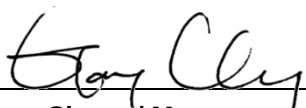


FCC C2PC Test Report

FCC ID : I88WAC6502D-E
Equipment : 802.11 ac Unified Pro Access Point
Model No. : WAC6502D-S, WAC6502D-E
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 : Dec. 03, 2015
Tested Date : Dec. 24, 2015 ~ Feb. 18, 2016

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



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Release Record

Report No.	Version	Description	Issued Date
FR5D0302	Rev. 01	Initial issue	Mar. 31, 2016

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 16.227MHz 40.65 (Margin -9.35dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 77.88 (Margin -0.32dB) - 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: 26.54 5725-5850MHz: 25.98	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

This report is prepared for FCC class II Permissive change.

This report is issued as a supplementary report to the original ICC project no. 491801. The modification is concerned as U-NII full bands complying with New U-NII rule requirement and increases output power of U-NII band 1 by software setting. There are No test results of U-NII band 2A/2C in this report since requirement of both bands is not changed and device keeps all conditions of both bands as grant.

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
ZyXEL	WAC6502D-S	802.11 ac Unified Pro Access Point	With internal antenna
	WAC6502D-E		With external antenna

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
5150-5250	a	5180-5240	36-48 [4]	2	6-54 Mbps
5150-5250	n (HT20)	5180-5240	36-48 [4]	2	MCS 0-15
5150-5250	n (HT40)	5190-5230	38-46 [2]	2	MCS 0-15
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	2	MCS 0-9
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	2	MCS 0-9
5150-5250	ac (VHT80)	5210	42 [1]	2	MCS 0-9

Note 1: RF output power specifies that Maximum Conducted Output Power.
Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
5725-5850	a	5745-5825	149-165 [5]	2	6-54 Mbps
5725-5850	n (HT20)	5745-5825	149-165 [5]	2	MCS 0-15
5725-5850	n (HT40)	5755-5795	151-159 [2]	2	MCS 0-15
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	2	MCS 0-9
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	2	MCS 0-9
5725-5850	ac (VHT80)	5775	155 [1]	2	MCS 0-9

Note 1: RF output power specifies that Maximum Conducted Output Power.
Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

1.1.3 Antenna Details

Ant. No.	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				Remark
			5150~5250	5250~5350	5470~5725	5725~5850	
1	Dipole	RSMA	7	7	7	7	For WAC6502D-E
2	Dipole	IPEX	6	6	6	6	For WAC6502D-S

Note:

1. The antenna connector of PCB board of EUT is IPEX.
2. WAC6502D-E has a RSMA connector jack to connect antenna and PCB board of EUT.

1.1.4 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

1.1.5 Accessories

N/A

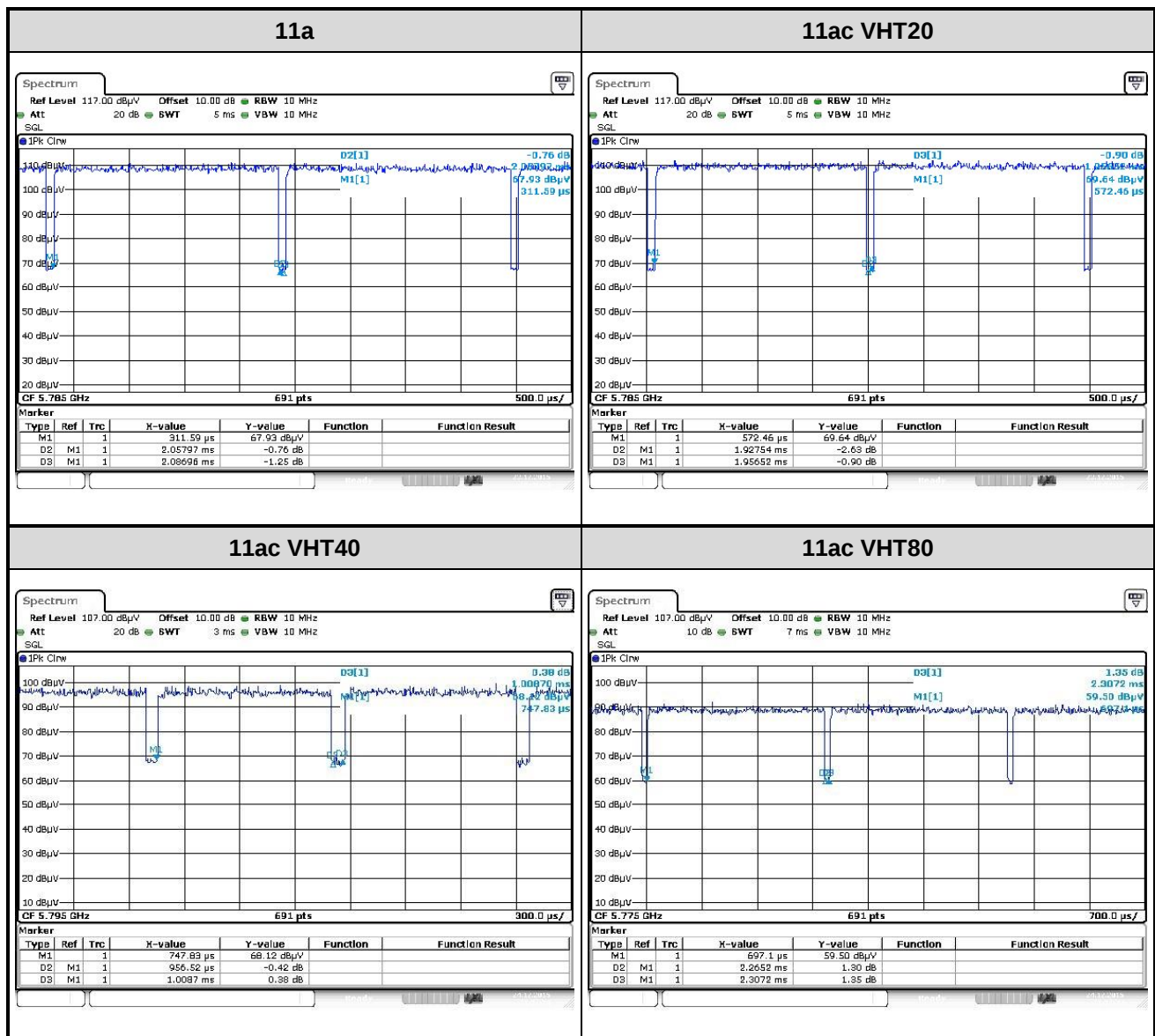
1.1.6 Channel List

For Frequency band 5150-5250 MHz			
802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	VHT 80	
48	5240	42	5210

For Frequency band 5725~5850 MHz			
802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
149	5745	151	5755
153	5765	159	5795
157	5785	VHT80	
161	5805	155	5775
165	5825	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	ART2, version: 4_9_802_1_CS_Bin		
Duty Cycle and Duty Factor	Mode	Duty cycle (%)	Duty factor (dB)
	11a	98.61%	0.06
	VHT20	98.52%	0.06
	VHT40	94.83%	0.23
	VHT80	98.18%	0.08



1.1.8 Power Setting

For Frequency band 5150-5250 MHz		
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5180	21.5
11a	5200	22.5
11a	5240	22.5
HT20	5180	21
HT20	5200	22.5
HT20	5240	22.5
HT40	5190	15.5
HT40	5230	24.5
VHT20	5180	21
VHT20	5200	22.5
VHT20	5240	22.5
VHT40	5190	15.5
VHT40	5230	24.5
VHT80	5210	15

For Frequency band 5725~5850 MHz		
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5745	20.5
11a	5785	23.5
11a	5825	24
HT20	5745	20
HT20	5785	23.5
HT20	5825	23.5
HT40	5755	17.5
HT40	5795	23.0
VHT20	5745	20
VHT20	5785	23.5
VHT20	5825	23.5
VHT40	5755	17.5
VHT40	5795	23.0
VHT80	5775	16.0

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	---	---

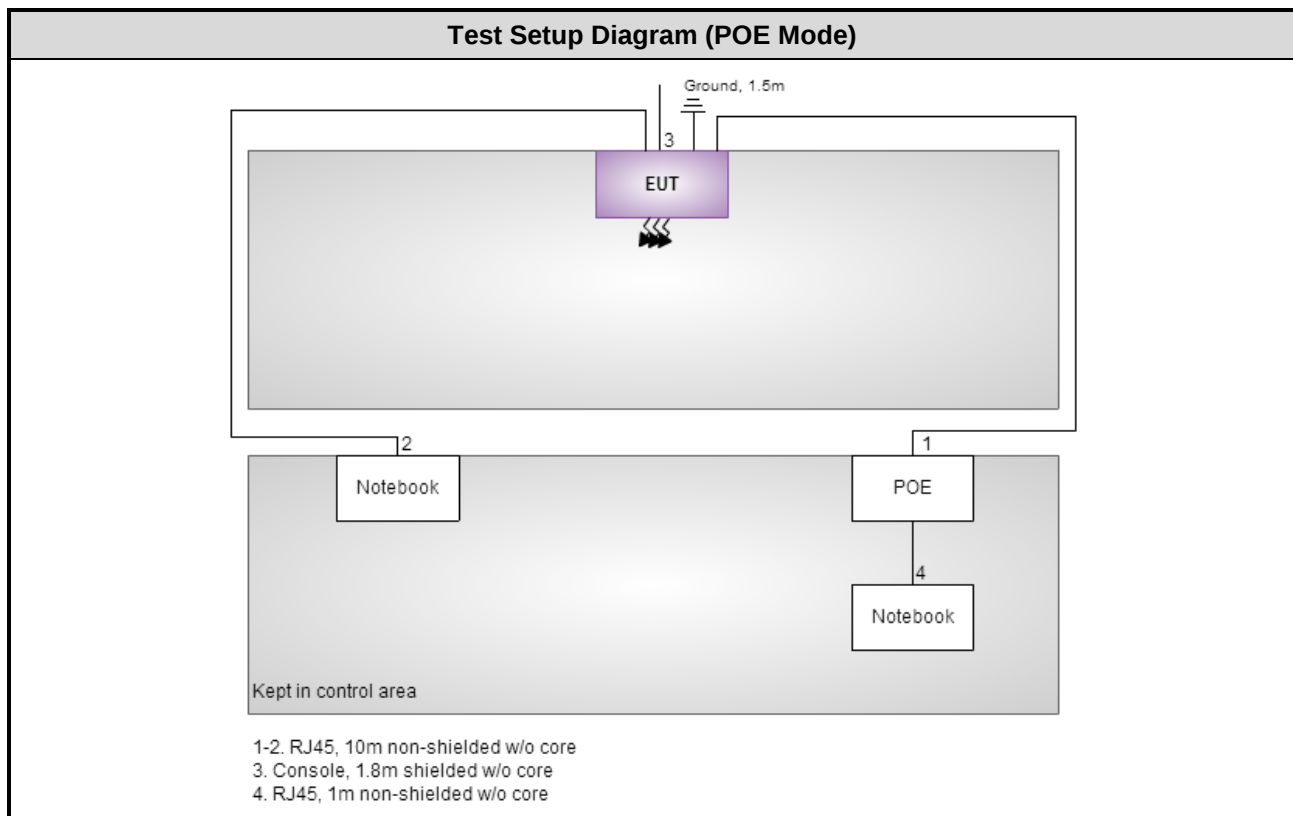
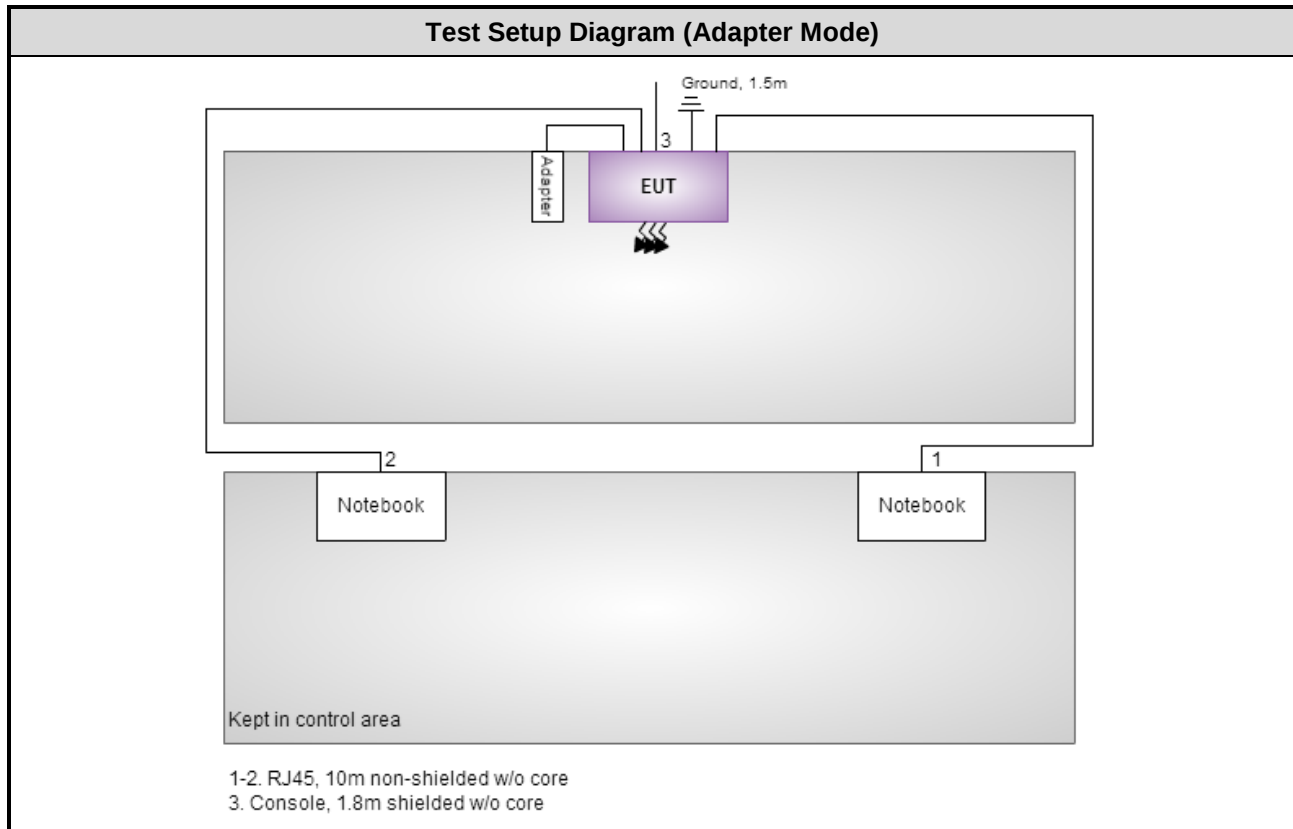
Note: No. 3 was provided by applicant.

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



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 30, 2015				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
EMC Receiver	R&S	ESCS 30	100169	Oct. 21, 2015	Oct. 20, 2016
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 13, 2015	Nov. 12, 2016
ESH3-Z6 V-Network	R&S	ESH3-Z6	100951	Jan. 23, 2015	Jan. 22, 2016
ESH3-Z6 V-Network	R&S	ESH3-Z6	100920	Nov. 26, 2015	Nov. 25, 2016
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Dec. 24 ~ Dec. 31, 2015				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Dec. 13, 2015	Dec. 12, 2016
Receiver	R&S	ESR3	101658	Nov. 04, 2015	Nov. 03, 2016
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 20, 2015	Aug. 19, 2016
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 16, 2015	Dec. 15, 2016
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 04, 2015	Nov. 03, 2016
Loop Antenna	R&S	HFH2-Z2	11900	Nov. 16, 2015	Nov. 15, 2016
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 10, 2015	Dec. 09, 2016
Preamplifier	Burgeon	BPA-530	SN:100219	Sep. 10, 2015	Sep. 09, 2016
Preamplifier	Agilent	83017A	MY39501308	Oct. 02, 2015	Oct. 01, 2016
Preamplifier	EMC	EMC184045B	980192	Sep. 01, 2015	Aug. 31, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 10, 2015	Dec. 09, 2016
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 10, 2015	Dec. 09, 2016
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 10, 2015	Dec. 09, 2016
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	Feb. 17 ~ Feb. 18, 2016				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Dec. 17, 2015	Dec. 16, 2016
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2015	Nov. 26, 2016
Power Meter	Anritsu	ML2495A	1241002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor	Anritsu	MA2411B	1207366	Sep. 21, 2015	Sep. 20, 2016
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 v01r01

FCC KDB 644545 D03 Guidance for IEEE 802.11ac New Rules v01

FCC KDB 662911 D01 Multiple Transmitter Output 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	±2.92 dB
Radiated emission ≤ 1GHz	±3.66 dB
Radiated emission > 1GHz	±5.63 dB
Time	±0.1%
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	19°C / 55%	Peter Lin
Radiated Emissions	03CH01-WS	22-23°C / 63%	Vincent Yeh
RF Conducted	TH01-WS	22°C / 63%	Brad Wu

- FCC site registration No.: 657002
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

For Frequency band 5150-5250 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
Conducted Emissions	VHT40	5230	MCS 0	1, 2, 3, 4
Radiated Emissions ≤ 1 GHz	VHT40	5230	MCS 0	1, 2, 3, 4
RF Output Power	11a	5180 / 5200 / 5240	6 Mbps	3
	HT20	5180 / 5200 / 5240	MCS 0	
	HT40	5190 / 5230	MCS 0	
	VHT20	5180 / 5200 / 5240	MCS 0	
	VHT40	5190 / 5230	MCS 0	
	VHT80	5210	MCS 0	
Radiated Emissions > 1 GHz	11a	5180 / 5200 / 5240	6 Mbps	2, 4
	VHT20	5180 / 5200 / 5240	MCS 0	
	VHT40	5190 / 5230	MCS 0	
	VHT80	5210	MCS 0	
Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240	6 Mbps	3
	VHT20	5180 / 5200 / 5240	MCS 0	
	VHT40	5190 / 5230	MCS 0	
	VHT80	5210	MCS 0	
Frequency Stability	Un-modulation	5200	---	---
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: model WAC6502D-S, AC Adapter mode 2) Configuration 2: model WAC6502D-S, POE mode 3) Configuration 3: model WAC6502D-E, AC Adapter mode 4) Configuration 4: model WAC6502D-E, POE mode				

For Frequency band 5725-5850 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
Conducted Emissions	11a	5825	6 Mbps	1, 2, 3, 4
Radiated Emissions ≤1GHz	11a	5825	6 Mbps	1, 2, 3, 4
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	3
	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	11a	5745 / 5785 / 5825	6 Mbps	2, 4
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	3
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	---
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: model WAC6502D-S, AC Adapter mode 2) Configuration 2: model WAC6502D-S, POE mode 3) Configuration 3: model WAC6502D-E, AC Adapter mode 4) Configuration 4: model WAC6502D-E, POE mode				

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

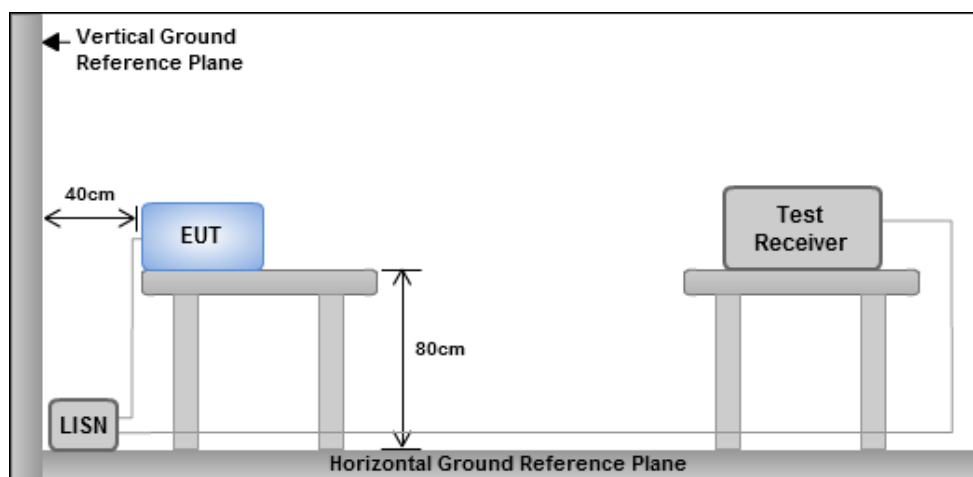
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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

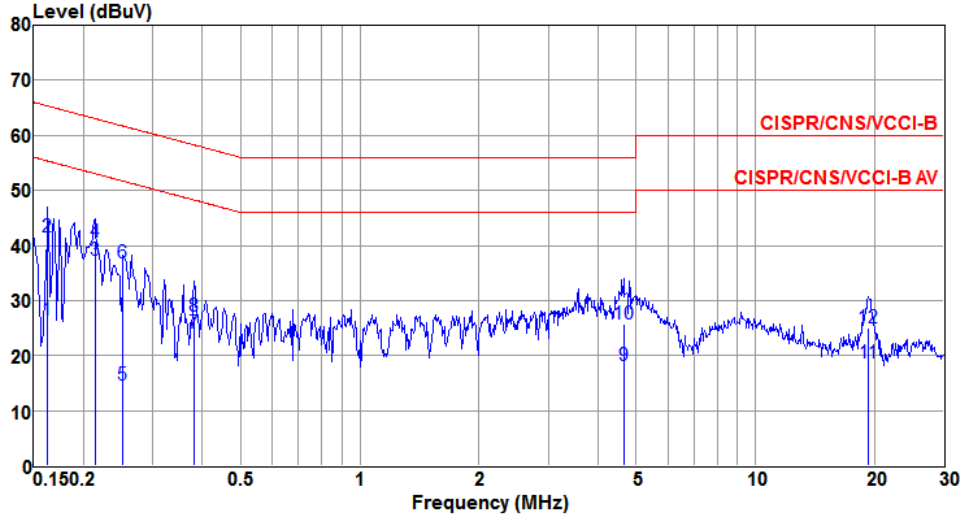


- Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Configuration 1: model WAC6502D-S, AC Adapter mode

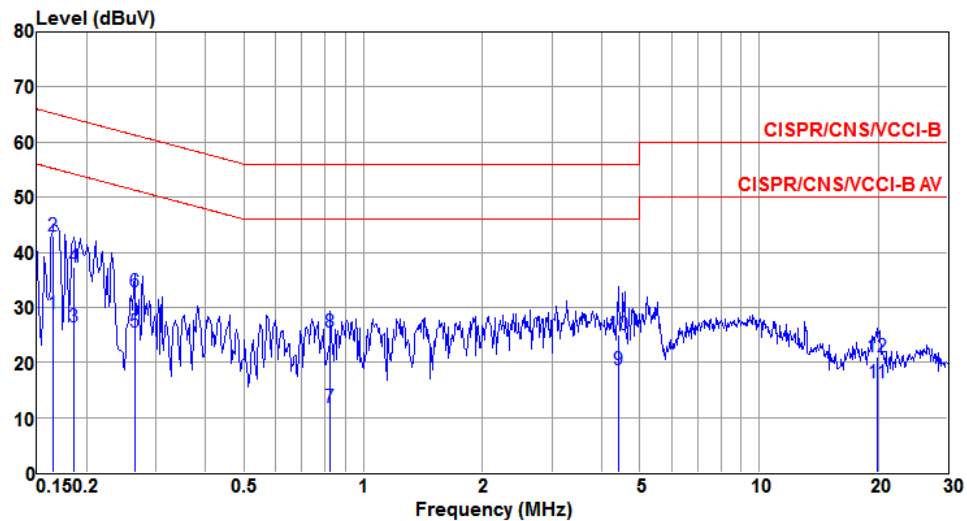
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.162	26.38	55.34	-28.96	16.69	9.67	0.02	Average
2	0.162	41.64	65.34	-23.70	31.95	9.67	0.02	QP
3@	0.214	37.37	53.05	-15.68	27.69	9.66	0.02	Average
4	0.214	40.68	63.05	-22.37	31.00	9.66	0.02	QP
5	0.252	14.75	51.69	-36.94	5.07	9.66	0.02	Average
6	0.252	36.76	61.69	-24.93	27.08	9.66	0.02	QP
7	0.381	23.98	48.25	-24.27	14.29	9.66	0.03	Average
8	0.381	27.22	58.25	-31.03	17.53	9.66	0.03	QP
9	4.647	18.11	46.00	-27.89	8.29	9.69	0.13	Average
10	4.647	25.79	56.00	-30.21	15.97	9.69	0.13	QP
11	19.326	18.73	50.00	-31.27	8.85	9.71	0.17	Average
12	19.326	24.97	60.00	-35.03	15.09	9.71	0.17	QP

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

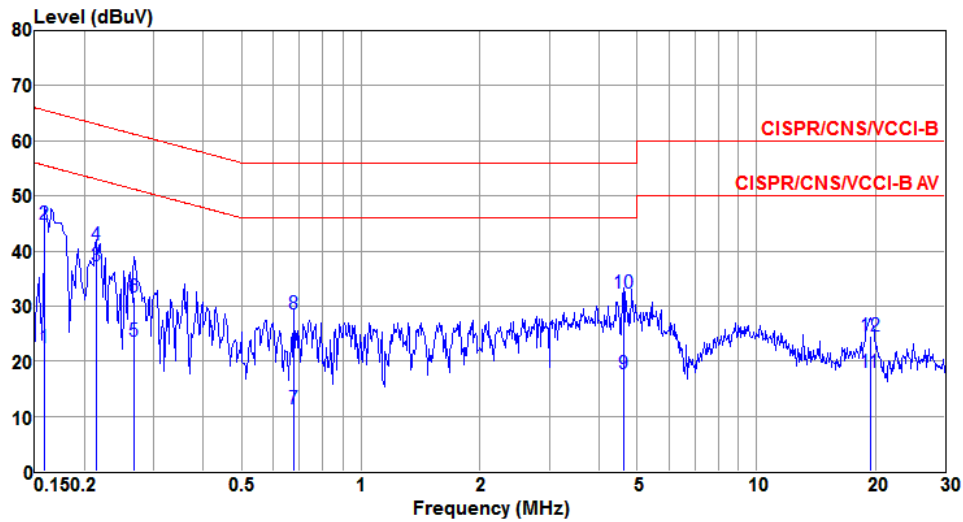
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral	Test Configuration	1



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.165	28.78	55.21	-26.43	19.09	9.67	0.02	Average
2@	0.165	42.85	65.21	-22.36	33.16	9.67	0.02	QP
3	0.186	26.52	54.20	-27.68	16.84	9.66	0.02	Average
4	0.186	37.28	64.20	-26.92	27.60	9.66	0.02	QP
5	0.264	25.48	51.29	-25.81	15.80	9.66	0.02	Average
6	0.264	32.84	61.29	-28.45	23.16	9.66	0.02	QP
7	0.826	11.76	46.00	-34.24	2.05	9.66	0.05	Average
8	0.826	25.44	56.00	-30.56	15.73	9.66	0.05	QP
9	4.407	18.77	46.00	-27.23	8.96	9.69	0.12	Average
10	4.407	25.07	56.00	-30.93	15.26	9.69	0.12	QP
11	19.950	16.33	50.00	-33.67	6.36	9.80	0.17	Average
12	19.950	21.13	60.00	-38.87	11.16	9.80	0.17	QP

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

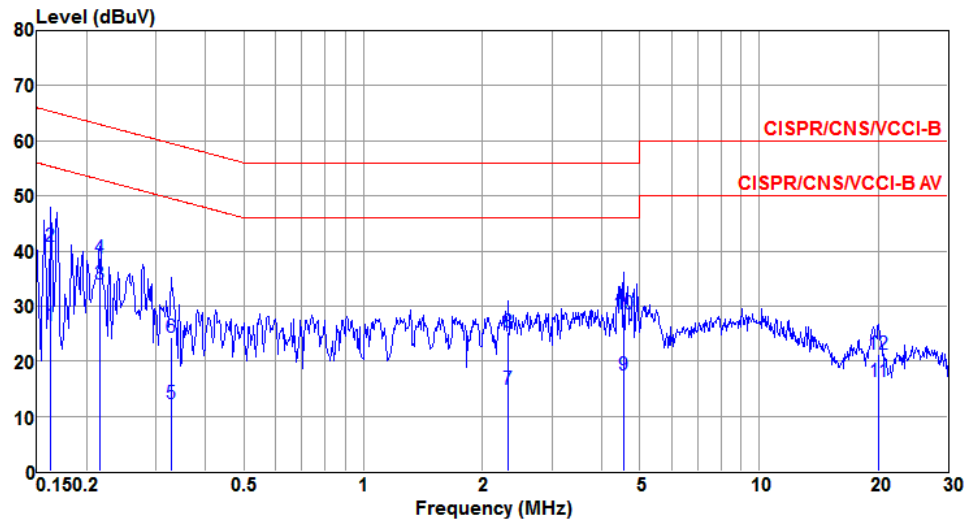
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	22.54	55.52	-32.98	12.85	9.67	0.02	Average
2	0.159	44.82	65.52	-20.70	35.13	9.67	0.02	QP
3@	0.214	37.26	53.05	-15.79	27.58	9.66	0.02	Average
4	0.214	41.05	63.05	-22.00	31.37	9.66	0.02	QP
5	0.267	23.60	51.20	-27.60	13.92	9.66	0.02	Average
6	0.267	31.68	61.20	-29.52	22.00	9.66	0.02	QP
7	0.675	11.30	46.00	-34.70	1.59	9.66	0.05	Average
8	0.675	28.50	56.00	-27.50	18.79	9.66	0.05	QP
9	4.622	17.77	46.00	-28.23	7.95	9.69	0.13	Average
10	4.622	32.35	56.00	-23.65	22.53	9.69	0.13	QP
11	19.428	18.04	50.00	-31.96	8.16	9.71	0.17	Average
12	19.428	24.49	60.00	-35.51	14.61	9.71	0.17	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	Test Configuration	1

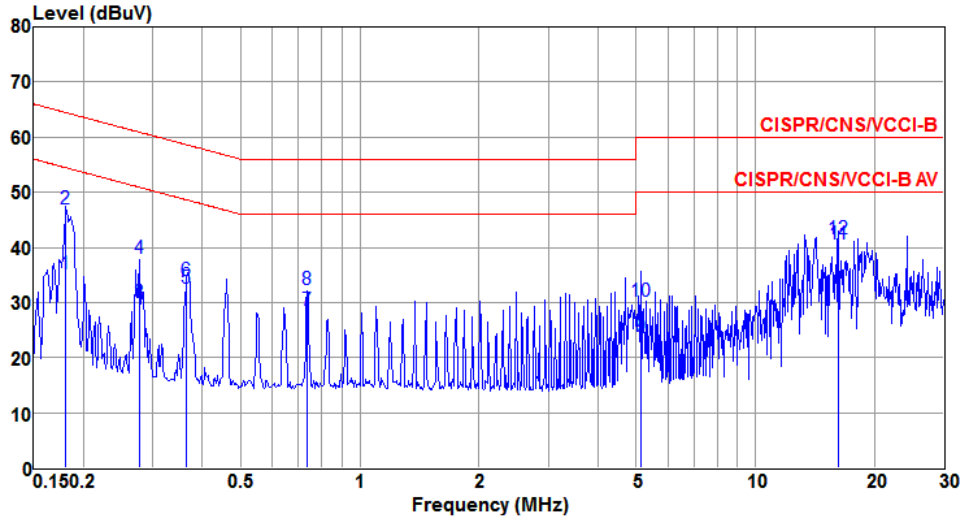


	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.162	26.33	55.34	-29.01	16.64	9.67	0.02	Average
2	0.162	40.90	65.34	-24.44	31.21	9.67	0.02	QP
3@	0.216	33.98	52.96	-18.98	24.30	9.66	0.02	Average
4	0.216	38.72	62.96	-24.24	29.04	9.66	0.02	QP
5	0.327	12.30	49.53	-37.23	2.61	9.66	0.03	Average
6	0.327	24.43	59.53	-35.10	14.74	9.66	0.03	QP
7	2.321	14.99	46.00	-31.01	5.23	9.67	0.09	Average
8	2.321	25.17	56.00	-30.83	15.41	9.67	0.09	QP
9	4.549	17.55	46.00	-28.45	7.73	9.69	0.13	Average
10	4.549	28.53	56.00	-27.47	18.71	9.69	0.13	QP
11	20.056	16.40	50.00	-33.60	6.43	9.80	0.17	Average
12	20.056	21.35	60.00	-38.65	11.38	9.80	0.17	QP

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

Configuration 2: model WAC6502D-S, POE mode

Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line	Test Configuration	2

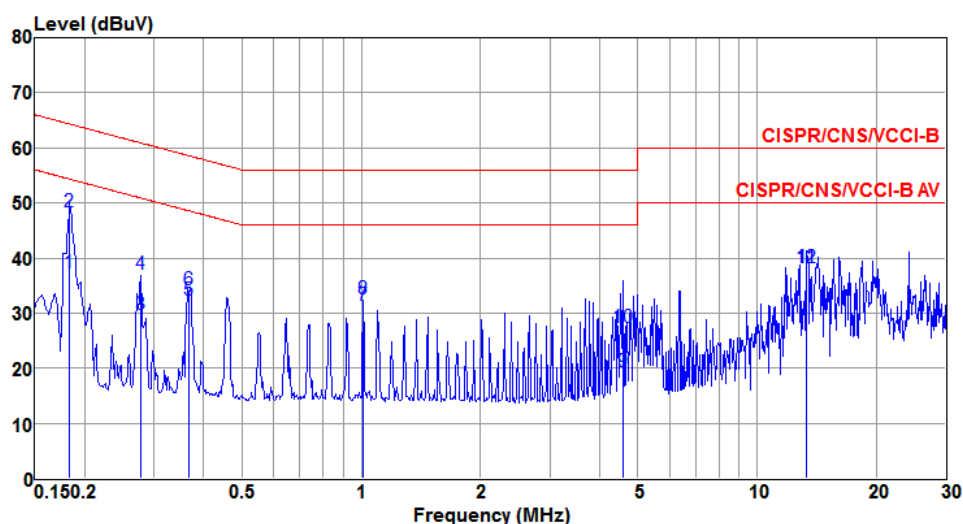


The graph displays the measured level in dBUV across a frequency range from 0.150.2 MHz to 30 MHz. Two red limit lines are shown: CISPR/CNS/VCCI-B (upper) and CISPR/CNS/VCCI-B AV (lower). The measured signal is shown as a blue line with peaks labeled 2, 4, 6, 8, 10, and 12. The level generally decreases with frequency, staying below the limits.

