FCC Test Report

FCC ID	**:**	**LNQRGM840**
Equipment	**:**	**RGMII 802.11ac WLAN module**
Model No.	**:**	**RGM840**
Brand Name	**:**	**Actiontec**
Applicant	**:**	**Actiontec Electronics, Inc.**
Address	**:**	**760 North Mary Ave. Sunnyvale, CA 94085**
Standard	**:**	**47 CFR FCC Part 15.407**
Received Date	**:**	**May 29, 2014**
Tested Date	**:**	**Jun. 03 ~ Jun. 30, 2014**

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

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

Table of Contents

1 GENERAL DESCRIPTION 5

1.1 Information 5
1.2 Local Support Equipment List 8
1.3 Test Setup Chart 8
1.4 The Equipment List 10
1.5 Testing Applied Standards 11
1.6 Measurement Uncertainty 11

2 TEST CONFIGURATION 12

2.1 Testing Condition 12
2.2 The Worst Test Modes and Channel Details 13

3 TRANSMITTER TEST RESULTS 15

3.1 Conducted Emissions 15
3.2 Emission Bandwidth 24
3.3 RF Output Power 29
3.4 Peak Power Spectral Density 32
3.5 Transmitter Radiated and Band Edge Emissions 38
3.6 Frequency Stability 109

4 TEST LABORATORY INFORMATION 111

Release Record

Report No.	Version	Description	Issued Date
FR452903	Rev. 01	Initial issue	Jul. 11, 2014
FR452903	Rev. 02	Revised frequency range on page 7.	Jul. 22, 2014

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.177MHz 60.04 (Margin -4.60dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 53.88 (Margin -0.12dB) - 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: 25.51 5725-5850MHz: 25.22 **Beamforming mode** 5150-5250MHz: 25.11 5725-5850MHz: 25.29	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
IEEE Std. 802.11	**Frequency Range (MHz)**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
a	5150-5250	5180-5240	36-48 [4]	4	6-54 Mbps
n (HT20)	5150-5250	5180-5240	36-48 [4]	4	MCS 0-31
n (HT40)	5150-5250	5190-5230	38-46 [2]	4	MCS 0-31
ac (VHT20)	5150-5250	5180-5240	36-48 [4]	4	MCS 0-9
ac (VHT40)	5150-5250	5190-5230	38-46 [2]	4	MCS 0-9
ac (VHT80)	5150-5250	5210	42 [1]	4	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 MIMO CDD function with beamforming.					

RF General Information					
IEEE Std. 802.11	**Frequency Range (MHz)**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
a	5725-5850	5745-5825	149-165 [5]	4	6-54 Mbps
n (HT20)	5725-5850	5745-5825	149-165 [5]	4	MCS 0-31
n (HT40)	5725-5850	5755-5795	151-159 [2]	4	MCS 0-31
ac (VHT20)	5725-5850	5745-5825	149-165 [5]	4	MCS 0-9
ac (VHT40)	5725-5850	5755-5795	151-159 [2]	4	MCS 0-9
ac (VHT80)	5725-5850	5775	155 [1]	4	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 MIMO CDD function with beamforming.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Gain (dBi)	Remark
1	N5X20SC	Printed	ipex	0.99	5150~5250MHz
				0.21	5725~5850MHz

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc from host

1.1.4 Accessories

N/A

1.1.5 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	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	telnet				
Duty Cycle and Duty Factor	Mode	Beanforming		Non-Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11a	---	---	99.63%	0.02
	VHT20	98.67%	0.06	99.40%	0.03
	VHT40	95.25%	0.21	98.71%	0.06
	VHT80	98.21%	0.08	95.36%	0.21

1.1.7 Power Setting

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Beanforming	Non-Beamforming
11a	5180	---	15
11a	5200	---	19
11a	5240	---	21
HT20	5180	15	15
HT20	5200	18	19
HT20	5240	20	20
HT40	5190	11	12
HT40	5230	17	18
VHT20	5180	15	15
VHT20	5200	18	19
VHT20	5240	20	20
VHT40	5190	11	12
VHT40	5230	17	18
VHT80	5210	11	11

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Beanforming	Non-Beamforming
11a	5745	---	15
11a	5785	---	19
11a	5825	---	17
HT20	5745	13	14
HT20	5785	20	20
HT20	5825	15	17
HT40	5755	12	13
HT40	5795	16	17
VHT20	5745	13	14
VHT20	5785	20	20
VHT20	5825	15	17
VHT40	5755	12	13
VHT40	5795	16	17
VHT80	5775	12	13

1.2 Local Support Equipment List

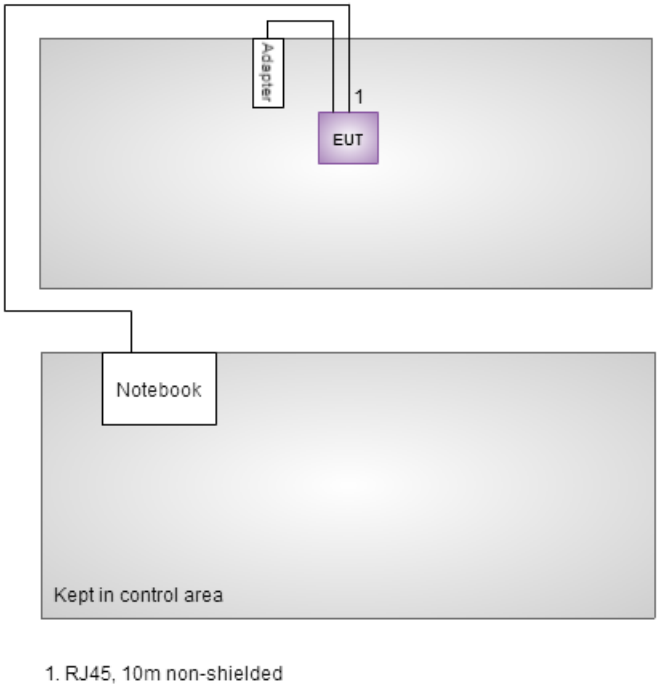
Support Equipment List						
No.	**Equipment**	**Brand**	**Model**	**S/N**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	E6430	---	DoC	RJ45, 10m non-shielded cable w/o core.
2	Notebook	DELL	E6430	---	DoC	RJ45, 1m non-shielded cable w/o core.
3	Client AP	---	QHS8405S4 4A_SN411	---	---	---

Note: Item 3 was provided by applicant.

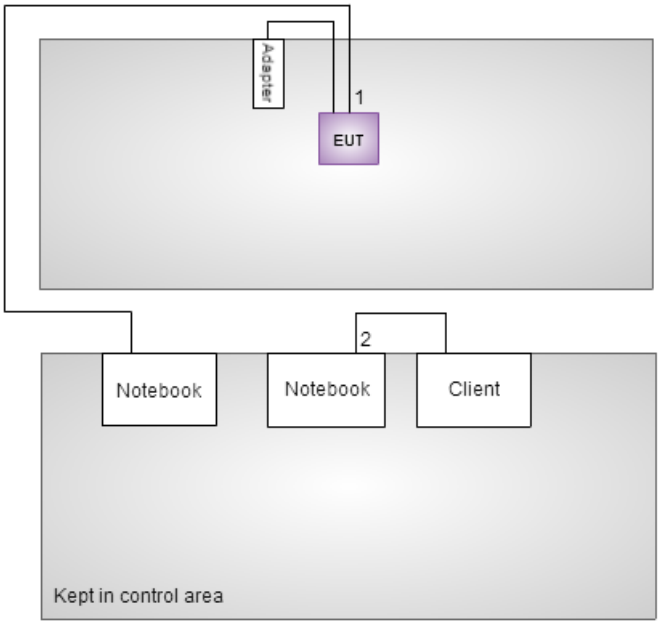
1.3 Test Setup Chart

Legacy/MIMO (CDD) Non-beamforming mode

Test Setup Diagram



Legacy/MIMO (CDD) beamforming mode

Test Setup Diagram


1. RJ45, 10m non-shielded
2. RJ45, 1m non-shielded

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC Receiver	R&S	ESCS 30	100169	Oct. 15, 2013	Oct. 14, 2014
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	Agilent	N9010A	MY53400091	Oct. 07, 2013	Oct. 06, 2014
Receiver	Agilent	N9038A	MY53290044	Jan. 08, 2014	Jan. 07, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-562	Feb. 07, 2014	Feb. 06, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 20, 2014	Feb. 19, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Preamplifier	EMC	EMC02325	980187	Nov. 22, 2013	Nov. 21, 2014
Preamplifier	Agilent	83017A	MY53270014	Nov. 22, 2013	Nov. 21, 2014
Preamplifier	WM	TF-130N-R1	923365	Oct. 23, 2013	Oct. 22, 2014
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 19, 2014	Feb. 18, 2015
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22601/4	Feb. 19, 2014	Feb. 18, 2015
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 19, 2014	Feb. 18, 2015
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 17, 2014	Feb. 16, 2015
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 17, 2014	Feb. 16, 2015
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 17, 2014	Feb. 16, 2015
Note: Calibration Interval of instruments listed above is one year.					

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

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2014	Feb. 16, 2015
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 11, 2013	Dec. 10, 2014
Power Meter	Anritsu	ML2495A	1241002	Oct. 24, 2013	Oct. 23, 2014
Power Sensor	Anritsu	MA2411B	1207366	Oct. 24, 2013	Oct. 23, 2014
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2009
FCC KDB 412172
FCC 789033 D02 General UNII Test Procedures New Rules v01
FCC KDB 644545 D01 Guidance for IEEE 802 11ac v01r02
FCC KDB 644545 D02 Alternative Guidance for 802 11ac v01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

Note: The EUT has been tested and complied with FCC part 15B requirement. FCC Part 15B test results are issued to another report.

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Temperature	±0.6 ^{o}C
Conducted emission	±2.670 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.26 dB
Radiated emission > 1GHz	±4.94 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	21°C / 55%	Skys Huang
Radiated Emissions	03CH03-WS	24-25°C / 66-67%	Aska Huang
RF Conducted	TH01-WS	25°C / 64%	Brad Wu

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

2.2 The Worst Test Modes and Channel Details

Legacy/MIMO (CDD) Non-beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5180	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5180	6 Mbps	---
RF Output Power	11a	5180 / 5200 / 5240	6 Mbps	---
	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 >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240	6 Mbps	---
	VHT20	5180 / 5200 / 5240	MCS 0	---
	VHT40	5190 / 5230	MCS 0	---
	VHT80	5210	MCS 0	---

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

Legacy/MIMO (CDD) beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT20	5240	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5240	MCS 0	---
RF Output Power	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 >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20	5180 / 5200 / 5240	MCS 0	---
	VHT40	5190 / 5230	MCS 0	---
	VHT80	5210	MCS 0	---

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

3 Transmitter Test Results

3.1 Conducted Emissions

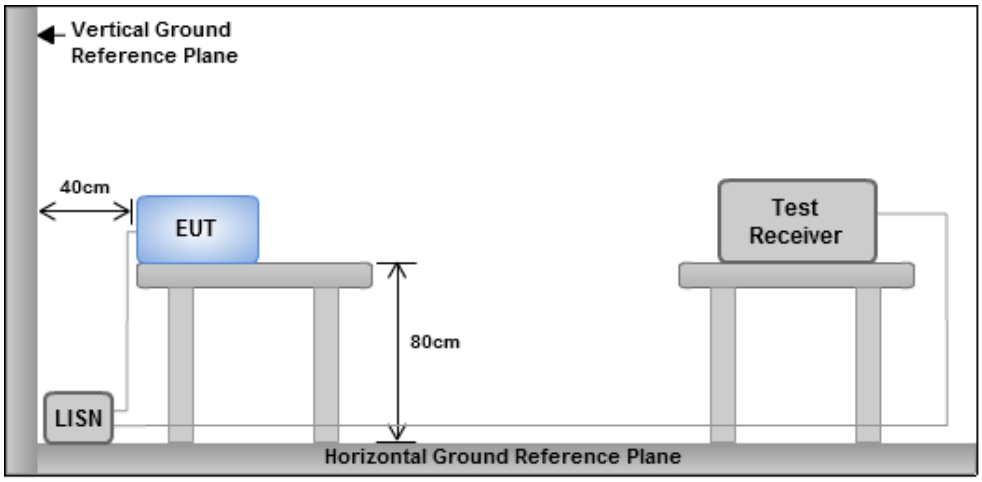
3.1.1 Limit of Conducted Emissions

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

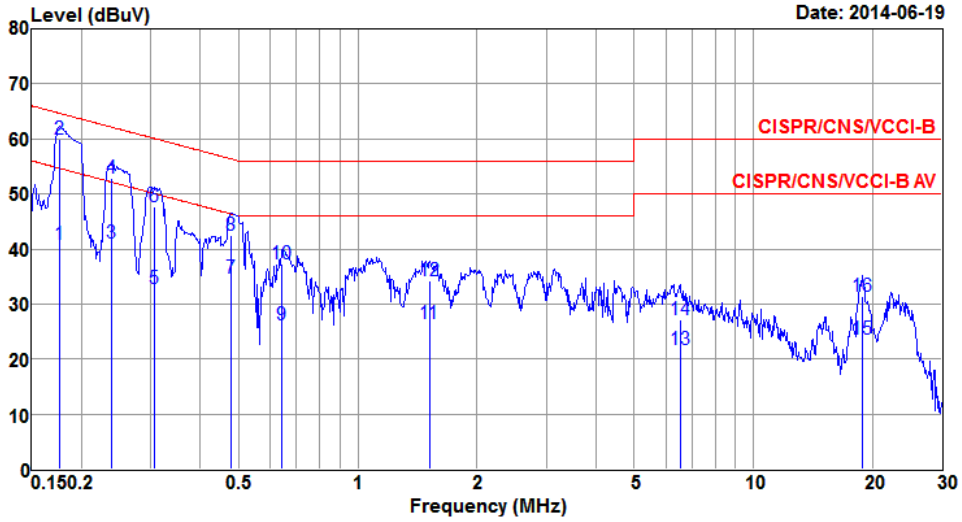


Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Legacy/MIMO (CDD) Non- beamforming mode

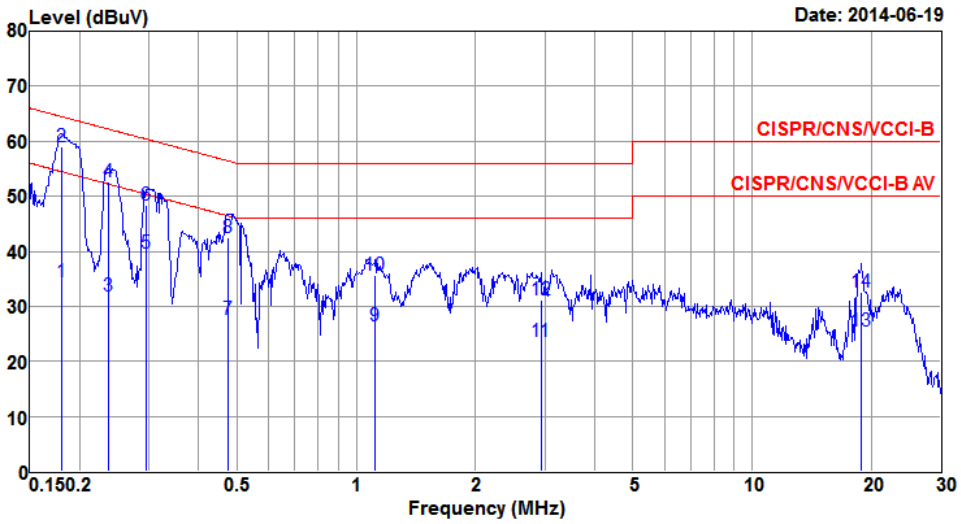
Modulation	11a	**Test Freq. (MHz)**	5180
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.177	40.89	54.64	-13.75	40.46	0.42	0.01	Average
2*	0.177	60.04	64.64	-4.60	59.61	0.42	0.01	QP
3	0.238	41.01	52.17	-11.16	40.55	0.45	0.01	Average
4	0.238	52.89	62.17	-9.28	52.43	0.45	0.01	QP
5	0.305	32.87	50.10	-17.23	32.36	0.49	0.02	Average
6	0.305	47.61	60.10	-12.49	47.10	0.49	0.02	QP
7	0.479	34.72	46.36	-11.64	34.09	0.57	0.06	Average
8	0.479	42.44	56.36	-13.92	41.81	0.57	0.06	QP
9	0.644	26.14	46.00	-19.86	25.40	0.63	0.11	Average
10	0.644	37.28	56.00	-18.72	36.54	0.63	0.11	QP
11	1.519	26.42	46.00	-19.58	25.43	0.90	0.09	Average
12	1.519	34.25	56.00	-21.75	33.26	0.90	0.09	QP
13	6.523	21.70	50.00	-28.30	20.10	1.40	0.20	Average
14	6.523	27.25	60.00	-32.75	25.65	1.40	0.20	QP
15	18.820	23.56	50.00	-26.44	21.12	2.06	0.38	Average
16	18.820	31.38	60.00	-28.62	28.94	2.06	0.38	QP

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

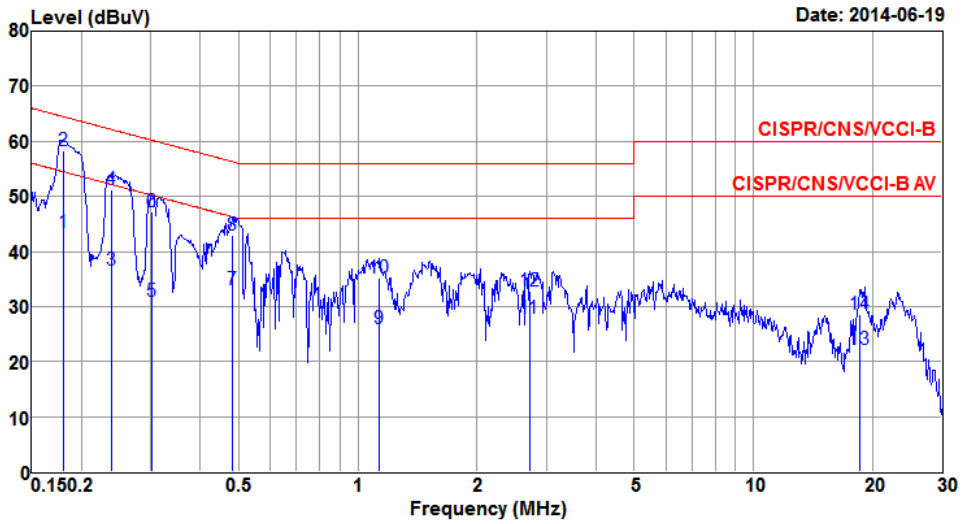
Modulation	11a	Test Freq. (MHz)	5180
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.181	34.57	54.46	-19.89	34.06	0.50	0.01	Average
2*	0.181	59.07	64.46	-5.39	58.56	0.50	0.01	QP
3	0.237	31.95	52.22	-20.27	31.41	0.53	0.01	Average
4	0.237	52.59	62.22	-9.63	52.05	0.53	0.01	QP
5	0.294	39.76	50.41	-10.65	39.17	0.57	0.02	Average
6	0.294	48.28	60.41	-12.13	47.69	0.57	0.02	QP
7	0.474	27.62	46.45	-18.83	26.92	0.65	0.05	Average
8	0.474	42.48	56.45	-13.97	41.78	0.65	0.05	QP
9	1.117	26.48	46.00	-19.52	25.47	0.84	0.17	Average
10	1.117	35.60	56.00	-20.40	34.59	0.84	0.17	QP
11	2.931	23.67	46.00	-22.33	22.47	1.11	0.09	Average
12	2.931	31.26	56.00	-24.74	30.06	1.11	0.09	QP
13	18.920	25.46	50.00	-24.54	22.55	2.53	0.38	Average
14	18.920	32.68	60.00	-27.32	29.77	2.53	0.38	QP

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

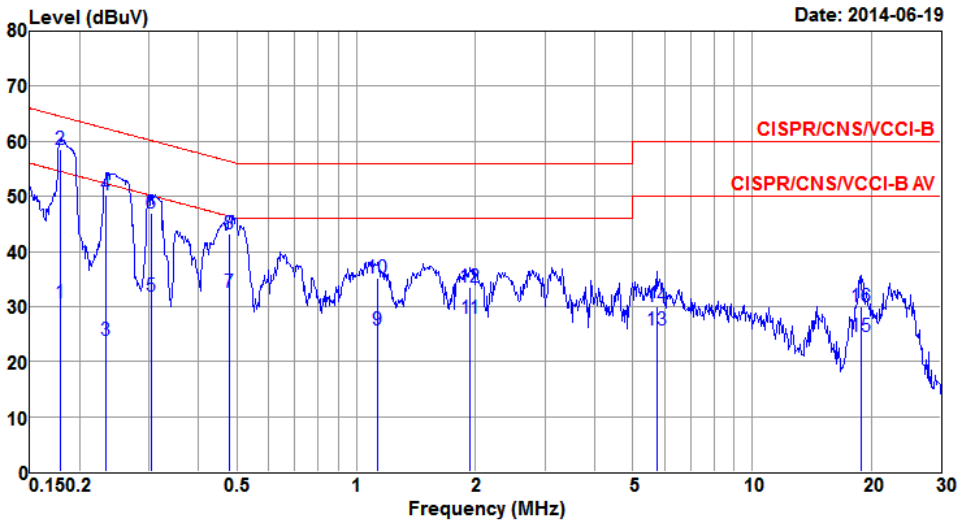
Modulation	VHT20	Test Freq. (MHz)	5785
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.180	43.37	54.50	-11.13	42.94	0.42	0.01	Average
2*	0.180	58.34	64.50	-6.16	57.91	0.42	0.01	QP
3	0.239	36.47	52.13	-15.66	36.01	0.45	0.01	Average
4	0.239	51.31	62.13	-10.82	50.85	0.45	0.01	QP
5	0.300	30.85	50.24	-19.39	30.35	0.48	0.02	Average
6	0.300	47.12	60.24	-13.12	46.62	0.48	0.02	QP
7	0.481	33.14	46.32	-13.18	32.51	0.57	0.06	Average
8	0.481	43.03	56.32	-13.29	42.40	0.57	0.06	QP
9	1.129	25.88	46.00	-20.12	24.93	0.78	0.17	Average
10	1.129	35.27	56.00	-20.73	34.32	0.78	0.17	QP
11	2.721	27.84	46.00	-18.16	26.72	1.04	0.08	Average
12	2.721	32.90	56.00	-23.10	31.78	1.04	0.08	QP
13	18.524	22.23	50.00	-27.77	19.80	2.05	0.38	Average
14	18.524	28.52	60.00	-31.48	26.09	2.05	0.38	QP

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

Modulation	VHT20	Test Freq. (MHz)	5785
Power Phase	Neutral		

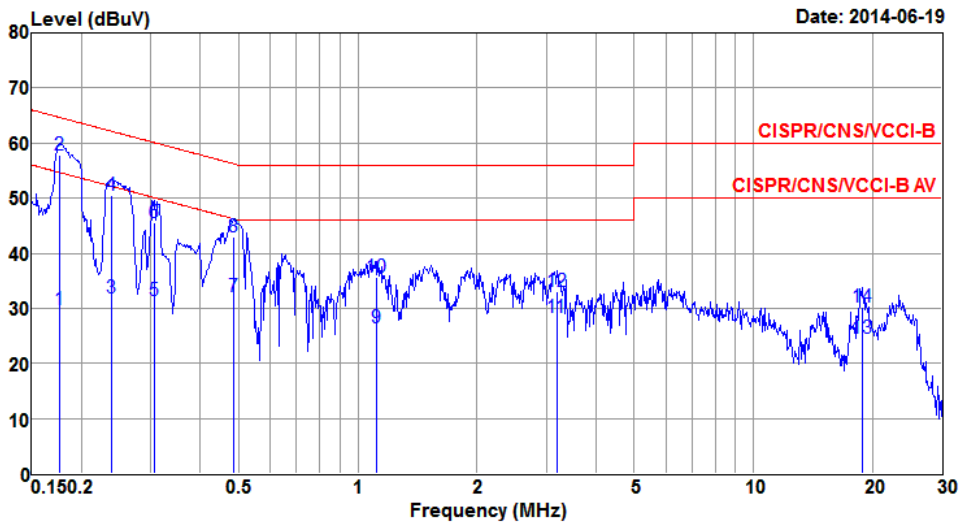


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.179	30.64	54.55	-23.91	30.13	0.50	0.01	Average
2*	0.179	58.56	64.55	-5.99	58.05	0.50	0.01	QP
3	0.233	23.79	52.35	-28.56	23.25	0.53	0.01	Average
4	0.233	50.18	62.35	-12.17	49.64	0.53	0.01	QP
5	0.303	31.82	50.15	-18.33	31.23	0.57	0.02	Average
6	0.303	47.01	60.15	-13.14	46.42	0.57	0.02	QP
7	0.479	32.67	46.36	-13.69	31.96	0.65	0.06	Average
8	0.479	43.09	56.36	-13.27	42.38	0.65	0.06	QP
9	1.135	25.85	46.00	-20.15	24.83	0.85	0.17	Average
10	1.135	35.19	56.00	-20.81	34.17	0.85	0.17	QP
11	1.939	27.81	46.00	-18.19	26.70	1.08	0.03	Average
12	1.939	33.46	56.00	-22.54	32.35	1.08	0.03	QP
13	5.744	25.63	50.00	-24.37	24.08	1.36	0.19	Average
14	5.744	29.99	60.00	-30.01	28.44	1.36	0.19	QP
15	18.920	24.49	50.00	-25.51	21.58	2.53	0.38	Average
16	18.920	30.06	60.00	-29.94	27.15	2.53	0.38	QP

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

Legacy/MIMO (CDD) beamforming mode

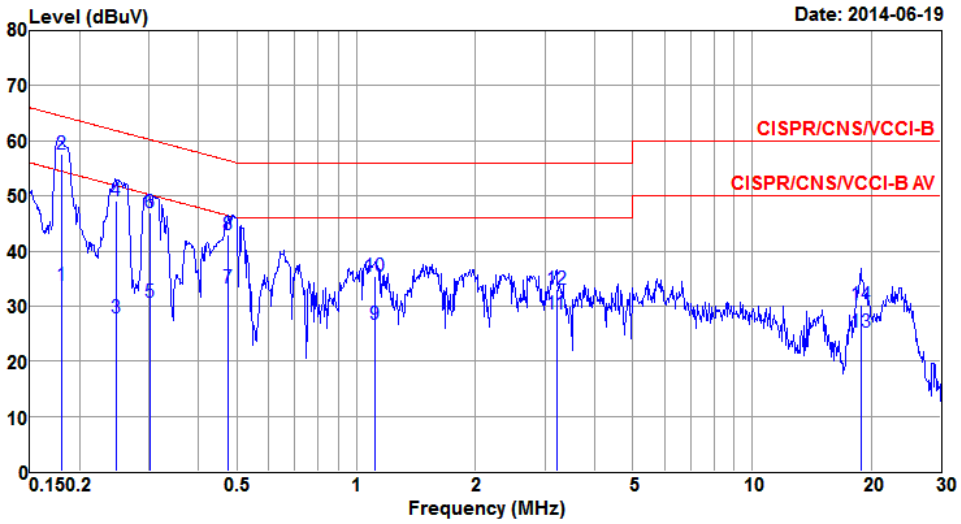
Modulation	VHT20	**Test Freq. (MHz)**	5240
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.177	29.69	54.64	-24.95	29.26	0.42	0.01	Average
2*	0.177	57.85	64.64	-6.79	57.42	0.42	0.01	QP
3	0.239	31.83	52.13	-20.30	31.37	0.45	0.01	Average
4	0.239	50.55	62.13	-11.58	50.09	0.45	0.01	QP
5	0.307	31.43	50.06	-18.63	30.92	0.49	0.02	Average
6	0.307	45.48	60.06	-14.58	44.97	0.49	0.02	QP
7	0.486	32.03	46.23	-14.20	31.40	0.57	0.06	Average
8	0.486	42.93	56.23	-13.30	42.30	0.57	0.06	QP
9	1.117	26.49	46.00	-19.51	25.55	0.77	0.17	Average
10	1.117	35.62	56.00	-20.38	34.68	0.77	0.17	QP
11	3.190	28.42	46.00	-17.58	27.26	1.05	0.11	Average
12	3.190	33.02	56.00	-22.98	31.86	1.05	0.11	QP
13	18.820	24.64	50.00	-25.36	22.20	2.06	0.38	Average
14	18.820	30.14	60.00	-29.86	27.70	2.06	0.38	QP

