FCC Test Report

FCC ID	:	**I88XMG3512-B10A**
Equipment	:	**Dual-Band Wireless AC/N VDSL2 Bonding Gateway with USB**
Model No.	:	**XMG3512-B10A**
Brand Name	:	**ZYXEL**
Applicant	:	**Zyxel Communications Corporation**
Address	:	**No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan, R.O.C**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**May 10, 2016**
Tested Date	:	**Jun. 01 ~ Sep. 08, 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.

Reviewed by: **Approved by:**

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

Testing Laboratory 2732

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Release Record

Report No.	Version	Description	Issued Date
FR651003AN	Rev. 01	Initial issue	Oct. 18, 2016

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 14.594MHz 37.70 (Margin -12.30dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 10400.00MHz 68.07 (Margin -0.13dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: ***Non-beamforming mode*** 5150-5250MHz: 25.95 5725-5850MHz: 26.98 ***Beamforming mode*** 5150-5250MHz: 26.05 5725-5850MHz: 26.25	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
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
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: 802.11ac supports beamforming function.					

1.1.2 Antenna Details

Model	**Type**	**Connector**	**Frequencies (MHz) / Antenna Gain (dBi)**		
			2400~2483.5	**5150~5250**	**5725~5850**
A1	Dipole	UFL	--	-0.54	-0.56
A2	Dipole	UFL	--	-0.54	-0.56
A3	Dipole	UFL	--	-0.54	-0.56
A4	Dipole	UFL	--	-0.54	-0.56
B1	Dipole	UFL	2.9	--	--
B2	Dipole	UFL	1.3	--	--

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.4 Accessories & Support Units

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: LEADER Model: MU42-3120350-A1 Power Rating: I/P: 100-240Vac, 50/60Hz, 1.5A O/P: 12Vdc, 3.5A Power Line: 1.5m non-shielded without core
2	Ethernet cable	1.7m non-shielded without core
3	Phone cable	1.75m non-shielded without core
Support Units (provided by applicant)		
No.	**Equipment**	**Description**
1	BF Client	Product: Dual-Band Wireless AC/N VDSL2 Bonding Gateway with USB Brand: ZYXEL Model: XMG3512-B10A
2	Fiber cable	0.88m shielded without core
3	Ethernet cable	1.7m non-shielded 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

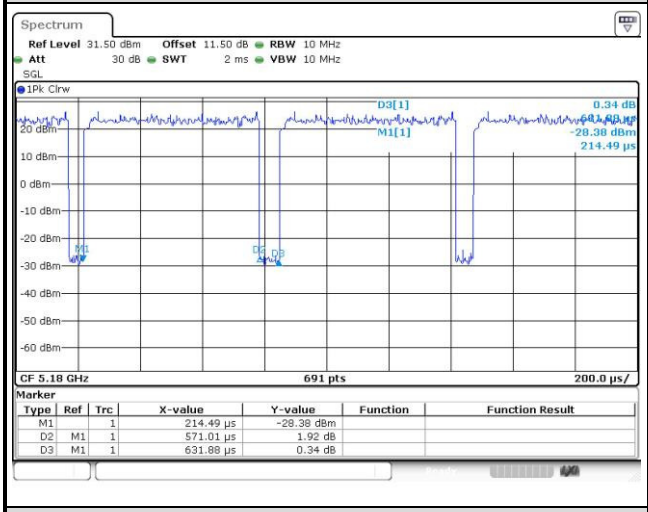
For Frequency band 5725~5850 MHz			
802.11 a / HT20 / VHT20		**HT40 / VHT40**	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
149	5745	151	5755
153	5765	159	5795
157	5785	**VHT80**	
161	5805	155	5775
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

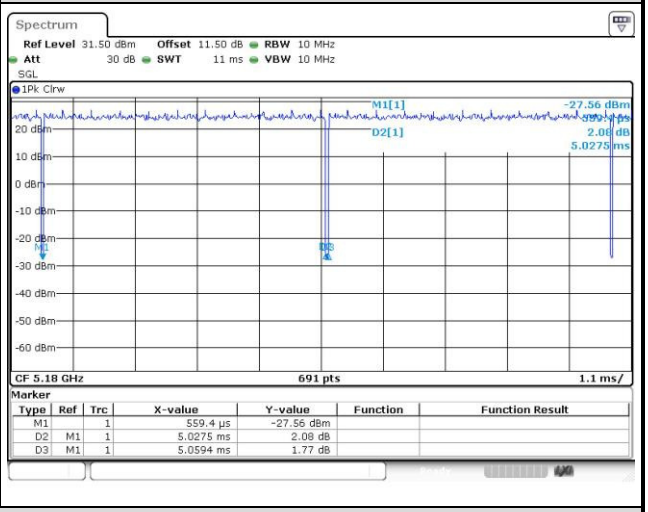
Test Tool	Telnet			
Duty Cycle and Duty Factor	Mode	Non-beamforming		Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11a	90.37%	0.44	---	---
	VHT20	99.37%	0.03	90.49%	0.43
	VHT40	98.37%	0.07	95.38%	0.21
	VHT80	96.14%	0.17	96.50%	0.15

Non-beamforming mode

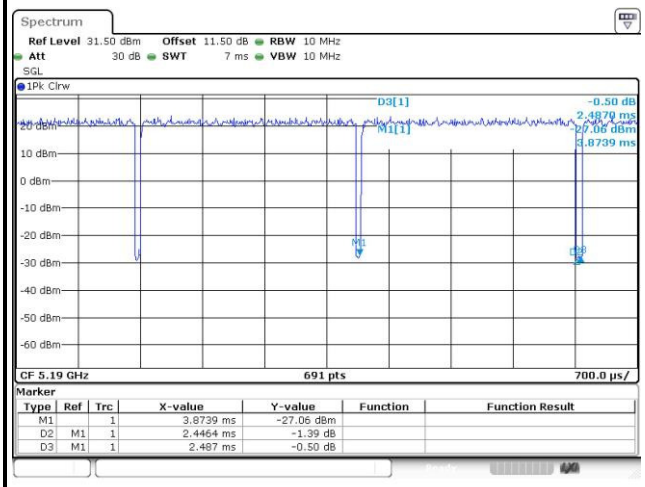
11a



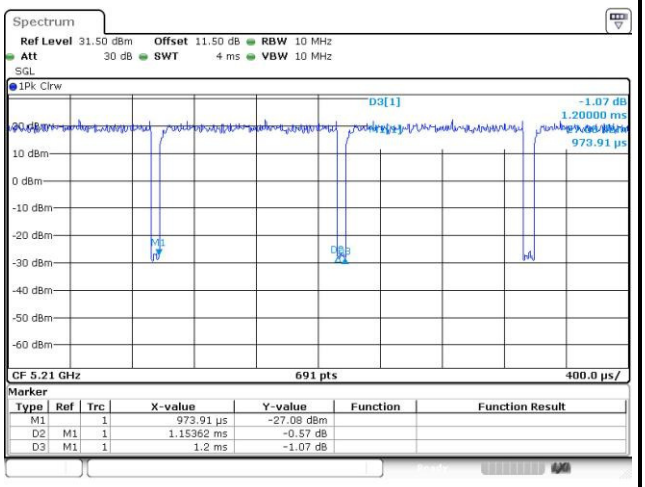
VHT20



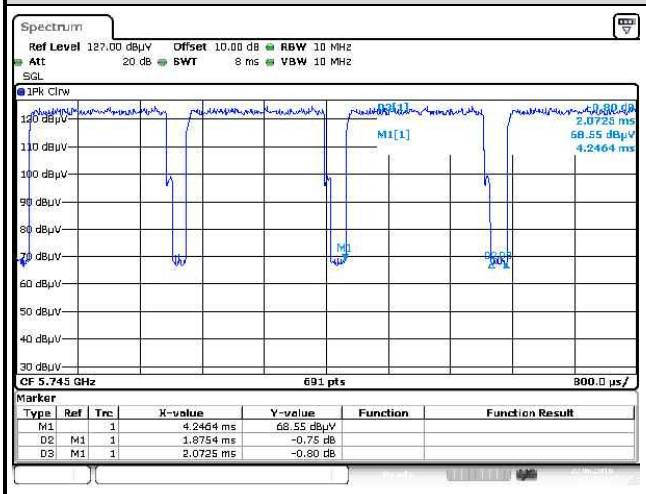
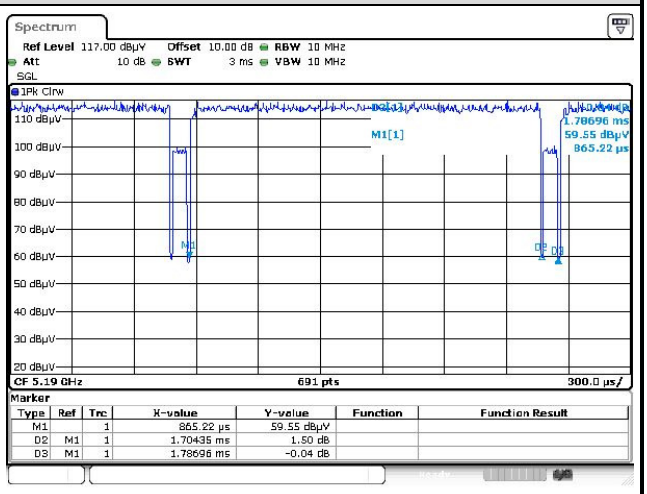
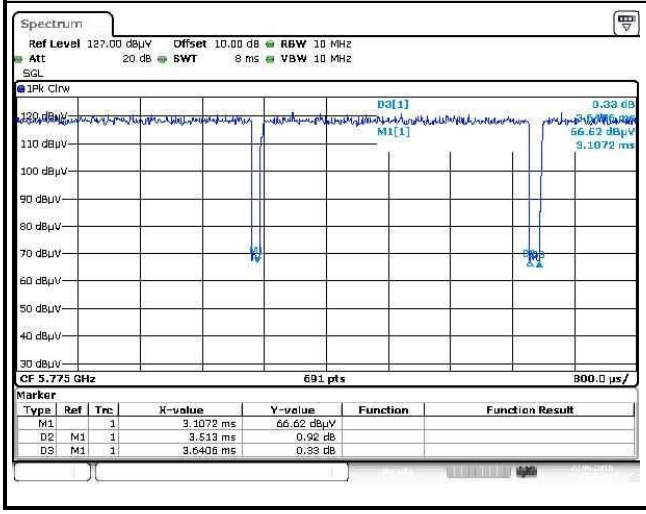
VHT40



VHT80



Beamforming mode

VHT20	VHT40
	
VHT80	**---**
	---

1.1.7 Power Setting

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5180	18	---
11a	5200	18	---
11a	5240	19	---
HT20	5180	18	---
HT20	5200	18	---
HT20	5240	18	---
HT40	5190	16	---
HT40	5230	21	---
VHT20	5180	18	17
VHT20	5200	18	17
VHT20	5240	18	17
VHT40	5190	16	14
VHT40	5230	21	20
VHT80	5210	14	12

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5745	19	---
11a	5785	19	---
11a	5825	18	---
HT20	5745	20	---
HT20	5785	20	---
HT20	5825	19	---
HT40	5755	23	---
HT40	5795	23	---
VHT20	5745	20	18
VHT20	5785	20	18
VHT20	5825	19	17
VHT40	5755	23	21
VHT40	5795	23	21
VHT80	5775	23	20

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 E6430	B6FV9T1	RJ45, 10m non-shielded.
2	Notebook	DELL	Latitude E6430	74GB4X1	RJ45, 10m non-shielded.
3	USB 3.0 flash	pqi	U273V 16G	58212	---
4	RJ45 Load	ICC	---	---	RJ45, 1m (x3) non-shielded.
5	RJ11 Load	ICC	---	---	RJ11, 1.7m non-shielded.
6	Fiber Load	ICC	---	---	Fiber, 0.88m shielded.

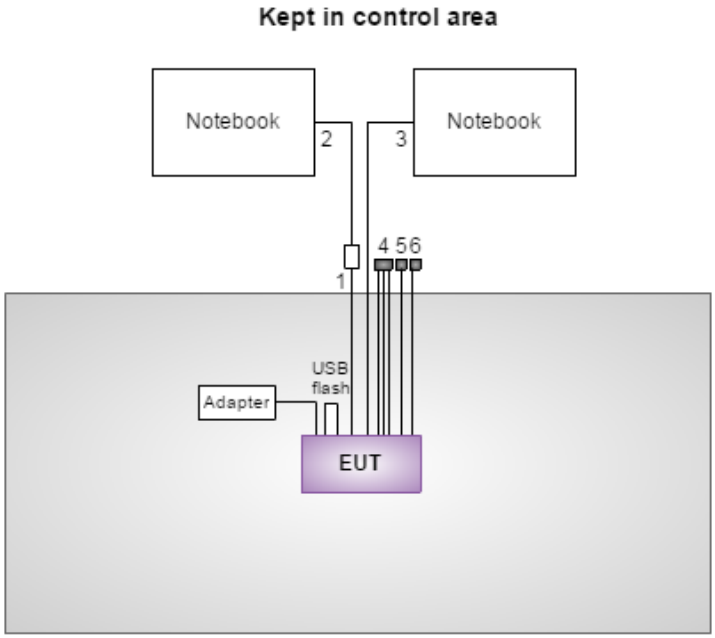
Beamforming mode

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**S/N**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E6430	B6FV9T1	RJ45, 10m non-shielded.
2	Notebook	DELL	Latitude E6430	74GB4X1	RJ45, 10m non-shielded.
3	USB 3.0 flash	pqi	U273V 16G	58212	---
4	RJ45 Load	ICC	---	---	RJ45, 1m (x3) non-shielded.
5	RJ11 Load	ICC	---	---	RJ11, 1.7m non-shielded.
6	Fiber Load	ICC	---	---	Fiber, 0.88m shielded.
7	Notebook	DELL	Latitude E6430	J5GB4X1	RJ45, 1.7m non-shielded.
8	BF Client	ZYXEL	XMG3512-B10A	---	---

Note: No. 8 is provided by applicant.

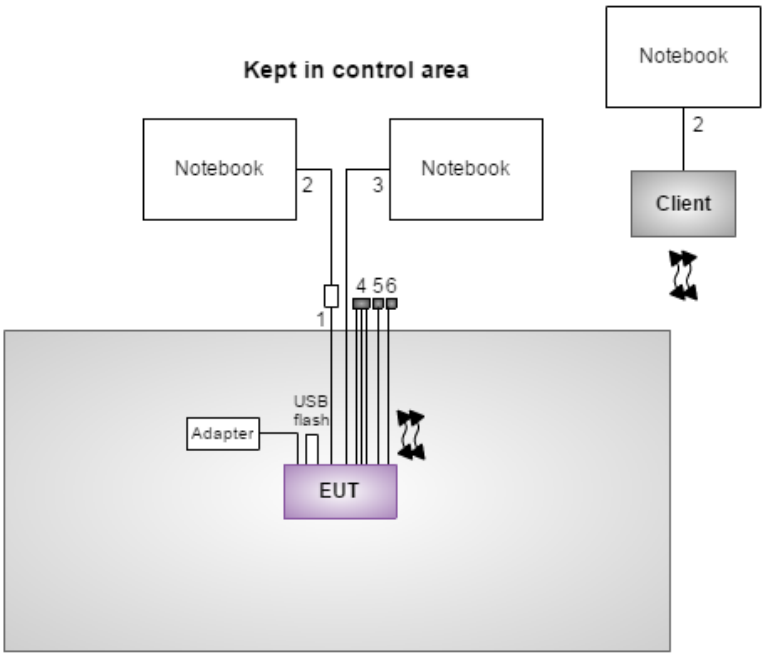
1.3 Test Setup Chart

Non-beamforming mode

Test Setup Diagram
 1. RJ45, 1.7m non-shielded 2-3. RJ45, 10m non-shielded 4. RJ45, 1m (x2) non-shielded with load 5. RJ11, 1.75m non-shielded with load 6. Fiber, 0.88m shielded with load

Beamforming mode

Test Setup Diagram



1. RJ45, 1.7m non-shielded
2-3. RJ45, 10m non-shielded
4. RJ45, 1m (x2) non-shielded with load
5. RJ11, 1.75m non-shielded with load
6. Fiber, 0.88m shielded with load
7. RJ45, 1.7m non-shielded

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Sep. 05, 2016				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC 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 chamber 2 / (03CH02-WS)				
Tested Date	Jun. 01 ~ Jun. 22, 2016				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Dec. 17, 2015	Dec. 16, 2016
Receiver	R&S	ESR3	101657	Jan. 12, 2016	Jan. 11, 2017
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-523	Nov. 09, 2015	Nov. 08, 2016
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Oct. 07, 2015	Oct. 06, 2016
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 04, 2015	Nov. 03, 2016
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 16, 2015	Nov. 15, 2016
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 10, 2015	Dec. 09, 2016
Preamplifier	Burgeon	BPA-530	100218	Nov. 03, 2015	Nov. 02, 2016
Preamplifier	Agilent	83017A	MY39501309	Sep. 22, 2015	Sep. 21, 2016
Preamplifier	EMC	EMC184045B	980192	Sep. 01, 2015	Aug. 31, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 10, 2015	Dec. 09, 2016
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-003	Dec. 10, 2015	Dec. 09, 2016
LF cable 10M	EMCC	CFD400-E	CFD400-001	Dec. 10, 2015	Dec. 09, 2016
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Sep. 05 ~ Sep. 08, 2016				
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
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 v01r03
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	±3.87 dB
Radiated emission > 1GHz	±5.60 dB
Time	±0.1%
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 59%	Howard Huang
Radiated Emissions	03CH02-WS	23-24°C / 62-64%	Felix Sung Warren Lee
RF Conducted	TH01-WS	23°C / 64%	Brad Wu

- FCC site registration No.: 181692
- IC site registration No.: 10807A-2

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	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0	---
Frequency Stability	Un-modulation	5200	---	---

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

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	VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	---

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

3 Transmitter Test Results

3.1 Conducted Emissions

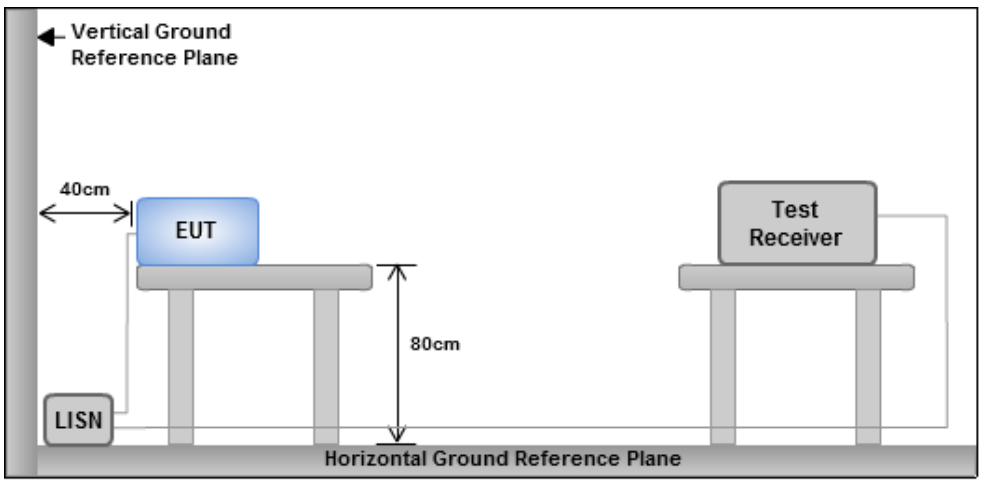
3.1.1 Limit of Conducted Emissions

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



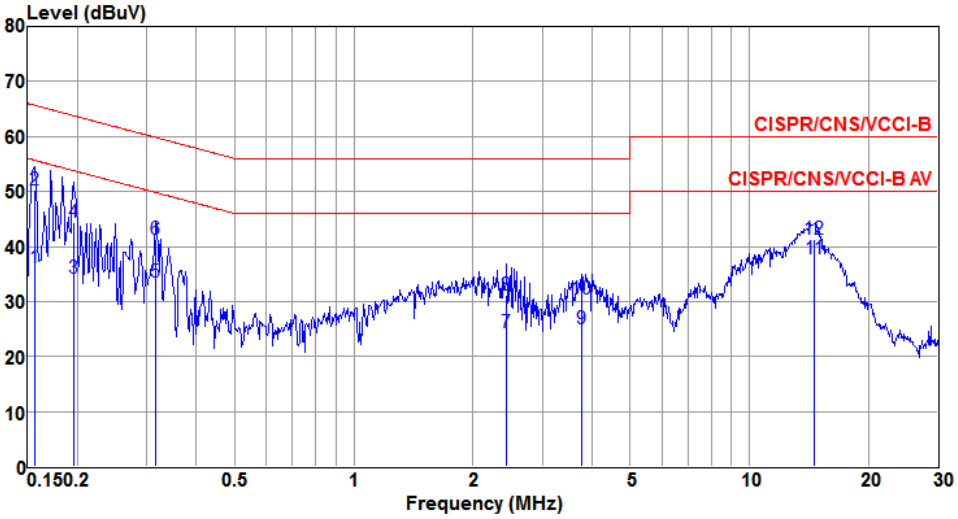
Note: 1. Support units were connected to second LISN.

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

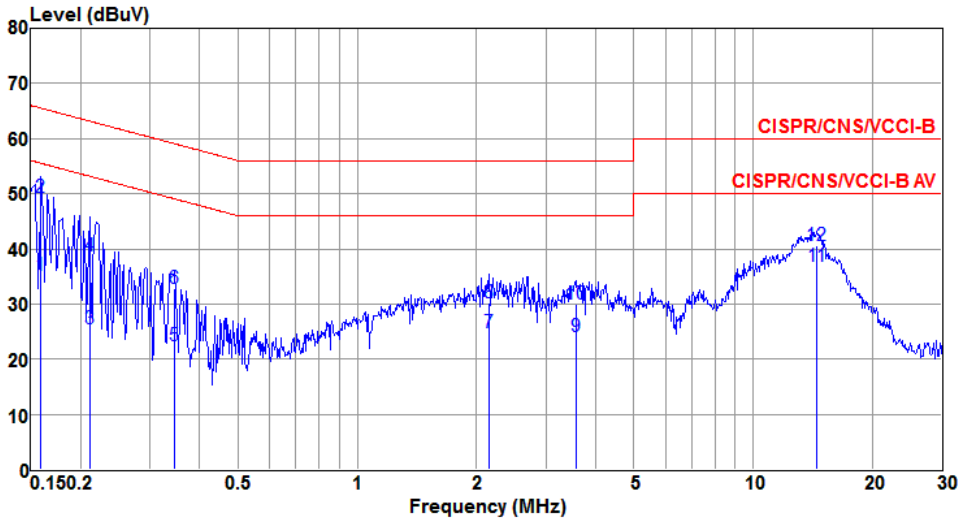
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.156	36.04	55.65	-19.61	26.39	9.63	0.02	Average
2	0.156	50.27	65.65	-15.38	40.62	9.63	0.02	QP
3	0.195	34.27	53.80	-19.53	24.61	9.64	0.02	Average
4	0.195	44.46	63.80	-19.34	34.80	9.64	0.02	QP
5	0.315	33.58	49.84	-16.26	23.92	9.63	0.03	Average
6	0.315	41.33	59.84	-18.51	31.67	9.63	0.03	QP
7	2.435	24.38	46.00	-21.62	14.66	9.63	0.09	Average
8	2.435	31.19	56.00	-24.81	21.47	9.63	0.09	QP
9	3.779	25.09	46.00	-20.91	15.33	9.64	0.12	Average
10	3.779	30.53	56.00	-25.47	20.77	9.64	0.12	QP
11@	14.594	37.70	50.00	-12.30	27.80	9.69	0.21	Average
12	14.594	41.35	60.00	-18.65	31.45	9.69	0.21	QP

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

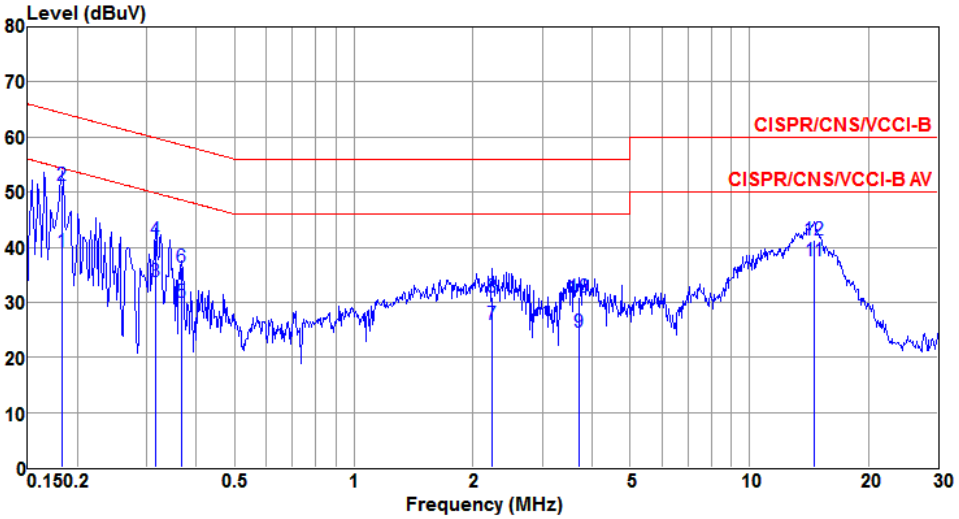
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	35.13	55.52	-20.39	25.49	9.62	0.02	Average
2	0.159	49.33	65.52	-16.19	39.69	9.62	0.02	QP
3	0.211	25.46	53.18	-27.72	15.82	9.62	0.02	Average
4	0.211	38.70	63.18	-24.48	29.06	9.62	0.02	QP
5	0.346	22.49	49.05	-26.56	12.83	9.63	0.03	Average
6	0.346	32.78	59.05	-26.27	23.12	9.63	0.03	QP
7	2.155	24.77	46.00	-21.23	15.05	9.64	0.08	Average
8	2.155	30.24	56.00	-25.76	20.52	9.64	0.08	QP
9	3.565	24.00	46.00	-22.00	14.26	9.63	0.11	Average
10	3.565	29.87	56.00	-26.13	20.13	9.63	0.11	QP
11@	14.517	36.88	50.00	-13.12	26.93	9.74	0.21	Average
12	14.517	40.56	60.00	-19.44	30.61	9.74	0.21	QP

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

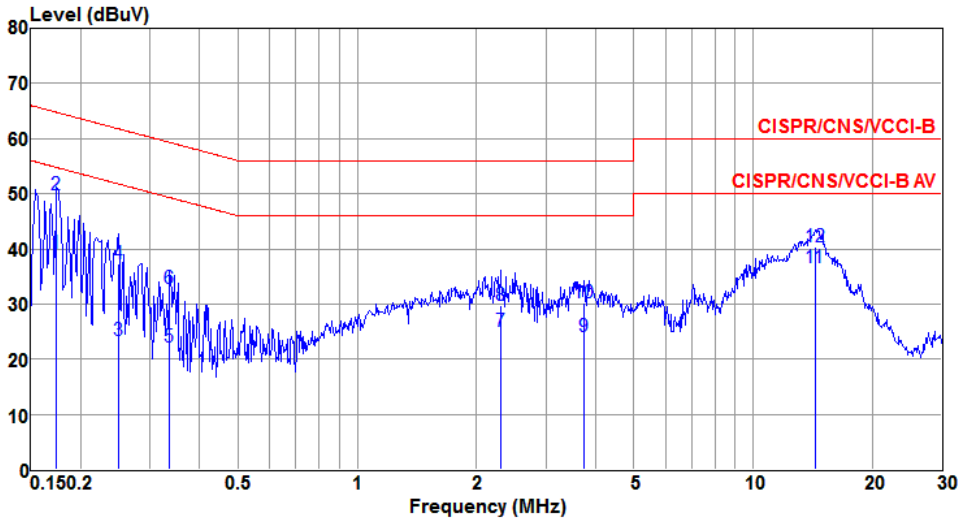
Modulation	VHT80	Test Freq. (MHz)	5775
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.183	39.19	54.33	-15.14	29.53	9.64	0.02	Average
2	0.183	51.10	64.33	-13.23	41.44	9.64	0.02	QP
3	0.315	33.64	49.84	-16.20	23.98	9.63	0.03	Average
4	0.315	41.23	59.84	-18.61	31.57	9.63	0.03	QP
5	0.367	30.03	48.56	-18.53	20.37	9.63	0.03	Average
6	0.367	36.45	58.56	-22.11	26.79	9.63	0.03	QP
7	2.237	26.05	46.00	-19.95	16.34	9.62	0.09	Average
8	2.237	31.02	56.00	-24.98	21.31	9.62	0.09	QP
9	3.700	24.67	46.00	-21.33	14.91	9.64	0.12	Average
10	3.700	30.82	56.00	-25.18	21.06	9.64	0.12	QP
11@	14.594	37.45	50.00	-12.55	27.55	9.69	0.21	Average
12	14.594	41.29	60.00	-18.71	31.39	9.69	0.21	QP

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

Modulation	VHT80	Test Freq. (MHz)	5775
Power Phase	Neutral		

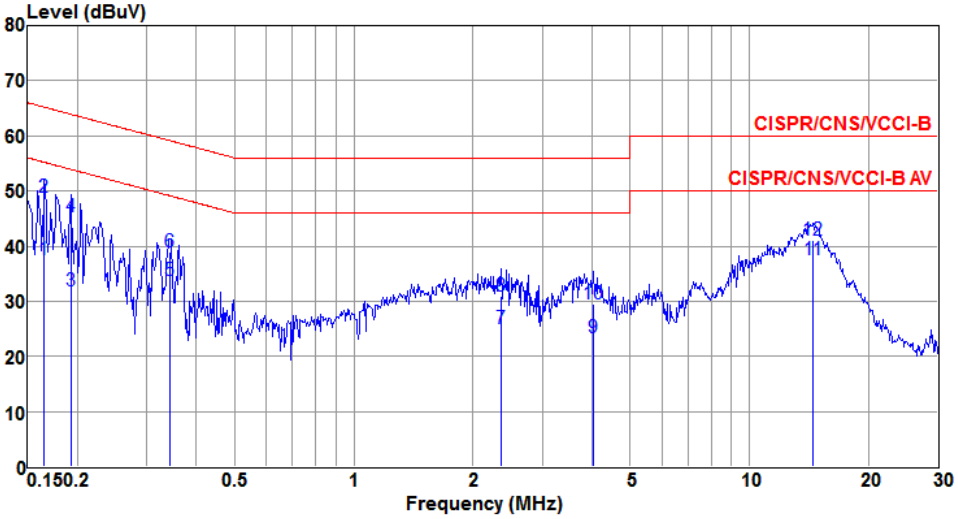


	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.174	39.14	54.77	-15.63	29.50	9.62	0.02	Average
2	0.174	49.81	64.77	-14.96	40.17	9.62	0.02	QP
3	0.249	23.32	51.78	-28.46	13.68	9.62	0.02	Average
4	0.249	37.25	61.78	-24.53	27.61	9.62	0.02	QP
5	0.336	22.08	49.31	-27.23	12.42	9.63	0.03	Average
6	0.336	32.80	59.31	-26.51	23.14	9.63	0.03	QP
7	2.297	24.97	46.00	-21.03	15.24	9.64	0.09	Average
8	2.297	29.76	56.00	-26.24	20.03	9.64	0.09	QP
9	3.740	24.00	46.00	-22.00	14.25	9.63	0.12	Average
10	3.740	30.22	56.00	-25.78	20.47	9.63	0.12	QP
11@	14.364	36.58	50.00	-13.42	26.64	9.74	0.20	Average
12	14.364	40.36	60.00	-19.64	30.42	9.74	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

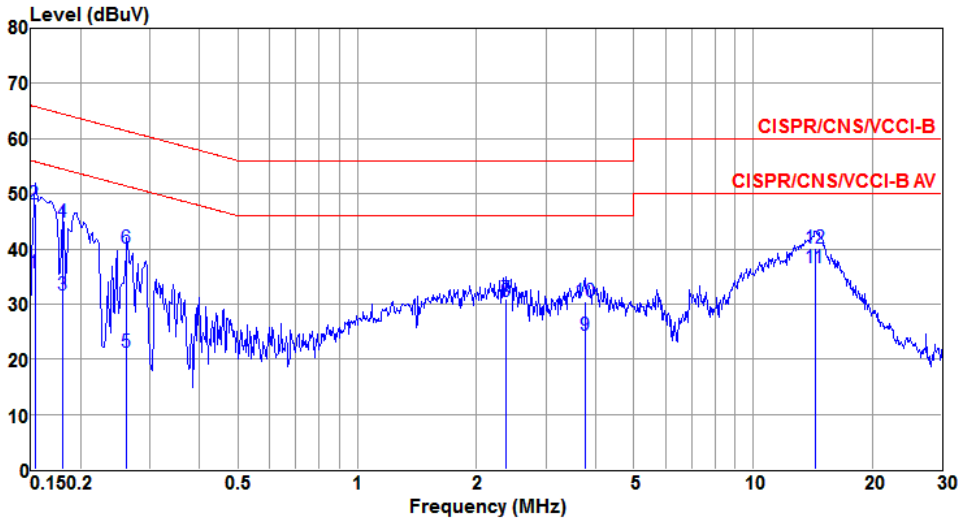
Modulation	VHT40	**Test Freq. (MHz)**	5230
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.165	37.54	55.21	-17.67	27.89	9.63	0.02	Average
2	0.165	48.92	65.21	-16.29	39.27	9.63	0.02	QP
3	0.192	31.87	53.93	-22.06	22.21	9.64	0.02	Average
4	0.192	45.44	63.93	-18.49	35.78	9.64	0.02	QP
5	0.343	33.83	49.13	-15.30	24.17	9.63	0.03	Average
6	0.343	38.89	59.13	-20.24	29.23	9.63	0.03	QP
7	2.358	25.04	46.00	-20.96	15.33	9.62	0.09	Average
8	2.358	31.01	56.00	-24.99	21.30	9.62	0.09	QP
9	4.027	23.34	46.00	-22.66	13.58	9.64	0.12	Average
10	4.027	29.53	56.00	-26.47	19.77	9.64	0.12	QP
11@	14.517	37.54	50.00	-12.46	27.64	9.69	0.21	Average
12	14.517	41.06	60.00	-18.94	31.16	9.69	0.21	QP