	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.181	35.19	54.46	-19.27	25.51	9.66	0.02	Average
2	0.181	47.03	64.46	-17.43	37.35	9.66	0.02	QP
3	0.277	29.92	50.90	-20.98	20.24	9.66	0.02	Average
4	0.277	38.02	60.90	-22.88	28.34	9.66	0.02	QP
5	0.365	32.68	48.61	-15.93	22.99	9.66	0.03	Average
6	0.365	33.92	58.61	-24.69	24.23	9.66	0.03	QP
7	0.735	28.45	46.00	-17.55	18.74	9.66	0.05	Average
8	0.735	32.32	56.00	-23.68	22.61	9.66	0.05	QP
9	5.139	23.93	50.00	-26.07	14.11	9.69	0.13	Average
10	5.139	30.30	60.00	-29.70	20.48	9.69	0.13	QP
11@	16.227	40.65	50.00	-9.35	30.74	9.71	0.20	Average
12	16.227	41.47	60.00	-18.53	31.56	9.71	0.20	QP

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

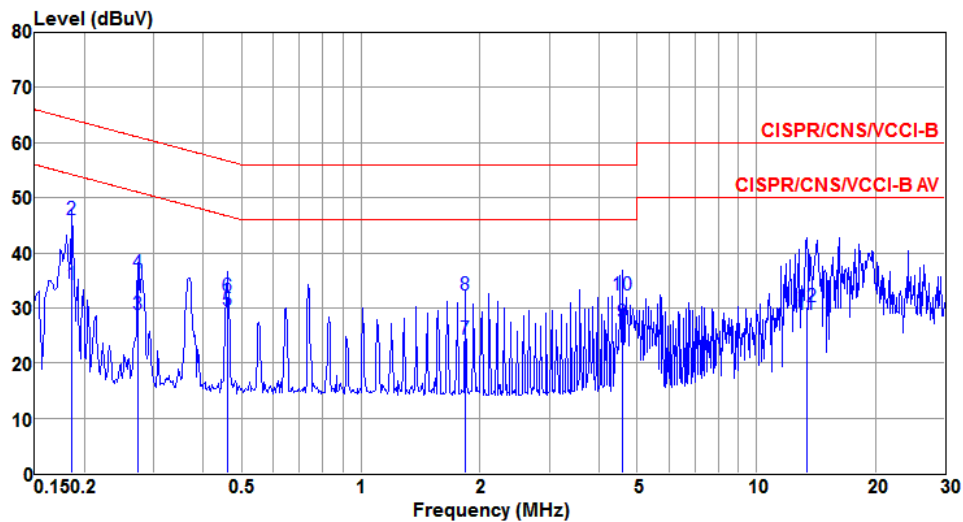
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.183	37.36	54.33	-16.97	27.68	9.66	0.02	Average
2	0.183	48.30	64.33	-16.03	38.62	9.66	0.02	QP
3	0.277	29.78	50.90	-21.12	20.10	9.66	0.02	Average
4	0.277	37.15	60.90	-23.75	27.47	9.66	0.02	QP
5	0.367	32.31	48.56	-16.25	22.62	9.66	0.03	Average
6	0.367	34.31	58.56	-24.25	24.62	9.66	0.03	QP
7	1.010	31.49	46.00	-14.51	21.77	9.66	0.06	Average
8	1.010	32.59	56.00	-23.41	22.87	9.66	0.06	QP
9	4.598	19.41	46.00	-26.59	9.59	9.69	0.13	Average
10	4.598	27.32	56.00	-28.68	17.50	9.69	0.13	QP
11@	13.360	38.31	50.00	-11.69	28.36	9.76	0.19	Average
12	13.360	38.33	60.00	-21.67	28.38	9.76	0.19	QP

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

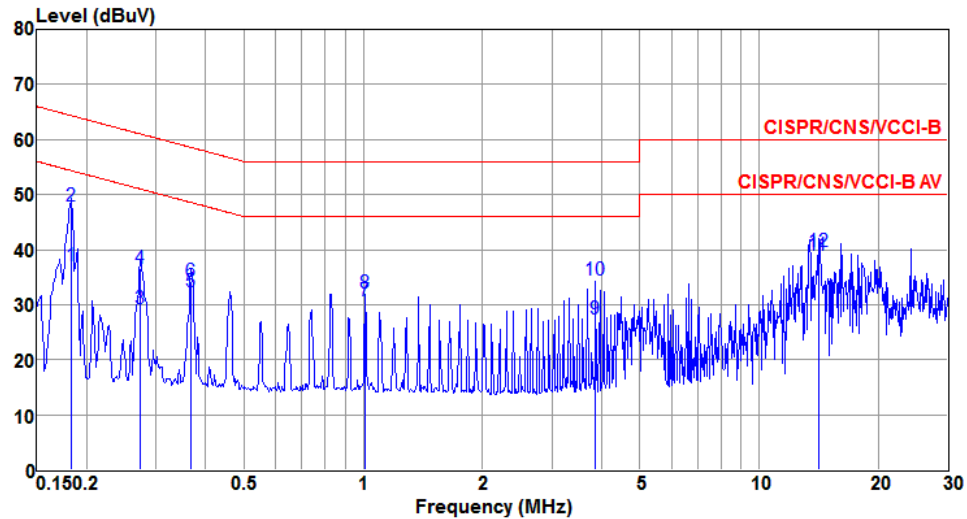
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line	Test Configuration	2



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line dBuV	Limit dB	Level dBuV	factor dB	loss dB	Remark
1	0.186	34.17	54.20	-20.03	24.51	9.64	0.02	Average
2	0.186	46.00	64.20	-18.20	36.34	9.64	0.02	QP
3	0.273	28.78	51.03	-22.25	19.12	9.64	0.02	Average
4	0.273	36.35	61.03	-24.68	26.69	9.64	0.02	QP
5@	0.461	29.51	46.67	-17.16	19.85	9.63	0.03	Average
6	0.461	31.99	56.67	-24.68	22.33	9.63	0.03	QP
7	1.839	24.41	46.00	-21.59	14.71	9.62	0.08	Average
8	1.839	32.30	56.00	-23.70	22.60	9.62	0.08	QP
9	4.598	27.28	46.00	-18.72	17.50	9.65	0.13	Average
10	4.598	32.36	56.00	-23.64	22.58	9.65	0.13	QP
11	13.408	28.76	50.00	-21.24	18.88	9.68	0.20	Average
12	13.408	30.32	60.00	-29.68	20.44	9.68	0.20	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	Test Configuration	2

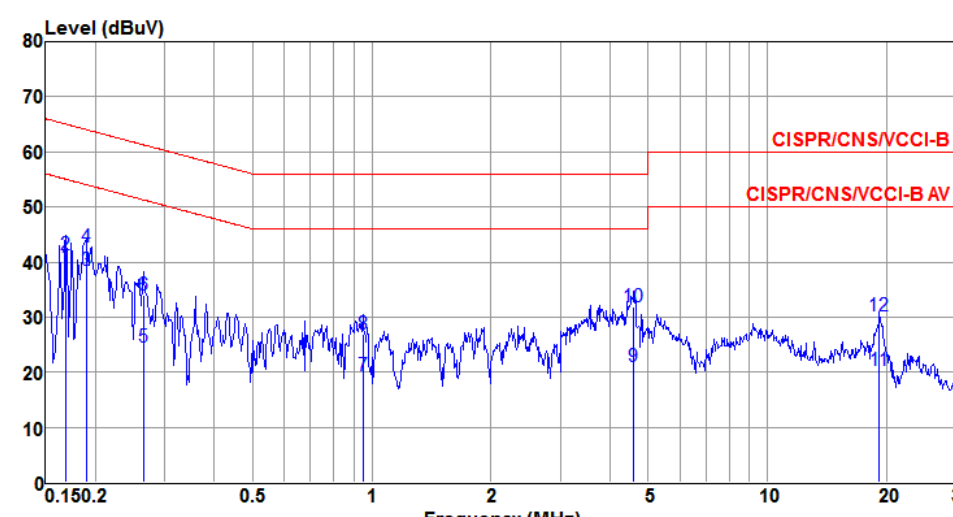


	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	0.183	37.08	54.33	-17.25	27.40	9.66	0.02	Average
2	0.183	47.96	64.33	-16.37	38.28	9.66	0.02	QP
3	0.273	29.23	51.03	-21.80	19.55	9.66	0.02	Average
4	0.273	36.58	61.03	-24.45	26.90	9.66	0.02	QP
5	0.367	32.31	48.56	-16.25	22.62	9.66	0.03	Average
6	0.367	34.21	58.56	-24.35	24.52	9.66	0.03	QP
7	1.010	30.71	46.00	-15.29	20.99	9.66	0.06	Average
8	1.010	32.21	56.00	-23.79	22.49	9.66	0.06	QP
9	3.860	27.41	46.00	-18.59	17.61	9.68	0.12	Average
10	3.860	34.48	56.00	-21.52	24.68	9.68	0.12	QP
11@	14.153	38.97	50.00	-11.03	29.01	9.76	0.20	Average
12	14.153	39.66	60.00	-20.34	29.70	9.76	0.20	QP

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

Configuration 3: model WAC6502D-E, AC Adapter mode

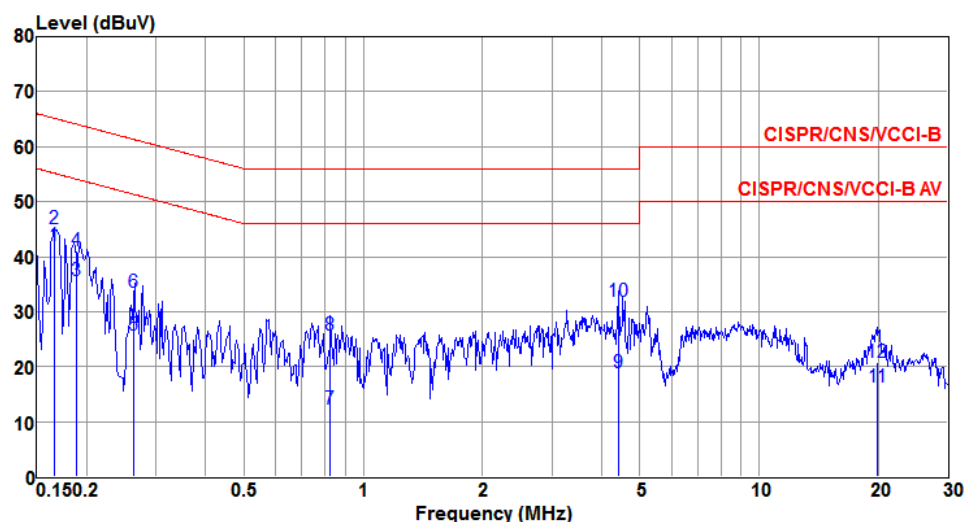
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line	Test Configuration	3



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.169	39.10	55.03	-15.93	29.45	9.63	0.02	Average
2	0.169	41.26	65.03	-23.77	31.61	9.63	0.02	QP
3@	0.189	38.40	54.06	-15.66	28.74	9.64	0.02	Average
4	0.189	42.65	64.06	-21.41	32.99	9.64	0.02	QP
5	0.264	24.51	51.29	-26.78	14.85	9.64	0.02	Average
6	0.264	34.09	61.29	-27.20	24.43	9.64	0.02	QP
7	0.948	19.32	46.00	-26.68	9.63	9.63	0.06	Average
8	0.948	26.84	56.00	-29.16	17.15	9.63	0.06	QP
9	4.598	21.11	46.00	-24.89	11.33	9.65	0.13	Average
10	4.598	31.98	56.00	-24.02	22.20	9.65	0.13	QP
11	19.224	20.33	50.00	-29.67	10.46	9.69	0.18	Average
12	19.224	30.13	60.00	-29.87	20.26	9.69	0.18	QP

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

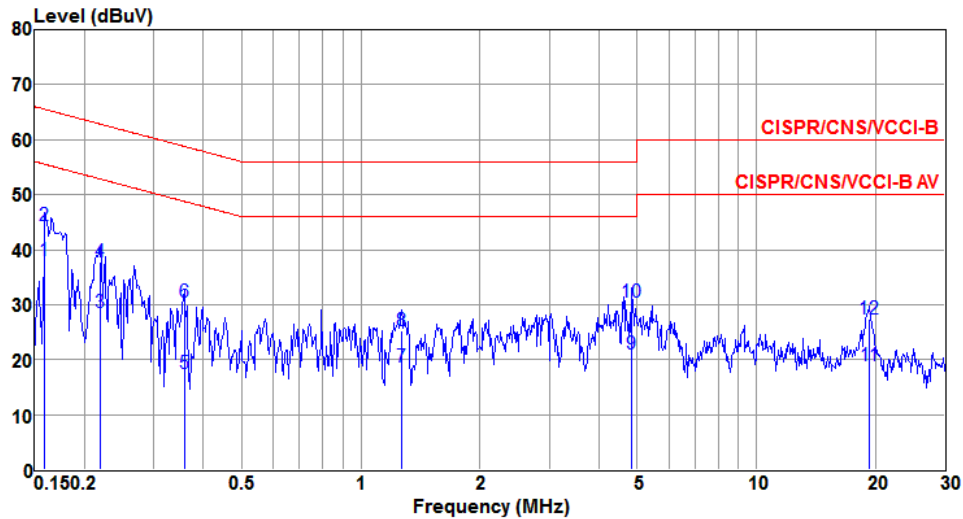
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral	Test Configuration	3



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	dBuV	Limit	Level	factor	loss	Remark
				dB	dBuV	dB	dB	
1@	0.166	42.00	55.16	-13.16	32.36	9.62	0.02	Average
2	0.166	45.00	65.16	-20.16	35.36	9.62	0.02	QP
3	0.188	35.64	54.12	-18.48	26.00	9.62	0.02	Average
4	0.188	41.14	64.12	-22.98	31.50	9.62	0.02	QP
5	0.263	25.65	51.34	-25.69	16.01	9.62	0.02	Average
6	0.263	33.49	61.34	-27.85	23.85	9.62	0.02	QP
7	0.824	12.18	46.00	-33.82	2.51	9.62	0.05	Average
8	0.824	25.68	56.00	-30.32	16.01	9.62	0.05	QP
9	4.410	18.86	46.00	-27.14	9.10	9.64	0.12	Average
10	4.410	31.96	56.00	-24.04	22.20	9.64	0.12	QP
11	19.920	16.35	50.00	-33.65	6.40	9.78	0.17	Average
12	19.920	20.83	60.00	-39.17	10.88	9.78	0.17	QP

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

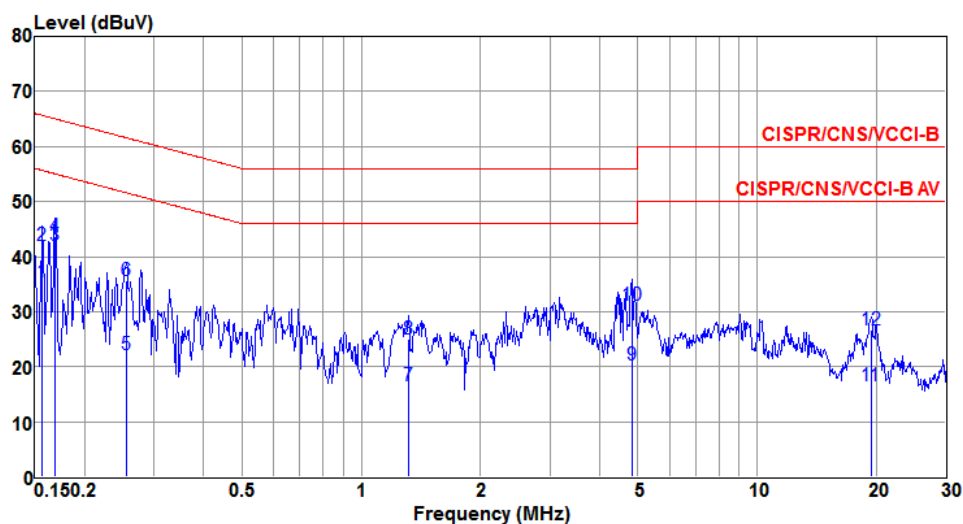
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line	Test Configuration	3



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
10	0.159	37.97	55.52	-17.55	28.32	9.63	0.02	Average
2	0.159	44.38	65.52	-21.14	34.73	9.63	0.02	QP
3	0.220	28.48	52.83	-24.35	18.82	9.64	0.02	Average
4	0.220	37.83	62.83	-25.00	28.17	9.64	0.02	QP
5	0.358	17.39	48.78	-31.39	7.73	9.63	0.03	Average
6	0.358	30.38	58.78	-28.40	20.72	9.63	0.03	QP
7	1.269	18.74	46.00	-27.26	9.04	9.63	0.07	Average
8	1.269	25.25	56.00	-30.75	15.55	9.63	0.07	QP
9	4.848	21.04	46.00	-24.96	11.26	9.65	0.13	Average
10	4.848	30.42	56.00	-25.58	20.64	9.65	0.13	QP
11	19.326	18.98	50.00	-31.02	9.12	9.69	0.17	Average
12	19.326	27.34	60.00	-32.66	17.48	9.69	0.17	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	Test Configuration	3

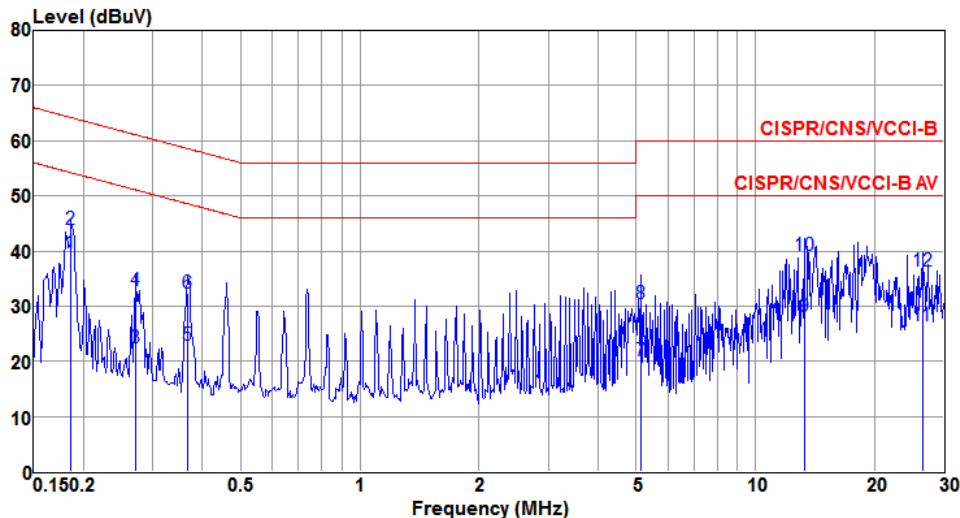


	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.156	35.43	55.65	-20.22	25.79	9.62	0.02	Average
2	0.156	42.11	65.65	-23.54	32.47	9.62	0.02	QP
3@	0.169	42.02	55.03	-13.01	32.38	9.62	0.02	Average
4	0.169	43.55	65.03	-21.48	33.91	9.62	0.02	QP
5	0.255	22.27	51.60	-29.33	12.63	9.62	0.02	Average
6	0.255	35.71	61.60	-25.89	26.07	9.62	0.02	QP
7	1.317	16.51	46.00	-29.49	6.81	9.63	0.07	Average
8	1.317	25.07	56.00	-30.93	15.37	9.63	0.07	QP
9	4.822	20.24	46.00	-25.76	10.47	9.64	0.13	Average
10	4.822	31.25	56.00	-24.75	21.48	9.64	0.13	QP
11	19.428	16.60	50.00	-33.40	6.65	9.78	0.17	Average
12	19.428	26.63	60.00	-33.37	16.68	9.78	0.17	QP

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

Configuration 4: model WAC6502D-E, POE mode

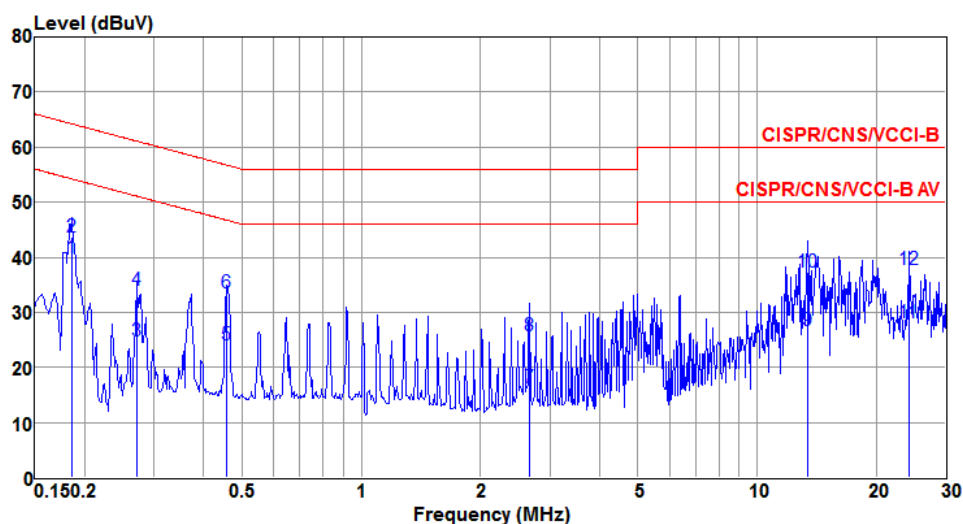
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line	Test Configuration	4



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	dBuV	Limit	Level	factor	loss	
				dB	dBuV	dB	dB	
10	0.186	39.69	54.20	-14.51	30.03	9.64	0.02	Average
2	0.186	43.97	64.20	-20.23	34.31	9.64	0.02	QP
3	0.270	22.50	51.12	-28.62	12.84	9.64	0.02	Average
4	0.270	32.91	61.12	-28.21	23.25	9.64	0.02	QP
5	0.367	22.86	48.56	-25.70	13.20	9.63	0.03	Average
6	0.367	32.33	58.56	-26.23	22.67	9.63	0.03	QP
7	5.139	20.16	50.00	-29.84	10.38	9.65	0.13	Average
8	5.139	30.50	60.00	-29.50	20.72	9.65	0.13	QP
9	13.337	28.16	50.00	-21.84	18.29	9.68	0.19	Average
10	13.337	39.23	60.00	-20.77	29.36	9.68	0.19	QP
11	26.418	26.44	50.00	-23.56	16.58	9.62	0.24	Average
12	26.418	36.47	60.00	-23.53	26.61	9.62	0.24	QP

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

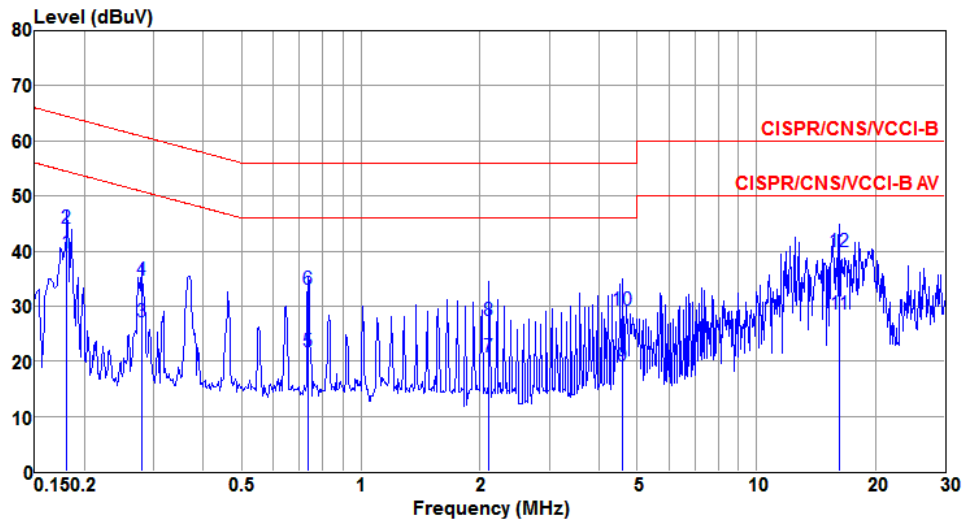
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral	Test Configuration	4



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1@	0.185	40.00	54.24	-14.24	30.36	9.62	0.02	Average
2	0.185	43.70	64.24	-20.54	34.06	9.62	0.02	QP
3	0.270	24.71	51.12	-26.41	15.07	9.62	0.02	Average
4	0.270	33.99	61.12	-27.13	24.35	9.62	0.02	QP
5	0.456	24.11	46.76	-22.65	14.45	9.63	0.03	Average
6	0.456	33.59	56.76	-23.17	23.93	9.63	0.03	QP
7	2.664	16.20	46.00	-29.80	6.46	9.64	0.10	Average
8	2.664	25.84	56.00	-30.16	16.10	9.64	0.10	QP
9	13.408	26.58	50.00	-23.42	16.65	9.73	0.20	Average
10	13.408	37.25	60.00	-22.75	27.32	9.73	0.20	QP
11	24.142	28.00	50.00	-22.00	18.01	9.75	0.24	Average
12	24.142	37.82	60.00	-22.18	27.83	9.75	0.24	QP

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

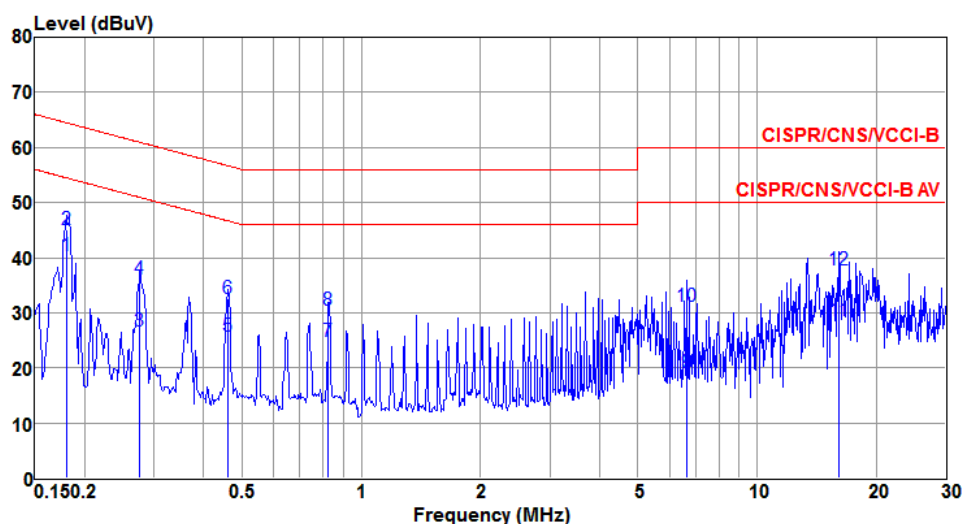
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line	Test Configuration	4



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1@	0.181	39.66	54.46	-14.80	30.00	9.64	0.02	Average
2	0.181	44.16	64.46	-20.30	34.50	9.64	0.02	QP
3	0.279	27.14	50.85	-23.71	17.48	9.64	0.02	Average
4	0.279	34.78	60.85	-26.07	25.12	9.64	0.02	QP
5	0.735	21.82	46.00	-24.18	12.14	9.63	0.05	Average
6	0.735	33.12	56.00	-22.88	23.44	9.63	0.05	QP
7	2.110	20.86	46.00	-25.14	11.16	9.62	0.08	Average
8	2.110	27.48	56.00	-28.52	17.78	9.62	0.08	QP
9	4.598	19.19	46.00	-26.81	9.41	9.65	0.13	Average
10	4.598	29.29	56.00	-26.71	19.51	9.65	0.13	QP
11	16.226	28.62	50.00	-21.38	18.73	9.69	0.20	Average
12	16.226	39.89	60.00	-20.11	30.00	9.69	0.20	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	Test Configuration	4



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1@	0.180	40.41	54.50	-14.09	30.77	9.62	0.02	Average
2	0.180	45.19	64.50	-19.31	35.55	9.62	0.02	QP
3	0.276	26.69	50.94	-24.25	17.05	9.62	0.02	Average
4	0.276	36.08	60.94	-24.86	26.44	9.62	0.02	QP
5	0.461	25.81	46.67	-20.86	16.15	9.63	0.03	Average
6	0.461	32.53	56.67	-24.14	22.87	9.63	0.03	QP
7	0.826	24.68	46.00	-21.32	15.01	9.62	0.05	Average
8	0.826	30.38	56.00	-25.62	20.71	9.62	0.05	QP
9	6.627	19.24	50.00	-30.76	9.43	9.67	0.14	Average
10	6.627	31.11	60.00	-28.89	21.30	9.67	0.14	QP
11	16.140	28.61	50.00	-21.39	18.65	9.76	0.20	Average
12	16.140	37.83	60.00	-22.17	27.87	9.76	0.20	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

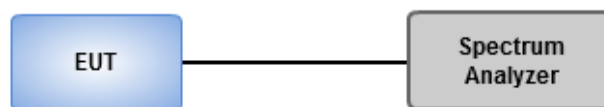
Occupied Bandwidth

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

6dB Bandwidth

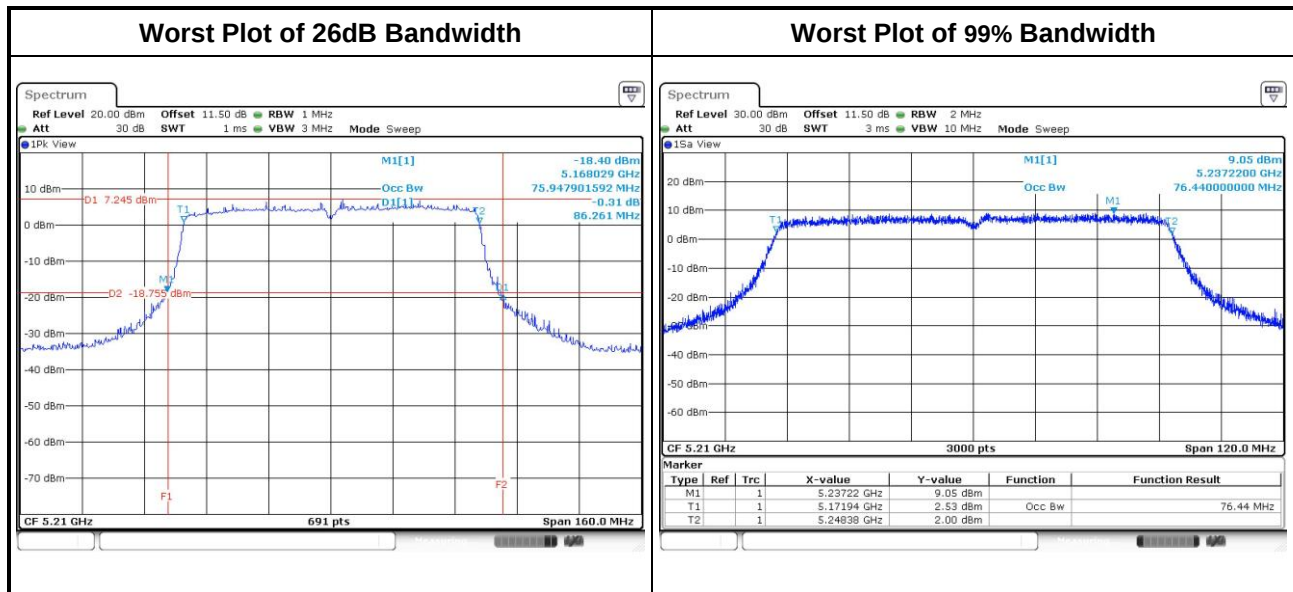
1. Set RBW = 100kHz, VBW = 300kHz
2. Detector = Peak, Trace mode = max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
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	2	5180	22.96	22.38	---	---	16.78	16.66	---	---
11a	2	5200	23.13	22.96	---	---	16.82	16.70	---	---
11a	2	5240	22.90	23.01	---	---	16.82	16.70	---	---
VHT20	2	5180	23.48	23.19	---	---	17.91	17.91	---	---
VHT20	2	5200	24.58	23.88	---	---	17.93	17.94	---	---
VHT20	2	5240	24.00	23.65	---	---	17.90	17.92	---	---
VHT40	2	5190	46.38	45.91	---	---	36.86	36.92	---	---
VHT40	2	5230	54.03	52.99	---	---	37.04	37.08	---	---
VHT80	2	5210	86.26	85.80	---	---	76.32	76.44	---	---

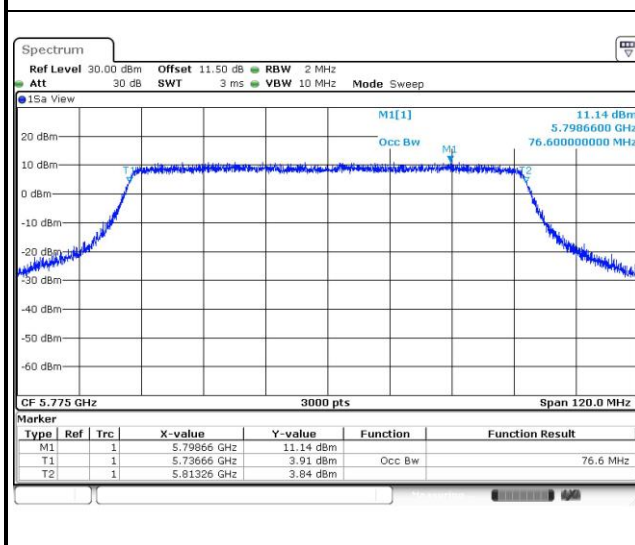


For Frequency band 5725-5850 MHz

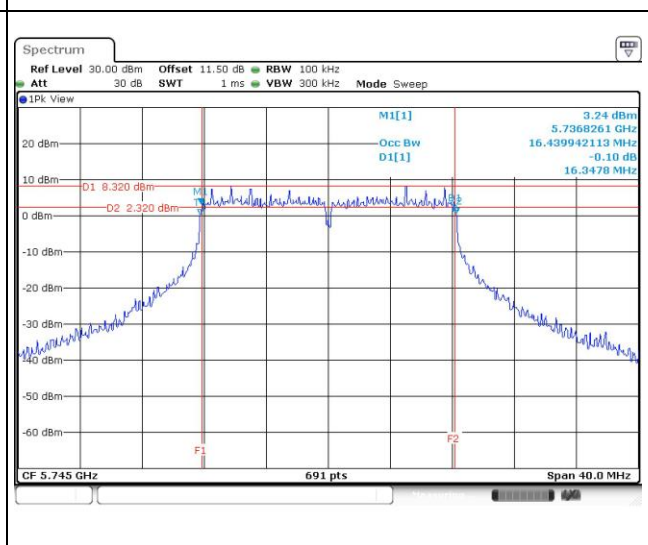
Emission Bandwidth

Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	2	5745	16.77	16.67	---	---	16.35	16.35	---	---	0.5
11a	2	5785	16.77	16.82	---	---	16.35	16.35	---	---	0.5
11a	2	5825	16.88	16.79	---	---	16.35	16.35	---	---	0.5
VHT20	2	5745	17.91	17.90	---	---	17.51	17.51	---	---	0.5
VHT20	2	5785	17.98	17.95	---	---	17.62	17.57	---	---	0.5
VHT20	2	5825	17.87	17.97	---	---	17.62	17.57	---	---	0.5
VHT40	2	5755	36.94	36.96	---	---	36.29	36.29	---	---	0.5
VHT40	2	5795	37.04	36.92	---	---	36.06	36.29	---	---	0.5
VHT80	2	5775	76.36	76.60	---	---	70.03	76.06	---	---	0.5

Worst Plot of 99% Bandwidth



Worst Plot 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
☐	Mobile and portable client devices	Conducted Power: 250 mW

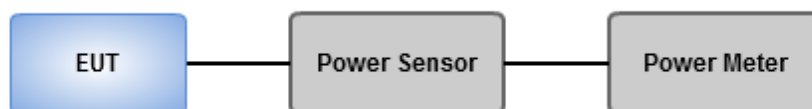
Frequency Band (MHz)	Limit
☐ 5250 ~ 5350	250mW or 11dBm+10 log B
☐ 5470 ~ 5725	250mW or 11dBm+10 log B
☒ 5725 ~ 5850	1 W

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

3.3.2 Test Procedures

- ☒ **Method PM-G (Measurement using a gated RF average power meter)**
 - ☒ Measurements may 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	2	5180	22.13	21.72	---	---	311.899	24.94	29.00
11a	2	5200	22.78	22.41	---	---	363.851	25.61	29.00
11a	2	5240	22.52	22.34	---	---	350.044	25.44	29.00
HT20	2	5180	21.58	20.96	---	---	268.618	24.29	29.00
HT20	2	5200	22.59	22.03	---	---	341.139	25.33	29.00
HT20	2	5240	22.37	22.19	---	---	338.161	25.29	29.00
HT40	2	5190	15.56	15.31	---	---	69.937	18.45	29.00
HT40	2	5230	23.58	23.39	---	---	446.307	26.50	29.00
VHT20	2	5180	21.71	21.12	---	---	277.671	24.44	29.00
VHT20	2	5200	22.65	22.16	---	---	348.514	25.42	29.00
VHT20	2	5240	22.43	22.25	---	---	342.865	25.35	29.00
VHT40	2	5190	15.72	15.45	---	---	72.400	18.60	29.00
VHT40	2	5230	23.63	23.43	---	---	450.967	26.54	29.00
VHT80	2	5210	14.53	14.08	---	---	53.965	17.32	29.00

Note: The maximum antenna gain 7dBi is higher than 6dBi, so the limit shall be reduced to 30 dBm – (7dBi – 6dBi) = 29 dBm.

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	2	5745	19.63	20.31	---	---	199.232	22.99	29.00
11a	2	5785	22.16	22.62	---	---	347.247	25.41	29.00
11a	2	5825	22.92	23.01	---	---	395.871	25.98	29.00
HT20	2	5745	18.83	19.76	---	---	171.007	22.33	29.00
HT20	2	5785	22.09	22.48	---	---	338.819	25.30	29.00
HT20	2	5825	22.21	22.92	---	---	362.226	25.59	29.00
HT40	2	5755	15.97	16.98	---	---	89.425	19.51	29.00
HT40	2	5795	22.01	22.08	---	---	320.291	25.06	29.00
VHT20	2	5745	19.02	19.95	---	---	178.655	22.52	29.00
VHT20	2	5785	22.14	22.59	---	---	345.233	25.38	29.00
VHT20	2	5825	22.27	23.02	---	---	369.103	25.67	29.00
VHT40	2	5755	16.11	17.21	---	---	93.434	19.71	29.00
VHT40	2	5795	22.17	22.32	---	---	335.424	25.26	29.00
VHT80	2	5775	15.52	15.04	---	---	67.560	18.30	30.00

Note: The maximum antenna gain 7dBi is higher than 6dBi, so the limit shall be reduced to 30 dBm – (7dBi – 6dBi) = 29 dBm.

