

FCC Test Report

FCC ID : PY313400249
Equipment : WiFi USB Adapter
Model No. : A6210
Brand Name : NETGEAR
Applicant : NETGEAR, Inc.
Address : 350 East Plumeria Drive, San Jose, California
95134, USA
Standard : 47 CFR FCC Part 15.407
Received Date : Feb. 12, 2014
Tested Date : Apr. 30 ~ May 21, 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
FR430402AN	Rev. 01	Initial issue	Jun. 06, 2014

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.184MHz 44.36 (Margin -9.92dB) - AV	Pass
15.407(b)(1)(2)(3) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5149.06MHz 53.90 (Margin -0.10dB) - 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]: 5150~5250MHz: 11a: 15.32 HT20: 15.22 HT40: 15.17 VHT20: 15.27 VHT40: 15.23 VHT80: 14.18 5250~5350MHz: 11a: 15.24 HT20: 15.12 HT40: 15.14 VHT20: 15.15 VHT40: 15.21 VHT80: 14.23 5470~5725MHz: 11a: 17.06 HT20: 16.90 HT40: 16.84 VHT20: 16.95 VHT40: 16.93 VHT80: 14.09	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	5150-5250 5250-5350 5470-5725	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [8]	2	6-54 Mbps
n (HT20)	5150-5250 5250-5350 5470-5725	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [8]	2	MCS 0-15
n (HT40)	5150-5250 5250-5350 5470-5725	5190-5230 5270-5310 5510-5670	38-46 [2] 54-62 [2] 102-134 [3]	2	MCS 0-15
ac (VHT20)	5150-5250 5250-5350 5470-5725	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [8]	2	MCS 0-8
ac (VHT40)	5150-5250 5250-5350 5470-5725	5190-5230 5270-5310 5510-5670	38-46 [2] 54-62 [2] 102-134 [3]	2	MCS 0-9
ac (VHT80)	5150-5250 5250-5350 5470-5725	5210 5290 5530	42 [1] 58 [1] 106 [1]	2	MCS 0-9

Note 1: RF output power specifies that Maximum Conducted Output Power.
 Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
 Note 3: 802.11ac supports MIMO CDD function with beam forming.

1.1.2 Antenna Details

Ant. No.	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)		
			5150~5250	5250~5350	5470~5725
ANT1	dipole	UFL	3	3	3.3
ANT2	dipole	UFL	2.8	2.9	3.3

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	5Vdc from host
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1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	USB cradle	0.85m shielded cable w/o core.

1.1.5 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	134	5670
64	5320	VHT80	
100	5500	42	5210
104	5520	58	5290
108	5540	106	5530
112	5560	---	---
116	5580	---	---
132	5660	---	---
136	5680	---	---
140	5700	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	MT7662 QA, V1.0.3.2		
Duty Cycle and Duty Factor	Mode	Duty cycle (%)	Duty factor (dB)
	11a	88.55%	0.53
	VHT20	87.56%	0.58
	VHT40	77.78%	1.09
	VHT80	63.05%	2.00

1.1.7 Power Setting

For Frequency band 5150-5250 MHz		
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5180	12/16
11a	5200	12/16
11a	5240	12/16
HT20	5180	12/16
HT20	5200	12/16
HT20	5240	12/16
HT40	5190	12/15
HT40	5230	11/15
VHT20	5180	12/16
VHT20	5200	12/16
VHT20	5240	12/16
VHT40	5190	12/15
VHT40	5230	11/15
VHT80	5210	0E/11

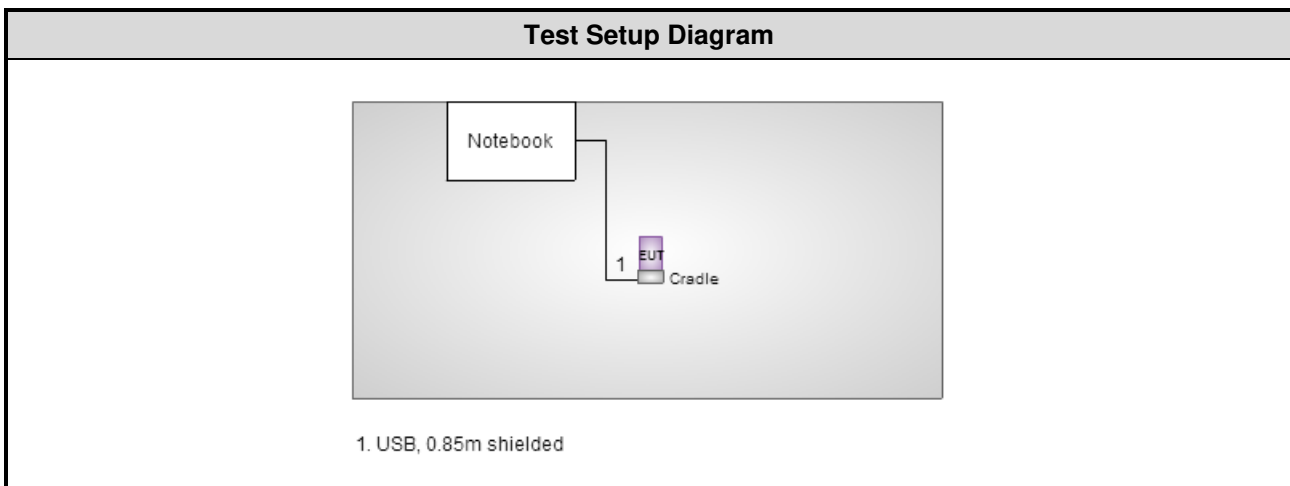
For Frequency band 5250-5350 MHz		
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5260	12/15
11a	5300	12/15
11a	5320	12/15
HT20	5260	12/15
HT20	5300	12/15
HT20	5320	12/15
HT40	5270	11/15
HT40	5310	11/15
VHT20	5260	12/15
VHT20	5300	12/15
VHT20	5320	12/15
VHT40	5270	11/15
VHT40	5310	11/15
VHT80	5290	0E/11

For Frequency band 5470-5725 MHz		
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5500	13/15
11a	5580	13/15
11a	5700	13/15
HT20	5500	13/15
HT20	5580	13/15
HT20	5700	13/15
HT40	5510	10/12
HT40	5550	13/16
HT40	5670	0F/12
VHT20	5500	13/15
VHT20	5580	13/15
VHT20	5700	13/15
VHT40	5510	10/12
VHT40	5550	13/16
VHT40	5670	0F/12
VHT80	5530	0C/0E

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	0.85m shielded cable w/o core.

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
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. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015

Note: Calibration Interval of instruments listed above is one year.

Test Item	Radiated Emission				
Test Site	966 chamber 2 / (03CH02-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Feb. 08, 2014	Feb. 07, 2015
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 9120 D	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
Preamplifier	Burgeon	BPA-530	100218	Dec. 09, 2013	Dec. 08, 2014
Preamplifier	Agilent	83017A	MY39501309	Dec. 09, 2013	Dec. 08, 2014
Preamplifier	EM	EM18G40G	060572	Jun. 20, 2013	Jun. 19, 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
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-003	Dec. 17, 2013	Dec. 16, 2014
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-004	Dec. 17, 2013	Dec. 16, 2014

Note: Calibration Interval of instruments listed above is one year.

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
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Note: Calibration Interval of instruments listed above is two year.

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2014	Feb. 16, 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 644545 D01 Guidance for IEEE 802 11ac v01r02

FCC KDB 644545 D02 Alternative Guidance for 802 11ac v01

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	± 34.134 Hz
Conducted power	± 0.808 dB
Frequency error	± 34.134 Hz
Temperature	± 0.6 °C
Conducted emission	± 2.670 dB
AC conducted emission	± 2.92 dB
Radiated emission ≤ 1 GHz	± 3.26 dB
Radiated emission > 1 GHz	± 4.94 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	25°C / 66%	Skys Huang
Radiated Emissions	03CH02-WS	20-22°C / 68-69%	Anderson Hong
RF Conducted	TH01-WS	21°C / 67%	Mark Liao

- 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	11a	5580	6 Mbps	---
Radiated Emissions ≤ 1 GHz	11a	5580	6 Mbps	---
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	---
	HT40	5190 / 5230 / 5270 / 5310 / 5510 5550 / 5670	MCS 0	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	---
	VHT40	5190 / 5230 / 5270 / 5310 / 5510 5550 / 5670	MCS 0	---
	VHT80	5210 / 5290 / 5530	MCS 0	---
Radiated Emissions > 1 GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	---
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0	---
	VHT40	5190 / 5230 / 5270 / 5310 / 5510 5550 / 5670	MCS 0	---
	VHT80	5210 / 5290 / 5530	MCS 0	---
Peak Excursion	11a	5200 / 5300 / 5580	6 Mbps	---
	VHT20	5200 / 5300 / 5580	MCS 0	---
	VHT40	5190 / 5270 / 5550	MCS 0	---
	VHT80	5210 / 5290 / 5530	MCS 0	---
Frequency Stability	Un-modulation	5320	---	---

NOTE:

1. The device can operate as 2 configurations as below and antenna of device can rotate.

- 1) Plugin into host directly.
- 2) Connect with a USB cradle.

After pretest for above configurations, device with USB cradle and 90° antenna angle (Antenna open) result was found as the worst case and was shown in this report.

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

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

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

3.1.2 Test Procedures

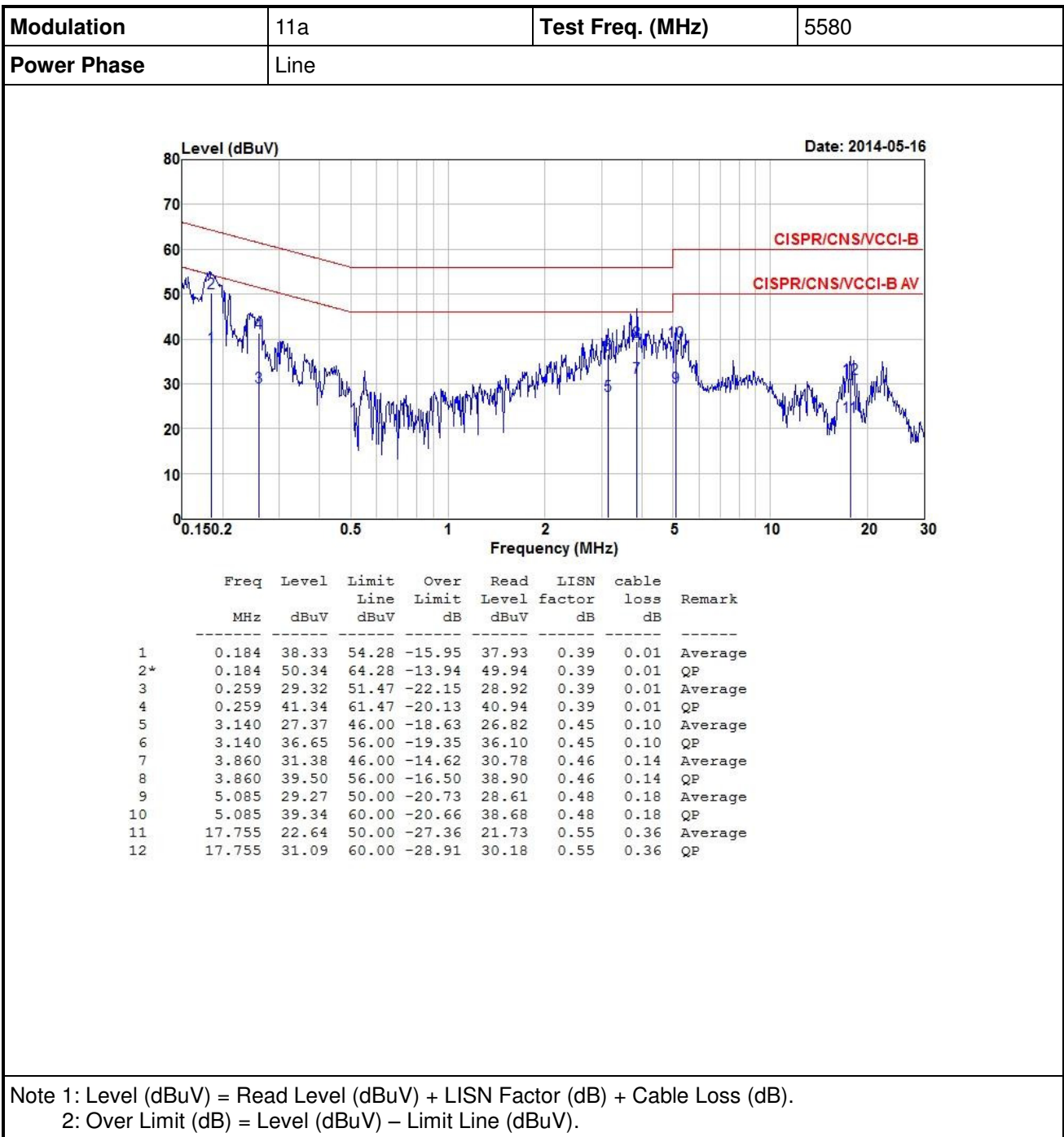
1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels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

3.1.3 Test Setup

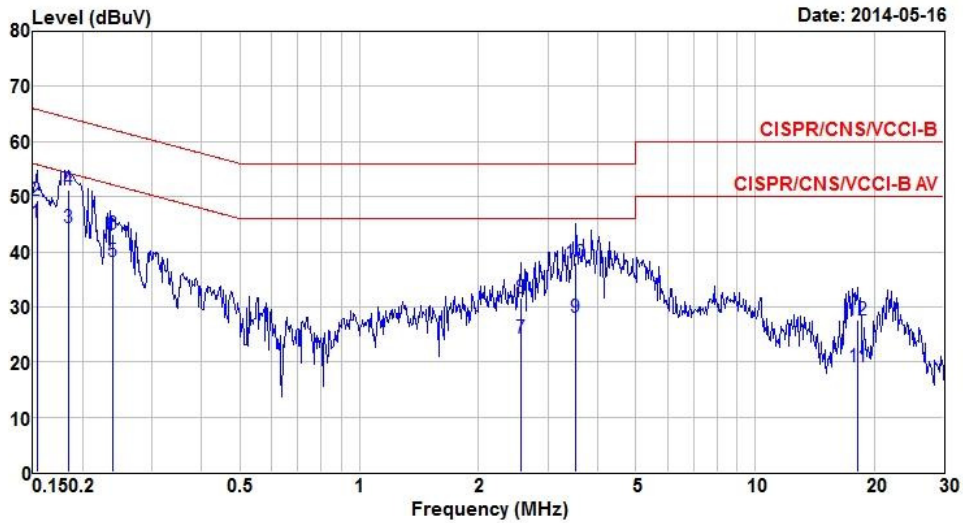


- Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions



Modulation	11a	Test Freq. (MHz)	5580
Power Phase	Neutral		



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.153	45.39	55.82	-10.43	44.89	0.48	0.02	Average
2	0.153	49.27	65.82	-16.55	48.77	0.48	0.02	QP
3*	0.184	44.36	54.28	-9.92	43.87	0.48	0.01	Average
4	0.184	51.22	64.28	-13.06	50.73	0.48	0.01	QP
5	0.239	38.13	52.13	-14.00	37.64	0.48	0.01	Average
6	0.239	43.20	62.13	-18.93	42.71	0.48	0.01	QP
7	2.567	24.33	46.00	-21.67	23.75	0.51	0.07	Average
8	2.567	31.65	56.00	-24.35	31.07	0.51	0.07	QP
9	3.528	28.16	46.00	-17.84	27.51	0.52	0.13	Average
10	3.528	37.89	56.00	-18.11	37.24	0.52	0.13	QP
11	18.232	19.04	50.00	-30.96	18.11	0.56	0.37	Average
12	18.232	27.71	60.00	-32.29	26.78	0.56	0.37	QP

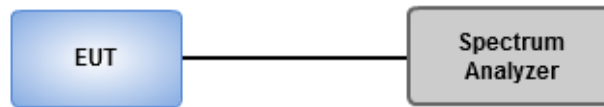
Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

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

Emission Bandwidth												
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)	
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	26dB BW	99%OBW
11a	2	5180	20.17	20.35	--	--	16.79	16.79	--	--	17.00	16.25
11a	2	5200	20.17	20.06	--	--	16.82	16.82	--	--	17.00	16.26
11a	2	5240	20.06	20.12	--	--	16.82	16.82	--	--	17.00	16.26
VHT20	2	5180	20.58	20.58	--	--	17.73	17.73	--	--	17.00	16.49
VHT20	2	5200	20.46	20.52	--	--	17.73	17.69	--	--	17.00	16.48
VHT20	2	5240	20.58	20.41	--	--	17.69	17.73	--	--	17.00	16.48
VHT40	2	5190	41.28	41.97	--	--	36.27	36.27	--	--	17.00	17.00
VHT40	2	5230	41.86	41.62	--	--	36.34	36.40	--	--	17.00	17.00
VHT80	2	5210	80.70	80.70	--	--	74.79	74.79	--	--	17.00	17.00
11a	2	5260	20.00	20.12	--	--	16.82	16.82	--	--	24.00	23.26
11a	2	5300	20.35	20.00	--	--	16.82	16.82	--	--	24.00	23.26
11a	2	5320	20.12	20.12	--	--	16.82	16.82	--	--	24.00	23.26
VHT20	2	5260	20.52	20.41	--	--	17.73	17.69	--	--	24.00	23.48
VHT20	2	5300	20.58	20.58	--	--	17.69	17.73	--	--	24.00	23.48
VHT20	2	5320	20.52	20.75	--	--	17.73	17.73	--	--	24.00	23.49
VHT40	2	5270	41.51	41.97	--	--	36.34	36.40	--	--	24.00	24.00
VHT40	2	5310	41.86	41.62	--	--	36.40	36.34	--	--	24.00	24.00
VHT80	2	5290	80.93	81.16	--	--	74.79	74.79	--	--	24.00	24.00
11a	2	5500	20.75	24.35	--	--	16.86	16.90	--	--	24.00	23.27
11a	2	5580	24.29	25.16	--	--	16.90	16.86	--	--	24.00	23.27
11a	2	5700	22.61	22.03	--	--	16.82	16.82	--	--	24.00	23.26
VHT20	2	5500	23.77	26.38	--	--	17.73	17.76	--	--	24.00	23.49
VHT20	2	5580	27.65	27.30	--	--	17.76	17.80	--	--	24.00	23.49
VHT20	2	5700	23.54	22.96	--	--	17.80	17.76	--	--	24.00	23.49
VHT40	2	5510	42.20	44.29	--	--	36.34	36.34	--	--	24.00	24.00
VHT40	2	5550	60.87	65.28	--	--	36.40	36.40	--	--	24.00	24.00
VHT40	2	5670	42.78	43.83	--	--	36.34	36.40	--	--	24.00	24.00
VHT80	2	5530	80.93	81.16	--	--	74.79	74.67	--	--	24.00	24.00



3.3 RF Output Power

3.3.1 Limit of RF Output Power

Frequency Band (GHz)	Limit for FCC 15.407
<input checked="" type="checkbox"/> 5.15~5.25	50mW or 4dBm+10 log B
<input checked="" type="checkbox"/> 5.25~5.35	250mW or 11dBm+10 log B
<input checked="" type="checkbox"/> 5.47~5.725	250mW or 11dBm+10 log B

Note: "B" is the 26dB emission bandwidth in MHz.

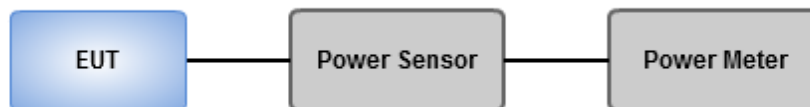
Frequency Band (GHz)	Limit for RSS-210 Annex 9
<input type="checkbox"/> 5.15~5.25	The maximum E.I.R.P shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less
<input type="checkbox"/> 5.25~5.35	The maximum conducted power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum E.I.R.P shall not exceed 1W or $17 + 10 \log_{10} B$, dBm, whichever power is less.
<input type="checkbox"/> 5.47~5.725	The maximum conducted power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum E.I.R.P shall not exceed 1W or $17 + 10 \log_{10} B$, dBm, whichever power is less.

Note: "B" is the 99% emission bandwidth in MHz.