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

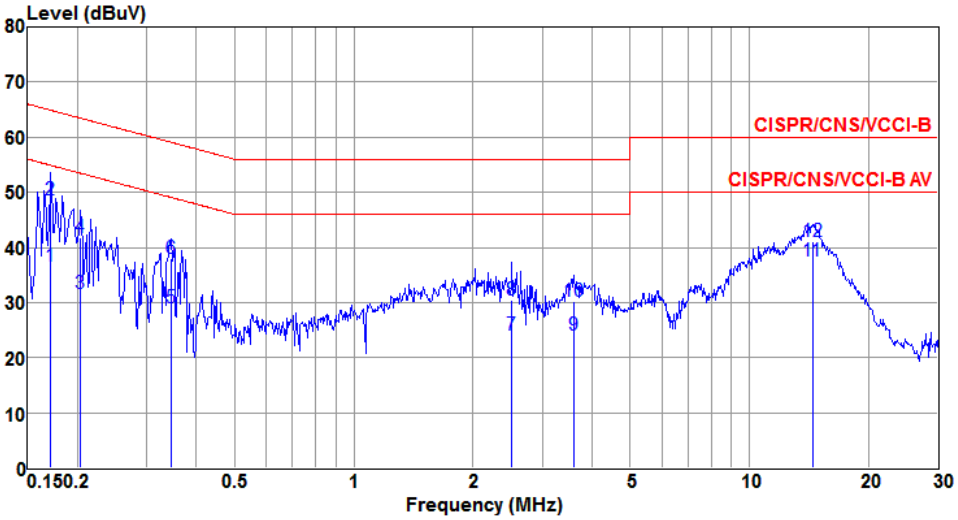
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.153	35.58	55.82	-20.24	25.94	9.62	0.02	Average
2	0.153	48.27	65.82	-17.55	38.63	9.62	0.02	QP
3	0.181	31.58	54.46	-22.88	21.94	9.62	0.02	Average
4	0.181	44.96	64.46	-19.50	35.32	9.62	0.02	QP
5	0.262	21.34	51.38	-30.04	11.70	9.62	0.02	Average
6	0.262	40.17	61.38	-21.21	30.53	9.62	0.02	QP
7	2.384	30.97	46.00	-15.03	21.24	9.64	0.09	Average
8	2.384	30.48	56.00	-25.52	20.75	9.64	0.09	QP
9	3.759	24.30	46.00	-21.70	14.55	9.63	0.12	Average
10	3.759	30.49	56.00	-25.51	20.74	9.63	0.12	QP
11@	14.364	36.58	50.00	-13.42	26.64	9.74	0.20	Average
12	14.364	40.14	60.00	-19.86	30.20	9.74	0.20	QP

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

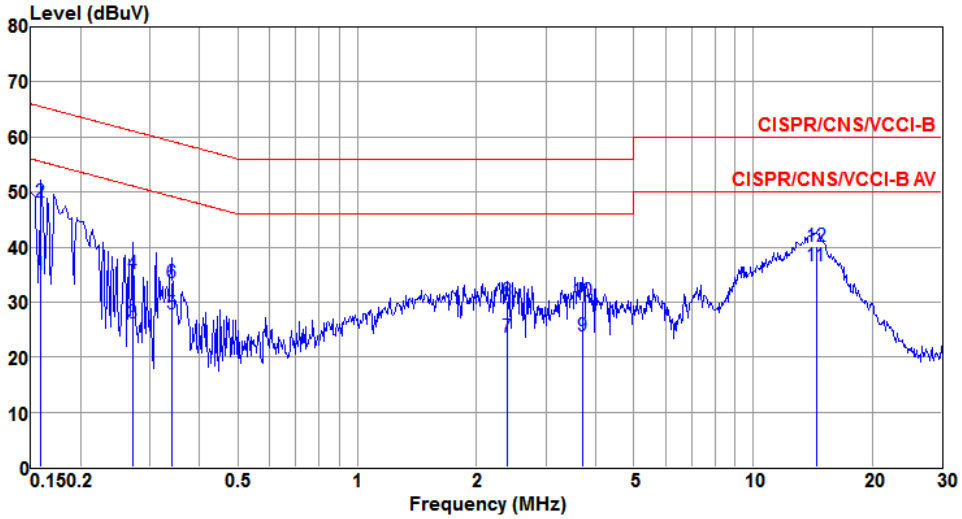
Modulation	VHT40	Test Freq. (MHz)	5755
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.171	36.55	54.90	-18.35	26.90	9.63	0.02	Average
2	0.171	48.71	64.90	-16.19	39.06	9.63	0.02	QP
3	0.204	31.54	53.45	-21.91	21.88	9.64	0.02	Average
4	0.204	41.85	63.45	-21.60	32.19	9.64	0.02	QP
5	0.346	29.08	49.05	-19.97	19.42	9.63	0.03	Average
6	0.346	37.99	59.05	-21.06	28.33	9.63	0.03	QP
7	2.513	24.06	46.00	-21.94	14.34	9.63	0.09	Average
8	2.513	30.50	56.00	-25.50	20.78	9.63	0.09	QP
9	3.603	24.08	46.00	-21.92	14.33	9.64	0.11	Average
10	3.603	30.18	56.00	-25.82	20.43	9.64	0.11	QP
11@	14.440	37.61	50.00	-12.39	27.72	9.69	0.20	Average
12	14.440	41.09	60.00	-18.91	31.20	9.69	0.20	QP

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

Modulation	VHT40	Test Freq. (MHz)	5755
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	34.91	55.52	-20.61	25.27	9.62	0.02	Average
2	0.159	48.14	65.52	-17.38	38.50	9.62	0.02	QP
3	0.270	26.31	51.12	-24.81	16.67	9.62	0.02	Average
4	0.270	35.18	61.12	-25.94	25.54	9.62	0.02	QP
5	0.339	27.82	49.22	-21.40	18.16	9.63	0.03	Average
6	0.339	33.57	59.22	-25.65	23.91	9.63	0.03	QP
7	2.396	23.55	46.00	-22.45	13.82	9.64	0.09	Average
8	2.396	30.15	56.00	-25.85	20.42	9.64	0.09	QP
9	3.700	23.90	46.00	-22.10	14.15	9.63	0.12	Average
10	3.700	30.12	56.00	-25.88	20.37	9.63	0.12	QP
11@	14.440	36.58	50.00	-13.42	26.64	9.74	0.20	Average
12	14.440	40.18	60.00	-19.82	30.24	9.74	0.20	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

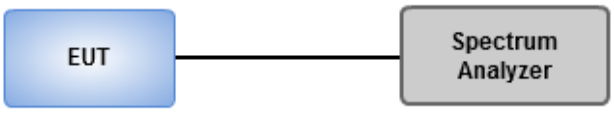
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW
2. Set VBW ≥ 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

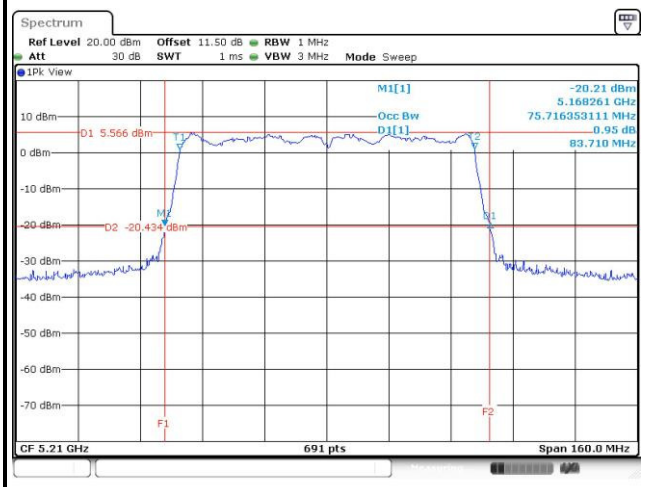
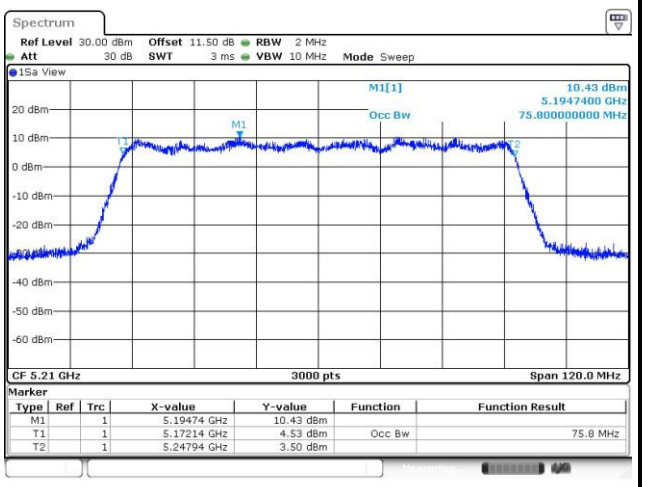
3.2.3 Test Setup



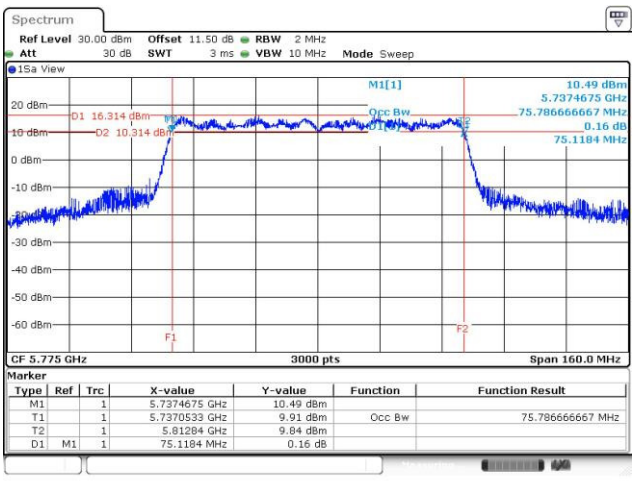
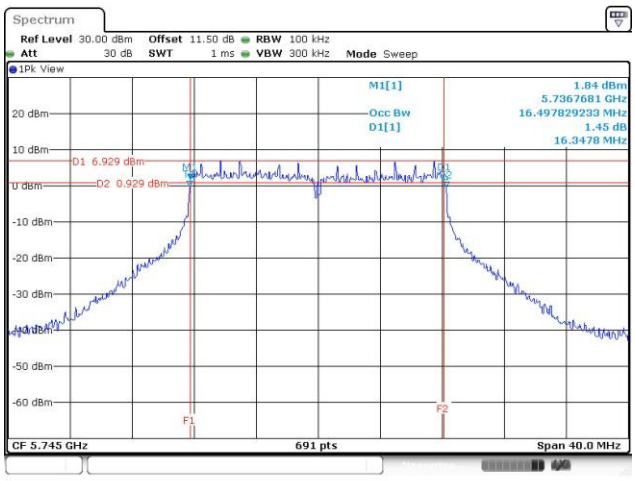
3.2.4 Test Result of Emission Bandwidth

Non-beamforming mode

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	23.01	23.65	23.77	23.59	16.82	17.01	16.95	16.99
11a	4	5200	23.25	23.65	23.83	23.54	16.82	16.98	16.98	16.98
11a	4	5240	23.01	23.65	23.88	23.36	16.83	17.01	17.01	16.90
VHT20	4	5180	24.75	24.81	24.35	23.77	18.16	18.22	18.07	18.00
VHT20	4	5200	24.64	24.75	24.29	23.88	18.16	18.23	18.09	17.98
VHT20	4	5240	24.70	24.81	24.17	23.77	18.18	18.23	18.13	17.98
VHT40	4	5190	44.17	43.83	44.41	43.83	37.18	36.80	36.90	36.68
VHT40	4	5230	51.25	44.06	46.15	64.70	37.24	36.86	36.96	36.98
VHT80	4	5210	83.71	81.16	83.25	82.32	75.80	75.40	75.56	75.72

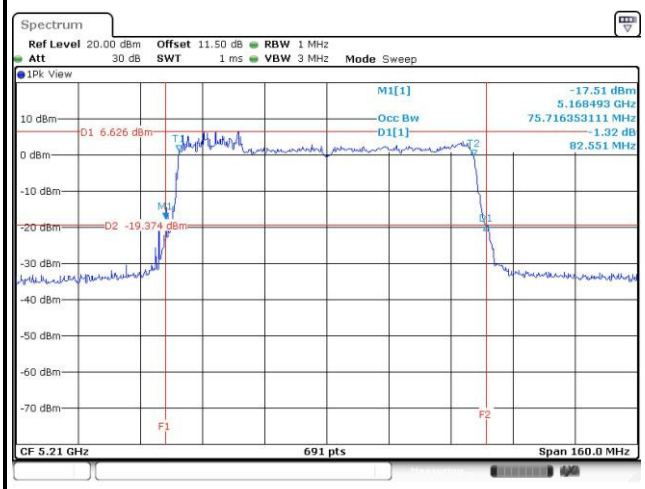
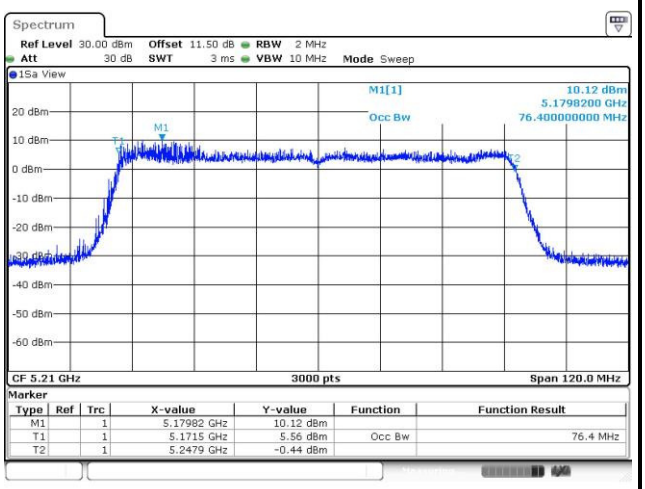
Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

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	16.95	16.93	16.93	16.88	16.35	16.35	16.35	16.35	0.5
11a	4	5785	16.89	16.96	17.03	16.88	16.35	16.35	16.35	16.35	0.5
11a	4	5825	16.88	17.04	17.09	16.88	16.35	16.35	16.35	16.35	0.5
VHT20	4	5745	18.32	18.17	18.08	17.95	17.62	17.62	17.57	17.62	0.5
VHT20	4	5785	18.27	18.20	18.17	17.95	17.62	17.57	17.62	17.62	0.5
VHT20	4	5825	18.24	18.27	18.21	17.96	17.62	17.57	17.62	17.57	0.5
VHT40	4	5755	37.07	37.07	36.80	36.91	36.41	36.41	35.71	36.06	0.5
VHT40	4	5795	37.17	36.91	36.72	36.91	36.41	36.41	36.06	36.17	0.5
VHT80	4	5775	75.73	75.68	75.47	75.79	75.13	75.13	75.13	75.13	0.5

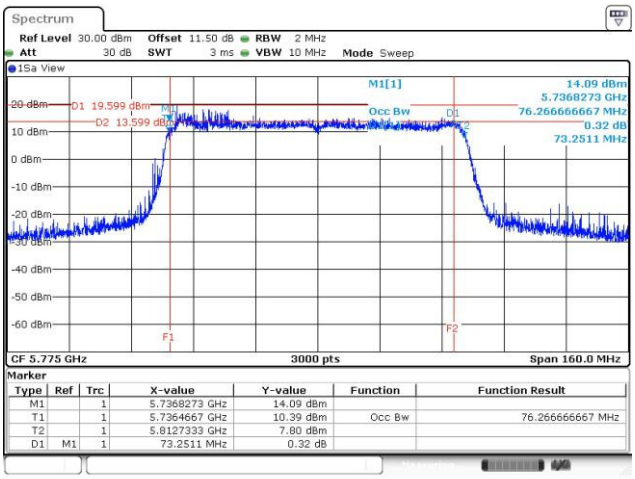
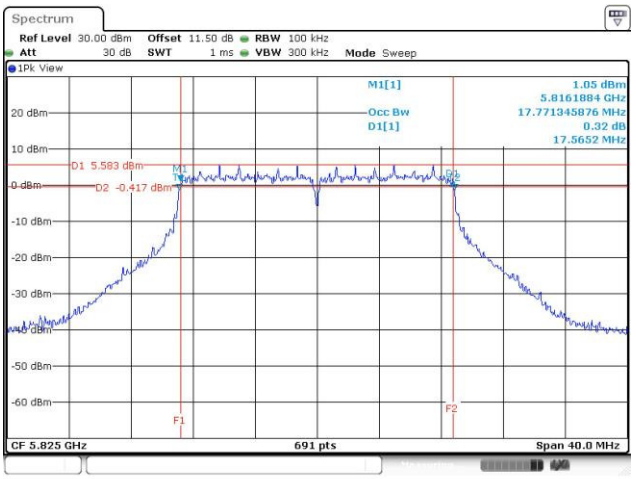
Worst Plot of 99% Bandwidth	Worst Plot of 6dB Bandwidth
	

Beamforming mode

Frequency band 5150-5250 MHz										
Emission Bandwidth										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
VHT20	4	5180	24.87	24.75	25.33	25.39	18.26	18.29	18.31	18.30
VHT20	4	5200	24.75	25.16	24.99	25.16	18.29	18.31	18.31	18.31
VHT20	4	5240	24.70	25.33	24.93	25.22	18.31	18.33	18.33	18.32
VHT40	4	5190	44.99	44.87	45.10	45.22	36.92	36.98	36.92	36.90
VHT40	4	5230	45.57	43.36	45.80	51.48	37.16	37.16	37.10	37.16
VHT80	4	5210	82.32	82.55	80.23	80.46	76.04	76.36	76.40	75.64

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

Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
VHT20	4	5745	18.27	18.28	18.29	18.28	17.80	17.62	17.62	17.62	0.5
VHT20	4	5785	18.27	18.28	18.27	18.27	17.62	17.62	17.62	17.62	0.5
VHT20	4	5825	18.27	18.27	18.28	18.27	17.62	17.62	17.57	17.62	0.5
VHT40	4	5755	37.01	36.96	37.04	36.93	36.52	36.41	36.41	36.17	0.5
VHT40	4	5795	36.99	36.93	37.01	37.04	36.17	35.83	35.83	35.83	0.5
VHT80	4	5775	76.16	76.27	76.00	76.00	75.83	75.83	75.83	75.83	0.5

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

3.3 RF Output Power

3.3.1 Limit of RF Output Power

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
☒	Indoor access point	Conducted Power: 1 W
☐	Fixed point-to-point access points	Conducted Power: 1 W
☐	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	18.03	16.24	17.35	17.02	210.281	23.23	30.00
11a	4	5200	18.09	16.23	17.31	17.18	212.459	23.27	30.00
11a	4	5240	19.16	17.28	18.35	18.29	271.714	24.34	30.00
HT20	4	5180	18.01	16.09	17.38	17.31	212.414	23.27	30.00
HT20	4	5200	18.25	16.42	17.02	17.11	212.442	23.27	30.00
HT20	4	5240	18.20	16.31	17.38	17.54	220.282	23.43	30.00
HT40	4	5190	16.06	14.19	15.01	15.02	130.071	21.14	30.00
HT40	4	5230	20.95	19.22	19.54	19.29	382.880	25.83	30.00
VHT20	4	5180	18.02	16.13	17.46	17.33	214.201	23.31	30.00
VHT20	4	5200	18.32	16.51	17.14	17.26	217.663	23.38	30.00
VHT20	4	5240	18.31	16.39	17.52	17.69	226.558	23.55	30.00
VHT40	4	5190	16.14	14.24	15.02	15.19	132.467	21.22	30.00
VHT40	4	5230	21.01	19.38	19.67	19.43	393.262	**25.95**	30.00
VHT80	4	5210	14.02	12.13	12.87	13.26	82.113	19.14	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	18.18	17.53	18.09	17.01	237.041	23.75	30.00
11a	4	5785	18.35	17.60	17.68	16.84	232.855	23.67	30.00
11a	4	5825	17.25	16.77	16.98	16.02	190.505	22.80	30.00
HT20	4	5745	19.26	18.31	18.65	17.92	287.324	24.58	30.00
HT20	4	5785	19.14	18.63	19.06	17.82	296.053	24.71	30.00
HT20	4	5825	18.04	17.52	17.94	16.81	230.377	23.62	30.00
HT40	4	5755	20.74	20.11	20.28	19.52	417.338	26.20	30.00
HT40	4	5795	21.12	20.24	20.41	19.26	429.335	26.33	30.00
VHT20	4	5745	19.39	18.43	18.79	18.07	296.363	24.72	30.00
VHT20	4	5785	19.25	18.72	19.12	17.96	302.788	24.81	30.00
VHT20	4	5825	18.13	17.61	18.06	16.94	236.094	23.73	30.00
VHT40	4	5755	20.88	20.23	20.40	19.63	429.381	26.33	30.00
VHT40	4	5795	21.27	20.45	20.54	19.39	445.021	26.48	30.00
VHT80	4	5775	21.65	20.92	20.97	20.18	499.070	**26.98**	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			
VHT20	4	5180	18.16	16.38	17.05	17.18	211.853	23.26	30.00
VHT20	4	5200	18.41	16.62	17.39	17.15	221.970	23.46	30.00
VHT20	4	5240	18.42	16.86	17.12	17.32	223.505	23.49	30.00
VHT40	4	5190	15.08	13.27	14.04	13.87	103.173	20.14	30.00
VHT40	4	5230	20.74	19.16	19.89	20.17	402.482	**26.05**	30.00
VHT80	4	5210	13.16	11.43	11.75	12.34	66.703	18.24	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			
VHT20	4	5745	18.64	17.91	18.06	17.04	249.471	23.97	30.00
VHT20	4	5785	18.33	18.02	17.71	17.38	245.186	23.89	30.00
VHT20	4	5825	17.6	17.07	17.15	16	200.168	23.01	30.00
VHT40	4	5755	20.93	20.12	20.44	19.25	421.483	**26.25**	30.00
VHT40	4	5795	20.71	19.65	20.23	19.46	403.764	26.06	30.00
VHT80	4	5775	20.25	19.48	19.30	18.62	352.533	25.47	30.00

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: 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: 11a/VHT80 / Beamforming: VHT20/VHT40VHT80)

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

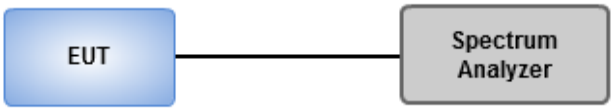
☒ Method SA-1 (Non- Beamforming: VHT20/VHT40)

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: 11a/VHT80 / Beamforming: VHT20/VHT40VHT80)

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



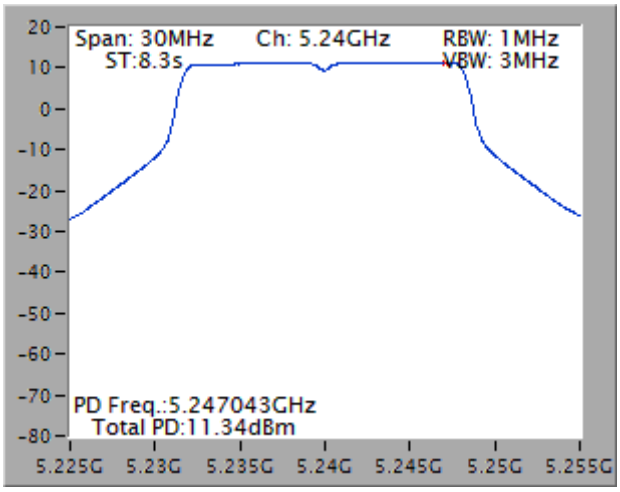
3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

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	10.30	0.44	10.74	17
11a	4	5200	10.33	0.44	10.77	17
11a	4	5240	11.34	0.44	11.78	17
VHT20	4	5180	10.68	0.00	10.68	17
VHT20	4	5200	10.69	0.00	10.69	17
VHT20	4	5240	10.75	0.00	10.75	17
VHT40	4	5190	5.83	0.00	5.83	17
VHT40	4	5230	10.54	0.00	10.54	17
VHT80	4	5210	0.63	0.17	0.80	17

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.

Worst Plot

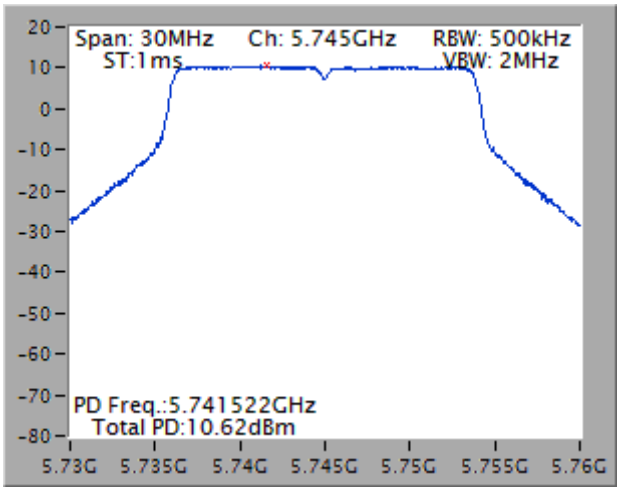


Note: The worst plot is w/o duty factor.

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	9.48	0.44	9.92	30.00
11a	4	5785	9.42	0.44	9.86	30.00
11a	4	5825	8.53	0.44	8.97	30.00
VHT20	4	5745	10.62	0.00	10.62	30.00
VHT20	4	5785	10.60	0.00	10.60	30.00
VHT20	4	5825	9.82	0.00	9.82	30.00
VHT40	4	5755	10.02	0.00	10.02	30.00
VHT40	4	5795	9.49	0.00	9.49	30.00
VHT80	4	5775	7.13	0.17	7.30	30.00

Note:
1. D.F is duty factor.
2. Test result of VHT20/VHT40/VHT80 is bin-by-bin summing measured value of each TX port.

Worst Plot

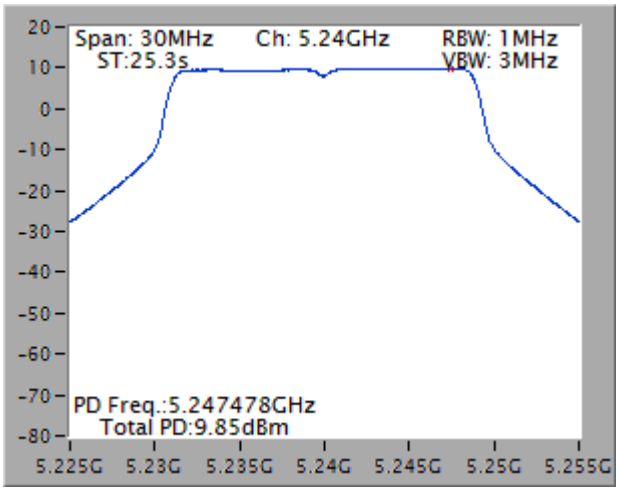


Beamforming mode

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	9.69	0.43	10.12	17
VHT20	4	5200	9.68	0.43	10.11	17
VHT20	4	5240	9.85	0.43	10.28	17
VHT40	4	5190	3.98	0.21	4.19	17
VHT40	4	5230	9.65	0.21	9.86	17
VHT80	4	5210	-0.27	0.15	-0.12	17

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.

Worst Plot

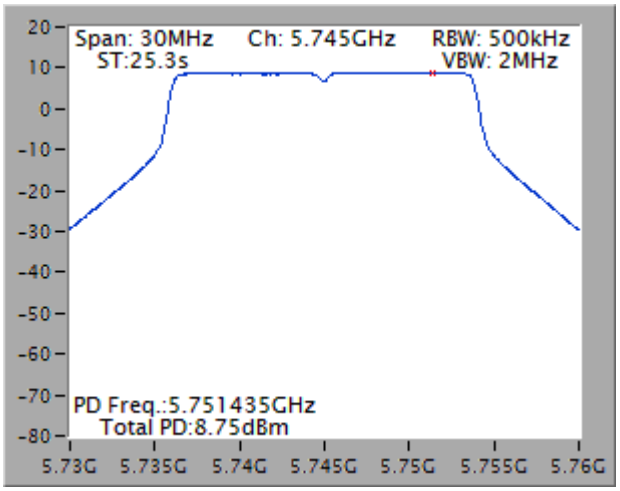


Note: The worst plot is w/o duty factor.

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	8.75	0.43	9.18	30.00
VHT20	4	5785	8.73	0.43	9.16	30.00
VHT20	4	5825	7.86	0.43	8.29	30.00
VHT40	4	5755	8.13	0.21	8.34	30.00
VHT40	4	5795	8.08	0.21	8.29	30.00
VHT80	4	5775	5.39	0.15	5.54	30.00

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.

Worst Plot



Note: The worst plot is w/o 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

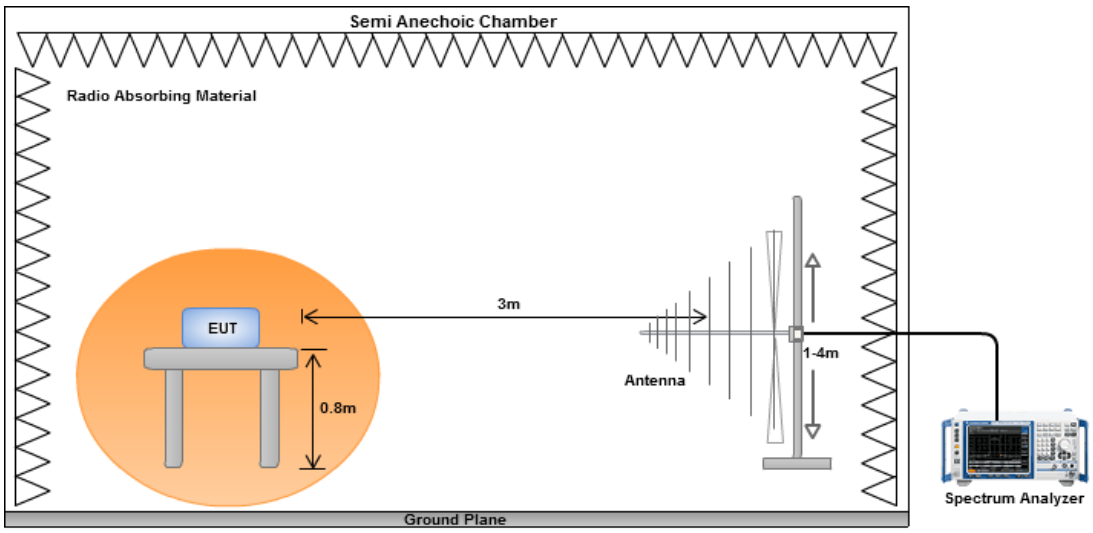
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

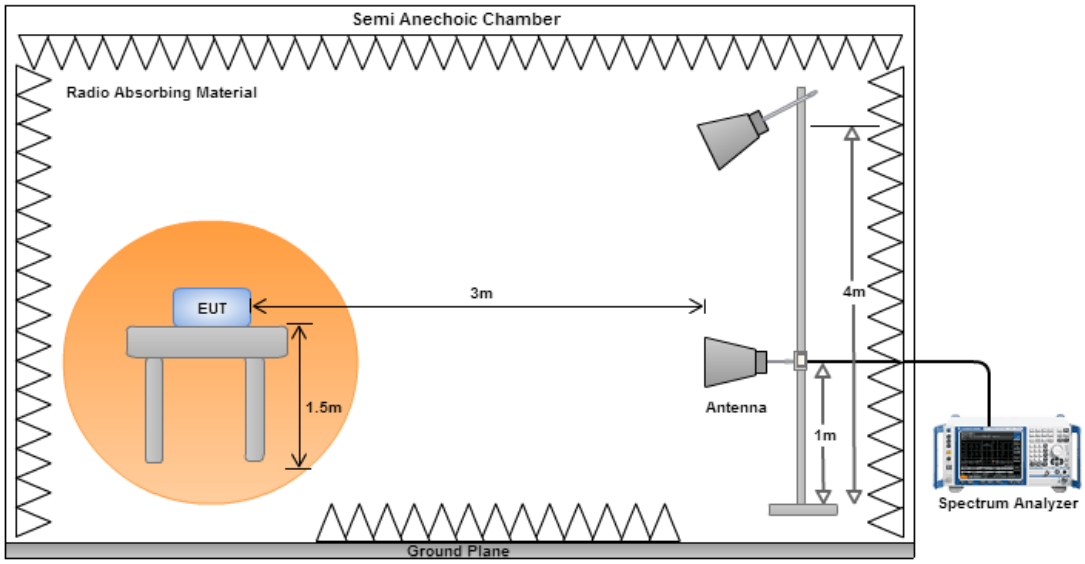
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



