FCC Test Report

FCC ID	:	**A8J-EAP1250**
Equipment	:	**AC1300 Ceiling Mount Access Point**
Model No.	:	**EAP1250, EWS330AP** **(Please refer to section 1.1.1 for more details)**
Brand Name	:	**EnGenius**
Applicant	:	**EnGenius Technologies**
Address	:	**1580 Scenic Avenue, Costa Mesa CA92626**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Dec. 11, 2017**
Tested Date	:	**Dec. 11, 2017 ~ Jan. 09, 2018**

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

Reviewed by: **Approved by:**

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

Testing Laboratory 2732

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR7D1201AN	Rev. 01	Initial issue	Jan. 29, 2018

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.516MHz 41.32 (Margin -4.68dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 15690.00MHz 52.98 (Margin -1.02dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: ***Non-beamforming mode*** 5150-5250MHz: 24.15 5725-5850MHz: 24.11 ***Beamforming mode*** 5150-5250MHz: 21.14 5725-5850MHz: 21.10	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
EnGenius	EWS330AP	AC1300 Ceiling Mount Access Point	For marketing difference
	EAP1250		
✦ The above models, model EAP1250 was selected as a representative one for the final test and only its data was recorded in this report.			

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. Note 3: 802.11n/ac supports beamforming function.					

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. Note 3: 802.11n/ac supports beamforming function.					

1.1.3 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequency (MHz) / Gain (dBi)			Remark
				2400~2483.5	5150~5250	5725~5850	
1	Antenna 1	Dipole	UFL	4.12	---	---	---
2	Antenna 2	Dipole	UFL	4.03	---	---	---
3	Antenna 3	Dipole	UFL	---	5.11	5.11	---
4	Antenna 4	Dipole	UFL	---	5.03	5.03	---

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter 54Vdc from POE (for support unit only)

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: DVE Model: DSA-12PFT-12 FUS 120100 Power Rating: I/P: 100-240Vac, 50/60Hz, 0.5A O/P: 12Vdc, 1A Power Line: 1.5m non-shielded without core

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	VHT80	
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	QCARCT, V3.0.187.0		
Duty Cycle and Duty Factor	Mode	Duty cycle (%)	Duty factor(dB)
	11a	98.10%	0.08
	VHT20	99.20%	0.03
	VHT40	98.28%	0.08
	VHT80	95.39%	0.20

1.1.8 Power Setting

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5180	18.5	---
11a	5200	20	---
11a	5240	20	---
HT20	5180	18.5	18.5
HT20	5200	20	20
HT20	5240	20	20
HT40	5190	16	18.5
HT40	5230	19.5	20
VHT20	5180	18.5	20
VHT20	5200	20	16
VHT20	5240	20	19.5
VHT40	5190	16	18.5
VHT40	5230	19.5	20
VHT80	5210	15.5	20

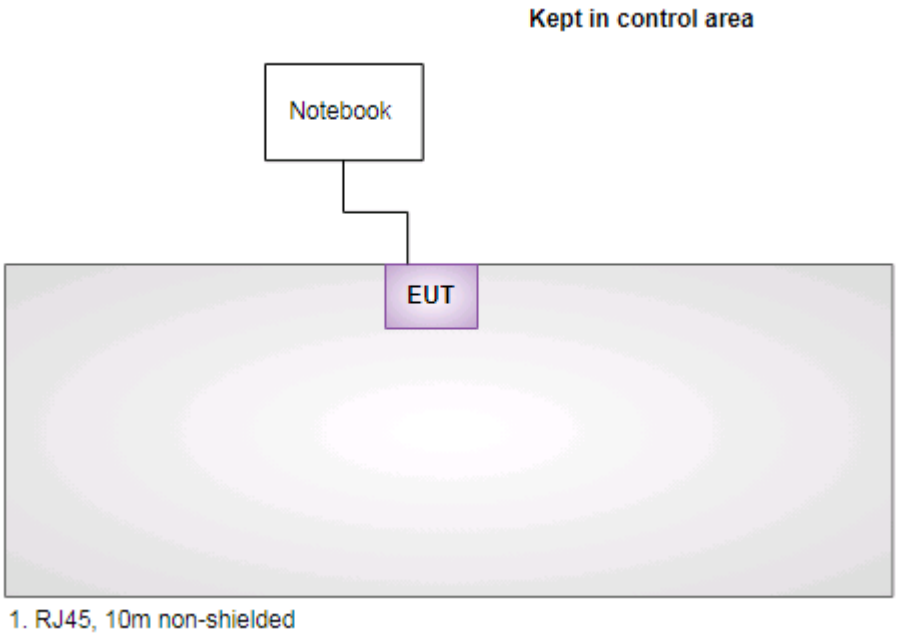
For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5745	19.5	---
11a	5785	20	---
11a	5825	20.5	---
HT20	5745	19.5	19.5
HT20	5785	20	20
HT20	5825	20.5	20.5
HT40	5755	20.00	20.00
HT40	5795	20.50	20.50
VHT20	5745	19.5	19.5
VHT20	5785	20	20
VHT20	5825	20.5	20.5
VHT40	5755	20.00	20.00
VHT40	5795	20.50	20.50
VHT80	5775	17.00	17.00

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E5420	DoC	RJ45, 10m non-shielded.

1.3 Test Setup Chart

Test Setup Diagram



1. RJ45, 10m non-shielded

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested date	Jan. 09, 2018				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 13, 2017	Nov. 12, 2018
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 18, 2017	Dec. 17, 2018
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested date	Dec. 11 ~ Dec. 15, 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Dec. 16, 2016	Dec. 15, 2017
Receiver	R&S	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 28, 2017	Apr. 27, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 09, 2017	Feb. 08, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 23, 2017	Nov. 22, 2018
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2017	Nov. 12, 2018
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 07, 2017	Dec. 06, 2018
Preamplifier	EMC	EMC02325	980187	Sep. 04, 2017	Sep. 03, 2018
Preamplifier	Agilent	83017A	MY53270014	Aug. 21, 2017	Aug. 20, 2018
Preamplifier	EMC	EMC184045B	980192	Aug. 22, 2017	Aug. 21, 2018
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Nov. 27, 2017	Nov. 26, 2018
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY32487/4	Nov. 27, 2017	Nov. 26, 2018
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Nov. 27, 2017	Nov. 26, 2018
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Nov. 27, 2017	Nov. 26, 2018
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Nov. 27, 2017	Nov. 26, 2018
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Nov. 27, 2017	Nov. 26, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested date	Dec. 18 ~ Dec. 22, 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2017	Dec. 03, 2018
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2017	Nov. 26, 2018
Power Meter	Anritsu	ML2495A	1241002	Oct. 16, 2017	Oct. 15, 2018
Power Sensor	Anritsu	MA2411B	1207366	Oct. 16, 2017	Oct. 15, 2018
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 01, 2017	Nov. 30, 2018
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
FCC KDB 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	±2.90 dB
Radiated emission ≤ 1GHz	±3.62 dB
Radiated emission > 1GHz	±5.60 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	23°C / 57%	Alex Tsai
Radiated Emissions	03CH03-WS	24-25°C / 66-67%	Roger Lu Brad Wu
RF Conducted	TH01-WS	21°C / 65%	Aska Huang BRAD WU

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- IC site registration No.: 10807C-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	VHT20	5200	MCS 0	1, 2
Radiated Emissions ≤1GHz	VHT20	5200	MCS 0	1, 2
RF Output Power	11a HT20 HT40 VHT20 VHT40 VHT80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	1
RF Output Power	HT20 HT40 VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	3
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0	1
Frequency Stability	Un-modulation	5200	---	1

NOTE:

1) The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The X-plane result was found as the worst case and was shown in this report.
2) Test configurations are listed as below:
   Configuration 1: Non-Beamforming / POE mode
   Configuration 2: Non-Beamforming / Adapter mode
   Configuration 3: Beamforming / POE mode

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT40	5795	6 Mbps	1, 2
Radiated Emissions ≤1GHz	VHT40	5795	6 Mbps	1, 2
RF Output Power	11a HT20 HT40 VHT20 VHT40 VHT80	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5745 / 5785 / 5825 5755 / 5795 5775	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	1
RF Output Power	HT20 HT40 VHT20 VHT40 VHT80	5745 / 5785 / 5825 5755 / 5795 5745 / 5785 / 5825 5755 / 5795 5775	MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	3
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5775	6 Mbps MCS 0 MCS 0 MCS 0	1
Frequency Stability	Un-modulation	5785	---	1

NOTE:

1) The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The X-plane result was found as the worst case and was shown in this report.
2) Test configurations are listed as below:
   Configuration 1: Non-Beamforming / POE mode
   Configuration 2: Non-Beamforming / Adapter mode
   Configuration 3: Beamforming / POE mode

3 Transmitter Test Results

3.1 Conducted Emissions

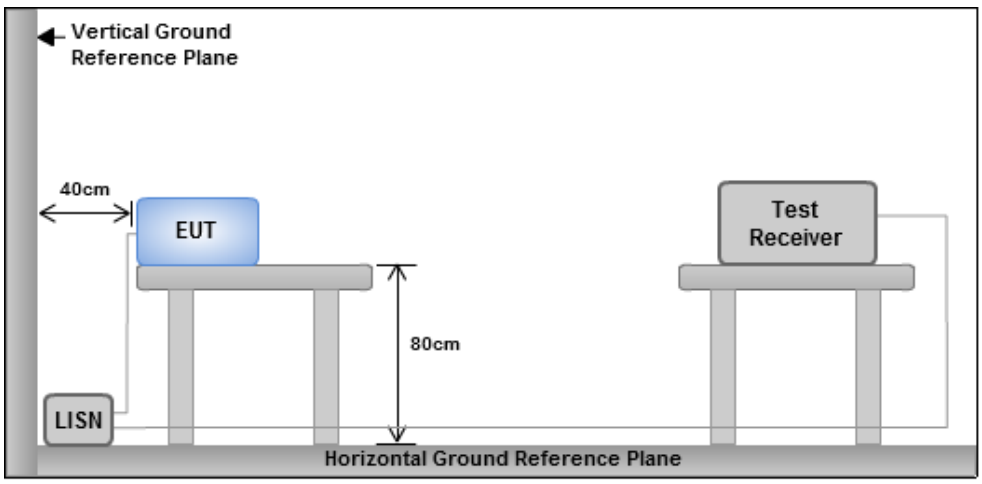
3.1.1 Limit of Conducted Emissions

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



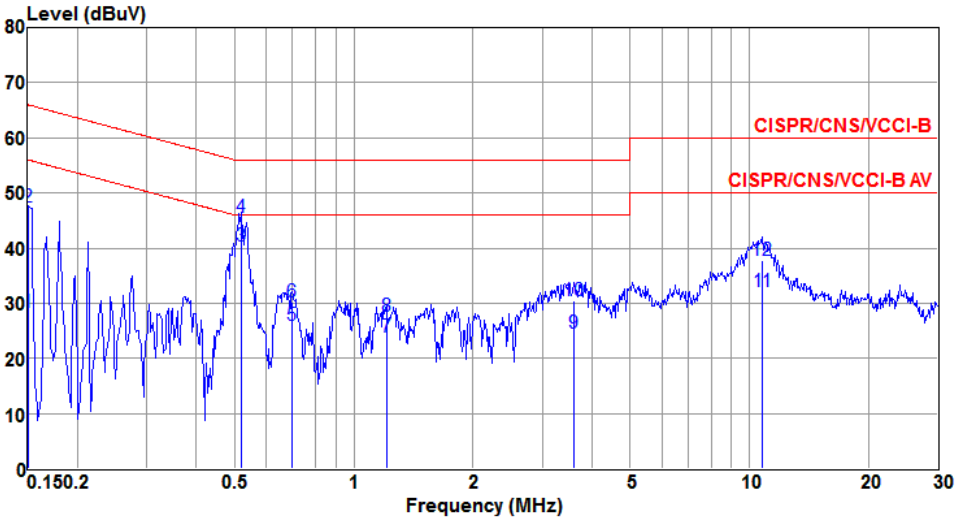
Note: 1. Support units were connected to second LISN.

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: POE mode

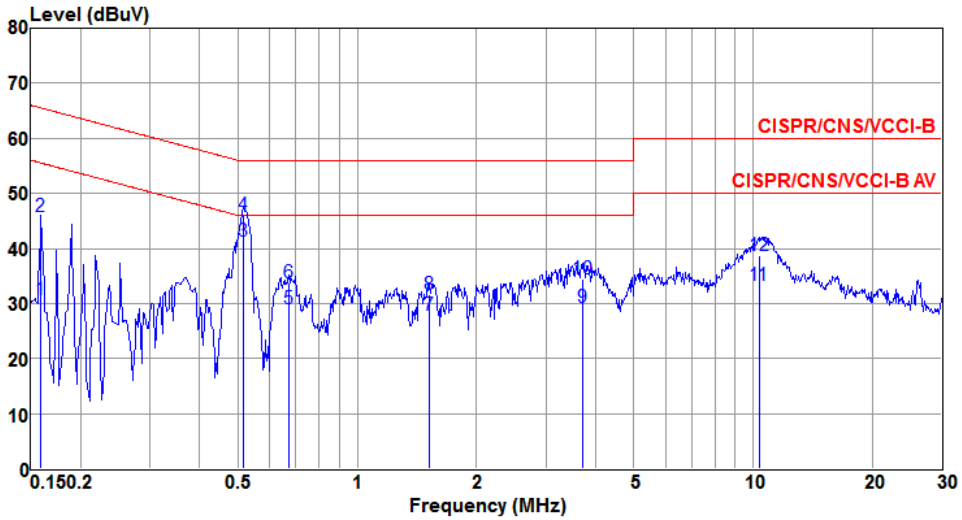
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	28.32	56.00	-27.68	28.21	0.07	0.04	Average
2	0.150	47.45	66.00	-18.55	47.34	0.07	0.04	QP
3@	0.518	40.37	46.00	-5.63	40.25	0.08	0.04	Average
4	0.518	45.46	56.00	-10.54	45.34	0.08	0.04	QP
5	0.697	25.87	46.00	-20.13	25.74	0.09	0.04	Average
6	0.697	30.28	56.00	-25.72	30.15	0.09	0.04	QP
7	1.210	23.73	46.00	-22.27	23.59	0.10	0.04	Average
8	1.210	27.56	56.00	-28.44	27.42	0.10	0.04	QP
9	3.603	24.53	46.00	-21.47	24.26	0.13	0.14	Average
10	3.603	30.56	56.00	-25.44	30.29	0.13	0.14	QP
11	10.790	32.12	50.00	-17.88	31.69	0.21	0.22	Average
12	10.790	37.72	60.00	-22.28	37.29	0.21	0.22	QP

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

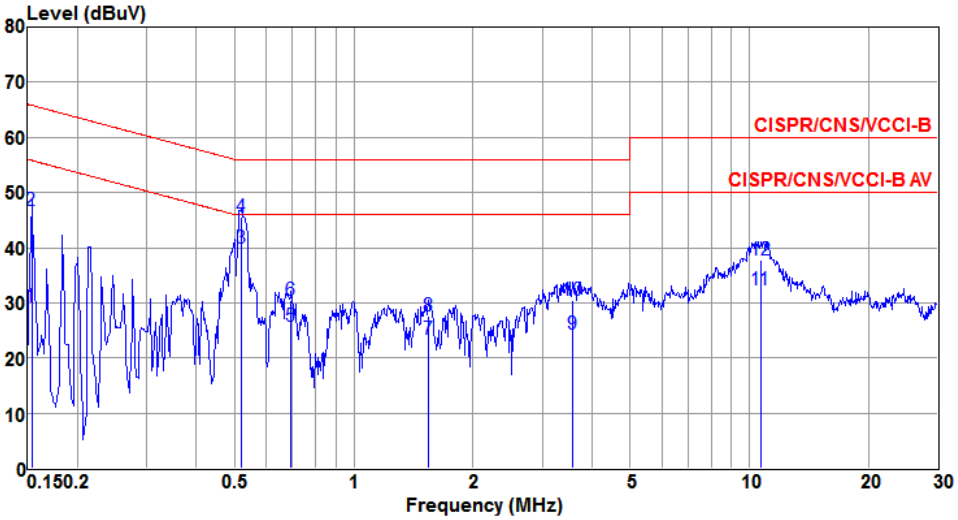
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	30.63	55.52	-24.89	30.55	0.04	0.04	Average
2	0.159	45.77	65.52	-19.75	45.69	0.04	0.04	QP
3@	0.516	41.32	46.00	-4.68	41.24	0.04	0.04	Average
4	0.516	46.09	56.00	-9.91	46.01	0.04	0.04	QP
5	0.672	29.03	46.00	-16.97	28.94	0.05	0.04	Average
6	0.672	33.85	56.00	-22.15	33.76	0.05	0.04	QP
7	1.519	27.92	46.00	-18.08	27.82	0.06	0.04	Average
8	1.519	31.71	56.00	-24.29	31.61	0.06	0.04	QP
9	3.720	29.37	46.00	-16.63	29.13	0.09	0.15	Average
10	3.720	34.50	56.00	-21.50	34.26	0.09	0.15	QP
11	10.342	33.17	50.00	-16.83	32.78	0.17	0.22	Average
12	10.342	38.74	60.00	-21.26	38.35	0.17	0.22	QP

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

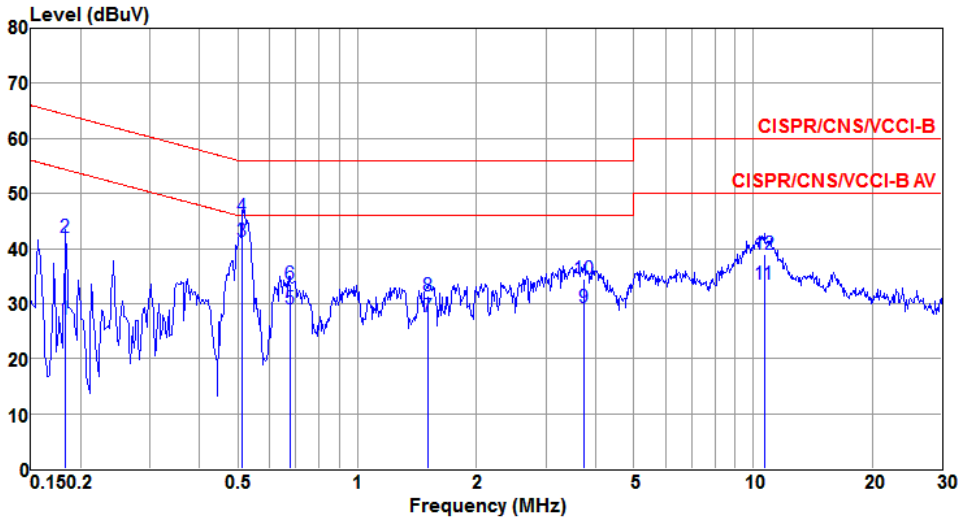
Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	29.16	55.82	-26.66	29.05	0.07	0.04	Average
2	0.153	46.82	65.82	-19.00	46.71	0.07	0.04	QP
3@	0.521	39.85	46.00	-6.15	39.73	0.08	0.04	Average
4	0.521	45.52	56.00	-10.48	45.40	0.08	0.04	QP
5	0.694	25.72	46.00	-20.28	25.59	0.09	0.04	Average
6	0.694	30.53	56.00	-25.47	30.40	0.09	0.04	QP
7	1.544	23.42	46.00	-22.58	23.28	0.10	0.04	Average
8	1.544	27.54	56.00	-28.46	27.40	0.10	0.04	QP
9	3.565	24.30	46.00	-21.70	24.03	0.13	0.14	Average
10	3.565	30.47	56.00	-25.53	30.20	0.13	0.14	QP
11	10.676	32.31	50.00	-17.69	31.88	0.21	0.22	Average
12	10.676	37.87	60.00	-22.13	37.44	0.21	0.22	QP

