

# FCC Test Report

**FCC ID** : MXF-NECNP04LM1  
**Equipment** : Wireless LAN Unit  
**Model No.** : NP04LM1  
**Brand Name** : NEC  
**Applicant** : Gemtek Technology Co., Ltd.  
**Address** : No. 15-1 Zhanghua Road, Hsinchu Industrial  
Park, Hukou, Hsinchu, Taiwan, 30352  
**Standard** : 47 CFR FCC Part 15.407  
**Received Date** : Feb. 10, 2014  
**Tested Date** : Feb. 14 ~ Feb. 24, 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



Testing Laboratory  
2732

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## Table of Contents

<b>1</b>	<b>GENERAL DESCRIPTION .....</b>	<b>5</b>
1.1	Information.....	5
1.2	Local Support Equipment List .....	8
1.3	Test Setup Chart .....	8
1.4	The Equipment List .....	9
1.5	Testing Applied Standards .....	10
1.6	Measurement Uncertainty .....	10
<b>2</b>	<b>TEST CONFIGURATION .....</b>	<b>11</b>
2.1	Testing Condition .....	11
2.2	The Worst Test Modes and Channel Details .....	12
<b>3</b>	<b>TRANSMITTER TEST RESULTS.....</b>	<b>13</b>
3.1	Conducted Emissions.....	13
3.2	Emission Bandwidth .....	16
3.3	RF Output Power .....	19
3.4	Peak Power Spectral Density .....	22
3.5	Peak Excursion.....	25
3.6	Transmitter Radiated and Band Edge Emissions .....	30
3.7	Frequency Stability.....	91
<b>4</b>	<b>TEST LABORATORY INFORMATION .....</b>	<b>93</b>

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## Release Record

Report No.	Version	Description	Issued Date
FR421001AN	Rev. 01	Initial issue	Mar. 27, 2014

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.154MHz 44.64 (Margin -11.14dB) - AV	Pass
15.407(b)(1)(2)(3) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 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]: 5150~5250 MHz:16.65 5250~5350 MHz:20.77 5470~5725 MHz:19.45	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 <sub>TX</sub> )	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]	1 NOTE 4	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]	1 NOTE 4	MCS 0-7
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 8-15
n (HT40)	5150-5250 5250-5350 5470-5725	5190-5230 5270-5310 5510-5670	38-46 [2] 54-62 [2] 102-134 [3]	1 NOTE 4	MCS 0-7
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 8-15
ac (VHT20)	5150-5250 5250-5350 5470-5725	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [8]	1 NOTE 4	MCS 0-8
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]	1 NOTE 4	MCS 0-9
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]	1 NOTE 4	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: 802.11a/n/ac supports diversity function.

Note 4: 802.11n/ac support 1Tx or 2Tx. In this test report, 2Tx function had been chosen and only its data was record in this test report since conducted power of single TX chain is same under 1Tx and 2Tx.

### 1.1.2 Antenna Details

Ant. No.	Type	Operating Frequency (MHz) / Gain (dBi)					Connector
		2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850	
1	PCB	0.34	-2.8	-2.72	-1.29	-0.19	---
2	PCB	1.15	-0.58	-0.45	3.24	1.78	---

### 1.1.3 Power Supply Type of Equipment under Test (EUT)

<b>Power Supply Type</b>	5Vdc from host
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### 1.1.4 Accessories

N/A

### 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	<b>VHT 80</b>	
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

<b>Test Tool</b>	Realtek 11ac 8812A USB WLAN MP Diagnostic Program, Version: 0.0059.20130716		
<b>Duty Cycle and Duty Factor</b>	<b>Mode</b>	<b>Duty cycle (%)</b>	<b>Duty factor (dB)</b>
	11a	100%	0
	HT20	100%	0
	HT40	100%	0
	VHT20	100%	0
	VHT40	100%	0
	VHT80	100%	0

### 1.1.7 Power Setting

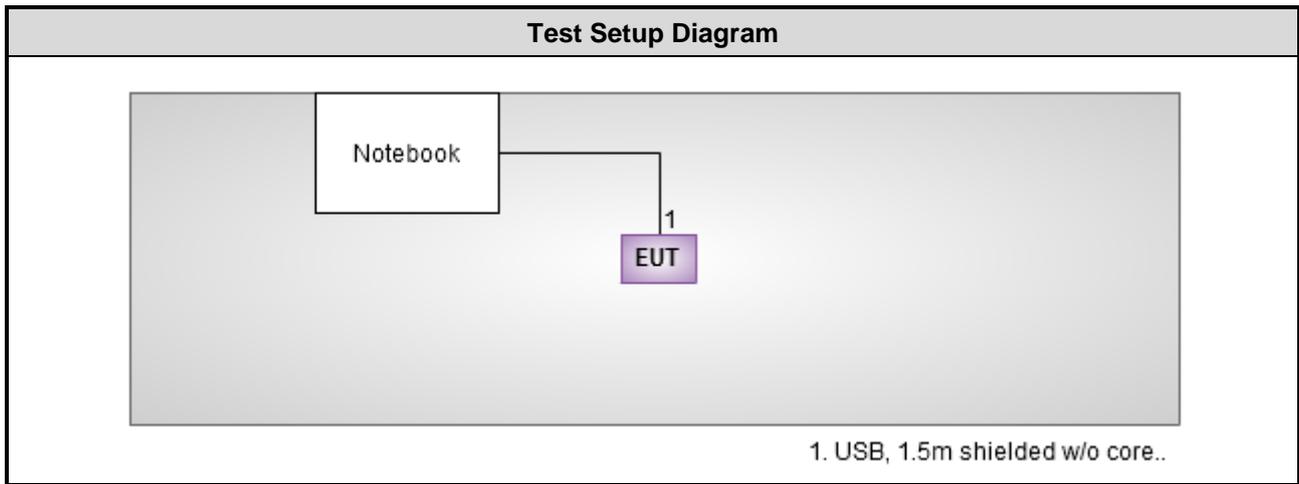
Channel	Frequency(MHz)	11a	HT20	VHT20
CH 36	5180	55	54/54	54/54
CH 40	5200	54	54/54	54/54
CH 48	5240	53	52/51	52/51
CH 52	5260	63	63/63	63/63
CH 60	5300	63	63/63	63/63
CH 64	5320	61	63/63	63/63
CH 100	5500	63	62/63	62/63
CH 116	5580	63	62/63	62/63
CH 140	5700	63	63/61	63/61

Channel	Frequency(MHz)	HT40	VHT40	VHT80
CH 38	5190	57/57	57/57	---
CH 46	5230	56/56	56/56	---
CH 54	5270	63/63	63/63	---
CH 62	5310	63/63	63/63	---
CH 102	5510	62/63	62/63	---
CH 110	5550	62/63	62/63	---
CH 134	5670	63/62	63/62	---
CH 42	5210	---	---	56/56
CH 58	5290	---	---	63/63
CH 106	5530	---	---	63/63

## 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	654RWW1	DoC	USB, 1.5m shielded 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 MESS-ELEKTRONIK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 24, 2013	Apr. 23, 2014
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Jan. 25, 2014	Jan. 24, 2015
Receiver	R&S	ESR3	101658	Jan. 10, 2014	Jan. 09, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jan. 02, 2014	Jan. 01, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Feb. 13, 2014	Feb. 12, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Preamplifier	Burgeon	BPA-530	SN:100219	Nov. 22, 2013	Nov. 21, 2014
Preamplifier	Agilent	83017A	MY39501308	Dec. 16, 2013	Dec. 15, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 16, 2013	Dec. 15, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 16, 2013	Dec. 15, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 16, 2013	Dec. 15, 2014
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 16, 2013	Dec. 15, 2014
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 16, 2013	Dec. 15, 2014
Note: Calibration Interval of instruments listed above is one year.					

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

<b>Test Item</b>	RF Conducted				
<b>Test Site</b>	(TH01-WS)				
<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Spectrum Analyzer	R&S	FSV40	101499	Feb. 08, 2014	Feb. 07, 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	19°C / 65%	Skys Huang
Radiated Emissions	03CH01-WS	19-20°C / 62-64%	Haru Yang Brad Wu
RF Conducted	TH01-WS	21°C / 61%	Felix Sung

➤ FCC site registration No.: 657002

➤ IC site registration No.: 10807A-1

## 2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
Conducted Emissions	VHT20	5320	MCS 0-NSS2	2Tx
Radiated Emissions <1GHz	VHT20	5320	MCS 0-NSS2	2Tx
RF Output Power	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	1Tx / chain 0
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 8	2Tx
	HT40	5190 / 5230/ 5270 / 5310 / 5510 5550 / 5670	MCS 8	2Tx
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0-NSS2	2Tx
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5550 / 5670	MCS 0-NSS2	2Tx
	VHT80	5210 / 5290 / 5530	MCS 0-NSS2	2Tx
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps	1Tx / chain 0
	VHT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0-NSS2	2Tx
	VHT40	5190 / 5230/ 5270 / 5310 / 5510 5550 / 5670	MCS 0-NSS2	2Tx
	VHT80	5210 / 5290 / 5530	MCS 0-NSS2	2Tx
Peak Excursion	11a	5240 / 5300 / 5700	6 Mbps	1Tx / chain 0
	VHT20	5200 / 5320 / 5700	MCS 0-NSS2	2Tx
	VHT40	5190 / 5310 / 5670	MCS 0-NSS2	2Tx
	VHT80	5210 / 5290 / 5530	MCS 0-NSS2	2Tx
Frequency Stability	Un-modulation	5320	---	---

**NOTE:**

1. The device supports diversity function that listed as below:
  - a.) 802.11achain 0 or chain 1.  
After pre-testing, **chain 0** has the worst emission value, therefore the following test results came out from this.
2. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.

## 3 Transmitter Test Results

### 3.1 Conducted Emissions

#### 3.1.1 Limit of Conducted Emissions

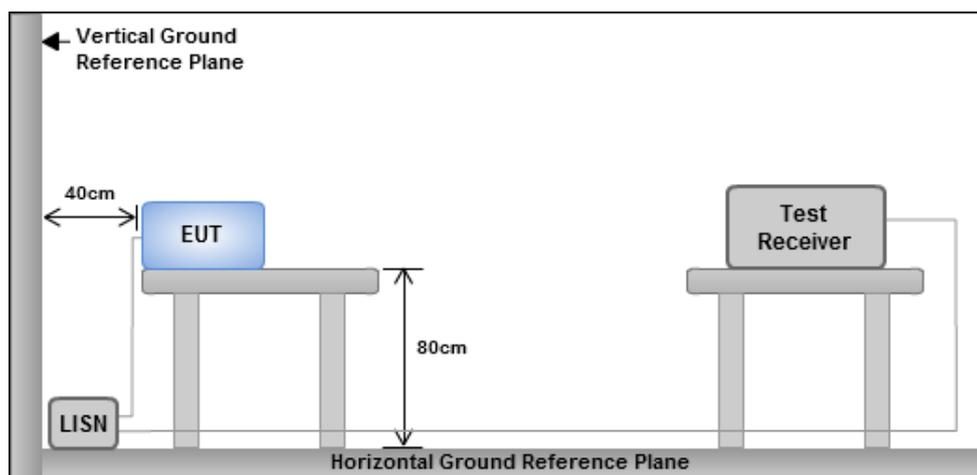
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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

#### 3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50  $\Omega$  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



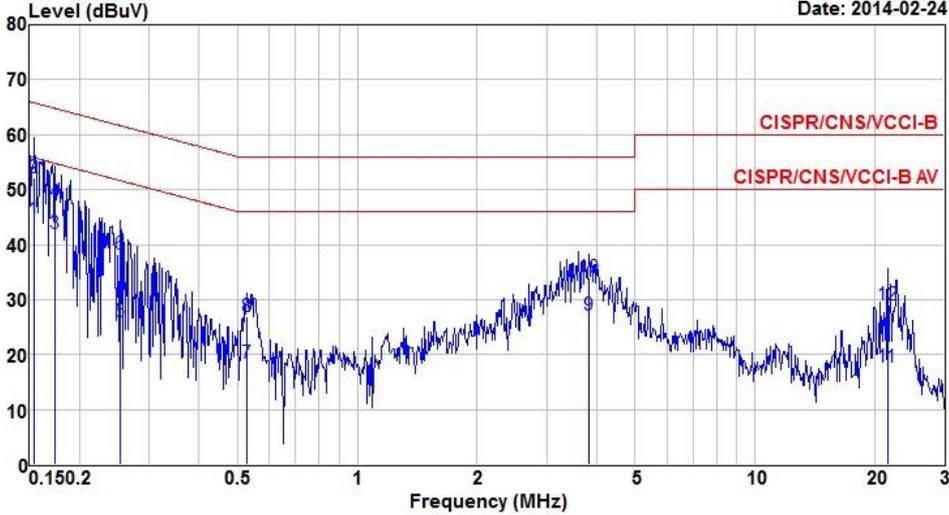
- Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

### 3.1.4 Test Result of Conducted Emissions

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5320
<b>Power Phase</b>	Line		

Date: 2014-02-24

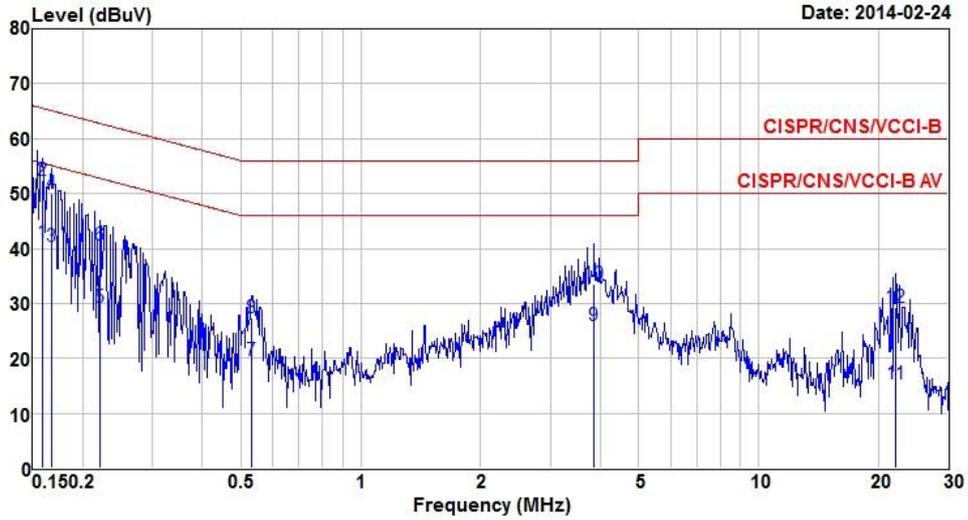


Line	Freq MHz	Level dBuV	Limit dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.154	44.64	55.78	-11.14	44.17	0.40	0.07	Average
2	0.154	52.10	65.78	-13.68	51.63	0.40	0.07	QP
3	0.174	41.96	54.77	-12.81	41.45	0.39	0.12	Average
4	0.174	47.72	64.77	-17.05	47.21	0.39	0.12	QP
5	0.253	26.09	51.64	-25.55	25.56	0.39	0.14	Average
6	0.253	38.22	61.64	-23.42	37.69	0.39	0.14	QP
7	0.529	18.39	46.00	-27.61	17.94	0.40	0.05	Average
8	0.529	26.81	56.00	-29.19	26.36	0.40	0.05	QP
9	3.820	27.16	46.00	-18.84	26.47	0.46	0.23	Average
10	3.820	34.08	56.00	-21.92	33.39	0.46	0.23	QP
11	21.600	17.63	50.00	-32.37	16.78	0.55	0.30	Average
12	21.600	29.13	60.00	-30.87	28.28	0.55	0.30	QP

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

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5320
<b>Power Phase</b>	Neutral		



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.158	41.00	55.56	-14.56	40.44	0.48	0.08	Average
2*	0.158	52.42	65.56	-13.14	51.86	0.48	0.08	QP
3	0.167	40.25	55.12	-14.87	39.67	0.48	0.10	Average
4	0.167	50.11	65.12	-15.01	49.53	0.48	0.10	QP
5	0.221	29.16	52.79	-23.63	28.52	0.48	0.16	Average
6	0.221	40.63	62.79	-22.16	39.99	0.48	0.16	QP
7	0.532	19.57	46.00	-26.43	19.05	0.47	0.05	Average
8	0.532	27.40	56.00	-28.60	26.88	0.47	0.05	QP
9	3.860	25.96	46.00	-20.04	25.20	0.52	0.24	Average
10	3.860	33.48	56.00	-22.52	32.72	0.52	0.24	QP
11	22.180	15.35	50.00	-34.65	14.47	0.55	0.33	Average
12	22.180	29.21	60.00	-30.79	28.33	0.55	0.33	QP

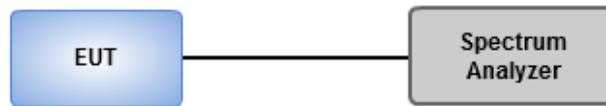
Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).  
 Note 2: Over Limit (dB) = Limit Line (dBuV) – Level (dBuV).

## 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.

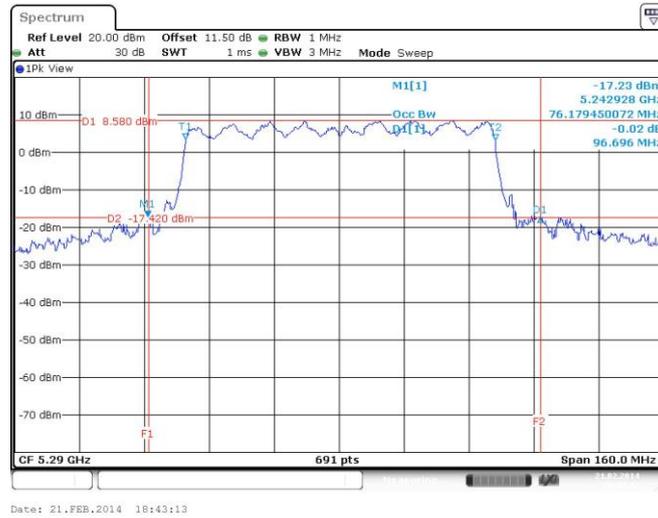
### 3.2.2 Test Setup



### 3.2.3 Test Result of Emission Bandwidth

Emission Bandwidth										
Mode	N <sub>TX</sub>	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% BW
11a	1	5180	22.96	---	---	16.86	---	---	17.00	16.27
11a	1	5200	23.19	---	---	16.86	---	---	17.00	16.27
11a	1	5240	23.54	---	---	16.82	---	---	17.00	16.26
11a	1	5260	40.43	---	---	17.66	---	---	24.00	23.47
11a	1	5300	41.30	---	---	17.91	---	---	24.00	23.53
11a	1	5320	40.22	---	---	17.47	---	---	24.00	23.42
11a	1	5500	35.36	---	---	17.15	---	---	24.00	23.34
11a	1	5580	40.29	---	---	17.29	---	---	24.00	23.38
11a	1	5700	44.57	---	---	17.95	---	---	24.00	23.54
VHT20	2	5180	21.97	21.33	---	17.87	17.76	---	17.00	16.49
VHT20	2	5200	21.74	21.45	---	17.95	17.73	---	17.00	16.49
VHT20	2	5240	21.97	21.68	---	17.84	17.76	---	17.00	16.49
VHT20	2	5260	25.68	21.91	---	17.95	17.80	---	24.00	23.50
VHT20	2	5300	26.14	23.77	---	17.91	17.76	---	24.00	23.49
VHT20	2	5320	29.74	23.30	---	17.95	17.76	---	24.00	23.49
VHT20	2	5500	22.09	21.57	---	17.87	17.73	---	24.00	23.49
VHT20	2	5580	22.67	21.57	---	17.87	17.73	---	24.00	23.49
VHT20	2	5700	25.91	22.03	---	17.95	17.76	---	24.00	23.49
VHT40	2	5190	44.87	44.75	---	36.92	36.66	---	17.00	17.00
VHT40	2	5230	45.10	44.52	---	37.32	36.79	---	17.00	17.00
VHT40	2	5270	44.99	44.75	---	36.92	36.73	---	24.00	24.00
VHT40	2	5310	49.51	45.10	---	37.19	36.79	---	24.00	24.00
VHT40	2	5510	44.75	44.87	---	36.99	36.73	---	24.00	24.00
VHT40	2	5550	44.99	44.75	---	37.05	36.79	---	24.00	24.00
VHT40	2	5670	51.13	44.52	---	37.05	36.73	---	24.00	24.00
VHT80	2	5210	84.17	85.57	---	75.90	75.65	---	17.00	17.00
VHT80	2	5290	87.65	96.70	---	75.77	75.77	---	24.00	24.00
VHT80	2	5530	84.64	86.49	---	75.77	75.77	---	24.00	24.00

### Worst Plots



### 3.3 RF Output Power

#### 3.3.1 Limit of RF Output Power

	Frequency Band (GHz)	Limit
<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.

