FCC Test Report

FCC ID	:	**2AQYEFMP177**
Equipment	:	**Mobile Phone**
Model No.	:	**F-41A**
Brand Name	:	**FUJITSU**
Applicant	:	**FUJITSU CONNECTED TECHNOLOGIES Ltd.**
Address	:	**Chuorinkan 7-10-1 Yamato, Kanagawa 242-0007, Japan.**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Feb. 01, 2020**
Tested Date	:	**Feb. 18 ~ Feb. 26, 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
FR8D1403-01AN	Rev. 01	Initial issue	Mar. 13, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.532MHz 30.16 (Margin -15.84dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 49.06 (Margin -4.94dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB Bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: 5150~5250MHz: 12.94 5250~5350MHz: 12.95 5470~5725MHz: 12.63	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 Product Details

Product Name	Mobile Phone
Brand Name	FUJITSU
Model Name	F-41A
IMEI Code	353531110004097 / 353531110004360
H/W Version	v1.2.0
S/W Version	R022.1e

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725	a	5180-5240 5260-5320 5500-5720	36-48 [4] 52-64 [4] 100-144 [12]	1	6-54 Mbps
5150-5250 5250-5350 5470-5725	n (HT20)	5180-5240 5260-5320 5500-5720	36-48 [4] 52-64 [4] 100-144 [12]	1	MCS 0-7
5150-5250 5250-5350 5470-5725	n (HT40)	5190-5230 5270-5310 5510-5710	38-46 [2] 54-62 [2] 102-142 [6]	1	MCS 0-7
5150-5250 5250-5350 5470-5725	ac (VHT20)	5180-5240 5260-5320 5500-5720	36-48 [4] 52-64 [4] 100-144 [12]	1	MCS 0-9
5150-5250 5250-5350 5470-5725	ac (VHT40)	5190-5230 5270-5310 5510-5710	38-46 [2] 54-62 [2] 102-142 [6]	1	MCS 0-9
5150-5250 5250-5350 5470-5725	ac (VHT80)	5210 5290 5530-5690	42 [1] 58 [1] 106-138 [3]	1	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.					

1.1.3 Antenna Details

Ant. No.	Type	Gain (dBi)	Connector	Remarks
1	Monopole	-3.6	No	---

1.1.4 Power Supply Type of Equipment under Test (EUT)

Supply Voltage	3.8Vdc from battery: 9Vdc,1.5A from adapter (No bundle, support unit only)

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	Battery	Brand: FUJITSU CONNECTED TECHNOLOGIES LIMITED Model Name: CA54310-0074 Power Rating: 3.8Vdc, 2,780mAh, 10.6Wh

1.1.6 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	118	5590
64	5320	126	5630
100	5500	134	5670
104	5520	142	5710
108	5540	**VHT80**	
112	5560	42	5210
116	5580	58	5290
120	5600	106	5530
124	5620	122	5610
128	5640	138	5690
132	5660	---	---
136	5680	---	---
140	5700	---	---
144	5720	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	Qualcom Radio Control Tool, V4.0.00142.0		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11a	100.00%	0.00
	VHT20	99.35%	0.03
	VHT40	99.42%	0.03
	VHT80	97.08%	0.13

1.1.8 Power Index of Test Tool

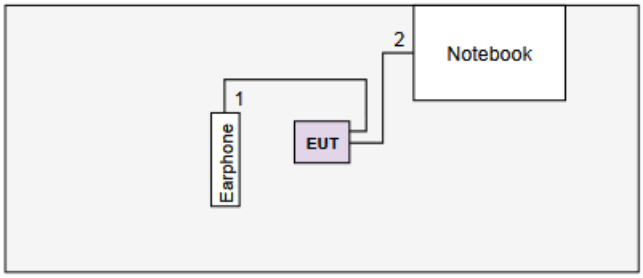
Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	13
11a	5200	13
11a	5240	13
11a	5260	13
11a	5300	13.5
11a	5320	13
11a	5500	13
11a	5580	13
11a	5700	13
11a	5720	13
VHT20	5180	13
VHT20	5200	13
VHT20	5240	13.5
VHT20	5260	13
VHT20	5300	13
VHT20	5320	13
VHT20	5500	13
VHT20	5580	13
VHT20	5700	13
VHT20	5720	13
VHT40	5190	13.5
VHT40	5230	13.5
VHT40	5270	13.5
VHT40	5310	13.5
VHT40	5510	13.5
VHT40	5590	13.5
VHT40	5670	13.5
VHT40	5710	12.5
VHT80	5210	13.5
VHT80	5290	13
VHT80	5530	13
VHT80	5610	13
VHT80	5690	13

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**S/N**	**Remarks**
1	Earphone	APPLE	MD827FE/A	6	---
2	Notebook	DELL	Latitude E5470	---	---

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1	Audio, 1.2m non-shielded.
2	USB, 1.2m shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
LISN	R&S	ENV216	101579	Mar. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 17, 2019	Dec. 16, 2020
Receiver	R&S	ESR3	101658	Dec. 12, 2019	Dec. 11, 2020
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 12, 2019	Jul. 11, 2020
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 12, 2019	Dec. 11, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2019	Nov. 14, 2020
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2019	Nov. 12, 2020
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 07, 2019	Oct. 06, 2020
Preamplifier	EMC	EMC02325	980225	Jul. 09, 2019	Jul. 08, 2020
Preamplifier	Agilent	83017A	MY39501308	Oct. 08, 2019	Oct. 07, 2020
Preamplifier	EMC	EMC184045B	980192	Aug. 01, 2019	Jul. 31, 2020
RF Cable	EMC	EMC104-SM-SM-8000	181106	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Oct. 07, 2019	Oct. 06, 2020
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Oct. 07, 2019	Oct. 06, 2020
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 07, 2019	Oct. 06, 2020
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 07, 2019	Oct. 06, 2020
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Oct. 07, 2019	Oct. 06, 2020
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 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
Measurement Software	Sporton	SENSE-15407_NII	V5.10	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

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

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

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

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

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 66%	Akun Chung
Radiated Emissions	03CH01-WS	22°C / 66%	Akun Chung Mike Shu
RF Conducted	TH01-WS	23°C / 61%	Brad Wu

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

2.2 The Worst Test Modes and Channel Details

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

NOTE:

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

3 Transmitter Test Results

3.1 Conducted Emissions

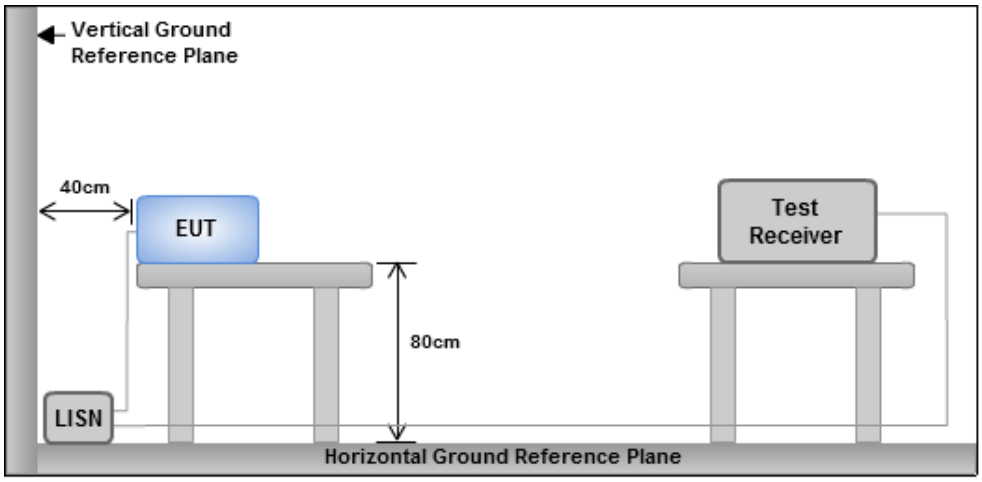
3.1.1 Limit of Conducted Emissions

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

3.1.2 Test Procedures

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

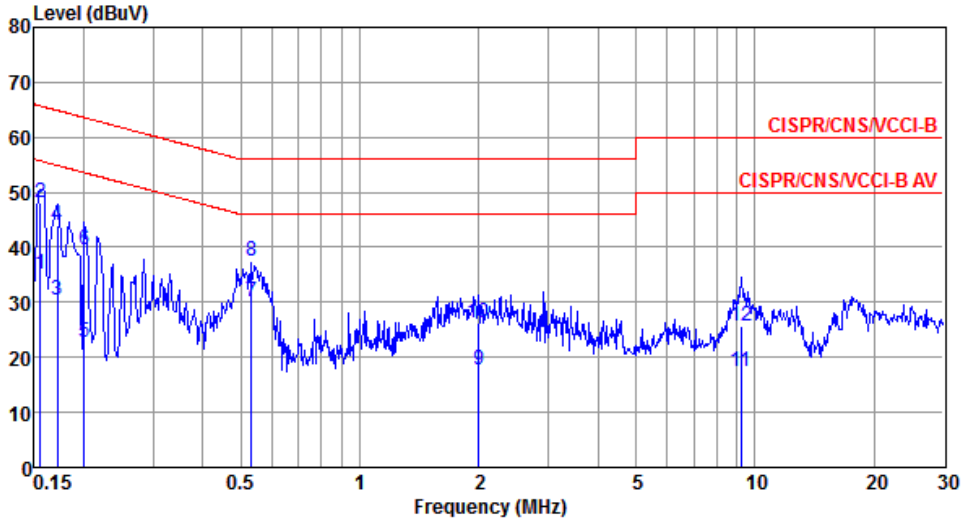
3.1.3 Test Setup



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

3.1.4 Test Result of Conducted Emissions

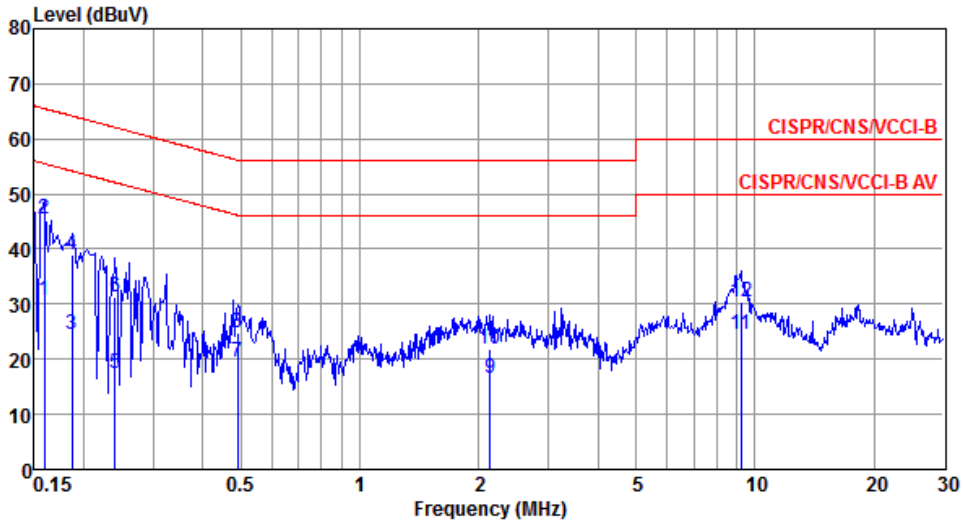
Modulation	11a	Test Freq. (MHz)	5300
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.156	35.18	55.69	-20.51	25.60	9.53	0.05	Average
2	0.156	48.24	65.69	-17.45	38.66	9.53	0.05	QP
3	0.171	30.39	54.90	-24.51	20.81	9.53	0.05	Average
4	0.171	44.00	64.90	-20.90	34.42	9.53	0.05	QP
5	0.201	22.70	53.58	-30.88	13.10	9.54	0.06	Average
6	0.201	39.59	63.58	-23.99	29.99	9.54	0.06	QP
7@	0.532	30.16	46.00	-15.84	20.49	9.58	0.09	Average
8	0.532	37.46	56.00	-18.54	27.79	9.58	0.09	QP
9	2.001	17.78	46.00	-28.22	8.00	9.60	0.18	Average
10	2.001	26.20	56.00	-29.80	16.42	9.60	0.18	QP
11	9.204	17.42	50.00	-32.58	7.39	9.65	0.38	Average
12	9.204	25.69	60.00	-34.31	15.66	9.65	0.38	QP

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

Modulation	11a	Test Freq. (MHz)	5300
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	30.56	55.52	-24.96	20.94	9.57	0.05	Average
2@	0.159	45.44	65.52	-20.08	35.82	9.57	0.05	QP
3	0.186	24.38	54.20	-29.82	14.74	9.58	0.06	Average
4	0.186	38.86	64.20	-25.34	29.22	9.58	0.06	QP
5	0.240	17.48	52.08	-34.60	7.82	9.59	0.07	Average
6	0.240	31.14	62.08	-30.94	21.48	9.59	0.07	QP
7	0.491	19.59	46.14	-26.55	9.88	9.62	0.09	Average
8	0.491	24.73	56.14	-31.41	15.02	9.62	0.09	QP
9	2.133	16.41	46.00	-29.59	6.57	9.65	0.19	Average
10	2.133	21.82	56.00	-34.18	11.98	9.65	0.19	QP
11	9.204	24.55	50.00	-25.45	14.46	9.71	0.38	Average
12	9.204	30.45	60.00	-29.55	20.36	9.71	0.38	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 Test Procedures

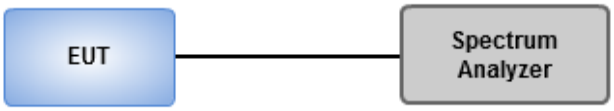
26dB Bandwidth

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.

3.2.2 Test Setup



3.2.3 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)_1TX	22.246M	16.787M	16M8D1D	21.667M	16.715M
802.11ac VHT20_Nss1,(MCS0)_1TX	22.246M	17.873M	17M9D1D	22.101M	17.873M
802.11ac VHT40_Nss1,(MCS0)_1TX	42.609M	36.179M	36M2D1D	42.609M	36.179M
802.11ac VHT80_Nss1,(MCS0)_1TX	84.348M	74.964M	75M0D1D	84.348M	74.964M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	22.391M	16.787M	16M8D1D	22.029M	16.715M
802.11ac VHT20_Nss1,(MCS0)_1TX	22.246M	17.873M	17M9D1D	22.029M	17.8M
802.11ac VHT40_Nss1,(MCS0)_1TX	43.188M	36.179M	36M2D1D	42.754M	36.179M
802.11ac VHT80_Nss1,(MCS0)_1TX	84.058M	74.385M	74M4D1D	84.058M	74.385M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	22.246M	16.787M	16M8D1D	15.957M	13.415M
802.11ac VHT20_Nss1,(MCS0)_1TX	22.174M	17.873M	17M9D1D	15.826M	14.023M
802.11ac VHT40_Nss1,(MCS0)_1TX	43.043M	36.179M	36M2D1D	37.13M	33.025M
802.11ac VHT80_Nss1,(MCS0)_1TX	84.058M	74.674M	74M7D1D	76.739M	72.069M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	3.13M	3.994M	3M99D1D	3.13M	3.994M
802.11ac VHT20_Nss1,(MCS0)_1TX	3.71M	4.284M	4M28D1D	3.71M	4.284M
802.11ac VHT40_Nss1,(MCS0)_1TX	3.072M	4.11M	4M11D1D	3.072M	4.11M
802.11ac VHT80_Nss1,(MCS0)_1TX	3.014M	11.52M	11M5D1D	3.014M	11.52M

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

Result

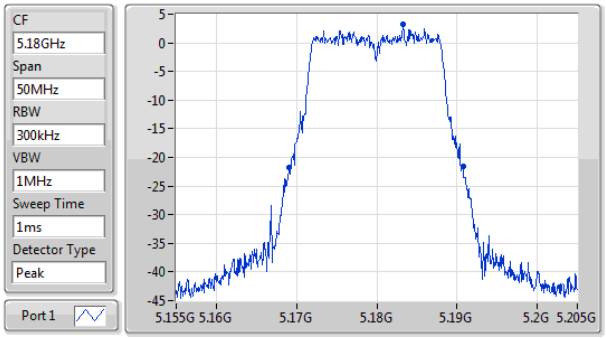
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-
5180MHz	Pass	Inf	21.667M	16.787M
5200MHz	Pass	Inf	22.246M	16.715M
5240MHz	Pass	Inf	21.957M	16.787M
5260MHz	Pass	Inf	22.029M	16.715M
5300MHz	Pass	Inf	22.246M	16.715M
5320MHz	Pass	Inf	22.391M	16.787M
5500MHz	Pass	Inf	21.957M	16.787M
5580MHz	Pass	Inf	22.246M	16.715M
5700MHz	Pass	Inf	21.957M	16.787M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.957M	13.415M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.13M	3.994M
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	22.101M	17.873M
5200MHz	Pass	Inf	22.246M	17.873M
5240MHz	Pass	Inf	22.174M	17.873M
5260MHz	Pass	Inf	22.174M	17.8M
5300MHz	Pass	Inf	22.246M	17.873M
5320MHz	Pass	Inf	22.029M	17.873M
5500MHz	Pass	Inf	22.174M	17.873M
5580MHz	Pass	Inf	21.957M	17.873M
5700MHz	Pass	Inf	22.101M	17.873M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.826M	14.023M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.71M	4.284M
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-	-	-
5190MHz	Pass	Inf	42.609M	36.179M
5230MHz	Pass	Inf	42.609M	36.179M
5270MHz	Pass	Inf	42.754M	36.179M
5310MHz	Pass	Inf	43.188M	36.179M
5510MHz	Pass	Inf	42.899M	36.179M
5590MHz	Pass	Inf	43.043M	36.179M
5670MHz	Pass	Inf	42.609M	36.179M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	37.13M	33.025M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.072M	4.11M
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-	-	-
5210MHz	Pass	Inf	84.348M	74.964M
5290MHz	Pass	Inf	84.058M	74.385M

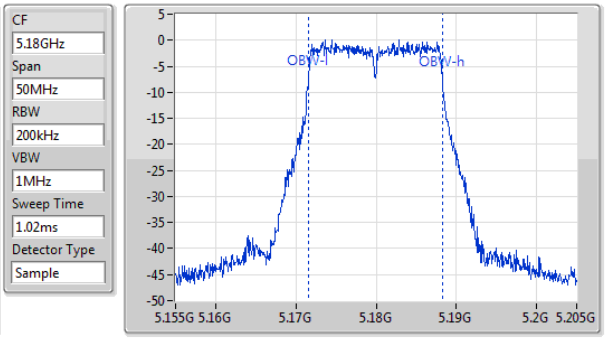
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
5530MHz	Pass	Inf	84.058M	74.674M
5610MHz	Pass	Inf	82.899M	74.385M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.739M	72.069M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.014M	11.52M

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

802.11a_Nss1,(6Mbps)_1TX EBW

5180MHz

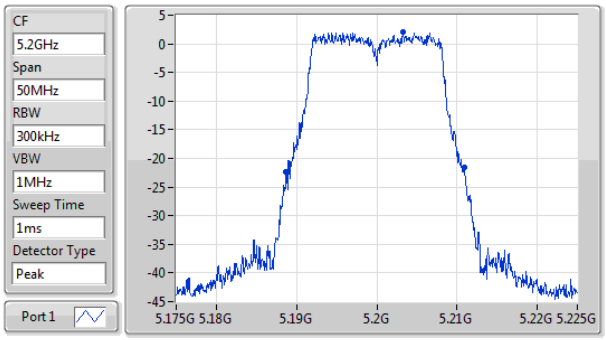


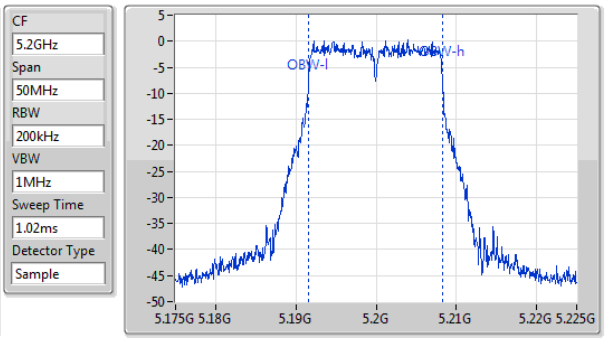


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.667M	5.169058G	5.190725G	16.787M	5.171534G	5.188321G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

5200MHz

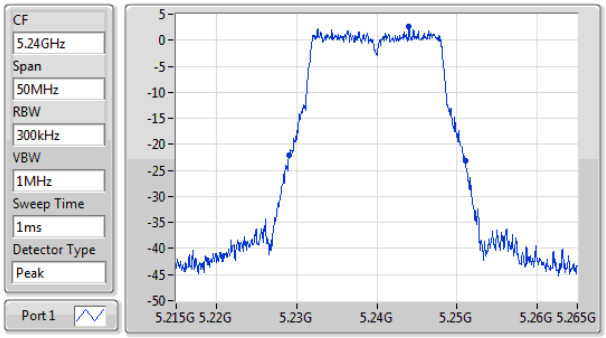


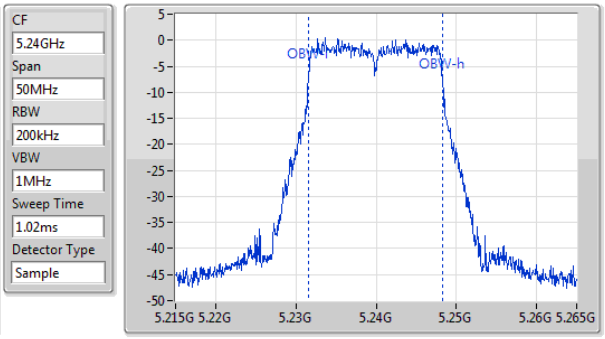


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.246M	5.188696G	5.210942G	16.715M	5.191534G	5.208249G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

5240MHz

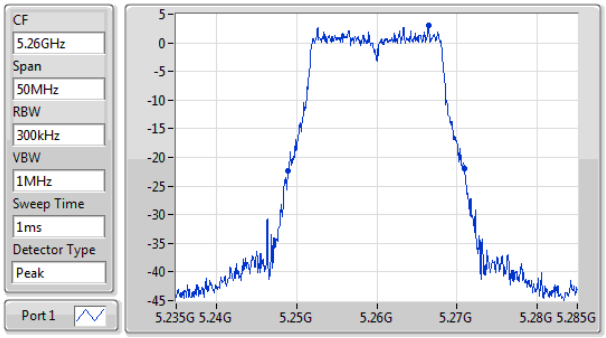


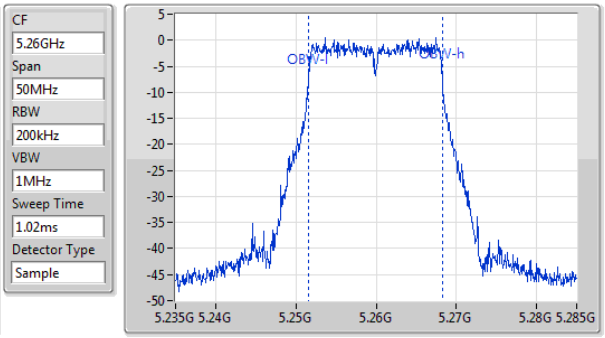


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.957M	5.229058G	5.251014G	16.787M	5.231534G	5.248321G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

5260MHz

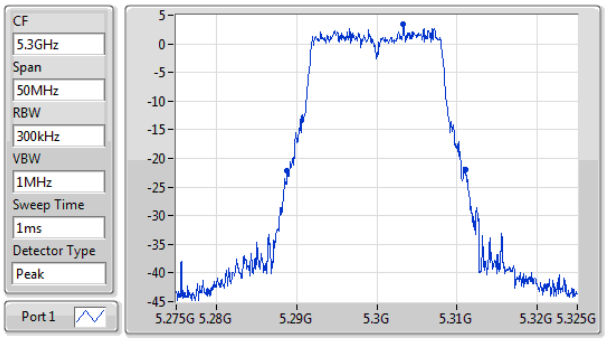


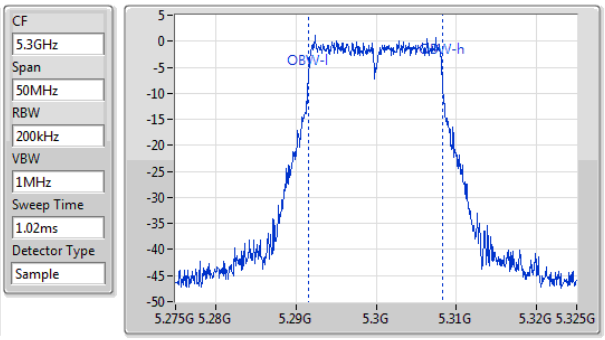


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.029M	5.248913G	5.270942G	16.715M	5.251534G	5.268249G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

5300MHz

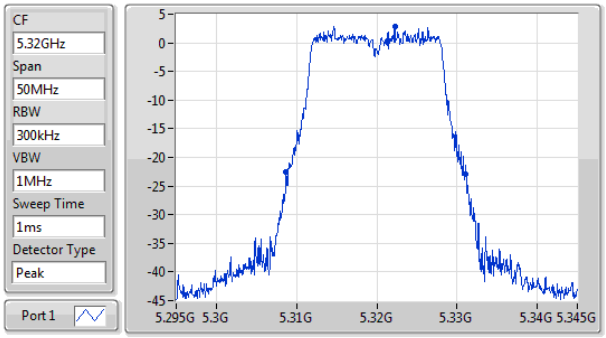


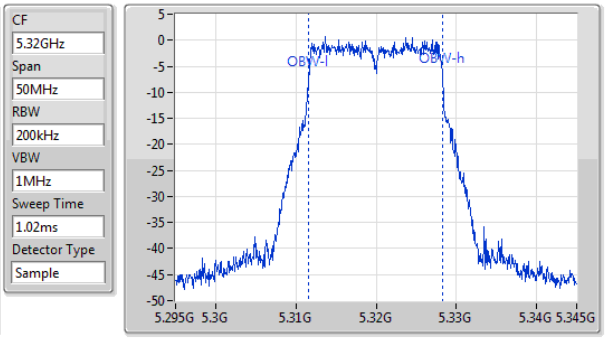


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.246M	5.288841G	5.311087G	16.715M	5.291534G	5.308249G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

5320MHz

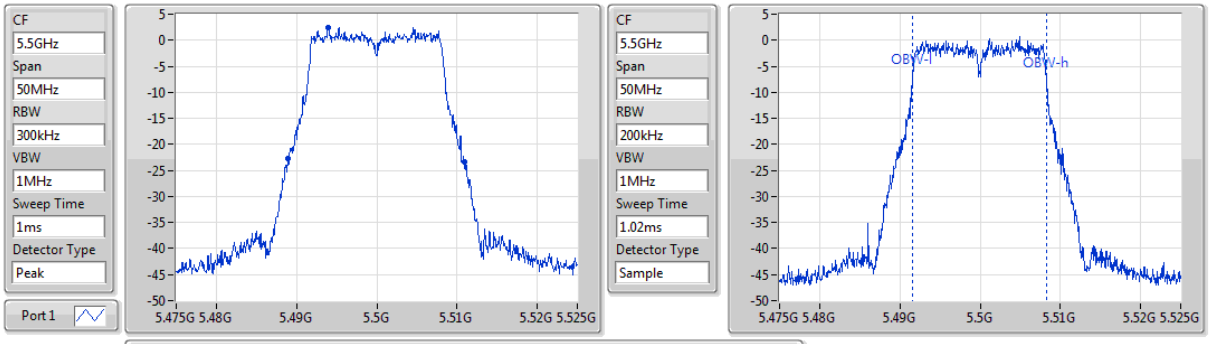




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.391M	5.308696G	5.331087G	16.787M	5.311534G	5.328321G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

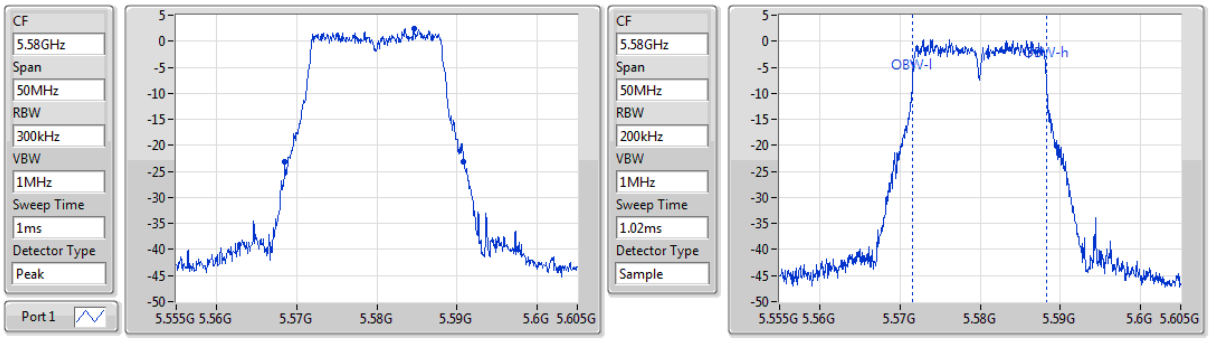
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.957M	5.488913G	5.51087G	16.787M	5.491534G	5.508321G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

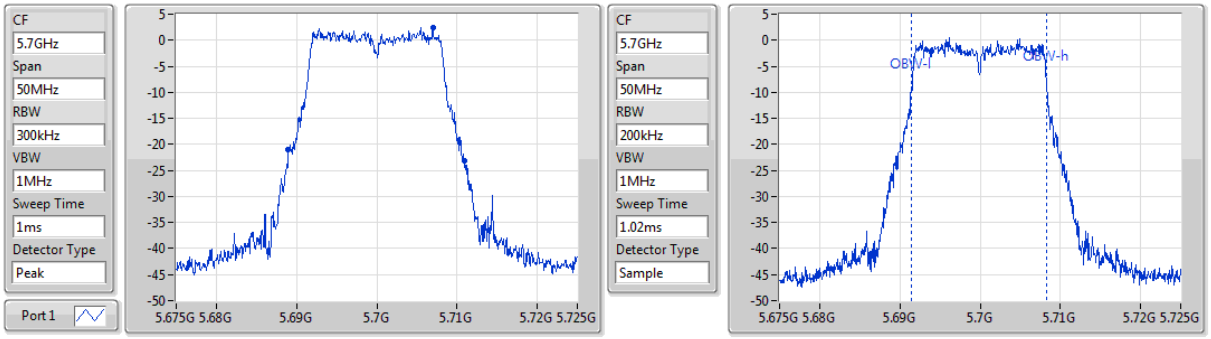
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.246M	5.568551G	5.590797G	16.715M	5.571534G	5.588249G	Inf	1

802.11a_Nss1,(6Mbps)_1TX EBW

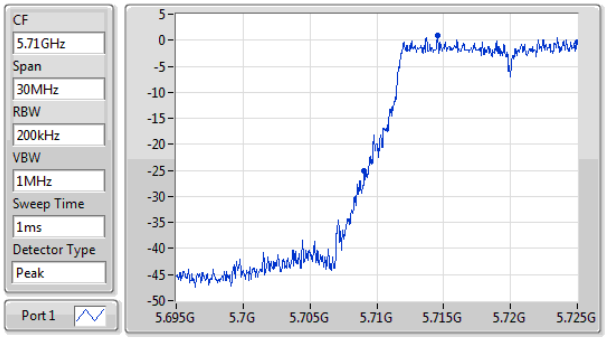
5700MHz

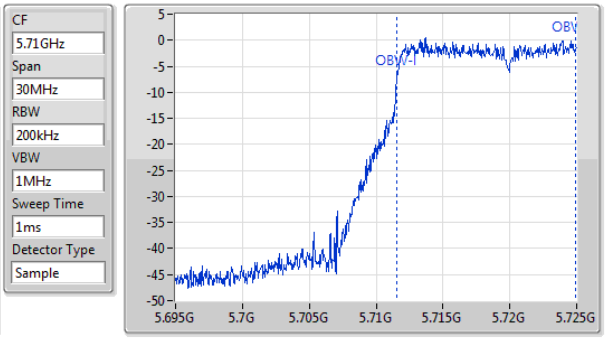


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.957M	5.688986G	5.710942G	16.787M	5.691462G	5.708249G	Inf	1

802.11a_Nss1,(6Mbps)_1TX — EBW

5720MHz Straddle 5.47-5.725GHz

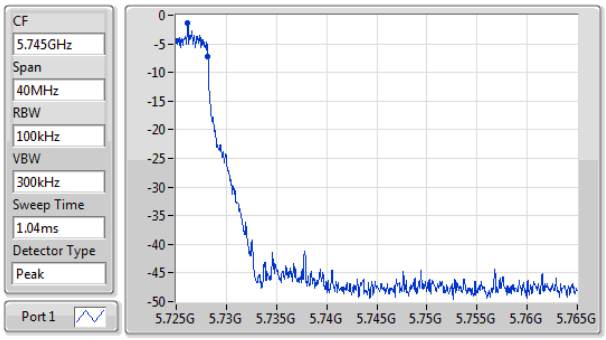


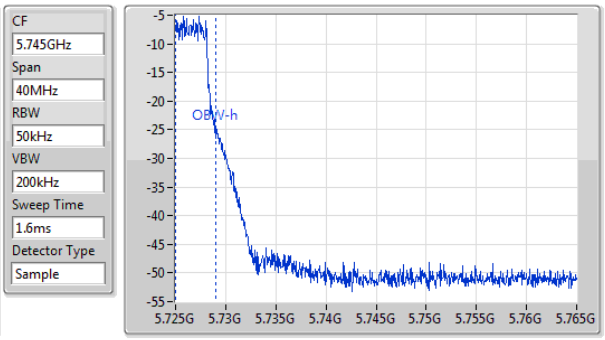


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.957M	5.709043G	5.725G	13.415M	5.71152G	5.724935G	Inf	1

802.11a_Nss1,(6Mbps)_1TX — EBW

5720MHz Straddle 5.725-5.85GHz

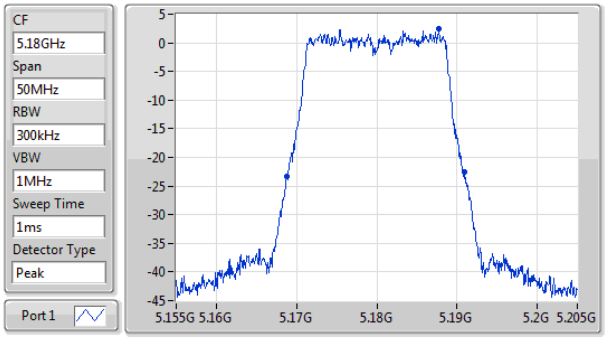


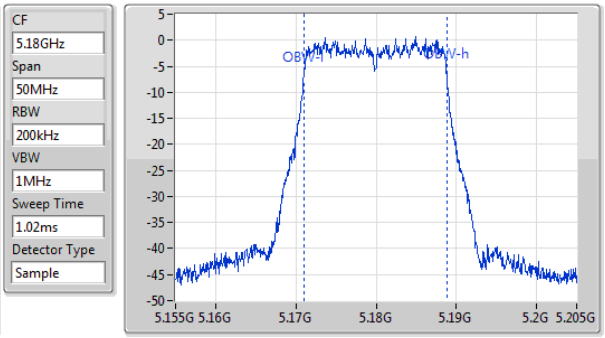


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.13M	5.725G	5.72813G	3.994M	5.725029G	5.729023G	500k	1

802.11ac VHT20_Nss1,(MCS0)_1TX — EBW

5180MHz

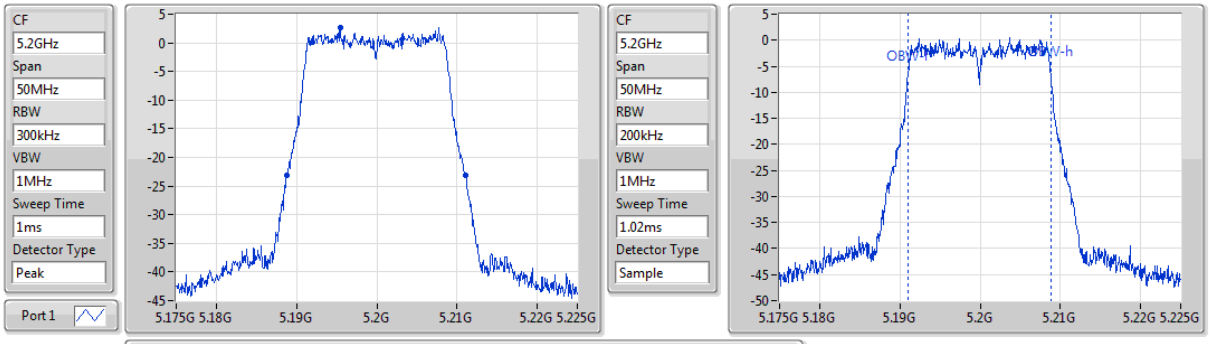




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.101M	5.168841G	5.190942G	17.873M	5.170955G	5.188828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

