FCC Test Report

FCC ID	:	**TLZ-CM299**
Equipment	:	**IEEE 802.11 1X1 ac/a/b/g/n Wireless LAN + Bluetooth Module**
Model No.	:	**AW-CM299**
Brand Name	:	**AzureWave**
Applicant	:	**AzureWave Technologies, Inc.**
Address	:	**8F, No. 94, Baozhong Rd., Xindian Dist., New Taipei City, Taiwan 231**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Jul. 18, 2017**
Tested Date	:	**Nov. 07, 2017 ~ Jan. 15, 2018**

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

Reviewed by: **Approved by:**

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

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR771801AN	Rev. 01	Initial issue	Jan. 31, 2018

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.153MHz 50.02 (Margin -15.80dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 53.85 (Margin -0.15dB) - AV 5470.00MHz 73.85 (Margin -0.15dB) - 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: 15.97 5250~5350MHz: 16.49 5470~5725MHz: 16.47 5725~5850MHz: 16.47	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

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250 5250-5350 5470-5725 5725-5850	a	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 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 [8] 149-165 [5]	1	MCS 0-7
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [3] 151-159 [2]	1	MCS 0-7
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 149-165 [5]	1	MCS 0-8
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [3] 151-159 [2]	1	MCS 0-9
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530 5775	42 [1] 58 [1] 106 [1] 155 [1]	1	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: The device has disabled the 5600-5650MHz band by S/W setting.					

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	Yageo	ANT5320LL04R2455A	Chip	N/A	2.09	4.32			

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc from host 1.8Vdc from host

1.1.4 Accessories

N/A

1.1.5 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	134	5670
64	5320	151	5755
100	5500	159	5795
104	5520	**VHT80**	
108	5540	42	5210
112	5560	58	5290
116	5580	106	5530
132	5660	155	5775
136	5680	---	---
140	5700		
149	5745	---	---
153	5765	---	---
157	5785	---	---
161	5805	---	---
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	Dut labtool, Version: 2.0.0.89		
Duty Cycle and Duty Factor	**Mode**	**Duty cycle (%)**	**Duty factor (dB)**
	11a	97.08%	0.13
	VHT20	96.90%	0.14
	VHT40	94.94%	0.23
	VHT80	87.41%	0.58

1.1.7 Power Setting

For Frequency band 5150-5250 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5180	13
11a	5200	16
11a	5240	16
HT20	5180	13
HT20	5200	16
HT20	5240	16
HT40	5190	11
HT40	5230	15
VHT20	5180	13
VHT20	5200	16
VHT20	5240	16
VHT40	5190	11
VHT40	5230	15
VHT80	5210	8

For Frequency band 5250~5350 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5260	16
11a	5300	16
11a	5320	13
HT20	5260	16
HT20	5300	16
HT20	5320	13
HT40	5270	15
HT40	5310	12
VHT20	5260	16
VHT20	5300	16
VHT20	5320	13
VHT40	5270	15
VHT40	5310	12
VHT80	5290	9

For Frequency band 5470~5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5500	15
11a	5580	16
11a	5700	14
HT20	5500	15
HT20	5580	16
HT20	5700	14
HT40	5510	13
HT40	5550	16
HT40	5670	15
VHT20	5500	15
VHT20	5580	16
VHT20	5700	14
VHT40	5510	13
VHT40	5550	16
VHT40	5670	15
VHT80	5530	9

For Frequency band 5725~5850 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5745	16
11a	5785	16
11a	5825	16
HT20	5745	16
HT20	5785	16
HT20	5825	16
HT40	5755	15
HT40	5795	16
VHT20	5745	16
VHT20	5785	16
VHT20	5825	16
VHT40	5755	15
VHT40	5795	16
VHT80	5775	13

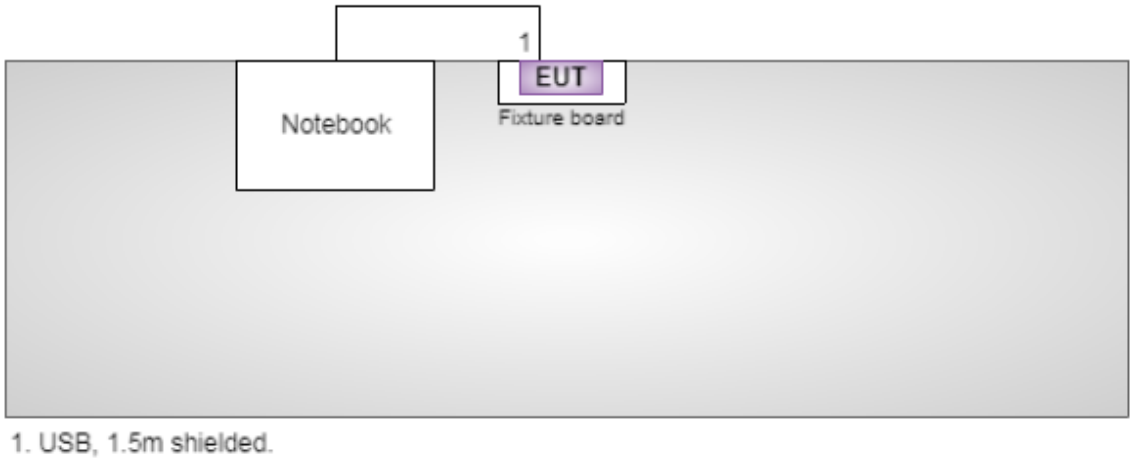
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E6430	---	USB, 1.5m shielded.
2	Fixture board	AzureWave	---	---	---

Note: No.2 was provided by applicant

1.3 Test Setup Chart

Test Setup Diagram



1. USB, 1.5m shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 26. 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 13, 2017	Nov. 12, 2018
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 18, 2017	Dec. 17, 2018
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)				
Tested Date	Nov. 07 ~ Nov. 29, 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&**S**	FSV40	101499	Dec. 16, 2016	Dec. 15, 2017
Receiver	Agilent	N9038A	MY53290044	Sep. 26, 2017	Sep. 25, 2018
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 28, 2017	Apr. 27, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 09, 2017	Feb. 08, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170508	Dec. 29, 2016	Dec. 28, 2017
Loop Antenna	TESEQ	HLA 6120	31244	Mar. 02, 2017	Mar. 01, 2018
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 09, 2016	Dec. 08, 2017
Preamplifier	EMC	EMC02325	980187	Sep. 04, 2017	Sep. 03, 2018
Preamplifier	Agilent	83017A	MY53270014	Aug. 21, 2017	Aug. 20, 2018
Preamplifier	EMC	EMC184045B	980192	Aug. 22, 2017	Aug. 21, 2018
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 04, 2017	Feb. 03, 2018
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 04, 2017	Feb. 03, 2018
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 04, 2017	Feb. 03, 2018
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 04, 2017	Feb. 03, 2018
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 04, 2017	Feb. 03, 2018
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 04, 2017	Feb. 03, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Jan. 15, 2018				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&**S**	FSV40	101499	Jan. 03, 2018	Jan. 02, 2019
Receiver	R&**S**	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 28, 2017	Apr. 27, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 09, 2017	Feb. 08, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 23, 2017	Nov. 22, 2018
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2017	Nov. 12, 2018
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 07, 2017	Dec. 06, 2018
Preamplifier	EMC	EMC02325	980187	Sep. 04, 2017	Sep. 03, 2018
Preamplifier	Agilent	83017A	MY53270014	Aug. 21, 2017	Aug. 20, 2018
Preamplifier	EMC	EMC184045B	980192	Aug. 22, 2017	Aug. 21, 2018
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Nov. 27, 2017	Nov. 26, 2018
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY32487/4	Nov. 27, 2017	Nov. 26, 2018
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Nov. 27, 2017	Nov. 26, 2018
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Nov. 27, 2017	Nov. 26, 2018
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Nov. 27, 2017	Nov. 26, 2018
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Nov. 27, 2017	Nov. 26, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Dec. 21, 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Mar. 15, 2017	Mar. 14, 2018
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2017	Nov. 26, 2018
Power Meter	Anritsu	ML2495A	1241002	Oct. 16, 2017	Oct. 15, 2018
Power Sensor	Anritsu	MA2411B	1207366	Oct. 16, 2017	Oct. 15, 2018
DC POWER SOURCE	GW INSTEK	GPC-6030D	EM892433	Oct. 26, 2017	Oct. 25, 2018
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

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

1.6 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	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Power density	±0.463 dB
Conducted emission	±2.670 dB
AC conducted emission	±2.90 dB
Radiated emission ≤ 1GHz	±3.66 dB
Radiated emission > 1GHz	±5.37 dB
Time	±0.1%
Temperature	±0.6 ^{o}C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 56%	Alex Huang
Radiated Emissions	03CH03WS	23-24°C / 61-65%	Vincent Yeh Brad Wu
RF Conducted	TH01-WS	20°C / 61%	Brad Wu

- FCC site registration No.: 207696
- IC site registration No.: 10807B-1

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	5300	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5300	6 Mbps	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700	6 Mbps	---
	HT20	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700	MCS 0	
	HT40	5190 / 5230 / 5270 / 5310 / 5510 / 5550 / 5670	MCS 0	
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230 / 5270 / 5310 / 5510 / 5550 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 / 5320 / 5500 / 5580 / 5700	MCS 0	
	VHT40	5190 / 5230 / 5270 / 5310 / 5510 / 5550 / 5670	MCS 0	
	VHT80	5210 / 5290 / 5530	MCS 0	
Frequency Stability	Un-modulation	5320	---	---

NOTE:

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

Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test Configuration**
Conducted Emissions	11a	5825	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5825	6 Mbps	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	---

NOTE:

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

3 Transmitter Test Results

3.1 Conducted Emissions

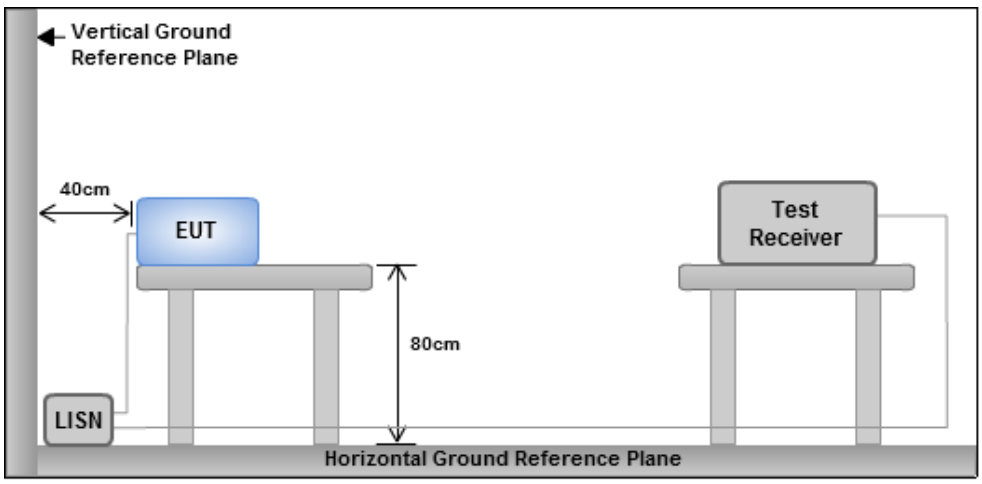
3.1.1 Limit of Conducted Emissions

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

3.1.2 Test Procedures

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

3.1.3 Test Setup

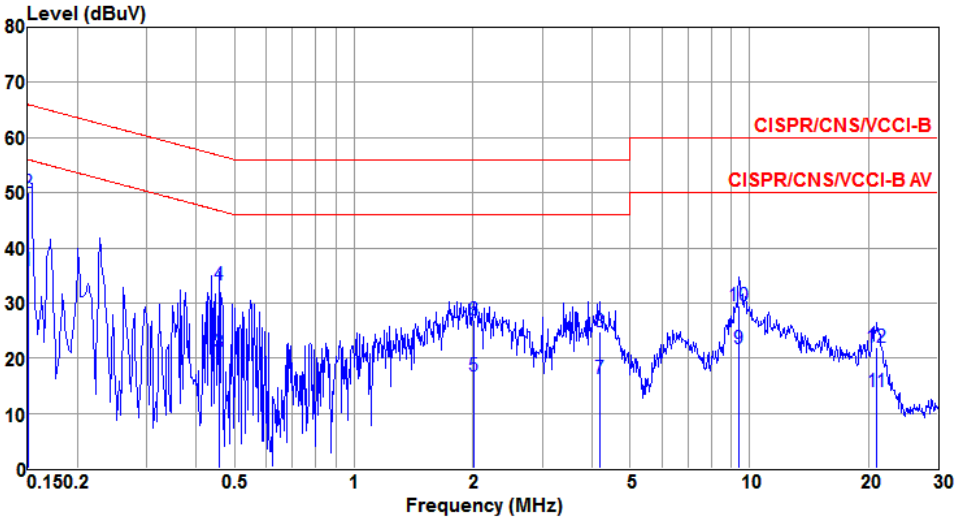


Note: 1. Support units were connected to second LISN.

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

3.1.4 Test Result of Conducted Emissions

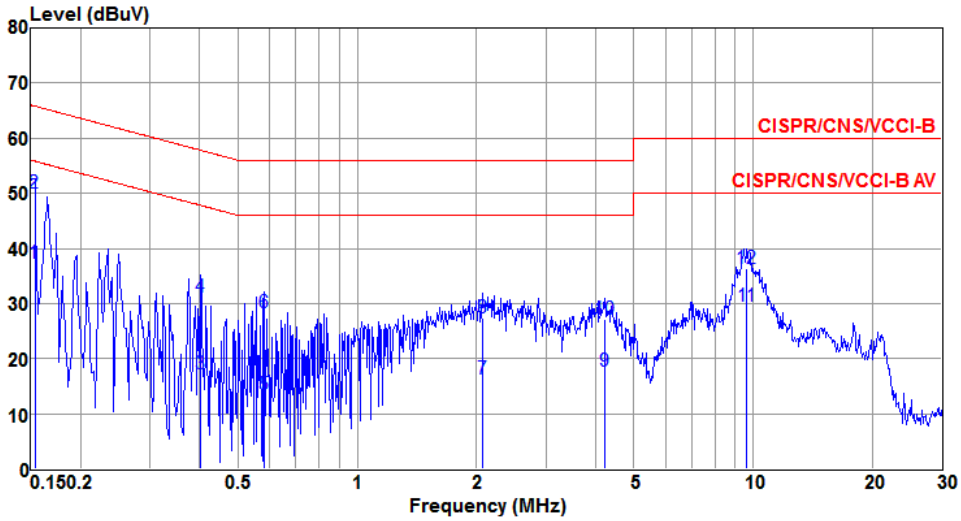
Modulation	11a	Test Freq. (MHz)	5300
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	35.91	56.00	-20.09	35.80	0.07	0.04	Average
2@	0.150	50.03	66.00	-15.97	49.92	0.07	0.04	QP
3	0.456	20.95	46.76	-25.81	20.83	0.08	0.04	Average
4	0.456	33.22	56.76	-23.54	33.10	0.08	0.04	QP
5	2.012	16.79	46.00	-29.21	16.64	0.11	0.04	Average
6	2.012	26.81	56.00	-29.19	26.66	0.11	0.04	QP
7	4.180	16.30	46.00	-29.70	16.01	0.13	0.16	Average
8	4.180	24.67	56.00	-31.33	24.38	0.13	0.16	QP
9	9.401	21.83	50.00	-28.17	21.41	0.20	0.22	Average
10	9.401	29.46	60.00	-30.54	29.04	0.20	0.22	QP
11	21.035	13.90	50.00	-36.10	13.36	0.27	0.27	Average
12	21.035	21.97	60.00	-38.03	21.43	0.27	0.27	QP

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

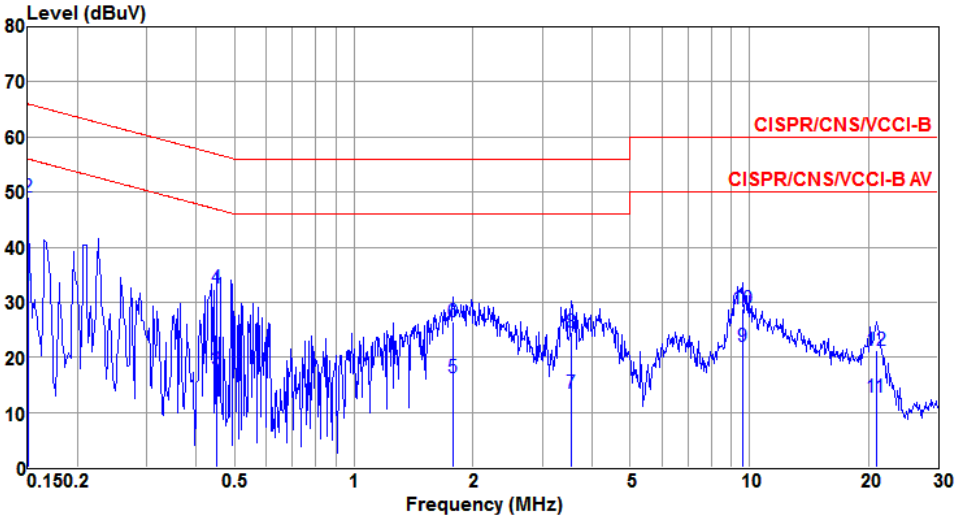
Modulation	11a	Test Freq. (MHz)	5300
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	37.32	55.82	-18.50	37.24	0.04	0.04	Average
2@	0.153	50.02	65.82	-15.80	49.94	0.04	0.04	QP
3	0.402	17.28	47.81	-30.53	17.20	0.04	0.04	Average
4	0.402	31.06	57.81	-26.75	30.98	0.04	0.04	QP
5	0.582	13.55	46.00	-32.45	13.47	0.04	0.04	Average
6	0.582	28.37	56.00	-27.63	28.29	0.04	0.04	QP
7	2.066	16.34	46.00	-29.66	16.22	0.07	0.05	Average
8	2.066	27.37	56.00	-28.63	27.25	0.07	0.05	QP
9	4.224	17.68	46.00	-28.32	17.43	0.09	0.16	Average
10	4.224	27.12	56.00	-28.88	26.87	0.09	0.16	QP
11	9.654	29.58	50.00	-20.42	29.19	0.17	0.22	Average
12	9.654	36.37	60.00	-23.63	35.98	0.17	0.22	QP

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

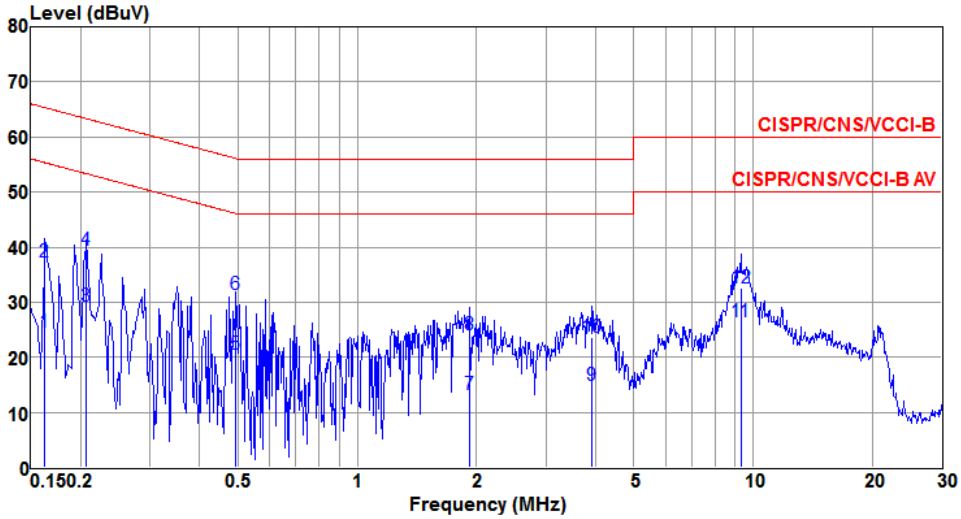
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	32.95	56.00	-23.05	32.84	0.07	0.04	Average
2@	0.150	49.16	66.00	-16.84	49.05	0.07	0.04	QP
3	0.449	17.75	46.89	-29.14	17.63	0.08	0.04	Average
4	0.449	32.52	56.89	-24.37	32.40	0.08	0.04	QP
5	1.781	16.27	46.00	-29.73	16.12	0.11	0.04	Average
6	1.781	26.50	56.00	-29.50	26.35	0.11	0.04	QP
7	3.547	13.36	46.00	-32.64	13.09	0.13	0.14	Average
8	3.547	24.46	56.00	-31.54	24.19	0.13	0.14	QP
9	9.603	21.84	50.00	-28.16	21.42	0.20	0.22	Average
10	9.603	28.89	60.00	-31.11	28.47	0.20	0.22	QP
11	20.924	12.86	50.00	-37.14	12.32	0.27	0.27	Average
12	20.924	21.25	60.00	-38.75	20.71	0.27	0.27	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)	5825
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.162	24.50	55.34	-30.84	24.42	0.04	0.04	Average
2	0.162	37.18	65.34	-28.16	37.10	0.04	0.04	QP
3	0.207	29.33	53.32	-23.99	29.25	0.04	0.04	Average
4	0.207	39.39	63.32	-23.93	39.31	0.04	0.04	QP
5	0.494	20.52	46.10	-25.58	20.44	0.04	0.04	Average
6	0.494	31.30	56.10	-24.80	31.22	0.04	0.04	QP
7	1.918	13.18	46.00	-32.82	13.07	0.07	0.04	Average
8	1.918	24.19	56.00	-31.81	24.08	0.07	0.04	QP
9	3.922	14.81	46.00	-31.19	14.56	0.09	0.16	Average
10	3.922	23.58	56.00	-32.42	23.33	0.09	0.16	QP
11@	9.302	26.44	50.00	-23.56	26.06	0.16	0.22	Average
12	9.302	32.67	60.00	-27.33	32.29	0.16	0.22	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission Bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

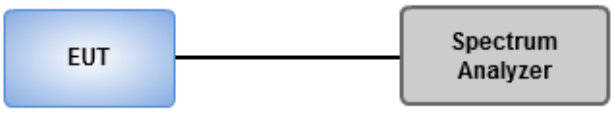
Occupied Bandwidth

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

6dB Bandwidth

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

3.2.3 Test Setup

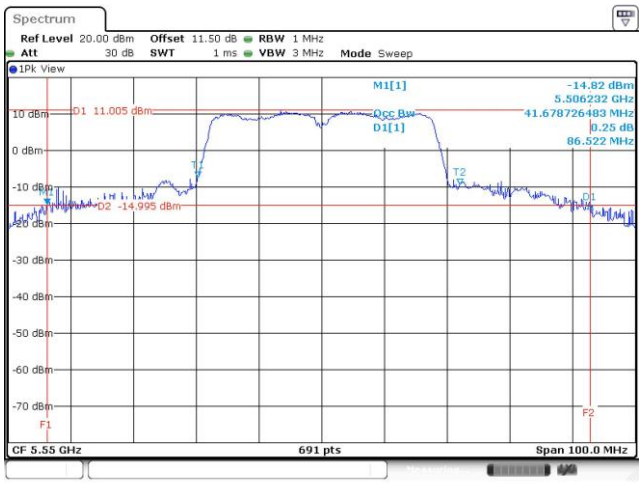
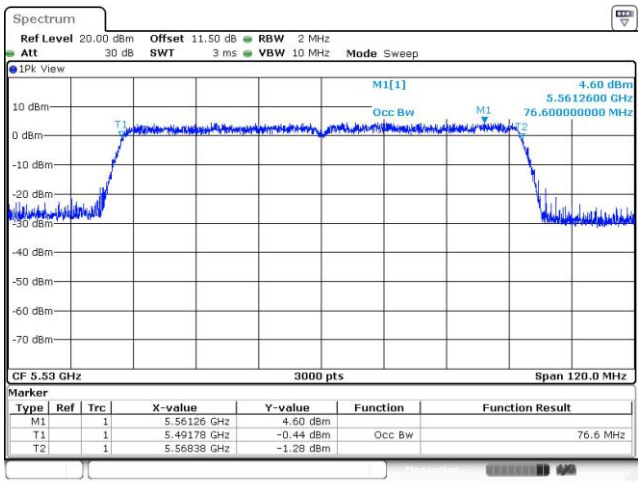


3.2.4 Test Result of Emission Bandwidth

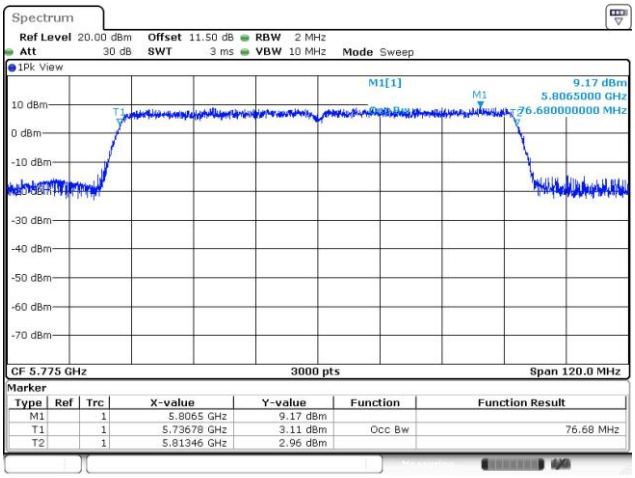
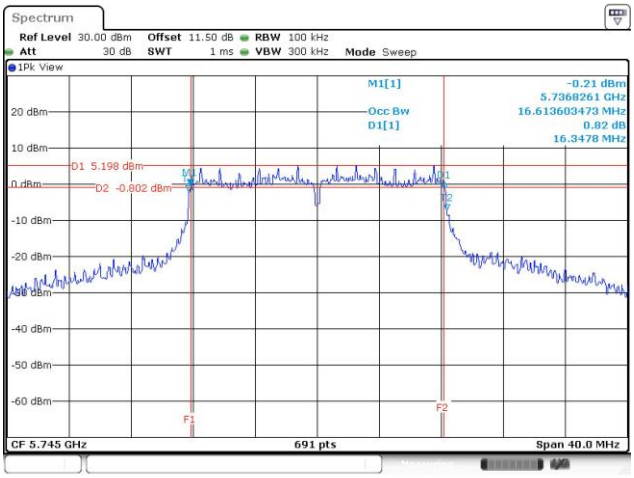
For Frequency band 5150~5250 MHz										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
11a	1	5180	21.16	---	---	---	16.75	---	---	---
11a	1	5200	40.36	---	---	---	17.10	---	---	---
11a	1	5240	36.88	---	---	---	17.30	---	---	---
VHT20	1	5180	23.99	---	---	---	17.69	---	---	---
VHT20	1	5200	42.39	---	---	---	18.03	---	---	---
VHT20	1	5240	42.97	---	---	---	17.91	---	---	---
VHT40	1	5190	41.88	---	---	---	36.34	---	---	---
VHT40	1	5230	82.46	---	---	---	36.92	---	---	---
VHT80	1	5210	82.78	---	---	---	76.52	---	---	---