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
☐	Mobile and portable 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

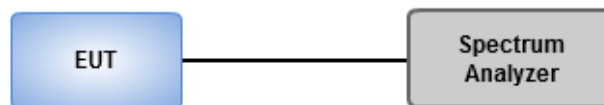
For 5150 ~ 5250 MHz

- ☒ Method SA-1 (802.11a / ac VHT20 / VHT80)
 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 (802.11ac VHT40)
 1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
 2. Set sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$.
 3. Perform a single sweep.
 4. Use the peak marker function to determine the maximum amplitude level.
 5. Add $10 \log(1/x)$, where x is the duty cycle.

For 5725 ~ 5850 MHz

- ☒ Method SA-1 (802.11a / ac VHT20 / VHT80)
 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 (802.11ac VHT40)
 1. Set RBW = 500 kHz, VBW = 2 MHz, Detector = RMS.
 2. Set sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$.
 3. Perform a single sweep.
 4. Use the peak marker function to determine the maximum amplitude level.
 5. Add $10 \log(1/x)$, where x is the duty cycle.

3.4.3 Test Setup

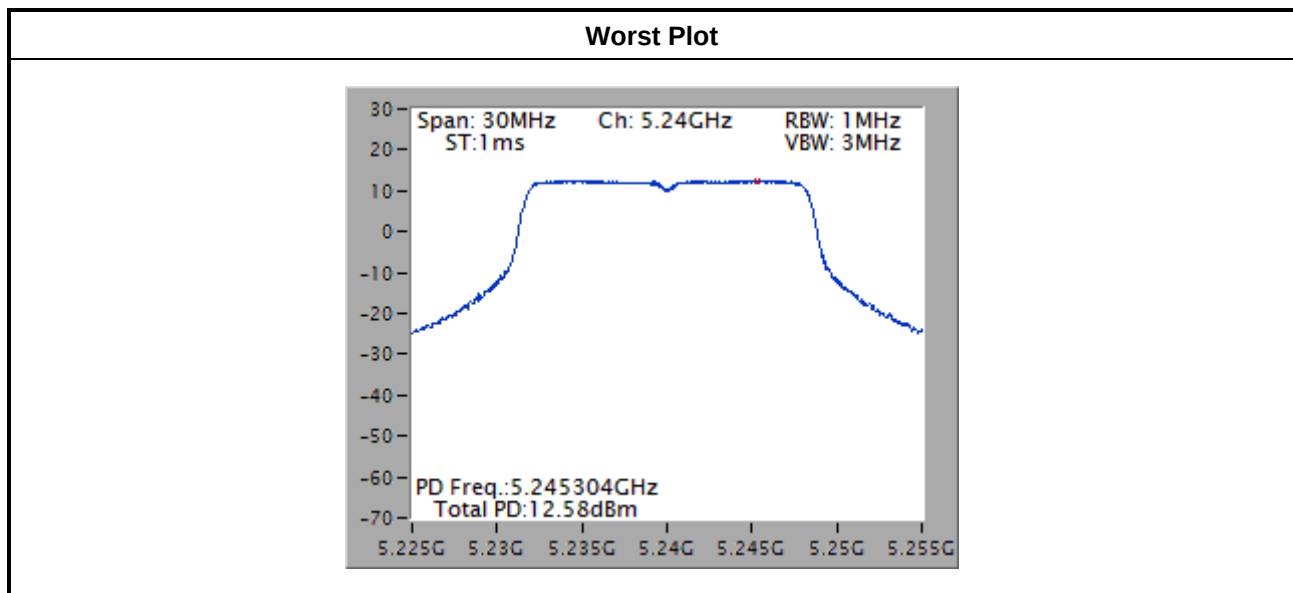


3.4.4 Test Result of Peak Power Spectral Density

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation 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	2	5180	11.61	0.00	11.61	12.99
11a	2	5200	12.47	0.00	12.47	12.99
11a	2	5240	12.58	0.00	12.58	12.99
VHT20	2	5180	11.16	0.00	11.16	12.99
VHT20	2	5200	12.32	0.00	12.32	12.99
VHT20	2	5240	12.23	0.00	12.23	12.99
VHT40	2	5190	1.90	0.23	2.13	12.99
VHT40	2	5230	9.29	0.23	9.52	12.99
VHT80	2	5210	-2.02	0.00	-2.02	12.99

Note:

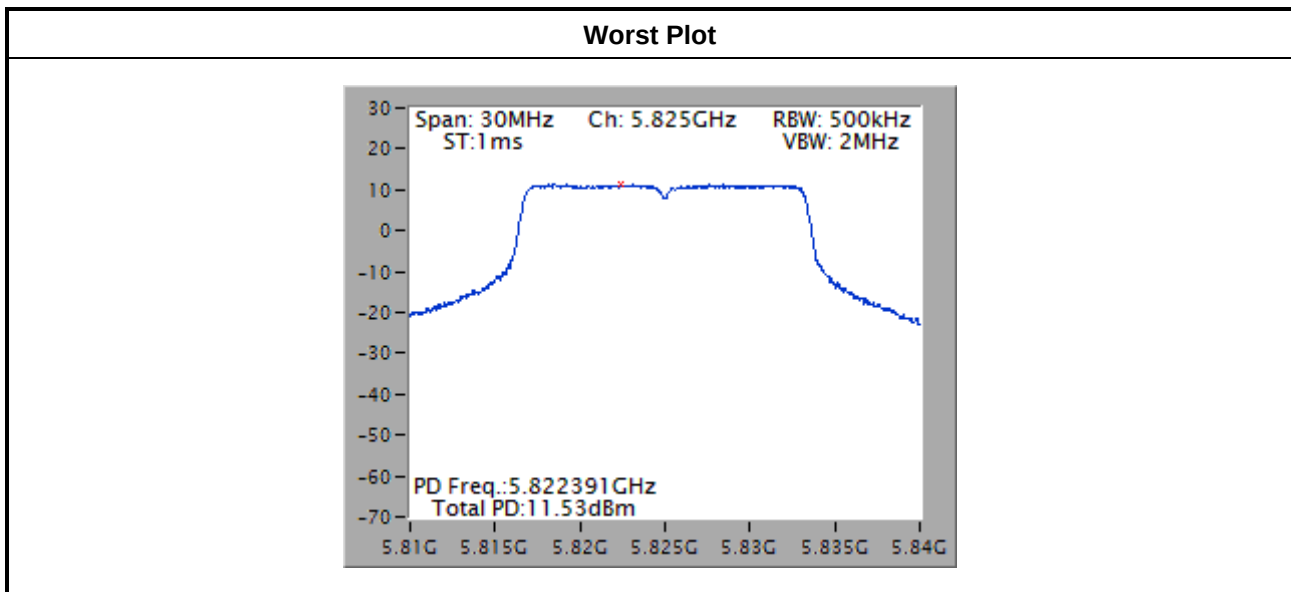
1. D.F is duty factor.
2. Test results are bin-by-bin summing measured value of each TX port.
3. Directional gain = $7 + 10 \cdot \log(2/1) = 10.01 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $17 \text{ dBm} - (10.01 \text{ dBi} - 6 \text{ dBi}) = 12.99 \text{ dBm}$.



For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation 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	2	5745	8.18	0.00	8.18	25.99
11a	2	5785	11.24	0.00	11.24	25.99
11a	2	5825	11.53	0.00	11.53	25.99
VHT20	2	5745	7.43	0.00	7.43	25.99
VHT20	2	5785	10.35	0.00	10.35	25.99
VHT20	2	5825	10.49	0.00	10.49	25.99
VHT40	2	5755	1.26	0.23	1.49	25.99
VHT40	2	5795	6.99	0.23	7.22	25.99
VHT80	2	5775	0.94	0.00	0.94	25.99

Note:

1. D.F is duty factor.
2. Test results are bin-by-bin summing measured value of each TX port.
3. Directional gain = $7 + 10 \cdot \log(2/1) = 10.01 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $30 \text{ dBm} - (10.01 \text{ dBi} - 6 \text{ dBi}) = 25.99 \text{ dBm}$.



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]
5.725 - 5.850 GHz	5.715 5.725 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] 5.85 5.86 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).

3.5.2 Test Procedures

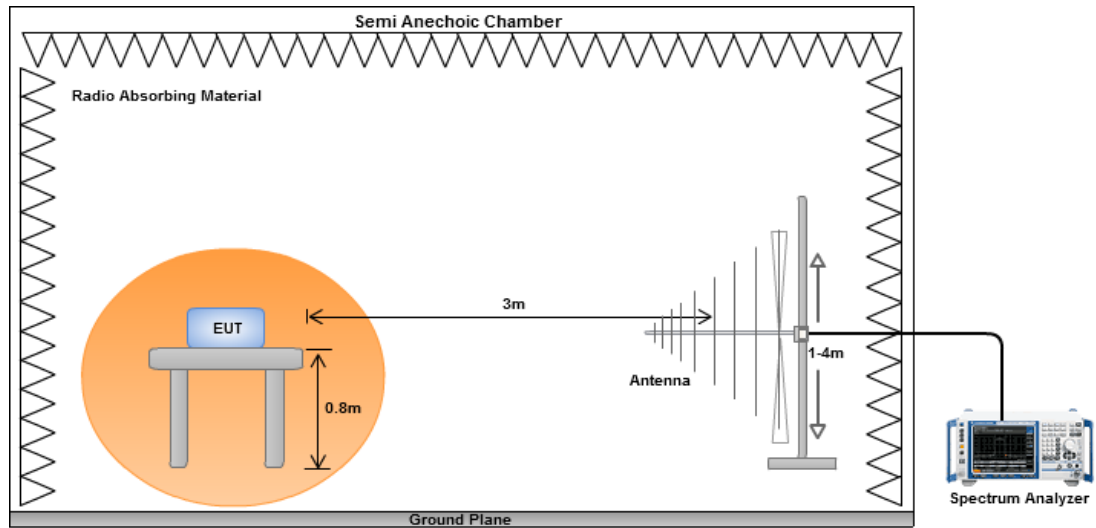
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360° . A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

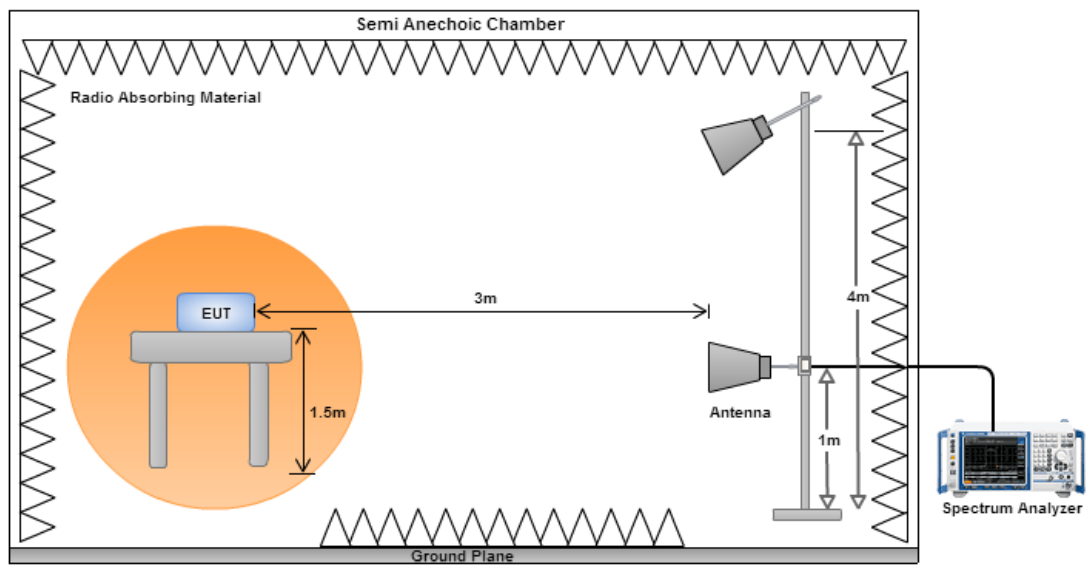
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



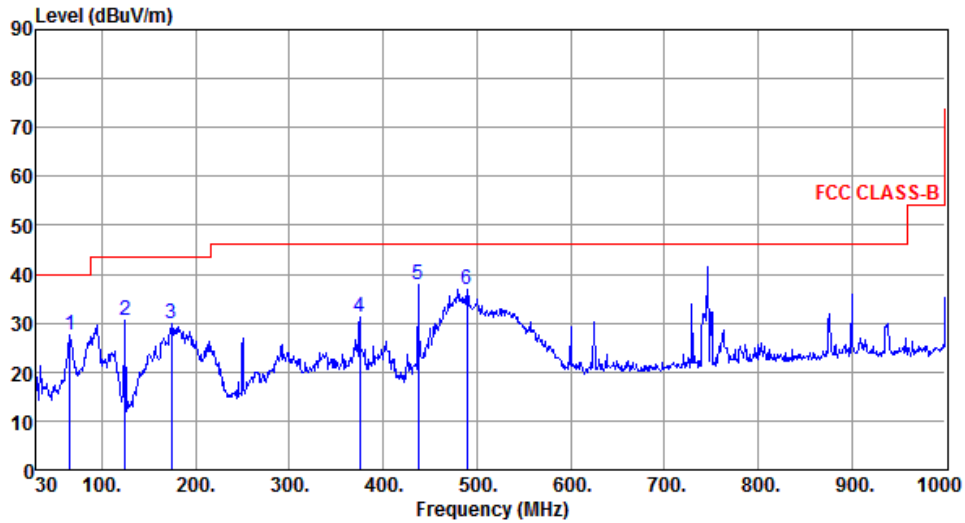
Radiated Emissions above 1 GHz



Configuration 1: model WAC6502D-S, AC Adapter mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	1

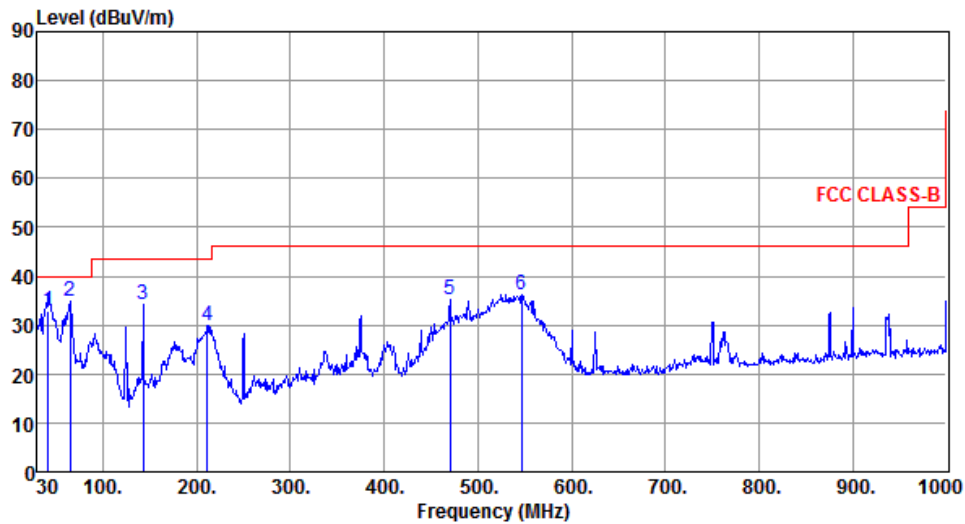


The graph displays the radiated unwanted emissions for the WAC6502D-S model in AC Adapter mode. The y-axis represents the Level in dBuV/m, ranging from 0 to 90. The x-axis represents the Frequency in MHz, ranging from 30 to 1000. A red line indicates the FCC CLASS-B limit, which is 40 dBuV/m from 30 to 100 MHz, 45 dBuV/m from 100 to 1000 MHz. Six peaks are identified and numbered 1 through 6. The emission level is generally below the limit, with peaks 1 through 6 being the highest.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	65.89	27.56	40.00	-12.44	46.15	-18.59	Peak	---	---
2	125.06	30.53	43.50	-12.97	48.95	-18.42	Peak	---	---
3	174.53	30.05	43.50	-13.45	47.55	-17.50	Peak	---	---
4	375.32	31.08	46.00	-14.92	45.18	-14.10	Peak	---	---
5	437.40	37.70	46.00	-8.30	50.19	-12.49	Peak	---	---
6	489.78	37.01	46.00	-8.99	48.34	-11.33	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	VHT40	Test Freq. (MHz)	5230
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	41.64	32.81	40.00	-7.19	49.48	-16.67	QP	100	125
2	64.92	35.00	40.00	-5.00	53.40	-18.40	Peak	---	---
3	142.52	34.17	43.50	-9.33	51.07	-16.90	Peak	---	---
4	211.39	29.88	43.50	-13.62	49.18	-19.30	Peak	---	---
5	470.38	35.30	46.00	-10.70	47.04	-11.74	Peak	---	---
6	547.01	36.14	46.00	-9.86	46.65	-10.51	Peak	---	---

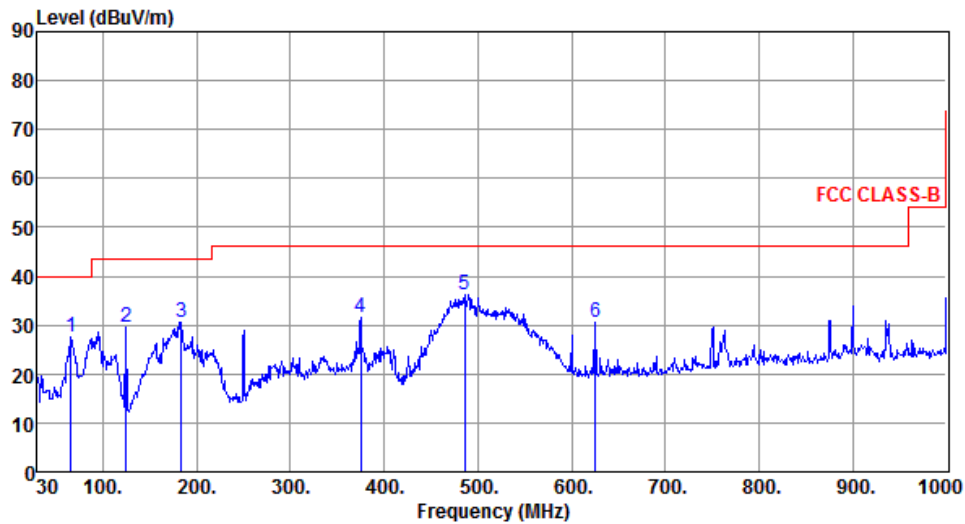
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	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	65.89	27.51	40.00	-12.49	46.10	-18.59	Peak	---	---
2	125.06	29.69	43.50	-13.81	48.11	-18.42	Peak	---	---
3	183.26	30.62	43.50	-12.88	49.00	-18.38	Peak	---	---
4	375.32	31.60	46.00	-14.40	45.70	-14.10	Peak	---	---
5	485.90	36.17	46.00	-9.83	47.59	-11.42	Peak	---	---
6	625.58	30.62	46.00	-15.38	39.70	-9.08	Peak	---	---

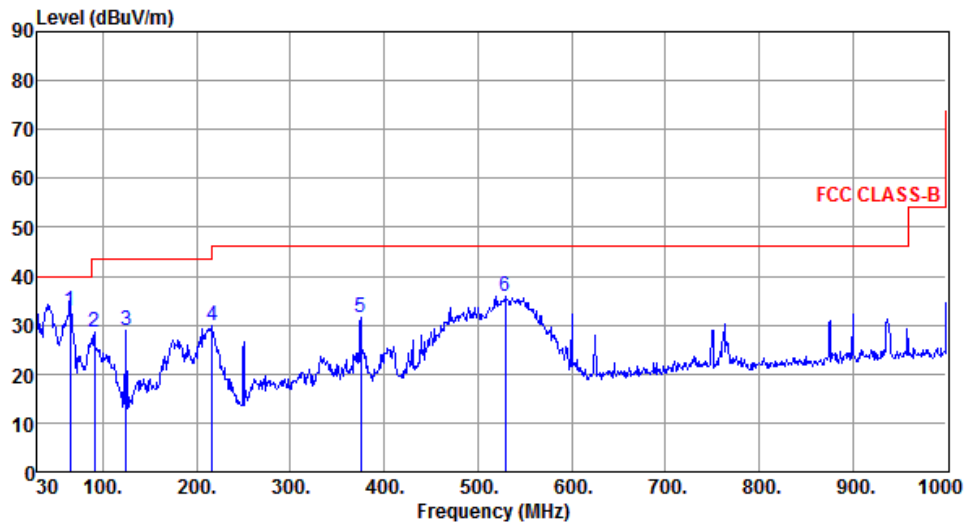
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	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	64.92	32.75	40.00	-7.25	51.15	-18.40	QP	100	144
2	91.11	28.63	43.50	-14.87	51.44	-22.81	Peak	---	---
3	125.06	28.80	43.50	-14.70	47.22	-18.42	Peak	---	---
4	216.24	29.97	46.00	-16.03	49.10	-19.13	Peak	---	---
5	375.32	31.44	46.00	-14.56	45.54	-14.10	Peak	---	---
6	529.55	36.00	46.00	-10.00	46.74	-10.74	Peak	---	---

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

*Factor includes antenna factor , cable loss and amplifier gain

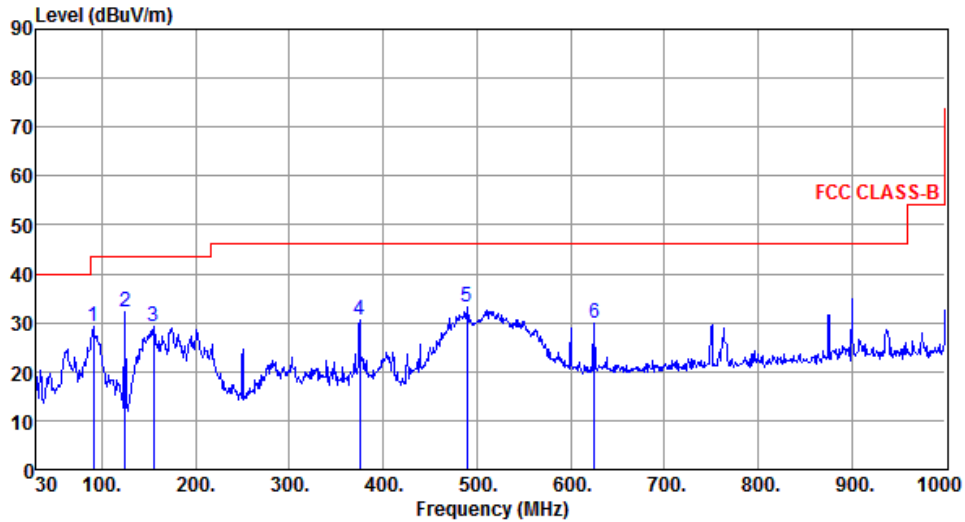
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Configuration 2: model WAC6502D-S, POE mode

3.5.5 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	2

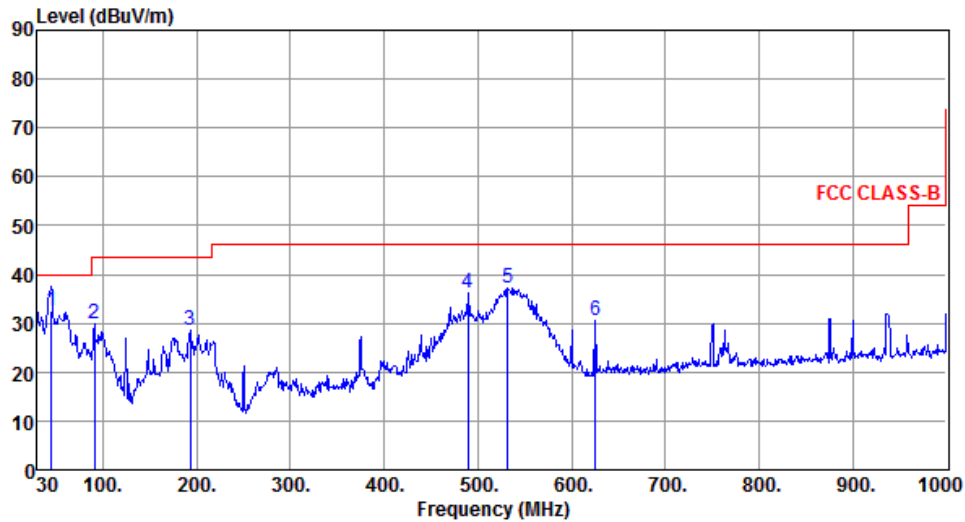


The graph displays the radiated unwanted emissions of the transmitter. The y-axis represents the Level in dBuV/m, ranging from 0 to 90. The x-axis represents the Frequency in MHz, ranging from 30 to 1000. A red line indicates the FCC CLASS-B limit, which is 40 dBuV/m from 30 to 100 MHz, 45 dBuV/m from 100 to 200 MHz, and 50 dBuV/m from 200 to 1000 MHz. A blue line shows the measured emission level, with six specific peaks labeled 1 through 6. The data for these peaks is summarized in the table below.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	91.11	29.15	43.50	-14.35	51.96	-22.81	Peak	---	---
2	125.06	32.15	43.50	-11.35	50.57	-18.42	Peak	---	---
3	155.13	29.34	43.50	-14.16	46.06	-16.72	Peak	---	---
4	375.32	30.46	46.00	-15.54	44.56	-14.10	Peak	---	---
5	489.78	33.37	46.00	-12.63	44.70	-11.33	Peak	---	---
6	625.58	29.87	46.00	-16.13	38.95	-9.08	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	VHT40	Test Freq. (MHz)	5230
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	44.98	32.39	40.00	-7.61	48.70	-16.31	QP	100	264
2	91.11	29.81	43.50	-13.69	52.62	-22.81	Peak	---	---
3	192.96	28.59	43.50	-14.91	47.75	-19.16	Peak	---	---
4	489.78	36.28	46.00	-9.72	47.61	-11.33	Peak	---	---
5	531.49	37.34	46.00	-8.66	48.05	-10.71	Peak	---	---
6	625.58	30.43	46.00	-15.57	39.51	-9.08	Peak	---	---

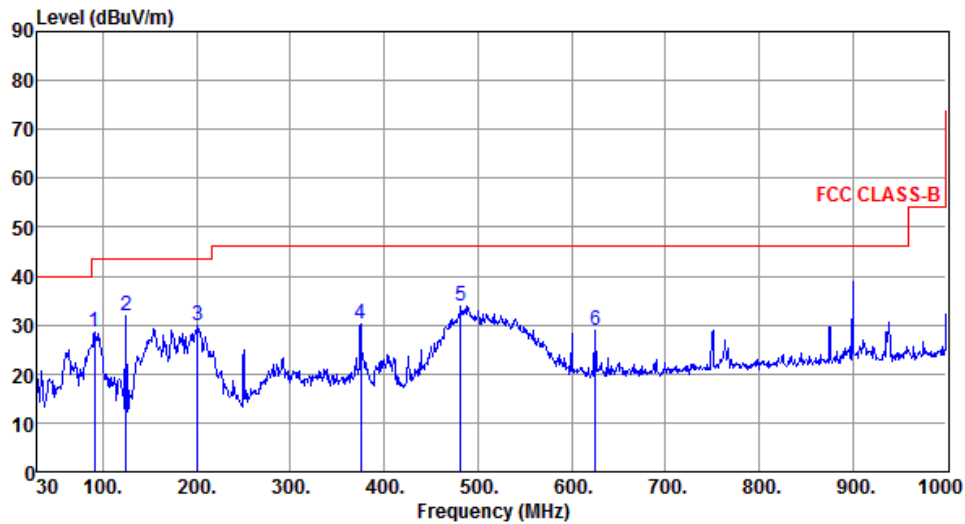
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	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	91.11	28.48	43.50	-15.02	51.29	-22.81	Peak	---	---
2	125.06	31.98	43.50	-11.52	50.40	-18.42	Peak	---	---
3	200.72	29.88	43.50	-13.62	49.17	-19.29	Peak	---	---
4	375.32	30.23	46.00	-15.77	44.33	-14.10	Peak	---	---
5	482.02	34.03	46.00	-11.97	45.52	-11.49	Peak	---	---
6	625.58	28.98	46.00	-17.02	38.06	-9.08	Peak	---	---

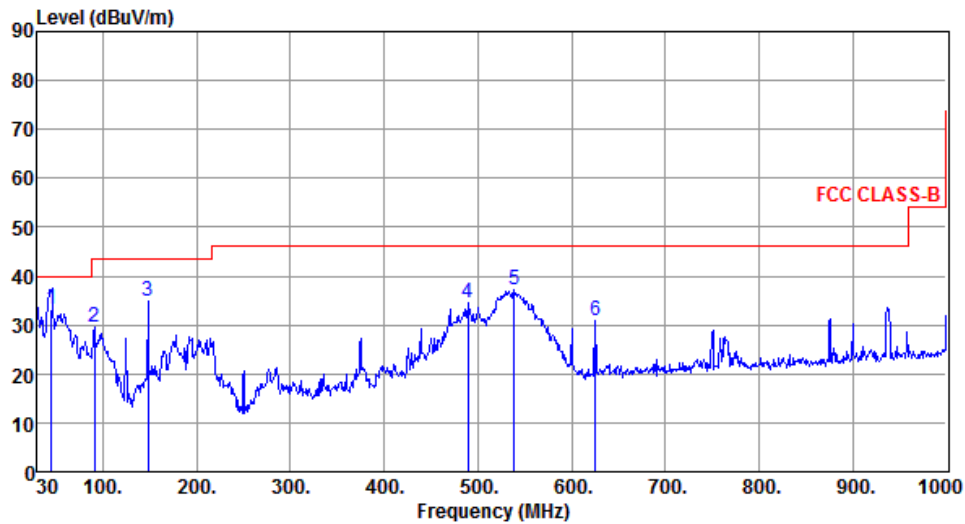
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	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	44.84	33.28	40.00	-6.72	49.61	-16.33	QP	100	120
2	91.11	29.54	43.50	-13.96	52.35	-22.81	Peak	---	---
3	148.34	34.85	43.50	-8.65	51.61	-16.76	Peak	---	---
4	489.78	34.38	46.00	-11.62	45.71	-11.33	Peak	---	---
5	539.25	37.23	46.00	-8.77	47.84	-10.61	Peak	---	---
6	625.58	30.88	46.00	-15.12	39.96	-9.08	Peak	---	---

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

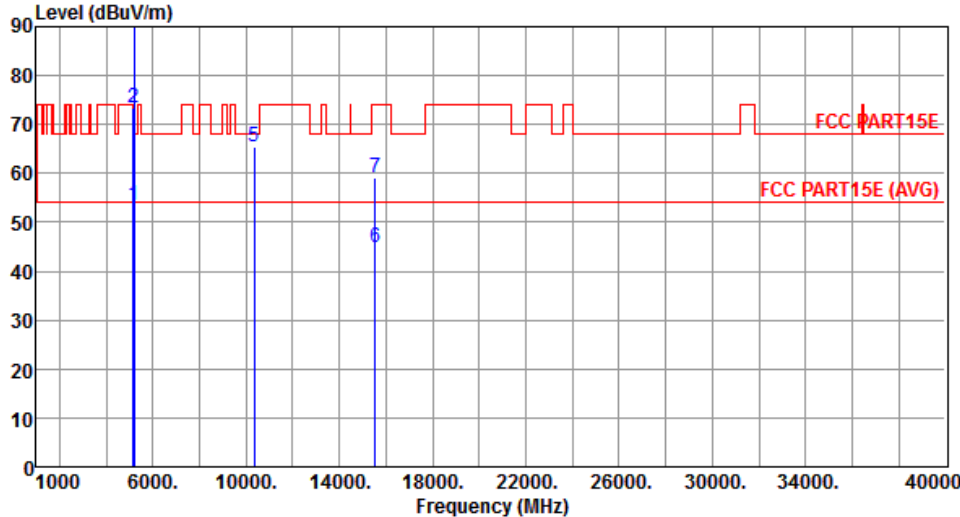
*Factor includes antenna factor , cable loss and amplifier gain

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.

