9	0.524	15.42	46.00	-30.58	5.68	9.65	0.09	Average
10	0.524	44.07	56.00	-11.93	34.33	9.65	0.09	QP
11	19.326	25.50	50.00	-24.50	15.02	9.83	0.65	Average
12	19.326	32.26	60.00	-27.74	21.78	9.83	0.65	QP

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

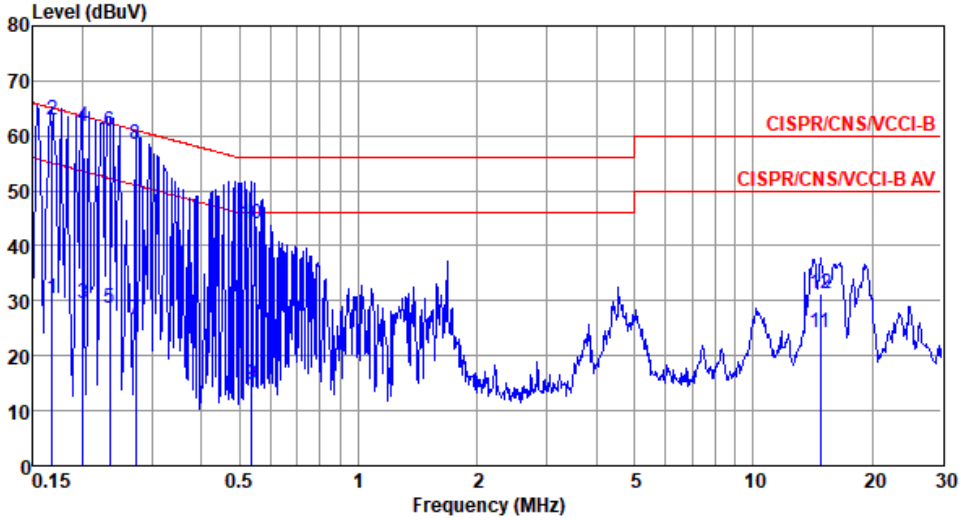
Modulation	VHT80	Test Freq. (MHz)	5775
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.174	30.13	54.77	-24.64	20.44	9.63	0.06	Average
2	0.174	61.38	64.77	-3.39	51.69	9.63	0.06	QP
3	0.204	29.56	53.45	-23.89	19.87	9.63	0.06	Average
4*	0.204	60.74	63.45	-2.71	51.05	9.63	0.06	QP
5	0.252	29.81	51.69	-21.88	20.11	9.63	0.07	Average
6	0.252	58.65	61.69	-3.04	48.95	9.63	0.07	QP
7	0.270	26.57	51.12	-24.55	16.87	9.63	0.07	Average
8	0.270	57.83	61.12	-3.29	48.13	9.63	0.07	QP
9	0.474	15.90	46.45	-30.55	6.18	9.63	0.09	Average
10	0.474	45.34	56.45	-11.11	35.62	9.63	0.09	QP
11	16.573	25.15	50.00	-24.85	14.82	9.71	0.62	Average
12	16.573	33.10	60.00	-26.90	22.77	9.71	0.62	QP

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

Modulation	VHT80	Test Freq. (MHz)	5775
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.168	30.32	55.08	-24.76	20.61	9.66	0.05	Average
2	0.168	62.87	65.08	-2.21	53.16	9.66	0.05	QP
3	0.201	29.57	53.58	-24.01	19.86	9.65	0.06	Average
4	0.201	61.83	63.58	-1.75	52.12	9.65	0.06	QP
5	0.234	28.67	52.30	-23.63	18.96	9.65	0.06	Average
6*	0.234	60.76	62.30	-1.54	51.05	9.65	0.06	QP
7	0.273	26.66	51.03	-24.37	16.94	9.65	0.07	Average
8	0.273	58.49	61.03	-2.54	48.77	9.65	0.07	QP
9	0.538	14.88	46.00	-31.12	5.14	9.65	0.09	Average
10	0.538	43.89	56.00	-12.11	34.15	9.65	0.09	QP
11	14.828	24.16	50.00	-25.84	13.78	9.79	0.59	Average
12	14.828	31.15	60.00	-28.85	20.77	9.79	0.59	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.

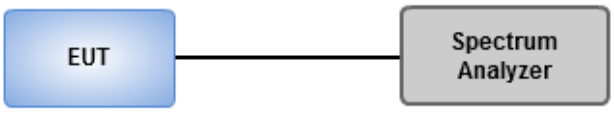
Occupied Bandwidth

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	35.217M	18.379M	18M4D1D	25.435M	16.425M
802.11ac VHT20_Nss1,(MCS0)_2TX	39.855M	21.852M	21M9D1D	26.087M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	70.435M	37.192M	37M2D1D	40.145M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.449M	75.832M	75M8D1D	80.29M	75.543M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	26.014M	16.643M	16M6D1D	23.333M	16.425M
802.11ac VHT20_Nss1,(MCS0)_2TX	29.565M	17.728M	17M7D1D	26.304M	17.583M
802.11ac VHT40_Nss1,(MCS0)_2TX	73.478M	37.048M	37M0D1D	40.145M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.739M	75.543M	75M5D1D	80M	75.543M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	25M	16.57M	16M6D1D	19.275M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	20M	17.583M	17M6D1D	19.71M	17.511M
802.11ac VHT40_Nss1,(MCS0)_2TX	40.87M	36.179M	36M2D1D	40M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	119.42M	76.411M	76M4D1D	80.58M	75.832M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	15.072M	16.498M	16M5D1D	14.058M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	16.739M	17.583M	17M6D1D	12.609M	17.438M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.362M	36.324M	36M3D1D	35.217M	36.179M
802.11ac VHT80_Nss1,(MCS0)_2TX	75.362M	76.122M	76M1D1D	75.362M	76.122M

Max-N dB = Maximum6dB downbandwidth for 5.725-5.85GHz band / Maximum26dB downbandwidth for other band;
Max-OBW = Maximum99% occupied bandwidth;
Min-N dB = Minimum6dB downbandwidth for 5.725-5.85GHz band / Maximum26dB downbandwidth for other band;
Min-OBW = Minimum99% occupied bandwidth;

Result

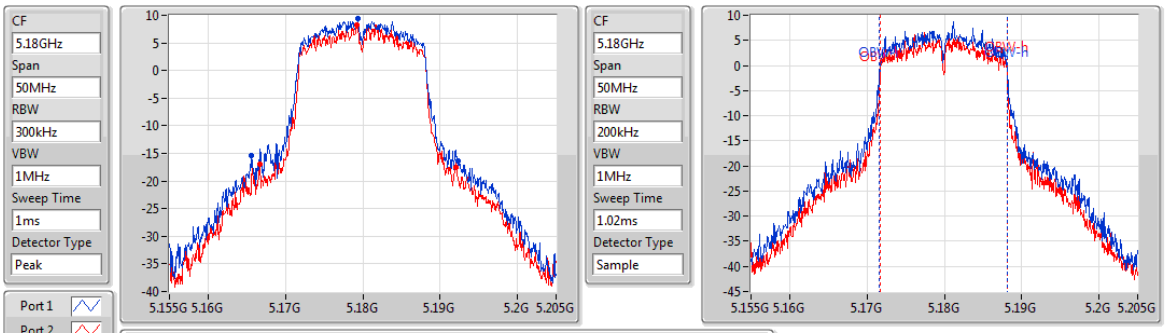
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	26.667M	16.643M	25.435M	16.425M
5200MHz	Pass	Inf	35.217M	18.379M	33.551M	17.656M
5240MHz	Pass	Inf	30.507M	17.077M	27.681M	16.715M
5260MHz	Pass	Inf	24.348M	16.57M	23.841M	16.425M
5300MHz	Pass	Inf	26.014M	16.643M	23.551M	16.425M
5320MHz	Pass	Inf	23.333M	16.57M	23.623M	16.425M
5500MHz	Pass	Inf	25M	16.498M	19.638M	16.353M
5580MHz	Pass	Inf	22.391M	16.57M	19.638M	16.425M
5700MHz	Pass	Inf	19.565M	16.425M	19.275M	16.353M
5745MHz	Pass	500k	14.058M	16.498M	15M	16.425M
5785MHz	Pass	500k	15.072M	16.498M	15.072M	16.353M
5825MHz	Pass	500k	15.072M	16.498M	15.072M	16.353M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	28.188M	17.728M	26.087M	17.583M
5200MHz	Pass	Inf	39.855M	21.852M	38.623M	20.695M
5240MHz	Pass	Inf	37.681M	18.452M	32.536M	18.017M
5260MHz	Pass	Inf	29.565M	17.728M	27.101M	17.656M
5300MHz	Pass	Inf	26.594M	17.656M	26.667M	17.583M
5320MHz	Pass	Inf	29.203M	17.656M	26.304M	17.583M
5500MHz	Pass	Inf	19.928M	17.583M	19.855M	17.583M
5580MHz	Pass	Inf	20M	17.583M	19.71M	17.583M
5700MHz	Pass	Inf	20M	17.583M	19.783M	17.511M
5745MHz	Pass	500k	12.609M	17.583M	15.725M	17.438M
5785MHz	Pass	500k	15.072M	17.583M	15.942M	17.511M
5825MHz	Pass	500k	15M	17.583M	16.739M	17.511M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	40.58M	36.179M	40.145M	36.324M
5230MHz	Pass	Inf	70.435M	37.192M	69.71M	36.614M
5270MHz	Pass	Inf	73.478M	37.048M	69.71M	36.758M
5310MHz	Pass	Inf	41.014M	36.324M	40.145M	36.179M
5510MHz	Pass	Inf	40.87M	36.179M	40.145M	36.179M
5590MHz	Pass	Inf	40.725M	36.179M	40M	36.179M
5670MHz	Pass	Inf	40.58M	36.179M	40.145M	36.179M
5755MHz	Pass	500k	35.217M	36.179M	35.362M	36.324M
5795MHz	Pass	500k	35.217M	36.179M	35.217M	36.179M

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.449M	75.832M	80.29M	75.543M
5290MHz	Pass	Inf	81.739M	75.543M	80M	75.543M
5530MHz	Pass	Inf	81.449M	76.122M	80.58M	75.832M
5610MHz	Pass	Inf	119.42M	76.411M	114.783M	76.122M
5775MHz	Pass	500k	75.362M	76.122M	75.362M	76.122M

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

802.11a_Nss1,(6Mbps)_2TX EBW

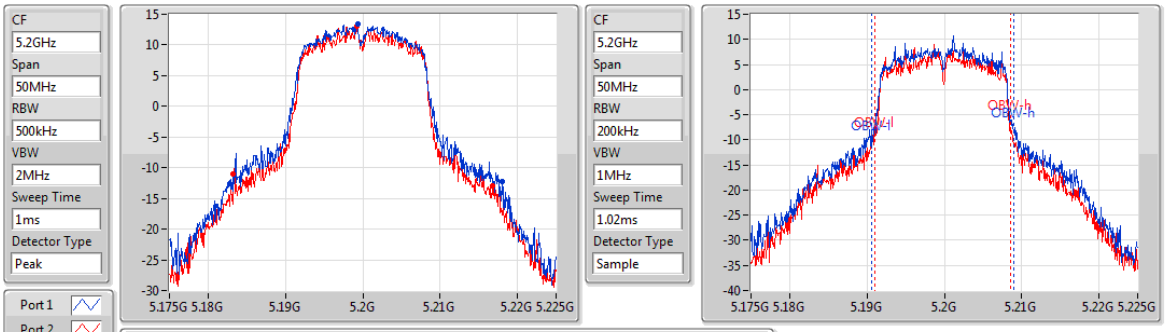
5180MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
26.667M	5.165652G	5.192319G	16.643M	5.171534G	5.188177G	Inf	1
25.435M	5.166667G	5.192101G	16.425M	5.171679G	5.188104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

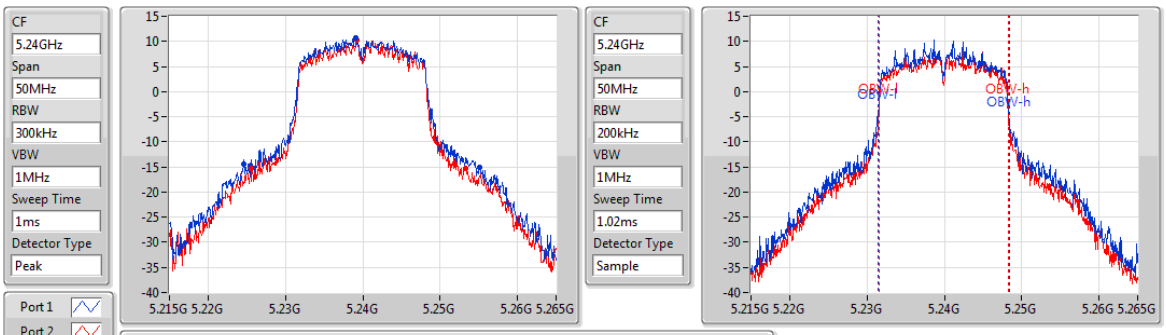
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.217M	5.182754G	5.217971G	18.379M	5.190666G	5.209045G	Inf	1
33.551M	5.183261G	5.216812G	17.656M	5.190955G	5.208611G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

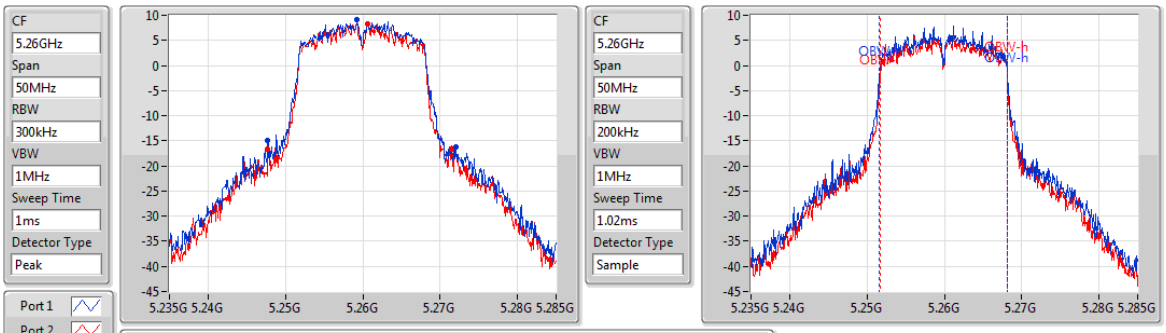
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.507M	5.224565G	5.255072G	17.077M	5.231389G	5.248466G	Inf	1
27.681M	5.225652G	5.253333G	16.715M	5.231534G	5.248249G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

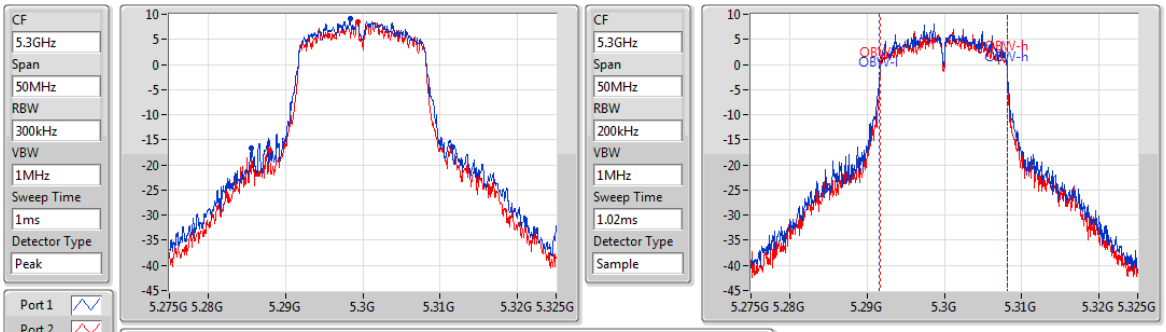
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.348M	5.247681G	5.272029G	16.57M	5.251606G	5.268177G	Inf	1
23.841M	5.247681G	5.271522G	16.425M	5.251679G	5.268104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

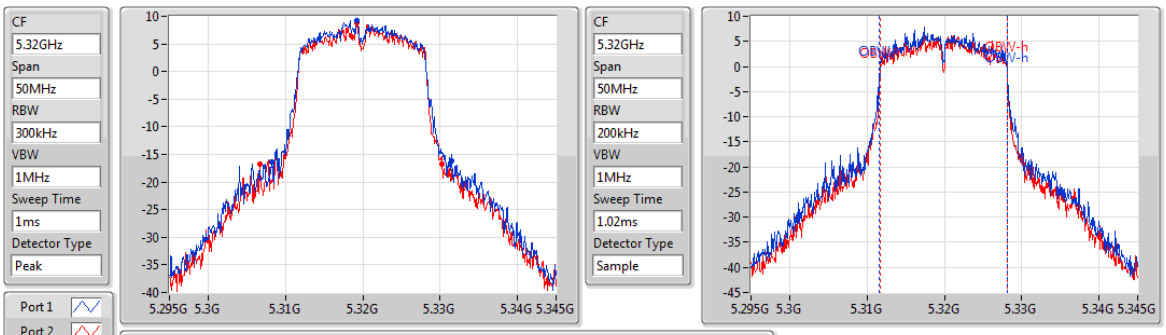
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
26.014M	5.28558G	5.311594G	16.643M	5.291534G	5.308177G	Inf	1
23.551M	5.287899G	5.311449G	16.425M	5.291679G	5.308104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

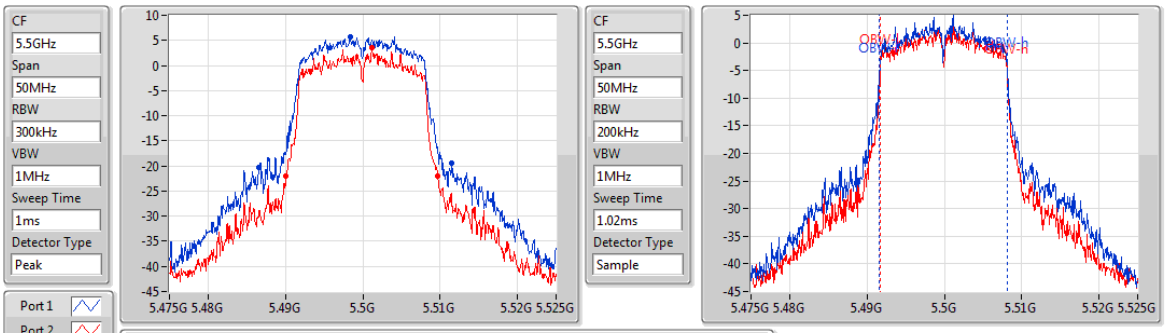
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.333M	5.308188G	5.331522G	16.57M	5.311606G	5.328177G	Inf	1
23.623M	5.306667G	5.33029G	16.425M	5.311679G	5.328104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

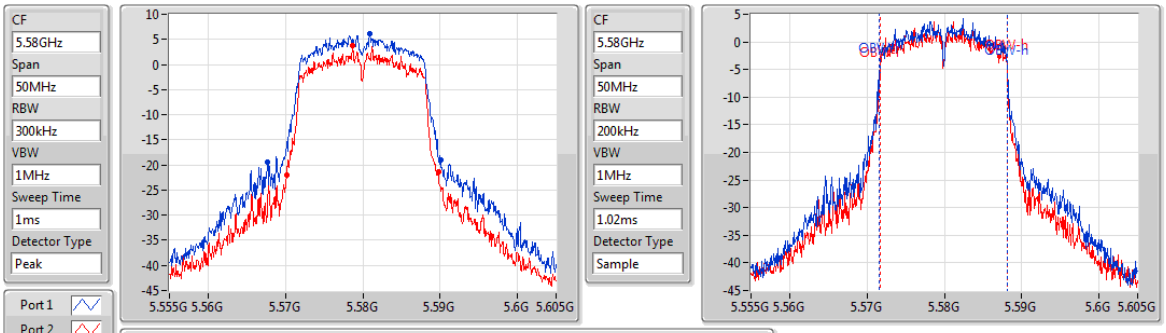
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25M	5.486522G	5.511522G	16.498M	5.491606G	5.508104G	Inf	1
19.638M	5.490072G	5.50971G	16.353M	5.491751G	5.508104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

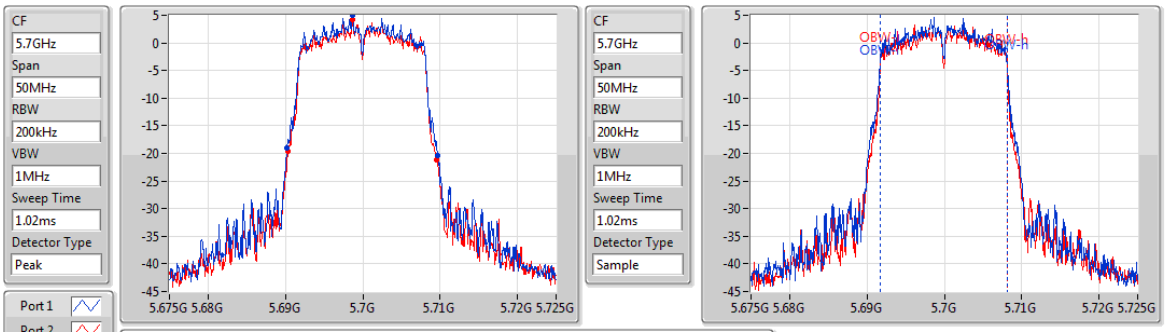
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.391M	5.567681G	5.590072G	16.57M	5.571606G	5.588177G	Inf	1
19.638M	5.570145G	5.589783G	16.425M	5.571679G	5.588104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

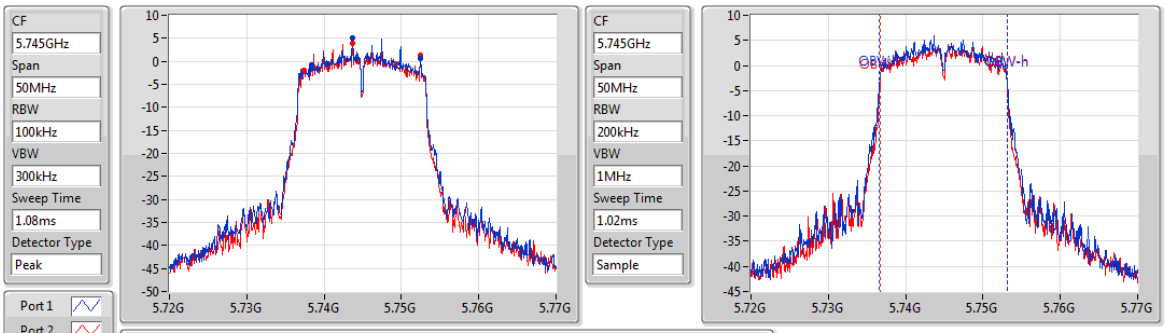
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.565M	5.690145G	5.70971G	16.425M	5.691679G	5.708104G	Inf	1
19.275M	5.69029G	5.709565G	16.353M	5.691751G	5.708104G	Inf	2

802.11a_Nss1,(6Mbps)_2TX EBW

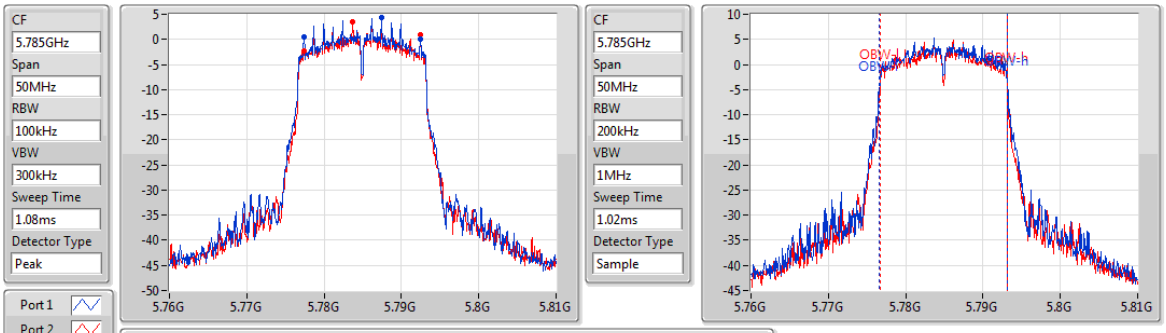
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.058M	5.738406G	5.752464G	16.498M	5.736606G	5.753104G	500k	1
15M	5.737464G	5.752464G	16.425M	5.736679G	5.753104G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

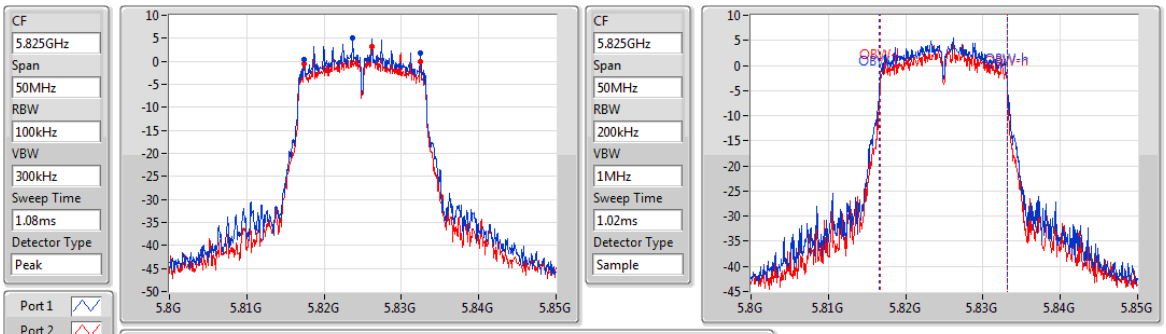
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.777391G	5.792464G	16.498M	5.776606G	5.793104G	500k	1
15.072M	5.777391G	5.792464G	16.353M	5.776751G	5.793104G	500k	2

802.11a_Nss1,(6Mbps)_2TX EBW

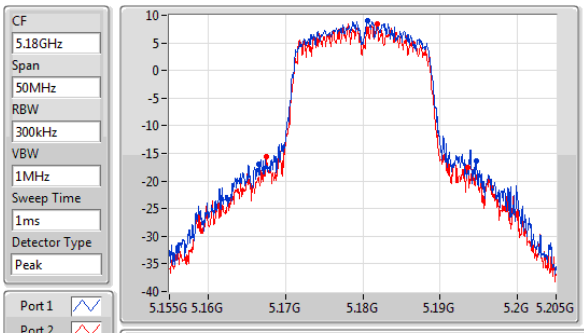
5825MHz

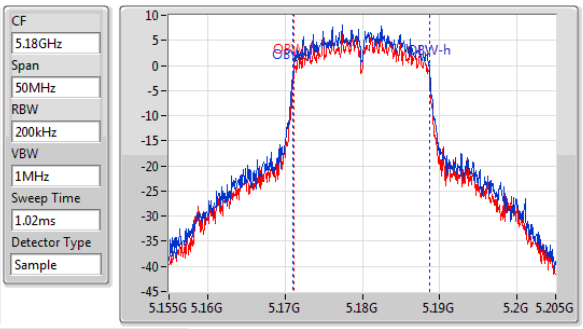


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.817391G	5.832464G	16.498M	5.816606G	5.833104G	500k	1
15.072M	5.817391G	5.832464G	16.353M	5.816751G	5.833104G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5180MHz

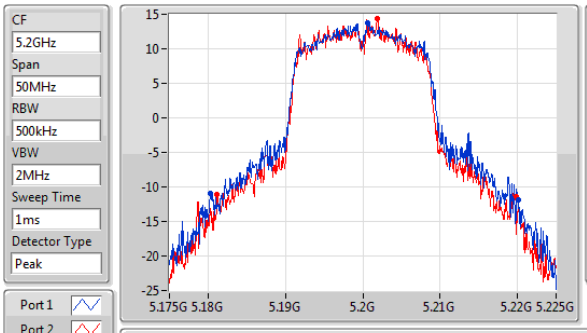


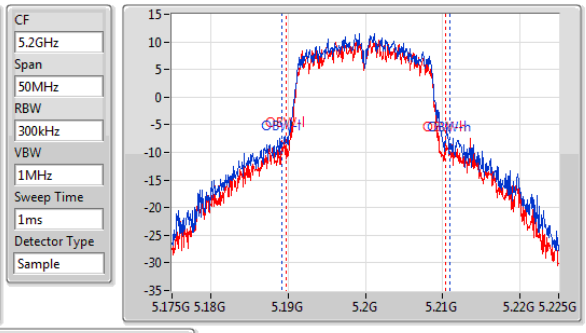


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
28.188M	5.166522G	5.19471G	17.728M	5.171027G	5.188755G	Inf	1
26.087M	5.167536G	5.193623G	17.583M	5.1711G	5.188683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5200MHz

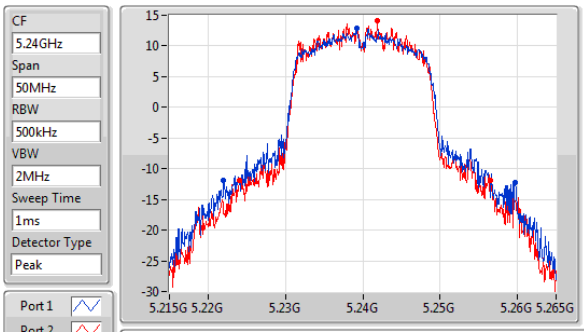


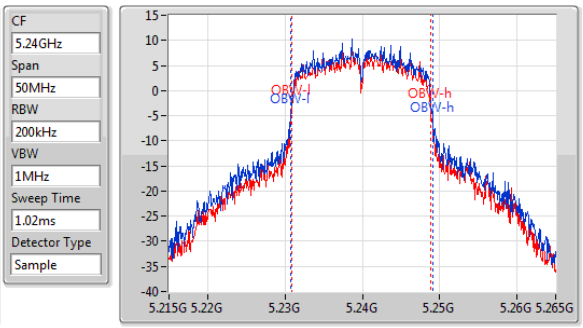


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.855M	5.18029G	5.220145G	21.852M	5.189146G	5.210999G	Inf	1
38.623M	5.181159G	5.219783G	20.695M	5.189725G	5.21042G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5240MHz

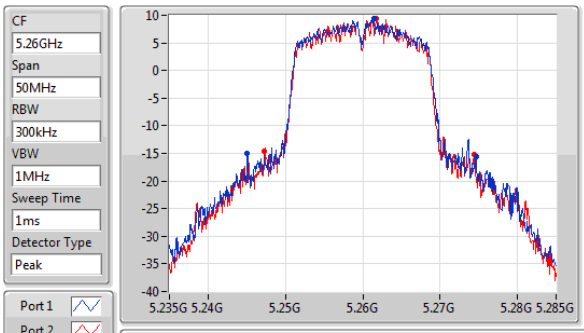


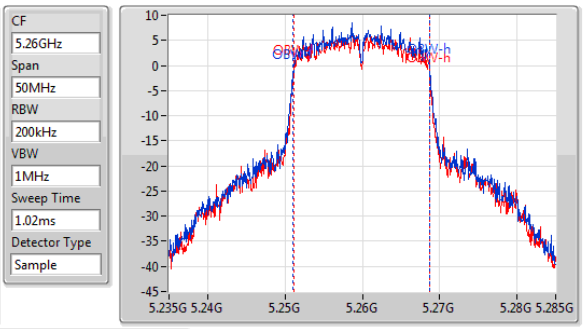


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.681M	5.222029G	5.25971G	18.452M	5.230738G	5.24919G	Inf	1
32.536M	5.223986G	5.256522G	18.017M	5.230883G	5.2489G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5260MHz

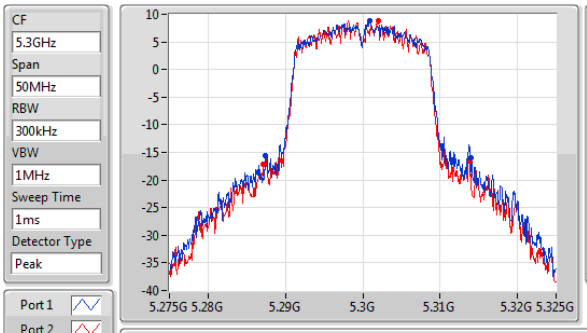


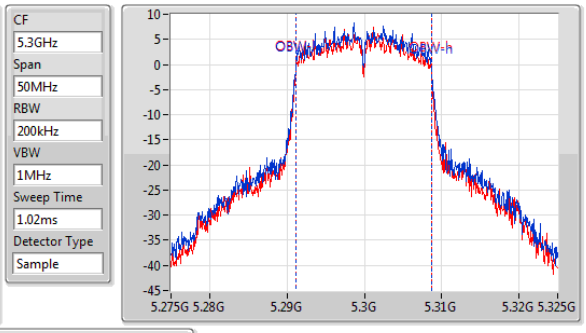


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
29.565M	5.245072G	5.274638G	17.728M	5.251027G	5.268755G	Inf	1
27.101M	5.247319G	5.27442G	17.656M	5.2511G	5.268755G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5300MHz

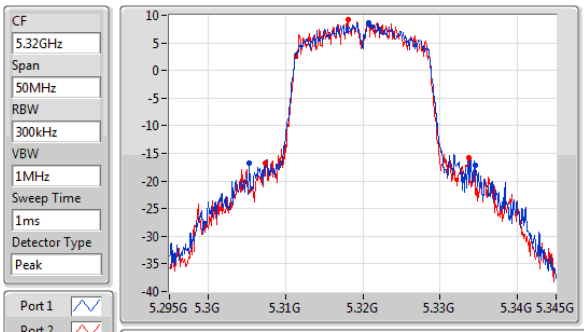


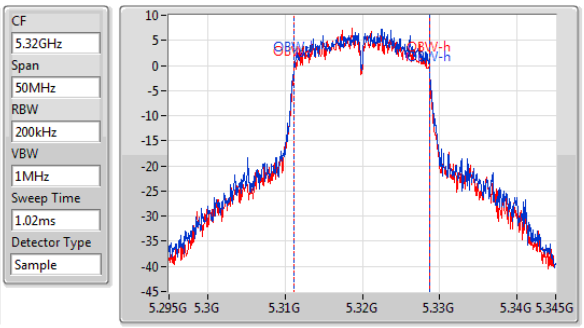


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
26.594M	5.287464G	5.314058G	17.656M	5.2911G	5.308755G	Inf	1
26.667M	5.287174G	5.313841G	17.583M	5.2911G	5.308683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5320MHz

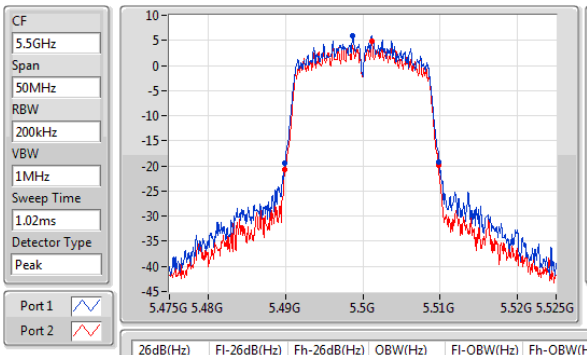


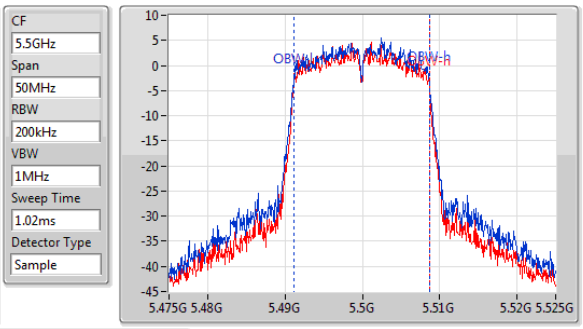


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
29.203M	5.305362G	5.334565G	17.656M	5.3111G	5.328755G	Inf	1
26.304M	5.307391G	5.333696G	17.583M	5.3111G	5.328683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5500MHz

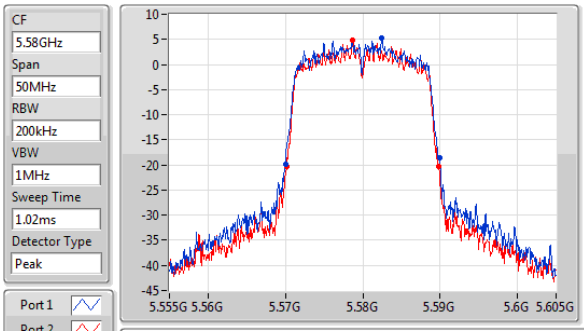


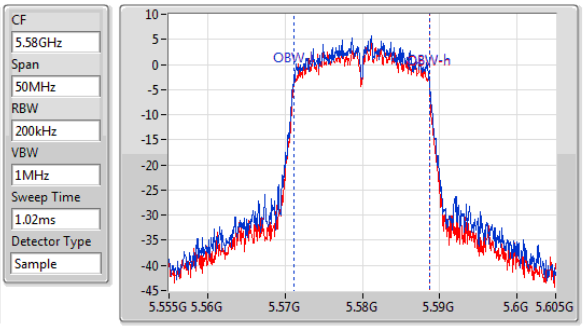


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.928M	5.489928G	5.509855G	17.583M	5.4911G	5.508683G	Inf	1
19.855M	5.489928G	5.509783G	17.583M	5.4911G	5.508683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5580MHz

