FCC Test Report

FCC ID	:	**I88NBG6817**
Equipment	:	**AC2600 MU-MIMO Dual-Band Wireless Gigabit Router**
Model No.	:	**NBG6817**
Brand Name	:	**ZYXEL**
Applicant	:	**ZyXEL Communications Corporation**
Address	:	**No.2, Industry East Road IX, Science Park, Hsinchu, Taiwan**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Apr. 13, 2016**
Tested Date	:	**May 04 ~ Jul. 19, 2016**

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

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

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Release Record

Report No.	Version	Description	Issued Date
FR641302AN	Rev. 01	Initial issue	May 30, 2016
FR641302AN	Rev. 02	1. Location of one antenna cable is changed. 2. CPU heat sink changed. 3. Capacitor of DC in portion is replaced with a higher capacitance value and specification capacitor.	Jul. 22, 2016
FR641302AN	Rev. 03	Brand name changed.	Jul. 28, 2016

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.461MHz 37.52 (Margin -9.15dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 53.85 (Margin -0.15dB) - 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: 29.87 5725-5850MHz: 29.93 ***Beamforming mode*** 5150-5250MHz: 27.79 5725-5850MHz: 27.52	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250	a	5180-5240	36-48 [4]	4	6-54 Mbps
5150-5250	n (HT20)	5180-5240	36-48 [4]	4	MCS 0-31
5150-5250	n (HT40)	5190-5230	38-46 [2]	4	MCS 0-31
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	4	MCS 0-9
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	4	MCS 0-9
5150-5250	ac (VHT80)	5210	42 [1]	4	MCS 0-9
5150-5250	ac (VHT80)	5210	42 [1]	2 Note4	MCS 0-9
5725-5850	a	5745-5825	149-165 [5]	4	6-54 Mbps
5725-5850	n (HT20)	5745-5825	149-165 [5]	4	MCS 0-31
5725-5850	n (HT40)	5755-5795	151-159 [2]	4	MCS 0-31
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	4	MCS 0-9
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	4	MCS 0-9
5725-5850	ac (VHT80)	5775	155 [1]	4	MCS 0-9
5725-5850	ac (VHT80)	5775	155 [1]	2 Note4	MCS 0-9

Note 1: RF output power specifies that Maximum Conducted Output Power.
Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
Note 3: 802.11n/ac supports beamforming function.
Note 4: The device supports non-contiguous 80MHz mode (5210MHz + 5775MHz)

1.1.2 Antenna Details

Model	**Type**	**Connector**	**Operating Frequencies (MHz) / Antenna Gain (dBi)**		
			2400~2483.5	**5150~5250**	**5725~5850**
RFA-25-Z3-79-140	Dipole	UFL	2.17	1.32	2.09
RFA-25-Z3-79B-200	Dipole	UFL	1.08	2.48	2.81
RFA-25-Z3-79BL-150	Dipole	UFL	2.25	1.3	2.72
RFA-25-Z3-79W-200	Dipole	UFL	1.16	0.98	1.85

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand Name: APD Model Name: WA-36A12FU Power Rating: I/P: 100-240Vac, 50-60Hz, 0.9A Max O/P: 12Vdc, 3A Power Line: 1.5m non-shielded cable with one core
2	RJ45 Cable	0.9m shielded cable without core.

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	**VHT80**	
48	5240	42	5210

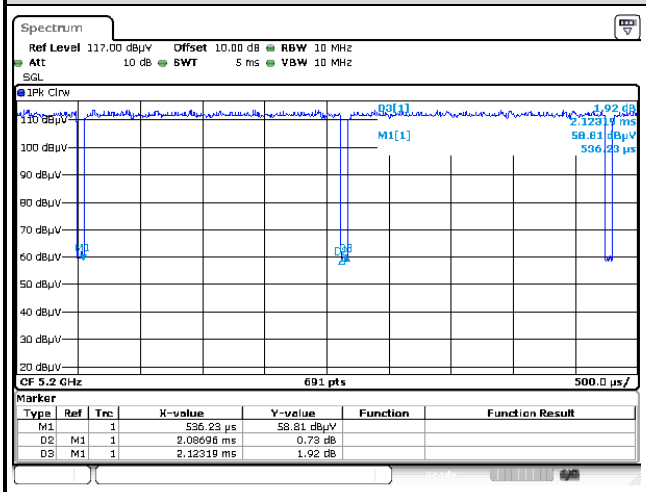
For Frequency band 5725~5850 MHz			
802.11 a / HT20 / VHT20		**HT40 / VHT40**	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
149	5745	151	5755
153	5765	159	5795
157	5785	**VHT80**	
161	5805	155	5775
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

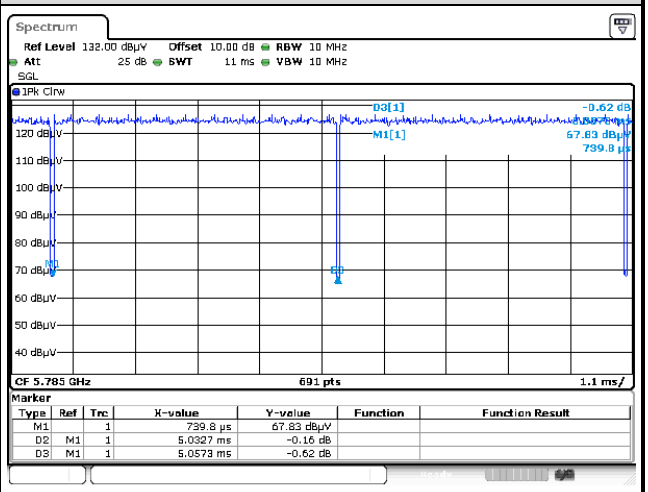
Test Tool	Non-beamforming: QCARCT, V3.0.144.0 Beamforming: LanTest			
Duty Cycle and Duty Factor	Mode	Non-beamforming		Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11a	98.29%	0.07	---	---
	VHT20	99.51%	0.02	90.74%	0.42
	VHT40	98.38%	0.07	95.31%	0.21
	VHT80	95.68%	0.19	86.29%	0.64
	VHT80+80	97.62%	0.10	95.89%	0.18

Non-beamforming mode

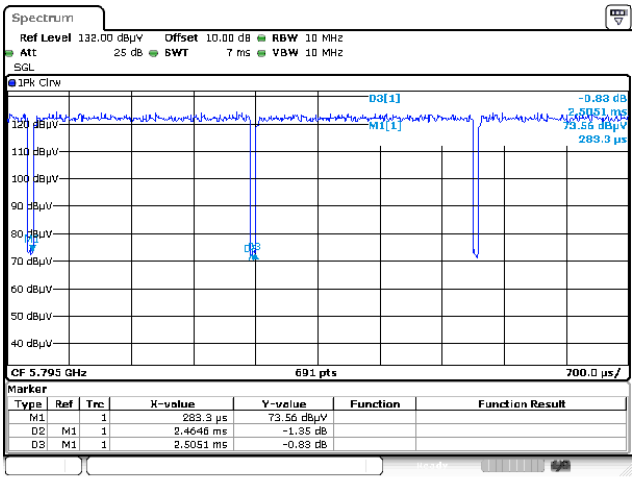
11a



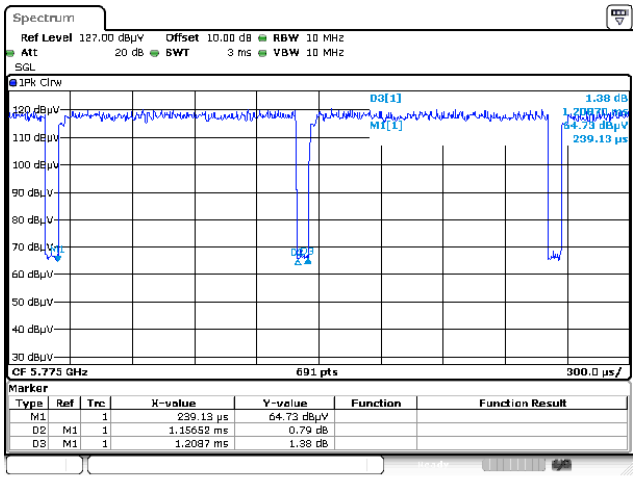
VHT20



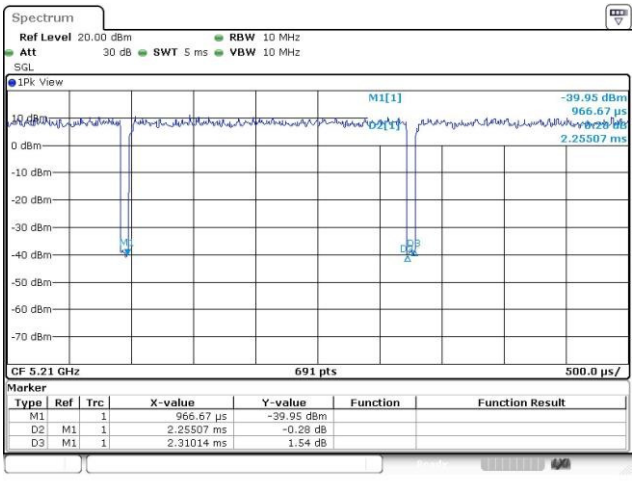
VHT40



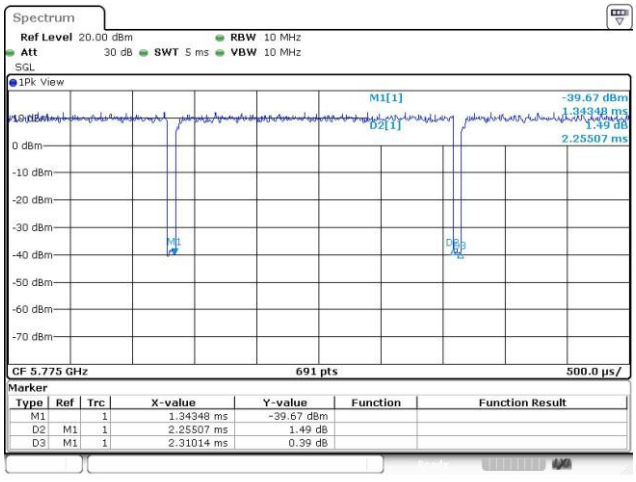
VHT80



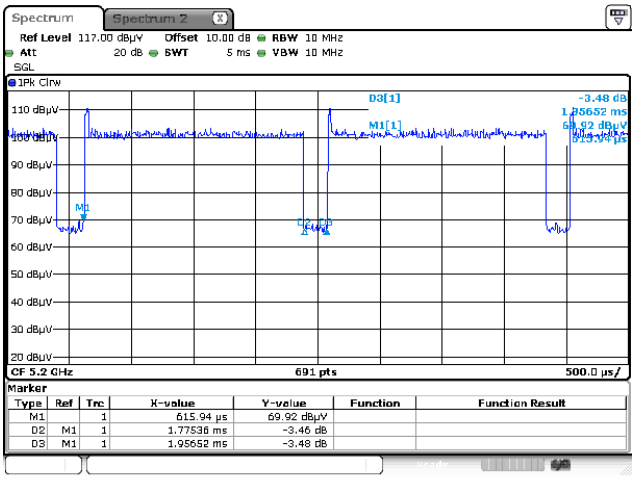
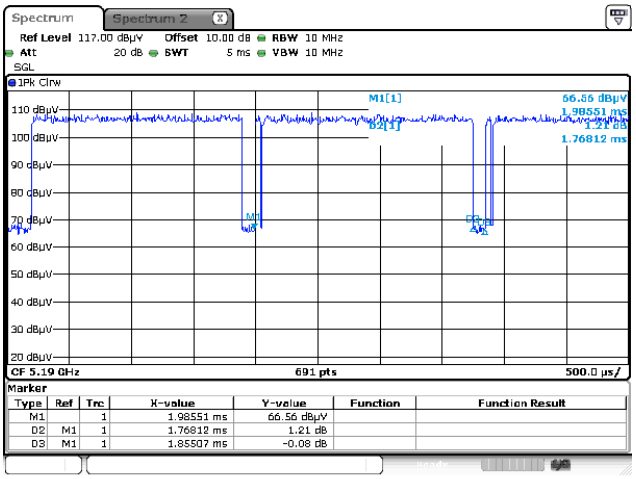
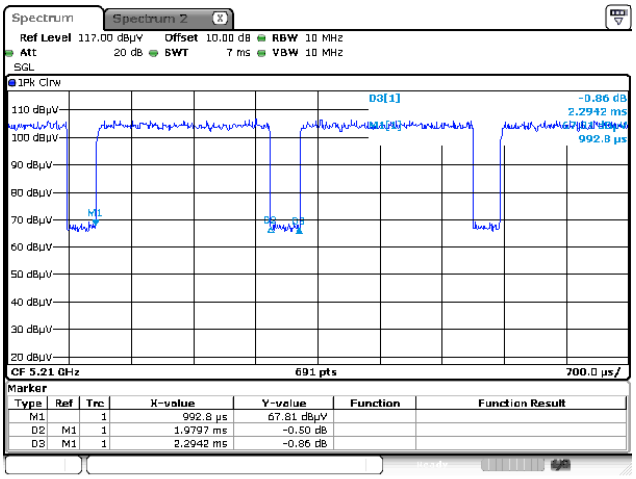
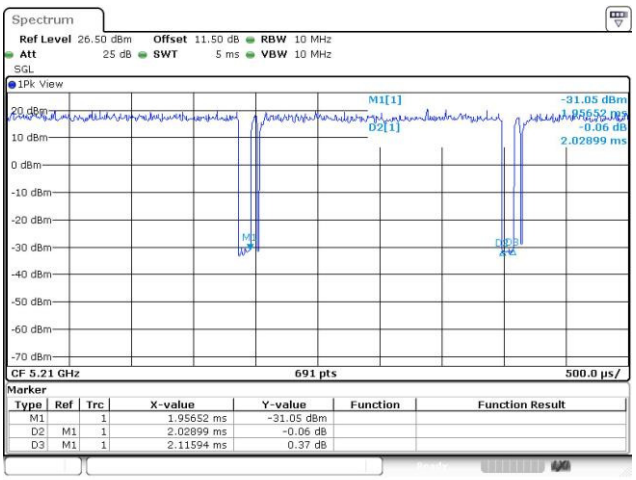
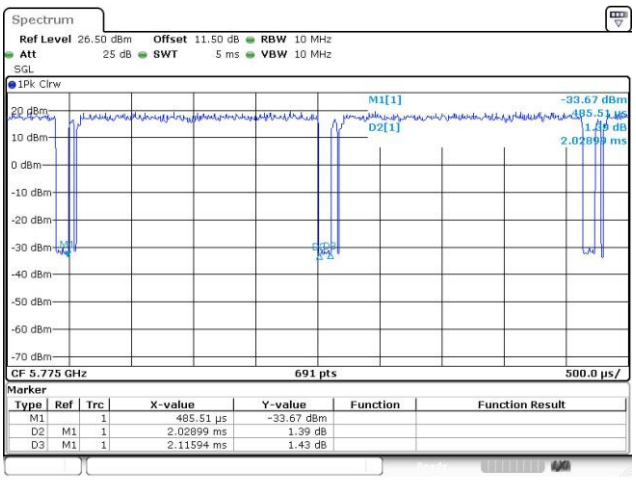
VHT80+80 5210MHz



VHT80+80 5775MHz



Beamforming mode

VHT20	VHT40
	
VHT80	**-**
	-
VHT80+80 5210MHz	**VHT80+80 5775MHz**
	

1.1.7 Power Setting

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5180	23	---
11a	5200	24	---
11a	5240	24	---
HT20	5180	22	29
HT20	5200	24	29
HT20	5240	24	29
HT40	5190	18.5	24
HT40	5230	24	28
VHT20	5180	22	29
VHT20	5200	24	29
VHT20	5240	24	29
VHT40	5190	18.5	24
VHT40	5230	24	28
VHT80	5210	16	23
VHT80+80	5210	19.5	26

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5745	23	---
11a	5785	23	---
11a	5825	23	---
HT20	5745	23	27
HT20	5785	23	27
HT20	5825	23	27
HT40	5755	22.5	26
HT40	5795	22.5	26
VHT20	5745	23	27
VHT20	5785	23	27
VHT20	5825	23	27
VHT40	5755	22.5	26
VHT40	5795	22.5	26
VHT80	5775	22	26
VHT80+80	5775	19.5	26

1.2 Local Support Equipment List

Non-beamforming mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**S/N**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E5420	B6FV9T1	RJ45, 8m shielded.
2	Notebook	DELL	Latitude E6430	74GB4X1	RJ45, 10m non-shielded.
3	USB 2.0 flash	Kingston	DTSE9	FXVJ0	---
4	USB 3.0 flash	pqi	U273V 16G	51882	---
5	Load	ICC	---	---	RJ45, 1.5m (x3) non-shielded

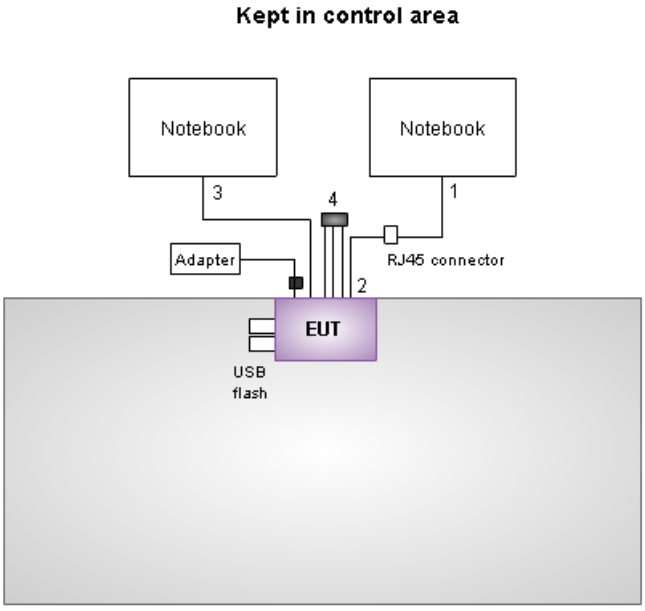
Beamforming mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**S/N**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E5420	B6FV9T1	RJ45, 8m shielded.
2	Notebook	DELL	Latitude E6430	74GB4X1	RJ45, 10m non-shielded.
3	USB 2.0 flash	Kingston	DTSE9	FXVJ0	---
4	USB 3.0 flash	pqi	U273V 16G	51882	---
5	Load	ICC	---	---	RJ45, 1.5m (x3) non-shielded
6	Notebook	DELL	Latitude E6430	G3GB4X1	RJ45, 1m non-shielded.
7	Client	ZyXEL	NBG6817	---	---

Note: No. 7 is provided by applicant.

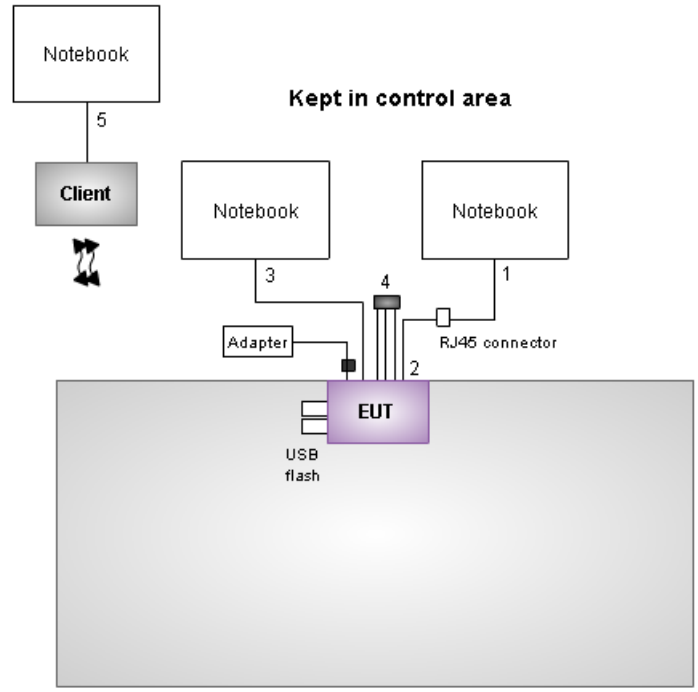
1.3 Test Setup Chart

Non-beamforming mode

Test Setup Diagram
 1. RJ45, 8m shielded 2. RJ45, 0.9m shielded 3. RJ45, 10m non-shielded 4. RJ45, 1.5m (x3) non-shielded with load

Beamforming mode

Test Setup Diagram



1. RJ45, 8m shielded
2. RJ45, 0.9m shielded
3. RJ45, 10m non-shielded
4. RJ45, 1.5m (x3) non-shielded with load
5. 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**
Receiver	R&S	ESR3	101657	Jan. 12, 2016	Jan. 11, 2017
LISN	R&S	ENV216	101579	Jan. 11, 2016	Jan. 10, 2017
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 21, 2015	Dec. 20, 2016
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 13, 2015	Dec. 12, 2016
Receiver	R&S	ESR3	101658	Nov. 04, 2015	Nov. 03, 2016
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 20, 2015	Aug. 19, 2016
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 16, 2015	Dec. 15, 2016
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 04, 2015	Nov. 03, 2016
Preamplifier	Burgeon	BPA-530	SN:100219	Sep. 10, 2015	Sep. 09, 2016
Preamplifier	Agilent	83017A	MY39501308	Oct. 02, 2015	Oct. 01, 2016
Preamplifier	EMC	EMC184045B	980192	Sep. 01, 2015	Aug. 31, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 10, 2015	Dec. 09, 2016
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 10, 2015	Dec. 09, 2016
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 10, 2015	Dec. 09, 2016
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 16, 2015	Nov. 15, 2016
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2016	Feb. 16, 2017
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2015	Nov. 26, 2016
Power Meter	Anritsu	ML2495A	1241002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor	Anritsu	MA2411B	1207366	Sep. 21, 2015	Sep. 20, 2016
Signal Generator	R&S	SMB100A	175727	Oct. 05, 2015	Oct. 04, 2016
AC POWER SOURCE	APC	AFC-500W	F312060012	Oct. 26, 2015	Oct. 25, 2016
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02
FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Power density	±0.463 dB
Conducted emission	±2.670 dB
AC conducted emission	±2.90 dB
Radiated emission ≤ 1GHz	±3.66 dB
Radiated emission > 1GHz	±5.63 dB
Time	±0.1%
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 63%	Howard Huang
Radiated Emissions	03CH01-WS	22-24°C / 61-66%	Vincent Yeh Anderson Hung Felix Sung
RF Conducted	TH01-WS	21°C / 64%	Alex Huang

- FCC site registration No.: 181692
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT40	5230	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5230	MCS 0	---
RF Output Power	11a HT20 HT40 VHT20 VHT40 VHT80 VHT80+80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5180 / 5200 / 5240 5190 / 5230 5210 5210	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80 VHT80+80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5210 5210	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0	---
Frequency Stability	Un-modulation	5200	---	---

Note: The device supports non-contiguous 80MHz mode (5210MHz + 5775MHz)

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5825	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5825	6 Mbps	---
RF Output Power	11a HT20 HT40 VHT20 VHT40 VHT80 VHT80+80	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5745 / 5785 / 5825 5755 / 5795 5775 5775	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80 VHT80+80	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5775 5775	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0	---
Frequency Stability	Un-modulation	5785	---	---

Note: The device supports non-contiguous 80MHz mode (5210MHz + 5775MHz)

Beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT40	5230	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5230	MCS 0	---
RF Output Power	HT20 HT40 VHT20 VHT40 VHT80 VHT80+80	5180 / 5200 / 5240 5190 / 5230 5180 / 5200 / 5240 5190 / 5230 5210 5210	MCS 0 MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80 VHT80+80	5180 / 5200 / 5240 5190 / 5230 5210 5210	MCS 0 MCS 0 MCS 0 MCS 0	---

Note: The device supports non-contiguous 80MHz mode (5210MHz + 5775MHz)

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 HT40 VHT20 VHT40 VHT80 VHT80+80	5745 / 5785 / 5825 5755 / 5795 5745 / 5785 / 5825 5755 / 5795 5775 5775	MCS 0 MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80 VHT80+80	5745 / 5785 / 5825 5755 / 5795 5775 5775	MCS 0 MCS 0 MCS 0 MCS 0	---

Note: The device supports non-contiguous 80MHz mode (5210MHz + 5775MHz)

3 Transmitter Test Results

3.1 Conducted Emissions

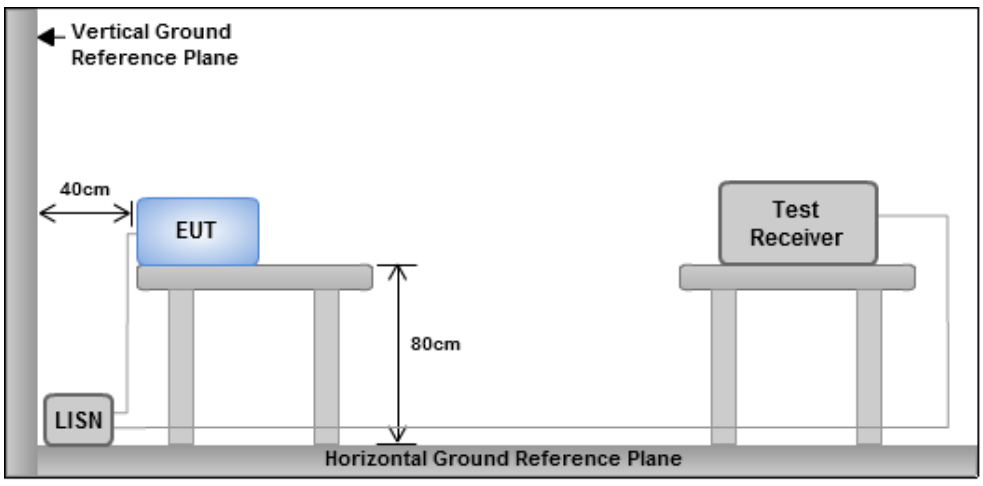
3.1.1 Limit of Conducted Emissions

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



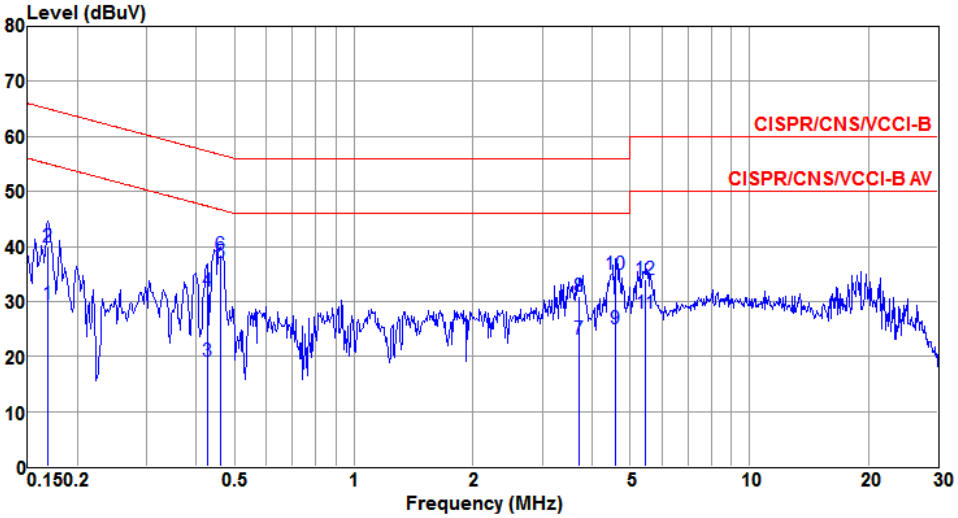
Note: 1. Support units were connected to second LISN.