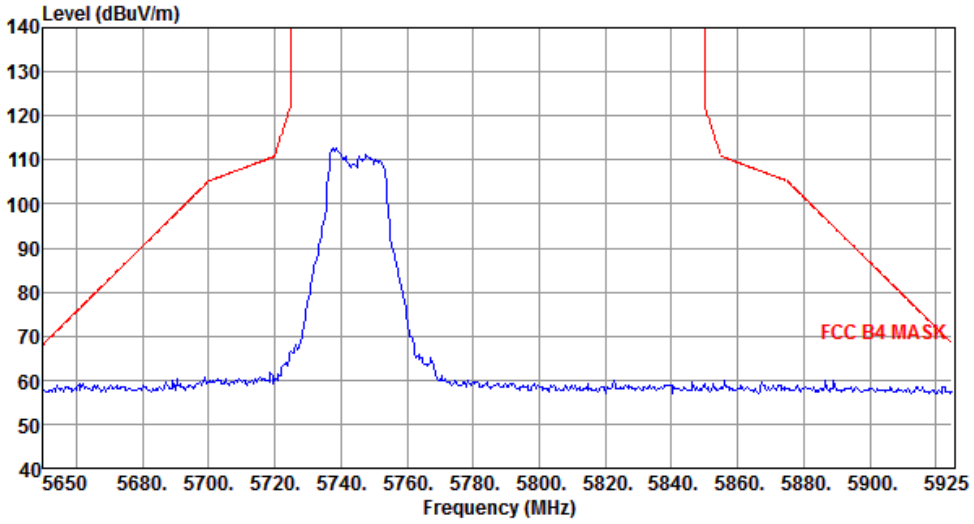
Radiated Emissions above 1 GHz



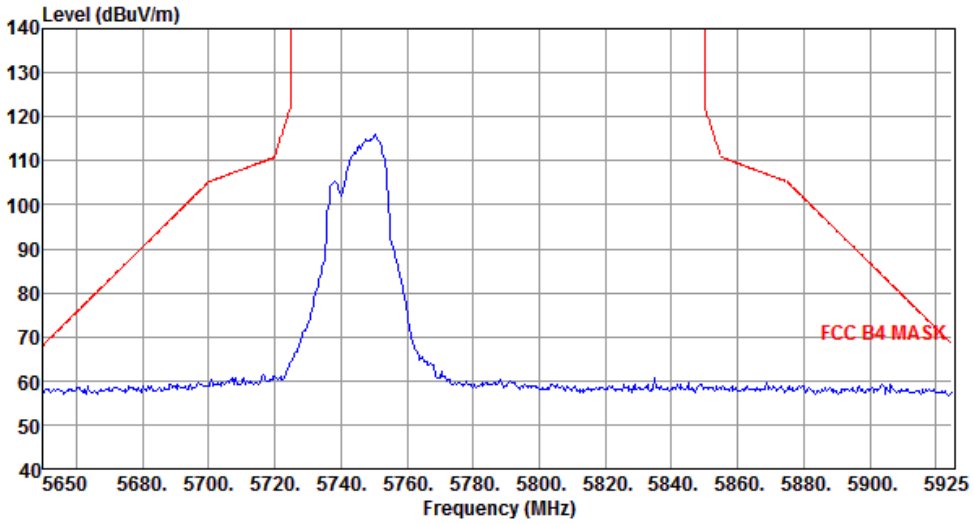
Non- beamforming mode

3.5.4 Transmitter Radiated Band Edge for 11a

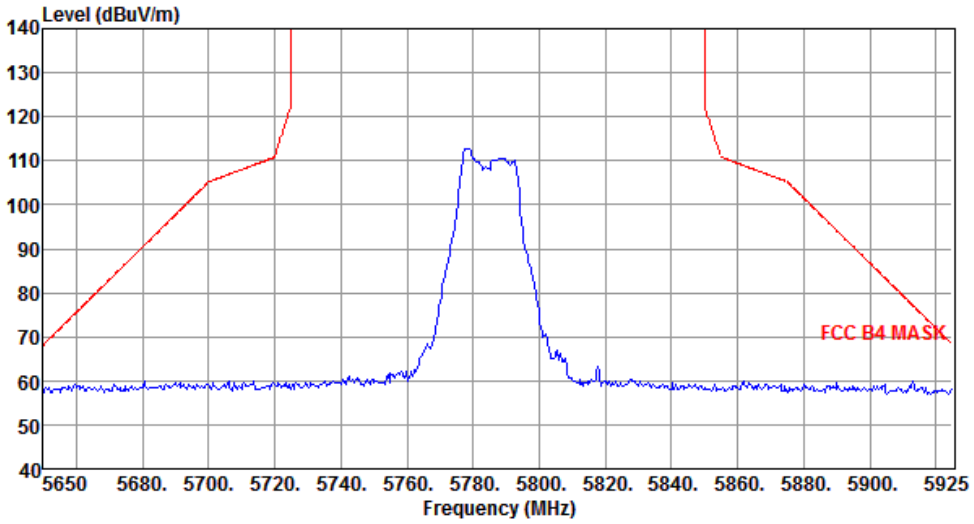
Modulation	11a	**Test Freq. (MHz)**	5745
Polarization	Horizontal		



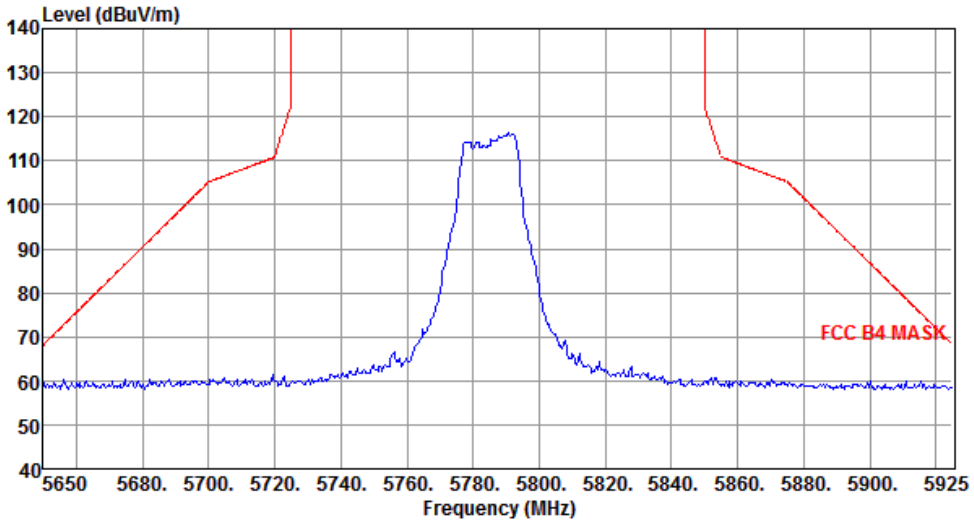
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



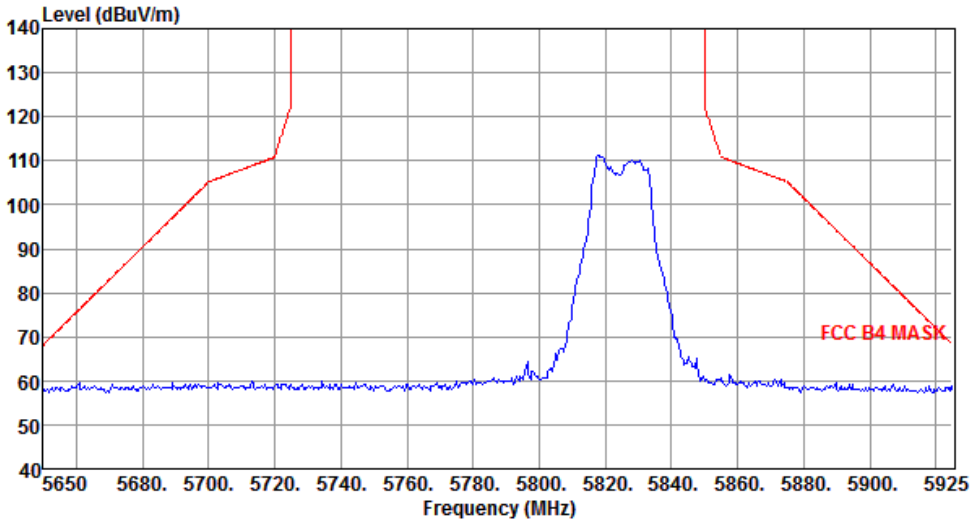
Modulation	11a	**Test Freq. (MHz)**	5785
Polarization	Horizontal		



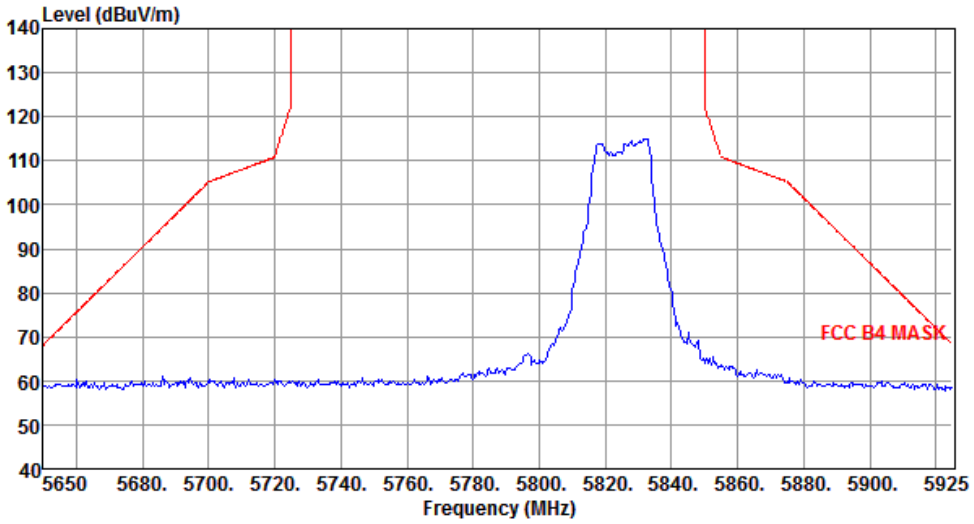
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



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

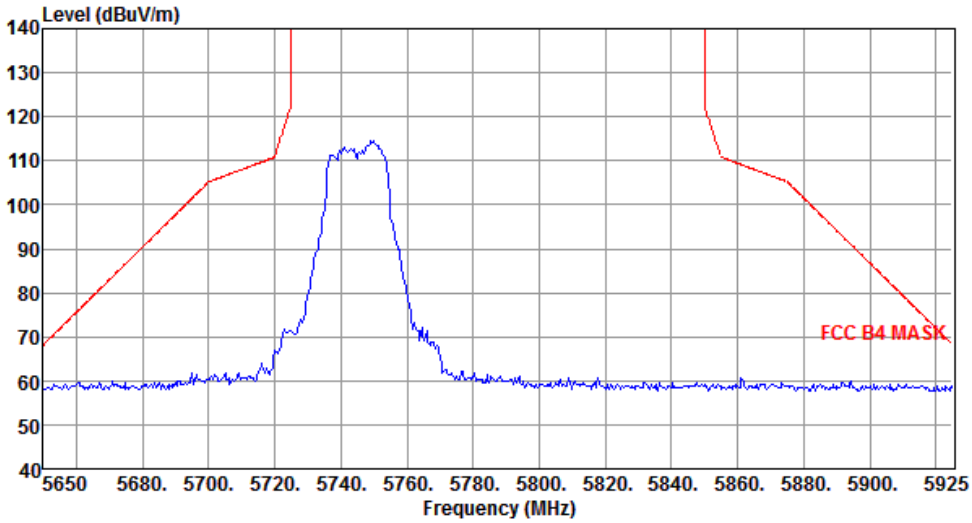


Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

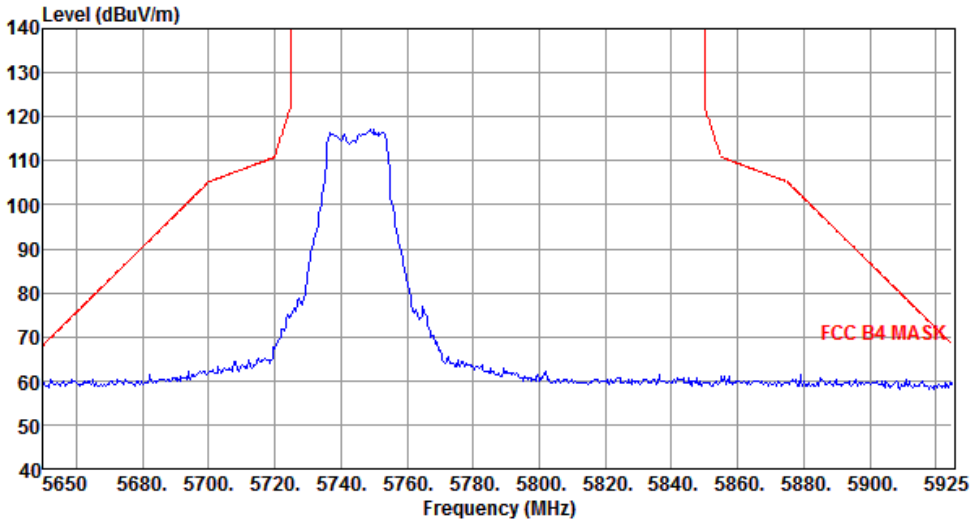


3.5.5 Transmitter Radiated Band Edge for VHT20

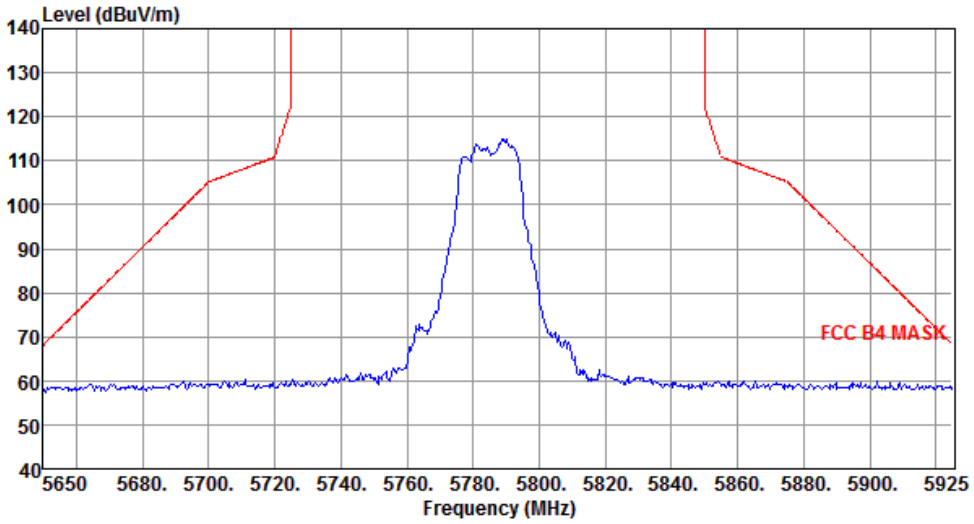
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



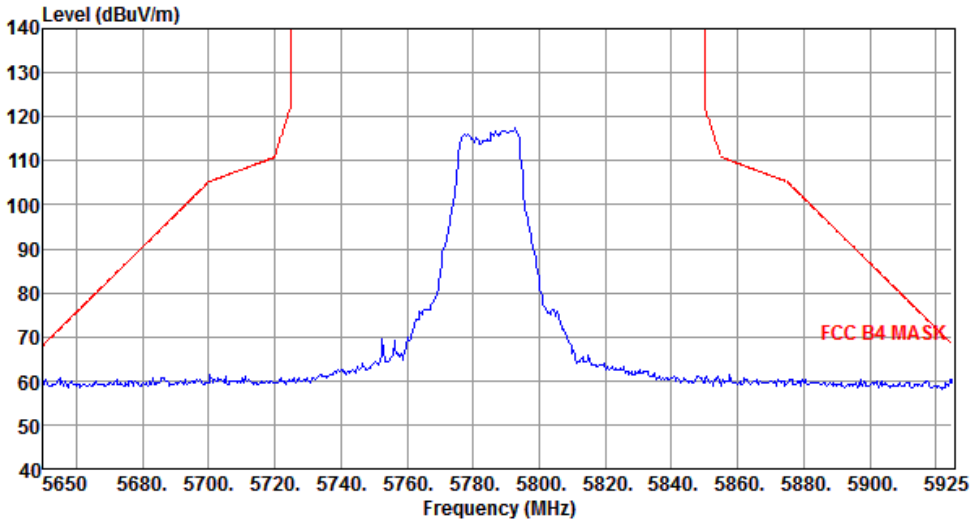
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Vertical		



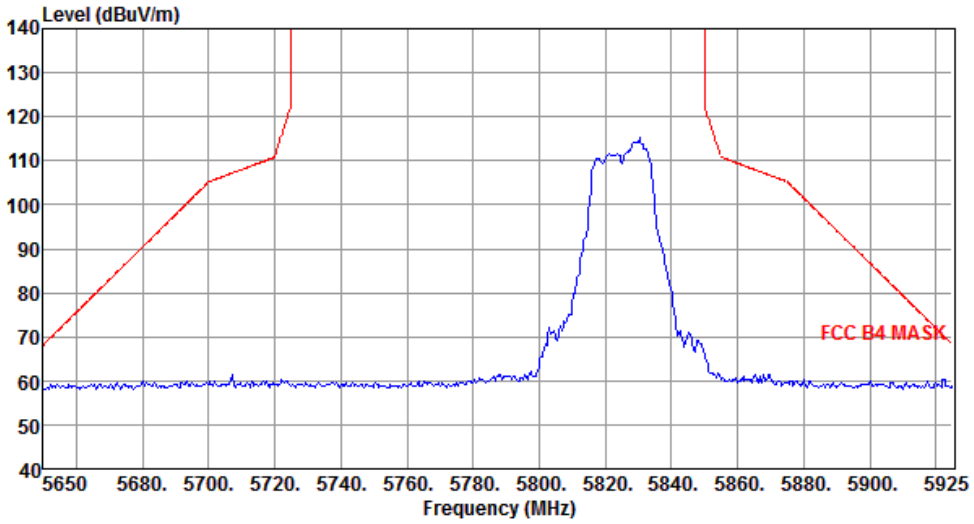
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Horizontal		



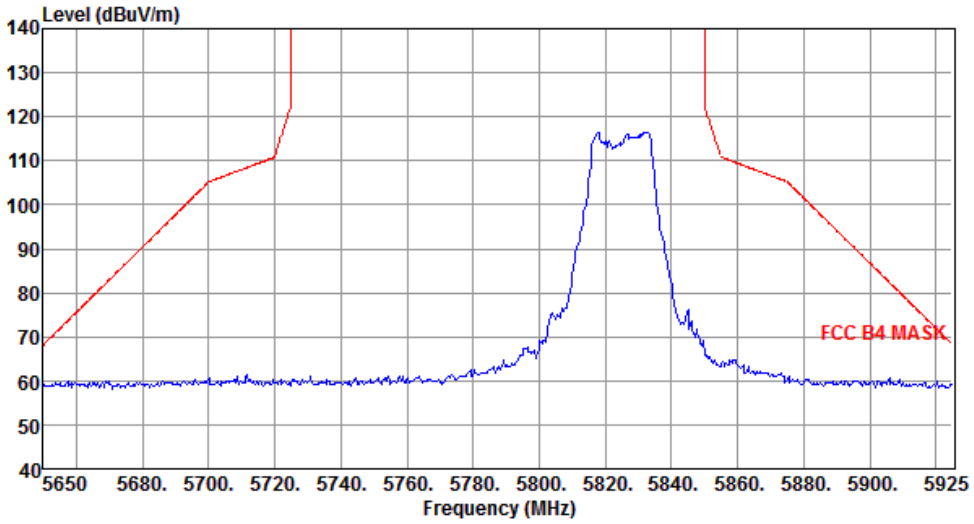
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Vertical		



Modulation	VHT20	**Test Freq. (MHz)**	5825
Polarization	Horizontal		

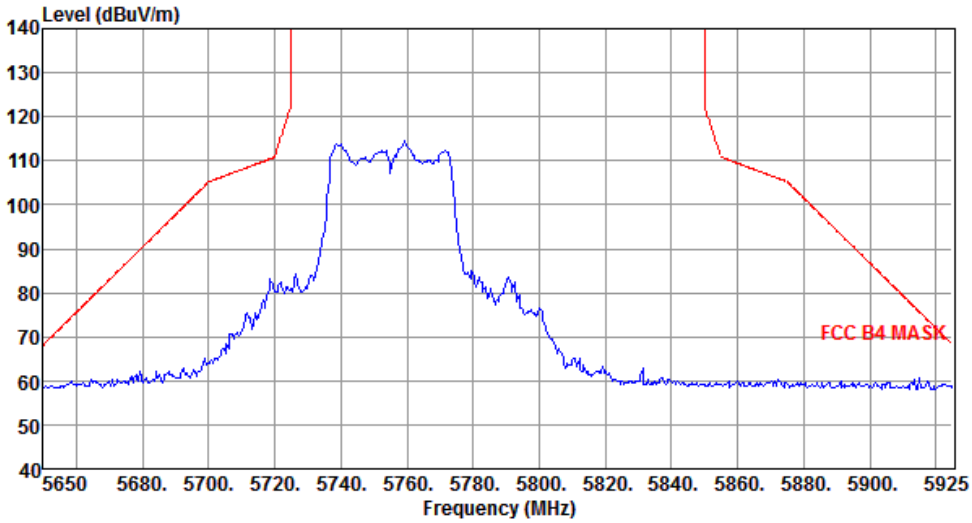


Modulation	VHT20	**Test Freq. (MHz)**	5825
Polarization	Vertical		

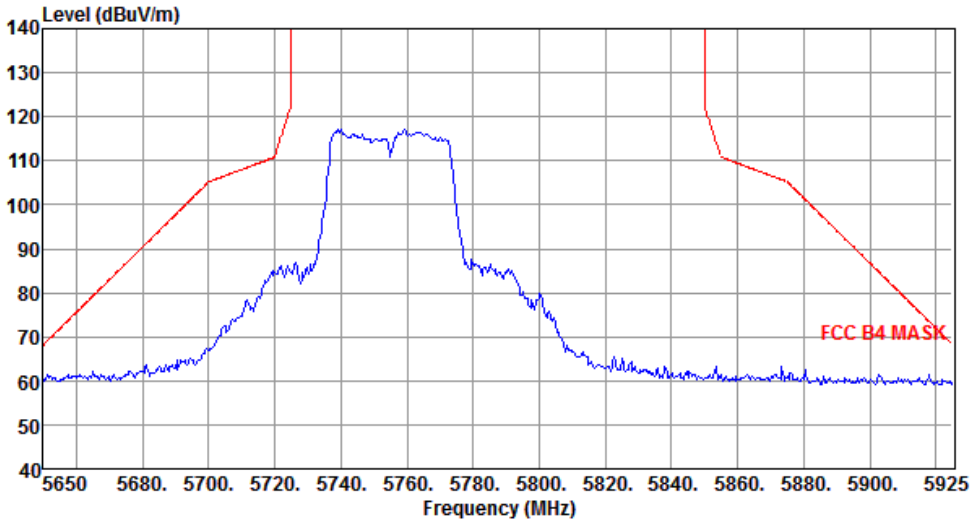


3.5.6 Transmitter Radiated Band Edge for VHT40

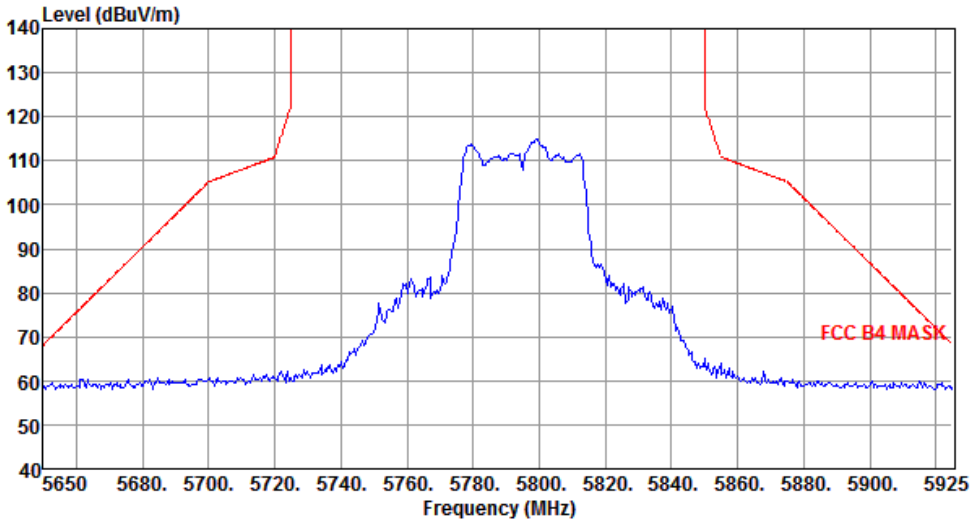
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



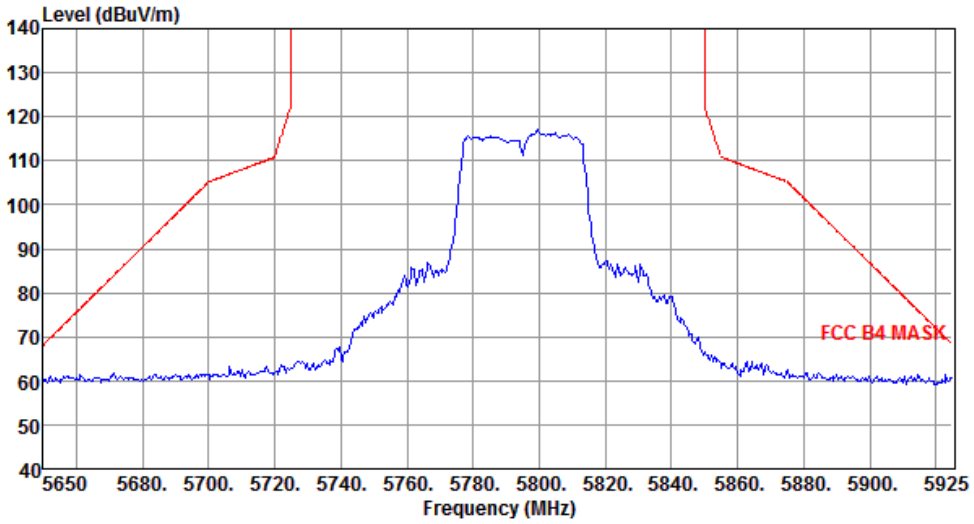
Modulation	VHT40	**Test Freq. (MHz)**	5755
Polarization	Vertical		



Modulation	VHT40	**Test Freq. (MHz)**	5795
Polarization	Horizontal		

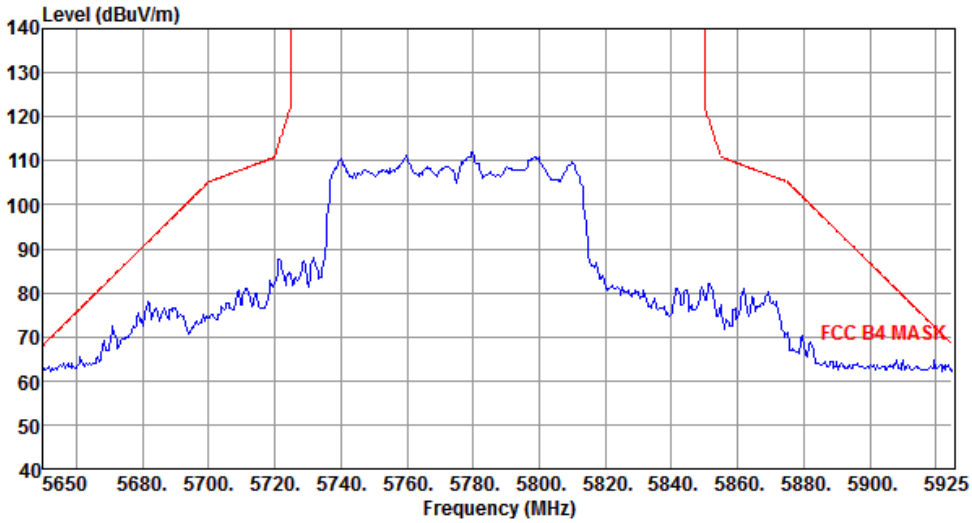


Modulation	VHT40	**Test Freq. (MHz)**	5795
Polarization	Vertical		

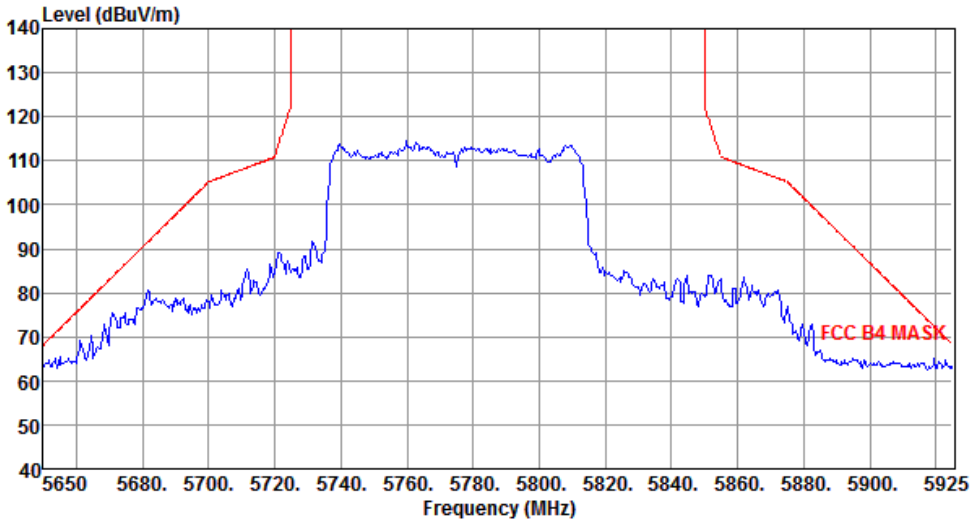


3.5.7 Transmitter Radiated Band Edge for VHT80

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		

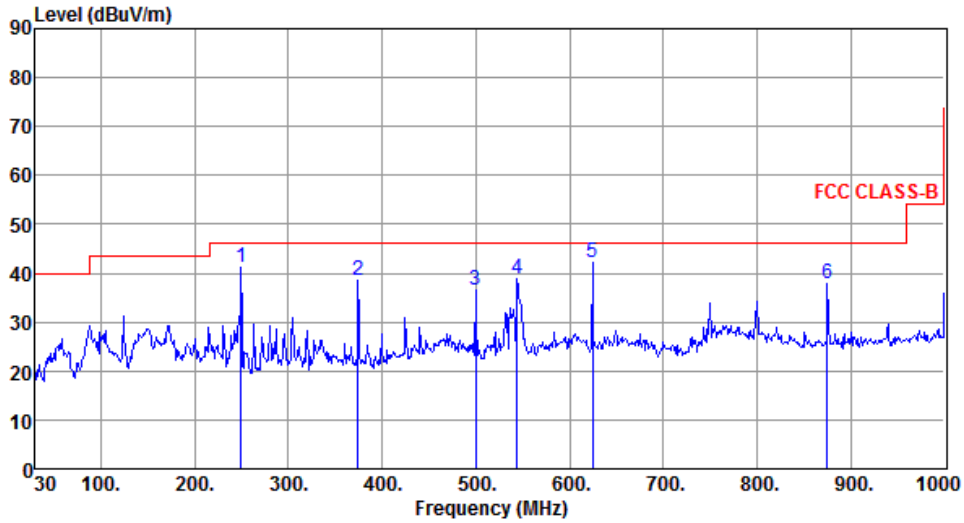


Modulation	VHT80	**Test Freq. (MHz)**	5775
Polarization	Vertical		



3.5.8 Transmitter Radiated Unwanted Emissions (Below 1GHz)

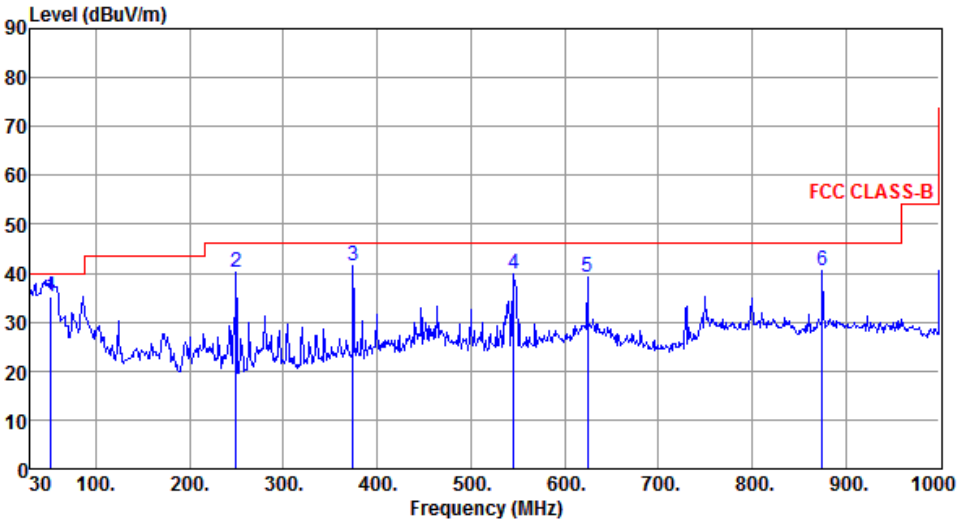
Modulation	VHT40	**Test Freq. (MHz)**	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	249.22	41.06	46.00	-4.94	53.85	-12.79	Peak	---	---
2	374.35	38.44	46.00	-7.56	47.80	-9.36	Peak	---	---
3	499.48	36.46	46.00	-9.54	42.98	-6.52	Peak	---	---
4	544.10	38.74	46.00	-7.26	44.48	-5.74	Peak	---	---
5	624.61	42.06	46.00	-3.94	46.35	-4.29	Peak	---	---
6	874.87	37.83	46.00	-8.17	38.75	-0.92	Peak	---	---

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

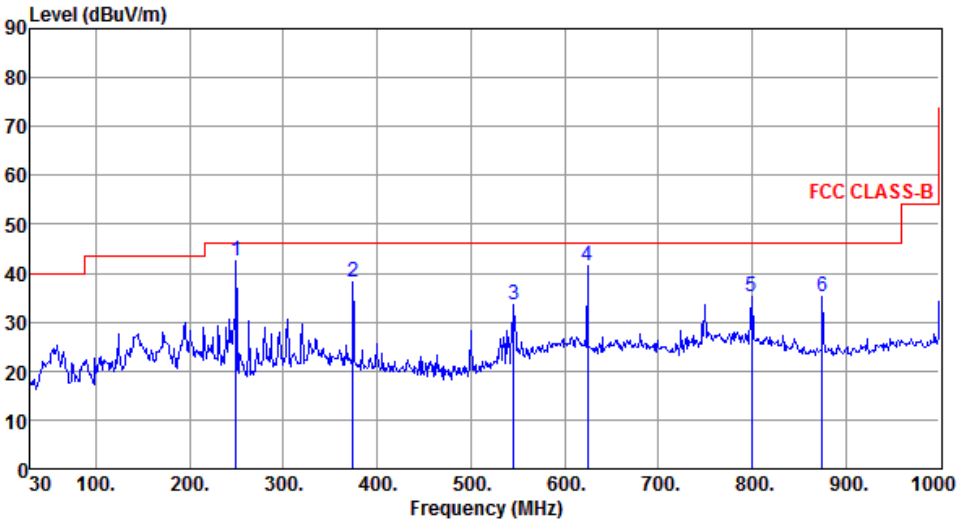
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.31	35.13	40.00	-4.87	47.06	-11.93	QP	100	66
2	249.22	40.18	46.00	-5.82	52.97	-12.79	Peak	---	---
3	374.35	41.57	46.00	-4.43	50.93	-9.36	Peak	---	---
4	546.04	39.81	46.00	-6.19	45.52	-5.71	Peak	---	---
5	624.61	39.19	46.00	-6.81	43.48	-4.29	Peak	---	---
6	874.87	40.52	46.00	-5.48	41.44	-0.92	Peak	---	---

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

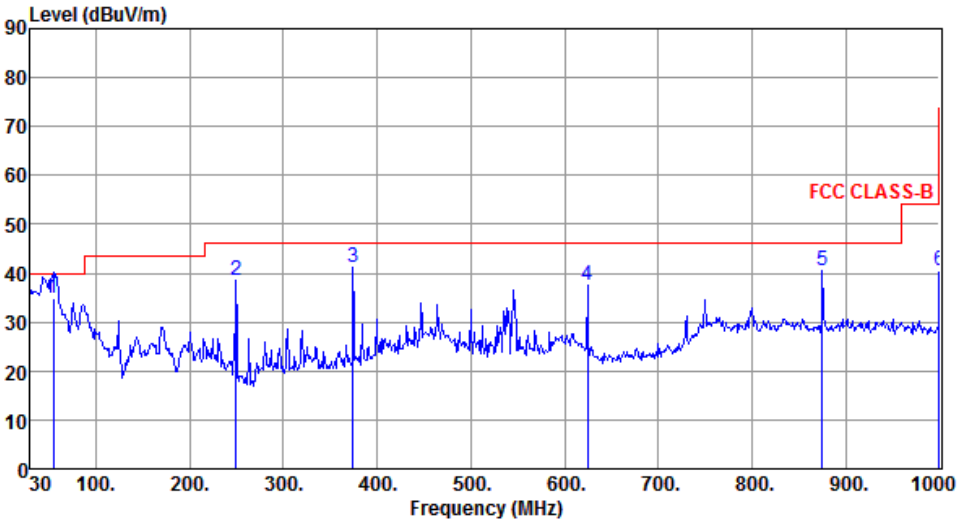
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	249.22	42.43	46.00	-3.57	55.22	-12.79	Peak	---	---
2	374.35	38.34	46.00	-7.66	47.70	-9.36	Peak	---	---
3	546.04	33.61	46.00	-12.39	39.32	-5.71	Peak	---	---
4	624.61	41.62	46.00	-4.38	45.91	-4.29	Peak	---	---
5	799.21	35.16	46.00	-10.84	37.06	-1.90	Peak	---	---
6	874.87	35.24	46.00	-10.76	36.16	-0.92	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		

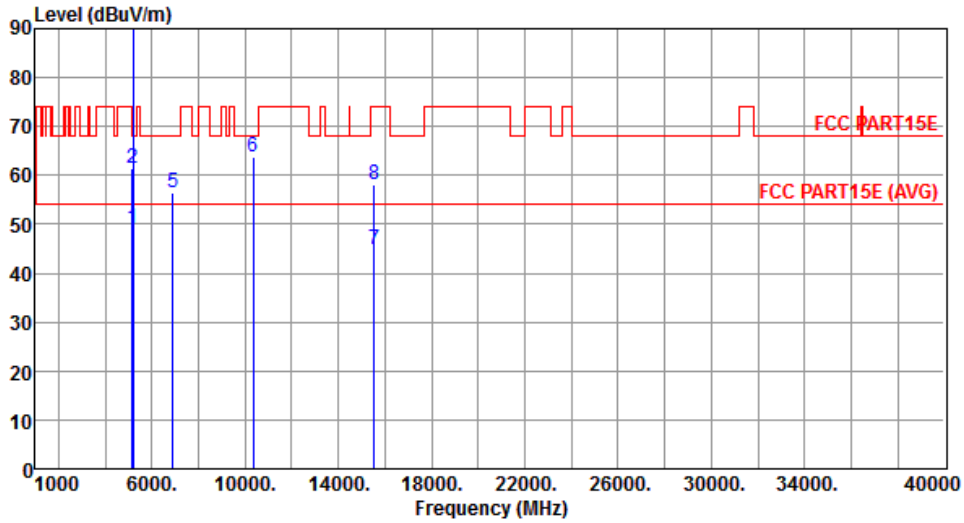


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	54.25	35.02	40.00	-4.98	47.16	-12.14	QP	100	81
2	249.22	38.52	46.00	-7.48	51.31	-12.79	Peak	---	---
3	374.35	41.05	46.00	-4.95	50.41	-9.36	Peak	---	---
4	624.61	37.60	46.00	-8.40	41.89	-4.29	Peak	---	---
5	874.87	40.60	46.00	-5.40	41.52	-0.92	Peak	---	---
6	1000.00	40.57	54.00	-13.43	39.90	0.67	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.