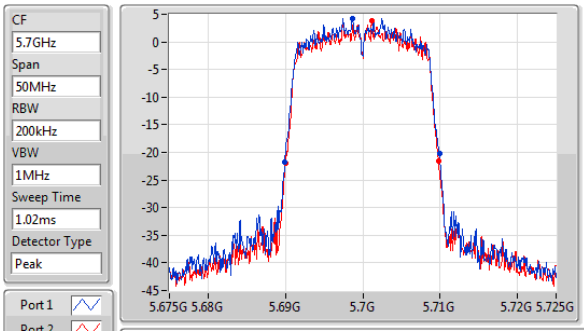


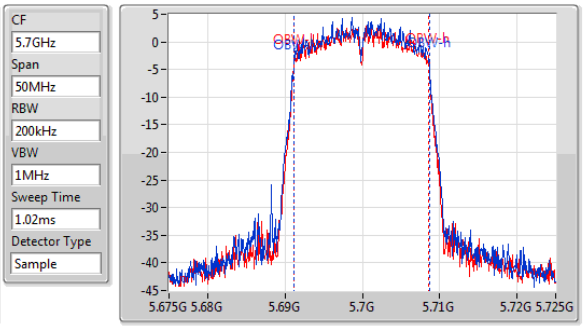


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.57G	5.59G	17.583M	5.5711G	5.588683G	Inf	1
19.71M	5.570145G	5.589855G	17.583M	5.5711G	5.588683G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

5700MHz

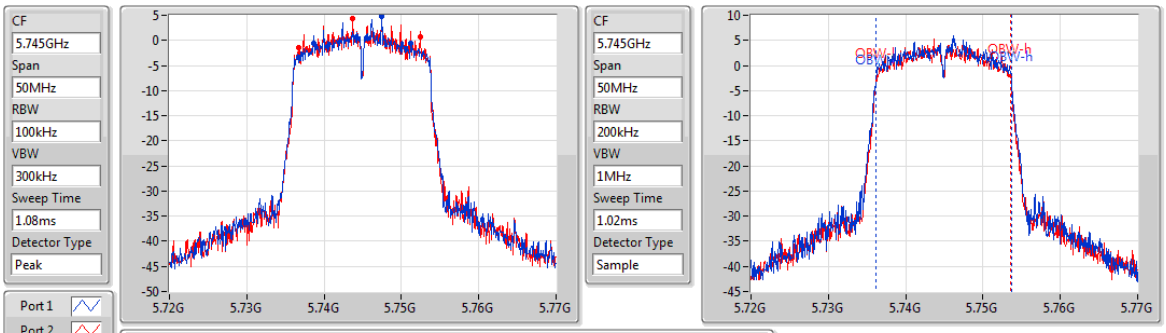




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20M	5.689928G	5.709928G	17.583M	5.6911G	5.708683G	Inf	1
19.783M	5.69G	5.709783G	17.511M	5.6911G	5.708611G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

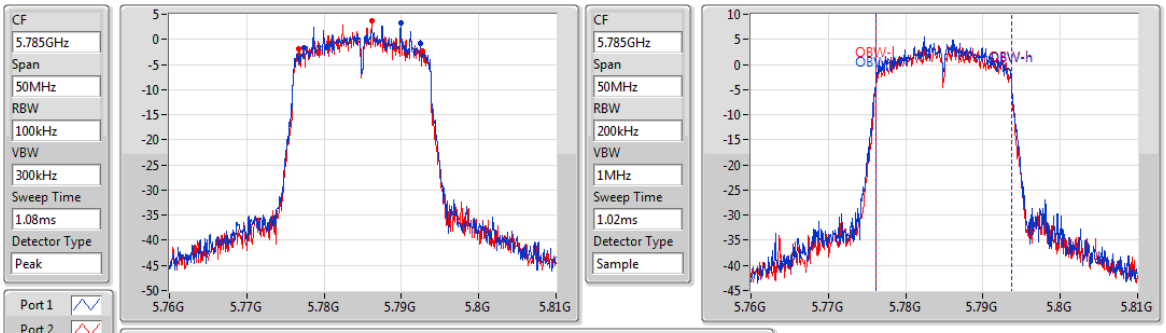
5745MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
12.609M	5.738623G	5.751232G	17.583M	5.7361G	5.753683G	500k	1
15.725M	5.736739G	5.752464G	17.438M	5.736172G	5.753611G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

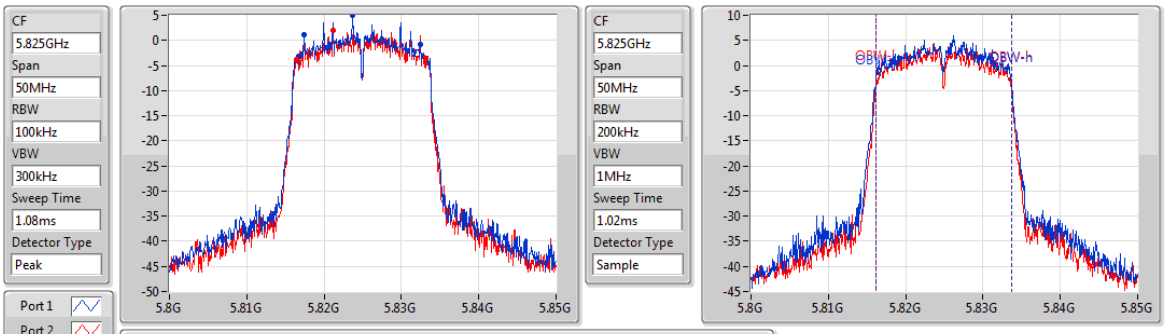
5785MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.072M	5.777391G	5.792464G	17.583M	5.7761G	5.793683G	500k	1
15.942M	5.776739G	5.792681G	17.511M	5.776172G	5.793683G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX EBW

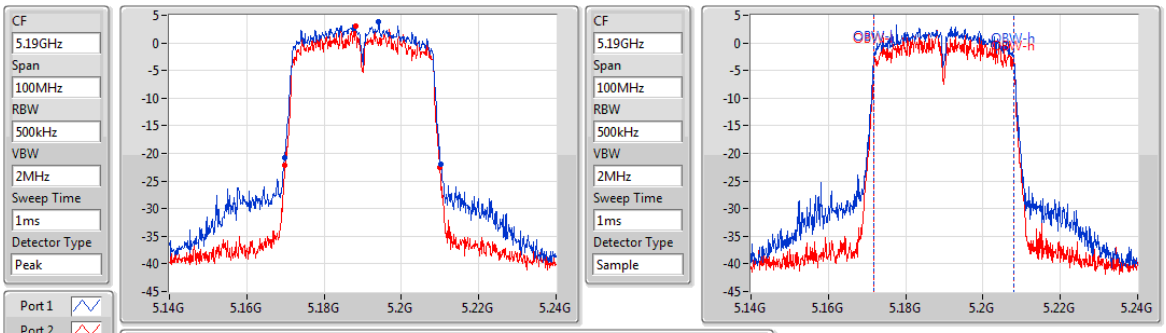
5825MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	5.817391G	5.832391G	17.583M	5.8161G	5.833683G	500k	1
16.739M	5.816377G	5.833116G	17.511M	5.816172G	5.833683G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

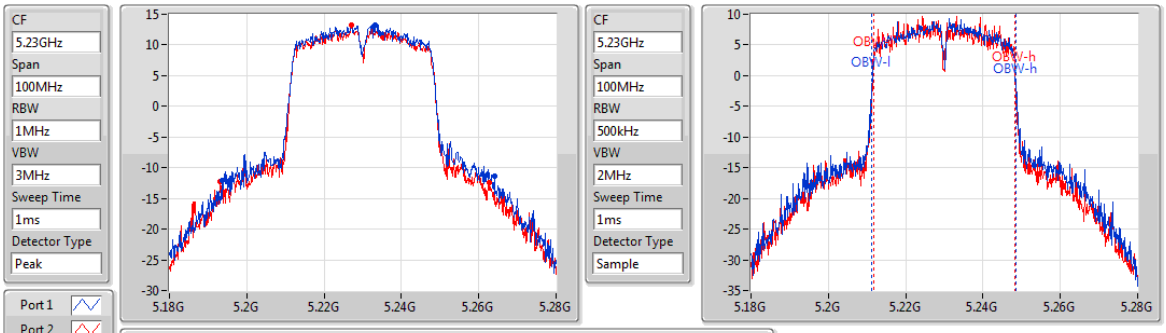
5190MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.16971G	5.21029G	36.179M	5.171766G	5.207945G	Inf	1
40.145M	5.169855G	5.21G	36.324M	5.171766G	5.20809G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

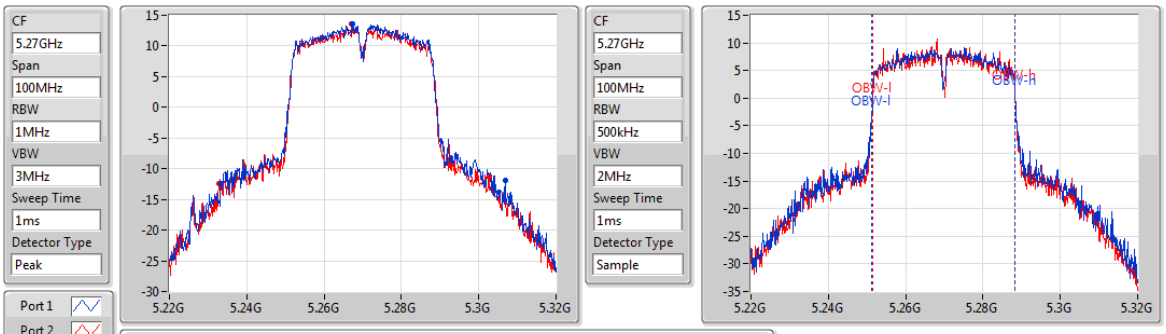
5230MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
70.435M	5.193623G	5.264058G	37.192M	5.211331G	5.248524G	Inf	1
69.71M	5.193043G	5.262754G	36.614M	5.211621G	5.248234G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

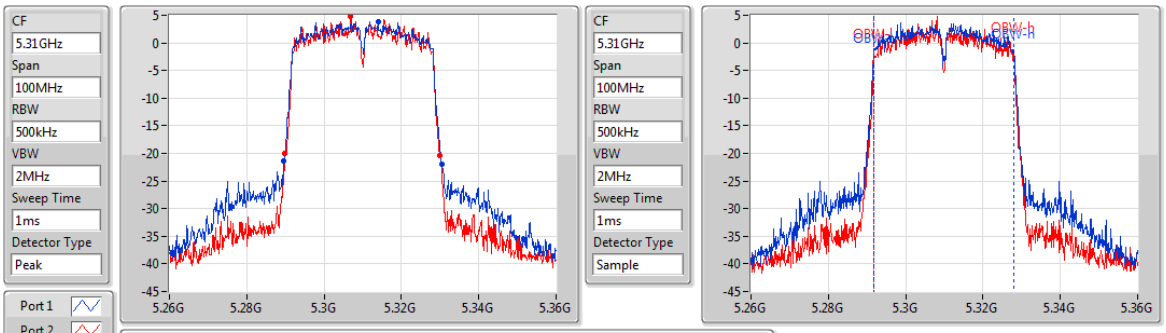
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
73.478M	5.233333G	5.306812G	37.048M	5.251331G	5.288379G	Inf	1
69.71M	5.232899G	5.302609G	36.758M	5.251476G	5.288234G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

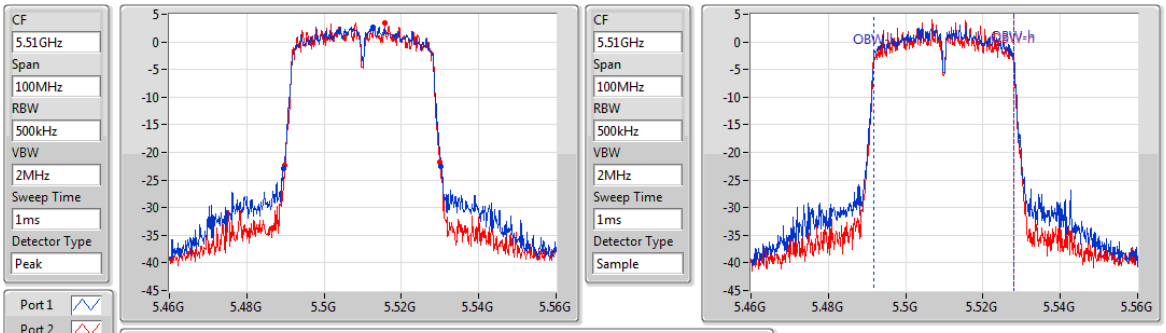
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.014M	5.289565G	5.33058G	36.324M	5.291766G	5.32809G	Inf	1
40.145M	5.289855G	5.33G	36.179M	5.291766G	5.327945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

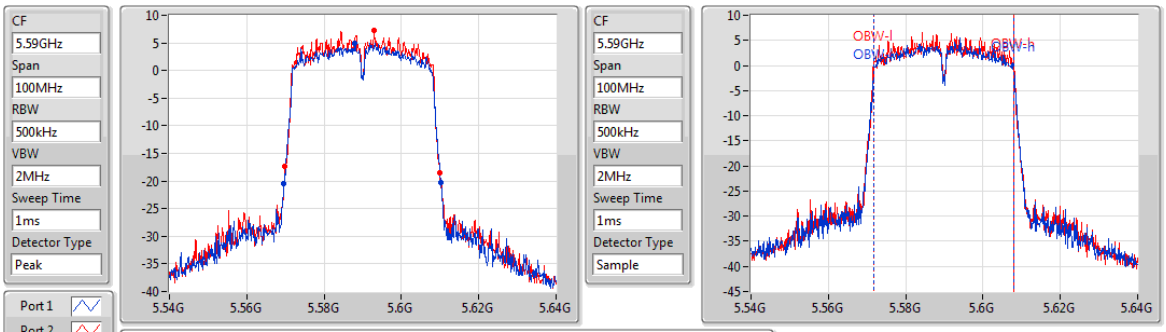
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.87M	5.48942G	5.53029G	36.179M	5.491766G	5.527945G	Inf	1
40.145M	5.489855G	5.53G	36.179M	5.491766G	5.527945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

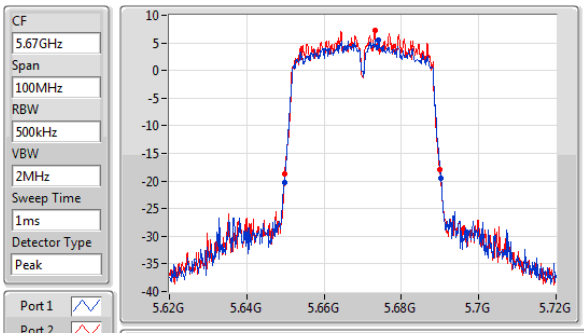
5590MHz

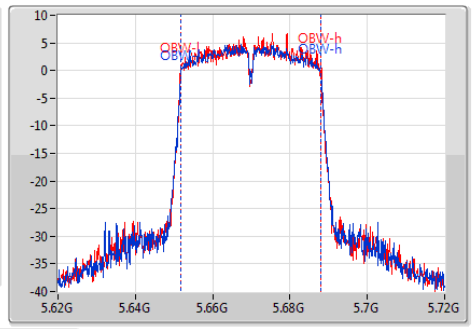


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.725M	5.569565G	5.61029G	36.179M	5.571766G	5.607945G	Inf	1
40M	5.569855G	5.609855G	36.179M	5.571766G	5.607945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5670MHz

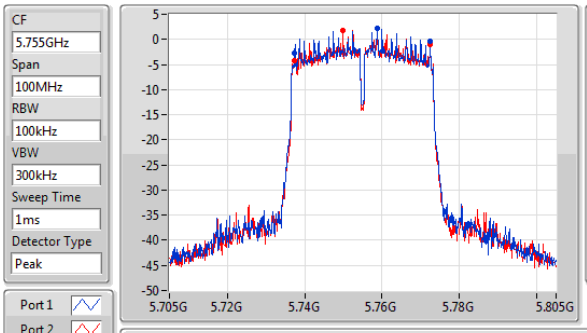


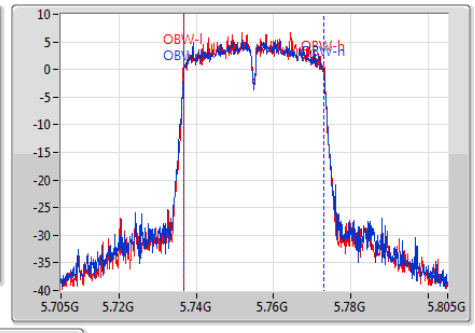


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.58M	5.64971G	5.69029G	36.179M	5.651766G	5.687945G	Inf	1
40.145M	5.649855G	5.69G	36.179M	5.651766G	5.687945G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5755MHz

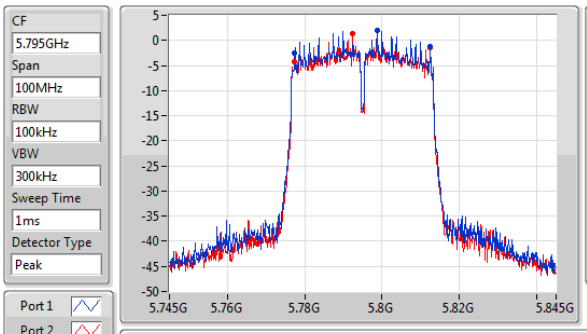


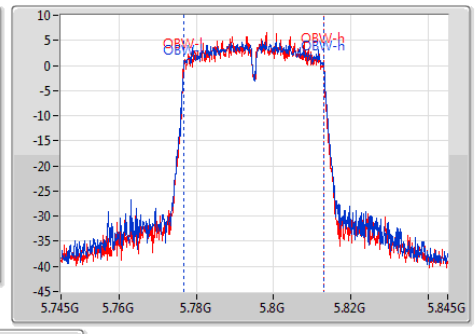


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.217M	5.737319G	5.772536G	36.179M	5.736766G	5.772945G	500k	1
35.362M	5.737174G	5.772536G	36.324M	5.736766G	5.77309G	500k	2

802.11ac VHT40_Nss1,(MCS0)_2TX EBW

5795MHz

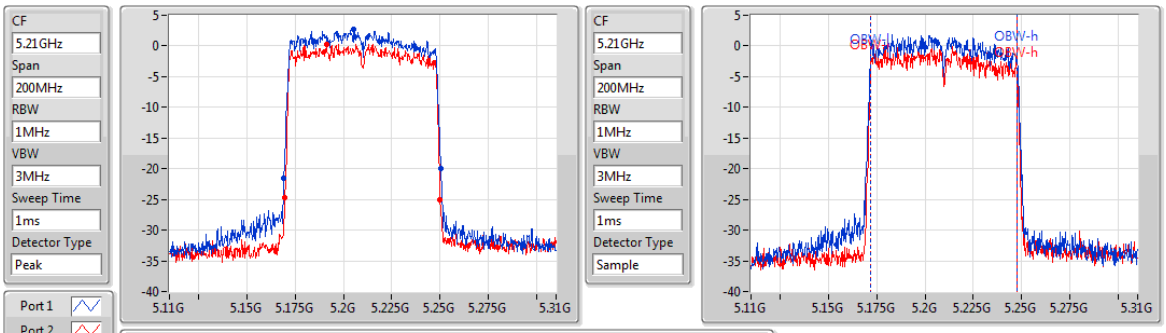




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.217M	5.777319G	5.812536G	36.179M	5.776766G	5.812945G	500k	1
35.217M	5.777319G	5.812536G	36.179M	5.776766G	5.812945G	500k	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

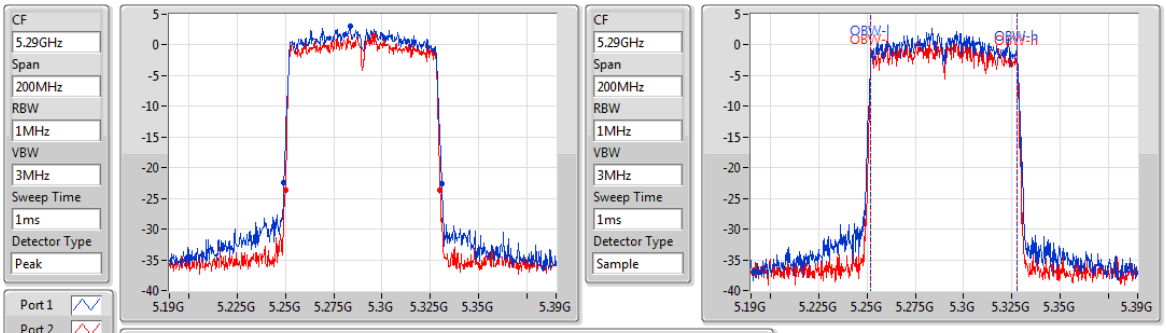
5210MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.449M	5.16913G	5.25058G	75.832M	5.171795G	5.247627G	Inf	1
80.29M	5.16971G	5.25G	75.543M	5.172084G	5.247627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

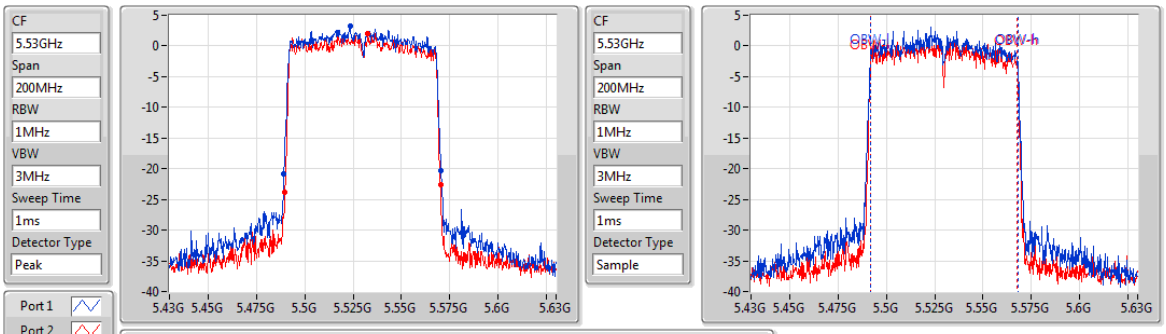
5290MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.739M	5.24913G	5.33087G	75.543M	5.252084G	5.327627G	Inf	1
80M	5.25G	5.33G	75.543M	5.252084G	5.327627G	Inf	2

802.11ac VHT80_Nss1,(MCS0)_2TX EBW

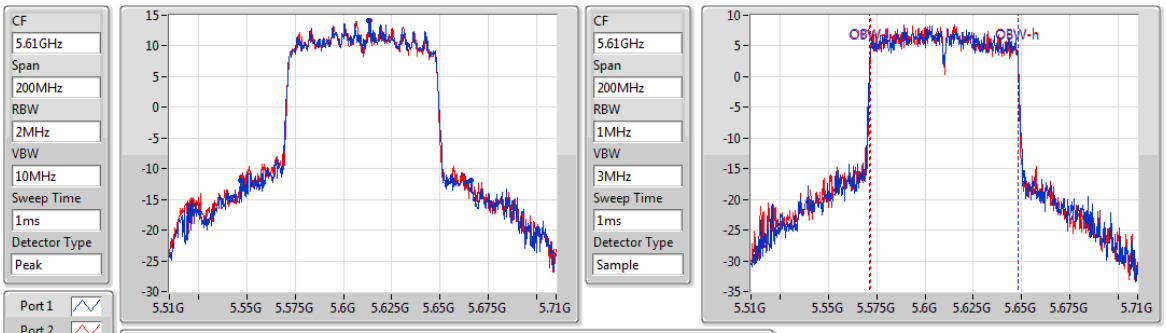
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.449M	5.48913G	5.57058G	76.122M	5.491795G	5.567916G	Inf	1
80.58M	5.48971G	5.57029G	75.832M	5.491795G	5.567627G	Inf	2

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

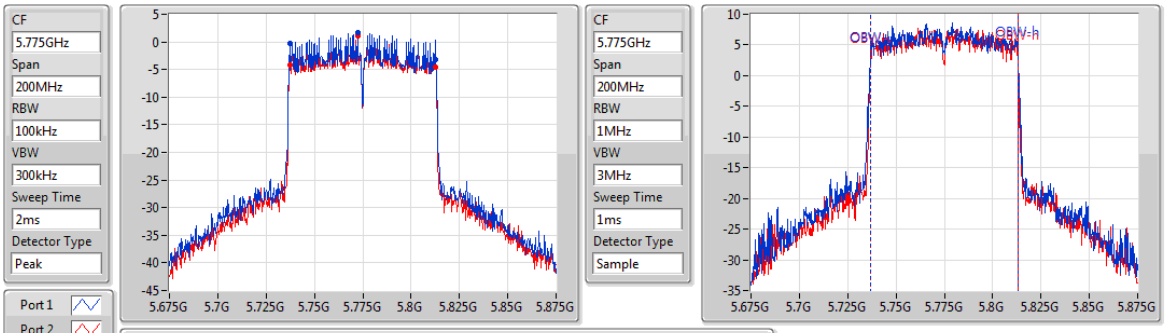
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
119.42M	5.546812G	5.666232G	76.411M	5.571505G	5.647916G	Inf	1
114.783M	5.547391G	5.662174G	76.122M	5.571795G	5.647916G	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	76.122M	5.736795G	5.812916G	500k	1
75.362M	5.737319G	5.812681G	76.122M	5.736795G	5.812916G	500k	2

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

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

3.3.2 Test Procedures

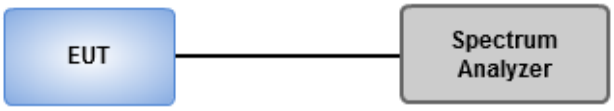
Method PM-G (Measurement using a gated RF average power meter)

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

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

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

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.59	0.18155	23.81	0.24044
802.11ac VHT20_Nss1,(MCS0)_2TX	23.09	0.20370	24.31	0.26977
802.11ac VHT40_Nss1,(MCS0)_2TX	21.68	0.14723	22.90	0.19498
802.11ac VHT80_Nss1,(MCS0)_2TX	13.44	0.02208	14.66	0.02924
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.65	0.11614	22.84	0.19231
802.11ac VHT20_Nss1,(MCS0)_2TX	20.95	0.12445	23.14	0.20606
802.11ac VHT40_Nss1,(MCS0)_2TX	22.43	0.17498	24.62	0.28973
802.11ac VHT80_Nss1,(MCS0)_2TX	14.28	0.02679	16.47	0.04436
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	17.40	0.05495	19.79	0.09528
802.11ac VHT20_Nss1,(MCS0)_2TX	18.20	0.06607	20.59	0.11455
802.11ac VHT40_Nss1,(MCS0)_2TX	18.38	0.06887	20.77	0.11940
802.11ac VHT80_Nss1,(MCS0)_2TX	21.01	0.12618	23.40	0.21878
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	18.38	0.06887	21.52	0.14191
802.11ac VHT20_Nss1,(MCS0)_2TX	18.33	0.06808	21.47	0.14028
802.11ac VHT40_Nss1,(MCS0)_2TX	18.66	0.07345	21.80	0.15136
802.11ac VHT80_Nss1,(MCS0)_2TX	20.72	0.11803	23.86	0.24322

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	1.22	18.02	16.56	20.36	24.00	21.58	30.00
5200MHz	Pass	1.22	20.05	19.05	22.59	24.00	23.81	30.00
5240MHz	Pass	1.22	18.22	17.16	20.73	24.00	21.95	30.00
5260MHz	Pass	2.19	17.85	17.01	20.46	24.00	22.65	26.99
5300MHz	Pass	2.19	18.11	17.12	20.65	24.00	22.84	26.99
5320MHz	Pass	2.19	17.95	17.04	20.53	24.00	22.72	26.99
5500MHz	Pass	2.39	14.65	13.71	17.22	23.93	19.61	26.99
5580MHz	Pass	2.39	14.73	13.35	17.10	23.93	19.49	26.99
5700MHz	Pass	2.39	14.71	14.05	17.40	23.85	19.79	26.99
5745MHz	Pass	3.14	15.68	15.03	18.38	30.00	21.52	36.00
5785MHz	Pass	3.14	15.22	14.70	17.98	30.00	21.12	36.00
5825MHz	Pass	3.14	15.56	14.57	18.10	30.00	21.24	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	1.22	17.92	16.54	20.29	24.00	21.51	30.00
5200MHz	Pass	1.22	20.51	19.61	23.09	24.00	24.31	30.00
5240MHz	Pass	1.22	18.66	17.71	21.22	24.00	22.44	30.00
5260MHz	Pass	2.19	18.32	17.53	20.95	24.00	23.14	26.99
5300MHz	Pass	2.19	17.85	17.02	20.47	24.00	22.66	26.99
5320MHz	Pass	2.19	17.96	17.15	20.58	24.00	22.77	26.99
5500MHz	Pass	2.39	15.62	14.71	18.20	23.98	20.59	26.99
5580MHz	Pass	2.39	15.01	14.36	17.71	23.95	20.10	26.99
5700MHz	Pass	2.39	14.13	13.59	16.88	23.96	19.27	26.99
5745MHz	Pass	3.14	15.52	15.12	18.33	30.00	21.47	36.00
5785MHz	Pass	3.14	15.11	14.69	17.92	30.00	21.06	36.00
5825MHz	Pass	3.14	15.52	14.58	18.09	30.00	21.23	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	1.22	13.12	11.35	15.33	24.00	16.55	30.00
5230MHz	Pass	1.22	19.15	18.13	21.68	24.00	22.90	30.00
5270MHz	Pass	2.19	19.71	19.11	22.43	24.00	24.62	26.99
5310MHz	Pass	2.19	13.86	12.66	16.31	24.00	18.50	26.99
5510MHz	Pass	2.39	13.25	12.13	15.74	24.00	18.13	26.99
5590MHz	Pass	2.39	14.85	14.79	17.83	24.00	20.22	26.99
5670MHz	Pass	2.39	15.41	15.33	18.38	24.00	20.77	26.99
5755MHz	Pass	3.14	15.90	15.38	18.66	30.00	21.80	36.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5795MHz	Pass	3.14	15.37	14.82	18.11	30.00	21.25	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	1.22	11.25	9.41	13.44	24.00	14.66	30.00
5290MHz	Pass	2.19	12.05	10.33	14.28	24.00	16.47	26.99
5530MHz	Pass	2.39	12.03	10.62	14.39	24.00	16.78	26.99
5610MHz	Pass	2.39	18.11	17.88	21.01	24.00	23.40	26.99
5775MHz	Pass	3.14	17.96	17.44	20.72	30.00	23.86	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

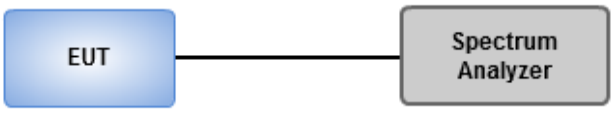
Duty cycle ≥ 98 %

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	10.55	14.78
802.11ac VHT20_Nss1,(MCS0)_2TX	10.78	15.01
802.11ac VHT40_Nss1,(MCS0)_2TX	7.08	11.31
802.11ac VHT80_Nss1,(MCS0)_2TX	-5.75	-1.52
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	9.55	14.75
802.11ac VHT20_Nss1,(MCS0)_2TX	9.21	14.41
802.11ac VHT40_Nss1,(MCS0)_2TX	7.25	12.45
802.11ac VHT80_Nss1,(MCS0)_2TX	-4.99	0.21
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	6.22	11.62
802.11ac VHT20_Nss1,(MCS0)_2TX	5.51	10.91
802.11ac VHT40_Nss1,(MCS0)_2TX	2.18	7.58
802.11ac VHT80_Nss1,(MCS0)_2TX	1.78	7.18
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	4.77	10.92
802.11ac VHT20_Nss1,(MCS0)_2TX	4.52	10.67
802.11ac VHT40_Nss1,(MCS0)_2TX	1.14	7.29
802.11ac VHT80_Nss1,(MCS0)_2TX	0.21	6.36

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	4.23	5.81	4.23	8.10	11.00	12.33	17.00
5200MHz	Pass	4.23	8.08	6.92	10.55	11.00	14.78	17.00
5240MHz	Pass	4.23	7.34	6.30	9.85	11.00	14.08	17.00
5260MHz	Pass	5.20	5.34	4.42	7.91	11.00	13.11	17.00
5300MHz	Pass	5.20	6.73	6.38	9.55	11.00	14.75	17.00
5320MHz	Pass	5.20	5.59	4.84	8.23	11.00	13.43	17.00
5500MHz	Pass	5.40	3.76	2.60	6.22	11.00	11.62	17.00
5580MHz	Pass	5.40	2.38	1.04	4.75	11.00	10.15	17.00
5700MHz	Pass	5.40	2.57	1.87	5.23	11.00	10.63	17.00
5745MHz	Pass	6.15	2.10	1.42	4.77	29.85	10.92	36.00
5785MHz	Pass	6.15	1.65	0.98	4.33	29.85	10.48	36.00
5825MHz	Pass	6.15	2.00	0.74	4.43	29.85	10.58	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.23	5.54	4.14	7.91	11.00	12.14	17.00
5200MHz	Pass	4.23	8.20	7.32	10.78	11.00	15.01	17.00
5240MHz	Pass	4.23	6.02	5.00	8.54	11.00	12.77	17.00
5260MHz	Pass	5.20	5.55	4.81	8.21	11.00	13.41	17.00
5300MHz	Pass	5.20	6.29	6.13	9.21	11.00	14.41	17.00
5320MHz	Pass	5.20	5.24	4.66	7.96	11.00	13.16	17.00
5500MHz	Pass	5.40	2.93	2.05	5.51	11.00	10.91	17.00
5580MHz	Pass	5.40	2.76	1.96	5.36	11.00	10.76	17.00
5700MHz	Pass	5.40	1.89	1.26	4.60	11.00	10.00	17.00
5745MHz	Pass	6.15	1.71	1.35	4.52	29.85	10.67	36.00
5785MHz	Pass	6.15	1.47	0.87	4.17	29.85	10.32	36.00
5825MHz	Pass	6.15	1.60	0.57	4.12	29.85	10.27	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.23	-2.58	-5.02	-0.62	11.00	3.61	17.00
5230MHz	Pass	4.23	4.58	3.55	7.08	11.00	11.31	17.00
5270MHz	Pass	5.20	4.51	3.98	7.25	11.00	12.45	17.00
5310MHz	Pass	5.20	-1.87	-3.40	0.43	11.00	5.63	17.00
5510MHz	Pass	5.40	-2.96	-4.23	-0.54	11.00	4.86	17.00
5590MHz	Pass	5.40	-1.01	-1.08	1.95	11.00	7.35	17.00
5670MHz	Pass	5.40	-0.68	-0.98	2.18	11.00	7.58	17.00
5755MHz	Pass	6.15	-1.54	-2.20	1.14	29.85	7.29	36.00
5795MHz	Pass	6.15	-2.03	-2.61	0.70	29.85	6.85	36.00

Mode	Result	DG	Port 1	Port 2	PD	PD Limit	EIRP PD	EIRP PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.23	-7.68	-10.18	-5.75	11.00	-1.52	17.00
5290MHz	Pass	5.20	-7.18	-9.00	-4.99	11.00	0.21	17.00
5530MHz	Pass	5.40	-7.20	-8.32	-4.71	11.00	0.69	17.00
5610MHz	Pass	5.40	-1.15	-1.29	1.78	11.00	7.18	17.00
5775MHz	Pass	6.15	-2.49	-3.13	0.21	29.85	6.36	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:
5150~5250MHz:
Directional gain = 1.22 + 10 * log(2/1) =4.23 dBi

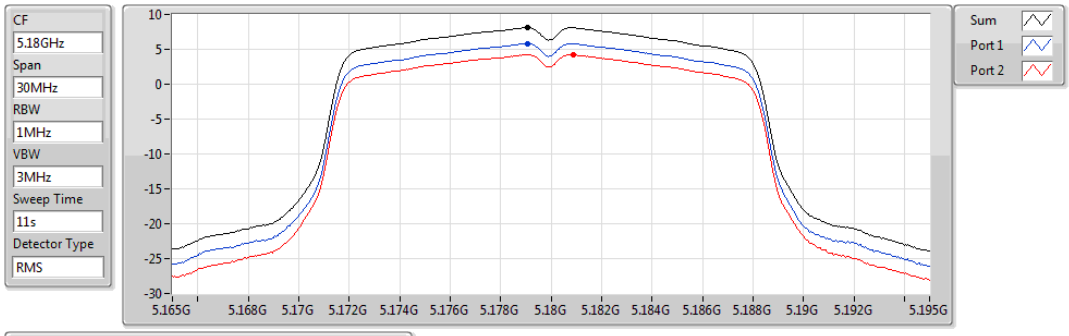
5250-5350 MHz
Directional gain = 2.19 + 10 * log(2/1) =5.2 dBi