#### 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

RF Output Power (dBm)								
Mode	N <sub>TX</sub>	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit
11a	1	5180	16.02	---	---	39.994	16.02	17.00
11a	1	5200	16.01	---	---	39.902	16.01	17.00
11a	1	5240	16.08	---	---	40.551	16.08	17.00
11a	1	5260	20.21	---	---	104.954	20.21	24.00
11a	1	5300	20.71	---	---	117.761	20.71	24.00
11a	1	5320	20.41	---	---	109.901	20.41	24.00
11a	1	5500	19.07	---	---	80.724	19.07	24.00
11a	1	5580	19.31	---	---	85.310	19.31	24.00
11a	1	5700	19.45	---	---	88.105	19.45	24.00
HT20	2	5180	13.16	12.88	---	40.110	16.03	17.00
HT20	2	5200	13.29	12.86	---	40.650	16.09	17.00
HT20	2	5240	13.22	12.62	---	39.270	15.94	17.00
HT20	2	5260	17.06	17.35	---	105.141	20.22	24.00
HT20	2	5300	17.43	17.63	---	113.278	20.54	24.00
HT20	2	5320	17.72	17.66	---	117.501	20.70	24.00
HT20	2	5500	14.89	14.68	---	60.208	17.80	24.00
HT20	2	5580	15.42	15.73	---	72.245	18.59	24.00
HT20	2	5700	16.11	16.09	---	81.476	19.11	24.00
HT40	2	5190	13.43	13.66	---	45.257	16.56	17.00
HT40	2	5230	13.62	13.49	---	45.350	16.57	17.00
HT40	2	5270	16.55	16.87	---	93.826	19.72	24.00
HT40	2	5310	17.09	17.11	---	102.573	20.11	24.00
HT40	2	5510	14.38	14.19	---	53.658	17.30	24.00
HT40	2	5550	14.56	14.73	---	58.293	17.66	24.00
HT40	2	5670	15.49	15.58	---	71.541	18.55	24.00

RF Output Power (dBm)								
Mode	N <sub>TX</sub>	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Total Power (mW)	Total Power (dBm)	Limit
VHT20	2	5180	13.23	12.91	---	40.581	16.08	17.00
VHT20	2	5200	13.41	12.99	---	41.835	16.22	17.00
VHT20	2	5240	13.31	12.67	---	39.922	16.01	17.00
VHT20	2	5260	17.11	17.42	---	106.612	20.28	24.00
VHT20	2	5300	17.55	17.67	---	115.364	20.62	24.00
VHT20	2	5320	17.78	17.74	---	119.408	20.77	24.00
VHT20	2	5500	14.94	14.71	---	60.769	17.84	24.00
VHT20	2	5580	15.51	15.83	---	73.846	18.68	24.00
VHT20	2	5700	16.15	16.14	---	82.325	19.16	24.00
VHT40	2	5190	13.54	13.73	---	46.199	16.65	17.00
VHT40	2	5230	13.67	13.58	---	46.084	16.64	17.00
VHT40	2	5270	16.66	16.92	---	95.549	19.80	24.00
VHT40	2	5310	17.17	17.21	---	104.721	20.20	24.00
VHT40	2	5510	14.46	14.27	---	54.656	17.38	24.00
VHT40	2	5550	14.69	14.81	---	59.713	17.76	24.00
VHT40	2	5670	15.52	15.69	---	72.713	18.62	24.00
VHT80	2	5210	13.42	13.51	---	44.417	16.48	17.00
VHT80	2	5290	17.07	17.25	---	104.022	20.17	24.00
VHT80	2	5530	15.22	14.91	---	64.240	18.08	24.00

## 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

### 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.

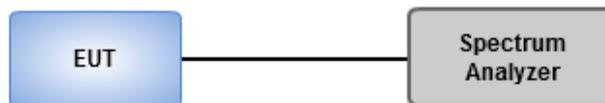
Method SA-2

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



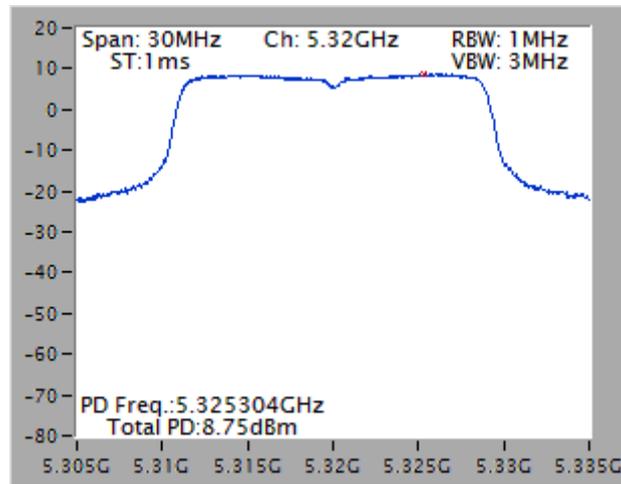
### 3.4.4 Test Result of Peak Power Spectral Density

Condition			Peak Power Spectral Density (dBm)			
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	PPSD w/o D.F (dBm)	Duty factor (dB)	PPSD with D.F (dBm)	PPSD Limit (dBm)
11a	1	5180	3.68	0.00	3.68	4
11a	1	5200	3.59	0.00	3.59	4
11a	1	5240	3.84	0.00	3.84	4
11a	1	5260	7.24	0.00	7.24	11
11a	1	5300	7.78	0.00	7.78	11
11a	1	5320	7.52	0.00	7.52	11
11a	1	5500	6.57	0.00	6.57	11
11a	1	5580	6.75	0.00	6.75	11
11a	1	5700	7.17	0.00	7.17	11
VHT20	2	5180	3.64	0.00	3.64	4
VHT20	2	5200	3.85	0.00	3.85	4
VHT20	2	5240	3.10	0.00	3.10	4
VHT20	2	5260	8.02	0.00	8.02	11
VHT20	2	5300	8.20	0.00	8.20	11
VHT20	2	5320	8.75	0.00	8.75	11
VHT20	2	5500	5.36	0.00	5.36	11
VHT20	2	5580	5.87	0.00	5.87	11
VHT20	2	5700	6.42	0.00	6.42	11
VHT40	2	5190	0.46	0.00	0.46	4
VHT40	2	5230	1.34	0.00	1.34	4
VHT40	2	5270	3.88	0.00	3.88	11
VHT40	2	5310	4.69	0.00	4.69	11
VHT40	2	5510	1.75	0.00	1.75	11
VHT40	2	5550	2.55	0.00	2.55	11
VHT40	2	5670	3.27	0.00	3.27	11
VHT80	2	5210	-1.99	0.00	-1.99	4
VHT80	2	5290	2.48	0.00	2.48	11
VHT80	2	5530	-0.56	0.00	-0.56	11

Note:

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

### Worst Plots



## 3.5 Peak Excursion

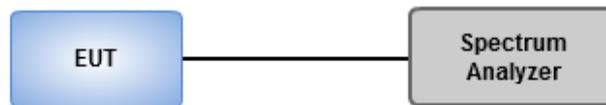
### 3.5.1 Peak Excursion Limit

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(MHz)		5150~5250					
Mode	Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5240	6.66	0.00	6.66	13
11a	QPSK	1	5240	8.67	0.00	8.67	13
11a	16QAM	1	5240	7.98	0.00	7.98	13
11a	64QAM	1	5240	8.99	0.00	8.99	13
VHT20	BPSK	2	5200	7.49	0.00	7.49	13
VHT20	QPSK	2	5200	8.72	0.00	8.72	13
VHT20	16QAM	2	5200	8.79	0.00	8.79	13
VHT20	64QAM	2	5200	8.94	0.00	8.94	13
VHT20	256QAM	2	5200	8.66	0.00	8.66	13
VHT40	BPSK	2	5190	9.31	0.00	9.31	13
VHT40	QPSK	2	5190	8.75	0.00	8.75	13
VHT40	16QAM	2	5190	8.17	0.00	8.17	13
VHT40	64QAM	2	5190	7.75	0.00	7.75	13
VHT40	256QAM	2	5190	9.51	0.00	9.51	13
VHT80	BPSK	2	5210	8.15	0.00	8.15	13
VHT80	QPSK	2	5210	7.91	0.00	7.91	13
VHT80	16QAM	2	5210	7.85	0.00	7.85	13
VHT80	64QAM	2	5210	8.49	0.00	8.49	13
VHT80	256QAM	2	5210	8.43	0.00	8.43	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission.

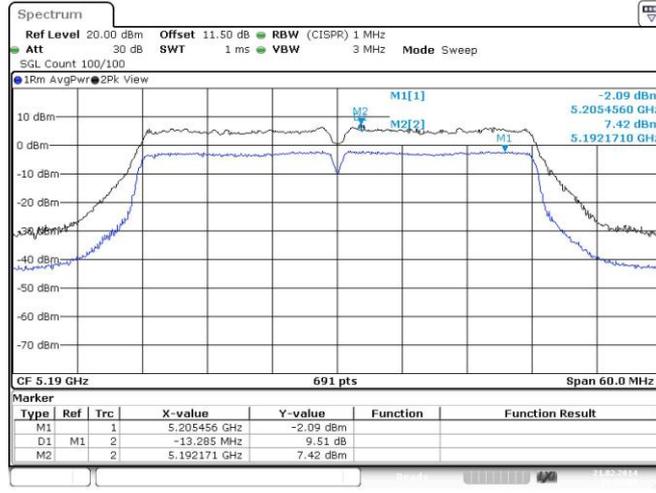
Frequency band(MHz)		5250~5350					
Mode	Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5300	7.1	0.00	7.10	13
11a	QPSK	1	5300	8.43	0.00	8.43	13
11a	16QAM	1	5300	7.33	0.00	7.33	13
11a	64QAM	1	5300	8.57	0.00	8.57	13
VHT20	BPSK	2	5320	7.33	0.00	7.33	13
VHT20	QPSK	2	5320	8.34	0.00	8.34	13
VHT20	16QAM	2	5320	8.67	0.00	8.67	13
VHT20	64QAM	2	5320	8.25	0.00	8.25	13
VHT20	256QAM	2	5320	7.94	0.00	7.94	13
VHT40	BPSK	2	5310	9.45	0.00	9.45	13
VHT40	QPSK	2	5310	8.57	0.00	8.57	13
VHT40	16QAM	2	5310	8.46	0.00	8.46	13
VHT40	64QAM	2	5310	9.48	0.00	9.48	13
VHT40	256QAM	2	5310	9.22	0.00	9.22	13
VHT80	BPSK	2	5290	8.57	0.00	8.57	13
VHT80	QPSK	2	5290	8.11	0.00	8.11	13
VHT80	16QAM	2	5290	8.21	0.00	8.21	13
VHT80	64QAM	2	5290	8.6	0.00	8.60	13
VHT80	256QAM	2	5290	8.1	0.00	8.10	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission.

Frequency band(MHz)		5470~5725					
Mode	Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measured value(dB)	Duty factor (dB)	Peak Excursion (dB)	Limit
11a	BPSK	1	5700	7.22	0.00	7.22	13
11a	QPSK	1	5700	8.48	0.00	8.48	13
11a	16QAM	1	5700	7.87	0.00	7.87	13
11a	64QAM	1	5700	8.78	0.00	8.78	13
VHT20	BPSK	2	5700	7.58	0.00	7.58	13
VHT20	QPSK	2	5700	8.03	0.00	8.03	13
VHT20	16QAM	2	5700	8.83	0.00	8.83	13
VHT20	64QAM	2	5700	8.18	0.00	8.18	13
VHT20	256QAM	2	5700	7.99	0.00	7.99	13
VHT40	BPSK	2	5670	9.17	0.00	9.17	13
VHT40	QPSK	2	5670	8.65	0.00	8.65	13
VHT40	16QAM	2	5670	8.55	0.00	8.55	13
VHT40	64QAM	2	5670	7.75	0.00	7.75	13
VHT40	256QAM	2	5670	8.99	0.00	8.99	13
VHT80	BPSK	2	5530	7.75	0.00	7.75	13
VHT80	QPSK	2	5530	7.43	0.00	7.43	13
VHT80	16QAM	2	5530	7.9	0.00	7.90	13
VHT80	64QAM	2	5530	8.77	0.00	8.77	13
VHT80	256QAM	2	5530	8.78	0.00	8.78	13

Note: Measured value = Peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission.

### 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

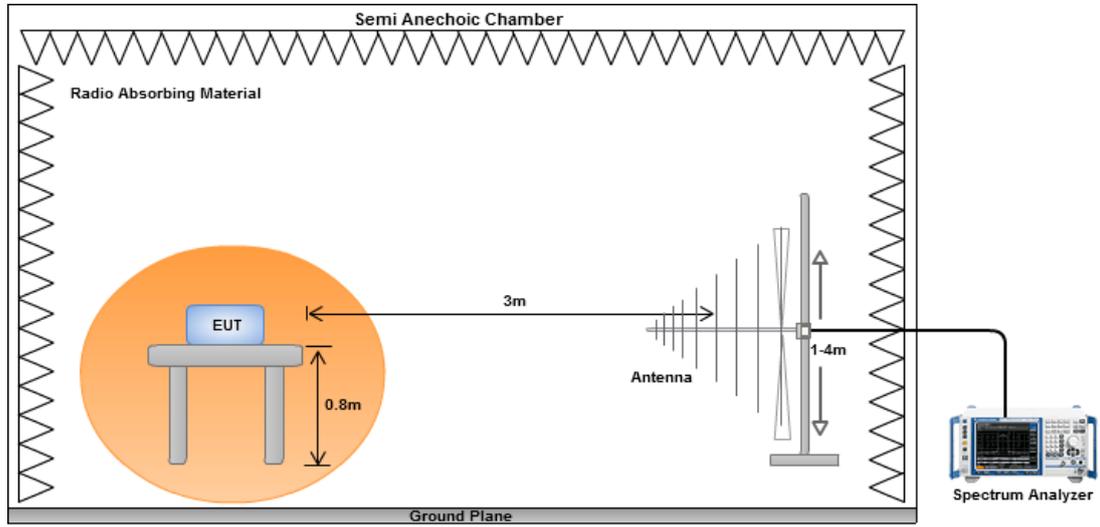
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

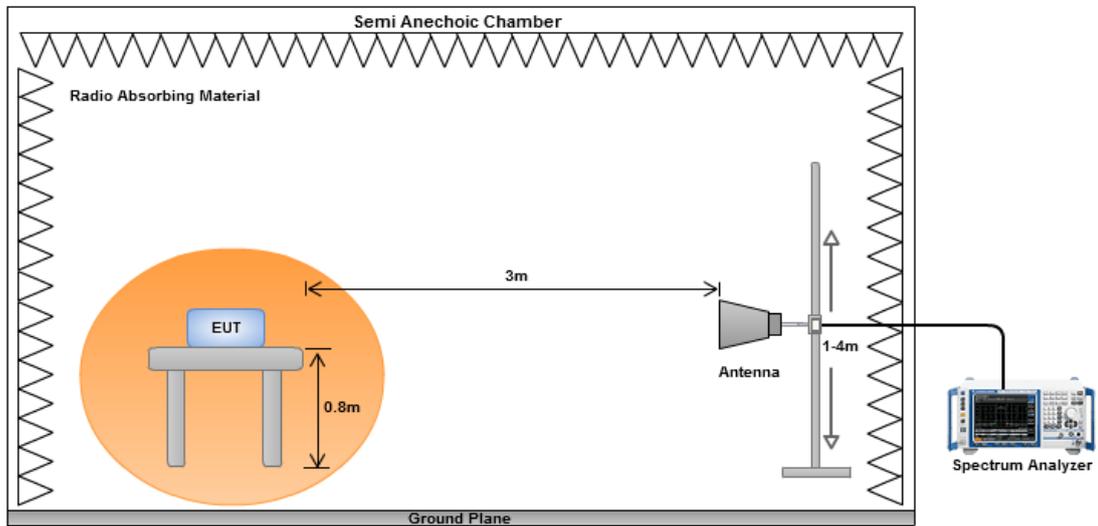
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

### 3.6.3 Test Setup

#### Radiated Emissions below 1 GHz

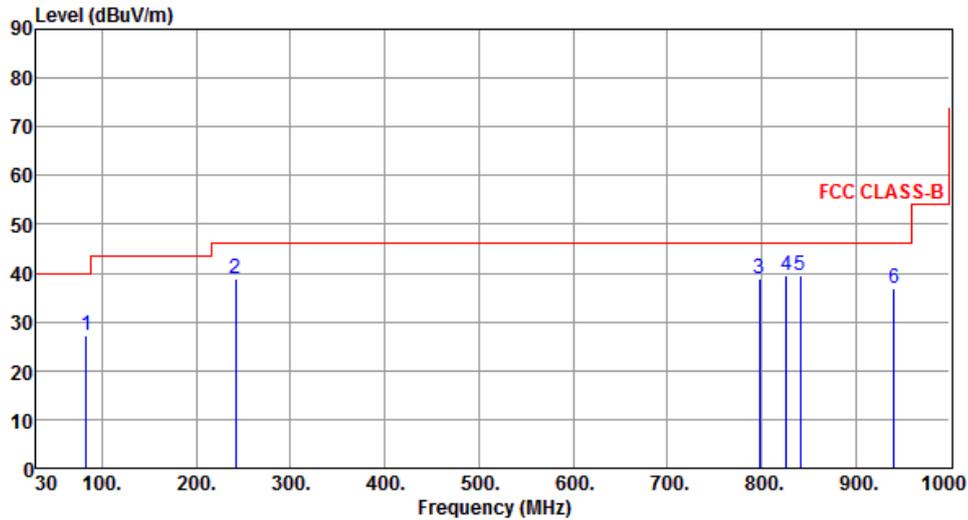


#### Radiated Emissions above 1 GHz



### 3.6.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5320
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	83.35	27.25	40.00	-12.75	49.33	-22.08	Peak	---	---
2	241.46	38.93	46.00	-7.07	57.05	-18.12	Peak	---	---
3	798.24	38.98	46.00	-7.02	45.77	-6.79	Peak	---	---
4	826.37	39.56	46.00	-6.44	46.00	-6.44	Peak	---	---
5	840.92	39.43	46.00	-6.57	45.69	-6.26	Peak	---	---
6	940.83	36.83	46.00	-9.17	41.65	-4.82	Peak	---	---

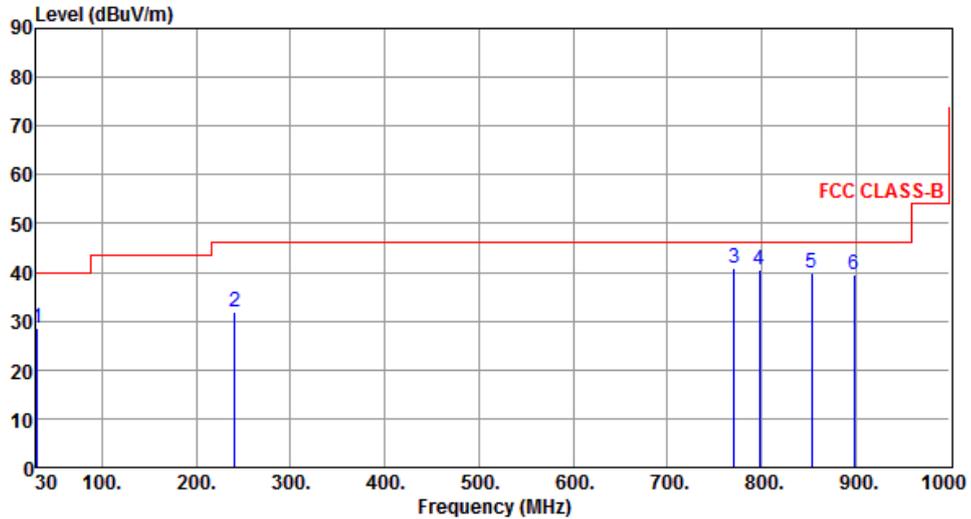
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*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.