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

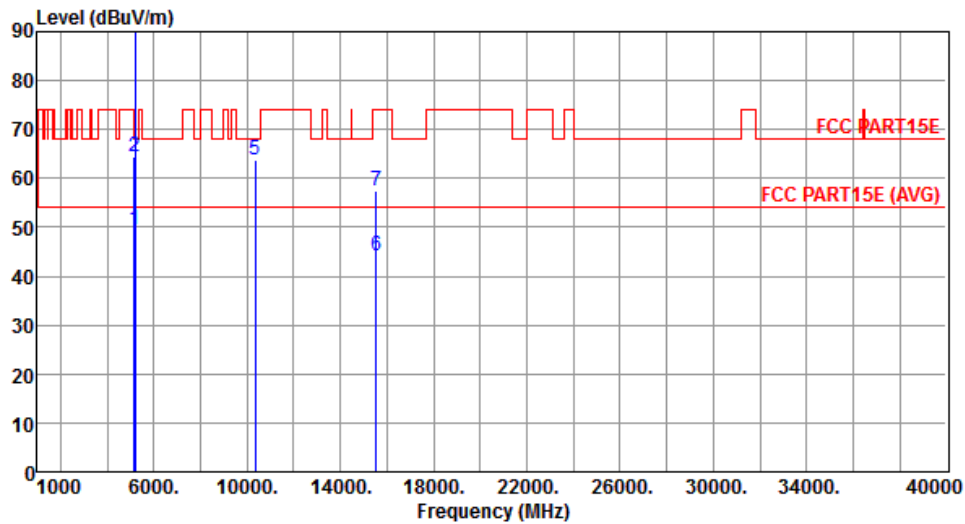
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.45	54.00	-0.55	49.05	4.40	Average	301	297
2	5150.00	73.36	74.00	-0.64	68.96	4.40	Peak	301	297
3 *	5180.00	106.20			101.76	4.44	Average	301	297
4 *	5180.00	118.67			114.23	4.44	Peak	301	297
5	10360.00	65.45	68.20	-2.75	51.25	14.20	Peak	223	341
6	15540.00	44.79	54.00	-9.21	29.68	15.11	Average	258	277
7	15540.00	58.96	74.00	-15.04	43.85	15.11	Peak	258	277

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5180
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	5150.00	49.63	54.00	-4.37	45.23	4.40	Average	318	6
2	5150.00	64.52	74.00	-9.48	60.12	4.40	Peak	318	6
3 *	5180.00	99.77			95.33	4.44	Average	318	6
4 *	5180.00	111.87			107.43	4.44	Peak	318	6
5	10360.00	63.92	68.20	-4.28	49.72	14.20	Peak	302	328
6	15540.00	44.10	54.00	-9.90	28.99	15.11	Average	344	349
7	15540.00	57.47	74.00	-16.53	42.36	15.11	Peak	344	349

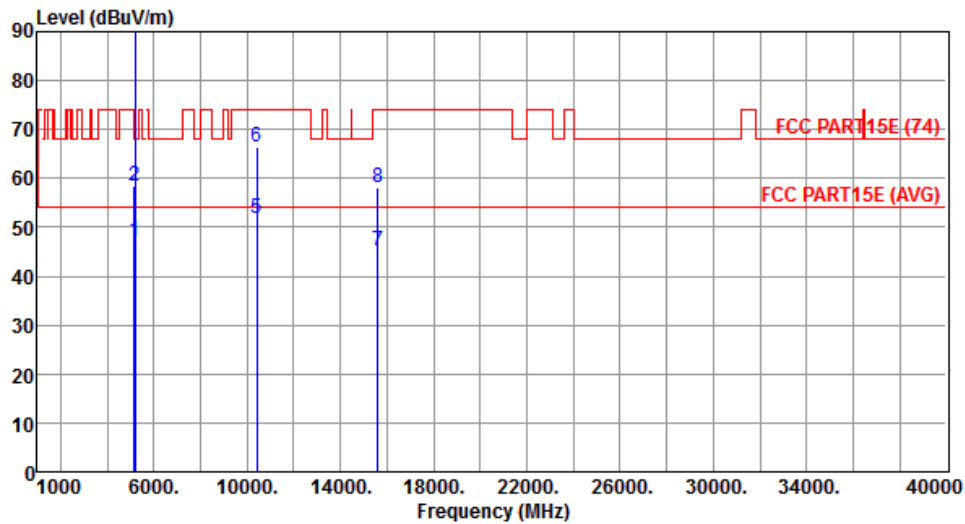
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5200
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	5150.00	47.15	54.00	-6.85	42.75	4.40	Average	288	294
2	5150.00	58.53	74.00	-15.47	54.13	4.40	Peak	288	294
3 *	5200.00	109.01			104.53	4.48	Average	288	294
4 *	5200.00	121.52			117.04	4.48	Peak	288	294
5	10400.00	51.93	54.00	-2.07	37.65	14.28	Average	202	302
6	10400.00	66.48	74.00	-7.52	52.20	14.28	Peak	202	302
7	15600.00	45.02	54.00	-8.98	30.00	15.02	Average	199	322
8	15600.00	58.18	74.00	-15.82	43.16	15.02	Peak	199	322

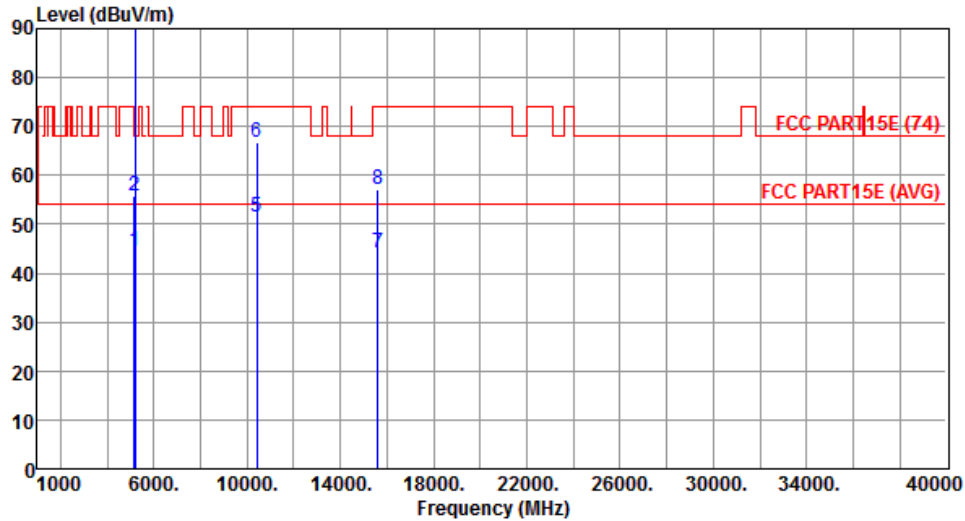
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5200
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	5150.00	44.52	54.00	-9.48	40.12	4.40	Average	320	4
2	5150.00	55.83	74.00	-18.17	51.43	4.40	Peak	320	4
3 *	5200.00	102.15			97.67	4.48	Average	320	4
4 *	5200.00	114.33			109.85	4.48	Peak	320	4
5	10400.00	51.43	54.00	-2.57	37.15	14.28	Average	293	348
6	10400.00	66.80	74.00	-7.20	52.52	14.28	Peak	293	348
7	15600.00	44.22	54.00	-9.78	29.20	15.02	Average	308	357
8	15600.00	57.25	74.00	-16.75	42.23	15.02	Peak	308	357

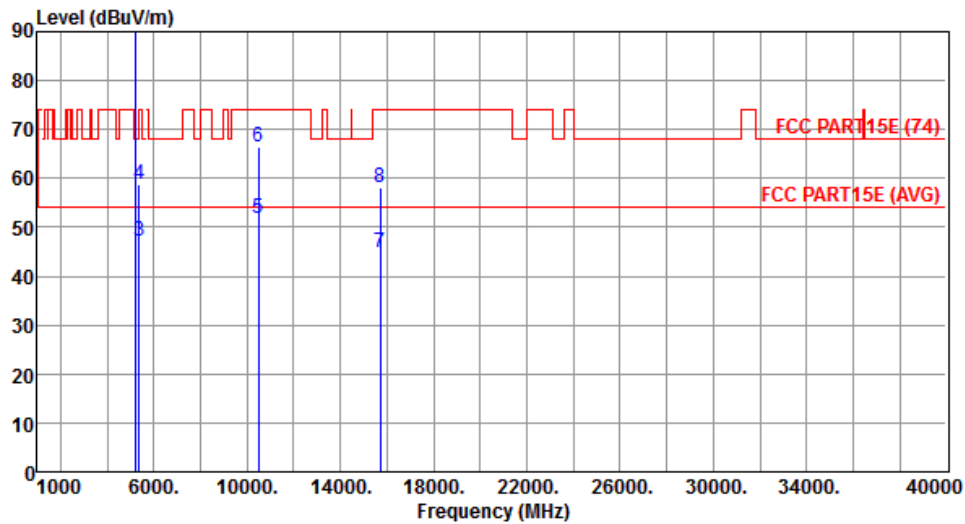
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5240
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	*	5240.00	109.21			104.69	4.52	Average	290	289
2	*	5240.00	121.32			116.80	4.52	Peak	290	289
3		5350.00	47.20	54.00	-6.80	42.56	4.64	Average	290	289
4		5350.00	58.73	74.00	-15.27	54.09	4.64	Peak	290	289
5		10480.00	51.89	54.00	-2.11	37.46	14.43	Average	210	319
6		10480.00	66.39	74.00	-7.61	51.96	14.43	Peak	210	319
7		15720.00	44.86	54.00	-9.14	29.99	14.87	Average	224	316
8		15720.00	57.99	74.00	-16.01	43.12	14.87	Peak	224	316

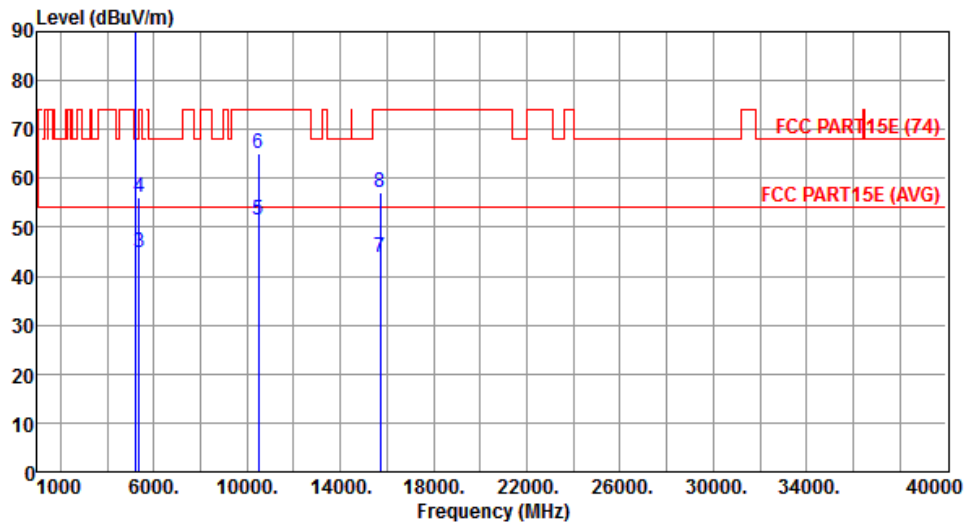
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5240
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	*	5240.00	102.22			97.70	4.52	Average	312	289
2	*	5240.00	114.41			109.89	4.52	Peak	312	289
3		5350.00	44.70	54.00	-9.30	40.06	4.64	Average	312	289
4		5350.00	56.15	74.00	-17.85	51.51	4.64	Peak	312	289
5		10480.00	51.63	54.00	-2.37	37.20	14.43	Average	302	352
6		10480.00	64.98	74.00	-9.02	50.55	14.43	Peak	302	352
7		15720.00	43.92	54.00	-10.08	29.05	14.87	Average	318	346
8		15720.00	57.12	74.00	-16.88	42.25	14.87	Peak	318	346

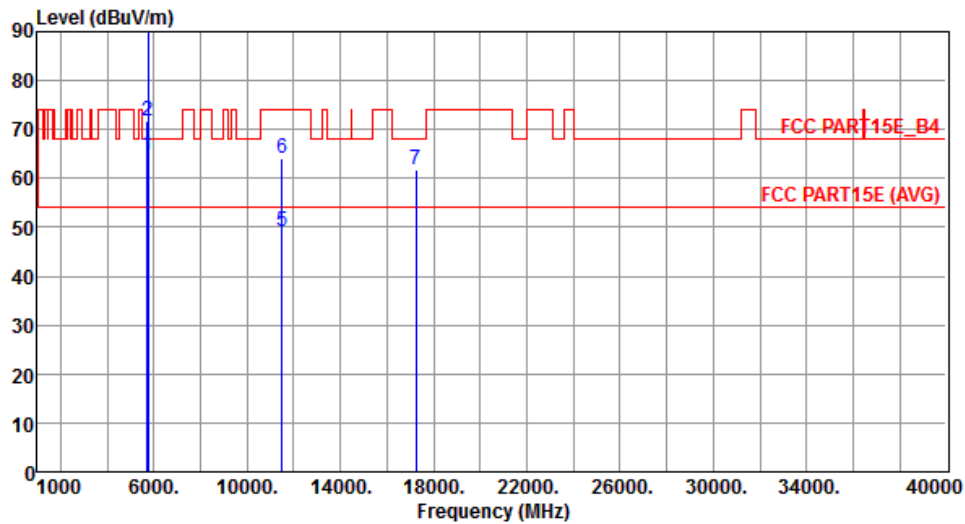
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5745
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	5715.00	64.65	68.20	-3.55	59.55	5.10	Peak	136	63
2	5725.00	71.85	78.20	-6.35	66.76	5.09	Peak	136	63
3 *	5745.00	104.78			99.64	5.14	Average	136	63
4 *	5745.00	116.96			111.82	5.14	Peak	136	63
5	11490.00	49.05	54.00	-4.95	33.52	15.53	Average	127	86
6	11490.00	64.09	74.00	-9.91	48.56	15.53	Peak	127	86
7	17235.00	61.63	68.20	-6.57	42.76	18.87	Peak	153	330

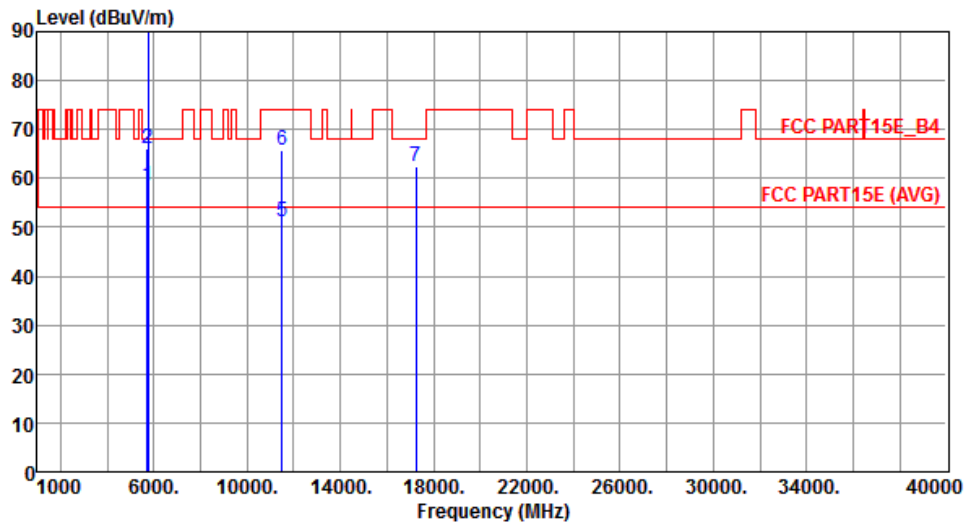
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5745
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	5715.00	58.35	68.20	-9.85	53.25	5.10	Peak	114	24
2	5725.00	65.95	78.20	-12.25	60.86	5.09	Peak	114	24
3 *	5745.00	97.78			92.64	5.14	Average	114	24
4 *	5745.00	109.88			104.74	5.14	Peak	114	24
5	11490.00	51.28	54.00	-2.72	35.75	15.53	Average	124	28
6	11490.00	65.81	74.00	-8.19	50.28	15.53	Peak	124	28
7	17235.00	62.53	68.20	-5.67	43.66	18.87	Peak	135	355

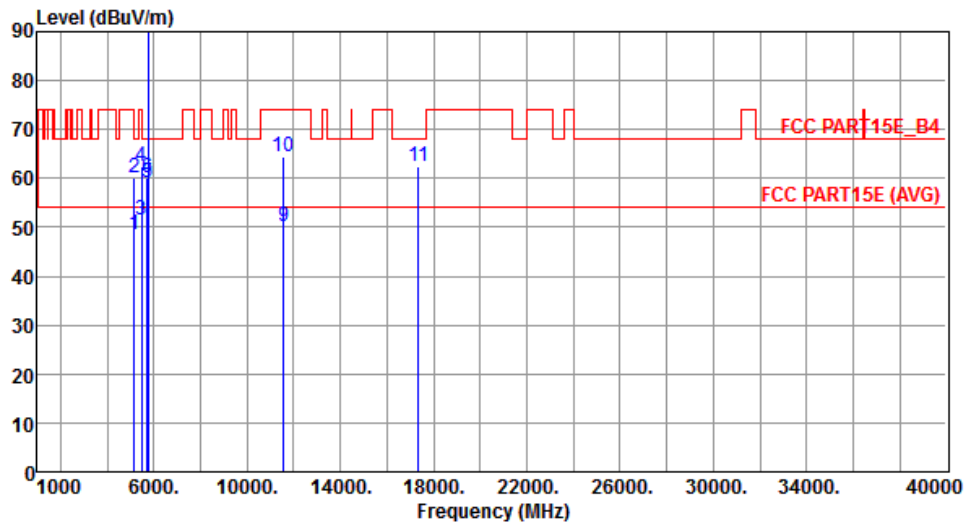
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5785
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	5144.00	48.49	54.00	-5.51	44.10	4.39	Average	132	59
2	5144.00	60.23	74.00	-13.77	55.84	4.39	Peak	132	59
3	5457.00	51.58	54.00	-2.42	46.80	4.78	Average	132	59
4	5457.00	62.58	74.00	-11.42	57.80	4.78	Peak	132	59
5	5715.00	59.07	68.20	-9.13	53.97	5.10	Peak	132	59
6	5725.00	60.16	78.20	-18.04	55.07	5.09	Peak	132	59
7 *	5785.00	106.65			101.46	5.19	Average	132	59
8 *	5785.00	118.69			113.50	5.19	Peak	132	59
9	11570.00	50.16	54.00	-3.84	34.83	15.33	Average	119	78
10	11570.00	64.55	74.00	-9.45	49.22	15.33	Peak	119	78
11	17355.00	62.53	68.20	-5.67	43.32	19.21	Peak	152	33

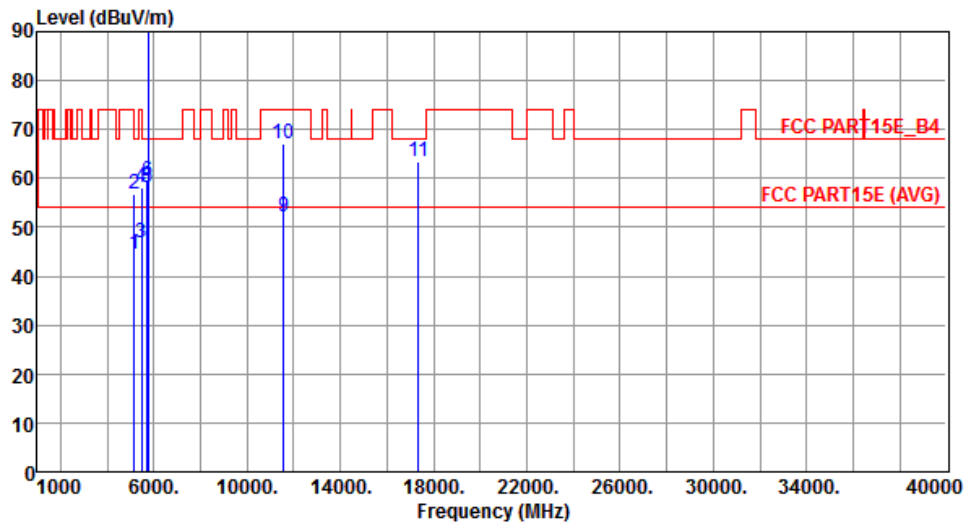
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5785
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	5144.00	44.41	54.00	-9.59	40.02	4.39	Average	110	24
2	5144.00	56.91	74.00	-17.09	52.52	4.39	Peak	110	24
3	5457.00	46.74	54.00	-7.26	41.96	4.78	Average	110	24
4	5457.00	58.23	74.00	-15.77	53.45	4.78	Peak	110	24
5	5715.00	58.27	68.20	-9.93	53.17	5.10	Peak	110	24
6	5725.00	59.41	78.20	-18.79	54.32	5.09	Peak	110	24
7 *	5785.00	100.31			95.12	5.19	Average	110	24
8 *	5785.00	112.65			107.46	5.19	Peak	110	24
9	11570.00	52.08	54.00	-1.92	36.75	15.33	Average	143	61
10	11570.00	67.01	74.00	-6.99	51.68	15.33	Peak	143	61
11	17355.00	63.40	68.20	-4.80	44.19	19.21	Peak	158	335

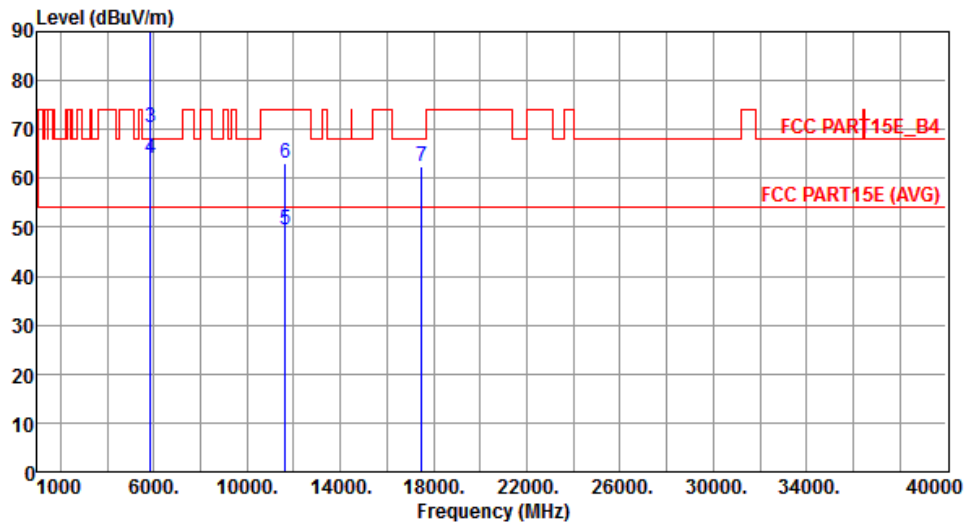
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5825
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	*	5825.00	106.11			100.87	5.24	Average	109	62
2	*	5825.00	118.23			112.99	5.24	Peak	109	62
3		5850.00	70.56	78.20	-7.64	65.30	5.26	Peak	109	62
4		5860.00	64.23	68.20	-3.97	58.96	5.27	Peak	109	62
5		11650.00	49.60	54.00	-4.40	34.51	15.09	Average	130	93
6		11650.00	63.25	74.00	-10.75	48.16	15.09	Peak	130	93
7		17475.00	62.57	68.20	-5.63	43.02	19.55	Peak	150	3

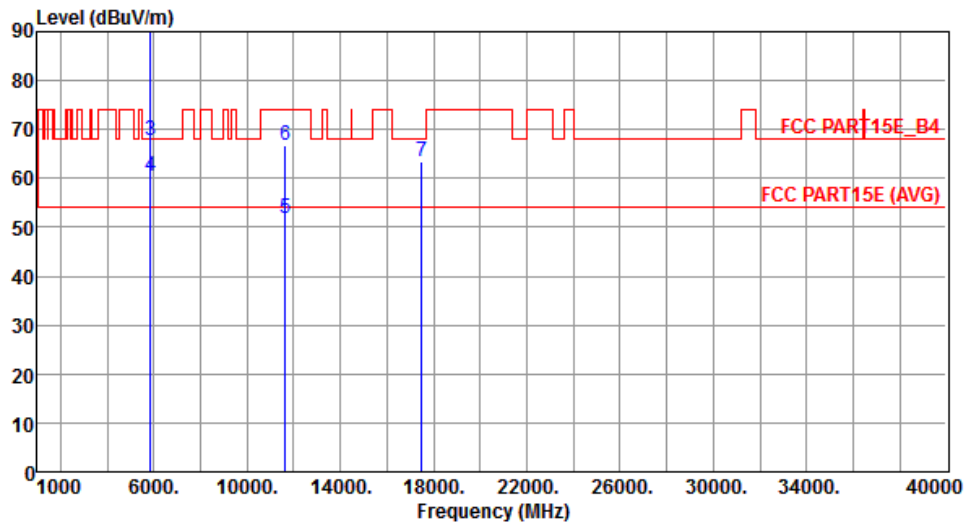
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5825
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	*	5825.00	99.92			94.68	5.24	Average	118	33
2	*	5825.00	111.98			106.74	5.24	Peak	118	33
3		5850.00	67.66	78.20	-10.54	62.40	5.26	Peak	118	33
4		5860.00	60.39	68.20	-7.81	55.12	5.27	Peak	118	33
5		11650.00	51.95	54.00	-2.05	36.86	15.09	Average	118	358
6		11650.00	66.65	74.00	-7.35	51.56	15.09	Peak	118	358
7		17475.00	63.44	68.20	-4.76	43.89	19.55	Peak	143	2

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

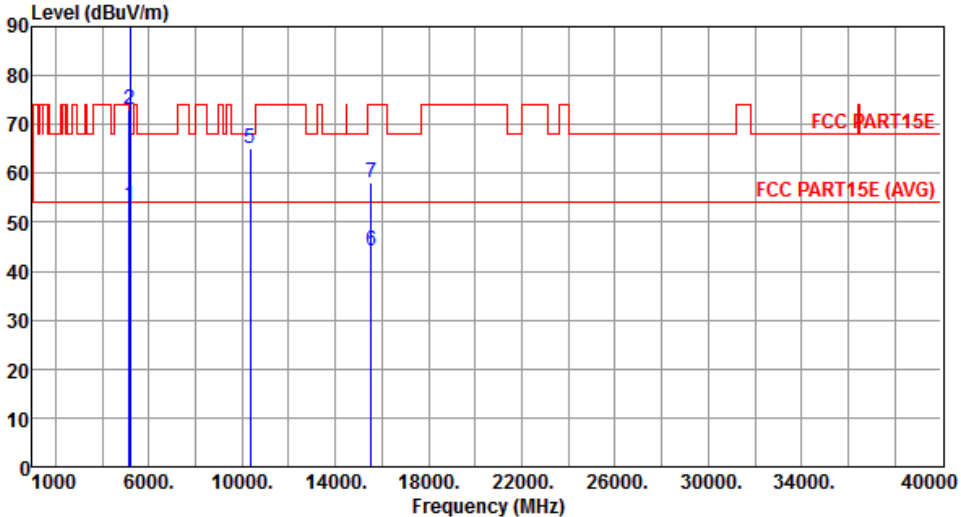
*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

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

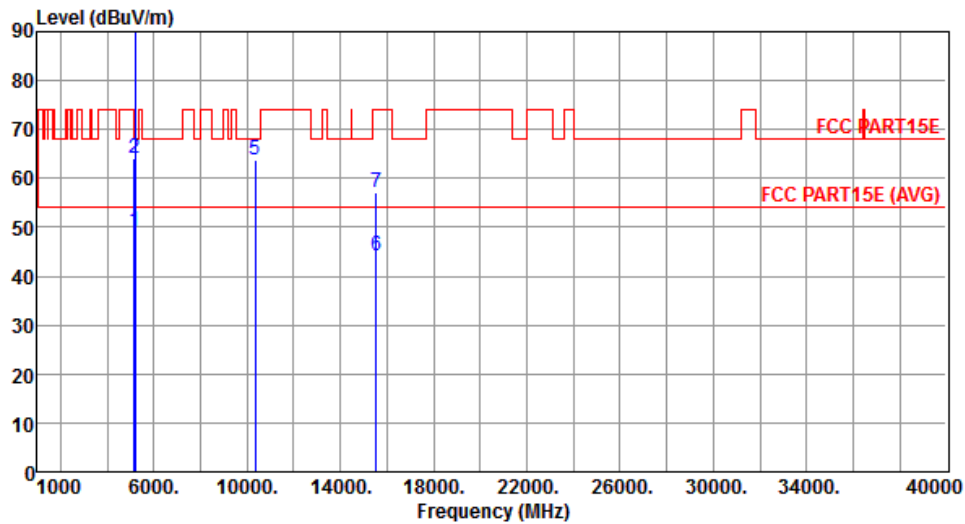
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.45	54.00	-0.55	49.05	4.40	Average	299	295
2	5150.00	72.90	74.00	-1.10	68.50	4.40	Peak	299	295
3 *	5180.00	105.07			100.63	4.44	Average	299	295
4 *	5180.00	117.80			113.36	4.44	Peak	299	295
5	10360.00	65.05	68.20	-3.15	50.85	14.20	Peak	230	25
6	15540.00	44.25	54.00	-9.75	29.14	15.11	Average	260	289
7	15540.00	58.02	74.00	-15.98	42.91	15.11	Peak	260	289

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5180
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	5150.00	49.13	54.00	-4.87	44.73	4.40	Average	302	357
2	5150.00	64.12	74.00	-9.88	59.72	4.40	Peak	302	357
3 *	5180.00	98.85			94.41	4.44	Average	302	357
4 *	5180.00	110.99			106.55	4.44	Peak	302	357
5	10360.00	63.81	68.20	-4.39	49.61	14.20	Peak	330	32
6	15540.00	44.01	54.00	-9.99	28.90	15.11	Average	355	355
7	15540.00	57.28	74.00	-16.72	42.17	15.11	Peak	355	355

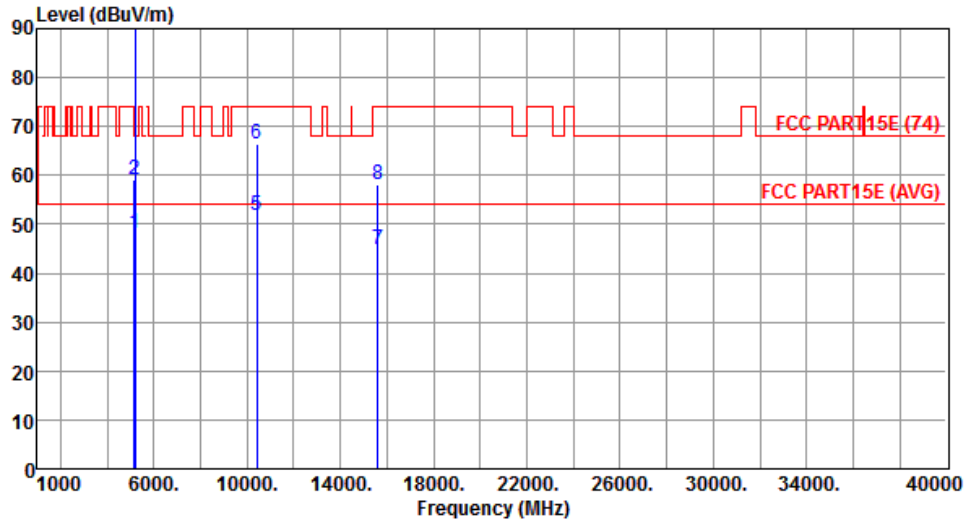
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5200
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	5150.00	48.02	54.00	-5.98	43.62	4.40	Average	290	310
2	5150.00	59.12	74.00	-14.88	54.72	4.40	Peak	290	310
3 *	5200.00	108.89			104.41	4.48	Average	290	310
4 *	5200.00	121.39			116.91	4.48	Peak	290	310
5	10400.00	51.77	54.00	-2.23	37.49	14.28	Average	213	295
6	10400.00	66.28	74.00	-7.72	52.00	14.28	Peak	213	295
7	15600.00	44.85	54.00	-9.15	29.83	15.02	Average	208	333
8	15600.00	58.01	74.00	-15.99	42.99	15.02	Peak	208	333

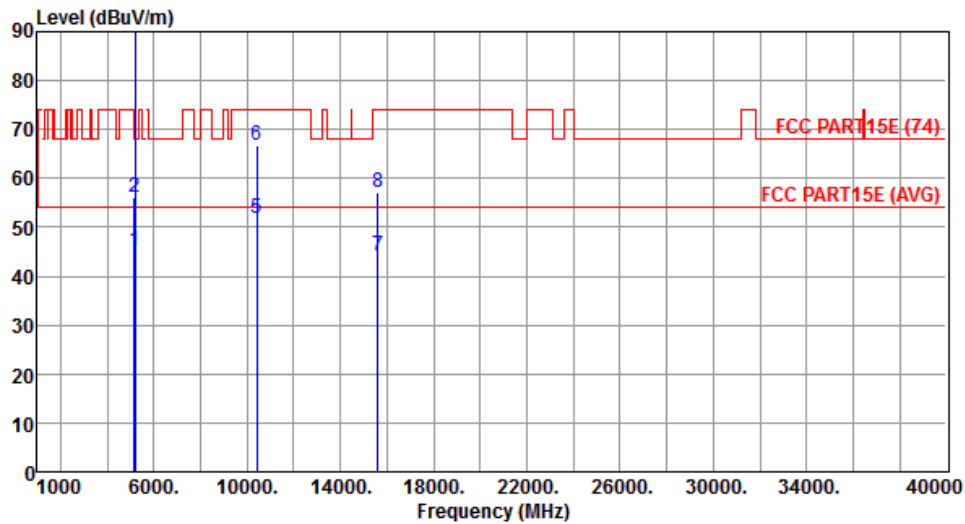
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5200
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	5150.00	45.01	54.00	-8.99	40.61	4.40	Average	305	359
2	5150.00	56.12	74.00	-17.88	51.72	4.40	Peak	305	359
3 *	5200.00	101.96			97.48	4.48	Average	305	359
4 *	5200.00	114.12			109.64	4.48	Peak	305	359
5	10400.00	51.72	54.00	-2.28	37.44	14.28	Average	280	340
6	10400.00	66.62	74.00	-7.38	52.34	14.28	Peak	280	340
7	15600.00	44.01	54.00	-9.99	28.99	15.02	Average	311	8
8	15600.00	57.12	74.00	-16.88	42.10	15.02	Peak	311	8

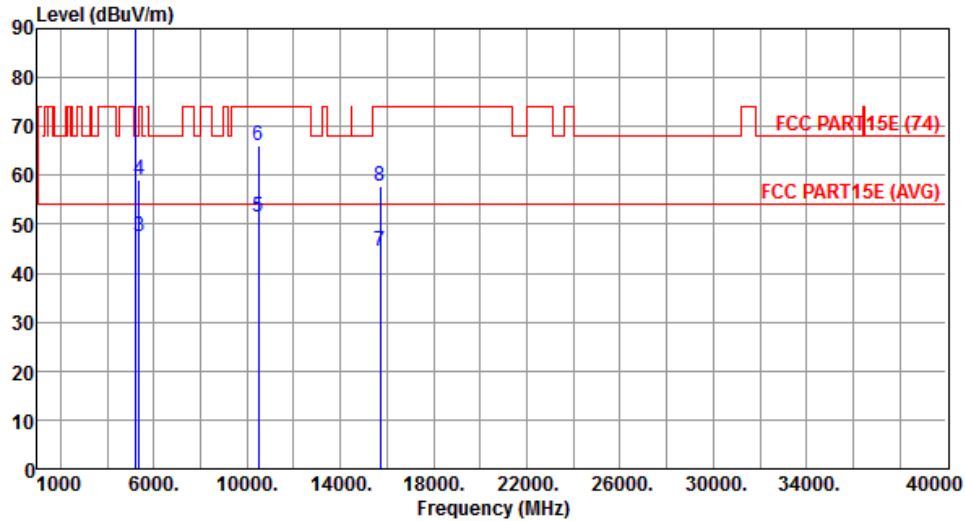
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5240
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	*	5240.00	109.02			104.50	4.52	Average	322	270
2	*	5240.00	121.18			116.66	4.52	Peak	322	270
3		5350.00	47.52	54.00	-6.48	42.88	4.64	Average	322	270
4		5350.00	58.95	74.00	-15.05	54.31	4.64	Peak	322	270
5		10480.00	51.58	54.00	-2.42	37.15	14.43	Average	238	330
6		10480.00	66.02	74.00	-7.98	51.59	14.43	Peak	238	330
7		15720.00	44.65	54.00	-9.35	29.78	14.87	Average	202	302
8		15720.00	57.71	74.00	-16.29	42.84	14.87	Peak	202	302

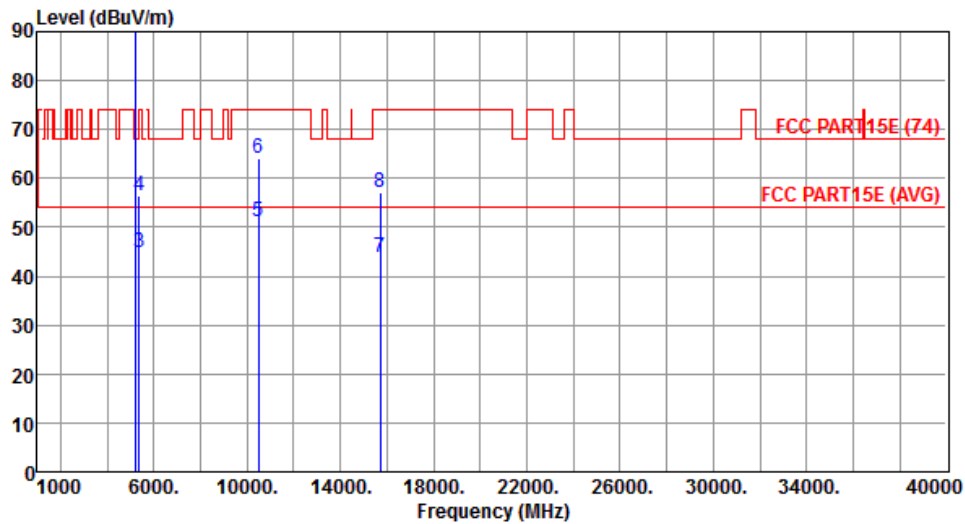
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5240
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	*	5240.00	102.03			97.51	4.52	Average	322	296
2	*	5240.00	114.23			109.71	4.52	Peak	322	296
3		5350.00	44.85	54.00	-9.15	40.21	4.64	Average	322	296
4		5350.00	56.40	74.00	-17.60	51.76	4.64	Peak	322	296
5		10480.00	51.20	54.00	-2.80	36.77	14.43	Average	296	346
6		10480.00	64.23	74.00	-9.77	49.80	14.43	Peak	296	346
7		15720.00	43.81	54.00	-10.19	28.94	14.87	Average	305	5
8		15720.00	56.98	74.00	-17.02	42.11	14.87	Peak	305	5

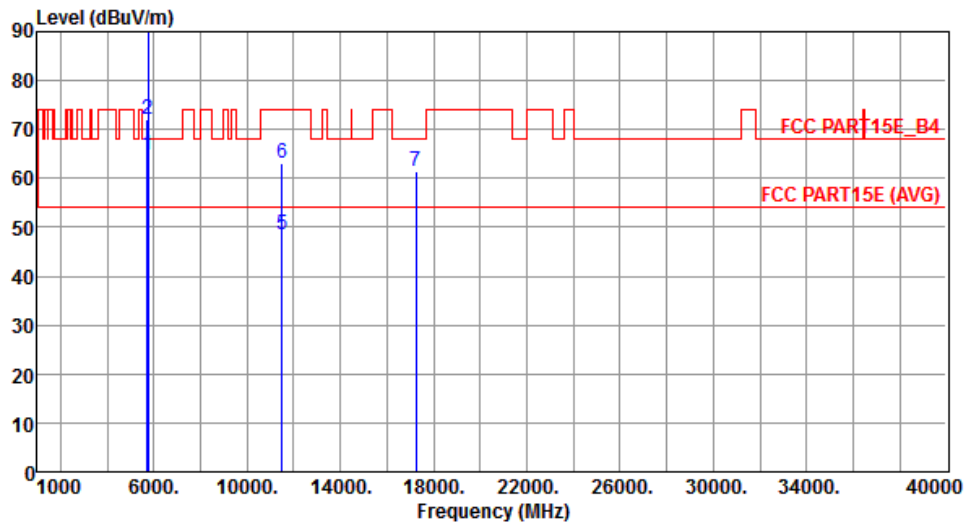
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5745
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	5715.00	64.75	68.20	-3.45	59.65	5.10	Peak	140	68
2	5725.00	72.22	78.20	-5.98	67.13	5.09	Peak	140	68
3 *	5745.00	103.52			98.38	5.14	Average	140	68
4 *	5745.00	115.62			110.48	5.14	Peak	140	68
5	11490.00	48.55	54.00	-5.45	33.02	15.53	Average	133	31
6	11490.00	63.25	74.00	-10.75	47.72	15.53	Peak	133	31
7	17235.00	61.33	68.20	-6.87	42.46	18.87	Peak	133	31