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

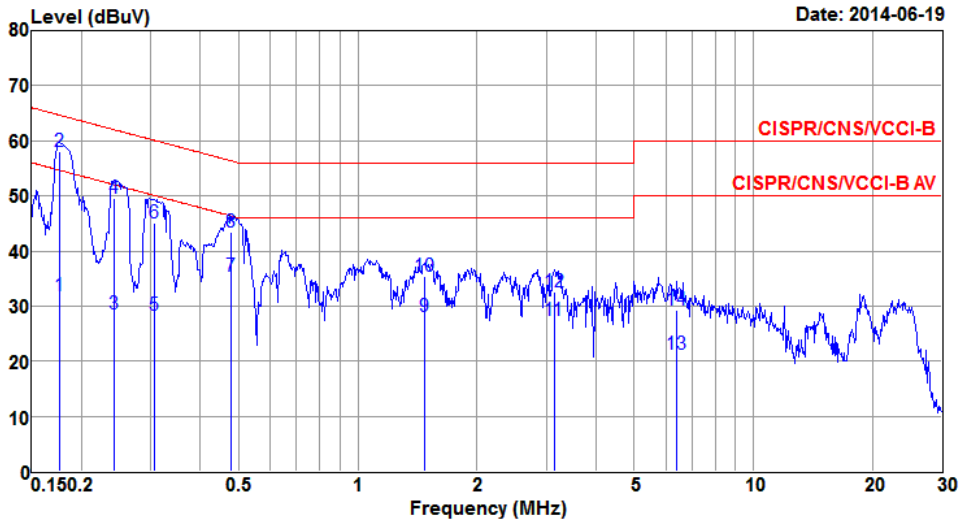
Modulation	VHT20	Test Freq. (MHz)	5240
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.181	33.78	54.46	-20.68	33.27	0.50	0.01	Average
2*	0.181	57.54	64.46	-6.92	57.03	0.50	0.01	QP
3	0.248	27.89	51.82	-23.93	27.34	0.54	0.01	Average
4	0.248	49.09	61.82	-12.73	48.54	0.54	0.01	QP
5	0.300	30.67	50.24	-19.57	30.08	0.57	0.02	Average
6	0.300	46.85	60.24	-13.39	46.26	0.57	0.02	QP
7	0.476	33.33	46.41	-13.08	32.63	0.65	0.05	Average
8	0.476	42.89	56.41	-13.52	42.19	0.65	0.05	QP
9	1.117	26.70	46.00	-19.30	25.69	0.84	0.17	Average
10	1.117	35.44	56.00	-20.56	34.43	0.84	0.17	QP
11	3.207	28.55	46.00	-17.45	27.32	1.12	0.11	Average
12	3.207	33.07	56.00	-22.93	31.84	1.12	0.11	QP
13	18.820	25.37	50.00	-24.63	22.46	2.53	0.38	Average
14	18.820	30.20	60.00	-29.80	27.29	2.53	0.38	QP

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

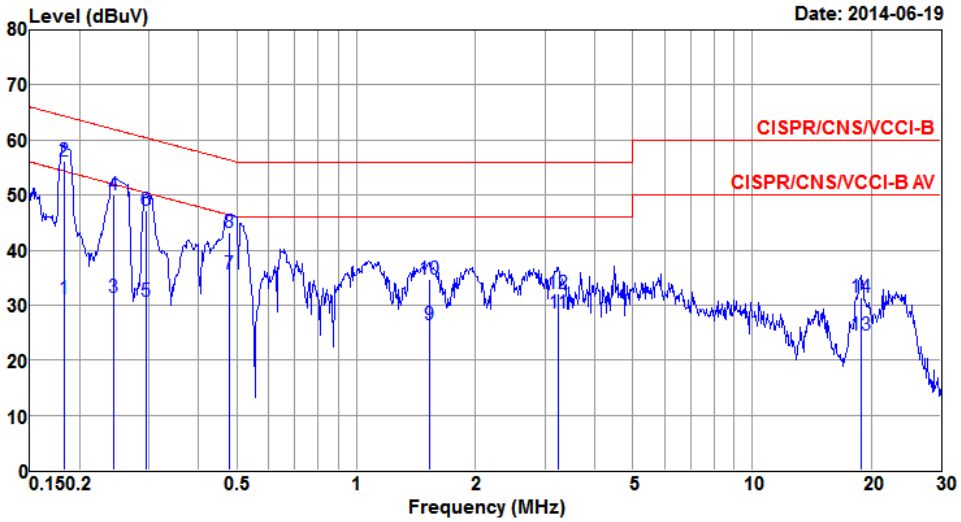
Modulation	VHT20	Test Freq. (MHz)	5785
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.177	31.94	54.64	-22.70	31.51	0.42	0.01	Average
2*	0.177	57.95	64.64	-6.69	57.52	0.42	0.01	QP
3	0.243	28.62	52.00	-23.38	28.16	0.45	0.01	Average
4	0.243	49.55	62.00	-12.45	49.09	0.45	0.01	QP
5	0.307	28.38	50.06	-21.68	27.87	0.49	0.02	Average
6	0.307	45.10	60.06	-14.96	44.59	0.49	0.02	QP
7	0.479	35.34	46.36	-11.02	34.71	0.57	0.06	Average
8	0.479	43.36	56.36	-13.00	42.73	0.57	0.06	QP
9	1.480	28.01	46.00	-17.99	27.02	0.89	0.10	Average
10	1.480	35.50	56.00	-20.50	34.51	0.89	0.10	QP
11	3.140	27.37	46.00	-18.63	26.22	1.05	0.10	Average
12	3.140	32.68	56.00	-23.32	31.53	1.05	0.10	QP
13	6.386	21.19	50.00	-28.81	19.60	1.39	0.20	Average
14	6.386	29.25	60.00	-30.75	27.66	1.39	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	VHT20	Test Freq. (MHz)	5785
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.182	31.21	54.37	-23.16	30.70	0.50	0.01	Average
2*	0.182	56.25	64.37	-8.12	55.74	0.50	0.01	QP
3	0.244	31.33	51.95	-20.62	30.78	0.54	0.01	Average
4	0.244	49.95	61.95	-12.00	49.40	0.54	0.01	QP
5	0.296	30.78	50.37	-19.59	30.19	0.57	0.02	Average
6	0.296	47.10	60.37	-13.27	46.51	0.57	0.02	QP
7	0.479	35.63	46.36	-10.73	34.92	0.65	0.06	Average
8	0.479	43.21	56.36	-13.15	42.50	0.65	0.06	QP
9	1.527	26.39	46.00	-19.61	25.32	0.98	0.09	Average
10	1.527	34.62	56.00	-21.38	33.55	0.98	0.09	QP
11	3.241	28.67	46.00	-17.33	27.44	1.12	0.11	Average
12	3.241	32.18	56.00	-23.82	30.95	1.12	0.11	QP
13	18.820	24.66	50.00	-25.34	21.75	2.53	0.38	Average
14	18.820	31.44	60.00	-28.56	28.53	2.53	0.38	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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.

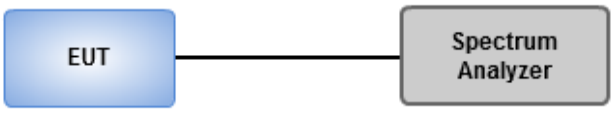
Occupied Bandwidth

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

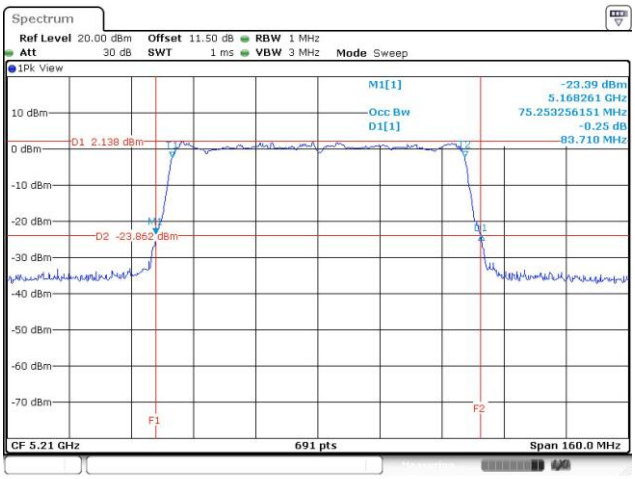
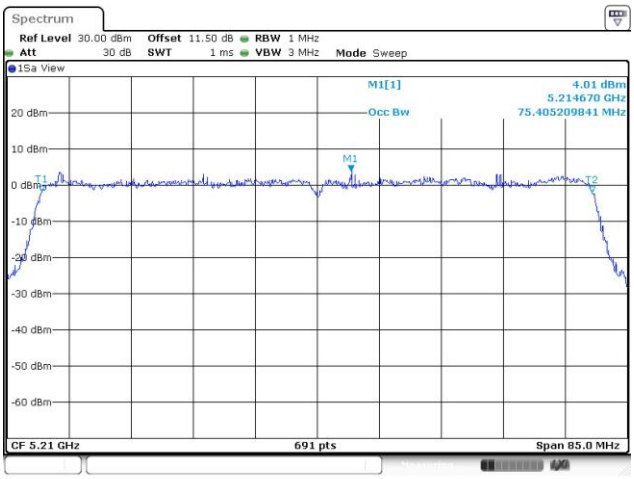
3.2.3 Test Setup



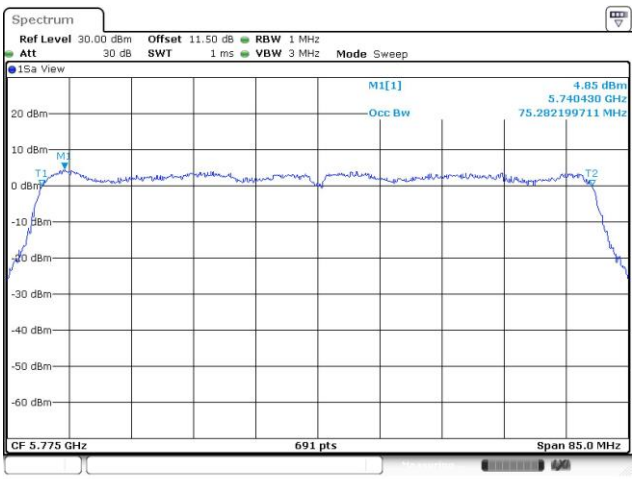
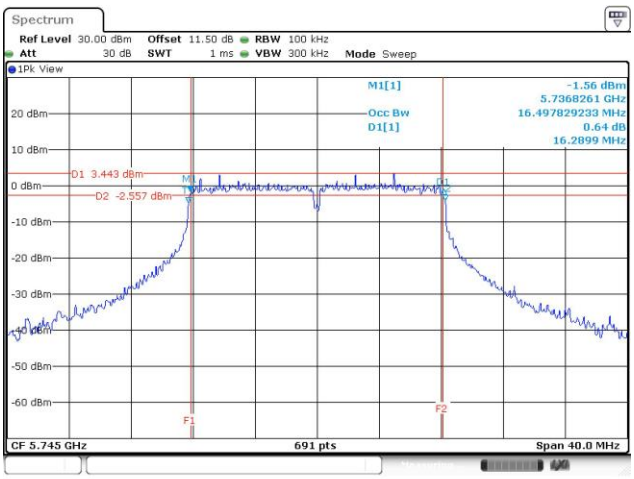
3.2.4 Test Result of Emission Bandwidth

Legacy/MIMO (CDD) Non- beamforming mode

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	4	5180	22.96	23.71	22.72	23.54	16.93	17.08	16.86	16.90
11a	4	5200	33.41	33.41	27.17	33.12	17.00	17.19	16.93	17.00
11a	4	5240	33.91	37.83	34.20	37.03	16.97	17.47	17.15	17.33
VHT20	4	5180	24.70	24.41	24.64	24.64	18.27	18.20	18.23	18.16
VHT20	4	5200	29.86	29.80	29.62	29.74	18.23	18.23	18.05	18.02
VHT20	4	5240	34.49	35.29	32.97	36.45	18.31	18.23	18.02	18.20
VHT40	4	5190	44.06	44.06	43.83	44.17	37.12	36.73	36.99	36.73
VHT40	4	5230	56.70	53.45	54.96	60.29	37.12	36.92	37.19	36.86
VHT80	4	5210	83.71	83.48	83.48	83.48	75.28	74.91	75.28	75.41

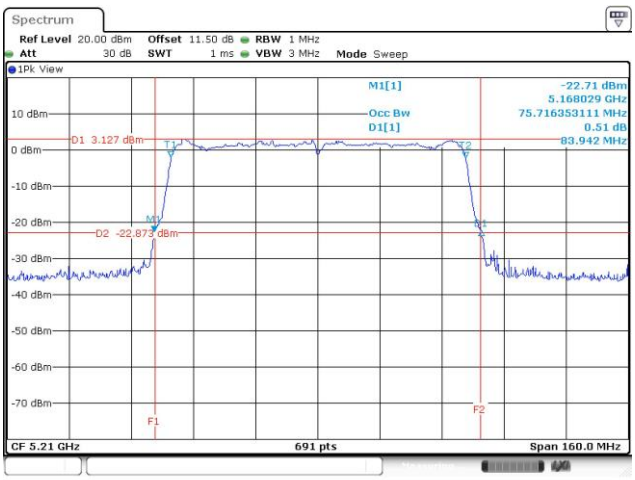
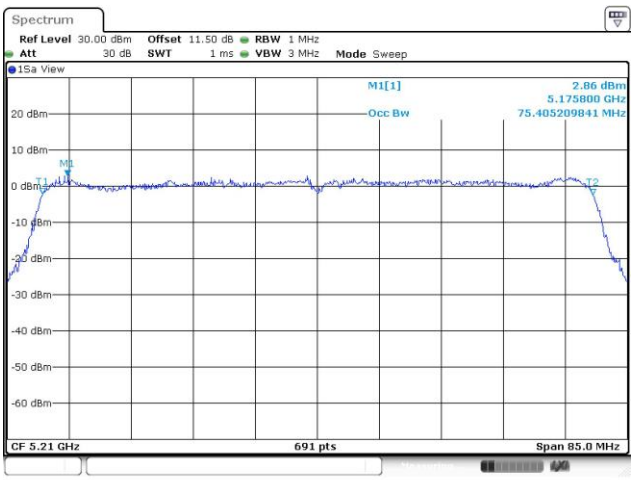
Worst Plots of 26dB Bandwidth	Worst Plots of 99% Bandwidth
	

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	4	5745	16.86	17.11	16.90	16.97	16.29	16.35	16.35	16.41	0.5
11a	4	5785	16.93	17.26	17.11	17.08	16.29	16.41	16.35	16.41	0.5
11a	4	5825	16.86	17.11	16.93	17.00	16.35	16.41	16.41	16.35	0.5
VHT20	4	5745	18.09	18.27	18.09	17.95	17.57	17.62	17.62	17.62	0.5
VHT20	4	5785	18.34	18.42	18.27	18.05	17.57	17.57	17.57	17.57	0.5
VHT20	4	5825	18.13	18.31	18.13	17.98	17.57	17.57	17.57	17.57	0.5
VHT40	4	5755	37.25	36.79	37.05	36.79	35.83	36.41	36.41	36.41	0.5
VHT40	4	5795	37.25	36.73	37.05	36.66	36.41	36.41	36.41	36.41	0.5
VHT80	4	5775	75.28	74.91	75.16	75.28	75.13	75.13	75.13	75.13	0.5

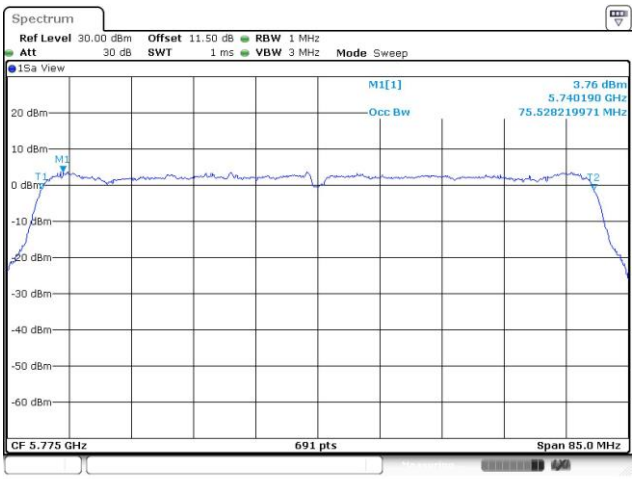
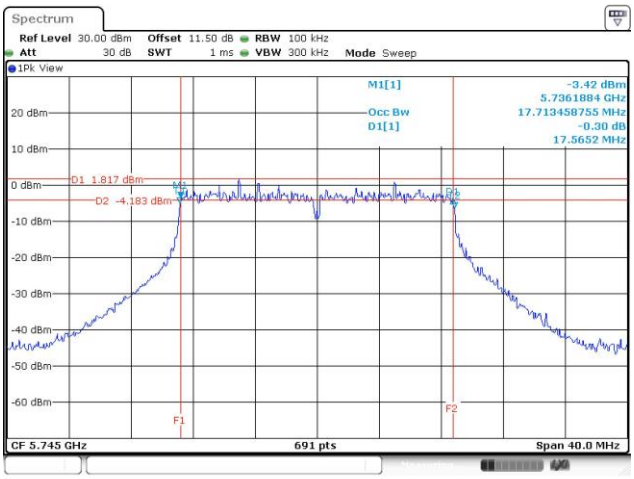
Worst Plots of 99% Bandwidth	Worst Plots of 6dB Bandwidth
	

Legacy/MIMO (CDD) beamforming mode

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
VHT20	4	5180	24.35	24.70	24.52	24.29	18.23	18.20	18.23	18.20
VHT20	4	5200	26.03	26.03	24.64	25.68	18.34	18.23	18.31	18.27
VHT20	4	5240	31.88	35.22	32.25	36.59	18.38	18.34	18.31	18.42
VHT40	4	5190	43.94	44.17	43.83	44.06	37.05	37.12	37.12	37.19
VHT40	4	5230	51.01	44.64	50.32	46.61	37.12	37.19	37.19	37.19
VHT80	4	5210	83.94	83.71	83.94	83.71	75.41	75.28	75.41	75.41

Worst Plots of 26dB Bandwidth	Worst Plots 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)
VHT20	4	5745	18.27	18.23	18.27	18.2	17.57	17.62	17.62	17.62	0.5
VHT20	4	5785	18.45	18.63	18.52	18.49	17.57	17.62	17.74	17.57	0.5
VHT20	4	5825	18.31	18.2	18.27	18.2	17.57	17.57	17.57	17.57	0.5
VHT40	4	5755	37.19	37.19	37.12	37.25	36.06	36.41	36.41	36.41	0.5
VHT40	4	5795	37.12	37.19	37.12	37.12	36.41	36.41	36.41	36.41	0.5
VHT80	4	5775	75.28	75.41	75.53	75.28	75.13	75.13	75.13	75.13	0.5

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

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

Legacy/MIMO (CDD) 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	4	5180	14.67	15.13	14.9	15.25	126.292	21.01	30.00
11a	4	5200	18.36	18.64	18.4	18.72	285.319	24.55	30.00
11a	4	5240	18.62	19.68	19.58	19.96	355.540	**25.51**	30.00
HT20	4	5180	14.58	14.49	14.31	14.59	112.578	20.51	30.00
HT20	4	5200	18.35	18.75	18.12	18.65	281.526	24.50	30.00
HT20	4	5240	18.41	18.98	18.89	19.5	314.982	24.98	30.00
HT40	4	5190	12.75	12.30	12.05	12.65	70.259	18.47	30.00
HT40	4	5230	17.92	18.27	17.89	18.29	258.057	24.12	30.00
VHT20	4	5180	14.67	14.54	14.33	14.62	113.829	20.56	30.00
VHT20	4	5200	18.37	18.82	18.16	18.68	284.169	24.54	30.00
VHT20	4	5240	18.49	18.99	18.95	19.5	317.531	25.02	30.00
VHT40	4	5190	12.77	12.32	12.07	12.70	70.712	18.49	30.00
VHT40	4	5230	17.96	18.29	17.94	18.35	260.591	24.16	30.00
VHT80	4	5210	11.05	11.02	10.32	11.03	48.824	16.89	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	4	5745	15.43	15.56	15.37	14.87	136.014	21.34	30.00
11a	4	5785	18.51	18.05	18.62	18.09	271.979	24.35	30.00
11a	4	5825	16.94	16.29	16.74	16.27	181.562	22.59	30.00
HT20	4	5745	13.49	14.37	14.29	14	101.661	20.07	30.00
HT20	4	5785	19.18	19.08	19.75	18.43	327.773	25.16	30.00
HT20	4	5825	16.7	16.62	16.81	16.28	183.129	22.63	30.00
HT40	4	5755	13.10	13.30	13.69	13.25	86.320	19.36	30.00
HT40	4	5795	16.72	17.21	17.22	17.08	203.365	23.08	30.00
VHT20	4	5745	13.54	14.43	14.31	14.01	102.482	20.11	30.00
VHT20	4	5785	19.2	19.13	19.78	18.6	332.527	**25.22**	30.00
VHT20	4	5825	16.73	16.65	16.88	16.3	184.747	22.67	30.00
VHT40	4	5755	13.16	13.38	13.78	13.34	87.934	19.44	30.00
VHT40	4	5795	16.81	17.25	17.24	17.11	205.432	23.13	30.00
VHT80	4	5775	13.04	12.95	13.32	13.07	81.617	19.12	30.00

Legacy/MIMO (CDD) 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	4	5180	14.66	14.52	14.31	14.59	113.307	20.54	28.99
HT20	4	5200	17.42	18.03	17.72	17.32	231.848	23.65	28.99
HT20	4	5240	18.45	18.99	18.98	19.51	317.633	25.02	28.99
HT40	4	5190	10.58	11.27	10.69	11.08	49.371	16.93	28.99
HT40	4	5230	17.01	17.32	17.12	17.19	208.068	23.18	28.99
VHT20	4	5180	14.68	14.63	14.42	14.64	115.193	20.61	28.99
VHT20	4	5200	17.46	18.07	17.79	17.36	234.407	23.70	28.99
VHT20	4	5240	18.49	19.13	19.08	19.59	324.379	**25.11**	28.99
VHT40	4	5190	10.64	11.29	10.72	11.11	49.762	16.97	28.99
VHT40	4	5230	17.02	17.39	17.15	17.11	208.462	23.19	28.99
VHT80	4	5210	11.02	10.95	10.38	11.09	48.860	16.89	28.99

Note:

1. Directional gain = 0.99+10* log(4/1) = 7.01 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (7.01 dBi – 6 dBi) = 28.99 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	4	5745	12.75	13.19	13.58	13.01	82.483	19.16	29.77
HT20	4	5785	19.20	19.08	19.79	18.46	329.511	25.18	29.77
HT20	4	5825	14.59	14.78	15.02	14.95	121.864	20.86	29.77
HT40	4	5755	11.79	12.30	12.51	12.22	66.579	18.23	29.77
HT40	4	5795	16.19	16.31	16.42	16.05	168.472	22.27	29.77
VHT20	4	5745	12.84	13.23	13.61	13.02	83.275	19.21	29.77
VHT20	4	5785	19.22	19.23	19.88	18.64	337.702	**25.29**	29.77
VHT20	4	5825	14.64	14.89	15.07	14.97	123.481	20.92	29.77
VHT40	4	5755	11.81	12.32	12.54	12.25	66.967	18.26	29.77
VHT40	4	5795	16.22	16.34	16.45	16.09	169.733	22.30	29.77
VHT80	4	5775	11.95	12.01	12.39	12.21	65.525	18.16	29.77

Note:

1. Directional gain = 0.21+10* log(4/1) = 6.23 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (6.23 dBi – 6 dBi) = 29.77 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/VHT20/VHT40)

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 (VHT80 only)

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

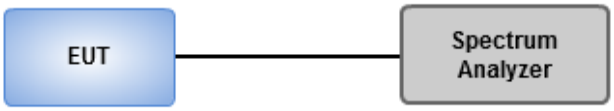
☒ Method SA-1 (802.11a/VHT20/VHT40)

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 (VHT80 only)

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



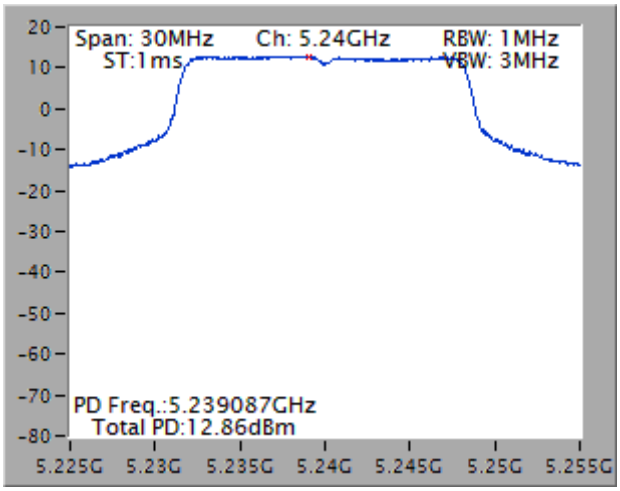
3.4.4 Test Result of Peak Power Spectral Density

Legacy/MIMO (CDD) Non- beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty Factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	4	5180	8.21	0.00	8.21	15.99
11a	4	5200	11.70	0.00	11.70	15.99
11a	4	5240	12.86	0.00	12.86	15.99
VHT20	4	5180	8.46	0.00	8.46	15.99
VHT20	4	5200	11.54	0.00	11.54	15.99
VHT20	4	5240	11.90	0.00	11.90	15.99
VHT40	4	5190	2.40	0.00	2.40	15.99
VHT40	4	5230	8.02	0.00	8.02	15.99
VHT80	4	5210	-1.67	0.21	-1.46	15.99

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 0.99+10* log(4/1) = 7.01 dBi > 6 dBi.
   Limit shall be reduced to 17 dBm – (7.01 dBi – 6 dBi) = 15.99 dBm.

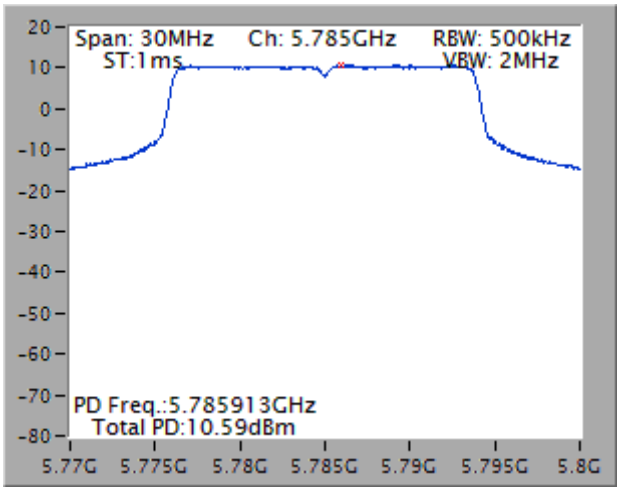
Worst Plots



For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty Factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	4	5745	6.75	0.00	6.75	29.77
11a	4	5785	10.13	0.00	10.13	29.77
11a	4	5825	8.60	0.00	8.60	29.77
VHT20	4	5745	5.55	0.00	5.55	29.77
VHT20	4	5785	10.59	0.00	10.59	29.77
VHT20	4	5825	8.04	0.00	8.04	29.77
VHT40	4	5755	1.84	0.00	1.84	29.77
VHT40	4	5795	5.54	0.00	5.54	29.77
VHT80	4	5775	-1.08	0.21	-0.87	29.77

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 0.21+10* log(4/1) = 6.23 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (6.23 dBi – 6 dBi) = 29.77 dBm.

Worst Plots

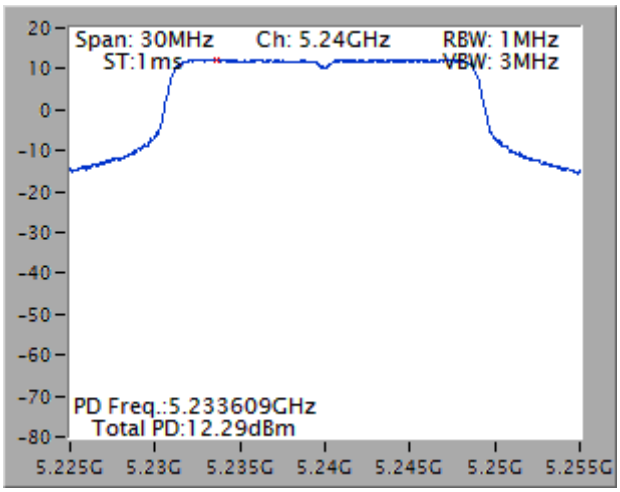


Legacy/MIMO (CDD) beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty Factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
VHT20	4	5180	8.71	0.00	8.71	15.99
VHT20	4	5200	11.08	0.00	11.08	15.99
VHT20	4	5240	12.29	0.00	12.29	15.99
VHT40	4	5190	1.09	0.21	1.30	15.99
VHT40	4	5230	7.21	0.21	7.42	15.99
VHT80	4	5210	-1.56	0.00	-1.56	15.99

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 0.99+10* log(4/1) = 7.01 dBi > 6 dBi.
   Limit shall be reduced to 17 dBm – (7.01 dBi – 6 dBi) = 15.99 dBm.

