

FCC C2PC Test Report

FCC ID : WBV-AP230
Equipment : Access Point
Model No. : AP230
Brand Name : Aerohive
Applicant : Aerohive Networks Inc.
Address : 330 Gibraltar Drive, Sunnyvale, CA 94089
Standard : 47 CFR FCC Part 15.407
Received Date : Jan. 21, 2014
Tested Date : Feb. 05 ~ Apr. 01, 2014

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

Approved & Reviewed by:



Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FR412201-01	Rev. 01	Initial issue	Apr. 14, 2014
FR412201-01	Rev. 02	Modify typing error of P26/29 and power limit of P28/31/35/38	Aug. 28, 2014

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.469MHz 44.06 (Margin -2.48dB) - AV	Pass
15.407(b)(1)(2)(3) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5380.00MHz 53.00 (Margin -1.00dB) – AV [dBuV/m at 3m]: 6142.00MHz 53.00 (Margin -1.00dB) – AV [dBuV/m at 3m]: 5470.00MHz 53.00 (Margin -1.00dB) – AV [dBuV/m at 3m]: 5958.00MHz 67.20 (Margin -1.00dB) – PK [dBuV/m at 3m]: 5350.00MHz 53.00 (Margin -1.00dB) – AV	Pass
15.407(a)(1)(2)(3)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)(1)(2)(3)	RF Output Power	Power [dBm]: Non-beamforming mode 5250~5350 MHz: 11a: 21.45 HT20: 18.67 HT40: 21.29 VHT20: 18.76 VHT40: 21.44 VHT80: 17.95 5470~5725 MHz: 11a: 23.08 HT20: 18.74 HT40: 21.69 VHT20: 18.80 VHT40: 21.78 VHT80: 21.91 Beamforming mode 5250~5350 MHz: 11a: 21.45 HT20: 18.10 HT40: 18.78 VHT20: 18.17 VHT40: 18.90 VHT80: 16.26 5470~5725 MHz: 11a: 23.08 HT20: 18.80 HT40: 18.78 VHT20: 18.87 VHT40: 19.27 VHT80: 19.35	Pass
15.407(a)(1)(2)(3)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(a)(6)	Peak Excursion	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
IEEE Std. 802.11	Frequency Range (MHz)	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
a	5250-5350 5470-5725	5260-5320 5500-5720	52-64 [4] 100-144 [9]	1	6-54 Mbps
n (HT20)	5250-5350 5470-5725	5260-5320 5500-5720	52-64 [4] 100-144 [9]	3	MCS 0-23
n (HT40)	5250-5350 5470-5725	5270-5310 5510-5710	54-62 [2] 102-142 [4]	3	MCS 0-23
ac (VHT20)	5250-5350 5470-5725	5260-5320 5500-5720	52-64 [4] 100-144 [9]	3	MCS 0-8
ac (VHT40)	5250-5350 5470-5725	5270-5310 5510-5710	54-62 [2] 102-142 [4]	3	MCS 0-9
ac (VHT80)	5250-5350 5470-5725	5290 5530-5690	58 [1] 106-138 [2]	3	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: The EUT includes MIMO CDD function with beamforming. Note 4: 1TX function transmits signal through chain 0 only.					

Note:

This report is issued as a FCC Class II Permissive Change. The modification is only concerned with adding 5250~5350MHz and 5470~5725 MHz band by software setting.

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)	
				5250~5350	5470~5725
4	ANT 4(5G)	PIFA	UFL	6.21	6.15
5	ANT 5(5G)	PIFA	UFL	5.95	6.12
6	ANT 6(5G)	PIFA	UFL	6.57	5.25

1.1.3 EUT Operational Condition

Power Supply Type	12Vdc from adapter 48Vdc or 55Vdc from PoE
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1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	AC adapter 1	Brand Name: DVE Model Name: DSA-24PFD-15 FUS Power Rating: I/P: 100-240Vac, 50-60Hz, 0.8A O/P: 12Vdc, 2.0A DC 1.5m non-shielded cable w/o core
2	AC adapter 2	Brand Name: Powertron Electronics Corp. Model Name: PA1024-120HUB200 Power Rating: I/P: 100-240Vac, 50-60Hz, 0.6A O/P: 12Vdc, 2.0A, 24W DC 1.5m non-shielded cable w/o core

1.1.5 Support Units

Support Units		
No.	Equipment	Description
1	PoE 1	Brand Name: PowerDsine Model Name: PD-3501G/AC Power Rating: I/P: 100-240Vac, 50-60Hz, 0.5A O/P: 48Vdc, 0.35A
2	PoE 2	Brand Name: PowerDsine Model Name: PD-9001GR/AT/AC Power Rating: I/P: 100-240Vac, 50-60Hz, 0.67A O/P: 55Vdc, 0.6A

1.1.6 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
52	5260	54	5270
56	5280	62	5310
60	5300	102	5510
64	5320	110	5550
100	5500	134	5670
104	5520	142	5710
108	5540	VHT 80	
112	5560	58	5290
116	5580	106	5530
132	5660	138	5690
136	5680	---	---
140	5700	---	---
144	5720	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	Hyperterminal, Version 5.1				
Duty Cycle and Duty Factor	Mode	Beamforming		Non-Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11a	99.17%	0.04	99.17%	0.04
	VHT20	99.63%	0.02	99.12%	0.04
	VHT40	98.82%	0.05	98.23%	0.08
	VHT80	98.49%	0.07	95.56%	0.20

1.1.8 Power Setting

Modulation Mode	Test Frequency (MHz)	Power Set	
		Beamforming	Non-Beamforming
11a	5260	82	82
11a	5300	82	82
11a	5320	74	74
11a	5500	76	76
11a	5580	88	88
11a	5700	70	70
11a	5720	78	78
HT20	5260	47	50
HT20	5300	47	50
HT20	5320	47	50
HT20	5500	52	52
HT20	5580	52	52
HT20	5700	54	54
HT20	5720	52	56
HT40	5270	50	60
HT40	5310	50	57
HT40	5510	52	54
HT40	5550	52	60
HT40	5670	54	66
HT40	5710	58	66
VHT20	5260	47	50
VHT20	5300	47	50
VHT20	5320	47	50
VHT20	5500	52	52
VHT20	5580	52	52
VHT20	5700	54	54
VHT20	5720	52	56
VHT40	5270	50	60
VHT40	5310	50	57
VHT40	5510	52	54
VHT40	5550	52	60
VHT40	5670	54	66
VHT40	5710	58	66
VHT80	5290	42	48
VHT80	5530	45	46
VHT80	5690	60	68

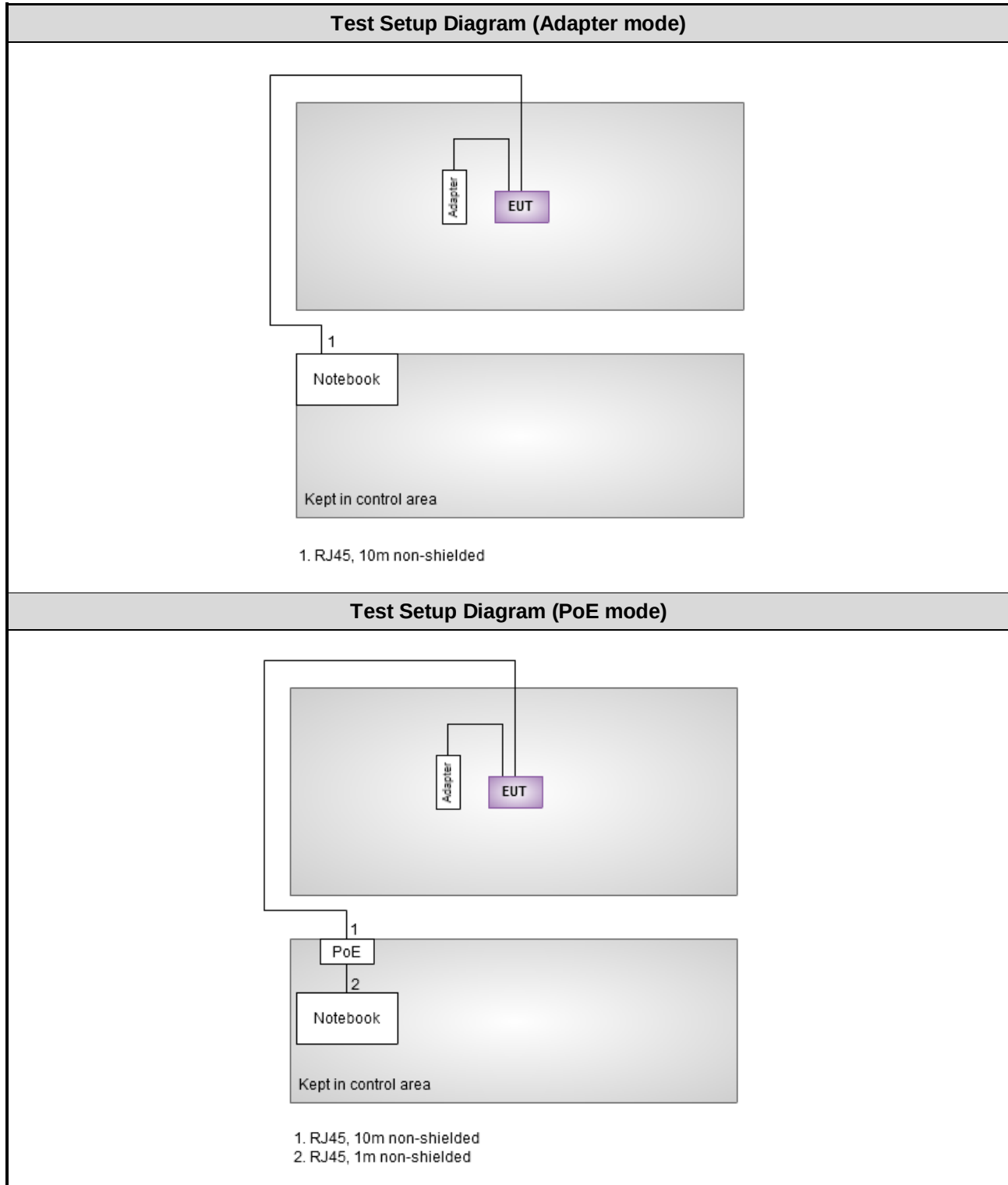
1.2 Local Support Equipment List

Support Equipment List						
No.	Equipment	Brand	Model	S/N	FCC ID	Signal cable / Length (m)
1	Notebook	DELL	E6430	---	DoC	RJ45, 1m non-shielded cable w/o core. RJ45, 10m non-shielded cable w/o core.
2	Notebook	DELL	E6430	---	DoC	---
3	Module	WNC	DNXB-AH5	---	---	---

Note: Module card is provided by applicant.

1.3 Test Setup Chart

Legacy/MIMO (CDD) Non-beamforming mode



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Test date	Feb. 21, 2014				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
EMC Receiver	R&S	ESCS 30	100169	Oct. 15, 2013	Oct. 14, 2014
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 24, 2013	Apr. 23, 2014
50 ohm terminal (Support Unit)	NA	50	04	Apr. 22, 2013	Apr. 21, 2014
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 2 / (03CH02-WS)				
Test date	Feb. 05 ~ Feb. 13, 2014				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSP 40	100305	Mar. 20, 2013	Mar. 19, 2014
Receiver	R&S	ESR3	101657	Jan. 18, 2014	Jan. 17, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-524	Jan. 08, 2014	Jan. 07, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120D	BBHA 9120 D 1095	Jan. 07, 2014	Jan. 06, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Amplifier	Burgeon	BPA-530	100218	Dec. 09, 2013	Dec. 08, 2014
Amplifier	Agilent	83017A	MY39501309	Dec. 09, 2013	Dec. 08, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 17, 2013	Dec. 16, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 17, 2013	Dec. 16, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 17, 2013	Dec. 16, 2014
RF Cable-R03m	Woken	CFD400NL-LW	CFD400NL-003	Dec. 17, 2013	Dec. 16, 2014
RF Cable-R10m	Woken	CFD400NL-LW	CFD400NL-004	Dec. 17, 2013	Dec. 16, 2014
control	EM Electronics	EM1000	060608	N/A	N/A
Note: Calibration Interval of instruments listed above is one year.					

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Amplifier	EM	EM18G40G	060572	Jun. 20, 2013	Jun. 19, 2015
Note: Calibration Interval of instruments listed above is two year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Test date	Mar. 31 ~ Apr. 01, 2014				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Jan. 25, 2014	Jan. 24, 2015
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 11, 2013	Dec. 10, 2014
Power Meter	Anritsu	ML2495A	1241002	Oct. 24, 2013	Oct. 23, 2014
Power Sensor	Anritsu	MA2411B	1207366	Oct. 24, 2013	Oct. 23, 2014
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407

ANSI C63.10-2009

FCC KDB 412172

FCC KDB 789033 D01 General UNII Test procedures v01r03

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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

1.6 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±74.147 Hz
Conducted power	±0.717 dB
Power density	±2.687 dB
Frequency error	±74.147 Hz
Temperature	±0.3 °C
AC conducted emission	±2.43 dB
Radiated emission	±2.49 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	14°C / 58%	Skys Huang
Radiated Emissions	03CH02-WS	20°C / 65%	Aska Huang
RF Conducted	TH01-WS	24°C / 63%	Felix Sung

➤ FCC site registration No.: 657002

➤ IC site registration No.: 10807A-2

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
Conducted Emissions	VHT40	5510	MCS 0	1, 2, 3, 4
Radiated Emissions ≤1GHz	VHT40	5510	MCS 0	1, 2
RF Output Power	11a	5260 / 5300 5320 5500 / 5580 / 5700 / 5720	6 Mbps	1, 3
	HT20	5260 / 5300 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	HT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT20	5260 / 5300 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5260 / 5300 5320 5500 / 5580 / 5700 / 5720	6 Mbps	1, 3
	VHT20	5260 / 5300 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	

Peak Excursion	11a	5260 / 5580	6 Mbps	1
	VHT20	5320 / 5500	MCS 0	
	VHT40	5270 / 5670	MCS 0	
	VHT80	5290 / 5690	MCS 0	
	11a	5260 / 5580	6 Mbps	3
	VHT20	5300 / 5500	MCS 0	
	VHT40	5310 / 5710	MCS 0	
	VHT80	5290 / 5690	MCS 0	
Frequency Stability	Un-modulation	5320	---	1, 3

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. Adapter 1 and Adapter 2 had been pretested and found that **Adapter 2** was the worst case and was selected for final testing. (Adapter 1: DSA-24PFD-15 FUS; Adapter 2: PA1024-120HUB200).
3. PoE 1 and PoE 2 had been pretested and found that **PoE 2** was the worst case and was selected for final testing. (PoE 1: PD-3501G/AC; PoE 2: PD-9001GR/AT/AC).
4. Test configurations are listed as below:
 - 1) Configuration 1: Legacy/MIMO (CDD) Non-beamforming mode, Adapter mode
 - 2) Configuration 2: Legacy/MIMO (CDD) Non-beamforming mode, PoE mode
 - 3) Configuration 3: Legacy/MIMO (CDD) beamforming mode, Adapter mode
 - 4) Configuration 4: Legacy/MIMO (CDD) beamforming mode, PoE mode

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

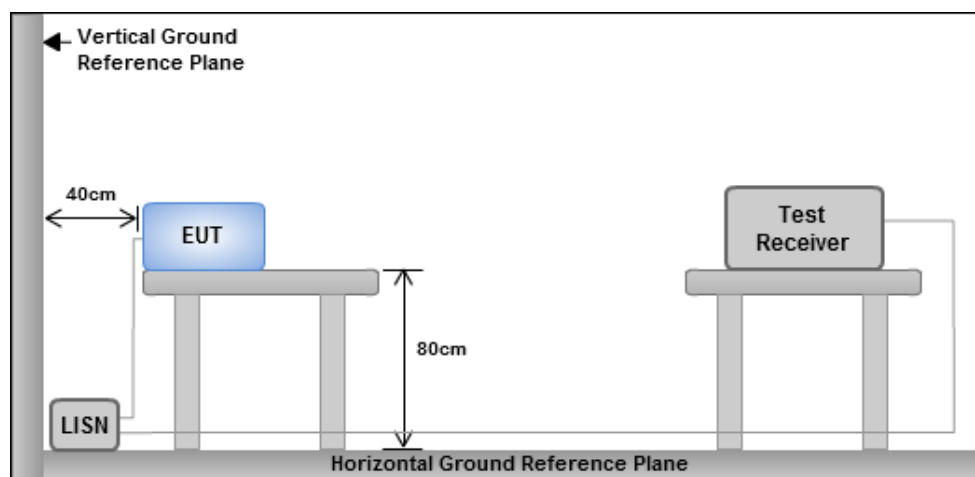
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

3.1.3 Test Setup



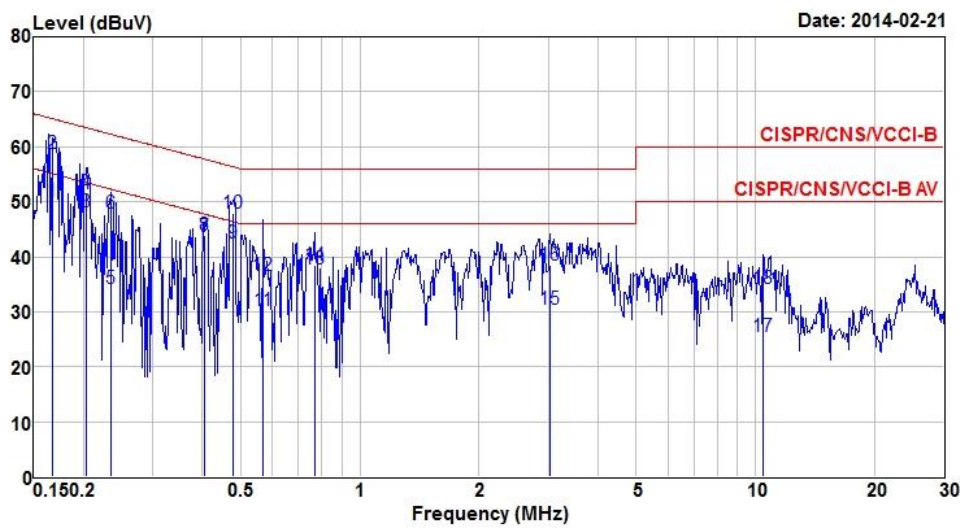
- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Legacy/MIMO (CDD) Non- beamforming mode

Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Line	Configuration	1

Date: 2014-02-21

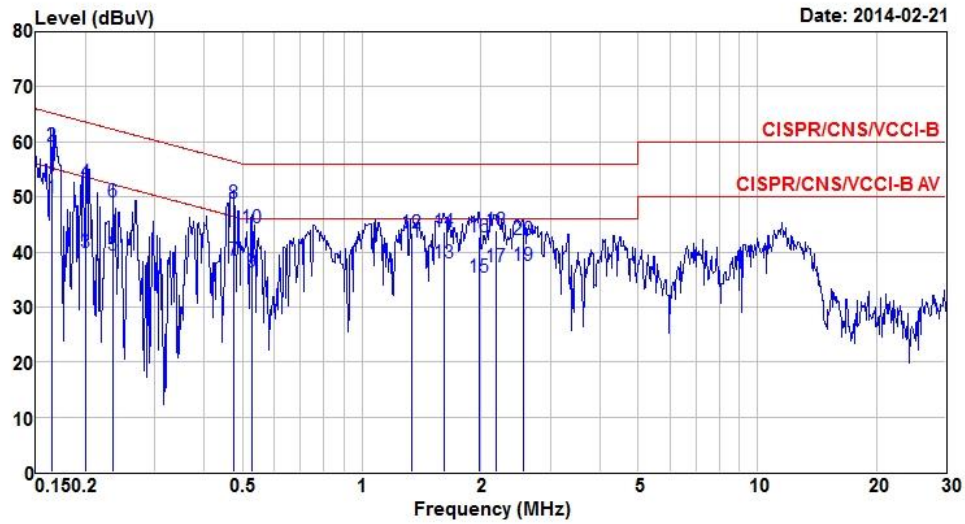


The graph shows the test results for conducted emissions. The Y-axis represents Level (dBuV) from 0 to 80, and the X-axis represents Frequency (MHz) on a logarithmic scale from 0.150.2 to 30. Two red limit lines are shown: CISPR/CNS/VCCI-B (upper) and CISPR/CNS/VCCI-B AV (lower). A blue test result line fluctuates below the limits. Numbered points (1-18) are marked on the test result line, corresponding to the data table below.

	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.168	50.14	55.08	-4.94	49.63	0.40	0.11	Average
2	0.168	58.66	65.08	-6.42	58.15	0.40	0.11	QP
3	0.204	48.16	53.45	-5.29	47.59	0.39	0.18	Average
4	0.204	51.55	63.45	-11.90	50.98	0.39	0.18	QP
5	0.234	34.31	52.30	-17.99	33.77	0.39	0.15	Average
6	0.234	48.02	62.30	-14.28	47.48	0.39	0.15	QP
7	0.404	43.61	47.77	-4.16	43.17	0.39	0.05	Average
8	0.404	43.83	57.77	-13.94	43.39	0.39	0.05	QP
9*	0.477	42.42	46.38	-3.96	41.98	0.39	0.05	Average
10	0.477	47.92	56.38	-8.46	47.48	0.39	0.05	QP
11	0.570	30.26	46.00	-15.74	29.81	0.40	0.05	Average
12	0.570	36.62	56.00	-19.38	36.17	0.40	0.05	QP
13	0.767	37.70	46.00	-8.30	37.26	0.40	0.04	Average
14	0.767	38.48	56.00	-17.52	38.04	0.40	0.04	QP
15	3.025	30.39	46.00	-15.61	29.73	0.45	0.21	Average
16	3.025	38.53	56.00	-17.47	37.87	0.45	0.21	QP
17	10.452	25.41	50.00	-24.59	24.76	0.54	0.11	Average
18	10.452	34.27	60.00	-25.73	33.62	0.54	0.11	QP

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

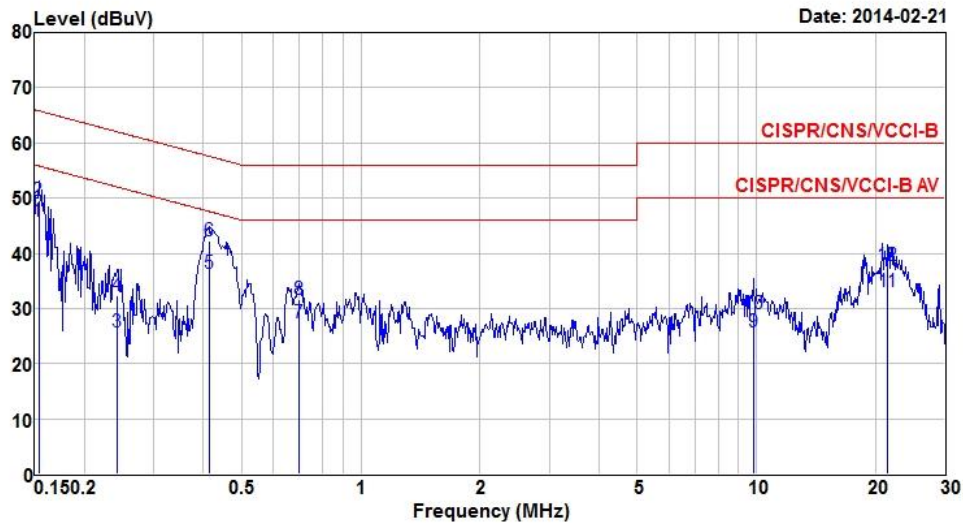
Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Neutral	Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.165	49.75	55.21	-5.46	49.17	0.48	0.10	Average
2	0.165	59.18	65.21	-6.03	58.60	0.48	0.10	QP
3	0.201	39.91	53.58	-13.67	39.25	0.48	0.18	Average
4	0.201	52.72	63.58	-10.86	52.06	0.48	0.18	QP
5	0.235	39.53	52.26	-12.73	38.90	0.48	0.15	Average
6	0.235	49.05	62.26	-13.21	48.42	0.48	0.15	QP
7	0.476	38.41	46.41	-8.00	37.89	0.47	0.05	Average
8	0.476	48.75	56.41	-7.66	48.23	0.47	0.05	QP
9	0.527	36.25	46.00	-9.75	35.73	0.47	0.05	Average
10	0.527	44.42	56.00	-11.58	43.90	0.47	0.05	QP
11*	1.338	41.68	46.00	-4.32	41.10	0.49	0.09	Average
12	1.338	43.55	56.00	-12.45	42.97	0.49	0.09	QP
13	1.610	37.92	46.00	-8.08	37.31	0.49	0.12	Average
14	1.610	43.77	56.00	-12.23	43.16	0.49	0.12	QP
15	1.980	35.41	46.00	-10.59	34.75	0.50	0.16	Average
16	1.980	42.67	56.00	-13.33	42.01	0.50	0.16	QP
17	2.178	37.19	46.00	-8.81	36.52	0.50	0.17	Average
18	2.178	43.96	56.00	-12.04	43.29	0.50	0.17	QP
19	2.554	37.41	46.00	-8.59	36.71	0.51	0.19	Average
20	2.554	42.16	56.00	-13.84	41.46	0.51	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).

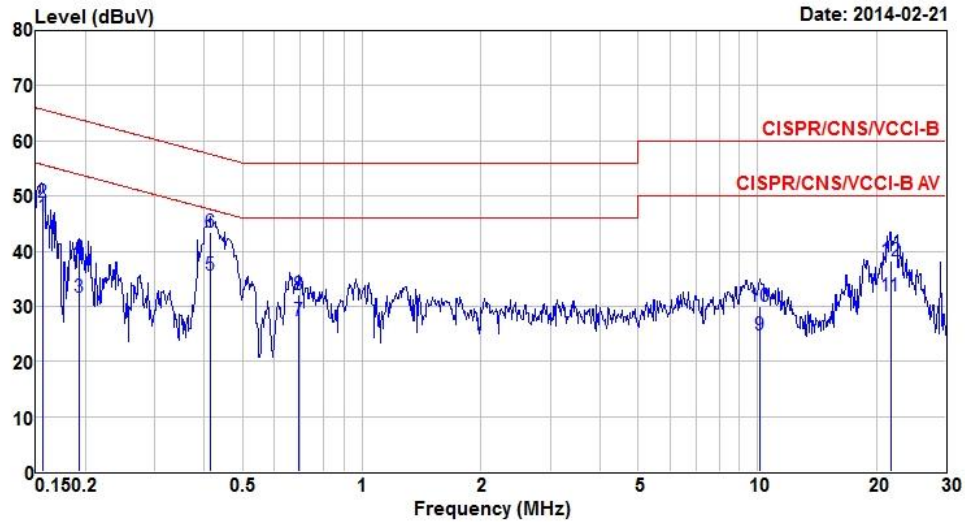
Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Line	Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.153	45.83	55.82	-9.99	45.36	0.40	0.07	Average
2	0.153	49.65	65.82	-16.17	49.18	0.40	0.07	QP
3	0.242	25.67	52.04	-26.37	25.14	0.39	0.14	Average
4	0.242	32.32	62.04	-29.72	31.79	0.39	0.14	QP
5	0.413	36.36	47.59	-11.23	35.92	0.39	0.05	Average
6	0.413	42.28	57.59	-15.31	41.84	0.39	0.05	QP
7	0.697	27.36	46.00	-18.64	26.92	0.40	0.04	Average
8	0.697	31.56	56.00	-24.44	31.12	0.40	0.04	QP
9	9.809	25.77	50.00	-24.23	25.12	0.54	0.11	Average
10	9.809	29.12	60.00	-30.88	28.47	0.54	0.11	QP
11	21.486	32.96	50.00	-17.04	32.12	0.55	0.29	Average
12	21.486	37.83	60.00	-22.17	36.99	0.55	0.29	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)	5510
Power Phase	Neutral	Configuration	2

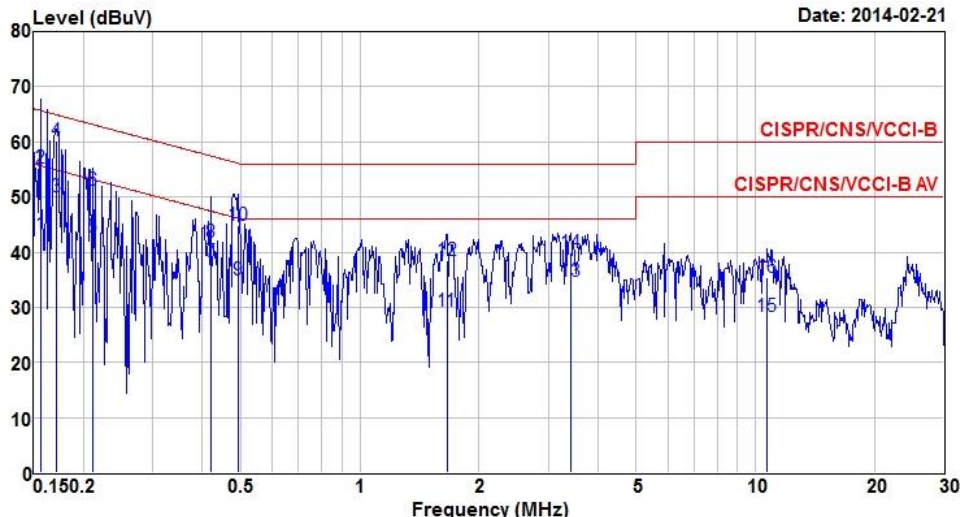


	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1*	0.156	46.30	55.69	-9.39	45.75	0.48	0.07	Average
2	0.156	48.80	65.69	-16.89	48.25	0.48	0.07	QP
3	0.192	31.54	53.93	-22.39	30.89	0.48	0.17	Average
4	0.192	38.78	63.93	-25.15	38.13	0.48	0.17	QP
5	0.413	35.75	47.59	-11.84	35.23	0.47	0.05	Average
6	0.413	43.39	57.59	-14.20	42.87	0.47	0.05	QP
7	0.690	27.43	46.00	-18.57	26.91	0.48	0.04	Average
8	0.690	32.03	56.00	-23.97	31.51	0.48	0.04	QP
9	10.179	24.69	50.00	-25.31	24.02	0.56	0.11	Average
10	10.179	29.89	60.00	-30.11	29.22	0.56	0.11	QP
11	21.715	31.88	50.00	-18.12	31.03	0.55	0.30	Average
12	21.715	38.19	60.00	-21.81	37.34	0.55	0.30	QP