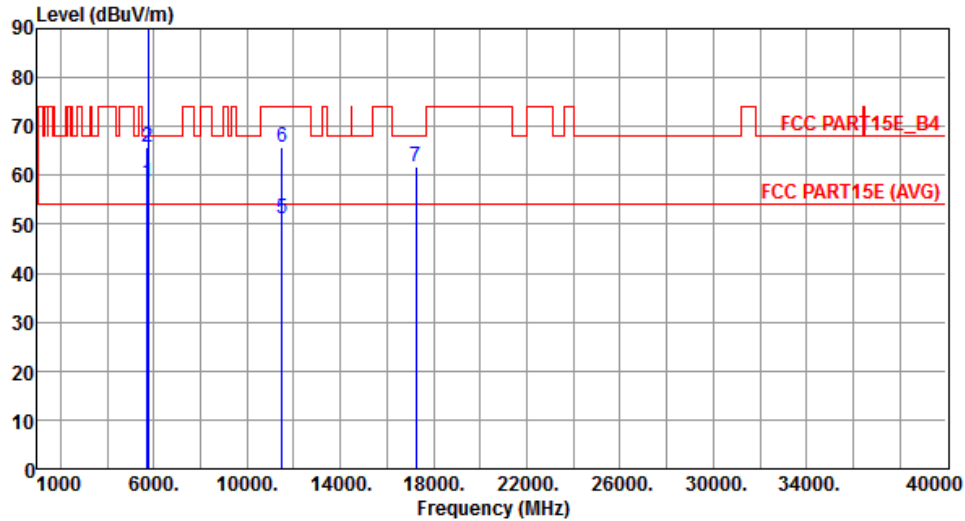
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5745
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	5715.00	58.59	68.20	-9.61	53.49	5.10	Peak	120	40
2	5725.00	65.66	78.20	-12.54	60.57	5.09	Peak	120	40
3 *	5745.00	96.68			91.54	5.14	Average	120	40
4 *	5745.00	109.01			103.87	5.14	Peak	120	40
5	11490.00	51.18	54.00	-2.82	35.65	15.53	Average	139	352
6	11490.00	65.65	74.00	-8.35	50.12	15.53	Peak	139	352
7	17235.00	61.71	68.20	-6.49	42.84	18.87	Peak	139	352

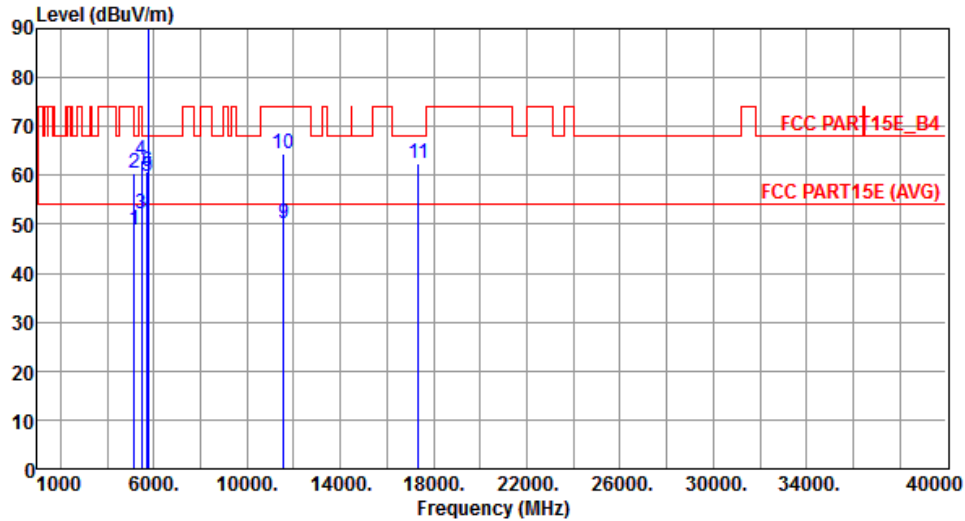
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5785
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	5144.00	48.95	54.00	-5.05	44.56	4.39	Average	140	93
2	5144.00	60.58	74.00	-13.42	56.19	4.39	Peak	140	93
3	5457.00	52.12	54.00	-1.88	47.34	4.78	Average	140	93
4	5457.00	63.12	74.00	-10.88	58.34	4.78	Peak	140	93
5	5715.00	59.85	68.20	-8.35	54.75	5.10	Peak	140	93
6	5725.00	60.63	78.20	-17.57	55.54	5.09	Peak	140	93
7 *	5785.00	106.08			100.89	5.19	Average	140	93
8 *	5785.00	118.15			112.96	5.19	Peak	140	93
9	11570.00	50.02	54.00	-3.98	34.69	15.33	Average	130	352
10	11570.00	64.32	74.00	-9.68	48.99	15.33	Peak	130	352
11	17355.00	62.41	68.20	-5.79	43.20	19.21	Peak	152	33

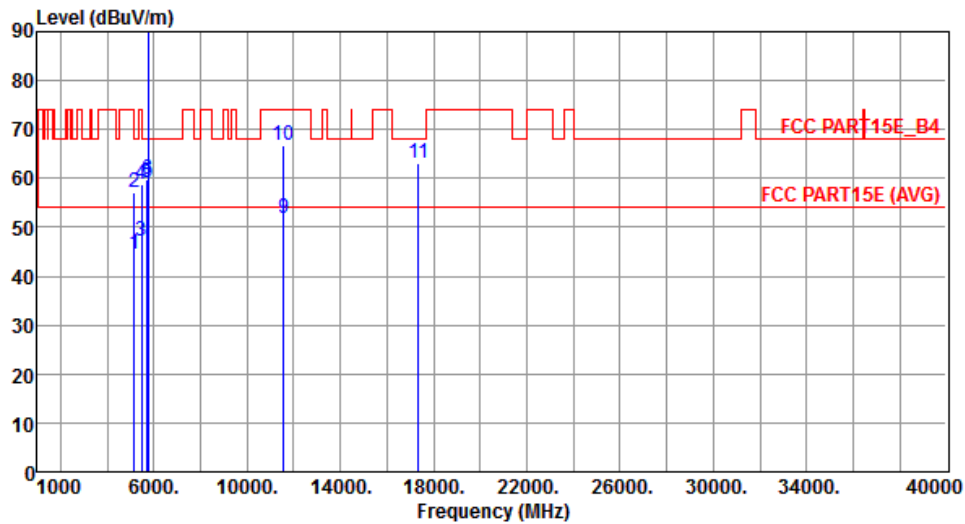
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5785
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	5144.00	44.66	54.00	-9.34	40.27	4.39	Average	127	35
2	5144.00	57.19	74.00	-16.81	52.80	4.39	Peak	127	35
3	5457.00	47.12	54.00	-6.88	42.34	4.78	Average	127	35
4	5457.00	58.85	74.00	-15.15	54.07	4.78	Peak	127	35
5	5715.00	59.12	68.20	-9.08	54.02	5.10	Peak	127	35
6	5725.00	59.66	78.20	-18.54	54.57	5.09	Peak	127	35
7 *	5785.00	99.88			94.69	5.19	Average	127	35
8 *	5785.00	112.18			106.99	5.19	Peak	127	35
9	11570.00	51.89	54.00	-2.11	36.56	15.33	Average	156	99
10	11570.00	66.85	74.00	-7.15	51.52	15.33	Peak	156	99
11	17355.00	63.15	68.20	-5.05	43.94	19.21	Peak	165	350

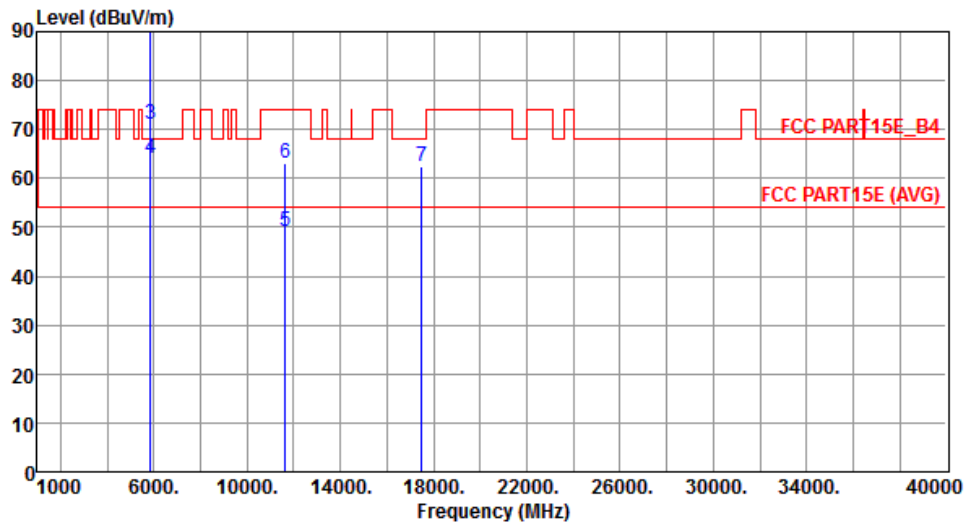
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5825
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	*	5825.00	105.67			100.43	5.24	Average	143	309
2	*	5825.00	117.71			112.47	5.24	Peak	143	309
3		5850.00	71.12	78.20	-7.08	65.86	5.26	Peak	143	309
4		5860.00	64.21	68.20	-3.99	58.94	5.27	Peak	143	309
5		11650.00	49.22	54.00	-4.78	34.13	15.09	Average	180	270
6		11650.00	63.02	74.00	-10.98	47.93	15.09	Peak	180	270
7		17475.00	62.29	68.20	-5.91	42.74	19.55	Peak	180	270

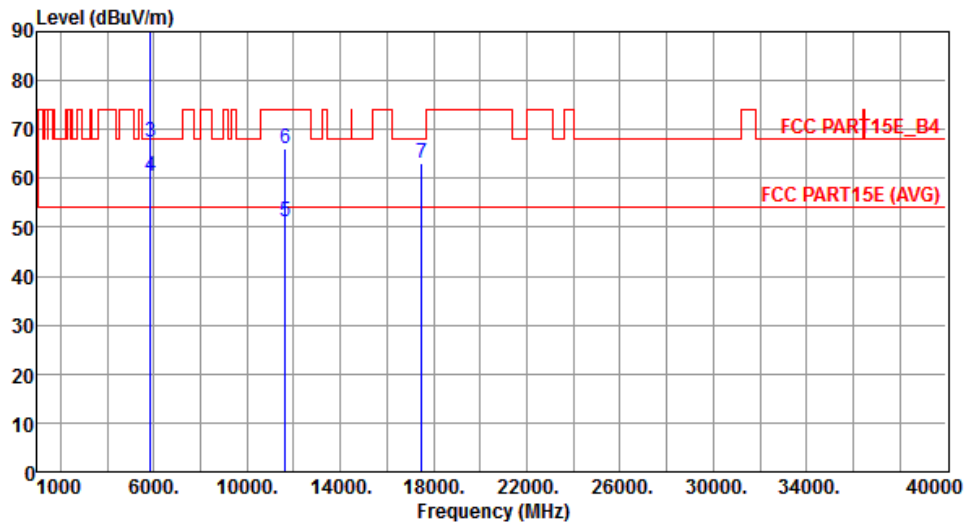
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5825
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	*	5825.00	99.48			94.24	5.24	Average	130	25
2	*	5825.00	111.51			106.27	5.24	Peak	130	25
3		5850.00	67.33	78.20	-10.87	62.07	5.26	Peak	130	25
4		5860.00	60.45	68.20	-7.75	55.18	5.27	Peak	130	25
5		11650.00	51.22	54.00	-2.78	36.13	15.09	Average	123	351
6		11650.00	66.12	74.00	-7.88	51.03	15.09	Peak	123	351
7		17475.00	63.12	68.20	-5.08	43.57	19.55	Peak	129	341

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

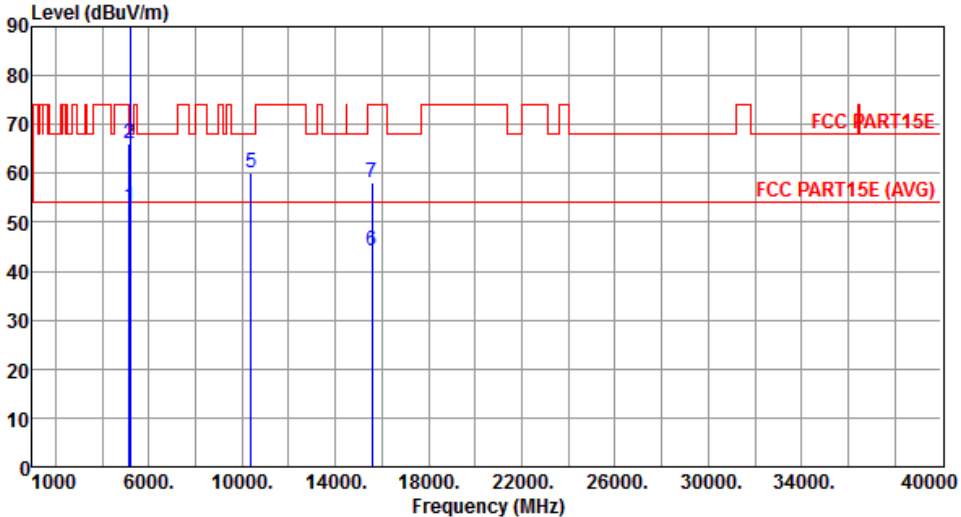
*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

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

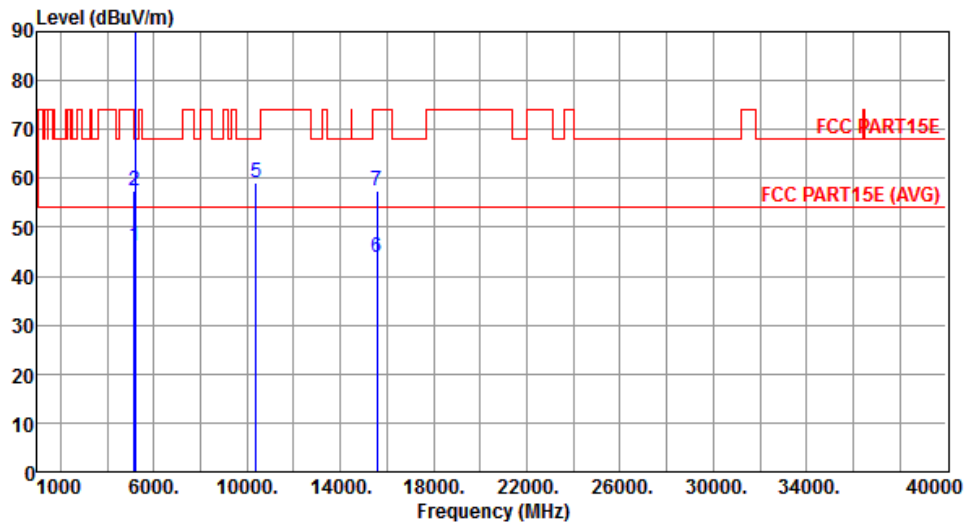
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.25	54.00	-0.75	48.85	4.40	Average	279	291
2	5150.00	66.05	74.00	-7.95	61.65	4.40	Peak	279	291
3 *	5190.00	100.21			95.75	4.46	Average	275	295
4 *	5190.00	110.29			105.83	4.46	Peak	275	295
5	10380.00	60.12	68.20	-8.08	45.87	14.25	Peak	212	336
6	15570.00	44.12	54.00	-9.88	29.06	15.06	Average	335	179
7	15570.00	57.96	74.00	-16.04	42.90	15.06	Peak	335	179

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5190
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	5150.00	46.06	54.00	-7.94	41.66	4.40	Average	300	8
2	5150.00	57.60	74.00	-16.40	53.20	4.40	Peak	300	8
3 *	5190.00	91.39			86.93	4.46	Average	300	8
4 *	5190.00	101.27			96.81	4.46	Peak	300	8
5	10380.00	59.01	68.20	-9.19	44.76	14.25	Peak	271	330
6	15570.00	43.88	54.00	-10.12	28.82	15.06	Average	280	340
7	15570.00	57.40	74.00	-16.60	42.34	15.06	Peak	280	340

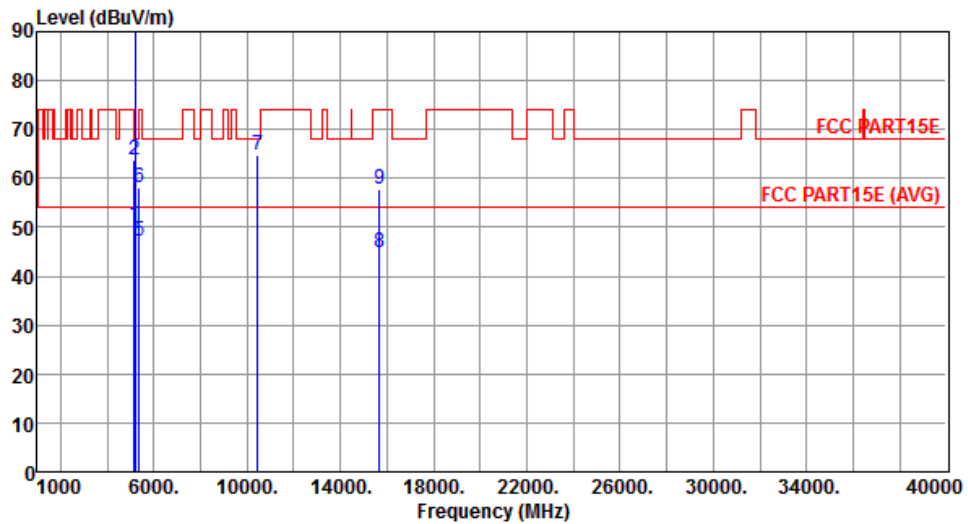
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5230
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	5150.00	50.61	54.00	-3.39	46.21	4.40	Average	282	292
2	5150.00	63.78	74.00	-10.22	59.38	4.40	Peak	282	292
3 *	5230.00	108.34			103.83	4.51	Average	282	292
4 *	5230.00	118.47			113.96	4.51	Peak	282	292
5	5350.00	47.01	54.00	-6.99	42.37	4.64	Average	282	292
6	5350.00	58.20	74.00	-15.80	53.56	4.64	Peak	282	292
7	10460.00	64.64	68.20	-3.56	50.24	14.40	Peak	204	305
8	15690.00	44.68	54.00	-9.32	29.77	14.91	Average	258	308
9	15690.00	57.89	74.00	-16.11	42.98	14.91	Peak	258	308

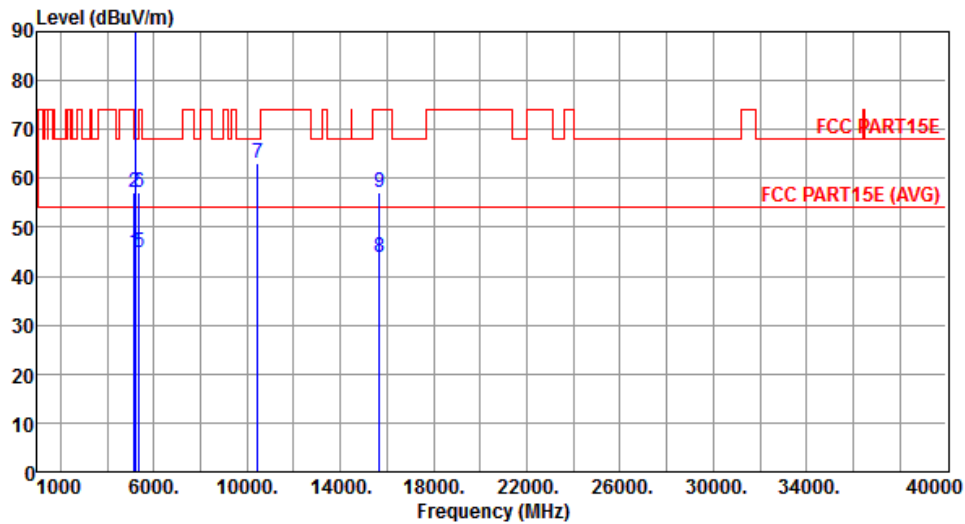
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5230
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	5150.00	44.95	54.00	-9.05	40.55	4.40	Average	298	353
2	5150.00	57.17	74.00	-16.83	52.77	4.40	Peak	298	353
3 *	5230.00	98.41			93.90	4.51	Average	298	353
4 *	5230.00	108.25			103.74	4.51	Peak	298	353
5	5350.00	44.78	54.00	-9.22	40.14	4.64	Average	298	353
6	5350.00	57.04	74.00	-16.96	52.40	4.64	Peak	298	353
7	10460.00	63.11	68.20	-5.09	48.71	14.40	Peak	285	339
8	15690.00	43.89	54.00	-10.11	28.98	14.91	Average	308	345
9	15690.00	56.98	74.00	-17.02	42.07	14.91	Peak	308	345

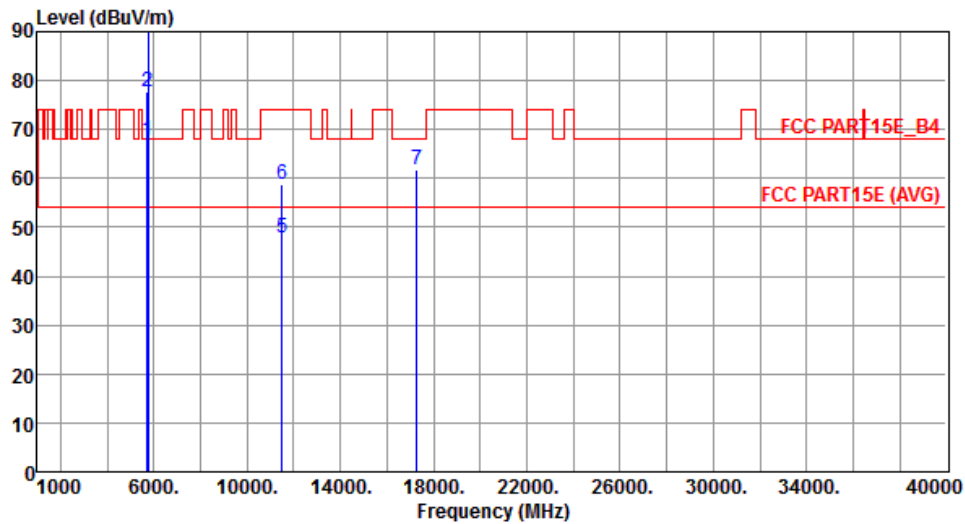
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5755
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	5715.00	67.68	68.20	-0.52	62.58	5.10	Peak	231	298
2	5725.00	77.76	78.20	-0.44	72.67	5.09	Peak	231	298
3 *	5755.00	100.66			95.52	5.14	Average	231	298
4 *	5755.00	110.53			105.39	5.14	Peak	231	298
5	11510.00	47.76	54.00	-6.24	32.25	15.51	Average	133	89
6	11510.00	58.65	74.00	-15.35	43.14	15.51	Peak	133	89
7	17265.00	61.70	68.20	-6.50	42.73	18.97	Peak	151	25

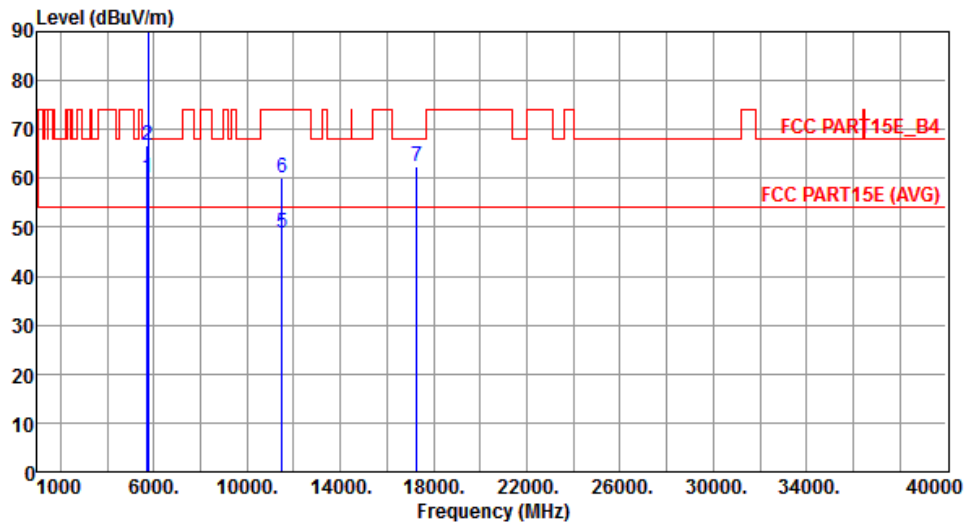
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5755
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	5715.00	59.99	68.20	-8.21	54.89	5.10	Peak	143	32
2	5725.00	66.75	78.20	-11.45	61.66	5.09	Peak	143	32
3 *	5755.00	92.84			87.70	5.14	Average	143	32
4 *	5755.00	102.96			97.82	5.14	Peak	143	32
5	11510.00	48.83	54.00	-5.17	33.32	15.51	Average	138	352
6	11510.00	60.15	74.00	-13.85	44.64	15.51	Peak	138	352
7	17265.00	62.44	68.20	-5.76	43.47	18.97	Peak	115	32

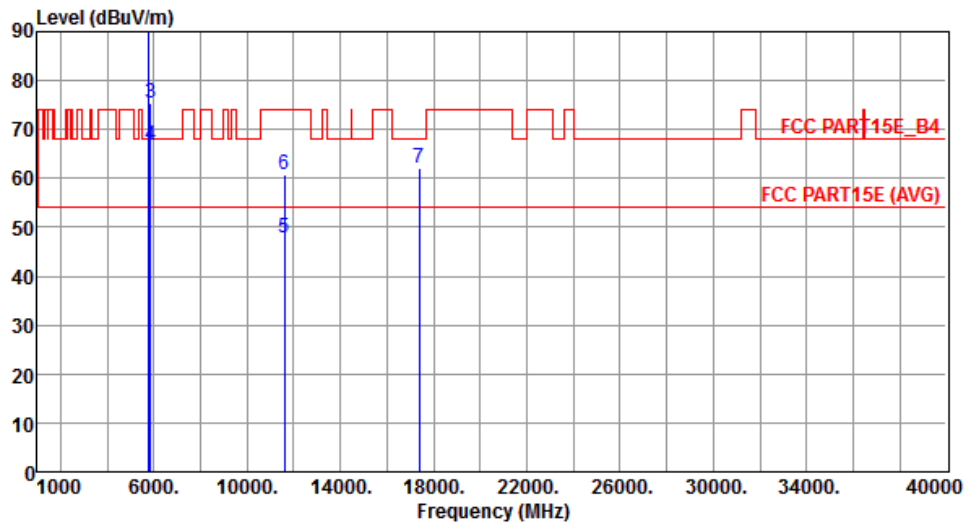
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5795
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	*	5795.00	105.33			100.13	5.20	Average	222	310
2	*	5795.00	110.24			105.04	5.20	Peak	222	310
3		5850.00	75.38	78.20	-2.82	70.12	5.26	Peak	222	310
4		5860.00	66.83	68.20	-1.37	61.56	5.27	Peak	222	310
5		11590.00	47.86	54.00	-6.14	32.59	15.27	Average	263	325
6		11590.00	60.94	74.00	-13.06	45.67	15.27	Peak	263	325
7		17385.00	61.96	68.20	-6.24	42.67	19.29	Peak	280	350

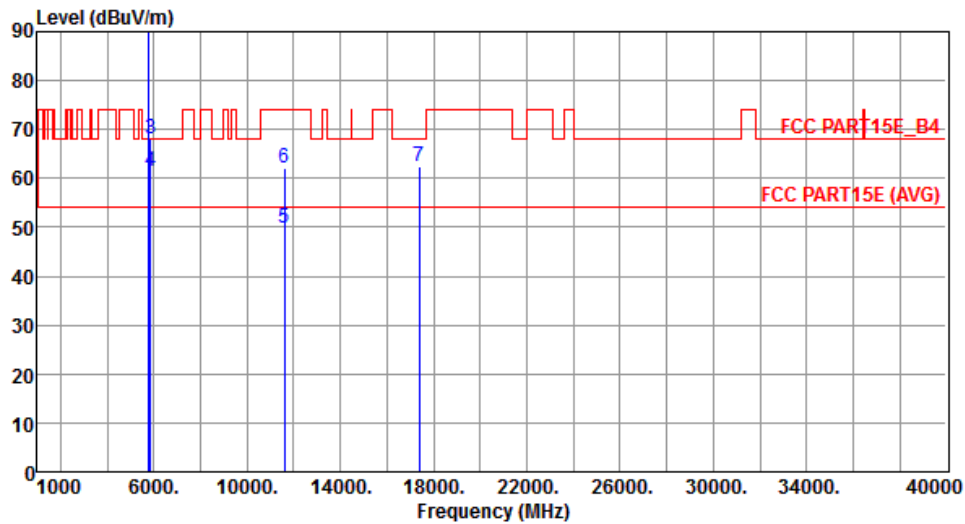
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5795
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	*	5795.00	97.51			92.31	5.20	Average	134	35
2	*	5795.00	107.67			102.47	5.20	Peak	134	35
3		5850.00	68.15	78.20	-10.05	62.89	5.26	Peak	134	35
4		5860.00	61.58	68.20	-6.62	56.31	5.27	Peak	134	35
5		11590.00	49.93	54.00	-4.07	34.66	15.27	Average	150	333
6		11590.00	62.03	74.00	-11.97	46.76	15.27	Peak	150	333
7		17385.00	62.35	68.20	-5.85	43.06	19.29	Peak	163	278

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

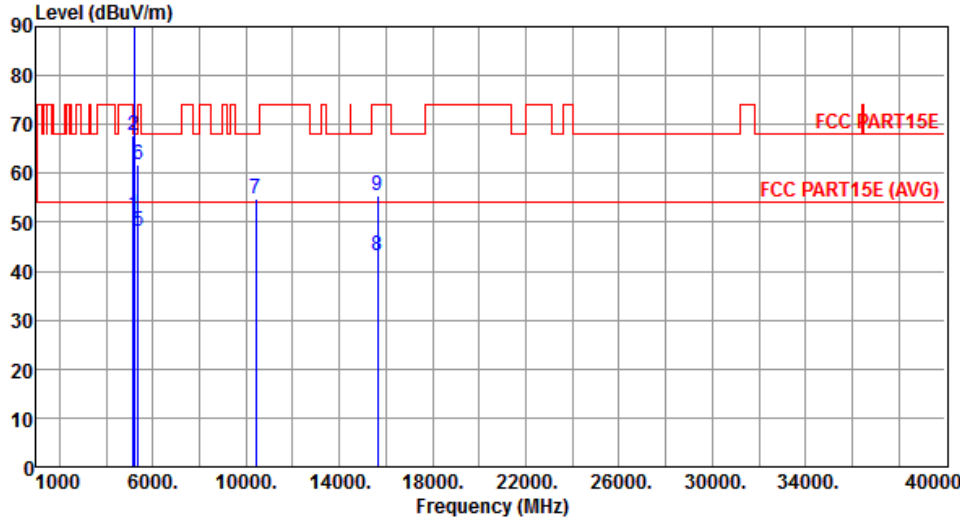
*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

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

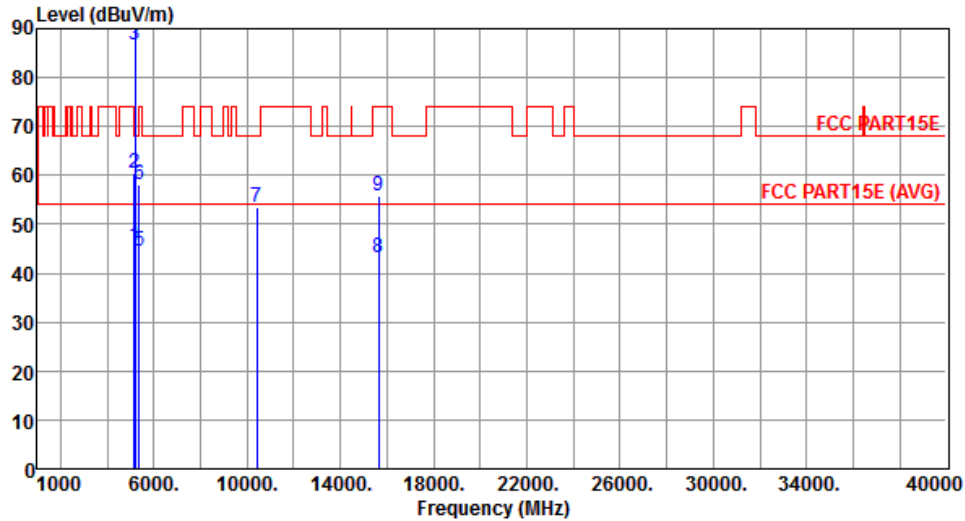
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.61	54.00	-2.39	47.21	4.40	Average	140	60
2	5150.00	67.75	74.00	-6.25	63.35	4.40	Peak	140	60
3 *	5210.00	94.70			90.21	4.49	Average	140	60
4 *	5210.00	106.51			102.02	4.49	Peak	140	60
5	5350.00	48.21	54.00	-5.79	43.57	4.64	Average	140	60
6	5350.00	61.81	74.00	-12.19	57.17	4.64	Peak	140	60
7	10420.00	54.70	68.20	-13.50	40.38	14.32	Peak	100	316
8	15630.00	43.32	54.00	-10.68	28.33	14.99	Average	100	217
9	15630.00	55.39	74.00	-18.61	40.40	14.99	Peak	100	217

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT80	Test Freq. (MHz)	5210
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	5150.00	45.64	54.00	-8.36	41.24	4.40	Average	341	0
2	5150.00	60.50	74.00	-13.50	56.10	4.40	Peak	341	0
3 *	5210.00	86.67			82.18	4.49	Average	348	0
4 *	5210.00	100.55			96.06	4.49	Peak	348	0
5	5350.00	44.36	54.00	-9.64	39.72	4.64	Average	348	0
6	5350.00	58.22	74.00	-15.78	53.58	4.64	Peak	348	0
7	10420.00	53.60	68.20	-14.60	39.28	14.32	Peak	100	185
8	15630.00	43.16	54.00	-10.84	28.17	14.99	Average	100	82
9	15630.00	55.65	74.00	-18.35	40.66	14.99	Peak	100	82

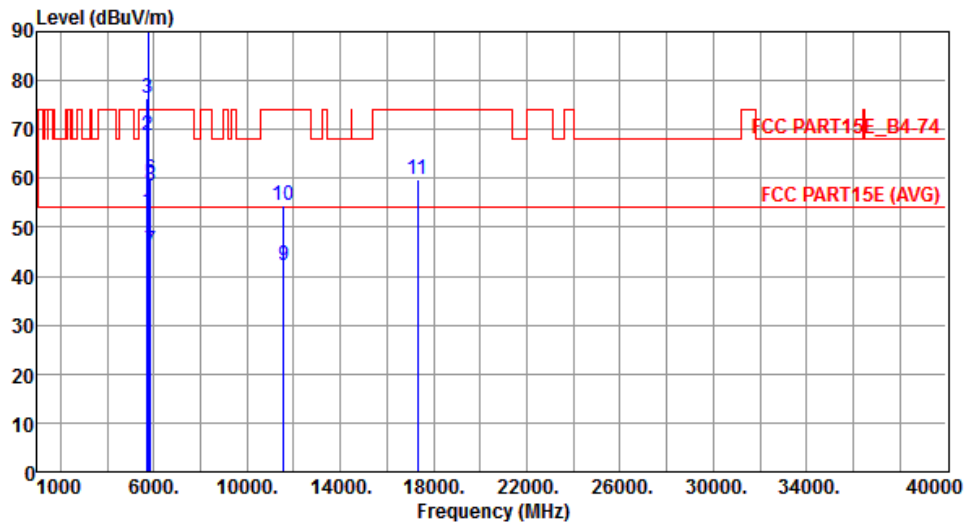
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT80	Test Freq. (MHz)	5775
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	5715.00	53.21	54.00	-0.79	48.11	5.10	Average	100	56
2	5715.00	68.74	74.00	-5.26	63.64	5.10	Peak	100	56
3	5725.00	76.35	78.20	-1.85	71.26	5.09	Peak	246	54
4 *	5775.00	93.19			88.02	5.17	Average	246	54
5 *	5775.00	105.29			100.12	5.17	Peak	246	54
6	5850.00	59.82	78.20	-18.38	54.56	5.26	Peak	100	56
7	5860.00	45.16	54.00	-8.84	39.89	5.27	Average	100	56
8	5860.00	58.58	74.00	-15.42	53.31	5.27	Peak	100	56
9	11550.00	42.24	54.00	-11.76	26.84	15.40	Average	100	245
10	11550.00	54.53	74.00	-19.47	39.13	15.40	Peak	100	245
11	17325.00	59.92	74.00	-14.08	40.79	19.13	Peak	100	112

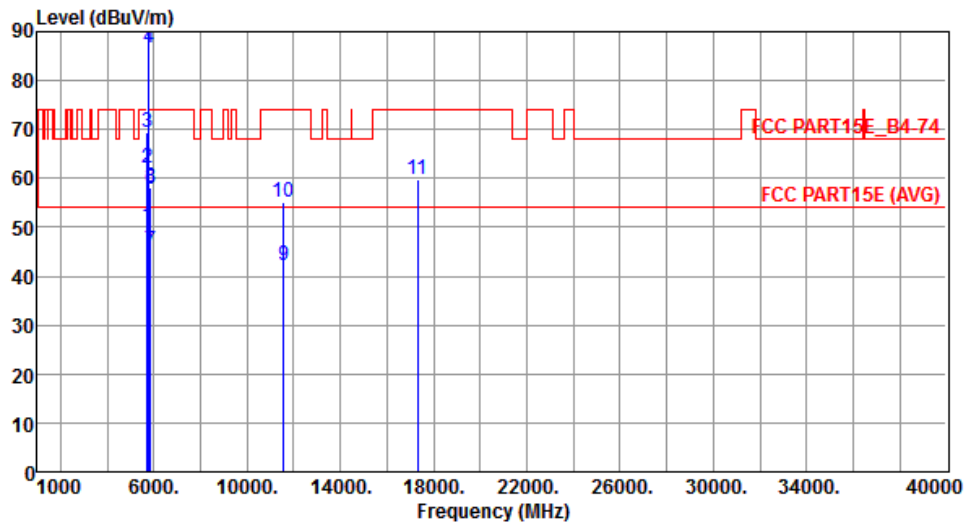
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT80	Test Freq. (MHz)	5775
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	5715.00	50.11	54.00	-3.89	45.01	5.10	Average	100	15
2	5715.00	62.21	74.00	-11.79	57.11	5.10	Peak	100	15
3	5725.00	69.42	78.20	-8.78	64.33	5.09	Peak	303	15
4 *	5775.00	86.71			81.54	5.17	Average	100	15
5 *	5775.00	99.42			94.25	5.17	Peak	100	15
6	5850.00	57.79	78.20	-20.41	52.53	5.26	Peak	100	15
7	5860.00	45.11	54.00	-8.89	39.84	5.27	Average	303	15
8	5860.00	58.19	74.00	-15.81	52.92	5.27	Peak	303	15
9	11550.00	42.19	54.00	-11.81	26.79	15.40	Average	100	134
10	11550.00	55.19	74.00	-18.81	39.79	15.40	Peak	100	134
11	17325.00	59.91	74.00	-14.09	40.78	19.13	Peak	100	312

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

*Factor includes antenna factor , cable loss and amplifier gain

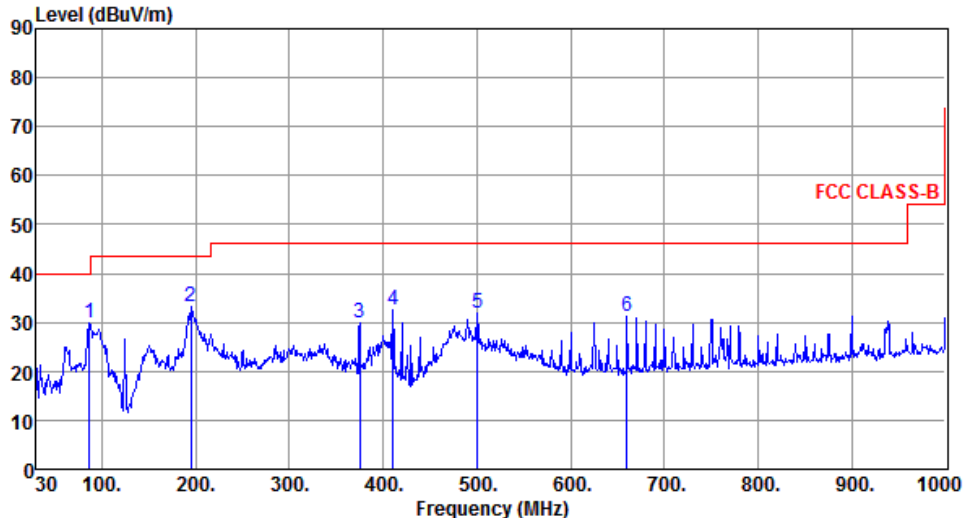
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: "*" is Peak / Average value of fundamental frequency.