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

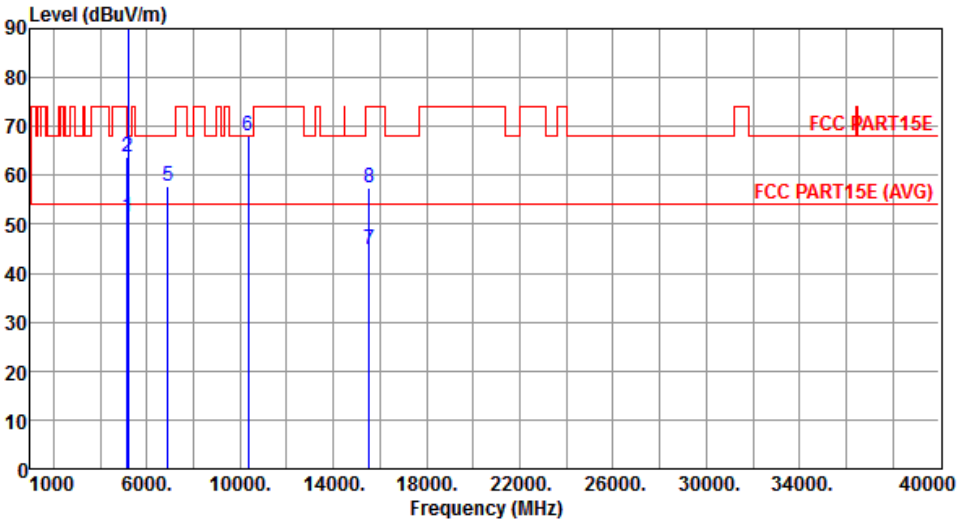
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	49.02	54.00	-4.98	44.12	4.90	Average	160	283
2		5150.00	61.46	74.00	-12.54	56.56	4.90	Peak	160	283
3	*	5180.00	102.38			97.45	4.93	Average	160	295
4	*	5180.00	111.49			106.56	4.93	Peak	160	295
5		6906.00	56.35	68.20	-11.85	47.84	8.51	Peak	130	288
6		10360.00	63.85	68.20	-4.35	50.18	13.67	Peak	270	57
7		15540.00	44.79	54.00	-9.21	29.07	15.72	Average	100	116
8		15540.00	58.03	74.00	-15.97	42.31	15.72	Peak	100	116

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

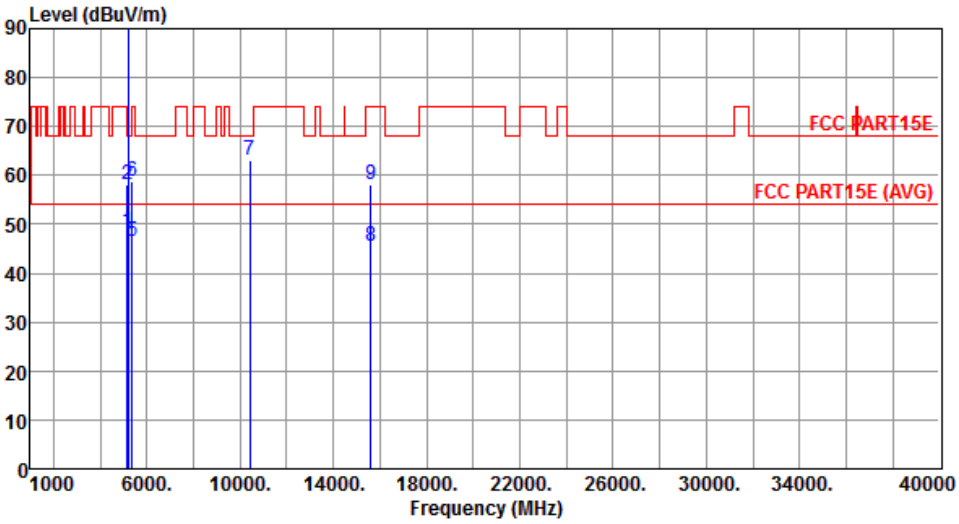
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	51.50	54.00	-2.50	46.60	4.90	Average	100	304
2		5150.00	63.91	74.00	-10.09	59.01	4.90	Peak	100	304
3	*	5180.00	108.02			103.09	4.93	Average	100	265
4	*	5180.00	117.26			112.33	4.93	Peak	100	265
5		6906.00	57.71	68.20	-10.49	49.20	8.51	Peak	217	172
6		10360.00	67.99	68.20	-0.21	54.32	13.67	Peak	118	98
7		15540.00	44.83	54.00	-9.17	29.11	15.72	Average	100	185
8		15540.00	57.58	74.00	-16.42	41.86	15.72	Peak	100	185

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

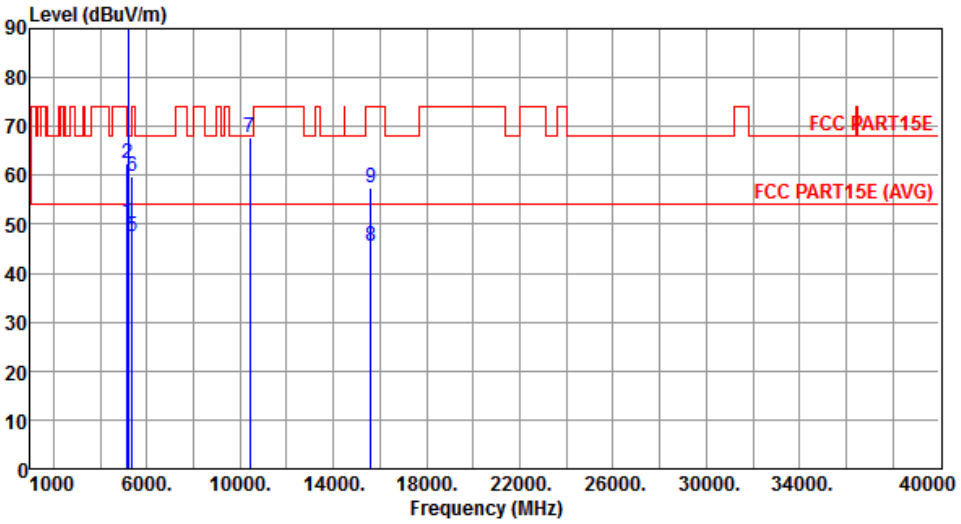
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.48	54.00	-5.52	43.58	4.90	Average	148	296
2		5150.00	58.10	74.00	-15.90	53.20	4.90	Peak	148	296
3	*	5200.00	102.63			97.68	4.95	Average	148	296
4	*	5200.00	111.62			106.67	4.95	Peak	148	296
5		5350.00	46.54	54.00	-7.46	41.41	5.13	Average	148	296
6		5350.00	58.81	74.00	-15.19	53.68	5.13	Peak	148	296
7		10400.00	63.11	68.20	-5.09	49.36	13.75	Peak	276	57
8		15600.00	45.50	54.00	-8.50	29.89	15.61	Average	100	82
9		15600.00	58.22	74.00	-15.78	42.61	15.61	Peak	100	82

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

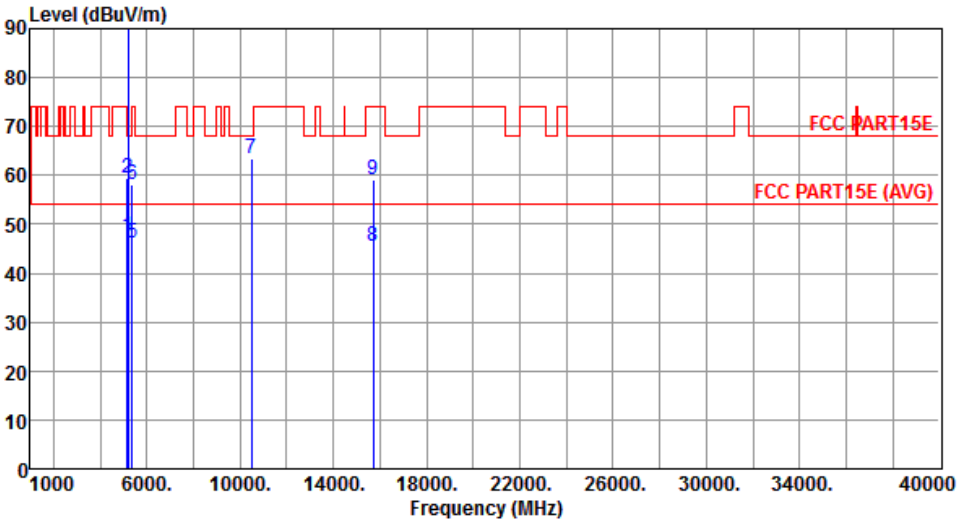
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	50.43	54.00	-3.57	45.53	4.90	Average	206	265
2		5150.00	62.36	74.00	-11.64	57.46	4.90	Peak	206	265
3	*	5200.00	108.26			103.31	4.95	Average	206	265
4	*	5200.00	117.50			112.55	4.95	Peak	206	265
5		5350.00	47.40	54.00	-6.60	42.27	5.13	Average	206	265
6		5350.00	59.62	74.00	-14.38	54.49	5.13	Peak	206	265
7		10400.00	67.78	68.20	-0.42	54.03	13.75	Peak	117	94
8		15600.00	45.56	54.00	-8.44	29.95	15.61	Average	100	167
9		15600.00	57.62	74.00	-16.38	42.01	15.61	Peak	100	167

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

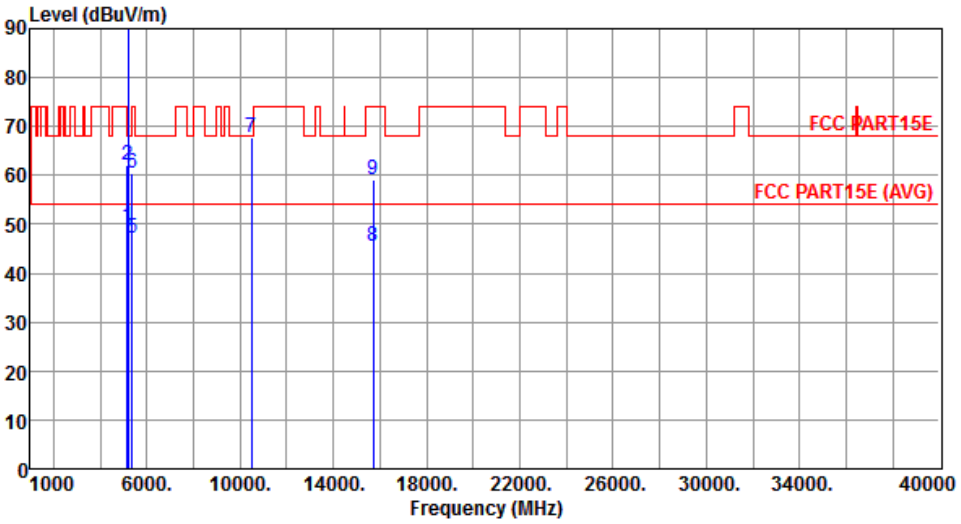
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



		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	47.53	54.00	-6.47	42.63	4.90	Average	150	297
2		5150.00	59.53	74.00	-14.47	54.63	4.90	Peak	150	297
3	*	5240.00	102.44			97.44	5.00	Average	150	297
4	*	5240.00	111.42			106.42	5.00	Peak	150	297
5		5350.00	46.24	54.00	-7.76	41.11	5.13	Average	150	297
6		5350.00	58.24	74.00	-15.76	53.11	5.13	Peak	150	297
7		10480.00	63.51	68.20	-4.69	49.61	13.90	Peak	281	60
8		15720.00	45.51	54.00	-8.49	30.12	15.39	Average	100	132
9		15720.00	58.98	74.00	-15.02	43.59	15.39	Peak	100	132

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

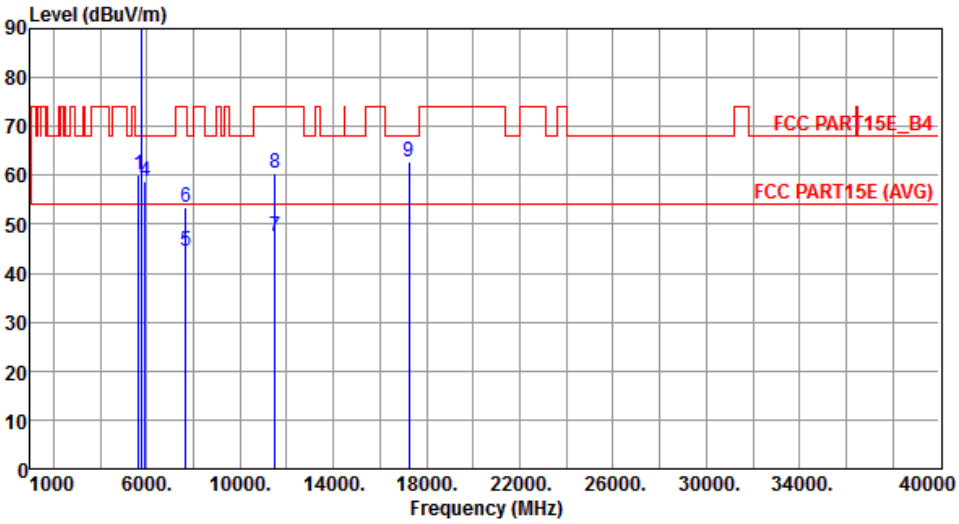
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



		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	49.53	54.00	-4.47	44.63	4.90	Average	220	262
2		5150.00	62.03	74.00	-11.97	57.13	4.90	Peak	220	262
3	*	5240.00	108.04			103.04	5.00	Average	220	262
4	*	5240.00	117.22			112.22	5.00	Peak	220	262
5		5350.00	47.24	54.00	-6.76	42.11	5.13	Average	220	262
6		5350.00	60.30	74.00	-13.70	55.17	5.13	Peak	220	262
7		10480.00	67.91	68.20	-0.29	54.01	13.90	Peak	120	98
8		15720.00	45.64	54.00	-8.36	30.25	15.39	Average	100	120
9		15720.00	59.06	74.00	-14.94	43.67	15.39	Peak	100	120

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

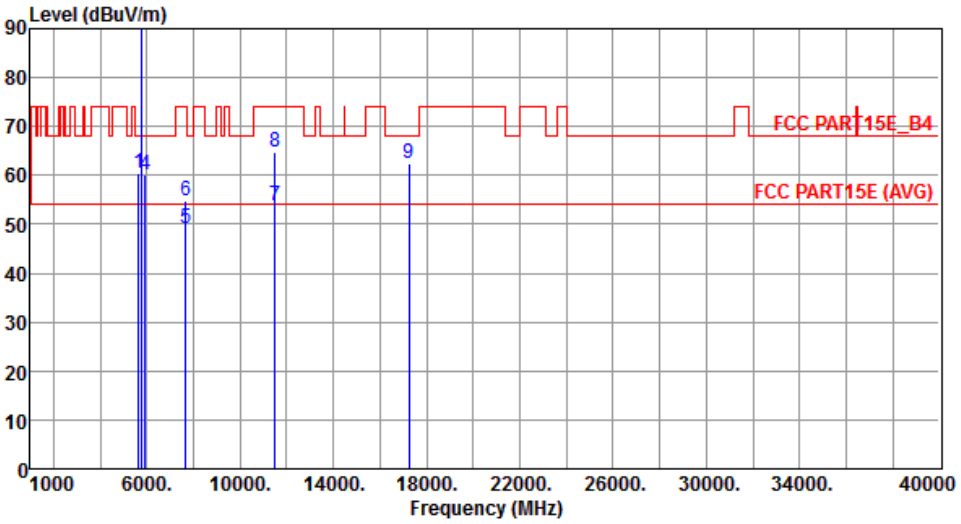
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.16	68.20	-8.04	54.61	5.55	Peak	100	286
2	*	5745.00	104.96			99.20	5.76	Average	100	286
3	*	5745.00	113.98			108.22	5.76	Peak	100	286
4		5925.10	58.71	68.20	-9.49	52.62	6.09	Peak	100	286
5		7660.00	44.65	54.00	-9.35	34.93	9.72	Average	180	106
6		7660.00	53.56	74.00	-20.44	43.84	9.72	Peak	180	106
7		11490.00	47.54	54.00	-6.46	32.92	14.62	Average	180	35
8		11490.00	60.46	74.00	-13.54	45.84	14.62	Peak	180	35
9		17235.00	62.73	68.20	-5.47	42.09	20.64	Peak	100	176

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

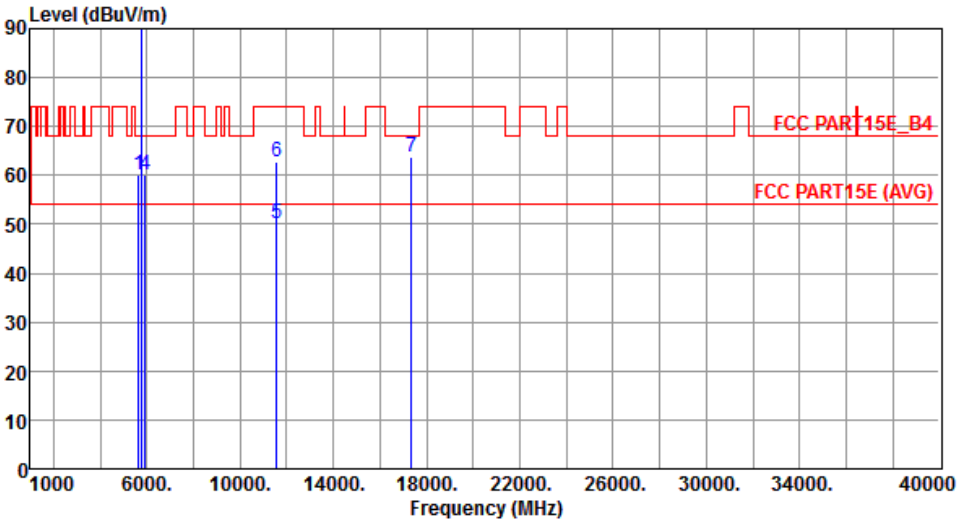
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.30	68.20	-7.90	54.75	5.55	Peak	234	264
2	*	5745.00	106.92			101.16	5.76	Average	234	264
3	*	5745.00	115.85			110.09	5.76	Peak	234	264
4		5925.10	60.13	68.20	-8.07	54.04	6.09	Peak	234	264
5		7660.00	49.17	54.00	-4.83	39.45	9.72	Average	121	93
6		7660.00	54.75	74.00	-19.25	45.03	9.72	Peak	121	93
7		11490.00	53.73	54.00	-0.27	39.11	14.62	Average	114	85
8		11490.00	64.87	74.00	-9.13	50.25	14.62	Peak	114	85
9		17235.00	62.60	68.20	-5.60	41.96	20.64	Peak	100	129

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

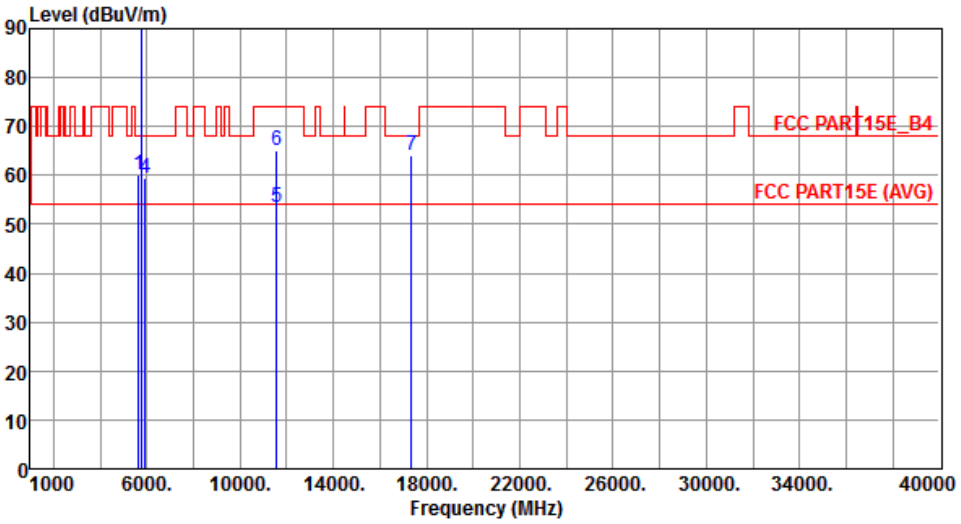
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.96	68.20	-8.24	54.41	5.55	Peak	100	283
2	*	5785.00	104.84			98.99	5.85	Average	100	283
3	*	5785.00	114.60			108.75	5.85	Peak	100	283
4		5925.10	60.06	68.20	-8.14	53.97	6.09	Peak	100	283
5		11570.00	50.12	54.00	-3.88	35.60	14.52	Average	178	39
6		11570.00	62.72	74.00	-11.28	48.20	14.52	Peak	178	39
7		17355.00	63.79	68.20	-4.41	42.50	21.29	Peak	100	193

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

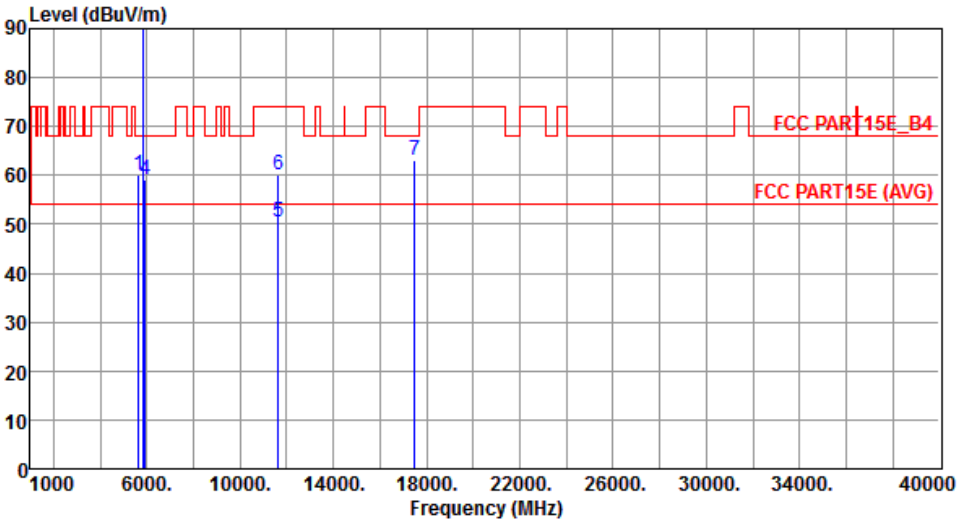
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.24	68.20	-7.96	54.69	5.55	Peak	232	265
2	*	5785.00	106.91			101.06	5.85	Average	232	265
3	*	5785.00	116.31			110.46	5.85	Peak	232	265
4		5925.10	59.51	68.20	-8.69	53.42	6.09	Peak	232	265
5		11570.00	53.62	54.00	-0.38	39.10	14.52	Average	115	107
6		11570.00	65.19	74.00	-8.81	50.67	14.52	Peak	115	107
7		17355.00	63.98	68.20	-4.22	42.69	21.29	Peak	100	127

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

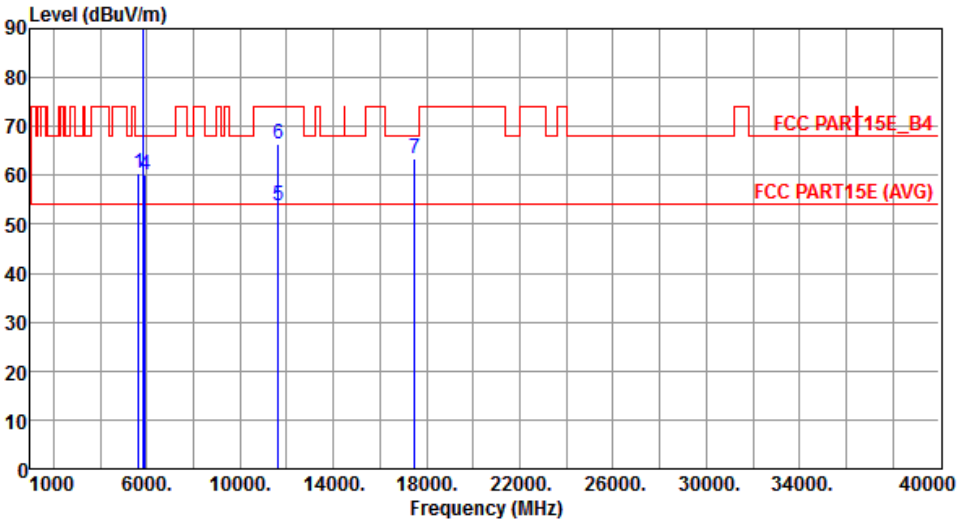
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.26	68.20	-7.94	54.71	5.55	Peak	100	284
2	*	5825.00	103.38			97.45	5.93	Average	100	284
3	*	5825.00	112.13			106.20	5.93	Peak	100	284
4		5925.10	59.22	68.20	-8.98	53.13	6.09	Peak	100	284
5		11650.00	50.34	54.00	-3.66	35.94	14.40	Average	176	40
6		11650.00	59.97	74.00	-14.03	45.57	14.40	Peak	176	40
7		17475.00	63.15	68.20	-5.05	41.21	21.94	Peak	176	40

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

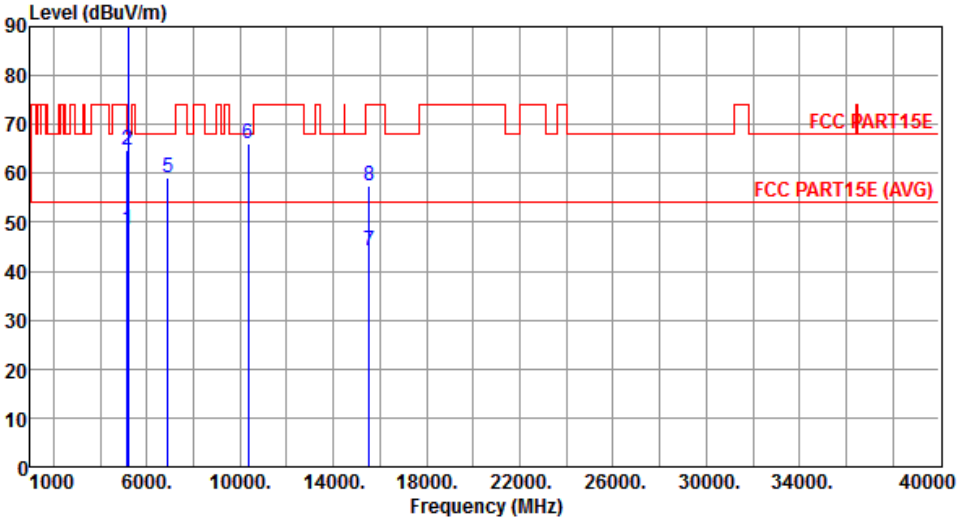


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.50	68.20	-7.70	54.95	5.55	Peak	249	260
2	*	5825.00	105.47			99.54	5.93	Average	249	260
3	*	5825.00	114.76			108.83	5.93	Peak	249	260
4		5925.10	60.06	68.20	-8.14	53.97	6.09	Peak	249	260
5		11650.00	53.85	54.00	-0.15	39.45	14.40	Average	109	107
6		11650.00	66.36	74.00	-7.64	51.96	14.40	Peak	109	107
7		17475.00	63.37	68.20	-4.83	41.43	21.94	Peak	100	128

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

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

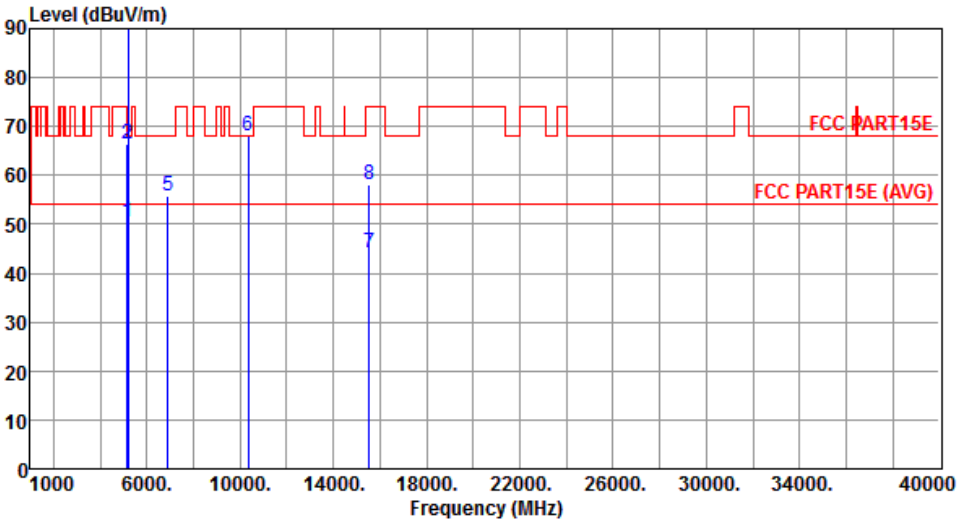
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	48.34	54.00	-5.66	43.44	4.90	Average	160	287
2		5150.00	64.82	74.00	-9.18	59.92	4.90	Peak	160	287
3	*	5180.00	101.97			97.04	4.93	Average	152	293
4	*	5180.00	111.92			106.99	4.93	Peak	152	293
5		6906.66	59.13	68.20	-9.07	50.62	8.51	Peak	223	59
6		10360.00	65.93	68.20	-2.27	52.26	13.67	Peak	177	30
7		15540.00	44.01	54.00	-9.99	28.29	15.72	Average	111	69
8		15540.00	57.60	74.00	-16.40	41.88	15.72	Peak	111	69

