FCC Test Report

FCC ID	:	**I88WAC5302D-S**
Equipment	:	**802.11ac Wall-Plate Unified Access Point**
Model No.	:	**WAC5302D-S**
Brand Name	:	**ZYXEL**
Applicant	:	**Zyxel Communications Corporation**
Address	:	**No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Aug. 24, 2016**
Tested Date	:	**Sep. 07 , 2016 ~ Jan. 16, 2017**

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
FR682405AN	Rev. 01	Initial issue	Feb. 10, 2017

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.156MHz 54.27 (Margin -11.38dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 53.72 (Margin -0.28dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: ***Non-beamforming mode*** 5150-5250MHz: 19.35 5725-5850MHz: 19.57 ***Beamforming mode*** 5150-5250MHz: 19.22 5725-5850MHz: 19.38	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]	2	6-54 Mbps
5150-5250	n (HT20)	5180-5240	36-48 [4]	2	MCS 0-15
5150-5250	n (HT40)	5190-5230	38-46 [2]	2	MCS 0-15
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	2	MCS 0-9
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	2	MCS 0-9
5150-5250	ac (VHT80)	5210	42 [1]	2	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: 802.11ac supports beamforming function.					

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5725-5850	a	5745-5825	149-165 [5]	2	6-54 Mbps
5725-5850	n (HT20)	5745-5825	149-165 [5]	2	MCS 0-15
5725-5850	n (HT40)	5755-5795	151-159 [2]	2	MCS 0-15
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	2	MCS 0-9
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	2	MCS 0-9
5725-5850	ac (VHT80)	5775	155 [1]	2	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: 802.11ac supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	**Model**	**Type**	**Connector**	**Operating Frequencies (MHz) / Antenna Gain (dBi)**		
				2400~2483.5	**5150~5250**	**5725~5850**
1	81XCAL15.G01	LOOP	I-PEX	5.82	---	---
	81XCAL15.G02	LOOP	I-PEX	5.02	---	---
2	AD751	PIFA	I-PEX	---	5	5

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type 1 (For Radiated test)	POE Brand: ZYXEL Model: PoE12-HP I/P: 100-240Vac, 50/60Hz, 1.5A max O/P: 48Vdc, 42.1W
Power Supply Type 2 (For Conducted test)	POE Brand: CISCO Model: SB-PWR-INJ2 I/P: 100-240Vac, 50/60Hz, 0.67A O/P: 55Vdc, 0.6A

Note: Above power supplies are provided by applicant for support units only.

1.1.4 Channel List

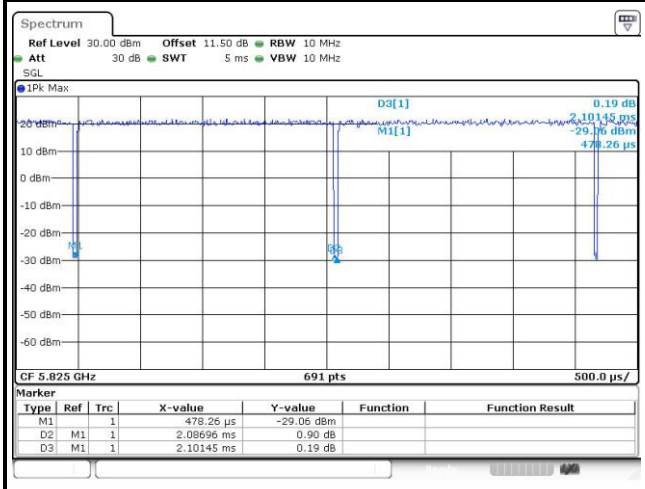
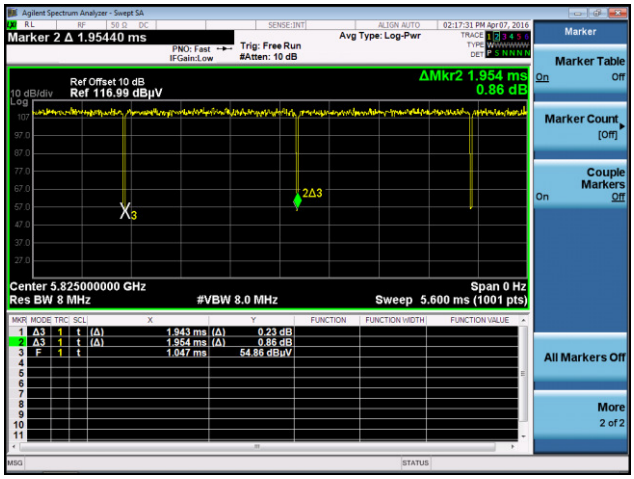
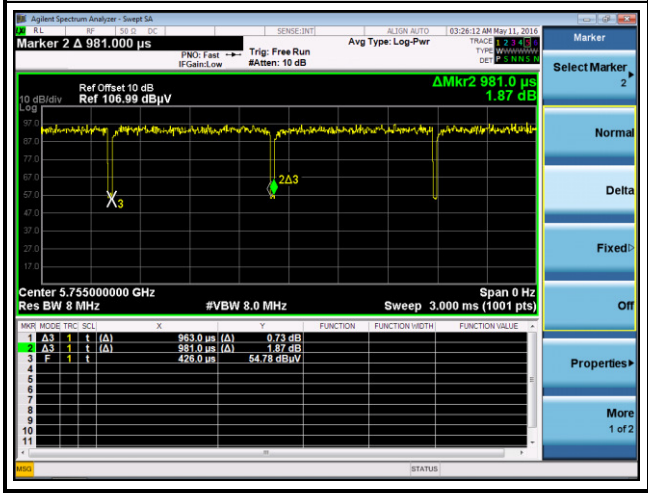
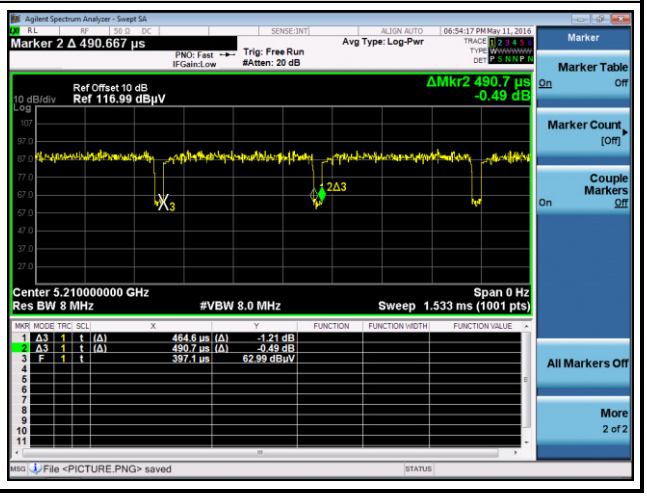
For Frequency band 5150-5250 MHz			
802.11 a / HT20 / VHT20		**HT40 / VHT40**	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	**VHT 80**	
48	5240	42	5210

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

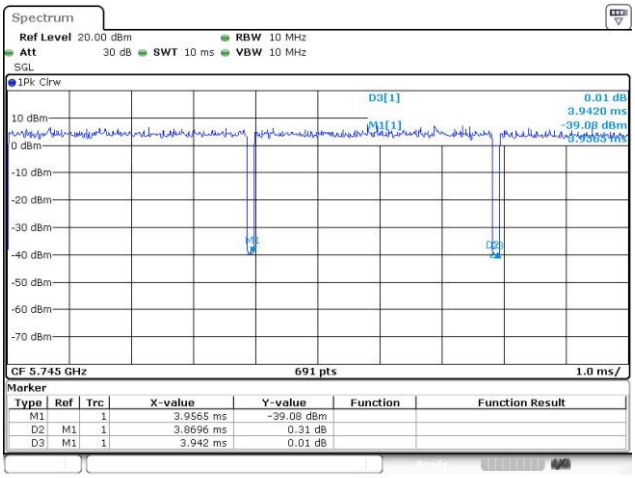
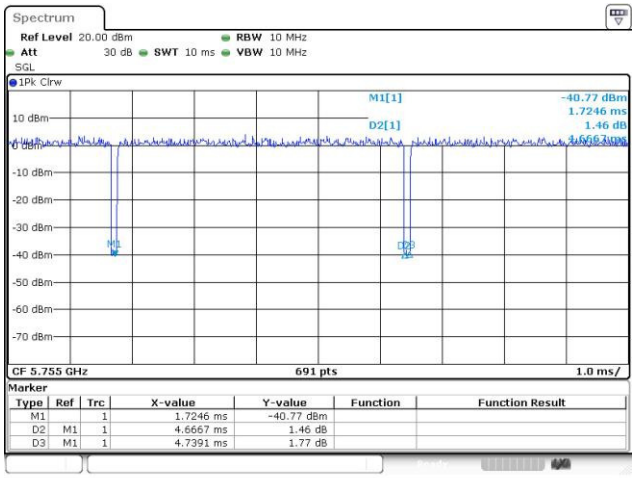
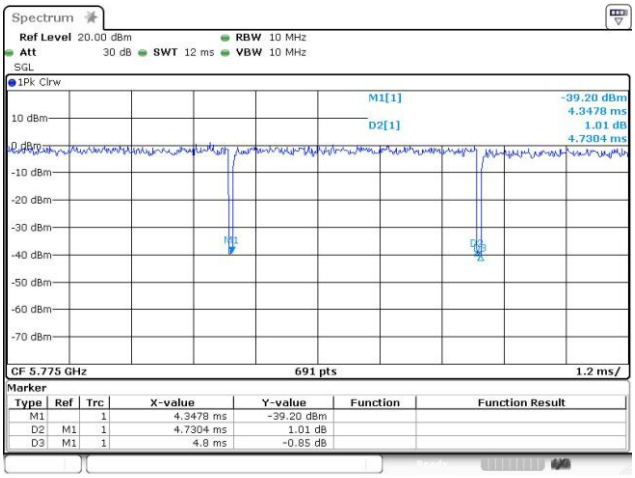
1.1.5 Test Tool and Duty Cycle

Test Tool	Non-beamforming: MTool, version: 2.0.3.2 Beamforming: Putty, version: 0.63				
Duty Cycle and Duty Factor	**Mode**	**Non-beamforming**		**Beamforming**	
		Duty cycle (%)	**Duty factor (dB)**	**Duty cycle (%)**	**Duty factor (dB)**
	11a	99.31%	0.03	---	---
	VHT20	99.44%	0.02	98.16%	0.08
	VHT40	98.17%	0.08	98.47%	0.07
	VHT80	94.68%	0.24	98.55%	0.06

Non-beamforming mode

11a	VHT20
	
VHT40	**VHT80**
	

Beamforming mode

VHT20	VHT40
	
VHT80	**--**
	--

1.1.6 Power Setting

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5180	66	---
11a	5200	88	---
11a	5240	88	---
HT20	5180	64	64
HT20	5200	88	88
HT20	5240	88	88
HT40	5190	56	56
HT40	5230	88	88
VHT20	5180	64	64
VHT20	5200	88	88
VHT20	5240	88	88
VHT40	5190	56	56
VHT40	5230	88	88
VHT80	5210	54	54

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5745	88	---
11a	5785	88	---
11a	5825	88	---
HT20	5745	88	88
HT20	5785	88	88
HT20	5825	88	88
HT40	5755	88	88
HT40	5795	88	88
VHT20	5745	88	88
VHT20	5785	88	88
VHT20	5825	88	88
VHT40	5755	88	88
VHT40	5795	88	88
VHT80	5775	76	76

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E6430	DoC	RJ45, 1m non-shielded.
2	Notebook	DELL	Latitude E6430	DoC	RJ45, 8m non-shielded.
3	USB flash	Transcend	8G	---	---
4	RJ45 load	ICC	---	---	RJ45, 1m non-shielded.
5	RJ45 load	---	---	---	RJ45, 8m non-shielded.
6	POE	ZYXEL	PoE12-HP	---	RJ45, 8m non-shielded.
7	POE	CISCO	SB-PWR-INJ2	---	RJ45, 8m non-shielded.

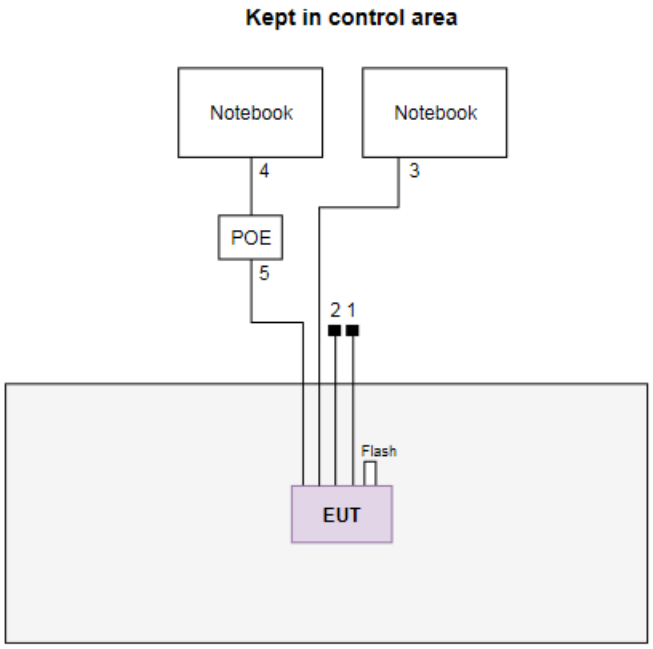
Note: No.5-7 were provided by applicant.

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E6430	DoC	RJ45, 1m non-shielded.
2	Notebook	DELL	Latitude E6430	DoC	RJ45, 8m non-shielded.
3	Notebook	DELL	Latitude E6440	DoC	---
4	USB flash	Transcend	8G	---	---
5	RJ45 load	ICC	---	---	RJ45, 1m non-shielded.
6	RJ45 load	---	---	---	RJ45, 8m non-shielded.
7	POE	ZYXEL	PoE12-HP	---	RJ45, 8m non-shielded.
8	POE	CISCO	SB-PWR-INJ2	---	RJ45, 8m non-shielded.
9	Wireless Module Card	---	BCM4630	---	---

Note: No.6-9 were provided by applicant.

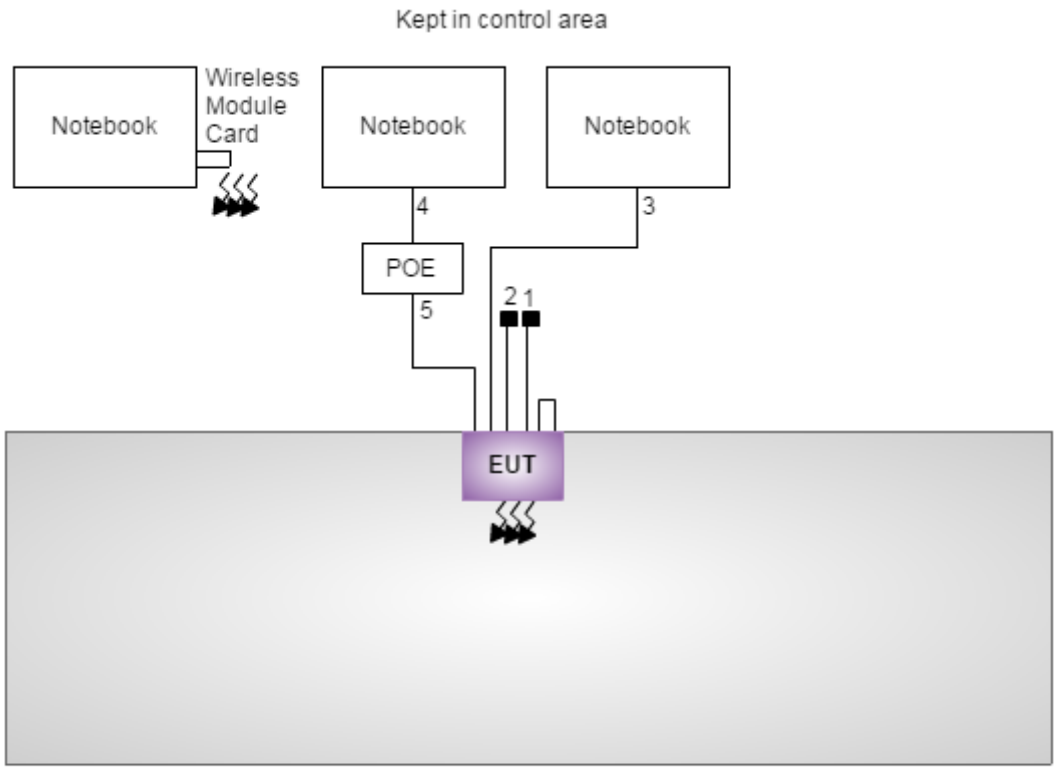
1.3 Test Setup Chart

NON-Beamforming mode

Test Setup Diagram
 1. RJ45, 8m non-shielded with load 2. RJ45, 1m non-shielded with load 3. RJ45, 8m non-shielded 4. RJ45, 1m non-shielded 5. RJ45, 8m non-shielded

Beamforming mode

Test Setup Diagram



1. RJ45, 8m non-shielded with load.
2. RJ45, 1m non-shielded with load.
3. RJ45, 8m non-shielded.
4. RJ45, 1m non-shielded.
5. RJ45, 8m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 30, 2016				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Jan. 12, 2016	Jan. 11, 2017
LISN	R&S	ENV216	101579	Jan. 11, 2016	Jan. 10, 2017
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 20, 2016	Dec. 19, 2017
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Sep. 07, 2016				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 14, 2015	Sep. 13, 2016
Receiver	Agilent	N9038A	MY53290044	Oct. 14, 2015	Oct. 13, 2016
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 26, 2016	Apr. 25, 2017
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 24, 2016	Feb. 23, 2017
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	EMC	EMC02325	980187	Sep. 21, 2015	Sep. 20, 2016
Preamplifier	Agilent	83017A	MY53270014	Aug. 22, 2016	Aug. 21, 2017
Preamplifier	EMC	EMC184045B	980192	Aug. 24, 2016	Aug. 23, 2017
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 05, 2016	Feb. 04, 2017
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 05, 2016	Feb. 04, 2017
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 05, 2016	Feb. 04, 2017
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 05, 2016	Feb. 04, 2017
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 05, 2016	Feb. 04, 2017
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 05, 2016	Feb. 04, 2017
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Jan. 12, 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 09, 2016	Sep. 08, 2017
Receiver	Agilent	N9038A	MY53290044	Oct. 06, 2016	Oct. 05, 2017
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 26, 2016	Apr. 25, 2017
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 24, 2016	Feb. 23, 2017
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 25, 2016	Oct. 24, 2017
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 10, 2016	Nov. 09, 2017
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 09, 2016	Dec. 08, 2017
Preamplifier	EMC	EMC02325	980187	Sep. 08, 2016	Sep. 07, 2017
Preamplifier	Agilent	83017A	MY53270014	Aug. 22, 2016	Aug. 21, 2017
Preamplifier	EMC	EMC184045B	980192	Aug. 24, 2016	Aug. 23, 2017
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 05, 2016	Feb. 04, 2017
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 05, 2016	Feb. 04, 2017
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 05, 2016	Feb. 04, 2017
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Feb. 05, 2016	Feb. 04, 2017
LF cable-3M	EMC	EMC8D-NM-NM-300 0	131103	Feb. 05, 2016	Feb. 04, 2017
LF cable-13M	EMC	EMC8D-NM-NM-130 00	131104	Feb. 05, 2016	Feb. 04, 2017
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	Jan. 11 ~ Jan. 16, 2017				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2016	Feb. 16, 2017
Spectrum Analyzer	Agilent	N9010A	MY54200247	Aug. 30, 2016	Aug. 29, 2017
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 21, 2016	Nov. 20, 2017
Power Meter	Anritsu	ML2495A	1241001	Aug. 24, 2016	Aug. 23, 2017
Power Sensor	Anritsu	MA2411B	1207362	Aug. 24, 2016	Aug. 23, 2017
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Oct, 12 ~ Oct. 13, 2016				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2016	Feb. 16, 2017
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 09, 2016	Sep. 08, 2017
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2015	Nov. 26, 2016
Power Meter	Anritsu	ML2495A	1241002	Oct. 06, 2016	Oct. 05, 2017
Power Sensor	Anritsu	MA2411B	1207366	Oct. 06, 2016	Oct. 05, 2017
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	±3.66 dB
Radiated emission > 1GHz	±5.37 dB
Time	±0.1%
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition

Tested Date: Sep. 07 ~ Oct. 17, 2016

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 56%	Howard Huang
Radiated Emissions	03CH03-WS	23-24°C / 66-68%	Aska Huang
RF Conducted	TH01-WS	22°C / 64%	Brad Wu

Tested Date: Dec. 30, 2016 ~ Jan. 16, 2017

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	24°C / 56%	Howard Huang
Radiated Emissions	03CH03-WS	21°C / 66%	Aska Huang
RF Conducted	TH01-WS	24°C / 61%	Aska Huang

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT20	5240	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5240	MCS 0	---
RF Output Power	11a	5180 / 5200 / 5240	6 Mbps	---
	HT20	5180 / 5200 / 5240	MCS 0	
	HT40	5190 / 5230	MCS 0	
	VHT20	5180 / 5200 / 5240	MCS 0	
	VHT40	5190 / 5230	MCS 0	
	VHT80	5210	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240	6 Mbps	---
	VHT20	5180 / 5200 / 5240	MCS 0	
	VHT40	5190 / 5230	MCS 0	
	VHT80	5210	MCS 0	
Frequency Stability	Un-modulation	5200	---	---
NOTE: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5745	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5745	6 Mbps	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	---
NOTE: 1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

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	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT20	5745	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5745	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	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.				

3 Transmitter Test Results

3.1 Conducted Emissions

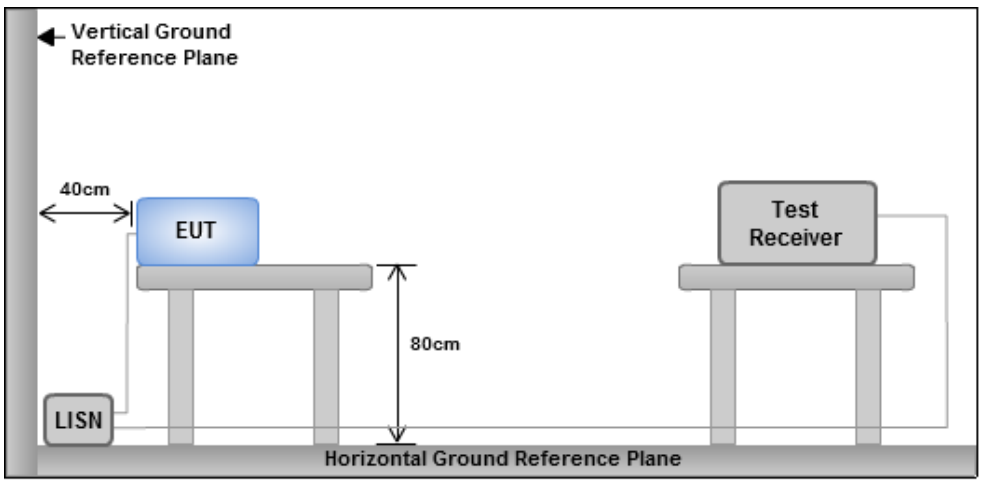
3.1.1 Limit of Conducted Emissions

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



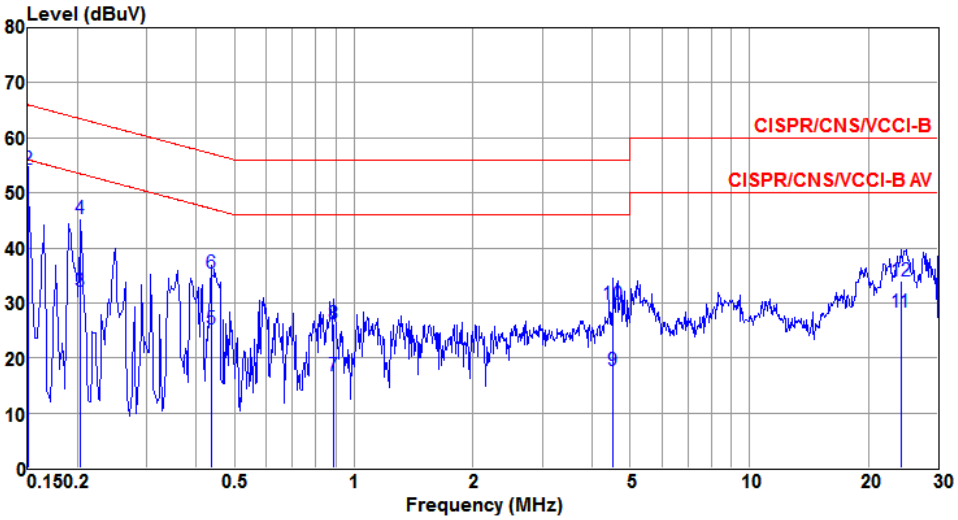
Note: 1. Support units were connected to second LISN.

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

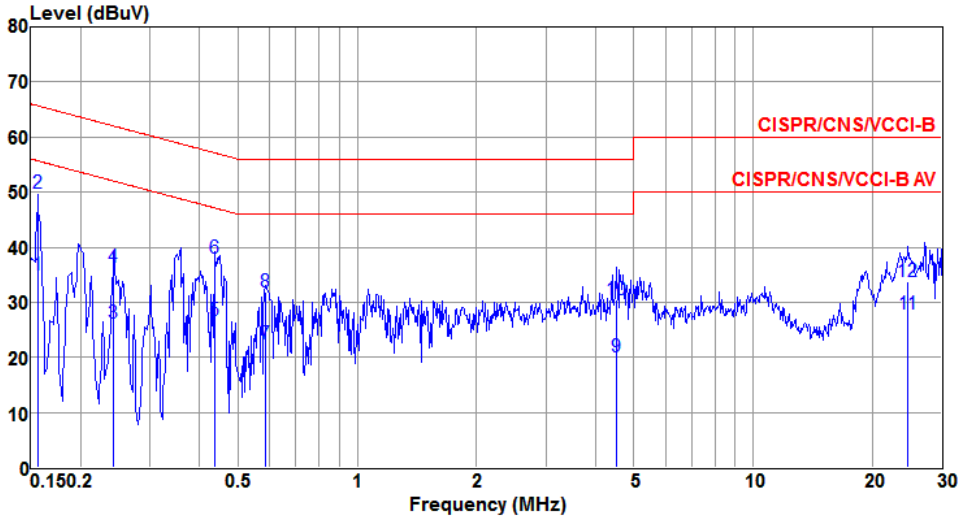
Modulation	VHT20	Test Freq. (MHz)	5240
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	42.53	56.00	-13.47	32.88	9.63	0.02	Average
2@	0.150	54.27	66.00	-11.73	44.62	9.63	0.02	QP
3	0.204	32.16	53.45	-21.29	22.50	9.64	0.02	Average
4	0.204	45.32	63.45	-18.13	35.66	9.64	0.02	QP
5	0.435	25.25	47.15	-21.90	15.59	9.63	0.03	Average
6	0.435	35.43	57.15	-21.72	25.77	9.63	0.03	QP
7	0.890	16.78	46.00	-29.22	7.09	9.63	0.06	Average
8	0.890	26.21	56.00	-29.79	16.52	9.63	0.06	QP
9	4.525	17.68	46.00	-28.32	7.90	9.65	0.13	Average
10	4.525	29.75	56.00	-26.25	19.97	9.65	0.13	QP
11	24.142	28.24	50.00	-21.76	18.36	9.64	0.24	Average
12	24.142	33.97	60.00	-26.03	24.09	9.64	0.24	QP

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

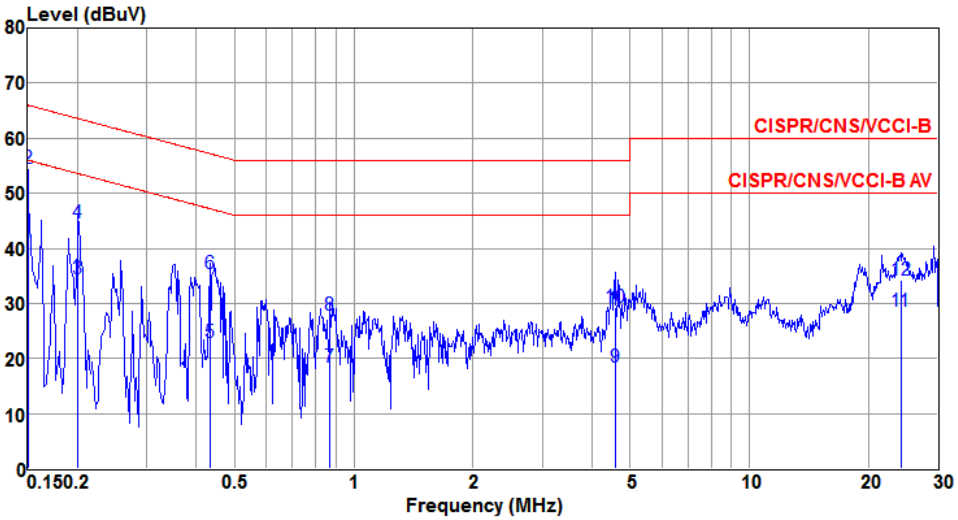
Modulation	VHT20	Test Freq. (MHz)	5240
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.156	34.90	55.69	-20.79	25.26	9.62	0.02	Average
2@	0.156	49.89	65.69	-15.80	40.25	9.62	0.02	QP
3	0.243	26.30	52.00	-25.70	16.66	9.62	0.02	Average
4	0.243	36.29	62.00	-25.71	26.65	9.62	0.02	QP
5	0.435	26.56	47.15	-20.59	16.90	9.63	0.03	Average
6	0.435	38.02	57.15	-19.13	28.36	9.63	0.03	QP
7	0.585	22.37	46.00	-23.63	12.70	9.63	0.04	Average
8	0.585	31.84	56.00	-24.16	22.17	9.63	0.04	QP
9	4.501	20.05	46.00	-25.95	10.29	9.64	0.12	Average
10	4.501	30.57	56.00	-25.43	20.81	9.64	0.12	QP
11	24.659	27.90	50.00	-22.10	17.92	9.74	0.24	Average
12	24.659	33.79	60.00	-26.21	23.81	9.74	0.24	QP

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

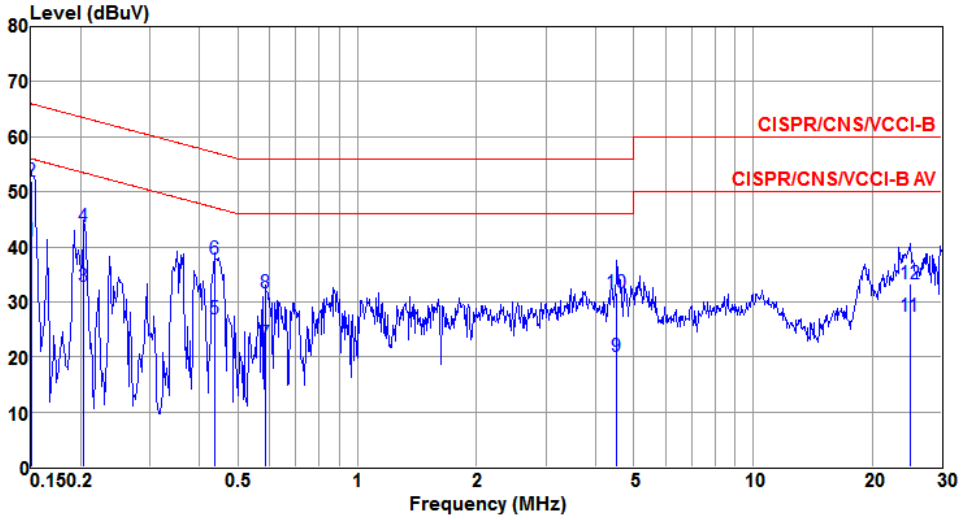
Modulation	11a	Test Freq. (MHz)	5745
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	41.09	56.00	-14.91	31.44	9.63	0.02	Average
2@	0.150	54.53	66.00	-11.47	44.88	9.63	0.02	QP
3	0.201	34.48	53.58	-19.10	24.82	9.64	0.02	Average
4	0.201	44.72	63.58	-18.86	35.06	9.64	0.02	QP
5	0.433	22.92	47.20	-24.28	13.26	9.63	0.03	Average
6	0.433	35.48	57.20	-21.72	25.82	9.63	0.03	QP
7	0.871	18.40	46.00	-27.60	8.71	9.63	0.06	Average
8	0.871	27.97	56.00	-28.03	18.28	9.63	0.06	QP
9	4.574	18.40	46.00	-27.60	8.62	9.65	0.13	Average
10	4.574	29.35	56.00	-26.65	19.57	9.65	0.13	QP
11	24.142	28.49	50.00	-21.51	18.61	9.64	0.24	Average
12	24.142	34.29	60.00	-25.71	24.41	9.64	0.24	QP

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

Modulation	11a	Test Freq. (MHz)	5745
Power Phase	Neutral		

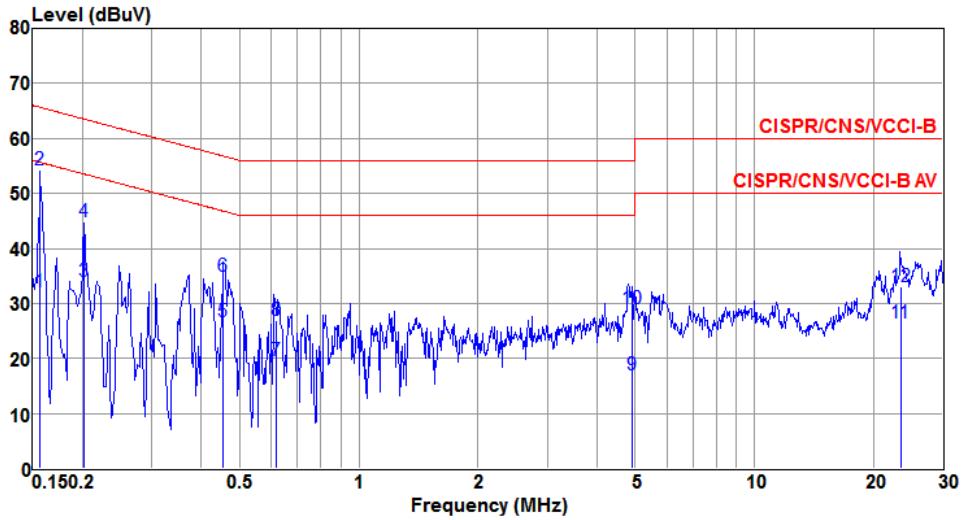


	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	41.13	56.00	-14.87	31.49	9.62	0.02	Average
2@	0.150	52.04	66.00	-13.96	42.40	9.62	0.02	QP
3	0.204	32.75	53.45	-20.70	23.11	9.62	0.02	Average
4	0.204	43.68	63.45	-19.77	34.04	9.62	0.02	QP
5	0.435	27.00	47.15	-20.15	17.34	9.63	0.03	Average
6	0.435	37.72	57.15	-19.43	28.06	9.63	0.03	QP
7	0.585	22.49	46.00	-23.51	12.82	9.63	0.04	Average
8	0.585	31.73	56.00	-24.27	22.06	9.63	0.04	QP
9	4.525	20.06	46.00	-25.94	10.29	9.64	0.13	Average
10	4.525	31.74	56.00	-24.26	21.97	9.64	0.13	QP
11	24.922	27.45	50.00	-22.55	17.46	9.74	0.25	Average
12	24.922	33.36	60.00	-26.64	23.37	9.74	0.25	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