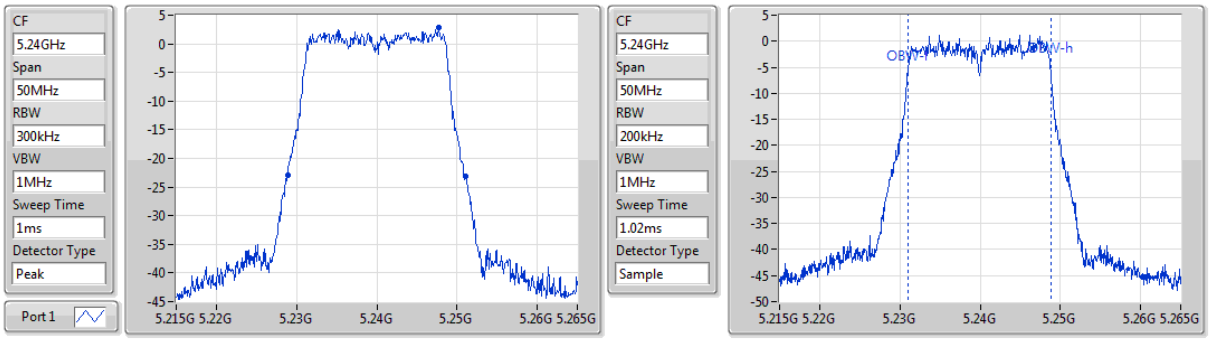
5200MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.246M	5.188768G	5.211014G	17.873M	5.190955G	5.208828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

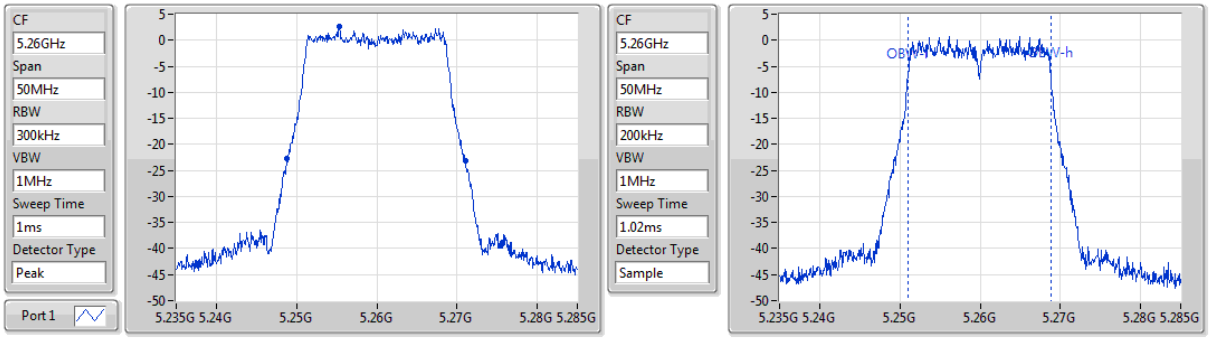
5240MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.174M	5.228913G	5.251087G	17.873M	5.230955G	5.248828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

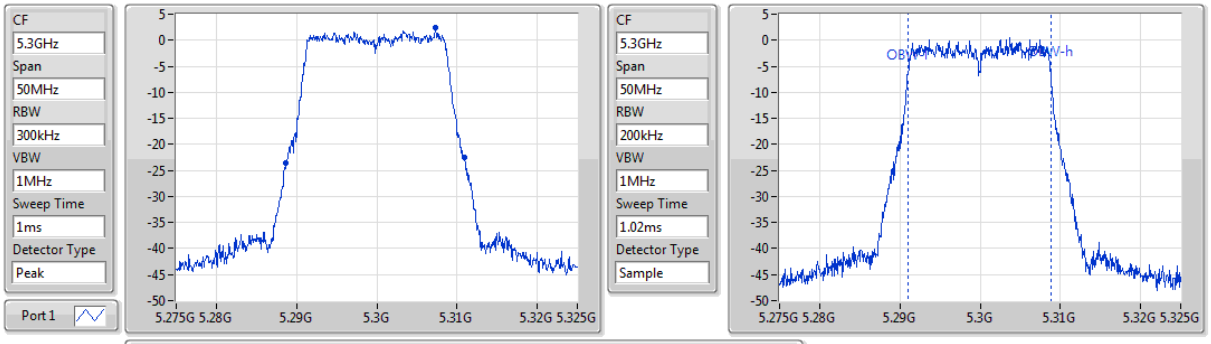
5260MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.174M	5.248841G	5.271014G	17.8M	5.251027G	5.268828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

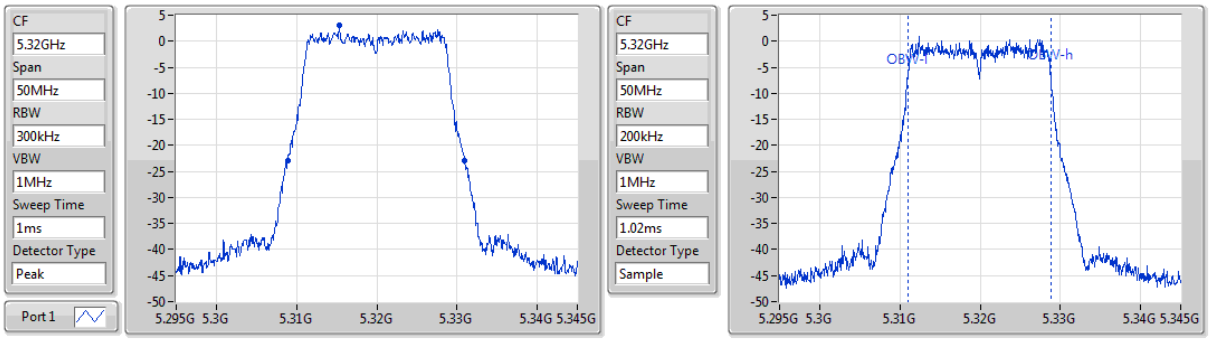
5300MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.246M	5.288696G	5.310942G	17.873M	5.290955G	5.308828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

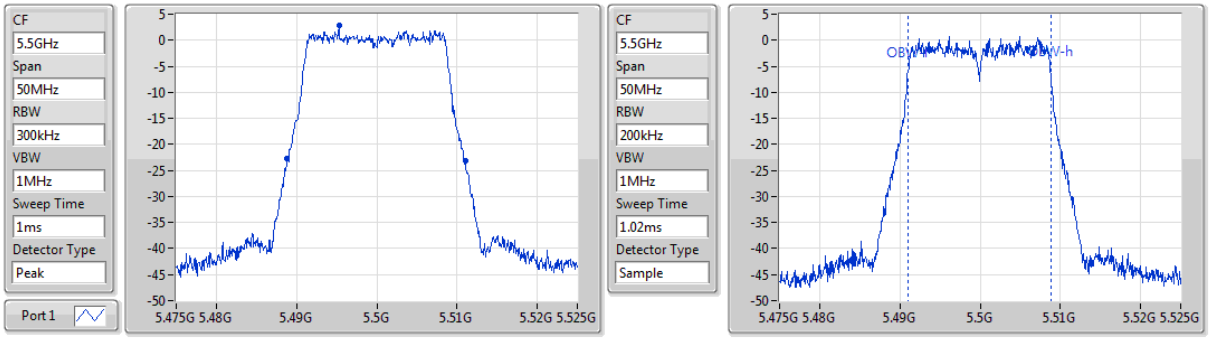
5320MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.029M	5.308913G	5.330942G	17.873M	5.310955G	5.328828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

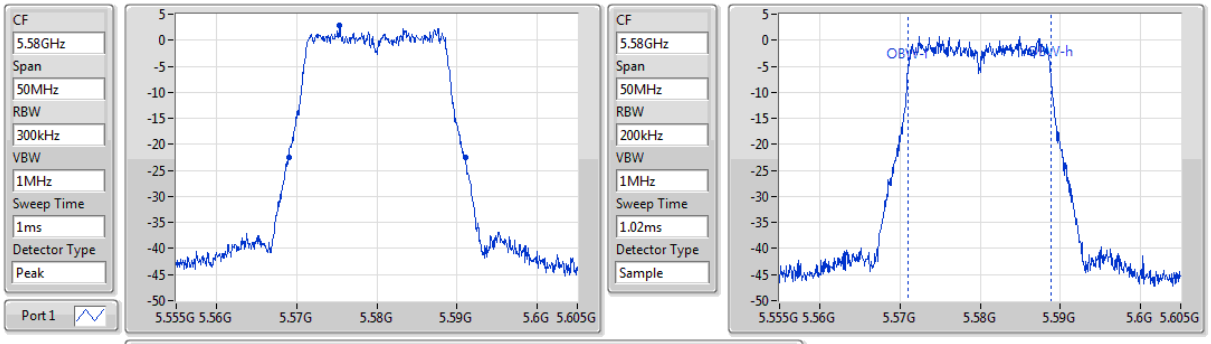
5500MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.174M	5.488841G	5.511014G	17.873M	5.490955G	5.508828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX **EBW**

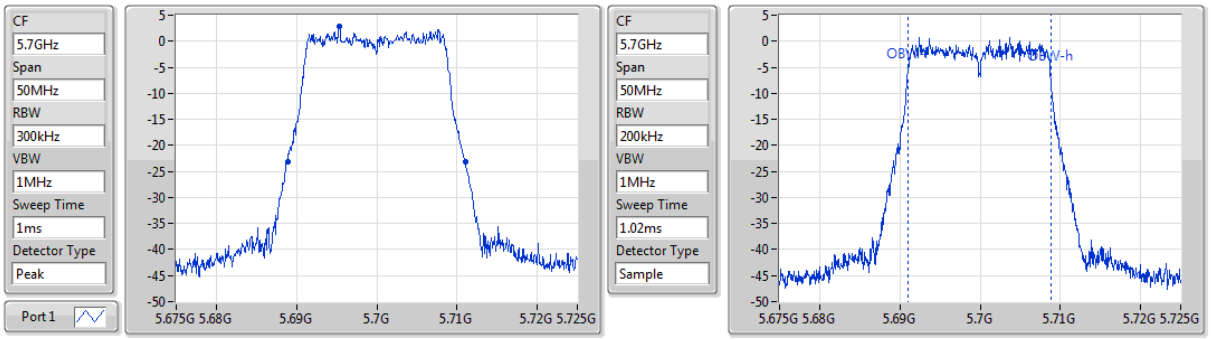
5580MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.957M	5.569058G	5.591014G	17.873M	5.570955G	5.588828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX **EBW**

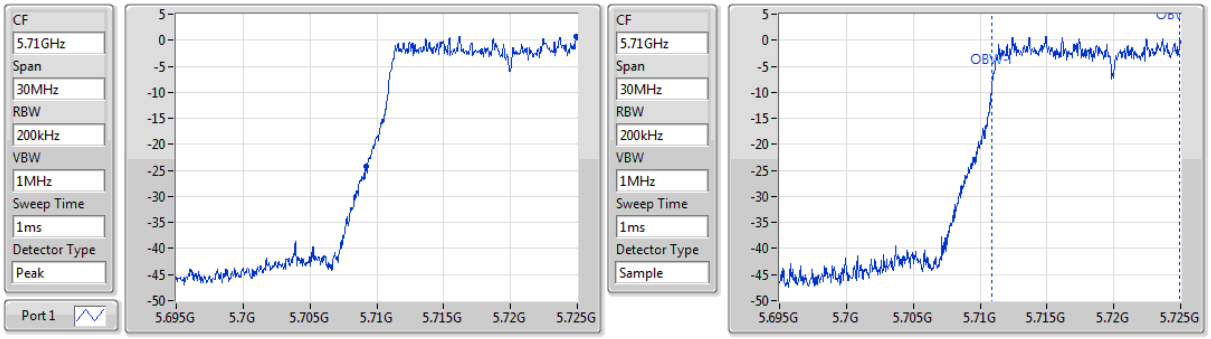
5700MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.101M	5.688913G	5.711014G	17.873M	5.690955G	5.708828G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX **EBW**

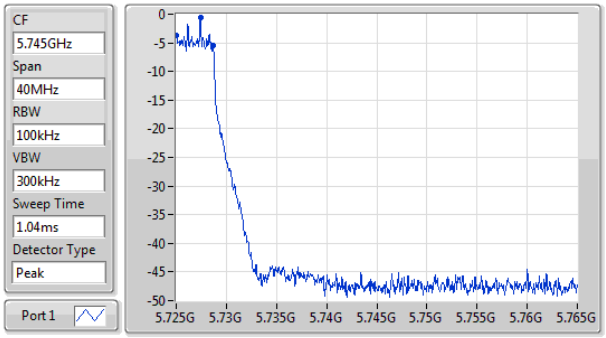
5720MHz Straddle 5.47-5.725GHz

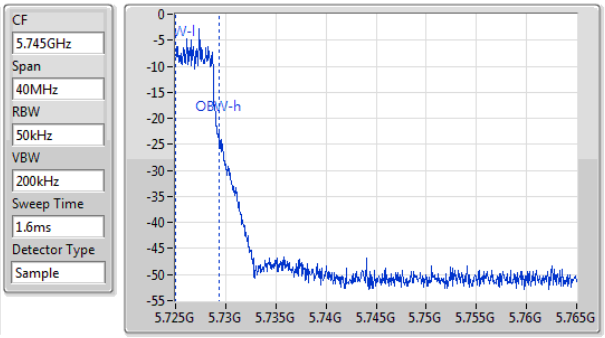


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.826M	5.709174G	5.725G	14.023M	5.710912G	5.724935G	Inf	1

802.11ac VHT20_Nss1,(MCS0)_1TX EBW

5720MHz Straddle 5.725-5.85GHz

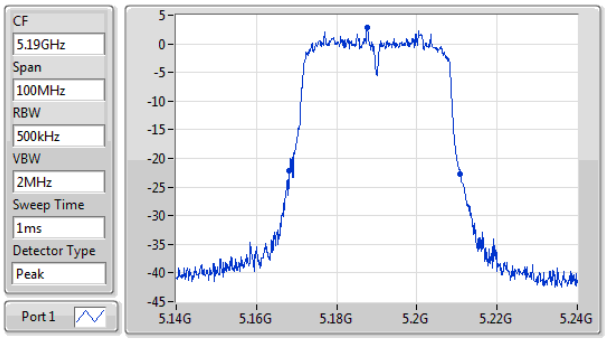


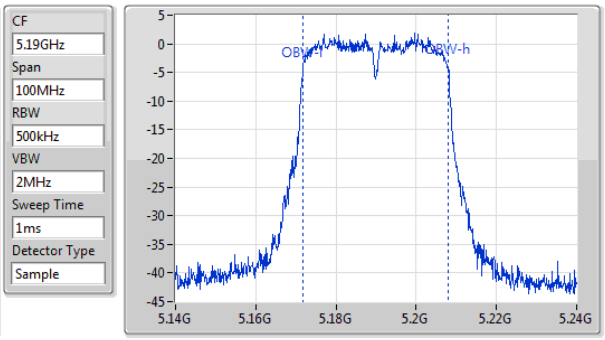


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.71M	5.725G	5.72871G	4.284M	5.725029G	5.729313G	500k	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

5190MHz

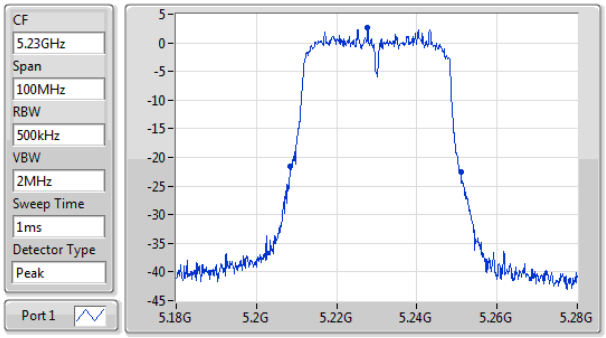


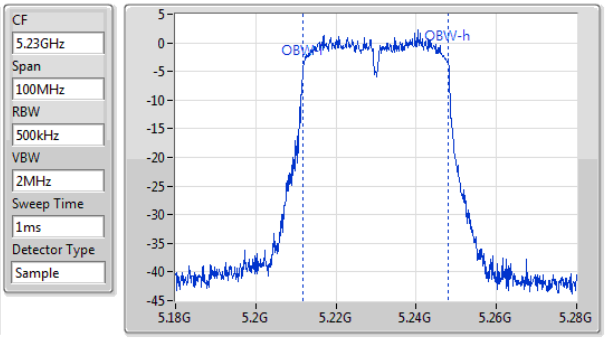


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.609M	5.168261G	5.21087G	36.179M	5.171766G	5.207945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

5230MHz

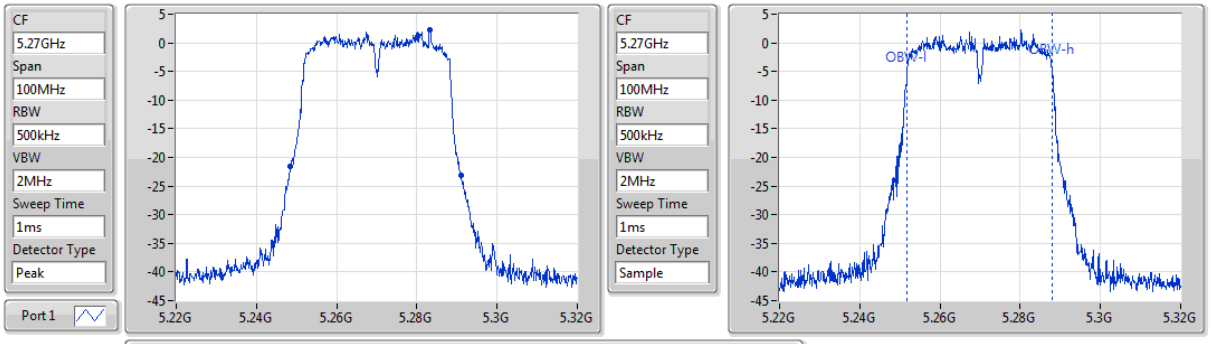




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.609M	5.208406G	5.251014G	36.179M	5.211766G	5.247945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

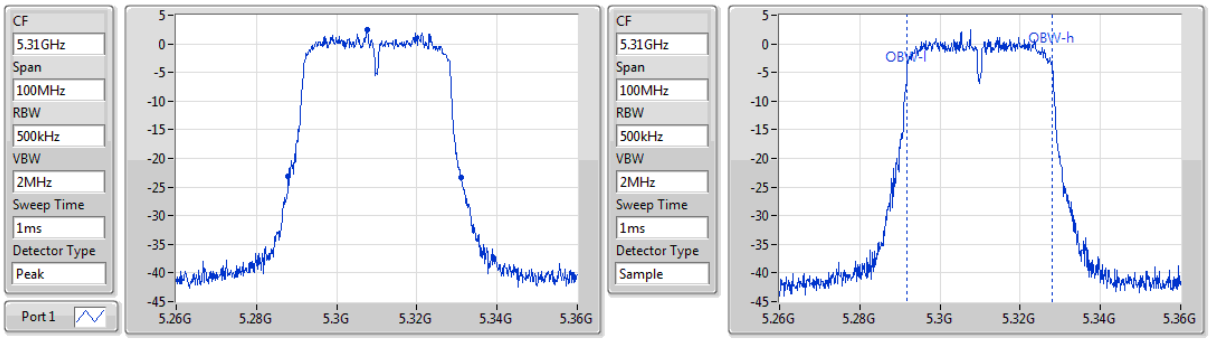
5270MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.754M	5.248406G	5.291159G	36.179M	5.251766G	5.287945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

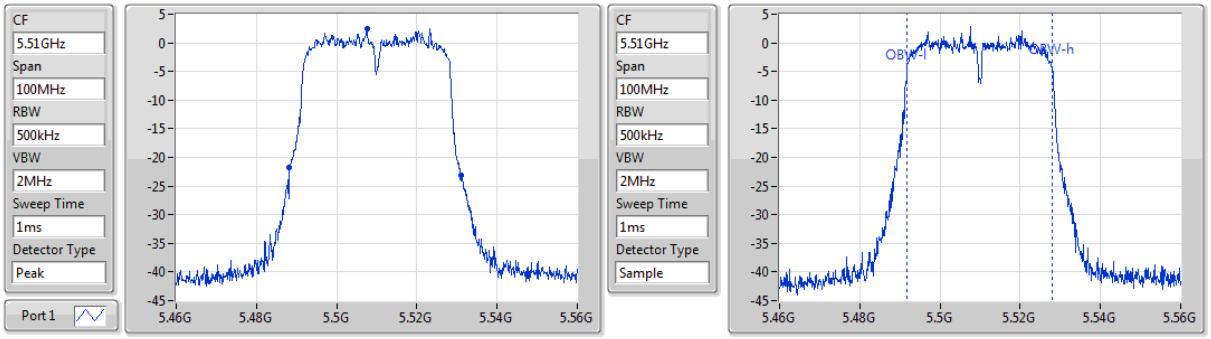
5310MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.188M	5.287971G	5.331159G	36.179M	5.291766G	5.327945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

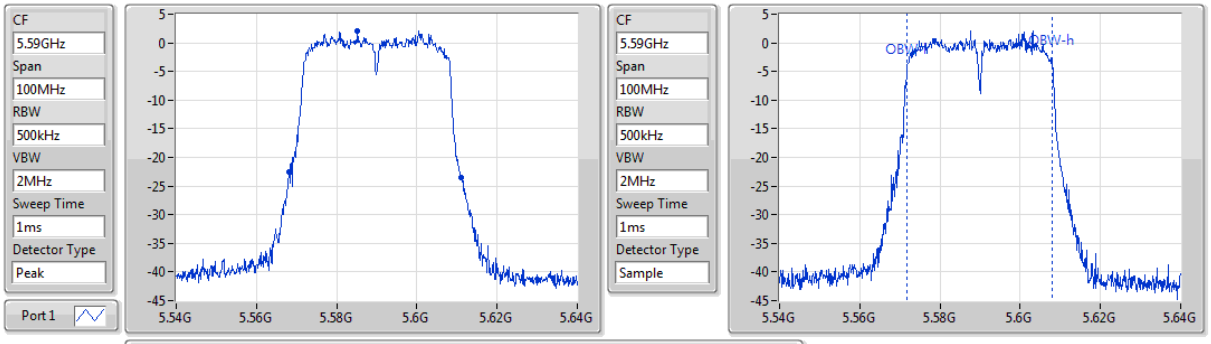
5510MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.899M	5.488261G	5.531159G	36.179M	5.491766G	5.527945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

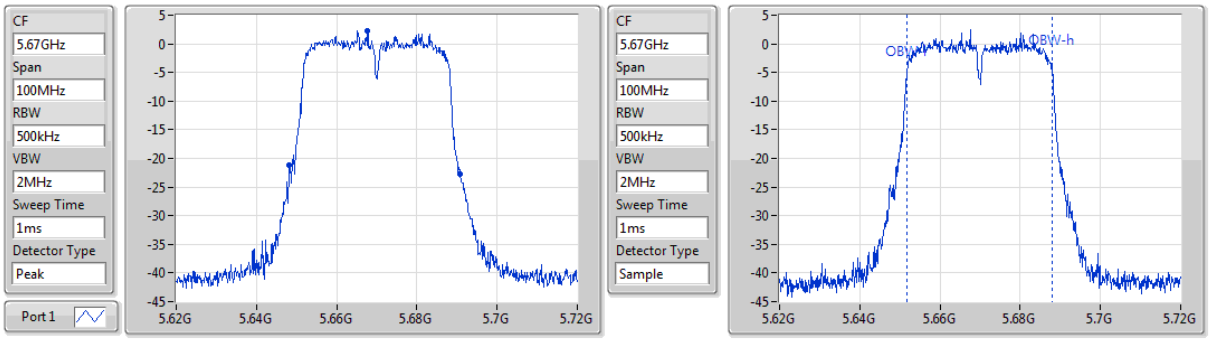
5590MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.043M	5.568116G	5.611159G	36.179M	5.571766G	5.607945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

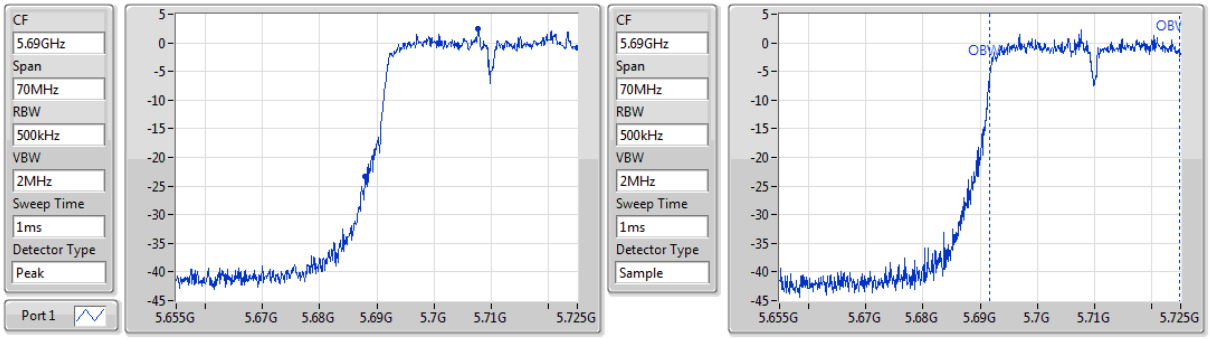
5670MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.609M	5.648261G	5.69087G	36.179M	5.651766G	5.687945G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

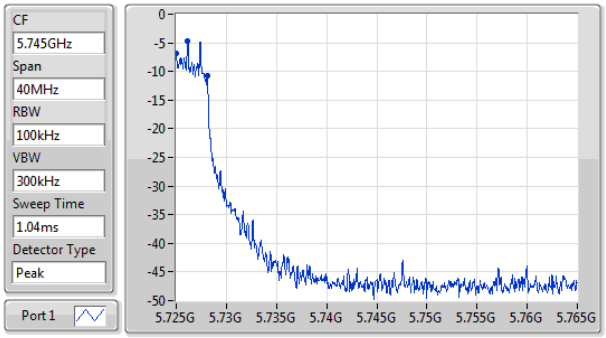
5710MHz Straddle 5.47-5.725GHz

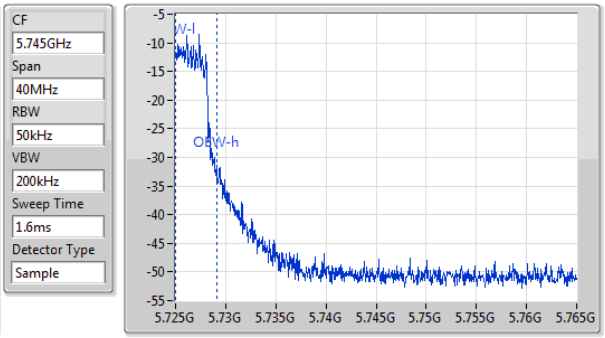


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.13M	5.68787G	5.725G	33.025M	5.691722G	5.724747G	Inf	1

802.11ac VHT40_Nss1,(MCS0)_1TX EBW

5710MHz Straddle 5.725-5.85GHz

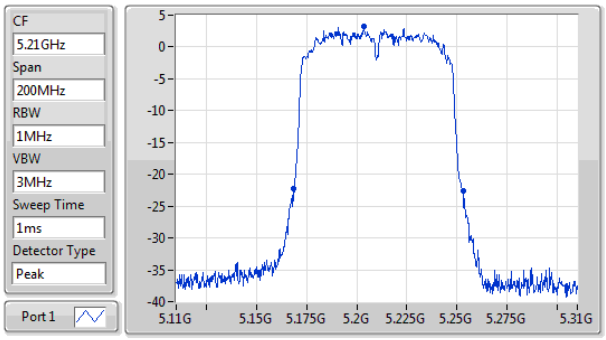


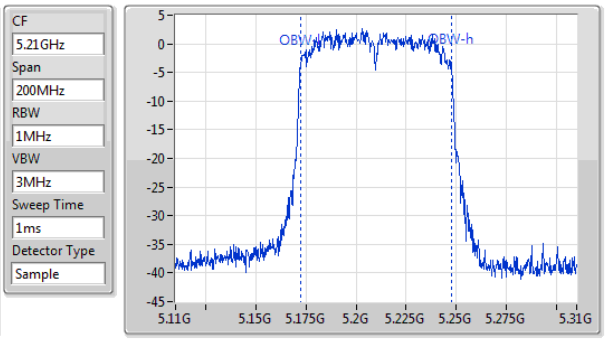


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.072M	5.725G	5.728072G	4.11M	5.725029G	5.729139G	500k	1

802.11ac VHT80_Nss1,(MCS0)_1TX EBW

5210MHz

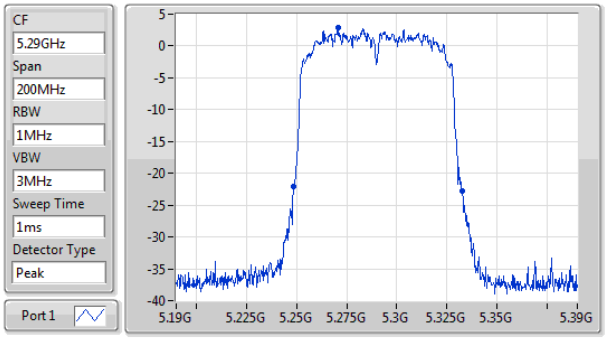


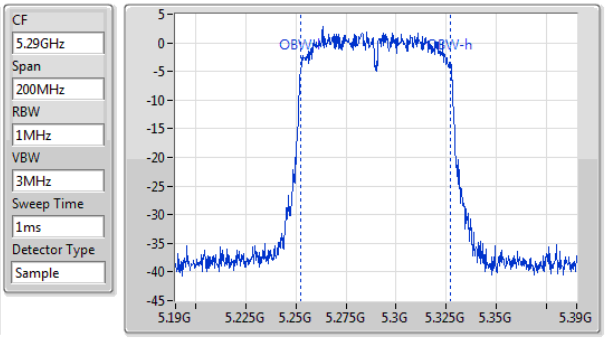


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.348M	5.168551G	5.252899G	74.964M	5.172373G	5.247337G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX EBW

5290MHz

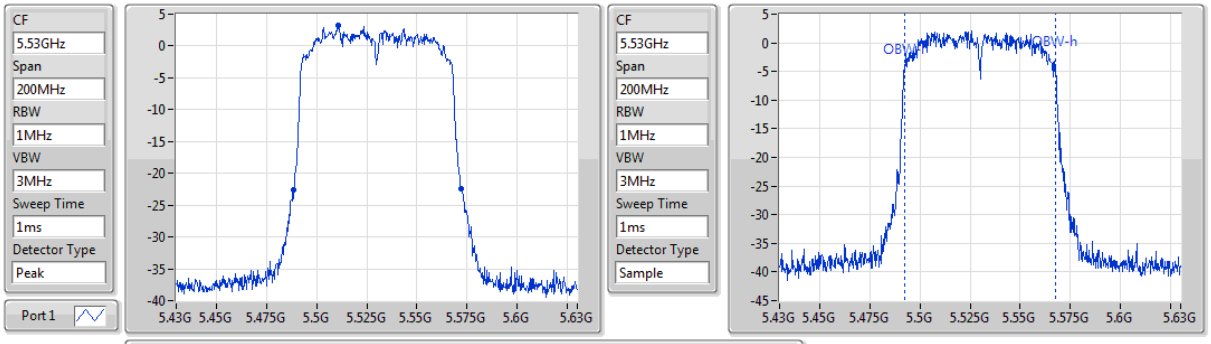




26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.058M	5.248551G	5.332609G	74.385M	5.252663G	5.327048G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX EBW

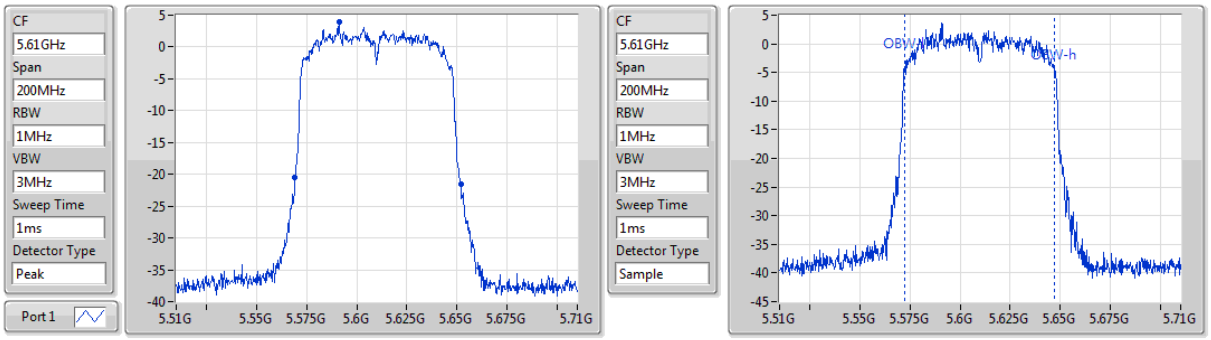
5530MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.058M	5.488261G	5.572319G	74.674M	5.492663G	5.567337G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX EBW

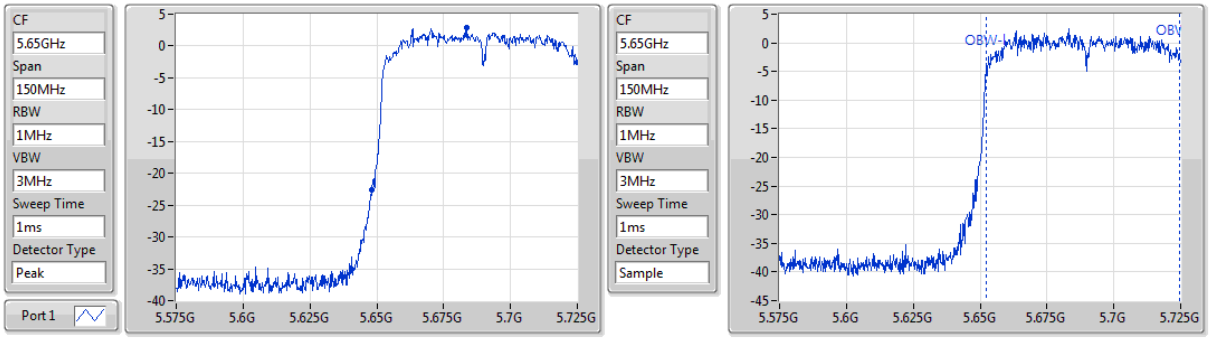
5610MHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
82.899M	5.56913G	5.652029G	74.385M	5.572663G	5.647048G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX EBW

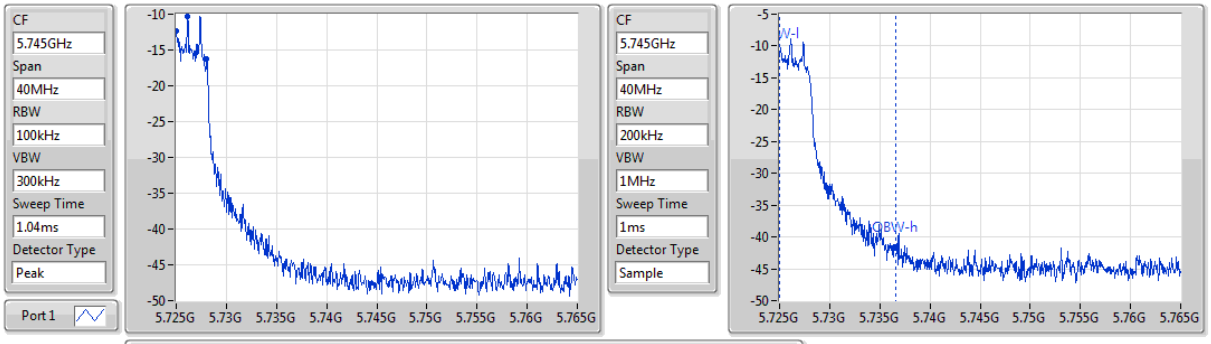
5690MHz Straddle 5.47-5.725GHz



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
76.739M	5.648261G	5.725G	72.069M	5.652388G	5.724457G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX **EBW**

5690MHz Straddle 5.725-5.85GHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.014M	5.725G	5.728014G	11.52M	5.725029G	5.736548G	500k	1

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
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