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

Legacy/MIMO (CDD) beamforming mode

Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Line	Configuration	3

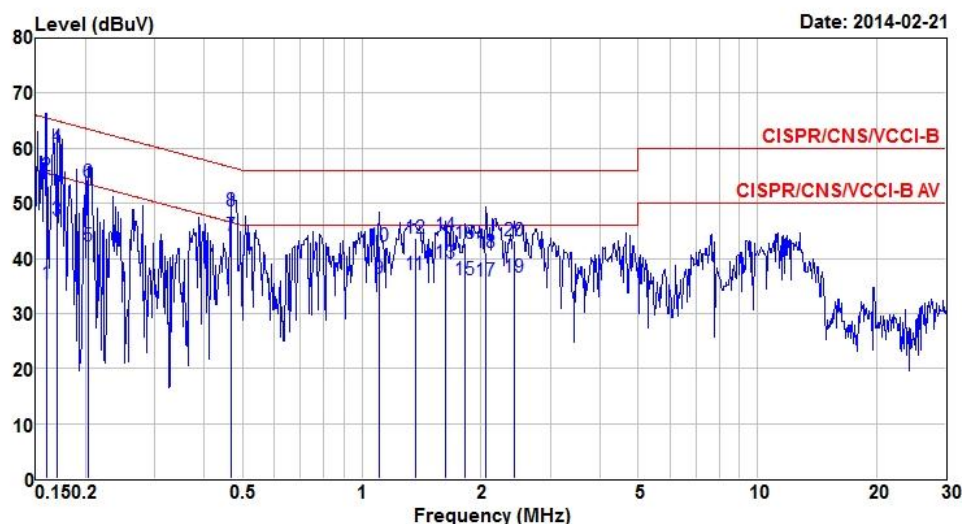


Date: 2014-02-21

	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.156	43.23	55.69	-12.46	42.76	0.40	0.07	Average
2	0.156	55.15	65.69	-10.54	54.68	0.40	0.07	QP
3	0.170	50.09	54.94	-4.85	49.58	0.40	0.11	Average
4*	0.170	60.14	64.94	-4.80	59.63	0.40	0.11	QP
5	0.211	42.71	53.18	-10.47	42.15	0.39	0.17	Average
6	0.211	51.31	63.18	-11.87	50.75	0.39	0.17	QP
7	0.419	38.18	47.46	-9.28	37.74	0.39	0.05	Average
8	0.419	41.87	57.46	-15.59	41.43	0.39	0.05	QP
9	0.494	34.91	46.10	-11.19	34.47	0.39	0.05	Average
10	0.494	44.77	56.10	-11.33	44.33	0.39	0.05	QP
11	1.662	29.33	46.00	-16.67	28.78	0.42	0.13	Average
12	1.662	38.44	56.00	-17.56	37.89	0.42	0.13	QP
13	3.417	34.59	46.00	-11.41	33.92	0.45	0.22	Average
14	3.417	39.94	56.00	-16.06	39.27	0.45	0.22	QP
15	10.733	28.35	50.00	-21.65	27.70	0.54	0.11	Average
16	10.733	35.44	60.00	-24.56	34.79	0.54	0.11	QP

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

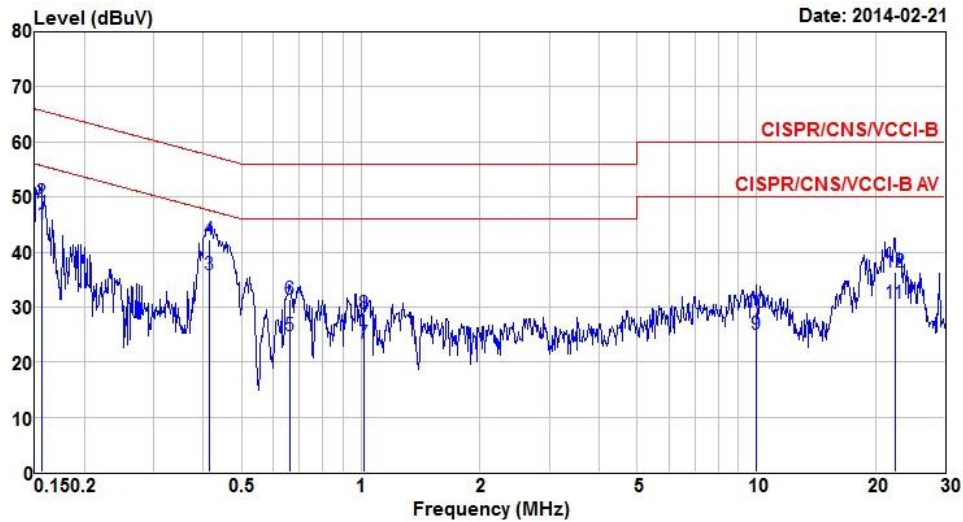
Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Neutral	Configuration	3



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.160	35.33	55.47	-20.14	34.76	0.48	0.09	Average
2	0.160	55.07	65.47	-10.40	54.50	0.48	0.09	QP
3	0.169	46.95	54.99	-8.04	46.36	0.48	0.11	Average
4	0.169	60.18	64.99	-4.81	59.59	0.48	0.11	QP
5	0.204	42.17	53.45	-11.28	41.51	0.48	0.18	Average
6	0.204	53.86	63.45	-9.59	53.20	0.48	0.18	QP
7*	0.469	44.06	46.54	-2.48	43.54	0.47	0.05	Average
8	0.469	48.59	56.54	-7.95	48.07	0.47	0.05	QP
9	1.106	36.45	46.00	-9.55	35.91	0.48	0.06	Average
10	1.106	42.27	56.00	-13.73	41.73	0.48	0.06	QP
11	1.367	37.12	46.00	-8.88	36.54	0.49	0.09	Average
12	1.367	43.57	56.00	-12.43	42.99	0.49	0.09	QP
13	1.628	39.28	46.00	-6.72	38.67	0.49	0.12	Average
14	1.628	44.05	56.00	-11.95	43.44	0.49	0.12	QP
15	1.829	36.12	46.00	-9.88	35.48	0.50	0.14	Average
16	1.829	42.71	56.00	-13.29	42.07	0.50	0.14	QP
17	2.055	35.77	46.00	-10.23	35.11	0.50	0.16	Average
18	2.055	41.10	56.00	-14.90	40.44	0.50	0.16	QP
19	2.435	36.60	46.00	-9.40	35.91	0.51	0.18	Average
20	2.435	43.25	56.00	-12.75	42.56	0.51	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).

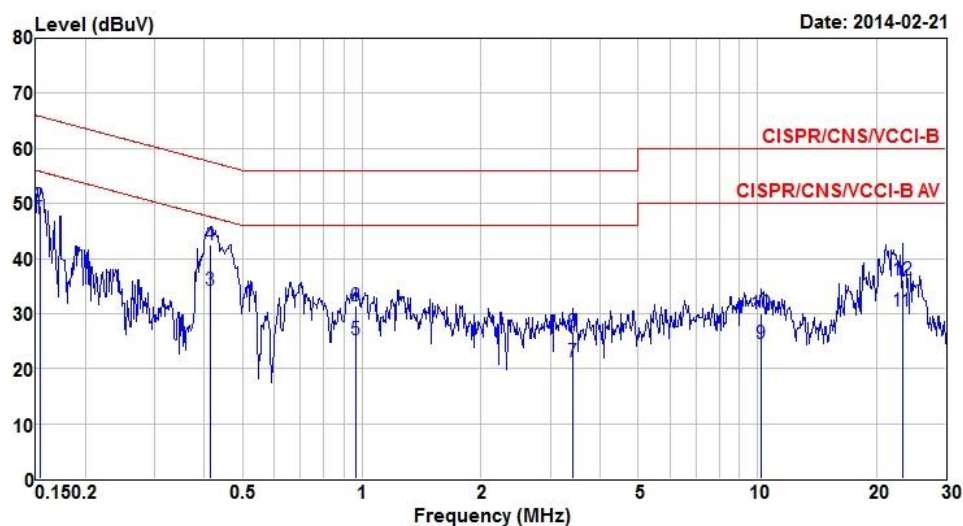
Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Line	Configuration	4



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1*	0.156	45.02	55.69	-10.67	44.55	0.40	0.07	Average
2	0.156	48.98	65.69	-16.71	48.51	0.40	0.07	QP
3	0.413	35.96	47.59	-11.63	35.52	0.39	0.05	Average
4	0.413	42.18	57.59	-15.41	41.74	0.39	0.05	QP
5	0.661	24.84	46.00	-21.16	24.40	0.40	0.04	Average
6	0.661	31.45	56.00	-24.55	31.01	0.40	0.04	QP
7	1.016	23.40	46.00	-22.60	22.95	0.41	0.04	Average
8	1.016	28.84	56.00	-27.16	28.39	0.41	0.04	QP
9	9.966	25.13	50.00	-24.87	24.48	0.54	0.11	Average
10	9.966	28.93	60.00	-31.07	28.28	0.54	0.11	QP
11	22.416	30.77	50.00	-19.23	29.88	0.55	0.34	Average
12	22.416	36.40	60.00	-23.60	35.51	0.55	0.34	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)	5510
Power Phase	Neutral	Configuration	4



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line dBuV	Limit dB	Level dBuV	factor dB	loss dB	Remark
1*	0.153	47.28	55.82	-8.54	46.73	0.48	0.07	Average
2	0.153	49.63	65.82	-16.19	49.08	0.48	0.07	QP
3	0.415	34.20	47.55	-13.35	33.68	0.47	0.05	Average
4	0.415	42.44	57.55	-15.11	41.92	0.47	0.05	QP
5	0.968	25.25	46.00	-20.75	24.73	0.48	0.04	Average
6	0.968	31.45	56.00	-24.55	30.93	0.48	0.04	QP
7	3.417	21.31	46.00	-24.69	20.57	0.52	0.22	Average
8	3.417	26.71	56.00	-29.29	25.97	0.52	0.22	QP
9	10.233	24.46	50.00	-25.54	23.79	0.56	0.11	Average
10	10.233	29.89	60.00	-30.11	29.22	0.56	0.11	QP
11	23.263	30.42	50.00	-19.58	29.48	0.54	0.40	Average
12	23.263	36.19	60.00	-23.81	35.25	0.54	0.40	QP

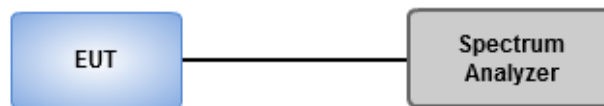
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 Emission Bandwidth

3.2.1 Test Procedures

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.

3.2.2 Test Setup

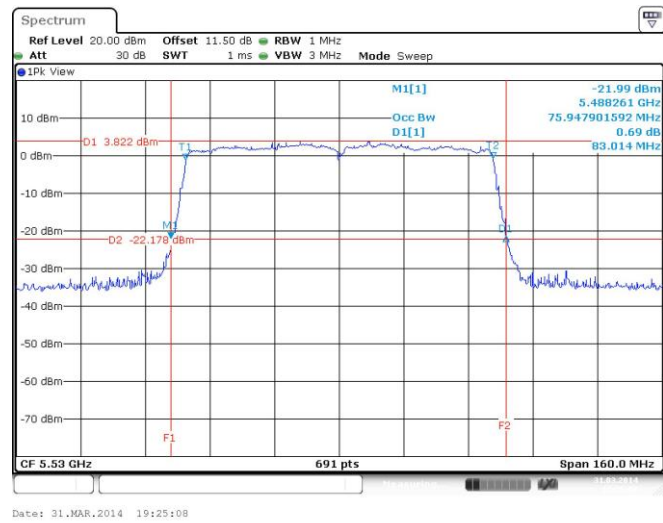


3.2.3 Test Result of Emission Bandwidth

Legacy/MIMO (CDD) Non- beamforming mode

Emission Bandwidth										
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)			99% Bandwidth (MHz)			Power limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	26dB BW	99% OBW
11a	1	5260	37.74	---	---	17.15	---	---	24.00	23.34
11a	1	5300	36.81	---	---	17.08	---	---	24.00	23.32
11a	1	5320	29.10	---	---	16.93	---	---	24.00	23.29
11a	1	5500	28.81	---	---	16.93	---	---	24.00	23.29
11a	1	5580	42.10	---	---	17.58	---	---	24.00	23.45
11a	1	5700	21.68	---	---	16.97	---	---	24.00	23.30
VHT20	3	5260	20.70	20.52	20.70	17.91	17.76	17.84	24.00	23.49
VHT20	3	5300	20.75	20.64	20.52	17.95	17.76	17.80	24.00	23.49
VHT20	3	5320	20.70	20.52	20.70	17.91	17.76	17.84	24.00	23.49
VHT20	3	5500	20.81	20.70	20.70	17.91	17.76	17.80	24.00	23.49
VHT20	3	5580	20.64	20.46	20.58	17.91	17.80	17.80	24.00	23.50
VHT20	3	5700	20.87	20.52	20.64	17.98	17.80	17.80	24.00	23.50
VHT40	3	5270	41.04	40.58	40.23	36.60	36.53	36.53	24.00	24.00
VHT40	3	5310	40.93	40.35	40.23	36.60	36.53	36.66	24.00	24.00
VHT40	3	5510	40.93	40.35	40.23	36.66	36.53	36.60	24.00	24.00
VHT40	3	5550	40.93	40.81	40.46	36.60	36.53	36.53	24.00	24.00
VHT40	3	5670	41.04	40.70	40.46	36.73	36.60	36.53	24.00	24.00
VHT80	3	5290	82.78	82.55	82.09	75.65	75.65	75.65	24.00	24.00
VHT80	3	5530	83.01	82.09	82.09	75.65	75.65	75.77	24.00	24.00

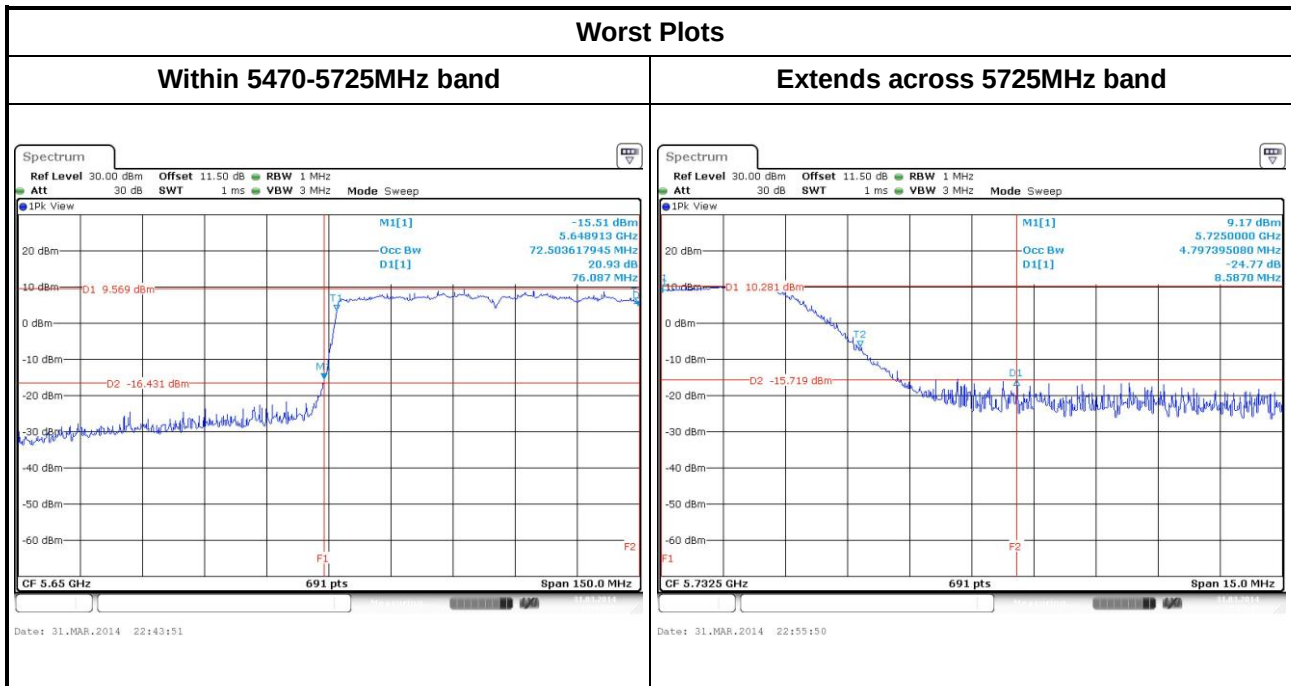
Worst Plots



Channel that extends across the 5.725 GHz boundary

UNII Emission Bandwidth Result (Within 5470-5725MHz band)										
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)			99% Bandwidth (MHz)			Power Limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	26dB BW	99% OBW
11a	1	5720	15.52	--	--	13.69	--	--	28.91	28.36
VHT20	3	5720	15.40	15.28	15.34	14.00	13.89	13.97	28.84	28.43
VHT40	3	5710	35.61	35.41	35.20	33.21	33.21	33.21	30.00	30.00
VHT80	3	5690	76.09	76.09	75.87	72.45	72.45	72.45	30.00	30.00

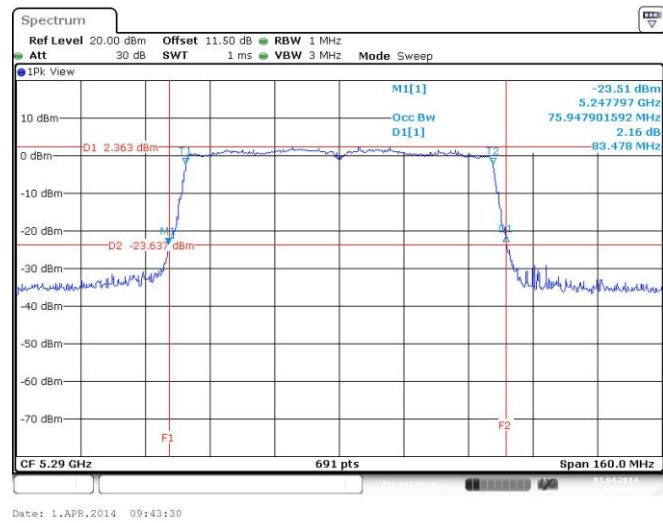
UNII Emission Bandwidth Result (Extends across 5725MHz band)										
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)			99% Bandwidth (MHz)			Power Limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	26dB BW	99% OBW
11a	1	5720	7.70	--	--	4.62	--	--	25.86	23.65
VHT20	3	5720	5.43	5.39	5.35	4.44	4.36	4.34	24.28	23.37
VHT40	3	5710	8.59	5.72	5.48	4.46	4.33	4.27	24.39	23.30
VHT80	3	5690	7.04	6.78	6.43	5.18	5.11	5.11	25.08	24.08



Legacy/MIMO (CDD) beamforming mode

Emission Bandwidth										
Mode	N _{Tx}	Freq. (MHz)	26dB Bandwidth (MHz)			99% Bandwidth (MHz)			Power limit (dBm)	
			Chain 0	Chain 1	26dB BW	26dB BW	Chain 1	Chain 2	26dB BW	99% OBW
11a	1	5260	37.74	---	---	17.15	---	---	24.00	23.34
11a	1	5300	36.81	---	---	17.08	---	---	24.00	23.32
11a	1	5320	29.10	---	---	16.93	---	---	24.00	23.29
11a	1	5500	28.81	---	---	16.93	---	---	24.00	23.29
11a	1	5580	42.10	---	---	17.58	---	---	24.00	23.45
11a	1	5700	21.68	---	---	16.97	---	---	24.00	23.30
VHT20	3	5260	20.70	20.58	20.46	17.95	17.73	17.80	24.00	23.49
VHT20	3	5300	20.75	20.64	20.70	17.95	17.73	17.76	24.00	23.49
VHT20	3	5320	20.70	20.52	20.52	17.91	17.73	17.80	24.00	23.49
VHT20	3	5500	20.64	20.58	20.70	17.95	17.73	17.76	24.00	23.49
VHT20	3	5580	20.75	20.35	20.52	17.91	17.73	17.76	24.00	23.49
VHT20	3	5700	20.81	20.46	20.58	17.95	17.73	17.80	24.00	23.49
VHT40	3	5270	41.16	40.70	40.46	36.60	36.47	36.60	24.00	24.00
VHT40	3	5310	40.93	40.46	40.35	36.60	36.47	36.60	24.00	24.00
VHT40	3	5510	41.04	40.70	40.46	36.60	36.53	36.60	24.00	24.00
VHT40	3	5550	40.93	40.58	40.35	36.66	36.53	36.53	24.00	24.00
VHT40	3	5670	40.93	40.46	40.58	36.73	36.53	36.60	24.00	24.00
VHT80	3	5290	83.48	82.55	82.09	75.90	75.53	75.53	24.00	24.00
VHT80	3	5530	83.25	82.55	81.86	75.77	75.53	75.53	24.00	24.00

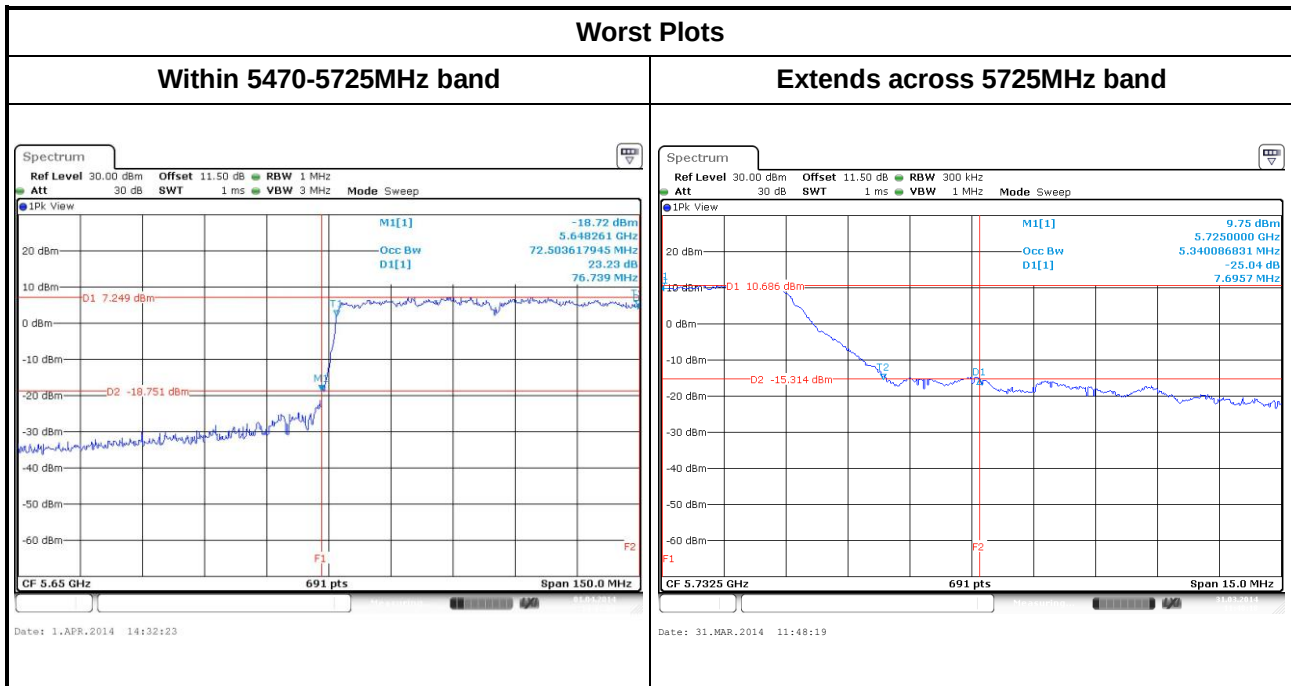
Worst Plots



Channel that extends across the 5.725 GHz boundary

UNII Emission Bandwidth Result (Within 5470-5725MHz band)										
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)			99% Bandwidth (MHz)			Power Limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	26dB BW	99% OBW
11a	1	5720	15.52	--	--	13.69	--	--	28.91	28.36
VHT20	3	5720	15.40	15.15	15.28	14.00	13.93	13.97	28.80	28.44
VHT40	3	5710	35.91	35.20	35.51	33.21	33.28	33.21	30.00	30.00
VHT80	3	5690	76.52	76.74	75.44	72.45	72.45	72.45	30.00	30.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)										
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)			99% Bandwidth (MHz)			Power Limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	26dB BW	99% OBW
11a	1	5720	7.70	--	--	4.62	--	--	25.86	23.65
VHT20	3	5720	5.35	5.26	5.30	4.41	4.30	4.36	24.21	23.33
VHT40	3	5710	5.65	5.37	5.26	4.38	4.25	4.24	24.21	23.27
VHT80	3	5690	7.17	6.91	6.65	5.25	5.17	5.07	25.23	24.05



3.3 RF Output Power

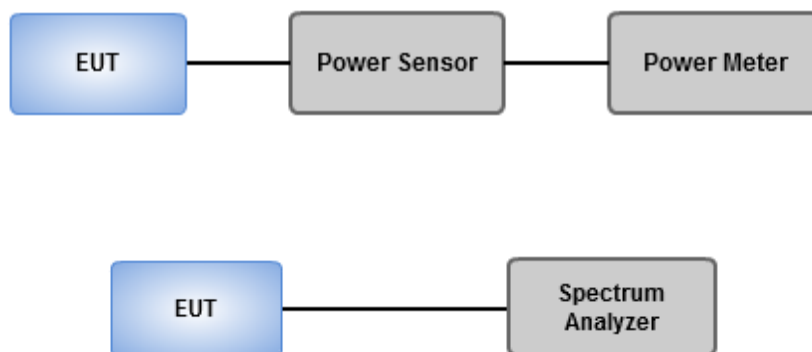
3.3.1 Limit of RF Output Power

Frequency Band (GHz)		Limit
☒	5.25~5.35	250mW or 11dBm+10 log B
☒	5.47~5.725	250mW or 11dBm+10 log B
Note: "B" is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

- ☒ **Power meter** (For channel that does not extends across the 5.725 GHz boundary)
 - ☒ 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
- ☒ **Spectrum analyzer** (For channel that extends across the 5.725 GHz boundary)
 1. Set RBW=1MHz, VBW=3MHz , Sweep time= Auto, Detector = RMS
 2. Trace average at least 100 traces in power averaging (i.e., RMS) mode
 3. Compute power by integrating the spectrum across the 26 dB EBW

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Legacy/MIMO (CDD) Non- beamforming mode

RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
11a	1	5260	21.45	--	--	139.637	21.45	23.79
11a	1	5300	21.41	--	--	138.357	21.41	23.79
11a	1	5320	19.40	--	--	87.096	19.40	23.79
11a	1	5500	20.01	--	--	100.231	20.01	23.85
11a	1	5580	23.08	--	--	203.236	23.08	23.85
11a	1	5700	17.89	--	--	61.518	17.89	23.85
HT20	3	5260	13.51	14.22	13.94	73.637	18.67	23.43
HT20	3	5300	13.41	14.32	13.91	73.571	18.67	23.43
HT20	3	5320	13.25	14.42	13.77	72.628	18.61	23.43
HT20	3	5500	13.70	14.38	13.79	74.791	18.74	23.85
HT20	3	5580	13.79	14.18	13.40	71.993	18.57	23.85
HT20	3	5700	13.68	14.11	13.43	71.127	18.52	23.85
HT40	3	5270	16.02	17.13	16.32	134.491	21.29	23.43
HT40	3	5310	15.16	15.92	15.11	104.328	20.18	23.43
HT40	3	5510	14.09	15.06	14.18	83.889	19.24	23.85
HT40	3	5550	15.73	16.86	15.69	123.008	20.90	23.85
HT40	3	5670	16.82	17.29	16.61	147.478	21.69	23.85

Note:

Mode	Frequency band (MHz)	Directional gain (dBi)	Power limit shall be reduced (dB)
11a	5250~5350	6.21	0.21
HT20 / HT40 / VHT20 / VHT40 / VHT80	5250~5350	6.57	0.57
11a	5470 ~ 5725	6.15	0.15
HT20 / HT40 / VHT20 / VHT40 / VHT80	5470 ~ 5725	6.15	0.15

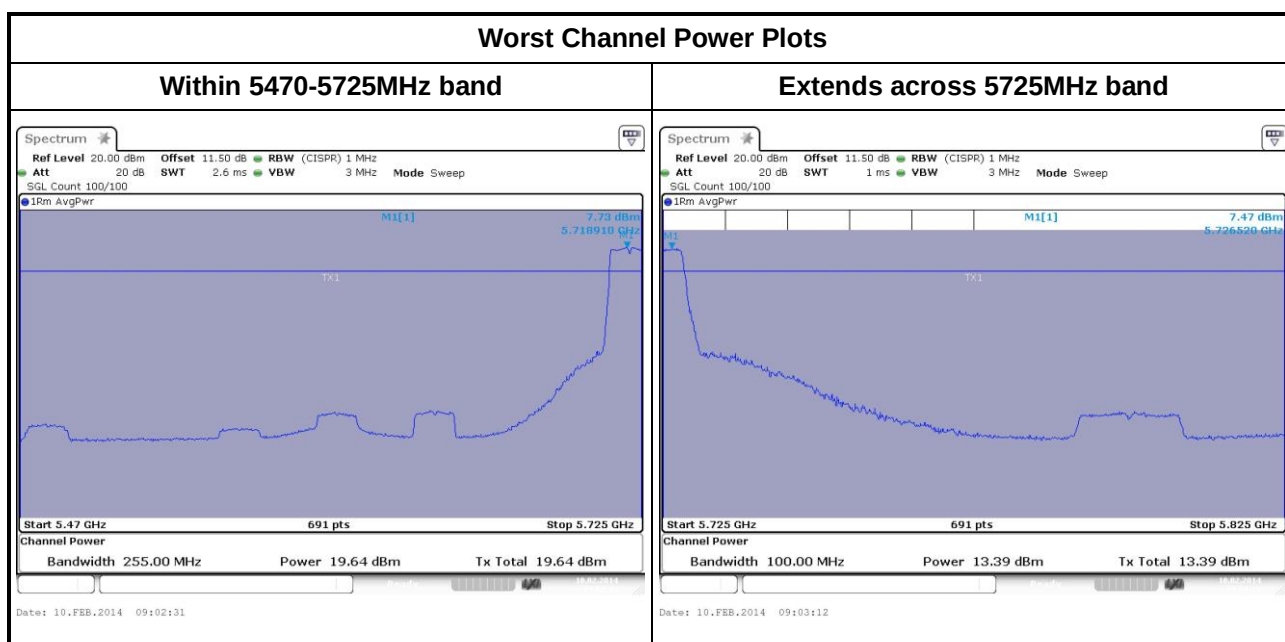
1. Gain of antenna 0 is selected for 802.11a since 11a only transmits signal through antenna 0
2. Maximum antenna gain is selected to the directional gain.

RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
VHT20	3	5260	13.59	14.29	14.07	75.236	18.76	23.43
VHT20	3	5300	13.49	14.38	14.01	74.928	18.75	23.43
VHT20	3	5320	13.32	14.49	13.83	73.752	18.68	23.43
VHT20	3	5500	13.75	14.43	13.88	75.881	18.80	23.85
VHT20	3	5580	13.89	14.27	13.51	73.660	18.67	23.85
VHT20	3	5700	13.78	14.18	13.55	72.706	18.62	23.85
VHT40	3	5270	16.16	17.32	16.43	139.210	21.44	23.43
VHT40	3	5310	15.22	16.01	15.25	106.665	20.28	23.43
VHT40	3	5510	14.15	15.10	14.21	84.724	19.28	23.85
VHT40	3	5550	15.85	16.98	15.76	126.018	21.00	23.85
VHT40	3	5670	16.92	17.36	16.72	150.644	21.78	23.85
VHT80	3	5290	12.65	13.93	12.86	62.445	17.95	23.43
VHT80	3	5530	11.63	12.86	11.98	49.650	16.96	23.85

Channel that extends across the 5.725 GHz boundary

Maximum Conducted Output Power (Within 5470-5725MHz band)								
RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
11a	1	5720	19.64	--	--	92.045	19.64	28.76
HT20	3	5720	12.96	13.41	12.77	60.621	17.83	28.69
HT40	3	5710	16.13	16.67	16.09	128.116	10.00	29.85
VHT20	3	5720	12.93	13.67	12.85	62.190	17.94	28.69
VHT40	3	5710	16.30	16.85	15.95	130.430	21.15	29.85
VHT80	3	5690	16.65	17.55	17.19	155.392	21.91	29.85

Maximum Conducted Output Power (Extends across 5725MHz band)								
RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
11a	1	5720	13.39	--	--	21.827	13.39	25.71
HT20	3	5720	7.01	7.49	7.07	15.727	11.97	24.13
HT40	3	5710	6.26	6.28	6.25	12.690	11.03	24.24
VHT20	3	5720	7.17	7.52	7.16	16.061	12.06	24.13
VHT40	3	5710	6.34	6.44	6.20	12.880	11.10	24.24
VHT80	3	5690	2.37	2.64	3.31	5.702	7.56	24.93



Note: Above plots are without duty factor.

Legacy/MIMO (CDD) beamforming mode

RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
11a	1	5260	21.45	--	--	139.637	21.45	23.79
11a	1	5300	21.41	--	--	138.357	21.41	23.79
11a	1	5320	19.40	--	--	87.096	19.40	23.79
11a	1	5500	20.01	--	--	100.231	20.01	23.85
11a	1	5580	23.08	--	--	203.236	23.08	23.85
11a	1	5700	17.89	--	--	61.518	17.89	23.85
HT20	3	5260	12.76	13.92	13.03	63.631	18.04	18.98
HT20	3	5300	12.81	14.02	13.06	64.564	18.10	18.98
HT20	3	5320	12.74	13.89	12.96	63.053	18.00	18.98
HT20	3	5500	13.76	14.44	13.85	75.832	18.80	19.38
HT20	3	5580	13.68	14.25	13.49	72.278	18.59	19.38
HT20	3	5700	13.74	14.16	13.52	72.211	18.59	19.38
HT40	3	5270	13.66	14.25	13.97	74.781	18.74	18.98
HT40	3	5310	13.66	14.42	13.92	75.557	18.78	18.98
HT40	3	5510	13.81	14.54	13.62	75.503	18.78	19.38
HT40	3	5550	13.78	14.45	13.52	74.230	18.71	19.38
HT40	3	5670	13.66	13.97	13.65	71.347	18.53	19.38

Note:

Mode	Frequency band (MHz)	Directional gain (dBi)	Power limit shall be reduced (dB)
11a	5250~5350	6.21	0.21
HT20 / HT40 / VHT20 / VHT40 / VHT80	5250~5350	11.02	5.02
11a	5470 ~ 5725	6.15	0.15
HT20 / HT40 / VHT20 / VHT40 / VHT80	5470 ~ 5725	10.62	4.62

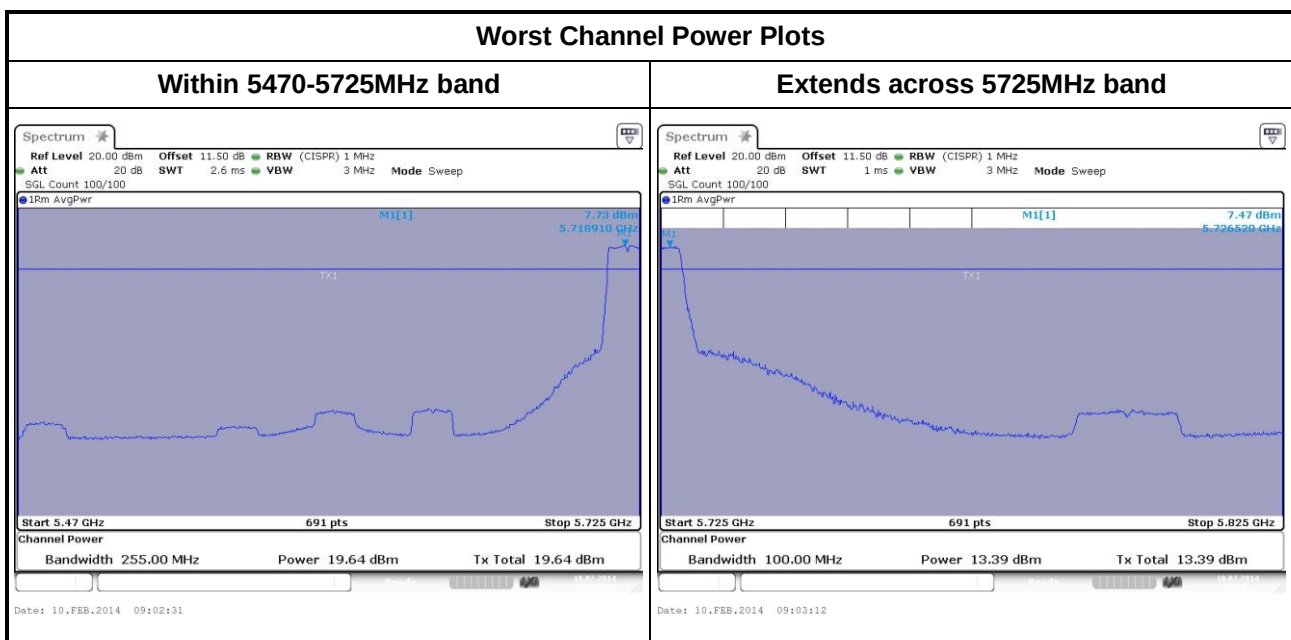
- Gain of antenna 0 is selected for 802.11a since 11a only transmits signal through antenna 0
- Directional gain = $10 * \log((10^{G1/20} + 10^{G2/20} + 10^{G3/20})/3)$ for HT20 / HT40 / VHT20 / VHT40 / VHT80

RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
VHT20	3	5260	12.64	14.04	13.06	63.947	18.06	18.98
VHT20	3	5300	12.93	14.09	13.08	65.602	18.17	18.98
VHT20	3	5320	12.82	13.99	13.02	64.248	18.08	18.98
VHT20	3	5500	13.81	14.51	13.93	77.010	18.87	19.38
VHT20	3	5580	13.72	14.31	13.57	73.279	18.65	19.38
VHT20	3	5700	13.82	14.21	13.60	73.371	18.66	19.38
VHT40	3	5270	13.73	14.31	14.02	75.817	18.80	18.98
VHT40	3	5310	13.81	14.51	14.05	77.702	18.90	18.98
VHT40	3	5510	13.88	14.62	13.71	76.904	18.86	19.38
VHT40	3	5550	13.85	14.58	13.60	75.883	18.80	19.38
VHT40	3	5670	13.77	14.02	13.78	72.936	18.63	19.38
VHT80	3	5290	11.15	12.04	11.23	42.301	16.26	18.98
VHT80	3	5530	11.25	11.95	11.58	43.391	16.37	19.38

Channel that extends across the 5.725 GHz boundary

Maximum Conducted Output Power (Within 5470-5725MHz band)								
RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
11a	1	5720	19.64	--	--	92.045	19.64	28.76
HT20	3	5720	12.17	12.76	12.14	51.730	17.14	24.18
HT40	3	5710	14.32	14.45	14.25	81.508	10.00	25.38
VHT20	3	5720	12.27	12.84	12.15	52.502	17.20	24.18
VHT40	3	5710	14.36	14.84	14.26	84.437	19.27	25.38
VHT80	3	5690	14.13	15.02	14.54	86.095	19.35	25.38

Maximum Conducted Output Power (Extends across 5725MHz band)								
RF Output Power (dBm)								
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit (dBm)
11a	1	5720	13.39	--	--	21.827	13.39	25.71
HT20	3	5720	6.48	6.71	6.36	13.460	11.29	19.59
HT40	3	5710	4.03	3.97	3.69	7.363	8.67	19.59
VHT20	3	5720	6.45	6.76	6.57	13.698	11.37	19.59
VHT40	3	5710	4.05	4.00	3.77	7.435	8.71	19.59
VHT80	3	5690	0.20	0.64	1.10	3.494	5.43	20.61



Note: Above plots are without duty factor.

3.4 Peak Power Spectral Density

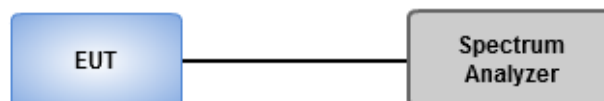
3.4.1 Limit of Peak Power Spectral Density

	Frequency Band (GHz)	Limit (dBm)
☒	5.25~5.35	11
☒	5.47~5.725	11

3.4.2 Test Procedures

- ☒ Method SA-1 (For 11a / 11ac VHT20 mode)
 - Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
 - Trace average 100 traces.
 - Use the peak marker function to determine the maximum amplitude level.
- ☐ Method SA-2
 - Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
 - Set sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{symbol period of the transmitted signal})$.
 - Perform a single sweep.
 - Use the peak marker function to determine the maximum amplitude level.
- ☒ Method SA-2 Alternative (For 11ac VHT40 / VHT80 mode)
 - Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
 - Set sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{total on/off period of the transmitted signal})$.
 - Perform a single sweep.
 - Use the peak marker function to determine the maximum amplitude level.
 - Add $10 \log(1/x)$, where x is the duty cycle.

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Legacy/MIMO (CDD) Non- beamforming mode

Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	1	5260	8.74	0.00	8.74	10.79
11a	1	5300	8.92	0.00	8.92	10.79
11a	1	5320	6.99	0.00	6.99	10.79
11a	1	5500	7.57	0.00	7.57	10.85
11a	1	5580	10.57	0.00	10.57	10.85
11a	1	5700	5.42	0.00	5.42	10.85
11a	1	5720	7.81	0.00	7.81	10.85
VHT20	3	5260	5.63	0.00	5.63	5.98
VHT20	3	5300	5.77	0.00	5.77	5.98
VHT20	3	5320	5.69	0.00	5.69	5.98
VHT20	3	5500	5.24	0.00	5.24	6.38
VHT20	3	5580	5.02	0.00	5.02	6.38
VHT20	3	5700	5.14	0.00	5.14	6.38
VHT20	3	5720	6.24	0.00	6.24	6.38
VHT40	3	5270	5.41	0.00	5.41	5.98
VHT40	3	5310	5.47	0.00	5.47	5.98
VHT40	3	5510	5.18	0.00	5.18	6.38
VHT40	3	5550	5.46	0.00	5.46	6.38
VHT40	3	5670	5.65	0.00	5.65	6.38
VHT40	3	5710	5.79	0.00	5.79	6.38
VHT80	3	5290	-0.50	0.20	-0.30	5.98
VHT80	3	5530	-1.03	0.20	-0.83	6.38
VHT80	3	5690	3.24	0.20	3.44	6.38

Note:

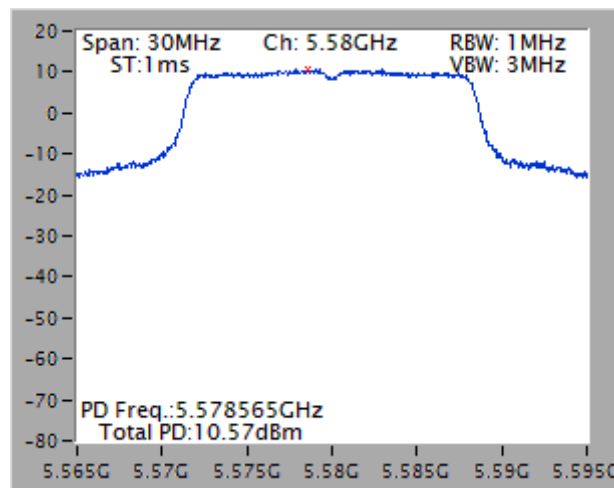
1. D.F is duty factor.
2. PSD limit is reduced since directional gain > 6 dBi . Please refer next page for detail information
3. Test result for VHT20/VHT40/VHT80 are bin-by-bin summing measured value of each TX port

Mode	Frequency band (MHz)	Directional gain (dBi)	Power limit shall be reduced (dB)
11a	5250~5350	6.21	0.21
HT20 / HT40 / VHT20 / VHT40 / VHT80	5250~5350	11.02	5.02
11a	5470 ~ 5725	6.15	0.15
HT20 / HT40 / VHT20 / VHT40 / VHT80	5470 ~ 5725	10.62	4.62

Note1: Gain of antenna 0 is selected for 802.11a since 11a only transmits signal through antenna 0

Note2: Directional gain = $10 * \log((10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3)$ for HT20 / HT40 / VHT20 / VHT40 / VHT80

Worst Plots



Legacy/MIMO (CDD) beamforming mode

Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	1	5260	8.74	0.00	8.74	10.79
11a	1	5300	8.92	0.00	8.92	10.79
11a	1	5320	6.99	0.00	6.99	10.79
11a	1	5500	7.57	0.00	7.57	10.85
11a	1	5580	10.57	0.00	10.57	10.85
11a	1	5700	5.42	0.00	5.42	10.85
11a	1	5720	7.81	0.00	7.81	10.85
VHT20	3	5260	5.34	0.00	5.34	5.98
VHT20	3	5300	5.72	0.00	5.72	5.98
VHT20	3	5320	5.72	0.00	5.72	5.98
VHT20	3	5500	5.39	0.00	5.39	6.38
VHT20	3	5580	5.28	0.00	5.28	6.38
VHT20	3	5700	5.52	0.00	5.52	6.38
VHT20	3	5720	5.33	0.00	5.33	6.38
VHT40	3	5270	2.59	0.00	2.59	5.98
VHT40	3	5310	2.59	0.00	2.59	5.98
VHT40	3	5510	2.68	0.00	2.68	6.38
VHT40	3	5550	2.71	0.00	2.71	6.38
VHT40	3	5670	2.53	0.00	2.53	6.38
VHT40	3	5710	3.86	0.00	3.86	6.38
VHT80	3	5290	-2.73	0.00	-2.73	5.98
VHT80	3	5530	-2.65	0.00	-2.65	6.38
VHT80	3	5690	0.87	0.00	0.87	6.38

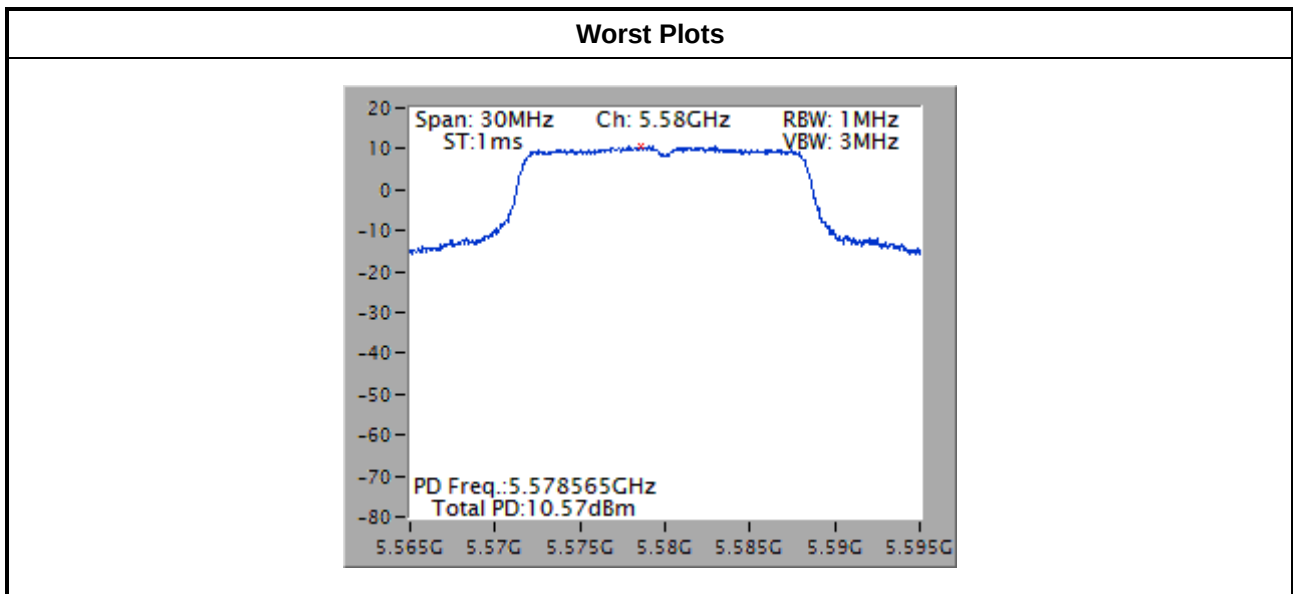
Note:

1. D.F is duty factor.
2. PPSS limit is reduced since directional gain > 6 dBi . Please refer next page for detail information
3. Test result for VHT20/VHT40/VHT80 are bin-by-bin summing measured value of each TX port

Mode	Frequency band (MHz)	Directional gain (dBi)	Power limit shall be reduced (dB)
11a	5250~5350	6.21	0.21
HT20 / HT40 / VHT20 / VHT40 / VHT80	5250~5350	11.02	5.02
11a	5470 ~ 5725	6.15	0.15
HT20 / HT40 / VHT20 / VHT40 / VHT80	5470 ~ 5725	10.62	4.62

Note1: Gain of antenna 0 is selected for 802.11a since 11a only transmits signal through antenna 0

Note2: Directional gain = $10 * \log((10^{G1/20} + 10^{G2/20} + 10^{G3/20})/3)$ for HT20 / HT40 / VHT20 / VHT40 / VHT80



3.5 Peak Excursion

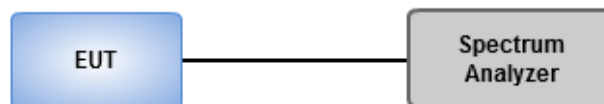
3.5.1 Peak Excursion Limit

Peak excursion of the modulation envelope shall not exceed 13 dB across any 1 MHz bandwidth.

3.5.2 Test Procedures

1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = peak.
2. Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak search function to find the peak of the spectrum.
4. Use the procedure of section 3.4.2 to measure the PPSD.
5. Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD

3.5.3 Test Setup



3.5.4 Test Result of Peak Excursion

Legacy/MIMO (CDD) Non- beamforming mode

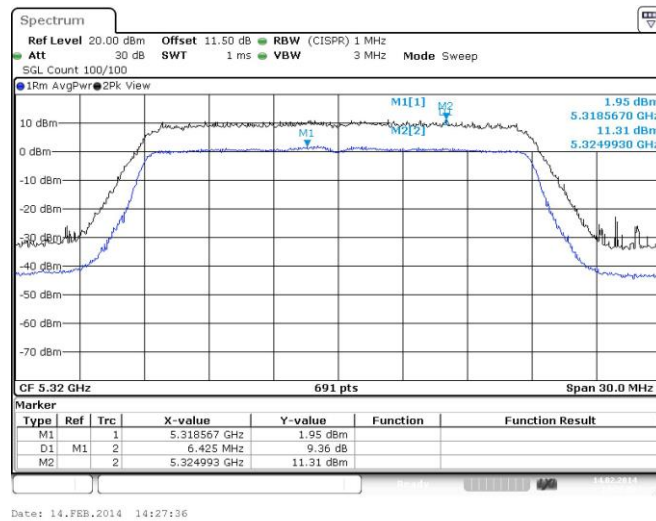
Frequency band(MHz)		5250~5350					
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5260	7.86	0.00	7.86	13
11a	QPSK	1	5260	8.18	0.14	8.04	13
11a	16QAM	1	5260	8.87	0.16	8.71	13
11a	64QAM	1	5260	8.23	0.22	8.01	13
VHT20	BPSK	3	5320	9.36	0.00	9.36	13
VHT20	QPSK	3	5320	8.34	0.00	8.34	13
VHT20	16QAM	3	5320	8.66	0.16	8.50	13
VHT20	64QAM	3	5320	9.30	0.32	8.98	13
VHT20	256QAM	3	5320	9.39	0.47	8.92	13
VHT40	BPSK	3	5270	8.70	0.00	8.70	13
VHT40	QPSK	3	5270	8.43	0.18	8.25	13
VHT40	16QAM	3	5270	9.21	0.32	8.89	13
VHT40	64QAM	3	5270	8.79	0.61	8.18	13
VHT40	256QAM	3	5270	9.37	0.75	8.62	13
VHT80	BPSK	3	5290	9.31	0.20	9.11	13
VHT80	QPSK	3	5290	9.47	0.35	9.12	13
VHT80	16QAM	3	5290	9.20	0.61	8.59	13
VHT80	64QAM	3	5290	10.22	0.94	9.28	13
VHT80	256QAM	3	5290	8.99	1.13	7.86	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak excursion = Measured value – duty factor

Frequency band(MHz)		5470~5725					
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5580	7.32	0.00	7.32	13
11a	QPSK	1	5580	8.64	0.14	8.50	13
11a	16QAM	1	5580	8.80	0.16	8.64	13
11a	64QAM	1	5580	8.78	0.22	8.56	13
VHT20	BPSK	3	5500	9.10	0.00	9.10	13
VHT20	QPSK	3	5500	8.23	0.00	8.23	13
VHT20	16QAM	3	5500	8.83	0.16	8.67	13
VHT20	64QAM	3	5500	9.30	0.32	8.98	13
VHT20	256QAM	3	5500	9.71	0.47	9.24	13
VHT40	BPSK	3	5670	8.62	0.00	8.62	13
VHT40	QPSK	3	5670	8.59	0.18	8.41	13
VHT40	16QAM	3	5670	9.21	0.32	8.89	13
VHT40	64QAM	3	5670	9.43	0.61	8.82	13
VHT40	256QAM	3	5670	8.93	0.75	8.18	13
VHT80	BPSK	3	5690	9.31	0.20	9.11	13
VHT80	QPSK	3	5690	9.01	0.35	8.66	13
VHT80	16QAM	3	5690	9.69	0.61	9.08	13
VHT80	64QAM	3	5690	9.94	0.94	9.00	13
VHT80	256QAM	3	5690	10.17	1.13	9.04	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak exclusion = Measured value – duty factor

Worst Plots



Legacy/MIMO (CDD) beamforming mode

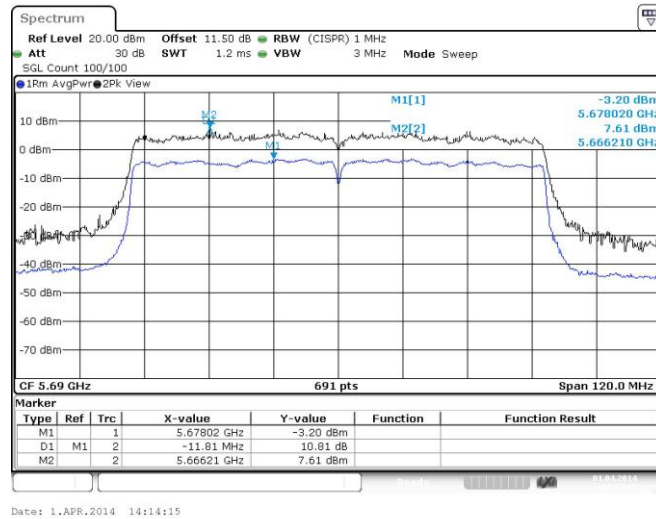
Frequency band(MHz)		5250~5350					
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5260	7.86	0.00	7.86	13
11a	QPSK	1	5260	8.18	0.14	8.04	13
11a	16QAM	1	5260	8.87	0.16	8.71	13
11a	64QAM	1	5260	8.23	0.22	8.01	13
VHT20	BPSK	3	5300	8.68	0.00	8.68	13
VHT20	QPSK	3	5300	8.93	0.00	8.93	13
VHT20	16QAM	3	5300	9.73	0.11	9.62	13
VHT20	64QAM	3	5300	9.52	0.19	9.33	13
VHT20	256QAM	3	5300	10.27	0.24	10.03	13
VHT40	BPSK	3	5310	8.41	0.00	8.41	13
VHT40	QPSK	3	5310	9.33	0.09	9.24	13
VHT40	16QAM	3	5310	9.73	0.18	9.55	13
VHT40	64QAM	3	5310	9.68	0.32	9.36	13
VHT40	256QAM	3	5310	10.88	0.38	10.50	13
VHT80	BPSK	3	5290	9.25	0.00	9.25	13
VHT80	QPSK	3	5290	9.46	0.18	9.28	13
VHT80	16QAM	3	5290	9.62	0.38	9.24	13
VHT80	64QAM	3	5290	10.66	0.48	10.18	13
VHT80	256QAM	3	5290	9.60	0.73	8.87	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak exclusion = Measured value – duty factor

Frequency band(MHz)		5470~5725					
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5580	7.32	0.00	7.32	13
11a	QPSK	1	5580	8.64	0.14	8.50	13
11a	16QAM	1	5580	8.80	0.16	8.64	13
11a	64QAM	1	5580	8.78	0.22	8.56	13
VHT20	BPSK	3	5500	8.45	0.00	8.45	13
VHT20	QPSK	3	5500	9.55	0.00	9.55	13
VHT20	16QAM	3	5500	8.81	0.11	8.70	13
VHT20	64QAM	3	5500	9.67	0.19	9.48	13
VHT20	256QAM	3	5500	10.41	0.24	10.17	13
VHT40	BPSK	3	5710	9.82	0.00	9.82	13
VHT40	QPSK	3	5710	8.90	0.09	8.81	13
VHT40	16QAM	3	5710	9.06	0.18	8.88	13
VHT40	64QAM	3	5710	10.06	0.32	9.74	13
VHT40	256QAM	3	5710	10.53	0.38	10.15	13
VHT80	BPSK	3	5690	10.81	0.00	10.81	13
VHT80	QPSK	3	5690	9.53	0.18	9.35	13
VHT80	16QAM	3	5690	9.50	0.38	9.12	13
VHT80	64QAM	3	5690	10.17	0.48	9.69	13
VHT80	256QAM	3	5690	10.05	0.73	9.32	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission. Since the duty cycle is < 98 %, duty factor is required to average spectrum
Peak exclusion = Measured value – duty factor

Worst Plots



3.6 Transmitter Radiated and Band Edge Emissions

3.6.1 Limit of Transmitter Radiated and Band Edge Emissions

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

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.825 GHz	5.715 5.725 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] 5.825 5.835 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.6.2 Test Procedures

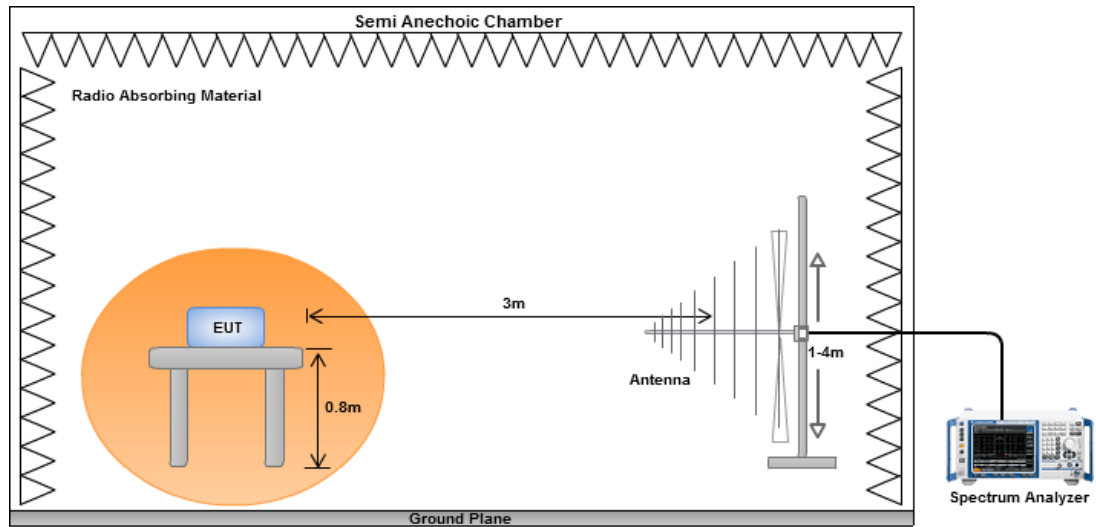
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

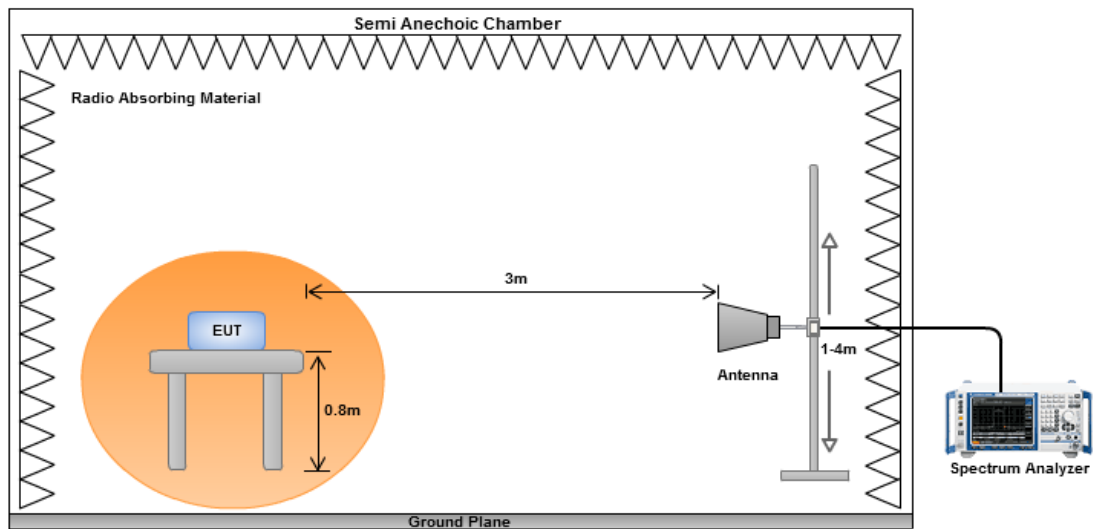
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.6.3 Test Setup