For Frequency band 5250~5350 MHz											
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	1	5260	38.26	---	---	---	17.29	---	---	---	24.00
11a	1	5300	39.20	---	---	---	17.12	---	---	---	24.00
11a	1	5320	23.33	---	---	---	16.78	---	---	---	24.00
VHT20	1	5260	43.33	---	---	---	17.95	---	---	---	24.00
VHT20	1	5300	43.70	---	---	---	18.02	---	---	---	24.00
VHT20	1	5320	28.26	---	---	---	17.70	---	---	---	24.00
VHT40	1	5270	81.16	---	---	---	36.82	---	---	---	24.00
VHT40	1	5310	46.09	---	---	---	36.42	---	---	---	24.00
VHT80	1	5290	84.41	---	---	---	76.52	---	---	---	24.00

For Frequency band 5470~5725 MHz											
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	1	5500	30.29	---	---	---	16.85	---	---	---	24.00
11a	1	5580	36.96	---	---	---	17.02	---	---	---	24.00
11a	1	5700	24.13	---	---	---	16.78	---	---	---	24.00
VHT20	1	5500	35.07	---	---	---	17.75	---	---	---	24.00
VHT20	1	5580	41.45	---	---	---	17.92	---	---	---	24.00
VHT20	1	5700	30.00	---	---	---	17.69	---	---	---	24.00
VHT40	1	5510	58.55	---	---	---	36.44	---	---	---	24.00
VHT40	1	5550	86.52	---	---	---	37.00	---	---	---	24.00
VHT40	1	5670	82.46	---	---	---	36.62	---	---	---	24.00
VHT80	1	5530	82.78	---	---	---	76.60	---	---	---	24.00

Worst Plots of 26dB Bandwidth	Worst Plots of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	1	5745	17.05	---	---	---	16.35	---	---	---	0.5
11a	1	5785	17.10	---	---	---	16.35	---	---	---	0.5
11a	1	5825	17.07	---	---	---	16.35	---	---	---	0.5
VHT20	1	5745	17.90	---	---	---	17.51	---	---	---	0.5
VHT20	1	5785	17.91	---	---	---	17.10	---	---	---	0.5
VHT20	1	5825	17.94	---	---	---	17.04	---	---	---	0.5
VHT40	1	5755	36.72	---	---	---	35.48	---	---	---	0.5
VHT40	1	5795	37.10	---	---	---	35.25	---	---	---	0.5
VHT80	1	5775	76.68	---	---	---	76.52	---	---	---	0.5

Worst Plots of 99% Bandwidth	Worst Plots of 6dB Bandwidth
	

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	250mW or 11dBm+10 log B
☒	5470 ~ 5725	250mW or 11dBm+10 log B
☒	5725 ~ 5850	1 W
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

☒ 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

For Frequency band 5150~5250 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	1	5180	12.12	---	---	---	16.293	12.12	24.00
11a	1	5200	15.54	---	---	---	35.810	15.54	24.00
11a	1	5240	15.86	---	---	---	38.548	15.86	24.00
HT20	1	5180	12.35	---	---	---	17.179	12.35	24.00
HT20	1	5200	15.55	---	---	---	35.892	15.55	24.00
HT20	1	5240	15.91	---	---	---	38.994	15.91	24.00
HT40	1	5190	10.52	---	---	---	11.272	10.52	24.00
HT40	1	5230	14.57	---	---	---	28.642	14.57	24.00
VHT20	1	5180	12.47	---	---	---	17.660	12.47	24.00
VHT20	1	5200	15.69	---	---	---	37.068	15.69	24.00
VHT20	1	5240	15.97	---	---	---	39.537	15.97	24.00
VHT40	1	5190	10.60	---	---	---	11.482	10.60	24.00
VHT40	1	5230	14.64	---	---	---	29.107	14.64	24.00
VHT80	1	5210	7.57	---	---	---	5.715	7.57	24.00

For Frequency band 5250~5350 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	1	5260	16.07	---	---	---	40.458	16.07	24.00
11a	1	5300	16.49	---	---	---	44.566	16.49	24.00
11a	1	5320	13.28	---	---	---	21.281	13.28	24.00
HT20	1	5260	15.88	---	---	---	38.726	15.88	24.00
HT20	1	5300	16.25	---	---	---	42.170	16.25	24.00
HT20	1	5320	13.57	---	---	---	22.751	13.57	24.00
HT40	1	5270	15.02	---	---	---	31.769	15.02	24.00
HT40	1	5310	12.43	---	---	---	17.498	12.43	24.00
VHT20	1	5260	15.94	---	---	---	39.264	15.94	24.00
VHT20	1	5300	16.38	---	---	---	43.451	16.38	24.00
VHT20	1	5320	13.64	---	---	---	23.121	13.64	24.00
VHT40	1	5270	15.07	---	---	---	32.137	15.07	24.00
VHT40	1	5310	12.47	---	---	---	17.660	12.47	24.00
VHT80	1	5290	9.62	---	---	---	9.162	9.62	24.00

For Frequency band 5470~5725 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	1	5500	15.03	---	---	---	31.842	15.03	24.00
11a	1	5580	16.22	---	---	---	41.879	16.22	24.00
11a	1	5700	14.19	---	---	---	26.242	14.19	24.00
HT20	1	5500	15.25	---	---	---	33.497	15.25	24.00
HT20	1	5580	16.39	---	---	---	43.551	16.39	24.00
HT20	1	5700	14.15	---	---	---	26.002	14.15	24.00
HT40	1	5510	13.02	---	---	---	20.045	13.02	24.00
HT40	1	5550	16.01	---	---	---	39.902	16.01	24.00
HT40	1	5670	15.22	---	---	---	33.266	15.22	24.00
VHT20	1	5500	15.32	---	---	---	34.041	15.32	24.00
VHT20	1	5580	16.47	---	---	---	44.361	16.47	24.00
VHT20	1	5700	14.21	---	---	---	26.363	14.21	24.00
VHT40	1	5510	13.04	---	---	---	20.137	13.04	24.00
VHT40	1	5550	16.09	---	---	---	40.644	16.09	24.00
VHT40	1	5670	15.28	---	---	---	33.729	15.28	24.00
VHT80	1	5530	9.46	---	---	---	8.831	9.46	24.00

For Frequency band 5725-5850 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	1	5745	16.28	---	---	---	42.462	16.28	30.00
11a	1	5785	16.44	---	---	---	44.055	16.44	30.00
11a	1	5825	16.47	---	---	---	44.361	16.47	30.00
HT20	1	5745	16.35	---	---	---	43.152	16.35	30.00
HT20	1	5785	16.19	---	---	---	41.591	16.19	30.00
HT20	1	5825	16.38	---	---	---	43.451	16.38	30.00
HT40	1	5755	15.11	---	---	---	32.434	15.11	30.00
HT40	1	5795	16.33	---	---	---	42.954	16.33	30.00
VHT20	1	5745	16.4	---	---	---	43.652	16.40	30.00
VHT20	1	5785	16.25	---	---	---	42.170	16.25	30.00
VHT20	1	5825	16.43	---	---	---	43.954	16.43	30.00
VHT40	1	5755	15.17	---	---	---	32.885	15.17	30.00
VHT40	1	5795	16.38	---	---	---	43.451	16.38	30.00
VHT80	1	5775	13.36	---	---	---	21.677	13.36	30.00

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

☐ Method SA-1

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.

☒ Method SA-2 Alternative

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

For 5725~5850 MHz

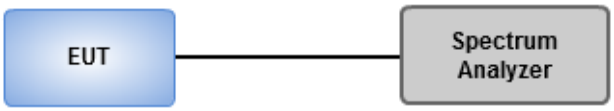
☐ Method SA-1

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

☒ Method SA-2 Alternative

1. Set RBW = 500 kHz, VBW = 2 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

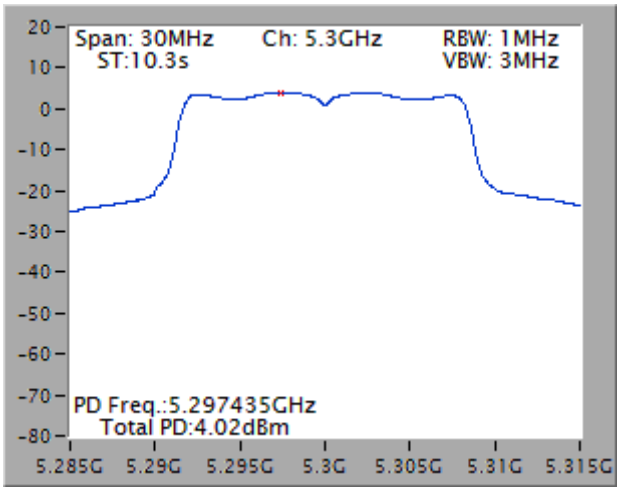
Frequency band			5150~5250 MHz / 5250~5350 MHz			
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	1	5180	-0.62	0.13	-0.49	11
11a	1	5200	2.96	0.13	3.09	11
11a	1	5240	3.31	0.13	3.44	11
VHT20	1	5180	-0.51	0.14	-0.37	11
VHT20	1	5200	2.69	0.14	2.83	11
VHT20	1	5240	3.19	0.14	3.33	11
VHT40	1	5190	-5.72	0.23	-5.49	11
VHT40	1	5230	-1.20	0.23	-0.97	11
VHT80	1	5210	-12.31	0.58	-11.73	11
11a	1	5260	3.69	0.13	3.82	11
11a	1	5300	4.02	0.13	4.15	11
11a	1	5320	0.54	0.13	0.67	11
VHT20	1	5260	3.39	0.14	3.53	11
VHT20	1	5300	3.77	0.14	3.91	11
VHT20	1	5320	0.66	0.14	0.80	11
VHT40	1	5270	-0.62	0.23	-0.39	11
VHT40	1	5310	-3.51	0.23	-3.28	11
VHT80	1	5290	-10.62	0.58	-10.04	11

Note: D.F is duty factor.

Frequency band			5470~5725 MHz			
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	1	5500	2.09	0.13	2.22	11
11a	1	5580	3.37	0.13	3.50	11
11a	1	5700	1.58	0.13	1.71	11
VHT20	1	5500	2.16	0.14	2.30	11
VHT20	1	5580	2.96	0.14	3.10	11
VHT20	1	5700	1.39	0.14	1.53	11
VHT40	1	5510	-3.17	0.23	-2.94	11
VHT40	1	5550	-0.01	0.23	0.22	11
VHT40	1	5670	-1.06	0.23	-0.83	11
VHT80	1	5530	-10.91	0.58	-10.33	11

Note: D.F is duty factor.

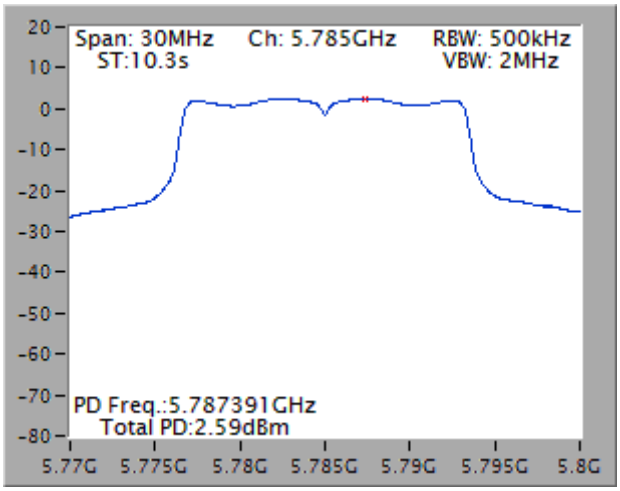
Worst Plot



Note: The plot without duty factor

Frequency band			5725-5850 MHz			
Condition			Peak Power Spectral Density (dBm/500kHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
11a	1	5745	2.23	0.13	2.36	30.00
11a	1	5785	2.59	0.13	2.72	30.00
11a	1	5825	2.35	0.13	2.48	30.00
VHT20	1	5745	2.02	0.14	2.16	30.00
VHT20	1	5785	2.12	0.14	2.26	30.00
VHT20	1	5825	2.20	0.14	2.34	30.00
VHT40	1	5755	-2.31	0.23	-2.08	30.00
VHT40	1	5795	-2.06	0.23	-1.83	30.00
VHT80	1	5775	-7.98	0.58	-7.40	30.00

Worst Plot



Note: The plot without duty factor

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	☒	15.407(b)(4)(i) 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.
	☐	15.407(b)(4)(ii) ,compliance with the emission limits in § 15.247(d) Shall be at least 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power,. Attenuation below the general limits specified in §15.209(a) is not required. In addition,radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see § 15.205(c))
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		

3.5.2 Test Procedures

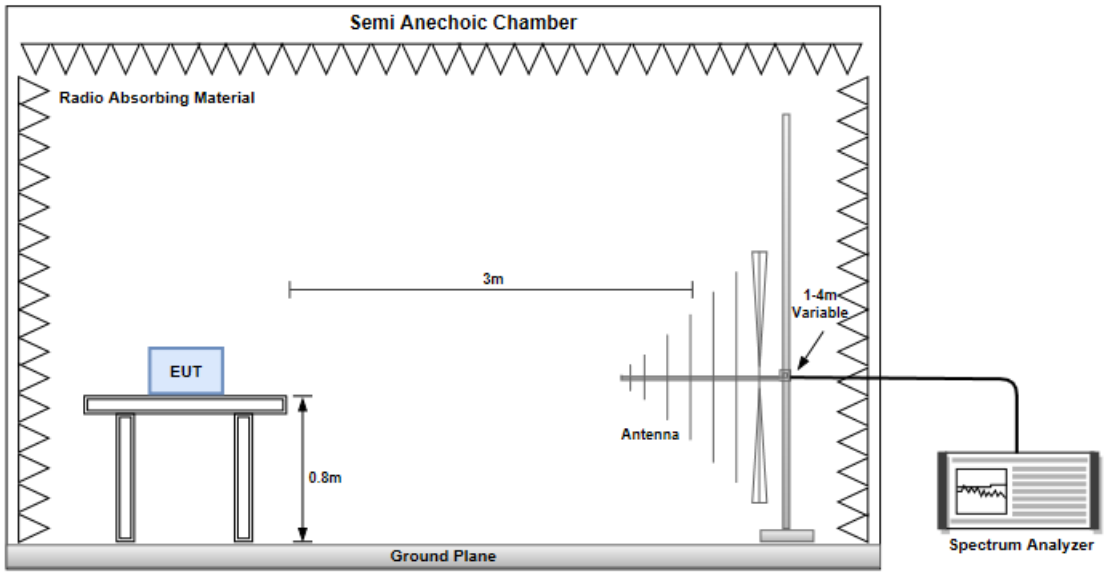
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

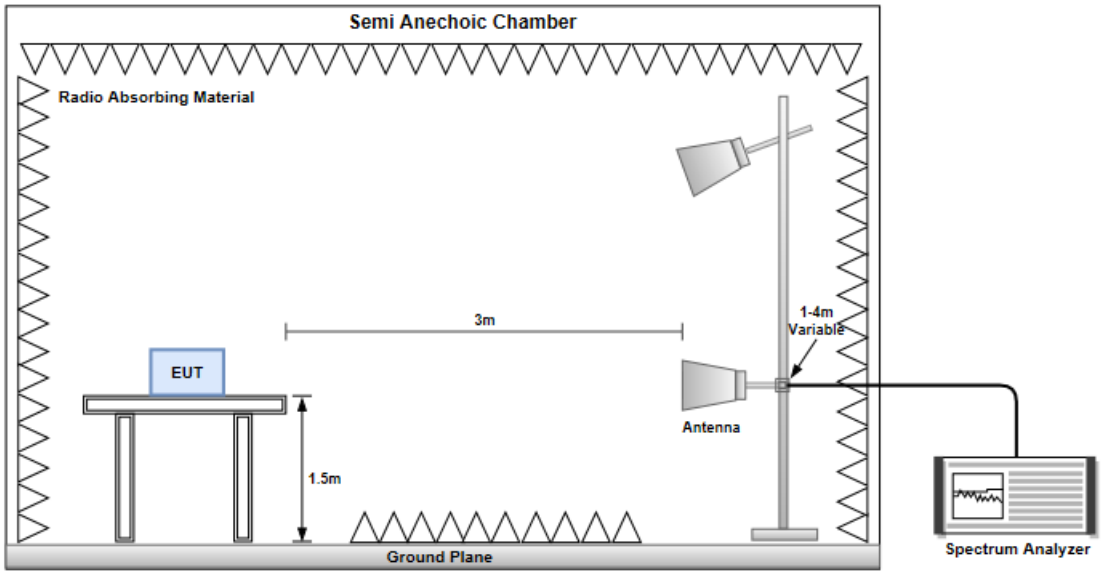
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

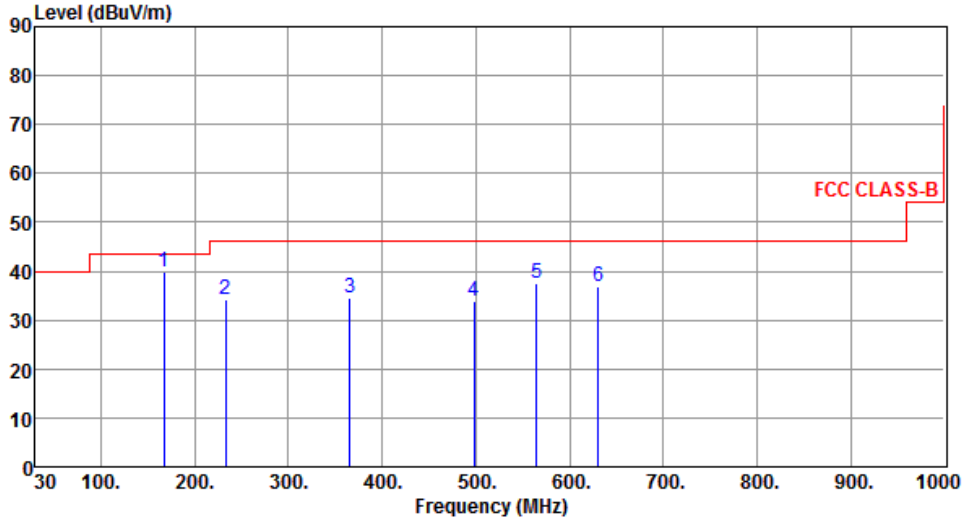


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

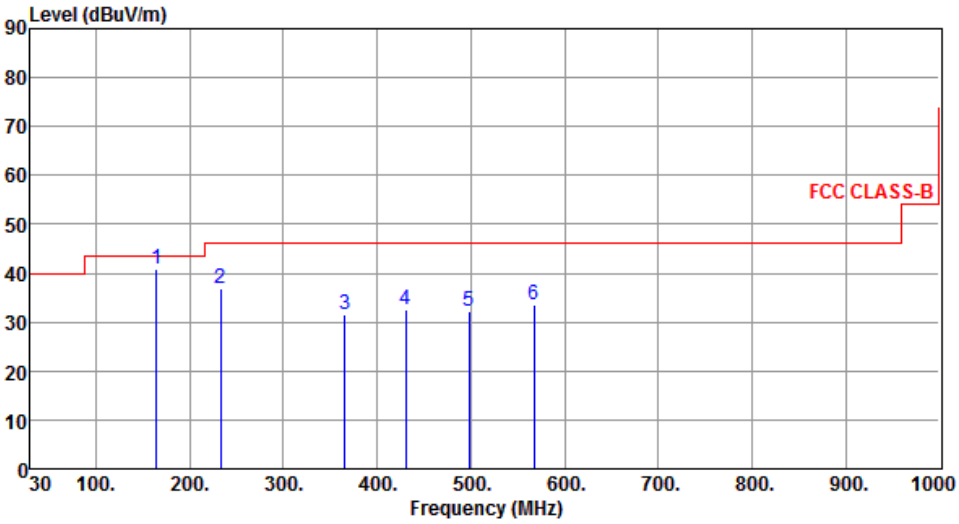
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	166.77	39.83	43.50	-3.67	48.00	-8.17	Peak	---	---
2	232.73	34.18	46.00	-11.82	43.99	-9.81	Peak	---	---
3	365.62	34.49	46.00	-11.51	40.44	-5.95	Peak	---	---
4	498.51	33.79	46.00	-12.21	36.80	-3.01	Peak	---	---
5	564.47	37.62	46.00	-8.38	39.17	-1.55	Peak	---	---
6	630.43	36.79	46.00	-9.21	37.03	-0.24	Peak	---	---

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

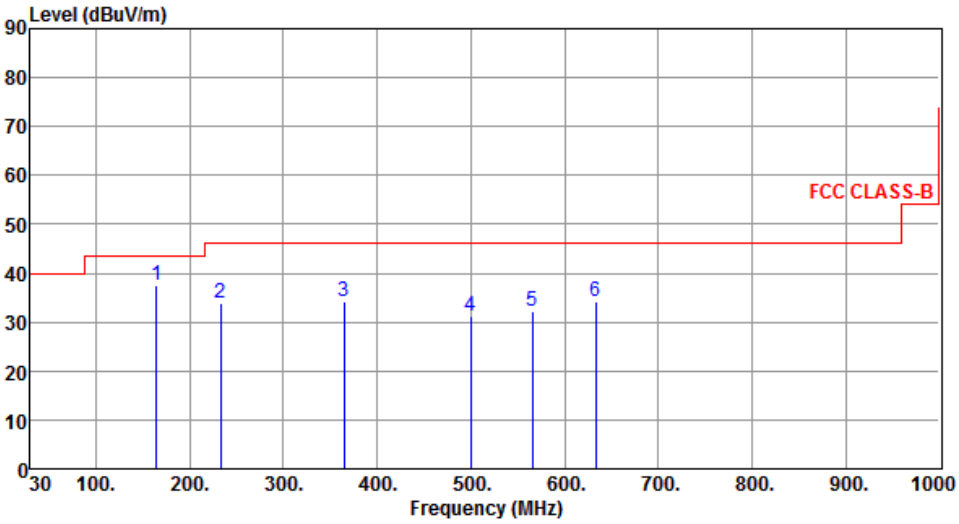
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	164.83	40.69	43.50	-2.81	48.79	-8.10	Peak	---	---
2	232.73	36.96	46.00	-9.04	46.77	-9.81	Peak	---	---
3	365.62	31.46	46.00	-14.54	37.41	-5.95	Peak	---	---
4	430.61	32.53	46.00	-13.47	36.73	-4.20	Peak	---	---
5	498.51	32.20	46.00	-13.80	35.21	-3.01	Peak	---	---
6	567.38	33.67	46.00	-12.33	35.14	-1.47	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.

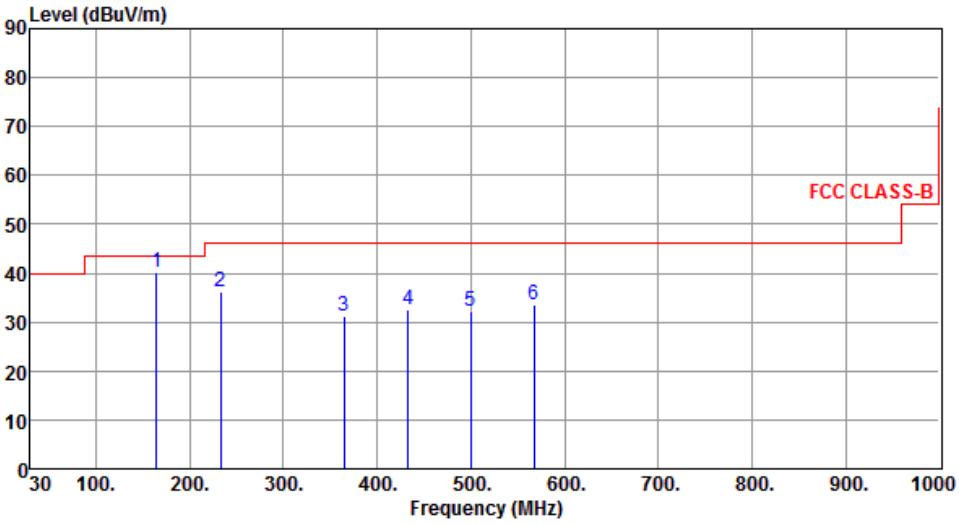
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	164.83	37.59	43.50	-5.91	45.69	-8.10	Peak	---	---
2	232.73	33.85	46.00	-12.15	43.66	-9.81	Peak	---	---
3	364.65	34.28	46.00	-11.72	40.26	-5.98	Peak	---	---
4	499.48	31.06	46.00	-14.94	34.06	-3.00	Peak	---	---
5	565.44	32.30	46.00	-13.70	33.83	-1.53	Peak	---	---
6	633.34	34.17	46.00	-11.83	34.37	-0.20	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)	5825
Polarization	Vertical		

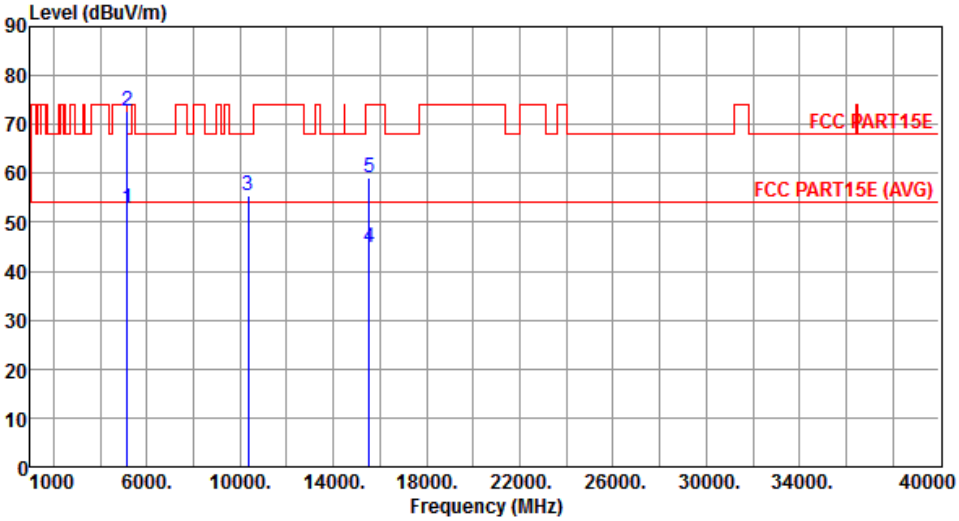


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	164.83	40.15	43.50	-3.35	48.25	-8.10	Peak	---	---
2	232.73	36.13	46.00	-9.87	45.94	-9.81	Peak	---	---
3	364.65	31.20	46.00	-14.80	37.18	-5.98	Peak	---	---
4	433.52	32.61	46.00	-13.39	36.73	-4.12	Peak	---	---
5	499.48	32.30	46.00	-13.70	35.30	-3.00	Peak	---	---
6	567.38	33.51	46.00	-12.49	34.98	-1.47	Peak	---	---