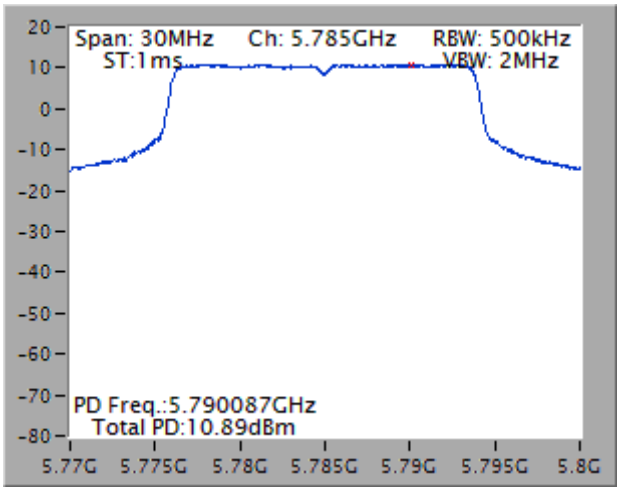
Worst Plots



For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty Factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
VHT20	4	5745	4.75	0.00	4.75	29.77
VHT20	4	5785	10.89	0.00	10.89	29.77
VHT20	4	5825	6.43	0.00	6.43	29.77
VHT40	4	5755	0.69	0.21	0.90	29.77
VHT40	4	5795	4.44	0.21	4.65	29.77
VHT80	4	5775	-1.99	0.00	-1.99	29.77

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 0.21+10* log(4/1) = 6.23 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (6.23 dBi – 6 dBi) = 29.77 dBm.

Worst Plots



3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.825 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

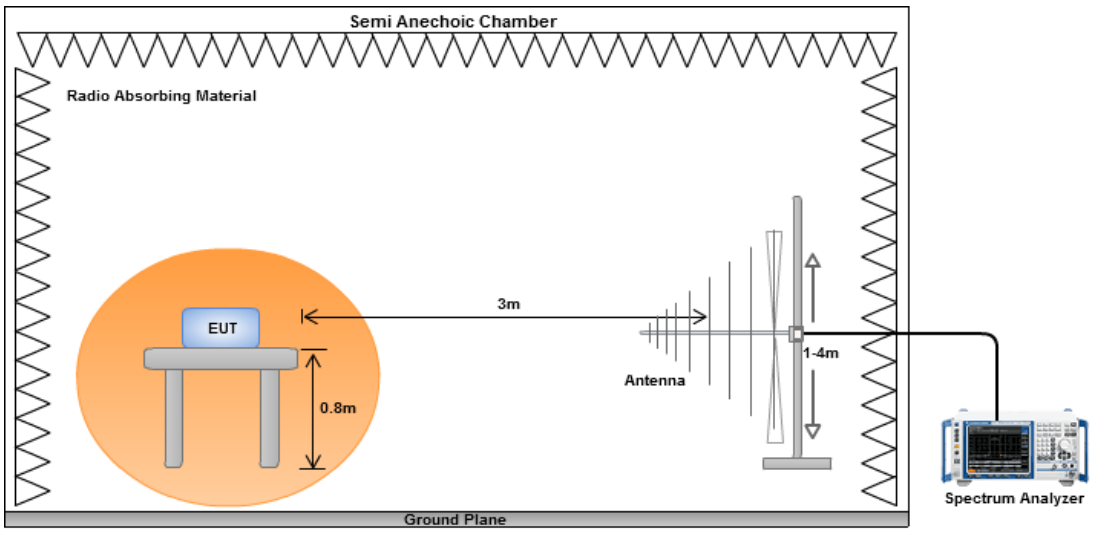
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

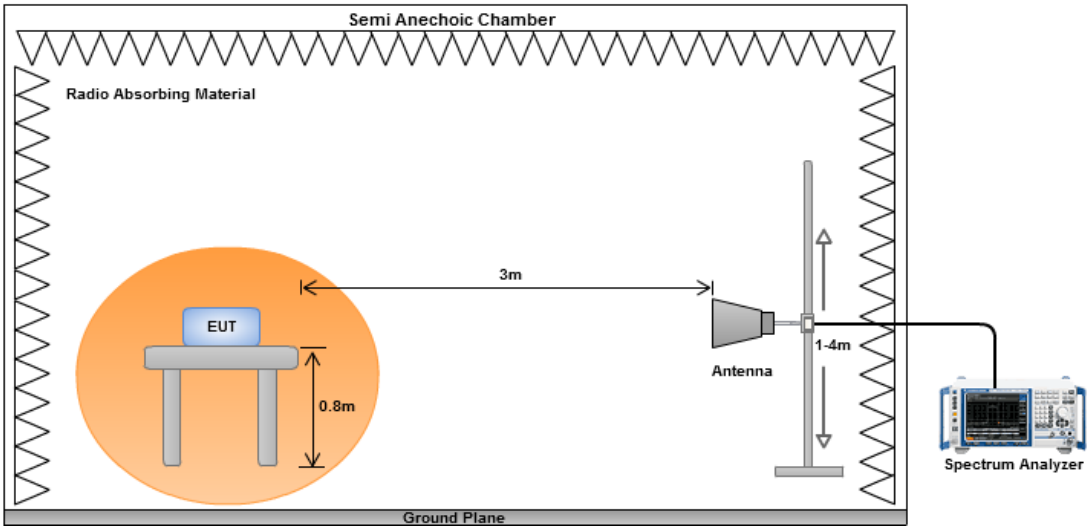
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



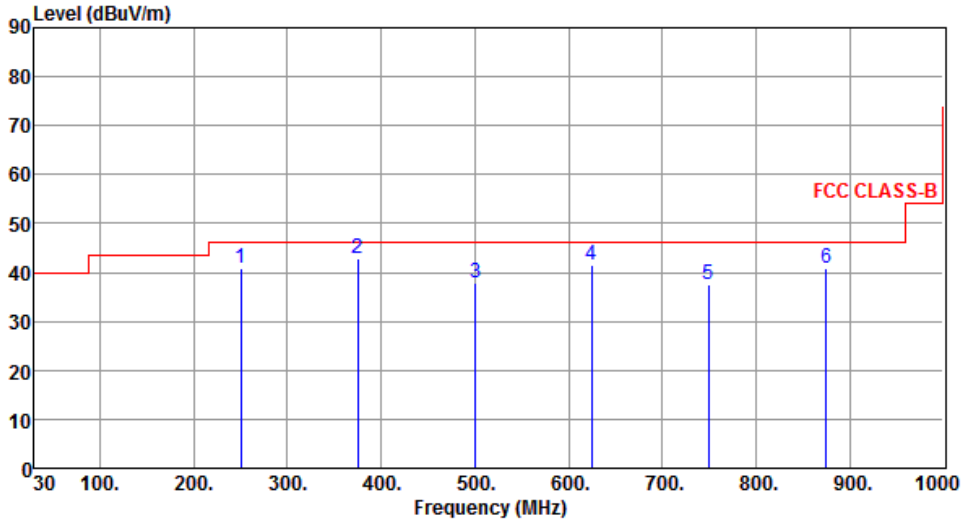
Radiated Emissions above 1 GHz



Legacy/MIMO (CDD) Non- beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

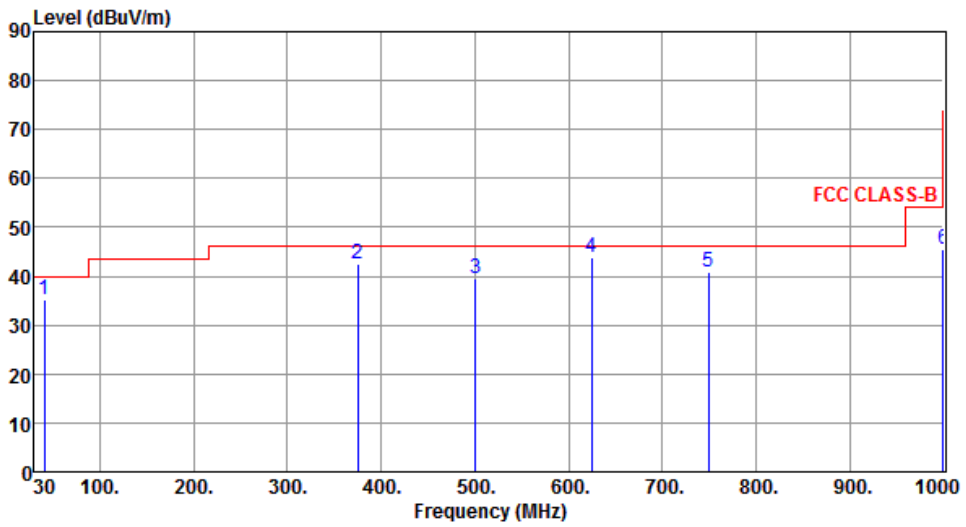
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	250.19	40.91	46.00	-5.09	55.41	-14.50	Peak	---	---
2	375.32	42.98	46.00	-3.02	53.79	-10.81	Peak	---	---
3	500.45	37.76	46.00	-8.24	45.81	-8.05	Peak	---	---
4	624.61	41.47	46.00	-4.53	46.78	-5.31	Peak	---	---
5	749.74	37.54	46.00	-8.46	40.79	-3.25	Peak	---	---
6	874.87	40.94	46.00	-5.06	42.18	-1.24	Peak	---	---

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

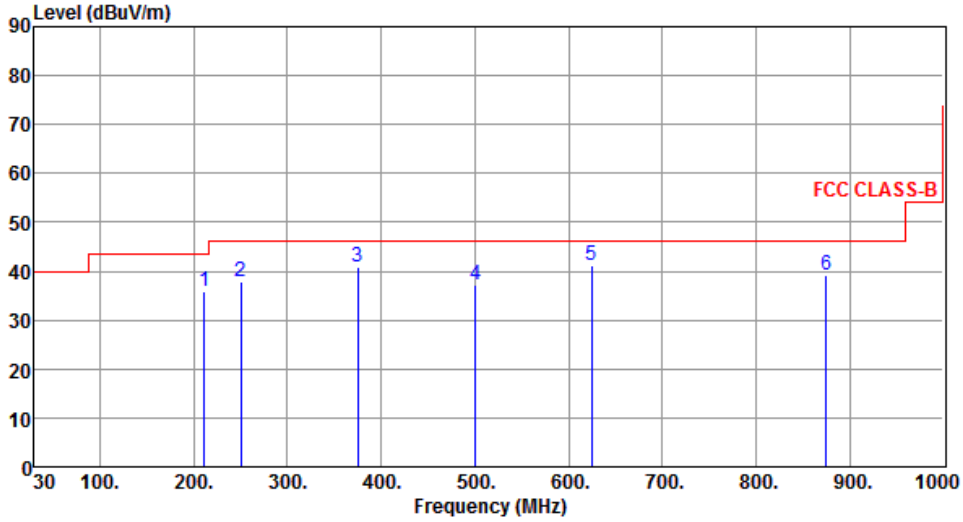
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	40.88	35.08	40.00	-4.92	48.63	-13.55	QP	---	---
2	375.32	42.37	46.00	-3.63	53.18	-10.81	Peak	---	---
3	500.45	39.39	46.00	-6.61	47.44	-8.05	Peak	---	---
4	624.90	43.91	46.00	-2.09	49.22	-5.31	QP	---	---
5	749.74	40.99	46.00	-5.01	44.24	-3.25	Peak	---	---
6	1000.00	45.47	54.00	-8.53	44.76	0.71	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.

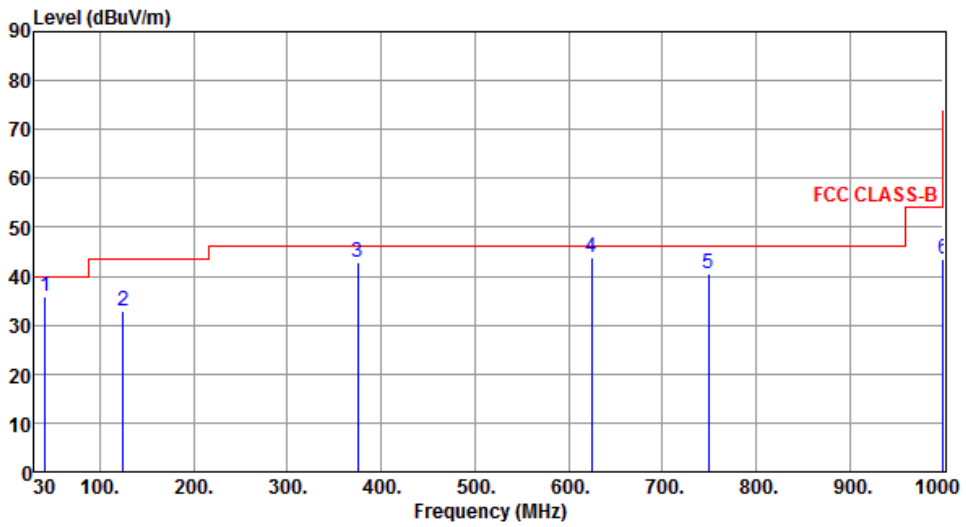
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	211.39	35.86	43.50	-7.64	52.01	-16.15	Peak	---	---
2	250.19	37.99	46.00	-8.01	52.49	-14.50	Peak	---	---
3	375.32	40.98	46.00	-5.02	51.79	-10.81	Peak	---	---
4	500.45	37.19	46.00	-8.81	45.24	-8.05	Peak	---	---
5	624.61	41.04	46.00	-4.96	46.35	-5.31	Peak	---	---
6	874.87	39.26	46.00	-6.74	40.50	-1.24	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		

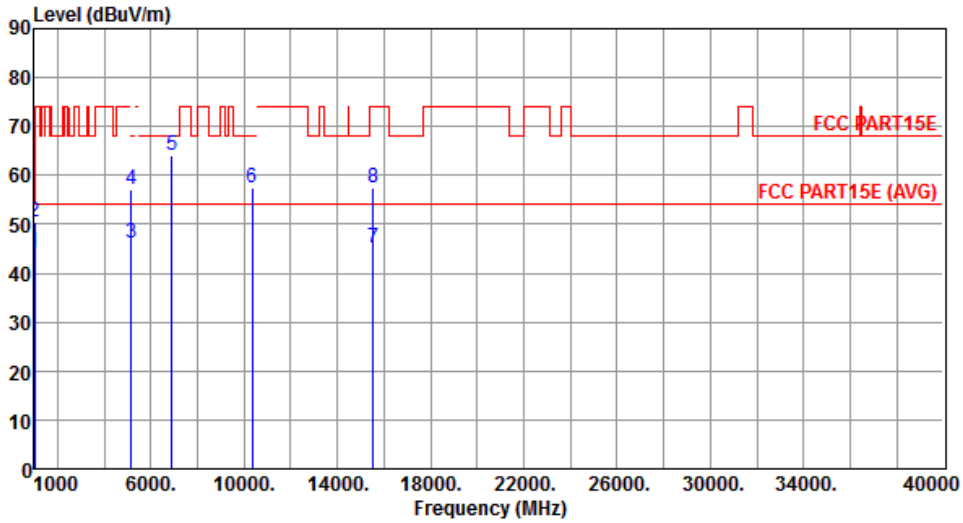


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	41.39	35.85	40.00	-4.15	49.36	-13.51	QP	---	---
2	125.06	32.78	43.50	-10.72	47.98	-15.20	Peak	---	---
3	375.32	42.84	46.00	-3.16	53.65	-10.81	Peak	---	---
4	624.95	43.85	46.00	-2.15	49.16	-5.31	QP	---	---
5	749.74	40.40	46.00	-5.60	43.65	-3.25	Peak	---	---
6	1000.00	43.67	54.00	-10.33	42.96	0.71	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

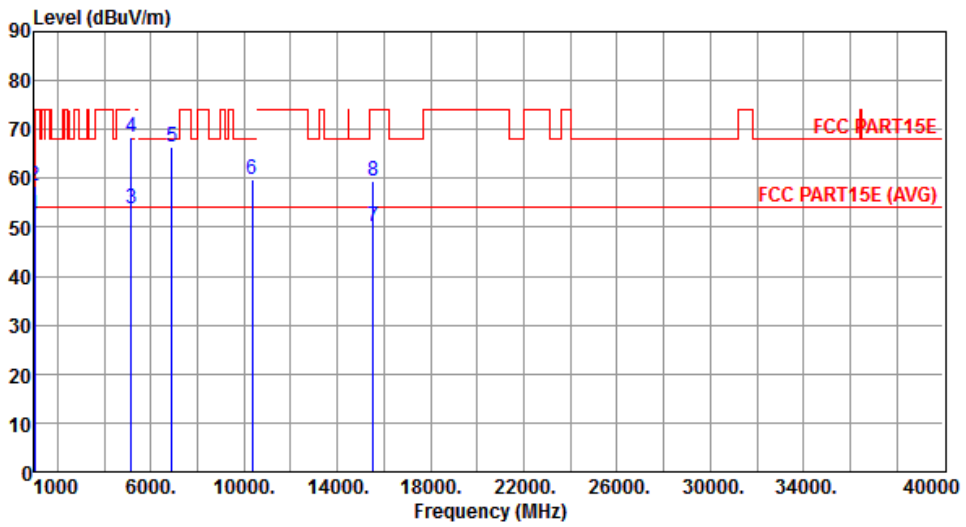
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.09	54.00	-9.91	52.96	-8.87	Average	---	---
2	1000.10	50.60	74.00	-23.40	59.47	-8.87	Peak	---	---
3	5150.00	46.27	54.00	-7.73	40.10	6.17	Average	---	---
4	5150.00	57.11	74.00	-16.89	50.94	6.17	Peak	---	---
5	6906.66	63.94	68.20	-4.26	53.54	10.40	Peak	---	---
6	10360.00	57.46	68.20	-10.74	40.54	16.92	Peak	---	---
7	15540.00	45.03	54.00	-8.97	27.11	17.92	Average	---	---
8	15540.00	57.43	74.00	-16.57	39.51	17.92	Peak	---	---

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

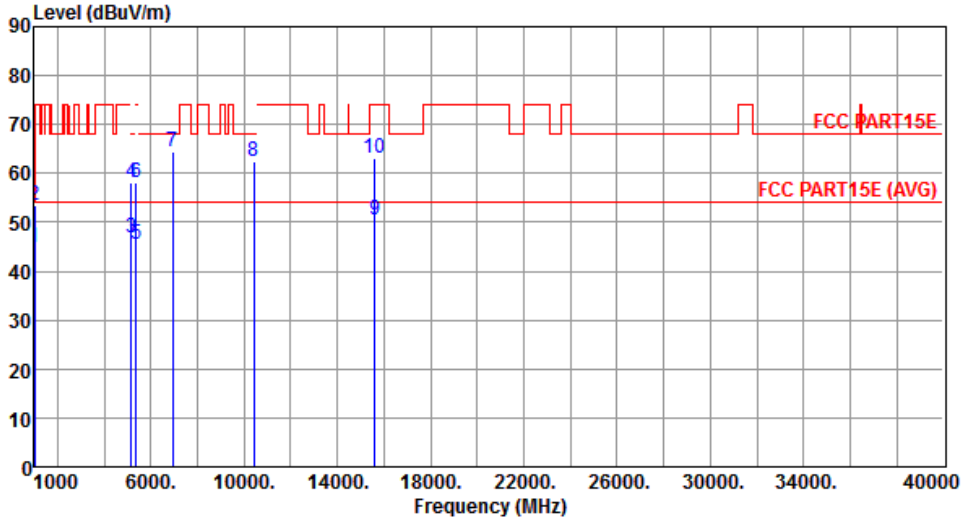
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.39	54.00	-1.61	61.26	-8.87	Average	---	---
2	1000.10	58.37	74.00	-15.63	67.24	-8.87	Peak	---	---
3	5150.00	53.86	54.00	-0.14	47.69	6.17	Average	---	---
4	5150.00	68.58	74.00	-5.42	62.41	6.17	Peak	---	---
5	6906.66	66.36	68.20	-1.84	55.96	10.40	Peak	---	---
6	10360.00	59.63	68.20	-8.57	42.71	16.92	Peak	---	---
7	15540.00	50.21	54.00	-3.79	32.29	17.92	Average	---	---
8	15540.00	59.59	74.00	-14.41	41.67	17.92	Peak	---	---

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

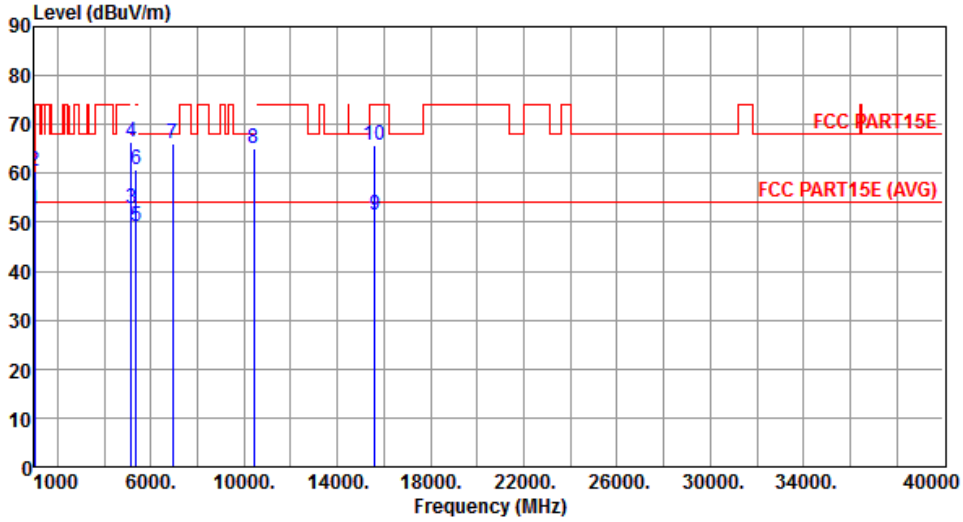
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.69	54.00	-9.31	53.56	-8.87	Average	---	---
2	1000.10	53.43	74.00	-20.57	62.30	-8.87	Peak	---	---
3	5150.00	46.75	54.00	-7.25	40.58	6.17	Average	---	---
4	5150.00	58.24	74.00	-15.76	52.07	6.17	Peak	---	---
5	5350.00	45.44	54.00	-8.56	38.94	6.50	Average	---	---
6	5350.00	58.05	74.00	-15.95	51.55	6.50	Peak	---	---
7	6933.33	64.42	68.20	-3.78	53.86	10.56	Peak	---	---
8	10400.00	62.42	68.20	-5.78	45.38	17.04	Peak	---	---
9	15600.00	50.60	54.00	-3.40	32.83	17.77	Average	---	---
10	15600.00	63.01	74.00	-10.99	45.24	17.77	Peak	---	---

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

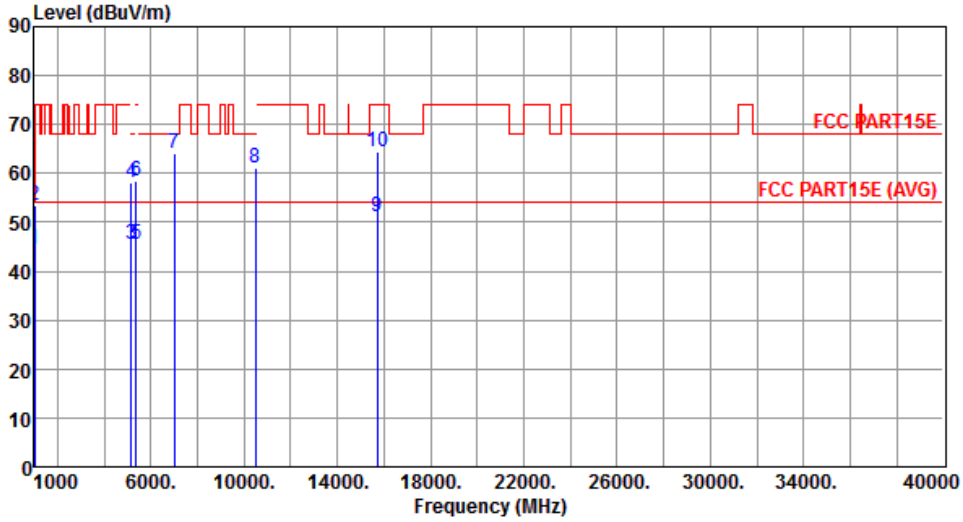
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.55	54.00	-1.45	61.42	-8.87	Average	---	---
2	1000.10	60.37	74.00	-13.63	69.24	-8.87	Peak	---	---
3	5150.00	52.91	54.00	-1.09	46.74	6.17	Average	---	---
4	5150.00	66.56	74.00	-7.44	60.39	6.17	Peak	---	---
5	5350.00	49.18	54.00	-4.82	42.68	6.50	Average	---	---
6	5350.00	60.71	74.00	-13.29	54.21	6.50	Peak	---	---
7	6933.33	66.02	68.20	-2.18	55.46	10.56	Peak	---	---
8	10400.00	65.00	68.20	-3.20	47.96	17.04	Peak	---	---
9	15600.00	51.62	54.00	-2.38	33.85	17.77	Average	---	---
10	15600.00	65.60	74.00	-8.40	47.83	17.77	Peak	---	---

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

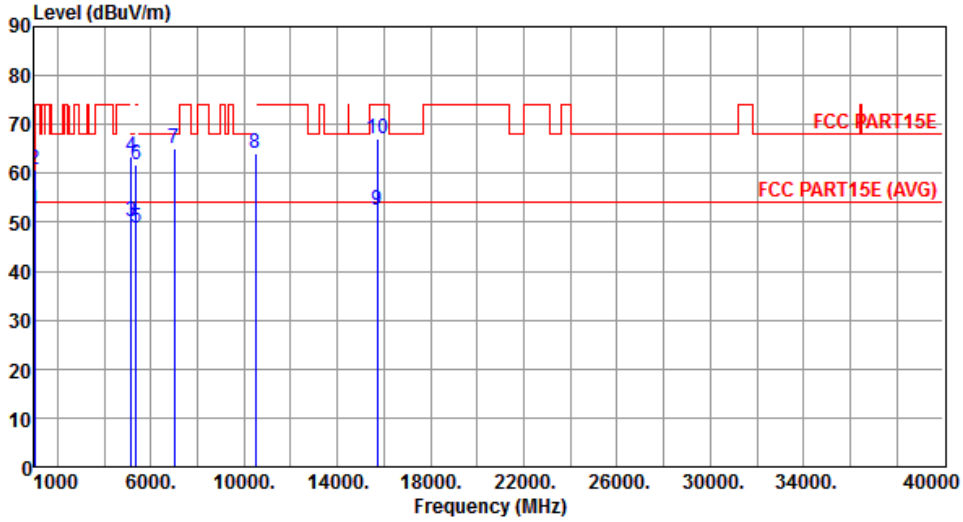
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.55	54.00	-9.45	53.42	-8.87	Average	---	---
2	1000.10	53.44	74.00	-20.56	62.31	-8.87	Peak	---	---
3	5150.00	45.42	54.00	-8.58	39.25	6.17	Average	---	---
4	5150.00	58.10	74.00	-15.90	51.93	6.17	Peak	---	---
5	5350.00	45.52	54.00	-8.48	39.02	6.50	Average	---	---
6	5350.00	58.61	74.00	-15.39	52.11	6.50	Peak	---	---
7	6986.66	64.23	68.20	-3.97	53.35	10.88	Peak	---	---
8	10480.00	61.19	68.20	-7.01	43.91	17.28	Peak	---	---
9	15720.00	51.00	54.00	-3.00	33.52	17.48	Average	---	---
10	15720.00	64.30	74.00	-9.70	46.82	17.48	Peak	---	---

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

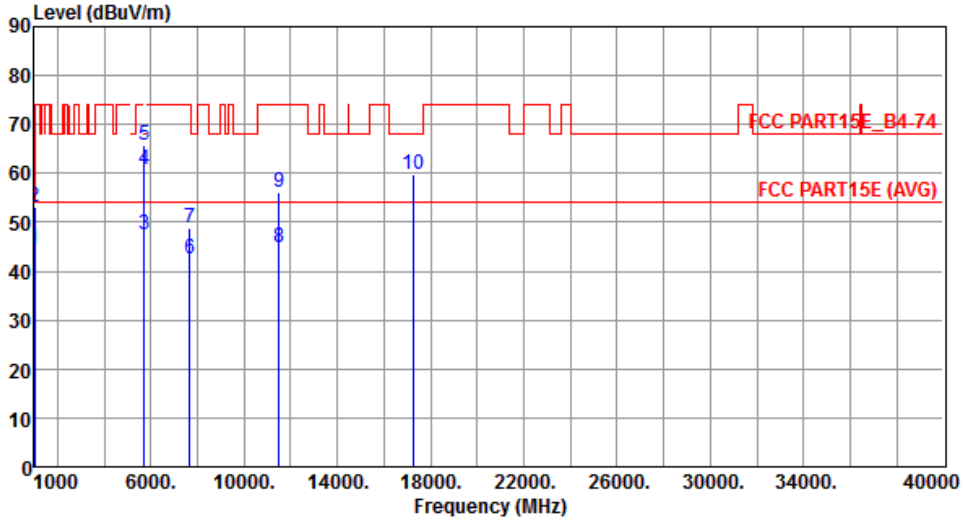
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.51	54.00	-1.49	61.38	-8.87	Average	---	---
2	1000.10	60.66	74.00	-13.34	69.53	-8.87	Peak	---	---
3	5150.00	50.25	54.00	-3.75	44.08	6.17	Average	---	---
4	5150.00	63.53	74.00	-10.47	57.36	6.17	Peak	---	---
5	5350.00	48.76	54.00	-5.24	42.26	6.50	Average	---	---
6	5350.00	61.73	74.00	-12.27	55.23	6.50	Peak	---	---
7	6986.66	65.23	68.20	-2.97	54.35	10.88	Peak	---	---
8	10480.00	63.97	68.20	-4.23	46.69	17.28	Peak	---	---
9	15720.00	52.31	54.00	-1.69	34.83	17.48	Average	---	---
10	15720.00	66.92	74.00	-7.08	49.44	17.48	Peak	---	---

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

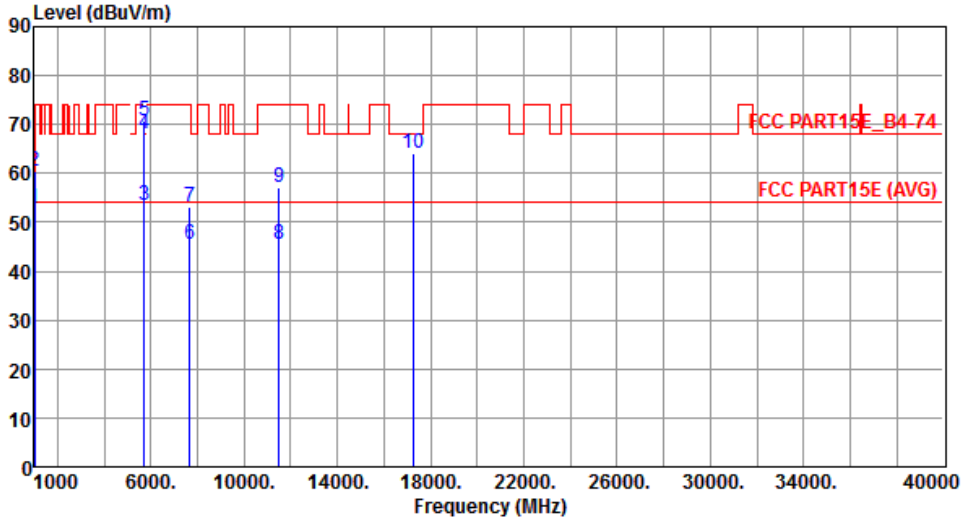
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.41	54.00	-9.59	53.28	-8.87	Average	---	---
2	1000.10	53.28	74.00	-20.72	62.15	-8.87	Peak	---	---
3	5715.00	47.46	54.00	-6.54	40.39	7.07	Average	---	---
4	5715.00	60.68	74.00	-13.32	53.61	7.07	Peak	---	---
5	5725.00	65.89	78.20	-12.31	58.82	7.07	Peak	---	---
6	7660.00	42.46	54.00	-11.54	31.25	11.21	Average	---	---
7	7660.00	48.73	74.00	-25.27	37.52	11.21	Peak	---	---
8	11490.00	44.70	54.00	-9.30	27.48	17.22	Average	---	---
9	11490.00	56.19	74.00	-17.81	38.97	17.22	Peak	---	---
10	17235.00	59.67	68.20	-8.53	40.59	19.08	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).

