FCC Test Report

FCC ID	:	**I88WAC6503D-S**
Equipment	:	**802.11 ac Unified Pro Access Point**
Model No.	:	**WAC6503D-S**
Brand Name	:	**ZyXEL**
Applicant	:	**ZyXEL Communications Corporation**
Address	:	**No. 2, Gongye E. 9th Road, Hsinchu Science Park, Hsinchu, Taiwan**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Oct. 07, 2014**
Tested Date	:	**Oct. 15 ~ Nov. 05, 2014**

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.

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

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Release Record

Report No.	Version	Description	Issued Date
FR4O0702-01AN	Rev. 01	Initial issue	Jan. 26, 2015

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 3.595MHz 34.01 (Margin -11.99dB) - AV	Pass
15.407(b)(1)(2)(3) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5350.00MHz 52.94 (Margin -1.06dB) - AV	Pass
15.407(a)(1)(2)(3)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)(1)(2)(3)	RF Output Power	Max Power [dBm]: 5250~5350MHz: 22.62 5470~5725MHz: 23.12	Pass
15.407(a)(1)(2)(3)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(a)(6)	Peak Excursion	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**
5250-5350 5470-5725	a	5260-5320 5500-5720	52-64 [4] 100-144 [9]	3	6-54 Mbps
5250-5350 5470-5725	n (HT20)	5260-5320 5500-5720	52-64 [4] 100-144 [9]	3	MCS 0-23
5250-5350 5470-5725	n (HT40)	5270-5310 5510-5710	54-62 [2] 102-142 [4]	3	MCS 0-23
5250-5350 5470-5725	ac (VHT20)	5260-5320 5500-5720	52-64 [4] 100-144 [9]	3	MCS 0-9
5250-5350 5470-5725	ac (VHT40)	5270-5310 5510-5710	54-62 [2] 102-142 [4]	3	MCS 0-9
5250-5350 5470-5725	ac (VHT80)	5290 5530-5690	58 [1] 106-138 [2]	3	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Antenna Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	**5150~5250**	**5250~5350**	**5470~5725**	**5725~5850**
1	WAC6503D-S	Dipole	IPEX	4	6	6	6	6

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	1. AC Adapter (support unit only.) Brand: DVE Model: DSA-24CA-12 120120 Rating: I/P: 100-240Vac, 50/60Hz, 0.8A O/P: 12Vdc, 2A
	2. POE Injector (support unit for radiated emission test only.) Brand: ZyXEL Model: PoE12-HP Rating: I/P: 100-240Vac, 50/60Hz, 1.5A max. O/P: 48Vdc, 42.1W
	3. POE Injector (support unit for conducted emission only.) Brand: PowerDsine 3001GC Model: E018205D G Rating: I/P: 100-250Vac, 50/60Hz, 0.5A O/P: 48Vdc, 0.35A

1.1.4 Accessories

N/A

1.1.5 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
52	5260	54	5270
56	5280	62	5310
60	5300	102	5510
64	5320	110	5550
100	5500	134	5670
104	5520	142	5710
108	5540	**VHT80**	
112	5560	58	5290
116	5580	106	5530
132	5660	138	5690
136	5680	---	---
140	5700	---	---
144	5720	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	CART, V4.9		
Duty Cycle and Duty Factor	Mode	Duty cycle (%)	Duty factor (dB)
	11a	98.32%	0.07
	VHT20	98.72%	0.06
	VHT40	95.20%	0.21
	VHT80	89.93%	0.46

1.1.7 Power Setting

For Frequency band 5250-5350 MHz		
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5260	14
11a	5300	14
11a	5320	14
HT20	5260	14
HT20	5300	14.5
HT20	5320	14.5
HT40	5270	18
HT40	5310	18
VHT20	5260	14
VHT20	5300	14.5
VHT20	5320	14.5
VHT40	5270	18
VHT40	5310	18
VHT80	5290	11

For Frequency band 5470-5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5500	13.5
11a	5580	13.5
11a	5700	13.5
HT20	5500	13.5
HT20	5580	13.5
HT20	5700	14
HT40	5510	14.5
HT40	5550	17
HT40	5670	17
VHT20	5500	13.5
VHT20	5580	13.5
VHT20	5700	14
VHT40	5510	14.5
VHT40	5550	17
VHT40	5670	17
VHT80	5530	11

Channel that extends across the 5.725 GHz boundary

For Frequency band 5470-5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5720	13.5
HT20	5720	14
HT40	5710	17.5
VHT20	5720	14
VHT40	5710	17.5
VHT80	5690	18.5

1.2 Local Support Equipment List

Support Equipment List (Adapter Mode)					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E5430	C0GB4X1	RJ45, 10m non-shielded w/o core.
2	Notebook	DELL	Latitude E5430	9ZFB4X1	RJ45, 10m non-shielded w/o core.
3	AC Adapter	DVE	DSA-24CA-12 120120	---	---

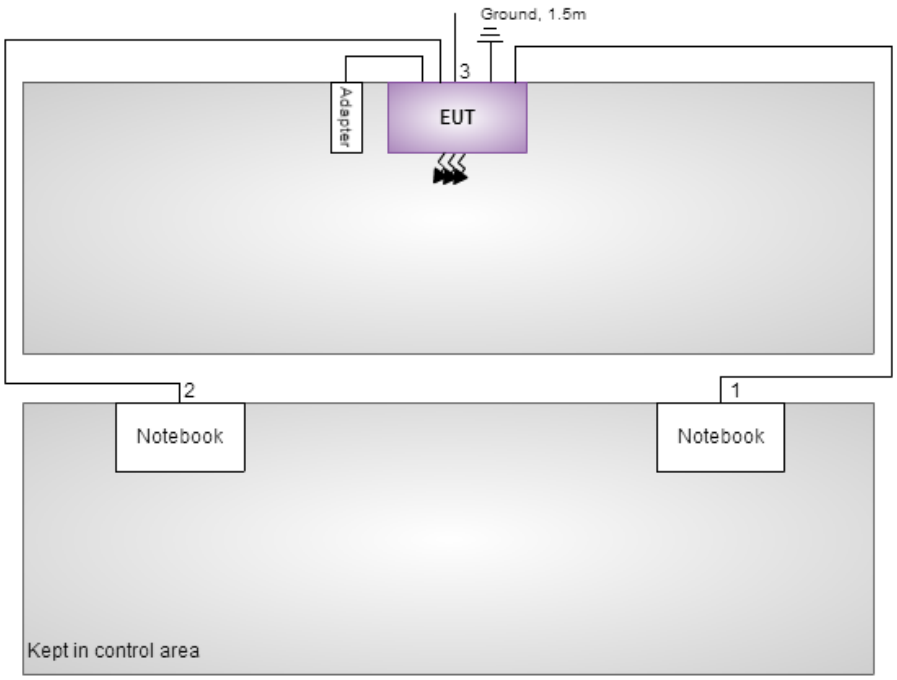
Note: No. 3 was provided by applicant.

Support Equipment List (POE Mode)					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E5430	C0GB4X1	RJ45, 10m non-shielded w/o core.
2	Notebook	DELL	Latitude E5430	9ZFB4X1	RJ45, 1m non-shielded w/o core.
3	POE Injector	ZyXEL	PoE12-HP	---	RJ45, 10m non-shielded w/o core.
4	POE Injector	PowerDsine 3001GC	E018205D G	---	RJ45, 10m non-shielded w/o core.

Note:
1) No. 3 & 4 were provided by applicant.
2) No. 3 was for radiated emission test used.
3) No. 4 was for conducted emission test used.

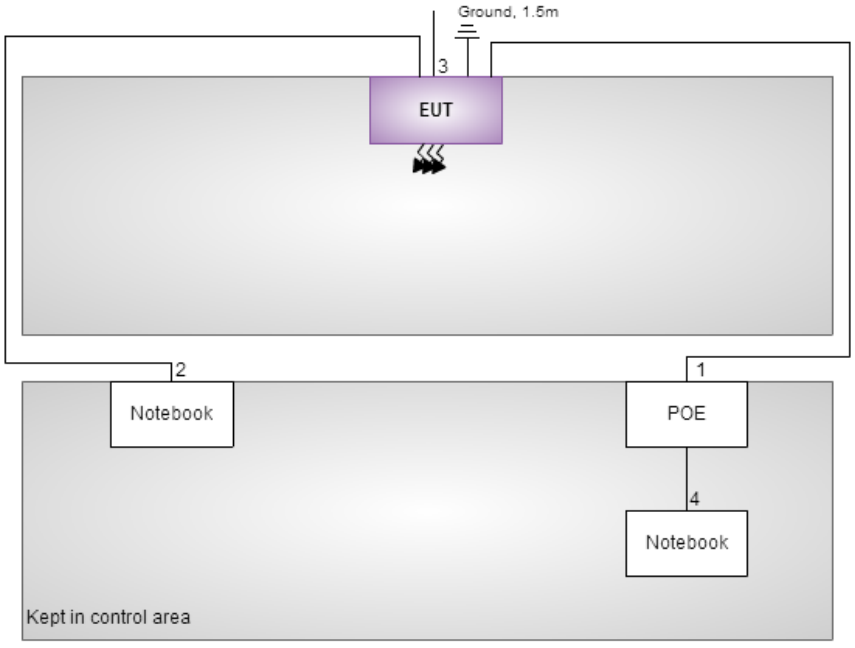
1.3 Test Setup Chart

Test Setup Diagram (Adapter Mode)



1-2. RJ45, 10m non-shielded w/o core
3. Console, 1.8m shielded w/o core

Test Setup Diagram (POE Mode)



1-2. RJ45, 10m non-shielded w/o core
3. Console, 1.8m shielded w/o core
4. RJ45, 1m non-shielded w/o core

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Test Date	Nov. 04, 2014				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC Receiver	R&S	ESCS 30	100174	Apr. 14. 2014	Apr. 13. 2015
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Test Date	Oct. 15 ~ Oct. 18, 2014				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 16, 2014	Sep. 15, 2015
Receiver	R&S	ESR3	101657	Jan. 18, 2014	Jan. 17, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-562	Feb. 07, 2014	Feb. 06, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 20, 2014	Feb. 19, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA9170154	Jan. 10, 2014	Jan. 09, 2015
Preamplifier	EMC	EMC02325	980187	Sep. 26, 2014	Sep. 25, 2015
Preamplifier	Agilent	83017A	MY53270014	Sep. 17, 2014	Sep. 16, 2015
Preamplifier	EMC	EMC184045B	980192	Aug. 26, 2014	Aug. 25, 2015
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 19, 2014	Feb. 18, 2015
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22601/4	Feb. 19, 2014	Feb. 18, 2015
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 19, 2014	Feb. 18, 2015
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Feb. 17, 2014	Feb. 16, 2015
LF cable-3M	EMC	EMC8D-NM-NM-300 0	131103	Feb. 17, 2014	Feb. 16, 2015
LF cable-13M	EMC	EMC8D-NM-NM-130 00	131104	Feb. 17, 2014	Feb. 16, 2015
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Note: Calibration Interval of instruments listed above is two year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Test Date	Nov. 05, 2014				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2014	Feb. 16, 2015
Power Meter	Anritsu	ML2495A	1241002	Sep. 29, 2014	Sep. 28, 2015
Power Sensor	Anritsu	MA2411B	1207366	Sep. 29, 2014	Sep. 28, 2015
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 C63.10-2009
FCC KDB 789033 D01 General UNII Test Procedures Old Rules v01r04
FCC KDB 644545 D01 Guidance for IEEE 802 11ac v01r02 Old Rules
FCC KDB 644545 D02 Alternative Guidance for 802 11ac Old Rules v01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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
Temperature	±0.6 °C
Conducted emission	±2.670 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.26 dB
Radiated emission > 1GHz	±4.94 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 58-62%	Peter Lin
Radiated Emissions	03CH03-WS	22-26°C / 63-67%	Anderson Hung Aska Huang
RF Conducted	TH01-WS	22°C / 65%	Felix Sung

- FCC site registration No.: 390588
- IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
Conducted Emissions	VHT80	5690	MCS 0	1, 2
Radiated Emissions ≤1GHz	VHT80	5690	MCS 0	1, 2
RF Output Power	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	1
	HT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	HT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	1
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
Peak Excursion	11a	5260 / 5500	6 Mbps	1
	VHT20	5260 / 5700	MCS 0	
	VHT40	5270 / 5550	MCS 0	
	VHT80	5290 / 5690	MCS 0	
Frequency Stability	Un-modulation	5320	---	1

NOTE:

1. This device can be powered by AC adapter or POE. Each power supply was selected for final testing as below configuration.
2. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.
3. Test configurations are listed as below:
   1) Configuration 1: AC Adapter mode
   2) Configuration 2: POE mode

3 Transmitter Test Results

3.1 Conducted Emissions

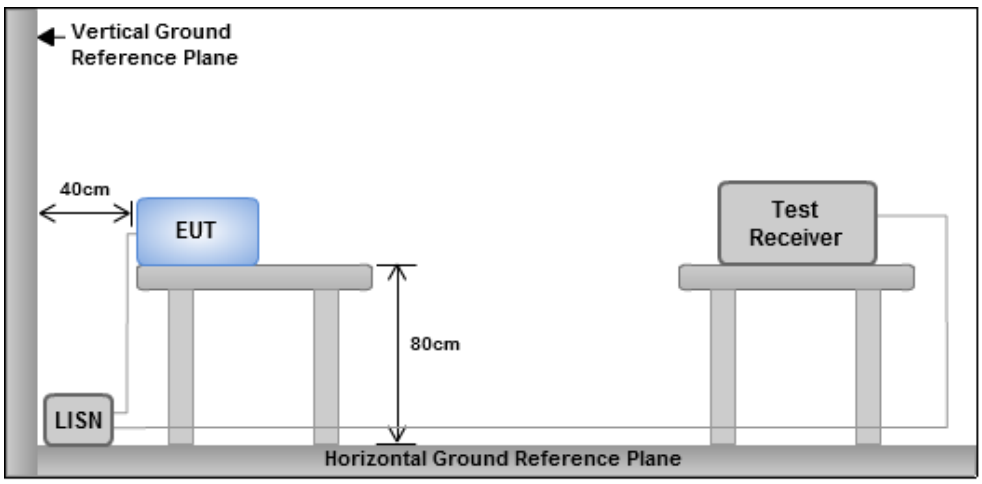
3.1.1 Limit of Conducted Emissions

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

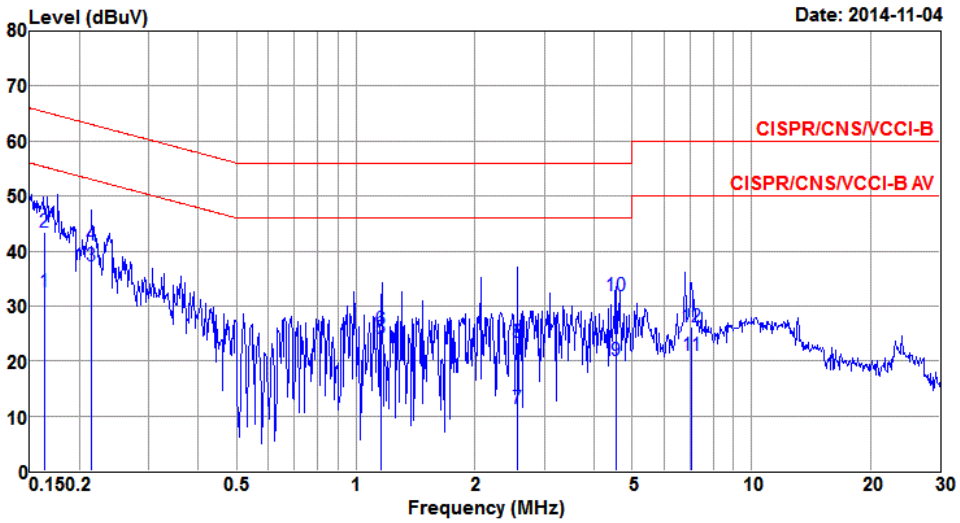


Note: 1. Support units were connected to second LISN.

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

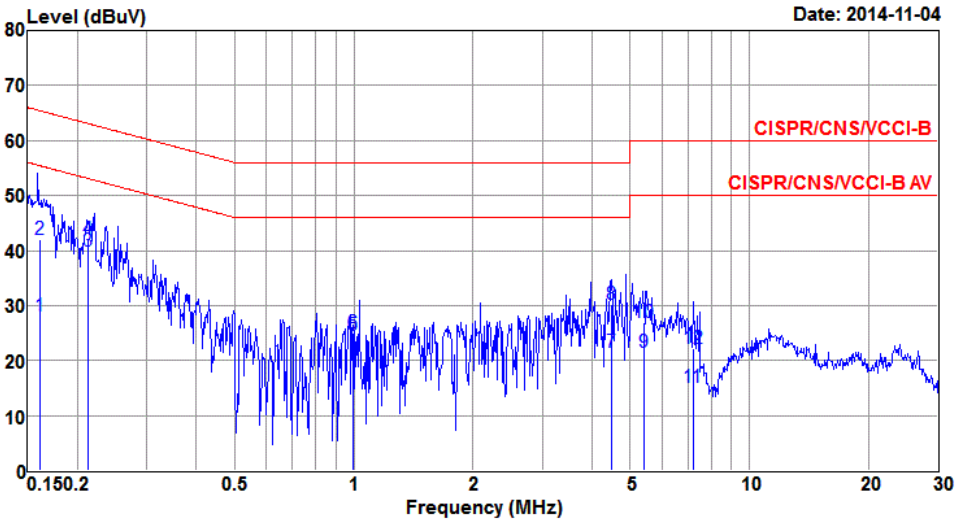
Modulation Mode	VHT80	Test Freq. (MHz)	5690
Power Phase	Line	Test Configuration	1



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.164	32.53	55.26	-22.73	32.10	0.41	0.02	Average
2	0.164	43.50	65.26	-21.76	43.07	0.41	0.02	QP
3*	0.215	37.34	53.01	-15.67	36.90	0.43	0.01	Average
4	0.215	41.12	63.01	-21.89	40.68	0.43	0.01	QP
5	1.161	24.05	46.00	-21.95	23.24	0.79	0.02	Average
6	1.161	25.79	56.00	-30.21	24.98	0.79	0.02	QP
7	2.568	11.33	46.00	-34.67	10.23	1.03	0.07	Average
8	2.568	23.27	56.00	-32.73	22.17	1.03	0.07	QP
9	4.548	20.12	46.00	-25.88	18.81	1.15	0.16	Average
10	4.548	31.92	56.00	-24.08	30.61	1.15	0.16	QP
11	7.062	20.91	50.00	-29.09	19.24	1.46	0.21	Average
12	7.062	26.22	60.00	-33.78	24.55	1.46	0.21	QP

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

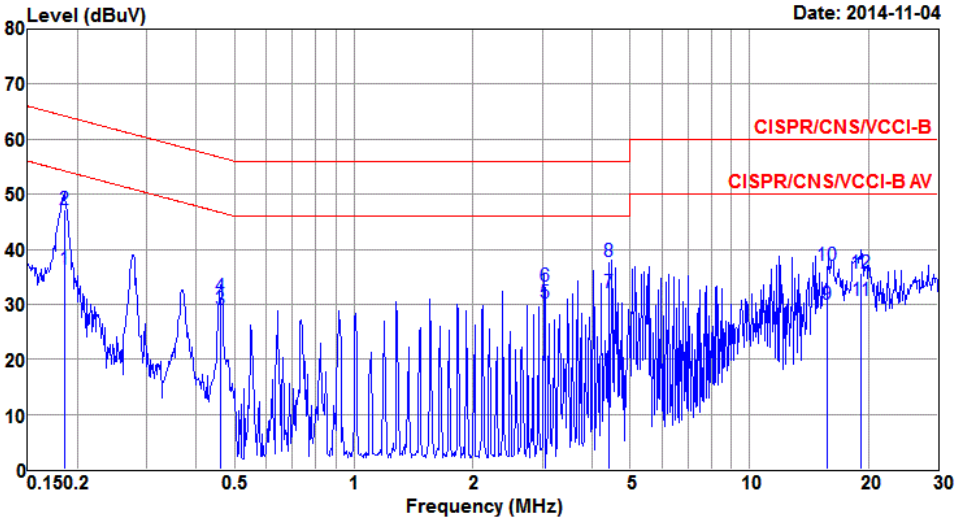
Modulation Mode	VHT80	Test Freq. (MHz)	5690
Power Phase	Neutral	Test Configuration	1