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

Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Neutral		

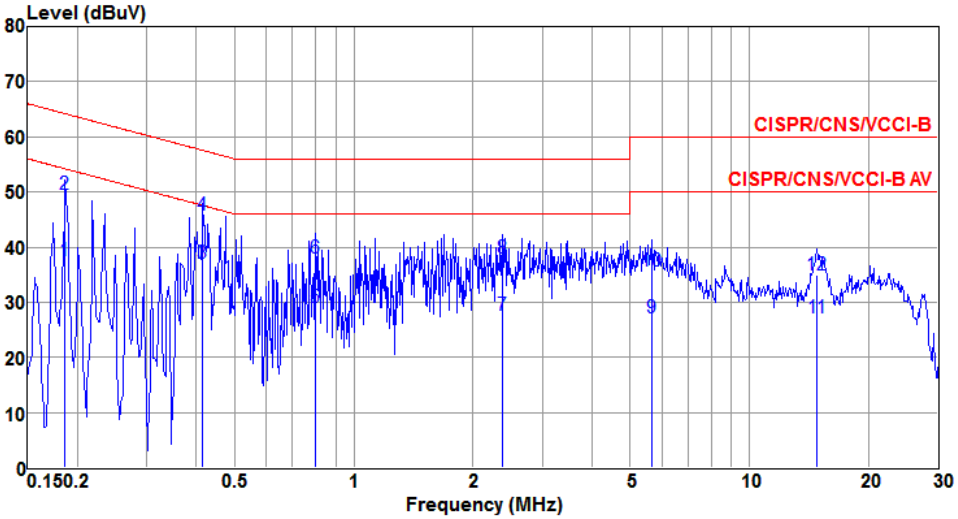


	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.183	27.09	54.33	-27.24	27.01	0.04	0.04	Average
2	0.183	41.97	64.33	-22.36	41.89	0.04	0.04	QP
3@	0.513	41.29	46.00	-4.71	41.21	0.04	0.04	Average
4	0.513	45.90	56.00	-10.10	45.82	0.04	0.04	QP
5	0.675	29.04	46.00	-16.96	28.95	0.05	0.04	Average
6	0.675	33.52	56.00	-22.48	33.43	0.05	0.04	QP
7	1.503	27.73	46.00	-18.27	27.63	0.06	0.04	Average
8	1.503	31.30	56.00	-24.70	31.20	0.06	0.04	QP
9	3.740	29.27	46.00	-16.73	29.03	0.09	0.15	Average
10	3.740	34.40	56.00	-21.60	34.16	0.09	0.15	QP
11	10.676	33.44	50.00	-16.56	33.04	0.18	0.22	Average
12	10.676	39.02	60.00	-20.98	38.62	0.18	0.22	QP

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

Configuration 2: Adapter mode

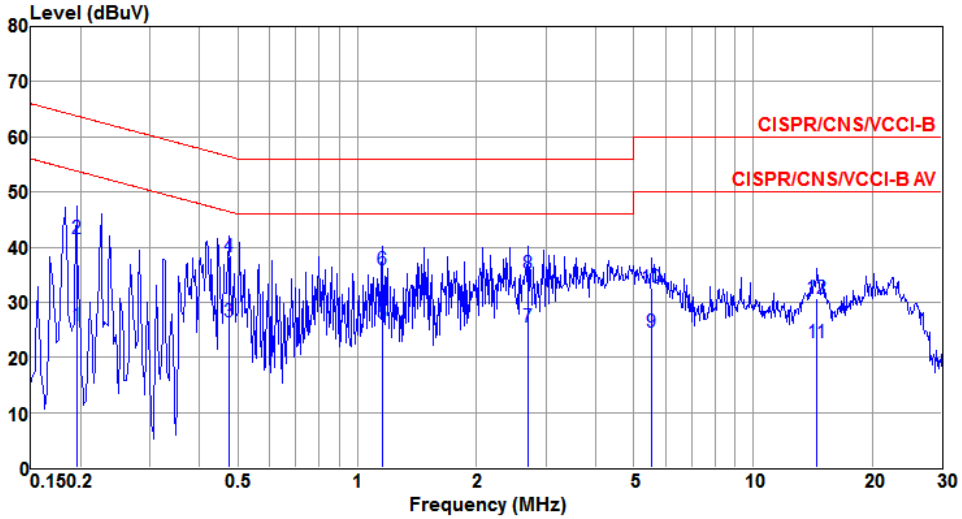
Modulation	VHT20	**Test Freq. (MHz)**	5200
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.186	37.52	54.20	-16.68	37.24	0.24	0.04	Average
2	0.186	49.52	64.20	-14.68	49.24	0.24	0.04	QP
3@	0.415	36.97	47.55	-10.58	36.59	0.34	0.04	Average
4	0.415	45.86	57.55	-11.69	45.48	0.34	0.04	QP
5	0.800	29.02	46.00	-16.98	28.60	0.38	0.04	Average
6	0.800	37.90	56.00	-18.10	37.48	0.38	0.04	QP
7	2.371	27.66	46.00	-18.34	27.15	0.44	0.07	Average
8	2.371	38.04	56.00	-17.96	37.53	0.44	0.07	QP
9	5.653	27.22	50.00	-22.78	26.53	0.51	0.18	Average
10	5.653	35.69	60.00	-24.31	35.00	0.51	0.18	QP
11	14.828	27.16	50.00	-22.84	26.20	0.73	0.23	Average
12	14.828	35.01	60.00	-24.99	34.05	0.73	0.23	QP

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

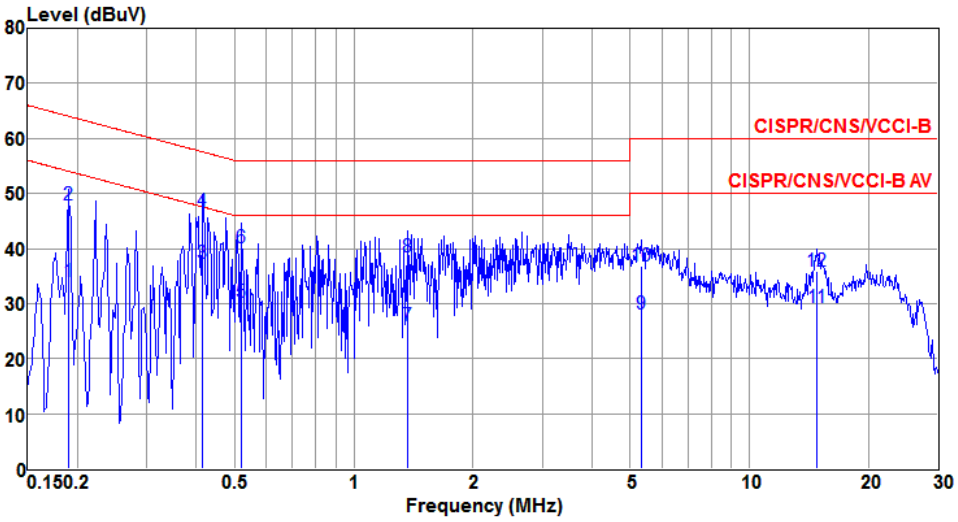
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.195	25.71	53.80	-28.09	25.53	0.14	0.04	Average
2	0.195	41.62	63.80	-22.18	41.44	0.14	0.04	QP
3	0.476	26.36	46.41	-20.05	26.12	0.20	0.04	Average
4@	0.476	38.19	56.41	-18.22	37.95	0.20	0.04	QP
5	1.160	26.30	46.00	-19.70	25.99	0.27	0.04	Average
6	1.160	35.82	56.00	-20.18	35.51	0.27	0.04	QP
7	2.692	25.49	46.00	-20.51	25.07	0.33	0.09	Average
8	2.692	35.14	56.00	-20.86	34.72	0.33	0.09	QP
9	5.535	24.63	50.00	-25.37	24.06	0.39	0.18	Average
10	5.535	32.57	60.00	-27.43	32.00	0.39	0.18	QP
11	14.517	22.77	50.00	-27.23	21.92	0.62	0.23	Average
12	14.517	30.68	60.00	-29.32	29.83	0.62	0.23	QP

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

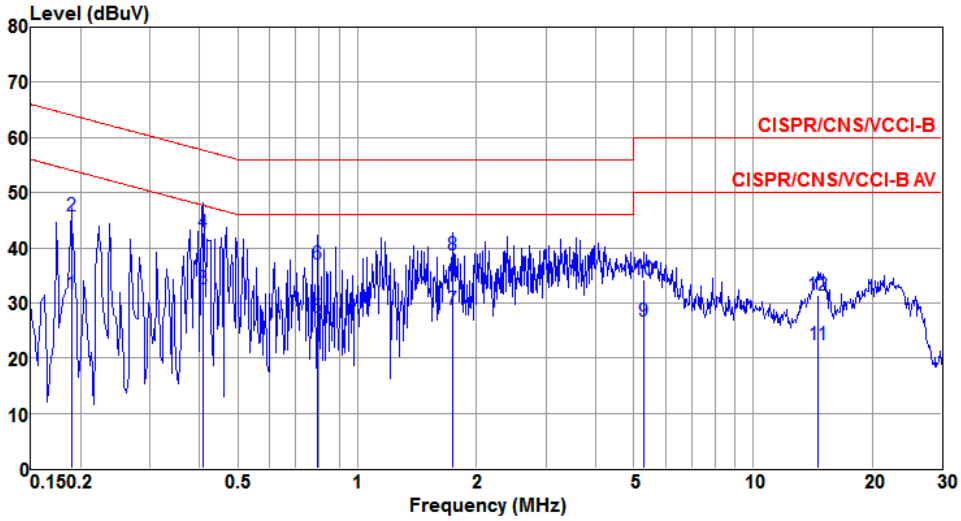
Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.189	34.11	54.06	-19.95	33.82	0.25	0.04	Average
2	0.189	47.87	64.06	-16.19	47.58	0.25	0.04	QP
3@	0.415	37.22	47.55	-10.33	36.84	0.34	0.04	Average
4	0.415	46.76	57.55	-10.79	46.38	0.34	0.04	QP
5	0.518	30.30	46.00	-15.70	29.91	0.35	0.04	Average
6	0.518	40.21	56.00	-15.79	39.82	0.35	0.04	QP
7	1.367	26.00	46.00	-20.00	25.55	0.41	0.04	Average
8	1.367	38.54	56.00	-17.46	38.09	0.41	0.04	QP
9	5.333	28.10	50.00	-21.90	27.42	0.50	0.18	Average
10	5.333	36.83	60.00	-23.17	36.15	0.50	0.18	QP
11	14.828	29.35	50.00	-20.65	28.39	0.73	0.23	Average
12	14.828	35.99	60.00	-24.01	35.03	0.73	0.23	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)	5795
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.189	31.72	54.06	-22.34	31.55	0.13	0.04	Average
2	0.189	45.75	64.06	-18.31	45.58	0.13	0.04	QP
3	0.408	32.47	47.68	-15.21	32.24	0.19	0.04	Average
4@	0.408	42.65	57.68	-15.03	42.42	0.19	0.04	QP
5	0.796	27.43	46.00	-18.57	27.15	0.24	0.04	Average
6	0.796	36.98	56.00	-19.02	36.70	0.24	0.04	QP
7	1.744	28.81	46.00	-17.19	28.47	0.30	0.04	Average
8	1.744	38.61	56.00	-17.39	38.27	0.30	0.04	QP
9	5.277	26.63	50.00	-23.37	26.07	0.38	0.18	Average
10	5.277	34.21	60.00	-25.79	33.65	0.38	0.18	QP
11	14.594	22.34	50.00	-27.66	21.49	0.62	0.23	Average
12	14.594	31.43	60.00	-28.57	30.58	0.62	0.23	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

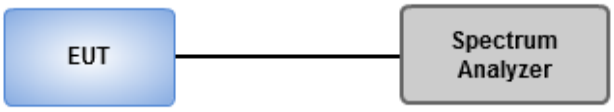
Occupied Bandwidth

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

6dB Bandwidth

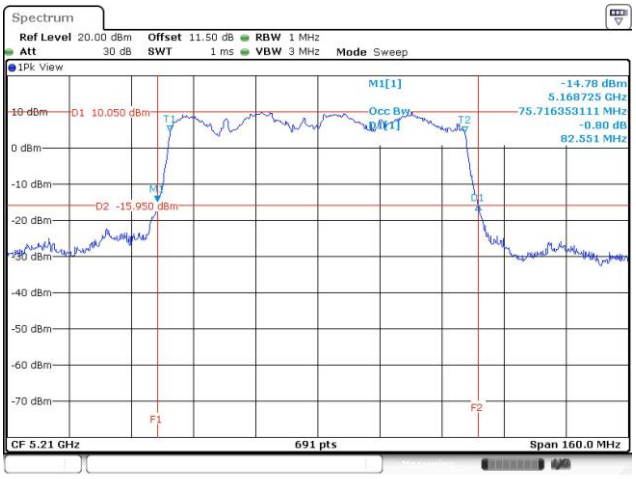
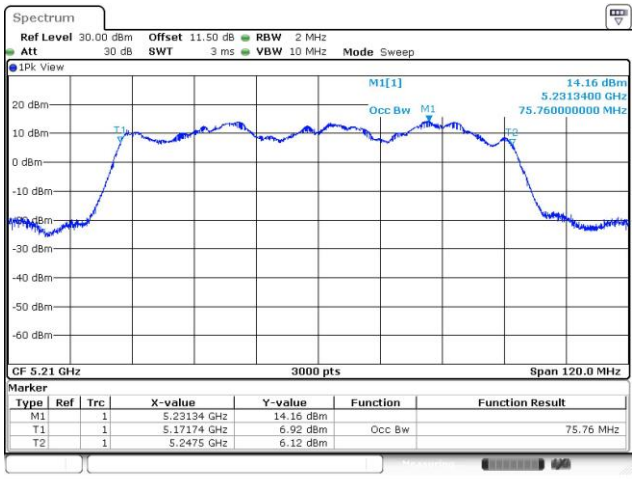
1. Set RBW = 100kHz, VBW = 300kHz
2. Detector = Peak,Trace mode = max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB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

3.2.3 Test Setup

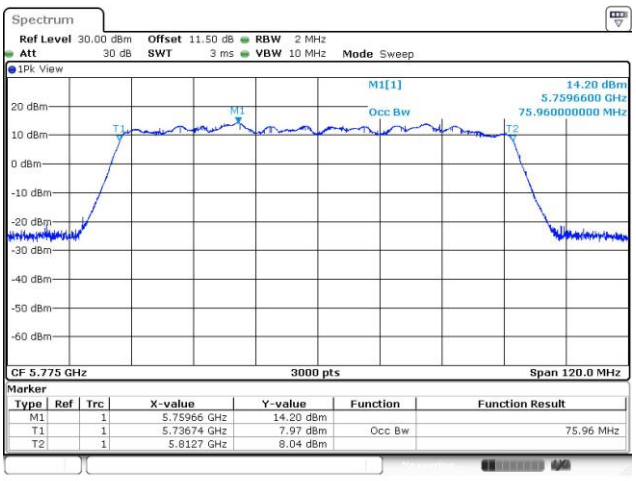
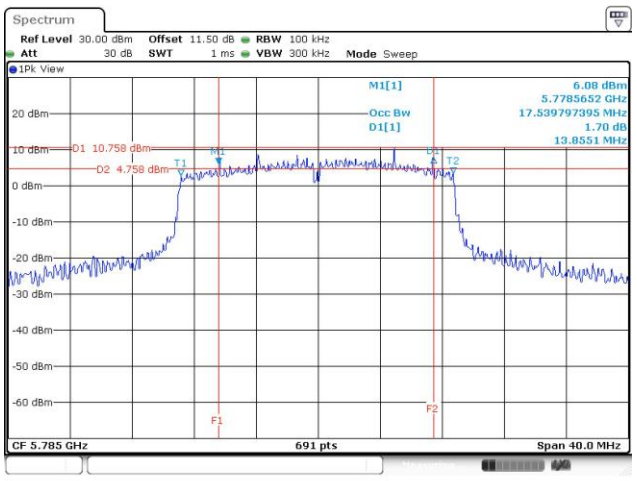


3.2.4 Test Result of Emission Bandwidth

For Frequency band 5150-5250 MHz										
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	27.48	24.93	---	---	16.40	16.51	---	---
11a	2	5200	33.91	36.09	---	---	16.72	16.78	---	---
11a	2	5240	33.70	32.10	---	---	16.70	16.61	---	---
VHT20	2	5180	19.71	24.35	---	---	17.47	17.67	---	---
VHT20	2	5200	38.33	31.23	---	---	17.57	17.81	---	---
VHT20	2	5240	32.03	29.64	---	---	17.65	17.66	---	---
VHT40	2	5190	40.93	40.35	---	---	36.22	35.96	---	---
VHT40	2	5230	80.15	68.99	---	---	38.12	36.74	---	---
VHT80	2	5210	82.09	82.55	---	---	75.76	75.72	---	---

Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	2	5745	16.38	16.49	---	---	15.36	16.35	---	---	0.5
11a	2	5785	16.48	16.51	---	---	15.42	16.35	---	---	0.5
11a	2	5825	16.60	16.55	---	---	16.00	16.29	---	---	0.5
VHT20	2	5745	17.47	17.68	---	---	15.01	17.57	---	---	0.5
VHT20	2	5785	17.55	17.68	---	---	13.86	17.57	---	---	0.5
VHT20	2	5825	17.65	17.70	---	---	14.67	17.57	---	---	0.5
VHT40	2	5755	36.40	36.12	---	---	35.36	35.36	---	---	0.5
VHT40	2	5795	36.64	36.50	---	---	35.36	35.36	---	---	0.5
VHT80	2	5775	75.96	75.52	---	---	75.83	75.83	---	---	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
☐	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 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