5470-5750 MHz
Directional gain = 2.39 + 10 * log(2/1) =5.4 dBi

5725-5850 MHz
Directional gain = 3.14 + 10 * log(2/1) =6.15 dBi > 6 dBi, limit shall be reduced to 30 dBm- (6.15 dBi – 6 dBi) = 29.85 dBm

802.11a_Nss1,(6Mbps)_2TX PSD

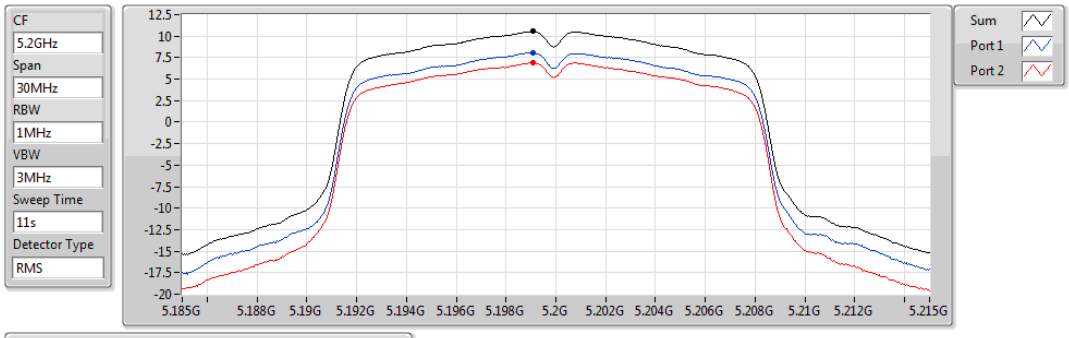
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.10	8.10	5.81	4.23

802.11a_Nss1,(6Mbps)_2TX PSD

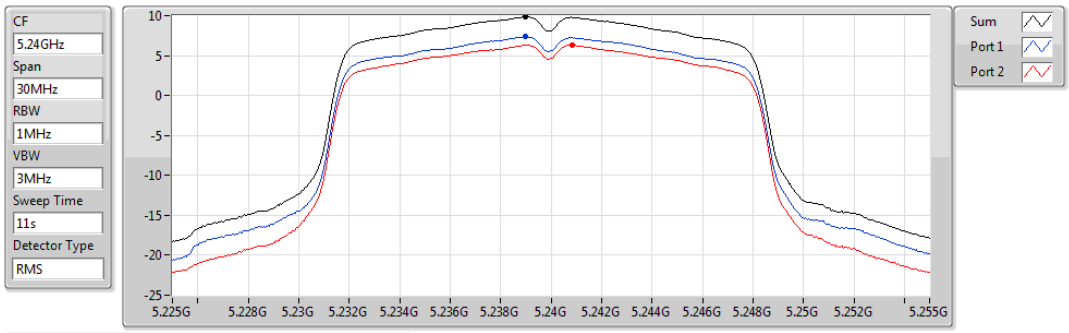
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.55	10.55	8.08	6.92

802.11a_Nss1,(6Mbps)_2TX PSD

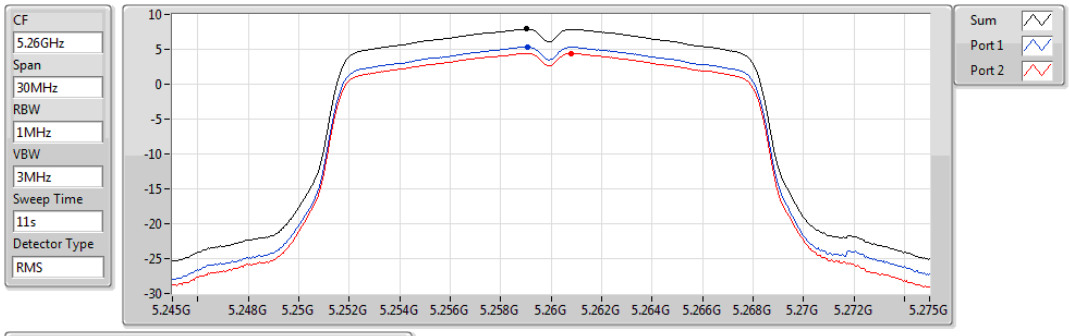
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.85	9.85	7.34	6.30

802.11a_Nss1,(6Mbps)_2TX PSD

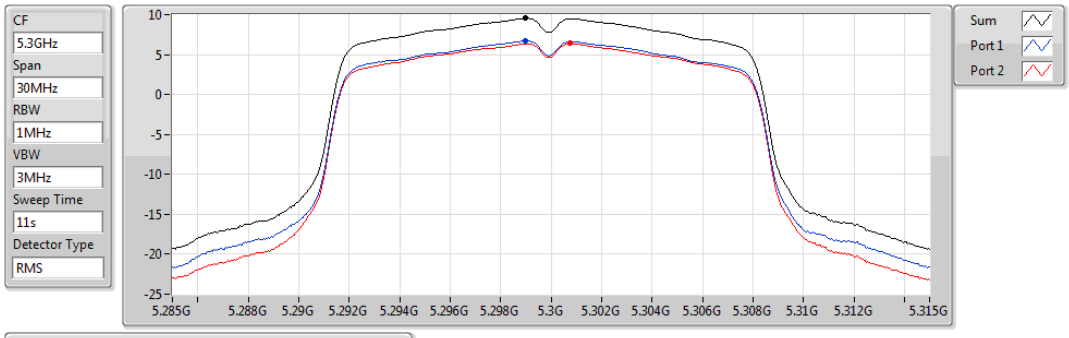
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.91	7.91	5.34	4.42

802.11a_Nss1,(6Mbps)_2TX PSD

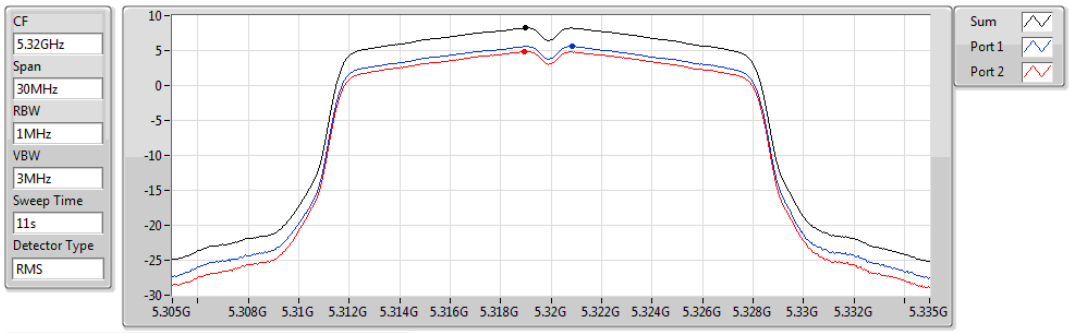
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.55	9.55	6.73	6.38

802.11a_Nss1,(6Mbps)_2TX PSD

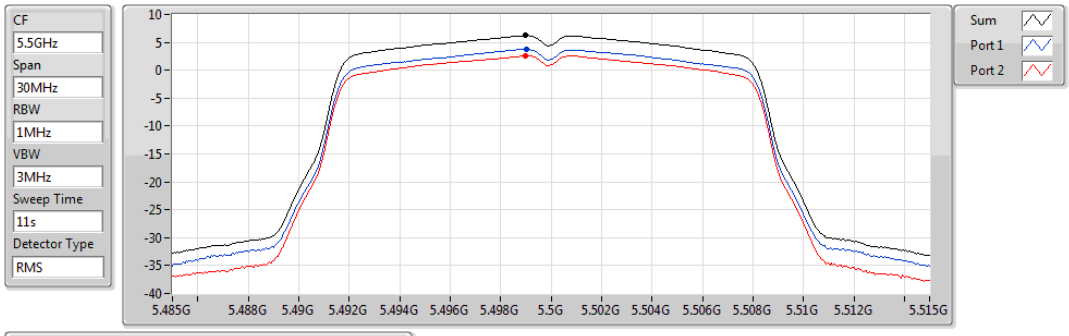
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.23	8.23	5.59	4.84

802.11a_Nss1,(6Mbps)_2TX PSD

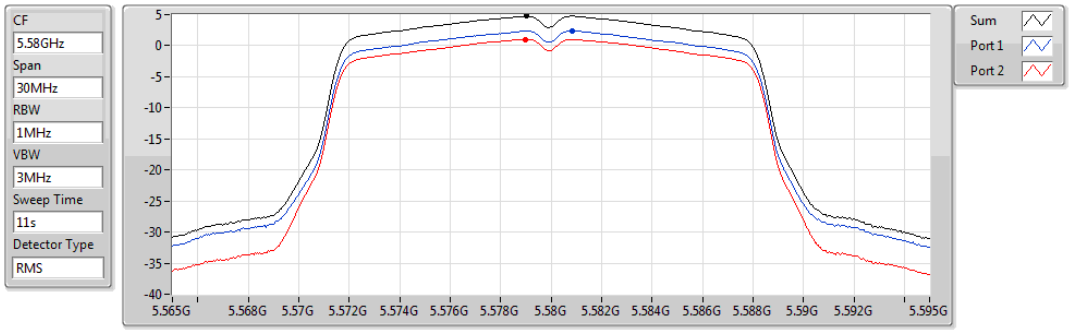
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.22	6.22	3.76	2.60

802.11a_Nss1,(6Mbps)_2TX PSD

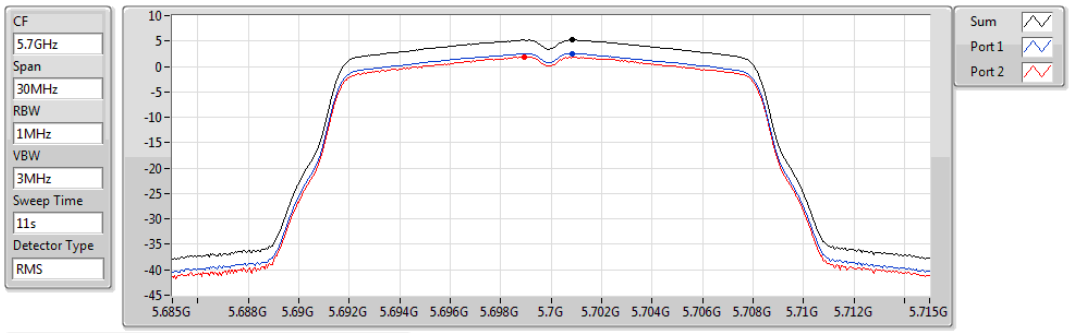
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.75	4.75	2.38	1.04

802.11a_Nss1,(6Mbps)_2TX PSD

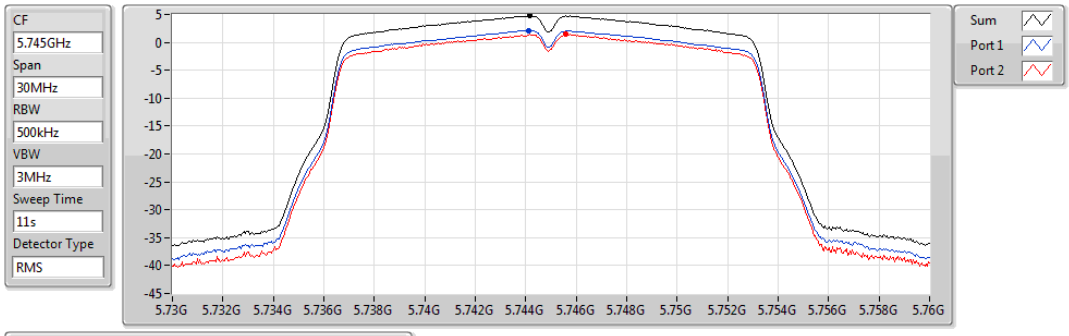
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.23	5.23	2.57	1.87

802.11a_Nss1,(6Mbps)_2TX PSD

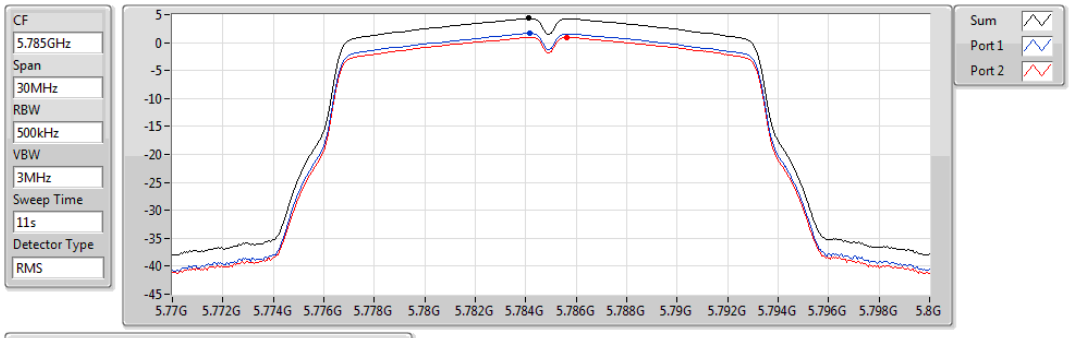
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.77	4.77	2.10	1.42

802.11a_Nss1,(6Mbps)_2TX PSD

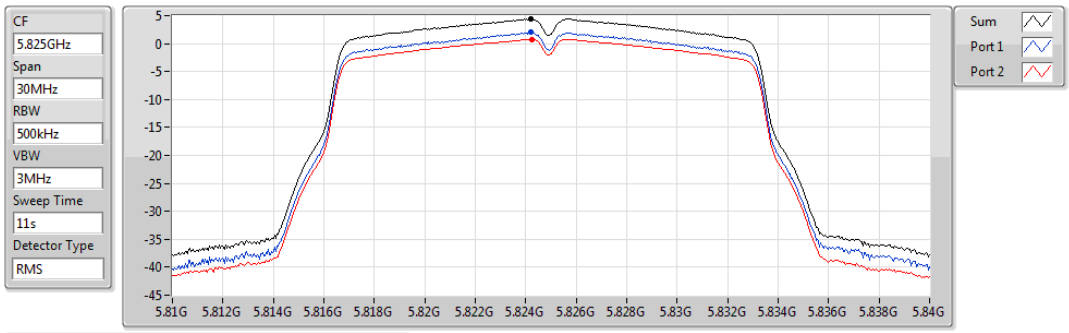
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.33	4.33	1.65	0.98

802.11a_Nss1,(6Mbps)_2TX PSD

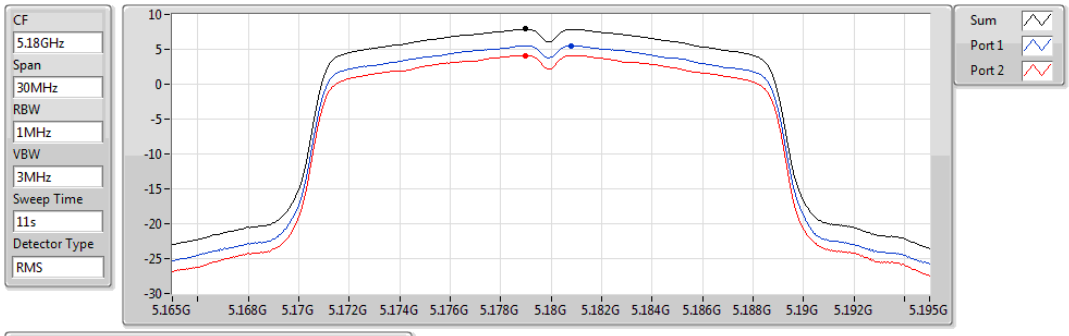
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.43	4.43	2.00	0.74

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

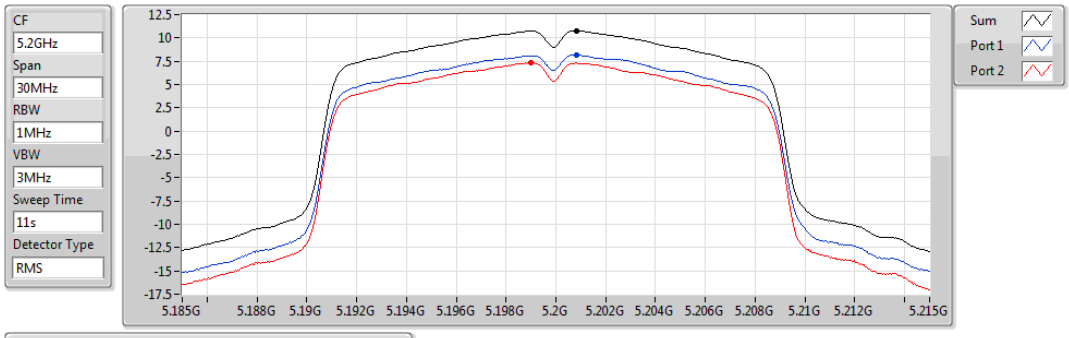
5180MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.91	7.91	5.54	4.14

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

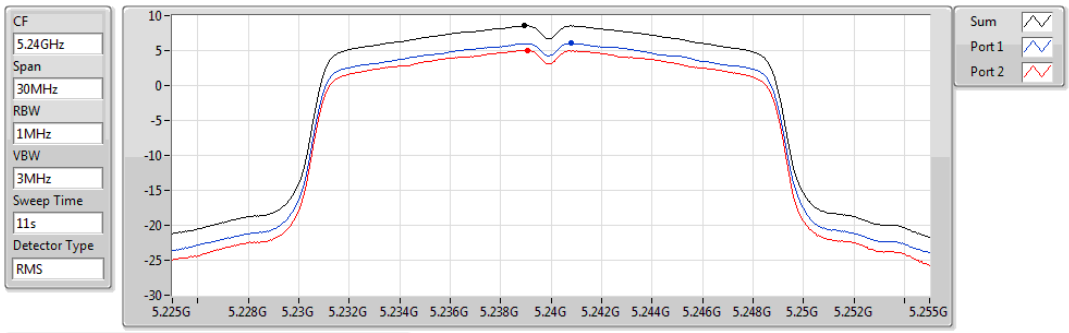
5200MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.78	10.78	8.20	7.32

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

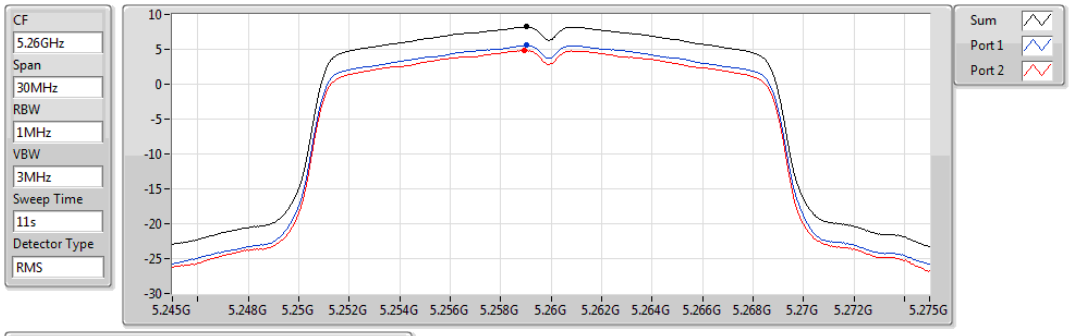
5240MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.54	8.54	6.02	5.00

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

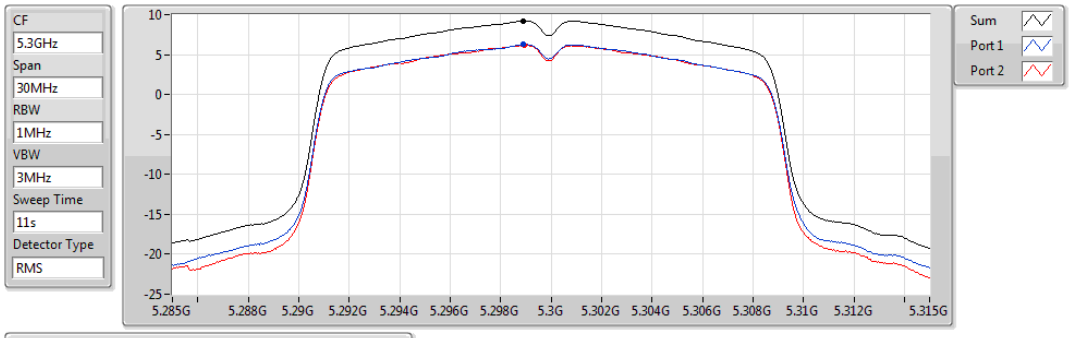
5260MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.21	8.21	5.55	4.81

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

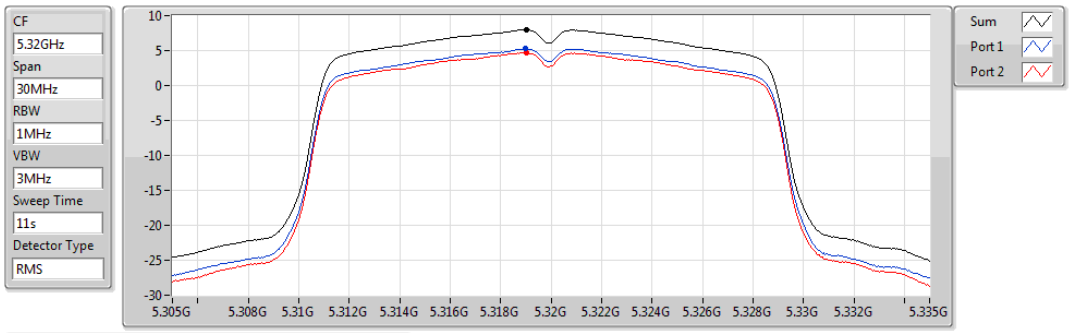
5300MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.21	9.21	6.29	6.13

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

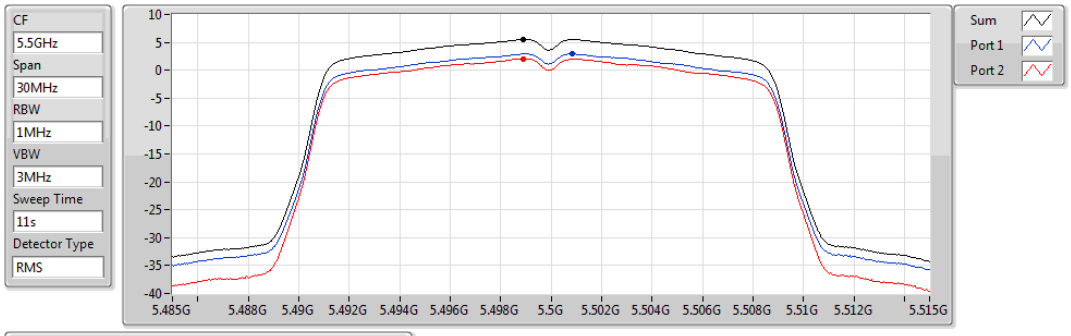
5320MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.96	7.96	5.24	4.66

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

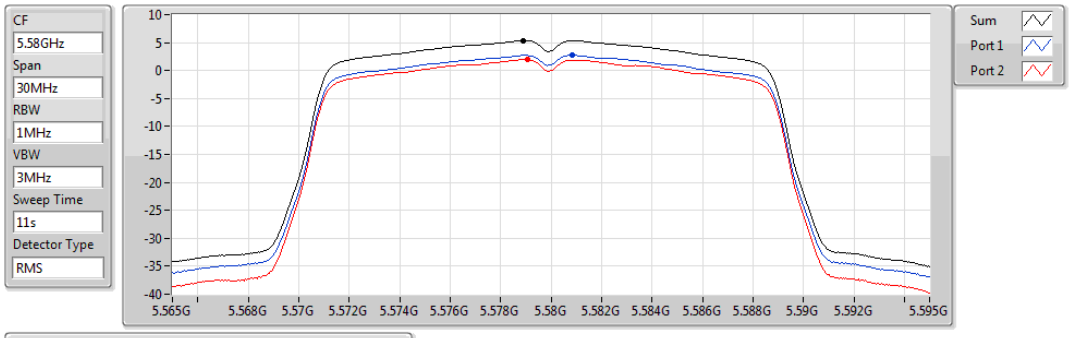
5500MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.51	5.51	2.93	2.05

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

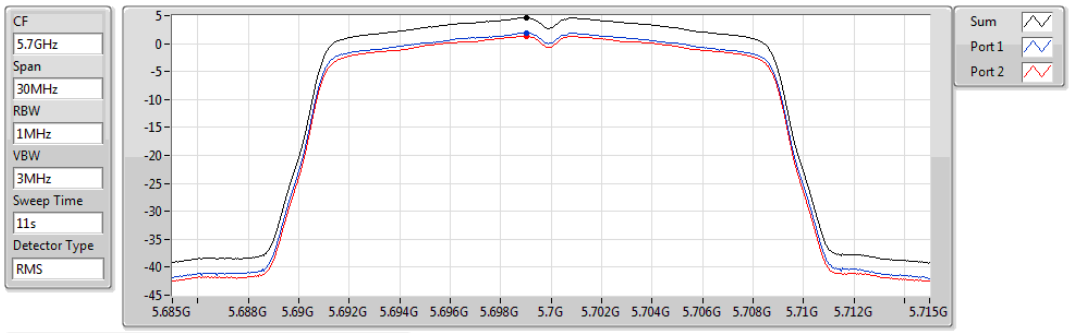
5580MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.36	5.36	2.76	1.96

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

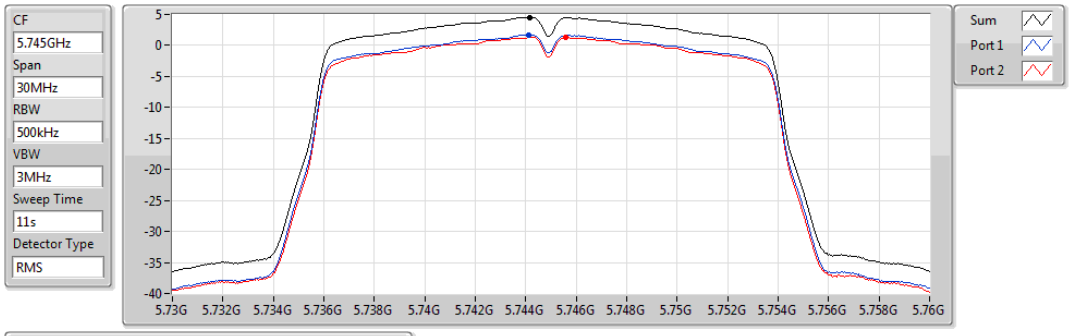
5700MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.60	4.60	1.89	1.26

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

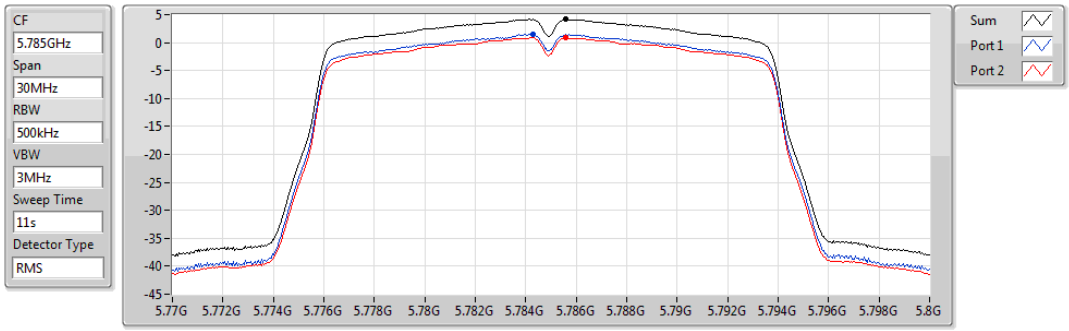
5745MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.52	4.52	1.71	1.35

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

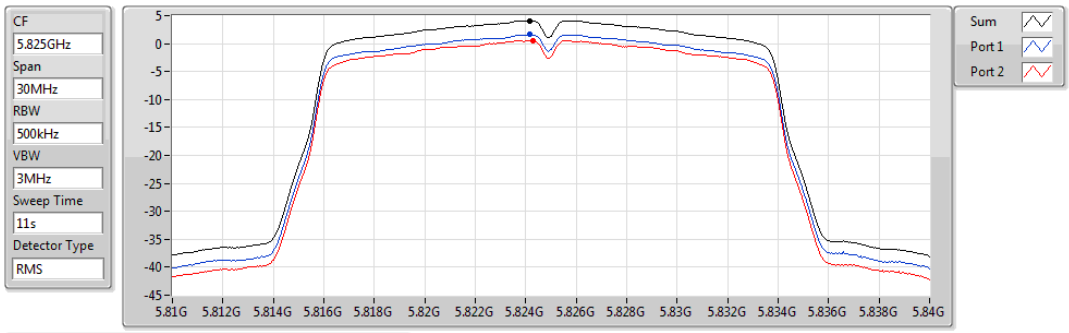
5785MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.17	4.17	1.47	0.87

802.11ac VHT20_Nss1,(MCS0)_2TX PSD

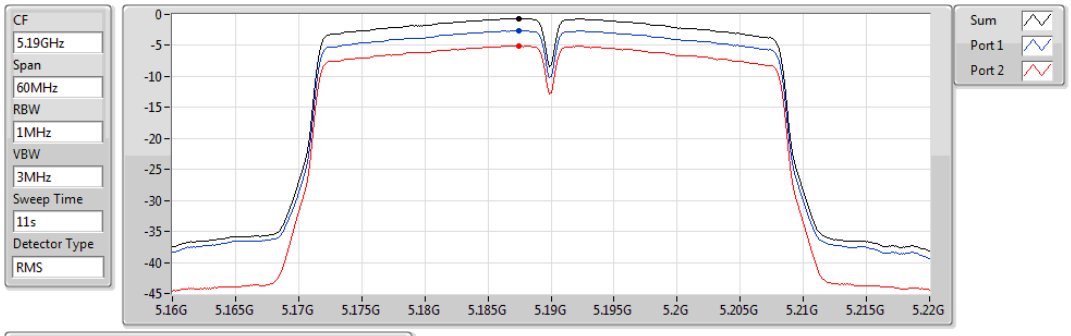
5825MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.12	4.12	1.60	0.57

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

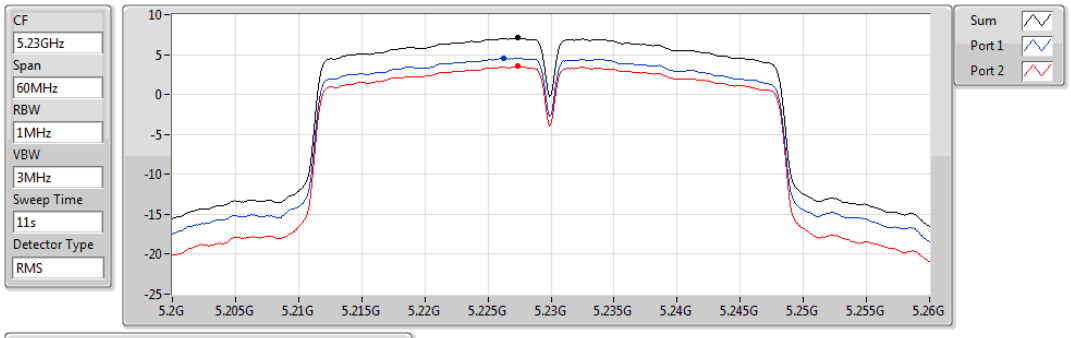
5190MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.62	-0.62	-2.58	-5.02

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

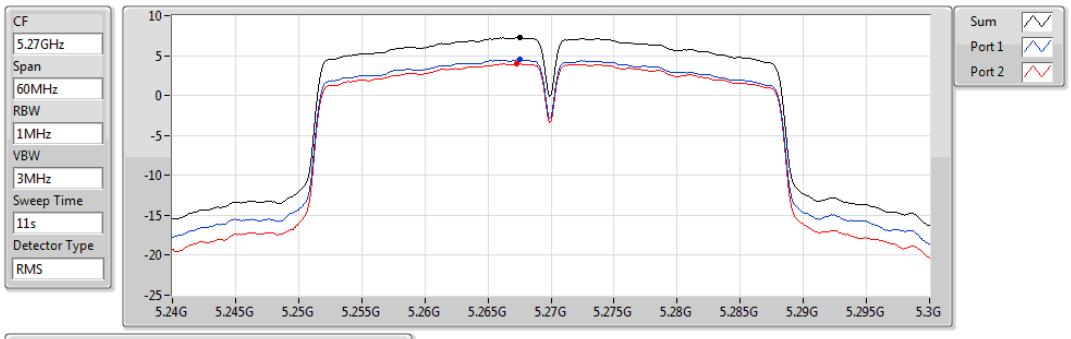
5230MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.08	7.08	4.58	3.55

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

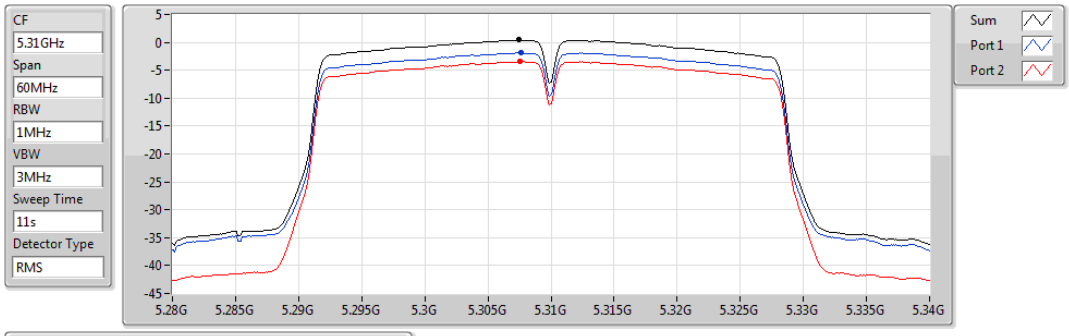
5270MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.25	7.25	4.51	3.98

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

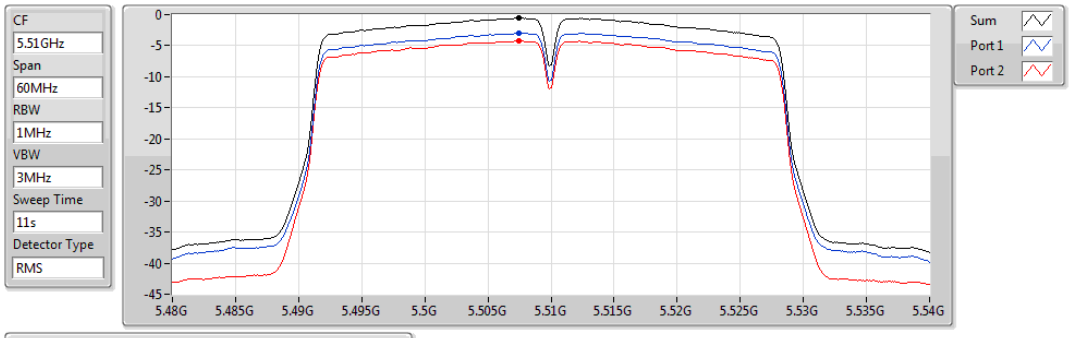
5310MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.43	0.43	-1.87	-3.40

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

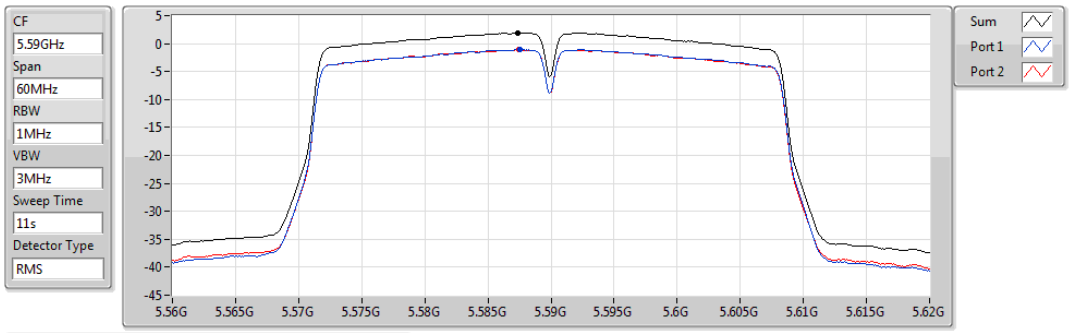
5510MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.54	-0.54	-2.96	-4.23

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

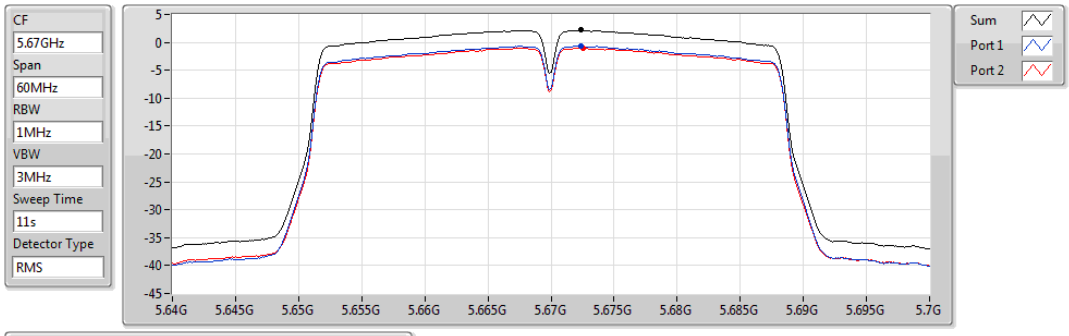
5590MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.95	1.95	-1.01	-1.08