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.161	28.05	55.42	-27.37	27.54	0.49	0.02	Average
2	0.161	42.10	65.42	-23.32	41.59	0.49	0.02	QP
3*	0.213	39.86	53.09	-13.23	39.33	0.52	0.01	Average
4	0.213	42.10	63.09	-20.99	41.57	0.52	0.01	QP
5	0.995	24.48	46.00	-21.52	23.66	0.80	0.02	Average
6	0.995	25.06	56.00	-30.94	24.24	0.80	0.02	QP
7	4.472	21.39	46.00	-24.61	20.03	1.20	0.16	Average
8	4.472	30.31	56.00	-25.69	28.95	1.20	0.16	QP
9	5.396	21.49	50.00	-28.51	19.99	1.32	0.18	Average
10	5.396	26.97	60.00	-33.03	25.47	1.32	0.18	QP
11	7.219	15.19	50.00	-34.81	13.47	1.51	0.21	Average
12	7.219	22.23	60.00	-37.77	20.51	1.51	0.21	QP

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

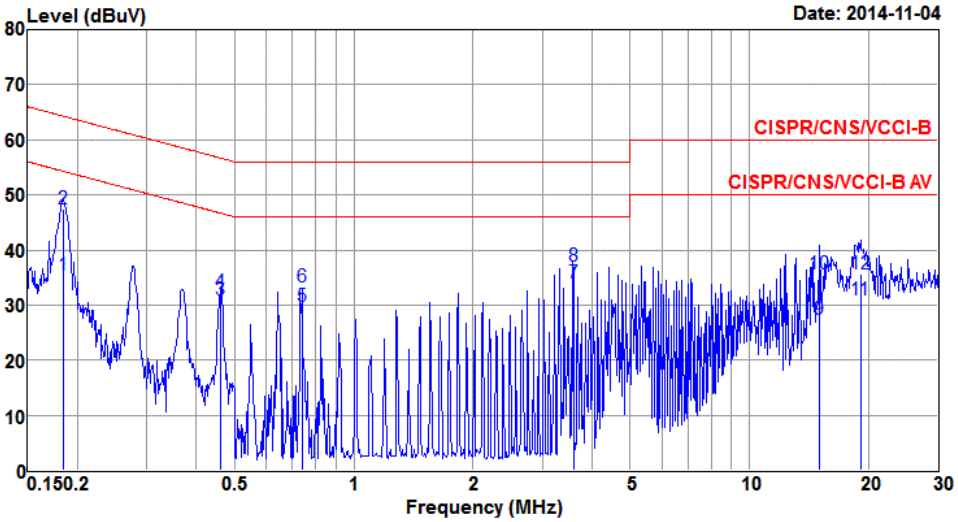
Modulation Mode	VHT80	Test Freq. (MHz)	5690
Power Phase	Line	Test Configuration	2



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.185	36.24	54.24	-18.00	35.84	0.39	0.01	Average
2	0.185	47.29	64.24	-16.95	46.89	0.39	0.01	QP
3	0.460	29.06	46.70	-17.64	28.65	0.39	0.02	Average
4	0.460	31.47	56.70	-25.23	31.06	0.39	0.02	QP
5	3.040	30.16	46.00	-15.84	29.61	0.45	0.10	Average
6	3.040	33.34	56.00	-22.66	32.79	0.45	0.10	QP
7*	4.419	32.18	46.00	-13.82	31.55	0.47	0.16	Average
8	4.419	37.66	56.00	-18.34	37.03	0.47	0.16	QP
9	15.746	29.88	50.00	-20.12	29.00	0.55	0.33	Average
10	15.746	37.03	60.00	-22.97	36.15	0.55	0.33	QP
11	19.224	30.71	50.00	-19.29	29.77	0.55	0.39	Average
12	19.224	35.69	60.00	-24.31	34.75	0.55	0.39	QP

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

Modulation Mode	VHT80	Test Freq. (MHz)	5690
Power Phase	Neutral	Test Configuration	2



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.184	35.41	54.28	-18.87	34.92	0.48	0.01	Average
2	0.184	47.37	64.28	-16.91	46.88	0.48	0.01	QP
3	0.461	30.93	46.67	-15.74	30.44	0.47	0.02	Average
4	0.461	32.42	56.67	-24.25	31.93	0.47	0.02	QP
5	0.739	29.64	46.00	-16.36	29.14	0.48	0.02	Average
6	0.739	33.30	56.00	-22.70	32.80	0.48	0.02	QP
7*	3.595	34.01	46.00	-11.99	33.36	0.52	0.13	Average
8	3.595	37.11	56.00	-18.89	36.46	0.52	0.13	QP
9	15.048	27.30	50.00	-22.70	26.43	0.56	0.31	Average
10	15.048	35.63	60.00	-24.37	34.76	0.56	0.31	QP
11	19.106	30.86	50.00	-19.14	29.92	0.56	0.38	Average
12	19.106	35.70	60.00	-24.30	34.76	0.56	0.38	QP

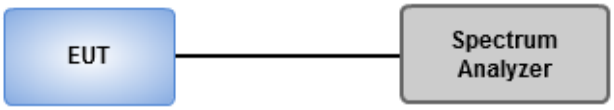
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 Emission Bandwidth

3.2.1 Test Procedures

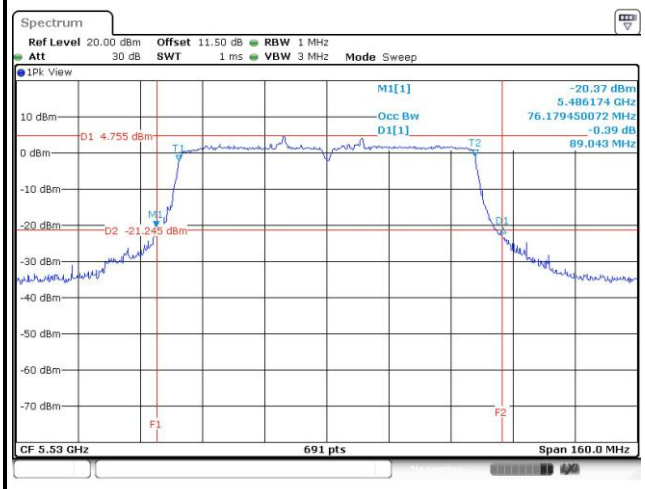
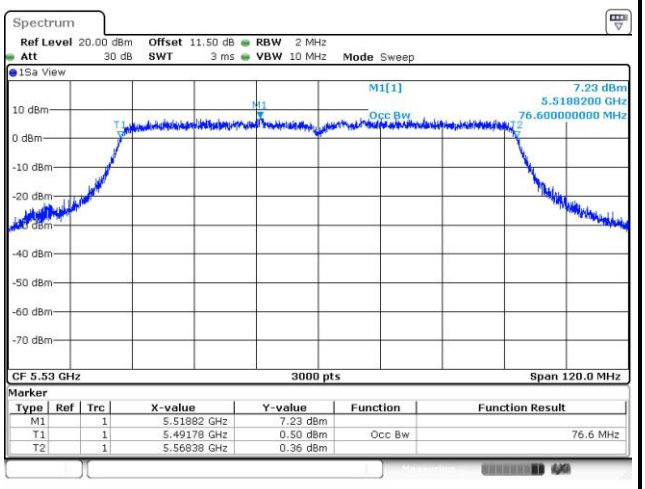
1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW, Detector = Peak.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

3.2.2 Test Setup



3.2.3 Test Result of Emission Bandwidth

Emission Bandwidth												
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	26dB BW	99%OBW
11a	3	5260	23.01	22.67	22.49	--	16.76	16.72	16.66	--	24.00	23.22
11a	3	5300	22.49	22.67	22.14	--	16.76	16.72	16.66	--	24.00	23.22
11a	3	5320	23.36	22.43	22.26	--	16.76	16.72	16.70	--	24.00	23.23
VHT20	3	5260	24.23	24.12	24.06	--	17.91	17.85	17.84	--	24.00	23.51
VHT20	3	5300	23.36	23.30	24.12	--	17.91	17.89	17.89	--	24.00	23.53
VHT20	3	5320	23.59	24.12	24.41	--	17.92	17.86	17.86	--	24.00	23.52
VHT40	3	5270	46.96	45.57	46.49	--	36.74	36.74	36.70	--	24.00	24.00
VHT40	3	5310	46.15	47.07	45.45	--	36.72	36.92	36.86	--	24.00	24.00
VHT80	3	5290	86.26	87.19	87.19	--	76.40	76.28	76.32	--	24.00	24.00
11a	3	5500	22.43	22.09	22.43	--	16.76	16.72	16.67	--	24.00	23.22
11a	3	5580	23.07	22.26	22.32	--	16.77	16.70	16.65	--	24.00	23.21
11a	3	5700	22.67	22.78	22.14	--	16.77	16.68	16.76	--	24.00	23.22
VHT20	3	5500	23.59	23.59	23.42	--	17.88	17.85	17.87	--	24.00	23.52
VHT20	3	5580	23.65	23.83	23.30	--	17.90	17.84	17.80	--	24.00	23.50
VHT20	3	5700	23.65	24.29	24.06	--	17.89	17.86	17.81	--	24.00	23.51
VHT40	3	5510	46.61	45.57	46.49	--	36.70	36.74	36.74	--	24.00	24.00
VHT40	3	5550	46.38	45.91	45.68	--	36.68	36.70	36.70	--	24.00	24.00
VHT40	3	5670	45.91	45.57	45.33	--	36.74	36.80	36.72	--	24.00	24.00
VHT80	3	5530	89.04	87.19	86.49	--	76.60	76.24	76.48	--	24.00	24.00

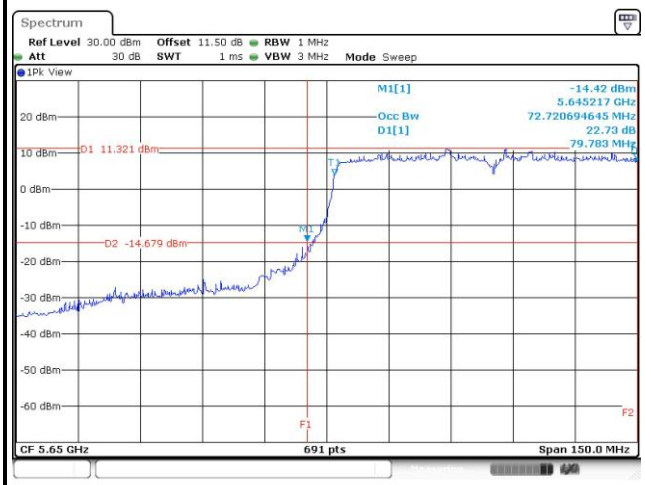
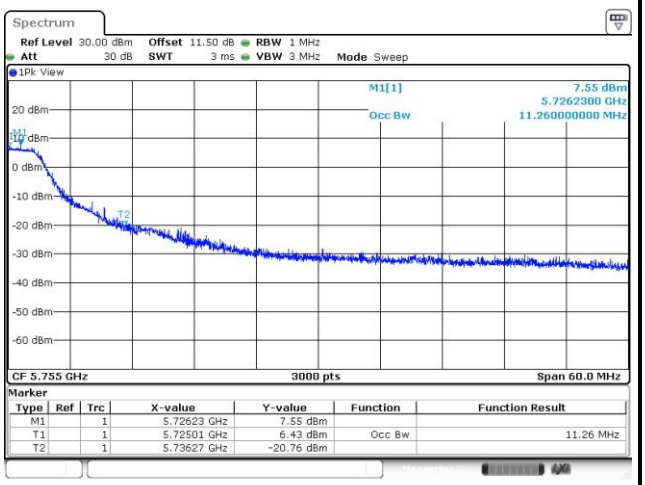
Worst Plots of 26dB Bandwidth	Worst Plots of 99% Bandwidth
	

Channel that extends across the 5.725 GHz boundary

UNII Emission Bandwidth Result (Within 5470-5725MHz band)												
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	26dB BW	99% BW
11a	3	5720	16.69	16.26	16.08	--	13.43	13.40	13.36	--	23.06	22.26
VHT20	3	5720	16.82	17.37	16.38	--	13.95	13.96	13.94	--	23.14	22.44
VHT40	3	5710	38.86	39.06	38.35	--	33.39	33.41	33.34	--	24.00	24.00
VHT80	3	5690	78.04	79.13	79.78	--	72.55	72.65	72.55	--	24.00	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)												
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	26dB BW	99% BW
11a	3	5720	6.17	6.63	6.15	--	4.59	4.48	4.36	--	24.89	23.39
VHT20	3	5720	6.93	7.24	7.13	--	4.85	4.80	4.78	--	25.41	23.79
VHT40	3	5710	9.10	8.58	8.87	--	6.60	6.67	6.52	--	26.33	25.14
VHT80	3	5690	9.65	11.22	8.96	--	10.72	11.26	9.70	--	26.52	26.87

Worst Plots

Within 5470-5725MHz band	Extends across 5725MHz band
	

3.3 RF Output Power

3.3.1 Limit of RF Output Power

Frequency Band (GHz)		Limit for FCC 15.407
☐	5.15~5.25	50mW or 4dBm+10 log B
☒	5.25~5.35	250mW or 11dBm+10 log B
☒	5.47~5.725	250mW or 11dBm+10 log B
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

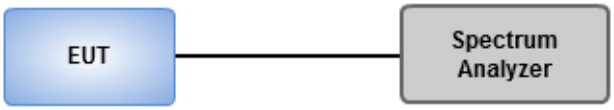
☒ Power meter (For channel that does not extends across the 5.725 GHz boundary)

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

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

1. Set RBW=1MHz, VBW=3MHz , Sweep time= Auto, Detector = RMS
2. Trace average at least 100 traces in power averaging mode
3. Compute power by integrating the spectrum across the 26 dB EBW

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

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	3	5260	14.22	14.76	14.16	--	82.408	19.16	24.00
11a	3	5300	14.14	14.66	13.95	--	80.015	19.03	24.00
11a	3	5320	14.11	14.62	13.93	--	79.454	19.00	24.00
HT20	3	5260	14.11	14.76	14.14	--	81.628	19.12	24.00
HT20	3	5300	14.45	14.71	14.32	--	84.481	19.27	24.00
HT20	3	5320	14.53	14.69	14.32	--	84.863	19.29	24.00
HT40	3	5270	17.51	18.19	17.62	--	180.091	22.55	24.00
HT40	3	5310	17.52	18.02	17.48	--	175.856	22.45	24.00
VHT20	3	5260	14.16	14.83	14.22	--	82.894	19.19	24.00
VHT20	3	5300	14.52	14.75	14.36	--	85.458	19.32	24.00
VHT20	3	5320	14.61	14.8	14.4	--	86.649	19.38	24.00
VHT40	3	5270	17.55	18.26	17.69	--	182.623	22.62	24.00
VHT40	3	5310	17.59	18.06	17.54	--	178.140	22.51	24.00
VHT80	3	5290	10.98	11.46	11.02	--	39.175	15.93	24.00

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	3	5500	14.41	14.82	14.22	--	84.369	19.26	24.00
11a	3	5580	14.73	14.55	14.26	--	84.895	19.29	24.00
11a	3	5700	14.61	14.29	13.96	--	80.649	19.07	24.00
HT20	3	5500	14.31	14.66	14.24	--	82.765	19.18	24.00
HT20	3	5580	14.71	14.3	14.13	--	82.378	19.16	24.00
HT20	3	5700	14.74	14.17	14.24	--	82.453	19.16	24.00
HT40	3	5510	16.14	15.95	15.96	--	119.916	20.79	24.00
HT40	3	5550	17.88	17.83	17.49	--	178.155	22.51	24.00
HT40	3	5670	17.82	17.34	16.92	--	163.938	22.15	24.00
VHT20	3	5500	14.4	14.72	14.32	--	84.230	19.25	24.00
VHT20	3	5580	14.75	14.34	14.18	--	83.200	19.20	24.00
VHT20	3	5700	14.78	14.23	14.3	--	83.461	19.21	24.00
VHT40	3	5510	16.18	16.01	16.03	--	121.485	20.85	24.00
VHT40	3	5550	17.95	17.88	17.55	--	180.635	22.57	24.00
VHT40	3	5670	17.88	17.43	16.99	--	166.715	22.22	24.00
VHT80	3	5530	12.31	11.97	11.79	--	47.862	16.80	24.00

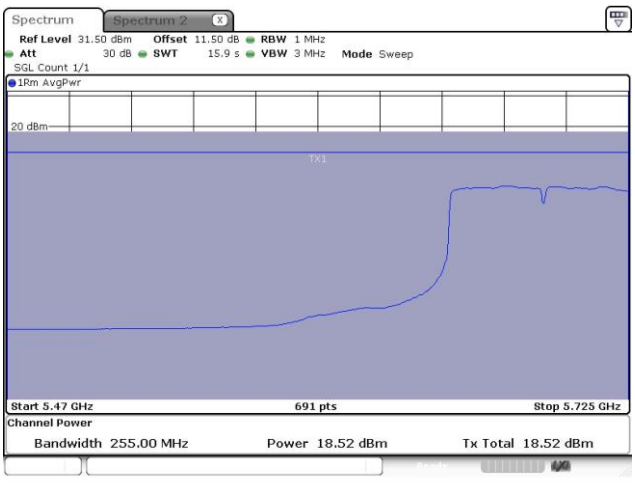
Channel that extends across the 5.725 GHz boundary

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N_{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
11a	3	5720	13.20	12.27	12.73	---	17.52	0.00	56.508	17.52	23.06
HT20	3	5720	13.23	12.44	12.97	---	17.66	0.00	58.392	17.66	23.14
HT40	3	5710	17.30	16.62	16.68	---	21.65	0.25	154.843	21.90	24.00
VHT20	3	5720	13.31	12.38	13.04	---	17.70	0.00	58.864	17.70	23.14
VHT40	3	5710	17.43	16.53	16.75	---	21.69	0.24	156.016	21.93	24.00
VHT80	3	5690	18.52	17.58	17.48	---	22.66	0.46	204.977	23.12	24.00

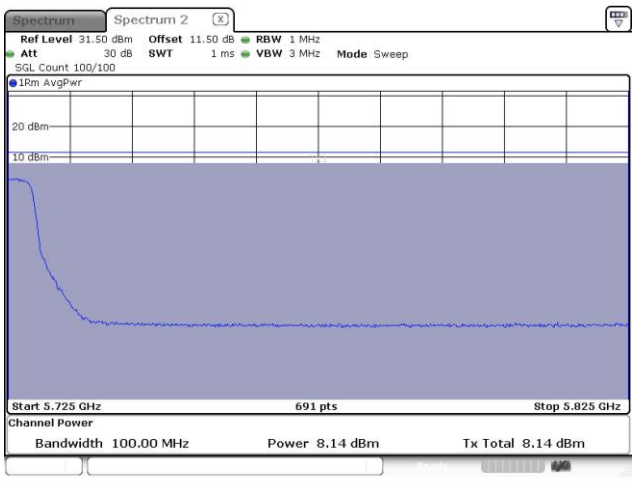
Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N_{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
11a	3	5720	7.30	5.96	6.72	---	11.47	0.00	14.014	11.47	24.89
HT20	3	5720	7.83	6.99	7.51	---	12.23	0.00	16.704	12.23	25.41
HT40	3	5710	6.37	5.69	6.05	---	10.82	0.25	12.784	11.07	26.33
VHT20	3	5720	8.14	6.97	7.65	---	12.38	0.00	17.315	12.38	25.41
VHT40	3	5710	6.69	5.71	6.04	---	10.94	0.24	13.113	11.18	26.33
VHT80	3	5690	3.73	2.47	2.96	---	7.86	0.46	6.785	8.32	26.52

Worst Channel Power Plots

Within 5470-5725MHz band



Extends across 5725MHz band



Note: Above plots are without duty factor.

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

	Frequency Band (GHz)	Limit (dBm)
☐	5.15~5.25	4
☒	5.25~5.35	11
☒	5.47~5.725	11

3.4.2 Test Procedures

☐ Method SA-1 (For 11a / 11ac VHT20)

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.

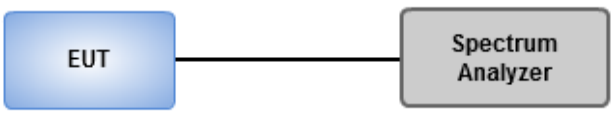
☐ Method SA-2

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (symbol period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.