Non-beamforming mode

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	19.64	19.81	---	---	187.764	22.74	30.00
11a	2	5200	20.91	21.18	---	---	254.530	24.06	30.00
11a	2	5240	21.06	21.21	---	---	259.773	24.15	30.00
HT20	2	5180	20.02	19.21	---	---	183.830	22.64	30.00
HT20	2	5200	21.29	20.71	---	---	252.347	24.02	30.00
HT20	2	5240	21.21	20.65	---	---	248.274	23.95	30.00
HT40	2	5190	17.04	16.85	---	---	99.000	19.96	30.00
HT40	2	5230	20.69	20.71	---	---	234.980	23.71	30.00
VHT20	2	5180	20.13	19.34	---	---	188.940	22.76	30.00
VHT20	2	5200	21.42	20.84	---	---	260.014	**24.15**	30.00
VHT20	2	5240	21.33	20.77	---	---	255.230	24.07	30.00
VHT40	2	5190	17.16	16.99	---	---	102.003	20.09	30.00
VHT40	2	5230	20.82	20.88	---	---	243.243	23.86	30.00
VHT80	2	5210	16.72	16.12	---	---	87.915	19.44	30.00

For Frequency band 5725-5850 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	2	5745	20.48	20.52	---	---	224.406	23.51	30.00
11a	2	5785	20.62	20.89	---	---	238.089	23.77	30.00
11a	2	5825	20.89	21.18	---	---	253.964	24.05	30.00
HT20	2	5745	20.62	20.14	---	---	218.621	23.40	30.00
HT20	2	5785	20.58	20.14	---	---	217.564	23.38	30.00
HT20	2	5825	20.92	20.81	---	---	244.098	23.88	30.00
HT40	2	5755	20.72	20.74	---	---	236.609	23.74	30.00
HT40	2	5795	21.04	20.92	---	---	250.652	23.99	30.00
VHT20	2	5745	20.76	20.21	---	---	224.078	23.50	30.00
VHT20	2	5785	20.71	20.28	---	---	224.420	23.51	30.00
VHT20	2	5825	21.06	20.93	---	---	251.524	24.01	30.00
VHT40	2	5755	20.87	20.89	---	---	244.924	23.89	30.00
VHT40	2	5795	21.16	21.04	---	---	257.674	**24.11**	30.00
VHT80	2	5775	17.83	17.43	---	---	116.009	20.64	30.00

Beamforming mode

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			
HT20	2	5180	17.01	16.20	---	---	91.921	19.63	27.92
HT20	2	5200	18.28	17.70	---	---	126.182	21.01	27.92
HT20	2	5240	18.20	17.64	---	---	124.146	20.94	27.92
HT40	2	5190	14.03	13.84	---	---	49.503	16.95	27.92
HT40	2	5230	17.68	17.70	---	---	117.498	20.70	27.92
VHT20	2	5180	17.12	16.33	---	---	94.477	19.75	27.92
VHT20	2	5200	18.41	17.83	---	---	130.016	**21.14**	27.92
VHT20	2	5240	18.32	17.76	---	---	127.624	21.06	27.92
VHT40	2	5190	14.15	13.98	---	---	51.005	17.08	27.92
VHT40	2	5230	17.81	17.87	---	---	121.630	20.85	27.92
VHT80	2	5210	13.71	13.11	---	---	43.961	16.43	27.92

Note:

1. Directional gain = 10 * log((10$^{5.11/20}$+10$^{5.03/20}$)^2/2) = 8.08 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (8.08 dBi – 6 dBi) = 27.92 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			
HT20	2	5745	17.61	17.13	---	---	109.318	20.39	27.92
HT20	2	5785	17.57	17.13	---	---	108.790	20.37	27.92
HT20	2	5825	17.91	17.80	---	---	122.058	20.87	27.92
HT40	2	5755	17.71	17.73	---	---	118.313	20.73	27.92
HT40	2	5795	18.03	17.91	---	---	125.335	20.98	27.92
VHT20	2	5745	17.75	17.20	---	---	112.047	20.49	27.92
VHT20	2	5785	17.70	17.27	---	---	112.218	20.50	27.92
VHT20	2	5825	18.05	17.92	---	---	125.770	21.00	27.92
VHT40	2	5755	17.86	17.88	---	---	122.470	20.88	27.92
VHT40	2	5795	18.15	18.03	---	---	128.846	**21.10**	27.92
VHT80	2	5775	14.82	14.42	---	---	58.008	17.63	27.92

Note:

1. Directional gain = 10 * log((10$^{5.11/20}$+10$^{5.03/20}$)^2/2) = 8.08 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (8.08 dBi – 6 dBi) = 27.92 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
☐	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 (Duty cycle>98%)

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

Method SA-2 Alternative (Duty cycle<98%)

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

For 5725 ~ 5850 MHz

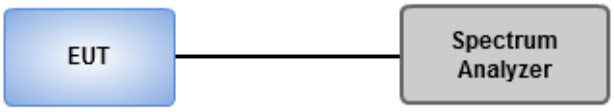
Method SA-1 (Duty cycle>98%)

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 (Duty cycle<98%)

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

3.4.3 Test Setup

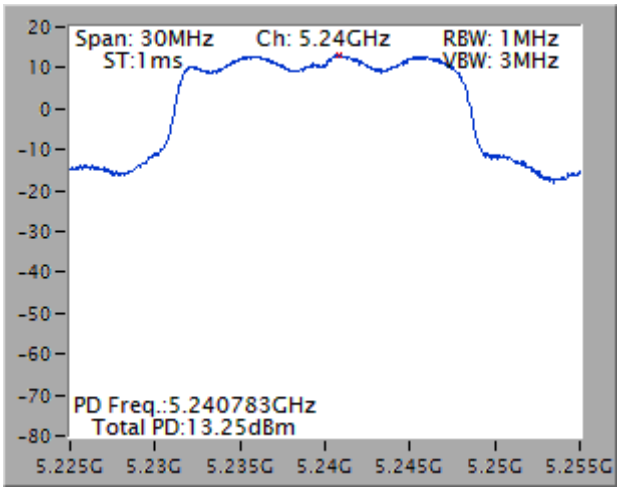


3.4.4 Test Result of Peak Power Spectral Density

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	11.26	0.00	11.26	14.92
11a	2	5200	12.74	0.00	12.74	14.92
11a	2	5240	13.25	0.00	13.25	14.92
VHT20	2	5180	11.28	0.00	11.28	14.92
VHT20	2	5200	12.95	0.00	12.95	14.92
VHT20	2	5240	13.11	0.00	13.11	14.92
VHT40	2	5190	6.34	0.00	6.34	14.92
VHT40	2	5230	10.28	0.00	10.28	14.92
VHT80	2	5210	2.02	0.20	2.22	14.92

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 10 * log((10$^{5.11/20}$+10$^{5.03/20}$)^2/2) = 8.08 dBi > 6dBi
   Limit shall be reduced to 17 dBm – (8.08 dBi – 6 dBi) = 14.92 dBm.

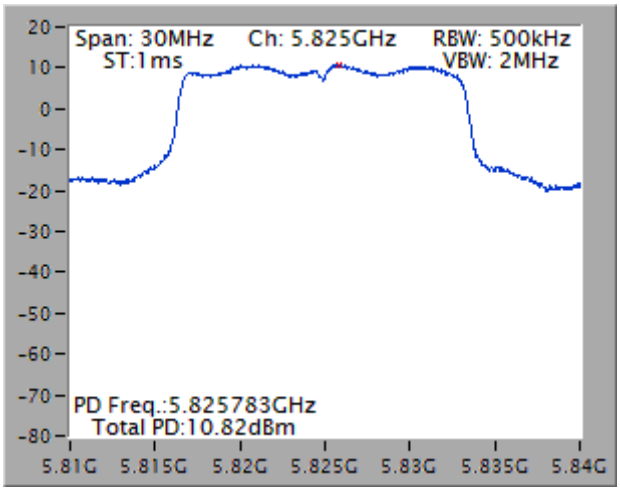
Worst Plot



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	10.19	0.00	10.19	27.92
11a	2	5785	10.43	0.00	10.43	27.92
11a	2	5825	10.82	0.00	10.82	27.92
VHT20	2	5745	9.95	0.00	9.95	27.92
VHT20	2	5785	10.25	0.00	10.25	27.92
VHT20	2	5825	10.60	0.00	10.60	27.92
VHT40	2	5755	7.94	0.00	7.94	27.92
VHT40	2	5795	8.31	0.00	8.31	27.92
VHT80	2	5775	0.93	0.20	1.13	27.92

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 10 * log((10$^{5.11/20}$+10$^{5.03/20}$)^2/2) = 8.08 dBi > 6dBi
   Limit shall be reduced to 30 dBm – (8.08 dBi – 6 dBi) = 27.92 dBm.

Worst Plot



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	☒	15.407(b)(4)(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
	☐	15.407(b)(4)(ii) ,compliance with the emission limits in § 15.247(d) Shall be at least 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power,. Attenuation below the general limits specified in §15.209(a) is not required. In addition,radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see § 15.205(c))
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		

3.5.2 Test Procedures

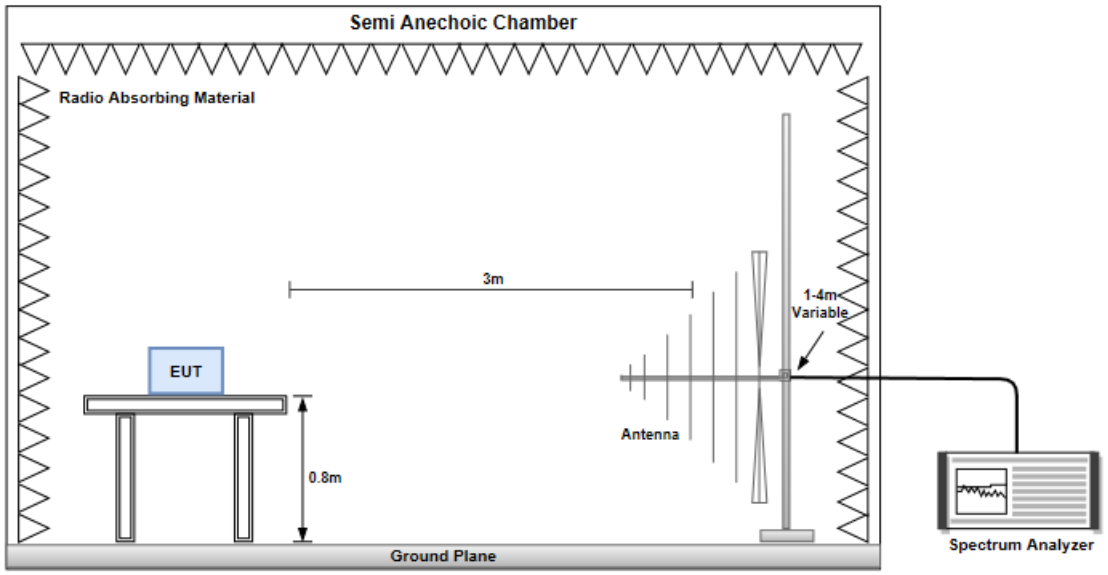
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

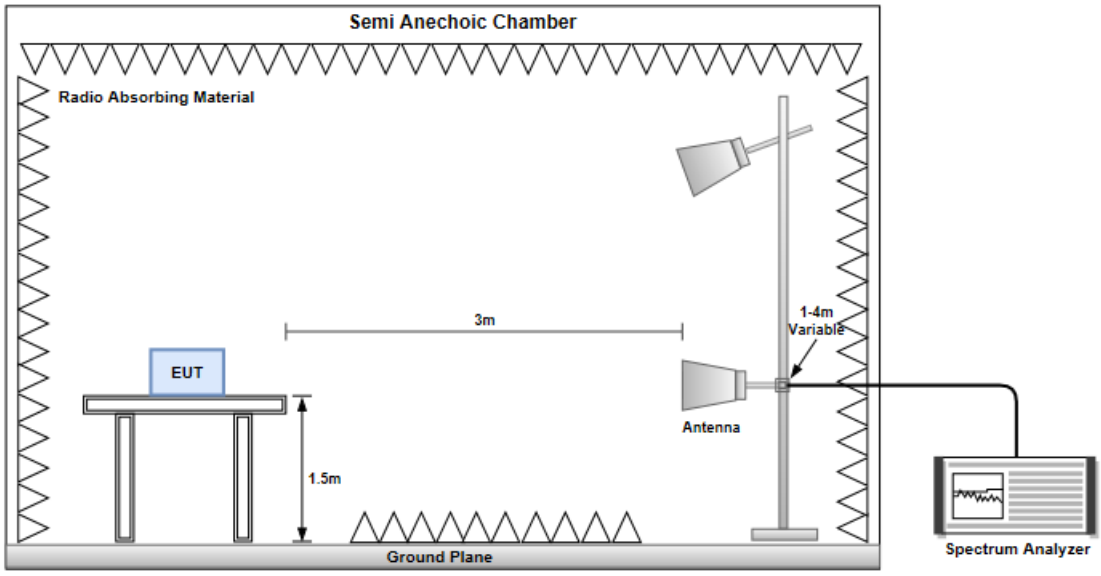
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



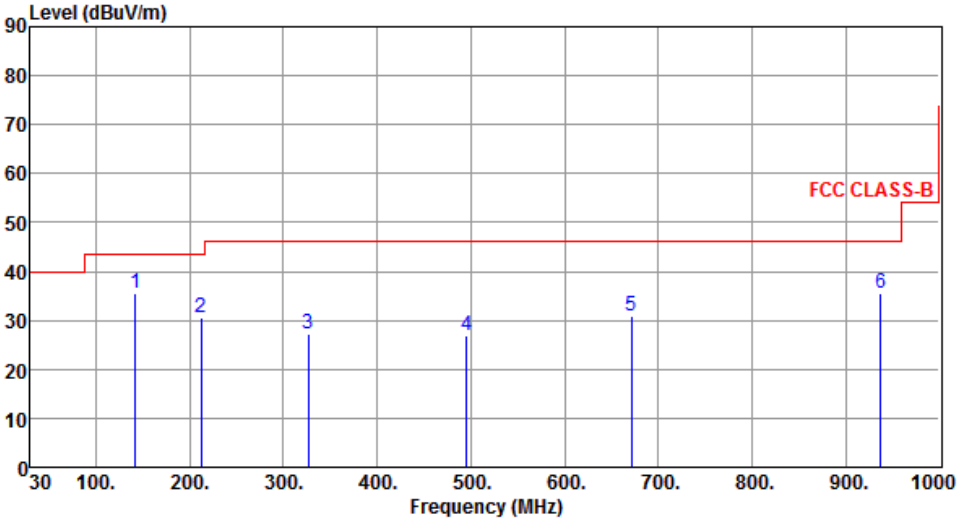
Radiated Emissions above 1 GHz



Configuration 1: POE mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

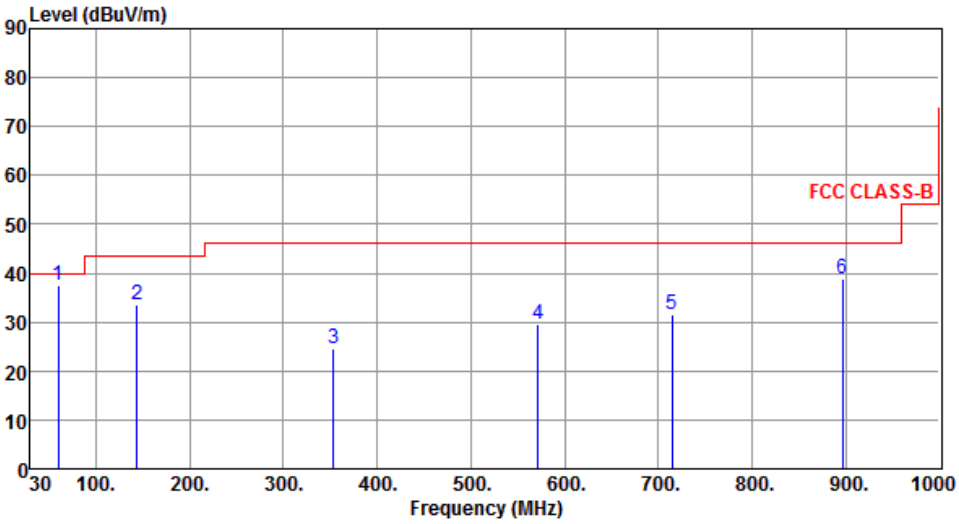
Modulation	VHT20	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	142.43	35.49	43.50	-8.01	43.86	-8.37	Peak	---	---
2	212.51	30.66	43.50	-12.84	41.32	-10.66	Peak	---	---
3	326.79	27.12	46.00	-18.88	34.03	-6.91	Peak	---	---
4	495.62	26.98	46.00	-19.02	30.02	-3.04	Peak	---	---
5	671.21	30.83	46.00	-15.17	30.51	0.32	Peak	---	---
6	936.87	35.54	46.00	-10.46	30.68	4.86	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.

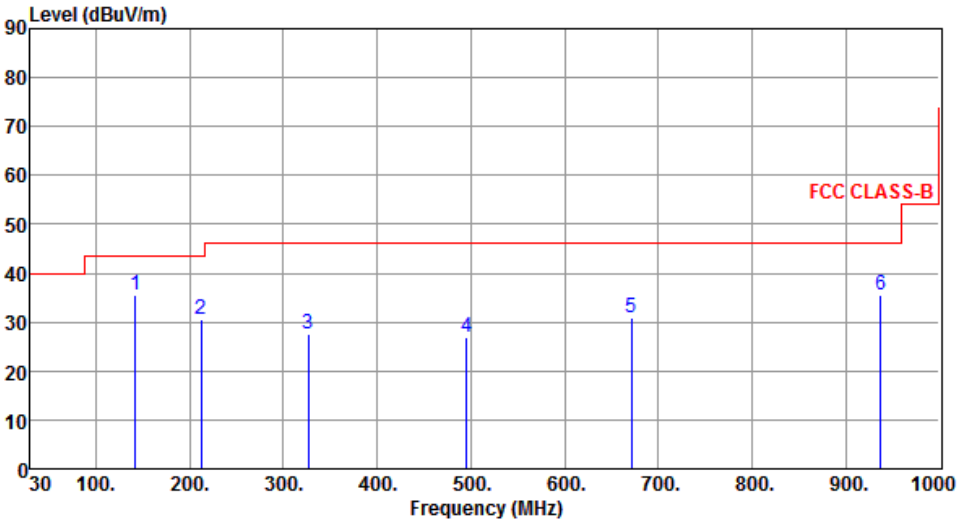
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	60.14	37.55	40.00	-2.45	46.23	-8.68	QP	100	1
2	143.51	33.45	43.50	-10.05	41.78	-8.33	Peak	---	---
3	353.14	24.67	46.00	-21.33	30.98	-6.31	Peak	---	---
4	571.34	29.51	46.00	-16.49	30.88	-1.37	Peak	---	---
5	714.74	31.58	46.00	-14.42	30.46	1.12	Peak	---	---
6	896.39	38.97	46.00	-7.03	34.93	4.04	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.