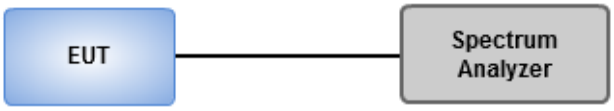
Method PM-G (Measurement using a gated RF average power meter)

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)_1TX	12.58	0.01811	8.98	0.00791
802.11ac VHT20_Nss1,(MCS0)_1TX	12.94	0.01968	9.34	0.00859
802.11ac VHT40_Nss1,(MCS0)_1TX	12.63	0.01832	9.03	0.00800
802.11ac VHT80_Nss1,(MCS0)_1TX	12.81	0.01910	9.21	0.00834
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	12.95	0.01972	9.35	0.00861
802.11ac VHT20_Nss1,(MCS0)_1TX	12.76	0.01888	9.16	0.00824
802.11ac VHT40_Nss1,(MCS0)_1TX	12.69	0.01858	9.09	0.00811
802.11ac VHT80_Nss1,(MCS0)_1TX	12.51	0.01782	8.91	0.00778
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	12.63	0.01832	9.03	0.00800
802.11ac VHT20_Nss1,(MCS0)_1TX	12.59	0.01816	8.99	0.00793
802.11ac VHT40_Nss1,(MCS0)_1TX	12.53	0.01791	8.93	0.00782
802.11ac VHT80_Nss1,(MCS0)_1TX	12.52	0.01786	8.92	0.00780

Result

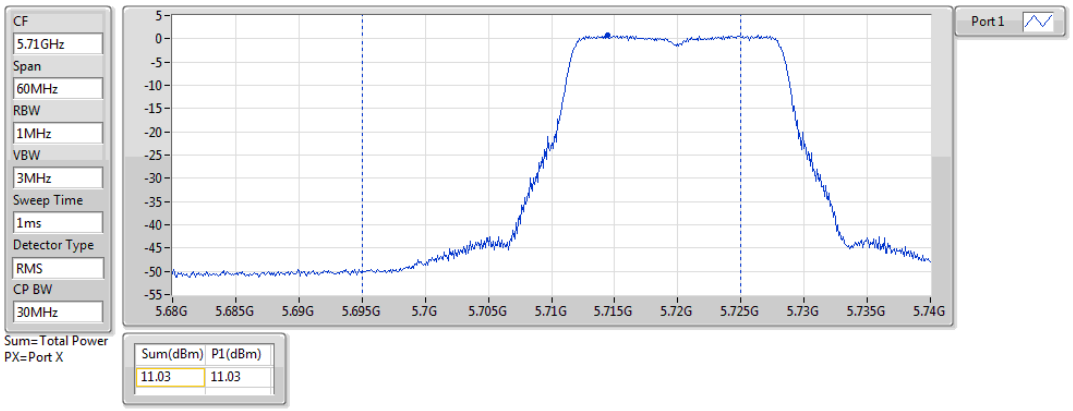
Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	-3.60	12.54	12.54	24.00	8.94	30.00
5200MHz	Pass	-3.60	12.58	12.58	24.00	8.98	30.00
5240MHz	Pass	-3.60	12.41	12.41	24.00	8.81	30.00
5260MHz	Pass	-3.60	12.48	12.48	24.00	8.88	30.00
5300MHz	Pass	-3.60	12.95	12.95	24.00	9.35	30.00
5320MHz	Pass	-3.60	12.44	12.44	24.00	8.84	30.00
5500MHz	Pass	-3.60	12.58	12.58	24.00	8.98	30.00
5580MHz	Pass	-3.60	12.63	12.63	24.00	9.03	30.00
5700MHz	Pass	-3.60	12.54	12.54	24.00	8.94	30.00
5720MHz	Pass	-3.60	12.38	12.38	Inf	8.78	Inf
5720MHz Straddle 5.47-5.725GHz	Pass	-3.60	11.03	11.03	24.00	7.43	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	-3.60	4.73	4.73	30.00	1.13	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	-3.60	12.49	12.49	24.00	8.89	30.00
5200MHz	Pass	-3.60	12.46	12.46	24.00	8.86	30.00
5240MHz	Pass	-3.60	12.94	12.94	24.00	9.34	30.00
5260MHz	Pass	-3.60	12.46	12.46	24.00	8.86	30.00
5300MHz	Pass	-3.60	12.76	12.76	24.00	9.16	30.00
5320MHz	Pass	-3.60	12.51	12.51	24.00	8.91	30.00
5500MHz	Pass	-3.60	12.46	12.46	24.00	8.86	30.00
5580MHz	Pass	-3.60	12.59	12.59	24.00	8.99	30.00
5700MHz	Pass	-3.60	12.56	12.56	24.00	8.96	30.00
5720MHz	Pass	-3.60	12.31	12.31	Inf	8.71	Inf
5720MHz Straddle 5.47-5.725GHz	Pass	-3.60	11.08	11.08	24.00	7.48	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	-3.60	5.20	5.20	30.00	1.60	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5190MHz	Pass	-3.60	12.63	12.63	24.00	9.03	30.00
5230MHz	Pass	-3.60	12.55	12.55	24.00	8.95	30.00
5270MHz	Pass	-3.60	12.64	12.64	24.00	9.04	30.00
5310MHz	Pass	-3.60	12.69	12.69	24.00	9.09	30.00
5510MHz	Pass	-3.60	12.53	12.53	24.00	8.93	30.00
5590MHz	Pass	-3.60	12.51	12.51	24.00	8.91	30.00
5670MHz	Pass	-3.60	12.46	12.46	24.00	8.86	30.00
5710MHz	Pass	-3.60	12.28	12.28	Inf	8.68	Inf
5710MHz Straddle 5.47-5.725GHz	Pass	-3.60	11.74	11.74	24.00	8.14	30.00

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5710MHz Straddle 5.725-5.85GHz	Pass	-3.60	0.06	0.06	30.00	-3.54	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5210MHz	Pass	-3.60	12.81	12.81	24.00	9.21	30.00
5290MHz	Pass	-3.60	12.51	12.51	24.00	8.91	30.00
5530MHz	Pass	-3.60	12.42	12.42	24.00	8.82	30.00
5610MHz	Pass	-3.60	12.52	12.52	24.00	8.92	30.00
5690MHz	Pass	-3.60	12.24	12.24	Inf	8.64	Inf
5690MHz Straddle 5.47-5.725GHz	Pass	-3.60	11.79	11.79	24.00	8.19	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	-3.60	-5.21	-5.21	30.00	-8.81	36.00

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

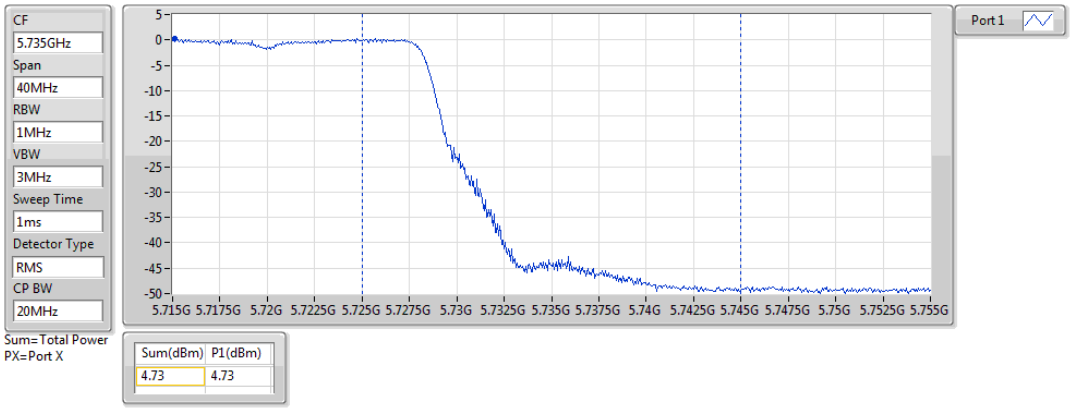
802.11a_Nss1,(6Mbps)_1TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



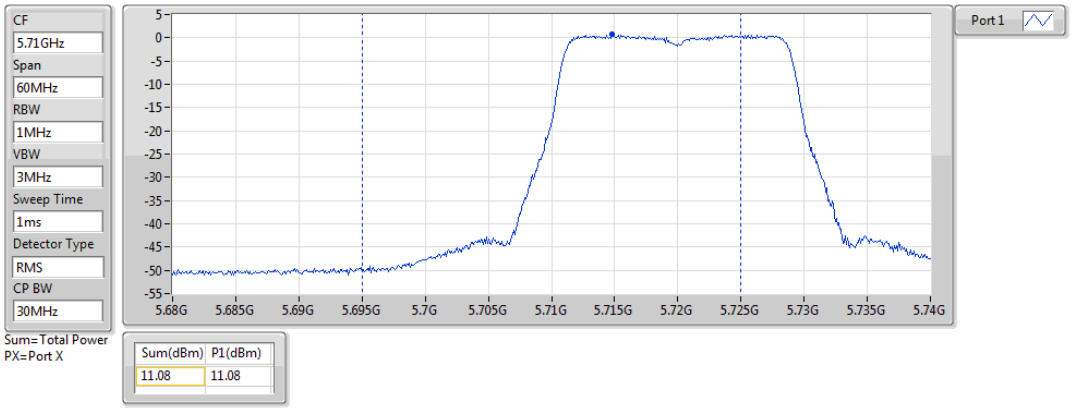
802.11a_Nss1,(6Mbps)_1TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



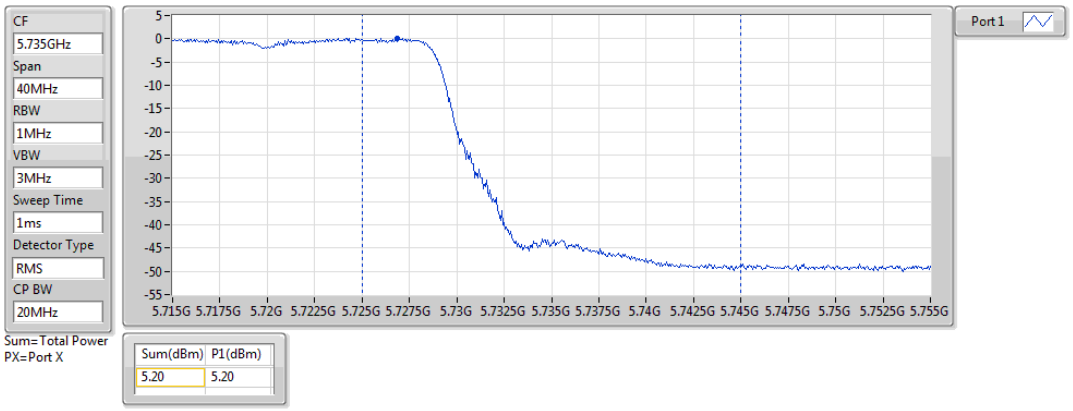
802.11ac VHT20_Nss1,(MCS0)_1TX **AV Power**

5720MHz Straddle 5.47-5.725GHz



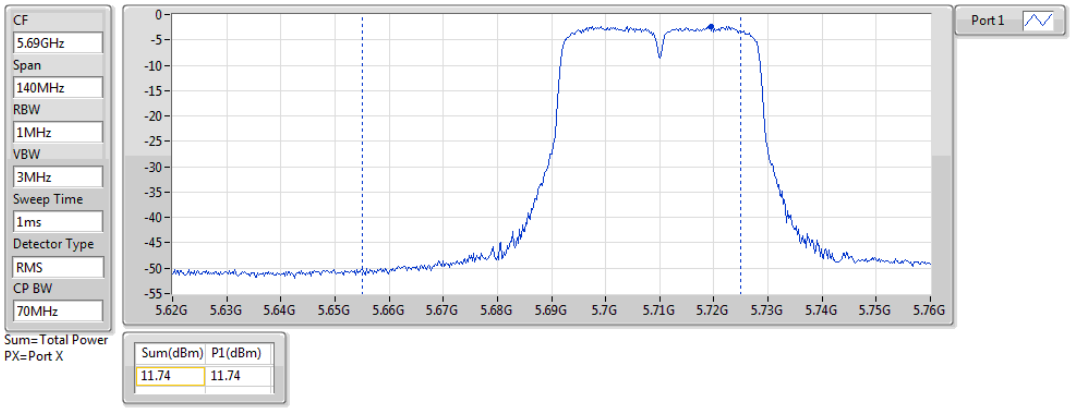
802.11ac VHT20_Nss1,(MCS0)_1TX **AV Power**

5720MHz Straddle 5.725-5.85GHz



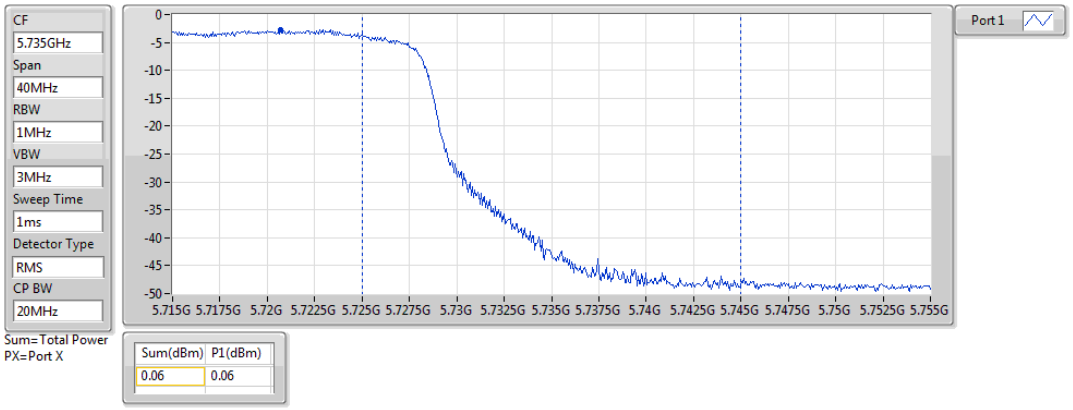
802.11ac VHT40_Nss1,(MCS0)_1TX **AV Power**

5710MHz Straddle 5.47-5.725GHz



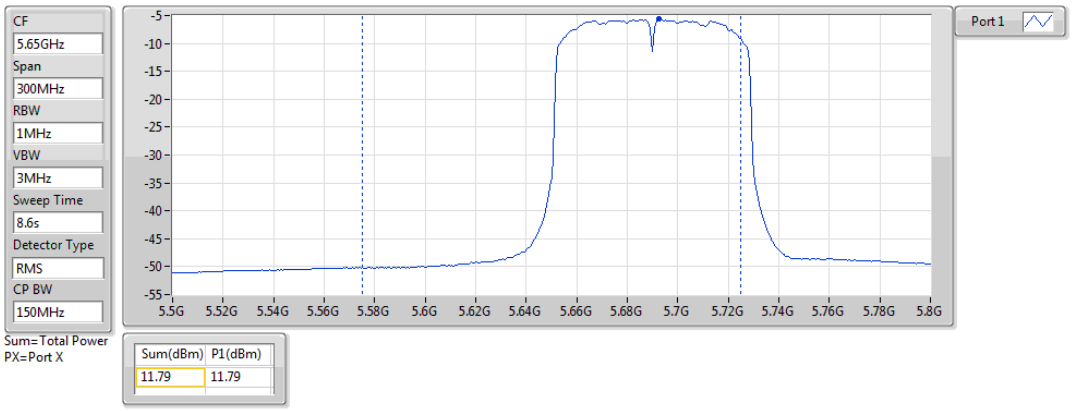
802.11ac VHT40_Nss1,(MCS0)_1TX **AV Power**

5710MHz Straddle 5.725-5.85GHz



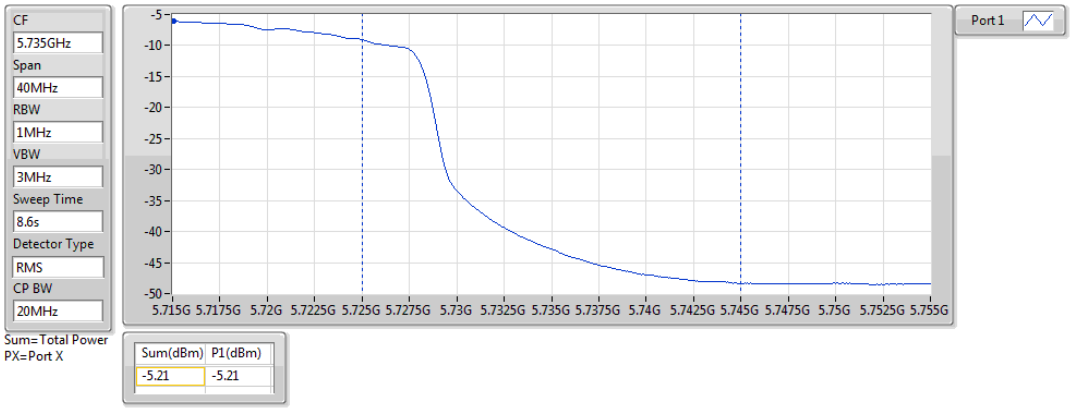
802.11ac VHT80_Nss1,(MCS0)_1TX **AV Power**

5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_1TX **AV Power**

5690MHz Straddle 5.725-5.85GHz



3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

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

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz

3.4.2 Test Procedures

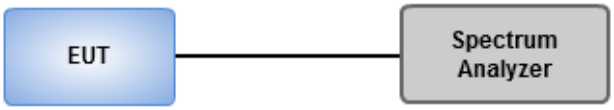
Duty cycle ≥ 98 %

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.

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)_1TX	-1.23	-4.83
802.11ac VHT20_Nss1,(MCS0)_1TX	-0.98	-4.58
802.11ac VHT40_Nss1,(MCS0)_1TX	-4.03	-7.63
802.11ac VHT80_Nss1,(MCS0)_1TX	-6.87	-10.47
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	-0.77	-4.37
802.11ac VHT20_Nss1,(MCS0)_1TX	-1.35	-4.95
802.11ac VHT40_Nss1,(MCS0)_1TX	-4.05	-7.65
802.11ac VHT80_Nss1,(MCS0)_1TX	-7.19	-10.79
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	-1.09	-4.69
802.11ac VHT20_Nss1,(MCS0)_1TX	-1.42	-5.02
802.11ac VHT40_Nss1,(MCS0)_1TX	-3.84	-7.44
802.11ac VHT80_Nss1,(MCS0)_1TX	-7.11	-10.71

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

Result

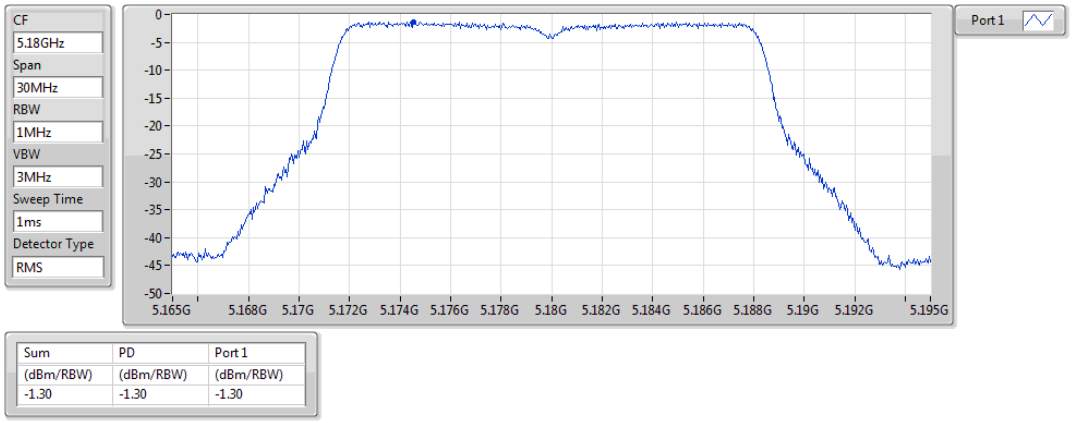
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	-3.60	-1.30	-1.30	11.00	-4.90	17.00
5200MHz	Pass	-3.60	-1.23	-1.23	11.00	-4.83	17.00
5240MHz	Pass	-3.60	-1.37	-1.37	11.00	-4.97	17.00
5260MHz	Pass	-3.60	-1.34	-1.34	11.00	-4.94	17.00
5300MHz	Pass	-3.60	-0.77	-0.77	11.00	-4.37	17.00
5320MHz	Pass	-3.60	-1.22	-1.22	11.00	-4.82	17.00
5500MHz	Pass	-3.60	-1.09	-1.09	11.00	-4.69	17.00
5580MHz	Pass	-3.60	-1.23	-1.23	11.00	-4.83	17.00
5700MHz	Pass	-3.60	-1.39	-1.39	11.00	-4.99	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	-3.60	-1.47	-1.47	11.00	-5.07	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	-3.60	-3.05	-3.05	30.00	-6.65	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	-3.60	-1.39	-1.39	11.00	-4.99	17.00
5200MHz	Pass	-3.60	-1.48	-1.48	11.00	-5.08	17.00
5240MHz	Pass	-3.60	-0.98	-0.98	11.00	-4.58	17.00
5260MHz	Pass	-3.60	-1.36	-1.36	11.00	-4.96	17.00
5300MHz	Pass	-3.60	-1.56	-1.56	11.00	-5.16	17.00
5320MHz	Pass	-3.60	-1.35	-1.35	11.00	-4.95	17.00
5500MHz	Pass	-3.60	-1.53	-1.53	11.00	-5.13	17.00
5580MHz	Pass	-3.60	-1.48	-1.48	11.00	-5.08	17.00
5700MHz	Pass	-3.60	-1.42	-1.42	11.00	-5.02	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	-3.60	-1.49	-1.49	11.00	-5.09	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	-3.60	-3.18	-3.18	30.00	-6.78	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5190MHz	Pass	-3.60	-4.06	-4.06	11.00	-7.66	17.00
5230MHz	Pass	-3.60	-4.03	-4.03	11.00	-7.63	17.00
5270MHz	Pass	-3.60	-4.21	-4.21	11.00	-7.81	17.00
5310MHz	Pass	-3.60	-4.05	-4.05	11.00	-7.65	17.00
5510MHz	Pass	-3.60	-3.84	-3.84	11.00	-7.44	17.00
5590MHz	Pass	-3.60	-4.04	-4.04	11.00	-7.64	17.00
5670MHz	Pass	-3.60	-4.22	-4.22	11.00	-7.82	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	-3.60	-4.59	-4.59	11.00	-8.19	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	-3.60	-7.19	-7.19	30.00	-10.79	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5210MHz	Pass	-3.60	-6.87	-6.87	11.00	-10.47	17.00
5290MHz	Pass	-3.60	-7.19	-7.19	11.00	-10.79	17.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5530MHz	Pass	-3.60	-7.11	-7.11	11.00	-10.71	17.00
5610MHz	Pass	-3.60	-7.20	-7.20	11.00	-10.80	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	-3.60	-7.48	-7.48	11.00	-11.08	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	-3.60	-12.70	-12.70	30.00	-16.30	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;

802.11a_Nss1,(6Mbps)_1TX **PSD**

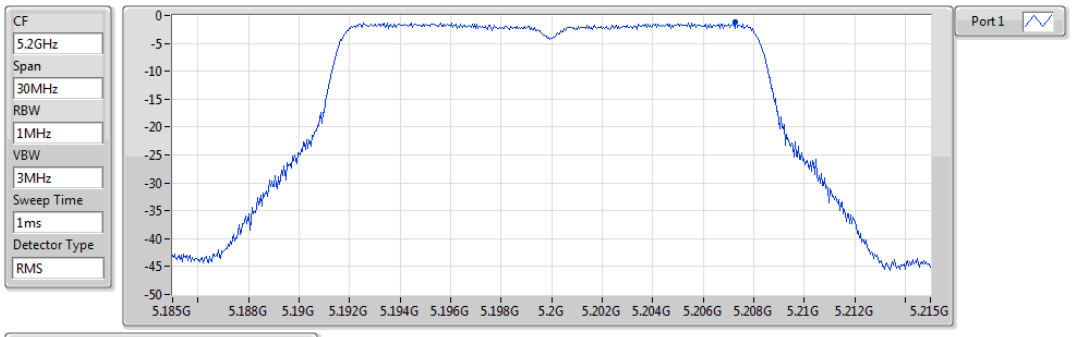
5180MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.30	-1.30	-1.30

802.11a_Nss1,(6Mbps)_1TX **PSD**

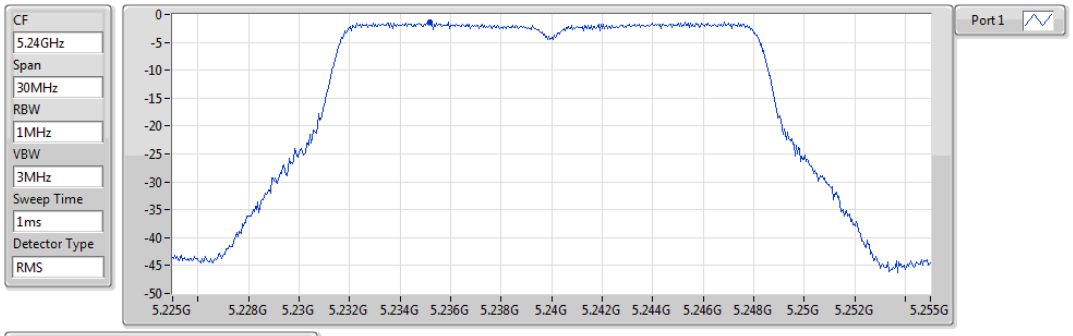
5200MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.23	-1.23	-1.23

802.11a_Nss1,(6Mbps)_1TX **PSD**

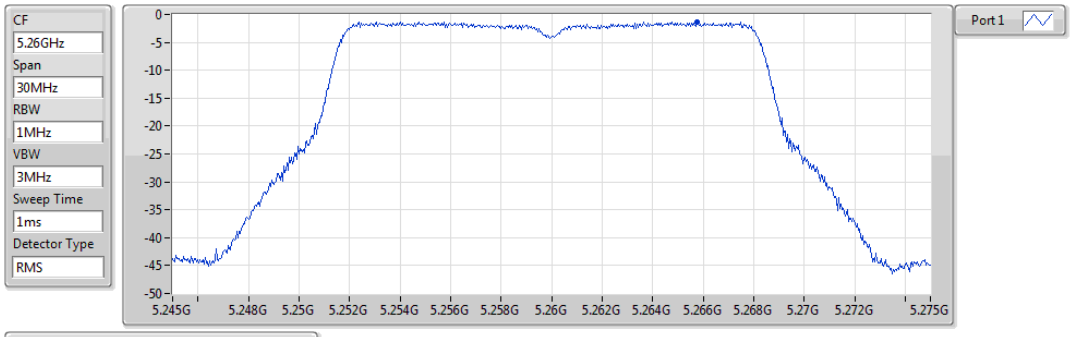
5240MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.37	-1.37	-1.37

802.11a_Nss1,(6Mbps)_1TX **PSD**

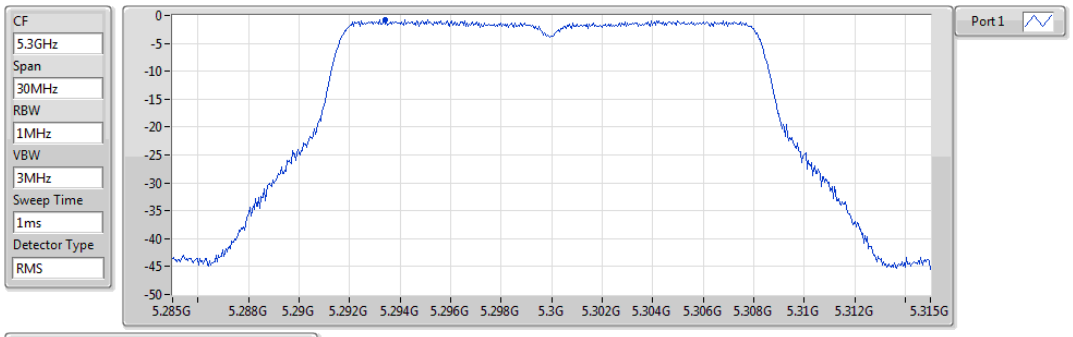
5260MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.34	-1.34	-1.34

802.11a_Nss1,(6Mbps)_1TX **PSD**

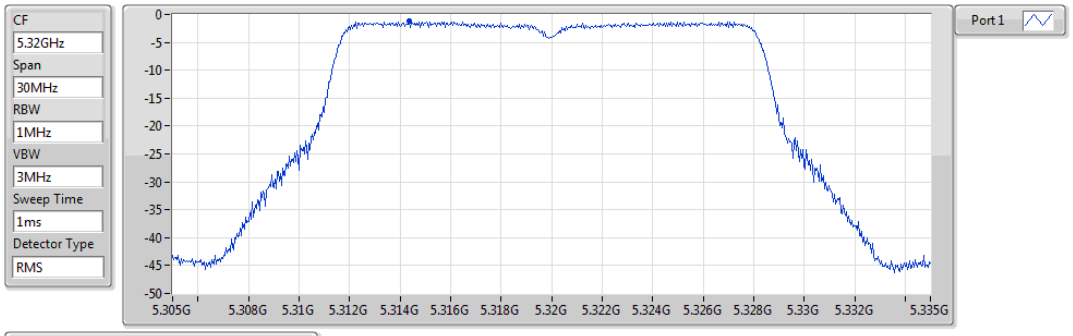
5300MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.77	-0.77	-0.77

802.11a_Nss1,(6Mbps)_1TX **PSD**

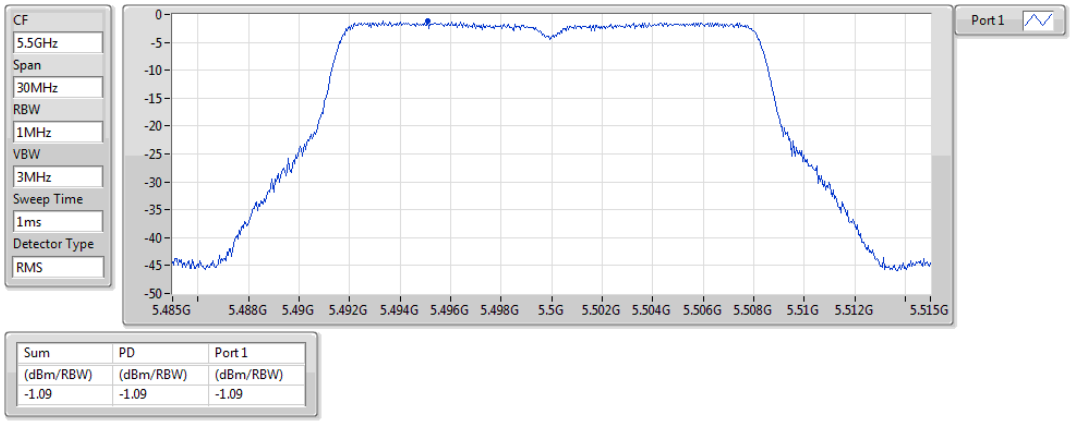
5320MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.22	-1.22	-1.22

802.11a_Nss1,(6Mbps)_1TX **PSD**

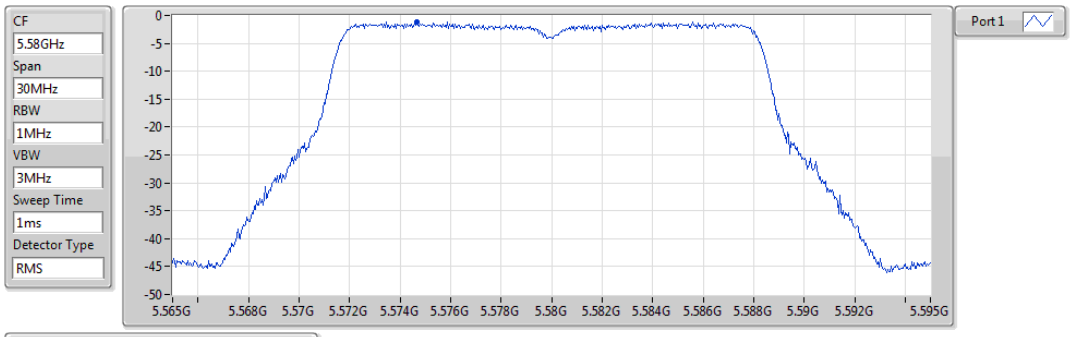
5500MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.09	-1.09	-1.09

802.11a_Nss1,(6Mbps)_1TX **PSD**

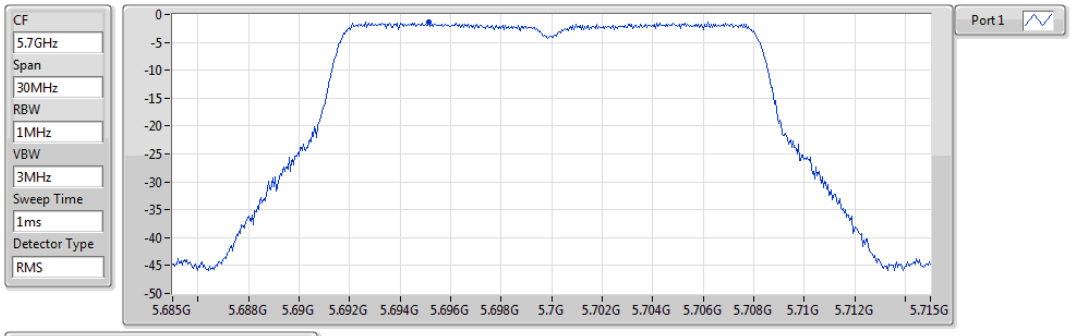
5580MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.23	-1.23	-1.23

802.11a_Nss1,(6Mbps)_1TX **PSD**

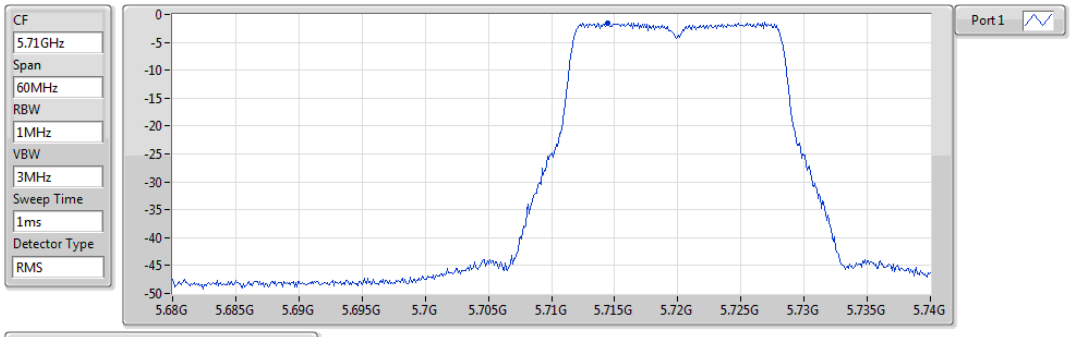
5700MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.39	-1.39	-1.39

802.11a_Nss1,(6Mbps)_1TX **PSD**

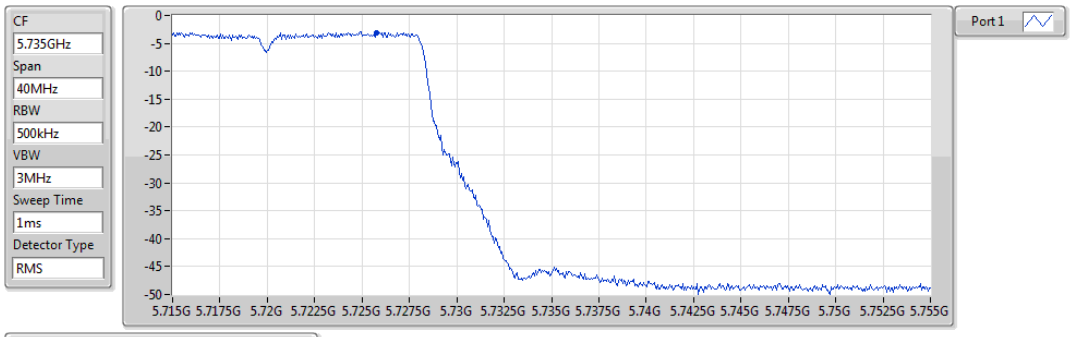
5720MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.47	-1.47	-1.47