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

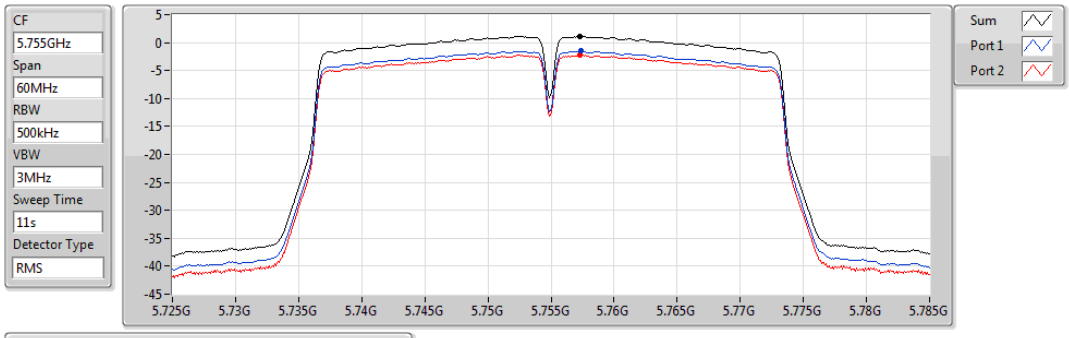
5670MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.18	2.18	-0.68	-0.98

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

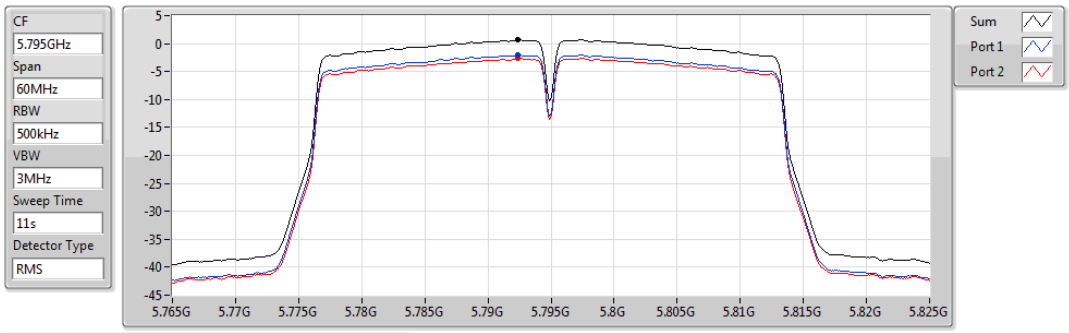
5755MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.14	1.14	-1.54	-2.20

802.11ac VHT40_Nss1,(MCS0)_2TX PSD

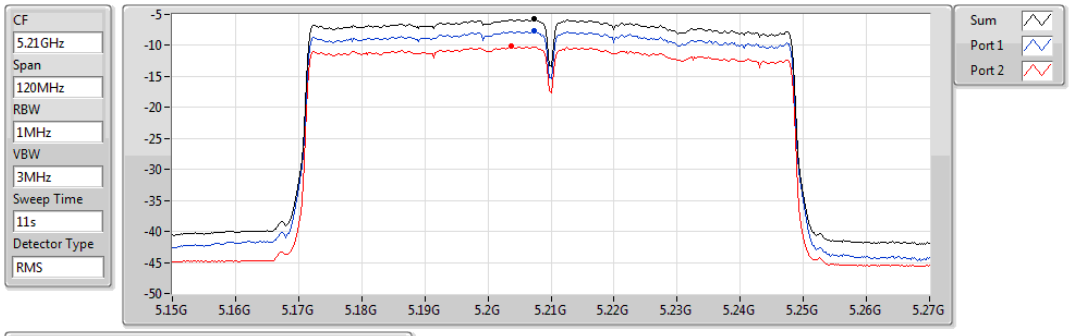
5795MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.70	0.70	-2.03	-2.61

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

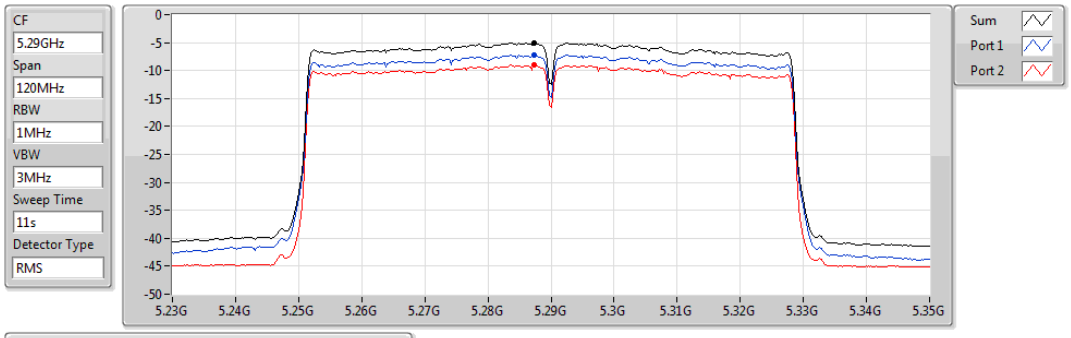
5210MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.75	-5.75	-7.68	-10.18

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

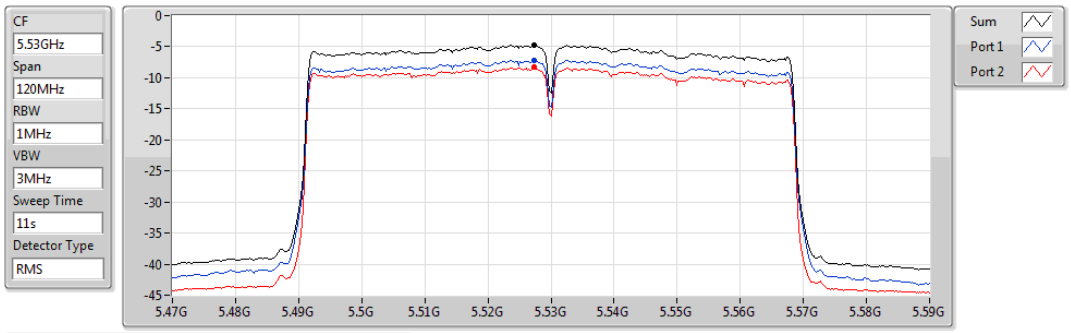
5290MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.99	-4.99	-7.18	-9.00

802.11ac VHT80_Nss1,(MCS0)_2TX PSD

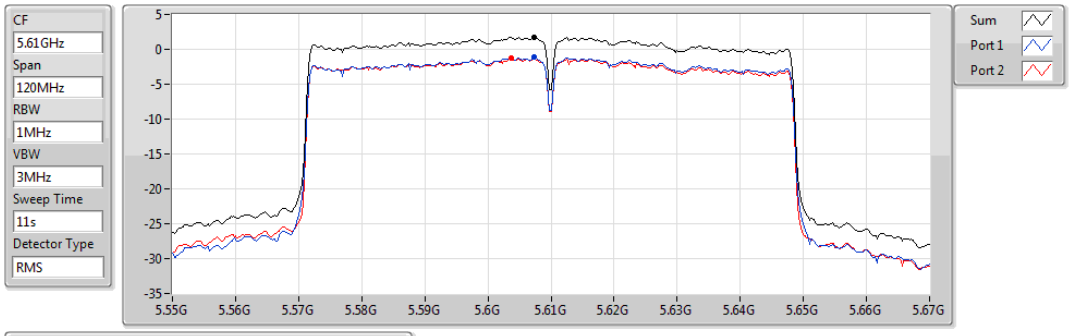
5530MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.71	-4.71	-7.20	-8.32

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

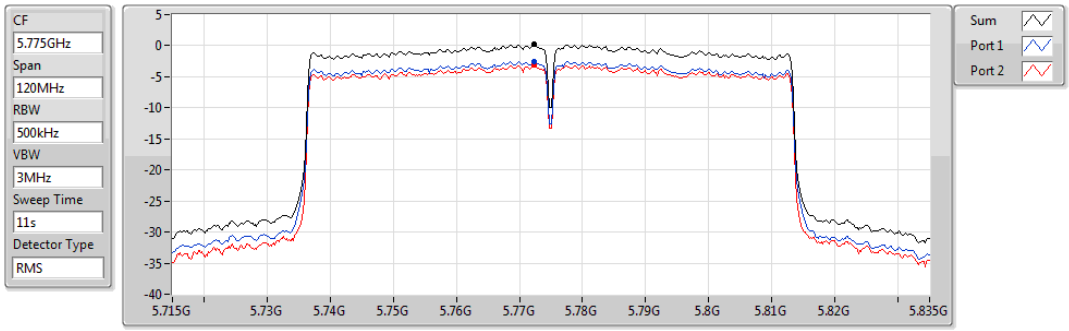
5610MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.78	1.78	-1.15	-1.29

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

5775MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.21	0.21	-2.49	-3.13

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

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

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

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

3.5.2 Test Procedures

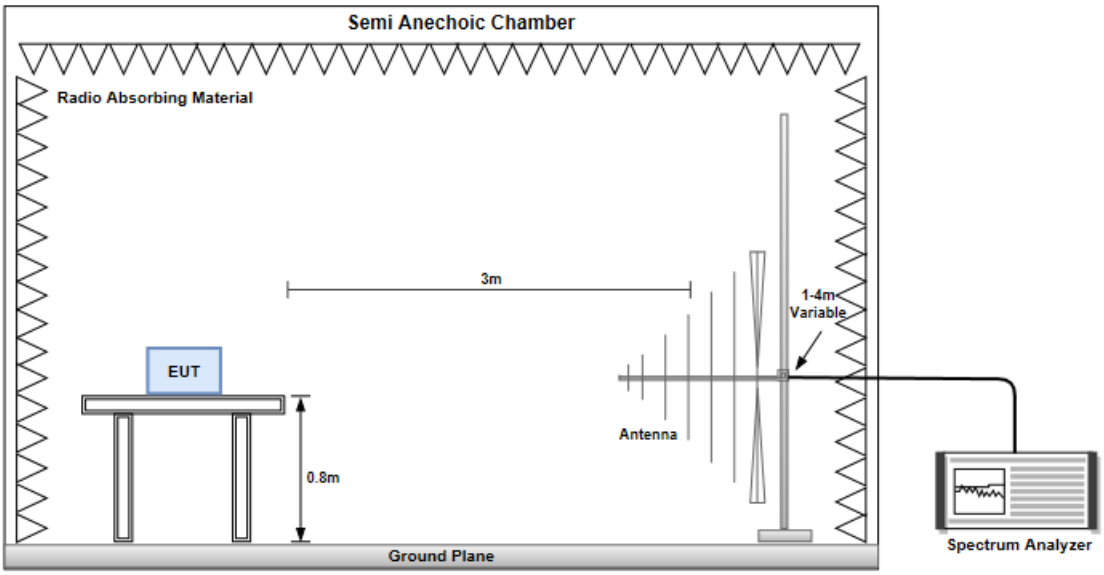
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

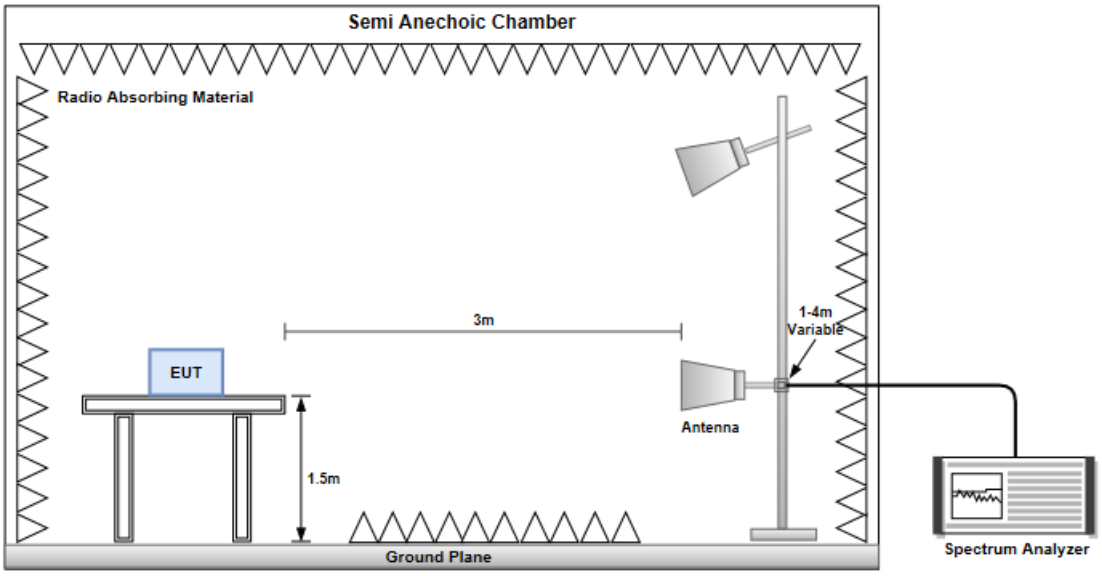
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

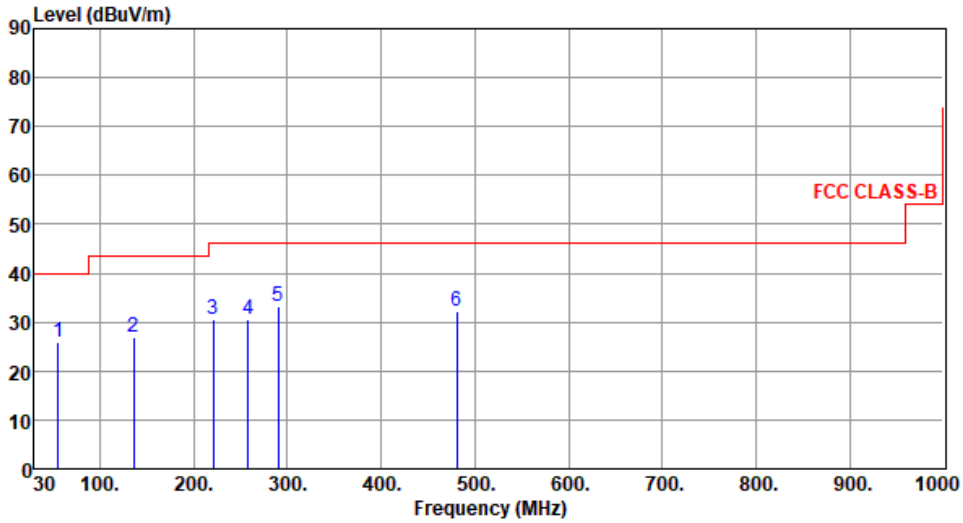


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

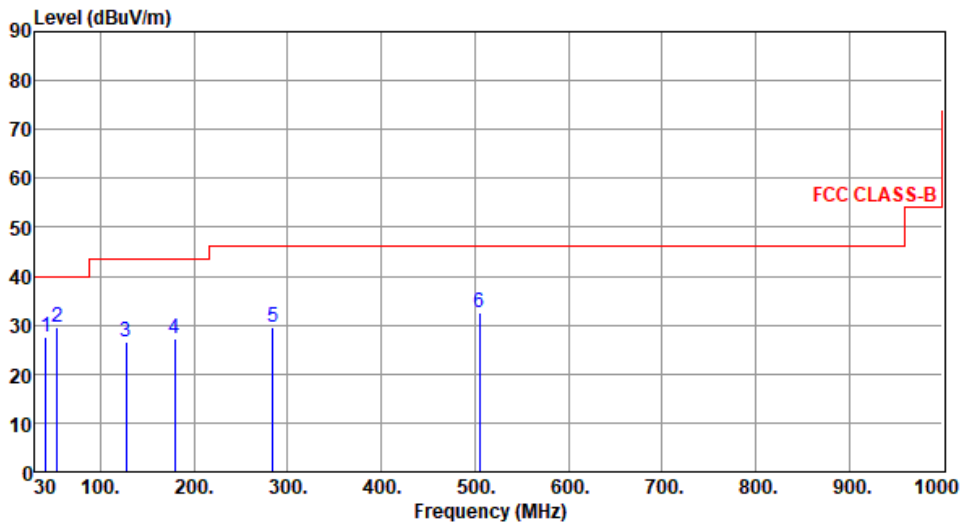
Modulation	VHT20	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	55.30	25.81	40.00	-14.19	34.91	-9.10	Peak	---	---
2	135.63	26.75	43.50	-16.75	36.37	-9.62	Peak	---	---
3	221.22	30.51	46.00	-15.49	42.92	-12.41	Peak	---	---
4	257.82	30.48	46.00	-15.52	40.43	-9.95	Peak	---	---
5	289.88	33.21	46.00	-12.79	41.89	-8.68	Peak	---	---
6	481.15	32.31	46.00	-13.69	35.73	-3.42	Peak	---	---

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

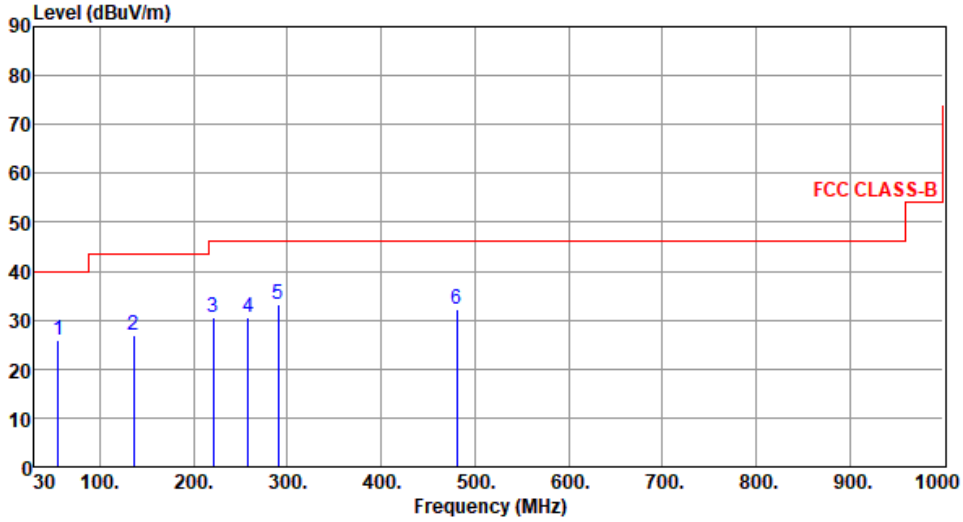
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	41.50	27.46	40.00	-12.54	36.39	-8.93	Peak	---	---
2	53.31	29.42	40.00	-10.58	38.36	-8.94	Peak	---	---
3	127.15	26.66	43.50	-16.84	37.16	-10.50	Peak	---	---
4	179.42	27.21	43.50	-16.29	37.59	-10.38	Peak	---	---
5	284.22	29.48	46.00	-16.52	38.38	-8.90	Peak	---	---
6	505.26	32.61	46.00	-13.39	35.62	-3.01	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.

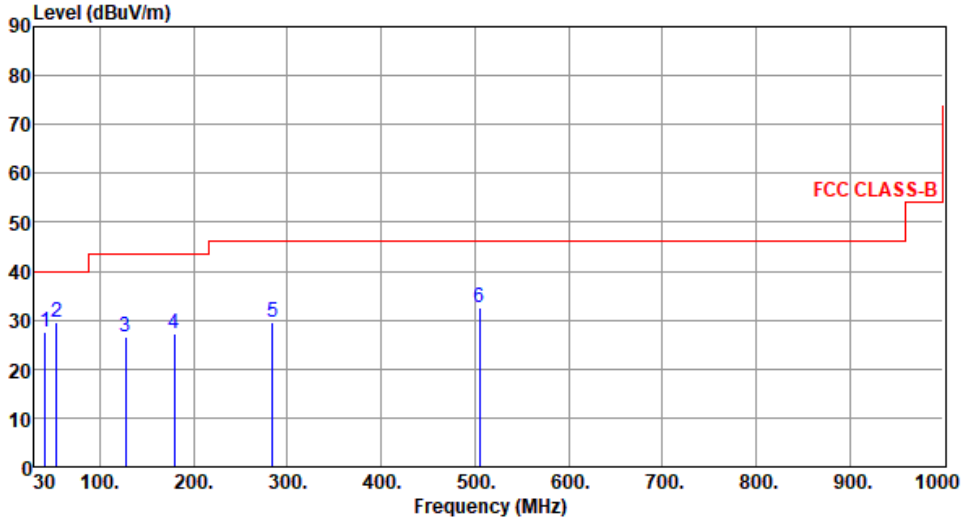
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	55.31	25.81	40.00	-14.19	34.91	-9.10	Peak	---	---
2	135.66	26.84	43.50	-16.66	36.45	-9.61	Peak	---	---
3	221.12	30.53	46.00	-15.47	42.94	-12.41	Peak	---	---
4	257.86	30.48	46.00	-15.52	40.43	-9.95	Peak	---	---
5	289.86	33.25	46.00	-12.75	41.94	-8.69	Peak	---	---
6	481.10	32.26	46.00	-13.74	35.68	-3.42	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	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		

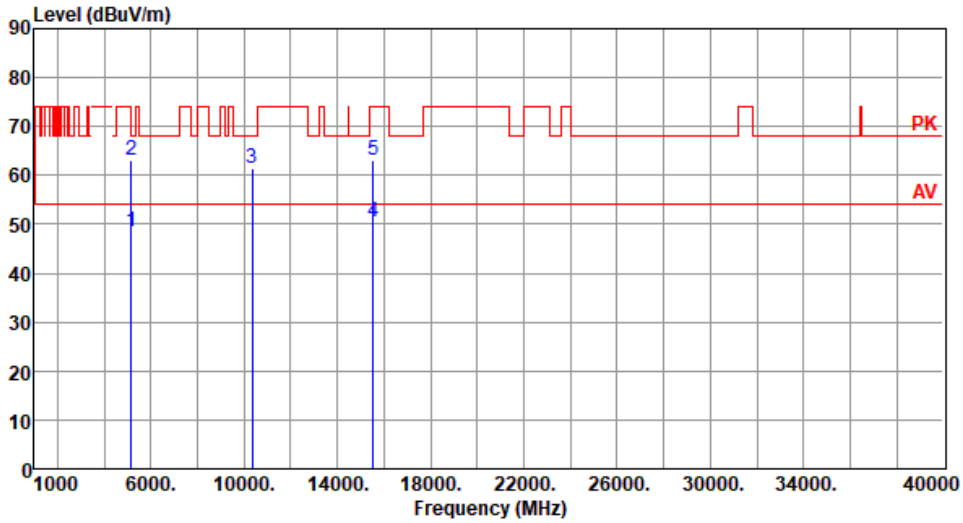


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	41.55	27.54	40.00	-12.46	36.47	-8.93	Peak	---	---
2	53.31	29.48	40.00	-10.52	38.42	-8.94	Peak	---	---
3	127.11	26.68	43.50	-16.82	37.18	-10.50	Peak	---	---
4	179.42	27.21	43.50	-16.29	37.59	-10.38	Peak	---	---
5	284.46	29.53	46.00	-16.47	38.43	-8.90	Peak	---	---
6	505.42	32.68	46.00	-13.32	35.68	-3.00	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

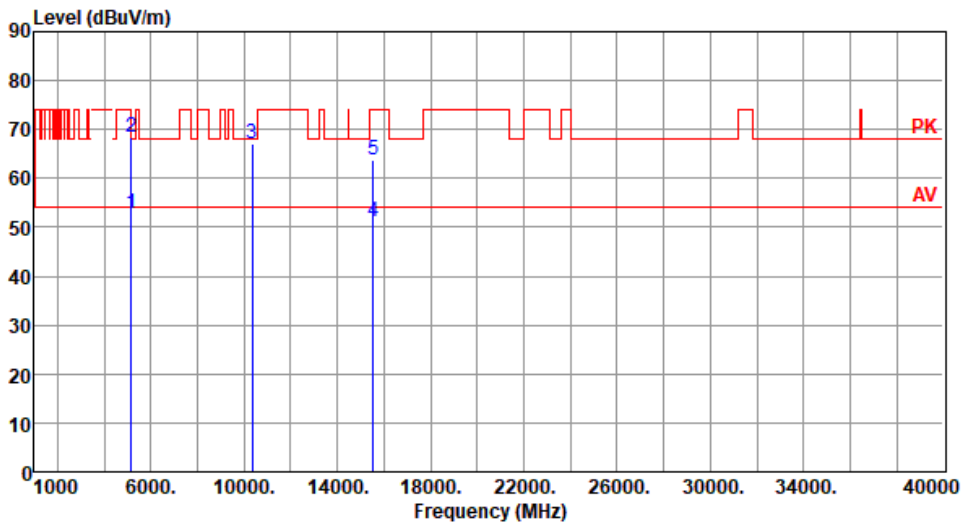
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	48.49	54.00	-5.51	41.17	7.32	Average	114	272
2	5150.00	63.15	74.00	-10.85	55.83	7.32	Peak	114	272
3	10360.00	61.56	68.20	-6.64	45.47	16.09	Peak	100	15
4	15540.00	50.62	54.00	-3.38	33.25	17.37	Average	100	326
5	15540.00	63.21	74.00	-10.79	45.84	17.37	Peak	100	326

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

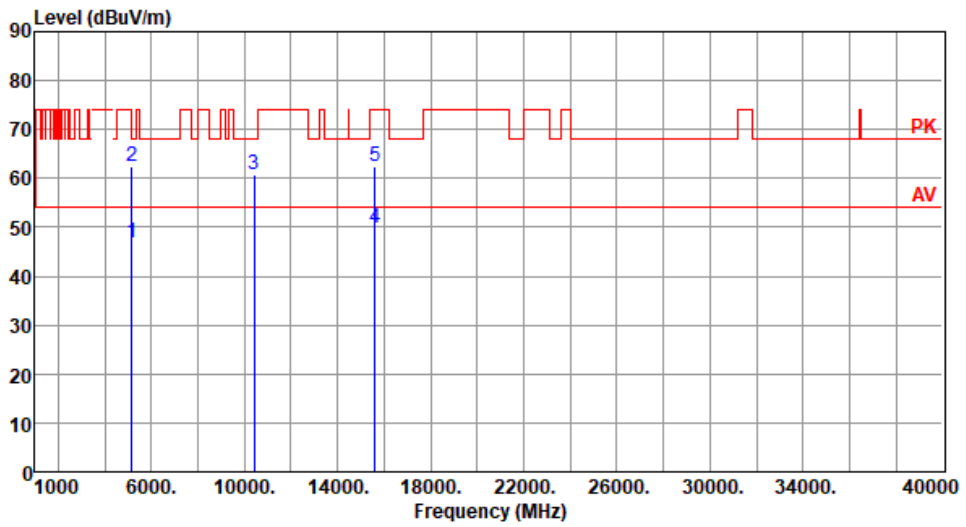
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	52.86	54.00	-1.14	45.54	7.32	Average	251	133
2	5150.00	68.25	74.00	-5.75	60.93	7.32	Peak	251	133
3	10360.00	67.05	68.20	-1.15	50.96	16.09	Peak	325	186
4	15540.00	51.06	54.00	-2.94	33.69	17.37	Average	304	172
5	15540.00	63.63	74.00	-10.37	46.26	17.37	Peak	304	172

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

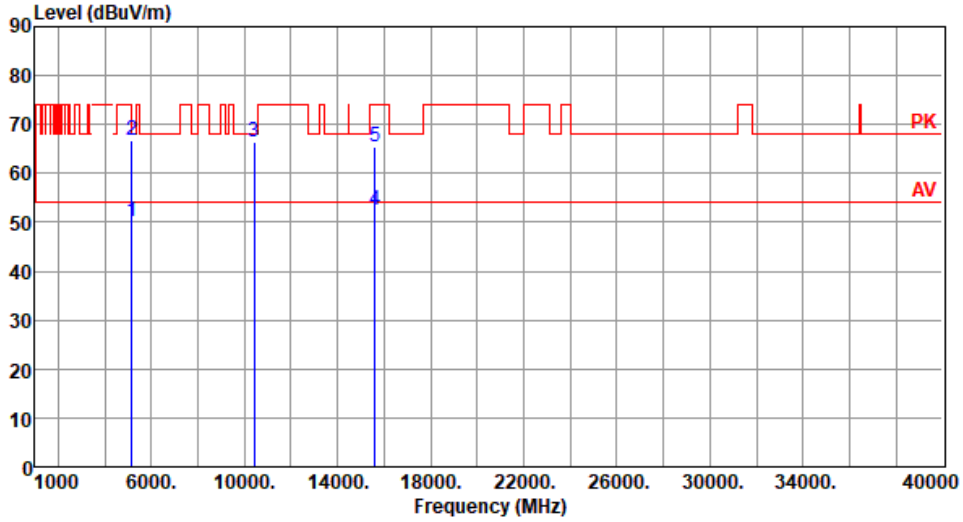
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.89	54.00	-7.11	39.57	7.32	Average	114	29
2	5150.00	62.28	74.00	-11.72	54.96	7.32	Peak	114	29
3	10400.00	60.86	68.20	-7.34	44.58	16.28	Peak	100	10
4	15600.00	49.67	54.00	-4.33	32.40	17.27	Average	100	335
5	15600.00	62.34	74.00	-11.66	45.07	17.27	Peak	100	335

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

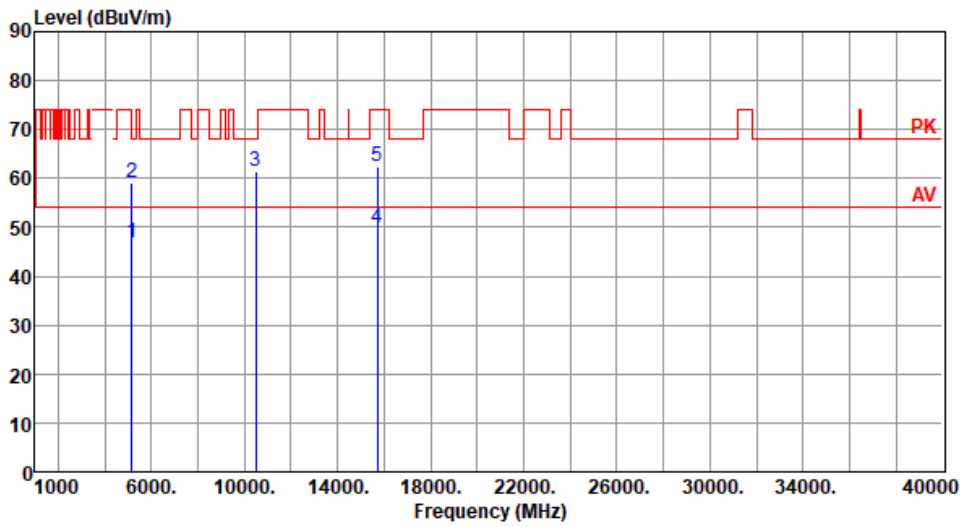
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	50.24	54.00	-3.76	42.92	7.32	Average	246	175
2	5150.00	66.85	74.00	-7.15	59.53	7.32	Peak	246	175
3	10400.00	66.52	68.20	-1.68	50.24	16.28	Peak	335	151
4	15600.00	52.42	54.00	-1.58	35.15	17.27	Average	302	154
5	15600.00	65.46	74.00	-8.54	48.19	17.27	Peak	302	154

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

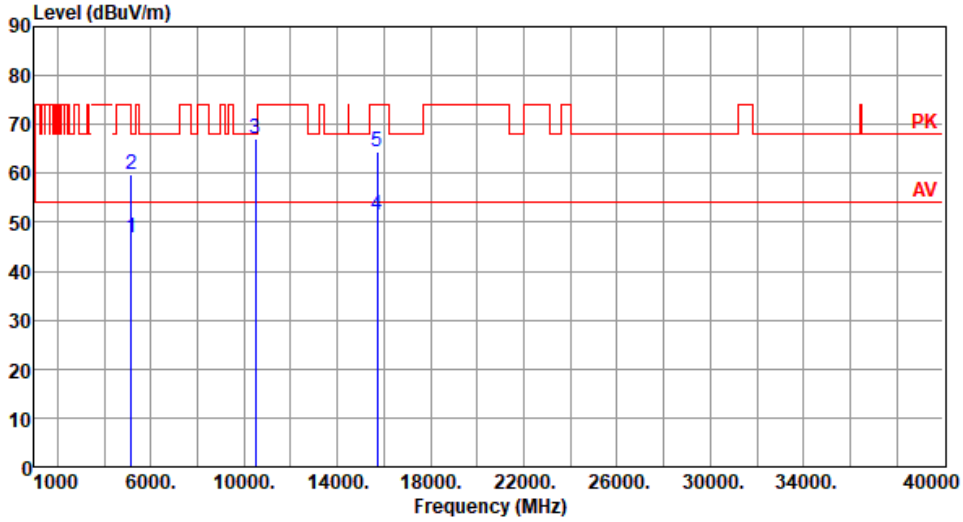
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.81	54.00	-7.19	39.49	7.32	Average	116	31
2	5150.00	59.24	74.00	-14.76	51.92	7.32	Peak	116	31
3	10480.00	61.46	68.20	-6.74	45.05	16.41	QP	100	33
4	15720.00	49.82	54.00	-4.18	33.22	16.60	Average	100	339
5	15720.00	62.45	74.00	-11.55	45.85	16.60	Peak	100	339

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

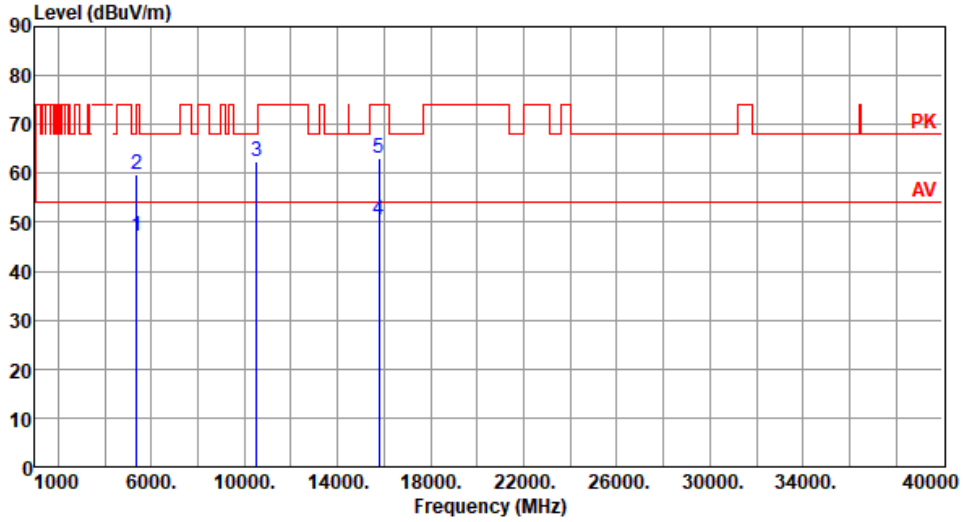
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	46.85	54.00	-7.15	39.53	7.32	Average	283	188
2	5150.00	59.68	74.00	-14.32	52.36	7.32	Peak	283	188
3	10480.00	66.99	68.20	-1.21	50.58	16.41	Peak	345	186
4	15720.00	51.35	54.00	-2.65	34.75	16.60	Average	311	331
5	15720.00	64.52	74.00	-9.48	47.92	16.60	Peak	311	331

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

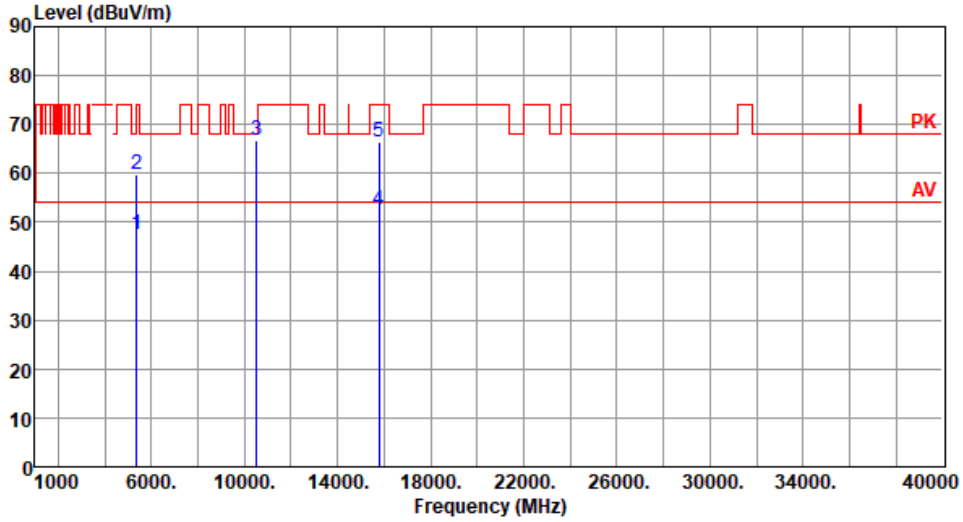
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.26	54.00	-6.74	40.41	6.85	Average	118	36
2	5350.00	59.81	74.00	-14.19	52.96	6.85	Peak	118	36
3	10520.00	62.58	68.20	-5.62	46.16	16.42	Peak	100	48
4	15780.00	50.46	54.00	-3.54	33.90	16.56	Average	100	326
5	15780.00	63.25	74.00	-10.75	46.69	16.56	Peak	100	326