☒ Method SA-2 Alternative (For 11ac VHT40 / VHT80)

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

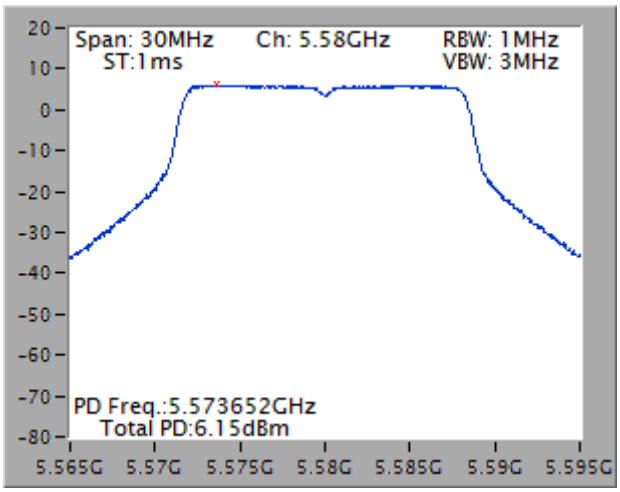
3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Condition			Peak Power Spectral Density (dBm)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty Factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	3	5260	5.89	0.00	5.89	6.23
11a	3	5300	5.36	0.00	5.36	6.23
11a	3	5320	5.37	0.00	5.37	6.23
VHT20	3	5260	5.40	0.00	5.40	6.23
VHT20	3	5300	5.81	0.00	5.81	6.23
VHT20	3	5320	5.70	0.00	5.70	6.23
VHT40	3	5270	5.84	0.21	6.05	6.23
VHT40	3	5310	5.50	0.21	5.71	6.23
VHT80	3	5290	-4.86	0.46	-4.40	6.23
11a	3	5500	6.02	0.00	6.02	6.23
11a	3	5580	6.15	0.00	6.15	6.23
11a	3	5700	5.35	0.00	5.35	6.23
11a	3	5720	5.72	0.00	5.72	6.23
VHT20	3	5500	5.70	0.00	5.70	6.23
VHT20	3	5580	5.97	0.00	5.97	6.23
VHT20	3	5700	5.61	0.00	5.61	6.23
VHT20	3	5720	5.71	0.00	5.71	6.23
VHT40	3	5510	3.46	0.21	3.67	6.23
VHT40	3	5550	5.64	0.21	5.85	6.23
VHT40	3	5670	5.14	0.21	5.35	6.23
VHT40	3	5710	5.77	0.21	5.98	6.23
VHT80	3	5530	-3.67	0.46	-3.21	6.23
VHT80	3	5690	3.33	0.46	3.79	6.23

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 6 + 10* log(3/1) = 10.77 dBi > 6 dBi.
   Limit shall be reduced to 11 dBm – (10.77 dBi – 6 dBi) = 6.23 dBm.

Worst Plots


Span: 30MHz
ST:1ms
Ch: 5.58GHz
RBW: 1MHz
VBW: 3MHz
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
PD Freq.:5.573652GHz
Total PD:6.15dBm
5.565G
5.57G
5.575G
5.58G
5.585G
5.59G
5.595G

3.5 Peak Excursion

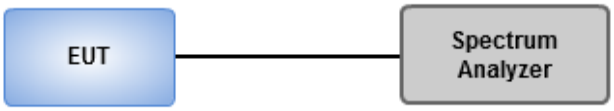
3.5.1 Peak Excursion Limit

Peak excursion of the modulation envelope shall not exceed 13 dB across any 1 MHz bandwidth.

3.5.2 Test Procedures

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = peak.
2. Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak search function to find the peak of the spectrum.
4. Use the procedure of section 3.4.2 to measure the PPSD.
5. Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD

3.5.3 Test Setup



3.5.4 Test Result of Peak Excursion

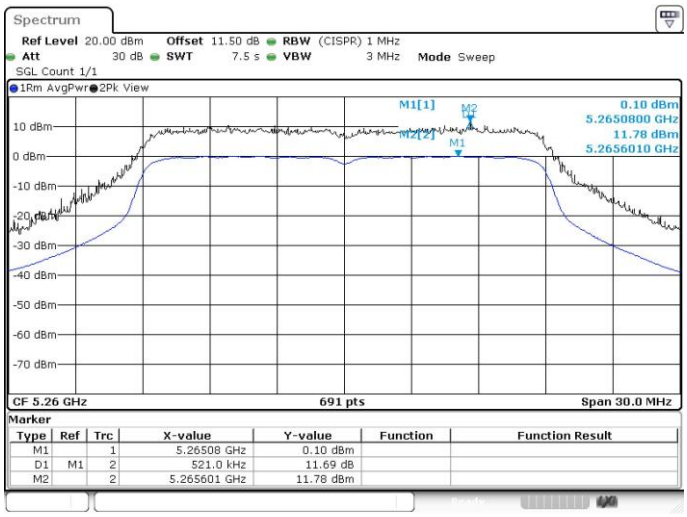
Frequency band 5250-5350 MHz							
Mode	**Modulation Mode**	**N_{TX}**	**Freq. (MHz)**	**Measured Value(dB)**	**Duty Factor (dB)**	**Peak Excursion (dB)**	**Limit**
11a	BPSK	3	5260	8.79	0.00	8.79	13
11a	QPSK	3	5260	9.05	0.22	8.83	13
11a	16QAM	3	5260	9.97	0.42	9.55	13
11a	64QAM	3	5260	10.5	0.81	9.69	13
VHT20	BPSK	3	5260	8.7	0.00	8.70	13
VHT20	QPSK	3	5260	9.54	0.22	9.32	13
VHT20	16QAM	3	5260	10.18	0.44	9.74	13
VHT20	64QAM	3	5260	10.31	0.91	9.40	13
VHT20	256QAM	3	5260	11.69	1.11	10.58	13
VHT40	BPSK	3	5270	8.71	0.21	8.50	13
VHT40	QPSK	3	5270	9.77	0.47	9.30	13
VHT40	16QAM	3	5270	9.86	0.87	8.99	13
VHT40	64QAM	3	5270	10.23	1.46	8.77	13
VHT40	256QAM	3	5270	10.27	1.75	8.52	13
VHT80	BPSK	3	5290	11.03	0.46	10.57	13
VHT80	QPSK	3	5290	11.47	0.94	10.53	13
VHT80	16QAM	3	5290	11.88	1.42	10.46	13
VHT80	64QAM	3	5290	10.92	2.10	8.82	13
VHT80	256QAM	3	5290	10.63	2.43	8.20	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak exclusion = Measured value – duty factor

Frequency band 5470-5725 MHz							
Mode	**Modulation Mode**	**N_{TX}**	**Freq. (MHz)**	**Measured Value(dB)**	**Duty Factor (dB)**	**Peak Excursion (dB)**	**Limit**
11a	BPSK	3	5500	8.24	0.00	8.24	13
11a	QPSK	3	5500	9.84	0.22	9.62	13
11a	16QAM	3	5500	10.39	0.42	9.97	13
11a	64QAM	3	5500	11.21	0.81	10.40	13
VHT20	BPSK	3	5700	8.41	0.00	8.41	13
VHT20	QPSK	3	5700	9.4	0.22	9.18	13
VHT20	16QAM	3	5700	9.8	0.44	9.36	13
VHT20	64QAM	3	5700	10.42	0.91	9.51	13
VHT20	256QAM	3	5700	10.2	1.11	9.09	13
VHT40	BPSK	3	5550	9.24	0.21	9.03	13
VHT40	QPSK	3	5550	9.79	0.47	9.32	13
VHT40	16QAM	3	5550	9.57	0.87	8.70	13
VHT40	64QAM	3	5550	10.59	1.46	9.13	13
VHT40	256QAM	3	5550	10.78	1.75	9.03	13
VHT80	BPSK	3	5690	9.6	0.46	9.14	13
VHT80	QPSK	3	5690	11.46	0.94	10.52	13
VHT80	16QAM	3	5690	11.38	1.42	9.96	13
VHT80	64QAM	3	5690	10.88	2.10	8.78	13
VHT80	256QAM	3	5690	10.87	2.43	8.44	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak exclusion = Measured value – duty factor

Worst Plots



Note: The plot without duty factor

3.6 Transmitter Radiated and Band Edge Emissions

3.6.1 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 - 5.825 GHz	5.715 5.725 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] 5.825 5.835 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

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

3.6.2 Test Procedures

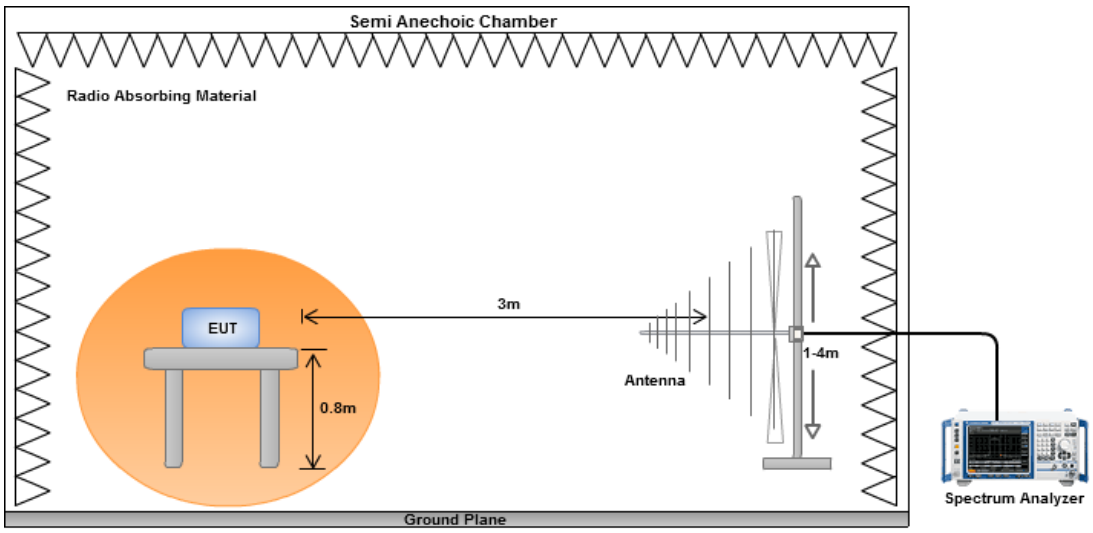
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
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:

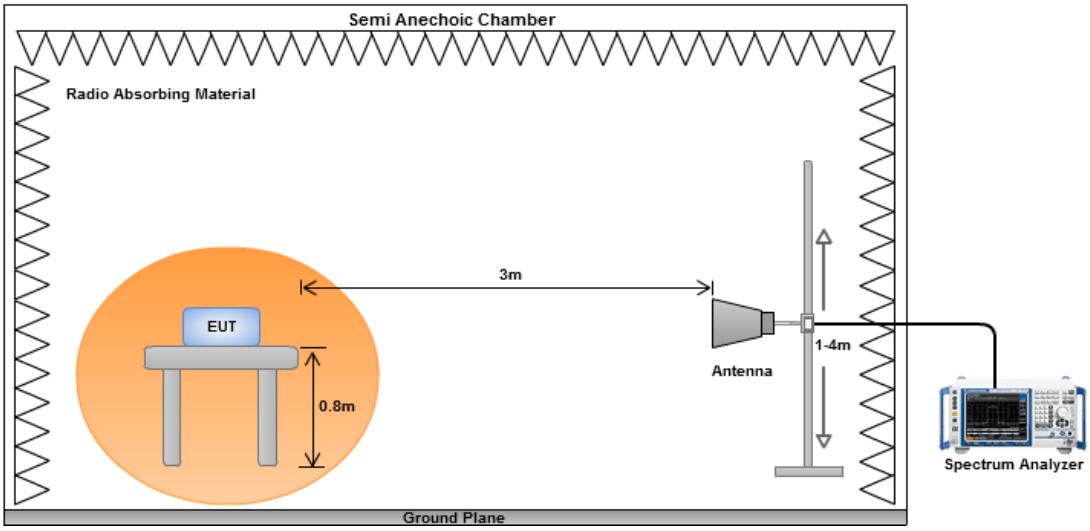
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.6.3 Test Setup

Radiated Emissions below 1 GHz

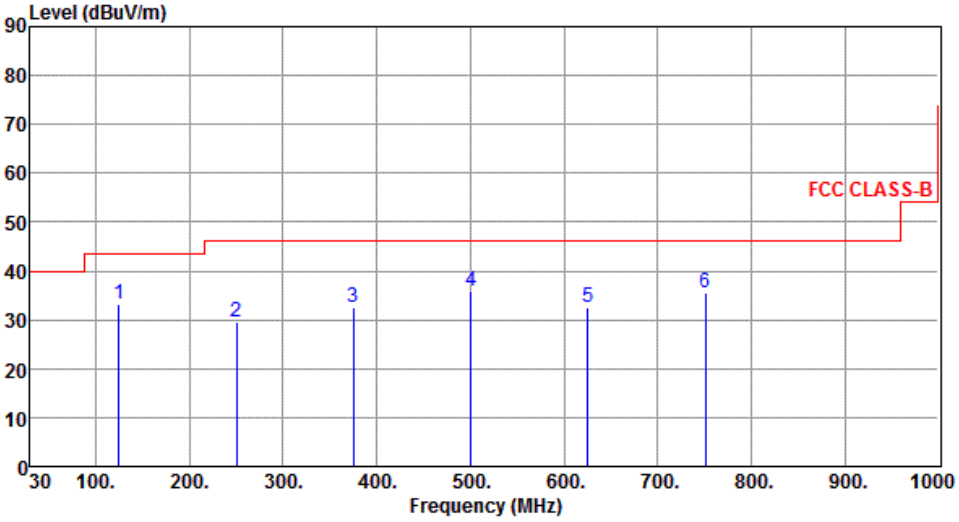


Radiated Emissions above 1 GHz



3.6.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

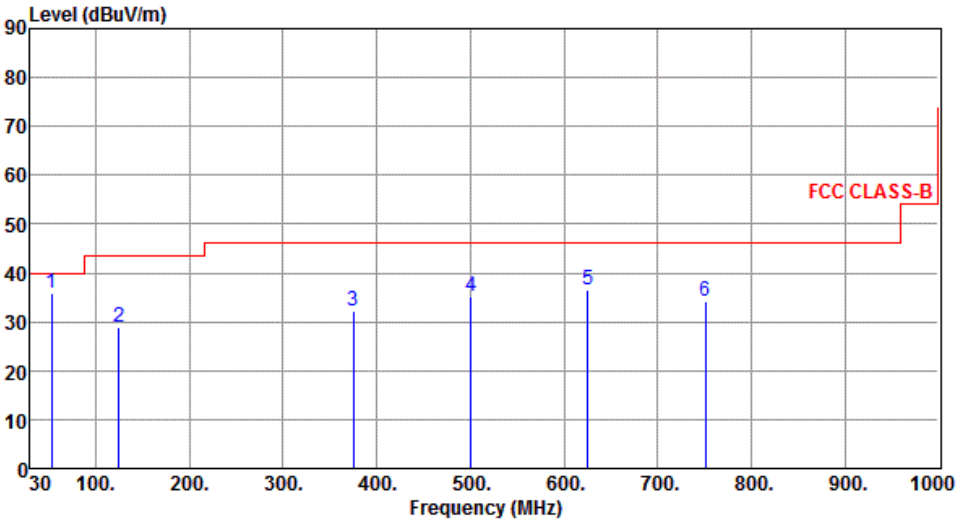
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	125.06	33.20	43.50	-10.30	48.35	-15.15	Peak	---	---
2	250.19	29.47	46.00	-16.53	43.94	-14.47	Peak	---	---
3	375.32	32.49	46.00	-13.51	43.24	-10.75	Peak	---	---
4	500.45	35.71	46.00	-10.29	43.71	-8.00	Peak	---	---
5	625.58	32.68	46.00	-13.32	37.94	-5.26	Peak	---	---
6	750.71	35.38	46.00	-10.62	38.53	-3.15	Peak	---	---

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

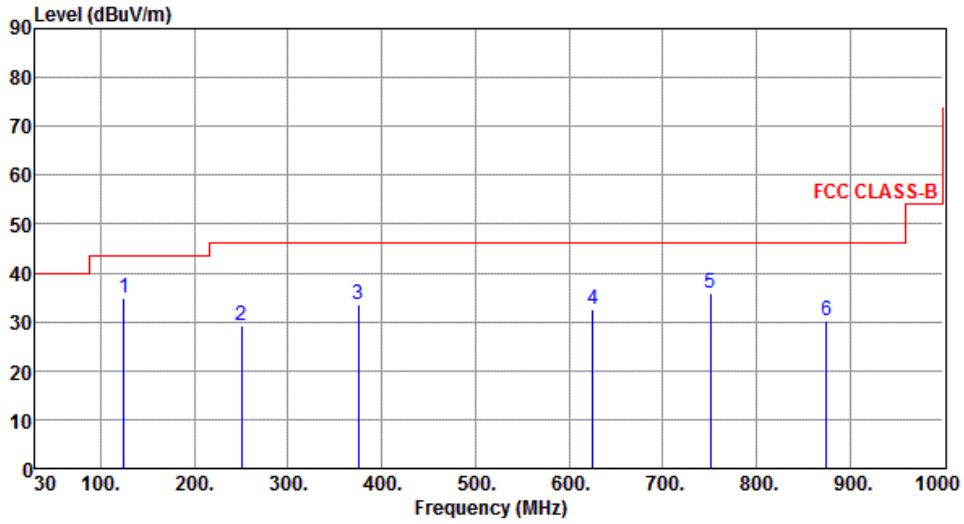
Modulation	VHT80	**Test Freq. (MHz)**	5690
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	53.28	35.73	40.00	-4.27	48.89	-13.16	Peak	---	---
2	125.06	28.95	43.50	-14.55	44.10	-15.15	Peak	---	---
3	375.32	32.08	46.00	-13.92	42.83	-10.75	Peak	---	---
4	500.45	35.25	46.00	-10.75	43.25	-8.00	Peak	---	---
5	625.58	36.41	46.00	-9.59	41.67	-5.26	Peak	---	---
6	750.71	34.04	46.00	-11.96	37.19	-3.15	Peak	---	---

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

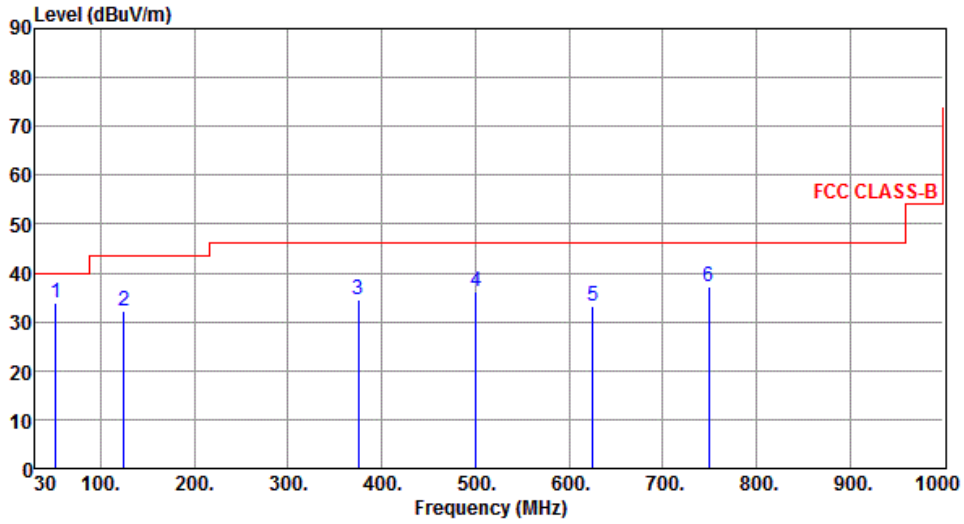
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	125.06	34.74	43.50	-8.76	49.89	-15.15	Peak	---	---
2	250.19	29.23	46.00	-16.77	43.70	-14.47	Peak	---	---
3	375.32	33.62	46.00	-12.38	44.37	-10.75	Peak	---	---
4	625.58	32.39	46.00	-13.61	37.65	-5.26	Peak	---	---
5	750.71	35.78	46.00	-10.22	38.93	-3.15	Peak	---	---
6	874.87	30.28	46.00	-15.72	31.43	-1.15	Peak	---	---

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

Modulation	VHT80	**Test Freq. (MHz)**	5690
Polarization	Vertical	**Test Configuration**	2

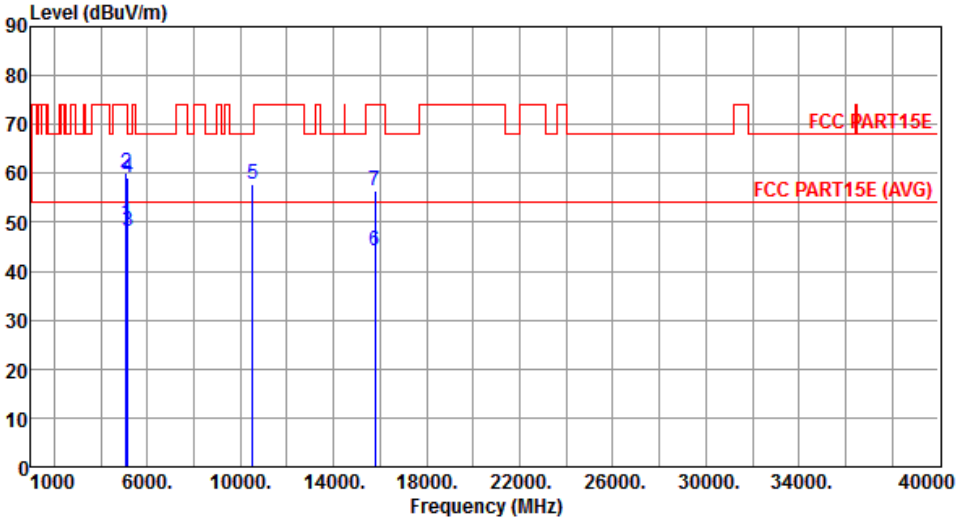


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.31	33.78	40.00	-6.22	46.88	-13.10	Peak	---	---
2	125.06	32.09	43.50	-11.41	47.24	-15.15	Peak	---	---
3	375.32	34.51	46.00	-11.49	45.26	-10.75	Peak	---	---
4	500.45	36.15	46.00	-9.85	44.15	-8.00	Peak	---	---
5	625.58	33.33	46.00	-12.67	38.59	-5.26	Peak	---	---
6	749.74	37.13	46.00	-8.87	40.29	-3.16	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.