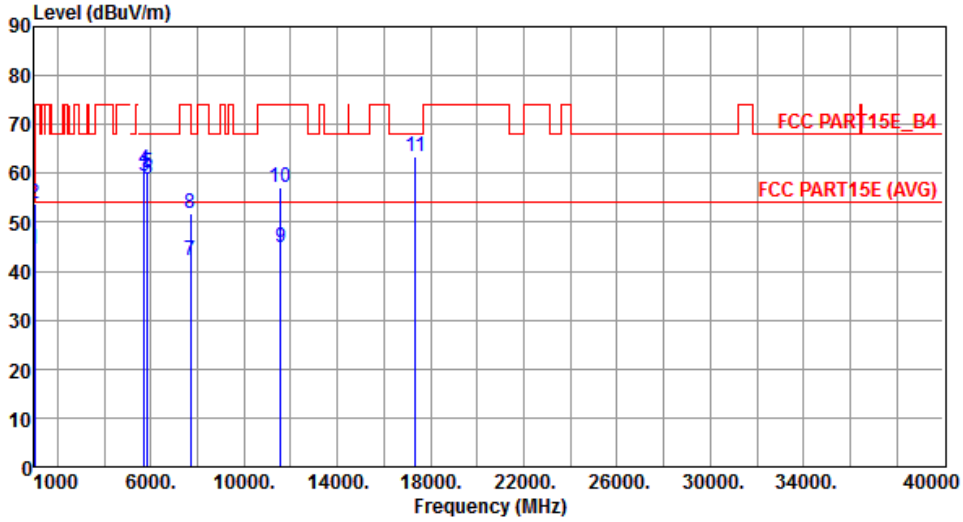
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.70	54.00	-1.30	61.57	-8.87	Average	---	---
2	1000.10	60.50	74.00	-13.50	69.37	-8.87	Peak	---	---
3	5715.00	53.49	54.00	-0.51	46.42	7.07	Average	---	---
4	5715.00	68.07	74.00	-5.93	61.00	7.07	Peak	---	---
5	5725.00	70.78	78.20	-7.42	63.71	7.07	Peak	---	---
6	7660.00	45.53	54.00	-8.47	34.32	11.21	Average	---	---
7	7660.00	53.14	74.00	-20.86	41.93	11.21	Peak	---	---
8	11490.00	45.43	54.00	-8.57	28.21	17.22	Average	---	---
9	11490.00	57.09	74.00	-16.91	39.87	17.22	Peak	---	---
10	17235.00	64.01	68.20	-4.19	44.93	19.08	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).

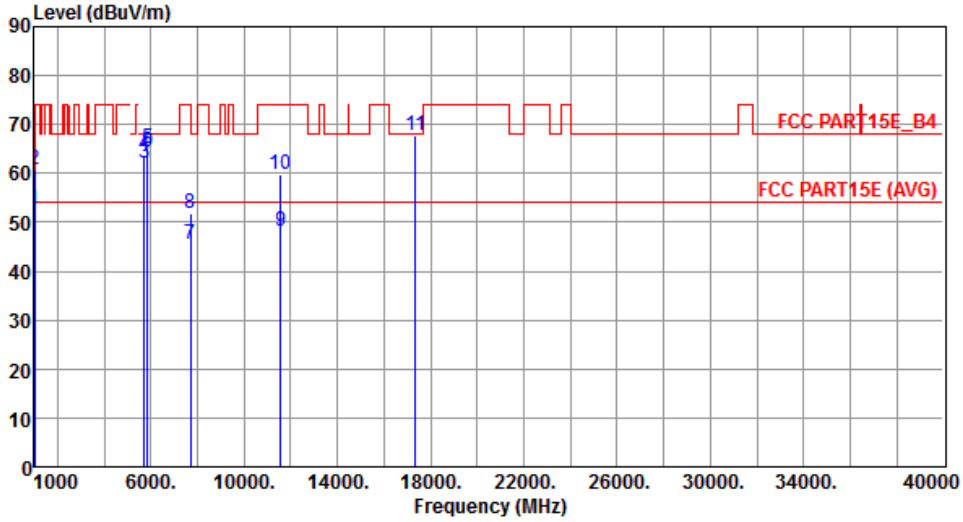
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.64	54.00	-9.36	53.51	-8.87	Average	---	---
2	1000.10	53.66	74.00	-20.34	62.53	-8.87	Peak	---	---
3	5715.00	59.29	68.20	-8.91	52.22	7.07	Peak	---	---
4	5725.00	60.83	78.20	-17.37	53.76	7.07	Peak	---	---
5	5850.00	60.05	78.20	-18.15	52.83	7.22	Peak	---	---
6	5860.00	58.92	68.20	-9.28	51.69	7.23	Peak	---	---
7	7713.33	42.06	54.00	-11.94	30.58	11.48	Average	---	---
8	7713.33	51.65	74.00	-22.35	40.17	11.48	Peak	---	---
9	11570.00	44.82	54.00	-9.18	27.74	17.08	Average	---	---
10	11570.00	57.10	74.00	-16.90	40.02	17.08	Peak	---	---
11	17355.00	63.44	68.20	-4.76	43.83	19.61	Peak	---	---

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

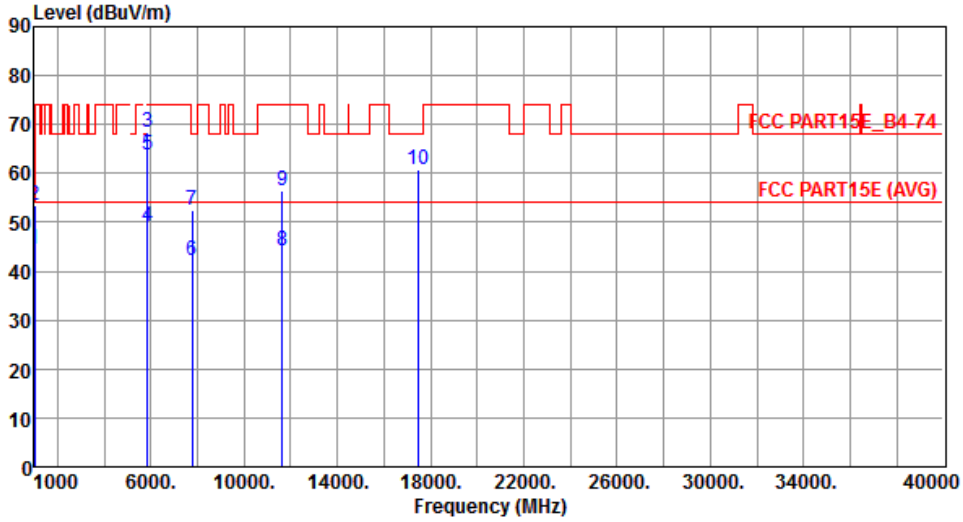
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.38	54.00	-1.62	61.25	-8.87	Average	---	---
2	1000.10	60.66	74.00	-13.34	69.53	-8.87	Peak	---	---
3	5715.00	62.18	68.20	-6.02	55.11	7.07	Peak	---	---
4	5725.00	63.79	78.20	-14.41	56.72	7.07	Peak	---	---
5	5850.00	65.17	78.20	-13.03	57.95	7.22	Peak	---	---
6	5860.00	64.53	68.20	-3.67	57.30	7.23	Peak	---	---
7	7713.33	45.43	54.00	-8.57	33.95	11.48	Average	---	---
8	7713.33	51.75	74.00	-22.25	40.27	11.48	Peak	---	---
9	11570.00	48.10	54.00	-5.90	31.02	17.08	Average	---	---
10	11570.00	59.65	74.00	-14.35	42.57	17.08	Peak	---	---
11	17355.00	67.82	68.20	-0.38	48.21	19.61	Peak	---	---

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

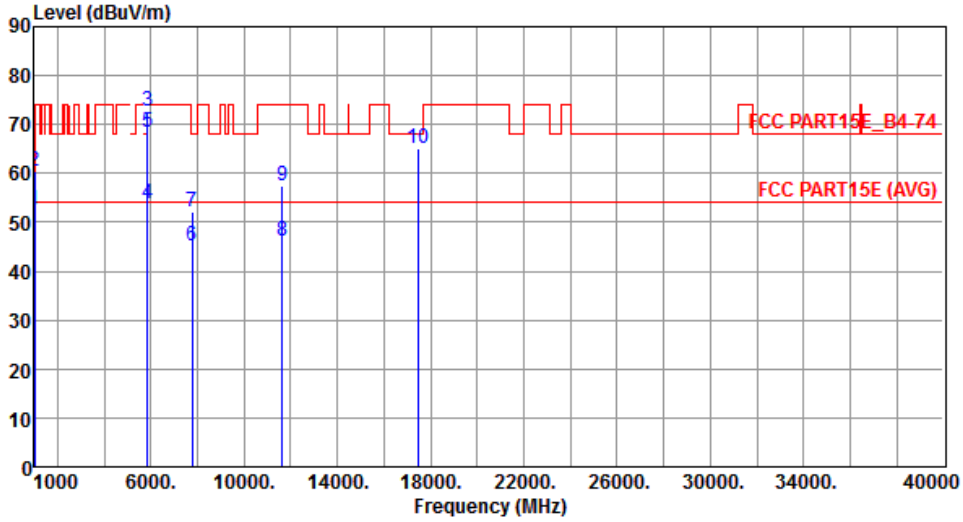
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.38	54.00	-9.62	53.25	-8.87	Average	---	---
2	1000.10	53.52	74.00	-20.48	62.39	-8.87	Peak	---	---
3	5850.00	68.47	78.20	-9.73	61.25	7.22	Peak	---	---
4	5860.00	49.09	54.00	-4.91	41.86	7.23	Average	---	---
5	5860.00	63.60	74.00	-10.40	56.37	7.23	Peak	---	---
6	7766.66	42.29	54.00	-11.71	30.54	11.75	Average	---	---
7	7766.66	52.43	68.20	-15.77	40.68	11.75	Peak	---	---
8	11650.00	44.31	54.00	-9.69	27.38	16.93	Average	---	---
9	11650.00	56.47	74.00	-17.53	39.54	16.93	Peak	---	---
10	17475.00	60.66	68.20	-7.54	40.51	20.15	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).

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

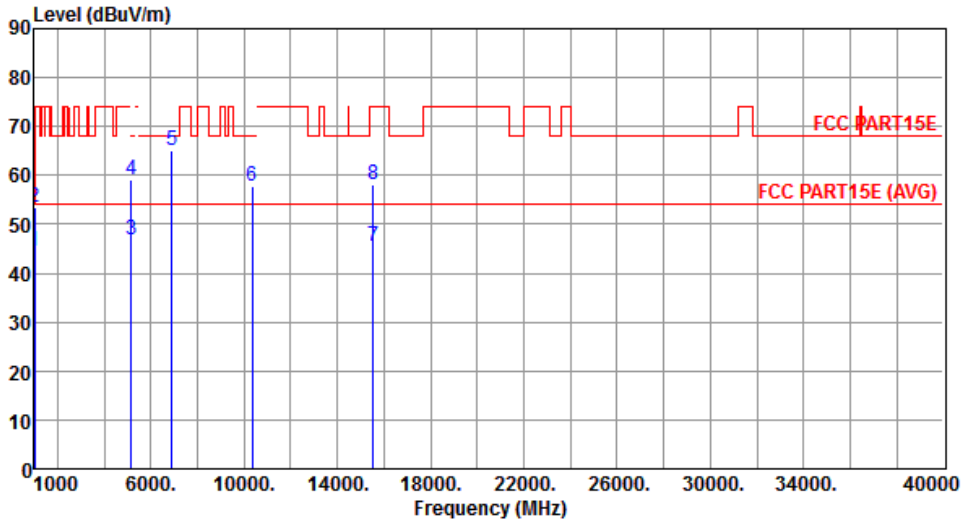


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.57	54.00	-1.43	61.44	-8.87	Average	---	---
2	1000.10	60.40	74.00	-13.60	69.27	-8.87	Peak	---	---
3	5850.00	72.88	78.20	-5.32	65.66	7.22	Peak	---	---
4	5860.00	53.82	54.00	-0.18	46.59	7.23	Average	---	---
5	5860.00	68.53	74.00	-5.47	61.30	7.23	Peak	---	---
6	7766.66	45.33	54.00	-8.67	33.58	11.75	Average	---	---
7	7766.66	52.14	68.20	-16.06	40.39	11.75	Peak	---	---
8	11650.00	46.08	54.00	-7.92	29.15	16.93	Average	---	---
9	11650.00	57.41	74.00	-16.59	40.48	16.93	Peak	---	---
10	17475.00	65.08	68.20	-3.12	44.93	20.15	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).

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

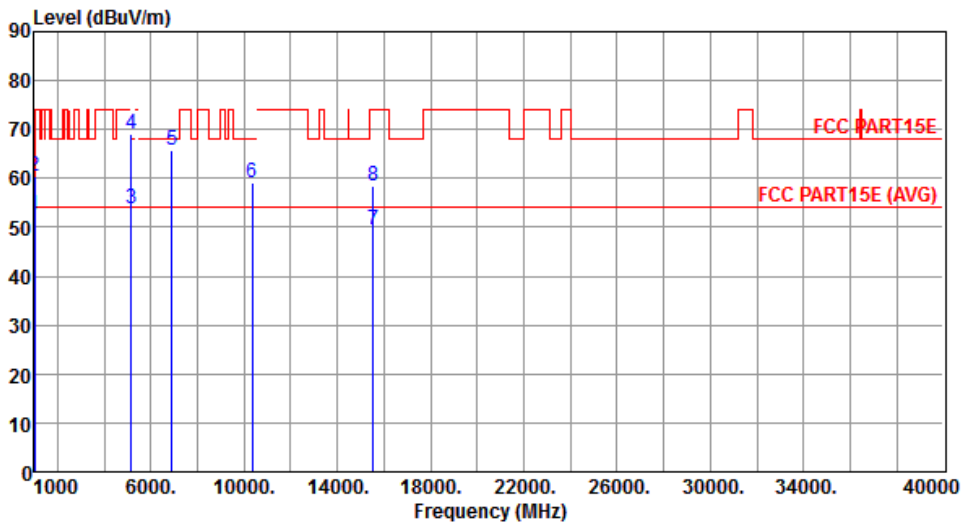
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.51	54.00	-9.49	53.38	-8.87	Average	---	---
2	1000.10	53.48	74.00	-20.52	62.35	-8.87	Peak	---	---
3	5150.00	46.71	54.00	-7.29	40.54	6.17	Average	---	---
4	5150.00	59.26	74.00	-14.74	53.09	6.17	Peak	---	---
5	6906.66	64.93	68.20	-3.27	54.53	10.40	Peak	---	---
6	10360.00	57.82	68.20	-10.38	40.90	16.92	Peak	---	---
7	15540.00	45.45	54.00	-8.55	27.53	17.92	Average	---	---
8	15540.00	58.14	74.00	-15.86	40.22	17.92	Peak	---	---

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

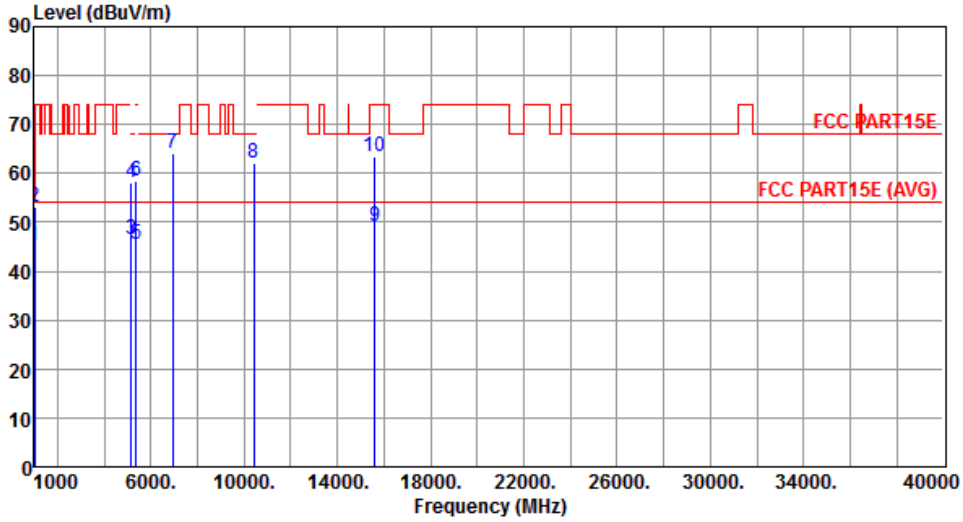
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.45	54.00	-1.55	61.32	-8.87	Average	---	---
2	1000.10	60.44	74.00	-13.56	69.31	-8.87	Peak	---	---
3	5150.00	53.70	54.00	-0.30	47.53	6.17	Average	---	---
4	5150.00	69.02	74.00	-4.98	62.85	6.17	Peak	---	---
5	6906.66	65.71	68.20	-2.49	55.31	10.40	Peak	---	---
6	10360.00	59.28	68.20	-8.92	42.36	16.92	Peak	---	---
7	15540.00	49.54	54.00	-4.46	31.62	17.92	Average	---	---
8	15540.00	58.56	74.00	-15.44	40.64	17.92	Peak	---	---

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

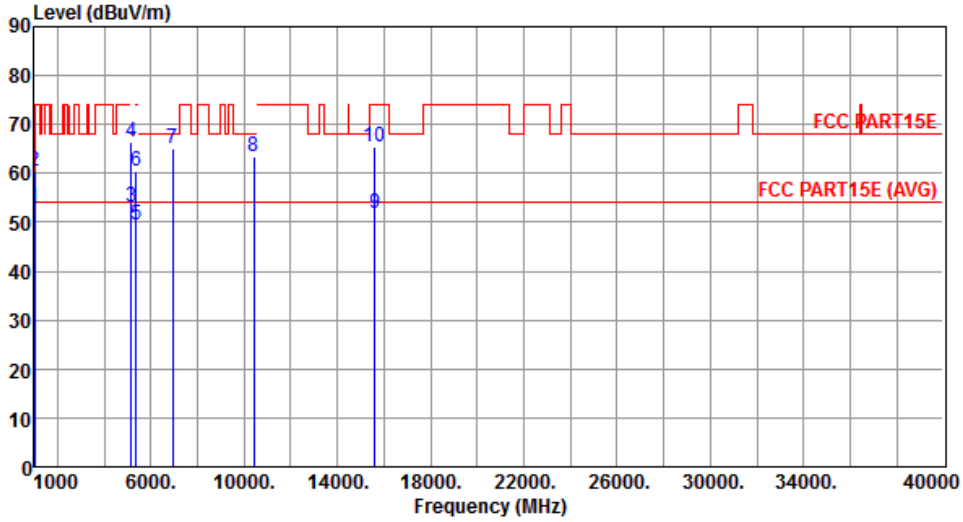
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	45.07	54.00	-8.93	53.94	-8.87	Average	---	---
2	1000.10	53.28	74.00	-20.72	62.15	-8.87	Peak	---	---
3	5150.00	46.52	54.00	-7.48	40.35	6.17	Average	---	---
4	5150.00	58.14	74.00	-15.86	51.97	6.17	Peak	---	---
5	5350.00	45.56	54.00	-8.44	39.06	6.50	Average	---	---
6	5350.00	58.48	74.00	-15.52	51.98	6.50	Peak	---	---
7	6933.33	64.01	68.20	-4.19	53.45	10.56	Peak	---	---
8	10400.00	61.98	68.20	-6.22	44.94	17.04	Peak	---	---
9	15600.00	49.19	54.00	-4.81	31.42	17.77	Average	---	---
10	15600.00	63.30	74.00	-10.70	45.53	17.77	Peak	---	---

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

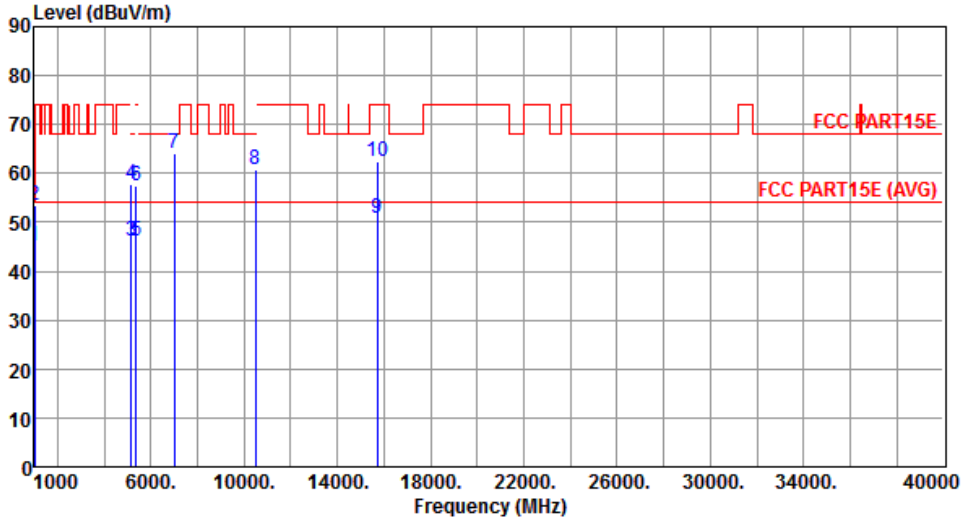
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.66	54.00	-1.34	61.53	-8.87	Average	---	---
2	1000.10	60.57	74.00	-13.43	69.44	-8.87	Peak	---	---
3	5150.00	53.27	54.00	-0.73	47.10	6.17	Average	---	---
4	5150.00	66.49	74.00	-7.51	60.32	6.17	Peak	---	---
5	5350.00	49.36	54.00	-4.64	42.86	6.50	Average	---	---
6	5350.00	60.42	74.00	-13.58	53.92	6.50	Peak	---	---
7	6933.33	65.21	68.20	-2.99	54.65	10.56	Peak	---	---
8	10400.00	63.36	68.20	-4.84	46.32	17.04	Peak	---	---
9	15600.00	51.70	54.00	-2.30	33.93	17.77	Average	---	---
10	15600.00	65.37	74.00	-8.63	47.60	17.77	Peak	---	---

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

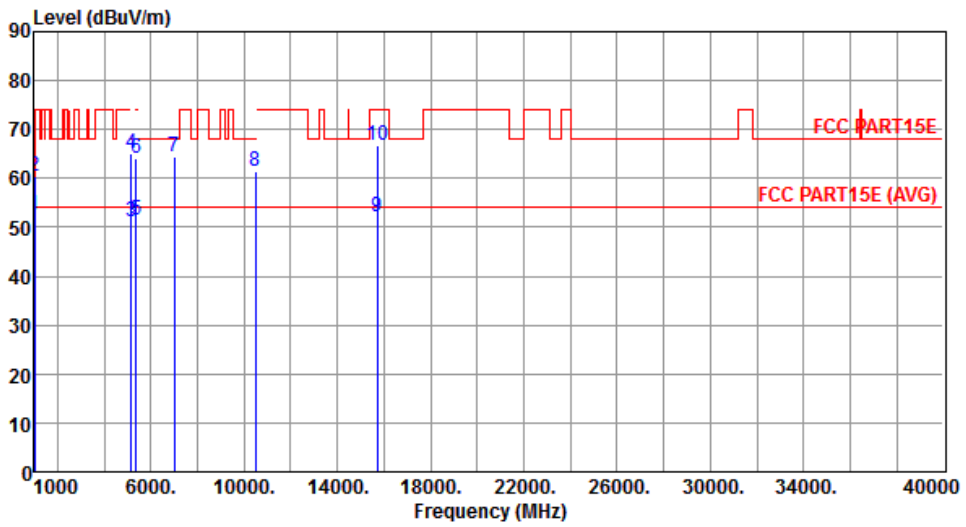
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	45.04	54.00	-8.96	53.91	-8.87	Average	---	---
2	1000.10	53.60	74.00	-20.40	62.47	-8.87	Peak	---	---
3	5150.00	46.19	54.00	-7.81	40.02	6.17	Average	---	---
4	5150.00	57.86	74.00	-16.14	51.69	6.17	Peak	---	---
5	5350.00	46.17	54.00	-7.83	39.67	6.50	Average	---	---
6	5350.00	57.40	74.00	-16.60	50.90	6.50	Peak	---	---
7	6986.66	64.15	68.20	-4.05	53.27	10.88	Peak	---	---
8	10480.00	60.84	68.20	-7.36	43.56	17.28	Peak	---	---
9	15720.00	50.79	54.00	-3.21	33.31	17.48	Average	---	---
10	15720.00	62.39	74.00	-11.61	44.91	17.48	Peak	---	---