Configuration 3: model WAC6502D-E, AC Adapter mode

3.5.10 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	3

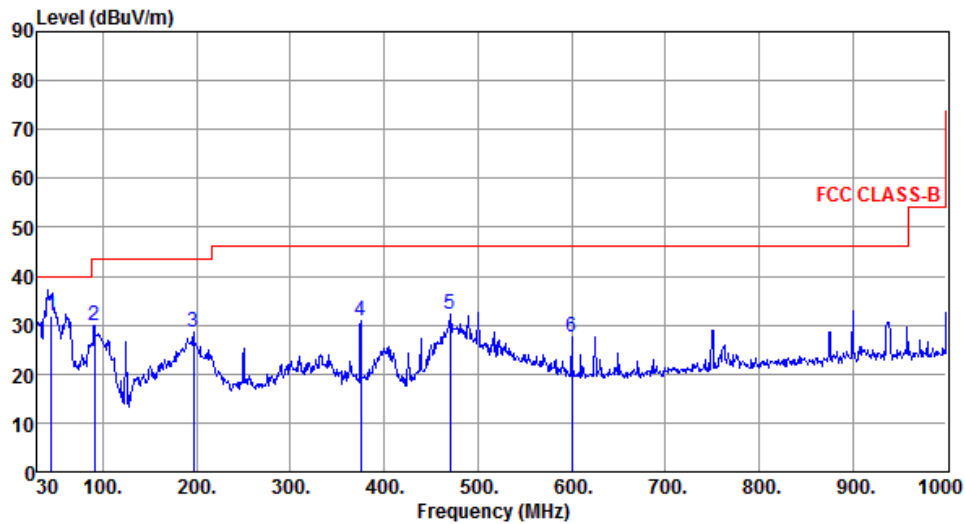


The graph displays the radiated unwanted emissions for the WAC6502D-E model in AC Adapter mode. The y-axis represents the Level in dBuV/m, ranging from 0 to 90. The x-axis represents the Frequency in MHz, ranging from 30 to 1000. A red line indicates the FCC CLASS-B limit, which is 40 dBuV/m from 30 MHz to 100 MHz, 45 dBuV/m from 100 MHz to 1000 MHz. A blue line shows the measured emission level, with six specific peaks labeled 1 through 6. The table below provides the detailed data for these peaks.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	86.26	29.78	40.00	-10.22	52.13	-22.35	Peak	---	---
2	194.90	33.15	43.50	-10.35	52.34	-19.19	Peak	---	---
3	375.32	29.77	46.00	-16.23	43.87	-14.10	Peak	---	---
4	410.24	32.42	46.00	-13.58	45.58	-13.16	Peak	---	---
5	500.45	31.80	46.00	-14.20	42.91	-11.11	Peak	---	---
6	660.50	31.08	46.00	-14.92	39.62	-8.54	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	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	44.86	31.78	40.00	-8.22	48.10	-16.32	QP	100	228
2	91.11	29.89	43.50	-13.61	52.70	-22.81	Peak	---	---
3	196.84	28.54	43.50	-14.96	47.77	-19.23	Peak	---	---
4	375.32	30.73	46.00	-15.27	44.83	-14.10	Peak	---	---
5	470.38	32.31	46.00	-13.69	44.05	-11.74	Peak	---	---
6	600.36	27.73	46.00	-18.27	37.24	-9.51	Peak	---	---

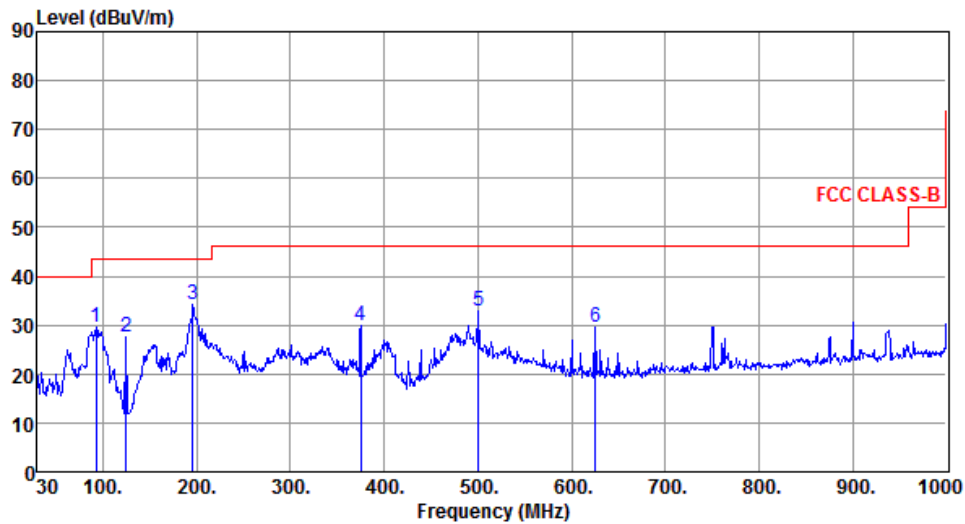
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	93.05	29.51	43.50	-13.99	51.99	-22.48	Peak	---	---
2	125.06	27.44	43.50	-16.06	45.86	-18.42	Peak	---	---
3	195.87	34.30	43.50	-9.20	53.51	-19.21	Peak	---	---
4	375.32	29.84	46.00	-16.16	43.94	-14.10	Peak	---	---
5	500.45	33.00	46.00	-13.00	44.11	-11.11	Peak	---	---
6	625.58	29.46	46.00	-16.54	38.54	-9.08	Peak	---	---

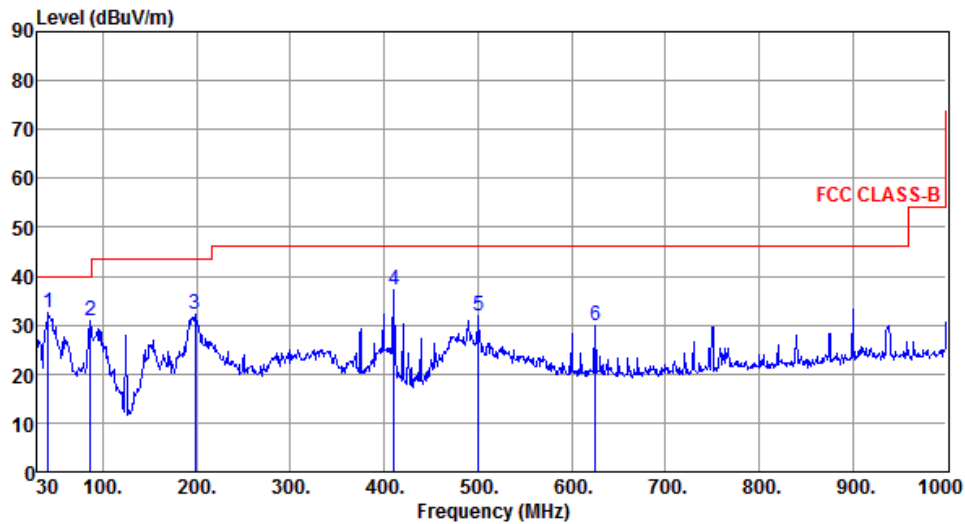
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	3



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	41.64	32.57	40.00	-7.43	49.24	-16.67	Peak	---	---
2	86.26	31.04	40.00	-8.96	53.39	-22.35	Peak	---	---
3	198.78	32.22	43.50	-11.28	51.48	-19.26	Peak	---	---
4	410.24	37.31	46.00	-8.69	50.47	-13.16	Peak	---	---
5	500.45	32.00	46.00	-14.00	43.11	-11.11	Peak	---	---
6	625.58	29.90	46.00	-16.10	38.98	-9.08	Peak	---	---

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

*Factor includes antenna factor , cable loss and amplifier gain

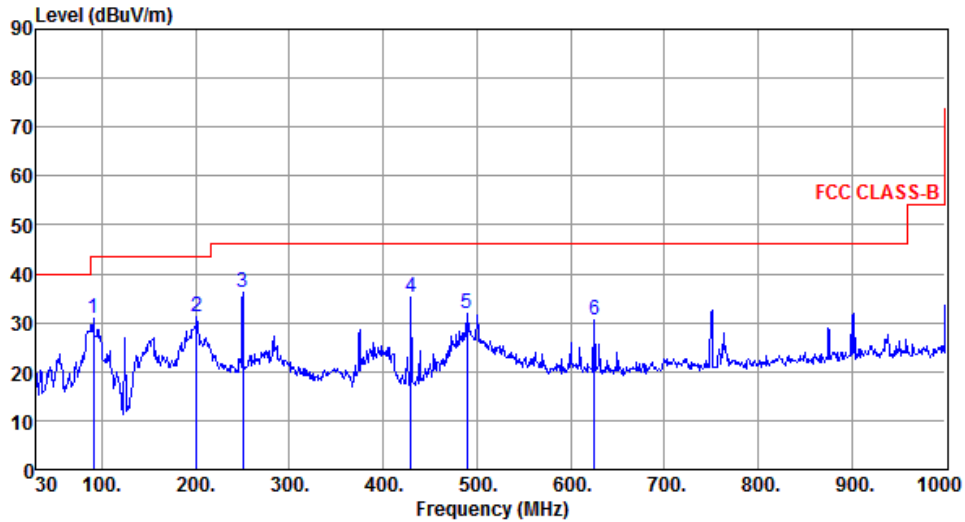
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

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

Configuration 4: model WAC6502D-E, POE mode

3.5.11 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	4

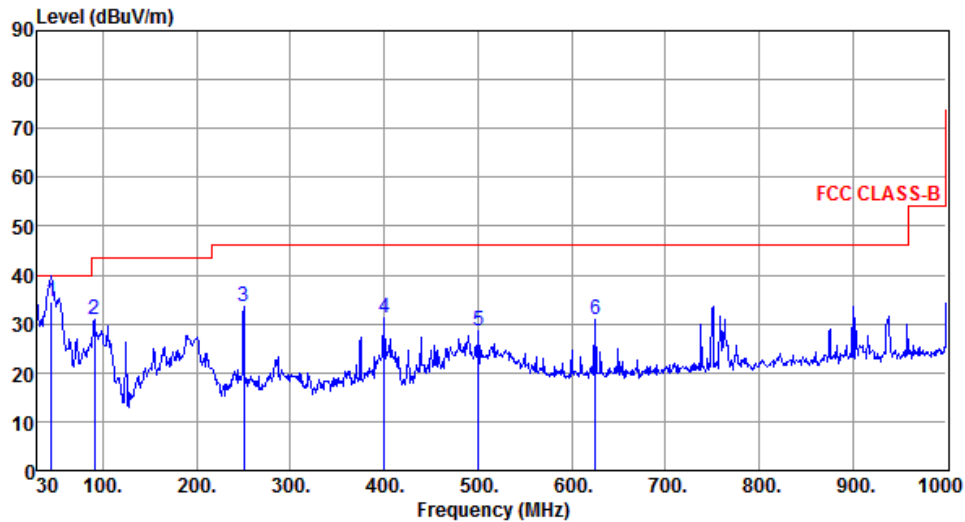


The graph displays the radiated unwanted emissions of the transmitter. The y-axis represents the Level in dBuV/m, ranging from 0 to 90. The x-axis represents the Frequency in MHz, ranging from 30 to 1000. A red line indicates the FCC CLASS-B limit, which is 40 dBuV/m from 30 MHz to 100 MHz, 45 dBuV/m from 100 MHz to 1000 MHz, and 70 dBuV/m at 1000 MHz. Six peaks are identified and numbered 1 through 6. The emission level for each peak is shown in the table below.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	91.11	30.80	43.50	-12.70	53.61	-22.81	Peak	---	---
2	200.72	31.07	43.50	-12.43	50.36	-19.29	Peak	---	---
3	250.19	36.12	46.00	-9.88	53.83	-17.71	Peak	---	---
4	429.64	35.34	46.00	-10.66	48.02	-12.68	Peak	---	---
5	489.78	31.80	46.00	-14.20	43.13	-11.33	Peak	---	---
6	625.58	30.43	46.00	-15.57	39.51	-9.08	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	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	44.67	34.66	40.00	-5.34	51.00	-16.34	QP	104	3
2	91.11	31.01	43.50	-12.49	53.82	-22.81	Peak	---	---
3	250.19	33.58	46.00	-12.42	51.29	-17.71	Peak	---	---
4	400.54	31.11	46.00	-14.89	44.51	-13.40	Peak	---	---
5	500.45	28.50	46.00	-17.50	39.61	-11.11	Peak	---	---
6	625.58	30.73	46.00	-15.27	39.81	-9.08	Peak	---	---

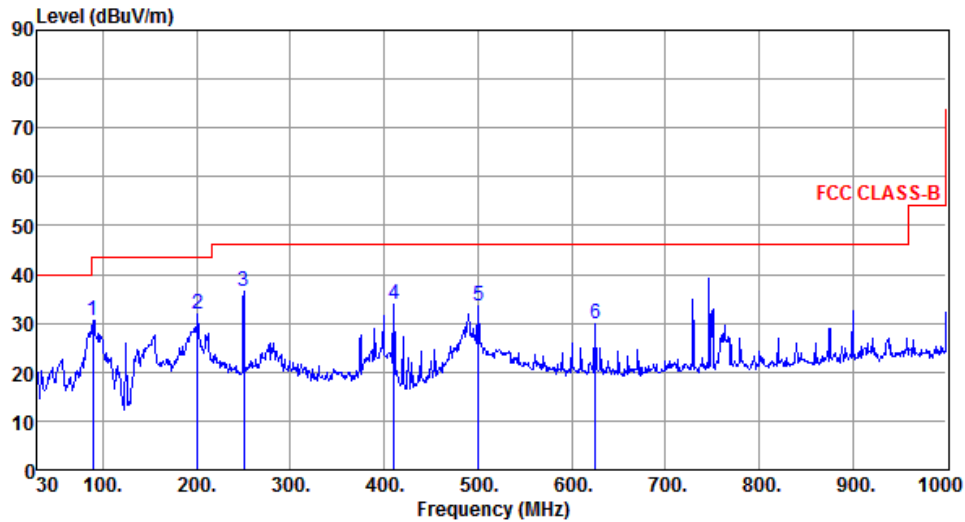
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*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	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	89.17	30.55	43.50	-12.95	53.40	-22.85	Peak	---	---
2	200.72	31.77	43.50	-11.73	51.06	-19.29	Peak	---	---
3	250.19	36.37	46.00	-9.63	54.08	-17.71	Peak	---	---
4	410.24	33.96	46.00	-12.04	47.12	-13.16	Peak	---	---
5	500.45	33.70	46.00	-12.30	44.81	-11.11	Peak	---	---
6	625.58	29.77	46.00	-16.23	38.85	-9.08	Peak	---	---

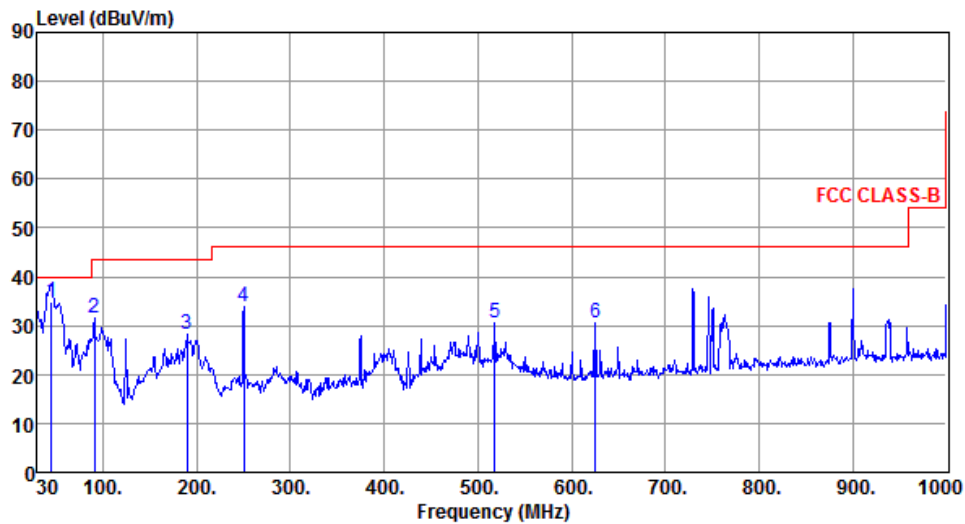
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	45.44	34.99	40.00	-5.01	51.30	-16.31	QP	100	230
2	91.11	31.42	43.50	-12.08	54.23	-22.81	Peak	---	---
3	190.05	28.10	43.50	-15.40	47.21	-19.11	Peak	---	---
4	250.19	33.73	46.00	-12.27	51.44	-17.71	Peak	---	---
5	517.91	30.41	46.00	-15.59	41.31	-10.90	Peak	---	---
6	625.58	30.63	46.00	-15.37	39.71	-9.08	Peak	---	---

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

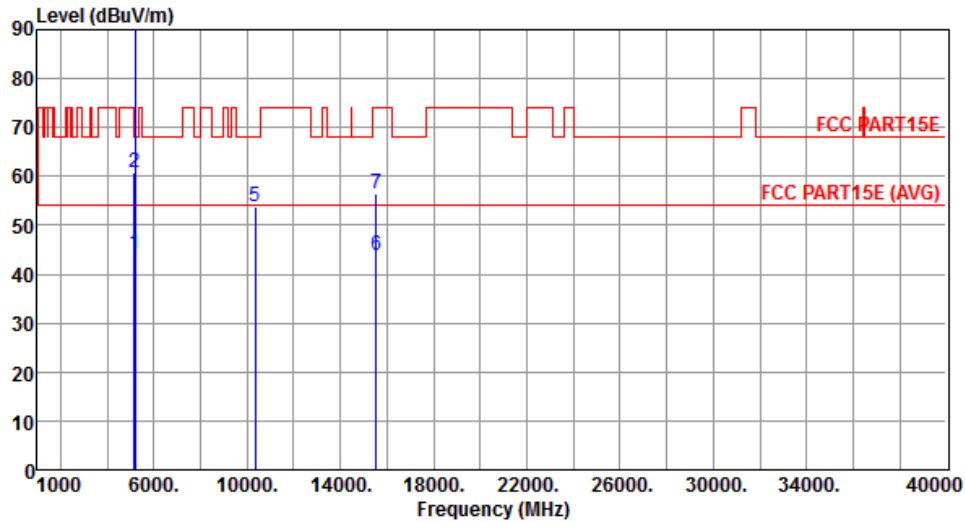
*Factor includes antenna factor , cable loss and amplifier gain

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.

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

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal	Test Configuration	4



	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	44.30	54.00	-9.70	39.90	4.40	Average	100	258
2	5150.00	60.82	74.00	-13.18	56.42	4.40	Peak	100	258
3 *	5180.00	93.78			89.34	4.44	Average	100	258
4 *	5180.00	105.70			101.26	4.44	Peak	100	258
5	10360.00	53.91	68.20	-14.29	39.71	14.20	Peak	100	293
6	15540.00	43.95	54.00	-10.05	28.84	15.11	Average	100	108
7	15540.00	56.46	74.00	-17.54	41.35	15.11	Peak	100	108

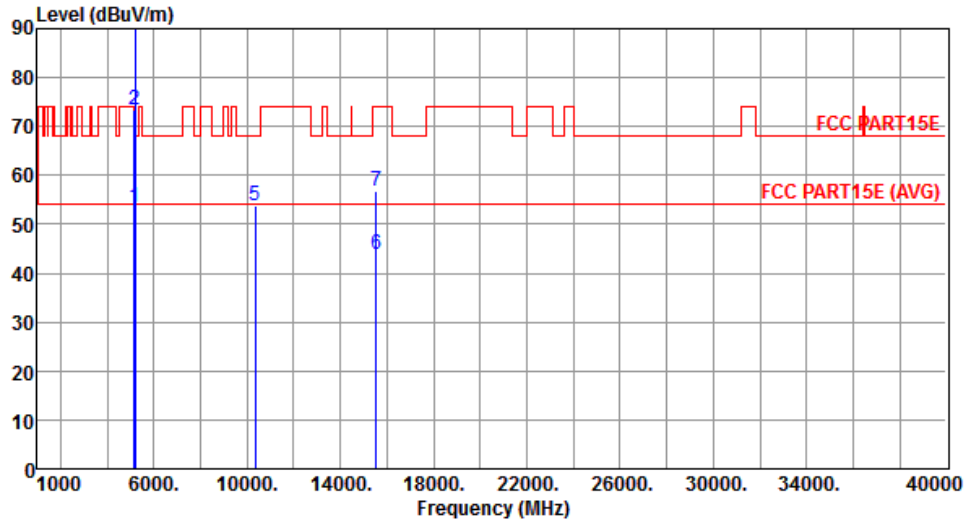
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical	Test Configuration	4



	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	53.42	54.00	-0.58	49.02	4.40	Average	170	230
2	5150.00	73.47	74.00	-0.53	69.07	4.40	Peak	170	230
3 *	5180.00	108.11			103.67	4.44	Average	170	240
4 *	5180.00	121.20			116.76	4.44	Peak	170	240
5	10360.00	53.76	68.20	-14.44	39.56	14.20	Peak	100	315
6	15540.00	43.96	54.00	-10.04	28.85	15.11	Average	100	227
7	15540.00	56.86	74.00	-17.14	41.75	15.11	Peak	100	227

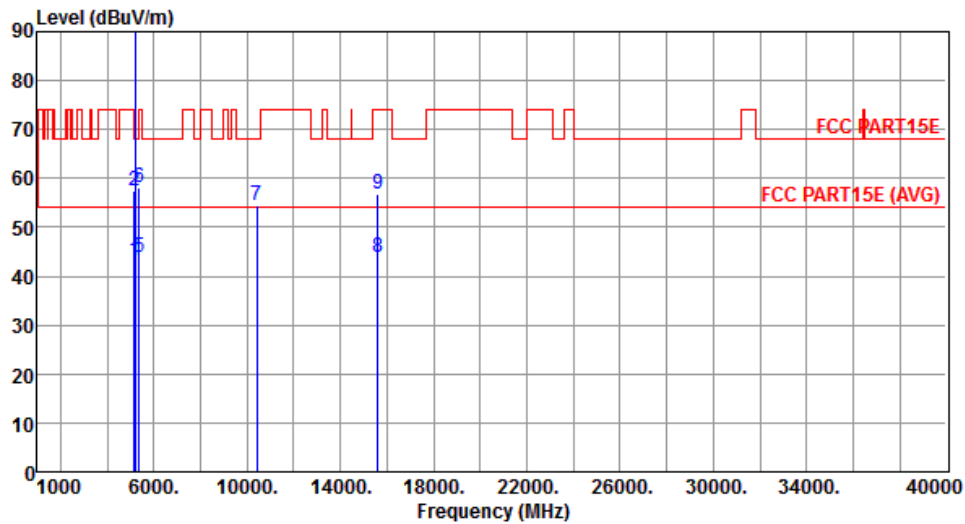
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal	Test Configuration	4



	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	43.32	54.00	-10.68	38.92	4.40	Average	113	252
2	5150.00	57.36	74.00	-16.64	52.96	4.40	Peak	113	252
3 *	5200.00	97.98			93.50	4.48	Average	113	252
4 *	5200.00	109.93			105.45	4.48	Peak	113	252
5	5350.00	43.81	54.00	-10.19	39.17	4.64	Average	113	252
6	5350.00	58.17	74.00	-15.83	53.53	4.64	Peak	113	252
7	10400.00	54.60	68.20	-13.60	40.32	14.28	Peak	100	15
8	15600.00	43.95	54.00	-10.05	28.93	15.02	Average	100	153
9	15600.00	56.79	74.00	-17.21	41.77	15.02	Peak	100	153

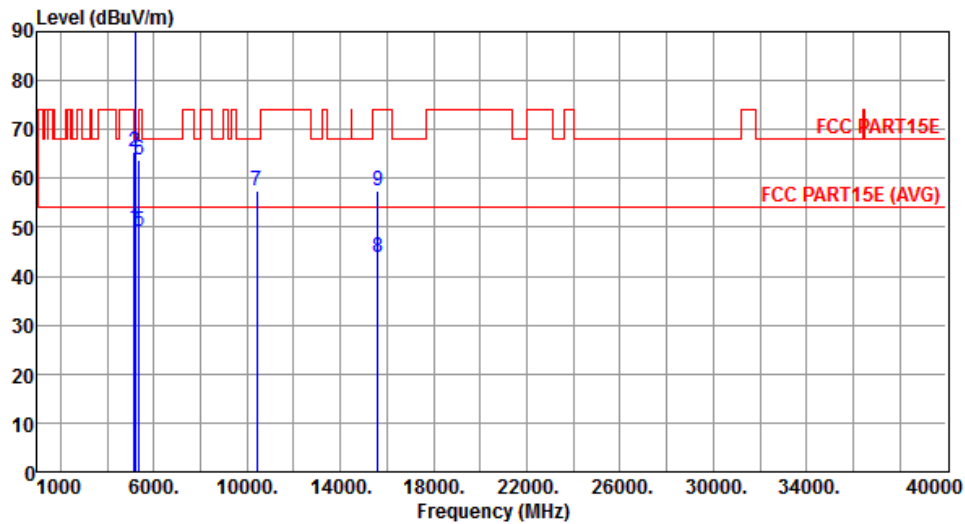
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical	Test Configuration	4



	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	49.66	54.00	-4.34	45.26	4.40	Average	164	247
2	5150.00	65.56	74.00	-8.44	61.16	4.40	Peak	164	247
3 *	5200.00	110.48			106.00	4.48	Average	164	247
4 *	5200.00	122.94			118.46	4.48	Peak	164	247
5	5350.00	49.22	54.00	-4.78	44.58	4.64	Average	164	247
6	5350.00	63.66	74.00	-10.34	59.02	4.64	Peak	164	247
7	10400.00	57.31	68.20	-10.89	43.03	14.28	Peak	142	0
8	15600.00	43.93	54.00	-10.07	28.91	15.02	Average	222	268
9	15600.00	57.32	74.00	-16.68	42.30	15.02	Peak	222	268

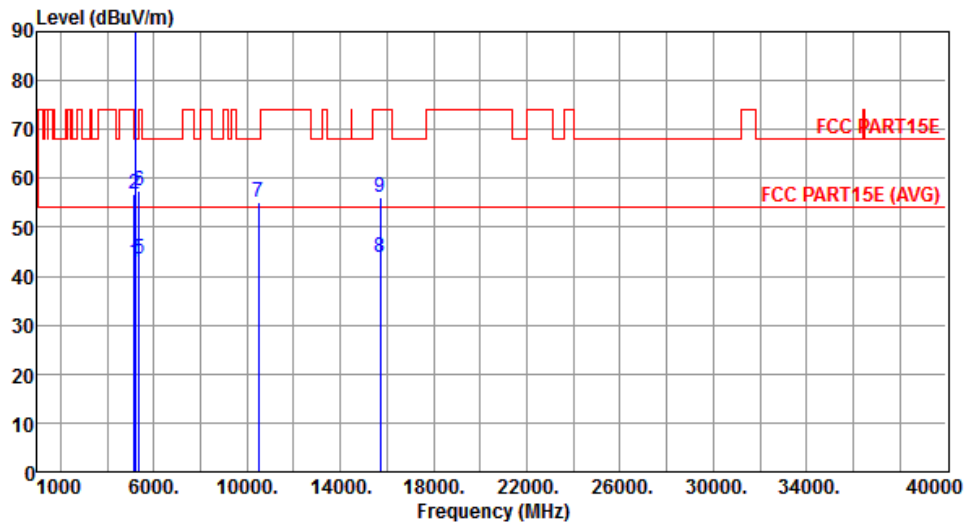
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	4



	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	42.73	54.00	-11.27	38.33	4.40	Average	128	254
2	5150.00	56.79	74.00	-17.21	52.39	4.40	Peak	128	254
3 *	5240.00	97.76			93.24	4.52	Average	128	254
4 *	5240.00	110.14			105.62	4.52	Peak	128	254
5	5350.00	43.44	54.00	-10.56	38.80	4.64	Average	128	254
6	5350.00	57.31	74.00	-16.69	52.67	4.64	Peak	128	254
7	10480.00	55.07	68.20	-13.13	40.64	14.43	Peak	100	8
8	15720.00	43.92	54.00	-10.08	29.05	14.87	Average	100	261
9	15720.00	56.18	74.00	-17.82	41.31	14.87	Peak	100	261

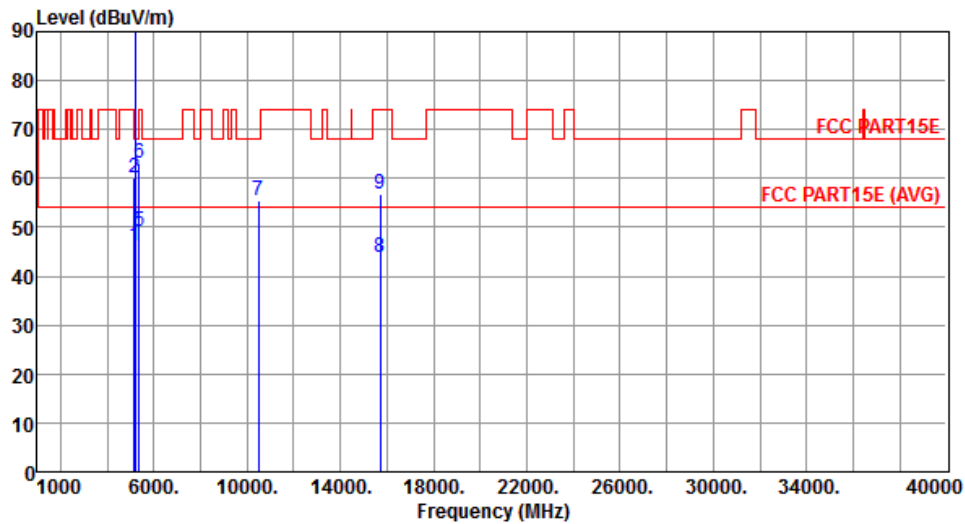
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical	Test Configuration	4



	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	46.08	54.00	-7.92	41.68	4.40	Average	174	246
2	5150.00	60.12	74.00	-13.88	55.72	4.40	Peak	174	246
3 *	5240.00	109.97			105.45	4.52	Average	174	246
4 *	5240.00	122.85			118.33	4.52	Peak	174	246
5	5350.00	49.26	54.00	-4.74	44.62	4.64	Average	174	285
6	5350.00	62.96	74.00	-11.04	58.32	4.64	Peak	174	285
7	10480.00	55.46	68.20	-12.74	41.03	14.43	Peak	104	16
8	15720.00	43.72	54.00	-10.28	28.85	14.87	Average	100	312
9	15720.00	56.95	74.00	-17.05	42.08	14.87	Peak	100	312

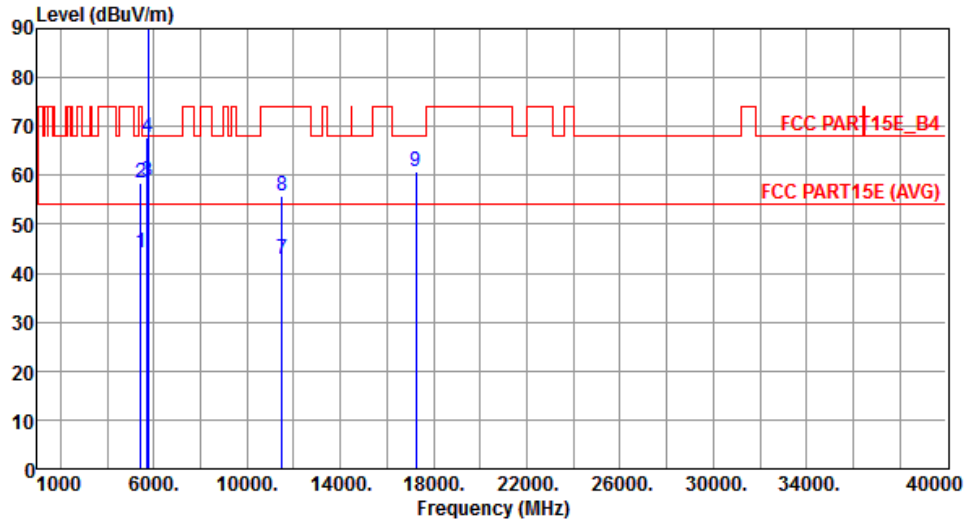
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	4