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

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

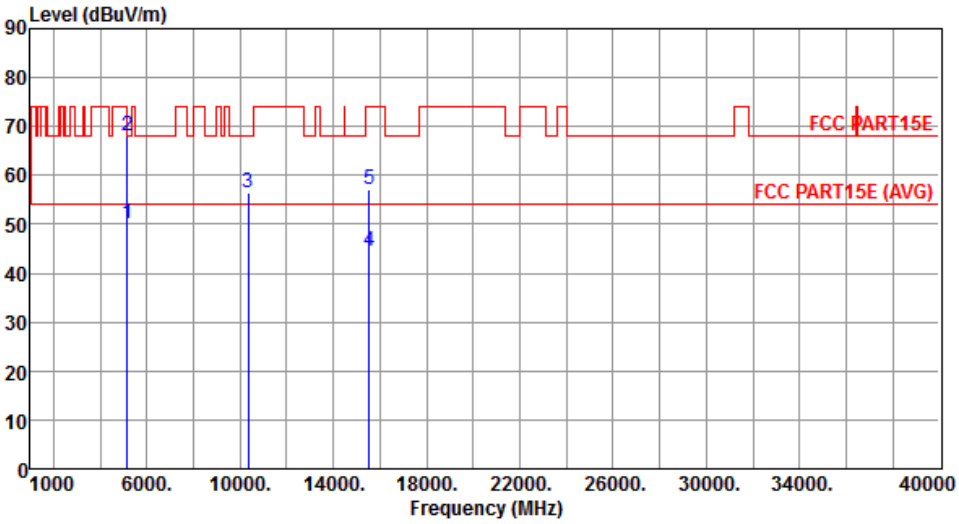
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.68	54.00	-1.32	47.47	5.21	Average	228	110
2	5150.00	72.59	74.00	-1.41	67.38	5.21	Peak	228	110
3	10360.00	55.35	68.20	-12.85	41.45	13.90	Peak	106	48
4	15540.00	44.76	54.00	-9.24	29.59	15.17	Average	105	101
5	15540.00	59.28	74.00	-14.72	44.11	15.17	Peak	105	101

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

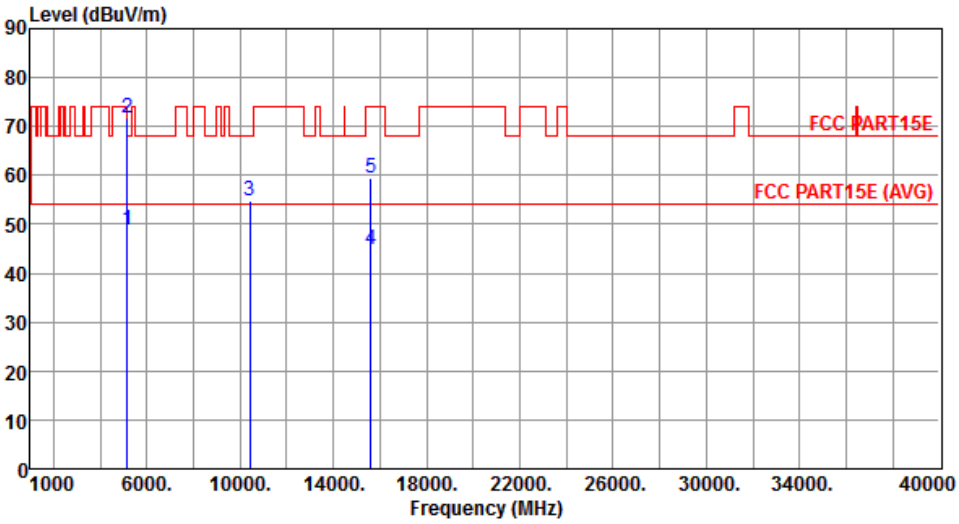
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	50.24	54.00	-3.76	45.03	5.21	Average	314	102
2	5150.00	68.15	74.00	-5.85	62.94	5.21	Peak	314	102
3	10360.00	56.45	68.20	-11.75	42.55	13.90	Peak	100	42
4	15540.00	44.51	54.00	-9.49	29.34	15.17	Average	100	319
5	15540.00	56.98	74.00	-17.02	41.81	15.17	Peak	100	319

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

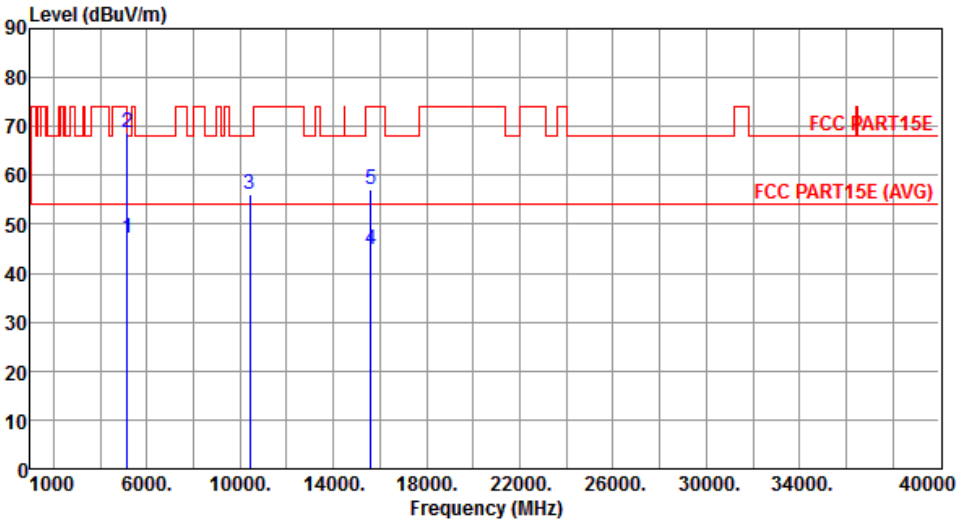
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	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	48.95	54.00	-5.05	43.74	5.21	Average	226	104
2	5150.00	71.62	74.00	-2.38	66.41	5.21	Peak	226	104
3	10400.00	54.93	68.20	-13.27	41.01	13.92	Peak	100	56
4	15600.00	44.85	54.00	-9.15	29.71	15.14	Average	100	91
5	15600.00	59.36	74.00	-14.64	44.22	15.14	Peak	100	91

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

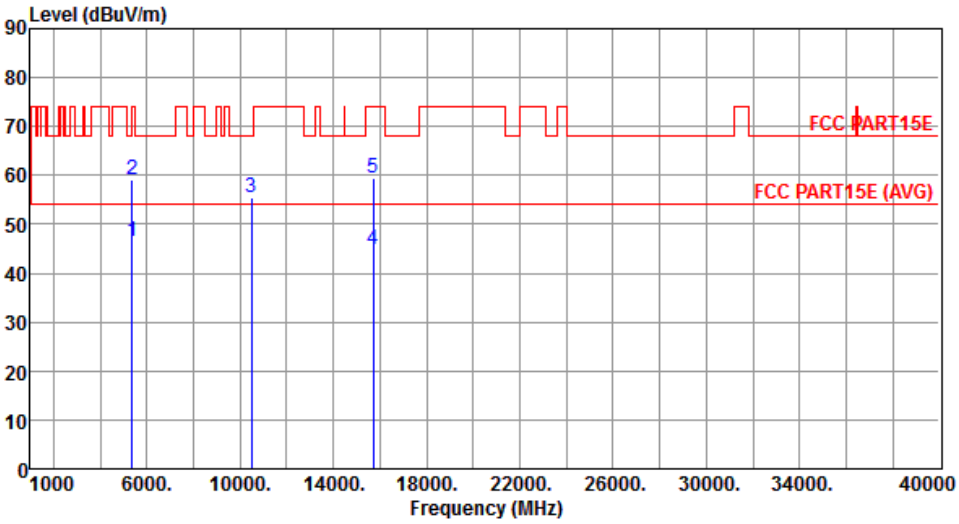
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.12	54.00	-6.88	41.91	5.21	Average	311	106
2	5150.00	68.74	74.00	-5.26	63.53	5.21	Peak	311	106
3	10400.00	56.15	68.20	-12.05	42.23	13.92	Peak	100	33
4	15600.00	44.86	54.00	-9.14	29.72	15.14	Average	100	312
5	15600.00	57.19	74.00	-16.81	42.05	15.14	Peak	100	312

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

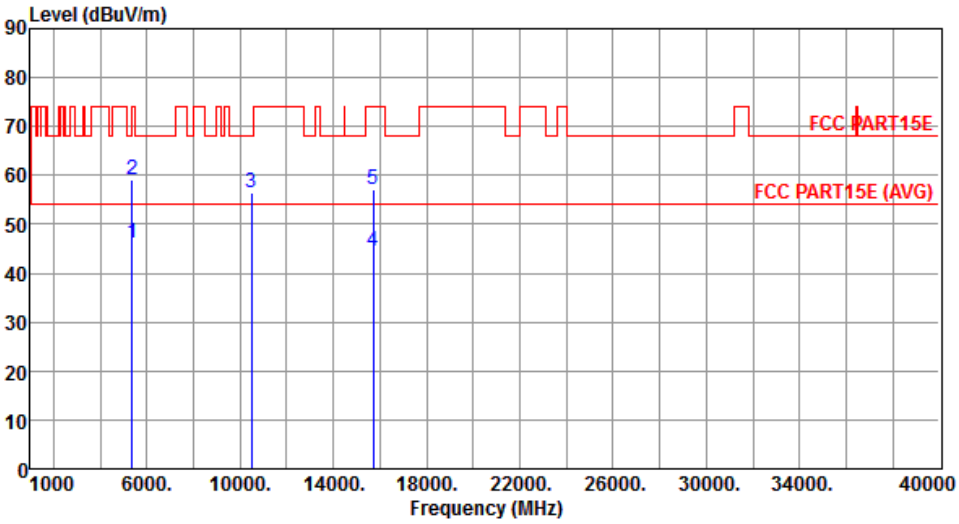
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.48	54.00	-7.52	40.98	5.50	Average	225	101
2	5350.00	59.22	74.00	-14.78	53.72	5.50	Peak	225	101
3	10480.00	55.46	68.20	-12.74	41.51	13.95	Peak	100	58
4	15720.00	44.93	54.00	-9.07	29.82	15.11	Average	100	81
5	15720.00	59.42	74.00	-14.58	44.31	15.11	Peak	100	81

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

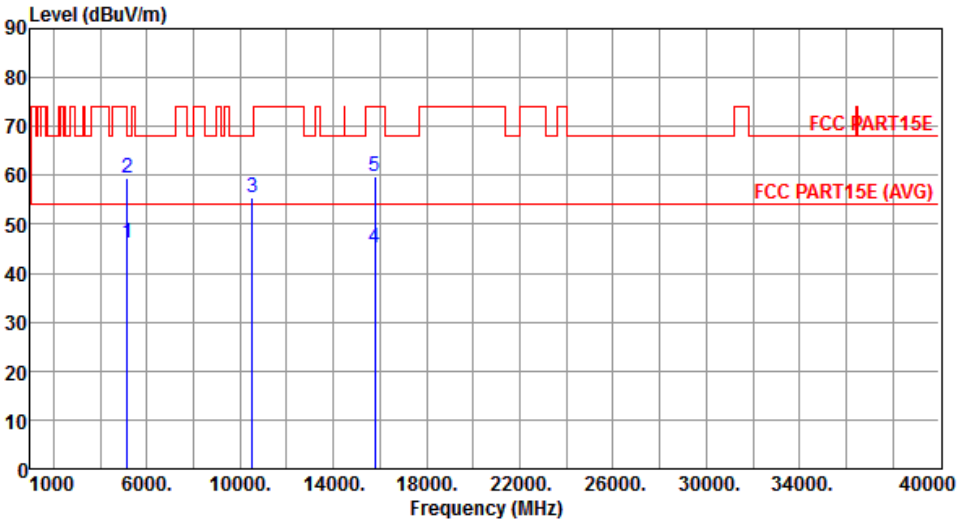
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.18	54.00	-7.82	40.68	5.50	Average	314	106
2	5350.00	59.03	74.00	-14.97	53.53	5.50	Peak	314	106
3	10480.00	56.39	68.20	-11.81	42.44	13.95	Peak	105	62
4	15720.00	44.57	54.00	-9.43	29.46	15.11	Average	100	306
5	15720.00	57.14	74.00	-16.86	42.03	15.11	Peak	100	306

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

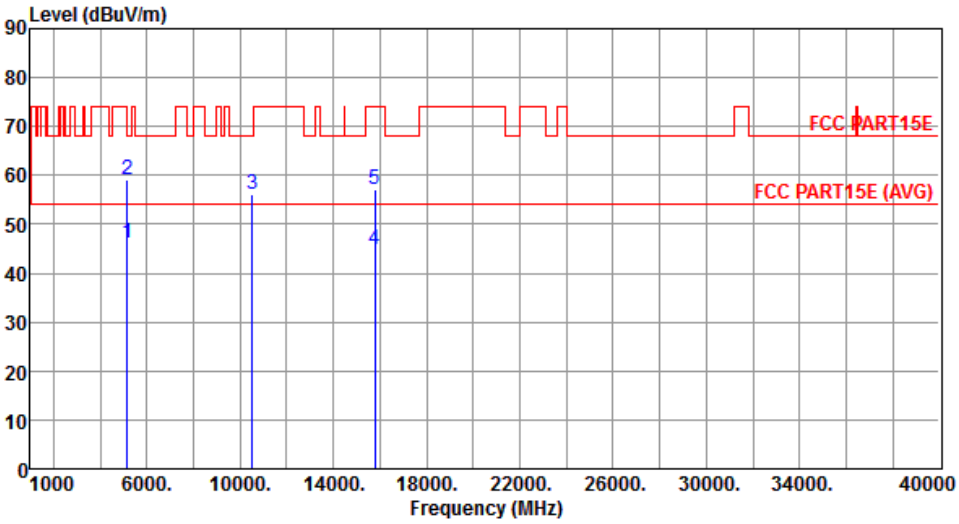
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	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	46.32	54.00	-7.68	41.11	5.21	Average	228	101
2	5150.00	59.54	74.00	-14.46	54.33	5.21	Peak	228	101
3	10520.00	55.38	68.20	-12.82	41.40	13.98	Peak	100	22
4	15780.00	45.15	54.00	-8.85	30.08	15.07	Average	100	88
5	15780.00	59.78	74.00	-14.22	44.71	15.07	Peak	100	88

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

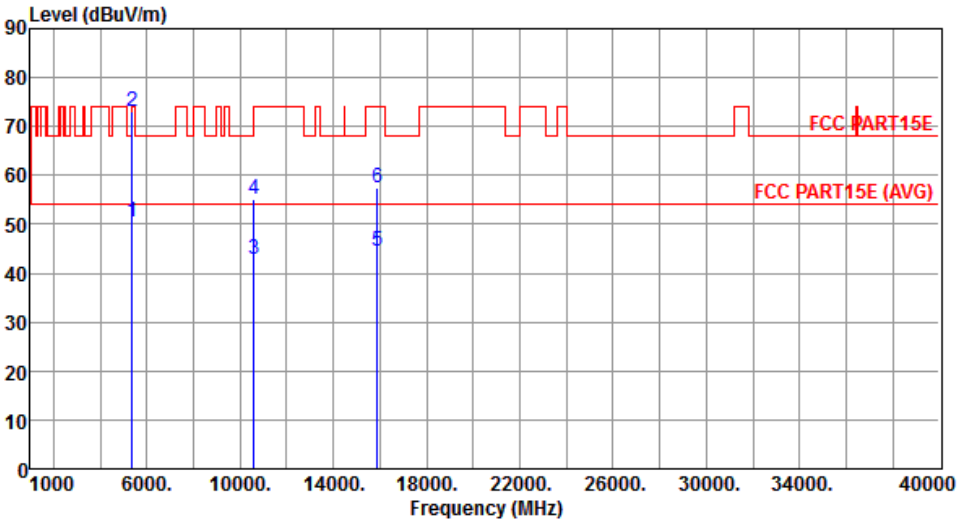
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	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	46.18	54.00	-7.82	40.97	5.21	Average	319	108
2	5150.00	59.06	74.00	-14.94	53.85	5.21	Peak	319	108
3	10520.00	56.28	68.20	-11.92	42.30	13.98	Peak	100	19
4	15780.00	44.69	54.00	-9.31	29.62	15.07	Average	100	325
5	15780.00	57.07	74.00	-16.93	42.00	15.07	Peak	100	325

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

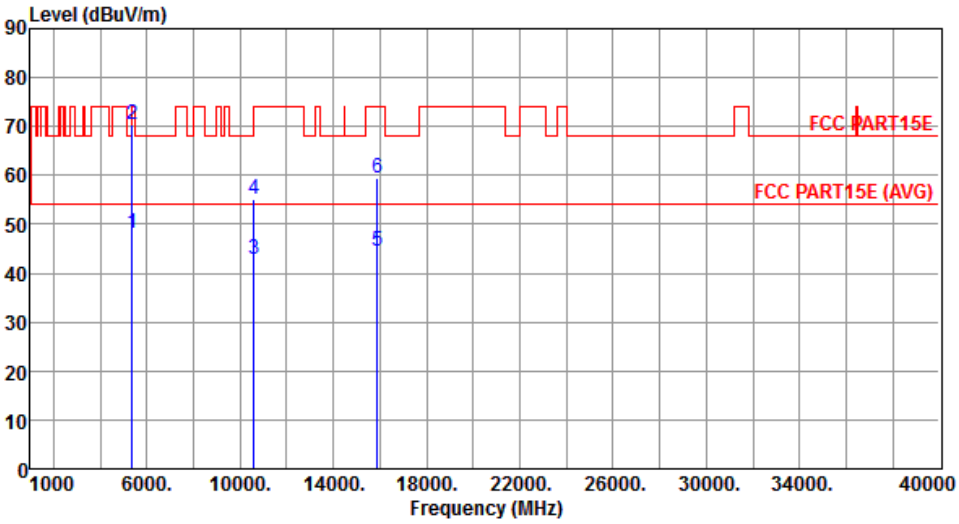
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	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	50.49	54.00	-3.51	44.99	5.50	Average	227	109
2	5350.00	73.02	74.00	-0.98	67.52	5.50	Peak	227	109
3	10600.00	42.84	54.00	-11.16	28.78	14.06	Average	100	91
4	10600.00	55.18	74.00	-18.82	41.12	14.06	Peak	100	91
5	15900.00	44.52	54.00	-9.48	29.48	15.04	Average	100	101
6	15900.00	57.39	74.00	-16.61	42.35	15.04	Peak	100	101

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

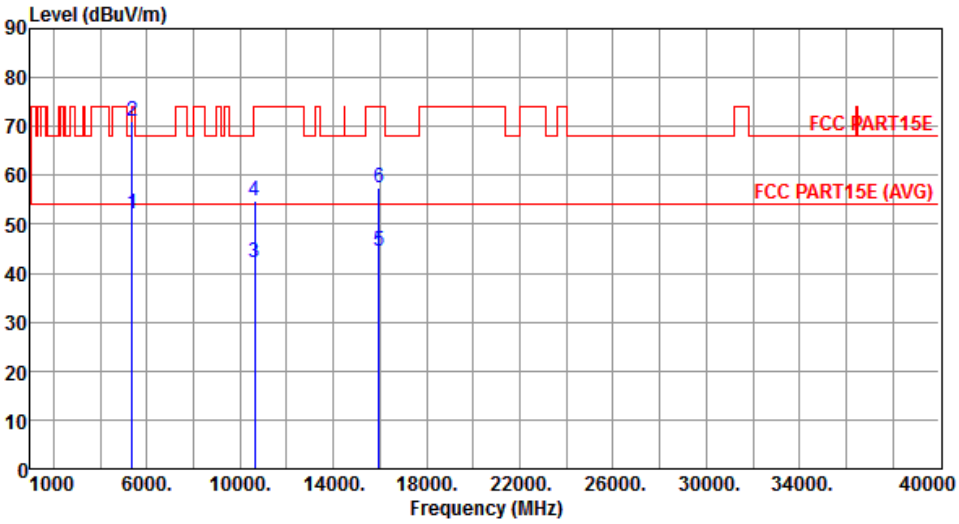
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	48.09	54.00	-5.91	42.59	5.50	Average	315	109
2	5350.00	70.51	74.00	-3.49	65.01	5.50	Peak	315	109
3	10600.00	42.76	54.00	-11.24	28.70	14.06	Average	100	65
4	10600.00	55.13	74.00	-18.87	41.07	14.06	Peak	100	65
5	15900.00	44.58	54.00	-9.42	29.54	15.04	Average	100	299
6	15900.00	59.36	74.00	-14.64	44.32	15.04	Peak	100	299

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

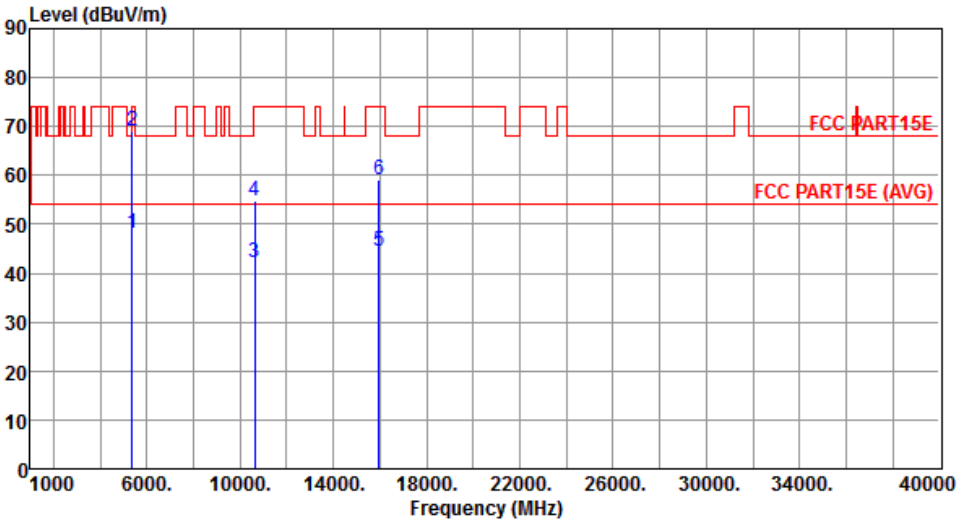
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.18	54.00	-1.82	46.68	5.50	Average	219	135
2	5350.00	71.19	74.00	-2.81	65.69	5.50	Peak	219	135
3	10640.00	42.34	54.00	-11.66	28.23	14.11	Average	101	51
4	10640.00	54.96	74.00	-19.04	40.85	14.11	Peak	101	51
5	15960.00	44.51	54.00	-9.49	29.50	15.01	Average	101	108
6	15960.00	57.42	74.00	-16.58	42.41	15.01	Peak	101	108

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

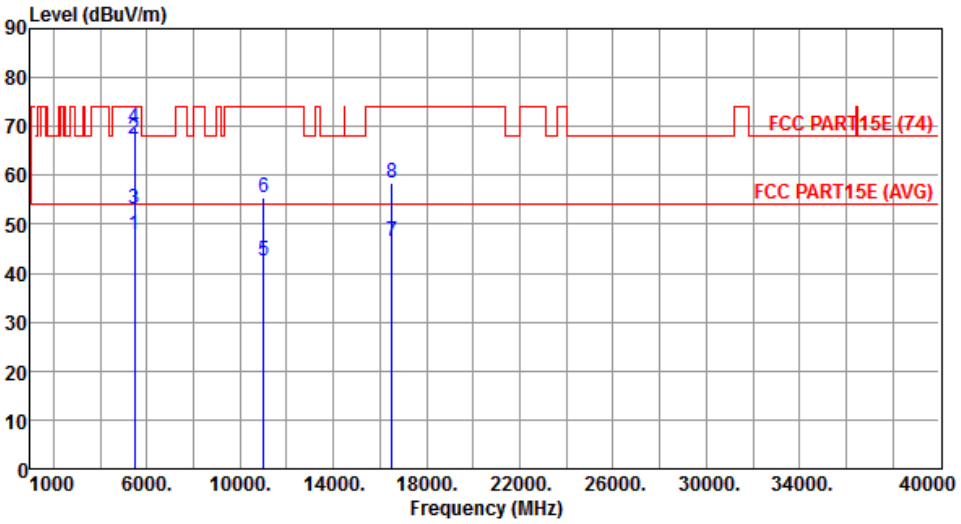
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	48.02	54.00	-5.98	42.52	5.50	Average	310	113
2	5350.00	69.15	74.00	-4.85	63.65	5.50	Peak	310	113
3	10640.00	42.29	54.00	-11.71	28.18	14.11	Average	101	56
4	10640.00	54.81	74.00	-19.19	40.70	14.11	Peak	101	56
5	15960.00	44.39	54.00	-9.61	29.38	15.01	Average	101	303
6	15960.00	59.25	74.00	-14.75	44.24	15.01	Peak	101	303

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

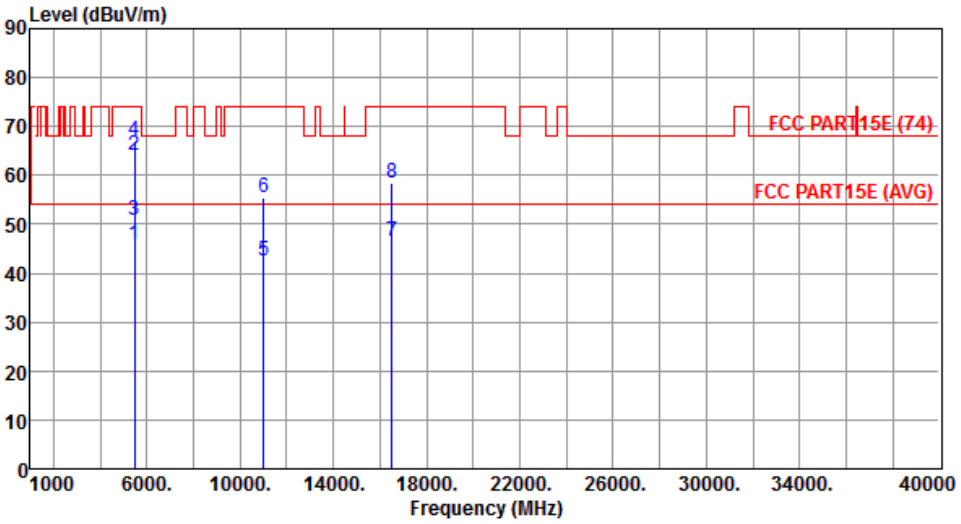
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.85	54.00	-6.15	42.20	5.65	Average	224	125
2	5460.00	67.51	74.00	-6.49	61.86	5.65	Peak	224	125
3	5470.00	53.08	54.00	-0.92	47.42	5.66	Average	224	125
4	5470.00	69.71	74.00	-4.29	64.05	5.66	Peak	224	125
5	11000.00	42.35	54.00	-11.65	27.89	14.46	Average	100	59
6	11000.00	55.48	74.00	-18.52	41.02	14.46	Peak	100	59
7	16500.00	46.36	54.00	-7.64	30.30	16.06	Average	100	91
8	16500.00	58.47	74.00	-15.53	42.41	16.06	Peak	100	91

