

FCC C2PC Test Report

FCC ID : SQG-WB45NBT
Equipment : 45 Series WB module with Bluetooth
Model No. : WB45NBT
Brand Name : Laird
Applicant : Laird Connectivity
Address : W66N220 Commerce Court, Cedarburg,
Wisconsin 53012, USA
Standard : 47 CFR FCC Part 15.407
Received Date : Apr. 11, 2019
Tested Date : Apr. 11 ~ Apr. 12, 2019
Nov. 06 ~ Nov. 13, 2019

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

Reviewed by:


Along Chen / Assistant Manager

Approved by:

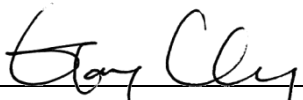

Gary Chang / Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	9
1.3	Test Setup Chart	9
1.4	The Equipment List	10
1.5	Testing Applied Standards	11
1.6	Deviation from Test Standard and Measurement Procedure.....	11
1.7	Measurement Uncertainty	12
2	TEST CONFIGURATION	13
2.1	Testing Condition	13
2.2	The Worst Test Modes and Channel Details	14
3	TRANSMITTER TEST RESULTS.....	16
3.1	Conducted Emissions.....	16
3.2	Emission Bandwidth	21
3.3	RF Output Power.....	32
3.4	Peak Power Spectral Density.....	35
3.5	Transmitter Radiated and Band Edge Emissions	47
3.6	Frequency Stability.....	208
4	TEST LABORATORY INFORMATION	210

Release Record

Report No.	Version	Description	Issued Date
FR350301-07AN	Rev. 01	Initial issue	Feb. 11, 2020

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 18.972MHz 40.71 (Margin -9.29dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 10520.00MHz 67.87 (Margin -0.33dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: 5150~5250MHz: 16.68 5250~5350MHz: 16.66 5470~5725MHz: 17.73 5725~5850MHz: 18.16	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

This report is prepared for FCC class II permissive change.

This report is issued as a supplementary report to original ICC report no. FR350301-01AN & FR350301-01AI. The modification is concerned with following:

- ✧ PCB materials and Balun change of Wi-Fi function.
- ✧ Diplexer 2nd source change of Wi-Fi function..
- ✧ Applicant is changed
- ✧ Adding channel 120, 124 and 128 by software setting.

In this report, all tests had been re-tested and presented in the following sections.

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	1	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	1	MCS 0-7
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. Note 3: 802.11n supports HT20 only					

1.1.2 Antenna Details

Ant. No.	Brand /Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	MAG.LAYERS EDA-1513-25GR2-B2-CY	Dipole	SMA Jack Reverse	2	2	2	2	2
2	MAG.LAYERS PCA-4606-2G4C1-A13-CY	PCB Dipole	UFL	2.21	---	---	---	---
3	Larid NanoBlade-IP04	PCB Dipole	UFL	2	3.9	3.9	4	4
4	Larid MAF95310 Mini NanoBlade Flex	PCB Dipole	UFL	2.79	3.38	3.38	3.38	3.38
5	Larid NanoBlue-IP04	PCB Dipole	UFL	2	---	---	---	---
6	Ethertronics WLAN_1000146	PIFA	UFL	2.5	3.5	3.5	3.5	3.5
7	SAA MG7018-41-000-R	Dipole	UFL	1.87	0.85	0.6	0.94	0.92
8	SAA MG7324-41-000-R	Dipole	UFL	1.32	1.04	1.6	2.75	2.24

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc and 1.8Vdc
--------------------------	-------------------

1.1.4 Accessories

N/A

1.1.5 Channel List

802.11 a / HT20	
Channel	Frequency(MHz)
36	5180
40	5200
44	5220
48	5240
52	5260
56	5280
60	5300
64	5320
100	5500
104	5520
108	5540
112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700
149	5745
153	5765
157	5785
161	5805
165	5825

1.1.6 Test Tool and Duty Cycle

Test Tool	putty, Version: 0.60.0.0		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11a	99.28%	0.03
	HT20	99.23%	0.03

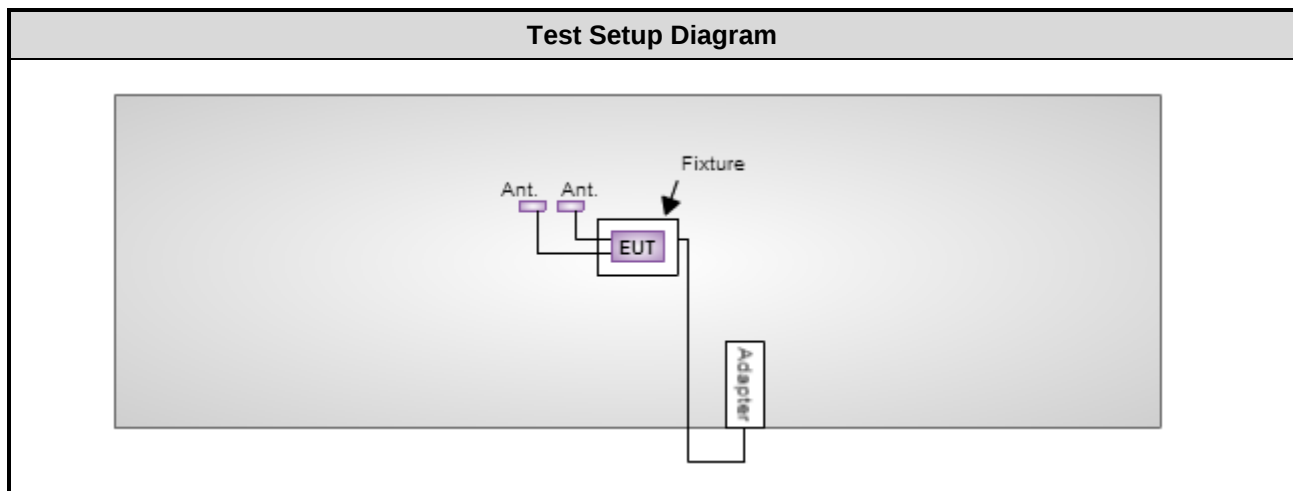
1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11a	5180	14
11a	5200	13
11a	5240	14.5
11a	5260	15.5
11a	5300	15
11a	5320	14.5
11a	5500	14.5
11a	5580	16.5
11a	5700	15
11a	5745	15.5
11a	5785	17.5
11a	5825	17
HT20	5180	14
HT20	5200	13
HT20	5240	15
HT20	5260	15.5
HT20	5300	15
HT20	5320	15
HT20	5500	14.5
HT20	5580	16.5
HT20	5700	15
HT20	5745	14.5
HT20	5785	17
HT20	5825	17

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E6430	DoC	---
2	Fixture	---	---	---	Provided by applicant.

1.3 Test Setup Chart



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

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Test Date	Nov. 13, 2019				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Jan. 08, 2019	Jan. 07, 2020
LISN	R&S	ENV216	101579	Mar. 08, 2019	Mar. 07, 2020
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 22, 2019	Oct. 21, 2020
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Test Date	Apr. 11 ~ Apr. 12, 2019				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Jan. 07, 2019	Jan. 06, 2020
Receiver	R&S	ESR3	101658	Dec. 11, 2018	Dec. 10, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 19, 2018	Apr. 18, 2019
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Jan. 07, 2019	Jan. 06, 2020
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2018	Nov. 14, 2019
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 09, 2018	Nov. 08, 2019
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 08, 2018	Oct. 07, 2019
Preamplifier	EMC	EMC02325	980187	Aug. 24, 2018	Aug. 23, 2019
Preamplifier	Agilent	83017A	MY53270014	Aug. 09, 2018	Aug. 08, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 09, 2018	Aug. 08, 2019
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Oct. 01, 2018	Sep. 30, 2019
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Oct. 01, 2018	Sep. 30, 2019
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Oct. 01, 2018	Sep. 30, 2019
LF cable-0.8M	EMC	EMC8D-NM-NM-8000	EMC8D-NM-NM-800-001	Oct. 01, 2018	Sep. 30, 2019
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Oct. 01, 2018	Sep. 30, 2019
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Oct. 01, 2018	Sep. 30, 2019
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Test Date	Nov. 06, 2019				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Apr. 17, 2019	Apr. 16, 2020
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 05, 2018	Dec. 04, 2019
Power Meter	Anritsu	ML2495A	1241002	Oct. 23, 2019	Oct. 22, 2020
Power Sensor	Anritsu	MA2411B	1207366	Oct. 23, 2019	Oct. 22, 2020
DC POWER SOURCE	GW INSTRON	GPC-6030D	GES855395	Oct. 29, 2019	Oct. 28, 2020
Measurement Software	--	SENSE-15247_DTS	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 ≤ 1 GHz	± 3.96 dB
Radiated emission > 1 GHz	± 4.51 dB
Time	$\pm 0.1\%$
Temperature	± 0.4 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 67%	Akun Chung
Radiated Emissions	03CH03-WS	22-24°C / 64-66%	Roger Lu
RF Conducted	TH01-WS	22°C / 62%	Brad Wu

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

2.2 The Worst Test Modes and Channel Details

Frequency band 5150~5350 MHz / 5470~5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	11a	5580	6 Mbps	1
Radiated Emissions ≤1GHz	11a	5580	6 Mbps	1, 2, 3
Radiated Emissions ≤1GHz	HT20	5240	MCS 0	4
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	1
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
Radiated Emissions >1GHz	11a	5180 / 5200 / 5240 / 5260 / 5300 5320	6 Mbps	1, 2, 4
		5500 / 5580 / 5700		1, 2, 3
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320	MCS 0	1, 2, 4
		5500 / 5580 / 5700		1, 2, 3
Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	1
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	
Frequency Stability	Un-modulation	5320	---	1
NOTE: 1. Test configurations are listed as below: 1) Configuration 1 : PCB Dipole antenna (Antenna No.3) , Y-plane 2) Configuration 2 : PIFA antenna (Antenna No.6) , Y-plane 3) Configuration 3 : Dipole antenna (Antenna No.8) , Y-plane / 5.47 ~ 5.725 GHz 4) Configuration 4: Dipole antenna (Antenna No.1), Y-plane / 5.15 ~ 5.35 GHz				

Frequency band 5725-5850 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	11a	5785	6 Mbps	1
Radiated Emissions ≤ 1 GHz	11a	5785	6 Mbps	1, 2, 3
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	1
	HT20	5745 / 5785 / 5825	MCS 0	
Radiated Emissions > 1 GHz	11a	5745 / 5785 / 5825	6 Mbps	1, 2, 3
	HT20	5745 / 5785 / 5825	MCS 0	
Emission Bandwidth	11a	5745 / 5785 / 5825	6 Mbps	1
6dB bandwidth	HT20	5745 / 5785 / 5825	MCS 0	
Peak Power Spectral Density				
Frequency Stability	Un-modulation	5785	---	1
NOTE: 1. Test configurations are listed as below: 1) Configuration 1 : PCB Dipole antenna (Antenna No.3) , Y-plane 2) Configuration 2 : PIFA antenna (Antenna No.6) , Y-plane 3) Configuration 3 : Dipole antenna (Antenna No.8) , Y-plane 2. The EUT was tested under 3.3Vdc.				

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

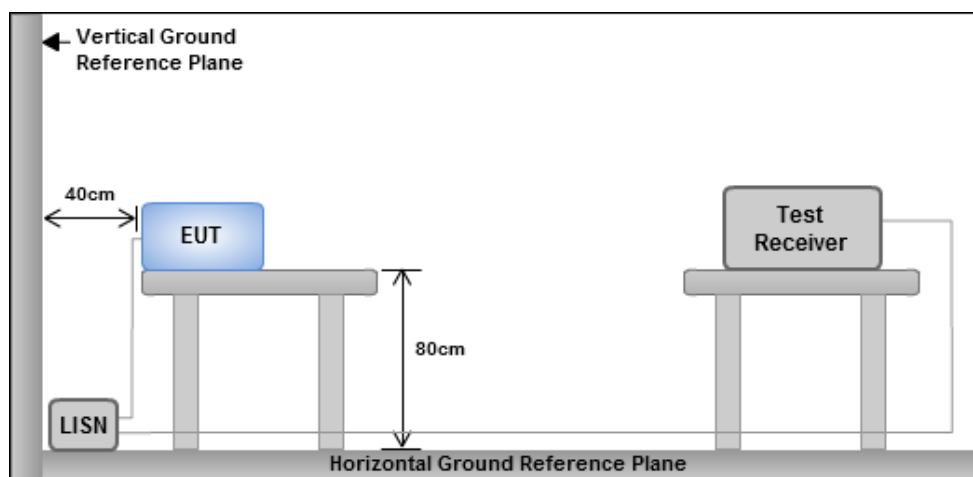
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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

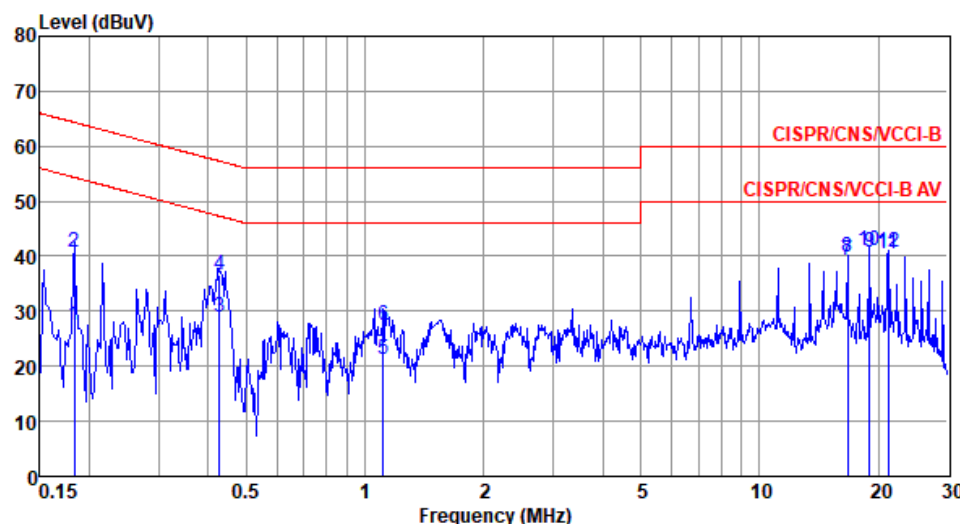
3.1.4 Test Result of Conducted Emissions

Modulation	11a	Test Freq. (MHz)	5580																																																																																																																																							
Power Phase	Line																																																																																																																																									
Level (dBUV) <table><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>LISN</th><th>cable</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuA</th><th>Line</th><th>Limit</th><th>Level</th><th>factor</th><th>loss</th><th>Remark</th></tr><tr><th></th><th></th><th></th><th>dBuA</th><th>dB</th><th>dBuA</th><th>dB</th><th>dB</th><th></th></tr><tr><td>1</td><td>0.162</td><td>22.97</td><td>55.34</td><td>-32.37</td><td>13.22</td><td>9.53</td><td>0.05</td><td>Average</td></tr><tr><td>2</td><td>0.162</td><td>40.62</td><td>65.34</td><td>-24.72</td><td>30.87</td><td>9.53</td><td>0.05</td><td>QP</td></tr><tr><td>3</td><td>0.426</td><td>28.50</td><td>47.33</td><td>-18.83</td><td>18.60</td><td>9.57</td><td>0.08</td><td>Average</td></tr><tr><td>4</td><td>0.426</td><td>35.83</td><td>57.33</td><td>-21.50</td><td>25.93</td><td>9.57</td><td>0.08</td><td>QP</td></tr><tr><td>5</td><td>1.117</td><td>22.51</td><td>46.00</td><td>-23.49</td><td>12.46</td><td>9.60</td><td>0.13</td><td>Average</td></tr><tr><td>6</td><td>1.117</td><td>28.22</td><td>56.00</td><td>-27.78</td><td>18.17</td><td>9.60</td><td>0.13</td><td>QP</td></tr><tr><td>7</td><td>16.750</td><td>34.96</td><td>50.00</td><td>-15.04</td><td>24.15</td><td>9.66</td><td>0.62</td><td>Average</td></tr><tr><td>8</td><td>16.750</td><td>36.50</td><td>60.00</td><td>-23.50</td><td>25.69</td><td>9.66</td><td>0.62</td><td>QP</td></tr><tr><td>9*</td><td>18.979</td><td>39.87</td><td>50.00</td><td>-10.13</td><td>28.97</td><td>9.66</td><td>0.65</td><td>Average</td></tr><tr><td>10</td><td>18.979</td><td>40.29</td><td>60.00</td><td>-19.71</td><td>29.39</td><td>9.66</td><td>0.65</td><td>QP</td></tr><tr><td>11</td><td>21.211</td><td>39.18</td><td>50.00</td><td>-10.82</td><td>28.23</td><td>9.65</td><td>0.67</td><td>Average</td></tr><tr><td>12</td><td>21.211</td><td>39.69</td><td>60.00</td><td>-20.31</td><td>28.74</td><td>9.65</td><td>0.67</td><td>QP</td></tr></table>					Freq	Level	Limit	Over	Read	LISN	cable			MHz	dBuA	Line	Limit	Level	factor	loss	Remark				dBuA	dB	dBuA	dB	dB		1	0.162	22.97	55.34	-32.37	13.22	9.53	0.05	Average	2	0.162	40.62	65.34	-24.72	30.87	9.53	0.05	QP	3	0.426	28.50	47.33	-18.83	18.60	9.57	0.08	Average	4	0.426	35.83	57.33	-21.50	25.93	9.57	0.08	QP	5	1.117	22.51	46.00	-23.49	12.46	9.60	0.13	Average	6	1.117	28.22	56.00	-27.78	18.17	9.60	0.13	QP	7	16.750	34.96	50.00	-15.04	24.15	9.66	0.62	Average	8	16.750	36.50	60.00	-23.50	25.69	9.66	0.62	QP	9*	18.979	39.87	50.00	-10.13	28.97	9.66	0.65	Average	10	18.979	40.29	60.00	-19.71	29.39	9.66	0.65	QP	11	21.211	39.18	50.00	-10.82	28.23	9.65	0.67	Average	12	21.211	39.69	60.00	-20.31	28.74	9.65	0.67	QP
	Freq	Level	Limit	Over	Read	LISN	cable																																																																																																																																			
	MHz	dBuA	Line	Limit	Level	factor	loss	Remark																																																																																																																																		
			dBuA	dB	dBuA	dB	dB																																																																																																																																			
1	0.162	22.97	55.34	-32.37	13.22	9.53	0.05	Average																																																																																																																																		
2	0.162	40.62	65.34	-24.72	30.87	9.53	0.05	QP																																																																																																																																		
3	0.426	28.50	47.33	-18.83	18.60	9.57	0.08	Average																																																																																																																																		
4	0.426	35.83	57.33	-21.50	25.93	9.57	0.08	QP																																																																																																																																		
5	1.117	22.51	46.00	-23.49	12.46	9.60	0.13	Average																																																																																																																																		
6	1.117	28.22	56.00	-27.78	18.17	9.60	0.13	QP																																																																																																																																		
7	16.750	34.96	50.00	-15.04	24.15	9.66	0.62	Average																																																																																																																																		
8	16.750	36.50	60.00	-23.50	25.69	9.66	0.62	QP																																																																																																																																		
9*	18.979	39.87	50.00	-10.13	28.97	9.66	0.65	Average																																																																																																																																		
10	18.979	40.29	60.00	-19.71	29.39	9.66	0.65	QP																																																																																																																																		
11	21.211	39.18	50.00	-10.82	28.23	9.65	0.67	Average																																																																																																																																		
12	21.211	39.69	60.00	-20.31	28.74	9.65	0.67	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)	5580																																																																																																																														
Power Phase	Neutral																																																																																																																																
Level (dBUV) <table><thead><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>LISN</th><th>cable</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuA</th><th>dBuA</th><th>dB</th><th>dBuA</th><th>dB</th><th>dB</th><th>Remark</th></tr></thead><tbody><tr><td>1</td><td>0.189</td><td>24.44</td><td>54.06</td><td>-29.62</td><td>14.66</td><td>9.58</td><td>0.06</td><td>Average</td></tr><tr><td>2</td><td>0.189</td><td>39.88</td><td>64.06</td><td>-24.18</td><td>30.10</td><td>9.58</td><td>0.06</td><td>QP</td></tr><tr><td>3</td><td>0.426</td><td>29.66</td><td>47.33</td><td>-17.67</td><td>19.80</td><td>9.61</td><td>0.08</td><td>Average</td></tr><tr><td>4</td><td>0.426</td><td>37.03</td><td>57.33</td><td>-20.30</td><td>27.17</td><td>9.61</td><td>0.08</td><td>QP</td></tr><tr><td>5</td><td>0.637</td><td>19.80</td><td>46.00</td><td>-26.20</td><td>9.88</td><td>9.63</td><td>0.10</td><td>Average</td></tr><tr><td>6</td><td>0.637</td><td>25.70</td><td>56.00</td><td>-30.30</td><td>15.78</td><td>9.63</td><td>0.10</td><td>QP</td></tr><tr><td>7*</td><td>18.976</td><td>39.94</td><td>50.00</td><td>-10.06</td><td>29.00</td><td>9.80</td><td>0.65</td><td>Average</td></tr><tr><td>8</td><td>18.976</td><td>40.24</td><td>60.00</td><td>-19.76</td><td>29.30</td><td>9.80</td><td>0.65</td><td>QP</td></tr><tr><td>9</td><td>21.208</td><td>39.25</td><td>50.00</td><td>-10.75</td><td>28.21</td><td>9.81</td><td>0.67</td><td>Average</td></tr><tr><td>10</td><td>21.208</td><td>39.82</td><td>60.00</td><td>-20.18</td><td>28.78</td><td>9.81</td><td>0.67</td><td>QP</td></tr><tr><td>11</td><td>23.443</td><td>38.10</td><td>50.00</td><td>-11.90</td><td>26.96</td><td>9.81</td><td>0.70</td><td>Average</td></tr><tr><td>12</td><td>23.443</td><td>38.44</td><td>60.00</td><td>-21.56</td><td>27.30</td><td>9.81</td><td>0.70</td><td>QP</td></tr></tbody></table>					Freq	Level	Limit	Over	Read	LISN	cable			MHz	dBuA	dBuA	dB	dBuA	dB	dB	Remark	1	0.189	24.44	54.06	-29.62	14.66	9.58	0.06	Average	2	0.189	39.88	64.06	-24.18	30.10	9.58	0.06	QP	3	0.426	29.66	47.33	-17.67	19.80	9.61	0.08	Average	4	0.426	37.03	57.33	-20.30	27.17	9.61	0.08	QP	5	0.637	19.80	46.00	-26.20	9.88	9.63	0.10	Average	6	0.637	25.70	56.00	-30.30	15.78	9.63	0.10	QP	7*	18.976	39.94	50.00	-10.06	29.00	9.80	0.65	Average	8	18.976	40.24	60.00	-19.76	29.30	9.80	0.65	QP	9	21.208	39.25	50.00	-10.75	28.21	9.81	0.67	Average	10	21.208	39.82	60.00	-20.18	28.78	9.81	0.67	QP	11	23.443	38.10	50.00	-11.90	26.96	9.81	0.70	Average	12	23.443	38.44	60.00	-21.56	27.30	9.81	0.70	QP
	Freq	Level	Limit	Over	Read	LISN	cable																																																																																																																										
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	Remark																																																																																																																									
1	0.189	24.44	54.06	-29.62	14.66	9.58	0.06	Average																																																																																																																									
2	0.189	39.88	64.06	-24.18	30.10	9.58	0.06	QP																																																																																																																									
3	0.426	29.66	47.33	-17.67	19.80	9.61	0.08	Average																																																																																																																									
4	0.426	37.03	57.33	-20.30	27.17	9.61	0.08	QP																																																																																																																									
5	0.637	19.80	46.00	-26.20	9.88	9.63	0.10	Average																																																																																																																									
6	0.637	25.70	56.00	-30.30	15.78	9.63	0.10	QP																																																																																																																									
7*	18.976	39.94	50.00	-10.06	29.00	9.80	0.65	Average																																																																																																																									
8	18.976	40.24	60.00	-19.76	29.30	9.80	0.65	QP																																																																																																																									
9	21.208	39.25	50.00	-10.75	28.21	9.81	0.67	Average																																																																																																																									
10	21.208	39.82	60.00	-20.18	28.78	9.81	0.67	QP																																																																																																																									
11	23.443	38.10	50.00	-11.90	26.96	9.81	0.70	Average																																																																																																																									
12	23.443	38.44	60.00	-21.56	27.30	9.81	0.70	QP																																																																																																																									
Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB). 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).																																																																																																																																	

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

Level (dBuV)

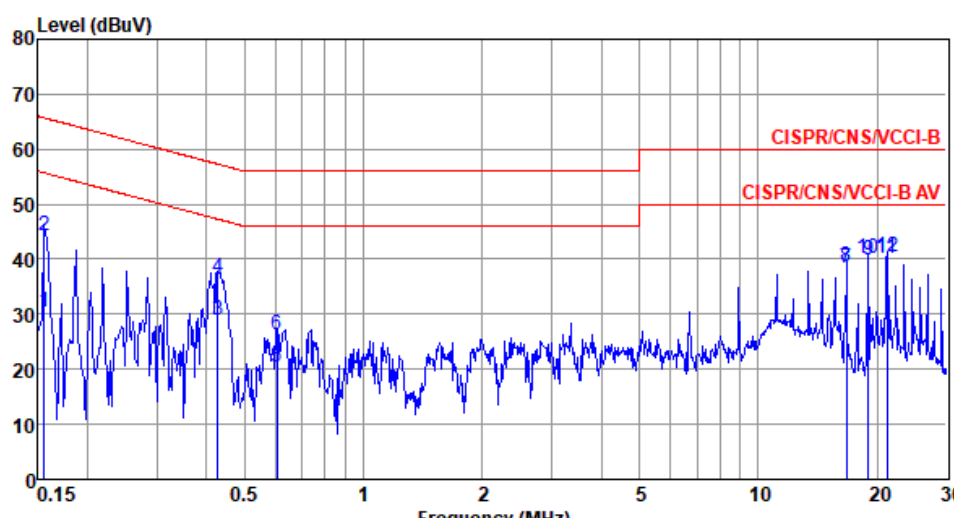


The graph displays the measured level in dBuV against frequency in MHz. Two red limit lines are shown: CISPR/CNS/VCCI-B (upper) and CISPR/CNS/VCCI-B AV (lower). The measured signal is shown as a blue line with several peaks. Peaks are labeled with numbers 1 through 12. The x-axis ranges from 0.15 to 30 MHz, and the y-axis ranges from 0 to 80 dBuV.

	Freq MHz	Level dBuA	Limit Line dBuA	Over Limit dB	Read Level dBuA	LISN factor dB	cable loss dB	Remark
1	0.183	27.58	54.33	-26.75	17.80	9.54	0.06	Average
2	0.183	40.73	64.33	-23.60	30.95	9.54	0.06	QP
3	0.428	28.93	47.29	-18.36	19.02	9.57	0.08	Average
4	0.428	36.68	57.29	-20.61	26.77	9.57	0.08	QP
5	1.111	21.15	46.00	-24.85	11.10	9.60	0.13	Average
6	1.111	27.36	56.00	-28.64	17.31	9.60	0.13	QP
7	16.741	39.18	50.00	-10.82	28.37	9.66	0.62	Average
8	16.741	39.93	60.00	-20.07	29.12	9.66	0.62	QP
9*	18.972	40.71	50.00	-9.29	29.81	9.66	0.65	Average
10	18.972	41.11	60.00	-18.89	30.21	9.66	0.65	QP
11	21.204	40.43	50.00	-9.57	29.48	9.65	0.67	Average
12	21.204	40.82	60.00	-19.18	29.87	9.65	0.67	QP

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

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



The graph displays the measured level in dBUV across a frequency range from 0.15 MHz to 30 MHz. Two red lines represent the CISPR/CNS/VCCI-B and CISPR/CNS/VCCI-B AV limits. The measured level is shown as a blue line with several peaks labeled 2, 4, 6, 8, 10, 11, and 12. The peaks are generally below the limits, with peak 2 being the highest at approximately 44.19 dBUV.

	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuA	Line	Limit	Level	factor	loss	
			dBuA	dB	dBuA	dB	dB	
1	0.156	30.36	55.69	-25.33	20.62	9.57	0.05	Average
2	0.156	44.19	65.69	-21.50	34.45	9.57	0.05	QP
3	0.428	28.90	47.29	-18.39	19.04	9.61	0.08	Average
4	0.428	36.68	57.29	-20.61	26.82	9.61	0.08	QP
5	0.604	20.48	46.00	-25.52	10.58	9.62	0.10	Average
6	0.604	26.14	56.00	-29.86	16.24	9.62	0.10	QP
7	16.739	38.34	50.00	-11.66	27.51	9.78	0.62	Average
8	16.739	38.77	60.00	-21.23	27.94	9.78	0.62	QP
9	18.971	39.81	50.00	-10.19	28.87	9.80	0.65	Average
10	18.971	40.14	60.00	-19.86	29.20	9.80	0.65	QP
11*	21.204	40.01	50.00	-9.99	28.97	9.81	0.67	Average
12	21.204	40.37	60.00	-19.63	29.33	9.81	0.67	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

3.2 Emission Bandwidth

3.2.1 Limit of Emission Bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

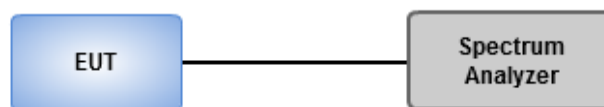
Occupied Bandwidth

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

6dB Bandwidth

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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	21.812M	16.498M	16M5D1D	21.304M	16.498M
802.11n HT20_Nss1,(MCS0)_1TX	24.203M	17.728M	17M7D1D	22.609M	17.583M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	25.362M	16.57M	16M6D1D	21.884M	16.498M
802.11n HT20_Nss1,(MCS0)_1TX	25.652M	17.728M	17M7D1D	23.043M	17.728M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	25.072M	16.57M	16M6D1D	21.522M	16.498M
802.11n HT20_Nss1,(MCS0)_1TX	23.478M	17.728M	17M7D1D	22.609M	17.656M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.377M	16.643M	16M6D1D	16.232M	16.498M
802.11n HT20_Nss1,(MCS0)_1TX	16.812M	17.873M	17M9D1D	15.942M	17.583M

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	21.812M	16.498M
5200MHz	Pass	Inf	21.522M	16.498M
5240MHz	Pass	Inf	21.304M	16.498M
5260MHz	Pass	Inf	25.362M	16.57M
5300MHz	Pass	Inf	21.884M	16.498M
5320MHz	Pass	Inf	22.101M	16.498M
5500MHz	Pass	Inf	21.884M	16.498M
5580MHz	Pass	Inf	25.072M	16.57M
5700MHz	Pass	Inf	21.522M	16.498M
5745MHz	Pass	500k	16.304M	16.498M
5785MHz	Pass	500k	16.377M	16.643M
5825MHz	Pass	500k	16.232M	16.643M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
5180MHz	Pass	Inf	23.116M	17.583M
5200MHz	Pass	Inf	22.609M	17.656M
5240MHz	Pass	Inf	24.203M	17.728M
5260MHz	Pass	Inf	25.652M	17.728M
5300MHz	Pass	Inf	23.043M	17.728M
5320MHz	Pass	Inf	24.203M	17.728M
5500MHz	Pass	Inf	22.826M	17.656M
5580MHz	Pass	Inf	23.478M	17.728M
5700MHz	Pass	Inf	22.609M	17.656M
5745MHz	Pass	500k	16.812M	17.583M
5785MHz	Pass	500k	15.942M	17.8M
5825MHz	Pass	500k	16.812M	17.873M

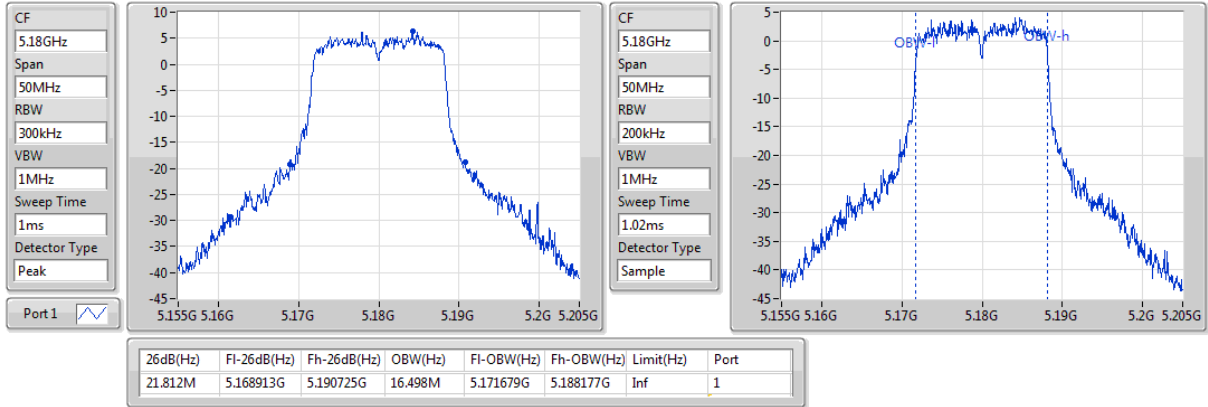
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_1TX

EBW

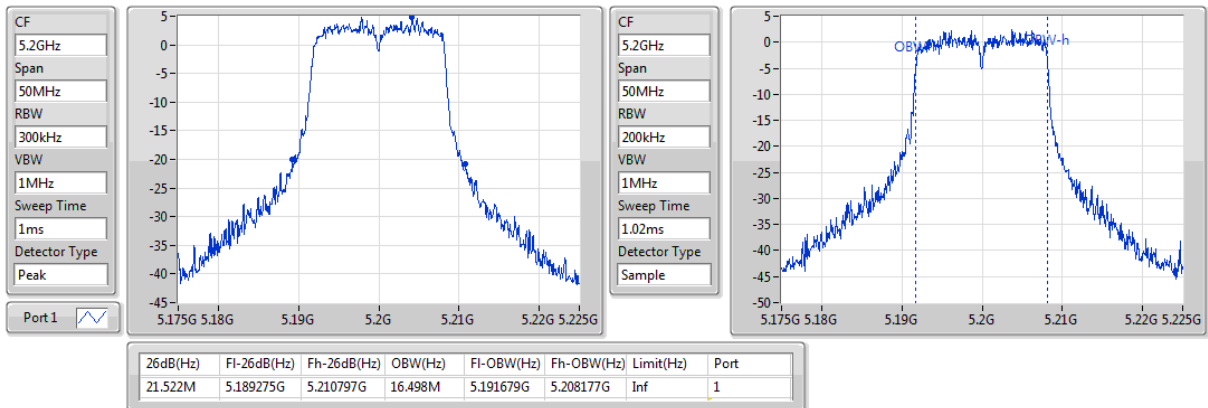
5180MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

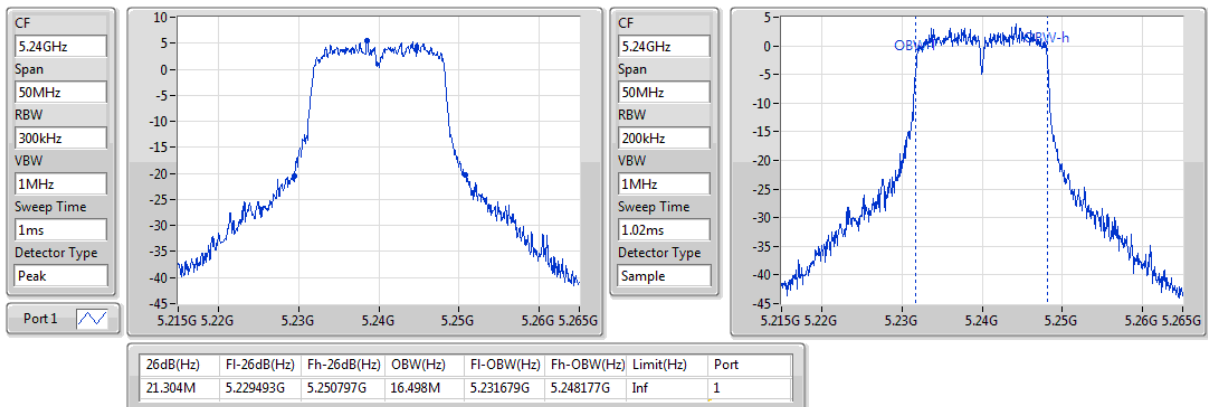
5200MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

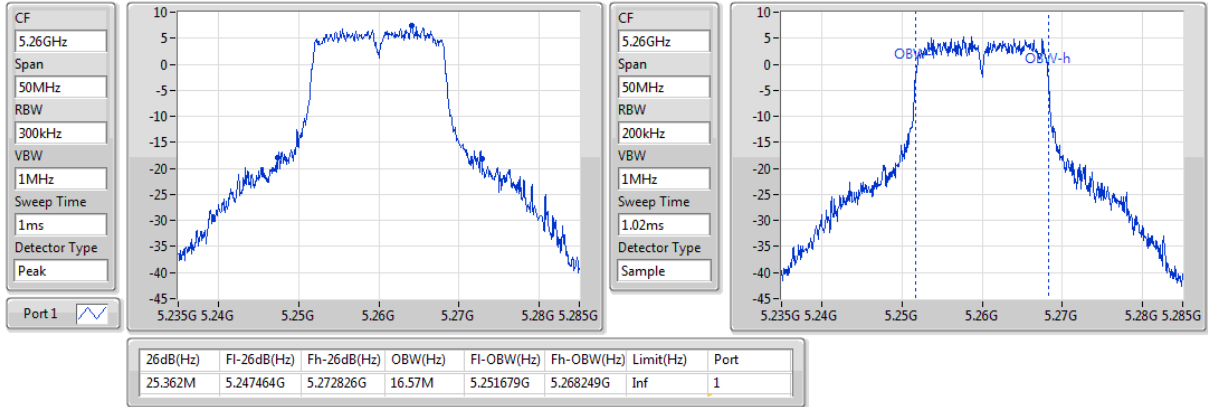
5240MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

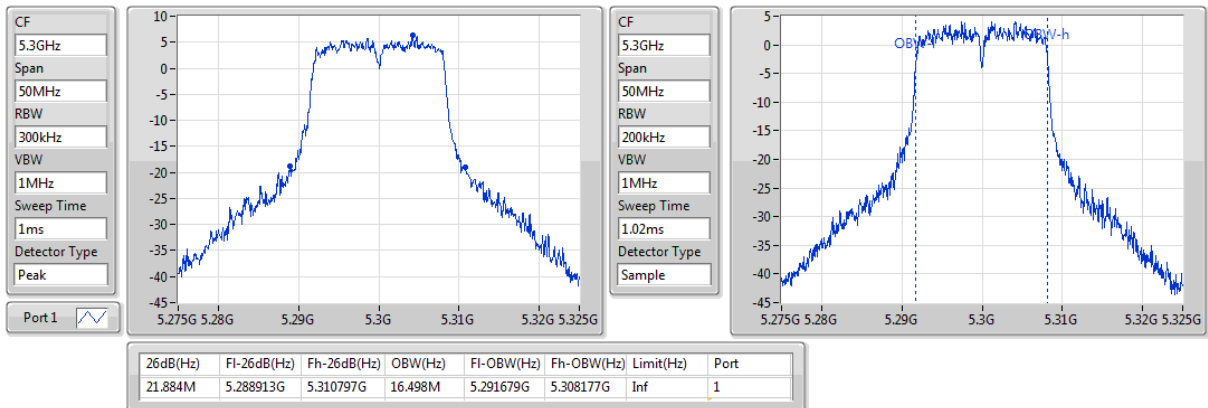
5260MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

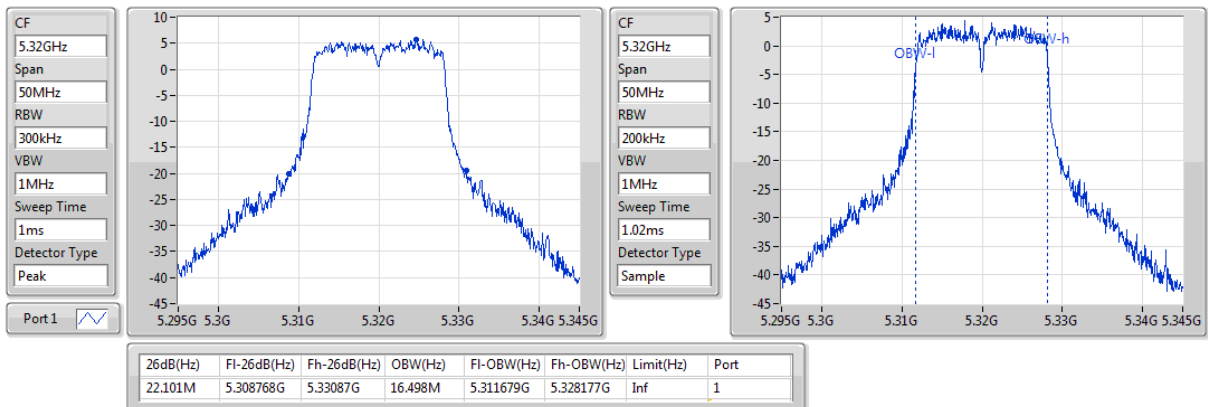
5300MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

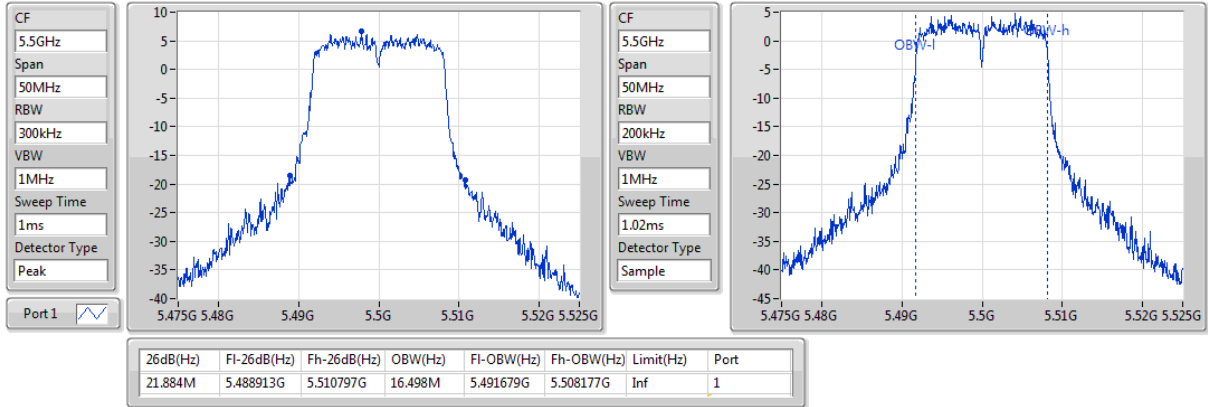
5320MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