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

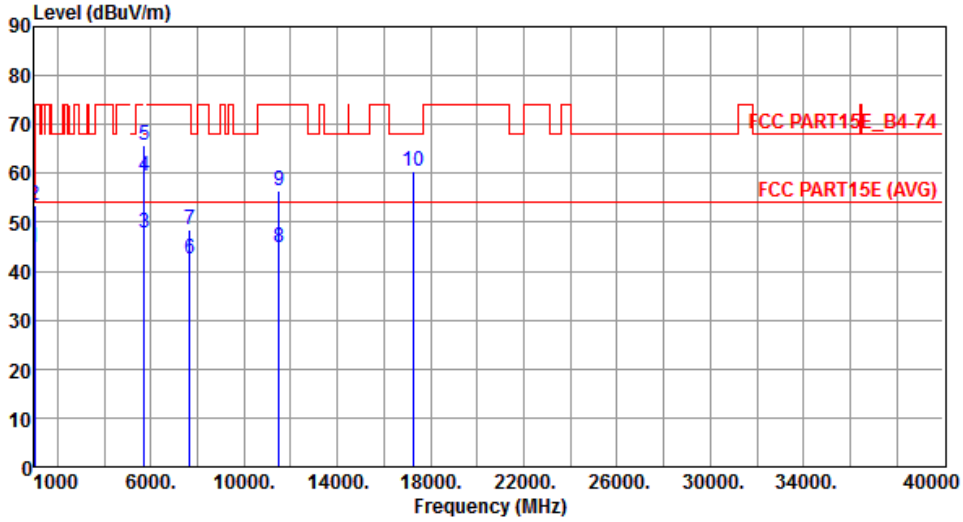
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.60	54.00	-1.40	61.47	-8.87	Average	---	---
2	1000.10	60.45	74.00	-13.55	69.32	-8.87	Peak	---	---
3	5150.00	51.16	54.00	-2.84	44.99	6.17	Average	---	---
4	5150.00	64.94	74.00	-9.06	58.77	6.17	Peak	---	---
5	5350.00	51.42	54.00	-2.58	44.92	6.50	Average	---	---
6	5350.00	63.99	74.00	-10.01	57.49	6.50	Peak	---	---
7	6986.66	64.55	68.20	-3.65	53.67	10.88	Peak	---	---
8	10480.00	61.59	68.20	-6.61	44.31	17.28	Peak	---	---
9	15720.00	52.00	54.00	-2.00	34.52	17.48	Average	---	---
10	15720.00	66.85	74.00	-7.15	49.37	17.48	Peak	---	---

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

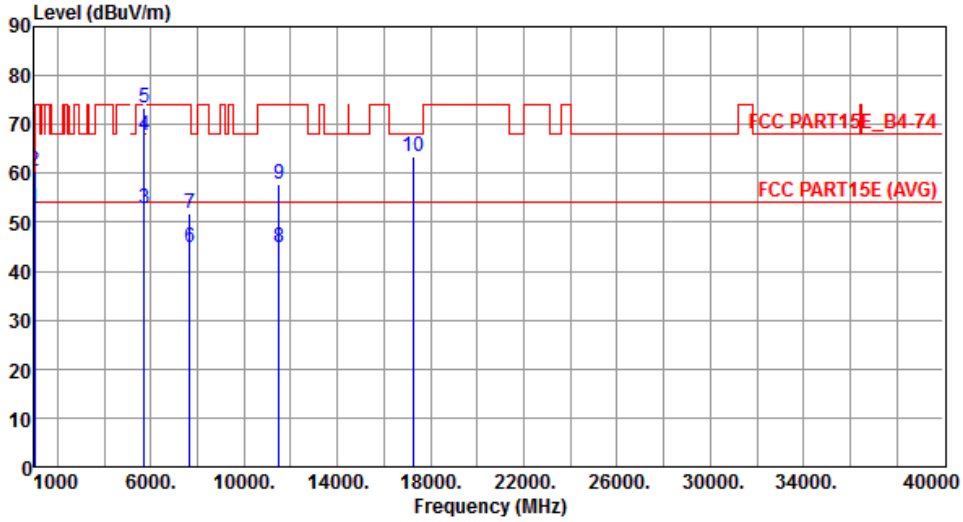
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.67	54.00	-9.33	53.54	-8.87	Average	---	---
2	1000.10	53.60	74.00	-20.40	62.47	-8.87	Peak	---	---
3	5715.00	47.77	54.00	-6.23	40.70	7.07	Average	---	---
4	5715.00	59.37	74.00	-14.63	52.30	7.07	Peak	---	---
5	5725.00	65.70	78.20	-12.50	58.63	7.07	Peak	---	---
6	7660.00	42.41	54.00	-11.59	31.20	11.21	Average	---	---
7	7660.00	48.45	74.00	-25.55	37.24	11.21	Peak	---	---
8	11490.00	44.86	54.00	-9.14	27.64	17.22	Average	---	---
9	11490.00	56.38	74.00	-17.62	39.16	17.22	Peak	---	---
10	17235.00	60.39	68.20	-7.81	41.31	19.08	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).

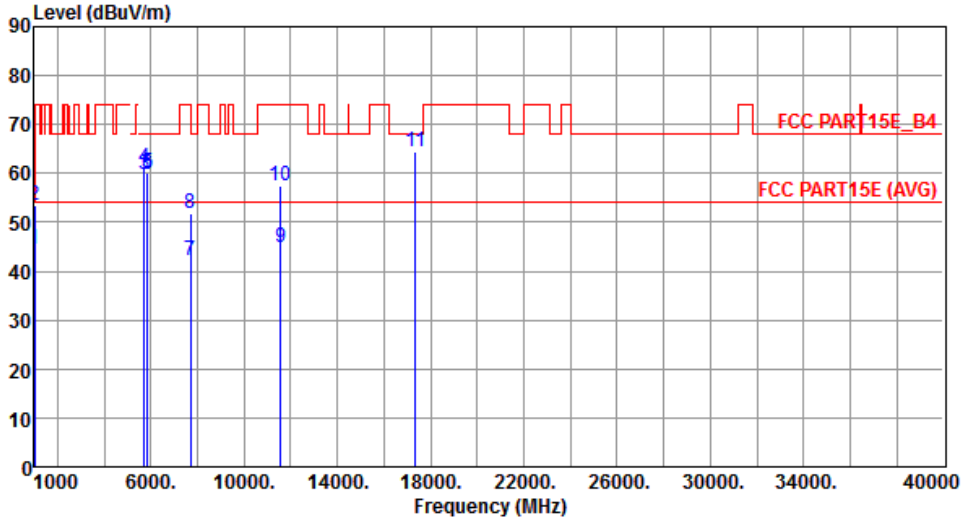
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.80	54.00	-1.20	61.67	-8.87	Average	---	---
2	1000.10	60.46	74.00	-13.54	69.33	-8.87	Peak	---	---
3	5715.00	52.79	54.00	-1.21	45.72	7.07	Average	---	---
4	5715.00	67.65	74.00	-6.35	60.58	7.07	Peak	---	---
5	5725.00	73.28	78.20	-4.92	66.21	7.07	Peak	---	---
6	7660.00	44.83	54.00	-9.17	33.62	11.21	Average	---	---
7	7660.00	51.78	74.00	-22.22	40.57	11.21	Peak	---	---
8	11490.00	44.86	54.00	-9.14	27.64	17.22	Average	---	---
9	11490.00	57.76	74.00	-16.24	40.54	17.22	Peak	---	---
10	17235.00	63.40	68.20	-4.80	44.32	19.08	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).

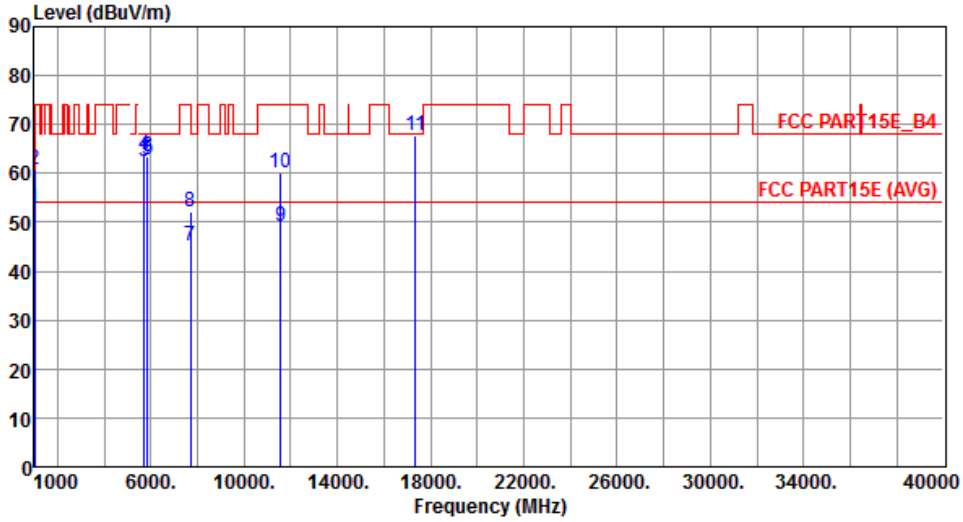
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.60	54.00	-9.40	53.47	-8.87	Average	---	---
2	1000.10	53.61	74.00	-20.39	62.48	-8.87	Peak	---	---
3	5715.00	59.73	68.20	-8.47	52.66	7.07	Peak	---	---
4	5725.00	61.06	78.20	-17.14	53.99	7.07	Peak	---	---
5	5850.00	60.00	78.20	-18.20	52.78	7.22	Peak	---	---
6	5860.00	59.84	68.20	-8.36	52.61	7.23	Peak	---	---
7	7713.33	42.13	54.00	-11.87	30.65	11.48	Average	---	---
8	7713.33	51.76	74.00	-22.24	40.28	11.48	Peak	---	---
9	11570.00	44.70	54.00	-9.30	27.62	17.08	Average	---	---
10	11570.00	57.43	74.00	-16.57	40.35	17.08	Peak	---	---
11	17355.00	64.56	68.20	-3.64	44.95	19.61	Peak	---	---

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

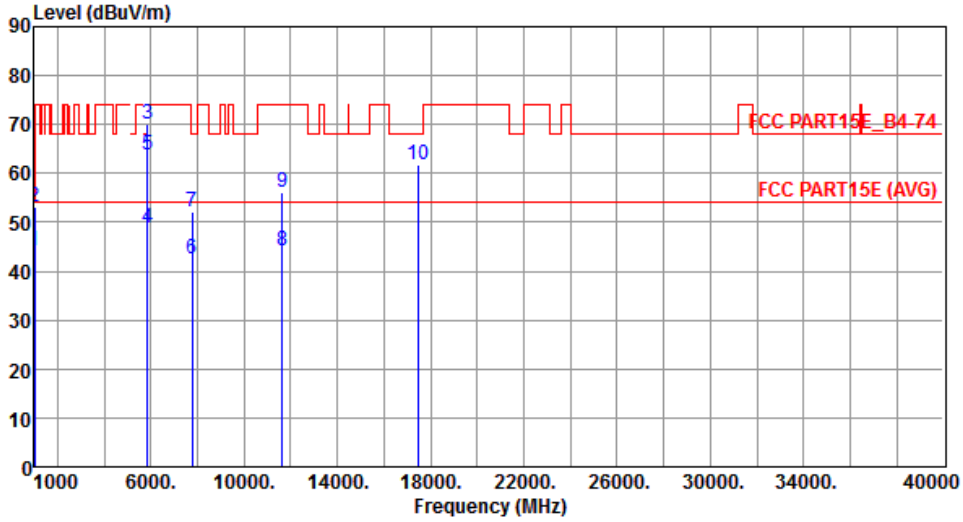
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.66	54.00	-1.34	61.53	-8.87	Average	---	---
2	1000.10	60.78	74.00	-13.22	69.65	-8.87	Peak	---	---
3	5715.00	62.30	68.20	-5.90	55.23	7.07	Peak	---	---
4	5725.00	63.92	78.20	-14.28	56.85	7.07	Peak	---	---
5	5850.00	62.87	78.20	-15.33	55.65	7.22	Peak	---	---
6	5860.00	63.36	68.20	-4.84	56.13	7.23	Peak	---	---
7	7713.33	45.23	54.00	-8.77	33.75	11.48	Average	---	---
8	7713.33	52.21	74.00	-21.79	40.73	11.48	Peak	---	---
9	11570.00	49.03	54.00	-4.97	31.95	17.08	Average	---	---
10	11570.00	60.26	74.00	-13.74	43.18	17.08	Peak	---	---
11	17355.00	67.82	68.20	-0.38	48.21	19.61	Peak	---	---

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

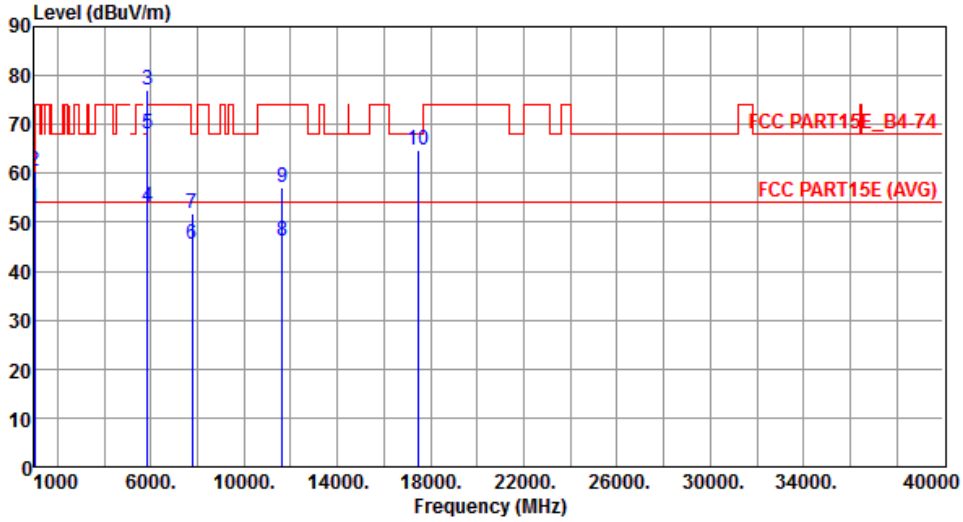
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.31	54.00	-9.69	53.18	-8.87	Average	---	---
2	1000.10	53.16	74.00	-20.84	62.03	-8.87	Peak	---	---
3	5850.00	70.08	78.20	-8.12	62.86	7.22	Peak	---	---
4	5860.00	48.87	54.00	-5.13	41.64	7.23	Average	---	---
5	5860.00	63.79	74.00	-10.21	56.56	7.23	Peak	---	---
6	7766.66	42.37	54.00	-11.63	30.62	11.75	Average	---	---
7	7766.66	52.29	68.20	-15.91	40.54	11.75	Peak	---	---
8	11650.00	44.19	54.00	-9.81	27.26	16.93	Average	---	---
9	11650.00	56.06	74.00	-17.94	39.13	16.93	Peak	---	---
10	17475.00	61.83	68.20	-6.37	41.68	20.15	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).

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

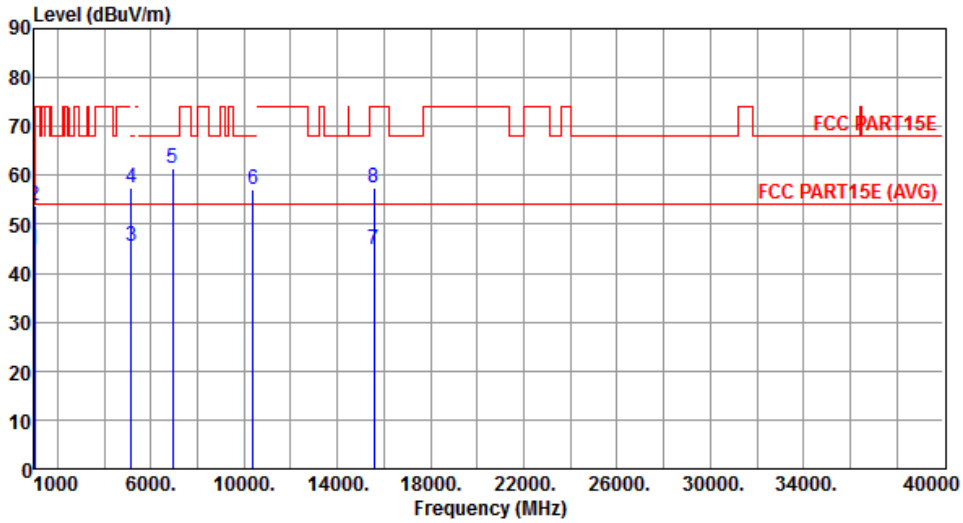


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.71	54.00	-1.29	61.58	-8.87	Average	---	---
2	1000.10	60.60	74.00	-13.40	69.47	-8.87	Peak	---	---
3	5850.00	76.97	78.20	-1.23	69.75	7.22	Peak	---	---
4	5860.00	53.29	54.00	-0.71	46.06	7.23	Average	---	---
5	5860.00	68.00	74.00	-6.00	60.77	7.23	Peak	---	---
6	7766.66	45.37	54.00	-8.63	33.62	11.75	Average	---	---
7	7766.66	51.89	68.20	-16.31	40.14	11.75	Peak	---	---
8	11650.00	46.14	54.00	-7.86	29.21	16.93	Average	---	---
9	11650.00	57.24	74.00	-16.76	40.31	16.93	Peak	---	---
10	17475.00	64.68	68.20	-3.52	44.53	20.15	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).

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

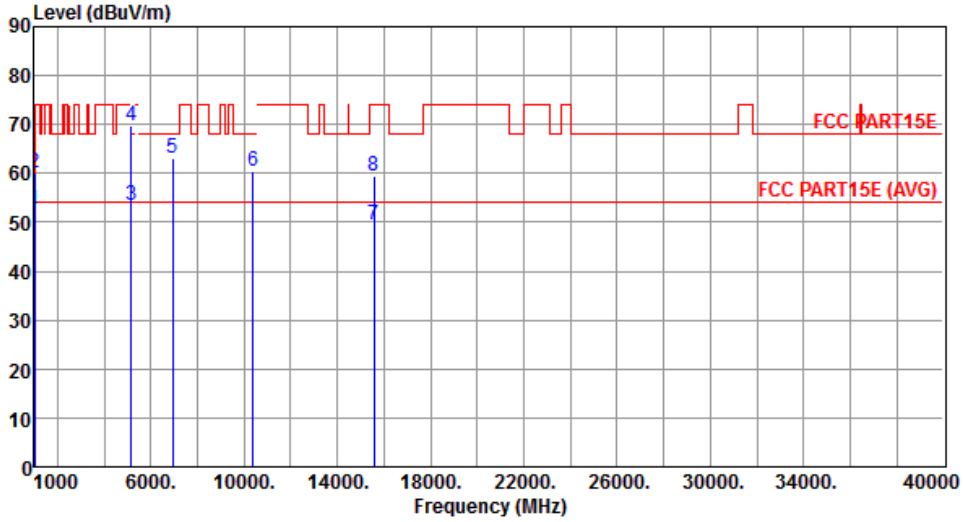
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.67	54.00	-9.33	53.54	-8.87	Average	---	---
2	1000.10	53.81	74.00	-20.19	62.68	-8.87	Peak	---	---
3	5150.00	45.42	54.00	-8.58	39.25	6.17	Average	---	---
4	5150.00	57.36	74.00	-16.64	51.19	6.17	Peak	---	---
5	6920.00	61.34	68.20	-6.86	50.86	10.48	Peak	---	---
6	10380.00	57.12	68.20	-11.08	40.13	16.99	Peak	---	---
7	15570.00	44.99	54.00	-9.01	27.15	17.84	Average	---	---
8	15570.00	57.41	74.00	-16.59	39.57	17.84	Peak	---	---

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

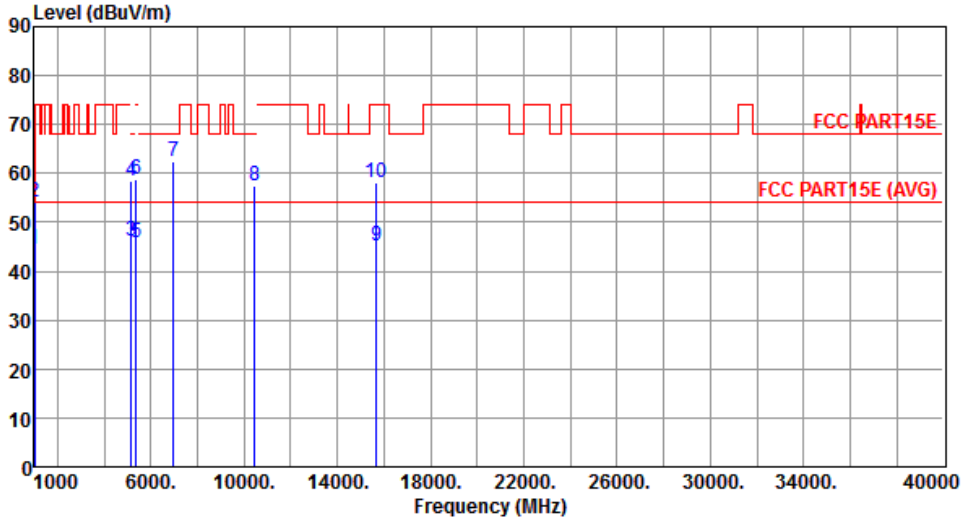
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.50	54.00	-1.50	61.37	-8.87	Average	---	---
2	1000.10	60.24	74.00	-13.76	69.11	-8.87	Peak	---	---
3	5150.00	53.53	54.00	-0.47	47.36	6.17	Average	---	---
4	5150.00	69.61	74.00	-4.39	63.44	6.17	Peak	---	---
5	6920.00	63.21	68.20	-4.99	52.73	10.48	Peak	---	---
6	10380.00	60.50	68.20	-7.70	43.51	16.99	Peak	---	---
7	15570.00	49.49	54.00	-4.51	31.65	17.84	Average	---	---
8	15570.00	59.36	74.00	-14.64	41.52	17.84	Peak	---	---

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

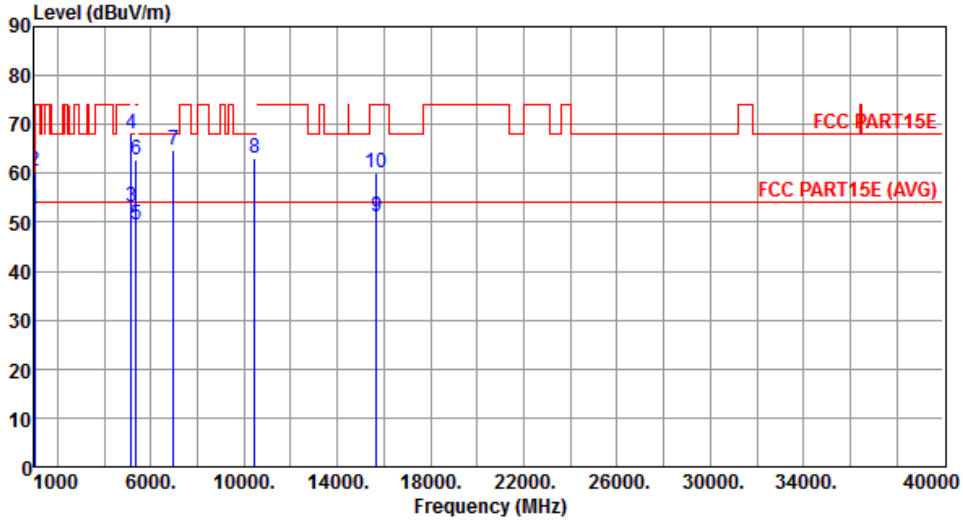
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.38	54.00	-9.62	53.25	-8.87	Average	---	---
2	1000.10	53.99	74.00	-20.01	62.86	-8.87	Peak	---	---
3	5150.00	46.31	54.00	-7.69	40.14	6.17	Average	---	---
4	5150.00	58.53	74.00	-15.47	52.36	6.17	Peak	---	---
5	5350.00	45.77	54.00	-8.23	39.27	6.50	Average	---	---
6	5350.00	58.74	74.00	-15.26	52.24	6.50	Peak	---	---
7	6973.33	62.34	68.20	-5.86	51.54	10.80	Peak	---	---
8	10460.00	57.41	68.20	-10.79	40.19	17.22	Peak	---	---
9	15690.00	45.05	54.00	-8.95	27.50	17.55	Average	---	---
10	15690.00	58.23	74.00	-15.77	40.68	17.55	Peak	---	---

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

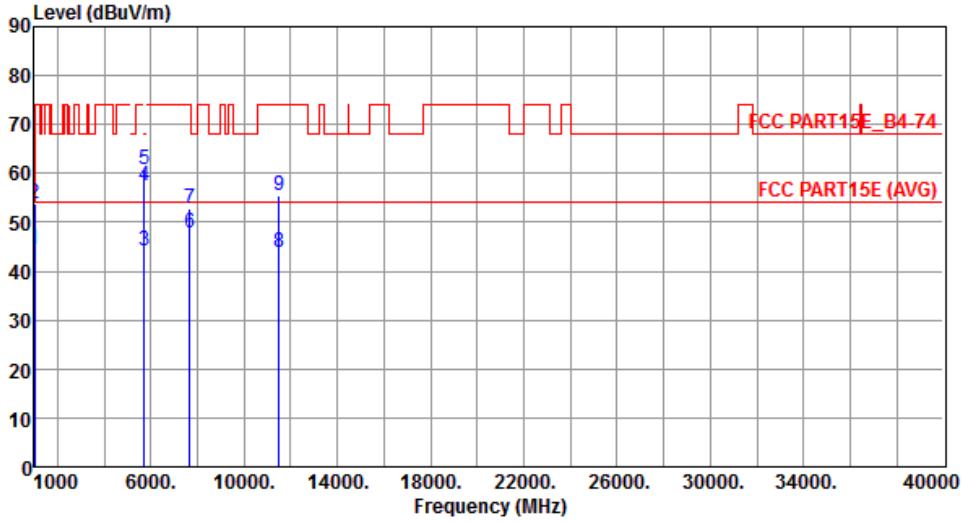
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.59	54.00	-1.41	61.46	-8.87	Average	---	---
2	1000.10	60.57	74.00	-13.43	69.44	-8.87	Peak	---	---
3	5150.00	53.19	54.00	-0.81	47.02	6.17	Average	---	---
4	5150.00	68.14	74.00	-5.86	61.97	6.17	Peak	---	---
5	5350.00	49.61	54.00	-4.39	43.11	6.50	Average	---	---
6	5350.00	62.64	74.00	-11.36	56.14	6.50	Peak	---	---
7	6973.33	64.92	68.20	-3.28	54.12	10.80	Peak	---	---
8	10460.00	63.05	68.20	-5.15	45.83	17.22	Peak	---	---
9	15690.00	51.28	54.00	-2.72	33.73	17.55	Average	---	---
10	15690.00	60.05	74.00	-13.95	42.50	17.55	Peak	---	---

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

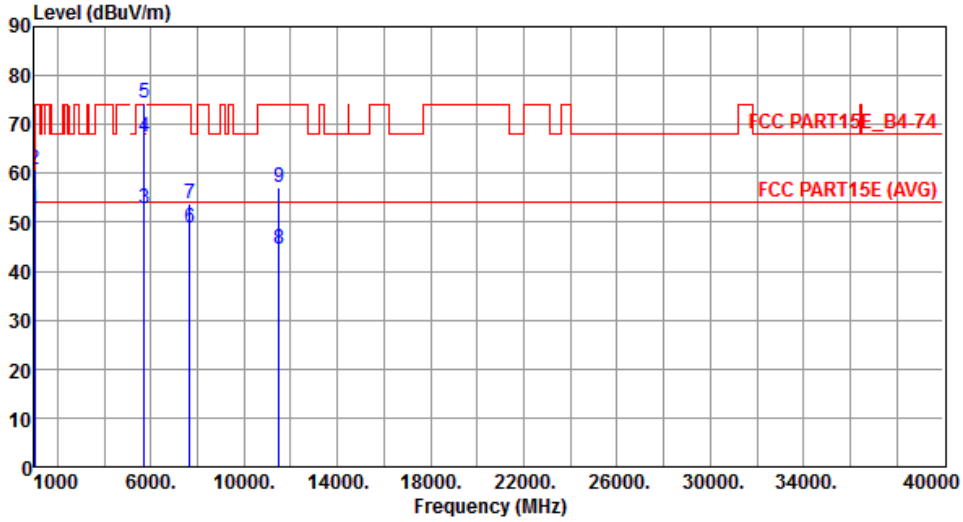
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.34	54.00	-9.66	53.21	-8.87	Average	---	---
2	1000.10	53.71	74.00	-20.29	62.58	-8.87	Peak	---	---
3	5715.00	44.27	54.00	-9.73	37.20	7.07	Average	---	---
4	5715.00	57.30	74.00	-16.70	50.23	7.07	Peak	---	---
5	5725.00	60.64	78.20	-17.56	53.57	7.07	Peak	---	---
6	7673.33	47.88	54.00	-6.12	36.61	11.27	Average	---	---
7	7673.33	52.79	74.00	-21.21	41.52	11.27	Peak	---	---
8	11510.00	43.73	54.00	-10.27	26.54	17.19	Average	---	---
9	11510.00	55.62	74.00	-18.38	38.43	17.19	Peak	---	---