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5320
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	30.97	28.69	40.00	-11.31	46.33	-17.64	Peak	---	---
2	240.49	32.02	46.00	-13.98	50.16	-18.14	Peak	---	---
3	771.08	40.73	46.00	-5.27	47.78	-7.05	Peak	---	---
4	798.24	40.51	46.00	-5.49	47.30	-6.79	Peak	---	---
5	853.53	39.70	46.00	-6.30	45.82	-6.12	Peak	---	---
6	898.15	39.54	46.00	-6.46	45.05	-5.51	Peak	---	---

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

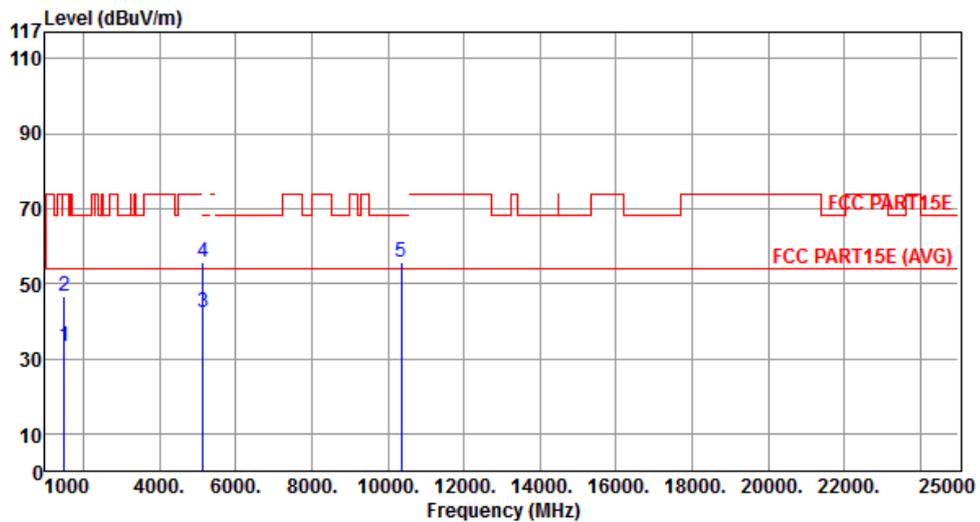
\*Factor includes antenna factor, cable loss and amplifier gain

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

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5180
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



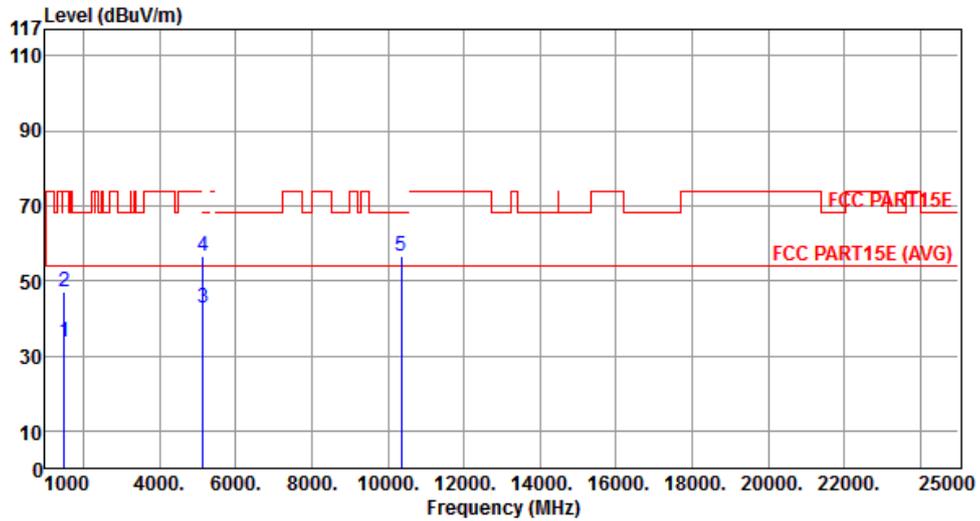
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.46	54.00	-20.54	40.19	-6.73	Average	---	---
2	1500.00	46.49	74.00	-27.51	53.22	-6.73	Peak	---	---
3	5150.00	42.29	54.00	-11.71	36.63	5.66	Average	---	---
4	5150.00	55.82	74.00	-18.18	50.16	5.66	Peak	---	---
5	10360.00	55.89	68.20	-12.31	40.92	14.97	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5180
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



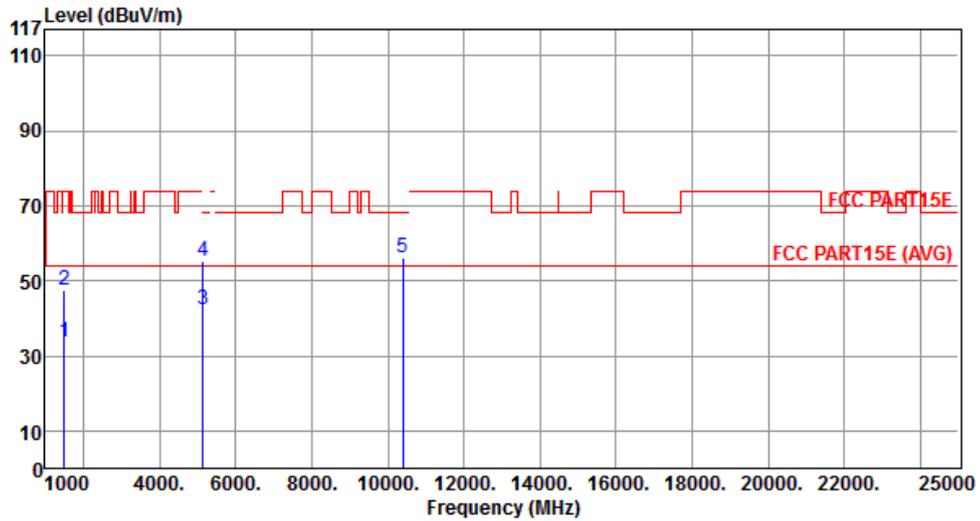
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.50	54.00	-20.50	40.23	-6.73	Average	---	---
2	1500.00	46.89	74.00	-27.11	53.62	-6.73	Peak	---	---
3	5150.00	42.85	54.00	-11.15	37.19	5.66	Average	---	---
4	5150.00	56.53	74.00	-17.47	50.87	5.66	Peak	---	---
5	10360.00	56.66	68.20	-11.54	41.69	14.97	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5200
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



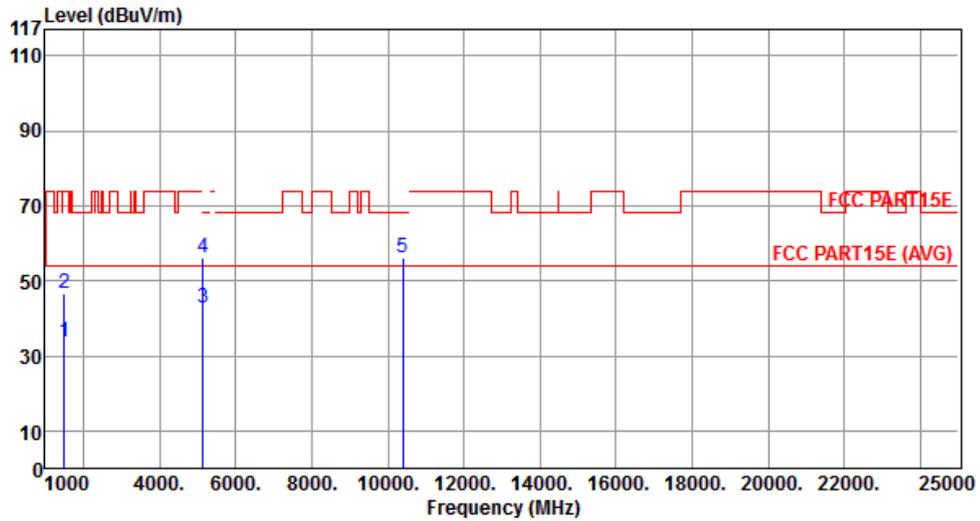
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.61	54.00	-20.39	40.34	-6.73	Average	---	---
2	1500.00	47.51	74.00	-26.49	54.24	-6.73	Peak	---	---
3	5150.00	42.24	54.00	-11.76	36.58	5.66	Average	---	---
4	5150.00	55.33	74.00	-18.67	49.67	5.66	Peak	---	---
5	10400.00	56.28	68.20	-11.92	41.25	15.03	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5200
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



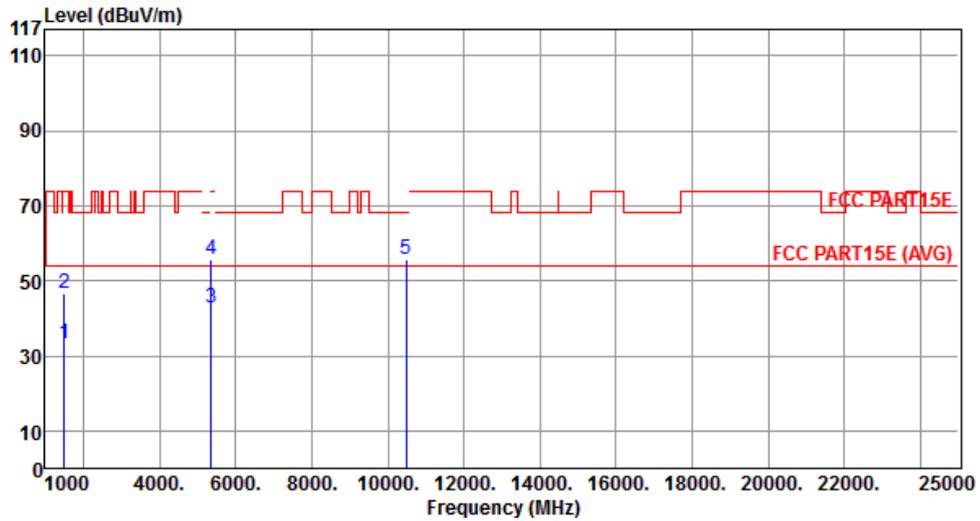
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.50	54.00	-20.50	40.23	-6.73	Average	---	---
2	1500.00	46.84	74.00	-27.16	53.57	-6.73	Peak	---	---
3	5150.00	42.64	54.00	-11.36	36.98	5.66	Average	---	---
4	5150.00	56.16	74.00	-17.84	50.50	5.66	Peak	---	---
5	10400.00	56.31	68.20	-11.89	41.28	15.03	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5240
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



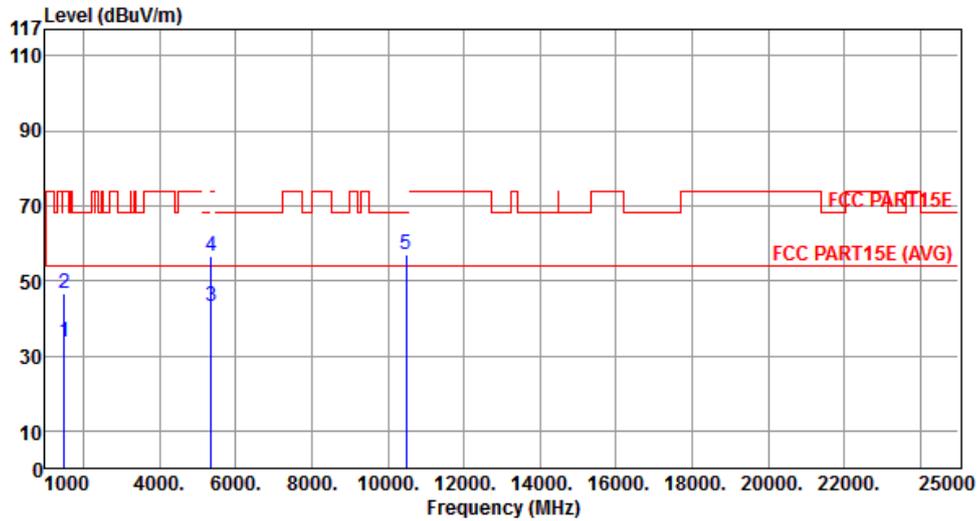
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.38	54.00	-20.62	40.11	-6.73	Average	---	---
2	1500.00	46.84	74.00	-27.16	53.57	-6.73	Peak	---	---
3	5350.00	42.73	54.00	-11.27	36.92	5.81	Average	---	---
4	5350.00	55.81	74.00	-18.19	50.00	5.81	Peak	---	---
5	10480.00	55.81	68.20	-12.39	40.67	15.14	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5240
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



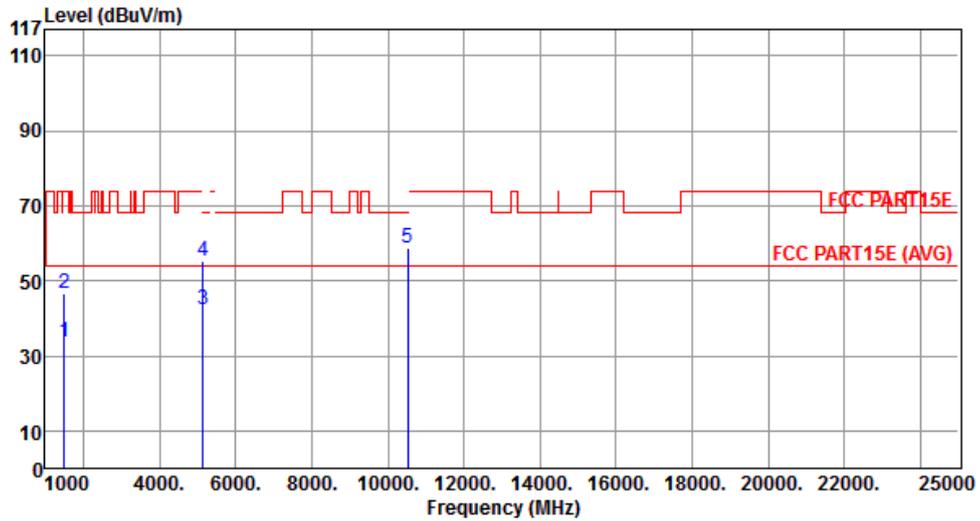
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.53	54.00	-20.47	40.26	-6.73	Average	---	---
2	1500.00	46.54	74.00	-27.46	53.27	-6.73	Peak	---	---
3	5350.00	43.06	54.00	-10.94	37.25	5.81	Average	---	---
4	5350.00	56.72	74.00	-17.28	50.91	5.81	Peak	---	---
5	10480.00	57.00	68.20	-11.20	41.86	15.14	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5260
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



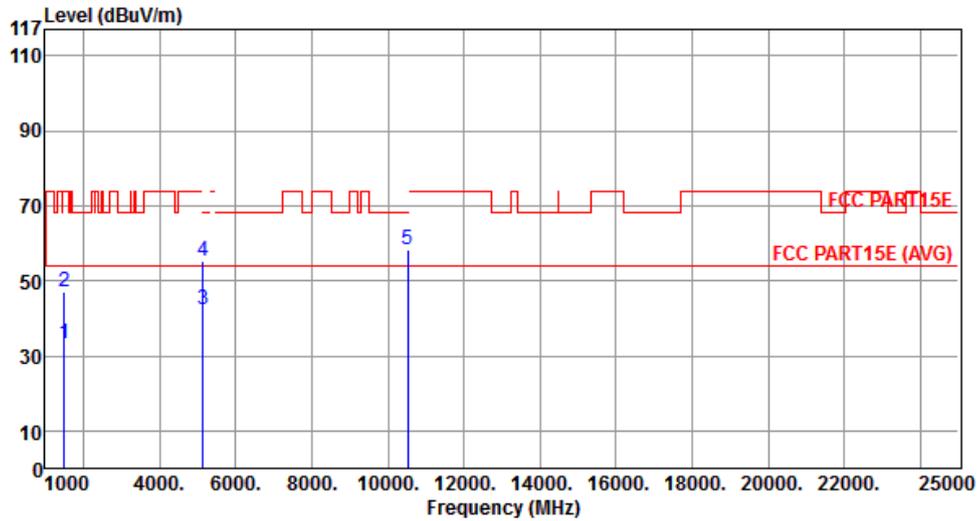
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.59	54.00	-20.41	40.32	-6.73	Average	---	---
2	1500.00	46.62	74.00	-27.38	53.35	-6.73	Peak	---	---
3	5150.00	42.47	54.00	-11.53	36.81	5.66	Average	---	---
4	5150.00	55.22	74.00	-18.78	49.56	5.66	Peak	---	---
5	10520.00	58.67	68.20	-9.53	43.51	15.16	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5260
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



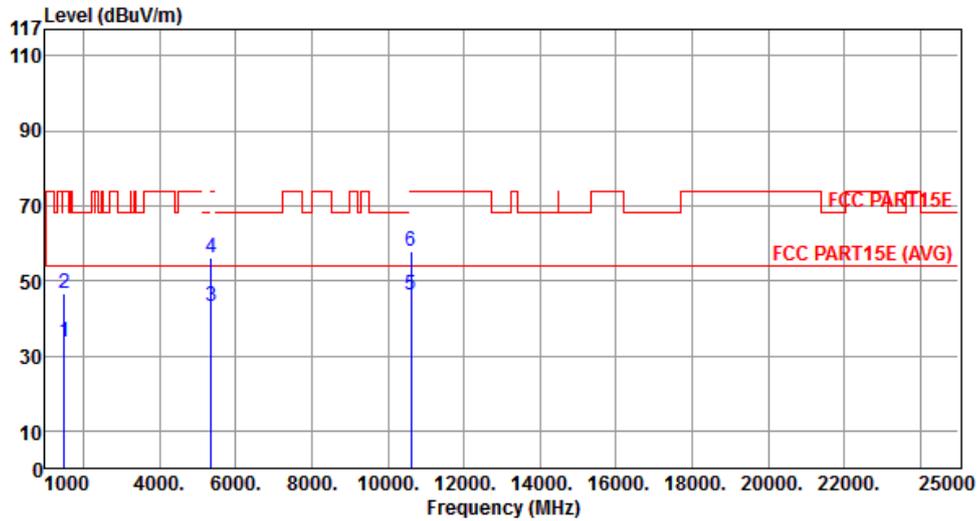
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.45	54.00	-20.55	40.18	-6.73	Average	---	---
2	1500.00	47.06	74.00	-26.94	53.79	-6.73	Peak	---	---
3	5150.00	42.43	54.00	-11.57	36.77	5.66	Average	---	---
4	5150.00	55.40	74.00	-18.60	49.74	5.66	Peak	---	---
5	10520.00	58.38	68.20	-9.82	43.22	15.16	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5300
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