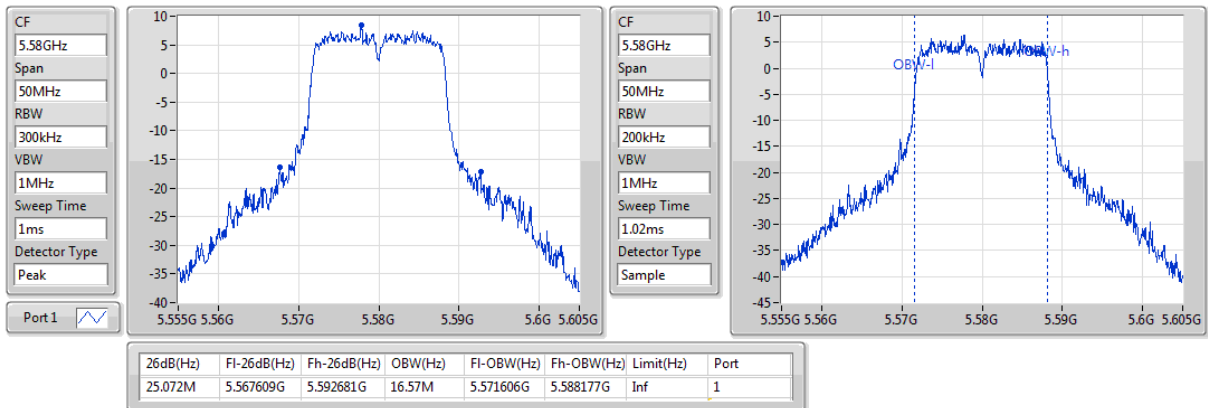
5500MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

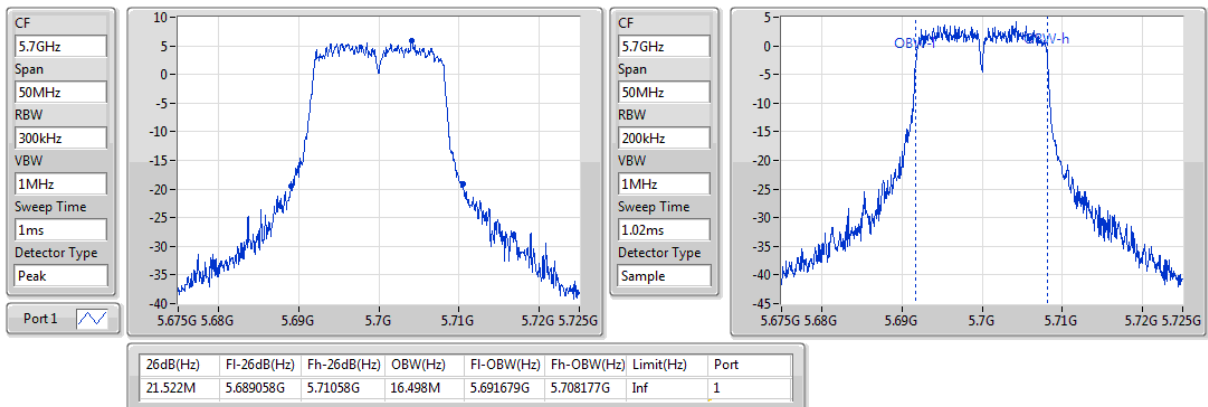
5580MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

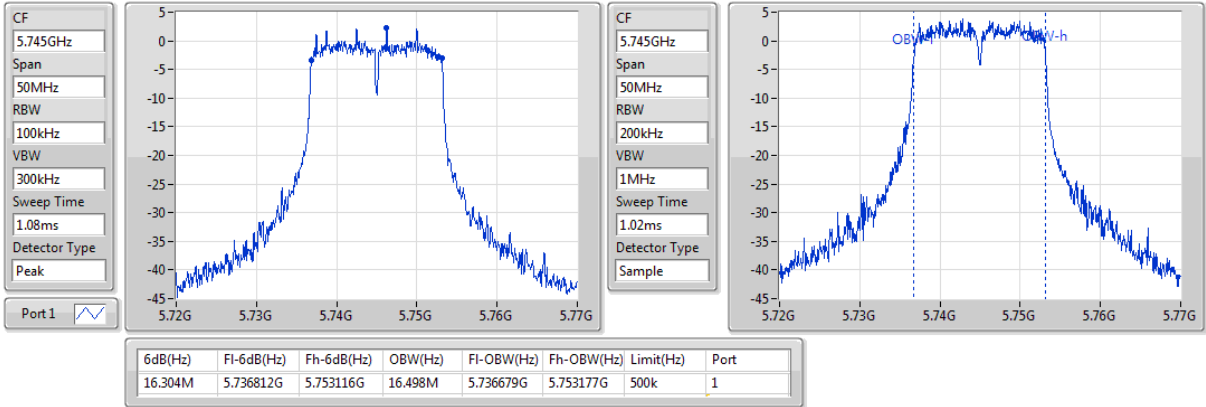
5700MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

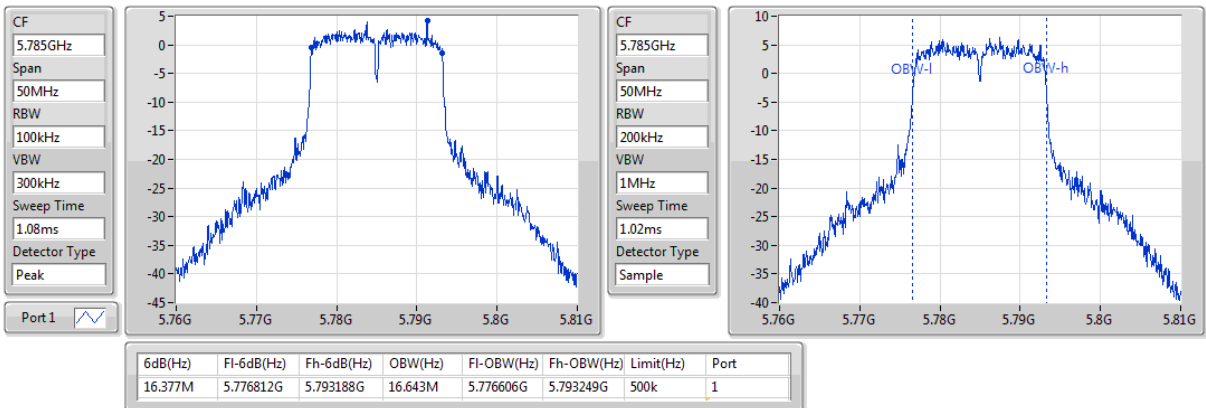
5745MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

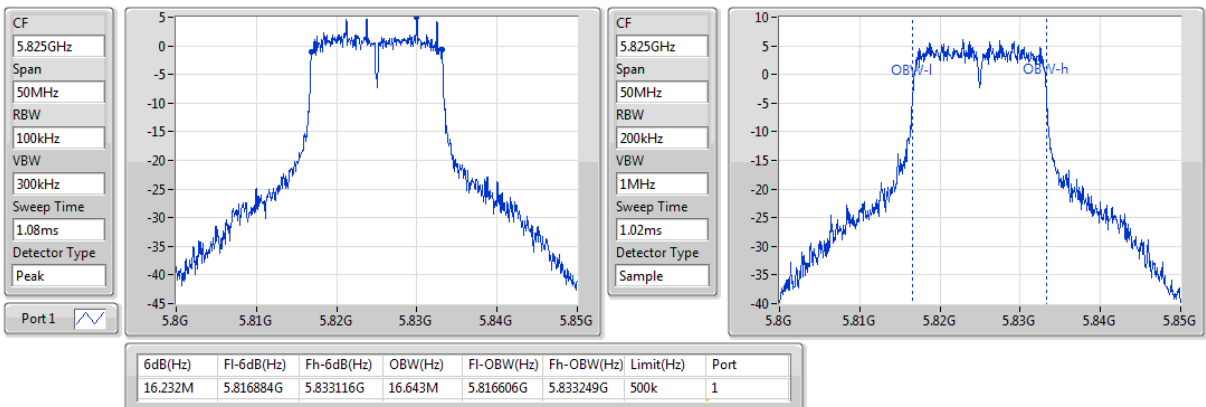
5785MHz



802.11a_Nss1,(6Mbps)_1TX

EBW

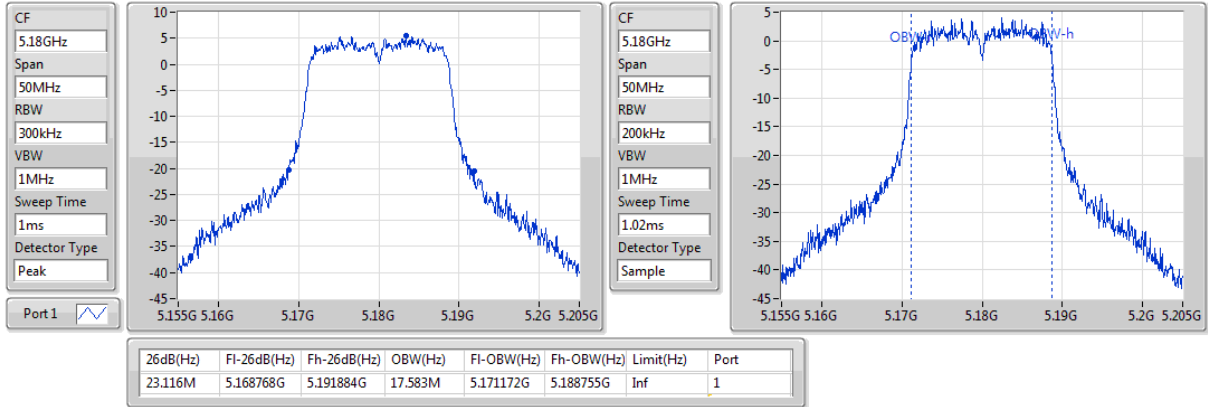
5825MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

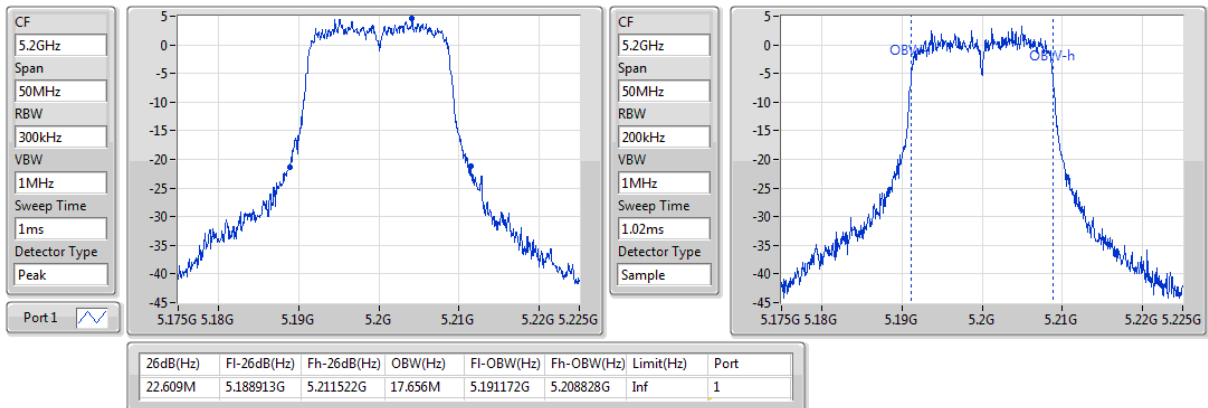
5180MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

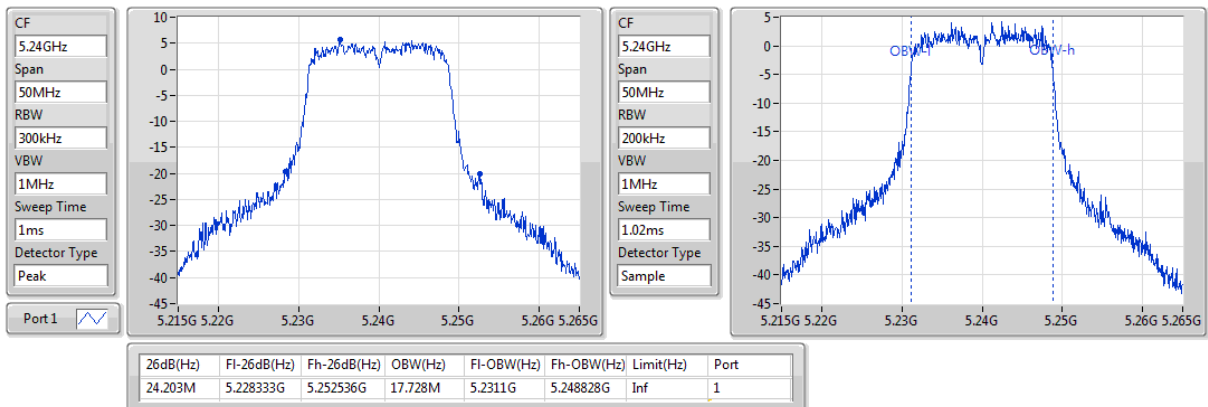
5200MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

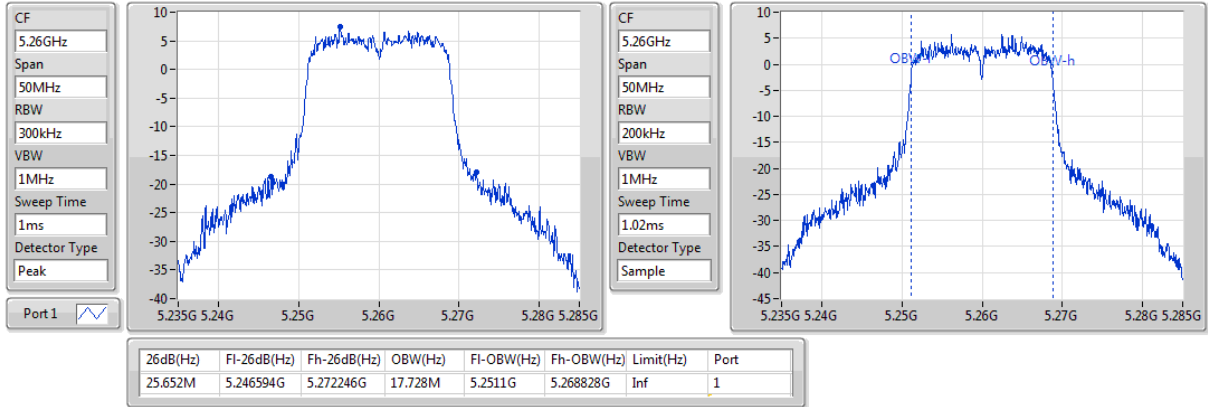
5240MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

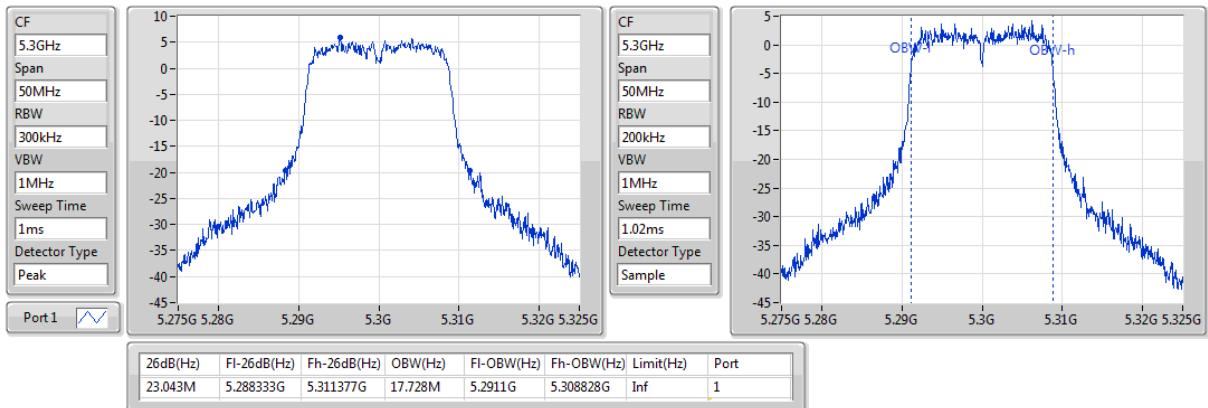
5260MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

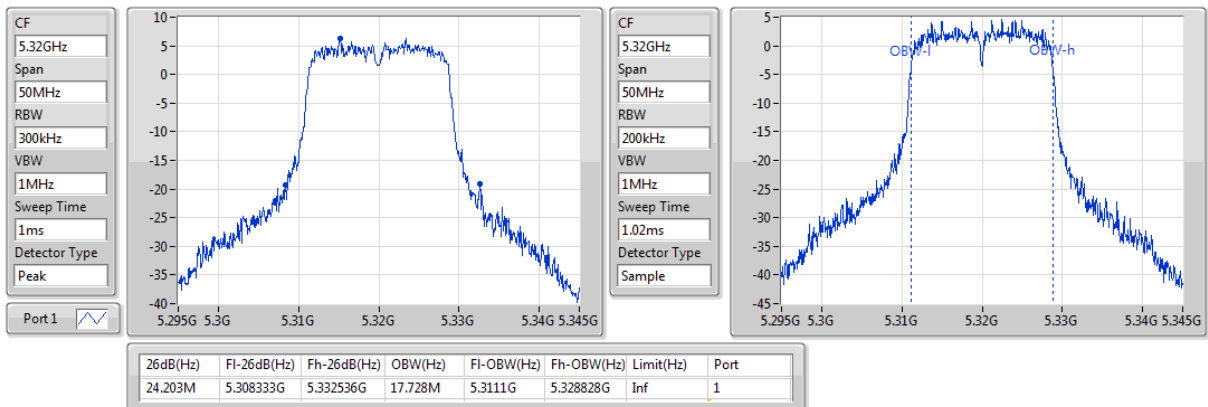
5300MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

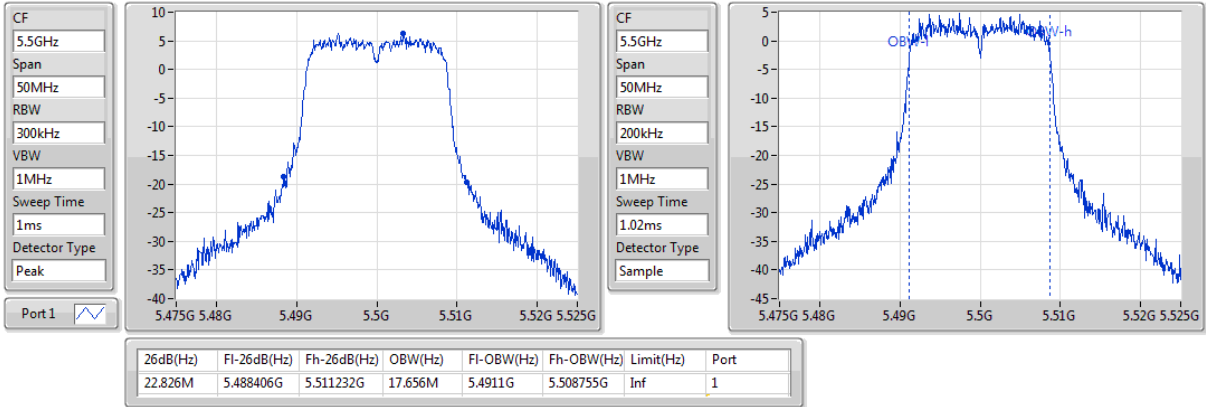
5320MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

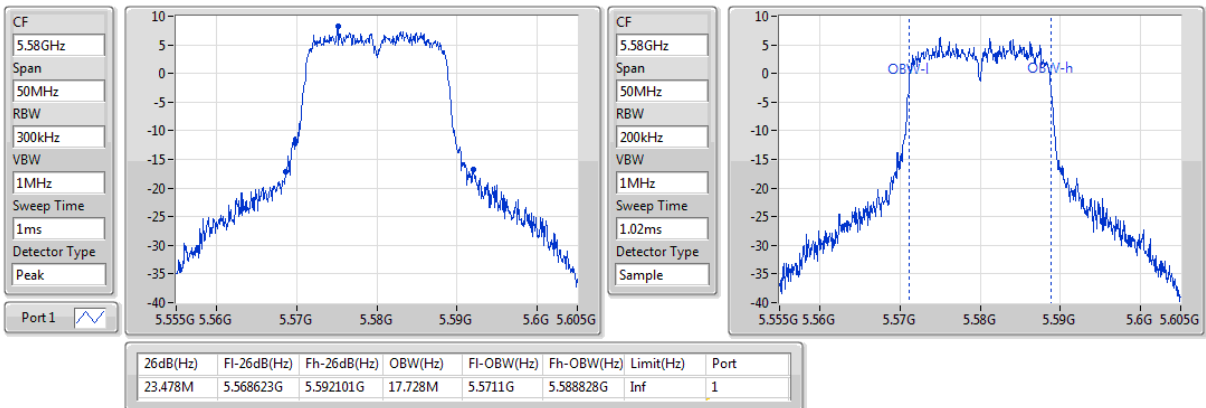
5500MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

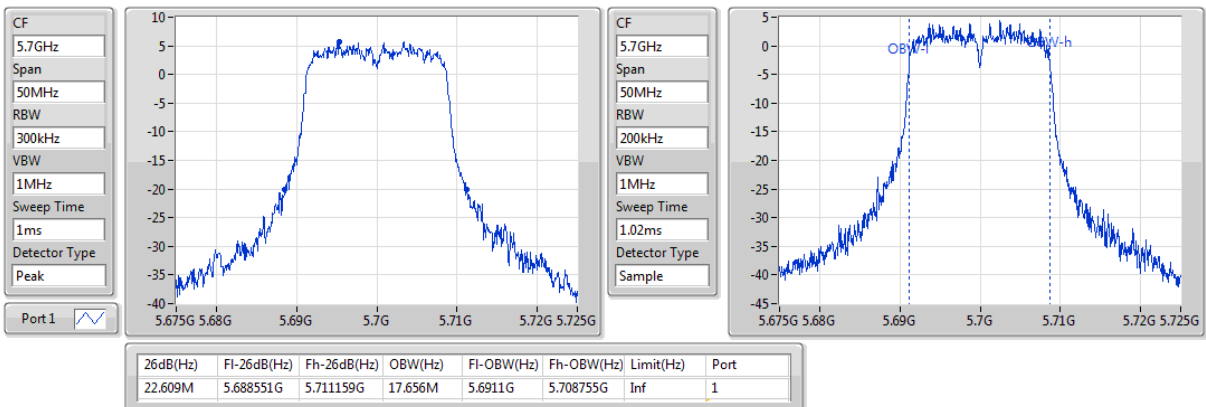
5580MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

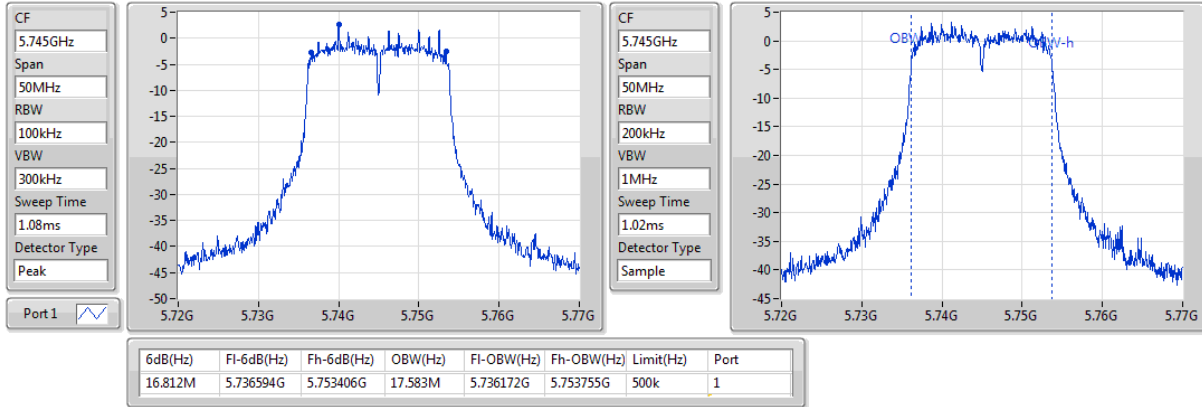
5700MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

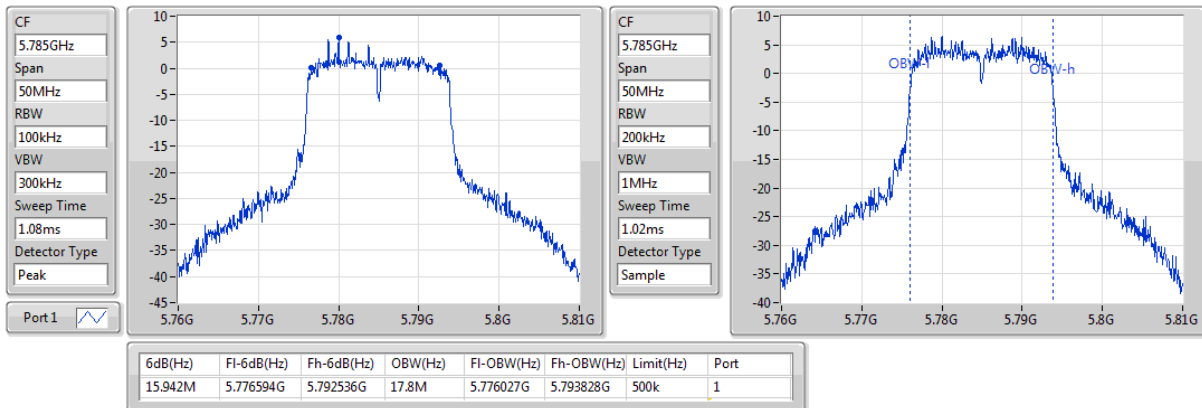
5745MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

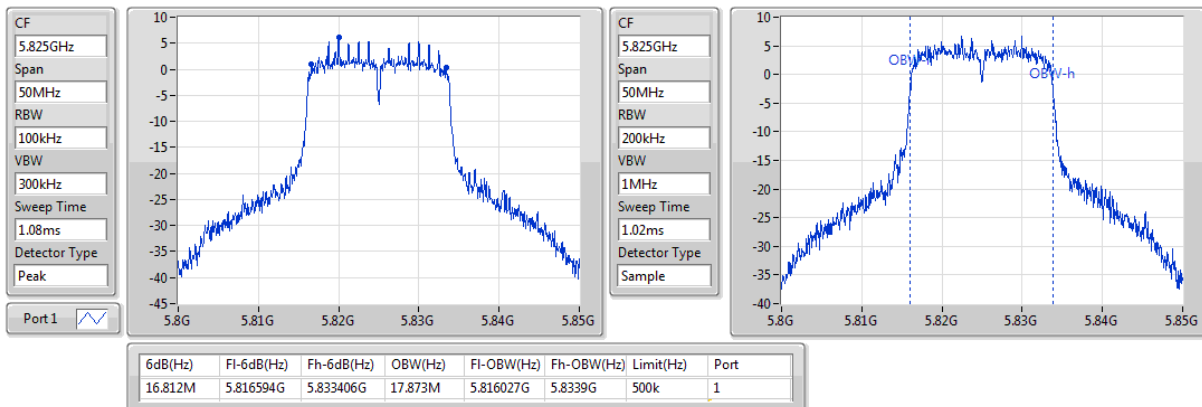
5785MHz



802.11n HT20_Nss1,(MCS0)_1TX

EBW

5825MHz



3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	Conducted Power: 250mW or 11dBm+10 log B
☒	5470 ~ 5725	Conducted Power: 250mW or 11dBm+10 log B
☒	5725 ~ 5850	Conducted Power: 1 W

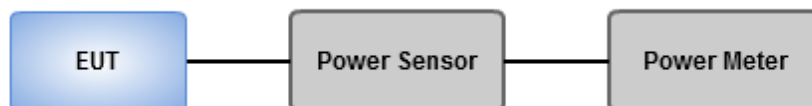
Note: "B" is the 26dB emission bandwidth in MHz.

3.3.2 Test Procedures

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

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

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.44	0.04406	20.34	0.10814
802.11n HT20_Nss1,(MCS0)_1TX	16.68	0.04656	20.58	0.11429
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.66	0.04634	20.56	0.11376
802.11n HT20_Nss1,(MCS0)_1TX	16.57	0.04539	20.47	0.11143
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	17.73	0.05929	21.73	0.14894
802.11n HT20_Nss1,(MCS0)_1TX	17.69	0.05875	21.69	0.14757
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	18.16	0.06546	22.16	0.16444
802.11n HT20_Nss1,(MCS0)_1TX	18.11	0.06471	22.11	0.16255

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	3.90	15.66	15.66	24.00	19.56	30.00
5200MHz	Pass	3.90	15.06	15.06	24.00	18.96	30.00
5240MHz	Pass	3.90	16.44	16.44	24.00	20.34	30.00
5260MHz	Pass	3.90	16.66	16.66	24.00	20.56	30.00
5300MHz	Pass	3.90	15.88	15.88	24.00	19.78	30.00
5320MHz	Pass	3.90	15.62	15.62	24.00	19.52	30.00
5500MHz	Pass	4.00	15.22	15.22	24.00	19.22	30.00
5580MHz	Pass	4.00	17.73	17.73	24.00	21.73	30.00
5700MHz	Pass	4.00	15.28	15.28	24.00	19.28	30.00
5745MHz	Pass	4.00	15.55	15.55	30.00	19.55	36.00
5785MHz	Pass	4.00	18.16	18.16	30.00	22.16	36.00
5825MHz	Pass	4.00	18.06	18.06	30.00	22.06	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.90	15.58	15.58	24.00	19.48	30.00
5200MHz	Pass	3.90	15.01	15.01	24.00	18.91	30.00
5240MHz	Pass	3.90	16.68	16.68	24.00	20.58	30.00
5260MHz	Pass	3.90	16.57	16.57	24.00	20.47	30.00
5300MHz	Pass	3.90	16.20	16.20	24.00	20.10	30.00
5320MHz	Pass	3.90	15.88	15.88	24.00	19.78	30.00
5500MHz	Pass	4.00	15.19	15.19	24.00	19.19	30.00
5580MHz	Pass	4.00	17.69	17.69	24.00	21.69	30.00
5700MHz	Pass	4.00	15.41	15.41	24.00	19.41	30.00
5745MHz	Pass	4.00	15.06	15.06	30.00	19.06	36.00
5785MHz	Pass	4.00	18.11	18.11	30.00	22.11	36.00
5825MHz	Pass	4.00	17.82	17.82	30.00	21.82	36.00

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

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

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

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz
☒	5725 ~ 5850	30 dBm /500 kHz

3.4.2 Test Procedures

For 5150 ~ 5250 MHz / 5250 ~ 5350 MHz / 5470 ~ 5725 MHz

Duty cycle $\geq 98\%$

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 $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add $10 \log(1/x)$, where x is the duty cycle.

For 5725 ~ 5850 MHz

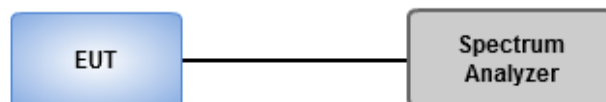
Duty cycle $\geq 98\%$

1. Set RBW = 500 kHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

Duty cycle $< 98\%$

1. Set RBW = 500 kHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
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	2.52	6.42
802.11n HT20_Nss1,(MCS0)_1TX	2.31	6.21
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	3.45	7.35
802.11n HT20_Nss1,(MCS0)_1TX	3.41	7.31
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	4.17	8.17
802.11n HT20_Nss1,(MCS0)_1TX	4.07	8.07
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX	2.95	6.95
802.11n HT20_Nss1,(MCS0)_1TX	2.94	6.94

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW W)	PD (dBm/RBW W)	PD Limit (dBm/RBW W)	EIRP PD (dBm/RBW W)	EIRP PD Limit (dBm/RBW W)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.90	2.52	2.52	11.00	6.42	17.00
5200MHz	Pass	3.90	1.94	1.94	11.00	5.84	17.00
5240MHz	Pass	3.90	2.43	2.43	11.00	6.33	17.00
5260MHz	Pass	3.90	3.45	3.45	11.00	7.35	17.00
5300MHz	Pass	3.90	2.26	2.26	11.00	6.16	17.00
5320MHz	Pass	3.90	2.16	2.16	11.00	6.06	17.00
5500MHz	Pass	4.00	2.69	2.69	11.00	6.69	17.00
5580MHz	Pass	4.00	4.17	4.17	11.00	8.17	17.00
5700MHz	Pass	4.00	2.00	2.00	11.00	6.00	17.00
5745MHz	Pass	4.00	0.48	0.48	30.00	4.48	36.00
5785MHz	Pass	4.00	2.95	2.95	30.00	6.95	36.00
5825MHz	Pass	4.00	2.68	2.68	30.00	6.68	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	3.90	1.87	1.87	11.00	5.77	17.00
5200MHz	Pass	3.90	0.83	0.83	11.00	4.73	17.00
5240MHz	Pass	3.90	2.31	2.31	11.00	6.21	17.00
5260MHz	Pass	3.90	3.41	3.41	11.00	7.31	17.00
5300MHz	Pass	3.90	2.15	2.15	11.00	6.05	17.00
5320MHz	Pass	3.90	2.47	2.47	11.00	6.37	17.00
5500MHz	Pass	4.00	2.55	2.55	11.00	6.55	17.00
5580MHz	Pass	4.00	4.07	4.07	11.00	8.07	17.00
5700MHz	Pass	4.00	1.95	1.95	11.00	5.95	17.00
5745MHz	Pass	4.00	-0.17	-0.17	30.00	3.83	36.00
5785MHz	Pass	4.00	2.80	2.80	30.00	6.80	36.00
5825MHz	Pass	4.00	2.94	2.94	30.00	6.94	36.00

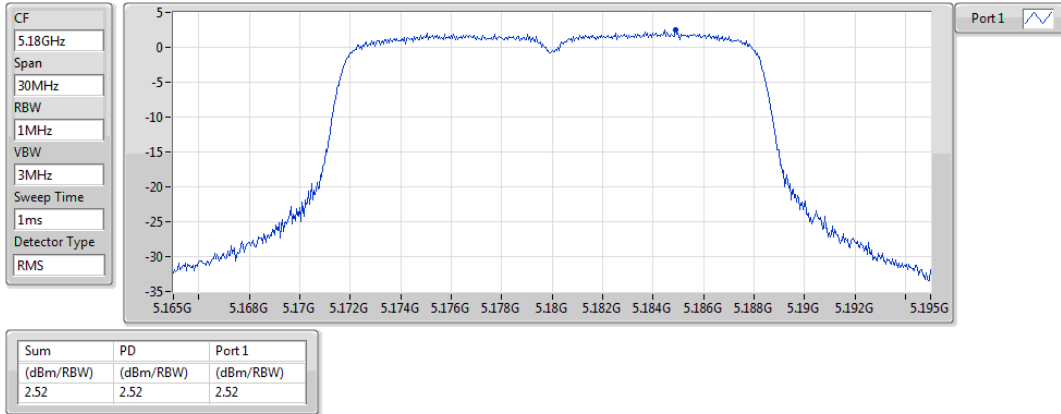
DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

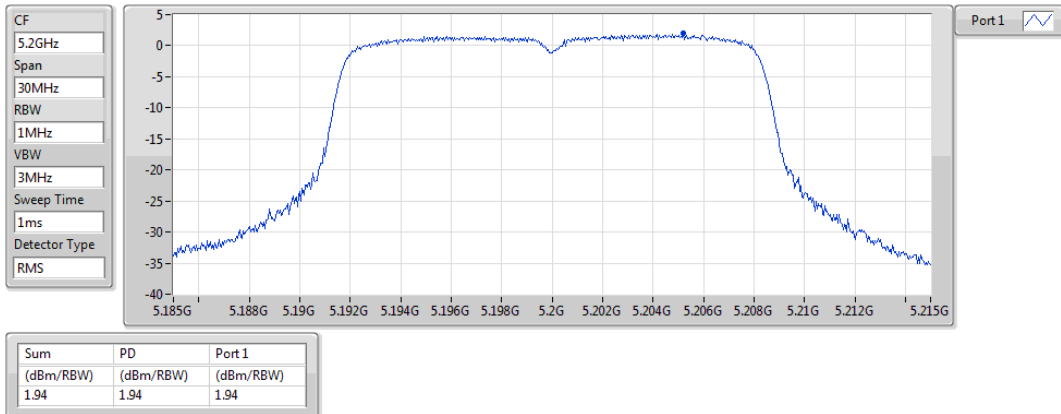
5180MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

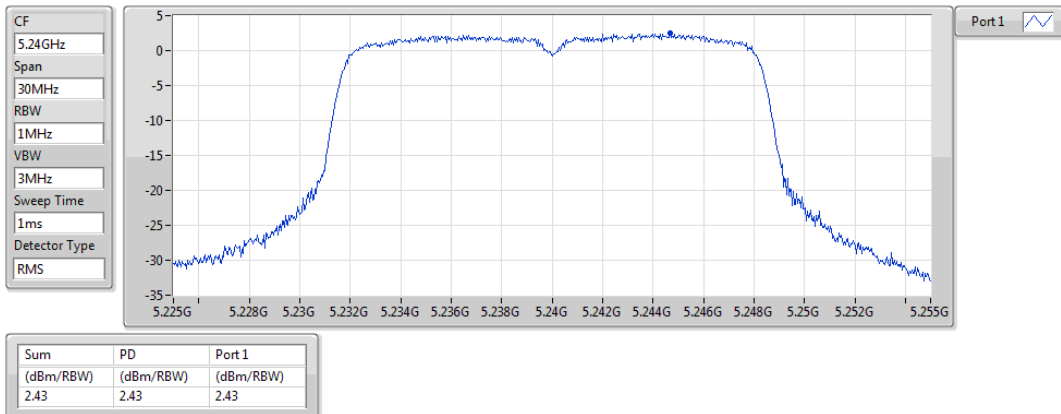
5200MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

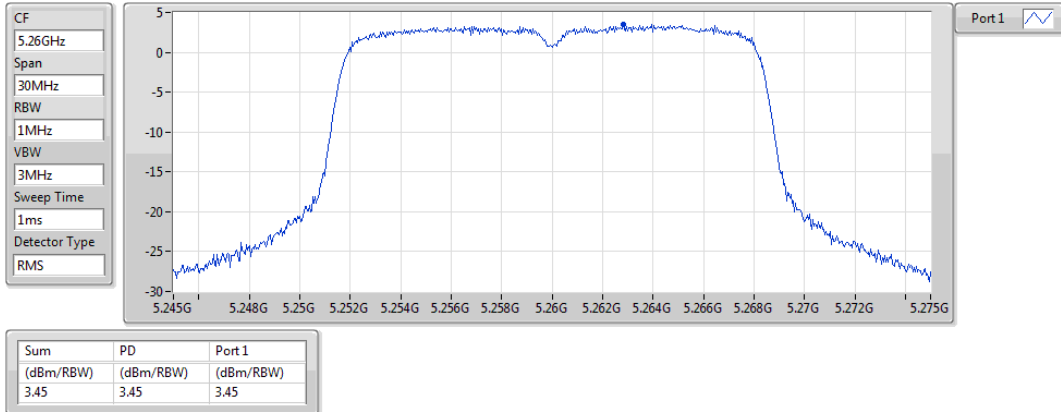
5240MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

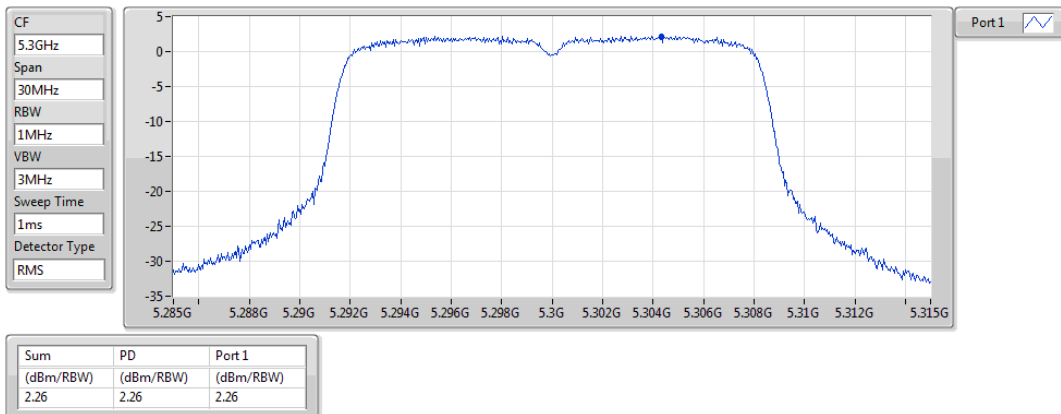
5260MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

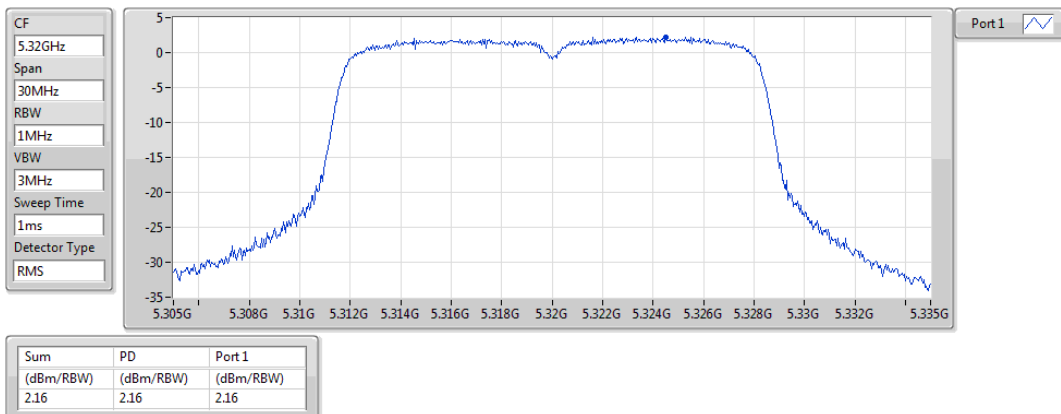
5300MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

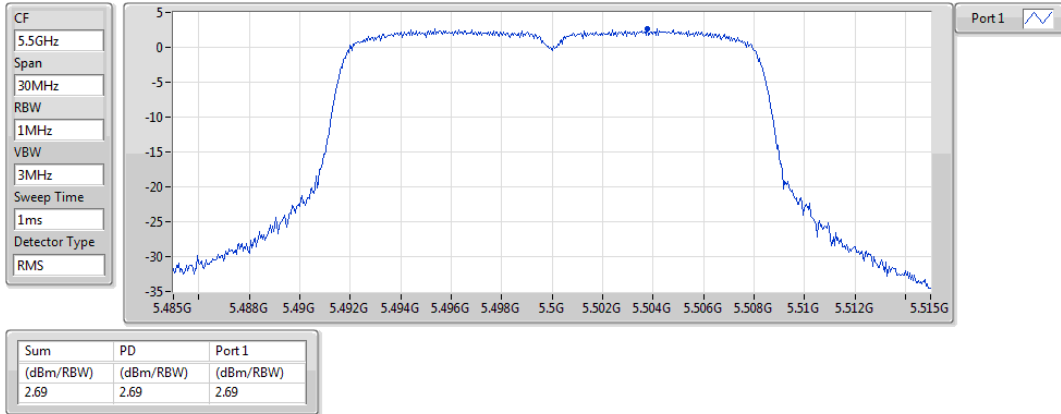
5320MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