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

Non-beamforming mode

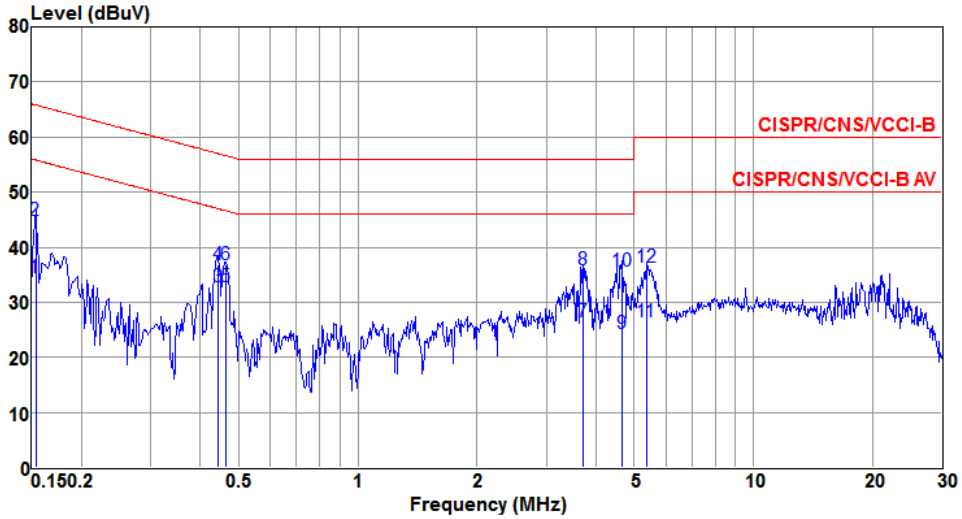
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.169	29.50	55.03	-25.53	19.85	9.63	0.02	Average
2	0.169	39.90	65.03	-25.13	30.25	9.63	0.02	QP
3	0.426	19.07	47.33	-28.26	9.41	9.63	0.03	Average
4	0.426	31.81	57.33	-25.52	22.15	9.63	0.03	QP
5@	0.461	37.12	46.67	-9.55	27.46	9.63	0.03	Average
6	0.461	38.49	56.67	-18.18	28.83	9.63	0.03	QP
7	3.700	23.18	46.00	-22.82	13.42	9.64	0.12	Average
8	3.700	30.85	56.00	-25.15	21.09	9.64	0.12	QP
9	4.574	24.99	46.00	-21.01	15.21	9.65	0.13	Average
10	4.574	34.93	56.00	-21.07	25.15	9.65	0.13	QP
11	5.476	27.88	50.00	-22.12	18.10	9.65	0.13	Average
12	5.476	33.97	60.00	-26.03	24.19	9.65	0.13	QP

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

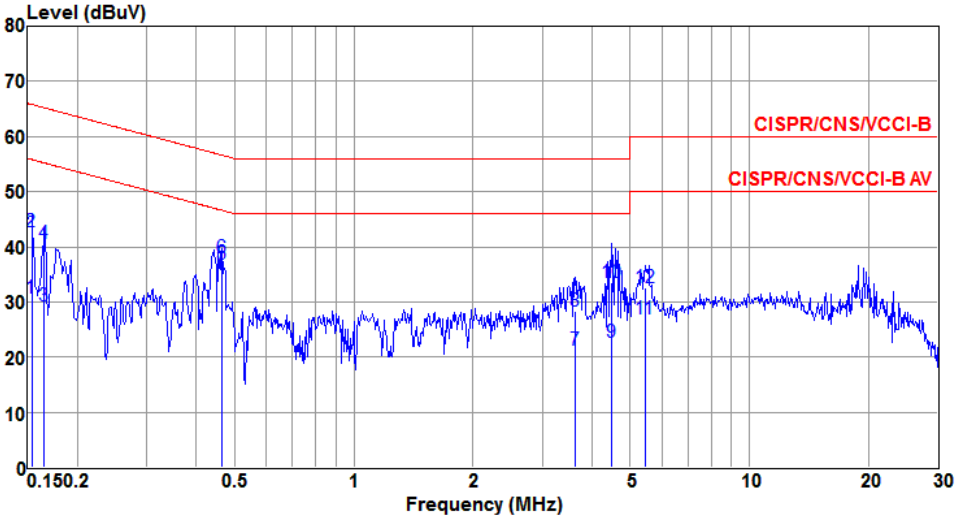
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	34.46	55.82	-21.36	24.82	9.62	0.02	Average
2	0.153	44.88	65.82	-20.94	35.24	9.62	0.02	QP
3	0.442	32.77	47.02	-14.25	23.11	9.63	0.03	Average
4	0.442	36.83	57.02	-20.19	27.17	9.63	0.03	QP
5@	0.464	32.73	46.63	-13.90	23.07	9.63	0.03	Average
6	0.464	36.73	56.63	-19.90	27.07	9.63	0.03	QP
7	3.700	26.55	46.00	-19.45	16.80	9.63	0.12	Average
8	3.700	36.00	56.00	-20.00	26.25	9.63	0.12	QP
9	4.672	24.31	46.00	-21.69	14.54	9.64	0.13	Average
10	4.672	35.59	56.00	-20.41	25.82	9.64	0.13	QP
11	5.362	26.37	50.00	-23.63	16.59	9.65	0.13	Average
12	5.362	36.42	60.00	-23.58	26.64	9.65	0.13	QP

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

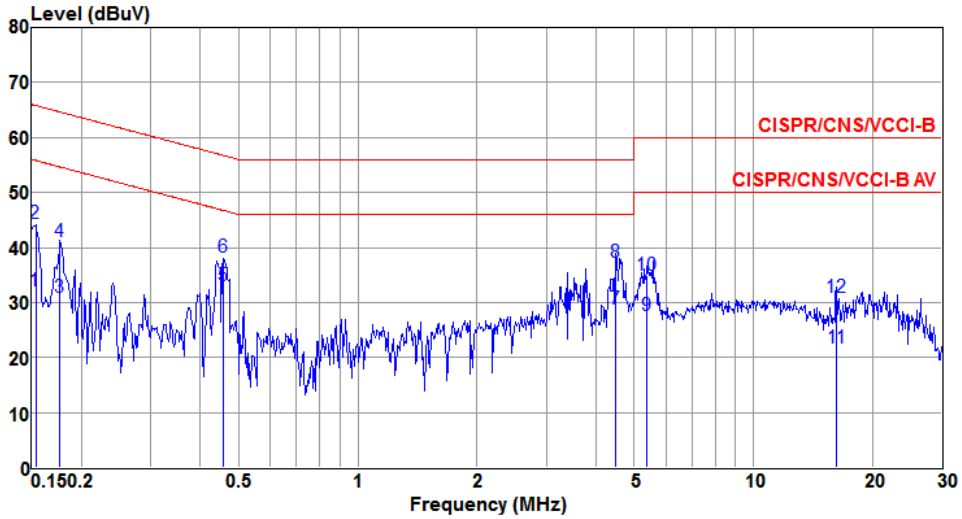
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	30.71	55.82	-25.11	21.06	9.63	0.02	Average
2	0.153	42.69	65.82	-23.13	33.04	9.63	0.02	QP
3	0.165	29.22	55.21	-25.99	19.57	9.63	0.02	Average
4	0.165	40.69	65.21	-24.52	31.04	9.63	0.02	QP
5@	0.464	36.91	46.63	-9.72	27.25	9.63	0.03	Average
6	0.464	38.08	56.63	-18.55	28.42	9.63	0.03	QP
7	3.623	21.13	46.00	-24.87	11.38	9.64	0.11	Average
8	3.623	28.41	56.00	-27.59	18.66	9.64	0.11	QP
9	4.478	22.59	46.00	-23.41	12.83	9.64	0.12	Average
10	4.478	33.41	56.00	-22.59	23.65	9.64	0.12	QP
11	5.447	26.92	50.00	-23.08	17.14	9.65	0.13	Average
12	5.447	32.48	60.00	-27.52	22.70	9.65	0.13	QP

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

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

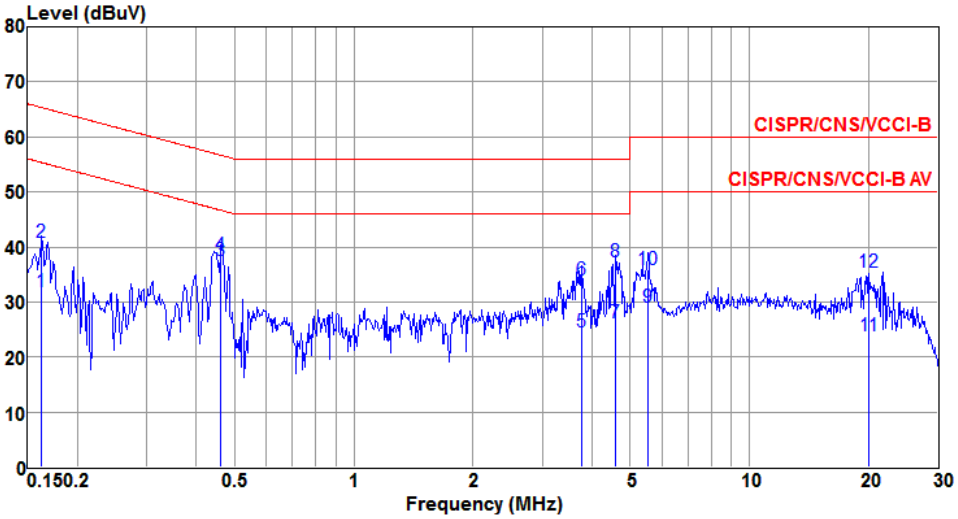


	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	32.10	55.82	-23.72	22.46	9.62	0.02	Average
2	0.153	44.44	65.82	-21.38	34.80	9.62	0.02	QP
3	0.177	31.00	54.64	-23.64	21.36	9.62	0.02	Average
4	0.177	41.15	64.64	-23.49	31.51	9.62	0.02	QP
5@	0.456	33.11	46.76	-13.65	23.45	9.63	0.03	Average
6	0.456	38.12	56.76	-18.64	28.46	9.63	0.03	QP
7	4.478	28.88	46.00	-17.12	19.12	9.64	0.12	Average
8	4.478	37.22	56.00	-18.78	27.46	9.64	0.12	QP
9	5.390	27.58	50.00	-22.42	17.80	9.65	0.13	Average
10	5.390	34.85	60.00	-25.15	25.07	9.65	0.13	QP
11	16.226	21.63	50.00	-28.37	11.67	9.76	0.20	Average
12	16.226	30.84	60.00	-29.16	20.88	9.76	0.20	QP

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

Beamforming mode

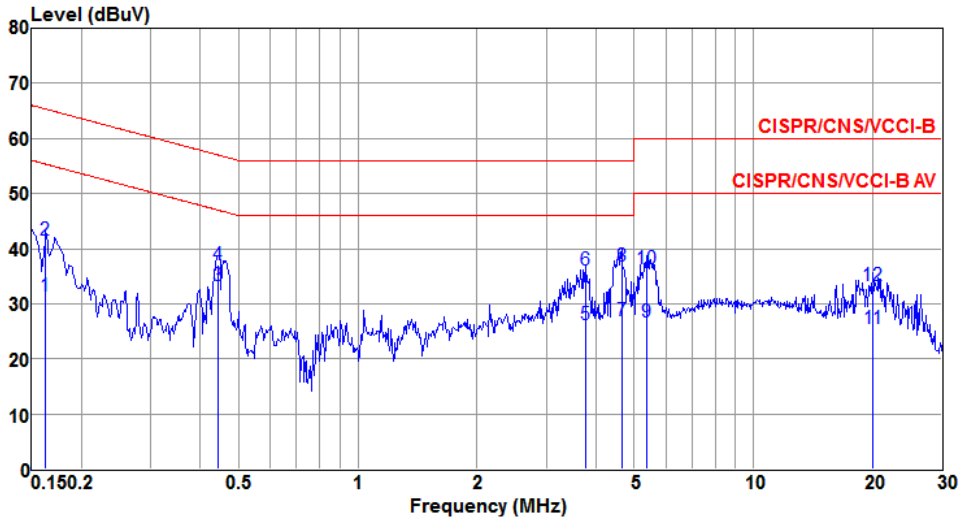
Modulation	VHT40	**Test Freq. (MHz)**	5230
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.162	31.82	55.34	-23.52	22.17	9.63	0.02	Average
2	0.162	40.85	65.34	-24.49	31.20	9.63	0.02	QP
3@	0.461	37.52	46.67	-9.15	27.86	9.63	0.03	Average
4	0.461	38.57	56.67	-18.10	28.91	9.63	0.03	QP
5	3.759	24.47	46.00	-21.53	14.71	9.64	0.12	Average
6	3.759	33.96	56.00	-22.04	24.20	9.64	0.12	QP
7	4.598	26.15	46.00	-19.85	16.37	9.65	0.13	Average
8	4.598	37.41	56.00	-18.59	27.63	9.65	0.13	QP
9	5.535	29.11	50.00	-20.89	19.33	9.65	0.13	Average
10	5.535	35.96	60.00	-24.04	26.18	9.65	0.13	QP
11	20.056	23.75	50.00	-26.25	13.89	9.69	0.17	Average
12	20.056	35.34	60.00	-24.66	25.48	9.69	0.17	QP

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

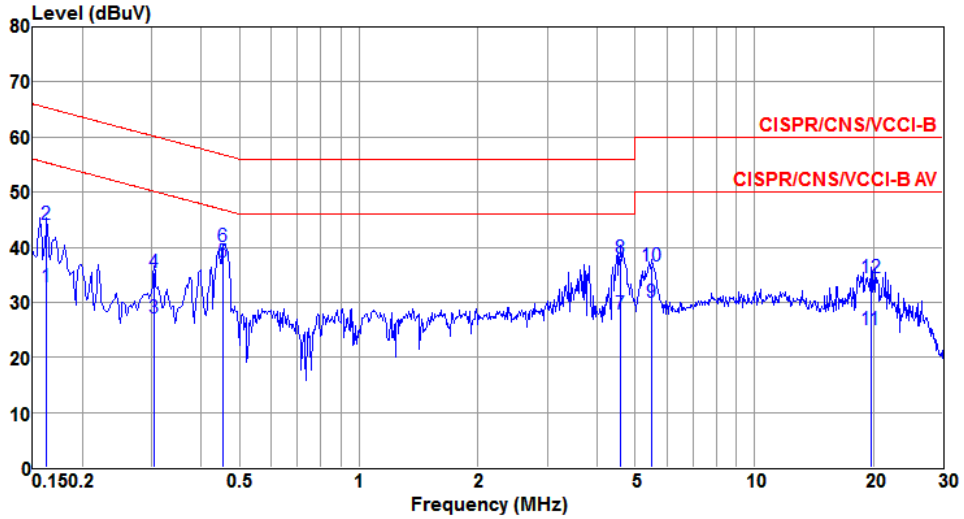
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.162	31.38	55.34	-23.96	21.74	9.62	0.02	Average
2	0.162	41.44	65.34	-23.90	31.80	9.62	0.02	QP
3@	0.444	33.23	46.98	-13.75	23.57	9.63	0.03	Average
4	0.444	37.07	56.98	-19.91	27.41	9.63	0.03	QP
5	3.759	26.22	46.00	-19.78	16.47	9.63	0.12	Average
6	3.759	36.04	56.00	-19.96	26.29	9.63	0.12	QP
7	4.647	26.95	46.00	-19.05	17.18	9.64	0.13	Average
8	4.647	36.80	56.00	-19.20	27.03	9.64	0.13	QP
9	5.362	26.70	50.00	-23.30	16.92	9.65	0.13	Average
10	5.362	36.31	60.00	-23.69	26.53	9.65	0.13	QP
11	20.056	25.51	50.00	-24.49	15.56	9.78	0.17	Average
12	20.056	33.24	60.00	-26.76	23.29	9.78	0.17	QP

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

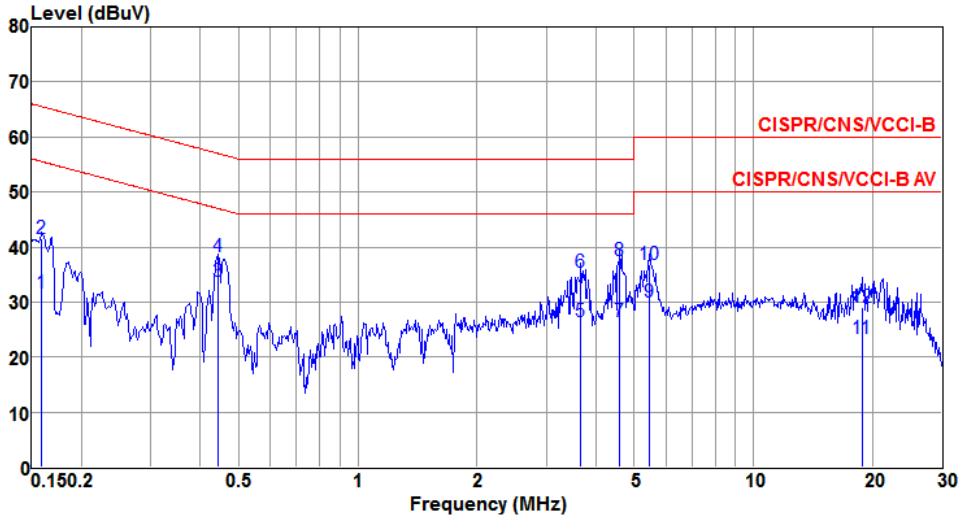
Modulation	VHT20	Test Freq. (MHz)	5785
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.162	32.82	55.34	-22.52	23.17	9.63	0.02	Average
2	0.162	44.08	65.34	-21.26	34.43	9.63	0.02	QP
3	0.303	27.25	50.15	-22.90	17.59	9.63	0.03	Average
4	0.303	35.35	60.15	-24.80	25.69	9.63	0.03	QP
5@	0.454	37.33	46.80	-9.47	27.67	9.63	0.03	Average
6	0.454	40.11	56.80	-16.69	30.45	9.63	0.03	QP
7	4.598	27.90	46.00	-18.10	18.12	9.65	0.13	Average
8	4.598	37.91	56.00	-18.09	28.13	9.65	0.13	QP
9	5.505	30.01	50.00	-19.99	20.23	9.65	0.13	Average
10	5.505	36.70	60.00	-23.30	26.92	9.65	0.13	QP
11	19.740	25.05	50.00	-24.95	15.19	9.69	0.17	Average
12	19.740	34.47	60.00	-25.53	24.61	9.69	0.17	QP

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

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



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	31.61	55.52	-23.91	21.97	9.62	0.02	Average
2	0.159	41.63	65.52	-23.89	31.99	9.62	0.02	QP
3@	0.444	33.87	46.98	-13.11	24.21	9.63	0.03	Average
4	0.444	38.21	56.98	-18.77	28.55	9.63	0.03	QP
5	3.661	26.49	46.00	-19.51	16.75	9.63	0.11	Average
6	3.661	35.43	56.00	-20.57	25.69	9.63	0.11	QP
7	4.598	26.45	46.00	-19.55	16.68	9.64	0.13	Average
8	4.598	37.56	56.00	-18.44	27.79	9.64	0.13	QP
9	5.476	29.96	50.00	-20.04	20.18	9.65	0.13	Average
10	5.476	36.81	60.00	-23.19	27.03	9.65	0.13	QP
11	18.820	23.26	50.00	-26.74	13.31	9.77	0.18	Average
12	18.820	29.10	60.00	-30.90	19.15	9.77	0.18	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

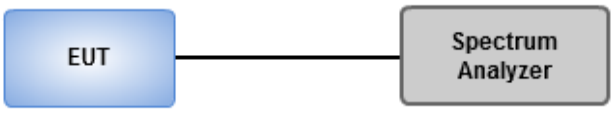
Occupied Bandwidth

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

6dB Bandwidth

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

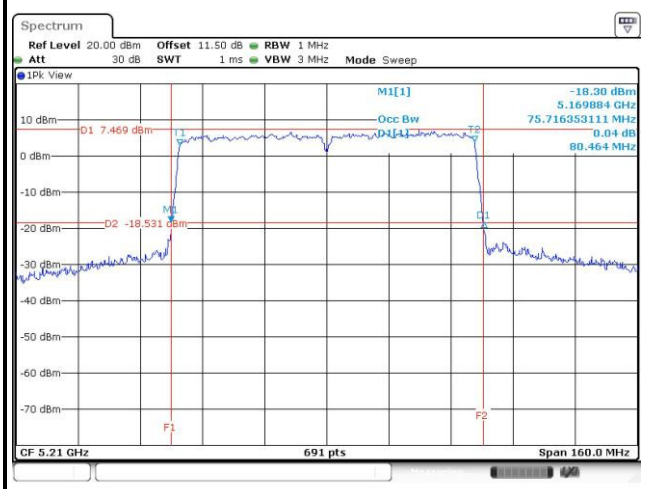
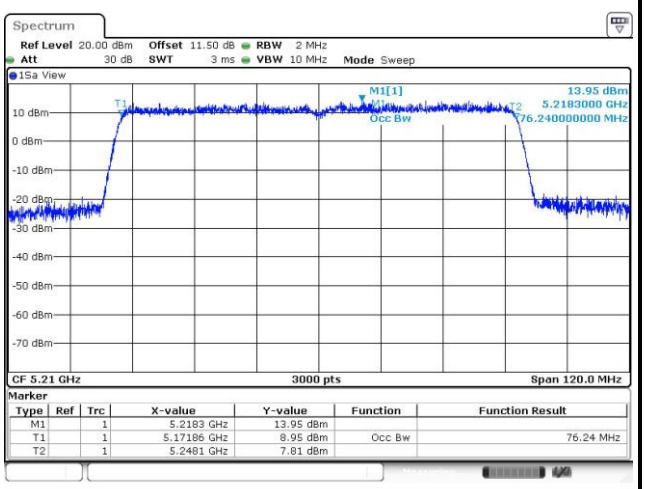
3.2.3 Test Setup



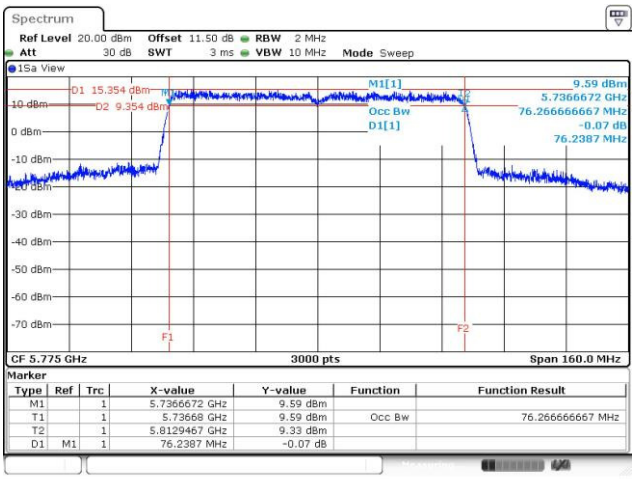
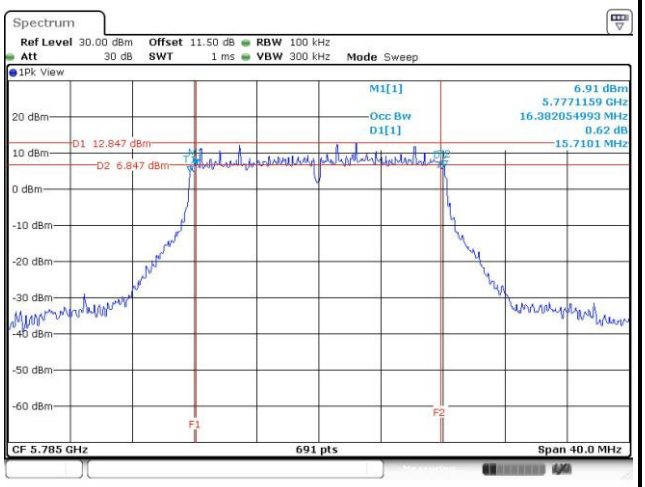
3.2.4 Test Result of Emission Bandwidth

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	20.12	20.12	20.06	19.42	16.47	16.44	16.41	16.42
11a	4	5200	19.88	20.41	20.29	20.12	16.45	16.45	16.41	16.44
11a	4	5240	19.88	19.83	19.65	20.17	16.45	16.45	16.40	16.42
VHT20	4	5180	20.64	20.64	20.46	20.46	17.60	17.60	17.58	17.59
VHT20	4	5200	20.58	20.70	20.70	20.75	17.60	17.61	17.60	17.61
VHT20	4	5240	20.41	20.52	20.64	20.75	17.58	17.60	17.57	17.60
VHT40	4	5190	40.81	40.81	40.46	40.46	36.26	36.26	36.28	36.22
VHT40	4	5230	41.04	40.93	40.58	40.81	36.26	36.28	36.32	36.28
VHT80	4	5210	80.46	80.46	80.46	80.46	76.00	75.96	76.04	75.84
VHT80+80	2	5210	80.23	80.23	---	---	76.16	76.24	---	---