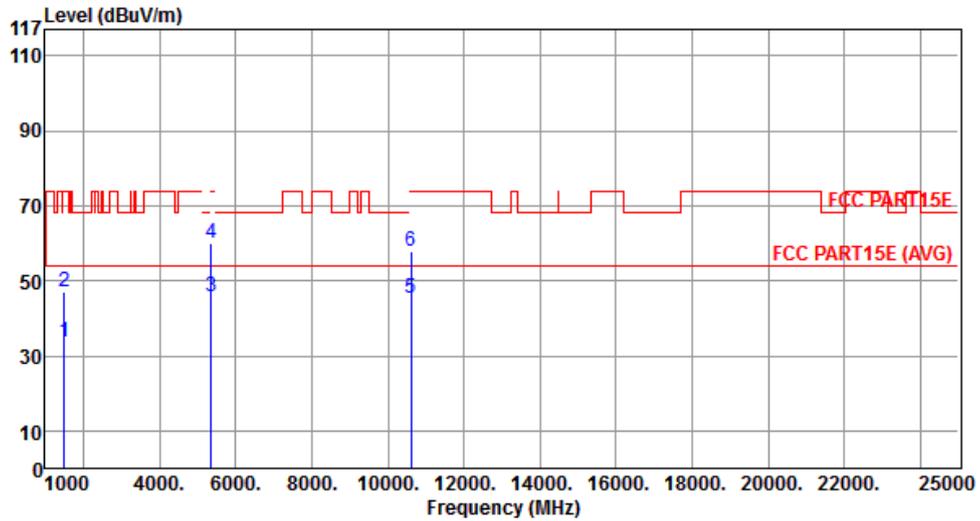
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.47	54.00	-20.53	40.20	-6.73	Average	---	---
2	1500.00	46.53	74.00	-27.47	53.26	-6.73	Peak	---	---
3	5350.00	43.10	54.00	-10.90	37.29	5.81	Average	---	---
4	5350.00	56.01	74.00	-17.99	50.20	5.81	Peak	---	---
5	10600.00	46.16	54.00	-7.84	30.98	15.18	Average	---	---
6	10600.00	57.90	74.00	-16.10	42.72	15.18	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5300
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



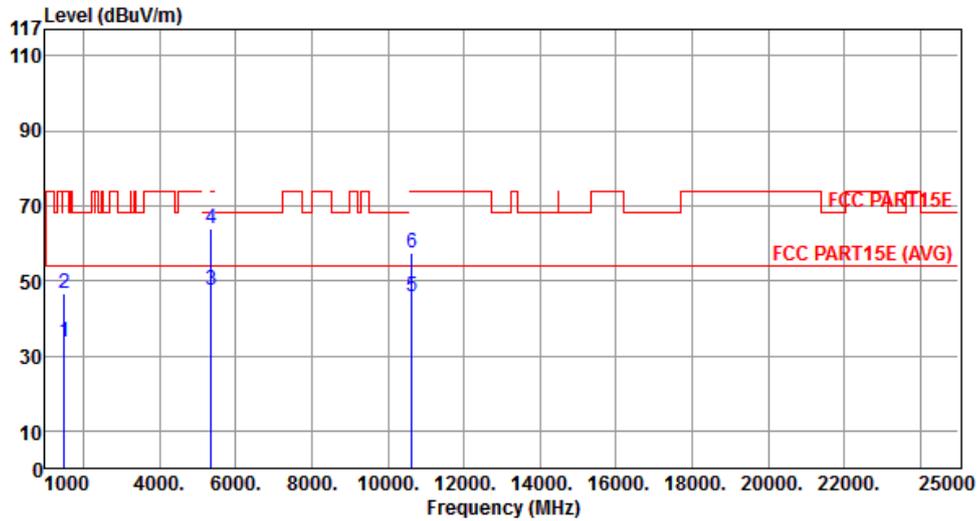
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.83	54.00	-20.17	40.56	-6.73	Average	---	---
2	1500.00	46.94	74.00	-27.06	53.67	-6.73	Peak	---	---
3	5350.00	45.64	54.00	-8.36	39.83	5.81	Average	---	---
4	5350.00	60.05	74.00	-13.95	54.24	5.81	Peak	---	---
5	10600.00	45.45	54.00	-8.55	30.27	15.18	Average	---	---
6	10600.00	58.02	74.00	-15.98	42.84	15.18	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5320
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



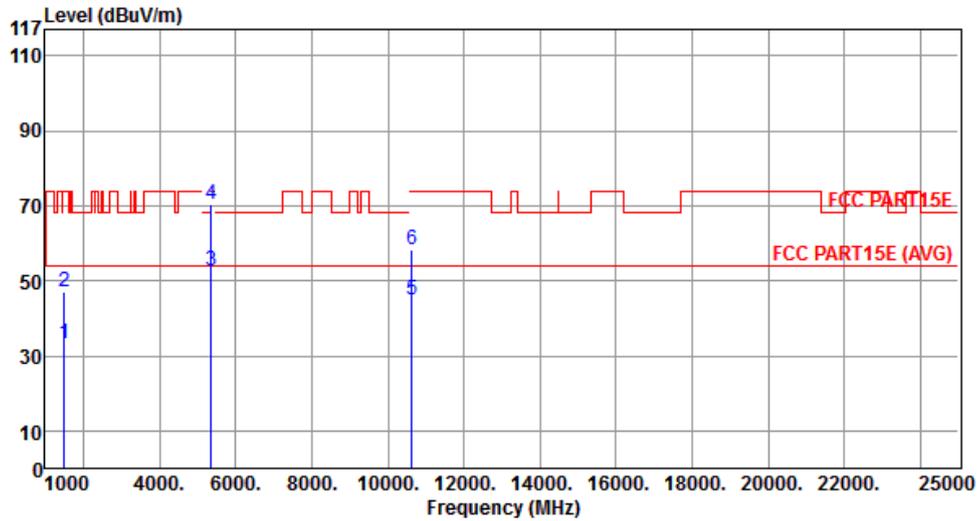
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.59	54.00	-20.41	40.32	-6.73	Average	---	---
2	1500.00	46.60	74.00	-27.40	53.33	-6.73	Peak	---	---
3	5350.00	47.35	54.00	-6.65	41.54	5.81	Average	---	---
4	5350.00	64.10	74.00	-9.90	58.29	5.81	Peak	---	---
5	10640.00	45.80	54.00	-8.20	30.61	15.19	Average	---	---
6	10640.00	57.57	74.00	-16.43	42.38	15.19	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5320
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



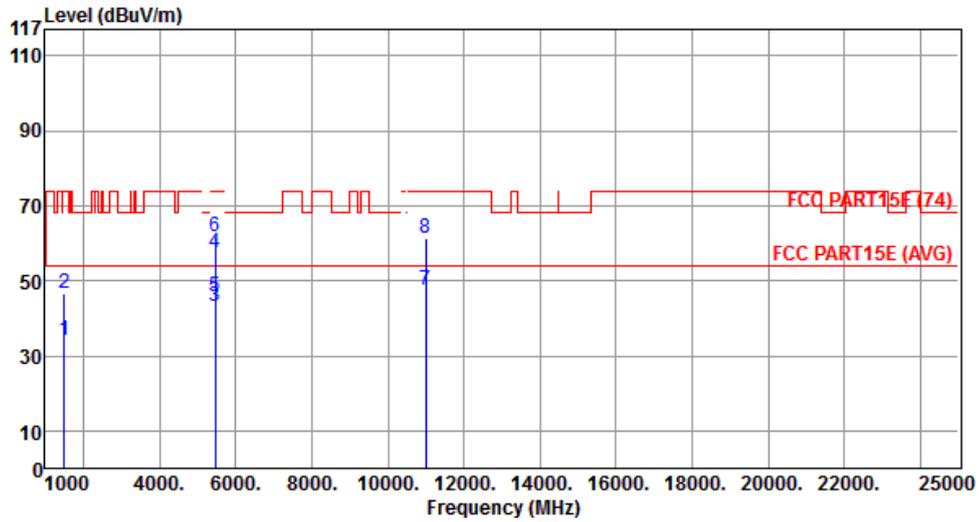
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.43	54.00	-20.57	40.16	-6.73	Average	---	---
2	1500.00	46.94	74.00	-27.06	53.67	-6.73	Peak	---	---
3	5350.00	52.75	54.00	-1.25	46.94	5.81	Average	---	---
4	5350.00	70.55	74.00	-3.45	64.74	5.81	Peak	---	---
5	10640.00	45.00	54.00	-9.00	29.81	15.19	Average	---	---
6	10640.00	58.40	74.00	-15.60	43.21	15.19	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5500
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



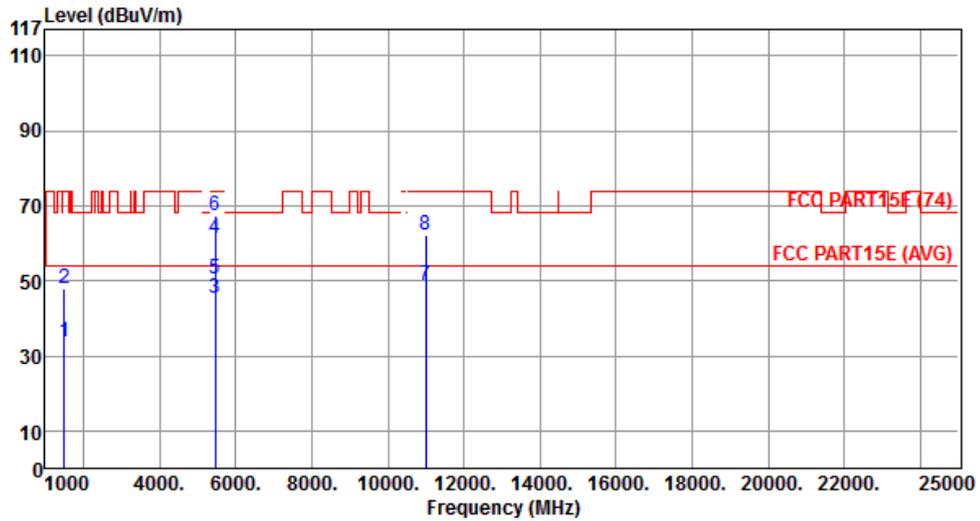
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.90	54.00	-20.10	40.63	-6.73	Average	---	---
2	1500.00	46.46	74.00	-27.54	53.19	-6.73	Peak	---	---
3	5460.00	43.07	54.00	-10.93	37.29	5.78	Average	---	---
4	5460.00	57.21	74.00	-16.79	51.43	5.78	Peak	---	---
5	5470.00	45.61	54.00	-8.39	39.85	5.76	Average	---	---
6	5470.00	61.61	74.00	-12.39	55.85	5.76	Peak	---	---
7	11000.00	47.38	54.00	-6.62	32.13	15.25	Average	---	---
8	11000.00	61.13	74.00	-12.87	45.88	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5500
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



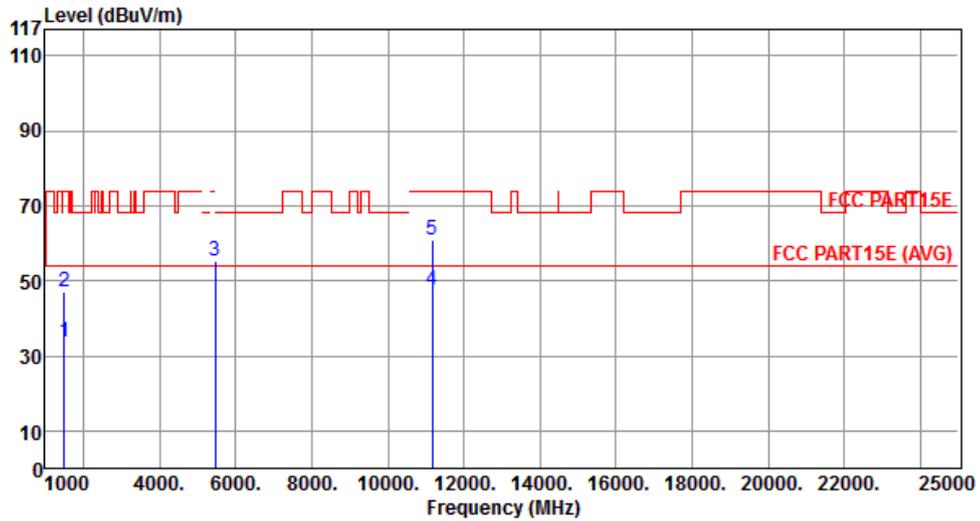
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.67	54.00	-20.33	40.40	-6.73	Average	---	---
2	1500.00	47.73	74.00	-26.27	54.46	-6.73	Peak	---	---
3	5460.00	45.47	54.00	-8.53	39.69	5.78	Average	---	---
4	5460.00	61.33	74.00	-12.67	55.55	5.78	Peak	---	---
5	5470.00	50.62	54.00	-3.38	44.86	5.76	Average	---	---
6	5470.00	67.40	74.00	-6.60	61.64	5.76	Peak	---	---
7	11000.00	48.93	54.00	-5.07	33.68	15.25	Average	---	---
8	11000.00	62.17	74.00	-11.83	46.92	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5580
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



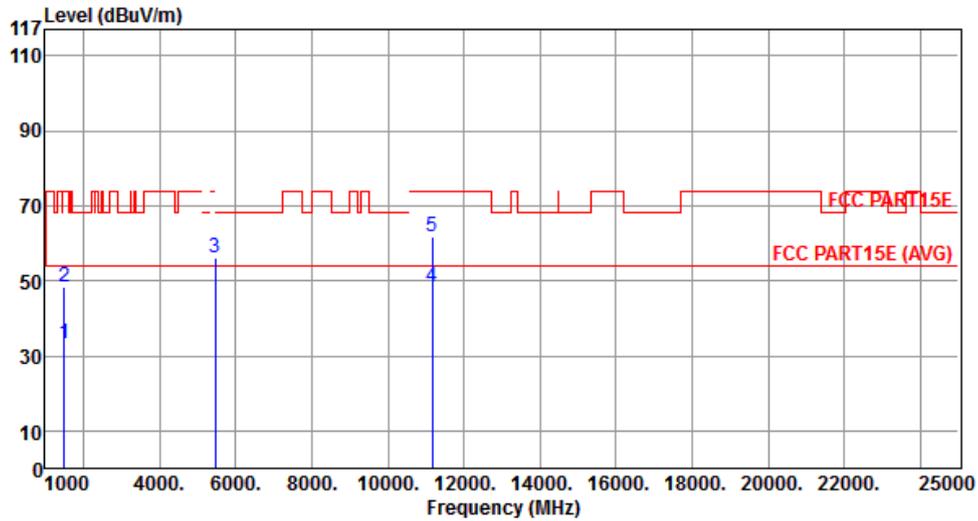
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.53	54.00	-20.47	40.26	-6.73	Average	---	---
2	1500.00	46.85	74.00	-27.15	53.58	-6.73	Peak	---	---
3	5470.00	55.37	68.20	-12.83	49.61	5.76	Peak	---	---
4	11160.00	47.47	54.00	-6.53	32.47	15.00	Average	---	---
5	11160.00	61.02	74.00	-12.98	46.02	15.00	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5580
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



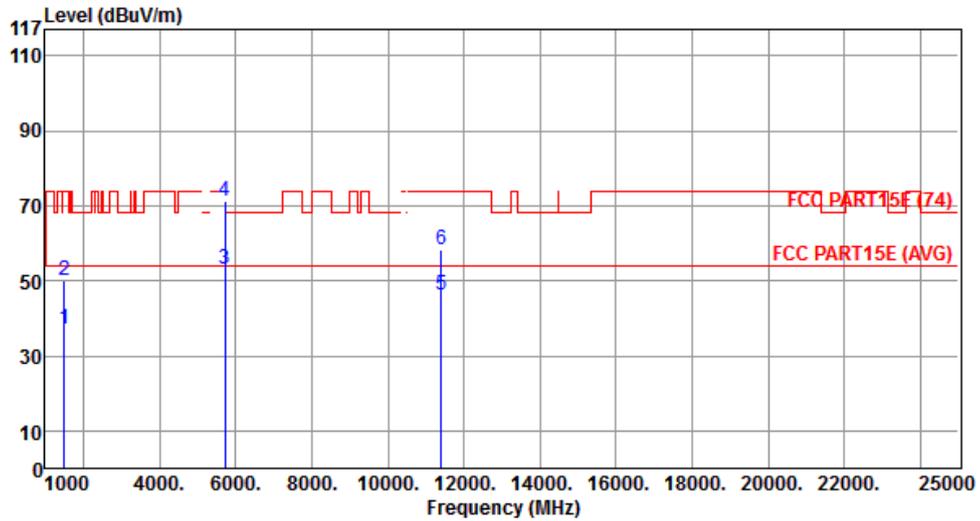
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.43	54.00	-20.57	40.16	-6.73	Average	---	---
2	1500.00	48.33	74.00	-25.67	55.06	-6.73	Peak	---	---
3	5470.00	56.10	68.20	-12.10	50.34	5.76	Peak	---	---
4	11160.00	48.41	54.00	-5.59	33.41	15.00	Average	---	---
5	11160.00	61.85	74.00	-12.15	46.85	15.00	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5700
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx



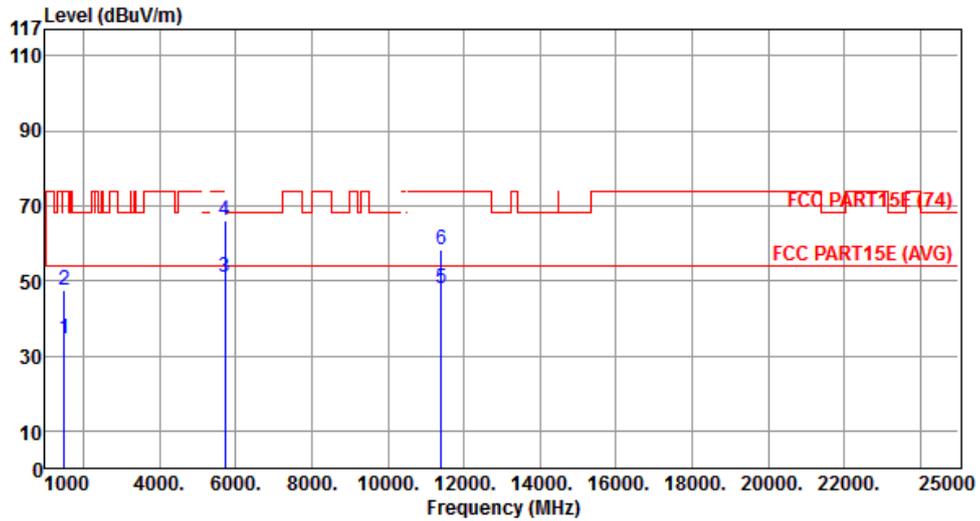
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	37.33	54.00	-16.67	44.06	-6.73	Average	---	---
2	1500.00	50.10	74.00	-23.90	56.83	-6.73	Peak	---	---
3	5725.00	53.00	54.00	-1.00	47.27	5.73	Average	---	---
4	5725.00	71.05	74.00	-2.95	65.32	5.73	Peak	---	---
5	11400.00	46.30	54.00	-7.70	31.68	14.62	Average	---	---
6	11400.00	58.49	74.00	-15.51	43.87	14.62	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).