802.11a_Nss1,(6Mbps)_1TX **PSD**

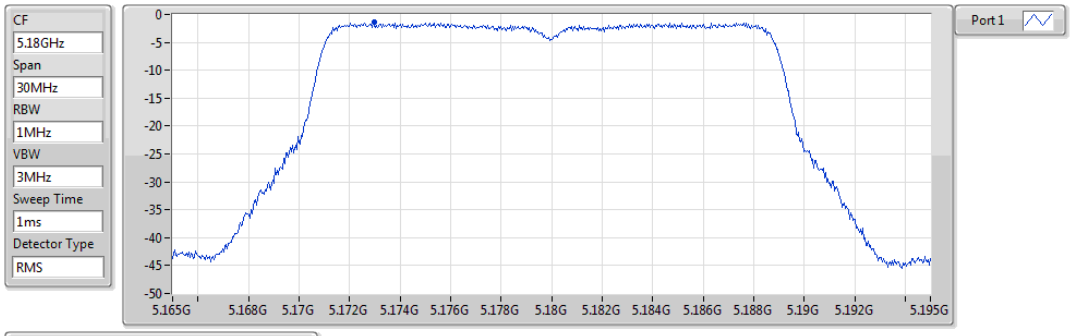
5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.05	-3.05	-3.05

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

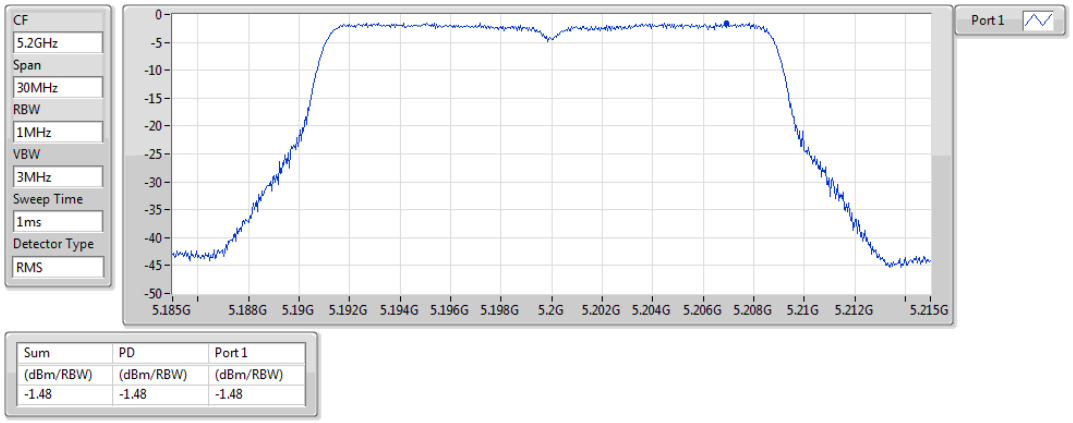
5180MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.39	-1.39	-1.39

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

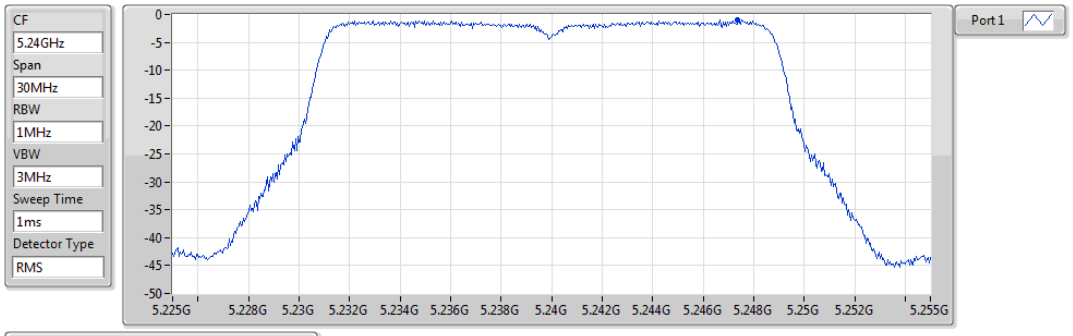
5200MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.48	-1.48	-1.48

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

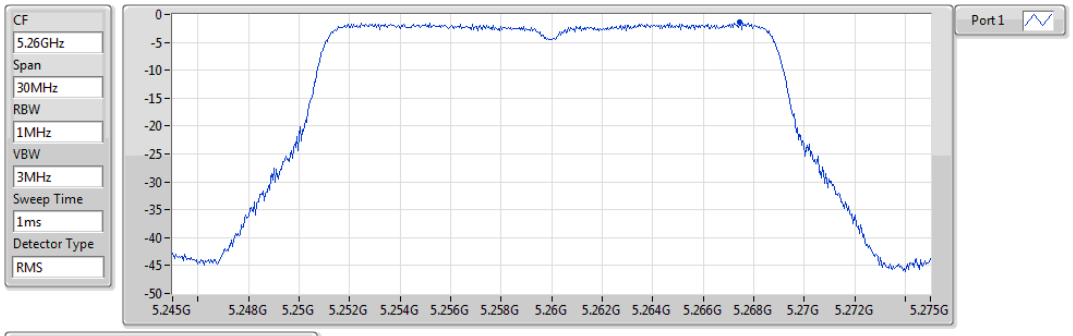
5240MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.98	-0.98	-0.98

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

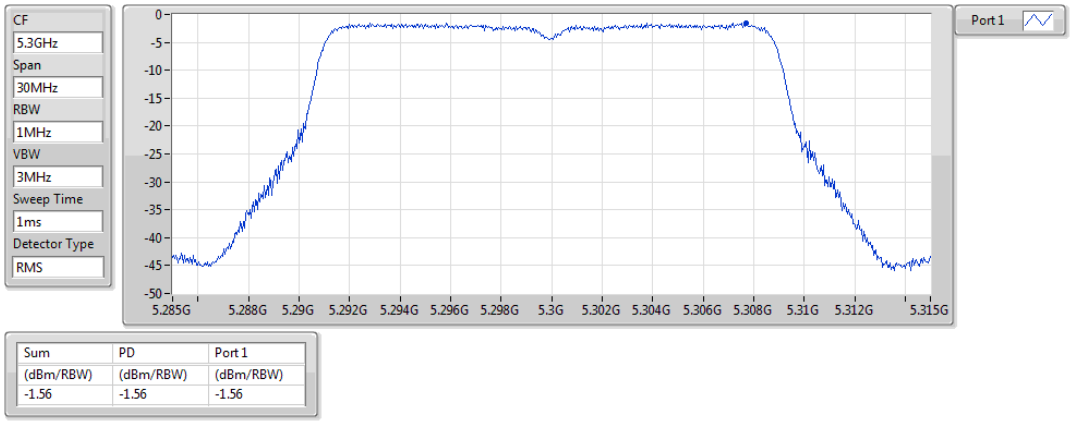
5260MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.36	-1.36	-1.36

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

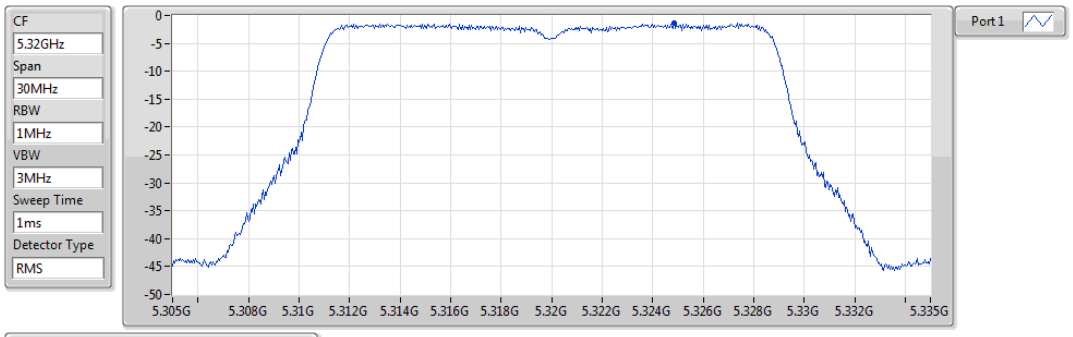
5300MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.56	-1.56	-1.56

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

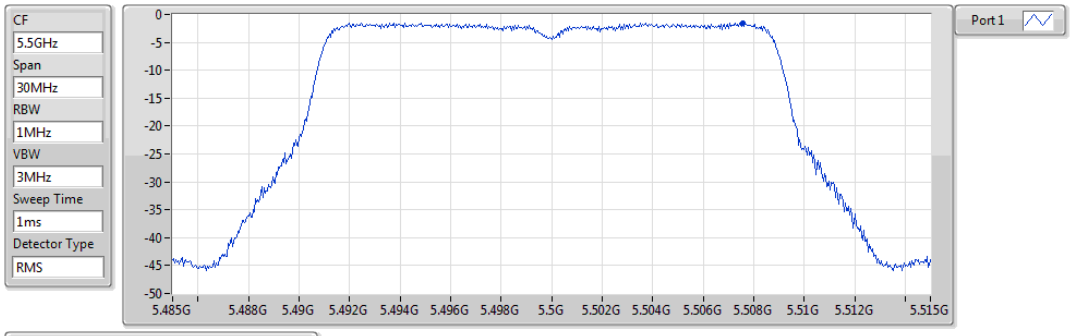
5320MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.35	-1.35	-1.35

802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

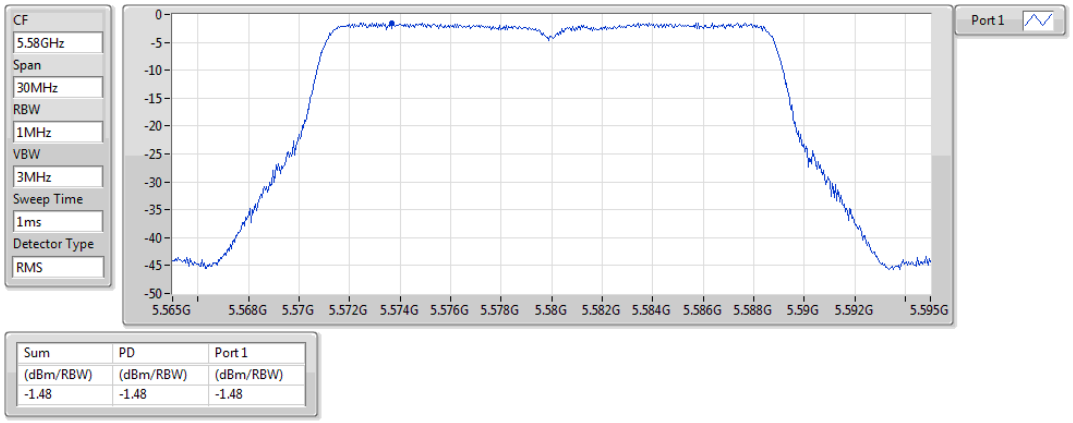
5500MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.53	-1.53	-1.53

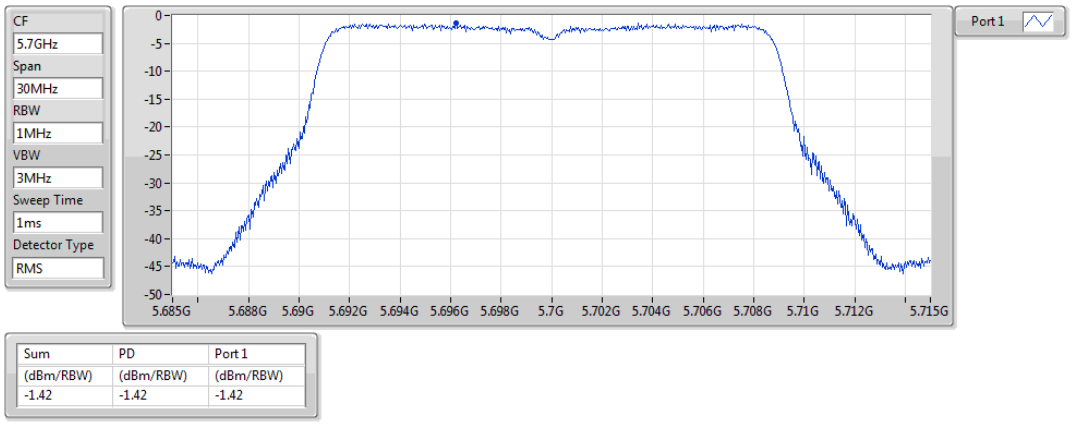
802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

5580MHz



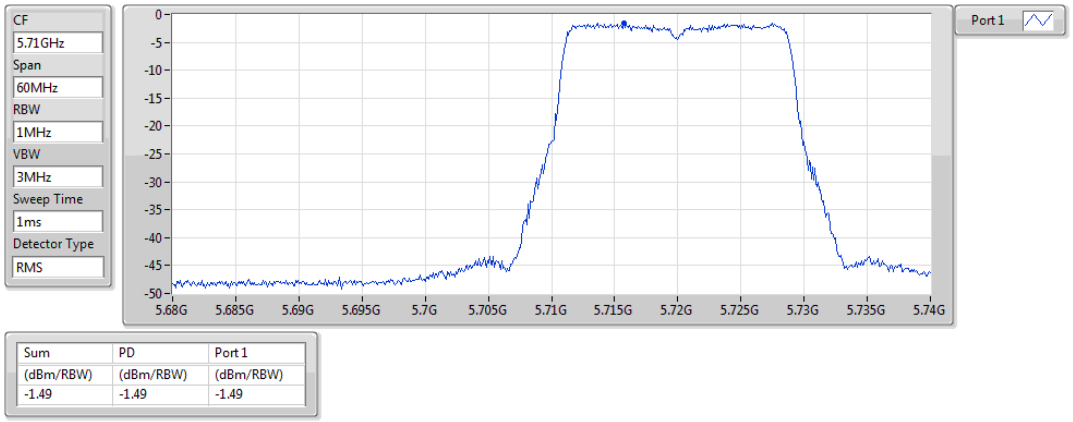
802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

5700MHz



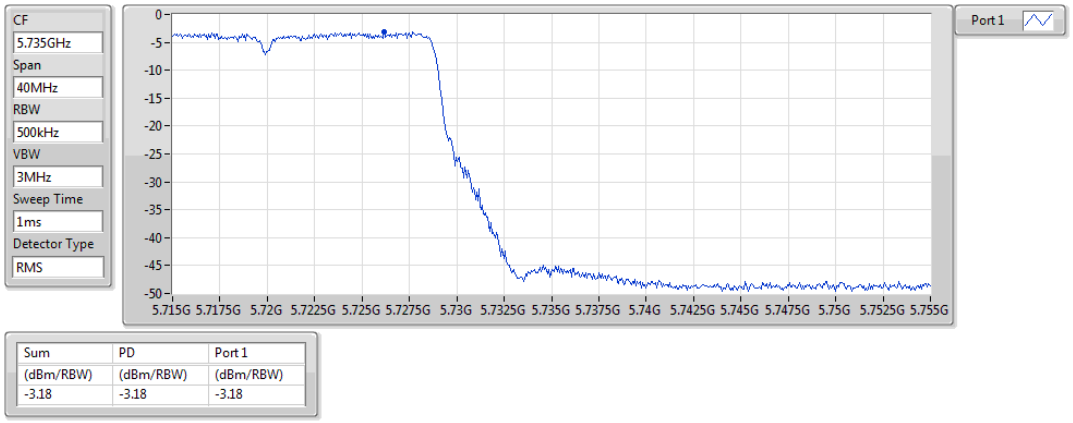
802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20_Nss1,(MCS0)_1TX **PSD**

5720MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.18	-3.18	-3.18

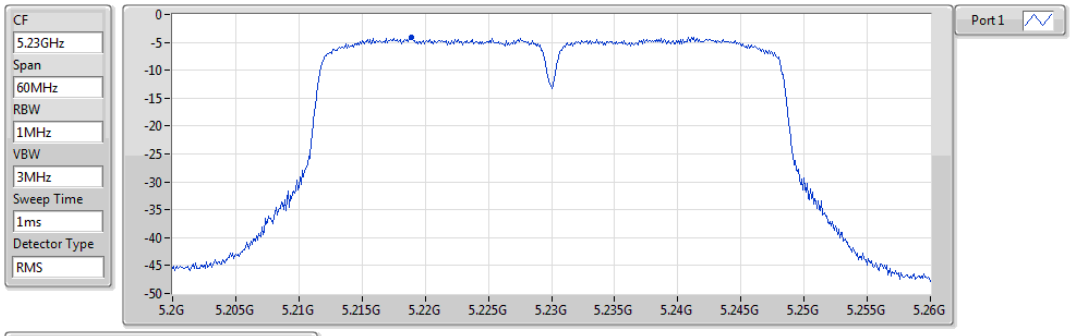
802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

5190MHz

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.06	-4.06	-4.06

802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

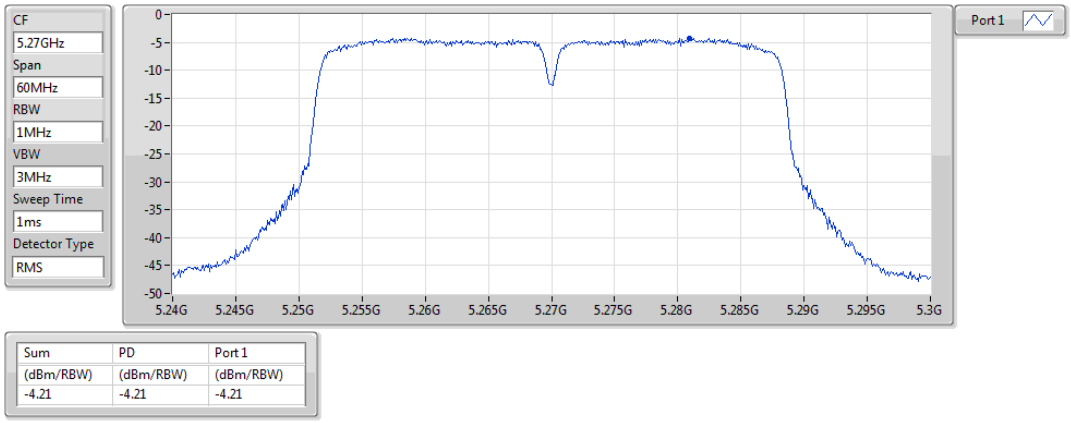
5230MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.03	-4.03	-4.03

802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

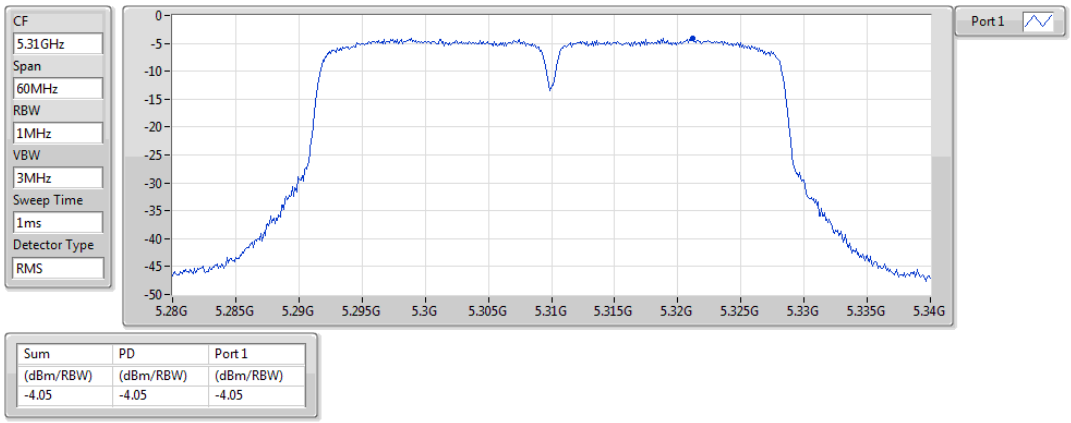
5270MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.21	-4.21	-4.21

802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

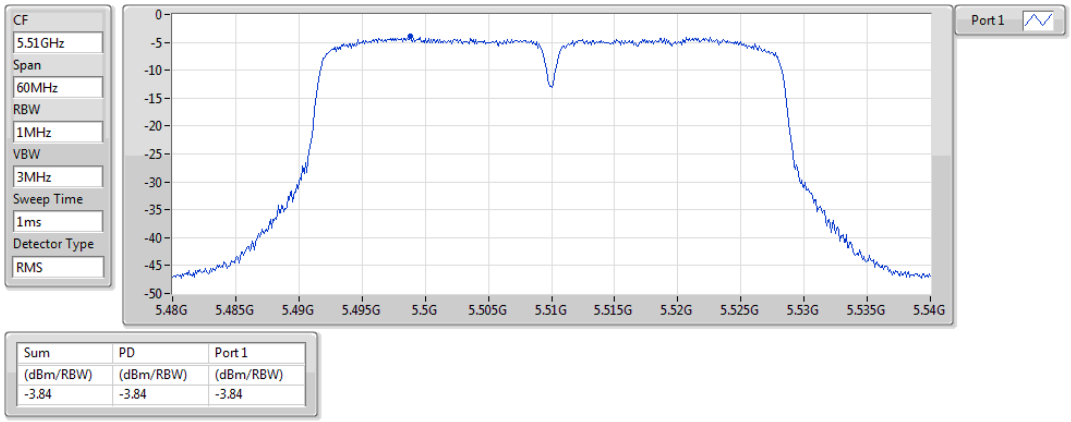
5310MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.05	-4.05	-4.05

802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

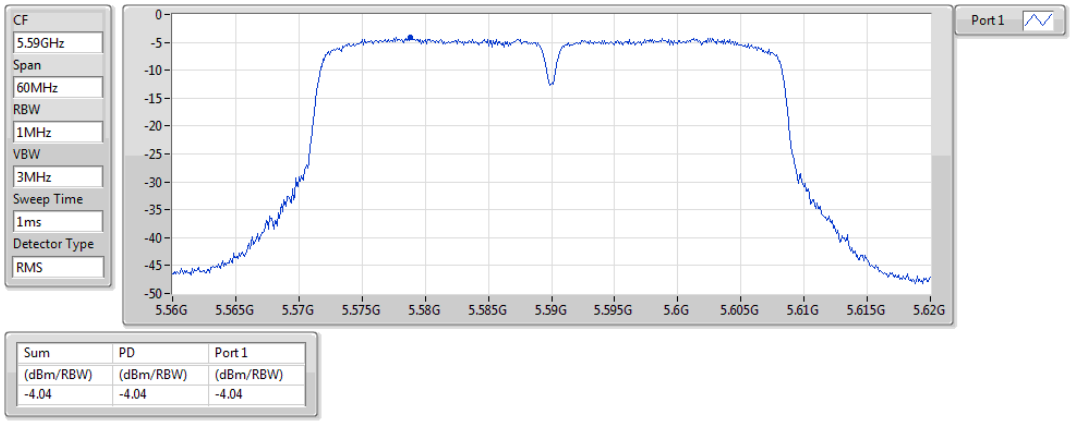
5510MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.84	-3.84	-3.84

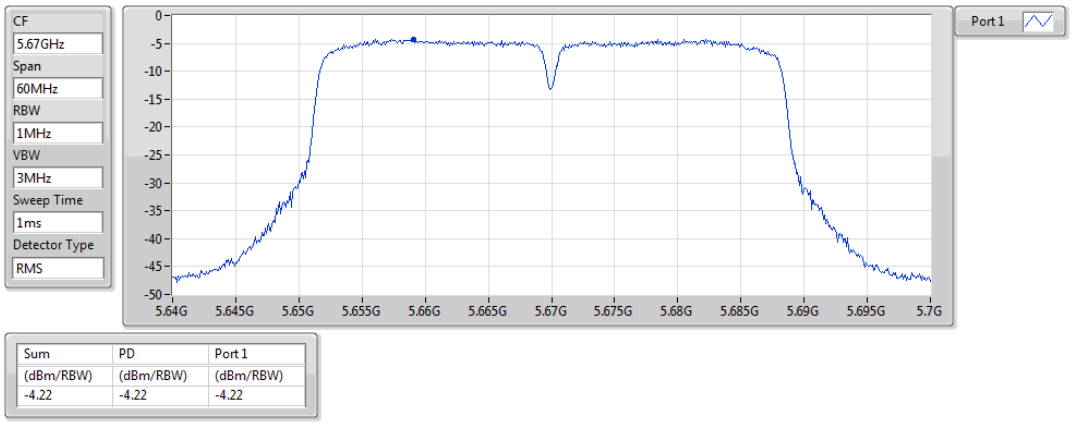
802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

5590MHz



802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

5670MHz

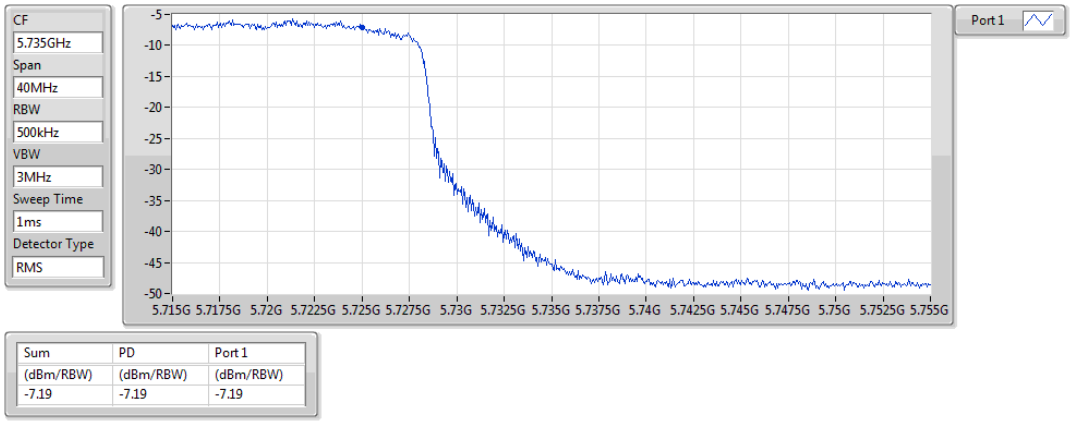


802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

5710MHz Straddle 5.47-5.725GHz

802.11ac VHT40_Nss1,(MCS0)_1TX **PSD**

5710MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.19	-7.19	-7.19

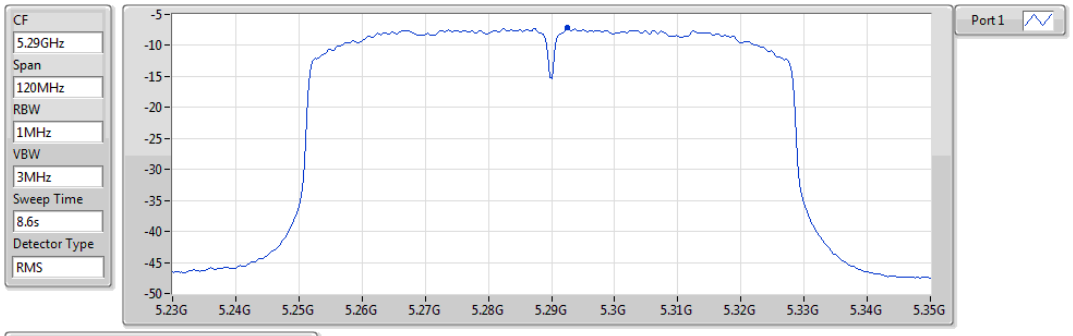
802.11ac VHT80_Nss1,(MCS0)_1TX **PSD**

5210MHz

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.87	-6.87	-6.87

802.11ac VHT80_Nss1,(MCS0)_1TX **PSD**

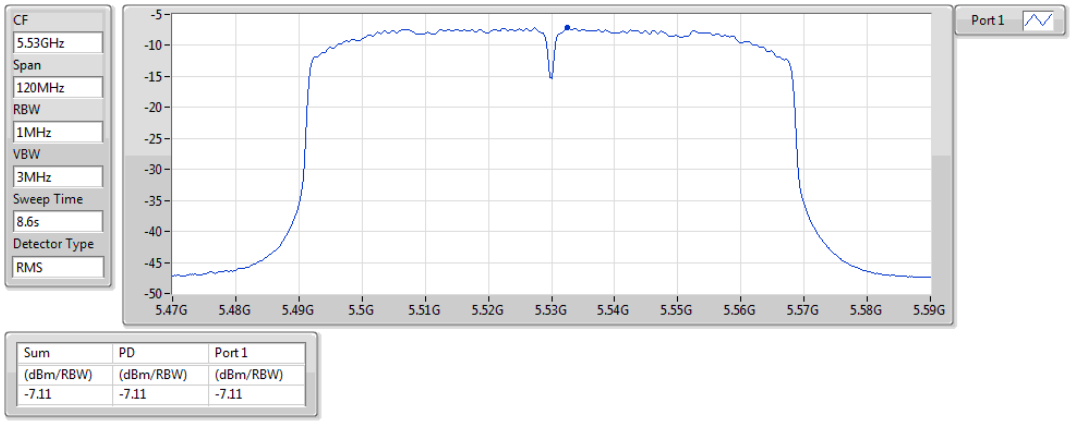
5290MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.19	-7.19	-7.19

802.11ac VHT80_Nss1,(MCS0)_1TX **PSD**

5530MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.11	-7.11	-7.11

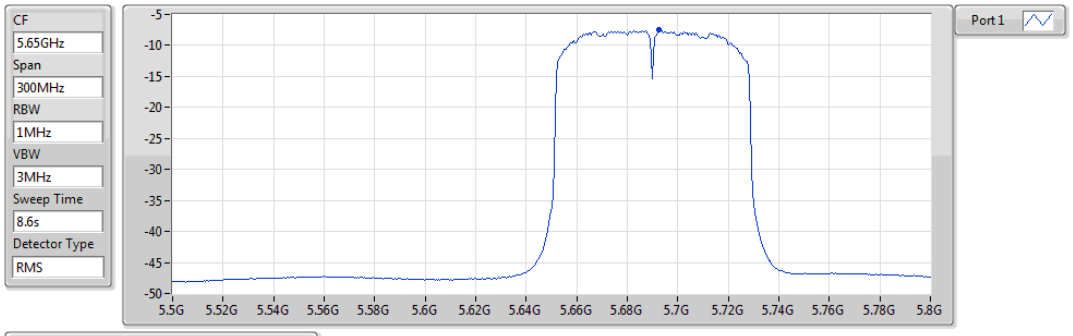
802.11ac VHT80_Nss1,(MCS0)_1TX **PSD**

5610MHz

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.20	-7.20	-7.20

802.11ac VHT80_Nss1,(MCS0)_1TX **PSD**

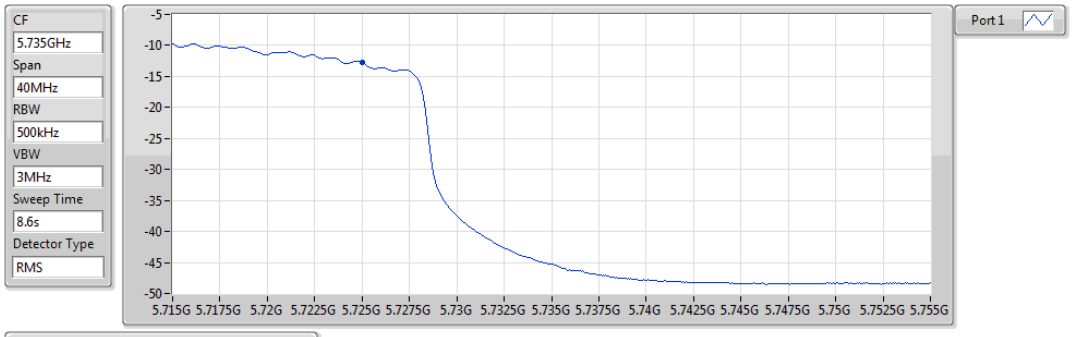
5690MHz Straddle 5.47-5.725GHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.48	-7.48	-7.48

802.11ac VHT80_Nss1,(MCS0)_1TX **PSD**

5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.70	-12.70	-12.70

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]

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

3.5.2 Test Procedures

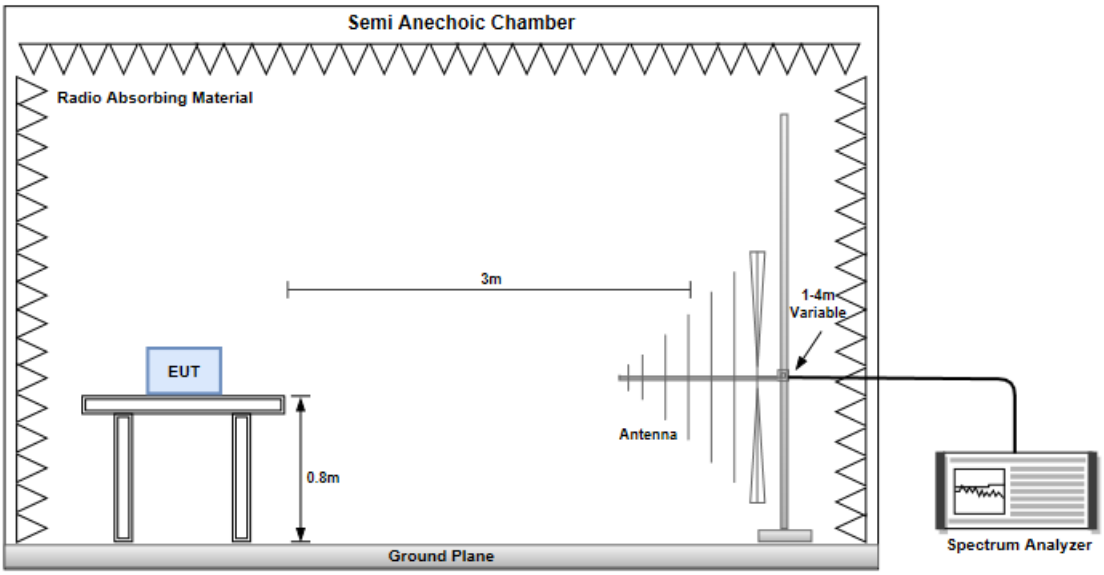
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

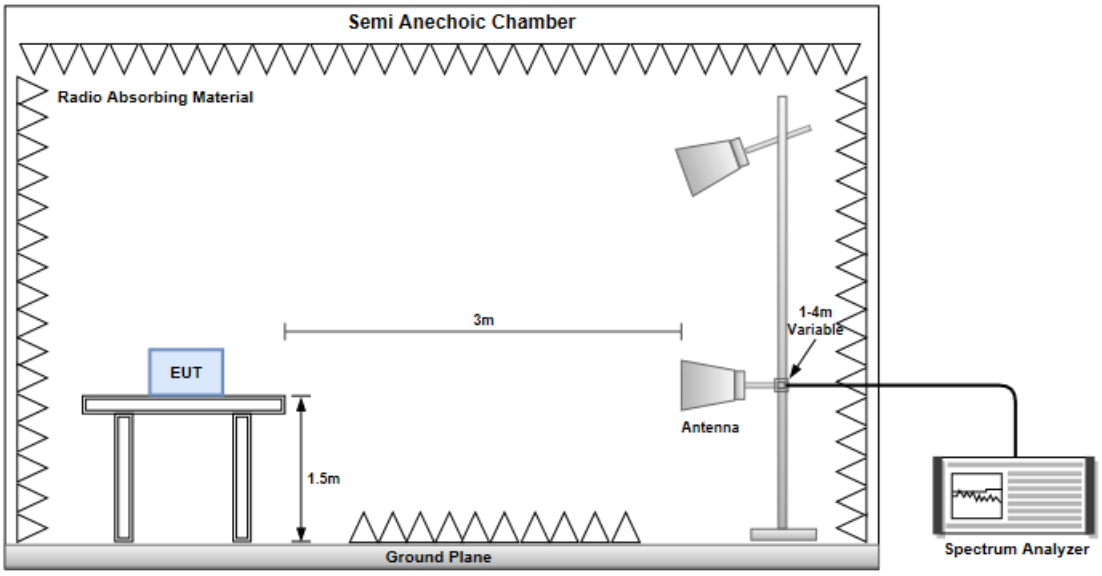
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