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

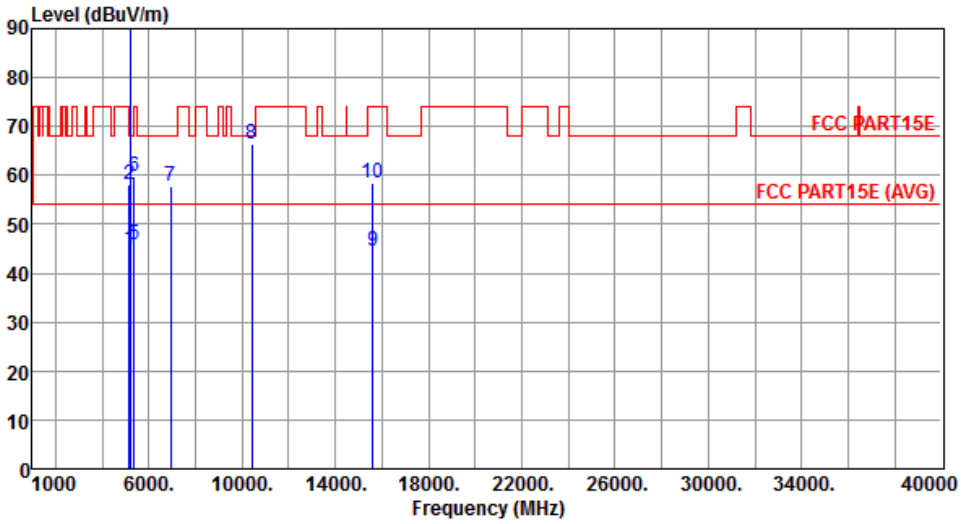
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	50.45	54.00	-3.55	45.55	4.90	Average	100	303
2		5150.00	66.40	74.00	-7.60	61.50	4.90	Peak	100	303
3	*	5180.00	107.28			102.35	4.93	Average	141	266
4	*	5180.00	117.58			112.65	4.93	Peak	141	266
5		6906.66	55.73	68.20	-12.47	47.22	8.51	Peak	102	333
6		10360.00	68.04	68.20	-0.16	54.37	13.67	Peak	145	93
7		15540.00	44.04	54.00	-9.96	28.32	15.72	Average	145	222
8		15540.00	58.13	74.00	-15.87	42.41	15.72	Peak	145	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

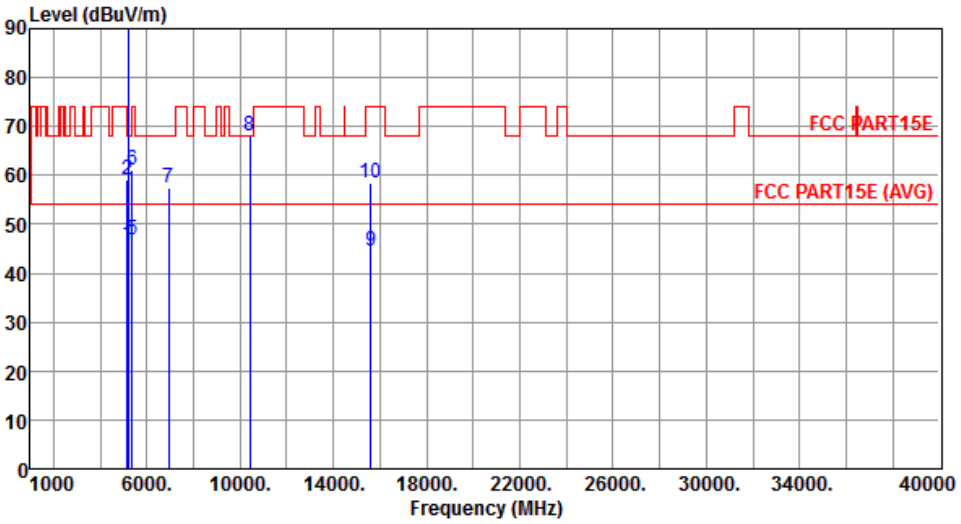
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	44.78	54.00	-9.22	39.88	4.90	Average	130	299
2		5150.00	58.24	74.00	-15.76	53.34	4.90	Peak	130	299
3	*	5200.00	102.26			97.31	4.95	Average	130	299
4	*	5200.00	112.38			107.43	4.95	Peak	130	299
5		5350.00	45.92	54.00	-8.08	40.79	5.13	Average	130	299
6		5350.00	59.79	74.00	-14.21	54.66	5.13	Peak	130	299
7		6933.33	57.67	68.20	-10.53	49.06	8.61	Peak	168	250
8		10400.00	66.39	68.20	-1.81	52.64	13.75	Peak	179	35
9		15600.00	44.45	54.00	-9.55	28.84	15.61	Average	211	153
10		15600.00	58.48	74.00	-15.52	42.87	15.61	Peak	211	153

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

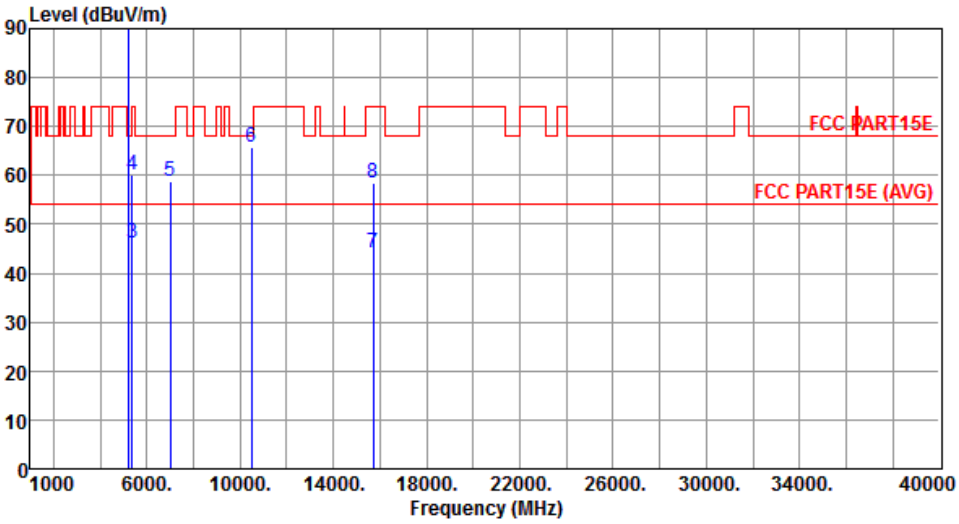
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	45.89	54.00	-8.11	40.99	4.90	Average	118	262
2		5150.00	59.11	74.00	-14.89	54.21	4.90	Peak	118	262
3	*	5200.00	107.63			102.68	4.95	Average	118	262
4	*	5200.00	118.99			114.04	4.95	Peak	118	262
5		5350.00	46.68	54.00	-7.32	41.55	5.13	Average	118	262
6		5350.00	60.96	74.00	-13.04	55.83	5.13	Peak	118	262
7		6933.33	57.35	68.20	-10.85	48.74	8.61	Peak	242	172
8		10400.00	68.03	68.20	-0.17	54.28	13.75	Peak	143	93
9		15600.00	44.47	54.00	-9.53	28.86	15.61	Average	166	231
10		15600.00	58.60	74.00	-15.40	42.99	15.61	Peak	166	231

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

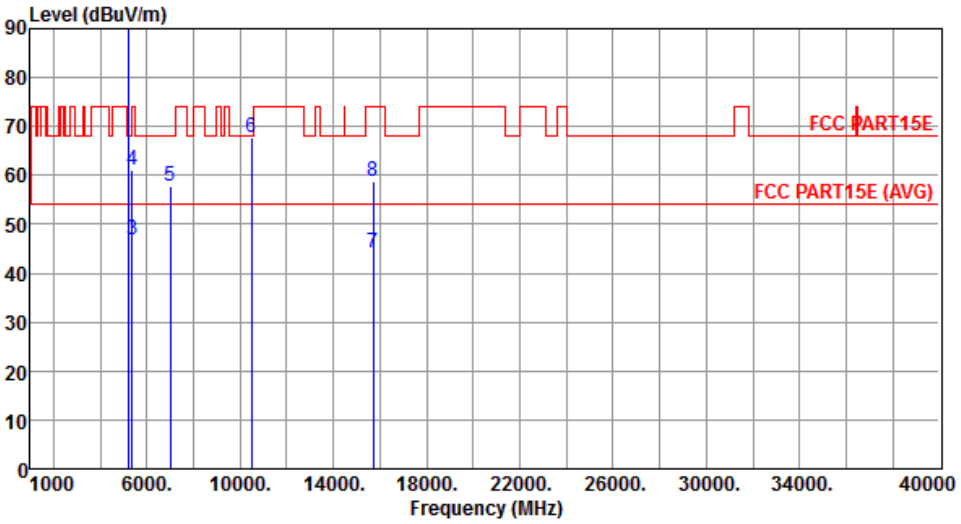
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5240.00	103.23			98.23	5.00	Average	114	291
2	*	5240.00	113.35			108.35	5.00	Peak	114	291
3		5350.00	46.02	54.00	-7.98	40.89	5.13	Average	114	291
4		5350.00	60.12	74.00	-13.88	54.99	5.13	Peak	114	291
5		6986.66	58.68	68.20	-9.52	49.87	8.81	Peak	165	251
6		10480.00	65.65	68.20	-2.55	51.75	13.90	Peak	177	32
7		15720.00	44.07	54.00	-9.93	28.68	15.39	Average	111	249
8		15720.00	58.55	74.00	-15.45	43.16	15.39	Peak	111	249

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

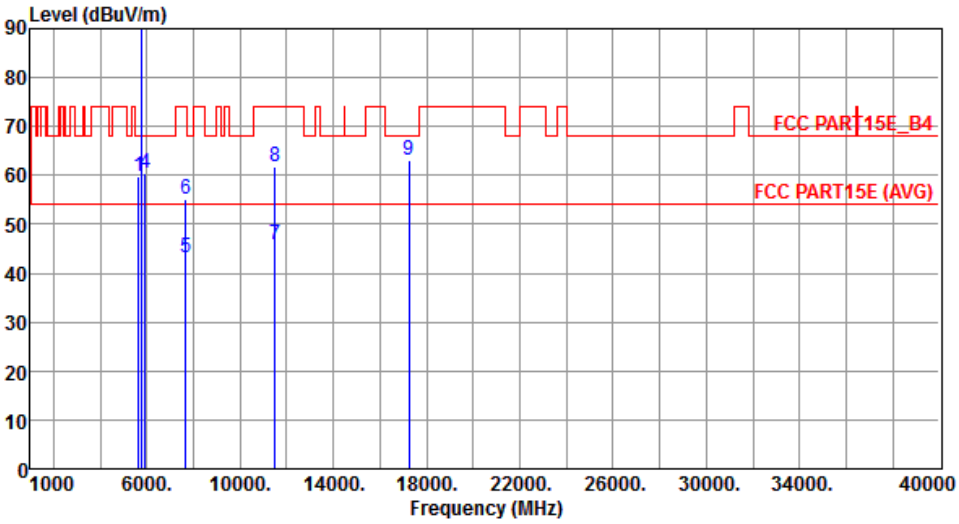
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5240.00	107.68			102.68	5.00	Average	117	262
2	*	5240.00	118.53			113.53	5.00	Peak	117	262
3		5350.00	46.89	54.00	-7.11	41.76	5.13	Average	117	262
4		5350.00	60.95	74.00	-13.05	55.82	5.13	Peak	117	262
5		6986.66	57.79	68.20	-10.41	48.98	8.81	Peak	153	322
6		10480.00	67.77	68.20	-0.43	53.87	13.90	Peak	129	94
7		15720.00	44.15	54.00	-9.85	28.76	15.39	Average	122	214
8		15720.00	58.63	74.00	-15.37	43.24	15.39	Peak	122	214

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

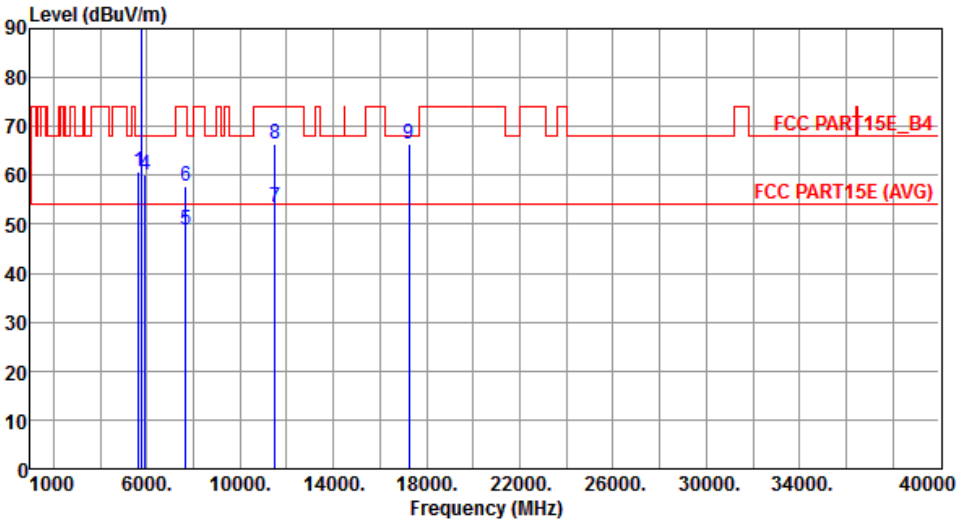
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.91	68.20	-8.29	54.36	5.55	Peak	270	137
2	*	5745.00	104.04			98.28	5.76	Average	270	137
3	*	5745.00	115.05			109.29	5.76	Peak	270	137
4		5925.10	60.41	68.20	-7.79	54.32	6.09	Peak	270	137
5		7660.00	43.20	54.00	-10.80	33.48	9.72	Average	224	113
6		7660.00	55.24	74.00	-18.76	45.52	9.72	Peak	224	113
7		11490.00	45.86	54.00	-8.14	31.24	14.62	Average	188	39
8		11490.00	61.85	74.00	-12.15	47.23	14.62	Peak	188	39
9		17235.00	63.13	68.20	-5.07	42.49	20.64	Peak	140	233

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

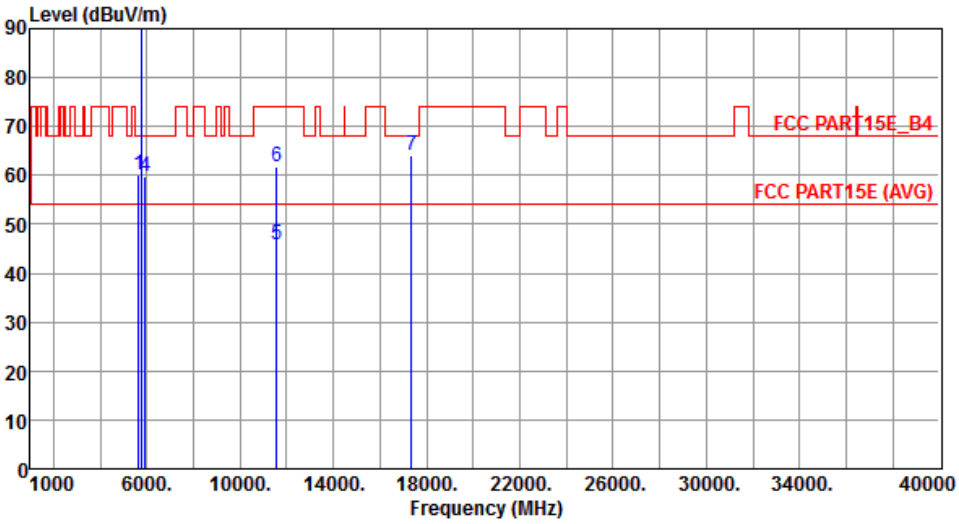
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.66	68.20	-7.54	55.11	5.55	Peak	272	289
2	*	5745.00	106.18			100.42	5.76	Average	272	289
3	*	5745.00	116.14			110.38	5.76	Peak	272	289
4		5925.10	60.23	68.20	-7.97	54.14	6.09	Peak	272	289
5		7660.00	48.68	54.00	-5.32	38.96	9.72	Average	100	97
6		7660.00	57.92	74.00	-16.08	48.20	9.72	Peak	100	97
7		11490.00	53.51	54.00	-0.49	38.89	14.62	Average	130	62
8		11490.00	66.51	74.00	-7.49	51.89	14.62	Peak	130	62
9		17235.00	66.46	68.20	-1.74	45.82	20.64	Peak	113	131

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

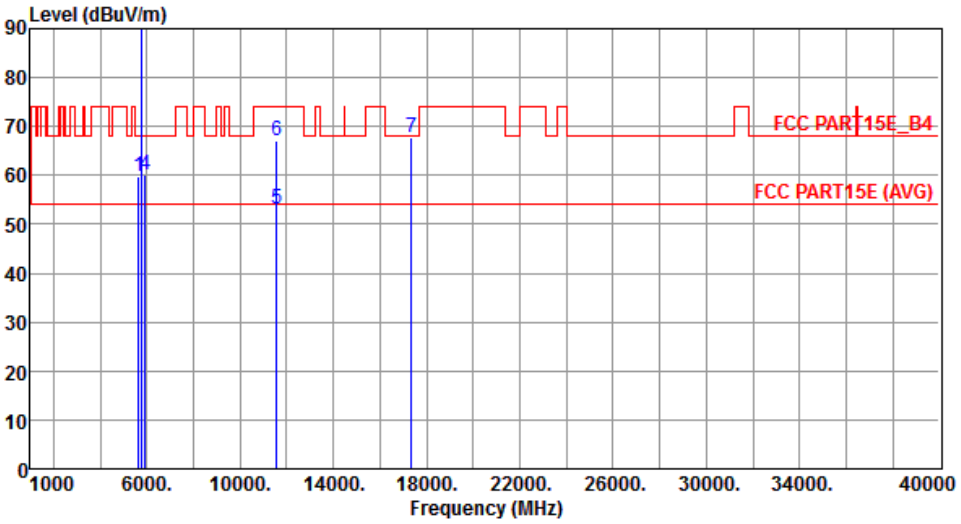
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.18	68.20	-8.02	54.63	5.55	Peak	254	139
2	*	5785.00	104.44			98.59	5.85	Average	254	139
3	*	5785.00	115.51			109.66	5.85	Peak	254	139
4		5925.10	59.77	68.20	-8.43	53.68	6.09	Peak	254	139
5		11570.00	45.85	54.00	-8.15	31.33	14.52	Average	199	43
6		11570.00	61.72	74.00	-12.28	47.20	14.52	Peak	199	43
7		17355.00	63.98	68.20	-4.22	42.69	21.29	Peak	162	221

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

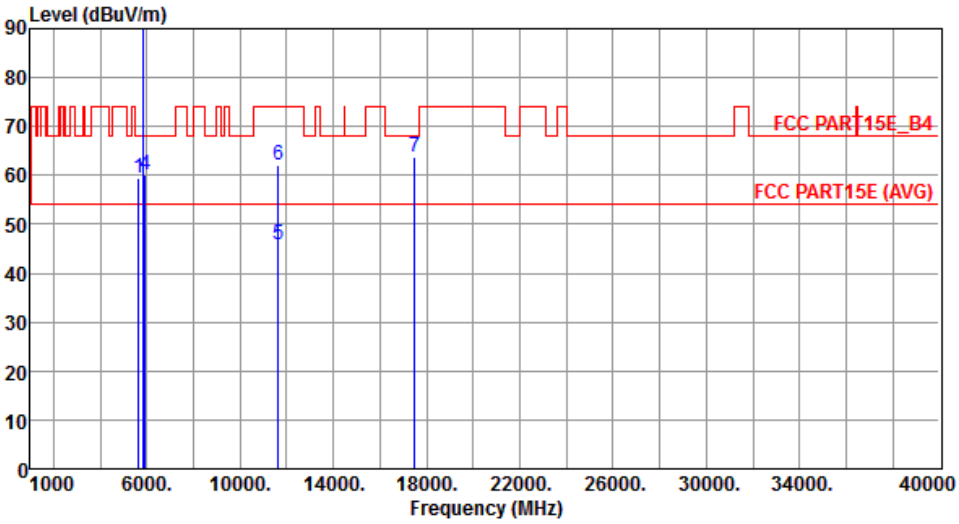
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.88	68.20	-8.32	54.33	5.55	Peak	232	280
2	*	5785.00	106.87			101.02	5.85	Average	232	280
3	*	5785.00	117.89			112.04	5.85	Peak	232	280
4		5925.10	60.19	68.20	-8.01	54.10	6.09	Peak	232	280
5		11570.00	53.08	54.00	-0.92	38.56	14.52	Average	182	71
6		11570.00	67.18	74.00	-6.82	52.66	14.52	Peak	182	71
7		17355.00	67.91	68.20	-0.29	46.62	21.29	Peak	104	132

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

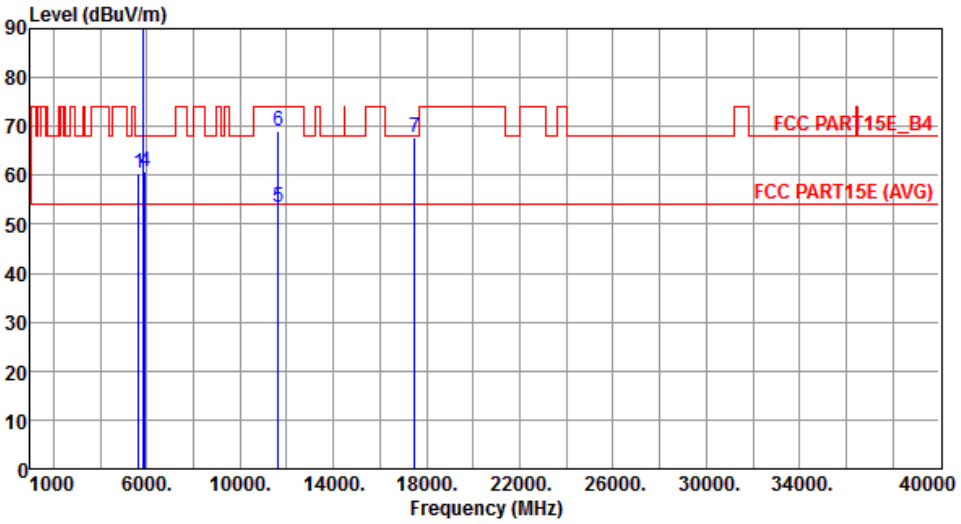
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.38	68.20	-8.82	53.83	5.55	Peak	236	135
2	*	5825.00	105.03			99.10	5.93	Average	236	135
3	*	5825.00	116.02			110.09	5.93	Peak	236	135
4		5925.10	59.97	68.20	-8.23	53.88	6.09	Peak	236	135
5		11650.00	45.74	54.00	-8.26	31.34	14.40	Average	199	45
6		11650.00	61.97	74.00	-12.03	47.57	14.40	Peak	199	45
7		17475.00	63.83	68.20	-4.37	41.89	21.94	Peak	144	224

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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

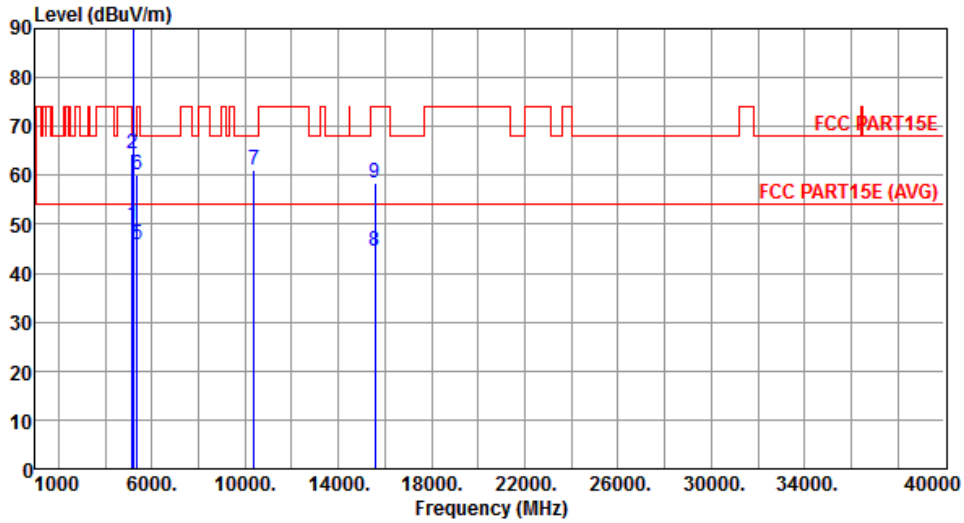


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.43	68.20	-7.77	54.88	5.55	Peak	263	291
2	*	5825.00	106.75			100.82	5.93	Average	263	291
3	*	5825.00	117.35			111.42	5.93	Peak	263	291
4		5925.10	60.63	68.20	-7.57	54.54	6.09	Peak	263	291
5		11650.00	53.51	54.00	-0.49	39.11	14.40	Average	114	111
6		11650.00	69.18	74.00	-4.82	54.78	14.40	Peak	114	111
7		17475.00	67.67	68.20	-0.53	45.73	21.94	Peak	104	130

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

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

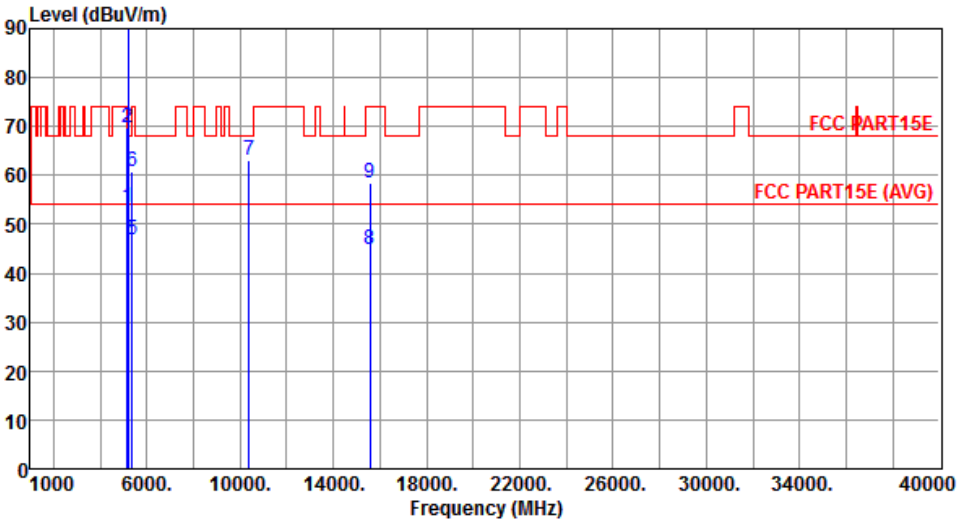
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	49.74	54.00	-4.26	44.84	4.90	Average	143	232
2		5150.00	64.41	74.00	-9.59	59.51	4.90	Peak	143	232
3	*	5190.00	98.07			93.13	4.94	Average	138	293
4	*	5190.00	108.43			103.49	4.94	Peak	138	293
5		5350.00	45.76	54.00	-8.24	40.63	5.13	Average	138	293
6		5350.00	60.22	74.00	-13.78	55.09	5.13	Peak	138	293
7		10380.00	61.08	68.20	-7.12	47.37	13.71	Peak	155	39
8		15570.00	44.52	54.00	-9.48	28.85	15.67	Average	188	197
9		15570.00	58.43	74.00	-15.57	42.76	15.67	Peak	188	197

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

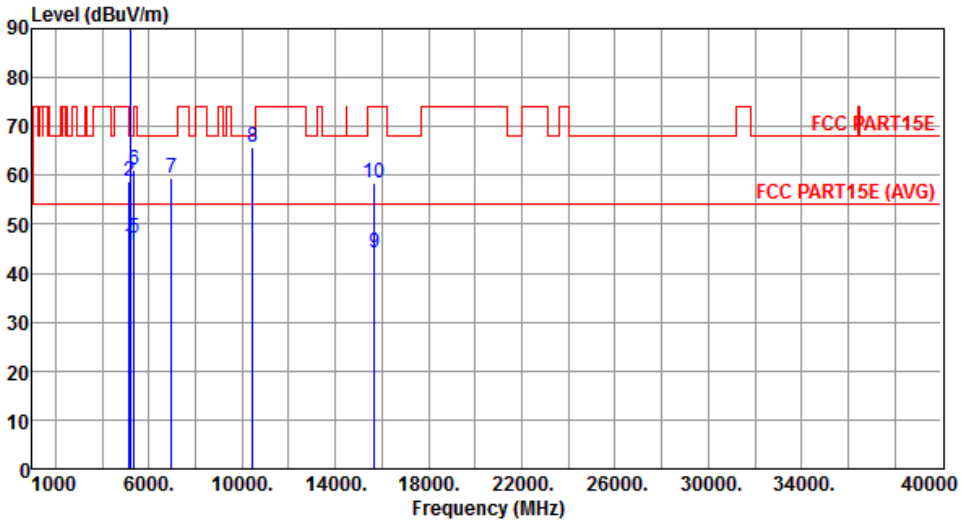
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



		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	53.54	54.00	-0.46	48.64	4.90	Average	200	99
2		5150.00	69.66	74.00	-4.34	64.76	4.90	Peak	200	99
3	*	5190.00	101.63			96.69	4.94	Average	172	268
4	*	5190.00	112.53			107.59	4.94	Peak	172	268
5		5350.00	46.68	54.00	-7.32	41.55	5.13	Average	172	268
6		5350.00	60.66	74.00	-13.34	55.53	5.13	Peak	172	268
7		10380.00	63.00	68.20	-5.20	49.29	13.71	Peak	166	31
8		15570.00	44.81	54.00	-9.19	29.14	15.67	Average	222	187
9		15570.00	58.55	74.00	-15.45	42.88	15.67	Peak	222	187

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

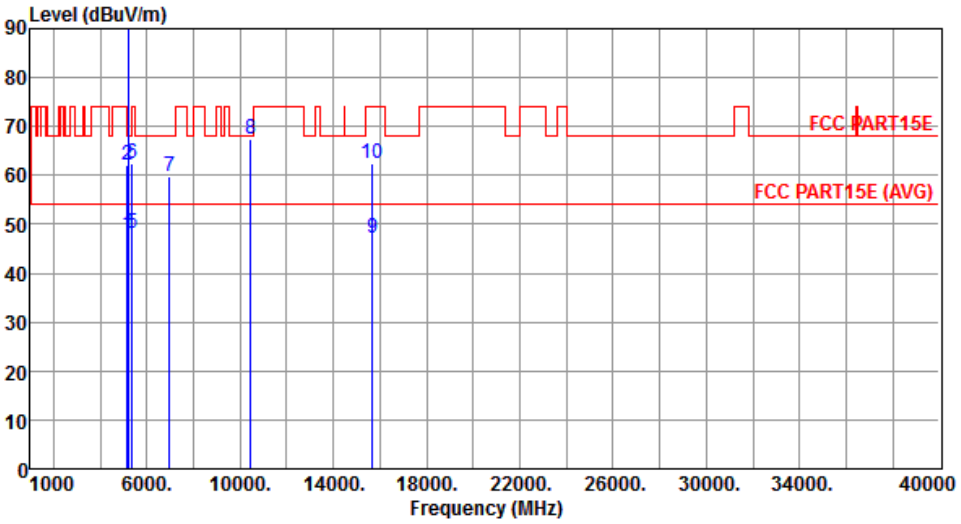
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



		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	45.45	54.00	-8.55	40.55	4.90	Average	118	280
2		5150.00	58.86	74.00	-15.14	53.96	4.90	Peak	118	280
3	*	5230.00	103.54			98.55	4.99	Average	118	280
4	*	5230.00	113.72			108.73	4.99	Peak	118	280
5		5350.00	47.02	54.00	-6.98	41.89	5.13	Average	118	280
6		5350.00	61.11	74.00	-12.89	55.98	5.13	Peak	118	280
7		6973.33	59.47	68.20	-8.73	50.71	8.76	Peak	153	249
8		10460.00	65.63	68.20	-2.57	51.77	13.86	Peak	153	33
9		15690.00	44.32	54.00	-9.68	28.89	15.43	Average	111	266
10		15690.00	58.32	74.00	-15.68	42.89	15.43	Peak	111	266

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

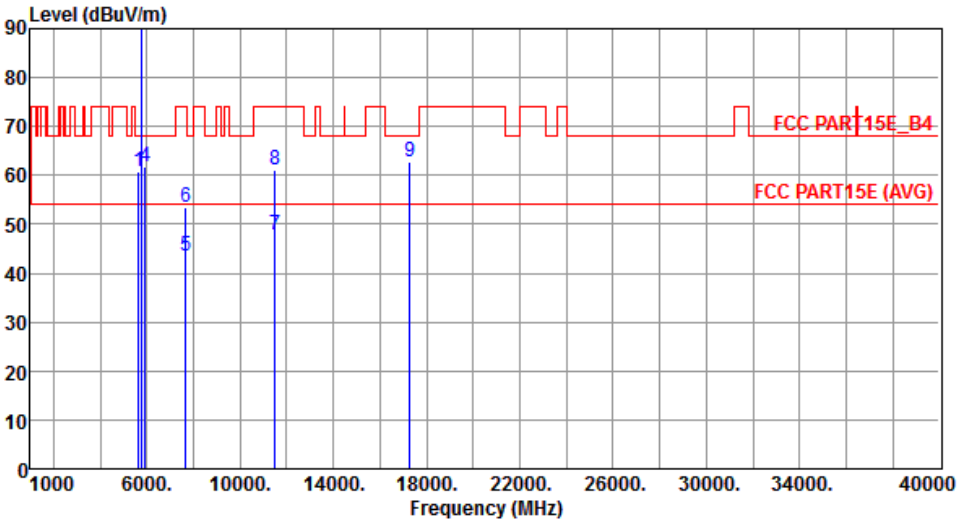
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



		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	47.67	54.00	-6.33	42.77	4.90	Average	175	264
2		5150.00	62.03	74.00	-11.97	57.13	4.90	Peak	175	264
3	*	5230.00	106.67			101.68	4.99	Average	175	264
4	*	5230.00	117.62			112.63	4.99	Peak	175	264
5		5350.00	48.22	54.00	-5.78	43.09	5.13	Average	175	264
6		5350.00	62.31	74.00	-11.69	57.18	5.13	Peak	175	264
7		6973.33	59.64	68.20	-8.56	50.88	8.76	Peak	211	171
8		10460.00	67.41	68.20	-0.79	53.55	13.86	Peak	166	34
9		15690.00	47.32	54.00	-6.68	31.89	15.43	Average	100	66
10		15690.00	62.53	74.00	-11.47	47.10	15.43	Peak	100	66