<b>Modulation</b>	11a	<b>Test Freq. (MHz)</b>	5700
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	1Tx

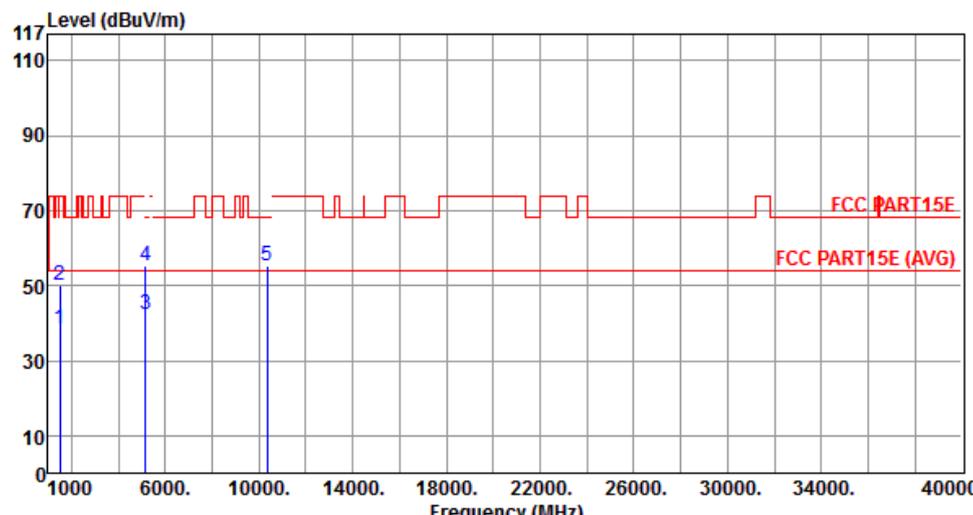


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.44	54.00	-19.56	66.87	-32.43	Average	---	---
2	1500.00	47.29	74.00	-26.71	79.72	-32.43	Peak	---	---
3	5725.00	50.74	54.00	-3.26	77.07	-26.33	Average	---	---
4	5725.00	66.06	74.00	-7.94	92.39	-26.33	Peak	---	---
5	11400.00	47.83	54.00	-6.17	73.21	-25.38	Average	---	---
6	11400.00	58.21	74.00	-15.79	83.59	-25.38	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

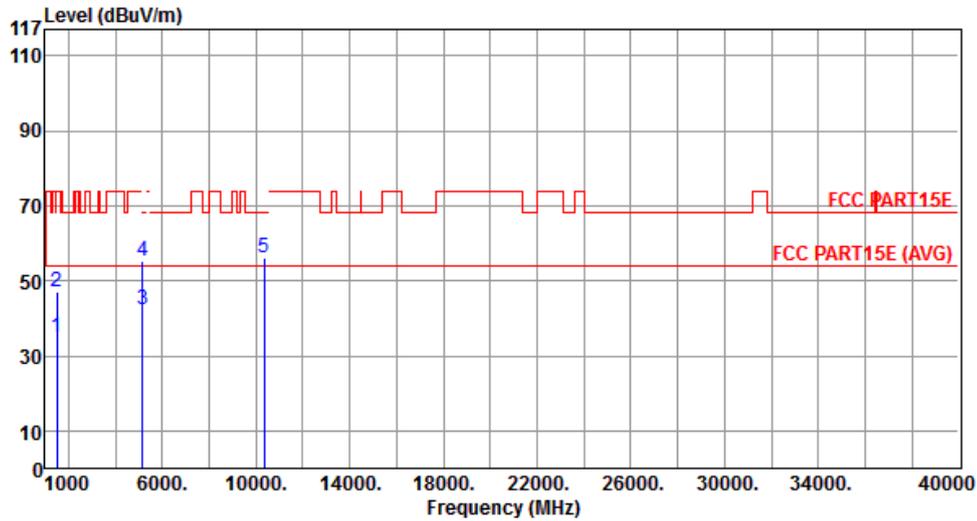
<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5180
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.45	54.00	-15.55	45.18	-6.73	Average	---	---
2	1500.00	50.26	74.00	-23.74	56.99	-6.73	Peak	---	---
3	5150.00	42.23	54.00	-11.77	36.57	5.66	Average	---	---
4	5150.00	55.15	74.00	-18.85	49.49	5.66	Peak	---	---
5	10360.00	55.30	68.20	-12.90	40.33	14.97	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5180
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



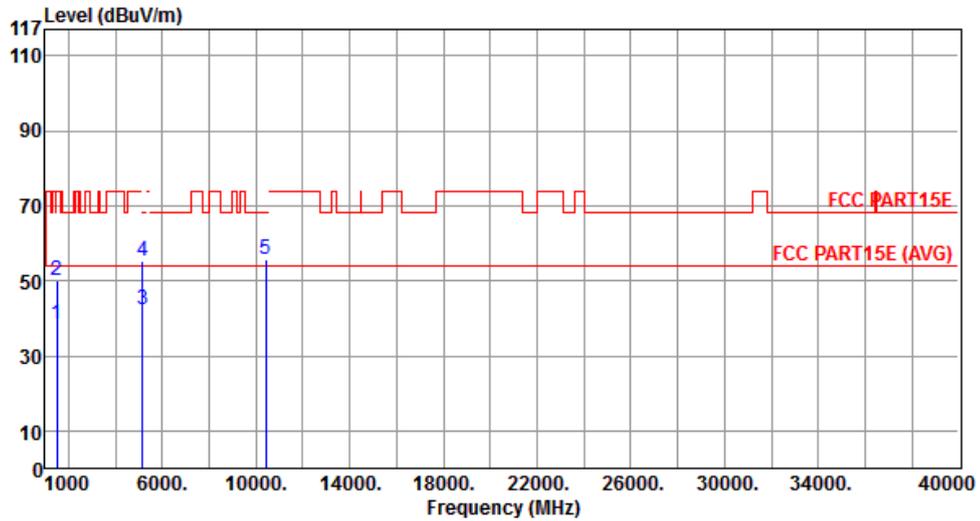
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.14	54.00	-18.86	41.87	-6.73	Average	---	---
2	1500.00	47.26	74.00	-26.74	53.99	-6.73	Peak	---	---
3	5150.00	42.25	54.00	-11.75	36.59	5.66	Average	---	---
4	5150.00	55.36	74.00	-18.64	49.70	5.66	Peak	---	---
5	10360.00	56.09	68.20	-12.11	41.12	14.97	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5200
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



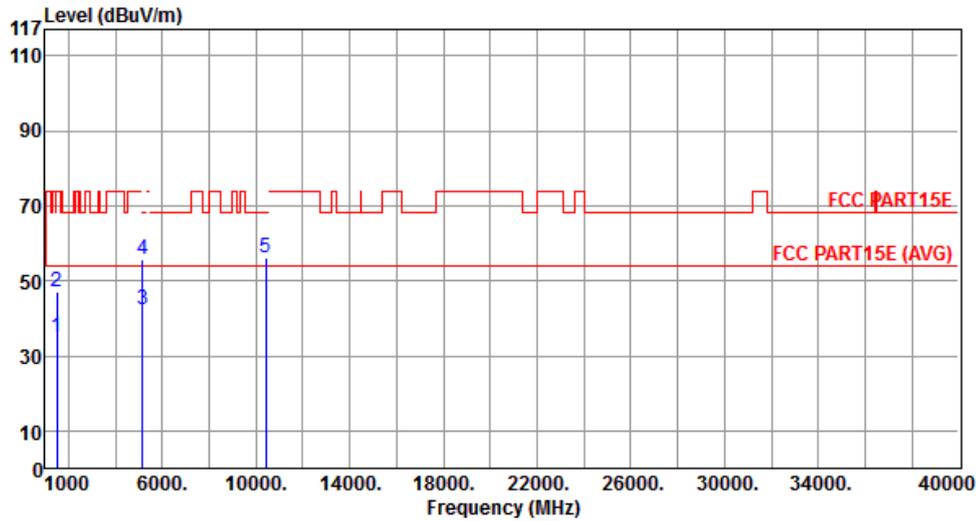
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.24	54.00	-15.76	44.97	-6.73	Average	---	---
2	1500.00	50.11	74.00	-23.89	56.84	-6.73	Peak	---	---
3	5150.00	42.15	54.00	-11.85	36.49	5.66	Average	---	---
4	5150.00	55.21	74.00	-18.79	49.55	5.66	Peak	---	---
5	10400.00	55.49	68.20	-12.71	40.46	15.03	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5200
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



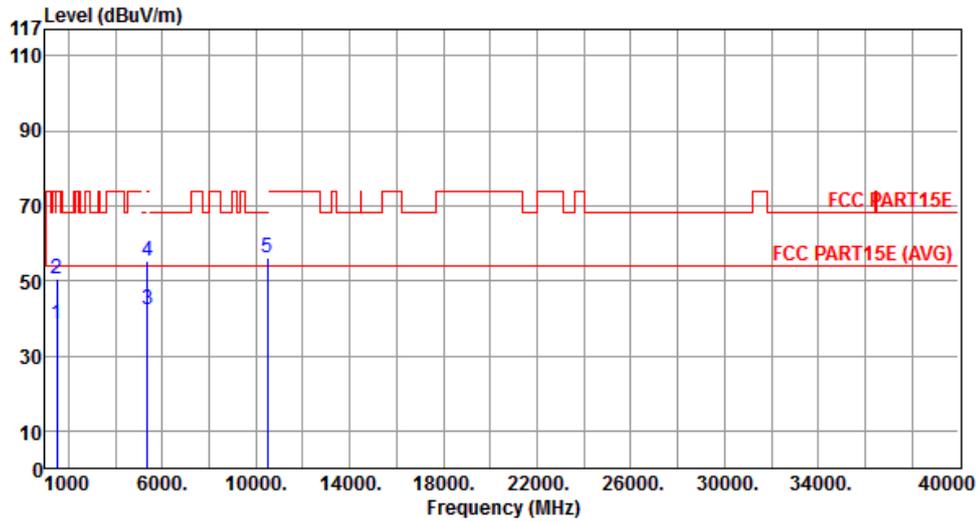
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.06	54.00	-18.94	41.79	-6.73	Average	---	---
2	1500.00	47.13	74.00	-26.87	53.86	-6.73	Peak	---	---
3	5150.00	42.26	54.00	-11.74	36.60	5.66	Average	---	---
4	5150.00	55.49	74.00	-18.51	49.83	5.66	Peak	---	---
5	10400.00	55.92	68.20	-12.28	40.89	15.03	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5240
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



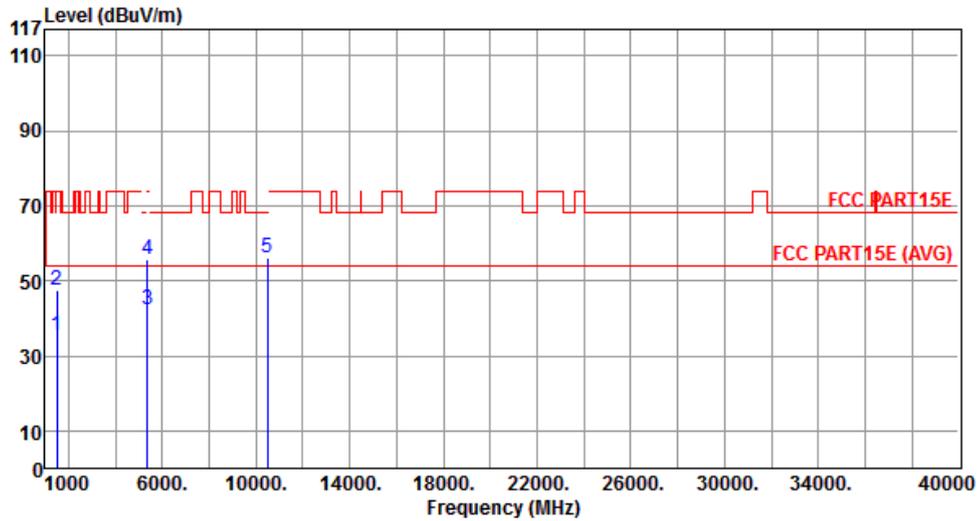
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.56	54.00	-15.44	45.29	-6.73	Average	---	---
2	1500.00	50.42	74.00	-23.58	57.15	-6.73	Peak	---	---
3	5350.00	42.25	54.00	-11.75	36.44	5.81	Average	---	---
4	5350.00	55.16	74.00	-18.84	49.35	5.81	Peak	---	---
5	10480.00	55.98	68.20	-12.22	40.84	15.14	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5240
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



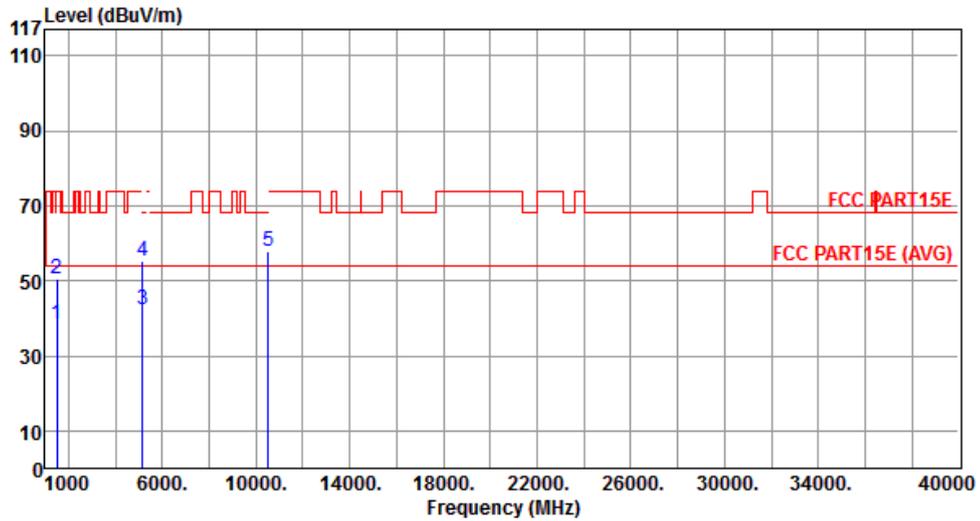
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.25	54.00	-18.75	41.98	-6.73	Average	---	---
2	1500.00	47.38	74.00	-26.62	54.11	-6.73	Peak	---	---
3	5350.00	42.35	54.00	-11.65	36.54	5.81	Average	---	---
4	5350.00	55.88	74.00	-18.12	50.07	5.81	Peak	---	---
5	10480.00	56.24	68.20	-11.96	41.10	15.14	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5260
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



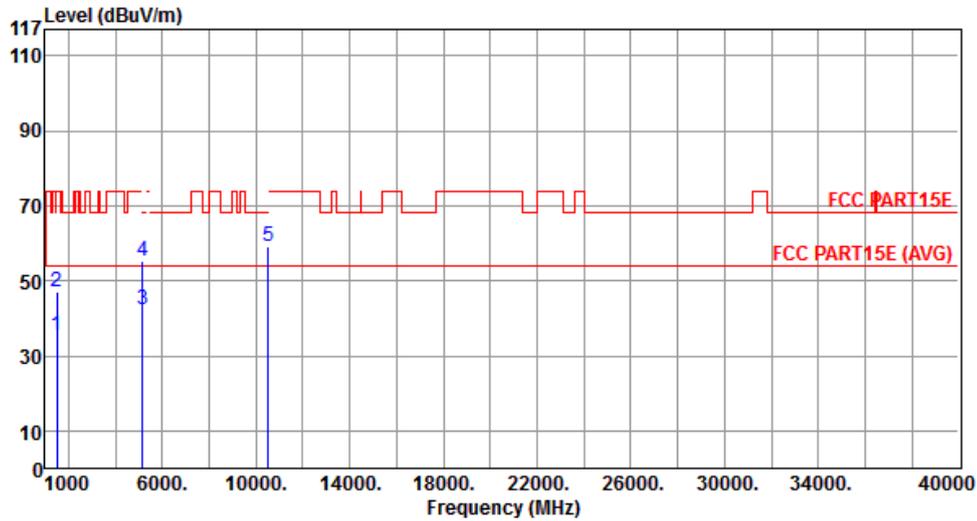
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.49	54.00	-15.51	45.22	-6.73	Average	---	---
2	1500.00	50.36	74.00	-23.64	57.09	-6.73	Peak	---	---
3	5150.00	42.13	54.00	-11.87	36.47	5.66	Average	---	---
4	5150.00	55.06	74.00	-18.94	49.40	5.66	Peak	---	---
5	10520.00	57.80	68.20	-10.40	42.64	15.16	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5260
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



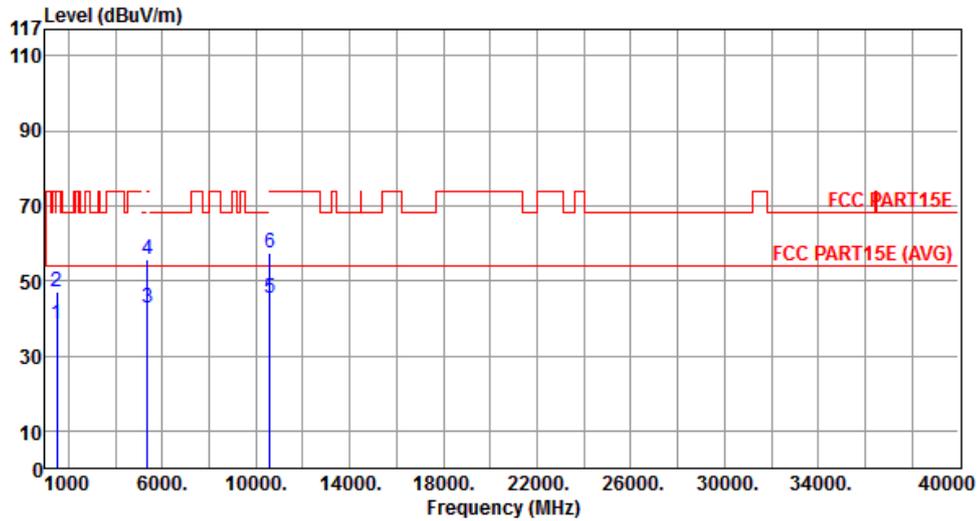
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.43	54.00	-18.57	42.16	-6.73	Average	---	---
2	1500.00	47.26	74.00	-26.74	53.99	-6.73	Peak	---	---
3	5150.00	42.36	54.00	-11.64	36.70	5.66	Average	---	---
4	5150.00	55.28	74.00	-18.72	49.62	5.66	Peak	---	---
5	10520.00	59.23	68.20	-8.97	44.07	15.16	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5300
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



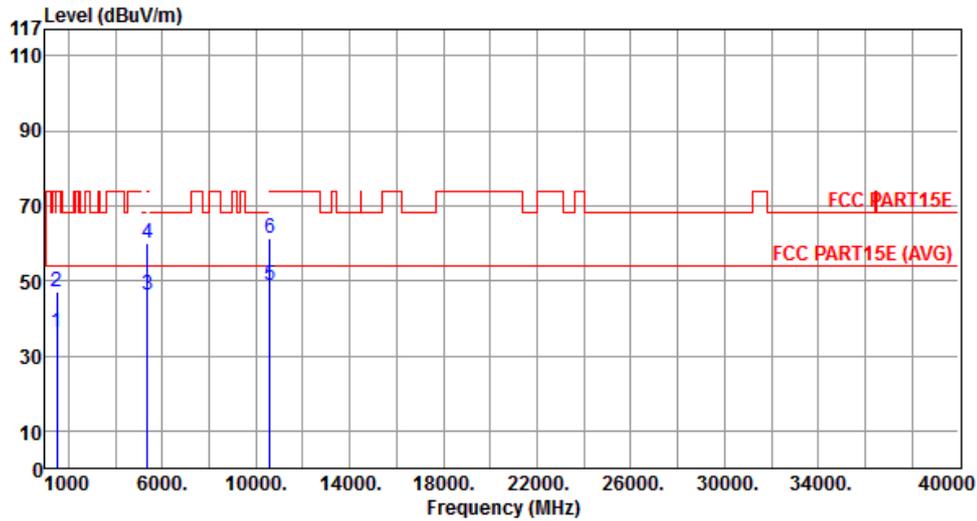
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.64	54.00	-15.36	45.37	-6.73	Average	---	---
2	1500.00	47.05	74.00	-26.95	53.78	-6.73	Peak	---	---
3	5350.00	42.74	54.00	-11.26	36.93	5.81	Average	---	---
4	5350.00	55.79	74.00	-18.21	49.98	5.81	Peak	---	---
5	10600.00	45.33	54.00	-8.67	30.15	15.18	Average	---	---
6	10600.00	57.45	74.00	-16.55	42.27	15.18	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5300
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