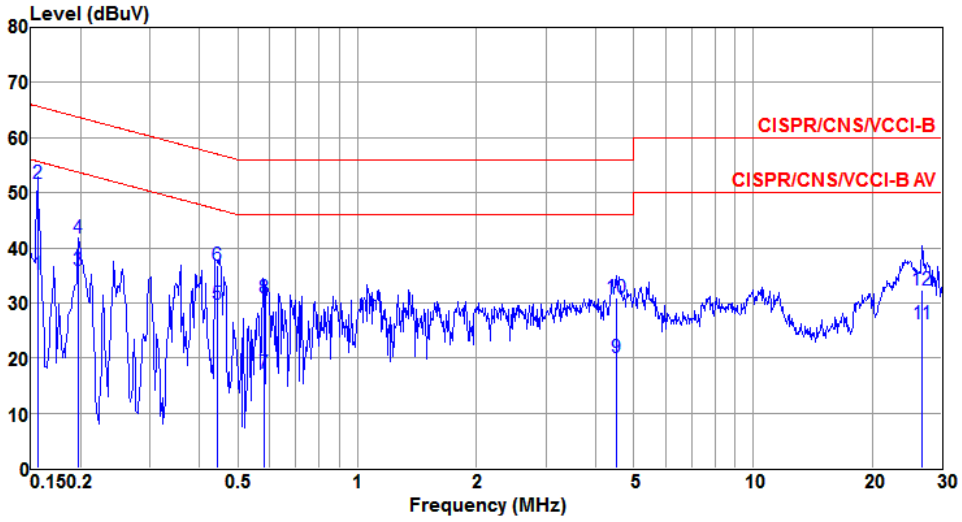
Modulation	VHT40	**Test Freq. (MHz)**	5230
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.156	32.11	55.65	-23.54	22.46	9.63	0.02	Average
2@	0.156	54.27	65.65	-11.38	44.62	9.63	0.02	QP
3	0.202	33.91	53.54	-19.63	24.25	9.64	0.02	Average
4	0.202	44.76	63.54	-18.78	35.10	9.64	0.02	QP
5	0.455	26.66	46.78	-20.12	17.00	9.63	0.03	Average
6	0.455	35.01	56.78	-21.77	25.35	9.63	0.03	QP
7	0.620	19.67	46.00	-26.33	10.00	9.63	0.04	Average
8	0.620	26.92	56.00	-29.08	17.25	9.63	0.04	QP
9	4.920	17.08	46.00	-28.92	7.30	9.65	0.13	Average
10	4.920	29.03	56.00	-26.97	19.25	9.65	0.13	QP
11	23.450	26.43	50.00	-23.57	16.55	9.65	0.23	Average
12	23.450	33.03	60.00	-26.97	23.15	9.65	0.23	QP

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

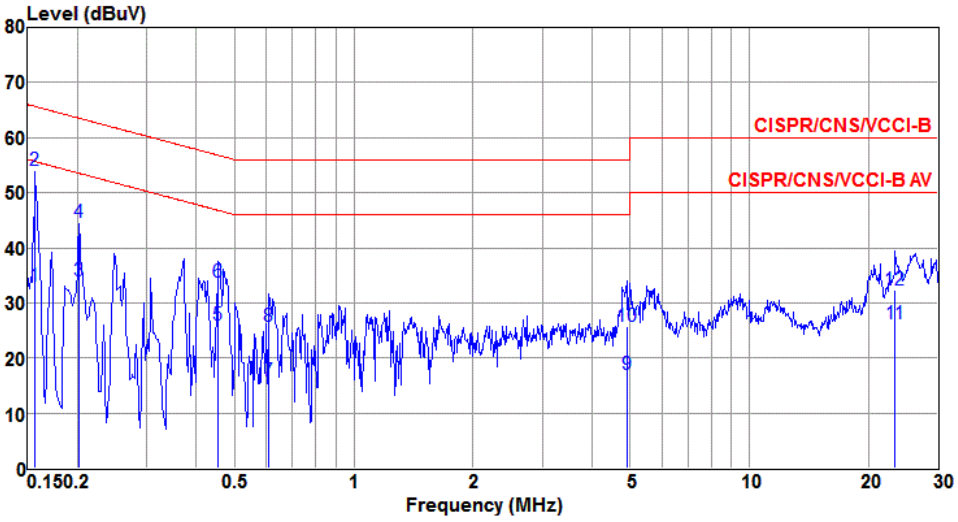
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.156	35.09	55.69	-20.60	25.45	9.62	0.02	Average
2@	0.156	51.79	65.69	-13.90	42.15	9.62	0.02	QP
3	0.198	35.94	53.71	-17.77	26.30	9.62	0.02	Average
4	0.198	41.84	63.71	-21.87	32.20	9.62	0.02	QP
5	0.442	29.86	47.02	-17.16	20.20	9.63	0.03	Average
6	0.442	36.91	57.02	-20.11	27.25	9.63	0.03	QP
7	0.580	17.32	46.00	-28.68	7.65	9.63	0.04	Average
8	0.580	30.97	56.00	-25.03	21.30	9.63	0.04	QP
9	4.520	20.06	46.00	-25.94	10.29	9.64	0.13	Average
10	4.520	31.01	56.00	-24.99	21.24	9.64	0.13	QP
11	26.750	26.22	50.00	-23.78	16.25	9.73	0.24	Average
12	26.750	32.32	60.00	-27.68	22.35	9.73	0.24	QP

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

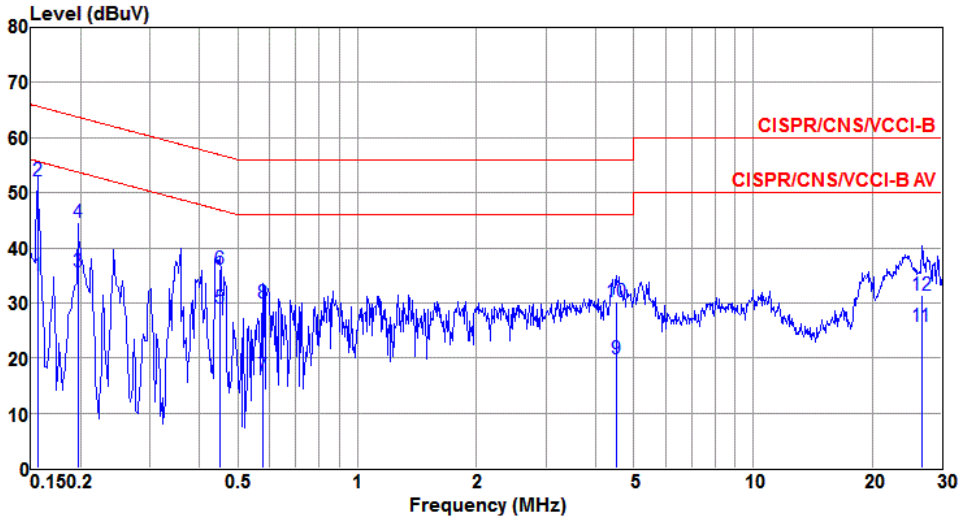
Modulation	VHT20	Test Freq. (MHz)	5745
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.156	33.11	55.65	-22.54	23.46	9.63	0.02	Average
2@	0.156	54.14	65.65	-11.51	44.49	9.63	0.02	QP
3	0.202	33.90	53.54	-19.64	24.24	9.64	0.02	Average
4	0.202	44.72	63.54	-18.82	35.06	9.64	0.02	QP
5	0.454	25.93	46.80	-20.87	16.27	9.63	0.03	Average
6	0.454	33.87	56.80	-22.93	24.21	9.63	0.03	QP
7	0.611	15.85	46.00	-30.15	6.18	9.63	0.04	Average
8	0.611	25.79	56.00	-30.21	16.12	9.63	0.04	QP
9	4.900	17.07	46.00	-28.93	7.29	9.65	0.13	Average
10	4.900	25.65	56.00	-30.35	15.87	9.65	0.13	QP
11	23.387	26.18	50.00	-23.82	16.31	9.65	0.22	Average
12	23.387	32.41	60.00	-27.59	22.54	9.65	0.22	QP

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

Modulation	VHT20	Test Freq. (MHz)	5745
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.156	34.95	55.69	-20.74	25.31	9.62	0.02	Average
2@	0.156	52.09	65.69	-13.60	42.45	9.62	0.02	QP
3	0.198	35.61	53.71	-18.10	25.97	9.62	0.02	Average
4	0.198	44.72	63.71	-18.99	35.08	9.62	0.02	QP
5	0.449	29.05	46.89	-17.84	19.39	9.63	0.03	Average
6	0.449	36.23	56.89	-20.66	26.57	9.63	0.03	QP
7	0.576	16.88	46.00	-29.12	7.21	9.63	0.04	Average
8	0.576	30.02	56.00	-25.98	20.35	9.63	0.04	QP
9	4.501	19.94	46.00	-26.06	10.18	9.64	0.12	Average
10	4.501	30.23	56.00	-25.77	20.47	9.64	0.12	QP
11	26.699	25.71	50.00	-24.29	15.74	9.73	0.24	Average
12	26.699	31.44	60.00	-28.56	21.47	9.73	0.24	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

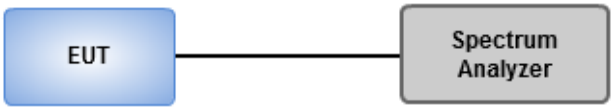
Occupied Bandwidth

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

6dB Bandwidth

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

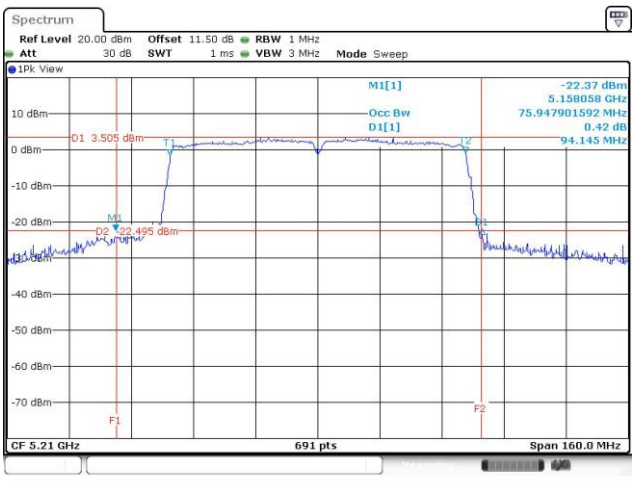
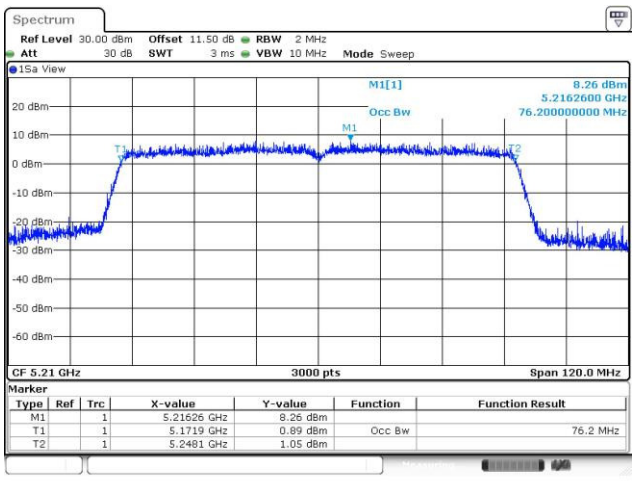
3.2.3 Test Setup



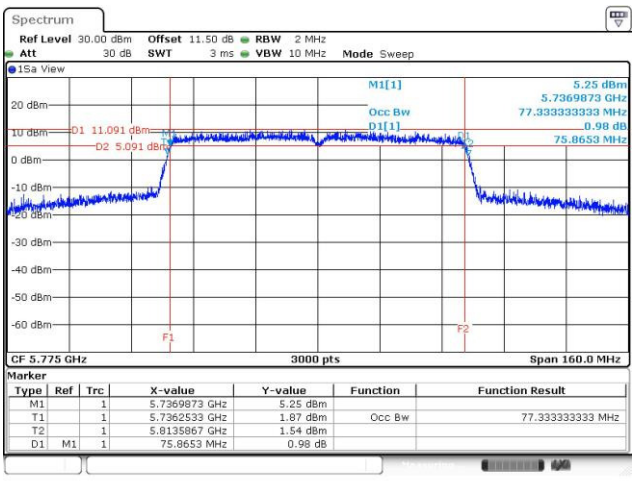
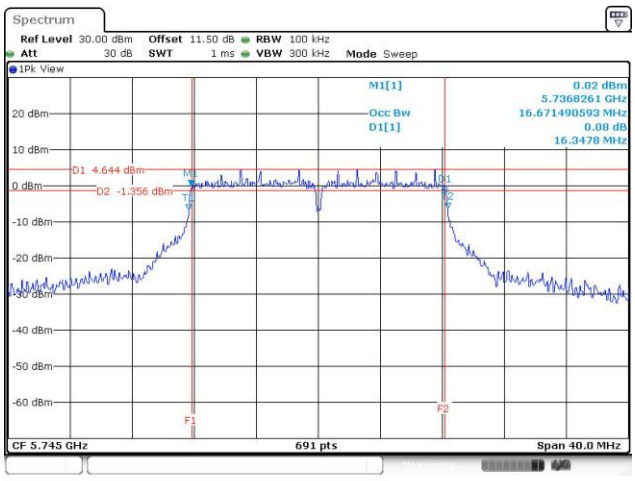
3.2.4 Test Result of Emission Bandwidth

Non-beamforming mode

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
11a	2	5180	21.74	23.48	---	---	17.04	17.16	---	---
11a	2	5200	26.61	27.59	---	---	17.22	17.10	---	---
11a	2	5240	21.80	24.81	---	---	17.20	17.28	---	---
VHT20	2	5180	23.83	25.51	---	---	18.24	18.02	---	---
VHT20	2	5200	28.70	28.70	---	---	18.24	18.16	---	---
VHT20	2	5240	38.12	38.77	---	---	18.27	18.06	---	---
VHT40	2	5190	45.22	52.64	---	---	36.82	36.62	---	---
VHT40	2	5230	80.00	84.64	---	---	36.88	37.02	---	---
VHT80	2	5210	94.15	85.10	---	---	76.20	76.08	---	---

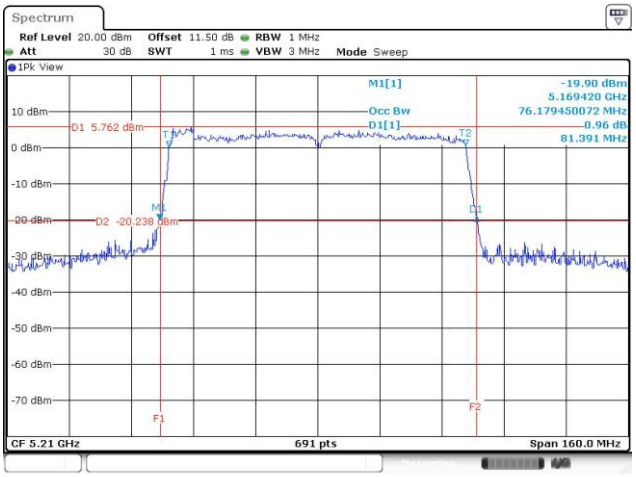
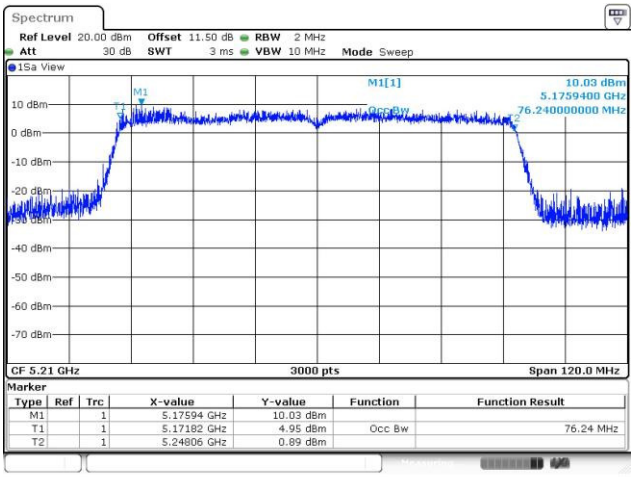
Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	2	5745	17.44	17.55	---	---	16.35	16.35	---	---	0.5
11a	2	5785	17.41	17.39	---	---	16.35	16.35	---	---	0.5
11a	2	5825	17.56	17.36	---	---	16.35	16.41	---	---	0.5
VHT20	2	5745	18.49	18.29	---	---	17.62	17.62	---	---	0.5
VHT20	2	5785	18.41	18.21	---	---	17.62	17.62	---	---	0.5
VHT20	2	5825	18.48	18.37	---	---	17.62	17.62	---	---	0.5
VHT40	2	5755	37.44	37.25	---	---	36.29	36.41	---	---	0.5
VHT40	2	5795	37.44	37.09	---	---	36.41	36.41	---	---	0.5
VHT80	2	5775	77.33	77.28	---	---	75.36	76.52	---	---	0.5

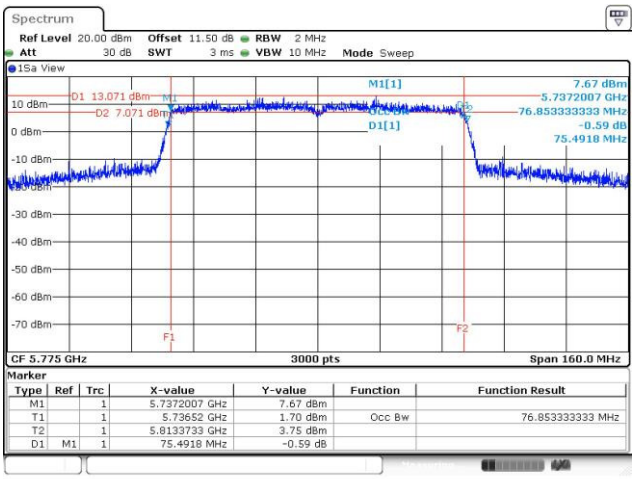
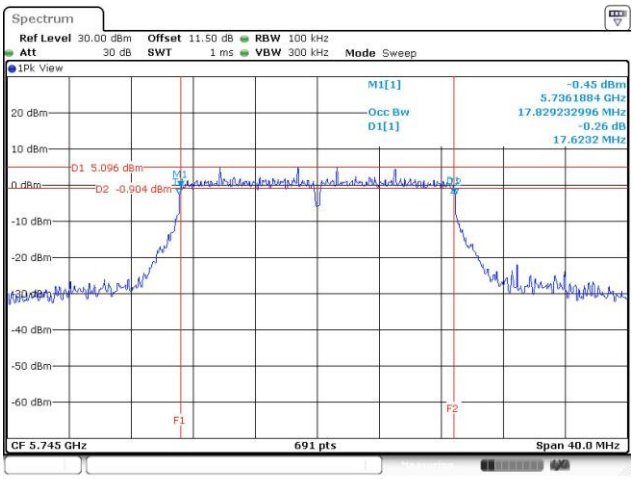
Worst Plot of 99% Bandwidth	Worst Plot of 6dB Bandwidth
	

Beamforming mode

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
VHT20	2	5180	21.86	21.62	---	---	18.14	17.89	---	---
VHT20	2	5200	26.78	23.59	---	---	18.16	18.01	---	---
VHT20	2	5240	23.65	25.04	---	---	18.25	17.89	---	---
VHT40	2	5190	40.70	40.93	---	---	36.66	36.60	---	---
VHT40	2	5230	55.54	66.67	---	---	36.78	36.76	---	---
VHT80	2	5210	80.70	81.39	---	---	76.08	76.24	---	---

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

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
VHT20	2	5745	18.25	20.65	---	---	17.62	17.62	---	---	0.5
VHT20	2	5785	18.79	18.01	---	---	17.62	17.62	---	---	0.5
VHT20	2	5825	18.23	18.08	---	---	17.62	17.62	---	---	0.5
VHT40	2	5755	37.04	38.16	---	---	36.06	36.41	---	---	0.5
VHT40	2	5795	37.25	36.77	---	---	36.41	35.71	---	---	0.5
VHT80	2	5775	76.85	76.59	---	---	75.59	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 may is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

Non-beamforming mode

For Frequency band 5150-5250 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	2	5180	15.32	15.54	---	---	69.850	18.44	30.00
11a	2	5200	16.34	16.3	---	---	85.711	19.33	30.00
11a	2	5240	16.21	16.35	---	---	84.935	19.29	30.00
HT20	2	5180	14.95	15.02	---	---	63.030	18.00	30.00
HT20	2	5200	16.11	16.04	---	---	81.011	19.09	30.00
HT20	2	5240	16.21	16.19	---	---	83.374	19.21	30.00
HT40	2	5190	12.85	12.93	---	---	38.909	15.90	30.00
HT40	2	5230	16.18	16.15	---	---	82.705	19.18	30.00
VHT20	2	5180	15.09	15.11	---	---	64.719	18.11	30.00
VHT20	2	5200	16.24	16.15	---	---	83.282	19.21	30.00
VHT20	2	5240	16.36	16.32	---	---	86.106	**19.35**	30.00
VHT40	2	5190	13.04	13.00	---	---	40.090	16.03	30.00
VHT40	2	5230	16.31	16.24	---	---	84.829	19.29	30.00
VHT80	2	5210	12.51	12.66	---	---	36.274	15.60	30.00

For Frequency band 5725-5850 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	2	5745	16.68	16.44	---	---	90.614	**19.57**	30.00
11a	2	5785	16.63	16.33	---	---	88.979	19.49	30.00
11a	2	5825	16.66	16.35	---	---	89.497	19.52	30.00
HT20	2	5745	16.52	16.31	---	---	87.631	19.43	30.00
HT20	2	5785	16.54	16.29	---	---	87.642	19.43	30.00
HT20	2	5825	16.52	16.28	---	---	87.336	19.41	30.00
HT40	2	5755	16.15	16.04	---	---	81.389	19.11	30.00
HT40	2	5795	16.22	16.01	---	---	81.782	19.13	30.00
VHT20	2	5745	16.6	16.44	---	---	89.764	19.53	30.00
VHT20	2	5785	16.65	16.42	---	---	90.091	19.55	30.00
VHT20	2	5825	16.64	16.41	---	---	89.884	19.54	30.00
VHT40	2	5755	16.28	16.11	---	---	83.294	19.21	30.00
VHT40	2	5795	16.33	16.08	---	---	83.504	19.22	30.00
VHT80	2	5775	16.39	16.02	---	---	83.546	19.22	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			
11n HT20	2	5180	14.96	15.07	---	---	63.469	18.03	27.99
11n HT20	2	5200	16.02	15.99	---	---	79.714	19.02	27.99
11n HT20	2	5240	15.94	16.03	---	---	79.351	19.00	27.99
11n HT40	2	5190	12.91	12.81	---	---	38.642	15.87	27.99
11n HT40	2	5230	16.03	16.17	---	---	81.487	19.11	27.99
VHT20	2	5180	15.01	15.12	---	---	64.204	18.08	27.99
VHT20	2	5200	16.11	16.02	---	---	80.826	19.08	27.99
VHT20	2	5240	16.02	16.12	---	---	80.921	19.08	27.99
VHT40	2	5190	12.98	12.87	---	---	39.225	15.94	27.99
VHT40	2	5230	16.16	16.25	---	---	83.474	**19.22**	27.99
VHT80	2	5210	12.42	12.60	---	---	35.655	15.52	27.99

Note:
1. Directional gain = 5+10* log(2/1) = 8.01 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (8.01 dBi – 6 dBi) = 27.99 dBm.

For Frequency band 5725-5850 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11n HT20	2	5745	16.16	16.35	---	---	84.457	19.27	27.99
11n HT20	2	5785	16.33	16.17	---	---	84.354	19.26	27.99
11n HT20	2	5825	16.14	16.11	---	---	81.947	19.14	27.99
11n HT40	2	5755	16.13	16.05	---	---	81.292	19.10	27.99
11n HT40	2	5795	16.01	16.03	---	---	79.989	19.03	27.99
VHT20	2	5745	16.22	16.52	---	---	86.754	**19.38**	27.99
VHT20	2	5785	16.51	16.23	---	---	86.747	**19.38**	27.99
VHT20	2	5825	16.21	16.13	---	---	82.803	19.18	27.99
VHT40	2	5755	16.19	16.11	---	---	82.423	19.16	27.99
VHT40	2	5795	16.11	16.09	---	---	81.476	19.11	27.99
VHT80	2	5775	16.21	16.13	---	---	82.803	19.18	27.99

Note:
1. Directional gain = 5+10* log(2/1) = 8 .01dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (8.01 dBi – 6 dBi) = 27.99 dBm.

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	17 dBm / MHz
☒	Indoor access point	17 dBm / MHz
☐	Fixed point-to-point access points	17 dBm / MHz
☐	Mobile and portable client devices	11 dBm / MHz

Frequency Band (MHz)		**Limit**
☐	5250 ~ 5350	11 dBm / MHz
☐	5470 ~ 5725	11 dBm / MHz
☒	5725 ~ 5850	30 dBm / 500 kHz

3.4.2 Test Procedures

For 5150 ~ 5250 MHz

☒ Method SA-1(For all modes except Non-Beamforming VHT80)

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

☒ Method SA-2 Alternative (For Non-Beamforming 11ac VHT80)

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

For 5725 ~ 5850 MHz

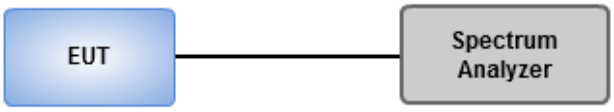
☒ Method SA-1(For all modes except Non-Beamforming VHT80)

1. Set RBW = 500 kHz, VBW = 2 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

☒ Method SA-2 Alternative (For Non-Beamforming 11ac VHT80)

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

3.4.3 Test Setup



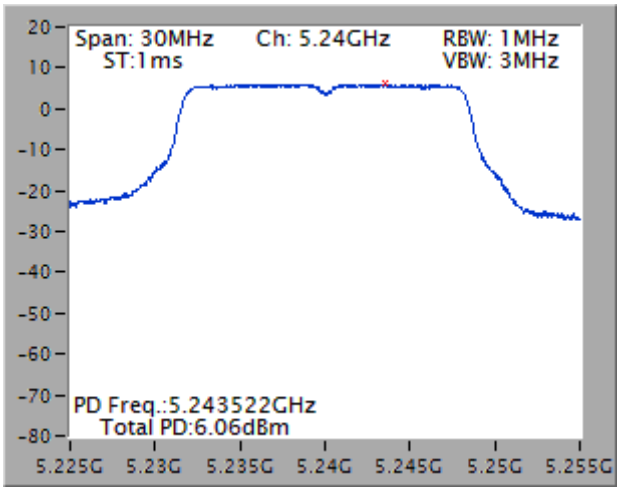
3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	2	5180	4.35	0.00	4.35	14.99
11a	2	5200	5.89	0.00	5.89	14.99
11a	2	5240	6.06	0.00	6.06	14.99
VHT20	2	5180	4.15	0.00	4.15	14.99
VHT20	2	5200	5.64	0.00	5.64	14.99
VHT20	2	5240	5.58	0.00	5.58	14.99
VHT40	2	5190	1.35	0.00	1.35	14.99
VHT40	2	5230	2.70	0.00	2.70	14.99
VHT80	2	5210	-4.57	0.24	-4.33	14.99

Note:
1. D.F is duty factor.
2. Test results are bin-by-bin summing measured value of each TX port.
3. Directional gain = 5+10* log(2/1) = 8.01 dBi > 6 dBi.
   Limit shall be reduced to 17 dBm – (8.01 dBi – 6 dBi) = 14.99 dBm.

Worst Plot

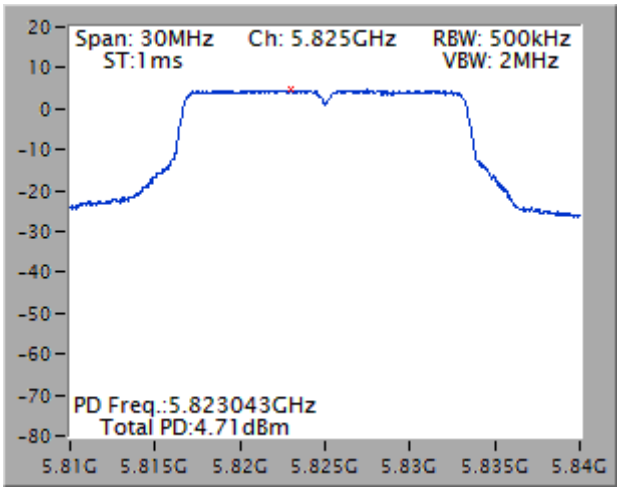


For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
11a	2	5745	4.64	0.00	4.64	27.99
11a	2	5785	4.69	0.00	4.69	27.99
11a	2	5825	4.71	0.00	4.71	27.99
VHT20	2	5745	4.38	0.00	4.38	27.99
VHT20	2	5785	4.26	0.00	4.26	27.99
VHT20	2	5825	4.26	0.00	4.26	27.99
VHT40	2	5755	1.12	0.00	1.12	27.99
VHT40	2	5795	1.17	0.00	1.17	27.99
VHT80	2	5775	-2.42	0.24	-2.18	27.99

Note:

1. D.F is duty factor.
2. Test results are bin-by-bin summing measured value of each TX port.
3. Directional gain = 5+10* log(2/1) = 8.01 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (8.01 dBi – 6 dBi) = 27.99 dBm.

Worst Plot

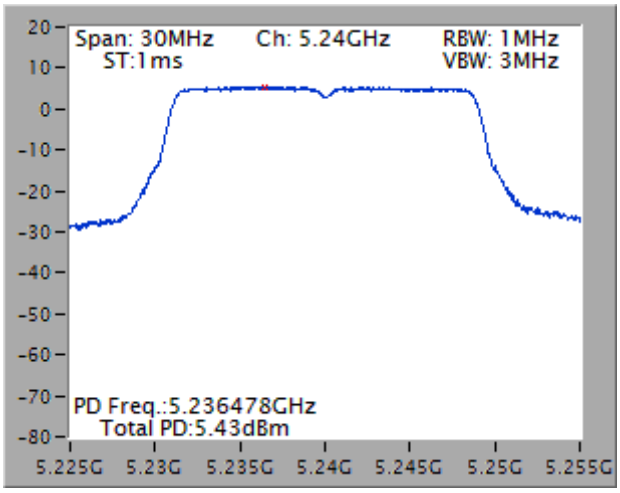


Beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT20	2	5180	4.27	0.00	4.27	14.99
VHT20	2	5200	5.42	0.00	5.42	14.99
VHT20	2	5240	5.43	0.00	5.43	14.99
VHT40	2	5190	-0.04	0.00	-0.04	14.99
VHT40	2	5230	3.44	0.00	3.44	14.99
VHT80	2	5210	-3.49	0.00	-3.49	14.99

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 5+10* log(2/1) = 8.01 dBi
   Limit shall be reduced to 17 dBm – (8.01 dBi – 6 dBi) = 14.99 dBm.

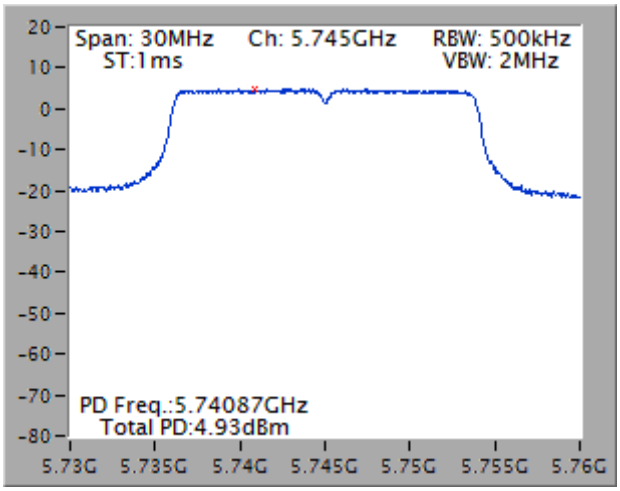
Worst Plot



For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT20	2	5745	4.93	0.00	4.93	27.99
VHT20	2	5785	4.74	0.00	4.74	27.99
VHT20	2	5825	4.79	0.00	4.79	27.99
VHT40	2	5755	2.01	0.00	2.01	27.99
VHT40	2	5795	1.91	0.00	1.91	27.99
VHT80	2	5775	-1.58	0.00	-1.58	27.99

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = 5+10* log(2/1) = 8.01 dBi
   Limit shall be reduced to 30 dBm – (8.01 dBi – 6 dBi) = 27.99dBm.