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

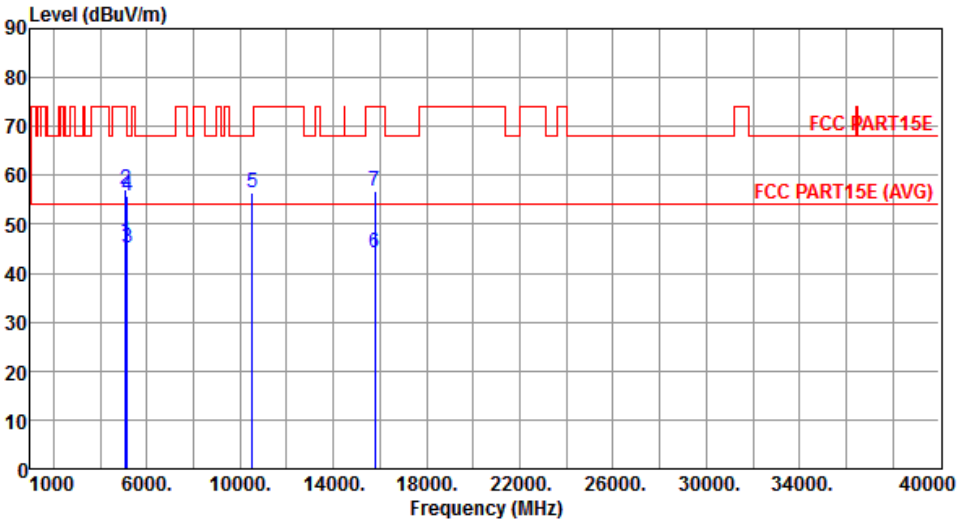
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5096.00	49.86	54.00	-4.14	43.79	6.07	Average	---	---
2	5096.00	60.23	74.00	-13.77	54.16	6.07	Peak	---	---
3	5150.00	48.32	54.00	-5.68	42.14	6.18	Average	---	---
4	5150.00	59.03	74.00	-14.97	52.85	6.18	Peak	---	---
5	10520.00	57.93	68.20	-10.27	40.53	17.40	Peak	---	---
6	15780.00	44.16	54.00	-9.84	26.86	17.30	Average	---	---
7	15780.00	56.47	74.00	-17.53	39.17	17.30	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).

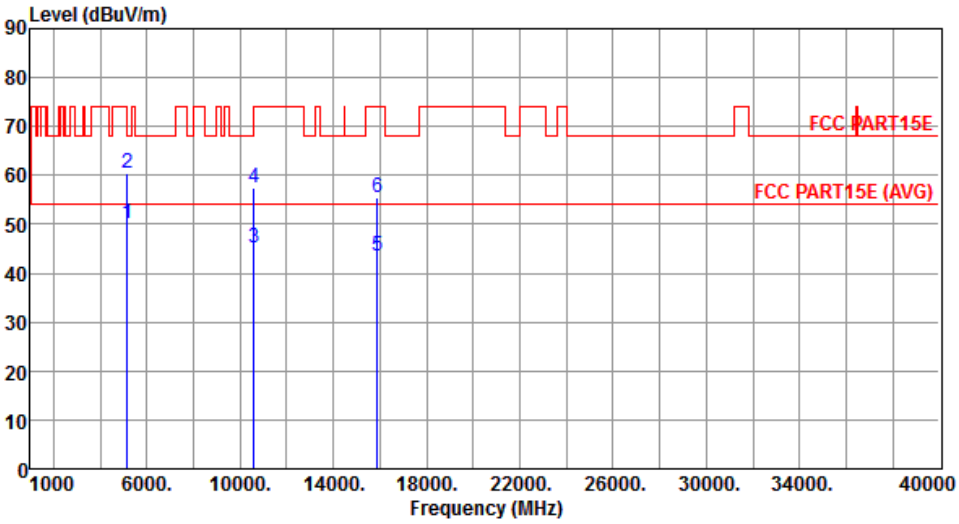
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5096.00	46.45	54.00	-7.55	40.38	6.07	Average	---	---
2	5096.00	56.98	74.00	-17.02	50.91	6.07	Peak	---	---
3	5150.00	45.33	54.00	-8.67	39.15	6.18	Average	---	---
4	5150.00	55.76	74.00	-18.24	49.58	6.18	Peak	---	---
5	10520.00	56.33	68.20	-11.87	38.93	17.40	Peak	---	---
6	15780.00	44.03	54.00	-9.97	26.73	17.30	Average	---	---
7	15780.00	56.91	74.00	-17.09	39.61	17.30	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).

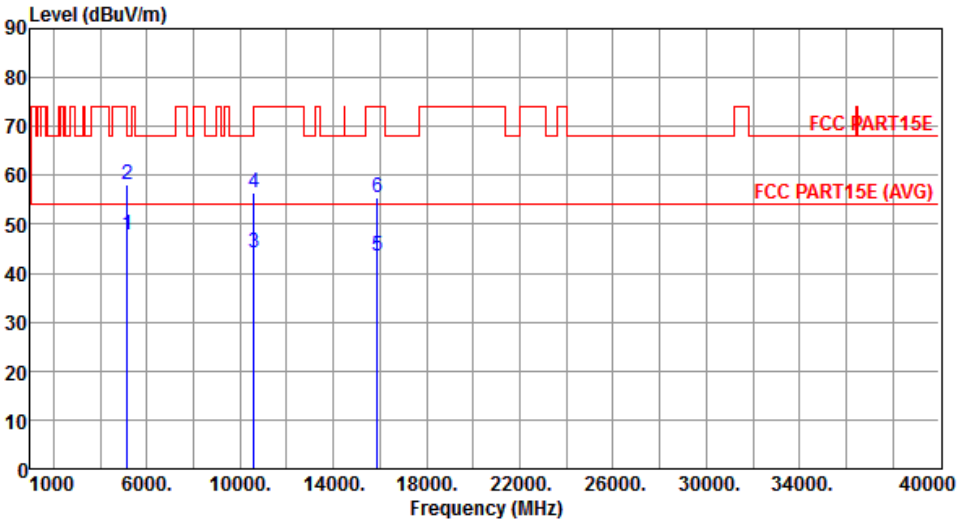
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	50.16	54.00	-3.84	43.99	6.17	Average	---	---
2	5144.00	60.44	74.00	-13.56	54.27	6.17	Peak	---	---
3	10600.00	45.18	54.00	-8.82	27.68	17.50	Average	---	---
4	10600.00	57.48	74.00	-16.52	39.98	17.50	Peak	---	---
5	15900.00	43.50	54.00	-10.50	26.50	17.00	Average	---	---
6	15900.00	55.60	74.00	-18.40	38.60	17.00	Peak	---	---

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

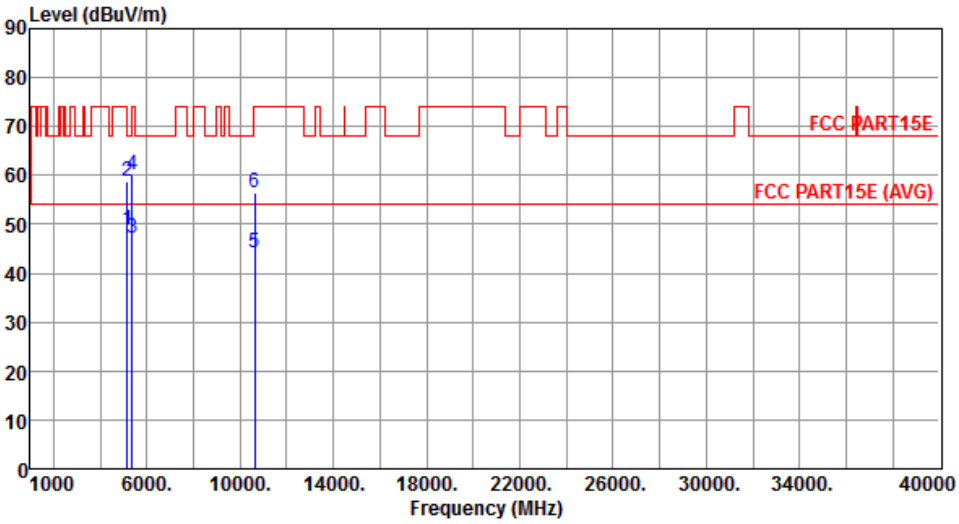
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	47.72	54.00	-6.28	41.55	6.17	Average	---	---
2	5144.00	58.01	74.00	-15.99	51.84	6.17	Peak	---	---
3	10600.00	44.03	54.00	-9.97	26.53	17.50	Average	---	---
4	10600.00	56.43	74.00	-17.57	38.93	17.50	Peak	---	---
5	15900.00	43.43	54.00	-10.57	26.43	17.00	Average	---	---
6	15900.00	55.59	74.00	-18.41	38.59	17.00	Peak	---	---

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

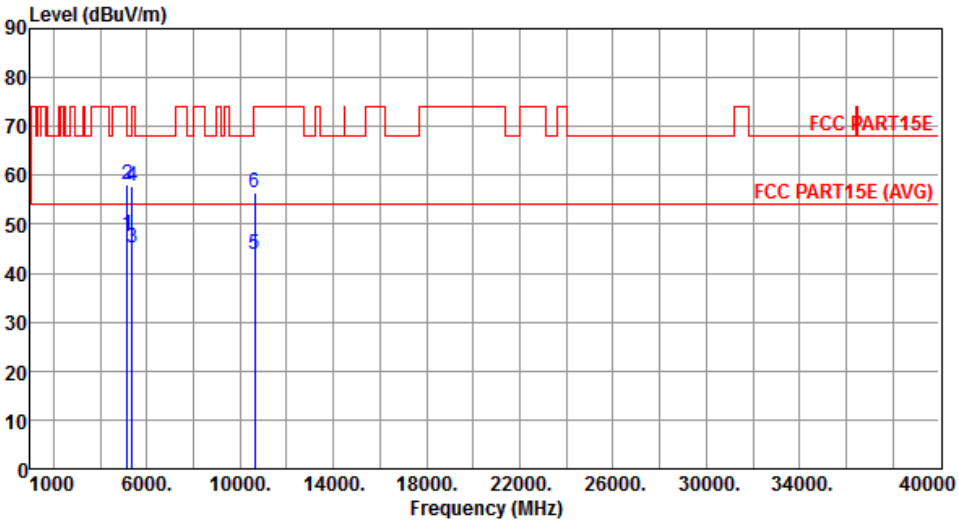
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	48.90	54.00	-5.10	42.73	6.17	Average	---	---
2	5144.00	58.90	74.00	-15.10	52.73	6.17	Peak	---	---
3	5350.00	47.07	54.00	-6.93	40.56	6.51	Average	---	---
4	5350.00	59.99	74.00	-14.01	53.48	6.51	Peak	---	---
5	10640.00	44.24	54.00	-9.76	26.68	17.56	Average	---	---
6	10640.00	56.54	74.00	-17.46	38.98	17.56	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).

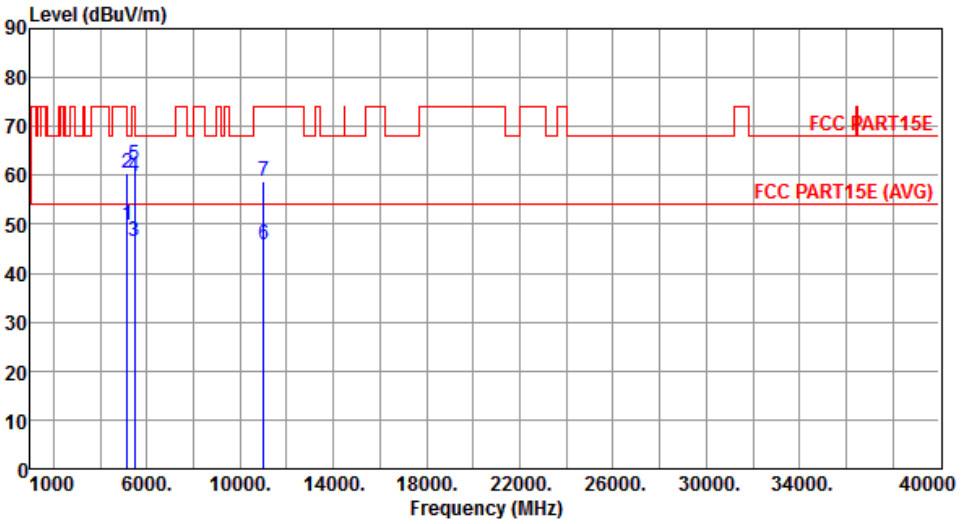
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	47.72	54.00	-6.28	41.55	6.17	Average	---	---
2	5144.00	58.01	74.00	-15.99	51.84	6.17	Peak	---	---
3	5350.00	45.20	54.00	-8.80	38.69	6.51	Average	---	---
4	5350.00	57.64	74.00	-16.36	51.13	6.51	Peak	---	---
5	10640.00	43.89	54.00	-10.11	26.33	17.56	Average	---	---
6	10640.00	56.36	74.00	-17.64	38.80	17.56	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).

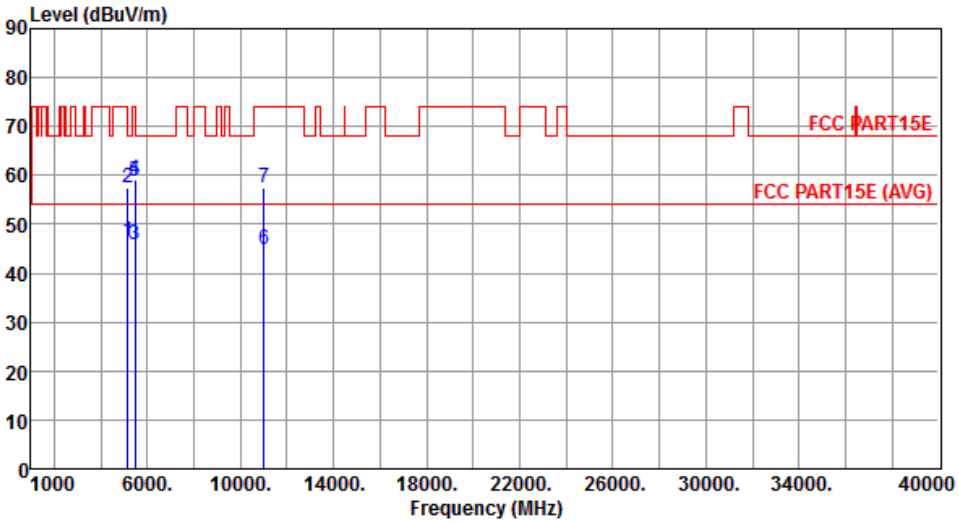
Modulation	11a	**Test Freq. (MHz)**	5500
Polarization	Horizontal	**Test Configuration**	1



	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	49.94	54.00	-4.06	43.76	6.18	Average	---	---
2	5150.00	60.47	74.00	-13.53	54.29	6.18	Peak	---	---
3	5460.00	46.62	54.00	-7.38	39.94	6.68	Average	---	---
4	5460.00	59.77	74.00	-14.23	53.09	6.68	Peak	---	---
5	5470.00	61.95	68.20	-6.25	55.25	6.70	Peak	---	---
6	11000.00	45.84	54.00	-8.16	27.84	18.00	Average	---	---
7	11000.00	58.93	74.00	-15.07	40.93	18.00	Peak	---	---

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

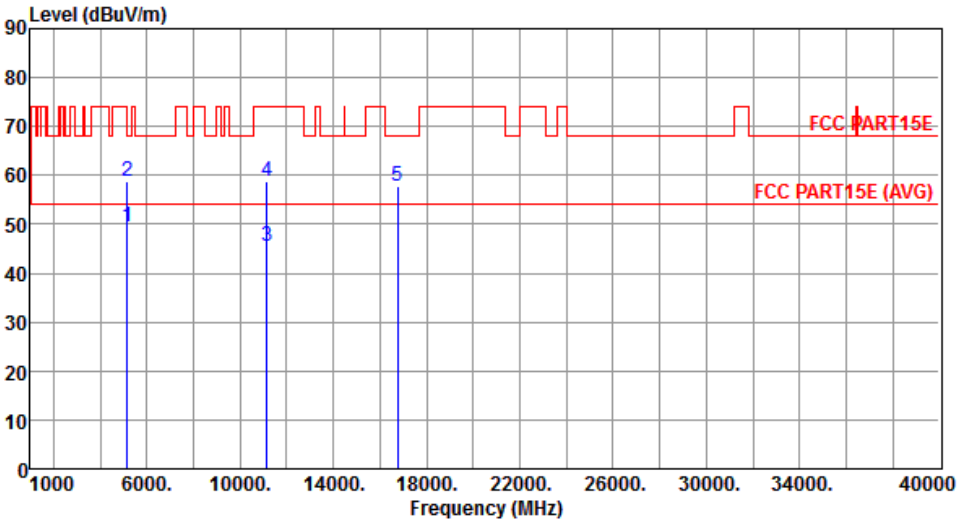
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	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	46.65	54.00	-7.35	40.47	6.18	Average	---	---
2	5150.00	57.55	74.00	-16.45	51.37	6.18	Peak	---	---
3	5460.00	45.94	54.00	-8.06	39.26	6.68	Average	---	---
4	5460.00	59.09	74.00	-14.91	52.41	6.68	Peak	---	---
5	5470.00	58.88	68.20	-9.32	52.18	6.70	Peak	---	---
6	11000.00	44.93	54.00	-9.07	26.93	18.00	Average	---	---
7	11000.00	57.54	74.00	-16.46	39.54	18.00	Peak	---	---

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

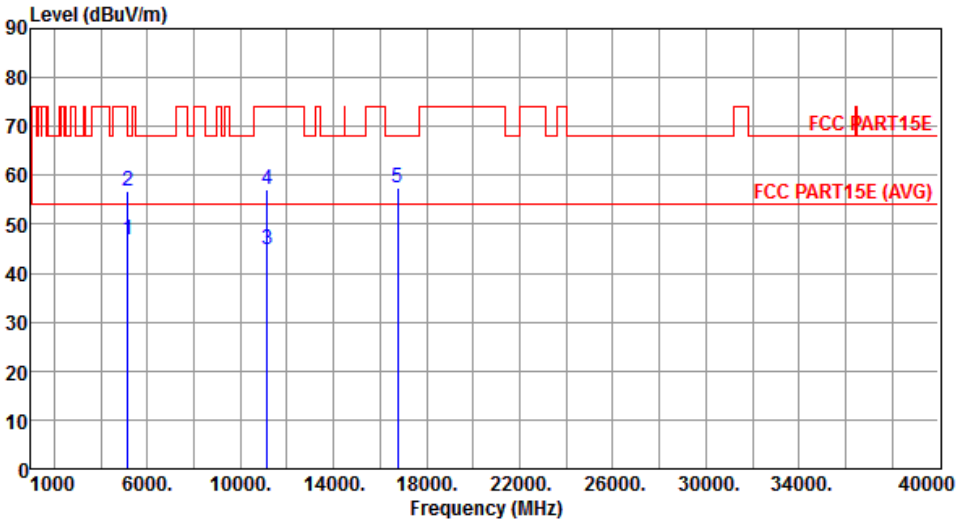
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5145.00	49.63	54.00	-4.37	43.46	6.17	Average	---	---
2	5145.00	58.85	74.00	-15.15	52.68	6.17	Peak	---	---
3	11160.00	45.64	54.00	-8.36	27.89	17.75	Average	---	---
4	11160.00	58.63	74.00	-15.37	40.88	17.75	Peak	---	---
5	16740.00	57.71	68.20	-10.49	39.60	18.11	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).