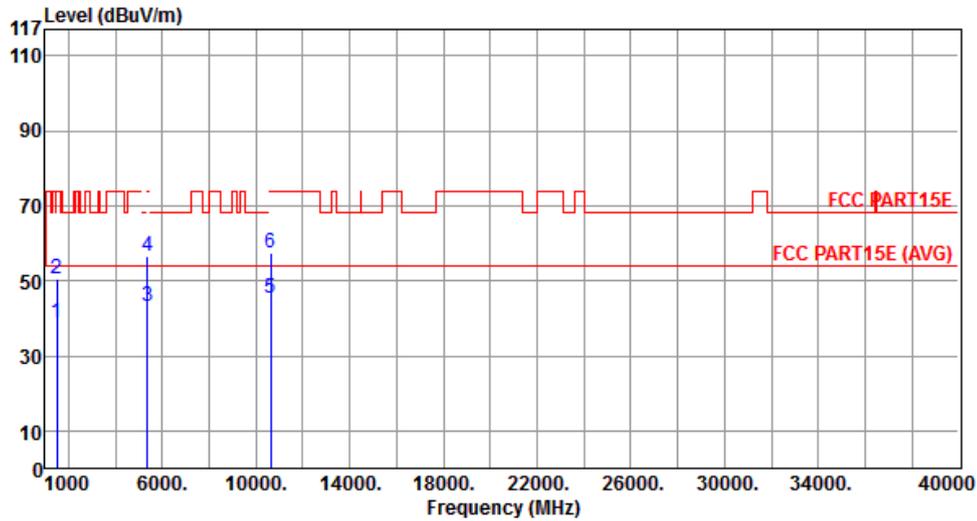
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	36.10	54.00	-17.90	42.83	-6.73	Average	---	---
2	1500.00	47.03	74.00	-26.97	53.76	-6.73	Peak	---	---
3	5350.00	46.25	54.00	-7.75	40.44	5.81	Average	---	---
4	5350.00	59.86	74.00	-14.14	54.05	5.81	Peak	---	---
5	10600.00	48.64	54.00	-5.36	33.46	15.18	Average	---	---
6	10600.00	61.46	74.00	-12.54	46.28	15.18	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5320
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



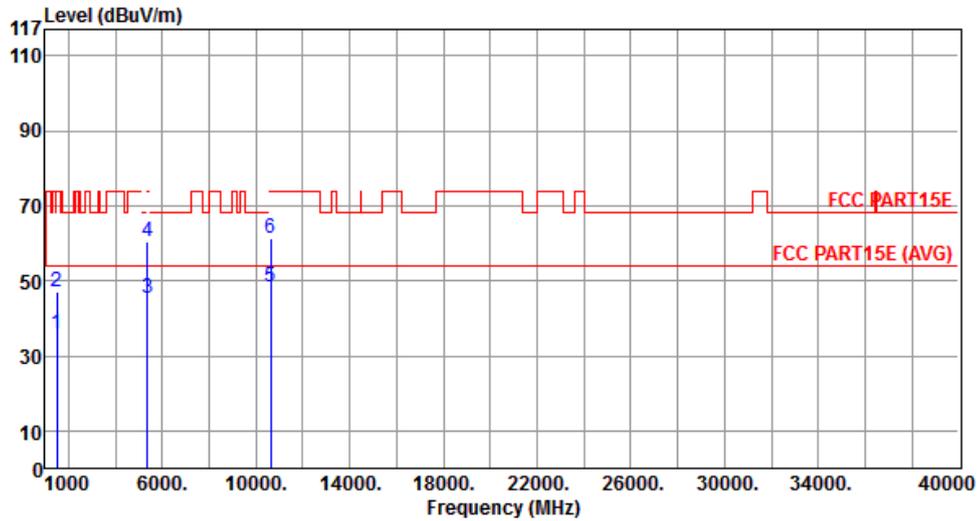
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.90	54.00	-15.10	45.63	-6.73	Average	---	---
2	1500.00	50.52	74.00	-23.48	57.25	-6.73	Peak	---	---
3	5350.00	43.03	54.00	-10.97	37.22	5.81	Average	---	---
4	5350.00	56.38	74.00	-17.62	50.57	5.81	Peak	---	---
5	10640.00	45.25	54.00	-8.75	30.06	15.19	Average	---	---
6	10640.00	57.30	74.00	-16.70	42.11	15.19	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5320
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



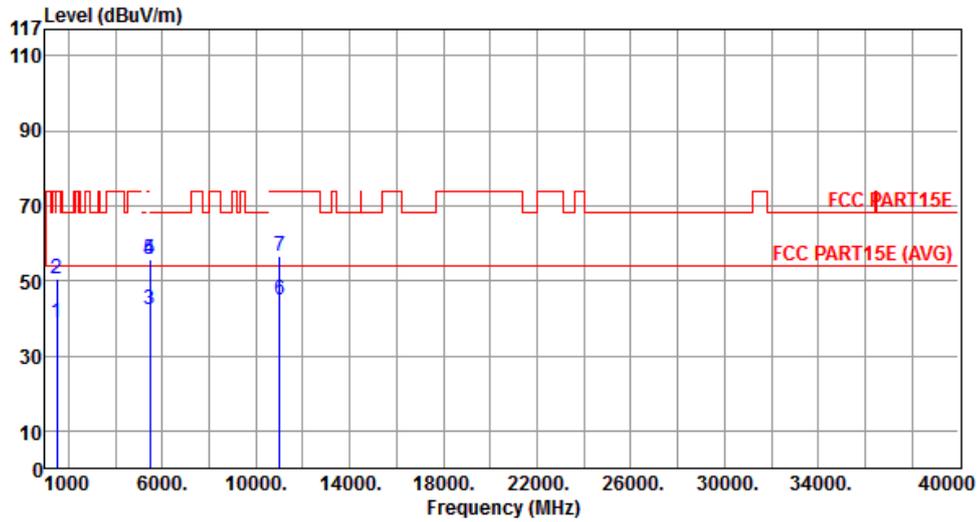
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.68	54.00	-18.32	42.41	-6.73	Average	---	---
2	1500.00	47.11	74.00	-26.89	53.84	-6.73	Peak	---	---
3	5350.00	45.12	54.00	-8.88	39.31	5.81	Average	---	---
4	5350.00	60.39	74.00	-13.61	54.58	5.81	Peak	---	---
5	10640.00	48.36	54.00	-5.64	33.17	15.19	Average	---	---
6	10640.00	61.23	74.00	-12.77	46.04	15.19	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5500
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>Tx</sub>)</b>	2Tx



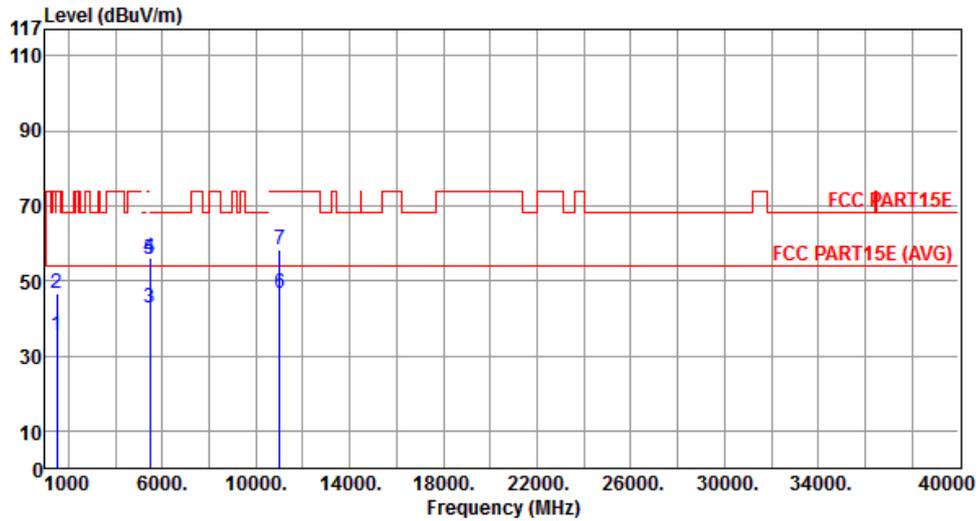
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.95	54.00	-15.05	45.68	-6.73	Average	---	---
2	1500.00	50.63	74.00	-23.37	57.36	-6.73	Peak	---	---
3	5460.00	42.50	54.00	-11.50	36.72	5.78	Average	---	---
4	5460.00	55.83	74.00	-18.17	50.05	5.78	Peak	---	---
5	5470.00	55.66	68.20	-12.54	49.90	5.76	Peak	---	---
6	11000.00	44.79	54.00	-9.21	29.54	15.25	Average	---	---
7	11000.00	56.60	74.00	-17.40	41.35	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5500
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



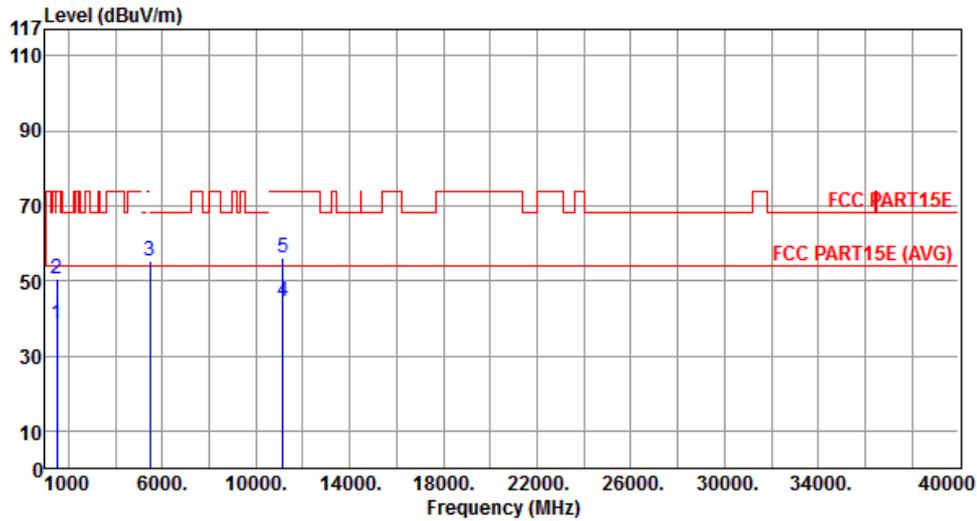
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.35	54.00	-18.65	42.08	-6.73	Average	---	---
2	1500.00	46.72	74.00	-27.28	53.45	-6.73	Peak	---	---
3	5460.00	42.60	54.00	-11.40	36.82	5.78	Average	---	---
4	5460.00	56.16	74.00	-17.84	50.38	5.78	Peak	---	---
5	5470.00	55.61	68.20	-12.59	49.85	5.76	Peak	---	---
6	11000.00	46.78	54.00	-7.22	31.53	15.25	Average	---	---
7	11000.00	58.49	74.00	-15.51	43.24	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5580
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



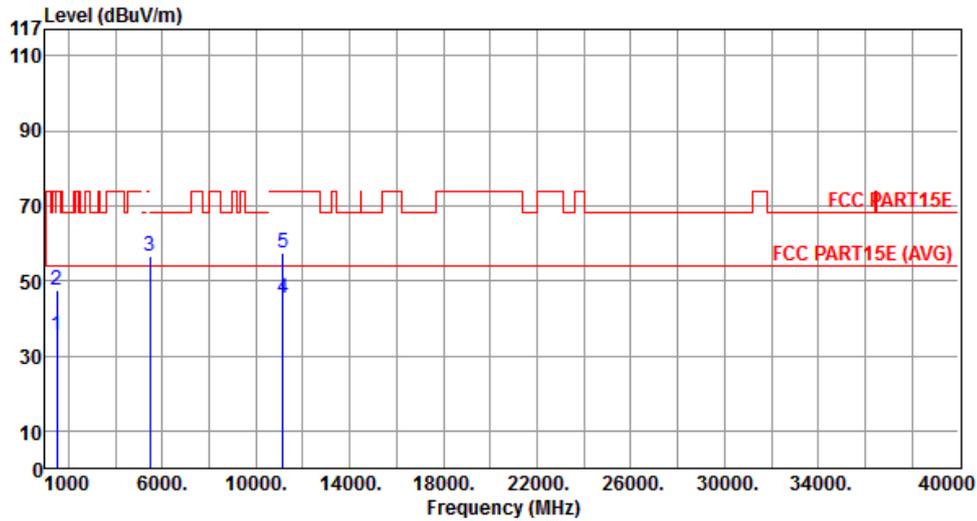
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	38.40	54.00	-15.60	45.13	-6.73	Average	---	---
2	1500.00	50.50	74.00	-23.50	57.23	-6.73	Peak	---	---
3	5470.00	55.36	68.20	-12.84	49.60	5.76	Peak	---	---
4	11160.00	44.56	54.00	-9.44	29.56	15.00	Average	---	---
5	11160.00	56.34	74.00	-17.66	41.34	15.00	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5580
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



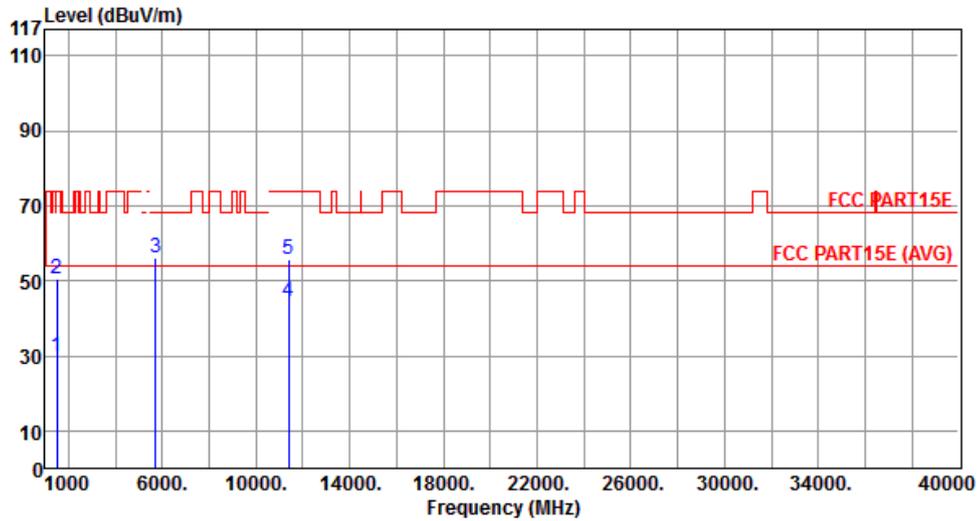
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.60	54.00	-18.40	42.33	-6.73	Average	---	---
2	1500.00	47.48	74.00	-26.52	54.21	-6.73	Peak	---	---
3	5470.00	56.65	68.20	-11.55	50.89	5.76	Peak	---	---
4	11160.00	45.34	54.00	-8.66	30.34	15.00	Average	---	---
5	11160.00	57.58	74.00	-16.42	42.58	15.00	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5700
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



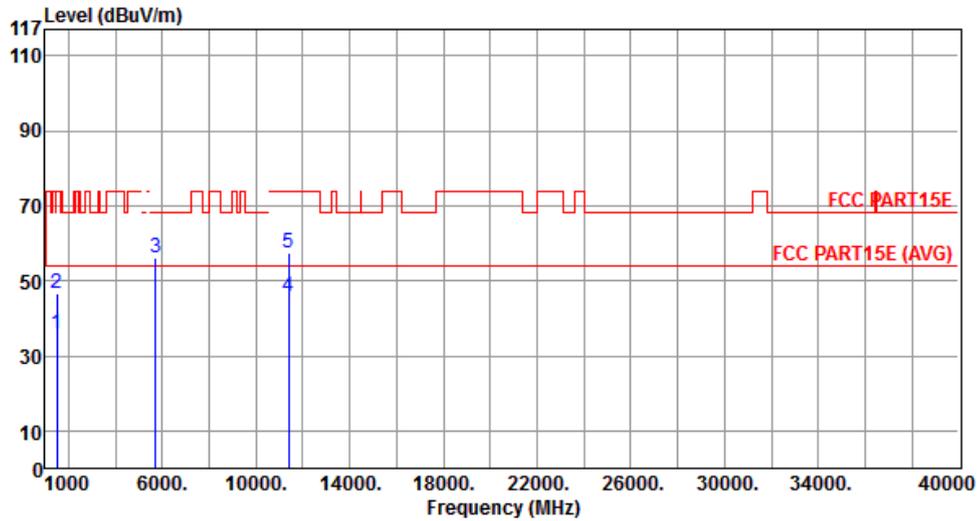
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	29.94	54.00	-24.06	36.67	-6.73	Average	---	---
2	1500.00	50.63	74.00	-23.37	57.36	-6.73	Peak	---	---
3	5725.00	55.97	68.20	-12.23	50.24	5.73	Peak	---	---
4	11400.00	44.50	54.00	-9.50	29.88	14.62	Average	---	---
5	11400.00	55.64	74.00	-18.36	41.02	14.62	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).

<b>Modulation</b>	VHT20	<b>Test Freq. (MHz)</b>	5700
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.85	54.00	-18.15	42.58	-6.73	Average	---	---
2	1500.00	46.79	74.00	-27.21	53.52	-6.73	Peak	---	---
3	5725.00	56.32	68.20	-11.88	50.59	5.73	Peak	---	---
4	11400.00	45.58	54.00	-8.42	30.96	14.62	Average	---	---
5	11400.00	57.52	74.00	-16.48	42.90	14.62	Peak	---	---

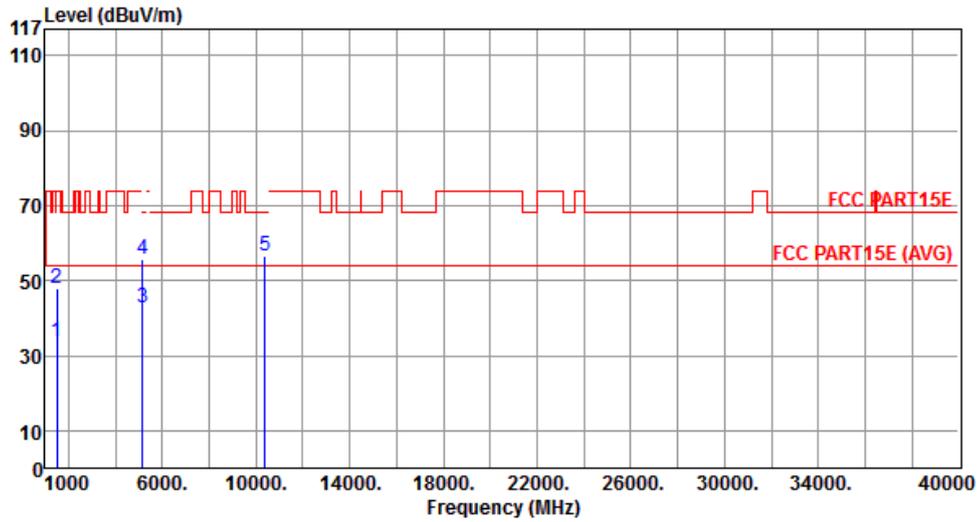
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*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

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5190
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



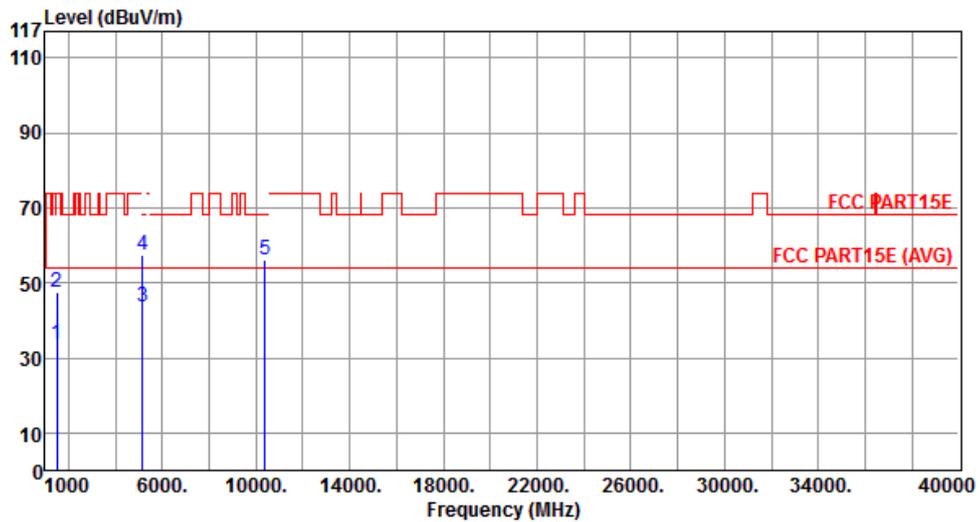
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.78	54.00	-20.22	40.51	-6.73	Average	---	---
2	1500.00	48.04	74.00	-25.96	54.77	-6.73	Peak	---	---
3	5150.00	42.63	54.00	-11.37	36.97	5.66	Average	---	---
4	5150.00	55.75	74.00	-18.25	50.09	5.66	Peak	---	---
5	10380.00	56.39	68.20	-11.81	41.38	15.01	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5190
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