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

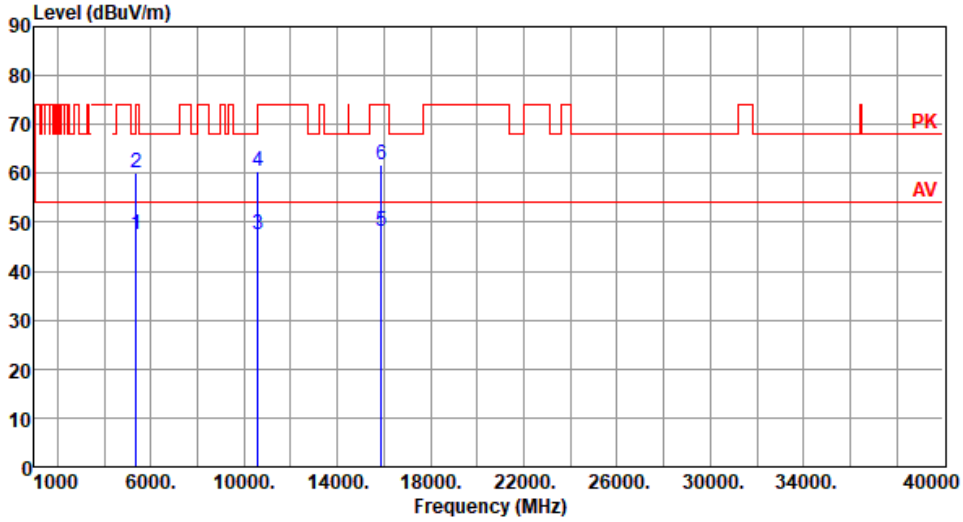
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.42	54.00	-6.58	40.57	6.85	Average	268	197
2	5350.00	59.94	74.00	-14.06	53.09	6.85	Peak	268	197
3	10520.00	66.75	68.20	-1.45	50.33	16.42	Peak	350	187
4	15780.00	52.38	54.00	-1.62	35.82	16.56	Average	287	218
5	15780.00	66.57	74.00	-7.43	50.01	16.56	Peak	287	218

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

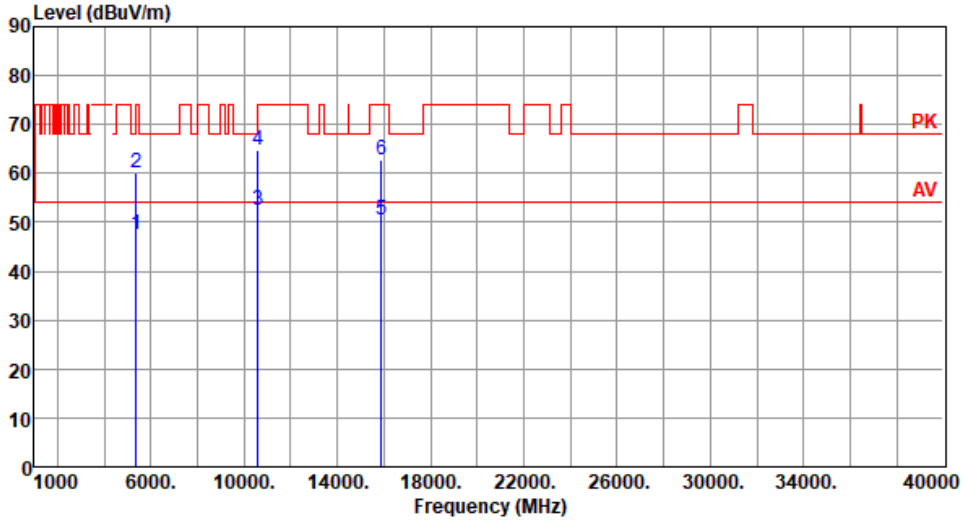
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.42	54.00	-6.58	40.57	6.85	Average	115	42
2	5350.00	59.96	74.00	-14.04	53.11	6.85	Peak	115	42
3	10600.00	47.48	54.00	-6.52	31.12	16.36	Average	100	7
4	10600.00	60.36	74.00	-13.64	44.00	16.36	Peak	100	7
5	15900.00	48.25	54.00	-5.75	31.56	16.69	Average	100	20
6	15900.00	61.84	74.00	-12.16	45.15	16.69	Peak	100	20

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

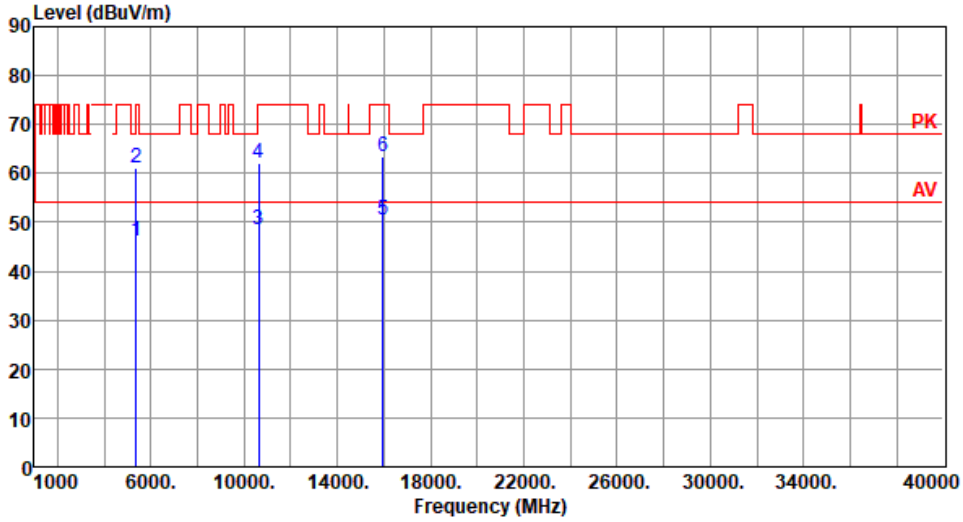
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.48	54.00	-6.52	40.63	6.85	Average	266	196
2	5350.00	60.27	74.00	-13.73	53.42	6.85	Peak	266	196
3	10600.00	52.50	54.00	-1.50	36.14	16.36	Average	294	172
4	10600.00	64.79	74.00	-9.21	48.43	16.36	Peak	294	172
5	15900.00	50.32	54.00	-3.68	33.63	16.69	Average	211	314
6	15900.00	62.90	74.00	-11.10	46.21	16.69	Peak	211	314

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

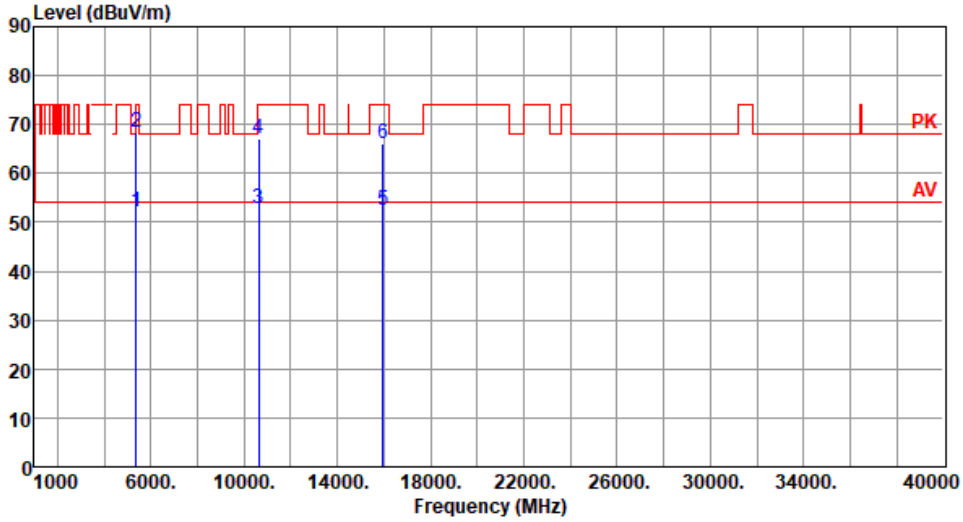
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	46.30	54.00	-7.70	39.45	6.85	Average	113	56
2	5350.00	60.95	74.00	-13.05	54.10	6.85	Peak	113	56
3	10640.00	48.56	54.00	-5.44	32.19	16.37	Average	100	22
4	10640.00	62.21	74.00	-11.79	45.84	16.37	Peak	100	22
5	15960.00	50.54	54.00	-3.46	34.01	16.53	Average	100	312
6	15960.00	63.38	74.00	-10.62	46.85	16.53	Peak	100	312

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

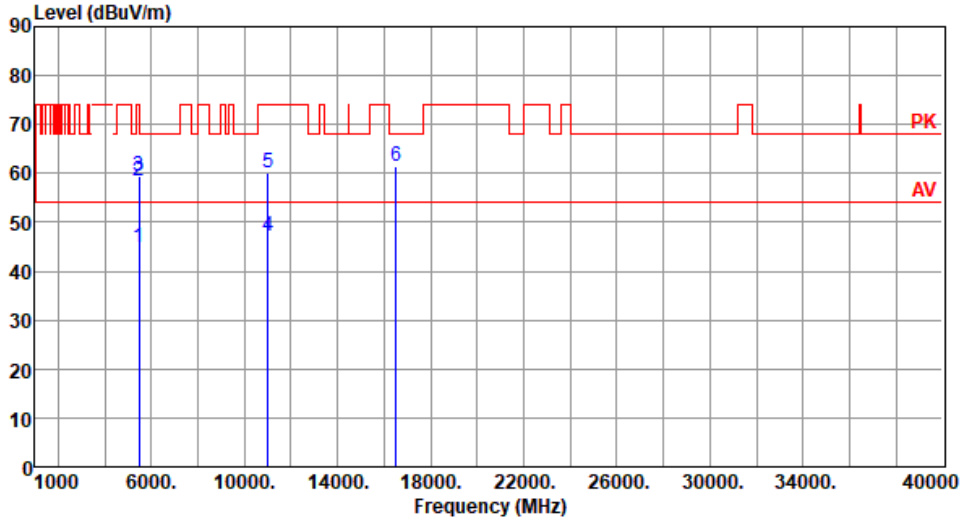
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	52.09	54.00	-1.91	45.24	6.85	Average	265	303
2	5350.00	68.40	74.00	-5.60	61.55	6.85	Peak	265	303
3	10640.00	52.88	54.00	-1.12	36.51	16.37	Average	286	169
4	10640.00	67.05	74.00	-6.95	50.68	16.37	Peak	286	169
5	15960.00	52.34	54.00	-1.66	35.81	16.53	Average	302	194
6	15960.00	66.08	74.00	-7.92	49.55	16.53	Peak	302	194

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

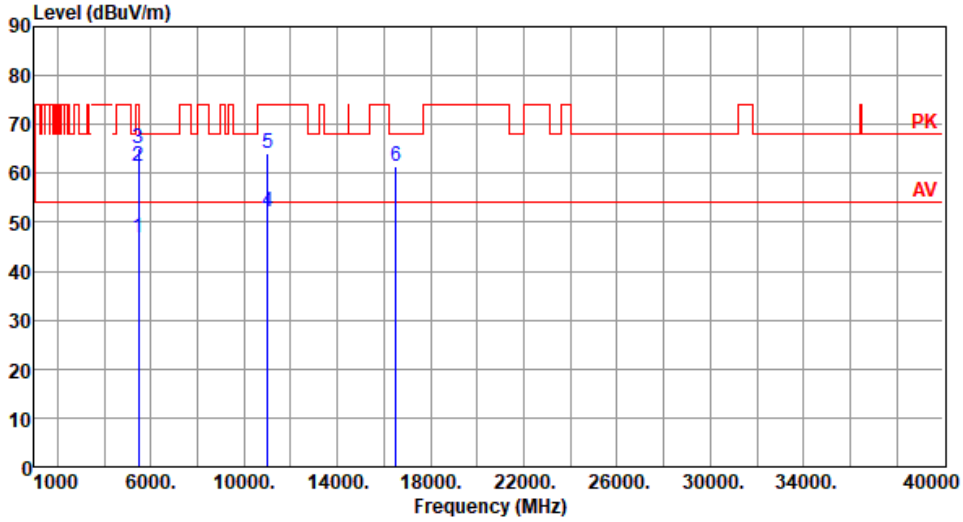
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.89	54.00	-9.11	37.64	7.25	Average	128	60
2	5460.00	58.46	74.00	-15.54	51.21	7.25	Peak	128	60
3	5470.00	59.31	68.20	-8.89	52.03	7.28	Peak	128	60
4	11000.00	47.14	54.00	-6.86	30.30	16.84	Average	225	8
5	11000.00	60.06	74.00	-13.94	43.22	16.84	Peak	225	8
6	16500.00	61.50	68.20	-6.70	43.86	17.64	Peak	100	49

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

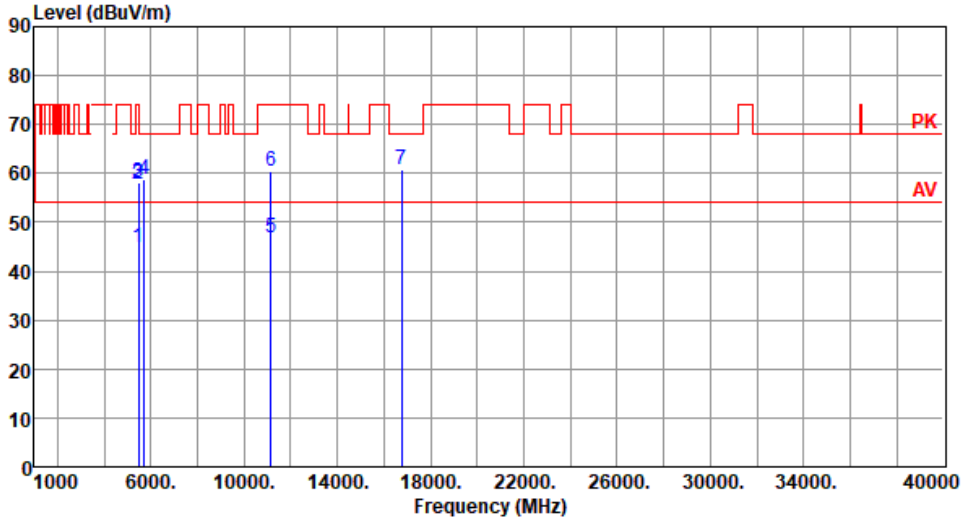
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.78	54.00	-7.22	39.53	7.25	Average	293	301
2	5460.00	61.55	74.00	-12.45	54.30	7.25	Peak	293	301
3	5470.00	65.12	68.20	-3.08	57.84	7.28	Peak	293	301
4	11000.00	52.13	54.00	-1.87	35.29	16.84	Average	268	161
5	11000.00	64.23	74.00	-9.77	47.39	16.84	Peak	268	161
6	16500.00	61.55	68.20	-6.65	43.91	17.64	Peak	100	38

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

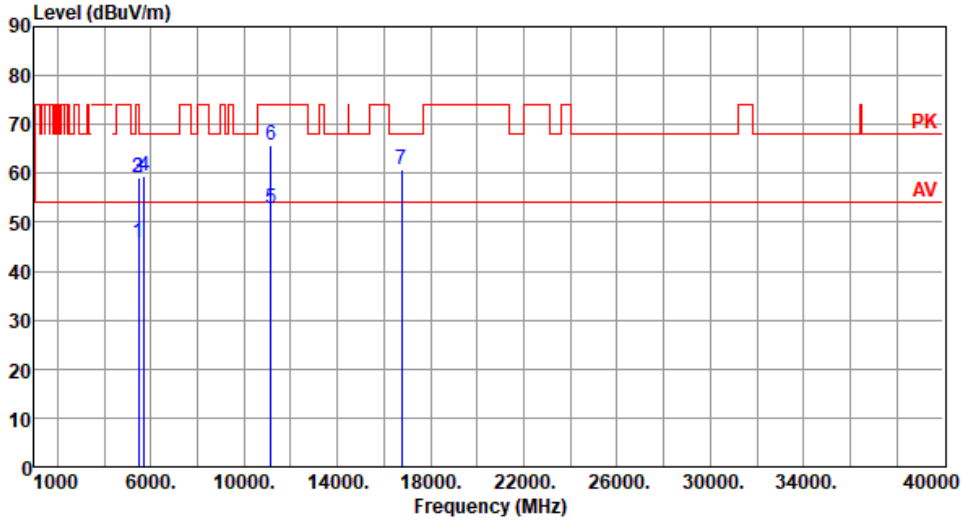
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	44.87	54.00	-9.13	37.62	7.25	Average	126	69
2	5460.00	57.70	74.00	-16.30	50.45	7.25	Peak	126	69
3	5470.00	58.15	68.20	-10.05	50.87	7.28	Peak	126	69
4	5725.00	58.76	68.20	-9.44	51.10	7.66	Peak	126	69
5	11160.00	46.83	54.00	-7.17	30.24	16.59	Average	249	6
6	11160.00	60.49	74.00	-13.51	43.90	16.59	Peak	249	6
7	16740.00	60.63	68.20	-7.57	42.40	18.23	Peak	100	50

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

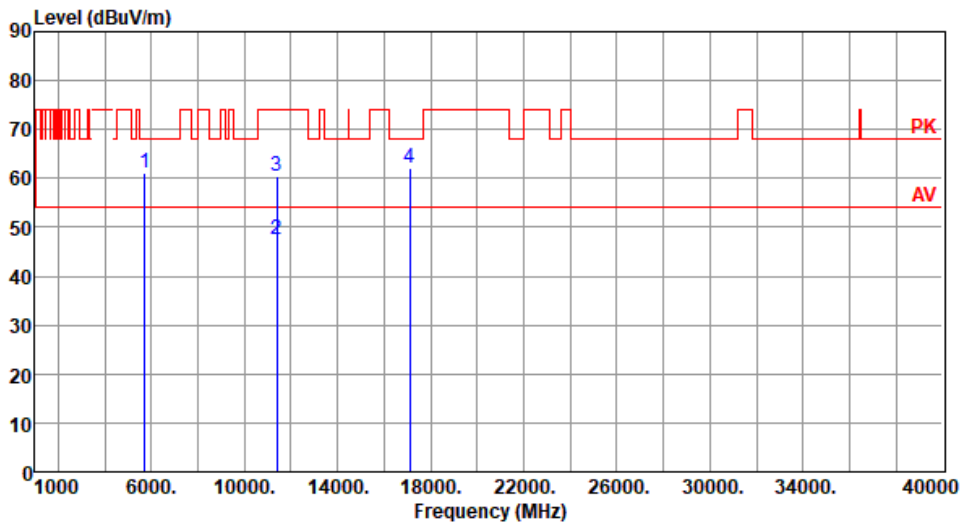
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	45.91	54.00	-8.09	38.66	7.25	Average	289	301
2	5460.00	59.23	74.00	-14.77	51.98	7.25	Peak	289	301
3	5470.00	59.09	68.20	-9.11	51.81	7.28	Peak	289	301
4	5725.00	59.59	68.20	-8.61	51.93	7.66	Peak	289	301
5	11160.00	52.78	54.00	-1.22	36.19	16.59	Average	268	166
6	11160.00	65.63	74.00	-8.37	49.04	16.59	Peak	268	166
7	16740.00	60.67	68.20	-7.53	42.44	18.23	Peak	100	30

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

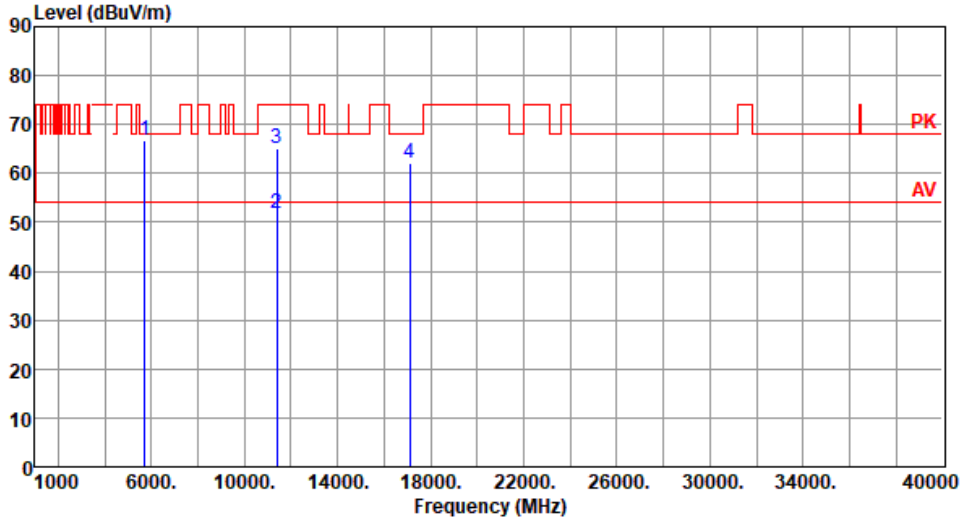
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	60.96	68.20	-7.24	53.30	7.66	Peak	126	58
2	11400.00	47.56	54.00	-6.44	30.83	16.73	Average	195	14
3	11400.00	60.45	74.00	-13.55	43.72	16.73	Peak	195	14
4	17100.00	62.15	68.20	-6.05	43.91	18.24	Peak	100	58

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

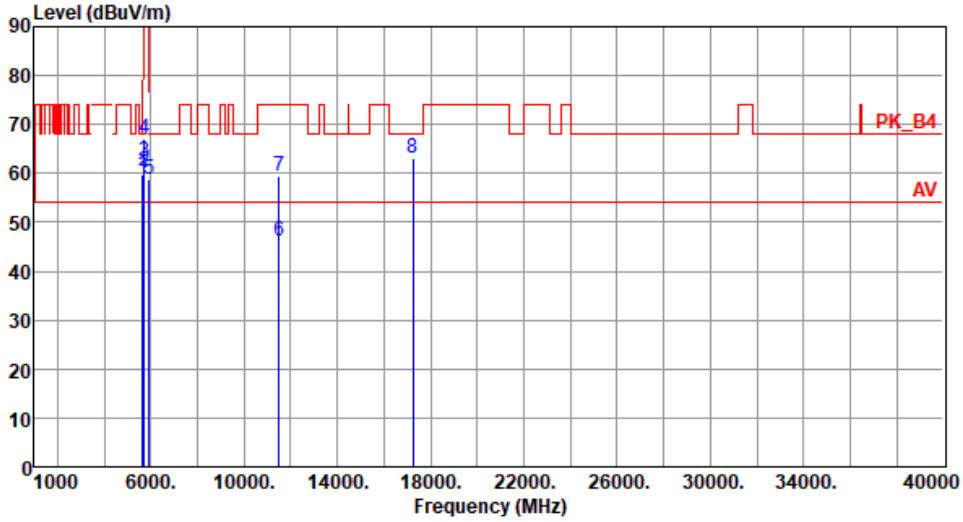
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	66.84	68.20	-1.36	59.18	7.66	Peak	304	252
2	11400.00	51.88	54.00	-2.12	35.15	16.73	Average	301	186
3	11400.00	64.93	74.00	-9.07	48.20	16.73	Peak	301	186
4	17100.00	62.22	68.20	-5.98	43.98	18.24	Peak	100	46

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

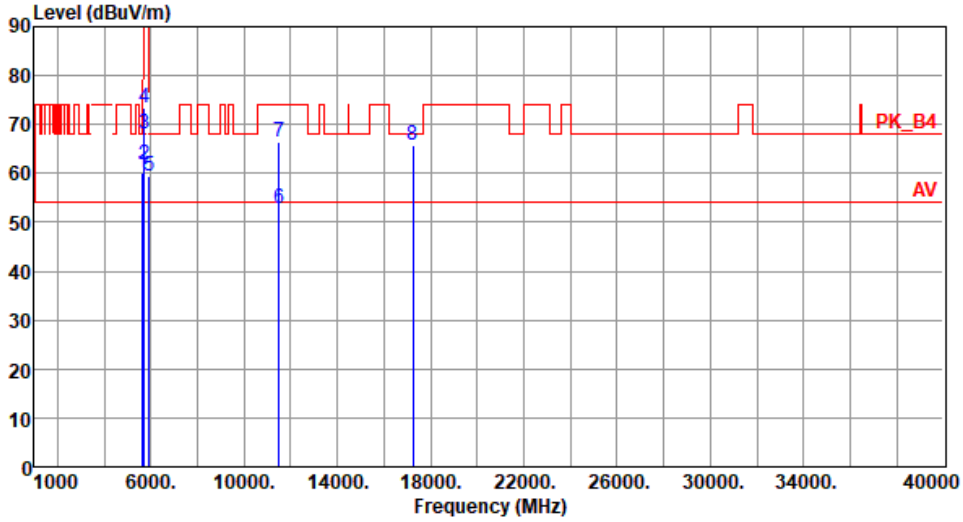
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.91	68.20	-8.29	52.52	7.39	Peak	119	64
2	5700.00	60.49	105.20	-44.71	52.99	7.50	Peak	119	64
3	5720.00	62.42	110.80	-48.38	54.80	7.62	Peak	119	64
4	5725.00	67.21	122.20	-54.99	59.55	7.66	Peak	119	64
5	5925.00	58.87	68.20	-9.33	50.80	8.07	Peak	119	64
6	11490.00	46.31	54.00	-7.69	29.55	16.76	Average	150	19
7	11490.00	59.51	74.00	-14.49	42.75	16.76	Peak	150	19
8	17235.00	62.96	68.20	-5.24	44.32	18.64	Peak	100	35

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

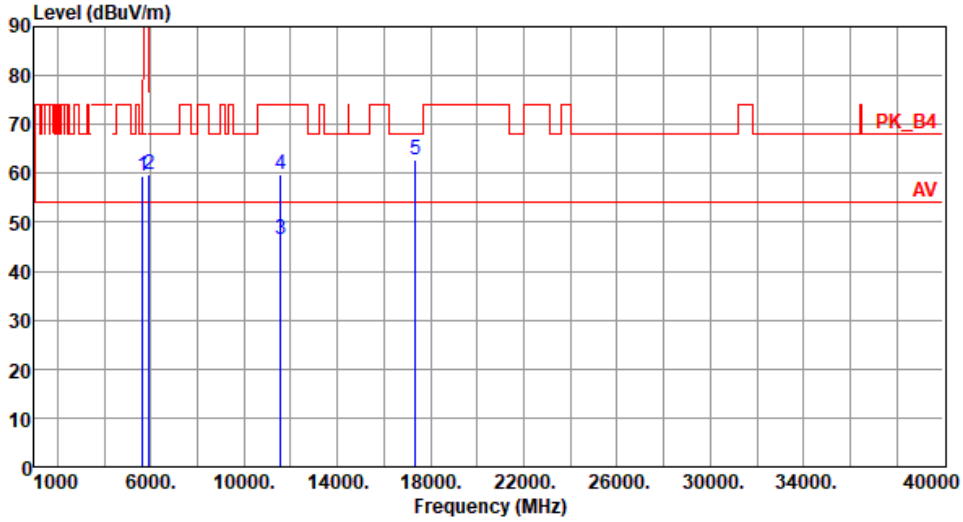
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	60.17	68.20	-8.03	52.78	7.39	Peak	279	195
2	5700.00	61.83	105.20	-43.37	54.33	7.50	Peak	279	195
3	5720.00	67.97	110.80	-42.83	60.35	7.62	Peak	279	195
4	5725.00	73.36	122.20	-48.84	65.70	7.66	Peak	279	195
5	5925.00	59.42	68.20	-8.78	51.35	8.07	Peak	279	195
6	11490.00	52.88	54.00	-1.12	36.12	16.76	Average	315	183
7	11490.00	66.40	74.00	-7.60	49.64	16.76	Peak	315	183
8	17235.00	65.71	68.20	-2.49	47.07	18.64	Peak	254	145

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

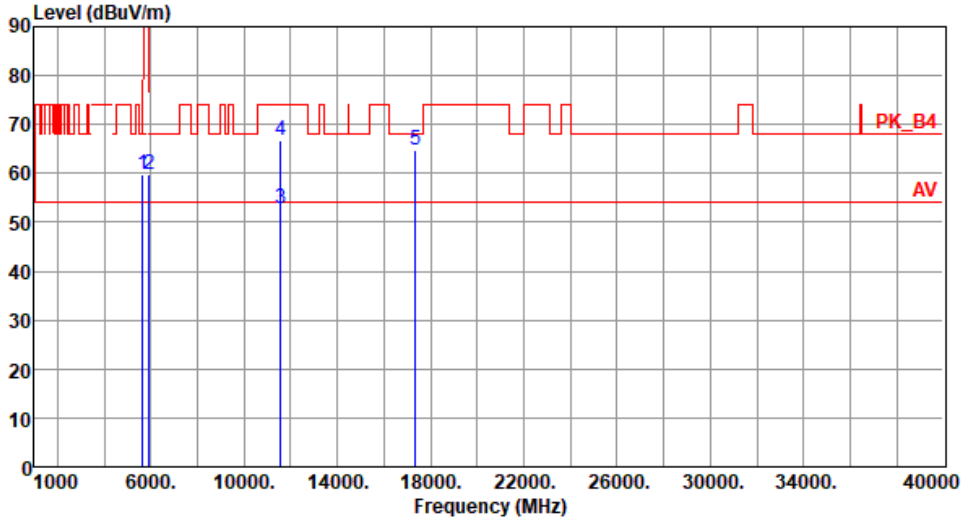
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	59.35	68.20	-8.85	51.96	7.39	Peak	121	63
2	5925.00	59.80	68.20	-8.40	51.73	8.07	Peak	121	63
3	11570.00	46.45	54.00	-7.55	29.84	16.61	Average	141	26
4	11570.00	59.74	74.00	-14.26	43.13	16.61	Peak	141	26
5	17355.00	62.75	68.20	-5.45	43.52	19.23	Peak	100	44

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

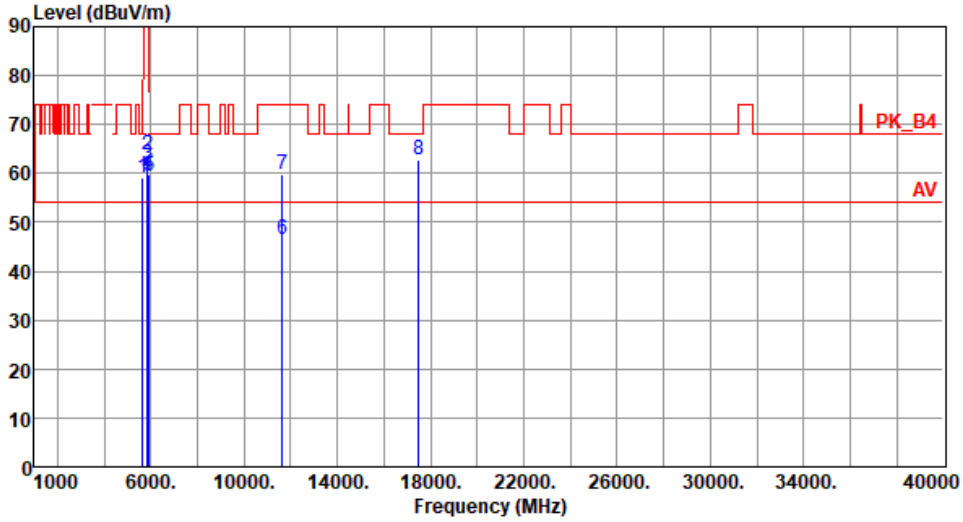
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	59.84	68.20	-8.36	52.45	7.39	Peak	275	185
2	5925.00	59.86	68.20	-8.34	51.79	8.07	Peak	275	185
3	11570.00	52.93	54.00	-1.07	36.32	16.61	Average	320	192
4	11570.00	66.74	74.00	-7.26	50.13	16.61	Peak	320	192
5	17355.00	64.64	68.20	-3.56	45.41	19.23	Peak	254	141

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

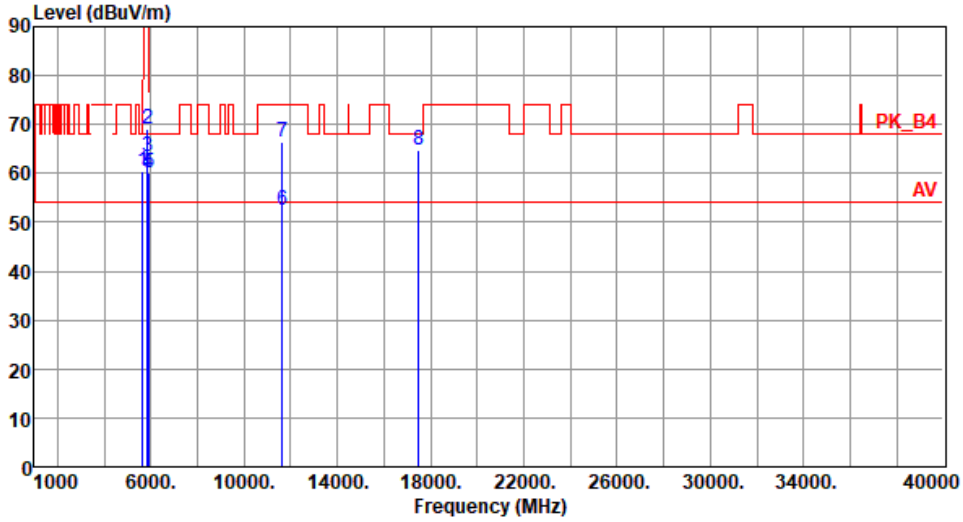
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.21	68.20	-8.99	51.82	7.39	Peak	118	62
2	5850.00	63.87	122.20	-58.33	55.85	8.02	Peak	118	62
3	5855.00	61.89	110.80	-48.91	53.87	8.02	Peak	118	62
4	5875.00	59.74	105.20	-45.46	51.71	8.03	Peak	118	62
5	5925.00	59.59	68.20	-8.61	51.52	8.07	Peak	118	62
6	11650.00	46.62	54.00	-7.38	30.24	16.38	Average	135	42
7	11650.00	59.88	74.00	-14.12	43.50	16.38	Peak	135	42
8	17475.00	62.86	68.20	-5.34	43.12	19.74	Peak	100	51

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

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

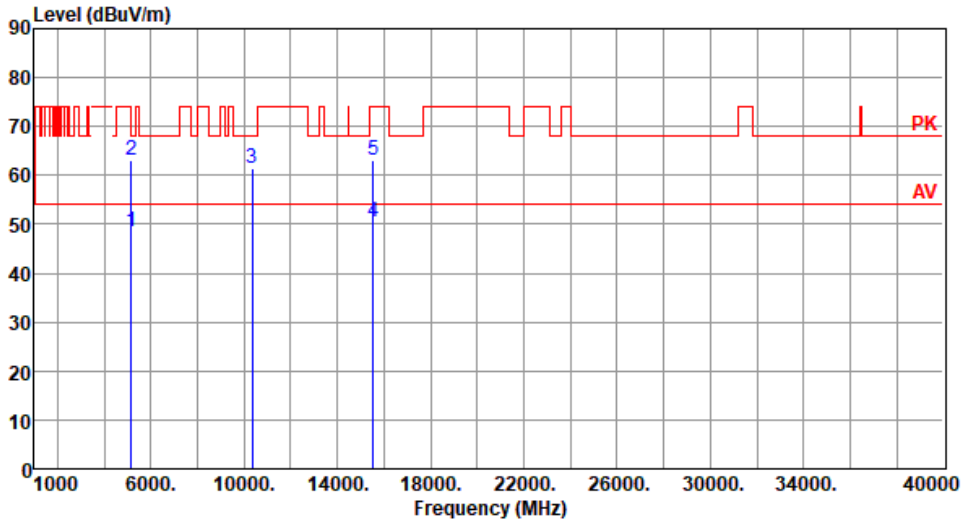


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.45	68.20	-7.75	53.06	7.39	Peak	274	196
2	5850.00	68.93	122.20	-53.27	60.91	8.02	Peak	274	196
3	5855.00	63.30	110.80	-47.50	55.28	8.02	Peak	274	196
4	5875.00	60.08	105.20	-45.12	52.05	8.03	Peak	274	196
5	5925.00	60.04	68.20	-8.16	51.97	8.07	Peak	274	196
6	11650.00	52.56	54.00	-1.44	36.18	16.38	Average	225	196
7	11650.00	66.39	74.00	-7.61	50.01	16.38	Peak	225	196
8	17475.00	64.68	68.20	-3.52	44.94	19.74	Peak	223	143