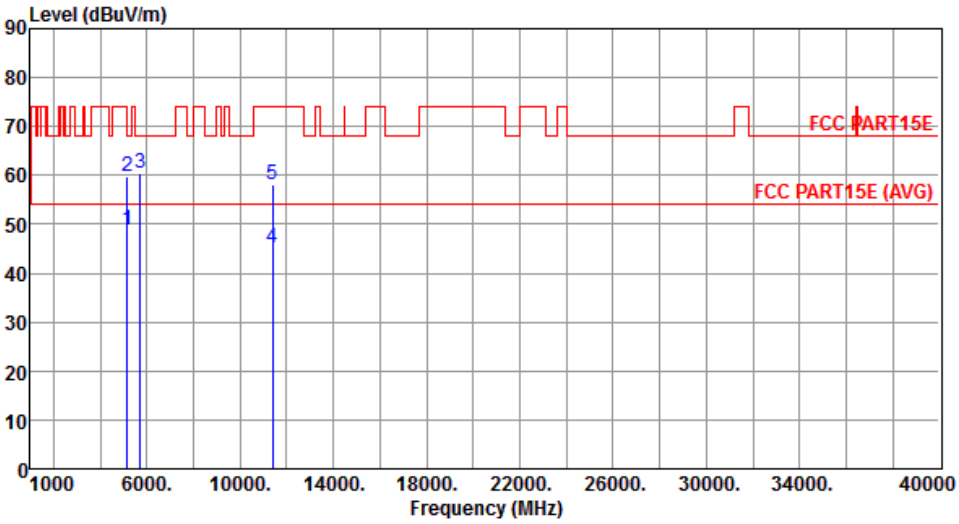
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5145.00	46.74	54.00	-7.26	40.57	6.17	Average	---	---
2	5145.00	56.71	74.00	-17.29	50.54	6.17	Peak	---	---
3	11160.00	44.85	54.00	-9.15	27.10	17.75	Average	---	---
4	11160.00	57.24	74.00	-16.76	39.49	17.75	Peak	---	---
5	16740.00	57.51	68.20	-10.69	39.40	18.11	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).

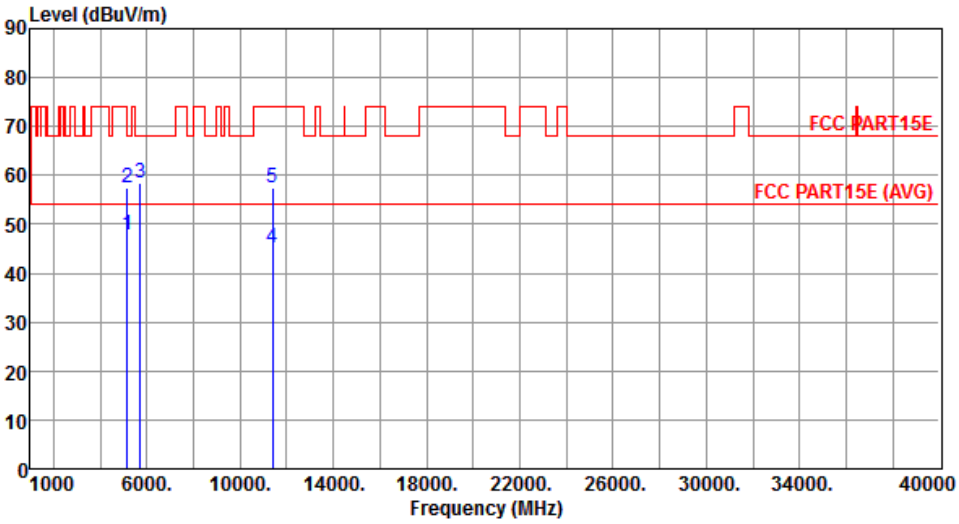
Modulation	11a	**Test Freq. (MHz)**	5700
Polarization	Horizontal	**Test Configuration**	1



	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	48.86	54.00	-5.14	42.68	6.18	Average	---	---
2	5150.00	59.67	74.00	-14.33	53.49	6.18	Peak	---	---
3	5725.00	60.60	68.20	-7.60	53.51	7.09	Peak	---	---
4	11400.00	45.33	54.00	-8.67	27.96	17.37	Average	---	---
5	11400.00	58.26	74.00	-15.74	40.89	17.37	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).

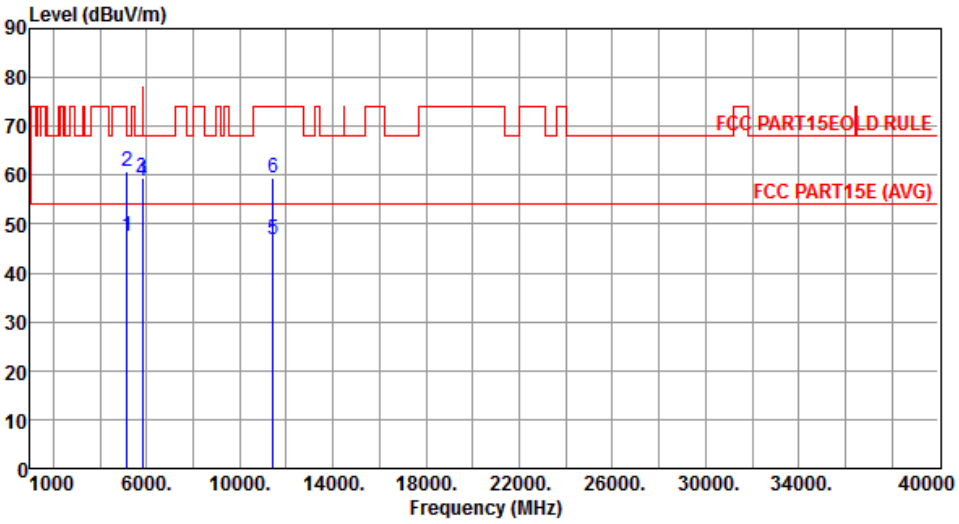
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical	Test Configuration	1



	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	47.76	54.00	-6.24	41.58	6.18	Average	---	---
2	5150.00	57.51	74.00	-16.49	51.33	6.18	Peak	---	---
3	5725.00	58.41	68.20	-9.79	51.32	7.09	Peak	---	---
4	11400.00	45.05	54.00	-8.95	27.68	17.37	Average	---	---
5	11400.00	57.58	74.00	-16.42	40.21	17.37	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).

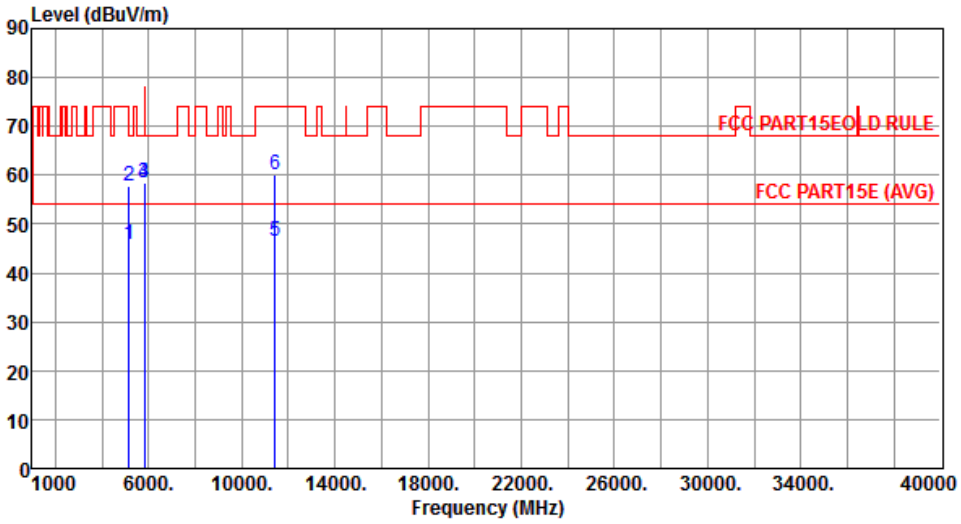
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal	Test Configuration	1



	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	47.51	54.00	-6.49	41.33	6.18	Average	---	---
2	5150.00	60.68	74.00	-13.32	54.50	6.18	Peak	---	---
3	5825.00	59.59	78.20	-18.61	52.37	7.22	Peak	---	---
4	5835.00	58.91	68.20	-9.29	51.68	7.23	Peak	---	---
5	11440.00	46.78	54.00	-7.22	29.47	17.31	Average	---	---
6	11440.00	59.35	74.00	-14.65	42.04	17.31	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical	Test Configuration	1

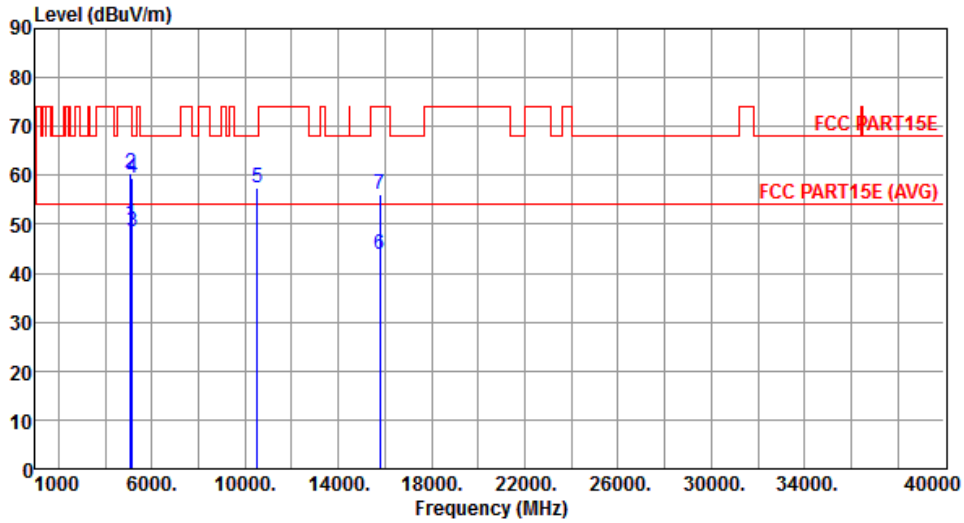


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.78	54.00	-8.22	39.60	6.18	Average	---	---
2	5150.00	57.73	74.00	-16.27	51.55	6.18	Peak	---	---
3	5825.00	58.47	78.20	-19.73	51.25	7.22	Peak	---	---
4	5835.00	58.34	68.20	-9.86	51.11	7.23	Peak	---	---
5	11440.00	46.55	54.00	-7.45	29.24	17.31	Average	---	---
6	11440.00	60.12	74.00	-13.88	42.81	17.31	Peak	---	---

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

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

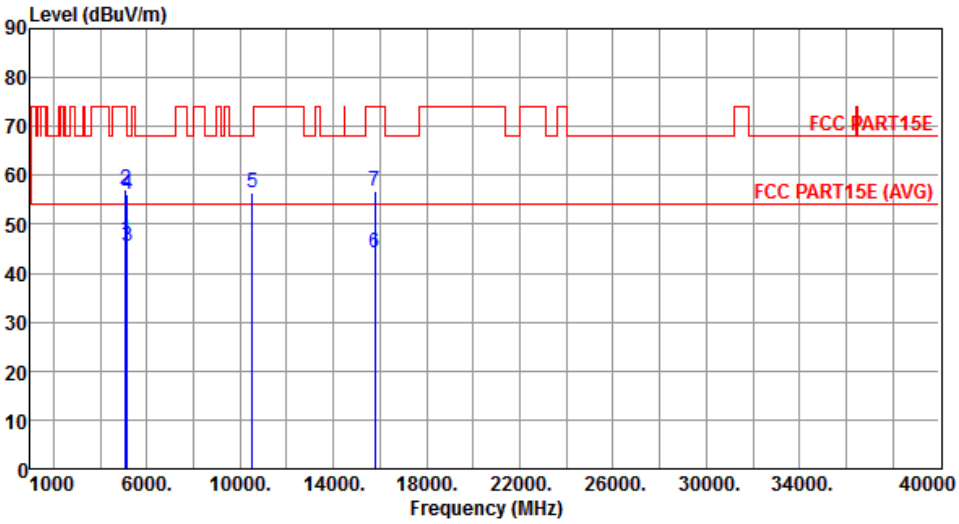
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5096.00	50.11	54.00	-3.89	44.04	6.07	Average	---	---
2	5096.00	60.54	74.00	-13.46	54.47	6.07	Peak	---	---
3	5150.00	48.62	54.00	-5.38	42.44	6.18	Average	---	---
4	5150.00	59.36	74.00	-14.64	53.18	6.18	Peak	---	---
5	10520.00	57.46	68.20	-10.74	40.06	17.40	Peak	---	---
6	15780.00	43.88	54.00	-10.12	26.58	17.30	Average	---	---
7	15780.00	56.23	74.00	-17.77	38.93	17.30	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).

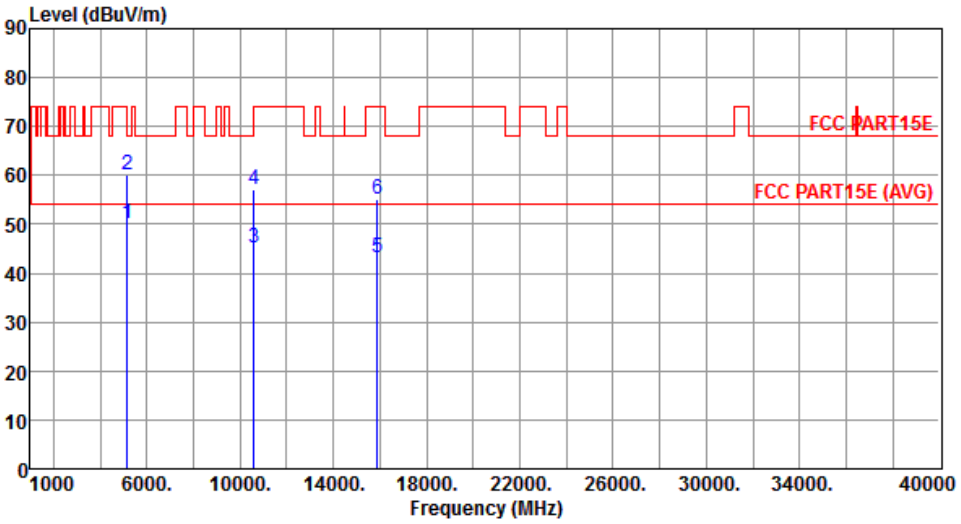
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5096.00	46.73	54.00	-7.27	40.66	6.07	Average	---	---
2	5096.00	57.18	74.00	-16.82	51.11	6.07	Peak	---	---
3	5150.00	45.64	54.00	-8.36	39.46	6.18	Average	---	---
4	5150.00	56.15	74.00	-17.85	49.97	6.18	Peak	---	---
5	10520.00	56.54	68.20	-11.66	39.14	17.40	Peak	---	---
6	15780.00	44.24	54.00	-9.76	26.94	17.30	Average	---	---
7	15780.00	56.65	74.00	-17.35	39.35	17.30	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).

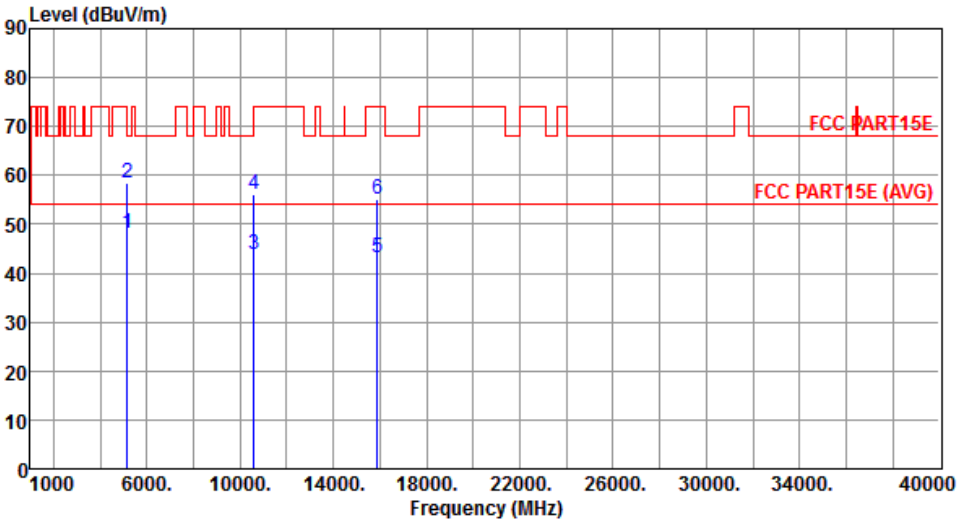
Modulation	VHT20	**Test Freq. (MHz)**	5300
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	50.06	54.00	-3.94	43.89	6.17	Average	---	---
2	5144.00	60.23	74.00	-13.77	54.06	6.17	Peak	---	---
3	10600.00	45.02	54.00	-8.98	27.52	17.50	Average	---	---
4	10600.00	57.13	74.00	-16.87	39.63	17.50	Peak	---	---
5	15900.00	43.23	54.00	-10.77	26.23	17.00	Average	---	---
6	15900.00	55.27	74.00	-18.73	38.27	17.00	Peak	---	---

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

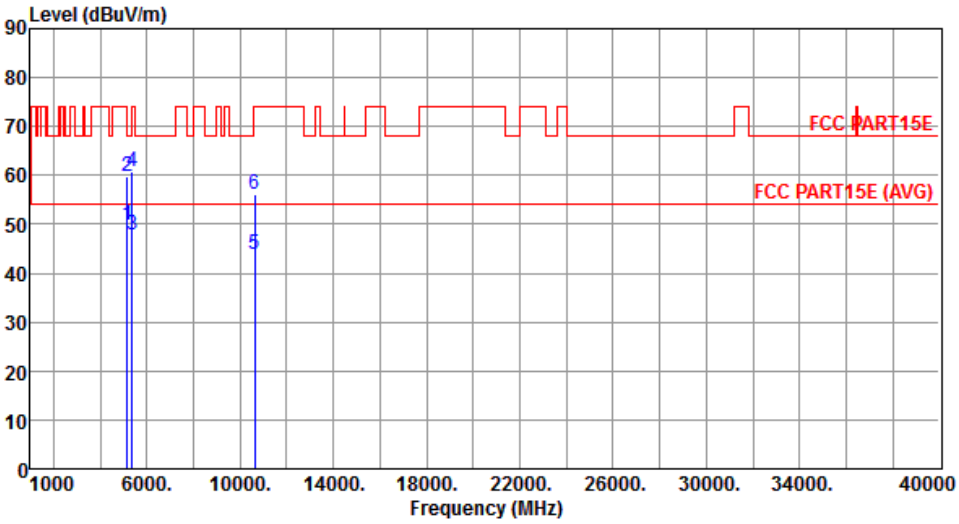
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	48.12	54.00	-5.88	41.95	6.17	Average	---	---
2	5144.00	58.33	74.00	-15.67	52.16	6.17	Peak	---	---
3	10600.00	43.87	54.00	-10.13	26.37	17.50	Average	---	---
4	10600.00	56.24	74.00	-17.76	38.74	17.50	Peak	---	---
5	15900.00	43.22	54.00	-10.78	26.22	17.00	Average	---	---
6	15900.00	55.17	74.00	-18.83	38.17	17.00	Peak	---	---

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

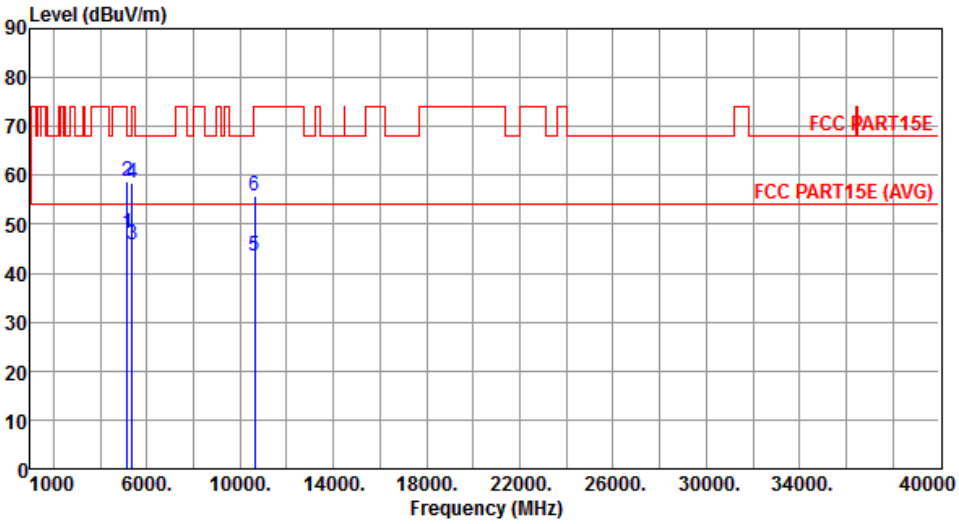
Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	49.74	54.00	-4.26	43.57	6.17	Average	---	---
2	5144.00	59.68	74.00	-14.32	53.51	6.17	Peak	---	---
3	5350.00	47.96	54.00	-6.04	41.45	6.51	Average	---	---
4	5350.00	60.83	74.00	-13.17	54.32	6.51	Peak	---	---
5	10640.00	43.82	54.00	-10.18	26.26	17.56	Average	---	---
6	10640.00	56.24	74.00	-17.76	38.68	17.56	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).