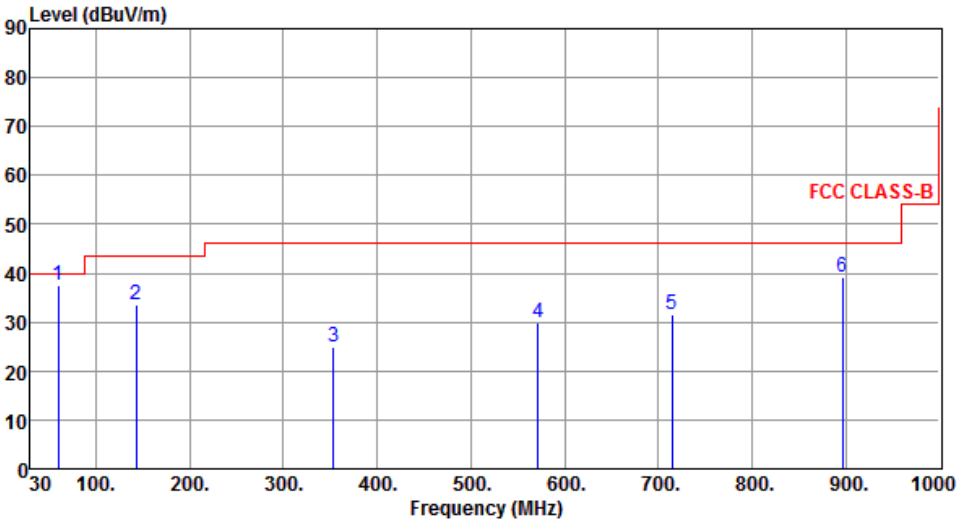
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	142.46	35.41	43.50	-8.09	43.78	-8.37	Peak	---	---
2	212.45	30.56	43.50	-12.94	41.22	-10.66	Peak	---	---
3	326.72	27.43	46.00	-18.57	34.35	-6.92	Peak	---	---
4	495.51	26.80	46.00	-19.20	29.85	-3.05	Peak	---	---
5	671.25	30.86	46.00	-15.14	30.53	0.33	Peak	---	---
6	936.87	35.54	46.00	-10.46	30.68	4.86	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)	5795
Polarization	Vertical		

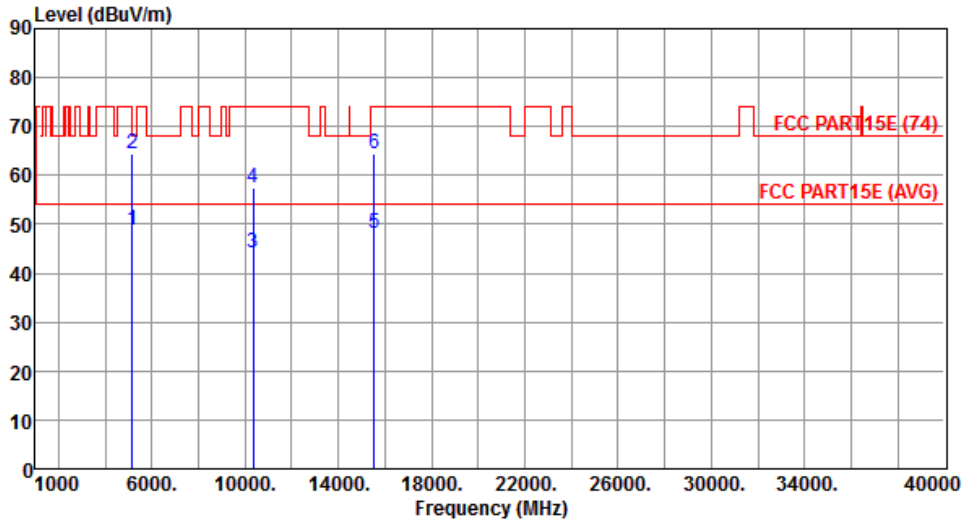


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	60.14	37.56	40.00	-2.44	46.24	-8.68	QP	100	3
2	143.32	33.49	43.50	-10.01	41.83	-8.34	Peak	---	---
3	353.21	24.95	46.00	-21.05	31.26	-6.31	Peak	---	---
4	571.34	29.85	46.00	-16.15	31.22	-1.37	Peak	---	---
5	714.74	31.58	46.00	-14.42	30.46	1.12	Peak	---	---
6	896.32	39.23	46.00	-6.77	35.19	4.04	Peak	---	---

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

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

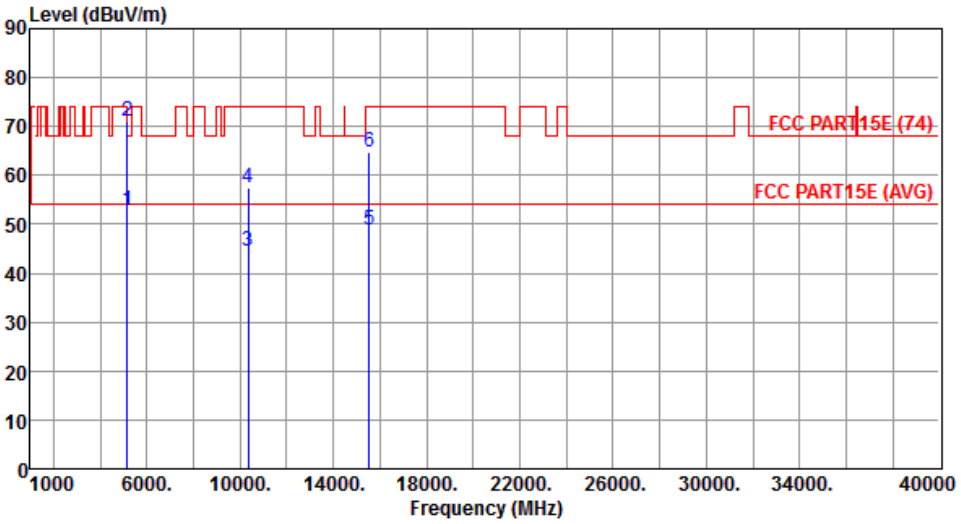
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.89	54.00	-5.11	42.89	6.00	Average	215	259
2	5150.00	64.39	74.00	-9.61	58.39	6.00	Peak	215	259
3	10360.00	44.29	54.00	-9.71	28.54	15.75	Average	100	36
4	10360.00	57.42	74.00	-16.58	41.67	15.75	Peak	100	36
5	15540.00	48.22	54.00	-5.78	31.49	16.73	Average	165	353
6	15540.00	64.35	74.00	-9.65	47.62	16.73	Peak	165	353

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

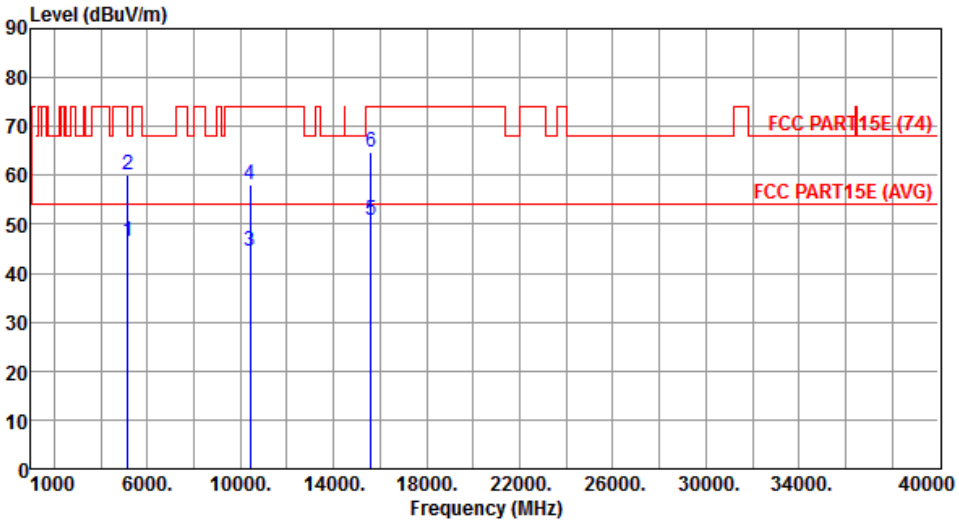
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.89	54.00	-1.11	46.89	6.00	Average	212	62
2	5150.00	71.13	74.00	-2.87	65.13	6.00	Peak	212	62
3	10360.00	44.35	54.00	-9.65	28.60	15.75	Average	100	26
4	10360.00	57.46	74.00	-16.54	41.71	15.75	Peak	100	26
5	15540.00	48.73	54.00	-5.27	32.00	16.73	Average	163	311
6	15540.00	64.71	74.00	-9.29	47.98	16.73	Peak	163	311

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

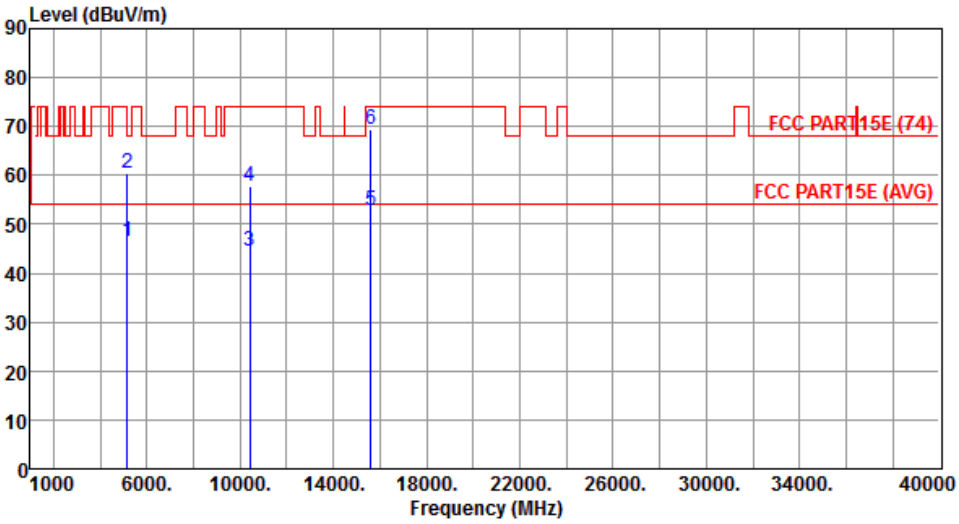
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.48	54.00	-7.52	40.48	6.00	Average	220	261
2	5150.00	60.11	74.00	-13.89	54.11	6.00	Peak	220	261
3	10400.00	44.35	54.00	-9.65	28.57	15.78	Average	100	31
4	10400.00	58.02	74.00	-15.98	42.24	15.78	Peak	100	31
5	15600.00	50.88	54.00	-3.12	34.23	16.65	Average	161	345
6	15600.00	64.92	74.00	-9.08	48.27	16.65	Peak	161	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).

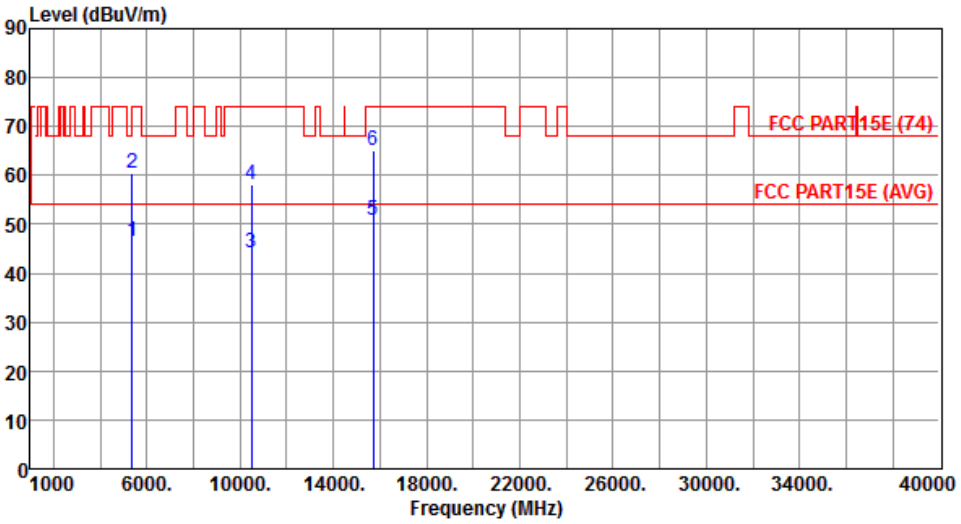
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.56	54.00	-7.44	40.56	6.00	Average	211	62
2	5150.00	60.35	74.00	-13.65	54.35	6.00	Peak	211	62
3	10400.00	44.52	54.00	-9.48	28.74	15.78	Average	100	21
4	10400.00	57.63	74.00	-16.37	41.85	15.78	Peak	100	21
5	15600.00	52.83	54.00	-1.17	36.18	16.65	Average	168	308
6	15600.00	69.29	74.00	-4.71	52.64	16.65	Peak	168	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).

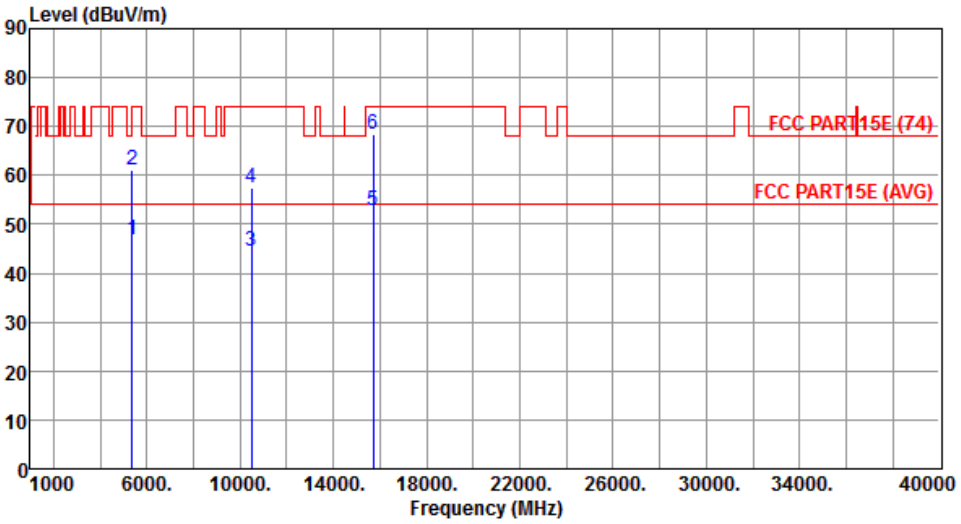
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.38	54.00	-7.62	40.02	6.36	Average	220	259
2	5350.00	60.44	74.00	-13.56	54.08	6.36	Peak	220	259
3	10480.00	44.29	54.00	-9.71	28.46	15.83	Average	100	29
4	10480.00	57.98	74.00	-16.02	42.15	15.83	Peak	100	29
5	15720.00	50.94	54.00	-3.06	34.43	16.51	Average	165	351
6	15720.00	65.07	74.00	-8.93	48.56	16.51	Peak	165	351

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

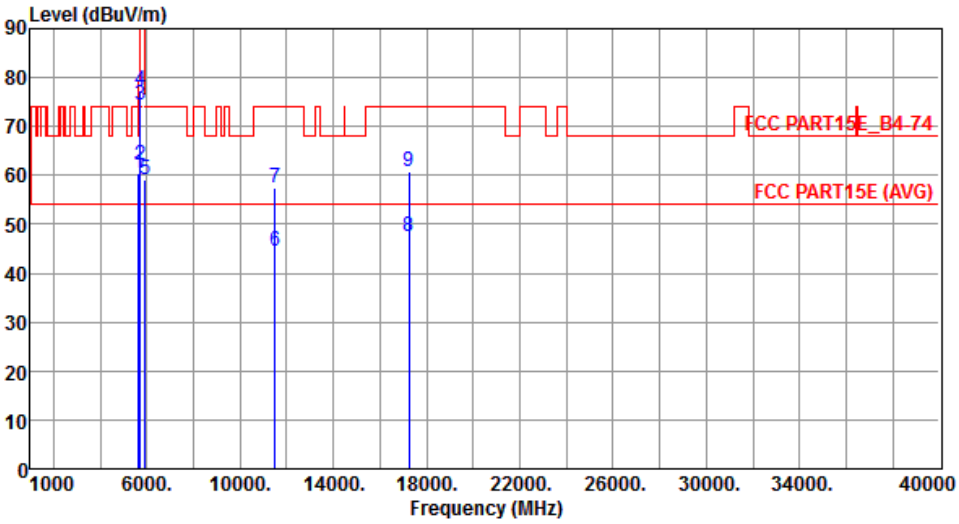
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.94	54.00	-7.06	40.58	6.36	Average	215	64
2	5350.00	61.07	74.00	-12.93	54.71	6.36	Peak	215	64
3	10480.00	44.44	54.00	-9.56	28.61	15.83	Average	100	15
4	10480.00	57.53	74.00	-16.47	41.70	15.83	Peak	100	15
5	15720.00	52.96	54.00	-1.04	36.45	16.51	Average	166	312
6	15720.00	68.57	74.00	-5.43	52.06	16.51	Peak	166	312

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

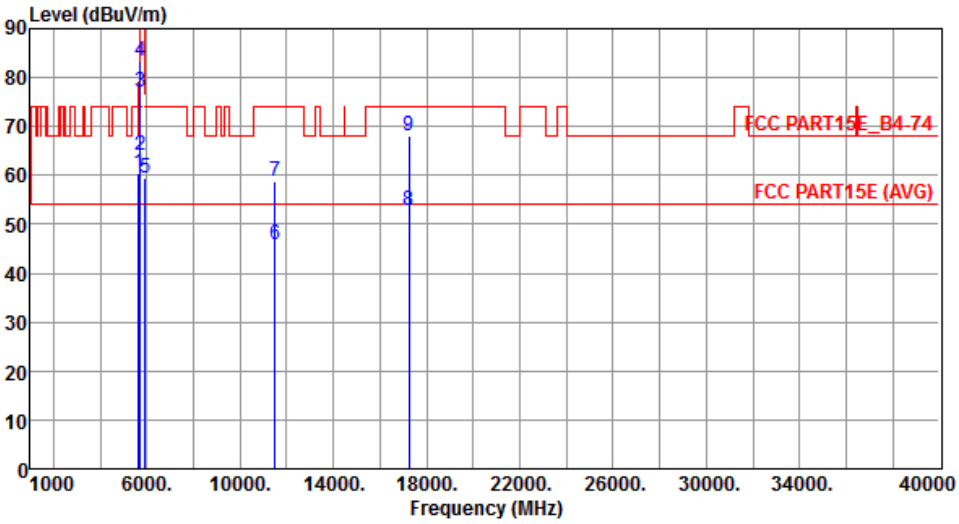
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.42	68.20	-7.78	53.62	6.80	Peak	224	96
2	5700.00	62.25	105.20	-42.95	55.37	6.88	Peak	224	96
3	5720.00	74.38	110.80	-36.42	67.47	6.91	Peak	224	96
4	5725.00	77.45	122.20	-44.75	70.54	6.91	Peak	224	96
5	5925.00	59.21	68.20	-8.99	52.00	7.21	Peak	224	96
6	11490.00	44.63	54.00	-9.37	28.04	16.59	Average	100	22
7	11490.00	57.46	74.00	-16.54	40.87	16.59	Peak	100	22
8	17235.00	47.65	54.00	-6.35	29.08	18.57	Average	100	351
9	17235.00	60.84	74.00	-13.16	42.27	18.57	Peak	100	351