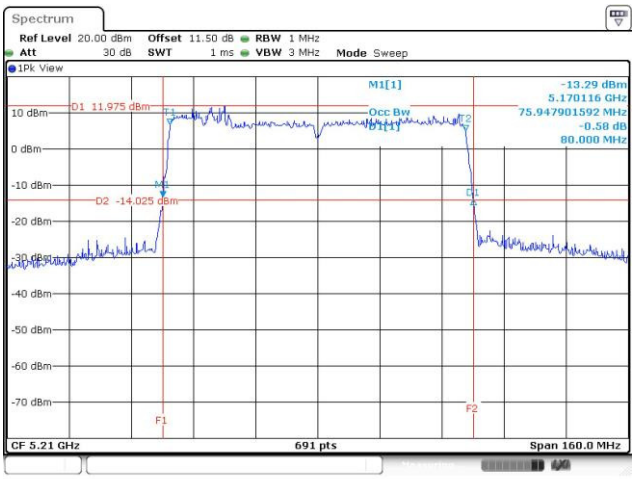
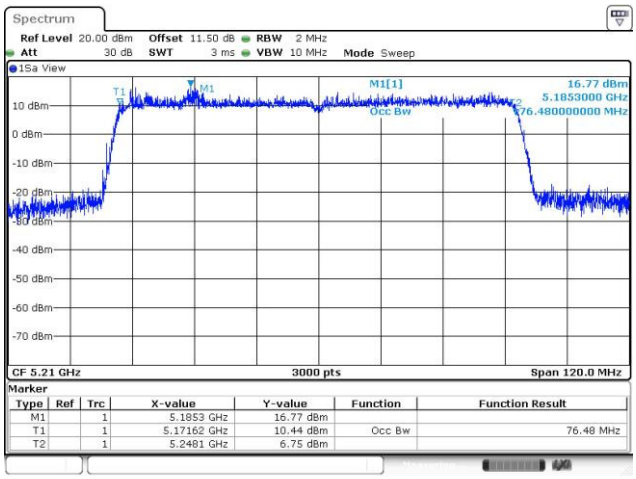
Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	4	5745	16.48	16.47	16.45	16.45	16.35	16.35	16.29	16.29	0.5
11a	4	5785	16.48	16.49	16.43	16.45	16.29	16.29	15.71	16.29	0.5
11a	4	5825	16.51	16.51	16.43	16.48	16.29	16.29	16.29	16.29	0.5
VHT20	4	5745	16.48	16.48	16.45	16.47	17.57	17.57	16.52	17.57	0.5
VHT20	4	5785	17.63	17.63	17.61	17.64	17.57	16.75	17.57	17.16	0.5
VHT20	4	5825	17.61	17.65	17.61	17.64	17.16	17.57	16.29	17.16	0.5
VHT40	4	5755	36.40	36.35	36.32	36.29	35.71	35.36	35.13	35.13	0.5
VHT40	4	5795	36.40	36.37	36.43	36.35	35.71	35.59	35.13	35.36	0.5
VHT80	4	5775	76.11	76.11	76.16	76.11	76.29	75.59	75.83	75.59	0.5
VHT80+80	2	5775	---	---	76.27	76.21	---	---	75.83	76.06	0.5

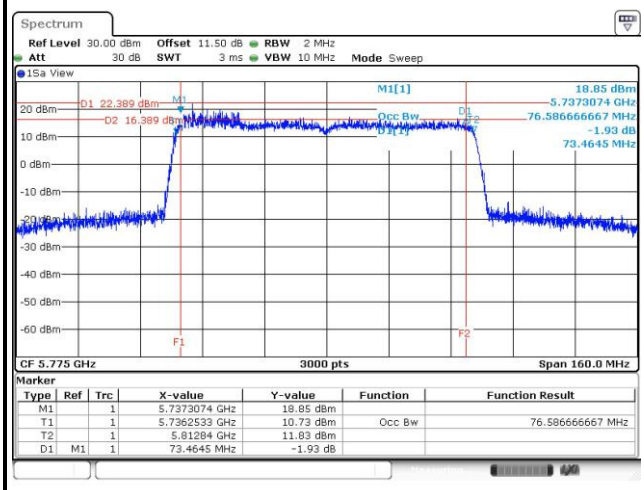
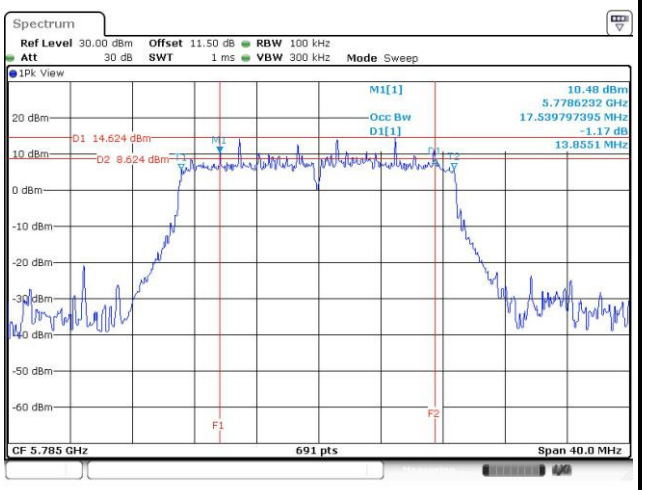
Worst Plot of 99% Bandwidth	Worst Plot of 6dB Bandwidth
	

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	20.64	20.99	20.64	20.46	17.65	17.64	17.64	17.65
VHT20	4	5200	20.58	20.87	20.99	20.99	17.64	17.65	17.64	17.65
VHT20	4	5240	20.58	20.70	20.99	21.04	17.63	17.65	17.59	17.65
VHT40	4	5190	40.23	40.00	40.00	40.23	36.38	36.42	36.36	36.30
VHT40	4	5230	40.00	40.35	40.00	40.35	36.26	36.34	36.36	36.38
VHT80	4	5210	79.54	80.00	79.77	79.77	76.36	76.12	76.16	76.40
VHT80+80	2	5210	79.54	79.30	---	---	76.48	76.40	---	---

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

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
VHT20	4	5745	17.55	17.56	17.57	17.57	14.43	15.77	17.57	17.45	0.5
VHT20	4	5785	17.69	17.67	17.67	17.68	15.42	13.86	16.87	16.99	0.5
VHT20	4	5825	17.57	17.68	17.65	17.68	17.22	17.57	15.13	17.39	0.5
VHT40	4	5755	36.45	36.37	36.37	36.37	35.48	35.71	35.48	35.36	0.5
VHT40	4	5795	36.48	36.32	36.35	36.35	35.07	35.59	35.13	34.44	0.5
VHT80	4	5775	76.59	76.16	76.48	76.27	75.83	73.28	75.83	75.83	0.5
VHT80+80	2	5775	---	---	76.32	76.21	---	---	75.83	76.06	0.5

Worst Plot of 99% Bandwidth	Worst Plot of 6dB Bandwidth
	

3.3 RF Output Power

3.3.1 Limit of RF Output Power

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
☒	Indoor access point	Conducted Power: 1 W
☐	Fixed point-to-point access points	Conducted Power: 1 W
☐	Mobile and portable client devices	Conducted Power: 250 mW

Frequency Band (MHz)		**Limit**
☐	5250 ~ 5350	250mW or 11dBm+10 log B
☐	5470 ~ 5725	250mW or 11dBm+10 log B
☒	5725 ~ 5850	1 W
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

☒ **Method PM-G (Measurement using a gated RF average power meter)**

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

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

Non-beamforming mode

For Frequency band 5150-5250 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	4	5180	22.01	22.30	22.15	22.16	657.175	28.18	30.00
11a	4	5200	22.98	23.12	22.71	23.02	790.811	28.98	30.00
11a	4	5240	22.95	23.07	22.39	22.88	767.480	28.85	30.00
HT20	4	5180	20.76	21.12	20.80	21.07	496.708	26.96	30.00
HT20	4	5200	22.71	23.21	22.74	23.11	788.625	28.97	30.00
HT20	4	5240	22.59	22.87	22.30	22.65	729.095	28.63	30.00
HT40	4	5190	18.40	18.61	18.29	18.54	280.696	24.48	30.00
HT40	4	5230	23.71	24.01	23.46	24.01	960.318	29.82	30.00
VHT20	4	5180	20.81	21.15	20.86	21.14	502.736	27.01	30.00
VHT20	4	5200	22.75	23.25	22.78	23.13	794.973	29.00	30.00
VHT20	4	5240	22.63	22.91	22.33	22.71	736.305	28.67	30.00
VHT40	4	5190	18.45	18.63	18.32	18.58	282.961	24.52	30.00
VHT40	4	5230	23.77	24.05	23.5	24.07	971.471	**29.87**	30.00
VHT80	4	5210	15.28	15.3	15.01	15.4	133.983	21.27	30.00
VHT80+80	2	5210	18.67	18.89	---	---	151.067	21.79	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	23.61	23.77	23.28	23.53	906.085	29.57	30.00
11a	4	5785	23.82	23.99	23.19	23.89	944.957	29.75	30.00
11a	4	5825	24.01	24.05	23.63	23.94	984.282	**29.93**	30.00
HT20	4	5745	23.32	23.47	23.11	23.51	866.147	29.38	30.00
HT20	4	5785	23.57	23.69	23.06	23.69	897.579	29.53	30.00
HT20	4	5825	23.90	23.92	22.81	23.71	918.023	29.63	30.00
HT40	4	5755	23.86	23.92	23.61	23.84	961.542	29.83	30.00
HT40	4	5795	23.94	23.91	23.52	23.84	960.787	29.83	30.00
VHT20	4	5745	23.38	23.51	23.14	23.55	874.687	29.42	30.00
VHT20	4	5785	23.59	23.73	23.11	23.72	904.757	29.57	30.00
VHT20	4	5825	23.95	23.98	22.87	23.75	929.127	29.68	30.00
VHT40	4	5755	23.89	23.95	23.65	23.87	968.740	29.86	30.00
VHT40	4	5795	23.99	23.96	23.55	23.88	970.304	29.87	30.00
VHT80	4	5775	22.98	22.93	22.15	22.76	747.804	28.74	30.00
VHT80+80	2	5775	---	---	20.21	20.69	222.174	23.47	30.00

Beamforming mode

For Frequency band 5150-5250 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
HT20	4	5180	21.55	21.73	21.54	21.49	575.315	27.60	28.44
HT20	4	5200	21.44	21.87	21.47	21.59	577.624	27.62	28.44
HT20	4	5240	21.43	21.86	21.37	21.44	568.861	27.55	28.44
HT40	4	5190	17.16	18.29	17.87	17.75	240.254	23.81	28.44
HT40	4	5230	21.34	21.78	21.76	21.75	586.397	27.68	28.44
VHT20	4	5180	21.62	21.83	21.62	21.53	585.060	27.67	28.44
VHT20	4	5200	21.53	21.93	21.56	21.65	587.625	27.69	28.44
VHT20	4	5240	21.5	21.92	21.44	21.52	578.072	27.62	28.44
VHT40	4	5190	17.21	18.35	17.98	17.82	244.333	23.88	28.44
VHT40	4	5230	21.43	21.85	21.88	21.89	600.799	**27.79**	28.44
VHT80	4	5210	15.31	15.52	15.66	15.38	140.935	21.49	28.44
VHT80+80	2	5210	18.53	18.89	---	---	148.731	21.72	30.00

Note:

1. For 4TX mode, Directional gain = $10 * \log((10^{1.32/20}+10^{2.48/20}+10^{1.3/20}+10^{0.98/20})^2/4)$ = 7.56 dBi > 6 dBi
   Limit shall be reduced to 30 dBm – (7.56 dBi – 6 dBi) = 28.44 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	21.26	21.49	21.35	21.33	546.878	27.38	27.60
HT20	4	5785	21.41	21.63	21.06	21.48	552.151	27.42	27.60
HT20	4	5825	21.49	21.35	21.27	21.22	543.789	27.35	27.60
HT40	4	5755	20.99	21.18	21.01	21.04	510.063	27.08	27.60
HT40	4	5795	21.08	21.11	20.79	21.26	510.964	27.08	27.60
VHT20	4	5745	21.39	21.58	21.43	21.46	560.555	27.49	27.60
VHT20	4	5785	21.52	21.73	21.12	21.59	564.473	**27.52**	27.60
VHT20	4	5825	21.51	21.48	21.39	21.36	556.678	27.46	27.60
VHT40	4	5755	21.03	21.22	21.03	21.11	515.086	27.12	27.60
VHT40	4	5795	21.14	21.18	20.88	21.35	520.157	27.16	27.60
VHT80	4	5775	20.85	21.21	20.99	21.53	521.584	27.17	27.60
VHT80+80	2	5775	---	---	20.15	20.53	216.494	23.35	30.00

Note:

1. For 4TX mode, Directional gain = $10 * \log((10^{2.09/20}+10^{2.81/20}+10^{2.72/20}+10^{1.85/20})^2/4)$ = 8.40 dBi > 6 dBi
   Limit shall be reduced to 30 dBm – (8.40 dBi – 6 dBi) = 27.60 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 (Non- Beamforming: 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 (Non- Beamforming: VHT80 / Beamforming: 11ac VHT20, VHT40, VHT80)

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

For 5725 ~ 5850 MHz

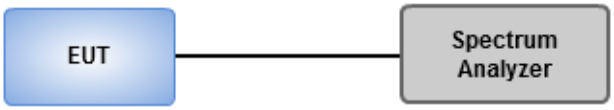
☒ Method SA-1 (Non- Beamforming: 802.11a/VHT20/VHT40)

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 (Non- Beamforming: VHT80 / Beamforming: 11ac VHT20, VHT40, VHT80)

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



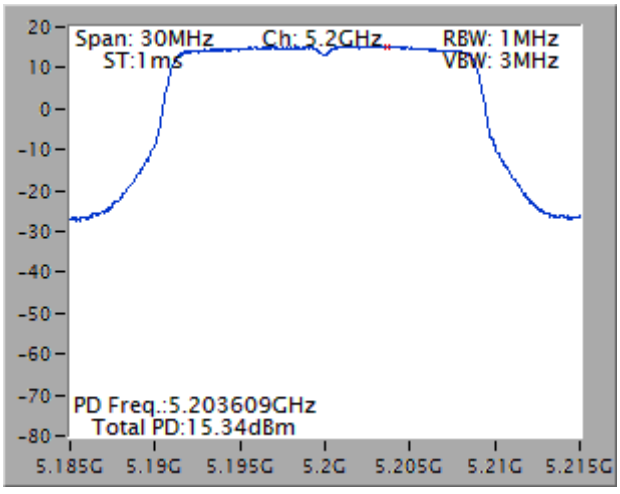
3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	4	5180	14.31	0.00	14.31	15.44
11a	4	5200	15.22	0.00	15.22	15.44
11a	4	5240	15.12	0.00	15.12	15.44
VHT20	4	5180	12.81	0.00	12.81	15.44
VHT20	4	5200	15.34	0.00	15.34	15.44
VHT20	4	5240	14.46	0.00	14.46	15.44
VHT40	4	5190	7.96	0.00	7.96	15.44
VHT40	4	5230	13.07	0.00	13.07	15.44
VHT80	4	5210	1.32	0.19	1.51	15.44
VHT80+80	2	5210	1.87	0.10	1.97	17.00

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. For 4TX mode, Directional gain = $10 * \log((10^{1.32/20}+10^{2.48/20}+10^{1.3/20}+10^{0.98/20})^2/4) = 7.56$ dBi > 6 dBi
   Limit shall be reduced to 17 dBm –(7.56 dBi – 6 dBi) = 15.44 dBm

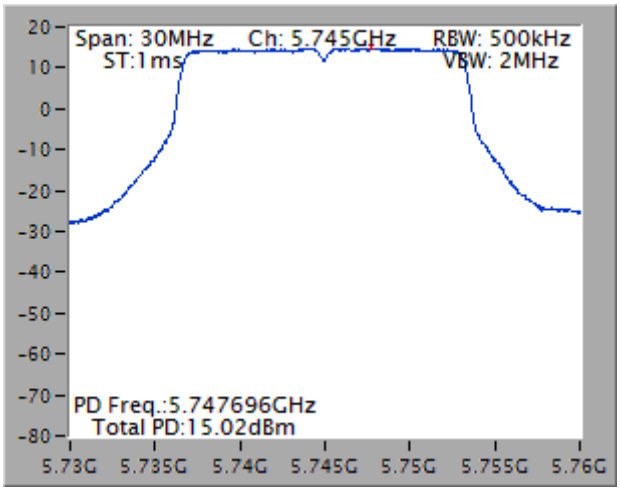
Worst Plot



For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
11a	4	5745	15.02	0.00	15.02	27.60
11a	4	5785	14.95	0.00	14.95	27.60
11a	4	5825	14.97	0.00	14.97	27.60
VHT20	4	5745	14.44	0.00	14.44	27.60
VHT20	4	5785	14.51	0.00	14.51	27.60
VHT20	4	5825	14.67	0.00	14.67	27.60
VHT40	4	5755	11.74	0.00	11.74	27.60
VHT40	4	5795	11.86	0.00	11.86	27.60
VHT80	4	5775	7.35	0.19	7.54	27.60
VHT80+80	2	5775	2.20	0.10	2.30	30.00

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. For 4TX mode, Directional gain = 10 * log((10$^{2.09/20}$+10$^{2.81/20}$+10$^{2.72/20}$+10$^{1.85/20}$)^2/4) = 8.40 dBi > 6 dBi
   Limit shall be reduced to 30 dBm – (8.40 dBi – 6 dBi) = 27.60 dBm.

Worst Plot

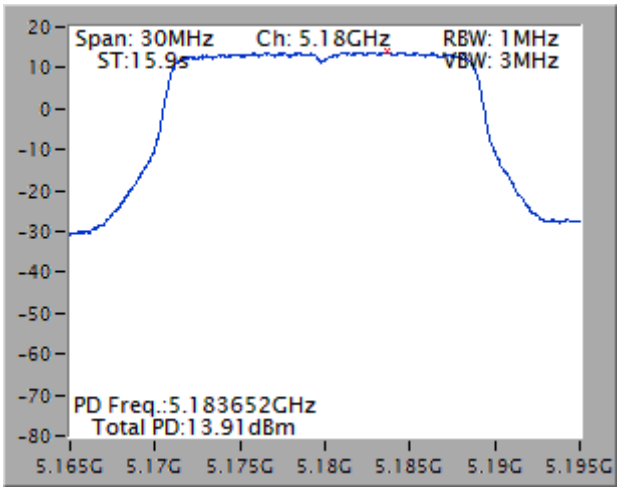


Beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT20	4	5180	13.91	0.42	14.33	15.44
VHT20	4	5200	13.79	0.42	14.21	15.44
VHT20	4	5240	13.80	0.42	14.22	15.44
VHT40	4	5190	7.07	0.21	7.28	15.44
VHT40	4	5230	10.97	0.21	11.18	15.44
VHT80	4	5210	2.62	0.64	3.26	15.44
VHT80+80	2	5210	2.16	0.18	2.34	17.00

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. For 4TX mode, Directional gain = 10 * log((10$^{1.32/20}$+10$^{2.48/20}$+10$^{1.3/20}$+10$^{0.98/20}$)^2/4) = 7.56 dBi > 6 dBi
   Limit shall be reduced to 17 dBm –(7.56 dBi – 6 dBi) = 15.44 dBm

Worst Plot

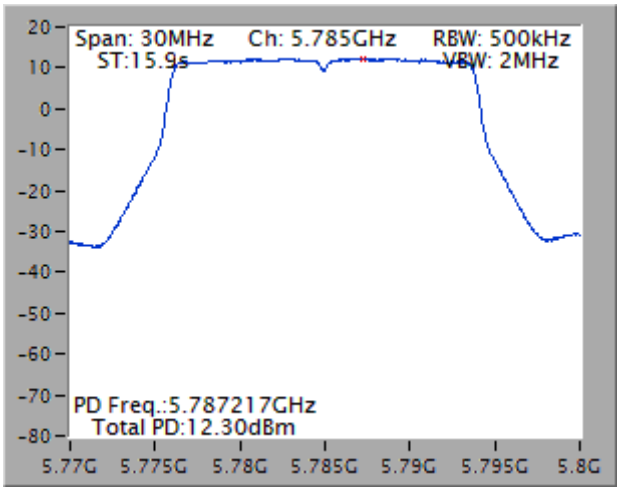


Note: The plot without duty factor.

For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT20	4	5745	12.13	0.42	12.55	27.60
VHT20	4	5785	12.30	0.42	12.72	27.60
VHT20	4	5825	12.29	0.42	12.71	27.60
VHT40	4	5755	8.97	0.21	9.18	27.60
VHT40	4	5795	9.13	0.21	9.34	27.60
VHT80	4	5775	5.74	0.64	6.38	27.60
VHT80+80	2	5775	2.35	0.18	2.53	30.00

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. For 4TX mode, Directional gain = 10 * log((10$^{2.09/20}$+10$^{2.81/20}$+10$^{2.72/20}$+10$^{1.85/20}$)^2/4) = 8.40 dBi > 6 dBi
   Limit shall be reduced to 30 dBm – (8.40 dBi – 6 dBi) = 27.60 dBm.

Worst Plot



Note: The plot without duty factor.

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

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

Un-restricted band emissions above 1GHz Limit		
Operating Band	**Limit**	
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]	
5.725 - 5.850 GHz	☐	15.407(b)(4)(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
	☒	15.407(b)(4)(ii) ,compliance with the emission limits in § 15.247(d) Shall be at least 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power,. Attenuation below the general limits specified in §15.209(a) is not required. In addition,radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see § 15.205(c))
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		

3.5.2 Test Procedures

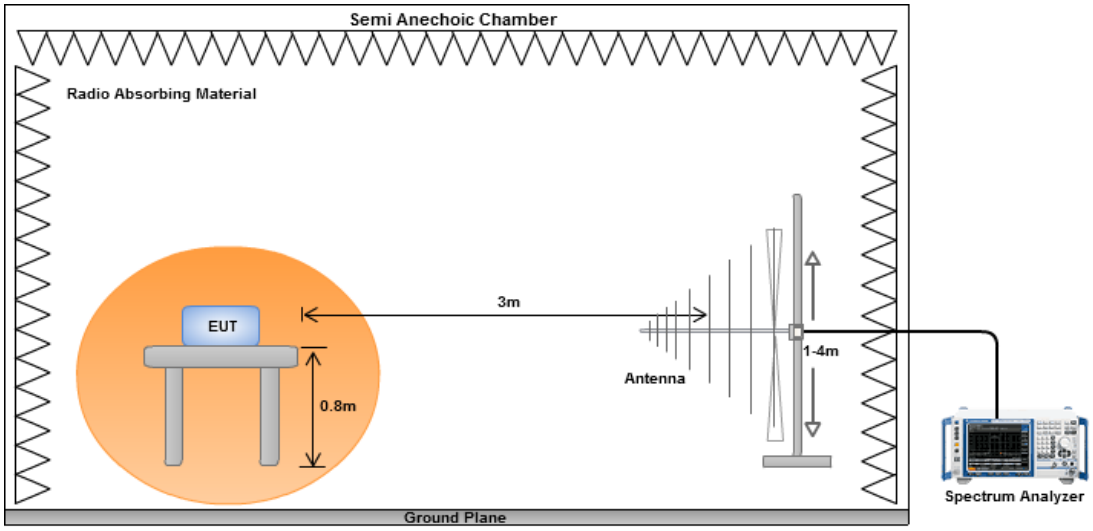
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

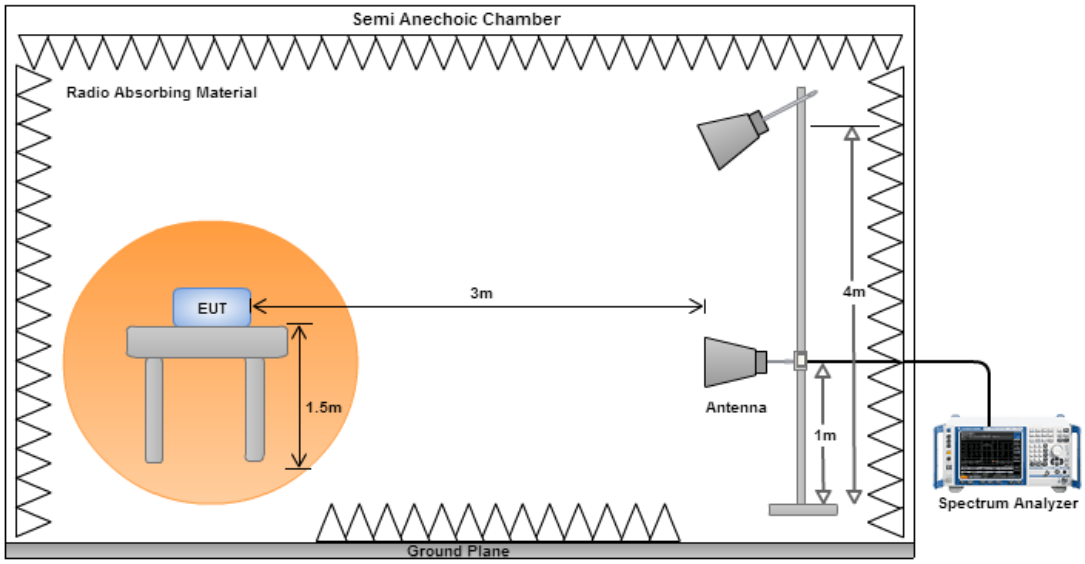
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.
4. Final tests are performed with the beam locked at the worst-case orientation determined in the baseline scan(methodology for circular beamforming pattern) for beamforming mode.