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

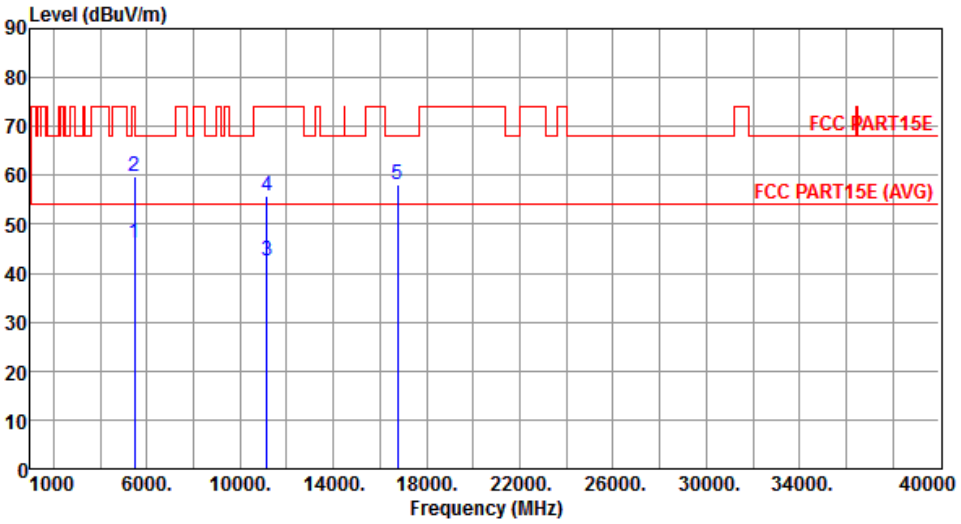
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	45.72	54.00	-8.28	40.07	5.65	Average	211	121
2	5460.00	64.13	74.00	-9.87	58.48	5.65	Peak	211	121
3	5470.00	50.89	54.00	-3.11	45.23	5.66	Average	211	121
4	5470.00	67.25	74.00	-6.75	61.59	5.66	Peak	211	121
5	11000.00	42.36	54.00	-11.64	27.90	14.46	Average	100	57
6	11000.00	55.49	74.00	-18.51	41.03	14.46	Peak	100	57
7	16500.00	46.38	54.00	-7.62	30.32	16.06	Average	100	207
8	16500.00	58.56	74.00	-15.44	42.50	16.06	Peak	100	207

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

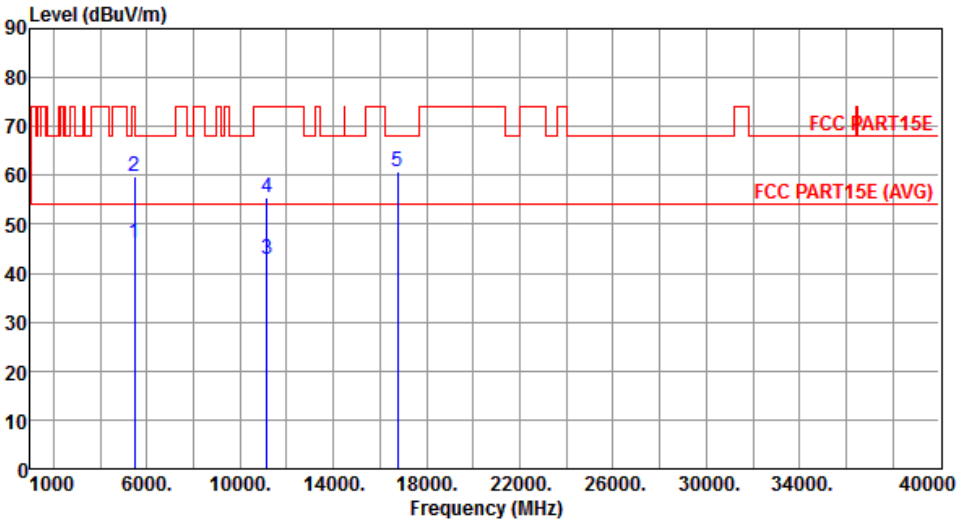
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	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	46.25	54.00	-7.75	40.60	5.65	Average	218	109
2	5460.00	59.81	74.00	-14.19	54.16	5.65	Peak	218	109
3	11160.00	42.65	54.00	-11.35	28.05	14.60	Average	100	53
4	11160.00	55.81	74.00	-18.19	41.21	14.60	Peak	100	53
5	16740.00	58.15	68.20	-10.05	41.98	16.17	Peak	100	102

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

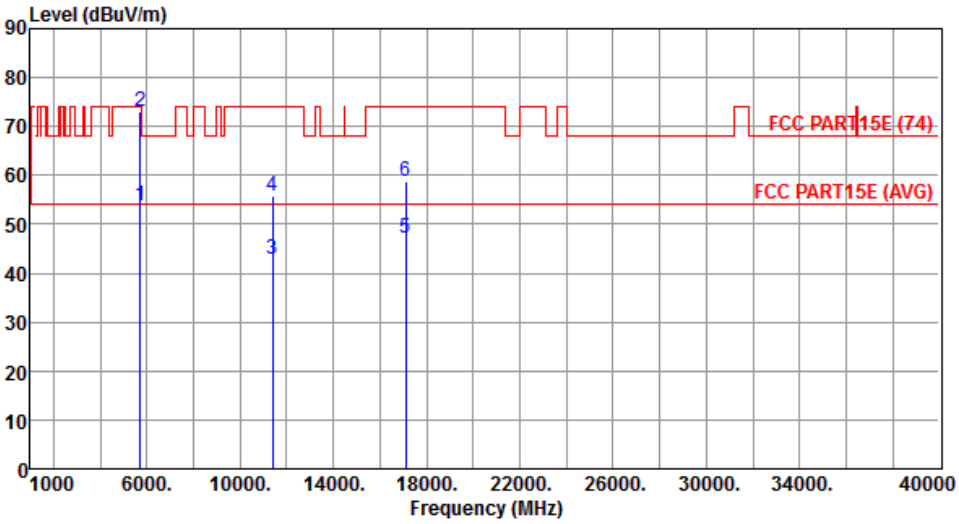
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	46.15	54.00	-7.85	40.50	5.65	Average	215	115
2	5460.00	59.82	74.00	-14.18	54.17	5.65	Peak	215	115
3	11160.00	42.68	54.00	-11.32	28.08	14.60	Average	100	69
4	11160.00	55.43	74.00	-18.57	40.83	14.60	Peak	100	69
5	16740.00	60.93	68.20	-7.27	44.76	16.17	Peak	100	295

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

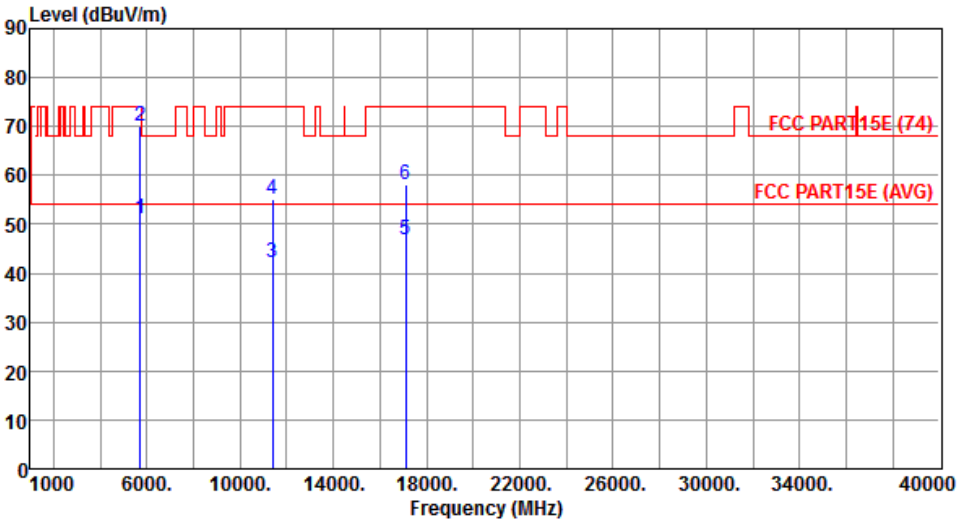
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	53.68	54.00	-0.32	47.69	5.99	Average	221	115
2	5725.00	73.22	74.00	-0.78	67.23	5.99	Peak	221	115
3	11400.00	42.69	54.00	-11.31	27.87	14.82	Average	100	51
4	11400.00	55.81	74.00	-18.19	40.99	14.82	Peak	100	51
5	17100.00	47.24	54.00	-6.76	30.54	16.70	Average	109	52
6	17100.00	58.63	74.00	-15.37	41.93	16.70	Peak	109	52

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

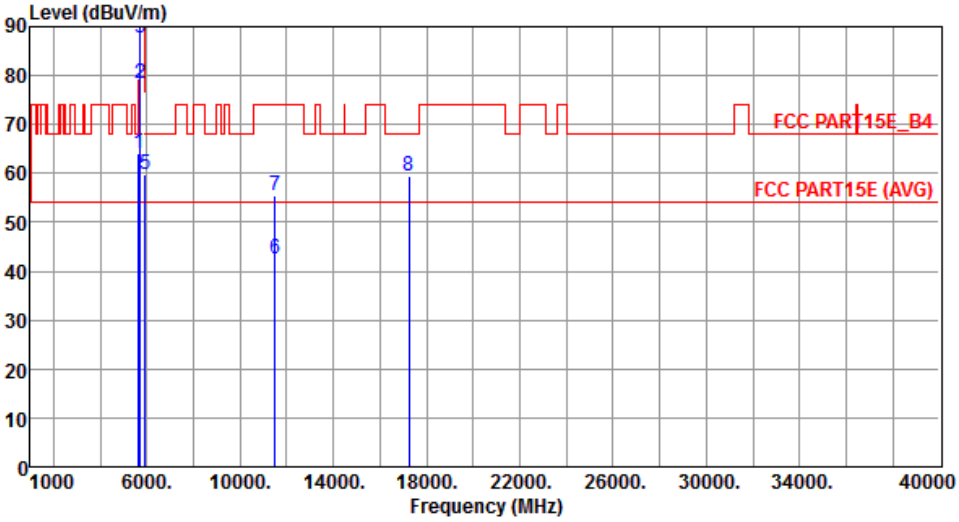
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	51.16	54.00	-2.84	45.17	5.99	Average	205	103
2	5725.00	70.01	74.00	-3.99	64.02	5.99	Peak	205	103
3	11400.00	42.13	54.00	-11.87	27.31	14.82	Average	101	86
4	11400.00	55.21	74.00	-18.79	40.39	14.82	Peak	101	86
5	17100.00	46.82	54.00	-7.18	30.12	16.70	Average	101	94
6	17100.00	58.19	74.00	-15.81	41.49	16.70	Peak	101	94

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

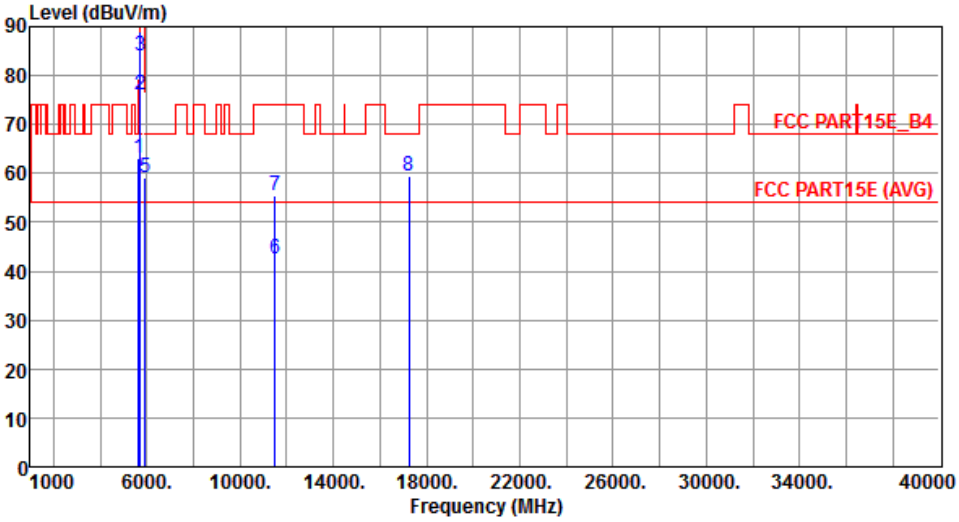
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	64.02	68.20	-4.18	58.15	5.87	Peak	224	116
2	5700.00	78.51	105.20	-26.69	72.55	5.96	Peak	224	116
3	5720.00	87.69	110.80	-23.11	81.71	5.98	Peak	224	116
4	5725.00	92.44	122.20	-29.76	86.45	5.99	Peak	224	116
5	5925.00	59.81	68.20	-8.39	53.55	6.26	Peak	224	116
6	11490.00	42.63	54.00	-11.37	27.73	14.90	Average	110	51
7	11490.00	55.49	74.00	-18.51	40.59	14.90	Peak	110	51
8	17235.00	59.34	68.20	-8.86	42.08	17.26	Peak	106	101

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

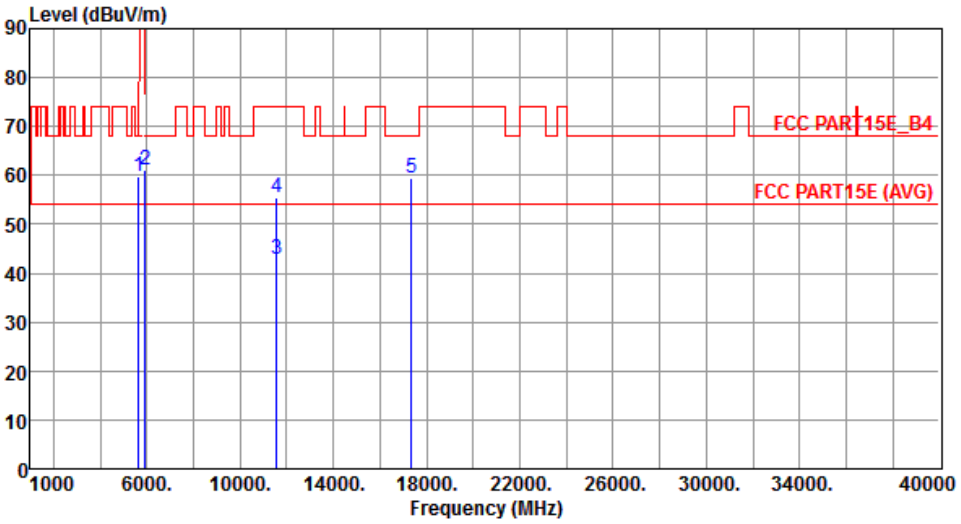
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	63.07	68.20	-5.13	57.20	5.87	Peak	204	110
2	5700.00	75.92	105.20	-29.28	69.96	5.96	Peak	204	110
3	5720.00	84.15	110.80	-26.65	78.17	5.98	Peak	204	110
4	5725.00	88.96	122.20	-33.24	82.97	5.99	Peak	204	110
5	5925.00	59.13	68.20	-9.07	52.87	6.26	Peak	204	110
6	11490.00	42.54	54.00	-11.46	27.64	14.90	Average	100	41
7	11490.00	55.47	74.00	-18.53	40.57	14.90	Peak	100	41
8	17235.00	59.45	68.20	-8.75	42.19	17.26	Peak	103	88

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

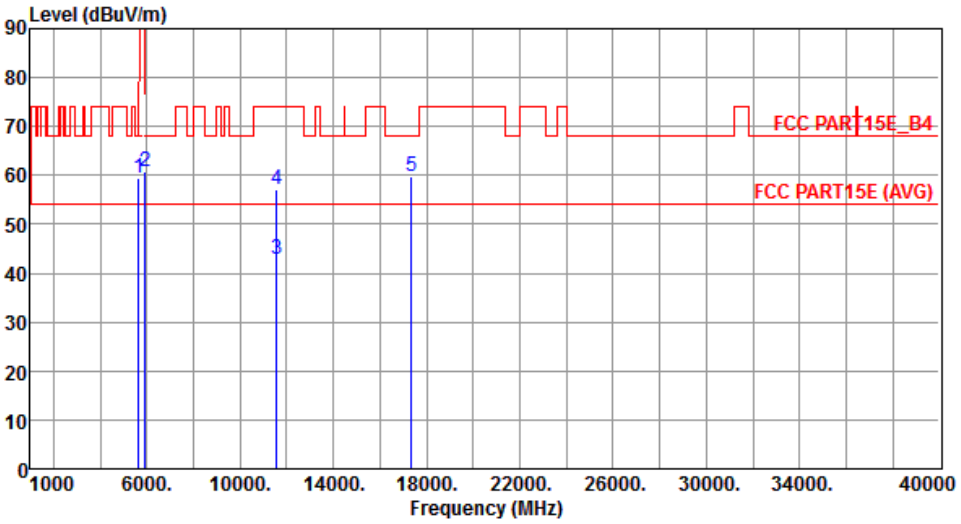
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.68	68.20	-8.52	53.81	5.87	Peak	208	104
2	5925.00	61.04	68.20	-7.16	54.78	6.26	Peak	208	104
3	11570.00	42.68	54.00	-11.32	27.91	14.77	Average	100	42
4	11570.00	55.49	74.00	-18.51	40.72	14.77	Peak	100	42
5	17355.00	59.42	68.20	-8.78	41.67	17.75	Peak	100	113

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

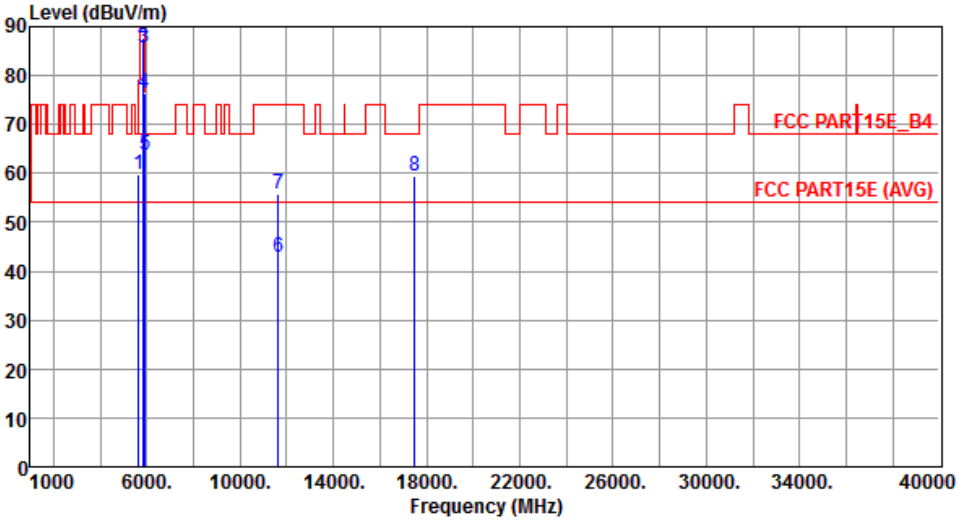
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.51	68.20	-8.69	53.64	5.87	Peak	250	101
2	5925.00	60.82	68.20	-7.38	54.56	6.26	Peak	250	101
3	11570.00	42.69	54.00	-11.31	27.92	14.77	Average	100	58
4	11570.00	57.24	74.00	-16.76	42.47	14.77	Peak	100	58
5	17355.00	59.76	68.20	-8.44	42.01	17.75	Peak	105	314

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

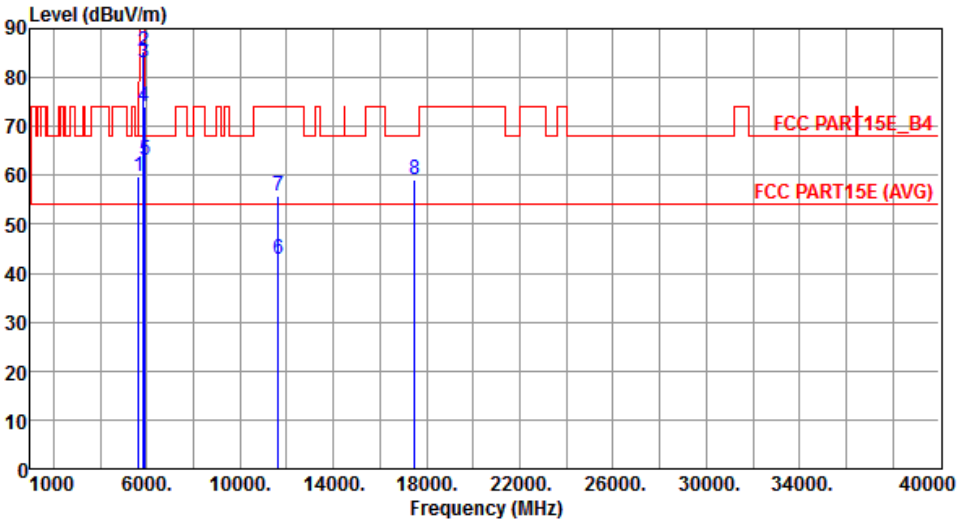
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	59.86	68.20	-8.34	53.99	5.87	Peak	218	115
2	5850.00	87.64	122.20	-34.56	81.47	6.17	Peak	218	115
3	5855.00	85.76	110.80	-25.04	79.58	6.18	Peak	218	115
4	5875.00	76.54	105.20	-28.66	70.34	6.20	Peak	218	115
5	5925.00	63.61	68.20	-4.59	57.35	6.26	Peak	218	115
6	11650.00	42.96	54.00	-11.04	28.35	14.61	Average	101	47
7	11650.00	55.81	74.00	-18.19	41.20	14.61	Peak	101	47
8	17475.00	59.48	68.20	-8.72	41.23	18.25	Peak	100	31

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

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

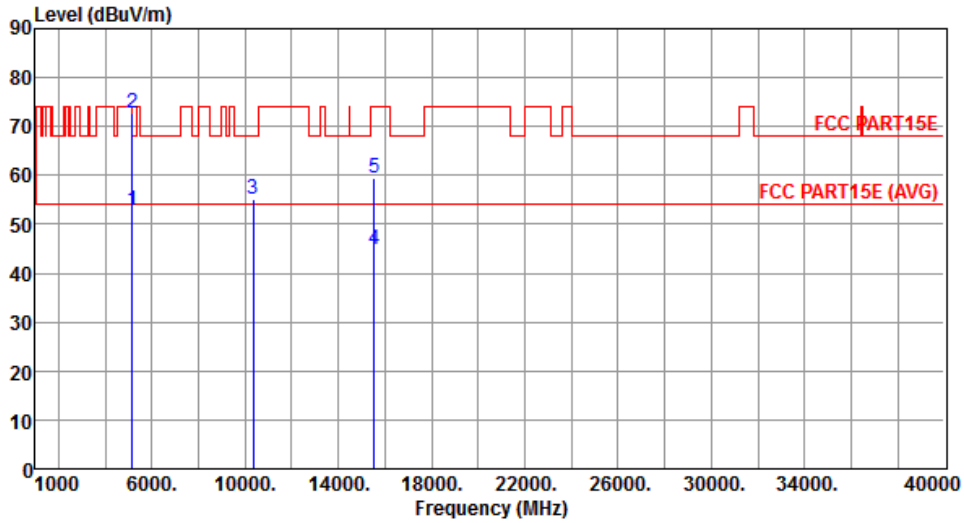


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.62	68.20	-8.58	53.75	5.87	Peak	229	114
2	5850.00	85.31	122.20	-36.89	79.14	6.17	Peak	229	114
3	5855.00	83.04	110.80	-27.76	76.86	6.18	Peak	229	114
4	5875.00	74.11	105.20	-31.09	67.91	6.20	Peak	229	114
5	5925.00	62.96	68.20	-5.24	56.70	6.26	Peak	229	114
6	11650.00	42.75	54.00	-11.25	28.14	14.61	Average	100	59
7	11650.00	55.68	74.00	-18.32	41.07	14.61	Peak	100	59
8	17475.00	59.26	68.20	-8.94	41.01	18.25	Peak	100	41

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

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

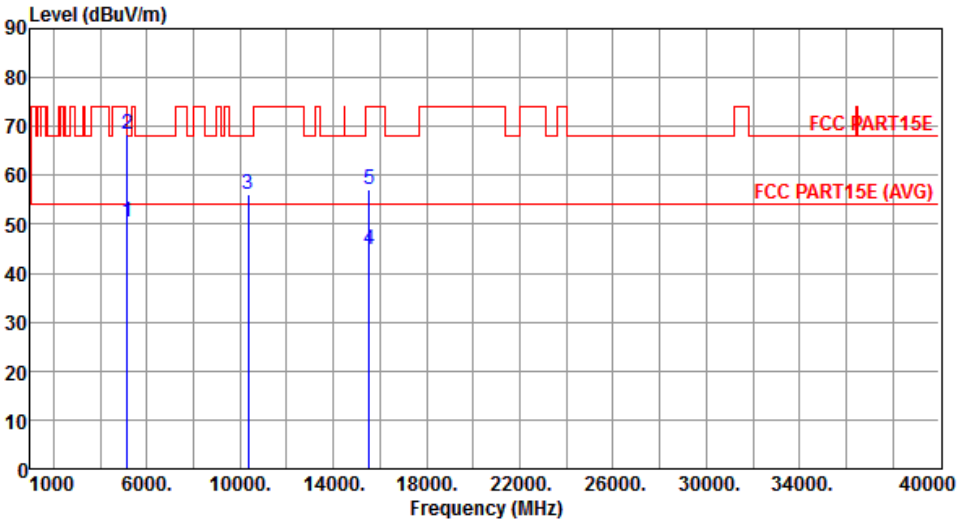
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.76	54.00	-1.24	47.55	5.21	Average	228	113
2	5150.00	72.67	74.00	-1.33	67.46	5.21	Peak	228	113
3	10360.00	55.26	68.20	-12.94	41.36	13.90	Peak	105	51
4	15540.00	44.85	54.00	-9.15	29.68	15.17	Average	105	96
5	15540.00	59.31	74.00	-14.69	44.14	15.17	Peak	105	96