Worst Plot



3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

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

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

3.5.2 Test Procedures

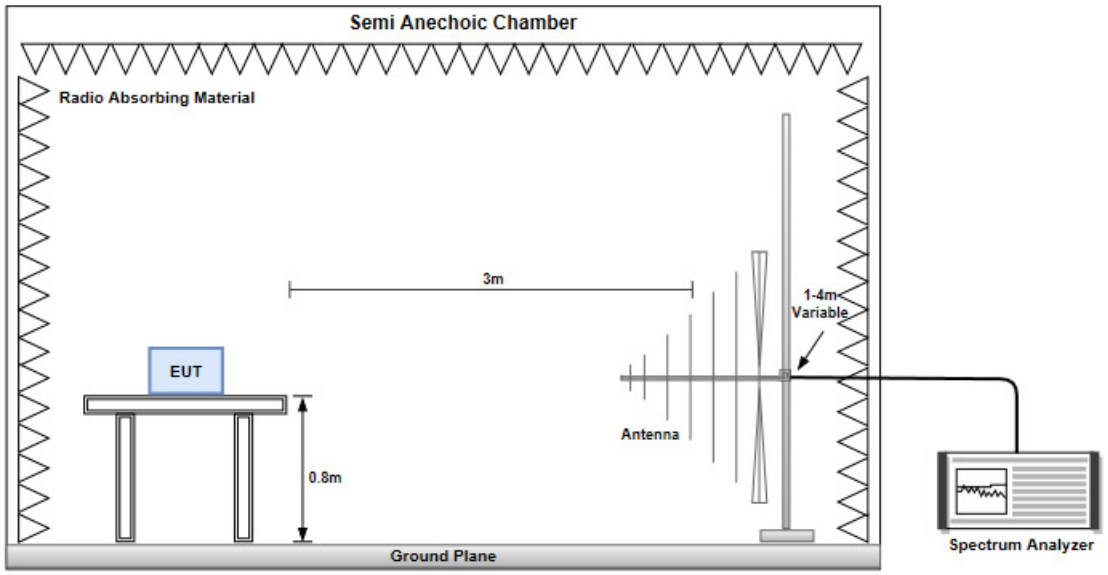
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

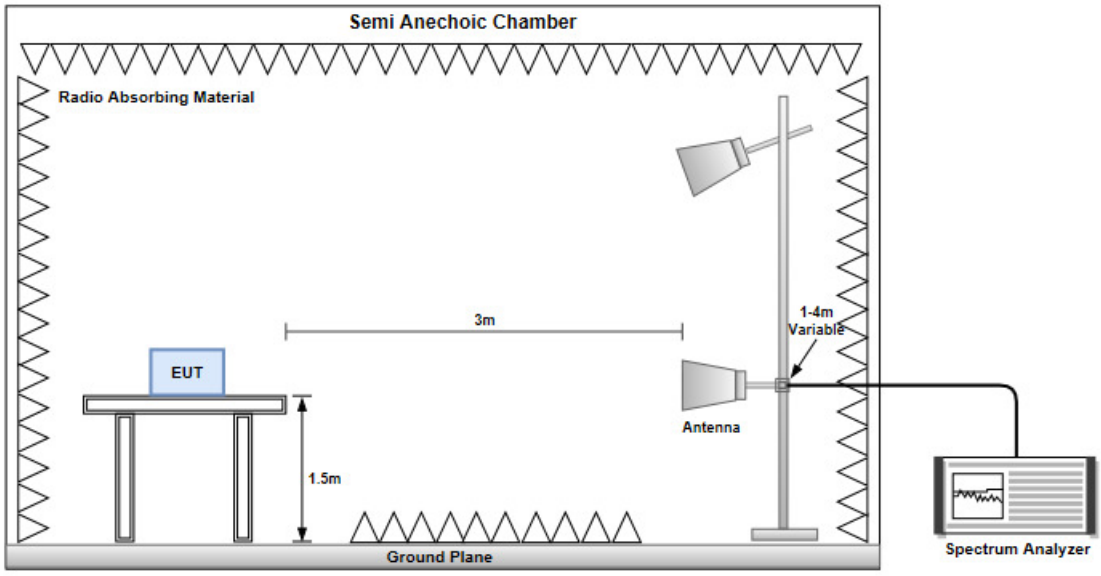
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



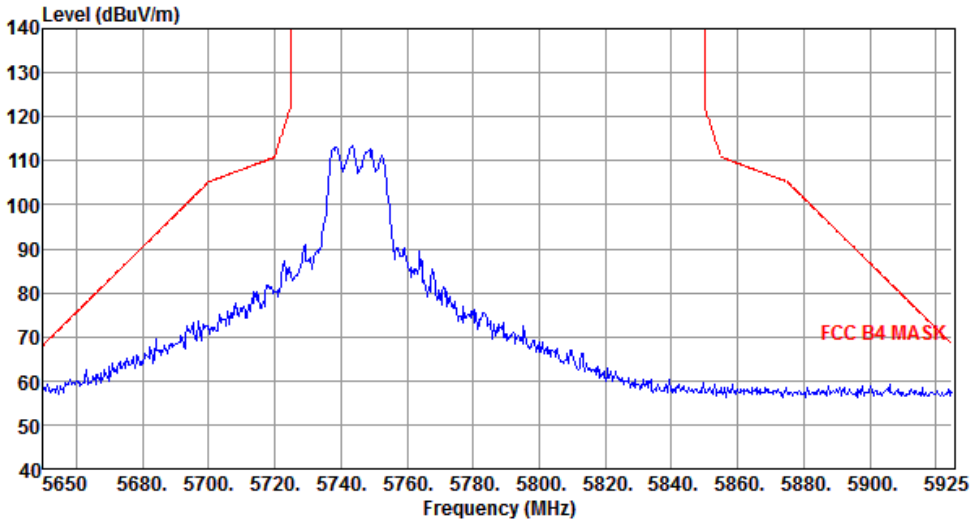
Radiated Emissions above 1 GHz



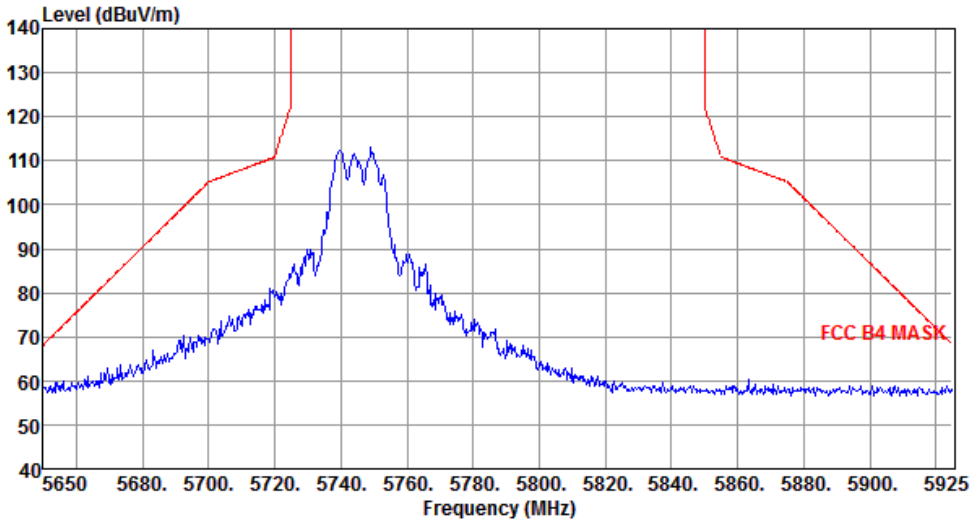
Non- beamforming mode

3.5.4 Transmitter Radiated Band Edge for 11a

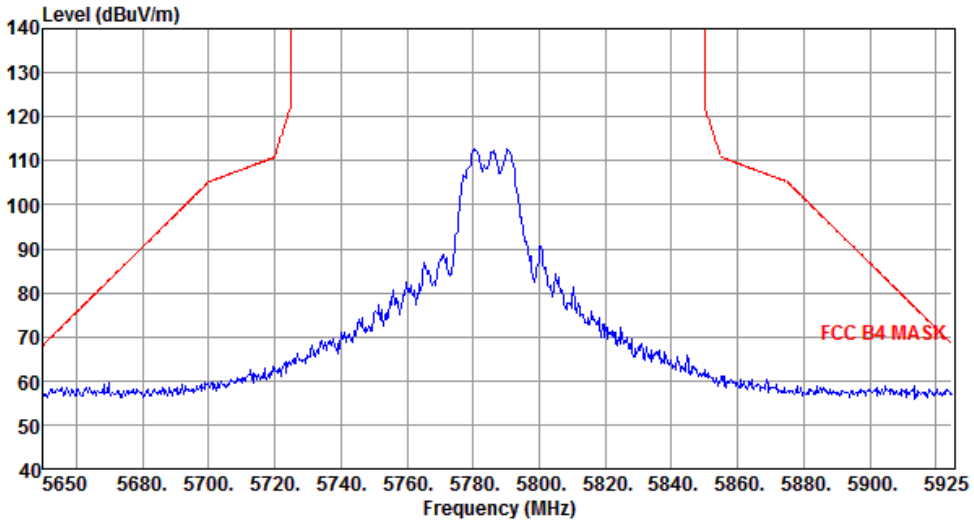
Modulation	11a	**Test Freq. (MHz)**	5745
Polarization	Horizontal		



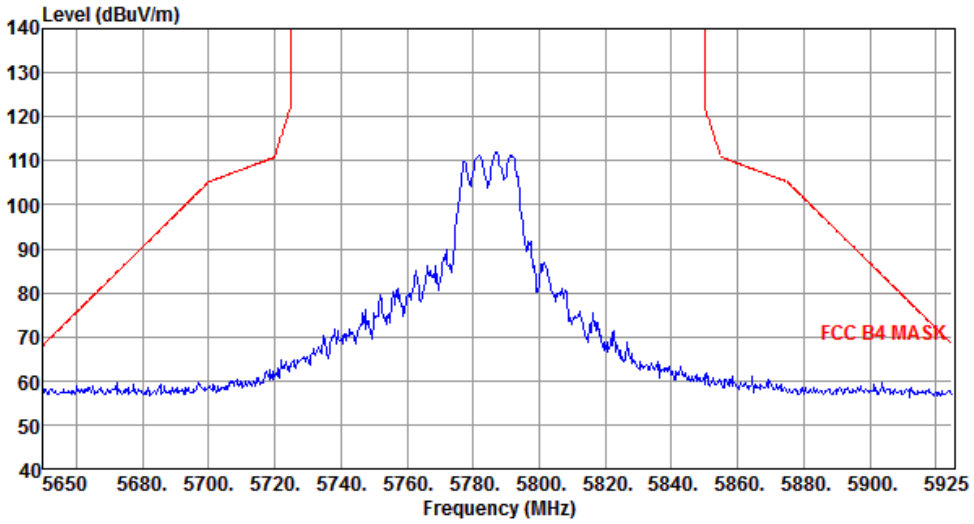
Modulation	11a	**Test Freq. (MHz)**	5745
Polarization	Vertical		



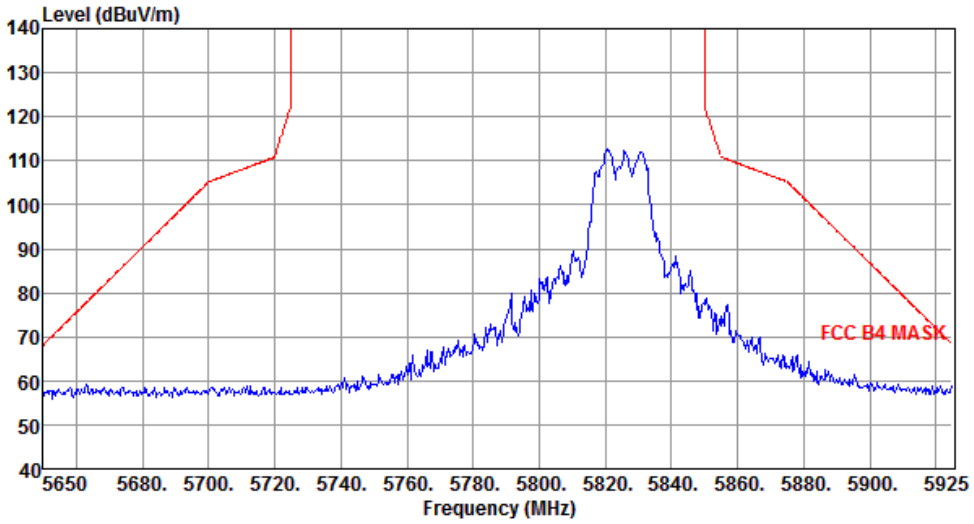
Modulation	11a	**Test Freq. (MHz)**	5785
Polarization	Horizontal		



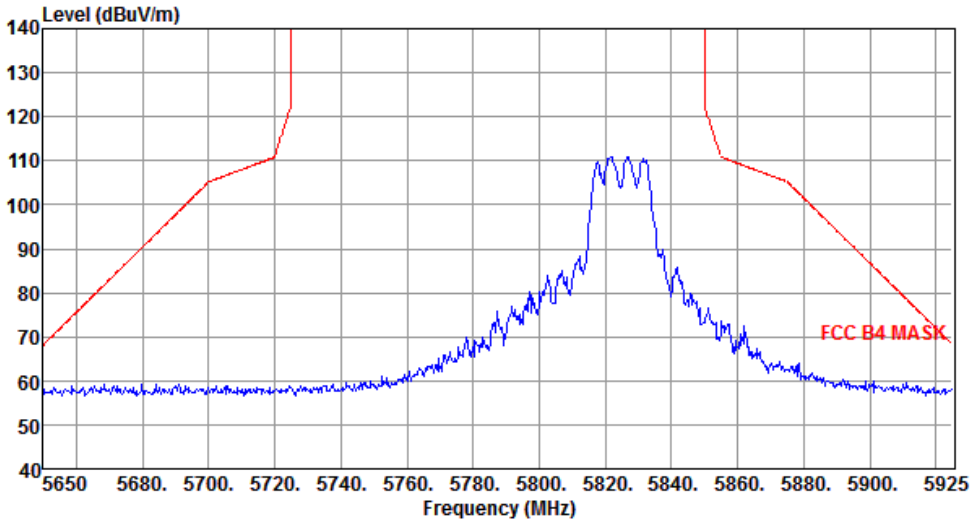
Modulation	11a	**Test Freq. (MHz)**	5785
Polarization	Vertical		



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

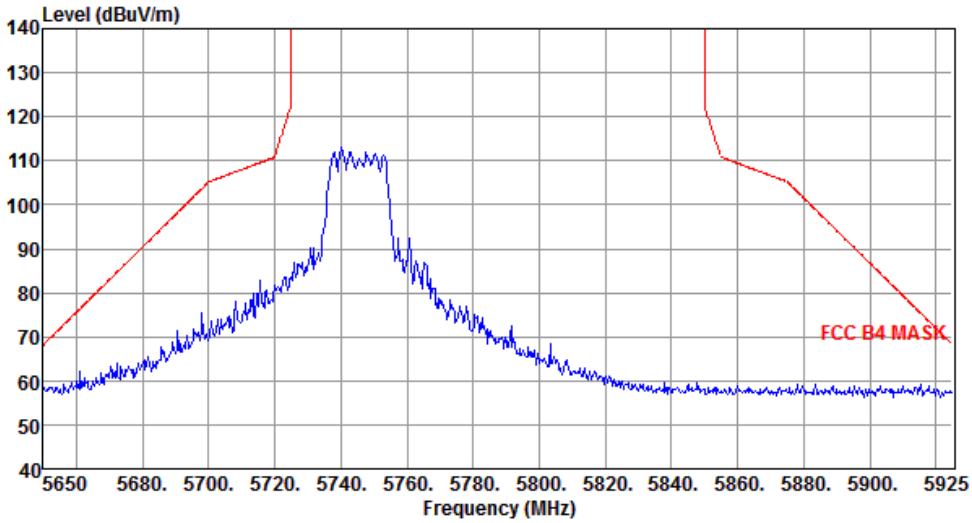


Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical		

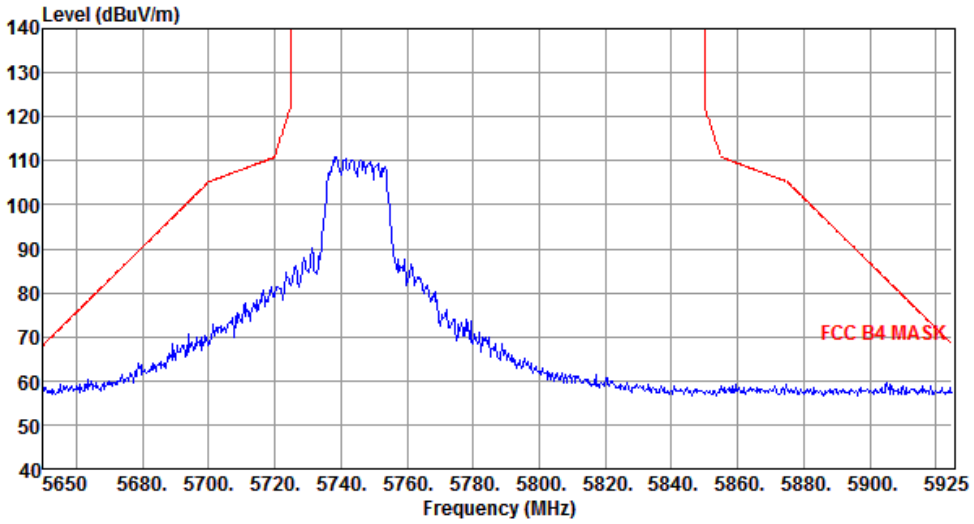


3.5.5 Transmitter Radiated Band Edge for VHT20

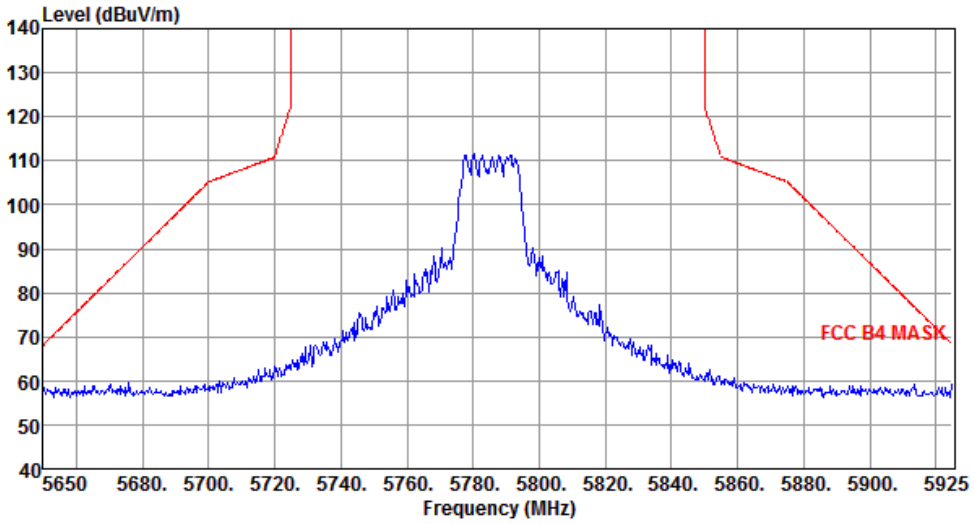
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



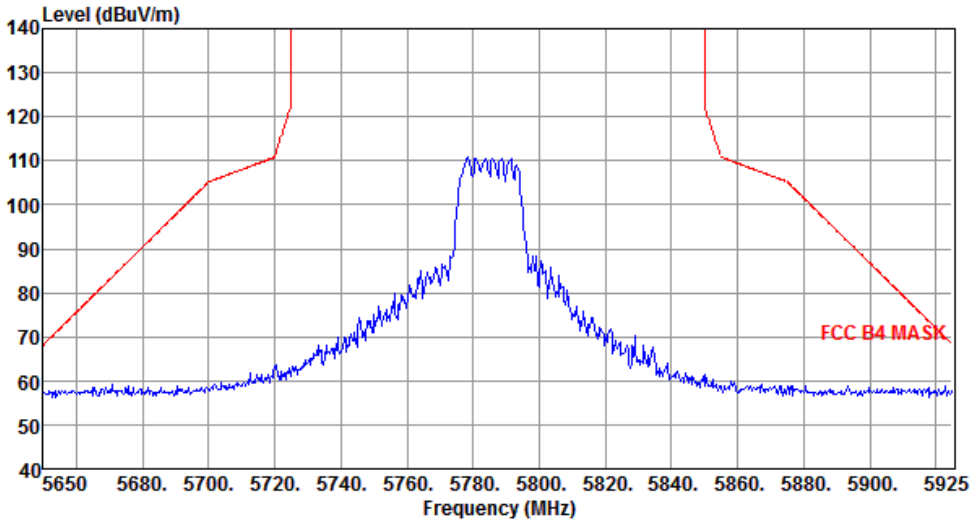
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Vertical		



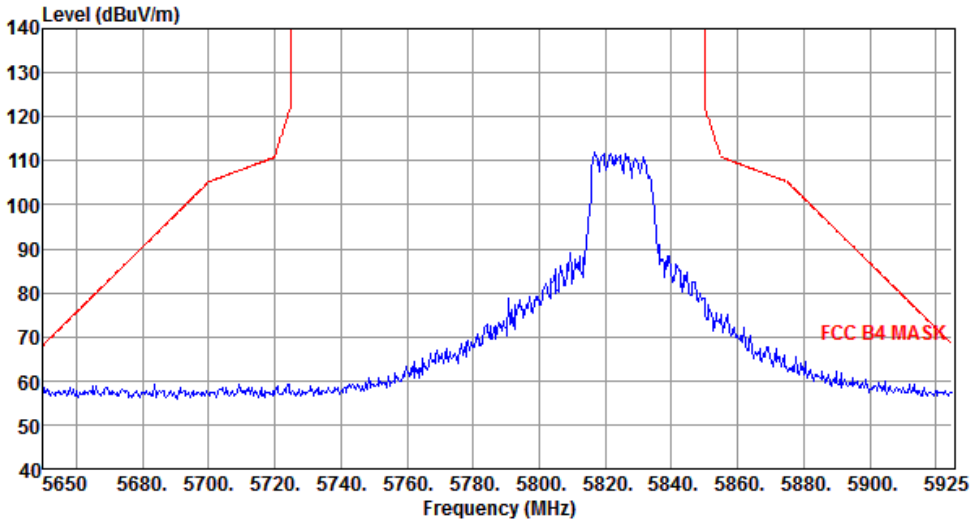
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



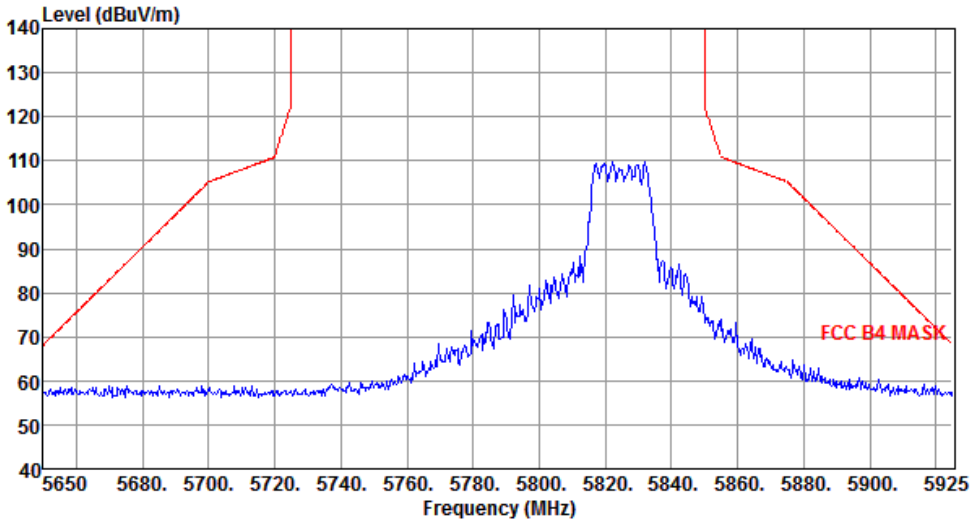
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Vertical		



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

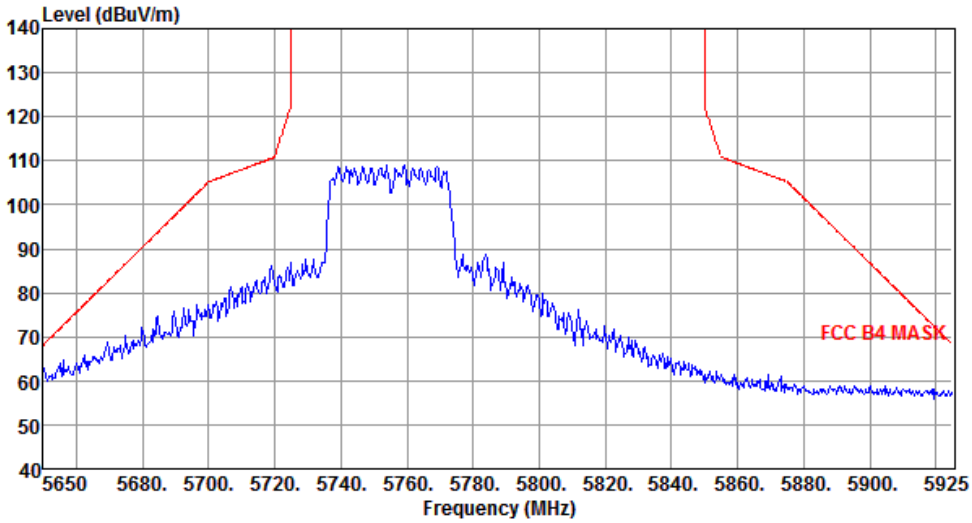


Modulation	VHT20	**Test Freq. (MHz)**	5825
Polarization	Vertical		

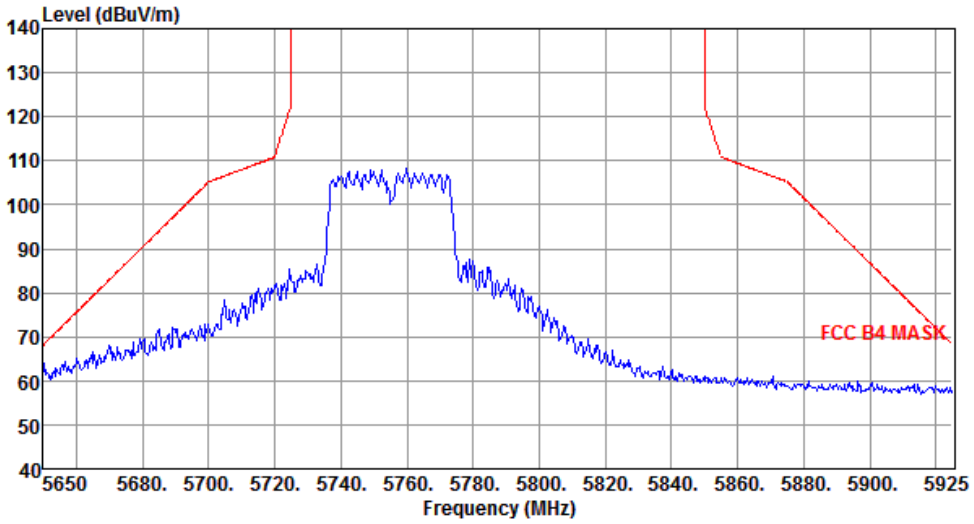


3.5.6 Transmitter Radiated Band Edge for VHT40

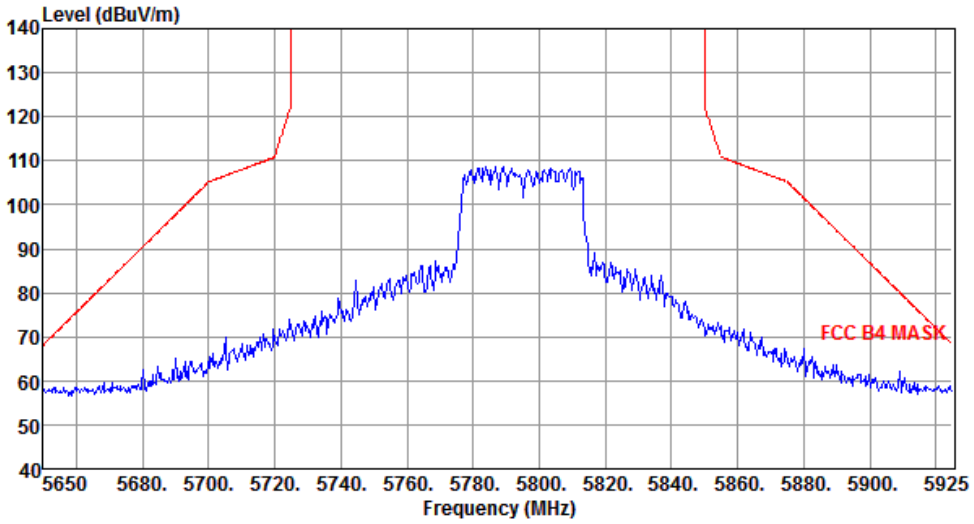
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



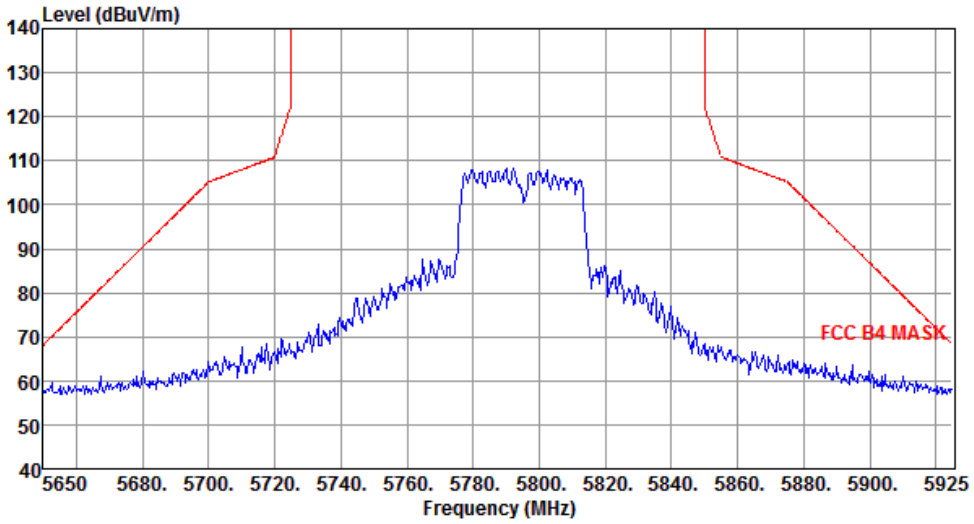
Modulation	VHT40	**Test Freq. (MHz)**	5755
Polarization	Vertical		



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

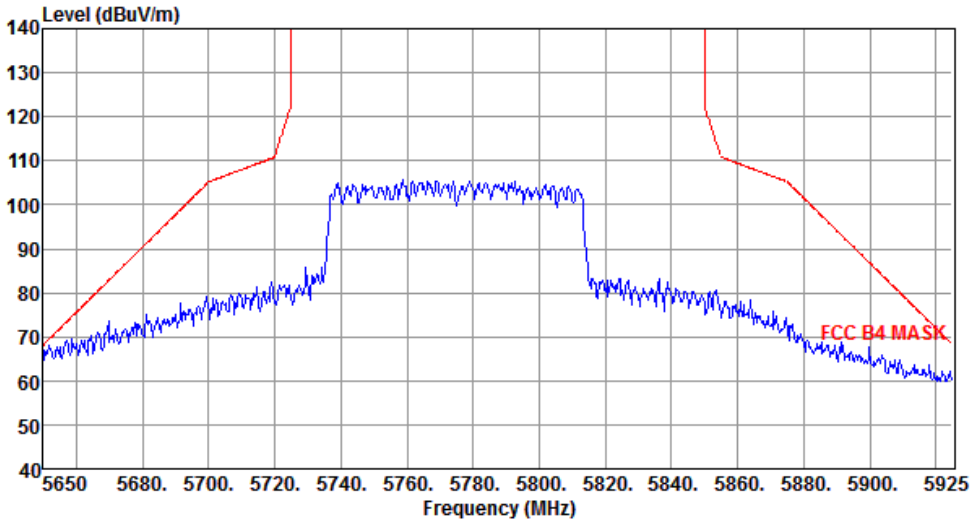


Modulation	VHT40	**Test Freq. (MHz)**	5795
Polarization	Vertical		

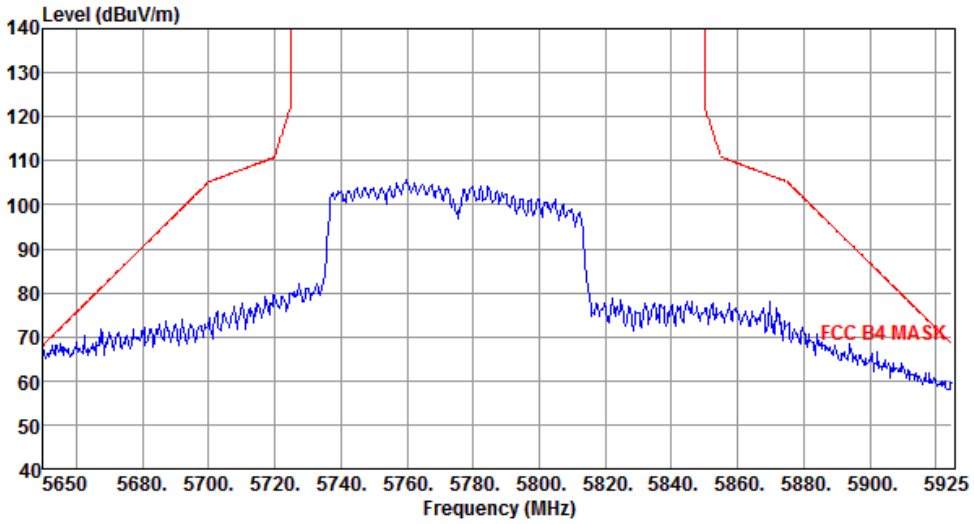


3.5.7 Transmitter Radiated Band Edge for VHT80

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		

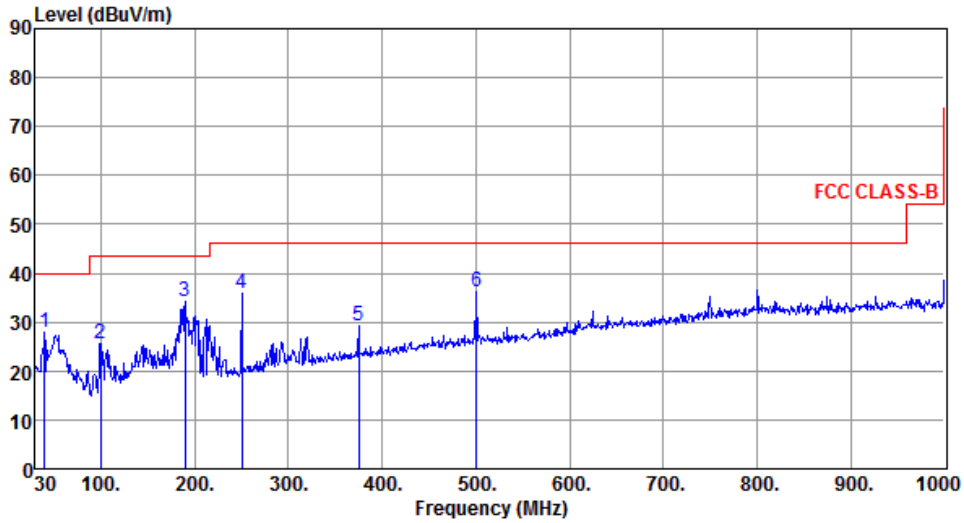


Modulation	VHT80	**Test Freq. (MHz)**	5775
Polarization	Vertical		



3.5.8 Transmitter Radiated Unwanted Emissions (Below 1GHz)

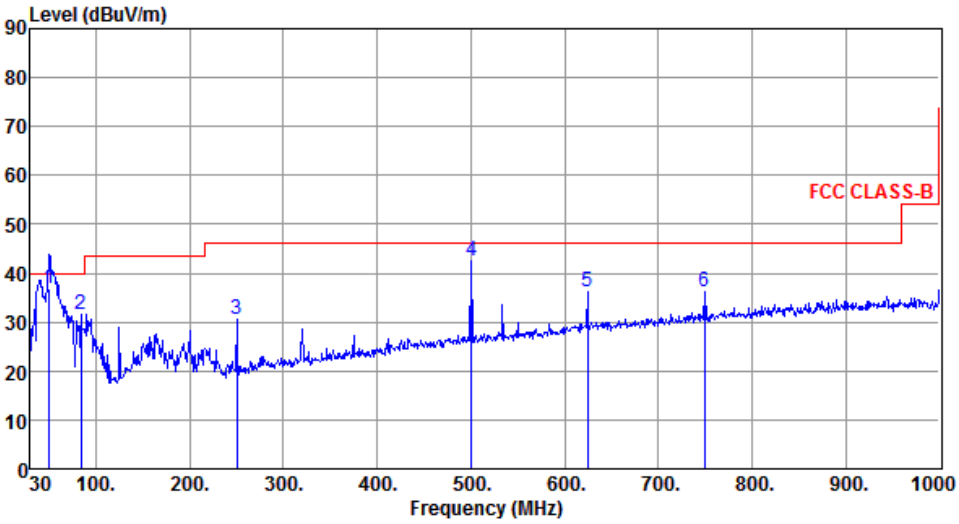
Modulation	VHT20	**Test Freq. (MHz)**	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.70	27.81	40.00	-12.19	36.33	-8.52	Peak	---	---
2	99.84	25.57	43.50	-17.93	39.01	-13.44	Peak	---	---
3	190.05	34.37	43.50	-9.13	45.17	-10.80	Peak	---	---
4	250.19	36.02	46.00	-9.98	45.41	-9.39	Peak	---	---
5	375.32	29.19	46.00	-16.81	34.99	-5.80	Peak	---	---
6	500.45	36.30	46.00	-9.70	39.41	-3.11	Peak	---	---