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level	dBuV/m	dB	reading	dB		High	Table
		dBuV/m			dBuV			cm	deg
1	5420.00	44.10	54.00	-9.90	39.37	4.73	Average	208	116
2	5420.00	58.39	74.00	-15.61	53.66	4.73	Peak	208	116
3	5715.00	58.75	68.20	-9.45	53.65	5.10	Peak	206	116
4	5725.00	67.90	78.20	-10.30	62.81	5.09	Peak	206	116
5 *	5745.00	95.42			90.28	5.14	Average	206	116
6 *	5745.00	107.71			102.57	5.14	Peak	206	116
7	11490.00	42.99	54.00	-11.01	27.46	15.53	Average	100	223
8	11490.00	55.87	74.00	-18.13	40.34	15.53	Peak	100	223
9	17235.00	60.66	68.20	-7.54	41.79	18.87	Peak	100	175

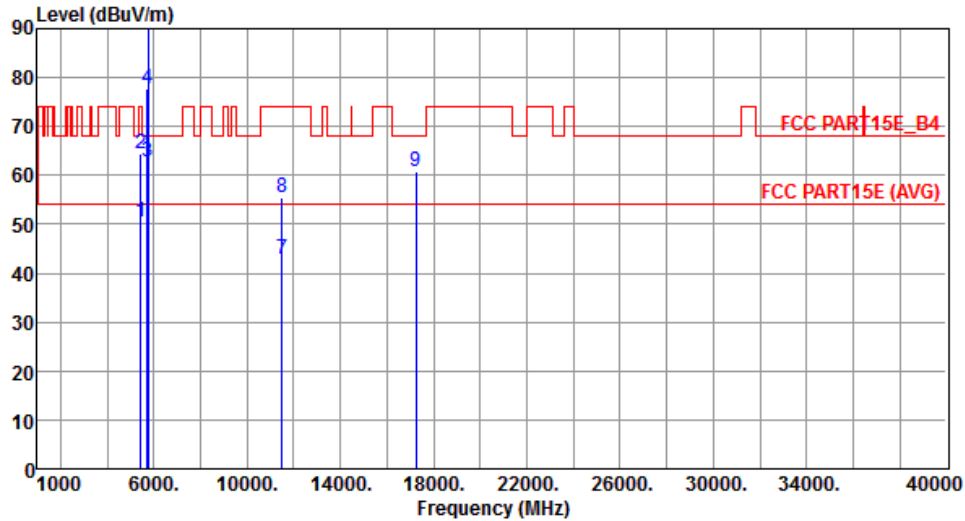
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5420.00	50.46	54.00	-3.54	45.73	4.73	Average	204	238
2	5420.00	64.58	74.00	-9.42	59.85	4.73	Peak	204	238
3	5715.00	62.74	68.20	-5.46	57.64	5.10	Peak	169	237
4	5725.00	77.66	78.20	-0.54	72.57	5.09	Peak	169	237
5 *	5745.00	105.25			100.11	5.14	Average	169	237
6 *	5745.00	117.64			112.50	5.14	Peak	169	237
7	11490.00	43.00	54.00	-11.00	27.47	15.53	Average	100	86
8	11490.00	55.50	74.00	-18.50	39.97	15.53	Peak	100	86
9	17235.00	60.80	68.20	-7.40	41.93	18.87	Peak	100	261

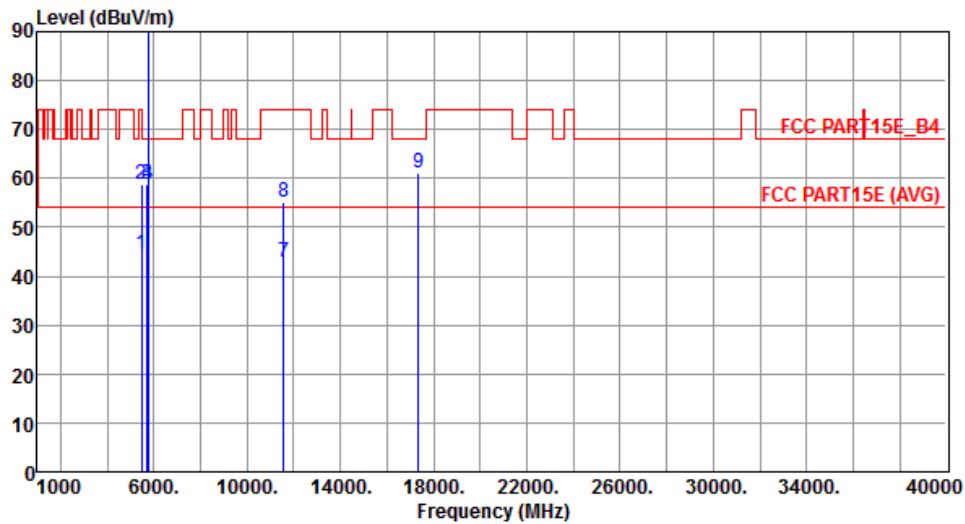
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5458.00	44.52	54.00	-9.48	39.74	4.78	Average	117	105
2	5458.00	58.72	74.00	-15.28	53.94	4.78	Peak	117	105
3	5715.00	58.88	68.20	-9.32	53.78	5.10	Peak	120	115
4	5725.00	58.70	78.20	-19.50	53.61	5.09	Peak	120	115
5 *	5785.00	97.77			92.58	5.19	Average	120	115
6 *	5785.00	110.16			104.97	5.19	Peak	120	115
7	11570.00	42.70	54.00	-11.30	27.37	15.33	Average	100	289
8	11570.00	55.22	74.00	-18.78	39.89	15.33	Peak	100	289
9	17355.00	60.96	68.20	-7.24	41.75	19.21	Peak	100	83

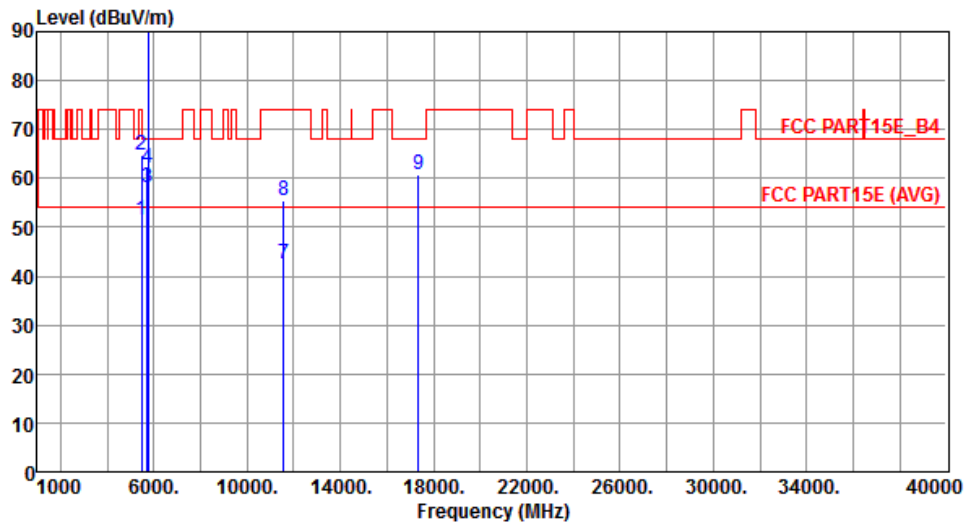
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5458.00	51.56	54.00	-2.44	46.78	4.78	Average	172	246
2	5458.00	64.70	74.00	-9.30	59.92	4.78	Peak	172	246
3	5715.00	58.09	68.20	-10.11	52.99	5.10	Peak	172	246
4	5725.00	62.03	78.20	-16.17	56.94	5.09	Peak	172	246
5 *	5785.00	108.58			103.39	5.19	Average	172	246
6 *	5785.00	121.11			115.92	5.19	Peak	172	246
7	11570.00	42.63	54.00	-11.37	27.30	15.33	Average	100	228
8	11570.00	55.38	74.00	-18.62	40.05	15.33	Peak	100	228
9	17355.00	60.75	68.20	-7.45	41.54	19.21	Peak	100	45

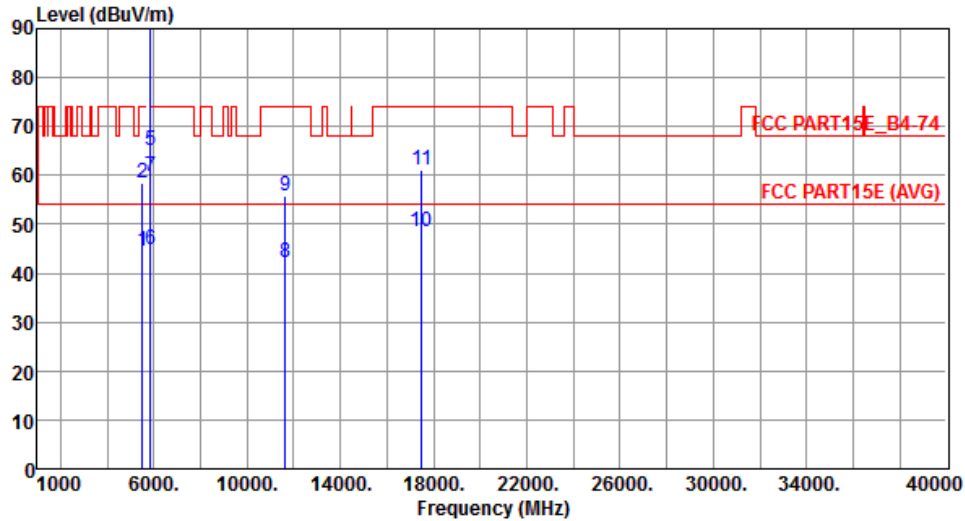
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	44.56	54.00	-9.44	39.72	4.84	Average	118	111
2	5500.00	58.48	74.00	-15.52	53.64	4.84	Peak	118	111
3 *	5825.00	96.62			91.38	5.24	Average	108	111
4 *	5825.00	109.26			104.02	5.24	Peak	108	111
5	5850.00	65.23	78.20	-12.97	59.97	5.26	Peak	108	111
6	5860.00	44.70	54.00	-9.30	39.43	5.27	Average	108	111
7	5860.00	59.81	74.00	-14.19	54.54	5.27	Peak	108	111
8	11650.00	42.22	54.00	-11.78	27.13	15.09	Average	100	111
9	11650.00	55.68	74.00	-18.32	40.59	15.09	Peak	100	111
10	17475.00	48.53	54.00	-5.47	28.98	19.55	Average	100	264
11	17475.00	61.13	74.00	-12.87	41.58	19.55	Peak	100	264

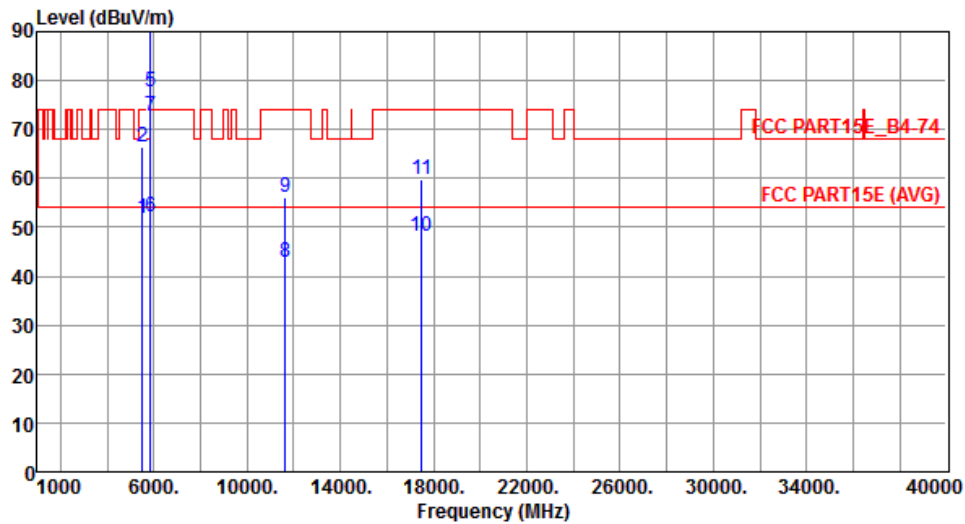
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	51.79	54.00	-2.21	46.95	4.84	Average	195	238
2	5500.00	66.36	74.00	-7.64	61.52	4.84	Peak	195	238
3 *	5825.00	108.88			103.64	5.24	Average	172	240
4 *	5825.00	121.85			116.61	5.24	Peak	172	240
5	5850.00	77.67	78.20	-0.53	72.41	5.26	Peak	172	240
6	5860.00	52.12	54.00	-1.88	46.85	5.27	Average	172	240
7	5860.00	72.74	74.00	-1.26	67.47	5.27	Peak	172	240
8	11650.00	42.77	54.00	-11.23	27.68	15.09	Average	100	162
9	11650.00	56.16	74.00	-17.84	41.07	15.09	Peak	100	162
10	17475.00	48.17	54.00	-5.83	28.62	19.55	Average	100	238
11	17475.00	59.73	74.00	-14.27	40.18	19.55	Peak	100	238

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

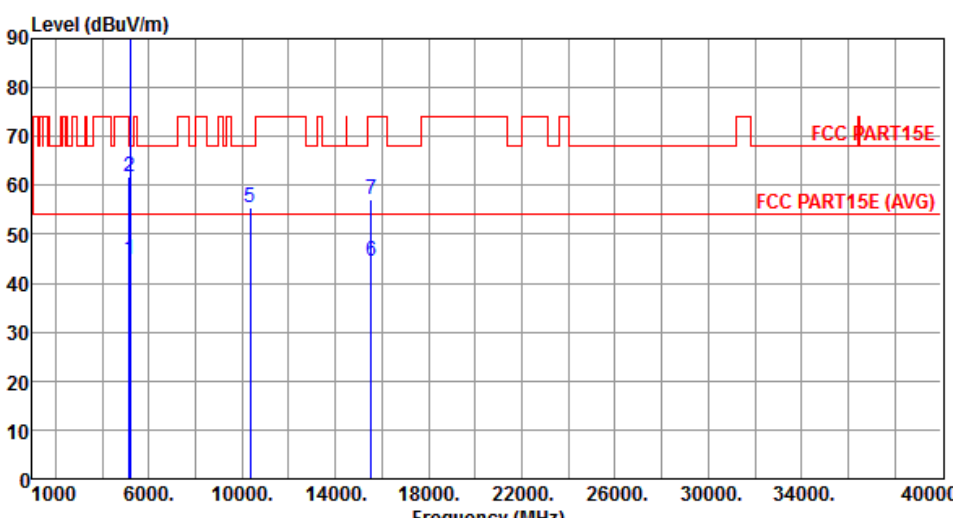
*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

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

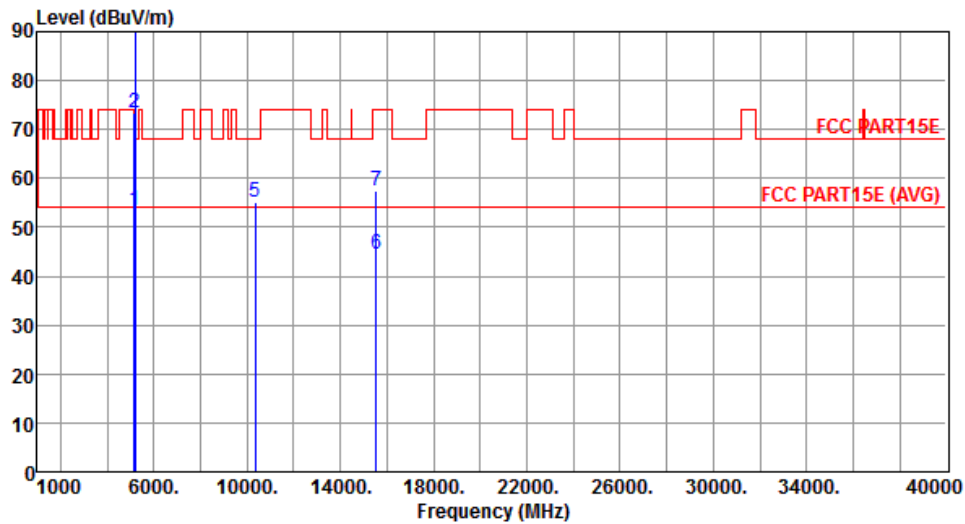
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal	Test Configuration	4



	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	44.98	54.00	-9.02	40.58	4.40	Average	114	253
2	5150.00	61.79	74.00	-12.21	57.39	4.40	Peak	114	253
3 *	5180.00	93.07			88.63	4.44	Average	114	253
4 *	5180.00	105.74			101.30	4.44	Peak	114	253
5	10360.00	55.44	68.20	-12.76	41.24	14.20	Peak	112	219
6	15540.00	44.44	54.00	-9.56	29.33	15.11	Average	105	76
7	15540.00	57.12	74.00	-16.88	42.01	15.11	Peak	105	76

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical	Test Configuration	4



	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	53.45	54.00	-0.55	49.05	4.40	Average	146	242
2	5150.00	73.50	74.00	-0.50	69.10	4.40	Peak	146	242
3 *	5180.00	105.66			101.22	4.44	Average	146	242
4 *	5180.00	118.41			113.97	4.44	Peak	146	242
5	10360.00	55.22	68.20	-12.98	41.02	14.20	Peak	165	358
6	15540.00	44.43	54.00	-9.57	29.32	15.11	Average	100	298
7	15540.00	57.46	74.00	-16.54	42.35	15.11	Peak	100	298

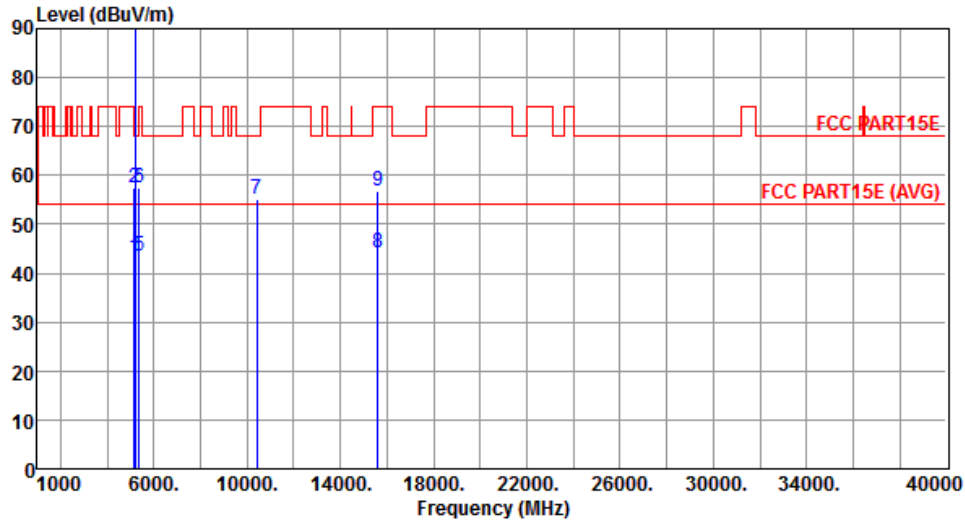
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal	Test Configuration	4



	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	43.15	54.00	-10.85	38.75	4.40	Average	111	258
2	5150.00	57.52	74.00	-16.48	53.12	4.40	Peak	111	258
3 *	5200.00	97.14			92.66	4.48	Average	111	258
4 *	5200.00	109.63			105.15	4.48	Peak	111	258
5	5350.00	43.66	54.00	-10.34	39.02	4.64	Average	111	258
6	5350.00	57.54	74.00	-16.46	52.90	4.64	Peak	111	258
7	10400.00	55.12	68.20	-13.08	40.84	14.28	Peak	100	217
8	15600.00	44.02	54.00	-9.98	29.00	15.02	Average	100	134
9	15600.00	56.75	74.00	-17.25	41.73	15.02	Peak	100	134

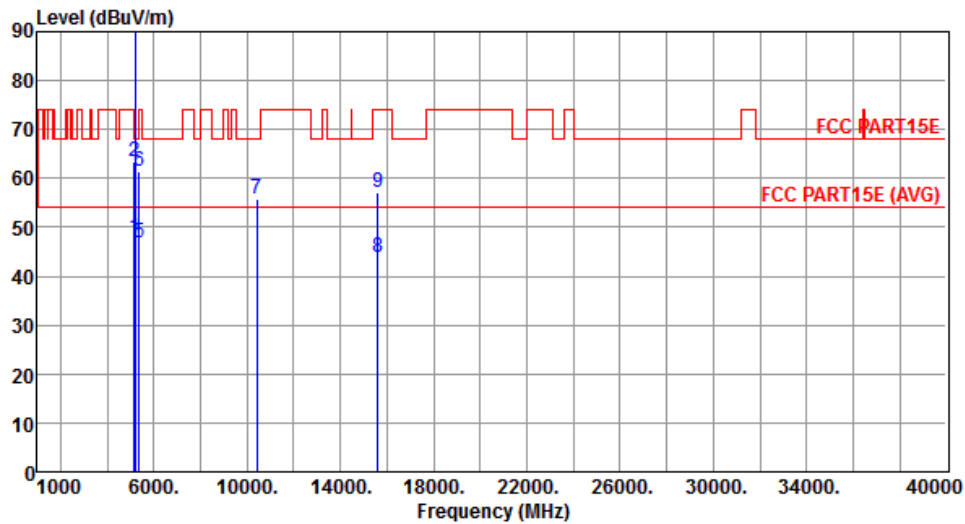
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical	Test Configuration	4



	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	47.93	54.00	-6.07	43.53	4.40	Average	176	244
2	5150.00	63.36	74.00	-10.64	58.96	4.40	Peak	176	244
3 *	5200.00	109.86			105.38	4.48	Average	176	244
4 *	5200.00	122.45			117.97	4.48	Peak	176	244
5	5350.00	46.96	54.00	-7.04	42.32	4.64	Average	176	244
6	5350.00	61.43	74.00	-12.57	56.79	4.64	Peak	176	244
7	10400.00	55.78	68.20	-12.42	41.50	14.28	Peak	100	108
8	15600.00	43.96	54.00	-10.04	28.94	15.02	Average	100	238
9	15600.00	57.17	74.00	-16.83	42.15	15.02	Peak	100	238

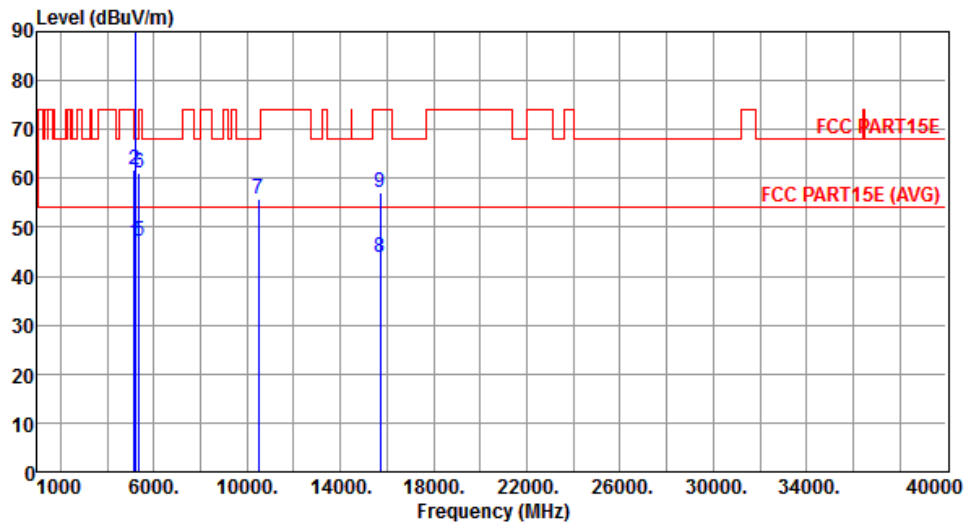
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.81	54.00	-7.19	42.41	4.40	Average	100	252
2	5150.00	61.73	74.00	-12.27	57.33	4.40	Peak	100	252
3 *	5240.00	97.83			93.31	4.52	Average	100	252
4 *	5240.00	110.14			105.62	4.52	Peak	100	252
5	5350.00	47.05	54.00	-6.95	42.41	4.64	Average	100	252
6	5350.00	61.23	74.00	-12.77	56.59	4.64	Peak	100	252
7	10480.00	55.79	68.20	-12.41	41.36	14.43	Peak	100	318
8	15720.00	43.98	54.00	-10.02	29.11	14.87	Average	100	238
9	15720.00	57.08	74.00	-16.92	42.21	14.87	Peak	100	238

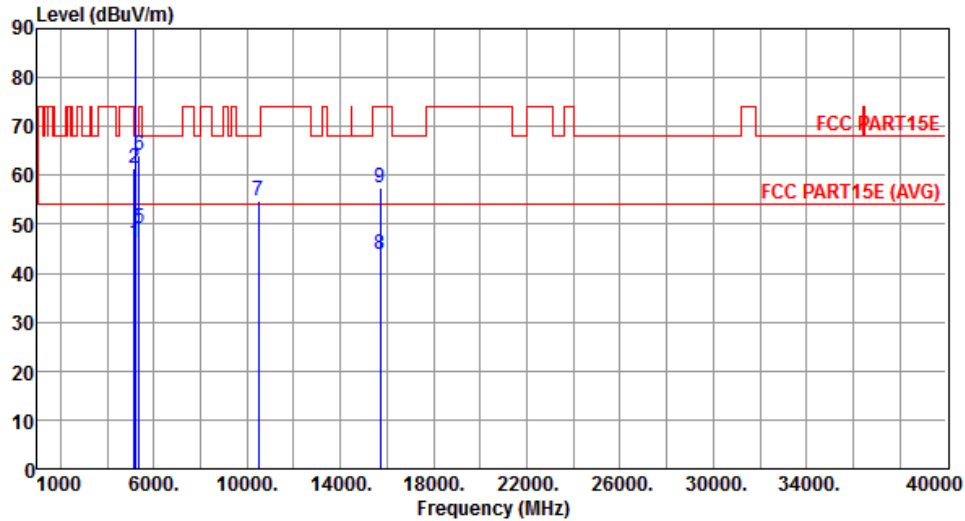
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical	Test Configuration	4



	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	46.02	54.00	-7.98	41.62	4.40	Average	174	246
2	5150.00	61.40	74.00	-12.60	57.00	4.40	Peak	174	246
3 *	5240.00	109.97			105.45	4.52	Average	174	246
4 *	5240.00	122.70			118.18	4.52	Peak	174	246
5	5350.00	49.05	54.00	-4.95	44.41	4.64	Average	174	246
6	5350.00	64.25	74.00	-9.75	59.61	4.64	Peak	174	246
7	10480.00	54.92	68.20	-13.28	40.49	14.43	Peak	100	123
8	15720.00	43.95	54.00	-10.05	29.08	14.87	Average	100	224
9	15720.00	57.36	74.00	-16.64	42.49	14.87	Peak	100	224

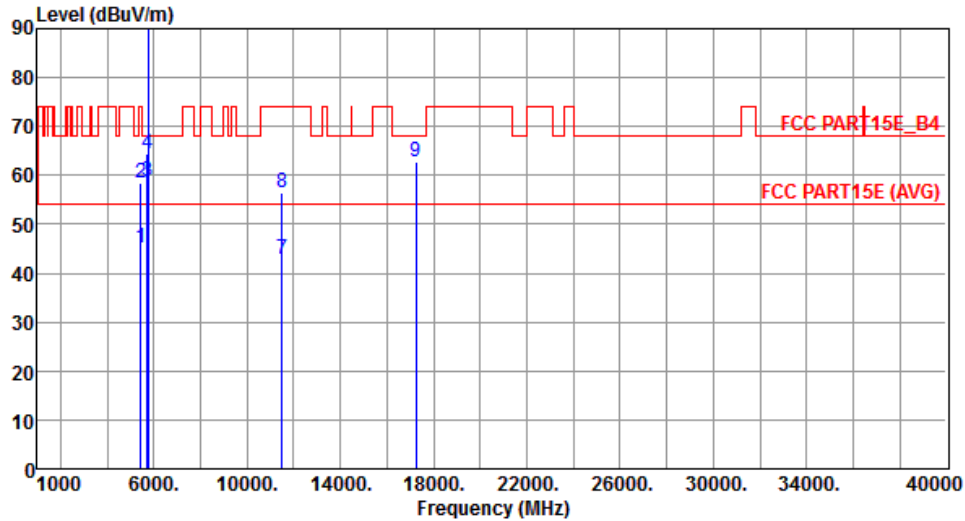
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5420.00	45.02	54.00	-8.98	40.29	4.73	Average	204	120
2	5420.00	58.32	74.00	-15.68	53.59	4.73	Peak	204	120
3	5715.00	58.62	68.20	-9.58	53.52	5.10	Peak	204	120
4	5725.00	64.47	78.20	-13.73	59.38	5.09	Peak	204	120
5 *	5745.00	93.23			88.09	5.14	Average	204	120
6 *	5745.00	106.18			101.04	5.14	Peak	204	120
7	11490.00	42.88	54.00	-11.12	27.35	15.53	Average	100	236
8	11490.00	56.56	74.00	-17.44	41.03	15.53	Peak	100	236
9	17235.00	62.85	68.20	-5.35	43.98	18.87	Peak	100	86

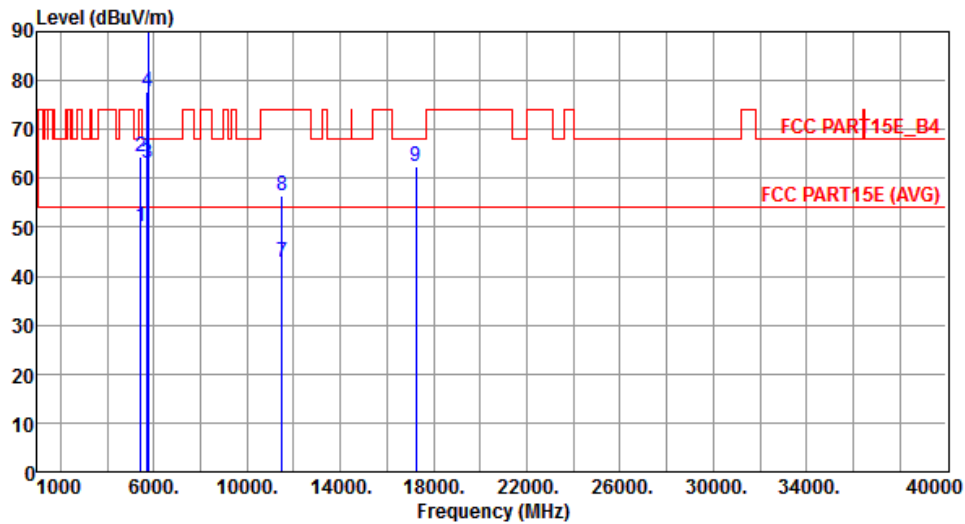
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5420.00	50.24	54.00	-3.76	45.51	4.73	Average	181	237
2	5420.00	64.28	74.00	-9.72	59.55	4.73	Peak	181	237
3	5715.00	63.04	68.20	-5.16	57.94	5.10	Peak	181	237
4	5725.00	77.65	78.20	-0.55	72.56	5.09	Peak	181	237
5 *	5745.00	103.99			98.85	5.14	Average	181	237
6 *	5745.00	116.97			111.83	5.14	Peak	181	237
7	11490.00	42.75	54.00	-11.25	27.22	15.53	Average	100	102
8	11490.00	56.60	74.00	-17.40	41.07	15.53	Peak	100	102
9	17235.00	62.47	68.20	-5.73	43.60	18.87	Peak	100	217

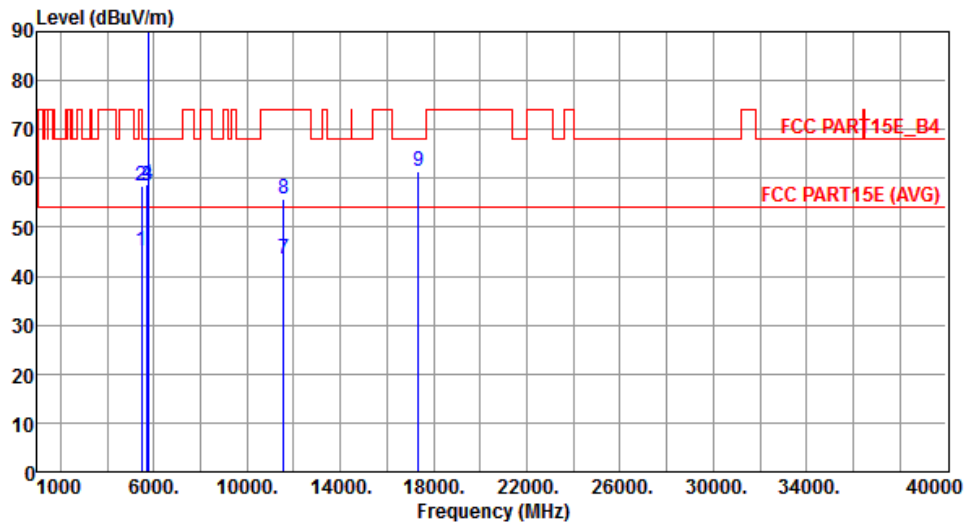
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5458.00	45.21	54.00	-8.79	40.43	4.78	Average	121	115
2	5458.00	58.32	74.00	-15.68	53.54	4.78	Peak	121	115
3	5715.00	58.31	68.20	-9.89	53.21	5.10	Peak	121	115
4	5725.00	58.69	78.20	-19.51	53.60	5.09	Peak	121	115
5 *	5785.00	96.01			90.82	5.19	Average	121	115
6 *	5785.00	108.31			103.12	5.19	Peak	121	115
7	11570.00	43.49	54.00	-10.51	28.16	15.33	Average	100	192
8	11570.00	55.80	74.00	-18.20	40.47	15.33	Peak	100	192
9	17355.00	61.27	68.20	-6.93	42.06	19.21	Peak	100	262

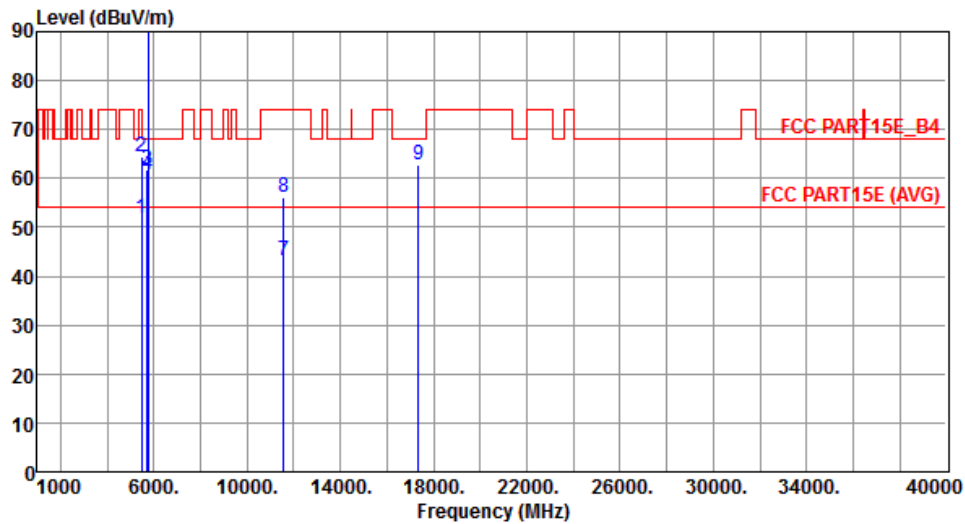
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5458.00	51.68	54.00	-2.32	46.90	4.78	Average	172	242
2	5458.00	64.29	74.00	-9.71	59.51	4.78	Peak	172	242
3	5715.00	61.68	68.20	-6.52	56.58	5.10	Peak	172	242
4	5725.00	60.90	78.20	-17.30	55.81	5.09	Peak	172	242
5 *	5785.00	108.45			103.26	5.19	Average	172	242
6 *	5785.00	121.10			115.91	5.19	Peak	172	242
7	11570.00	43.29	54.00	-10.71	27.96	15.33	Average	100	285
8	11570.00	56.03	74.00	-17.97	40.70	15.33	Peak	100	285
9	17355.00	62.66	68.20	-5.54	43.45	19.21	Peak	100	145