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

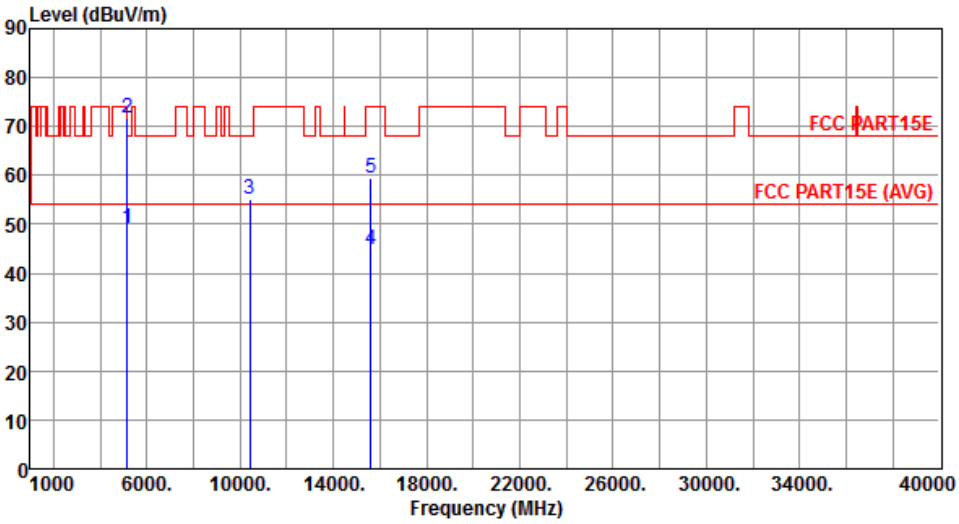
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	50.45	54.00	-3.55	45.24	5.21	Average	314	106
2	5150.00	68.42	74.00	-5.58	63.21	5.21	Peak	314	106
3	10360.00	56.21	68.20	-11.99	42.31	13.90	Peak	100	39
4	15540.00	44.69	54.00	-9.31	29.52	15.17	Average	100	324
5	15540.00	57.06	74.00	-16.94	41.89	15.17	Peak	100	324

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

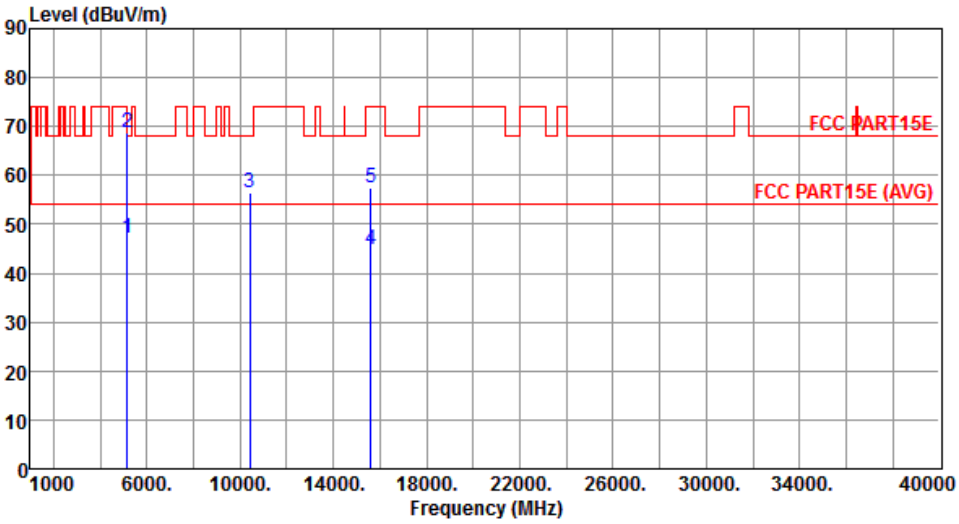
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.11	54.00	-4.89	43.90	5.21	Average	226	101
2	5150.00	71.83	74.00	-2.17	66.62	5.21	Peak	226	101
3	10400.00	55.12	68.20	-13.08	41.20	13.92	Peak	100	47
4	15600.00	44.99	54.00	-9.01	29.85	15.14	Average	100	88
5	15600.00	59.48	74.00	-14.52	44.34	15.14	Peak	100	88

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

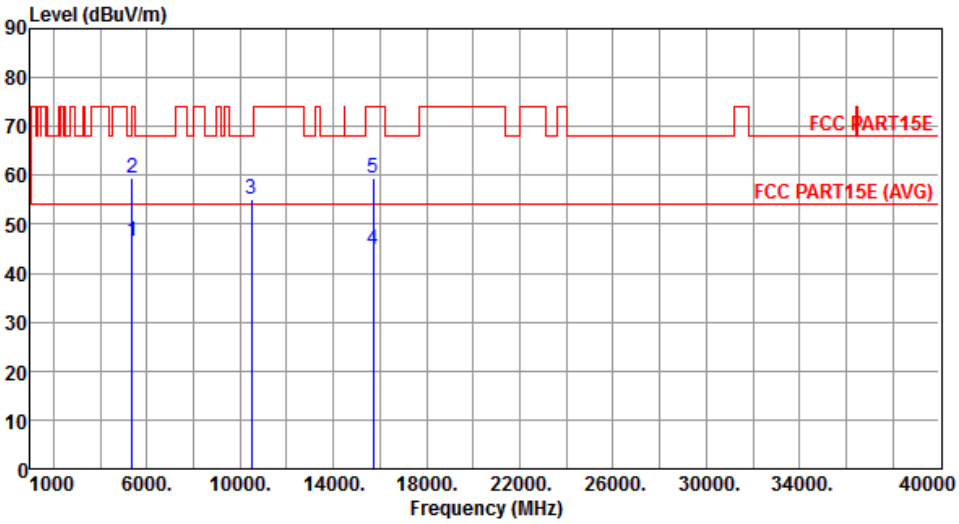
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.02	54.00	-6.98	41.81	5.21	Average	314	108
2	5150.00	68.65	74.00	-5.35	63.44	5.21	Peak	314	108
3	10400.00	56.41	68.20	-11.79	42.49	13.92	Peak	100	45
4	15600.00	44.92	54.00	-9.08	29.78	15.14	Average	100	315
5	15600.00	57.30	74.00	-16.70	42.16	15.14	Peak	100	315

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

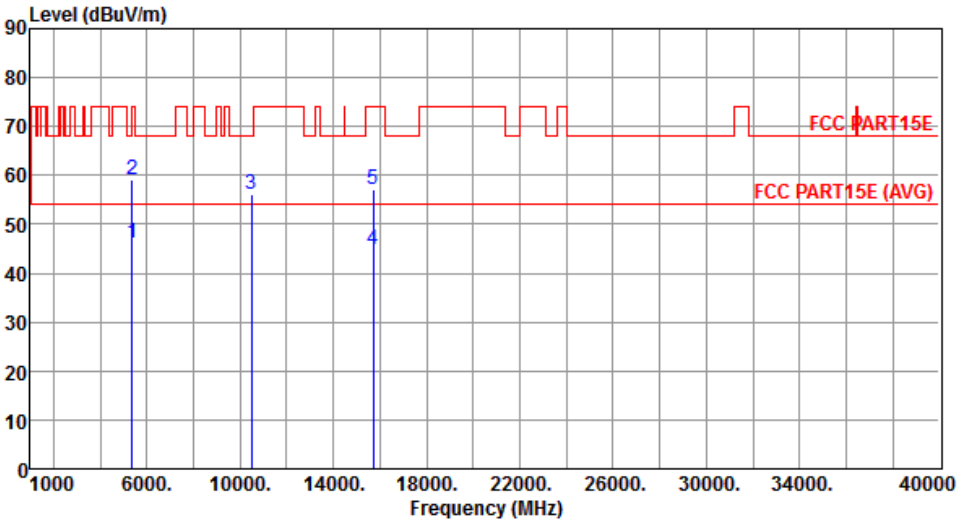
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.61	54.00	-7.39	41.11	5.50	Average	226	104
2	5350.00	59.31	74.00	-14.69	53.81	5.50	Peak	226	104
3	10480.00	55.23	68.20	-12.97	41.28	13.95	Peak	100	49
4	15720.00	44.86	54.00	-9.14	29.75	15.11	Average	100	92
5	15720.00	59.32	74.00	-14.68	44.21	15.11	Peak	100	92

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

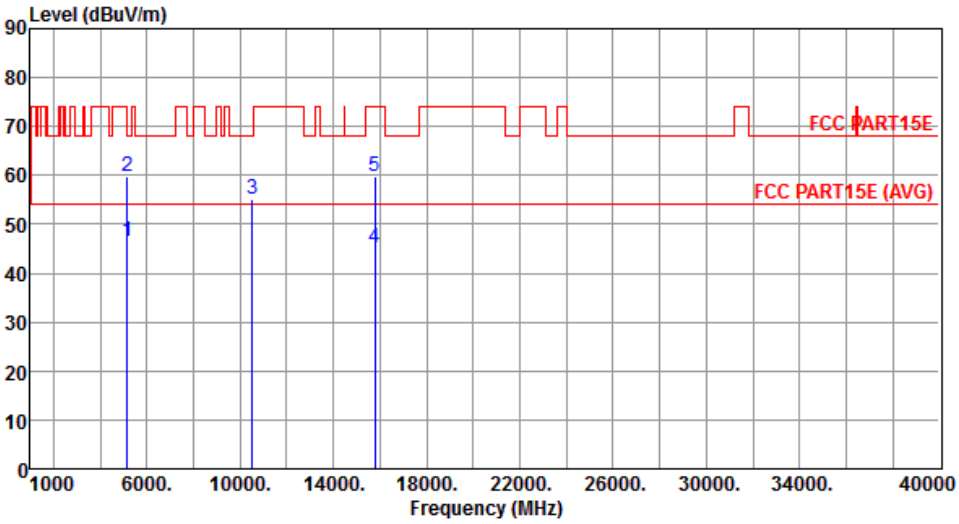
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.25	54.00	-7.75	40.75	5.50	Average	314	101
2	5350.00	59.18	74.00	-14.82	53.68	5.50	Peak	314	101
3	10480.00	56.21	68.20	-11.99	42.26	13.95	Peak	100	49
4	15720.00	44.68	54.00	-9.32	29.57	15.11	Average	100	313
5	15720.00	57.24	74.00	-16.76	42.13	15.11	Peak	100	313

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

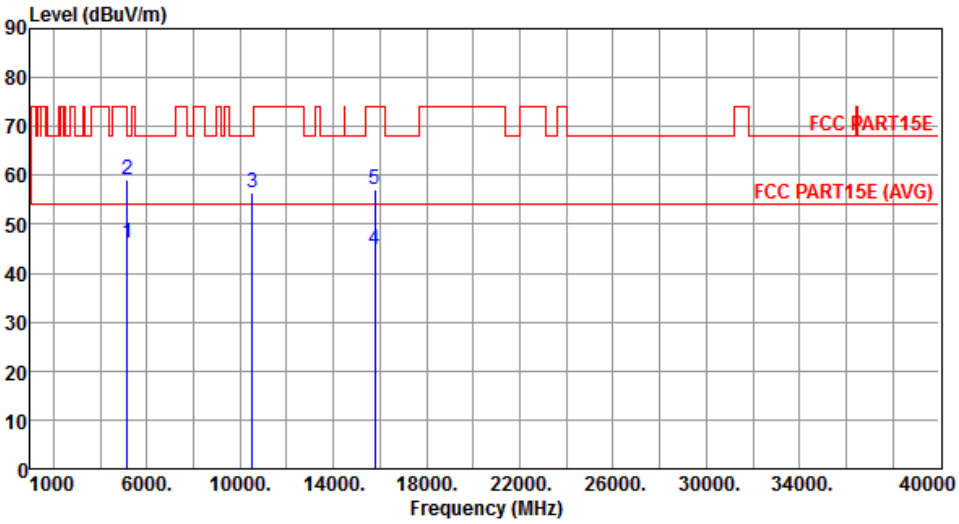
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.45	54.00	-7.55	41.24	5.21	Average	226	105
2	5150.00	59.68	74.00	-14.32	54.47	5.21	Peak	226	105
3	10520.00	55.24	68.20	-12.96	41.26	13.98	Peak	100	42
4	15780.00	45.02	54.00	-8.98	29.95	15.07	Average	100	93
5	15780.00	59.63	74.00	-14.37	44.56	15.07	Peak	100	93

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

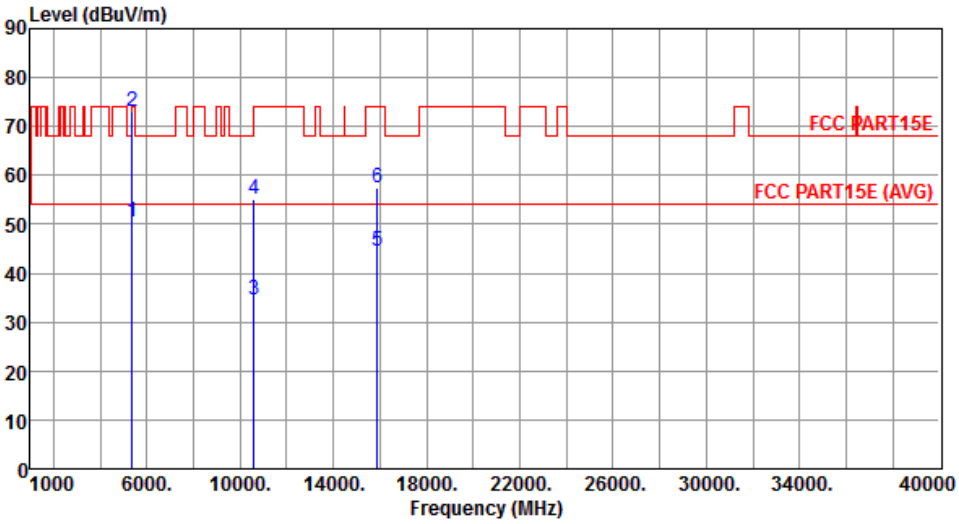
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.25	54.00	-7.75	41.04	5.21	Average	314	110
2	5150.00	59.13	74.00	-14.87	53.92	5.21	Peak	314	110
3	10520.00	56.35	68.20	-11.85	42.37	13.98	Peak	100	34
4	15780.00	44.85	54.00	-9.15	29.78	15.07	Average	100	319
5	15780.00	57.15	74.00	-16.85	42.08	15.07	Peak	100	319

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

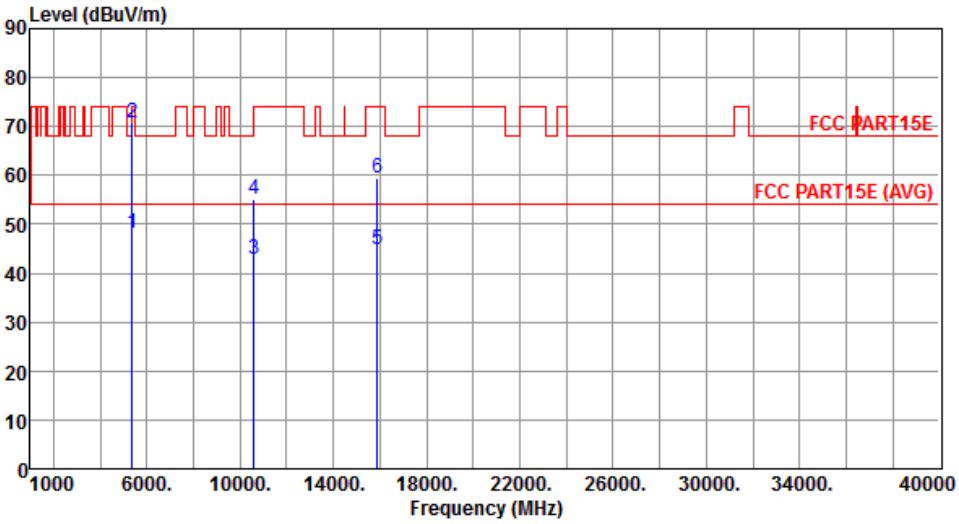
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	50.52	54.00	-3.48	45.02	5.50	Average	227	104
2	5350.00	73.19	74.00	-0.81	67.69	5.50	Peak	227	104
3	10600.00	34.51	54.00	-19.49	28.70	5.81	Average	100	52
4	10600.00	55.03	74.00	-18.97	40.97	14.06	Peak	100	52
5	15900.00	44.66	54.00	-9.34	29.62	15.04	Average	100	103
6	15900.00	57.45	74.00	-16.55	42.41	15.04	Peak	100	103

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

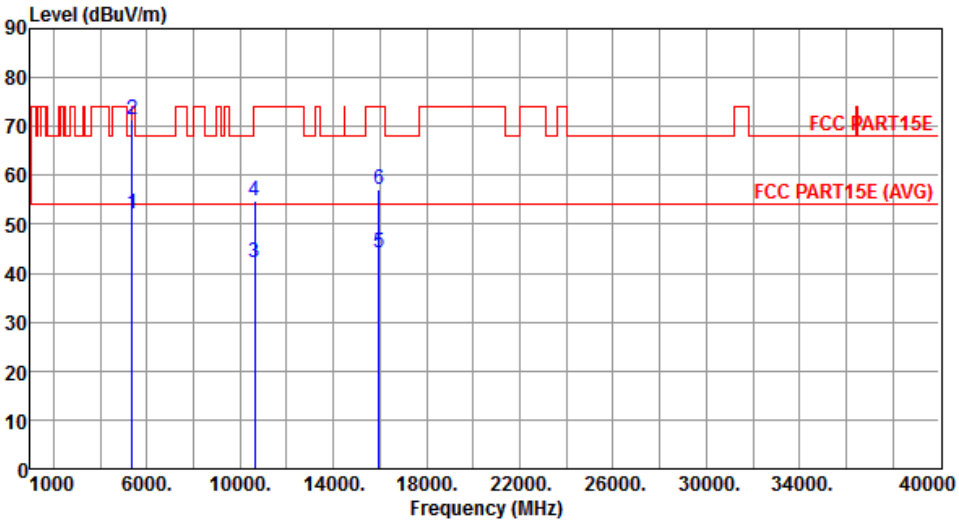
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	48.25	54.00	-5.75	42.75	5.50	Average	314	115
2	5350.00	70.66	74.00	-3.34	65.16	5.50	Peak	314	115
3	10600.00	42.85	54.00	-11.15	28.79	14.06	Average	100	53
4	10600.00	55.18	74.00	-18.82	41.12	14.06	Peak	100	53
5	15900.00	44.69	54.00	-9.31	29.65	15.04	Average	100	296
6	15900.00	59.41	74.00	-14.59	44.37	15.04	Peak	100	296

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

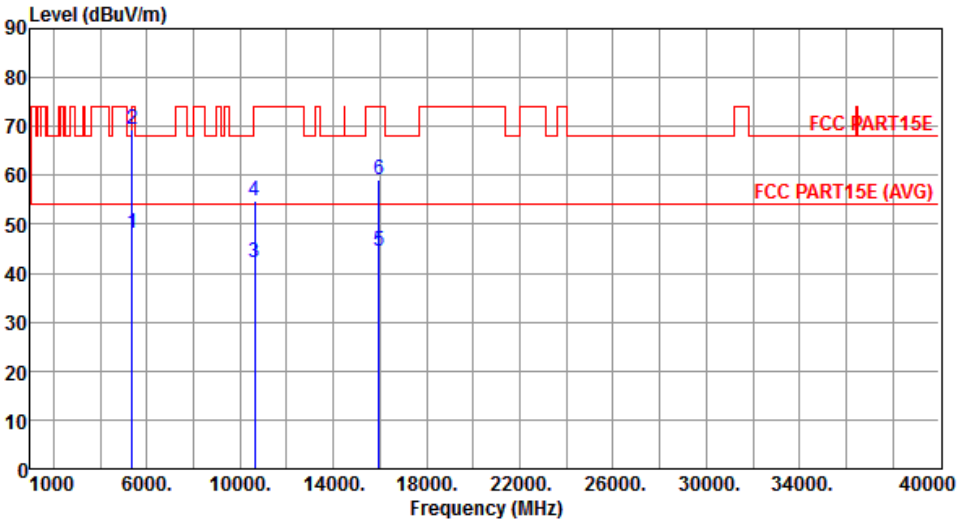
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	52.26	54.00	-1.74	46.76	5.50	Average	219	138
2	5350.00	71.28	74.00	-2.72	65.78	5.50	Peak	219	138
3	10640.00	42.25	54.00	-11.75	28.14	14.11	Average	101	66
4	10640.00	54.81	74.00	-19.19	40.70	14.11	Peak	101	66
5	15960.00	44.31	54.00	-9.69	29.30	15.01	Average	101	104
6	15960.00	57.26	74.00	-16.74	42.25	15.01	Peak	101	104

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

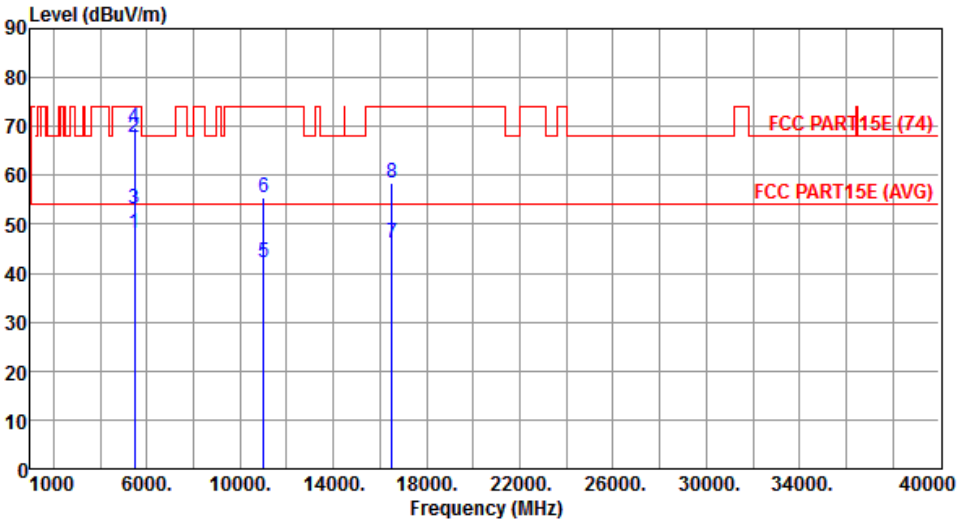
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	48.16	54.00	-5.84	42.66	5.50	Average	310	116
2	5350.00	69.25	74.00	-4.75	63.75	5.50	Peak	310	116
3	10640.00	42.34	54.00	-11.66	28.23	14.11	Average	101	53
4	10640.00	54.96	74.00	-19.04	40.85	14.11	Peak	101	53
5	15960.00	44.52	54.00	-9.48	29.51	15.01	Average	101	301
6	15960.00	59.28	74.00	-14.72	44.27	15.01	Peak	101	301

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

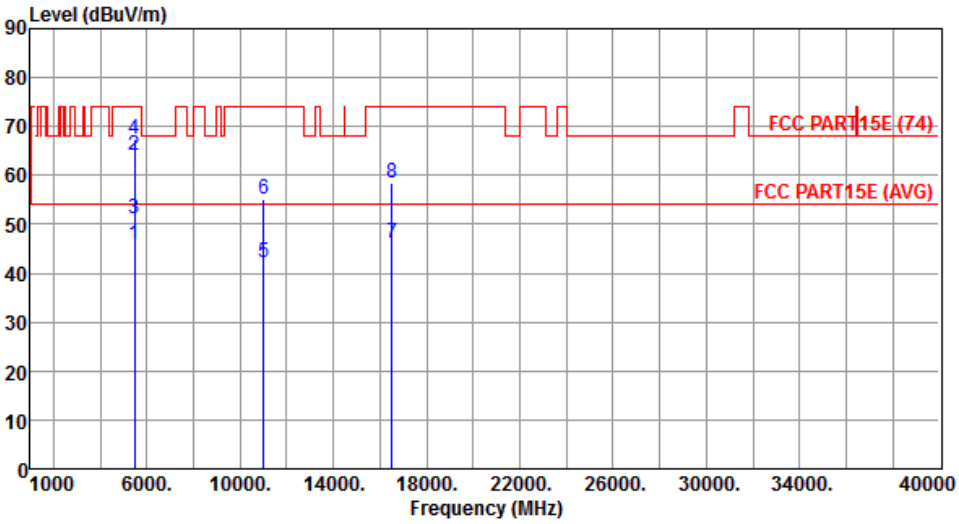
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.07	54.00	-5.93	42.42	5.65	Average	221	136
2	5460.00	67.66	74.00	-6.34	62.01	5.65	Peak	221	136
3	5470.00	53.21	54.00	-0.79	47.55	5.66	Average	221	136
4	5470.00	69.83	74.00	-4.17	64.17	5.66	Peak	221	136
5	11000.00	42.21	54.00	-11.79	27.75	14.46	Average	100	52
6	11000.00	55.36	74.00	-18.64	40.90	14.46	Peak	100	52
7	16500.00	46.21	54.00	-7.79	30.15	16.06	Average	100	84
8	16500.00	58.31	74.00	-15.69	42.25	16.06	Peak	100	84

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

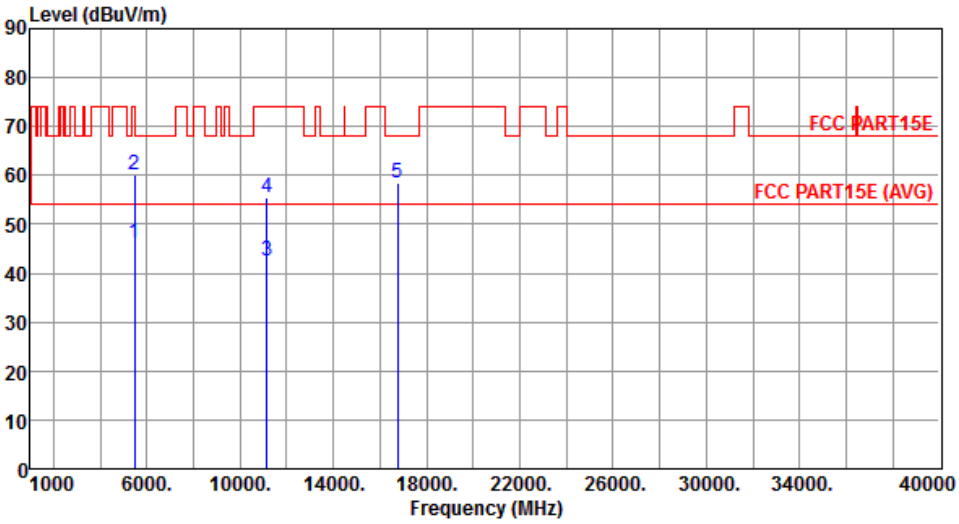
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.82	54.00	-8.18	40.17	5.65	Average	211	126
2	5460.00	64.26	74.00	-9.74	58.61	5.65	Peak	211	126
3	5470.00	51.06	54.00	-2.94	45.40	5.66	Average	211	126
4	5470.00	67.44	74.00	-6.56	61.78	5.66	Peak	211	126
5	11000.00	42.14	54.00	-11.86	27.68	14.46	Average	100	64
6	11000.00	55.29	74.00	-18.71	40.83	14.46	Peak	100	64
7	16500.00	46.29	54.00	-7.71	30.23	16.06	Average	100	205
8	16500.00	58.44	74.00	-15.56	42.38	16.06	Peak	100	205