3.5.3 Test Setup

Radiated Emissions below 1 GHz



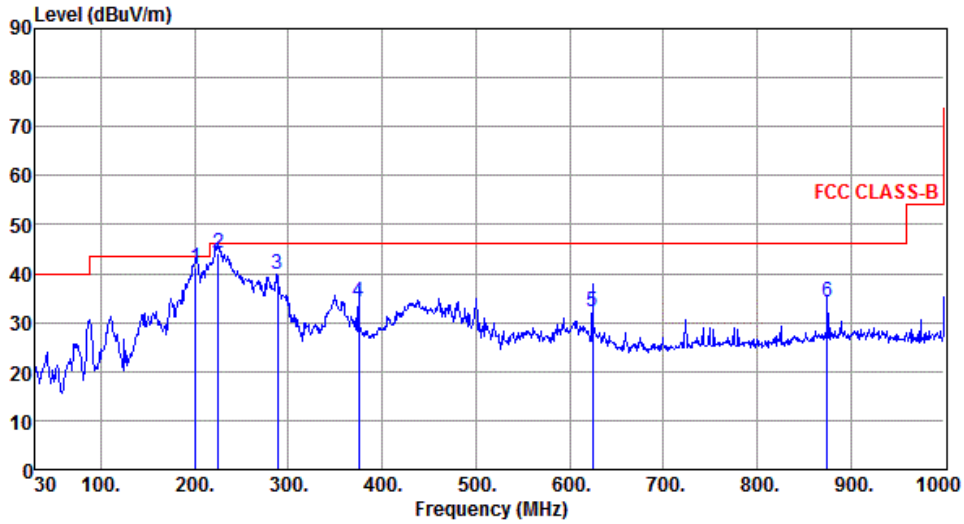
Radiated Emissions above 1 GHz



Non- beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

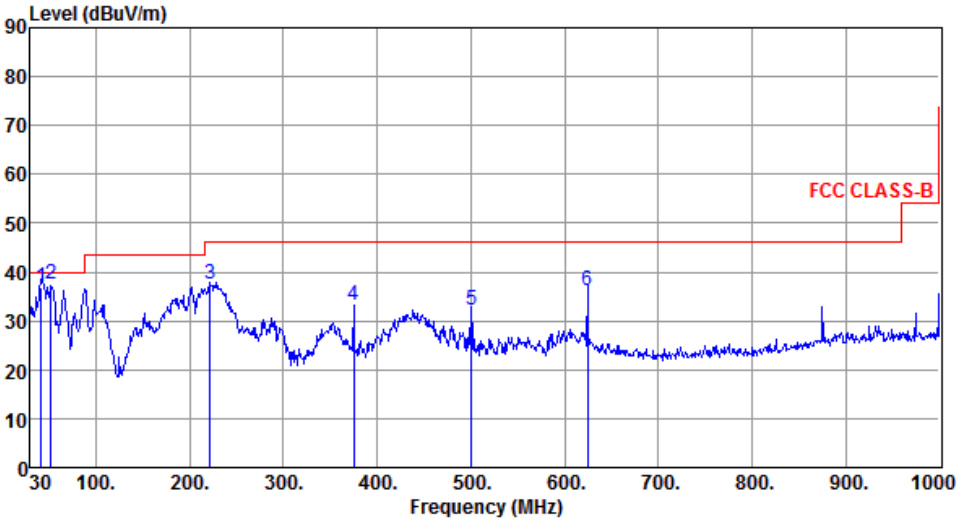
Modulation	VHT40	**Test Freq. (MHz)**	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	200.93	41.29	43.50	-2.21	60.58	-19.29	QP	100	175
2	225.33	44.32	46.00	-1.68	63.10	-18.78	QP	100	226
3	288.35	39.84	46.00	-6.16	56.00	-16.16	Peak	---	---
4	375.41	34.37	46.00	-11.63	48.47	-14.10	Peak	---	---
5	624.47	32.27	46.00	-13.73	41.38	-9.11	Peak	---	---
6	875.20	34.13	46.00	-11.87	39.68	-5.55	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).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

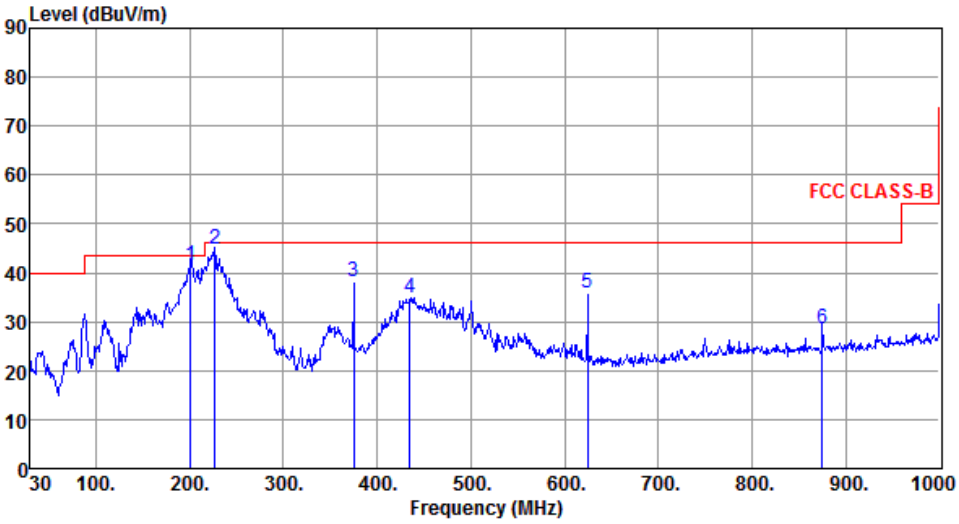
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	41.43	36.86	40.00	-3.14	53.55	-16.69	QP	100	17
2	52.17	37.54	40.00	-2.46	54.15	-16.61	QP	100	341
3	221.55	37.43	46.00	-8.57	56.38	-18.95	Peak	---	---
4	375.42	33.35	46.00	-12.65	47.45	-14.10	Peak	---	---
5	500.49	32.08	46.00	-13.92	43.19	-11.11	Peak	---	---
6	624.32	36.24	46.00	-9.76	45.35	-9.11	Peak	---	---

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

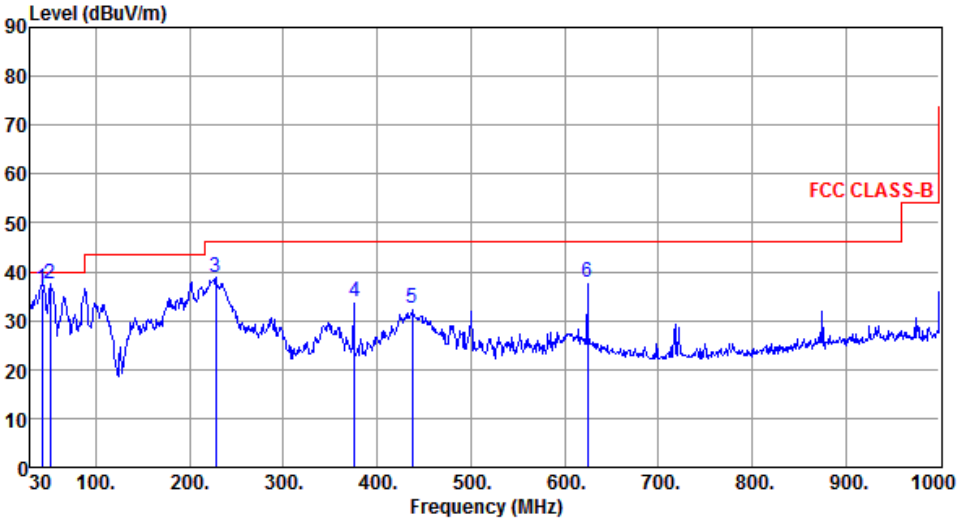
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	200.73	41.37	43.50	-2.13	60.66	-19.29	QP	100	152
2	226.58	44.71	46.00	-1.29	63.44	-18.73	QP	100	341
3	375.37	38.22	46.00	-7.78	52.32	-14.10	Peak	---	---
4	435.11	34.76	46.00	-11.24	47.30	-12.54	Peak	---	---
5	624.53	35.85	46.00	-10.15	44.96	-9.11	Peak	---	---
6	874.51	28.63	46.00	-17.37	34.20	-5.57	Peak	---	---

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

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

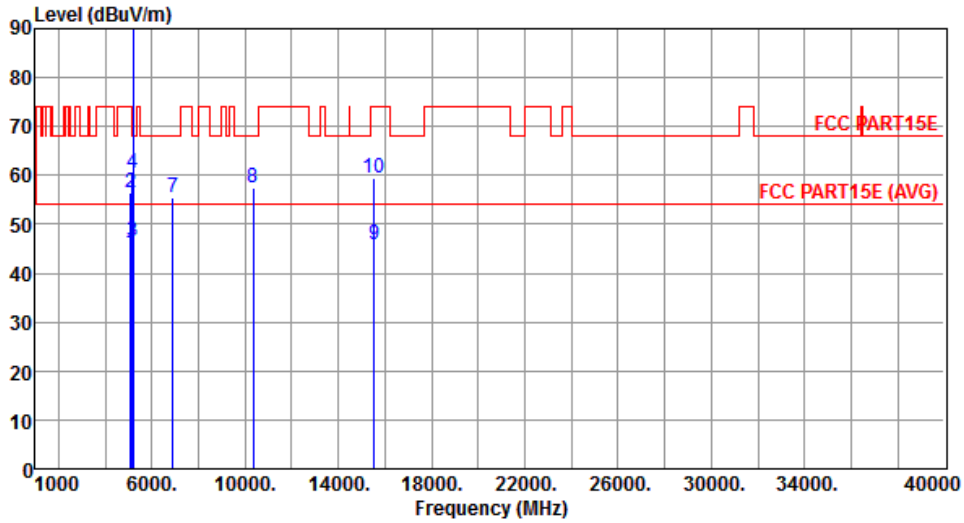


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.71	36.53	40.00	-3.47	53.08	-16.55	QP	100	62
2	51.42	37.43	40.00	-2.57	53.96	-16.53	QP	100	336
3	227.56	38.75	46.00	-7.25	57.44	-18.69	Peak	---	---
4	375.62	33.93	46.00	-12.07	48.02	-14.09	Peak	---	---
5	437.26	32.58	46.00	-13.42	45.07	-12.49	Peak	---	---
6	624.46	37.72	46.00	-8.28	46.83	-9.11	Peak	---	---

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

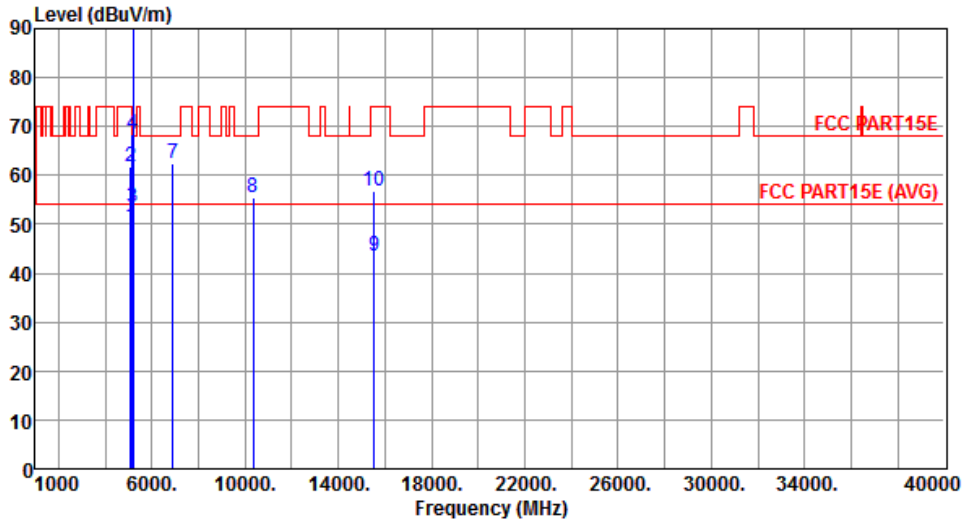
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5103.00	44.11	54.00	-9.89	39.78	4.33	Average	125	343
2		5103.00	56.62	74.00	-17.38	52.29	4.33	Peak	125	343
3		5150.00	46.38	54.00	-7.62	41.98	4.40	Average	100	114
4		5150.00	60.58	74.00	-13.42	56.18	4.40	Peak	100	114
5	*	5180.00	102.32			97.88	4.44	Average	125	343
6	*	5180.00	113.79			109.35	4.44	Peak	125	343
7		6906.00	55.43	68.20	-12.77	47.69	7.74	Peak	100	23
8		10360.00	57.29	68.20	-10.91	43.09	14.20	Peak	100	54
9		15540.00	45.91	54.00	-8.09	30.80	15.11	Average	144	297
10		15540.00	59.51	74.00	-14.49	44.40	15.11	Peak	144	297

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

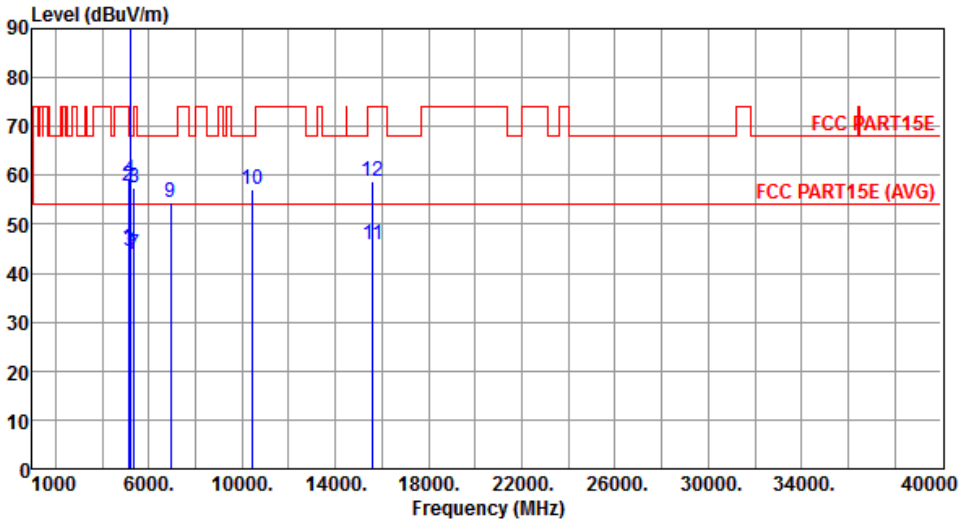
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5103.00	49.35	54.00	-4.65	45.02	4.33	Average	100	207
2		5103.00	61.93	74.00	-12.07	57.60	4.33	Peak	100	207
3		5150.00	53.56	54.00	-0.44	49.16	4.40	Average	100	26
4		5150.00	68.50	74.00	-5.50	64.10	4.40	Peak	100	26
5	*	5180.00	109.47			105.03	4.44	Average	100	207
6	*	5180.00	121.96			117.52	4.44	Peak	100	207
7		6906.00	62.28	68.20	-5.92	54.54	7.74	Peak	246	337
8		10360.00	55.41	68.20	-12.79	41.21	14.20	Peak	100	164
9		15540.00	43.65	54.00	-10.35	28.54	15.11	Average	100	92
10		15540.00	56.73	74.00	-17.27	41.62	15.11	Peak	100	92

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

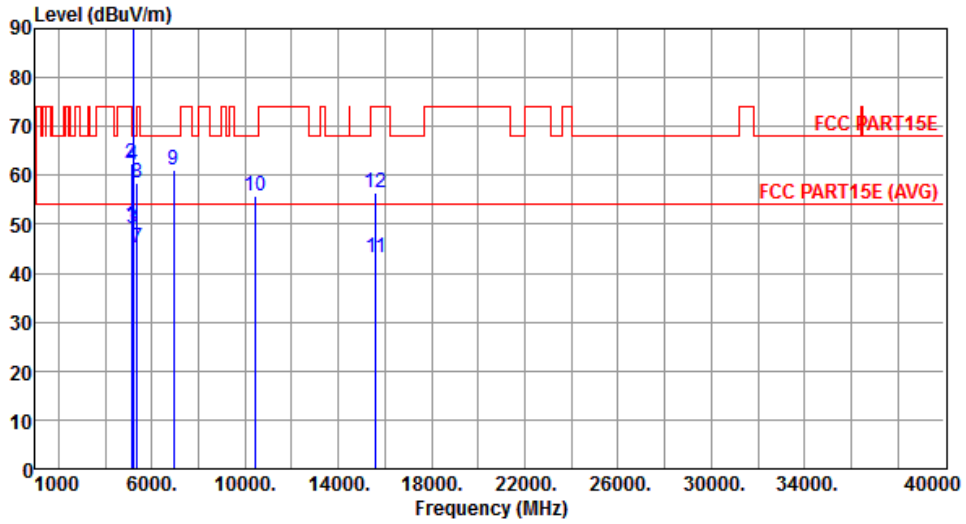
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5122.00	45.15	54.00	-8.85	40.80	4.35	Average	132	348
2		5122.00	57.67	74.00	-16.33	53.32	4.35	Peak	132	348
3		5150.00	44.48	54.00	-9.52	40.08	4.40	Average	132	348
4		5150.00	59.25	74.00	-14.75	54.85	4.40	Peak	132	348
5	*	5200.00	104.06			99.58	4.48	Average	132	347
6	*	5200.00	115.77			111.29	4.48	Peak	132	347
7		5350.00	43.83	54.00	-10.17	39.19	4.64	Average	132	347
8		5350.00	57.58	74.00	-16.42	52.94	4.64	Peak	132	347
9		6933.00	54.31	68.20	-13.89	46.54	7.77	Peak	100	23
10		10400.00	57.23	68.20	-10.97	42.95	14.28	Peak	158	56
11		15600.00	45.80	54.00	-8.20	30.78	15.02	Average	155	313
12		15600.00	58.91	74.00	-15.09	43.89	15.02	Peak	155	313

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

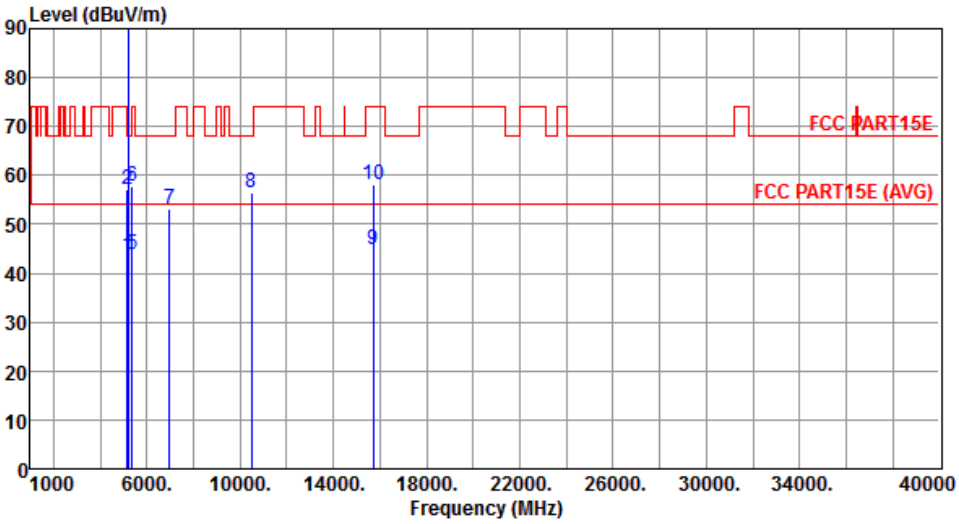
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5122.00	49.74	54.00	-4.26	45.39	4.35	Average	100	342
2		5122.00	62.50	74.00	-11.50	58.15	4.35	Peak	100	342
3		5150.00	49.15	54.00	-4.85	44.75	4.40	Average	100	126
4		5150.00	62.15	74.00	-11.85	57.75	4.40	Peak	100	126
5	*	5200.00	110.71			106.23	4.48	Average	100	342
6	*	5200.00	123.20			118.72	4.48	Peak	100	342
7		5350.00	45.13	54.00	-8.87	40.49	4.64	Average	100	266
8		5350.00	58.40	74.00	-15.60	53.76	4.64	Peak	100	266
9		6933.00	60.97	68.20	-7.23	53.20	7.77	Peak	242	337
10		10400.00	55.96	68.20	-12.24	41.68	14.28	Peak	100	125
11		15600.00	43.03	54.00	-10.97	28.01	15.02	Average	100	239
12		15600.00	56.39	74.00	-17.61	41.37	15.02	Peak	100	239

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

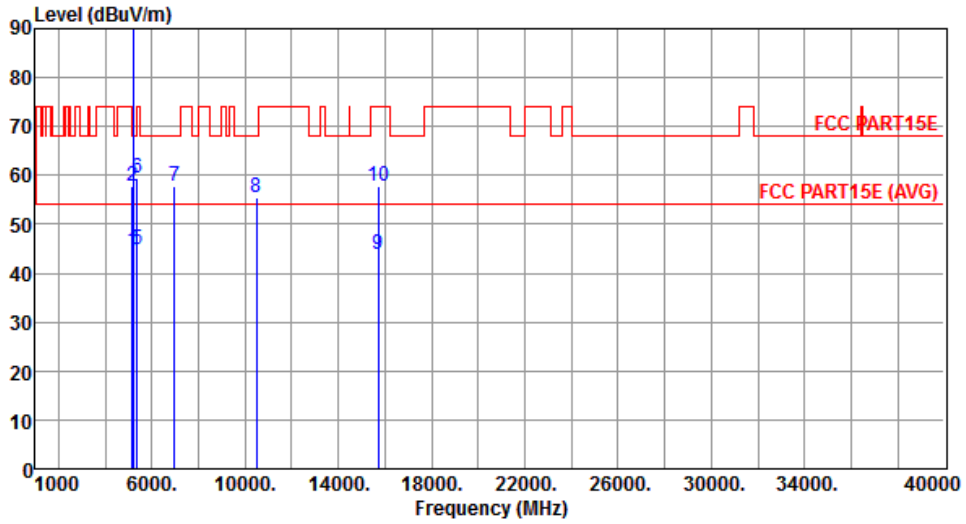
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	43.40	54.00	-10.60	39.00	4.40	Average	100	340
2		5150.00	57.04	74.00	-16.96	52.64	4.40	Peak	100	340
3	*	5240.00	103.74			99.22	4.52	Average	100	340
4	*	5240.00	115.51			110.99	4.52	Peak	100	340
5		5350.00	43.80	54.00	-10.20	39.16	4.64	Average	100	340
6		5350.00	57.77	74.00	-16.23	53.13	4.64	Peak	100	340
7		6986.00	53.17	68.20	-15.03	45.33	7.84	Peak	235	25
8		10480.00	56.49	68.20	-11.71	42.06	14.43	Peak	100	65
9		15720.00	44.99	54.00	-9.01	30.12	14.87	Average	100	299
10		15720.00	58.25	74.00	-15.75	43.38	14.87	Peak	100	299

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

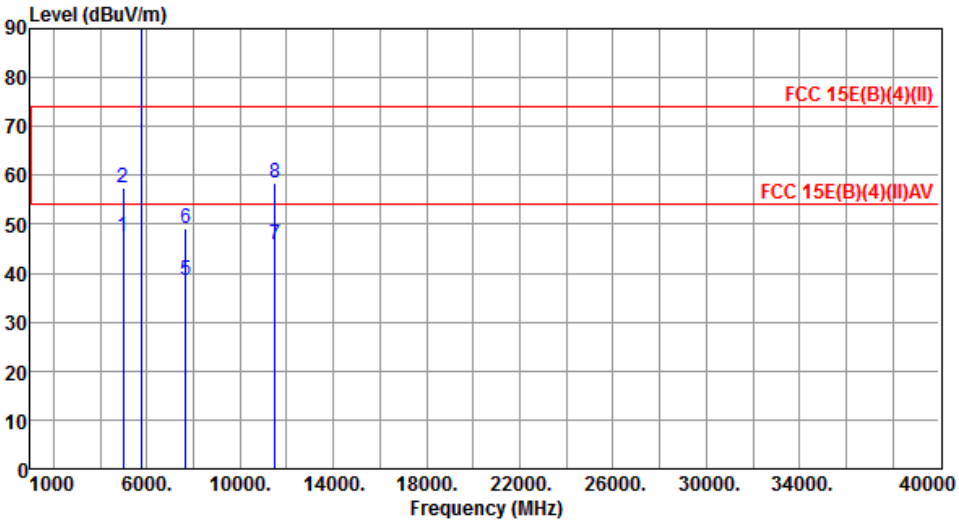
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	44.65	54.00	-9.35	40.25	4.40	Average	146	129
2		5150.00	57.65	74.00	-16.35	53.25	4.40	Peak	146	129
3	*	5240.00	110.77			106.25	4.52	Average	146	129
4	*	5240.00	123.30			118.78	4.52	Peak	146	129
5		5350.00	44.86	54.00	-9.14	40.22	4.64	Average	146	129
6		5350.00	59.45	74.00	-14.55	54.81	4.64	Peak	146	129
7		6986.00	57.81	68.20	-10.39	49.97	7.84	Peak	253	336
8		10480.00	55.37	68.20	-12.83	40.94	14.43	Peak	100	241
9		15720.00	43.99	54.00	-10.01	29.12	14.87	Average	100	186
10		15720.00	57.71	74.00	-16.29	42.84	14.87	Peak	100	186

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

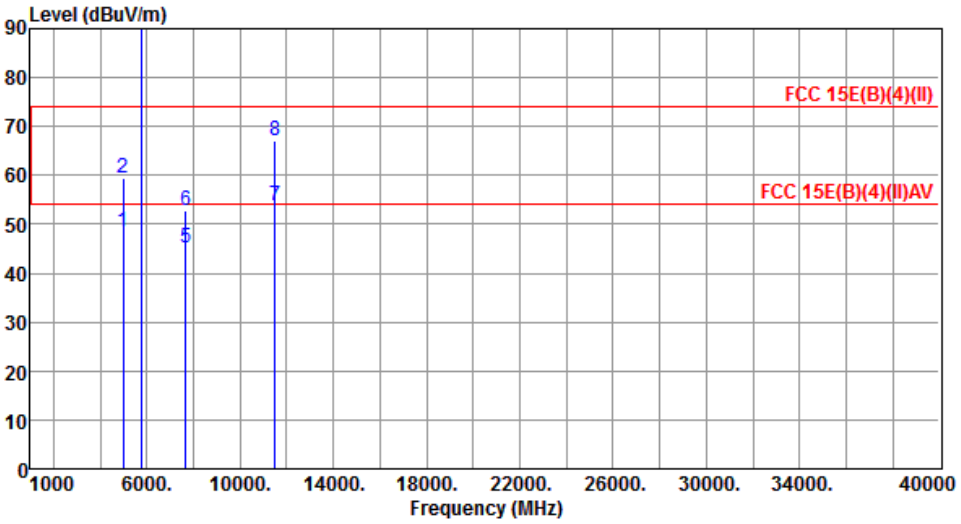
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.39	54.00	-6.61	43.22	4.17	Average	285	211
2		5000.00	57.60	74.00	-16.40	53.43	4.17	Peak	285	211
3	*	5745.00	101.00			95.86	5.14	Average	119	144
4	*	5745.00	113.86			108.72	5.14	Peak	119	144
5		7660.00	38.66	54.00	-15.34	29.87	8.79	Average	333	211
6		7660.00	49.08	74.00	-24.92	40.29	8.79	Peak	333	211
7		11490.00	45.88	54.00	-8.12	30.35	15.53	Average	322	359
8		11490.00	58.40	74.00	-15.60	42.87	15.53	Peak	322	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