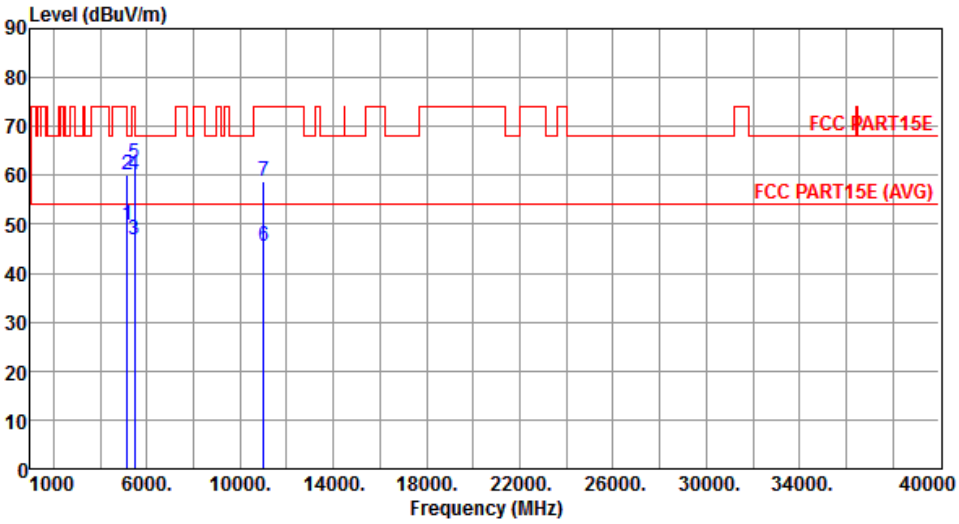
Modulation	VHT20	**Test Freq. (MHz)**	5320
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	48.23	54.00	-5.77	42.06	6.17	Average	---	---
2	5144.00	58.66	74.00	-15.34	52.49	6.17	Peak	---	---
3	5350.00	45.85	54.00	-8.15	39.34	6.51	Average	---	---
4	5350.00	58.37	74.00	-15.63	51.86	6.51	Peak	---	---
5	10640.00	43.43	54.00	-10.57	25.87	17.56	Average	---	---
6	10640.00	55.87	74.00	-18.13	38.31	17.56	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).

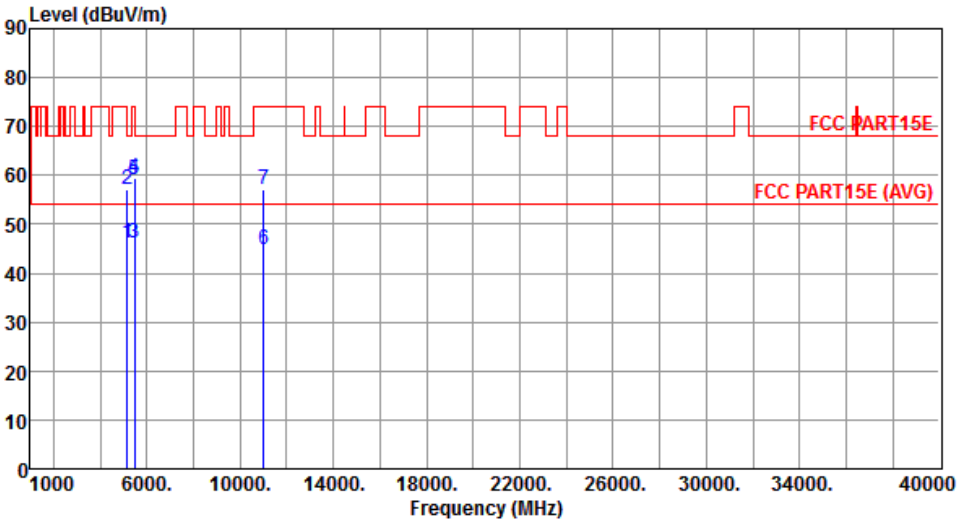
Modulation	VHT20	**Test Freq. (MHz)**	5500
Polarization	Horizontal	**Test Configuration**	1



	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	49.65	54.00	-4.35	43.47	6.18	Average	---	---
2	5150.00	60.12	74.00	-13.88	53.94	6.18	Peak	---	---
3	5460.00	46.91	54.00	-7.09	40.23	6.68	Average	---	---
4	5460.00	60.21	74.00	-13.79	53.53	6.68	Peak	---	---
5	5470.00	62.48	68.20	-5.72	55.78	6.70	Peak	---	---
6	11000.00	45.43	54.00	-8.57	27.43	18.00	Average	---	---
7	11000.00	58.62	74.00	-15.38	40.62	18.00	Peak	---	---

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

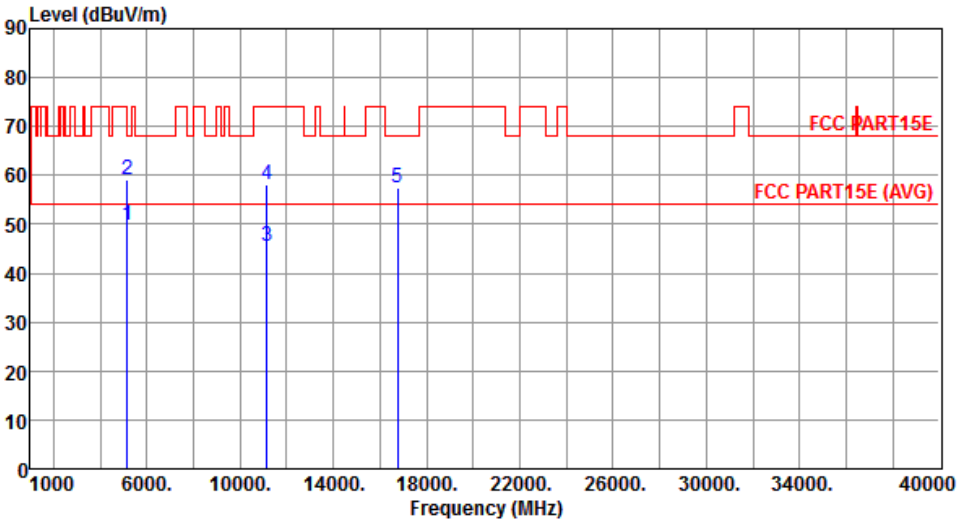
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.23	54.00	-7.77	40.05	6.18	Average	---	---
2	5150.00	57.09	74.00	-16.91	50.91	6.18	Peak	---	---
3	5460.00	46.23	54.00	-7.77	39.55	6.68	Average	---	---
4	5460.00	59.42	74.00	-14.58	52.74	6.68	Peak	---	---
5	5470.00	59.28	68.20	-8.92	52.58	6.70	Peak	---	---
6	11000.00	44.71	54.00	-9.29	26.71	18.00	Average	---	---
7	11000.00	57.20	74.00	-16.80	39.20	18.00	Peak	---	---

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

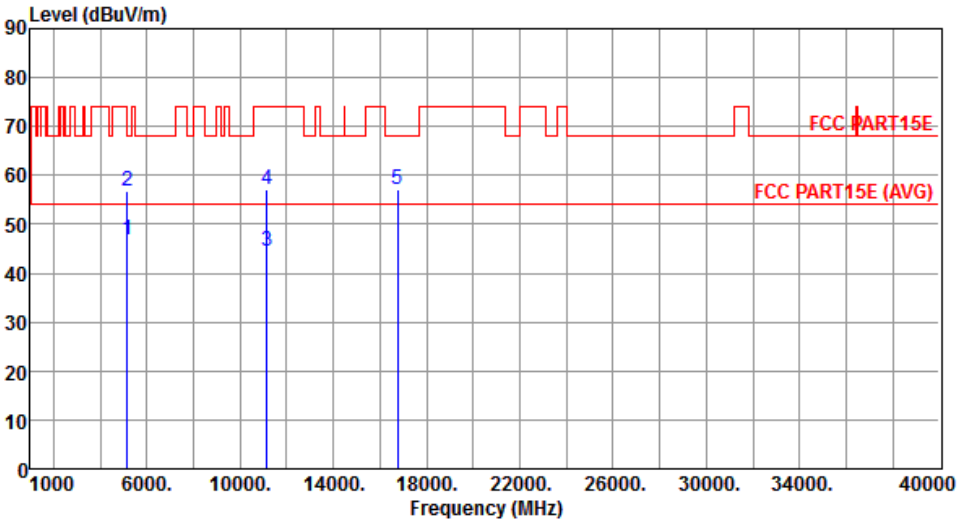
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5145.00	49.89	54.00	-4.11	43.72	6.17	Average	---	---
2	5145.00	59.03	74.00	-14.97	52.86	6.17	Peak	---	---
3	11160.00	45.37	54.00	-8.63	27.62	17.75	Average	---	---
4	11160.00	58.26	74.00	-15.74	40.51	17.75	Peak	---	---
5	16740.00	57.50	68.20	-10.70	39.39	18.11	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).

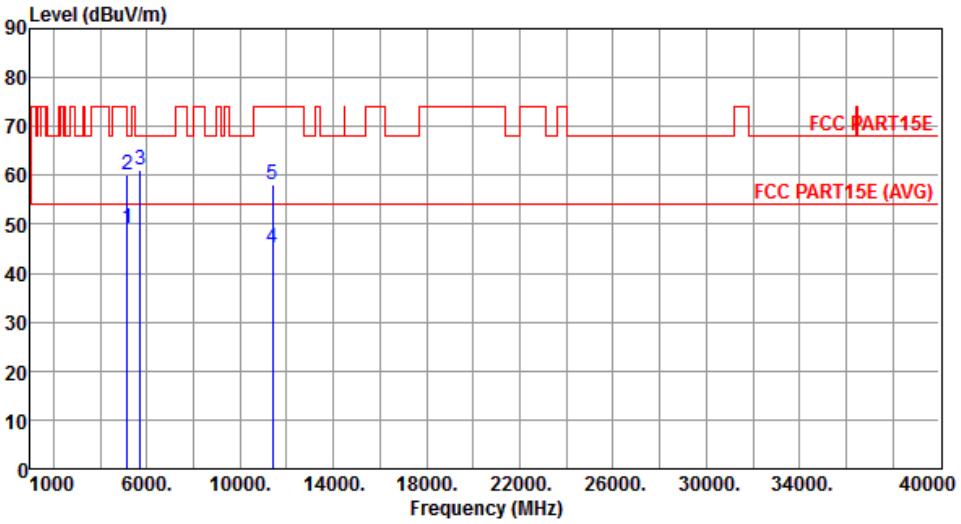
Modulation	VHT20	**Test Freq. (MHz)**	5580
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5145.00	46.97	54.00	-7.03	40.80	6.17	Average	---	---
2	5145.00	56.88	74.00	-17.12	50.71	6.17	Peak	---	---
3	11160.00	44.43	54.00	-9.57	26.68	17.75	Average	---	---
4	11160.00	57.00	74.00	-17.00	39.25	17.75	Peak	---	---
5	16740.00	57.15	68.20	-11.05	39.04	18.11	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).

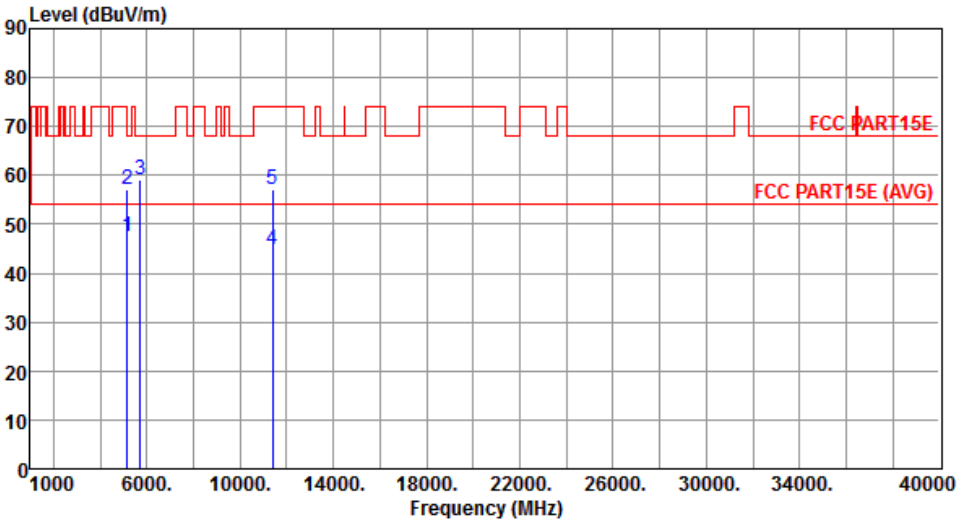
Modulation	VHT20	**Test Freq. (MHz)**	5700
Polarization	Horizontal	**Test Configuration**	1



	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	49.08	54.00	-4.92	42.90	6.18	Average	---	---
2	5150.00	59.99	74.00	-14.01	53.81	6.18	Peak	---	---
3	5725.00	60.97	68.20	-7.23	53.88	7.09	Peak	---	---
4	11400.00	45.02	54.00	-8.98	27.65	17.37	Average	---	---
5	11400.00	58.00	74.00	-16.00	40.63	17.37	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).

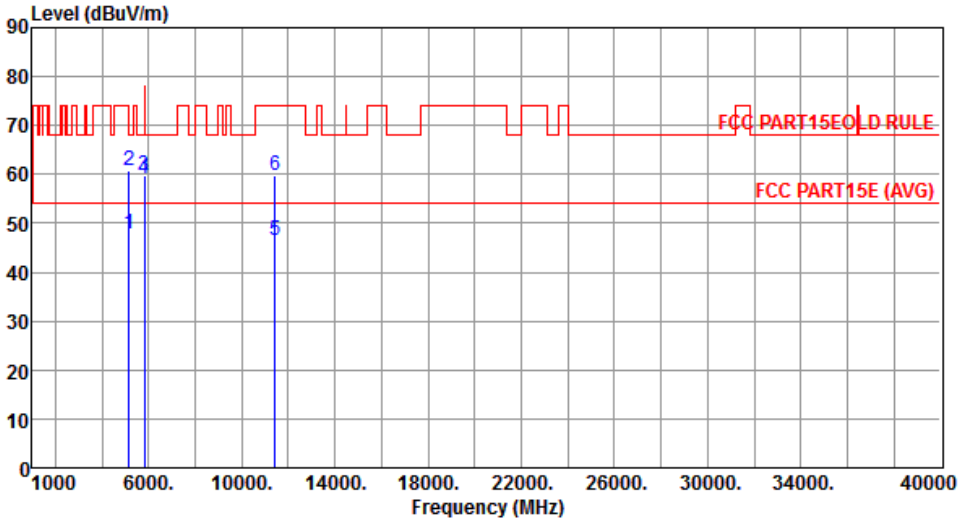
Modulation	VHT20	**Test Freq. (MHz)**	5700
Polarization	Vertical	**Test Configuration**	1



	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	47.36	54.00	-6.64	41.18	6.18	Average	---	---
2	5150.00	57.25	74.00	-16.75	51.07	6.18	Peak	---	---
3	5725.00	58.97	68.20	-9.23	51.88	7.09	Peak	---	---
4	11400.00	44.83	54.00	-9.17	27.46	17.37	Average	---	---
5	11400.00	57.27	74.00	-16.73	39.90	17.37	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).