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

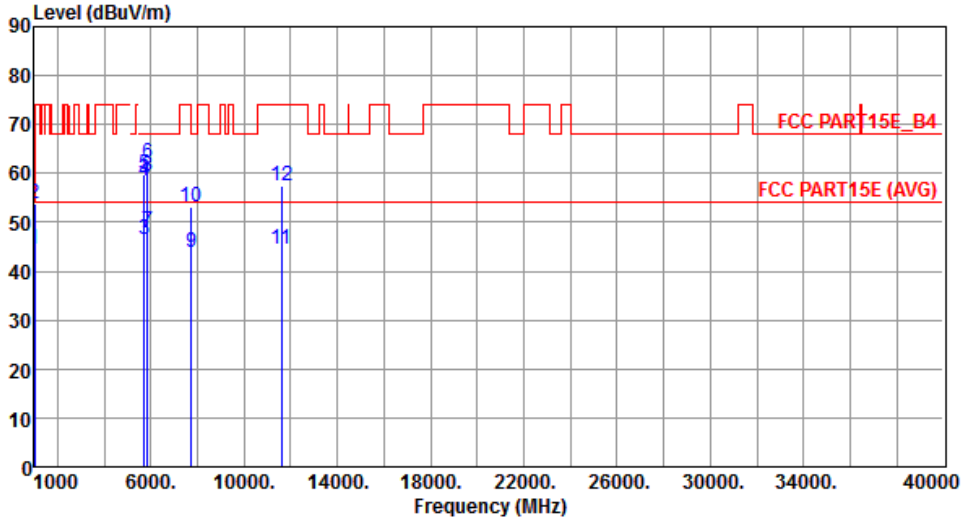
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.55	54.00	-1.45	61.42	-8.87	Average	---	---
2	1000.10	60.78	74.00	-13.22	69.65	-8.87	Peak	---	---
3	5715.00	52.89	54.00	-1.11	45.82	7.07	Average	---	---
4	5715.00	67.47	74.00	-6.53	60.40	7.07	Peak	---	---
5	5725.00	74.43	78.20	-3.77	67.36	7.07	Peak	---	---
6	7673.33	48.89	54.00	-5.11	37.62	11.27	Average	---	---
7	7673.33	53.94	74.00	-20.06	42.67	11.27	Peak	---	---
8	11510.00	44.57	54.00	-9.43	27.38	17.19	Average	---	---
9	11510.00	57.15	74.00	-16.85	39.96	17.19	Peak	---	---

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

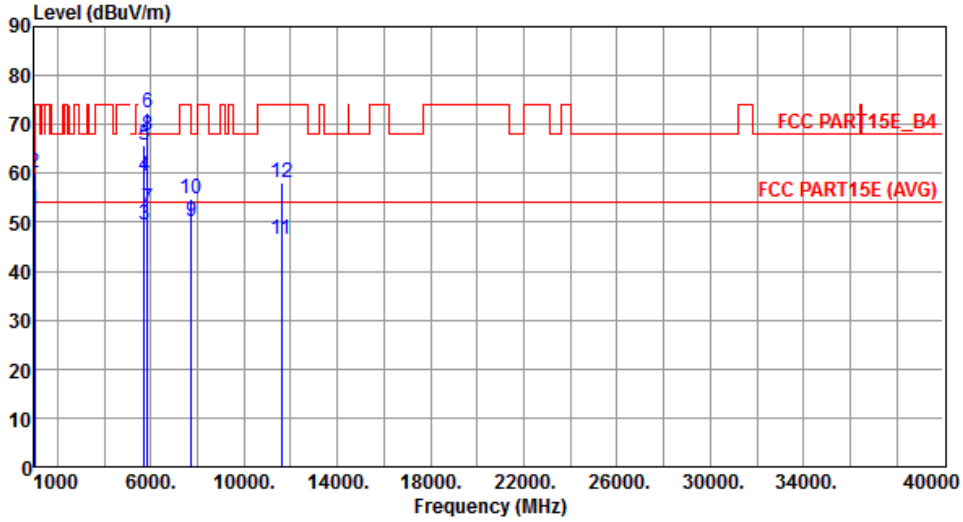
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.61	54.00	-9.39	53.48	-8.87	Average	---	---
2	1000.10	53.67	74.00	-20.33	62.54	-8.87	Peak	---	---
3	5715.00	46.34	54.00	-7.66	39.27	7.07	Average	---	---
4	5715.00	58.31	68.20	-9.89	51.24	7.07	Peak	---	---
5	5725.00	59.67	78.20	-18.53	52.60	7.07	Peak	---	---
6	5850.00	62.20	78.20	-16.00	54.98	7.22	Peak	---	---
7	5860.00	48.18	54.00	-5.82	40.95	7.23	Average	---	---
8	5860.00	59.60	68.20	-8.60	52.37	7.23	Peak	---	---
9	7726.66	43.98	54.00	-10.02	32.43	11.55	Average	---	---
10	7726.66	53.20	74.00	-20.80	41.65	11.55	Peak	---	---
11	11590.00	44.52	54.00	-9.48	27.48	17.04	Average	---	---
12	11590.00	57.38	74.00	-16.62	40.34	17.04	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).

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

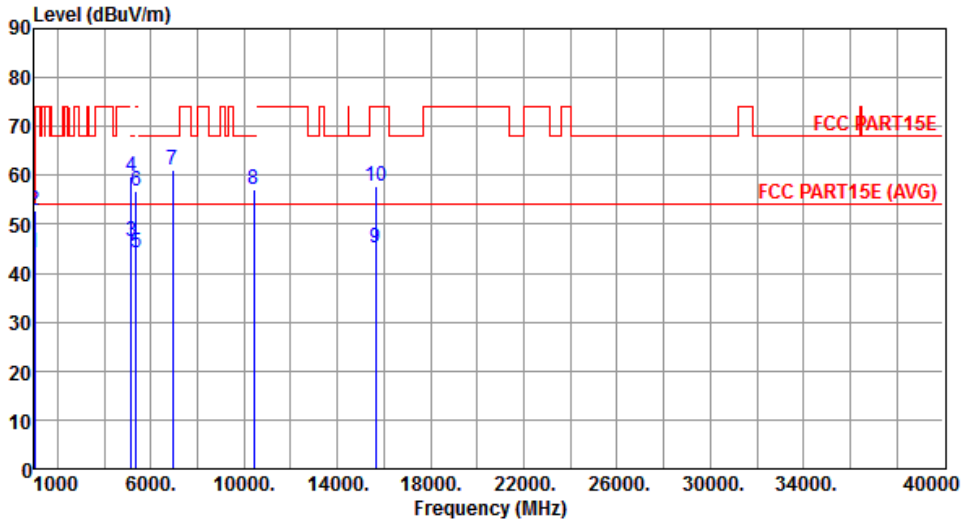


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.38	54.00	-1.62	61.25	-8.87	Average	---	---
2	1000.10	60.09	74.00	-13.91	68.96	-8.87	Peak	---	---
3	5715.00	49.47	54.00	-4.53	42.40	7.07	Average	---	---
4	5715.00	59.60	68.20	-8.60	52.53	7.07	Peak	---	---
5	5725.00	65.90	78.20	-12.30	58.83	7.07	Peak	---	---
6	5850.00	72.35	78.20	-5.85	65.13	7.22	Peak	---	---
7	5860.00	52.89	54.00	-1.11	45.66	7.23	Average	---	---
8	5860.00	67.63	68.20	-0.57	60.40	7.23	Peak	---	---
9	7726.66	50.20	54.00	-3.80	38.65	11.55	Average	---	---
10	7726.66	54.92	74.00	-19.08	43.37	11.55	Peak	---	---
11	11590.00	46.47	54.00	-7.53	29.43	17.04	Average	---	---
12	11590.00	58.26	74.00	-15.74	41.22	17.04	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).

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

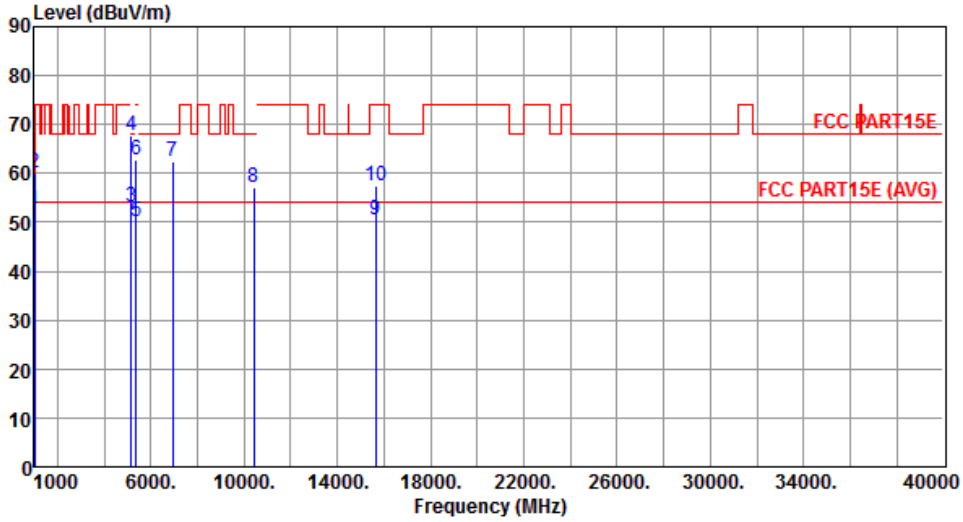
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.11	54.00	-9.89	52.98	-8.87	Average	---	---
2	1000.10	52.69	74.00	-21.31	61.56	-8.87	Peak	---	---
3	5150.00	46.42	54.00	-7.58	40.25	6.17	Average	---	---
4	5150.00	59.73	74.00	-14.27	53.56	6.17	Peak	---	---
5	5350.00	44.02	54.00	-9.98	37.52	6.50	Average	---	---
6	5350.00	56.71	74.00	-17.29	50.21	6.50	Peak	---	---
7	6946.66	61.21	68.20	-6.99	50.57	10.64	Peak	---	---
8	10420.00	56.96	68.20	-11.24	39.86	17.10	Peak	---	---
9	15630.00	45.03	54.00	-8.97	27.33	17.70	Average	---	---
10	15630.00	57.93	74.00	-16.07	40.23	17.70	Peak	---	---

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

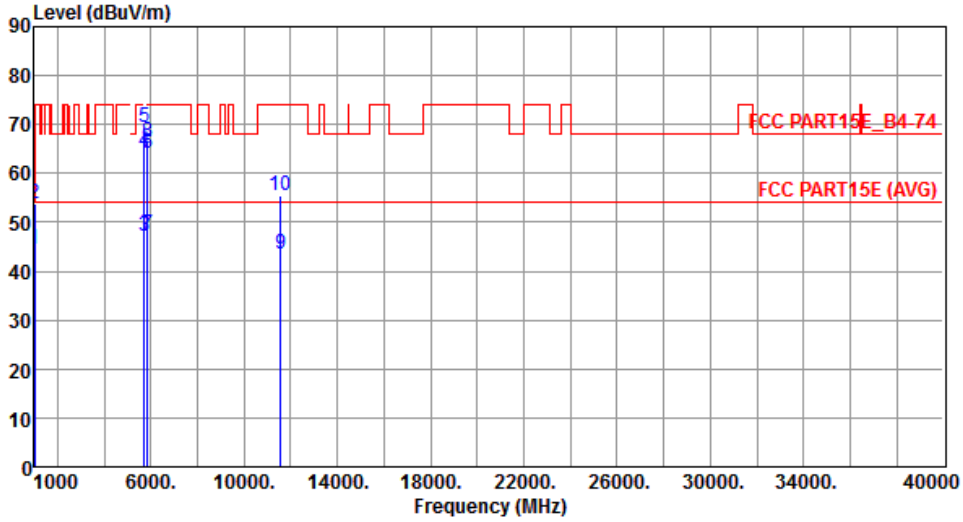
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.39	54.00	-1.61	61.26	-8.87	Average	---	---
2	1000.10	60.01	74.00	-13.99	68.88	-8.87	Peak	---	---
3	5150.00	53.14	54.00	-0.86	46.97	6.17	Average	---	---
4	5150.00	67.63	74.00	-6.37	61.46	6.17	Peak	---	---
5	5350.00	50.15	54.00	-3.85	43.65	6.50	Average	---	---
6	5350.00	62.74	74.00	-11.26	56.24	6.50	Peak	---	---
7	6946.66	62.43	68.20	-5.77	51.79	10.64	Peak	---	---
8	10420.00	57.25	68.20	-10.95	40.15	17.10	Peak	---	---
9	15630.00	50.51	54.00	-3.49	32.81	17.70	Average	---	---
10	15630.00	57.55	74.00	-16.45	39.85	17.70	Peak	---	---

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

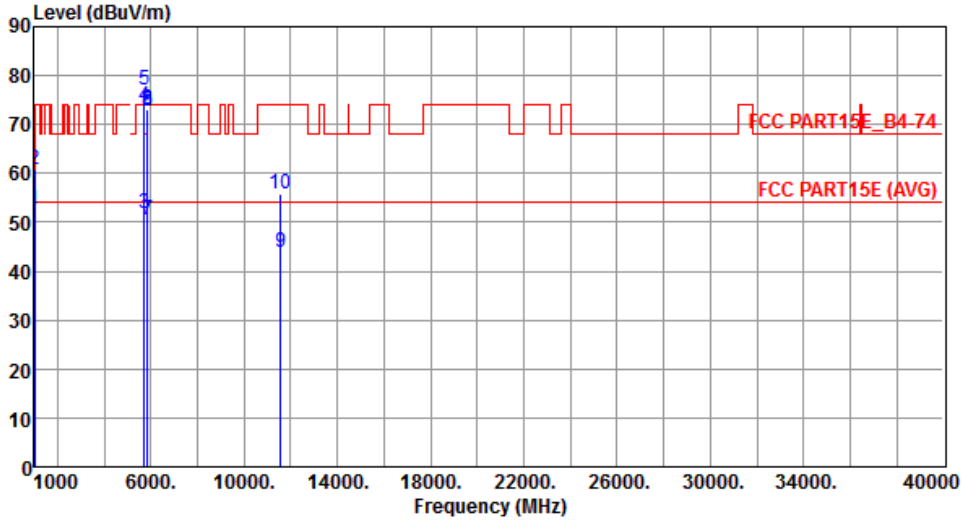
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.37	54.00	-9.63	53.24	-8.87	Average	---	---
2	1000.10	53.91	74.00	-20.09	62.78	-8.87	Peak	---	---
3	5715.00	47.28	54.00	-6.72	40.21	7.07	Average	---	---
4	5715.00	64.40	74.00	-9.60	57.33	7.07	Peak	---	---
5	5725.00	69.26	78.20	-8.94	62.19	7.07	Peak	---	---
6	5850.00	64.13	78.20	-14.07	56.91	7.22	Peak	---	---
7	5860.00	47.60	54.00	-6.40	40.37	7.23	Average	---	---
8	5860.00	66.46	74.00	-7.54	59.23	7.23	Peak	---	---
9	11550.00	43.47	54.00	-10.53	26.35	17.12	Average	---	---
10	11550.00	55.53	74.00	-18.47	38.41	17.12	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



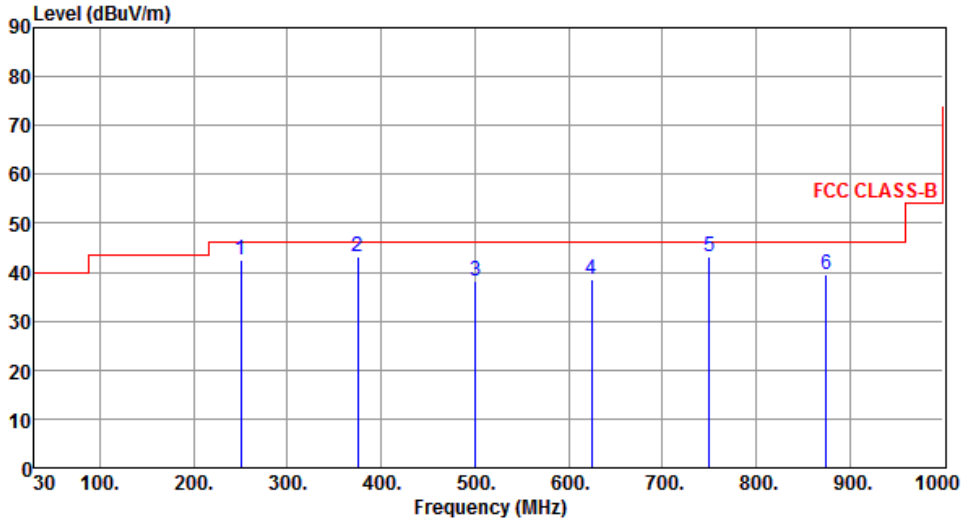
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.54	54.00	-1.46	61.41	-8.87	Average	---	---
2	1000.10	60.76	74.00	-13.24	69.63	-8.87	Peak	---	---
3	5715.00	51.78	54.00	-2.22	44.71	7.07	Average	---	---
4	5715.00	73.59	74.00	-0.41	66.52	7.07	Peak	---	---
5	5725.00	76.98	78.20	-1.22	69.91	7.07	Peak	---	---
6	5850.00	73.20	78.20	-5.00	65.98	7.22	Peak	---	---
7	5860.00	50.39	54.00	-3.61	43.16	7.23	Average	---	---
8	5860.00	72.59	74.00	-1.41	65.36	7.23	Peak	---	---
9	11550.00	43.80	54.00	-10.20	26.68	17.12	Average	---	---
10	11550.00	55.95	74.00	-18.05	38.83	17.12	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).

Legacy/MIMO (CDD) beamforming mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

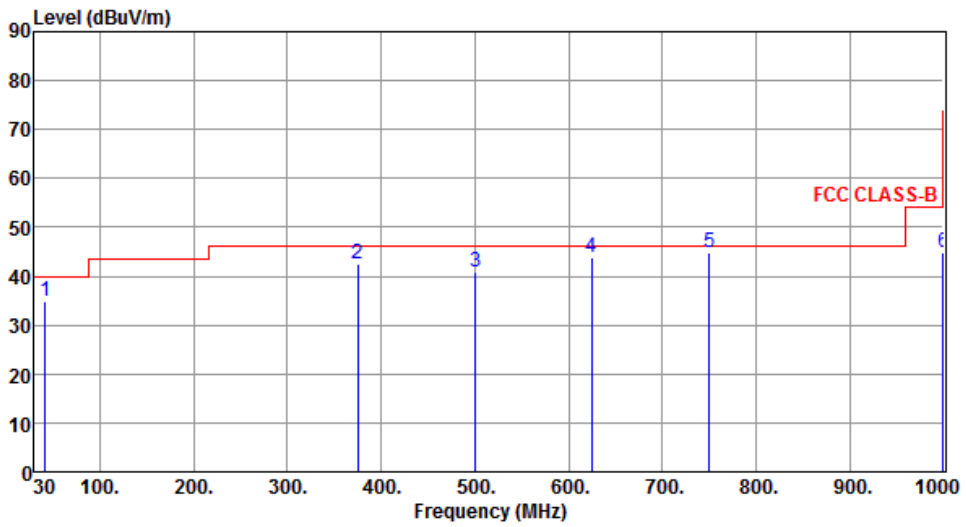
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	250.19	42.39	46.00	-3.61	56.89	-14.50	Peak	---	---
2	375.32	43.18	46.00	-2.82	53.99	-10.81	Peak	---	---
3	500.45	38.14	46.00	-7.86	46.19	-8.05	Peak	---	---
4	624.61	38.62	46.00	-7.38	43.93	-5.31	Peak	---	---
5	749.92	43.06	46.00	-2.94	46.31	-3.25	QP	---	---
6	874.87	39.56	46.00	-6.44	40.80	-1.24	Peak	---	---

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

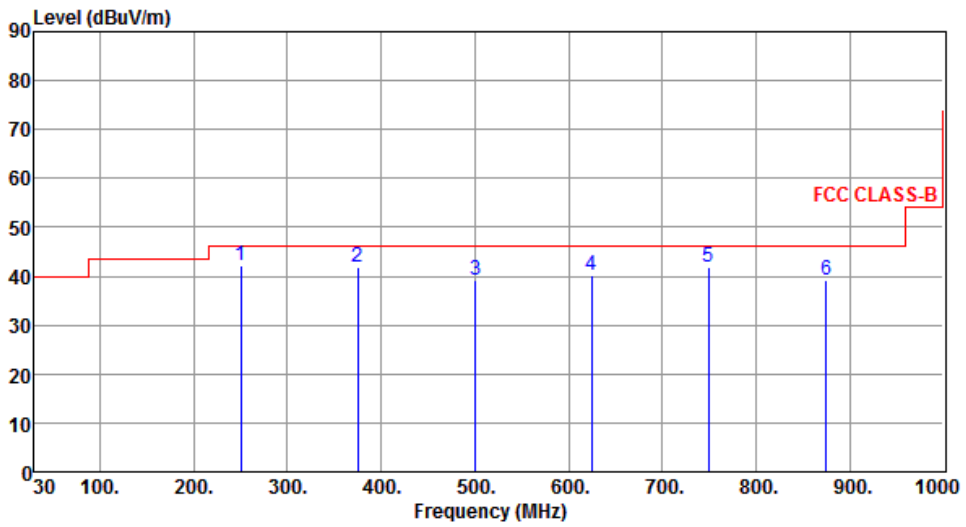
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	41.26	35.02	40.00	-4.98	48.54	-13.52	QP	---	---
2	375.21	42.42	46.00	-3.58	53.24	-10.82	QP	---	---
3	500.45	40.90	46.00	-5.10	48.95	-8.05	Peak	---	---
4	624.98	43.77	46.00	-2.23	49.08	-5.31	QP	---	---
5	750.00	44.99	46.00	-1.01	48.24	-3.25	QP	---	---
6	1000.00	44.98	54.00	-9.02	44.27	0.71	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.

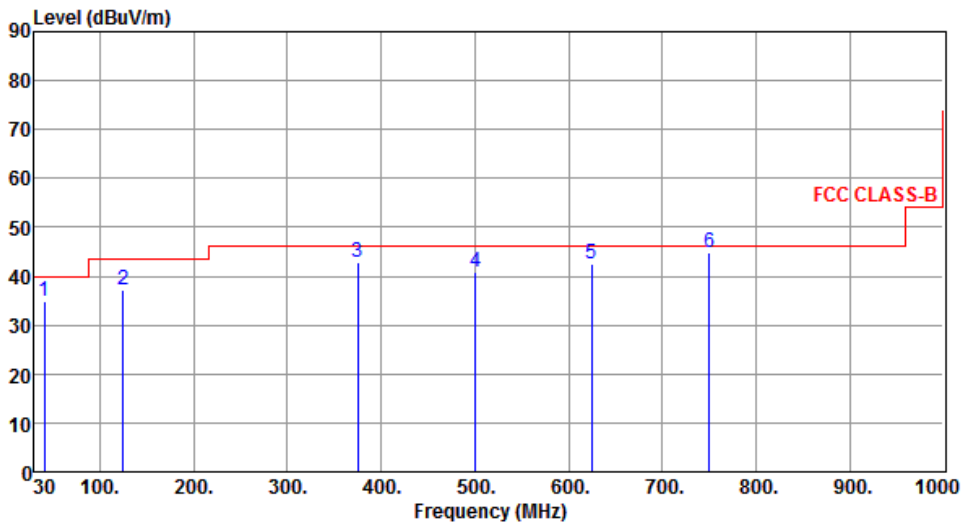
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	250.19	42.23	46.00	-3.77	56.73	-14.50	Peak	---	---
2	375.32	41.75	46.00	-4.25	52.56	-10.81	Peak	---	---
3	500.45	39.20	46.00	-6.80	47.25	-8.05	Peak	---	---
4	624.61	40.17	46.00	-5.83	45.48	-5.31	Peak	---	---
5	749.74	41.87	46.00	-4.13	45.12	-3.25	Peak	---	---
6	874.87	39.31	46.00	-6.69	40.55	-1.24	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		

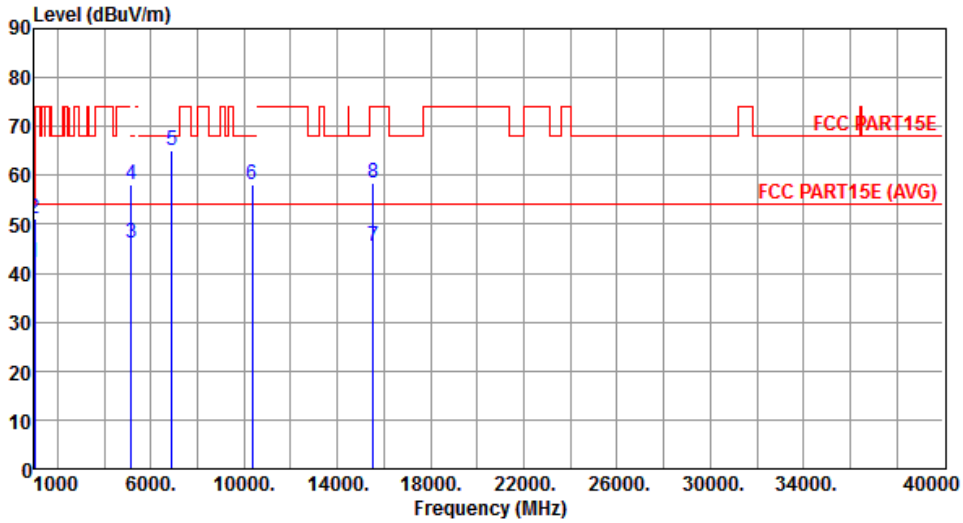


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	40.72	34.99	40.00	-5.01	48.55	-13.56	QP	---	---
2	125.06	37.35	43.50	-6.15	52.55	-15.20	Peak	---	---
3	375.32	42.85	46.00	-3.15	53.66	-10.81	Peak	---	---
4	500.45	40.69	46.00	-5.31	48.74	-8.05	Peak	---	---
5	624.61	42.67	46.00	-3.33	47.98	-5.31	Peak	---	---
6	749.86	44.95	46.00	-1.05	48.20	-3.25	QP	---	---

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

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

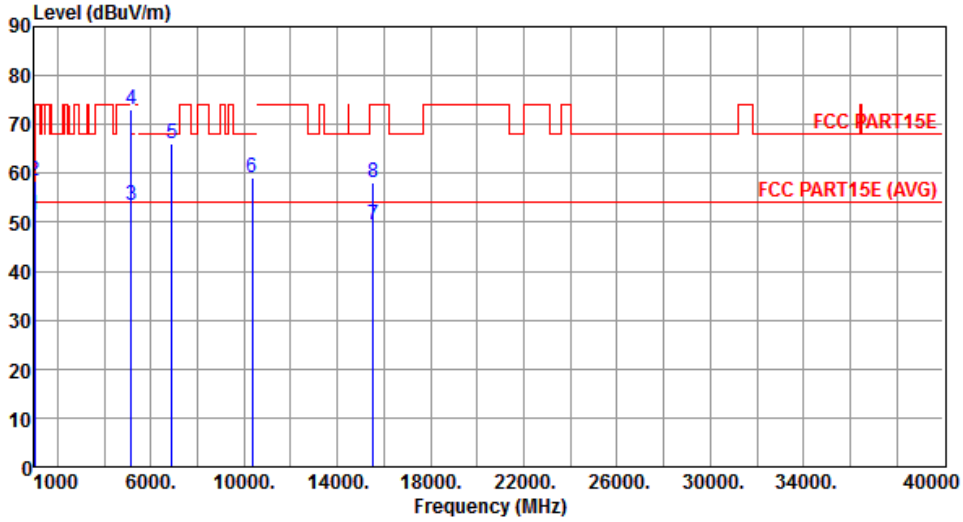
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	42.34	54.00	-11.66	51.21	-8.87	Average	---	---
2	1000.10	50.99	74.00	-23.01	59.86	-8.87	Peak	---	---
3	5150.00	46.06	54.00	-7.94	39.89	6.17	Average	---	---
4	5150.00	58.01	74.00	-15.99	51.84	6.17	Peak	---	---
5	6906.66	64.97	68.20	-3.23	54.57	10.40	Peak	---	---
6	10360.00	58.06	68.20	-10.14	41.14	16.92	Peak	---	---
7	15540.00	45.34	54.00	-8.66	27.42	17.92	Average	---	---
8	15540.00	58.49	74.00	-15.51	40.57	17.92	Peak	---	---