Radiated Emissions below 1 GHz



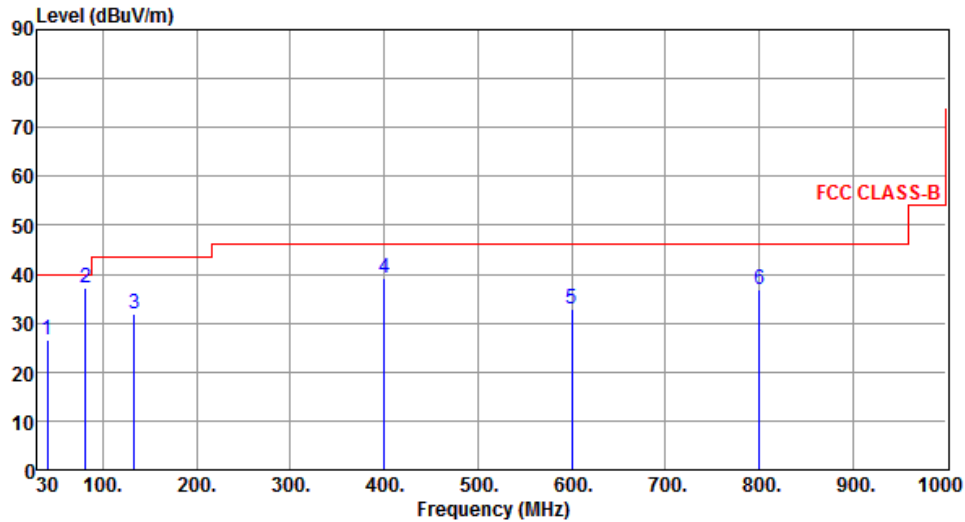
Radiated Emissions above 1 GHz



Legacy/MIMO (CDD) Non- beamforming mode

3.6.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	40.85	26.40	40.00	-13.60	43.38	-16.98	Peak	---	---
2	81.64	37.08	40.00	-2.92	58.89	-21.81	Peak	---	---
3	133.52	31.75	43.50	-11.75	49.57	-17.82	Peak	---	---
4	399.85	39.13	46.00	-6.87	52.85	-13.72	Peak	---	---
5	600.50	32.82	46.00	-13.18	42.39	-9.57	Peak	---	---
6	800.33	37.00	46.00	-9.00	43.68	-6.68	Peak	---	---

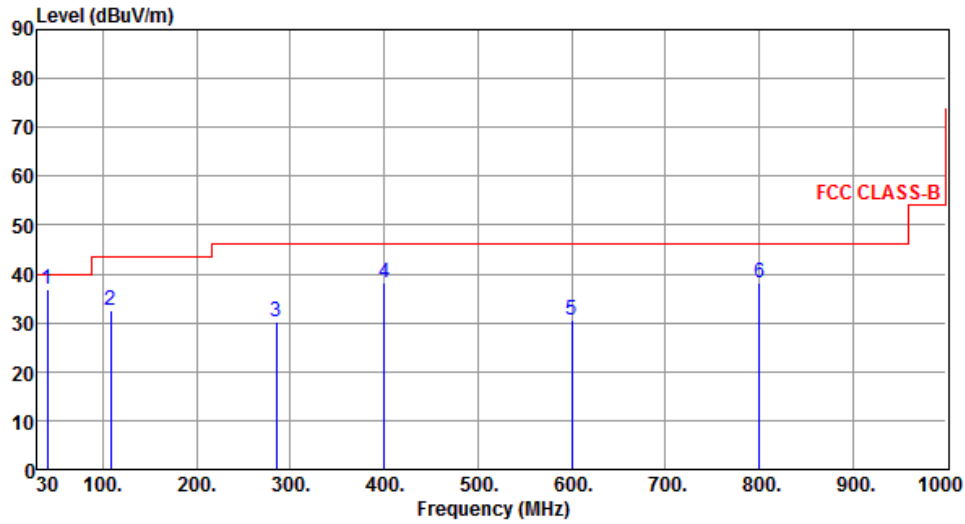
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5510
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	40.34	36.88	40.00	-3.12	53.89	-17.01	QP	---	---
2	108.68	32.38	43.50	-11.12	52.68	-20.30	Peak	---	---
3	285.34	30.14	46.00	-15.86	46.75	-16.61	Peak	---	---
4	399.94	38.10	46.00	-7.90	51.82	-13.72	Peak	---	---
5	600.50	30.68	46.00	-15.32	40.25	-9.57	Peak	---	---
6	800.30	38.15	46.00	-7.85	44.83	-6.68	Peak	---	---

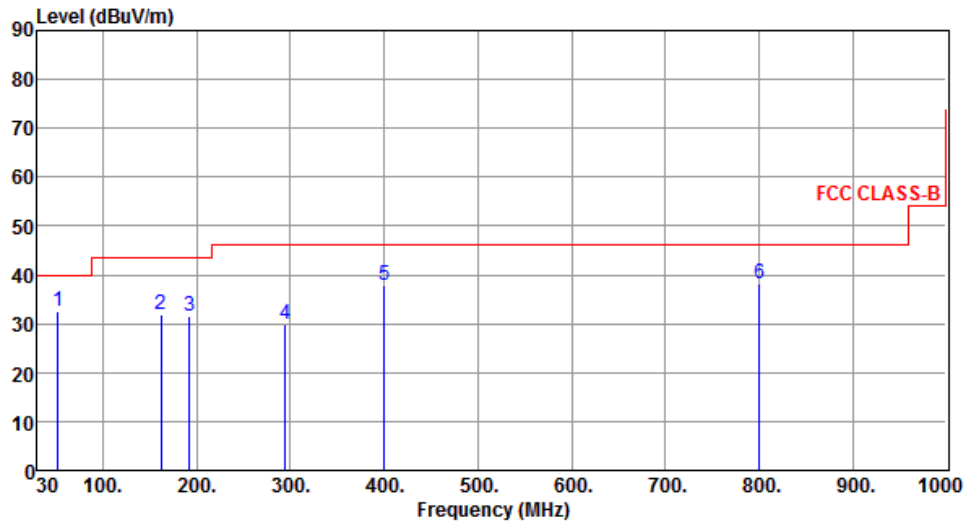
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5510
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	51.74	32.46	40.00	-7.54	48.93	-16.47	Peak	---	---
2	162.42	31.76	43.50	-11.74	48.65	-16.89	Peak	---	---
3	192.63	31.67	43.50	-11.83	51.28	-19.61	Peak	---	---
4	294.72	30.01	46.00	-15.99	46.36	-16.35	Peak	---	---
5	399.84	37.76	46.00	-8.24	51.48	-13.72	Peak	---	---
6	800.10	38.25	46.00	-7.75	44.93	-6.68	Peak	---	---

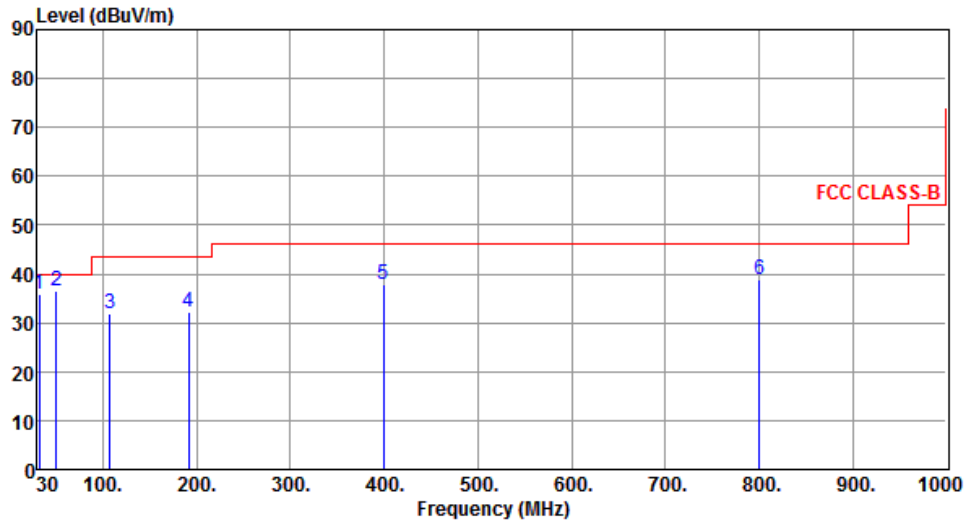
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*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)	5510
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	31.66	35.79	40.00	-4.21	53.47	-17.68	QP	---	---
2	50.31	36.37	40.00	-3.63	52.68	-16.31	QP	---	---
3	107.82	31.82	43.50	-11.68	52.25	-20.43	Peak	---	---
4	191.12	32.08	43.50	-11.42	51.63	-19.55	Peak	---	---
5	399.72	37.71	46.00	-8.29	51.44	-13.73	Peak	---	---
6	800.06	39.00	46.00	-7.00	45.68	-6.68	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

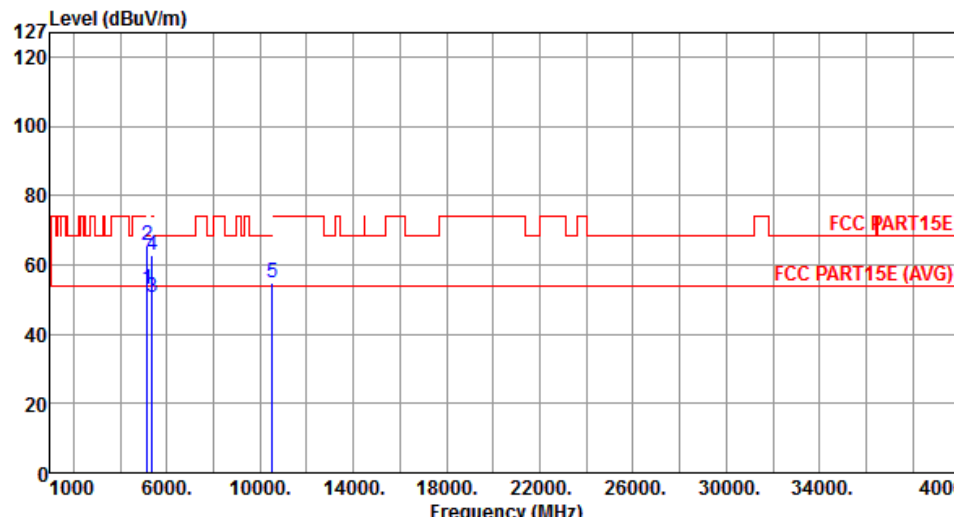
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		
Level (dBuV/m) <			

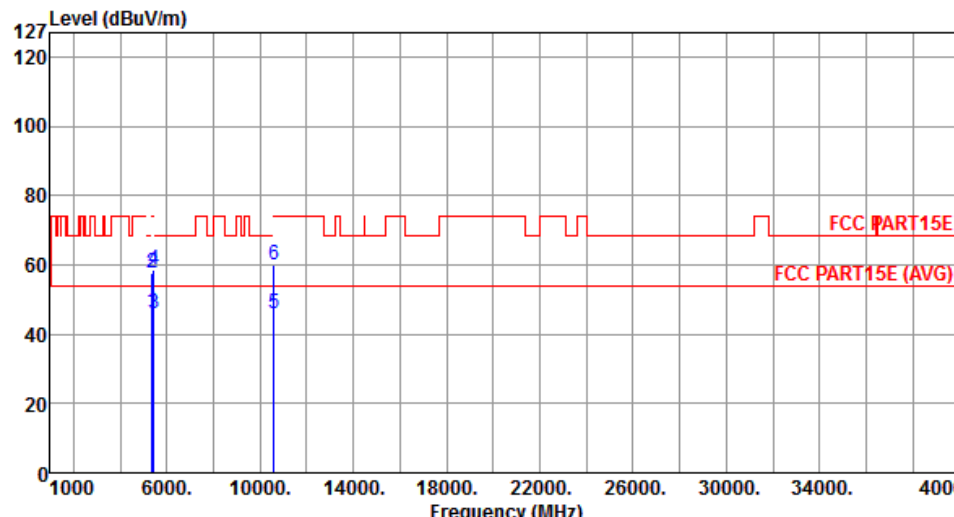
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5142.00	52.73	54.00	-1.27	47.04	5.69	Average	---	---
2	5142.00	65.42	74.00	-8.58	59.73	5.69	Peak	---	---
3	5380.00	50.73	54.00	-3.27	44.70	6.03	Average	---	---
4	5380.00	62.60	74.00	-11.40	56.57	6.03	Peak	---	---
5	10520.00	54.66	68.20	-13.54	39.96	14.70	Peak	---	---

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

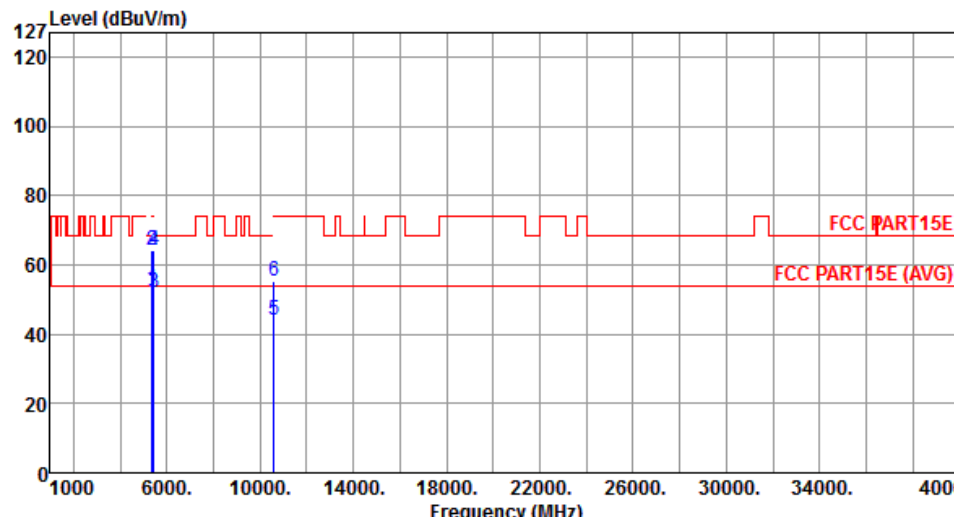
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	5380.00	46.21	54.00	-7.79	40.18	6.03	Average	---
2	5380.00	57.62	74.00	-16.38	51.59	6.03	Peak	---
3	5420.00	46.10	54.00	-7.90	40.03	6.07	Average	---
4	5420.00	58.60	74.00	-15.40	52.53	6.07	Peak	---
5	10600.00	46.07	54.00	-7.93	31.21	14.86	Average	---
6	10600.00	59.78	74.00	-14.22	44.92	14.86	Peak	---

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

Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		

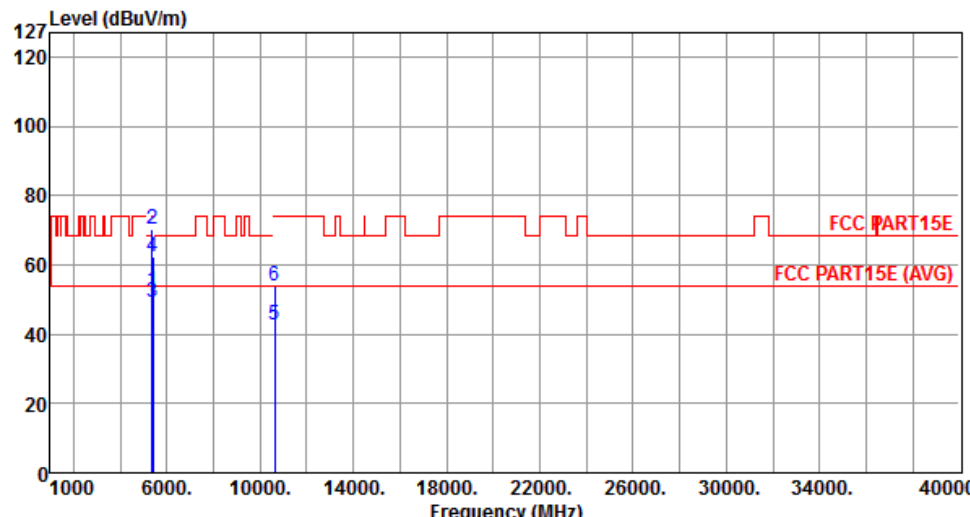


Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg	
1	5380.00	53.00	54.00	-1.00	46.97	6.03	Average	---	---
2	5380.00	64.28	74.00	-9.72	58.25	6.03	Peak	---	---
3	5420.00	51.87	54.00	-2.13	45.80	6.07	Average	---	---
4	5420.00	64.24	74.00	-9.76	58.17	6.07	Peak	---	---
5	10600.00	44.11	54.00	-9.89	29.25	14.86	Average	---	---
6	10600.00	55.30	74.00	-18.70	40.44	14.86	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5320
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	5350.00	52.52	54.00	-1.48	46.53	5.99	Average	---	---
2	5350.00	70.44	74.00	-3.56	64.45	5.99	Peak	---	---
3	5400.00	49.07	54.00	-4.93	43.02	6.05	Average	---	---
4	5400.00	62.30	74.00	-11.70	56.25	6.05	Peak	---	---
5	10640.00	42.81	54.00	-11.19	27.86	14.95	Average	---	---
6	10640.00	54.10	74.00	-19.90	39.15	14.95	Peak	---	---

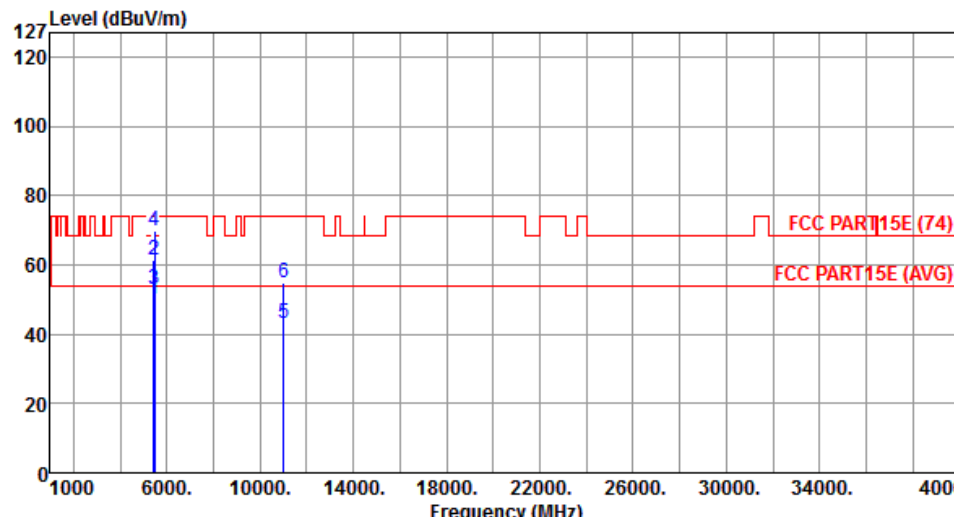
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		
Level (dBuV/m)			

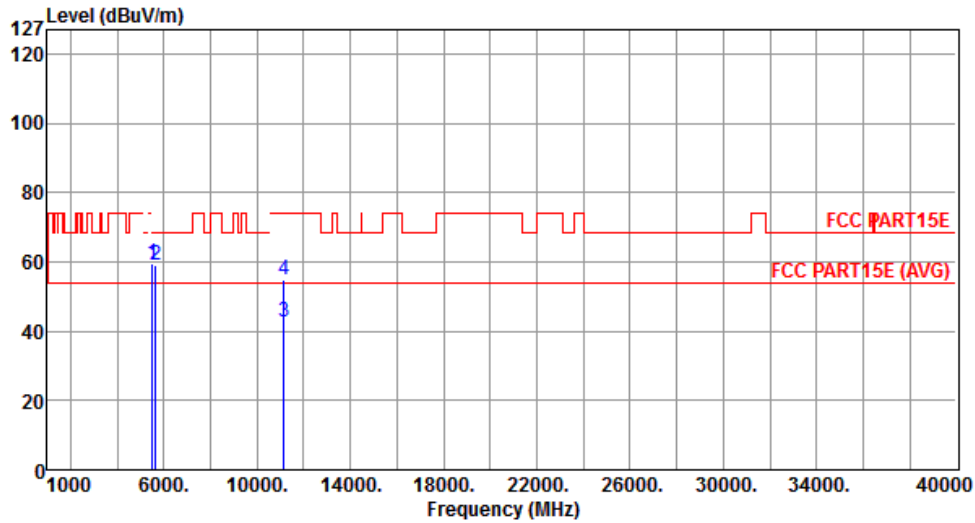
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5420.00	50.27	54.00	-3.73	44.20	6.07	Average	---	---
2	5420.00	61.44	74.00	-12.56	55.37	6.07	Peak	---	---
3	5470.00	52.76	54.00	-1.24	46.62	6.14	Average	---	---
4	5470.00	69.81	74.00	-4.19	63.67	6.14	Peak	---	---
5	11000.00	42.91	54.00	-11.09	27.22	15.69	Average	---	---
6	11000.00	54.93	74.00	-19.07	39.24	15.69	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



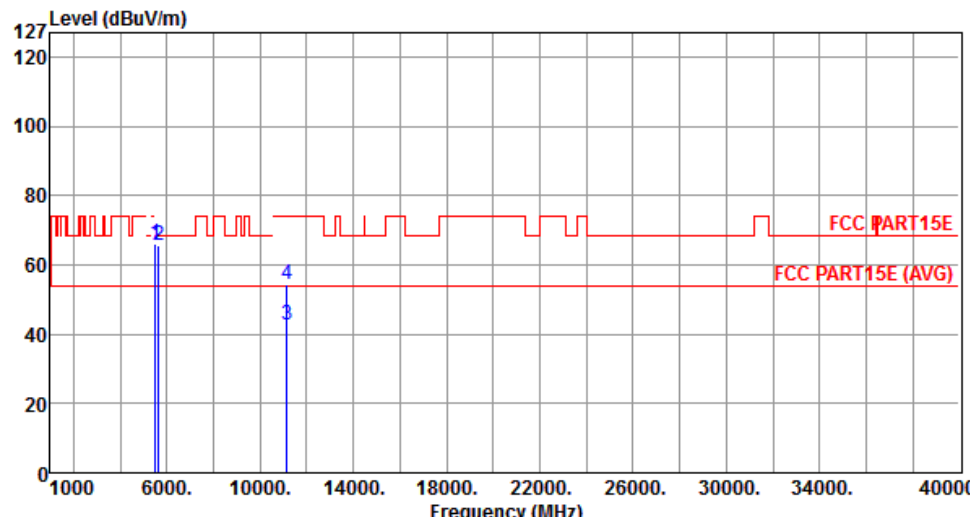
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	59.55	68.20	-8.65	53.38	6.17	Peak	---	---
2	5660.00	58.82	68.20	-9.38	52.36	6.46	Peak	---	---
3	11160.00	42.63	54.00	-11.37	27.10	15.53	Average	---	---
4	11160.00	54.88	74.00	-19.12	39.35	15.53	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

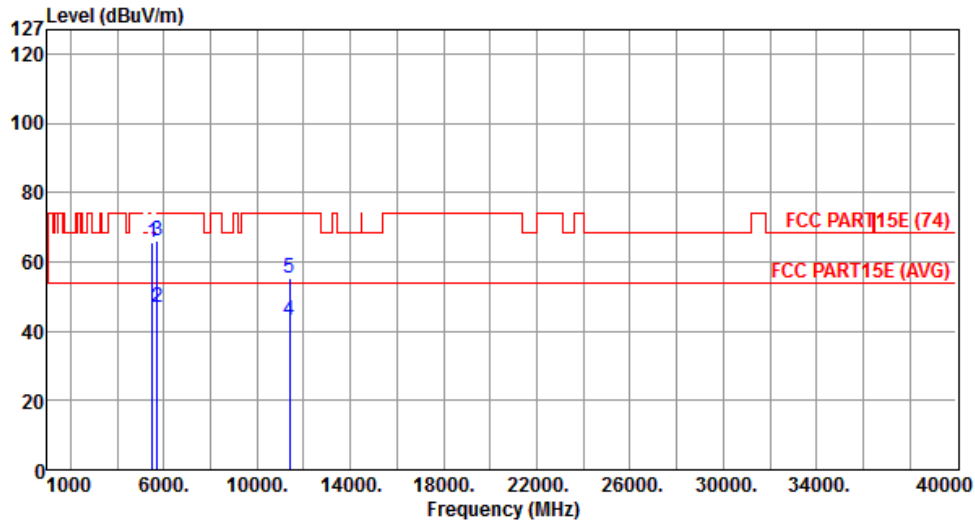
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	65.99	68.20	-2.21	59.82	6.17	Peak	---	---
2	5660.00	65.39	68.20	-2.81	58.93	6.46	Peak	---	---
3	11160.00	42.77	54.00	-11.23	27.24	15.53	Average	---	---
4	11160.00	54.46	74.00	-19.54	38.93	15.53	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5700
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	5500.00	65.42	68.20	-2.78	59.25	6.17	Peak	---	---
2	5725.00	46.85	54.00	-7.15	40.26	6.59	Average	---	---
3	5725.00	65.91	74.00	-8.09	59.32	6.59	Peak	---	---
4	11400.00	42.92	54.00	-11.08	27.63	15.29	Average	---	---
5	11400.00	55.50	74.00	-18.50	40.21	15.29	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

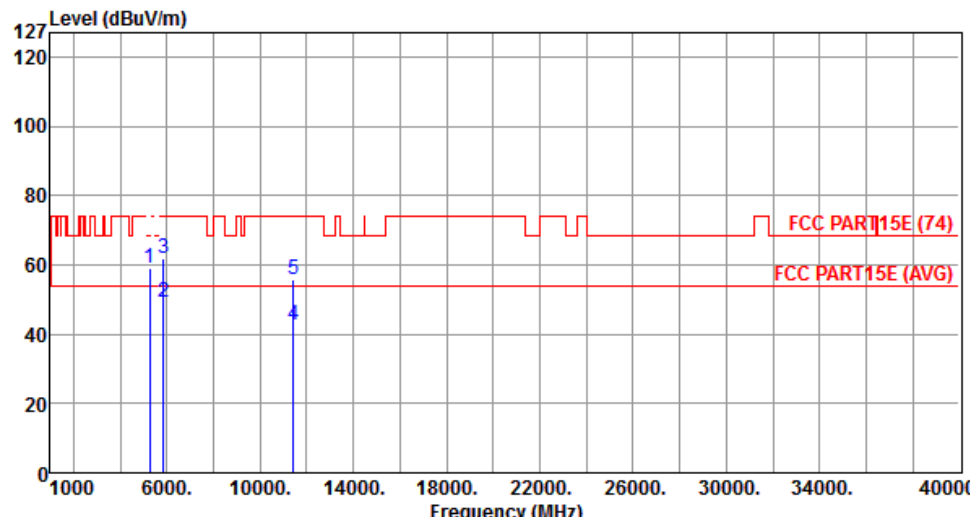
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		

	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level	dBuV/m	dB	reading	dB		High	Table
		dBuV/m			dBuV			cm	deg
1	5500.00	61.30	68.20	-6.90	55.13	6.17	Peak	---	---
2	5725.00	51.84	54.00	-2.16	45.25	6.59	Average	---	---
3	5725.00	72.94	74.00	-1.06	66.35	6.59	Peak	---	---
4	11400.00	42.32	54.00	-11.68	27.03	15.29	Average	---	---
5	11400.00	54.86	74.00	-19.14	39.57	15.29	Peak	---	---

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

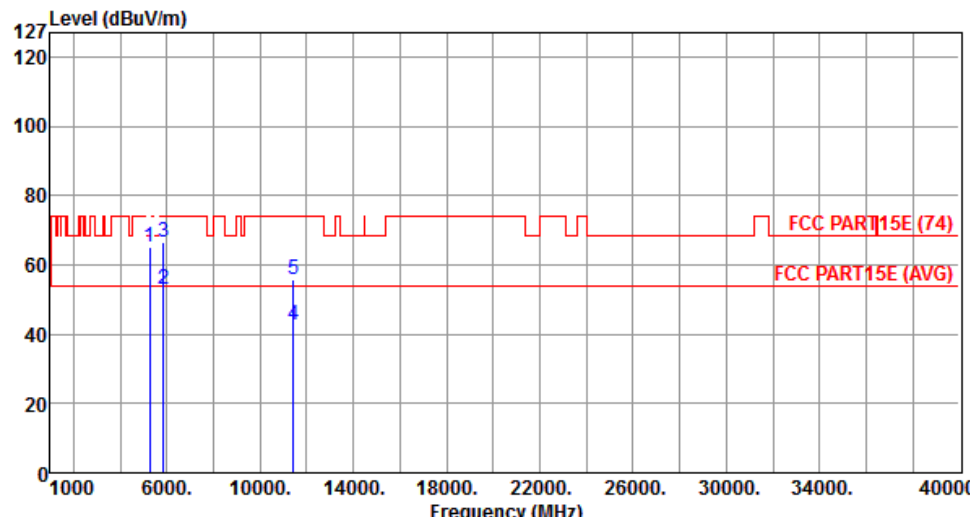
Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5250.00	58.90	68.20	-9.30	53.03	5.87	Peak	---	---
2	5838.40	49.30	54.00	-4.70	42.53	6.77	Average	---	---
3	5838.40	62.04	74.00	-11.96	55.27	6.77	Peak	---	---
4	11440.00	42.52	54.00	-11.48	27.27	15.25	Average	---	---
5	11440.00	55.80	74.00	-18.20	40.55	15.25	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		



The graph displays the emission level in dBuV/m against frequency in MHz. The y-axis ranges from 0 to 127 dBuV/m, and the x-axis ranges from 1000 to 40000 MHz. A red line represents the FCC Part 15E (74) limit, and a lower red line represents the FCC Part 15E (AVG) limit. Test results are marked with blue vertical lines and numbers 1 through 5, indicating specific frequency points and their corresponding emission levels.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5250.00	65.29	68.20	-2.91	59.42	5.87	Peak	---	---
2	5838.40	52.76	54.00	-1.24	45.99	6.77	Average	---	---
3	5838.40	66.62	74.00	-7.38	59.85	6.77	Peak	---	---
4	11440.00	42.65	54.00	-11.35	27.40	15.25	Average	---	---
5	11440.00	55.56	74.00	-18.44	40.31	15.25	Peak	---	---