3.3.2 Test Procedures

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

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	2	5180	12.08	12.26	--	--	32.970	15.18	17.00
11a	2	5200	12.28	12.34	--	--	34.044	15.32	17.00
11a	2	5240	12.06	12.20	--	--	32.665	15.14	17.00
HT20	2	5180	12.01	12.14	--	--	32.254	15.09	17.00
HT20	2	5200	12.16	12.25	--	--	33.232	15.22	17.00
HT20	2	5240	12.04	12.11	--	--	32.251	15.09	17.00
HT40	2	5190	12.06	12.26	--	--	32.896	15.17	17.00
HT40	2	5230	12.02	12.16	--	--	32.366	15.10	17.00
VHT20	2	5180	12.03	12.22	--	--	32.631	15.14	17.00
VHT20	2	5200	12.21	12.30	--	--	33.617	15.27	17.00
VHT20	2	5240	12.05	12.15	--	--	32.438	15.11	17.00
VHT40	2	5190	12.11	12.33	--	--	33.356	15.23	17.00
VHT40	2	5230	12.06	12.24	--	--	32.819	15.16	17.00
VHT80	2	5210	11.23	11.10	--	--	26.156	14.18	17.00
11a	2	5260	12.10	12.11	--	--	32.474	15.12	24.00
11a	2	5300	12.21	12.24	--	--	33.384	15.24	24.00
11a	2	5320	12.13	12.15	--	--	32.736	15.15	24.00
HT20	2	5260	12.06	12.05	--	--	32.102	15.07	24.00
HT20	2	5300	12.14	12.08	--	--	32.512	15.12	24.00
HT20	2	5320	12.03	12.04	--	--	31.954	15.05	24.00
HT40	2	5270	12.01	12.25	--	--	32.674	15.14	24.00
HT40	2	5310	12.03	12.22	--	--	32.631	15.14	24.00
VHT20	2	5180	12.09	12.03	--	--	32.140	15.07	24.00
VHT20	2	5200	12.16	12.11	--	--	32.699	15.15	24.00
VHT20	2	5240	12.06	12.09	--	--	32.250	15.09	24.00
VHT40	2	5190	12.09	12.31	--	--	33.202	15.21	24.00
VHT40	2	5230	12.06	12.28	--	--	32.974	15.18	24.00
VHT80	2	5290	11.20	11.24	--	--	26.487	14.23	24.00

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	2	5500	13.68	13.65	--	--	46.509	16.68	24.00
11a	2	5580	14.02	14.08	--	--	50.821	17.06	24.00
11a	2	5700	13.92	13.33	--	--	46.188	16.65	24.00
HT20	2	5500	13.59	13.55	--	--	45.502	16.58	24.00
HT20	2	5580	13.88	13.89	--	--	48.925	16.90	24.00
HT20	2	5700	13.80	13.27	--	--	45.221	16.55	24.00
HT40	2	5510	11.85	12.16	--	--	31.755	15.02	24.00
HT40	2	5550	13.78	13.88	--	--	48.312	16.84	24.00
HT40	2	5670	12.11	11.87	--	--	31.637	15.00	24.00
VHT20	2	5500	13.62	13.60	--	--	45.923	16.62	23.69
VHT20	2	5580	13.92	13.95	--	--	49.492	16.95	23.69
VHT20	2	5700	13.84	13.30	--	--	45.590	16.59	23.69
VHT40	2	5510	11.96	12.22	--	--	32.376	15.10	23.69
VHT40	2	5550	13.88	13.96	--	--	49.323	16.93	23.69
VHT40	2	5670	12.14	11.96	--	--	32.072	15.06	23.69
VHT80	2	5530	10.96	11.19	--	--	25.626	14.09	23.69

Note:

1. Directional gain for 11ac beam forming = $10 * \log((10^{3.3/20} + 10^{3.3/20})^2 / 2) = 6.31 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to $24 \text{ dBm} - (6.31 \text{ dBi} - 6 \text{ dBi}) = 23.69 \text{ dBm}$.

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

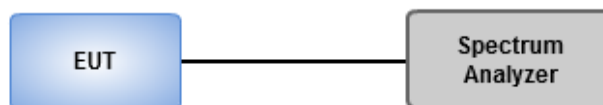
	Frequency Band (GHz)	Limit (dBm)
<input checked="" type="checkbox"/>	5.15~5.25	4
<input checked="" type="checkbox"/>	5.25~5.35	11
<input checked="" type="checkbox"/>	5.47~5.725	11

Frequency Band (GHz)	Limit (dBm) for RSS-210 Annex 9
<input type="checkbox"/> 5.15~5.25	The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band
<input type="checkbox"/> 5.25~5.35	The power spectral density shall not exceed 11 dBm in any 1.0 MHz band
<input type="checkbox"/> 5.47~5.725	The power spectral density shall not exceed 11 dBm in any 1.0 MHz band

3.4.2 Test Procedures

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

3.4.3 Test Setup



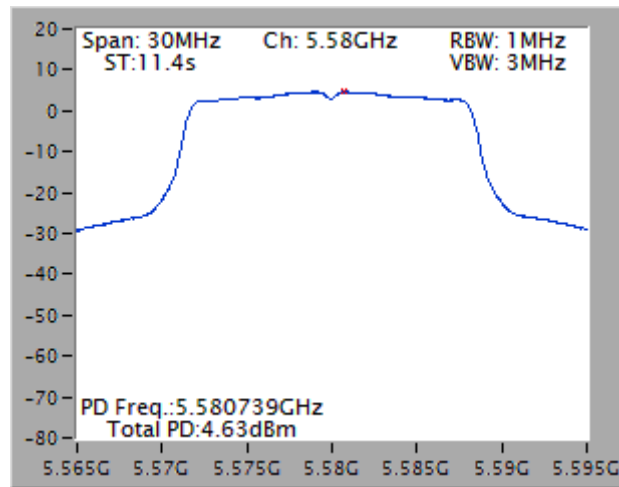
3.4.4 Test Result of Peak Power Spectral Density

Condition			Peak Power Spectral Density (dBm)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty Factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	2	5180	2.75	0.53	3.28	4
11a	2	5200	2.87	0.53	3.40	4
11a	2	5240	2.80	0.53	3.33	4
VHT20	2	5180	2.73	0.58	3.31	4
VHT20	2	5200	2.68	0.58	3.26	4
VHT20	2	5240	2.37	0.58	2.95	4
VHT40	2	5190	-1.07	1.09	0.02	4
VHT40	2	5230	-1.13	1.09	-0.04	4
VHT80	2	5210	-5.88	2.00	-3.88	4
11a	2	5260	2.76	0.53	3.29	11
11a	2	5300	2.76	0.53	3.29	11
11a	2	5320	2.51	0.53	3.04	11
VHT20	2	5260	2.43	0.58	3.01	11
VHT20	2	5300	2.20	0.58	2.78	11
VHT20	2	5320	2.31	0.58	2.89	11
VHT40	2	5270	-1.43	1.09	-0.34	11
VHT40	2	5310	-1.25	1.09	-0.16	11
VHT80	2	5290	-6.10	2.00	-4.10	11
11a	2	5500	4.24	0.53	4.77	10.69
11a	2	5580	4.63	0.53	5.16	10.69
11a	2	5700	4.13	0.53	4.66	10.69
VHT20	2	5500	4.01	0.58	4.59	10.69
VHT20	2	5580	4.37	0.58	4.95	10.69
VHT20	2	5700	3.82	0.58	4.40	10.69
VHT40	2	5510	-1.21	1.09	-0.12	10.69
VHT40	2	5550	0.55	1.09	1.64	10.69
VHT40	2	5670	-1.41	1.09	-0.32	10.69
VHT80	2	5530	-6.08	2.00	-4.08	10.69

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{3.3/20} + 10^{3.3/20})^2 / 2) = 6.31 \text{ dBi} > 6 \text{ dBi}$.
Limit shall be reduced to 11 dBm – (6.31 dBi – 6 dBi) = 10.69 dBm.

Worst Plots



Note: Power density plot without duty factor.

3.5 Peak Excursion

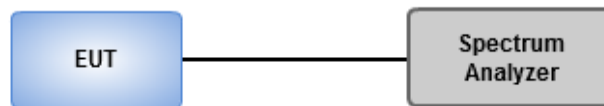
3.5.1 Peak Excursion Limit

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

Frequency band 5150-5250 MHz							
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured Value(dB)	Duty Factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	2	5200	8.96	0.53	8.43	13
11a	QPSK	2	5200	10.48	1.02	9.46	13
11a	16QAM	2	5200	11.14	1.80	9.34	13
11a	64QAM	2	5200	12.43	2.97	9.46	13
VHT20	BPSK	2	5200	8.89	0.58	8.31	13
VHT20	QPSK	2	5200	9.62	1.07	8.55	13
VHT20	16QAM	2	5200	10.71	1.82	8.89	13
VHT20	64QAM	2	5200	11.37	2.89	8.48	13
VHT20	256QAM	2	5200	12.75	3.63	9.12	13
VHT40	BPSK	2	5190	9.19	1.09	8.10	13
VHT40	QPSK	2	5190	10.74	1.87	8.87	13
VHT40	16QAM	2	5190	11.82	2.93	8.89	13
VHT40	64QAM	2	5190	14.11	4.18	9.93	13
VHT40	256QAM	2	5190	13.68	4.69	8.99	13
VHT80	BPSK	2	5210	10.57	2.00	8.57	13
VHT80	QPSK	2	5210	11.76	3.10	8.66	13
VHT80	16QAM	2	5210	13.7	4.31	9.39	13
VHT80	64QAM	2	5210	13.77	5.32	8.45	13
VHT80	256QAM	2	5210	14.74	5.79	8.95	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

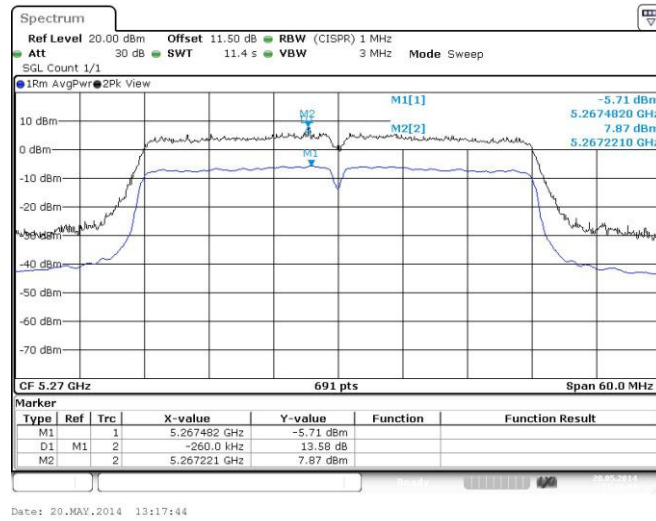
Frequency band 5250-5350 MHz							
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured Value(dB)	Duty Factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	2	5300	8.83	0.53	8.30	13
11a	QPSK	2	5300	10.83	1.02	9.81	13
11a	16QAM	2	5300	10.84	1.80	9.04	13
11a	64QAM	2	5300	12.11	2.97	9.14	13
VHT20	BPSK	2	5300	8.62	0.58	8.04	13
VHT20	QPSK	2	5300	9.77	1.07	8.70	13
VHT20	16QAM	2	5300	10.7	1.82	8.88	13
VHT20	64QAM	2	5300	11.7	2.89	8.81	13
VHT20	256QAM	2	5300	12.57	3.63	8.94	13
VHT40	BPSK	2	5270	9.46	1.09	8.37	13
VHT40	QPSK	2	5270	11.03	1.87	9.16	13
VHT40	16QAM	2	5270	13.58	2.93	10.65	13
VHT40	64QAM	2	5270	13.03	4.18	8.85	13
VHT40	256QAM	2	5270	13.67	4.69	8.98	13
VHT80	BPSK	2	5290	10.57	2.00	8.57	13
VHT80	QPSK	2	5290	12.03	3.10	8.93	13
VHT80	16QAM	2	5290	13.09	4.31	8.78	13
VHT80	64QAM	2	5290	14.2	5.32	8.88	13
VHT80	256QAM	2	5290	14.59	5.79	8.80	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 5470-5725 MHz							
Mode	Modulation Mode	N _{TX}	Freq. (MHz)	Measured Value(dB)	Duty Factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	2	5580	8.55	0.53	8.02	13
11a	QPSK	2	5580	9.67	1.02	8.65	13
11a	16QAM	2	5580	10.91	1.80	9.11	13
11a	64QAM	2	5580	11.36	2.97	8.39	13
VHT20	BPSK	2	5580	8.46	0.58	7.88	13
VHT20	QPSK	2	5580	10.12	1.07	9.05	13
VHT20	16QAM	2	5580	11.33	1.82	9.51	13
VHT20	64QAM	2	5580	12.09	2.89	9.20	13
VHT20	256QAM	2	5580	12.2	3.63	8.57	13
VHT40	BPSK	2	5550	9.41	1.09	8.32	13
VHT40	QPSK	2	5550	10.55	1.87	8.68	13
VHT40	16QAM	2	5550	12.13	2.93	9.20	13
VHT40	64QAM	2	5550	12.73	4.18	8.55	13
VHT40	256QAM	2	5550	13.87	4.69	9.18	13
VHT80	BPSK	2	5530	11.83	2.00	9.83	13
VHT80	QPSK	2	5530	12.09	3.10	8.99	13
VHT80	16QAM	2	5530	12.84	4.31	8.53	13
VHT80	64QAM	2	5530	14.43	5.32	9.11	13
VHT80	256QAM	2	5530	13.92	5.79	8.13	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



Note: Peak exclusion = Measured value – duty factor

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).

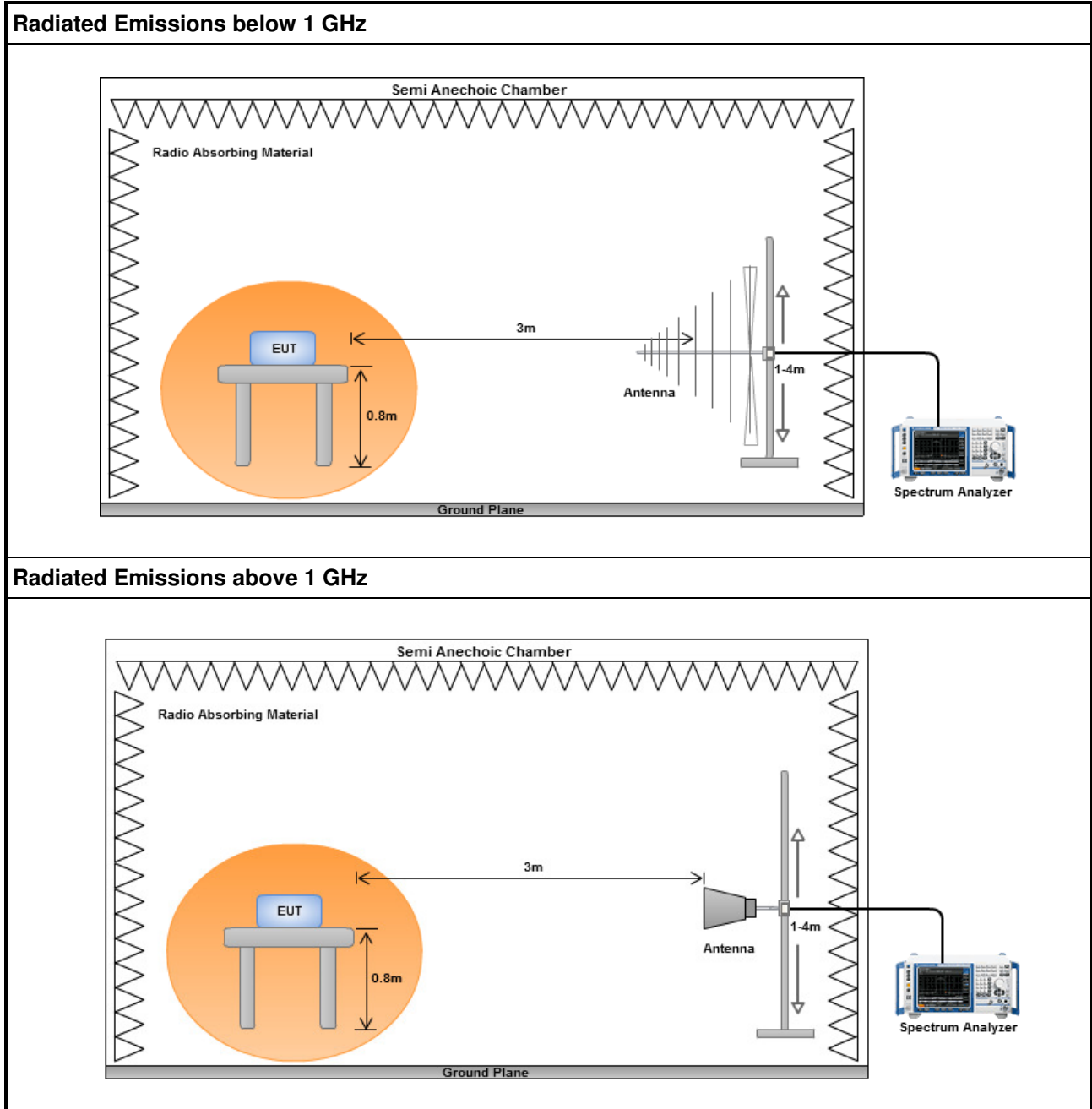
3.6.2 Test Procedures

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 (1 m ~ 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:

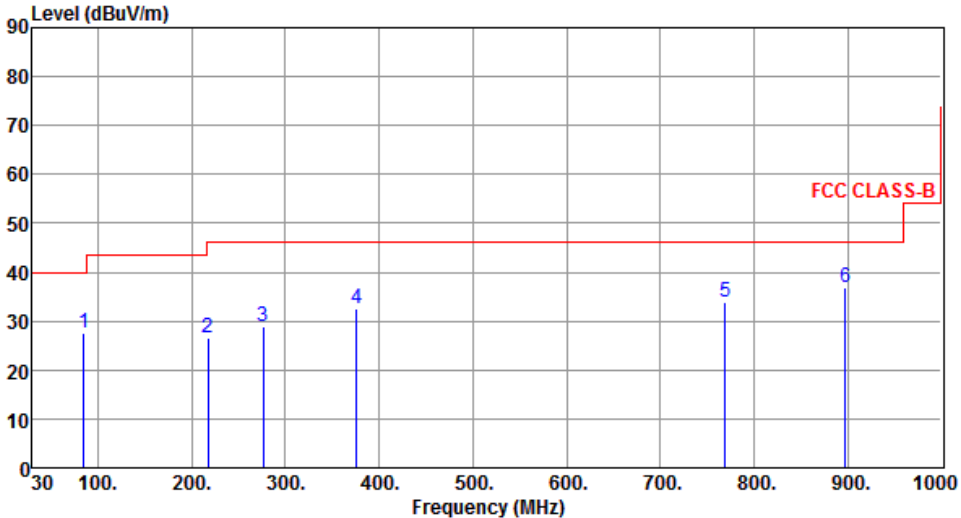
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.6.3 Test Setup



3.6.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

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

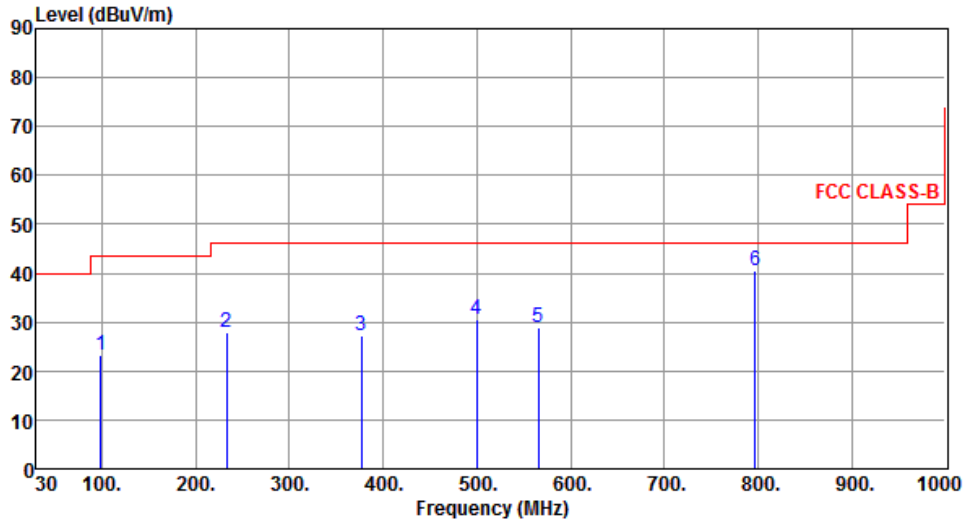


The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red line represents the FCC CLASS-B limit, which is 40 dBuV/m from 30 to 100 MHz, 45 dBuV/m from 100 to 200 MHz, and 46 dBuV/m from 200 to 1000 MHz. Six blue vertical lines represent emission peaks labeled 1 through 6, with their respective frequencies and levels indicated in the table below.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	85.29	27.71	40.00	-12.29	50.08	-22.37	Peak	---	---
2	217.21	26.44	46.00	-19.56	46.00	-19.56	Peak	---	---
3	276.38	29.01	46.00	-16.99	45.95	-16.94	Peak	---	---
4	376.29	32.69	46.00	-13.31	47.08	-14.39	Peak	---	---
5	769.14	33.74	46.00	-12.26	40.87	-7.13	Peak	---	---
6	897.18	36.79	46.00	-9.21	42.36	-5.57	Peak	---	---