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

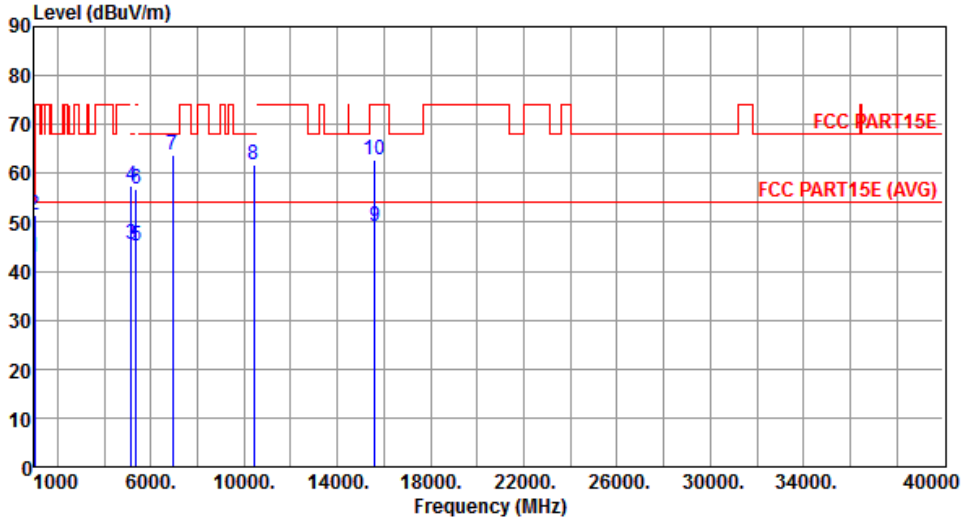
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	51.48	54.00	-2.52	60.35	-8.87	Average	---	---
2	1000.10	58.56	74.00	-15.44	67.43	-8.87	Peak	---	---
3	5150.00	53.60	54.00	-0.40	47.43	6.17	Average	---	---
4	5150.00	73.08	74.00	-0.92	66.91	6.17	Peak	---	---
5	6906.66	66.05	68.20	-2.15	55.65	10.40	Peak	---	---
6	10360.00	59.06	68.20	-9.14	42.14	16.92	Peak	---	---
7	15540.00	49.51	54.00	-4.49	31.59	17.92	Average	---	---
8	15540.00	58.25	74.00	-15.75	40.33	17.92	Peak	---	---

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

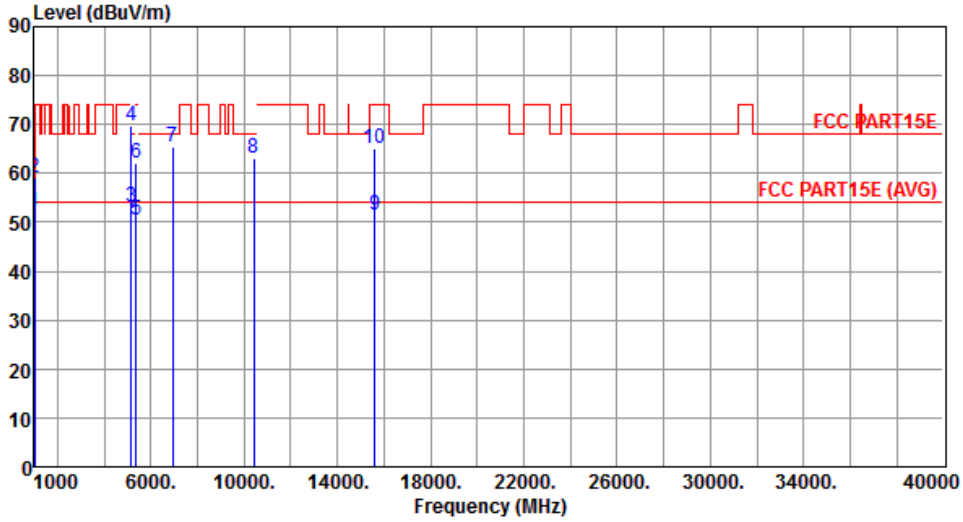
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	42.78	54.00	-11.22	51.65	-8.87	Average	---	---
2	1000.10	51.31	74.00	-22.69	60.18	-8.87	Peak	---	---
3	5150.00	45.54	54.00	-8.46	39.37	6.17	Average	---	---
4	5150.00	57.52	74.00	-16.48	51.35	6.17	Peak	---	---
5	5350.00	45.32	54.00	-8.68	38.82	6.50	Average	---	---
6	5350.00	56.92	74.00	-17.08	50.42	6.50	Peak	---	---
7	6933.33	63.80	68.20	-4.40	53.24	10.56	Peak	---	---
8	10400.00	61.82	68.20	-6.38	44.78	17.04	Peak	---	---
9	15600.00	49.06	54.00	-4.94	31.29	17.77	Average	---	---
10	15600.00	62.90	74.00	-11.10	45.13	17.77	Peak	---	---

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

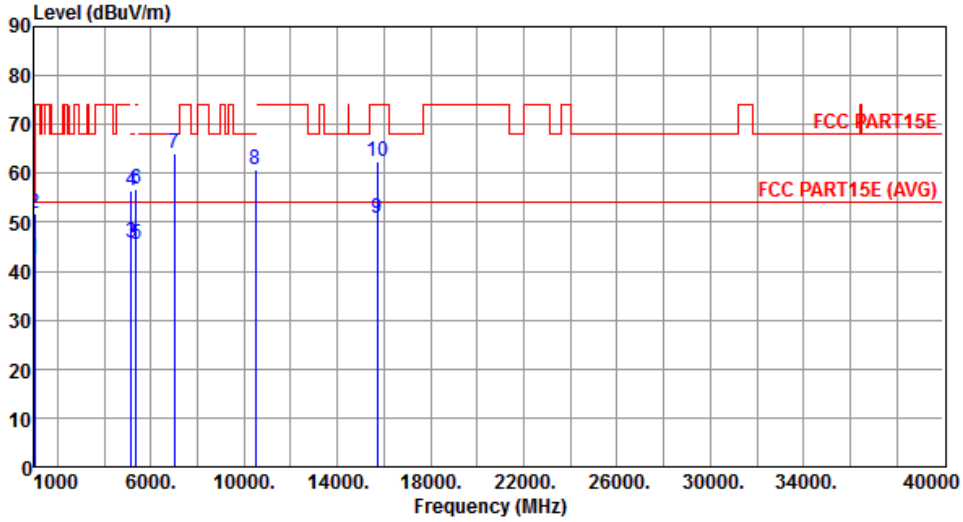
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.09	54.00	-1.91	60.96	-8.87	Average	---	---
2	1000.10	59.05	74.00	-14.95	67.92	-8.87	Peak	---	---
3	5150.00	53.13	54.00	-0.87	46.96	6.17	Average	---	---
4	5150.00	69.90	74.00	-4.10	63.73	6.17	Peak	---	---
5	5350.00	50.51	54.00	-3.49	44.01	6.50	Average	---	---
6	5350.00	62.12	74.00	-11.88	55.62	6.50	Peak	---	---
7	6933.33	65.44	68.20	-2.76	54.88	10.56	Peak	---	---
8	10400.00	62.94	68.20	-5.26	45.90	17.04	Peak	---	---
9	15600.00	51.62	54.00	-2.38	33.85	17.77	Average	---	---
10	15600.00	64.94	74.00	-9.06	47.17	17.77	Peak	---	---

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

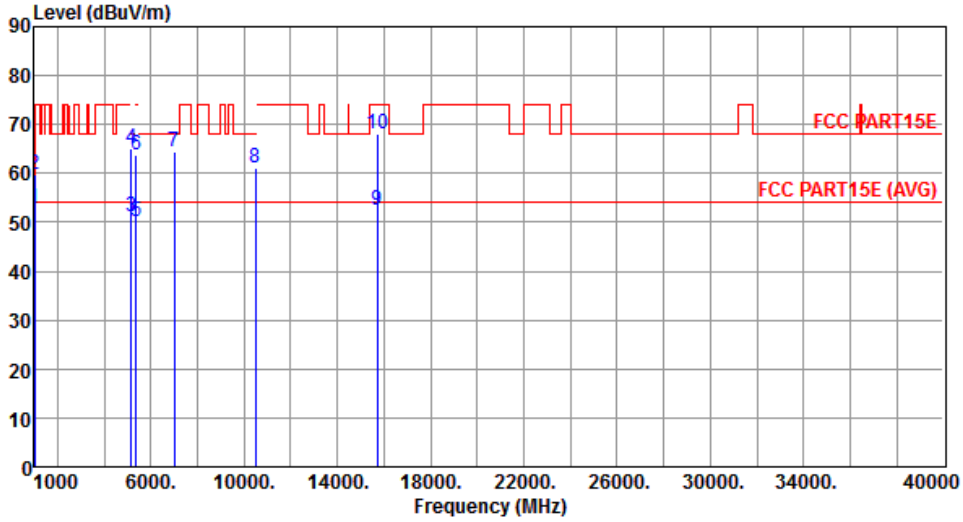
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	42.62	54.00	-11.38	51.49	-8.87	Average	---	---
2	1000.10	51.70	74.00	-22.30	60.57	-8.87	Peak	---	---
3	5150.00	45.71	54.00	-8.29	39.54	6.17	Average	---	---
4	5150.00	56.36	74.00	-17.64	50.19	6.17	Peak	---	---
5	5350.00	45.55	54.00	-8.45	39.05	6.50	Average	---	---
6	5350.00	56.69	74.00	-17.31	50.19	6.50	Peak	---	---
7	6986.66	64.06	68.20	-4.14	53.18	10.88	Peak	---	---
8	10480.00	60.63	68.20	-7.57	43.35	17.28	Peak	---	---
9	15720.00	50.67	54.00	-3.33	33.19	17.48	Average	---	---
10	15720.00	62.35	74.00	-11.65	44.87	17.48	Peak	---	---

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

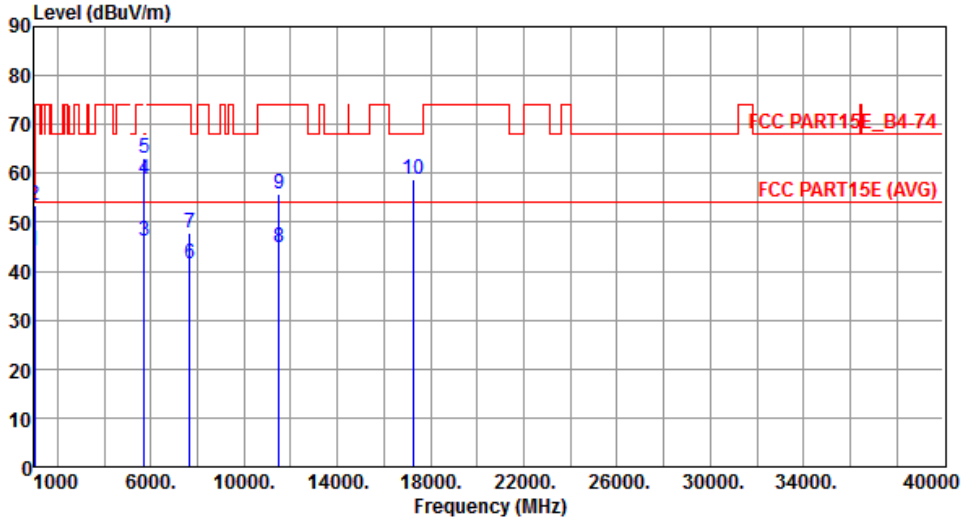
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.71	54.00	-1.29	61.58	-8.87	Average	---	---
2	1000.10	59.67	74.00	-14.33	68.54	-8.87	Peak	---	---
3	5150.00	51.03	54.00	-2.97	44.86	6.17	Average	---	---
4	5150.00	65.09	74.00	-8.91	58.92	6.17	Peak	---	---
5	5350.00	50.06	54.00	-3.94	43.56	6.50	Average	---	---
6	5350.00	63.81	74.00	-10.19	57.31	6.50	Peak	---	---
7	6986.66	64.43	68.20	-3.77	53.55	10.88	Peak	---	---
8	10480.00	61.15	68.20	-7.05	43.87	17.28	Peak	---	---
9	15720.00	52.49	54.00	-1.51	35.01	17.48	Average	---	---
10	15720.00	68.00	74.00	-6.00	50.52	17.48	Peak	---	---

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

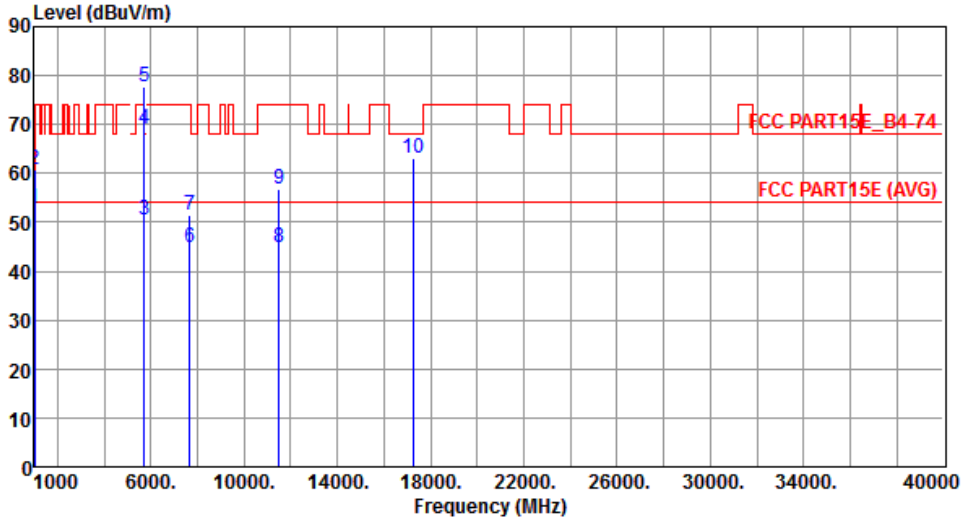
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.28	54.00	-9.72	53.15	-8.87	Average	---	---
2	1000.10	53.31	74.00	-20.69	62.18	-8.87	Peak	---	---
3	5715.00	46.15	54.00	-7.85	39.08	7.07	Average	---	---
4	5715.00	58.74	74.00	-15.26	51.67	7.07	Peak	---	---
5	5725.00	63.06	78.20	-15.14	55.99	7.07	Peak	---	---
6	7660.00	41.55	54.00	-12.45	30.34	11.21	Average	---	---
7	7660.00	47.98	74.00	-26.02	36.77	11.21	Peak	---	---
8	11490.00	44.76	54.00	-9.24	27.54	17.22	Average	---	---
9	11490.00	55.85	74.00	-18.15	38.63	17.22	Peak	---	---
10	17235.00	58.94	68.20	-9.26	39.86	19.08	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).

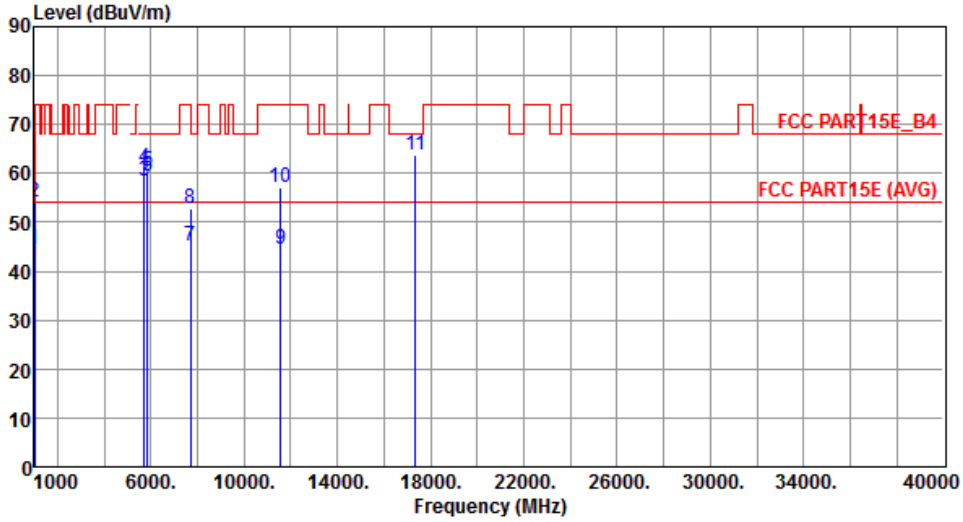
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.66	54.00	-1.34	61.53	-8.87	Average	---	---
2	1000.10	60.77	74.00	-13.23	69.64	-8.87	Peak	---	---
3	5715.00	50.38	54.00	-3.62	43.31	7.07	Average	---	---
4	5715.00	69.23	74.00	-4.77	62.16	7.07	Peak	---	---
5	5725.00	77.58	78.20	-0.62	70.51	7.07	Peak	---	---
6	7660.00	44.73	54.00	-9.27	33.52	11.21	Average	---	---
7	7660.00	51.48	74.00	-22.52	40.27	11.21	Peak	---	---
8	11490.00	44.79	54.00	-9.21	27.57	17.22	Average	---	---
9	11490.00	56.66	74.00	-17.34	39.44	17.22	Peak	---	---
10	17235.00	62.94	68.20	-5.26	43.86	19.08	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).

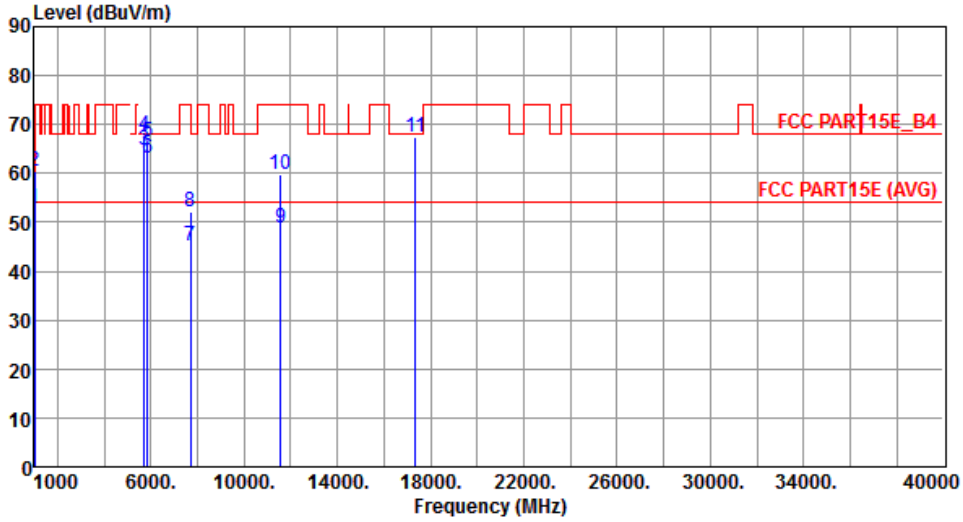
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	44.60	54.00	-9.40	53.47	-8.87	Average	---	---
2	1000.10	54.01	74.00	-19.99	62.88	-8.87	Peak	---	---
3	5715.00	58.34	68.20	-9.86	51.27	7.07	Peak	---	---
4	5725.00	61.27	78.20	-16.93	54.20	7.07	Peak	---	---
5	5850.00	60.40	78.20	-17.80	53.18	7.22	Peak	---	---
6	5860.00	59.33	68.20	-8.87	52.10	7.23	Peak	---	---
7	7713.33	45.04	54.00	-8.96	33.56	11.48	Average	---	---
8	7713.33	52.75	74.00	-21.25	41.27	11.48	Peak	---	---
9	11570.00	44.48	54.00	-9.52	27.40	17.08	Average	---	---
10	11570.00	56.97	74.00	-17.03	39.89	17.08	Peak	---	---
11	17355.00	63.92	68.20	-4.28	44.31	19.61	Peak	---	---

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

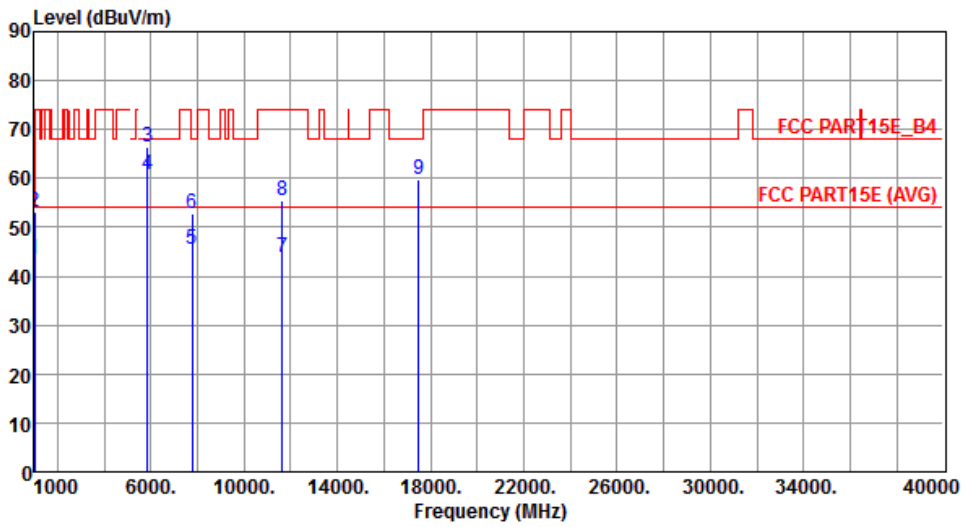
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.78	54.00	-1.22	61.65	-8.87	Average	---	---
2	1000.10	60.50	74.00	-13.50	69.37	-8.87	Peak	---	---
3	5715.00	64.73	68.20	-3.47	57.66	7.07	Peak	---	---
4	5725.00	67.78	78.20	-10.42	60.71	7.07	Peak	---	---
5	5850.00	66.44	78.20	-11.76	59.22	7.22	Peak	---	---
6	5860.00	63.02	68.20	-5.18	55.79	7.23	Peak	---	---
7	7713.33	45.10	54.00	-8.90	33.62	11.48	Average	---	---
8	7713.33	52.06	74.00	-21.94	40.58	11.48	Peak	---	---
9	11570.00	48.71	54.00	-5.29	31.63	17.08	Average	---	---
10	11570.00	59.66	74.00	-14.34	42.58	17.08	Peak	---	---
11	17355.00	67.43	68.20	-0.77	47.82	19.61	Peak	---	---

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

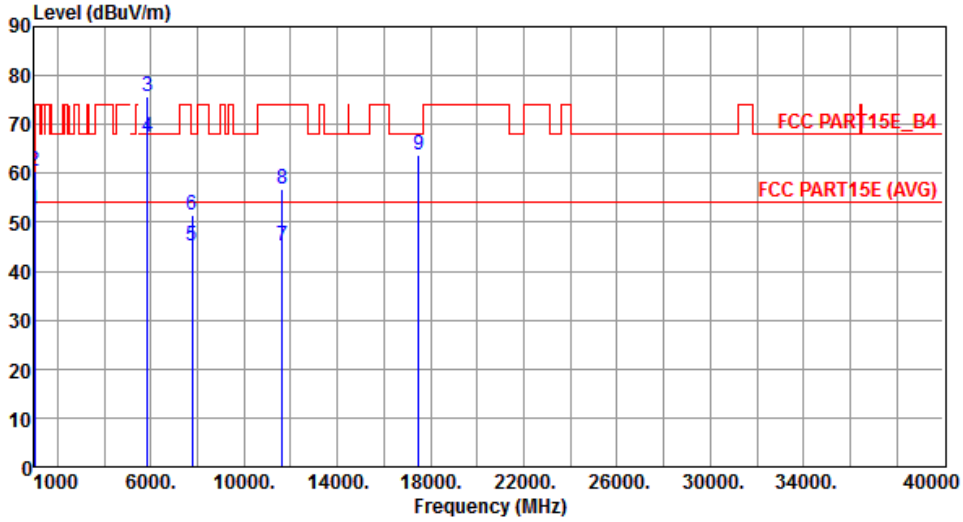
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	43.48	54.00	-10.52	52.35	-8.87	Average	---	---
2	1000.10	53.27	74.00	-20.73	62.14	-8.87	Peak	---	---
3	5850.00	66.58	78.20	-11.62	59.36	7.22	Peak	---	---
4	5860.00	60.67	68.20	-7.53	53.44	7.23	Peak	---	---
5	7766.66	45.61	54.00	-8.39	33.86	11.75	Average	---	---
6	7766.66	52.97	68.20	-15.23	41.22	11.75	Peak	---	---
7	11650.00	43.95	54.00	-10.05	27.02	16.93	Average	---	---
8	11650.00	55.42	74.00	-18.58	38.49	16.93	Peak	---	---
9	17475.00	59.87	68.20	-8.33	39.72	20.15	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).

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

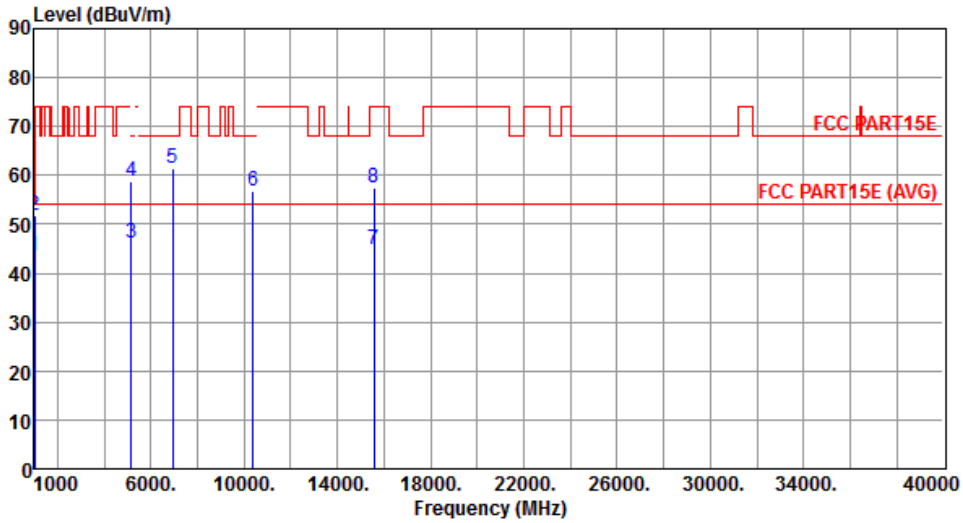


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.58	54.00	-1.42	61.45	-8.87	Average	---	---
2	1000.10	60.44	74.00	-13.56	69.31	-8.87	Peak	---	---
3	5850.00	75.66	78.20	-2.54	68.44	7.22	Peak	---	---
4	5860.00	67.44	68.20	-0.76	60.21	7.23	Peak	---	---
5	7766.66	45.18	54.00	-8.82	33.43	11.75	Average	---	---
6	7766.66	51.44	68.20	-16.76	39.69	11.75	Peak	---	---
7	11650.00	45.17	54.00	-8.83	28.24	16.93	Average	---	---
8	11650.00	56.71	74.00	-17.29	39.78	16.93	Peak	---	---
9	17475.00	63.71	68.20	-4.49	43.56	20.15	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).