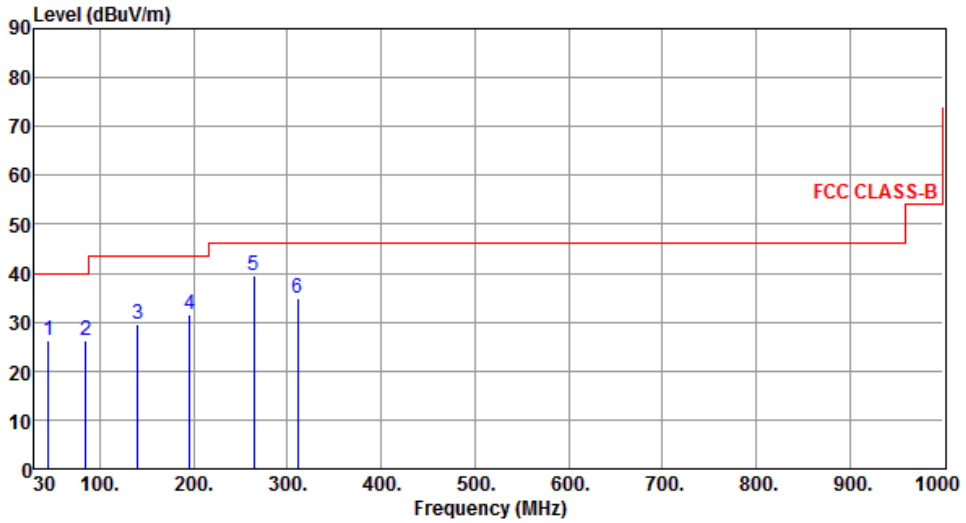


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

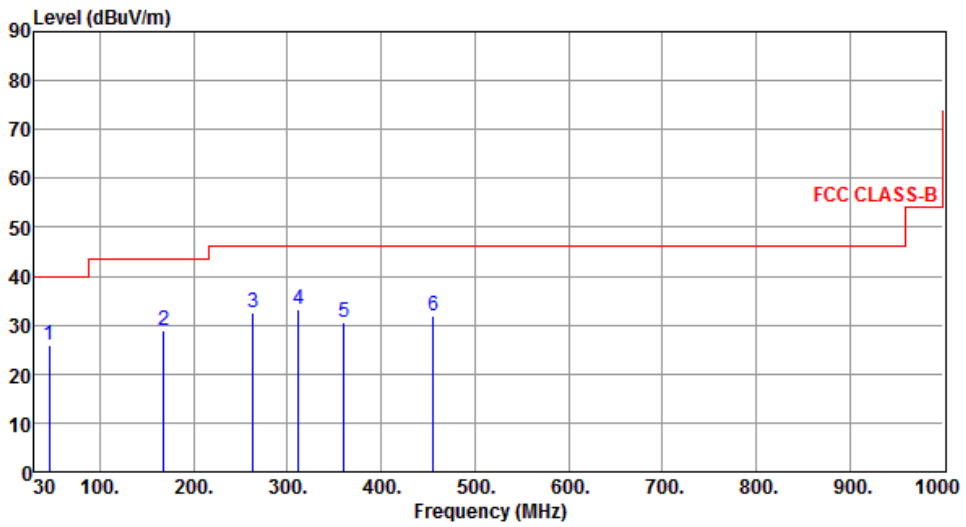
Modulation	11a	**Test Freq. (MHz)**	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	45.41	26.17	40.00	-13.83	34.55	-8.38	Peak	---	---
2	85.22	26.10	40.00	-13.90	40.11	-14.01	Peak	---	---
3	140.58	29.66	43.50	-13.84	38.52	-8.86	Peak	---	---
4	195.73	31.69	43.50	-11.81	43.44	-11.75	Peak	---	---
5	263.79	39.44	46.00	-6.56	48.82	-9.38	Peak	---	---
6	311.25	34.84	46.00	-11.16	42.53	-7.69	Peak	---	---

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

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

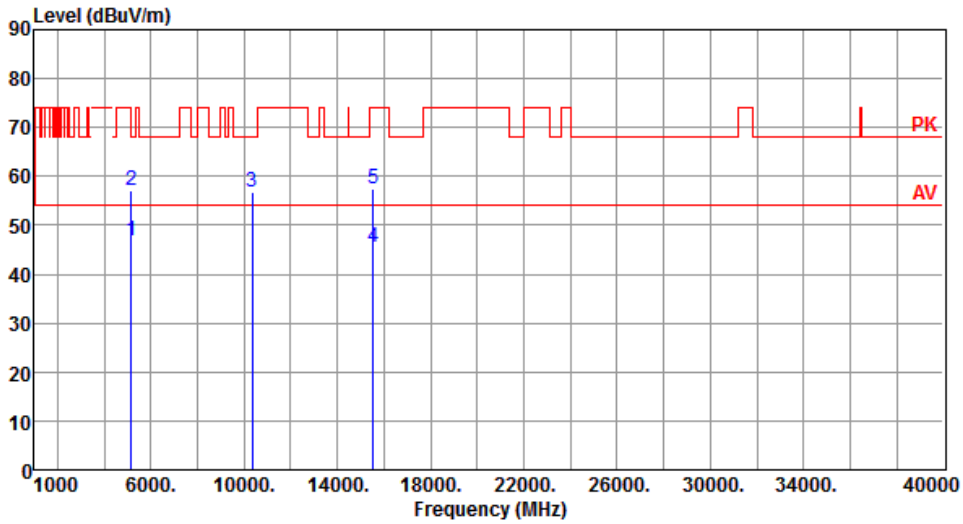


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	45.56	25.83	40.00	-14.17	34.19	-8.36	Peak	---	---
2	167.67	28.93	43.50	-14.57	37.63	-8.70	Peak	---	---
3	263.62	32.41	46.00	-13.59	41.80	-9.39	Peak	---	---
4	311.45	33.32	46.00	-12.68	41.00	-7.68	Peak	---	---
5	360.75	30.54	46.00	-15.46	37.12	-6.58	Peak	---	---
6	455.86	31.92	46.00	-14.08	35.88	-3.96	Peak	---	---

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

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

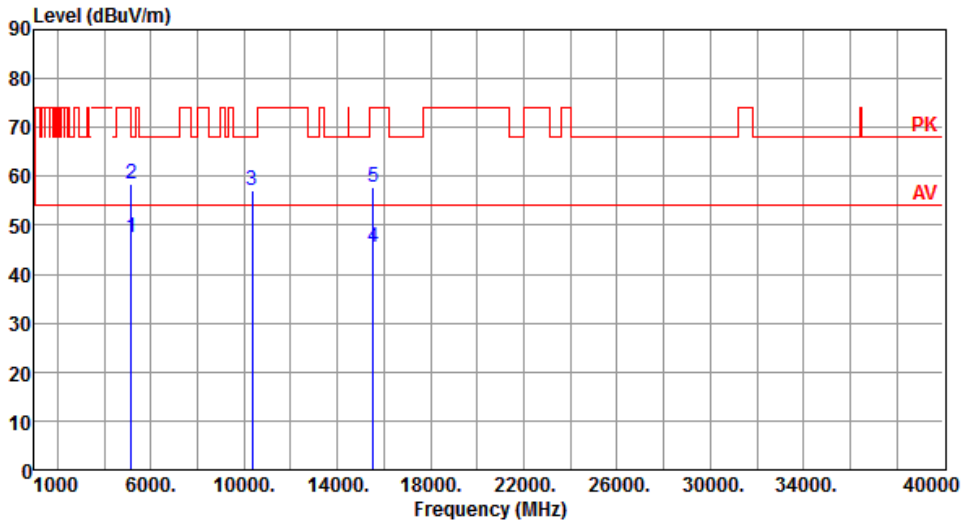
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.89	54.00	-7.11	42.25	4.64	Average	387	144
2	5150.00	57.11	74.00	-16.89	52.47	4.64	Peak	387	144
3	10360.00	56.66	68.20	-11.54	42.47	14.19	Peak	100	109
4	15540.00	45.38	54.00	-8.62	30.47	14.91	Average	100	102
5	15540.00	57.30	74.00	-16.70	42.39	14.91	Peak	100	102

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

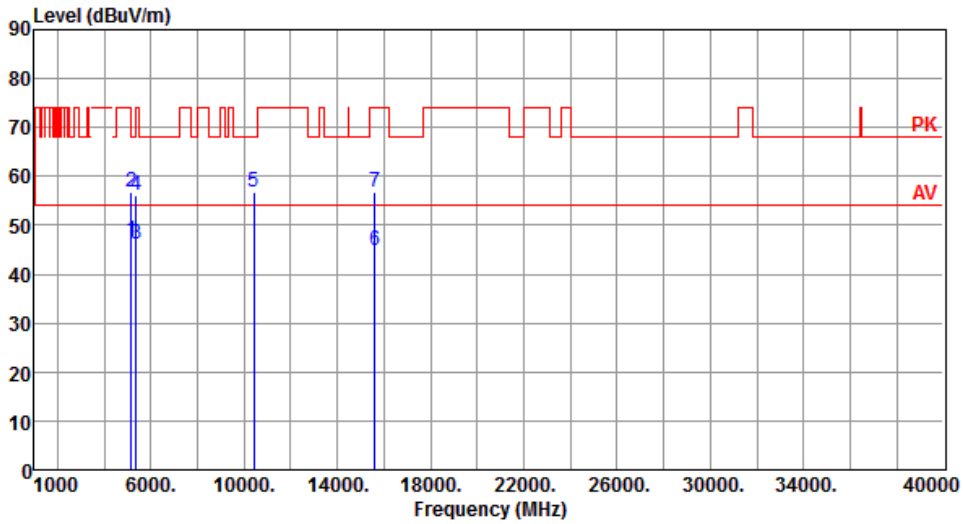
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.63	54.00	-6.37	42.99	4.64	Average	245	90
2	5150.00	58.42	74.00	-15.58	53.78	4.64	Peak	245	90
3	10360.00	57.06	68.20	-11.14	42.87	14.19	Peak	100	63
4	15540.00	45.54	54.00	-8.46	30.63	14.91	Average	100	51
5	15540.00	57.86	74.00	-16.14	42.95	14.91	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).

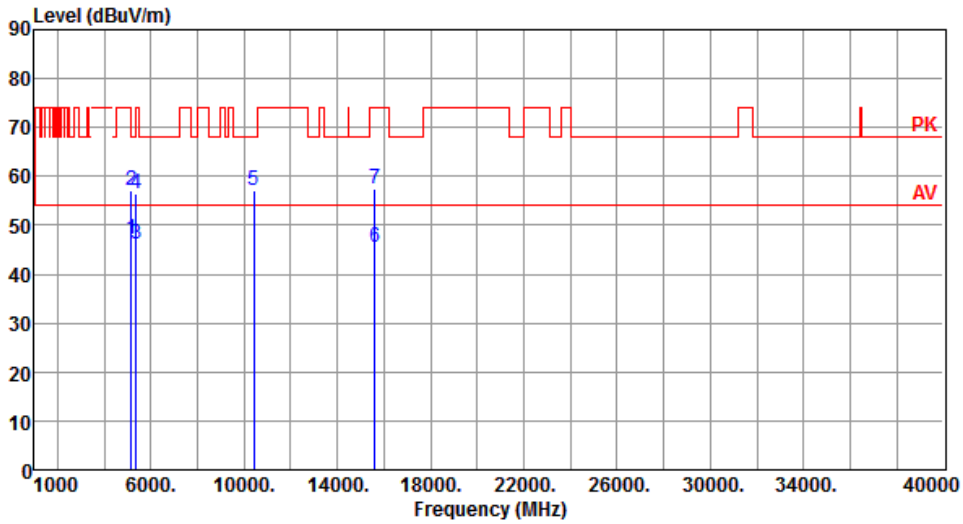
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	42.25	4.64	Average	387	150
2	5150.00	56.85	74.00	-17.15	52.21	4.64	Peak	387	150
3	5350.00	46.04	54.00	-7.96	42.10	3.94	Average	387	150
4	5350.00	56.11	74.00	-17.89	52.17	3.94	Peak	387	150
5	10400.00	56.64	68.20	-11.56	42.34	14.30	Peak	100	111
6	15600.00	44.90	54.00	-9.10	30.26	14.64	Average	100	100
7	15600.00	56.93	74.00	-17.07	42.29	14.64	Peak	100	100

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

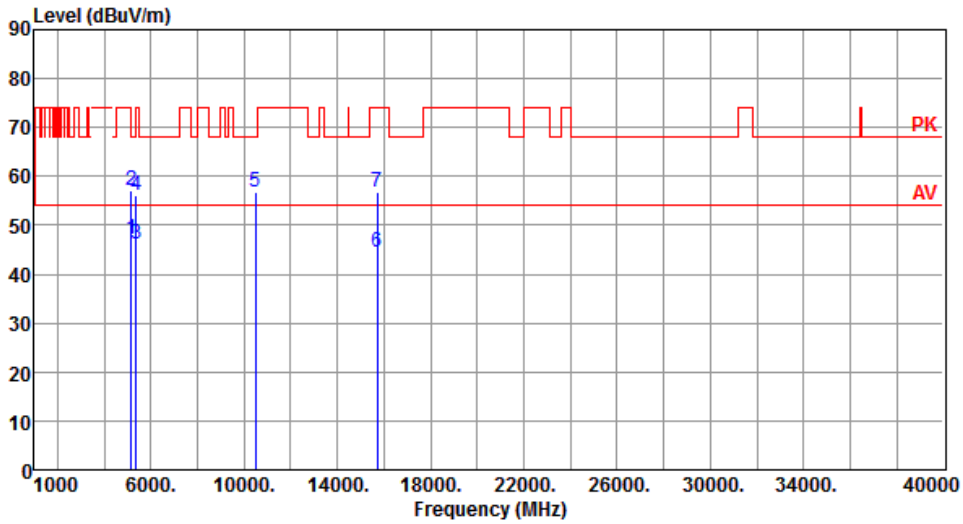
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.08	54.00	-6.92	42.44	4.64	Average	232	82
2	5150.00	57.03	74.00	-16.97	52.39	4.64	Peak	232	82
3	5350.00	46.33	54.00	-7.67	42.39	3.94	Average	232	82
4	5350.00	56.41	74.00	-17.59	52.47	3.94	Peak	232	82
5	10400.00	57.29	68.20	-10.91	42.99	14.30	Peak	100	49
6	15600.00	45.52	54.00	-8.48	30.88	14.64	Average	100	59
7	15600.00	57.61	74.00	-16.39	42.97	14.64	Peak	100	59

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

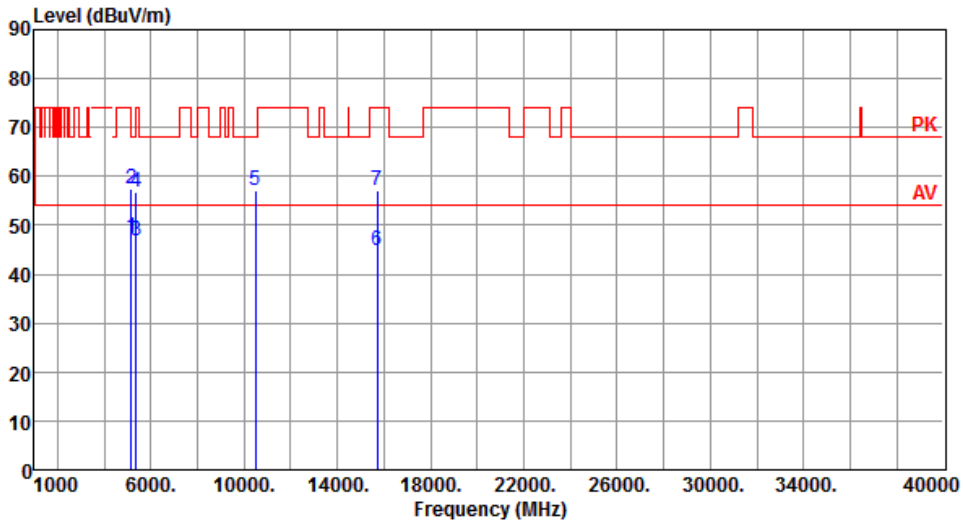
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.13	54.00	-6.87	42.49	4.64	Average	381	148
2	5150.00	57.05	74.00	-16.95	52.41	4.64	Peak	381	148
3	5350.00	46.23	54.00	-7.77	42.29	3.94	Average	381	148
4	5350.00	56.22	74.00	-17.78	52.28	3.94	Peak	381	148
5	10480.00	56.86	68.20	-11.34	42.40	14.46	Peak	100	101
6	15720.00	44.55	54.00	-9.45	30.34	14.21	Average	100	105
7	15720.00	56.92	74.00	-17.08	42.71	14.21	Peak	100	105

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

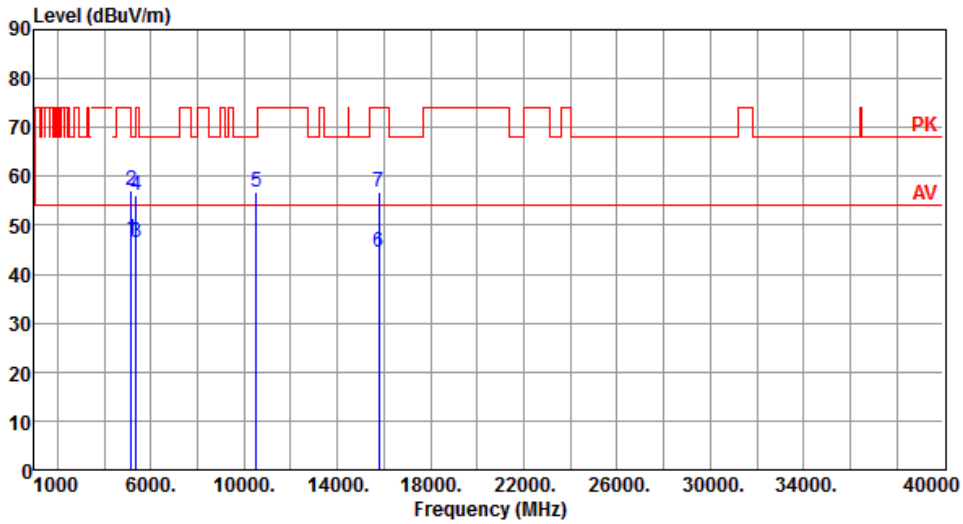
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.46	54.00	-6.54	42.82	4.64	Average	242	82
2	5150.00	57.44	74.00	-16.56	52.80	4.64	Peak	242	82
3	5350.00	46.70	54.00	-7.30	42.76	3.94	Average	242	82
4	5350.00	56.65	74.00	-17.35	52.71	3.94	Peak	242	82
5	10480.00	57.28	68.20	-10.92	42.82	14.46	Peak	100	58
6	15720.00	44.87	54.00	-9.13	30.66	14.21	Average	100	58
7	15720.00	57.03	74.00	-16.97	42.82	14.21	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).

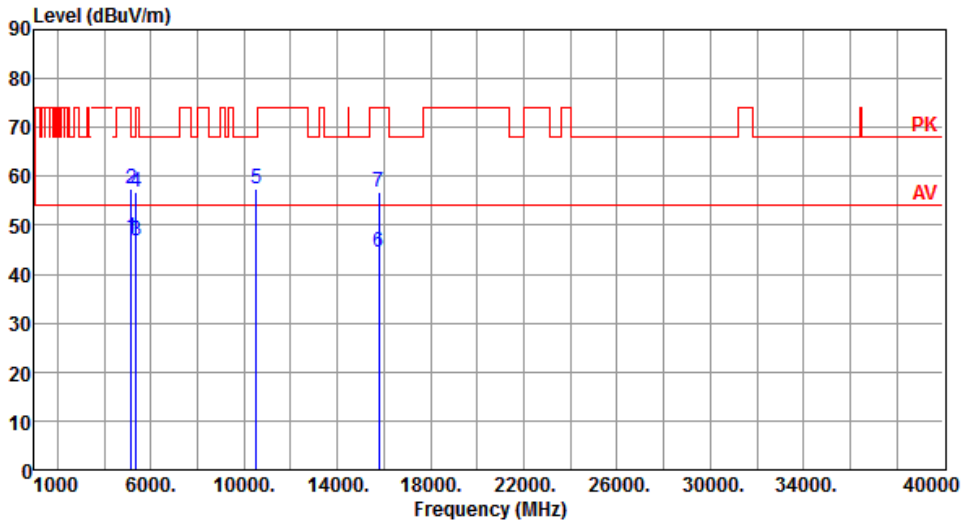
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.00	54.00	-7.00	42.36	4.64	Average	385	145
2	5150.00	57.08	74.00	-16.92	52.44	4.64	Peak	385	145
3	5350.00	46.44	54.00	-7.56	42.50	3.94	Average	385	145
4	5350.00	56.29	74.00	-17.71	52.35	3.94	Peak	385	145
5	10520.00	56.87	68.20	-11.33	42.41	14.46	Peak	100	101
6	15780.00	44.62	54.00	-9.38	30.44	14.18	Average	100	106
7	15780.00	56.67	74.00	-17.33	42.49	14.18	Peak	100	106

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

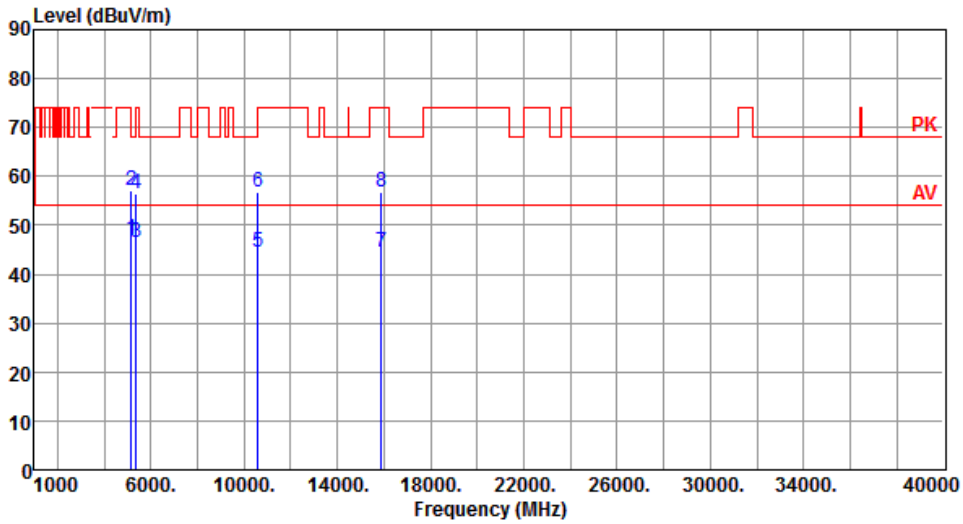
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.46	54.00	-6.54	42.82	4.64	Average	222	82
2	5150.00	57.57	74.00	-16.43	52.93	4.64	Peak	222	82
3	5350.00	46.81	54.00	-7.19	42.87	3.94	Average	222	82
4	5350.00	56.81	74.00	-17.19	52.87	3.94	Peak	222	82
5	10520.00	57.31	68.20	-10.89	42.85	14.46	Peak	100	52
6	15780.00	44.54	54.00	-9.46	30.36	14.18	Average	100	41
7	15780.00	56.81	74.00	-17.19	42.63	14.18	Peak	100	41

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

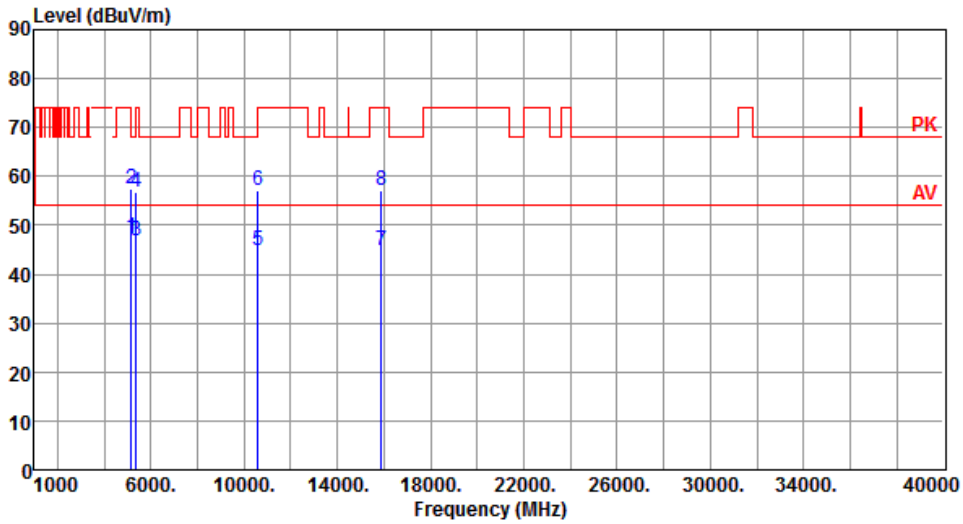
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.03	54.00	-6.97	42.39	4.64	Average	385	148
2	5150.00	57.14	74.00	-16.86	52.50	4.64	Peak	385	148
3	5350.00	46.34	54.00	-7.66	42.40	3.94	Average	385	148
4	5350.00	56.41	74.00	-17.59	52.47	3.94	Peak	385	148
5	10600.00	44.64	54.00	-9.36	30.36	14.28	Average	100	102
6	10600.00	56.67	74.00	-17.33	42.39	14.28	Peak	100	102
7	15900.00	44.63	54.00	-9.37	30.38	14.25	Average	100	105
8	15900.00	56.64	74.00	-17.36	42.39	14.25	Peak	100	105

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

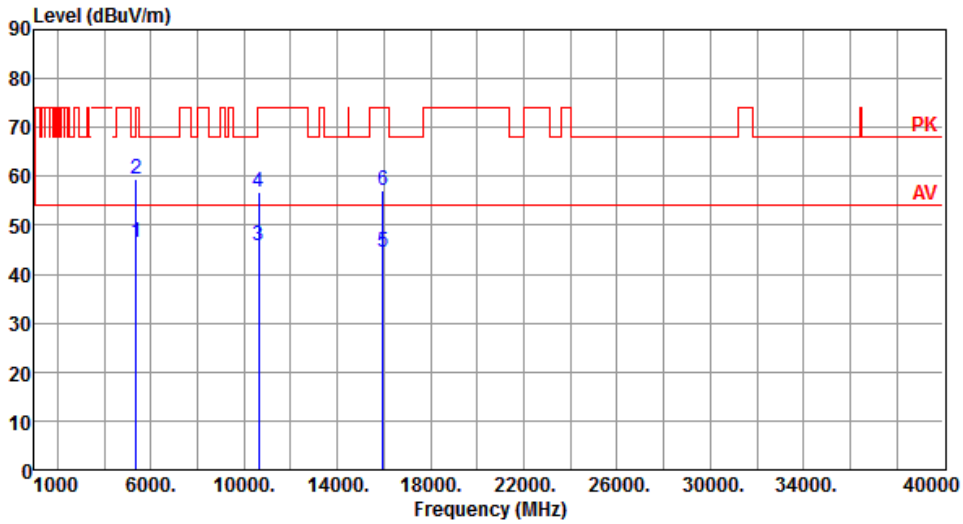
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.46	54.00	-6.54	42.82	4.64	Average	226	84
2	5150.00	57.33	74.00	-16.67	52.69	4.64	Peak	226	84
3	5350.00	46.83	54.00	-7.17	42.89	3.94	Average	226	84
4	5350.00	56.71	74.00	-17.29	52.77	3.94	Peak	226	84
5	10600.00	44.97	54.00	-9.03	30.69	14.28	Average	100	53
6	10600.00	57.05	74.00	-16.95	42.77	14.28	Peak	100	53
7	15900.00	44.76	54.00	-9.24	30.51	14.25	Average	100	56
8	15900.00	57.06	74.00	-16.94	42.81	14.25	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).

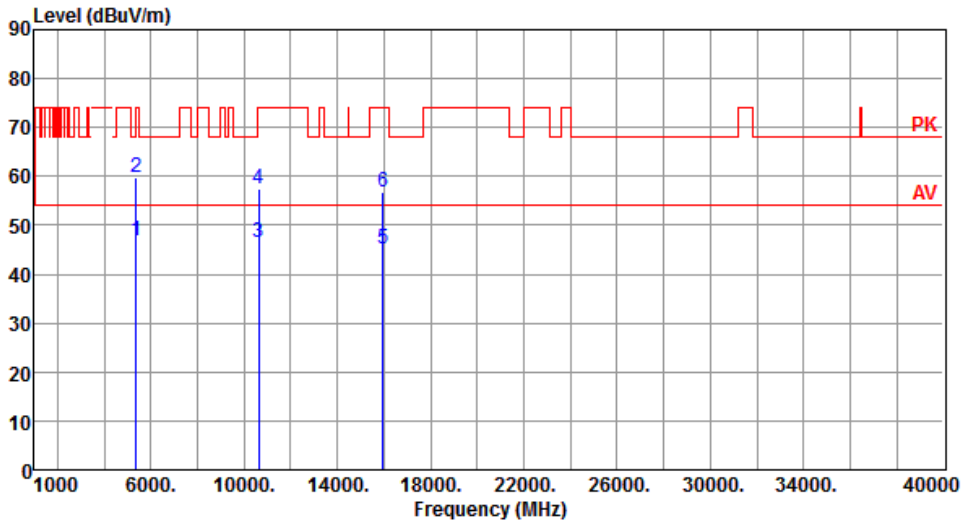
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	46.60	54.00	-7.40	42.66	3.94	Average	383	141
2	5350.00	59.43	74.00	-14.57	55.49	3.94	Peak	383	141
3	10640.00	45.80	54.00	-8.20	31.42	14.38	Average	100	105
4	10640.00	56.83	74.00	-17.17	42.45	14.38	Peak	100	105
5	15960.00	44.63	54.00	-9.37	30.41	14.22	Average	100	101
6	15960.00	57.04	74.00	-16.96	42.82	14.22	Peak	100	101

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

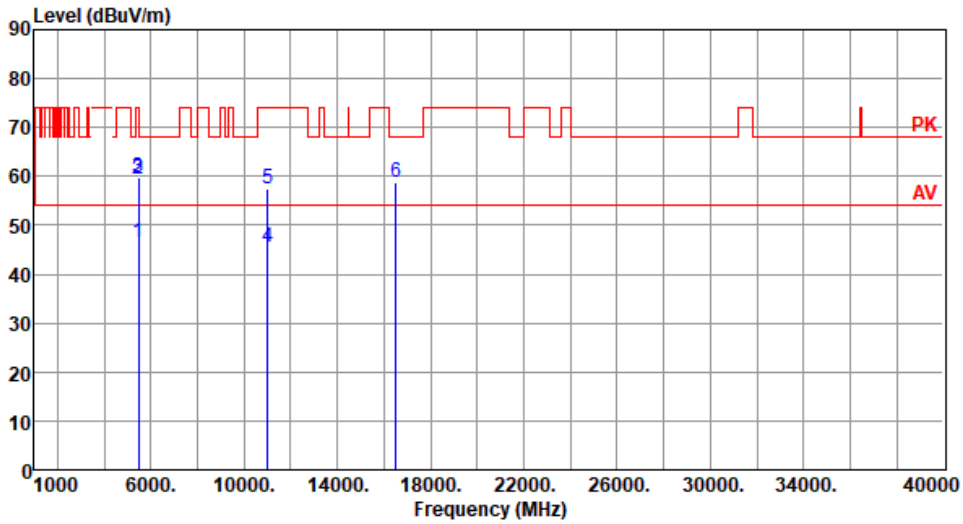
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	46.92	54.00	-7.08	42.98	3.94	Average	219	85
2	5350.00	59.82	74.00	-14.18	55.88	3.94	Peak	219	85
3	10640.00	46.37	54.00	-7.63	31.99	14.38	Average	100	47
4	10640.00	57.38	74.00	-16.62	43.00	14.38	Peak	100	47
5	15960.00	45.10	54.00	-8.90	30.88	14.22	Average	100	52
6	15960.00	56.91	74.00	-17.09	42.69	14.22	Peak	100	52

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

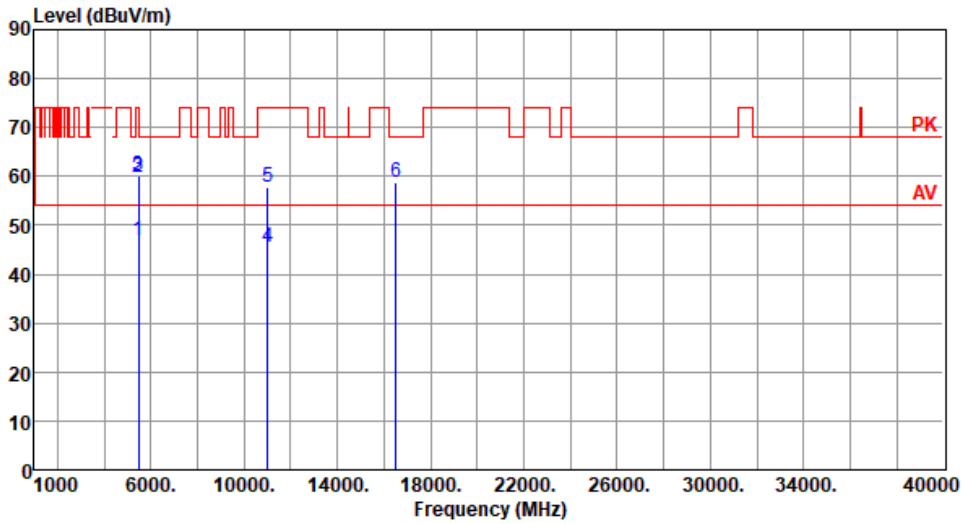
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	46.51	54.00	-7.49	42.06	4.45	Average	387	350
2	5460.00	59.46	74.00	-14.54	55.01	4.45	Peak	387	350
3	5470.00	59.79	68.20	-8.41	55.29	4.50	Peak	387	350
4	11000.00	45.37	54.00	-8.63	30.49	14.88	Average	100	101
5	11000.00	57.36	74.00	-16.64	42.48	14.88	Peak	100	101
6	16500.00	58.63	68.20	-9.57	42.44	16.19	Peak	100	103

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

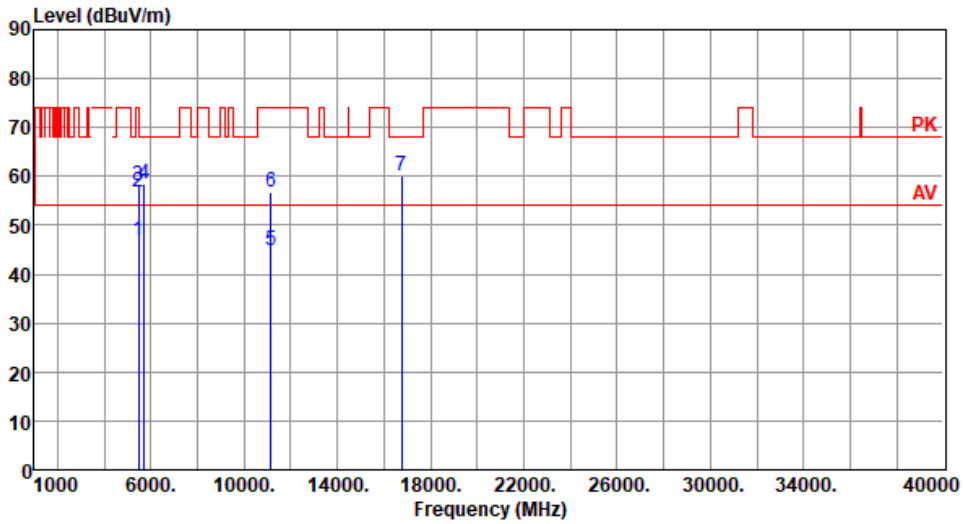
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.87	54.00	-7.13	42.42	4.45	Average	369	85
2	5460.00	59.93	74.00	-14.07	55.48	4.45	Peak	369	85
3	5470.00	60.04	68.20	-8.16	55.54	4.50	Peak	369	85
4	11000.00	45.35	54.00	-8.65	30.47	14.88	Average	100	52
5	11000.00	57.75	74.00	-16.25	42.87	14.88	Peak	100	52
6	16500.00	58.82	68.20	-9.38	42.63	16.19	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).