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

Modulation	11a	Test Freq. (MHz)	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	98.87	23.27	43.50	-20.23	45.07	-21.80	Peak	---	---
2	232.73	27.98	46.00	-18.02	46.57	-18.59	Peak	---	---
3	377.26	27.31	46.00	-18.69	41.67	-14.36	Peak	---	---
4	499.48	30.59	46.00	-15.41	42.30	-11.71	Peak	---	---
5	565.44	28.93	46.00	-17.07	39.22	-10.29	Peak	---	---
6	797.27	40.39	46.00	-5.61	47.11	-6.72	Peak	---	---

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

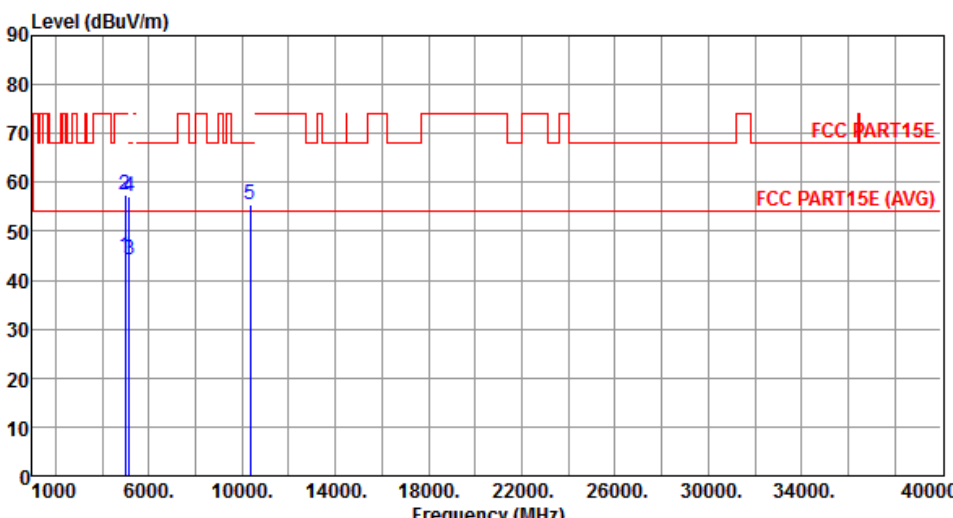
*Factor includes antenna factor , cable loss and amplifier gain

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

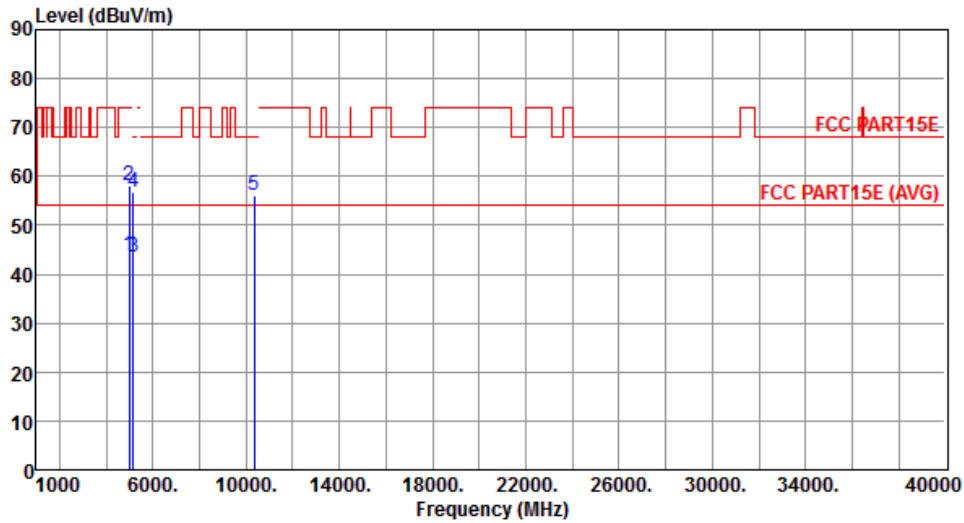
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.75	54.00	-9.25	39.33	5.42	Average	---	---
2	5000.00	57.60	74.00	-16.40	52.18	5.42	Peak	---	---
3	5150.00	44.26	54.00	-9.74	38.55	5.71	Average	---	---
4	5150.00	56.97	74.00	-17.03	51.26	5.71	Peak	---	---
5	10360.00	55.47	68.20	-12.73	41.03	14.44	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)	5180
Polarization	Vertical		



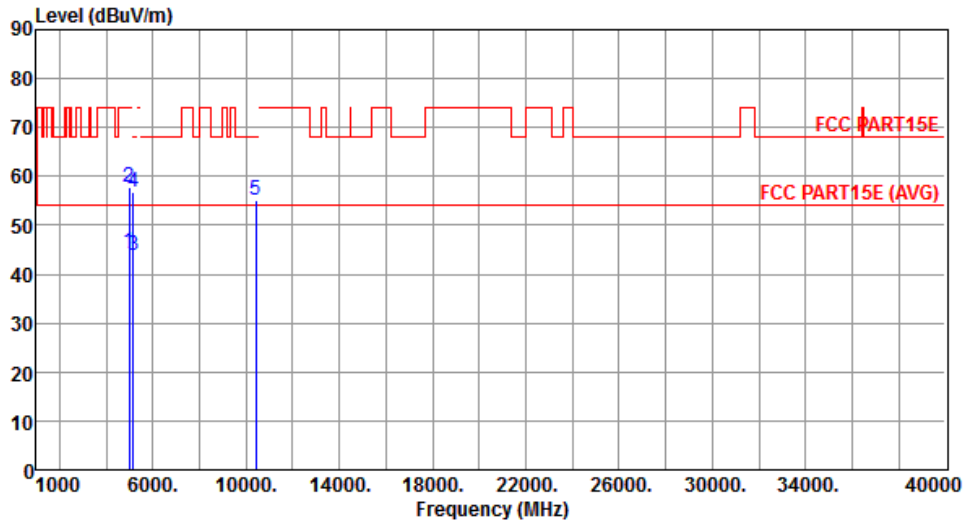
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	43.75	54.00	-10.25	38.33	5.42	Average	---	---
2	5000.00	58.10	74.00	-15.90	52.68	5.42	Peak	---	---
3	5150.00	43.64	54.00	-10.36	37.93	5.71	Average	---	---
4	5150.00	56.90	74.00	-17.10	51.19	5.71	Peak	---	---
5	10360.00	56.15	68.20	-12.05	41.71	14.44	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)	5200
Polarization	Horizontal		

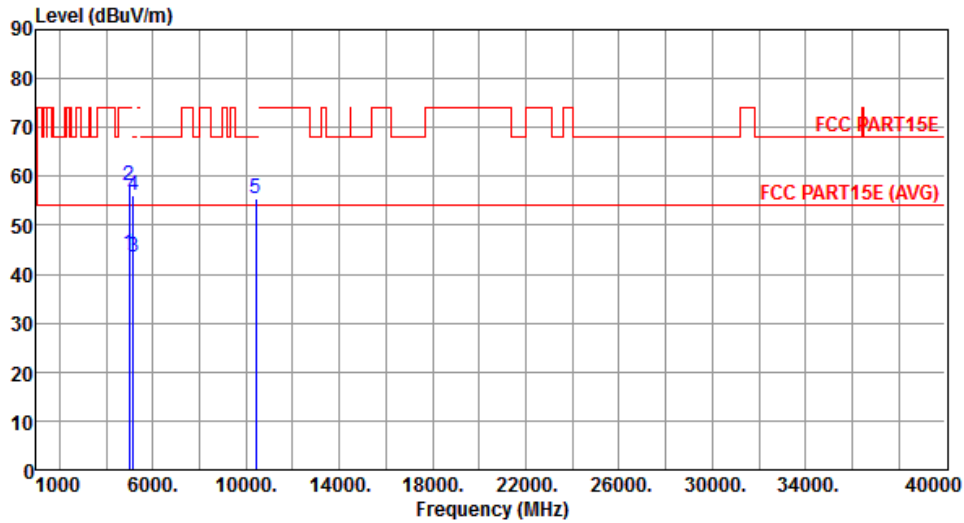


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.58	54.00	-9.42	39.16	5.42	Average	---	---
2	5000.00	57.85	74.00	-16.15	52.43	5.42	Peak	---	---
3	5150.00	43.87	54.00	-10.13	38.16	5.71	Average	---	---
4	5150.00	56.69	74.00	-17.31	50.98	5.71	Peak	---	---
5	10400.00	55.05	68.20	-13.15	40.55	14.50	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)	5200
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Polarization	Vertical
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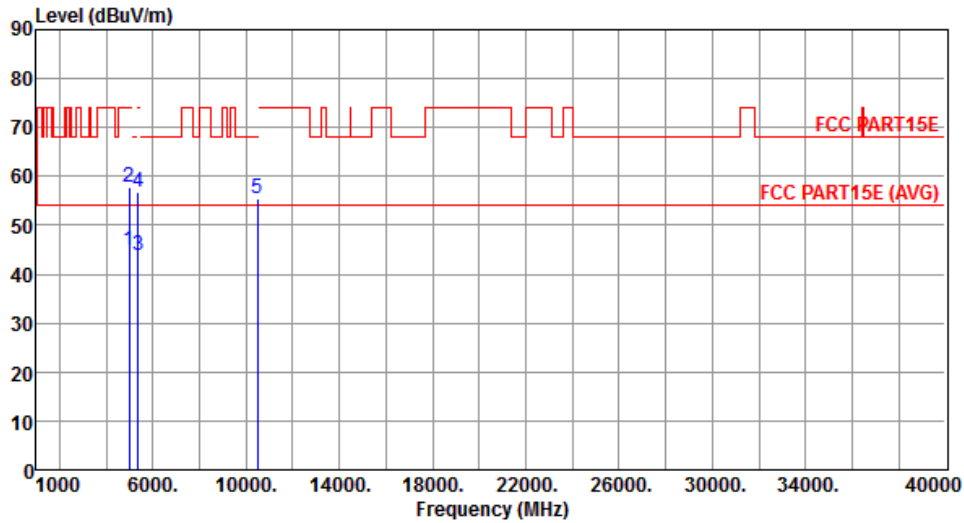
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.04	54.00	-9.96	38.62	5.42	Average	---	---
2	5000.00	58.15	74.00	-15.85	52.73	5.42	Peak	---	---
3	5150.00	43.37	54.00	-10.63	37.66	5.71	Average	---	---
4	5150.00	56.19	74.00	-17.81	50.48	5.71	Peak	---	---
5	10400.00	55.46	68.20	-12.74	40.96	14.50	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)	5240
Polarization	Horizontal		



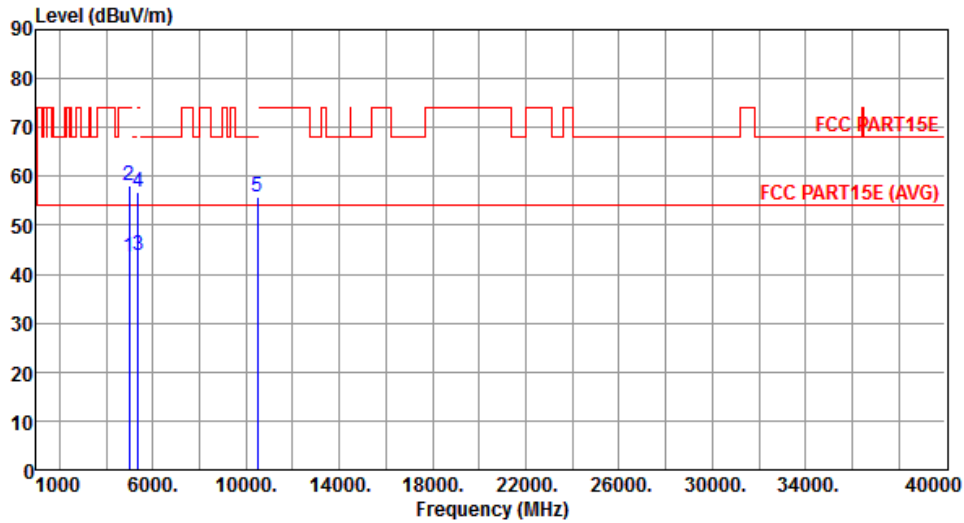
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.77	54.00	-9.23	39.35	5.42	Average	---	---
2	5000.00	57.76	74.00	-16.24	52.34	5.42	Peak	---	---
3	5350.00	43.88	54.00	-10.12	37.89	5.99	Average	---	---
4	5350.00	56.78	74.00	-17.22	50.79	5.99	Peak	---	---
5	10480.00	55.46	68.20	-12.74	40.83	14.63	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	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



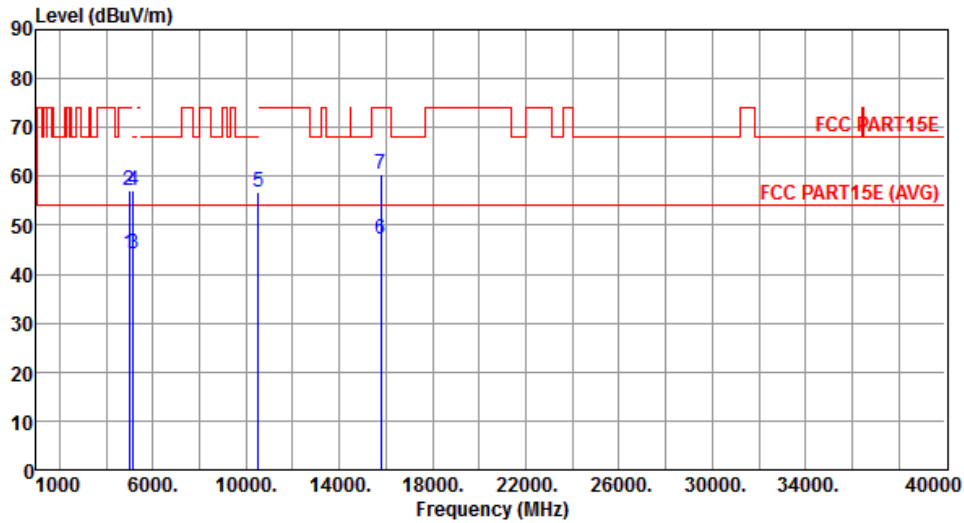
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	43.66	54.00	-10.34	38.24	5.42	Average	---	---
2	5000.00	58.15	74.00	-15.85	52.73	5.42	Peak	---	---
3	5350.00	43.85	54.00	-10.15	37.86	5.99	Average	---	---
4	5350.00	56.63	74.00	-17.37	50.64	5.99	Peak	---	---
5	10480.00	55.86	68.20	-12.34	41.23	14.63	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	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



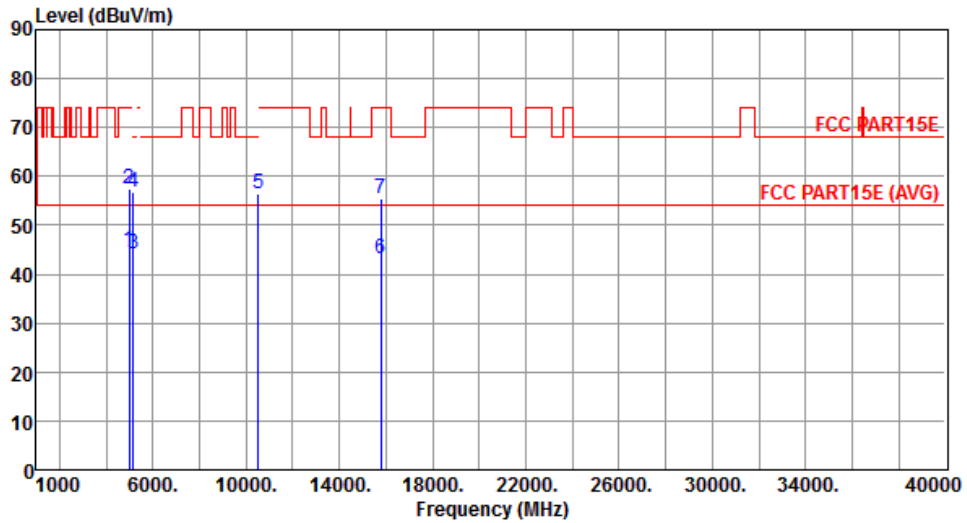
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.14	54.00	-9.86	38.72	5.42	Average	---	---
2	5000.00	57.07	74.00	-16.93	51.65	5.42	Peak	---	---
3	5150.00	44.06	54.00	-9.94	38.35	5.71	Average	---	---
4	5150.00	57.19	74.00	-16.81	51.48	5.71	Peak	---	---
5	10520.00	56.88	68.20	-11.32	42.18	14.70	Peak	---	---
6	15780.00	47.12	54.00	-6.88	32.34	14.78	Average	---	---
7	15780.00	60.41	74.00	-13.59	45.63	14.78	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		



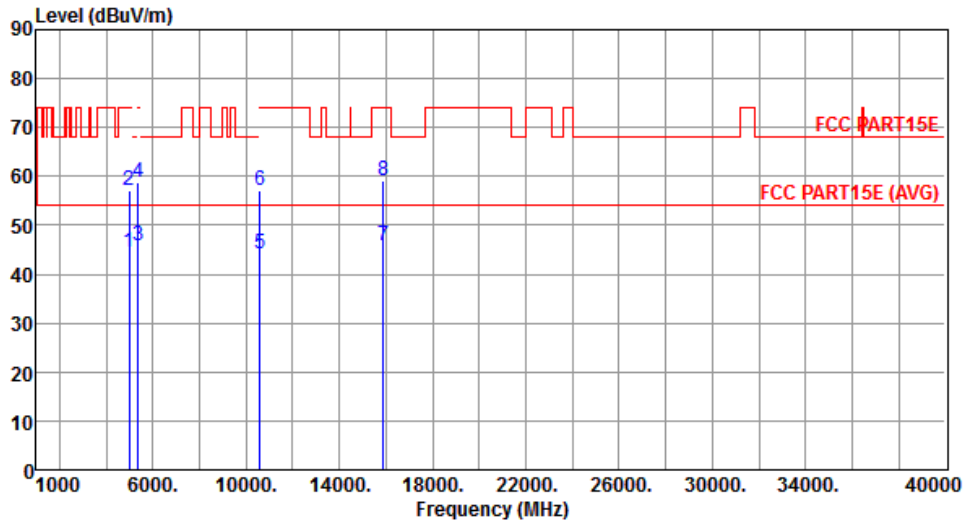
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.69	54.00	-9.31	39.27	5.42	Average	---	---
2	5000.00	57.60	74.00	-16.40	52.18	5.42	Peak	---	---
3	5150.00	44.15	54.00	-9.85	38.44	5.71	Average	---	---
4	5150.00	56.76	74.00	-17.24	51.05	5.71	Peak	---	---
5	10520.00	56.53	68.20	-11.67	41.83	14.70	Peak	---	---
6	15780.00	43.21	54.00	-10.79	28.43	14.78	Average	---	---
7	15780.00	55.44	74.00	-18.56	40.66	14.78	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		