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

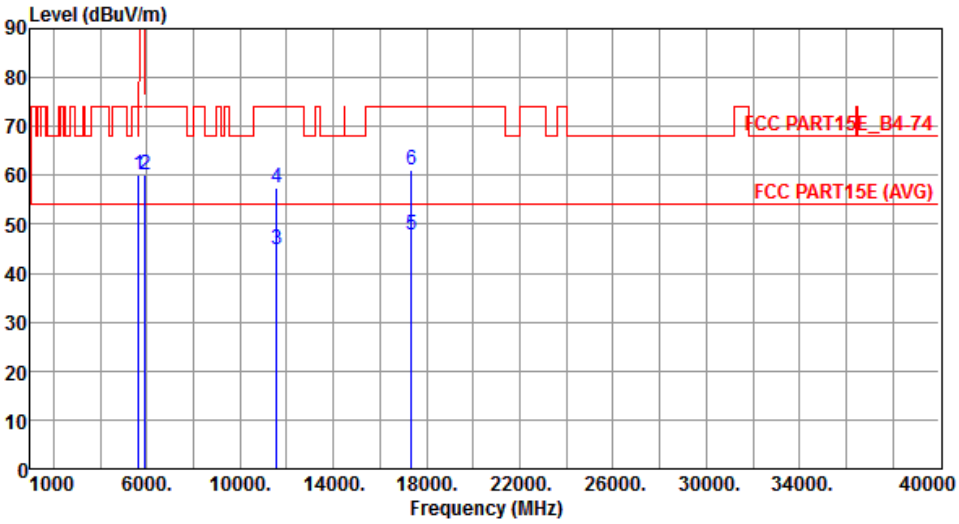
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.58	68.20	-7.62	53.78	6.80	Peak	210	339
2	5700.00	64.10	105.20	-41.10	57.22	6.88	Peak	210	339
3	5720.00	77.16	110.80	-33.64	70.25	6.91	Peak	210	339
4	5725.00	83.45	122.20	-38.75	76.54	6.91	Peak	210	339
5	5925.00	59.38	68.20	-8.82	52.17	7.21	Peak	210	339
6	11490.00	45.68	54.00	-8.32	29.09	16.59	Average	141	342
7	11490.00	58.89	74.00	-15.11	42.30	16.59	Peak	141	342
8	17235.00	52.78	54.00	-1.22	34.21	18.57	Average	161	356
9	17235.00	68.02	74.00	-5.98	49.45	18.57	Peak	161	356

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

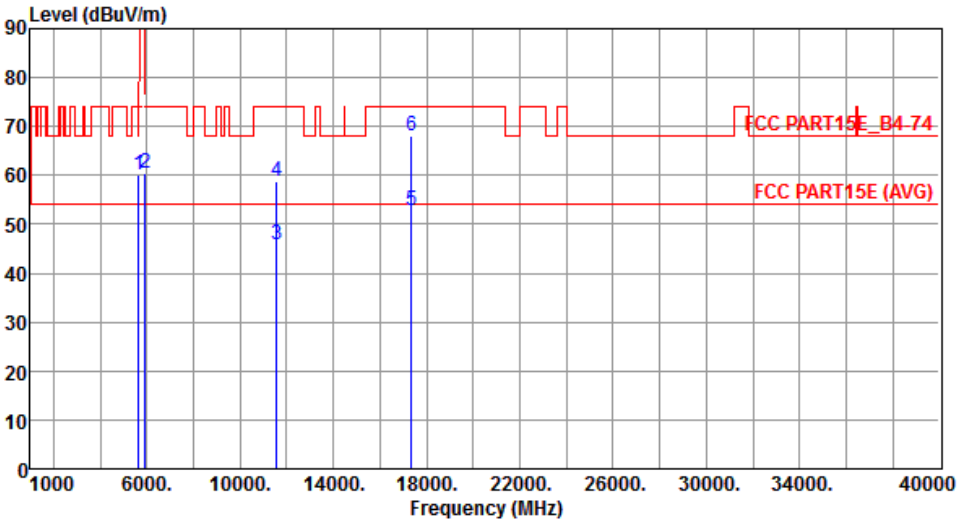
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.16	68.20	-8.04	53.36	6.80	Peak	226	98
2	5925.00	60.21	68.20	-7.99	53.00	7.21	Peak	226	98
3	11570.00	44.80	54.00	-9.20	28.31	16.49	Average	100	14
4	11570.00	57.55	74.00	-16.45	41.06	16.49	Peak	100	14
5	17355.00	47.79	54.00	-6.21	28.85	18.94	Average	100	356
6	17355.00	61.00	74.00	-13.00	42.06	18.94	Peak	100	356

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

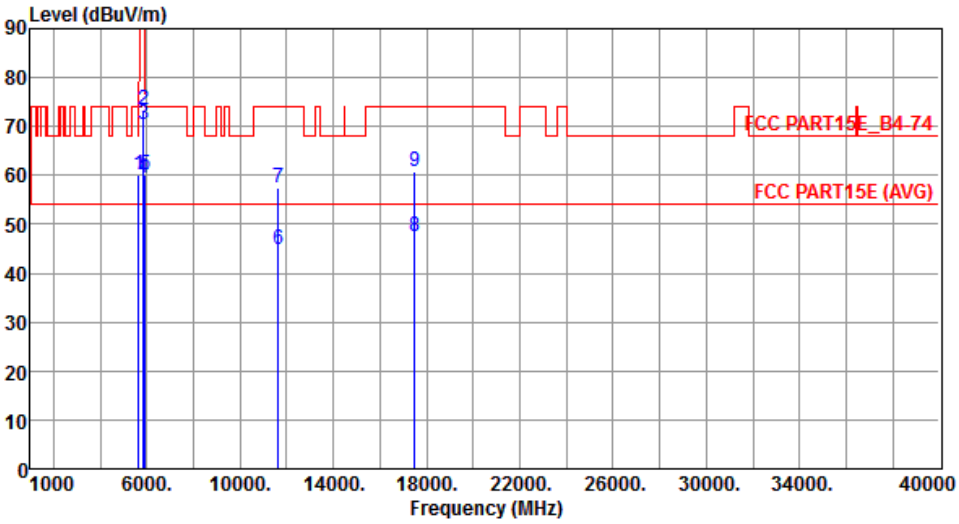
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.24	68.20	-7.96	53.44	6.80	Peak	220	341
2	5925.00	60.35	68.20	-7.85	53.14	7.21	Peak	220	341
3	11570.00	45.73	54.00	-8.27	29.24	16.49	Average	155	339
4	11570.00	58.94	74.00	-15.06	42.45	16.49	Peak	155	339
5	17355.00	52.84	54.00	-1.16	33.90	18.94	Average	161	356
6	17355.00	68.11	74.00	-5.89	49.17	18.94	Peak	161	356

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

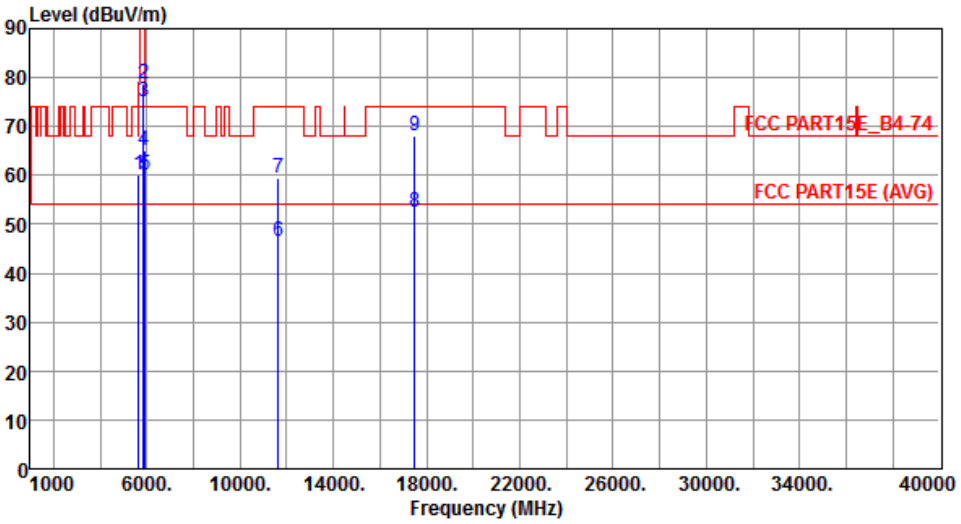
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.98	68.20	-8.22	53.18	6.80	Peak	226	104
2	5850.00	73.24	122.20	-48.96	66.14	7.10	Peak	226	104
3	5855.00	70.42	110.80	-40.38	63.30	7.12	Peak	226	104
4	5875.00	59.48	105.20	-45.72	52.34	7.14	Peak	226	104
5	5925.00	60.06	68.20	-8.14	52.85	7.21	Peak	226	104
6	11650.00	44.69	54.00	-9.31	28.32	16.37	Average	100	22
7	11650.00	57.48	74.00	-16.52	41.11	16.37	Peak	100	22
8	17475.00	47.62	54.00	-6.38	28.30	19.32	Average	100	348
9	17475.00	60.89	74.00	-13.11	41.57	19.32	Peak	100	348

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

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

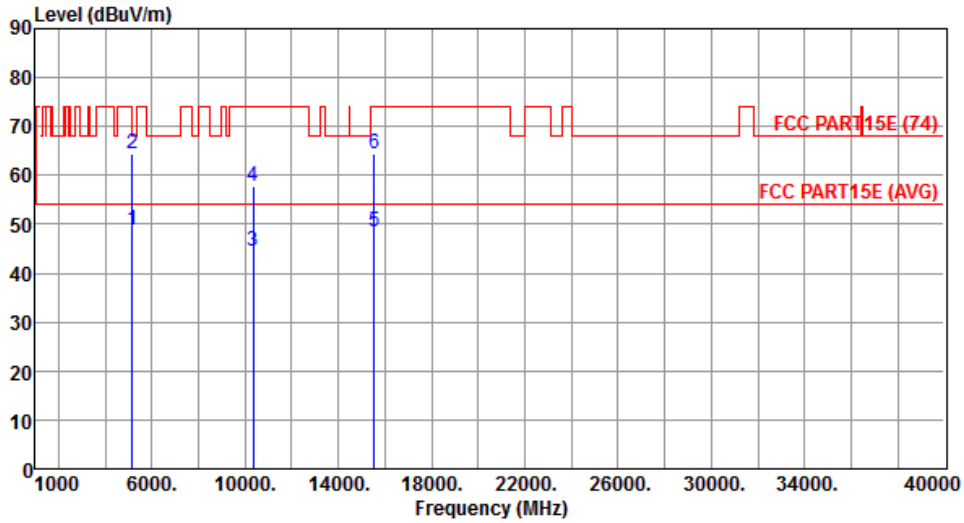


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.04	68.20	-8.16	53.24	6.80	Peak	209	340
2	5850.00	78.67	122.20	-43.53	71.57	7.10	Peak	209	340
3	5855.00	75.15	110.80	-35.65	68.03	7.12	Peak	209	340
4	5875.00	64.97	105.20	-40.23	57.83	7.14	Peak	209	340
5	5925.00	60.19	68.20	-8.01	52.98	7.21	Peak	209	340
6	11650.00	46.45	54.00	-7.55	30.08	16.37	Average	164	354
7	11650.00	59.38	74.00	-14.62	43.01	16.37	Peak	164	354
8	17475.00	52.60	54.00	-1.40	33.28	19.32	Average	166	353
9	17475.00	68.15	74.00	-5.85	48.83	19.32	Peak	166	353

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

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

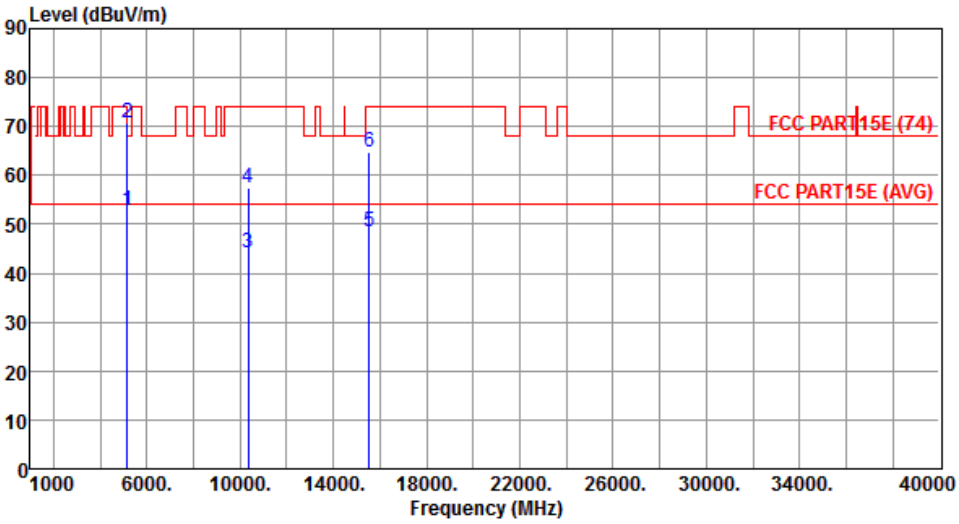
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.95	54.00	-5.05	42.95	6.00	Average	214	258
2	5150.00	64.42	74.00	-9.58	58.42	6.00	Peak	214	258
3	10360.00	44.45	54.00	-9.55	28.70	15.75	Average	100	39
4	10360.00	57.62	74.00	-16.38	41.87	15.75	Peak	100	39
5	15540.00	48.38	54.00	-5.62	31.65	16.73	Average	166	348
6	15540.00	64.51	74.00	-9.49	47.78	16.73	Peak	166	348

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

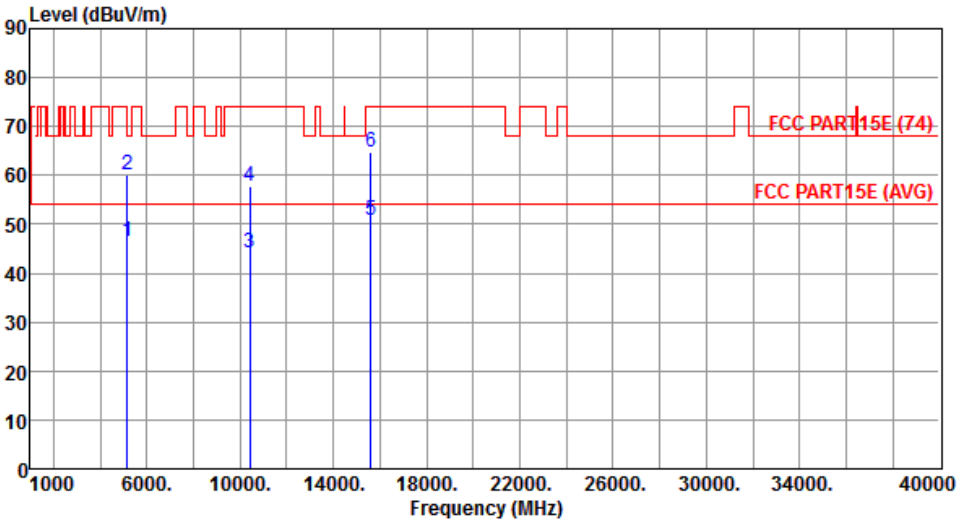
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	52.83	54.00	-1.17	46.83	6.00	Average	221	76
2	5150.00	70.81	74.00	-3.19	64.81	6.00	Peak	221	76
3	10360.00	44.26	54.00	-9.74	28.51	15.75	Average	105	31
4	10360.00	57.58	74.00	-16.42	41.83	15.75	Peak	105	31
5	15540.00	48.65	54.00	-5.35	31.92	16.73	Average	163	314
6	15540.00	64.88	74.00	-9.12	48.15	16.73	Peak	163	314

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

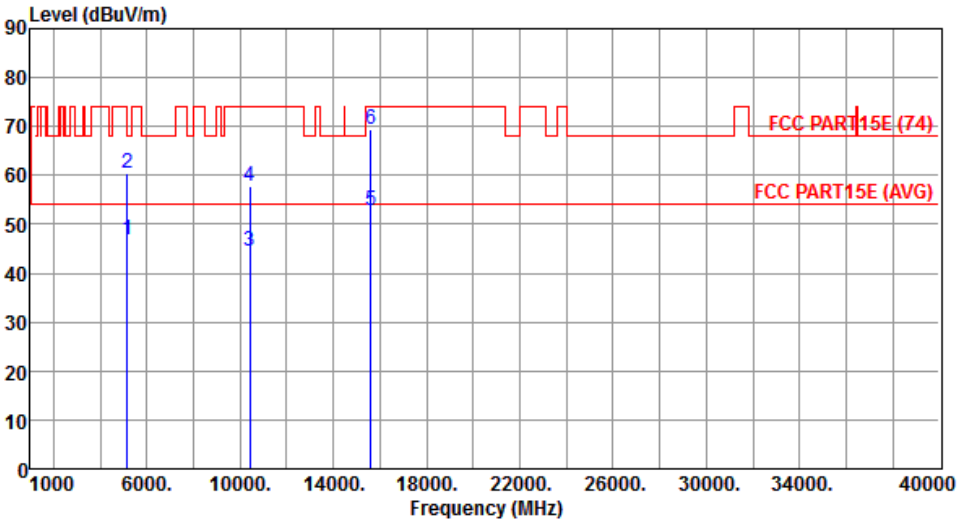
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.59	54.00	-7.41	40.59	6.00	Average	220	266
2	5150.00	60.15	74.00	-13.85	54.15	6.00	Peak	220	266
3	10400.00	44.25	54.00	-9.75	28.47	15.78	Average	100	39
4	10400.00	57.88	74.00	-16.12	42.10	15.78	Peak	100	39
5	15600.00	50.65	54.00	-3.35	34.00	16.65	Average	146	342
6	15600.00	64.78	74.00	-9.22	48.13	16.65	Peak	146	342

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

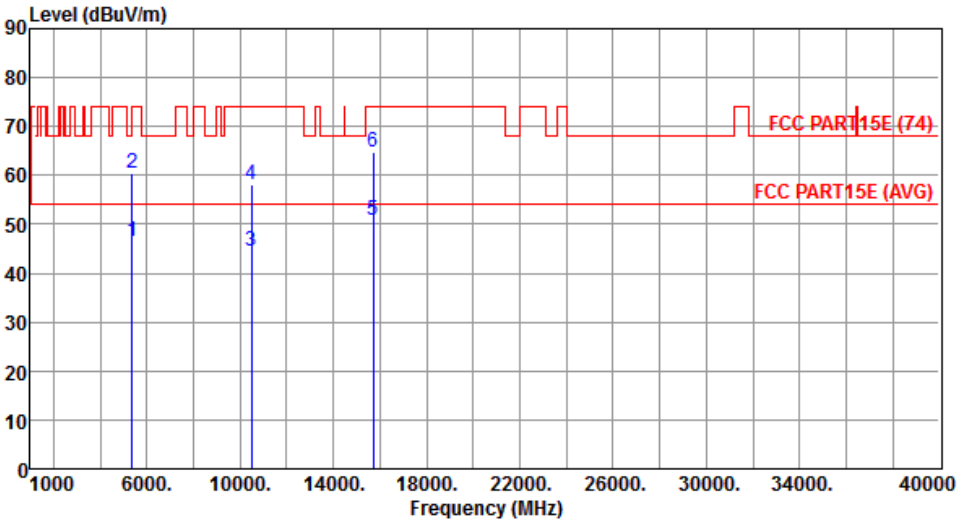
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.86	54.00	-7.14	40.86	6.00	Average	211	65
2	5150.00	60.44	74.00	-13.56	54.44	6.00	Peak	211	65
3	10400.00	44.39	54.00	-9.61	28.61	15.78	Average	100	24
4	10400.00	57.81	74.00	-16.19	42.03	15.78	Peak	100	24
5	15600.00	52.95	54.00	-1.05	36.30	16.65	Average	168	310
6	15600.00	69.45	74.00	-4.55	52.80	16.65	Peak	168	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).