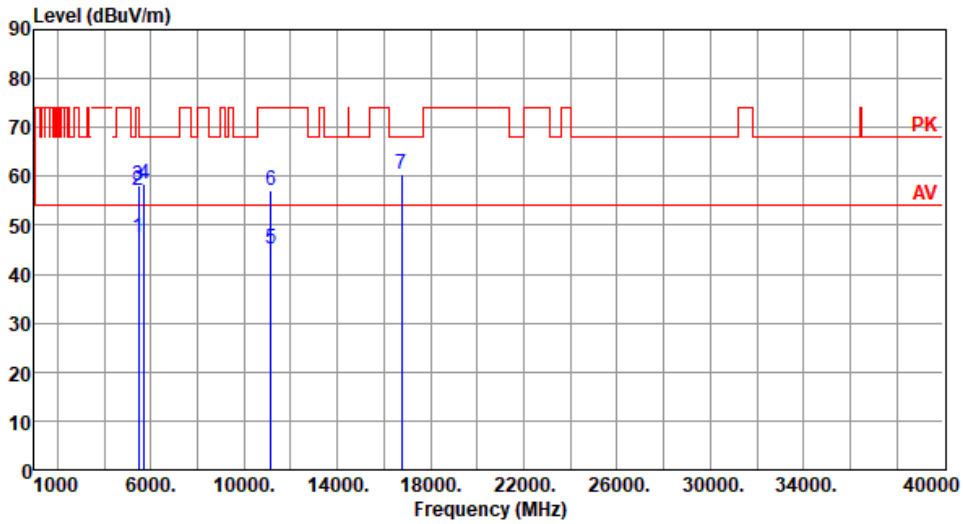
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	46.82	54.00	-7.18	42.37	4.45	Average	374	339
2	5460.00	56.87	74.00	-17.13	52.42	4.45	Peak	374	339
3	5470.00	57.97	68.20	-10.23	53.47	4.50	Peak	374	339
4	5725.00	58.56	68.20	-9.64	53.71	4.85	Peak	374	339
5	11160.00	44.85	54.00	-9.15	30.47	14.38	Average	100	107
6	11160.00	56.85	74.00	-17.15	42.47	14.38	Peak	100	107
7	16740.00	60.05	68.20	-8.15	42.58	17.47	Peak	100	103

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

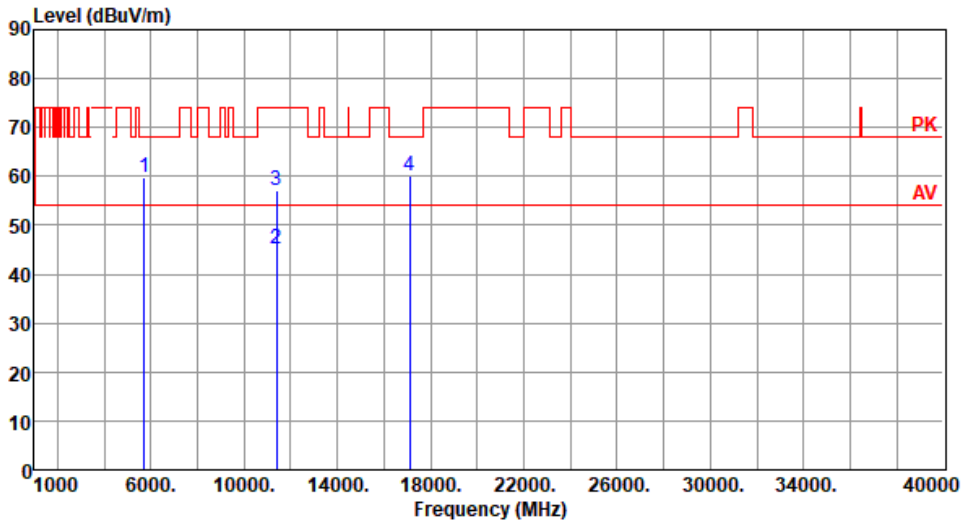
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.33	54.00	-6.67	42.88	4.45	Average	375	82
2	5460.00	57.21	74.00	-16.79	52.76	4.45	Peak	375	82
3	5470.00	57.97	68.20	-10.23	53.47	4.50	Peak	375	82
4	5725.00	58.54	68.20	-9.66	53.69	4.85	Peak	375	82
5	11160.00	45.13	54.00	-8.87	30.75	14.38	Average	100	52
6	11160.00	57.07	74.00	-16.93	42.69	14.38	Peak	100	52
7	16740.00	60.32	68.20	-7.88	42.85	17.47	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).

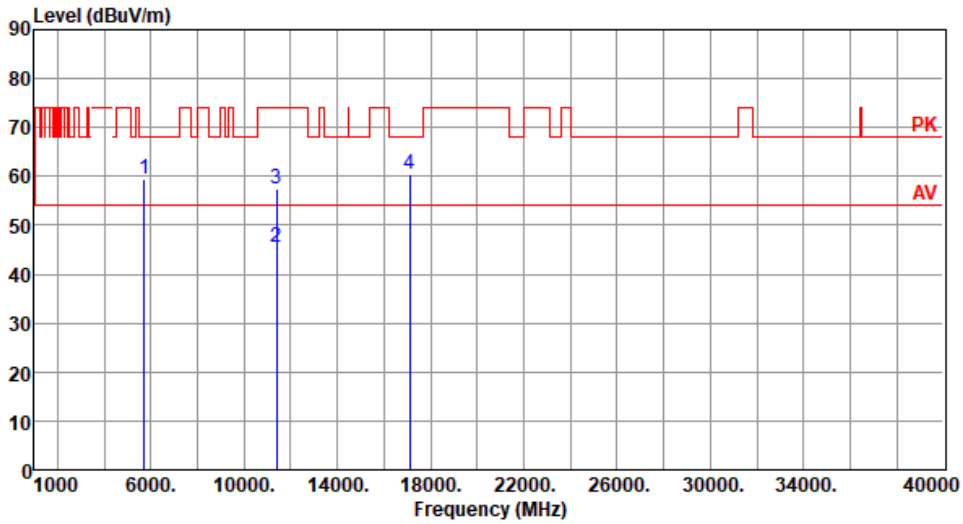
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.62	68.20	-8.58	54.77	4.85	Peak	375	342
2	11400.00	45.04	54.00	-8.96	30.36	14.68	Average	100	102
3	11400.00	57.09	74.00	-16.91	42.41	14.68	Peak	100	102
4	17100.00	60.08	68.20	-8.12	42.40	17.68	Peak	100	105

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

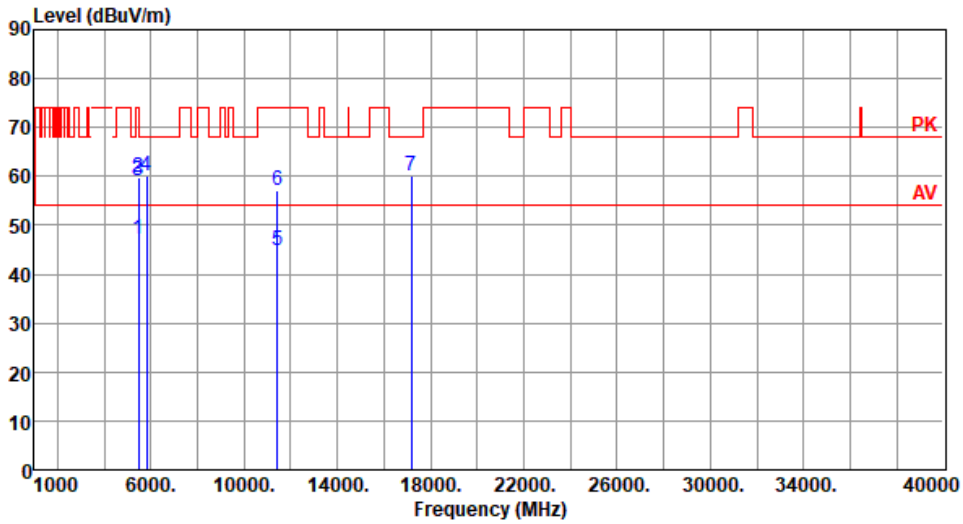
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.30	68.20	-8.90	54.45	4.85	Peak	362	88
2	11400.00	45.53	54.00	-8.47	30.85	14.68	Average	100	52
3	11400.00	57.50	74.00	-16.50	42.82	14.68	Peak	100	52
4	17100.00	60.51	68.20	-7.69	42.83	17.68	Peak	100	59

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

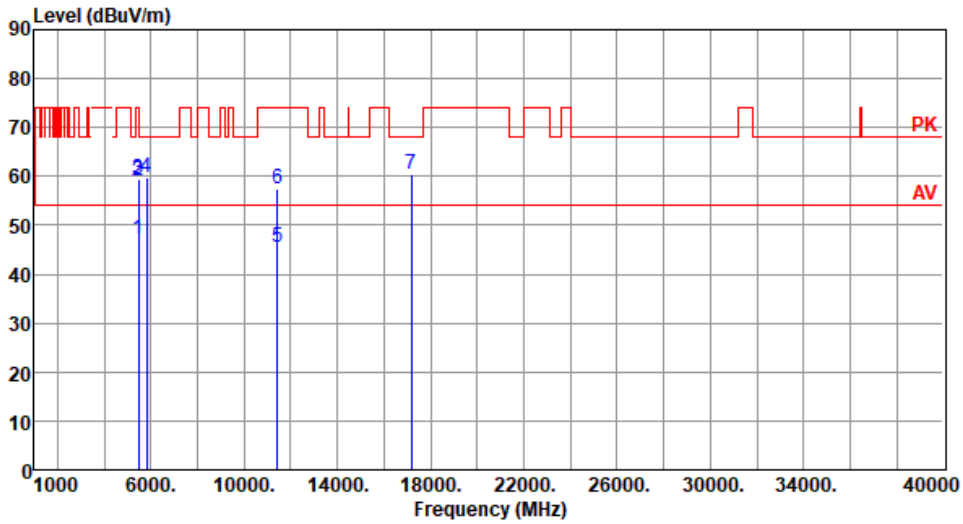
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.04	54.00	-6.96	42.59	4.45	Average	377	345
2	5460.00	59.68	74.00	-14.32	55.23	4.45	Peak	377	345
3	5470.00	59.19	68.20	-9.01	54.69	4.50	Peak	377	345
4	5825.00	60.16	68.20	-8.04	54.87	5.29	Peak	377	345
5	11440.00	44.91	54.00	-9.09	30.25	14.66	Average	100	101
6	11440.00	56.99	74.00	-17.01	42.33	14.66	Peak	100	101
7	17160.00	60.05	68.20	-8.15	42.40	17.65	Peak	100	103

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

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

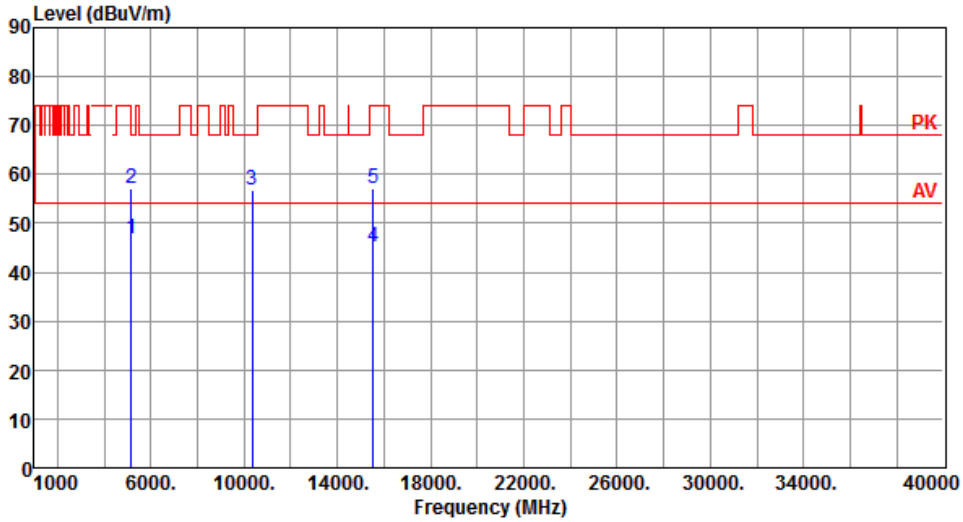


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.28	54.00	-6.72	42.83	4.45	Average	368	89
2	5460.00	59.12	74.00	-14.88	54.67	4.45	Peak	368	89
3	5470.00	59.32	68.20	-8.88	54.82	4.50	Peak	368	89
4	5825.00	59.93	68.20	-8.27	54.64	5.29	Peak	368	89
5	11440.00	45.41	54.00	-8.59	30.75	14.66	Average	100	53
6	11440.00	57.40	74.00	-16.60	42.74	14.66	Peak	100	53
7	17160.00	60.45	68.20	-7.75	42.80	17.65	Peak	100	62

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

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

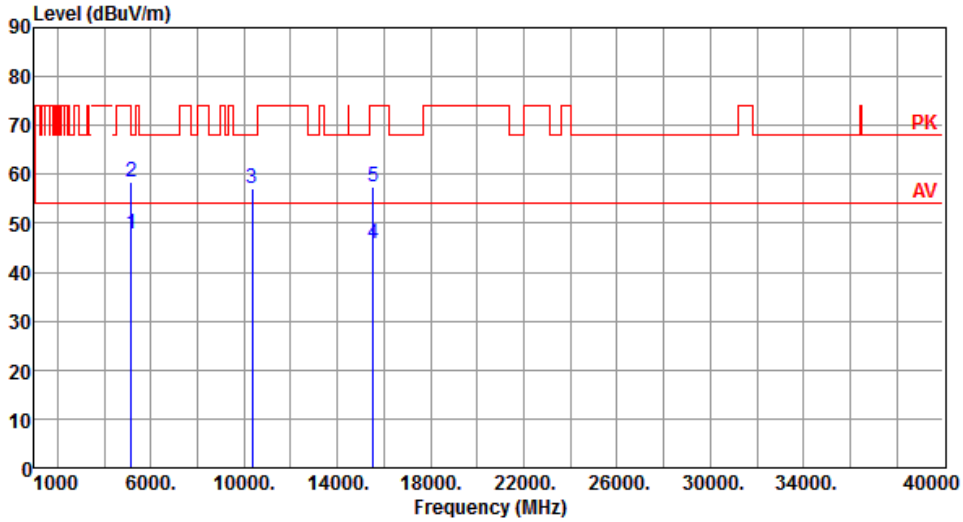
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.89	54.00	-7.11	42.25	4.64	Average	385	148
2	5150.00	57.03	74.00	-16.97	52.39	4.64	Peak	385	148
3	10360.00	56.66	68.20	-11.54	42.47	14.19	Peak	100	108
4	15540.00	45.08	54.00	-8.92	30.17	14.91	Average	100	102
5	15540.00	57.27	74.00	-16.73	42.36	14.91	Peak	100	102

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

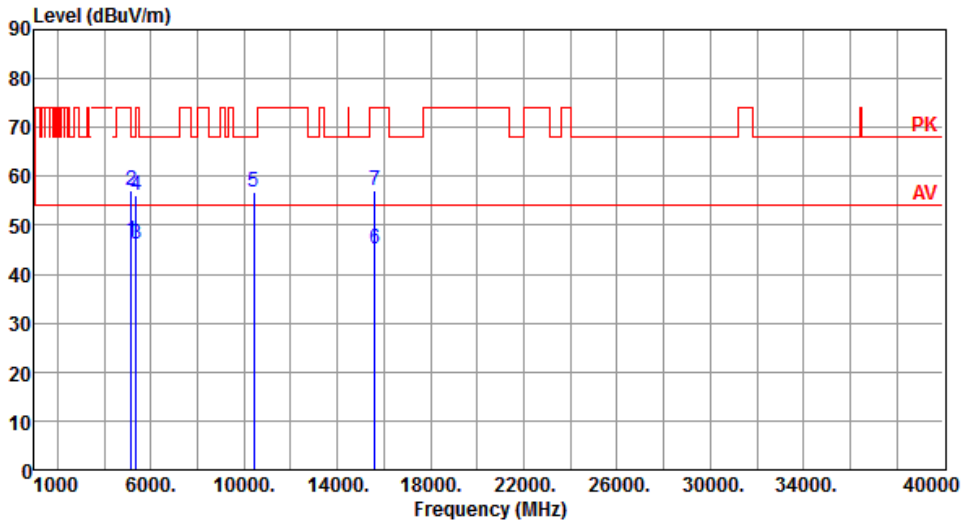
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.89	54.00	-6.11	43.25	4.64	Average	228	92
2	5150.00	58.51	74.00	-15.49	53.87	4.64	Peak	228	92
3	10360.00	57.07	68.20	-11.13	42.88	14.19	Peak	100	52
4	15540.00	45.89	54.00	-8.11	30.98	14.91	Average	100	51
5	15540.00	57.61	74.00	-16.39	42.70	14.91	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).

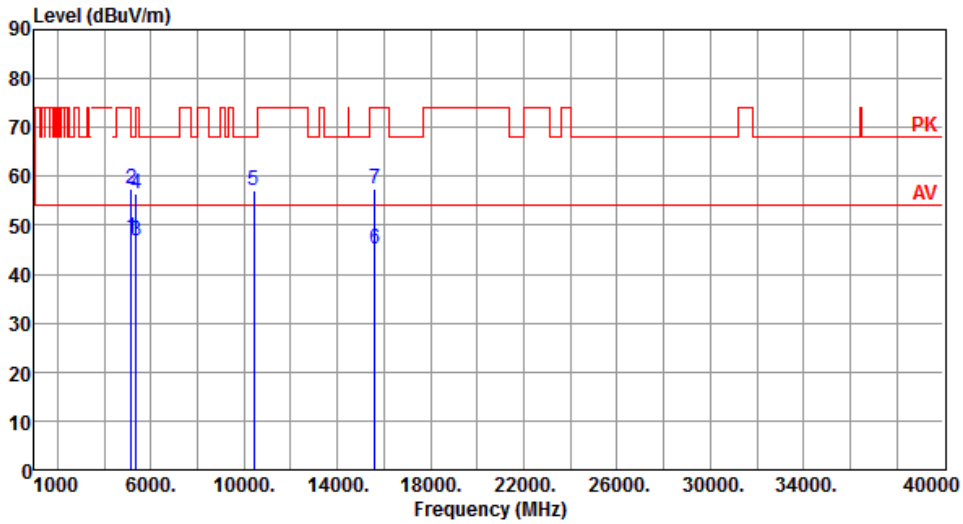
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	46.94	54.00	-7.06	42.30	4.64	Average	389	144
2	5150.00	57.10	74.00	-16.90	52.46	4.64	Peak	389	144
3	5350.00	46.13	54.00	-7.87	42.19	3.94	Average	389	144
4	5350.00	56.27	74.00	-17.73	52.33	3.94	Peak	389	144
5	10400.00	56.72	68.20	-11.48	42.42	14.30	Peak	100	107
6	15600.00	45.06	54.00	-8.94	30.42	14.64	Average	100	102
7	15600.00	57.04	74.00	-16.96	42.40	14.64	Peak	100	102

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

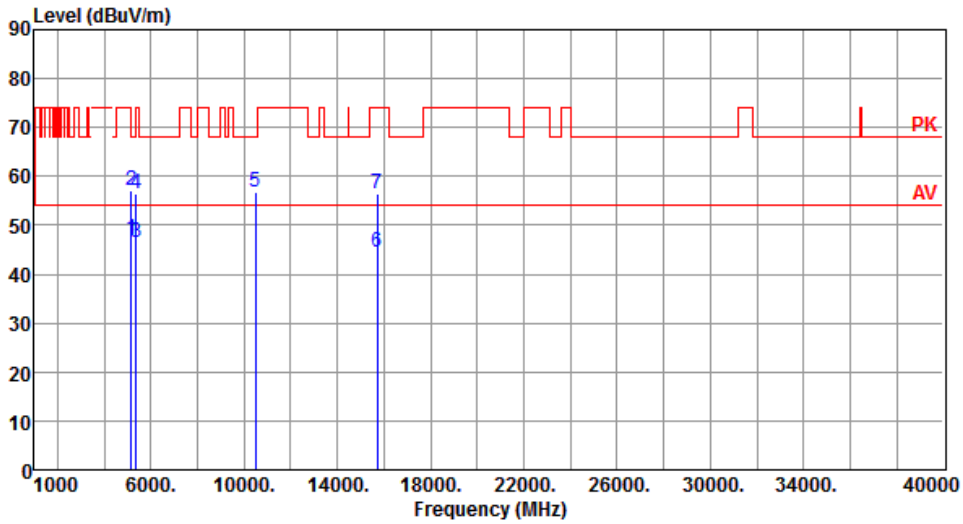
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.34	54.00	-6.66	42.70	4.64	Average	236	87
2	5150.00	57.33	74.00	-16.67	52.69	4.64	Peak	236	87
3	5350.00	46.82	54.00	-7.18	42.88	3.94	Average	236	87
4	5350.00	56.59	74.00	-17.41	52.65	3.94	Peak	236	87
5	10400.00	56.97	68.20	-11.23	42.67	14.30	Peak	100	51
6	15600.00	45.27	54.00	-8.73	30.63	14.64	Average	100	59
7	15600.00	57.56	74.00	-16.44	42.92	14.64	Peak	100	59

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

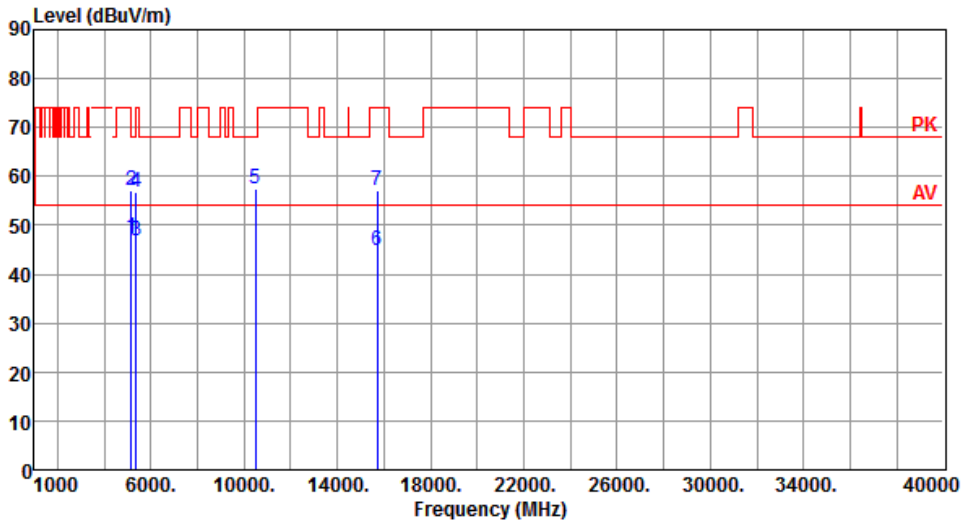
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.05	54.00	-6.95	42.41	4.64	Average	390	145
2	5150.00	57.03	74.00	-16.97	52.39	4.64	Peak	390	145
3	5350.00	46.35	54.00	-7.65	42.41	3.94	Average	390	145
4	5350.00	56.34	74.00	-17.66	52.40	3.94	Peak	390	145
5	10480.00	56.80	68.20	-11.40	42.34	14.46	Peak	100	111
6	15720.00	44.53	54.00	-9.47	30.32	14.21	Average	100	100
7	15720.00	56.58	74.00	-17.42	42.37	14.21	Peak	100	100

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

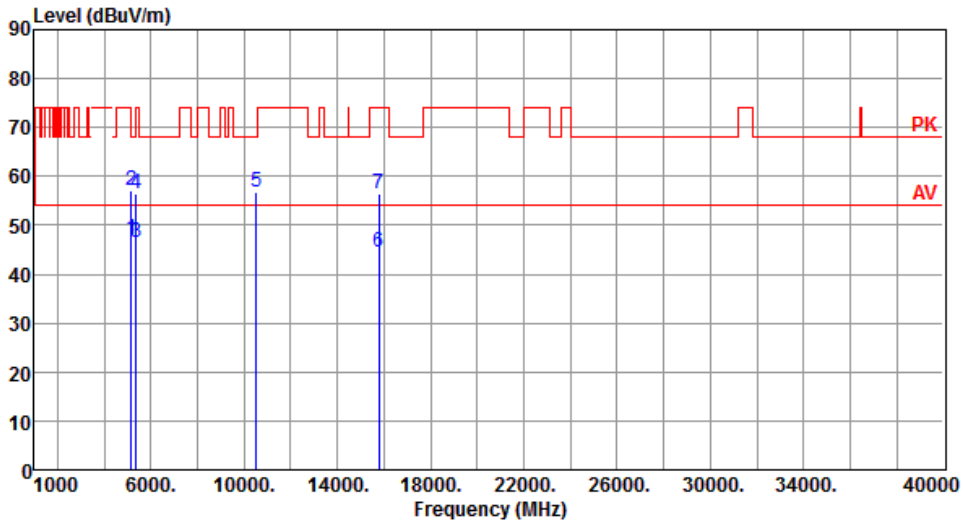
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.45	54.00	-6.55	42.81	4.64	Average	241	81
2	5150.00	57.27	74.00	-16.73	52.63	4.64	Peak	241	81
3	5350.00	46.81	54.00	-7.19	42.87	3.94	Average	241	81
4	5350.00	56.65	74.00	-17.35	52.71	3.94	Peak	241	81
5	10480.00	57.30	68.20	-10.90	42.84	14.46	Peak	100	52
6	15720.00	44.84	54.00	-9.16	30.63	14.21	Average	100	55
7	15720.00	57.08	74.00	-16.92	42.87	14.21	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).

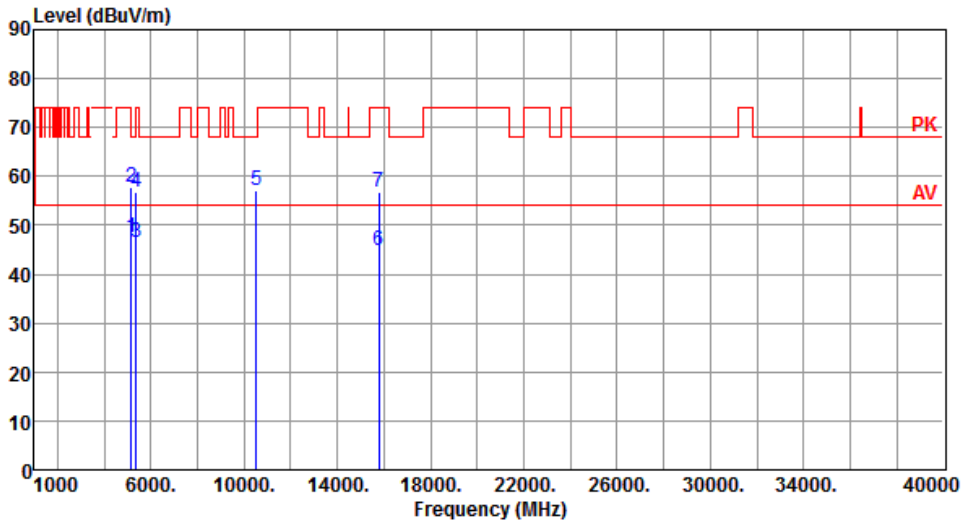
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.13	54.00	-6.87	42.49	4.64	Average	388	142
2	5150.00	57.19	74.00	-16.81	52.55	4.64	Peak	388	142
3	5350.00	46.50	54.00	-7.50	42.56	3.94	Average	388	142
4	5350.00	56.33	74.00	-17.67	52.39	3.94	Peak	388	142
5	10520.00	56.79	68.20	-11.41	42.33	14.46	Peak	100	105
6	15780.00	44.43	54.00	-9.57	30.25	14.18	Average	100	101
7	15780.00	56.54	74.00	-17.46	42.36	14.18	Peak	100	101

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

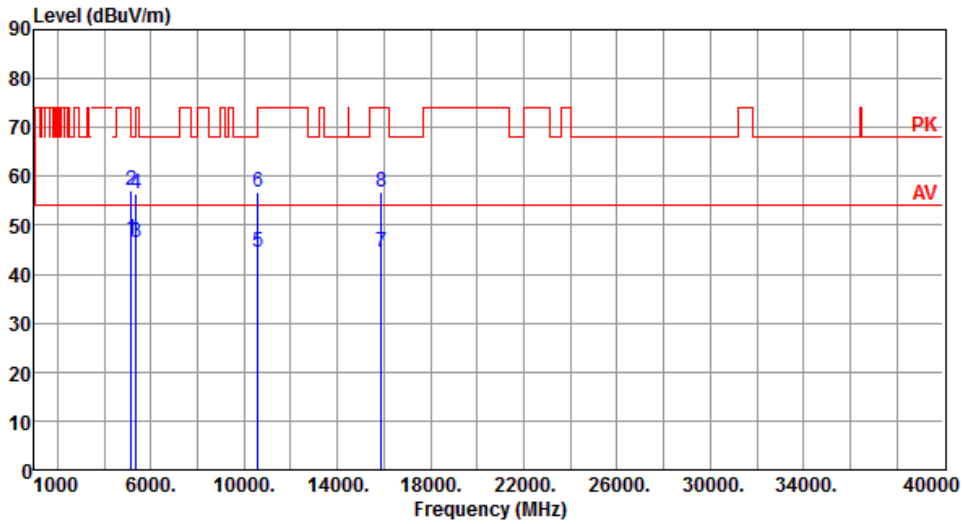
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.54	54.00	-6.46	42.90	4.64	Average	225	86
2	5150.00	57.62	74.00	-16.38	52.98	4.64	Peak	225	86
3	5350.00	46.60	54.00	-7.40	42.66	3.94	Average	225	86
4	5350.00	56.73	74.00	-17.27	52.79	3.94	Peak	225	86
5	10520.00	57.24	68.20	-10.96	42.78	14.46	Peak	100	49
6	15780.00	44.81	54.00	-9.19	30.63	14.18	Average	100	50
7	15780.00	56.87	74.00	-17.13	42.69	14.18	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).

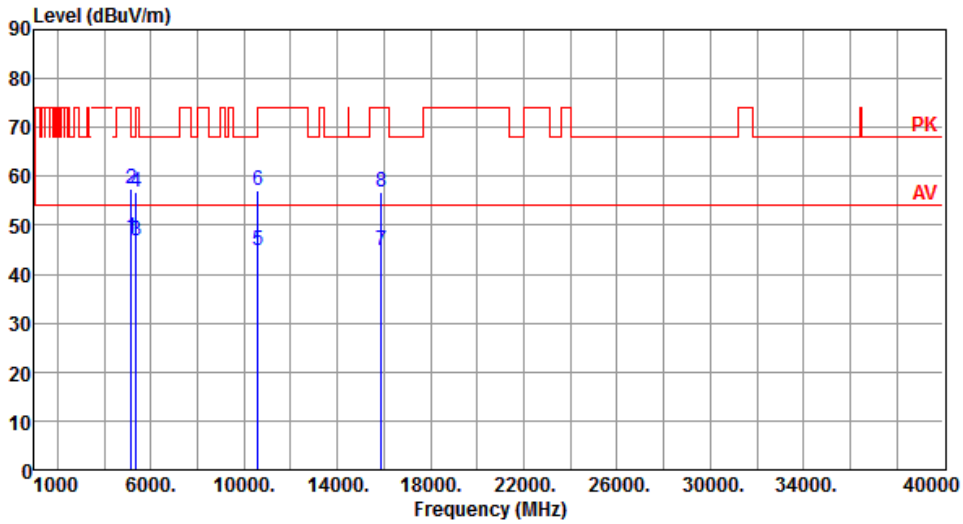
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.09	54.00	-6.91	42.45	4.64	Average	378	141
2	5150.00	57.11	74.00	-16.89	52.47	4.64	Peak	378	141
3	5350.00	46.38	54.00	-7.62	42.44	3.94	Average	378	141
4	5350.00	56.43	74.00	-17.57	52.49	3.94	Peak	378	141
5	10600.00	44.49	54.00	-9.51	30.21	14.28	Average	100	106
6	10600.00	56.72	74.00	-17.28	42.44	14.28	Peak	100	106
7	15900.00	44.47	54.00	-9.53	30.22	14.25	Average	100	102
8	15900.00	56.63	74.00	-17.37	42.38	14.25	Peak	100	102

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

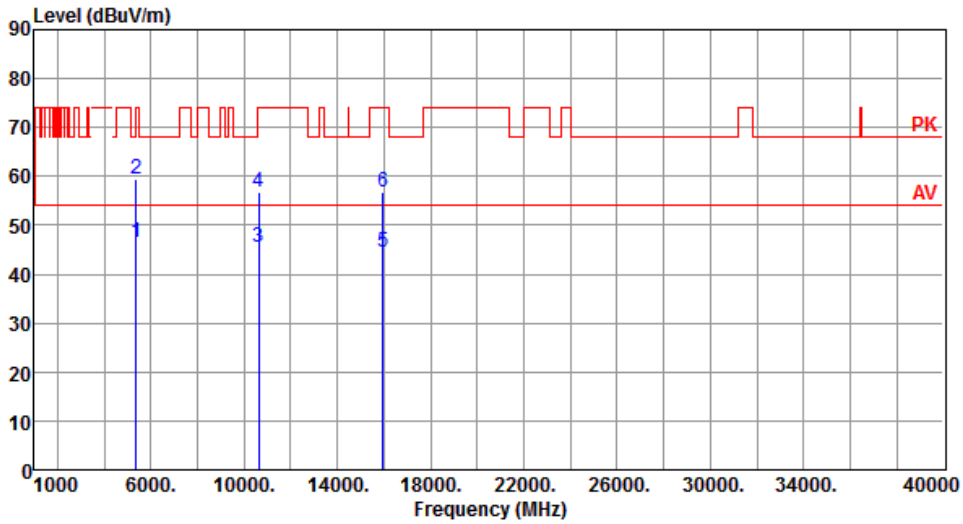
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.56	54.00	-6.44	42.92	4.64	Average	230	81
2	5150.00	57.39	74.00	-16.61	52.75	4.64	Peak	230	81
3	5350.00	46.86	54.00	-7.14	42.92	3.94	Average	230	81
4	5350.00	56.79	74.00	-17.21	52.85	3.94	Peak	230	81
5	10600.00	44.84	54.00	-9.16	30.56	14.28	Average	100	59
6	10600.00	57.15	74.00	-16.85	42.87	14.28	Peak	100	59
7	15900.00	44.83	54.00	-9.17	30.58	14.25	Average	100	52
8	15900.00	56.71	74.00	-17.29	42.46	14.25	Peak	100	52

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

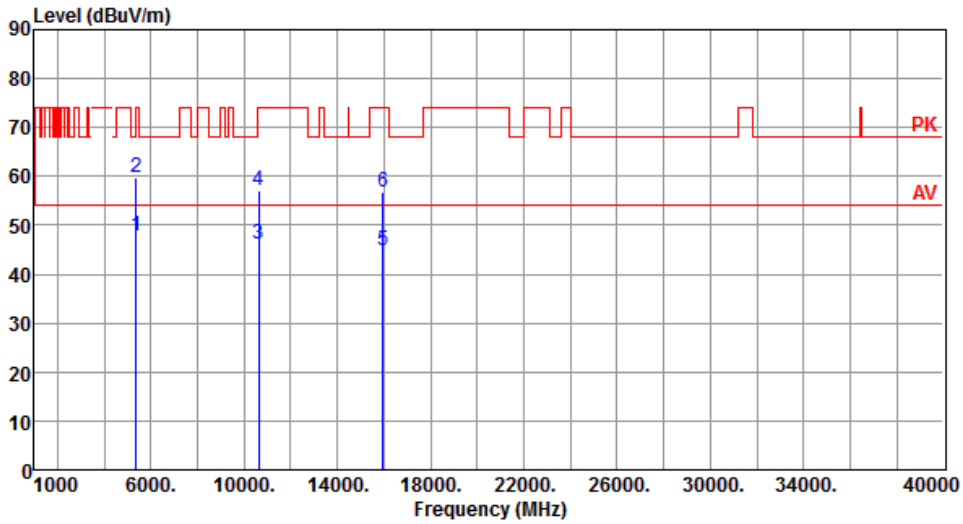
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	46.65	54.00	-7.35	42.71	3.94	Average	384	148
2	5350.00	59.56	74.00	-14.44	55.62	3.94	Peak	384	148
3	10640.00	45.64	54.00	-8.36	31.26	14.38	Average	100	109
4	10640.00	56.86	74.00	-17.14	42.48	14.38	Peak	100	109
5	15960.00	44.47	54.00	-9.53	30.25	14.22	Average	100	112
6	15960.00	56.88	74.00	-17.12	42.66	14.22	Peak	100	112

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

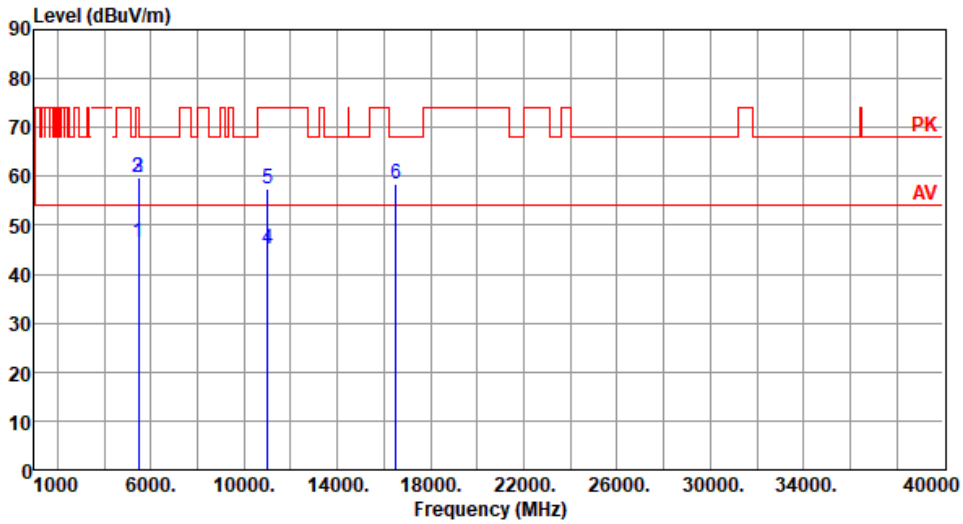
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	47.87	54.00	-6.13	43.93	3.94	Average	225	92
2	5350.00	59.86	74.00	-14.14	55.92	3.94	Peak	225	92
3	10640.00	46.02	54.00	-7.98	31.64	14.38	Average	100	42
4	10640.00	57.13	74.00	-16.87	42.75	14.38	Peak	100	42
5	15960.00	44.85	54.00	-9.15	30.63	14.22	Average	100	56
6	15960.00	56.92	74.00	-17.08	42.70	14.22	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).