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

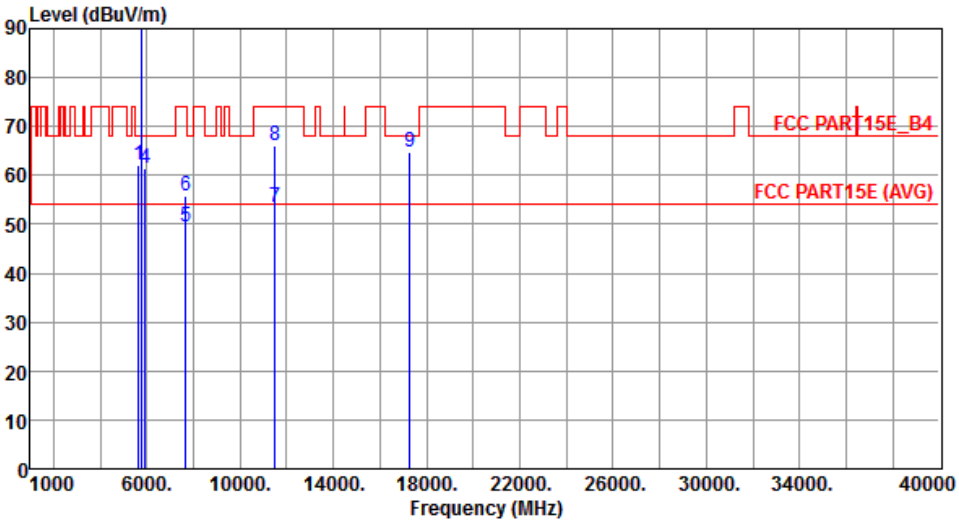
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.68	68.20	-7.52	55.13	5.55	Peak	257	137
2	*	5755.00	104.01			98.22	5.79	Average	257	137
3	*	5755.00	115.23			109.44	5.79	Peak	257	137
4		5925.10	61.61	68.20	-6.59	55.52	6.09	Peak	257	137
5		7673.33	43.61	54.00	-10.39	33.89	9.72	Average	202	114
6		7673.33	53.48	74.00	-20.52	43.76	9.72	Peak	202	114
7		11510.00	47.83	54.00	-6.17	33.21	14.62	Average	180	35
8		11510.00	61.17	74.00	-12.83	46.55	14.62	Peak	180	35
9		17265.00	62.92	68.20	-5.28	42.11	20.81	Peak	111	238

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

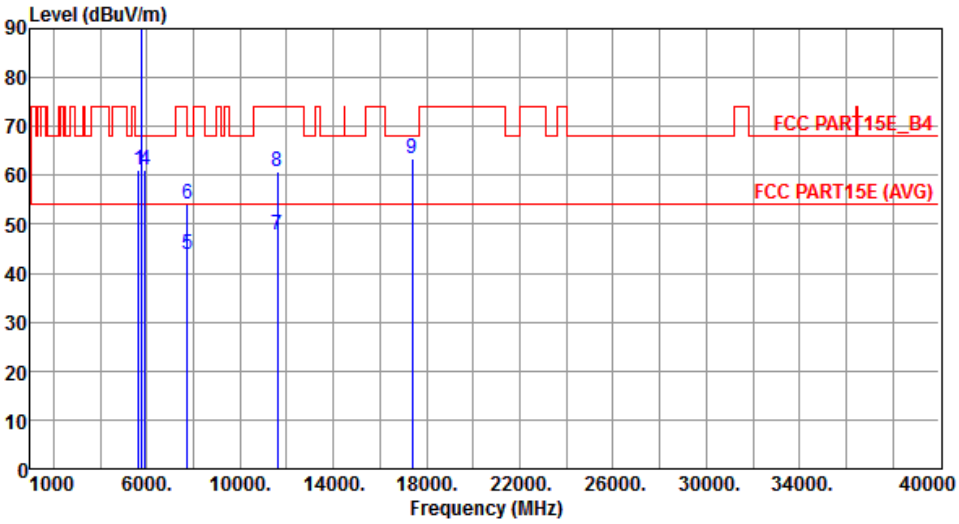
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	62.08	68.20	-6.12	56.53	5.55	Peak	183	265
2	*	5755.00	107.12			101.33	5.79	Average	183	265
3	*	5755.00	117.95			112.16	5.79	Peak	183	265
4		5925.10	61.36	68.20	-6.84	55.27	6.09	Peak	183	265
5		7673.33	49.43	54.00	-4.57	39.71	9.72	Average	118	93
6		7673.33	55.77	74.00	-18.23	46.05	9.72	Peak	118	93
7		11510.00	53.49	54.00	-0.51	38.87	14.62	Average	159	57
8		11510.00	66.04	74.00	-7.96	51.42	14.62	Peak	159	57
9		17265.00	64.86	68.20	-3.34	44.05	20.81	Peak	117	129

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

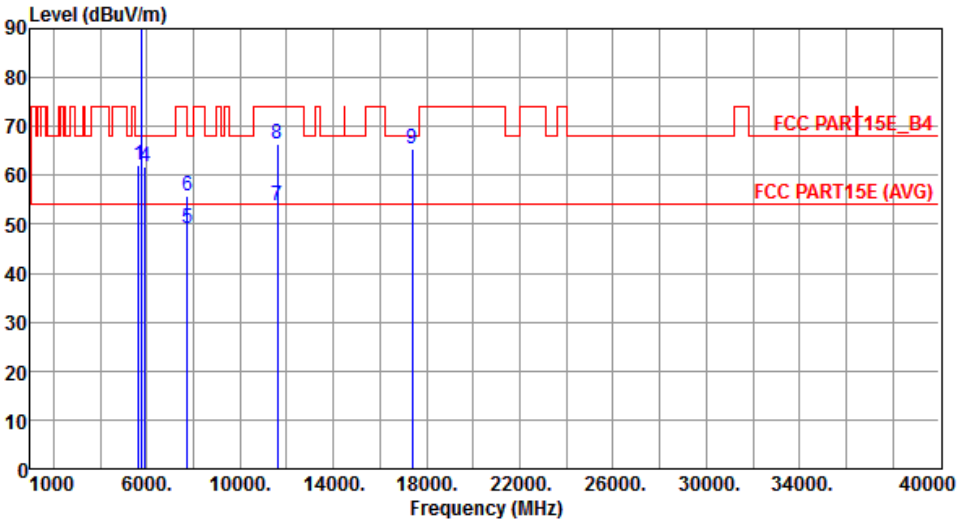
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.98	68.20	-7.22	55.43	5.55	Peak	198	138
2	*	5795.00	104.00			98.13	5.87	Average	198	138
3	*	5795.00	115.36			109.49	5.87	Peak	198	138
4		5925.10	61.14	68.20	-7.06	55.05	6.09	Peak	198	138
5		7726.66	43.69	54.00	-10.31	33.91	9.78	Average	209	103
6		7726.66	54.04	74.00	-19.96	44.26	9.78	Peak	209	103
7		11590.00	47.92	54.00	-6.08	33.42	14.50	Average	188	37
8		11590.00	60.83	74.00	-13.17	46.33	14.50	Peak	188	37
9		17385.00	63.51	68.20	-4.69	42.05	21.46	Peak	221	165

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

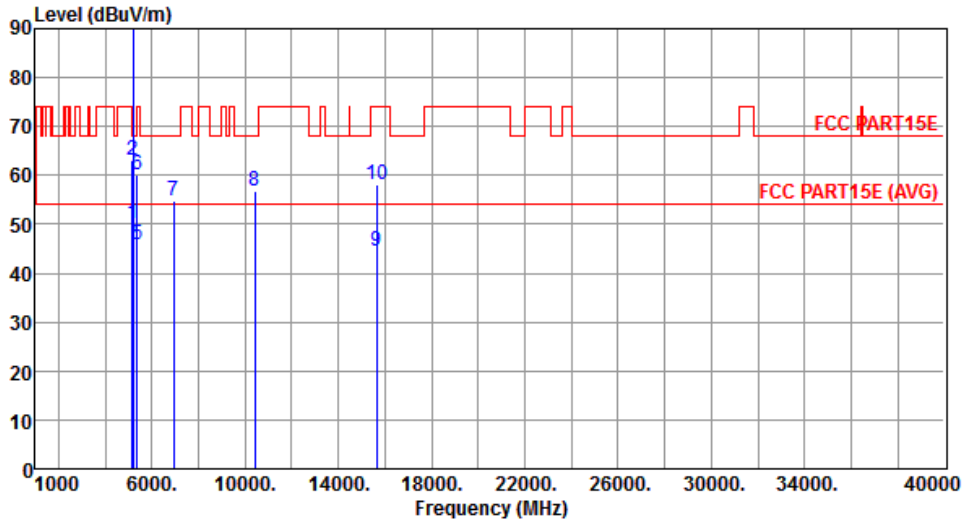


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	61.99	68.20	-6.21	56.44	5.55	Peak	170	266
2	*	5795.00	106.50			100.63	5.87	Average	170	266
3	*	5795.00	117.51			111.64	5.87	Peak	170	266
4		5925.10	61.61	68.20	-6.59	55.52	6.09	Peak	170	266
5		7726.66	49.17	54.00	-4.83	39.39	9.78	Average	115	91
6		7726.66	55.85	74.00	-18.15	46.07	9.78	Peak	115	91
7		11590.00	53.74	54.00	-0.26	39.24	14.50	Average	178	69
8		11590.00	66.44	74.00	-7.56	51.94	14.50	Peak	178	69
9		17385.00	65.56	68.20	-2.64	44.10	21.46	Peak	178	69

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

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

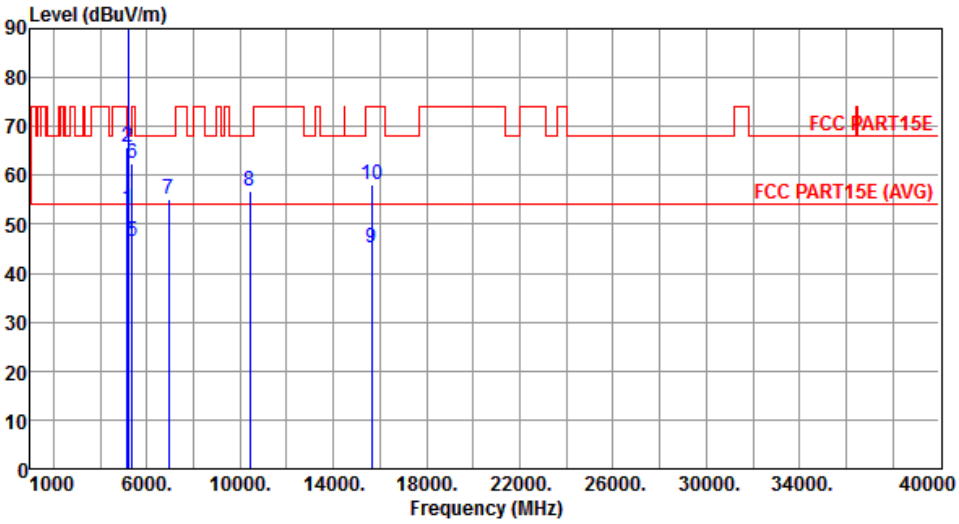
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	50.29	54.00	-3.71	45.39	4.90	Average	123	295
2		5150.00	63.19	74.00	-10.81	58.29	4.90	Peak	123	295
3	*	5210.00	94.60			89.63	4.97	Average	123	295
4	*	5210.00	104.19			99.22	4.97	Peak	123	295
5		5350.00	45.99	54.00	-8.01	40.86	5.13	Average	123	295
6		5350.00	60.04	74.00	-13.96	54.91	5.13	Peak	123	295
7		6946.66	54.65	68.20	-13.55	45.99	8.66	Peak	155	243
8		10420.00	56.64	68.20	-11.56	42.86	13.78	Peak	211	165
9		15630.00	44.42	54.00	-9.58	28.87	15.55	Average	166	243
10		15630.00	58.01	74.00	-15.99	42.46	15.55	Peak	166	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

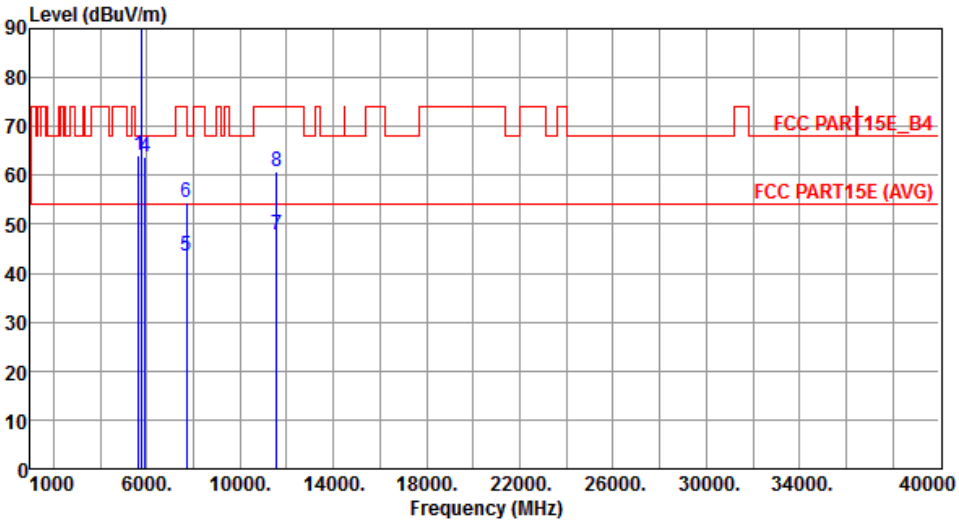
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



		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	53.23	54.00	-0.77	48.33	4.90	Average	126	249
2		5150.00	65.75	74.00	-8.25	60.85	4.90	Peak	126	249
3	*	5210.00	98.02			93.05	4.97	Average	177	262
4	*	5210.00	107.66			102.69	4.97	Peak	177	262
5		5350.00	46.56	54.00	-7.44	41.43	5.13	Average	177	262
6		5350.00	62.55	74.00	-11.45	57.42	5.13	Peak	177	262
7		6946.66	55.18	68.20	-13.02	46.52	8.66	Peak	100	311
8		10420.00	56.93	68.20	-11.27	43.15	13.78	Peak	123	93
9		15630.00	45.10	54.00	-8.90	29.55	15.55	Average	123	93
10		15630.00	58.14	74.00	-15.86	42.59	15.55	Peak	123	93

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

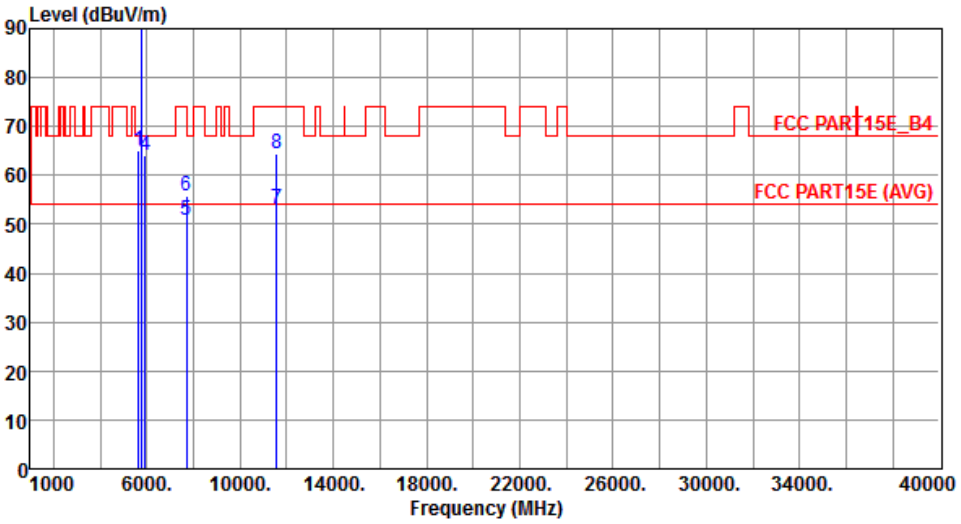
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	64.18	68.20	-4.02	58.63	5.55	Peak	201	137
2	*	5775.00	101.80			95.96	5.84	Average	201	137
3	*	5775.00	111.98			106.14	5.84	Peak	201	137
4		5925.10	63.60	68.20	-4.60	57.51	6.09	Peak	201	137
5		7700.00	43.64	54.00	-10.36	33.89	9.75	Average	200	103
6		7700.00	54.34	74.00	-19.66	44.59	9.75	Peak	200	103
7		11550.00	47.99	54.00	-6.01	33.44	14.55	Average	182	34
8		11550.00	60.88	74.00	-13.12	46.33	14.55	Peak	182	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	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



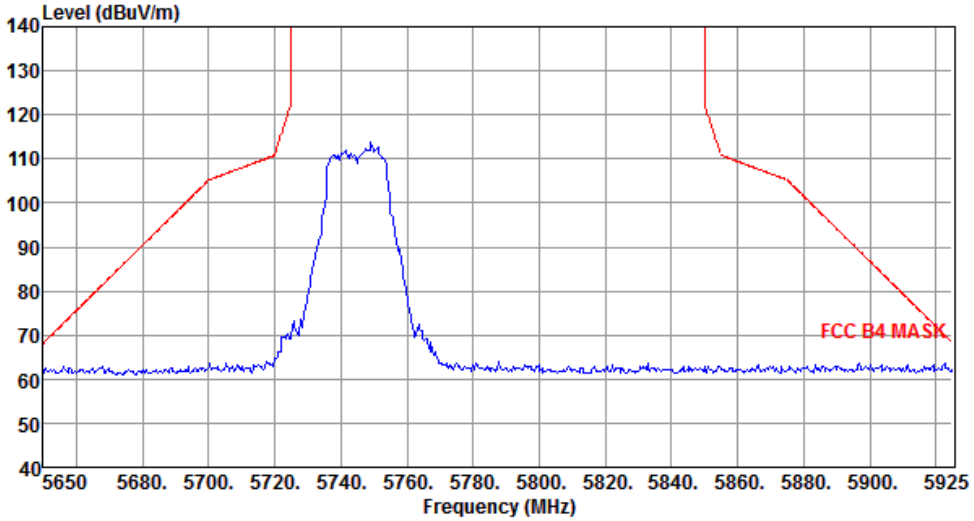
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	65.10	68.20	-3.10	59.55	5.55	Peak	196	268
2	*	5775.00	104.66			98.82	5.84	Average	196	268
3	*	5775.00	115.65			109.81	5.84	Peak	196	268
4		5925.10	64.15	68.20	-4.05	58.06	6.09	Peak	196	268
5		7700.00	50.72	54.00	-3.28	40.97	9.75	Average	100	90
6		7700.00	55.90	74.00	-18.10	46.15	9.75	Peak	100	90
7		11550.00	53.10	54.00	-0.90	38.55	14.55	Average	120	61
8		11550.00	64.32	74.00	-9.68	49.77	14.55	Peak	120	61

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

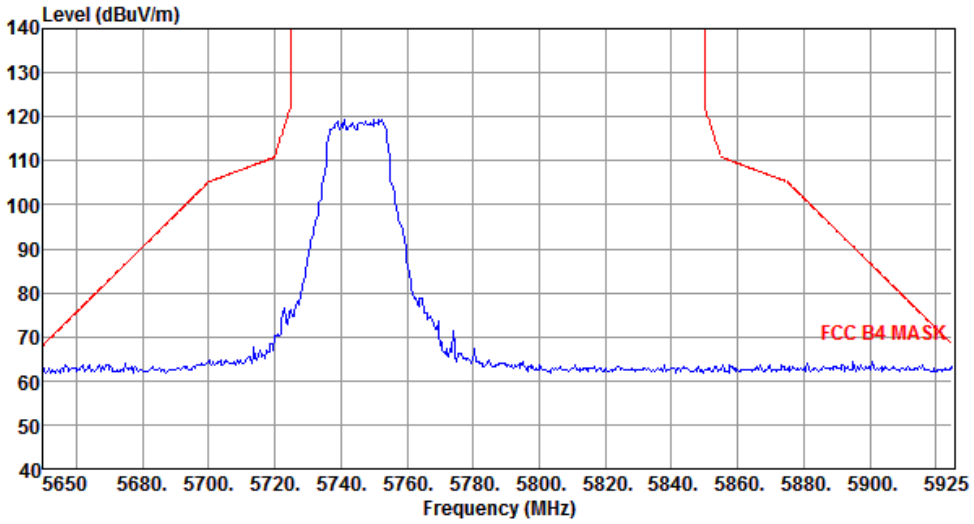
Beamforming mode

3.5.13 Transmitter Radiated Band Edge for VHT20

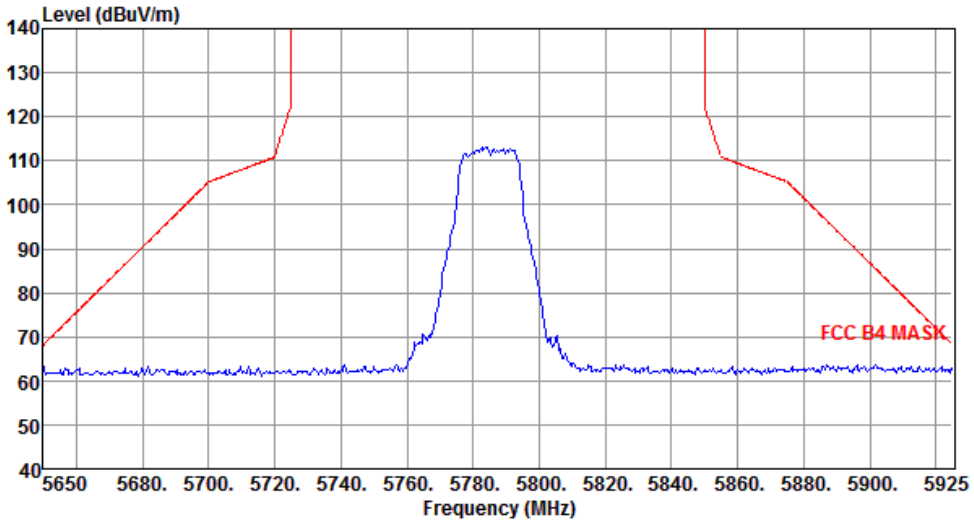
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Horizontal		



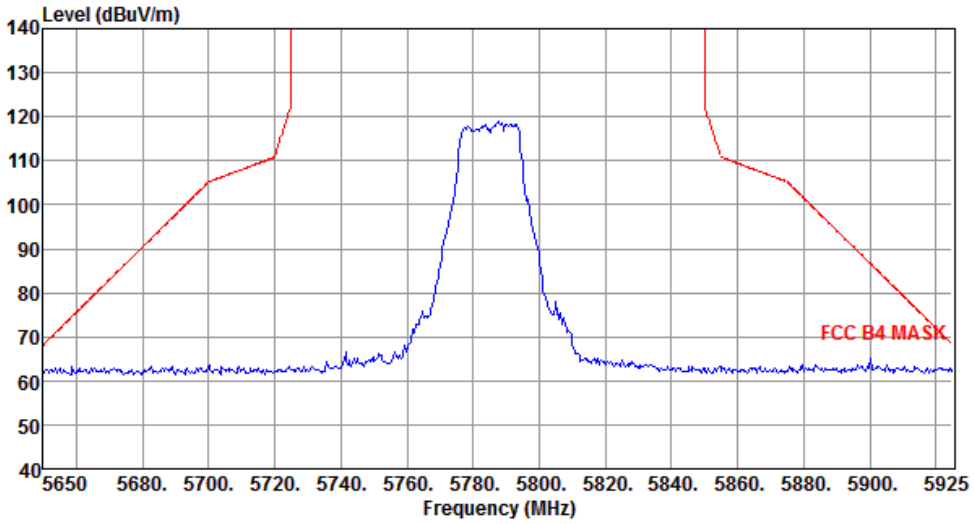
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Vertical		



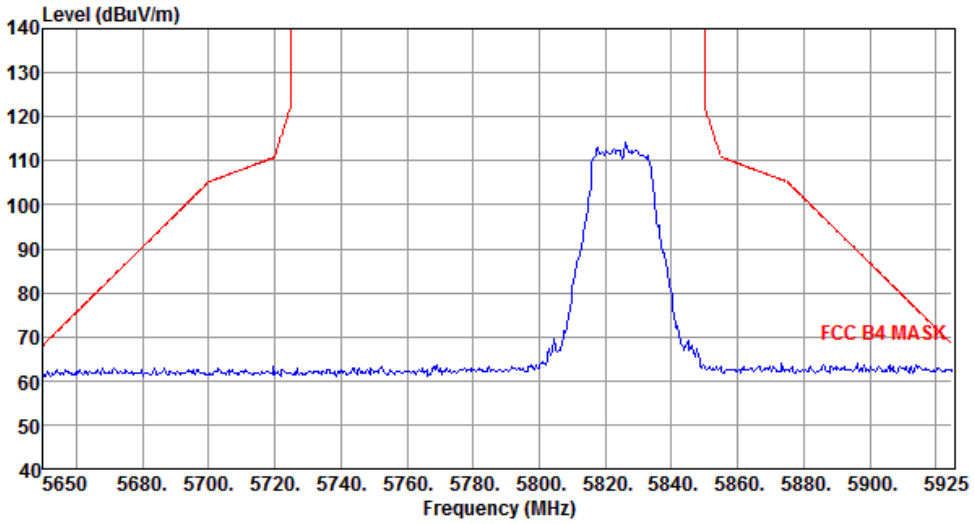
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Horizontal		



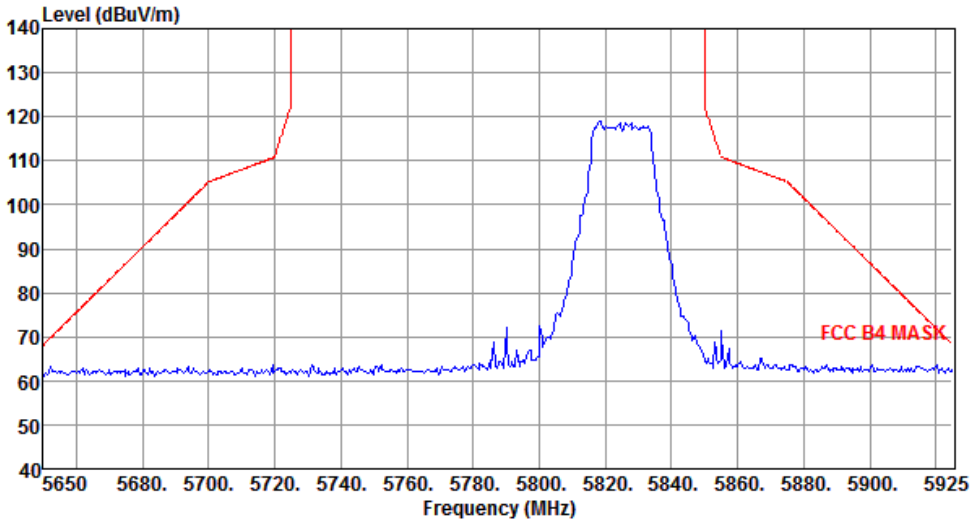
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Vertical		



Modulation	VHT20	**Test Freq. (MHz)**	5825
Polarization	Horizontal		

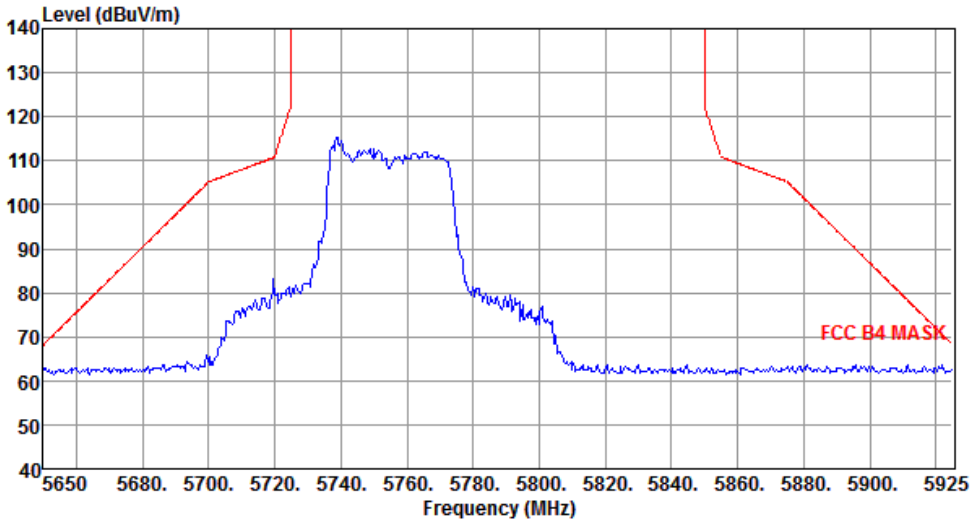


Modulation	VHT20	**Test Freq. (MHz)**	5825
Polarization	Vertical		

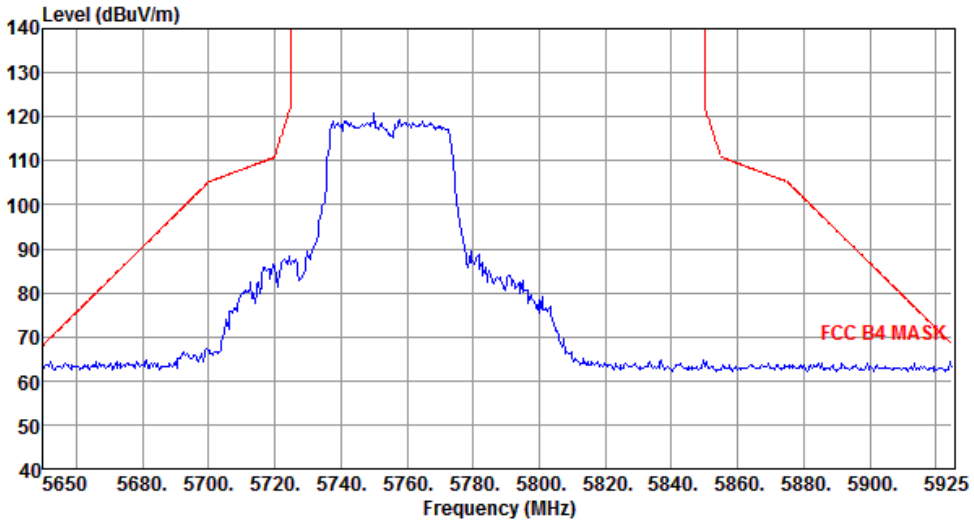


3.5.14 Transmitter Radiated Band Edge for VHT40

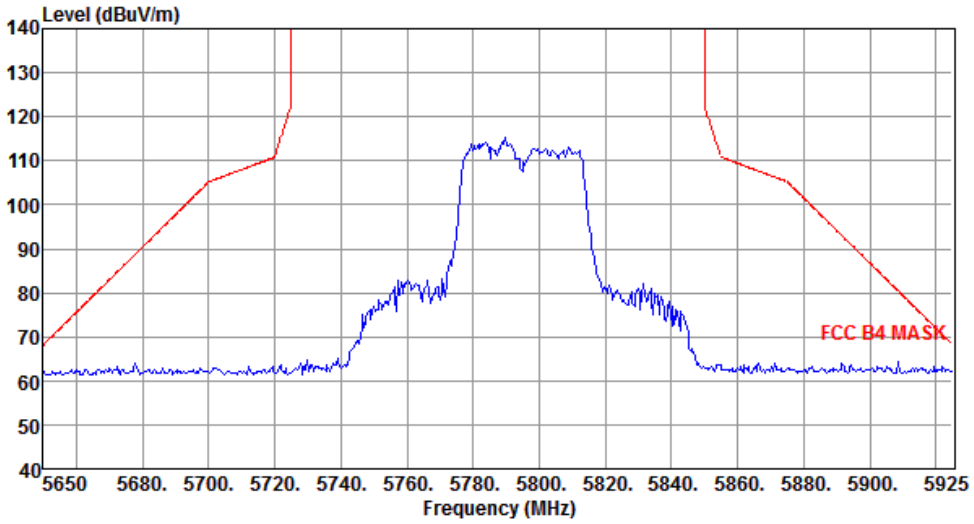
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



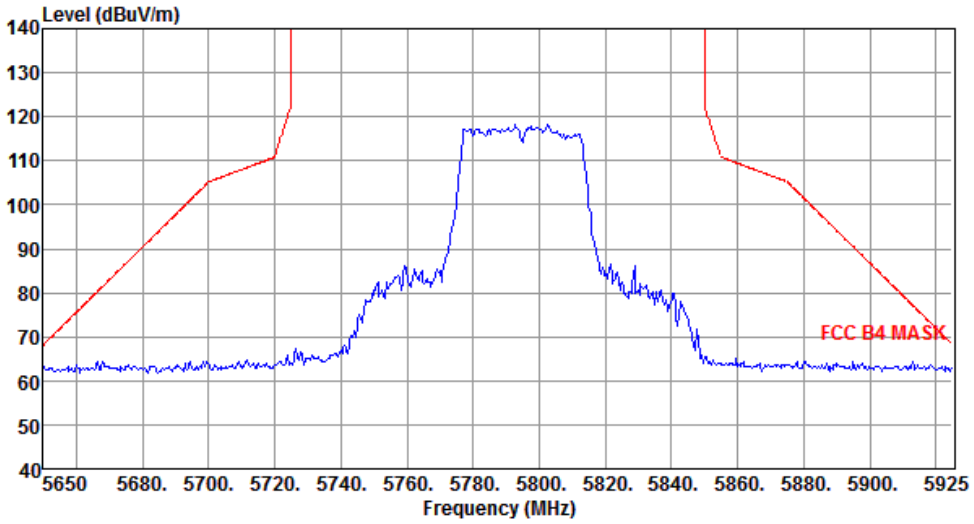
Modulation	VHT40	**Test Freq. (MHz)**	5755
Polarization	Vertical		