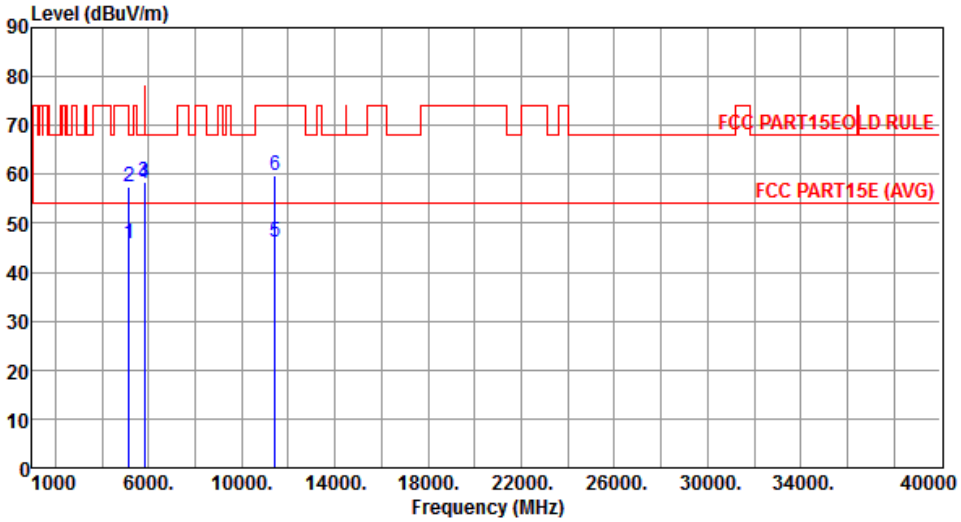
Modulation	VHT20	**Test Freq. (MHz)**	5720
Polarization	Horizontal	**Test Configuration**	1



	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	47.77	54.00	-6.23	41.59	6.18	Average	---	---
2	5150.00	60.87	74.00	-13.13	54.69	6.18	Peak	---	---
3	5825.00	59.86	78.20	-18.34	52.64	7.22	Peak	---	---
4	5835.00	59.06	68.20	-9.14	51.83	7.23	Peak	---	---
5	11440.00	46.61	54.00	-7.39	29.30	17.31	Average	---	---
6	11440.00	59.68	74.00	-14.32	42.37	17.31	Peak	---	---

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

Modulation	VHT20	**Test Freq. (MHz)**	5720
Polarization	Vertical	**Test Configuration**	1

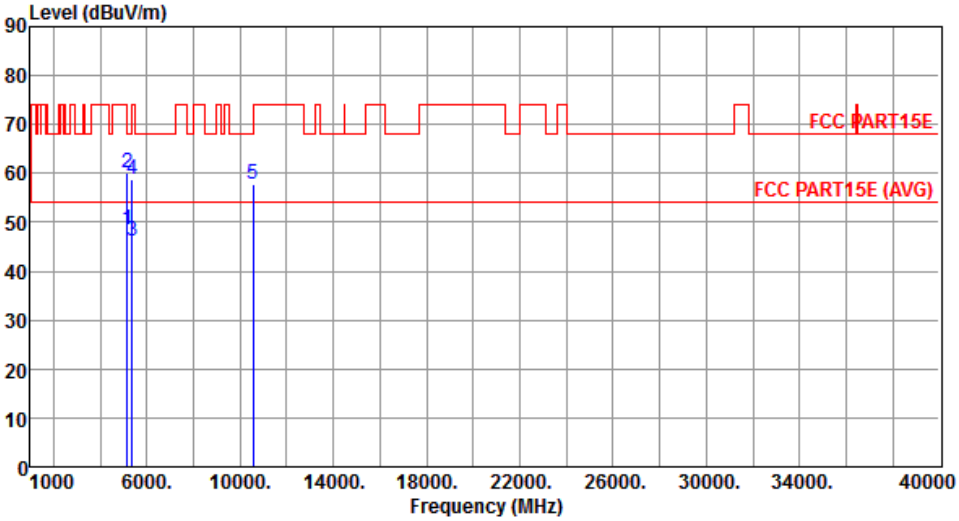


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.69	54.00	-8.31	39.51	6.18	Average	---	---
2	5150.00	57.43	74.00	-16.57	51.25	6.18	Peak	---	---
3	5825.00	58.39	78.20	-19.81	51.17	7.22	Peak	---	---
4	5835.00	58.25	68.20	-9.95	51.02	7.23	Peak	---	---
5	11440.00	46.14	54.00	-7.86	28.83	17.31	Average	---	---
6	11440.00	59.81	74.00	-14.19	42.50	17.31	Peak	---	---

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

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

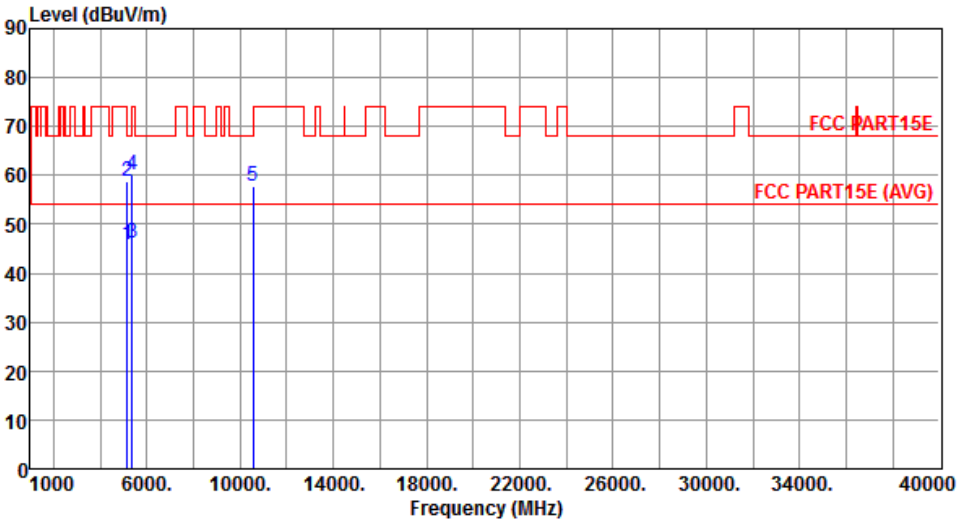
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	1



	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	48.38	54.00	-5.62	42.20	6.18	Average	---	---
2	5150.00	59.97	74.00	-14.03	53.79	6.18	Peak	---	---
3	5350.00	46.02	54.00	-7.98	39.51	6.51	Average	---	---
4	5350.00	58.73	74.00	-15.27	52.22	6.51	Peak	---	---
5	10540.00	57.81	68.20	-10.39	40.38	17.43	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).

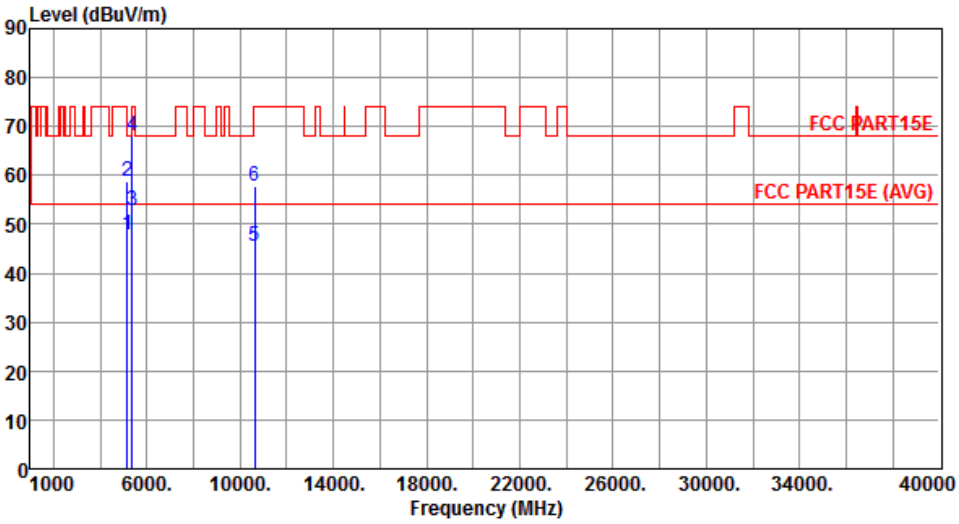
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical	Test Configuration	1



	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	45.94	54.00	-8.06	39.76	6.18	Average	---	---
2	5150.00	58.73	74.00	-15.27	52.55	6.18	Peak	---	---
3	5350.00	46.04	54.00	-7.96	39.53	6.51	Average	---	---
4	5350.00	60.04	74.00	-13.96	53.53	6.51	Peak	---	---
5	10540.00	57.64	68.20	-10.56	40.21	17.43	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).

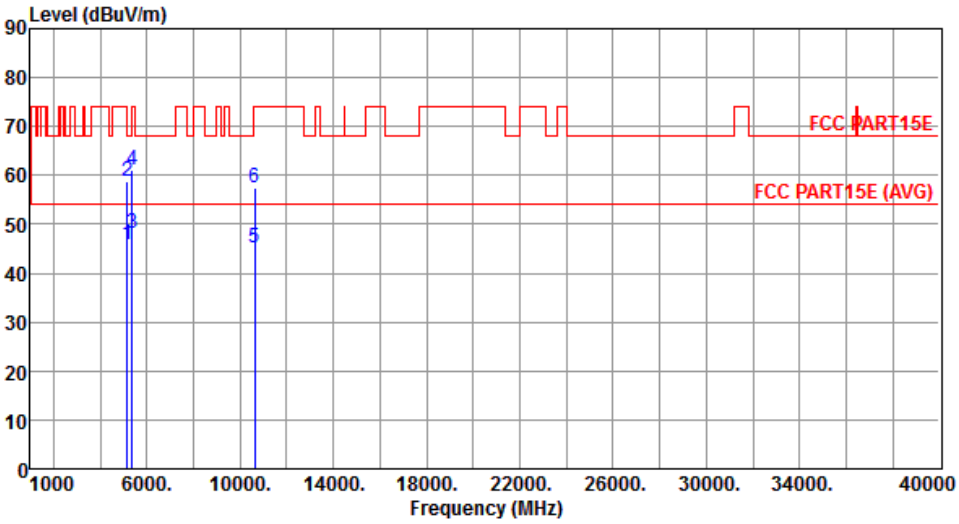
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal	Test Configuration	1



	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	47.96	54.00	-6.04	41.78	6.18	Average	---	---
2	5150.00	58.93	74.00	-15.07	52.75	6.18	Peak	---	---
3	5350.00	52.86	54.00	-1.14	46.35	6.51	Average	---	---
4	5350.00	67.94	74.00	-6.06	61.43	6.51	Peak	---	---
5	10620.00	45.64	54.00	-8.36	28.12	17.52	Average	---	---
6	10620.00	57.85	74.00	-16.15	40.33	17.52	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).

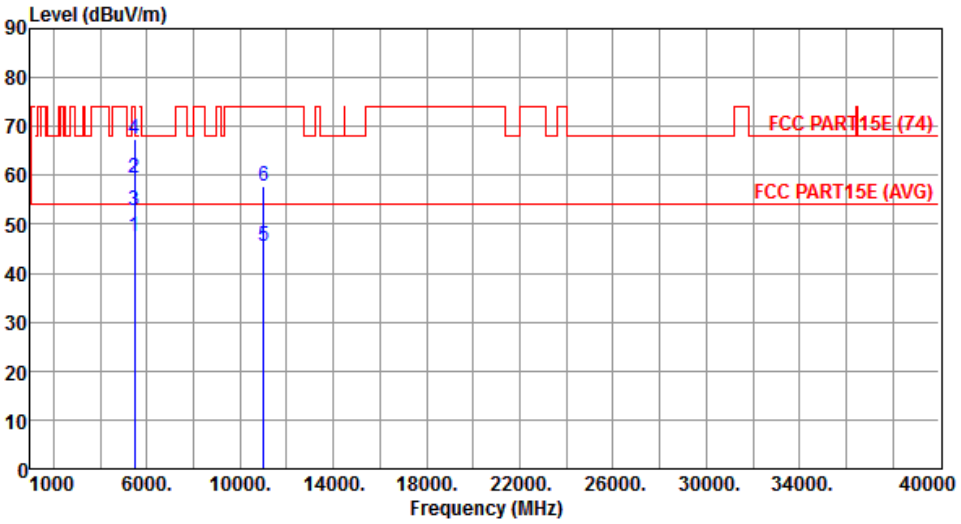
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical	Test Configuration	1



	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	45.89	54.00	-8.11	39.71	6.18	Average	---	---
2	5150.00	58.73	74.00	-15.27	52.55	6.18	Peak	---	---
3	5350.00	48.13	54.00	-5.87	41.62	6.51	Average	---	---
4	5350.00	61.15	74.00	-12.85	54.64	6.51	Peak	---	---
5	10620.00	45.21	54.00	-8.79	27.69	17.52	Average	---	---
6	10620.00	57.29	74.00	-16.71	39.77	17.52	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).

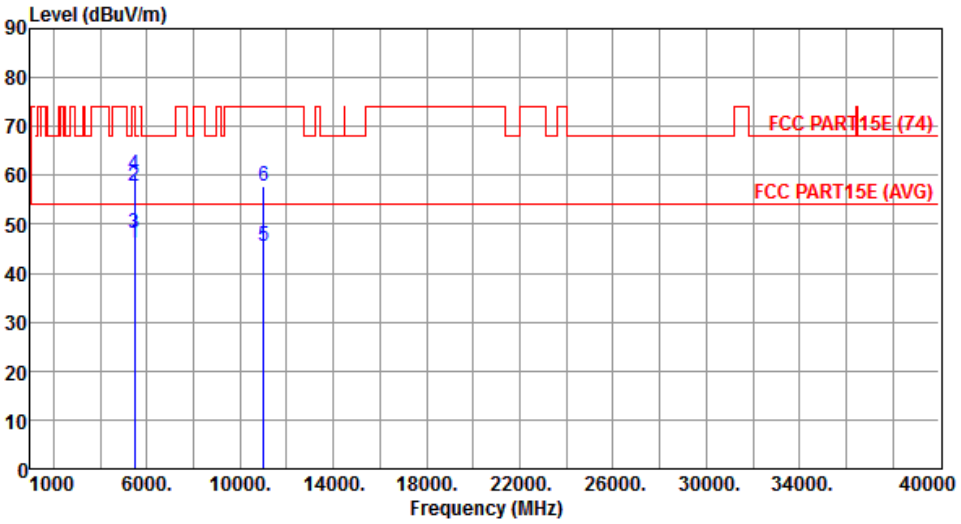
Modulation	VHT40	**Test Freq. (MHz)**	5510
Polarization	Horizontal	**Test Configuration**	1



	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	47.39	54.00	-6.61	40.71	6.68	Average	---	---
2	5460.00	59.32	74.00	-14.68	52.64	6.68	Peak	---	---
3	5470.00	52.80	54.00	-1.20	46.10	6.70	Average	---	---
4	5470.00	67.31	74.00	-6.69	60.61	6.70	Peak	---	---
5	11020.00	45.64	54.00	-8.36	27.66	17.98	Average	---	---
6	11020.00	57.79	74.00	-16.21	39.81	17.98	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).

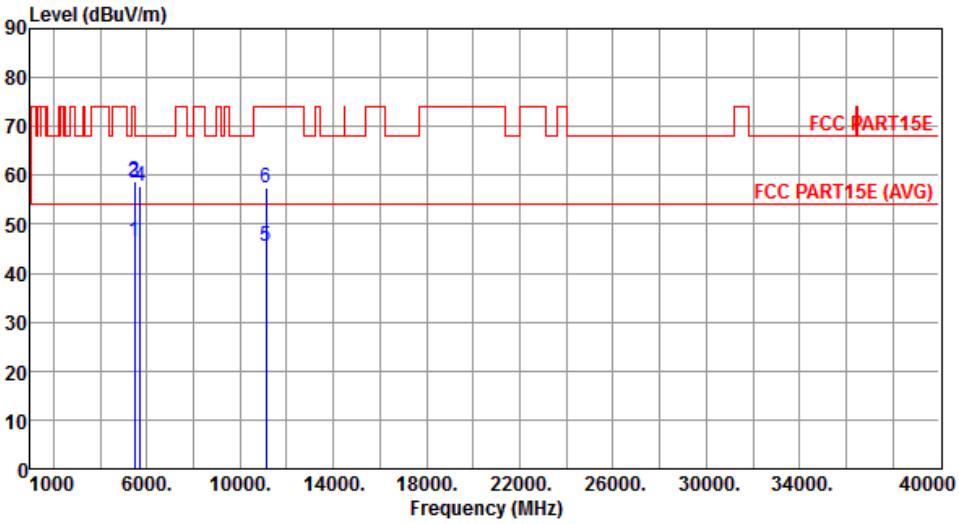
Modulation	VHT40	**Test Freq. (MHz)**	5510
Polarization	Vertical	**Test Configuration**	1



	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	39.53	6.68	Average	---	---
2	5460.00	57.95	74.00	-16.05	51.27	6.68	Peak	---	---
3	5470.00	48.04	54.00	-5.96	41.34	6.70	Average	---	---
4	5470.00	60.18	74.00	-13.82	53.48	6.70	Peak	---	---
5	11020.00	45.65	54.00	-8.35	27.67	17.98	Average	---	---
6	11020.00	57.73	74.00	-16.27	39.75	17.98	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).

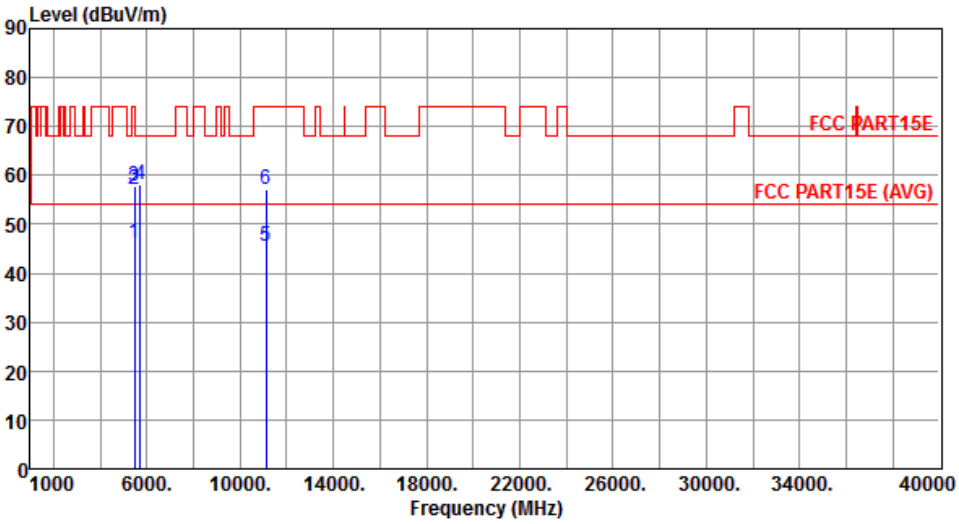
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal	Test Configuration	1



	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	46.54	54.00	-7.46	39.86	6.68	Average	---	---
2	5460.00	58.83	74.00	-15.17	52.15	6.68	Peak	---	---
3	5470.00	58.57	68.20	-9.63	51.87	6.70	Peak	---	---
4	5725.00	57.80	68.20	-10.40	50.71	7.09	Peak	---	---
5	11100.00	45.49	54.00	-8.51	27.64	17.85	Average	---	---
6	11100.00	57.57	74.00	-16.43	39.72	17.85	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).

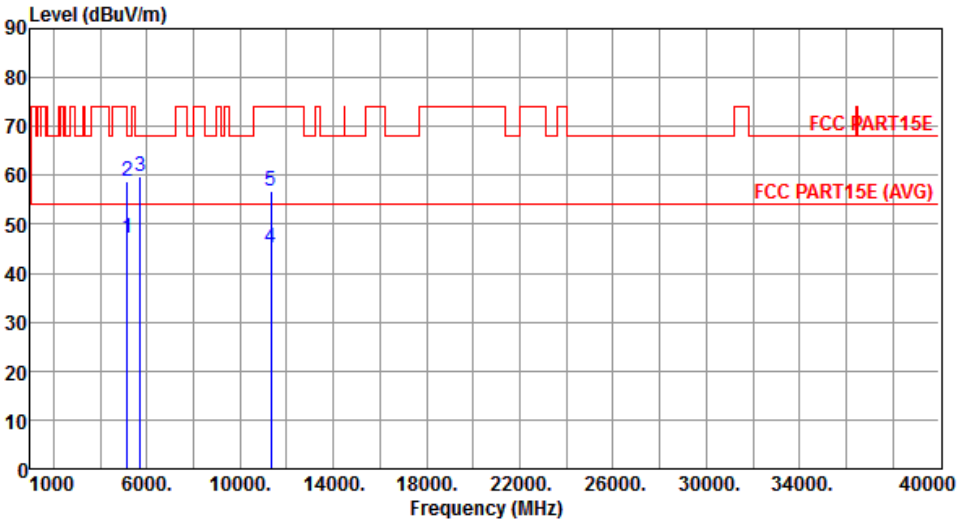
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical	Test Configuration	1



	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	46.10	54.00	-7.90	39.42	6.68	Average	---	---
2	5460.00	57.16	74.00	-16.84	50.48	6.68	Peak	---	---
3	5470.00	57.91	68.20	-10.29	51.21	6.70	Peak	---	---
4	5725.00	58.07	68.20	-10.13	50.98	7.09	Peak	---	---
5	11100.00	45.40	54.00	-8.60	27.55	17.85	Average	---	---
6	11100.00	57.11	74.00	-16.89	39.26	17.85	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).

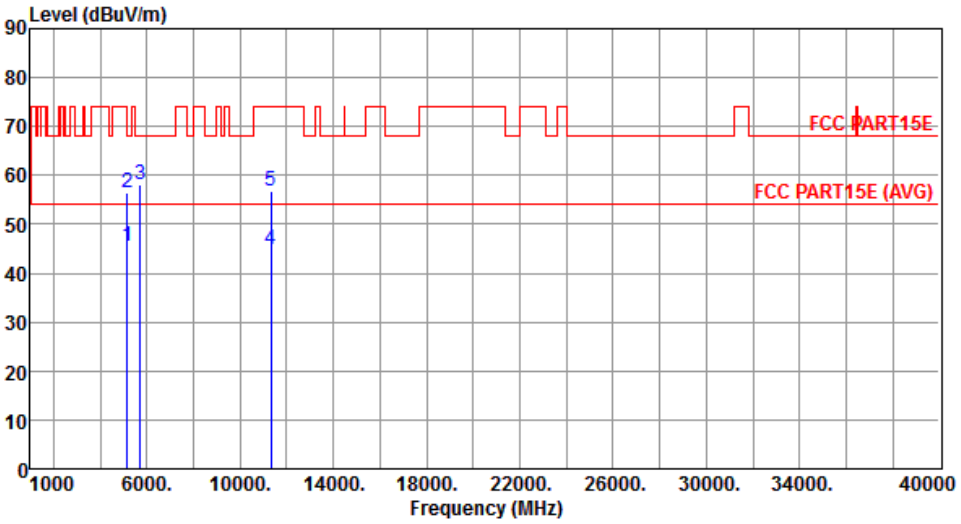
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.18	54.00	-6.82	41.00	6.18	Average	---	---
2	5150.00	58.68	74.00	-15.32	52.50	6.18	Peak	---	---
3	5725.00	59.77	68.20	-8.43	52.68	7.09	Peak	---	---
4	11340.00	45.10	54.00	-8.90	27.63	17.47	Average	---	---
5	11340.00	56.91	74.00	-17.09	39.44	17.47	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).