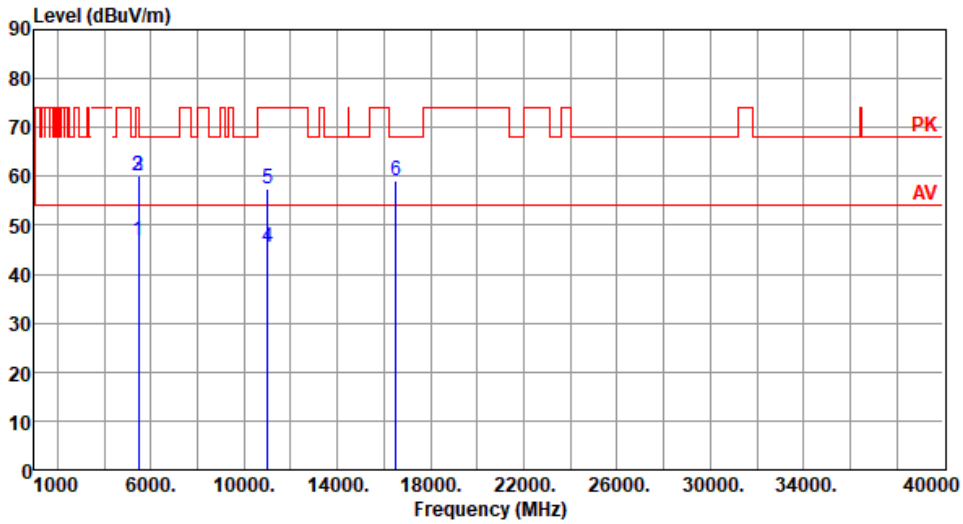
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.64	54.00	-7.36	42.19	4.45	Average	390	345
2	5460.00	59.64	74.00	-14.36	55.19	4.45	Peak	390	345
3	5470.00	59.83	68.20	-8.37	55.33	4.50	Peak	390	345
4	11000.00	45.29	54.00	-8.71	30.41	14.88	Average	100	105
5	11000.00	57.30	74.00	-16.70	42.42	14.88	Peak	100	105
6	16500.00	58.54	68.20	-9.66	42.35	16.19	Peak	100	106

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

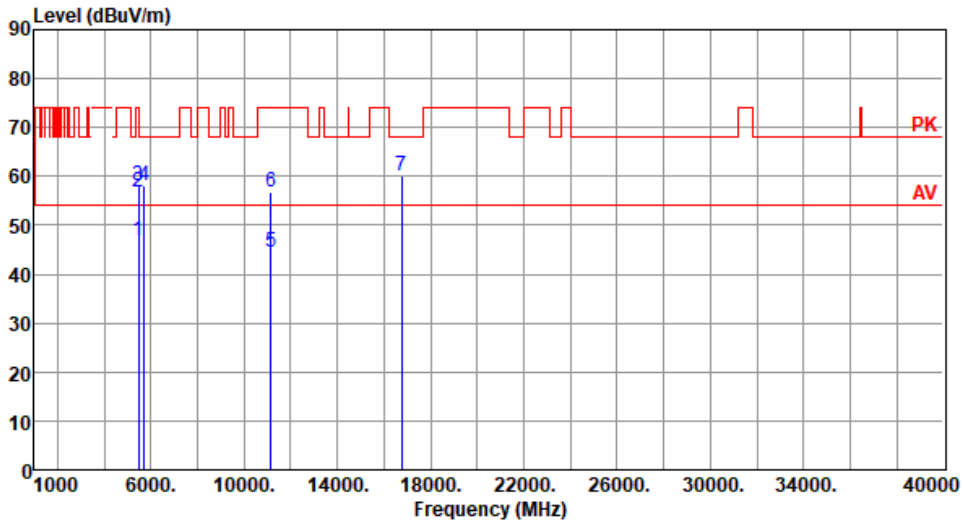
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.96	54.00	-7.04	42.51	4.45	Average	363	87
2	5460.00	60.04	74.00	-13.96	55.59	4.45	Peak	363	87
3	5470.00	60.12	68.20	-8.08	55.62	4.50	Peak	363	87
4	11000.00	45.63	54.00	-8.37	30.75	14.88	Average	100	53
5	11000.00	57.47	74.00	-16.53	42.59	14.88	Peak	100	53
6	16500.00	59.04	68.20	-9.16	42.85	16.19	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).

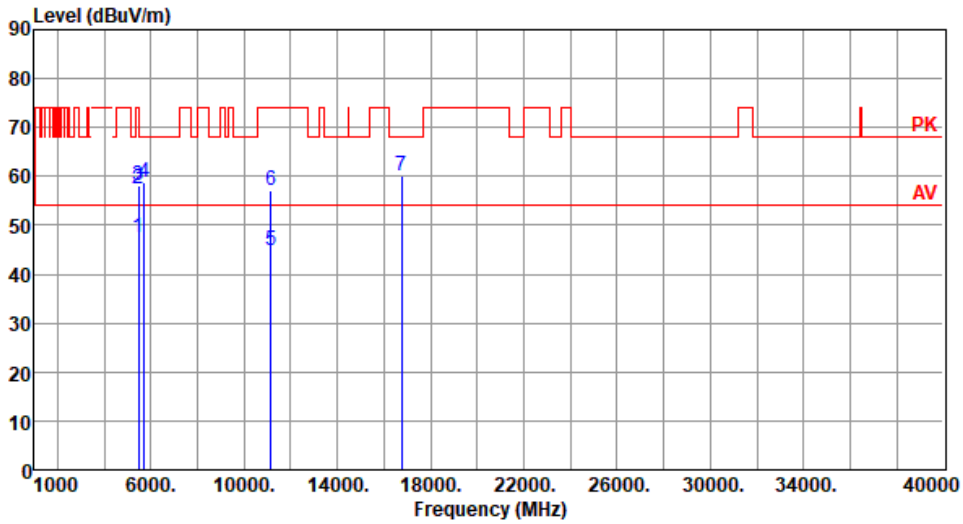
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	46.88	54.00	-7.12	42.43	4.45	Average	375	338
2	5460.00	56.85	74.00	-17.15	52.40	4.45	Peak	375	338
3	5470.00	58.04	68.20	-10.16	53.54	4.50	Peak	375	338
4	5725.00	58.11	68.20	-10.09	53.26	4.85	Peak	375	338
5	11160.00	44.63	54.00	-9.37	30.25	14.38	Average	100	108
6	11160.00	56.79	74.00	-17.21	42.41	14.38	Peak	100	108
7	16740.00	60.05	68.20	-8.15	42.58	17.47	Peak	100	105

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

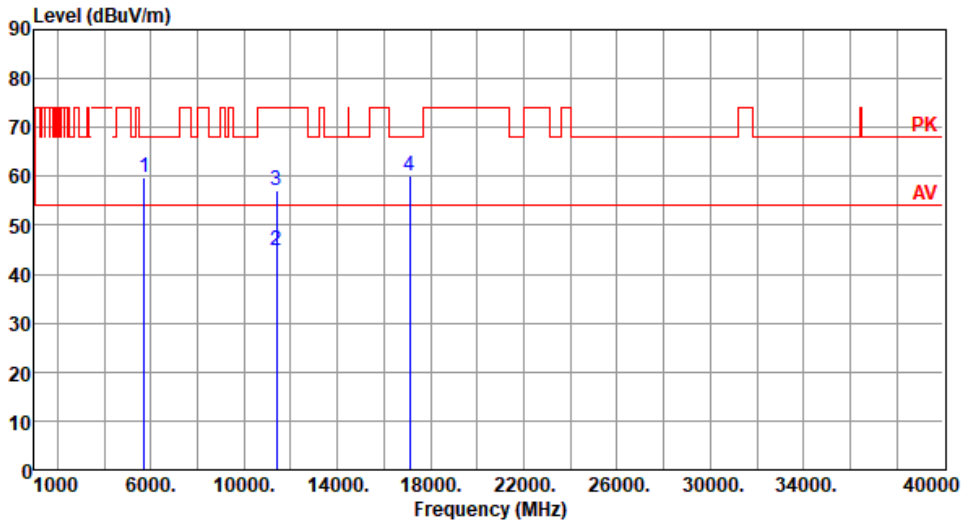
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.44	54.00	-6.56	42.99	4.45	Average	369	86
2	5460.00	57.35	74.00	-16.65	52.90	4.45	Peak	369	86
3	5470.00	58.19	68.20	-10.01	53.69	4.50	Peak	369	86
4	5725.00	58.63	68.20	-9.57	53.78	4.85	Peak	369	86
5	11160.00	44.96	54.00	-9.04	30.58	14.38	Average	100	52
6	11160.00	57.12	74.00	-16.88	42.74	14.38	Peak	100	52
7	16740.00	60.16	68.20	-8.04	42.69	17.47	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).

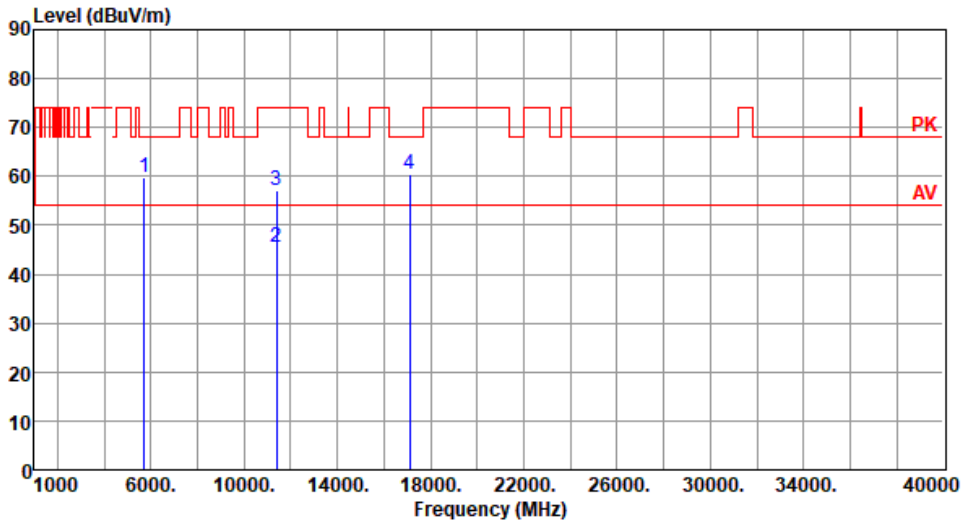
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.65	68.20	-8.55	54.80	4.85	Peak	371	341
2	11400.00	44.91	54.00	-9.09	30.23	14.68	Average	100	101
3	11400.00	57.09	74.00	-16.91	42.41	14.68	Peak	100	101
4	17100.00	60.00	68.20	-8.20	42.32	17.68	Peak	100	105

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

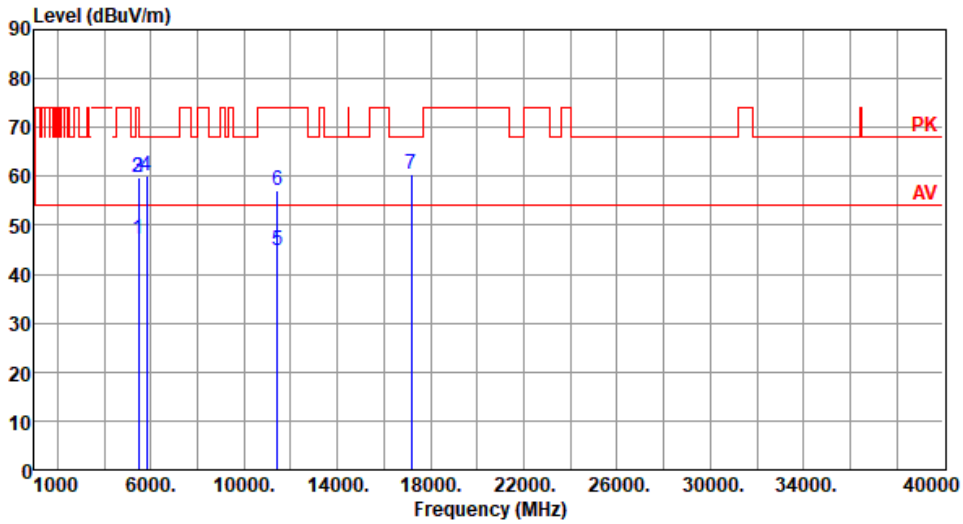
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.75	68.20	-8.45	54.90	4.85	Peak	356	86
2	11400.00	45.37	54.00	-8.63	30.69	14.68	Average	100	52
3	11400.00	57.26	74.00	-16.74	42.58	14.68	Peak	100	52
4	17100.00	60.31	68.20	-7.89	42.63	17.68	Peak	100	58

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

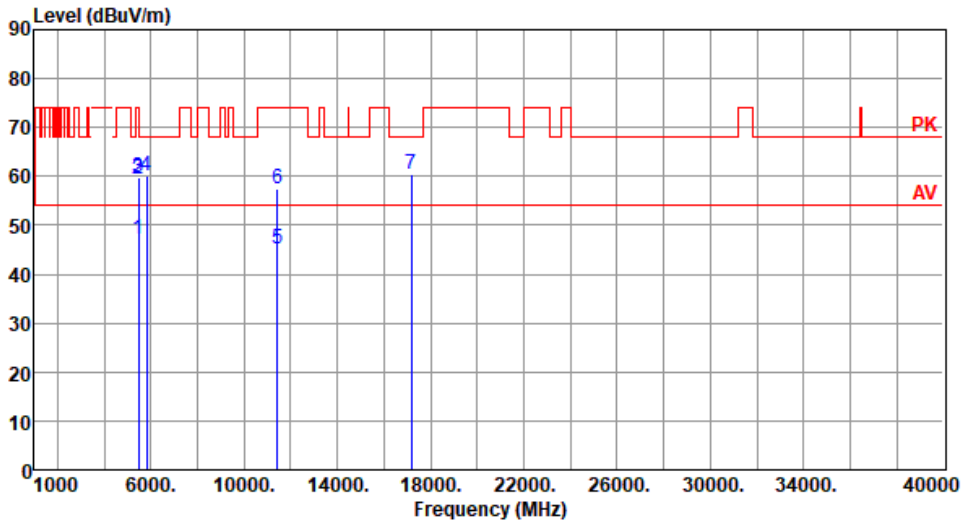
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.17	54.00	-6.83	42.72	4.45	Average	378	342
2	5460.00	59.63	74.00	-14.37	55.18	4.45	Peak	378	342
3	5470.00	59.75	68.20	-8.45	55.25	4.50	Peak	378	342
4	5825.00	60.25	68.20	-7.95	54.96	5.29	Peak	378	342
5	11440.00	44.91	54.00	-9.09	30.25	14.66	Average	100	100
6	11440.00	57.05	74.00	-16.95	42.39	14.66	Peak	100	100
7	17160.00	60.29	68.20	-7.91	42.64	17.65	Peak	100	102

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

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Vertical		

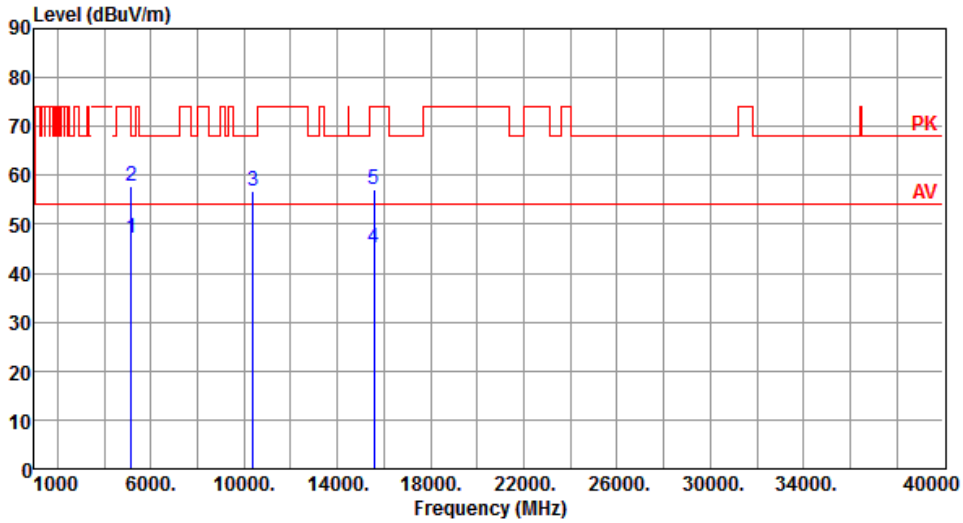


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.30	54.00	-6.70	42.85	4.45	Average	357	87
2	5460.00	59.60	74.00	-14.40	55.15	4.45	Peak	357	87
3	5470.00	59.72	68.20	-8.48	55.22	4.50	Peak	357	87
4	5825.00	60.19	68.20	-8.01	54.90	5.29	Peak	357	87
5	11440.00	45.18	54.00	-8.82	30.52	14.66	Average	100	57
6	11440.00	57.37	74.00	-16.63	42.71	14.66	Peak	100	57
7	17160.00	60.41	68.20	-7.79	42.76	17.65	Peak	100	62

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

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

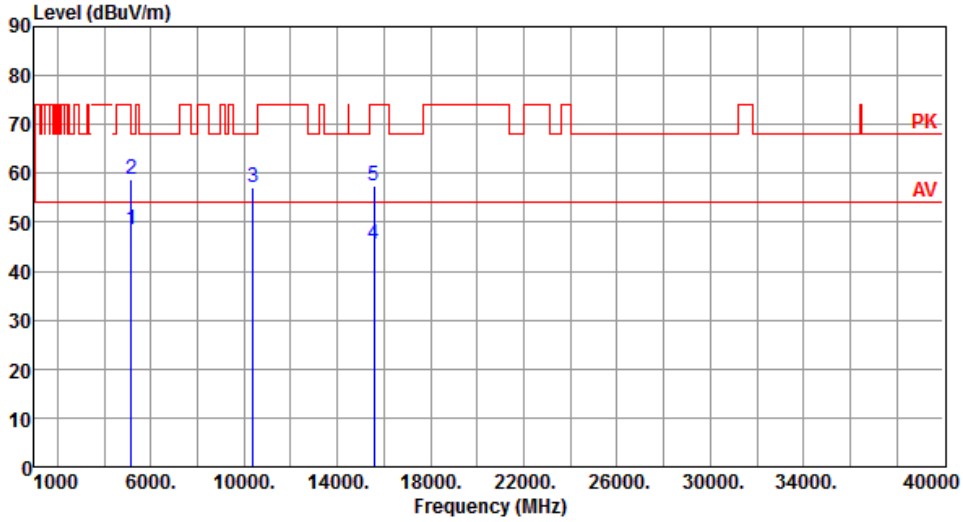
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.19	54.00	-6.81	42.55	4.64	Average	385	145
2	5150.00	57.63	74.00	-16.37	52.99	4.64	Peak	385	145
3	10380.00	56.69	68.20	-11.51	42.45	14.24	Peak	100	105
4	15570.00	45.22	54.00	-8.78	30.44	14.78	Average	100	102
5	15570.00	57.14	74.00	-16.86	42.36	14.78	Peak	100	102

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

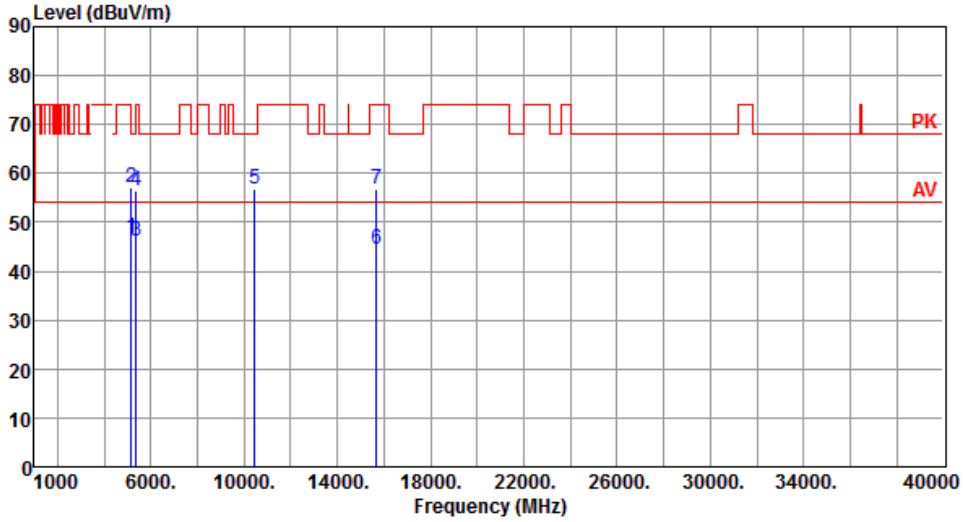
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.48	54.00	-5.52	43.84	4.64	Average	218	89
2	5150.00	58.62	74.00	-15.38	53.98	4.64	Peak	218	89
3	10380.00	57.05	68.20	-11.15	42.81	14.24	Peak	100	55
4	15570.00	45.58	54.00	-8.42	30.80	14.78	Average	100	51
5	15570.00	57.44	74.00	-16.56	42.66	14.78	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).

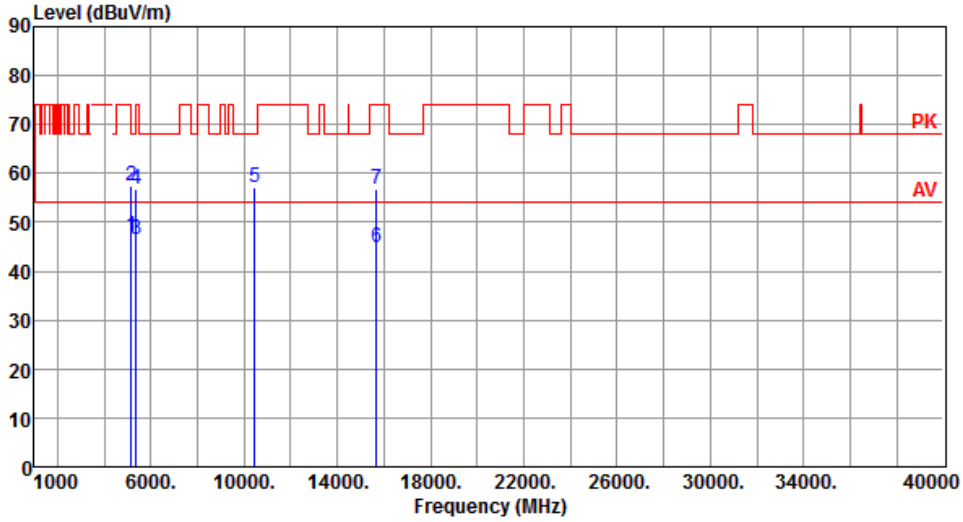
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	46.78	54.00	-7.22	42.14	4.64	Average	381	144
2	5150.00	57.00	74.00	-17.00	52.36	4.64	Peak	381	144
3	5350.00	46.22	54.00	-7.78	42.28	3.94	Average	381	144
4	5350.00	56.41	74.00	-17.59	52.47	3.94	Peak	381	144
5	10460.00	56.86	68.20	-11.34	42.44	14.42	Peak	100	105
6	15690.00	44.50	54.00	-9.50	30.24	14.26	Average	100	102
7	15690.00	56.67	74.00	-17.33	42.41	14.26	Peak	100	102

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

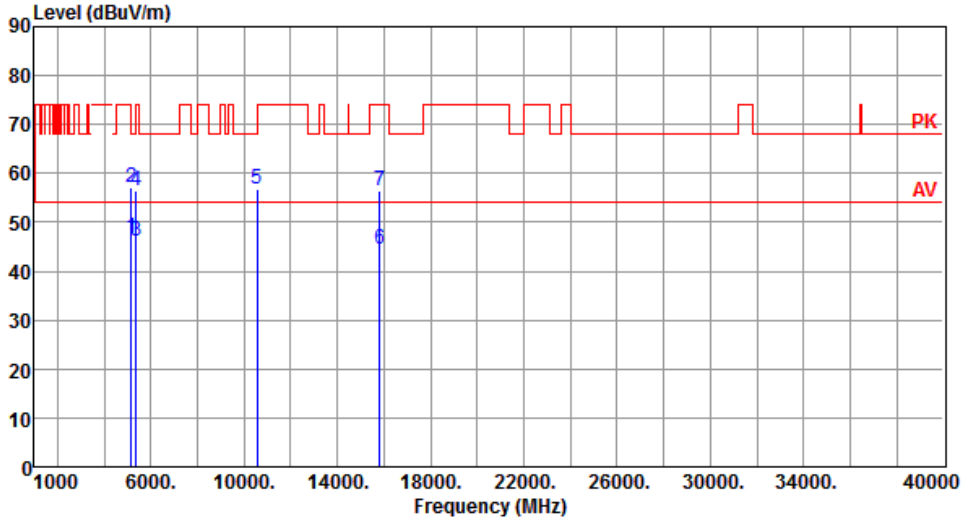
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.22	54.00	-6.78	42.58	4.64	Average	226	90
2	5150.00	57.33	74.00	-16.67	52.69	4.64	Peak	226	90
3	5350.00	46.65	54.00	-7.35	42.71	3.94	Average	226	90
4	5350.00	56.71	74.00	-17.29	52.77	3.94	Peak	226	90
5	10460.00	57.08	68.20	-11.12	42.66	14.42	Peak	100	54
6	15690.00	44.89	54.00	-9.11	30.63	14.26	Average	100	59
7	15690.00	56.89	74.00	-17.11	42.63	14.26	Peak	100	59

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

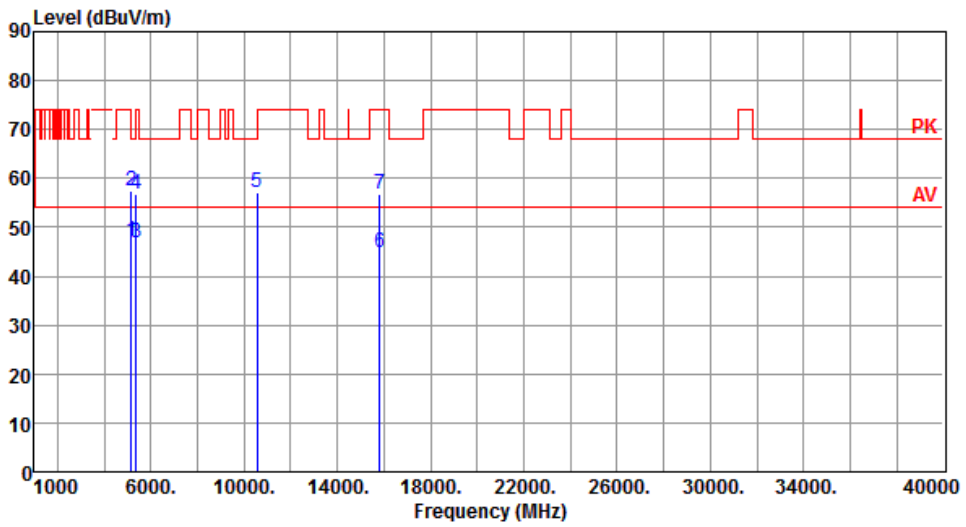
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.97	54.00	-7.03	42.33	4.64	Average	371	145
2	5150.00	57.03	74.00	-16.97	52.39	4.64	Peak	371	145
3	5350.00	46.19	54.00	-7.81	42.25	3.94	Average	371	145
4	5350.00	56.34	74.00	-17.66	52.40	3.94	Peak	371	145
5	10540.00	56.73	68.20	-11.47	42.31	14.42	Peak	100	101
6	15810.00	44.37	54.00	-9.63	30.19	14.18	Average	100	100
7	15810.00	56.46	74.00	-17.54	42.28	14.18	Peak	100	100

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

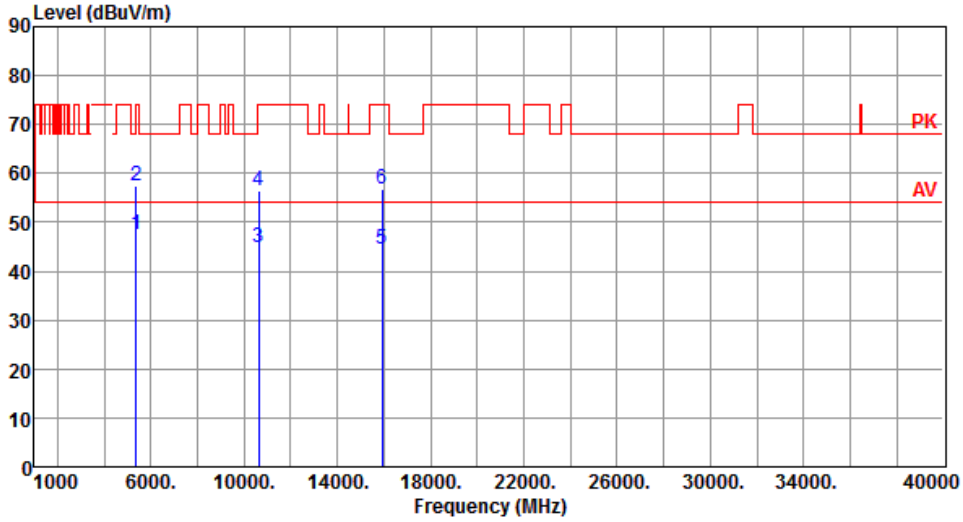
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.18	54.00	-6.82	42.54	4.64	Average	227	78
2	5150.00	57.33	74.00	-16.67	52.69	4.64	Peak	227	78
3	5350.00	46.74	54.00	-7.26	42.80	3.94	Average	227	78
4	5350.00	56.68	74.00	-17.32	52.74	3.94	Peak	227	78
5	10540.00	57.10	68.20	-11.10	42.68	14.42	Peak	100	50
6	15810.00	44.77	54.00	-9.23	30.59	14.18	Average	100	59
7	15810.00	56.78	74.00	-17.22	42.60	14.18	Peak	100	59

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

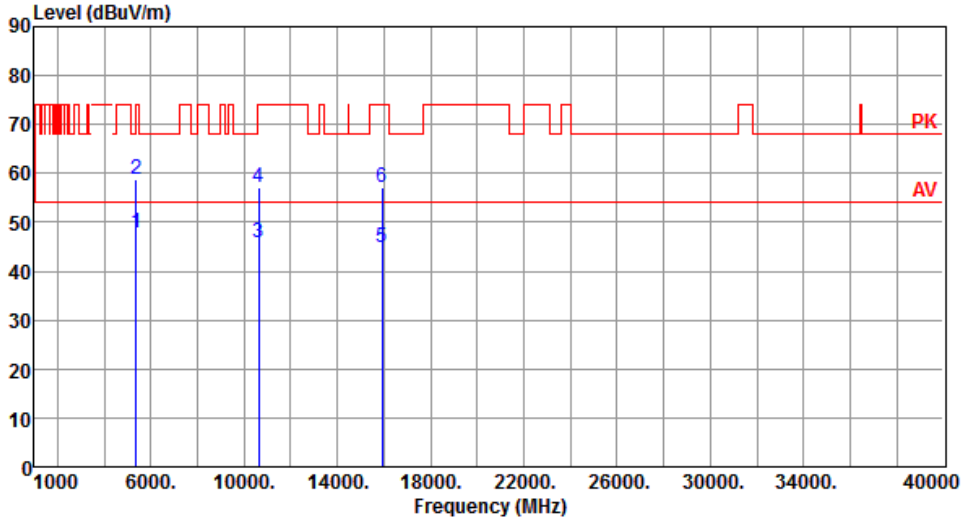
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	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	47.41	54.00	-6.59	43.47	3.94	Average	381	144
2	5350.00	57.38	74.00	-16.62	53.44	3.94	Peak	381	144
3	10620.00	44.75	54.00	-9.25	30.41	14.34	Average	100	102
4	10620.00	56.59	74.00	-17.41	42.25	14.34	Peak	100	102
5	15930.00	44.56	54.00	-9.44	30.33	14.23	Average	100	115
6	15930.00	56.71	74.00	-17.29	42.48	14.23	Peak	100	115

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

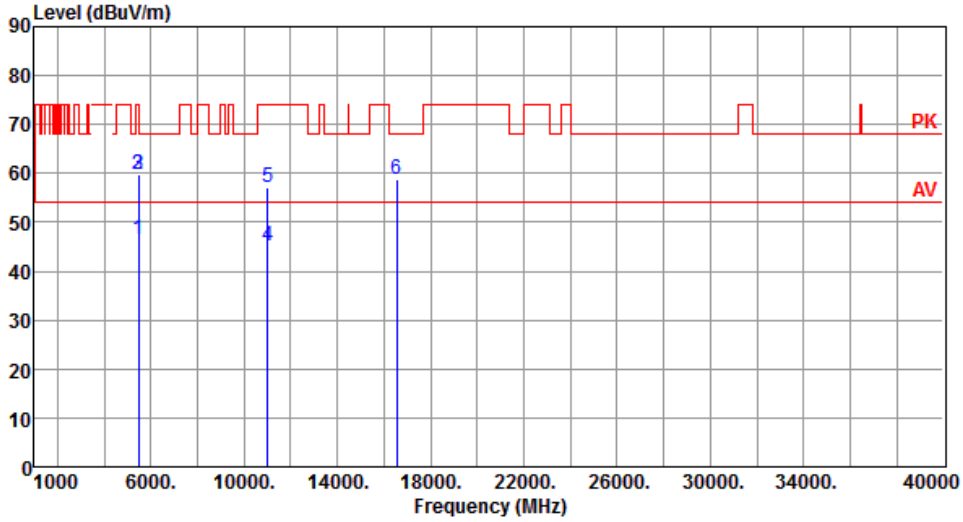
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	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	47.92	54.00	-6.08	43.98	3.94	Average	227	91
2	5350.00	58.81	74.00	-15.19	54.87	3.94	Peak	227	91
3	10620.00	45.92	54.00	-8.08	31.58	14.34	Average	100	51
4	10620.00	57.11	74.00	-16.89	42.77	14.34	Peak	100	51
5	15930.00	44.82	54.00	-9.18	30.59	14.23	Average	100	59
6	15930.00	57.03	74.00	-16.97	42.80	14.23	Peak	100	59

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

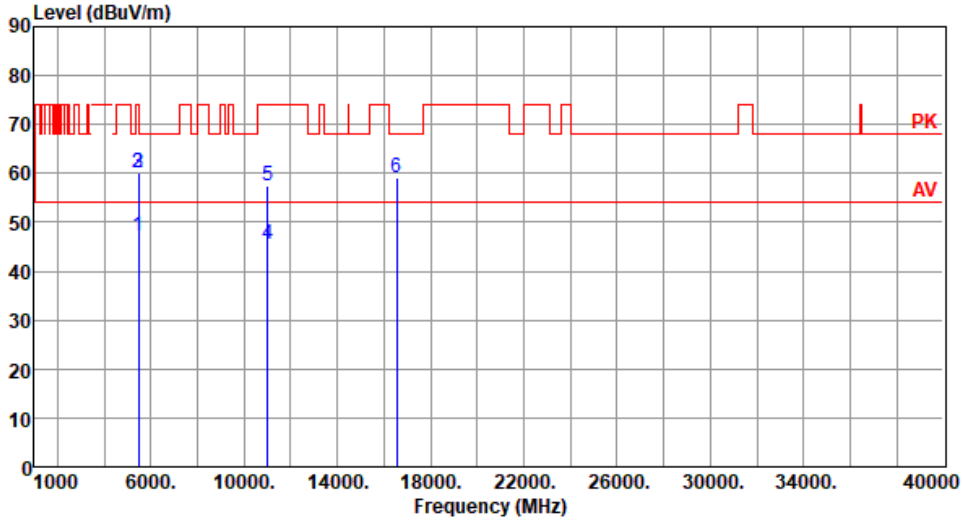
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.66	54.00	-7.34	42.21	4.45	Average	389	344
2	5460.00	59.71	74.00	-14.29	55.26	4.45	Peak	389	344
3	5470.00	59.94	68.20	-8.26	55.44	4.50	Peak	389	344
4	11020.00	45.10	54.00	-8.90	30.29	14.81	Average	100	109
5	11020.00	57.13	74.00	-16.87	42.32	14.81	Peak	100	109
6	16530.00	58.73	68.20	-9.47	42.40	16.33	Peak	100	100