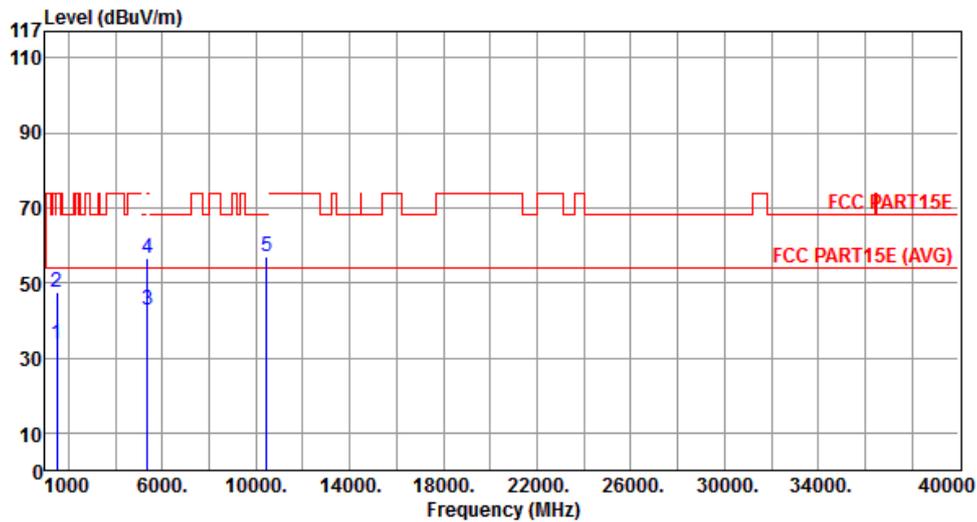
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.88	54.00	-20.12	40.61	-6.73	Average	---	---
2	1500.00	47.46	74.00	-26.54	54.19	-6.73	Peak	---	---
3	5150.00	43.59	54.00	-10.41	37.93	5.66	Average	---	---
4	5150.00	57.21	74.00	-16.79	51.55	5.66	Peak	---	---
5	10380.00	55.93	68.20	-12.27	40.92	15.01	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5230
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



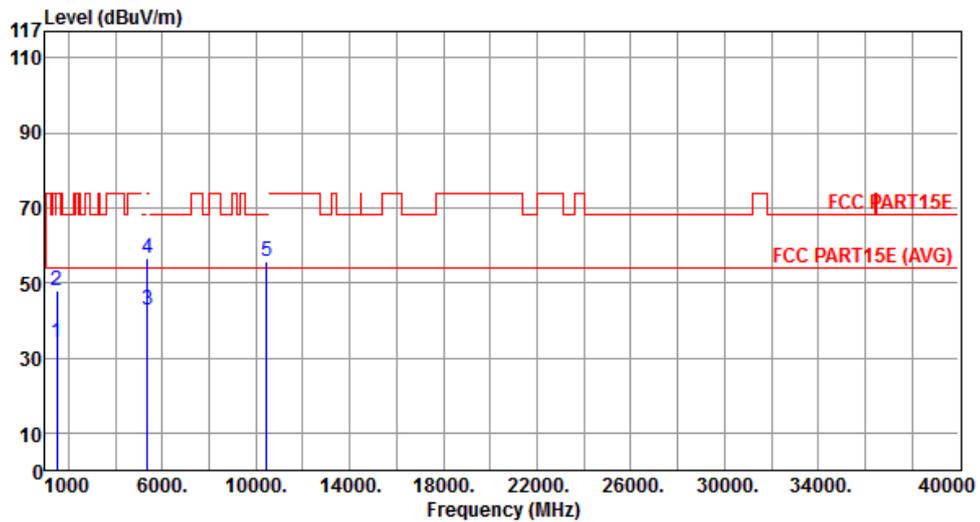
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.56	54.00	-20.44	40.29	-6.73	Average	---	---
2	1500.00	47.63	74.00	-26.37	54.36	-6.73	Peak	---	---
3	5350.00	42.75	54.00	-11.25	36.94	5.81	Average	---	---
4	5350.00	56.54	74.00	-17.46	50.73	5.81	Peak	---	---
5	10460.00	56.96	68.20	-11.24	41.85	15.11	Peak	---	---

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

\*Factor includes antenna factor , cable loss and amplifier gain

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

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5230
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



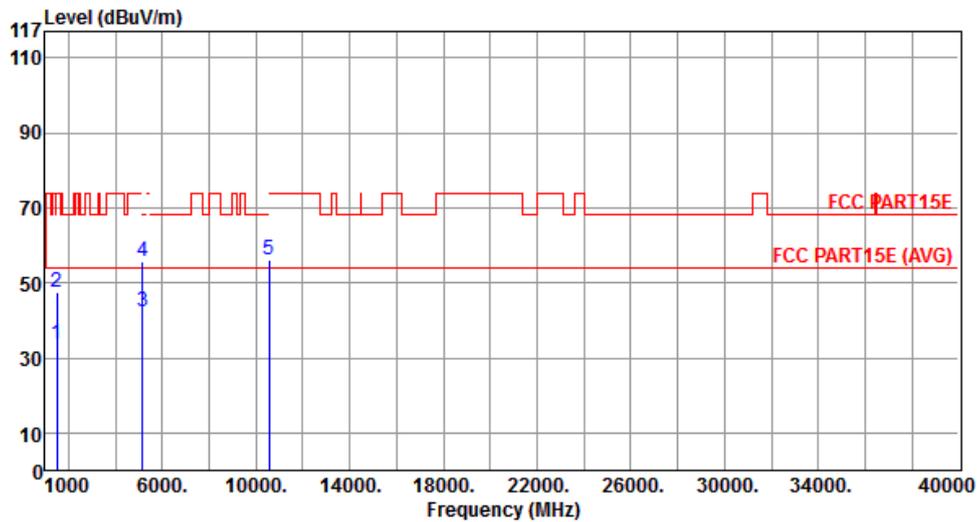
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.25	54.00	-19.75	40.98	-6.73	Average	---	---
2	1500.00	48.05	74.00	-25.95	54.78	-6.73	Peak	---	---
3	5350.00	42.94	54.00	-11.06	37.13	5.81	Average	---	---
4	5350.00	56.74	74.00	-17.26	50.93	5.81	Peak	---	---
5	10460.00	55.89	68.20	-12.31	40.78	15.11	Peak	---	---

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

\*Factor includes antenna factor , cable loss and amplifier gain

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

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5270
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



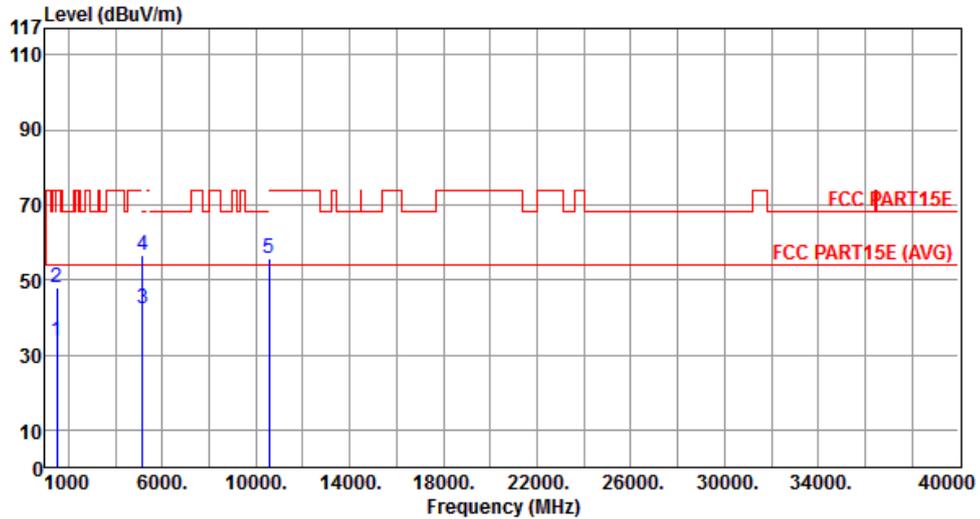
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.83	54.00	-20.17	40.56	-6.73	Average	---	---
2	1500.00	47.65	74.00	-26.35	54.38	-6.73	Peak	---	---
3	5150.00	42.36	54.00	-11.64	36.70	5.66	Average	---	---
4	5150.00	55.55	74.00	-18.45	49.89	5.66	Peak	---	---
5	10540.00	55.93	68.20	-12.27	40.76	15.17	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5270
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



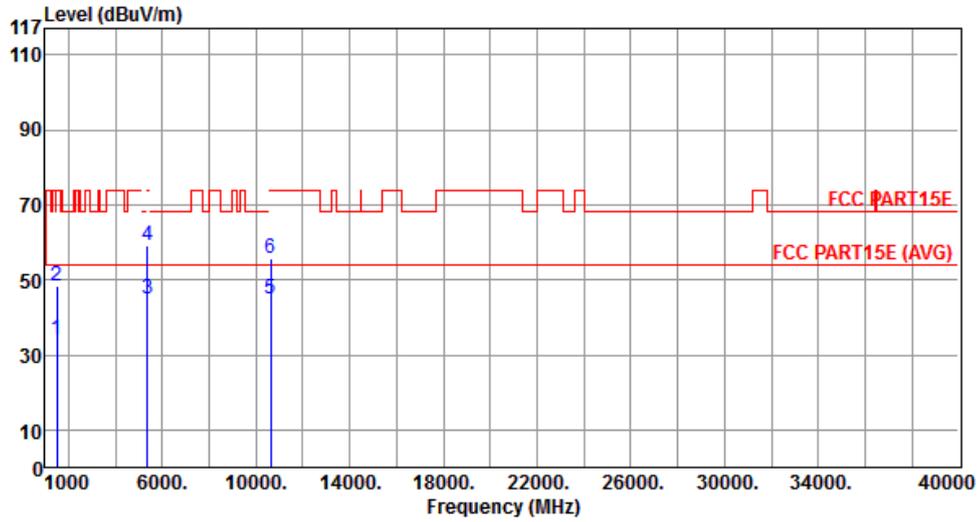
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.58	54.00	-20.42	40.31	-6.73	Average	---	---
2	1500.00	47.95	74.00	-26.05	54.68	-6.73	Peak	---	---
3	5150.00	42.34	54.00	-11.66	36.68	5.66	Average	---	---
4	5150.00	56.51	74.00	-17.49	50.85	5.66	Peak	---	---
5	10540.00	55.88	68.20	-12.32	40.71	15.17	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5310
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



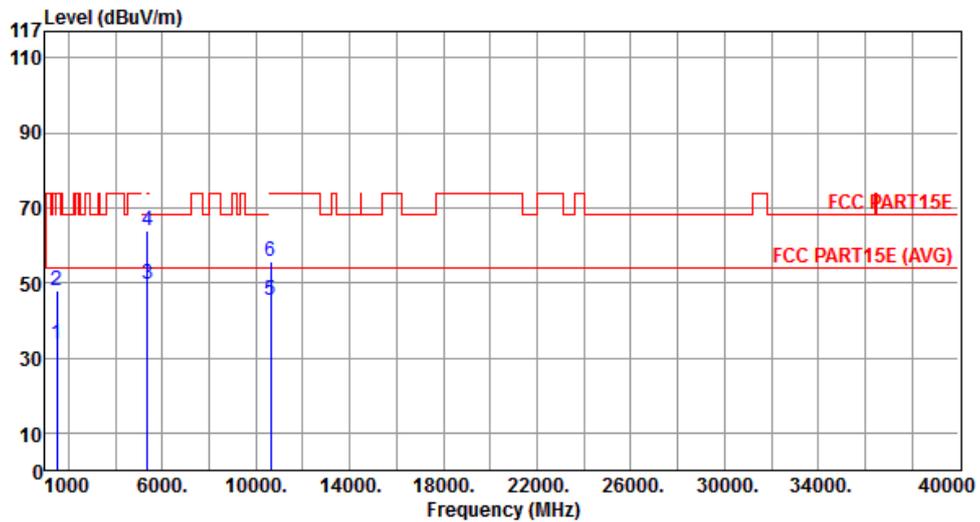
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.90	54.00	-20.10	40.63	-6.73	Average	---	---
2	1500.00	48.19	74.00	-25.81	54.92	-6.73	Peak	---	---
3	5350.00	45.05	54.00	-8.95	39.24	5.81	Average	---	---
4	5350.00	58.94	74.00	-15.06	53.13	5.81	Peak	---	---
5	10620.00	44.71	54.00	-9.29	29.53	15.18	Average	---	---
6	10620.00	55.55	74.00	-18.45	40.37	15.18	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5310
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



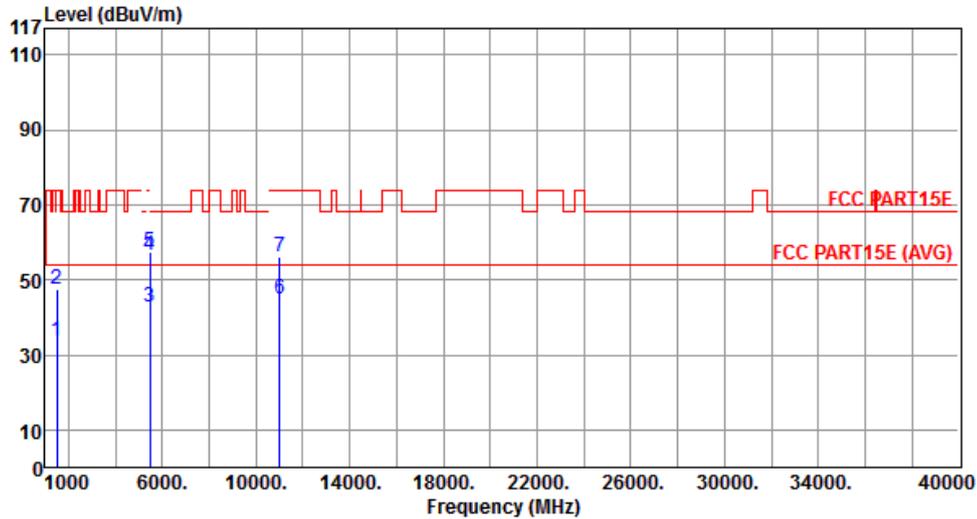
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.75	54.00	-20.25	40.48	-6.73	Average	---	---
2	1500.00	47.81	74.00	-26.19	54.54	-6.73	Peak	---	---
3	5350.00	49.52	54.00	-4.48	43.71	5.81	Average	---	---
4	5350.00	63.87	74.00	-10.13	58.06	5.81	Peak	---	---
5	10620.00	45.44	54.00	-8.56	30.26	15.18	Average	---	---
6	10620.00	55.83	74.00	-18.17	40.65	15.18	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5510
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



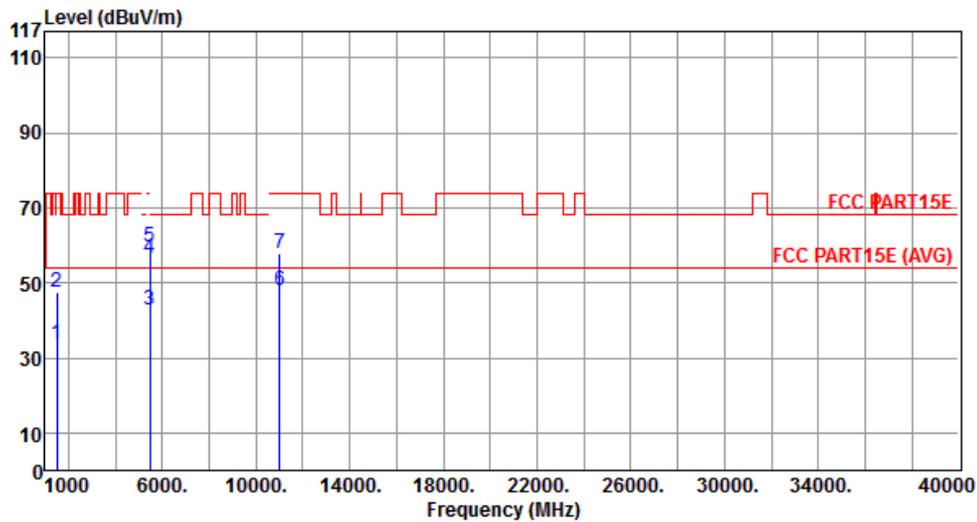
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.82	54.00	-20.18	40.55	-6.73	Average	---	---
2	1500.00	47.34	74.00	-26.66	54.07	-6.73	Peak	---	---
3	5460.00	42.55	54.00	-11.45	36.77	5.78	Average	---	---
4	5460.00	56.34	74.00	-17.66	50.56	5.78	Peak	---	---
5	5470.00	57.26	68.20	-10.94	51.50	5.76	Peak	---	---
6	11020.00	44.79	54.00	-9.21	29.57	15.22	Average	---	---
7	11020.00	56.08	74.00	-17.92	40.86	15.22	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5510
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



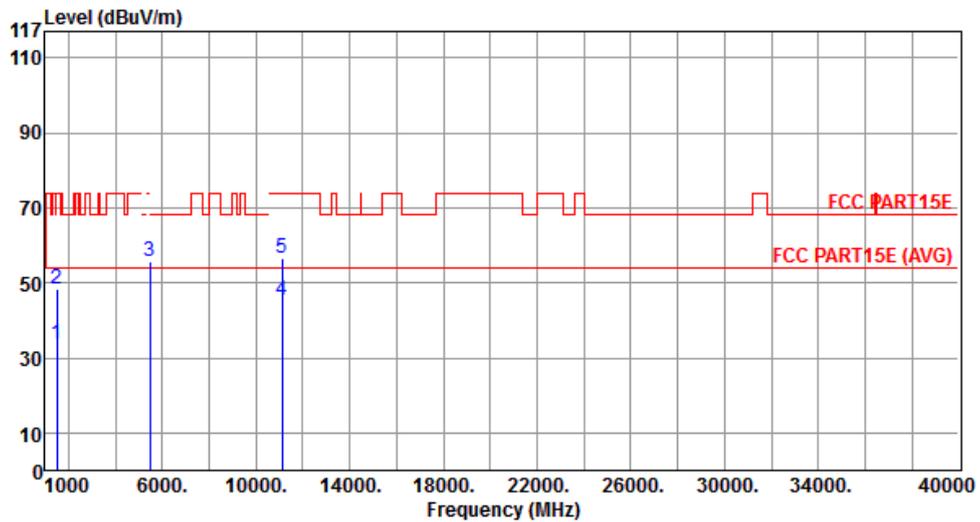
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.76	54.00	-20.24	40.49	-6.73	Average	---	---
2	1500.00	47.30	74.00	-26.70	54.03	-6.73	Peak	---	---
3	5460.00	42.76	54.00	-11.24	36.98	5.78	Average	---	---
4	5460.00	56.52	74.00	-17.48	50.74	5.78	Peak	---	---
5	5470.00	59.59	68.20	-8.61	53.83	5.76	Peak	---	---
6	11020.00	47.73	54.00	-6.27	32.51	15.22	Average	---	---
7	11020.00	57.98	74.00	-16.02	42.76	15.22	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5550
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