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

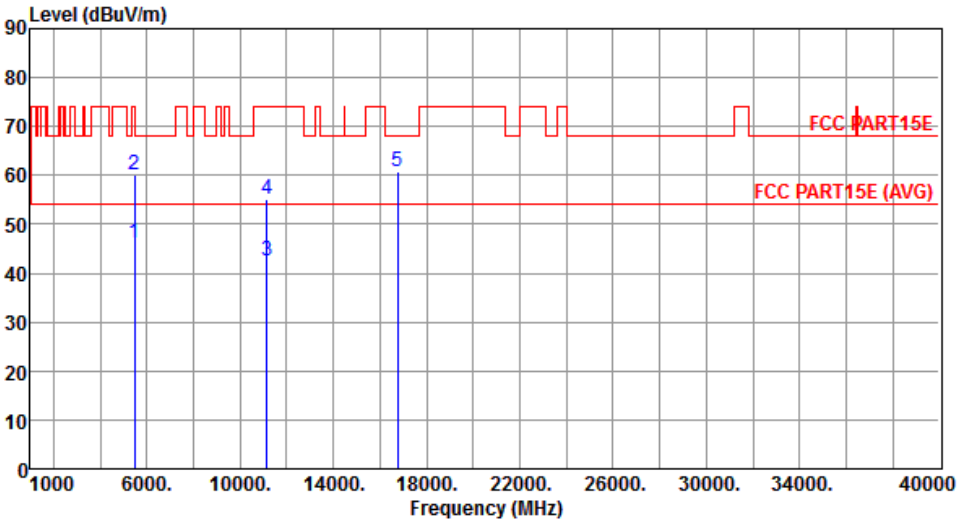
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.33	54.00	-7.67	40.68	5.65	Average	218	105
2	5460.00	60.06	74.00	-13.94	54.41	5.65	Peak	218	105
3	11160.00	42.35	54.00	-11.65	27.75	14.60	Average	100	49
4	11160.00	55.46	74.00	-18.54	40.86	14.60	Peak	100	49
5	16740.00	58.33	68.20	-9.87	42.16	16.17	Peak	100	96

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

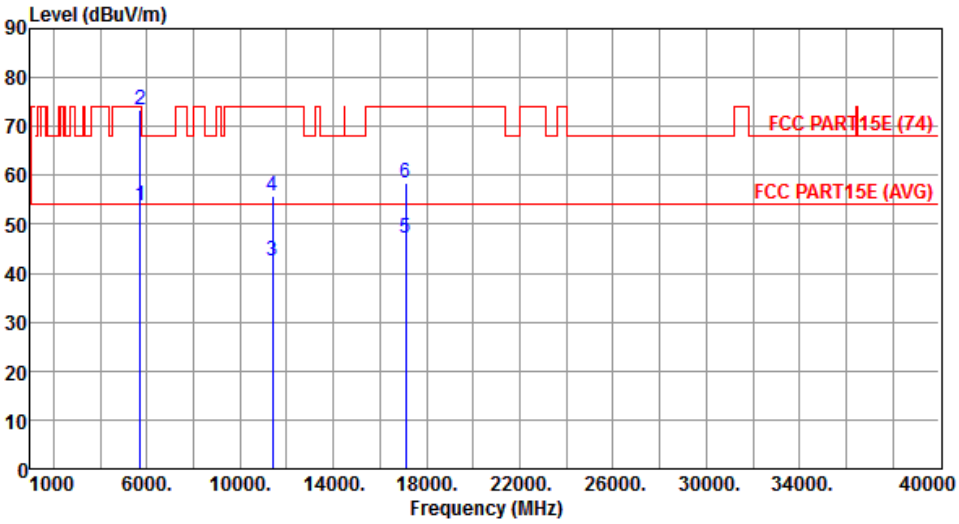
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	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	46.21	54.00	-7.79	40.56	5.65	Average	215	112
2	5460.00	59.98	74.00	-14.02	54.33	5.65	Peak	215	112
3	11160.00	42.50	54.00	-11.50	27.90	14.60	Average	100	58
4	11160.00	55.13	74.00	-18.87	40.53	14.60	Peak	100	58
5	16740.00	60.77	68.20	-7.43	44.60	16.17	Peak	100	322

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

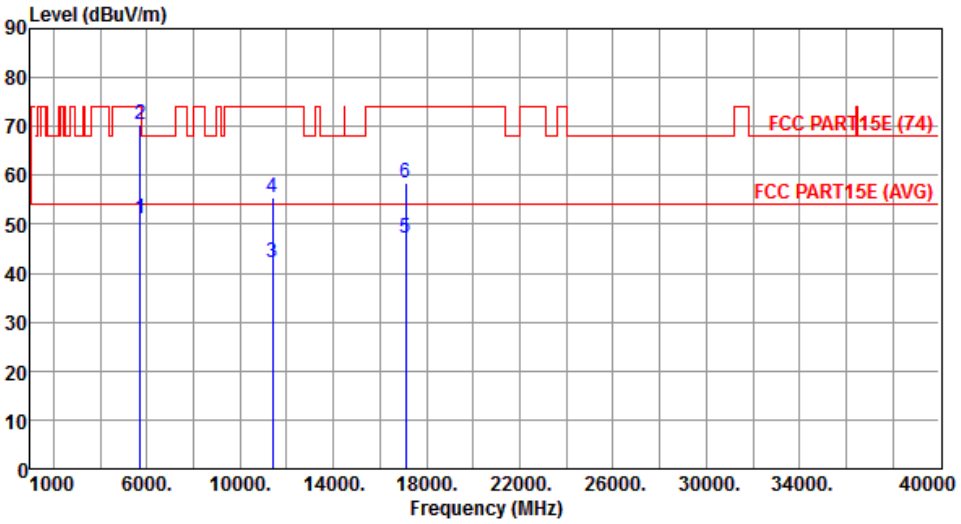
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	53.85	54.00	-0.15	47.86	5.99	Average	221	116
2	5725.00	73.40	74.00	-0.60	67.41	5.99	Peak	221	116
3	11400.00	42.45	54.00	-11.55	27.63	14.82	Average	101	56
4	11400.00	55.68	74.00	-18.32	40.86	14.82	Peak	101	56
5	17100.00	47.15	54.00	-6.85	30.45	16.70	Average	100	63
6	17100.00	58.46	74.00	-15.54	41.76	16.70	Peak	100	63

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

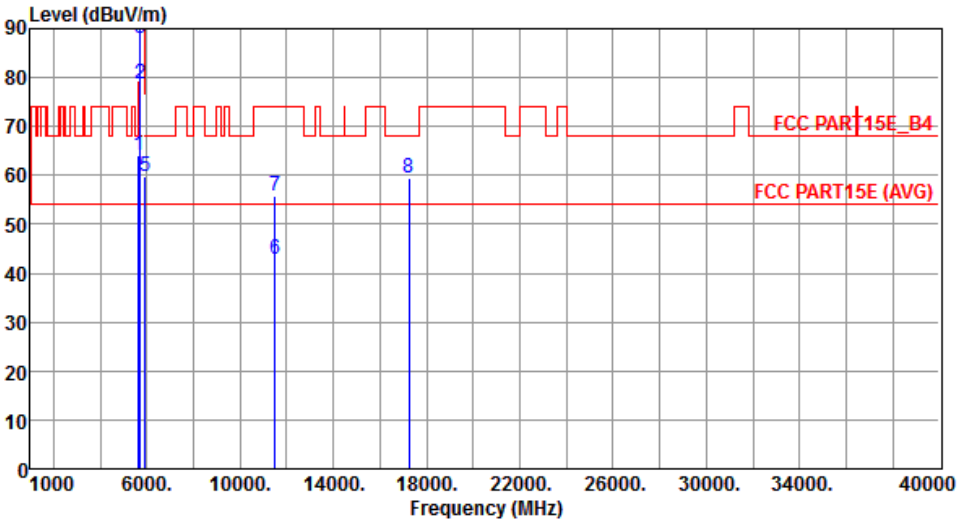
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	51.25	54.00	-2.75	45.26	5.99	Average	205	106
2	5725.00	70.28	74.00	-3.72	64.29	5.99	Peak	205	106
3	11400.00	42.21	54.00	-11.79	27.39	14.82	Average	101	95
4	11400.00	55.36	74.00	-18.64	40.54	14.82	Peak	101	95
5	17100.00	47.04	54.00	-6.96	30.34	16.70	Average	100	322
6	17100.00	58.29	74.00	-15.71	41.59	16.70	Peak	100	322

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

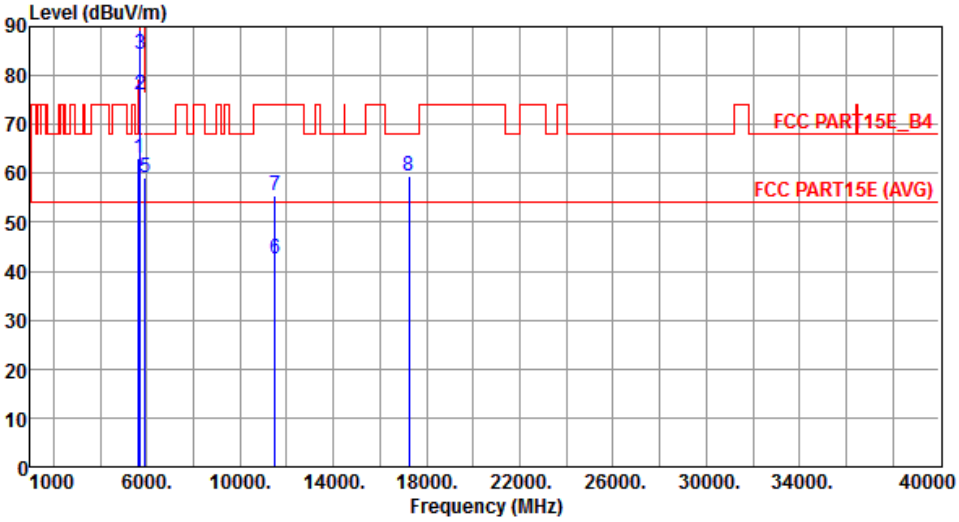
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	64.13	68.20	-4.07	58.26	5.87	Peak	220	119
2	5700.00	78.67	105.20	-26.53	72.71	5.96	Peak	220	119
3	5720.00	87.98	110.80	-22.82	82.00	5.98	Peak	220	119
4	5725.00	92.65	122.20	-29.55	86.66	5.99	Peak	220	119
5	5925.00	59.93	68.20	-8.27	53.67	6.26	Peak	220	119
6	11490.00	42.86	54.00	-11.14	27.96	14.90	Average	110	45
7	11490.00	55.74	74.00	-18.26	40.84	14.90	Peak	110	45
8	17235.00	59.48	68.20	-8.72	42.22	17.26	Peak	106	100

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

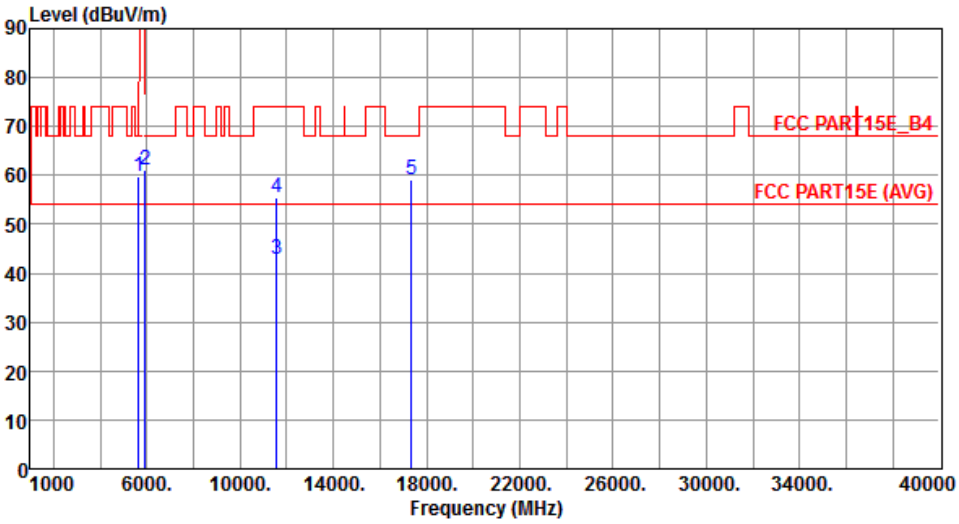
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	63.21	68.20	-4.99	57.34	5.87	Peak	204	105
2	5700.00	76.11	105.20	-29.09	70.15	5.96	Peak	204	105
3	5720.00	84.42	110.80	-26.38	78.44	5.98	Peak	204	105
4	5725.00	89.21	122.20	-32.99	83.22	5.99	Peak	204	105
5	5925.00	59.21	68.20	-8.99	52.95	6.26	Peak	204	105
6	11490.00	42.65	54.00	-11.35	27.75	14.90	Average	100	56
7	11490.00	55.61	74.00	-18.39	40.71	14.90	Peak	100	56
8	17235.00	59.31	68.20	-8.89	42.05	17.26	Peak	103	92

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

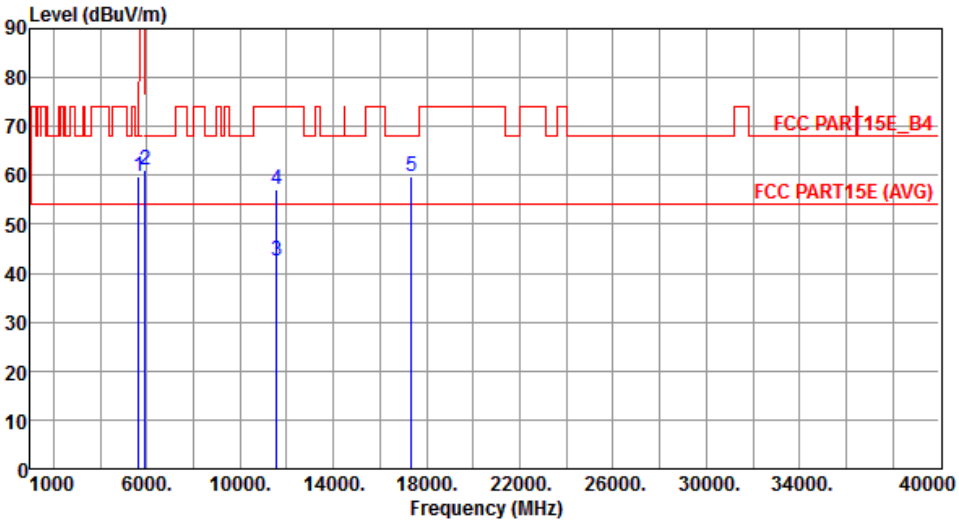
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.79	68.20	-8.41	53.92	5.87	Peak	211	105
2	5925.00	61.11	68.20	-7.09	54.85	6.26	Peak	211	105
3	11570.00	42.73	54.00	-11.27	27.96	14.77	Average	100	39
4	11570.00	55.61	74.00	-18.39	40.84	14.77	Peak	100	39
5	17355.00	59.24	68.20	-8.96	41.49	17.75	Peak	100	111

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

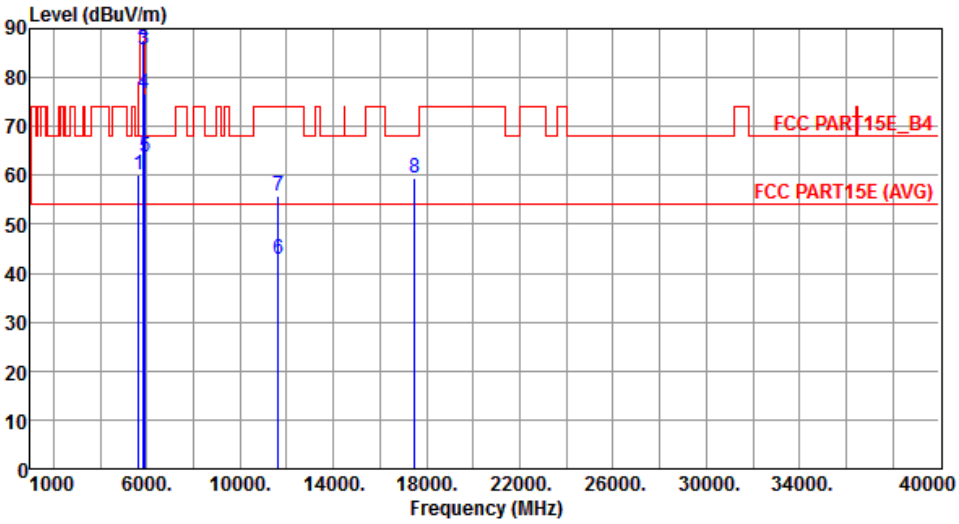
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.64	68.20	-8.56	53.77	5.87	Peak	250	105
2	5925.00	61.02	68.20	-7.18	54.76	6.26	Peak	250	105
3	11570.00	42.54	54.00	-11.46	27.77	14.77	Average	100	51
4	11570.00	57.12	74.00	-16.88	42.35	14.77	Peak	100	51
5	17355.00	59.84	68.20	-8.36	42.09	17.75	Peak	100	319

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

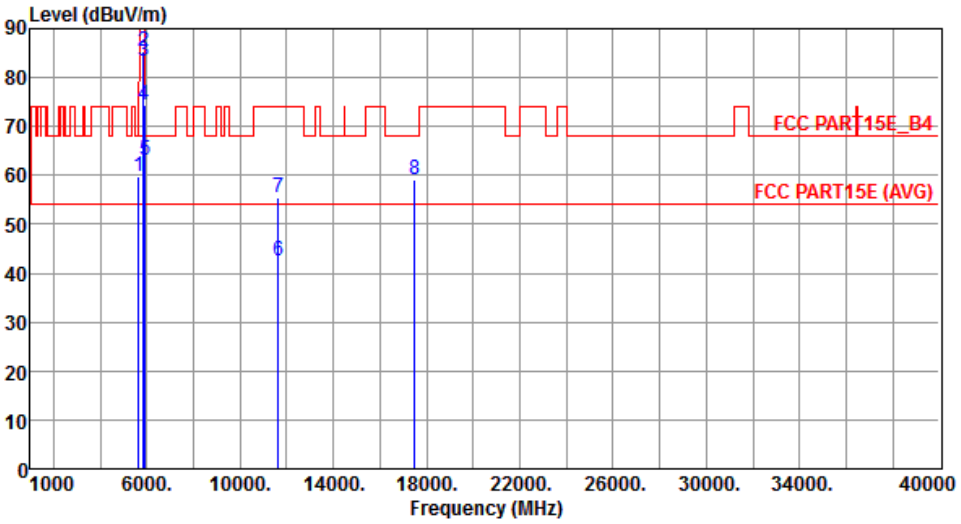
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.01	68.20	-8.19	54.14	5.87	Peak	218	112
2	5850.00	87.81	122.20	-34.39	81.64	6.17	Peak	218	112
3	5855.00	85.83	110.80	-24.97	79.65	6.18	Peak	218	112
4	5875.00	76.69	105.20	-28.51	70.49	6.20	Peak	218	112
5	5925.00	63.87	68.20	-4.33	57.61	6.26	Peak	218	112
6	11650.00	42.85	54.00	-11.15	28.24	14.61	Average	101	51
7	11650.00	55.76	74.00	-18.24	41.15	14.61	Peak	101	51
8	17475.00	59.32	68.20	-8.88	41.07	18.25	Peak	100	44

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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

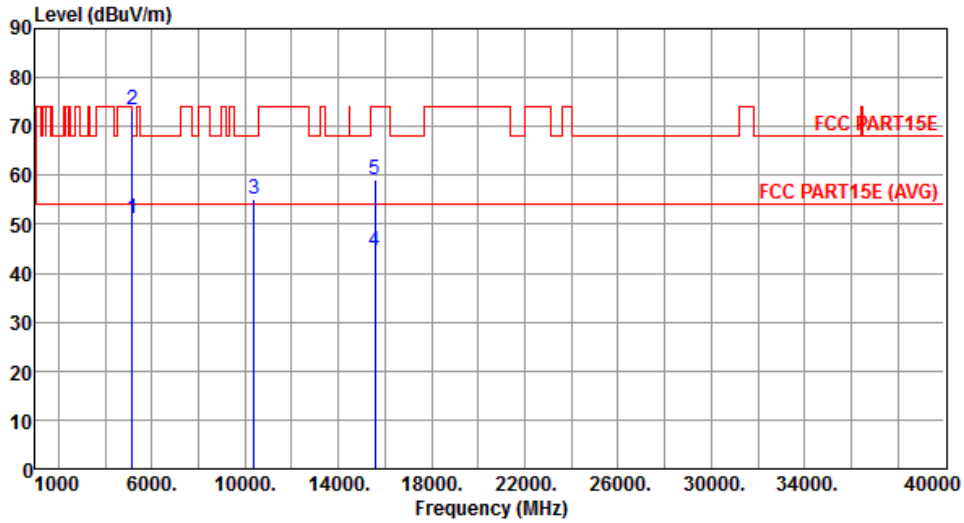


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.85	68.20	-8.35	53.98	5.87	Peak	229	116
2	5850.00	85.42	122.20	-36.78	79.25	6.17	Peak	229	116
3	5855.00	83.21	110.80	-27.59	77.03	6.18	Peak	229	116
4	5875.00	74.26	105.20	-30.94	68.06	6.20	Peak	229	116
5	5925.00	63.04	68.20	-5.16	56.78	6.26	Peak	229	116
6	11650.00	42.61	54.00	-11.39	28.00	14.61	Average	100	46
7	11650.00	55.57	74.00	-18.43	40.96	14.61	Peak	100	46
8	17475.00	59.11	68.20	-9.09	40.86	18.25	Peak	100	38

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

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

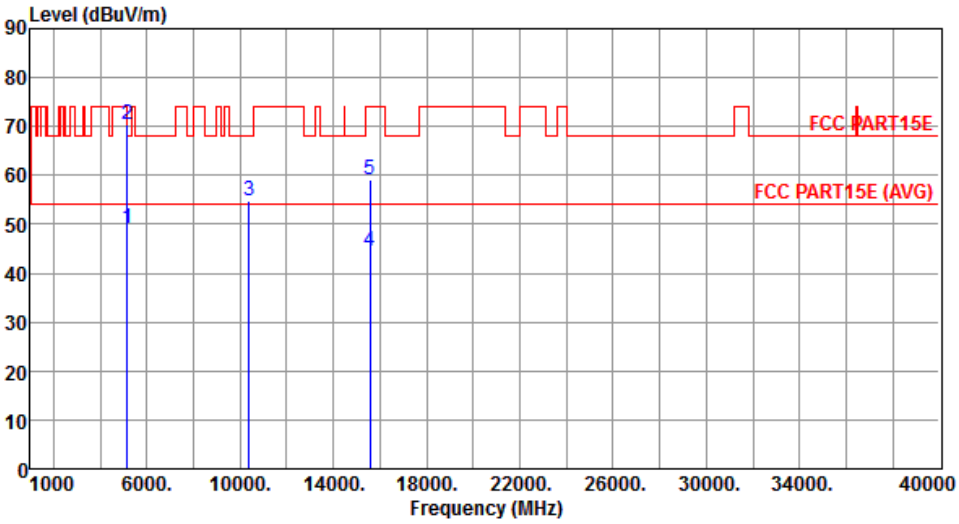
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.24	54.00	-2.76	46.03	5.21	Average	226	114
2	5150.00	73.31	74.00	-0.69	68.10	5.21	Peak	226	114
3	10380.00	55.03	68.20	-13.17	41.13	13.90	Peak	100	62
4	15570.00	44.65	54.00	-9.35	29.49	15.16	Average	100	108
5	15570.00	59.24	74.00	-14.76	44.08	15.16	Peak	100	108

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

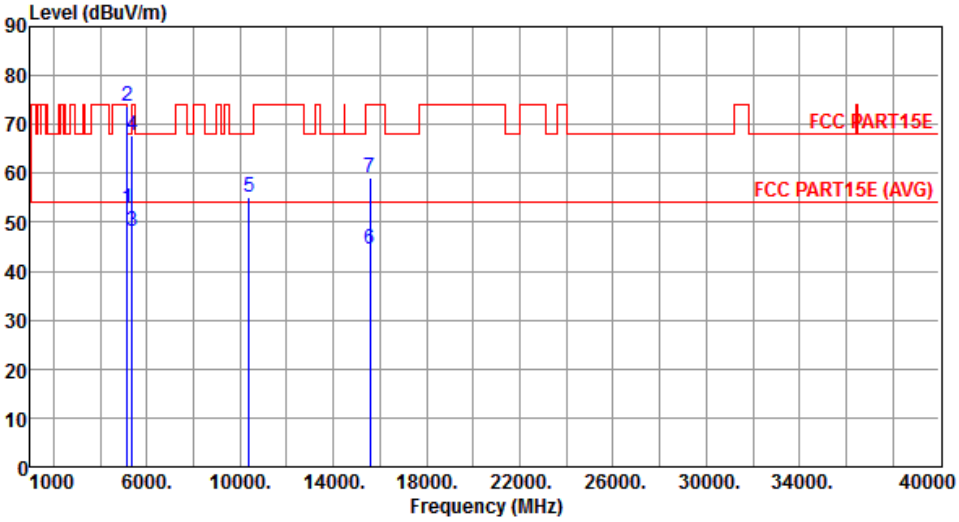
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.02	54.00	-4.98	43.81	5.21	Average	300	109
2	5150.00	70.24	74.00	-3.76	65.03	5.21	Peak	300	109
3	10380.00	54.92	68.20	-13.28	41.02	13.90	Peak	100	35
4	15570.00	44.51	54.00	-9.49	29.35	15.16	Average	100	112
5	15570.00	59.08	74.00	-14.92	43.92	15.16	Peak	100	112