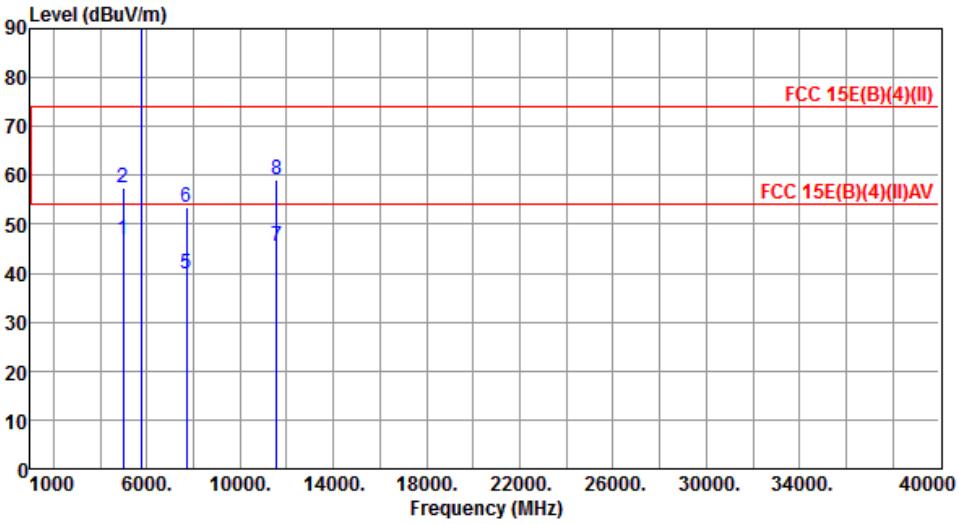
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	48.52	54.00	-5.48	44.35	4.17	Average	266	311
2		5000.00	59.51	74.00	-14.49	55.34	4.17	Peak	266	311
3	*	5745.00	111.32			106.18	5.14	Average	324	50
4	*	5745.00	123.74			118.60	5.14	Peak	324	50
5		7660.00	45.18	54.00	-8.82	36.39	8.79	Average	288	352
6		7660.00	52.96	74.00	-21.04	44.17	8.79	Peak	288	352
7		11490.00	53.64	54.00	-0.36	38.11	15.53	Average	341	307
8		11490.00	67.11	74.00	-6.89	51.58	15.53	Peak	341	307

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

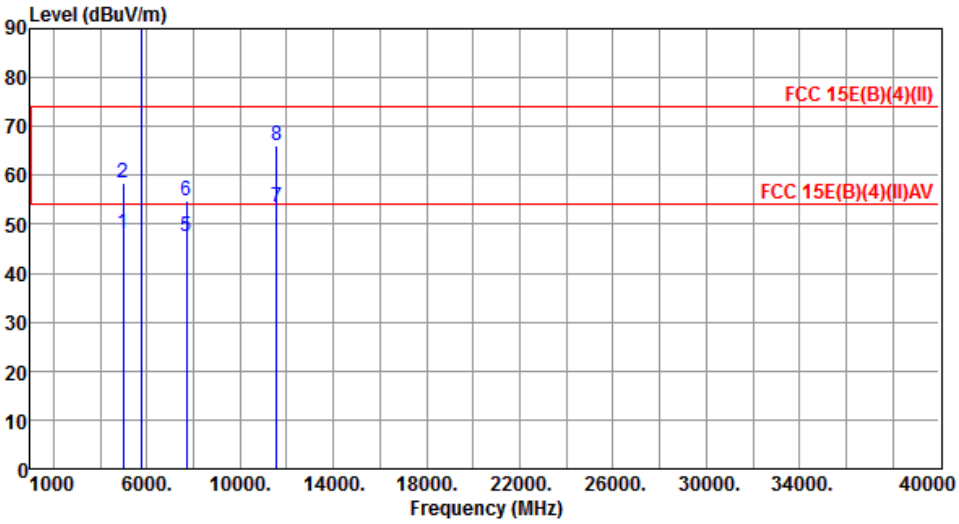
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	46.70	54.00	-7.30	42.53	4.17	Average	288	215
2		5000.00	57.46	74.00	-16.54	53.29	4.17	Peak	288	215
3	*	5785.00	101.72			96.53	5.19	Average	111	133
4	*	5785.00	114.30			109.11	5.19	Peak	111	133
5		7713.33	39.96	54.00	-14.04	31.22	8.74	Average	313	131
6		7713.33	53.63	74.00	-20.37	44.89	8.74	Peak	313	131
7		11570.00	45.55	54.00	-8.45	30.22	15.33	Average	323	351
8		11570.00	58.99	74.00	-15.01	43.66	15.33	Peak	323	351

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

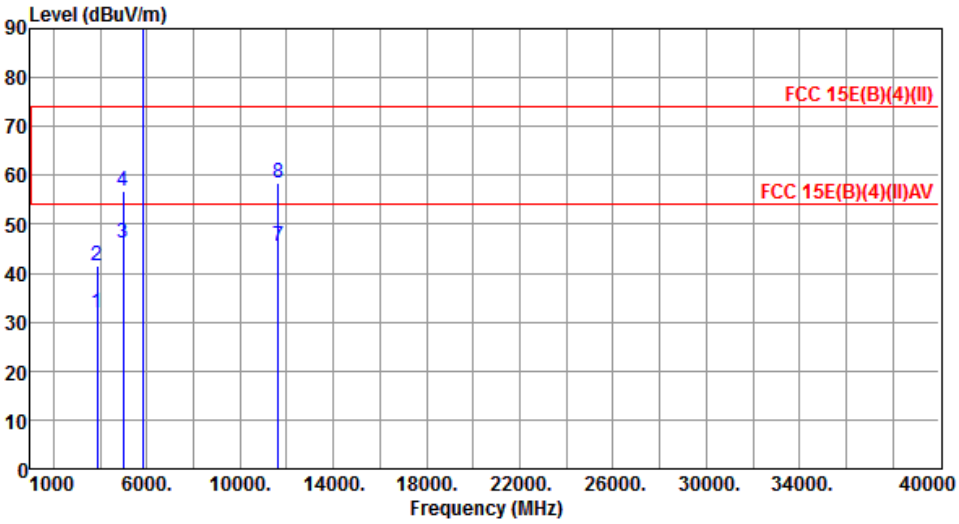
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	48.05	54.00	-5.95	43.88	4.17	Average	266	343
2		5000.00	58.34	74.00	-15.66	54.17	4.17	Peak	266	343
3	*	5785.00	111.56			106.37	5.19	Average	333	59
4	*	5785.00	123.97			118.78	5.19	Peak	333	59
5		7713.33	47.59	54.00	-6.41	38.85	8.74	Average	111	206
6		7713.33	54.71	74.00	-19.29	45.97	8.74	Peak	111	206
7		11570.00	53.56	54.00	-0.44	38.23	15.33	Average	357	300
8		11570.00	66.02	74.00	-7.98	50.69	15.33	Peak	357	300

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

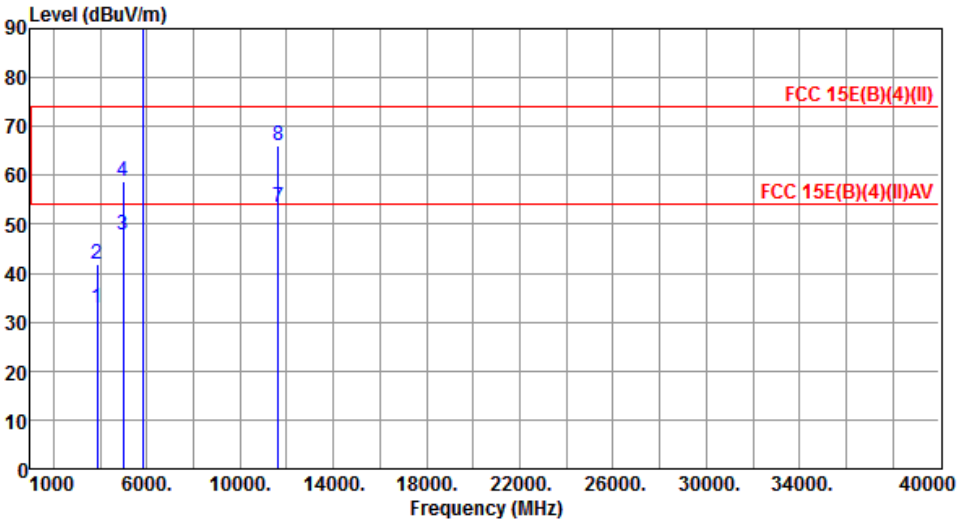
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		3883.33	32.01	54.00	-21.99	30.87	1.14	Average	199	222
2		3883.33	41.46	74.00	-32.54	40.32	1.14	Peak	199	222
3		5000.00	46.04	54.00	-7.96	41.87	4.17	Average	299	232
4		5000.00	56.95	74.00	-17.05	52.78	4.17	Peak	299	232
5	*	5825.00	101.60			96.36	5.24	Average	123	155
6	*	5825.00	113.50			108.26	5.24	Peak	123	155
7		11650.00	45.37	54.00	-8.63	30.28	15.09	Average	322	349
8		11650.00	58.37	74.00	-15.63	43.28	15.09	Peak	322	349

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

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

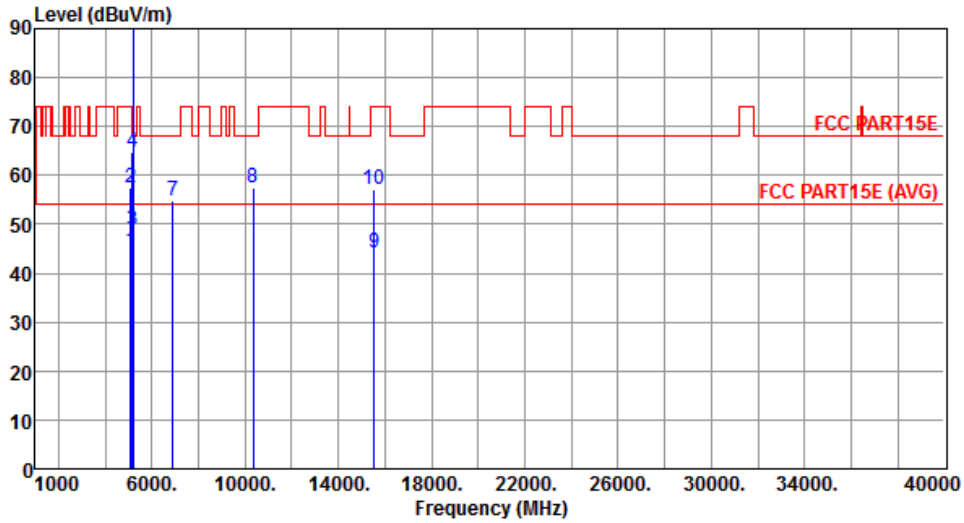


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		3883.33	32.73	54.00	-21.27	31.59	1.14	Average	188	265
2		3883.33	41.73	74.00	-32.27	40.59	1.14	Peak	188	265
3		5000.00	47.76	54.00	-6.24	43.59	4.17	Average	226	355
4		5000.00	58.72	74.00	-15.28	54.55	4.17	Peak	226	355
5	*	5825.00	111.44			106.20	5.24	Average	335	63
6	*	5825.00	123.96			118.72	5.24	Peak	335	63
7		11650.00	53.53	54.00	-0.47	38.44	15.09	Average	362	299
8		11650.00	66.24	74.00	-7.76	51.15	15.09	Peak	362	299

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

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

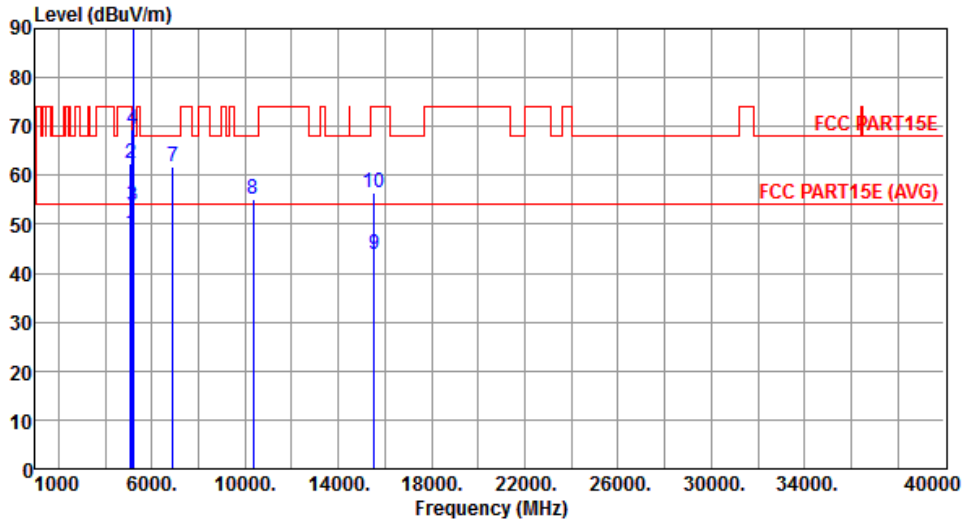
Modulation	VHT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5103.00	44.51	54.00	-9.49	40.18	4.33	Average	240	357
2		5103.00	57.45	74.00	-16.55	53.12	4.33	Peak	240	357
3		5150.00	48.88	54.00	-5.12	44.48	4.40	Average	240	357
4		5150.00	64.89	74.00	-9.11	60.49	4.40	Peak	240	357
5	*	5180.00	103.43			98.99	4.44	Average	240	357
6	*	5180.00	115.67			111.23	4.44	Peak	240	357
7		6906.00	54.96	68.20	-13.24	47.22	7.74	Peak	100	23
8		10360.00	57.45	68.20	-10.75	43.25	14.20	Peak	100	55
9		15540.00	44.25	54.00	-9.75	29.14	15.11	Average	100	192
10		15540.00	56.98	74.00	-17.02	41.87	15.11	Peak	100	192

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

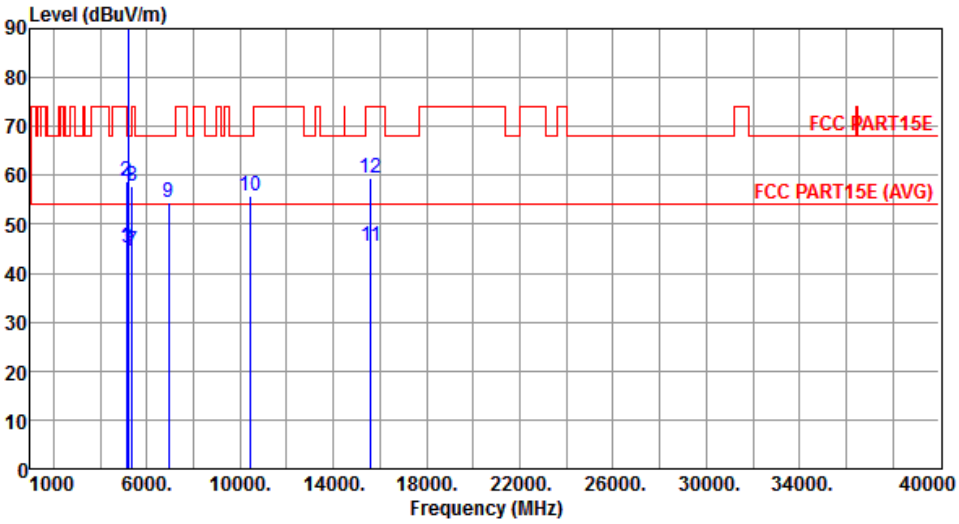
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5103.00	48.21	54.00	-5.79	43.88	4.33	Average	100	206
2		5103.00	62.37	74.00	-11.63	58.04	4.33	Peak	100	206
3		5150.00	53.73	54.00	-0.27	49.33	4.40	Average	100	26
4		5150.00	69.50	74.00	-4.50	65.10	4.40	Peak	100	26
5	*	5180.00	110.20			105.76	4.44	Average	100	206
6	*	5180.00	121.83			117.39	4.44	Peak	100	206
7		6906.00	61.80	68.20	-6.40	54.06	7.74	Peak	247	336
8		10360.00	55.13	68.20	-13.07	40.93	14.20	Peak	100	214
9		15540.00	43.68	54.00	-10.32	28.57	15.11	Average	100	148
10		15540.00	56.50	74.00	-17.50	41.39	15.11	Peak	100	148

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

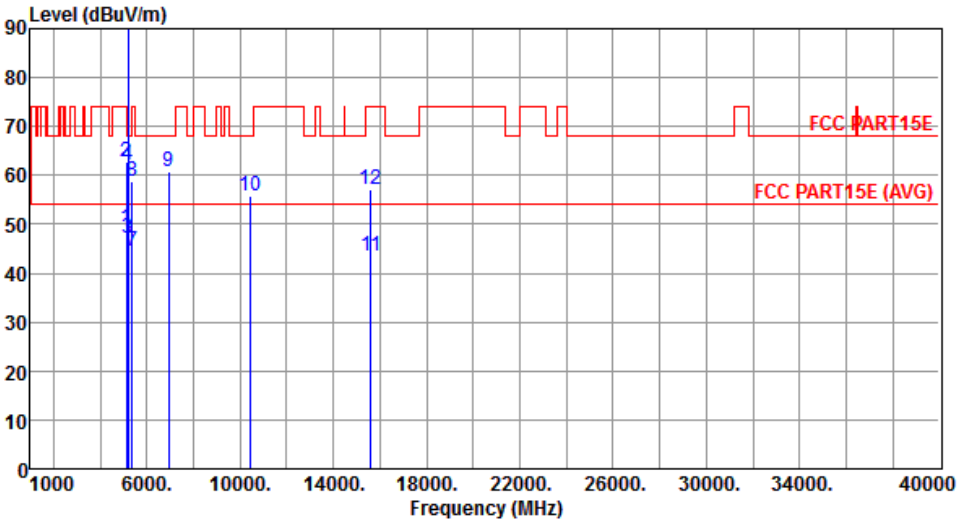
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5122.00	45.17	54.00	-8.83	40.82	4.35	Average	133	348
2		5122.00	58.63	74.00	-15.37	54.28	4.35	Peak	133	348
3		5150.00	45.10	54.00	-8.90	40.70	4.40	Average	133	342
4		5150.00	58.05	74.00	-15.95	53.65	4.40	Peak	133	342
5	*	5200.00	103.85			99.37	4.48	Average	133	342
6	*	5200.00	115.21			110.73	4.48	Peak	133	342
7		5350.00	44.67	54.00	-9.33	40.03	4.64	Average	133	342
8		5350.00	57.91	74.00	-16.09	53.27	4.64	Peak	133	342
9		6933.00	54.45	68.20	-13.75	46.68	7.77	Peak	228	25
10		10400.00	55.80	68.20	-12.40	41.52	14.28	Peak	100	289
11		15600.00	45.59	54.00	-8.41	30.57	15.02	Average	100	297
12		15600.00	59.31	74.00	-14.69	44.29	15.02	Peak	100	297

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

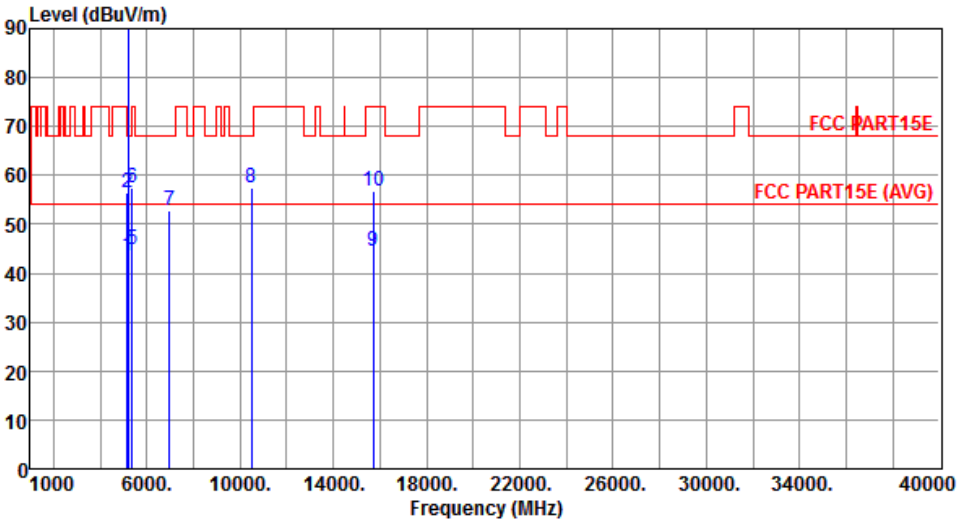
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5122.00	49.30	54.00	-4.70	44.95	4.35	Average	100	127
2		5122.00	62.64	74.00	-11.36	58.29	4.35	Peak	100	127
3		5150.00	47.14	54.00	-6.86	42.74	4.40	Average	100	24
4		5150.00	62.13	74.00	-11.87	57.73	4.40	Peak	100	24
5	*	5200.00	111.58			107.10	4.48	Average	100	127
6	*	5200.00	124.02			119.54	4.48	Peak	100	127
7		5350.00	44.50	54.00	-9.50	39.86	4.64	Average	100	127
8		5350.00	58.84	74.00	-15.16	54.20	4.64	Peak	100	127
9		6933.00	60.84	68.20	-7.36	53.07	7.77	Peak	243	336
10		10400.00	55.73	68.20	-12.47	41.45	14.28	Peak	100	86
11		15600.00	43.42	54.00	-10.58	28.40	15.02	Average	100	322
12		15600.00	57.19	74.00	-16.81	42.17	15.02	Peak	100	322

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

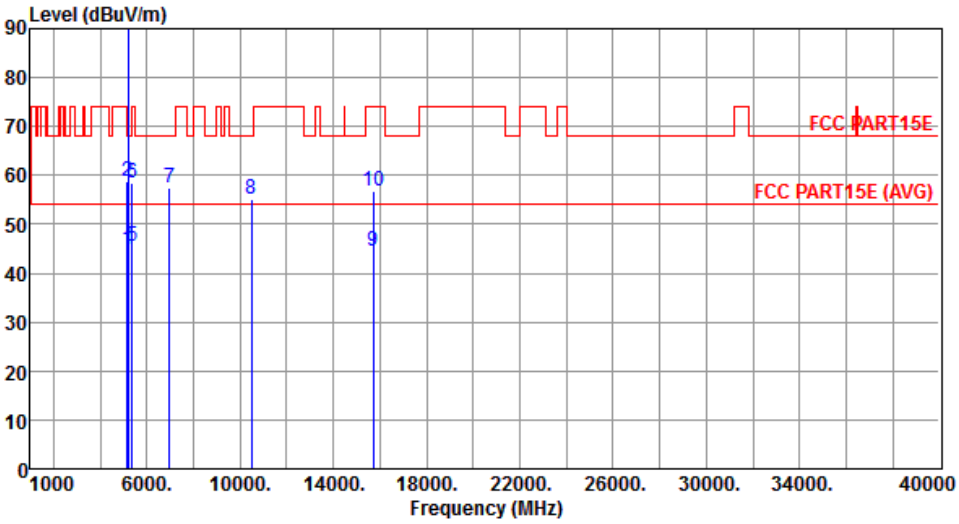
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	43.35	54.00	-10.65	38.95	4.40	Average	152	342
2		5150.00	56.53	74.00	-17.47	52.13	4.40	Peak	152	342
3	*	5240.00	103.85			99.33	4.52	Average	152	342
4	*	5240.00	115.14			110.62	4.52	Peak	152	342
5		5350.00	44.98	54.00	-9.02	40.34	4.64	Average	152	342
6		5350.00	57.57	74.00	-16.43	52.93	4.64	Peak	152	342
7		6986.00	52.78	68.20	-15.42	44.94	7.84	Peak	235	24
8		10480.00	57.47	68.20	-10.73	43.04	14.43	Peak	121	60
9		15720.00	44.66	54.00	-9.34	29.79	14.87	Average	100	325
10		15720.00	56.66	74.00	-17.34	41.79	14.87	Peak	100	325

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

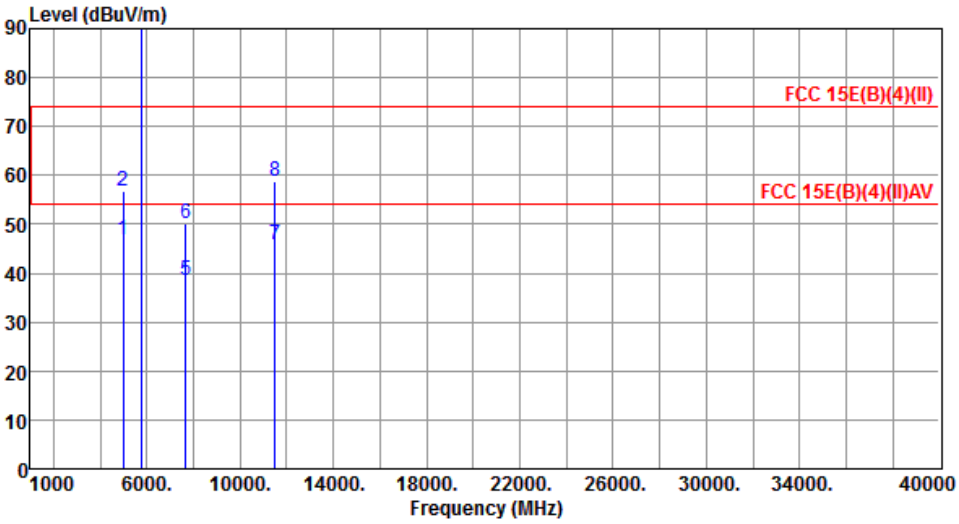
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	44.70	54.00	-9.30	40.30	4.40	Average	151	127
2		5150.00	58.63	74.00	-15.37	54.23	4.40	Peak	151	127
3	*	5240.00	111.88			107.36	4.52	Average	101	205
4	*	5240.00	123.74			119.22	4.52	Peak	101	205
5		5350.00	45.59	54.00	-8.41	40.95	4.64	Average	101	205
6		5350.00	58.52	74.00	-15.48	53.88	4.64	Peak	101	205
7		6986.00	57.52	68.20	-10.68	49.68	7.84	Peak	247	336
8		10480.00	55.18	68.20	-13.02	40.75	14.43	Peak	100	311
9		15720.00	44.36	54.00	-9.64	29.49	14.87	Average	100	186
10		15720.00	56.75	74.00	-17.25	41.88	14.87	Peak	100	186

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

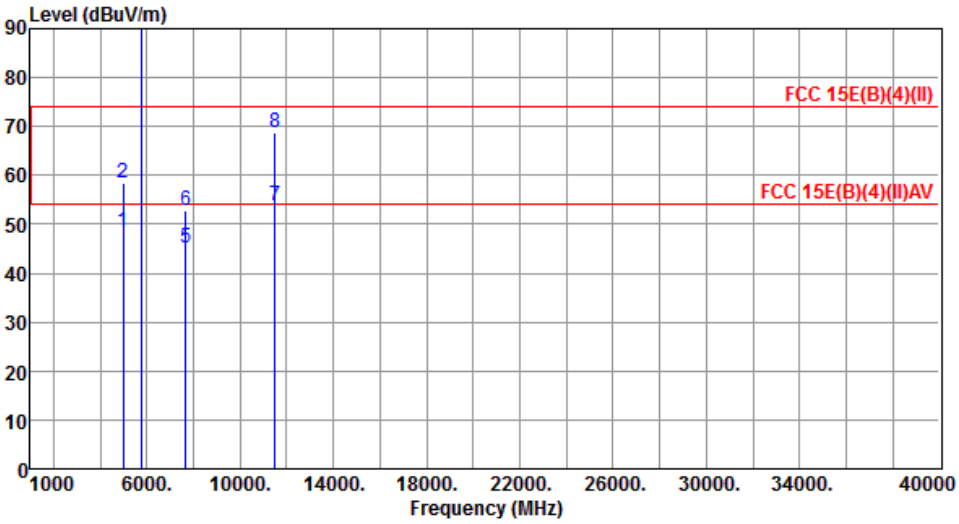
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	46.95	54.00	-7.05	42.78	4.17	Average	277	221
2		5000.00	56.72	74.00	-17.28	52.55	4.17	Peak	277	211
3	*	5745.00	101.50			96.36	5.14	Average	118	153
4	*	5745.00	113.40			108.26	5.14	Peak	118	153
5		7660.00	38.66	54.00	-15.34	29.87	8.79	Average	333	143
6		7660.00	50.11	74.00	-23.89	41.32	8.79	Peak	333	143
7		11490.00	45.77	54.00	-8.23	30.24	15.53	Average	322	344
8		11490.00	58.74	74.00	-15.26	43.21	15.53	Peak	322	344