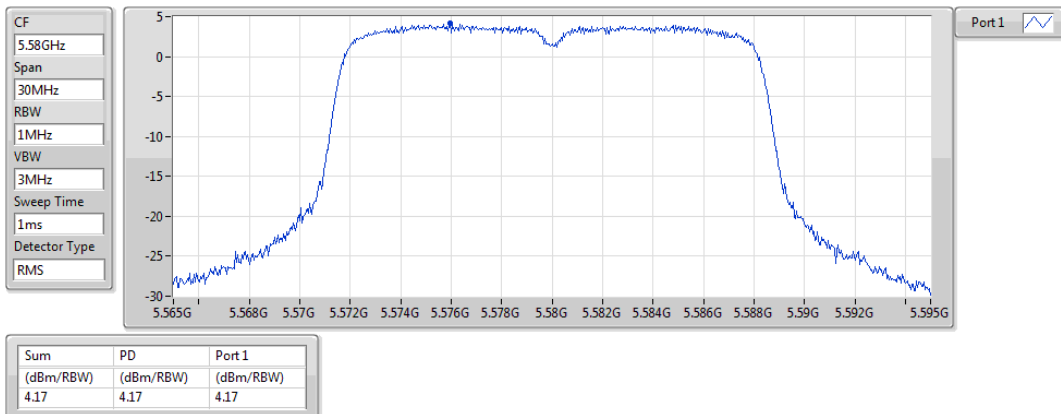
5500MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

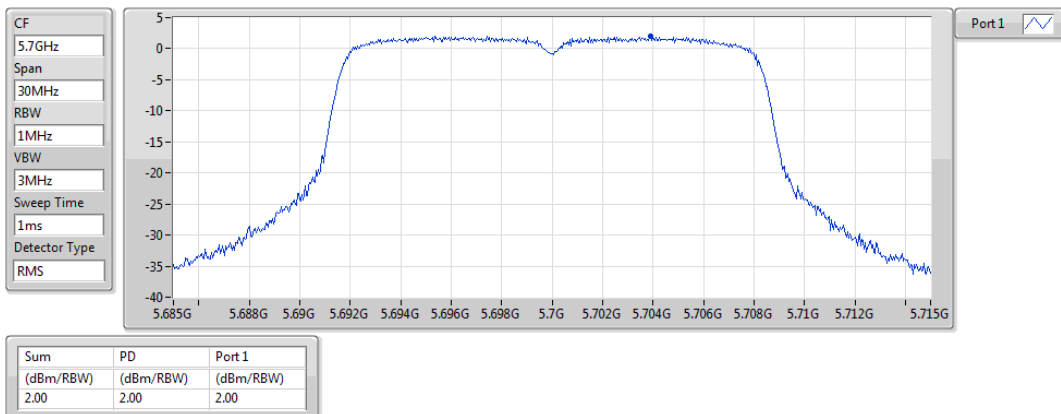
5580MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

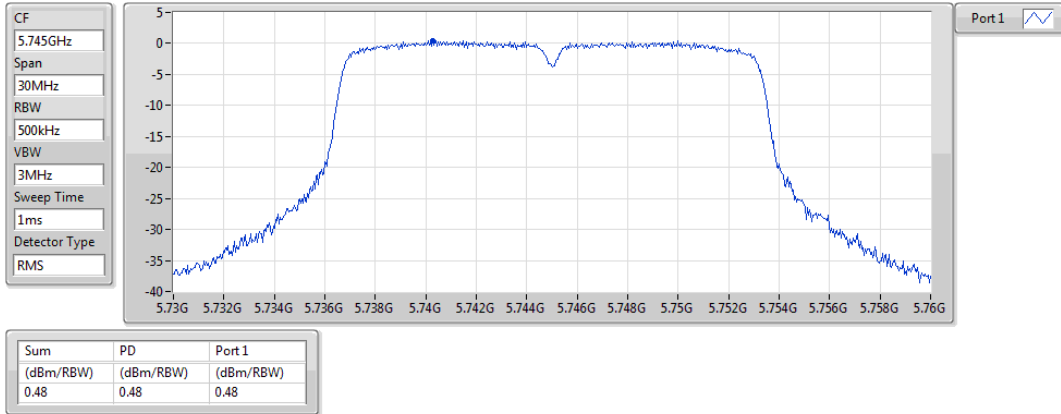
5700MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

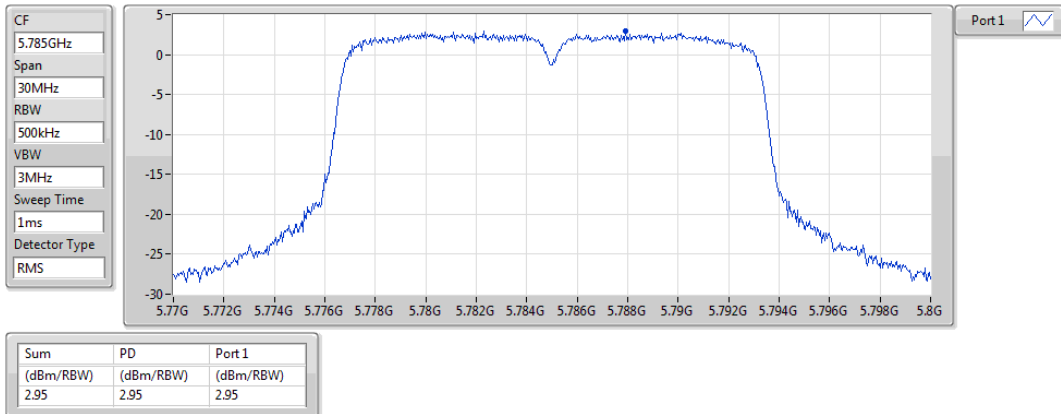
5745MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

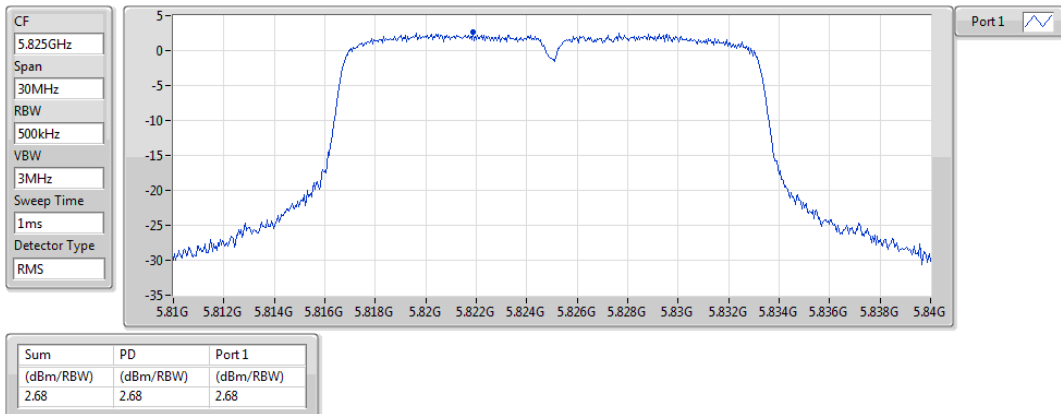
5785MHz



802.11a_Nss1,(6Mbps)_1TX

PSD

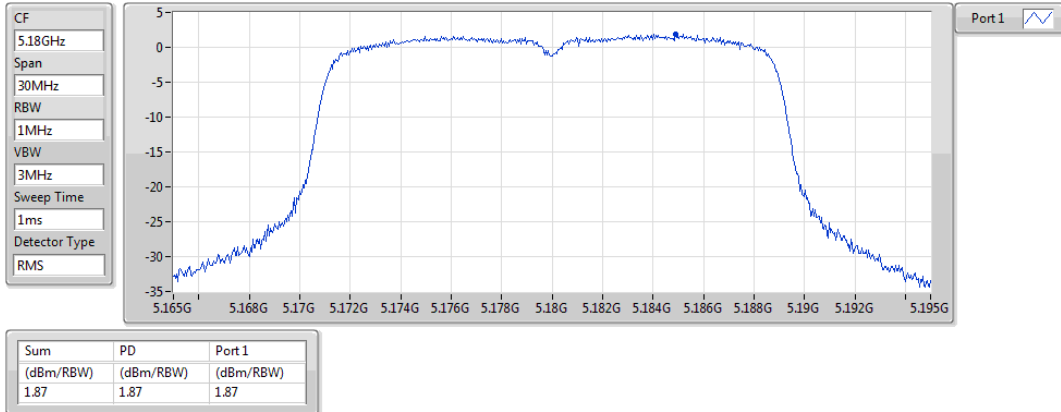
5825MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

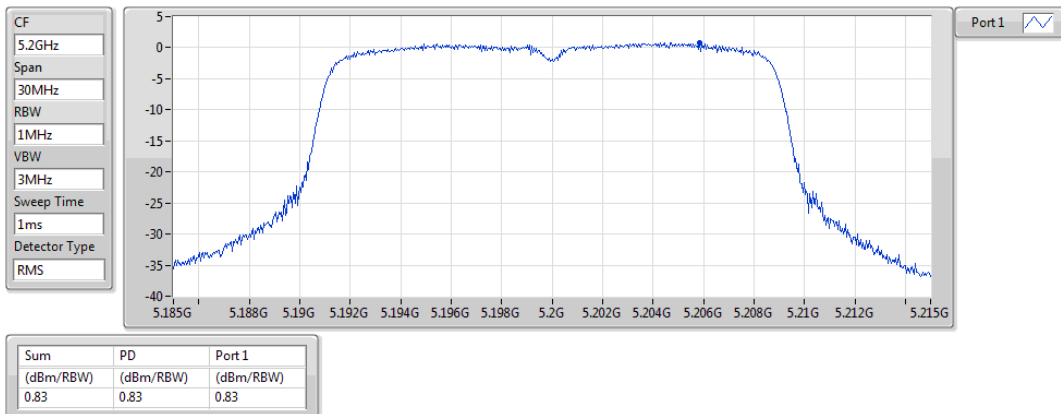
5180MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

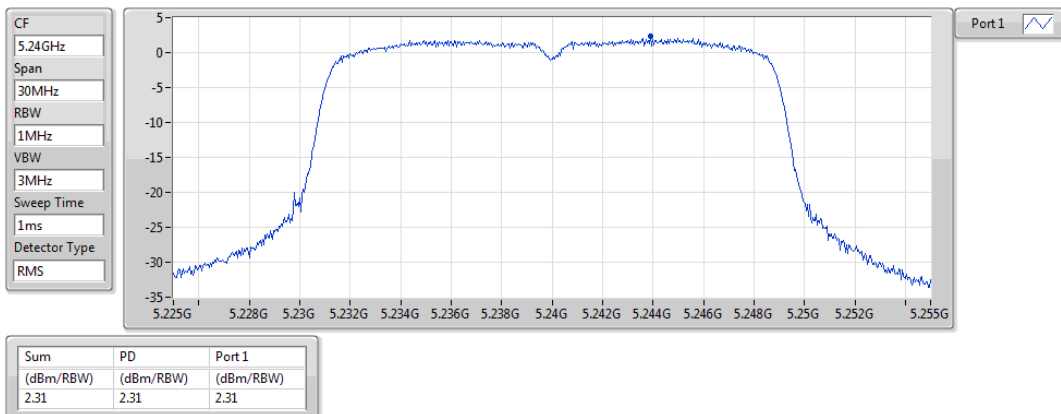
5200MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

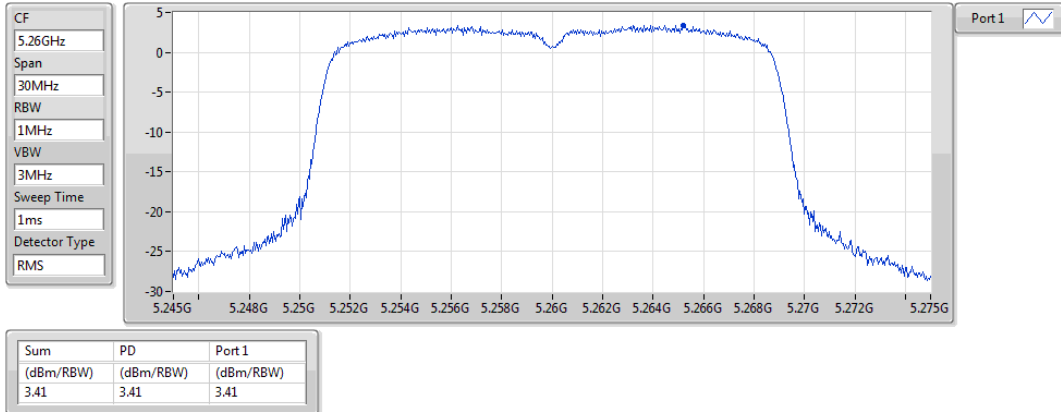
5240MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

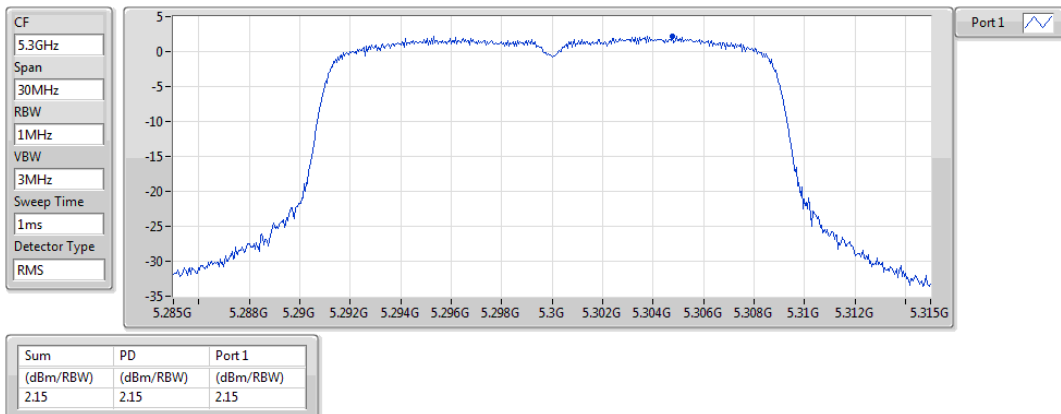
5260MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

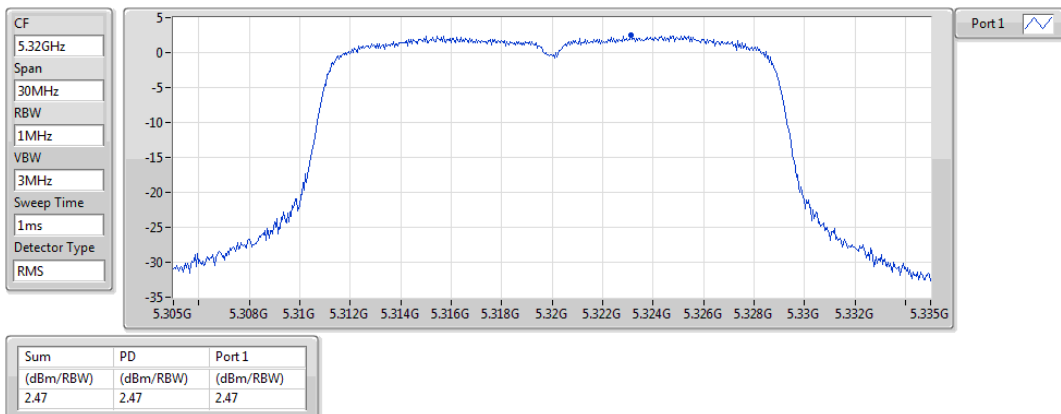
5300MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

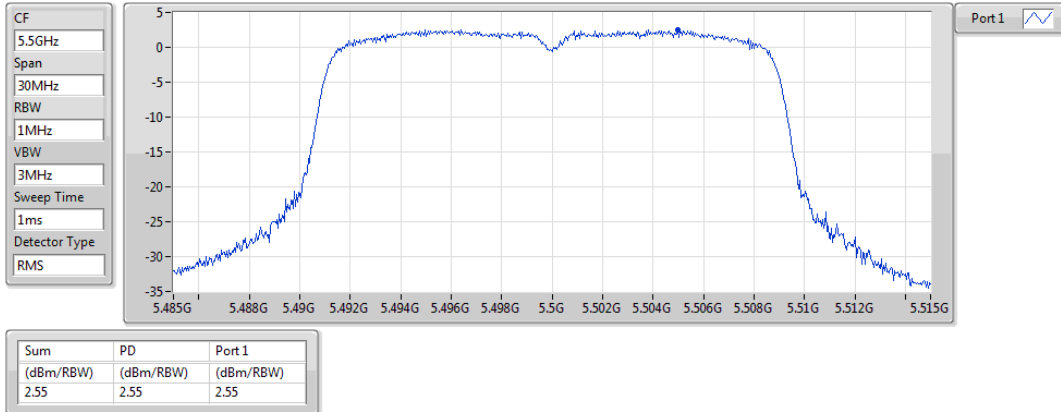
5320MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

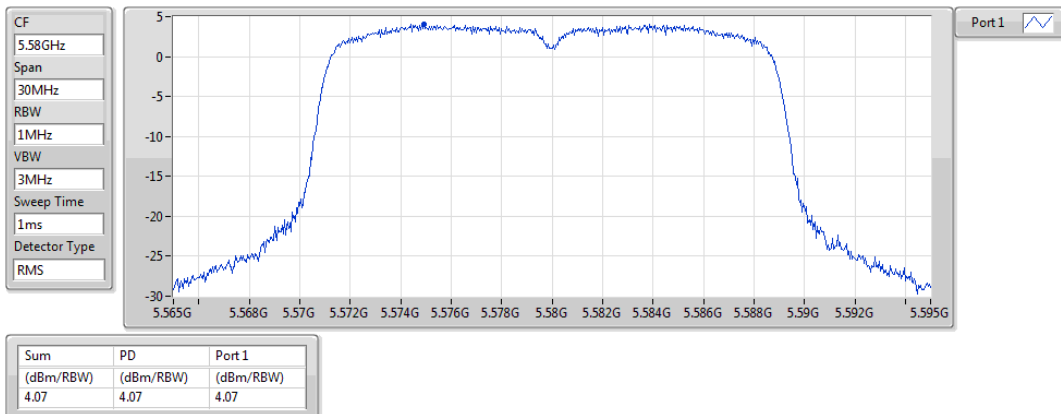
5500MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

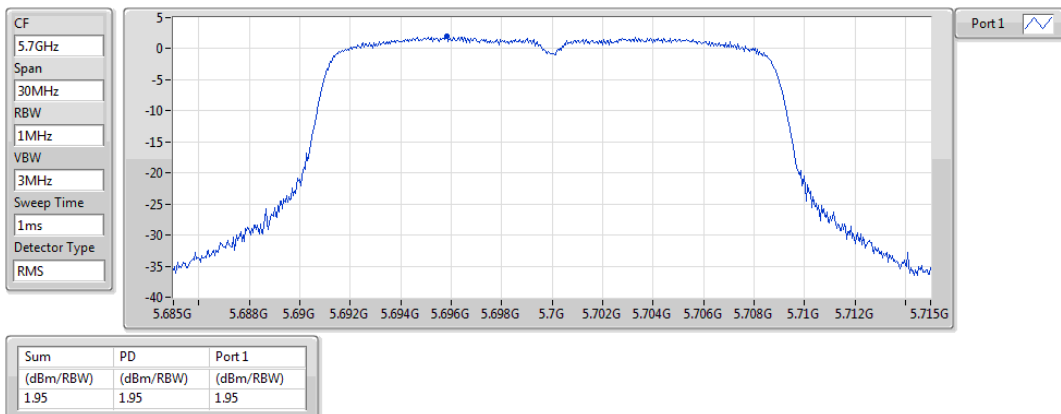
5580MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

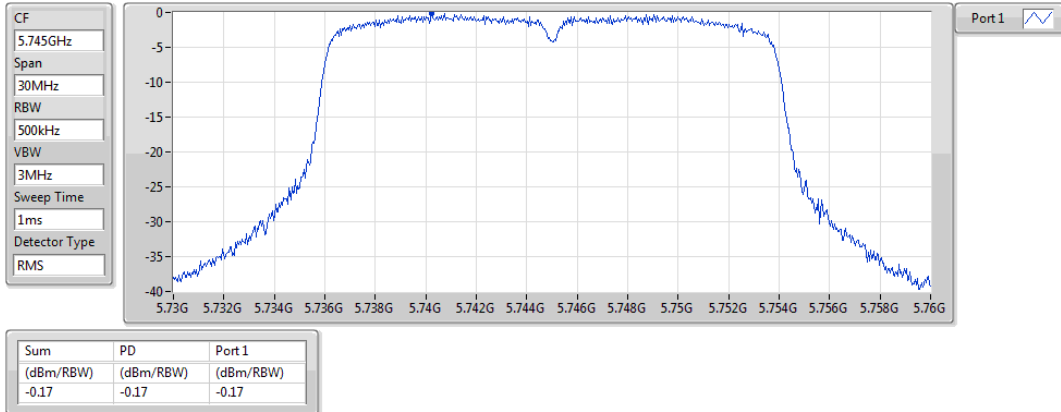
5700MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

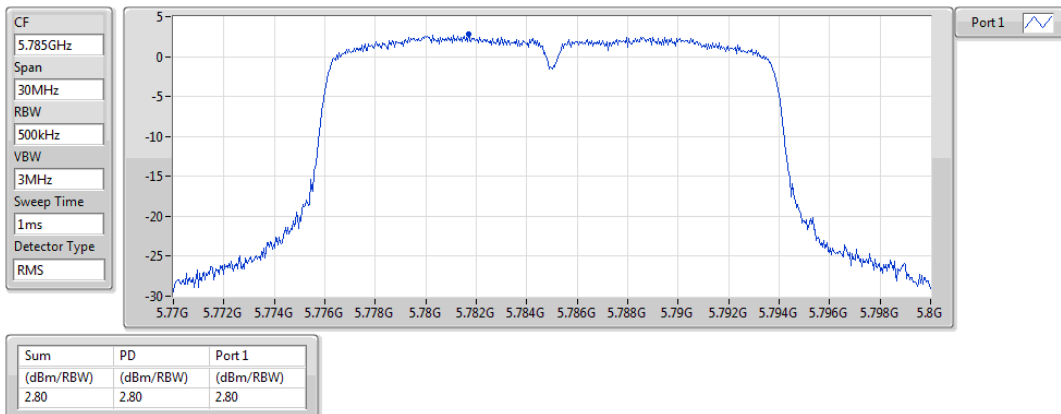
5745MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

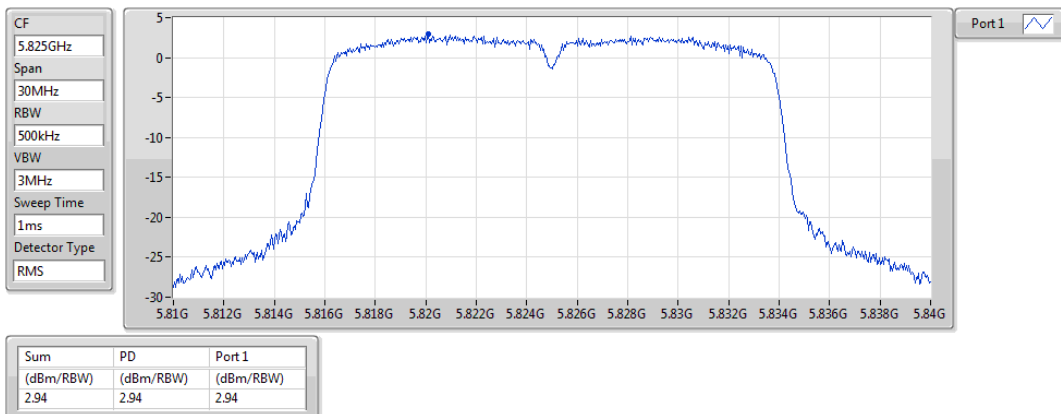
5785MHz



802.11n HT20_Nss1,(MCS0)_1TX

PSD

5825MHz



3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

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

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

3.5.2 Test Procedures

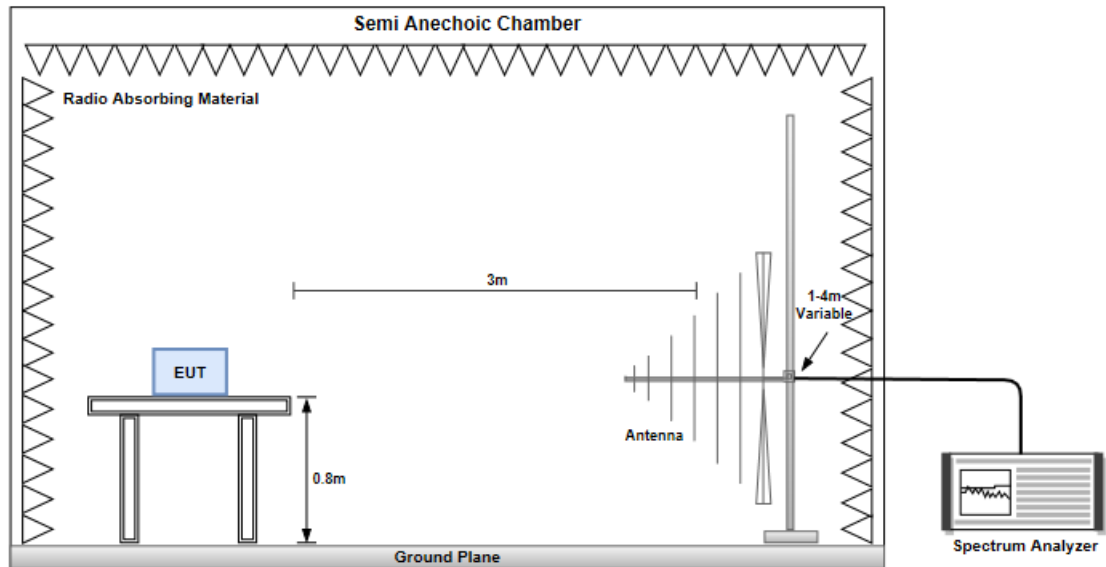
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360° . A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

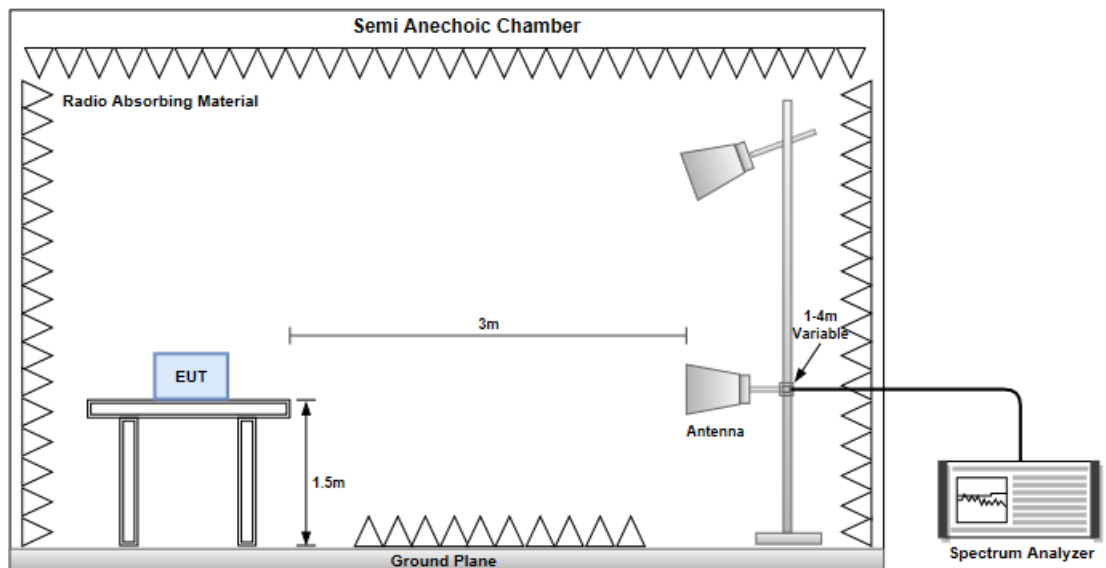
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



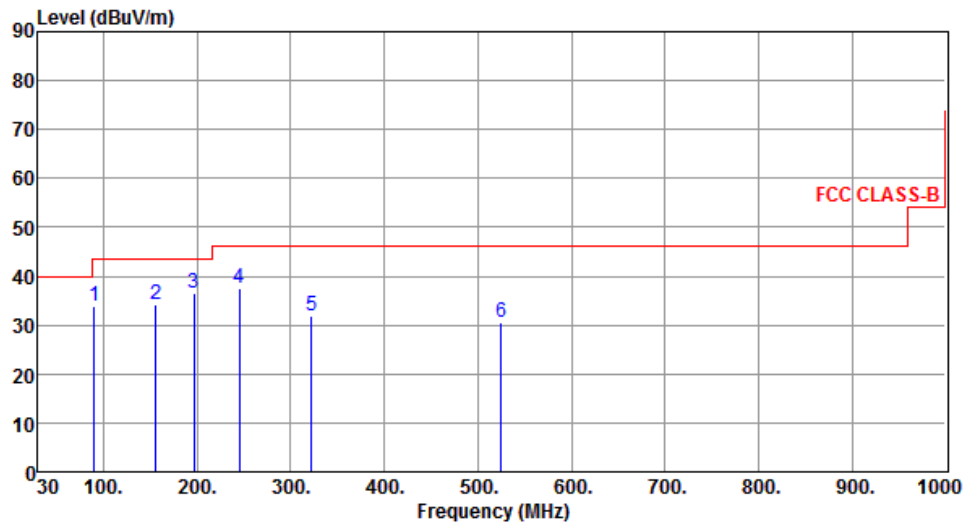
Configuration 1 : PCB Dipole antenna (Antenna No.3) , Y-plane

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		
Level (dBuV/m) <			

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	90.26	33.77	43.50	-9.73	48.22	-14.45	Peak	---	---
2	156.23	34.26	43.50	-9.24	42.58	-8.32	Peak	---	---
3	196.84	36.54	43.50	-6.96	47.50	-10.96	Peak	---	---
4	245.29	37.63	46.00	-8.37	47.00	-9.37	Peak	---	---
5	321.89	31.75	46.00	-14.25	38.83	-7.08	Peak	---	---
6	524.68	30.53	46.00	-15.47	32.84	-2.31	Peak	---	---

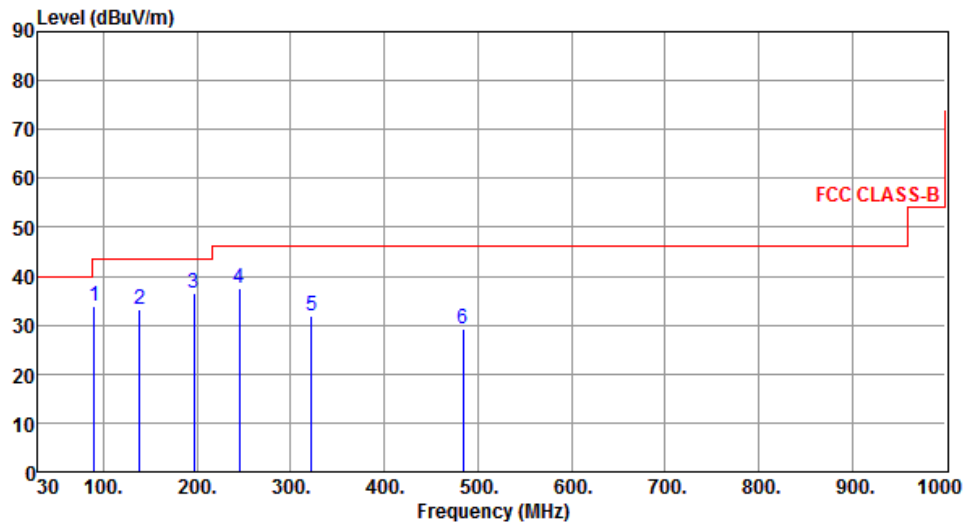
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	90.15	33.85	43.50	-9.65	48.31	-14.46	Peak	---	---
2	138.58	33.36	43.50	-10.14	42.25	-8.89	Peak	---	---
3	196.79	36.45	43.50	-7.05	47.40	-10.95	Peak	---	---
4	245.35	37.69	46.00	-8.31	47.06	-9.37	Peak	---	---
5	321.88	31.75	46.00	-14.25	38.83	-7.08	Peak	---	---
6	483.88	29.23	46.00	-16.77	32.30	-3.07	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).

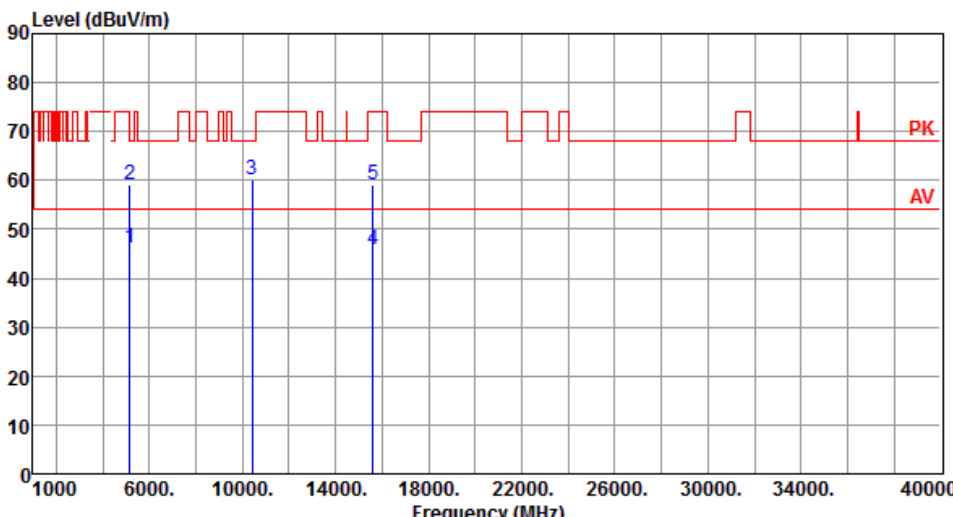
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		
Level (dBuV/m) </			

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

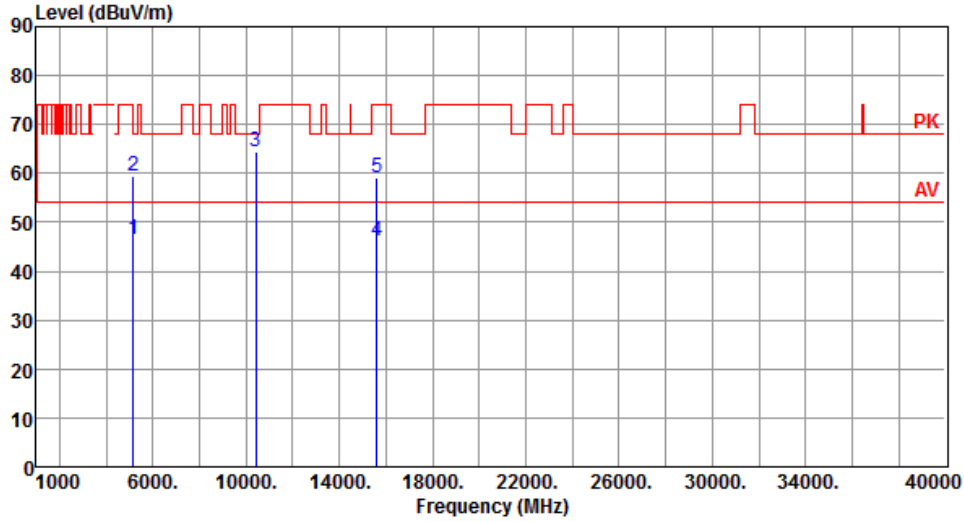
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	46.21	54.00	-7.79	40.26	5.95	Average	125	185
2	5150.00	59.20	74.00	-14.80	53.25	5.95	Peak	125	185
3	10400.00	60.01	68.20	-8.19	44.68	15.33	Peak	100	328
4	15600.00	45.73	54.00	-8.27	30.24	15.49	Average	100	100
5	15600.00	58.99	74.00	-15.01	43.50	15.49	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).

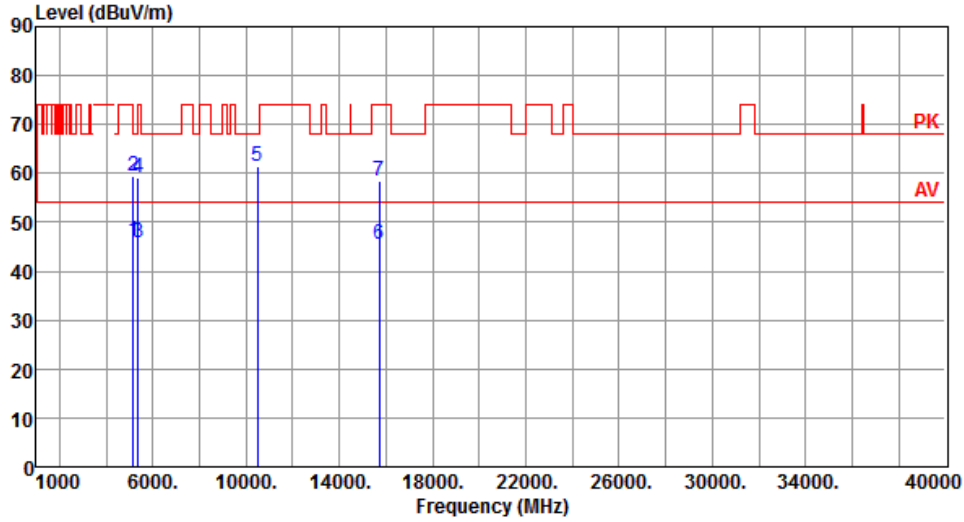
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	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	46.63	54.00	-7.37	40.68	5.95	Average	100	179
2	5150.00	59.49	74.00	-14.51	53.54	5.95	Peak	100	179
3	10400.00	64.31	68.20	-3.89	48.98	15.33	Peak	169	171
4	15600.00	46.06	54.00	-7.94	30.57	15.49	Average	100	30
5	15600.00	59.01	74.00	-14.99	43.52	15.49	Peak	100	30

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

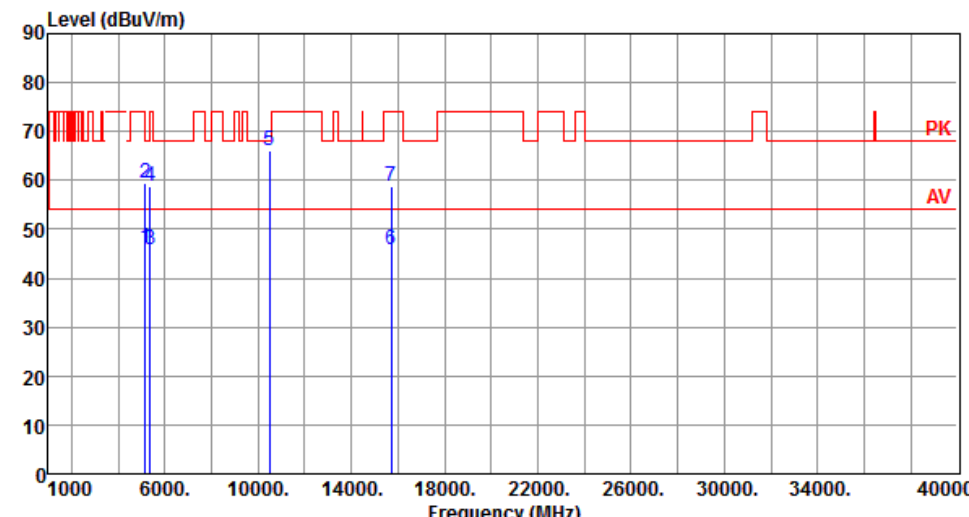
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.23	54.00	-7.77	40.28	5.95	Average	124	176
2	5150.00	59.47	74.00	-14.53	53.52	5.95	Peak	124	176
3	5350.00	45.78	54.00	-8.22	40.38	5.40	Average	124	176
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	124	176
5	10480.00	61.43	68.20	-6.77	46.12	15.31	Peak	100	326
6	15720.00	45.48	54.00	-8.52	30.25	15.23	Average	100	80
7	15720.00	58.48	74.00	-15.52	43.25	15.23	Peak	100	80

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

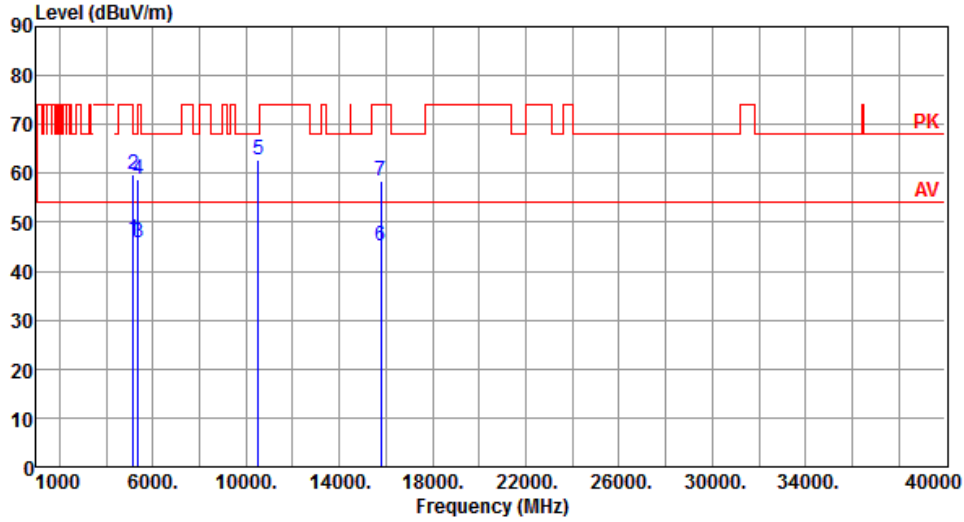
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.21	54.00	-7.79	40.26	5.95	Average	100	175
2	5150.00	59.49	74.00	-14.51	53.54	5.95	Peak	100	175
3	5350.00	45.67	54.00	-8.33	40.27	5.40	Average	100	175
4	5350.00	58.66	74.00	-15.34	53.26	5.40	Peak	100	175
5	10480.00	66.25	68.20	-1.95	50.94	15.31	Peak	186	179
6	15720.00	45.75	54.00	-8.25	30.52	15.23	Average	100	90
7	15720.00	58.81	74.00	-15.19	43.58	15.23	Peak	100	90

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

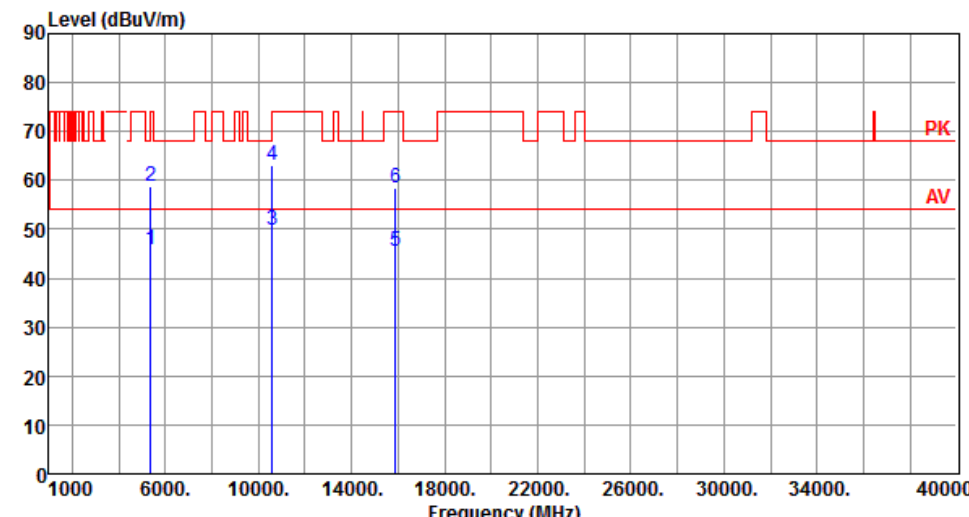


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.52	54.00	-7.48	40.57	5.95	Average	121	176
2	5150.00	59.64	74.00	-14.36	53.69	5.95	Peak	121	176
3	5350.00	45.96	54.00	-8.04	40.56	5.40	Average	121	176
4	5350.00	58.64	74.00	-15.36	53.24	5.40	Peak	121	176
5	10520.00	62.68	68.20	-5.52	47.35	15.33	Peak	100	323
6	15780.00	45.30	54.00	-8.70	30.35	14.95	Average	100	90
7	15780.00	58.33	74.00	-15.67	43.38	14.95	Peak	100	90