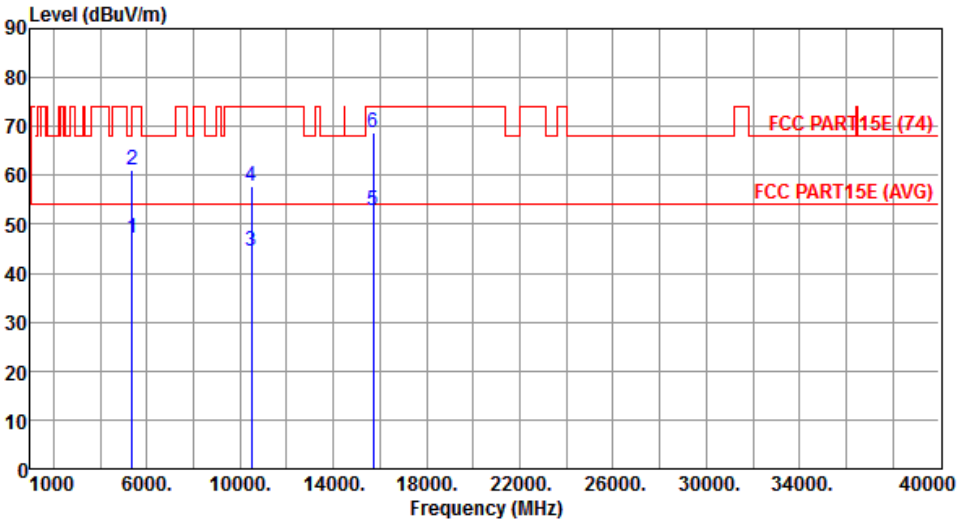
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.42	54.00	-7.58	40.06	6.36	Average	220	258
2	5350.00	60.51	74.00	-13.49	54.15	6.36	Peak	220	258
3	10480.00	44.34	54.00	-9.66	28.51	15.83	Average	100	36
4	10480.00	58.16	74.00	-15.84	42.33	15.83	Peak	100	36
5	15720.00	50.76	54.00	-3.24	34.25	16.51	Average	165	354
6	15720.00	64.91	74.00	-9.09	48.40	16.51	Peak	165	354

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

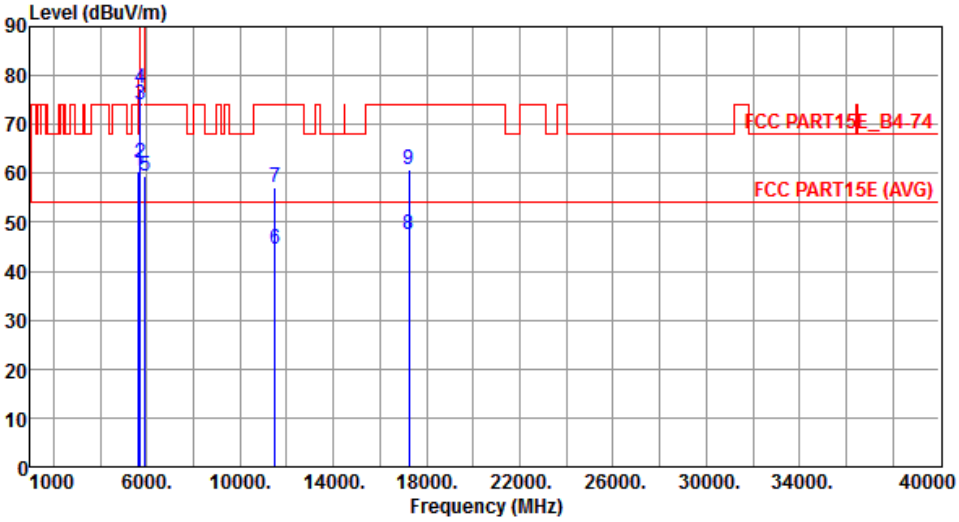
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.08	54.00	-6.92	40.72	6.36	Average	215	68
2	5350.00	61.15	74.00	-12.85	54.79	6.36	Peak	215	68
3	10480.00	44.52	54.00	-9.48	28.69	15.83	Average	100	18
4	10480.00	57.68	74.00	-16.32	41.85	15.83	Peak	100	18
5	15720.00	52.89	54.00	-1.11	36.38	16.51	Average	167	312
6	15720.00	68.64	74.00	-5.36	52.13	16.51	Peak	167	312

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

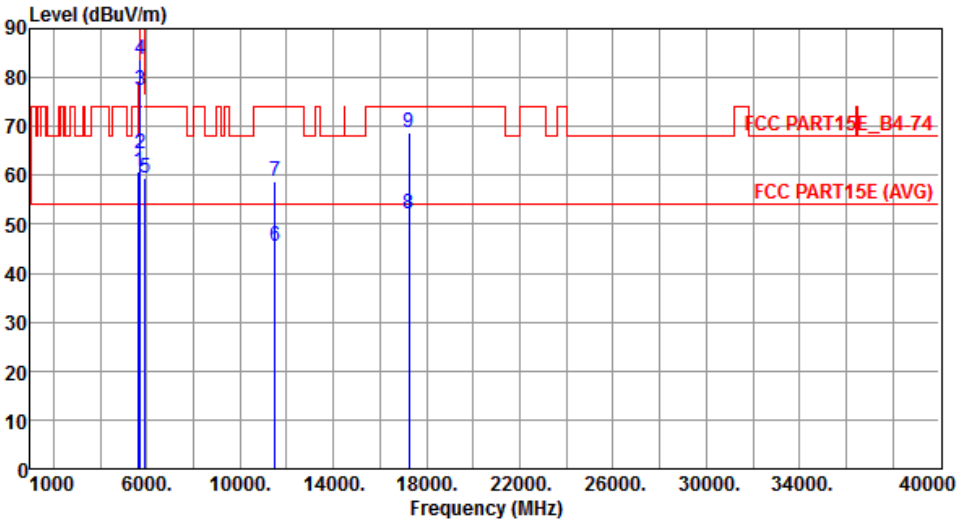
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.29	68.20	-7.91	53.49	6.80	Peak	224	105
2	5700.00	62.18	105.20	-43.02	55.30	6.88	Peak	224	105
3	5720.00	74.15	110.80	-36.65	67.24	6.91	Peak	224	105
4	5725.00	77.36	122.20	-44.84	70.45	6.91	Peak	224	105
5	5925.00	59.34	68.20	-8.86	52.13	7.21	Peak	224	105
6	11490.00	44.58	54.00	-9.42	27.99	16.59	Average	100	26
7	11490.00	57.24	74.00	-16.76	40.65	16.59	Peak	100	26
8	17235.00	47.59	54.00	-6.41	29.02	18.57	Average	100	354
9	17235.00	60.72	74.00	-13.28	42.15	18.57	Peak	100	354

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

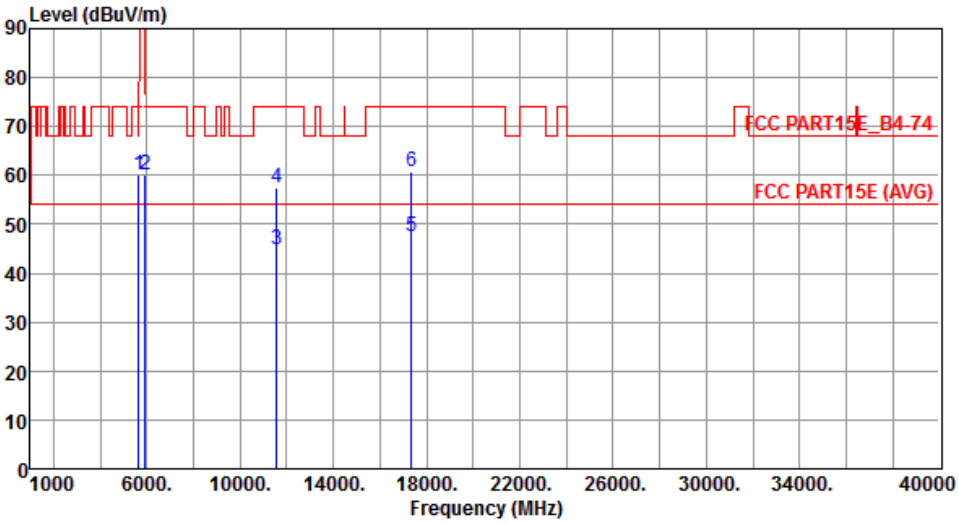
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.72	68.20	-7.48	53.92	6.80	Peak	210	341
2	5700.00	64.53	105.20	-40.67	57.65	6.88	Peak	210	341
3	5720.00	77.45	110.80	-33.35	70.54	6.91	Peak	210	341
4	5725.00	83.62	122.20	-38.58	76.71	6.91	Peak	210	341
5	5925.00	59.46	68.20	-8.74	52.25	7.21	Peak	210	341
6	11490.00	45.56	54.00	-8.44	28.97	16.59	Average	141	344
7	11490.00	58.92	74.00	-15.08	42.33	16.59	Peak	141	344
8	17235.00	52.13	54.00	-1.87	33.56	18.57	Average	167	355
9	17235.00	68.91	74.00	-5.09	50.34	18.57	Peak	167	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).

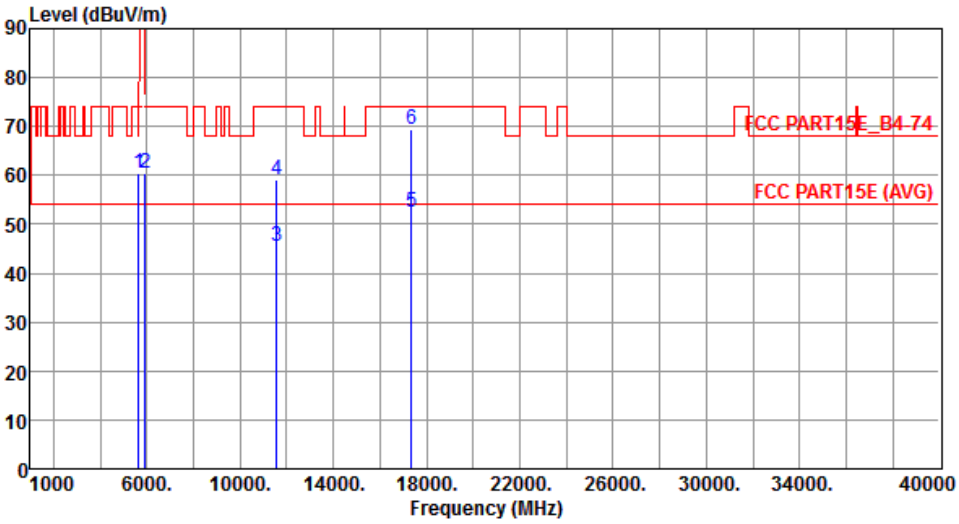
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.12	68.20	-8.08	53.32	6.80	Peak	226	104
2	5925.00	60.19	68.20	-8.01	52.98	7.21	Peak	226	104
3	11570.00	44.68	54.00	-9.32	28.19	16.49	Average	100	27
4	11570.00	57.41	74.00	-16.59	40.92	16.49	Peak	100	27
5	17355.00	47.64	54.00	-6.36	28.70	18.94	Average	100	351
6	17355.00	60.85	74.00	-13.15	41.91	18.94	Peak	100	351

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

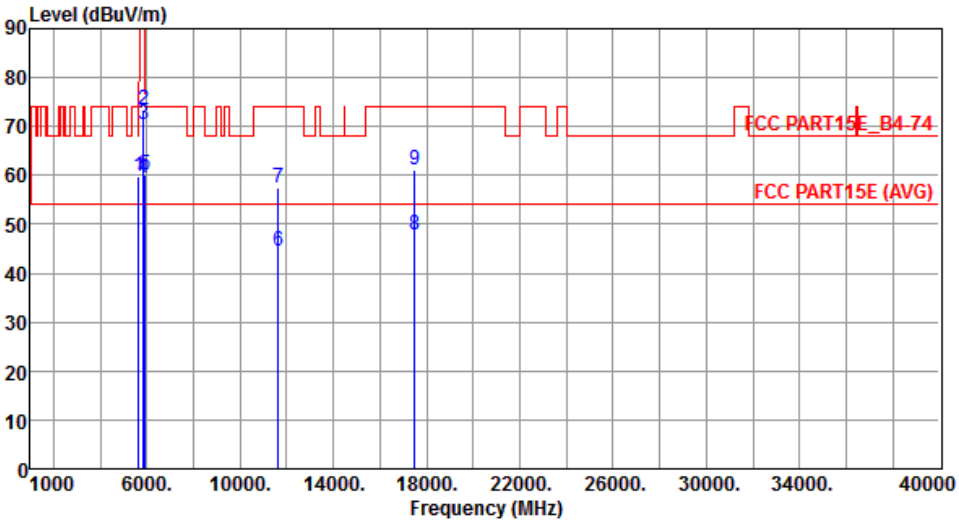
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.39	68.20	-7.81	53.59	6.80	Peak	220	344
2	5925.00	60.46	68.20	-7.74	53.25	7.21	Peak	220	344
3	11570.00	45.49	54.00	-8.51	29.00	16.49	Average	155	336
4	11570.00	59.04	74.00	-14.96	42.55	16.49	Peak	155	336
5	17355.00	52.62	54.00	-1.38	33.68	18.94	Average	167	355
6	17355.00	69.52	74.00	-4.48	50.58	18.94	Peak	167	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).

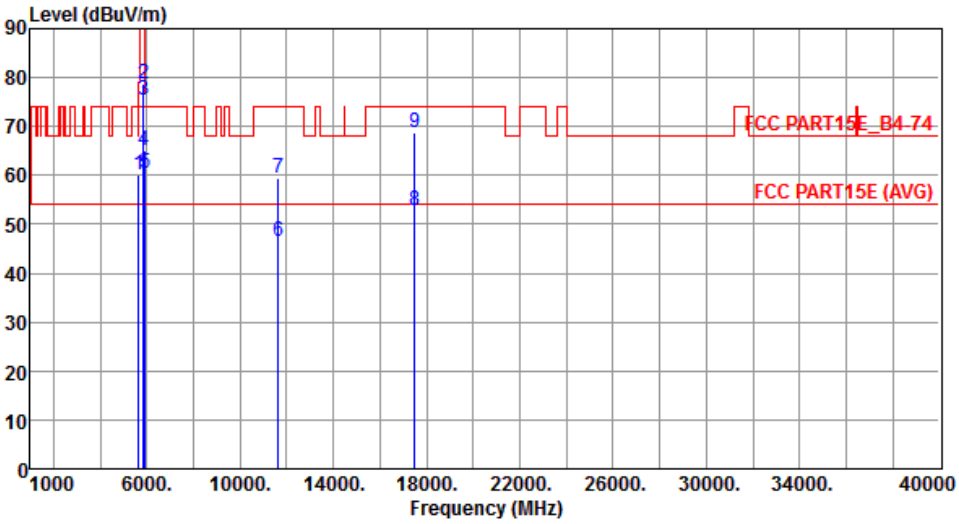
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	59.87	68.20	-8.33	53.07	6.80	Peak	226	108
2	5850.00	73.25	122.20	-48.95	66.15	7.10	Peak	226	108
3	5855.00	70.56	110.80	-40.24	63.44	7.12	Peak	226	108
4	5875.00	59.52	105.20	-45.68	52.38	7.14	Peak	226	108
5	5925.00	60.14	68.20	-8.06	52.93	7.21	Peak	226	108
6	11650.00	44.58	54.00	-9.42	28.21	16.37	Average	110	31
7	11650.00	57.34	74.00	-16.66	40.97	16.37	Peak	110	31
8	17475.00	47.68	54.00	-6.32	28.36	19.32	Average	100	355
9	17475.00	61.04	74.00	-12.96	41.72	19.32	Peak	100	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).