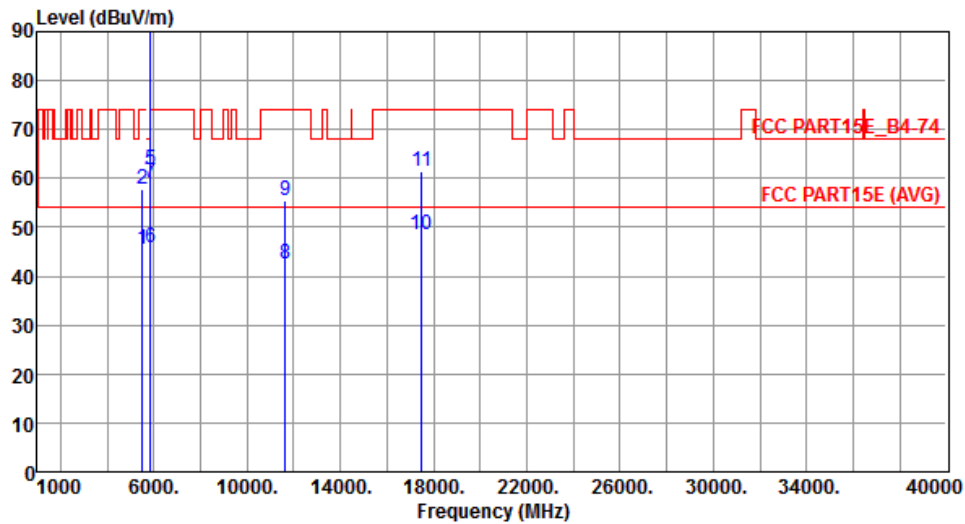
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	45.59	54.00	-8.41	40.75	4.84	Average	109	111
2	5500.00	57.91	74.00	-16.09	53.07	4.84	Peak	109	111
3 *	5825.00	95.50			90.26	5.24	Average	109	111
4 *	5825.00	108.84			103.60	5.24	Peak	109	111
5	5850.00	61.87	78.20	-16.33	56.61	5.26	Peak	109	111
6	5860.00	45.91	54.00	-8.09	40.64	5.27	Average	109	111
7	5860.00	59.19	74.00	-14.81	53.92	5.27	Peak	109	111
8	11650.00	42.35	54.00	-11.65	27.26	15.09	Average	100	240
9	11650.00	55.51	74.00	-18.49	40.42	15.09	Peak	100	240
10	17475.00	48.49	54.00	-5.51	28.94	19.55	Average	100	173
11	17475.00	61.30	74.00	-12.70	41.75	19.55	Peak	100	173

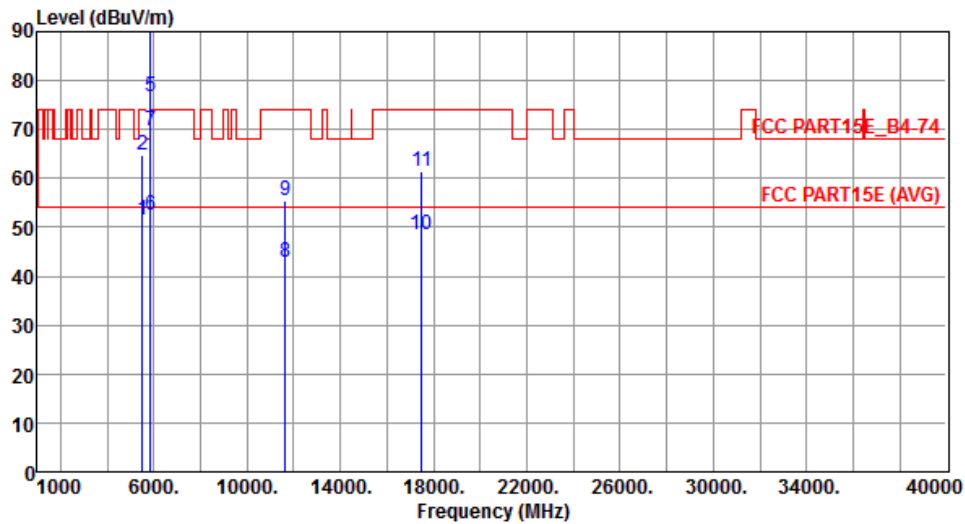
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	51.53	54.00	-2.47	46.69	4.84	Average	173	244
2	5500.00	64.61	74.00	-9.39	59.77	4.84	Peak	173	244
3 *	5825.00	108.49			103.25	5.24	Average	173	245
4 *	5825.00	121.42			116.18	5.24	Peak	173	245
5	5850.00	76.57	78.20	-1.63	71.31	5.26	Peak	173	236
6	5860.00	52.31	54.00	-1.69	47.04	5.27	Average	173	244
7	5860.00	69.81	74.00	-4.19	64.54	5.27	Peak	173	244
8	11650.00	42.73	54.00	-11.27	27.64	15.09	Average	100	208
9	11650.00	55.36	74.00	-18.64	40.27	15.09	Peak	100	208
10	17475.00	48.62	54.00	-5.38	29.07	19.55	Average	100	310
11	17475.00	61.59	74.00	-12.41	42.04	19.55	Peak	100	310

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

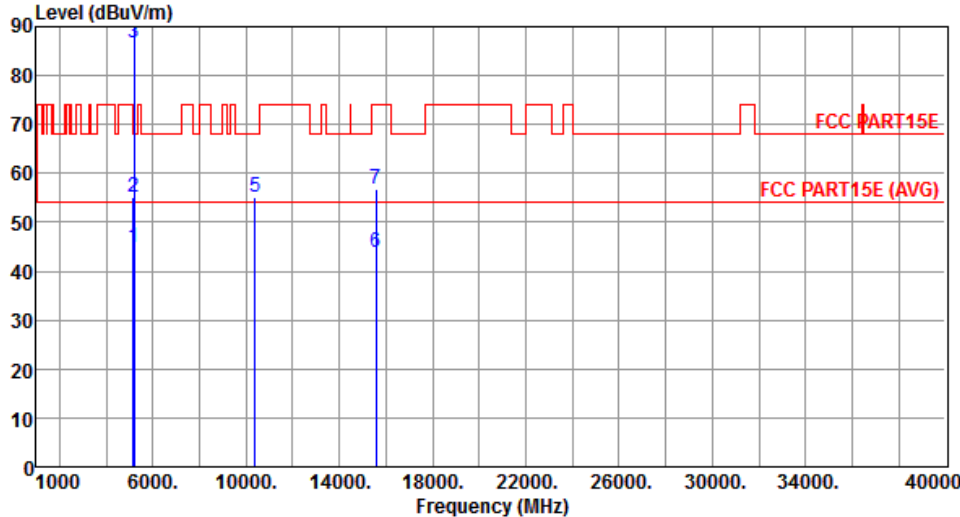
*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

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

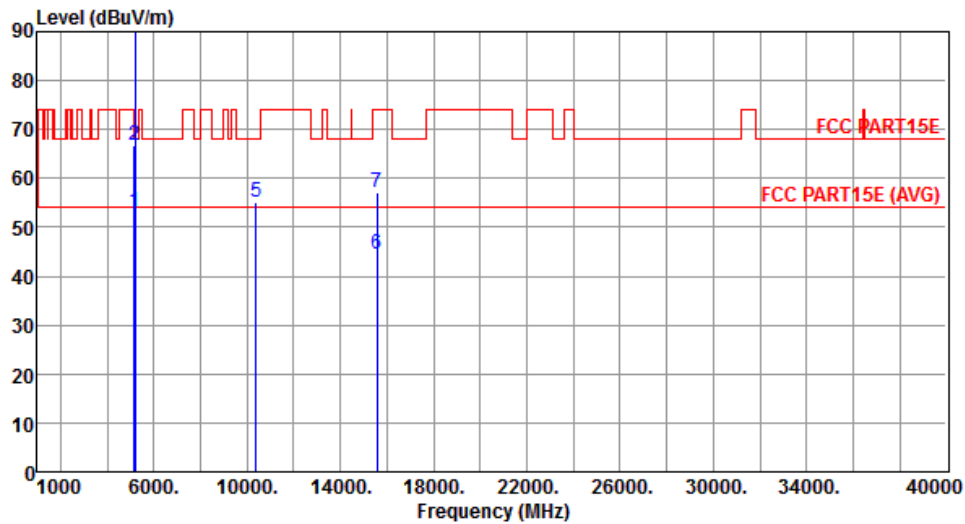
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal	Test Configuration	4



	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	44.73	54.00	-9.27	40.33	4.40	Average	100	254
2	5150.00	55.25	74.00	-18.75	50.85	4.40	Peak	100	254
3 *	5190.00	86.52			82.06	4.46	Average	100	254
4 *	5190.00	96.29			91.83	4.46	Peak	100	254
5	10380.00	55.19	68.20	-13.01	40.94	14.25	Peak	100	309
6	15570.00	43.74	54.00	-10.26	28.68	15.06	Average	100	19
7	15570.00	56.89	74.00	-17.11	41.83	15.06	Peak	100	19

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical	Test Configuration	4



	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	53.26	54.00	-0.74	48.86	4.40	Average	162	124
2	5150.00	66.83	74.00	-7.17	62.43	4.40	Peak	162	124
3 *	5190.00	100.11			95.65	4.46	Average	162	124
4 *	5190.00	109.87			105.41	4.46	Peak	162	124
5	10380.00	55.23	68.20	-12.97	40.98	14.25	Peak	188	355
6	15570.00	44.39	54.00	-9.61	29.33	15.06	Average	171	2
7	15570.00	57.12	74.00	-16.88	42.06	15.06	Peak	171	2

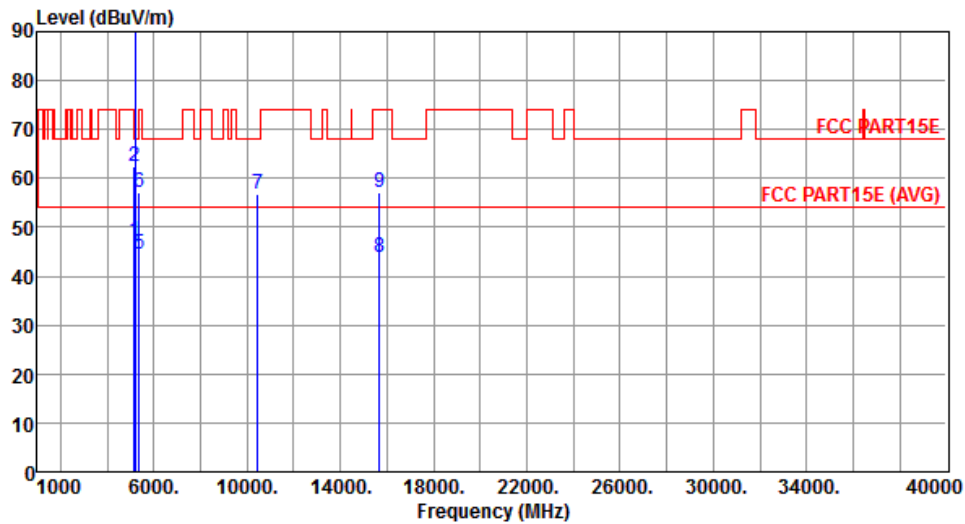
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	4



	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	47.11	54.00	-6.89	42.71	4.40	Average	100	354
2	5150.00	62.42	74.00	-11.58	58.02	4.40	Peak	100	354
3 *	5230.00	95.76			91.25	4.51	Average	100	354
4 *	5230.00	105.45			100.94	4.51	Peak	100	354
5	5350.00	44.67	54.00	-9.33	40.03	4.64	Average	100	354
6	5350.00	57.06	74.00	-16.94	52.42	4.64	Peak	100	354
7	10460.00	56.91	68.20	-11.29	42.51	14.40	Peak	110	260
8	15690.00	43.75	54.00	-10.25	28.84	14.91	Average	105	345
9	15690.00	56.98	74.00	-17.02	42.07	14.91	Peak	105	345

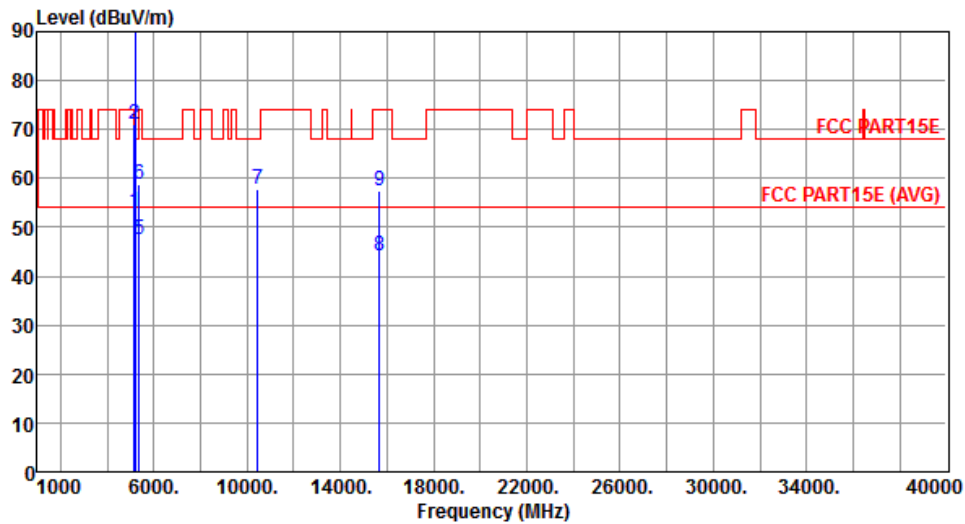
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical	Test Configuration	4



	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	53.15	54.00	-0.85	48.75	4.40	Average	188	130
2	5150.00	71.20	74.00	-2.80	66.80	4.40	Peak	188	130
3 *	5230.00	108.99			104.48	4.51	Average	189	250
4 *	5230.00	118.76			114.25	4.51	Peak	189	250
5	5350.00	47.50	54.00	-6.50	42.86	4.64	Average	188	130
6	5350.00	58.77	74.00	-15.23	54.13	4.64	Peak	188	130
7	10460.00	57.91	68.20	-10.29	43.51	14.40	Peak	198	350
8	15690.00	44.02	54.00	-9.98	29.11	14.91	Average	173	19
9	15690.00	57.39	74.00	-16.61	42.48	14.91	Peak	173	19

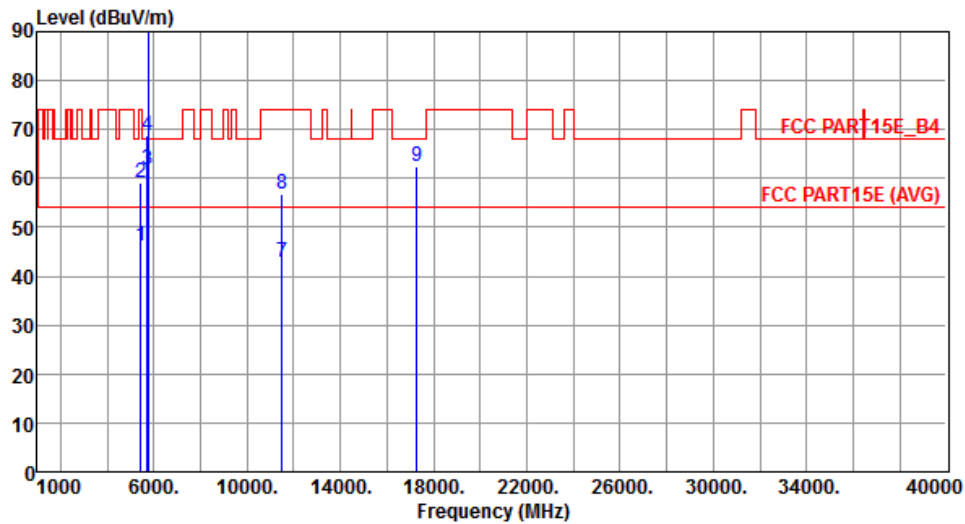
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5426.00	46.31	54.00	-7.69	41.56	4.75	Average	131	339
2	5426.00	59.06	74.00	-14.94	54.31	4.75	Peak	131	339
3	5715.00	61.67	68.20	-6.53	56.57	5.10	Peak	131	339
4	5725.00	68.79	78.20	-9.41	63.70	5.09	Peak	131	339
5 *	5755.00	89.13			83.99	5.14	Average	131	339
6 *	5755.00	98.98			93.84	5.14	Peak	131	339
7	11510.00	42.76	54.00	-11.24	27.25	15.51	Average	183	274
8	11510.00	56.80	74.00	-17.20	41.29	15.51	Peak	183	274
9	17265.00	62.30	68.20	-5.90	43.33	18.97	Peak	155	298

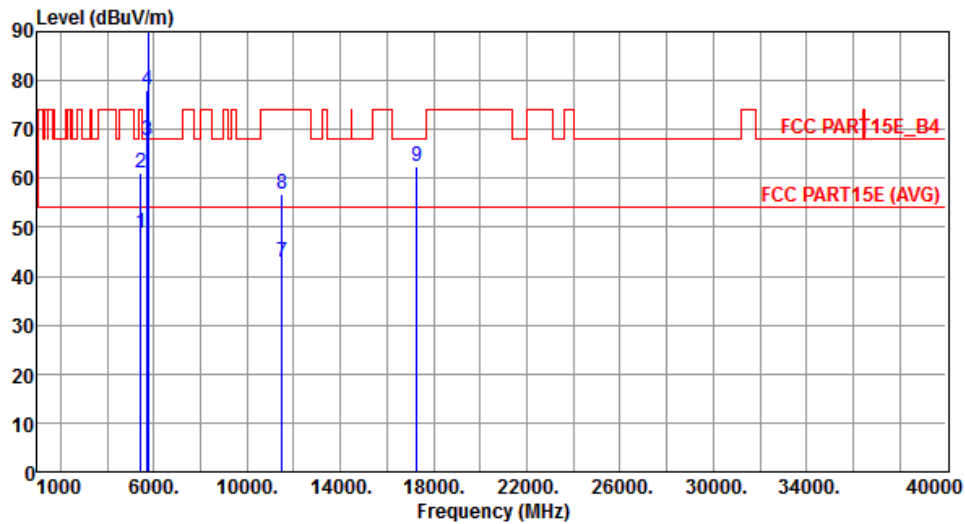
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5426.00	48.94	54.00	-5.06	44.19	4.75	Average	201	249
2	5426.00	61.00	74.00	-13.00	56.25	4.75	Peak	201	249
3	5715.00	67.83	68.20	-0.37	62.73	5.10	Peak	201	249
4	5725.00	77.88	78.20	-0.32	72.79	5.09	Peak	201	249
5 *	5755.00	102.03			96.89	5.14	Average	201	249
6 *	5755.00	112.08			106.94	5.14	Peak	201	249
7	11510.00	42.98	54.00	-11.02	27.47	15.51	Average	224	329
8	11510.00	56.73	74.00	-17.27	41.22	15.51	Peak	224	329
9	17265.00	62.51	68.20	-5.69	43.54	18.97	Peak	220	321

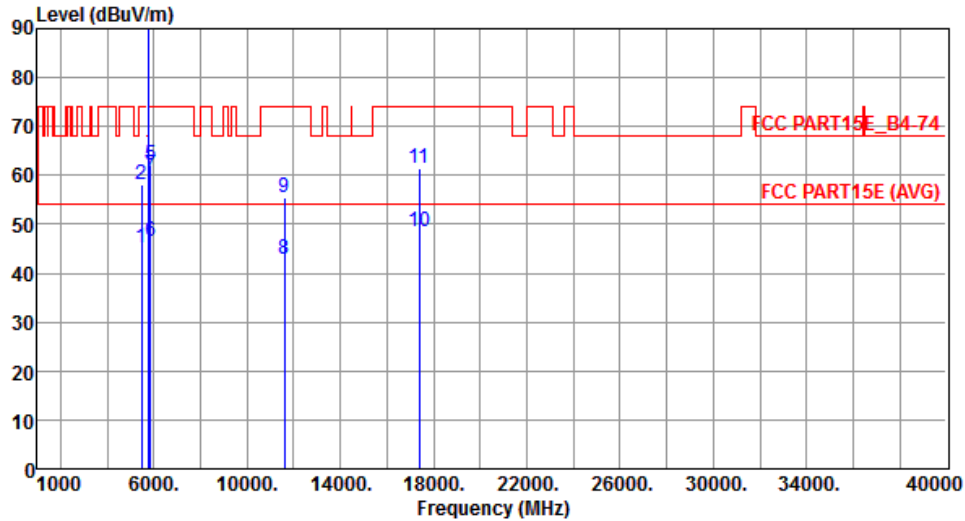
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5459.00	45.14	54.00	-8.86	40.36	4.78	Average	127	353
2	5459.00	58.07	74.00	-15.93	53.29	4.78	Peak	127	353
3 *	5795.00	94.91			89.71	5.20	Average	127	353
4 *	5795.00	104.87			99.67	5.20	Peak	127	353
5	5850.00	62.12	78.20	-16.08	56.86	5.26	Peak	127	353
6	5860.00	46.41	54.00	-7.59	41.14	5.27	Average	127	353
7	5860.00	60.21	74.00	-13.79	54.94	5.27	Peak	127	353
8	11590.00	42.75	54.00	-11.25	27.48	15.27	Average	150	322
9	11590.00	55.58	74.00	-18.42	40.31	15.27	Peak	150	322
10	17385.00	48.52	54.00	-5.48	29.23	19.29	Average	163	37
11	17385.00	61.32	74.00	-12.68	42.03	19.29	Peak	163	37

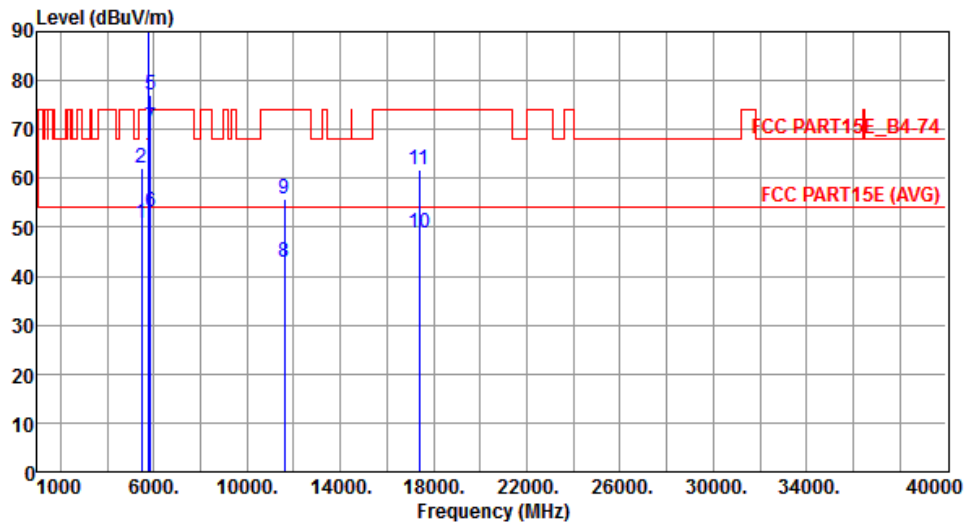
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5459.00	50.96	54.00	-3.04	46.18	4.78	Average	200	242
2	5459.00	62.19	74.00	-11.81	57.41	4.78	Peak	200	242
3 *	5795.00	107.84			102.64	5.20	Average	200	242
4 *	5795.00	117.78			112.58	5.20	Peak	200	242
5	5850.00	77.12	78.20	-1.08	71.86	5.26	Peak	200	242
6	5860.00	53.23	54.00	-0.77	47.96	5.27	Average	200	242
7	5860.00	70.39	74.00	-3.61	65.12	5.27	Peak	200	242
8	11590.00	42.88	54.00	-11.12	27.61	15.27	Average	233	229
9	11590.00	55.66	74.00	-18.34	40.39	15.27	Peak	233	229
10	17385.00	48.71	54.00	-5.29	29.42	19.29	Average	201	255
11	17385.00	61.66	74.00	-12.34	42.37	19.29	Peak	201	255

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

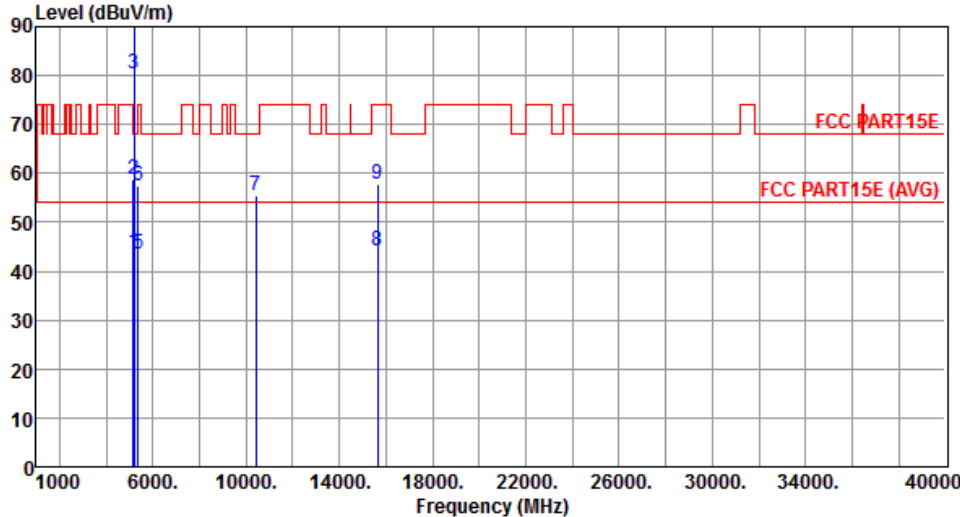
*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

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

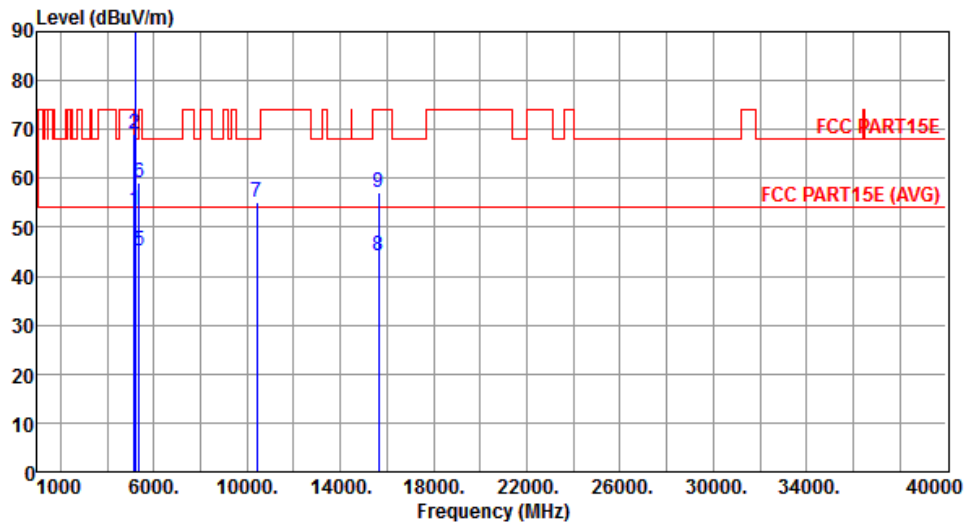
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal	Test Configuration	4



	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	43.68	54.00	-10.32	39.28	4.40	Average	114	252
2	5150.00	58.83	74.00	-15.17	54.43	4.40	Peak	114	252
3 *	5210.00	80.44			75.95	4.49	Average	114	252
4 *	5210.00	92.65			88.16	4.49	Peak	114	252
5	5350.00	43.57	54.00	-10.43	38.93	4.64	Average	114	252
6	5350.00	57.42	74.00	-16.58	52.78	4.64	Peak	114	252
7	10420.00	55.37	68.20	-12.83	41.05	14.32	Peak	100	218
8	15630.00	44.14	54.00	-9.86	29.15	14.99	Average	100	124
9	15630.00	57.87	74.00	-16.13	42.88	14.99	Peak	100	124

Note 1: Emission Level (dBUV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical	Test Configuration	4



	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	53.42	54.00	-0.58	49.02	4.40	Average	195	234
2	5150.00	69.06	74.00	-4.94	64.66	4.40	Peak	195	234
3 *	5210.00	95.05			90.56	4.49	Average	195	234
4 *	5210.00	107.37			102.88	4.49	Peak	195	234
5	5350.00	45.25	54.00	-8.75	40.61	4.64	Average	195	234
6	5350.00	59.17	74.00	-14.83	54.53	4.64	Peak	195	234
7	10420.00	54.98	68.20	-13.22	40.66	14.32	Peak	100	312
8	15630.00	44.31	54.00	-9.69	29.32	14.99	Average	100	76
9	15630.00	57.10	74.00	-16.90	42.11	14.99	Peak	100	76

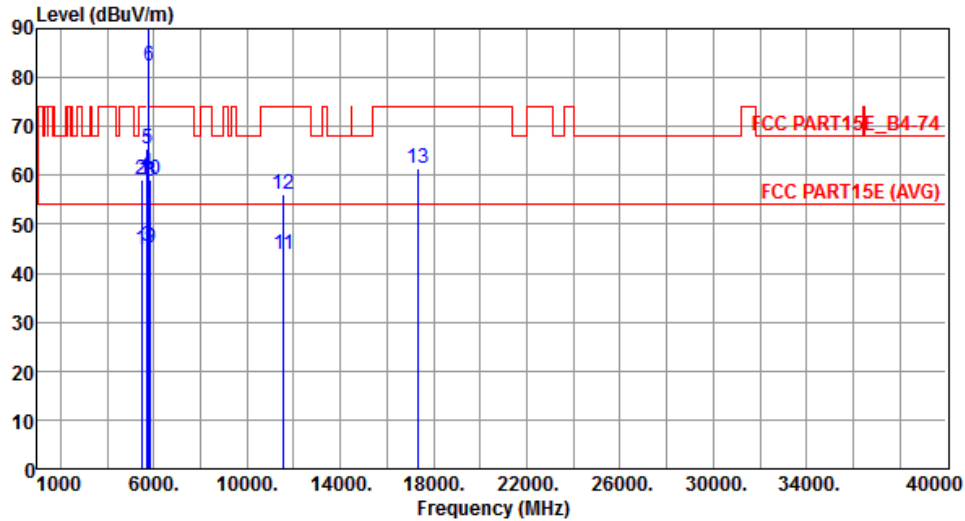
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5455.00	44.78	54.00	-9.22	40.01	4.77	Average	100	134
2	5455.00	59.08	74.00	-14.92	54.31	4.77	Peak	100	134
3	5715.00	45.52	54.00	-8.48	40.42	5.10	Average	100	134
4	5715.00	60.54	74.00	-13.46	55.44	5.10	Peak	100	134
5	5725.00	65.36	78.20	-12.84	60.27	5.09	Peak	100	99
6 *	5775.00	82.49			77.32	5.17	Average	100	99
7 *	5775.00	95.23			90.06	5.17	Peak	100	99
8	5850.00	58.77	78.20	-19.43	53.51	5.26	Peak	100	99
9	5860.00	45.22	54.00	-8.78	39.95	5.27	Average	100	99
10	5860.00	59.28	74.00	-14.72	54.01	5.27	Peak	100	99
11	11550.00	43.68	54.00	-10.32	28.28	15.40	Average	100	69
12	11550.00	56.23	74.00	-17.77	40.83	15.40	Peak	100	232
13	17325.00	61.56	74.00	-12.44	42.43	19.13	Peak	100	186

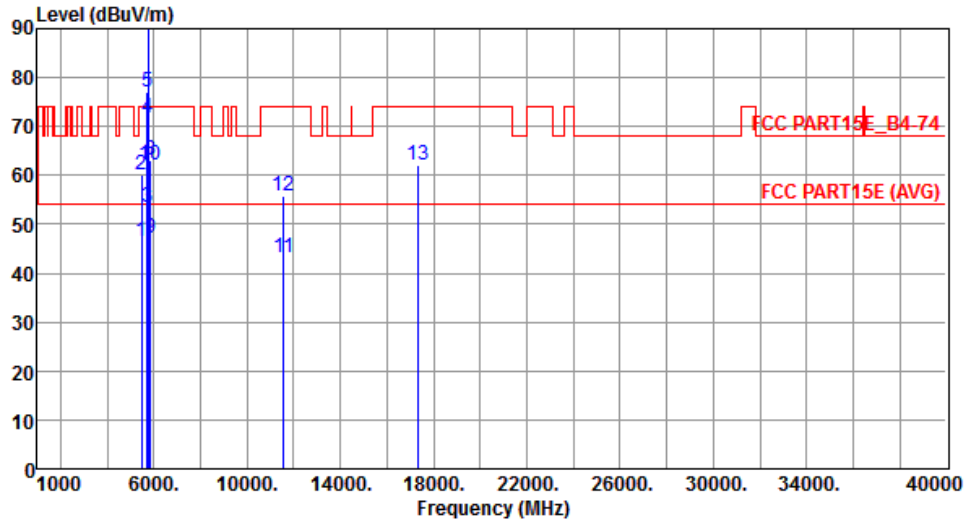
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: "*" is Peak / Average value of fundamental frequency.

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5455.00	46.40	54.00	-7.60	41.63	4.77	Average	201	230
2	5455.00	60.26	74.00	-13.74	55.49	4.77	Peak	201	230
3	5715.00	53.32	54.00	-0.68	48.22	5.10	Average	201	239
4	5715.00	71.84	74.00	-2.16	66.74	5.10	Peak	201	239
5	5725.00	77.12	78.20	-1.08	72.03	5.09	Peak	201	230
6 *	5775.00	94.59			89.42	5.17	Average	201	230
7 *	5775.00	107.42			102.25	5.17	Peak	201	230
8	5850.00	63.19	78.20	-15.01	57.93	5.26	Peak	201	226
9	5860.00	47.19	54.00	-6.81	41.92	5.27	Average	201	233
10	5860.00	62.18	74.00	-11.82	56.91	5.27	Peak	201	233
11	11550.00	43.10	54.00	-10.90	27.70	15.40	Average	100	53
12	11550.00	55.70	74.00	-18.30	40.30	15.40	Peak	100	53
13	17325.00	62.18	74.00	-11.82	43.05	19.13	Peak	100	214

Note 1: Emission Level (dBuV/m) = SA Reading (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: "*" is Peak / Average value of fundamental frequency.

3.6 Frequency Stability

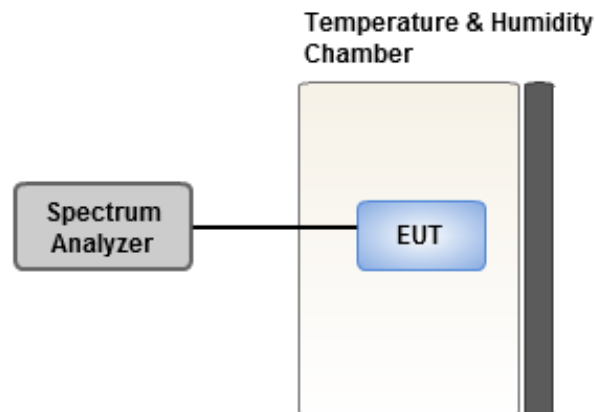
3.6.1 Limit of Frequency Stability

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 50 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: 5200 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	5.97	6.02	6.75	6.24
T20°C Vmin	4.23	4.38	4.63	4.39
T50°C Vnom	3.75	3.67	4.22	3.85
T40°C Vnom	3.89	4.47	4.05	3.48
T30°C Vnom	3.28	2.80	3.75	4.10
T20°C Vnom	2.51	2.99	2.17	2.56
T10°C Vnom	2.08	1.85	2.17	2.18
T0°C Vnom	3.12	3.23	3.29	3.49
T-10°C Vnom	1.91	0.95	0.55	2.26
T-20°C Vnom	0.53	0.86	0.45	0.62
T-30°C Vnom	0.95	1.26	1.32	0.42
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	5.78	5.85	6.11	5.85
T20°C Vmin	4.05	3.85	4.12	4.30
T50°C Vnom	3.50	3.67	3.66	4.22
T40°C Vnom	3.48	3.29	3.63	3.27
T30°C Vnom	3.78	4.23	3.76	3.80
T20°C Vnom	2.39	2.40	2.62	2.32
T10°C Vnom	2.76	2.73	3.38	3.27
T0°C Vnom	2.94	3.31	3.53	3.08
T-10°C Vnom	2.06	2.34	2.14	1.90
T-20°C Vnom	0.79	1.43	0.56	0.47
T-30°C Vnom	1.10	1.33	1.31	1.22
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>.

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

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