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

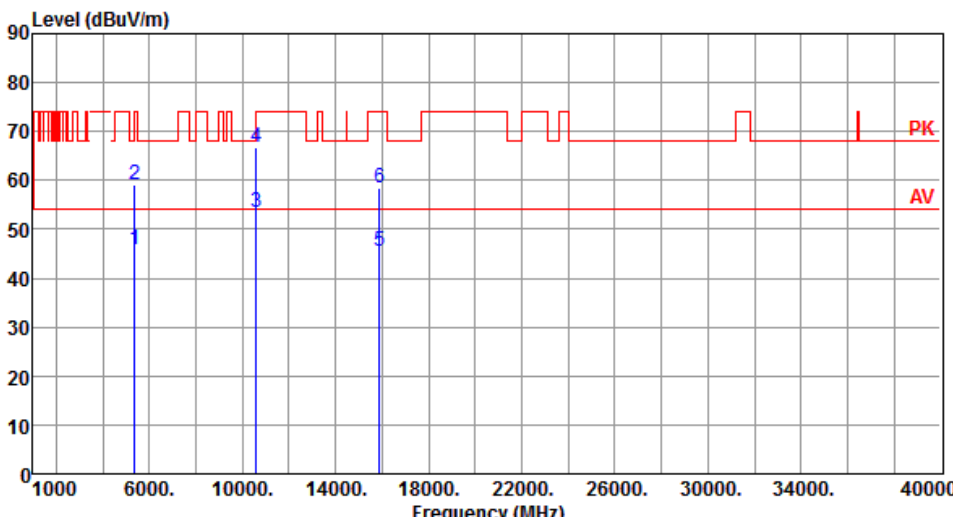
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.78	54.00	-8.22	40.38	5.40	Average	119	178
2	5350.00	58.92	74.00	-15.08	53.52	5.40	Peak	119	178
3	10600.00	49.76	54.00	-4.24	34.35	15.41	Average	100	330
4	10600.00	63.01	74.00	-10.99	47.60	15.41	Peak	100	330
5	15900.00	45.34	54.00	-8.66	30.45	14.89	Average	100	65
6	15900.00	58.38	74.00	-15.62	43.49	14.89	Peak	100	65

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

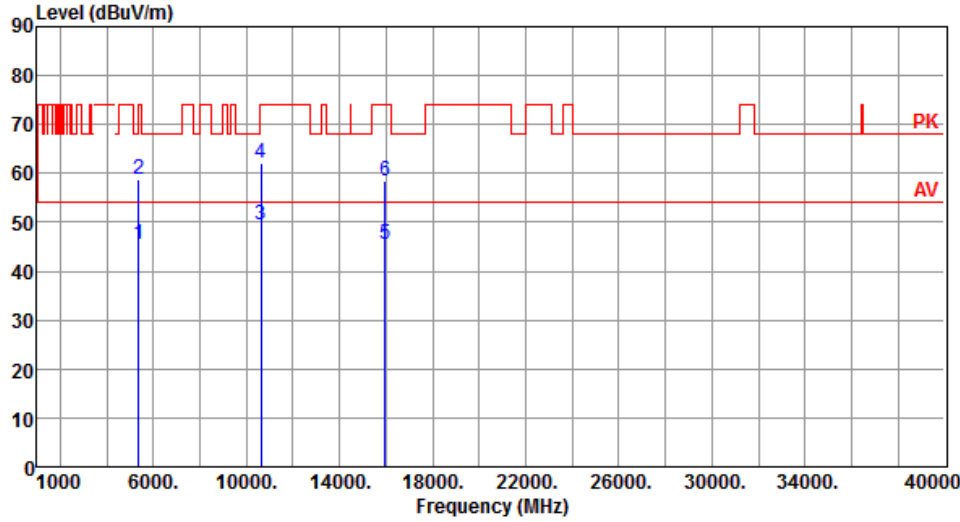
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.76	54.00	-8.24	40.36	5.40	Average	100	169
2	5350.00	58.98	74.00	-15.02	53.58	5.40	Peak	100	169
3	10600.00	53.33	54.00	-0.67	37.92	15.41	Average	180	171
4	10600.00	66.63	74.00	-7.37	51.22	15.41	Peak	180	171
5	15900.00	45.58	54.00	-8.42	30.69	14.89	Average	100	70
6	15900.00	58.45	74.00	-15.55	43.56	14.89	Peak	100	70

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

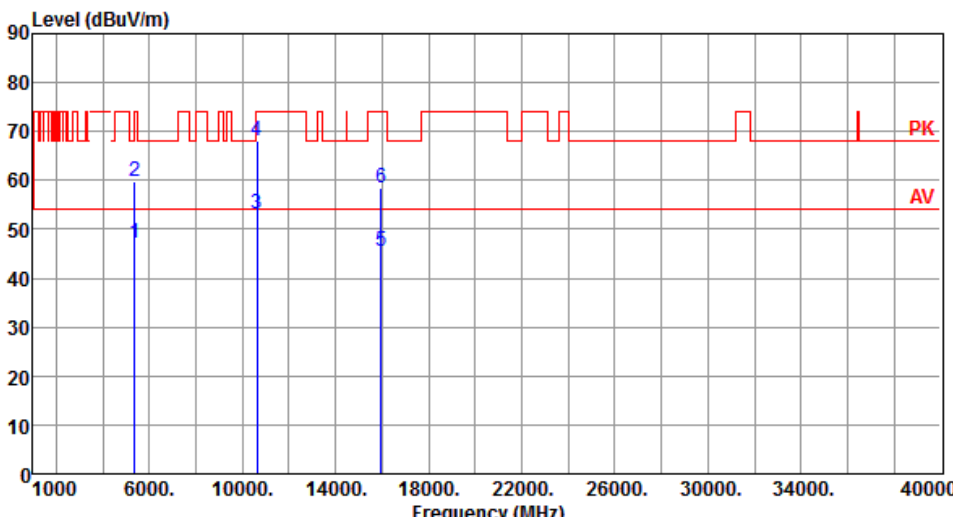
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	45.66	54.00	-8.34	40.26	5.40	Average	120	171
2	5350.00	58.94	74.00	-15.06	53.54	5.40	Peak	120	171
3	10640.00	49.48	54.00	-4.52	34.12	15.36	Average	100	326
4	10640.00	62.21	74.00	-11.79	46.85	15.36	Peak	100	326
5	15960.00	45.40	54.00	-8.60	30.49	14.91	Average	100	20
6	15960.00	58.33	74.00	-15.67	43.42	14.91	Peak	100	20

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

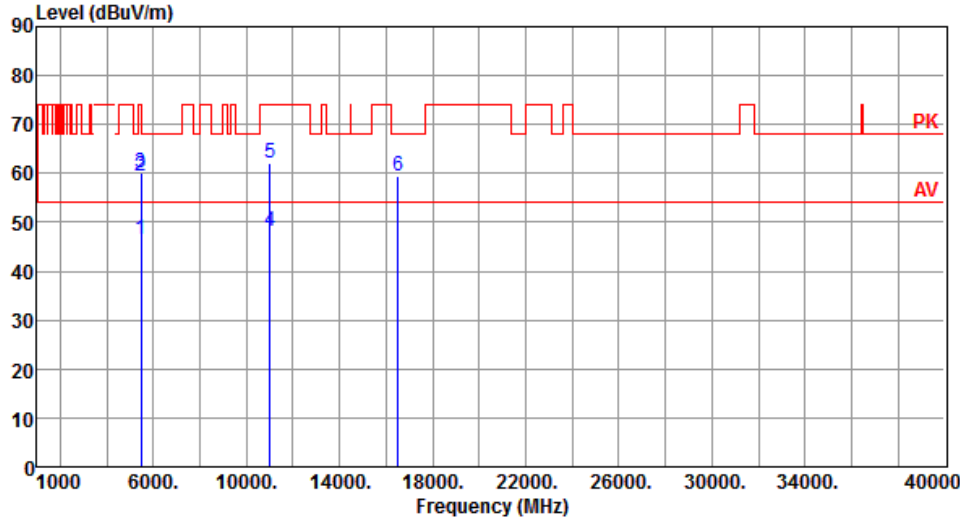
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	47.27	54.00	-6.73	41.87	5.40	Average	100	162
2	5350.00	59.70	74.00	-14.30	54.30	5.40	Peak	100	162
3	10640.00	53.15	54.00	-0.85	37.79	15.36	Average	157	167
4	10640.00	67.92	74.00	-6.08	52.56	15.36	Peak	157	167
5	15960.00	45.43	54.00	-8.57	30.52	14.91	Average	100	30
6	15960.00	58.50	74.00	-15.50	43.59	14.91	Peak	100	30

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

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

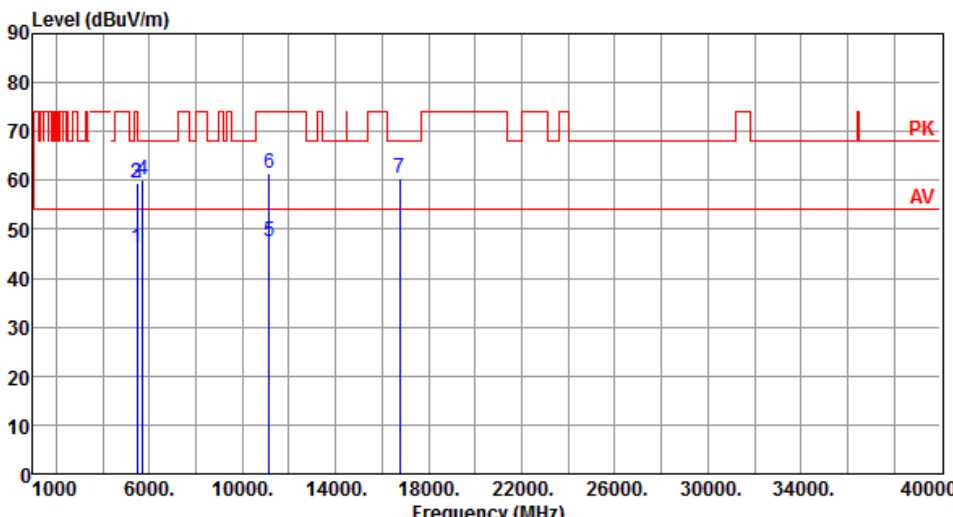


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.45	54.00	-7.55	40.53	5.92	Average	109	174
2	5460.00	59.48	74.00	-14.52	53.56	5.92	Peak	109	174
3	5470.00	60.27	68.20	-7.93	54.31	5.96	Peak	109	174
4	11000.00	48.26	54.00	-5.74	32.68	15.58	Average	188	331
5	11000.00	62.15	74.00	-11.85	46.57	15.58	Peak	188	331
6	16500.00	59.35	68.20	-8.85	43.52	15.83	Peak	100	80

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/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		
Level (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	46.18	54.00	-7.82	40.26	5.92	Average	110	176
2	5460.00	59.45	74.00	-14.55	53.53	5.92	Peak	110	176
3	5470.00	59.61	68.20	-8.59	53.65	5.96	Peak	110	176
4	5725.00	60.24	68.20	-7.96	53.95	6.29	Peak	110	176
5	11160.00	47.62	54.00	-6.38	32.36	15.26	Average	199	335
6	11160.00	61.51	74.00	-12.49	46.25	15.26	Peak	199	335
7	16740.00	60.34	68.20	-7.86	43.49	16.85	Peak	100	90

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

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		
Level (dBuV/m) <			

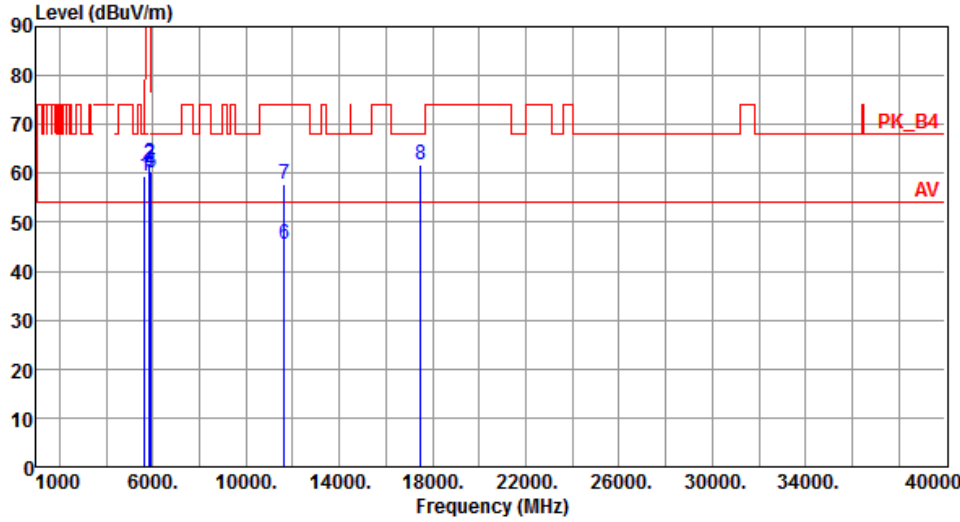
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		
Level (dBUV/m) <			

Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		
Level (dBuV/m) </			

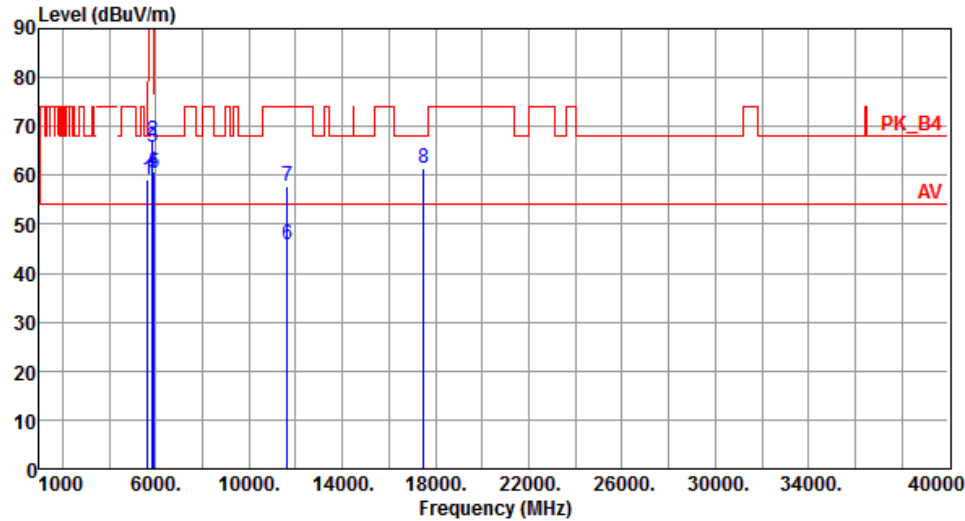
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		
Level (dBuV/m)			

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.36	68.20	-8.84	53.45	5.91	Peak	100	176
2	5850.00	61.98	122.20	-60.22	55.31	6.67	Peak	100	176
3	5855.00	61.94	110.80	-48.86	55.26	6.68	Peak	100	176
4	5875.00	60.37	105.20	-44.83	53.65	6.72	Peak	100	176
5	5925.00	60.24	68.20	-7.96	53.42	6.82	Peak	100	176
6	11650.00	45.62	54.00	-8.38	30.56	15.06	Average	100	20
7	11650.00	57.64	74.00	-16.36	42.58	15.06	Peak	100	20
8	17475.00	61.76	68.20	-6.44	43.53	18.23	Peak	100	60

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

Modulation	11a	Test Freq. (MHz)	5825						
Polarization	Vertical								
									
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.16	68.20	-9.04	53.25	5.91	Peak	100	18
2	5850.00	66.95	122.20	-55.25	60.28	6.67	Peak	100	18
3	5855.00	65.70	110.80	-45.10	59.02	6.68	Peak	100	18
4	5875.00	60.88	105.20	-44.32	54.16	6.72	Peak	100	18
5	5925.00	60.35	68.20	-7.85	53.53	6.82	Peak	100	18
6	11650.00	45.74	54.00	-8.26	30.68	15.06	Average	100	40
7	11650.00	57.74	74.00	-16.26	42.68	15.06	Peak	100	40
8	17475.00	61.50	68.20	-6.70	43.27	18.23	Peak	100	25

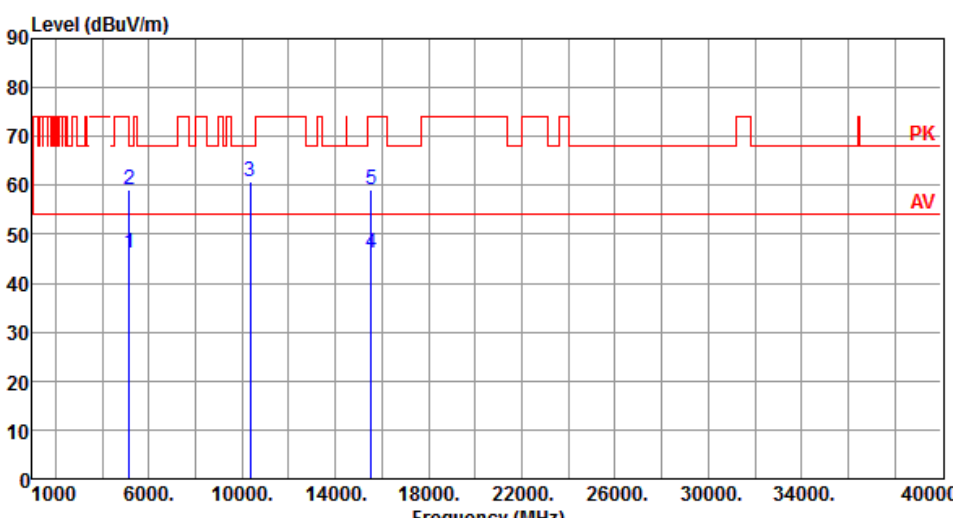
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

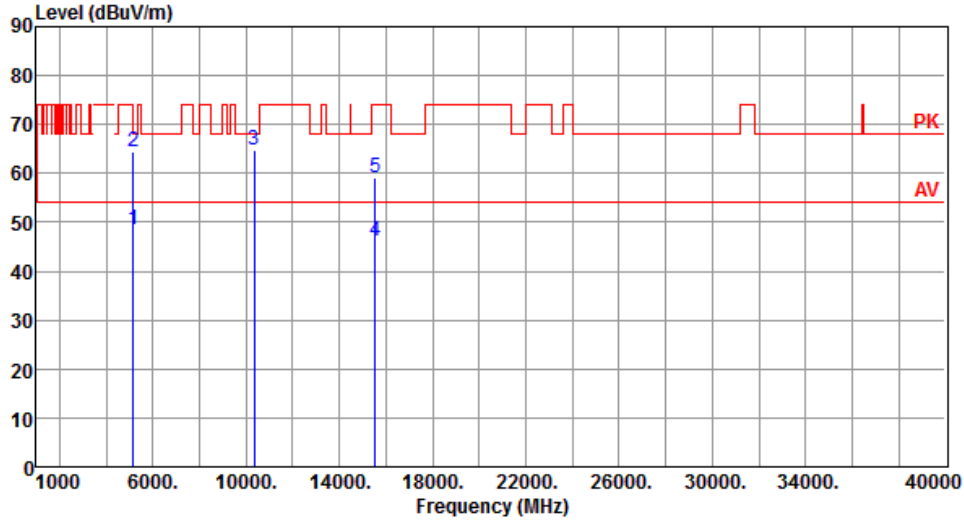
Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	46.16	54.00	-7.84	40.21	5.95	Average	125	183
2	5150.00	59.26	74.00	-14.74	53.31	5.95	Peak	125	183
3	10360.00	60.72	68.20	-7.48	45.62	15.10	Peak	100	325
4	15540.00	46.17	54.00	-7.83	30.52	15.65	Average	100	30
5	15540.00	59.19	74.00	-14.81	43.54	15.65	Peak	100	30

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

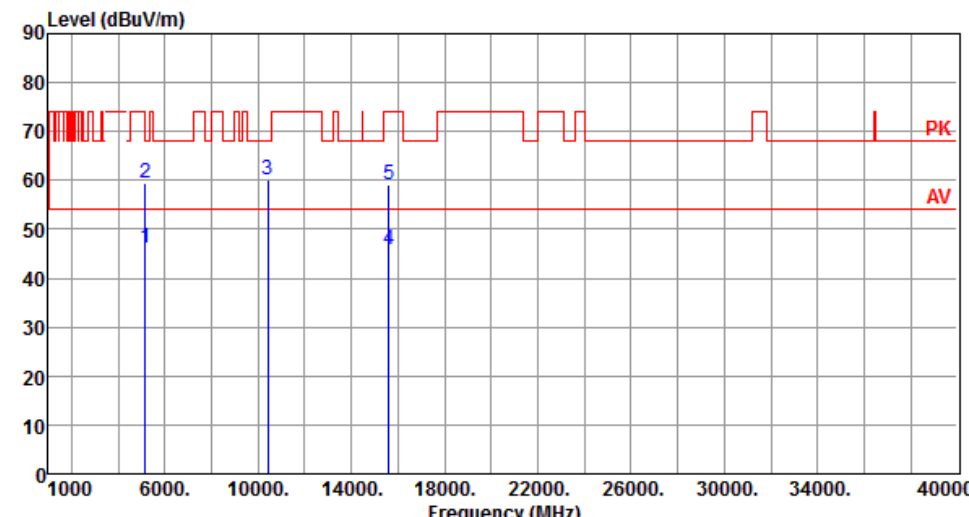
Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.64	54.00	-5.36	42.69	5.95	Average	100	178
2	5150.00	64.53	74.00	-9.47	58.58	5.95	Peak	100	178
3	10360.00	64.66	68.20	-3.54	49.56	15.10	Peak	195	165
4	15540.00	46.23	54.00	-7.77	30.58	15.65	Average	100	60
5	15540.00	59.14	74.00	-14.86	43.49	15.65	Peak	100	60

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

Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Horizontal		

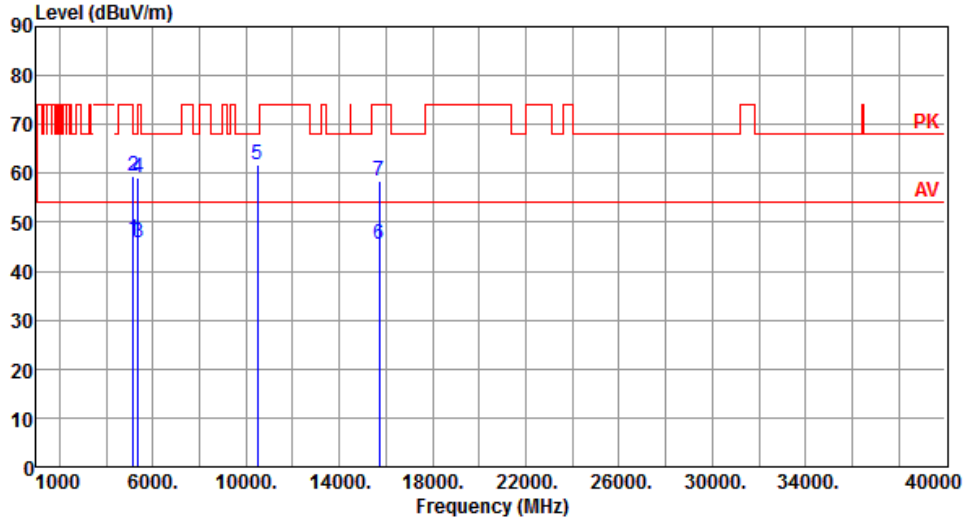


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.28	54.00	-7.72	40.33	5.95	Average	124	180
2	5150.00	59.34	74.00	-14.66	53.39	5.95	Peak	124	180
3	10400.00	60.05	68.20	-8.15	44.72	15.33	Peak	100	327
4	15600.00	45.87	54.00	-8.13	30.38	15.49	Average	100	95
5	15600.00	59.11	74.00	-14.89	43.62	15.49	Peak	100	95

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

Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Vertical		
Level (dBUV/m) <			

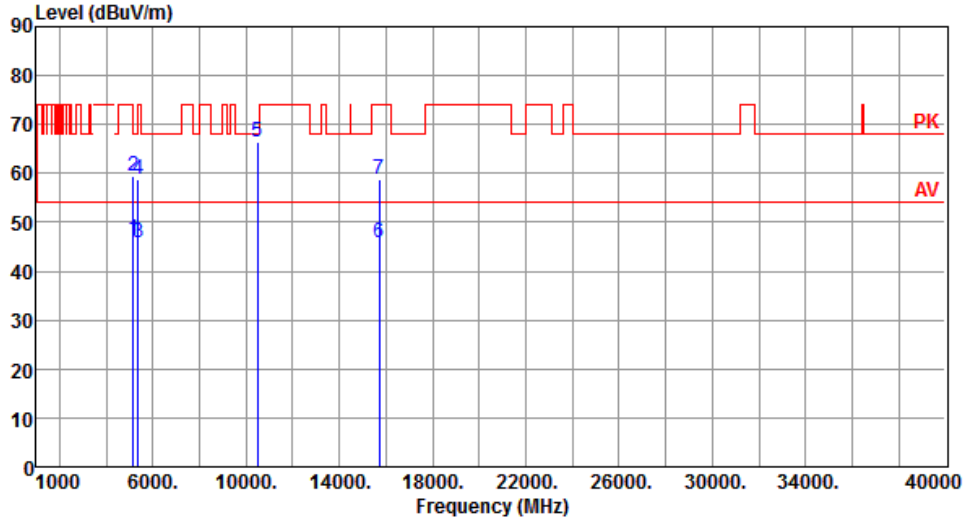
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.34	54.00	-7.66	40.39	5.95	Average	125	176
2	5150.00	59.51	74.00	-14.49	53.56	5.95	Peak	125	176
3	5350.00	45.96	54.00	-8.04	40.56	5.40	Average	125	176
4	5350.00	58.98	74.00	-15.02	53.58	5.40	Peak	125	176
5	10480.00	61.76	68.20	-6.44	46.45	15.31	Peak	100	326
6	15720.00	45.54	54.00	-8.46	30.31	15.23	Average	100	60
7	15720.00	58.54	74.00	-15.46	43.31	15.23	Peak	100	60

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

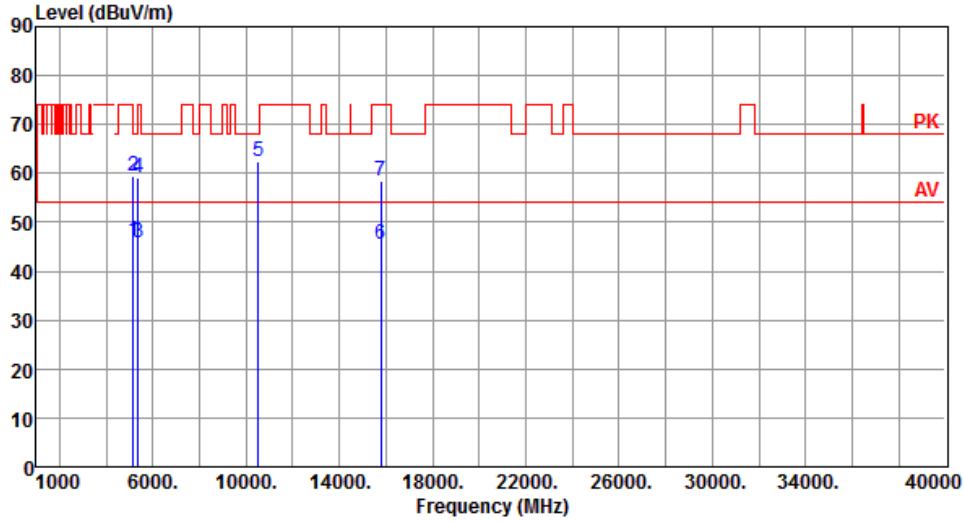
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.36	54.00	-7.64	40.41	5.95	Average	100	178
2	5150.00	59.57	74.00	-14.43	53.62	5.95	Peak	100	178
3	5350.00	45.78	54.00	-8.22	40.38	5.40	Average	100	178
4	5350.00	58.77	74.00	-15.23	53.37	5.40	Peak	100	178
5	10480.00	66.54	68.20	-1.66	51.23	15.31	Peak	180	176
6	15720.00	45.67	54.00	-8.33	30.44	15.23	Average	100	85
7	15720.00	58.85	74.00	-15.15	43.62	15.23	Peak	100	80

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

Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Horizontal		

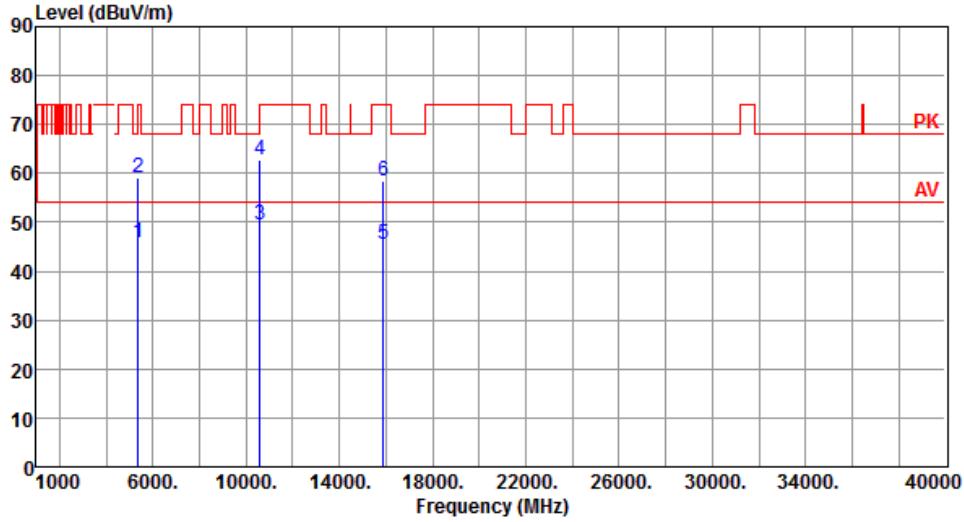


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.30	54.00	-7.70	40.35	5.95	Average	118	180
2	5150.00	59.52	74.00	-14.48	53.57	5.95	Peak	118	180
3	5350.00	45.87	54.00	-8.13	40.47	5.40	Average	118	180
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	118	180
5	10520.00	62.54	68.20	-5.66	47.21	15.33	Peak	100	325
6	15780.00	45.37	54.00	-8.63	30.42	14.95	Average	100	80
7	15780.00	58.36	74.00	-15.64	43.41	14.95	Peak	100	80

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

Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Vertical		
Level (dBuV/m) <			

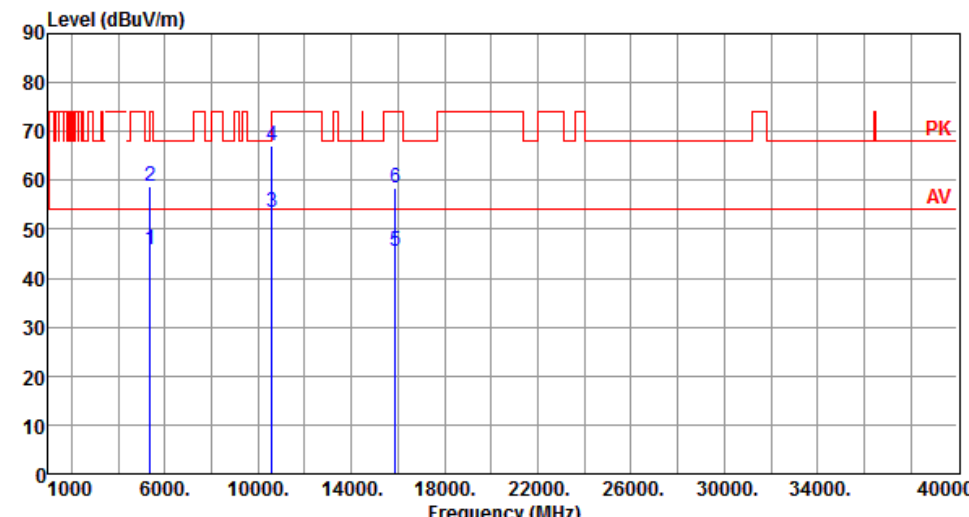
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.87	54.00	-8.13	40.47	5.40	Average	120	182
2	5350.00	59.15	74.00	-14.85	53.75	5.40	Peak	120	182
3	10600.00	49.52	54.00	-4.48	34.11	15.41	Average	100	331
4	10600.00	62.75	74.00	-11.25	47.34	15.41	Peak	100	331
5	15900.00	45.41	54.00	-8.59	30.52	14.89	Average	100	60
6	15900.00	58.34	74.00	-15.66	43.45	14.89	Peak	100	60

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

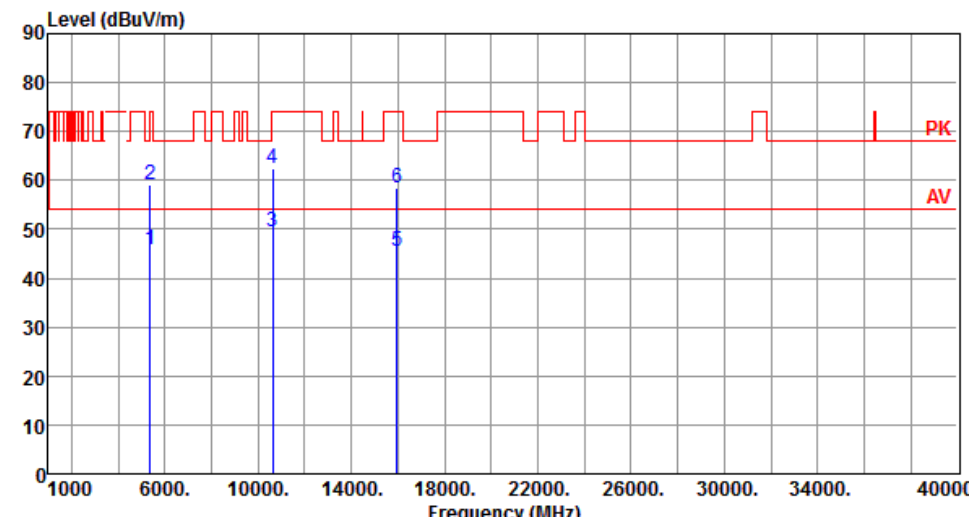
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.68	54.00	-8.32	40.28	5.40	Average	100	171
2	5350.00	58.82	74.00	-15.18	53.42	5.40	Peak	100	171
3	10600.00	53.42	54.00	-0.58	38.01	15.41	Average	179	175
4	10600.00	67.15	74.00	-6.85	51.74	15.41	Peak	179	175
5	15900.00	45.37	54.00	-8.63	30.48	14.89	Average	100	60
6	15900.00	58.47	74.00	-15.53	43.58	14.89	Peak	100	60

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

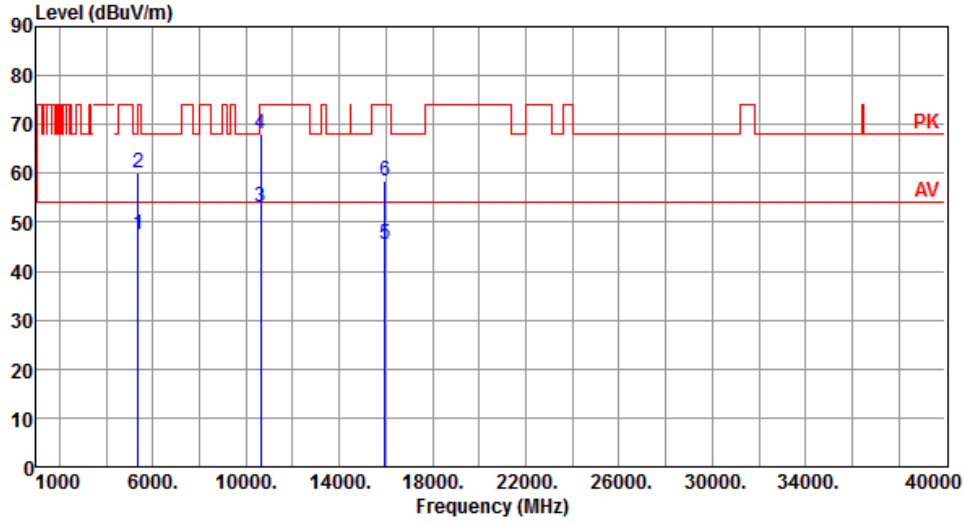
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.78	54.00	-8.22	40.38	5.40	Average	119	172
2	5350.00	59.05	74.00	-14.95	53.65	5.40	Peak	119	172
3	10640.00	49.41	54.00	-4.59	34.05	15.36	Average	100	328
4	10640.00	62.41	74.00	-11.59	47.05	15.36	Peak	100	328
5	15960.00	45.48	54.00	-8.52	30.57	14.91	Average	100	60
6	15960.00	58.43	74.00	-15.57	43.52	14.91	Peak	100	60

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

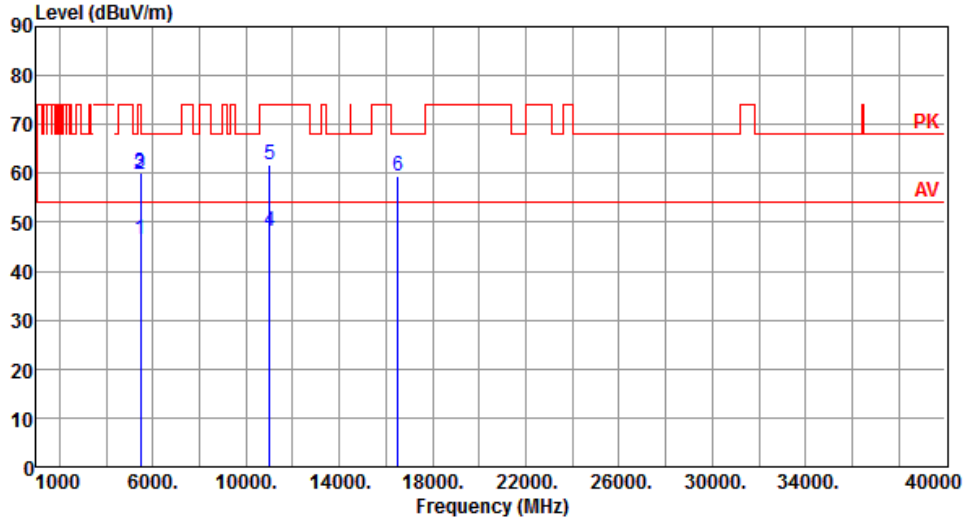
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	47.65	54.00	-6.35	42.25	5.40	Average	100	159
2	5350.00	60.15	74.00	-13.85	54.75	5.40	Peak	100	159
3	10640.00	53.21	54.00	-0.79	37.85	15.36	Average	160	163
4	10640.00	68.21	74.00	-5.79	52.85	15.36	Peak	160	163
5	15960.00	45.38	54.00	-8.62	30.47	14.91	Average	100	90
6	15960.00	58.53	74.00	-15.47	43.62	14.91	Peak	100	90

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

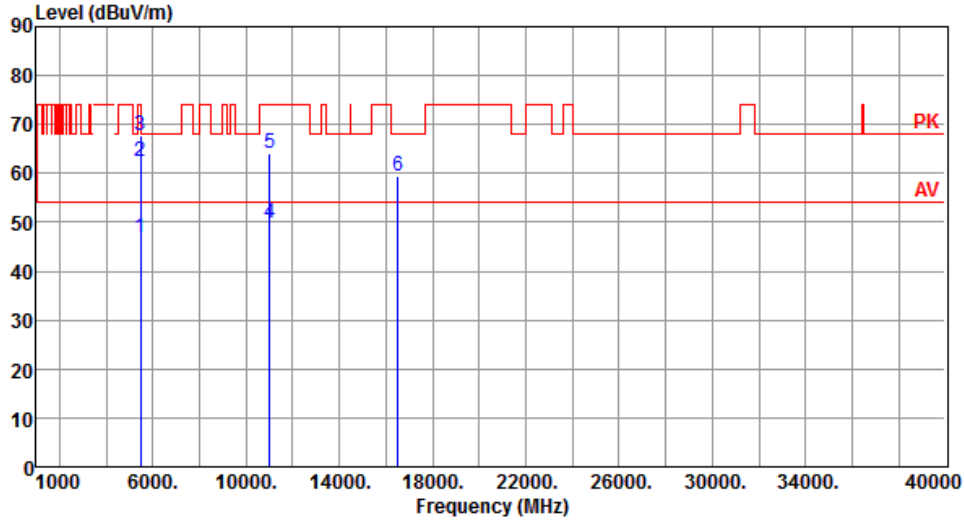
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	46.49	54.00	-7.51	40.57	5.92	Average	111	177
2	5460.00	59.62	74.00	-14.38	53.70	5.92	Peak	111	177
3	5470.00	60.18	68.20	-8.02	54.22	5.96	Peak	111	177
4	11000.00	48.15	54.00	-5.85	32.57	15.58	Average	197	333
5	11000.00	61.91	74.00	-12.09	46.33	15.58	Peak	197	333
6	16500.00	59.39	68.20	-8.81	43.56	15.83	Peak	100	20

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

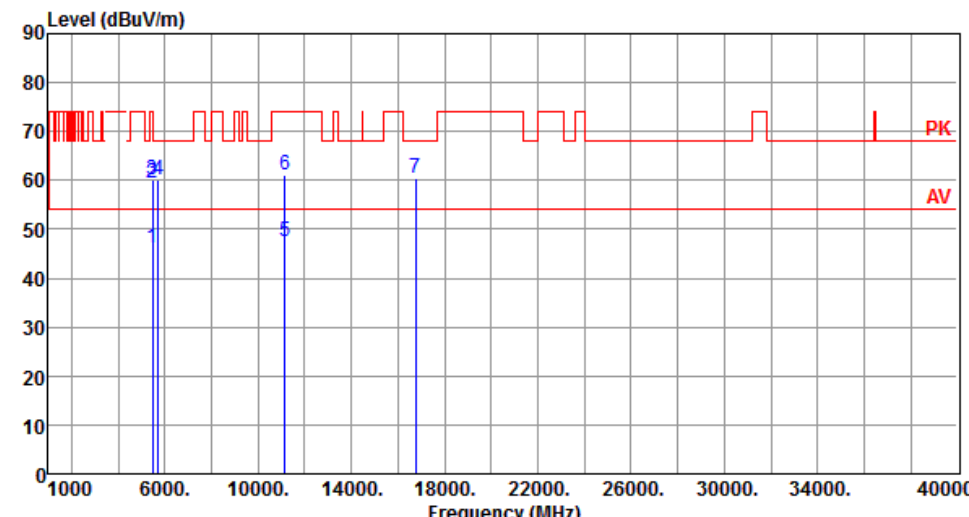
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.95	54.00	-7.05	41.03	5.92	Average	100	20
2	5460.00	62.38	74.00	-11.62	56.46	5.92	Peak	100	20
3	5470.00	67.77	68.20	-0.43	61.81	5.96	Peak	100	20
4	11000.00	49.77	54.00	-4.23	34.19	15.58	Average	157	168
5	11000.00	63.94	74.00	-10.06	48.36	15.58	Peak	157	168
6	16500.00	59.38	68.20	-8.82	43.55	15.83	Peak	100	30