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

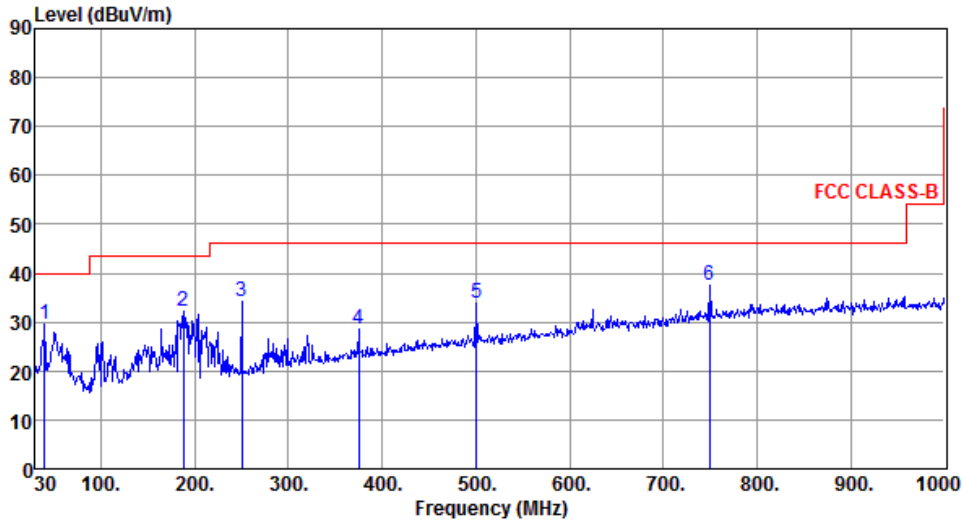
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	50.53	36.72	40.00	-3.28	44.72	-8.00	QP	100	15
2	84.32	31.56	40.00	-8.44	45.23	-13.67	Peak	---	---
3	250.19	30.54	46.00	-15.46	39.93	-9.39	Peak	---	---
4	500.45	42.45	46.00	-3.55	45.56	-3.11	Peak	---	---
5	624.61	36.20	46.00	-9.80	36.81	-0.61	Peak	---	---
6	749.74	36.08	46.00	-9.92	34.48	1.60	Peak	---	---

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

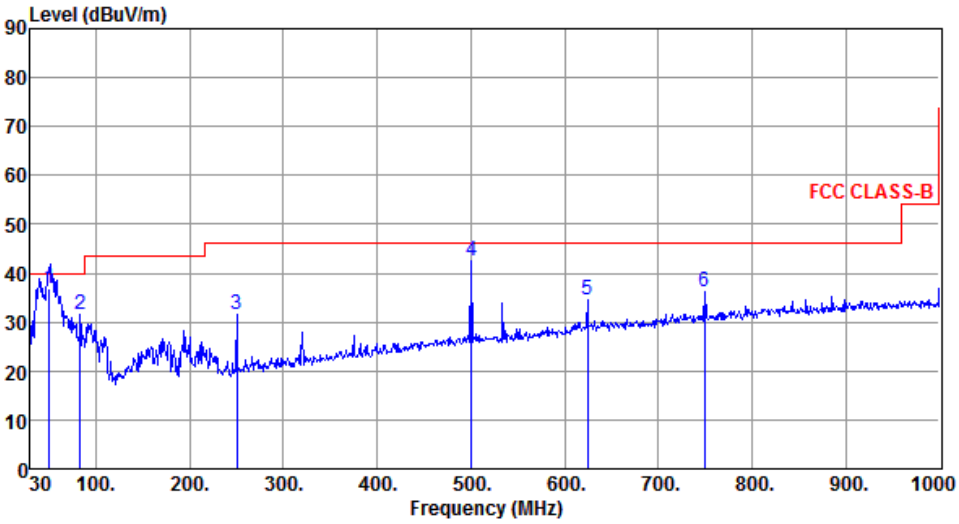
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.70	29.53	40.00	-10.47	38.05	-8.52	Peak	---	---
2	188.11	32.33	43.50	-11.17	42.92	-10.59	Peak	---	---
3	250.19	34.07	46.00	-11.93	43.46	-9.39	Peak	---	---
4	375.32	28.56	46.00	-17.44	34.36	-5.80	Peak	---	---
5	500.45	33.81	46.00	-12.19	36.92	-3.11	Peak	---	---
6	749.74	37.54	46.00	-8.46	35.94	1.60	Peak	---	---

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

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

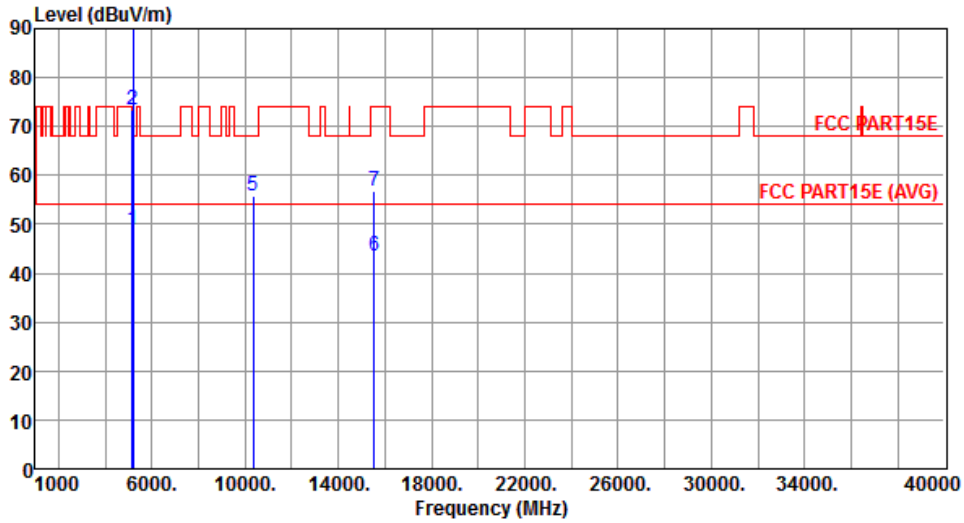


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	50.65	36.74	40.00	-3.26	44.75	-8.01	QP	100	20
2	83.35	31.63	40.00	-8.37	45.16	-13.53	Peak	---	---
3	250.19	31.62	46.00	-14.38	41.01	-9.39	Peak	---	---
4	500.45	42.52	46.00	-3.48	45.63	-3.11	Peak	---	---
5	624.61	34.50	46.00	-11.50	35.11	-0.61	Peak	---	---
6	749.74	36.21	46.00	-9.79	34.61	1.60	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

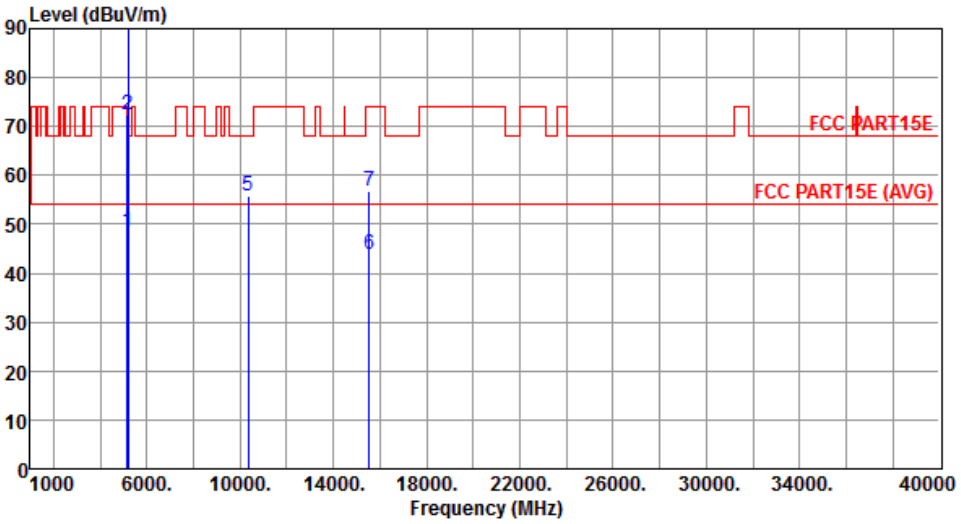
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



		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	48.74	54.00	-5.26	42.87	5.87	Average	183	68
2		5150.00	73.55	74.00	-0.45	67.68	5.87	Peak	183	68
3	*	5180.00	98.71			92.81	5.90	Average	183	68
4	*	5180.00	109.22			103.32	5.90	Peak	183	68
5		10360.00	55.79	68.20	-12.41	40.57	15.22	Peak	188	162
6		15540.00	43.61	54.00	-10.39	27.54	16.07	Average	196	38
7		15540.00	56.79	74.00	-17.21	40.72	16.07	Peak	196	38

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

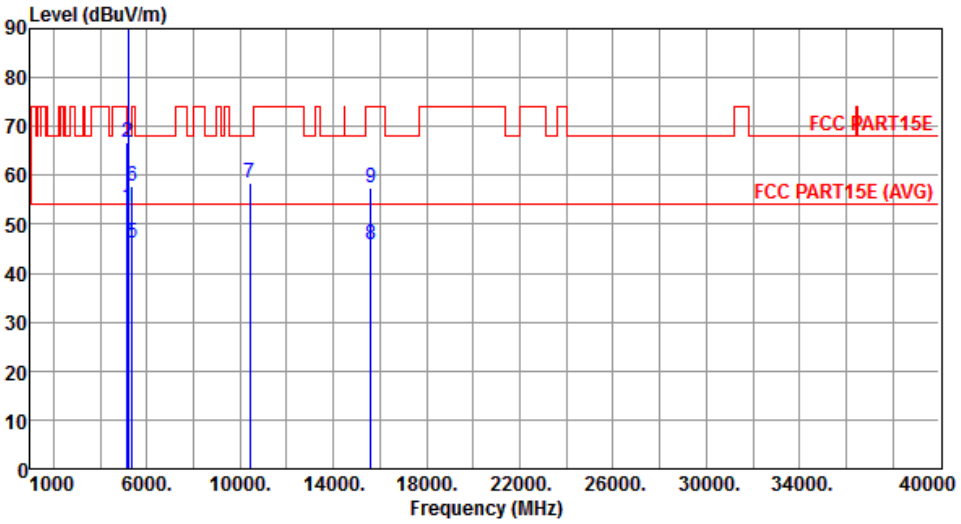
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



		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	48.47	54.00	-5.53	42.60	5.87	Average	375	350
2		5150.00	72.32	74.00	-1.68	66.45	5.87	Peak	375	350
3	*	5180.00	98.06			92.16	5.90	Average	375	350
4	*	5180.00	109.21			103.31	5.90	Peak	375	350
5		10360.00	55.65	68.20	-12.55	40.43	15.22	Peak	185	45
6		15540.00	43.72	54.00	-10.28	27.65	16.07	Average	182	61
7		15540.00	56.79	74.00	-17.21	40.72	16.07	Peak	182	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

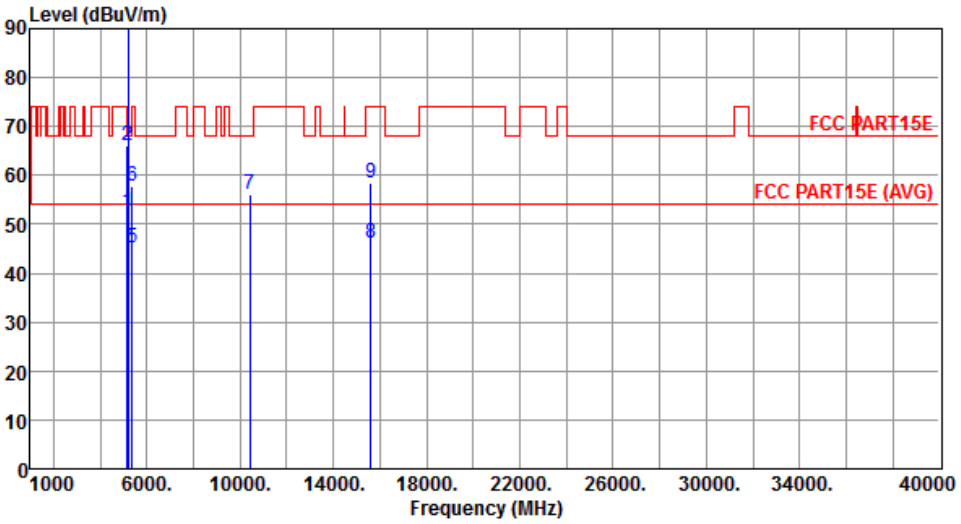
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



		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	53.49	54.00	-0.51	47.62	5.87	Average	190	71
2		5150.00	66.59	74.00	-7.41	60.72	5.87	Peak	190	71
3	*	5200.00	100.76			94.85	5.91	Average	190	71
4	*	5200.00	111.03			105.12	5.91	Peak	190	71
5		5350.00	46.08	54.00	-7.92	39.87	6.21	Average	190	71
6		5350.00	57.70	74.00	-16.30	51.49	6.21	Peak	190	71
7		10400.00	58.39	68.20	-9.81	43.12	15.27	Peak	155	342
8		15600.00	45.85	54.00	-8.15	29.85	16.00	Average	200	54
9		15600.00	57.44	74.00	-16.56	41.44	16.00	Peak	200	54

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

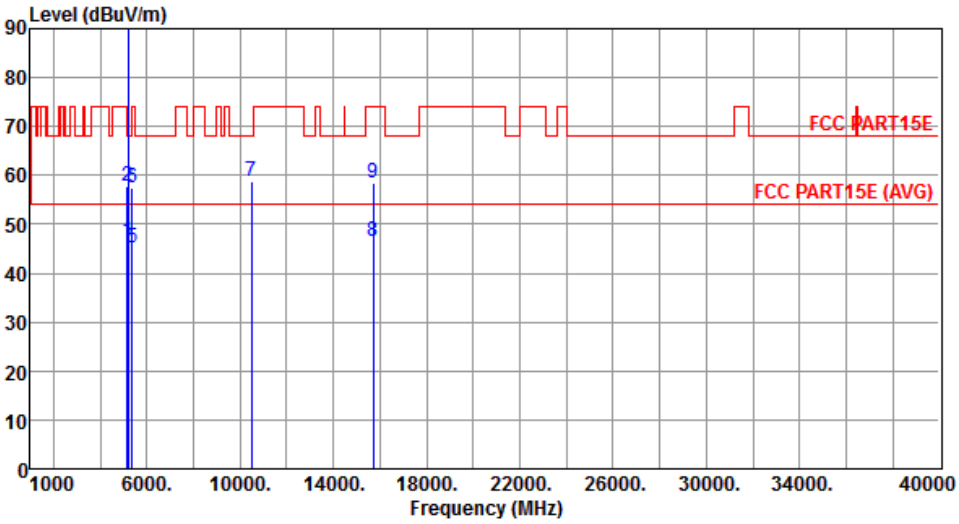
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



		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	52.35	54.00	-1.65	46.48	5.87	Average	335	351
2		5150.00	66.25	74.00	-7.75	60.38	5.87	Peak	335	351
3	*	5200.00	98.14			92.23	5.91	Average	335	351
4	*	5200.00	108.53			102.62	5.91	Peak	335	351
5		5350.00	45.18	54.00	-8.82	38.97	6.21	Average	335	351
6		5350.00	57.70	74.00	-16.30	51.49	6.21	Peak	335	351
7		10400.00	56.09	68.20	-12.11	40.82	15.27	Peak	315	2
8		15600.00	46.31	54.00	-7.69	30.31	16.00	Average	325	316
9		15600.00	58.48	74.00	-15.52	42.48	16.00	Peak	325	316

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

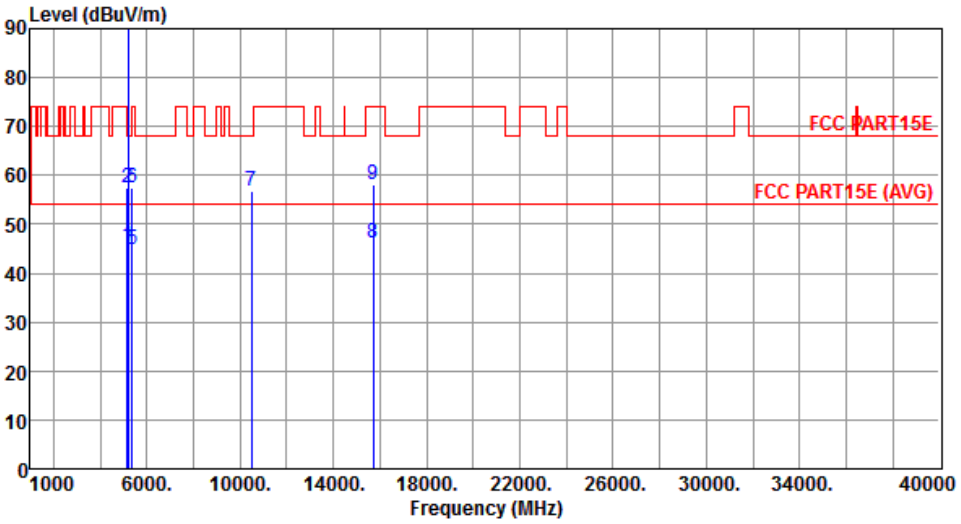
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



		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	46.39	54.00	-7.61	40.52	5.87	Average	182	56
2		5150.00	57.85	74.00	-16.15	51.98	5.87	Peak	182	56
3	*	5240.00	100.15			94.16	5.99	Average	182	56
4	*	5240.00	111.30			105.31	5.99	Peak	182	56
5		5350.00	45.11	54.00	-8.89	38.90	6.21	Average	182	56
6		5350.00	57.57	74.00	-16.43	51.36	6.21	Peak	182	56
7		10480.00	58.81	68.20	-9.39	43.45	15.36	Peak	155	342
8		15720.00	46.34	54.00	-7.66	30.48	15.86	Average	152	1
9		15720.00	58.34	74.00	-15.66	42.48	15.86	Peak	152	1

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

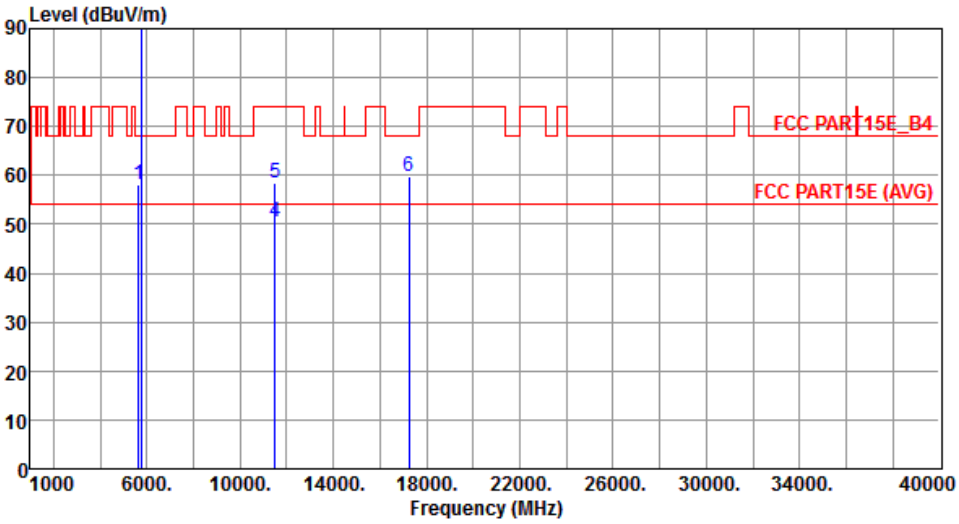
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



		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	45.55	54.00	-8.45	39.68	5.87	Average	385	345
2		5150.00	57.29	74.00	-16.71	51.42	5.87	Peak	385	345
3	*	5240.00	100.22			94.23	5.99	Average	385	345
4	*	5240.00	111.51			105.52	5.99	Peak	385	345
5		5350.00	44.97	54.00	-9.03	38.76	6.21	Average	385	345
6		5350.00	57.46	74.00	-16.54	51.25	6.21	Peak	385	345
7		10480.00	56.85	68.20	-11.35	41.49	15.36	Peak	355	3
8		15720.00	46.17	54.00	-7.83	30.31	15.86	Average	185	2
9		15720.00	58.07	74.00	-15.93	42.21	15.86	Peak	185	2

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

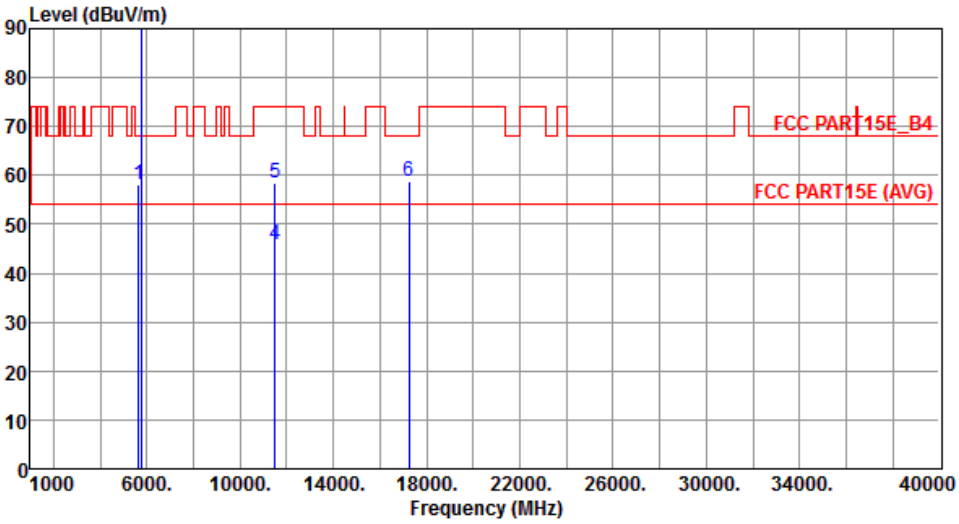
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	58.15	68.20	-10.05	51.52	6.63	Peak	186	66
2	*	5745.00	101.31			94.42	6.89	Average	186	66
3	*	5745.00	112.43			105.54	6.89	Peak	186	66
4		11490.00	50.43	54.00	-3.57	34.42	16.01	Average	198	25
5		11490.00	58.54	74.00	-15.46	42.53	16.01	Peak	198	25
6		17235.00	59.90	68.20	-8.30	41.47	18.43	Peak	185	70

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

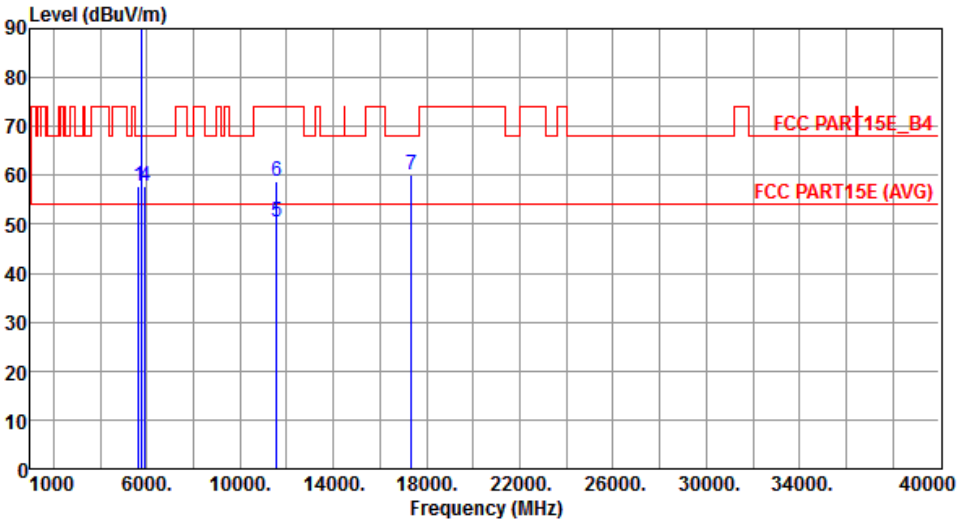
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	58.16	68.20	-10.04	51.53	6.63	Peak	365	350
2	*	5745.00	99.65			92.76	6.89	Average	365	350
3	*	5745.00	110.42			103.53	6.89	Peak	365	350
4		11490.00	45.73	54.00	-8.27	29.72	16.01	Average	198	346
5		11490.00	58.52	74.00	-15.48	42.51	16.01	Peak	198	346
6		17235.00	58.90	68.20	-9.30	40.47	18.43	Peak	200	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

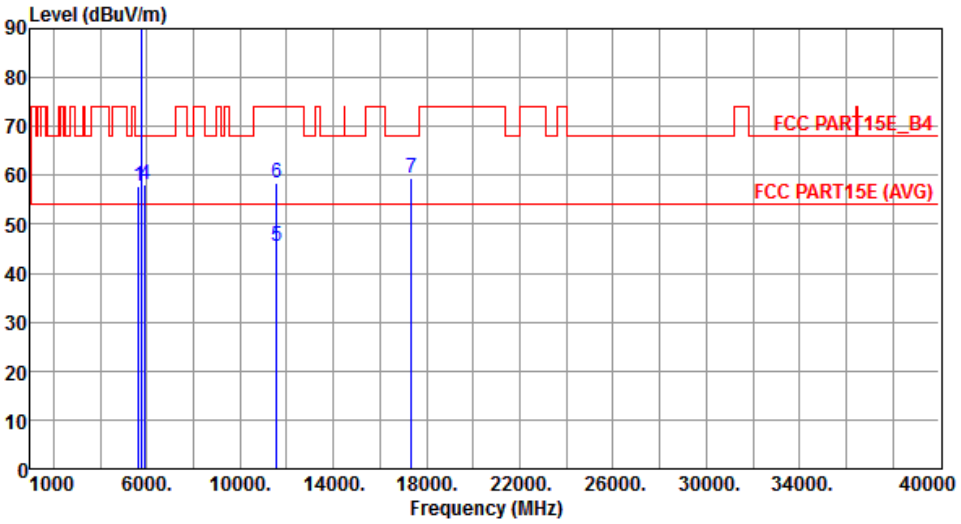
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.86	68.20	-10.34	51.23	6.63	Peak	180	65
2	*	5785.00	101.31			94.31	7.00	Average	180	65
3	*	5785.00	112.48			105.48	7.00	Peak	180	65
4		5925.00	57.82	68.20	-10.38	50.48	7.34	Peak	180	65
5		11570.00	50.37	54.00	-3.63	34.48	15.89	Average	199	25
6		11570.00	58.71	74.00	-15.29	42.82	15.89	Peak	200	25
7		17355.00	60.14	68.20	-8.06	41.32	18.82	Peak	186	70

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

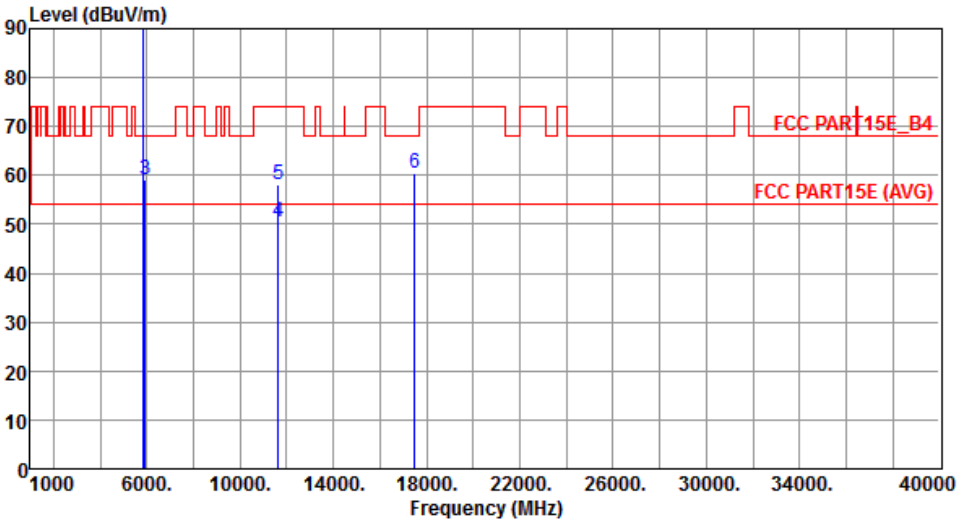
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.79	68.20	-10.41	51.16	6.63	Peak	348	350
2	*	5785.00	99.72			92.72	7.00	Average	348	350
3	*	5785.00	110.53			103.53	7.00	Peak	348	350
4		5925.00	58.06	68.20	-10.14	50.72	7.34	Peak	348	350
5		11570.00	45.55	54.00	-8.45	29.66	15.89	Average	196	340
6		11570.00	58.33	74.00	-15.67	42.44	15.89	Peak	196	340
7		17355.00	59.31	68.20	-8.89	40.49	18.82	Peak	199	172

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

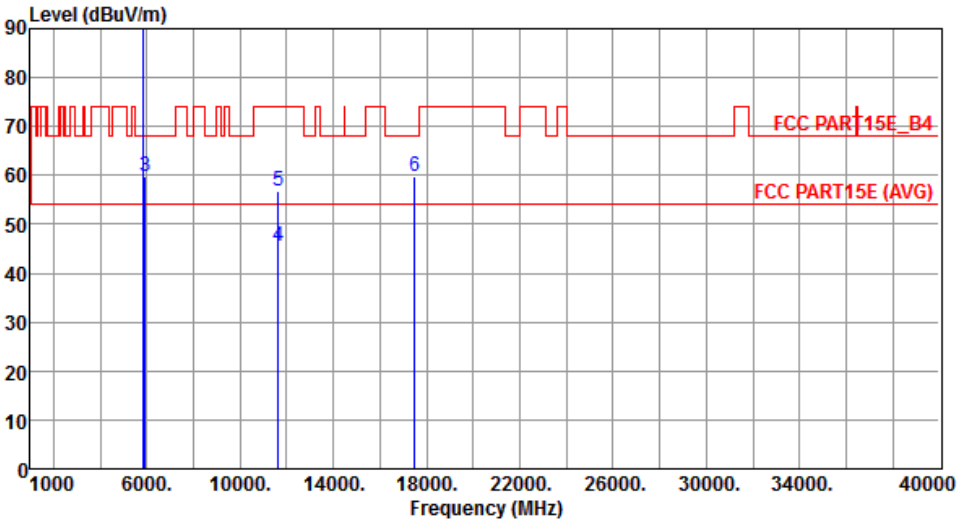
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5825.00	101.70			94.60	7.10	Average	182	60
2	*	5825.00	112.87			105.77	7.10	Peak	182	60
3		5925.00	59.02	68.20	-9.18	51.68	7.34	Peak	182	60
4		11650.00	50.49	54.00	-3.51	34.75	15.74	Average	205	20
5		11650.00	58.22	74.00	-15.78	42.48	15.74	Peak	205	20
6		17475.00	60.60	68.20	-7.60	41.37	19.23	Peak	198	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		

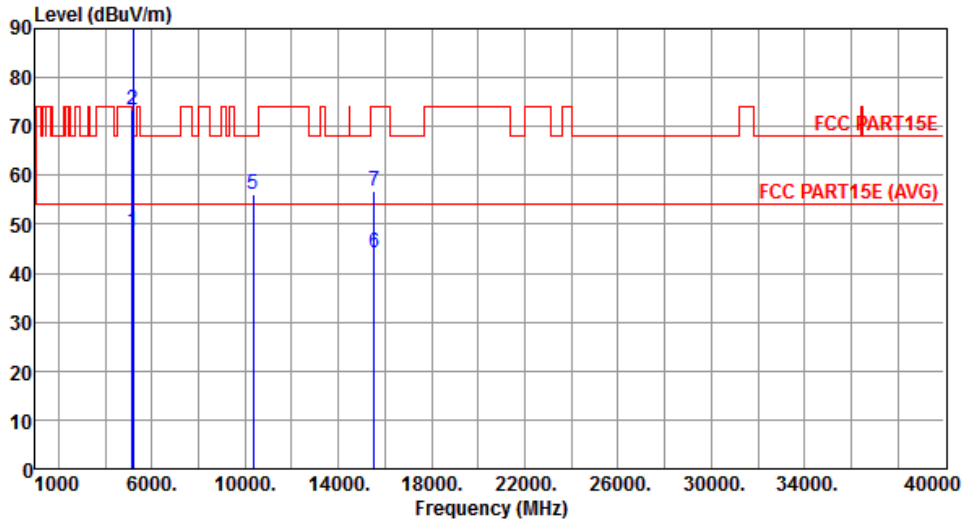


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5825.00	99.86			92.76	7.10	Average	370	355
2	*	5825.00	110.88			103.78	7.10	Peak	370	355
3		5925.00	59.65	68.20	-8.55	52.31	7.34	Peak	370	355
4		11650.00	45.46	54.00	-8.54	29.72	15.74	Average	198	341
5		11650.00	56.76	74.00	-17.24	41.02	15.74	Peak	198	341
6		17475.00	59.72	68.20	-8.48	40.49	19.23	Peak	200	351

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

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

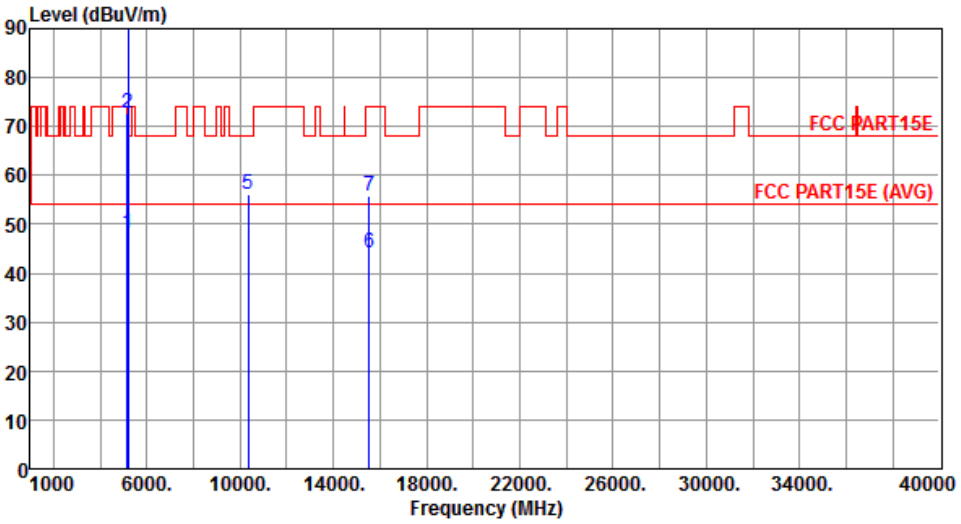
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



		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	48.44	54.00	-5.56	42.57	5.87	Average	195	58
2		5150.00	73.55	74.00	-0.45	67.68	5.87	Peak	195	58
3	*	5180.00	98.42			92.52	5.90	Average	195	58
4	*	5180.00	109.45			103.55	5.90	Peak	195	58
5		10360.00	56.16	68.20	-12.04	40.94	15.22	Peak	155	125
6		15540.00	44.04	54.00	-9.96	27.97	16.07	Average	155	125
7		15540.00	56.90	74.00	-17.10	40.83	16.07	Peak	155	125

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

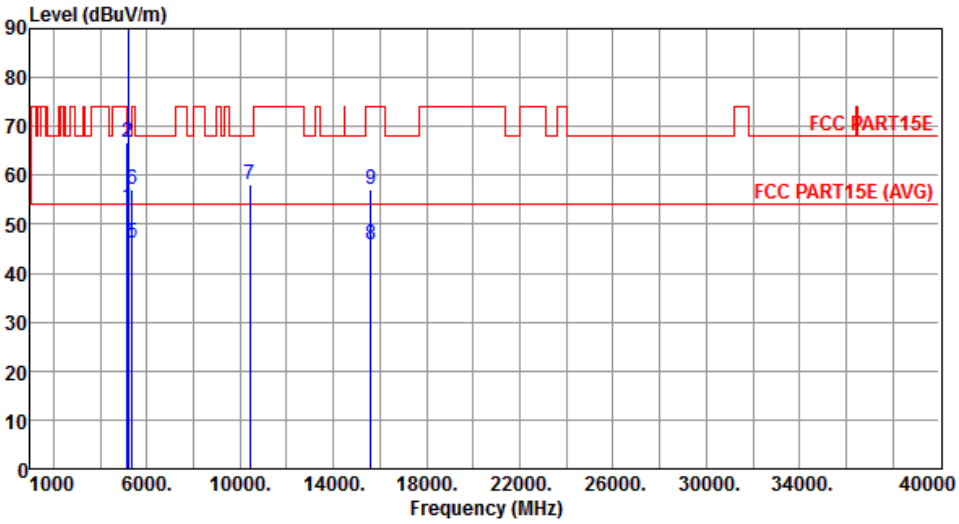
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



		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	48.05	54.00	-5.95	42.18	5.87	Average	373	350
2		5150.00	72.73	74.00	-1.27	66.86	5.87	Peak	373	350
3	*	5180.00	97.63			91.73	5.90	Average	373	350
4	*	5180.00	108.72			102.82	5.90	Peak	373	350
5		10360.00	56.19	68.20	-12.01	40.97	15.22	Peak	373	350
6		15540.00	44.02	54.00	-9.98	27.95	16.07	Average	200	156
7		15540.00	55.92	74.00	-18.08	39.85	16.07	Peak	200	156

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

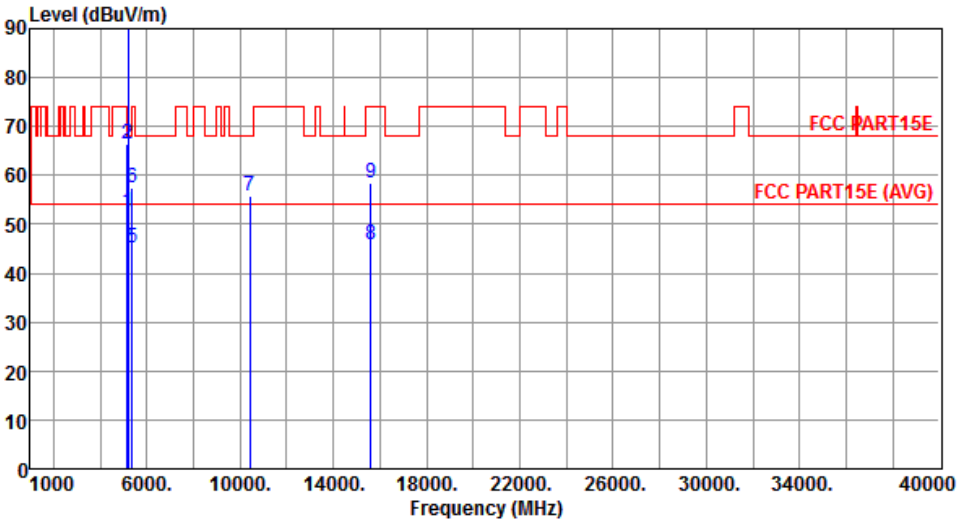
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



		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	53.59	54.00	-0.41	47.72	5.87	Average	194	70
2		5150.00	66.79	74.00	-7.21	60.92	5.87	Peak	194	70
3	*	5200.00	100.69			94.78	5.91	Average	194	70
4	*	5200.00	110.99			105.08	5.91	Peak	194	70
5		5350.00	46.02	54.00	-7.98	39.81	6.21	Average	194	70
6		5350.00	57.10	74.00	-16.90	50.89	6.21	Peak	194	70
7		10400.00	58.08	68.20	-10.12	42.81	15.27	Peak	157	350
8		15600.00	45.78	54.00	-8.22	29.78	16.00	Average	202	56
9		15600.00	57.20	74.00	-16.80	41.20	16.00	Peak	202	56

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

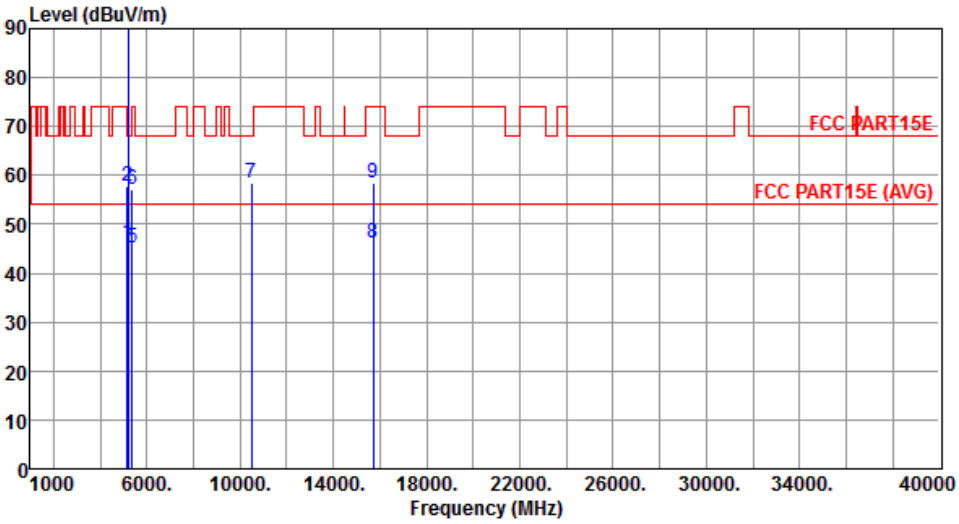
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



		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	52.39	54.00	-1.61	46.52	5.87	Average	337	353
2		5150.00	66.29	74.00	-7.71	60.42	5.87	Peak	337	353
3	*	5200.00	98.01			92.10	5.91	Average	337	353
4	*	5200.00	108.45			102.54	5.91	Peak	337	353
5		5350.00	45.11	54.00	-8.89	38.90	6.21	Average	337	353
6		5350.00	57.50	74.00	-16.50	51.29	6.21	Peak	337	353
7		10400.00	55.95	68.20	-12.25	40.68	15.27	Peak	320	0
8		15600.00	45.90	54.00	-8.10	29.90	16.00	Average	326	325
9		15600.00	58.29	74.00	-15.71	42.29	16.00	Peak	326	325

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

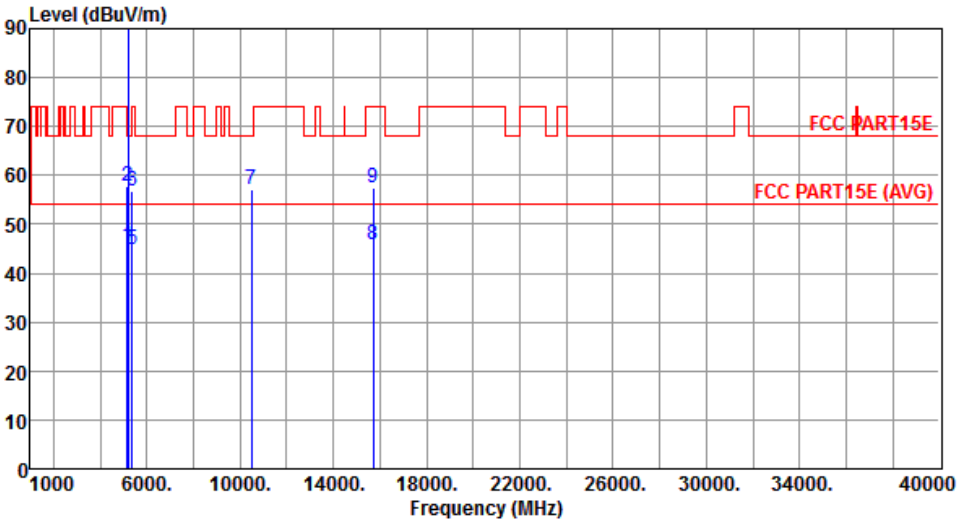
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



		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	46.18	54.00	-7.82	40.31	5.87	Average	185	58
2		5150.00	57.88	74.00	-16.12	52.01	5.87	Peak	185	58
3	*	5240.00	100.07			94.08	5.99	Average	185	58
4	*	5240.00	110.37			104.38	5.99	Peak	185	58
5		5350.00	45.04	54.00	-8.96	38.83	6.21	Average	185	58
6		5350.00	56.98	74.00	-17.02	50.77	6.21	Peak	185	58
7		10480.00	58.51	68.20	-9.69	43.15	15.36	Peak	157	344
8		15720.00	46.15	54.00	-7.85	30.29	15.86	Average	157	0
9		15720.00	58.36	74.00	-15.64	42.50	15.86	Peak	157	0

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

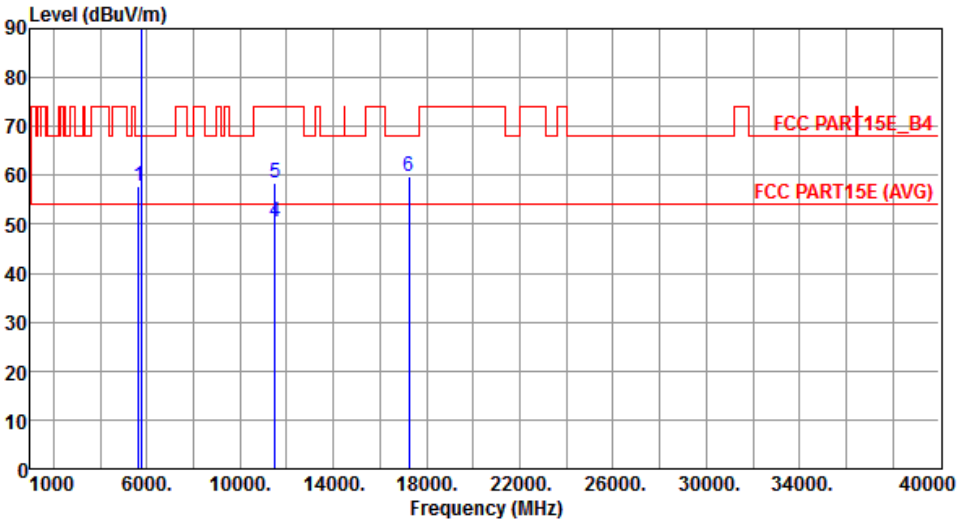
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5150.00	45.64	54.00	-8.36	39.77	5.87	Average	387	349
2		5150.00	57.71	74.00	-16.29	51.84	5.87	Peak	387	349
3	*	5240.00	100.01			94.02	5.99	Average	387	349
4	*	5240.00	111.46			105.47	5.99	Peak	387	349
5		5350.00	44.93	54.00	-9.07	38.72	6.21	Average	387	349
6		5350.00	56.73	74.00	-17.27	50.52	6.21	Peak	387	349
7		10480.00	57.12	68.20	-11.08	41.76	15.36	Peak	346	6
8		15720.00	45.82	54.00	-8.18	29.96	15.86	Average	194	1
9		15720.00	57.42	74.00	-16.58	41.56	15.86	Peak	194	1

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

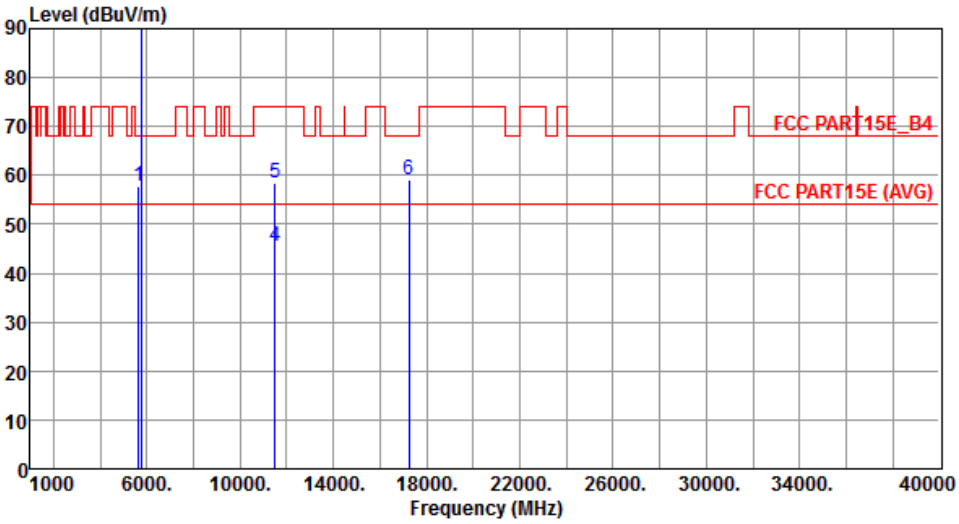
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.87	68.20	-10.33	51.24	6.63	Peak	185	65
2	*	5745.00	101.20			94.31	6.89	Average	185	65
3	*	5745.00	112.31			105.42	6.89	Peak	185	65
4		11490.00	50.34	54.00	-3.66	34.33	16.01	Average	200	26
5		11490.00	58.49	74.00	-15.51	42.48	16.01	Peak	200	26
6		17235.00	59.77	68.20	-8.43	41.34	18.43	Peak	188	68

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

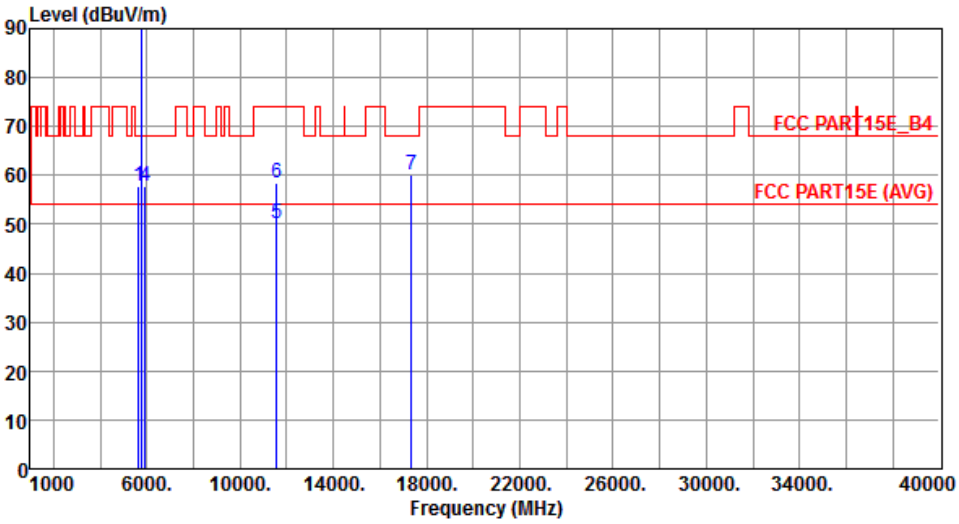
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.87	68.20	-10.33	51.24	6.63	Peak	368	350
2	*	5745.00	99.73			92.84	6.89	Average	368	350
3	*	5745.00	110.26			103.37	6.89	Peak	368	350
4		11490.00	45.54	54.00	-8.46	29.53	16.01	Average	200	348
5		11490.00	58.55	74.00	-15.45	42.54	16.01	Peak	200	348
6		17235.00	59.17	68.20	-9.03	40.74	18.43	Peak	200	168

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

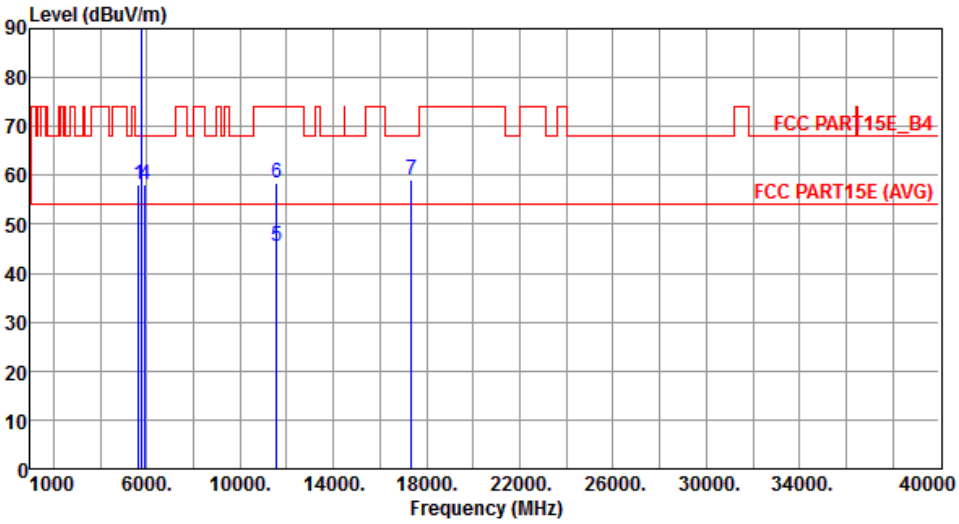
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.65	68.20	-10.55	51.02	6.63	Peak	182	66
2	*	5785.00	101.06			94.06	7.00	Average	182	66
3	*	5785.00	112.42			105.42	7.00	Peak	182	66
4		5925.00	57.67	68.20	-10.53	50.33	7.34	Peak	182	66
5		11570.00	50.20	54.00	-3.80	34.31	15.89	Average	200	27
6		11570.00	58.60	74.00	-15.40	42.71	15.89	Peak	200	27
7		17355.00	60.27	68.20	-7.93	41.45	18.82	Peak	185	72

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

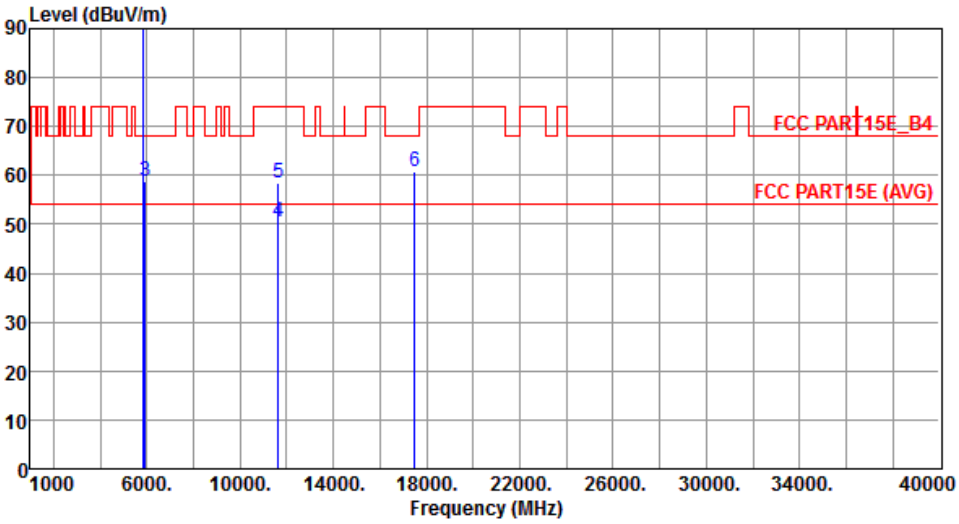
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.98	68.20	-10.22	51.35	6.63	Peak	350	352
2	*	5785.00	99.56			92.56	7.00	Average	350	352
3	*	5785.00	110.42			103.42	7.00	Peak	350	352
4		5925.00	58.02	68.20	-10.18	50.68	7.34	Peak	350	352
5		11570.00	45.64	54.00	-8.36	29.75	15.89	Average	195	342
6		11570.00	58.36	74.00	-15.64	42.47	15.89	Peak	195	342
7		17355.00	59.14	68.20	-9.06	40.32	18.82	Peak	200	166

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

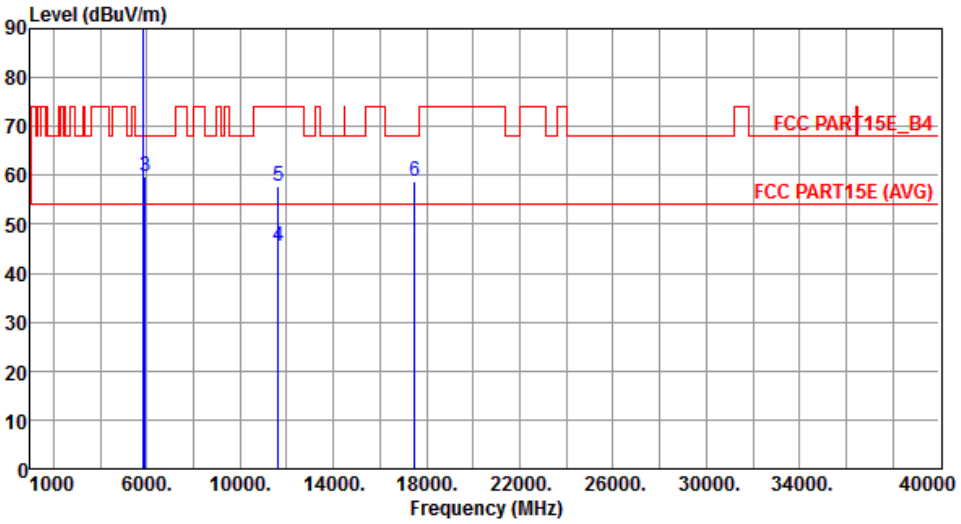
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5825.00	101.63			94.53	7.10	Average	185	63
2	*	5825.00	112.77			105.67	7.10	Peak	185	63
3		5925.00	58.67	68.20	-9.53	51.33	7.34	Peak	185	63
4		11650.00	50.60	54.00	-3.40	34.86	15.74	Average	206	22
5		11650.00	58.35	74.00	-15.65	42.61	15.74	Peak	206	22
6		17475.00	60.79	68.20	-7.41	41.56	19.23	Peak	200	42

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

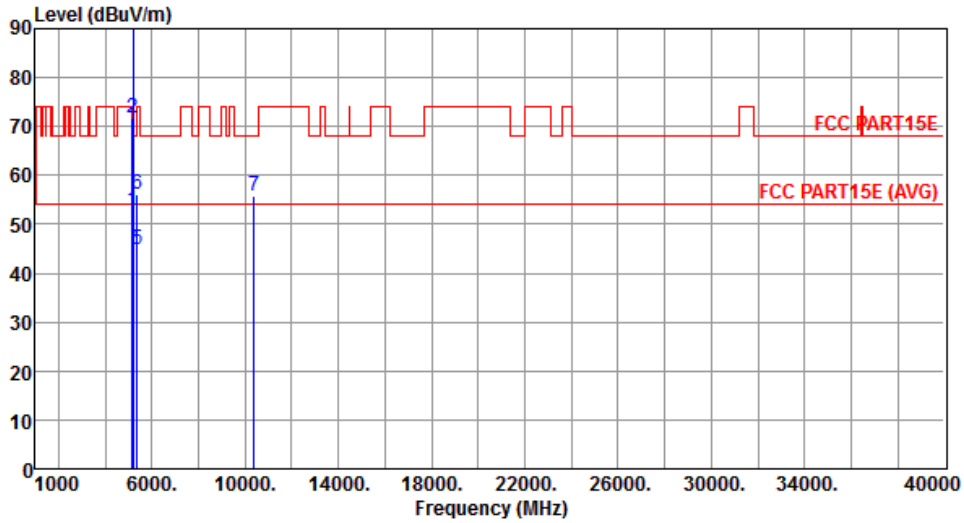


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5825.00	99.93			92.83	7.10	Average	372	357
2	*	5825.00	110.95			103.85	7.10	Peak	372	357
3		5925.00	59.79	68.20	-8.41	52.45	7.34	Peak	372	357
4		11650.00	45.57	54.00	-8.43	29.83	15.74	Average	200	345
5		11650.00	57.76	74.00	-16.24	42.02	15.74	Peak	200	345
6		17475.00	58.94	68.20	-9.26	39.71	19.23	Peak	200	345

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

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

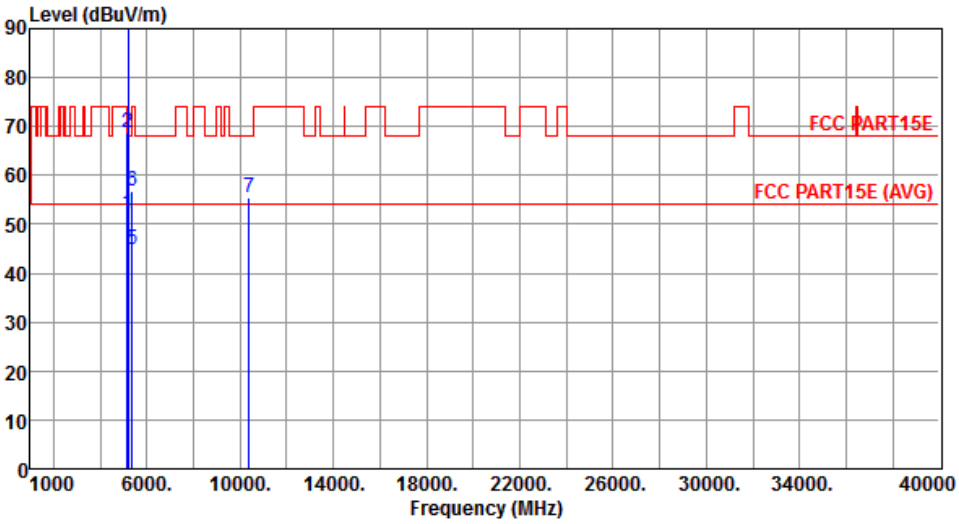
Modulation	VHT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



		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	52.94	54.00	-1.06	47.07	5.87	Average	181	69
2		5150.00	71.75	74.00	-2.25	65.88	5.87	Peak	181	69
3	*	5190.00	91.51			85.61	5.90	Average	181	69
4	*	5190.00	102.97			97.07	5.90	Peak	181	69
5		5350.00	44.72	54.00	-9.28	38.51	6.21	Average	181	69
6		5350.00	56.26	74.00	-17.74	50.05	6.21	Peak	181	69
7		10380.00	55.79	68.20	-12.41	40.54	15.25	Peak	185	75

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

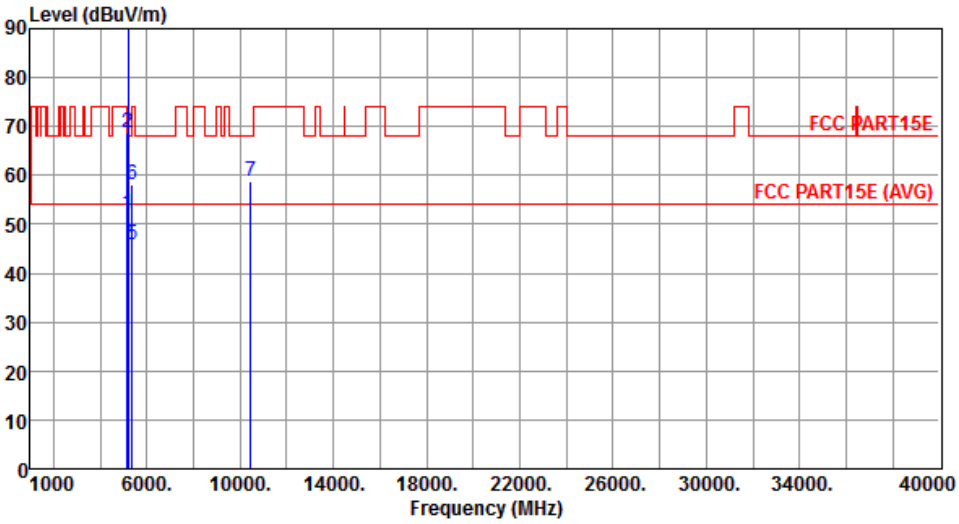
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



		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	52.10	54.00	-1.90	46.23	5.87	Average	373	355
2		5150.00	68.77	74.00	-5.23	62.90	5.87	Peak	373	355
3	*	5190.00	91.11			85.21	5.90	Average	373	355
4	*	5190.00	103.11			97.21	5.90	Peak	373	355
5		5350.00	44.97	54.00	-9.03	38.76	6.21	Average	373	355
6		5350.00	56.70	74.00	-17.30	50.49	6.21	Peak	373	355
7		10380.00	55.59	68.20	-12.61	40.34	15.25	Peak	350	148

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

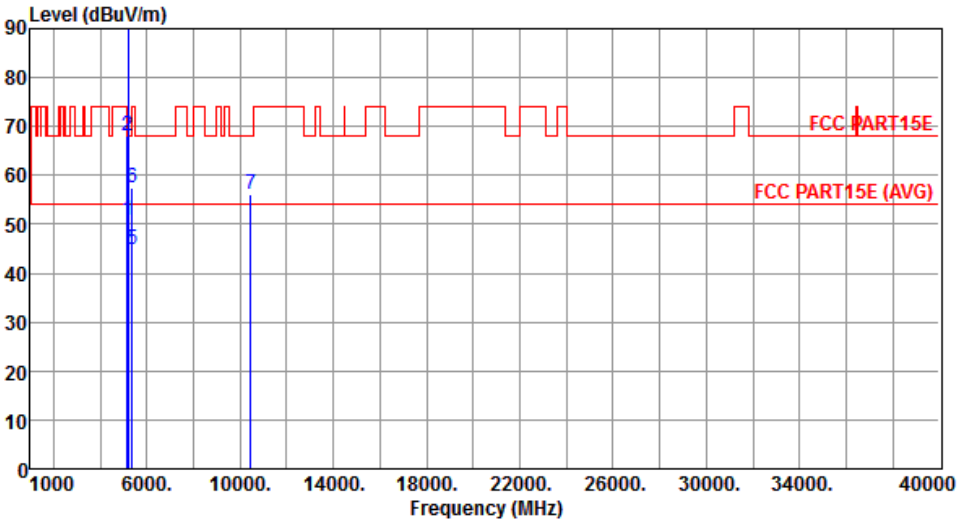
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



		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	52.18	54.00	-1.82	46.31	5.87	Average	192	67
2		5150.00	68.83	74.00	-5.17	62.96	5.87	Peak	192	67
3	*	5230.00	95.88			89.91	5.97	Average	192	67
4	*	5230.00	107.69			101.72	5.97	Peak	192	67
5		5350.00	45.93	54.00	-8.07	39.72	6.21	Average	192	67
6		5350.00	57.98	74.00	-16.02	51.77	6.21	Peak	192	67
7		10460.00	58.91	68.20	-9.29	43.57	15.34	Peak	185	70

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

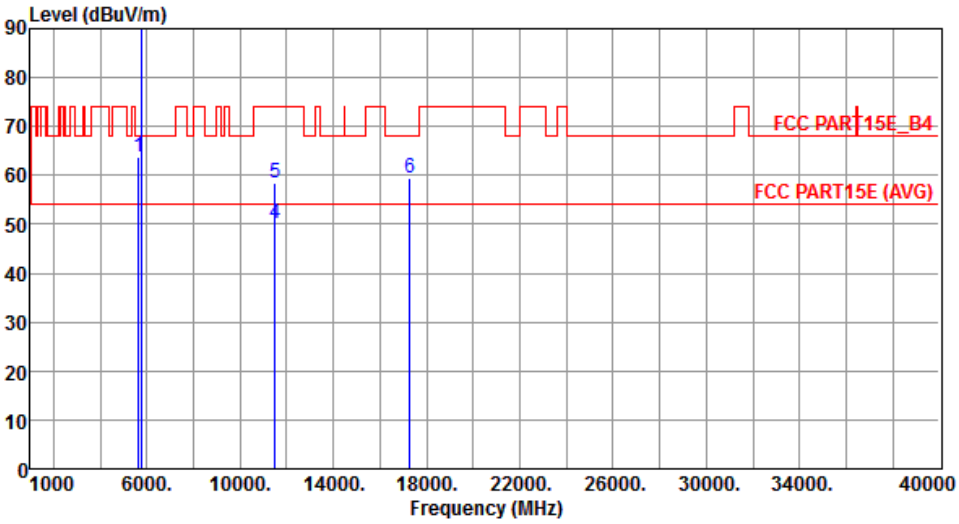
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



		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	50.66	54.00	-3.34	44.79	5.87	Average	370	352
2		5150.00	68.06	74.00	-5.94	62.19	5.87	Peak	370	352
3	*	5230.00	95.44			89.47	5.97	Average	370	352
4	*	5230.00	106.18			100.21	5.97	Peak	370	352
5		5350.00	44.84	54.00	-9.16	38.63	6.21	Average	370	352
6		5350.00	57.53	74.00	-16.47	51.32	6.21	Peak	370	352
7		10460.00	56.02	68.20	-12.18	40.68	15.34	Peak	188	350

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

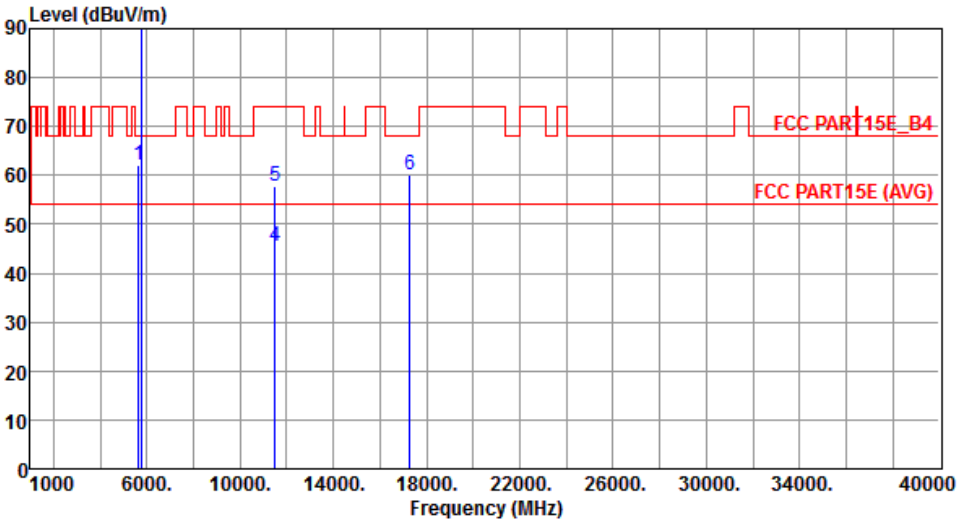
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	63.66	68.20	-4.54	57.03	6.63	Peak	186	54
2	*	5755.00	97.61			90.68	6.93	Average	186	54
3	*	5755.00	109.30			102.37	6.93	Peak	186	54
4		11510.00	50.26	54.00	-3.74	34.26	16.00	Average	180	26
5		11510.00	58.43	74.00	-15.57	42.43	16.00	Peak	180	26
6		17265.00	59.37	68.20	-8.83	40.86	18.51	Peak	185	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

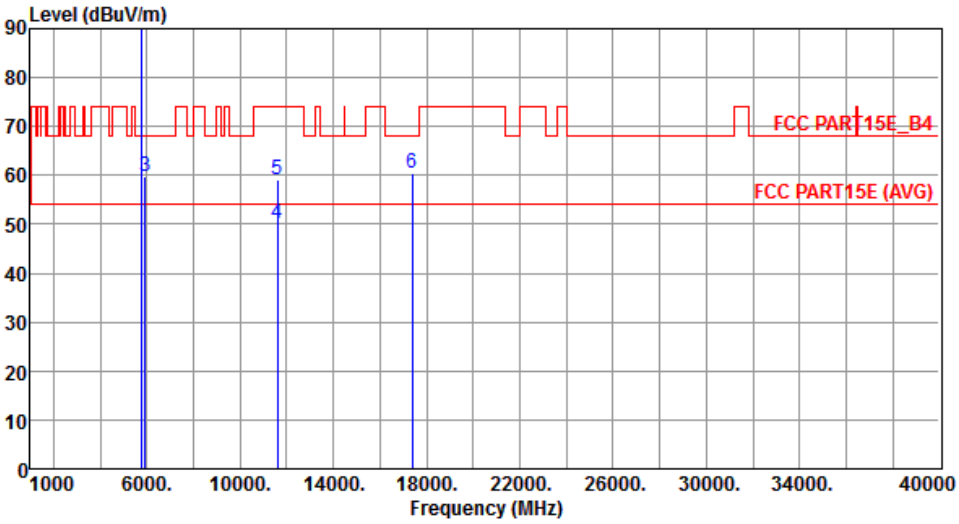
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	62.00	68.20	-6.20	55.37	6.63	Peak	361	363
2	*	5755.00	96.62			89.69	6.93	Average	361	363
3	*	5755.00	107.72			100.79	6.93	Peak	361	363
4		11510.00	45.53	54.00	-8.47	29.53	16.00	Average	200	185
5		11510.00	57.86	74.00	-16.14	41.86	16.00	Peak	200	185
6		17265.00	59.96	68.20	-8.24	41.45	18.51	Peak	155	196

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

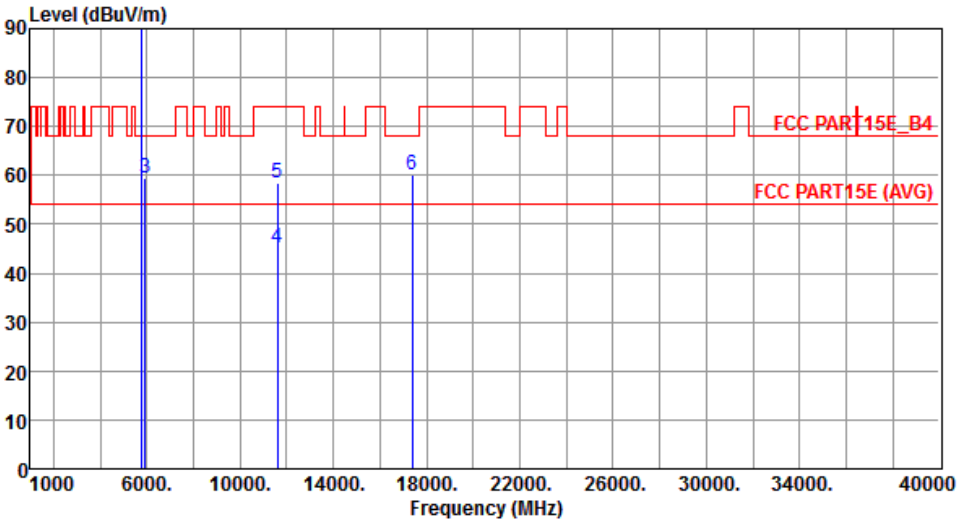
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5795.00	97.80			90.77	7.03	Average	190	65
2	*	5795.00	109.36			102.33	7.03	Peak	190	65
3		5925.00	59.76	68.20	-8.44	52.42	7.34	Peak	190	65
4		11590.00	50.16	54.00	-3.84	34.31	15.85	Average	188	26
5		11590.00	59.20	74.00	-14.80	43.35	15.85	Peak	188	26
6		17385.00	60.41	68.20	-7.79	41.48	18.93	Peak	196	41

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

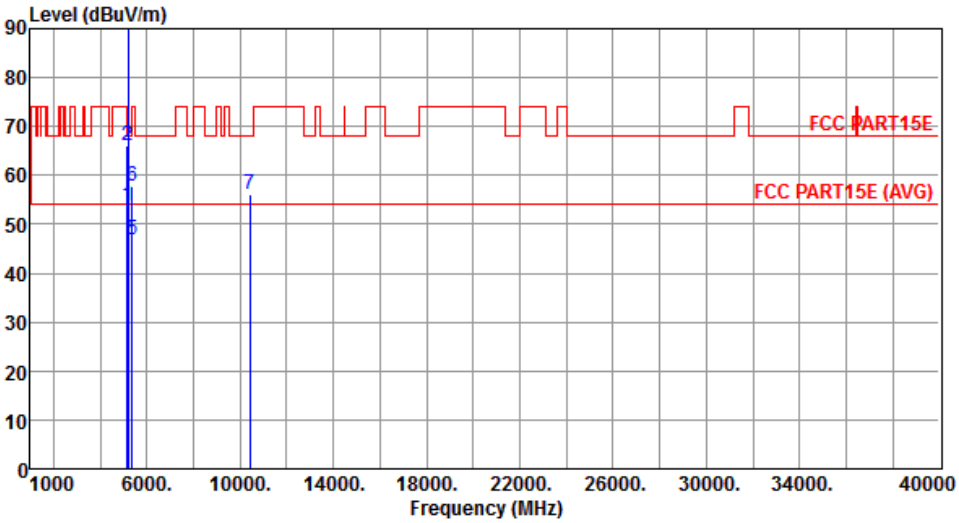


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	*	5795.00	96.64			89.61	7.03	Average	359	355
2	*	5795.00	108.23			101.20	7.03	Peak	359	355
3		5925.00	59.38	68.20	-8.82	52.04	7.34	Peak	359	355
4		11590.00	45.20	54.00	-8.80	29.35	15.85	Average	216	248
5		11590.00	58.33	74.00	-15.67	42.48	15.85	Peak	216	248
6		17385.00	60.24	68.20	-7.96	41.31	18.93	Peak	165	196

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

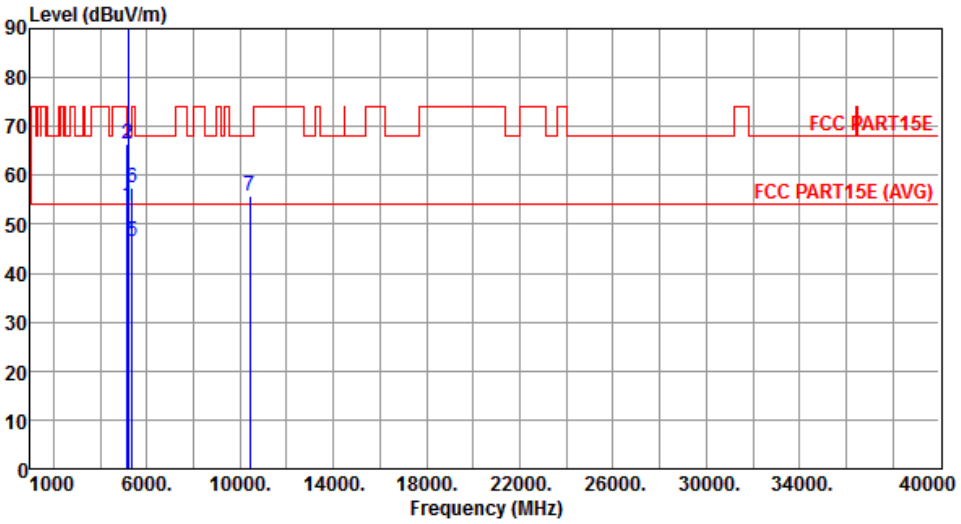
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



		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	53.72	54.00	-0.28	47.85	5.87	Average	185	66
2		5150.00	65.98	74.00	-8.02	60.11	5.87	Peak	185	66
3	*	5210.00	90.10			84.17	5.93	Average	185	66
4	*	5210.00	99.04			93.11	5.93	Peak	185	66
5		5350.00	46.85	54.00	-7.15	40.64	6.21	Average	185	66
6		5350.00	57.83	74.00	-16.17	51.62	6.21	Peak	185	66
7		10420.00	56.15	68.20	-12.05	40.85	15.30	Peak	182	82

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

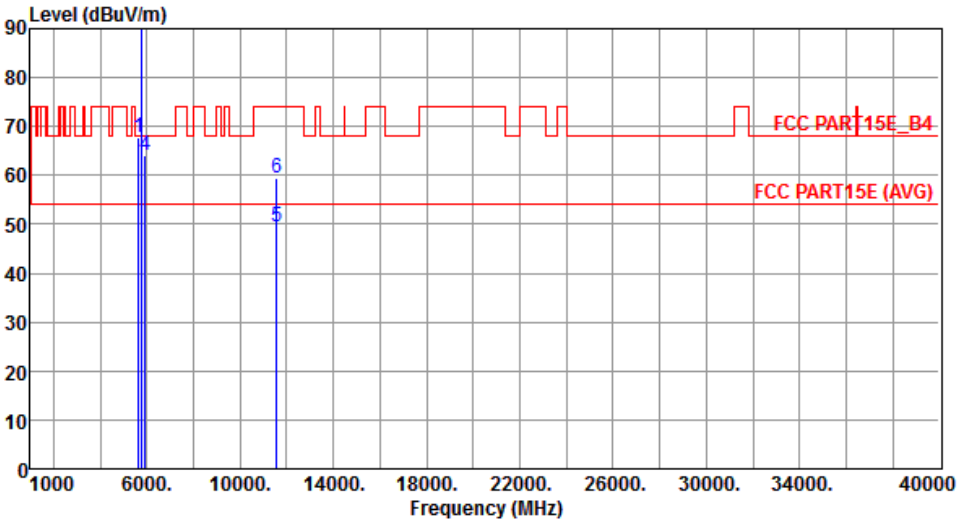
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



		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	53.69	54.00	-0.31	47.82	5.87	Average	358	351
2		5150.00	66.55	74.00	-7.45	60.68	5.87	Peak	358	351
3	*	5210.00	89.81			83.88	5.93	Average	358	351
4	*	5210.00	98.43			92.50	5.93	Peak	358	351
5		5350.00	46.57	54.00	-7.43	40.36	6.21	Average	348	351
6		5350.00	57.61	74.00	-16.39	51.40	6.21	Peak	348	351
7		10420.00	55.82	68.20	-12.38	40.52	15.30	Peak	322	345

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

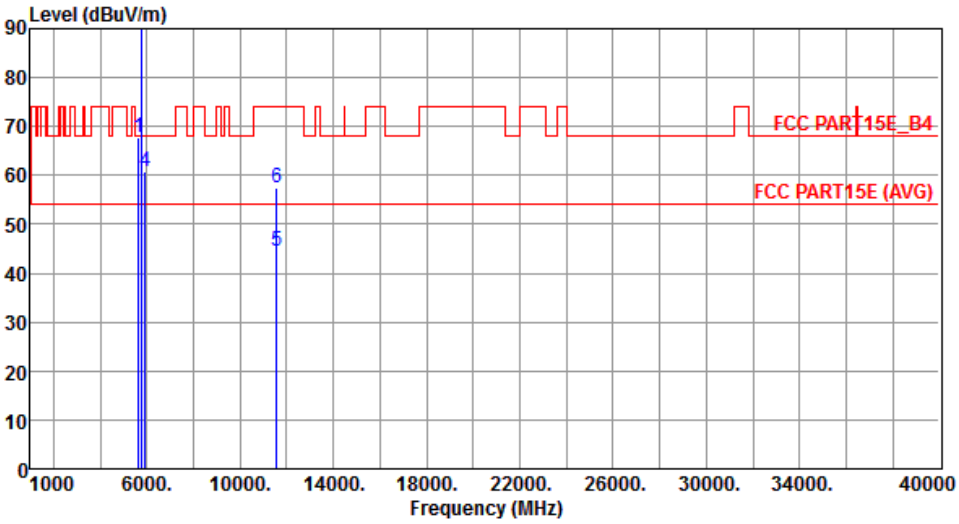
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	67.75	68.20	-0.45	61.12	6.63	Peak	186	66
2	*	5775.00	97.04			90.06	6.98	Average	186	66
3	*	5775.00	106.66			99.68	6.98	Peak	186	66
4		5925.00	64.04	68.20	-4.16	56.70	7.34	Peak	186	66
5		11550.00	49.58	54.00	-4.42	33.65	15.93	Average	182	147
6		11550.00	59.61	74.00	-14.39	43.68	15.93	Peak	182	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	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



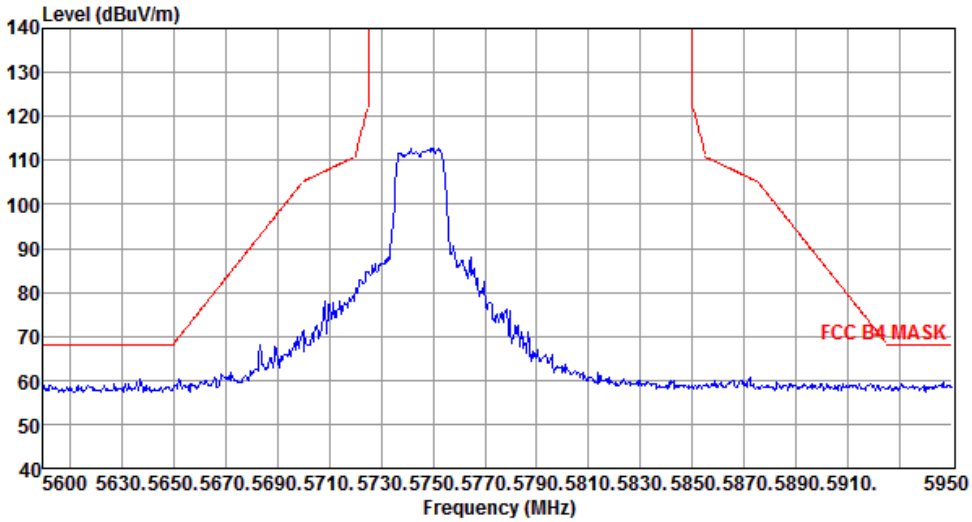
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	67.59	68.20	-0.61	60.96	6.63	Peak	363	355
2	*	5775.00	95.82			88.84	6.98	Average	363	355
3	*	5775.00	104.85			97.87	6.98	Peak	363	355
4		5925.00	60.84	68.20	-7.36	53.50	7.34	Peak	363	355
5		11550.00	44.58	54.00	-9.42	28.65	15.93	Average	220	138
6		11550.00	57.31	74.00	-16.69	41.38	15.93	Peak	220	138

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

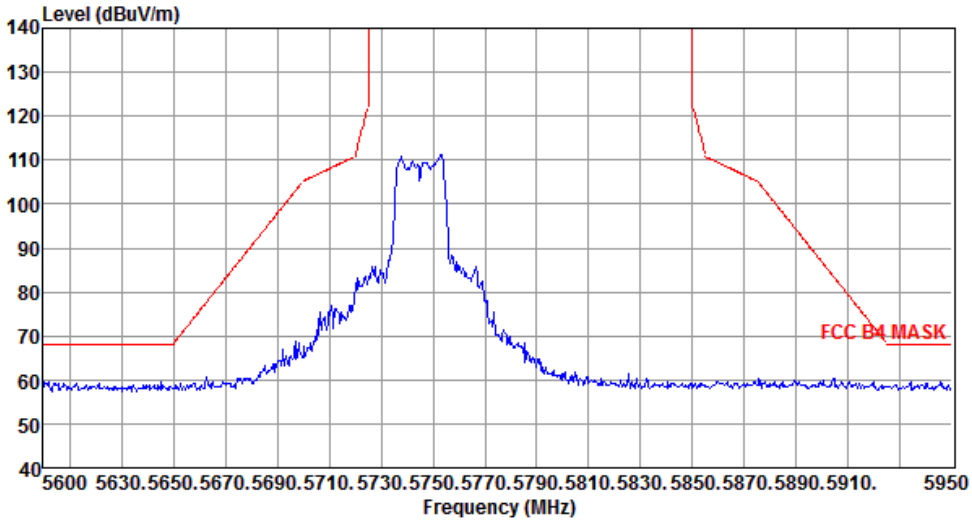
Beamforming mode

3.5.13 Transmitter Radiated Band Edge for VHT20

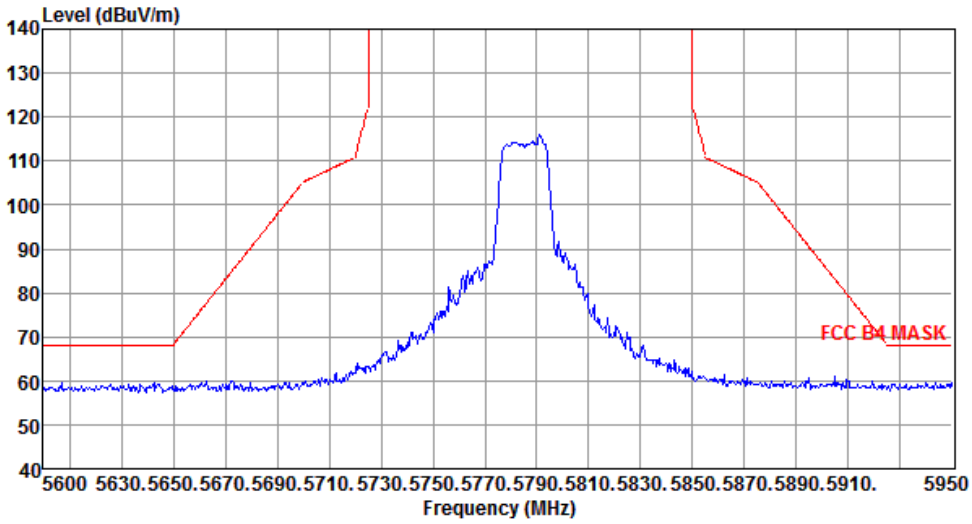
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Horizontal		



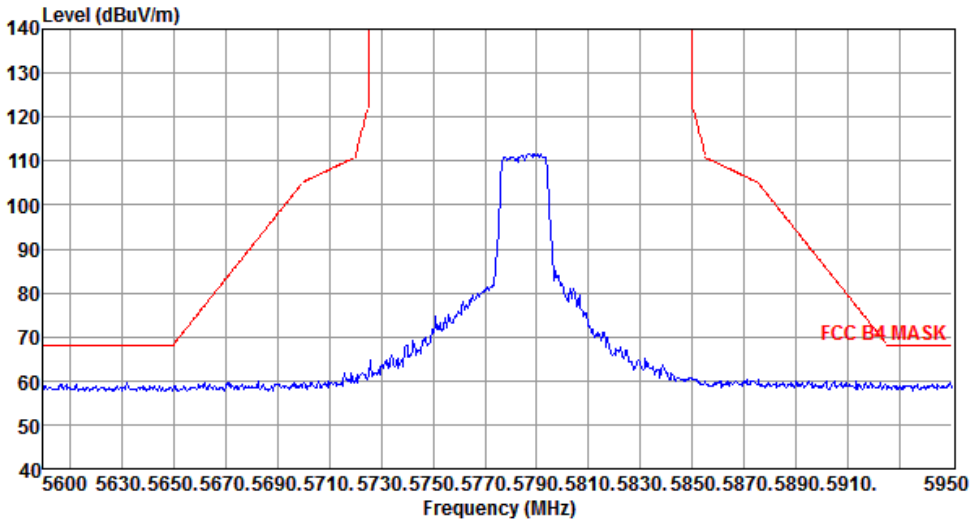
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Vertical		



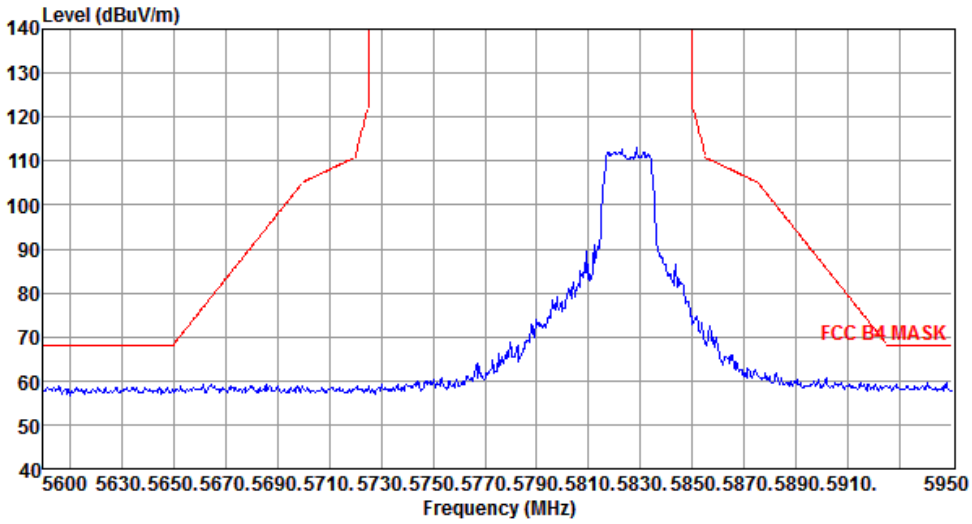
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Horizontal		



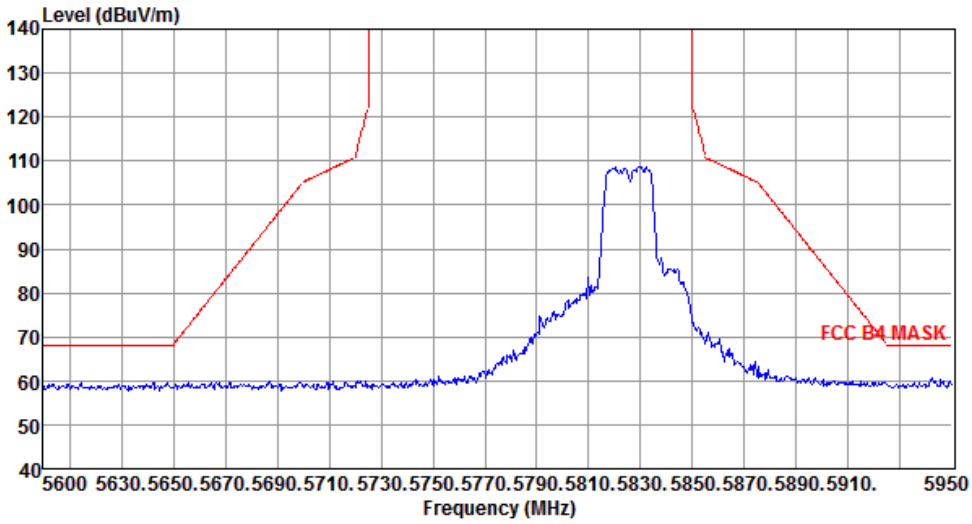
Modulation	VHT20	**Test Freq. (MHz)**	5785
Polarization	Vertical		



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

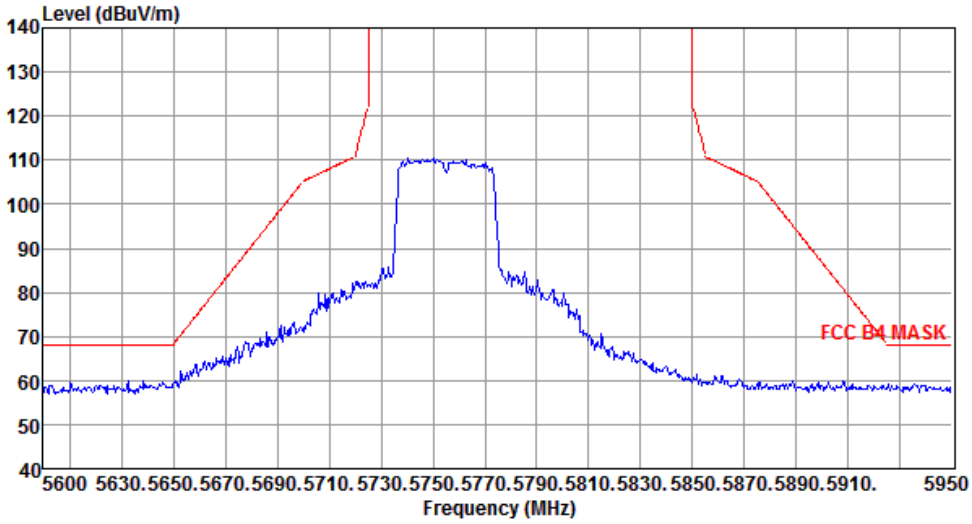


Modulation	VHT20	**Test Freq. (MHz)**	5825
Polarization	Vertical		

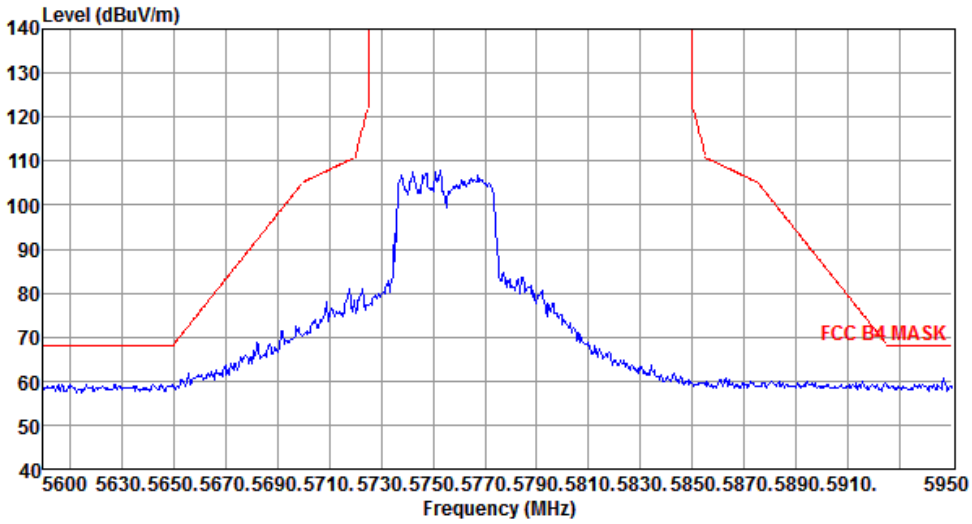


3.5.14 Transmitter Radiated Band Edge for VHT40

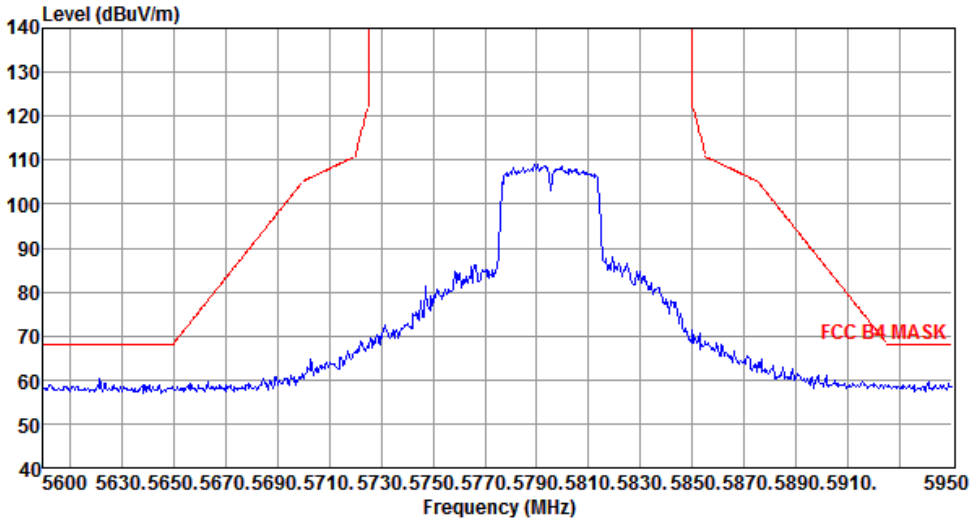
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



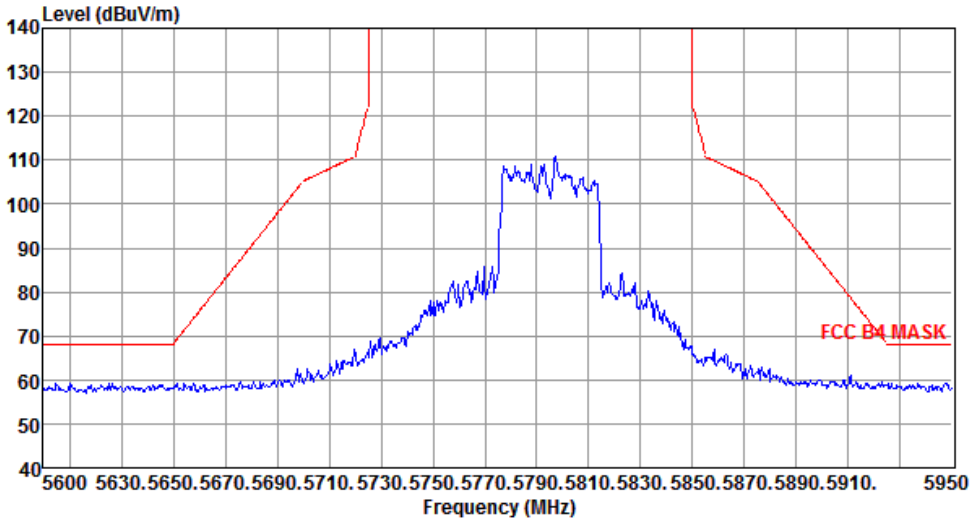
Modulation	VHT40	**Test Freq. (MHz)**	5755
Polarization	Vertical		



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

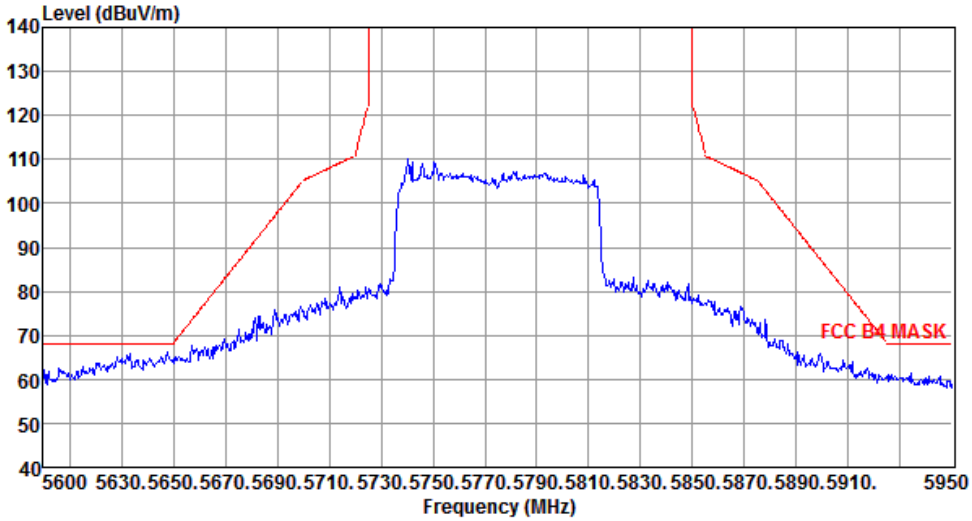


Modulation	VHT40	**Test Freq. (MHz)**	5795
Polarization	Vertical		

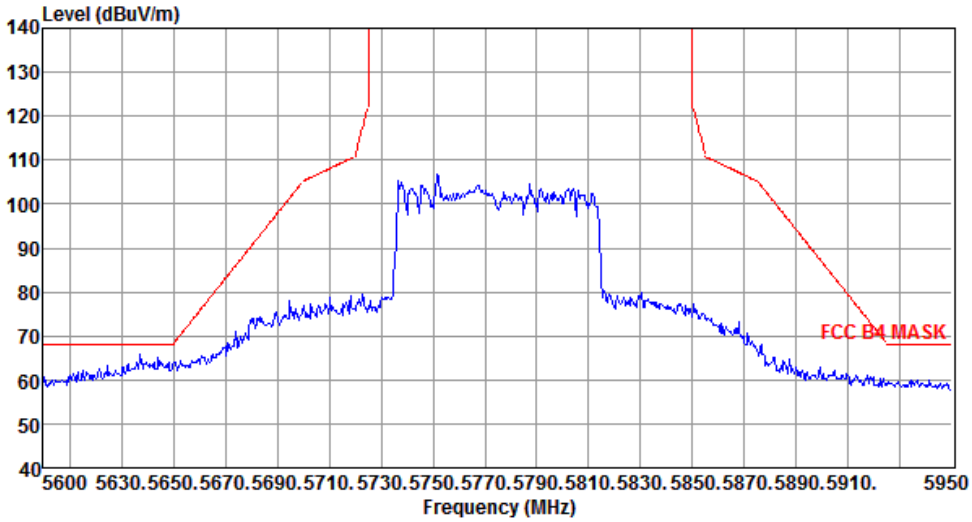


3.5.15 Transmitter Radiated Band Edge for VHT80

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		

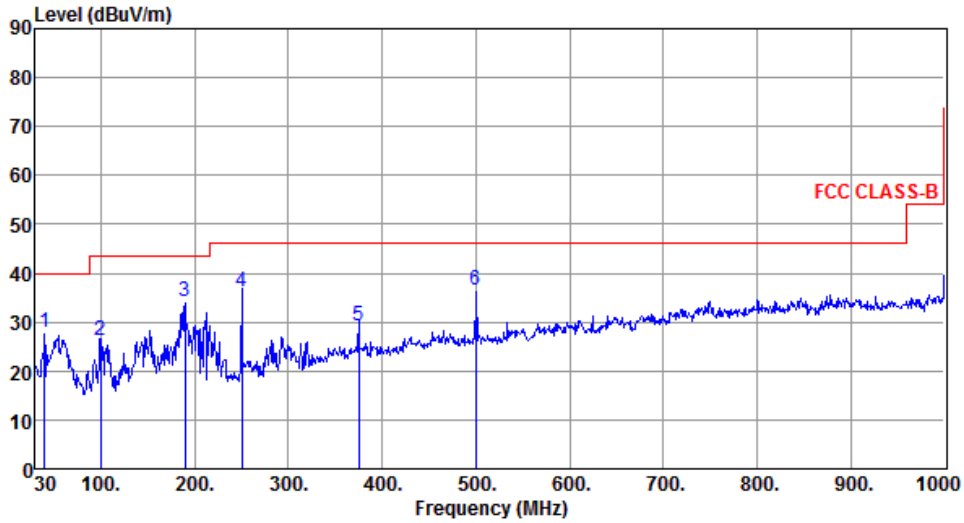


Modulation	VHT80	**Test Freq. (MHz)**	5775
Polarization	Vertical		



3.5.16 Transmitter Radiated Unwanted Emissions (Below 1GHz)

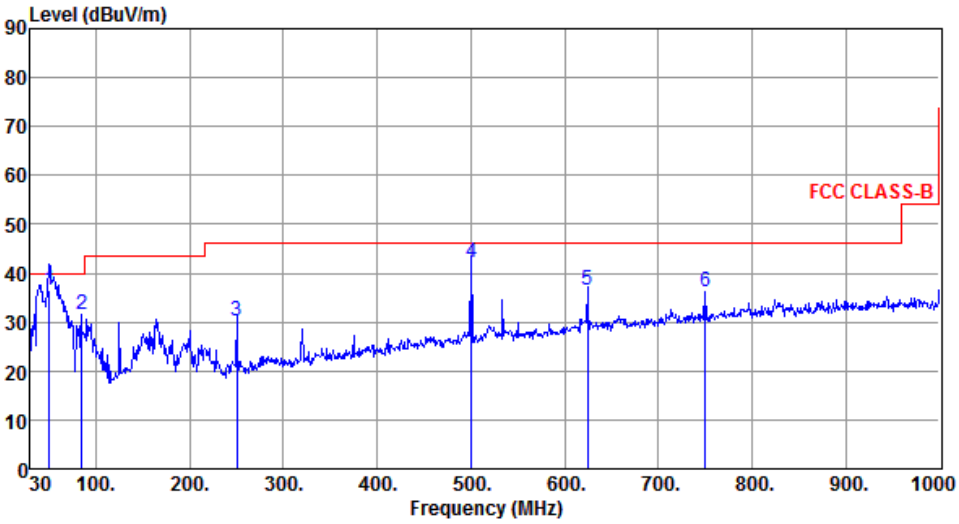
Modulation	VHT40	**Test Freq. (MHz)**	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.86	27.82	40.00	-12.18	36.13	-8.31	Peak	---	---
2	99.75	26.21	43.50	-17.29	39.49	-13.28	Peak	---	---
3	190.12	34.12	43.50	-9.38	44.85	-10.73	Peak	---	---
4	250.12	36.21	46.00	-9.79	45.55	-9.34	Peak	---	---
5	375.16	29.31	46.00	-16.69	34.98	-5.67	Peak	---	---
6	500.27	36.41	46.00	-9.59	39.34	-2.93	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.

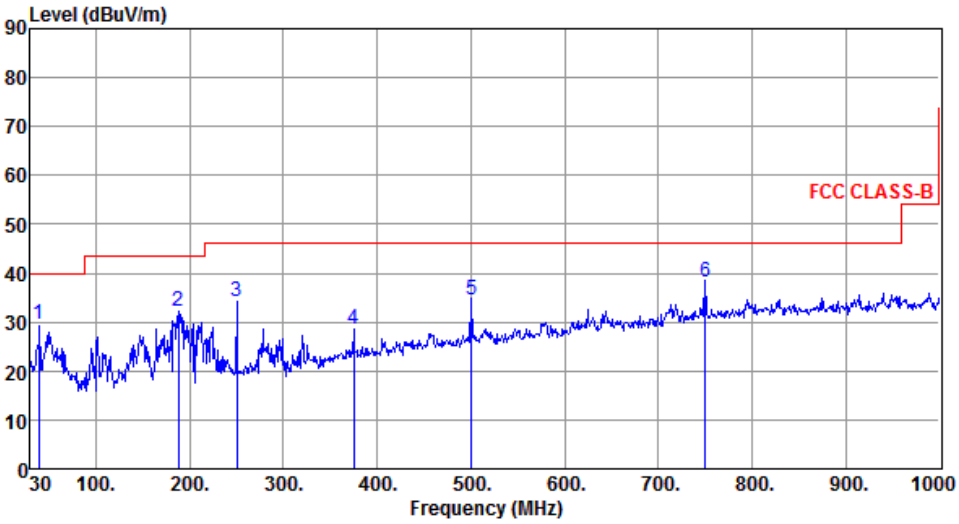
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	50.20	36.55	40.00	-3.45	44.38	-7.83	QP	100	23
2	84.52	31.63	40.00	-8.37	45.14	-13.51	Peak	---	---
3	250.20	30.15	46.00	-15.85	39.49	-9.34	Peak	---	---
4	500.36	42.16	46.00	-3.84	45.08	-2.92	Peak	---	---
5	624.78	36.54	46.00	-9.46	36.92	-0.38	Peak	---	---
6	749.96	36.28	46.00	-9.72	34.38	1.90	Peak	---	---

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

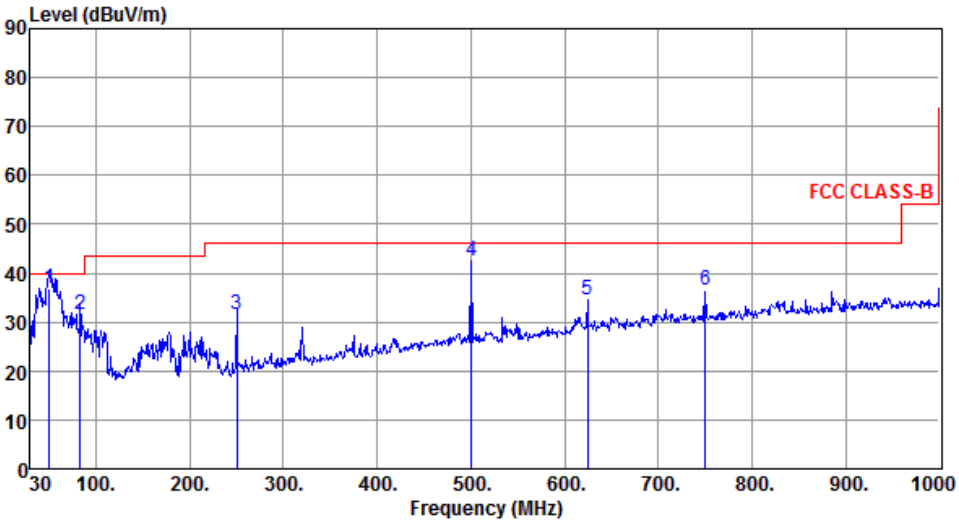
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	39.42	29.51	40.00	-10.49	37.88	-8.37	Peak	---	---
2	188.24	32.16	43.50	-11.34	42.71	-10.55	Peak	---	---
3	250.12	34.24	46.00	-11.76	43.58	-9.34	Peak	---	---
4	375.12	28.41	46.00	-17.59	34.08	-5.67	Peak	---	---
5	500.42	34.51	46.00	-11.49	37.43	-2.92	Peak	---	---
6	749.96	38.24	46.00	-7.76	36.34	1.90	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		

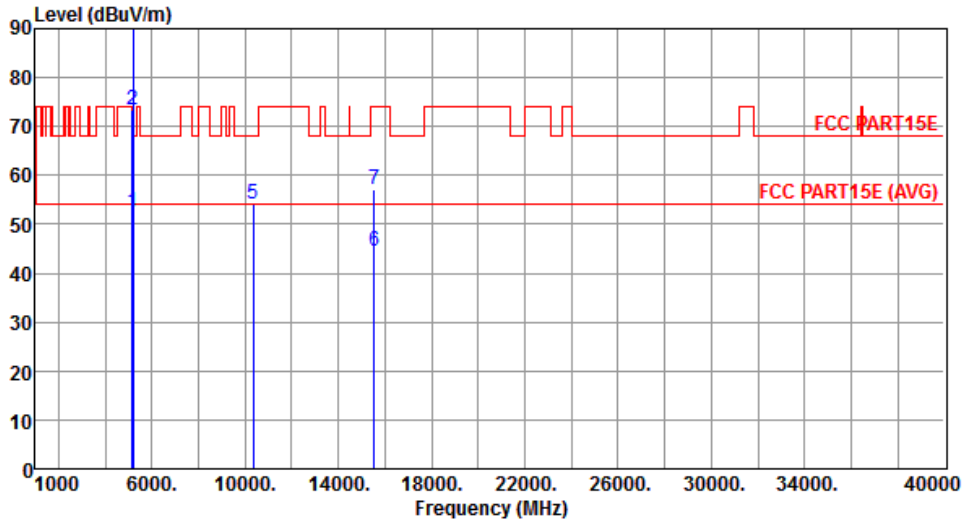


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	50.24	36.72	40.00	-3.28	44.55	-7.83	QP	100	19
2	83.22	31.50	40.00	-8.50	44.83	-13.33	Peak	---	---
3	250.12	31.42	46.00	-14.58	40.76	-9.34	Peak	---	---
4	500.36	42.41	46.00	-3.59	45.33	-2.92	Peak	---	---
5	624.90	34.66	46.00	-11.34	35.04	-0.38	Peak	---	---
6	749.96	36.51	46.00	-9.49	34.61	1.90	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

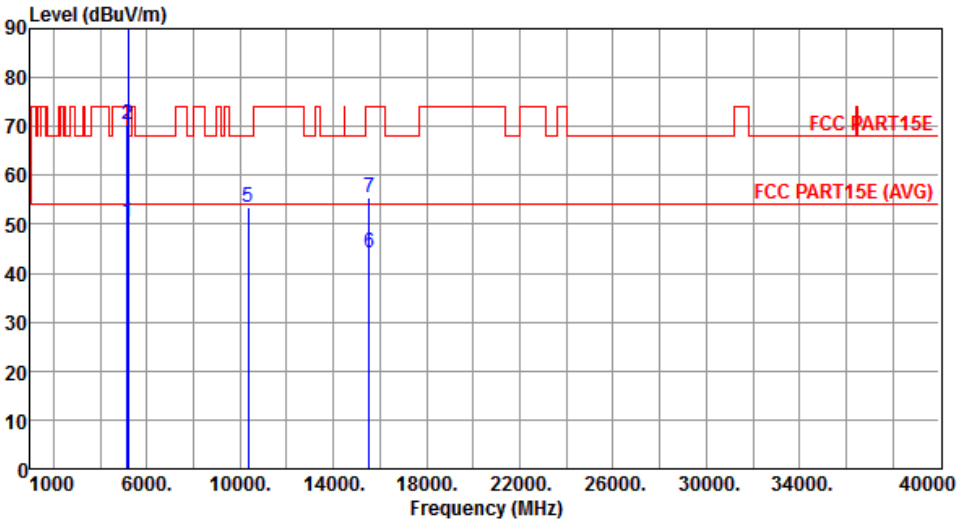
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



		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	52.40	54.00	-1.60	46.53	5.87	Average	223	73
2		5150.00	73.53			67.66	5.87	Peak	223	73
3	*	5180.00	99.94			94.04	5.90	Average	223	73
4	*	5180.00	111.60	68.20	43.40	105.70	5.90	Peak	223	73
5		10360.00	54.17	68.20	-14.03	38.95	15.22	Peak	175	264
6		15540.00	44.38	54.00	-9.62	28.31	16.07	Average	191	354
7		15540.00	57.07	74.00	-16.93	41.00	16.07	Peak	191	354

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

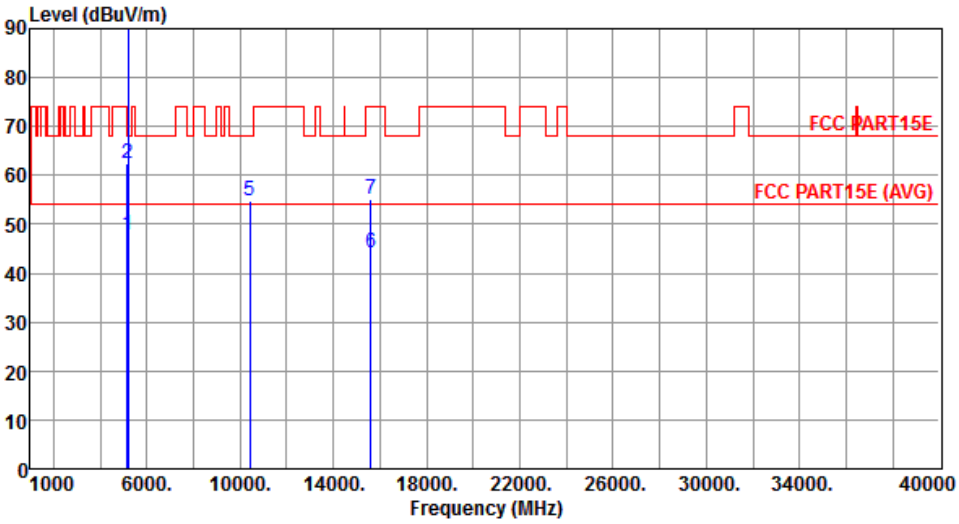
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



		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	50.32	54.00	-3.68	44.45	5.87	Average	273	325
2		5150.00	70.39	74.00	-3.61	64.52	5.87	Peak	273	325
3	*	5180.00	98.75			92.85	5.90	Average	273	325
4	*	5180.00	110.09			104.19	5.90	Peak	273	325
5		10360.00	53.55	68.20	-14.65	38.33	15.22	Peak	264	281
6		15540.00	44.17	54.00	-9.83	28.10	16.07	Average	204	168
7		15540.00	55.34	74.00	-18.66	39.27	16.07	Peak	204	168

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

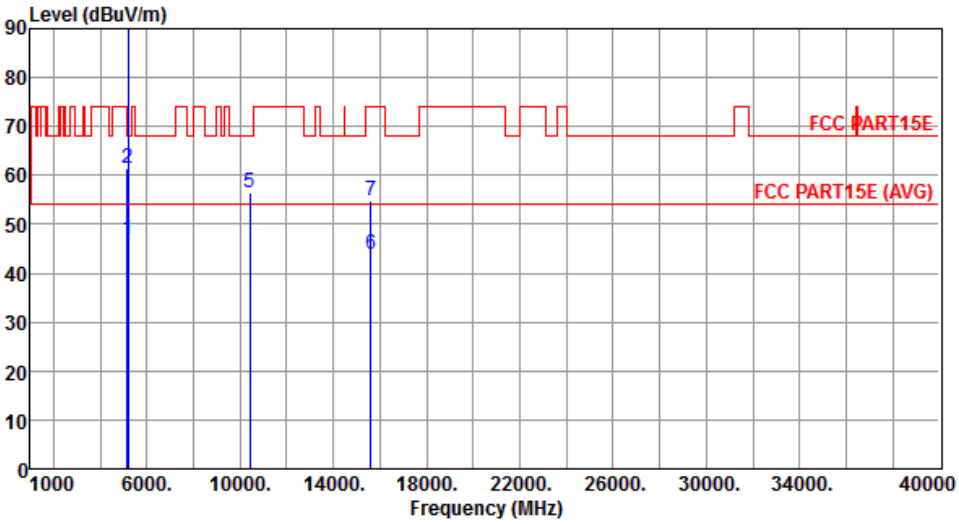
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



		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	47.90	54.00	-6.10	42.03	5.87	Average	100	55
2		5150.00	62.29			56.42	5.87	Peak	100	55
3	*	5200.00	101.49			95.58	5.91	Average	100	55
4	*	5200.00	113.55	68.20	45.35	107.64	5.91	Peak	100	55
5		10400.00	54.66	68.20	-13.54	39.39	15.27	Peak	133	52
6		15600.00	44.12	54.00	-9.88	28.12	16.00	Average	125	184
7		15600.00	55.04	74.00	-18.96	39.04	16.00	Peak	125	184

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

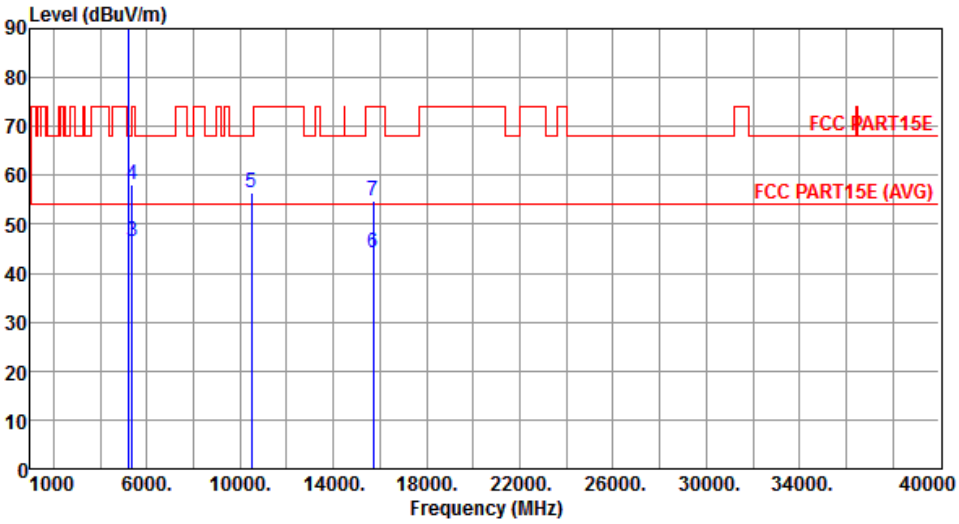
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



		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	46.84	54.00	-7.16	40.97	5.87	Average	335	325
2		5150.00	61.38	74.00	-12.62	55.51	5.87	Peak	335	325
3	*	5200.00	96.48			90.57	5.91	Average	335	325
4	*	5200.00	108.41			102.50	5.91	Peak	335	325
5		10400.00	56.33	68.20	-11.87	41.06	15.27	Peak	281	343
6		15600.00	43.85	54.00	-10.15	27.85	16.00	Average	176	218
7		15600.00	54.76	74.00	-19.24	38.76	16.00	Peak	176	218

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

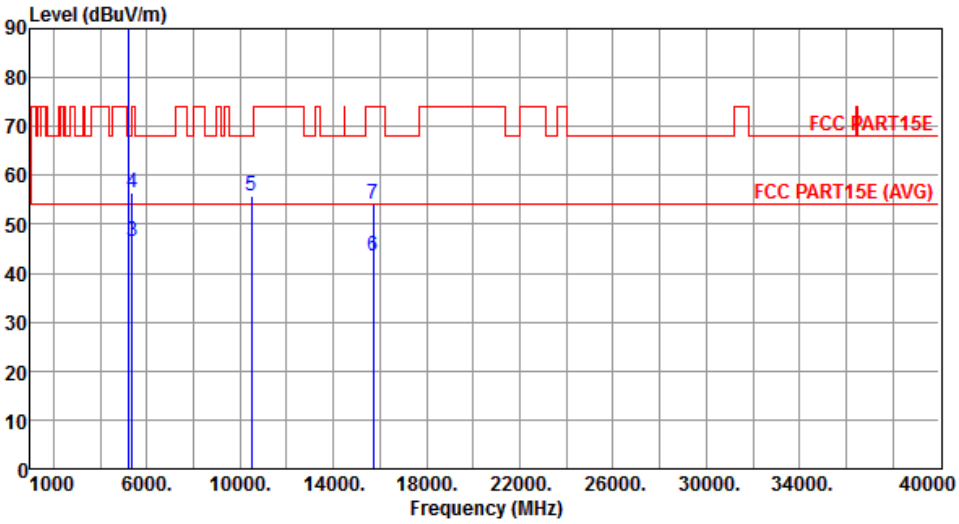
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



		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	102.61			96.62	5.99	Average	220	53
2	*	5240.00	113.80			107.81	5.99	Peak	220	53
3		5350.00	46.50	54.00	-7.50	40.29	6.21	Average	220	53
4		5350.00	58.00	74.00	-16.00	51.79	6.21	Peak	220	53
5		10480.00	56.58	68.20	-11.62	41.22	15.36	Peak	289	330
6		15720.00	44.28	54.00	-9.72	28.42	15.86	Average	131	250
7		15720.00	54.89	74.00	-19.11	39.03	15.86	Peak	131	250

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

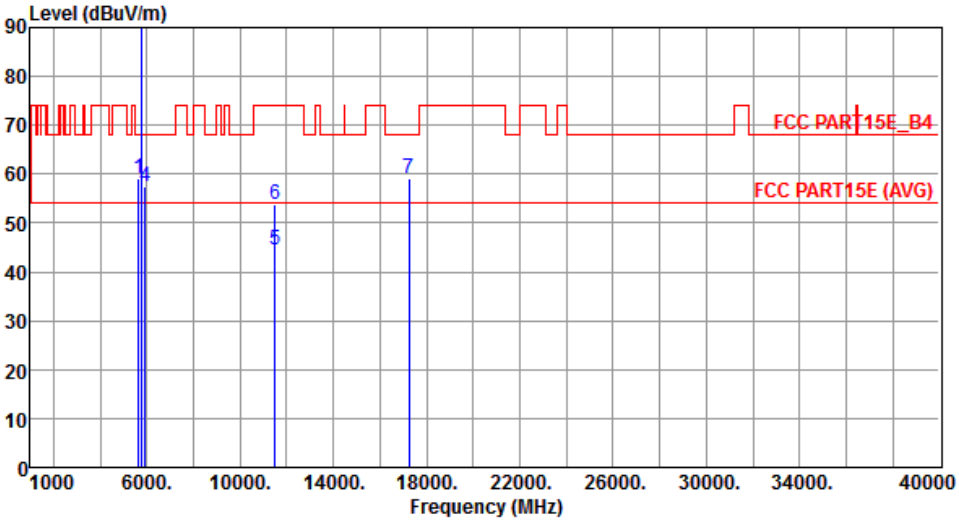
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



		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	96.47			90.48	5.99	Average	346	333
2	*	5240.00	108.09			102.10	5.99	Peak	346	333
3		5350.00	46.50	54.00	-7.50	40.29	6.21	Average	346	333
4		5350.00	56.40	74.00	-17.60	50.19	6.21	Peak	346	333
5		10480.00	55.90	68.20	-12.30	40.54	15.36	Peak	265	343
6		15720.00	43.38	54.00	-10.62	27.52	15.86	Average	131	175
7		15720.00	54.03	74.00	-19.97	38.17	15.86	Peak	131	175

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

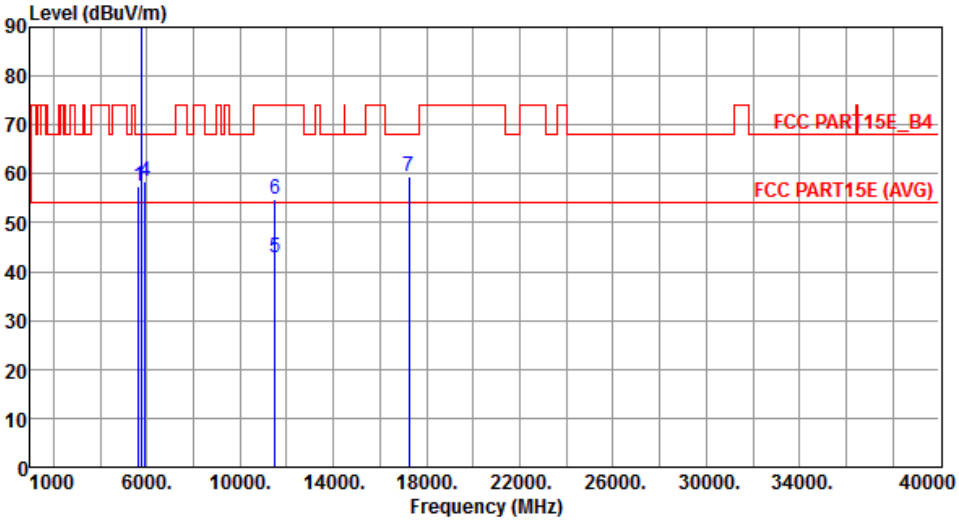
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	59.18	68.20	-9.02	52.15	7.03	Peak	100	69
2	*	5745.00	104.49			97.14	7.35	Average	100	69
3	*	5745.00	114.56			107.67	6.89	Peak	100	69
4		5925.00	57.60	68.20	-10.60	49.68	7.92	Peak	100	69
5		11490.00	44.42	54.00	-9.58	31.12	13.30	Average	120	175
6		11490.00	53.87	74.00	-20.13	40.57	13.30	Peak	120	175
7		17235.00	58.99	68.20	-9.21	41.17	17.82	Peak	163	79

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

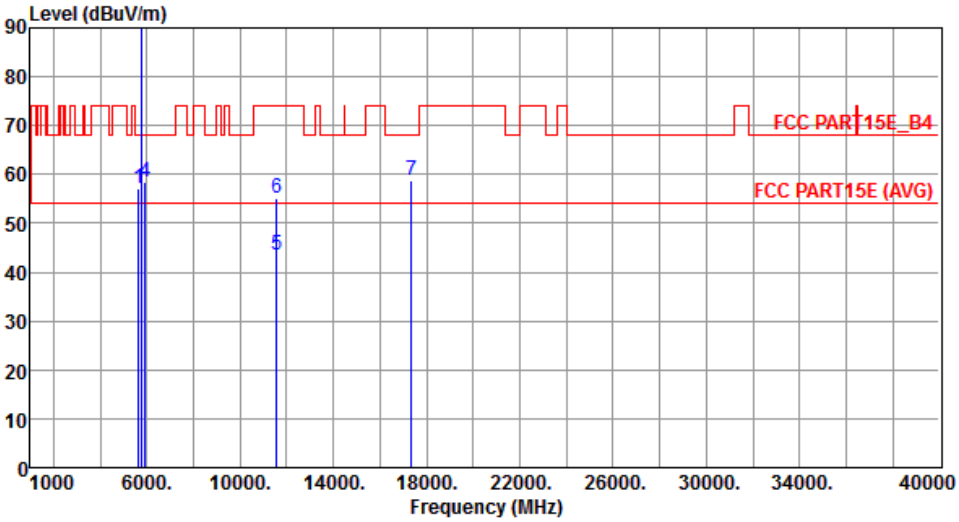
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.41	68.20	-10.79	50.78	6.63	Peak	353	13
2	*	5745.00	102.20			95.31	6.89	Average	353	13
3	*	5745.00	112.90			106.01	6.89	Peak	353	13
4		5925.00	58.44	68.20	-9.76	51.10	7.34	Peak	353	13
5		11490.00	42.71	54.00	-11.29	26.70	16.01	Average	131	78
6		11490.00	54.67	74.00	-19.33	38.66	16.01	Peak	131	78
7		17235.00	59.49	68.20	-8.71	41.06	18.43	Peak	271	236

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

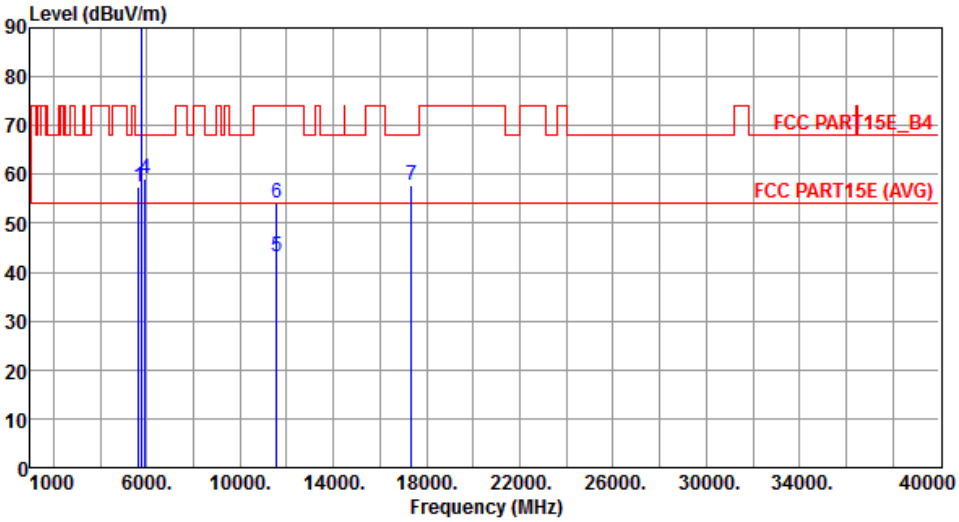
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.18	68.20	-11.02	50.55	6.63	Peak	133	68
2	*	5785.00	107.34			100.34	7.00	Average	133	68
3	*	5785.00	116.64			109.64	7.00	Peak	133	68
4		5925.00	58.61	68.20	-9.59	51.27	7.34	Peak	133	68
5		11570.00	43.40	54.00	-10.60	27.51	15.89	Average	185	224
6		11570.00	55.11	74.00	-18.89	39.22	15.89	Peak	185	224
7		17355.00	58.80	68.20	-9.40	39.98	18.82	Peak	361	85

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

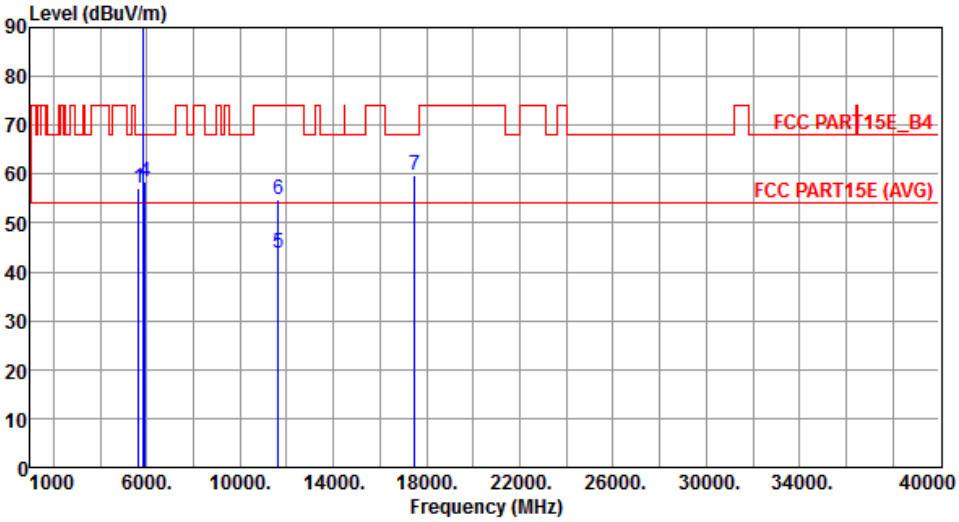
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.39	68.20	-10.81	50.76	6.63	Peak	315	11
2	*	5785.00	104.07			97.07	7.00	Average	315	11
3	*	5785.00	114.32			107.32	7.00	Peak	315	11
4		5925.00	58.97	68.20	-9.23	51.63	7.34	Peak	315	11
5		11570.00	43.19	54.00	-10.81	27.30	15.89	Average	261	195
6		11570.00	54.11	74.00	-19.89	38.22	15.89	Peak	261	195
7		17355.00	57.90	68.20	-10.30	39.08	18.82	Peak	182	346

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

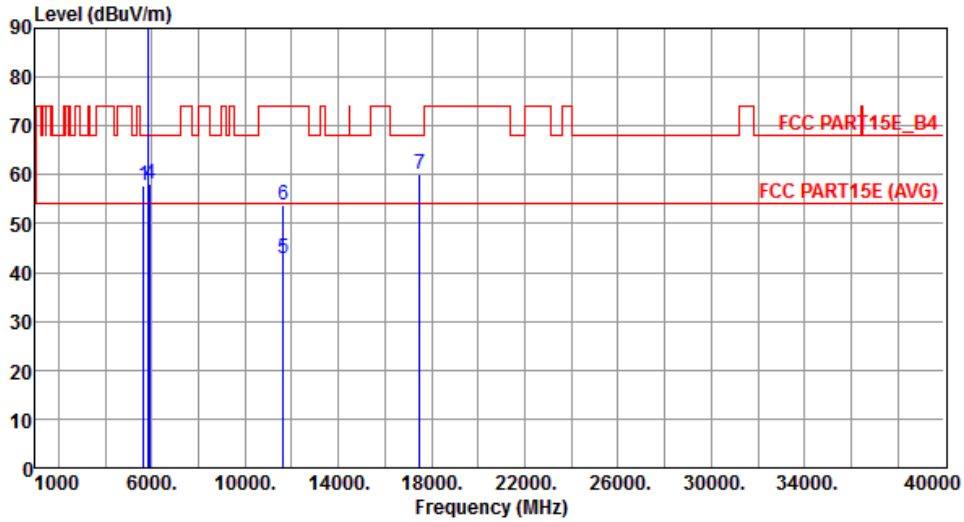
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.14	68.20	-11.06	50.51	6.63	Peak	132	64
2	*	5825.00	103.75			96.65	7.10	Average	132	64
3	*	5825.00	113.35			106.26	7.09	Peak	132	64
4		5925.00	58.43	68.20	-9.77	51.09	7.34	Peak	132	64
5		11650.00	43.72	54.00	-10.28	27.98	15.74	Average	315	124
6		11650.00	54.75	74.00	-19.25	39.01	15.74	Peak	315	124
7		17475.00	59.70	68.20	-8.50	40.47	19.23	Peak	142	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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

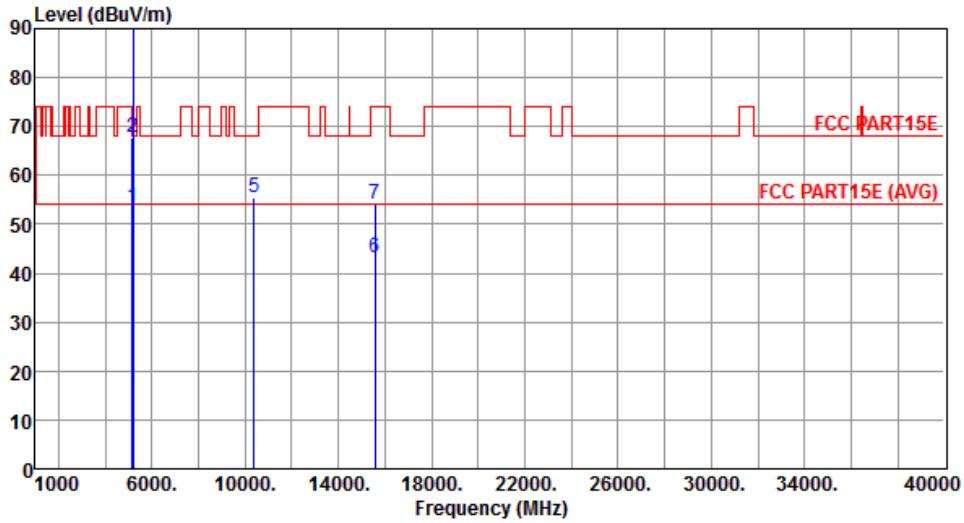


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	57.71	68.20	-10.49	51.08	6.63	Peak	296	17
2	*	5825.00	101.47			94.37	7.10	Average	296	17
3	*	5825.00	110.80			103.71	7.09	Peak	296	17
4		5925.00	58.24	68.20	-9.96	50.90	7.34	Peak	296	17
5		11650.00	42.86	54.00	-11.14	27.12	15.74	Average	163	254
6		11650.00	53.89	74.00	-20.11	38.15	15.74	Peak	163	254
7		17475.00	59.98	68.20	-8.22	40.75	19.23	Peak	196	114

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

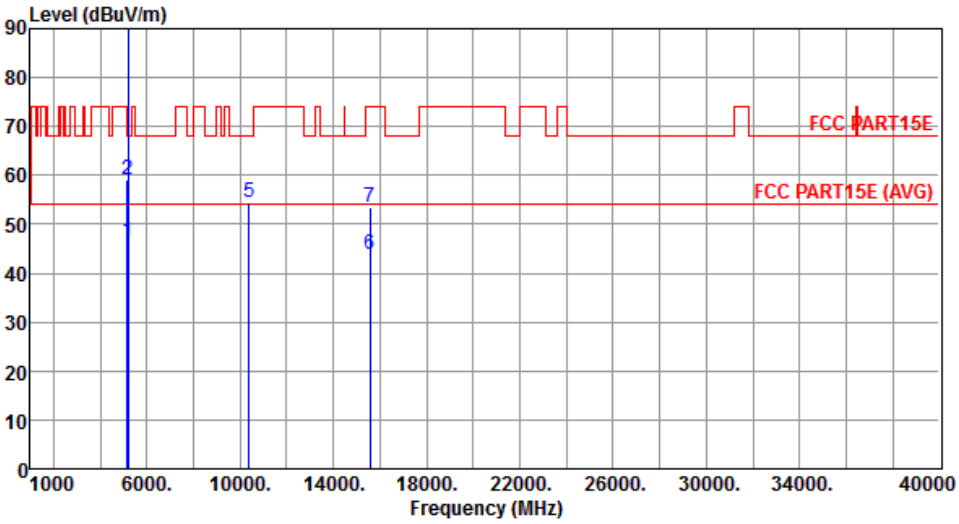
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



		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	53.52	54.00	-0.48	47.65	5.87	Average	224	97
2		5150.00	67.71	74.00	-6.29	61.84	5.87	Peak	224	97
3	*	5190.00	95.45			89.55	5.90	Average	224	97
4	*	5190.00	106.54			100.64	5.90	Peak	224	97
5		10380.00	55.62	68.20	-12.58	40.37	15.25	Peak	100	328
6		15570.00	43.02	54.00	-10.98	26.98	16.04	Average	334	265
7		15570.00	53.99	74.00	-20.01	37.95	16.04	Peak	334	265

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

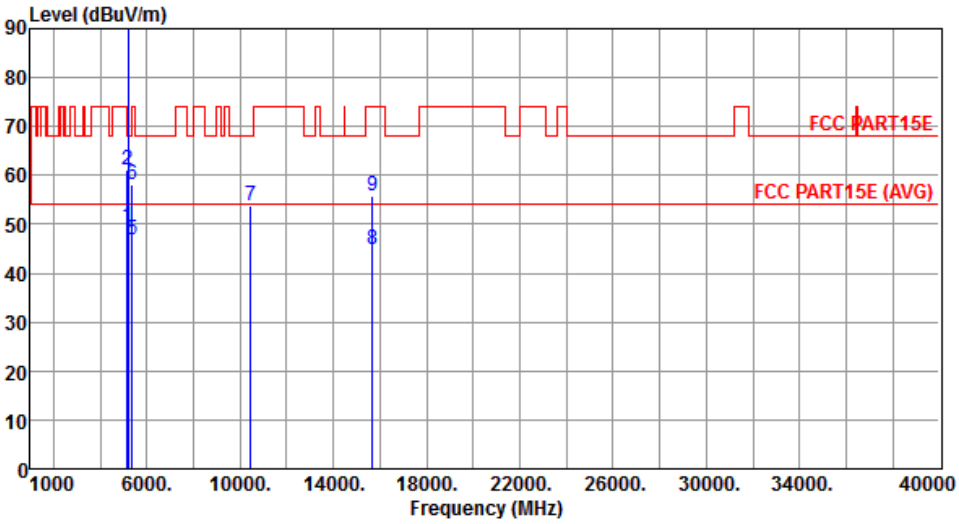
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



		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	46.49	54.00	-7.51	40.62	5.87	Average	350	325
2		5150.00	59.05	74.00	-14.95	53.18	5.87	Peak	350	325
3	*	5190.00	91.64			85.74	5.90	Average	350	325
4	*	5190.00	103.41			97.51	5.90	Peak	350	325
5		10380.00	54.63	68.20	-13.57	39.38	15.25	Peak	104	347
6		15570.00	43.97	54.00	-10.03	27.93	16.04	Average	114	63
7		15570.00	53.57	74.00	-20.43	37.53	16.04	Peak	114	63

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

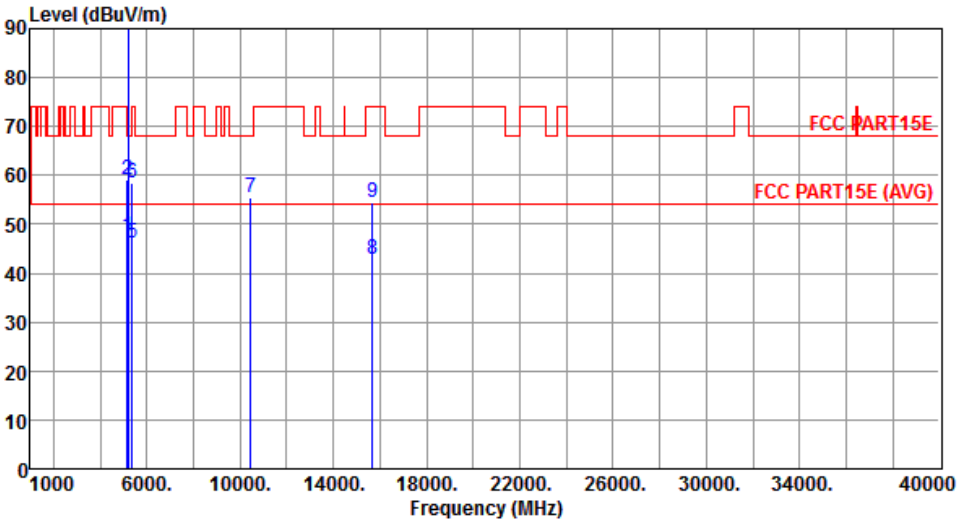
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



		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	49.48	54.00	-4.52	43.61	5.87	Average	100	47
2		5150.00	61.17	74.00	-12.83	55.30	5.87	Peak	100	47
3	*	5230.00	99.48			93.51	5.97	Average	100	47
4	*	5230.00	109.89			103.92	5.97	Peak	100	47
5		5350.00	46.69	54.00	-7.31	40.48	6.21	Average	100	47
6		5350.00	58.12	74.00	-15.88	51.91	6.21	Peak	100	47
7		10460.00	53.94	68.20	-14.26	38.60	15.34	Peak	215	194
8		15690.00	44.81	54.00	-9.19	28.92	15.89	Average	327	158
9		15690.00	55.64	74.00	-18.36	39.75	15.89	Peak	327	158

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

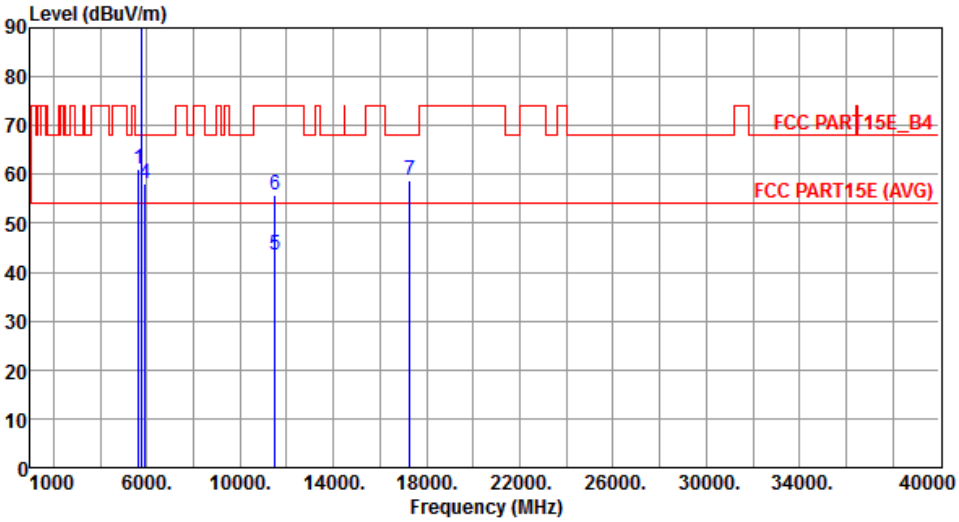
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



		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	47.64	54.00	-6.36	41.77	5.87	Average	366	338
2		5150.00	58.95	74.00	-15.05	53.08	5.87	Peak	366	338
3	*	5230.00	96.55			90.58	5.97	Average	366	338
4	*	5230.00	106.53			100.56	5.97	Peak	366	338
5		5350.00	46.29	54.00	-7.71	40.08	6.21	Average	366	338
6		5350.00	58.30	74.00	-15.70	52.09	6.21	Peak	366	338
7		10460.00	55.45	68.20	-12.75	40.11	15.34	Peak	115	308
8		15690.00	42.95	54.00	-11.05	27.06	15.89	Average	131	205
9		15690.00	54.47	74.00	-19.53	38.58	15.89	Peak	131	205

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

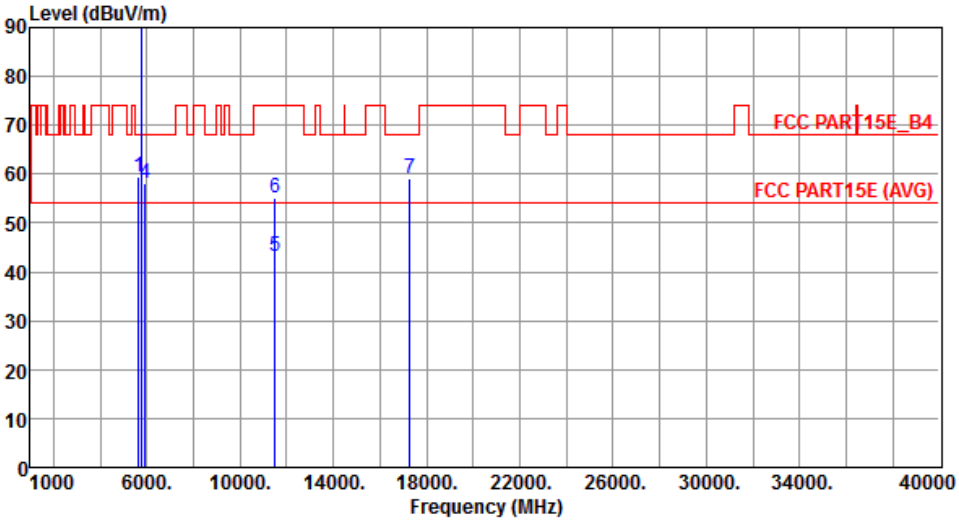
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	61.02	68.20	-7.18	54.39	6.63	Peak	100	48
2	*	5755.00	102.05			95.12	6.93	Average	100	48
3	*	5755.00	113.00			106.07	6.93	Peak	100	48
4		5925.00	58.19	68.20	-10.01	50.85	7.34	Peak	100	48
5		11510.00	43.45	54.00	-10.55	27.45	16.00	Average	147	53
6		11510.00	55.95	74.00	-18.05	39.95	16.00	Peak	147	53
7		17265.00	58.81	68.20	-9.39	40.30	18.51	Peak	100	194

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

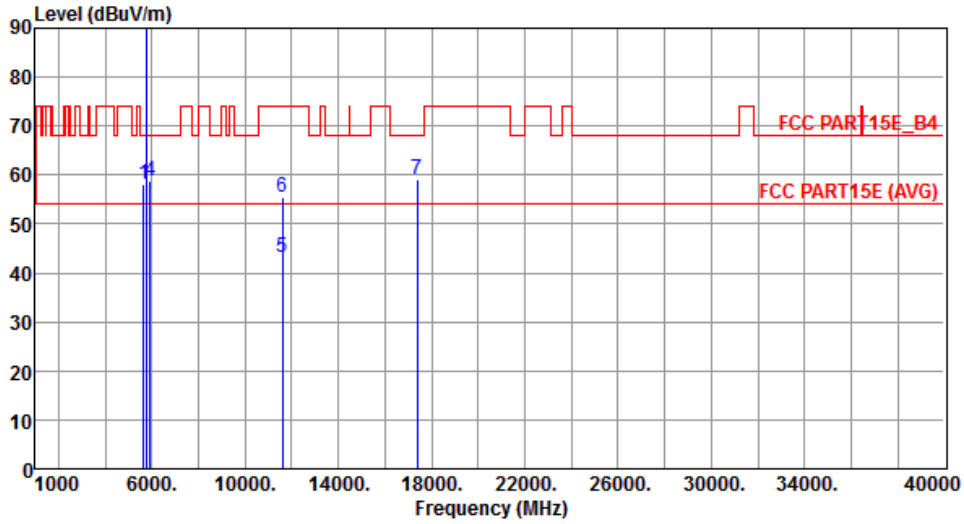
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	59.42	68.20	-8.78	52.79	6.63	Peak	368	12
2	*	5755.00	98.00			91.07	6.93	Average	368	12
3	*	5755.00	109.10			102.17	6.93	Peak	368	12
4		5925.00	57.98	68.20	-10.22	50.64	7.34	Peak	368	12
5		11510.00	43.03	54.00	-10.97	27.03	16.00	Average	261	345
6		11510.00	55.14	74.00	-18.86	39.14	16.00	Peak	261	345
7		17265.00	59.13	68.20	-9.07	40.62	18.51	Peak	114	55

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

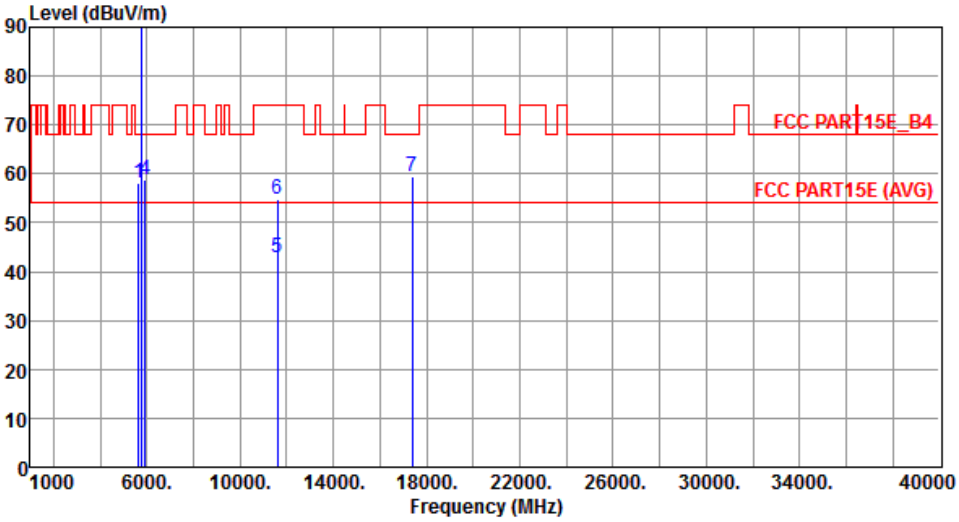
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	58.28	68.20	-9.92	51.65	6.63	Peak	100	52
2	*	5795.00	101.31			94.28	7.03	Average	100	52
3	*	5795.00	111.11			104.08	7.03	Peak	100	52
4		5925.00	58.76	68.20	-9.44	51.42	7.34	Peak	100	52
5		11590.00	43.09	54.00	-10.91	27.24	15.85	Average	124	175
6		11590.00	55.44	74.00	-18.56	39.59	15.85	Peak	124	175
7		17385.00	59.05	68.20	-9.15	40.12	18.93	Peak	216	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	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

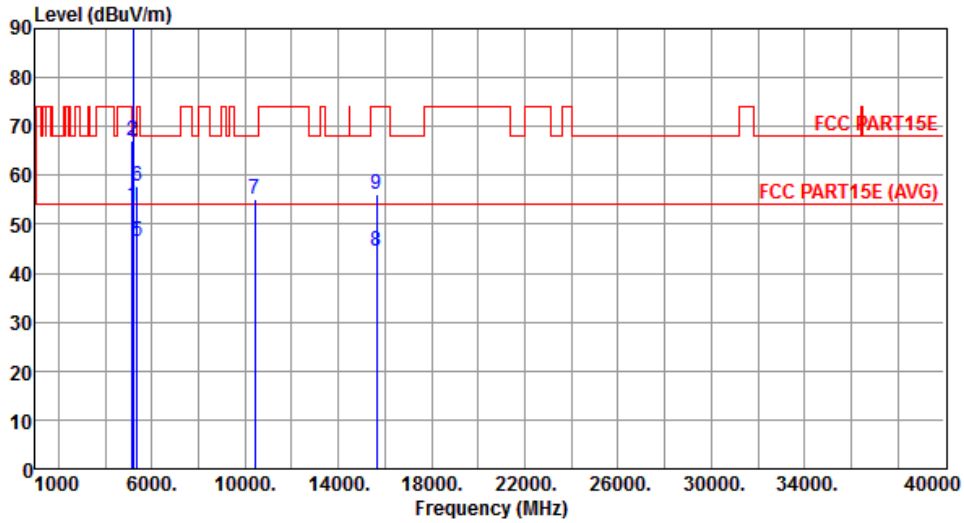


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	58.09	68.20	-10.11	51.46	6.63	Peak	337	16
2	*	5795.00	98.71			91.68	7.03	Average	337	16
3	*	5795.00	109.05			102.02	7.03	Peak	337	16
4		5925.00	58.65	68.20	-9.55	51.31	7.34	Peak	337	16
5		11590.00	43.00	54.00	-11.00	27.15	15.85	Average	115	108
6		11590.00	54.75	74.00	-19.25	38.90	15.85	Peak	115	108
7		17385.00	59.49	68.20	-8.71	40.56	18.93	Peak	193	229

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

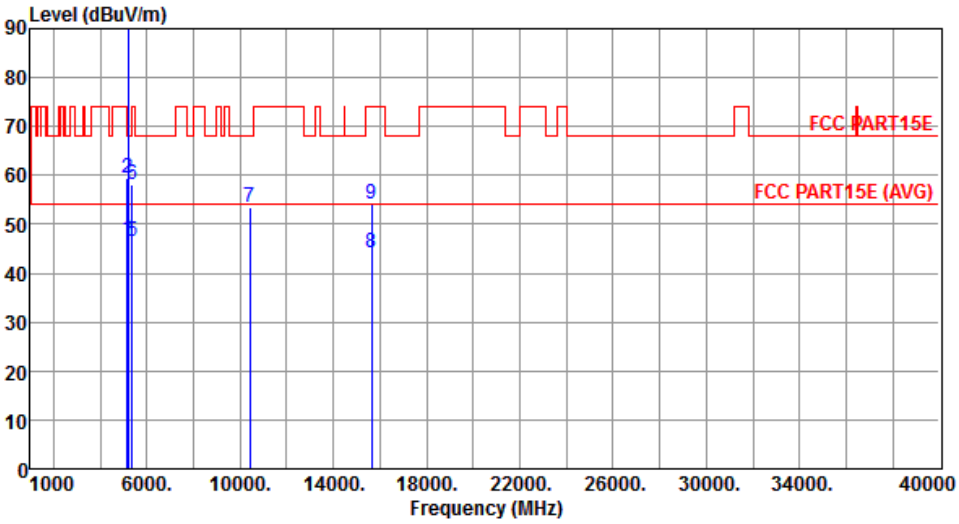
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



		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	53.65	54.00	-0.35	47.78	5.87	Average	316	55
2		5150.00	67.25	74.00	-6.75	61.38	5.87	Peak	316	55
3	*	5210.00	92.13			86.20	5.93	Average	316	55
4	*	5210.00	101.55			95.62	5.93	Peak	316	55
5		5350.00	46.50	54.00	-7.50	40.29	6.21	Average	316	55
6		5350.00	57.92	74.00	-16.08	51.71	6.21	Peak	316	55
7		10420.00	55.16	68.20	-13.04	39.86	15.30	Peak	192	316
8		15630.00	44.37	54.00	-9.63	28.41	15.96	Average	236	305
9		15630.00	56.09	74.00	-17.91	40.13	15.96	Peak	236	305

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

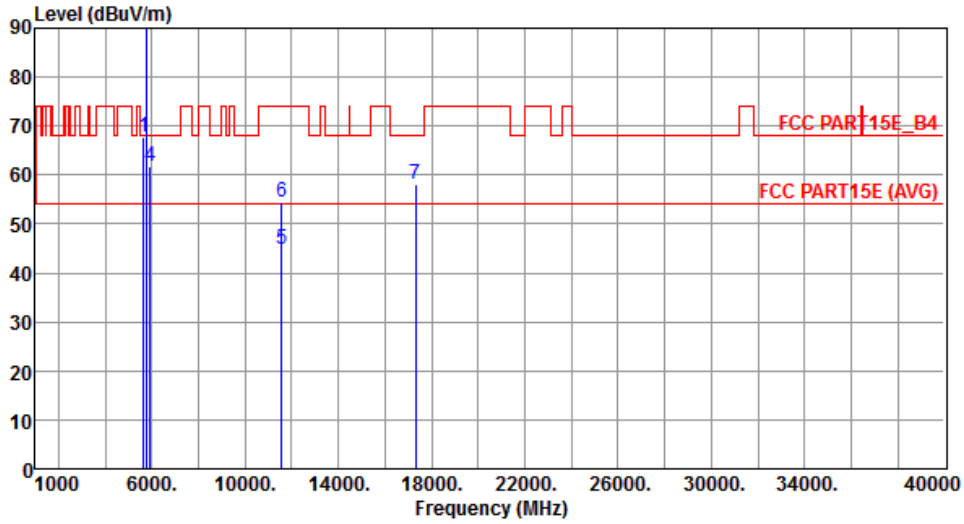
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



		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	46.85	54.00	-7.15	40.98	5.87	Average	343	308
2		5150.00	59.55	74.00	-14.45	53.68	5.87	Peak	343	308
3	*	5210.00	89.46			83.53	5.93	Average	343	308
4	*	5210.00	99.87			93.94	5.93	Peak	343	308
5		5350.00	46.58	54.00	-7.42	40.37	6.21	Average	343	308
6		5350.00	58.04	74.00	-15.96	51.83	6.21	Peak	343	308
7		10420.00	53.41	68.20	-14.79	38.11	15.30	Peak	205	243
8		15630.00	44.12	54.00	-9.88	28.16	15.96	Average	166	82
9		15630.00	54.20	74.00	-19.80	38.24	15.96	Peak	166	82

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

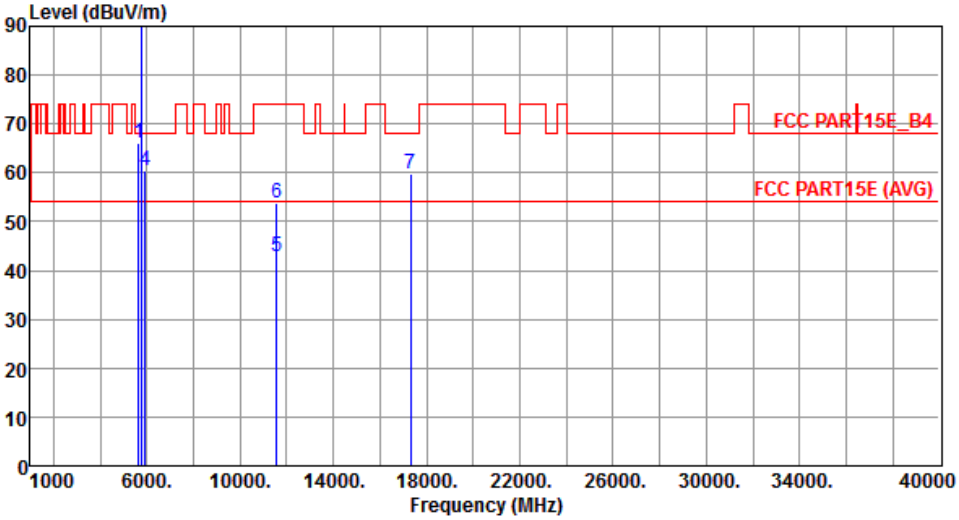
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	67.89	68.20	-0.31	61.26	6.63	Peak	100	69
2	*	5775.00	99.02			92.04	6.98	Average	100	69
3	*	5775.00	109.69			102.72	6.97	Peak	100	69
4		5925.00	61.75	68.20	-6.45	54.41	7.34	Peak	100	69
5		11550.00	44.73	54.00	-9.27	28.80	15.93	Average	125	183
6		11550.00	54.42	74.00	-19.58	38.49	15.93	Peak	125	183
7		17325.00	58.13	68.20	-10.07	39.41	18.72	Peak	100	33

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

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1		5650.00	66.07	68.20	-2.13	59.44	6.63	Peak	368	12
2	*	5775.00	95.30			88.32	6.98	Average	368	12
3	*	5775.00	106.42			99.45	6.97	Peak	368	12
4		5925.00	60.37	68.20	-7.83	53.03	7.34	Peak	368	12
5		11550.00	42.90	54.00	-11.10	26.97	15.93	Average	134	186
6		11550.00	53.78	74.00	-20.22	37.85	15.93	Peak	134	186
7		17325.00	59.85	68.20	-8.35	41.13	18.72	Peak	239	254

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

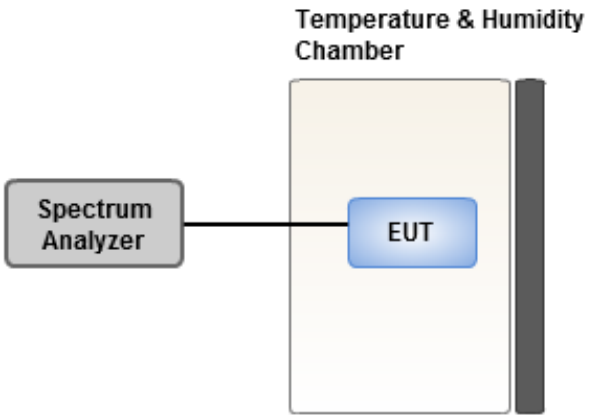
3.6.1 Limit of Frequency Stability

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	1.47	1.77	1.89	1.38
T20°CVmin	0.53	0.41	1.19	0.52
T50°CVnom	3.10	2.74	3.86	3.36
T40°CVnom	1.01	1.37	1.03	1.69
T30°CVnom	2.38	2.27	2.67	2.58
T20°CVnom	3.14	2.78	3.91	3.42
T10°CVnom	2.68	3.23	2.62	2.68
T0°CVnom	4.24	4.93	4.79	3.91
T-10°CVnom	2.92	2.86	2.77	3.31
T-20°CVnom	2.14	2.75	2.53	2.18
T-30°CVnom	1.37	1.29	0.98	1.39
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	1.50	1.41	1.63	1.39
T20°CVmin	3.81	4.34	3.84	3.84
T50°CVnom	3.93	4.48	3.94	3.98
T40°CVnom	1.98	2.22	1.88	2.61
T30°CVnom	1.70	1.88	2.37	2.20
T20°CVnom	2.52	2.56	2.38	2.97
T10°CVnom	2.52	2.88	2.20	3.16
T0°CVnom	3.67	3.61	3.77	4.17
T-10°CVnom	2.02	2.48	1.74	1.60
T-20°CVnom	1.85	1.94	2.32	2.22
T-30°CVnom	1.27	1.42	1.50	1.01
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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

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