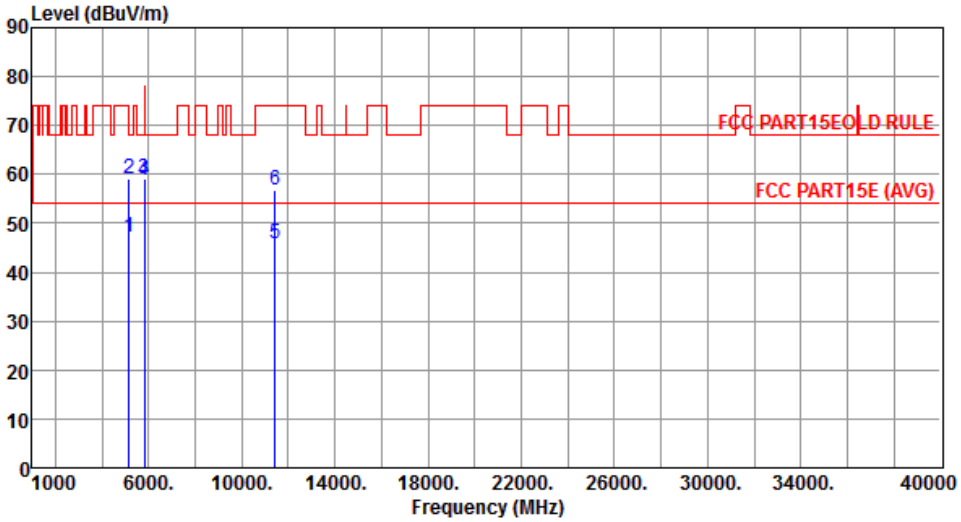
Modulation	VHT40	**Test Freq. (MHz)**	5670
Polarization	Vertical	**Test Configuration**	1



	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	45.40	54.00	-8.60	39.22	6.18	Average	---	---
2	5150.00	56.57	74.00	-17.43	50.39	6.18	Peak	---	---
3	5725.00	58.07	68.20	-10.13	50.98	7.09	Peak	---	---
4	11340.00	44.79	54.00	-9.21	27.32	17.47	Average	---	---
5	11340.00	56.88	74.00	-17.12	39.41	17.47	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).

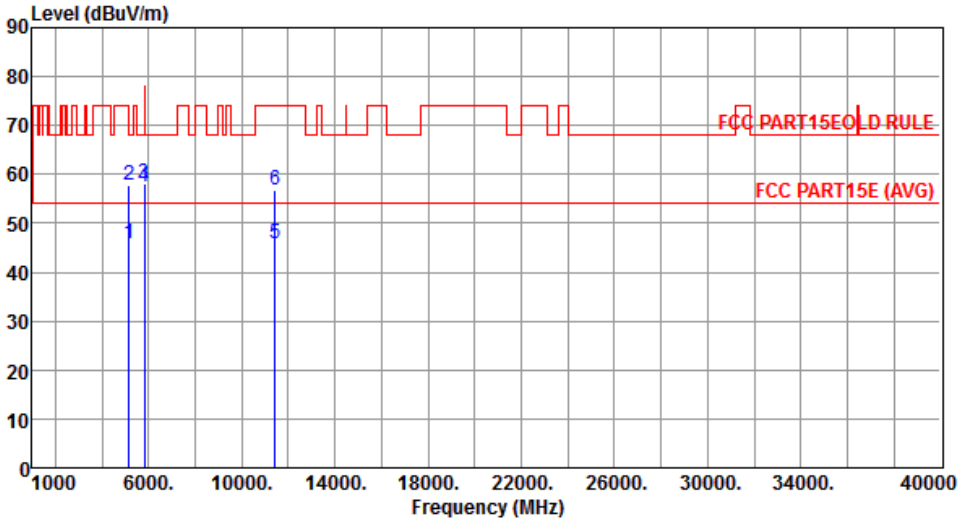
Modulation	VHT40	**Test Freq. (MHz)**	5710
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.24	54.00	-6.76	41.06	6.18	Average	---	---
2	5150.00	59.18	74.00	-14.82	53.00	6.18	Peak	---	---
3	5825.00	59.07	78.20	-19.13	51.85	7.22	Peak	---	---
4	5835.00	58.67	68.20	-9.53	51.44	7.23	Peak	---	---
5	11420.00	45.97	54.00	-8.03	28.62	17.35	Average	---	---
6	11420.00	56.90	74.00	-17.10	39.55	17.35	Peak	---	---

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

Modulation	VHT40	**Test Freq. (MHz)**	5710
Polarization	Vertical	**Test Configuration**	1

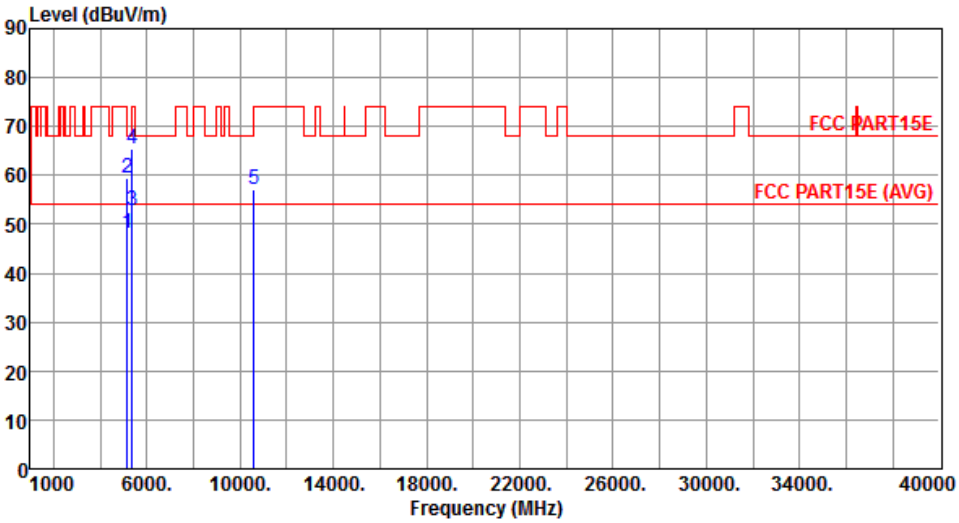


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.75	54.00	-8.25	39.57	6.18	Average	---	---
2	5150.00	57.64	74.00	-16.36	51.46	6.18	Peak	---	---
3	5825.00	58.15	78.20	-20.05	50.93	7.22	Peak	---	---
4	5835.00	57.29	68.20	-10.91	50.06	7.23	Peak	---	---
5	11420.00	45.73	54.00	-8.27	28.38	17.35	Average	---	---
6	11420.00	56.91	74.00	-17.09	39.56	17.35	Peak	---	---

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

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

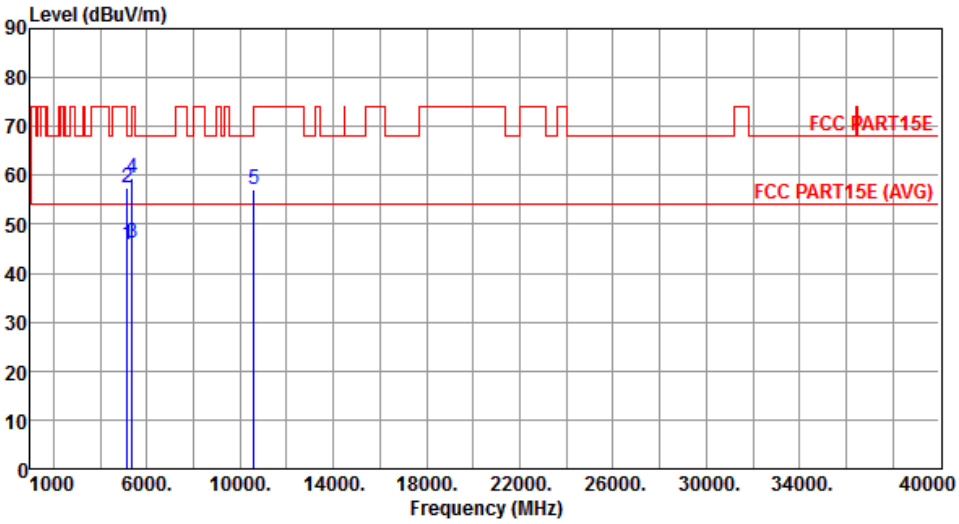
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal	Test Configuration	1



	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	48.21	54.00	-5.79	42.03	6.18	Average	---	---
2	5150.00	59.52	74.00	-14.48	53.34	6.18	Peak	---	---
3	5350.00	52.94	54.00	-1.06	46.43	6.51	Average	---	---
4	5350.00	65.35	74.00	-8.65	58.84	6.51	Peak	---	---
5	10580.00	56.96	68.20	-11.24	39.48	17.48	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).

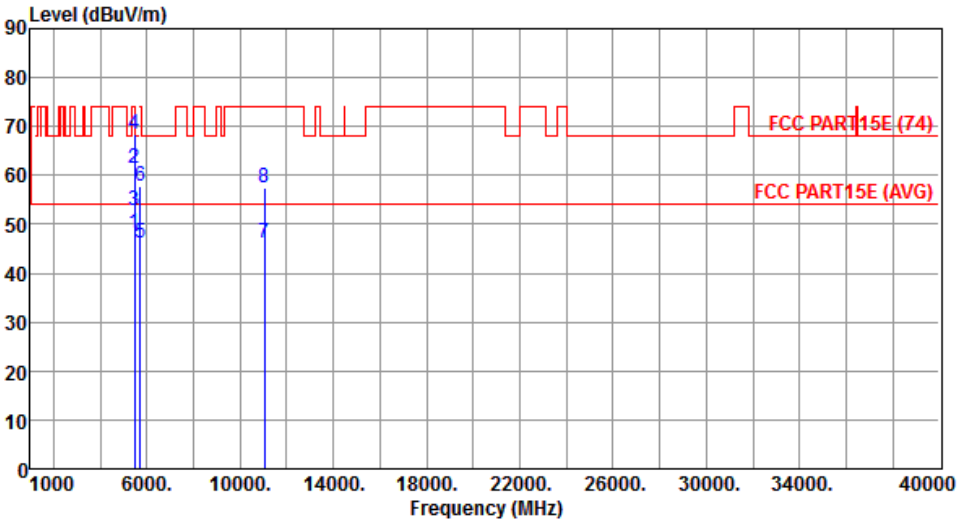
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical	Test Configuration	1



	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	45.93	54.00	-8.07	39.75	6.18	Average	---	---
2	5150.00	57.58	74.00	-16.42	51.40	6.18	Peak	---	---
3	5350.00	46.10	54.00	-7.90	39.59	6.51	Average	---	---
4	5350.00	59.59	74.00	-14.41	53.08	6.51	Peak	---	---
5	10580.00	57.11	68.20	-11.09	39.63	17.48	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).

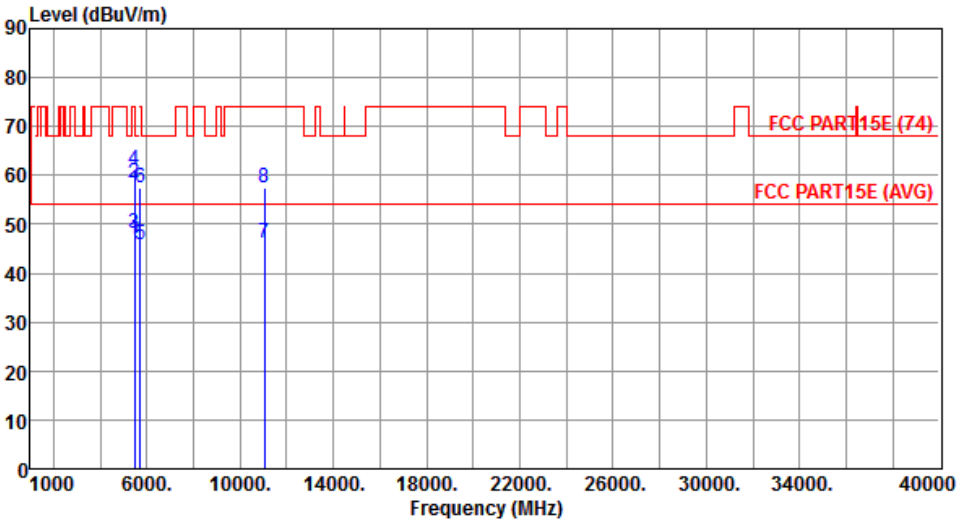
Modulation	VHT80	**Test Freq. (MHz)**	5530
Polarization	Horizontal	**Test Configuration**	1



	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	48.12	54.00	-5.88	41.44	6.68	Average	---	---
2	5460.00	61.59	74.00	-12.41	54.91	6.68	Peak	---	---
3	5470.00	52.72	54.00	-1.28	46.02	6.70	Average	---	---
4	5470.00	68.29	74.00	-5.71	61.59	6.70	Peak	---	---
5	5725.00	46.02	54.00	-7.98	38.93	7.09	Average	---	---
6	5725.00	57.89	74.00	-16.11	50.80	7.09	Peak	---	---
7	11060.00	46.33	54.00	-7.67	28.42	17.91	Average	---	---
8	11060.00	57.59	74.00	-16.41	39.68	17.91	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).

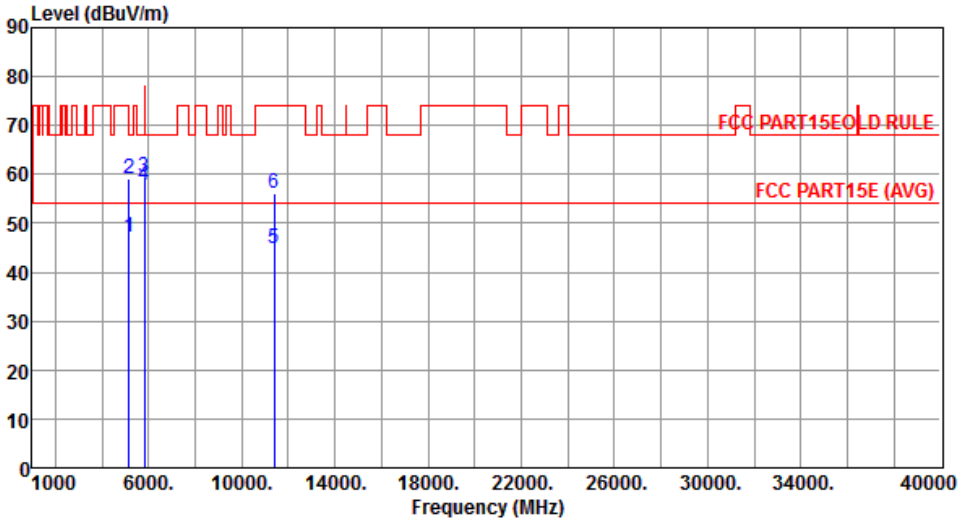
Modulation	VHT80	**Test Freq. (MHz)**	5530
Polarization	Vertical	**Test Configuration**	1



	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	46.99	54.00	-7.01	40.31	6.68	Average	---	---
2	5460.00	58.32	74.00	-15.68	51.64	6.68	Peak	---	---
3	5470.00	48.07	54.00	-5.93	41.37	6.70	Average	---	---
4	5470.00	61.18	74.00	-12.82	54.48	6.70	Peak	---	---
5	5725.00	45.72	54.00	-8.28	38.63	7.09	Average	---	---
6	5725.00	57.36	74.00	-16.64	50.27	7.09	Peak	---	---
7	11060.00	46.12	54.00	-7.88	28.21	17.91	Average	---	---
8	11060.00	57.36	74.00	-16.64	39.45	17.91	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).

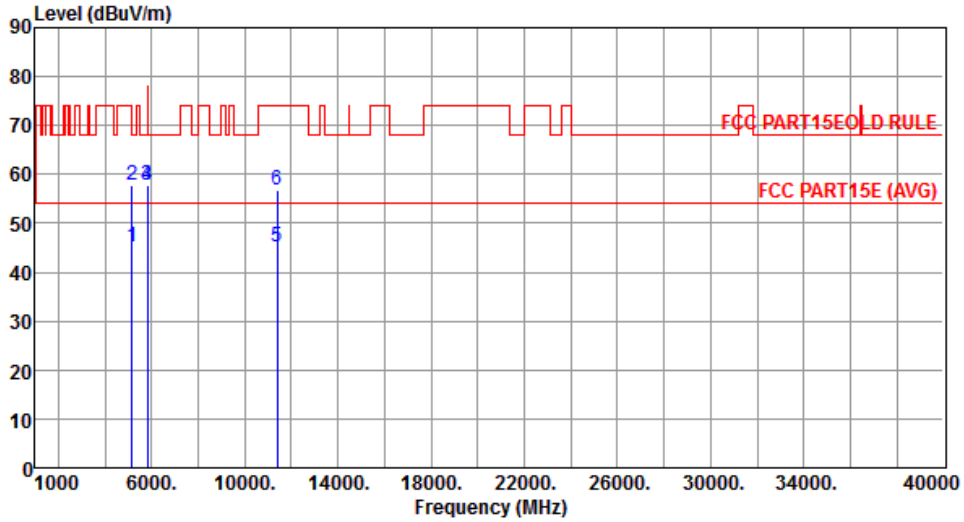
Modulation	VHT80	**Test Freq. (MHz)**	5690
Polarization	Horizontal	**Test Configuration**	1



	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	47.32	54.00	-6.68	41.14	6.18	Average	---	---
2	5150.00	59.03	74.00	-14.97	52.85	6.18	Peak	---	---
3	5825.00	59.43	78.20	-18.77	52.21	7.22	Peak	---	---
4	5835.00	57.67	68.20	-10.53	50.44	7.23	Peak	---	---
5	11380.00	44.87	54.00	-9.13	27.46	17.41	Average	---	---
6	11380.00	56.16	74.00	-17.84	38.75	17.41	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).

Modulation	VHT80	**Test Freq. (MHz)**	5690
Polarization	Vertical	**Test Configuration**	1



	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	45.25	54.00	-8.75	39.07	6.18	Average	---	---
2	5150.00	57.67	74.00	-16.33	51.49	6.18	Peak	---	---
3	5825.00	57.86	78.20	-20.34	50.64	7.22	Peak	---	---
4	5835.00	57.67	68.20	-10.53	50.44	7.23	Peak	---	---
5	11380.00	45.01	54.00	-8.99	27.60	17.41	Average	---	---
6	11380.00	56.75	74.00	-17.25	39.34	17.41	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).

3.7 Frequency Stability

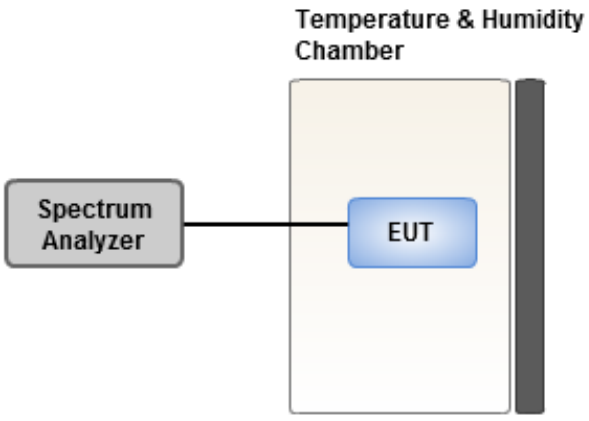
3.7.1 Limit of Frequency Stability

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.

3.7.2 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 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.7.3 Test Setup



3.7.4 Test Result of Frequency Stability

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	2.22	2.47	2.44	2.52
T20°CVmin	3.32	2.47	3.04	3.15
T50°CVnom	3.88	3.88	4.18	3.80
T40°CVnom	3.60	3.75	3.74	3.69
T30°CVnom	2.80	3.36	3.26	3.15
T20°CVnom	3.20	3.32	2.46	3.01
T10°CVnom	2.27	2.78	2.67	2.24
T0°CVnom	2.82	2.06	1.69	1.56
T-10°CVnom	1.74	1.59	2.63	2.50
T-20°CVnom	1.26	1.14	0.86	1.17
T-30°CVnom	0.73	0.45	1.12	0.19
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		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, 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 Hsiang. Location map can be found on our website http://www.icertifi.com.tw.

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

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

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

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