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

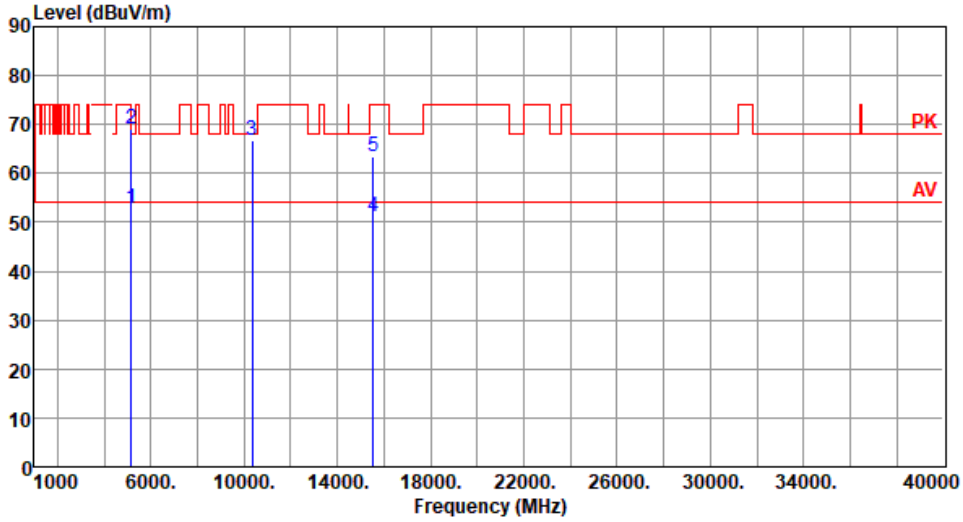
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	48.42	54.00	-5.58	41.10	7.32	Average	115	268
2	5150.00	63.08	74.00	-10.92	55.76	7.32	Peak	115	268
3	10360.00	61.44	68.20	-6.76	45.35	16.09	Peak	100	26
4	15540.00	50.54	54.00	-3.46	33.17	17.37	Average	100	312
5	15540.00	63.18	74.00	-10.82	45.81	17.37	Peak	100	312

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

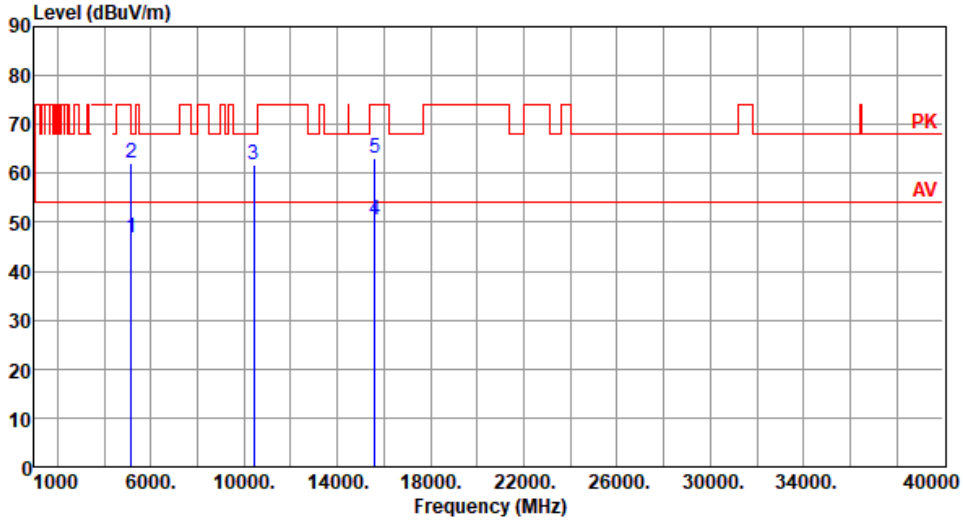
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	52.77	54.00	-1.23	45.45	7.32	Average	238	143
2	5150.00	69.22	74.00	-4.78	61.90	7.32	Peak	238	143
3	10360.00	66.84	68.20	-1.36	50.75	16.09	Peak	324	181
4	15540.00	50.98	54.00	-3.02	33.61	17.37	Average	305	176
5	15540.00	63.51	74.00	-10.49	46.14	17.37	Peak	305	176

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

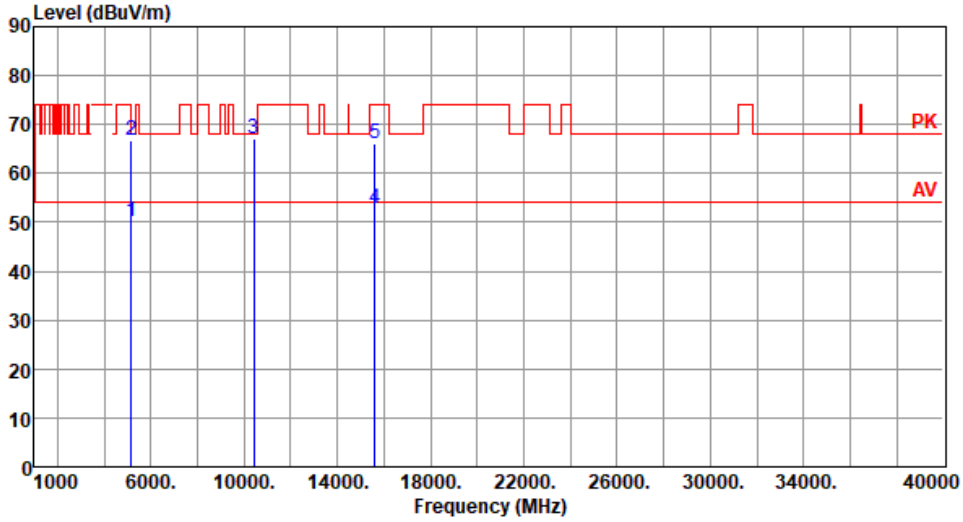
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	46.84	54.00	-7.16	39.52	7.32	Average	115	28
2	5150.00	62.25	74.00	-11.75	54.93	7.32	Peak	115	28
3	10400.00	61.75	68.20	-6.45	45.47	16.28	Peak	100	22
4	15600.00	50.58	54.00	-3.42	33.31	17.27	Average	100	306
5	15600.00	63.22	74.00	-10.78	45.95	17.27	Peak	100	306

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

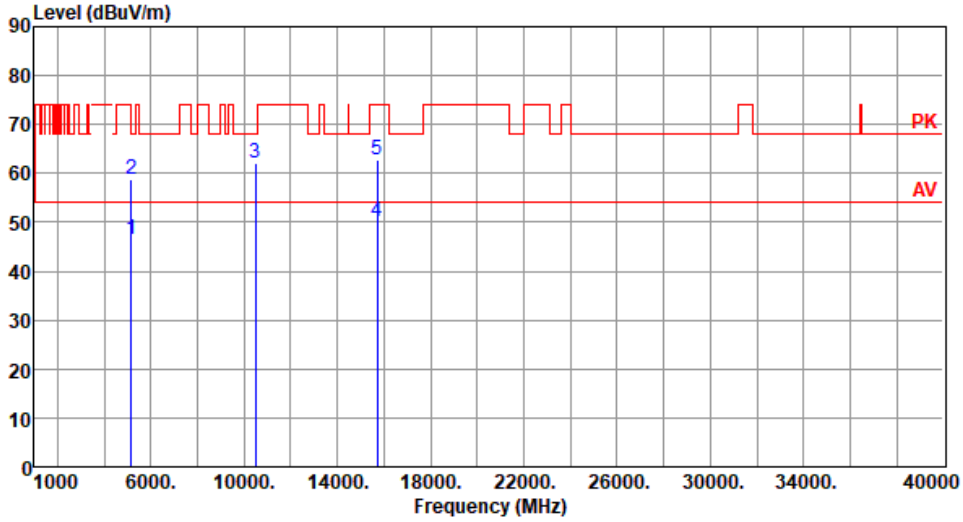
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	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	50.21	54.00	-3.79	42.89	7.32	Average	245	176
2	5150.00	66.84	74.00	-7.16	59.52	7.32	Peak	245	176
3	10400.00	66.92	68.20	-1.28	50.64	16.28	Peak	303	145
4	15600.00	52.85	54.00	-1.15	35.58	17.27	Average	292	183
5	15600.00	65.94	74.00	-8.06	48.67	17.27	Peak	292	183

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

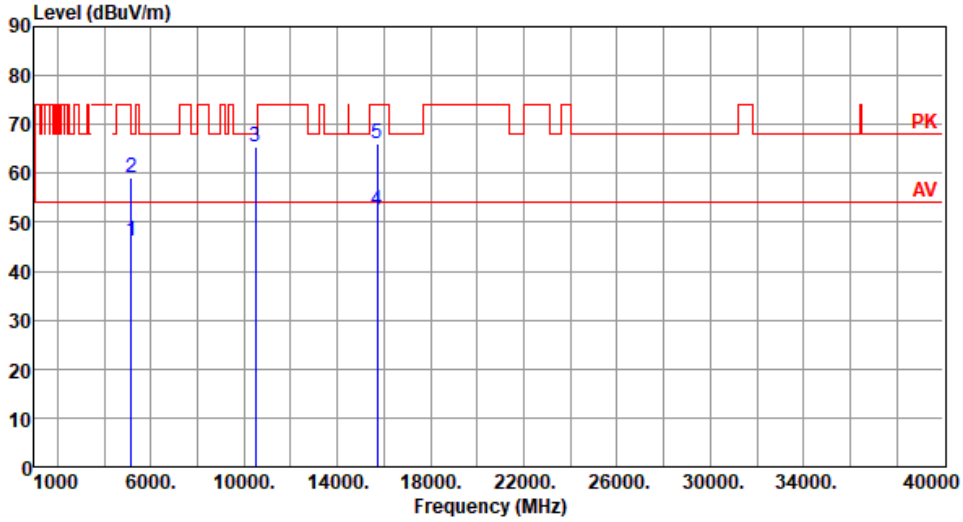
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	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	46.34	54.00	-7.66	39.02	7.32	Average	115	32
2	5150.00	58.72	74.00	-15.28	51.40	7.32	Peak	115	32
3	10480.00	62.14	68.20	-6.06	45.73	16.41	Peak	100	55
4	15720.00	50.31	54.00	-3.69	33.71	16.60	Average	100	33
5	15720.00	62.88	74.00	-11.12	46.28	16.60	Peak	100	33

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

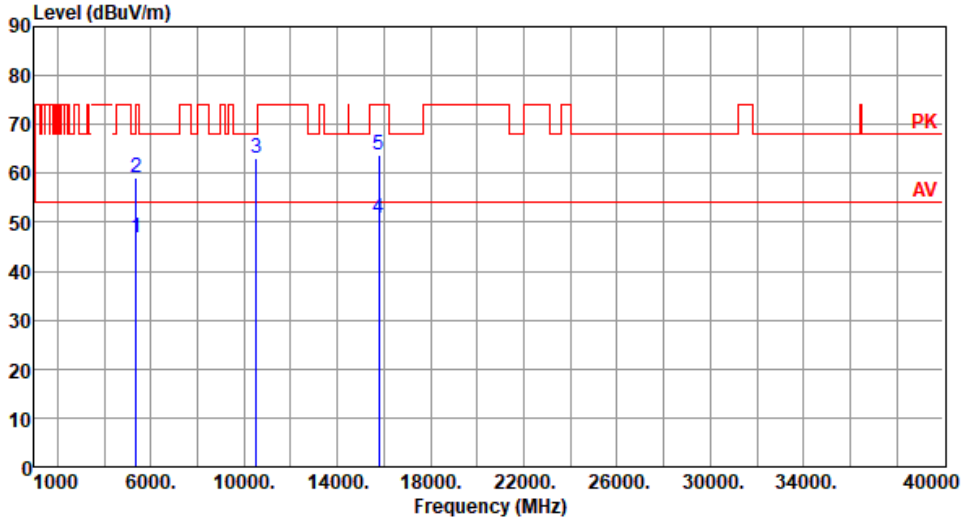
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.31	54.00	-7.69	38.99	7.32	Average	281	189
2	5150.00	59.15	74.00	-14.85	51.83	7.32	Peak	281	189
3	10480.00	65.46	68.20	-2.74	49.05	16.41	Peak	286	177
4	15720.00	52.56	54.00	-1.44	35.96	16.60	Average	274	234
5	15720.00	66.16	74.00	-7.84	49.56	16.60	Peak	274	234

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

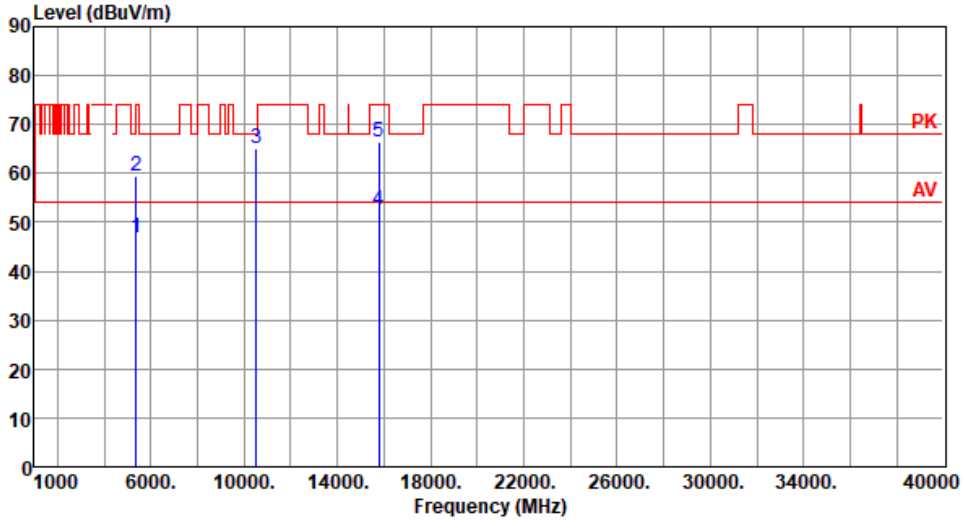
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.71	54.00	-7.29	39.86	6.85	Average	116	34
2	5350.00	59.28	74.00	-14.72	52.43	6.85	Peak	116	34
3	10520.00	62.95	68.20	-5.25	46.53	16.42	Peak	100	51
4	15780.00	50.85	54.00	-3.15	34.29	16.56	Average	100	296
5	15780.00	63.61	74.00	-10.39	47.05	16.56	Peak	100	296

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

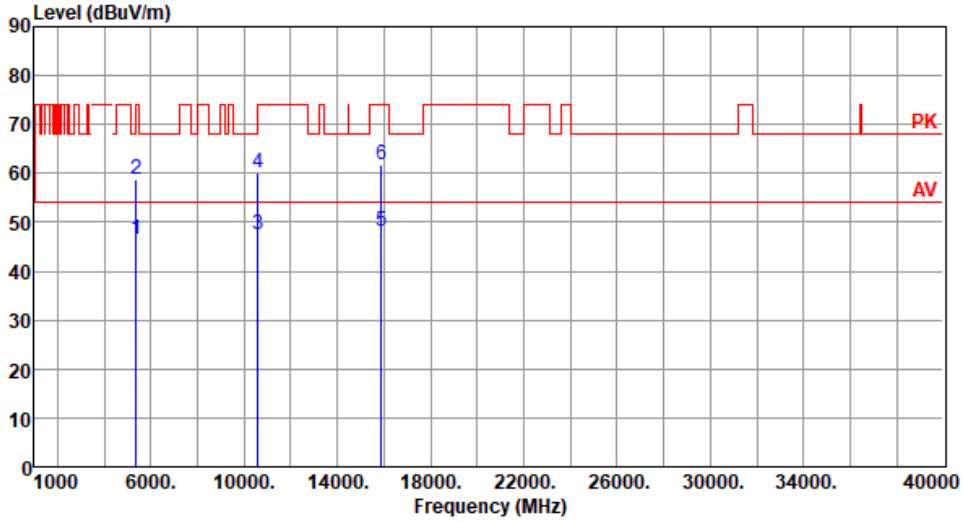
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.91	54.00	-7.09	40.06	6.85	Average	269	198
2	5350.00	59.39	74.00	-14.61	52.54	6.85	Peak	269	198
3	10520.00	65.10	68.20	-3.10	48.68	16.42	Peak	295	175
4	15780.00	52.41	54.00	-1.59	35.85	16.56	Average	275	236
5	15780.00	66.32	74.00	-7.68	49.76	16.56	Peak	275	236

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

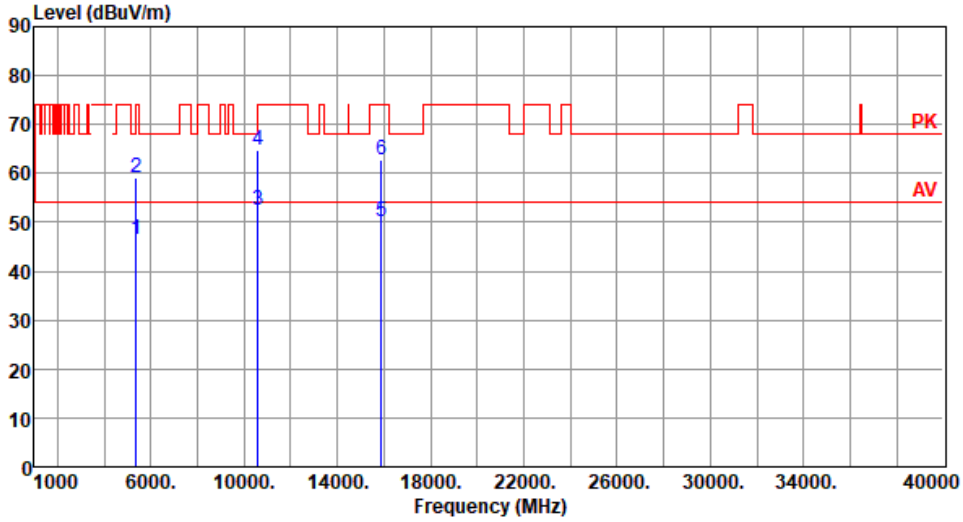
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.46	54.00	-7.54	39.61	6.85	Average	116	45
2	5350.00	58.85	74.00	-15.15	52.00	6.85	Peak	116	45
3	10600.00	47.39	54.00	-6.61	31.03	16.36	Average	110	5
4	10600.00	60.25	74.00	-13.75	43.89	16.36	Peak	110	5
5	15900.00	48.18	54.00	-5.82	31.49	16.69	Average	100	36
6	15900.00	61.81	74.00	-12.19	45.12	16.69	Peak	100	36

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

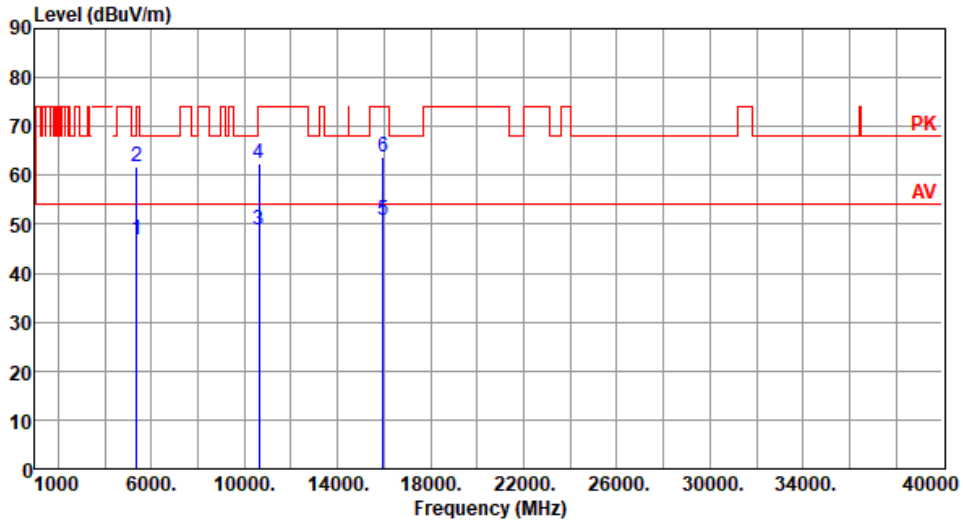
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.42	54.00	-7.58	39.57	6.85	Average	265	195
2	5350.00	59.19	74.00	-14.81	52.34	6.85	Peak	265	195
3	10600.00	52.56	54.00	-1.44	36.20	16.36	Average	304	172
4	10600.00	64.68	74.00	-9.32	48.32	16.36	Peak	304	172
5	15900.00	50.28	54.00	-3.72	33.59	16.69	Average	211	315
6	15900.00	62.88	74.00	-11.12	46.19	16.69	Peak	211	315

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

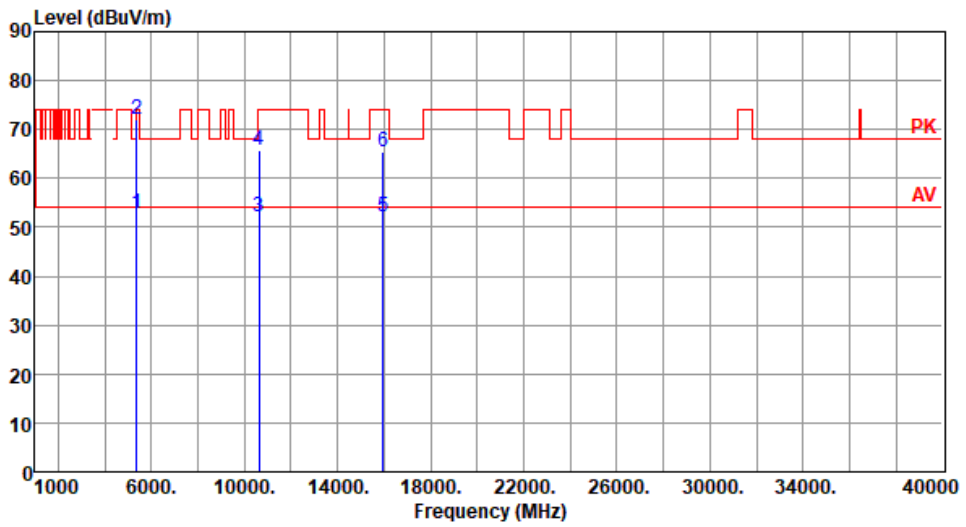
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	46.95	54.00	-7.05	40.10	6.85	Average	116	49
2	5350.00	61.76	74.00	-12.24	54.91	6.85	Peak	116	49
3	10640.00	48.78	54.00	-5.22	32.41	16.37	Average	100	5
4	10640.00	62.55	74.00	-11.45	46.18	16.37	Peak	100	5
5	15960.00	50.93	54.00	-3.07	34.40	16.53	Average	100	33
6	15960.00	63.79	74.00	-10.21	47.26	16.53	Peak	100	33

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

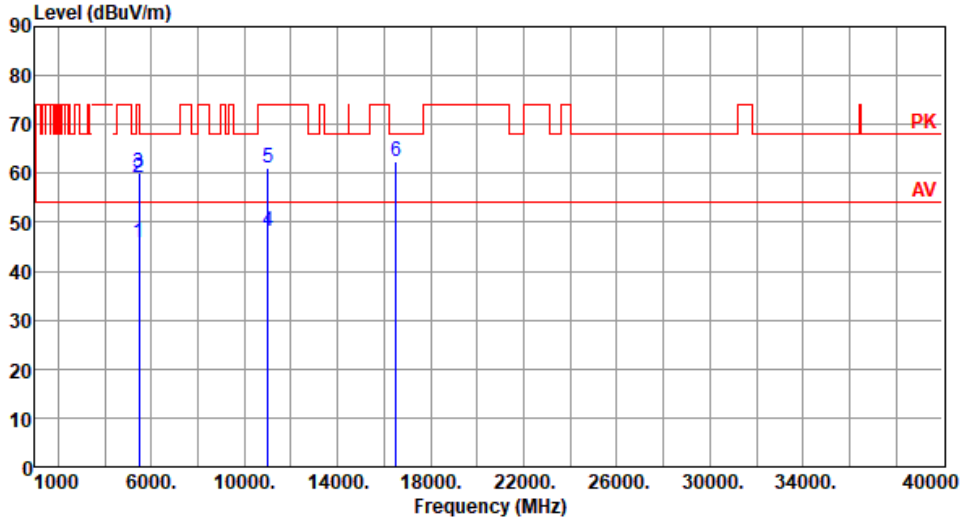
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	52.93	54.00	-1.07	46.08	6.85	Average	299	291
2	5350.00	72.00	74.00	-2.00	65.15	6.85	Peak	299	291
3	10640.00	52.16	54.00	-1.84	35.79	16.37	Average	294	175
4	10640.00	65.61	74.00	-8.39	49.24	16.37	Peak	294	175
5	15960.00	52.09	54.00	-1.91	35.56	16.53	Average	325	199
6	15960.00	65.58	74.00	-8.42	49.05	16.53	Peak	325	199

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

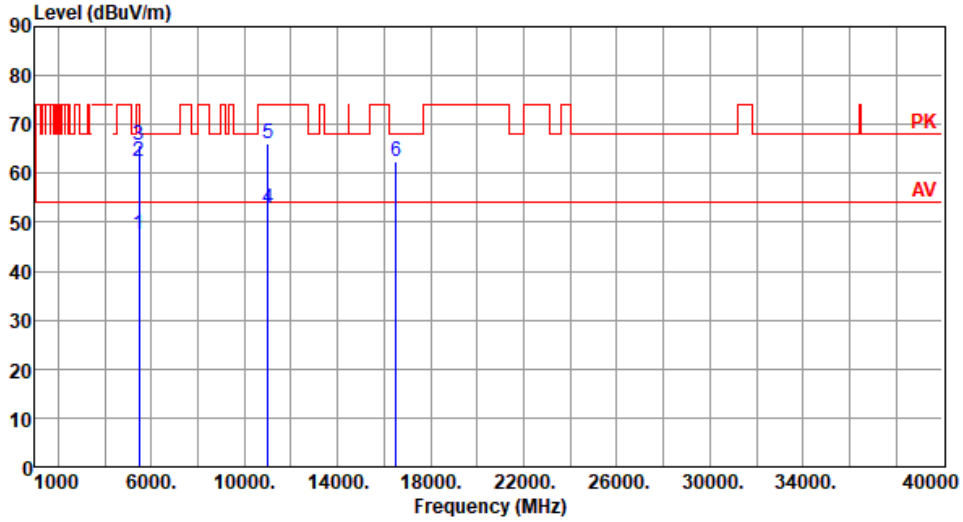
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.76	54.00	-8.24	38.51	7.25	Average	125	63
2	5460.00	59.28	74.00	-14.72	52.03	7.25	Peak	125	63
3	5470.00	60.25	68.20	-7.95	52.97	7.28	Peak	125	63
4	11000.00	48.11	54.00	-5.89	31.27	16.84	Average	220	53
5	11000.00	60.95	74.00	-13.05	44.11	16.84	Peak	220	53
6	16500.00	62.44	68.20	-5.76	44.80	17.64	Peak	100	51

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

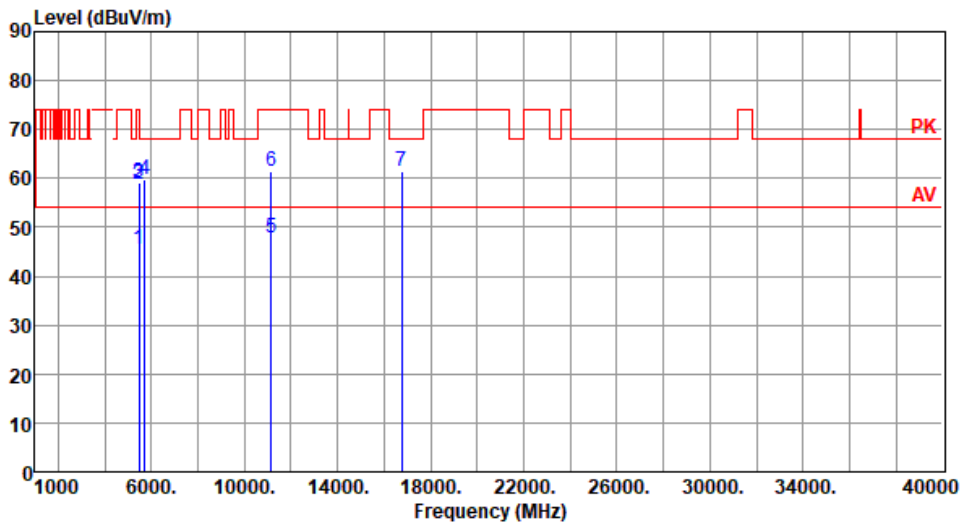
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	47.56	54.00	-6.44	40.31	7.25	Average	264	233
2	5460.00	62.31	74.00	-11.69	55.06	7.25	Peak	264	233
3	5470.00	65.62	68.20	-2.58	58.34	7.28	Peak	264	233
4	11000.00	52.86	54.00	-1.14	36.02	16.84	Average	339	169
5	11000.00	66.00	74.00	-8.00	49.16	16.84	Peak	339	169
6	16500.00	62.48	68.20	-5.72	44.84	17.64	Peak	100	55

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

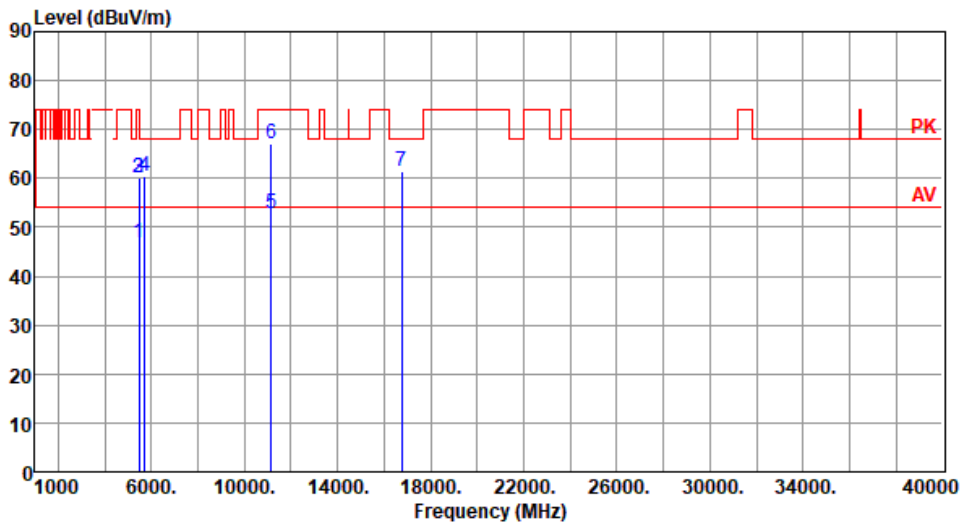
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.62	54.00	-8.38	38.37	7.25	Average	125	61
2	5460.00	58.66	74.00	-15.34	51.41	7.25	Peak	125	61
3	5470.00	59.12	68.20	-9.08	51.84	7.28	Peak	125	61
4	5725.00	59.68	68.20	-8.52	52.02	7.66	Peak	125	61
5	11160.00	47.74	54.00	-6.26	31.15	16.59	Average	234	9
6	11160.00	61.35	74.00	-12.65	44.76	16.59	Peak	234	9
7	16740.00	61.58	68.20	-6.62	43.35	18.23	Peak	100	23

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

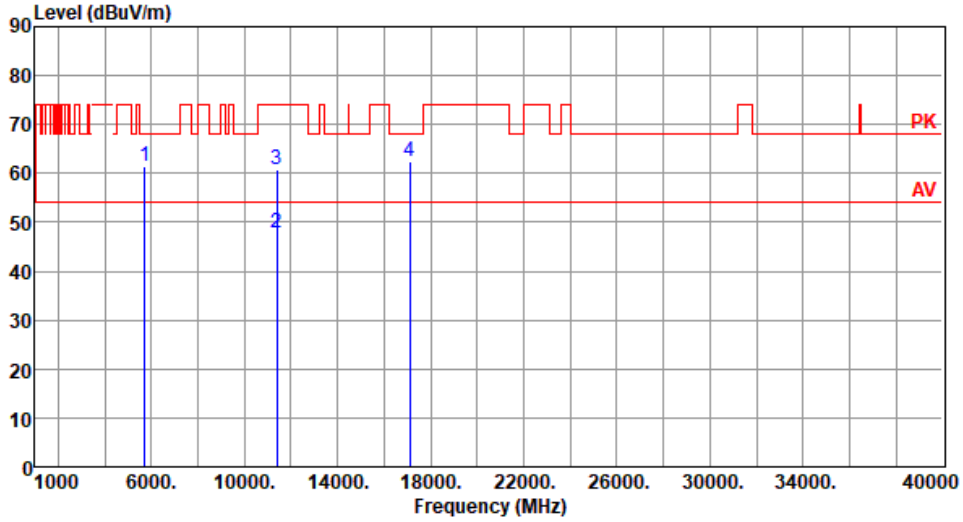
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	46.88	54.00	-7.12	39.63	7.25	Average	290	303
2	5460.00	60.15	74.00	-13.85	52.90	7.25	Peak	290	303
3	5470.00	59.96	68.20	-8.24	52.68	7.28	Peak	290	303
4	5725.00	60.53	68.20	-7.67	52.87	7.66	Peak	290	303
5	11160.00	52.92	54.00	-1.08	36.33	16.59	Average	264	165
6	11160.00	67.15	74.00	-6.85	50.56	16.59	Peak	264	165
7	16740.00	61.43	68.20	-6.77	43.20	18.23	Peak	100	56

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

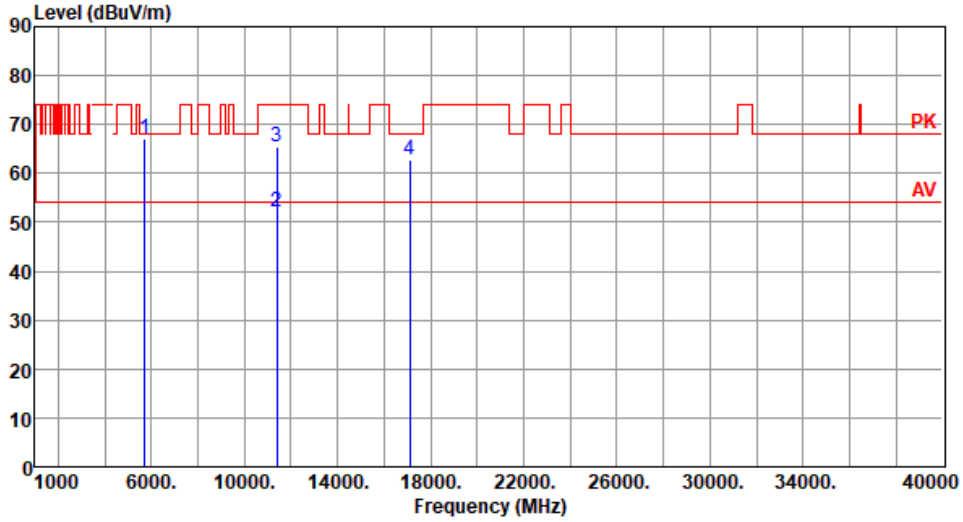
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	61.35	68.20	-6.85	53.69	7.66	Peak	121	59
2	11400.00	47.95	54.00	-6.05	31.22	16.73	Average	196	25
3	11400.00	60.81	74.00	-13.19	44.08	16.73	Peak	196	25
4	17100.00	62.58	68.20	-5.62	44.34	18.24	Peak	100	34

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

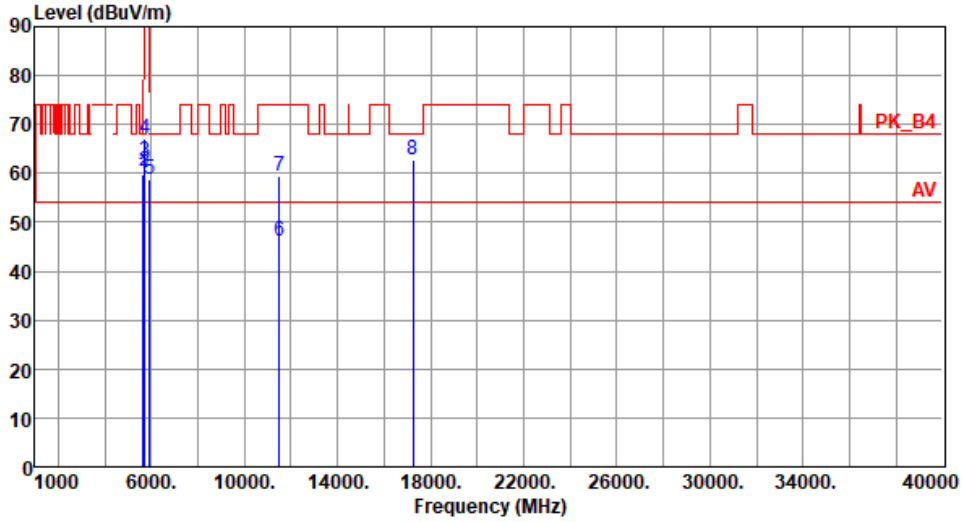
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	67.15	68.20	-1.05	59.49	7.66	Peak	341	246
2	11400.00	52.17	54.00	-1.83	35.44	16.73	Average	342	187
3	11400.00	65.58	74.00	-8.42	48.85	16.73	Peak	342	187
4	17100.00	62.85	68.20	-5.35	44.61	18.24	Peak	100	53