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

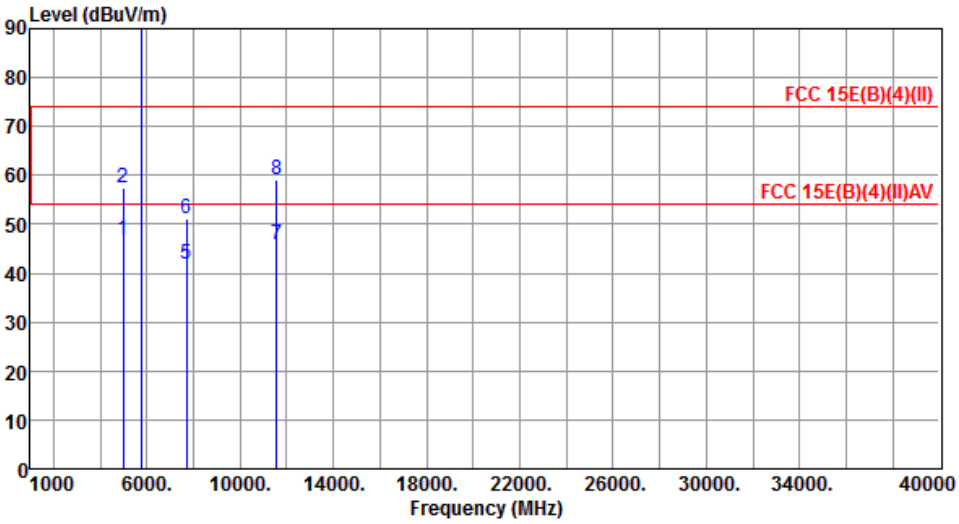
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	48.35	54.00	-5.65	44.18	4.17	Average	222	333
2		5000.00	58.52	74.00	-15.48	54.35	4.17	Peak	222	333
3	*	5745.00	111.59			106.45	5.14	Average	360	81
4	*	5745.00	123.16			118.02	5.14	Peak	360	81
5		7660.00	45.11	54.00	-8.89	36.32	8.79	Average	233	111
6		7660.00	52.88	74.00	-21.12	44.09	8.79	Peak	233	111
7		11490.00	53.70	54.00	-0.30	38.17	15.53	Average	355	299
8		11490.00	68.75	74.00	-5.25	53.22	15.53	Peak	355	299

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

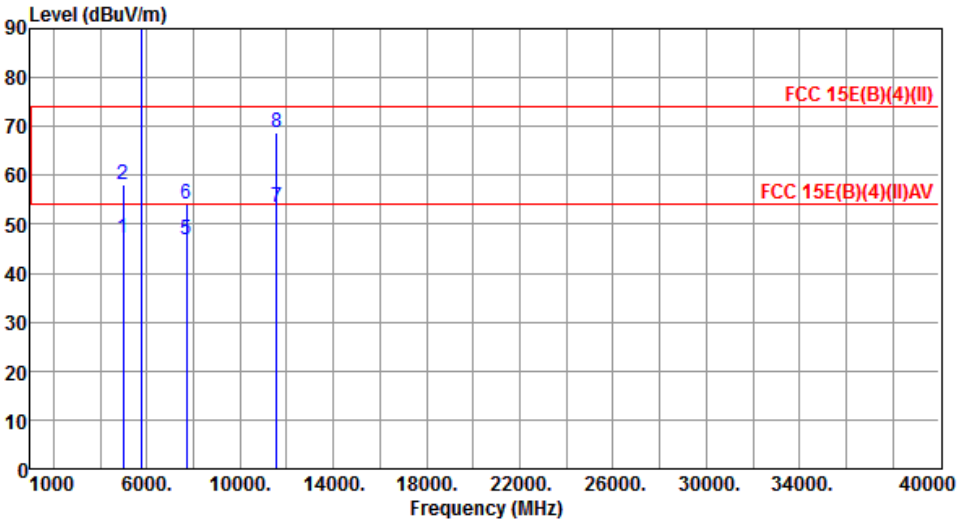
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	46.82	54.00	-7.18	42.65	4.17	Average	166	321
2		5000.00	57.46	74.00	-16.54	53.29	4.17	Peak	166	321
3	*	5785.00	102.21			97.02	5.19	Average	121	135
4	*	5785.00	113.43			108.24	5.19	Peak	121	135
5		7713.33	41.89	54.00	-12.11	33.15	8.74	Average	266	194
6		7713.33	51.27	74.00	-22.73	42.53	8.74	Peak	266	194
7		11570.00	45.68	54.00	-8.32	30.35	15.33	Average	322	343
8		11570.00	58.96	74.00	-15.04	43.63	15.33	Peak	322	343

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

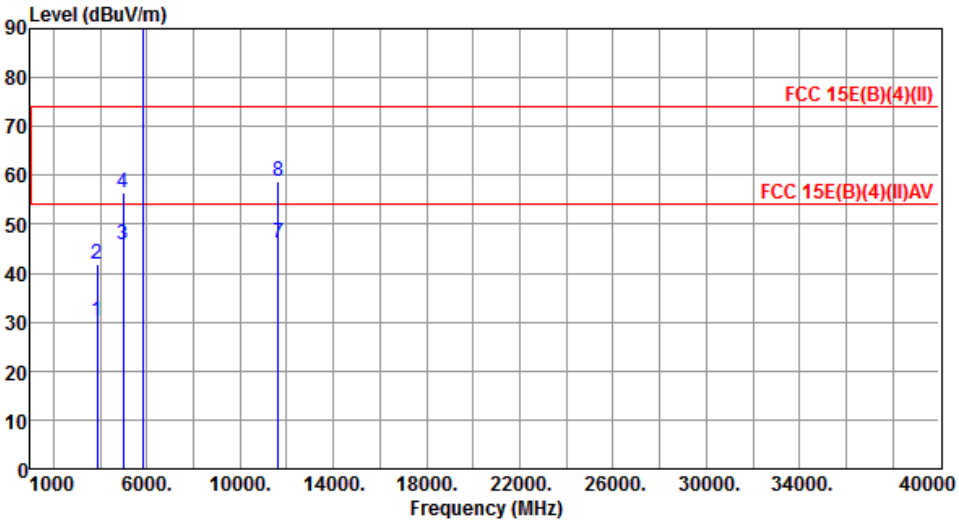
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.28	54.00	-6.72	43.11	4.17	Average	225	317
2		5000.00	58.24	74.00	-15.76	54.07	4.17	Peak	225	317
3	*	5785.00	112.57			107.38	5.19	Average	355	81
4	*	5785.00	124.18			118.99	5.19	Peak	355	81
5		7713.33	46.72	54.00	-7.28	37.98	8.74	Average	266	343
6		7713.33	54.01	74.00	-19.99	45.27	8.74	Peak	266	343
7		11570.00	53.57	54.00	-0.43	38.24	15.33	Average	359	302
8		11570.00	68.88	74.00	-5.12	53.55	15.33	Peak	359	302

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

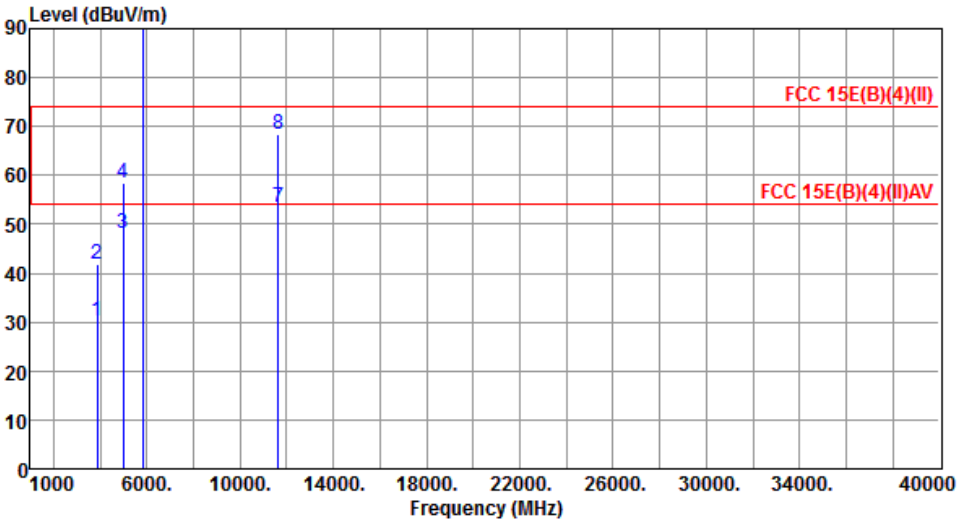
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		3883.33	30.20	54.00	-23.80	29.06	1.14	Average	188	343
2		3883.33	41.73	74.00	-32.27	40.59	1.14	Peak	188	343
3		5000.00	45.93	54.00	-8.07	41.76	4.17	Average	299	224
4		5000.00	56.54	74.00	-17.46	52.37	4.17	Peak	299	224
5	*	5825.00	101.80			96.56	5.24	Average	118	152
6	*	5825.00	113.97			108.73	5.24	Peak	118	152
7		11650.00	46.31	54.00	-7.69	31.22	15.09	Average	313	337
8		11650.00	58.62	74.00	-15.38	43.53	15.09	Peak	313	337

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

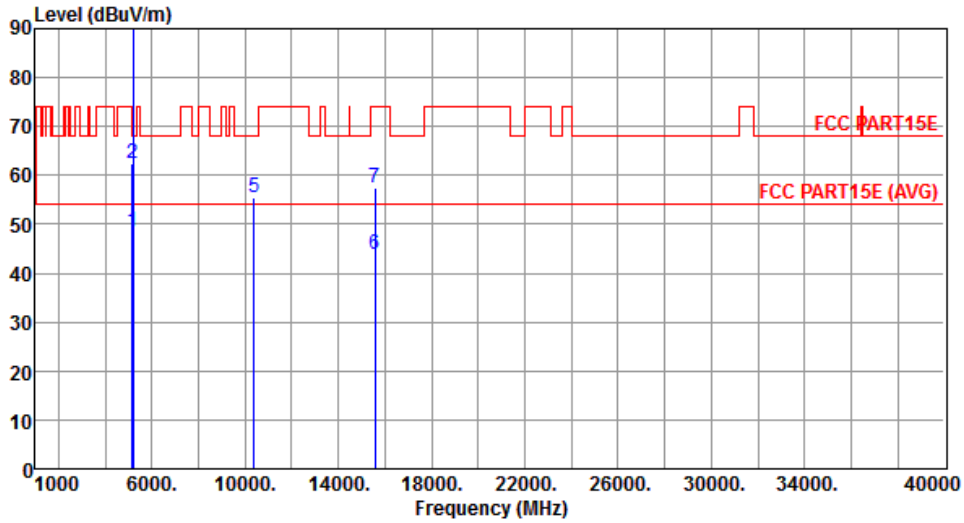


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		3883.33	30.25	54.00	-23.75	29.11	1.14	Average	165	321
2		3883.33	42.01	74.00	-31.99	40.87	1.14	Peak	165	321
3		5000.00	48.24	54.00	-5.76	44.07	4.17	Average	214	331
4		5000.00	58.46	74.00	-15.54	54.29	4.17	Peak	214	331
5	*	5825.00	112.01			106.77	5.24	Average	351	78
6	*	5825.00	123.47			118.23	5.24	Peak	351	78
7		11650.00	53.63	54.00	-0.37	38.54	15.09	Average	352	300
8		11650.00	68.45	74.00	-5.55	53.36	15.09	Peak	352	300

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

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

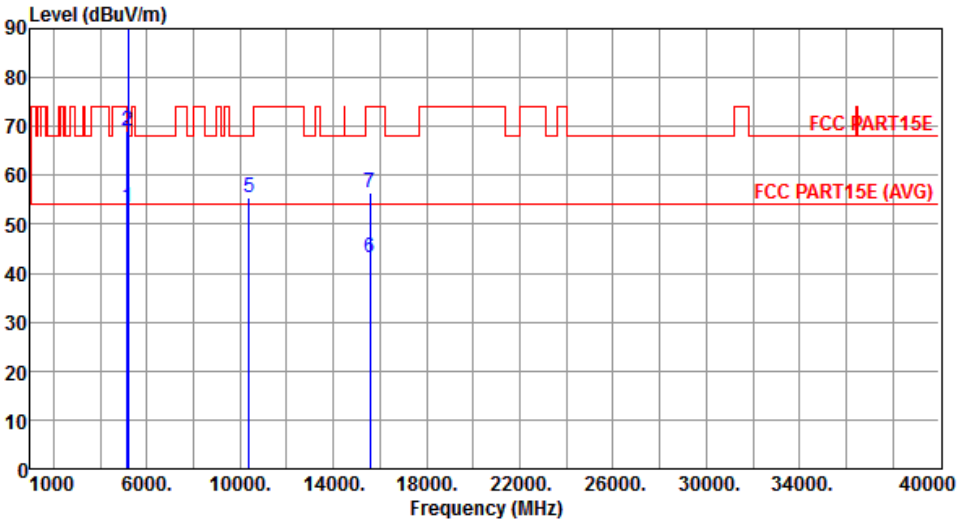
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.59	54.00	-5.41	44.19	4.40	Average	222	355
2		5150.00	62.29	74.00	-11.71	57.89	4.40	Peak	222	355
3	*	5190.00	96.89			92.43	4.46	Average	222	355
4	*	5190.00	108.35			103.89	4.46	Peak	222	355
5		10380.00	55.59	68.20	-12.61	41.34	14.25	Peak	166	29
6		15570.00	43.70	54.00	-10.30	28.64	15.06	Average	188	321
7		15570.00	57.40	74.00	-16.60	42.34	15.06	Peak	188	321

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

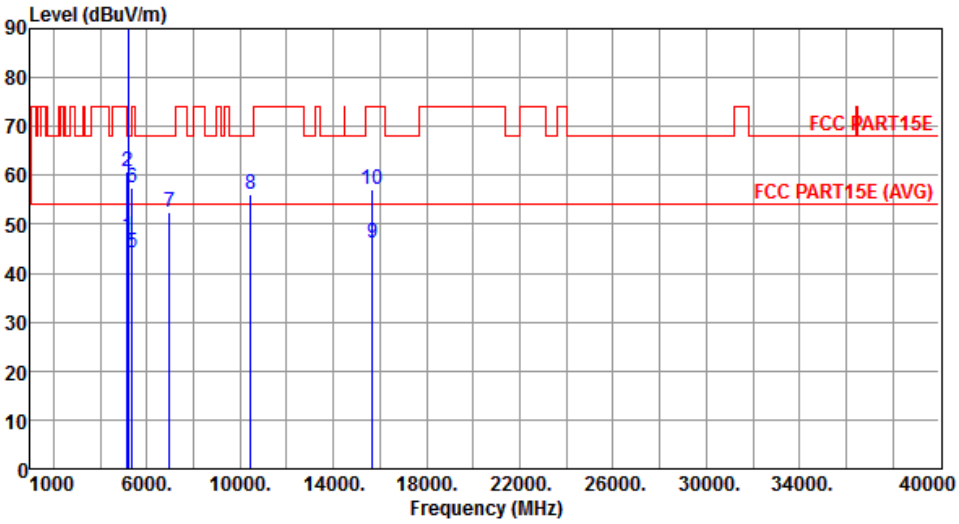
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.61	54.00	-0.39	49.21	4.40	Average	100	172
2		5150.00	69.00	74.00	-5.00	64.60	4.40	Peak	100	172
3	*	5190.00	103.82			99.36	4.46	Average	113	211
4	*	5190.00	115.29			110.83	4.46	Peak	113	211
5		10380.00	55.35	68.20	-12.85	41.10	14.25	Peak	222	165
6		15570.00	43.29	54.00	-10.71	28.23	15.06	Average	188	211
7		15570.00	56.30	74.00	-17.70	41.24	15.06	Peak	188	211

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

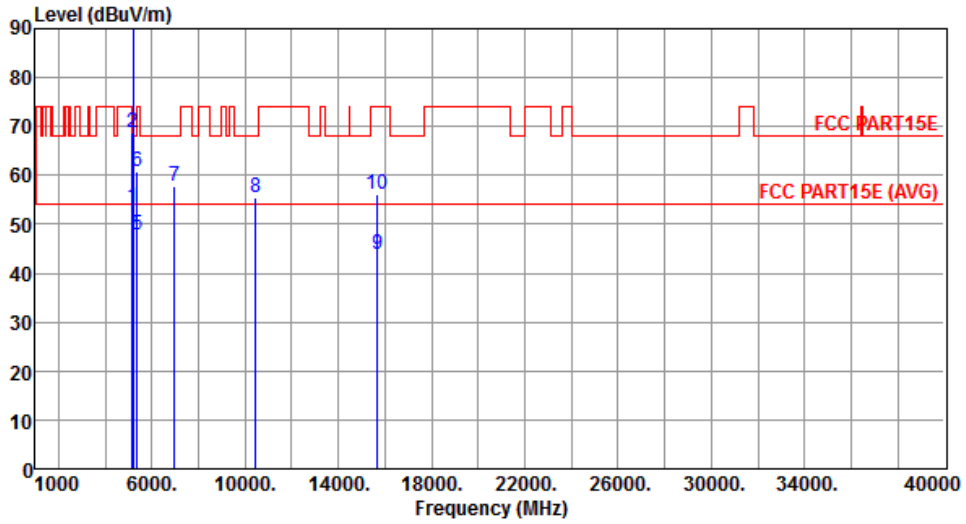
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	47.64	54.00	-6.36	43.24	4.40	Average	227	354
2		5150.00	60.79	74.00	-13.21	56.39	4.40	Peak	227	354
3	*	5230.00	103.86			99.35	4.51	Average	227	354
4	*	5230.00	115.29			110.78	4.51	Peak	227	354
5		5350.00	44.16	54.00	-9.84	39.52	4.64	Average	227	354
6		5350.00	57.51	74.00	-16.49	52.87	4.64	Peak	227	354
7		6973.33	52.59	68.20	-15.61	44.76	7.83	Peak	208	345
8		10460.00	56.22	68.20	-11.98	41.82	14.40	Peak	211	244
9		15690.00	46.13	54.00	-7.87	31.22	14.91	Average	208	12
10		15690.00	57.26	74.00	-16.74	42.35	14.91	Peak	208	12

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

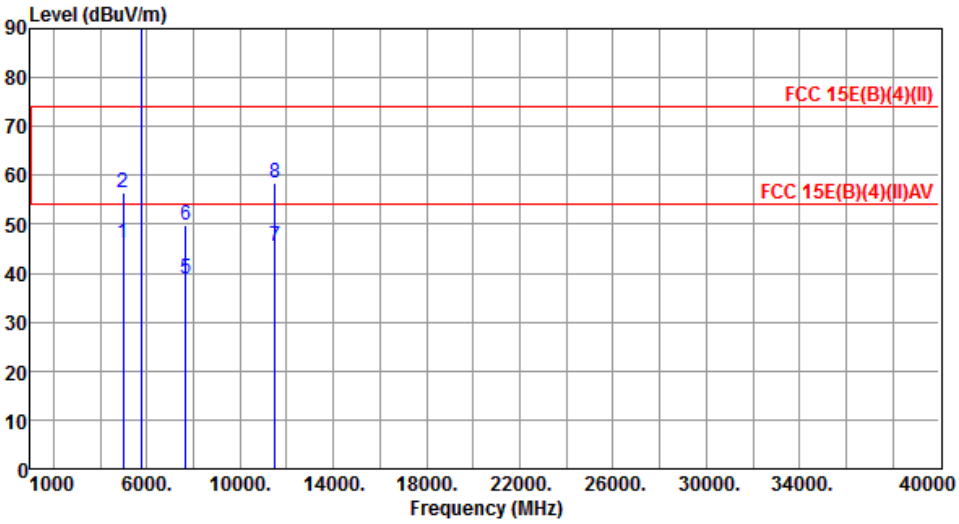
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.62	54.00	-0.38	49.22	4.40	Average	210	351
2		5150.00	68.75	74.00	-5.25	64.35	4.40	Peak	210	351
3	*	5230.00	110.49			105.98	4.51	Average	210	351
4	*	5230.00	121.89			117.38	4.51	Peak	210	351
5		5350.00	47.94	54.00	-6.06	43.30	4.64	Average	210	351
6		5350.00	60.94	74.00	-13.06	56.30	4.64	Peak	210	351
7		6973.33	57.79	68.20	-10.41	49.96	7.83	Peak	226	320
8		10460.00	55.58	68.20	-12.62	41.18	14.40	Peak	188	22
9		15690.00	43.79	54.00	-10.21	28.88	14.91	Average	222	186
10		15690.00	56.26	74.00	-17.74	41.35	14.91	Peak	222	186

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

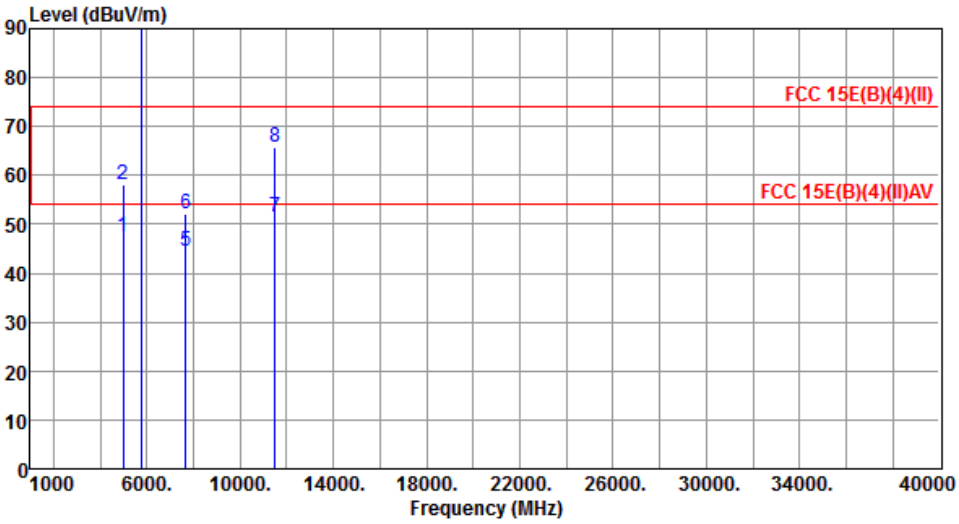
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	46.04	54.00	-7.96	41.87	4.17	Average	243	235
2		5000.00	56.61	74.00	-17.39	52.44	4.17	Peak	243	235
3	*	5755.00	98.51			93.37	5.14	Average	122	153
4	*	5755.00	110.56			105.42	5.14	Peak	122	153
5		7673.33	38.88	54.00	-15.12	30.10	8.78	Average	265	277
6		7673.33	49.91	74.00	-24.09	41.13	8.78	Peak	265	277
7		11510.00	45.66	54.00	-8.34	30.15	15.51	Average	333	357
8		11510.00	58.48	74.00	-15.52	42.97	15.51	Peak	333	357

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

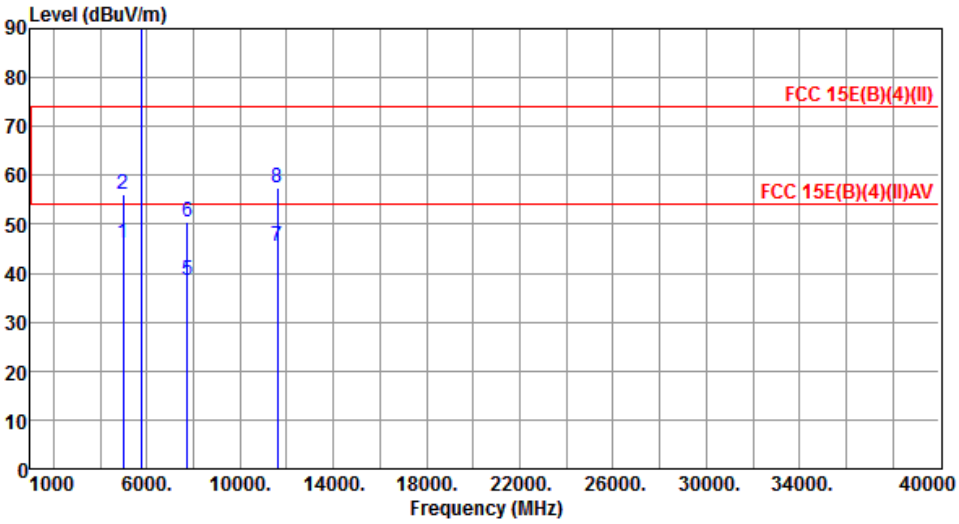
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.44	54.00	-6.56	43.27	4.17	Average	265	311
2		5000.00	58.28	74.00	-15.72	54.11	4.17	Peak	265	311
3	*	5755.00	108.36			103.22	5.14	Average	360	82
4	*	5755.00	120.35			115.21	5.14	Peak	360	82
5		7673.33	44.66	54.00	-9.34	35.88	8.78	Average	222	289
6		7673.33	52.11	74.00	-21.89	43.33	8.78	Peak	222	289
7		11510.00	51.62	54.00	-2.38	36.11	15.51	Average	336	299
8		11510.00	65.74	74.00	-8.26	50.23	15.51	Peak	336	299