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

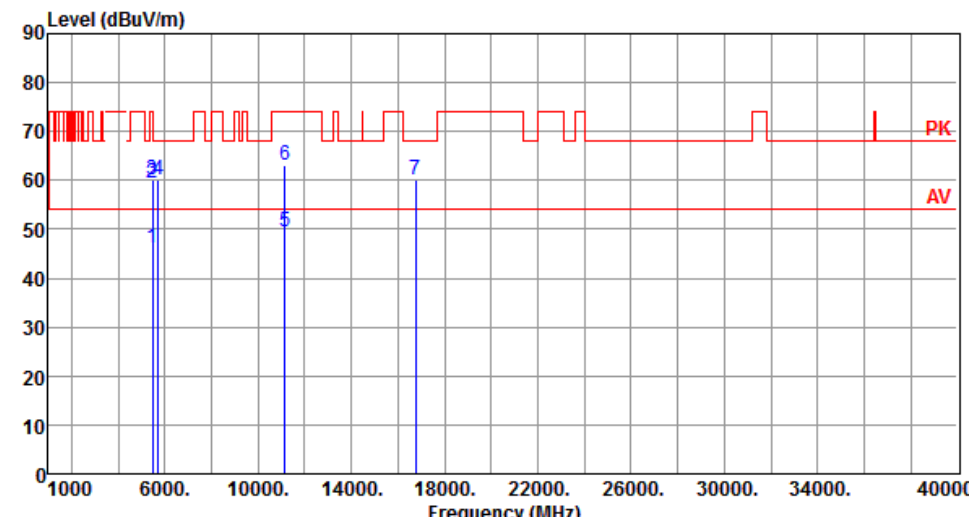
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	46.22	54.00	-7.78	40.30	5.92	Average	109	175
2	5460.00	59.48	74.00	-14.52	53.56	5.92	Peak	109	175
3	5470.00	60.08	68.20	-8.12	54.12	5.96	Peak	109	175
4	5725.00	60.16	68.20	-8.04	53.87	6.29	Peak	109	175
5	11160.00	47.43	54.00	-6.57	32.17	15.26	Average	195	336
6	11160.00	61.04	74.00	-12.96	45.78	15.26	Peak	195	336
7	16740.00	60.38	68.20	-7.82	43.53	16.85	Peak	100	80

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

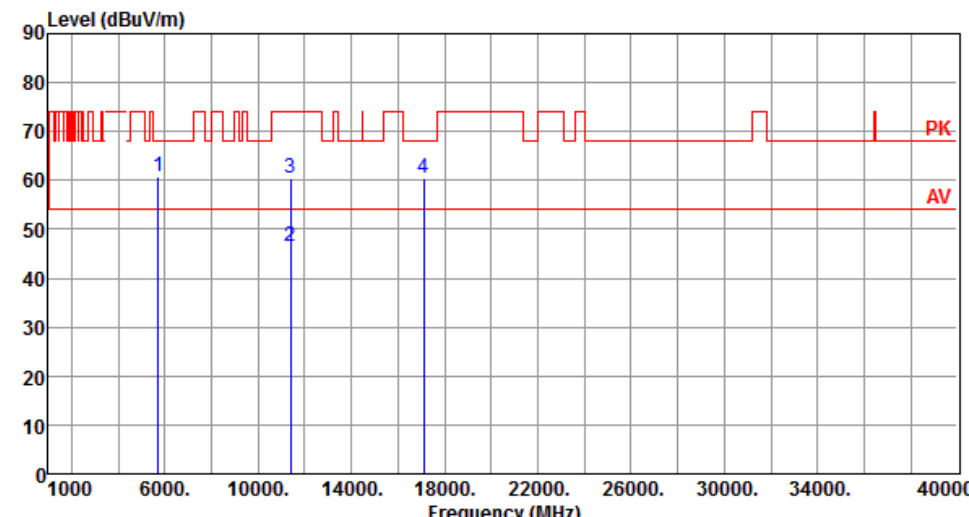
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.26	54.00	-7.74	40.34	5.92	Average	100	25
2	5460.00	59.59	74.00	-14.41	53.67	5.92	Peak	100	25
3	5470.00	60.01	68.20	-8.19	54.05	5.96	Peak	100	25
4	5725.00	60.04	68.20	-8.16	53.75	6.29	Peak	100	25
5	11160.00	49.41	54.00	-4.59	34.15	15.26	Average	159	165
6	11160.00	63.22	74.00	-10.78	47.96	15.26	Peak	159	165
7	16740.00	60.26	68.20	-7.94	43.41	16.85	Peak	100	30

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

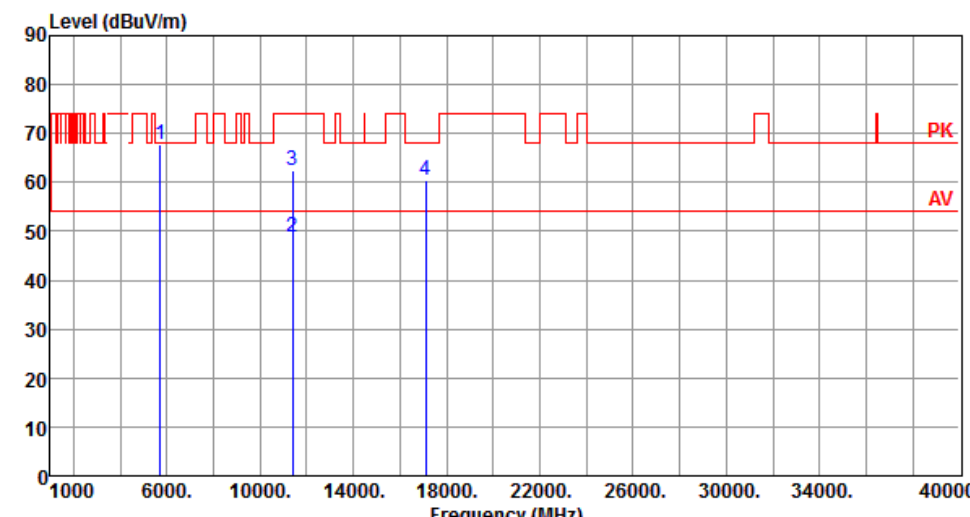
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	60.87	68.20	-7.33	54.58	6.29	Peak	100	175
2	11400.00	46.45	54.00	-7.55	31.12	15.33	Average	195	345
3	11400.00	60.58	74.00	-13.42	45.25	15.33	Peak	195	345
4	17100.00	60.50	68.20	-7.70	43.61	16.89	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	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		



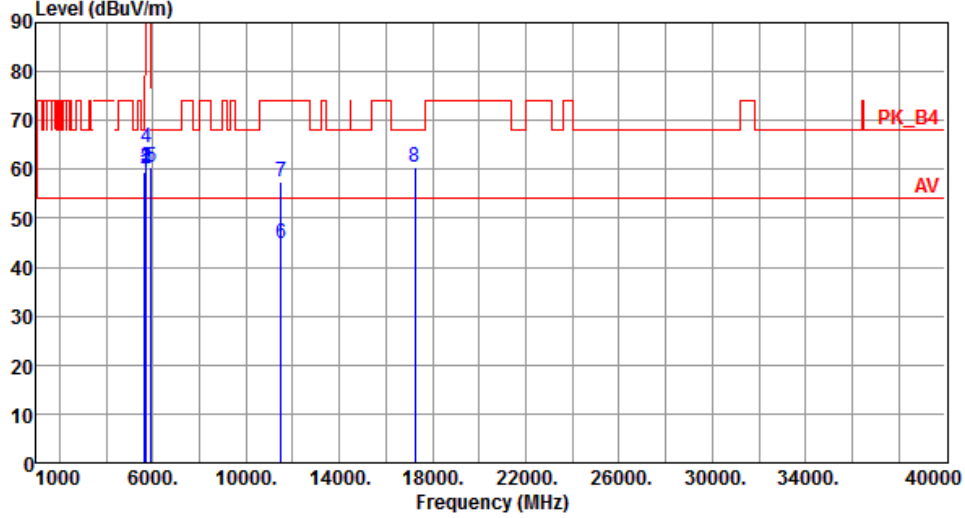
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	67.78	68.20	-0.42	61.49	6.29	Peak	101	19
2	11400.00	48.95	54.00	-5.05	33.62	15.33	Average	160	171
3	11400.00	62.54	74.00	-11.46	47.21	15.33	Peak	160	171
4	17100.00	60.34	68.20	-7.86	43.45	16.89	Peak	100	20

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal		

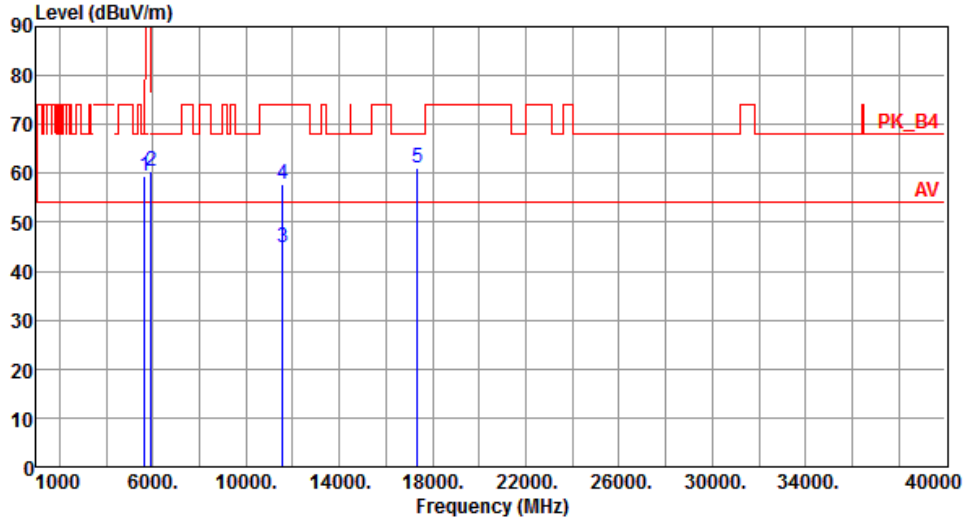


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.38	68.20	-8.82	53.47	5.91	Peak	100	179
2	5700.00	59.98	105.20	-45.22	53.75	6.23	Peak	100	179
3	5720.00	60.40	110.80	-50.40	54.12	6.28	Peak	100	179
4	5725.00	64.47	122.20	-57.73	58.18	6.29	Peak	100	179
5	5925.00	60.50	68.20	-7.70	53.68	6.82	Peak	100	179
6	11490.00	44.88	54.00	-9.12	29.43	15.45	Average	100	55
7	11490.00	57.61	74.00	-16.39	42.16	15.45	Peak	100	55
8	17235.00	60.45	68.20	-7.75	43.47	16.98	Peak	100	85

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

Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical		
Level (dBUV/m) </			

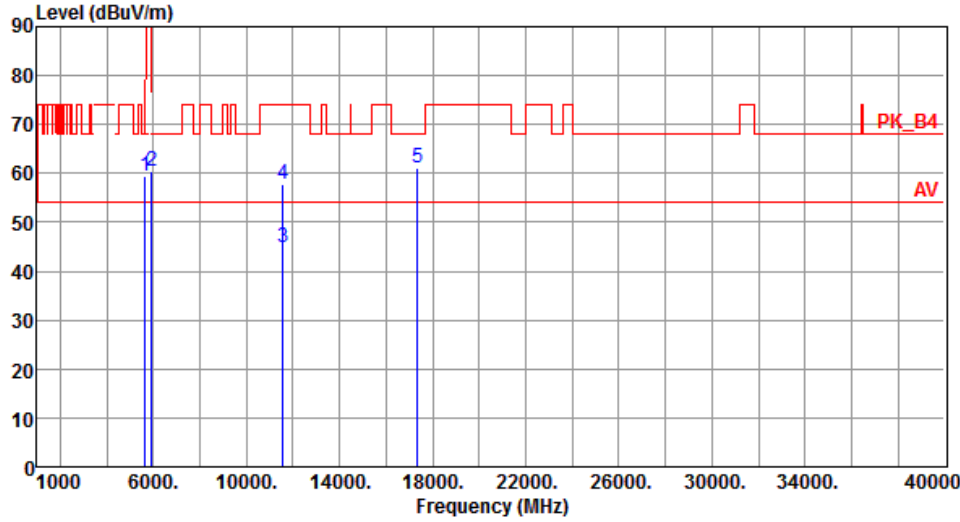
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.32	68.20	-8.88	53.41	5.91	Peak	100	179
2	5925.00	60.40	68.20	-7.80	53.58	6.82	Peak	100	179
3	11570.00	44.75	54.00	-9.25	29.45	15.30	Average	100	60
4	11570.00	57.68	74.00	-16.32	42.38	15.30	Peak	100	60
5	17355.00	61.07	68.20	-7.13	43.46	17.61	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).

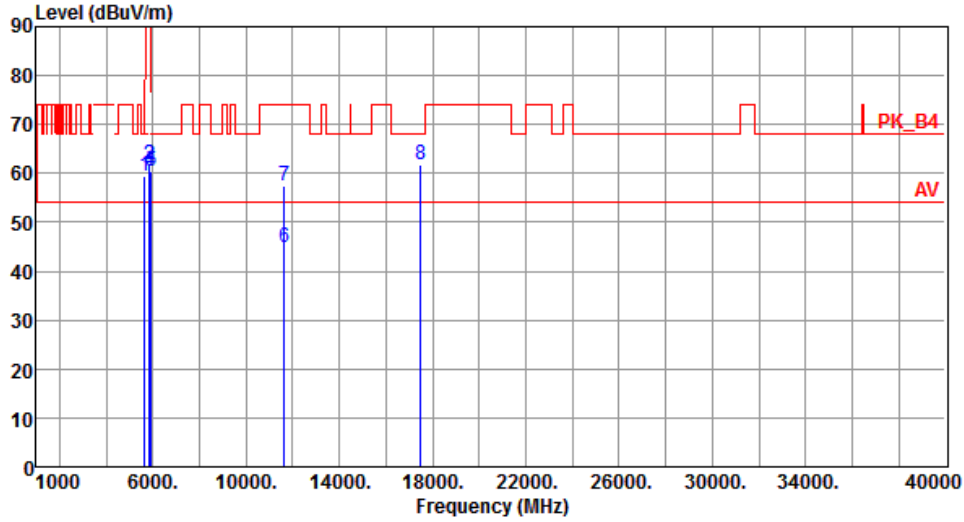
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.45	68.20	-8.75	53.54	5.91	Peak	100	22
2	5925.00	60.35	68.20	-7.85	53.53	6.82	Peak	100	22
3	11570.00	44.77	54.00	-9.23	29.47	15.30	Average	100	20
4	11570.00	57.87	74.00	-16.13	42.57	15.30	Peak	100	20
5	17355.00	60.96	68.20	-7.24	43.35	17.61	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).

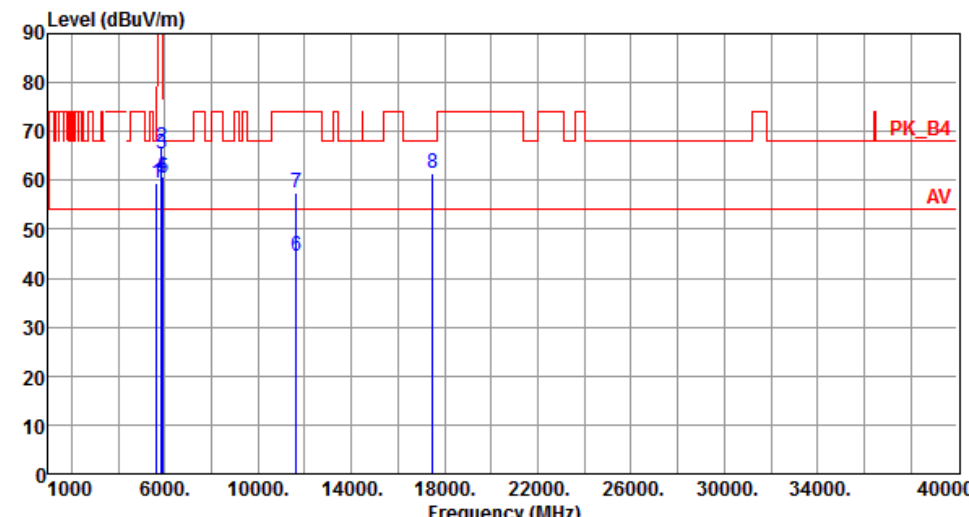
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.60	68.20	-8.60	53.69	5.91	Peak	100	177
2	5850.00	61.84	122.20	-60.36	55.17	6.67	Peak	100	177
3	5855.00	61.81	110.80	-48.99	55.13	6.68	Peak	100	177
4	5875.00	60.46	105.20	-44.74	53.74	6.72	Peak	100	177
5	5925.00	60.41	68.20	-7.79	53.59	6.82	Peak	100	177
6	11650.00	44.81	54.00	-9.19	29.75	15.06	Average	100	50
7	11650.00	57.42	74.00	-16.58	42.36	15.06	Peak	100	50
8	17475.00	61.70	68.20	-6.50	43.47	18.23	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	HT20	Test Freq. (MHz)	5825
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.38	68.20	-8.82	53.47	5.91	Peak	100	18
2	5850.00	66.72	122.20	-55.48	60.05	6.67	Peak	100	18
3	5855.00	65.43	110.80	-45.37	58.75	6.68	Peak	100	18
4	5875.00	60.78	105.20	-44.42	54.06	6.72	Peak	100	18
5	5925.00	60.39	68.20	-7.81	53.57	6.82	Peak	100	18
6	11650.00	44.57	54.00	-9.43	29.51	15.06	Average	100	80
7	11650.00	57.54	74.00	-16.46	42.48	15.06	Peak	100	80
8	17475.00	61.58	68.20	-6.62	43.35	18.23	Peak	100	30

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

Configuration 2 : PIFA antenna (Antenna No.6) , Y-plane

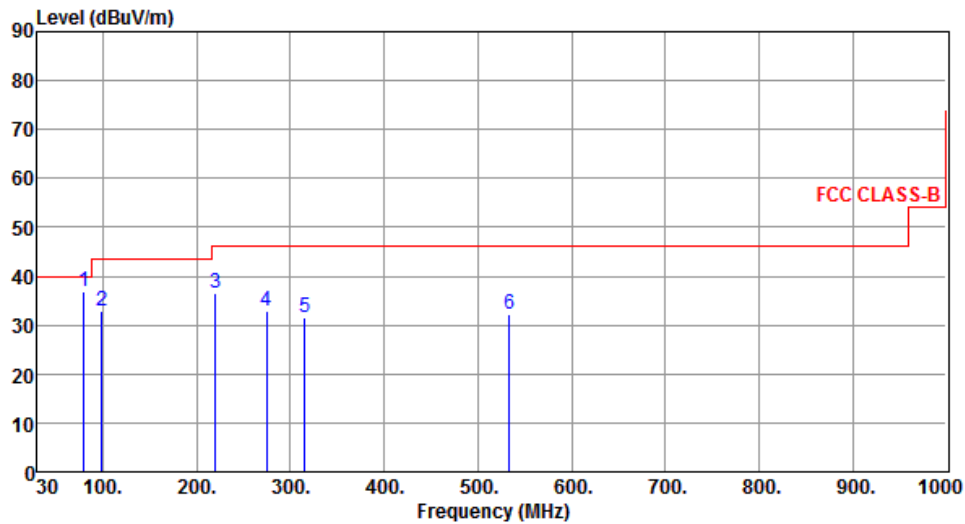
3.5.7 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		
Level (dBuV/m)			

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	79.55	36.87	40.00	-3.13	49.59	-12.72	Peak	---	---
2	98.85	32.76	43.50	-10.74	46.43	-13.67	Peak	---	---
3	220.23	36.41	46.00	-9.59	47.36	-10.95	Peak	---	---
4	274.59	32.86	46.00	-13.14	41.26	-8.40	Peak	---	---
5	315.24	31.68	46.00	-14.32	38.93	-7.25	Peak	---	---
6	533.29	32.34	46.00	-13.66	34.47	-2.13	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

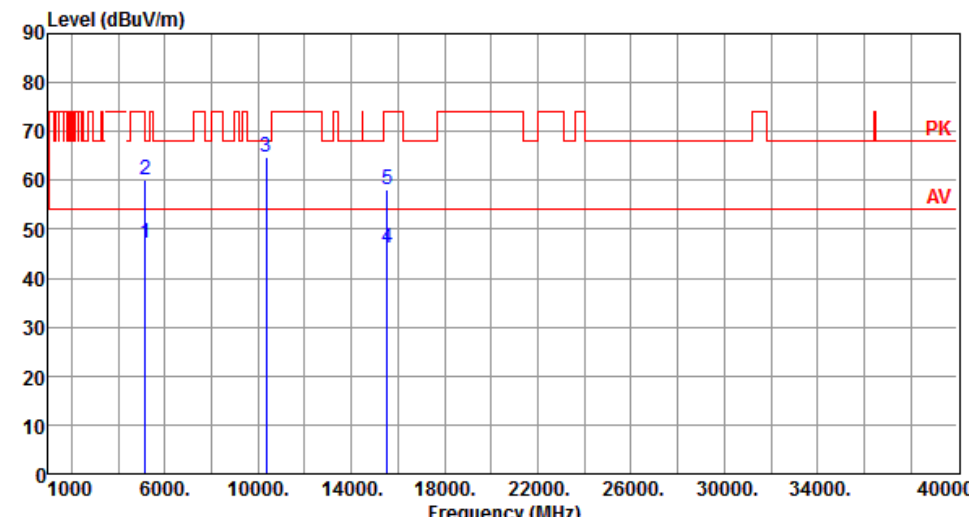
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		
Level (dBuV/m) <			

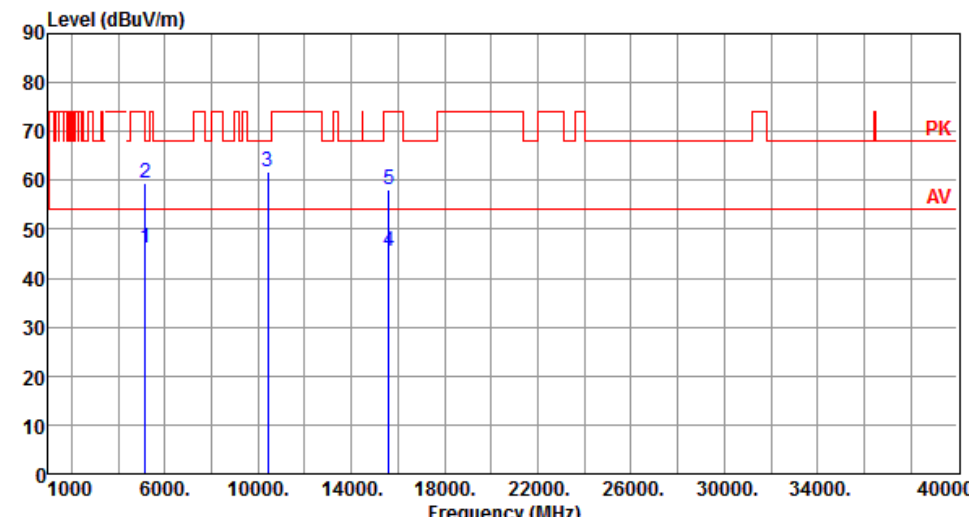
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	47.28	54.00	-6.72	41.33	5.95	Average	100	169
2	5150.00	60.26	74.00	-13.74	54.31	5.95	Peak	100	169
3	10360.00	64.81	68.20	-3.39	49.71	15.10	Peak	180	177
4	15540.00	46.10	54.00	-7.90	30.45	15.65	Average	100	60
5	15540.00	58.28	74.00	-15.72	42.63	15.65	Peak	100	60

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

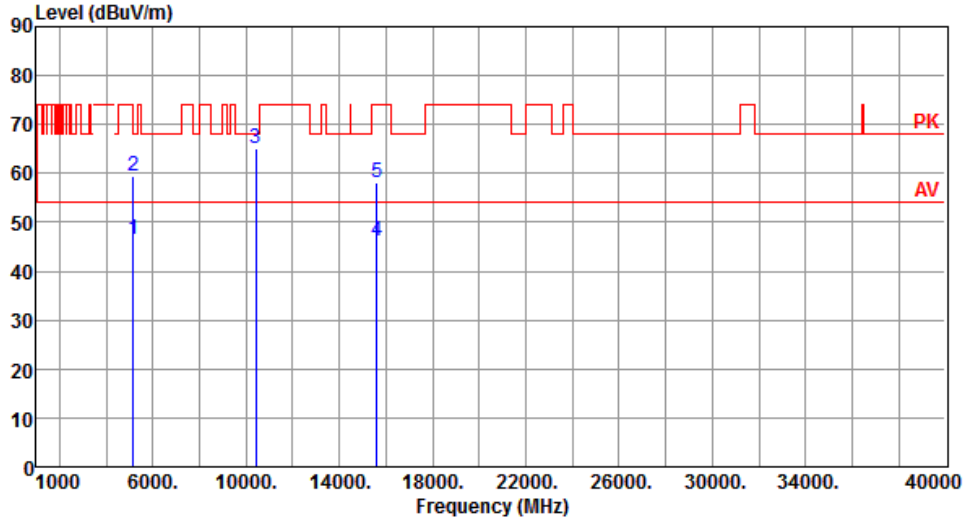
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	46.23	54.00	-7.77	40.28	5.95	Average	100	182
2	5150.00	59.37	74.00	-14.63	53.42	5.95	Peak	100	182
3	10400.00	61.65	68.20	-6.55	46.32	15.33	Peak	100	333
4	15600.00	45.61	54.00	-8.39	30.12	15.49	Average	100	30
5	15600.00	58.03	74.00	-15.97	42.54	15.49	Peak	100	30

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

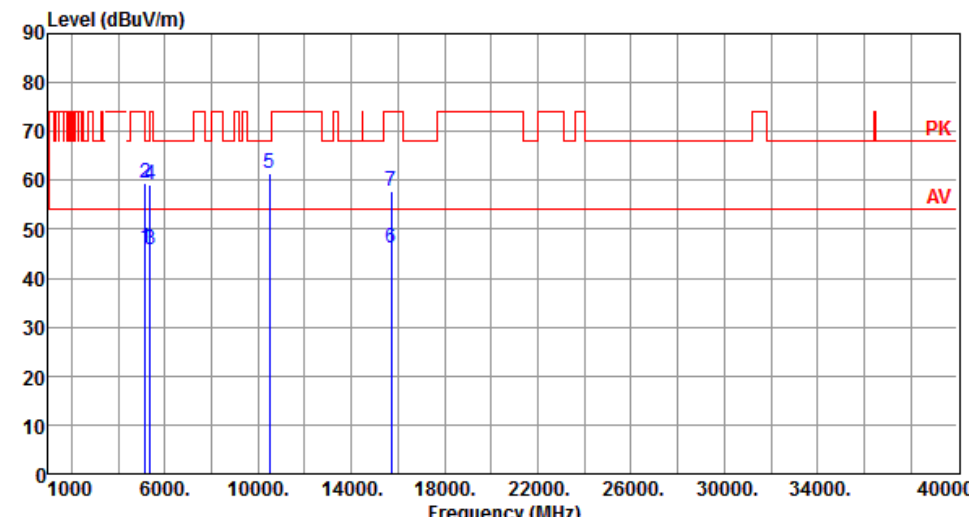
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.33	54.00	-7.67	40.38	5.95	Average	100	171
2	5150.00	59.41	74.00	-14.59	53.46	5.95	Peak	100	171
3	10400.00	64.94	68.20	-3.26	49.61	15.33	Peak	185	177
4	15600.00	46.09	54.00	-7.91	30.60	15.49	Average	100	25
5	15600.00	58.17	74.00	-15.83	42.68	15.49	Peak	100	25

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

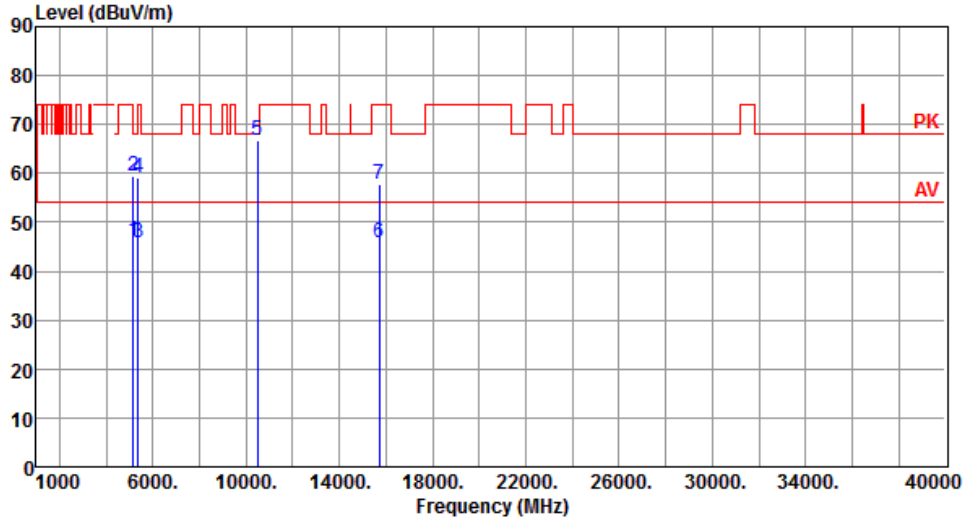
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.23	54.00	-7.77	40.28	5.95	Average	102	184
2	5150.00	59.54	74.00	-14.46	53.59	5.95	Peak	102	184
3	5350.00	45.74	54.00	-8.26	40.34	5.40	Average	102	184
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	102	184
5	10480.00	61.52	68.20	-6.68	46.21	15.31	Peak	105	323
6	15720.00	46.08	54.00	-7.92	30.85	15.23	Average	100	100
7	15720.00	57.75	74.00	-16.25	42.52	15.23	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).

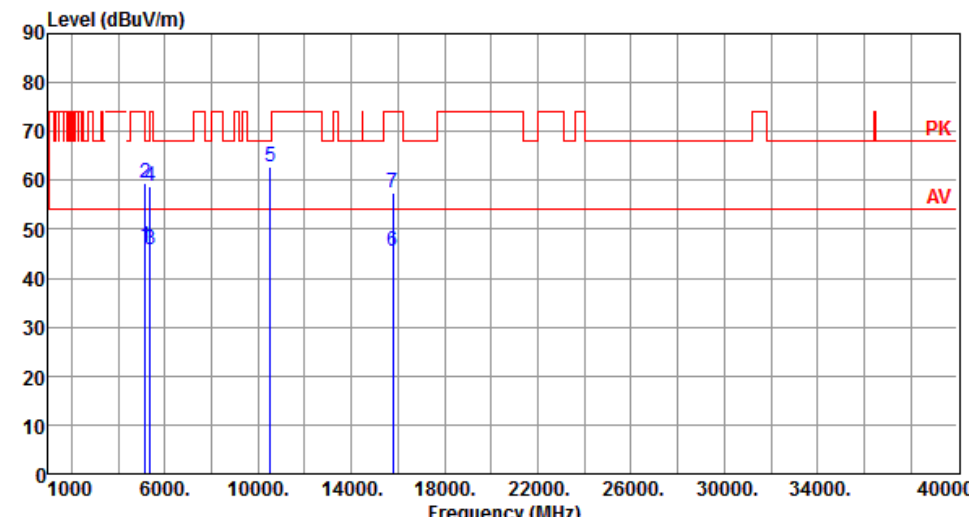
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.28	54.00	-7.72	40.33	5.95	Average	100	168
2	5150.00	59.47	74.00	-14.53	53.52	5.95	Peak	100	168
3	5350.00	45.85	54.00	-8.15	40.45	5.40	Average	100	168
4	5350.00	59.08	74.00	-14.92	53.68	5.40	Peak	100	168
5	10480.00	66.87	68.20	-1.33	51.56	15.31	Peak	205	178
6	15720.00	45.69	54.00	-8.31	30.46	15.23	Average	100	30
7	15720.00	57.85	74.00	-16.15	42.62	15.23	Peak	100	30

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

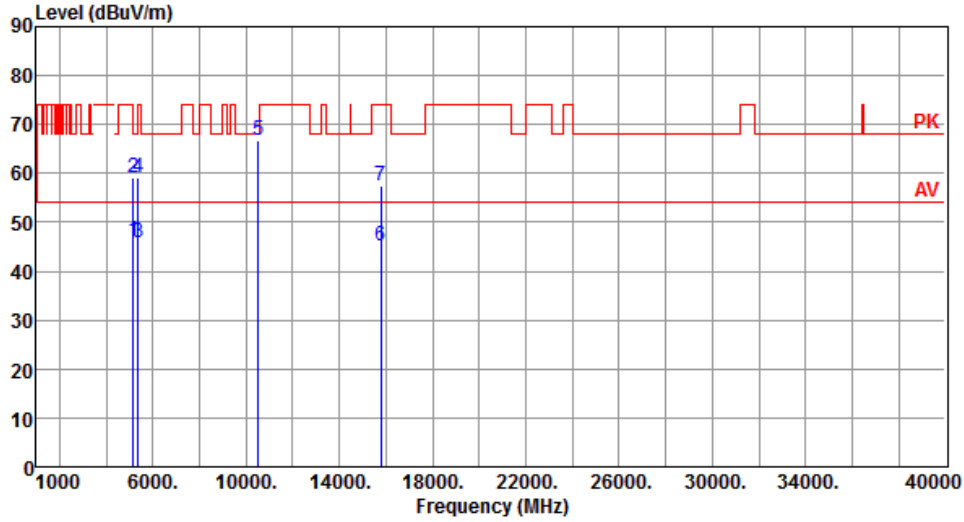
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	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	46.34	54.00	-7.66	40.39	5.95	Average	103	185
2	5150.00	59.60	74.00	-14.40	53.65	5.95	Peak	103	185
3	5350.00	45.94	54.00	-8.06	40.54	5.40	Average	103	185
4	5350.00	58.87	74.00	-15.13	53.47	5.40	Peak	103	185
5	10520.00	62.79	68.20	-5.41	47.46	15.33	Peak	100	329
6	15780.00	45.37	54.00	-8.63	30.42	14.95	Average	100	80
7	15780.00	57.46	74.00	-16.54	42.51	14.95	Peak	100	80

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

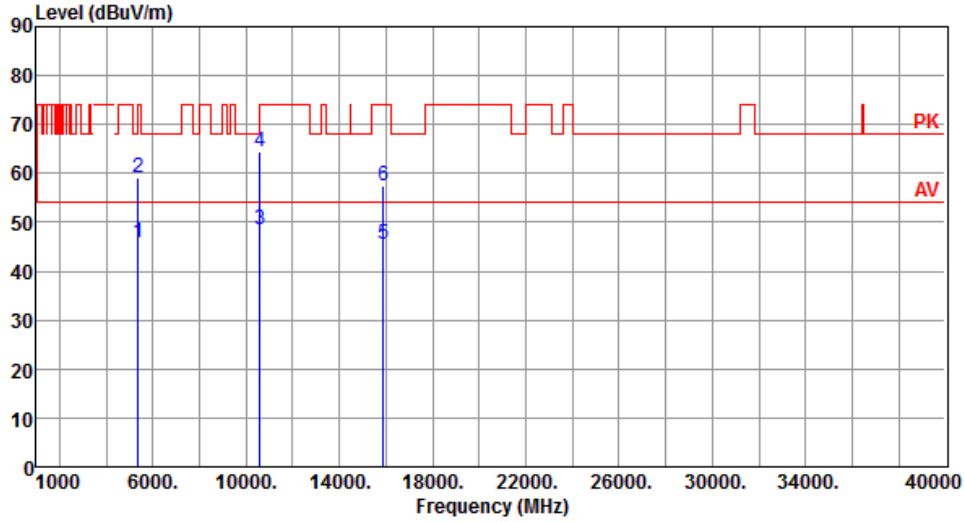
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	46.23	54.00	-7.77	40.28	5.95	Average	100	165
2	5150.00	59.19	74.00	-14.81	53.24	5.95	Peak	100	165
3	5350.00	45.83	54.00	-8.17	40.43	5.40	Average	100	165
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	100	165
5	10520.00	66.92	68.20	-1.28	51.59	15.33	Peak	206	169
6	15780.00	45.31	54.00	-8.69	30.36	14.95	Average	100	40
7	15780.00	57.50	74.00	-16.50	42.55	14.95	Peak	100	40

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

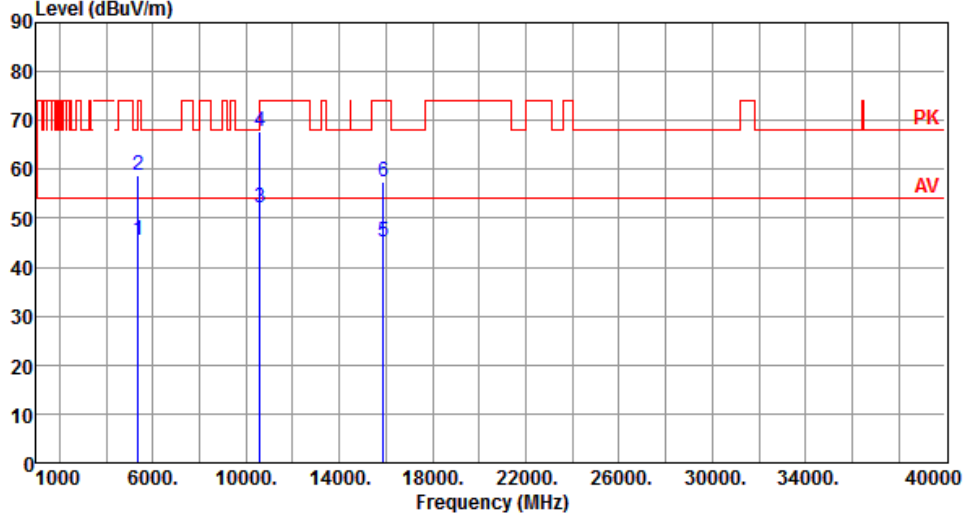
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.87	54.00	-8.13	40.47	5.40	Average	102	188
2	5350.00	58.96	74.00	-15.04	53.56	5.40	Peak	102	188
3	10600.00	48.52	54.00	-5.48	33.11	15.41	Average	100	322
4	10600.00	64.52	74.00	-9.48	49.11	15.41	Peak	100	322
5	15900.00	45.36	54.00	-8.64	30.47	14.89	Average	100	50
6	15900.00	57.45	74.00	-16.55	42.56	14.89	Peak	100	50

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

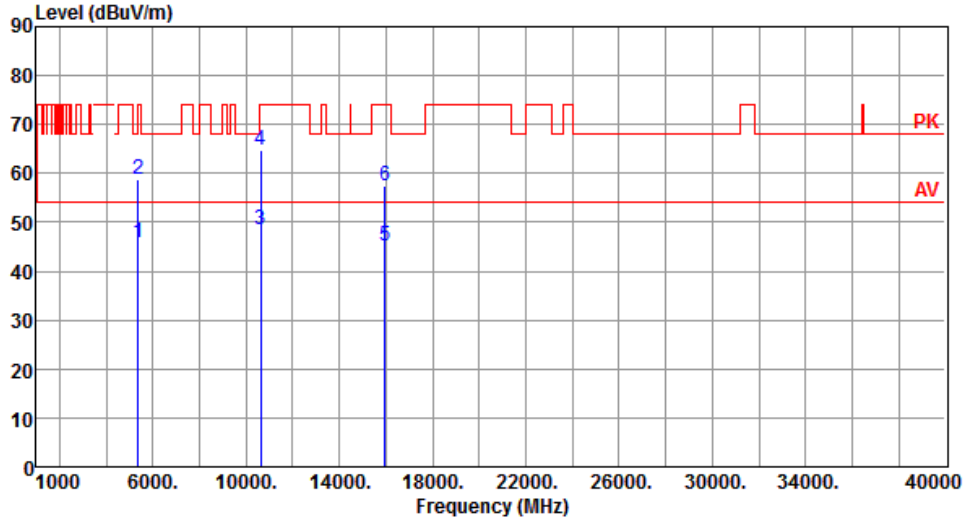
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.64	54.00	-8.36	40.24	5.40	Average	100	168
2	5350.00	58.66	74.00	-15.34	53.26	5.40	Peak	100	168
3	10600.00	52.25	54.00	-1.75	36.84	15.41	Average	201	169
4	10600.00	67.66	74.00	-6.34	52.25	15.41	Peak	201	169
5	15900.00	45.24	54.00	-8.76	30.35	14.89	Average	100	40
6	15900.00	57.52	74.00	-16.48	42.63	14.89	Peak	100	40

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

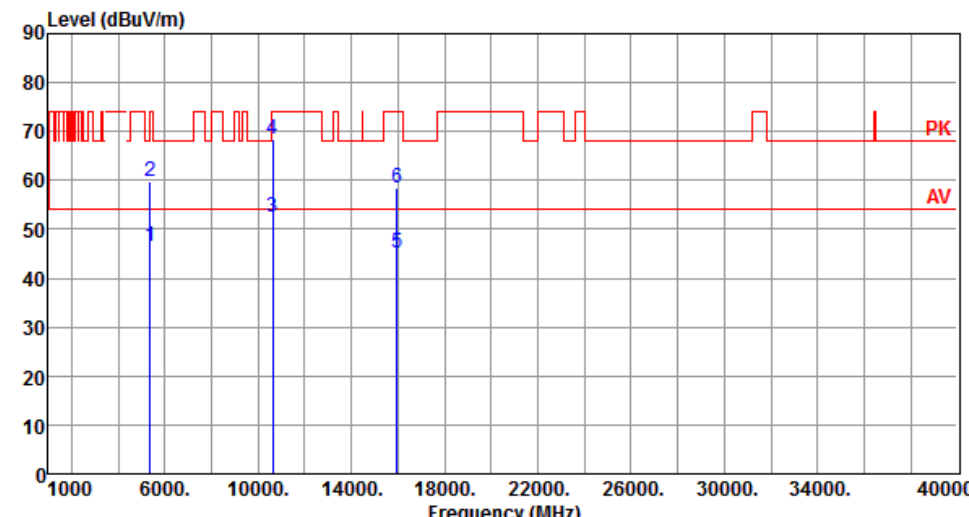
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	45.77	54.00	-8.23	40.37	5.40	Average	100	186
2	5350.00	58.85	74.00	-15.15	53.45	5.40	Peak	100	186
3	10640.00	48.64	54.00	-5.36	33.28	15.36	Average	100	329
4	10640.00	64.64	74.00	-9.36	49.28	15.36	Peak	100	329
5	15960.00	45.22	54.00	-8.78	30.31	14.91	Average	100	329
6	15960.00	57.45	74.00	-16.55	42.54	14.91	Peak	100	329