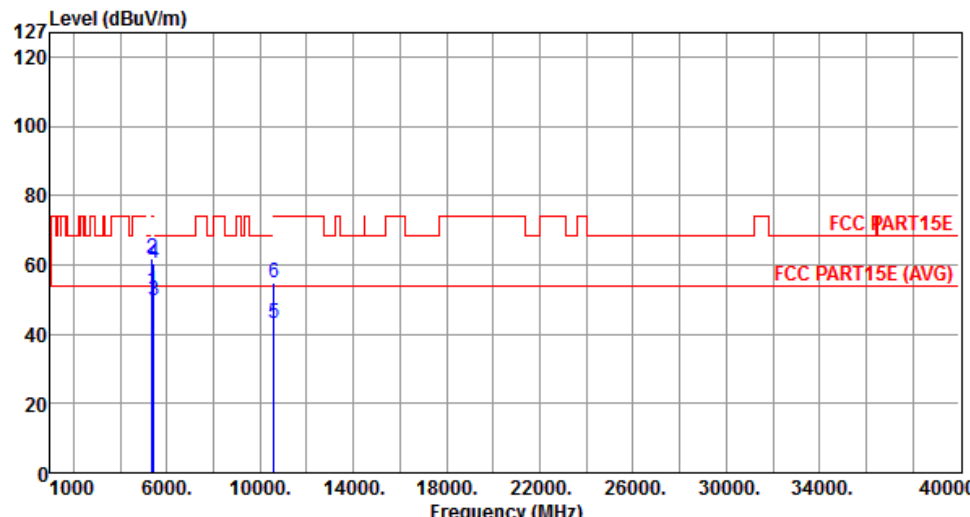
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		
Level (dBUV/m)			

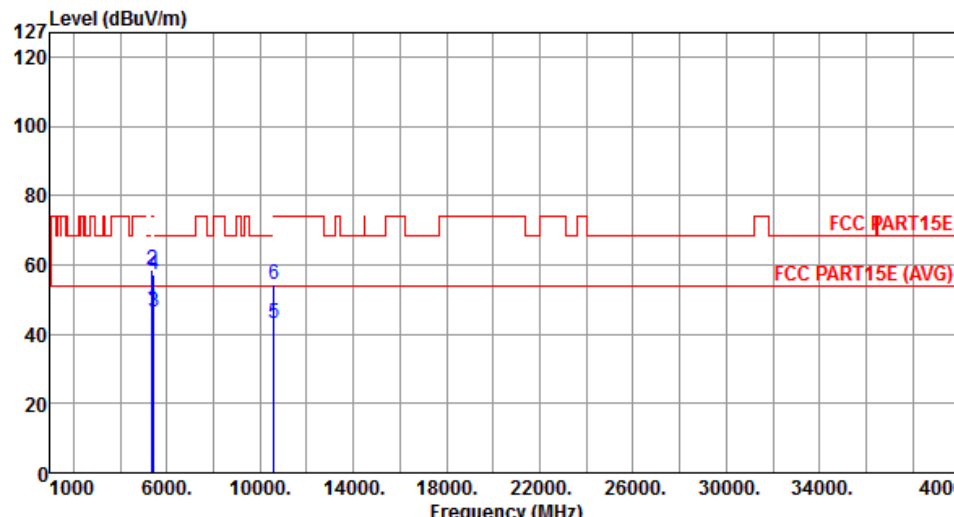
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5380.00	52.33	54.00	-1.67	46.30	6.03	Average	---
2	5380.00	61.76	74.00	-12.24	55.73	6.03	Peak	---
3	5420.00	49.62	54.00	-4.38	43.55	6.07	Average	---
4	5420.00	60.45	74.00	-13.55	54.38	6.07	Peak	---
5	10600.00	43.11	54.00	-10.89	28.25	14.86	Average	---
6	10600.00	55.02	74.00	-18.98	40.16	14.86	Peak	---

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

Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



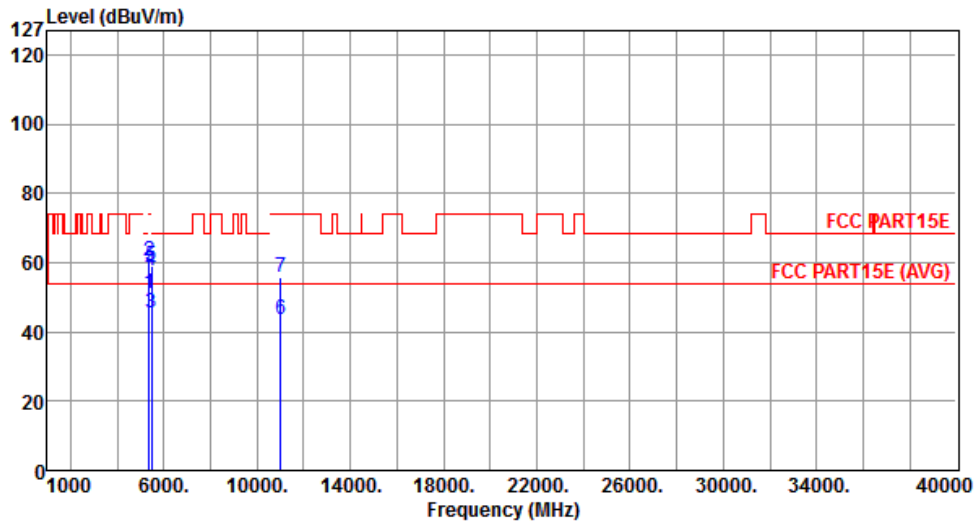
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5380.00	47.26	54.00	-6.74	41.23	6.03	Average	---	---
2	5380.00	58.71	74.00	-15.29	52.68	6.03	Peak	---	---
3	5420.00	46.54	54.00	-7.46	40.47	6.07	Average	---	---
4	5420.00	57.14	74.00	-16.86	51.07	6.07	Peak	---	---
5	10600.00	43.09	54.00	-10.91	28.23	14.86	Average	---	---
6	10600.00	54.50	74.00	-19.50	39.64	14.86	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		
Level (dBuV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5500
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	5378.00	51.12	54.00	-2.88	45.10	6.02	Average	---	---
2	5378.00	60.58	74.00	-13.42	54.56	6.02	Peak	---	---
3	5460.00	45.50	54.00	-8.50	39.38	6.12	Average	---	---
4	5460.00	57.54	74.00	-16.46	51.42	6.12	Peak	---	---
5	5470.00	59.24	68.20	-8.96	53.10	6.14	Peak	---	---
6	11000.00	43.62	54.00	-10.38	27.93	15.69	Average	---	---
7	11000.00	55.74	74.00	-18.26	40.05	15.69	Peak	---	---

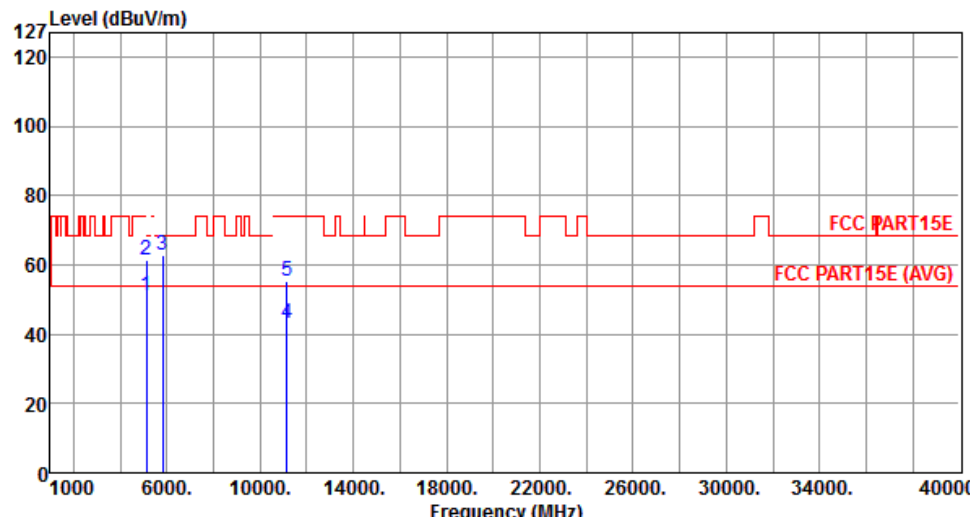
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		
Level (dBuV/m)			

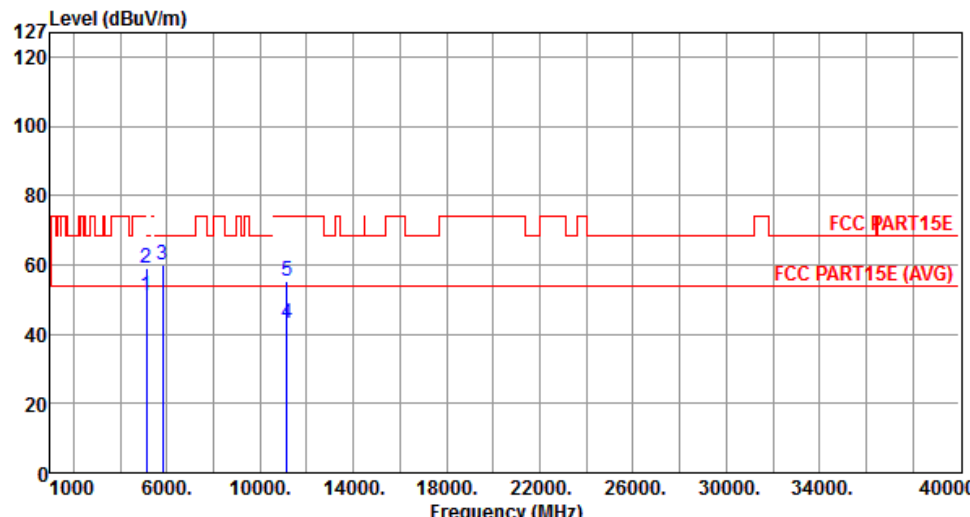
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5115.00	51.08	54.00	-2.92	45.44	5.64	Average	---	---
2	5115.00	61.26	74.00	-12.74	55.62	5.64	Peak	---	---
3	5812.00	62.95	68.20	-5.25	56.18	6.77	Peak	---	---
4	11160.00	42.97	54.00	-11.03	27.44	15.53	Average	---	---
5	11160.00	55.46	74.00	-18.54	39.93	15.53	Peak	---	---

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

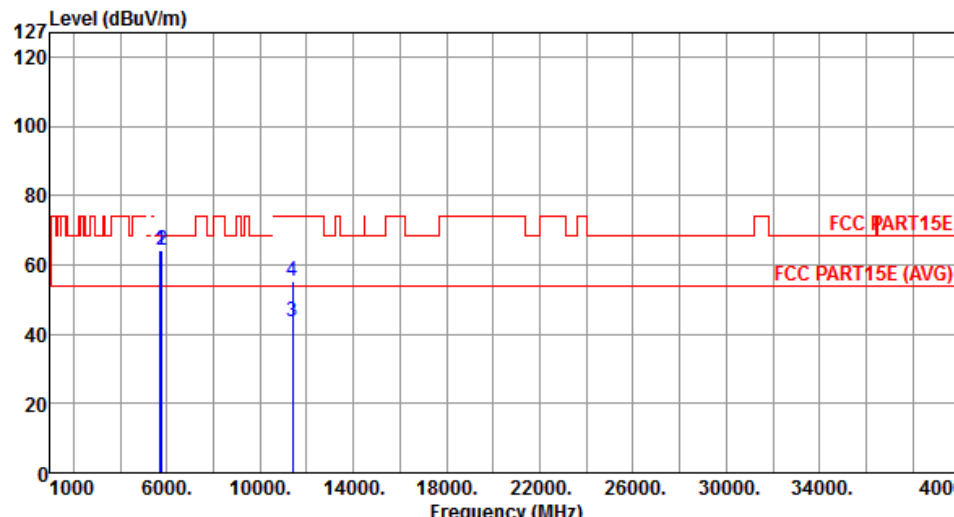
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5115.00	50.85	54.00	-3.15	45.21	5.64	Average	---	---
2	5115.00	58.91	74.00	-15.09	53.27	5.64	Peak	---	---
3	5812.00	60.20	68.20	-8.00	53.43	6.77	Peak	---	---
4	11160.00	43.18	54.00	-10.82	27.65	15.53	Average	---	---
5	11160.00	55.41	74.00	-18.59	39.88	15.53	Peak	---	---

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

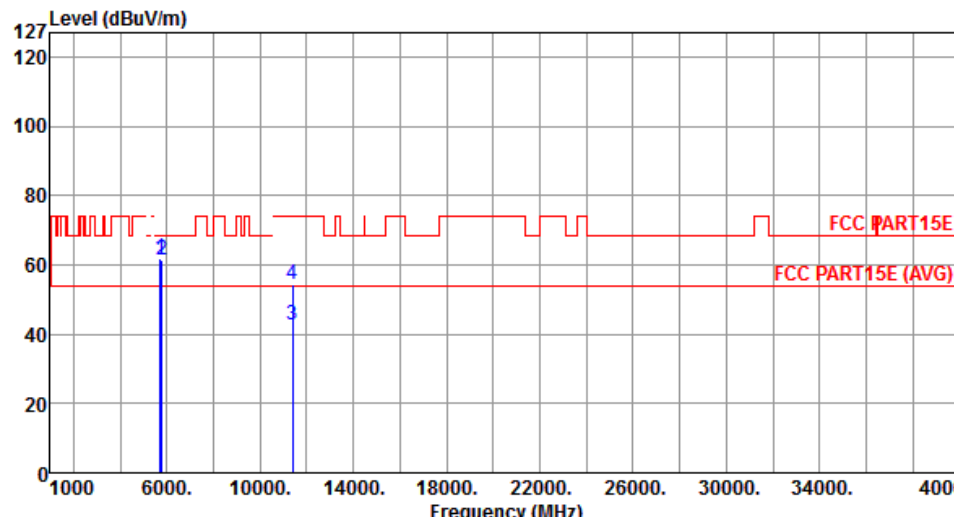
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.23	68.20	-3.97	57.64	6.59	Peak	---	---
2	5778.00	64.16	68.20	-4.04	57.45	6.71	Peak	---	---
3	11400.00	43.44	54.00	-10.56	28.15	15.29	Average	---	---
4	11400.00	55.47	74.00	-18.53	40.18	15.29	Peak	---	---

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

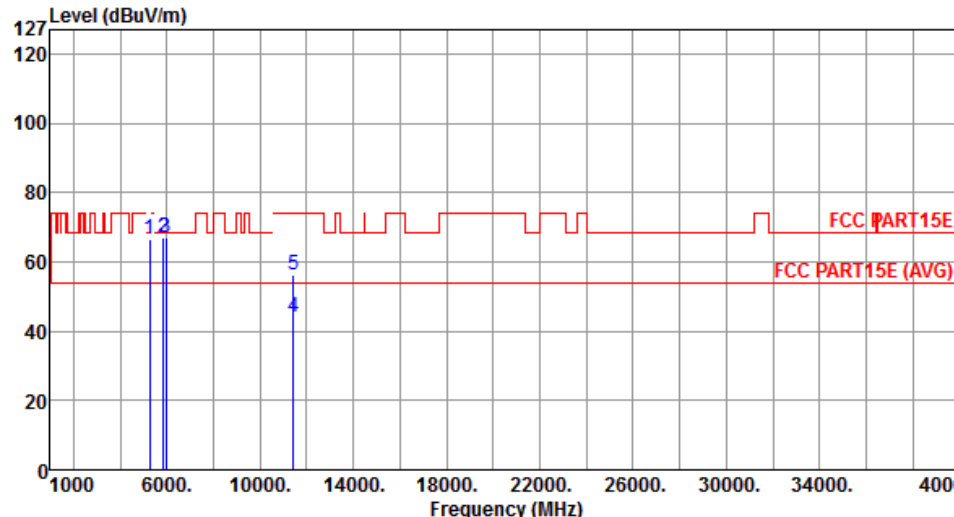
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	62.07	68.20	-6.13	55.48	6.59	Peak	---	---
2	5778.00	61.50	68.20	-6.70	54.79	6.71	Peak	---	---
3	11400.00	42.82	54.00	-11.18	27.53	15.29	Average	---	---
4	11400.00	54.47	74.00	-19.53	39.18	15.29	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		



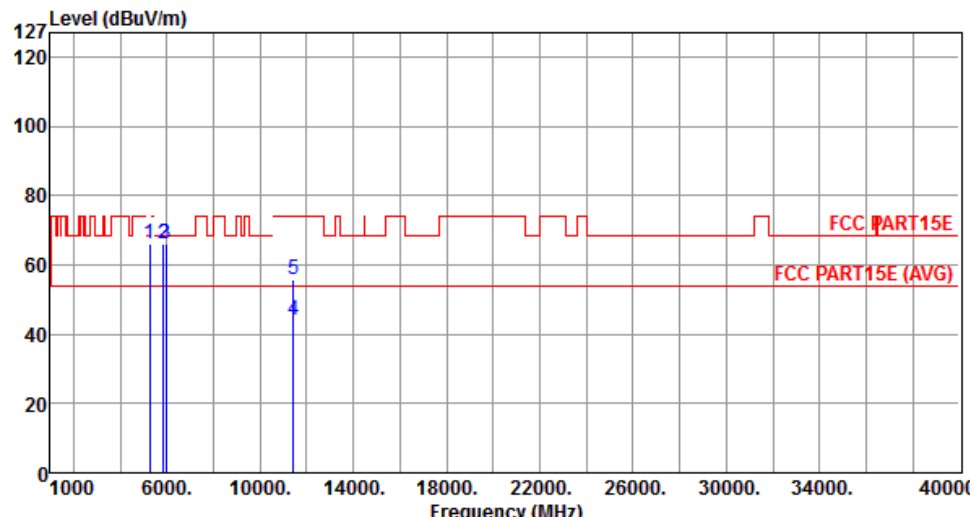
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5250.00	66.34	68.20	-1.86	60.47	5.87	Peak	---	---
2	5839.25	66.96	68.20	-1.24	60.19	6.77	Peak	---	---
3	5958.00	66.94	68.20	-1.26	60.12	6.82	Peak	---	---
4	11440.00	43.82	54.00	-10.18	28.57	15.25	Average	---	---
5	11440.00	56.19	74.00	-17.81	40.94	15.25	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Vertical		

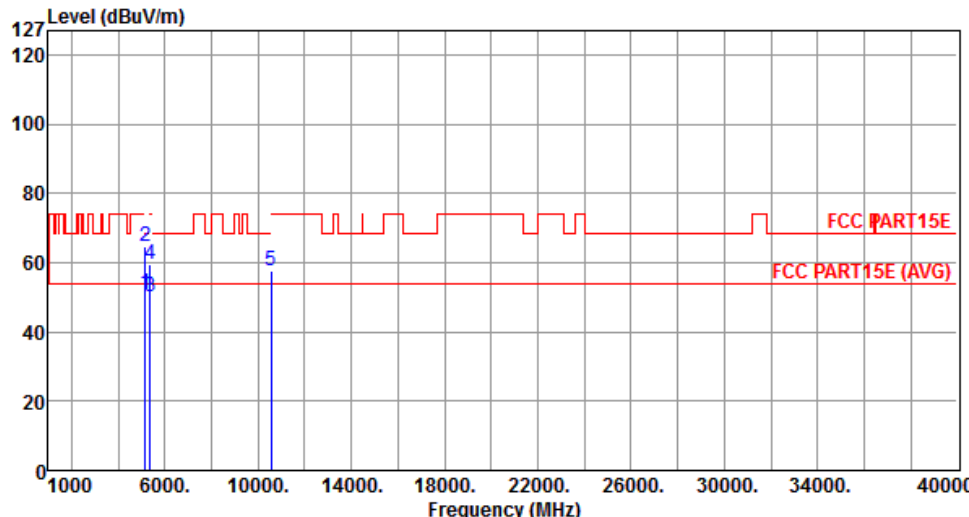


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5250.00	66.01	68.20	-2.19	60.14	5.87	Peak	---	---
2	5839.25	66.26	68.20	-1.94	59.49	6.77	Peak	---	---
3	5958.00	66.06	68.20	-2.14	59.24	6.82	Peak	---	---
4	11440.00	43.90	54.00	-10.10	28.65	15.25	Average	---	---
5	11440.00	55.61	74.00	-18.39	40.36	15.25	Peak	---	---

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

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

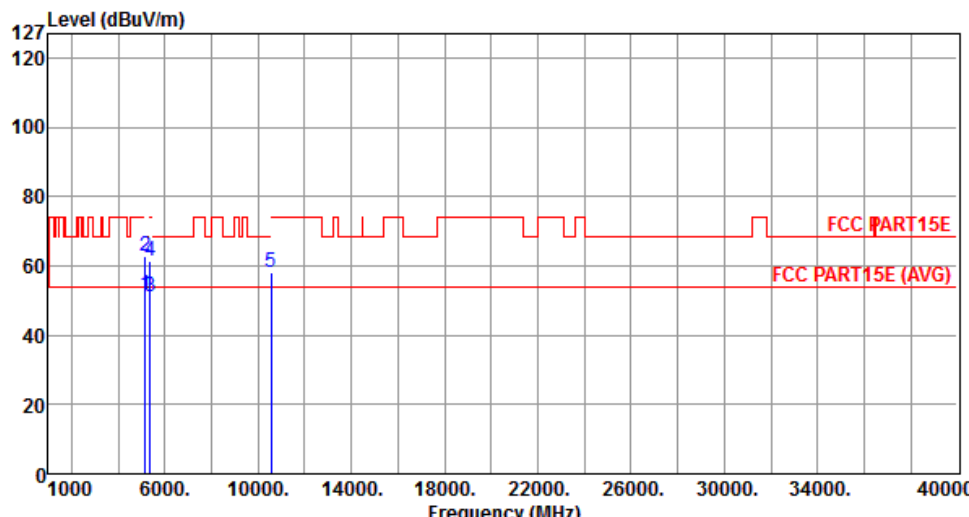
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	51.03	54.00	-2.97	45.34	5.69	Average	---	---
2	5144.00	64.61	74.00	-9.39	58.92	5.69	Peak	---	---
3	5350.00	50.10	54.00	-3.90	44.11	5.99	Average	---	---
4	5350.00	59.75	74.00	-14.25	53.76	5.99	Peak	---	---
5	10540.00	57.76	68.20	-10.44	43.01	14.75	Peak	---	---

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

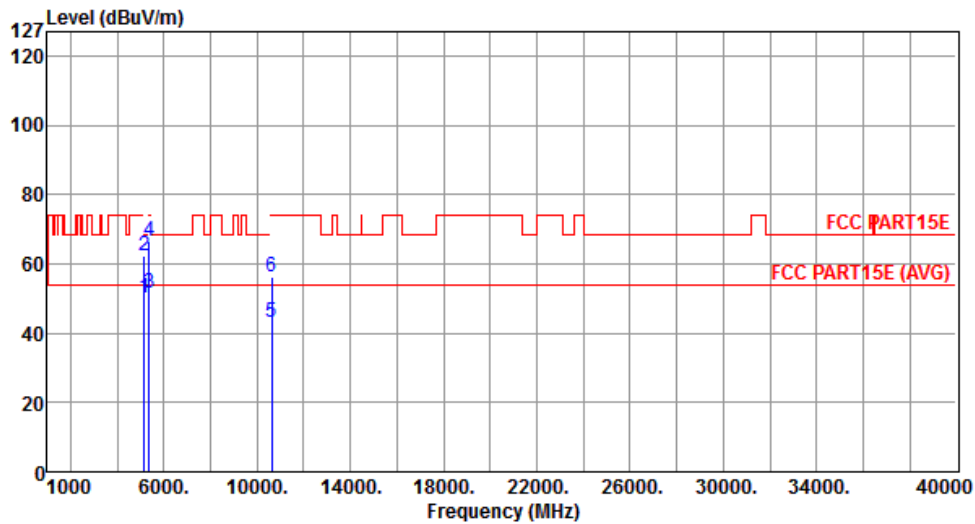
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	51.62	54.00	-2.38	45.93	5.69	Average	---	---
2	5144.00	62.90	74.00	-11.10	57.21	5.69	Peak	---	---
3	5350.00	50.86	54.00	-3.14	44.87	5.99	Average	---	---
4	5350.00	61.35	74.00	-12.65	55.36	5.99	Peak	---	---
5	10540.00	58.18	68.20	-10.02	43.43	14.75	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



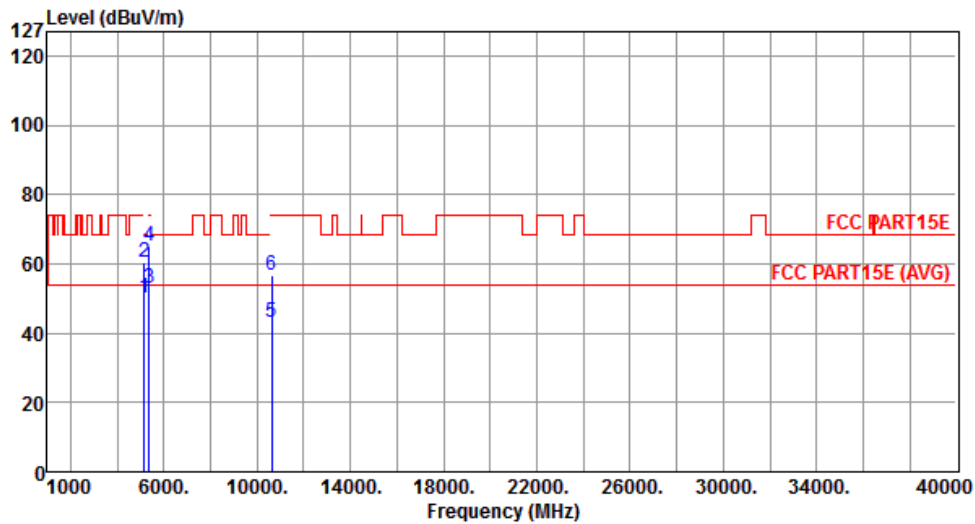
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5144.00	50.02	54.00	-3.98	44.33	5.69	Average	---	---
2	5144.00	62.18	74.00	-11.82	56.49	5.69	Peak	---	---
3	5350.00	51.38	54.00	-2.62	45.39	5.99	Average	---	---
4	5350.00	66.38	74.00	-7.62	60.39	5.99	Peak	---	---
5	10620.00	43.06	54.00	-10.94	28.16	14.90	Average	---	---
6	10620.00	56.30	74.00	-17.70	41.40	14.90	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



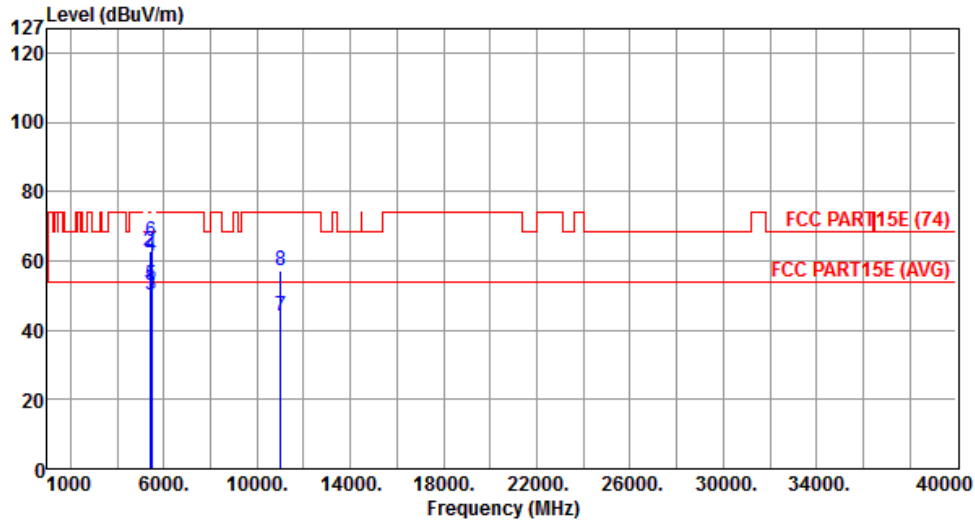
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5146.00	50.21	54.00	-3.79	44.52	5.69	Average	---	---
2	5146.00	60.38	74.00	-13.62	54.69	5.69	Peak	---	---
3	5350.00	52.86	54.00	-1.14	46.87	5.99	Average	---	---
4	5350.00	65.18	74.00	-8.82	59.19	5.99	Peak	---	---
5	10620.00	43.06	54.00	-10.94	28.16	14.90	Average	---	---
6	10620.00	56.59	74.00	-17.41	41.69	14.90	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT40	Test Freq. (MHz)	5510
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	5412.00	50.87	54.00	-3.13	44.81	6.06	Average	---	---
2	5412.00	62.94	74.00	-11.06	56.88	6.06	Peak	---	---
3	5460.00	50.04	54.00	-3.96	43.92	6.12	Average	---	---
4	5460.00	61.52	74.00	-12.48	55.40	6.12	Peak	---	---
5	5470.00	52.90	54.00	-1.10	46.76	6.14	Average	---	---
6	5470.00	65.52	74.00	-8.48	59.38	6.14	Peak	---	---
7	11020.00	43.82	54.00	-10.18	28.16	15.66	Average	---	---
8	11020.00	57.05	74.00	-16.95	41.39	15.66	Peak	---	---

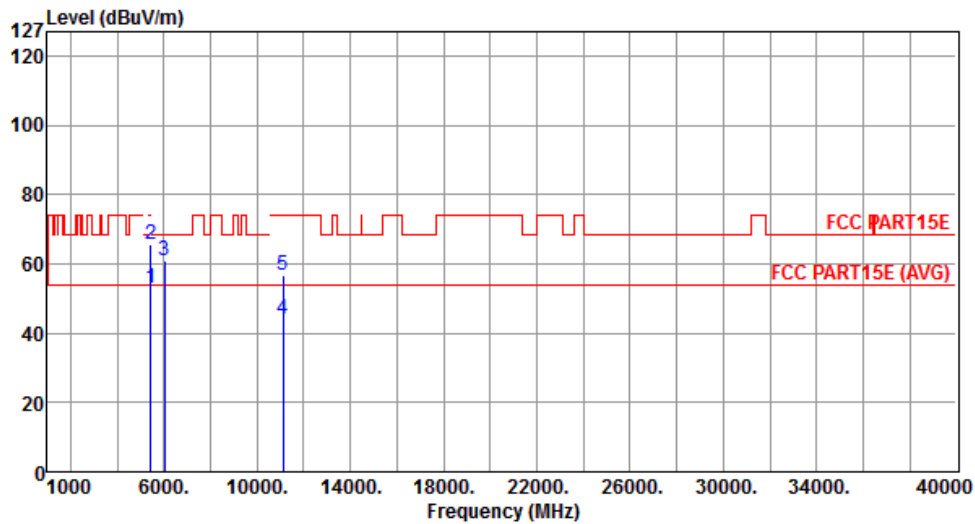
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		
Level (dBUV/m) </			

Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		



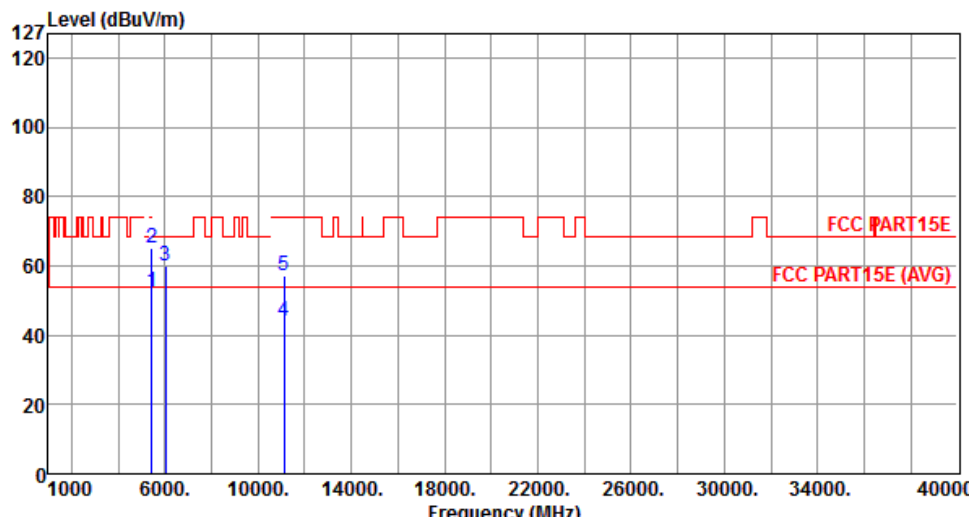
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5434.00	52.97	54.00	-1.03	46.89	6.08	Average	---	---
2	5434.00	65.42	74.00	-8.58	59.34	6.08	Peak	---	---
3	6012.00	61.10	68.20	-7.10	54.22	6.88	Peak	---	---
4	11100.00	43.91	54.00	-10.09	28.32	15.59	Average	---	---
5	11100.00	56.84	74.00	-17.16	41.25	15.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

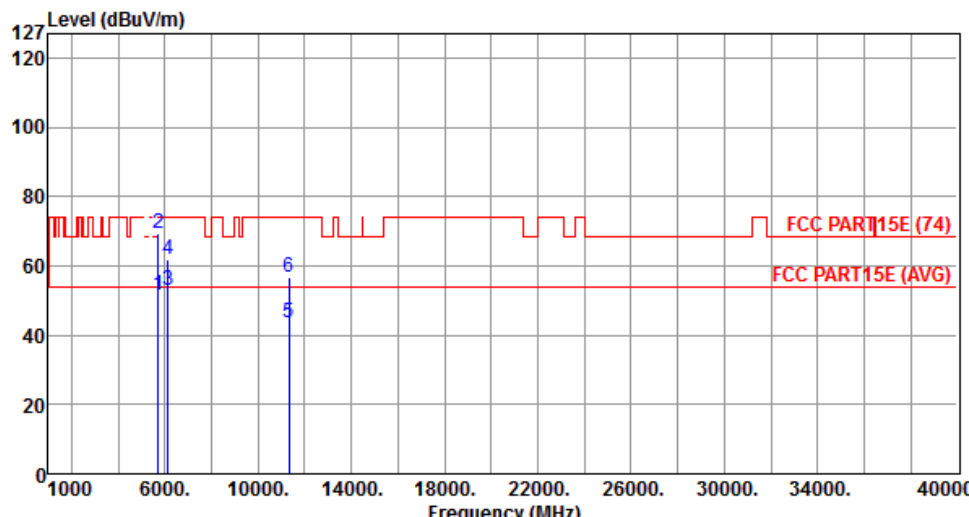
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5434.00	52.50	54.00	-1.50	46.42	6.08	Average	---	---
2	5434.00	64.96	74.00	-9.04	58.88	6.08	Peak	---	---
3	6012.00	60.19	68.20	-8.01	53.31	6.88	Peak	---	---
4	11100.00	44.00	54.00	-10.00	28.41	15.59	Average	---	---
5	11100.00	57.02	74.00	-16.98	41.43	15.59	Peak	---	---

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

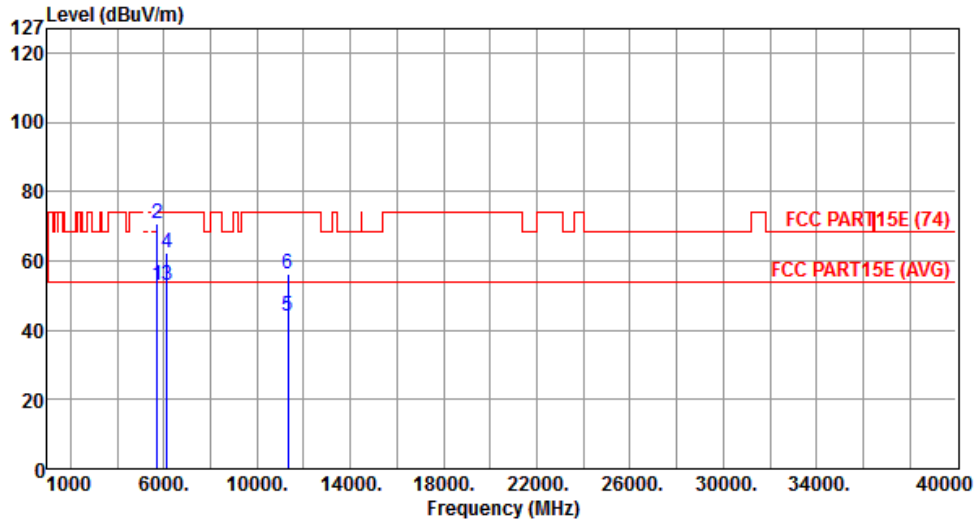
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	51.61	54.00	-2.39	45.02	6.59	Average	---	---
2	5725.00	69.45	74.00	-4.55	62.86	6.59	Peak	---	---
3	6142.00	52.74	54.00	-1.26	45.34	7.40	Average	---	---
4	6142.00	61.99	74.00	-12.01	54.59	7.40	Peak	---	---
5	11340.00	43.57	54.00	-10.43	28.22	15.35	Average	---	---
6	11340.00	56.73	74.00	-17.27	41.38	15.35	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).

Modulation	VHT40	Test Freq. (MHz)	5670
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	5725.00	52.87	54.00	-1.13	46.28	6.59	Average	---	---
2	5725.00	70.95	74.00	-3.05	64.36	6.59	Peak	---	---
3	6142.00	53.00	54.00	-1.00	45.60	7.40	Average	---	---
4	6142.00	62.39	74.00	-11.61	54.99	7.40	Peak	---	---
5	11340.00	44.03	54.00	-9.97	28.68	15.35	Average	---	---
6	11340.00	56.37	74.00	-17.63	41.02	15.35	Peak	---	---

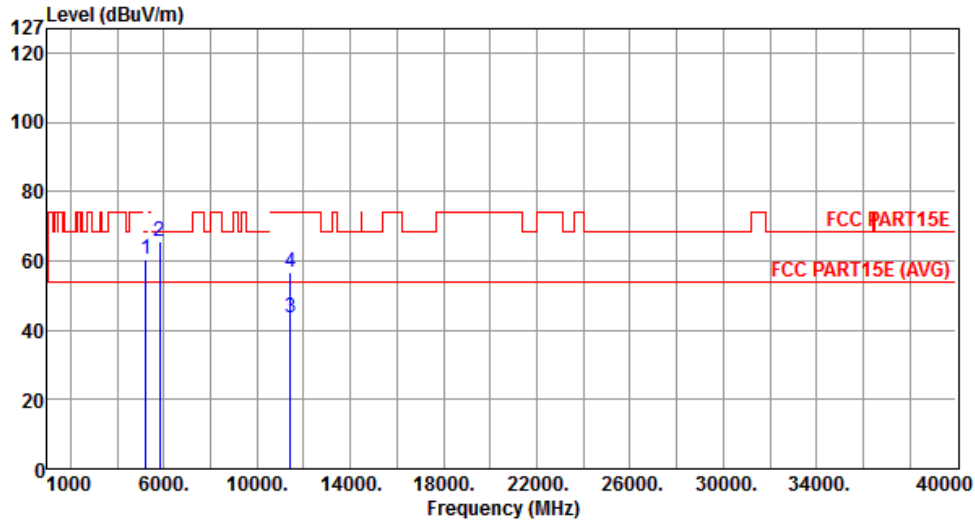
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT40	Test Freq. (MHz)	5710
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	5234.00	60.64	68.20	-7.56	54.80	5.84	Peak	---	---
2	5825.00	65.40	68.20	-2.80	58.62	6.78	Peak	---	---
3	11420.00	43.52	54.00	-10.48	28.25	15.27	Average	---	---
4	11420.00	56.80	74.00	-17.20	41.53	15.27	Peak	---	---

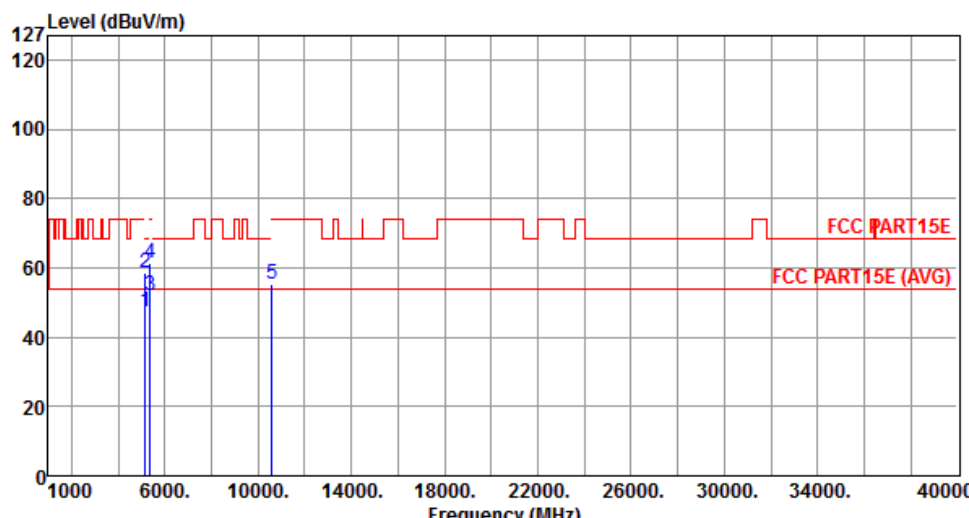
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

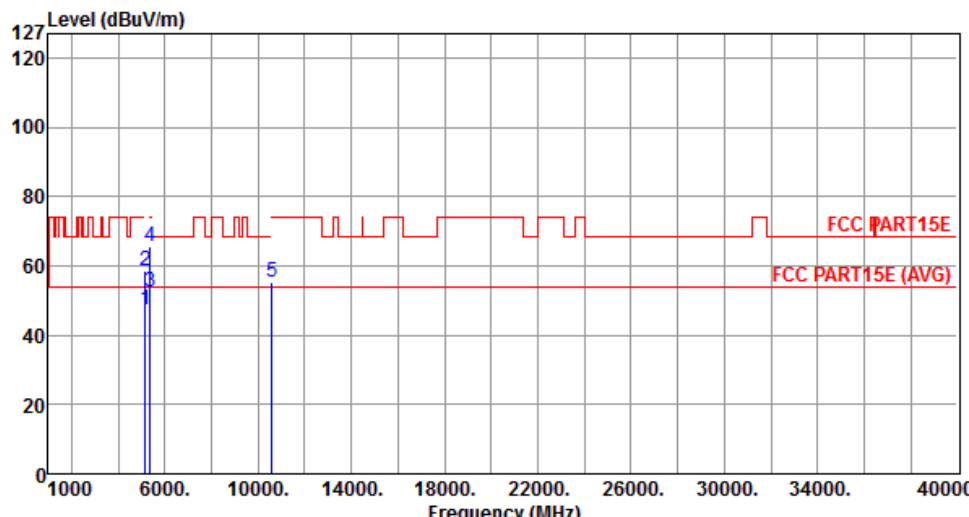
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		



	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	47.56	54.00	-6.44	41.85	5.71	Average	---	---
2	5150.00	58.61	74.00	-15.39	52.90	5.71	Peak	---	---
3	5350.00	52.23	54.00	-1.77	46.24	5.99	Average	---	---
4	5350.00	61.56	74.00	-12.44	55.57	5.99	Peak	---	---
5	10580.00	55.20	68.20	-13.00	40.37	14.83	Peak	---	---

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

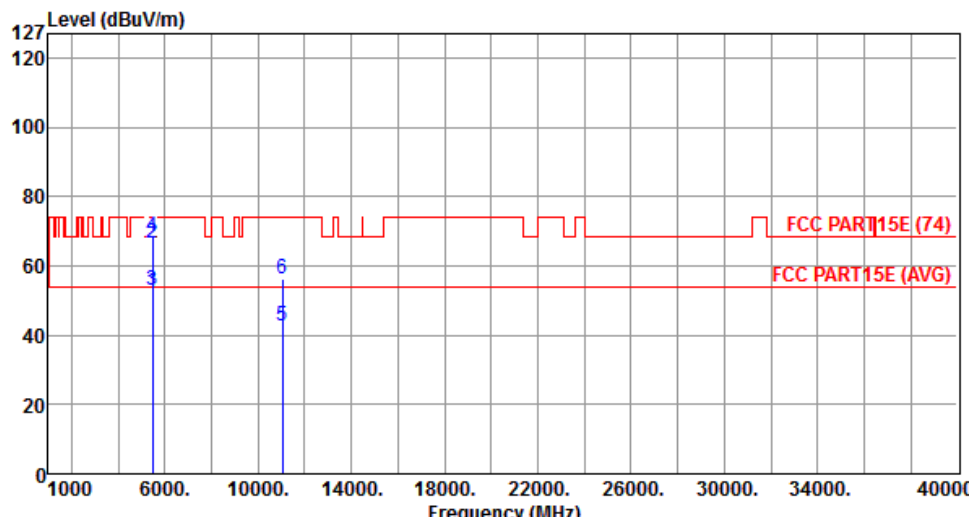
Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		



	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	47.11	54.00	-6.89	41.40	5.71	Average	---	---
2	5150.00	58.53	74.00	-15.47	52.82	5.71	Peak	---	---
3	5350.00	52.68	54.00	-1.32	46.69	5.99	Average	---	---
4	5350.00	65.64	74.00	-8.36	59.65	5.99	Peak	---	---
5	10580.00	55.15	68.20	-13.05	40.32	14.83	Peak	---	---

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

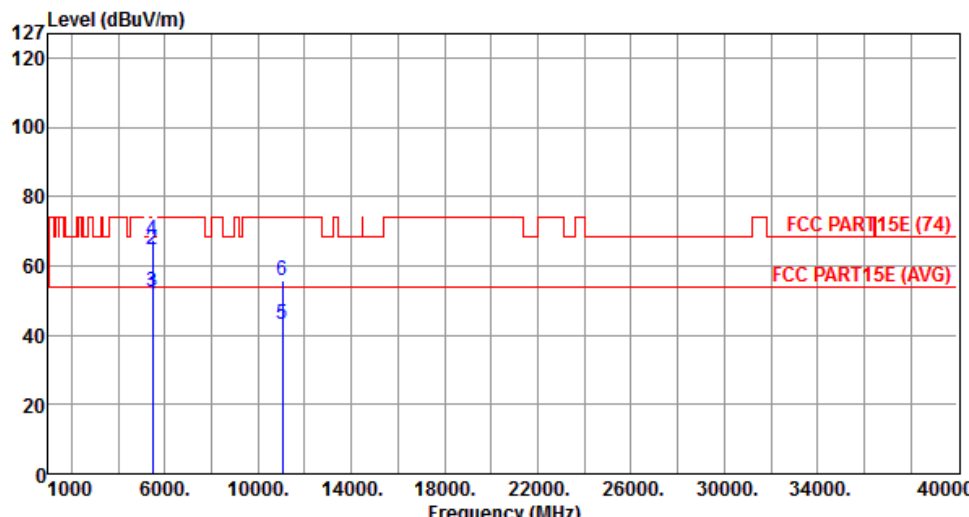
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.66	54.00	-1.34	46.54	6.12	Average	---	---
2	5460.00	66.56	74.00	-7.44	60.44	6.12	Peak	---	---
3	5470.00	53.00	54.00	-1.00	46.86	6.14	Average	---	---
4	5470.00	68.64	74.00	-5.36	62.50	6.14	Peak	---	---
5	11060.00	42.75	54.00	-11.25	27.12	15.63	Average	---	---
6	11060.00	56.01	74.00	-17.99	40.38	15.63	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		

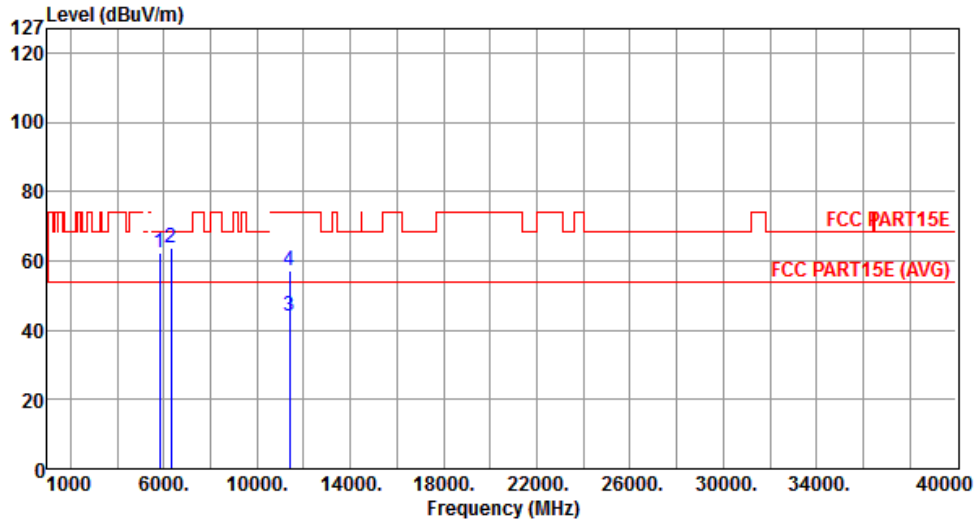


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.43	54.00	-2.57	45.31	6.12	Average	---	---
2	5460.00	64.71	74.00	-9.29	58.59	6.12	Peak	---	---
3	5470.00	52.36	54.00	-1.64	46.22	6.14	Average	---	---
4	5470.00	67.71	74.00	-6.29	61.57	6.14	Peak	---	---
5	11060.00	42.98	54.00	-11.02	27.35	15.63	Average	---	---
6	11060.00	55.90	74.00	-18.10	40.27	15.63	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5825.00	62.30	68.20	-5.90	55.52	6.78	Peak	---	---
2	6322.00	63.85	68.20	-4.35	55.81	8.04	Peak	---	---
3	11380.00	44.00	54.00	-10.00	28.68	15.32	Average	---	---
4	11380.00	57.14	74.00	-16.86	41.82	15.32	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

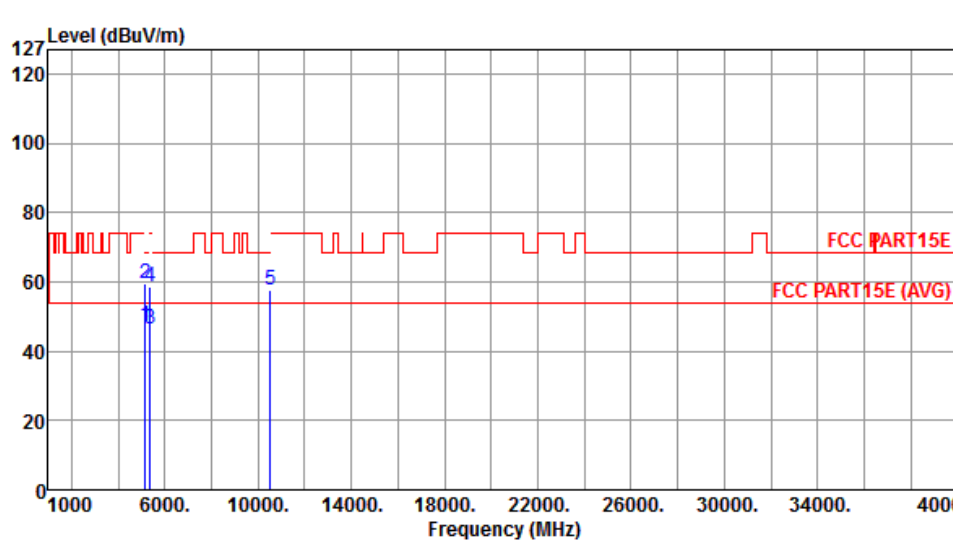
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Legacy/MIMO (CDD) beamforming mode

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

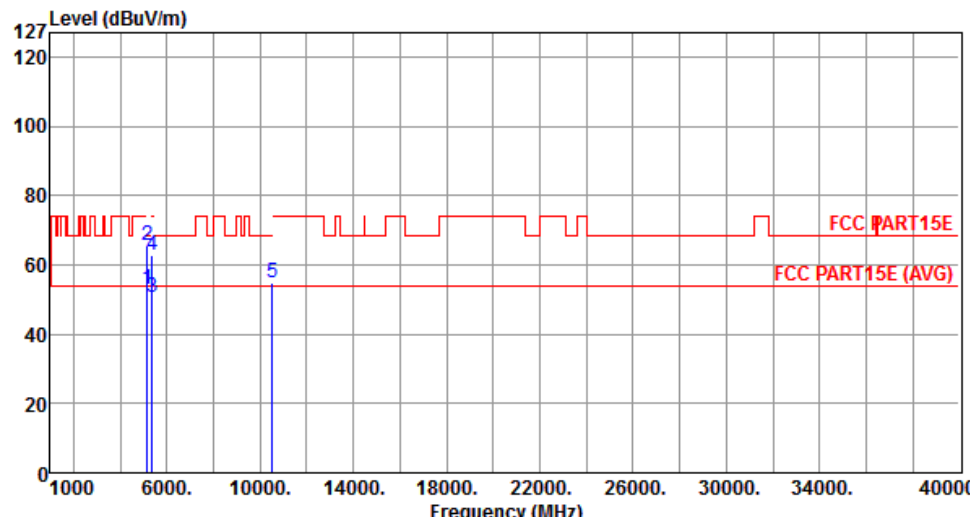
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5142.00	47.56	54.00	-6.44	41.87	5.69	Average	---	---
2	5142.00	59.38	74.00	-14.62	53.69	5.69	Peak	---	---
3	5380.00	46.51	54.00	-7.49	40.48	6.03	Average	---	---
4	5380.00	58.46	74.00	-15.54	52.43	6.03	Peak	---	---
5	10520.00	57.69	68.20	-10.51	42.99	14.70	Peak	---	---

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

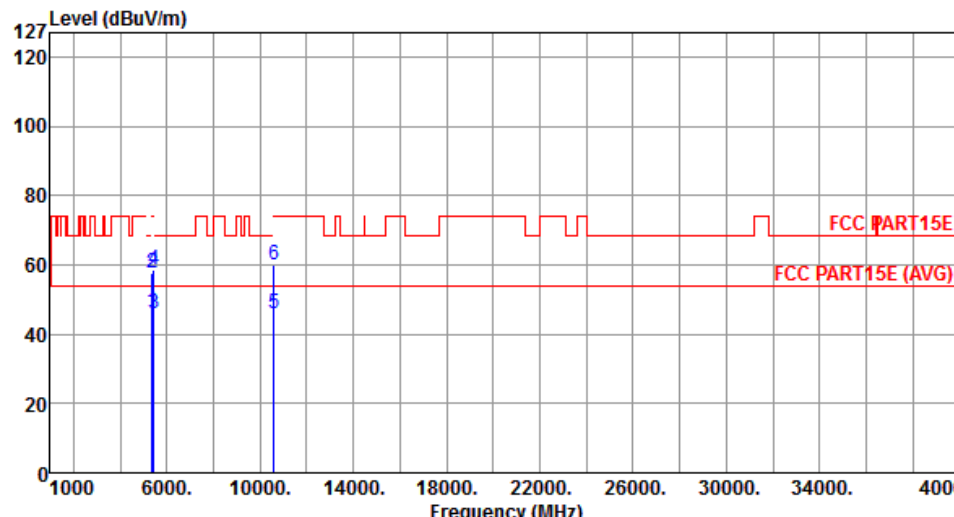
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5142.00	52.73	54.00	-1.27	47.04	5.69	Average	---	---
2	5142.00	65.42	74.00	-8.58	59.73	5.69	Peak	---	---
3	5380.00	50.73	54.00	-3.27	44.70	6.03	Average	---	---
4	5380.00	62.60	74.00	-11.40	56.57	6.03	Peak	---	---
5	10520.00	54.66	68.20	-13.54	39.96	14.70	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



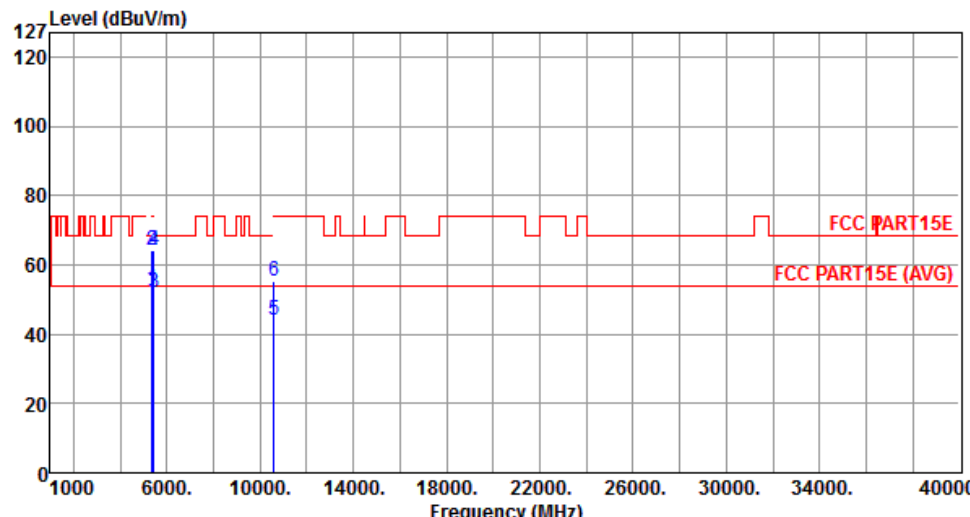
Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5380.00	46.21	54.00	-7.79	40.18	6.03	Average	---
2	5380.00	57.62	74.00	-16.38	51.59	6.03	Peak	---
3	5420.00	46.10	54.00	-7.90	40.03	6.07	Average	---
4	5420.00	58.60	74.00	-15.40	52.53	6.07	Peak	---
5	10600.00	46.07	54.00	-7.93	31.21	14.86	Average	---
6	10600.00	59.78	74.00	-14.22	44.92	14.86	Peak	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	11a	Test Freq. (MHz)	5300
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	5380.00	53.00	54.00	-1.00	46.97	6.03	Average	---	---
2	5380.00	64.28	74.00	-9.72	58.25	6.03	Peak	---	---
3	5420.00	51.87	54.00	-2.13	45.80	6.07	Average	---	---
4	5420.00	64.24	74.00	-9.76	58.17	6.07	Peak	---	---
5	10600.00	44.11	54.00	-9.89	29.25	14.86	Average	---	---
6	10600.00	55.30	74.00	-18.70	40.44	14.86	Peak	---	---

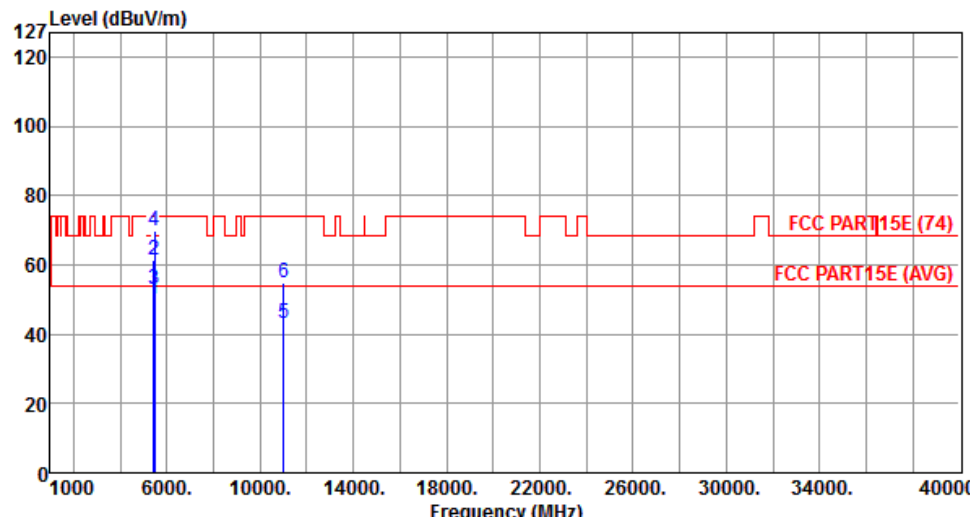
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		
Level (dBuV/m) </			

Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		
Level (dBuV/m)			