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

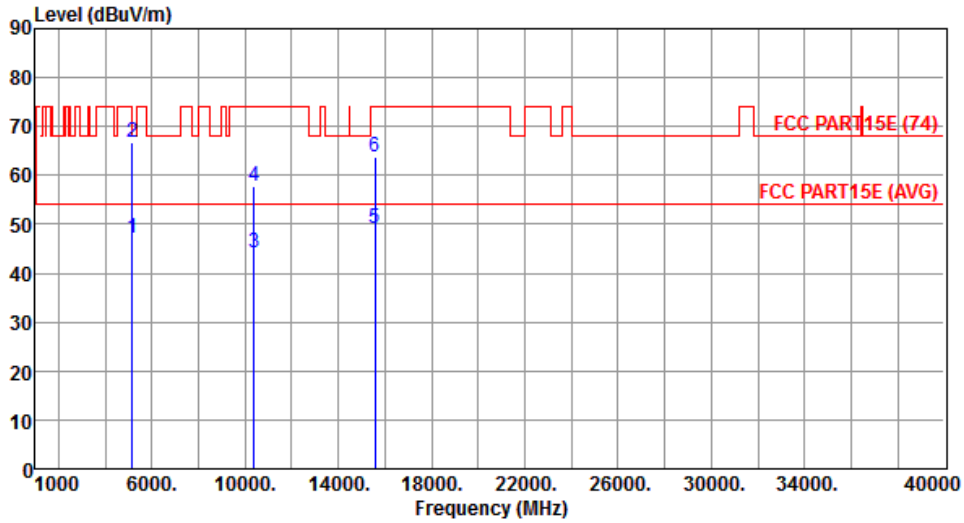


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.16	68.20	-8.04	53.36	6.80	Peak	209	343
2	5850.00	78.74	122.20	-43.46	71.64	7.10	Peak	209	343
3	5855.00	75.39	110.80	-35.41	68.27	7.12	Peak	209	343
4	5875.00	65.11	105.20	-40.09	57.97	7.14	Peak	209	343
5	5925.00	60.44	68.20	-7.76	53.23	7.21	Peak	209	343
6	11650.00	46.38	54.00	-7.62	30.01	16.37	Average	161	355
7	11650.00	59.42	74.00	-14.58	43.05	16.37	Peak	161	355
8	17475.00	52.76	54.00	-1.24	33.44	19.32	Average	167	354
9	17475.00	68.73	74.00	-5.27	49.41	19.32	Peak	167	354

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

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

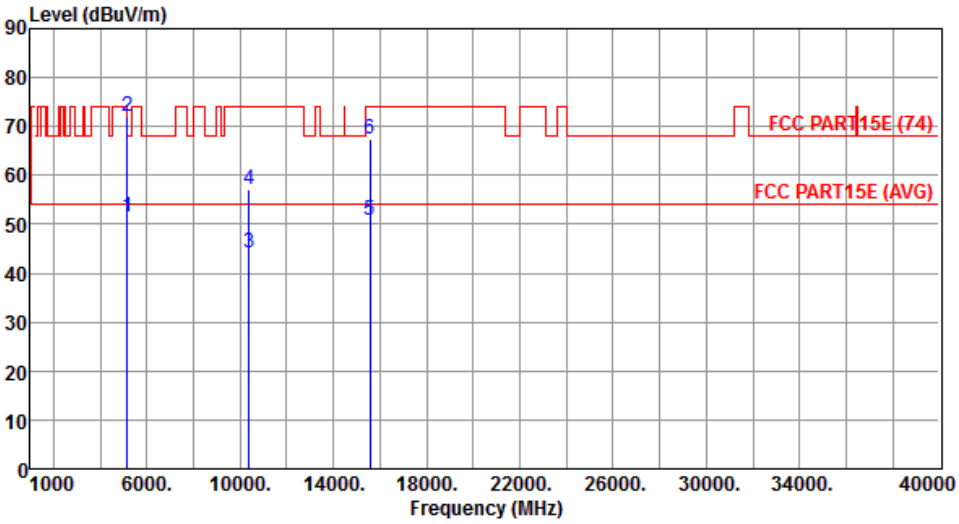
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.21	54.00	-6.79	41.21	6.00	Average	211	256
2	5150.00	66.59	74.00	-7.41	60.59	6.00	Peak	211	256
3	10380.00	44.11	54.00	-9.89	28.35	15.76	Average	100	24
4	10380.00	57.92	74.00	-16.08	42.16	15.76	Peak	100	24
5	15570.00	49.25	54.00	-4.75	32.56	16.69	Average	168	351
6	15570.00	63.64	74.00	-10.36	46.95	16.69	Peak	168	351

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

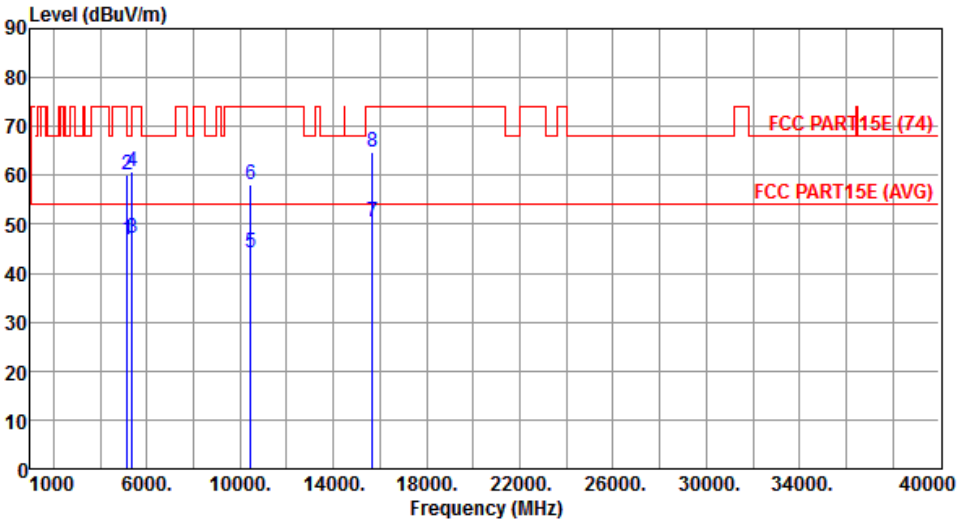
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.43	54.00	-2.57	45.43	6.00	Average	194	95
2	5150.00	72.22	74.00	-1.78	66.22	6.00	Peak	194	95
3	10380.00	44.16	54.00	-9.84	28.40	15.76	Average	101	29
4	10380.00	57.28	74.00	-16.72	41.52	15.76	Peak	101	29
5	15570.00	50.65	54.00	-3.35	33.96	16.69	Average	162	134
6	15570.00	67.42	74.00	-6.58	50.73	16.69	Peak	162	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).

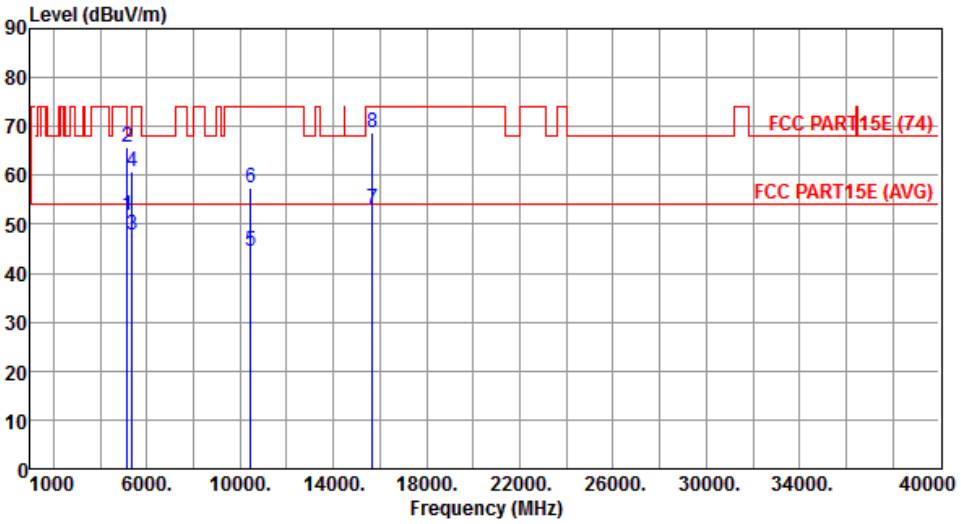
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.96	54.00	-7.04	40.96	6.00	Average	208	258
2	5150.00	60.09	74.00	-13.91	54.09	6.00	Peak	208	258
3	5350.00	47.16	54.00	-6.84	40.80	6.36	Average	208	258
4	5350.00	60.78	74.00	-13.22	54.42	6.36	Peak	208	258
5	10460.00	44.25	54.00	-9.75	28.43	15.82	Average	100	31
6	10460.00	58.06	74.00	-15.94	42.24	15.82	Peak	100	31
7	15690.00	50.62	54.00	-3.38	34.07	16.55	Average	166	356
8	15690.00	64.75	74.00	-9.25	48.20	16.55	Peak	166	356

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

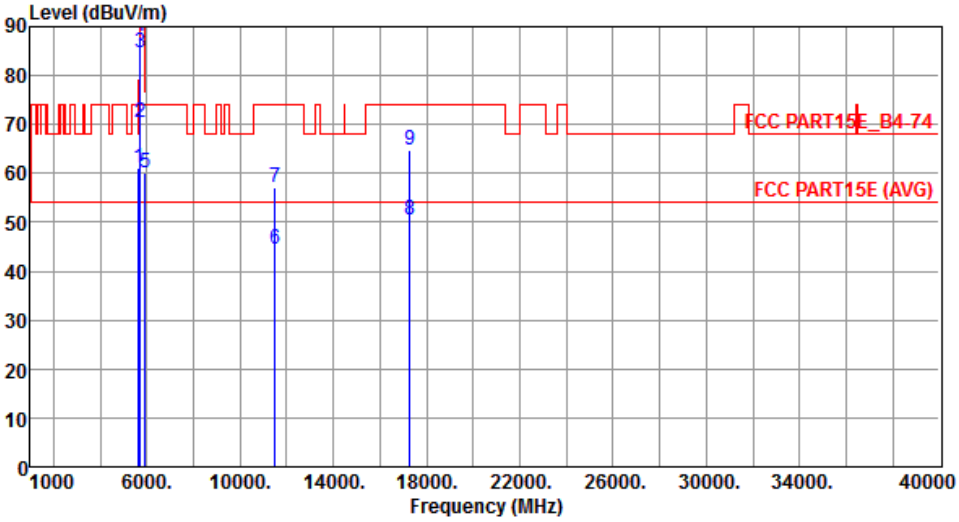
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.84	54.00	-2.16	45.84	6.00	Average	203	322
2	5150.00	65.85	74.00	-8.15	59.85	6.00	Peak	203	322
3	5350.00	47.96	54.00	-6.04	41.60	6.36	Average	203	322
4	5350.00	60.61	74.00	-13.39	54.25	6.36	Peak	203	322
5	10460.00	44.35	54.00	-9.65	28.53	15.82	Average	106	21
6	10460.00	57.52	74.00	-16.48	41.70	15.82	Peak	106	21
7	15690.00	52.98	54.00	-1.02	36.43	16.55	Average	165	125
8	15690.00	68.65	74.00	-5.35	52.10	16.55	Peak	165	125

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

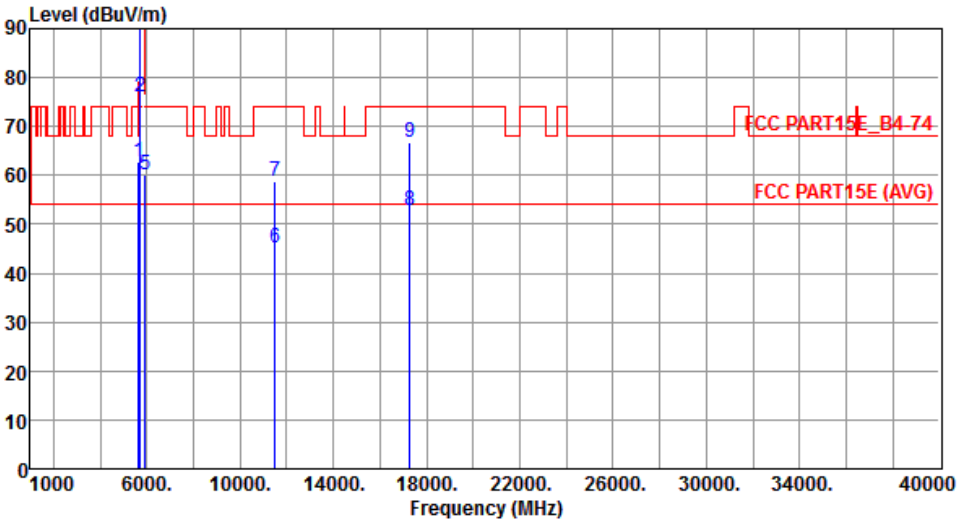
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.95	68.20	-7.25	54.15	6.80	Peak	225	108
2	5700.00	70.48	105.20	-34.72	63.60	6.88	Peak	225	108
3	5720.00	84.62	110.80	-26.18	77.71	6.91	Peak	225	108
4	5725.00	87.96	122.20	-34.24	81.05	6.91	Peak	225	108
5	5925.00	59.98	68.20	-8.22	52.77	7.21	Peak	225	108
6	11510.00	44.39	54.00	-9.61	27.81	16.58	Average	100	35
7	11510.00	57.08	74.00	-16.92	40.50	16.58	Peak	100	35
8	17265.00	50.48	54.00	-3.52	31.82	18.66	Average	156	224
9	17265.00	64.65	74.00	-9.35	45.99	18.66	Peak	156	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).

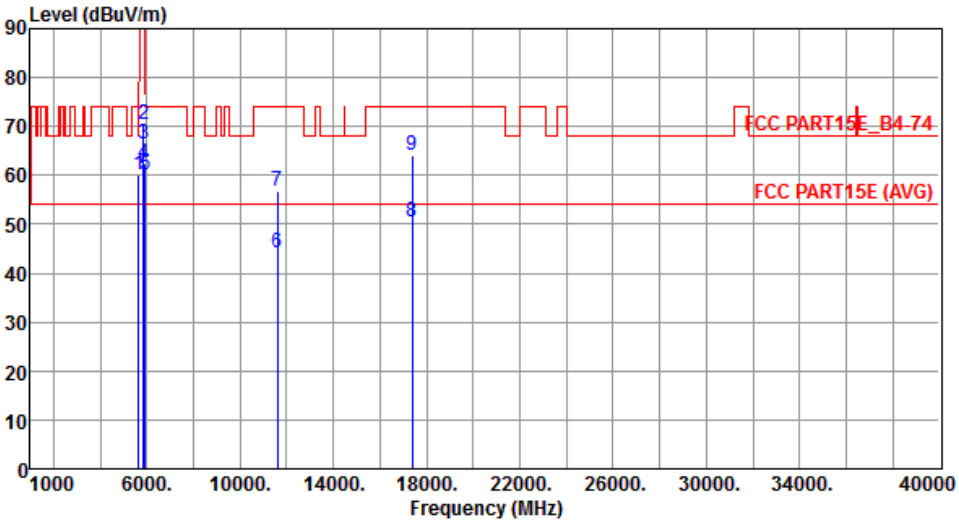
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.83	68.20	-5.37	56.03	6.80	Peak	188	90
2	5700.00	75.91	105.20	-29.29	69.03	6.88	Peak	188	90
3	5720.00	89.90	110.80	-20.90	82.99	6.91	Peak	188	90
4	5725.00	91.01	122.20	-31.19	84.10	6.91	Peak	188	90
5	5925.00	60.03	68.20	-8.17	52.82	7.21	Peak	188	90
6	11510.00	45.32	54.00	-8.68	28.74	16.58	Average	145	346
7	11510.00	58.69	74.00	-15.31	42.11	16.58	Peak	145	346
8	17265.00	52.91	54.00	-1.09	34.25	18.66	Average	170	170
9	17265.00	66.79	74.00	-7.21	48.13	18.66	Peak	170	170

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

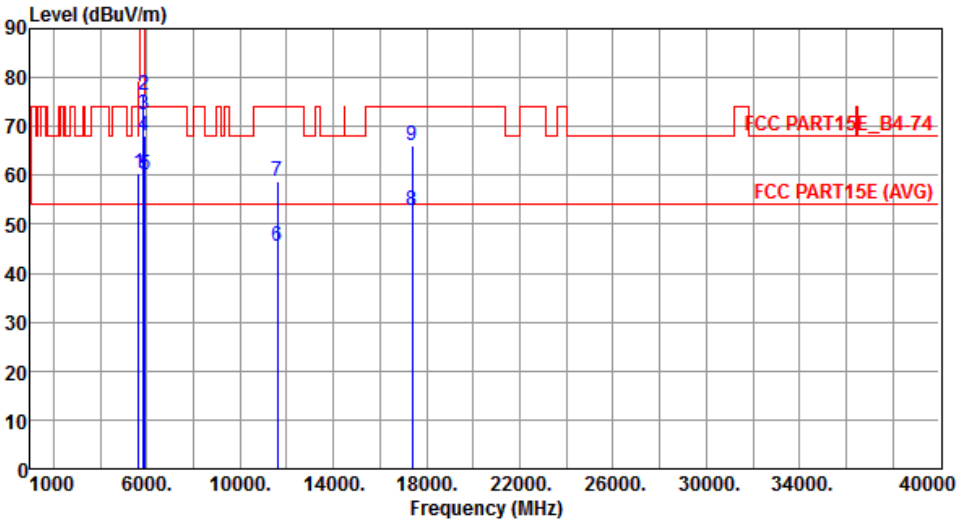
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.25	68.20	-7.95	53.45	6.80	Peak	229	102
2	5850.00	70.42	122.20	-51.78	63.32	7.10	Peak	229	102
3	5855.00	66.45	110.80	-44.35	59.33	7.12	Peak	229	102
4	5875.00	62.47	105.20	-42.73	55.33	7.14	Peak	229	102
5	5925.00	60.13	68.20	-8.07	52.92	7.21	Peak	229	102
6	11590.00	44.21	54.00	-9.79	27.75	16.46	Average	100	46
7	11590.00	56.95	74.00	-17.05	40.49	16.46	Peak	100	46
8	17385.00	50.42	54.00	-3.58	31.38	19.04	Average	155	245
9	17385.00	64.03	74.00	-9.97	44.99	19.04	Peak	155	245

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

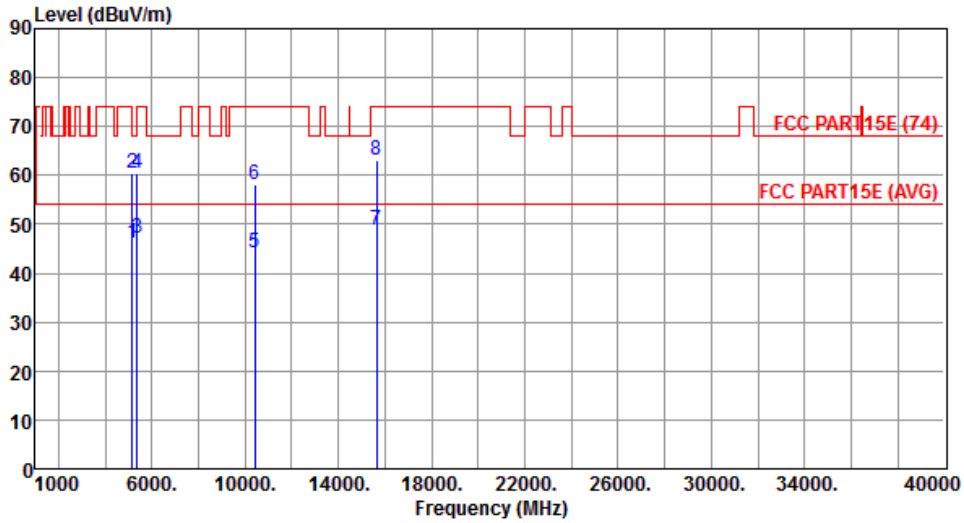


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.44	68.20	-7.76	53.64	6.80	Peak	190	89
2	5850.00	76.27	122.20	-45.93	69.17	7.10	Peak	190	89
3	5855.00	72.27	110.80	-38.53	65.15	7.12	Peak	190	89
4	5875.00	68.07	105.20	-37.13	60.93	7.14	Peak	190	89
5	5925.00	60.25	68.20	-7.95	53.04	7.21	Peak	190	89
6	11590.00	45.46	54.00	-8.54	29.00	16.46	Average	144	342
7	11590.00	58.84	74.00	-15.16	42.38	16.46	Peak	144	342
8	17385.00	52.78	54.00	-1.22	33.74	19.04	Average	173	173
9	17385.00	66.18	74.00	-7.82	47.14	19.04	Peak	173	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).