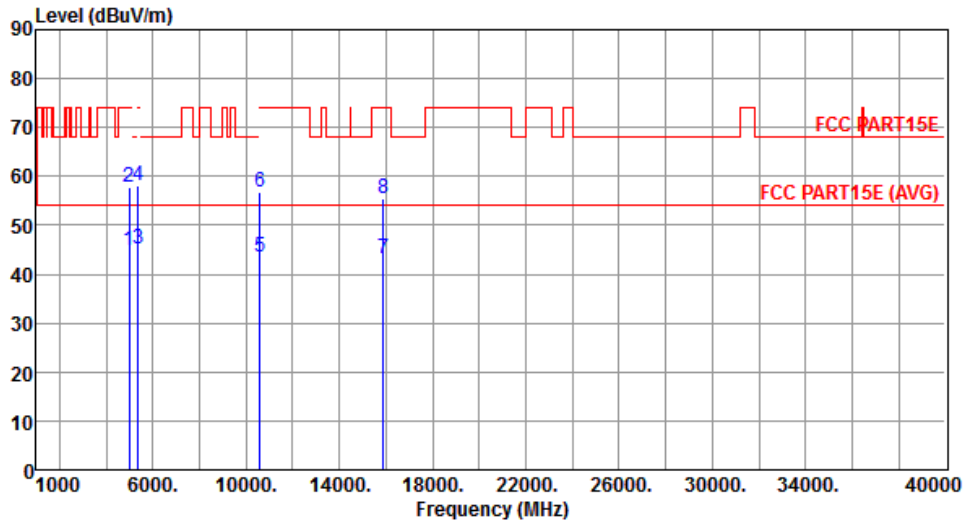
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.38	54.00	-9.62	38.96	5.42	Average	---	---
2	5000.00	57.20	74.00	-16.80	51.78	5.42	Peak	---	---
3	5350.00	45.67	54.00	-8.33	39.68	5.99	Average	---	---
4	5350.00	58.77	74.00	-15.23	52.78	5.99	Peak	---	---
5	10600.00	44.17	54.00	-9.83	29.31	14.86	Average	---	---
6	10600.00	57.08	74.00	-16.92	42.22	14.86	Peak	---	---
7	15900.00	45.98	54.00	-8.02	31.45	14.53	Average	---	---
8	15900.00	59.26	74.00	-14.74	44.73	14.53	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)	5300
Polarization	Vertical		



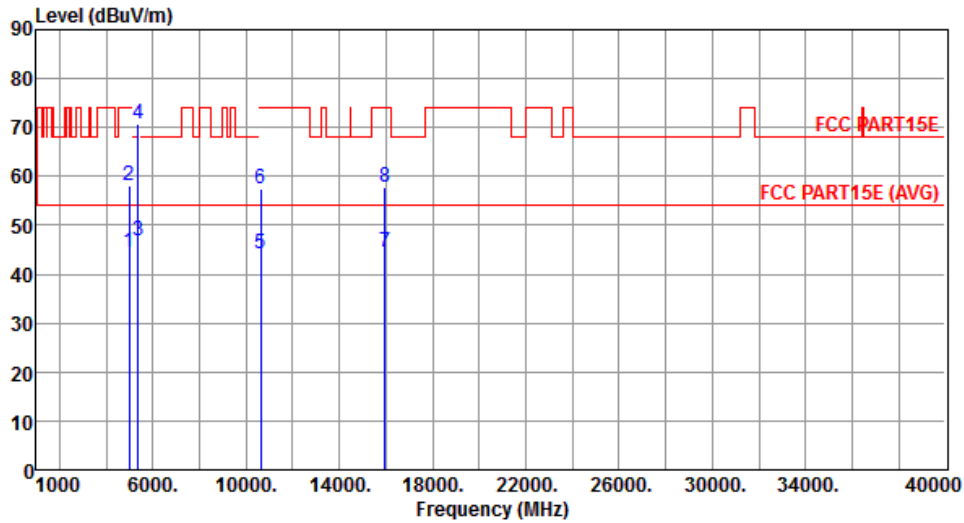
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.74	54.00	-9.26	39.32	5.42	Average	---	---
2	5000.00	57.85	74.00	-16.15	52.43	5.42	Peak	---	---
3	5350.00	45.28	54.00	-8.72	39.29	5.99	Average	---	---
4	5350.00	57.97	74.00	-16.03	51.98	5.99	Peak	---	---
5	10600.00	43.43	54.00	-10.57	28.57	14.86	Average	---	---
6	10600.00	56.72	74.00	-17.28	41.86	14.86	Peak	---	---
7	15900.00	43.09	54.00	-10.91	28.56	14.53	Average	---	---
8	15900.00	55.36	74.00	-18.64	40.83	14.53	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)	5320
Polarization	Horizontal		



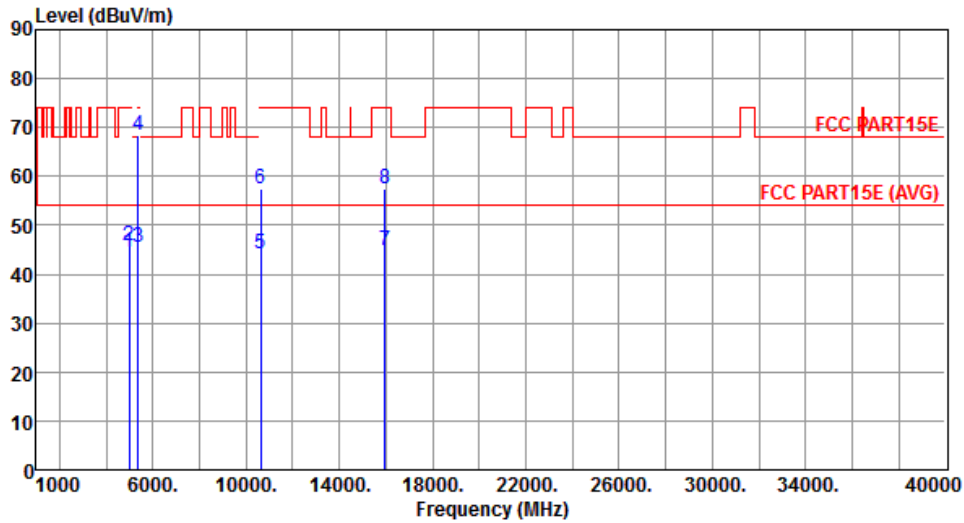
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.57	54.00	-9.43	39.15	5.42	Average	---	---
2	5000.00	58.09	74.00	-15.91	52.67	5.42	Peak	---	---
3	5350.00	46.69	54.00	-7.31	40.70	5.99	Average	---	---
4	5350.00	70.79	74.00	-3.21	64.80	5.99	Peak	---	---
5	10640.00	44.10	54.00	-9.90	29.15	14.95	Average	---	---
6	10640.00	57.33	74.00	-16.67	42.38	14.95	Peak	---	---
7	15960.00	44.61	54.00	-9.39	30.20	14.41	Average	---	---
8	15960.00	57.75	74.00	-16.25	43.34	14.41	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	Vertical		



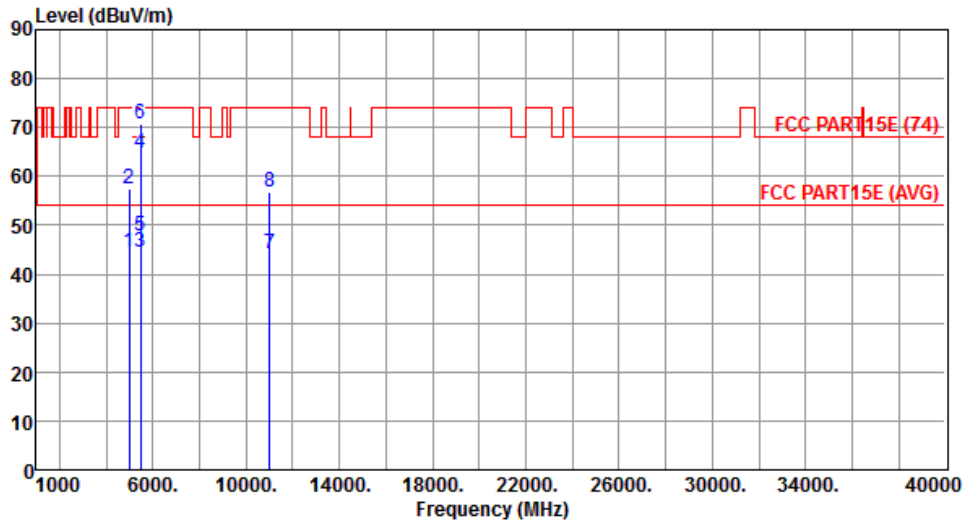
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.48	54.00	-9.52	39.06	5.42	Average	---	---
2	5000.00	45.95	74.00	-28.05	40.53	5.42	Peak	---	---
3	5350.00	45.52	54.00	-8.48	39.53	5.99	Average	---	---
4	5350.00	68.54	74.00	-5.46	62.55	5.99	Peak	---	---
5	10640.00	44.16	54.00	-9.84	29.21	14.95	Average	---	---
6	10640.00	57.50	74.00	-16.50	42.55	14.95	Peak	---	---
7	15960.00	44.73	54.00	-9.27	30.32	14.41	Average	---	---
8	15960.00	57.33	74.00	-16.67	42.92	14.41	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		



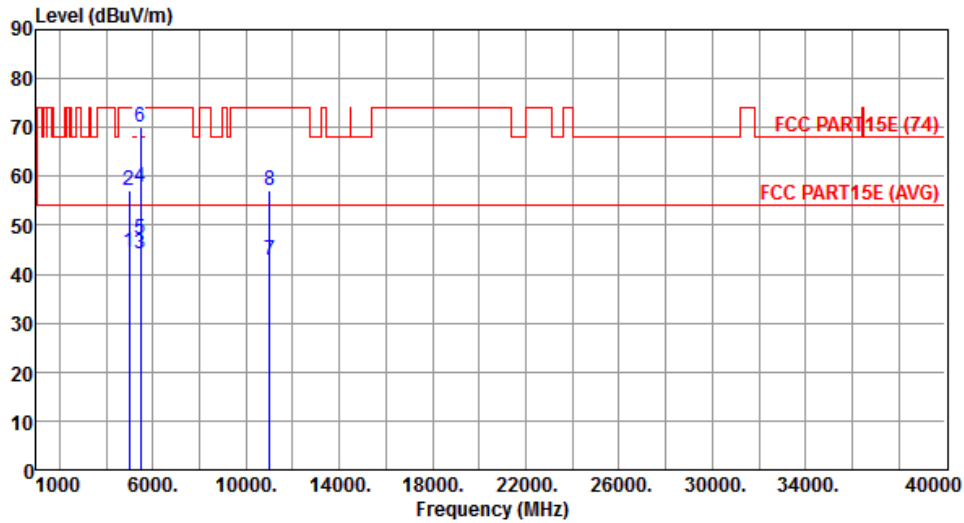
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.54	54.00	-9.46	39.12	5.42	Average	---	---
2	5000.00	57.42	74.00	-16.58	52.00	5.42	Peak	---	---
3	5460.00	44.57	54.00	-9.43	38.45	6.12	Average	---	---
4	5460.00	64.87	74.00	-9.13	58.75	6.12	Peak	---	---
5	5470.00	47.95	54.00	-6.05	41.81	6.14	Average	---	---
6	5470.00	70.90	74.00	-3.10	64.76	6.14	Peak	---	---
7	11000.00	44.06	54.00	-9.94	28.37	15.69	Average	---	---
8	11000.00	56.70	74.00	-17.30	41.01	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)	5500
Polarization	Vertical		



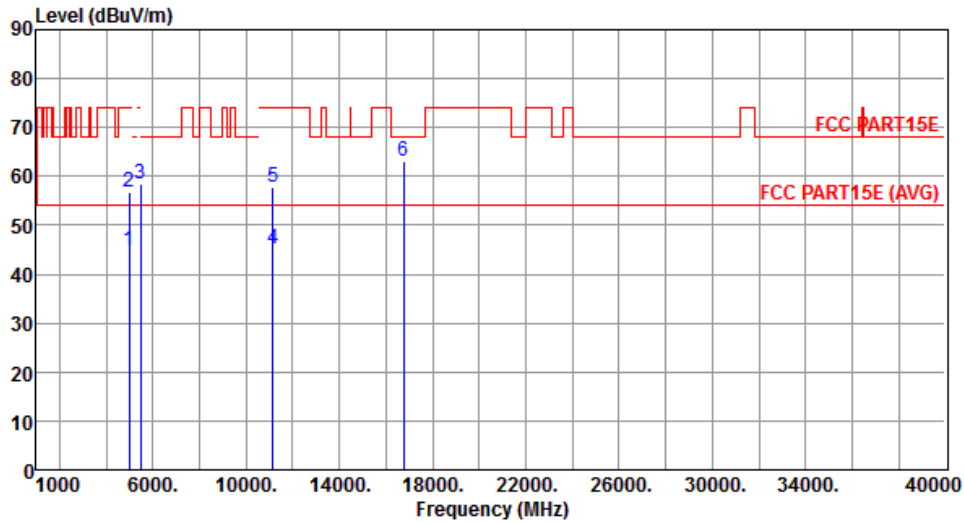
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.66	54.00	-9.34	39.24	5.42	Average	---	---
2	5000.00	57.25	74.00	-16.75	51.83	5.42	Peak	---	---
3	5460.00	44.21	54.00	-9.79	38.09	6.12	Average	---	---
4	5460.00	57.93	74.00	-16.07	51.81	6.12	Peak	---	---
5	5470.00	47.09	54.00	-6.91	40.95	6.14	Average	---	---
6	5470.00	69.97	74.00	-4.03	63.83	6.14	Peak	---	---
7	11000.00	42.88	54.00	-11.12	27.19	15.69	Average	---	---
8	11000.00	57.23	74.00	-16.77	41.54	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		



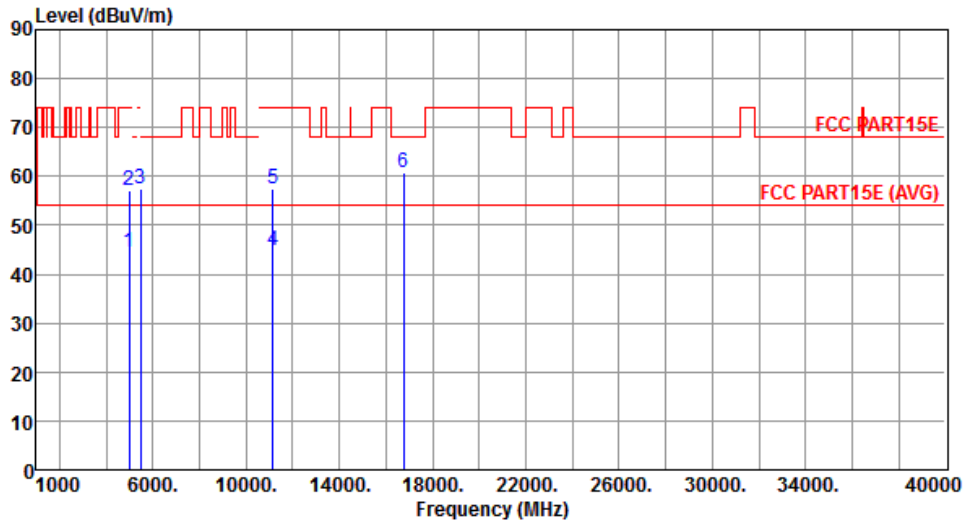
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.75	54.00	-9.25	39.33	5.42	Average	---	---
2	5000.00	56.66	74.00	-17.34	51.24	5.42	Peak	---	---
3	5470.00	58.46	68.20	-9.74	52.32	6.14	Peak	---	---
4	11160.00	45.19	54.00	-8.81	29.66	15.53	Average	---	---
5	11160.00	57.72	74.00	-16.28	42.19	15.53	Peak	---	---
6	16740.00	63.17	68.20	-5.03	45.72	17.45	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		



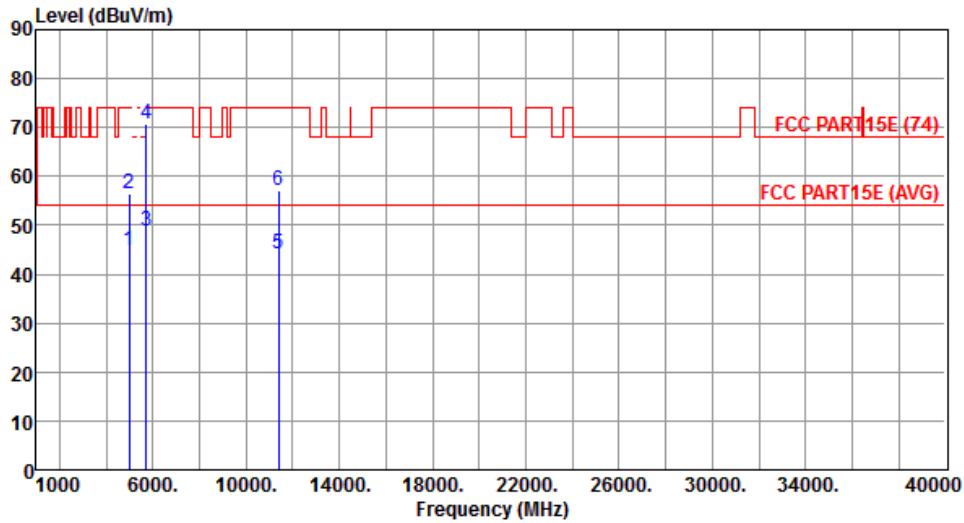
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.50	54.00	-9.50	39.08	5.42	Average	---	---
2	5000.00	56.96	74.00	-17.04	51.54	5.42	Peak	---	---
3	5470.00	57.44	68.20	-10.76	51.30	6.14	Peak	---	---
4	11160.00	44.77	54.00	-9.23	29.24	15.53	Average	---	---
5	11160.00	57.30	74.00	-16.70	41.77	15.53	Peak	---	---
6	16740.00	60.68	68.20	-7.52	43.23	17.45	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		



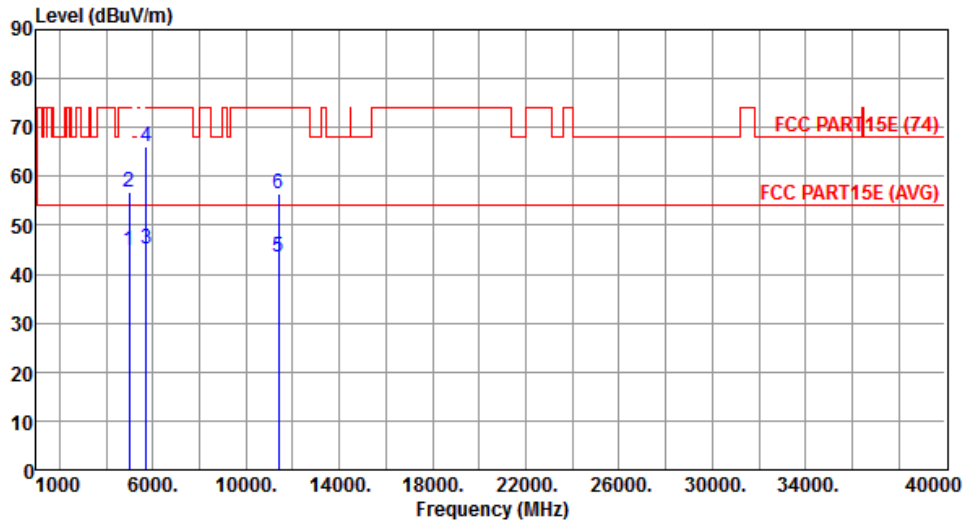
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.77	54.00	-9.23	39.35	5.42	Average	---	---
2	5000.00	56.61	74.00	-17.39	51.19	5.42	Peak	---	---
3	5725.00	48.72	54.00	-5.28	42.13	6.59	Average	---	---
4	5725.00	70.65	74.00	-3.35	64.06	6.59	Peak	---	---
5	11400.00	44.22	54.00	-9.78	28.93	15.29	Average	---	---
6	11400.00	56.96	74.00	-17.04	41.67	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	5000.00	44.71	54.00	-9.29	39.29	5.42	Average	---	---
2	5000.00	56.74	74.00	-17.26	51.32	5.42	Peak	---	---
3	5725.00	45.22	54.00	-8.78	38.63	6.59	Average	---	---
4	5725.00	66.20	74.00	-7.80	59.61	6.59	Peak	---	---
5	11400.00	43.53	54.00	-10.47	28.24	15.29	Average	---	---
6	11400.00	56.61	74.00	-17.39	41.32	15.29	Peak	---	---