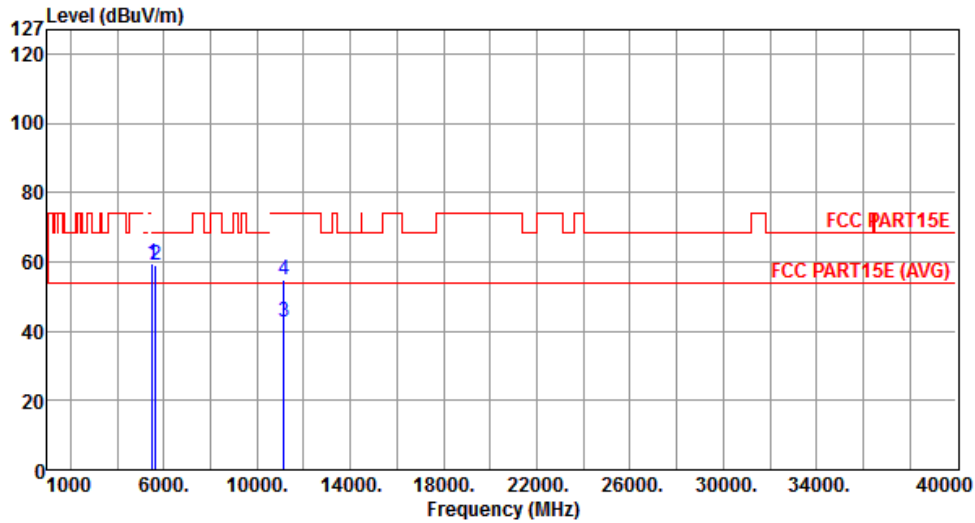
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5420.00	50.27	54.00	-3.73	44.20	6.07	Average	---	---
2	5420.00	61.44	74.00	-12.56	55.37	6.07	Peak	---	---
3	5470.00	52.76	54.00	-1.24	46.62	6.14	Average	---	---
4	5470.00	69.81	74.00	-4.19	63.67	6.14	Peak	---	---
5	11000.00	42.91	54.00	-11.09	27.22	15.69	Average	---	---
6	11000.00	54.93	74.00	-19.07	39.24	15.69	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



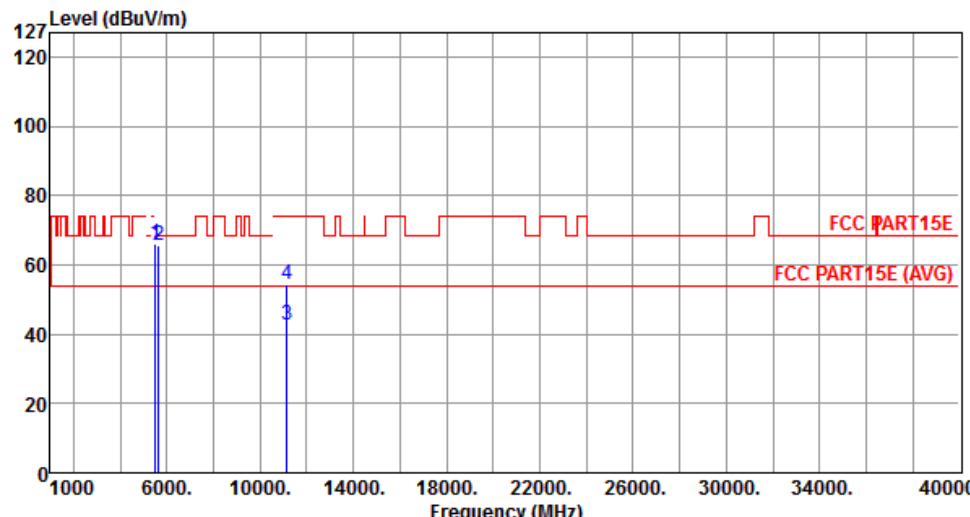
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	59.55	68.20	-8.65	53.38	6.17	Peak	---	---
2	5660.00	58.82	68.20	-9.38	52.36	6.46	Peak	---	---
3	11160.00	42.63	54.00	-11.37	27.10	15.53	Average	---	---
4	11160.00	54.88	74.00	-19.12	39.35	15.53	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

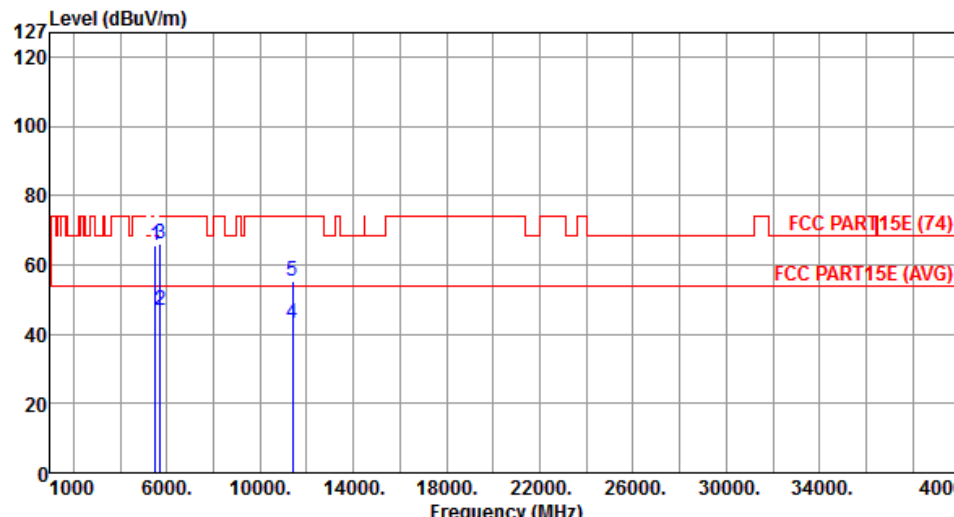
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	65.99	68.20	-2.21	59.82	6.17	Peak	---	---
2	5660.00	65.39	68.20	-2.81	58.93	6.46	Peak	---	---
3	11160.00	42.77	54.00	-11.23	27.24	15.53	Average	---	---
4	11160.00	54.46	74.00	-19.54	38.93	15.53	Peak	---	---

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

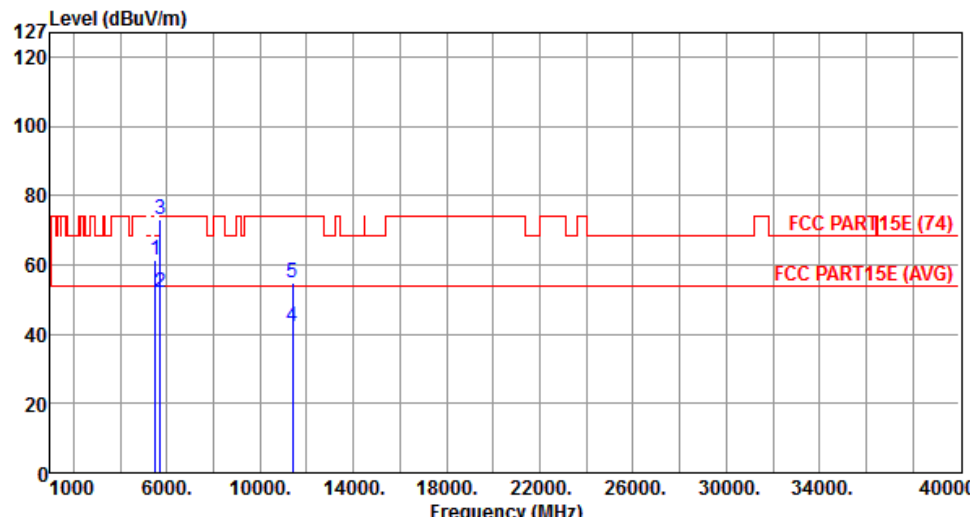
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	65.42	68.20	-2.78	59.25	6.17	Peak	---	---
2	5725.00	46.85	54.00	-7.15	40.26	6.59	Average	---	---
3	5725.00	65.91	74.00	-8.09	59.32	6.59	Peak	---	---
4	11400.00	42.92	54.00	-11.08	27.63	15.29	Average	---	---
5	11400.00	55.50	74.00	-18.50	40.21	15.29	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		

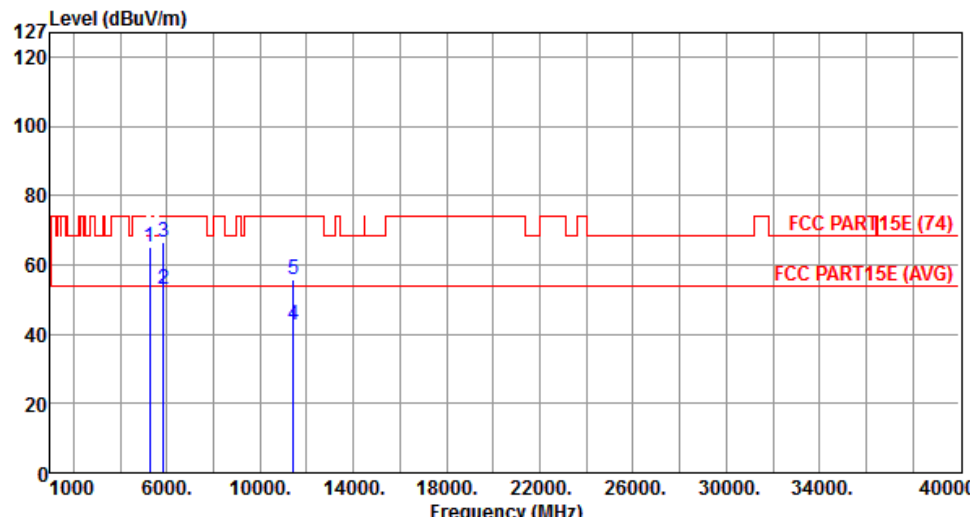


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5500.00	61.30	68.20	-6.90	55.13	6.17	Peak	---	---
2	5725.00	51.84	54.00	-2.16	45.25	6.59	Average	---	---
3	5725.00	72.94	74.00	-1.06	66.35	6.59	Peak	---	---
4	11400.00	42.32	54.00	-11.68	27.03	15.29	Average	---	---
5	11400.00	54.86	74.00	-19.14	39.57	15.29	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		



The graph displays the emission level in dBuV/m against frequency in MHz. The y-axis ranges from 0 to 127 dBuV/m, and the x-axis ranges from 1000 to 40000 MHz. A red line represents the FCC Part 15E (74) limit, and a lower red line represents the FCC Part 15E (AVG) limit. Blue vertical lines indicate test results at 5250.00 MHz (Peak), 5838.40 MHz (Average), 5838.40 MHz (Peak), 11440.00 MHz (Average), and 11440.00 MHz (Peak). The emission levels are generally below the limits, with a significant margin at 11440.00 MHz.

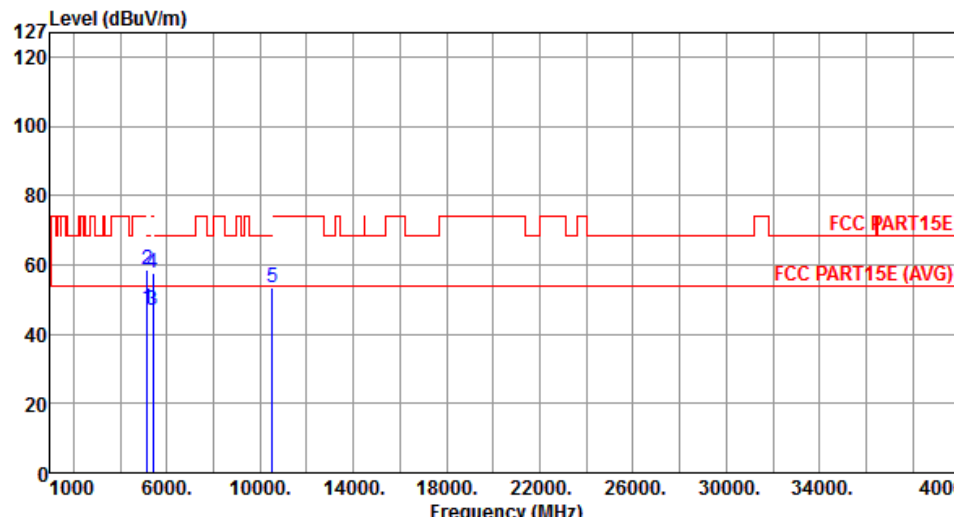
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5250.00	65.29	68.20	-2.91	59.42	5.87	Peak	---	---
2	5838.40	52.76	54.00	-1.24	45.99	6.77	Average	---	---
3	5838.40	66.62	74.00	-7.38	59.85	6.77	Peak	---	---
4	11440.00	42.65	54.00	-11.35	27.40	15.25	Average	---	---
5	11440.00	55.56	74.00	-18.44	40.31	15.25	Peak	---	---

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

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

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		
Level (dBuV/m) 127 120 100 80 60 40 20 0 1000 6000 10000 14000 18000 22000 26000 30000 34000 40000 Frequency (MHz) 1 2 3 4 5 5147.00 5147.00 5386.00 5386.00 10520.00 51.49 61.78 49.35 59.30 54.00 54.00 74.00 54.00 74.00 68.20 -2.51 -12.22 -4.65 -14.70 -14.20 45.79 56.08 43.32 53.27 39.30 5.70 5.70 6.03 6.03 14.70 Average Peak Average Peak Peak --- --- --- --- --- Turn Table deg			

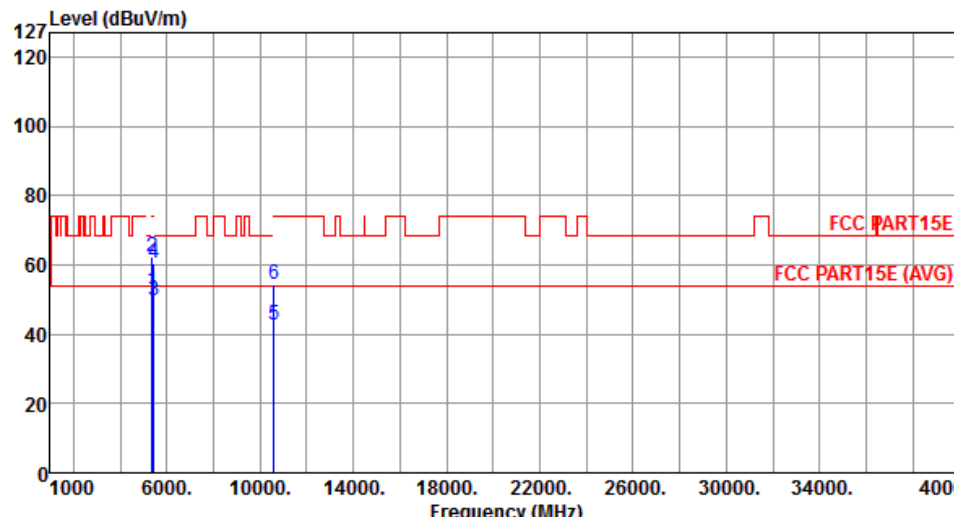
Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5147.00	47.12	54.00	-6.88	41.42	5.70	Average	---	---
2	5147.00	58.58	74.00	-15.42	52.88	5.70	Peak	---	---
3	5386.00	46.63	54.00	-7.37	40.60	6.03	Average	---	---
4	5386.00	57.73	74.00	-16.27	51.70	6.03	Peak	---	---
5	10520.00	53.27	68.20	-14.93	38.57	14.70	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



The graph displays the emission level in dBUV/m against frequency in MHz. The y-axis ranges from 0 to 127 dBUV/m, and the x-axis ranges from 1000 to 40000 MHz. A red line represents the FCC PART15E limit, and a blue line represents the measured emission level. The emission level is consistently below the limit across the entire frequency range.

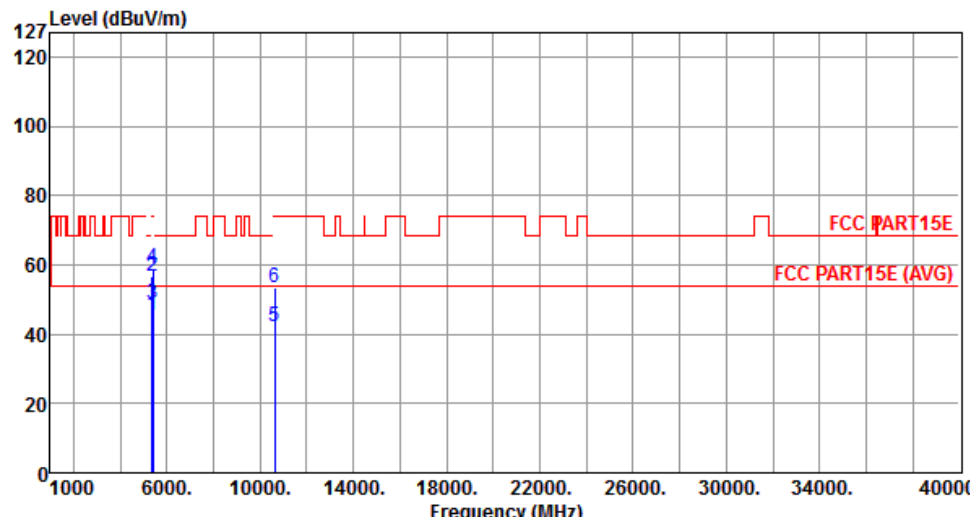
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5380.00	52.55	54.00	-1.45	46.52	6.03	Average	---	---
2	5380.00	62.12	74.00	-11.88	56.09	6.03	Peak	---	---
3	5420.00	49.78	54.00	-4.22	43.71	6.07	Average	---	---
4	5420.00	60.49	74.00	-13.51	54.42	6.07	Peak	---	---
5	10600.00	42.81	54.00	-11.19	27.95	14.86	Average	---	---
6	10600.00	54.59	74.00	-19.41	39.73	14.86	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		
Level (dBuV/m)			

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5320
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	5350.00	45.50	54.00	-8.50	39.51	5.99	Average	---	---
2	5350.00	56.77	74.00	-17.23	50.78	5.99	Peak	---	---
3	5400.00	48.60	54.00	-5.40	42.55	6.05	Average	---	---
4	5400.00	59.26	74.00	-14.74	53.21	6.05	Peak	---	---
5	10640.00	42.38	54.00	-11.62	27.43	14.95	Average	---	---
6	10640.00	53.48	74.00	-20.52	38.53	14.95	Peak	---	---

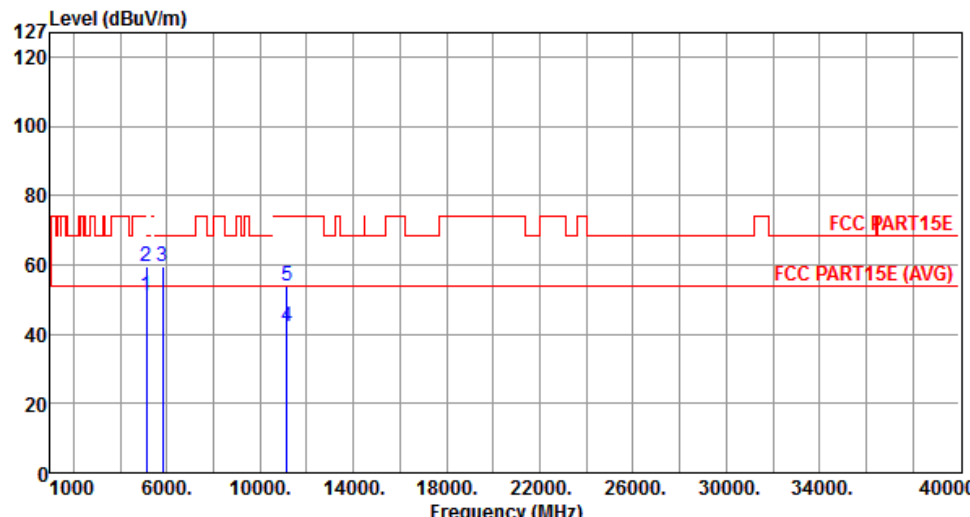
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		
Level (dBuV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		
Level (dBuV/m) </			

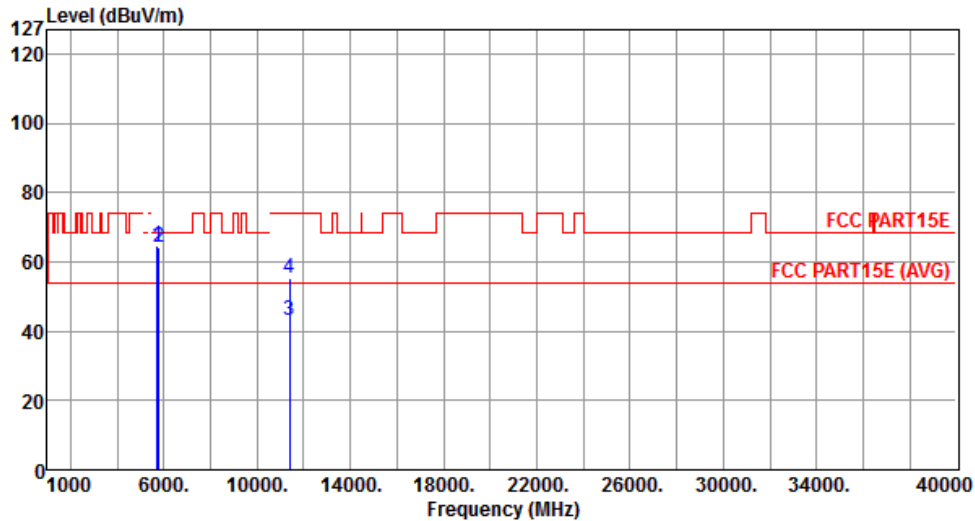
Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5115.00	50.96	54.00	-3.04	45.32	5.64	Average	---	---
2	5115.00	59.34	74.00	-14.66	53.70	5.64	Peak	---	---
3	5812.00	59.75	68.20	-8.45	52.98	6.77	Peak	---	---
4	11160.00	42.33	54.00	-11.67	26.80	15.53	Average	---	---
5	11160.00	53.78	74.00	-20.22	38.25	15.53	Peak	---	---

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

Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



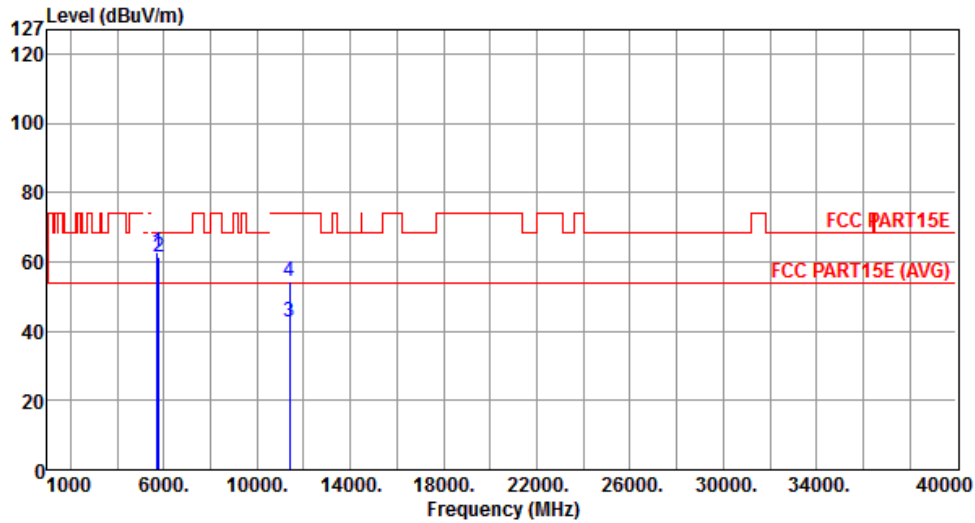
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	64.48	68.20	-3.72	57.89	6.59	Peak	---	---
2	5778.00	64.43	68.20	-3.77	57.72	6.71	Peak	---	---
3	11400.00	43.28	54.00	-10.72	27.99	15.29	Average	---	---
4	11400.00	55.27	74.00	-18.73	39.98	15.29	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



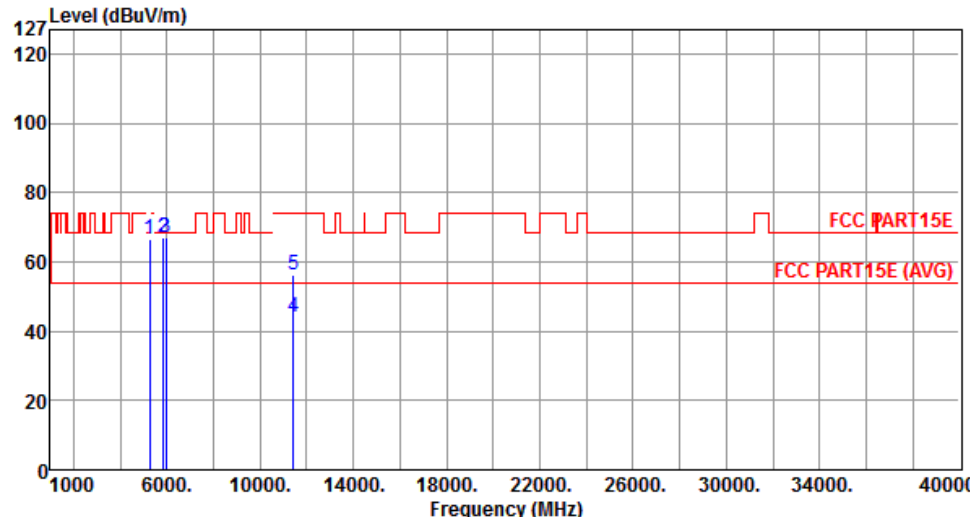
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	62.58	68.20	-5.62	55.99	6.59	Peak	---	---
2	5778.00	61.61	68.20	-6.59	54.90	6.71	Peak	---	---
3	11400.00	42.61	54.00	-11.39	27.32	15.29	Average	---	---
4	11400.00	54.27	74.00	-19.73	38.98	15.29	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

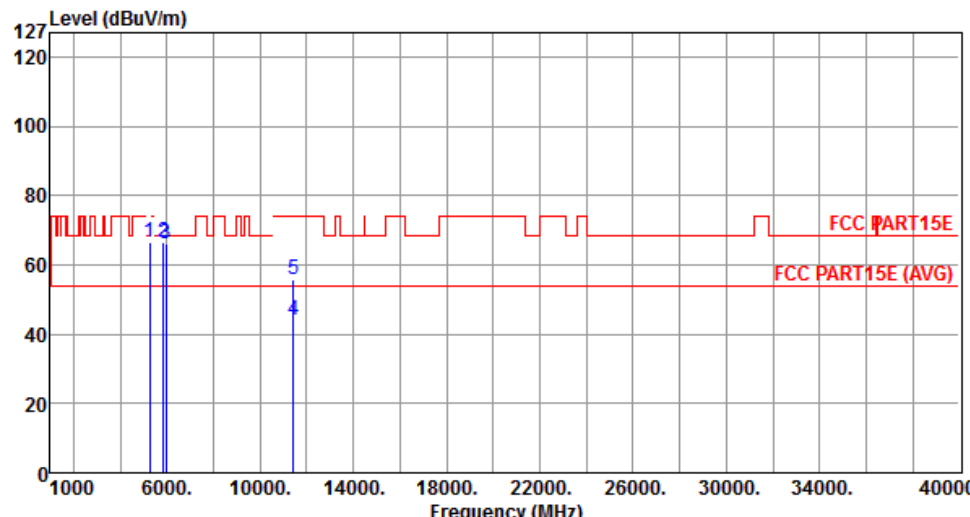
Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		



Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5250.00	66.49	68.20	-1.71	60.62	5.87	Peak	---
2	5839.25	66.98	68.20	-1.22	60.21	6.77	Peak	---
3	5958.00	67.20	68.20	-1.00	60.38	6.82	Peak	---
4	11440.00	43.82	54.00	-10.18	28.57	15.25	Average	---
5	11440.00	56.19	74.00	-17.81	40.94	15.25	Peak	---

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

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Vertical		

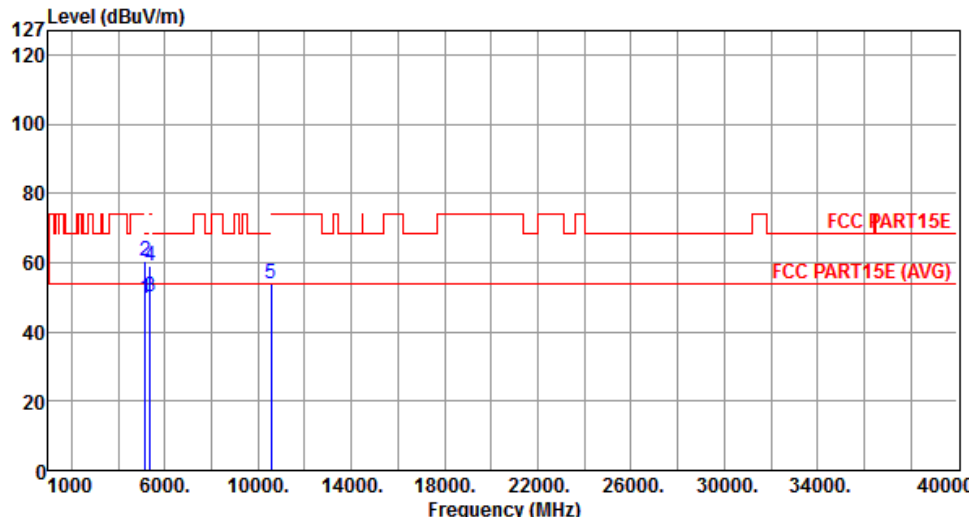


	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level	dBuV/m	dB	reading	dB		High	Table
		dBuV/m			dBuV			cm	deg
1	5250.00	66.41	68.20	-1.79	60.54	5.87	Peak	---	---
2	5839.25	66.53	68.20	-1.67	59.76	6.77	Peak	---	---
3	5958.00	66.11	68.20	-2.09	59.29	6.82	Peak	---	---
4	11440.00	43.90	54.00	-10.10	28.65	15.25	Average	---	---
5	11440.00	55.61	74.00	-18.39	40.36	15.25	Peak	---	---

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

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

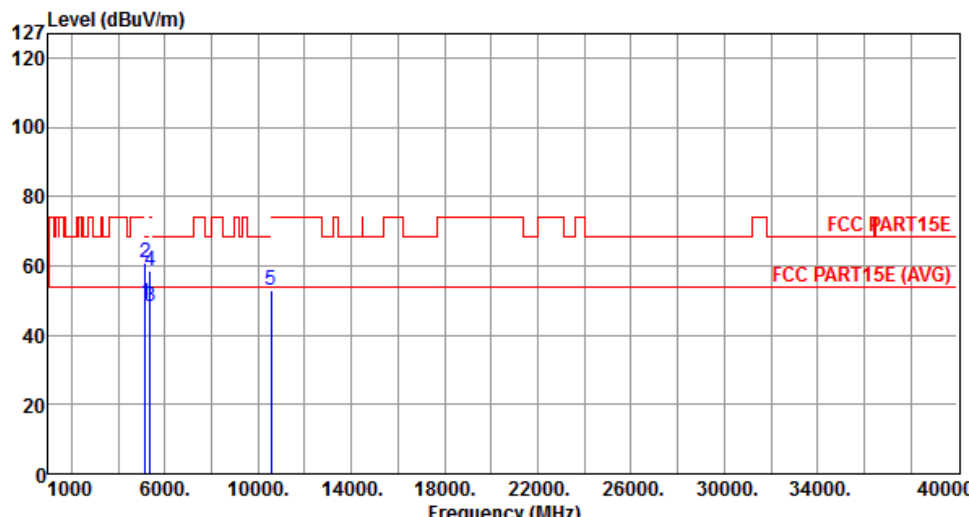
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5141.00	49.47	54.00	-4.53	43.78	5.69	Average	---	---
2	5141.00	60.49	74.00	-13.51	54.80	5.69	Peak	---	---
3	5362.00	50.11	54.00	-3.89	44.11	6.00	Average	---	---
4	5362.00	59.08	74.00	-14.92	53.08	6.00	Peak	---	---
5	10540.00	53.94	68.20	-14.26	39.19	14.75	Peak	---	---

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

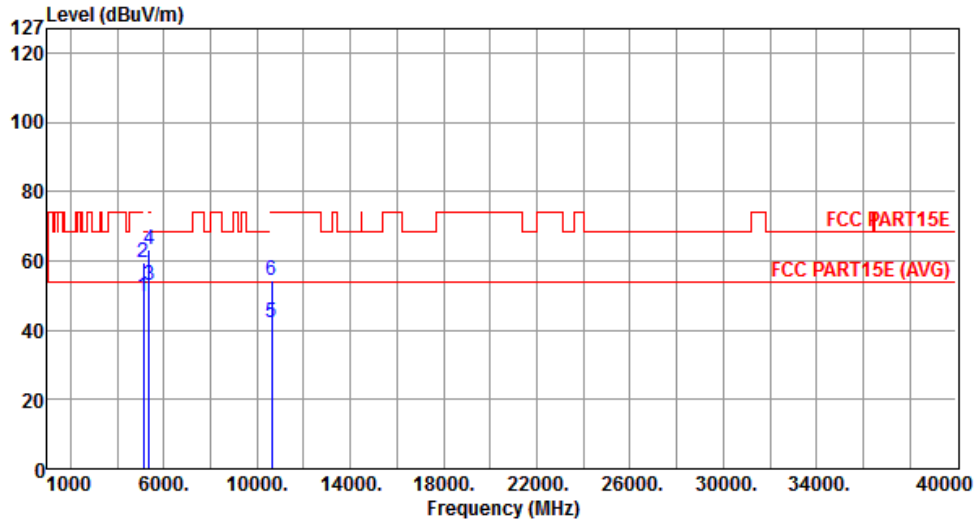
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5141.00	49.18	54.00	-4.82	43.49	5.69	Average	---	---
2	5141.00	60.99	74.00	-13.01	55.30	5.69	Peak	---	---
3	5362.00	48.47	54.00	-5.53	42.47	6.00	Average	---	---
4	5362.00	58.78	74.00	-15.22	52.78	6.00	Peak	---	---
5	10540.00	53.11	68.20	-15.09	38.36	14.75	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



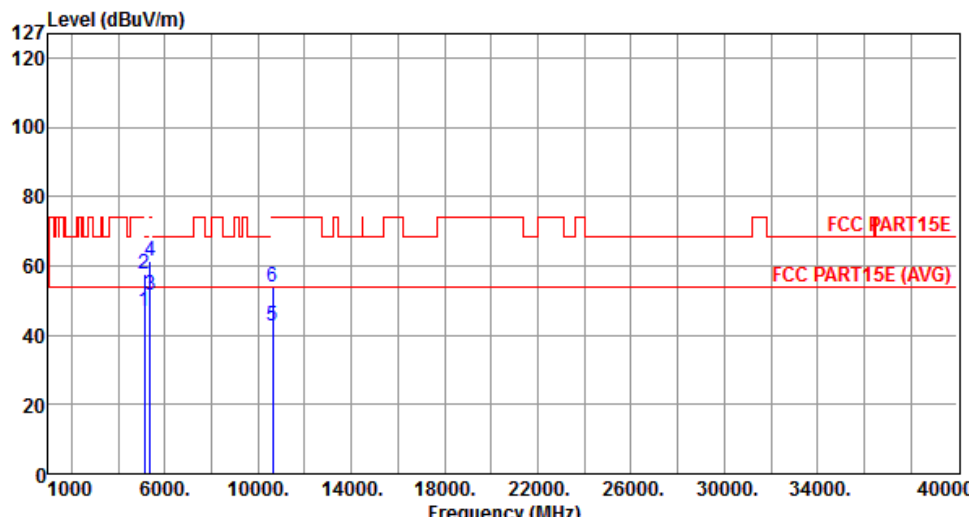
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5137.00	49.62	54.00	-4.38	43.95	5.67	Average	---	---
2	5137.00	59.54	74.00	-14.46	53.87	5.67	Peak	---	---
3	5350.00	53.00	54.00	-1.00	47.01	5.99	Average	---	---
4	5350.00	63.41	74.00	-10.59	57.42	5.99	Peak	---	---
5	10620.00	42.27	54.00	-11.73	27.37	14.90	Average	---	---
6	10620.00	54.37	74.00	-19.63	39.47	14.90	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

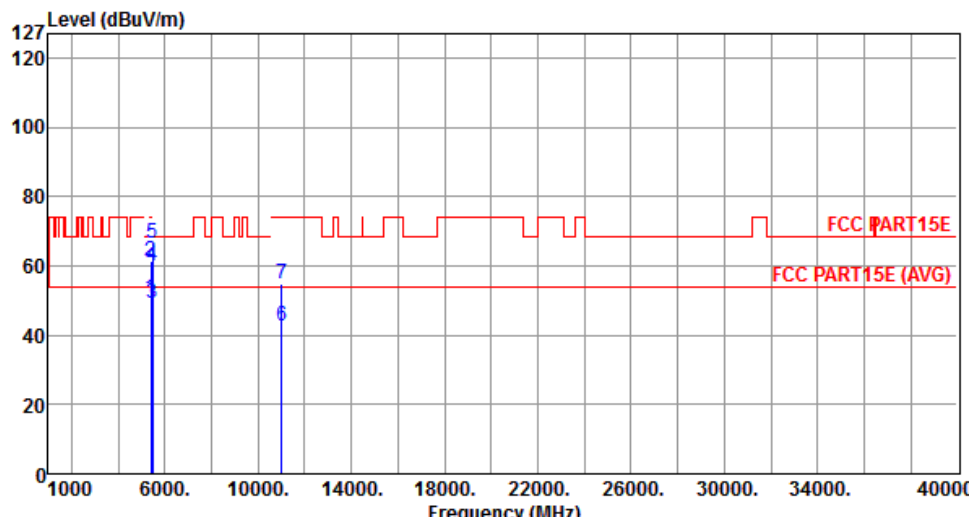
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5137.00	46.85	54.00	-7.15	41.18	5.67	Average	---	---
2	5137.00	57.60	74.00	-16.40	51.93	5.67	Peak	---	---
3	5350.00	51.67	54.00	-2.33	45.68	5.99	Average	---	---
4	5350.00	61.17	74.00	-12.83	55.18	5.99	Peak	---	---
5	10620.00	42.56	54.00	-11.44	27.66	14.90	Average	---	---
6	10620.00	53.78	74.00	-20.22	38.88	14.90	Peak	---	---

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

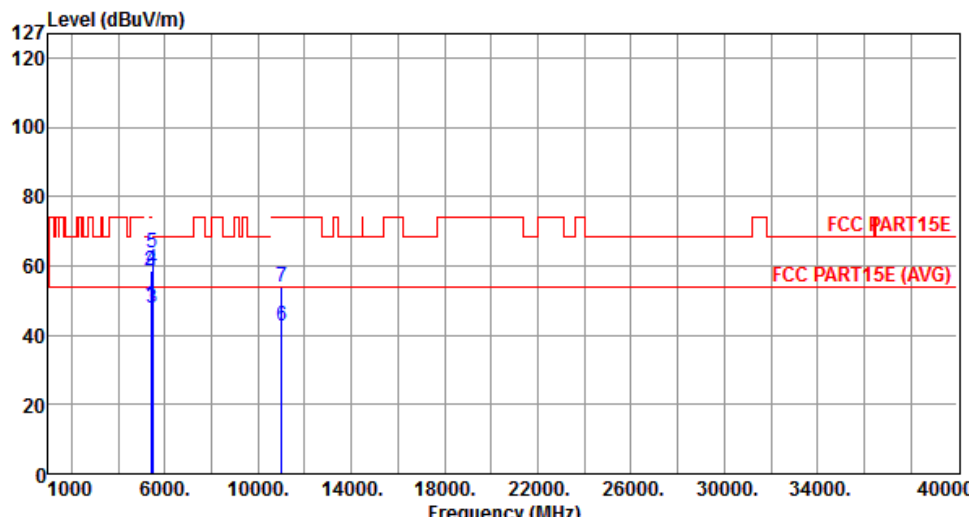
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5412.00	50.54	54.00	-3.46	44.48	6.06	Average	---	---
2	5412.00	61.42	74.00	-12.58	55.36	6.06	Peak	---	---
3	5460.00	49.06	54.00	-4.94	42.94	6.12	Average	---	---
4	5460.00	59.99	74.00	-14.01	53.87	6.12	Peak	---	---
5	5470.00	66.40	68.20	-1.80	60.26	6.14	Peak	---	---
6	11020.00	42.69	54.00	-11.31	27.03	15.66	Average	---	---
7	11020.00	54.74	74.00	-19.26	39.08	15.66	Peak	---	---

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

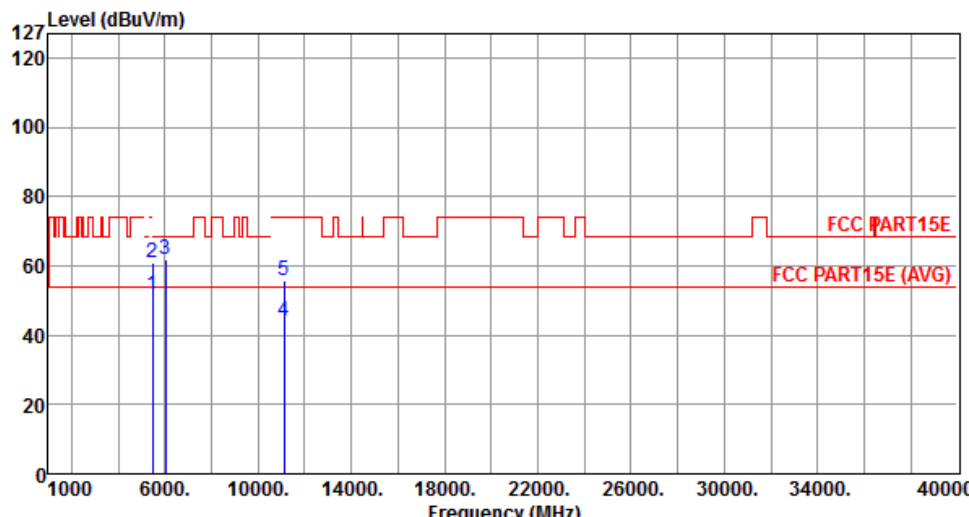
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5412.00	48.83	54.00	-5.17	42.77	6.06	Average	---	---
2	5412.00	58.53	74.00	-15.47	52.47	6.06	Peak	---	---
3	5460.00	47.92	54.00	-6.08	41.80	6.12	Average	---	---
4	5460.00	58.82	74.00	-15.18	52.70	6.12	Peak	---	---
5	5470.00	63.77	68.20	-4.43	57.63	6.14	Peak	---	---
6	11020.00	42.85	54.00	-11.15	27.19	15.66	Average	---	---
7	11020.00	54.06	74.00	-19.94	38.40	15.66	Peak	---	---

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

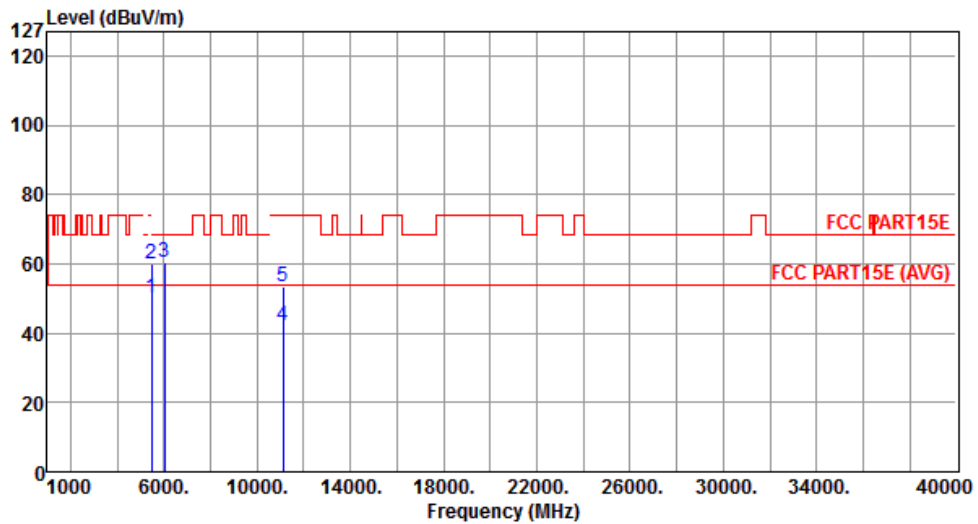
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5458.00	51.53	54.00	-2.47	45.41	6.12	Average	---	---
2	5458.00	60.79	74.00	-13.21	54.67	6.12	Peak	---	---
3	6012.00	61.67	68.20	-6.53	54.79	6.88	Peak	---	---
4	11100.00	43.87	54.00	-10.13	28.28	15.59	Average	---	---
5	11100.00	55.57	74.00	-18.43	39.98	15.59	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5550
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	5458.00	50.09	54.00	-3.91	43.97	6.12	Average	---	---
2	5458.00	60.21	74.00	-13.79	54.09	6.12	Peak	---	---
3	6012.00	60.60	68.20	-7.60	53.72	6.88	Peak	---	---
4	11100.00	42.16	54.00	-11.84	26.57	15.59	Average	---	---
5	11100.00	53.42	74.00	-20.58	37.83	15.59	Peak	---	---

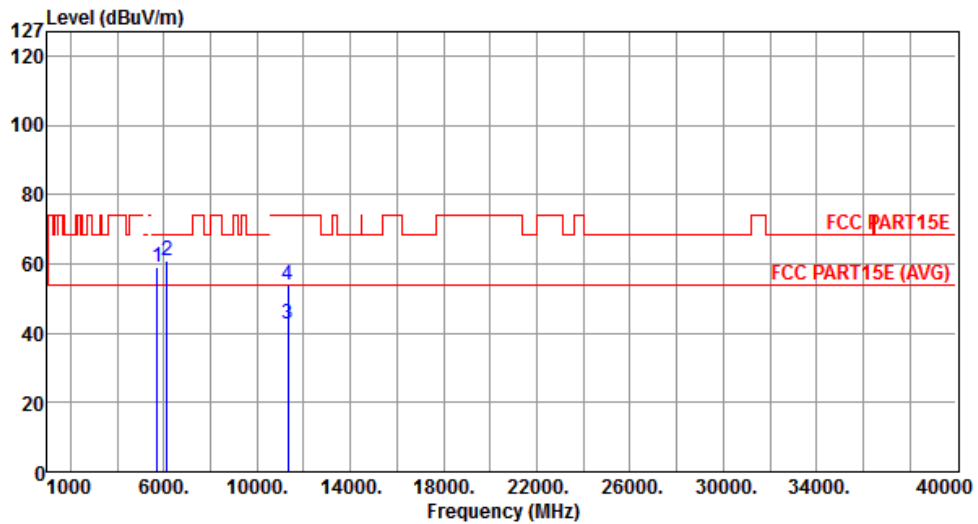
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



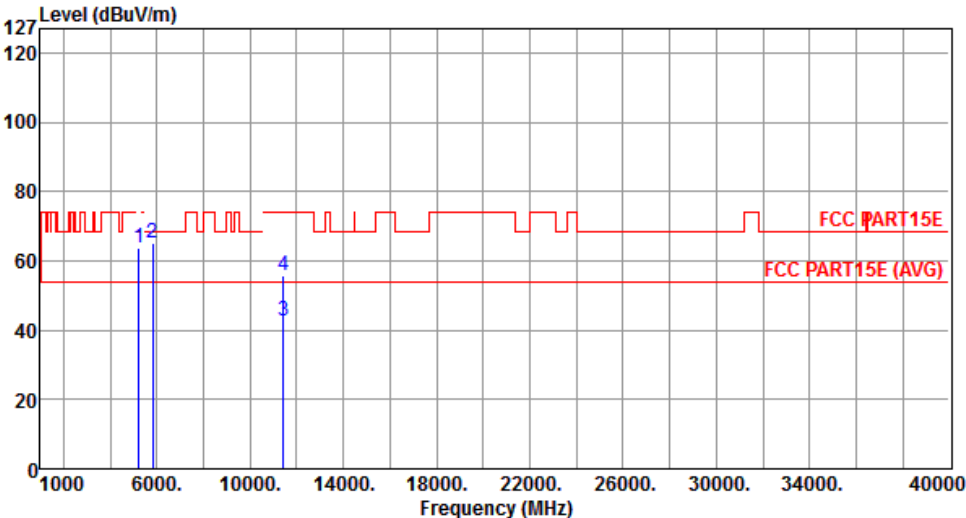
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.02	68.20	-9.18	52.43	6.59	Peak	---	---
2	6142.00	60.98	68.20	-7.22	53.58	7.40	Peak	---	---
3	11340.00	42.62	54.00	-11.38	27.27	15.35	Average	---	---
4	11340.00	53.78	74.00	-20.22	38.43	15.35	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).

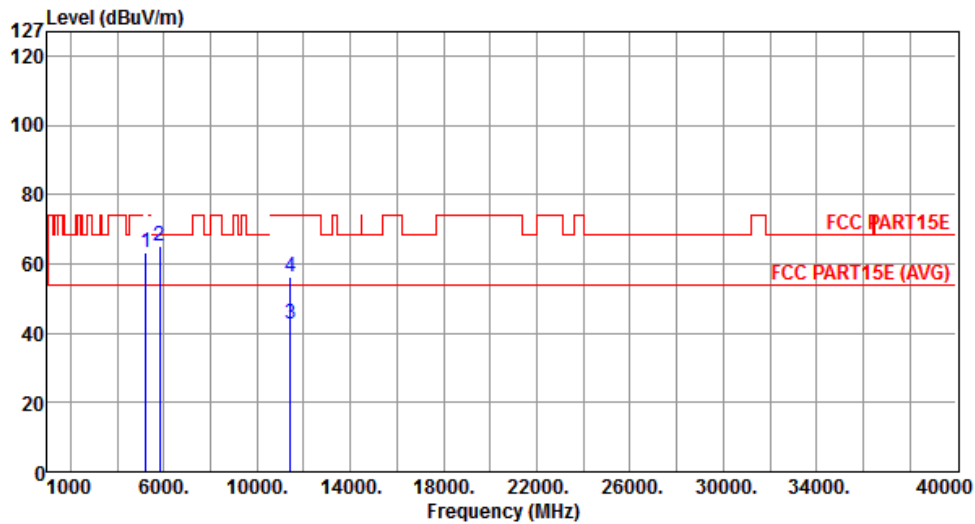
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5234.00	63.58	68.20	-4.62	57.74	5.84	Peak	---	---
2	5834.10	65.16	68.20	-3.04	58.38	6.78	Peak	---	---
3	11420.00	42.79	54.00	-11.21	27.52	15.27	Average	---	---
4	11420.00	55.66	74.00	-18.34	40.39	15.27	Peak	---	---

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

Modulation	VHT40	Test Freq. (MHz)	5710
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	5234.00	63.26	68.20	-4.94	57.42	5.84	Peak	---	---
2	5834.10	65.22	68.20	-2.98	58.44	6.78	Peak	---	---
3	11420.00	42.62	54.00	-11.38	27.35	15.27	Average	---	---
4	11420.00	56.20	74.00	-17.80	40.93	15.27	Peak	---	---

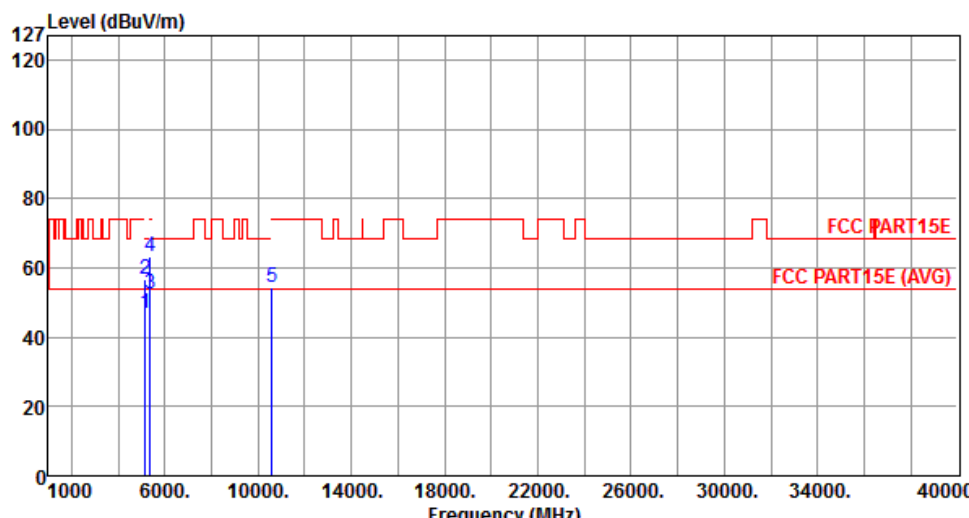
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		

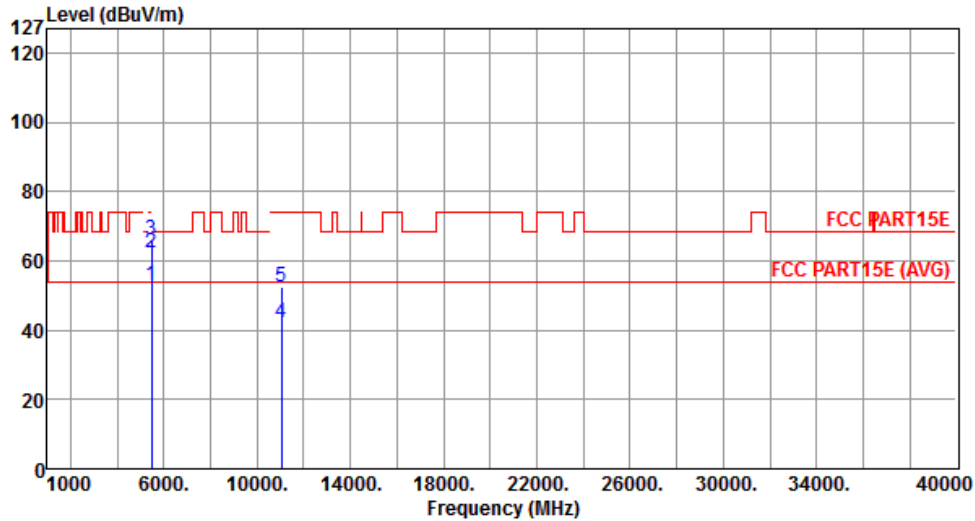


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.08	54.00	-6.92	41.37	5.71	Average	---	---
2	5150.00	56.55	74.00	-17.45	50.84	5.71	Peak	---	---
3	5350.00	52.32	54.00	-1.68	46.33	5.99	Average	---	---
4	5350.00	63.26	74.00	-10.74	57.27	5.99	Peak	---	---
5	10580.00	54.25	68.20	-13.95	39.42	14.83	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		
Level (dBuV/m) </			

Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



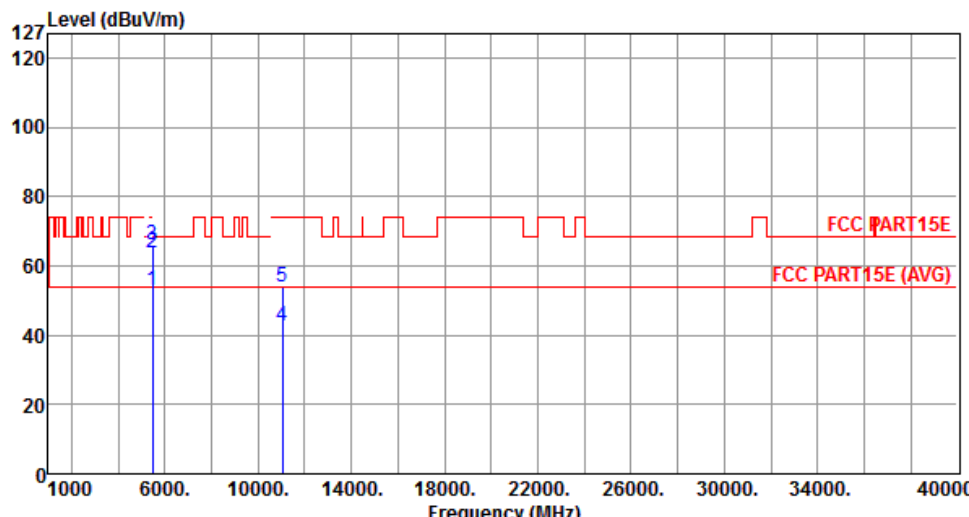
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.79	54.00	-1.21	46.67	6.12	Average	---	---
2	5460.00	62.37	74.00	-11.63	56.25	6.12	Peak	---	---
3	5470.00	66.13	68.20	-2.07	59.99	6.14	Peak	---	---
4	11060.00	42.24	54.00	-11.76	26.61	15.63	Average	---	---
5	11060.00	52.58	74.00	-21.42	36.95	15.63	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		

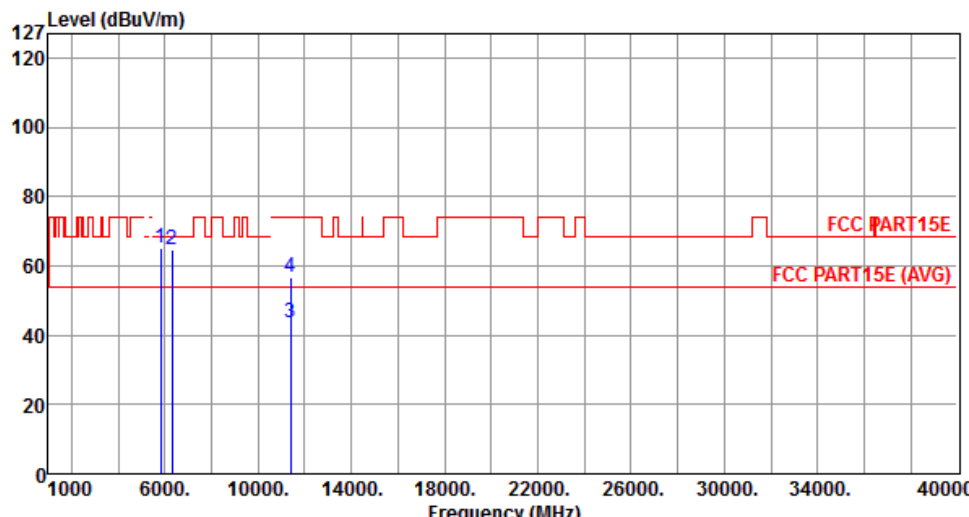


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.82	54.00	-1.18	46.70	6.12	Average	---	---
2	5460.00	63.73	74.00	-10.27	57.61	6.12	Peak	---	---
3	5470.00	66.20	68.20	-2.00	60.06	6.14	Peak	---	---
4	11060.00	42.50	54.00	-11.50	26.87	15.63	Average	---	---
5	11060.00	53.80	74.00	-20.20	38.17	15.63	Peak	---	---

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

Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5825.00	64.92	68.20	-3.28	58.14	6.78	Peak	---	---
2	6322.06	64.72	68.20	-3.48	56.68	8.04	Peak	---	---
3	11380.00	43.72	54.00	-10.28	28.40	15.32	Average	---	---
4	11380.00	56.60	74.00	-17.40	41.28	15.32	Peak	---	---

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

3.7 Frequency Stability

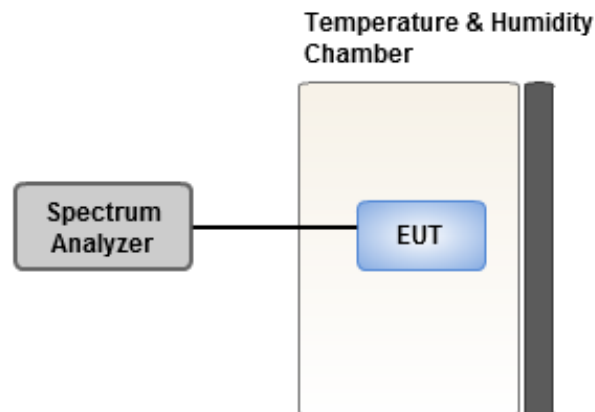
3.7.1 Limit of Frequency Stability

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.

3.7.2 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.

3.7.3 Test Setup



3.7.4 Test Result of Frequency Stability.

Legacy/MIMO (CDD) Non- beamforming mode

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	3.76	2.74	2.89	3.40
T20°CVmin	1.21	0.59	0.50	0.89
T50°CVnom	2.10	1.93	2.61	2.61
T40°CVnom	2.63	2.64	1.71	1.67
T30°CVnom	2.11	2.43	2.69	2.38
T20°CVnom	2.07	2.73	2.46	2.05
T10°CVnom	2.27	1.59	1.45	1.38
T0°CVnom	0.90	0.62	0.84	0.94
T-10°CVnom	0.87	0.90	0.51	0.76
T-20°CVnom	1.26	1.12	1.27	1.11
T-30°CVnom	0.70	0.75	0.30	0.62
Vnom [Vdc]: 110	Vmax [Vdc]: 126.5			Vmin [Vdc]: 93.5
Tnom [°C]: 20	Tmax [°C]: 50			Tmin [°C]: -30

Legacy/MIMO (CDD) beamforming mode

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	3.14	2.45	2.17	2.44
T20°CVmin	1.23	1.64	2.02	1.43
T50°CVnom	3.31	3.31	3.39	2.94
T40°CVnom	1.92	1.87	2.69	1.98
T30°CVnom	2.46	1.60	2.08	2.59
T20°CVnom	1.99	1.67	1.76	1.58
T10°CVnom	0.40	0.44	0.28	0.86
T0°CVnom	1.32	0.92	0.74	0.89
T-10°CVnom	-0.01	0.37	0.79	0.58
T-20°CVnom	0.29	0.23	0.23	-0.33
T-30°CVnom	0.17	-0.40	0.17	0.10
Vnom [Vdc]: 110	Vmax [Vdc]: 126.5			Vmin [Vdc]: 93.5
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, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

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

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

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