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

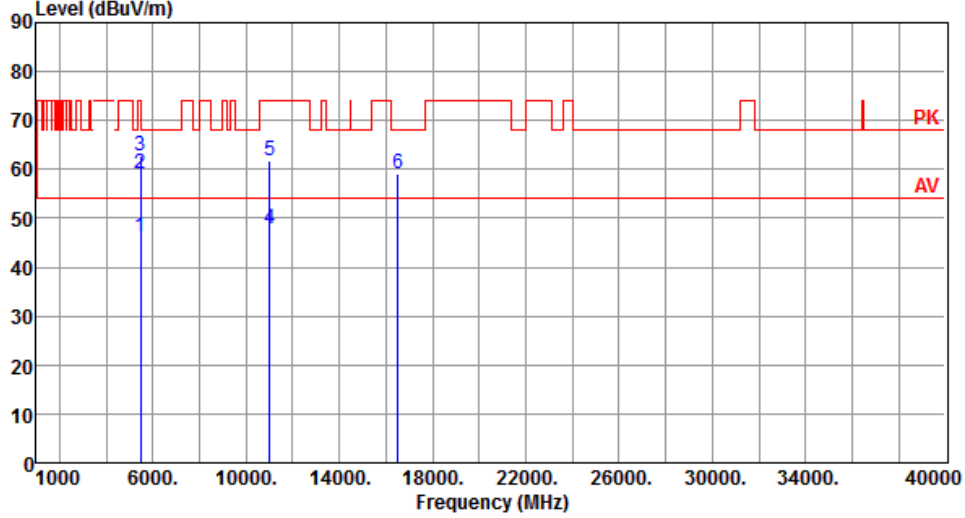
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	46.43	54.00	-7.57	41.03	5.40	Average	100	172
2	5350.00	59.64	74.00	-14.36	54.24	5.40	Peak	100	172
3	10640.00	52.60	54.00	-1.40	37.24	15.36	Average	185	174
4	10640.00	68.38	74.00	-5.62	53.02	15.36	Peak	185	174
5	15960.00	45.33	54.00	-8.67	30.42	14.91	Average	100	80
6	15960.00	58.45	74.00	-15.55	43.54	14.91	Peak	100	80

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

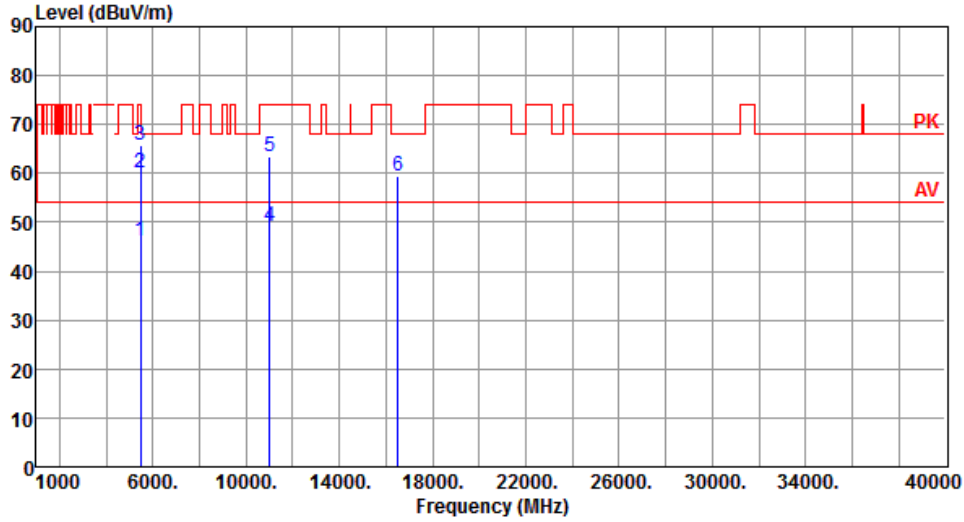
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	46.17	54.00	-7.83	40.25	5.92	Average	105	143
2	5460.00	59.05	74.00	-14.95	53.13	5.92	Peak	105	143
3	5470.00	62.81	68.20	-5.39	56.85	5.96	Peak	105	143
4	11000.00	47.86	54.00	-6.14	32.28	15.58	Average	105	143
5	11000.00	61.83	74.00	-12.17	46.25	15.58	Peak	105	143
6	16500.00	59.25	68.20	-8.95	43.42	15.83	Peak	105	143

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

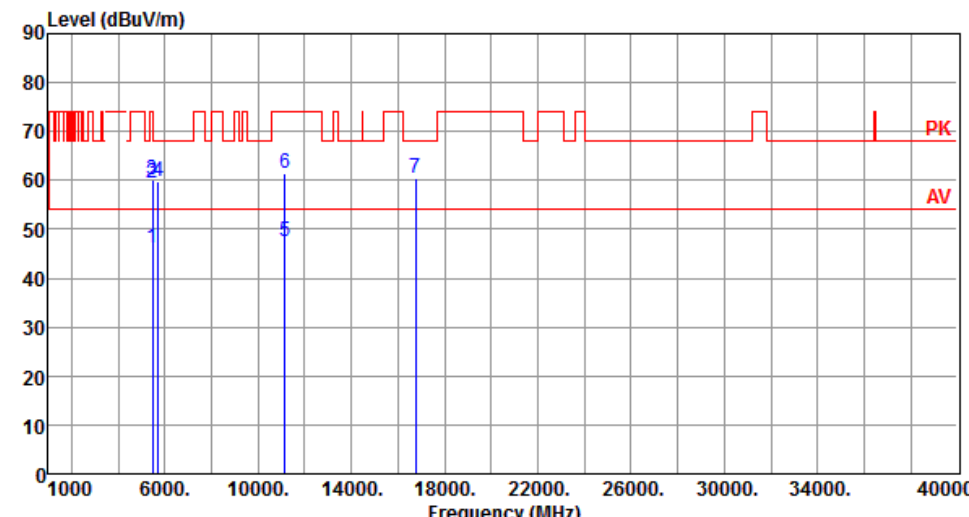
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.26	54.00	-7.74	40.34	5.92	Average	216	195
2	5460.00	60.16	74.00	-13.84	54.24	5.92	Peak	216	195
3	5470.00	65.76	68.20	-2.44	59.80	5.96	Peak	216	195
4	11000.00	49.26	54.00	-4.74	33.68	15.58	Average	200	165
5	11000.00	63.47	74.00	-10.53	47.89	15.58	Peak	200	165
6	16500.00	59.37	68.20	-8.83	43.54	15.83	Peak	100	20

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

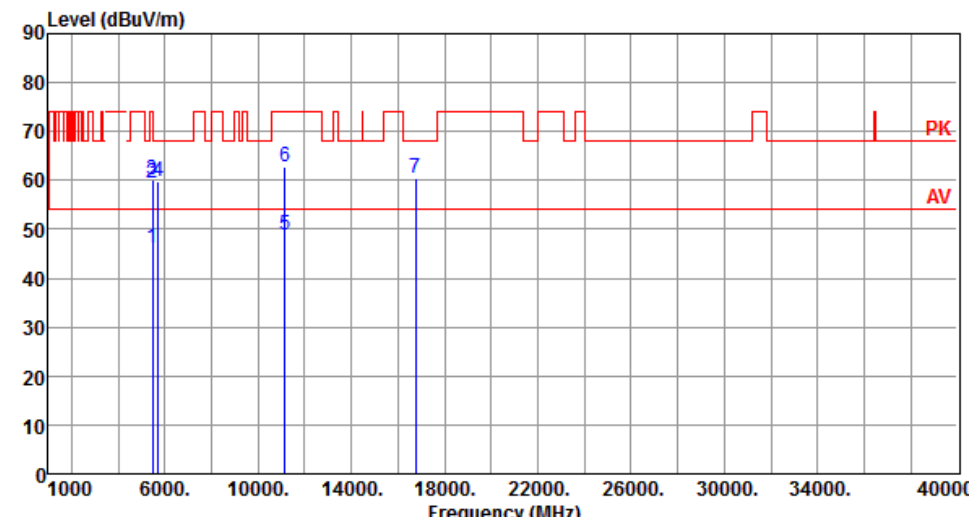
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	46.26	54.00	-7.74	40.34	5.92	Average	100	145
2	5460.00	59.38	74.00	-14.62	53.46	5.92	Peak	100	145
3	5470.00	60.19	68.20	-8.01	54.23	5.96	Peak	100	145
4	5725.00	59.91	68.20	-8.29	53.62	6.29	Peak	100	145
5	11160.00	47.44	54.00	-6.56	32.18	15.26	Average	155	332
6	11160.00	61.60	74.00	-12.40	46.34	15.26	Peak	155	332
7	16740.00	60.31	68.20	-7.89	43.46	16.85	Peak	100	200

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

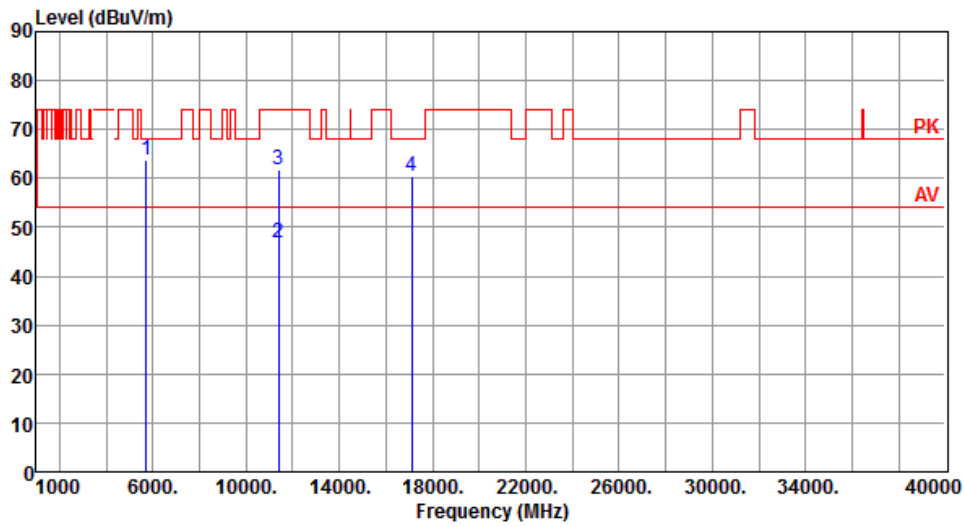
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.16	54.00	-7.84	40.24	5.92	Average	200	197
2	5460.00	59.48	74.00	-14.52	53.56	5.92	Peak	200	197
3	5470.00	60.22	68.20	-7.98	54.26	5.96	Peak	200	197
4	5725.00	59.86	68.20	-8.34	53.57	6.29	Peak	200	197
5	11160.00	48.81	54.00	-5.19	33.55	15.26	Average	200	162
6	11160.00	62.83	74.00	-11.17	47.57	15.26	Peak	200	162
7	16740.00	60.37	68.20	-7.83	43.52	16.85	Peak	100	90

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

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	63.91	68.20	-4.29	57.62	6.29	Peak	103	149
2	11400.00	46.80	54.00	-7.20	31.47	15.33	Average	155	335
3	11400.00	61.87	74.00	-12.13	46.54	15.33	Peak	155	335
4	17100.00	60.42	68.20	-7.78	43.53	16.89	Peak	100	45

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

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		
Level (dBuV/m)			

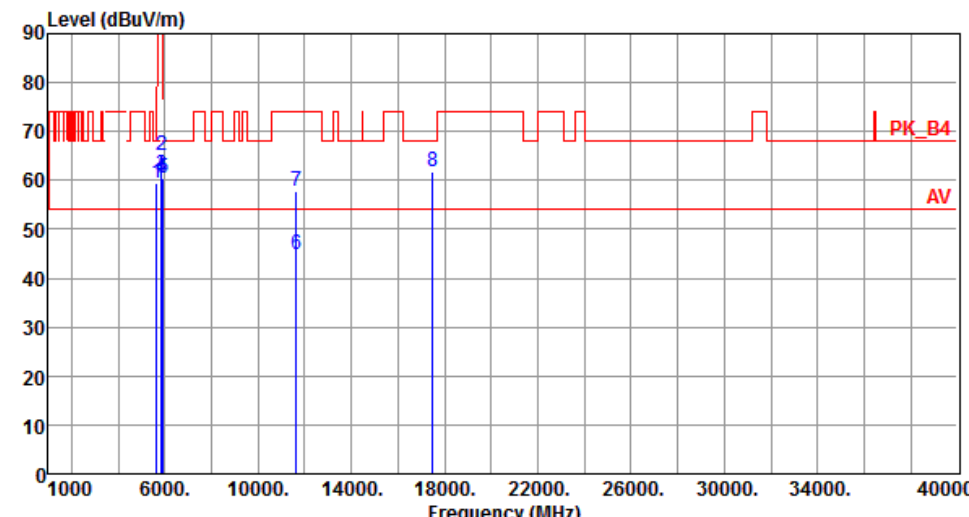
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		
Level (dBUV/m)			

Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		
Level (dBUV/m)			

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		
Level (dBuV/m) </			

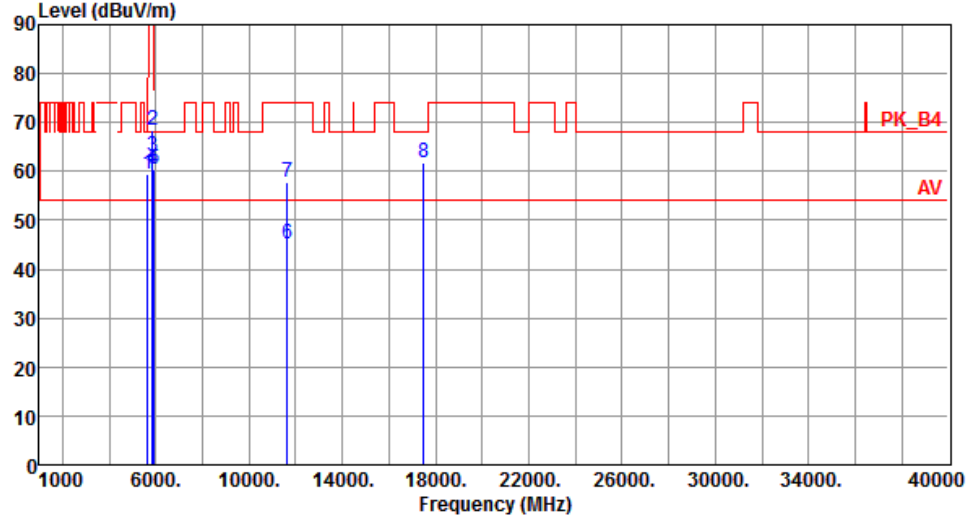
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		
 			

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



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.53	68.20	-8.67	53.62	5.91	Peak	117	140
2	5850.00	65.01	122.20	-57.19	58.34	6.67	Peak	117	140
3	5855.00	61.04	110.80	-49.76	54.36	6.68	Peak	117	140
4	5875.00	60.30	105.20	-44.90	53.58	6.72	Peak	117	140
5	5925.00	60.37	68.20	-7.83	53.55	6.82	Peak	117	140
6	11650.00	44.92	54.00	-9.08	29.86	15.06	Average	100	55
7	11650.00	57.75	74.00	-16.25	42.69	15.06	Peak	100	55
8	17475.00	61.65	68.20	-6.55	43.42	18.23	Peak	100	90

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

Modulation	11a	Test Freq. (MHz)	5825						
Polarization	Vertical								
									
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.49	68.20	-8.71	53.58	5.91	Peak	205	345
2	5850.00	68.46	122.20	-53.74	61.79	6.67	Peak	205	345
3	5855.00	63.25	110.80	-47.55	56.57	6.68	Peak	205	345
4	5875.00	60.31	105.20	-44.89	53.59	6.72	Peak	205	345
5	5925.00	60.39	68.20	-7.81	53.57	6.82	Peak	205	345
6	11650.00	45.17	54.00	-8.83	30.11	15.06	Average	100	22
7	11650.00	57.73	74.00	-16.27	42.67	15.06	Peak	100	22
8	17475.00	61.90	68.20	-6.30	43.67	18.23	Peak	100	30

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

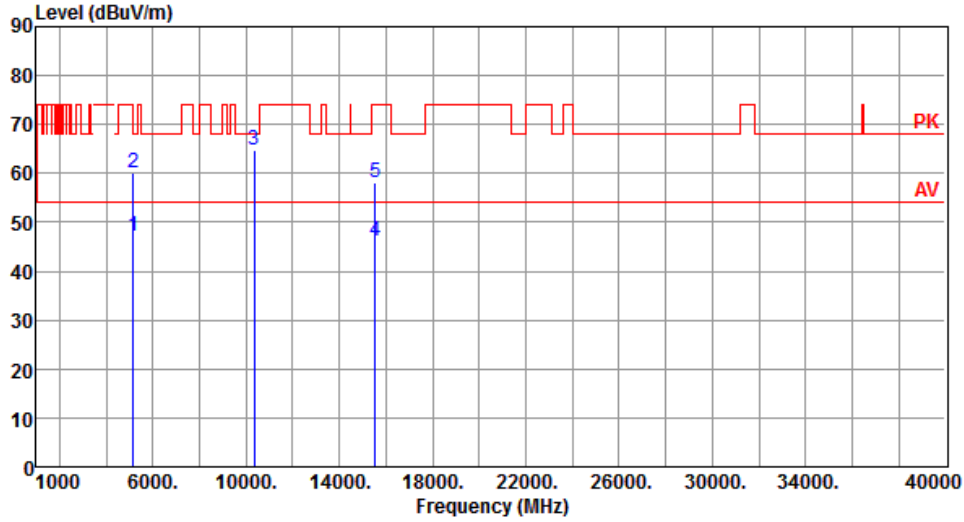
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

3.5.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Horizontal		
Level (dBuV/m)			

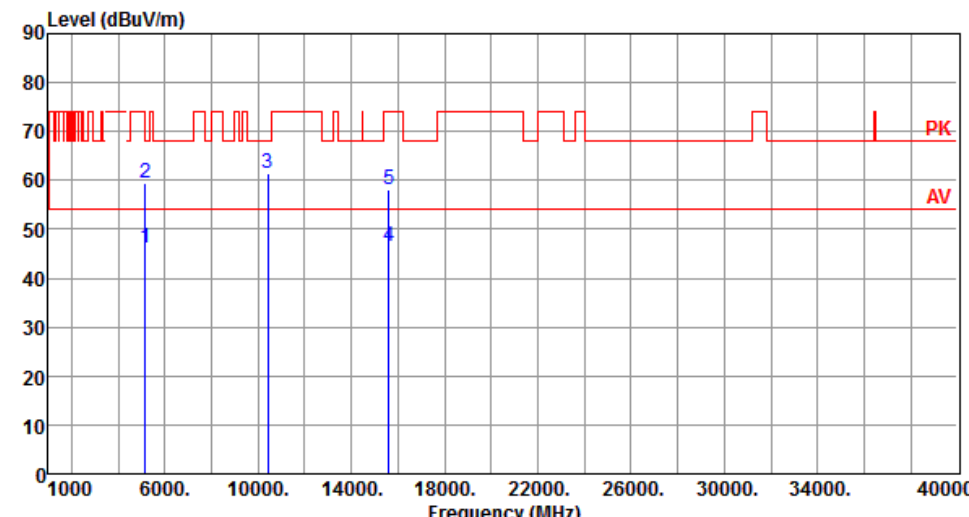
Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	47.22	54.00	-6.78	41.27	5.95	Average	100	170
2	5150.00	60.21	74.00	-13.79	54.26	5.95	Peak	100	170
3	10360.00	64.75	68.20	-3.45	49.65	15.10	Peak	185	176
4	15540.00	46.01	54.00	-7.99	30.36	15.65	Average	100	50
5	15540.00	58.21	74.00	-15.79	42.56	15.65	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).

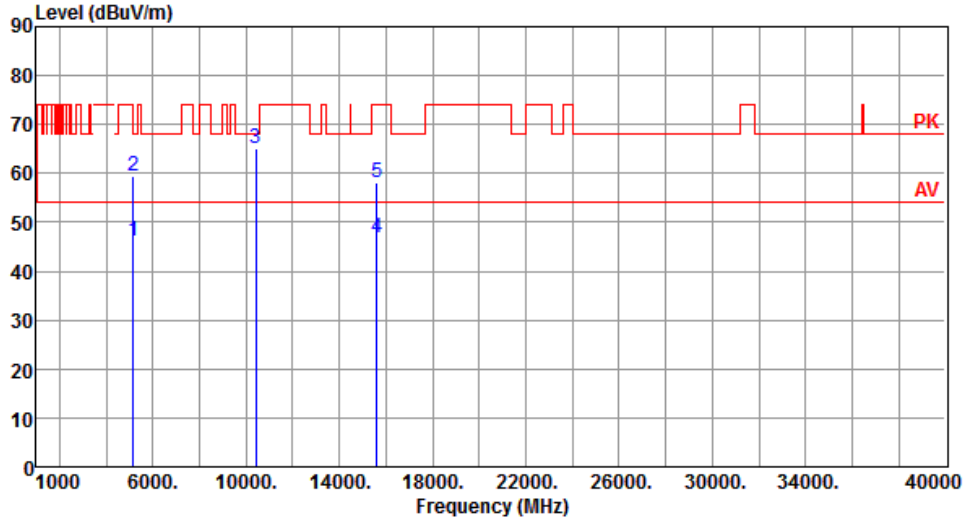
Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	46.21	54.00	-7.79	40.26	5.95	Average	100	188
2	5150.00	59.51	74.00	-14.49	53.56	5.95	Peak	100	188
3	10400.00	61.58	68.20	-6.62	46.25	15.33	Peak	179	175
4	15600.00	46.62	54.00	-7.38	31.13	15.49	Average	100	20
5	15600.00	58.18	74.00	-15.82	42.69	15.49	Peak	100	20

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

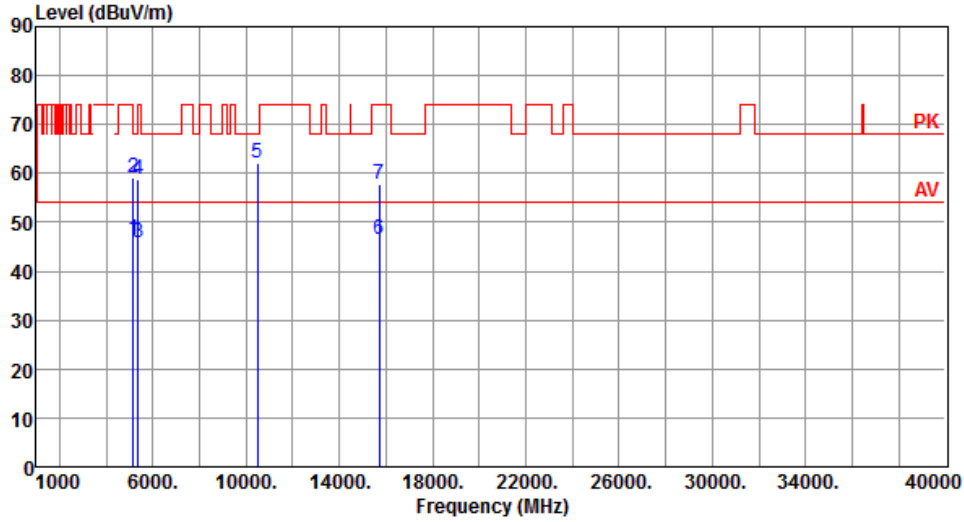
Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.31	54.00	-7.69	40.36	5.95	Average	100	175
2	5150.00	59.53	74.00	-14.47	53.58	5.95	Peak	100	175
3	10400.00	65.07	68.20	-3.13	49.74	15.33	Peak	183	174
4	15600.00	46.74	54.00	-7.26	31.25	15.49	Average	100	30
5	15600.00	58.07	74.00	-15.93	42.58	15.49	Peak	100	30

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

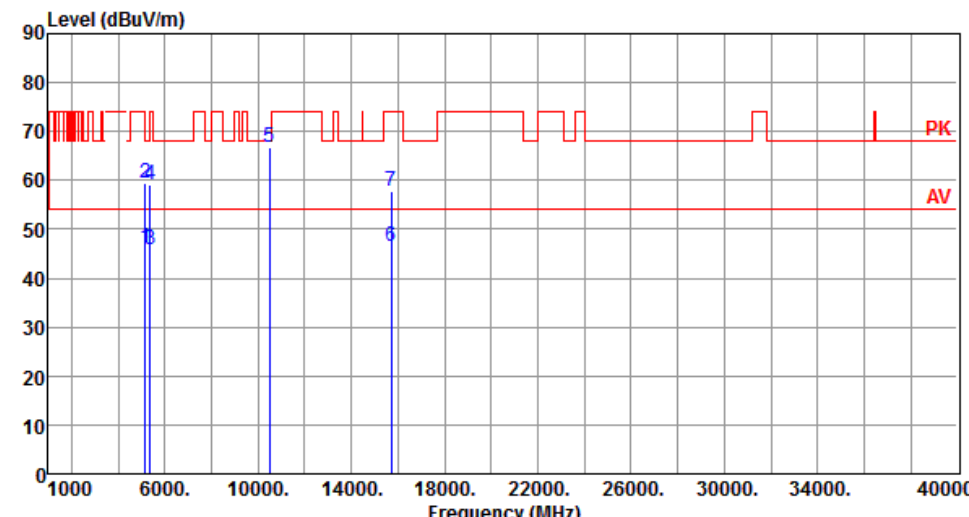
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.34	54.00	-7.66	40.39	5.95	Average	105	182
2	5150.00	59.20	74.00	-14.80	53.25	5.95	Peak	105	182
3	5350.00	45.81	54.00	-8.19	40.41	5.40	Average	105	182
4	5350.00	58.87	74.00	-15.13	53.47	5.40	Peak	105	182
5	10480.00	62.21	68.20	-5.99	46.90	15.31	Peak	100	328
6	15720.00	46.39	54.00	-7.61	31.16	15.23	Average	100	50
7	15720.00	57.81	74.00	-16.19	42.58	15.23	Peak	100	50

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

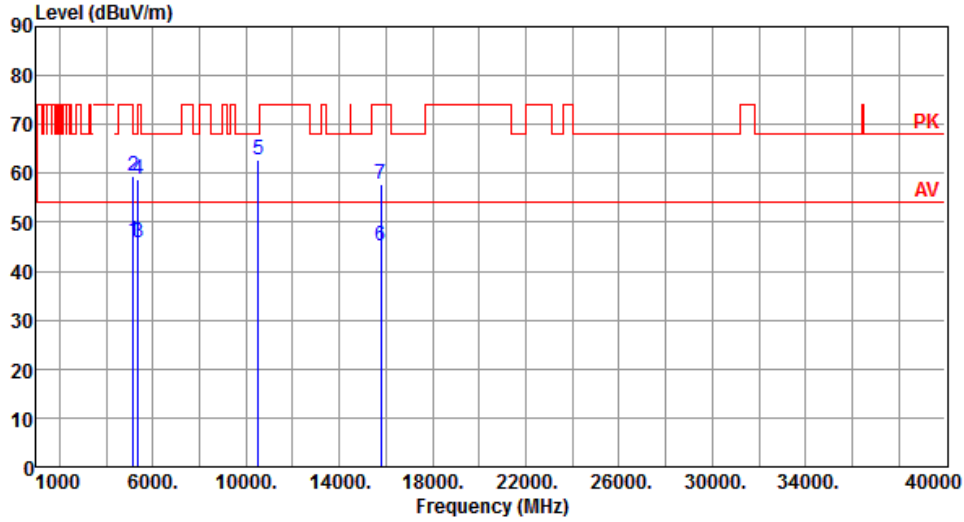
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.20	54.00	-7.80	40.25	5.95	Average	100	170
2	5150.00	59.54	74.00	-14.46	53.59	5.95	Peak	100	170
3	5350.00	45.96	54.00	-8.04	40.56	5.40	Average	100	170
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	100	170
5	10480.00	66.68	68.20	-1.52	51.37	15.31	Peak	203	175
6	15720.00	46.59	54.00	-7.41	31.36	15.23	Average	100	20
7	15720.00	57.82	74.00	-16.18	42.59	15.23	Peak	100	20

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

Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Horizontal		

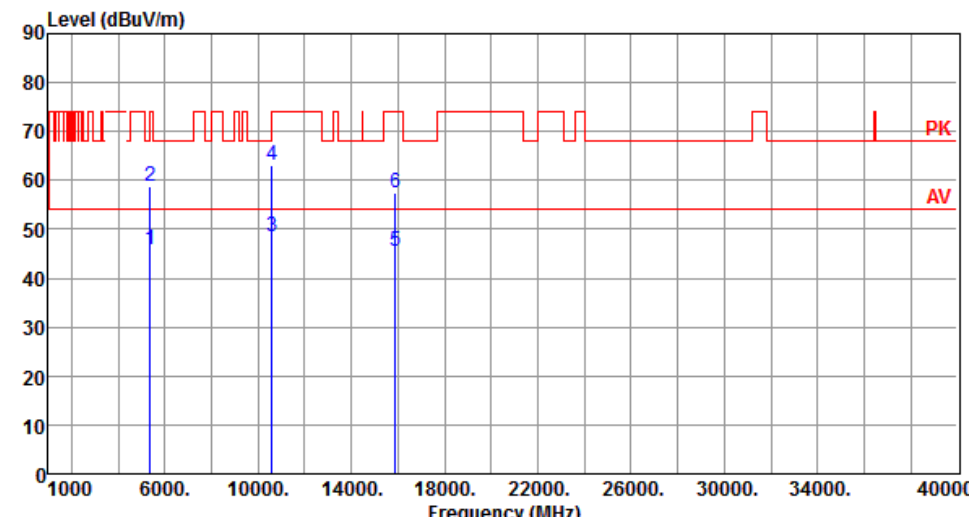


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.31	54.00	-7.69	40.36	5.95	Average	100	182
2	5150.00	59.33	74.00	-14.67	53.38	5.95	Peak	100	182
3	5350.00	45.69	54.00	-8.31	40.29	5.40	Average	100	182
4	5350.00	58.86	74.00	-15.14	53.46	5.40	Peak	100	182
5	10520.00	62.92	68.20	-5.28	47.59	15.33	Peak	100	323
6	15780.00	45.31	54.00	-8.69	30.36	14.95	Average	100	25
7	15780.00	57.80	74.00	-16.20	42.85	14.95	Peak	100	25

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

Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Vertical		
Level (dBuV/m)			

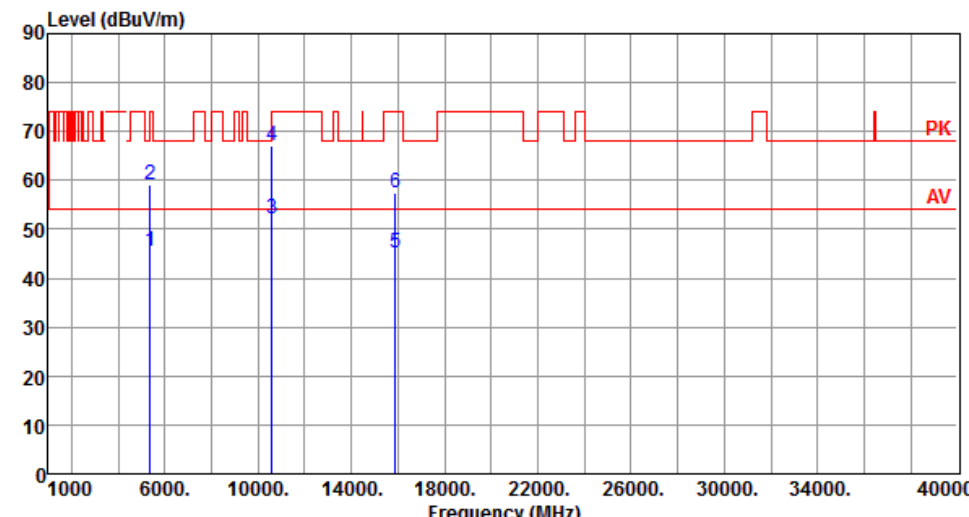
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.68	54.00	-8.32	40.28	5.40	Average	100	183
2	5350.00	58.86	74.00	-15.14	53.46	5.40	Peak	100	183
3	10600.00	48.36	54.00	-5.64	32.95	15.41	Average	100	322
4	10600.00	63.10	74.00	-10.90	47.69	15.41	Peak	100	322
5	15900.00	45.46	54.00	-8.54	30.57	14.89	Average	100	60
6	15900.00	57.48	74.00	-16.52	42.59	14.89	Peak	100	60

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

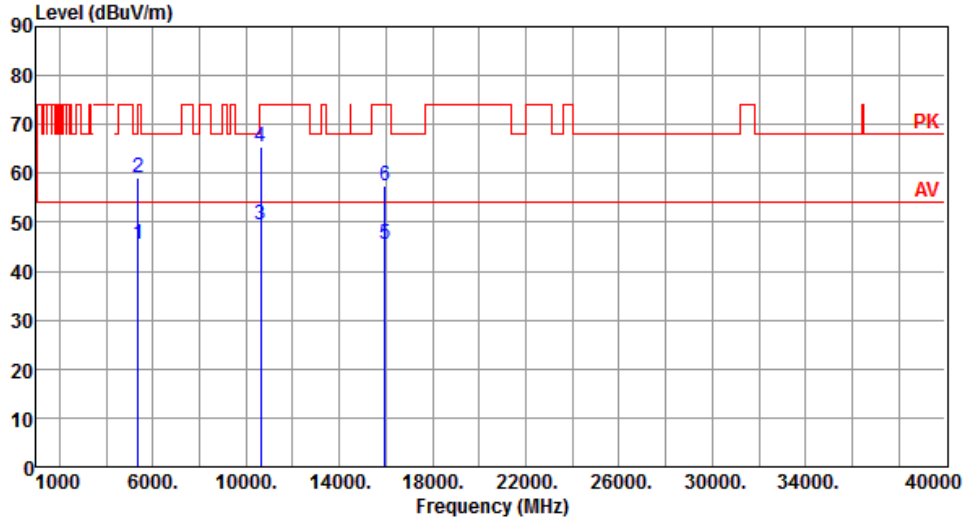
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.66	54.00	-8.34	40.26	5.40	Average	100	172
2	5350.00	58.96	74.00	-15.04	53.56	5.40	Peak	100	172
3	10600.00	52.10	54.00	-1.90	36.69	15.41	Average	195	163
4	10600.00	67.01	74.00	-6.99	51.60	15.41	Peak	195	163
5	15900.00	45.15	54.00	-8.85	30.26	14.89	Average	100	50
6	15900.00	57.43	74.00	-16.57	42.54	14.89	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).

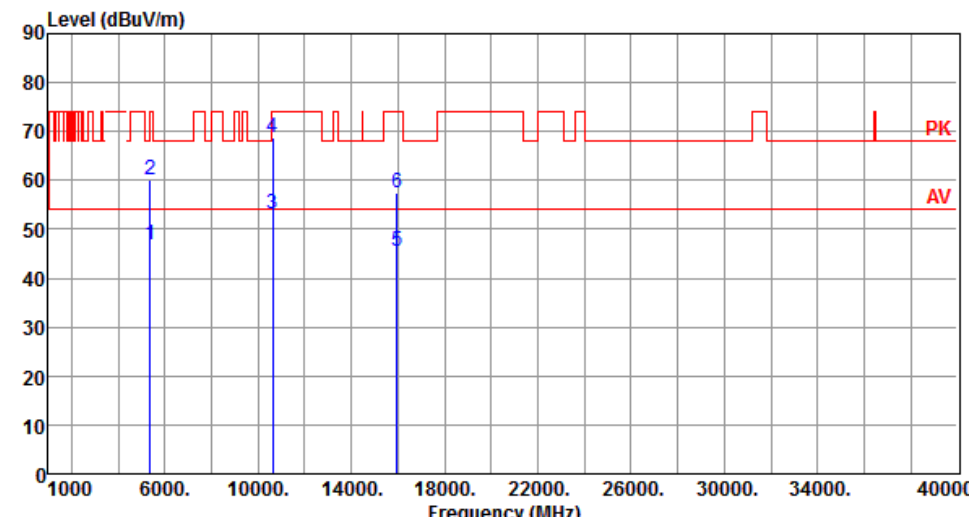
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.66	54.00	-8.34	40.26	5.40	Average	100	189
2	5350.00	58.96	74.00	-15.04	53.56	5.40	Peak	100	189
3	10640.00	49.51	54.00	-4.49	34.15	15.36	Average	100	329
4	10640.00	65.48	74.00	-8.52	50.12	15.36	Peak	100	329
5	15960.00	45.34	54.00	-8.66	30.43	14.91	Average	100	60
6	15960.00	57.48	74.00	-16.52	42.57	14.91	Peak	100	60

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

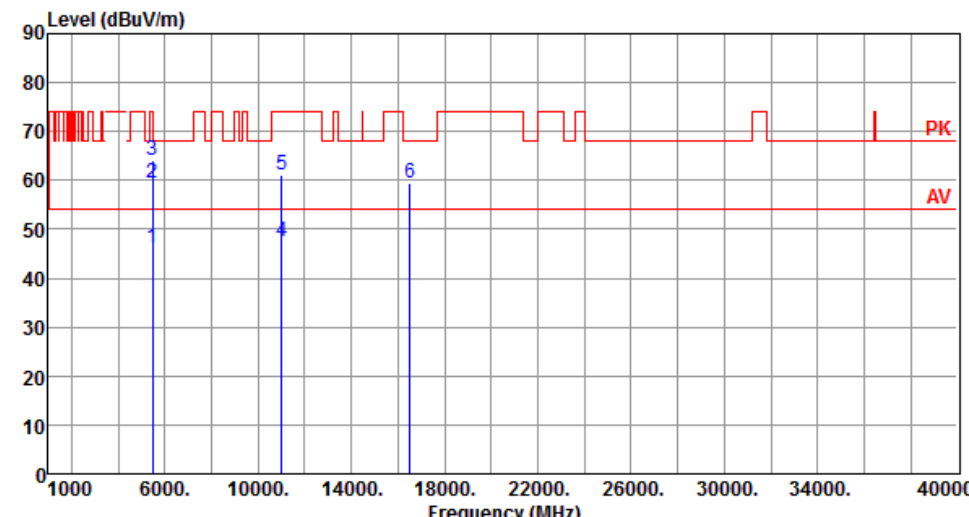
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	46.85	54.00	-7.15	41.45	5.40	Average	100	171
2	5350.00	60.11	74.00	-13.89	54.71	5.40	Peak	100	171
3	10640.00	52.97	54.00	-1.03	37.61	15.36	Average	186	174
4	10640.00	68.78	74.00	-5.22	53.42	15.36	Peak	186	174
5	15960.00	45.47	54.00	-8.53	30.56	14.91	Average	100	90
6	15960.00	57.56	74.00	-16.44	42.65	14.91	Peak	100	90

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

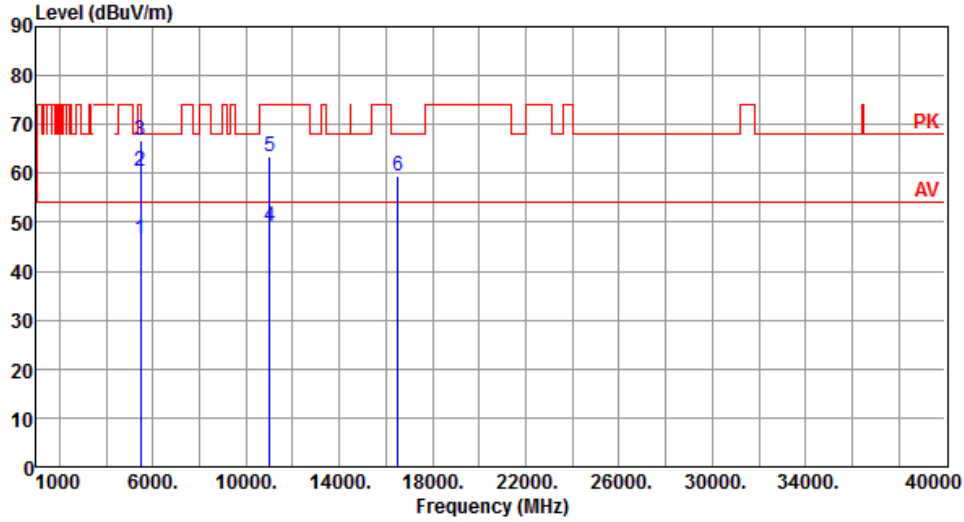
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	46.16	54.00	-7.84	40.24	5.92	Average	108	146
2	5460.00	59.47	74.00	-14.53	53.55	5.92	Peak	108	146
3	5470.00	64.17	68.20	-4.03	58.21	5.96	Peak	108	146
4	11000.00	47.64	54.00	-6.36	32.06	15.58	Average	160	331
5	11000.00	61.15	74.00	-12.85	45.57	15.58	Peak	160	331
6	16500.00	59.41	68.20	-8.79	43.58	15.83	Peak	100	20

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

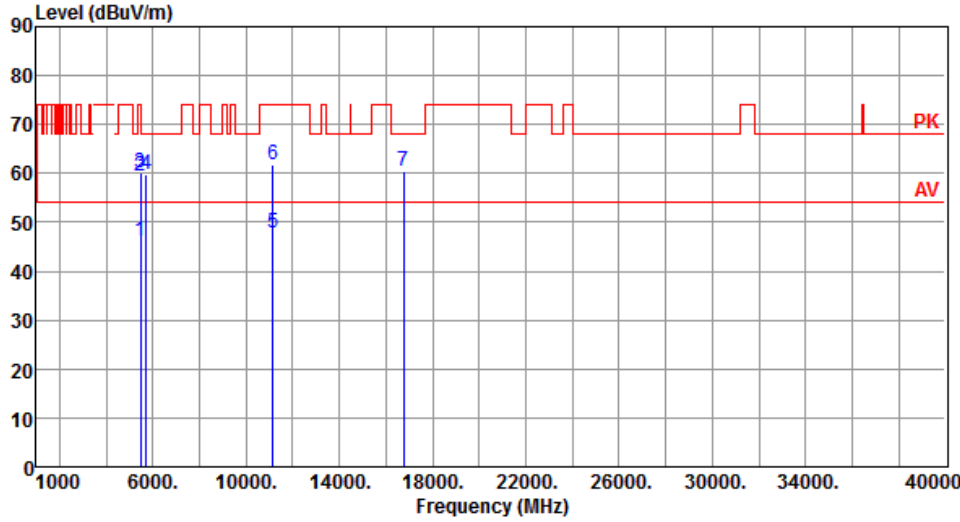
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.47	54.00	-7.53	40.55	5.92	Average	203	193
2	5460.00	60.46	74.00	-13.54	54.54	5.92	Peak	203	193
3	5470.00	66.71	68.20	-1.49	60.75	5.96	Peak	203	193
4	11000.00	49.13	54.00	-4.87	33.55	15.58	Average	203	161
5	11000.00	63.35	74.00	-10.65	47.77	15.58	Peak	203	161
6	16500.00	59.35	68.20	-8.85	43.52	15.83	Peak	100	90

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

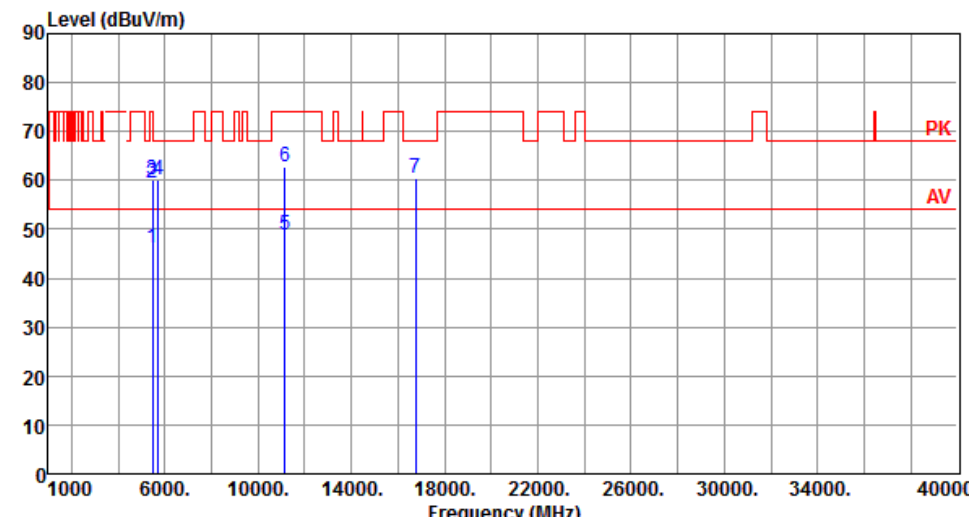
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	46.32	54.00	-7.68	40.40	5.92	Average	100	147
2	5460.00	59.53	74.00	-14.47	53.61	5.92	Peak	100	147
3	5470.00	60.02	68.20	-8.18	54.06	5.96	Peak	100	147
4	5725.00	59.84	68.20	-8.36	53.55	6.29	Peak	100	147
5	11160.00	47.81	54.00	-6.19	32.55	15.26	Average	159	332
6	11160.00	61.71	74.00	-12.29	46.45	15.26	Peak	159	332
7	16740.00	60.40	68.20	-7.80	43.55	16.85	Peak	100	60

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

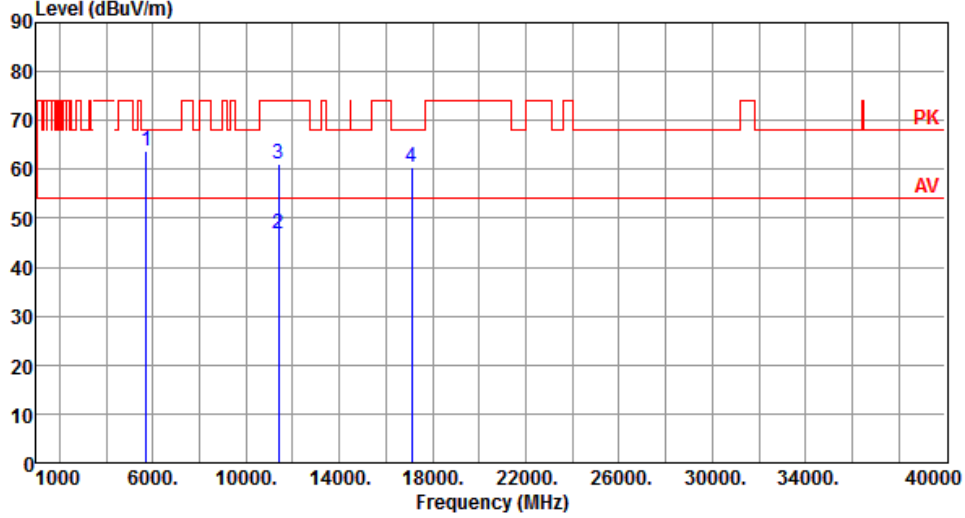
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.26	54.00	-7.74	40.34	5.92	Average	205	194
2	5460.00	59.49	74.00	-14.51	53.57	5.92	Peak	205	194
3	5470.00	60.08	68.20	-8.12	54.12	5.96	Peak	205	194
4	5725.00	59.98	68.20	-8.22	53.69	6.29	Peak	205	194
5	11160.00	48.93	54.00	-5.07	33.67	15.26	Average	195	165
6	11160.00	62.84	74.00	-11.16	47.58	15.26	Peak	195	165
7	16740.00	60.30	68.20	-7.90	43.45	16.85	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).