Modulation	VHT40	**Test Freq. (MHz)**	5795
Polarization	Horizontal		

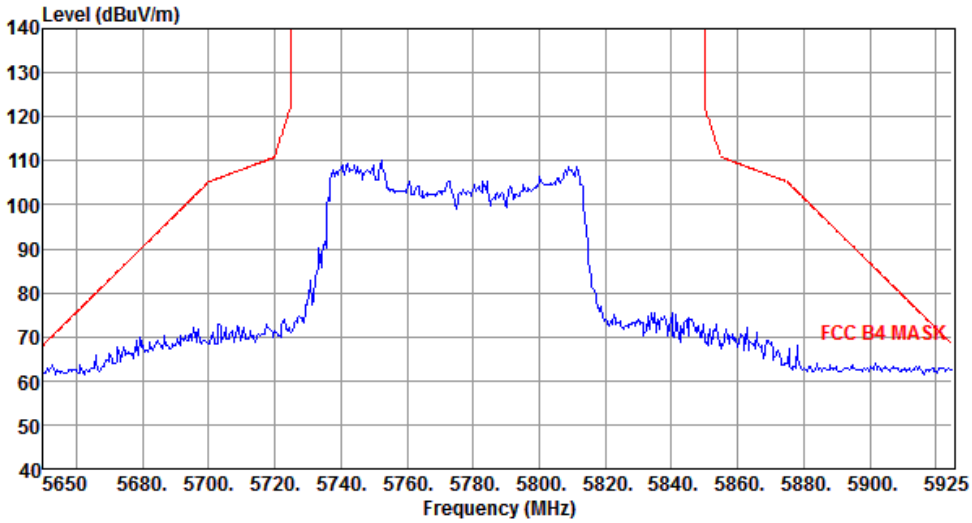


Modulation	VHT40	**Test Freq. (MHz)**	5795
Polarization	Vertical		

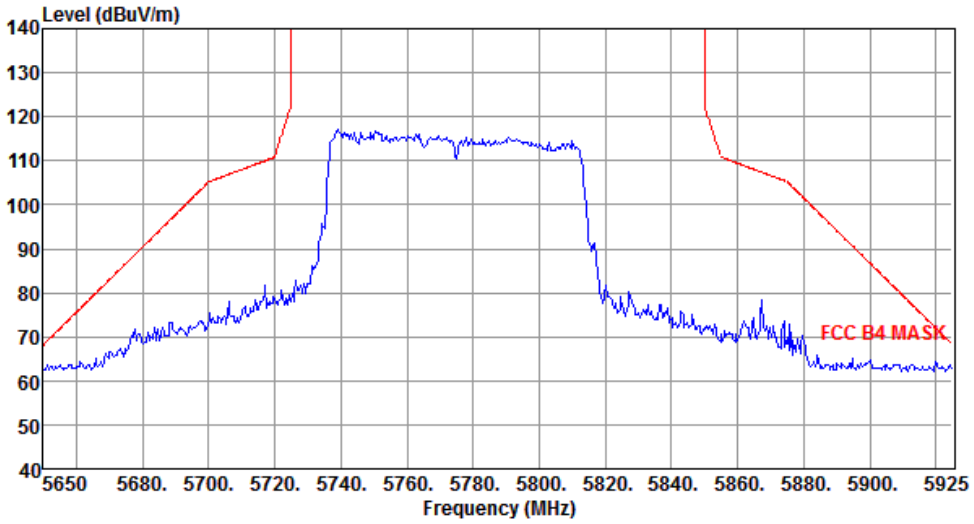


3.5.15 Transmitter Radiated Band Edge for VHT80

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		

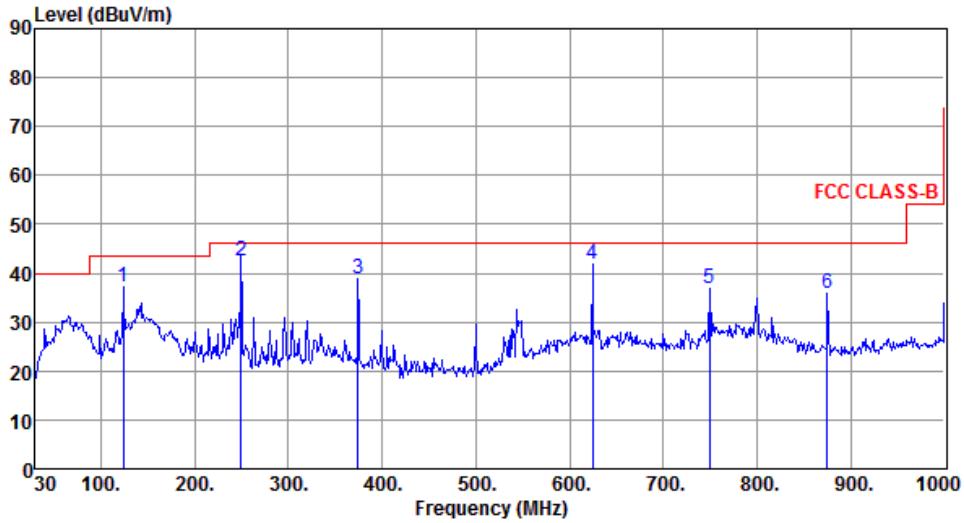


Modulation	VHT80	**Test Freq. (MHz)**	5775
Polarization	Vertical		



3.5.16 Transmitter Radiated Unwanted Emissions (Below 1GHz)

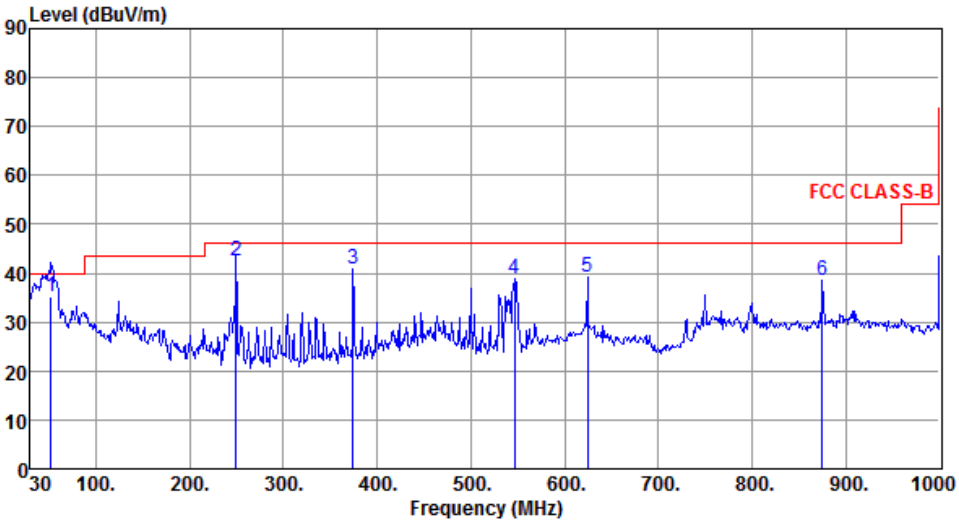
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	124.09	37.14	43.50	-6.36	50.82	-13.68	Peak	---	---
2	249.22	42.65	46.00	-3.35	55.44	-12.79	Peak	---	---
3	374.35	38.75	46.00	-7.25	48.11	-9.36	Peak	---	---
4	624.61	41.71	46.00	-4.29	46.00	-4.29	Peak	---	---
5	749.74	36.82	46.00	-9.18	39.19	-2.37	Peak	---	---
6	874.87	35.72	46.00	-10.28	36.64	-0.92	Peak	---	---

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

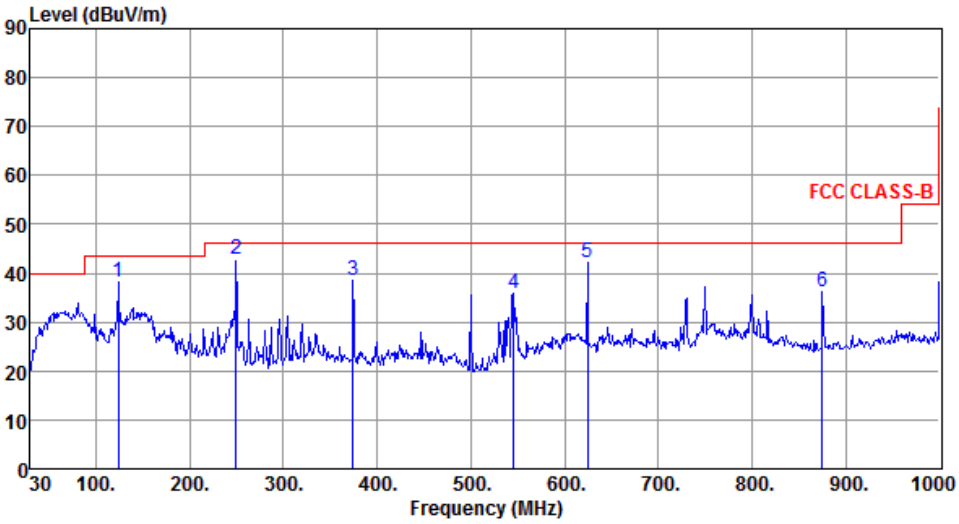
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.31	35.23	40.00	-4.77	47.16	-11.93	QP	100	67
2	249.22	42.52	46.00	-3.48	55.31	-12.79	Peak	---	---
3	374.35	40.80	46.00	-5.20	50.16	-9.36	Peak	---	---
4	547.01	38.91	46.00	-7.09	44.60	-5.69	Peak	---	---
5	624.61	39.14	46.00	-6.86	43.43	-4.29	Peak	---	---
6	874.87	38.43	46.00	-7.57	39.35	-0.92	Peak	---	---

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

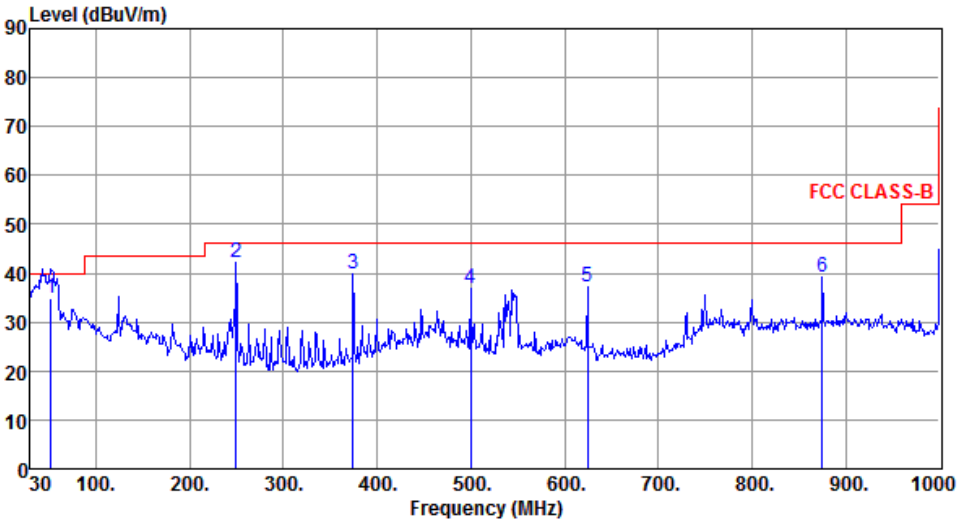
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	124.09	38.21	43.50	-5.29	51.89	-13.68	Peak	---	---
2	249.22	42.95	46.00	-3.05	55.74	-12.79	Peak	---	---
3	374.35	38.45	46.00	-7.55	47.81	-9.36	Peak	---	---
4	546.04	35.84	46.00	-10.16	41.55	-5.71	Peak	---	---
5	624.61	42.03	46.00	-3.97	46.32	-4.29	Peak	---	---
6	874.87	36.05	46.00	-9.95	36.97	-0.92	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		

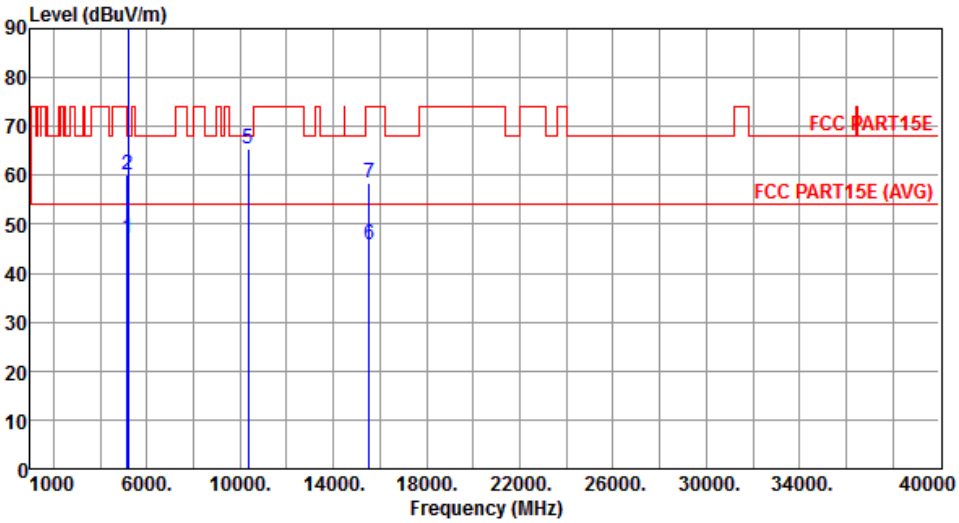


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.31	34.99	40.00	-5.01	46.92	-11.93	QP	100	56
2	249.22	42.31	46.00	-3.69	55.10	-12.79	Peak	---	---
3	374.35	40.00	46.00	-6.00	49.36	-9.36	Peak	---	---
4	499.48	36.75	46.00	-9.25	43.27	-6.52	Peak	---	---
5	624.61	37.32	46.00	-8.68	41.61	-4.29	Peak	---	---
6	874.87	39.30	46.00	-6.70	40.22	-0.92	Peak	---	---

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

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

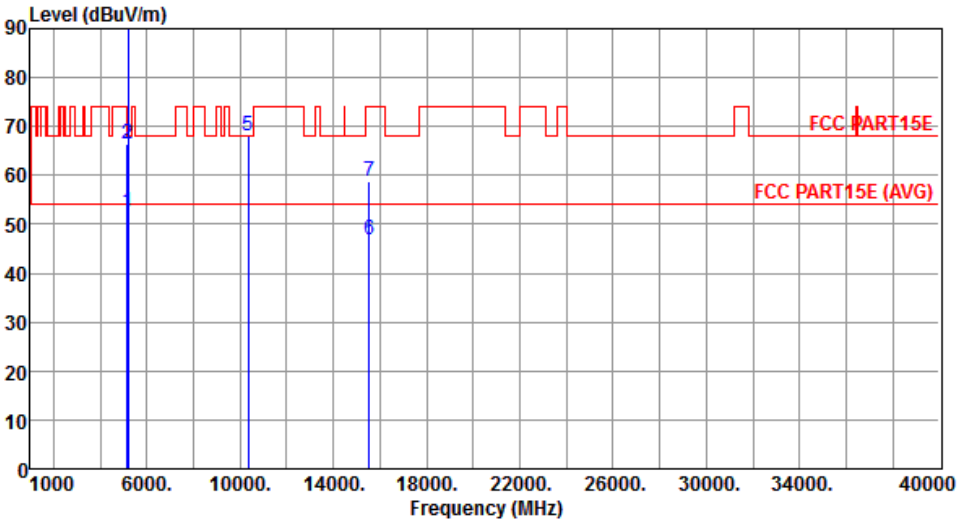
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	47.22	54.00	-6.78	42.32	4.90	Average	158	102
2		5150.00	60.25	74.00	-13.75	55.35	4.90	Peak	158	102
3	*	5180.00	100.90			95.97	4.93	Average	158	102
4	*	5180.00	112.07			107.14	4.93	Peak	158	102
5		10360.00	65.40	68.20	-2.80	51.73	13.67	Peak	145	33
6		15540.00	45.94	54.00	-8.06	30.22	15.72	Average	222	153
7		15540.00	58.58	74.00	-15.42	42.86	15.72	Peak	222	153

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

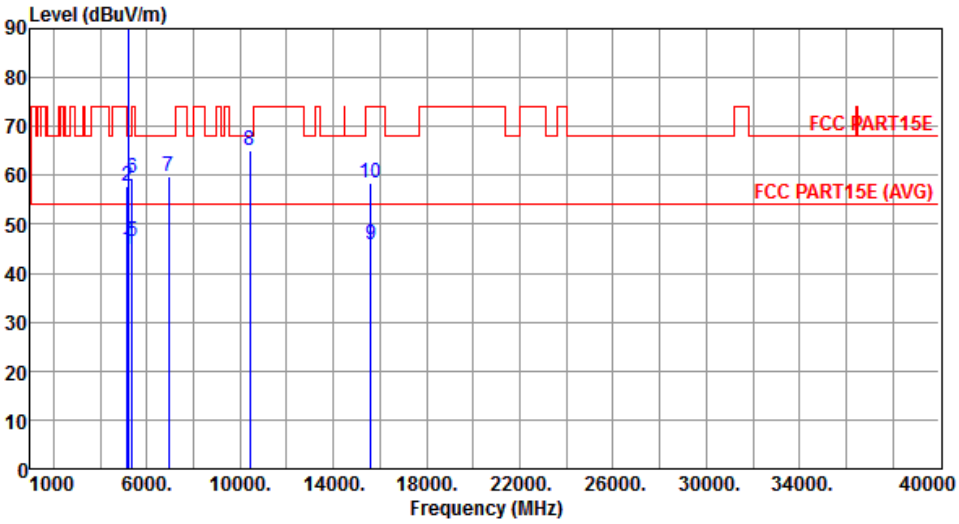
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	52.55	54.00	-1.45	47.65	4.90	Average	231	100
2		5150.00	66.57	74.00	-7.43	61.67	4.90	Peak	231	100
3	*	5180.00	107.48			102.55	4.93	Average	231	100
4	*	5180.00	118.07			113.14	4.93	Peak	231	100
5		10360.00	68.02	68.20	-0.18	54.35	13.67	Peak	180	35
6		15540.00	46.94	54.00	-7.06	31.22	15.72	Average	222	69
7		15540.00	58.90	74.00	-15.10	43.18	15.72	Peak	222	69

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

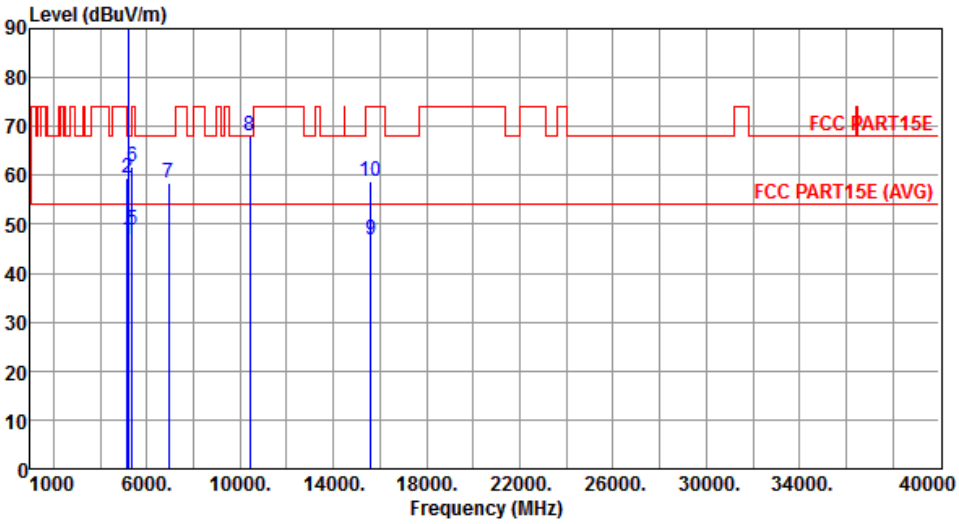
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	44.78	54.00	-9.22	39.88	4.90	Average	170	101
2		5150.00	57.66	74.00	-16.34	52.76	4.90	Peak	170	101
3	*	5200.00	100.64			95.69	4.95	Average	170	101
4	*	5200.00	111.73			106.78	4.95	Peak	170	101
5		5350.00	46.35	54.00	-7.65	41.22	5.13	Average	170	101
6		5350.00	59.42	74.00	-14.58	54.29	5.13	Peak	170	101
7		6933.33	59.74	68.20	-8.46	51.13	8.61	Peak	231	63
8		10400.00	65.13	68.20	-3.07	51.38	13.75	Peak	143	42
9		15600.00	45.82	54.00	-8.18	30.21	15.61	Average	222	153
10		15600.00	58.46	74.00	-15.54	42.85	15.61	Peak	222	153

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

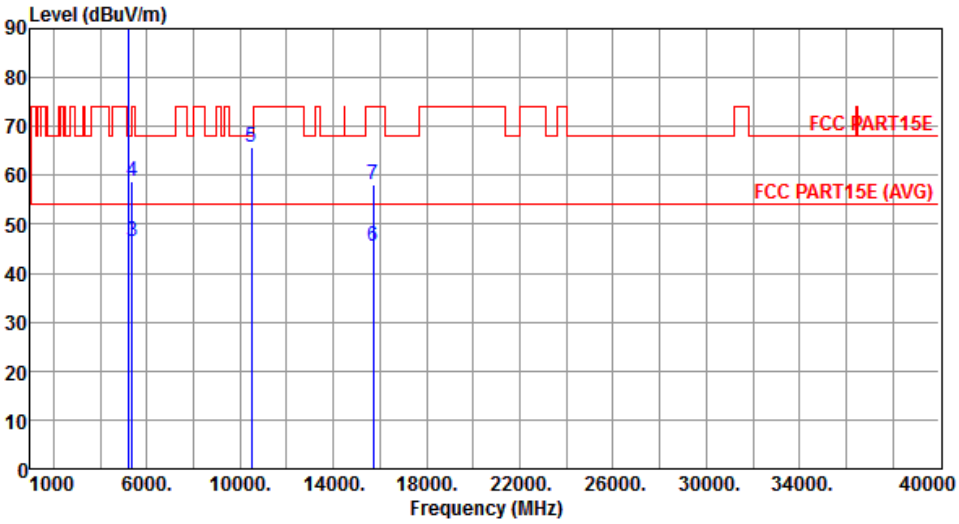
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	46.68	54.00	-7.32	41.78	4.90	Average	251	67
2		5150.00	59.54	74.00	-14.46	54.64	4.90	Peak	251	67
3	*	5200.00	107.98			103.03	4.95	Average	251	67
4	*	5200.00	118.84			113.89	4.95	Peak	251	67
5		5350.00	48.75	54.00	-5.25	43.62	5.13	Average	251	67
6		5350.00	61.76	74.00	-12.24	56.63	5.13	Peak	251	67
7		6933.33	58.52	68.20	-9.68	49.91	8.61	Peak	177	35
8		10400.00	68.07	68.20	-0.13	54.32	13.75	Peak	177	35
9		15600.00	46.96	54.00	-7.04	31.35	15.61	Average	222	165
10		15600.00	58.80	74.00	-15.20	43.19	15.61	Peak	222	165

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

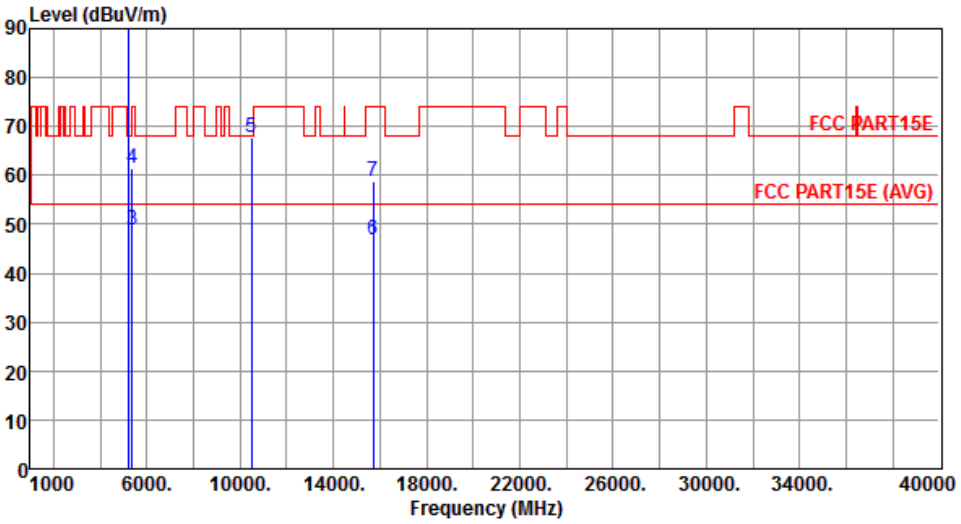
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5240.00	100.62			95.62	5.00	Average	155	106
2	*	5240.00	111.73			106.73	5.00	Peak	155	106
3		5350.00	46.45	54.00	-7.55	41.32	5.13	Average	222	234
4		5350.00	58.86	74.00	-15.14	53.73	5.13	Peak	222	234
5		10480.00	65.60	68.20	-2.60	51.70	13.90	Peak	172	32
6		15720.00	45.65	54.00	-8.35	30.26	15.39	Average	222	234
7		15720.00	58.06	74.00	-15.94	42.67	15.39	Peak	222	234

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

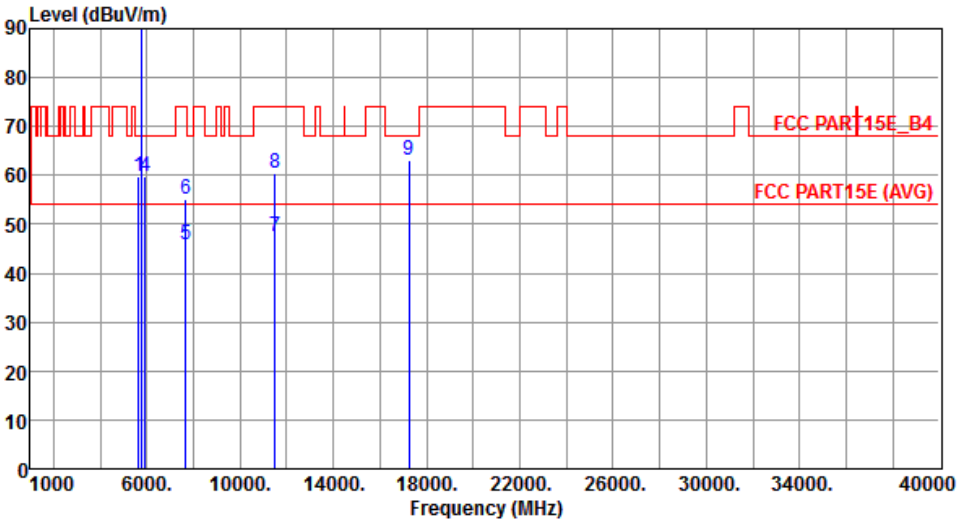
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5240.00	108.32			103.32	5.00	Average	207	71
2	*	5240.00	119.78			114.78	5.00	Peak	207	71
3		5350.00	48.68	54.00	-5.32	43.55	5.13	Average	207	71
4		5350.00	61.52	74.00	-12.48	56.39	5.13	Peak	207	71
5		10480.00	67.87	68.20	-0.33	53.97	13.90	Peak	176	33
6		15720.00	46.66	54.00	-7.34	31.27	15.39	Average	222	147
7		15720.00	58.64	74.00	-15.36	43.25	15.39	Peak	222	147

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

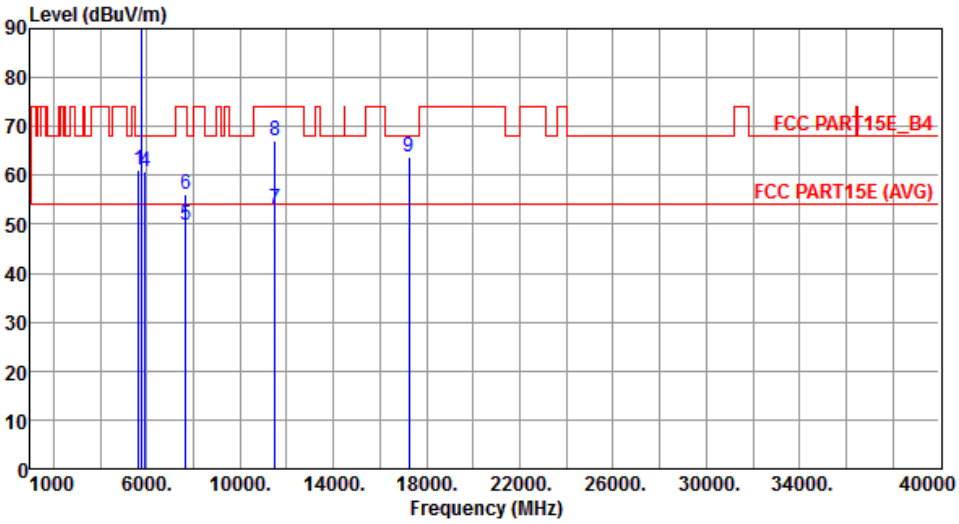
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.88	68.20	-8.32	54.33	5.55	Peak	190	64
2	*	5745.00	102.22			96.46	5.76	Average	190	64
3	*	5745.00	113.41			107.65	5.76	Peak	190	64
4		5925.10	59.67	68.20	-8.53	53.58	6.09	Peak	190	64
5		7660.00	45.75	54.00	-8.25	36.03	9.72	Average	183	108
6		7660.00	55.26	74.00	-18.74	45.54	9.72	Peak	183	108
7		11490.00	47.59	54.00	-6.41	32.97	14.62	Average	204	152
8		11490.00	60.40	74.00	-13.60	45.78	14.62	Peak	204	152
9		17235.00	63.17	68.20	-5.03	42.53	20.64	Peak	211	134

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

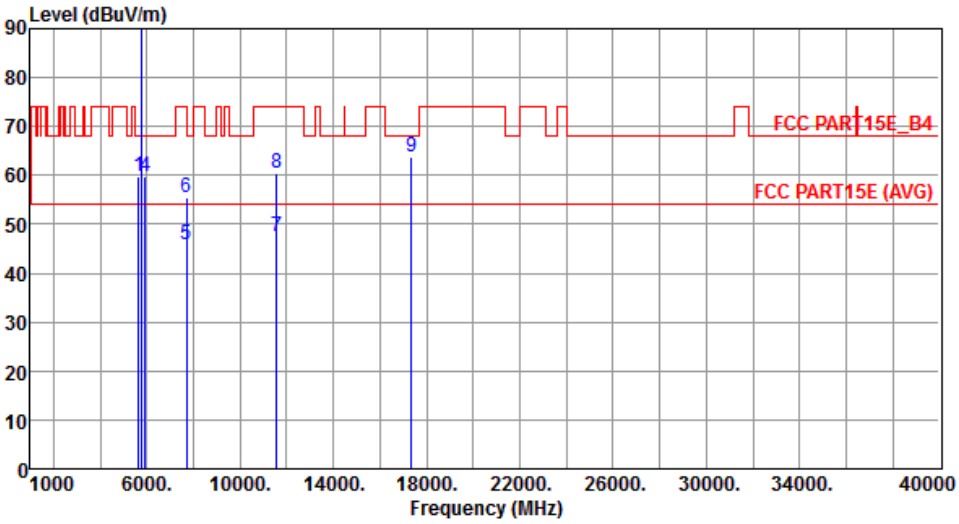
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	61.18	68.20	-7.02	55.63	5.55	Peak	224	69
2	*	5745.00	109.51			103.75	5.76	Average	224	69
3	*	5745.00	120.53			114.77	5.76	Peak	224	69
4		5925.10	60.91	68.20	-7.29	54.82	6.09	Peak	224	69
5		7660.00	49.89	54.00	-4.11	40.17	9.72	Average	100	92
6		7660.00	56.11	74.00	-17.89	46.39	9.72	Peak	100	92
7		11490.00	53.16	54.00	-0.84	38.54	14.62	Average	114	64
8		11490.00	67.18	74.00	-6.82	52.56	14.62	Peak	114	64
9		17235.00	63.87	68.20	-4.33	43.23	20.64	Peak	100	133

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

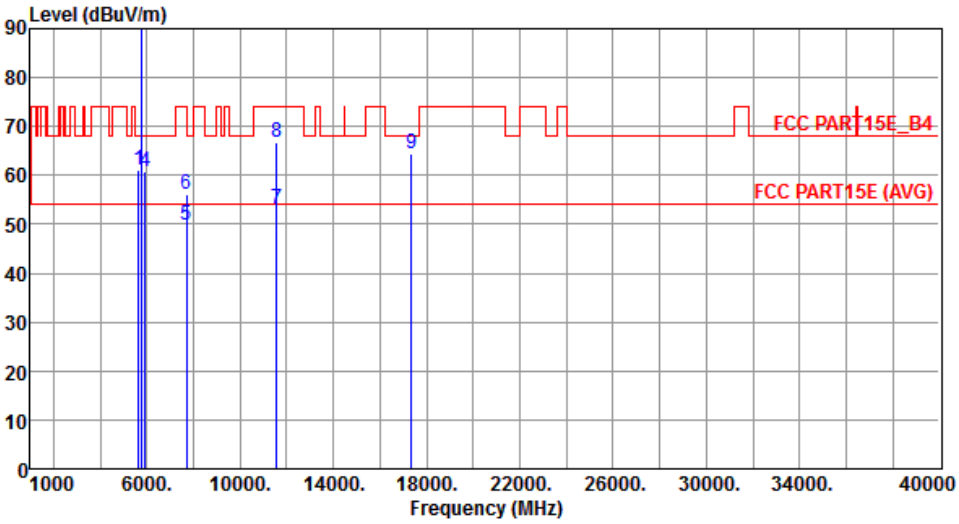
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.88	68.20	-8.32	54.33	5.55	Peak	192	69
2	*	5785.00	102.37			96.52	5.85	Average	192	69
3	*	5785.00	113.68			107.83	5.85	Peak	192	69
4		5925.10	59.75	68.20	-8.45	53.66	6.09	Peak	192	69
5		7713.33	45.81	54.00	-8.19	36.05	9.76	Average	188	110
6		7713.33	55.32	74.00	-18.68	45.56	9.76	Peak	188	110
7		11570.00	47.49	54.00	-6.51	32.97	14.52	Average	222	163
8		11570.00	60.30	74.00	-13.70	45.78	14.52	Peak	222	163
9		17355.00	63.82	68.20	-4.38	42.53	21.29	Peak	222	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