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

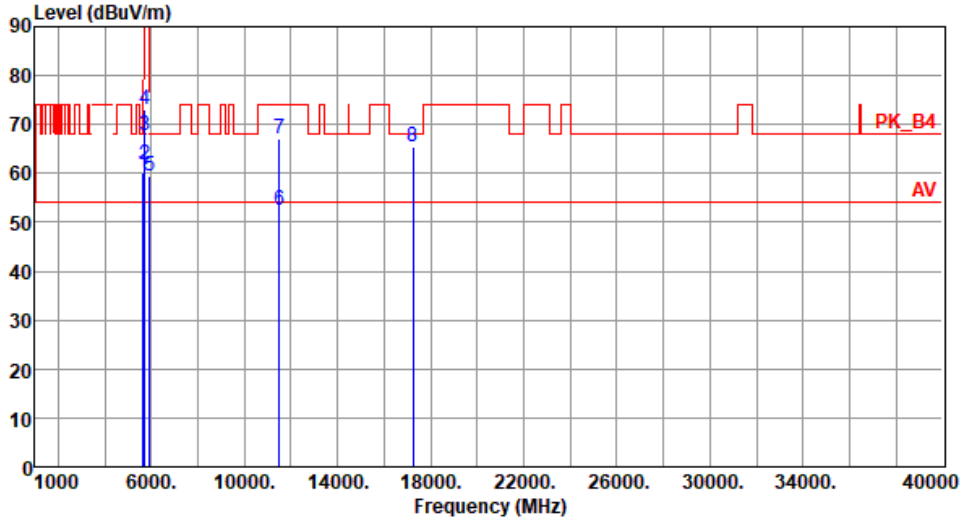
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.85	68.20	-8.35	52.46	7.39	Peak	120	65
2	5700.00	60.36	105.20	-44.84	52.86	7.50	Peak	120	65
3	5720.00	62.34	110.80	-48.46	54.72	7.62	Peak	120	65
4	5725.00	66.98	122.20	-55.22	59.32	7.66	Peak	120	65
5	5925.00	58.76	68.20	-9.44	50.69	8.07	Peak	120	65
6	11490.00	46.19	54.00	-7.81	29.43	16.76	Average	153	21
7	11490.00	59.46	74.00	-14.54	42.70	16.76	Peak	153	21
8	17235.00	62.89	68.20	-5.31	44.25	18.64	Peak	100	47

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

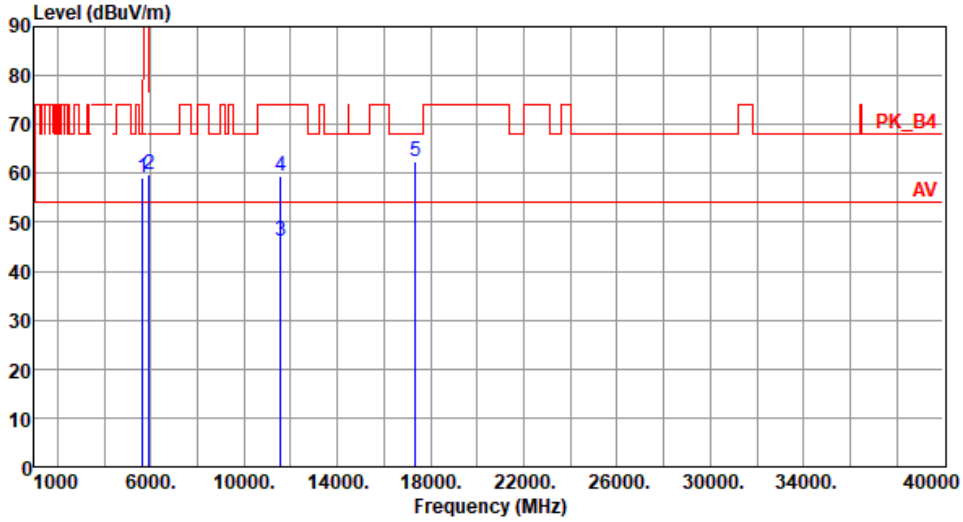
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	60.02	68.20	-8.18	52.63	7.39	Peak	315	196
2	5700.00	61.74	105.20	-43.46	54.24	7.50	Peak	315	196
3	5720.00	67.71	110.80	-43.09	60.09	7.62	Peak	315	196
4	5725.00	73.02	122.20	-49.18	65.36	7.66	Peak	315	196
5	5925.00	59.38	68.20	-8.82	51.31	8.07	Peak	315	196
6	11490.00	52.35	54.00	-1.65	35.59	16.76	Average	325	190
7	11490.00	66.96	74.00	-7.04	50.20	16.76	Peak	325	190
8	17235.00	65.54	68.20	-2.66	46.90	18.64	Peak	256	155

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

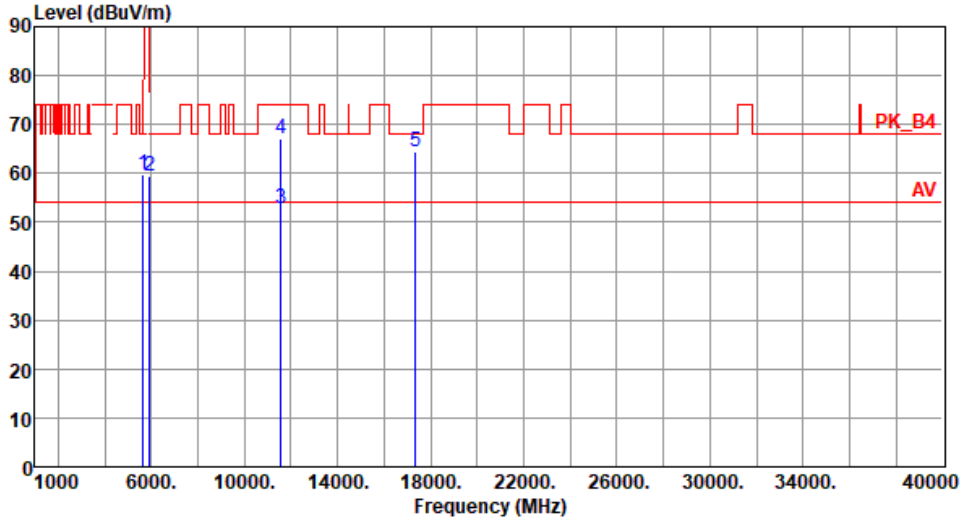
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	59.18	68.20	-9.02	51.79	7.39	Peak	122	65
2	5925.00	59.64	68.20	-8.56	51.57	8.07	Peak	122	65
3	11570.00	46.28	54.00	-7.72	29.67	16.61	Average	145	31
4	11570.00	59.52	74.00	-14.48	42.91	16.61	Peak	145	31
5	17355.00	62.56	68.20	-5.64	43.33	19.23	Peak	100	51

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

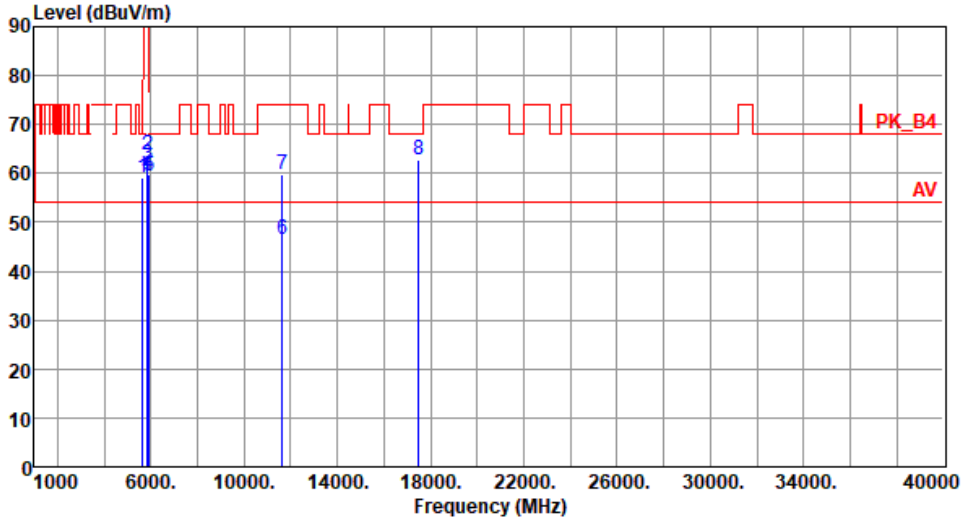
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	59.65	68.20	-8.55	52.26	7.39	Peak	274	188
2	5925.00	59.61	68.20	-8.59	51.54	8.07	Peak	274	188
3	11570.00	52.96	54.00	-1.04	36.35	16.61	Average	319	189
4	11570.00	67.23	74.00	-6.77	50.62	16.61	Peak	319	189
5	17355.00	64.48	68.20	-3.72	45.25	19.23	Peak	236	144

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

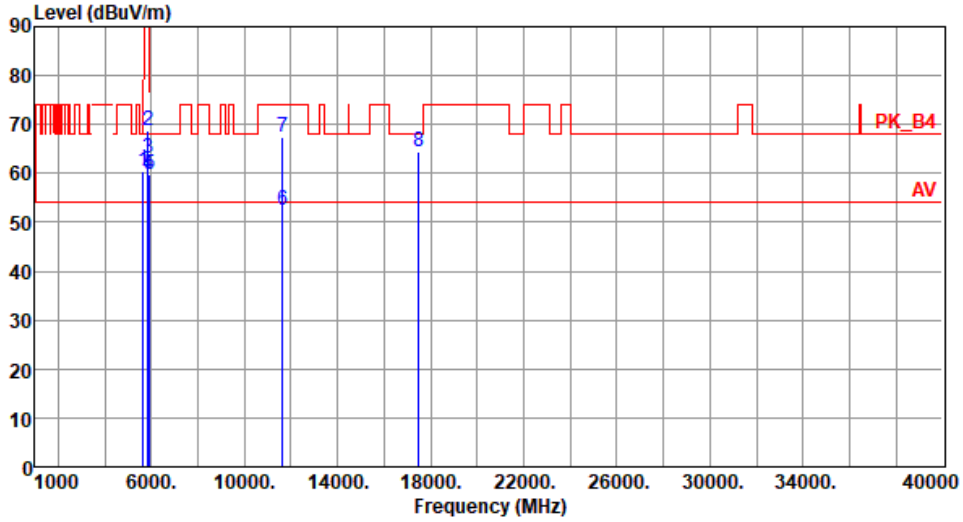
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	59.13	68.20	-9.07	51.74	7.39	Peak	115	49
2	5850.00	63.79	122.20	-58.41	55.77	8.02	Peak	115	49
3	5855.00	61.81	110.80	-48.99	53.79	8.02	Peak	115	49
4	5875.00	59.67	105.20	-45.53	51.64	8.03	Peak	115	49
5	5925.00	59.53	68.20	-8.67	51.46	8.07	Peak	115	49
6	11650.00	46.55	54.00	-7.45	30.17	16.38	Average	131	46
7	11650.00	59.79	74.00	-14.21	43.41	16.38	Peak	131	46
8	17475.00	62.78	68.20	-5.42	43.04	19.74	Peak	100	47

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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

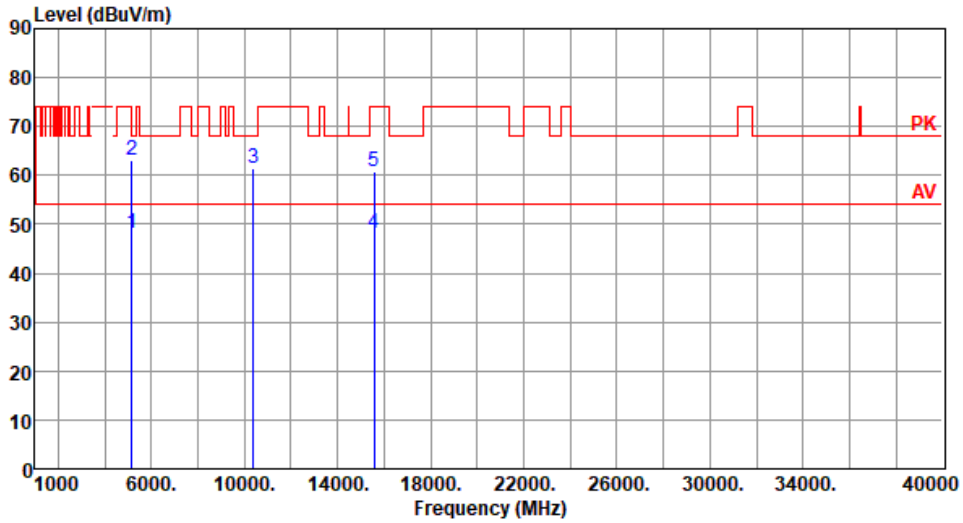


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.34	68.20	-7.86	52.95	7.39	Peak	304	195
2	5850.00	68.85	122.20	-53.35	60.83	8.02	Peak	304	195
3	5855.00	63.04	110.80	-47.76	55.02	8.02	Peak	304	195
4	5875.00	59.92	105.20	-45.28	51.89	8.03	Peak	304	195
5	5925.00	59.89	68.20	-8.31	51.82	8.07	Peak	304	195
6	11650.00	52.57	54.00	-1.43	36.19	16.38	Average	316	182
7	11650.00	67.46	74.00	-6.54	51.08	16.38	Peak	316	182
8	17475.00	64.54	68.20	-3.66	44.80	19.74	Peak	226	141

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

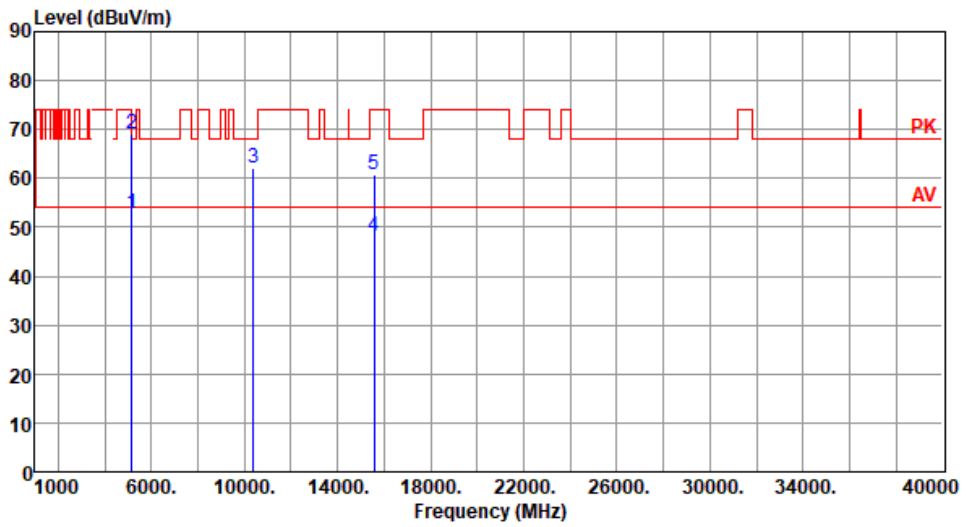
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	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	48.14	54.00	-5.86	40.82	7.32	Average	116	265
2	5150.00	62.95	74.00	-11.05	55.63	7.32	Peak	116	265
3	10380.00	61.35	68.20	-6.85	45.17	16.18	Peak	100	36
4	15570.00	48.16	54.00	-5.84	30.84	17.32	Average	100	334
5	15570.00	60.84	74.00	-13.16	43.52	17.32	Peak	100	334

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

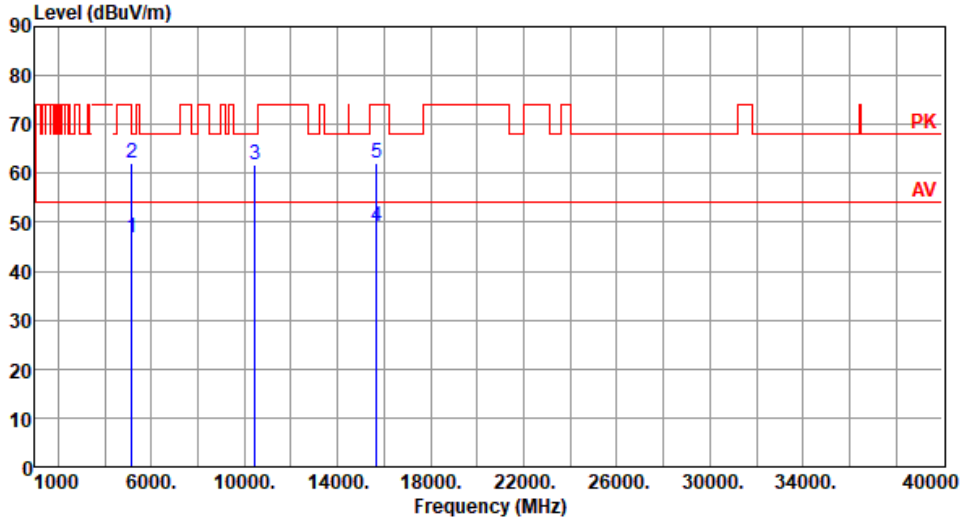
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	52.86	54.00	-1.14	45.54	7.32	Average	236	136
2	5150.00	69.17	74.00	-4.83	61.85	7.32	Peak	236	136
3	10380.00	62.21	68.20	-5.99	46.03	16.18	Peak	316	188
4	15570.00	48.22	54.00	-5.78	30.90	17.32	Average	300	191
5	15570.00	60.90	74.00	-13.10	43.58	17.32	Peak	300	191

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

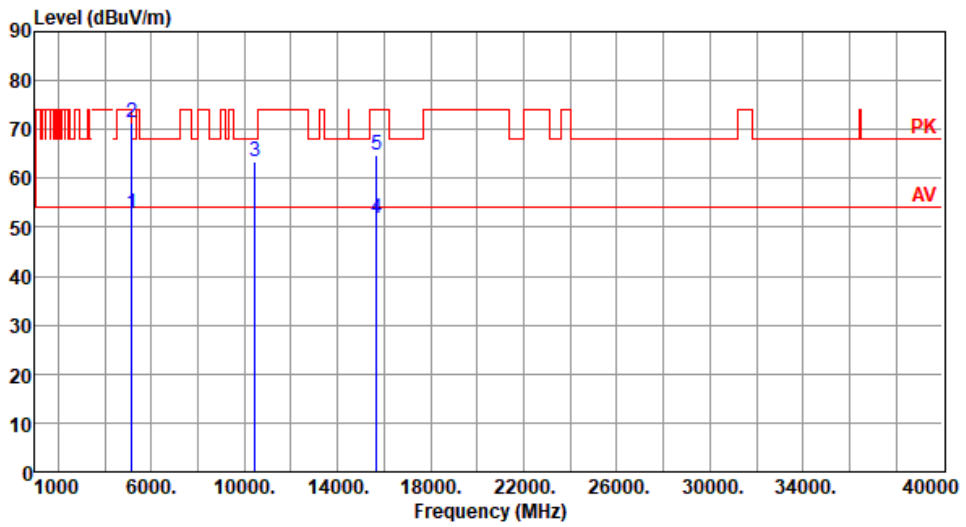
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	46.69	54.00	-7.31	39.37	7.32	Average	116	31
2	5150.00	62.15	74.00	-11.85	54.83	7.32	Peak	116	31
3	10460.00	61.86	68.20	-6.34	45.49	16.37	Peak	100	35
4	15690.00	49.24	54.00	-4.76	32.56	16.68	Average	100	335
5	15690.00	62.08	74.00	-11.92	45.40	16.68	Peak	100	335

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

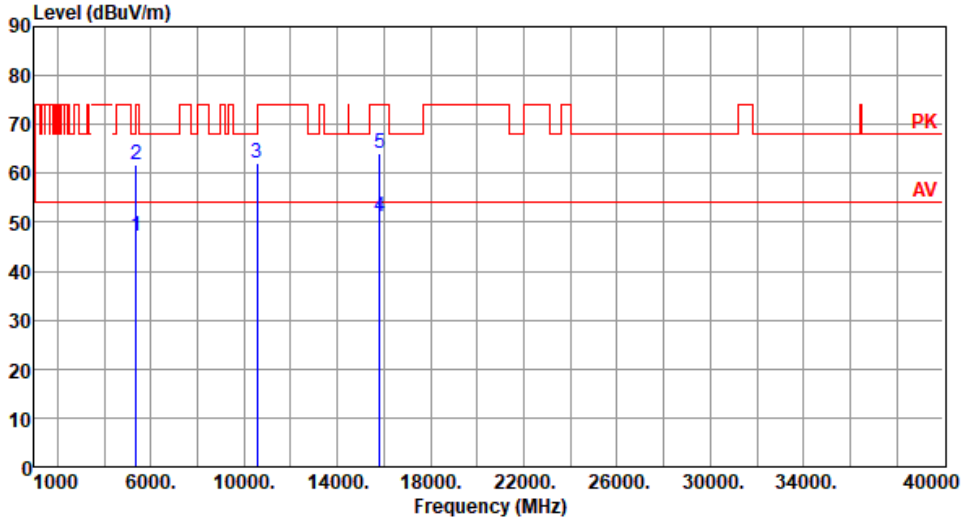
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	52.93	54.00	-1.07	45.61	7.32	Average	236	135
2	5150.00	71.32	74.00	-2.68	64.00	7.32	Peak	236	135
3	10460.00	63.30	68.20	-4.90	46.93	16.37	Peak	282	172
4	15690.00	51.86	54.00	-2.14	35.18	16.68	Average	282	231
5	15690.00	64.60	74.00	-9.40	47.92	16.68	Peak	282	231

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

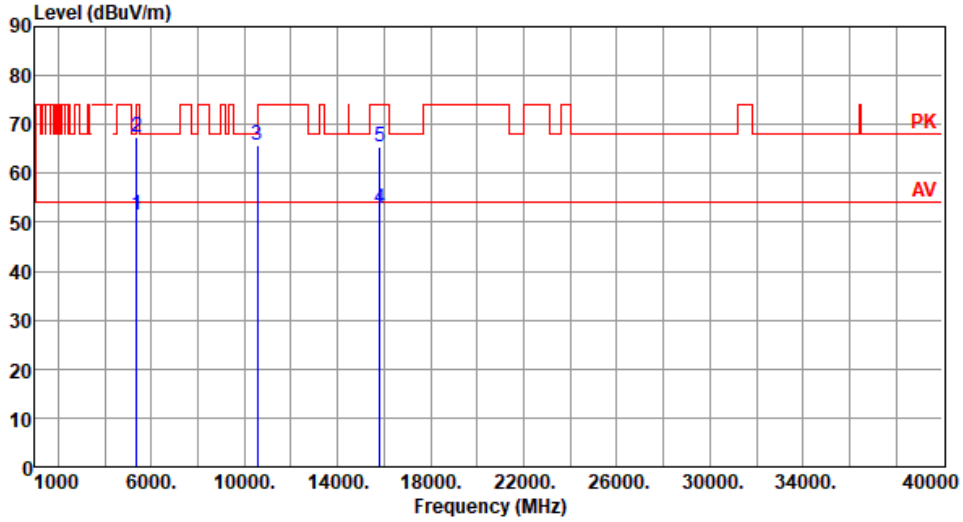
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.25	54.00	-6.75	40.40	6.85	Average	119	36
2	5350.00	61.66	74.00	-12.34	54.81	6.85	Peak	119	36
3	10540.00	62.15	68.20	-6.05	45.74	16.41	Peak	100	39
4	15810.00	51.29	54.00	-2.71	34.73	16.56	Average	100	343
5	15810.00	64.15	74.00	-9.85	47.59	16.56	Peak	100	343

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

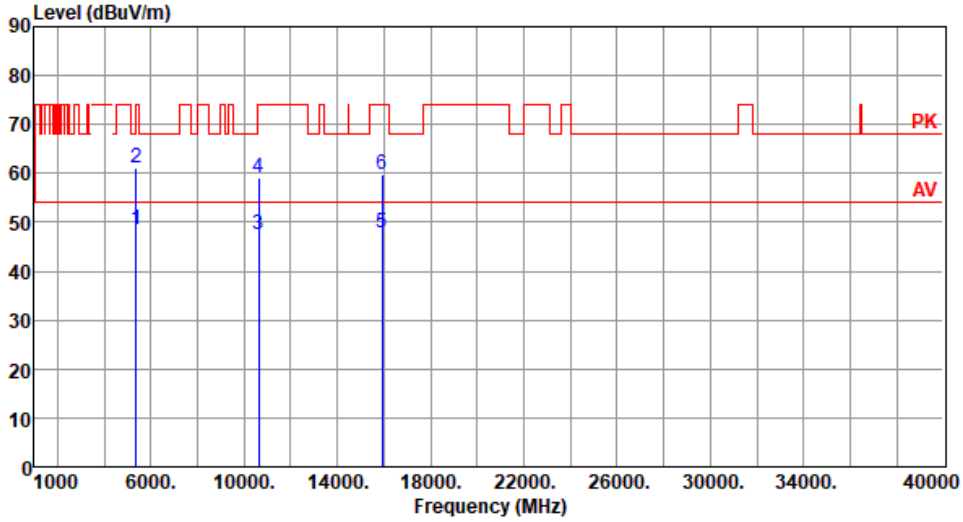
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.54	54.00	-2.46	44.69	6.85	Average	235	134
2	5350.00	67.34	74.00	-6.66	60.49	6.85	Peak	235	134
3	10540.00	65.62	68.20	-2.58	49.21	16.41	Peak	293	176
4	15810.00	52.71	54.00	-1.29	36.15	16.56	Average	293	233
5	15810.00	65.54	74.00	-8.46	48.98	16.56	Peak	293	233

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

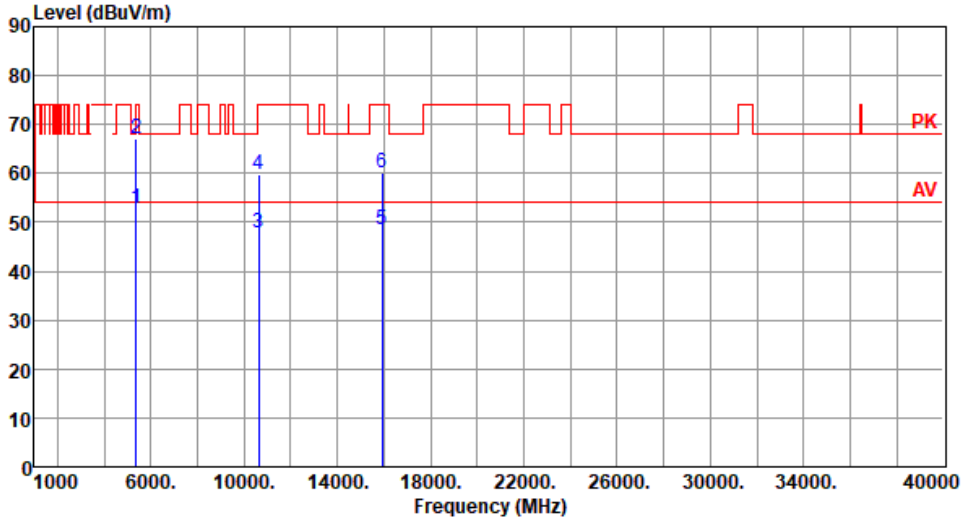
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	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	48.41	54.00	-5.59	41.56	6.85	Average	120	39
2	5350.00	61.17	74.00	-12.83	54.32	6.85	Peak	120	39
3	10620.00	47.48	54.00	-6.52	31.11	16.37	Average	100	45
4	10620.00	58.95	74.00	-15.05	42.58	16.37	Peak	100	45
5	15930.00	47.84	54.00	-6.16	31.23	16.61	Average	100	345
6	15930.00	59.77	74.00	-14.23	43.16	16.61	Peak	100	345

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

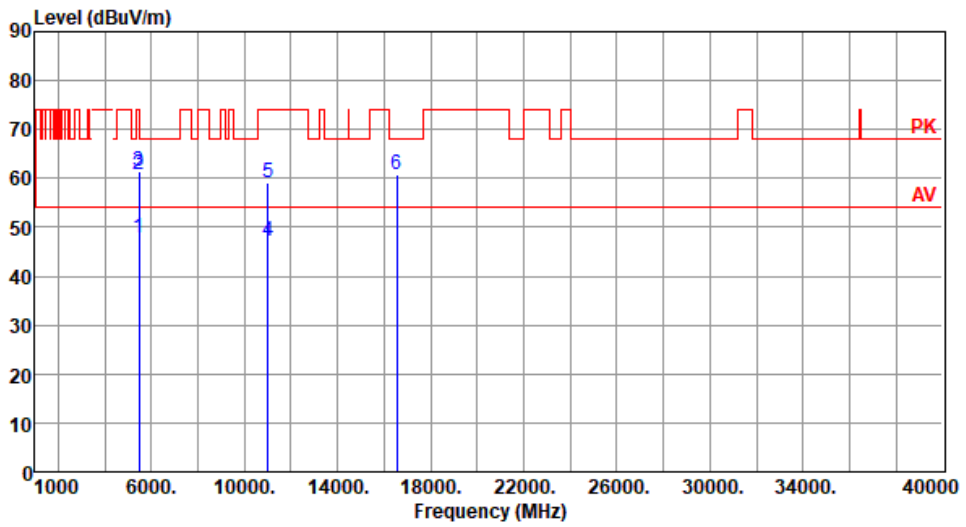
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	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	52.97	54.00	-1.03	46.12	6.85	Average	224	135
2	5350.00	67.19	74.00	-6.81	60.34	6.85	Peak	224	135
3	10620.00	47.91	54.00	-6.09	31.54	16.37	Average	290	175
4	10620.00	59.92	74.00	-14.08	43.55	16.37	Peak	290	175
5	15930.00	48.57	54.00	-5.43	31.96	16.61	Average	285	231
6	15930.00	60.14	74.00	-13.86	43.53	16.61	Peak	285	231

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

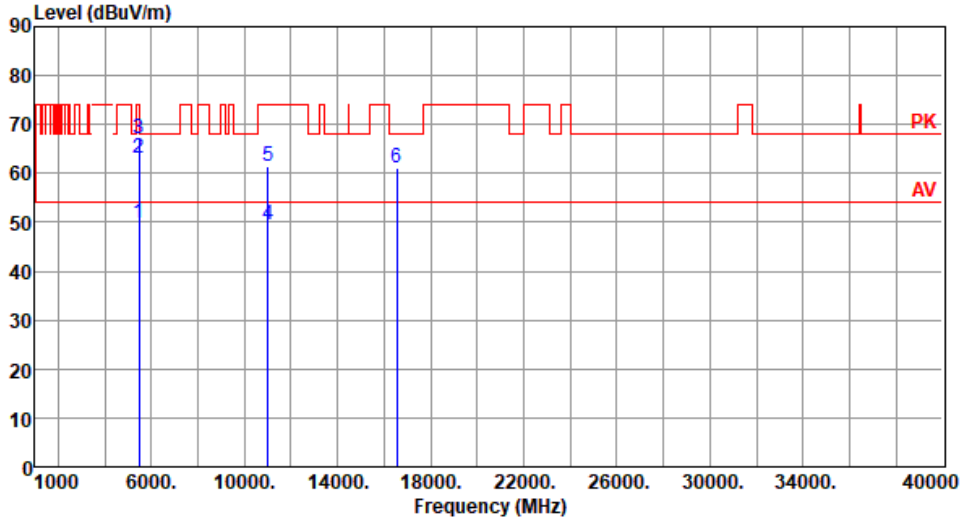
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	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	47.74	54.00	-6.26	40.49	7.25	Average	125	61
2	5460.00	60.71	74.00	-13.29	53.46	7.25	Peak	125	61
3	5470.00	61.40	68.20	-6.80	54.12	7.28	Peak	125	61
4	11020.00	47.27	54.00	-6.73	30.46	16.81	Average	100	35
5	11020.00	59.28	74.00	-14.72	42.47	16.81	Peak	100	35
6	16530.00	60.85	68.20	-7.35	43.02	17.83	Peak	100	25

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

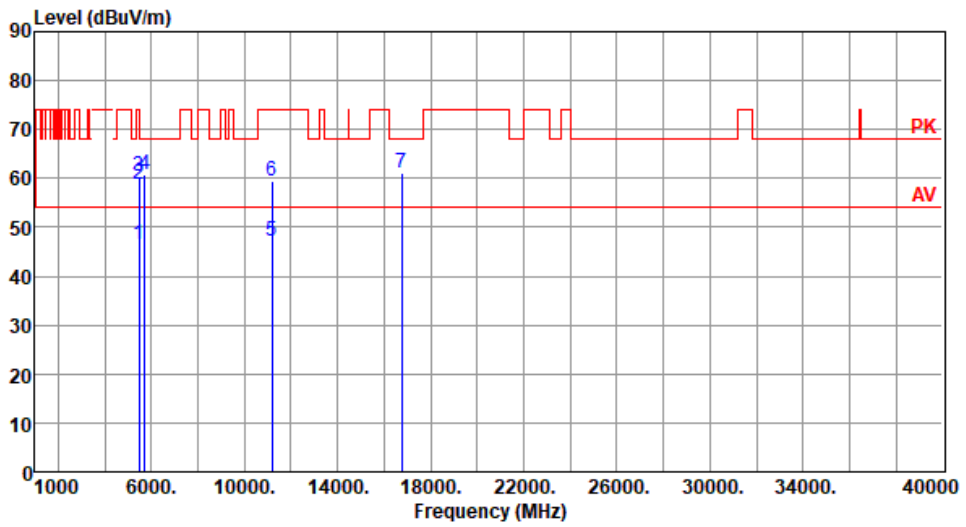
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	49.78	54.00	-4.22	42.53	7.25	Average	272	198
2	5460.00	63.09	74.00	-10.91	55.84	7.25	Peak	272	198
3	5470.00	67.14	68.20	-1.06	59.86	7.28	Peak	272	198
4	11020.00	49.37	54.00	-4.63	32.56	16.81	Average	333	165
5	11020.00	61.37	74.00	-12.63	44.56	16.81	Peak	333	165
6	16530.00	61.04	68.20	-7.16	43.21	17.83	Peak	100	30

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

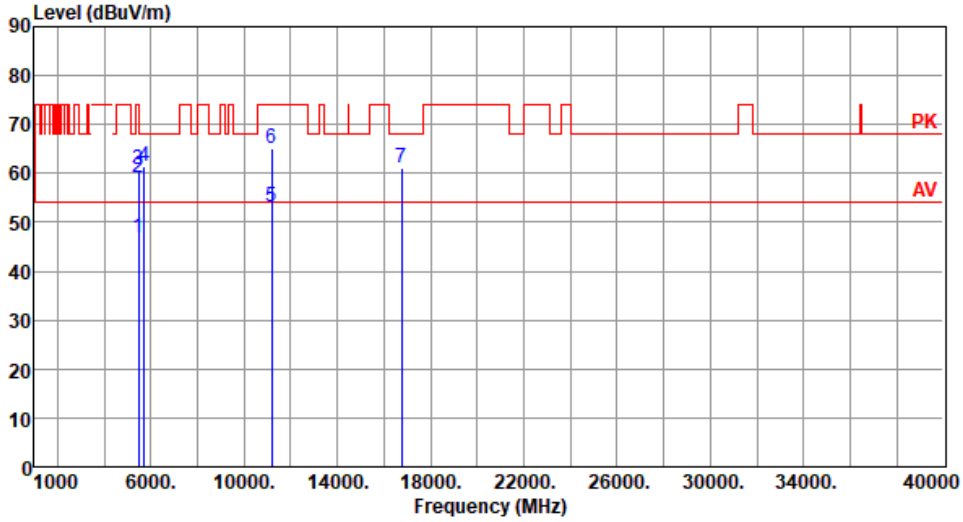
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.46	54.00	-7.54	39.21	7.25	Average	123	61
2	5460.00	58.77	74.00	-15.23	51.52	7.25	Peak	123	61
3	5470.00	60.54	68.20	-7.66	53.26	7.28	Peak	123	61
4	5725.00	60.92	68.20	-7.28	53.26	7.66	Peak	123	61
5	11180.00	47.09	54.00	-6.91	30.53	16.56	Average	236	10
6	11180.00	59.54	74.00	-14.46	42.98	16.56	Peak	236	10
7	16770.00	61.05	68.20	-7.15	42.82	18.23	Peak	100	60