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

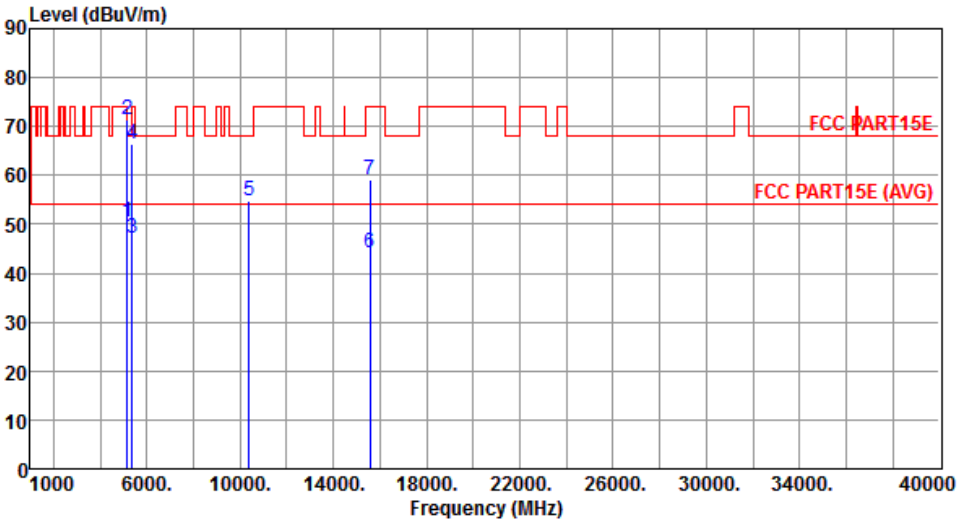
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.85	54.00	-1.15	47.64	5.21	Average	231	104
2	5150.00	73.72	74.00	-0.28	68.51	5.21	Peak	231	104
3	5350.00	48.24	54.00	-5.76	42.74	5.50	Average	228	104
4	5350.00	67.80	74.00	-6.20	62.30	5.50	Peak	228	104
5	10380.00	55.03	68.20	-13.17	41.13	13.90	Peak	100	62
6	15570.00	44.65	54.00	-9.35	29.49	15.16	Average	100	108
7	15570.00	59.24	74.00	-14.76	44.08	15.16	Peak	100	108

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

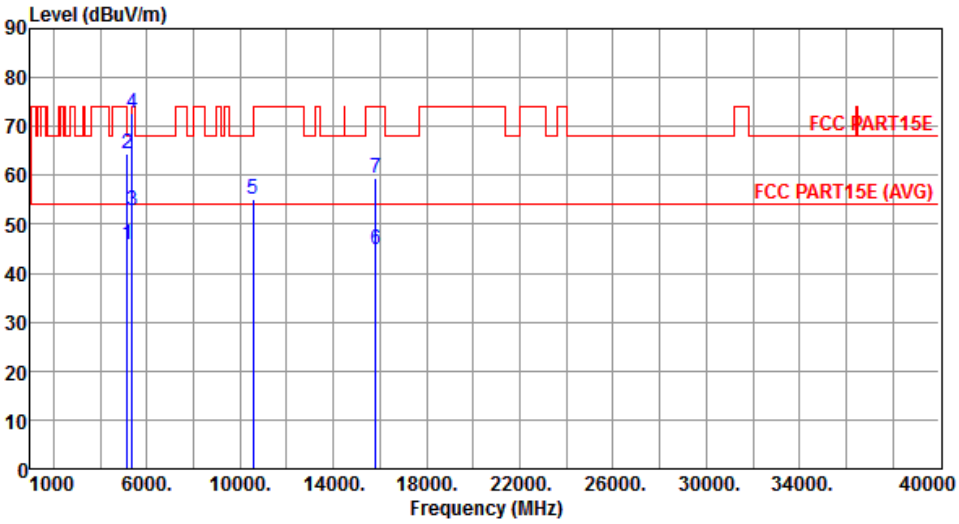
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	50.42	54.00	-3.58	45.21	5.21	Average	295	101
2	5150.00	71.24	74.00	-2.76	66.03	5.21	Peak	295	101
3	5350.00	47.02	54.00	-6.98	41.52	5.50	Average	295	101
4	5350.00	66.51	74.00	-7.49	61.01	5.50	Peak	295	101
5	10380.00	54.92	68.20	-13.28	41.02	13.90	Peak	100	41
6	15570.00	44.25	54.00	-9.75	29.09	15.16	Average	108	96
7	15570.00	59.12	74.00	-14.88	43.96	15.16	Peak	108	96

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

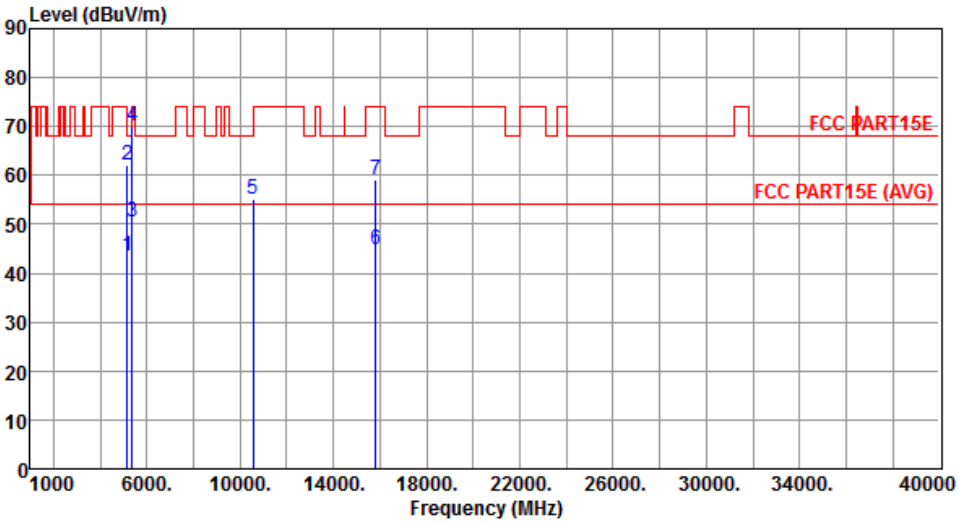
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.95	54.00	-8.05	40.74	5.21	Average	224	104
2	5150.00	64.42	74.00	-9.58	59.21	5.21	Peak	224	104
3	5350.00	52.74	54.00	-1.26	47.24	5.50	Average	224	104
4	5350.00	72.76	74.00	-1.24	67.26	5.50	Peak	224	104
5	10540.00	55.14	68.20	-13.06	41.14	14.00	Peak	100	42
6	15810.00	44.81	54.00	-9.19	29.75	15.06	Average	100	91
7	15810.00	59.39	74.00	-14.61	44.33	15.06	Peak	100	91

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

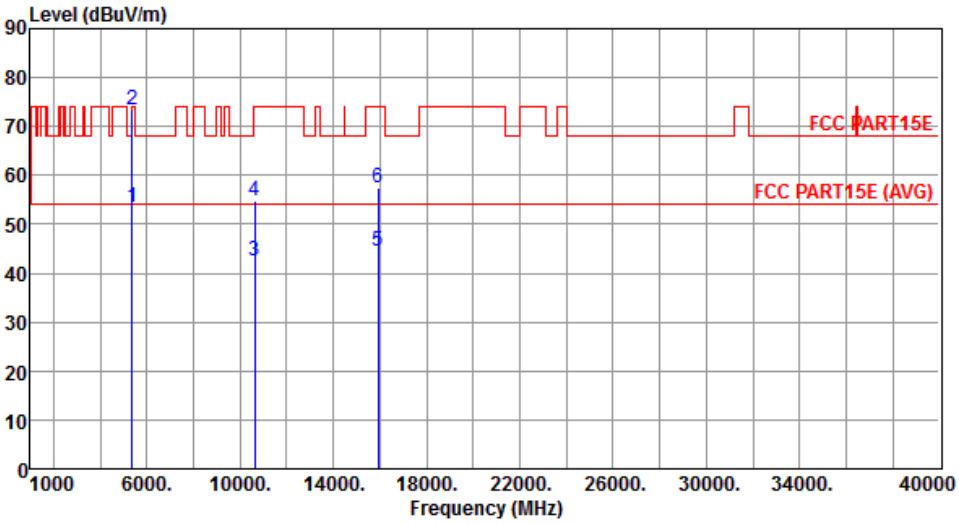
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	43.42	54.00	-10.58	38.21	5.21	Average	295	115
2	5150.00	62.08	74.00	-11.92	56.87	5.21	Peak	295	115
3	5350.00	50.44	54.00	-3.56	44.94	5.50	Average	295	115
4	5350.00	70.21	74.00	-3.79	64.71	5.50	Peak	295	115
5	10540.00	55.04	68.20	-13.16	41.04	14.00	Peak	100	31
6	15810.00	44.69	54.00	-9.31	29.63	15.06	Average	108	65
7	15810.00	59.15	74.00	-14.85	44.09	15.06	Peak	108	65

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

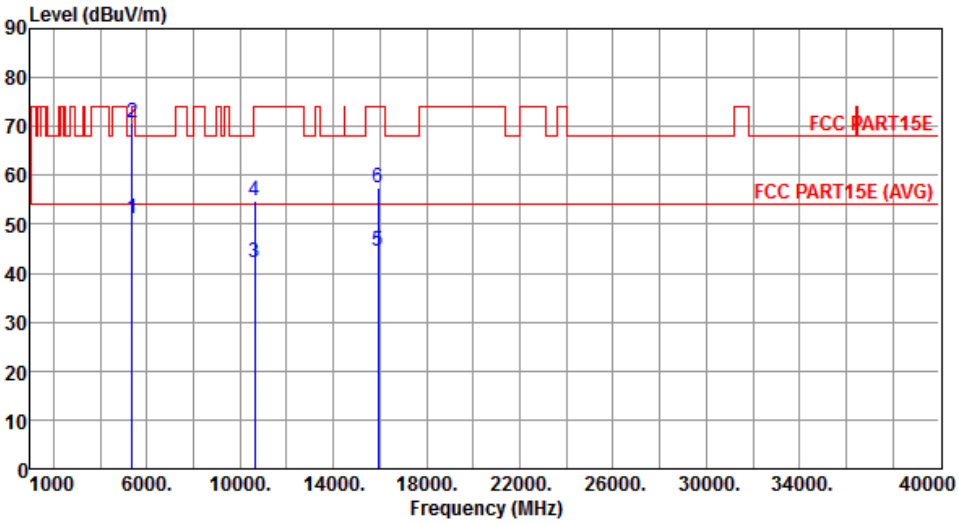
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	53.58	54.00	-0.42	48.08	5.50	Average	227	140
2	5350.00	73.55	74.00	-0.45	68.05	5.50	Peak	227	140
3	10620.00	42.35	54.00	-11.65	28.28	14.07	Average	103	66
4	10620.00	54.96	74.00	-19.04	40.89	14.07	Peak	103	66
5	15930.00	44.65	54.00	-9.35	29.63	15.02	Average	100	41
6	15930.00	57.44	74.00	-16.56	42.42	15.02	Peak	100	41

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

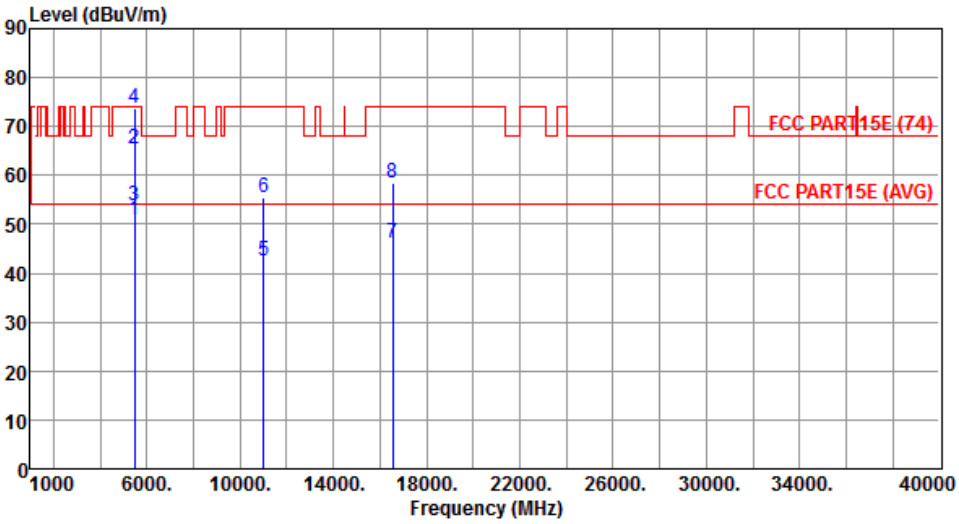
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.06	54.00	-2.94	45.56	5.50	Average	258	110
2	5350.00	70.88	74.00	-3.12	65.38	5.50	Peak	258	110
3	10620.00	42.06	54.00	-11.94	27.99	14.07	Average	103	51
4	10620.00	54.81	74.00	-19.19	40.74	14.07	Peak	103	51
5	15930.00	44.54	54.00	-9.46	29.52	15.02	Average	100	36
6	15930.00	57.29	74.00	-16.71	42.27	15.02	Peak	100	36

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

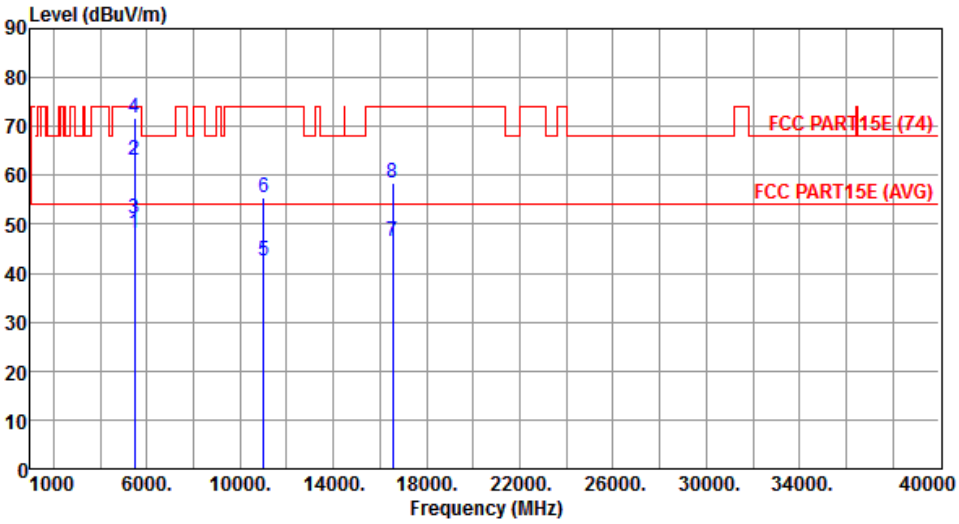
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.70	54.00	-3.30	45.05	5.65	Average	208	134
2	5460.00	65.58	74.00	-8.42	59.93	5.65	Peak	208	134
3	5470.00	53.65	54.00	-0.35	47.99	5.66	Average	208	134
4	5470.00	73.85	74.00	-0.15	68.19	5.66	Peak	208	134
5	11020.00	42.35	54.00	-11.65	27.87	14.48	Average	112	34
6	11020.00	55.46	74.00	-18.54	40.98	14.48	Peak	112	34
7	16530.00	46.32	54.00	-7.68	30.25	16.07	Average	112	18
8	16530.00	58.45	74.00	-15.55	42.38	16.07	Peak	112	18

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

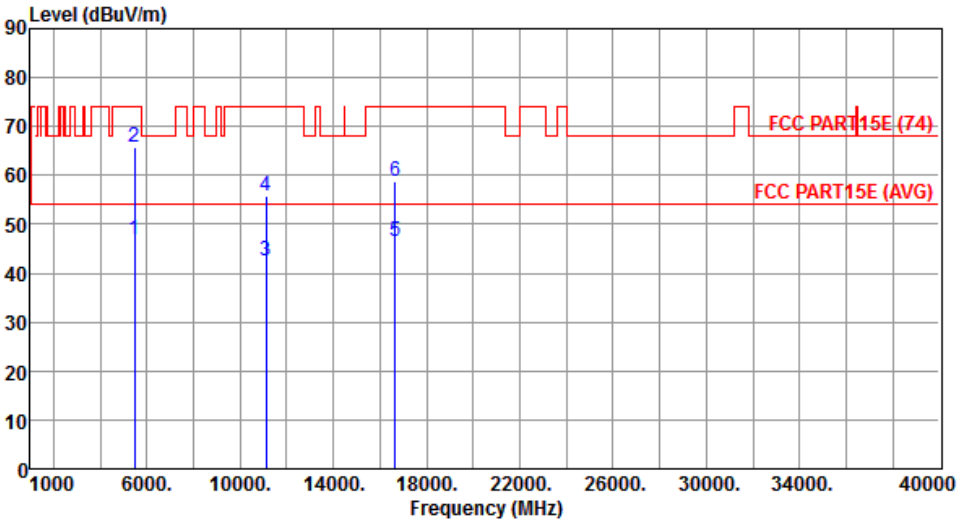
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.24	54.00	-5.76	42.59	5.65	Average	220	106
2	5460.00	63.15	74.00	-10.85	57.50	5.65	Peak	220	106
3	5470.00	51.24	54.00	-2.76	45.58	5.66	Average	220	106
4	5470.00	71.62	74.00	-2.38	65.96	5.66	Peak	220	106
5	11020.00	42.48	54.00	-11.52	28.00	14.48	Average	101	36
6	11020.00	55.61	74.00	-18.39	41.13	14.48	Peak	101	36
7	16530.00	46.54	54.00	-7.46	30.47	16.07	Average	101	116
8	16530.00	58.59	74.00	-15.41	42.52	16.07	Peak	101	116

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

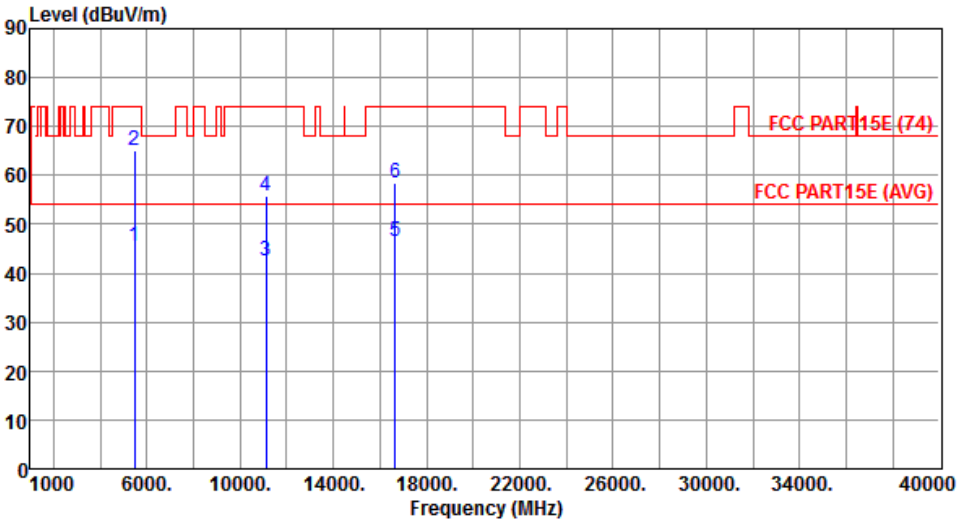
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		



	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	46.69	54.00	-7.31	41.04	5.65	Average	219	105
2	5460.00	65.66	74.00	-8.34	60.01	5.65	Peak	219	105
3	11100.00	42.46	54.00	-11.54	27.91	14.55	Average	105	84
4	11100.00	55.89	74.00	-18.11	41.34	14.55	Peak	105	84
5	16650.00	46.54	54.00	-7.46	30.41	16.13	Average	101	29
6	16650.00	58.66	74.00	-15.34	42.53	16.13	Peak	101	29

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

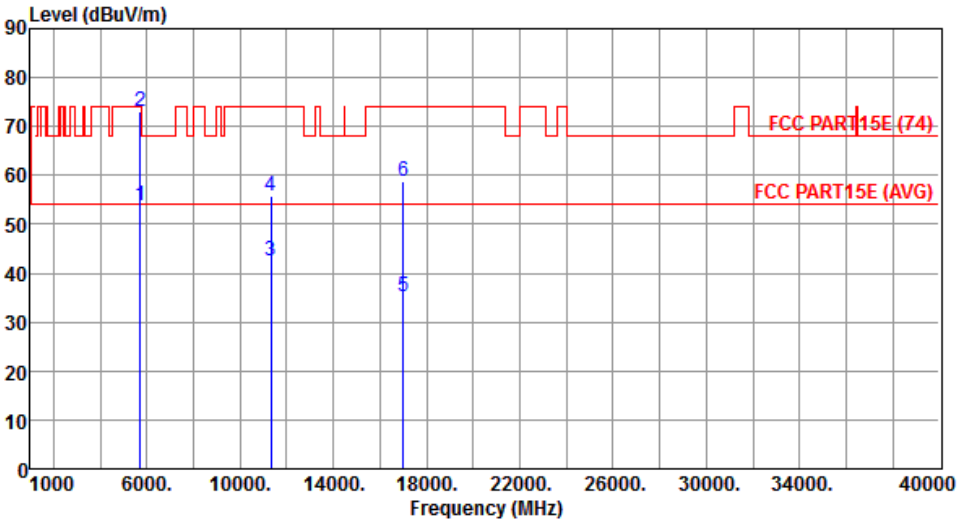
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.54	54.00	-8.46	39.89	5.65	Average	236	108
2	5460.00	65.02	74.00	-8.98	59.37	5.65	Peak	236	108
3	11100.00	42.38	54.00	-11.62	27.83	14.55	Average	105	99
4	11100.00	55.71	74.00	-18.29	41.16	14.55	Peak	105	99
5	16650.00	46.39	54.00	-7.61	30.26	16.13	Average	101	22
6	16650.00	58.52	74.00	-15.48	42.39	16.13	Peak	101	22

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

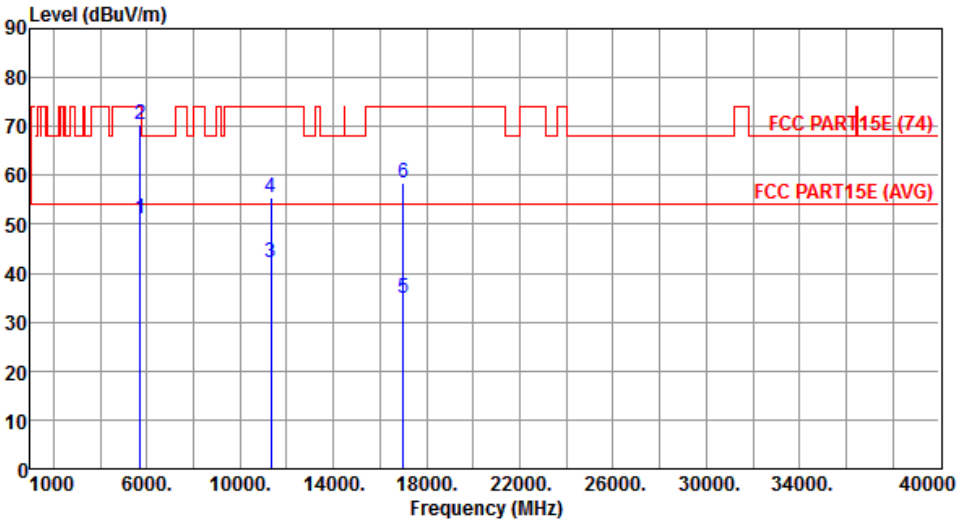
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	53.84	54.00	-0.16	47.85	5.99	Average	210	117
2	5725.00	73.17	74.00	-0.83	67.18	5.99	Peak	210	117
3	11340.00	42.65	54.00	-11.35	27.88	14.77	Average	114	102
4	11340.00	55.68	74.00	-18.32	40.91	14.77	Peak	114	102
5	17010.00	35.30	54.00	-18.70	30.36	4.94	Average	100	22
6	17010.00	58.62	74.00	-15.38	42.29	16.33	Peak	100	22

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

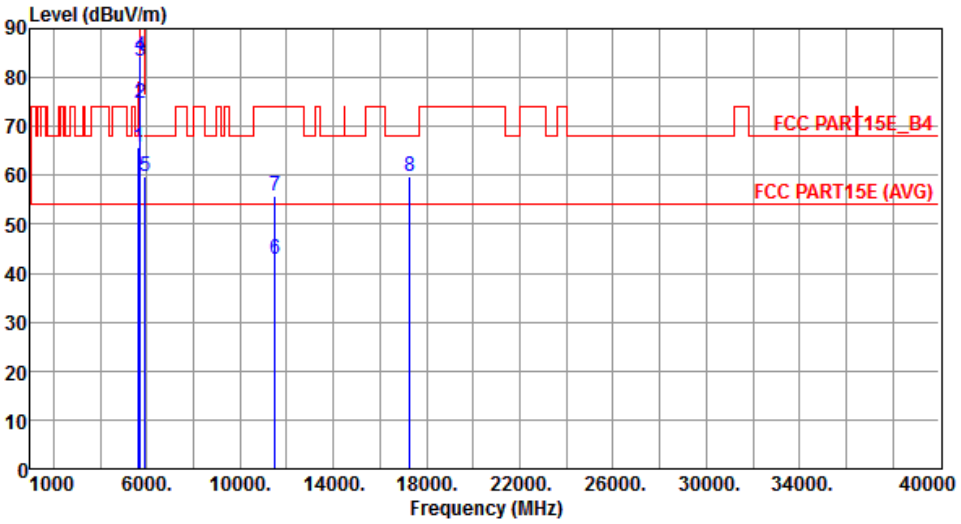
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	51.24	54.00	-2.76	45.25	5.99	Average	225	101
2	5725.00	70.25	74.00	-3.75	64.26	5.99	Peak	225	101
3	11340.00	42.33	54.00	-11.67	27.56	14.77	Average	110	65
4	11340.00	55.47	74.00	-18.53	40.70	14.77	Peak	110	65
5	17010.00	35.02	54.00	-18.98	30.08	4.94	Average	100	45
6	17010.00	58.47	74.00	-15.53	42.14	16.33	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).