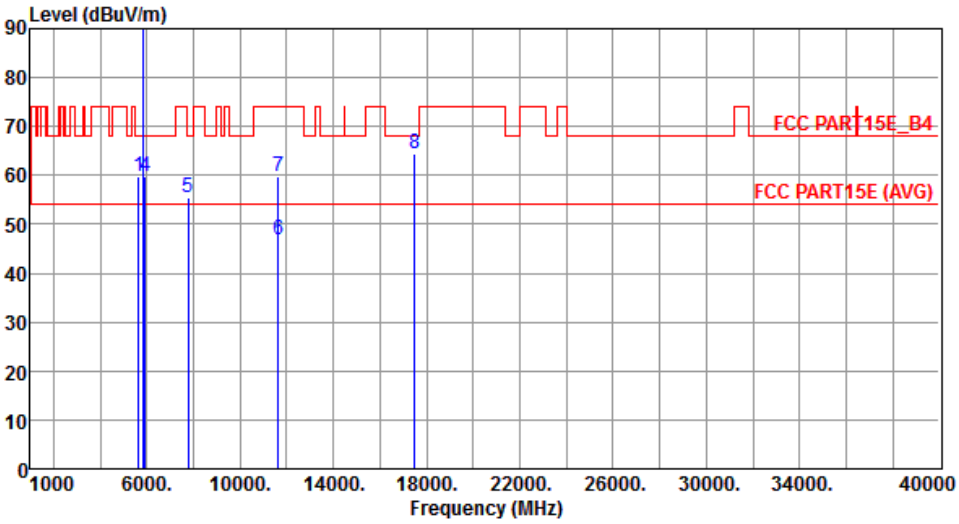
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	61.24	68.20	-6.96	55.69	5.55	Peak	209	66
2	*	5785.00	109.15			103.30	5.85	Average	209	66
3	*	5785.00	120.31			114.46	5.85	Peak	209	66
4		5925.10	60.74	68.20	-7.46	54.65	6.09	Peak	209	66
5		7713.33	49.93	54.00	-4.07	40.17	9.76	Average	103	98
6		7713.33	56.04	74.00	-17.96	46.28	9.76	Peak	103	98
7		11570.00	53.03	54.00	-0.97	38.51	14.52	Average	121	61
8		11570.00	66.76	74.00	-7.24	52.24	14.52	Peak	121	61
9		17355.00	64.43	68.20	-3.77	43.14	21.29	Peak	111	133

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

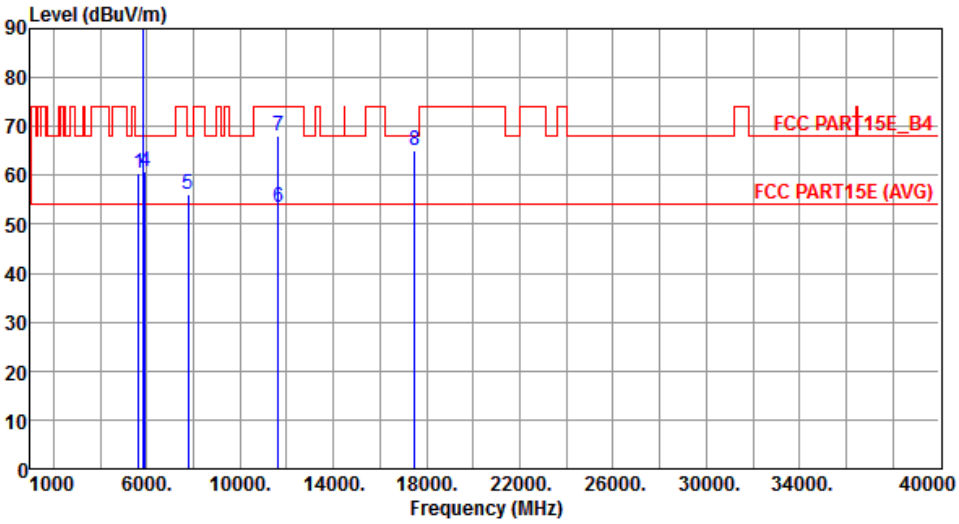
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.93	68.20	-8.27	54.38	5.55	Peak	199	59
2	*	5825.00	101.97			96.04	5.93	Average	199	59
3	*	5825.00	113.25			107.32	5.93	Peak	199	59
4		5925.10	59.74	68.20	-8.46	53.65	6.09	Peak	199	59
5		7766.66	55.37	68.20	-12.83	45.54	9.83	Peak	184	111
6		11650.00	46.94	54.00	-7.06	32.54	14.40	Average	206	163
7		11650.00	59.74	74.00	-14.26	45.34	14.40	Peak	206	163
8		17475.00	64.37	68.20	-3.83	42.43	21.94	Peak	214	221

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

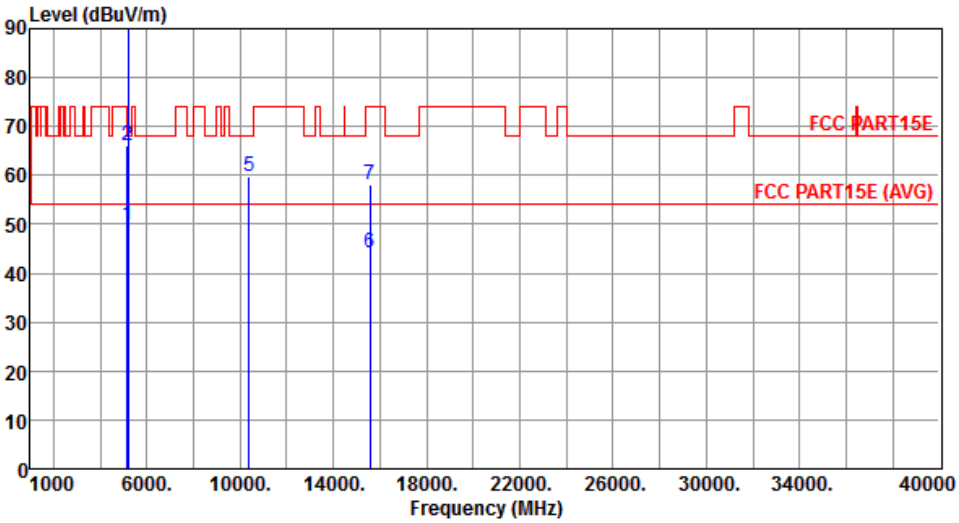


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	60.38	68.20	-7.82	54.83	5.55	Peak	176	73
2	*	5825.00	108.46			102.53	5.93	Average	176	73
3	*	5825.00	119.87			113.94	5.93	Peak	176	73
4		5925.10	60.75	68.20	-7.45	54.66	6.09	Peak	176	73
5		7766.66	56.25	68.20	-11.95	46.42	9.83	Peak	100	113
6		11650.00	53.47	54.00	-0.53	39.07	14.40	Average	116	63
7		11650.00	68.07	74.00	-5.93	53.67	14.40	Peak	116	63
8		17475.00	64.99	68.20	-3.21	43.05	21.94	Peak	211	135

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

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

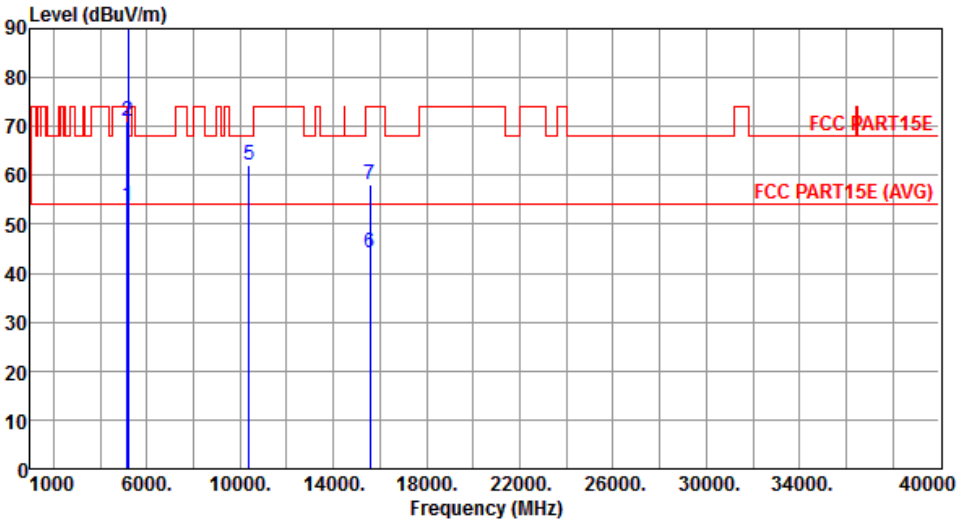
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



		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	49.88	54.00	-4.12	44.98	4.90	Average	179	301
2		5150.00	66.17	74.00	-7.83	61.27	4.90	Peak	179	301
3	*	5190.00	97.82			92.88	4.94	Average	171	298
4	*	5190.00	108.05			103.11	4.94	Peak	171	298
5		10380.00	59.93	68.20	-8.27	46.22	13.71	Peak	221	153
6		15570.00	44.13	54.00	-9.87	28.46	15.67	Average	159	111
7		15570.00	58.04	74.00	-15.96	42.37	15.67	Peak	159	111

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

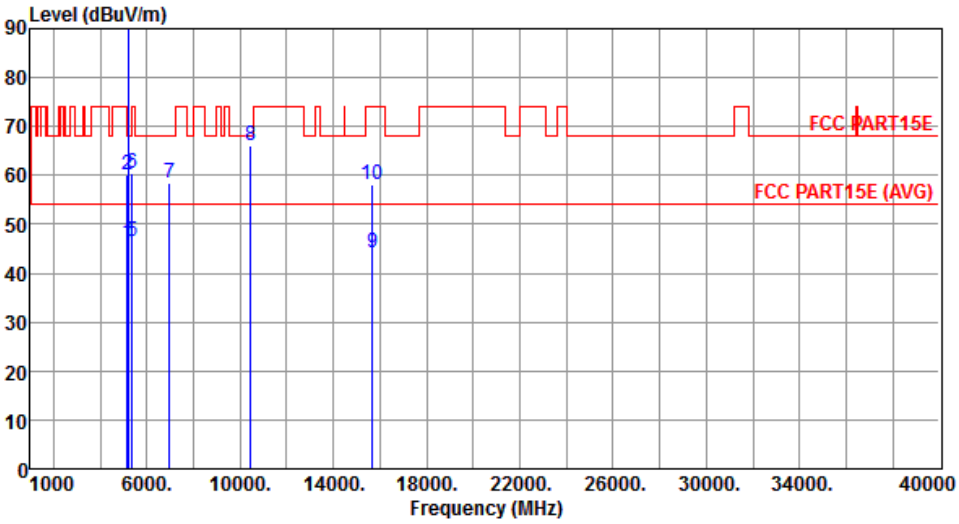
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



		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	53.83	54.00	-0.17	48.93	4.90	Average	260	276
2		5150.00	70.92	74.00	-3.08	66.02	4.90	Peak	260	276
3	*	5190.00	103.26			98.32	4.94	Average	260	276
4	*	5190.00	114.10			109.16	4.94	Peak	260	276
5		10380.00	62.26	68.20	-5.94	48.55	13.71	Peak	172	39
6		15570.00	44.20	54.00	-9.80	28.53	15.67	Average	153	233
7		15570.00	58.20	74.00	-15.80	42.53	15.67	Peak	153	233

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

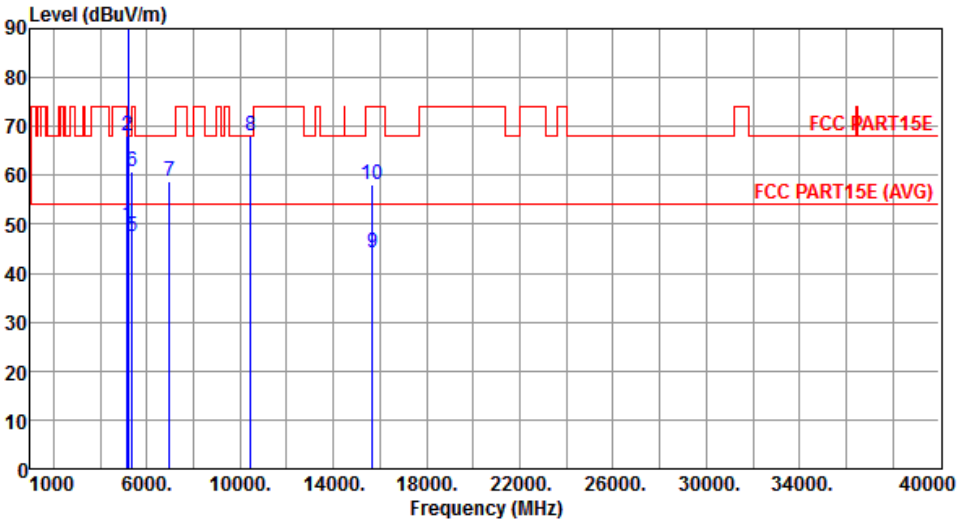
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



		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	46.25	54.00	-7.75	41.35	4.90	Average	172	334
2		5150.00	60.09	74.00	-13.91	55.19	4.90	Peak	172	334
3	*	5230.00	103.86			98.87	4.99	Average	172	334
4	*	5230.00	114.88			109.89	4.99	Peak	172	334
5		5350.00	46.66	54.00	-7.34	41.53	5.13	Average	172	334
6		5350.00	60.51	74.00	-13.49	55.38	5.13	Peak	172	334
7		6973.33	58.41	68.20	-9.79	49.65	8.76	Peak	188	221
8		10460.00	65.94	68.20	-2.26	52.08	13.86	Peak	155	224
9		15690.00	44.15	54.00	-9.85	28.72	15.43	Average	231	211
10		15690.00	58.01	74.00	-15.99	42.58	15.43	Peak	231	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

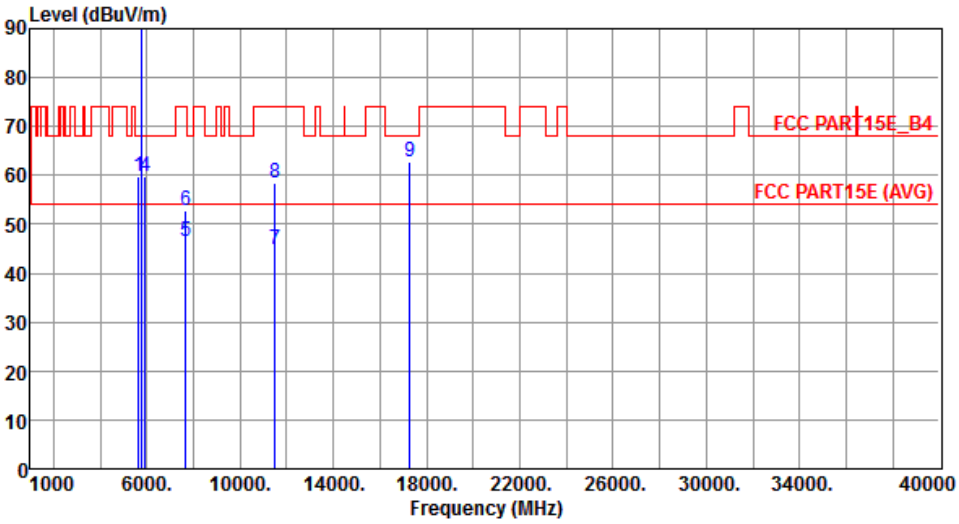
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



		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	49.91	54.00	-4.09	45.01	4.90	Average	251	277
2		5150.00	68.02	74.00	-5.98	63.12	4.90	Peak	251	277
3	*	5230.00	110.26			105.27	4.99	Average	164	271
4	*	5230.00	121.57			116.58	4.99	Peak	164	271
5		5350.00	47.42	54.00	-6.58	42.29	5.13	Average	164	271
6		5350.00	60.71	74.00	-13.29	55.58	5.13	Peak	164	271
7		6973.33	58.73	68.20	-9.47	49.97	8.76	Peak	176	172
8		10460.00	68.03	68.20	-0.17	54.17	13.86	Peak	177	36
9		15690.00	44.19	54.00	-9.81	28.76	15.43	Average	155	232
10		15690.00	58.10	74.00	-15.90	42.67	15.43	Peak	155	232

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

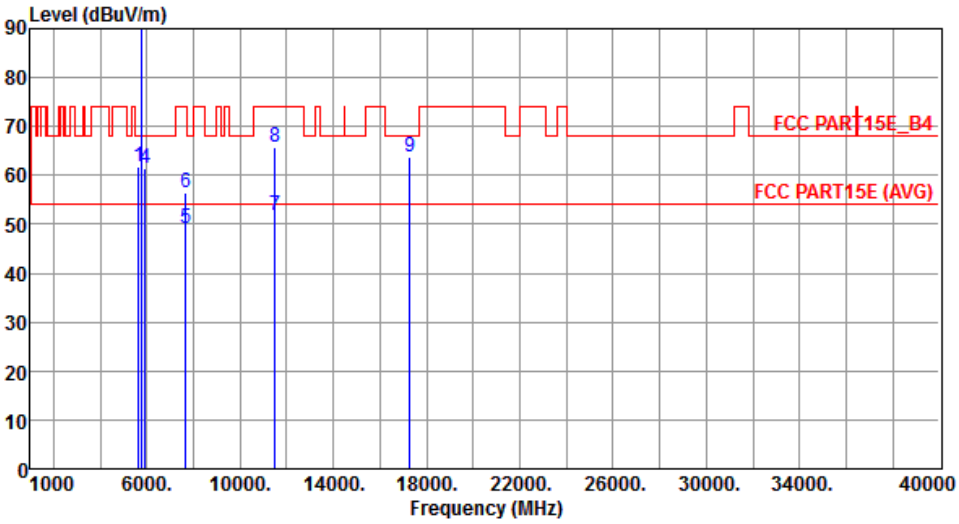
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	59.63	68.20	-8.57	54.08	5.55	Peak	216	210
2	*	5755.00	101.34			95.55	5.79	Average	216	210
3	*	5755.00	112.34			106.55	5.79	Peak	216	210
4		5925.10	59.73	68.20	-8.47	53.64	6.09	Peak	216	210
5		7673.33	46.52	54.00	-7.48	36.80	9.72	Average	133	112
6		7673.33	52.83	74.00	-21.17	43.11	9.72	Peak	133	112
7		11510.00	44.71	54.00	-9.29	30.09	14.62	Average	292	65
8		11510.00	58.37	74.00	-15.63	43.75	14.62	Peak	292	65
9		17265.00	62.84	68.20	-5.36	42.03	20.81	Peak	135	246

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

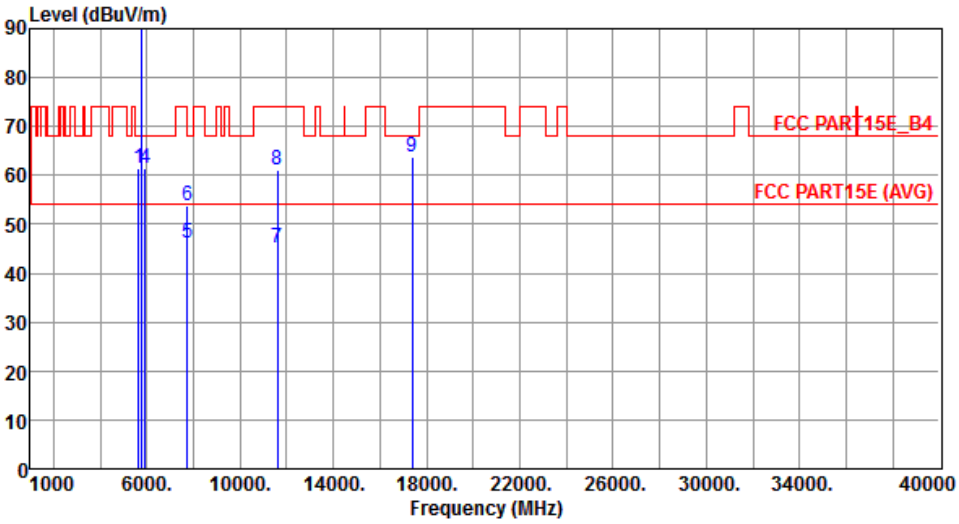
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	61.93	68.20	-6.27	56.38	5.55	Peak	213	70
2	*	5755.00	109.08			103.29	5.79	Average	213	70
3	*	5755.00	119.90			114.11	5.79	Peak	213	70
4		5925.10	61.44	68.20	-6.76	55.35	6.09	Peak	213	70
5		7673.33	49.26	54.00	-4.74	39.54	9.72	Average	112	91
6		7673.33	56.41	74.00	-17.59	46.69	9.72	Peak	112	91
7		11510.00	51.69	54.00	-2.31	37.07	14.62	Average	118	62
8		11510.00	65.75	74.00	-8.25	51.13	14.62	Peak	118	62
9		17265.00	63.79	68.20	-4.41	42.98	20.81	Peak	118	155

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

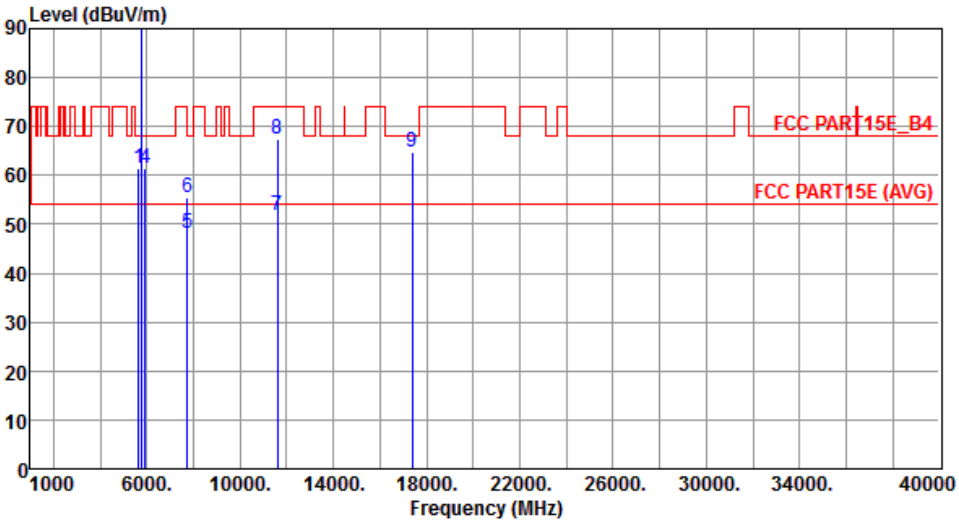
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	61.29	68.20	-6.91	55.74	5.55	Peak	210	210
2	*	5795.00	101.46			95.59	5.87	Average	210	210
3	*	5795.00	112.75			106.88	5.87	Peak	210	210
4		5925.10	61.29	68.20	-6.91	55.20	6.09	Peak	210	210
5		7726.66	46.31	54.00	-7.69	36.53	9.78	Average	135	121
6		7726.66	53.67	74.00	-20.33	43.89	9.78	Peak	135	121
7		11590.00	45.08	54.00	-8.92	30.58	14.50	Average	288	66
8		11590.00	60.97	74.00	-13.03	46.47	14.50	Peak	288	66
9		17385.00	63.80	68.20	-4.40	42.34	21.46	Peak	179	133

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

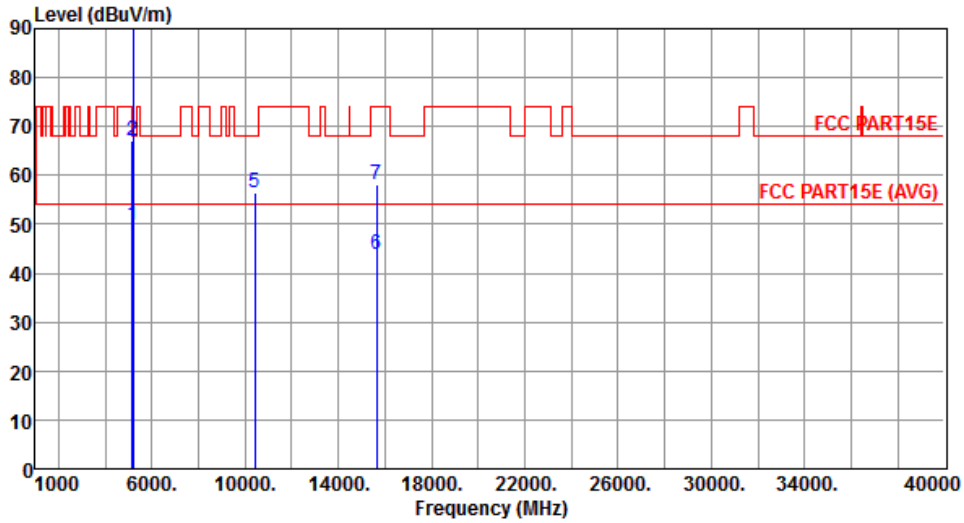


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	61.38	68.20	-6.82	55.83	5.55	Peak	166	39
2	*	5795.00	108.13			102.26	5.87	Average	251	73
3	*	5795.00	119.30			113.43	5.87	Peak	251	73
4		5925.10	61.39	68.20	-6.81	55.30	6.09	Peak	166	39
5		7726.66	48.13	54.00	-5.87	38.35	9.78	Average	166	39
6		7726.66	55.50	74.00	-18.50	45.72	9.78	Peak	166	39
7		11590.00	51.72	54.00	-2.28	37.22	14.50	Average	117	62
8		11590.00	67.54	74.00	-6.46	53.04	14.50	Peak	117	62
9		17385.00	64.70	68.20	-3.50	43.24	21.46	Peak	166	39

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

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

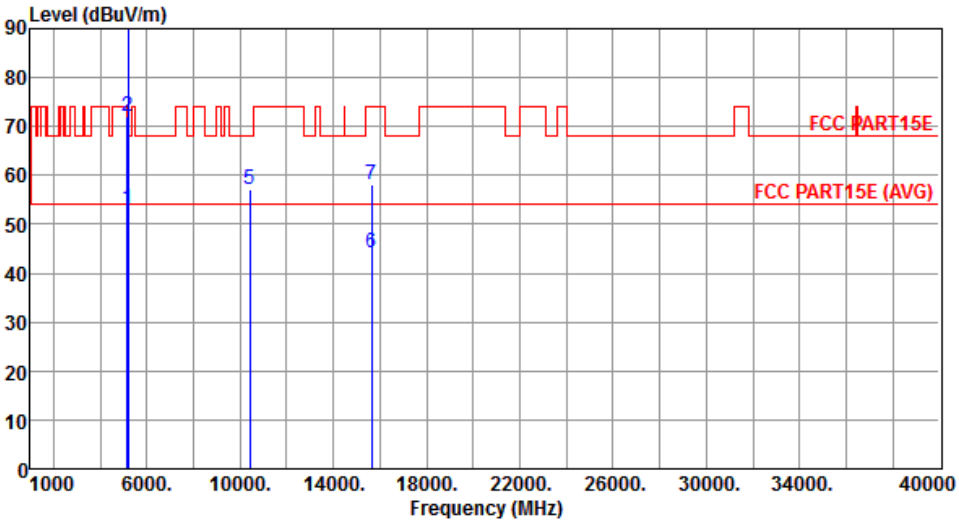
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



		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	49.77	54.00	-4.23	44.87	4.90	Average	178	273
2		5150.00	67.19	74.00	-6.81	62.29	4.90	Peak	178	273
3	*	5210.00	90.94			85.97	4.97	Average	178	273
4	*	5210.00	103.14			98.17	4.97	Peak	178	273
5		10420.00	56.54	68.20	-11.66	42.76	13.78	Peak	222	147
6		15630.00	43.94	54.00	-10.06	28.39	15.55	Average	188	214
7		15630.00	58.02	74.00	-15.98	42.47	15.55	Peak	188	214

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

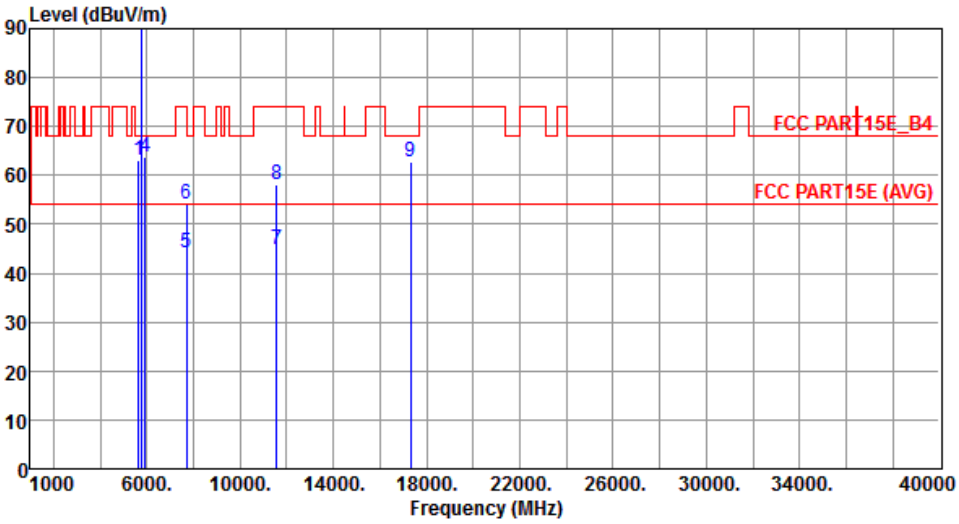
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



		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	53.09	54.00	-0.91	48.19	4.90	Average	217	74
2		5150.00	72.19	74.00	-1.81	67.29	4.90	Peak	217	74
3	*	5210.00	97.19			92.22	4.97	Average	217	74
4	*	5210.00	109.29			104.32	4.97	Peak	217	74
5		10420.00	57.10	68.20	-11.10	43.32	13.78	Peak	172	36
6		15630.00	44.04	54.00	-9.96	28.49	15.55	Average	166	221
7		15630.00	58.13	74.00	-15.87	42.58	15.55	Peak	166	221

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

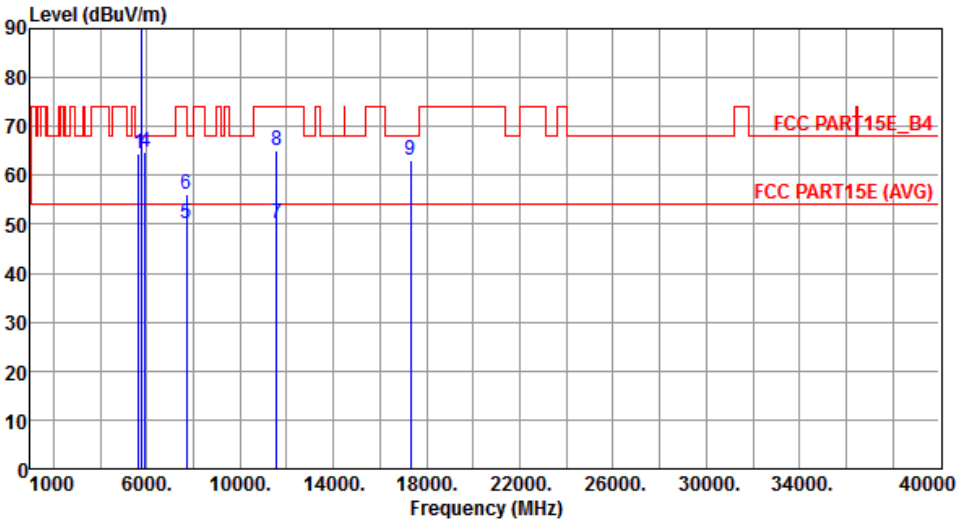
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5649.90	62.98	68.20	-5.22	57.43	5.55	Peak	339	210
2	*	5775.00	96.16			90.32	5.84	Average	339	210
3	*	5775.00	108.72			102.88	5.84	Peak	339	210
4		5925.10	63.84	68.20	-4.36	57.75	6.09	Peak	339	210
5		7700.00	44.32	54.00	-9.68	34.57	9.75	Average	134	112
6		7700.00	54.28	74.00	-19.72	44.53	9.75	Peak	134	112
7		11550.00	44.69	54.00	-9.31	30.14	14.55	Average	263	53
8		11550.00	58.24	74.00	-15.76	43.69	14.55	Peak	263	53
9		17325.00	62.72	68.20	-5.48	41.59	21.13	Peak	222	165

Note 1: Emission Level (dBuV/m) = SA Reading (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		5649.90	64.54	68.20	-3.66	58.99	5.55	Peak	178	68
2	*	5775.00	104.41			98.57	5.84	Average	178	68
3	*	5775.00	117.52			111.68	5.84	Peak	178	68
4		5925.10	64.61	68.20	-3.59	58.52	6.09	Peak	178	68
5		7700.00	50.00	54.00	-4.00	40.25	9.75	Average	116	94
6		7700.00	56.22	74.00	-17.78	46.47	9.75	Peak	116	94
7		11550.00	50.12	54.00	-3.88	35.57	14.55	Average	123	143
8		11550.00	64.96	74.00	-9.04	50.41	14.55	Peak	123	143
9		17325.00	63.15	68.20	-5.05	42.02	21.13	Peak	222	165

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

3.6 Frequency Stability

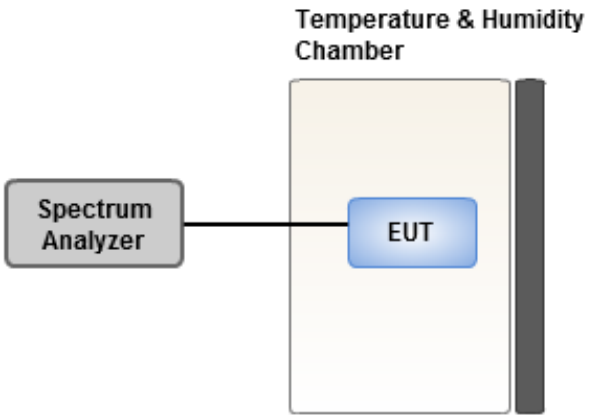
3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5200 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	1.45	1.15	1.82	1.95
T20°CVmin	0.67	0.36	0.46	0.70
T50°CVnom	3.48	3.47	3.61	3.72
T40°CVnom	1.46	1.52	2.34	1.38
T30°CVnom	1.83	2.42	2.47	1.90
T20°CVnom	3.18	3.56	3.27	3.23
T10°CVnom	2.73	2.78	2.68	3.21
T0°CVnom	4.08	4.06	4.22	4.37
T-10°CVnom	2.71	2.51	3.34	2.46
T-20°CVnom	2.04	2.33	1.82	2.03
T-30°CVnom	0.87	0.58	1.46	1.18
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	0.26	0.63	-0.06	0.50
T20°CVmin	0.34	0.33	0.93	0.43
T50°CVnom	0.72	0.52	0.86	0.81
T40°CVnom	0.15	0.33	0.55	0.51
T30°CVnom	0.50	0.74	1.07	0.57
T20°CVnom	-0.33	-0.10	0.51	-0.36
T10°CVnom	-0.17	0.04	0.19	-0.33
T0°CVnom	0.31	0.19	0.75	0.24
T-10°CVnom	0.02	0.38	0.08	0.02
T-20°CVnom	0.83	0.74	0.77	1.15
T-30°CVnom	0.37	-0.05	0.55	0.39
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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