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

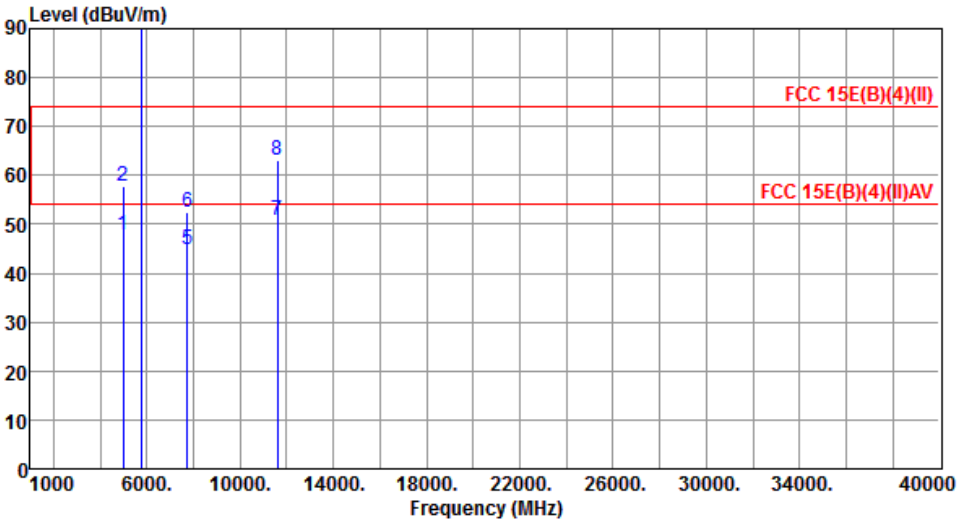
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	46.21	54.00	-7.79	42.04	4.17	Average	222	283
2		5000.00	55.96	74.00	-18.04	51.79	4.17	Peak	222	283
3	*	5795.00	98.57			93.37	5.20	Average	111	128
4	*	5795.00	110.38			105.18	5.20	Peak	111	128
5		7726.66	38.52	54.00	-15.48	29.80	8.72	Average	322	151
6		7726.66	50.62	74.00	-23.38	41.90	8.72	Peak	322	151
7		11590.00	45.36	54.00	-8.64	30.09	15.27	Average	311	334
8		11590.00	57.45	74.00	-16.55	42.18	15.27	Peak	311	334

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

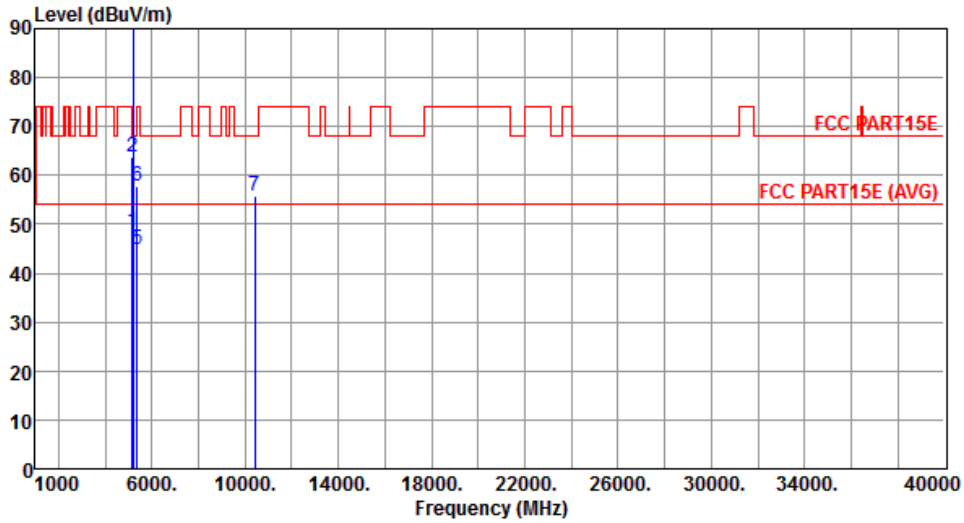


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.84	54.00	-6.16	43.67	4.17	Average	264	327
2		5000.00	57.88	74.00	-16.12	53.71	4.17	Peak	264	327
3	*	5795.00	108.42			103.22	5.20	Average	355	78
4	*	5795.00	120.51			115.31	5.20	Peak	355	78
5		7726.66	44.90	54.00	-9.10	36.18	8.72	Average	211	34
6		7726.66	52.34	74.00	-21.66	43.62	8.72	Peak	211	34
7		11590.00	50.94	54.00	-3.06	35.67	15.27	Average	334	302
8		11590.00	63.25	74.00	-10.75	47.98	15.27	Peak	334	302

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

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

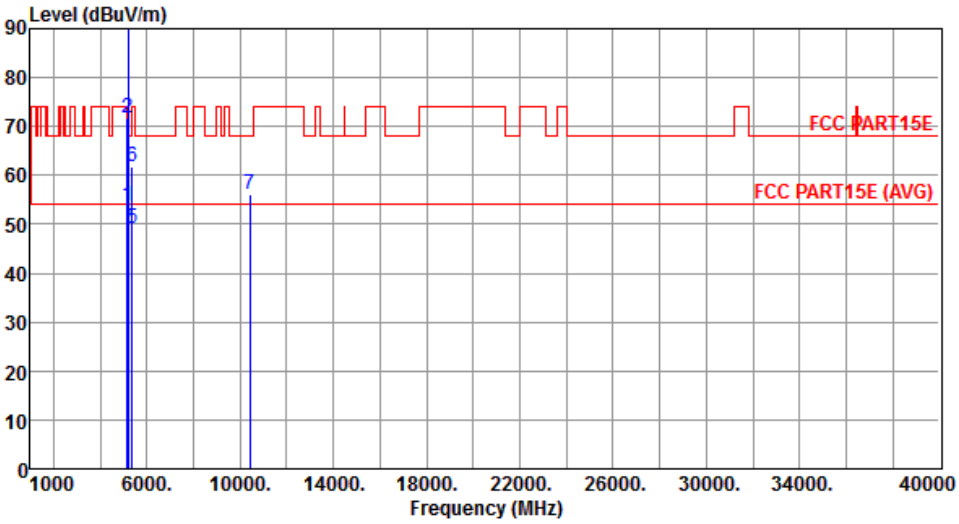
Modulation	VHT80	**Test Freq. (MHz)**	5210
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.49	54.00	-5.51	44.09	4.40	Average	235	354
2		5150.00	63.65	74.00	-10.35	59.25	4.40	Peak	235	354
3	*	5210.00	93.77			89.28	4.49	Average	235	354
4	*	5210.00	103.65			99.16	4.49	Peak	235	354
5		5350.00	44.84	54.00	-9.16	40.20	4.64	Average	235	354
6		5350.00	57.80	74.00	-16.20	53.16	4.64	Peak	235	354
7		10420.00	55.64	68.20	-12.56	41.32	14.32	Peak	195	247

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

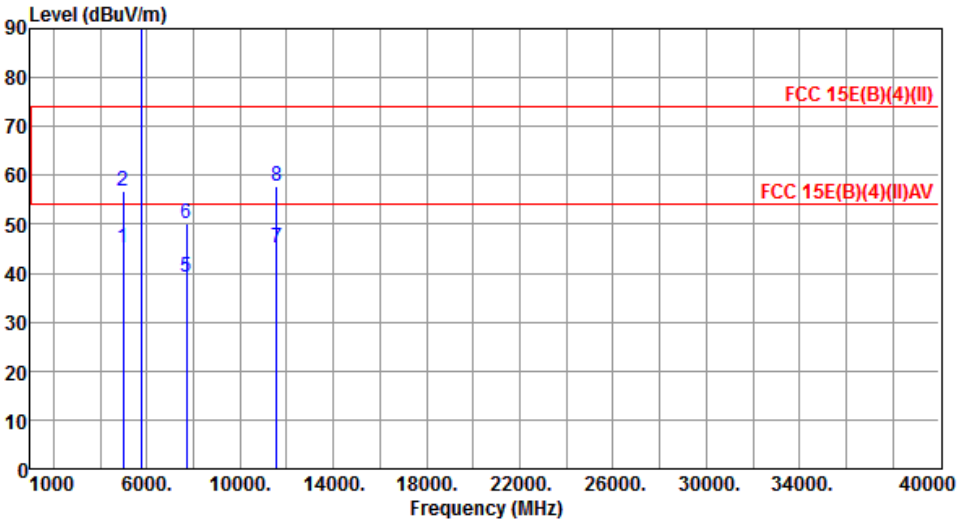
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.85	54.00	-0.15	49.45	4.40	Average	100	172
2		5150.00	71.88	74.00	-2.12	67.48	4.40	Peak	100	172
3	*	5210.00	99.60			95.11	4.49	Average	124	209
4	*	5210.00	109.12			104.63	4.49	Peak	124	209
5		5350.00	49.24	54.00	-4.76	44.60	4.64	Average	211	352
6		5350.00	61.94	74.00	-12.06	57.30	4.64	Peak	211	352
7		10420.00	55.97	68.20	-12.23	41.65	14.32	Peak	205	182

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

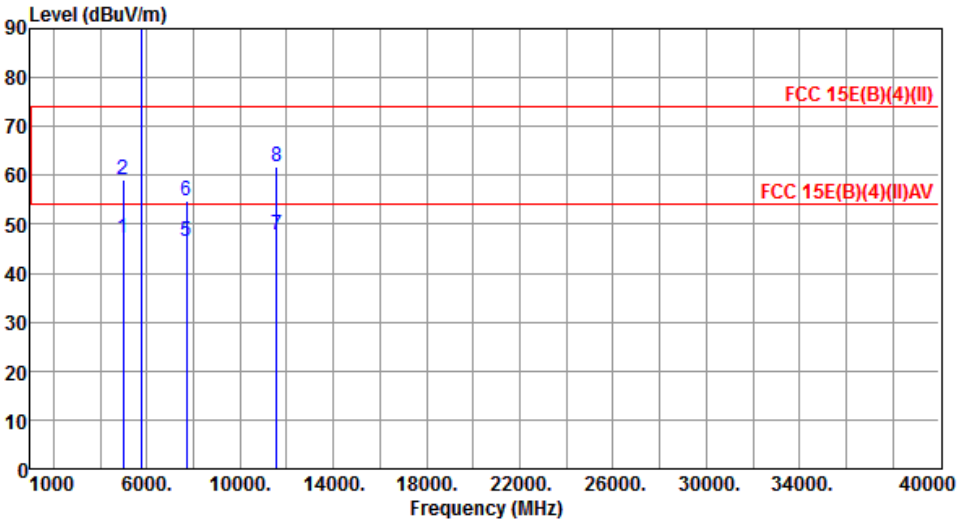
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	45.13	54.00	-8.87	40.96	4.17	Average	222	311
2		5000.00	56.82	74.00	-17.18	52.65	4.17	Peak	222	311
3	*	5775.00	96.44			91.27	5.17	Average	122	162
4	*	5775.00	106.54			101.37	5.17	Peak	122	162
5		7700.00	39.28	54.00	-14.72	30.53	8.75	Average	315	143
6		7700.00	50.02	74.00	-23.98	41.27	8.75	Peak	315	143
7		11550.00	45.10	54.00	-8.90	29.70	15.40	Average	313	342
8		11550.00	57.66	74.00	-16.34	42.26	15.40	Peak	313	342

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		

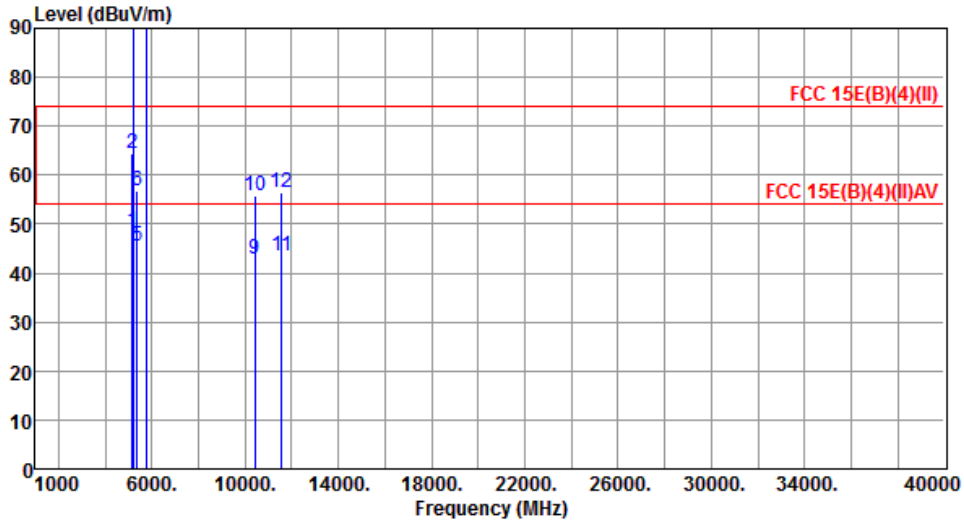


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.06	54.00	-6.94	42.89	4.17	Average	265	343
2		5000.00	58.95	74.00	-15.05	54.78	4.17	Peak	265	343
3	*	5775.00	106.28			101.11	5.17	Average	356	51
4	*	5775.00	116.23			111.06	5.17	Peak	356	51
5		7700.00	46.64	54.00	-7.36	37.89	8.75	Average	214	303
6		7700.00	54.82	74.00	-19.18	46.07	8.75	Peak	214	303
7		11550.00	47.72	54.00	-6.28	32.32	15.40	Average	356	302
8		11550.00	61.72	74.00	-12.28	46.32	15.40	Peak	356	302

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

3.5.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT80+80

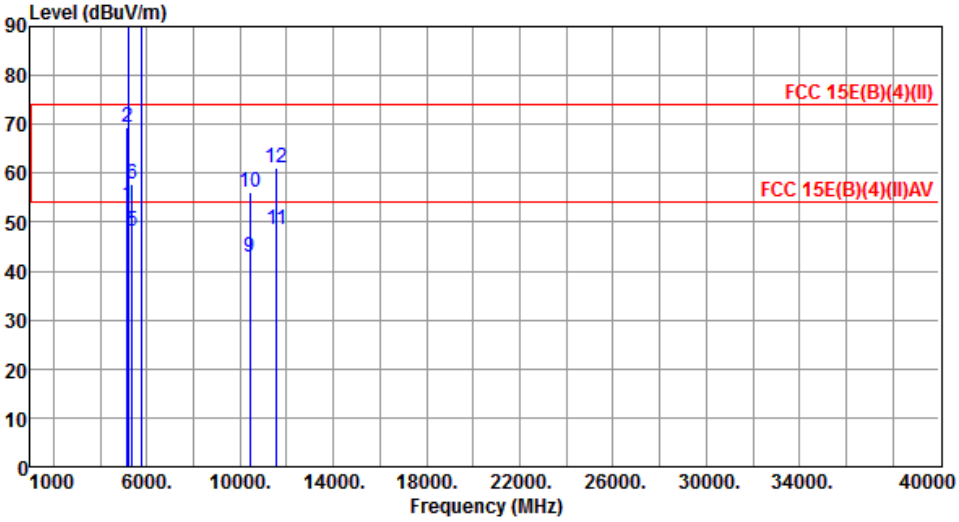
Modulation	VHT80+80	Test Freq. (MHz)	5210+5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.41	54.00	-5.59	44.01	4.40	Average	120	336
2		5150.00	64.50	74.00	-9.50	60.10	4.40	Peak	120	336
3	*	5210.00	93.38			88.89	4.49	Average	122	338
4	*	5210.00	102.44			97.95	4.49	Peak	122	338
5		5350.00	45.59	54.00	-8.41	40.95	4.64	Average	122	338
6		5350.00	56.91	74.00	-17.09	52.27	4.64	Peak	122	338
7	*	5775.00	93.60			88.43	5.17	Average	166	83
8	*	5775.00	103.48			98.31	5.17	Peak	166	83
9		10420.00	42.94	54.00	-11.06	28.62	14.32	Average	229	313
10		10420.00	55.95	74.00	-18.05	41.63	14.32	Peak	229	313
11		11550.00	43.42	54.00	-10.58	28.02	15.40	Average	100	320
12		11550.00	56.61	74.00	-17.39	41.21	15.40	Peak	100	320

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	VHT80+80	Test Freq. (MHz)	5210+5775
Polarization	Vertical		



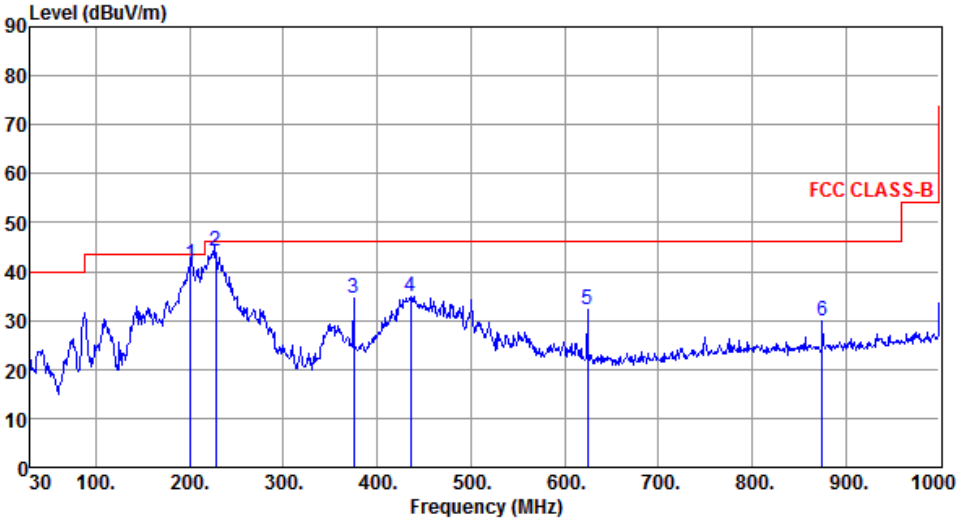
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	53.56	54.00	-0.44	49.16	4.40	Average	114	340
2		5150.00	69.56	74.00	-4.44	65.16	4.40	Peak	114	340
3	*	5210.00	97.86			93.37	4.49	Average	100	205
4	*	5210.00	107.92			103.43	4.49	Peak	100	205
5		5350.00	48.06	54.00	-5.94	43.42	4.64	Average	100	348
6		5350.00	57.87	74.00	-16.13	53.23	4.64	Peak	100	348
7	*	5775.00	103.35			98.18	5.17	Average	163	309
8	*	5775.00	113.34			108.17	5.17	Peak	163	309
9		10420.00	42.98	54.00	-11.02	28.66	14.32	Average	222	183
10		10420.00	56.11	74.00	-17.89	41.79	14.32	Peak	222	183
11		11550.00	48.38	54.00	-5.62	32.98	15.40	Average	333	325
12		11550.00	60.94	74.00	-13.06	45.54	15.40	Peak	333	325

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Beamforming mode

3.5.10 Transmitter Radiated Unwanted Emissions (Below 1GHz)

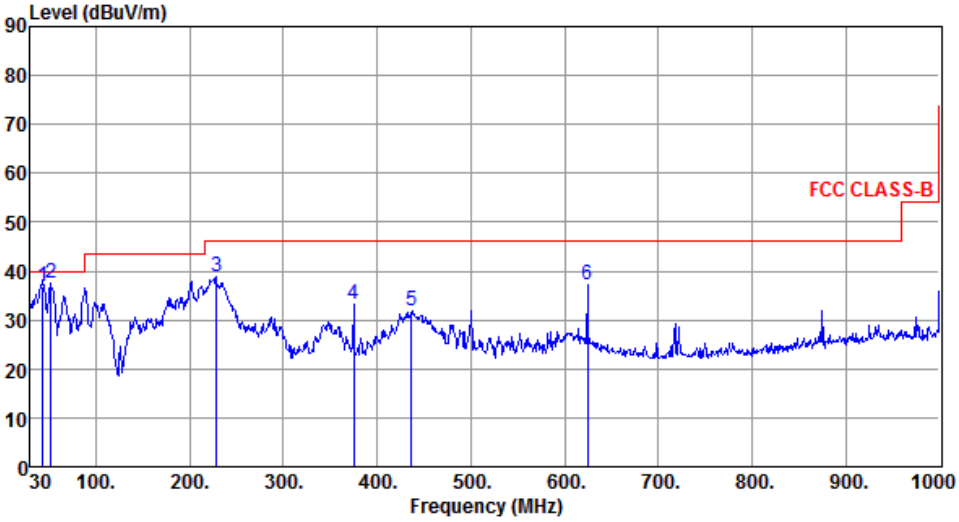
Modulation	VHT40	**Test Freq. (MHz)**	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	200.93	41.37	43.50	-2.13	60.66	-19.29	QP	100	185
2	227.53	44.27	46.00	-1.73	62.96	-18.69	QP	100	223
3	375.30	34.49	46.00	-11.51	48.59	-14.10	Peak	---	---
4	435.56	34.93	46.00	-11.07	47.46	-12.53	Peak	---	---
5	624.80	32.14	46.00	-13.86	41.24	-9.10	Peak	---	---
6	874.88	29.79	46.00	-16.21	35.35	-5.56	Peak	---	---

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

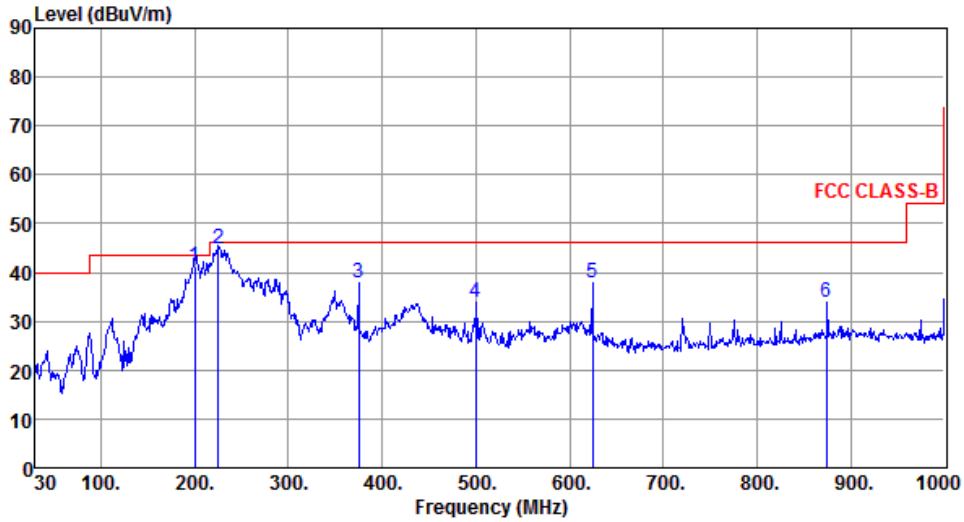
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	43.47	36.94	40.00	-3.06	53.41	-16.47	QP	100	17
2	51.60	37.69	40.00	-2.31	54.23	-16.54	QP	100	353
3	228.45	39.01	46.00	-6.99	57.66	-18.65	Peak	---	---
4	375.50	33.22	46.00	-12.78	47.32	-14.10	Peak	---	---
5	436.82	31.91	46.00	-14.09	44.41	-12.50	Peak	---	---
6	624.40	37.18	46.00	-8.82	46.29	-9.11	Peak	---	---

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

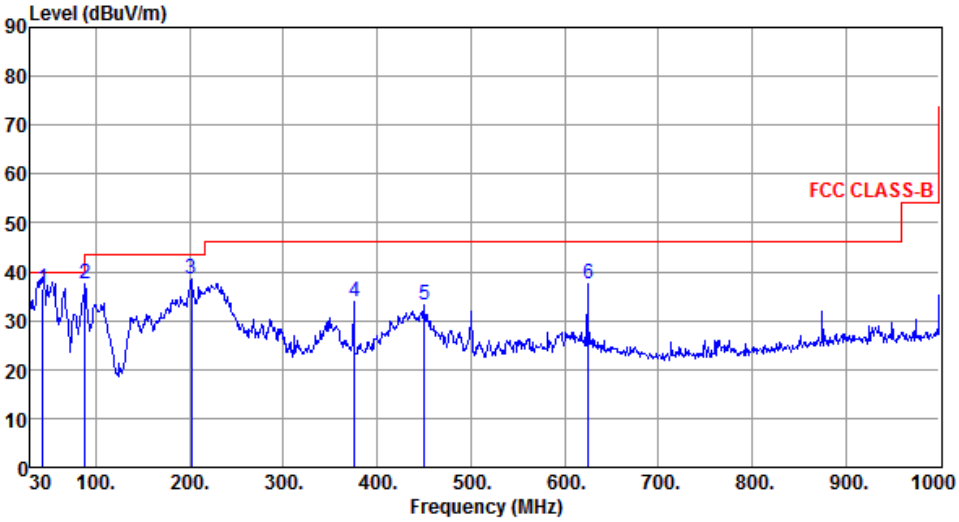
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	199.85	41.23	43.50	-2.27	60.51	-19.28	QP	100	155
2	225.00	44.85	46.00	-1.15	63.65	-18.80	QP	100	336
3	374.85	38.01	46.00	-7.99	52.12	-14.11	Peak	---	---
4	500.00	34.01	46.00	-11.99	45.13	-11.12	Peak	---	---
5	624.35	37.75	46.00	-8.25	46.86	-9.11	Peak	---	---
6	874.07	34.02	46.00	-11.98	39.59	-5.57	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		

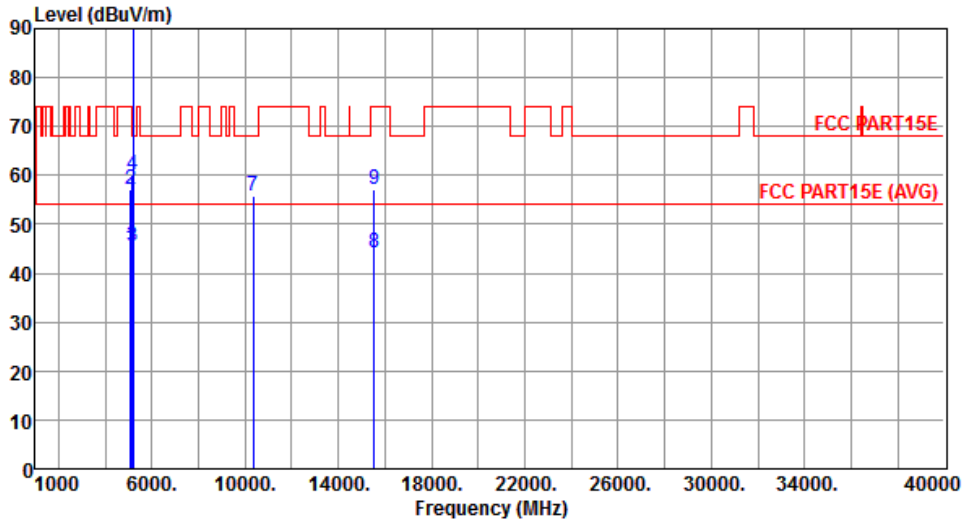


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	43.45	36.47	40.00	-3.53	52.95	-16.48	QP	100	59
2	88.51	37.61	43.50	-5.89	60.34	-22.73	Peak	---	---
3	201.50	38.45	43.50	-5.05	57.75	-19.30	Peak	---	---
4	375.85	33.84	46.00	-12.16	47.93	-14.09	Peak	---	---
5	450.55	33.21	46.00	-12.79	45.37	-12.16	Peak	---	---
6	625.13	37.40	46.00	-8.60	46.49	-9.09	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.