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

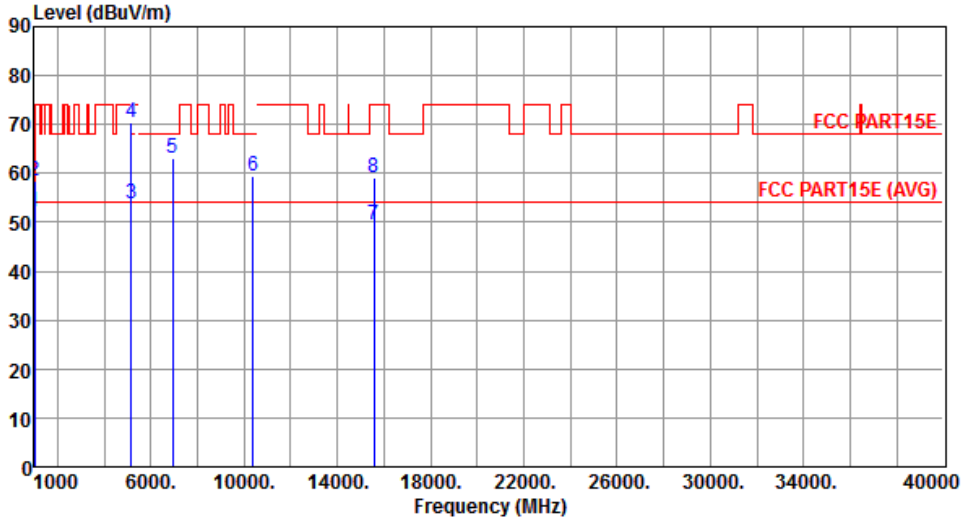
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	43.62	54.00	-10.38	52.49	-8.87	Average	---	---
2	1000.10	51.96	74.00	-22.04	60.83	-8.87	Peak	---	---
3	5150.00	46.11	54.00	-7.89	39.94	6.17	Average	---	---
4	5150.00	58.64	74.00	-15.36	52.47	6.17	Peak	---	---
5	6920.00	61.27	68.20	-6.93	50.79	10.48	Peak	---	---
6	10380.00	56.85	68.20	-11.35	39.86	16.99	Peak	---	---
7	15570.00	44.89	54.00	-9.11	27.05	17.84	Average	---	---
8	15570.00	57.48	74.00	-16.52	39.64	17.84	Peak	---	---

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

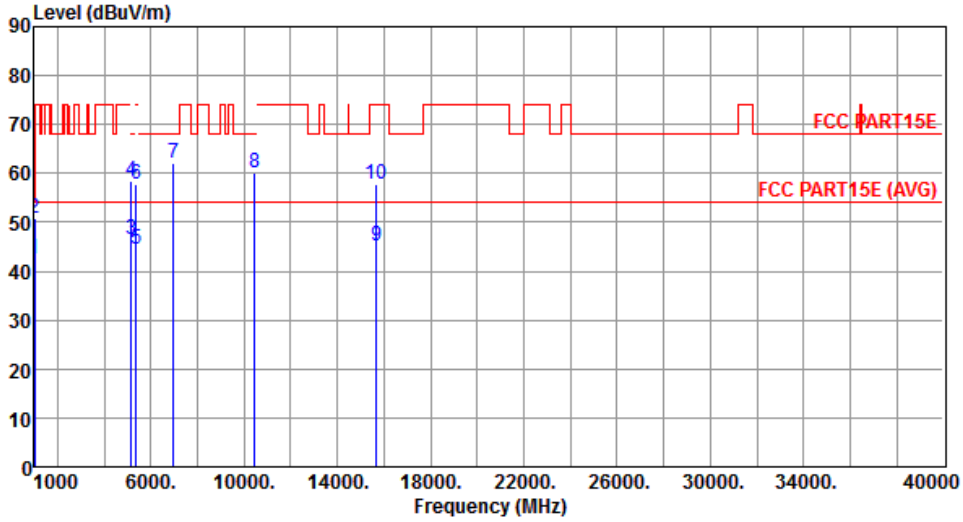
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.15	54.00	-1.85	61.02	-8.87	Average	---	---
2	1000.10	58.55	74.00	-15.45	67.42	-8.87	Peak	---	---
3	5150.00	53.80	54.00	-0.20	47.63	6.17	Average	---	---
4	5150.00	70.24	74.00	-3.76	64.07	6.17	Peak	---	---
5	6920.00	63.05	68.20	-5.15	52.57	10.48	Peak	---	---
6	10380.00	59.34	68.20	-8.86	42.35	16.99	Peak	---	---
7	15570.00	49.37	54.00	-4.63	31.53	17.84	Average	---	---
8	15570.00	59.05	74.00	-14.95	41.21	17.84	Peak	---	---

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

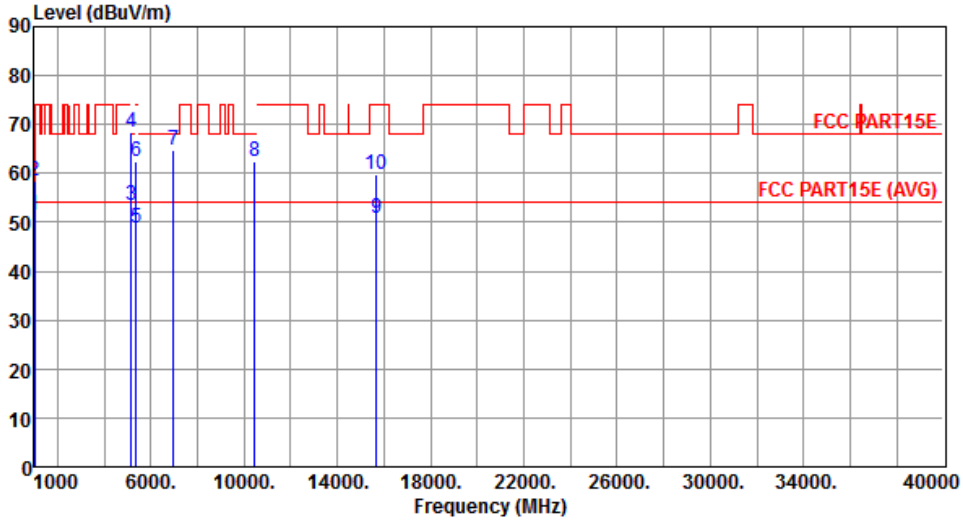
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	42.37	54.00	-11.63	51.24	-8.87	Average	---	---
2	1000.10	50.80	74.00	-23.20	59.67	-8.87	Peak	---	---
3	5150.00	46.39	54.00	-7.61	40.22	6.17	Average	---	---
4	5150.00	58.53	74.00	-15.47	52.36	6.17	Peak	---	---
5	5350.00	44.61	54.00	-9.39	38.11	6.50	Average	---	---
6	5350.00	57.65	74.00	-16.35	51.15	6.50	Peak	---	---
7	6973.33	61.98	68.20	-6.22	51.18	10.80	Peak	---	---
8	10460.00	60.12	68.20	-8.08	42.90	17.22	Peak	---	---
9	15690.00	45.24	54.00	-8.76	27.69	17.55	Average	---	---
10	15690.00	57.76	74.00	-16.24	40.21	17.55	Peak	---	---

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

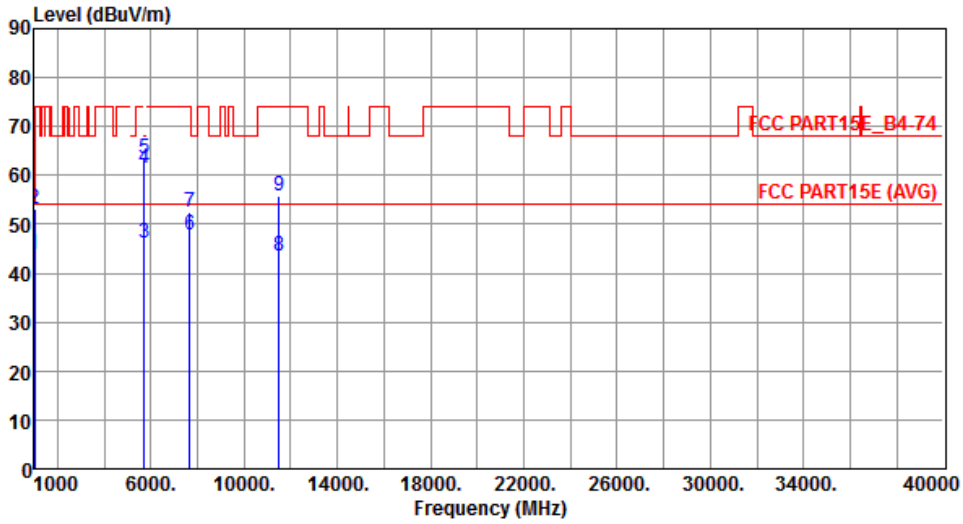
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	51.37	54.00	-2.63	60.24	-8.87	Average	---	---
2	1000.10	58.31	74.00	-15.69	67.18	-8.87	Peak	---	---
3	5150.00	53.33	54.00	-0.67	47.16	6.17	Average	---	---
4	5150.00	68.50	74.00	-5.50	62.33	6.17	Peak	---	---
5	5350.00	48.65	54.00	-5.35	42.15	6.50	Average	---	---
6	5350.00	62.28	74.00	-11.72	55.78	6.50	Peak	---	---
7	6973.33	64.67	68.20	-3.53	53.87	10.80	Peak	---	---
8	10460.00	62.50	68.20	-5.70	45.28	17.22	Peak	---	---
9	15690.00	50.81	54.00	-3.19	33.26	17.55	Average	---	---
10	15690.00	59.72	74.00	-14.28	42.17	17.55	Peak	---	---

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

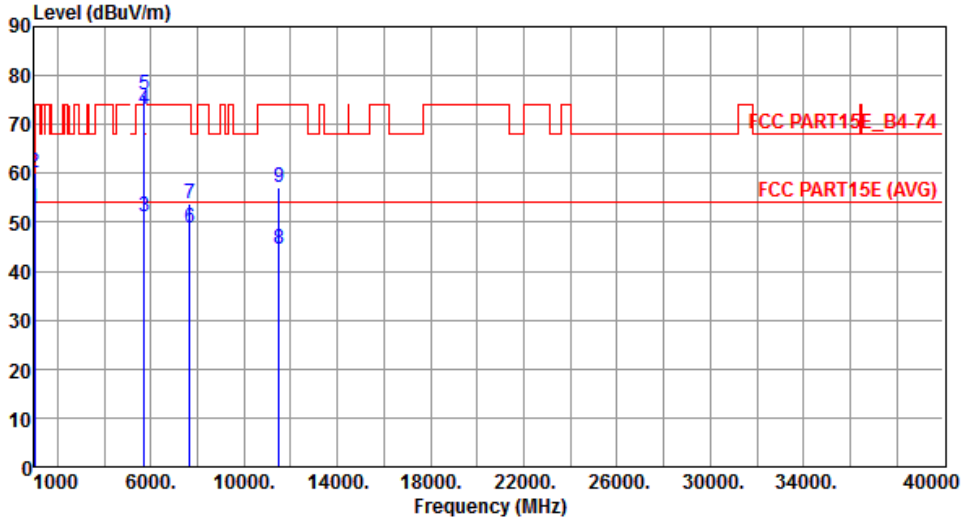
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	43.76	54.00	-10.24	52.63	-8.87	Average	---	---
2	1000.10	52.99	74.00	-21.01	61.86	-8.87	Peak	---	---
3	5715.00	46.01	54.00	-7.99	38.94	7.07	Average	---	---
4	5715.00	61.48	74.00	-12.52	54.41	7.07	Peak	---	---
5	5725.00	63.41	78.20	-14.79	56.34	7.07	Peak	---	---
6	7673.33	47.85	54.00	-6.15	36.58	11.27	Average	---	---
7	7673.33	52.62	74.00	-21.38	41.35	11.27	Peak	---	---
8	11510.00	43.62	54.00	-10.38	26.43	17.19	Average	---	---
9	11510.00	55.70	74.00	-18.30	38.51	17.19	Peak	---	---

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

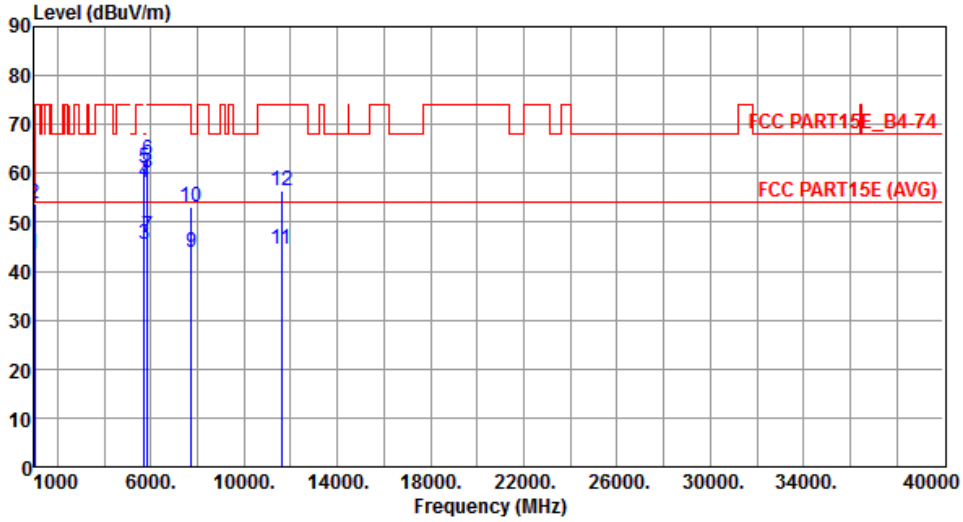
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.67	54.00	-1.33	61.54	-8.87	Average	---	---
2	1000.10	60.09	74.00	-13.91	68.96	-8.87	Peak	---	---
3	5715.00	51.26	54.00	-2.74	44.19	7.07	Average	---	---
4	5715.00	73.18	74.00	-0.82	66.11	7.07	Peak	---	---
5	5725.00	76.17	78.20	-2.03	69.10	7.07	Peak	---	---
6	7673.33	48.80	54.00	-5.20	37.53	11.27	Average	---	---
7	7673.33	53.79	74.00	-20.21	42.52	11.27	Peak	---	---
8	11510.00	44.40	54.00	-9.60	27.21	17.19	Average	---	---
9	11510.00	57.21	74.00	-16.79	40.02	17.19	Peak	---	---

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

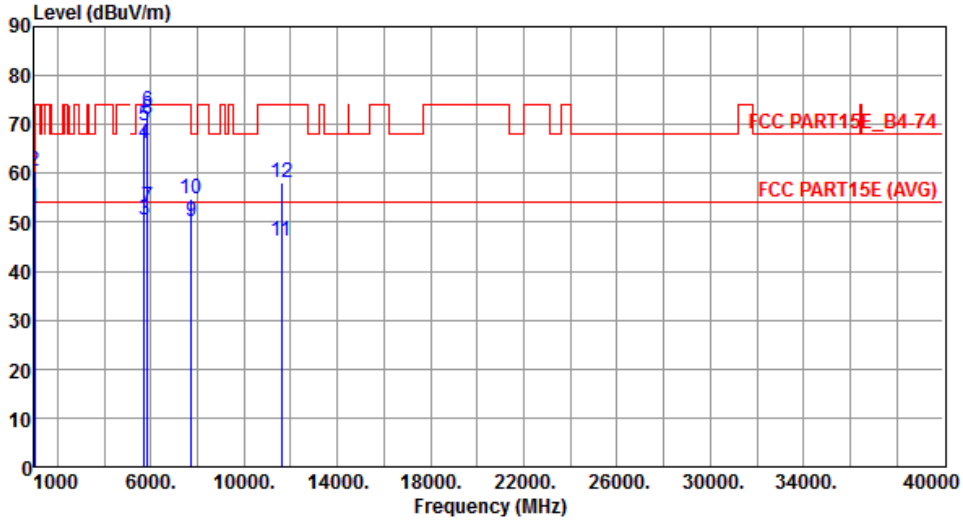
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	43.46	54.00	-10.54	52.33	-8.87	Average	---	---
2	1000.10	53.67	74.00	-20.33	62.54	-8.87	Peak	---	---
3	5715.00	45.66	54.00	-8.34	38.59	7.07	Average	---	---
4	5715.00	58.01	74.00	-15.99	50.94	7.07	Peak	---	---
5	5725.00	61.06	78.20	-17.14	53.99	7.07	Peak	---	---
6	5850.00	62.87	78.20	-15.33	55.65	7.22	Peak	---	---
7	5860.00	47.06	54.00	-6.94	39.83	7.23	Average	---	---
8	5860.00	59.99	74.00	-14.01	52.76	7.23	Peak	---	---
9	7726.66	43.90	54.00	-10.10	32.35	11.55	Average	---	---
10	7726.66	53.13	74.00	-20.87	41.58	11.55	Peak	---	---
11	11590.00	44.39	54.00	-9.61	27.35	17.04	Average	---	---
12	11590.00	56.50	74.00	-17.50	39.46	17.04	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).

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

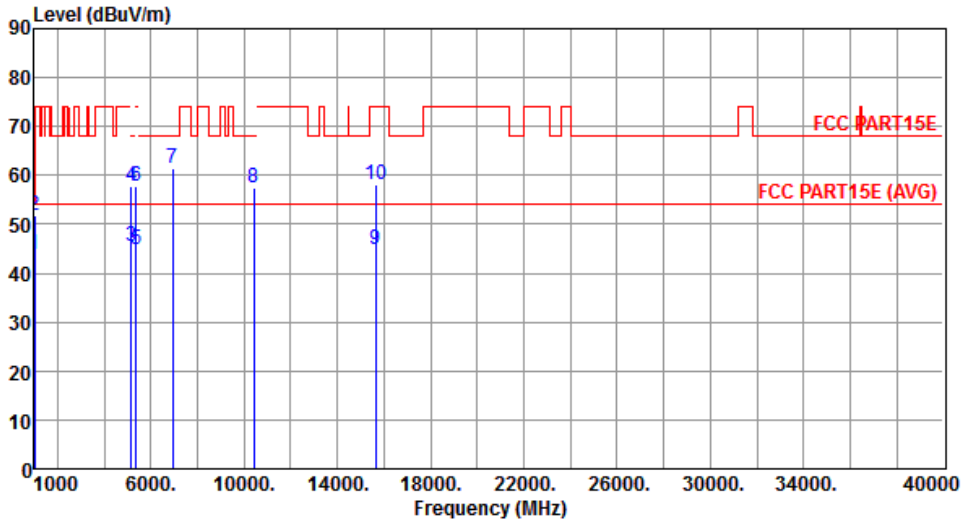


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.75	54.00	-1.25	61.62	-8.87	Average	---	---
2	1000.10	60.50	74.00	-13.50	69.37	-8.87	Peak	---	---
3	5715.00	50.49	54.00	-3.51	43.42	7.07	Average	---	---
4	5715.00	66.01	74.00	-7.99	58.94	7.07	Peak	---	---
5	5725.00	69.74	78.20	-8.46	62.67	7.07	Peak	---	---
6	5850.00	72.82	78.20	-5.38	65.60	7.22	Peak	---	---
7	5860.00	53.16	54.00	-0.84	45.93	7.23	Average	---	---
8	5860.00	70.96	74.00	-3.04	63.73	7.23	Peak	---	---
9	7726.66	50.00	54.00	-4.00	38.45	11.55	Average	---	---
10	7726.66	54.73	74.00	-19.27	43.18	11.55	Peak	---	---
11	11590.00	46.25	54.00	-7.75	29.21	17.04	Average	---	---
12	11590.00	58.28	74.00	-15.72	41.24	17.04	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).

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

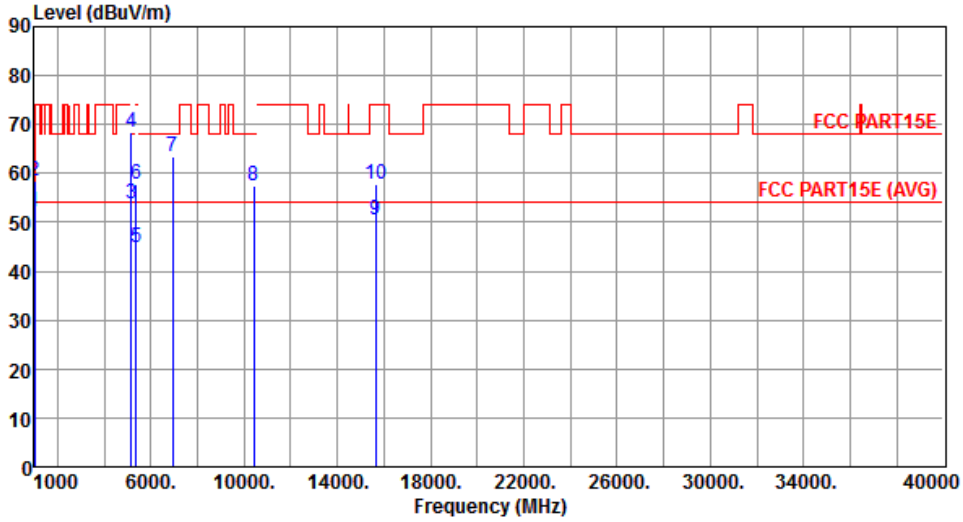
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	43.94	54.00	-10.06	52.81	-8.87	Average	---	---
2	1000.10	51.87	74.00	-22.13	60.74	-8.87	Peak	---	---
3	5150.00	45.51	54.00	-8.49	39.34	6.17	Average	---	---
4	5150.00	57.67	74.00	-16.33	51.50	6.17	Peak	---	---
5	5350.00	44.85	54.00	-9.15	38.35	6.50	Average	---	---
6	5350.00	57.72	74.00	-16.28	51.22	6.50	Peak	---	---
7	6946.66	61.40	68.20	-6.80	50.76	10.64	Peak	---	---
8	10420.00	57.52	68.20	-10.68	40.42	17.10	Peak	---	---
9	15630.00	44.99	54.00	-9.01	27.29	17.70	Average	---	---
10	15630.00	58.01	74.00	-15.99	40.31	17.70	Peak	---	---

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

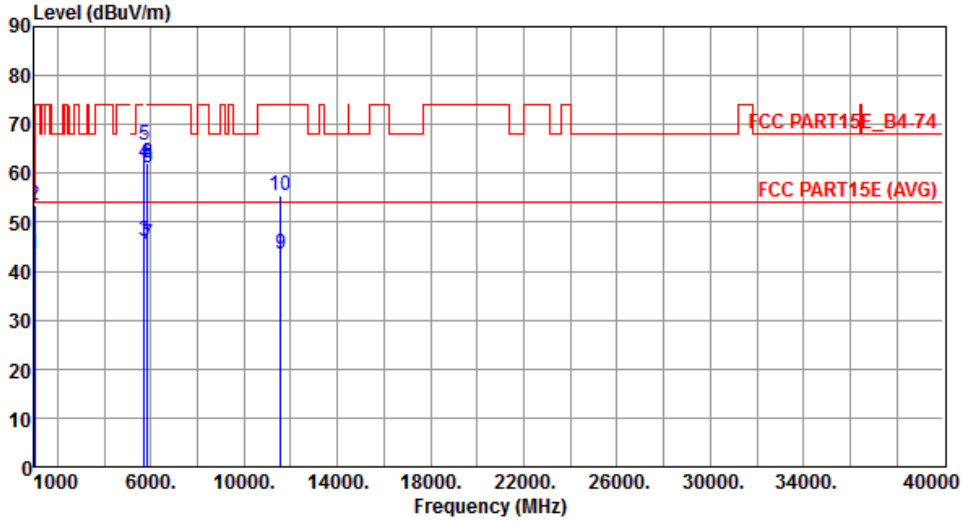
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	52.28	54.00	-1.72	61.15	-8.87	Average	---	---
2	1000.10	58.60	74.00	-15.40	67.47	-8.87	Peak	---	---
3	5150.00	53.88	54.00	-0.12	47.71	6.17	Average	---	---
4	5150.00	68.53	74.00	-5.47	62.36	6.17	Peak	---	---
5	5350.00	44.70	54.00	-9.30	38.20	6.50	Average	---	---
6	5350.00	57.74	74.00	-16.26	51.24	6.50	Peak	---	---
7	6946.66	63.28	68.20	-4.92	52.64	10.64	Peak	---	---
8	10420.00	57.48	68.20	-10.72	40.38	17.10	Peak	---	---
9	15630.00	50.46	54.00	-3.54	32.76	17.70	Average	---	---
10	15630.00	57.64	74.00	-16.36	39.94	17.70	Peak	---	---

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

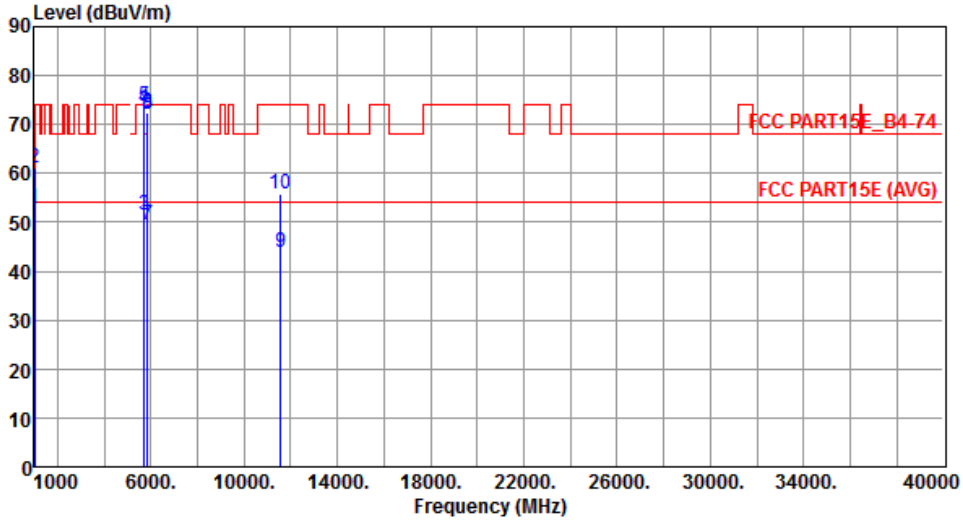
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1000.10	43.61	54.00	-10.39	52.48	-8.87	Average	---	---
2	1000.10	53.48	74.00	-20.52	62.35	-8.87	Peak	---	---
3	5715.00	46.03	54.00	-7.97	38.96	7.07	Average	---	---
4	5715.00	62.21	74.00	-11.79	55.14	7.07	Peak	---	---
5	5725.00	65.64	78.20	-12.56	58.57	7.07	Peak	---	---
6	5850.00	61.03	78.20	-17.17	53.81	7.22	Peak	---	---
7	5860.00	45.65	54.00	-8.35	38.42	7.23	Average	---	---
8	5860.00	62.26	74.00	-11.74	55.03	7.23	Peak	---	---
9	11550.00	43.65	54.00	-10.35	26.53	17.12	Average	---	---
10	11550.00	55.61	74.00	-18.39	38.49	17.12	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	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	1000.10	52.84	54.00	-1.16	61.71	-8.87	Average	---	---
2	1000.10	60.96	74.00	-13.04	69.83	-8.87	Peak	---	---
3	5715.00	51.58	54.00	-2.42	44.51	7.07	Average	---	---
4	5715.00	73.29	74.00	-0.71	66.22	7.07	Peak	---	---
5	5725.00	73.81	78.20	-4.39	66.74	7.07	Peak	---	---
6	5850.00	72.35	78.20	-5.85	65.13	7.22	Peak	---	---
7	5860.00	49.47	54.00	-4.53	42.24	7.23	Average	---	---
8	5860.00	72.06	74.00	-1.94	64.83	7.23	Peak	---	---
9	11550.00	43.88	54.00	-10.12	26.76	17.12	Average	---	---
10	11550.00	55.85	74.00	-18.15	38.73	17.12	Peak	---	---

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

3.6 Frequency Stability

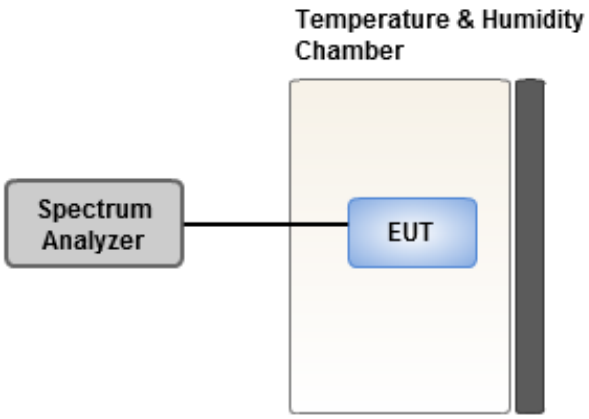
3.6.1 Limit of Frequency Stability

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

Legacy/MIMO (CDD) Non- beamforming mode

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-0.41	-0.29	0.13	0.05
T20°CVmin	6.00	6.08	5.73	6.37
T60°CVnom	5.22	4.80	5.01	5.53
T50°CVnom	5.30	5.82	5.60	5.42
T40°CVnom	-0.65	-0.65	-0.60	-0.66
T30°CVnom	1.15	1.29	1.39	1.36
T20°CVnom	1.78	1.84	2.33	1.78
T10°CVnom	0.99	1.46	0.76	1.54
T0°CVnom	-0.55	-0.07	0.01	-0.72
T-10°CVnom	0.67	0.83	0.99	1.25
T-20°CVnom	-0.81	-0.67	-1.10	-0.99
T-30°CVnom	-0.92	-0.10	-0.76	-0.43
Vnom [Vac]: 110		Vmax [Vac]: 126.5		Vmin [Vac]: 93.5
Tnom [°C]: 20		Tmax [°C]: 60		Tmin [°C]: -30

Legacy/MIMO (CDD) beamforming mode

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-0.77	-0.49	-0.87	-0.79
T20°CVmin	5.59	5.61	5.51	6.34
T60°CVnom	5.36	5.64	6.08	5.39
T50°CVnom	5.01	4.90	4.83	5.83
T40°CVnom	-1.30	-1.01	-1.61	-0.93
T30°CVnom	1.29	1.71	1.21	1.84
T20°CVnom	1.60	1.12	1.42	2.04
T10°CVnom	0.36	0.47	-0.11	0.43
T0°CVnom	-0.98	-0.35	-0.98	-0.47
T-10°CVnom	0.61	0.81	0.89	0.73
T-20°CVnom	-1.05	-1.10	-1.16	-0.87
T-30°CVnom	-0.59	-0.39	-0.69	-0.36
Vnom [Vac]: 110		Vmax [Vac]: 126.5		Vmin [Vac]: 93.5
Tnom [°C]: 20		Tmax [°C]: 60		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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

═END═