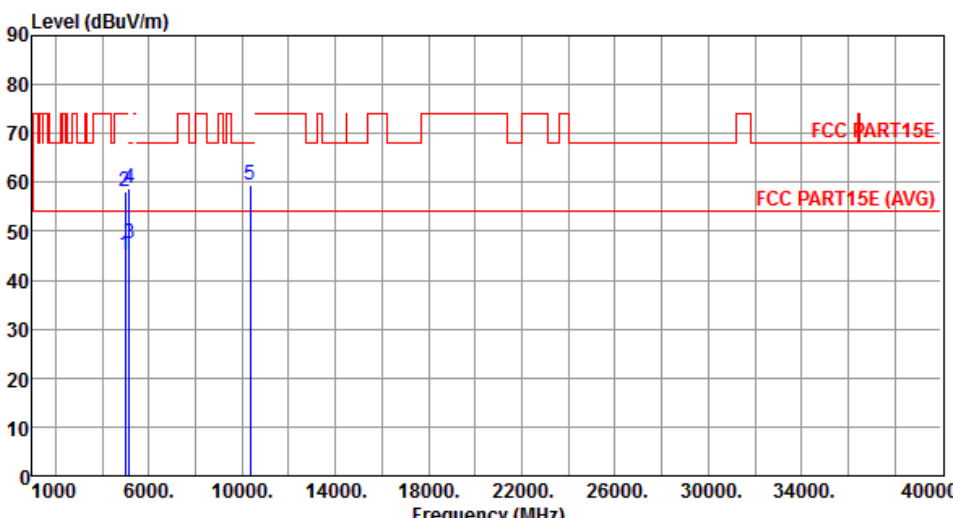
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

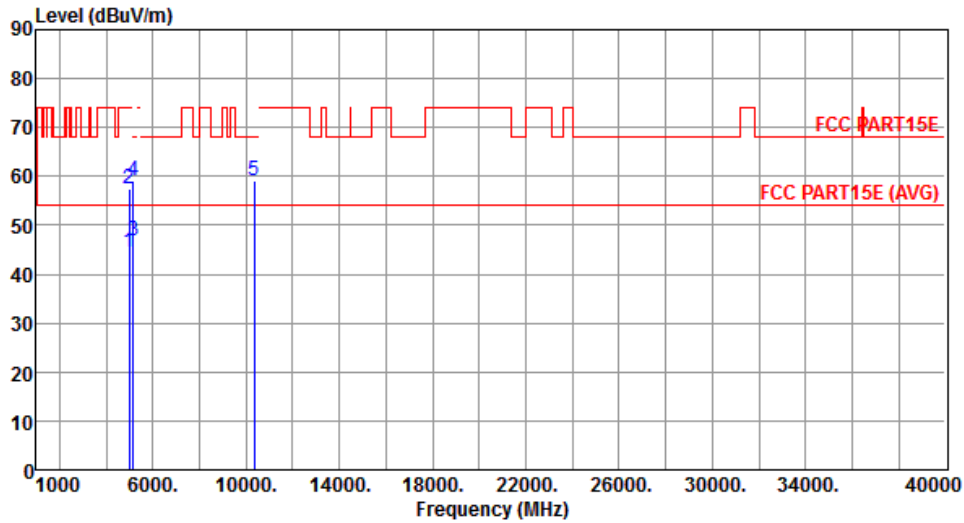
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	45.30	54.00	-8.70	39.88	5.42	Average	---	---
2	5000.00	58.17	74.00	-15.83	52.75	5.42	Peak	---	---
3	5150.00	47.39	54.00	-6.61	41.68	5.71	Average	---	---
4	5150.00	58.92	74.00	-15.08	53.21	5.71	Peak	---	---
5	10360.00	59.31	68.20	-8.89	44.87	14.44	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)	5180
Polarization	Vertical		



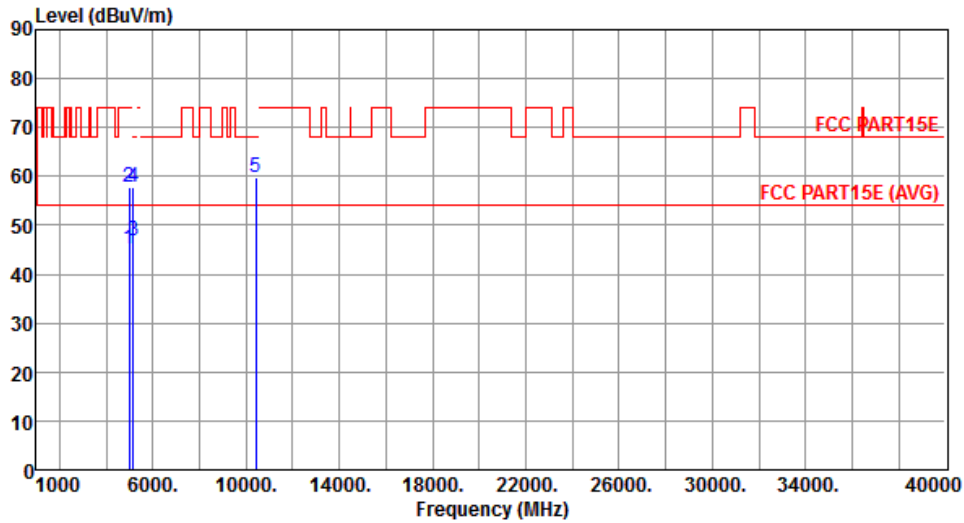
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.53	54.00	-9.47	39.11	5.42	Average	---	---
2	5000.00	57.56	74.00	-16.44	52.14	5.42	Peak	---	---
3	5150.00	46.92	54.00	-7.08	41.21	5.71	Average	---	---
4	5150.00	58.97	74.00	-15.03	53.26	5.71	Peak	---	---
5	10360.00	59.15	68.20	-9.05	44.71	14.44	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)	5200
Polarization	Horizontal		



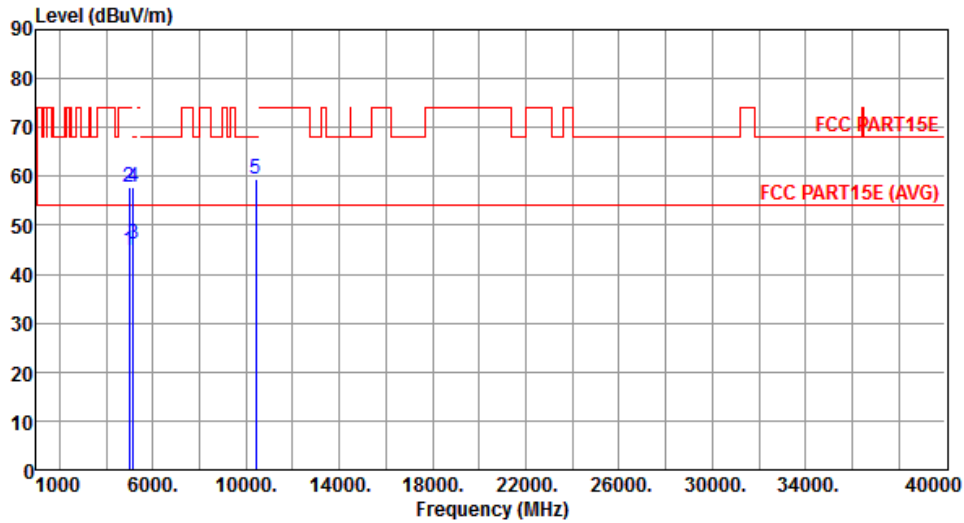
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	45.23	54.00	-8.77	39.81	5.42	Average	---	---
2	5000.00	57.86	74.00	-16.14	52.44	5.42	Peak	---	---
3	5150.00	46.73	54.00	-7.27	41.02	5.71	Average	---	---
4	5150.00	57.89	74.00	-16.11	52.18	5.71	Peak	---	---
5	10400.00	59.65	68.20	-8.55	45.15	14.50	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)	5200
Polarization	Vertical		



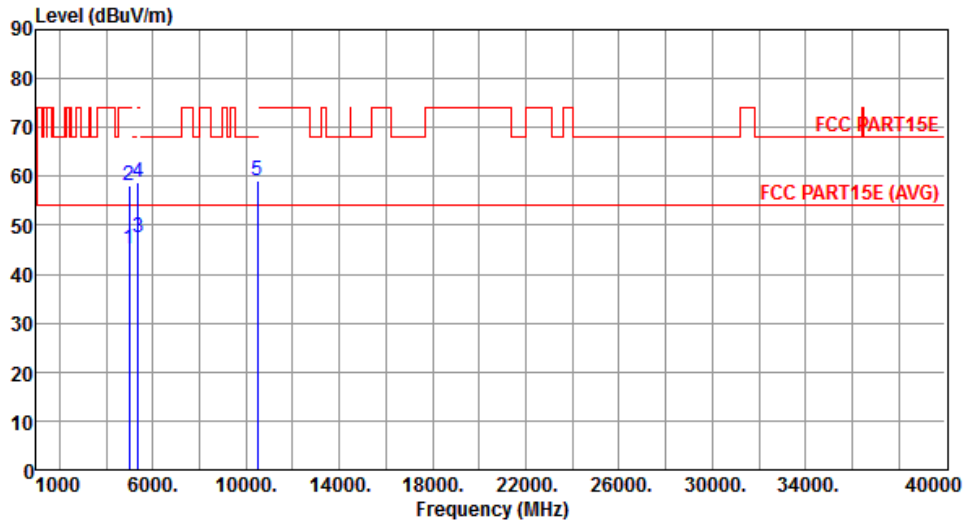
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.77	54.00	-9.23	39.35	5.42	Average	---	---
2	5000.00	57.68	74.00	-16.32	52.26	5.42	Peak	---	---
3	5150.00	46.28	54.00	-7.72	40.57	5.71	Average	---	---
4	5150.00	57.94	74.00	-16.06	52.23	5.71	Peak	---	---
5	10400.00	59.33	68.20	-8.87	44.83	14.50	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)	5240
Polarization	Horizontal		

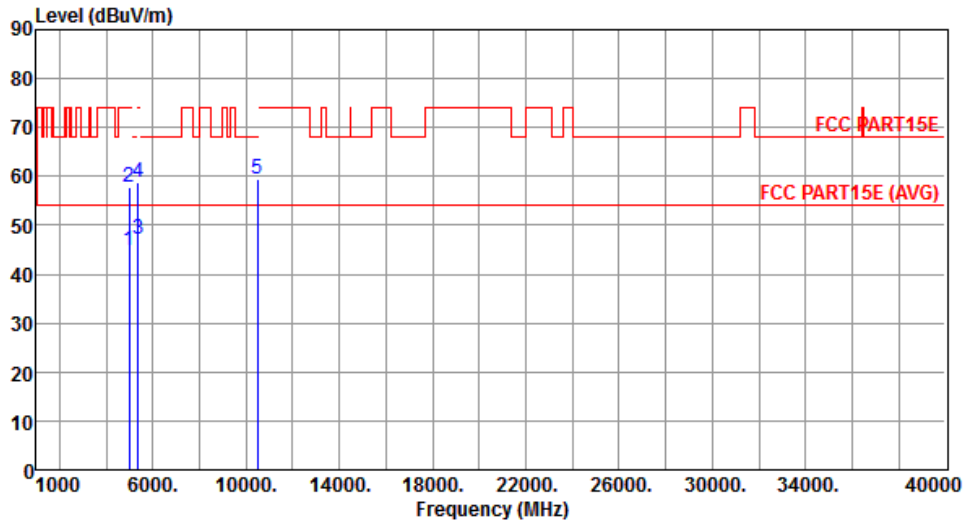


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	45.15	54.00	-8.85	39.73	5.42	Average	---	---
2	5000.00	58.28	74.00	-15.72	52.86	5.42	Peak	---	---
3	5350.00	47.43	54.00	-6.57	41.44	5.99	Average	---	---
4	5350.00	58.86	74.00	-15.14	52.87	5.99	Peak	---	---
5	10480.00	59.16	68.20	-9.04	44.53	14.63	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	VHT20	Test Freq. (MHz)	5240
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Polarization	Vertical
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	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.76	54.00	-9.24	39.34	5.42	Average	---	---
2	5000.00	57.89	74.00	-16.11	52.47	5.42	Peak	---	---
3	5350.00	47.14	54.00	-6.86	41.15	5.99	Average	---	---
4	5350.00	58.75	74.00	-15.25	52.76	5.99	Peak	---	---
5	10480.00	59.46	68.20	-8.74	44.83	14.63	Peak	---	---

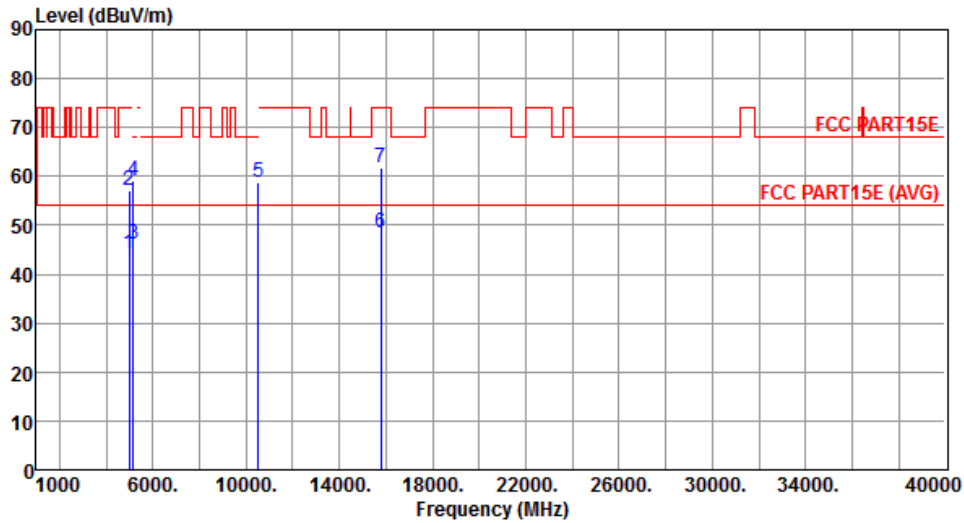
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

Modulation	VHT20	Test Freq. (MHz)	5260
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Polarization	Horizontal
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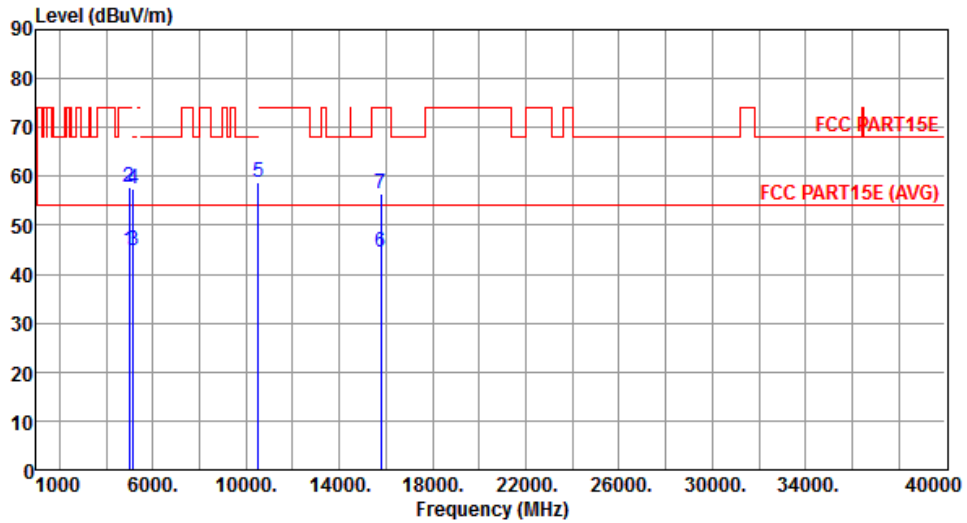
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.25	54.00	-9.75	38.83	5.42	Average	---	---
2	5000.00	57.16	74.00	-16.84	51.74	5.42	Peak	---	---
3	5150.00	46.07	54.00	-7.93	40.36	5.71	Average	---	---
4	5150.00	59.14	74.00	-14.86	53.43	5.71	Peak	---	---
5	10520.00	58.63	68.20	-9.57	43.93	14.70	Peak	---	---
6	15780.00	48.64	54.00	-5.36	33.86	14.78	Average	---	---
7	15780.00	61.94	74.00	-12.06	47.16	14.78	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)	5260
Polarization	Vertical		



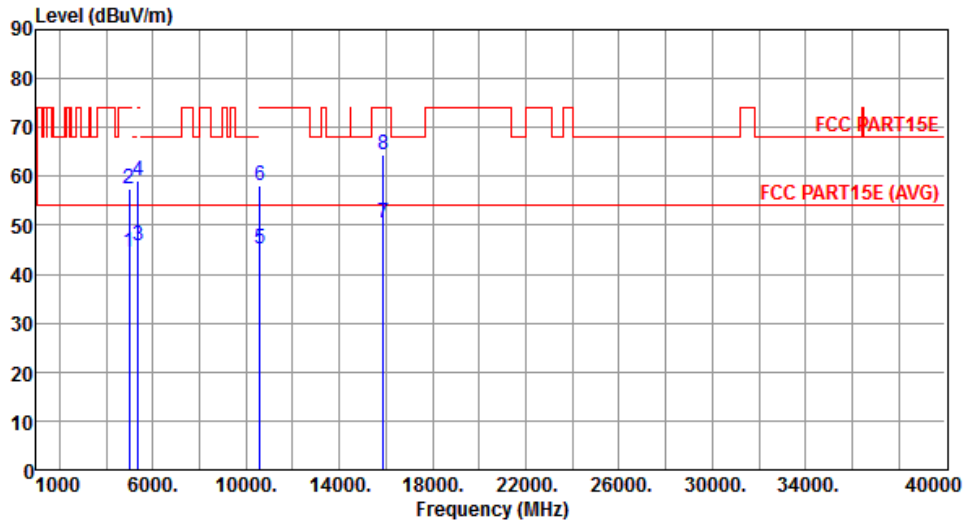
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.85	54.00	-9.15	39.43	5.42	Average	---	---
2	5000.00	57.81	74.00	-16.19	52.39	5.42	Peak	---	---
3	5150.00	44.88	54.00	-9.12	39.17	5.71	Average	---	---
4	5150.00	57.48	74.00	-16.52	51.77	5.71	Peak	---	---
5	10520.00	58.65	68.20	-9.55	43.95	14.70	Peak	---	---
6	15780.00	44.36	54.00	-9.64	29.58	14.78	Average	---	---
7	15780.00	56.62	74.00	-17.38	41.84	14.78	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		



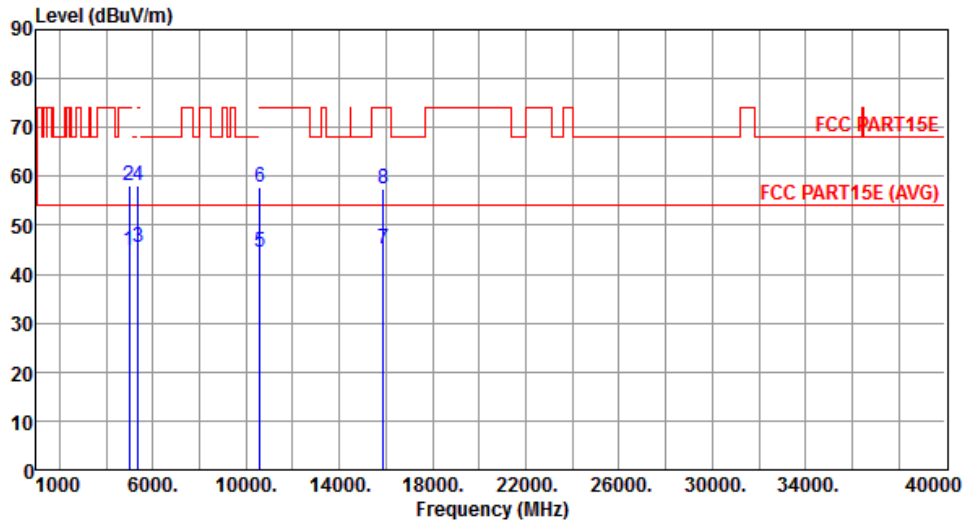
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.65	54.00	-9.35	39.23	5.42	Average	---	---
2	5000.00	57.36	74.00	-16.64	51.94	5.42	Peak	---	---
3	5350.00	45.81	54.00	-8.19	39.82	5.99	Average	---	---
4	5350.00	58.95	74.00	-15.05	52.96	5.99	Peak	---	---
5	10600.00	45.25	54.00	-8.75	30.39	14.86	Average	---	---
6	10600.00	58.13	74.00	-15.87	43.27	14.86	Peak	---	---
7	15900.00	50.45	54.00	-3.55	35.92	14.53	Average	---	---
8	15900.00	64.36	74.00	-9.64	49.83	14.53	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)	5300
Polarization	Vertical		



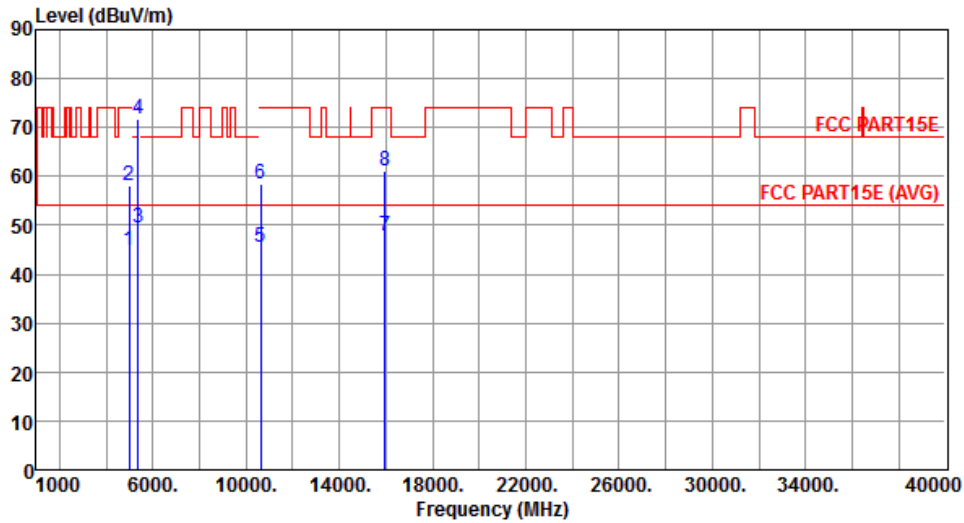
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.95	54.00	-9.05	39.53	5.42	Average	---	---
2	5000.00	58.06	74.00	-15.94	52.64	5.42	Peak	---	---
3	5350.00	45.62	54.00	-8.38	39.63	5.99	Average	---	---
4	5350.00	58.15	74.00	-15.85	52.16	5.99	Peak	---	---
5	10600.00	44.66	54.00	-9.34	29.80	14.86	Average	---	---
6	10600.00	57.91	74.00	-16.09	43.05	14.86	Peak	---	---
7	15900.00	45.29	54.00	-8.71	30.76	14.53	Average	---	---
8	15900.00	57.51	74.00	-16.49	42.98	14.53	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)	5320
Polarization	Horizontal		



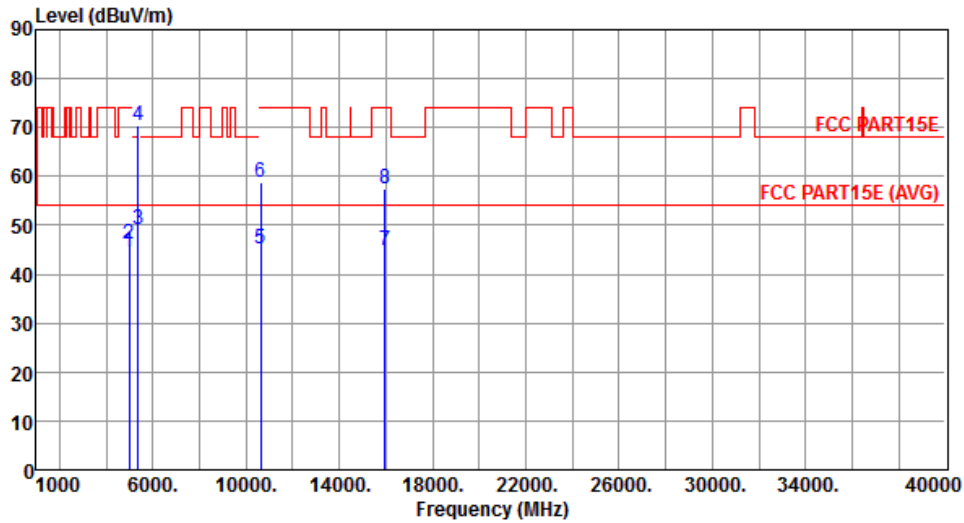
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.68	54.00	-9.32	39.26	5.42	Average	---	---
2	5000.00	58.21	74.00	-15.79	52.79	5.42	Peak	---	---
3	5350.00	49.33	54.00	-4.67	43.34	5.99	Average	---	---
4	5350.00	71.89	74.00	-2.11	65.90	5.99	Peak	---	---
5	10640.00	45.35	54.00	-8.65	30.40	14.95	Average	---	---
6	10640.00	58.48	74.00	-15.52	43.53	14.95	Peak	---	---
7	15960.00	47.85	54.00	-6.15	33.44	14.41	Average	---	---
8	15960.00	60.99	74.00	-13.01	46.58	14.41	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	Vertical		



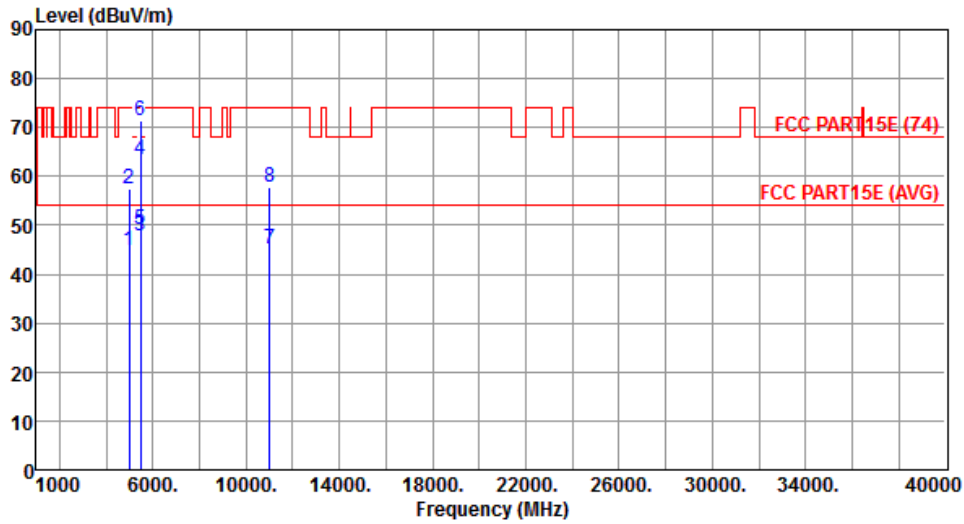
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.65	54.00	-9.35	39.23	5.42	Average	---	---
2	5000.00	46.12	74.00	-27.88	40.70	5.42	Peak	---	---
3	5350.00	49.08	54.00	-4.92	43.09	5.99	Average	---	---
4	5350.00	70.45	74.00	-3.55	64.46	5.99	Peak	---	---
5	10640.00	45.24	54.00	-8.76	30.29	14.95	Average	---	---
6	10640.00	58.68	74.00	-15.32	43.73	14.95	Peak	---	---
7	15960.00	44.82	54.00	-9.18	30.41	14.41	Average	---	---
8	15960.00	57.48	74.00	-16.52	43.07	14.41	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		



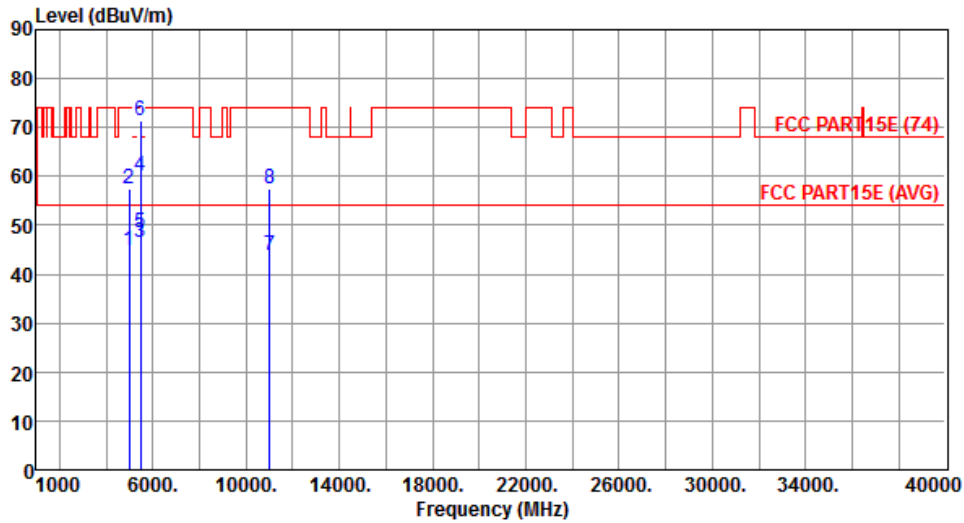
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.68	54.00	-9.32	39.26	5.42	Average	---	---
2	5000.00	57.61	74.00	-16.39	52.19	5.42	Peak	---	---
3	5460.00	47.89	54.00	-6.11	41.77	6.12	Average	---	---
4	5460.00	63.50	74.00	-10.50	57.38	6.12	Peak	---	---
5	5470.00	49.25	54.00	-4.75	43.11	6.14	Average	---	---
6	5470.00	71.56	74.00	-2.44	65.42	6.14	Peak	---	---
7	11000.00	45.15	54.00	-8.85	29.46	15.69	Average	---	---
8	11000.00	57.76	74.00	-16.24	42.07	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).

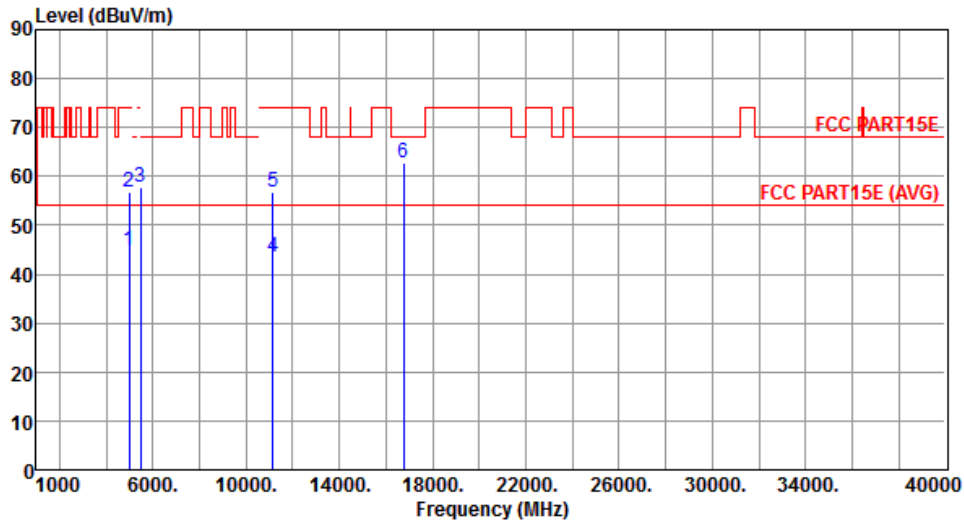
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.84	54.00	-9.16	39.42	5.42	Average	---	---
2	5000.00	57.36	74.00	-16.64	51.94	5.42	Peak	---	---
3	5460.00	46.59	54.00	-7.41	40.47	6.12	Average	---	---
4	5460.00	60.24	74.00	-13.76	54.12	6.12	Peak	---	---
5	5470.00	48.48	54.00	-5.52	42.34	6.14	Average	---	---
6	5470.00	71.35	74.00	-2.65	65.21	6.14	Peak	---	---
7	11000.00	43.95	54.00	-10.05	28.26	15.69	Average	---	---
8	11000.00	57.36	74.00	-16.64	41.67	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)	5580
Polarization	Horizontal		



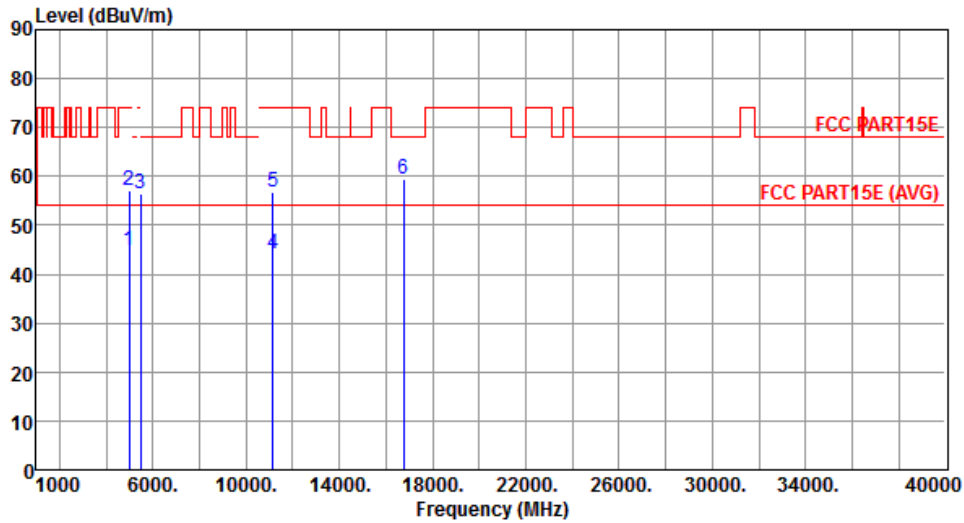
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.94	54.00	-9.06	39.52	5.42	Average	---	---
2	5000.00	56.82	74.00	-17.18	51.40	5.42	Peak	---	---
3	5470.00	57.87	68.20	-10.33	51.73	6.14	Peak	---	---
4	11160.00	43.58	54.00	-10.42	28.05	15.53	Average	---	---
5	11160.00	56.84	74.00	-17.16	41.31	15.53	Peak	---	---
6	16740.00	62.81	68.20	-5.39	45.36	17.45	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		



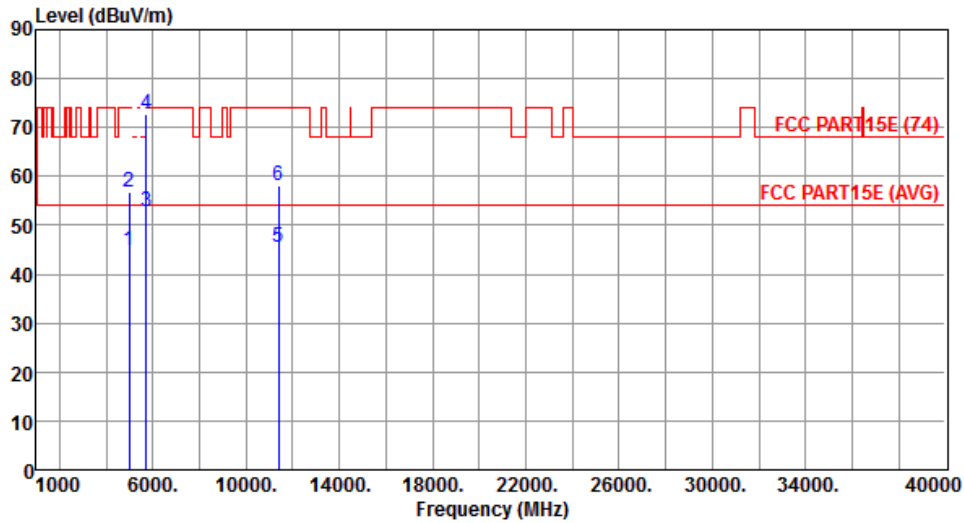
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.68	54.00	-9.32	39.26	5.42	Average	---	---
2	5000.00	57.15	74.00	-16.85	51.73	5.42	Peak	---	---
3	5470.00	56.62	68.20	-11.58	50.48	6.14	Peak	---	---
4	11160.00	44.23	54.00	-9.77	28.70	15.53	Average	---	---
5	11160.00	56.71	74.00	-17.29	41.18	15.53	Peak	---	---
6	16740.00	59.44	68.20	-8.76	41.99	17.45	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		



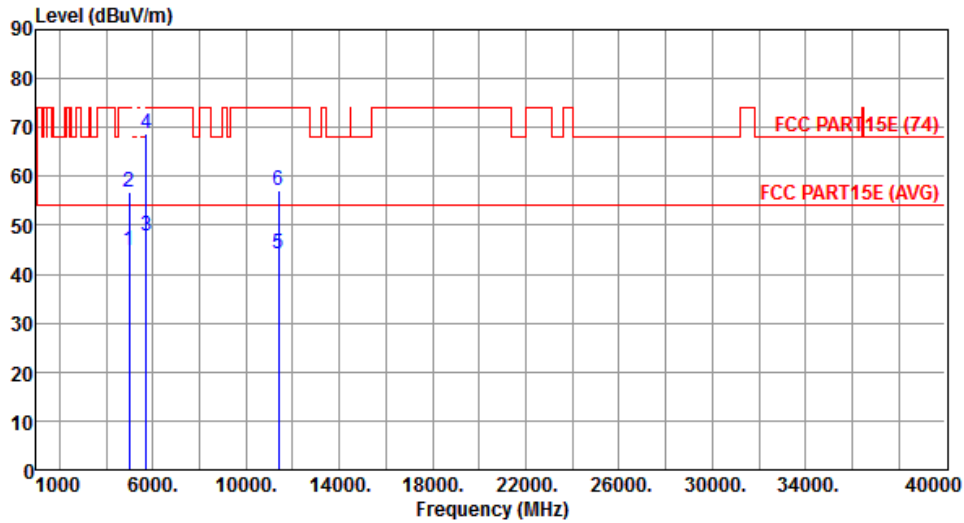
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.89	54.00	-9.11	39.47	5.42	Average	---	---
2	5000.00	56.75	74.00	-17.25	51.33	5.42	Peak	---	---
3	5725.00	52.80	54.00	-1.20	46.21	6.59	Average	---	---
4	5725.00	72.81	74.00	-1.19	66.22	6.59	Peak	---	---
5	11400.00	45.38	54.00	-8.62	30.09	15.29	Average	---	---
6	11400.00	58.14	74.00	-15.86	42.85	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	5000.00	44.86	54.00	-9.14	39.44	5.42	Average	---	---
2	5000.00	56.92	74.00	-17.08	51.50	5.42	Peak	---	---
3	5725.00	47.78	54.00	-6.22	41.19	6.59	Average	---	---
4	5725.00	68.68	74.00	-5.32	62.09	6.59	Peak	---	---
5	11400.00	44.28	54.00	-9.72	28.99	15.29	Average	---	---
6	11400.00	57.14	74.00	-16.86	41.85	15.29	Peak	---	---

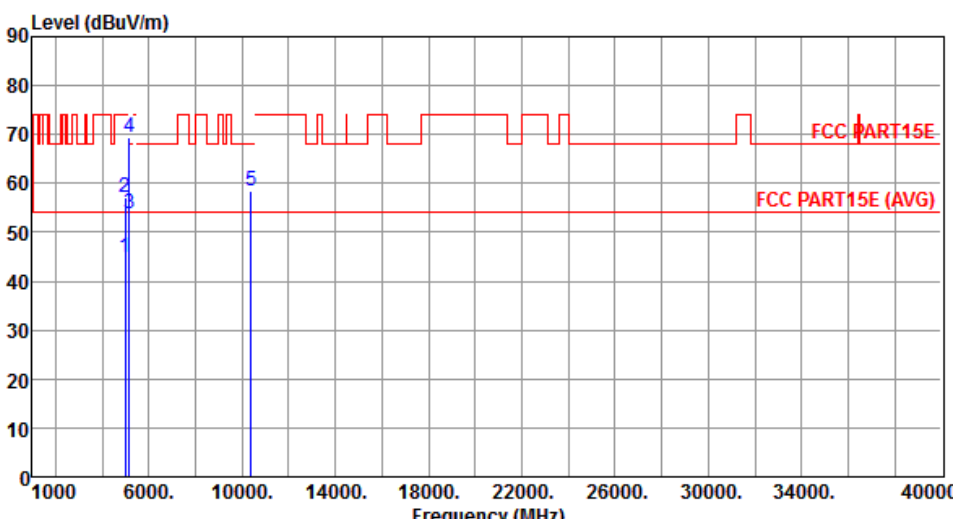
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

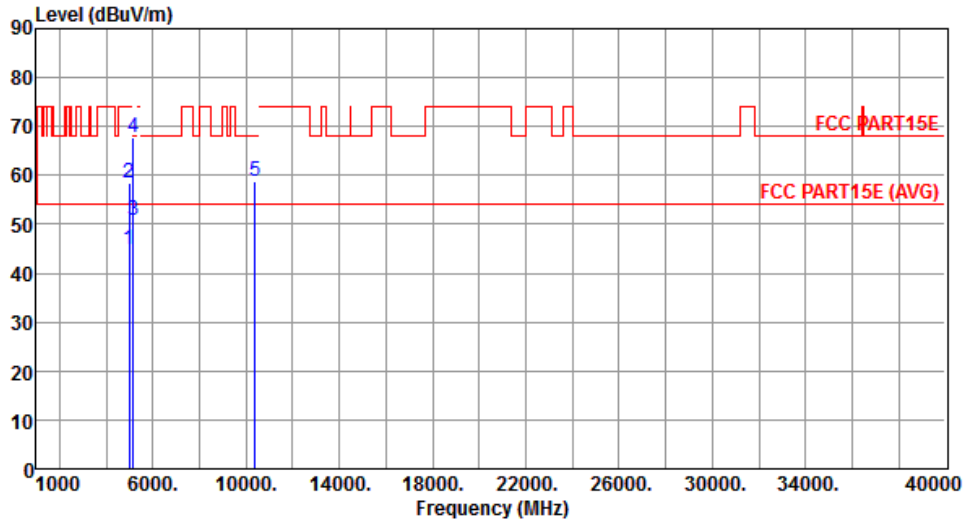
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.84	54.00	-9.16	39.42	5.42	Average	---	---
2	5000.00	57.10	74.00	-16.90	51.68	5.42	Peak	---	---
3	5149.06	53.90	54.00	-0.10	48.20	5.70	Average	---	---
4	5149.06	69.29	74.00	-4.71	63.59	5.70	Peak	---	---
5	10380.00	58.38	68.20	-9.82	43.92	14.46	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)	5190
Polarization	Vertical		



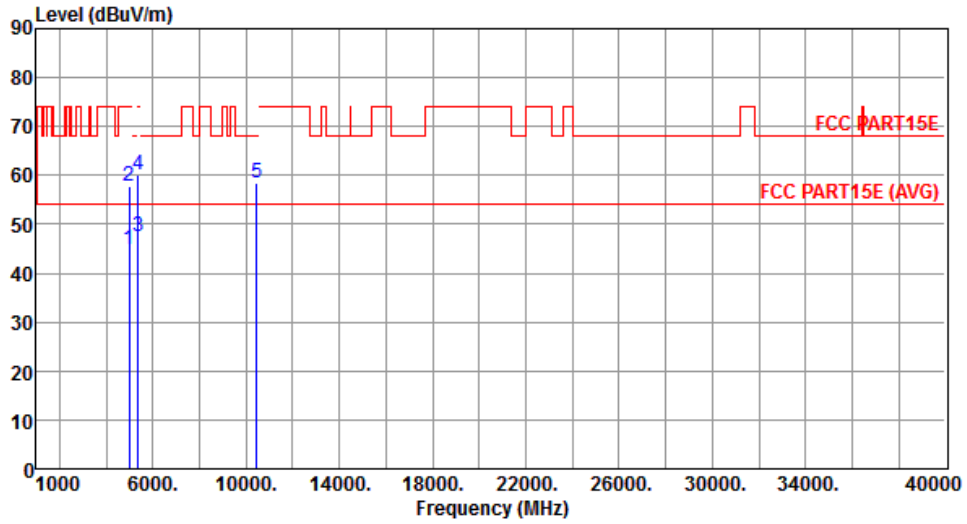
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.69	54.00	-9.31	39.27	5.42	Average	---	---
2	5000.00	58.60	74.00	-15.40	53.18	5.42	Peak	---	---
3	5149.06	50.81	54.00	-3.19	45.11	5.70	Average	---	---
4	5149.06	67.64	74.00	-6.36	61.94	5.70	Peak	---	---
5	10380.00	58.78	68.20	-9.42	44.32	14.46	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)	5230
Polarization	Horizontal		



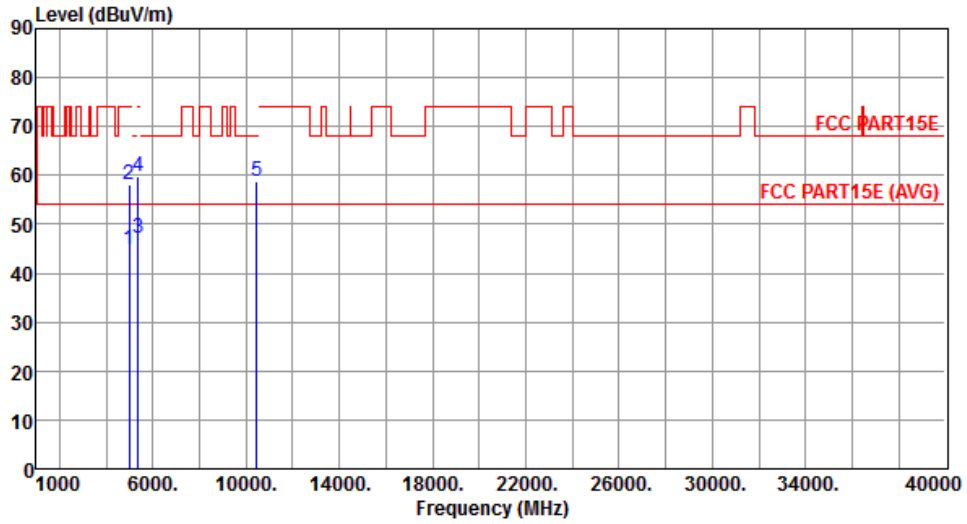
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.68	54.00	-9.32	39.26	5.42	Average	---	---
2	5000.00	57.89	74.00	-16.11	52.47	5.42	Peak	---	---
3	5350.00	47.53	54.00	-6.47	41.54	5.99	Average	---	---
4	5350.00	60.21	74.00	-13.79	54.22	5.99	Peak	---	---
5	10460.00	58.42	68.20	-9.78	43.82	14.60	Peak	---	---

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

*Factor includes antenna factor , cable loss and amplifier gain

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

Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



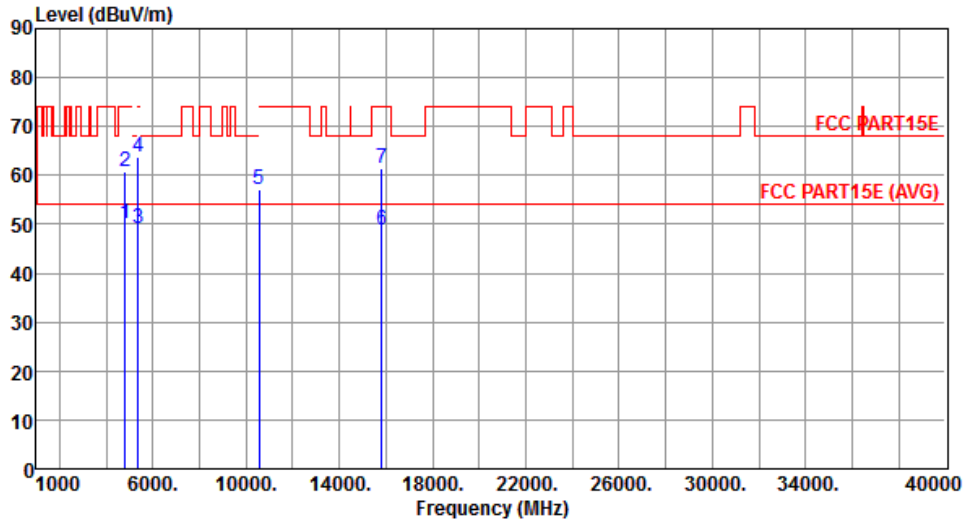
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.89	54.00	-9.11	39.47	5.42	Average	---	---
2	5000.00	58.25	74.00	-15.75	52.83	5.42	Peak	---	---
3	5350.00	47.25	54.00	-6.75	41.26	5.99	Average	---	---
4	5350.00	59.86	74.00	-14.14	53.87	5.99	Peak	---	---
5	10460.00	58.81	68.20	-9.39	44.21	14.60	Peak	---	---

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

*Factor includes antenna factor , cable loss and amplifier gain

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

Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



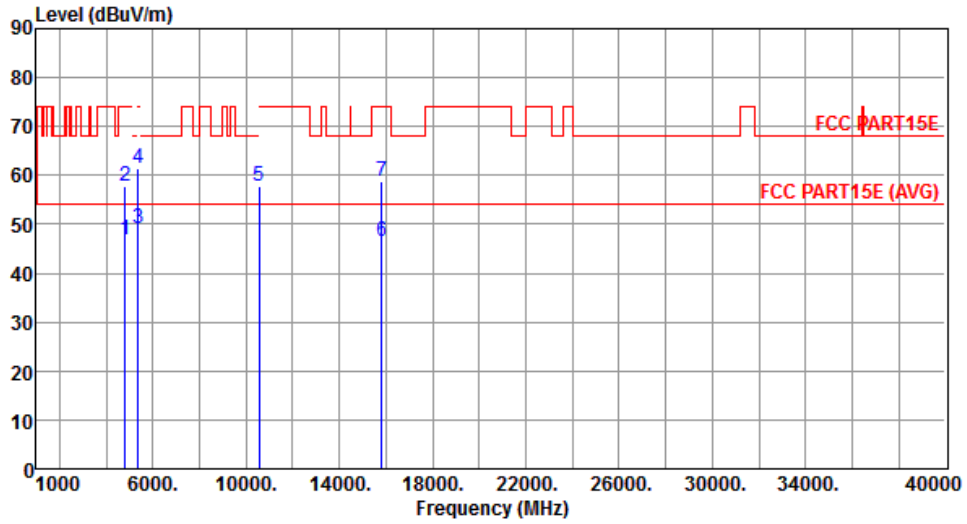
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4806.00	50.18	54.00	-3.82	45.13	5.05	Average	---	---
2	4806.00	60.62	74.00	-13.38	55.57	5.05	Peak	---	---
3	5350.00	49.18	54.00	-4.82	43.19	5.99	Average	---	---
4	5350.00	63.76	74.00	-10.24	57.77	5.99	Peak	---	---
5	10540.00	57.25	68.20	-10.95	42.50	14.75	Peak	---	---
6	15810.00	48.75	54.00	-5.25	34.03	14.72	Average	---	---
7	15810.00	61.43	74.00	-12.57	46.71	14.72	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		



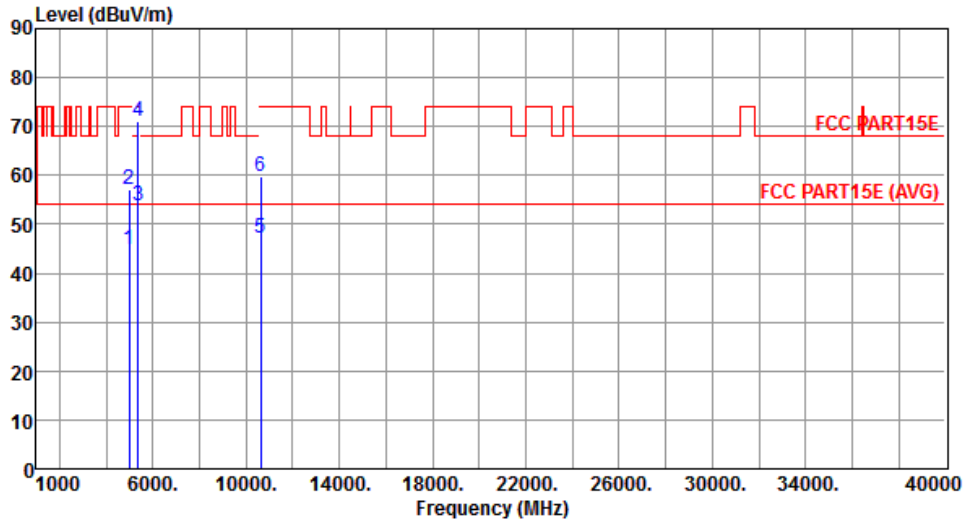
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4806.00	46.66	54.00	-7.34	41.61	5.05	Average	---	---
2	4806.00	57.82	74.00	-16.18	52.77	5.05	Peak	---	---
3	5350.00	49.07	54.00	-4.93	43.08	5.99	Average	---	---
4	5350.00	61.32	74.00	-12.68	55.33	5.99	Peak	---	---
5	10540.00	57.86	68.20	-10.34	43.11	14.75	Peak	---	---
6	15810.00	46.44	54.00	-7.56	31.72	14.72	Average	---	---
7	15810.00	58.92	74.00	-15.08	44.20	14.72	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		



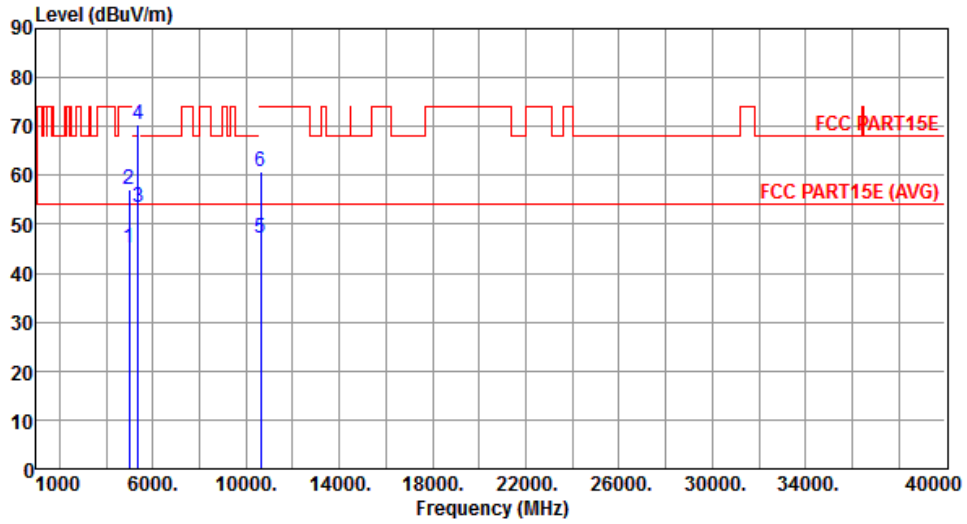
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.76	54.00	-9.24	39.34	5.42	Average	---	---
2	5000.00	57.10	74.00	-16.90	51.68	5.42	Peak	---	---
3	5350.39	53.76	54.00	-0.24	47.77	5.99	Average	---	---
4	5350.39	71.17	74.00	-2.83	65.18	5.99	Peak	---	---
5	10620.00	47.29	54.00	-6.71	32.39	14.90	Average	---	---
6	10620.00	59.92	74.00	-14.08	45.02	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		



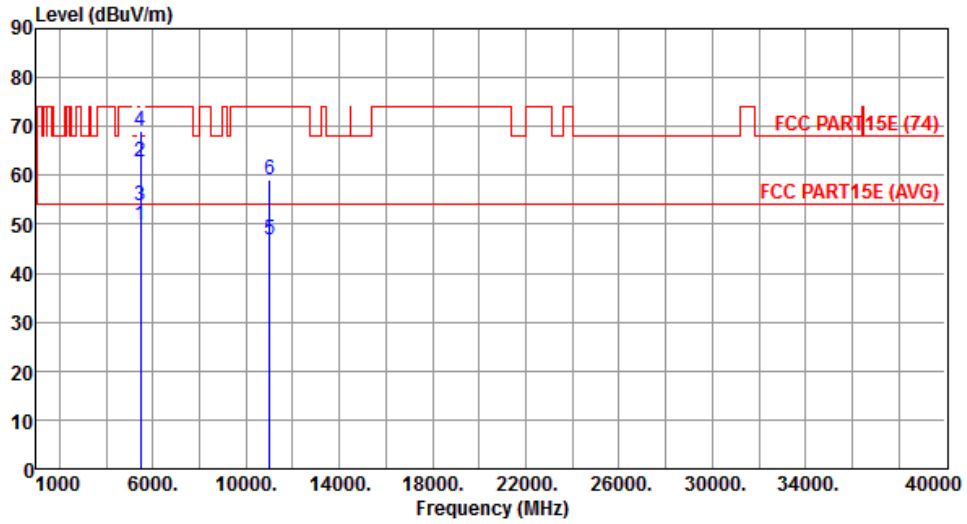
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	45.08	54.00	-8.92	39.66	5.42	Average	---	---
2	5000.00	57.00	74.00	-17.00	51.58	5.42	Peak	---	---
3	5350.39	53.59	54.00	-0.41	47.60	5.99	Average	---	---
4	5350.39	70.53	74.00	-3.47	64.54	5.99	Peak	---	---
5	10620.00	47.04	54.00	-6.96	32.14	14.90	Average	---	---
6	10620.00	60.64	74.00	-13.36	45.74	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		



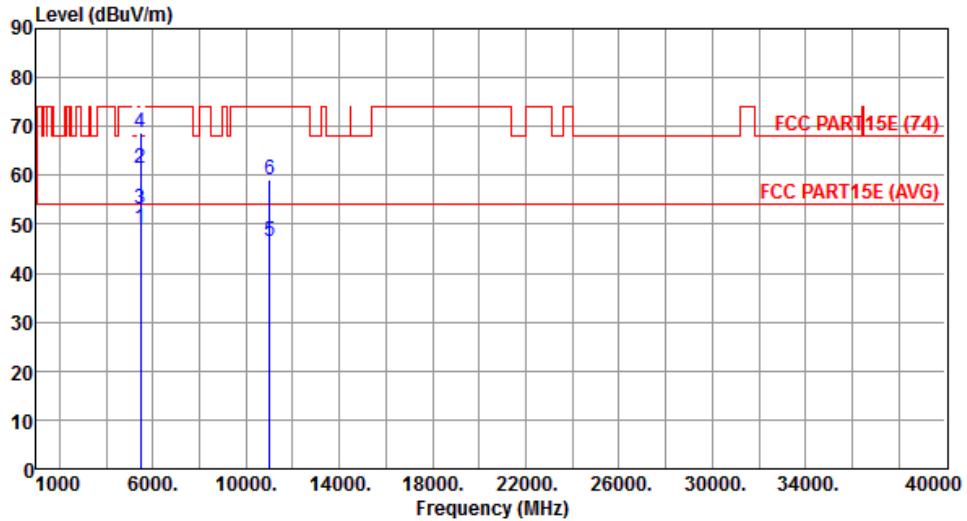
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.69	54.00	-4.31	43.57	6.12	Average	---	---
2	5460.00	62.90	74.00	-11.10	56.78	6.12	Peak	---	---
3	5469.68	53.89	54.00	-0.11	47.75	6.14	Average	---	---
4	5469.68	69.20	74.00	-4.80	63.06	6.14	Peak	---	---
5	11020.00	46.71	54.00	-7.29	31.05	15.66	Average	---	---
6	11020.00	59.01	74.00	-14.99	43.35	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		



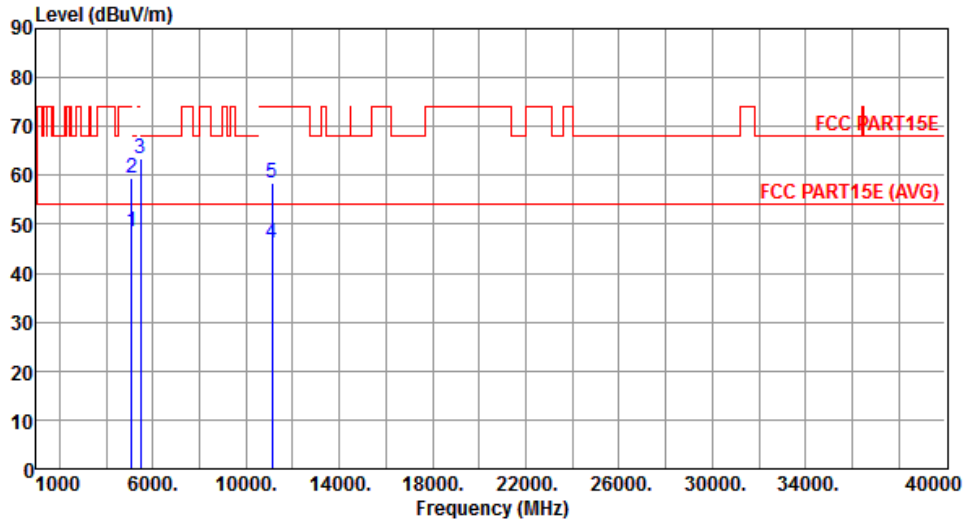
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	49.01	54.00	-4.99	42.89	6.12	Average	---	---
2	5460.00	61.60	74.00	-12.40	55.48	6.12	Peak	---	---
3	5469.68	53.21	54.00	-0.79	47.07	6.14	Average	---	---
4	5469.68	68.91	74.00	-5.09	62.77	6.14	Peak	---	---
5	11020.00	46.56	54.00	-7.44	30.90	15.66	Average	---	---
6	11020.00	59.08	74.00	-14.92	43.42	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		



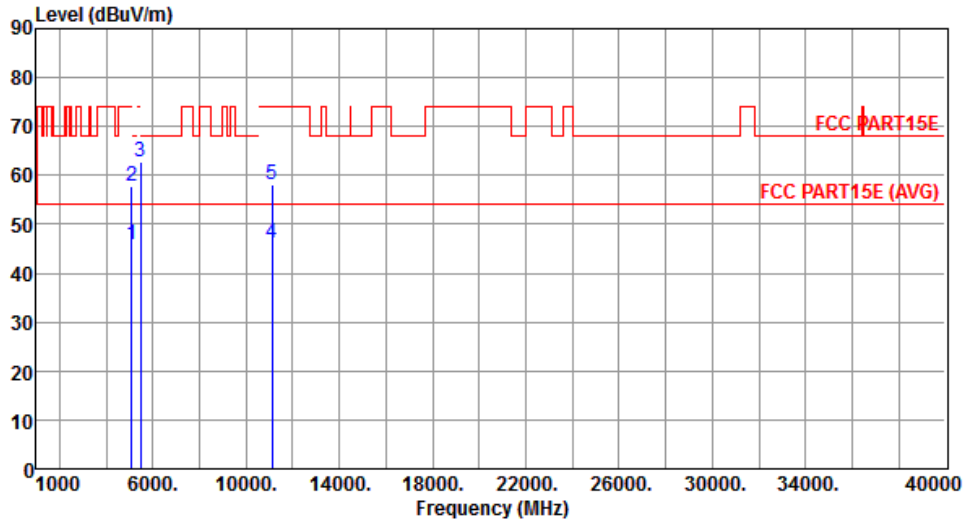
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5086.00	48.33	54.00	-5.67	42.75	5.58	Average	---	---
2	5086.00	59.33	74.00	-14.67	53.75	5.58	Peak	---	---
3	5470.00	63.30	68.20	-4.90	57.16	6.14	Peak	---	---
4	11100.00	46.10	54.00	-7.90	30.51	15.59	Average	---	---
5	11100.00	58.53	74.00	-15.47	42.94	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		



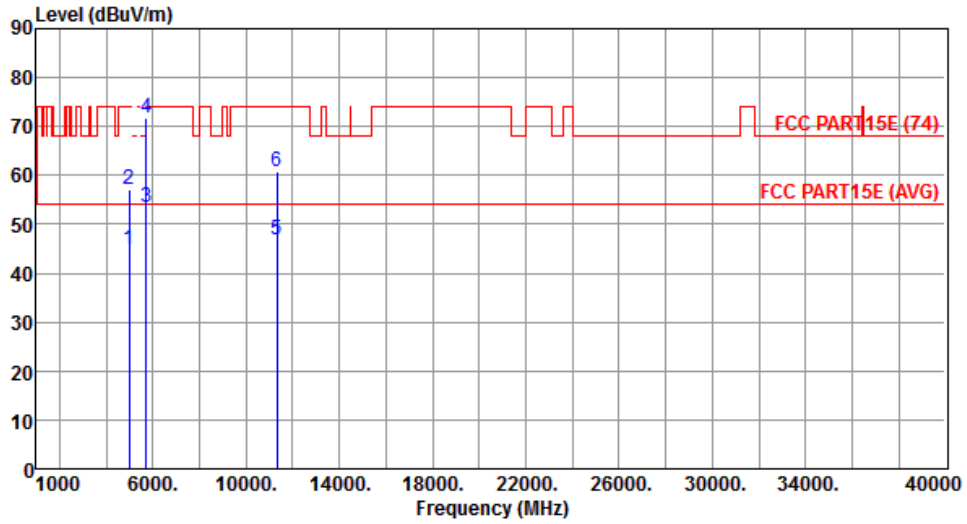
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5086.00	45.69	54.00	-8.31	40.11	5.58	Average	---	---
2	5086.00	57.65	74.00	-16.35	52.07	5.58	Peak	---	---
3	5470.00	62.82	68.20	-5.38	56.68	6.14	Peak	---	---
4	11100.00	46.07	54.00	-7.93	30.48	15.59	Average	---	---
5	11100.00	58.13	74.00	-15.87	42.54	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		



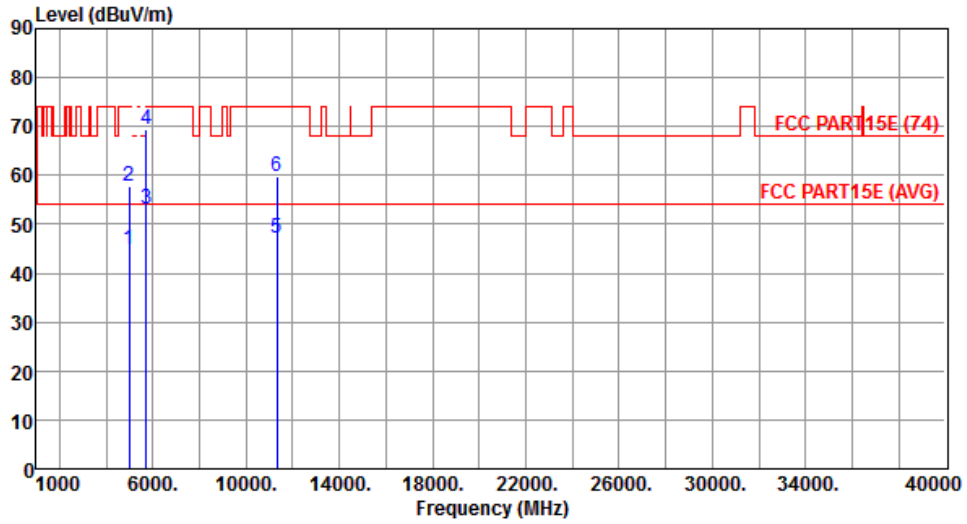
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5000.00	44.75	54.00	-9.25	39.33	5.42	Average	---	---
2	5000.00	57.08	74.00	-16.92	51.66	5.42	Peak	---	---
3	5725.00	53.53	54.00	-0.47	46.94	6.59	Average	---	---
4	5725.00	71.85	74.00	-2.15	65.26	6.59	Peak	---	---
5	11340.00	46.90	54.00	-7.10	31.55	15.35	Average	---	---
6	11340.00	60.62	74.00	-13.38	45.27	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	5000.00	44.89	54.00	-9.11	39.47	5.42	Average	---	---
2	5000.00	57.66	74.00	-16.34	52.24	5.42	Peak	---	---
3	5725.00	53.25	54.00	-0.75	46.66	6.59	Average	---	---
4	5725.00	69.46	74.00	-4.54	62.87	6.59	Peak	---	---
5	11340.00	47.03	54.00	-6.97	31.68	15.35	Average	---	---
6	11340.00	59.92	74.00	-14.08	44.57	15.35	Peak	---	---

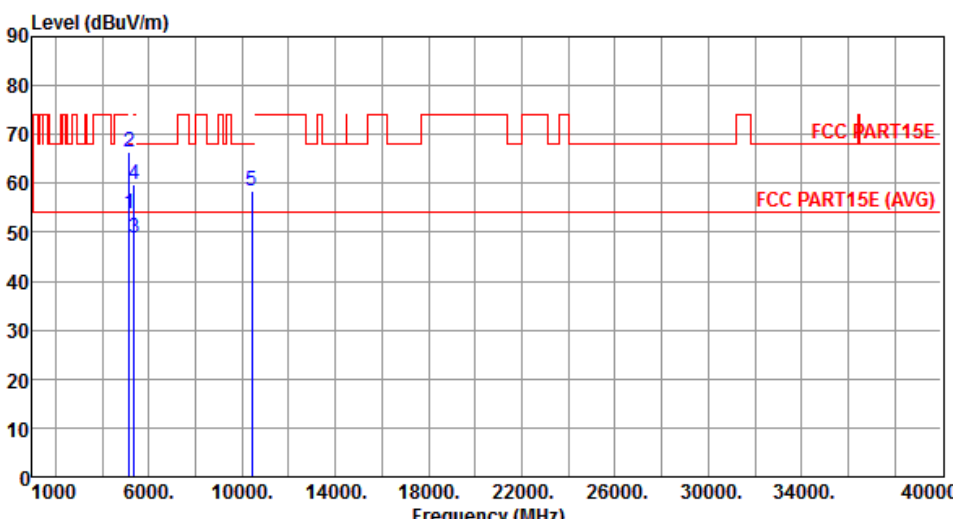
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

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

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

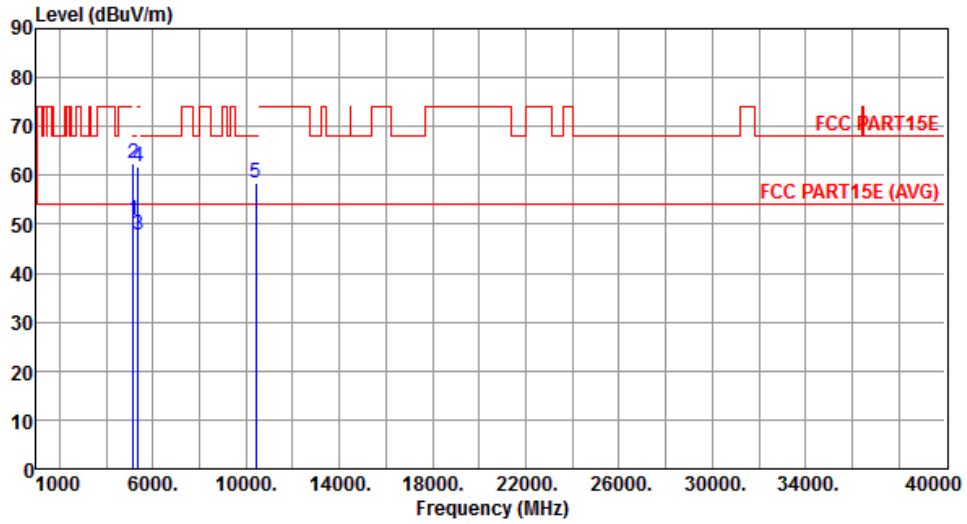
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.76	54.00	-0.24	48.05	5.71	Average	---	---
2	5150.00	66.47	74.00	-7.53	60.76	5.71	Peak	---	---
3	5367.60	48.84	54.00	-5.16	42.82	6.02	Average	---	---
4	5367.60	59.65	74.00	-14.35	53.63	6.02	Peak	---	---
5	10420.00	58.38	68.20	-9.82	43.84	14.54	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)	5210
Polarization	Vertical		



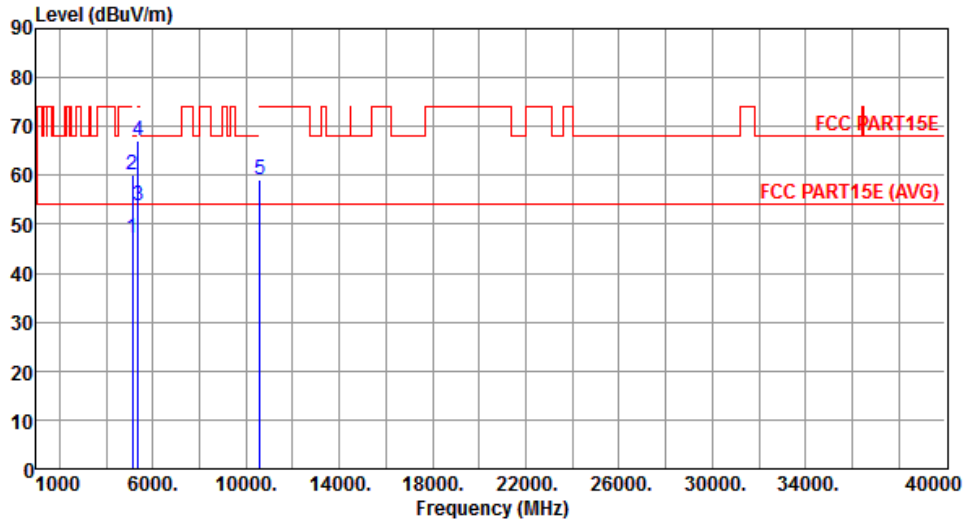
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	50.92	54.00	-3.08	45.21	5.71	Average	---	---
2	5150.00	62.58	74.00	-11.42	56.87	5.71	Peak	---	---
3	5367.60	47.98	54.00	-6.02	41.96	6.02	Average	---	---
4	5367.60	61.88	74.00	-12.12	55.86	6.02	Peak	---	---
5	10420.00	58.39	68.20	-9.81	43.85	14.54	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	Horizontal		



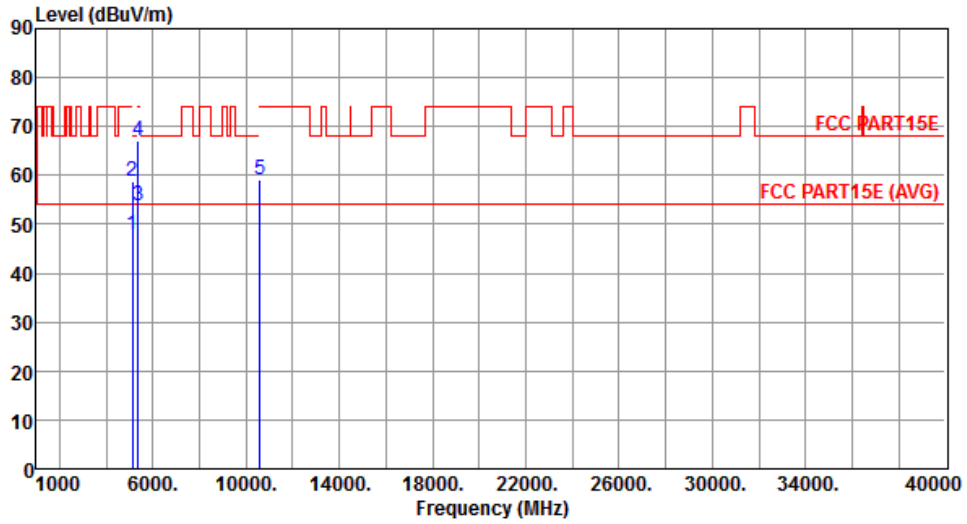
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5133.00	47.10	54.00	-6.90	41.43	5.67	Average	---	---
2	5133.00	60.19	74.00	-13.81	54.52	5.67	Peak	---	---
3	5352.30	53.81	54.00	-0.19	47.82	5.99	Average	---	---
4	5352.30	67.21	74.00	-6.79	61.22	5.99	Peak	---	---
5	10580.00	59.13	68.20	-9.07	44.30	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		



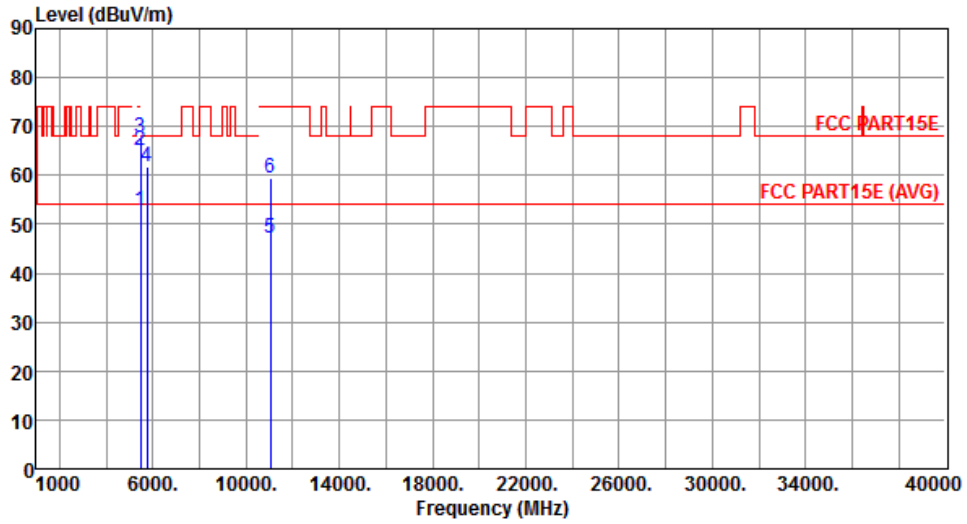
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5133.00	47.67	54.00	-6.33	42.00	5.67	Average	---	---
2	5133.00	58.87	74.00	-15.13	53.20	5.67	Peak	---	---
3	5352.30	53.70	54.00	-0.30	47.71	5.99	Average	---	---
4	5352.30	67.03	74.00	-6.97	61.04	5.99	Peak	---	---
5	10580.00	58.97	68.20	-9.23	44.14	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		



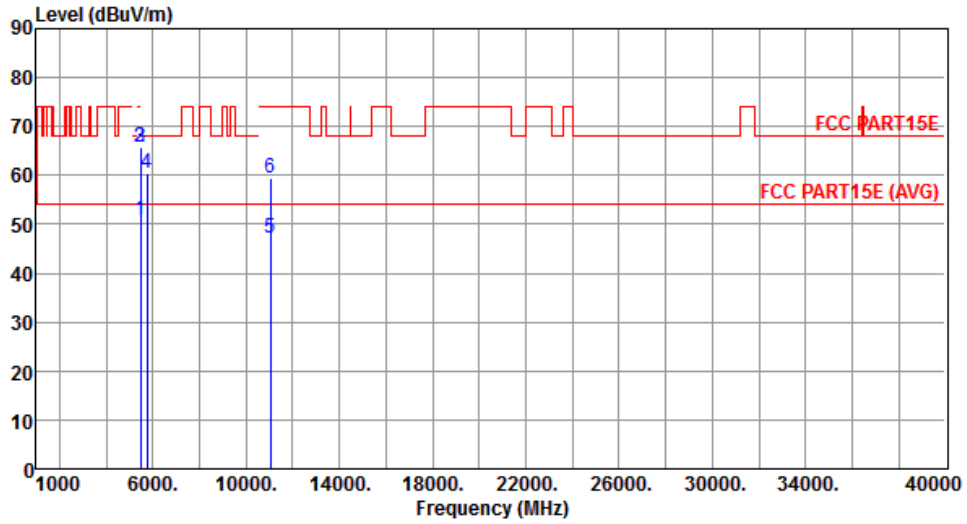
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	52.71	54.00	-1.29	46.59	6.12	Average	---	---
2	5460.00	65.19	74.00	-8.81	59.07	6.12	Peak	---	---
3	5466.50	67.86	68.20	-0.34	61.73	6.13	Peak	---	---
4	5743.35	61.66	68.20	-6.54	55.02	6.64	Peak	---	---
5	11060.00	47.29	54.00	-6.71	31.66	15.63	Average	---	---
6	11060.00	59.50	74.00	-14.50	43.87	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	50.94	54.00	-3.06	44.82	6.12	Average	---	---
2	5460.00	65.70	74.00	-8.30	59.58	6.12	Peak	---	---
3	5466.50	65.79	68.20	-2.41	59.66	6.13	Peak	---	---
4	5743.35	60.29	68.20	-7.91	53.65	6.64	Peak	---	---
5	11060.00	47.17	54.00	-6.83	31.54	15.63	Average	---	---
6	11060.00	59.31	74.00	-14.69	43.68	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).

3.7 Frequency Stability

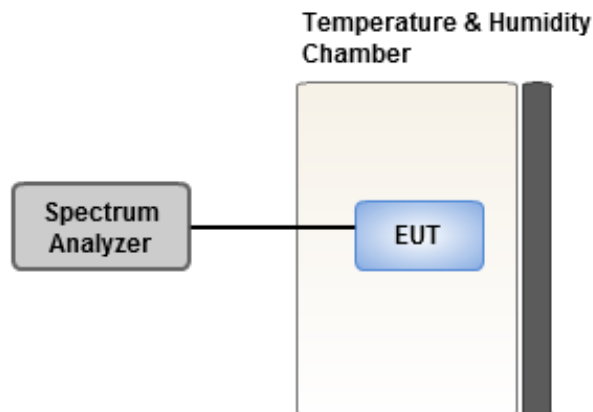
3.7.1 Limit of Frequency Stability

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

Frequency: 5320 MHz	Frequency Drift (ppm)			
	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	1.59	1.62	1.59	1.56
T20°C Vmin	2.01	2.07	2.00	2.04
T50°C Vnom	2.53	2.61	2.60	2.53
T40°C Vnom	2.11	2.18	2.10	2.19
T30°C Vnom	1.76	1.82	1.86	1.76
T20°C Vnom	1.50	1.52	1.52	1.53
T10°C Vnom	1.24	1.30	1.27	1.21
T0°C Vnom	0.80	0.79	0.80	0.81
T-10°C Vnom	-0.98	-0.89	-0.97	-0.99
T-20°C Vnom	-1.69	-1.67	-1.63	-1.62
T-30°C Vnom	-1.98	-1.97	-1.95	-2.00
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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