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

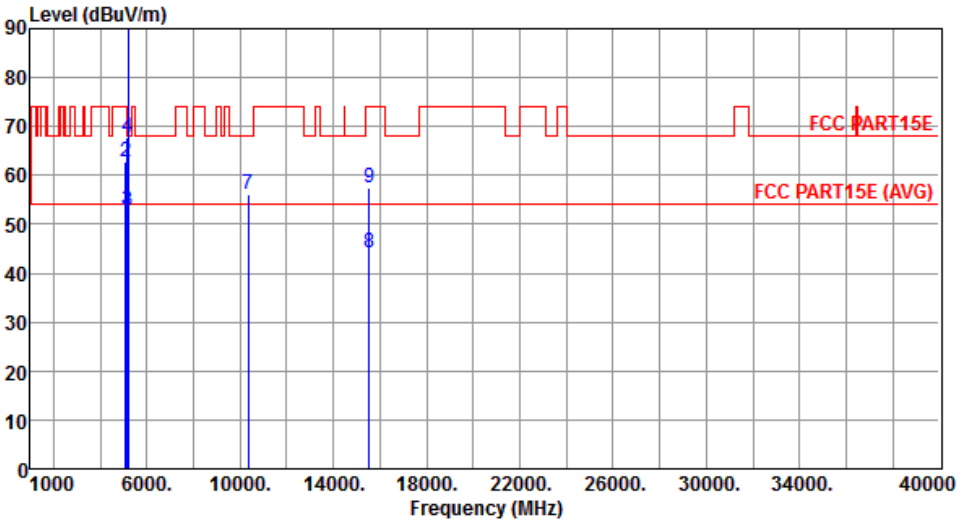
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5100.00	45.10	54.00	-8.90	40.77	4.33	Average	222	114
2		5100.00	56.97	74.00	-17.03	52.64	4.33	Peak	222	114
3		5150.00	45.48	54.00	-8.52	41.08	4.40	Average	203	53
4		5150.00	59.95	74.00	-14.05	55.55	4.40	Peak	203	53
5	*	5180.00	103.92			99.48	4.44	Average	203	84
6	*	5180.00	116.04			111.60	4.44	Peak	203	84
7		10360.00	55.85	68.20	-12.35	41.65	14.20	Peak	133	199
8		15540.00	44.29	54.00	-9.71	29.18	15.11	Average	188	243
9		15540.00	57.29	74.00	-16.71	42.18	15.11	Peak	188	243

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

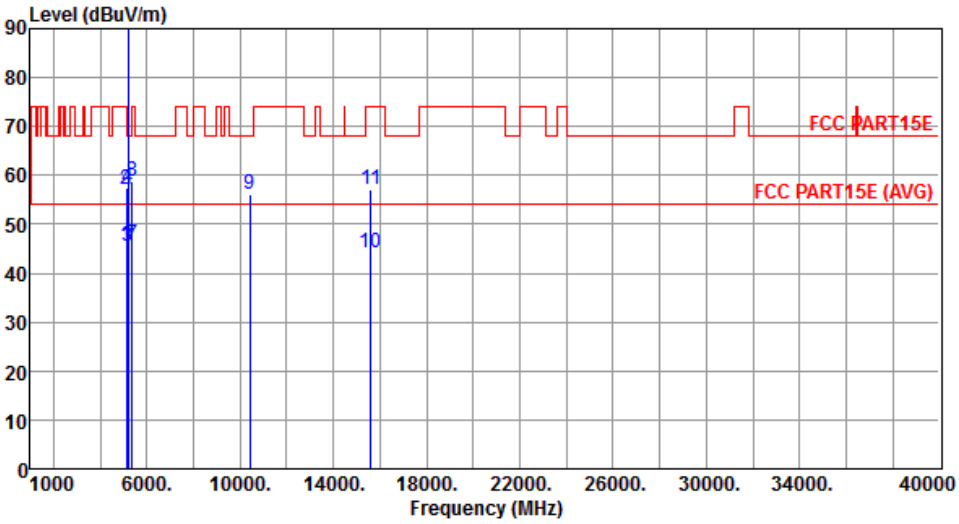
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5100.00	51.57	54.00	-2.43	47.24	4.33	Average	100	216
2		5100.00	62.75	74.00	-11.25	58.42	4.33	Peak	100	216
3		5150.00	52.72	54.00	-1.28	48.32	4.40	Average	100	216
4		5150.00	67.83	74.00	-6.17	63.43	4.40	Peak	100	216
5	*	5180.00	110.61			106.17	4.44	Average	217	196
6	*	5180.00	122.63			118.19	4.44	Peak	217	196
7		10360.00	56.03	68.20	-12.17	41.83	14.20	Peak	222	285
8		15540.00	44.33	54.00	-9.67	29.22	15.11	Average	233	143
9		15540.00	57.46	74.00	-16.54	42.35	15.11	Peak	233	143

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

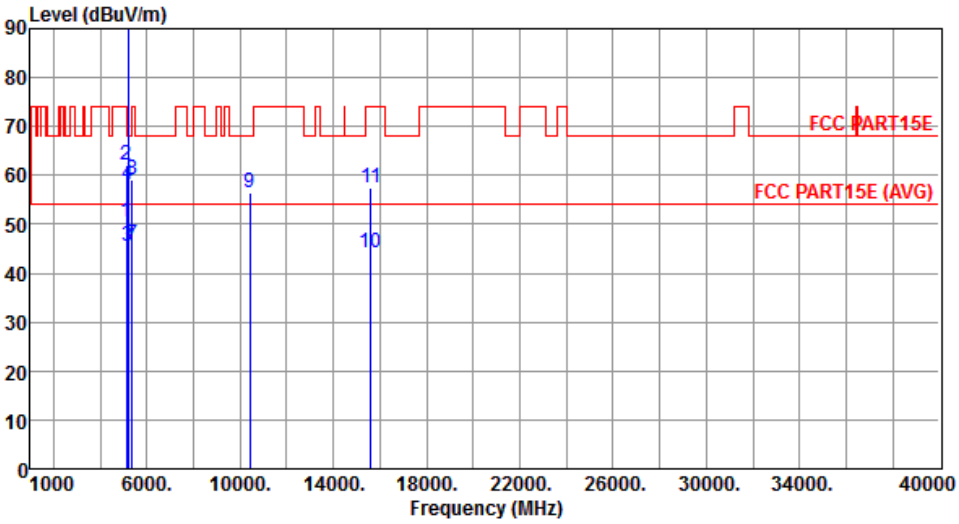
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5120.00	45.54	54.00	-8.46	41.19	4.35	Average	211	343
2		5120.00	57.11	74.00	-16.89	52.76	4.35	Peak	211	343
3		5150.00	45.51	54.00	-8.49	41.11	4.40	Average	211	89
4		5150.00	57.39	74.00	-16.61	52.99	4.40	Peak	211	89
5	*	5200.00	104.47			99.99	4.48	Average	211	89
6	*	5200.00	116.62			112.14	4.48	Peak	211	89
7		5350.00	45.94	54.00	-8.06	41.30	4.64	Average	211	89
8		5350.00	58.83	74.00	-15.17	54.19	4.64	Peak	211	89
9		10400.00	56.16	68.20	-12.04	41.88	14.28	Peak	222	199
10		15600.00	44.20	54.00	-9.80	29.18	15.02	Average	177	211
11		15600.00	57.21	74.00	-16.79	42.19	15.02	Peak	177	211

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

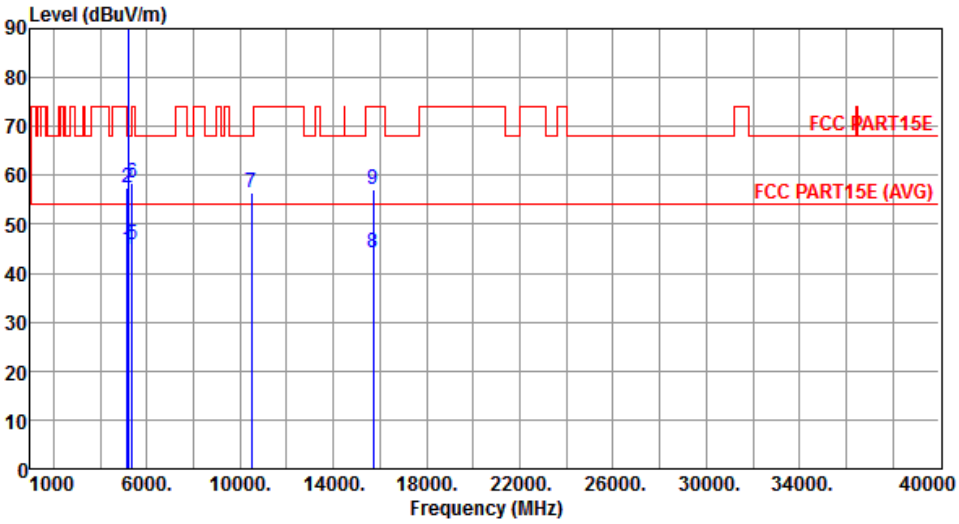
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5120.00	50.57	54.00	-3.43	46.22	4.35	Average	100	199
2		5120.00	62.23	74.00	-11.77	57.88	4.35	Peak	100	199
3		5150.00	45.63	54.00	-8.37	41.23	4.40	Average	100	199
4		5150.00	58.21	74.00	-15.79	53.81	4.40	Peak	100	199
5	*	5200.00	111.36			106.88	4.48	Average	217	199
6	*	5200.00	123.47			118.99	4.48	Peak	217	199
7		5350.00	45.99	54.00	-8.01	41.35	4.64	Average	100	199
8		5350.00	59.06	74.00	-14.94	54.42	4.64	Peak	100	199
9		10400.00	56.35	68.20	-11.85	42.07	14.28	Peak	244	188
10		15600.00	44.24	54.00	-9.76	29.22	15.02	Average	189	227
11		15600.00	57.36	74.00	-16.64	42.34	15.02	Peak	189	227

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

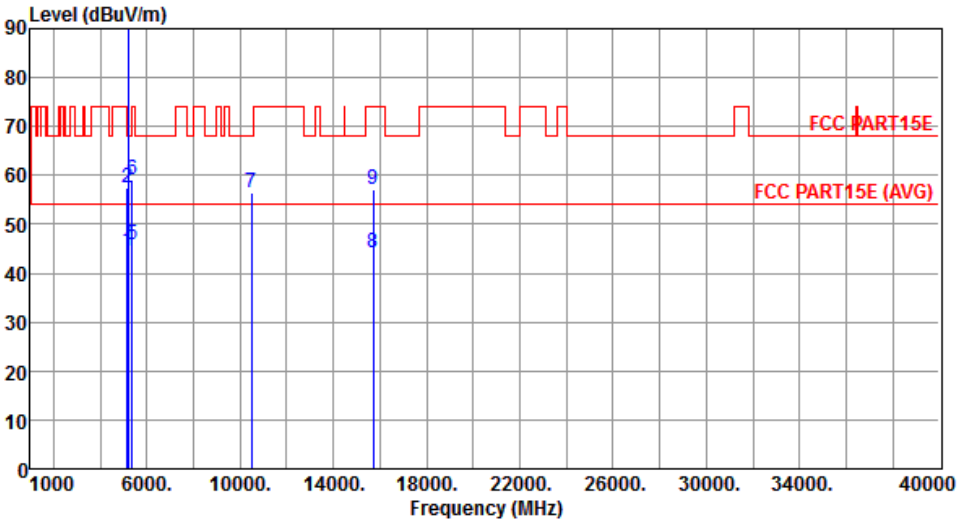
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	44.69	54.00	-9.31	40.29	4.40	Average	209	77
2		5150.00	57.51	74.00	-16.49	53.11	4.40	Peak	209	77
3	*	5240.00	104.17			99.65	4.52	Average	209	77
4	*	5240.00	116.10			111.58	4.52	Peak	209	77
5		5350.00	45.92	54.00	-8.08	41.28	4.64	Average	209	77
6		5350.00	58.54	74.00	-15.46	53.90	4.64	Peak	209	77
7		10480.00	56.41	68.20	-11.79	41.98	14.43	Peak	266	188
8		15720.00	44.15	54.00	-9.85	29.28	14.87	Average	199	186
9		15720.00	57.04	74.00	-16.96	42.17	14.87	Peak	199	186

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

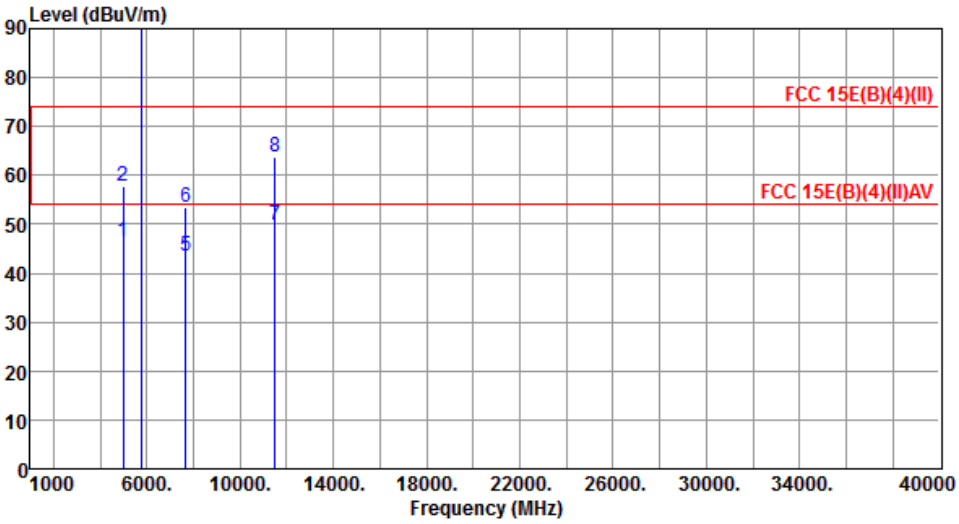
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	44.51	54.00	-9.49	40.11	4.40	Average	117	214
2		5150.00	57.59	74.00	-16.41	53.19	4.40	Peak	117	214
3	*	5240.00	111.26			106.74	4.52	Average	216	214
4	*	5240.00	122.84			118.32	4.52	Peak	216	214
5		5350.00	45.98	54.00	-8.02	41.34	4.64	Average	117	214
6		5350.00	58.97	74.00	-15.03	54.33	4.64	Peak	117	214
7		10480.00	56.52	68.20	-11.68	42.09	14.43	Peak	222	329
8		15720.00	44.24	54.00	-9.76	29.37	14.87	Average	188	226
9		15720.00	57.12	74.00	-16.88	42.25	14.87	Peak	188	226

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

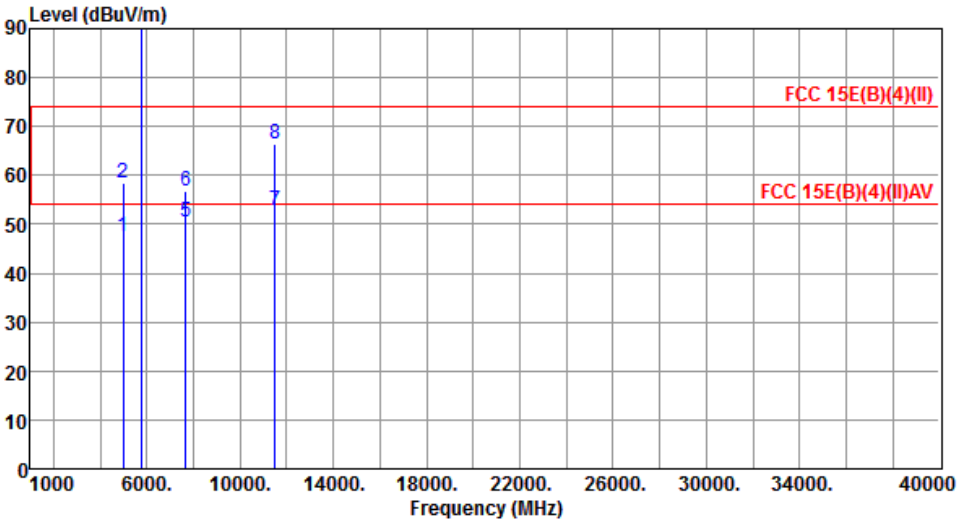
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	46.45	54.00	-7.55	42.28	4.17	Average	122	134
2		5000.00	57.93	74.00	-16.07	53.76	4.17	Peak	122	134
3	*	5745.00	105.89			100.75	5.14	Average	208	100
4	*	5745.00	117.82			112.68	5.14	Peak	208	100
5		7660.00	43.44	54.00	-10.56	34.65	8.79	Average	188	235
6		7660.00	53.46	74.00	-20.54	44.67	8.79	Peak	188	235
7		11490.00	49.82	54.00	-4.18	34.29	15.53	Average	255	322
8		11490.00	63.70	74.00	-10.30	48.17	15.53	Peak	255	322

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

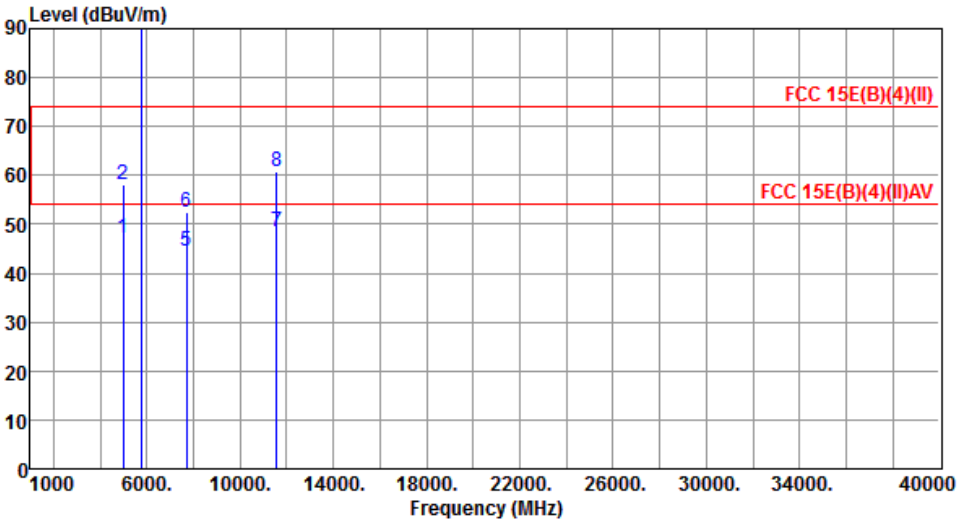
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.54	54.00	-6.46	43.37	4.17	Average	117	154
2		5000.00	58.54	74.00	-15.46	54.37	4.17	Peak	117	154
3	*	5745.00	112.95			107.81	5.14	Average	199	155
4	*	5745.00	125.00			119.86	5.14	Peak	199	155
5		7660.00	50.62	54.00	-3.38	41.83	8.79	Average	245	245
6		7660.00	56.90	74.00	-17.10	48.11	8.79	Peak	245	245
7		11490.00	52.64	54.00	-1.36	37.11	15.53	Average	245	36
8		11490.00	66.45	74.00	-7.55	50.92	15.53	Peak	245	36

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

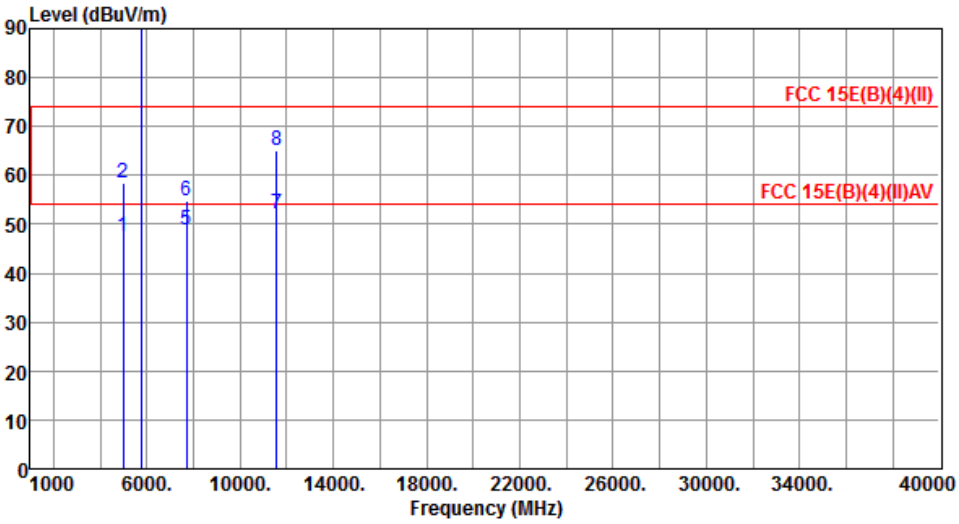
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.16	54.00	-6.84	42.99	4.17	Average	222	321
2		5000.00	58.06	74.00	-15.94	53.89	4.17	Peak	222	321
3	*	5785.00	107.87			102.68	5.19	Average	222	96
4	*	5785.00	119.98			114.79	5.19	Peak	222	96
5		7713.33	44.61	54.00	-9.39	35.87	8.74	Average	321	222
6		7713.33	52.39	74.00	-21.61	43.65	8.74	Peak	321	222
7		11570.00	48.51	54.00	-5.49	33.18	15.33	Average	188	222
8		11570.00	60.65	74.00	-13.35	45.32	15.33	Peak	188	222

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

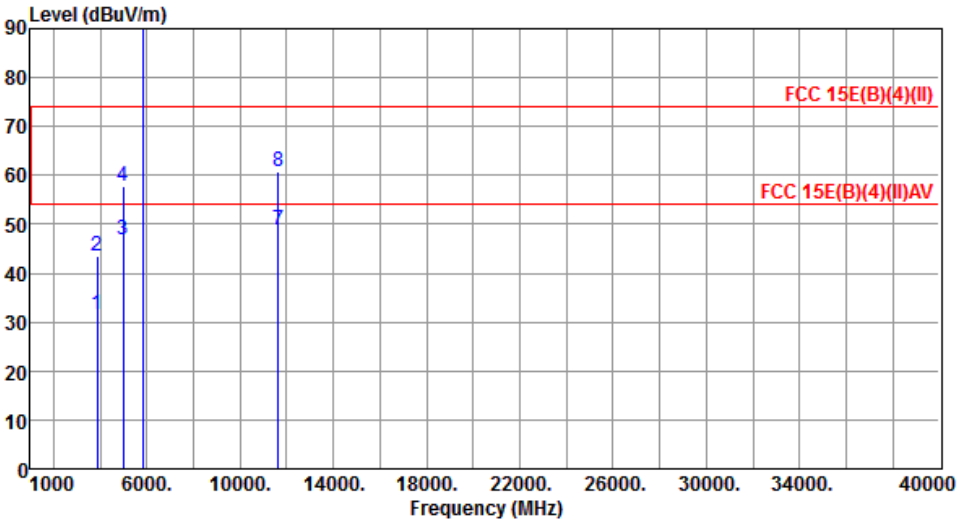
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5000.00	47.39	54.00	-6.61	43.22	4.17	Average	121	132
2		5000.00	58.58	74.00	-15.42	54.41	4.17	Peak	121	132
3	*	5785.00	114.72			109.53	5.19	Average	217	259
4	*	5785.00	127.02			121.83	5.19	Peak	217	259
5		7713.33	48.66	54.00	-5.34	39.92	8.74	Average	235	246
6		7713.33	54.86	74.00	-19.14	46.12	8.74	Peak	235	246
7		11570.00	52.16	54.00	-1.84	36.83	15.33	Average	255	34
8		11570.00	65.20	74.00	-8.80	49.87	15.33	Peak	255	34

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

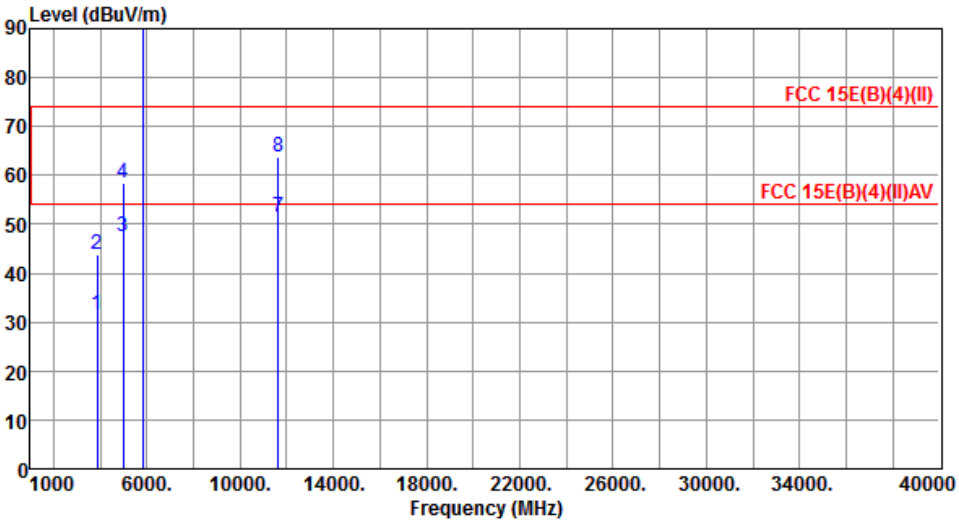
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		3883.33	31.49	54.00	-22.51	30.35	1.14	Average	333	188
2		3883.33	43.42	74.00	-30.58	42.28	1.14	Peak	333	188
3		5000.00	46.76	54.00	-7.24	42.59	4.17	Average	123	111
4		5000.00	57.95	74.00	-16.05	53.78	4.17	Peak	123	111
5	*	5825.00	107.06			101.82	5.24	Average	222	97
6	*	5825.00	119.57			114.33	5.24	Peak	222	97
7		11650.00	48.95	54.00	-5.05	33.86	15.09	Average	221	345
8		11650.00	60.64	74.00	-13.36	45.55	15.09	Peak	221	345

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	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		3883.33	31.67	54.00	-22.33	30.53	1.14	Average	222	165
2		3883.33	43.73	74.00	-30.27	42.59	1.14	Peak	222	165
3		5000.00	47.50	54.00	-6.50	43.33	4.17	Average	111	134
4		5000.00	58.43	74.00	-15.57	54.26	4.17	Peak	111	134
5	*	5825.00	113.91			108.67	5.24	Average	217	208
6	*	5825.00	126.33			121.09	5.24	Peak	217	208
7		11650.00	51.45	54.00	-2.55	36.36	15.09	Average	333	36
8		11650.00	63.89	74.00	-10.11	48.80	15.09	Peak	333	36

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency