FCC Test Report

FCC ID	:	**2ABLK-844FX-X**
Equipment	:	**GigaCenter**
Model No.	:	**844FB-1 ; 844F-1 ; 844FB-2 ; 844F-2** **(refer to item 1.1.1 for more details)**
Brand Name	:	**Calix Inc**
Applicant	:	**Calix Inc**
Address	:	**1035 N. McDowell Blvd. Petaluma, CA 94954**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Jan. 10, 2017**
Tested Date	:	**Feb. 08 ~ Mar. 07, 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
FR712305AN	Rev. 01	Initial issue	Apr. 17, 2017

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.158MHz 41.97 (Margin -4.03dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 52.99 (Margin -1.01dB) – AV [dBuV/m at 3m]: 17475.00MHz 52.99 (Margin -1.01dB) – AV [dBuV/m at 3m]: 5150.00MHz 72.99 (Margin -1.01dB) – PK [dBuV/m at 3m]: 5850.00MHz 77.19 (Margin -1.01dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	***Non-beamforming mode*** Max Power [dBm]: 5150-5250MHz: 29.47 5725-5850MHz: 27.85 ***Beamforming mode*** Max Power [dBm]: 5150-5250MHz: 29.34 5725-5850MHz: 26.97	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Product Details

The device has 4 configurations as below table.
RF function is identical to each configuration. Differences between 4 configurations are only non-RF function by depopulation of components without PCB Modifications.

Model Name	844FB-1	844FB-2	844F-1	844F-2
LAN / WAN function	4 LAN ports	4 LAN ports 1WAN port	4 LAN ports	4 LAN ports 1WAN port
G.fast function	bonding G.fast	bonding G.fast	Single G.fast	Single G.fast
Power Supply	1. Adapter 2. UPS	Adapter (DC jack)	1. Adapter 2. UPS	Adapter (DC jack)
Housing Type	Housing 1	Housing 2	Housing 1	Housing 2
Frequency band (GHz)	2.412 ~ 2.462 / 5.18 ~ 5.24 / 5.745 ~ 5.825			
Bean forming mode	Supported			
Master or Client	Master			
USB function	USB3.0			
VOIP function	VOIP (FXS)			

Note: Four models (844FB-1, 844FB-2, 844F-1 and 844F-2) had been covered during the pretest, and found that 844F-1 was the worst case and was selected for final test.

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5150-5250	a	5180-5240	36-48 [4]	4	6-54 Mbps
5150-5250	n (HT20)	5180-5240	36-48 [4]	4	MCS 0-31
5150-5250	n (HT40)	5190-5230	38-46 [2]	4	MCS 0-31
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	4	MCS 0-9
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	4	MCS 0-9
5150-5250	ac (VHT80)	5210	42 [1]	4	MCS 0-9
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]	4	6-54 Mbps
5725-5850	n (HT20)	5745-5825	149-165 [5]	4	MCS 0-31
5725-5850	n (HT40)	5755-5795	151-159 [2]	4	MCS 0-31
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	4	MCS 0-9
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	4	MCS 0-9
5725-5850	ac (VHT80)	5775	155 [1]	4	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: 802.11ac supports beamforming function.					

1.1.3 Antenna Details

Ant. No.	**Model**	**Type**	**Connector**	**Operating Frequency (MHz) / Gain (dBi)**		
				2400~2483.5	**5150~5250**	**5725~5850**
1	PCB antenna	Dipole	IPEX	0	-0.8	-1.2
2	PCB antenna	Dipole	IPEX	0	-0.8	-1.2
3	PCB antenna	Dipole	IPEX	0	-0.8	-1.2
4	PCB antenna	Dipole	IPEX	0	-0.8	-1.2

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter 12Vdc from UPS

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: MASS POWER Model: NBS65A120410M2 Power Rating: I/P: 100-240Vac, 50/60Hz, 1.5A O/P: 12Vdc, 4.1A Power Line: DC 1.2m non-shielded without core AC 1.5m non-shielded without core
2	UPS	Brand: Cyber Power Model: DTC50U12V3-G Power Rating: I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 12Vdc, 50W Power Line: DC 1.2m non-shielded without core AC 2.45m non-shielded without core

1.1.6 Channel List

For Frequency band 5150-5250 MHz			
802.11 a / HT20 / VHT20		**HT40 / VHT40**	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	**VHT80**	
48	5240	42	5210

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

1.1.7 Test Tool and Duty Cycle

Test Tool	Non-beamforming: MTool, Version: 3.0.0.1 Beamforming: LanTest20, Version: 2.0.0.2				
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	99.26%	0.03	99.57%	0.02
	VHT40	98.24%	0.08	98.25%	0.08
	VHT80	99.24%	0.03	96.82%	0.14

1.1.8 Power Setting

For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5180	82	---
11a	5200	92	---
11a	5240	92	---
HT20	5180	80	80
HT20	5200	92	92
HT20	5240	92	92
HT40	5190	64	64
HT40	5230	70	70
VHT20	5180	80	80
VHT20	5200	92	92
VHT20	5240	92	92
VHT40	5190	64	64
VHT40	5230	70	70
VHT80	5210	60	60

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5745	72	---
11a	5785	84	---
11a	5825	84	---
HT20	5745	68	66
HT20	5785	84	84
HT20	5825	84	84
HT40	5755	62	60
HT40	5795	82	82
VHT20	5745	68	66
VHT20	5785	84	84
VHT20	5825	84	84
VHT40	5755	62	60
VHT40	5795	82	82
VHT80	5775	62	62

1.2 Local Support Equipment List

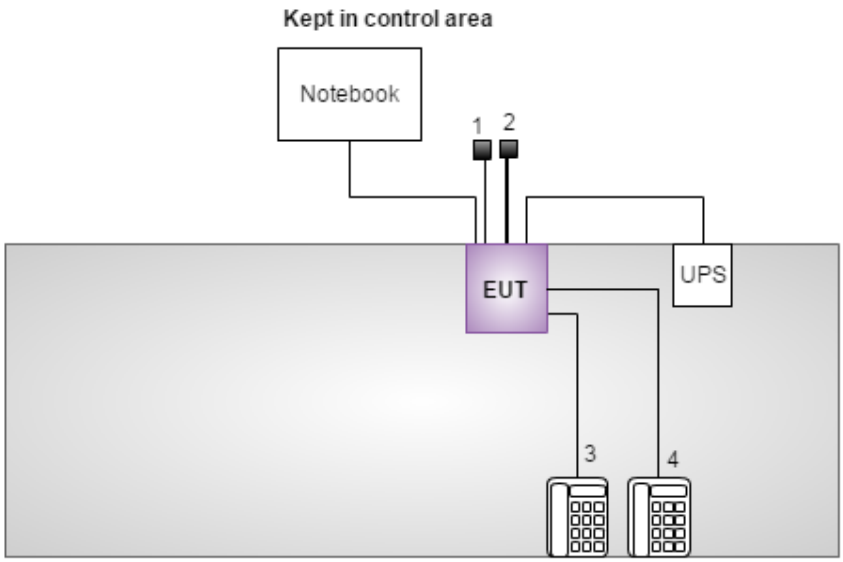
Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E6430	DoC	RJ45, 10m non-shielded.
2	Telephone	HTT	HTT-806	---	RJ11, 1.5m non-shielded
3	Telephone	HTT	HTT-806	---	RJ11, 1.5m non-shielded
4	Load	ICC	---	---	RJ45, 1m(x3) non-shielded.
5	Load	ICC	---	---	RJ11, 1.5m non-shielded.
6	Client	ASUS	PCE-AC88	MSQ-PCIE 0U00	---

Note: No. 6 was supplied by applicant.

1.3 Test Setup Chart

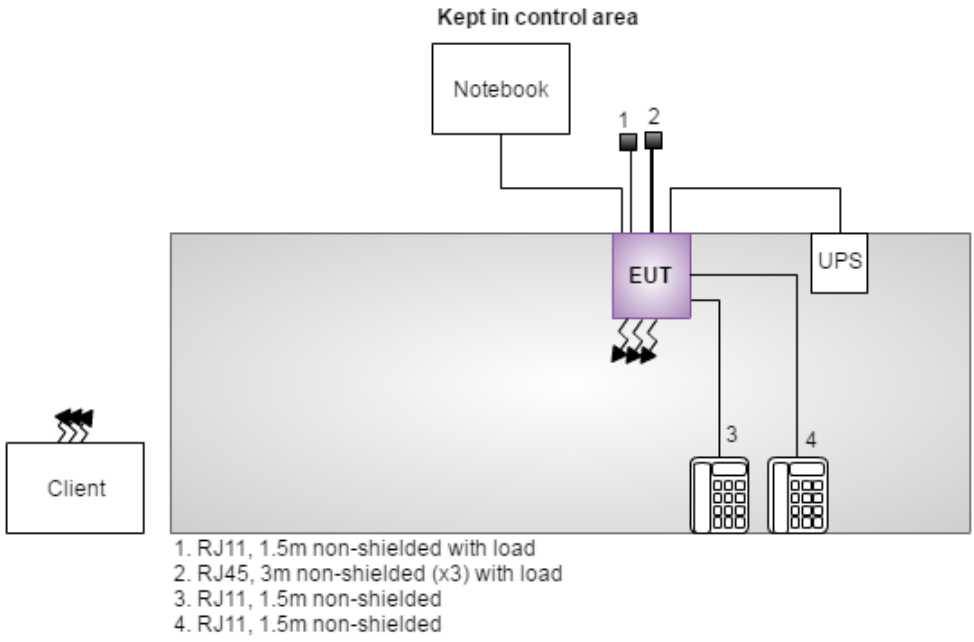
Non-beamforming mode

Test Setup Diagram



1. RJ11, 1.5m non-shielded with load
2. RJ45, 3m non-shielded (x3) with load
3. RJ11, 1.5m non-shielded
4. RJ11, 1.5m non-shielded

Beamforming mode

Test Setup Diagram
 1. RJ11, 1.5m non-shielded with load 2. RJ45, 3m non-shielded (x3) with load 3. RJ11, 1.5m non-shielded 4. RJ11, 1.5m non-shielded

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Dec. 21, 2016	Dec. 20, 2017
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 08, 2016	Nov. 07, 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 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Nov. 25, 2016	Nov. 24, 2017
Receiver	R&S	ESR3	101658	Nov. 24, 2016	Nov. 23, 2017
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 04, 2016	Aug. 03, 2017
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 21, 2016	Dec. 20, 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	980225	Aug. 05, 2016	Aug. 04, 2017
Preamplifier	Agilent	83017A	MY39501308	Oct. 06, 2016	Oct. 05, 2017
Preamplifier	EMC	EMC184045B	980192	Aug. 24, 2016	Aug. 23, 2017
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 09, 2016	Dec. 08, 2017
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 09, 2016	Dec. 08, 2017
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 09, 2016	Dec. 08, 2017
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	16052	Dec. 09, 2016	Dec. 08, 2017
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 09, 2016	Dec. 08, 2017
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 09, 2016	Dec. 08, 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)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	ROHDE&SCHWARZ	FSV40	101486	Nov. 15, 2016	Nov. 14, 2017
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 21, 2016	Nov. 20, 2017
Power Meter	Anritsu	ML2495A	1241002	Oct. 06, 2016	Oct. 05, 2017
Power Sensor	Anritsu	MA2411B	1207366	Oct. 06, 2016	Oct. 05, 2017
AC POWER SOURCE	APC	AFC-500W	F312060012	Oct. 28, 2016	Oct. 27, 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	±5.63 dB
Time	±0.1%
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	17°C / 59%	Howard Huang
Radiated Emissions	03CH01-WS	20-22°C / 61-64%	Vincent Yeh Kevin Lee
RF Conducted	TH01-WS	21°C / 64%	Brad Wu

- FCC Designation.: TW2732
- FCC site registration No.: 181692
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

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

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.
2. Two power supply (Adapter and UPS) had been covered during the pretest, and found that conducted emissions with adapter and radiated Emissions with UPS were the worst case for final test.

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

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.
2. Two power supply (Adapter and UPS) had been covered during the pretest, and found that conducted emissions with adapter and radiated Emissions with UPS were the worst case for final test.

Beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT20	5200	MCS 0	---
Radiated Emissions ≤1GHz	VHT20	5200	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: 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. 2. Two power supply (Adapter and UPS) had been covered during the pretest, and found that conducted emissions with adapter and radiated Emissions with UPS were the worst case for final test.				

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT40	5795	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5795	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: 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. 2. Two power supply (Adapter and UPS) had been covered during the pretest, and found that conducted emissions with adapter and radiated Emissions with UPS were the worst case for final test.				

3 Transmitter Test Results

3.1 Conducted Emissions

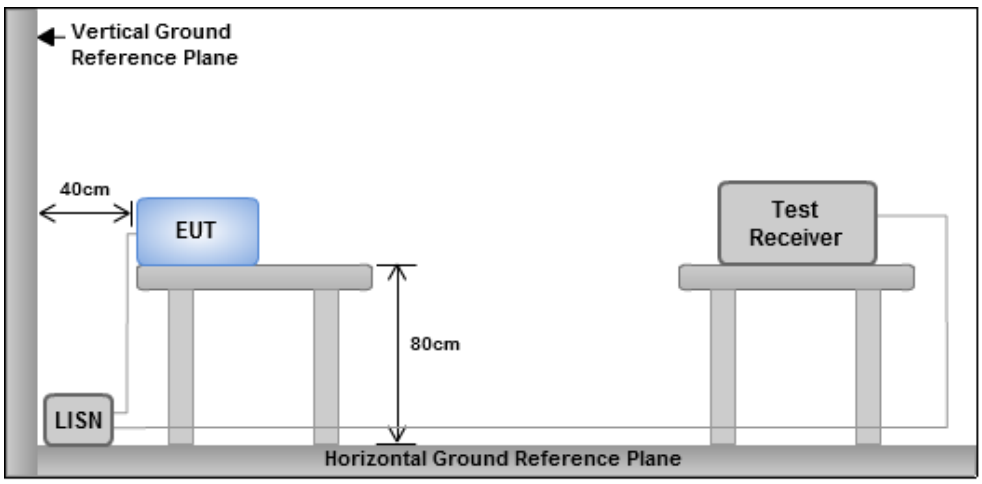
3.1.1 Limit of Conducted Emissions

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



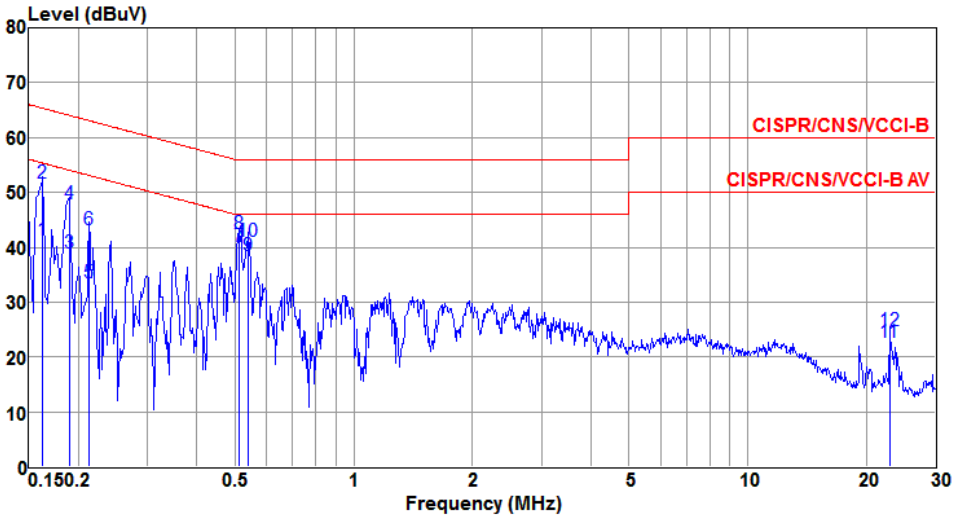
Note: 1. Support units were connected to second LISN.

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

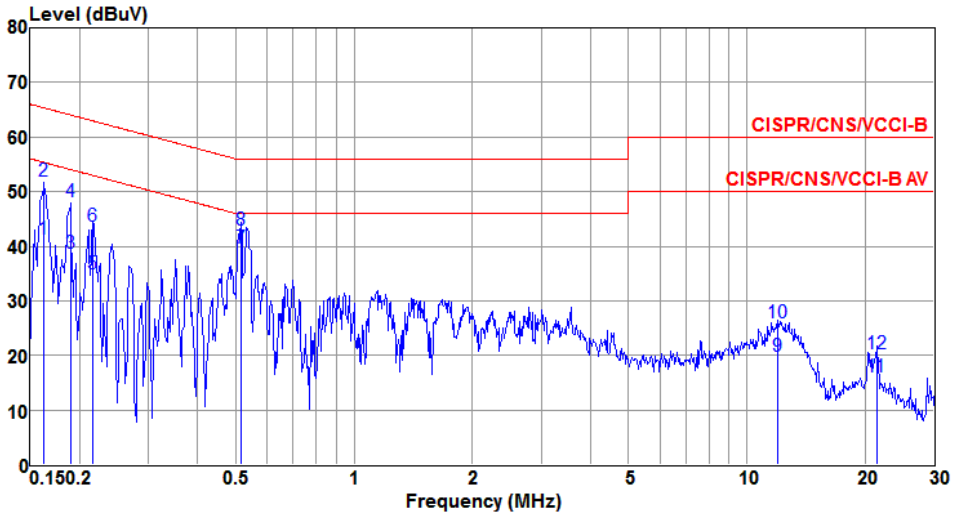
Modulation	11a	Test Freq. (MHz)	5200
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.162	41.28	55.34	-14.06	41.18	0.08	0.02	Average
2	0.162	51.79	65.34	-13.55	51.69	0.08	0.02	QP
3	0.189	38.83	54.06	-15.23	38.72	0.09	0.02	Average
4	0.189	47.84	64.06	-16.22	47.73	0.09	0.02	QP
5	0.213	33.60	53.10	-19.50	33.48	0.10	0.02	Average
6	0.213	43.20	63.10	-19.90	43.08	0.10	0.02	QP
7@	0.510	40.11	46.00	-5.89	40.01	0.06	0.04	Average
8	0.510	42.50	56.00	-13.50	42.40	0.06	0.04	QP
9	0.541	38.48	46.00	-7.52	38.38	0.06	0.04	Average
10	0.541	41.16	56.00	-14.84	41.06	0.06	0.04	QP
11	22.896	22.75	50.00	-27.25	22.11	0.42	0.22	Average
12	22.896	24.69	60.00	-35.31	24.05	0.42	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).

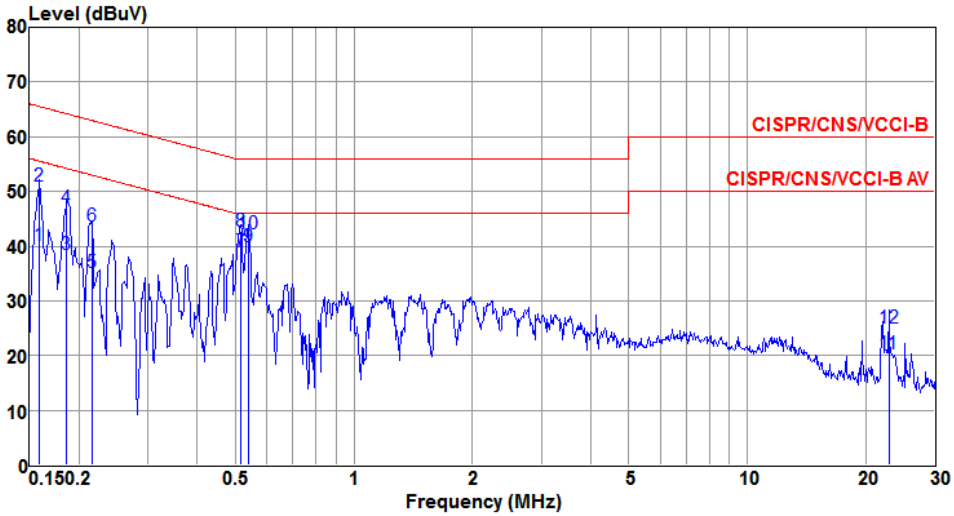
Modulation	11a	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.162	41.30	55.34	-14.04	41.18	0.10	0.02	Average
2	0.162	52.03	65.34	-13.31	51.91	0.10	0.02	QP
3	0.189	38.80	54.06	-15.26	38.69	0.09	0.02	Average
4	0.189	48.16	64.06	-15.90	48.05	0.09	0.02	QP
5	0.216	34.96	52.96	-18.00	34.85	0.09	0.02	Average
6	0.216	43.66	62.96	-19.30	43.55	0.09	0.02	QP
7@	0.516	39.57	46.00	-6.43	39.41	0.12	0.04	Average
8	0.516	43.07	56.00	-12.93	42.91	0.12	0.04	QP
9	11.996	19.74	50.00	-30.26	19.22	0.34	0.18	Average
10	11.996	25.97	60.00	-34.03	25.45	0.34	0.18	QP
11	21.373	15.95	50.00	-34.05	15.34	0.42	0.19	Average
12	21.373	20.20	60.00	-39.80	19.59	0.42	0.19	QP

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

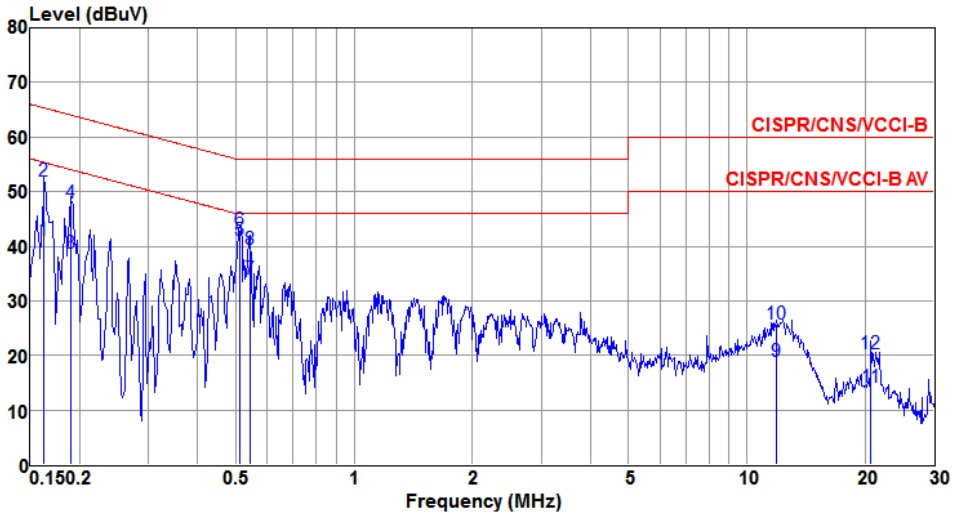
Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.159	40.02	55.52	-15.50	39.92	0.08	0.02	Average
2	0.159	50.92	65.52	-14.60	50.82	0.08	0.02	QP
3	0.186	38.46	54.20	-15.74	38.35	0.09	0.02	Average
4	0.186	46.88	64.20	-17.32	46.77	0.09	0.02	QP
5	0.216	35.08	52.96	-17.88	34.96	0.10	0.02	Average
6	0.216	43.60	62.96	-19.36	43.48	0.10	0.02	QP
7	0.516	38.92	46.00	-7.08	38.82	0.06	0.04	Average
8	0.516	42.74	56.00	-13.26	42.64	0.06	0.04	QP
9@	0.538	39.78	46.00	-6.22	39.68	0.06	0.04	Average
10	0.538	42.14	56.00	-13.86	42.04	0.06	0.04	QP
11	22.896	20.25	50.00	-29.75	19.61	0.42	0.22	Average
12	22.896	24.91	60.00	-35.09	24.27	0.42	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	11a	Test Freq. (MHz)	5785
Power Phase	Neutral		

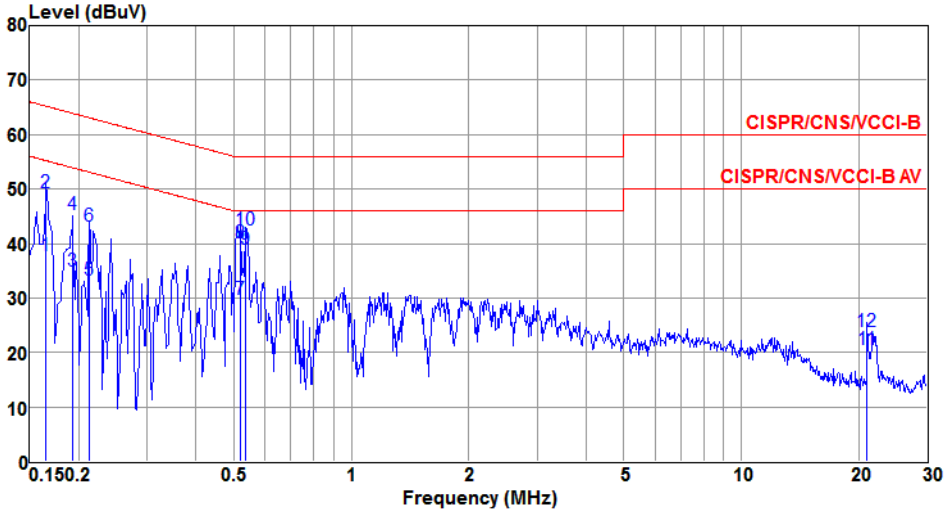


	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.162	41.02	55.34	-14.32	40.90	0.10	0.02	Average
2	0.162	51.92	65.34	-13.42	51.80	0.10	0.02	QP
3	0.189	38.82	54.06	-15.24	38.71	0.09	0.02	Average
4	0.189	48.00	64.06	-16.06	47.89	0.09	0.02	QP
5@	0.510	41.15	46.00	-4.85	40.99	0.12	0.04	Average
6	0.510	42.96	56.00	-13.04	42.80	0.12	0.04	QP
7	0.544	33.95	46.00	-12.05	33.79	0.12	0.04	Average
8	0.544	39.46	56.00	-16.54	39.30	0.12	0.04	QP
9	11.933	18.98	50.00	-31.02	18.47	0.33	0.18	Average
10	11.933	25.74	60.00	-34.26	25.23	0.33	0.18	QP
11	20.704	14.17	50.00	-35.83	13.57	0.42	0.18	Average
12	20.704	20.40	60.00	-39.60	19.80	0.42	0.18	QP

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

Beamforming mode

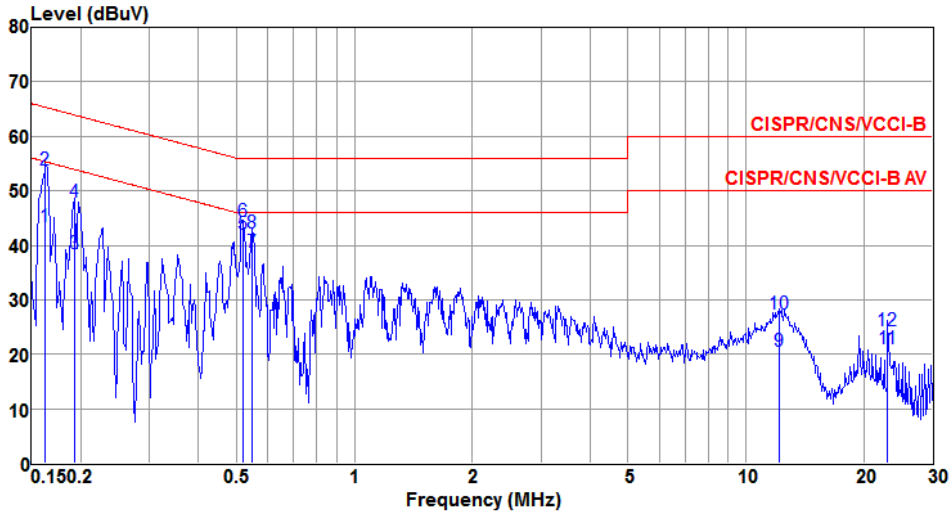
Modulation	VHT20	**Test Freq. (MHz)**	5200
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.165	37.73	55.21	-17.48	37.63	0.08	0.02	Average
2	0.165	49.32	65.21	-15.89	49.22	0.08	0.02	QP
3	0.192	34.92	53.93	-19.01	34.80	0.10	0.02	Average
4	0.192	45.35	63.93	-18.58	45.23	0.10	0.02	QP
5	0.213	33.33	53.10	-19.77	33.21	0.10	0.02	Average
6	0.213	43.25	63.10	-19.85	43.13	0.10	0.02	QP
7	0.521	29.77	46.00	-16.23	29.67	0.06	0.04	Average
8	0.521	40.10	56.00	-15.90	40.00	0.06	0.04	QP
9@	0.535	38.91	46.00	-7.09	38.81	0.06	0.04	Average
10	0.535	42.51	56.00	-13.49	42.41	0.06	0.04	QP
11	21.035	20.44	50.00	-29.56	19.84	0.41	0.19	Average
12	21.035	23.91	60.00	-36.09	23.31	0.41	0.19	QP

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

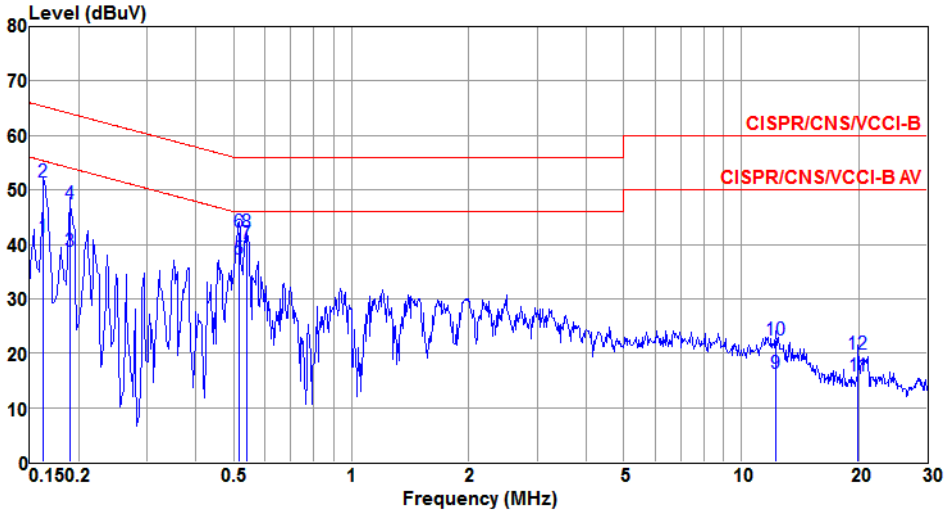
Modulation	VHT20	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.162	43.46	55.34	-11.88	43.34	0.10	0.02	Average
2	0.162	53.81	65.34	-11.53	53.69	0.10	0.02	QP
3	0.192	38.37	53.93	-15.56	38.26	0.09	0.02	Average
4	0.192	48.01	63.93	-15.92	47.90	0.09	0.02	QP
5@	0.518	41.97	46.00	-4.03	41.81	0.12	0.04	Average
6	0.518	44.27	56.00	-11.73	44.11	0.12	0.04	QP
7	0.549	38.80	46.00	-7.20	38.64	0.12	0.04	Average
8	0.549	42.18	56.00	-13.82	42.02	0.12	0.04	QP
9	12.124	20.59	50.00	-29.41	20.07	0.34	0.18	Average
10	12.124	27.34	60.00	-32.66	26.82	0.34	0.18	QP
11	23.018	20.92	50.00	-29.08	20.26	0.44	0.22	Average
12	23.018	24.33	60.00	-35.67	23.67	0.44	0.22	QP

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

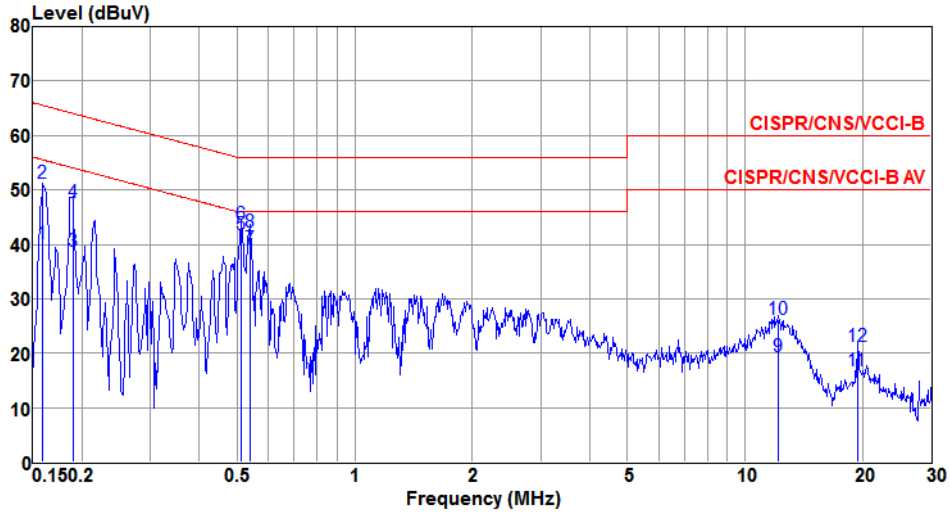
Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.162	41.20	55.34	-14.14	41.10	0.08	0.02	Average
2	0.162	51.39	65.34	-13.95	51.29	0.08	0.02	QP
3	0.189	38.82	54.06	-15.24	38.71	0.09	0.02	Average
4	0.189	47.50	64.06	-16.56	47.39	0.09	0.02	QP
5	0.516	37.38	46.00	-8.62	37.28	0.06	0.04	Average
6	0.516	42.31	56.00	-13.69	42.21	0.06	0.04	QP
7@	0.538	40.03	46.00	-5.97	39.93	0.06	0.04	Average
8	0.538	42.14	56.00	-13.86	42.04	0.06	0.04	QP
9	12.253	16.26	50.00	-33.74	15.81	0.26	0.19	Average
10	12.253	22.39	60.00	-37.61	21.94	0.26	0.19	QP
11	19.950	15.71	50.00	-34.29	15.14	0.40	0.17	Average
12	19.950	19.88	60.00	-40.12	19.31	0.40	0.17	QP

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

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



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	
1	0.159	40.21	55.52	-15.31	40.09	0.10	0.02	Average
2	0.159	51.10	65.52	-14.42	50.98	0.10	0.02	QP
3	0.189	38.61	54.06	-15.45	38.50	0.09	0.02	Average
4	0.189	47.79	64.06	-16.27	47.68	0.09	0.02	QP
5@	0.513	41.68	46.00	-4.32	41.52	0.12	0.04	Average
6	0.513	43.55	56.00	-12.45	43.39	0.12	0.04	QP
7	0.538	39.15	46.00	-6.85	38.99	0.12	0.04	Average
8	0.538	42.27	56.00	-13.73	42.11	0.12	0.04	QP
9	12.188	19.44	50.00	-30.56	18.92	0.34	0.18	Average
10	12.188	26.09	60.00	-33.91	25.57	0.34	0.18	QP
11	19.428	16.87	50.00	-33.13	16.29	0.41	0.17	Average
12	19.428	21.24	60.00	-38.76	20.66	0.41	0.17	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

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

3.2.2 Test Procedures

26dB Bandwidth

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

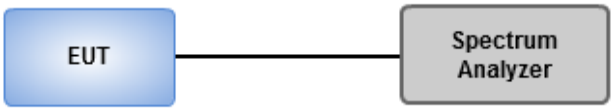
Occupied Bandwidth

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

6dB Bandwidth

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

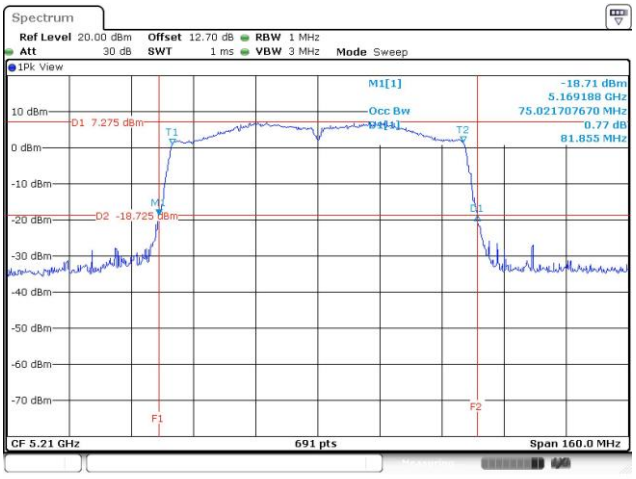
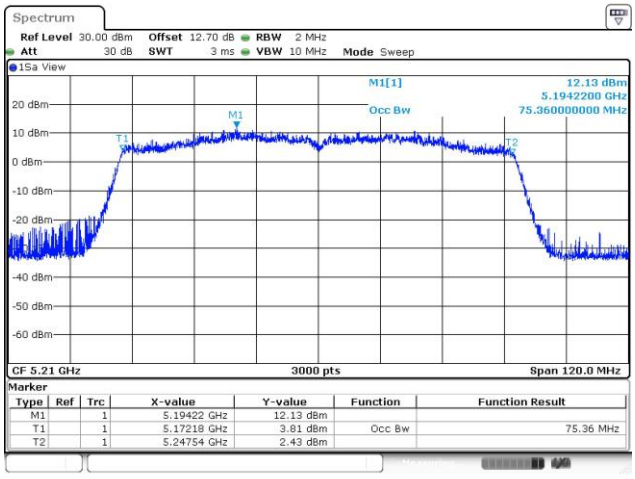
3.2.3 Test Setup



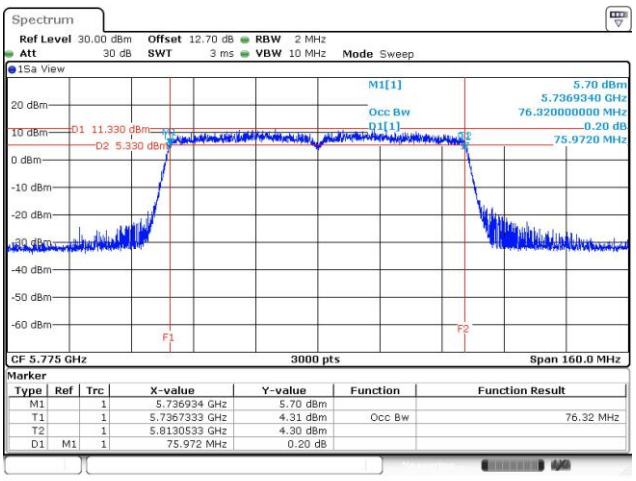
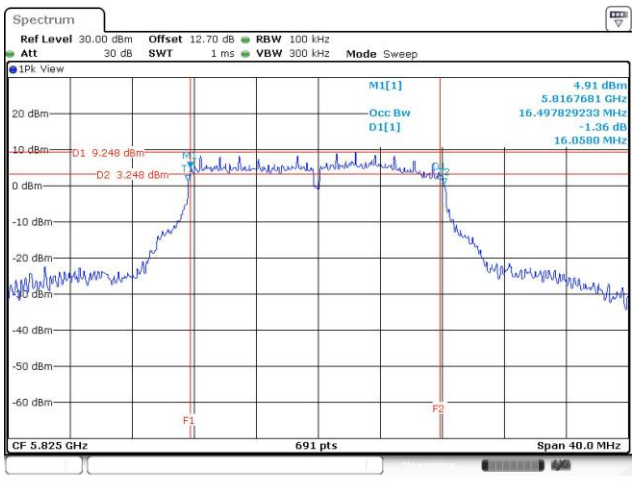
3.2.4 Test Result of Emission Bandwidth

Non-beamforming mode

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
11a	4	5180	27.65	21.62	21.57	22.03	17.07	17.01	16.99	16.96
11a	4	5200	40.22	37.97	39.71	39.28	17.56	17.48	17.56	17.32
11a	4	5240	40.07	38.70	40.00	39.71	17.44	17.45	17.46	17.18
VHT20	4	5180	28.41	27.94	22.32	29.80	18.12	17.98	18.03	17.97
VHT20	4	5200	43.26	41.74	41.59	42.83	18.55	18.33	18.44	18.24
VHT20	4	5240	42.17	40.43	44.20	43.41	18.45	18.29	18.43	18.31
VHT40	4	5190	40.81	40.70	40.58	40.70	36.62	36.62	36.50	36.54
VHT40	4	5230	41.04	49.51	48.23	41.51	36.68	36.74	36.58	36.66
VHT80	4	5210	81.86	80.93	80.93	80.93	75.28	75.36	75.16	75.20

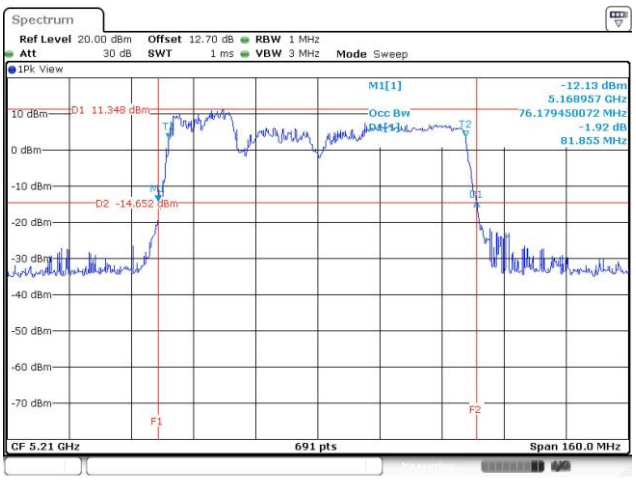
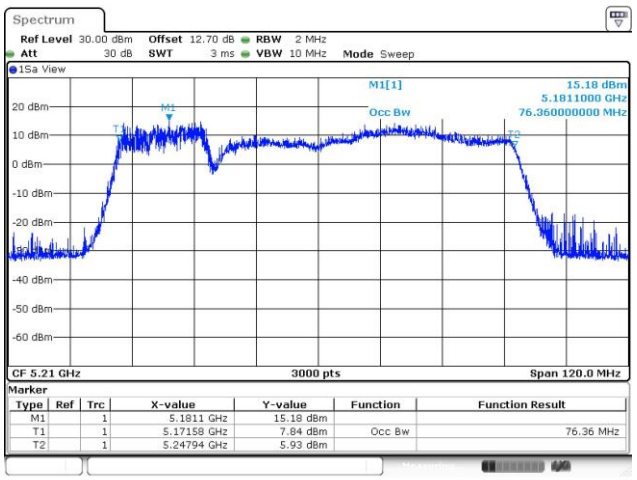
Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	4	5745	17.07	16.96	16.80	16.95	16.35	16.35	16.35	16.41	0.5
11a	4	5785	17.21	17.09	16.96	17.19	16.41	16.35	16.29	16.35	0.5
11a	4	5825	17.21	17.07	16.99	17.25	16.29	16.06	16.29	16.29	0.5
VHT20	4	5745	18.09	17.89	17.91	17.93	17.57	17.62	17.57	17.62	0.5
VHT20	4	5785	18.28	18.16	18.16	18.25	17.57	17.57	17.57	17.57	0.5
VHT20	4	5825	18.32	18.11	18.23	18.28	17.57	17.62	17.57	17.57	0.5
VHT40	4	5755	36.59	36.51	36.69	36.64	36.29	36.41	36.41	36.29	0.5
VHT40	4	5795	36.85	36.75	37.01	36.93	36.29	36.29	36.29	36.29	0.5
VHT80	4	5775	76.11	76.00	76.32	76.11	76.06	76.29	76.29	76.06	0.5

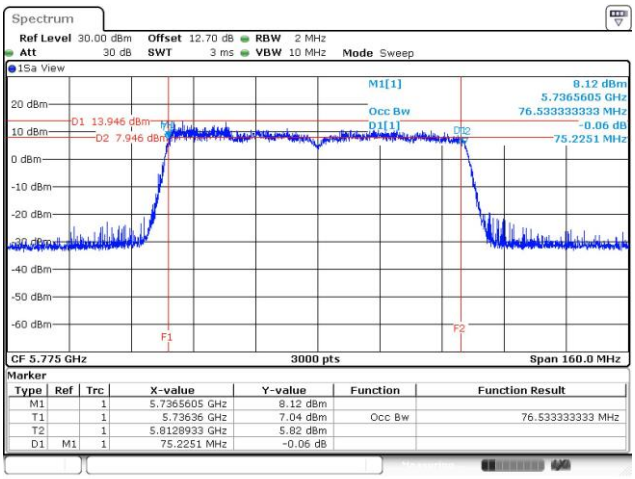
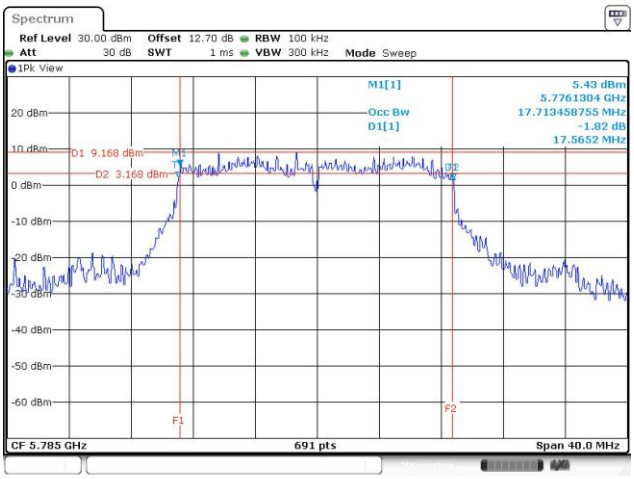
Worst Plot of 99% Bandwidth	Worst Plot of 6dB Bandwidth
	

Beamforming mode

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
Mode	**N_{TX}**	**Freq. (MHz)**	**26dB Bandwidth (MHz)**				**99% Bandwidth (MHz)**			
			Chain 0	**Chain 1**	**Chain 2**	**Chain 3**	**Chain 0**	**Chain 1**	**Chain 2**	**Chain 3**
VHT20	4	5180	34.28	26.74	28.26	36.09	18.13	18.18	18.14	18.13
VHT20	4	5200	40.65	36.88	40.65	38.99	18.34	18.53	18.48	18.47
VHT20	4	5240	39.86	38.77	34.64	39.86	18.40	18.35	18.40	18.21
VHT40	4	5190	41.04	41.28	40.81	40.58	36.60	36.88	36.42	36.56
VHT40	4	5230	40.70	40.93	41.28	40.81	36.70	36.86	36.90	36.42
VHT80	4	5210	80.00	81.86	79.77	80.70	75.80	76.36	74.76	75.96

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

For Frequency band 5725-5850 MHz											
Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
VHT20	4	5745	17.95	17.89	17.84	18.05	17.62	17.57	17.62	17.62	0.5
VHT20	4	5785	18.15	18.09	18.04	18.23	17.57	17.57	17.57	17.57	0.5
VHT20	4	5825	18.19	18.11	18.03	18.23	17.57	17.57	17.62	17.57	0.5
VHT40	4	5755	36.69	36.67	36.43	36.56	35.71	36.29	36.06	36.06	0.5
VHT40	4	5795	36.93	36.96	36.77	36.83	36.29	36.29	36.52	35.71	0.5
VHT80	4	5775	76.21	76.53	76.32	76.32	75.83	75.83	75.83	73.04	0.5

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

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

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

3.3.2 Test Procedures

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

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

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

Non-beamforming mode

For Frequency band 5150-5250 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	4	5180	21.13	20.82	21.1	20.86	501.223	27.00	30.00
11a	4	5200	23.49	23.3	23.57	23.45	885.973	**29.47**	30.00
11a	4	5240	23.54	23.28	23.53	23.25	875.530	29.42	30.00
HT20	4	5180	21.00	20.33	20.77	20.39	462.582	26.65	30.00
HT20	4	5200	23.54	23.17	23.54	23.26	871.215	29.40	30.00
HT20	4	5240	23.41	23.21	23.46	23.20	859.441	29.34	30.00
HT40	4	5190	16.59	16.22	16.44	16.19	173.130	22.38	30.00
HT40	4	5230	17.78	17.89	17.77	17.65	239.548	23.79	30.00
VHT20	4	5180	21.04	20.41	20.82	20.46	468.913	26.71	30.00
VHT20	4	5200	23.57	23.21	23.58	23.21	874.366	29.42	30.00
VHT20	4	5240	23.46	23.26	23.51	23.24	868.907	29.39	30.00
VHT40	4	5190	16.64	16.28	16.49	16.23	175.135	22.43	30.00
VHT40	4	5230	17.86	17.93	17.81	17.69	242.325	23.84	30.00
VHT80	4	5210	15.93	15.6	15.43	15.61	146.788	21.67	30.00

For Frequency band 5725-5850 MHz									
Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	4	5745	18.62	18.5	18.91	18.94	299.719	24.77	30.00
11a	4	5785	21.78	21.62	21.82	22.1	610.108	**27.85**	30.00
11a	4	5825	21.75	21.64	21.45	21.8	586.498	27.68	30.00
HT20	4	5745	17.58	17.49	17.78	17.88	234.740	23.71	30.00
HT20	4	5785	21.79	21.74	21.72	21.71	597.133	27.76	30.00
HT20	4	5825	21.72	21.71	21.36	21.30	568.515	27.55	30.00
HT40	4	5755	16.30	16.00	16.01	16.44	166.427	22.21	30.00
HT40	4	5795	20.89	21.07	21.36	21.50	528.709	27.23	30.00
VHT20	4	5745	17.62	17.52	17.84	17.93	237.204	23.75	30.00
VHT20	4	5785	21.83	21.77	21.74	21.75	601.622	27.79	30.00
VHT20	4	5825	21.76	21.75	21.41	21.34	574.093	27.59	30.00
VHT40	4	5755	16.34	16.02	16.06	16.48	167.875	22.25	30.00
VHT40	4	5795	20.94	21.11	21.44	21.53	534.836	27.28	30.00
VHT80	4	5775	15.96	15.65	16.03	16.49	160.826	22.06	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	4	5180	20.84	20.25	20.51	20.23	445.163	26.49	30.00
11n HT20	4	5200	23.21	23.15	23.32	23.11	835.377	29.22	30.00
11n HT20	4	5240	23.35	23.02	23.31	23.02	831.455	29.20	30.00
11n HT40	4	5190	16.48	16.02	16.21	16.05	166.512	22.21	30.00
11n HT40	4	5230	17.61	17.70	17.58	17.42	229.048	23.60	30.00
VHT20	4	5180	20.98	20.36	20.68	20.35	459.299	26.62	30.00
VHT20	4	5200	23.35	23.26	23.45	23.22	859.311	**29.34**	30.00
VHT20	4	5240	23.46	23.19	23.43	23.11	855.206	29.32	30.00
VHT40	4	5190	16.59	16.11	16.32	16.17	170.690	22.32	30.00
VHT40	4	5230	17.75	17.82	17.69	17.57	235.997	23.73	30.00
VHT80	4	5210	15.81	15.49	15.25	15.49	142.403	21.54	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			
11n HT20	4	5745	17.32	16.34	16.92	17.14	197.968	22.97	30.00
11n HT20	4	5785	20.93	20.81	19.96	19.94	442.094	26.46	30.00
11n HT20	4	5825	20.82	20.95	20.42	20.06	456.778	26.60	30.00
11n HT40	4	5755	15.51	15.42	16.45	16.41	158.306	21.99	30.00
11n HT40	4	5795	20.32	20.71	21.42	20.75	482.933	26.84	30.00
VHT20	4	5745	17.41	16.45	17.02	17.22	202.311	23.06	30.00
VHT20	4	5785	21.02	20.93	20.08	20.04	453.138	26.56	30.00
VHT20	4	5825	20.95	21.08	20.56	20.18	470.679	26.73	30.00
VHT40	4	5755	15.62	15.53	16.58	16.55	162.887	22.12	30.00
VHT40	4	5795	20.43	20.86	21.55	20.89	497.940	26.97	30.00
VHT80	4	5775	16.01	15.78	16.29	15.73	157.718	21.98	30.00

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

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

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

3.4.2 Test Procedures

For 5150 ~ 5250 MHz

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

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

☒ Method SA-2 Alternative (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

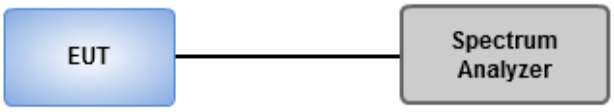
☒ Method SA-1 (Non- Beamforming: all modes / Beamforming: VHT20/VHT40)

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

☒ Method SA-2 Alternative (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



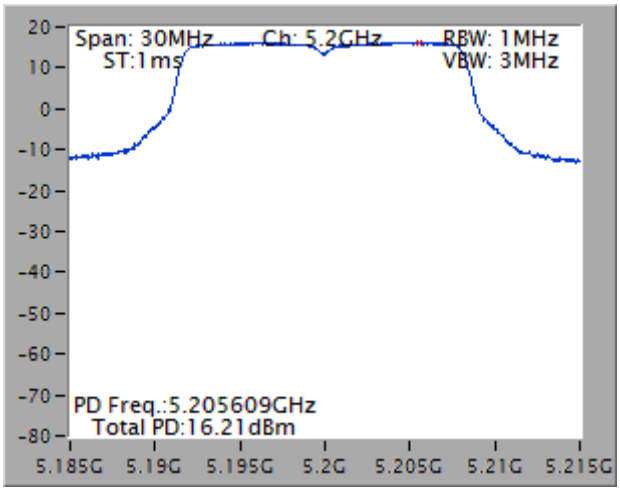
3.4.4 Test Result of Peak Power Spectral Density

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	4	5180	13.99	0.00	13.99	17
11a	4	5200	16.21	0.00	16.21	17
11a	4	5240	16.08	0.00	16.08	17
VHT20	4	5180	13.25	0.00	13.25	17
VHT20	4	5200	16.02	0.00	16.02	17
VHT20	4	5240	15.83	0.00	15.83	17
VHT40	4	5190	6.14	0.00	6.14	17
VHT40	4	5230	7.31	0.00	7.31	17
VHT80	4	5210	2.40	0.00	2.40	17

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

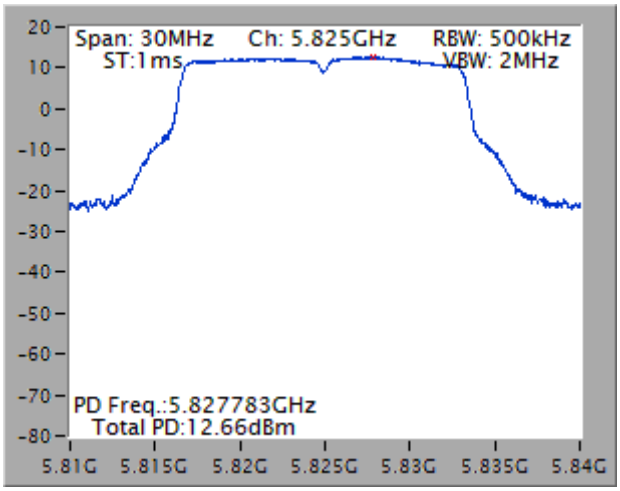
Worst Plot



For Frequency band 5725-5850 MHz						
Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
11a	4	5745	9.58	0.00	9.58	30
11a	4	5785	12.51	0.00	12.51	30
11a	4	5825	12.66	0.00	12.66	30
VHT20	4	5745	8.16	0.00	8.16	30
VHT20	4	5785	12.40	0.00	12.40	30
VHT20	4	5825	12.37	0.00	12.37	30
VHT40	4	5755	3.63	0.00	3.63	30
VHT40	4	5795	8.70	0.00	8.70	30
VHT80	4	5775	0.19	0.00	0.19	30

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

Worst Plot

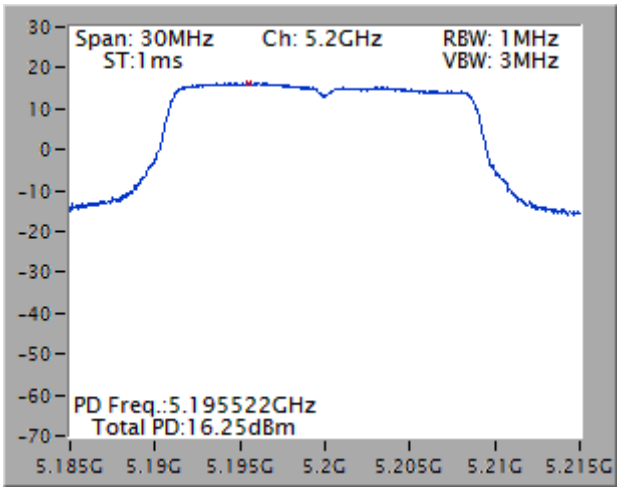


Beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT20	4	5180	13.90	0.00	13.90	17
VHT20	4	5200	16.25	0.00	16.25	17
VHT20	4	5240	16.24	0.00	16.24	17
VHT40	4	5190	6.17	0.00	6.17	17
VHT40	4	5230	7.06	0.00	7.06	17
VHT80	4	5210	1.55	0.14	1.69	17

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

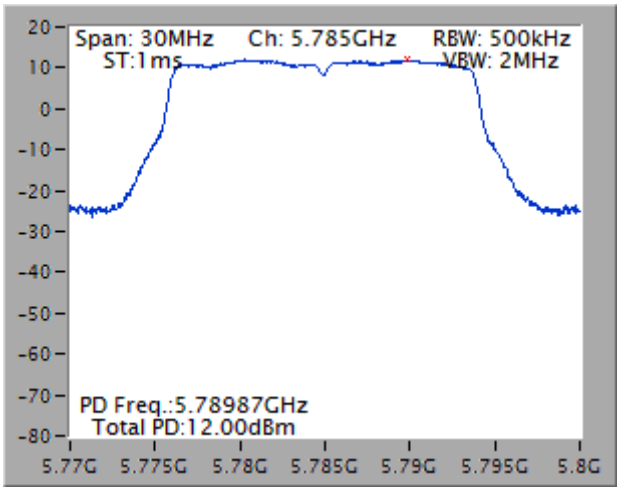
Worst Plot



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	4	5745	7.31	0.00	7.31	30
VHT20	4	5785	12.00	0.00	12.00	30
VHT20	4	5825	11.96	0.00	11.96	30
VHT40	4	5755	2.88	0.00	2.88	30
VHT40	4	5795	8.50	0.00	8.50	30
VHT80	4	5775	0.15	0.14	0.29	30

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

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

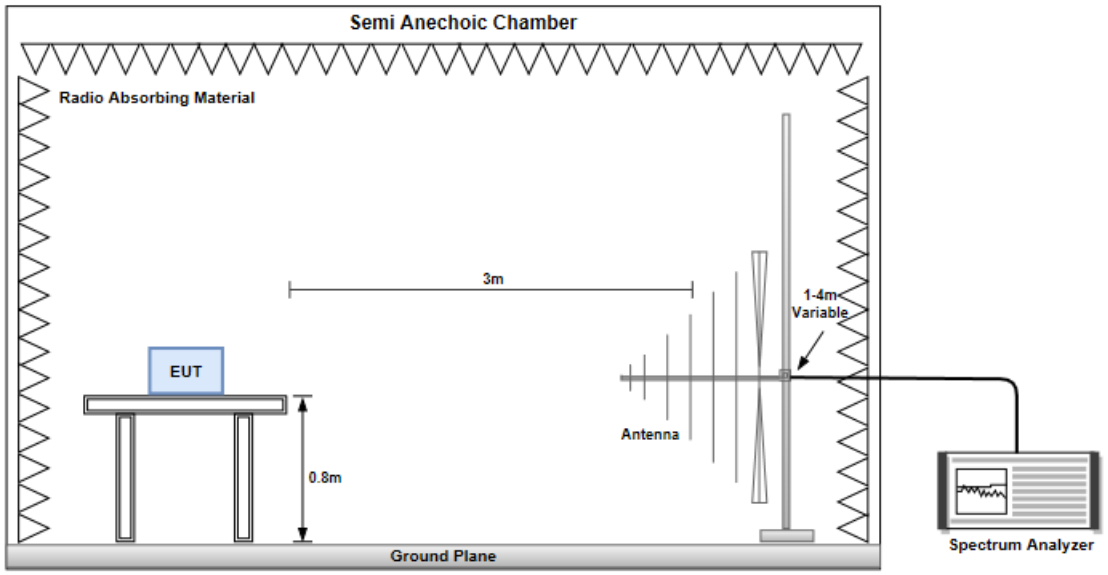
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

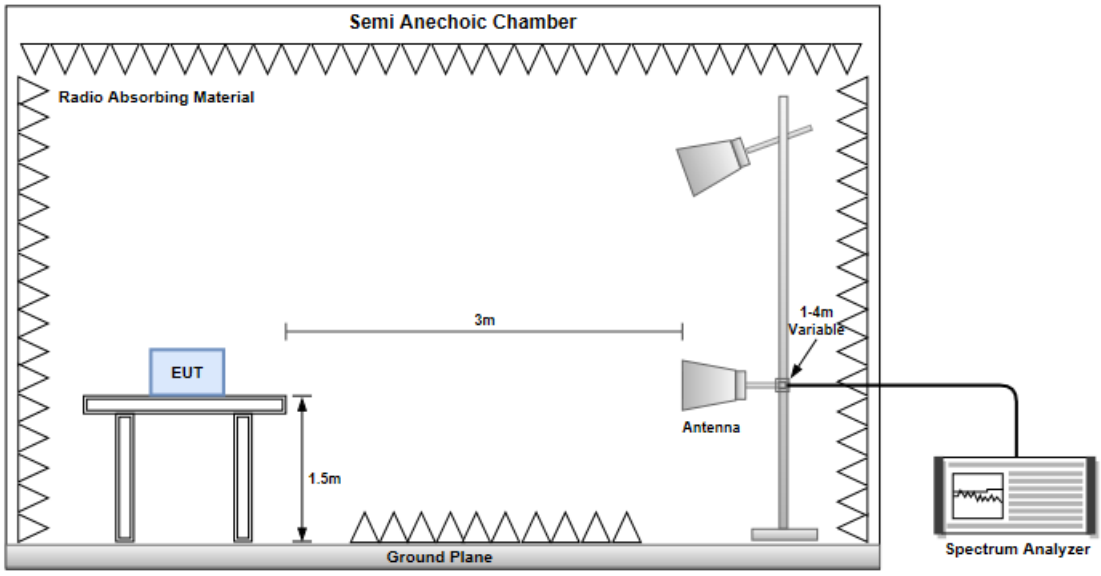
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



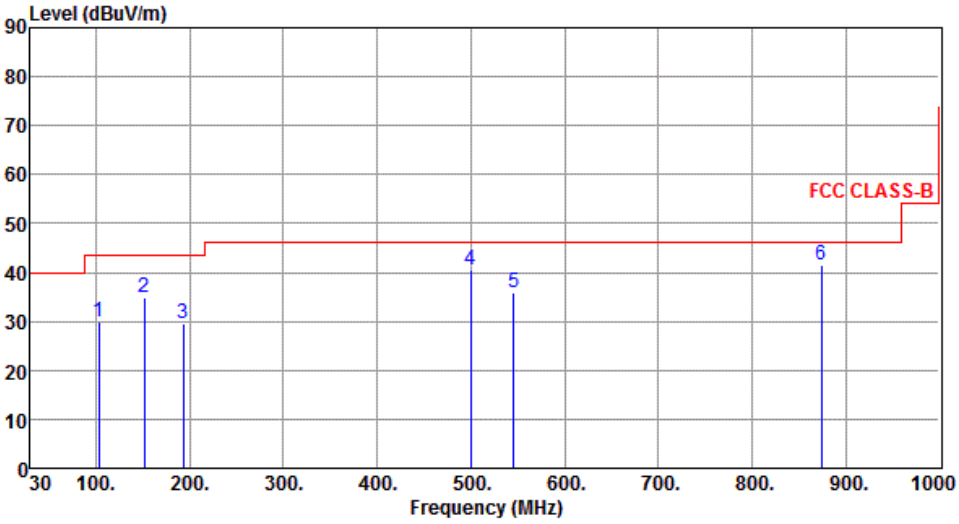
Radiated Emissions above 1 GHz



Non- beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

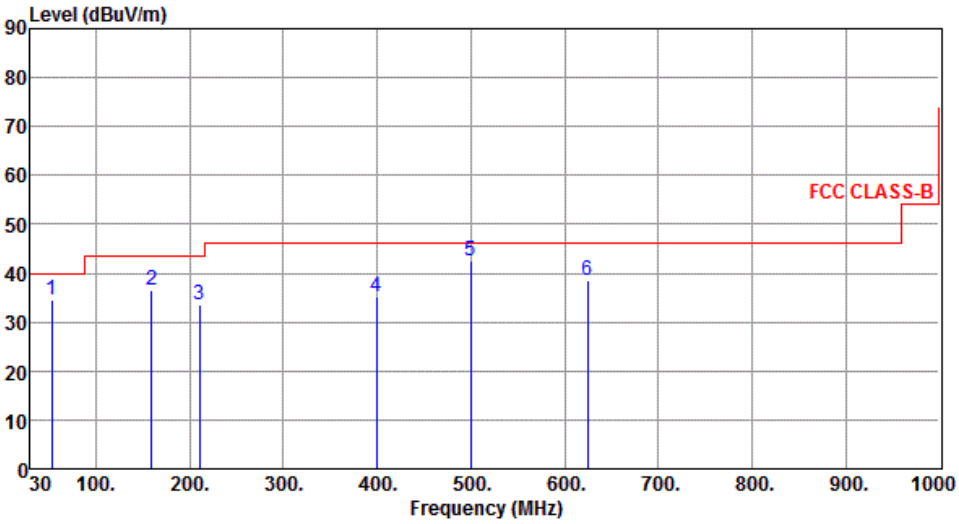
Modulation	11a	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	102.75	29.99	43.50	-13.51	42.38	-12.39	Peak	---	---
2	151.25	34.89	43.50	-8.61	43.07	-8.18	Peak	---	---
3	192.96	29.40	43.50	-14.10	40.39	-10.99	Peak	---	---
4	499.86	40.43	46.00	-5.57	43.24	-2.81	Peak	---	---
5	546.04	35.93	46.00	-10.07	37.86	-1.93	Peak	---	---
6	874.47	41.47	46.00	-4.53	37.70	3.77	Peak	---	---

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

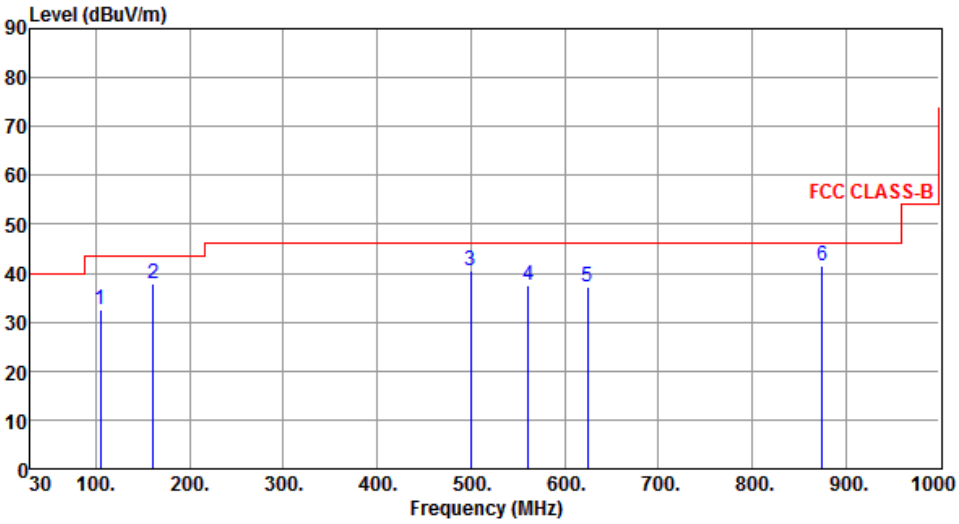
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	53.28	34.59	40.00	-5.41	42.66	-8.07	QP	100	282
2	159.38	36.44	43.50	-7.06	44.52	-8.08	Peak	---	---
3	210.86	33.38	43.50	-10.12	44.08	-10.70	Peak	---	---
4	399.43	35.33	46.00	-10.67	40.33	-5.00	Peak	---	---
5	499.99	42.59	46.00	-3.41	45.40	-2.81	QP	103	47
6	624.29	38.58	46.00	-7.42	38.94	-0.36	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.

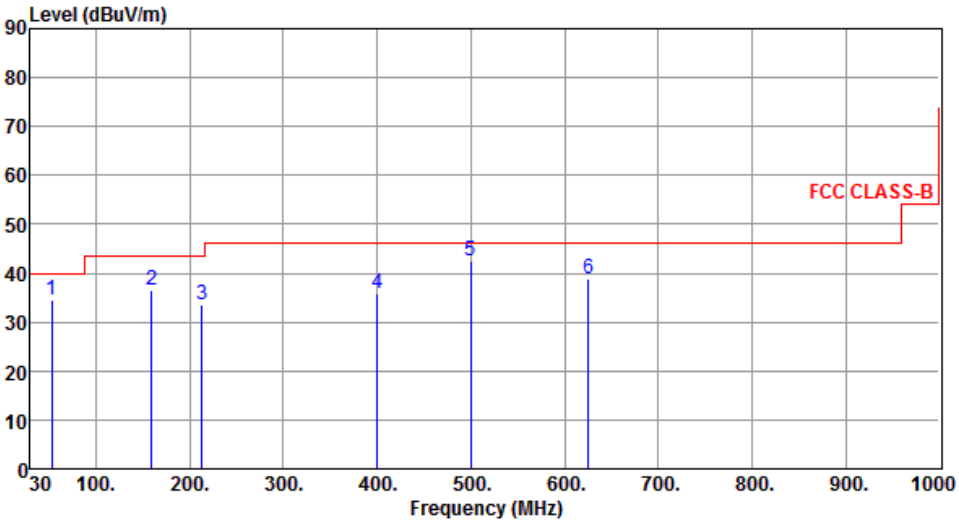
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	105.23	32.59	43.50	-10.91	44.56	-11.97	Peak	---	---
2	161.38	37.83	43.50	-5.67	45.98	-8.15	Peak	---	---
3	499.68	40.43	46.00	-5.57	43.25	-2.82	Peak	---	---
4	561.16	37.47	46.00	-8.53	39.06	-1.59	Peak	---	---
5	624.62	37.10	46.00	-8.90	37.45	-0.35	Peak	---	---
6	874.64	41.36	46.00	-4.64	37.59	3.77	Peak	---	---

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

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

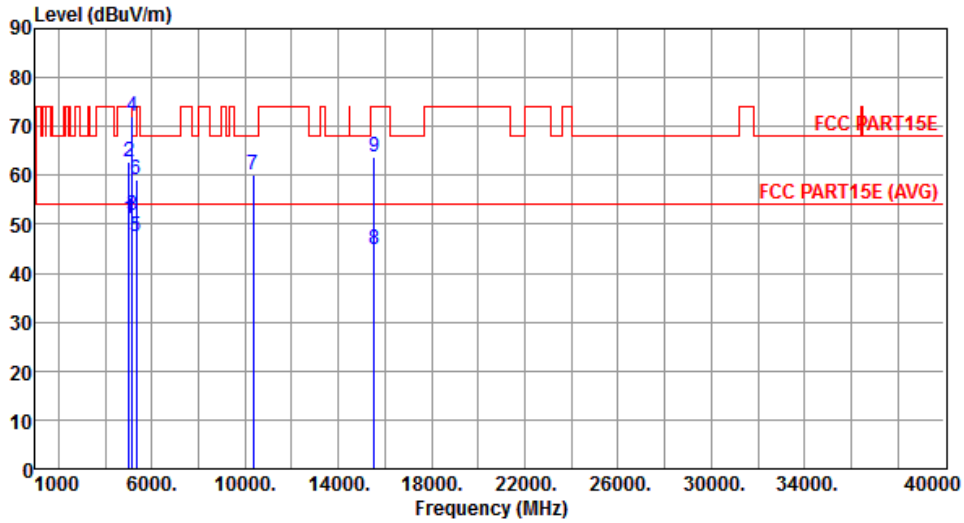


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.86	34.59	40.00	-5.41	42.60	-8.01	QP	100	249
2	159.69	36.54	43.50	-6.96	44.61	-8.07	Peak	---	---
3	213.49	33.38	43.50	-10.12	44.07	-10.69	Peak	---	---
4	399.98	35.89	46.00	-10.11	40.88	-4.99	Peak	---	---
5	499.87	42.49	46.00	-3.51	45.30	-2.81	QP	102	43
6	625.26	38.72	46.00	-7.28	39.06	-0.34	Peak	---	---

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

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

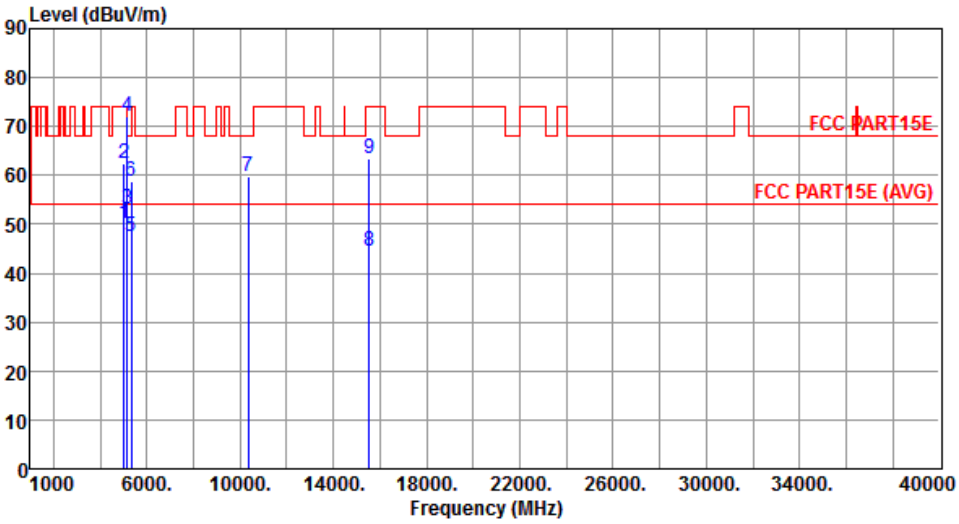
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5020.00	51.04	54.00	-2.96	46.68	4.36	Average	203	304
2	5020.00	62.76	74.00	-11.24	58.40	4.36	Peak	203	304
3	5150.00	51.70	54.00	-2.30	47.22	4.48	Average	252	278
4	5150.00	72.22	74.00	-1.78	67.74	4.48	Peak	252	278
5	5340.00	47.46	54.00	-6.54	42.74	4.72	Average	203	304
6	5340.00	59.23	68.20	-8.97	54.51	4.72	Peak	203	304
7	10360.00	60.20	68.20	-8.00	46.42	13.78	Peak	100	280
8	15540.00	44.96	54.00	-9.04	30.57	14.39	Average	125	237
9	15540.00	63.66	74.00	-10.34	49.27	14.39	Peak	125	237

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

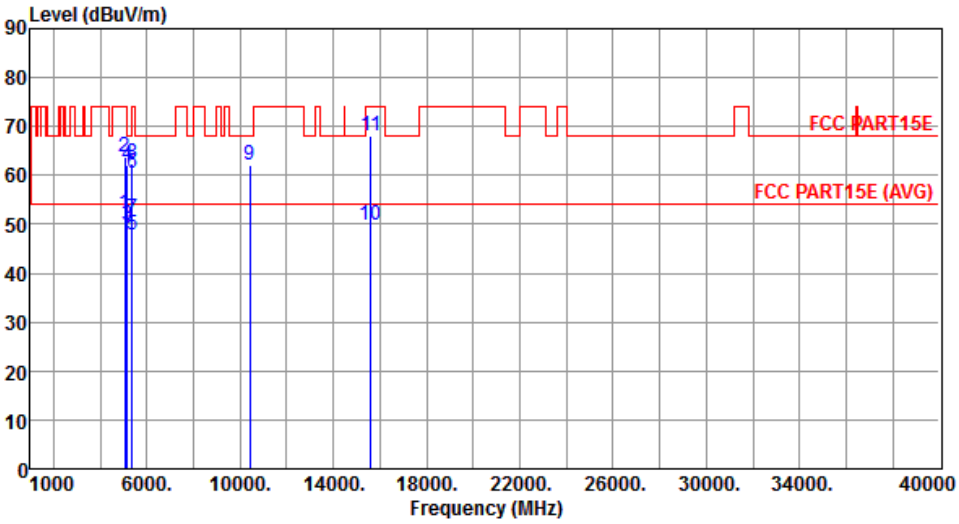
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5020.00	50.02	54.00	-3.98	45.66	4.36	Average	120	24
2	5020.00	62.32	74.00	-11.68	57.96	4.36	Peak	120	24
3	5150.00	52.99	54.00	-1.01	48.51	4.48	Average	120	14
4	5150.00	71.97	74.00	-2.03	67.49	4.48	Peak	120	14
5	5340.00	47.48	54.00	-6.52	42.76	4.72	Average	120	24
6	5340.00	58.93	68.20	-9.27	54.21	4.72	Peak	120	24
7	10360.00	59.93	68.20	-8.27	46.15	13.78	Peak	128	161
8	15540.00	44.64	54.00	-9.36	30.25	14.39	Average	215	193
9	15540.00	63.39	74.00	-10.61	49.00	14.39	Peak	215	193

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

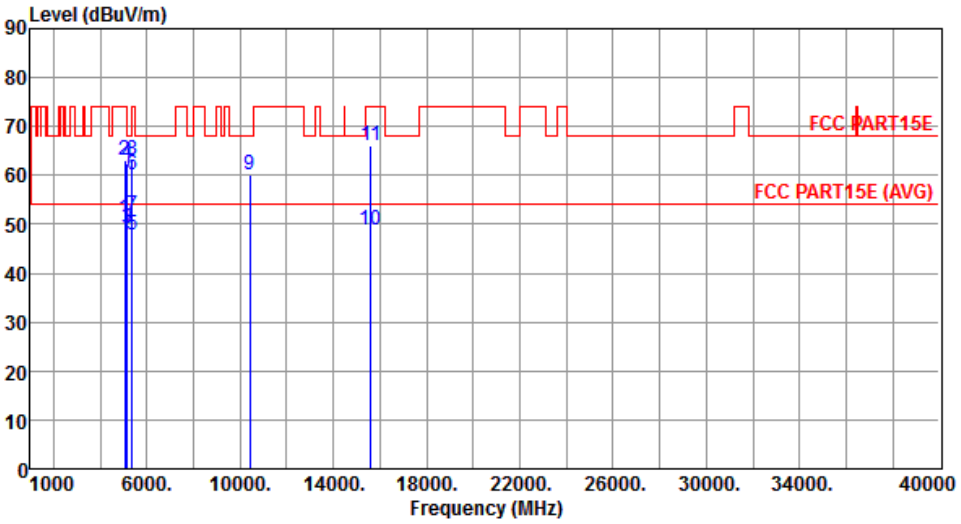
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5040.00	52.16	54.00	-1.84	47.79	4.37	Average	204	292
2	5040.00	63.82	74.00	-10.18	59.45	4.37	Peak	204	292
3	5150.00	49.67	54.00	-4.33	45.19	4.48	Average	204	292
4	5150.00	62.22	74.00	-11.78	57.74	4.48	Peak	204	292
5	5350.00	47.89	54.00	-6.11	43.15	4.74	Average	204	76
6	5350.00	60.29	74.00	-13.71	55.55	4.74	Peak	204	76
7	5360.00	51.12	54.00	-2.88	46.37	4.75	Average	204	76
8	5360.00	62.32	74.00	-11.68	57.57	4.75	Peak	204	76
9	10400.00	62.18	68.20	-6.02	48.33	13.85	Peak	125	230
10	15600.00	49.91	54.00	-4.09	35.61	14.30	Average	122	224
11	15600.00	68.05	74.00	-5.95	53.75	14.30	Peak	122	224

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

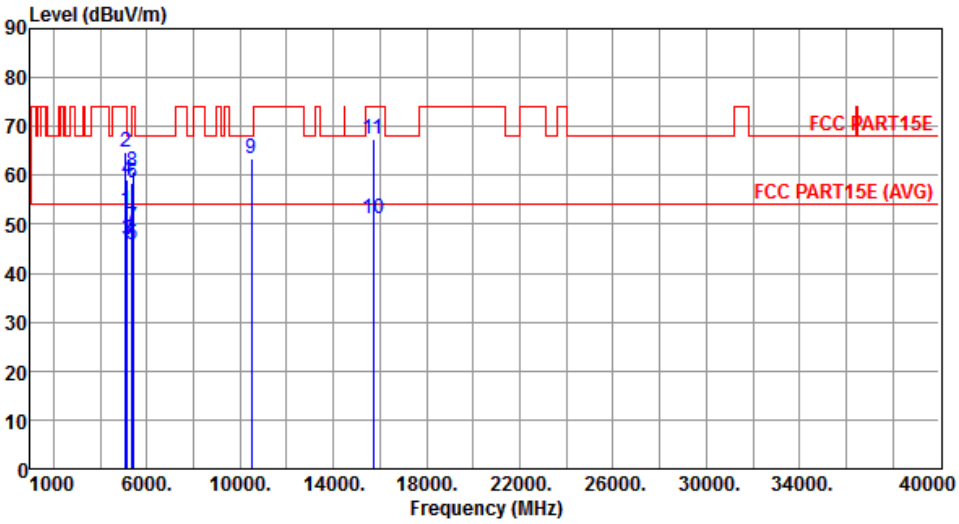
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5040.00	51.10	54.00	-2.90	46.73	4.37	Average	127	17
2	5040.00	63.20	74.00	-10.80	58.83	4.37	Peak	127	17
3	5150.00	49.11	54.00	-4.89	44.63	4.48	Average	127	17
4	5150.00	62.48	74.00	-11.52	58.00	4.48	Peak	127	17
5	5350.00	47.92	54.00	-6.08	43.18	4.74	Average	127	97
6	5350.00	60.20	74.00	-13.80	55.46	4.74	Peak	127	97
7	5360.00	51.72	54.00	-2.28	46.97	4.75	Average	127	97
8	5360.00	63.24	74.00	-10.76	58.49	4.75	Peak	127	97
9	10400.00	59.96	68.20	-8.24	46.11	13.85	Peak	340	154
10	15600.00	48.91	54.00	-5.09	34.61	14.30	Average	106	251
11	15600.00	66.19	74.00	-7.81	51.89	14.30	Peak	106	251

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

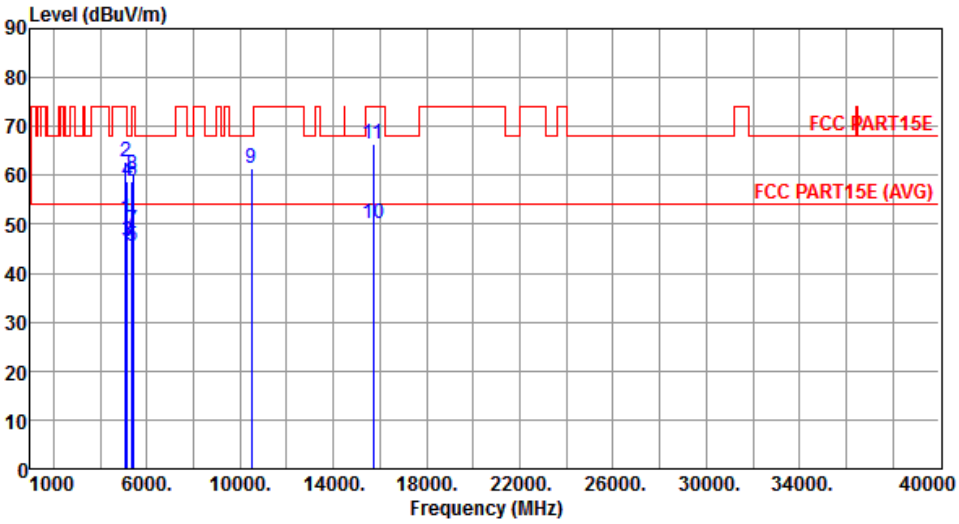
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5080.00	52.64	54.00	-1.36	48.24	4.40	Average	209	291
2	5080.00	64.63	74.00	-9.37	60.23	4.40	Peak	209	291
3	5150.00	46.95	54.00	-7.05	42.47	4.48	Average	209	291
4	5150.00	59.21	74.00	-14.79	54.73	4.48	Peak	209	291
5	5350.00	45.85	54.00	-8.15	41.11	4.74	Average	209	75
6	5350.00	58.43	74.00	-15.57	53.69	4.74	Peak	209	75
7	5400.00	49.38	54.00	-4.62	44.56	4.82	Average	209	75
8	5400.00	60.63	74.00	-13.37	55.81	4.82	Peak	209	75
9	10480.00	63.44	68.20	-4.76	49.49	13.95	Peak	133	232
10	15720.00	51.09	54.00	-2.91	36.98	14.11	Average	123	282
11	15720.00	67.54	74.00	-6.46	53.43	14.11	Peak	123	282

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

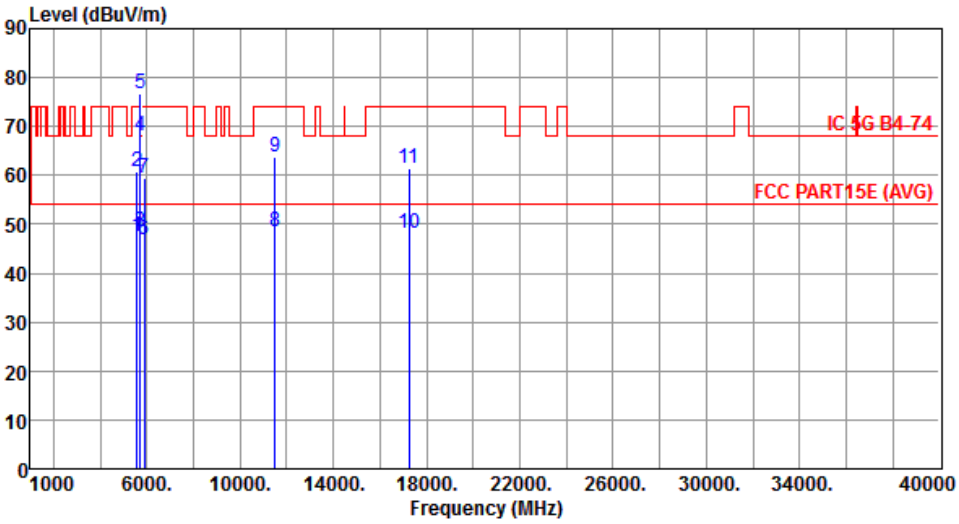
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5080.00	51.23	54.00	-2.77	46.83	4.40	Average	130	15
2	5080.00	62.92	74.00	-11.08	58.52	4.40	Peak	130	15
3	5150.00	46.62	54.00	-7.38	42.14	4.48	Average	130	15
4	5150.00	58.86	74.00	-15.14	54.38	4.48	Peak	130	15
5	5350.00	45.61	54.00	-8.39	40.87	4.74	Average	130	101
6	5350.00	58.91	74.00	-15.09	54.17	4.74	Peak	130	101
7	5400.00	48.82	54.00	-5.18	44.00	4.82	Average	130	101
8	5400.00	60.14	74.00	-13.86	55.32	4.82	Peak	130	101
9	10480.00	61.56	68.20	-6.64	47.61	13.95	Peak	336	151
10	15720.00	50.02	54.00	-3.98	35.91	14.11	Average	100	262
11	15720.00	66.52	74.00	-7.48	52.41	14.11	Peak	100	262

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

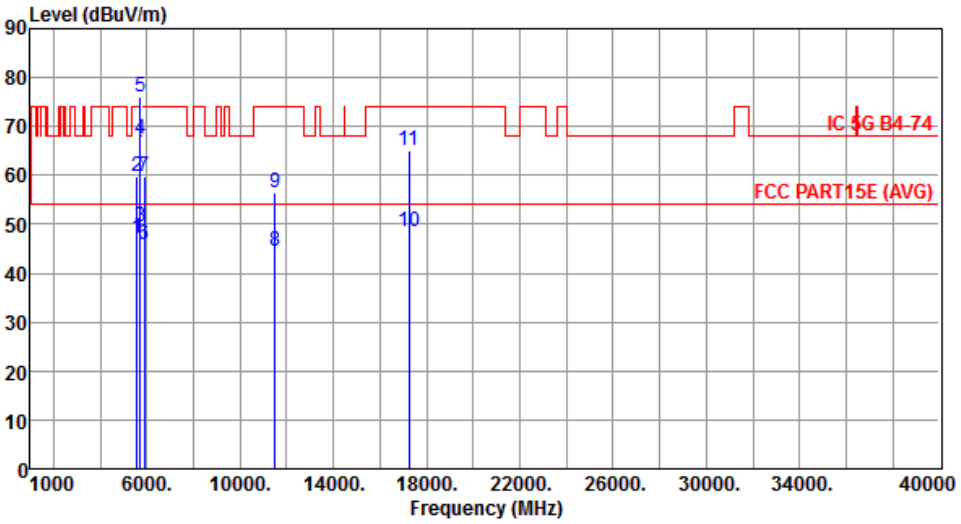
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5580.00	47.55	54.00	-6.45	42.48	5.07	Average	321	260
2	5580.00	60.67	74.00	-13.33	55.60	5.07	Peak	321	260
3	5715.00	48.45	54.00	-5.55	43.15	5.30	Average	321	260
4	5715.00	67.95	74.00	-6.05	62.65	5.30	Peak	321	260
5	5725.00	76.77	78.20	-1.43	71.45	5.32	Peak	321	260
6	5905.00	46.94	54.00	-7.06	41.33	5.61	Average	321	260
7	5905.00	59.37	74.00	-14.63	53.76	5.61	Peak	321	260
8	11490.00	48.50	54.00	-5.50	33.68	14.82	Average	170	250
9	11490.00	63.81	74.00	-10.19	48.99	14.82	Peak	170	250
10	17235.00	48.27	54.00	-5.73	30.56	17.71	Average	100	242
11	17235.00	61.38	74.00	-12.62	43.67	17.71	Peak	100	242

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

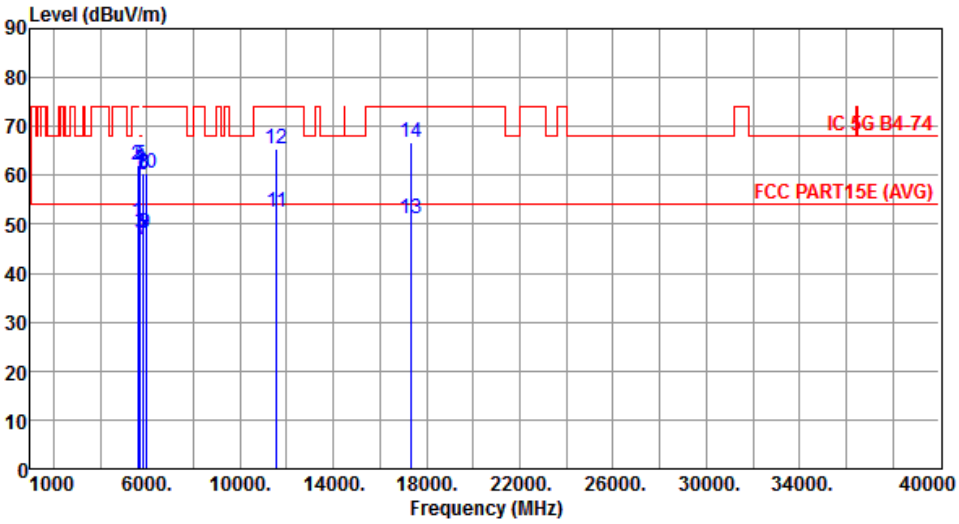
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5580.00	47.15	54.00	-6.85	42.08	5.07	Average	293	207
2	5580.00	59.72	74.00	-14.28	54.65	5.07	Peak	293	207
3	5715.00	49.40	54.00	-4.60	44.10	5.30	Average	293	346
4	5715.00	67.25	74.00	-6.75	61.95	5.30	Peak	293	346
5	5725.00	76.04	78.20	-2.16	70.72	5.32	Peak	293	207
6	5905.00	45.84	54.00	-8.16	40.23	5.61	Average	293	207
7	5905.00	59.65	74.00	-14.35	54.04	5.61	Peak	293	207
8	11490.00	44.36	54.00	-9.64	29.54	14.82	Average	114	60
9	11490.00	56.50	74.00	-17.50	41.68	14.82	Peak	114	60
10	17235.00	48.58	54.00	-5.42	30.87	17.71	Average	162	241
11	17235.00	64.94	74.00	-9.06	47.23	17.71	Peak	162	241

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

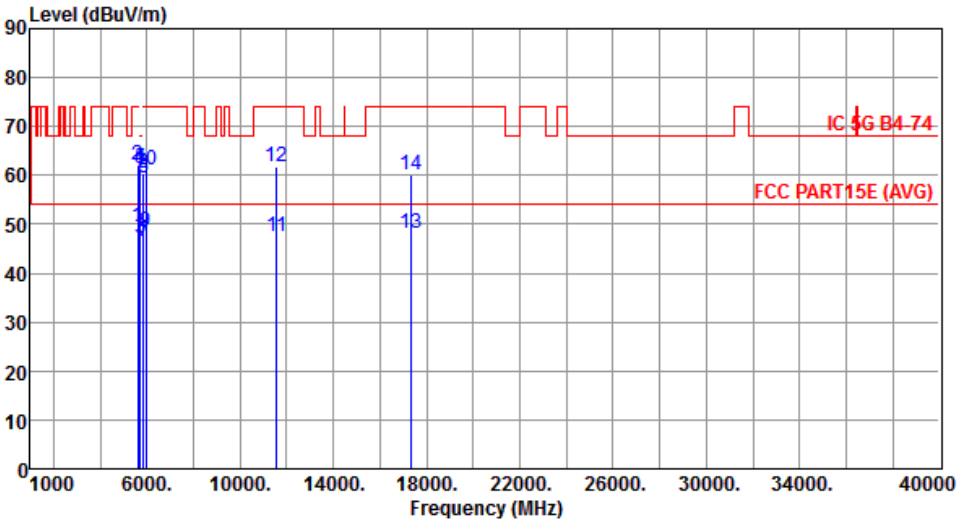
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5625.00	50.60	54.00	-3.40	45.45	5.15	Average	255	260
2	5625.00	62.02	74.00	-11.98	56.87	5.15	Peak	255	260
3	5715.00	48.26	54.00	-5.74	42.96	5.30	Average	255	260
4	5715.00	61.43	74.00	-12.57	56.13	5.30	Peak	255	260
5	5725.00	62.16	78.20	-16.04	56.84	5.32	Peak	255	260
6	5850.00	60.19	78.20	-18.01	54.67	5.52	Peak	255	260
7	5860.00	46.79	54.00	-7.21	41.25	5.54	Average	255	260
8	5860.00	60.54	74.00	-13.46	55.00	5.54	Peak	255	260
9	5945.00	48.07	54.00	-5.93	42.40	5.67	Average	255	260
10	5945.00	60.31	74.00	-13.69	54.64	5.67	Peak	255	260
11	11570.00	52.56	54.00	-1.44	37.92	14.64	Average	165	245
12	11570.00	65.57	74.00	-8.43	50.93	14.64	Peak	165	245
13	17355.00	51.12	54.00	-2.88	33.11	18.01	Average	321	300
14	17355.00	66.88	74.00	-7.12	48.87	18.01	Peak	321	300

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

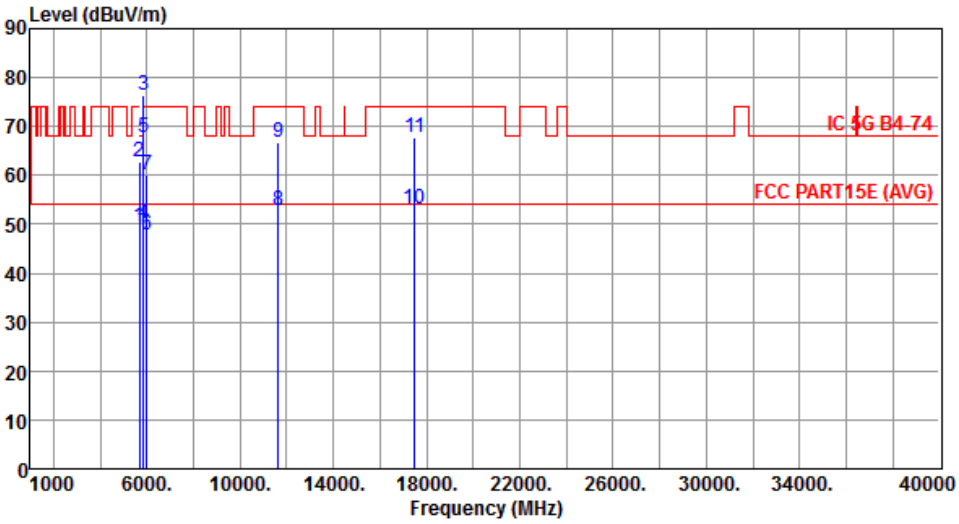
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5625.00	49.48	54.00	-4.52	44.33	5.15	Average	221	60
2	5625.00	62.23	74.00	-11.77	57.08	5.15	Peak	221	60
3	5715.00	47.11	54.00	-6.89	41.81	5.30	Average	221	60
4	5715.00	61.54	74.00	-12.46	56.24	5.30	Peak	221	60
5	5725.00	61.34	78.20	-16.86	56.02	5.32	Peak	221	60
6	5850.00	59.34	78.20	-18.86	53.82	5.52	Peak	221	60
7	5860.00	46.38	54.00	-7.62	40.84	5.54	Average	221	60
8	5860.00	60.48	74.00	-13.52	54.94	5.54	Peak	221	60
9	5945.00	48.57	54.00	-5.43	42.90	5.67	Average	221	60
10	5945.00	61.21	74.00	-12.79	55.54	5.67	Peak	221	60
11	11570.00	47.57	54.00	-6.43	32.93	14.64	Average	117	78
12	11570.00	61.63	74.00	-12.37	46.99	14.64	Peak	117	78
13	17355.00	48.07	54.00	-5.93	30.06	18.01	Average	200	231
14	17355.00	60.12	74.00	-13.88	42.11	18.01	Peak	200	231

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

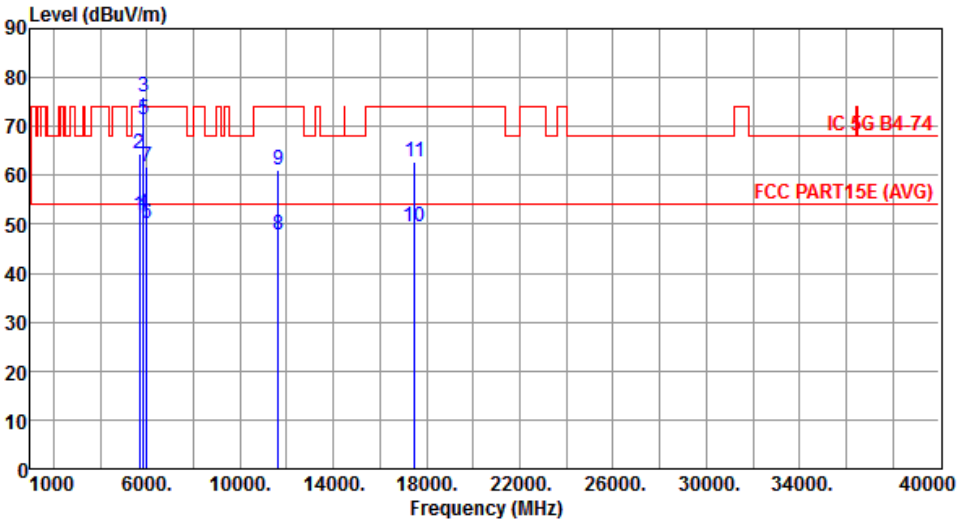
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5665.00	49.34	54.00	-4.66	44.13	5.21	Average	331	261
2	5665.00	62.81	74.00	-11.19	57.60	5.21	Peak	331	261
3	5850.00	76.37	78.20	-1.83	70.85	5.52	Peak	331	261
4	5860.00	49.99	54.00	-4.01	44.45	5.54	Average	331	261
5	5860.00	67.84	74.00	-6.16	62.30	5.54	Peak	331	261
6	5985.00	47.71	54.00	-6.29	41.97	5.74	Average	331	261
7	5985.00	59.96	74.00	-14.04	54.22	5.74	Peak	331	261
8	11650.00	52.93	54.00	-1.07	38.49	14.44	Average	176	243
9	11650.00	66.87	74.00	-7.13	52.43	14.44	Peak	176	243
10	17475.00	52.99	54.00	-1.01	34.70	18.29	Average	213	299
11	17475.00	67.91	74.00	-6.09	49.62	18.29	Peak	213	299

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

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

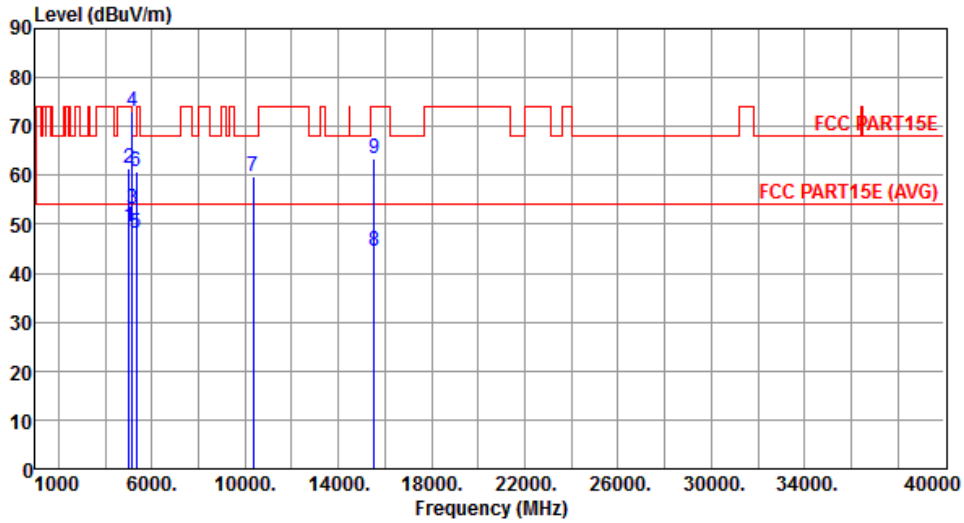


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5665.00	51.74	54.00	-2.26	46.53	5.21	Average	137	63
2	5665.00	64.54	74.00	-9.46	59.33	5.21	Peak	137	63
3	5850.00	76.00	78.20	-2.20	70.48	5.52	Peak	137	63
4	5860.00	52.28	54.00	-1.72	46.74	5.54	Average	137	173
5	5860.00	71.55	74.00	-2.45	66.01	5.54	Peak	137	173
6	5985.00	50.05	54.00	-3.95	44.31	5.74	Average	137	63
7	5985.00	61.63	74.00	-12.37	55.89	5.74	Peak	137	63
8	11650.00	47.89	54.00	-6.11	33.45	14.44	Average	134	53
9	11650.00	61.17	74.00	-12.83	46.73	14.44	Peak	134	53
10	17475.00	49.47	54.00	-4.53	31.18	18.29	Average	135	226
11	17475.00	62.85	74.00	-11.15	44.56	18.29	Peak	135	226

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

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

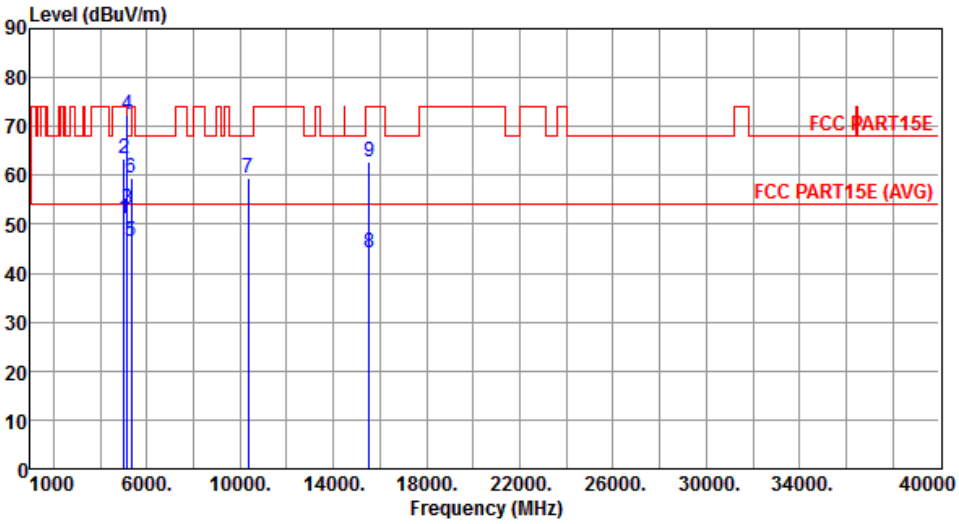
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5020.00	49.48	54.00	-4.52	45.12	4.36	Average	127	294
2	5020.00	61.48	74.00	-12.52	57.12	4.36	Peak	127	294
3	5150.00	52.99	54.00	-1.01	48.51	4.48	Average	127	294
4	5150.00	72.98	74.00	-1.02	68.50	4.48	Peak	127	294
5	5340.00	48.06	54.00	-5.94	43.34	4.72	Average	127	294
6	5340.00	60.74	68.20	-7.46	56.02	4.72	Peak	127	294
7	10360.00	59.76	68.20	-8.44	45.98	13.78	Peak	100	312
8	15540.00	44.38	54.00	-9.62	29.99	14.39	Average	120	247
9	15540.00	63.43	74.00	-10.57	49.04	14.39	Peak	120	247

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

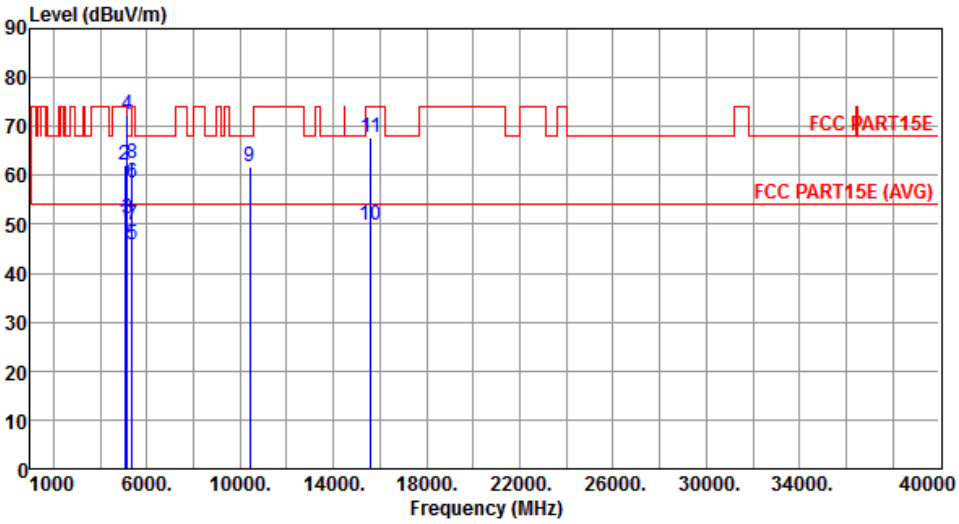
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5020.00	50.99	54.00	-3.01	46.63	4.36	Average	201	205
2	5020.00	63.48	74.00	-10.52	59.12	4.36	Peak	201	205
3	5150.00	52.99	54.00	-1.01	48.51	4.48	Average	201	205
4	5150.00	72.30	74.00	-1.70	67.82	4.48	Peak	201	205
5	5340.00	46.42	54.00	-7.58	41.70	4.72	Average	201	205
6	5340.00	59.45	68.20	-8.75	54.73	4.72	Peak	201	205
7	10360.00	59.41	68.20	-8.79	45.63	13.78	Peak	115	192
8	15540.00	44.26	54.00	-9.74	29.87	14.39	Average	198	185
9	15540.00	62.83	74.00	-11.17	48.44	14.39	Peak	198	185

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

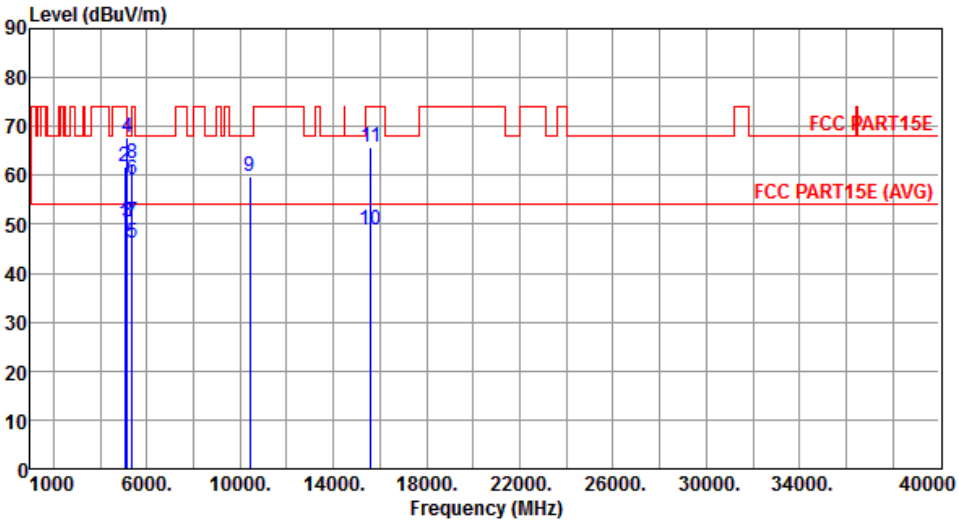
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5040.00	50.48	54.00	-3.52	46.11	4.37	Average	118	293
2	5040.00	62.06	74.00	-11.94	57.69	4.37	Peak	118	293
3	5150.00	51.19	54.00	-2.81	46.71	4.48	Average	118	293
4	5150.00	72.23	74.00	-1.77	67.75	4.48	Peak	118	293
5	5350.00	45.86	54.00	-8.14	41.12	4.74	Average	118	293
6	5350.00	58.57	74.00	-15.43	53.83	4.74	Peak	118	293
7	5360.00	49.92	54.00	-4.08	45.17	4.75	Average	118	293
8	5360.00	62.48	74.00	-11.52	57.73	4.75	Peak	118	293
9	10400.00	61.83	68.20	-6.37	47.98	13.85	Peak	106	248
10	15600.00	49.72	54.00	-4.28	35.42	14.30	Average	104	212
11	15600.00	67.79	74.00	-6.21	53.49	14.30	Peak	104	212

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

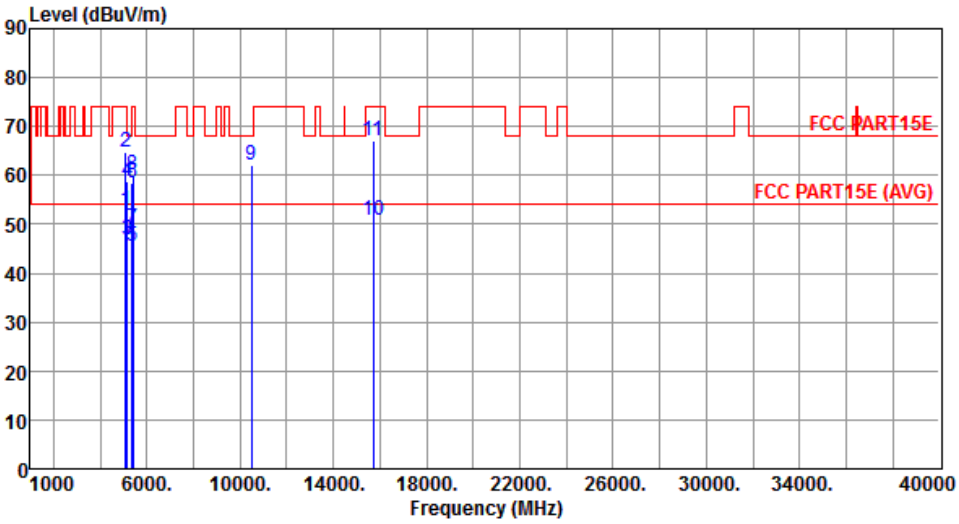
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5040.00	50.16	54.00	-3.84	45.79	4.37	Average	202	315
2	5040.00	61.67	74.00	-12.33	57.30	4.37	Peak	202	315
3	5150.00	50.58	54.00	-3.42	46.10	4.48	Average	202	315
4	5150.00	67.72	74.00	-6.28	63.24	4.48	Peak	202	315
5	5350.00	46.22	54.00	-7.78	41.48	4.74	Average	202	315
6	5350.00	58.99	74.00	-15.01	54.25	4.74	Peak	202	315
7	5360.00	50.62	54.00	-3.38	45.87	4.75	Average	202	315
8	5360.00	62.38	74.00	-11.62	57.63	4.75	Peak	202	315
9	10400.00	59.67	68.20	-8.53	45.82	13.85	Peak	383	162
10	15600.00	48.73	54.00	-5.27	34.43	14.30	Average	110	241
11	15600.00	65.82	74.00	-8.18	51.52	14.30	Peak	110	241

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

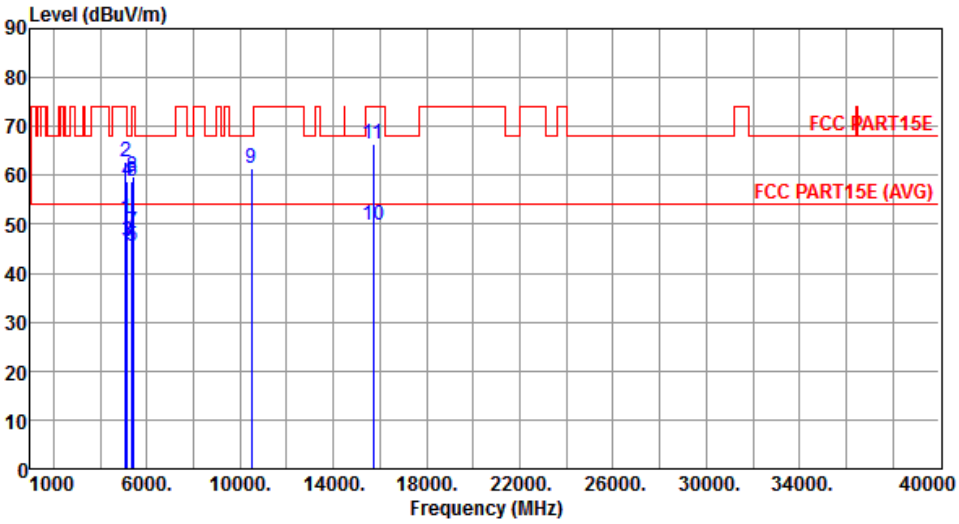
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5080.00	52.76	54.00	-1.24	48.36	4.40	Average	210	288
2	5080.00	64.79	74.00	-9.21	60.39	4.40	Peak	210	288
3	5150.00	46.82	54.00	-7.18	42.34	4.48	Average	210	288
4	5150.00	58.86	74.00	-15.14	54.38	4.48	Peak	210	288
5	5350.00	45.39	54.00	-8.61	40.65	4.74	Average	210	288
6	5350.00	58.59	74.00	-15.41	53.85	4.74	Peak	210	288
7	5400.00	49.19	54.00	-4.81	44.37	4.82	Average	210	288
8	5400.00	60.19	74.00	-13.81	55.37	4.82	Peak	210	288
9	10480.00	62.19	68.20	-6.01	48.24	13.95	Peak	116	208
10	15720.00	50.83	54.00	-3.17	36.72	14.11	Average	109	293
11	15720.00	67.20	74.00	-6.80	53.09	14.11	Peak	109	293

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

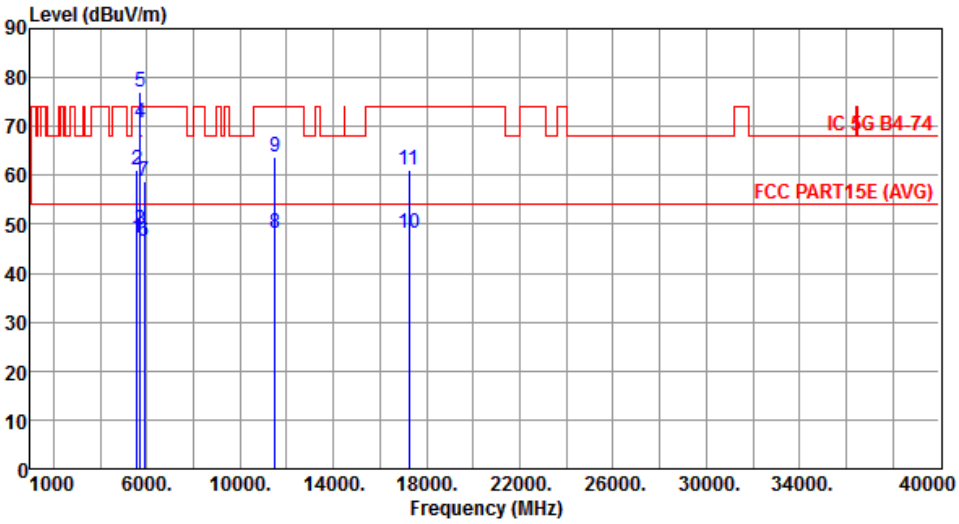
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5080.00	51.09	54.00	-2.91	46.69	4.40	Average	126	21
2	5080.00	62.71	74.00	-11.29	58.31	4.40	Peak	126	21
3	5150.00	46.46	54.00	-7.54	41.98	4.48	Average	126	21
4	5150.00	58.71	74.00	-15.29	54.23	4.48	Peak	126	21
5	5350.00	45.43	54.00	-8.57	40.69	4.74	Average	126	98
6	5350.00	58.69	74.00	-15.31	53.95	4.74	Peak	126	98
7	5400.00	48.58	54.00	-5.42	43.76	4.82	Average	126	98
8	5400.00	59.73	74.00	-14.27	54.91	4.82	Peak	126	98
9	10480.00	61.39	68.20	-6.81	47.44	13.95	Peak	324	162
10	15720.00	49.83	54.00	-4.17	35.72	14.11	Average	100	156
11	15720.00	66.38	74.00	-7.62	52.27	14.11	Peak	100	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).

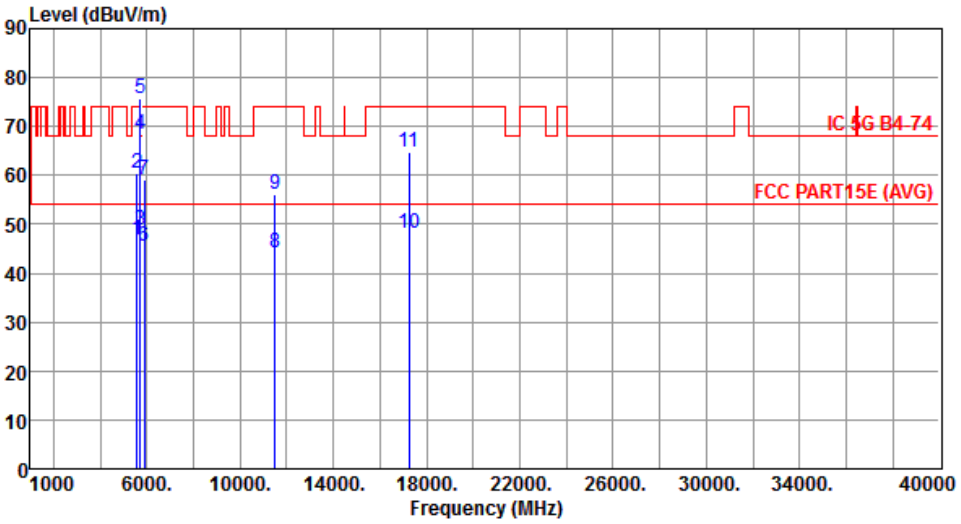
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5580.00	47.10	54.00	-6.90	42.03	5.07	Average	231	262
2	5580.00	61.15	74.00	-12.85	56.08	5.07	Peak	231	262
3	5715.00	48.78	54.00	-5.22	43.48	5.30	Average	231	262
4	5715.00	70.66	74.00	-3.34	65.36	5.30	Peak	231	262
5	5725.00	77.17	78.20	-1.03	71.85	5.32	Peak	231	262
6	5905.00	46.46	54.00	-7.54	40.85	5.61	Average	231	262
7	5905.00	58.86	74.00	-15.14	53.25	5.61	Peak	231	262
8	11490.00	48.21	54.00	-5.79	33.39	14.82	Average	167	248
9	11490.00	63.64	74.00	-10.36	48.82	14.82	Peak	167	248
10	17235.00	48.02	54.00	-5.98	30.31	17.71	Average	100	252
11	17235.00	61.12	74.00	-12.88	43.41	17.71	Peak	100	252

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

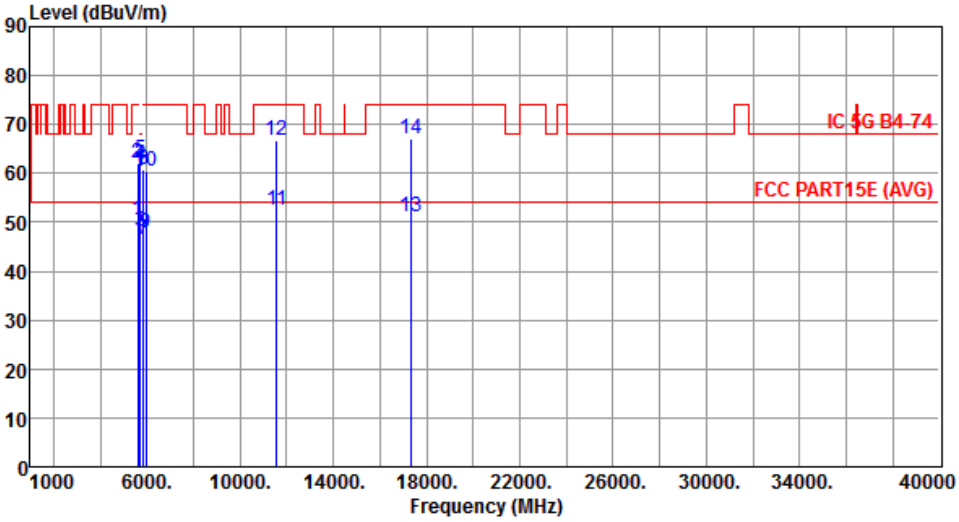
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5580.00	46.87	54.00	-7.13	41.80	5.07	Average	296	210
2	5580.00	60.42	74.00	-13.58	55.35	5.07	Peak	296	210
3	5715.00	48.93	54.00	-5.07	43.63	5.30	Average	296	210
4	5715.00	68.53	74.00	-5.47	63.23	5.30	Peak	296	210
5	5725.00	75.81	78.20	-2.39	70.49	5.32	Peak	296	210
6	5905.00	45.46	54.00	-8.54	39.85	5.61	Average	296	210
7	5905.00	59.18	74.00	-14.82	53.57	5.61	Peak	296	210
8	11490.00	44.18	54.00	-9.82	29.36	14.82	Average	111	65
9	11490.00	56.17	74.00	-17.83	41.35	14.82	Peak	111	65
10	17235.00	48.16	54.00	-5.84	30.45	17.71	Average	111	65
11	17235.00	64.62	74.00	-9.38	46.91	17.71	Peak	111	65

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

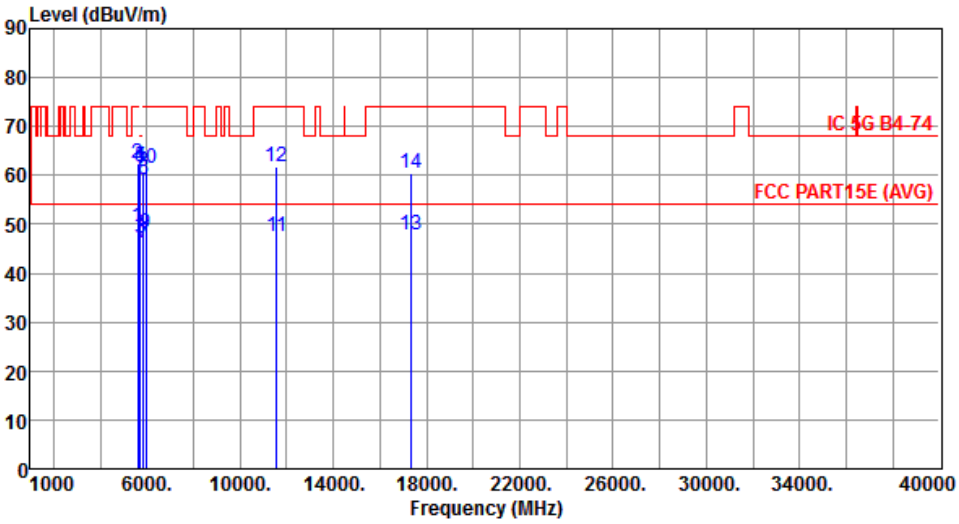
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5625.00	50.48	54.00	-3.52	45.33	5.15	Average	256	260
2	5625.00	62.26	74.00	-11.74	57.11	5.15	Peak	256	260
3	5715.00	48.12	54.00	-5.88	42.82	5.30	Average	256	260
4	5715.00	61.87	74.00	-12.13	56.57	5.30	Peak	256	260
5	5725.00	62.73	78.20	-15.47	57.41	5.32	Peak	256	260
6	5850.00	60.62	78.20	-17.58	55.10	5.52	Peak	256	260
7	5860.00	46.62	54.00	-7.38	41.08	5.54	Average	256	260
8	5860.00	60.73	74.00	-13.27	55.19	5.54	Peak	256	260
9	5945.00	47.89	54.00	-6.11	42.22	5.67	Average	256	260
10	5945.00	60.47	74.00	-13.53	54.80	5.67	Peak	256	260
11	11570.00	52.59	54.00	-1.41	37.95	14.64	Average	174	243
12	11570.00	66.85	74.00	-7.15	52.21	14.64	Peak	174	243
13	17355.00	51.29	54.00	-2.71	33.28	18.01	Average	318	299
14	17355.00	66.96	74.00	-7.04	48.95	18.01	Peak	318	299

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

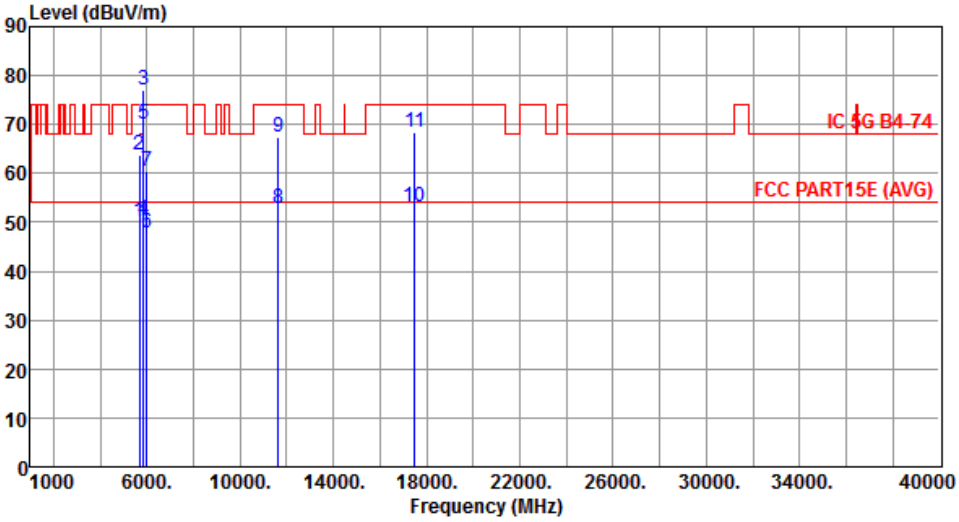
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5625.00	49.39	54.00	-4.61	44.24	5.15	Average	226	58
2	5625.00	62.41	74.00	-11.59	57.26	5.15	Peak	226	58
3	5715.00	47.03	54.00	-6.97	41.73	5.30	Average	226	58
4	5715.00	61.77	74.00	-12.23	56.47	5.30	Peak	226	58
5	5725.00	61.68	78.20	-16.52	56.36	5.32	Peak	226	58
6	5850.00	59.13	78.20	-19.07	53.61	5.52	Peak	226	58
7	5860.00	46.19	54.00	-7.81	40.65	5.54	Average	226	58
8	5860.00	60.72	74.00	-13.28	55.18	5.54	Peak	226	58
9	5945.00	48.30	54.00	-5.70	42.63	5.67	Average	226	58
10	5945.00	61.38	74.00	-12.62	55.71	5.67	Peak	226	58
11	11570.00	47.41	54.00	-6.59	32.77	14.64	Average	121	81
12	11570.00	61.74	74.00	-12.26	47.10	14.64	Peak	121	81
13	17355.00	47.86	54.00	-6.14	29.85	18.01	Average	199	239
14	17355.00	60.35	74.00	-13.65	42.34	18.01	Peak	199	239

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

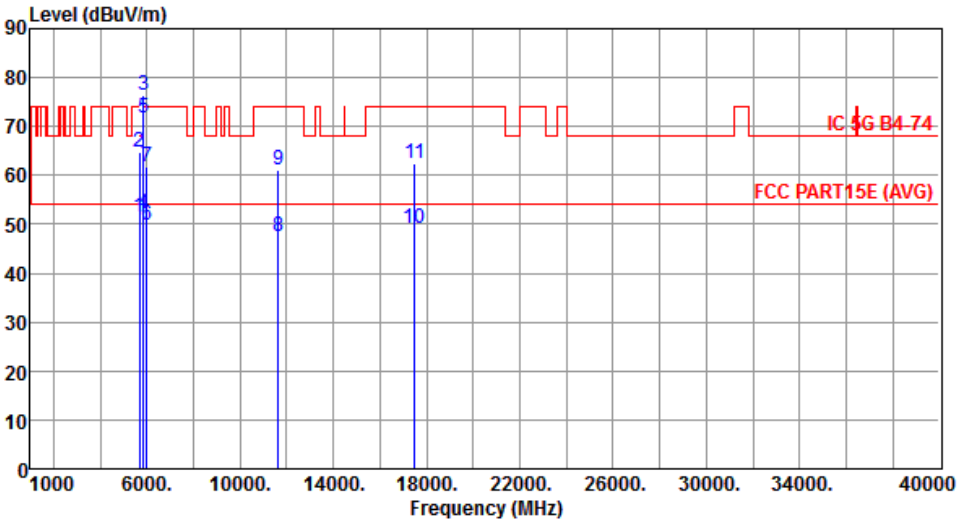
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5665.00	50.11	54.00	-3.89	44.90	5.21	Average	303	261
2	5665.00	63.72	74.00	-10.28	58.51	5.21	Peak	303	261
3	5850.00	77.19	78.20	-1.01	71.67	5.52	Peak	303	261
4	5860.00	50.53	54.00	-3.47	44.99	5.54	Average	303	261
5	5860.00	69.98	74.00	-4.02	64.44	5.54	Peak	303	261
6	5985.00	47.95	54.00	-6.05	42.21	5.74	Average	303	261
7	5985.00	60.36	74.00	-13.64	54.62	5.74	Peak	303	261
8	11650.00	52.95	54.00	-1.05	38.51	14.44	Average	175	245
9	11650.00	67.48	74.00	-6.52	53.04	14.44	Peak	175	245
10	17475.00	52.99	54.00	-1.01	34.70	18.29	Average	213	303
11	17475.00	68.34	74.00	-5.66	50.05	18.29	Peak	213	303

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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

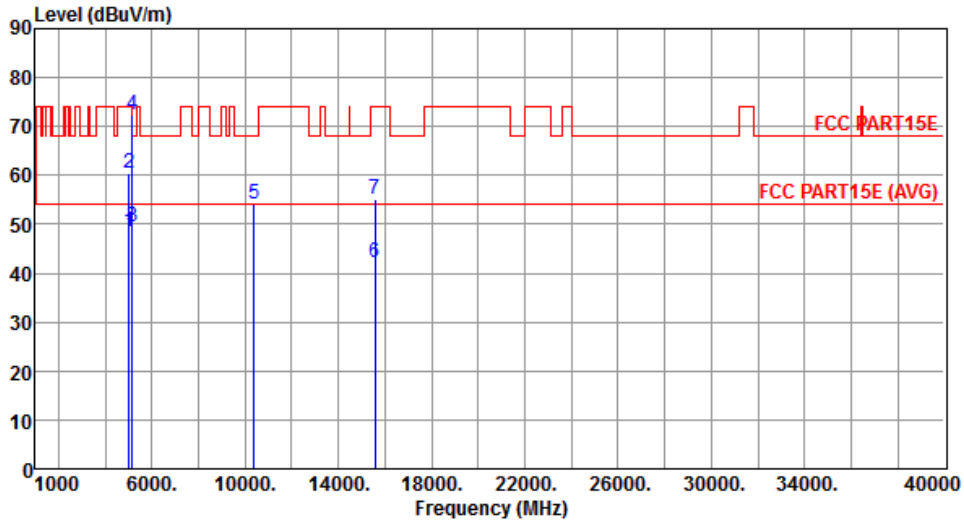


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5665.00	51.63	54.00	-2.37	46.42	5.21	Average	140	61
2	5665.00	64.69	74.00	-9.31	59.48	5.21	Peak	140	61
3	5850.00	76.29	78.20	-1.91	70.77	5.52	Peak	140	61
4	5860.00	52.16	54.00	-1.84	46.62	5.54	Average	140	61
5	5860.00	71.75	74.00	-2.25	66.21	5.54	Peak	140	61
6	5985.00	49.92	54.00	-4.08	44.18	5.74	Average	140	61
7	5985.00	61.78	74.00	-12.22	56.04	5.74	Peak	140	61
8	11650.00	47.51	54.00	-6.49	33.07	14.44	Average	132	56
9	11650.00	60.95	74.00	-13.05	46.51	14.44	Peak	132	56
10	17475.00	49.26	54.00	-4.74	30.97	18.29	Average	130	233
11	17475.00	62.49	74.00	-11.51	44.20	18.29	Peak	130	233

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

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

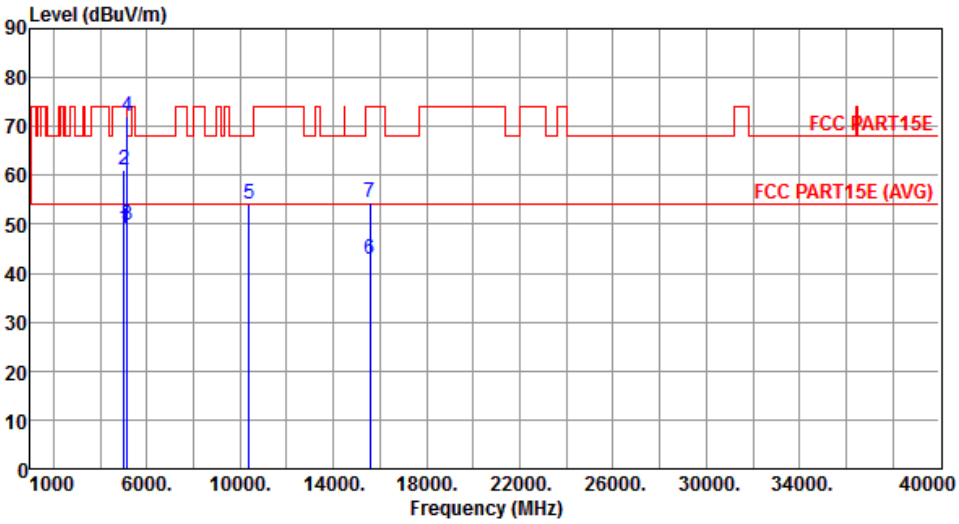
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5030.00	48.56	54.00	-5.44	44.20	4.36	Average	131	297
2	5030.00	60.38	74.00	-13.62	56.02	4.36	Peak	131	297
3	5150.00	49.35	54.00	-4.65	44.87	4.48	Average	131	297
4	5150.00	72.39	74.00	-1.61	67.91	4.48	Peak	131	297
5	10380.00	54.03	68.20	-14.17	40.21	13.82	Peak	127	342
6	15570.00	42.28	54.00	-11.72	27.94	14.34	Average	310	41
7	15570.00	55.01	74.00	-18.99	40.67	14.34	Peak	310	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).

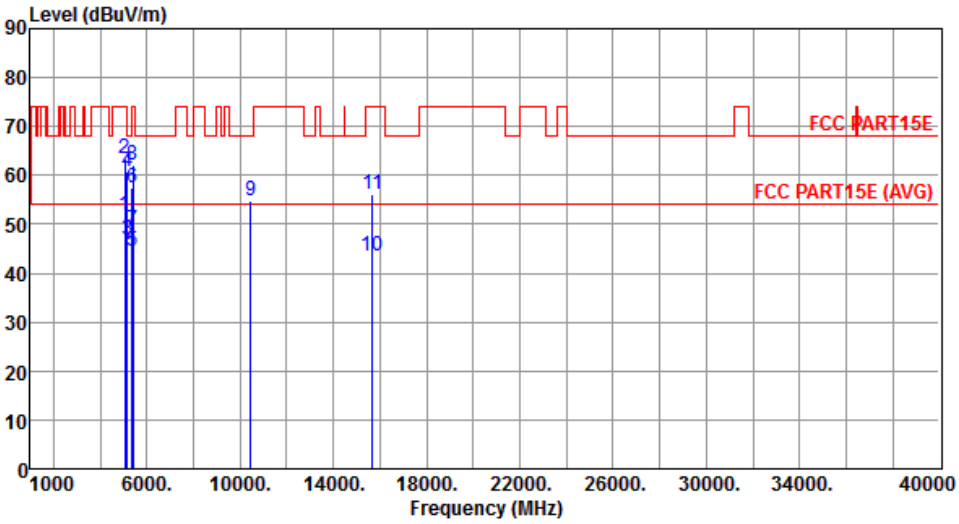
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5030.00	49.12	54.00	-4.88	44.76	4.36	Average	153	101
2	5030.00	61.22	74.00	-12.78	56.86	4.36	Peak	153	101
3	5150.00	49.88	54.00	-4.12	45.40	4.48	Average	153	101
4	5150.00	72.22	74.00	-1.78	67.74	4.48	Peak	153	101
5	10380.00	54.24	68.20	-13.96	40.42	13.82	Peak	100	357
6	15570.00	42.77	54.00	-11.23	28.43	14.34	Average	121	208
7	15570.00	54.60	74.00	-19.40	40.26	14.34	Peak	121	208

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

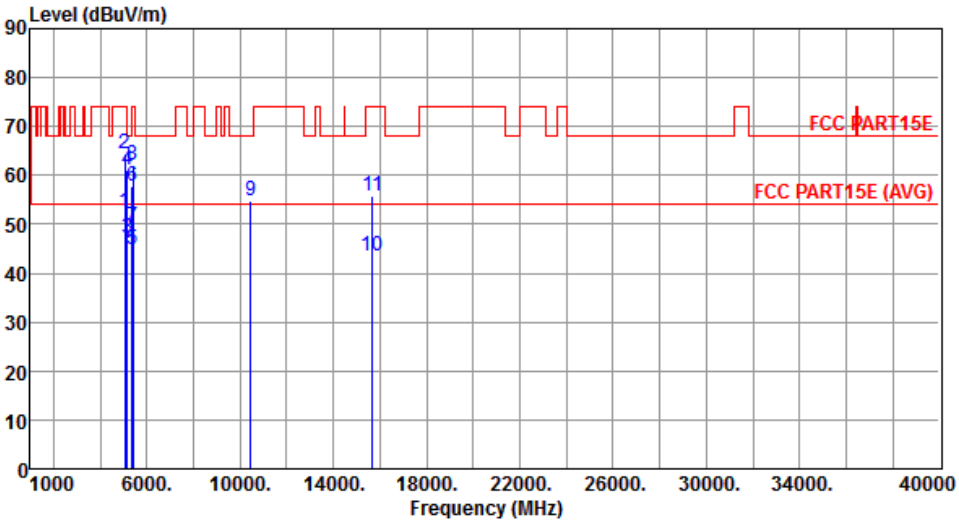
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5070.00	51.89	54.00	-2.11	47.49	4.40	Average	203	300
2	5070.00	63.47	74.00	-10.53	59.07	4.40	Peak	203	300
3	5150.00	46.71	54.00	-7.29	42.23	4.48	Average	144	297
4	5150.00	60.73	74.00	-13.27	56.25	4.48	Peak	144	297
5	5350.00	44.57	54.00	-9.43	39.83	4.74	Average	144	297
6	5350.00	57.38	74.00	-16.62	52.64	4.74	Peak	144	297
7	5390.00	48.95	54.00	-5.05	44.15	4.80	Average	144	297
8	5390.00	62.04	74.00	-11.96	57.24	4.80	Peak	144	297
9	10460.00	54.72	68.20	-13.48	40.79	13.93	Peak	249	327
10	15690.00	43.59	54.00	-10.41	29.44	14.15	Average	286	45
11	15690.00	56.28	74.00	-17.72	42.13	14.15	Peak	286	45

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

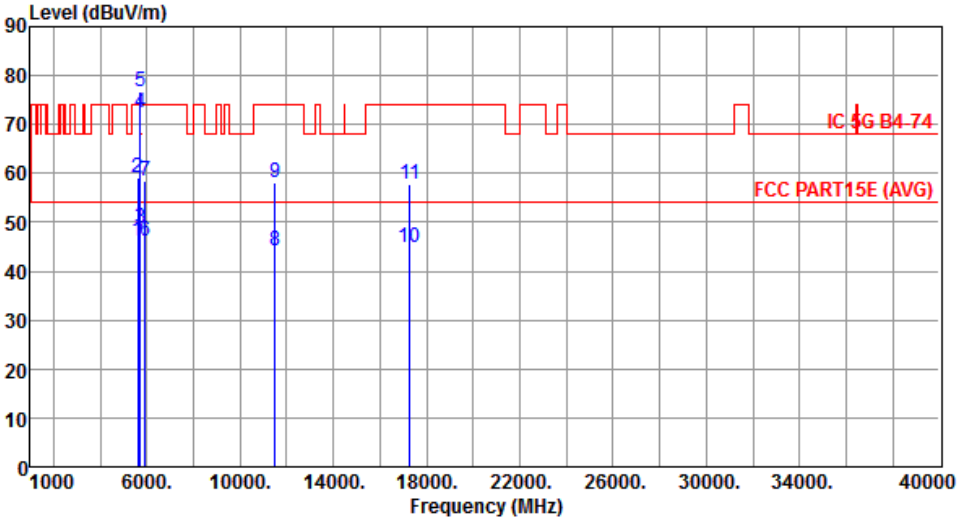
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5070.00	52.47	54.00	-1.53	48.07	4.40	Average	174	164
2	5070.00	64.59	74.00	-9.41	60.19	4.40	Peak	174	164
3	5150.00	47.12	54.00	-6.88	42.64	4.48	Average	184	100
4	5150.00	61.17	74.00	-12.83	56.69	4.48	Peak	184	100
5	5350.00	44.68	54.00	-9.32	39.94	4.74	Average	184	100
6	5350.00	57.82	74.00	-16.18	53.08	4.74	Peak	184	100
7	5390.00	49.62	54.00	-4.38	44.82	4.80	Average	184	100
8	5390.00	61.99	74.00	-12.01	57.19	4.80	Peak	184	100
9	10460.00	54.79	68.20	-13.41	40.86	13.93	Peak	219	258
10	15690.00	43.62	54.00	-10.38	29.47	14.15	Average	115	201
11	15690.00	55.83	74.00	-18.17	41.68	14.15	Peak	115	201

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

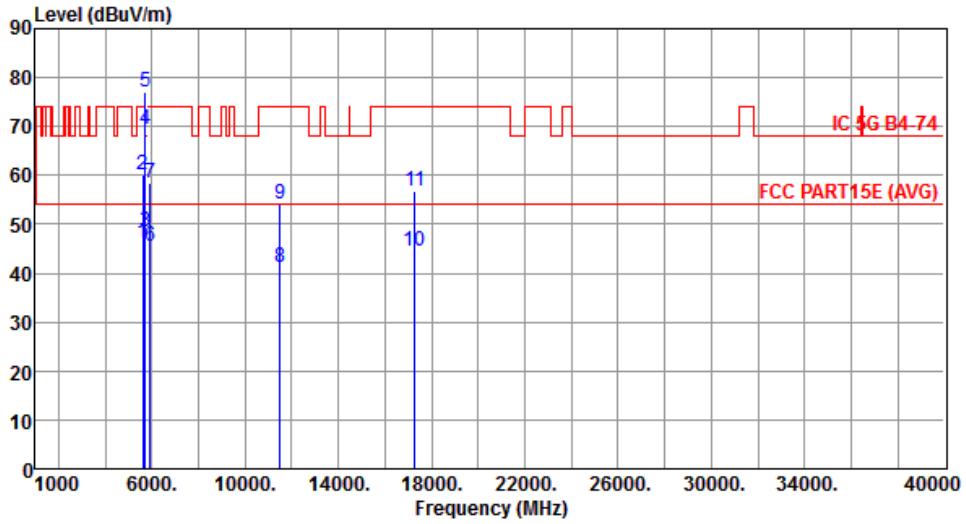
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5595.00	46.30	54.00	-7.70	41.20	5.10	Average	226	260
2	5595.00	59.18	74.00	-14.82	54.08	5.10	Peak	226	260
3	5715.00	48.68	54.00	-5.32	43.38	5.30	Average	226	260
4	5715.00	72.50	74.00	-1.50	67.20	5.30	Peak	226	260
5	5725.00	76.88	78.20	-1.32	71.56	5.32	Peak	226	260
6	5915.00	46.12	54.00	-7.88	40.50	5.62	Average	226	260
7	5915.00	58.57	74.00	-15.43	52.95	5.62	Peak	226	260
8	11510.00	44.13	54.00	-9.87	29.33	14.80	Average	160	265
9	11510.00	58.05	74.00	-15.95	43.25	14.80	Peak	160	265
10	17265.00	44.68	54.00	-9.32	26.90	17.78	Average	194	298
11	17265.00	57.90	74.00	-16.10	40.12	17.78	Peak	194	298

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

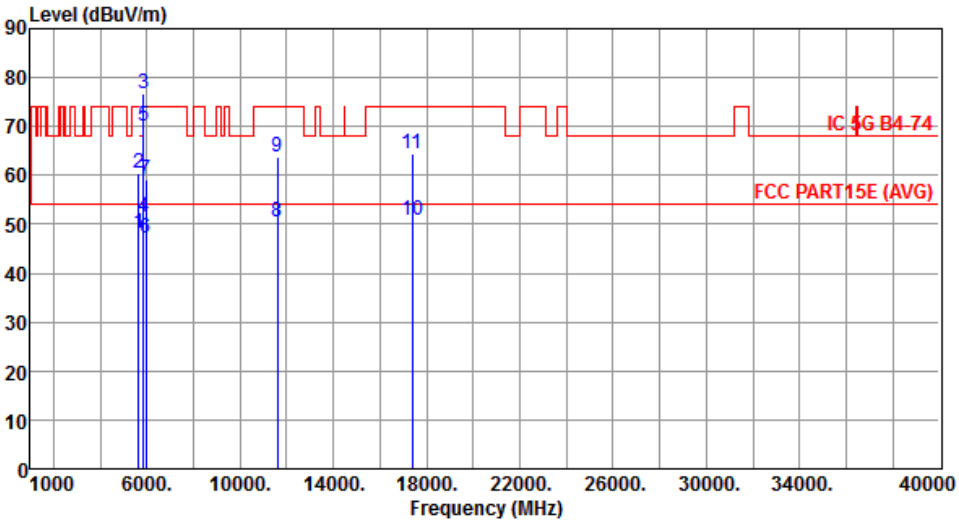
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5595.00	46.10	54.00	-7.90	41.00	5.10	Average	245	10
2	5595.00	60.18	74.00	-13.82	55.08	5.10	Peak	245	10
3	5715.00	48.36	54.00	-5.64	43.06	5.30	Average	245	10
4	5715.00	69.42	74.00	-4.58	64.12	5.30	Peak	245	10
5	5725.00	77.19	78.20	-1.01	71.87	5.32	Peak	245	10
6	5915.00	45.51	54.00	-8.49	39.89	5.62	Average	245	10
7	5915.00	58.29	74.00	-15.71	52.67	5.62	Peak	245	10
8	11510.00	41.08	54.00	-12.92	26.28	14.80	Average	172	90
9	11510.00	54.05	74.00	-19.95	39.25	14.80	Peak	172	90
10	17265.00	44.58	54.00	-9.42	26.80	17.78	Average	172	234
11	17265.00	56.90	74.00	-17.10	39.12	17.78	Peak	172	234

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

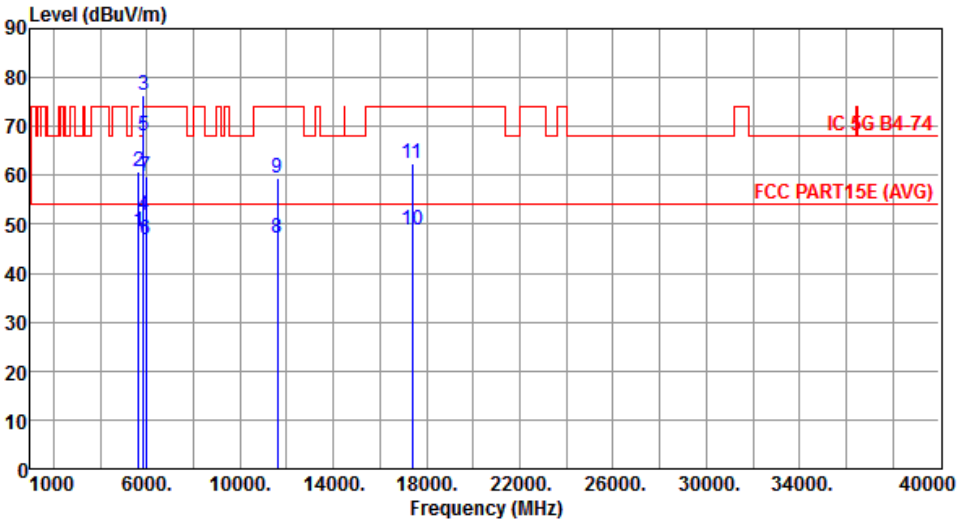
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5635.00	48.07	54.00	-5.93	42.90	5.17	Average	257	261
2	5635.00	60.41	74.00	-13.59	55.24	5.17	Peak	257	261
3	5850.00	76.78	78.20	-1.42	71.26	5.52	Peak	257	261
4	5860.00	51.34	54.00	-2.66	45.80	5.54	Average	257	261
5	5860.00	69.95	74.00	-4.05	64.41	5.54	Peak	257	261
6	5955.00	47.08	54.00	-6.92	41.39	5.69	Average	257	261
7	5955.00	59.23	74.00	-14.77	53.54	5.69	Peak	257	261
8	11590.00	50.48	54.00	-3.52	35.89	14.59	Average	174	241
9	11590.00	63.79	74.00	-10.21	49.20	14.59	Peak	174	241
10	17385.00	50.77	54.00	-3.23	32.70	18.07	Average	152	255
11	17385.00	64.36	74.00	-9.64	46.29	18.07	Peak	152	255

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

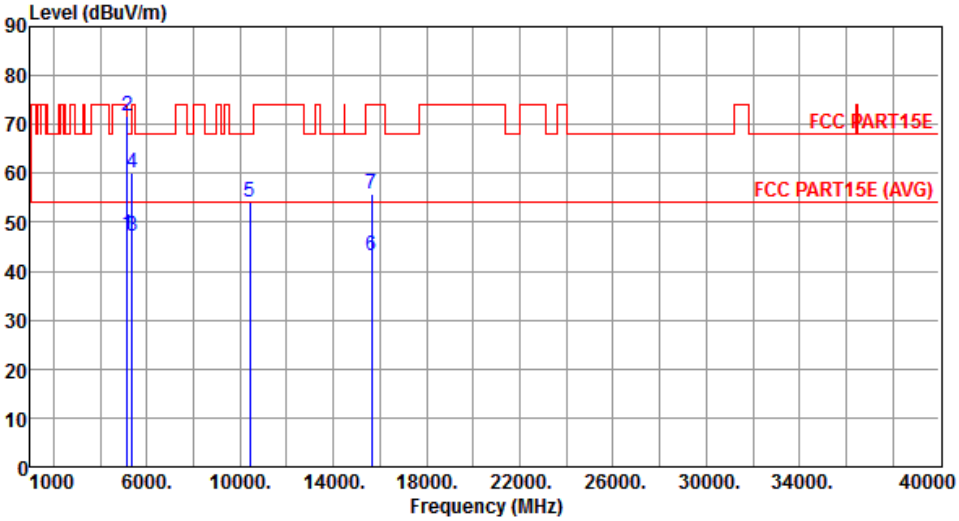


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5635.00	48.47	54.00	-5.53	43.30	5.17	Average	197	9
2	5635.00	60.71	74.00	-13.29	55.54	5.17	Peak	197	9
3	5850.00	76.30	78.20	-1.90	70.78	5.52	Peak	197	9
4	5860.00	51.74	54.00	-2.26	46.20	5.54	Average	197	9
5	5860.00	68.12	74.00	-5.88	62.58	5.54	Peak	197	9
6	5955.00	46.88	54.00	-7.12	41.19	5.69	Average	197	9
7	5955.00	59.77	74.00	-14.23	54.08	5.69	Peak	197	9
8	11590.00	47.02	54.00	-6.98	32.43	14.59	Average	126	96
9	11590.00	59.42	74.00	-14.58	44.83	14.59	Peak	126	96
10	17385.00	48.76	54.00	-5.24	30.69	18.07	Average	186	239
11	17385.00	62.31	74.00	-11.69	44.24	18.07	Peak	186	239

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

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

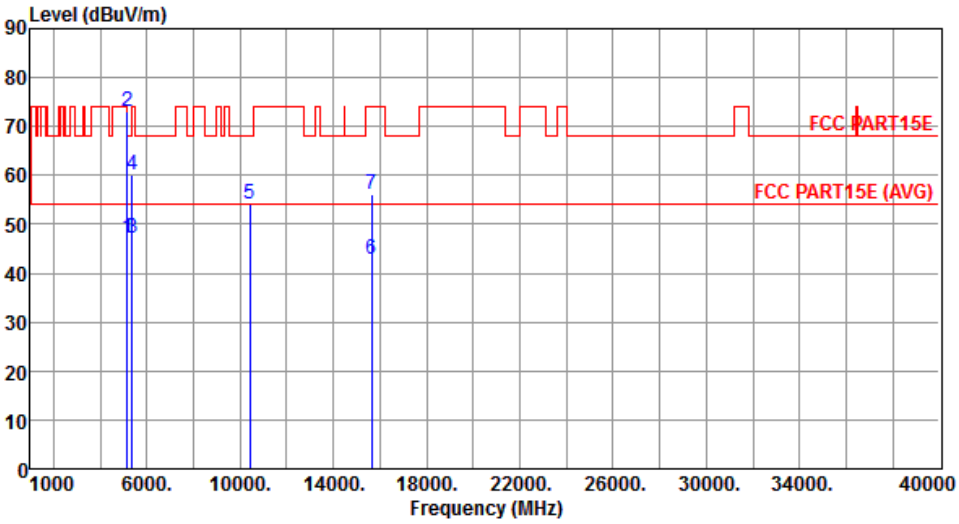
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.64	54.00	-6.36	43.16	4.48	Average	187	298
2	5150.00	71.81	74.00	-2.19	67.33	4.48	Peak	187	298
3	5350.00	47.02	54.00	-6.98	42.28	4.74	Average	187	298
4	5350.00	60.06	74.00	-13.94	55.32	4.74	Peak	187	298
5	10420.00	54.11	68.20	-14.09	40.24	13.87	Peak	231	186
6	15630.00	43.12	54.00	-10.88	28.87	14.25	Average	130	62
7	15630.00	55.68	74.00	-18.32	41.43	14.25	Peak	130	62

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

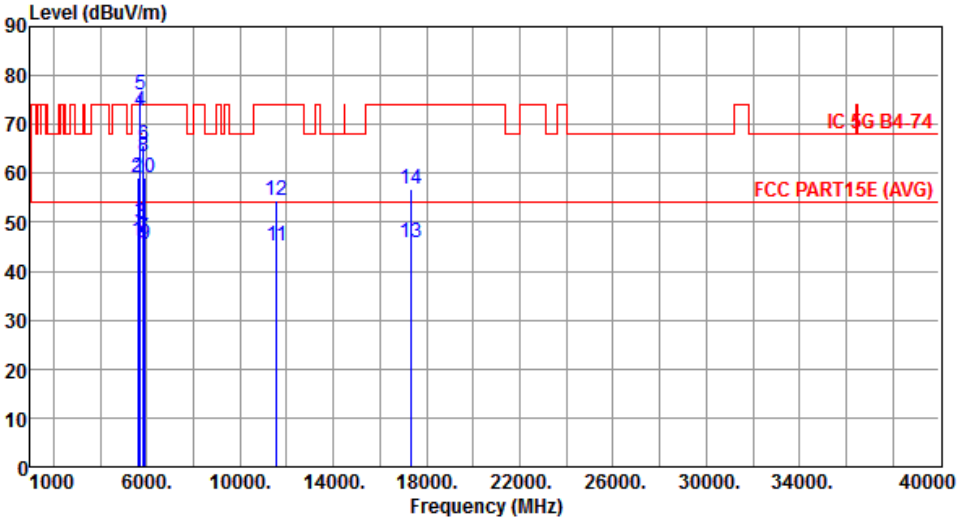
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.08	54.00	-6.92	42.60	4.48	Average	185	100
2	5150.00	72.99	74.00	-1.01	68.51	4.48	Peak	185	100
3	5350.00	47.11	54.00	-6.89	42.37	4.74	Average	185	100
4	5350.00	59.97	74.00	-14.03	55.23	4.74	Peak	185	100
5	10420.00	54.11	68.20	-14.09	40.24	13.87	Peak	231	186
6	15630.00	42.94	54.00	-11.06	28.69	14.25	Average	142	216
7	15630.00	56.19	74.00	-17.81	41.94	14.25	Peak	142	216

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

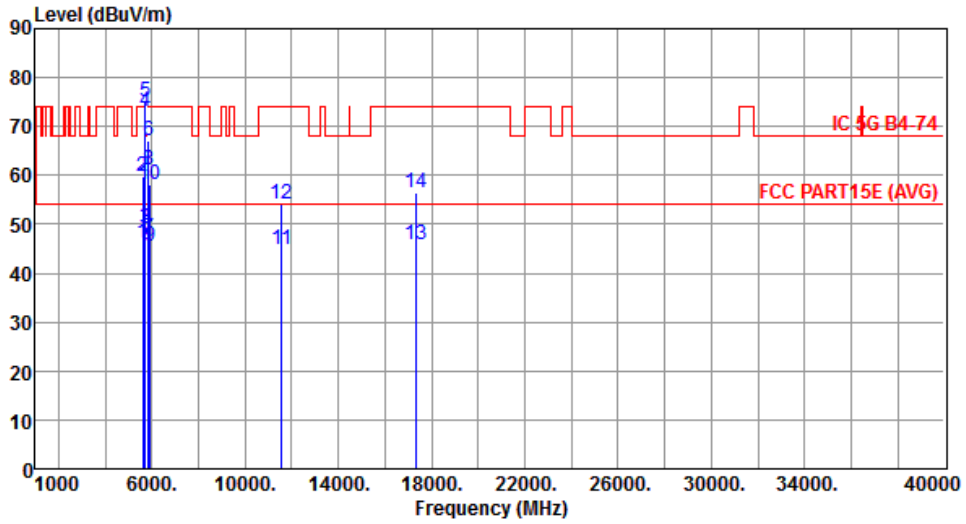
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5615.00	46.13	54.00	-7.87	41.00	5.13	Average	220	260
2	5615.00	58.95	74.00	-15.05	53.82	5.13	Peak	220	260
3	5715.00	49.81	54.00	-4.19	44.51	5.30	Average	220	260
4	5715.00	72.59	74.00	-1.41	67.29	5.30	Peak	220	260
5	5725.00	76.01	78.20	-2.19	70.69	5.32	Peak	220	260
6	5850.00	65.79	78.20	-12.41	60.27	5.52	Peak	220	260
7	5860.00	46.81	54.00	-7.19	41.27	5.54	Average	220	260
8	5860.00	63.28	74.00	-10.72	57.74	5.54	Peak	220	260
9	5935.00	45.65	54.00	-8.35	40.00	5.65	Average	220	260
10	5935.00	58.96	74.00	-15.04	53.31	5.65	Peak	220	260
11	11550.00	45.03	54.00	-8.97	30.34	14.69	Average	156	102
12	11550.00	54.53	74.00	-19.47	39.84	14.69	Peak	156	102
13	17325.00	45.89	54.00	-8.11	27.96	17.93	Average	100	258
14	17325.00	56.83	74.00	-17.17	38.90	17.93	Peak	100	258

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

Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Vertical		



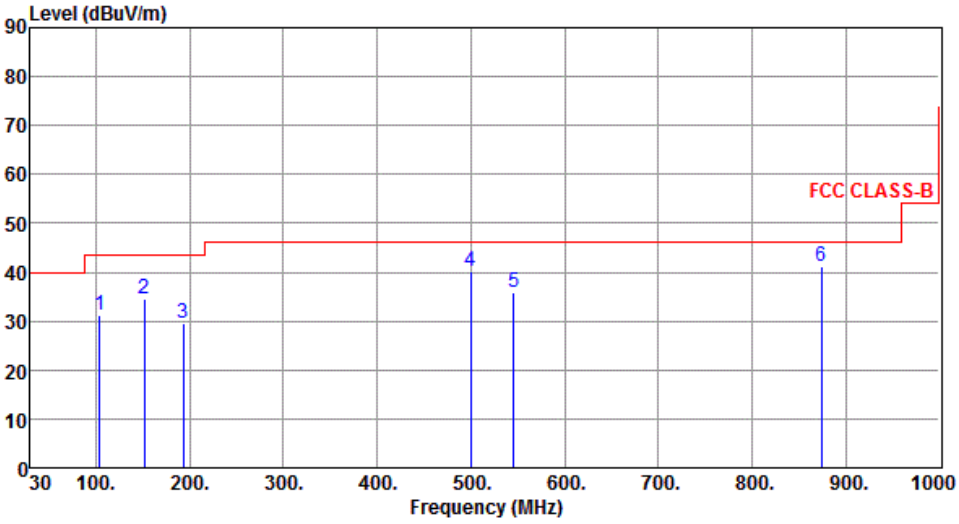
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5615.00	46.24	54.00	-7.76	41.11	5.13	Average	218	10
2	5615.00	59.62	74.00	-14.38	54.49	5.13	Peak	218	10
3	5715.00	49.00	54.00	-5.00	43.70	5.30	Average	218	10
4	5715.00	72.99	74.00	-1.01	67.69	5.30	Peak	218	10
5	5725.00	75.19	78.20	-3.01	69.87	5.32	Peak	218	10
6	5850.00	67.22	78.20	-10.98	61.70	5.52	Peak	218	10
7	5860.00	47.10	54.00	-6.90	41.56	5.54	Average	218	10
8	5860.00	61.22	74.00	-12.78	55.68	5.54	Peak	218	10
9	5935.00	45.58	54.00	-8.42	39.93	5.65	Average	218	10
10	5935.00	58.27	74.00	-15.73	52.62	5.65	Peak	218	10
11	11550.00	44.81	54.00	-9.19	30.12	14.69	Average	145	98
12	11550.00	54.26	74.00	-19.74	39.57	14.69	Peak	145	98
13	17325.00	45.77	54.00	-8.23	27.84	17.93	Average	129	254
14	17325.00	56.56	74.00	-17.44	38.63	17.93	Peak	129	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).

Beamforming mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

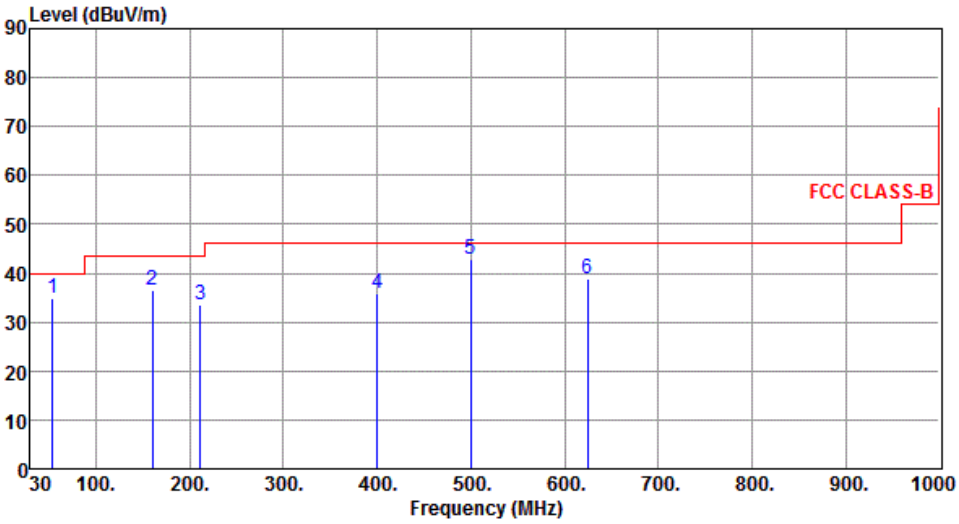
Modulation	VHT20	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	104.12	31.20	43.50	-12.30	43.36	-12.16	Peak	---	---
2	151.52	34.59	43.50	-8.91	42.76	-8.17	Peak	---	---
3	193.26	29.43	43.50	-14.07	40.43	-11.00	Peak	---	---
4	500.03	40.23	46.00	-5.77	43.04	-2.81	Peak	---	---
5	545.84	35.72	46.00	-10.28	37.65	-1.93	Peak	---	---
6	874.22	41.34	46.00	-4.66	37.57	3.77	Peak	---	---

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

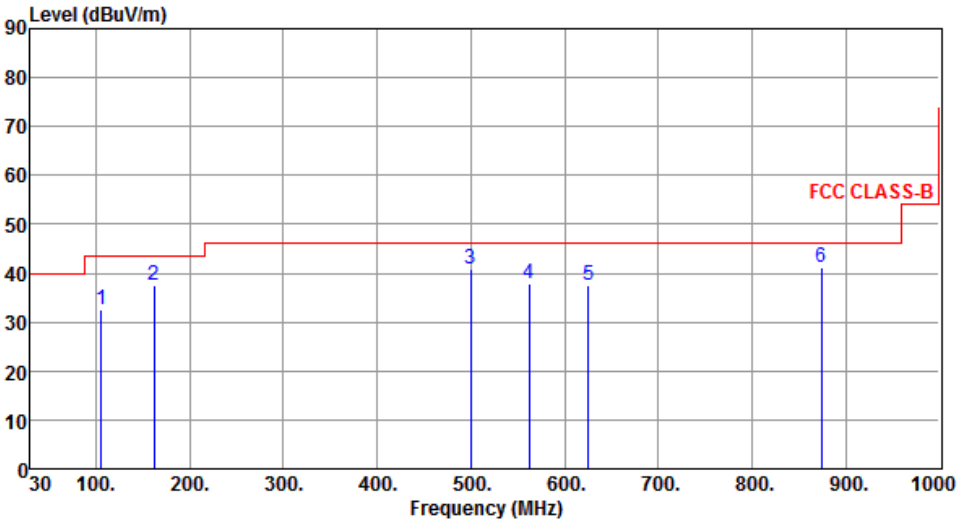
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	53.52	34.79	40.00	-5.21	42.89	-8.10	QP	100	317
2	159.89	36.64	43.50	-6.86	44.71	-8.07	Peak	---	---
3	211.73	33.53	43.50	-9.97	44.23	-10.70	Peak	---	---
4	399.87	35.83	46.00	-10.17	40.82	-4.99	Peak	---	---
5	499.99	42.77	46.00	-3.23	45.58	-2.81	QP	100	63
6	624.74	38.88	46.00	-7.12	39.23	-0.35	Peak	---	---

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

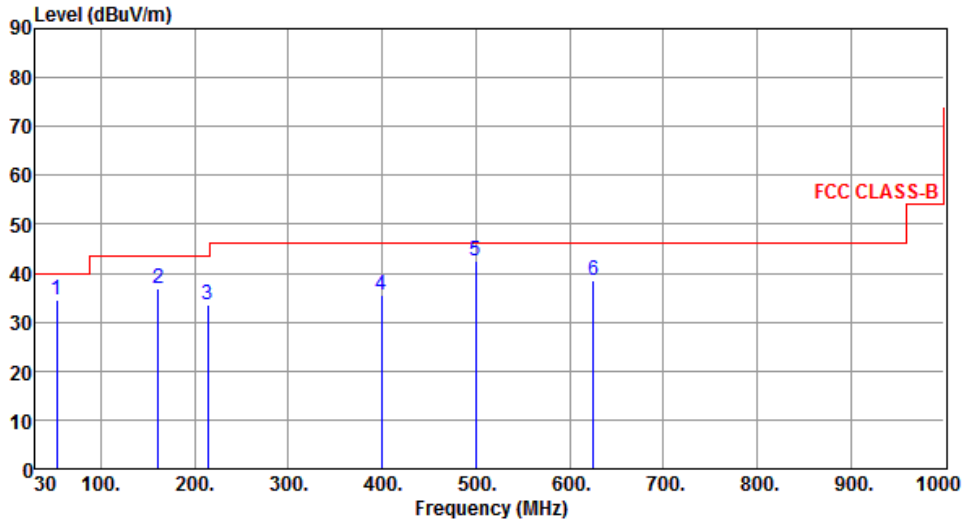
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	105.64	32.69	43.50	-10.81	44.60	-11.91	Peak	---	---
2	162.12	37.66	43.50	-5.84	45.84	-8.18	Peak	---	---
3	499.97	40.82	46.00	-5.18	43.63	-2.81	Peak	---	---
4	561.85	37.78	46.00	-8.22	39.35	-1.57	Peak	---	---
5	625.26	37.46	46.00	-8.54	37.80	-0.34	Peak	---	---
6	874.16	41.06	46.00	-4.94	37.29	3.77	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

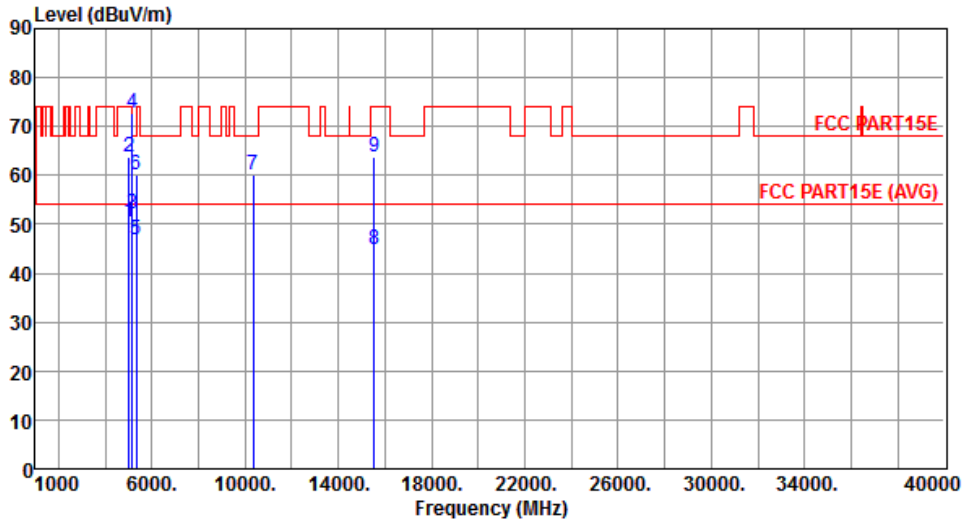


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	52.94	34.64	40.00	-5.36	42.66	-8.02	QP	100	268
2	160.82	36.95	43.50	-6.55	45.06	-8.11	Peak	---	---
3	214.29	33.57	43.50	-9.93	44.26	-10.69	Peak	---	---
4	399.68	35.59	46.00	-10.41	40.59	-5.00	Peak	---	---
5	499.98	42.58	46.00	-3.42	45.39	-2.81	QP	100	58
6	625.79	38.54	46.00	-7.46	38.87	-0.33	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.

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

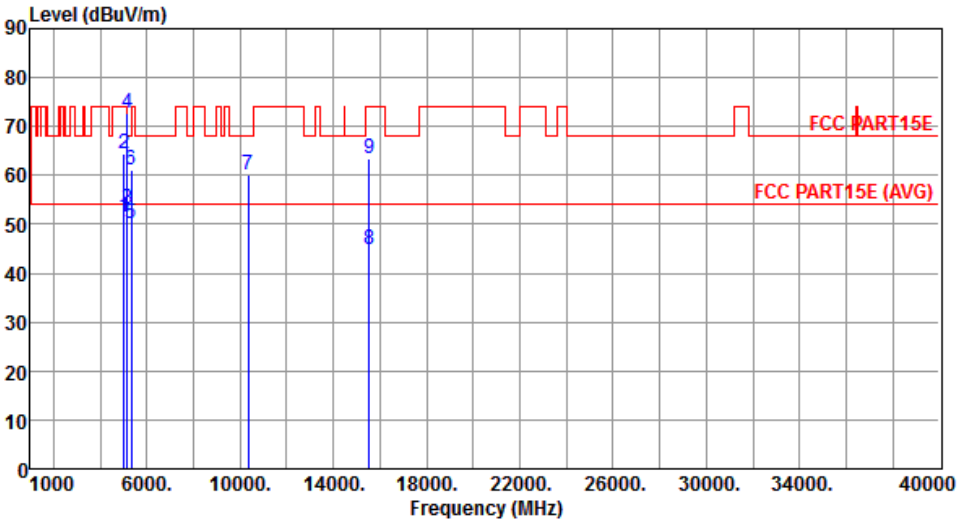
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5020.00	50.44	54.00	-3.56	46.08	4.36	Average	115	284
2	5020.00	63.72	74.00	-10.28	59.36	4.36	Peak	115	284
3	5150.00	52.25	54.00	-1.75	47.77	4.48	Average	115	284
4	5150.00	72.79	74.00	-1.21	68.31	4.48	Peak	115	284
5	5340.00	46.89	54.00	-7.11	42.17	4.72	Average	115	284
6	5340.00	60.05	68.20	-8.15	55.33	4.72	Peak	115	284
7	10360.00	60.20	68.20	-8.00	46.42	13.78	Peak	100	280
8	15540.00	44.96	54.00	-9.04	30.57	14.39	Average	116	254
9	15540.00	63.76	74.00	-10.24	49.37	14.39	Peak	116	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).

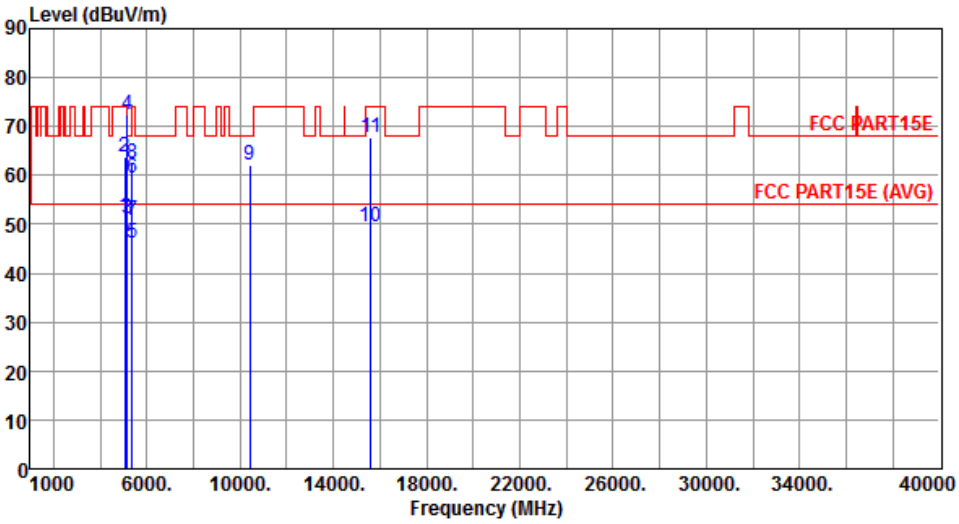
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5020.00	51.63	54.00	-2.37	47.27	4.36	Average	216	180
2	5020.00	64.54	74.00	-9.46	60.18	4.36	Peak	216	180
3	5150.00	52.99	54.00	-1.01	48.51	4.48	Average	216	318
4	5150.00	72.82	74.00	-1.18	68.34	4.48	Peak	216	318
5	5340.00	50.23	54.00	-3.77	45.51	4.72	Average	181	318
6	5340.00	61.18	68.20	-7.02	56.46	4.72	Peak	181	318
7	10360.00	60.03	68.20	-8.17	46.25	13.78	Peak	116	206
8	15540.00	44.76	54.00	-9.24	30.37	14.39	Average	202	204
9	15540.00	63.56	74.00	-10.44	49.17	14.39	Peak	202	204

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

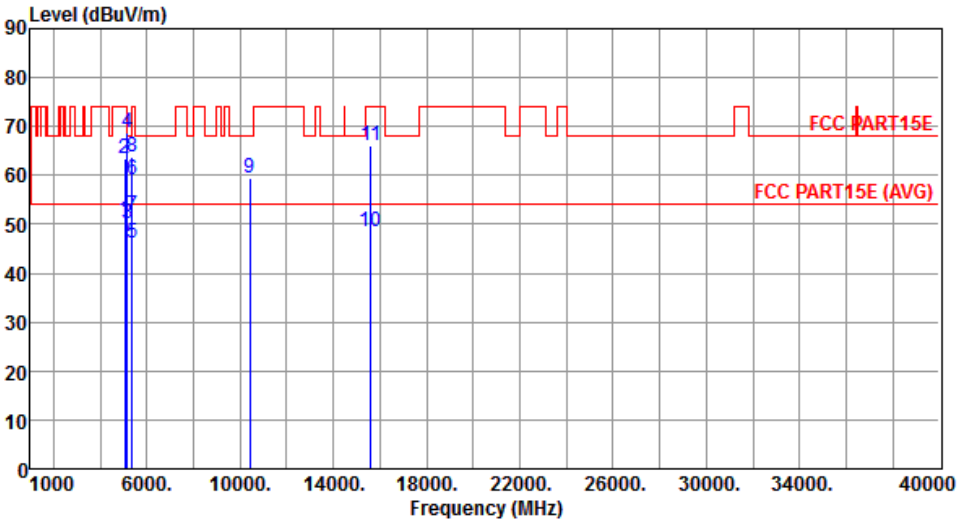
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5040.00	51.41	54.00	-2.59	47.04	4.37	Average	106	290
2	5040.00	63.79	74.00	-10.21	59.42	4.37	Peak	106	290
3	5150.00	51.19	54.00	-2.81	46.71	4.48	Average	176	290
4	5150.00	72.25	74.00	-1.75	67.77	4.48	Peak	176	290
5	5350.00	46.02	54.00	-7.98	41.28	4.74	Average	176	290
6	5350.00	59.28	74.00	-14.72	54.54	4.74	Peak	176	290
7	5360.00	50.66	54.00	-3.34	45.91	4.75	Average	176	290
8	5360.00	62.56	74.00	-11.44	57.81	4.75	Peak	176	290
9	10400.00	61.95	68.20	-6.25	48.10	13.85	Peak	100	258
10	15600.00	49.63	54.00	-4.37	35.33	14.30	Average	108	231
11	15600.00	67.91	74.00	-6.09	53.61	14.30	Peak	108	231

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

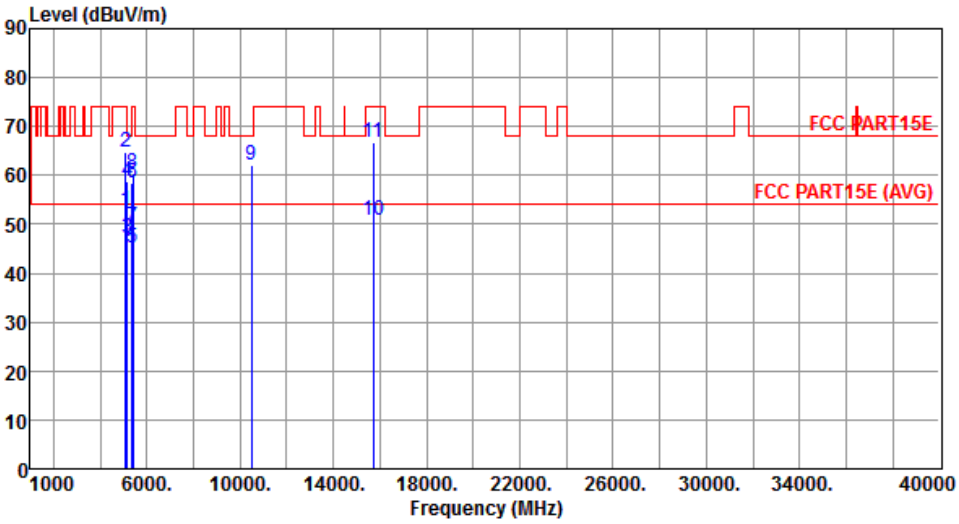
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5040.00	50.97	54.00	-3.03	46.60	4.37	Average	203	324
2	5040.00	63.34	74.00	-10.66	58.97	4.37	Peak	203	324
3	5150.00	50.15	54.00	-3.85	45.67	4.48	Average	203	324
4	5150.00	68.73	74.00	-5.27	64.25	4.48	Peak	203	324
5	5350.00	46.32	54.00	-7.68	41.58	4.74	Average	203	324
6	5350.00	59.19	74.00	-14.81	54.45	4.74	Peak	203	324
7	5360.00	51.86	54.00	-2.14	47.11	4.75	Average	203	324
8	5360.00	63.81	74.00	-10.19	59.06	4.75	Peak	203	324
9	10400.00	59.52	68.20	-8.68	45.67	13.85	Peak	352	158
10	15600.00	48.61	54.00	-5.39	34.31	14.30	Average	103	226
11	15600.00	65.97	74.00	-8.03	51.67	14.30	Peak	103	226

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

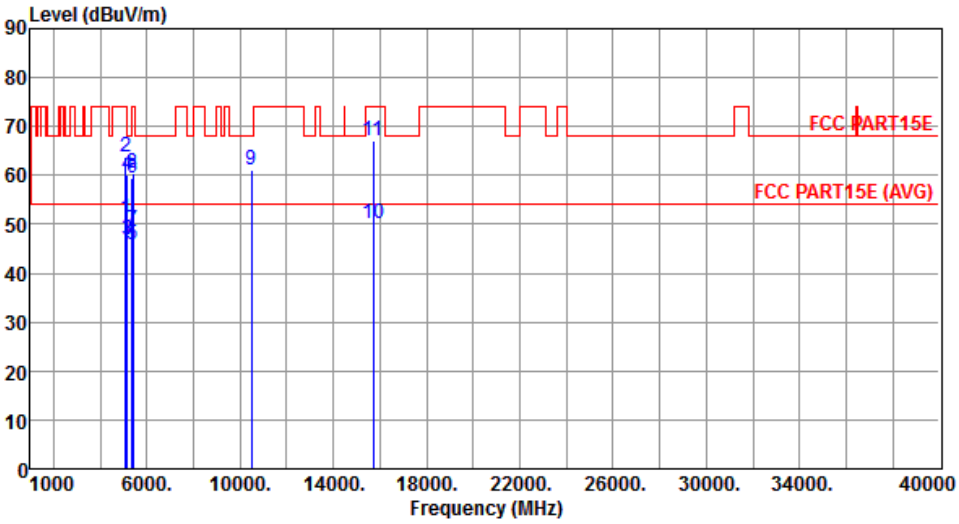
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5080.00	52.88	54.00	-1.12	48.48	4.40	Average	206	286
2	5080.00	64.91	74.00	-9.09	60.51	4.40	Peak	206	286
3	5150.00	47.03	54.00	-6.97	42.55	4.48	Average	206	286
4	5150.00	58.94	74.00	-15.06	54.46	4.48	Peak	206	286
5	5350.00	45.29	54.00	-8.71	40.55	4.74	Average	206	286
6	5350.00	58.46	74.00	-15.54	53.72	4.74	Peak	210	288
7	5400.00	49.49	54.00	-4.51	44.67	4.82	Average	206	286
8	5400.00	60.47	74.00	-13.53	55.65	4.82	Peak	210	288
9	10480.00	62.04	68.20	-6.16	48.09	13.95	Peak	112	214
10	15720.00	50.68	54.00	-3.32	36.57	14.11	Average	103	303
11	15720.00	66.82	74.00	-7.18	52.71	14.11	Peak	103	303

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

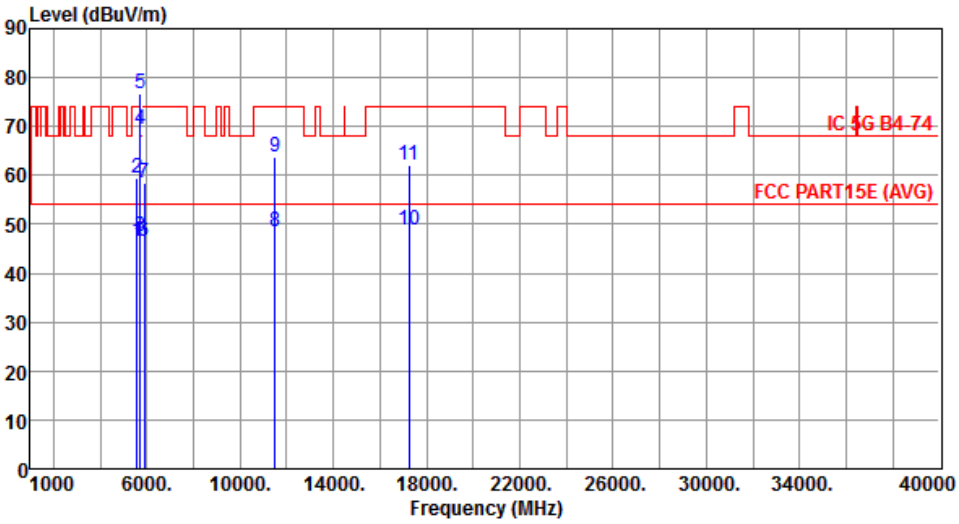
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5080.00	51.29	54.00	-2.71	46.89	4.40	Average	122	26
2	5080.00	63.82	74.00	-10.18	59.42	4.40	Peak	122	26
3	5150.00	46.82	54.00	-7.18	42.34	4.48	Average	122	26
4	5150.00	59.96	74.00	-14.04	55.48	4.48	Peak	122	26
5	5350.00	45.71	54.00	-8.29	40.97	4.74	Average	122	104
6	5350.00	59.37	74.00	-14.63	54.63	4.74	Peak	122	104
7	5400.00	48.82	54.00	-5.18	44.00	4.82	Average	122	104
8	5400.00	60.29	74.00	-13.71	55.47	4.82	Peak	122	104
9	10480.00	61.06	68.20	-7.14	47.11	13.95	Peak	311	157
10	15720.00	50.30	54.00	-3.70	36.19	14.11	Average	100	167
11	15720.00	66.92	74.00	-7.08	52.81	14.11	Peak	100	167

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

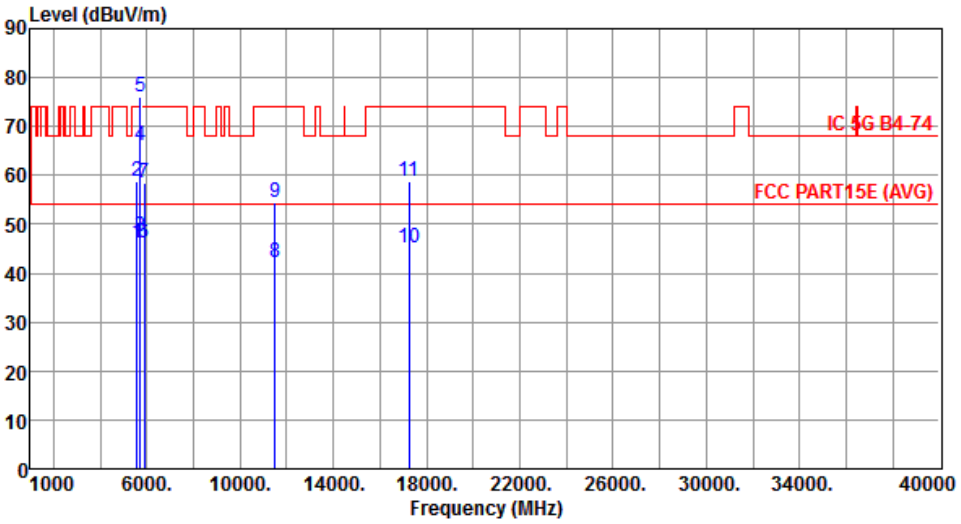
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5580.00	46.33	54.00	-7.67	41.26	5.07	Average	100	306
2	5580.00	59.29	74.00	-14.71	54.22	5.07	Peak	100	306
3	5715.00	47.42	54.00	-6.58	42.12	5.30	Average	100	306
4	5715.00	69.28	74.00	-4.72	63.98	5.30	Peak	100	306
5	5725.00	76.82	78.20	-1.38	71.50	5.32	Peak	100	306
6	5905.00	46.51	54.00	-7.49	40.90	5.61	Average	100	306
7	5905.00	58.40	74.00	-15.60	52.79	5.61	Peak	100	306
8	11490.00	48.63	54.00	-5.37	33.81	14.82	Average	128	250
9	11490.00	63.81	74.00	-10.19	48.99	14.82	Peak	128	250
10	17235.00	48.85	54.00	-5.15	31.14	17.71	Average	106	273
11	17235.00	61.94	74.00	-12.06	44.23	17.71	Peak	106	273

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

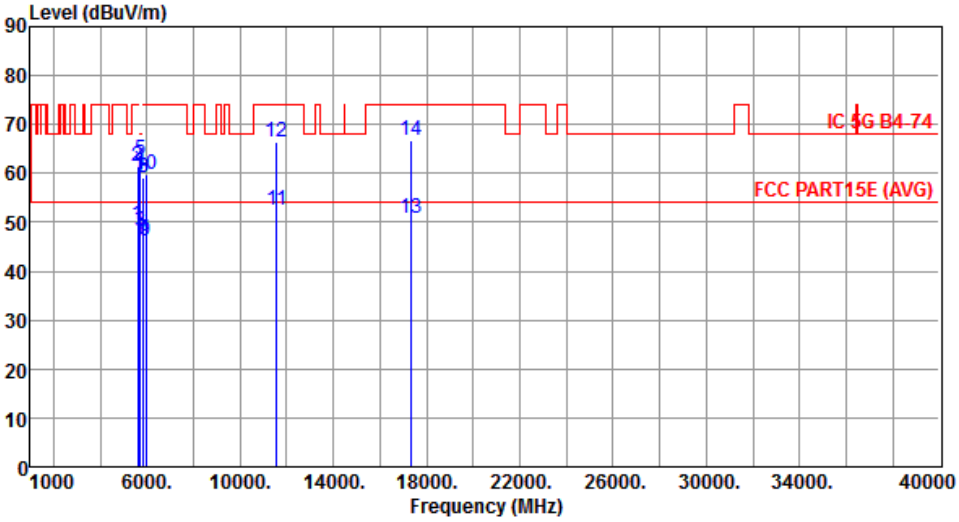
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5580.00	46.30	54.00	-7.70	41.23	5.07	Average	112	17
2	5580.00	58.93	74.00	-15.07	53.86	5.07	Peak	112	17
3	5715.00	47.43	54.00	-6.57	42.13	5.30	Average	112	17
4	5715.00	66.00	74.00	-8.00	60.70	5.30	Peak	112	17
5	5725.00	76.12	78.20	-2.08	70.80	5.32	Peak	112	17
6	5905.00	46.24	54.00	-7.76	40.63	5.61	Average	112	17
7	5905.00	58.57	74.00	-15.43	52.96	5.61	Peak	112	17
8	11490.00	42.09	54.00	-11.91	27.27	14.82	Average	144	268
9	11490.00	54.48	74.00	-19.52	39.66	14.82	Peak	144	268
10	17235.00	45.03	54.00	-8.97	27.32	17.71	Average	100	224
11	17235.00	58.84	74.00	-15.16	41.13	17.71	Peak	100	224

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

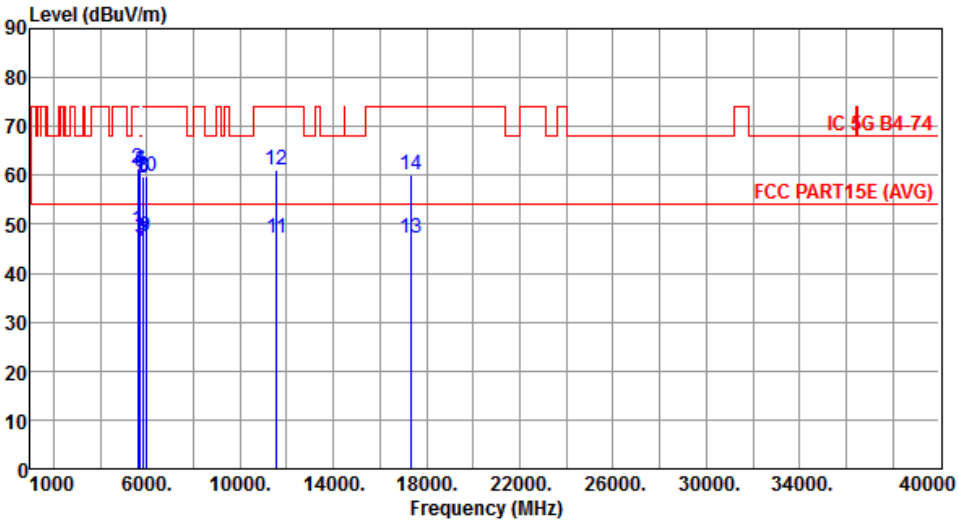
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5625.00	49.57	54.00	-4.43	44.42	5.15	Average	142	305
2	5625.00	61.47	74.00	-12.53	56.32	5.15	Peak	142	305
3	5715.00	48.20	54.00	-5.80	42.90	5.30	Average	142	305
4	5715.00	61.16	74.00	-12.84	55.86	5.30	Peak	142	305
5	5725.00	62.62	78.20	-15.58	57.30	5.32	Peak	142	305
6	5850.00	59.12	78.20	-19.08	53.60	5.52	Peak	142	305
7	5860.00	46.34	54.00	-7.66	40.80	5.54	Average	142	305
8	5860.00	59.18	74.00	-14.82	53.64	5.54	Peak	142	305
9	5945.00	46.23	54.00	-7.77	40.56	5.67	Average	142	305
10	5945.00	59.80	74.00	-14.20	54.13	5.67	Peak	142	305
11	11570.00	52.49	54.00	-1.51	37.85	14.64	Average	126	249
12	11570.00	66.38	74.00	-7.62	51.74	14.64	Peak	126	249
13	17355.00	50.83	54.00	-3.17	32.82	18.01	Average	100	233
14	17355.00	66.75	74.00	-7.25	48.74	18.01	Peak	100	233

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

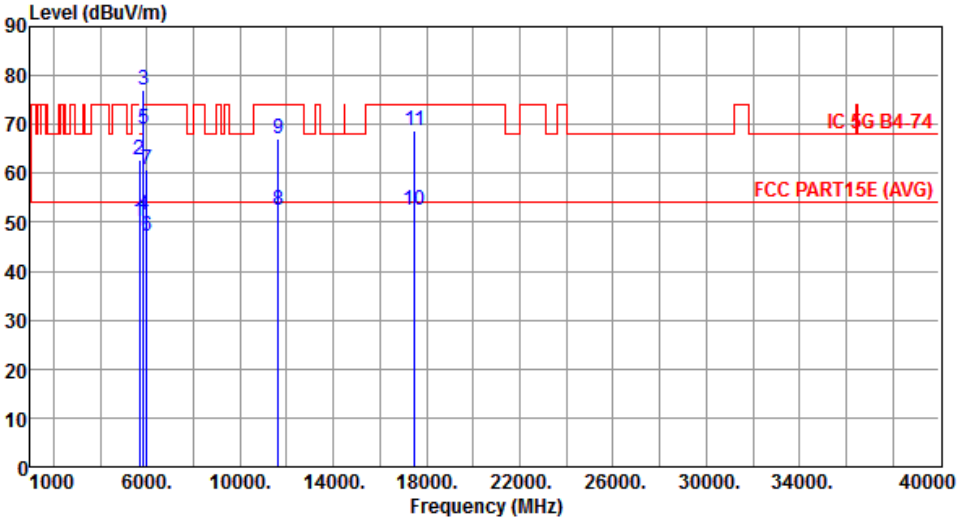
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5625.00	48.98	54.00	-5.02	43.83	5.15	Average	105	21
2	5625.00	61.44	74.00	-12.56	56.29	5.15	Peak	105	21
3	5715.00	47.00	54.00	-7.00	41.70	5.30	Average	105	21
4	5715.00	60.98	74.00	-13.02	55.68	5.30	Peak	105	21
5	5725.00	60.80	78.20	-17.40	55.48	5.32	Peak	105	21
6	5850.00	59.58	78.20	-18.62	54.06	5.52	Peak	105	21
7	5860.00	46.56	54.00	-7.44	41.02	5.54	Average	105	21
8	5860.00	59.66	74.00	-14.34	54.12	5.54	Peak	105	21
9	5945.00	47.36	54.00	-6.64	41.69	5.67	Average	105	21
10	5945.00	59.93	74.00	-14.07	54.26	5.67	Peak	105	21
11	11570.00	47.11	54.00	-6.89	32.47	14.64	Average	140	277
12	11570.00	61.26	74.00	-12.74	46.62	14.64	Peak	140	277
13	17355.00	47.26	54.00	-6.74	29.25	18.01	Average	104	207
14	17355.00	60.18	74.00	-13.82	42.17	18.01	Peak	104	207

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

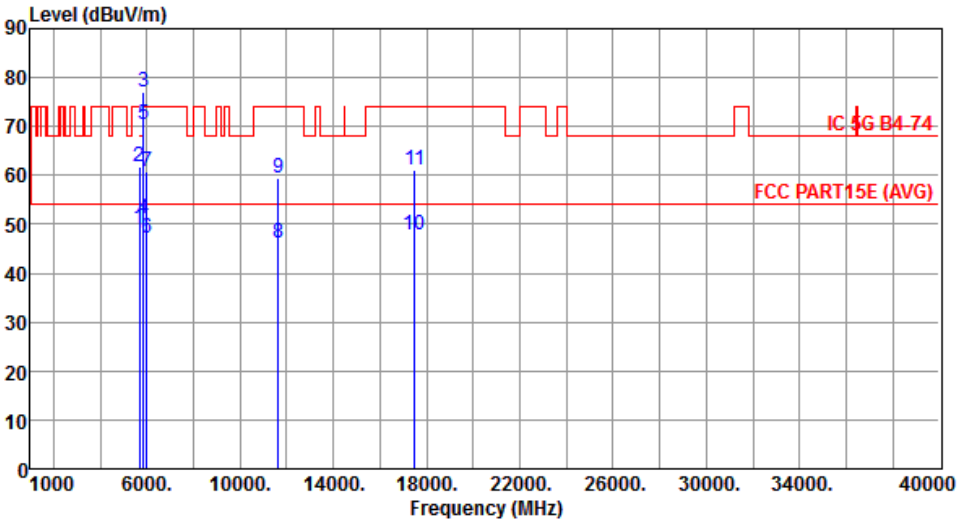
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5665.00	50.18	54.00	-3.82	44.97	5.21	Average	126	309
2	5665.00	62.81	74.00	-11.19	57.60	5.21	Peak	126	309
3	5850.00	77.08	78.20	-1.12	71.56	5.52	Peak	126	309
4	5860.00	51.37	54.00	-2.63	45.83	5.54	Average	126	309
5	5860.00	69.24	74.00	-4.76	63.70	5.54	Peak	126	309
6	5985.00	47.12	54.00	-6.88	41.38	5.74	Average	126	309
7	5985.00	60.63	74.00	-13.37	54.89	5.74	Peak	126	309
8	11650.00	52.48	54.00	-1.52	38.04	14.44	Average	129	274
9	11650.00	67.16	74.00	-6.84	52.72	14.44	Peak	129	274
10	17475.00	52.44	54.00	-1.56	34.15	18.29	Average	100	245
11	17475.00	68.91	74.00	-5.09	50.62	18.29	Peak	100	245

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

Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

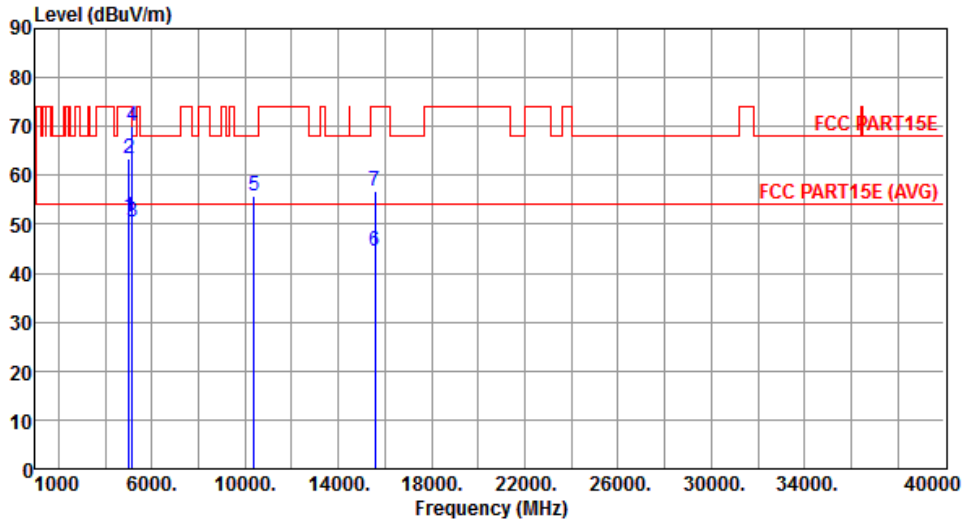


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5665.00	49.10	54.00	-4.90	43.89	5.21	Average	129	20
2	5665.00	61.62	74.00	-12.38	56.41	5.21	Peak	129	20
3	5850.00	76.92	78.20	-1.28	71.40	5.52	Peak	129	2
4	5860.00	51.13	54.00	-2.87	45.59	5.54	Average	129	2
5	5860.00	70.44	74.00	-3.56	64.90	5.54	Peak	129	2
6	5985.00	47.26	54.00	-6.74	41.52	5.74	Average	129	8
7	5985.00	60.69	74.00	-13.31	54.95	5.74	Peak	129	8
8	11650.00	46.06	54.00	-7.94	31.62	14.44	Average	135	263
9	11650.00	59.48	74.00	-14.52	45.04	14.44	Peak	135	263
10	17475.00	47.88	54.00	-6.12	29.59	18.29	Average	112	286
11	17475.00	61.12	74.00	-12.88	42.83	18.29	Peak	112	286

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

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

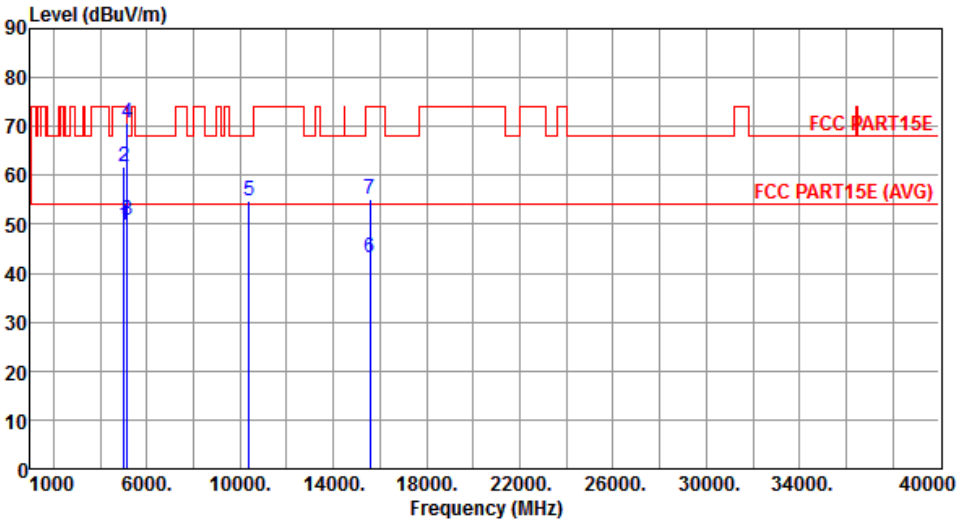
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5030.00	51.46	54.00	-2.54	47.10	4.36	Average	194	292
2	5030.00	63.45	74.00	-10.55	59.09	4.36	Peak	194	292
3	5150.00	50.32	54.00	-3.68	45.84	4.48	Average	103	292
4	5150.00	70.15	74.00	-3.85	65.67	4.48	Peak	103	292
5	10380.00	55.68	68.20	-12.52	41.86	13.82	Peak	118	340
6	15570.00	44.51	54.00	-9.49	30.17	14.34	Average	296	46
7	15570.00	56.94	74.00	-17.06	42.60	14.34	Peak	296	46

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

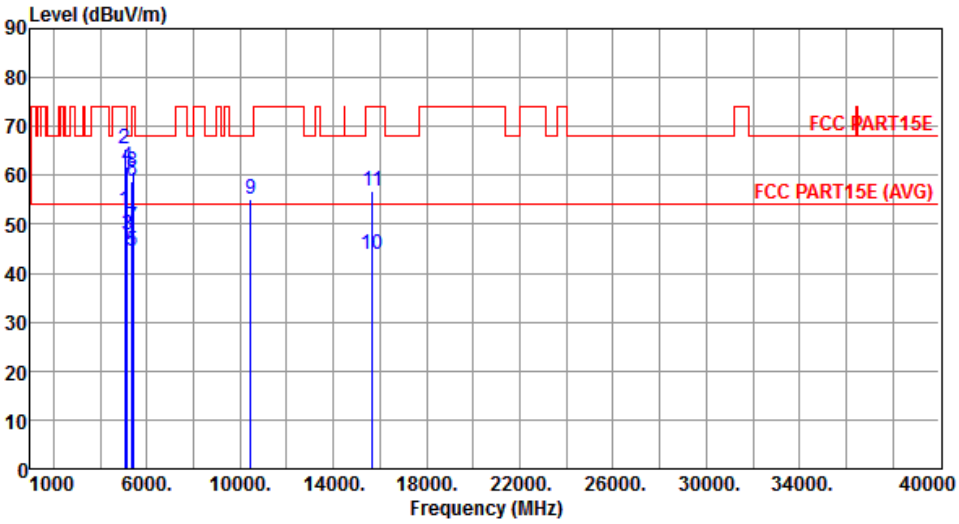
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5030.00	49.90	54.00	-4.10	45.54	4.36	Average	179	318
2	5030.00	61.85	74.00	-12.15	57.49	4.36	Peak	179	318
3	5150.00	50.96	54.00	-3.04	46.48	4.48	Average	179	318
4	5150.00	70.63	74.00	-3.37	66.15	4.48	Peak	179	318
5	10380.00	54.67	68.20	-13.53	40.85	13.82	Peak	100	347
6	15570.00	43.15	54.00	-10.85	28.81	14.34	Average	117	201
7	15570.00	55.16	74.00	-18.84	40.82	14.34	Peak	117	201

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

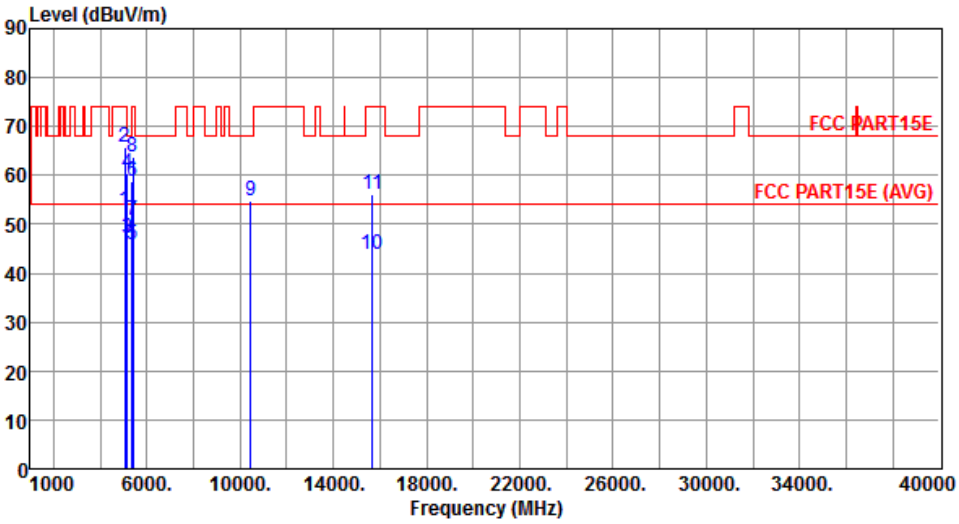
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5070.00	52.67	54.00	-1.33	48.27	4.40	Average	166	287
2	5070.00	65.32	74.00	-8.68	60.92	4.40	Peak	166	287
3	5150.00	47.67	54.00	-6.33	43.19	4.48	Average	145	287
4	5150.00	61.68	74.00	-12.32	57.20	4.48	Peak	145	287
5	5350.00	44.65	54.00	-9.35	39.91	4.74	Average	145	287
6	5350.00	58.79	74.00	-15.21	54.05	4.74	Peak	145	287
7	5390.00	49.57	54.00	-4.43	44.77	4.80	Average	145	287
8	5390.00	60.92	74.00	-13.08	56.12	4.80	Peak	145	287
9	10460.00	55.23	68.20	-12.97	41.30	13.93	Peak	229	314
10	15690.00	43.73	54.00	-10.27	29.58	14.15	Average	257	52
11	15690.00	56.83	74.00	-17.17	42.68	14.15	Peak	257	52

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

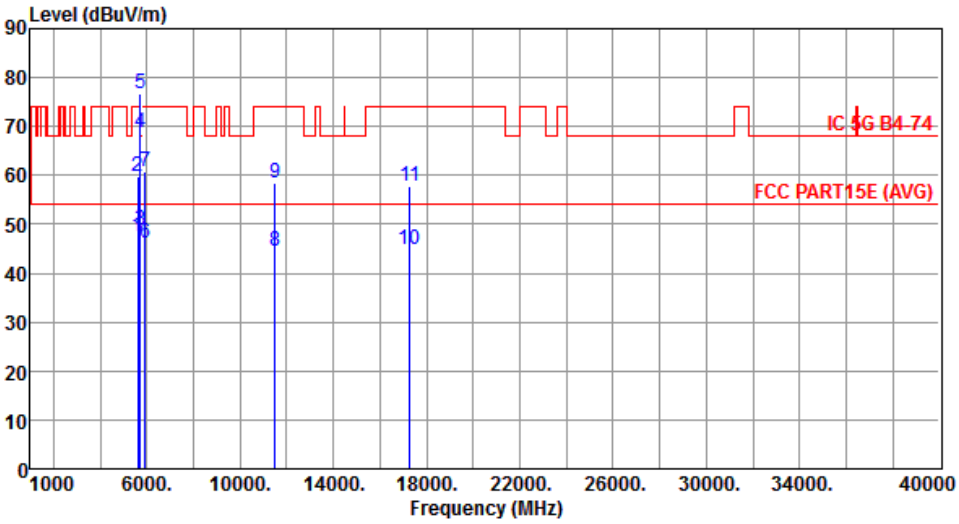
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5070.00	52.71	54.00	-1.29	48.31	4.40	Average	200	168
2	5070.00	65.62	74.00	-8.38	61.22	4.40	Peak	200	168
3	5150.00	47.22	54.00	-6.78	42.74	4.48	Average	200	314
4	5150.00	60.45	74.00	-13.55	55.97	4.48	Peak	200	314
5	5350.00	45.73	54.00	-8.27	40.99	4.74	Average	200	314
6	5350.00	58.66	74.00	-15.34	53.92	4.74	Peak	200	314
7	5390.00	50.87	54.00	-3.13	46.07	4.80	Average	200	314
8	5390.00	63.78	74.00	-10.22	58.98	4.80	Peak	200	314
9	10460.00	54.86	68.20	-13.34	40.93	13.93	Peak	205	271
10	15690.00	43.74	54.00	-10.26	29.59	14.15	Average	108	192
11	15690.00	56.06	74.00	-17.94	41.91	14.15	Peak	108	192

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

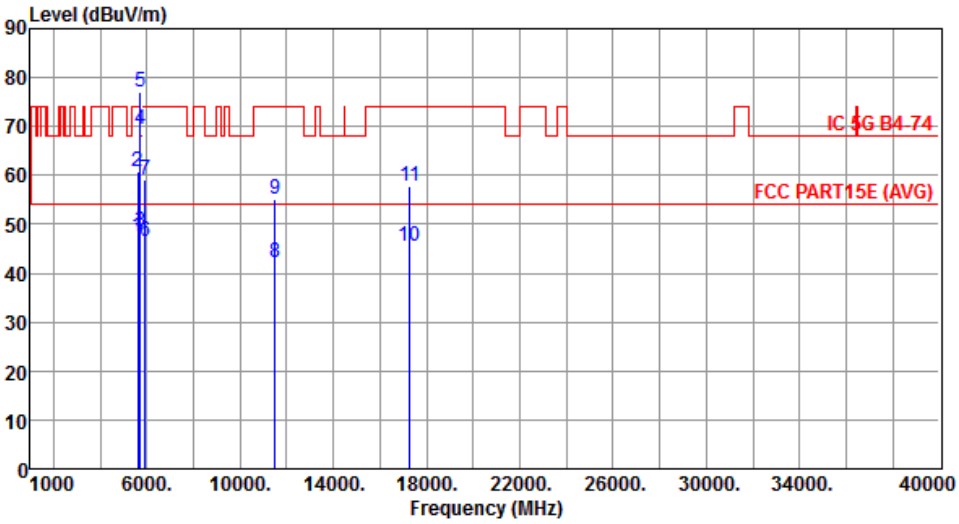
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5595.00	47.54	54.00	-6.46	42.44	5.10	Average	151	299
2	5595.00	59.93	74.00	-14.07	54.83	5.10	Peak	151	299
3	5715.00	48.87	54.00	-5.13	43.57	5.30	Average	151	299
4	5715.00	68.65	74.00	-5.35	63.35	5.30	Peak	151	299
5	5725.00	76.70	78.20	-1.50	71.38	5.32	Peak	151	299
6	5915.00	46.30	54.00	-7.70	40.68	5.62	Average	151	299
7	5915.00	60.91	74.00	-13.09	55.29	5.62	Peak	151	299
8	11510.00	44.54	54.00	-9.46	29.74	14.80	Average	113	245
9	11510.00	58.49	74.00	-15.51	43.69	14.80	Peak	113	245
10	17265.00	44.98	54.00	-9.02	27.20	17.78	Average	100	186
11	17265.00	57.83	74.00	-16.17	40.05	17.78	Peak	100	186

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

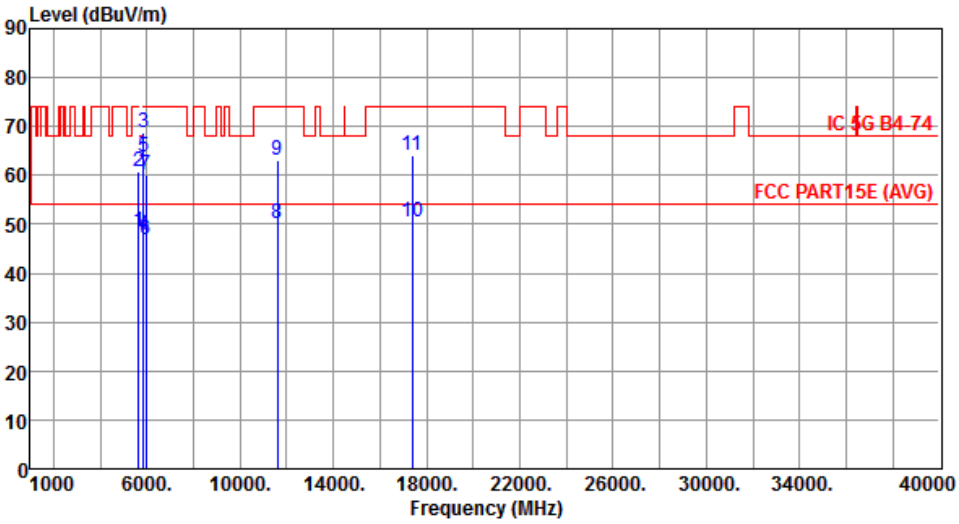
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5595.00	47.58	54.00	-6.42	42.48	5.10	Average	113	18
2	5595.00	60.92	74.00	-13.08	55.82	5.10	Peak	113	18
3	5715.00	48.53	54.00	-5.47	43.23	5.30	Average	113	18
4	5715.00	69.28	74.00	-4.72	63.98	5.30	Peak	113	18
5	5725.00	77.02	78.20	-1.18	71.70	5.32	Peak	113	18
6	5915.00	46.50	54.00	-7.50	40.88	5.62	Average	113	18
7	5915.00	58.97	74.00	-15.03	53.35	5.62	Peak	113	18
8	11510.00	42.26	54.00	-11.74	27.46	14.80	Average	143	282
9	11510.00	55.19	74.00	-18.81	40.39	14.80	Peak	143	282
10	17265.00	45.42	54.00	-8.58	27.64	17.78	Average	113	186
11	17265.00	57.75	74.00	-16.25	39.97	17.78	Peak	113	186

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

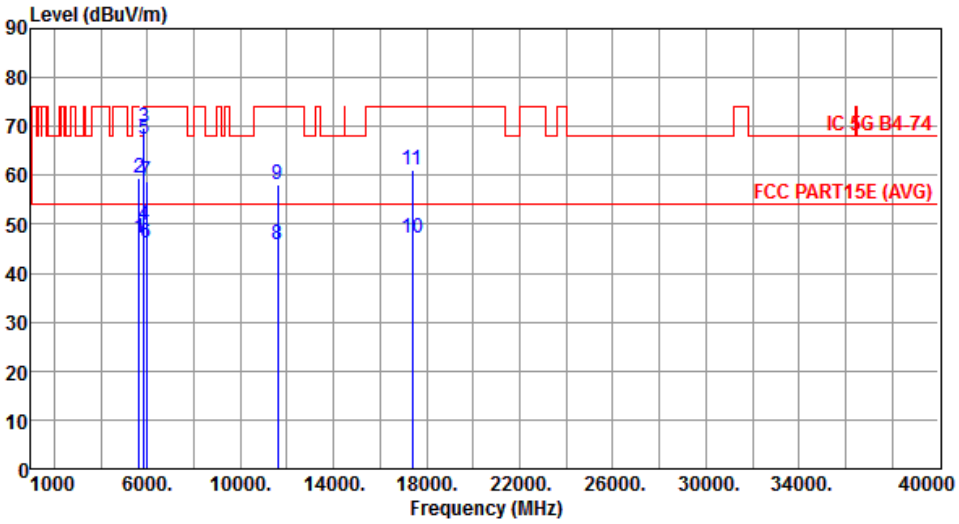
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5635.00	48.56	54.00	-5.44	43.39	5.17	Average	131	305
2	5635.00	60.86	74.00	-13.14	55.69	5.17	Peak	131	305
3	5850.00	68.64	78.20	-9.56	63.12	5.52	Peak	131	305
4	5860.00	47.92	54.00	-6.08	42.38	5.54	Average	131	305
5	5860.00	63.60	74.00	-10.40	58.06	5.54	Peak	131	305
6	5955.00	46.93	54.00	-7.07	41.24	5.69	Average	131	305
7	5955.00	59.97	74.00	-14.03	54.28	5.69	Peak	131	305
8	11590.00	50.15	54.00	-3.85	35.56	14.59	Average	126	308
9	11590.00	63.26	74.00	-10.74	48.67	14.59	Peak	126	308
10	17385.00	50.37	54.00	-3.63	32.30	18.07	Average	100	196
11	17385.00	64.14	74.00	-9.86	46.07	18.07	Peak	100	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).

Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

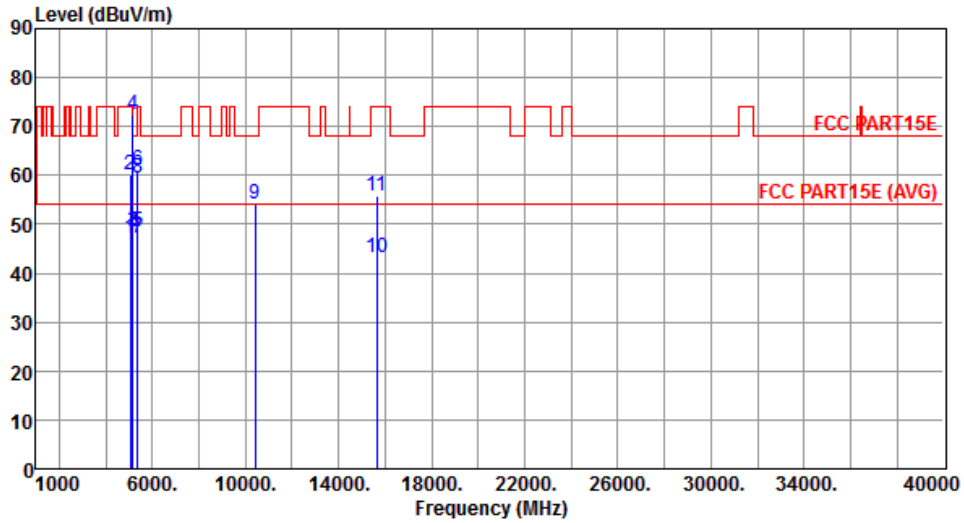


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5635.00	47.20	54.00	-6.80	42.03	5.17	Average	111	20
2	5635.00	59.60	74.00	-14.40	54.43	5.17	Peak	111	20
3	5850.00	69.80	78.20	-8.40	64.28	5.52	Peak	111	20
4	5860.00	49.92	54.00	-4.08	44.38	5.54	Average	111	20
5	5860.00	67.34	74.00	-6.66	61.80	5.54	Peak	111	20
6	5955.00	46.16	54.00	-7.84	40.47	5.69	Average	111	20
7	5955.00	58.94	74.00	-15.06	53.25	5.69	Peak	111	20
8	11590.00	45.86	54.00	-8.14	31.27	14.59	Average	140	289
9	11590.00	58.06	74.00	-15.94	43.47	14.59	Peak	140	289
10	17385.00	47.21	54.00	-6.79	29.14	18.07	Average	134	278
11	17385.00	60.96	74.00	-13.04	42.89	18.07	Peak	134	278

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

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

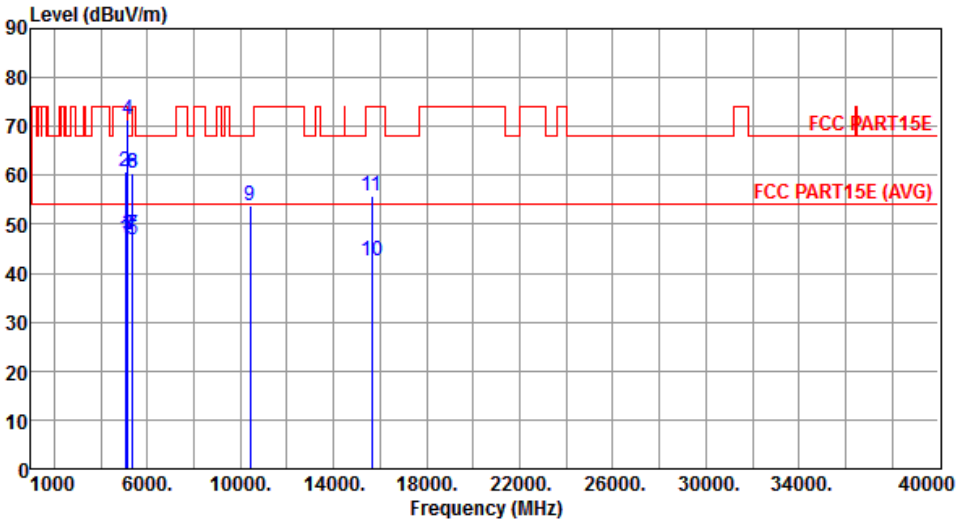
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5050.00	47.26	54.00	-6.74	42.88	4.38	Average	125	295
2	5050.00	59.95	74.00	-14.05	55.57	4.38	Peak	125	295
3	5150.00	48.35	54.00	-5.65	43.87	4.48	Average	125	295
4	5150.00	72.39	74.00	-1.61	67.91	4.48	Peak	125	295
5	5350.00	48.48	54.00	-5.52	43.74	4.74	Average	125	295
6	5350.00	61.24	74.00	-12.76	56.50	4.74	Peak	125	295
7	5370.00	47.13	54.00	-6.87	42.36	4.77	Average	125	295
8	5370.00	59.48	74.00	-14.52	54.71	4.77	Peak	125	295
9	10420.00	54.11	68.20	-14.09	40.24	13.87	Peak	231	186
10	15630.00	43.12	54.00	-10.88	28.87	14.25	Average	130	62
11	15630.00	55.68	74.00	-18.32	41.43	14.25	Peak	130	62

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

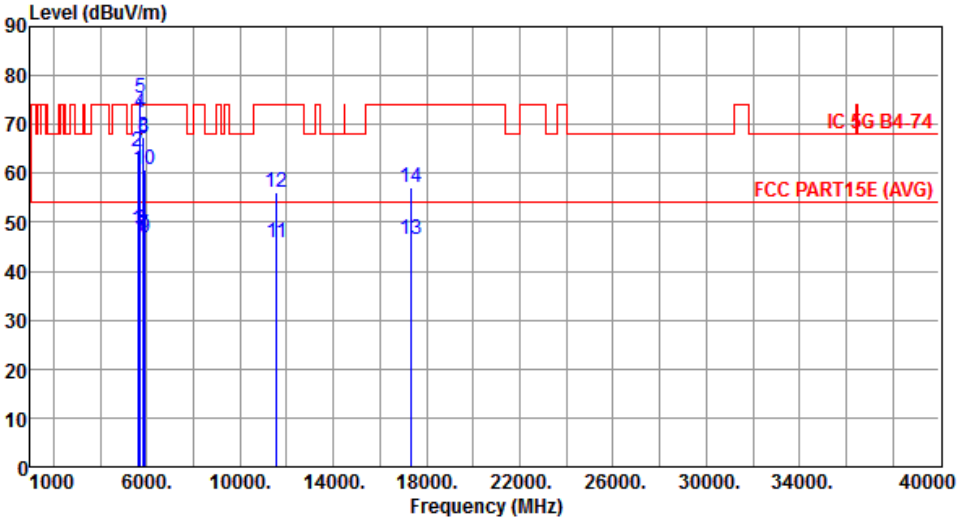
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5050.00	47.28	54.00	-6.72	42.90	4.38	Average	254	100
2	5050.00	60.68	74.00	-13.32	56.30	4.38	Peak	254	100
3	5150.00	47.67	54.00	-6.33	43.19	4.48	Average	254	100
4	5150.00	71.47	74.00	-2.53	66.99	4.48	Peak	254	100
5	5350.00	46.72	54.00	-7.28	41.98	4.74	Average	254	100
6	5350.00	60.44	74.00	-13.56	55.70	4.74	Peak	254	100
7	5370.00	47.94	54.00	-6.06	43.17	4.77	Average	254	100
8	5370.00	60.58	74.00	-13.42	55.81	4.77	Peak	254	100
9	10420.00	53.88	68.20	-14.32	40.01	13.87	Peak	187	175
10	15630.00	42.67	54.00	-11.33	28.42	14.25	Average	132	211
11	15630.00	55.89	74.00	-18.11	41.64	14.25	Peak	132	211

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

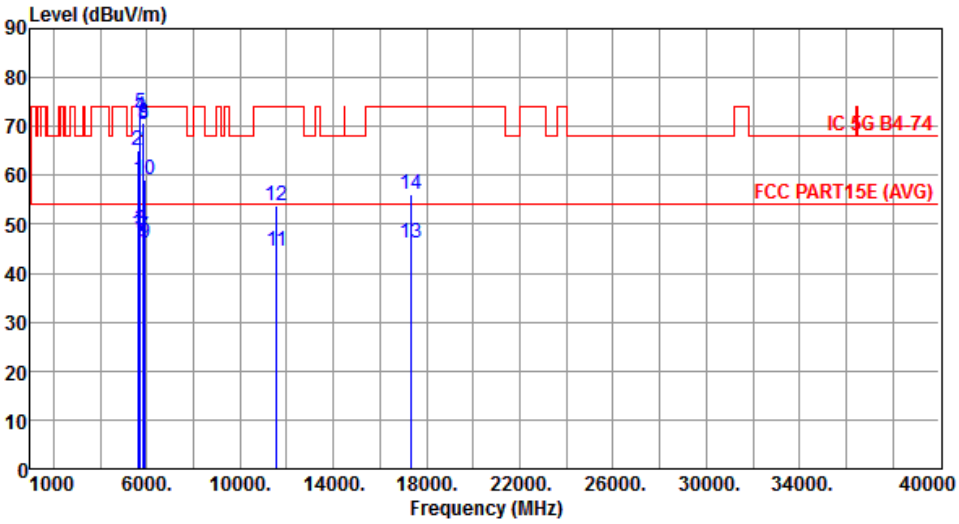
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5615.00	48.43	54.00	-5.57	43.30	5.13	Average	132	304
2	5615.00	64.28	74.00	-9.72	59.15	5.13	Peak	132	304
3	5715.00	48.59	54.00	-5.41	43.29	5.30	Average	132	304
4	5715.00	72.48	74.00	-1.52	67.18	5.30	Peak	132	304
5	5725.00	75.30	78.20	-2.90	69.98	5.32	Peak	132	304
6	5850.00	67.00	78.20	-11.20	61.48	5.52	Peak	132	304
7	5860.00	47.33	54.00	-6.67	41.79	5.54	Average	132	304
8	5860.00	67.26	74.00	-6.74	61.72	5.54	Peak	132	304
9	5935.00	46.94	54.00	-7.06	41.29	5.65	Average	132	304
10	5935.00	60.93	74.00	-13.07	55.28	5.65	Peak	132	304
11	11550.00	45.87	54.00	-8.13	31.18	14.69	Average	126	278
12	11550.00	56.03	74.00	-17.97	41.34	14.69	Peak	126	278
13	17325.00	46.36	54.00	-7.64	28.43	17.93	Average	100	245
14	17325.00	57.16	74.00	-16.84	39.23	17.93	Peak	100	245

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

Modulation	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	5615.00	48.13	54.00	-5.87	43.00	5.13	Average	125	9
2	5615.00	65.03	74.00	-8.97	59.90	5.13	Peak	125	9
3	5715.00	48.82	54.00	-5.18	43.52	5.30	Average	125	9
4	5715.00	71.90	74.00	-2.10	66.60	5.30	Peak	125	9
5	5725.00	72.88	78.20	-5.32	67.56	5.32	Peak	125	9
6	5850.00	70.82	78.20	-7.38	65.30	5.52	Peak	125	9
7	5860.00	47.60	54.00	-6.40	42.06	5.54	Average	125	9
8	5860.00	70.34	74.00	-3.66	64.80	5.54	Peak	125	9
9	5935.00	46.00	54.00	-8.00	40.35	5.65	Average	125	9
10	5935.00	59.11	74.00	-14.89	53.46	5.65	Peak	125	9
11	11550.00	44.34	54.00	-9.66	29.65	14.69	Average	136	304
12	11550.00	53.94	74.00	-20.06	39.25	14.69	Peak	136	304
13	17325.00	46.13	54.00	-7.87	28.20	17.93	Average	126	191
14	17325.00	56.08	74.00	-17.92	38.15	17.93	Peak	126	191

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

3.6 Frequency Stability

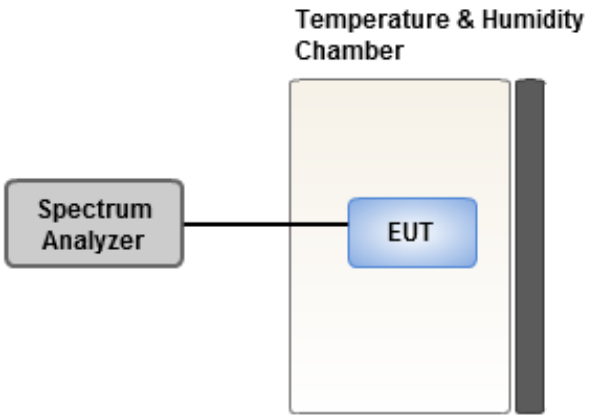
3.6.1 Limit of Frequency Stability

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

3.6.2 Test Procedures

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

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5200 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	5.26	5.06	5.51	5.24
T20°CVmin	4.66	5.42	5.14	5.30
T50°CVnom	3.70	4.08	4.05	3.70
T40°CVnom	3.36	3.69	3.54	3.39
T30°CVnom	3.18	3.41	3.58	3.09
T20°CVnom	3.57	3.76	3.17	3.54
T10°CVnom	2.44	2.84	2.81	2.87
T0°CVnom	3.80	3.91	3.57	4.04
T-10°CVnom	1.94	2.09	2.30	1.88
T-20°CVnom	1.29	1.48	1.91	1.80
T-30°CVnom	0.49	1.23	0.21	0.74
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	0.32	0.33	0.31	0.44
T20°CVmin	0.18	0.40	-0.03	0.52
T50°CVnom	-0.21	-0.13	0.09	0.22
T40°CVnom	0.55	0.58	0.11	0.26
T30°CVnom	0.06	-0.01	0.11	0.22
T20°CVnom	0.57	0.80	0.46	1.06
T10°CVnom	-0.04	0.47	0.48	-0.34
T0°CVnom	0.10	-0.23	0.25	0.55
T-10°CVnom	0.16	0.18	0.41	-0.30
T-20°CVnom	0.70	0.81	1.01	1.21
T-30°CVnom	0.20	0.17	0.81	0.32
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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Email: ICC_Service@icertifi.com.tw

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