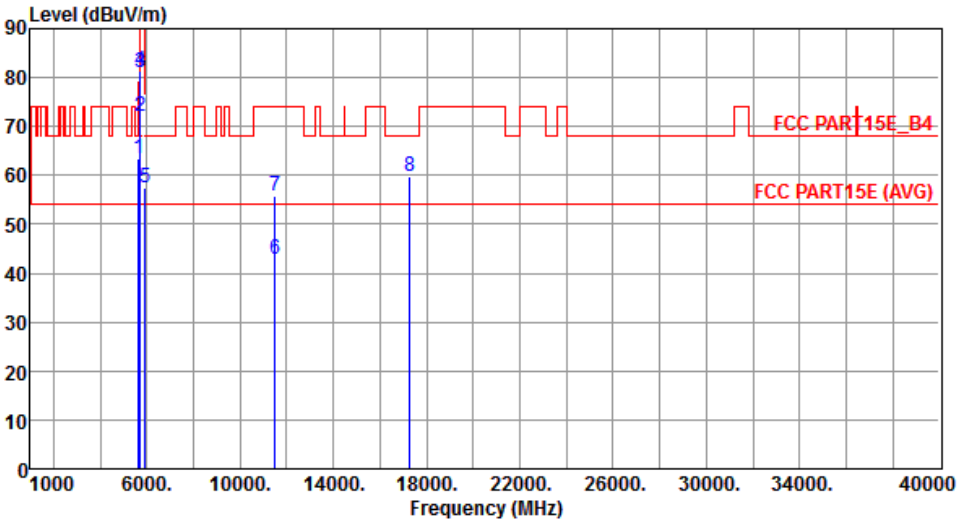
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	65.80	68.20	-2.40	59.93	5.87	Peak	209	117
2	5700.00	74.78	105.20	-30.42	68.82	5.96	Peak	209	117
3	5720.00	83.36	110.80	-27.44	77.38	5.98	Peak	209	117
4	5725.00	84.51	122.20	-37.69	78.52	5.99	Peak	209	117
5	5925.00	59.82	68.20	-8.38	53.56	6.26	Peak	209	117
6	11510.00	42.95	54.00	-11.05	28.06	14.89	Average	108	66
7	11510.00	55.86	74.00	-18.14	40.97	14.89	Peak	108	66
8	17265.00	59.63	68.20	-8.57	42.26	17.37	Peak	102	94

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

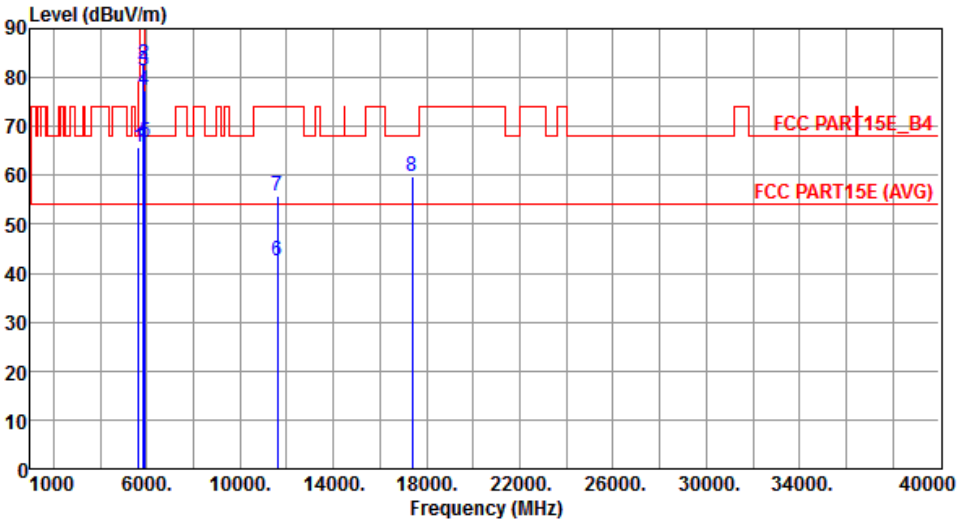
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	63.42	68.20	-4.78	57.55	5.87	Peak	225	102
2	5700.00	72.18	105.20	-33.02	66.22	5.96	Peak	225	102
3	5720.00	81.06	110.80	-29.74	75.08	5.98	Peak	225	102
4	5725.00	81.25	122.20	-40.95	75.26	5.99	Peak	225	102
5	5925.00	57.46	68.20	-10.74	51.20	6.26	Peak	225	102
6	11510.00	42.95	54.00	-11.05	28.06	14.89	Average	108	66
7	11510.00	55.86	74.00	-18.14	40.97	14.89	Peak	108	66
8	17265.00	59.63	68.20	-8.57	42.26	17.37	Peak	102	94

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

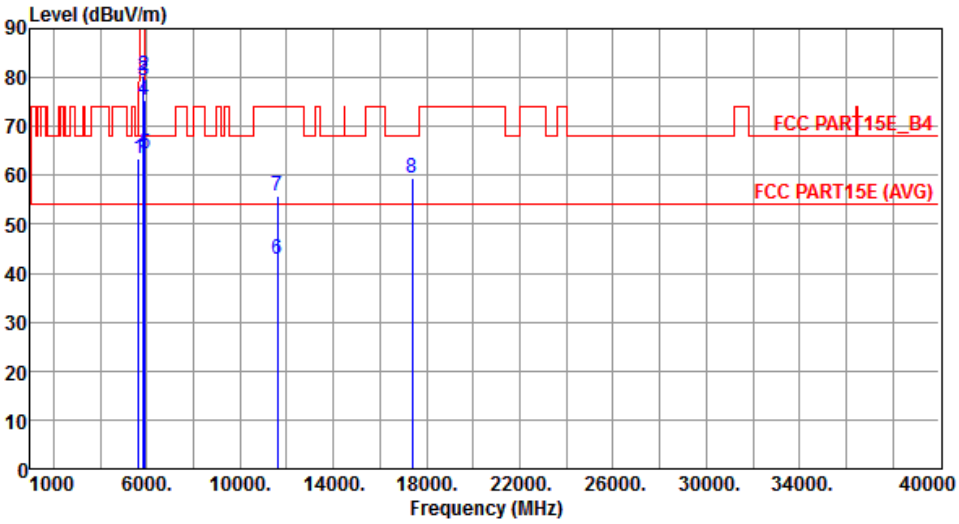
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	65.79	68.20	-2.41	59.92	5.87	Peak	219	110
2	5850.00	82.67	122.20	-39.53	76.50	6.17	Peak	219	110
3	5855.00	81.24	110.80	-29.56	75.06	6.18	Peak	219	110
4	5875.00	77.33	105.20	-27.87	71.13	6.20	Peak	219	110
5	5925.00	66.61	68.20	-1.59	60.35	6.26	Peak	219	110
6	11590.00	42.65	54.00	-11.35	27.92	14.73	Average	109	52
7	11590.00	55.68	74.00	-18.32	40.95	14.73	Peak	109	52
8	17385.00	59.89	68.20	-8.31	42.02	17.87	Peak	100	24

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

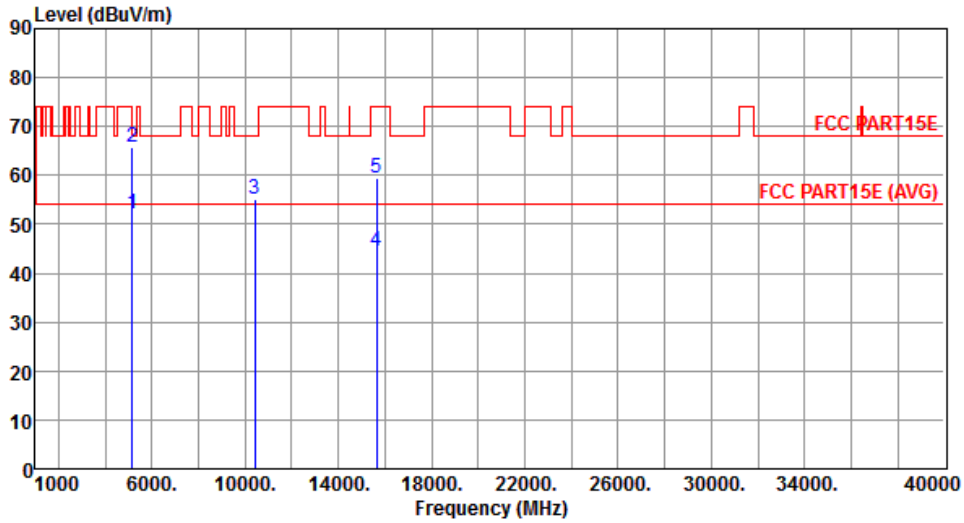


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	63.42	68.20	-4.78	57.55	5.87	Peak	235	101
2	5850.00	80.45	122.20	-41.75	74.28	6.17	Peak	235	101
3	5855.00	79.26	110.80	-31.54	73.08	6.18	Peak	235	101
4	5875.00	75.24	105.20	-29.96	69.04	6.20	Peak	235	101
5	5925.00	64.32	68.20	-3.88	58.06	6.26	Peak	235	101
6	11590.00	42.84	54.00	-11.16	28.11	14.73	Average	109	33
7	11590.00	55.79	74.00	-18.21	41.06	14.73	Peak	109	33
8	17385.00	59.56	68.20	-8.64	41.69	17.87	Peak	100	21

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

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

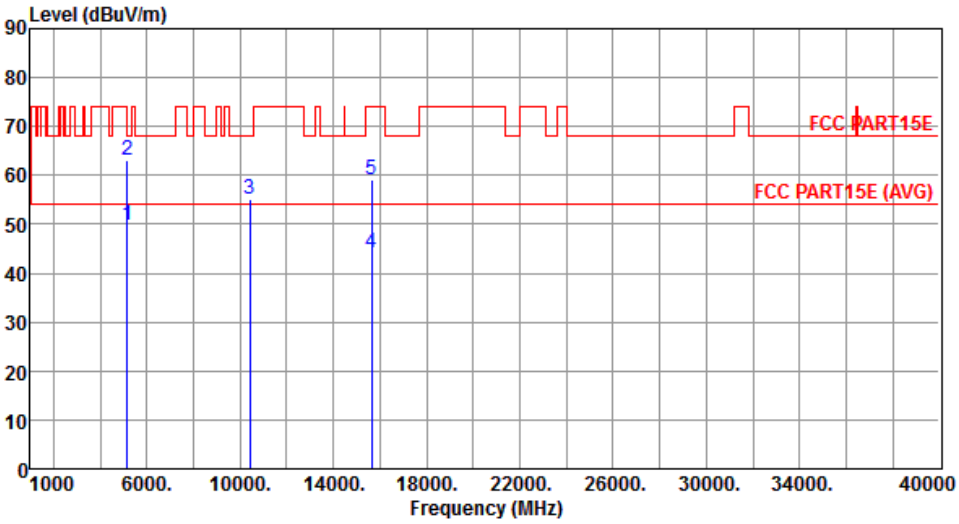
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.11	54.00	-1.89	46.90	5.21	Average	266	116
2	5150.00	65.89	74.00	-8.11	60.68	5.21	Peak	266	116
3	10420.00	55.16	68.20	-13.04	41.24	13.92	Peak	106	11
4	15630.00	44.62	54.00	-9.38	29.49	15.13	Average	100	24
5	15630.00	59.36	74.00	-14.64	44.23	15.13	Peak	100	24

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

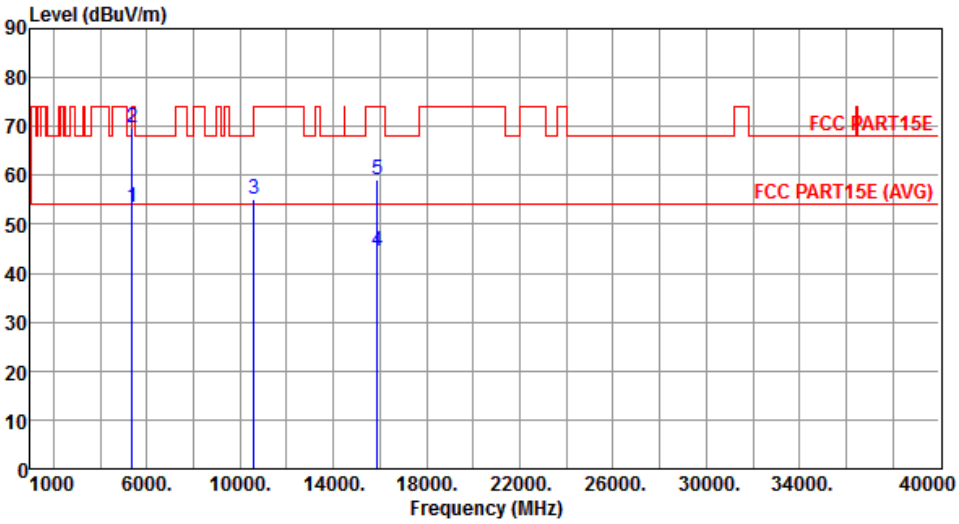
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.68	54.00	-4.32	44.47	5.21	Average	295	104
2	5150.00	63.24	74.00	-10.76	58.03	5.21	Peak	295	104
3	10420.00	55.04	68.20	-13.16	41.12	13.92	Peak	101	28
4	15630.00	44.31	54.00	-9.69	29.18	15.13	Average	115	64
5	15630.00	59.25	74.00	-14.75	44.12	15.13	Peak	115	64

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

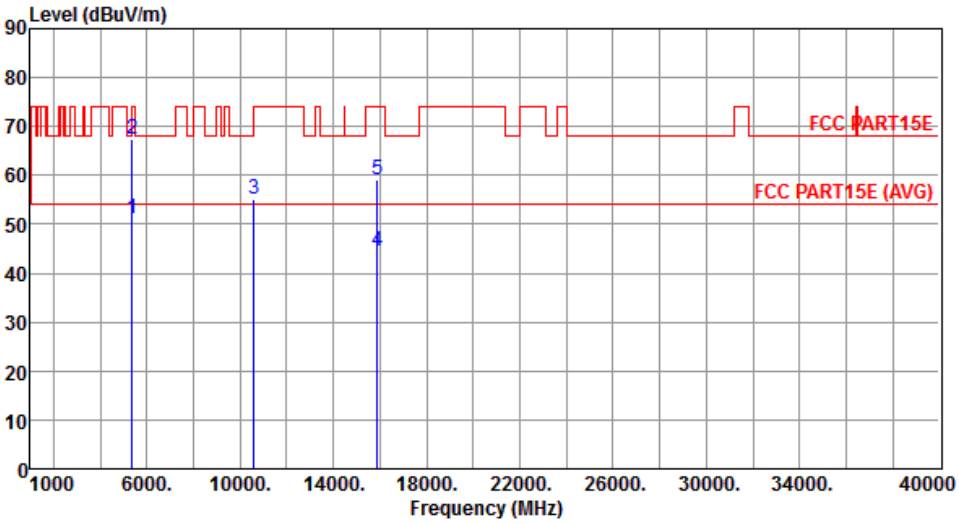
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	53.39	54.00	-0.61	47.89	5.50	Average	215	136
2	5350.00	69.88	74.00	-4.12	64.38	5.50	Peak	215	136
3	10580.00	55.26	68.20	-12.94	41.22	14.04	Peak	105	16
4	15870.00	44.52	54.00	-9.48	29.47	15.05	Average	108	21
5	15870.00	59.11	74.00	-14.89	44.06	15.05	Peak	108	21

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

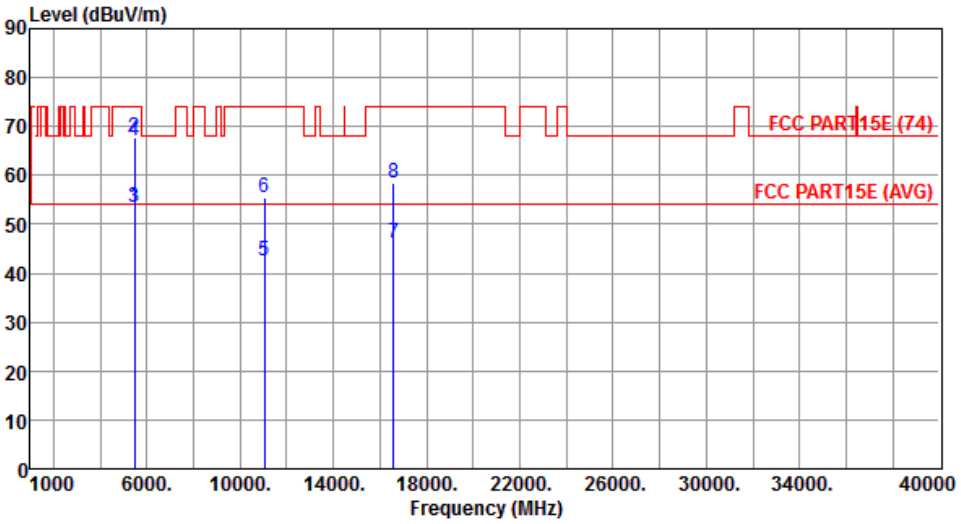
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.08	54.00	-2.92	45.58	5.50	Average	249	110
2	5350.00	67.45	74.00	-6.55	61.95	5.50	Peak	249	110
3	10580.00	55.13	68.20	-13.07	41.09	14.04	Peak	105	29
4	15870.00	44.63	54.00	-9.37	29.58	15.05	Average	121	45
5	15870.00	59.28	74.00	-14.72	44.23	15.05	Peak	121	45

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

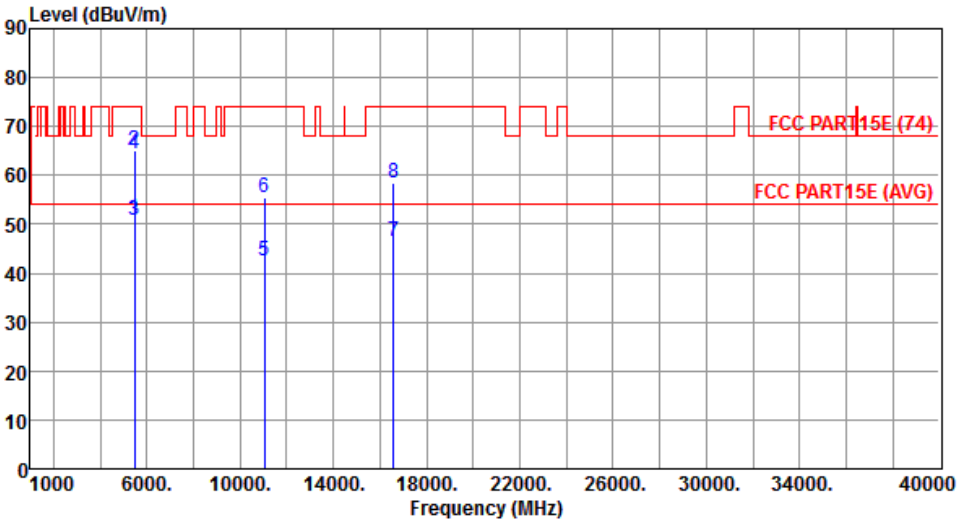
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.48	54.00	-0.52	47.83	5.65	Average	215	134
2	5460.00	67.73	74.00	-6.27	62.08	5.65	Peak	215	134
3	5470.00	53.35	54.00	-0.65	47.69	5.66	Average	215	134
4	5470.00	67.09	74.00	-6.91	61.43	5.66	Peak	215	134
5	11060.00	42.48	54.00	-11.52	27.97	14.51	Average	100	111
6	11060.00	55.61	74.00	-18.39	41.10	14.51	Peak	100	111
7	16590.00	46.29	54.00	-7.71	30.19	16.10	Average	100	25
8	16590.00	58.52	74.00	-15.48	42.42	16.10	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).

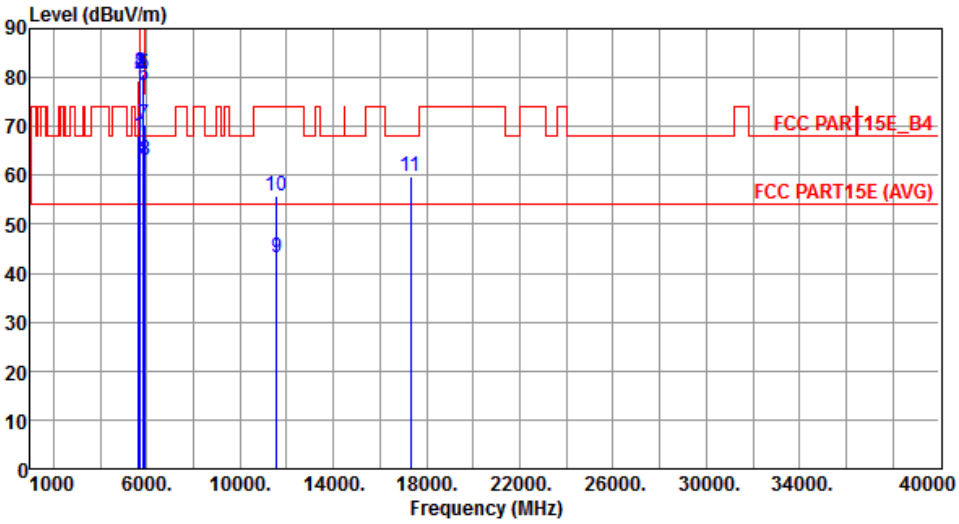
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.02	54.00	-2.98	45.37	5.65	Average	245	101
2	5460.00	65.14	74.00	-8.86	59.49	5.65	Peak	245	101
3	5470.00	50.95	54.00	-3.05	45.29	5.66	Average	245	101
4	5470.00	64.52	74.00	-9.48	58.86	5.66	Peak	245	101
5	11060.00	42.35	54.00	-11.65	27.84	14.51	Average	100	65
6	11060.00	55.48	74.00	-18.52	40.97	14.51	Peak	100	65
7	16590.00	46.35	54.00	-7.65	30.25	16.10	Average	100	21
8	16590.00	58.61	74.00	-15.39	42.51	16.10	Peak	100	21

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

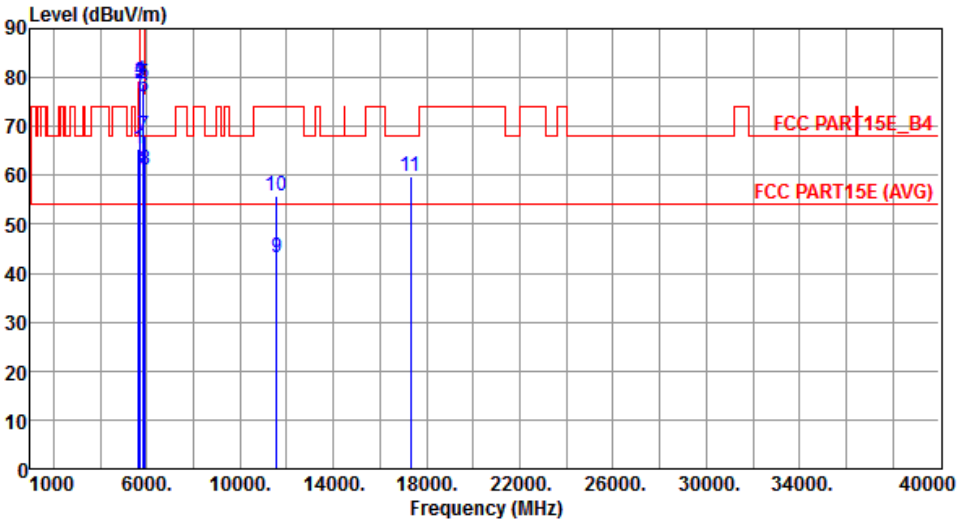
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	67.95	68.20	-0.25	62.08	5.87	Peak	215	120
2	5700.00	80.81	105.20	-24.39	74.85	5.96	Peak	215	120
3	5720.00	81.00	110.80	-29.80	75.02	5.98	Peak	215	120
4	5725.00	81.15	122.20	-41.05	75.16	5.99	Peak	215	120
5	5850.00	80.79	122.20	-41.41	74.62	6.17	Peak	215	120
6	5855.00	78.31	110.80	-32.49	72.13	6.18	Peak	215	120
7	5875.00	70.43	105.20	-34.77	64.23	6.20	Peak	215	120
8	5925.00	63.12	68.20	-5.08	56.86	6.26	Peak	215	120
9	11550.00	43.15	54.00	-10.85	28.34	14.81	Average	105	26
10	11550.00	55.92	74.00	-18.08	41.11	14.81	Peak	105	26
11	17325.00	59.84	68.20	-8.36	42.21	17.63	Peak	105	26

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

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	65.42	68.20	-2.78	59.55	5.87	Peak	229	110
2	5700.00	78.65	105.20	-26.55	72.69	5.96	Peak	229	110
3	5720.00	79.06	110.80	-31.74	73.08	5.98	Peak	229	110
4	5725.00	79.24	122.20	-42.96	73.25	5.99	Peak	229	110
5	5850.00	78.62	122.20	-43.58	72.45	6.17	Peak	229	110
6	5855.00	75.91	110.80	-34.89	69.73	6.18	Peak	229	110
7	5875.00	68.01	105.20	-37.19	61.81	6.20	Peak	229	110
8	5925.00	61.06	68.20	-7.14	54.80	6.26	Peak	229	110
9	11550.00	43.29	54.00	-10.71	28.48	14.81	Average	105	58
10	11550.00	55.71	74.00	-18.29	40.90	14.81	Peak	105	58
11	17325.00	59.65	68.20	-8.55	42.02	17.63	Peak	105	23

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

3.6 Frequency Stability

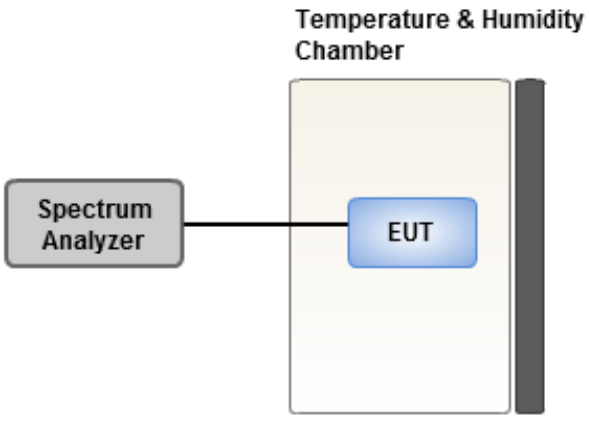
3.6.1 Limit of Frequency Stability

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 50 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 -30 to 85 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	7.16	7.63	7.10	7.45
T20°CVmin	6.04	6.73	6.02	6.28
T85°CVnom	11.59	11.59	11.29	11.58
T80°CVnom	11.10	11.44	11.02	11.15
T70°CVnom	9.72	10.19	9.71	10.05
T60°CVnom	10.17	10.58	10.17	10.77
T50°CVnom	8.07	8.06	8.29	8.78
T40°CVnom	7.64	7.86	8.03	8.17
T30°CVnom	7.72	7.44	7.83	7.76
T20°CVnom	6.35	5.87	6.86	6.80
T10°CVnom	4.85	5.30	5.09	5.42
T0°CVnom	3.49	3.46	3.31	3.62
T-10°CVnom	2.80	3.26	3.33	2.56
T-20°CVnom	2.60	3.06	3.16	2.93
T-30°CVnom	1.04	1.34	1.28	1.40
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 85		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	6.26	6.58	6.63	5.81
T20°CVmin	5.37	5.80	5.45	5.64
T85°CVnom	10.94	11.01	10.46	11.25
T80°CVnom	10.26	10.53	10.86	10.03
T70°CVnom	9.02	9.06	9.07	9.48
T60°CVnom	9.39	9.20	9.98	9.34
T50°CVnom	7.50	7.30	7.36	7.44
T40°CVnom	6.75	6.79	6.82	7.04
T30°CVnom	6.72	5.38	6.64	6.26
T20°CVnom	5.92	5.98	6.22	6.21
T10°CVnom	4.59	3.90	4.80	4.60
T0°CVnom	2.97	3.14	3.00	2.82
T-10°CVnom	2.23	2.06	2.44	2.59
T-20°CVnom	2.44	2.55	2.36	2.81
T-30°CVnom	0.56	0.99	0.68	1.07
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 85		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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