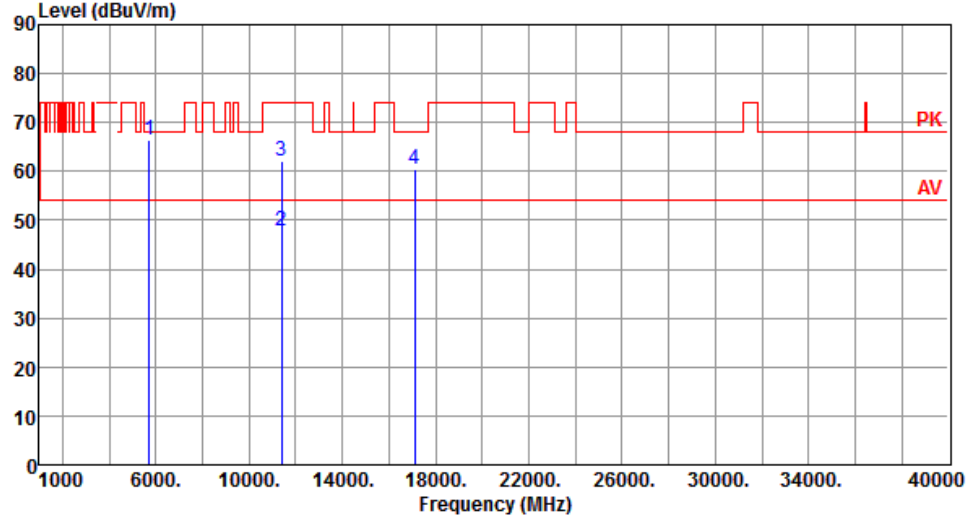
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	63.65	68.20	-4.55	57.36	6.29	Peak	105	153
2	11400.00	46.85	54.00	-7.15	31.52	15.33	Average	155	332
3	11400.00	60.98	74.00	-13.02	45.65	15.33	Peak	155	332
4	17100.00	60.42	68.20	-7.78	43.53	16.89	Peak	100	40

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

Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		

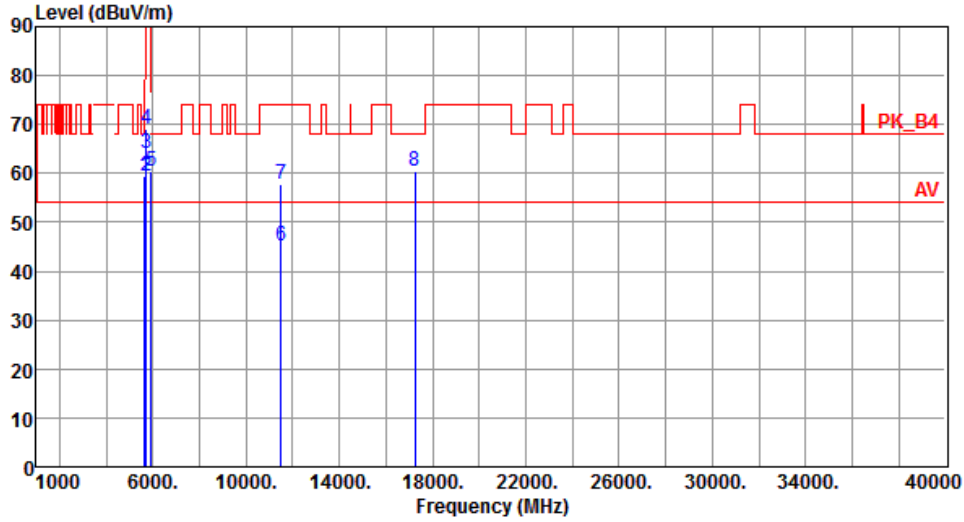


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.41	68.20	-1.79	60.12	6.29	Peak	212	195
2	11400.00	47.74	54.00	-6.26	32.41	15.33	Average	205	165
3	11400.00	62.18	74.00	-11.82	46.85	15.33	Peak	205	165
4	17100.00	60.44	68.20	-7.76	43.55	16.89	Peak	100	30

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

Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal		
Level (dBuV/m) </			

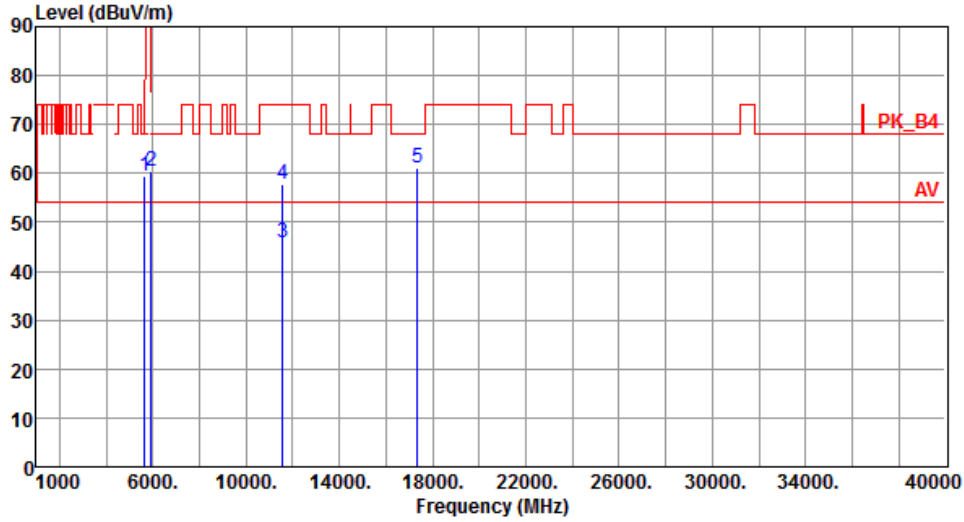
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.47	68.20	-8.73	53.56	5.91	Peak	188	343
2	5700.00	59.48	105.20	-45.72	53.25	6.23	Peak	188	343
3	5720.00	64.22	110.80	-46.58	57.94	6.28	Peak	188	343
4	5725.00	69.14	122.20	-53.06	62.85	6.29	Peak	188	343
5	5925.00	60.28	68.20	-7.92	53.46	6.82	Peak	188	343
6	11490.00	45.02	54.00	-8.98	29.57	15.45	Average	100	50
7	11490.00	57.77	74.00	-16.23	42.32	15.45	Peak	100	50
8	17235.00	60.51	68.20	-7.69	43.53	16.98	Peak	100	90

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

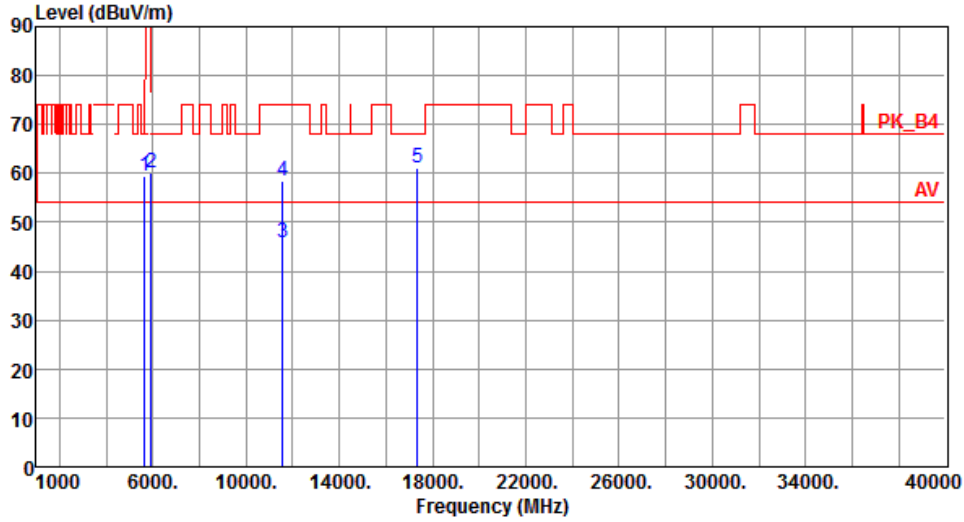
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.60	68.20	-8.60	53.69	5.91	Peak	112	145
2	5925.00	60.47	68.20	-7.73	53.65	6.82	Peak	112	145
3	11570.00	45.68	54.00	-8.32	30.38	15.30	Average	100	331
4	11570.00	57.86	74.00	-16.14	42.56	15.30	Peak	100	331
5	17355.00	61.07	68.20	-7.13	43.46	17.61	Peak	100	90

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

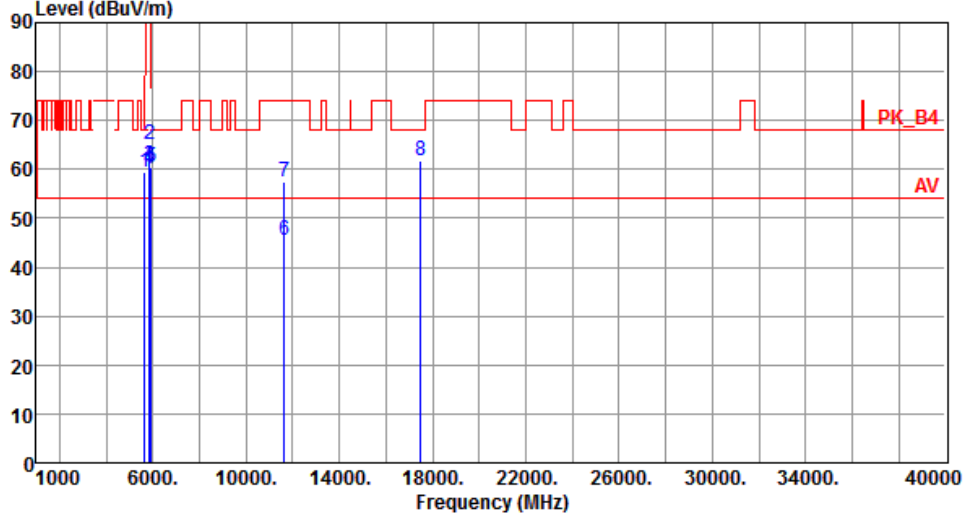
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.47	68.20	-8.73	53.56	5.91	Peak	234	333
2	5925.00	60.27	68.20	-7.93	53.45	6.82	Peak	234	333
3	11570.00	45.87	54.00	-8.13	30.57	15.30	Average	100	185
4	11570.00	58.35	74.00	-15.65	43.05	15.30	Peak	100	185
5	17355.00	61.00	68.20	-7.20	43.39	17.61	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).

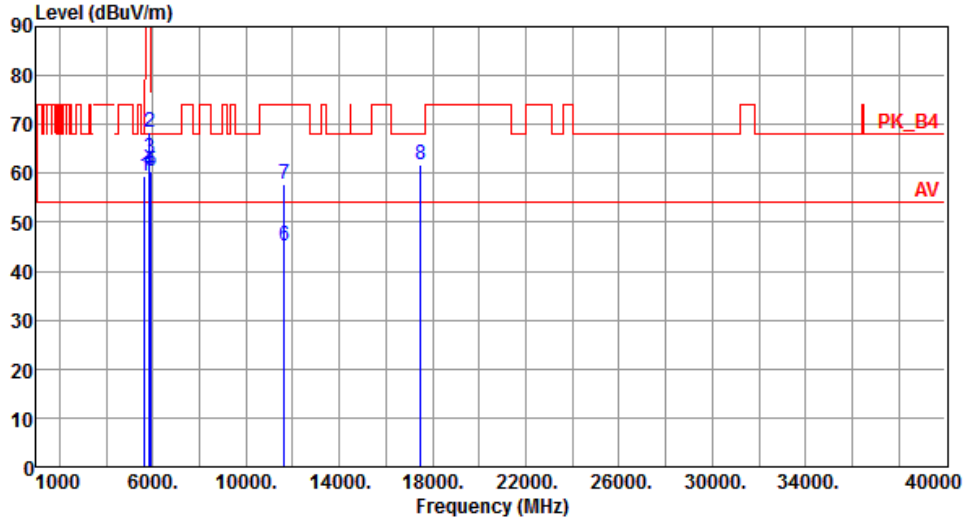
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.45	68.20	-8.75	53.54	5.91	Peak	115	140
2	5850.00	64.93	122.20	-57.27	58.26	6.67	Peak	115	140
3	5855.00	60.89	110.80	-49.91	54.21	6.68	Peak	115	140
4	5875.00	60.17	105.20	-45.03	53.45	6.72	Peak	115	140
5	5925.00	60.38	68.20	-7.82	53.56	6.82	Peak	115	140
6	11650.00	45.37	54.00	-8.63	30.31	15.06	Average	100	60
7	11650.00	57.59	74.00	-16.41	42.53	15.06	Peak	100	60
8	17475.00	61.81	68.20	-6.39	43.58	18.23	Peak	100	90

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

Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.47	68.20	-8.73	53.56	5.91	Peak	207	341
2	5850.00	68.28	122.20	-53.92	61.61	6.67	Peak	207	341
3	5855.00	63.05	110.80	-47.75	56.37	6.68	Peak	207	341
4	5875.00	60.28	105.20	-44.92	53.56	6.72	Peak	207	341
5	5925.00	60.28	68.20	-7.92	53.46	6.82	Peak	207	341
6	11650.00	45.29	54.00	-8.71	30.23	15.06	Average	100	30
7	11650.00	57.62	74.00	-16.38	42.56	15.06	Peak	100	30
8	17475.00	61.78	68.20	-6.42	43.55	18.23	Peak	100	25

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

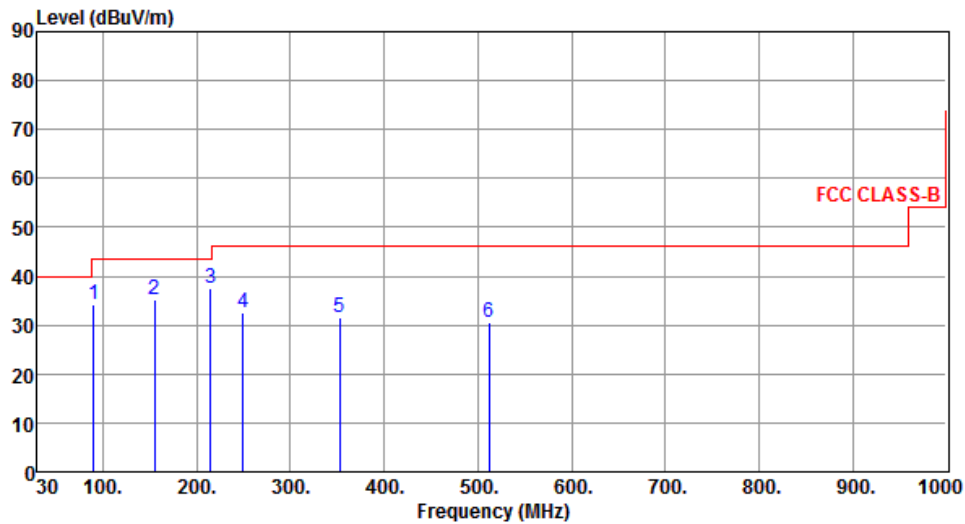
Configuration 3 : Dipole antenna (Antenna No.8) , Y-plane

3.5.10 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		
Level (dBuV/m) <			

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



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	90.11	34.05	43.50	-9.45	48.52	-14.47	Peak	---	---
2	155.26	35.13	43.50	-8.37	43.45	-8.32	Peak	---	---
3	215.26	37.41	43.50	-6.09	48.39	-10.98	Peak	---	---
4	249.33	32.45	46.00	-13.55	41.73	-9.28	Peak	---	---
5	352.20	31.62	46.00	-14.38	37.89	-6.27	Peak	---	---
6	512.12	30.67	46.00	-15.33	33.22	-2.55	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

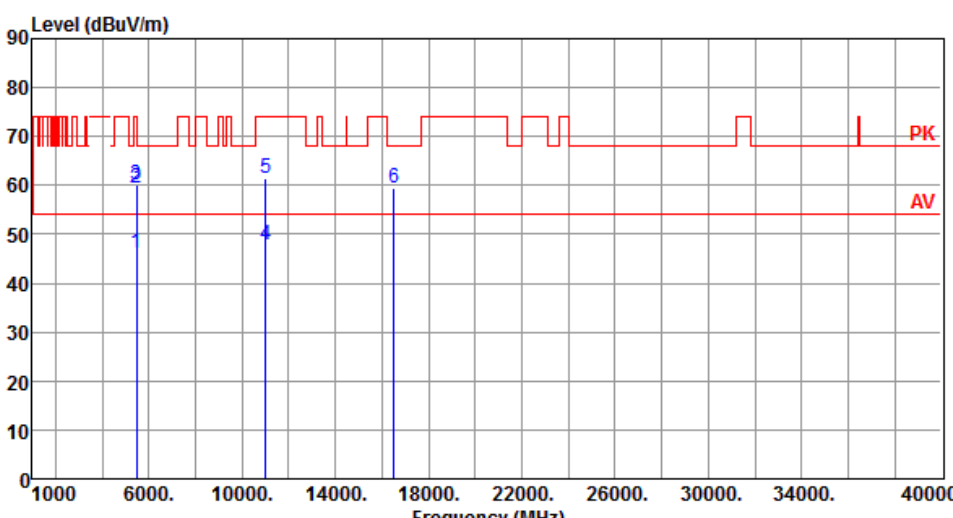
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

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

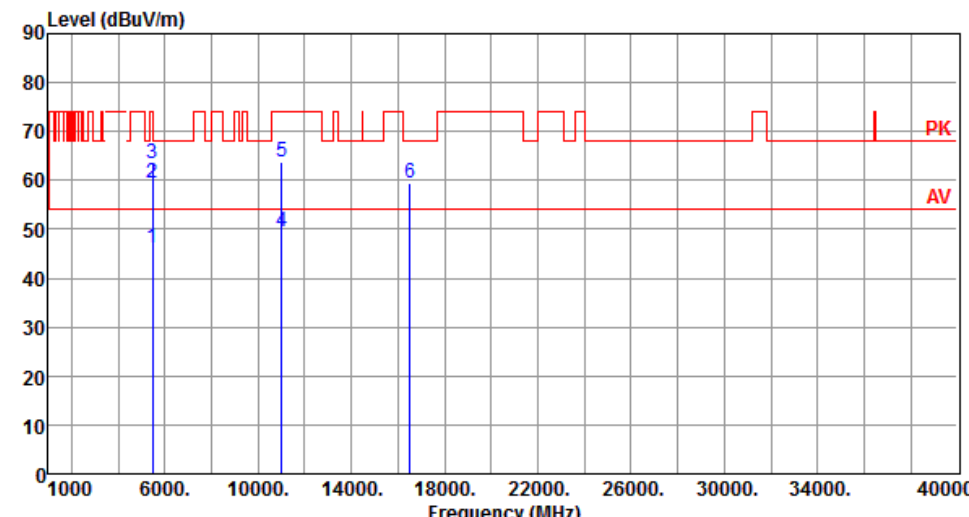
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	46.17	54.00	-7.83	40.25	5.92	Average	100	39
2	5460.00	59.38	74.00	-14.62	53.46	5.92	Peak	100	39
3	5470.00	60.21	68.20	-7.99	54.25	5.96	Peak	100	39
4	11000.00	47.73	54.00	-6.27	32.15	15.58	Average	230	326
5	11000.00	61.60	74.00	-12.40	46.02	15.58	Peak	230	326
6	16500.00	59.45	68.20	-8.75	43.62	15.83	Peak	100	50

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

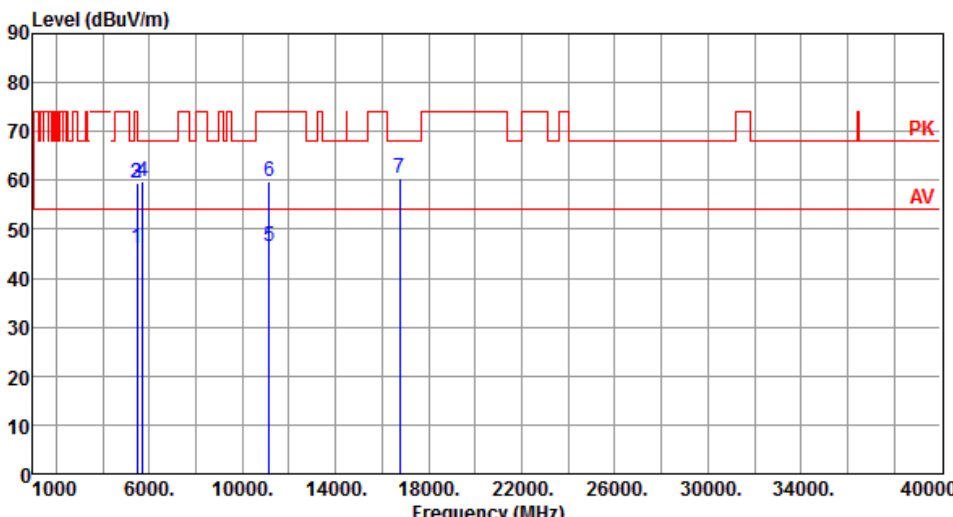
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	46.16	54.00	-7.84	40.24	5.92	Average	240	331
2	5460.00	59.53	74.00	-14.47	53.61	5.92	Peak	240	331
3	5470.00	63.30	68.20	-4.90	57.34	5.96	Peak	240	331
4	11000.00	49.60	54.00	-4.40	34.02	15.58	Average	185	172
5	11000.00	63.61	74.00	-10.39	48.03	15.58	Peak	185	172
6	16500.00	59.35	68.20	-8.85	43.52	15.83	Peak	100	30

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

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



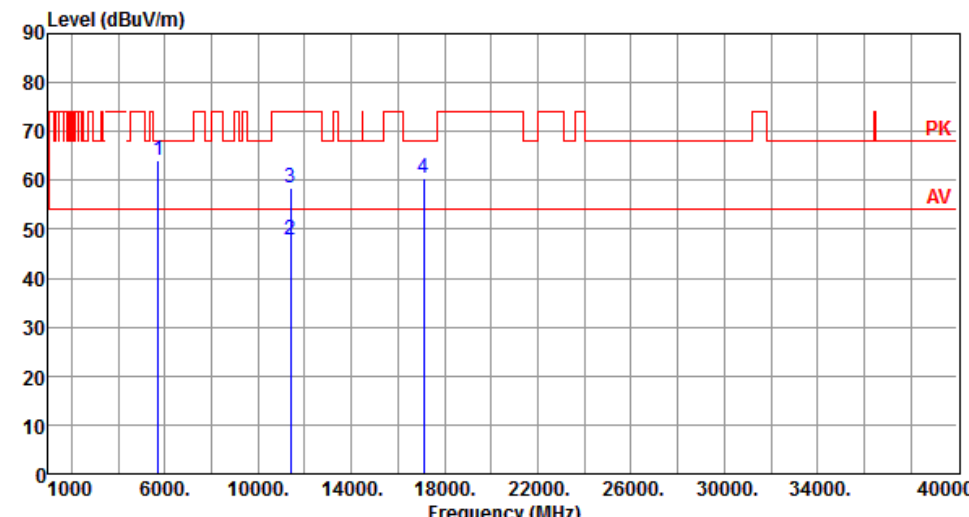
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.17	54.00	-7.83	40.25	5.92	Average	100	38
2	5460.00	59.38	74.00	-14.62	53.46	5.92	Peak	100	38
3	5470.00	59.54	68.20	-8.66	53.58	5.96	Peak	100	38
4	5725.00	59.88	68.20	-8.32	53.59	6.29	Peak	100	38
5	11160.00	46.44	54.00	-7.56	31.18	15.26	Average	220	329
6	11160.00	59.63	74.00	-14.37	44.37	15.26	Peak	220	329
7	16740.00	60.46	68.20	-7.74	43.61	16.85	Peak	100	50

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

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		
Level (dBuV/m)			

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



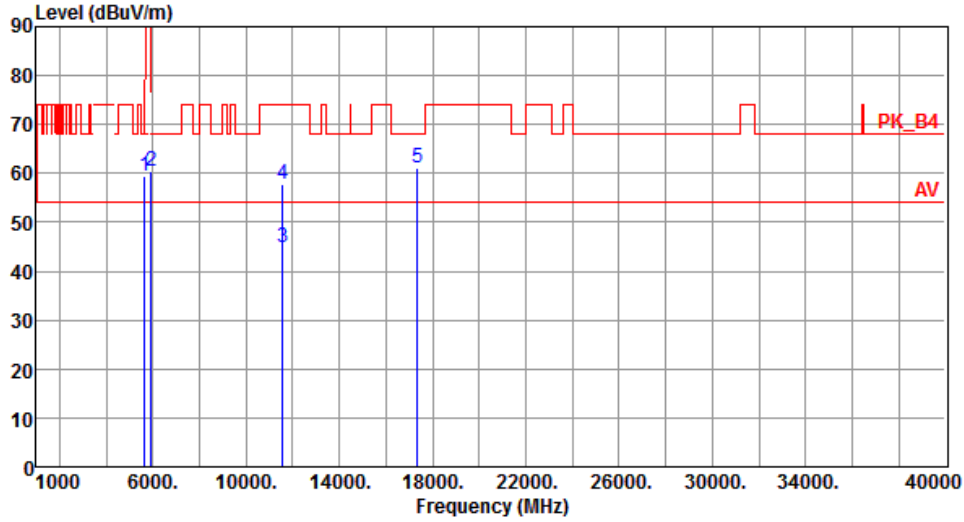
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.03	68.20	-4.17	57.74	6.29	Peak	222	327
2	11400.00	47.89	54.00	-6.11	32.56	15.33	Average	174	190
3	11400.00	58.49	74.00	-15.51	43.16	15.33	Peak	174	190
4	17100.00	60.47	68.20	-7.73	43.58	16.89	Peak	100	80

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

Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		
Level (dBUV/m)			

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

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

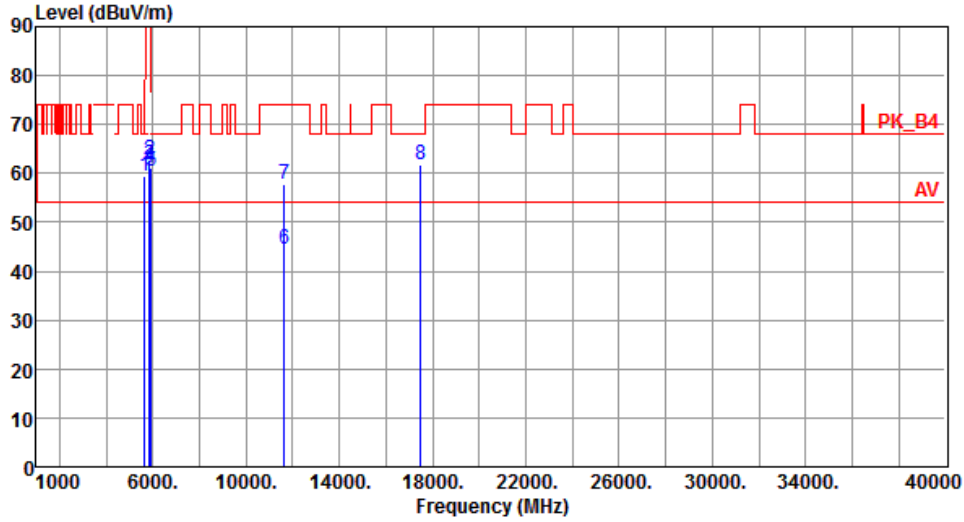


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.49	68.20	-8.71	53.58	5.91	Peak	100	178
2	5925.00	60.44	68.20	-7.76	53.62	6.82	Peak	100	178
3	11570.00	44.94	54.00	-9.06	29.64	15.30	Average	100	20
4	11570.00	57.88	74.00	-16.12	42.58	15.30	Peak	100	20
5	17355.00	61.07	68.20	-7.13	43.46	17.61	Peak	100	50

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

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		
Level (dBuV/m) </			

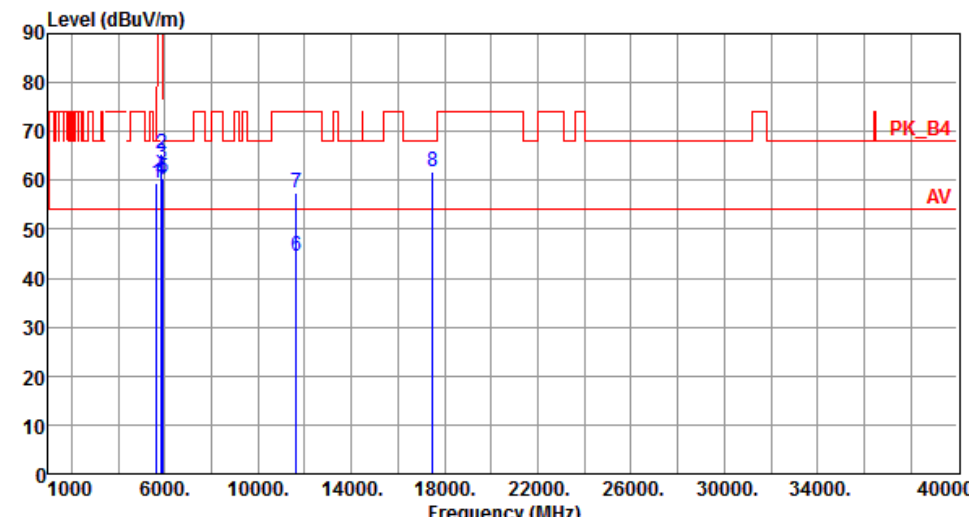
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.33	68.20	-8.87	53.42	5.91	Peak	100	177
2	5850.00	62.92	122.20	-59.28	56.25	6.67	Peak	100	177
3	5855.00	61.80	110.80	-49.00	55.12	6.68	Peak	100	177
4	5875.00	61.08	105.20	-44.12	54.36	6.72	Peak	100	177
5	5925.00	60.39	68.20	-7.81	53.57	6.82	Peak	100	177
6	11650.00	44.40	54.00	-9.60	29.34	15.06	Average	100	40
7	11650.00	57.62	74.00	-16.38	42.56	15.06	Peak	100	40
8	17475.00	61.91	68.20	-6.29	43.68	18.23	Peak	100	60

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

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

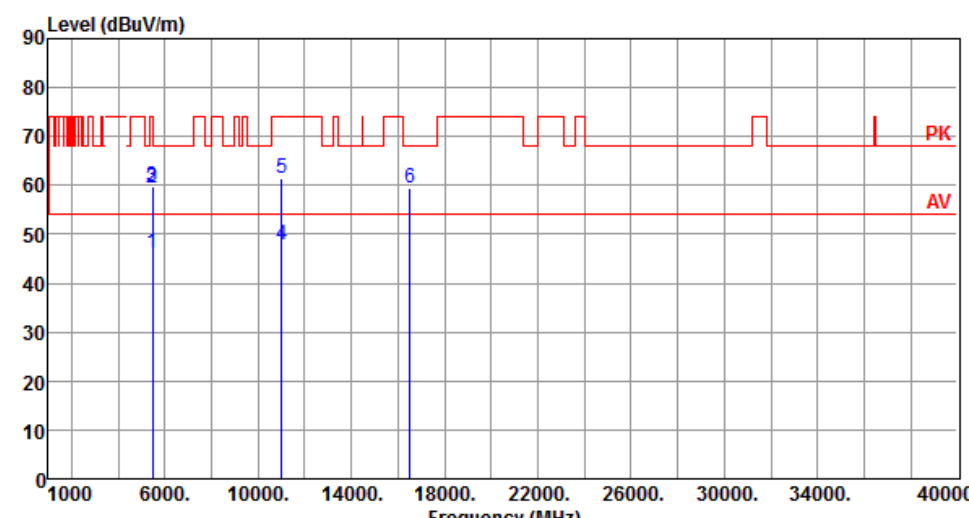


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.47	68.20	-8.73	53.56	5.91	Peak	239	34
2	5850.00	65.33	122.20	-56.87	58.66	6.67	Peak	239	34
3	5855.00	63.34	110.80	-47.46	56.66	6.68	Peak	239	34
4	5875.00	60.17	105.20	-45.03	53.45	6.72	Peak	239	34
5	5925.00	60.38	68.20	-7.82	53.56	6.82	Peak	239	34
6	11650.00	44.51	54.00	-9.49	29.45	15.06	Average	100	50
7	11650.00	57.53	74.00	-16.47	42.47	15.06	Peak	100	50
8	17475.00	61.82	68.20	-6.38	43.59	18.23	Peak	100	90

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

3.5.12 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



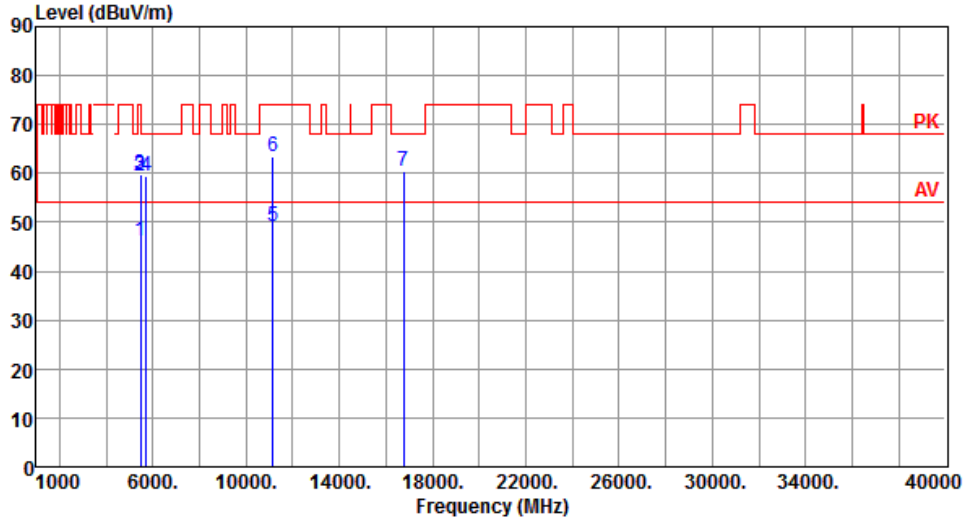
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.29	54.00	-7.71	40.37	5.92	Average	100	42
2	5460.00	59.48	74.00	-14.52	53.56	5.92	Peak	100	42
3	5470.00	59.77	68.20	-8.43	53.81	5.96	Peak	100	42
4	11000.00	47.73	54.00	-6.27	32.15	15.58	Average	225	327
5	11000.00	61.55	74.00	-12.45	45.97	15.58	Peak	225	327
6	16500.00	59.41	68.20	-8.79	43.58	15.83	Peak	100	230

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

Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Vertical		
Level (dBuV/m)			

Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Horizontal		
Level (dBUV/m)			

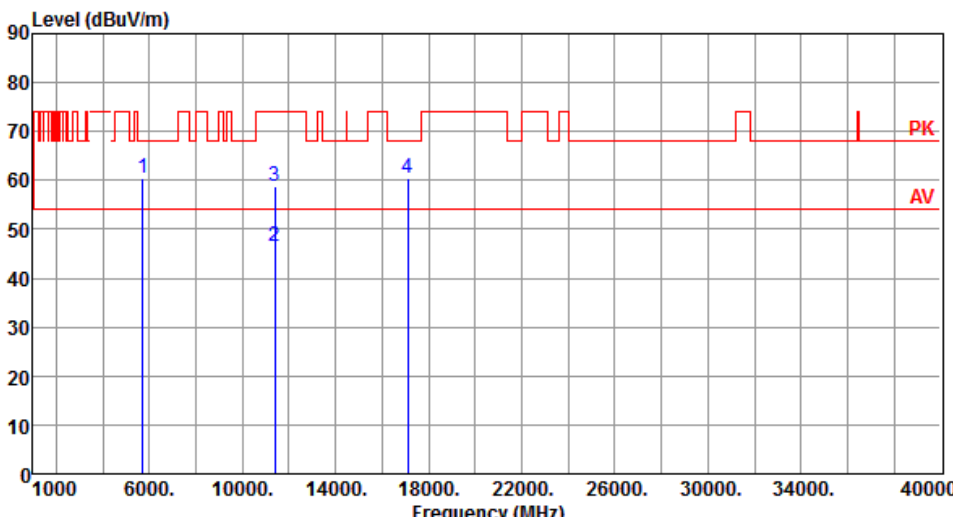
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.12	54.00	-7.88	40.20	5.92	Average	240	335
2	5460.00	59.36	74.00	-14.64	53.44	5.92	Peak	240	335
3	5470.00	59.64	68.20	-8.56	53.68	5.96	Peak	240	335
4	5725.00	59.53	68.20	-8.67	53.24	6.29	Peak	240	335
5	11160.00	49.11	54.00	-4.89	33.85	15.26	Average	187	169
6	11160.00	63.47	74.00	-10.53	48.21	15.26	Peak	187	169
7	16740.00	60.31	68.20	-7.89	43.46	16.85	Peak	100	20

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

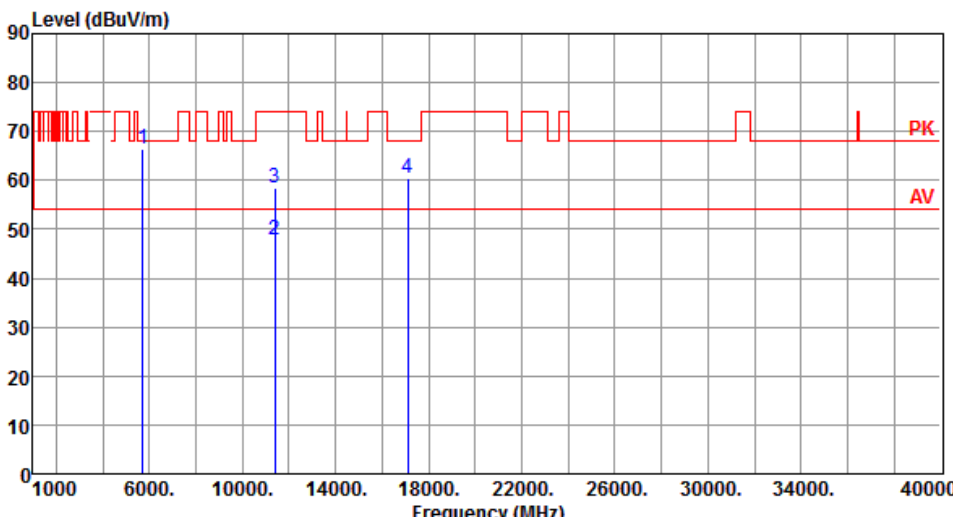
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	60.55	68.20	-7.65	54.26	6.29	Peak	100	37
2	11400.00	46.54	54.00	-7.46	31.21	15.33	Average	100	325
3	11400.00	58.91	74.00	-15.09	43.58	15.33	Peak	100	325
4	17100.00	60.46	68.20	-7.74	43.57	16.89	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).