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

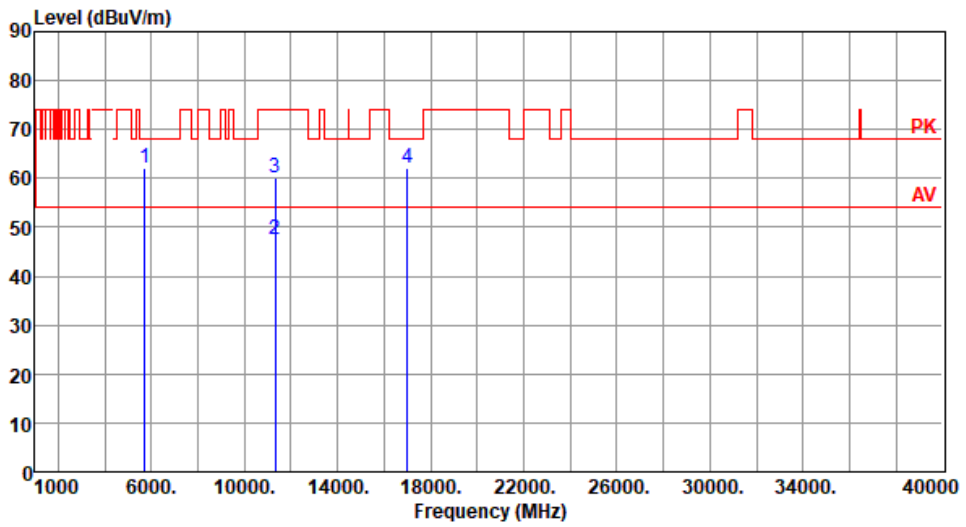
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Vertical		



	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	46.77	54.00	-7.23	39.52	7.25	Average	301	231
2	5460.00	59.11	74.00	-14.89	51.86	7.25	Peak	301	231
3	5470.00	60.80	68.20	-7.40	53.52	7.28	Peak	301	231
4	5725.00	61.38	68.20	-6.82	53.72	7.66	Peak	301	231
5	11180.00	52.99	54.00	-1.01	36.43	16.56	Average	337	169
6	11180.00	64.95	74.00	-9.05	48.39	16.56	Peak	337	169
7	16770.00	61.22	68.20	-6.98	42.99	18.23	Peak	100	30

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

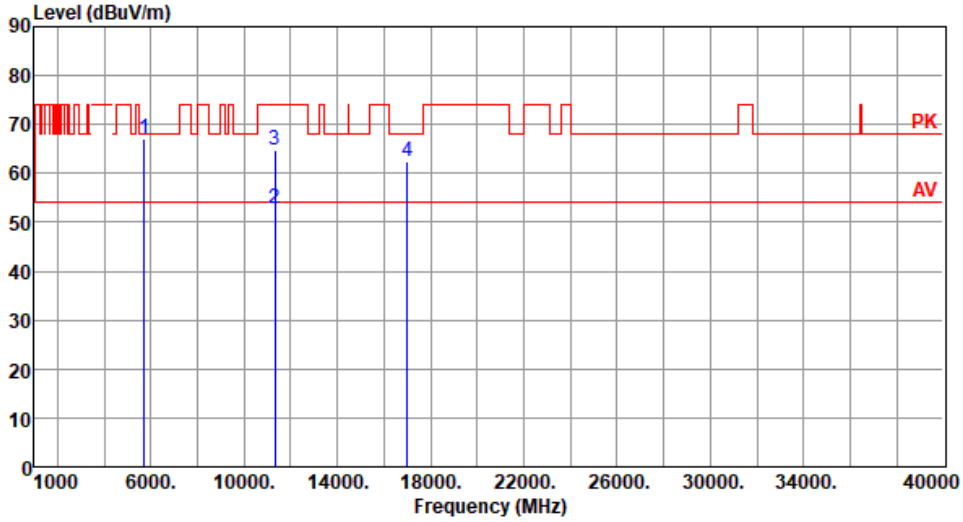
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	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	61.96	68.20	-6.24	54.30	7.66	Peak	120	69
2	11340.00	47.63	54.00	-6.37	31.05	16.58	Average	232	15
3	11340.00	60.09	74.00	-13.91	43.51	16.58	Peak	232	15
4	17010.00	62.11	68.20	-6.09	43.45	18.66	Peak	100	30

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

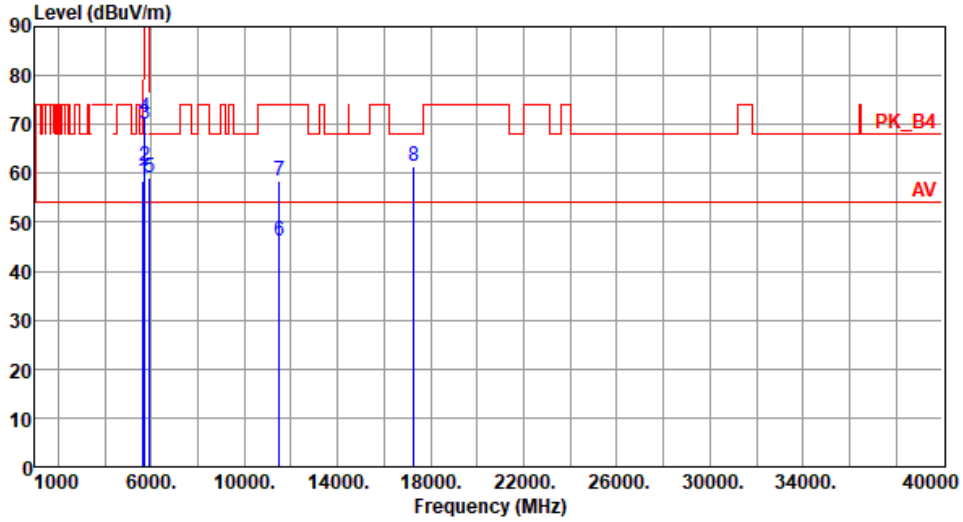
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	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	67.10	68.20	-1.10	59.44	7.66	Peak	280	206
2	11340.00	52.71	54.00	-1.29	36.13	16.58	Average	327	178
3	11340.00	64.67	74.00	-9.33	48.09	16.58	Peak	327	178
4	17010.00	62.27	68.20	-5.93	43.61	18.66	Peak	100	40

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

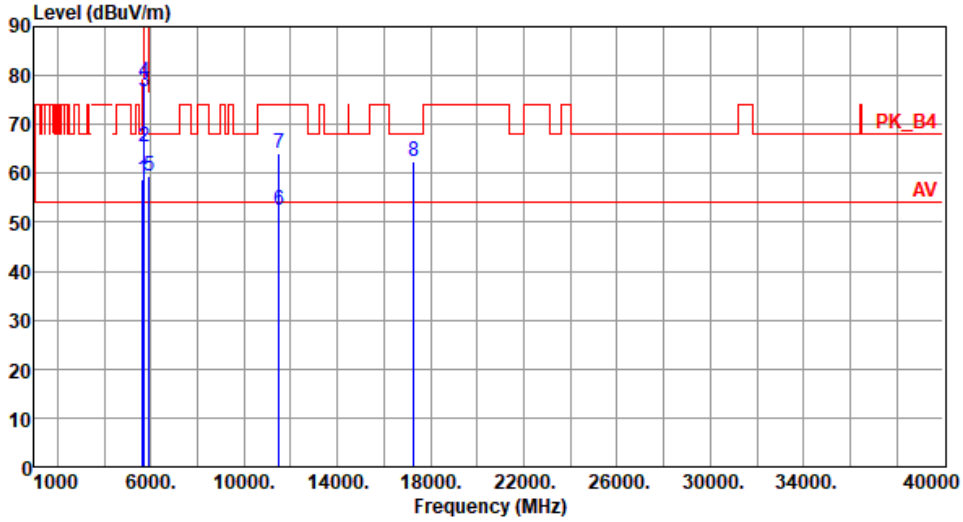
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	58.51	68.20	-9.69	51.12	7.39	Peak	125	64
2	5700.00	61.36	105.20	-43.84	53.86	7.50	Peak	125	64
3	5720.00	70.08	110.80	-40.72	62.46	7.62	Peak	125	64
4	5725.00	71.33	122.20	-50.87	63.67	7.66	Peak	125	64
5	5925.00	59.19	68.20	-9.01	51.12	8.07	Peak	125	64
6	11510.00	46.20	54.00	-7.80	29.45	16.75	Average	100	32
7	11510.00	58.33	74.00	-15.67	41.58	16.75	Peak	100	32
8	17265.00	61.35	68.20	-6.85	42.54	18.81	Peak	100	50

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

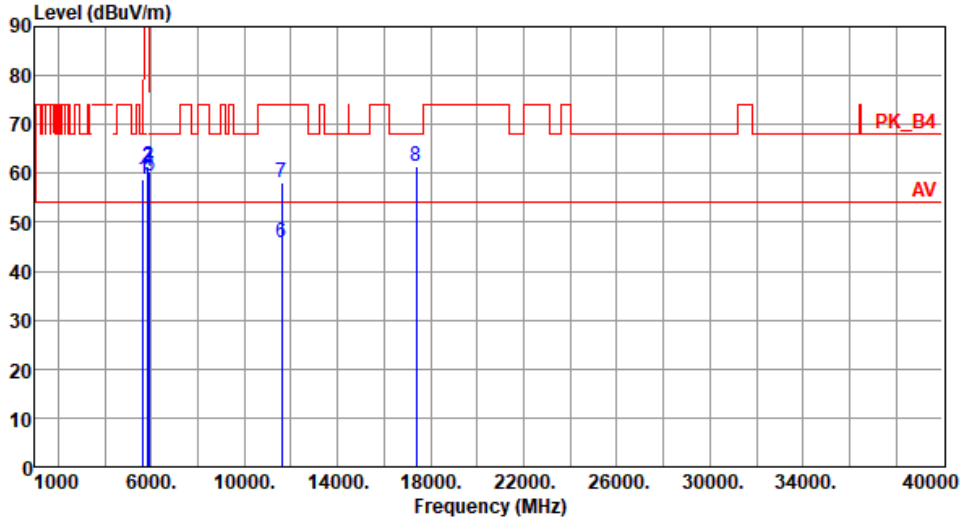
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	58.85	68.20	-9.35	51.46	7.39	Peak	276	195
2	5700.00	65.46	105.20	-39.74	57.96	7.50	Peak	276	195
3	5720.00	76.87	110.80	-33.93	69.25	7.62	Peak	276	195
4	5725.00	78.65	122.20	-43.55	70.99	7.66	Peak	276	195
5	5925.00	59.49	68.20	-8.71	51.42	8.07	Peak	276	195
6	11510.00	52.63	54.00	-1.37	35.88	16.75	Average	318	193
7	11510.00	64.16	74.00	-9.84	47.41	16.75	Peak	318	193
8	17265.00	62.50	68.20	-5.70	43.69	18.81	Peak	247	141

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

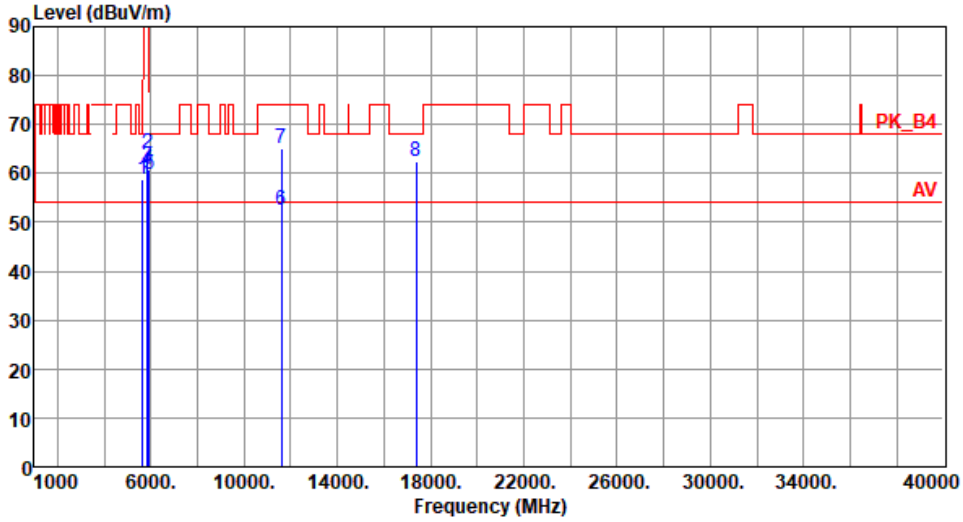
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	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	58.71	68.20	-9.49	51.32	7.39	Peak	123	62
2	5850.00	61.48	122.20	-60.72	53.46	8.02	Peak	123	62
3	5855.00	61.14	110.80	-49.66	53.12	8.02	Peak	123	62
4	5875.00	60.48	105.20	-44.72	52.45	8.03	Peak	123	62
5	5925.00	59.42	68.20	-8.78	51.35	8.07	Peak	123	62
6	11590.00	45.82	54.00	-8.18	29.25	16.57	Average	100	32
7	11590.00	58.14	74.00	-15.86	41.57	16.57	Peak	100	32
8	17385.00	61.46	68.20	-6.74	42.11	19.35	Peak	100	49

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

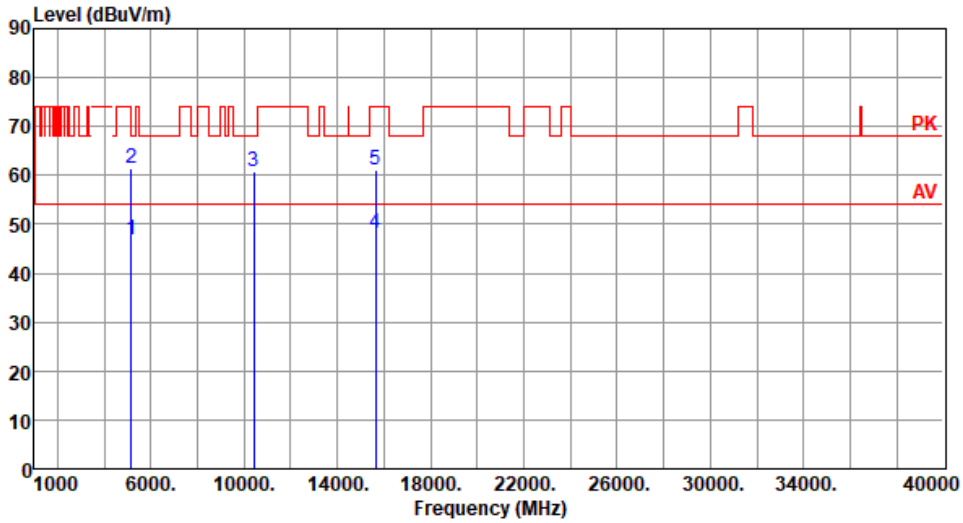


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	58.85	68.20	-9.35	51.46	7.39	Peak	274	201
2	5850.00	64.25	122.20	-57.95	56.23	8.02	Peak	274	201
3	5855.00	61.47	110.80	-49.33	53.45	8.02	Peak	274	201
4	5875.00	60.61	105.20	-44.59	52.58	8.03	Peak	274	201
5	5925.00	59.76	68.20	-8.44	51.69	8.07	Peak	274	201
6	11590.00	52.52	54.00	-1.48	35.95	16.57	Average	294	190
7	11590.00	65.01	74.00	-8.99	48.44	16.57	Peak	294	190
8	17385.00	62.58	68.20	-5.62	43.23	19.35	Peak	245	145

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

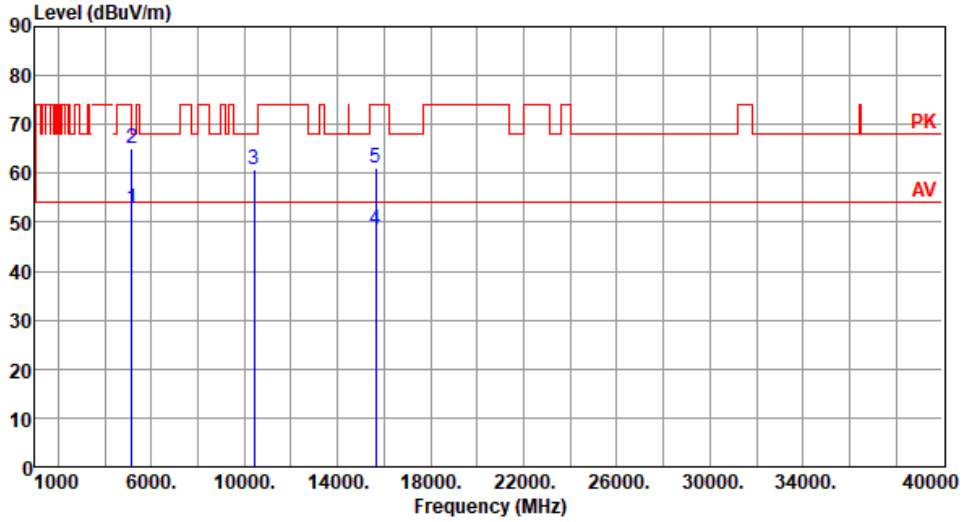
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



	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	46.98	54.00	-7.02	39.66	7.32	Average	115	31
2	5150.00	61.35	74.00	-12.65	54.03	7.32	Peak	115	31
3	10420.00	60.68	68.20	-7.52	44.37	16.31	Peak	100	35
4	15630.00	48.24	54.00	-5.76	31.16	17.08	Average	100	48
5	15630.00	61.19	74.00	-12.81	44.11	17.08	Peak	100	48

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

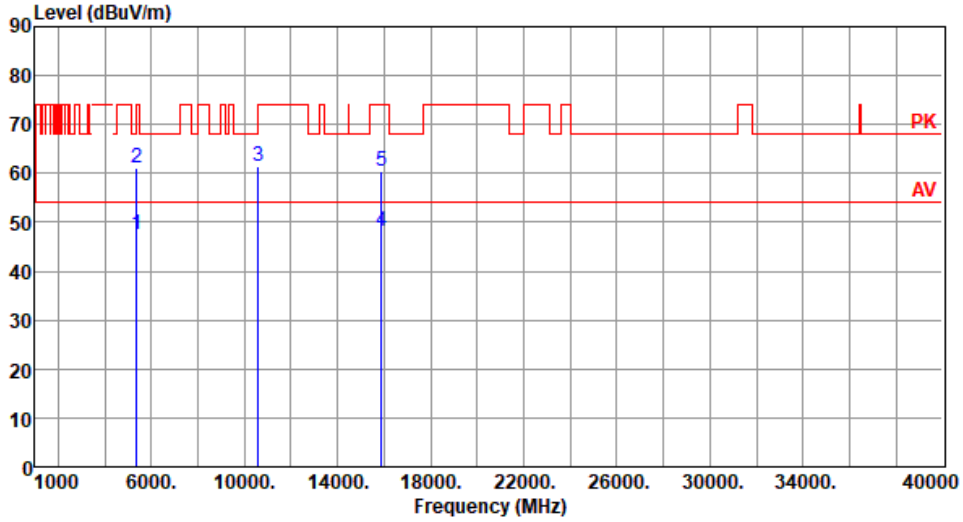
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	52.91	54.00	-1.09	45.59	7.32	Average	234	204
2	5150.00	65.10	74.00	-8.90	57.78	7.32	Peak	234	204
3	10420.00	60.74	68.20	-7.46	44.43	16.31	Peak	322	185
4	15630.00	48.32	54.00	-5.68	31.24	17.08	Average	305	169
5	15630.00	61.23	74.00	-12.77	44.15	17.08	Peak	305	169

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

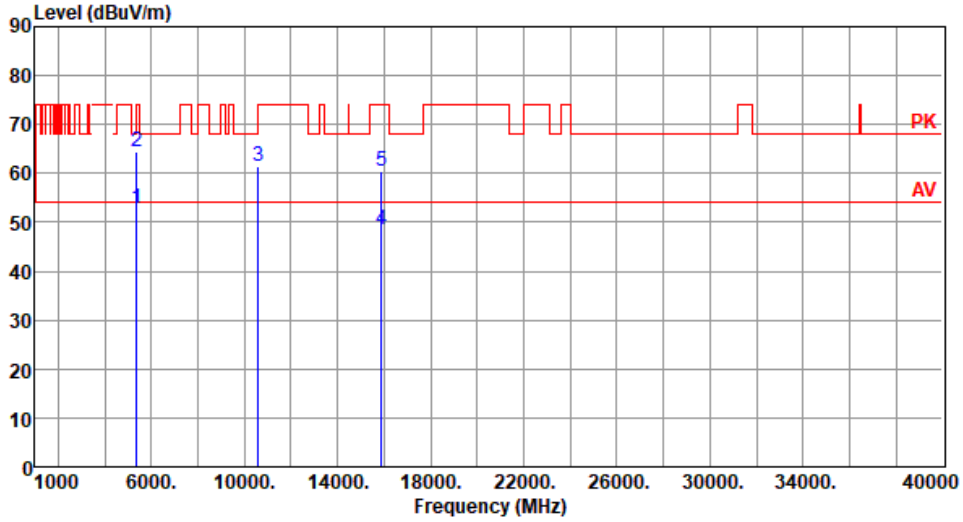
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.46	54.00	-6.54	40.61	6.85	Average	116	25
2	5350.00	61.24	74.00	-12.76	54.39	6.85	Peak	116	25
3	10580.00	61.42	68.20	-6.78	45.05	16.37	Peak	100	49
4	15870.00	48.26	54.00	-5.74	31.62	16.64	Average	100	205
5	15870.00	60.45	74.00	-13.55	43.81	16.64	Peak	100	205

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

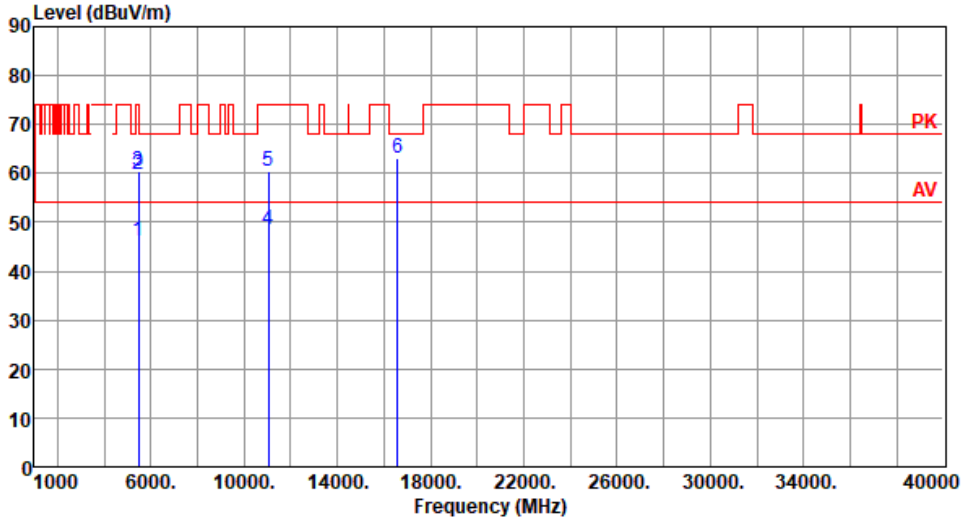
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.81	54.00	-1.19	45.96	6.85	Average	258	202
2	5350.00	64.45	74.00	-9.55	57.60	6.85	Peak	258	202
3	10580.00	61.56	68.20	-6.64	45.19	16.37	Peak	341	182
4	15870.00	48.35	54.00	-5.65	31.71	16.64	Average	288	216
5	15870.00	60.61	74.00	-13.39	43.97	16.64	Peak	288	216

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

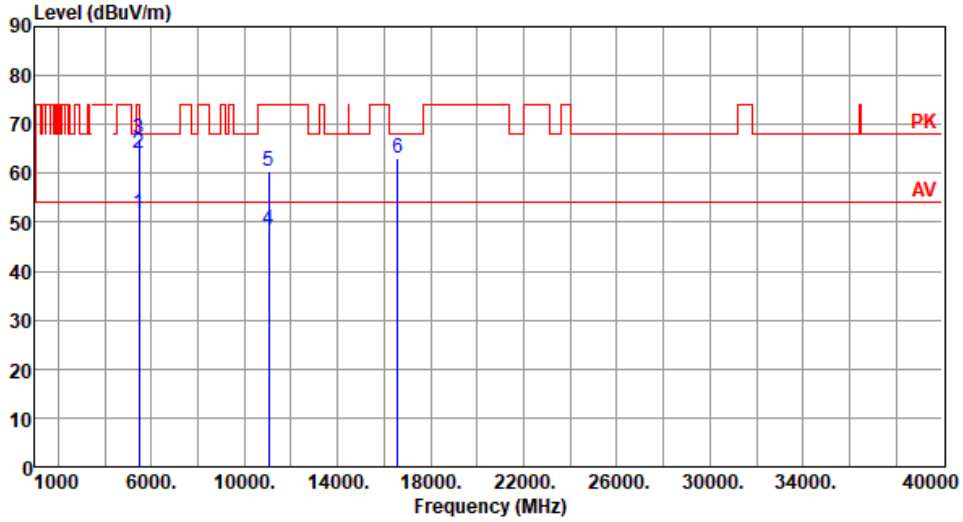
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	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	46.15	54.00	-7.85	38.90	7.25	Average	125	63
2	5460.00	59.66	74.00	-14.34	52.41	7.25	Peak	125	63
3	5470.00	60.42	68.20	-7.78	53.14	7.28	Peak	125	63
4	11060.00	48.45	54.00	-5.55	31.70	16.75	Average	100	34
5	11060.00	60.34	74.00	-13.66	43.59	16.75	Peak	100	34
6	16590.00	63.08	68.20	-5.12	44.87	18.21	Peak	100	55

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

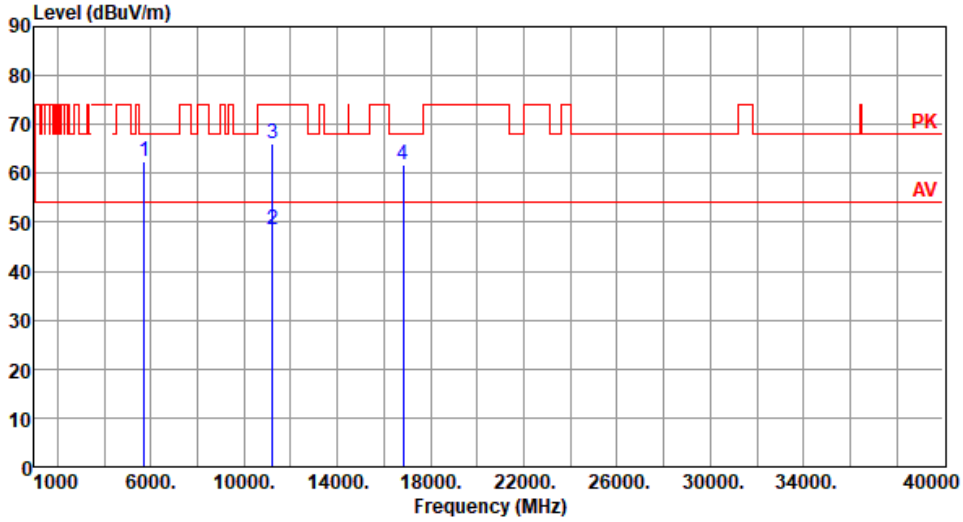
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	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	51.96	54.00	-2.04	44.71	7.25	Average	225	236
2	5460.00	64.20	74.00	-9.80	56.95	7.25	Peak	225	236
3	5470.00	67.09	68.20	-1.11	59.81	7.28	Peak	225	236
4	11060.00	48.60	54.00	-5.40	31.85	16.75	Average	265	163
5	11060.00	60.56	74.00	-13.44	43.81	16.75	Peak	265	163
6	16590.00	63.17	68.20	-5.03	44.96	18.21	Peak	100	45

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

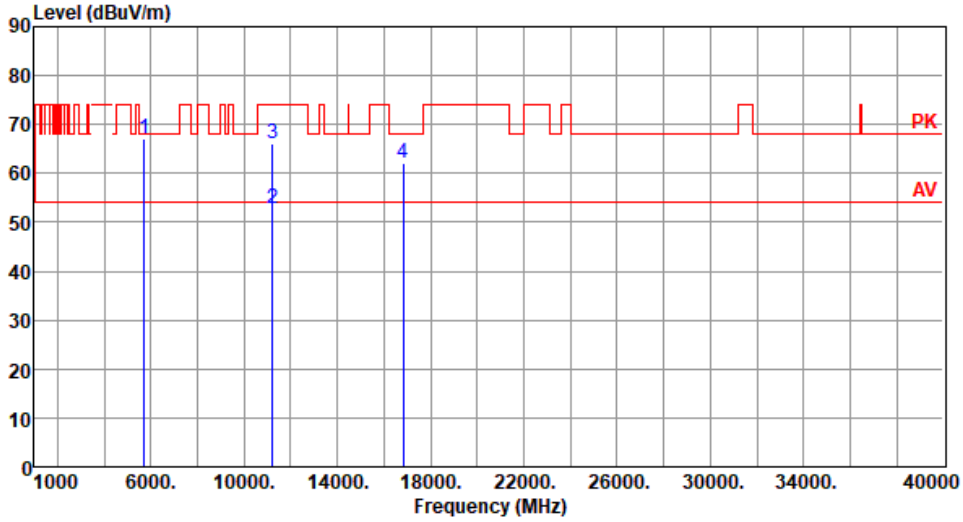
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	62.48	68.20	-5.72	54.82	7.66	Peak	129	56
2	11220.00	48.45	54.00	-5.55	31.93	16.52	Average	100	28
3	11220.00	65.98	74.00	-8.02	49.46	16.52	Peak	100	28
4	16830.00	61.82	68.20	-6.38	43.48	18.34	Peak	112	59

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

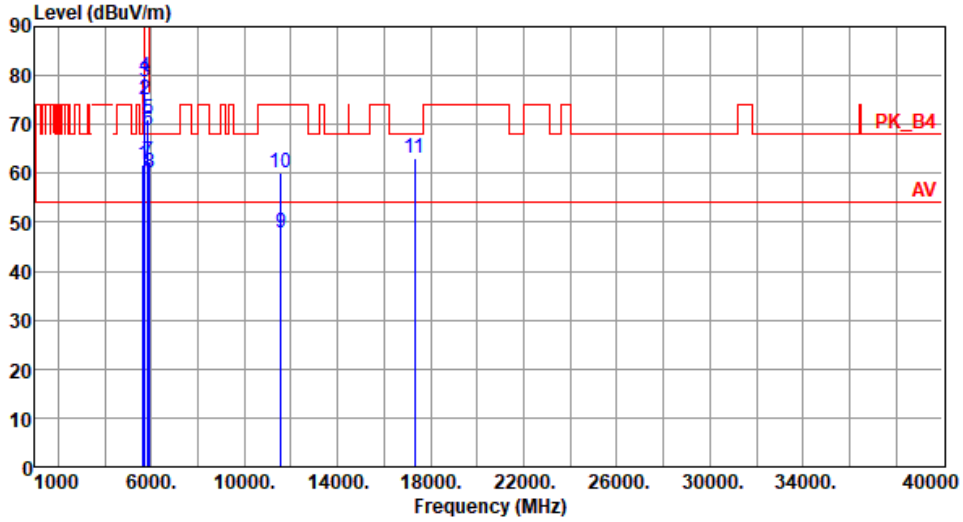
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.10	68.20	-1.10	59.44	7.66	Peak	254	195
2	11220.00	52.64	54.00	-1.36	36.12	16.52	Average	321	167
3	11220.00	66.04	74.00	-7.96	49.52	16.52	Peak	321	167
4	16830.00	61.95	68.20	-6.25	43.61	18.34	Peak	105	44

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

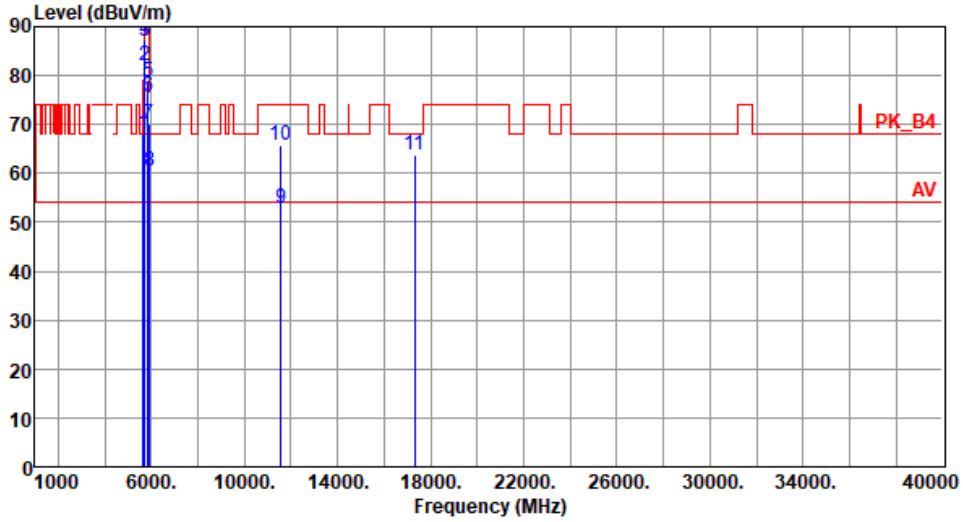
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	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	61.67	68.20	-6.53	54.28	7.39	Peak	105	62
2	5700.00	74.92	105.20	-30.28	67.42	7.50	Peak	105	62
3	5720.00	78.80	110.80	-32.00	71.18	7.62	Peak	105	62
4	5725.00	79.76	122.20	-42.44	72.10	7.66	Peak	105	62
5	5850.00	71.16	122.20	-51.04	63.14	8.02	Peak	105	62
6	5855.00	68.81	110.80	-41.99	60.79	8.02	Peak	105	62
7	5875.00	62.38	105.20	-42.82	54.35	8.03	Peak	105	62
8	5925.00	60.24	68.20	-7.96	52.17	8.07	Peak	105	62
9	11550.00	47.75	54.00	-6.25	31.09	16.66	Average	155	21
10	11550.00	60.16	74.00	-13.84	43.50	16.66	Peak	155	21
11	17325.00	62.95	68.20	-5.25	43.86	19.09	Peak	100	42

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

Modulation	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	67.99	68.20	-0.21	60.60	7.39	Peak	316	283
2	5700.00	82.07	105.20	-23.13	74.57	7.50	Peak	316	283
3	5720.00	87.13	110.80	-23.67	79.51	7.62	Peak	316	283
4	5725.00	87.33	122.20	-34.87	79.67	7.66	Peak	316	283
5	5850.00	78.78	122.20	-43.42	70.76	8.02	Peak	316	283
6	5855.00	75.56	110.80	-35.24	67.54	8.02	Peak	316	283
7	5875.00	70.08	105.20	-35.12	62.05	8.03	Peak	316	283
8	5925.00	60.49	68.20	-7.71	52.42	8.07	Peak	316	283
9	11550.00	52.95	54.00	-1.05	36.29	16.66	Average	319	187
10	11550.00	65.90	74.00	-8.10	49.24	16.66	Peak	319	187
11	17325.00	63.77	68.20	-4.43	44.68	19.09	Peak	326	149

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

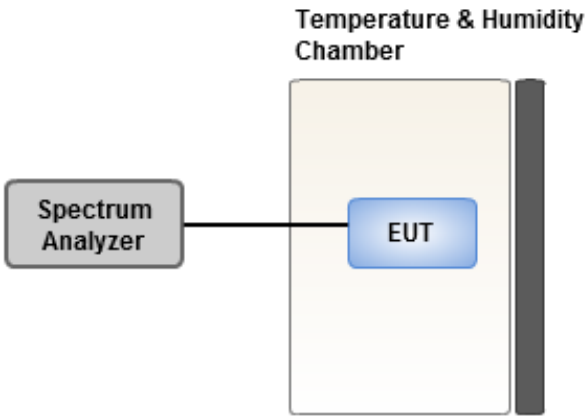
3.6.1 Limit of Frequency Stability

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	4.67	5.10	5.17	5.17
T20°CVmin	4.28	4.85	4.63	4.42
T60°CVnom	4.53	4.74	4.31	5.31
T50°CVnom	4.02	3.99	4.01	3.63
T40°CVnom	4.41	4.77	4.87	4.66
T30°CVnom	3.84	4.10	4.19	4.13
T20°CVnom	4.03	4.53	4.52	4.26
T10°CVnom	3.01	3.05	3.06	3.56
T0°CVnom	2.78	2.86	2.98	2.94
T-10°CVnom	2.66	2.68	2.93	2.48
T-20°CVnom	2.39	2.83	2.37	2.78
T-30°CVnom	1.96	2.56	1.57	2.08
Vnom [Vac]: 12		Vmax [Vac]: 13.8		Vmin [Vac]: 10.2
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	4.84	4.94	4.94	4.97
T20°CVmin	4.76	4.84	4.95	4.40
T60°CVnom	4.54	4.23	4.87	4.36
T50°CVnom	4.20	4.65	4.51	4.39
T40°CVnom	4.45	4.15	4.44	4.48
T30°CVnom	3.25	3.90	3.25	3.43
T20°CVnom	4.06	4.61	4.56	4.65
T10°CVnom	2.35	2.76	2.90	2.32
T0°CVnom	2.58	3.27	2.86	2.54
T-10°CVnom	2.63	3.36	3.07	2.76
T-20°CVnom	2.68	2.95	2.77	2.21
T-30°CVnom	2.01	2.40	2.37	1.64
Vnom [Vac]: 12		Vmax [Vac]: 13.8		Vmin [Vac]: 10.2
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.

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