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

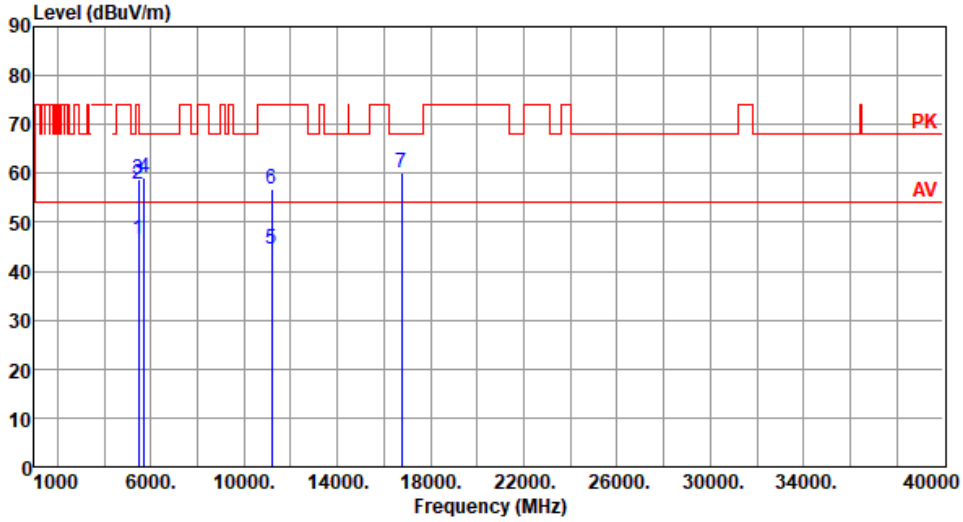
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	47.04	54.00	-6.96	42.59	4.45	Average	358	86
2	5460.00	60.09	74.00	-13.91	55.64	4.45	Peak	358	86
3	5470.00	60.16	68.20	-8.04	55.66	4.50	Peak	358	86
4	11020.00	45.43	54.00	-8.57	30.62	14.81	Average	100	52
5	11020.00	57.50	74.00	-16.50	42.69	14.81	Peak	100	52
6	16530.00	59.08	68.20	-9.12	42.75	16.33	Peak	100	59

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

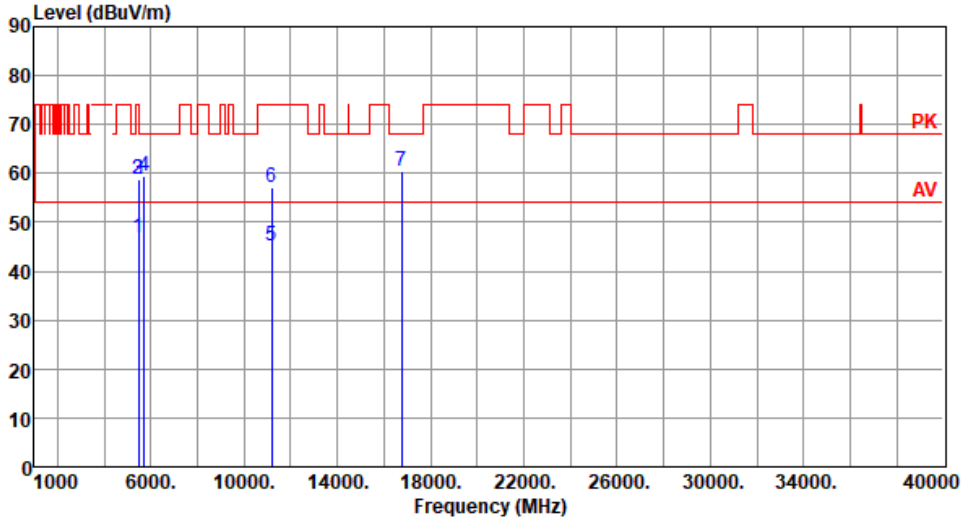
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Horizontal		



	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	46.63	54.00	-7.37	42.18	4.45	Average	385	339
2	5460.00	57.79	74.00	-16.21	53.34	4.45	Peak	385	339
3	5470.00	58.70	68.20	-9.50	54.20	4.50	Peak	385	339
4	5725.00	58.96	68.20	-9.24	54.11	4.85	Peak	385	339
5	11180.00	44.47	54.00	-9.53	30.14	14.33	Average	100	103
6	11180.00	56.72	74.00	-17.28	42.39	14.33	Peak	100	103
7	16770.00	59.99	68.20	-8.21	42.41	17.58	Peak	100	105

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

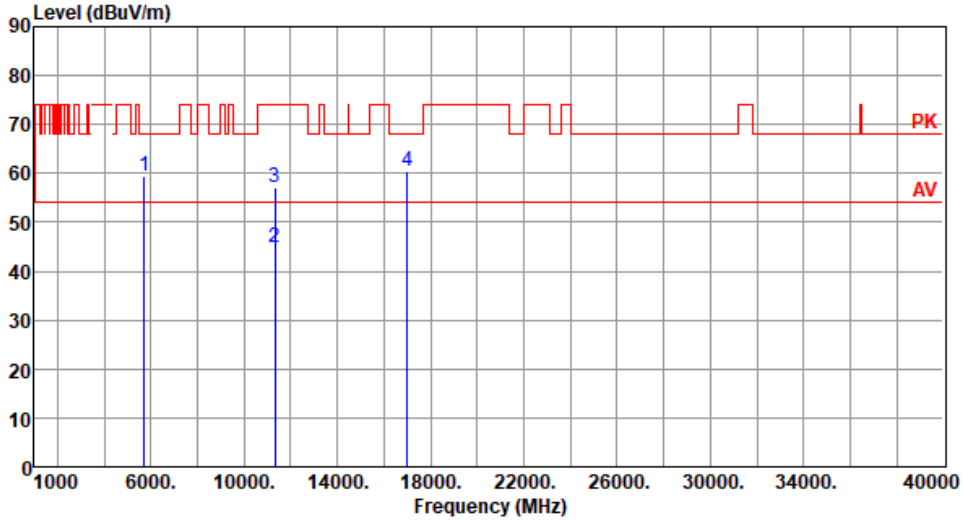
Modulation	VHT40	Test Freq. (MHz)	5590
Polarization	Vertical		



	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	46.76	54.00	-7.24	42.31	4.45	Average	362	82
2	5460.00	58.63	74.00	-15.37	54.18	4.45	Peak	362	82
3	5470.00	58.83	68.20	-9.37	54.33	4.50	Peak	362	82
4	5725.00	59.32	68.20	-8.88	54.47	4.85	Peak	362	82
5	11180.00	45.01	54.00	-8.99	30.68	14.33	Average	100	57
6	11180.00	57.23	74.00	-16.77	42.90	14.33	Peak	100	57
7	16770.00	60.43	68.20	-7.77	42.85	17.58	Peak	100	52

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

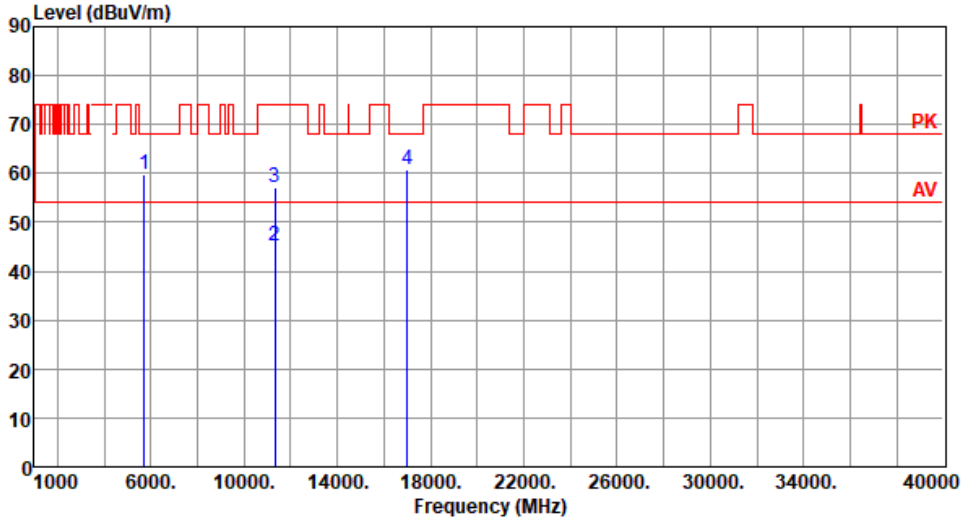
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.51	68.20	-8.69	54.66	4.85	Peak	374	346
2	11340.00	44.88	54.00	-9.12	30.41	14.47	Average	100	102
3	11340.00	57.05	74.00	-16.95	42.58	14.47	Peak	100	102
4	17010.00	60.40	68.20	-7.80	42.51	17.89	Peak	100	109

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

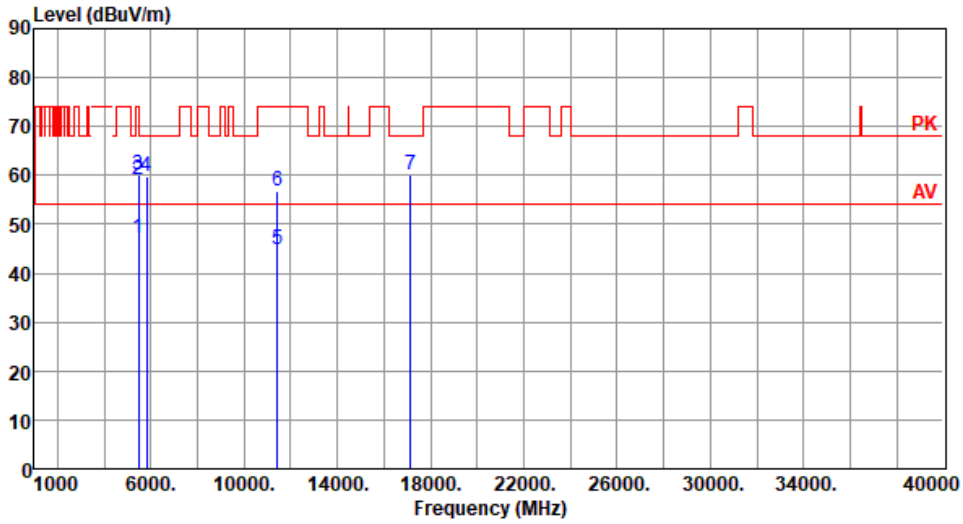
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	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	59.69	68.20	-8.51	54.84	4.85	Peak	348	81
2	11340.00	45.12	54.00	-8.88	30.65	14.47	Average	100	51
3	11340.00	57.16	74.00	-16.84	42.69	14.47	Peak	100	51
4	17010.00	60.65	68.20	-7.55	42.76	17.89	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).

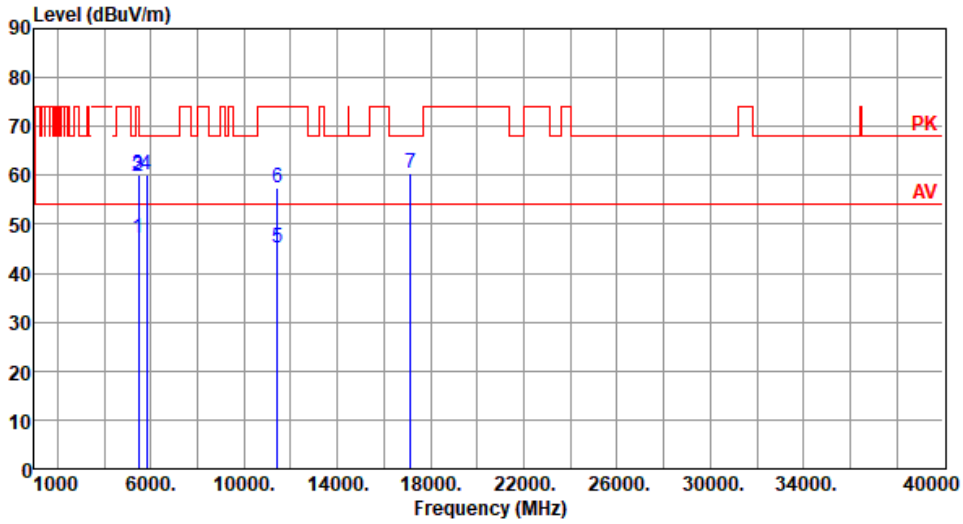
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.31	54.00	-6.69	42.86	4.45	Average	286	341
2	5460.00	59.12	74.00	-14.88	54.67	4.45	Peak	286	341
3	5470.00	60.19	68.20	-8.01	55.69	4.50	Peak	286	341
4	5825.00	59.82	68.20	-8.38	54.53	5.29	Peak	286	341
5	11420.00	44.96	54.00	-9.04	30.29	14.67	Average	100	101
6	11420.00	56.95	74.00	-17.05	42.28	14.67	Peak	100	101
7	17130.00	60.06	68.20	-8.14	42.39	17.67	Peak	100	104

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

Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Vertical		

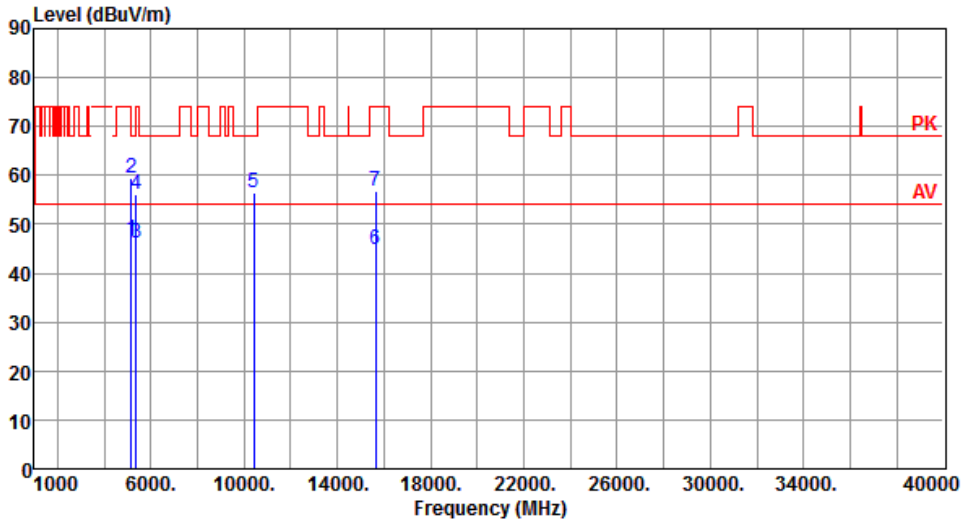


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.15	54.00	-6.85	42.70	4.45	Average	358	83
2	5460.00	59.93	74.00	-14.07	55.48	4.45	Peak	358	83
3	5470.00	60.19	68.20	-8.01	55.69	4.50	Peak	358	83
4	5825.00	59.96	68.20	-8.24	54.67	5.29	Peak	358	83
5	11420.00	45.22	54.00	-8.78	30.55	14.67	Average	100	55
6	11420.00	57.52	74.00	-16.48	42.85	14.67	Peak	100	55
7	17130.00	60.38	68.20	-7.82	42.71	17.67	Peak	100	53

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

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

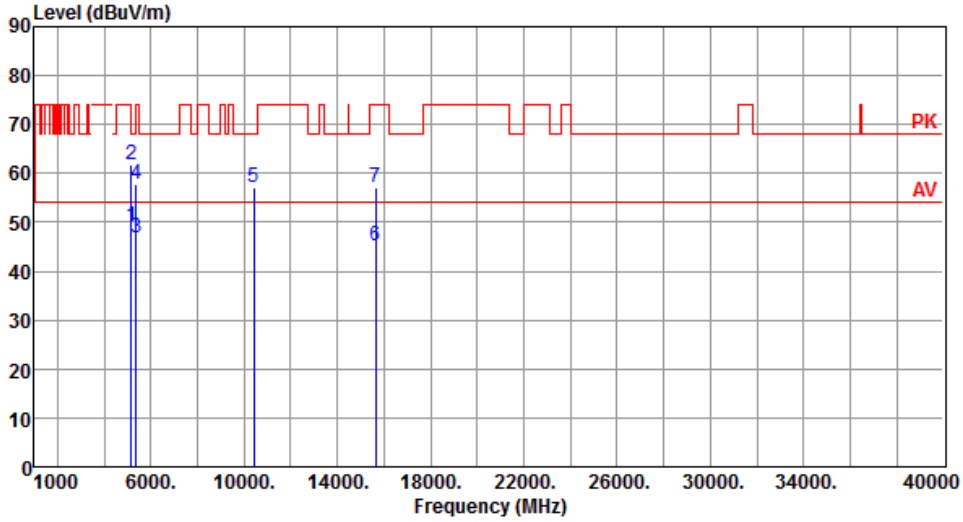
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



	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	46.75	54.00	-7.25	42.11	4.64	Average	379	142
2	5150.00	59.38	74.00	-14.62	54.74	4.64	Peak	379	142
3	5350.00	46.19	54.00	-7.81	42.25	3.94	Average	379	142
4	5350.00	56.27	74.00	-17.73	52.33	3.94	Peak	379	142
5	10420.00	56.51	68.20	-11.69	42.17	14.34	Peak	100	102
6	15630.00	44.92	54.00	-9.08	30.41	14.51	Average	100	105
7	15630.00	56.88	74.00	-17.12	42.37	14.51	Peak	100	105

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

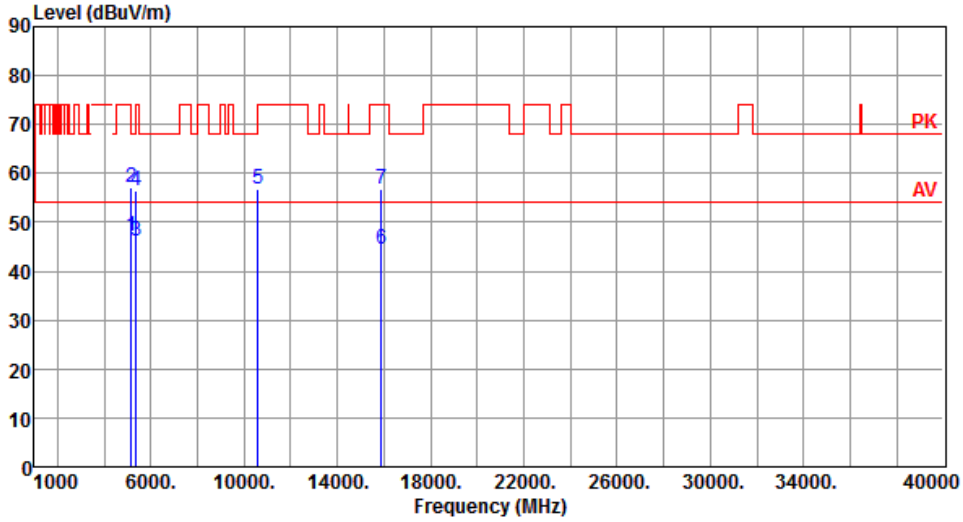
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.06	54.00	-4.94	44.42	4.64	Average	214	84
2	5150.00	61.69	74.00	-12.31	57.05	4.64	Peak	214	84
3	5350.00	46.78	54.00	-7.22	42.84	3.94	Average	214	84
4	5350.00	57.78	74.00	-16.22	53.84	3.94	Peak	214	84
5	10420.00	57.18	68.20	-11.02	42.84	14.34	Peak	100	58
6	15630.00	45.21	54.00	-8.79	30.70	14.51	Average	100	59
7	15630.00	57.23	74.00	-16.77	42.72	14.51	Peak	100	59

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

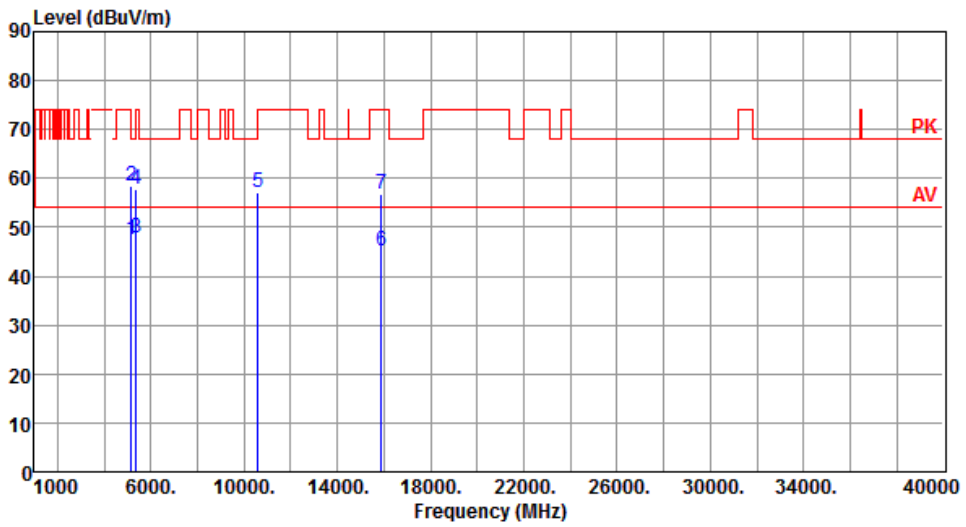
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.04	54.00	-6.96	42.40	4.64	Average	374	150
2	5150.00	57.11	74.00	-16.89	52.47	4.64	Peak	374	150
3	5350.00	46.27	54.00	-7.73	42.33	3.94	Average	374	150
4	5350.00	56.33	74.00	-17.67	52.39	3.94	Peak	374	150
5	10580.00	56.73	68.20	-11.47	42.41	14.32	Peak	100	101
6	15870.00	44.58	54.00	-9.42	30.35	14.23	Average	100	104
7	15870.00	56.80	74.00	-17.20	42.57	14.23	Peak	100	104

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

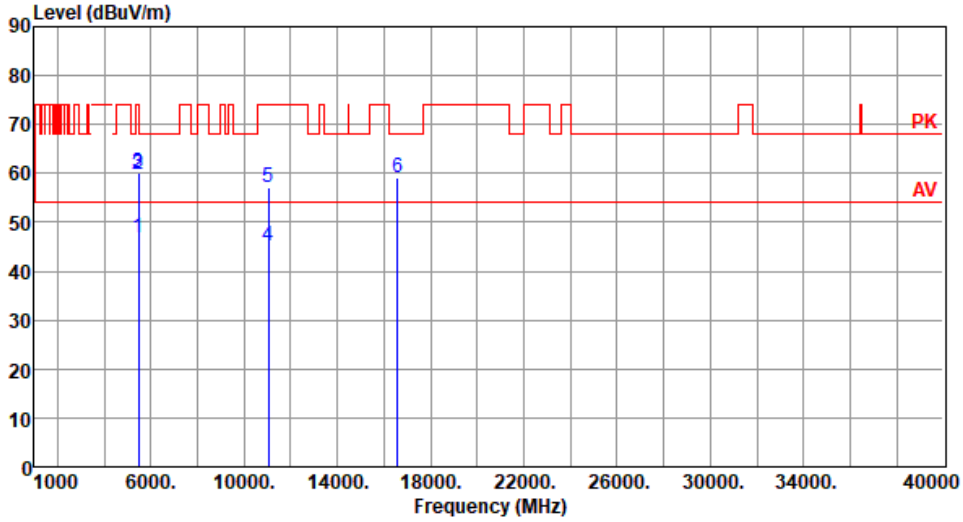
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.41	54.00	-6.59	42.77	4.64	Average	242	80
2	5150.00	58.41	74.00	-15.59	53.77	4.64	Peak	242	80
3	5350.00	47.93	54.00	-6.07	43.99	3.94	Average	242	80
4	5350.00	57.78	74.00	-16.22	53.84	3.94	Peak	242	80
5	10580.00	57.16	68.20	-11.04	42.84	14.32	Peak	100	55
6	15870.00	45.15	54.00	-8.85	30.92	14.23	Average	100	49
7	15870.00	56.92	74.00	-17.08	42.69	14.23	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).

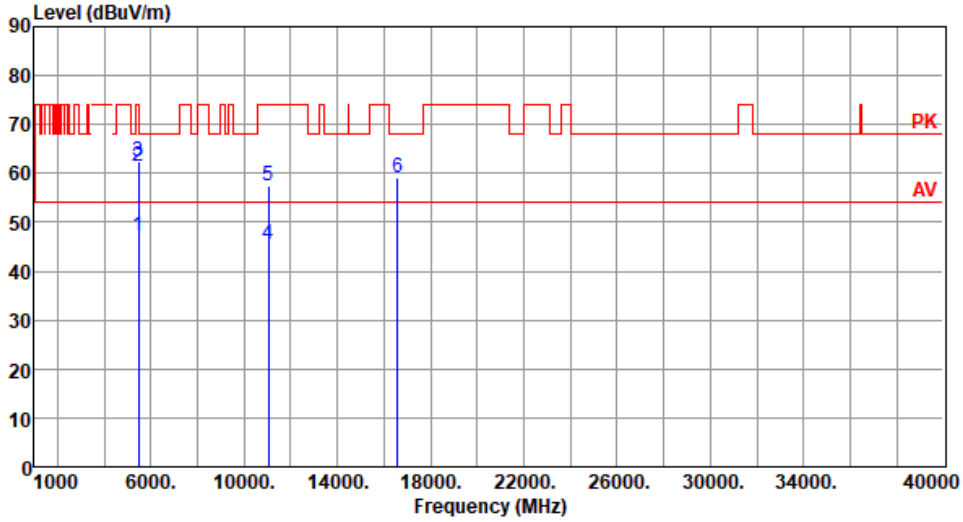
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	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	46.93	54.00	-7.07	42.48	4.45	Average	374	150
2	5460.00	59.79	74.00	-14.21	55.34	4.45	Peak	374	150
3	5470.00	59.97	68.20	-8.23	55.47	4.50	Peak	374	150
4	11060.00	45.08	54.00	-8.92	30.41	14.67	Average	100	109
5	11060.00	57.14	74.00	-16.86	42.47	14.67	Peak	100	109
6	16590.00	59.00	68.20	-9.20	42.39	16.61	Peak	100	105

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

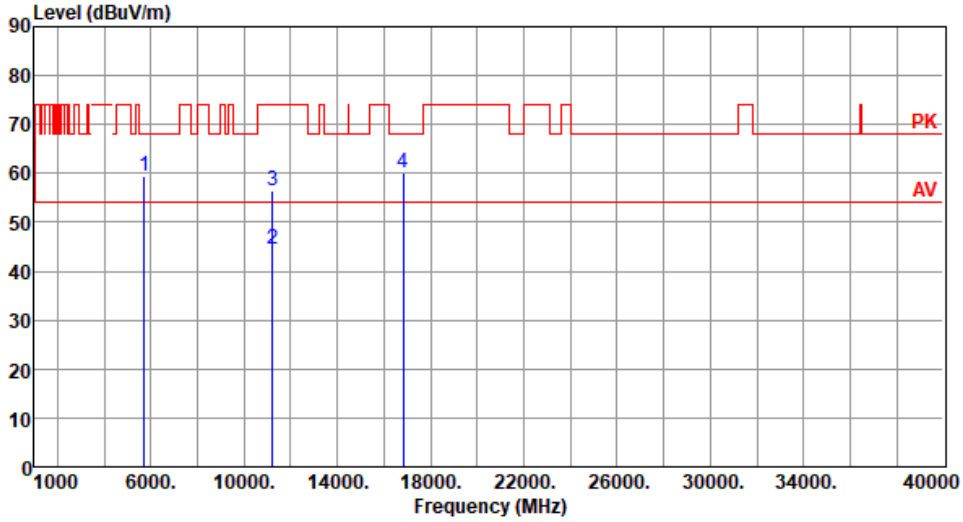
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	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	47.14	54.00	-6.86	42.69	4.45	Average	339	79
2	5460.00	61.31	74.00	-12.69	56.86	4.45	Peak	339	79
3	5470.00	62.35	68.20	-5.85	57.85	4.50	Peak	339	79
4	11060.00	45.54	54.00	-8.46	30.87	14.67	Average	100	52
5	11060.00	57.45	74.00	-16.55	42.78	14.67	Peak	100	52
6	16590.00	59.20	68.20	-9.00	42.59	16.61	Peak	100	59

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

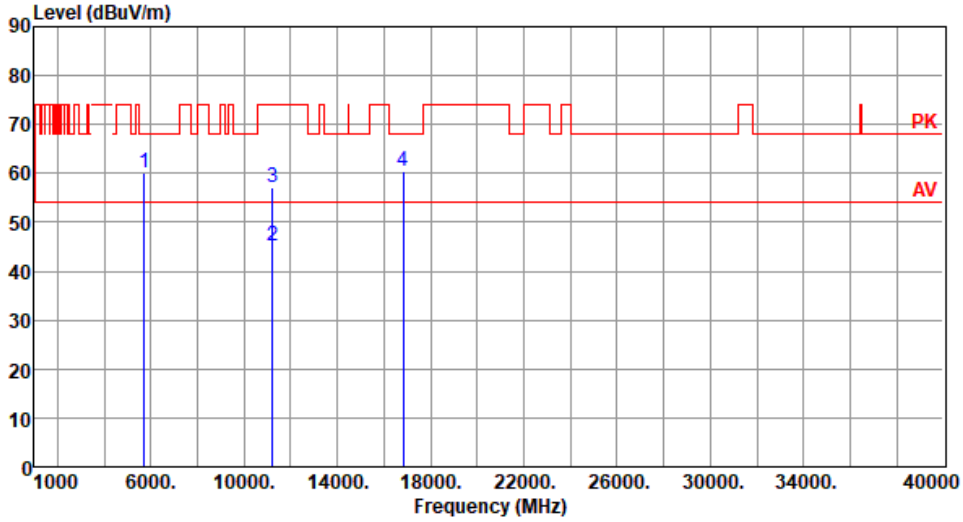
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Horizontal		



	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	59.32	68.20	-8.88	54.47	4.85	Peak	390	161
2	11220.00	44.57	54.00	-9.43	30.28	14.29	Average	100	101
3	11220.00	56.43	74.00	-17.57	42.14	14.29	Peak	100	101
4	16830.00	60.06	68.20	-8.14	42.41	17.65	Peak	100	105

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

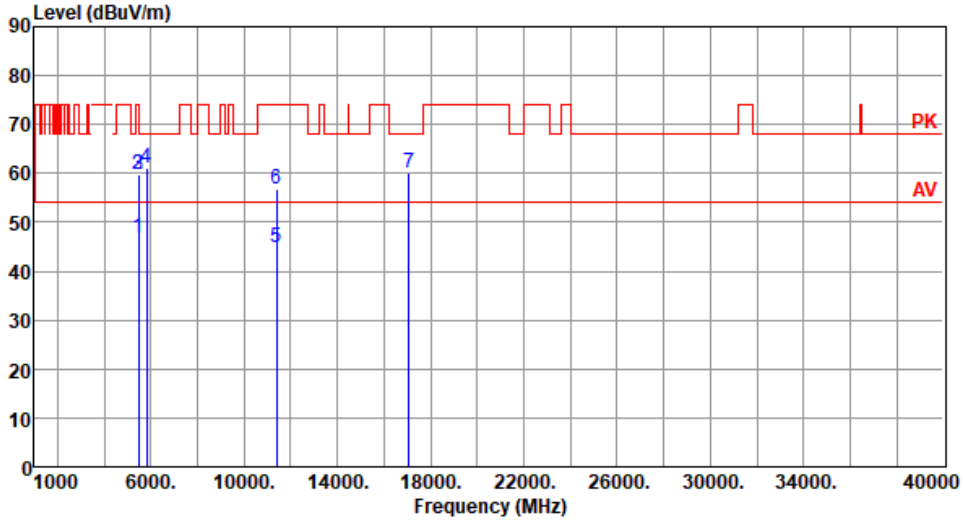
Modulation	VHT80	Test Freq. (MHz)	5610
Polarization	Vertical		



	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	60.07	68.20	-8.13	55.22	4.85	Peak	335	82
2	11220.00	45.07	54.00	-8.93	30.78	14.29	Average	100	52
3	11220.00	57.14	74.00	-16.86	42.85	14.29	Peak	100	52
4	16830.00	60.31	68.20	-7.89	42.66	17.65	Peak	100	59

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

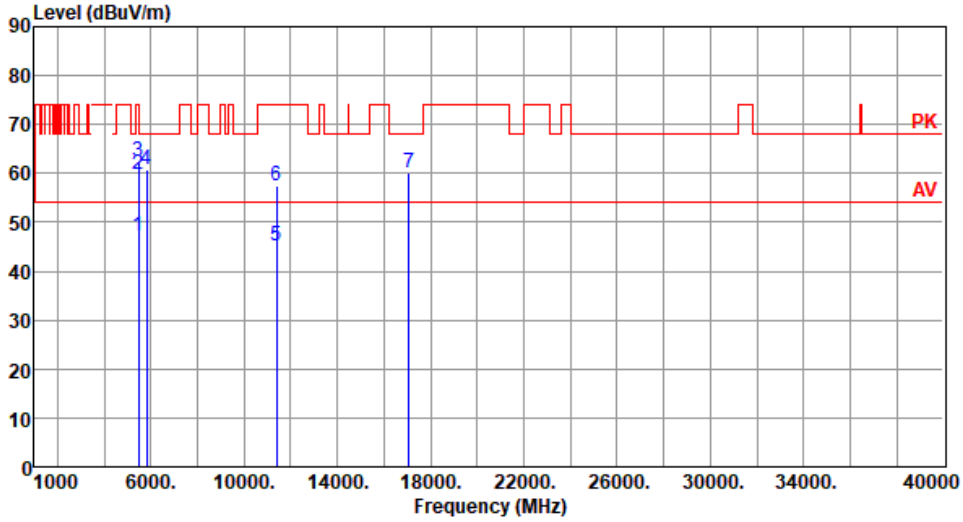
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.85	54.00	-7.15	42.40	4.45	Average	375	151
2	5460.00	59.78	74.00	-14.22	55.33	4.45	Peak	375	151
3	5470.00	59.86	68.20	-8.34	55.36	4.50	Peak	375	151
4	5825.00	61.01	68.20	-7.19	55.72	5.29	Peak	375	151
5	11380.00	44.84	54.00	-9.16	30.23	14.61	Average	100	110
6	11380.00	56.84	74.00	-17.16	42.23	14.61	Peak	100	110
7	17070.00	60.00	68.20	-8.20	42.25	17.75	Peak	100	104

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

Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.28	54.00	-6.72	42.83	4.45	Average	341	80
2	5460.00	59.74	74.00	-14.26	55.29	4.45	Peak	341	80
3	5470.00	62.35	68.20	-5.85	57.85	4.50	Peak	341	80
4	5825.00	60.93	68.20	-7.27	55.64	5.29	Peak	341	80
5	11380.00	45.32	54.00	-8.68	30.71	14.61	Average	100	56
6	11380.00	57.29	74.00	-16.71	42.68	14.61	Peak	100	56
7	17070.00	60.17	68.20	-8.03	42.42	17.75	Peak	100	62

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

3.6 Frequency Stability

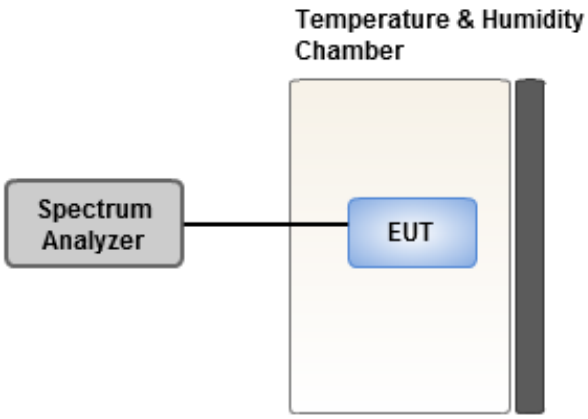
3.6.1 Limit of Frequency Stability

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

3.6.2 Test Procedures

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

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	**0 minute**	**2 minutes**	**5 minutes**	**10 minutes**
T20°CVmax	1.31	1.23	1.26	1.21
T20°CVmin	1.05	1.06	0.86	1.26
T55CVnom	1.02	1.44	1.33	1.22
T50CVnom	0.80	0.43	0.94	0.98
T40°CVnom	1.15	0.93	1.31	1.24
T30°CVnom	0.13	0.43	0.23	0.61
T20°CVnom	0.96	1.08	1.15	0.98
T10°CVnom	-1.92	-1.59	-1.67	-1.34
T0°CVnom	-2.58	-2.89	-2.56	-2.89
T-10°CVnom	-4.11	-4.46	-3.72	-3.80
T-20°CVnom	-5.80	-5.92	-5.82	-5.48
T-30°CVnom	-7.45	-7.72	-7.27	-7.36
Vnom [V]: 3.9		Vmax [V]: 4.485		Vmin [V]: 3.315
Tnom [°C]: 20		Tmax [°C]: 55		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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

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