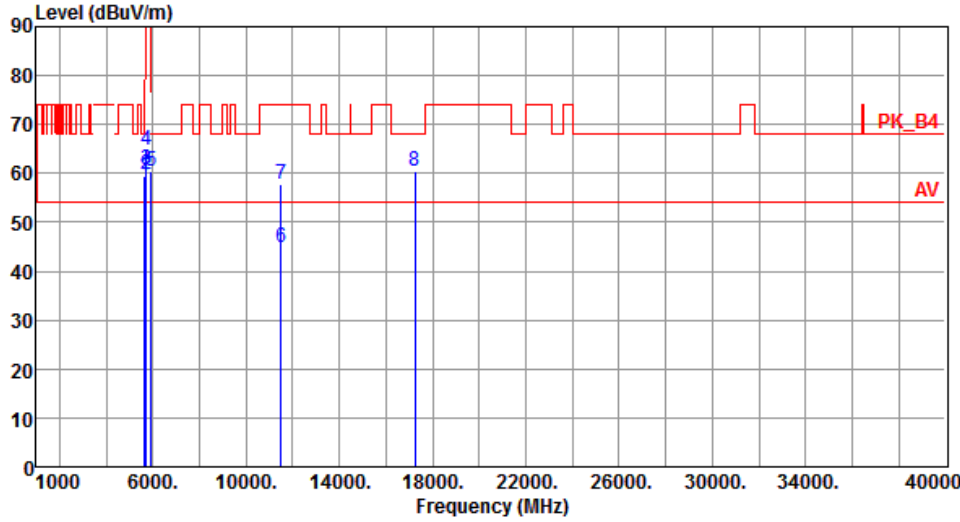
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	66.42	68.20	-1.78	60.13	6.29	Peak	221	325
2	11400.00	47.74	54.00	-6.26	32.41	15.33	Average	170	185
3	11400.00	58.38	74.00	-15.62	43.05	15.33	Peak	170	185
4	17100.00	60.51	68.20	-7.69	43.62	16.89	Peak	100	80

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

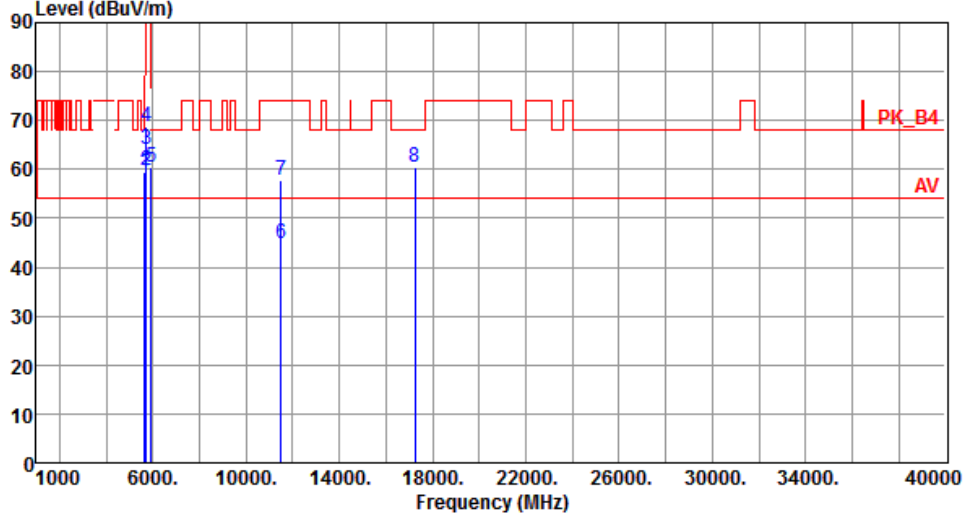
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.43	68.20	-8.77	53.52	5.91	Peak	100	174
2	5700.00	59.68	105.20	-45.52	53.45	6.23	Peak	100	174
3	5720.00	60.89	110.80	-49.91	54.61	6.28	Peak	100	174
4	5725.00	64.78	122.20	-57.42	58.49	6.29	Peak	100	174
5	5925.00	60.39	68.20	-7.81	53.57	6.82	Peak	100	174
6	11490.00	44.80	54.00	-9.20	29.35	15.45	Average	100	25
7	11490.00	57.71	74.00	-16.29	42.26	15.45	Peak	100	25
8	17235.00	60.45	68.20	-7.75	43.47	16.98	Peak	100	30

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

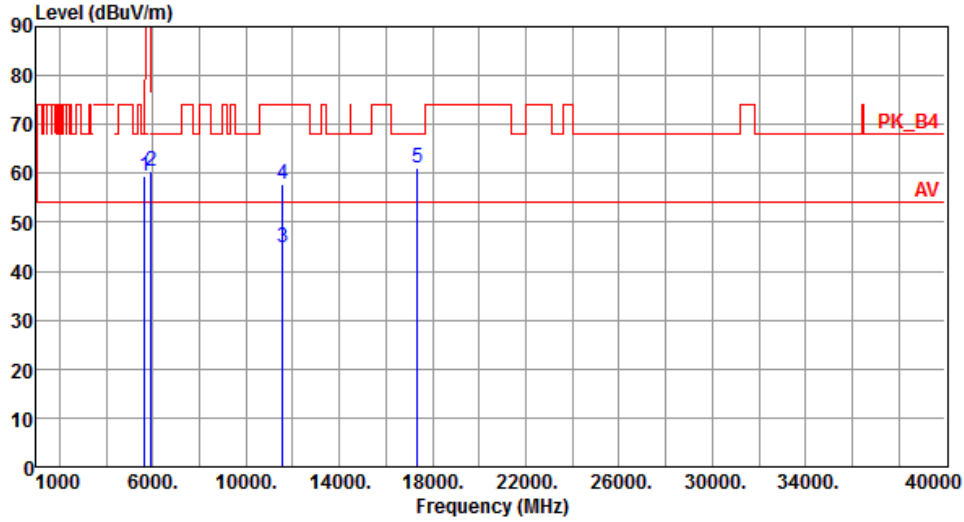
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.38	68.20	-8.82	53.47	5.91	Peak	250	37
2	5700.00	59.85	105.20	-45.35	53.62	6.23	Peak	250	37
3	5720.00	63.95	110.80	-46.85	57.67	6.28	Peak	250	37
4	5725.00	68.66	122.20	-53.54	62.37	6.29	Peak	250	37
5	5925.00	60.46	68.20	-7.74	53.64	6.82	Peak	250	37
6	11490.00	44.93	54.00	-9.07	29.48	15.45	Average	100	60
7	11490.00	57.82	74.00	-16.18	42.37	15.45	Peak	100	60
8	17235.00	60.54	68.20	-7.66	43.56	16.98	Peak	100	90

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

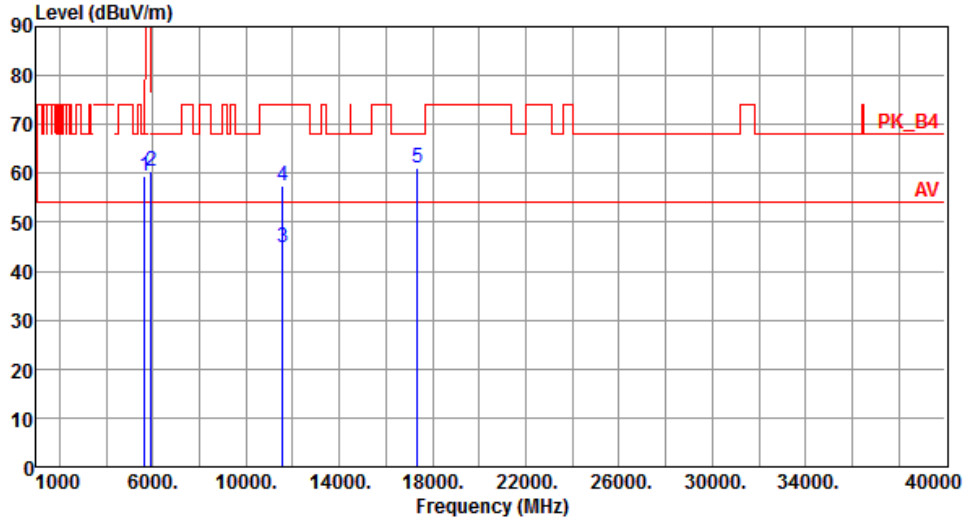
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.55	68.20	-8.65	53.64	5.91	Peak	100	178
2	5925.00	60.37	68.20	-7.83	53.55	6.82	Peak	100	178
3	11570.00	44.81	54.00	-9.19	29.51	15.30	Average	100	30
4	11570.00	57.93	74.00	-16.07	42.63	15.30	Peak	100	30
5	17355.00	61.12	68.20	-7.08	43.51	17.61	Peak	100	90

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

Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.48	68.20	-8.72	53.57	5.91	Peak	243	30
2	5925.00	60.39	68.20	-7.81	53.57	6.82	Peak	243	30
3	11570.00	44.96	54.00	-9.04	29.66	15.30	Average	100	80
4	11570.00	57.61	74.00	-16.39	42.31	15.30	Peak	100	80
5	17355.00	61.06	68.20	-7.14	43.45	17.61	Peak	100	85

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

Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Vertical		
Level (dBUV/m) <			

Configuration 4: Dipole antenna (Antenna No.1), Y-plane.

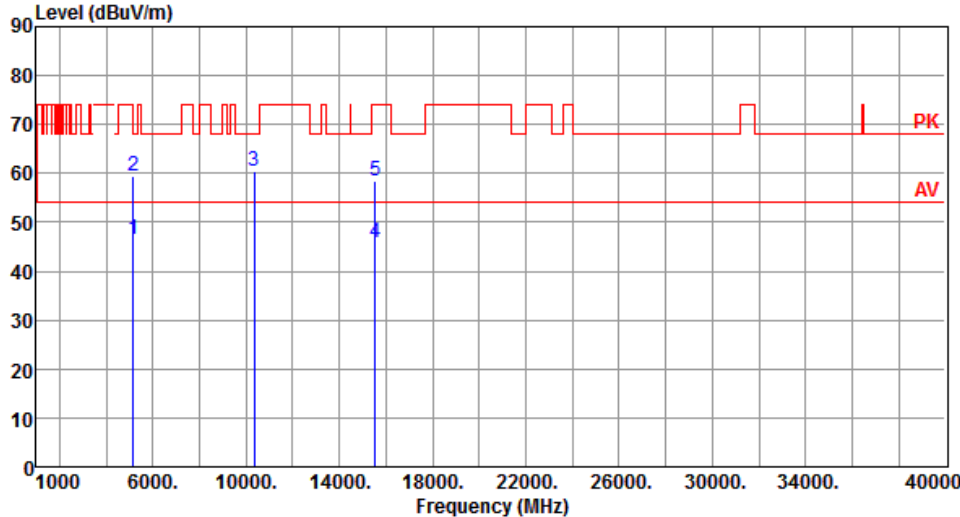
3.5.13 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Vertical		
Level (dBuV/m) <			

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

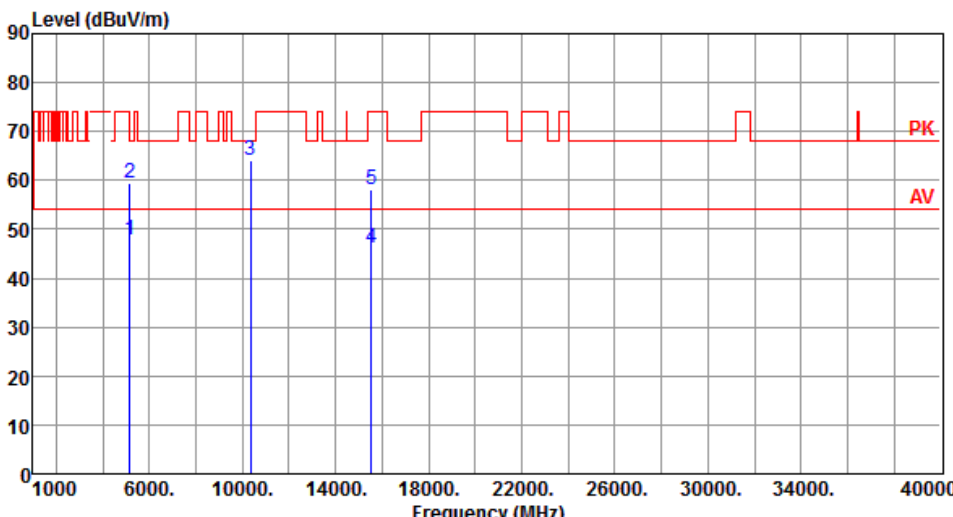
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	46.60	54.00	-7.40	40.65	5.95	Average	169	211
2	5150.00	59.42	74.00	-14.58	53.47	5.95	Peak	169	211
3	10360.00	60.36	68.20	-7.84	45.26	15.10	Peak	140	316
4	15540.00	45.91	54.00	-8.09	30.26	15.65	Average	100	30
5	15540.00	58.34	74.00	-15.66	42.69	15.65	Peak	100	30

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

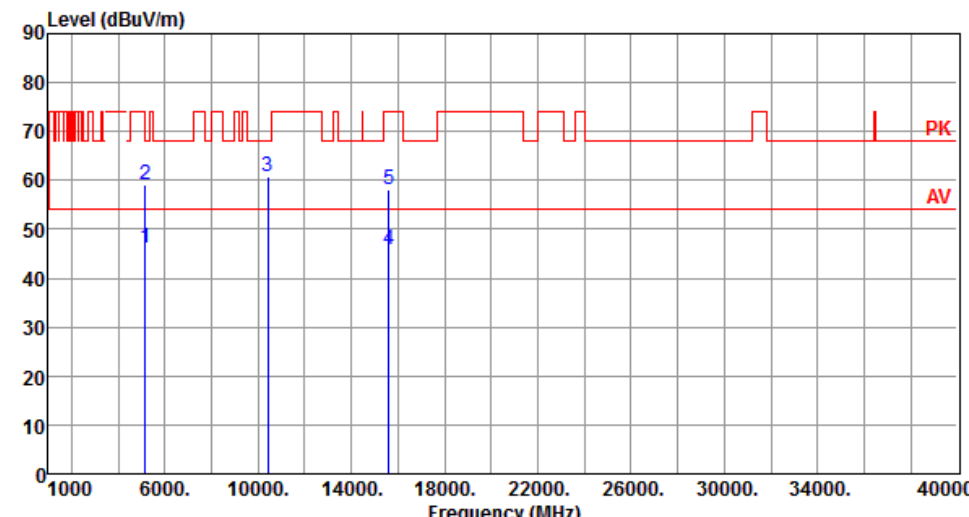
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	47.67	54.00	-6.33	41.72	5.95	Average	249	5
2	5150.00	59.57	74.00	-14.43	53.62	5.95	Peak	249	5
3	10360.00	64.11	68.20	-4.09	49.01	15.10	Peak	189	175
4	15540.00	46.19	54.00	-7.81	30.54	15.65	Average	100	60
5	15540.00	58.27	74.00	-15.73	42.62	15.65	Peak	100	60

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

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



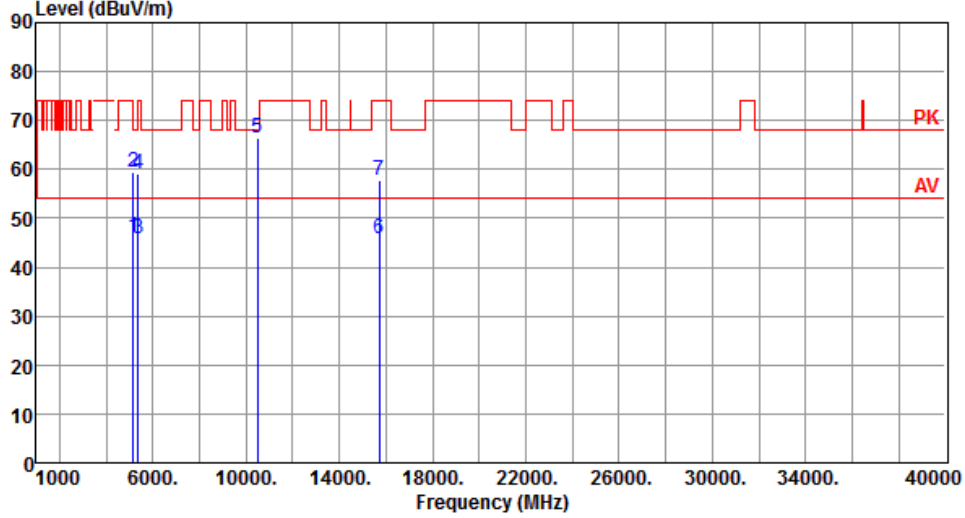
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.16	54.00	-7.84	40.21	5.95	Average	169	211
2	5150.00	59.21	74.00	-14.79	53.26	5.95	Peak	169	211
3	10400.00	60.64	68.20	-7.56	45.31	15.33	Peak	140	317
4	15600.00	45.91	54.00	-8.09	30.42	15.49	Average	100	50
5	15600.00	58.12	74.00	-15.88	42.63	15.49	Peak	100	50

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

Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		
Level (dBuV/m)			

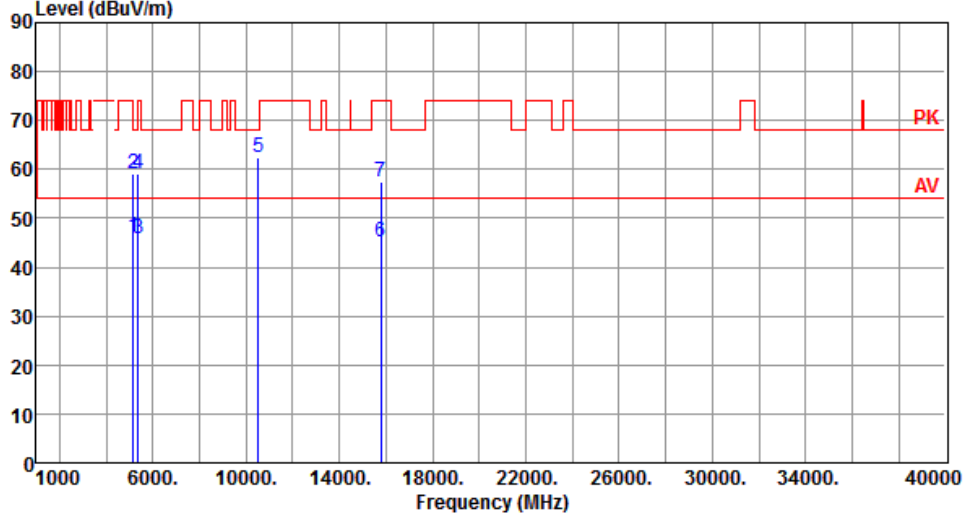
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.21	54.00	-7.79	40.26	5.95	Average	246	7
2	5150.00	59.49	74.00	-14.51	53.54	5.95	Peak	246	7
3	5350.00	45.98	54.00	-8.02	40.58	5.40	Average	246	7
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	246	7
5	10480.00	66.26	68.20	-1.94	50.95	15.31	Peak	188	175
6	15720.00	45.72	54.00	-8.28	30.49	15.23	Average	100	25
7	15720.00	57.85	74.00	-16.15	42.62	15.23	Peak	100	25

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

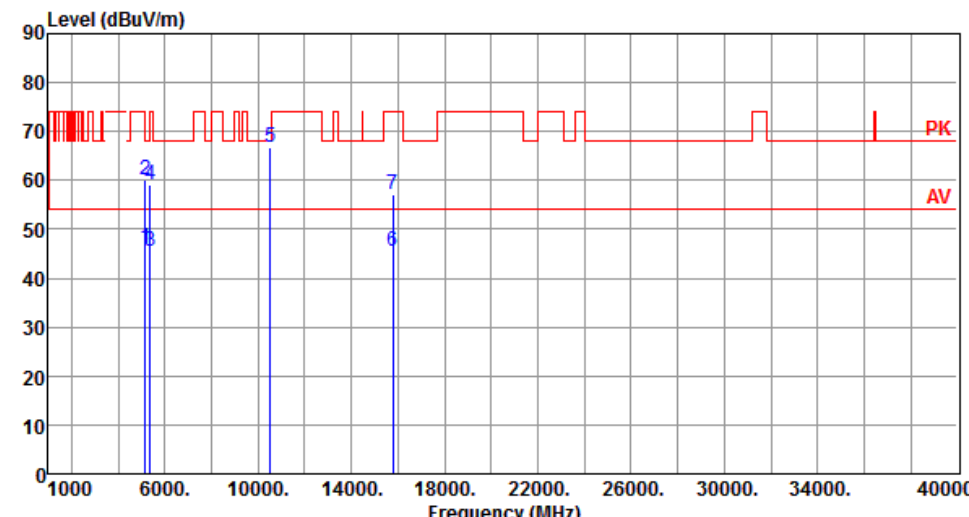
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	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	46.26	54.00	-7.74	40.31	5.95	Average	168	212
2	5150.00	59.21	74.00	-14.79	53.26	5.95	Peak	168	212
3	5350.00	45.94	54.00	-8.06	40.54	5.40	Average	168	212
4	5350.00	59.09	74.00	-14.91	53.69	5.40	Peak	168	212
5	10520.00	62.49	68.20	-5.71	47.16	15.33	Peak	142	310
6	15780.00	45.31	54.00	-8.69	30.36	14.95	Average	100	50
7	15780.00	57.44	74.00	-16.56	42.49	14.95	Peak	100	50

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

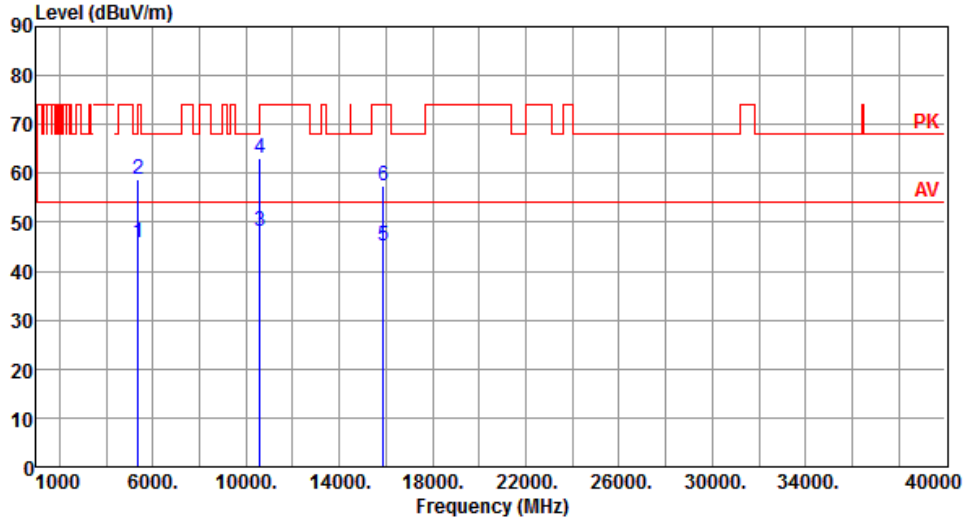
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	46.21	54.00	-7.79	40.26	5.95	Average	256	4
2	5150.00	60.26	74.00	-13.74	54.31	5.95	Peak	256	4
3	5350.00	45.64	54.00	-8.36	40.24	5.40	Average	256	4
4	5350.00	58.96	74.00	-15.04	53.56	5.40	Peak	256	4
5	10520.00	66.67	68.20	-1.53	51.34	15.33	Peak	182	177
6	15780.00	45.37	54.00	-8.63	30.42	14.95	Average	100	80
7	15780.00	57.26	74.00	-16.74	42.31	14.95	Peak	100	80

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

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

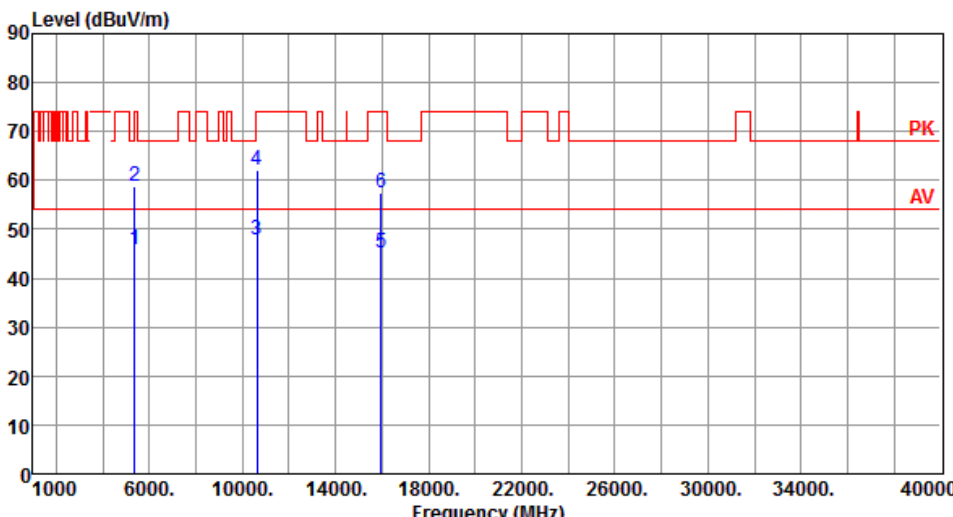


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.71	54.00	-8.29	40.31	5.40	Average	144	317
2	5350.00	58.64	74.00	-15.36	53.24	5.40	Peak	144	317
3	10600.00	48.07	54.00	-5.93	32.66	15.41	Average	142	318
4	10600.00	62.98	74.00	-11.02	47.57	15.41	Peak	142	318
5	15900.00	45.27	54.00	-8.73	30.38	14.89	Average	100	40
6	15900.00	57.42	74.00	-16.58	42.53	14.89	Peak	100	40

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

Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		
Level (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	45.75	54.00	-8.25	40.35	5.40	Average	170	211
2	5350.00	58.85	74.00	-15.15	53.45	5.40	Peak	170	211
3	10640.00	47.81	54.00	-6.19	32.45	15.36	Average	138	317
4	10640.00	62.22	74.00	-11.78	46.86	15.36	Peak	138	317
5	15960.00	45.26	54.00	-8.74	30.35	14.91	Average	100	90
6	15960.00	57.48	74.00	-16.52	42.57	14.91	Peak	100	90

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

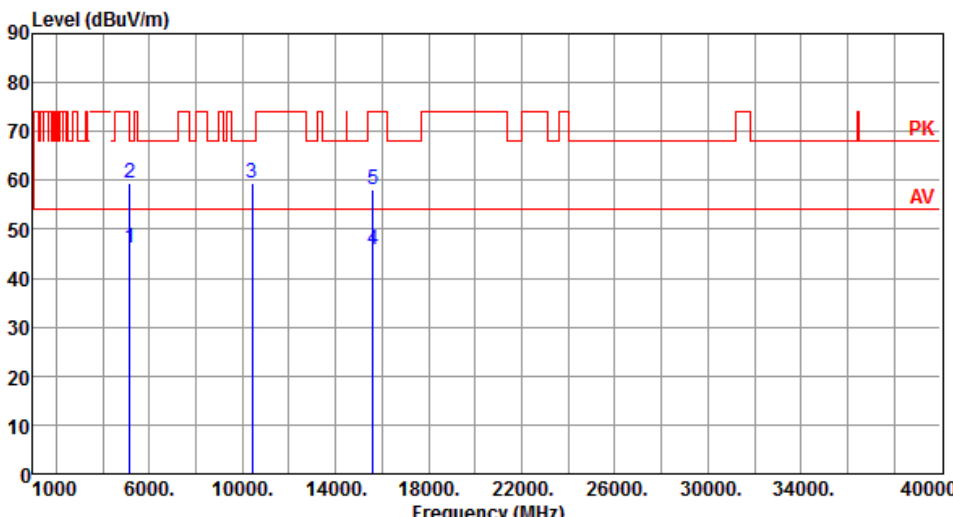
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		
Level (dBUV/m)			

3.5.15 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical		
Level (dBuV/m) </			

Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Horizontal		

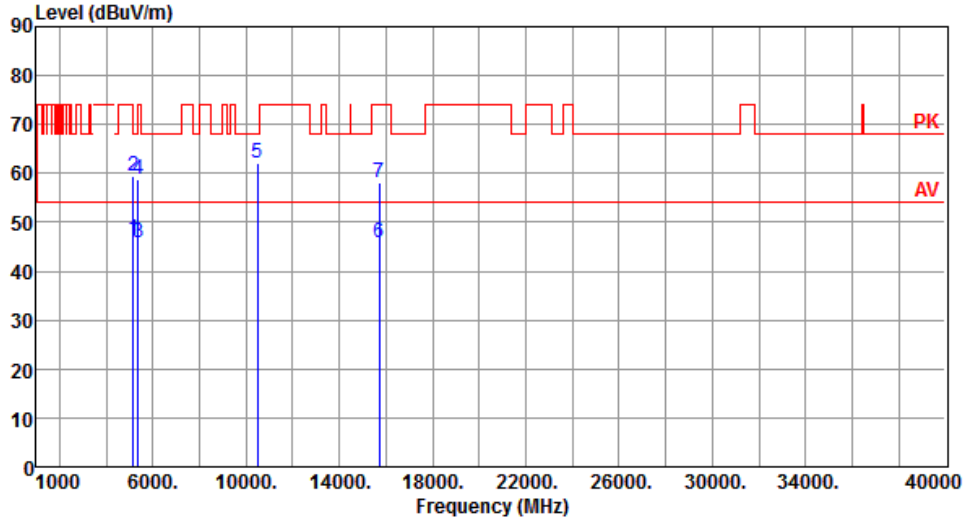


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.23	54.00	-7.77	40.28	5.95	Average	172	213
2	5150.00	59.40	74.00	-14.60	53.45	5.95	Peak	172	213
3	10400.00	59.59	68.20	-8.61	44.26	15.33	Peak	130	310
4	15600.00	45.82	54.00	-8.18	30.33	15.49	Average	100	70
5	15600.00	58.06	74.00	-15.94	42.57	15.49	Peak	100	70

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

Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Vertical		
Level (dBuV/m) </			

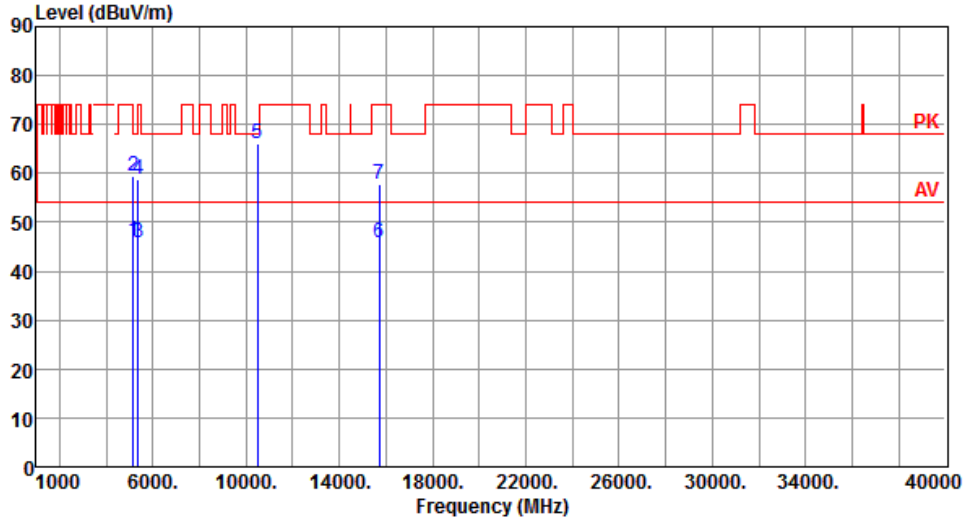
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.40	54.00	-7.60	40.45	5.95	Average	160	216
2	5150.00	59.51	74.00	-14.49	53.56	5.95	Peak	160	216
3	5350.00	45.67	54.00	-8.33	40.27	5.40	Average	160	216
4	5350.00	58.92	74.00	-15.08	53.52	5.40	Peak	160	216
5	10480.00	62.19	68.20	-6.01	46.88	15.31	Peak	138	315
6	15720.00	45.68	54.00	-8.32	30.45	15.23	Average	100	20
7	15720.00	57.98	74.00	-16.02	42.75	15.23	Peak	100	20

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

Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Vertical		

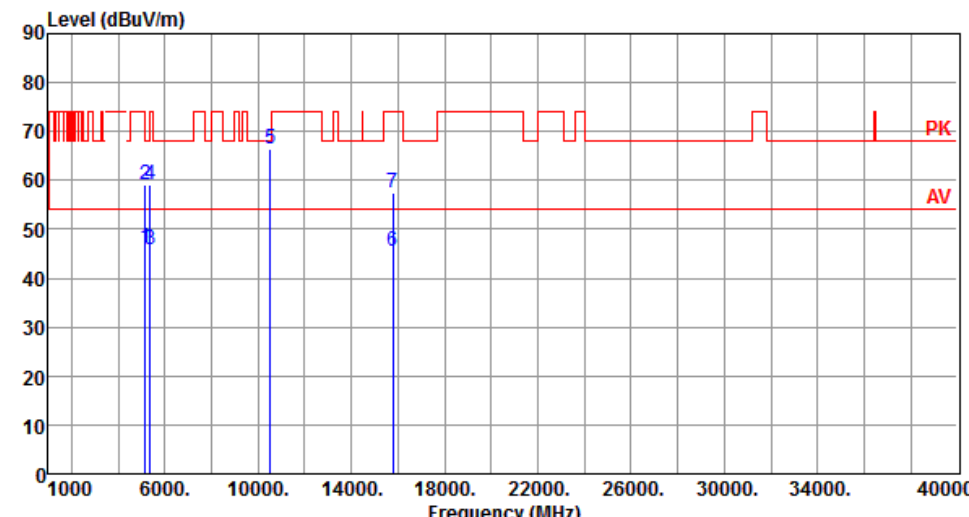


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.27	54.00	-7.73	40.32	5.95	Average	252	7
2	5150.00	59.42	74.00	-14.58	53.47	5.95	Peak	252	7
3	5350.00	45.79	54.00	-8.21	40.39	5.40	Average	252	7
4	5350.00	58.94	74.00	-15.06	53.54	5.40	Peak	252	7
5	10480.00	66.12	68.20	-2.08	50.81	15.31	Peak	191	176
6	15720.00	45.88	54.00	-8.12	30.65	15.23	Average	100	30
7	15720.00	57.81	74.00	-16.19	42.58	15.23	Peak	100	30

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

Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Horizontal		
Level (dBuV/m) </			

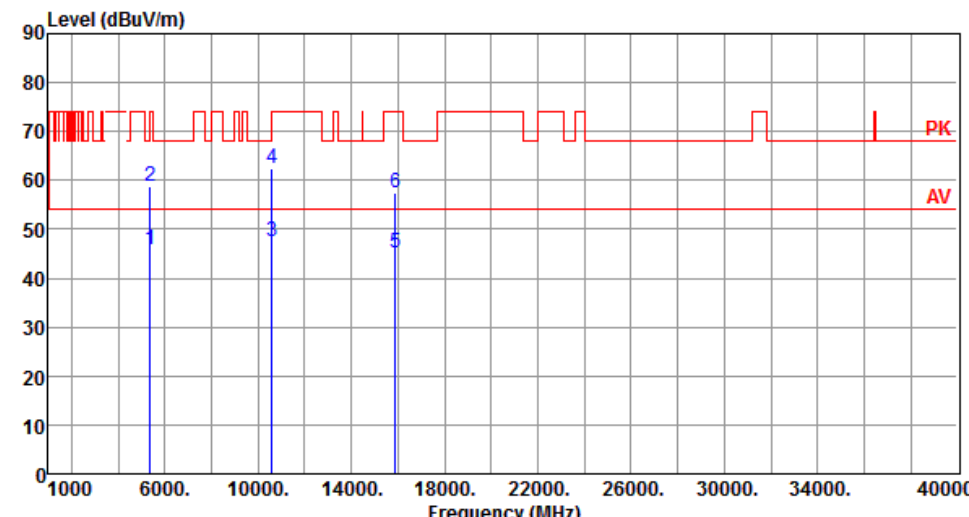
Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	46.21	54.00	-7.79	40.26	5.95	Average	249	7
2	5150.00	59.21	74.00	-14.79	53.26	5.95	Peak	249	7
3	5350.00	45.85	54.00	-8.15	40.45	5.40	Average	249	7
4	5350.00	59.06	74.00	-14.94	53.66	5.40	Peak	249	7
5	10520.00	66.58	68.20	-1.62	51.25	15.33	Peak	190	174
6	15780.00	45.51	54.00	-8.49	30.56	14.95	Average	100	90
7	15780.00	57.31	74.00	-16.69	42.36	14.95	Peak	100	90

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

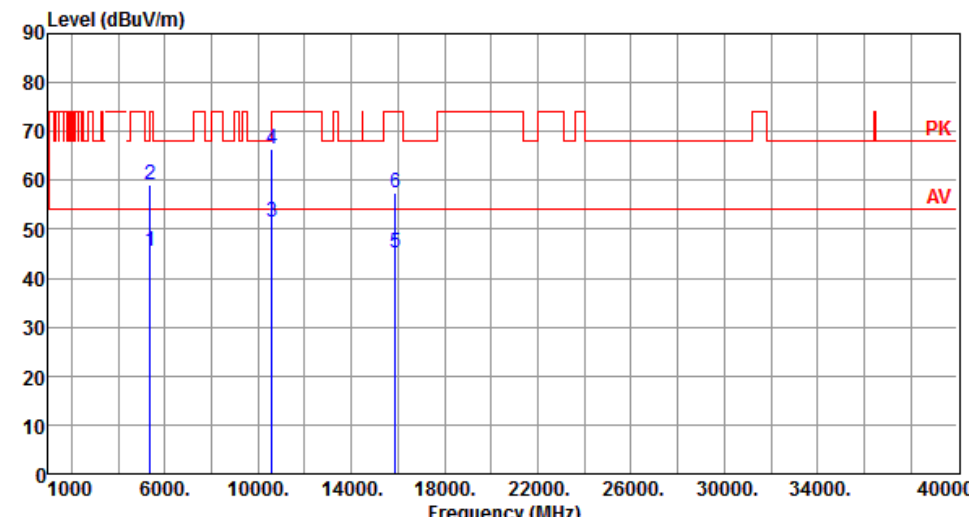
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.68	54.00	-8.32	40.28	5.40	Average	169	214
2	5350.00	58.87	74.00	-15.13	53.47	5.40	Peak	169	214
3	10600.00	47.64	54.00	-6.36	32.23	15.41	Average	130	319
4	10600.00	62.52	74.00	-11.48	47.11	15.41	Peak	130	319
5	15900.00	45.17	54.00	-8.83	30.28	14.89	Average	100	40
6	15900.00	57.45	74.00	-16.55	42.56	14.89	Peak	100	40

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

Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Vertical		

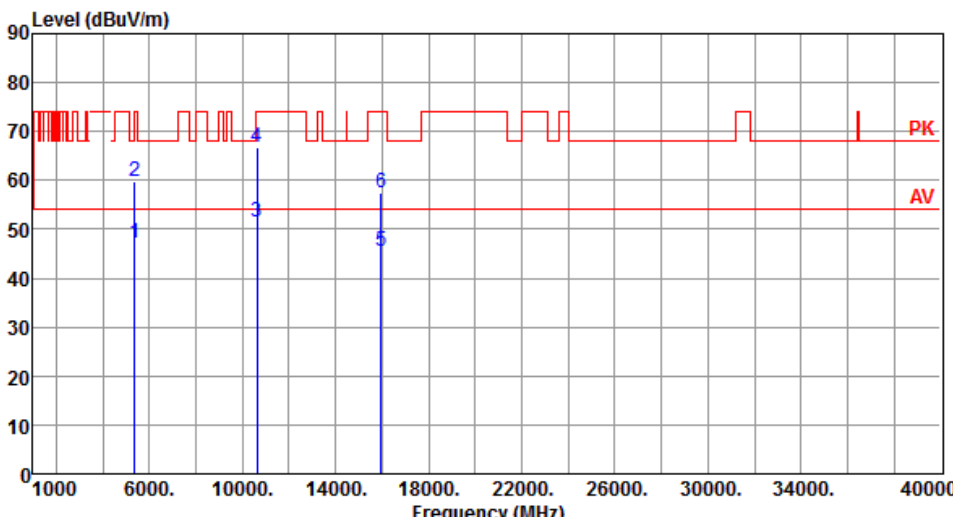


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.65	54.00	-8.35	40.25	5.40	Average	240	8
2	5350.00	59.05	74.00	-14.95	53.65	5.40	Peak	240	8
3	10600.00	51.50	54.00	-2.50	36.09	15.41	Average	184	174
4	10600.00	66.38	74.00	-7.62	50.97	15.41	Peak	184	174
5	15900.00	45.21	54.00	-8.79	30.32	14.89	Average	100	60
6	15900.00	57.47	74.00	-16.53	42.58	14.89	Peak	100	60

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

Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	HT20	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	47.08	54.00	-6.92	41.68	5.40	Average	246	3
2	5350.00	59.69	74.00	-14.31	54.29	5.40	Peak	246	3
3	10640.00	51.57	54.00	-2.43	36.21	15.36	Average	187	179
4	10640.00	66.82	74.00	-7.18	51.46	15.36	Peak	187	179
5	15960.00	45.45	54.00	-8.55	30.54	14.91	Average	100	30
6	15960.00	57.45	74.00	-16.55	42.54	14.91	Peak	100	30

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

3.6 Frequency Stability

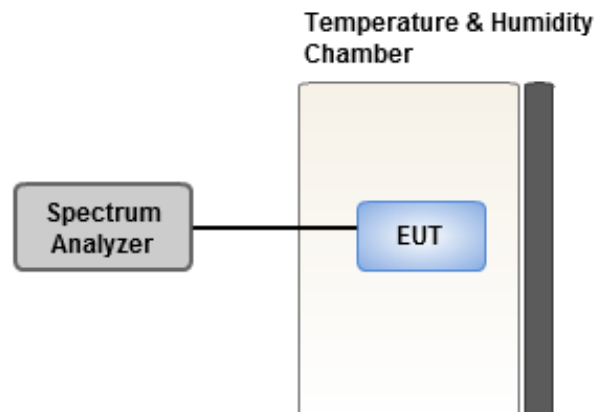
3.6.1 Limit of Frequency Stability

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°C Vmax	-2.37	-2.26	-2.60	-2.18
T20°C Vmin	-3.20	-2.71	-2.65	-3.19
T70°C Vnom	-3.17	-2.69	-2.61	-3.17
T60°C Vnom	-3.16	-2.70	-2.59	-3.15
T50°C Vnom	-3.11	-2.66	-2.58	-3.12
T40°C Vnom	-2.05	-1.47	-1.59	-1.50
T30°C Vnom	-2.05	-1.41	-1.57	-1.49
T20°C Vnom	-2.68	-2.36	-2.68	-1.83
T10°C Vnom	-0.15	0.34	-0.19	-0.24
T0°C Vnom	2.66	3.31	3.48	2.86
T-10°C Vnom	4.85	4.82	4.88	5.20
T-20°C Vnom	5.52	5.91	5.37	5.94
T-30°C Vnom	4.92	4.98	5.45	4.72
Vnom [Vac]: 120	Vmax [Vac]: 138			Vmin [Vac]: 102
Tnom [°C]: 20	Tmax [°C]: 70			Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	-2.15	-1.77	-1.98	-2.29
T20°C Vmin	-3.31	-3.04	-3.04	-3.54
T70°C Vnom	-2.16	-2.58	-2.24	-2.15
T60°C Vnom	-2.01	-2.08	-1.61	-1.74
T50°C Vnom	-2.01	-2.26	-2.26	-2.24
T40°C Vnom	-0.16	-0.19	0.07	-0.36
T30°C Vnom	-2.12	-1.87	-2.33	-1.46
T20°C Vnom	-2.31	-1.98	-1.79	-2.45
T10°C Vnom	-0.22	-0.01	0.34	-0.55
T0°C Vnom	1.87	2.37	2.32	1.99
T-10°C Vnom	4.72	5.36	5.12	5.24
T-20°C Vnom	5.38	5.44	5.04	5.09
T-30°C Vnom	4.78	5.14	4.91	4.82
Vnom [Vac]: 120	Vmax [Vac]: 138			Vmin [Vac]: 102
Tnom [°C]: 20	Tmax [°C]: 70			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

Tel: 886-2-2601-1640

No. 30-2, Ding Fwu Tsuen, Lin
Kou District, New Taipei City,
Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St.,
Kwei Shan District, Tao Yuan City
333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd
St., Kwei Shan District, Tao Yuan
City 333, Taiwan, R.O.C.

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

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==