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

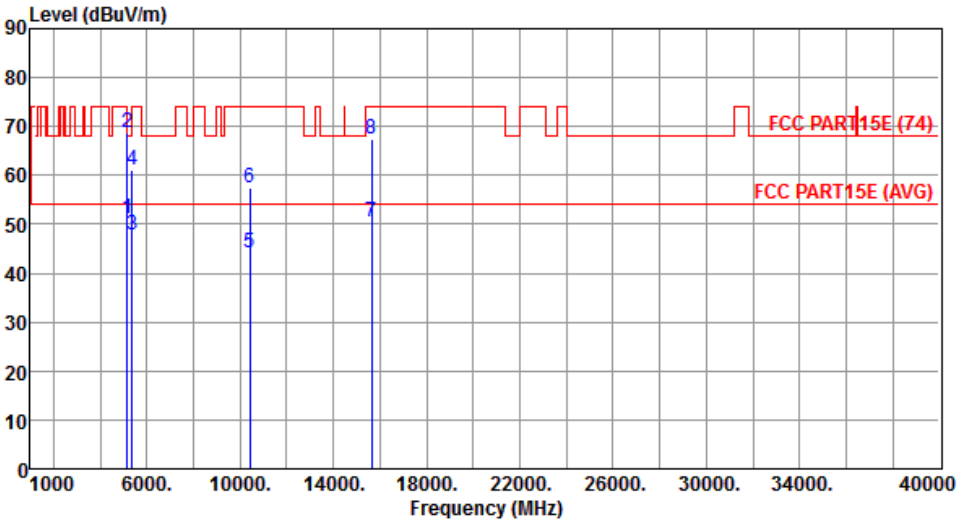
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.24	54.00	-7.76	40.24	6.00	Average	216	255
2	5150.00	60.56	74.00	-13.44	54.56	6.00	Peak	216	255
3	5350.00	47.25	54.00	-6.75	40.89	6.36	Average	216	255
4	5350.00	60.34	74.00	-13.66	53.98	6.36	Peak	216	255
5	10420.00	44.21	54.00	-9.79	28.42	15.79	Average	100	36
6	10420.00	57.96	74.00	-16.04	42.17	15.79	Peak	100	36
7	15630.00	48.85	54.00	-5.15	32.24	16.61	Average	166	359
8	15630.00	63.21	74.00	-10.79	46.60	16.61	Peak	166	359

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

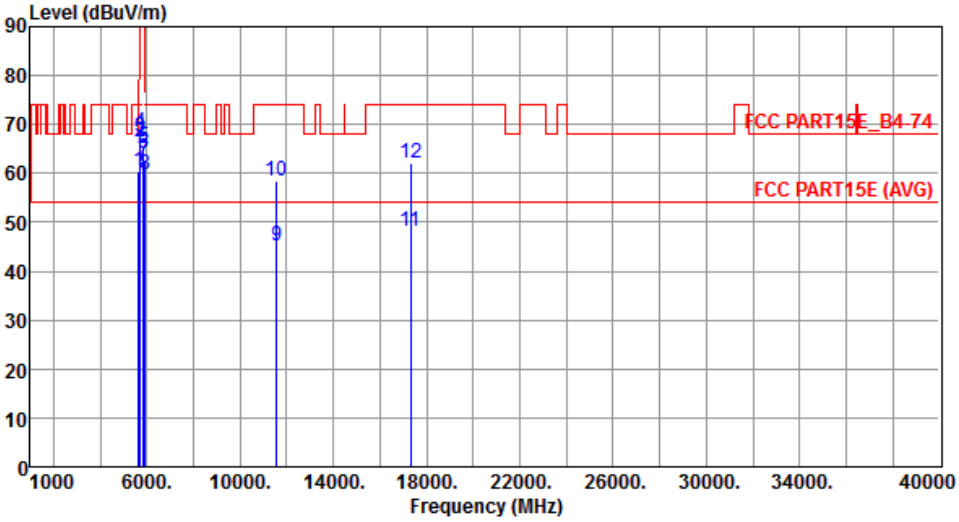
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	51.20	54.00	-2.80	45.20	6.00	Average	202	325
2	5150.00	68.71	74.00	-5.29	62.71	6.00	Peak	202	325
3	5350.00	47.91	54.00	-6.09	41.55	6.36	Average	202	325
4	5350.00	61.01	74.00	-12.99	54.65	6.36	Peak	202	325
5	10420.00	44.21	54.00	-9.79	28.42	15.79	Average	100	65
6	10420.00	57.46	74.00	-16.54	41.67	15.79	Peak	100	65
7	15630.00	50.46	54.00	-3.54	33.85	16.61	Average	156	134
8	15630.00	67.45	74.00	-6.55	50.84	16.61	Peak	156	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).

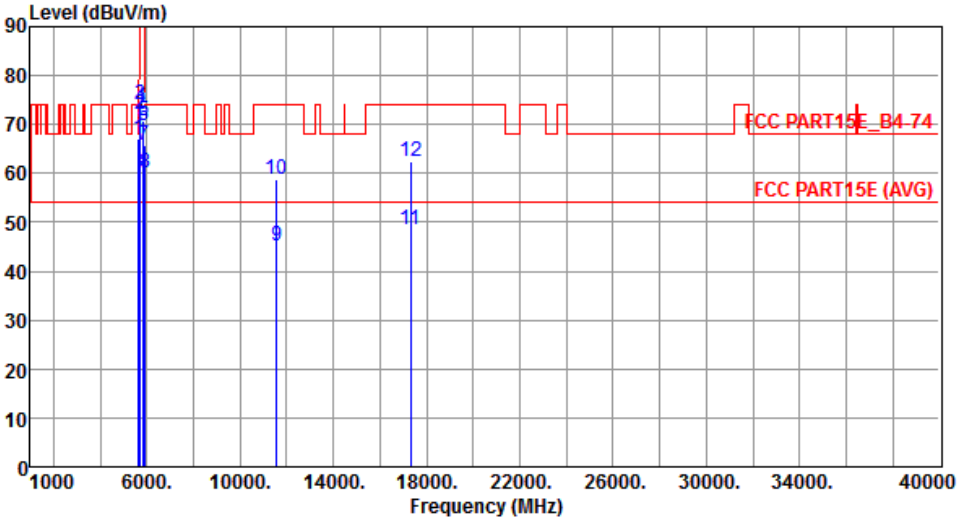
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	60.42	68.20	-7.78	53.62	6.80	Peak	226	105
2	5700.00	66.49	105.20	-38.71	59.61	6.88	Peak	226	105
3	5720.00	67.58	110.80	-43.22	60.67	6.91	Peak	226	105
4	5725.00	68.44	122.20	-53.76	61.53	6.91	Peak	226	105
5	5850.00	65.42	122.20	-56.78	58.32	7.10	Peak	226	105
6	5855.00	64.25	110.80	-46.55	57.13	7.12	Peak	226	105
7	5875.00	62.42	105.20	-42.78	55.28	7.14	Peak	226	105
8	5925.00	59.88	68.20	-8.32	52.67	7.21	Peak	226	105
9	11550.00	45.18	54.00	-8.82	28.66	16.52	Average	100	23
10	11550.00	58.56	74.00	-15.44	42.04	16.52	Peak	100	23
11	17325.00	48.02	54.00	-5.98	29.17	18.85	Average	155	346
12	17325.00	62.15	74.00	-11.85	43.30	18.85	Peak	155	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).

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



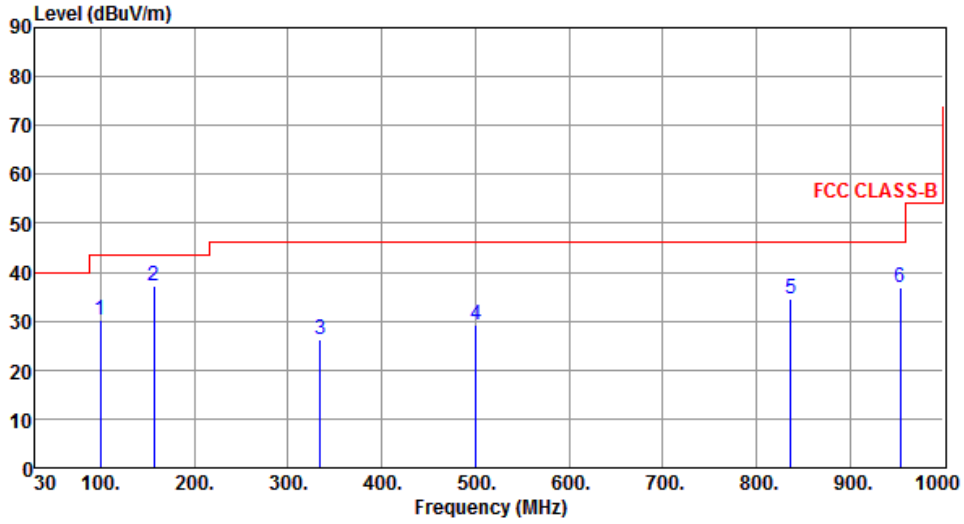
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	66.99	68.20	-1.21	60.19	6.80	Peak	203	98
2	5700.00	72.02	105.20	-33.18	65.14	6.88	Peak	203	98
3	5720.00	74.02	110.80	-36.78	67.11	6.91	Peak	203	98
4	5725.00	73.54	122.20	-48.66	66.63	6.91	Peak	203	98
5	5850.00	70.57	122.20	-51.63	63.47	7.10	Peak	203	98
6	5855.00	69.65	110.80	-41.15	62.53	7.12	Peak	203	98
7	5875.00	65.87	105.20	-39.33	58.73	7.14	Peak	203	98
8	5925.00	60.03	68.20	-8.17	52.82	7.21	Peak	203	98
9	11550.00	45.32	54.00	-8.68	28.80	16.52	Average	125	356
10	11550.00	58.67	74.00	-15.33	42.15	16.52	Peak	125	356
11	17325.00	48.33	54.00	-5.67	29.48	18.85	Average	185	1
12	17325.00	62.44	74.00	-11.56	43.59	18.85	Peak	185	1

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

Configuration 2: Adapter mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

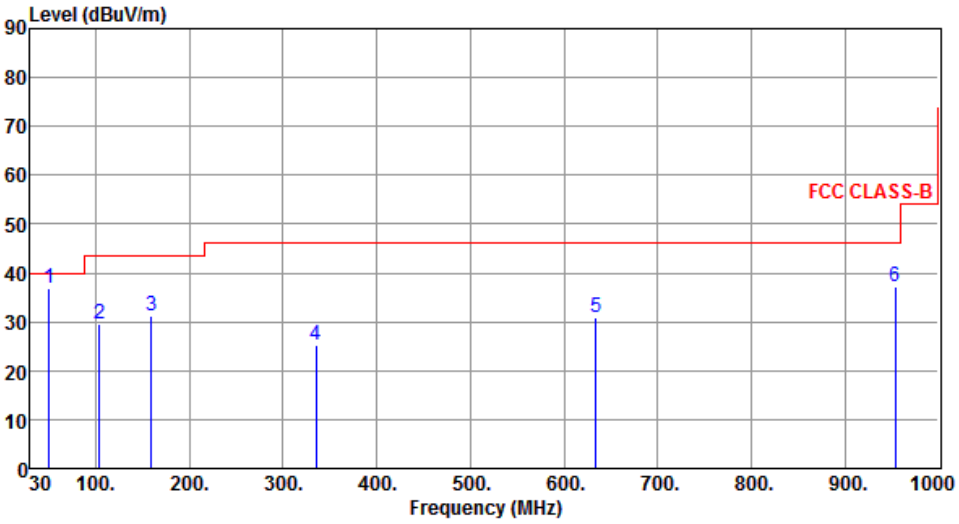
Modulation	VHT20	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.65	30.23	43.50	-13.27	43.43	-13.20	Peak	---	---
2	157.07	37.25	43.50	-6.25	45.27	-8.02	Peak	---	---
3	334.42	26.37	46.00	-19.63	33.11	-6.74	Peak	---	---
4	500.31	29.25	46.00	-16.75	32.23	-2.98	Peak	---	---
5	837.21	34.66	46.00	-11.34	31.59	3.07	Peak	---	---
6	953.38	36.86	46.00	-9.14	31.71	5.15	Peak	---	---

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

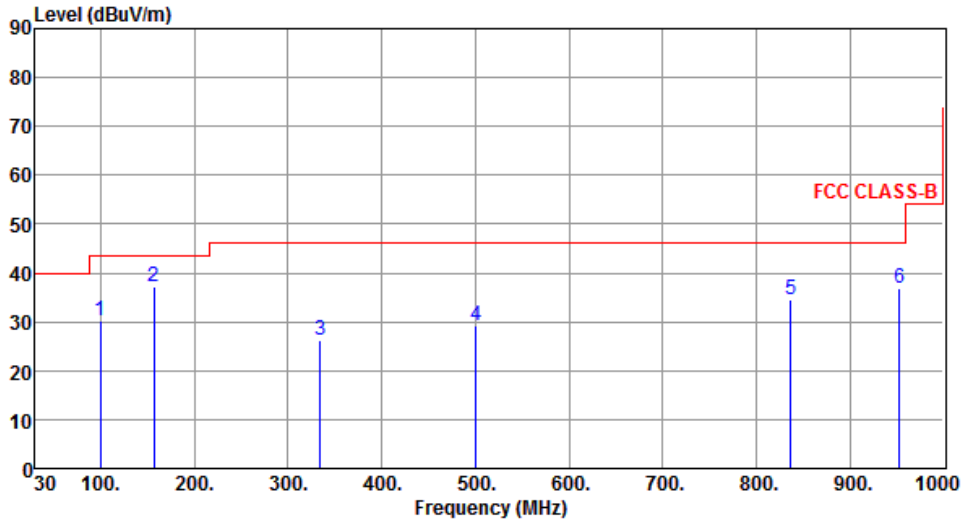
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	50.44	36.95	40.00	-3.05	44.86	-7.91	QP	100	48
2	103.68	29.42	43.50	-14.08	41.94	-12.52	Peak	---	---
3	159.11	31.36	43.50	-12.14	39.35	-7.99	Peak	---	---
4	335.45	25.32	46.00	-20.68	32.04	-6.72	Peak	---	---
5	634.41	30.84	46.00	-15.16	31.01	-0.17	Peak	---	---
6	953.38	37.23	46.00	-8.77	32.08	5.15	Peak	---	---

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

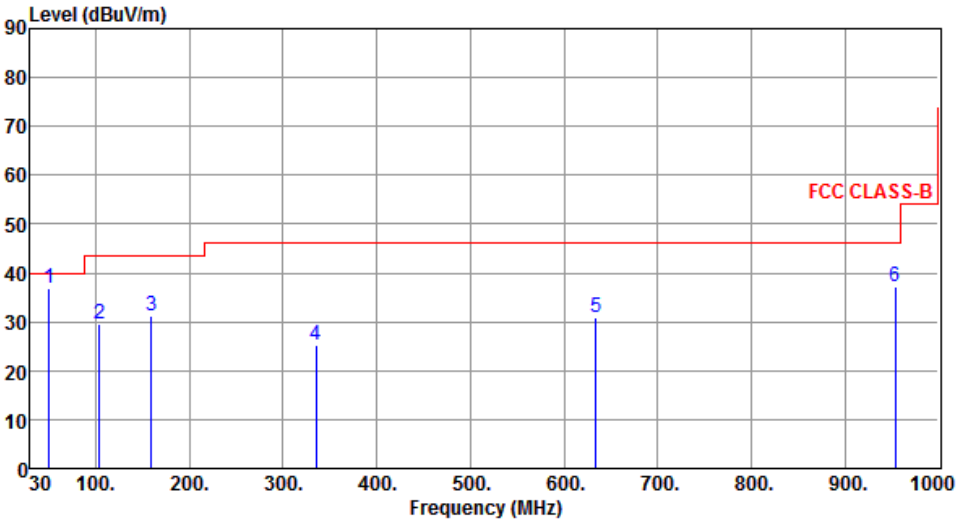
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.65	30.21	43.50	-13.29	43.41	-13.20	Peak	---	---
2	157.12	37.25	43.50	-6.25	45.27	-8.02	Peak	---	---
3	334.75	26.32	46.00	-19.68	33.05	-6.73	Peak	---	---
4	500.45	29.21	46.00	-16.79	32.19	-2.98	Peak	---	---
5	837.12	34.59	46.00	-11.41	31.52	3.07	Peak	---	---
6	953.32	36.84	46.00	-9.16	31.69	5.15	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	50.42	36.94	40.00	-3.06	44.84	-7.90	QP	100	52
2	103.66	29.47	43.50	-14.03	42.00	-12.53	Peak	---	---
3	159.21	31.35	43.50	-12.15	39.34	-7.99	Peak	---	---
4	335.55	25.24	46.00	-20.76	31.96	-6.72	Peak	---	---
5	634.28	30.82	46.00	-15.18	31.00	-0.18	Peak	---	---
6	953.33	37.21	46.00	-8.79	32.06	5.15	Peak	---	---

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

3.6 Frequency Stability

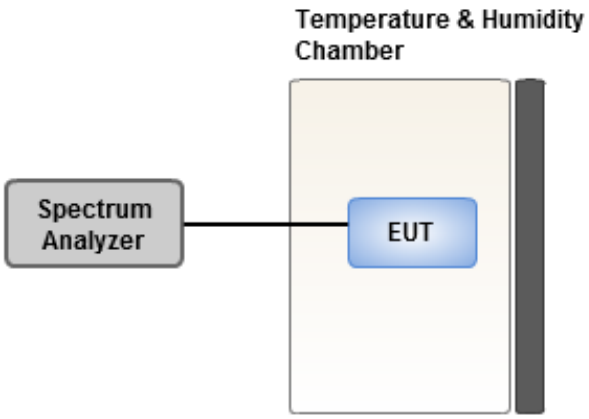
3.6.1 Limit of Frequency Stability

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°CVmax	5.76	5.49	6.46	6.29
T20°CVmin	4.96	5.00	4.94	5.24
T50°CVnom	5.28	6.10	5.33	5.36
T40°CVnom	3.30	3.35	3.02	3.24
T30°CVnom	3.06	2.93	3.44	2.95
T20°CVnom	2.72	3.05	2.56	2.76
T10°CVnom	4.17	4.06	3.78	4.20
T0°CVnom	3.93	3.91	4.18	4.08
T-10°CVnom	2.94	3.11	3.21	2.81
T-20°CVnom	1.38	1.64	1.84	0.85
T-30°CVnom	1.82	2.26	1.80	2.02
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°CVmax	5.27	5.95	5.55	5.35
T20°CVmin	4.87	5.29	5.36	4.93
T50°CVnom	4.15	4.53	4.08	3.94
T40°CVnom	2.57	2.55	2.56	2.67
T30°CVnom	2.69	3.10	3.19	3.01
T20°CVnom	1.95	2.35	2.10	1.87
T10°CVnom	2.48	2.58	2.63	2.16
T0°CVnom	2.66	2.27	2.88	2.89
T-10°CVnom	1.68	1.62	1.76	1.97
T-20°CVnom	0.72	0.87	1.18	0.82
T-30°CVnom	0.98	1.71	0.92	0.76
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 (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

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

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

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

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

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