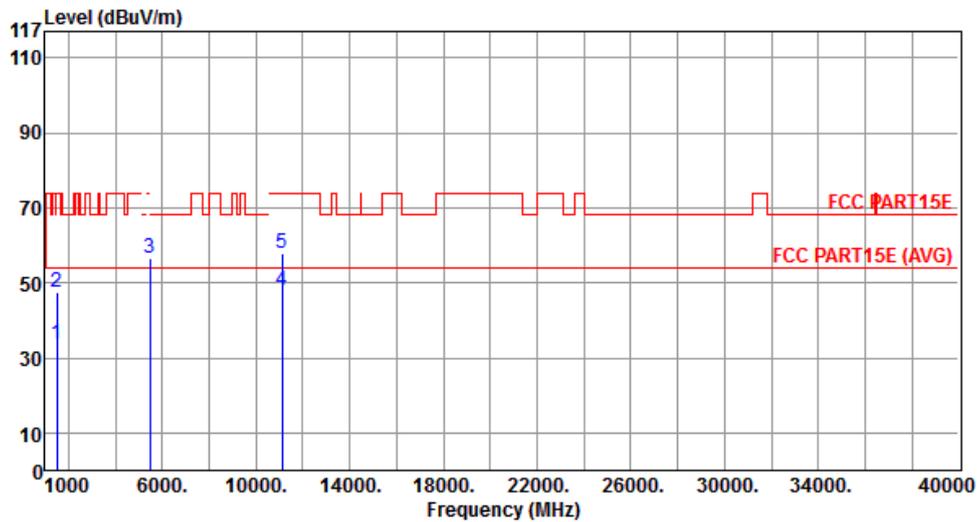
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.48	54.00	-20.52	40.21	-6.73	Average	---	---
2	1500.00	48.15	74.00	-25.85	54.88	-6.73	Peak	---	---
3	5470.00	55.72	68.20	-12.48	49.96	5.76	Peak	---	---
4	11100.00	45.27	54.00	-8.73	30.18	15.09	Average	---	---
5	11100.00	56.71	74.00	-17.29	41.62	15.09	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5550
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



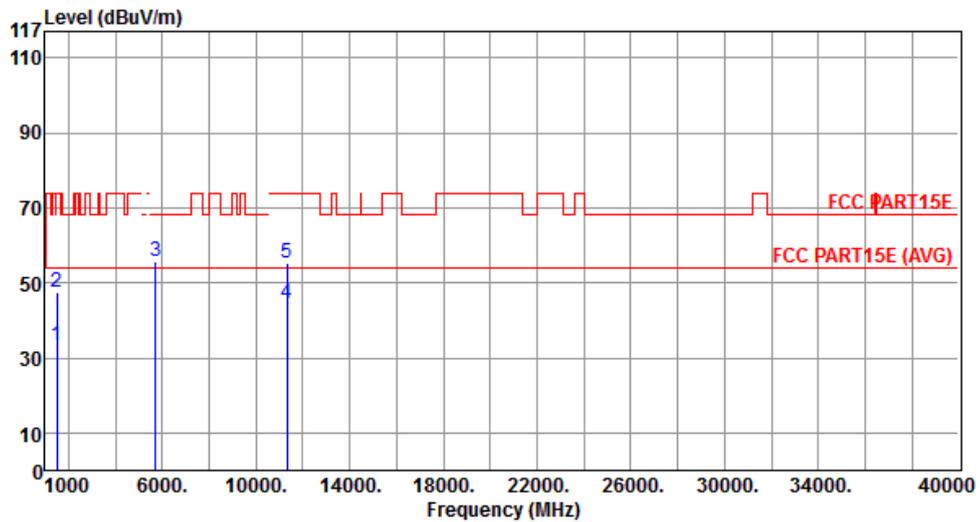
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.75	54.00	-20.25	40.48	-6.73	Average	---	---
2	1500.00	47.46	74.00	-26.54	54.19	-6.73	Peak	---	---
3	5470.00	56.36	68.20	-11.84	50.60	5.76	Peak	---	---
4	11100.00	47.77	54.00	-6.23	32.68	15.09	Average	---	---
5	11100.00	58.03	74.00	-15.97	42.94	15.09	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5670
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



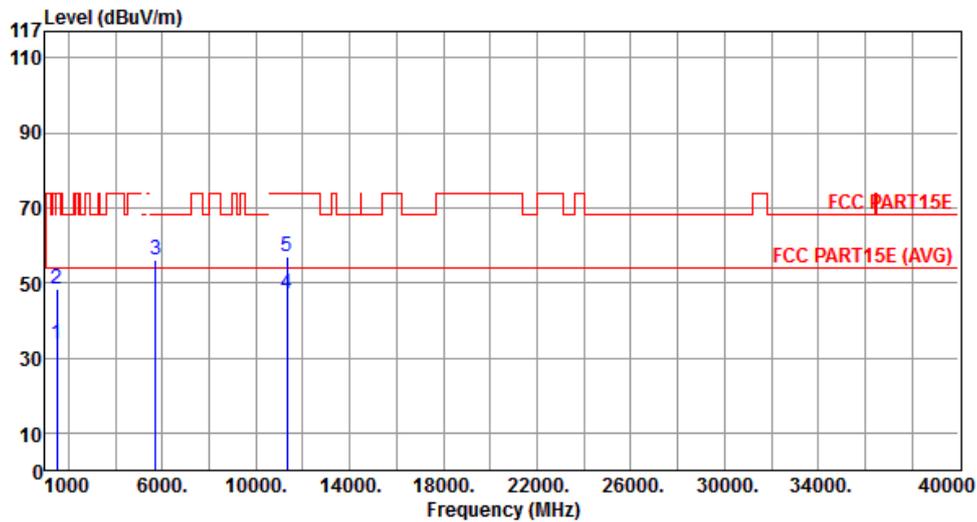
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.45	54.00	-20.55	40.18	-6.73	Average	---	---
2	1500.00	47.53	74.00	-26.47	54.26	-6.73	Peak	---	---
3	5725.00	55.86	68.20	-12.34	50.13	5.73	Peak	---	---
4	11340.00	44.67	54.00	-9.33	29.96	14.71	Average	---	---
5	11340.00	55.45	74.00	-18.55	40.74	14.71	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).

<b>Modulation</b>	VHT40	<b>Test Freq. (MHz)</b>	5670
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.50	54.00	-20.50	40.23	-6.73	Average	---	---
2	1500.00	48.48	74.00	-25.52	55.21	-6.73	Peak	---	---
3	5725.00	56.21	68.20	-11.99	50.48	5.73	Peak	---	---
4	11340.00	46.91	54.00	-7.09	32.20	14.71	Average	---	---
5	11340.00	57.03	74.00	-16.97	42.32	14.71	Peak	---	---

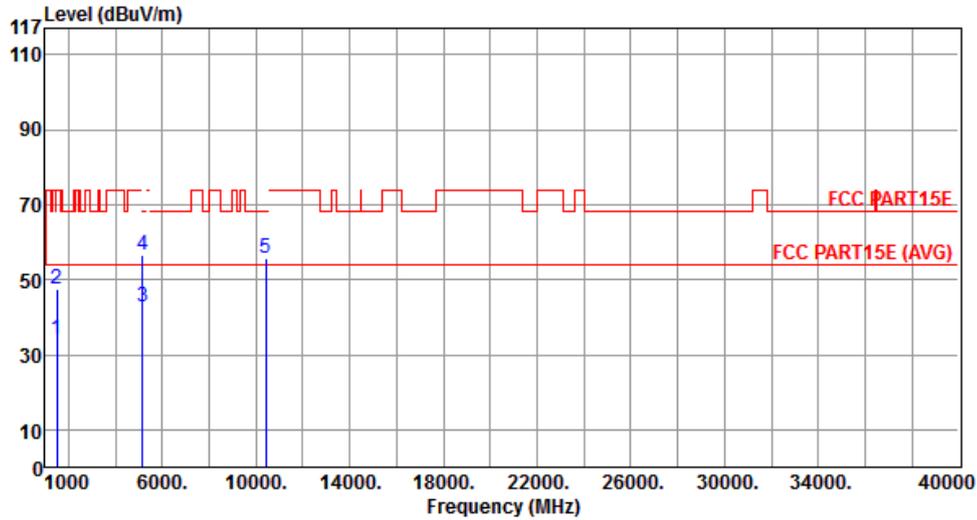
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*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

<b>Modulation</b>	VHT80	<b>Test Freq. (MHz)</b>	5210
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



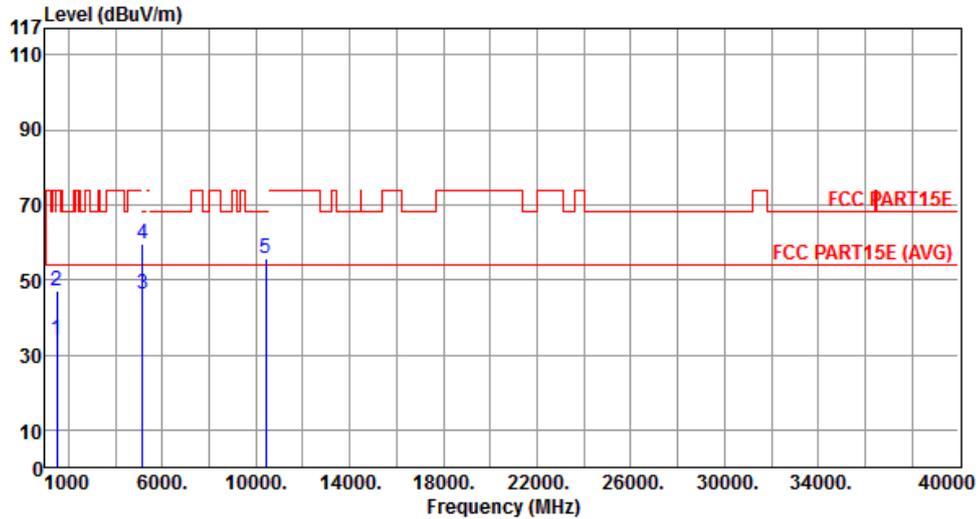
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.95	54.00	-20.05	40.68	-6.73	Average	---	---
2	1500.00	47.29	74.00	-26.71	54.02	-6.73	Peak	---	---
3	5150.00	42.70	54.00	-11.30	37.04	5.66	Average	---	---
4	5150.00	56.53	74.00	-17.47	50.87	5.66	Peak	---	---
5	10420.00	55.76	68.20	-12.44	40.71	15.05	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).

<b>Modulation</b>	VHT80	<b>Test Freq. (MHz)</b>	5210
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



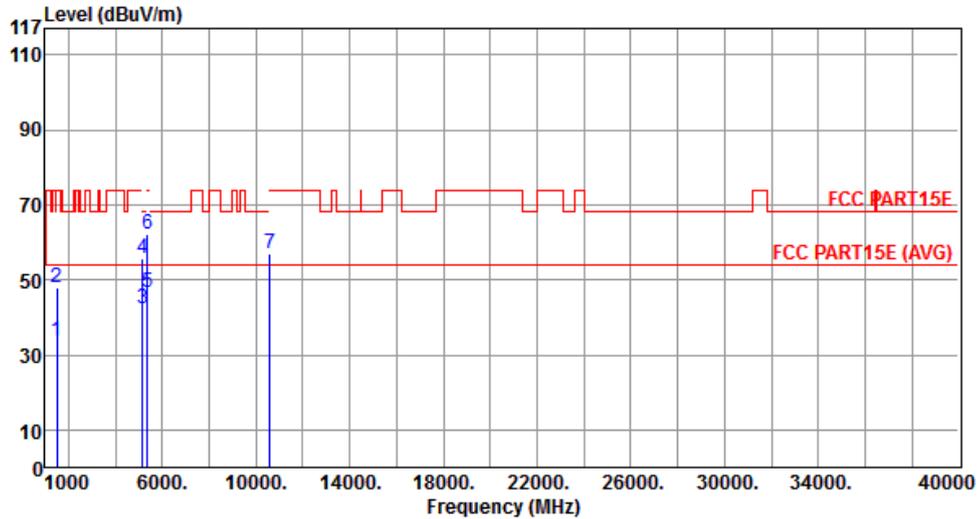
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.01	54.00	-19.99	40.74	-6.73	Average	---	---
2	1500.00	47.13	74.00	-26.87	53.86	-6.73	Peak	---	---
3	5150.00	46.14	54.00	-7.86	40.48	5.66	Average	---	---
4	5150.00	59.59	74.00	-14.41	53.93	5.66	Peak	---	---
5	10420.00	55.69	68.20	-12.51	40.64	15.05	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).

<b>Modulation</b>	VHT80	<b>Test Freq. (MHz)</b>	5290
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



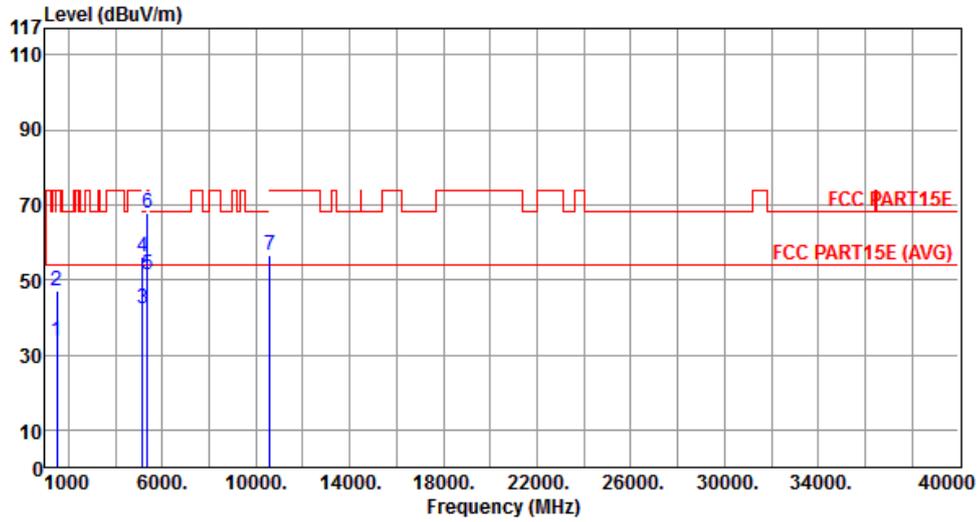
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.81	54.00	-20.19	40.54	-6.73	Average	---	---
2	1500.00	47.83	74.00	-26.17	54.56	-6.73	Peak	---	---
3	5150.00	42.39	54.00	-11.61	36.73	5.66	Average	---	---
4	5150.00	55.81	74.00	-18.19	50.15	5.66	Peak	---	---
5	5350.00	46.75	54.00	-7.25	40.94	5.81	Average	---	---
6	5350.00	62.26	74.00	-11.74	56.45	5.81	Peak	---	---
7	10580.00	56.84	68.20	-11.36	41.67	15.17	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).

<b>Modulation</b>	VHT80	<b>Test Freq. (MHz)</b>	5290
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



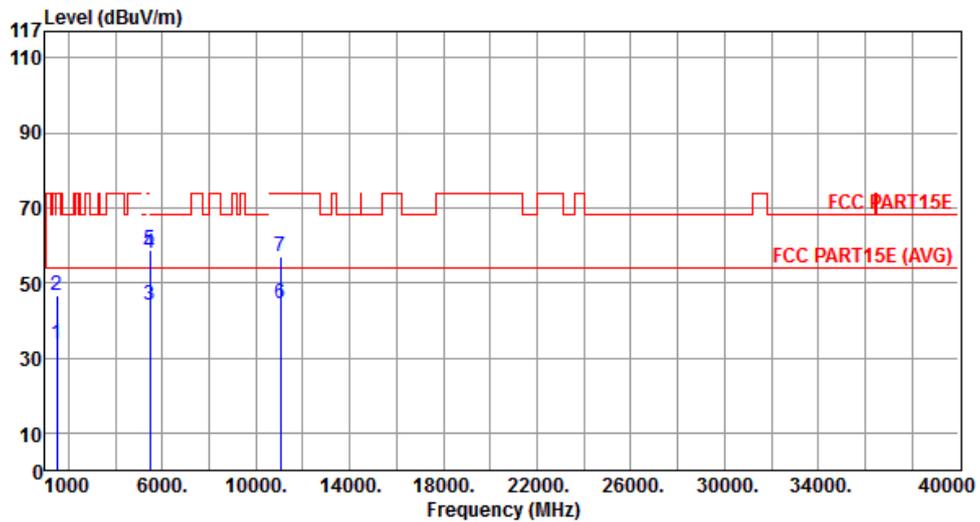
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.86	54.00	-20.14	40.59	-6.73	Average	---	---
2	1500.00	47.01	74.00	-26.99	53.74	-6.73	Peak	---	---
3	5150.00	42.51	54.00	-11.49	36.85	5.66	Average	---	---
4	5150.00	56.14	74.00	-17.86	50.48	5.66	Peak	---	---
5	5350.00	51.23	54.00	-2.77	45.42	5.81	Average	---	---
6	5350.00	67.64	74.00	-6.36	61.83	5.81	Peak	---	---
7	10580.00	56.68	68.20	-11.52	41.51	15.17	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).

<b>Modulation</b>	VHT80	<b>Test Freq. (MHz)</b>	5530
<b>Polarization</b>	Horizontal	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



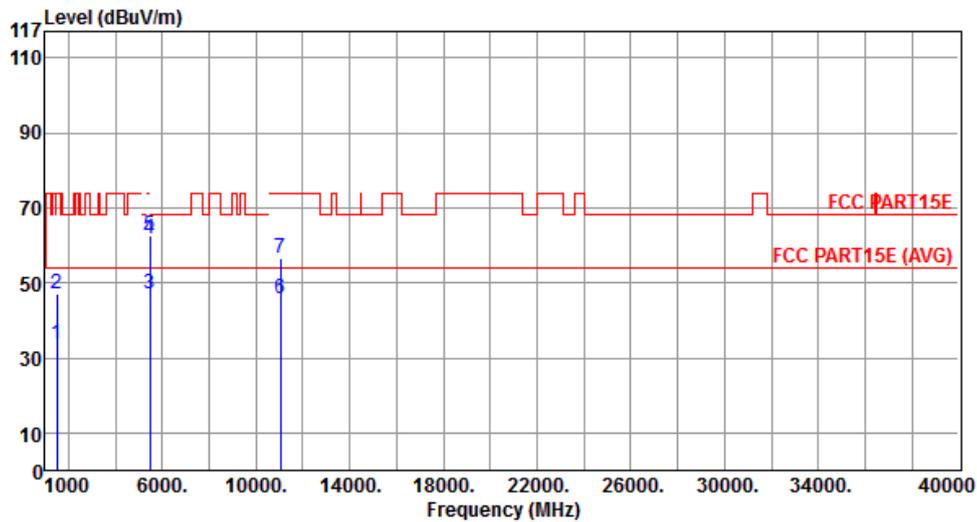
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.72	54.00	-20.28	40.45	-6.73	Average	---	---
2	1500.00	46.47	74.00	-27.53	53.20	-6.73	Peak	---	---
3	5460.00	44.23	54.00	-9.77	38.45	5.78	Average	---	---
4	5460.00	57.67	74.00	-16.33	51.89	5.78	Peak	---	---
5	5470.00	58.68	68.20	-9.52	52.92	5.76	Peak	---	---
6	11060.00	44.49	54.00	-9.51	29.33	15.16	Average	---	---
7	11060.00	56.99	74.00	-17.01	41.83	15.16	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).

<b>Modulation</b>	VHT80	<b>Test Freq. (MHz)</b>	5530
<b>Polarization</b>	Vertical	<b>Transmit Chains (N<sub>TX</sub>)</b>	2Tx



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.61	54.00	-20.39	40.34	-6.73	Average	---	---
2	1500.00	46.85	74.00	-27.15	53.58	-6.73	Peak	---	---
3	5460.00	47.14	54.00	-6.86	41.36	5.78	Average	---	---
4	5460.00	61.60	74.00	-12.40	55.82	5.78	Peak	---	---
5	5470.00	62.57	68.20	-5.63	56.81	5.76	Peak	---	---
6	11060.00	45.72	54.00	-8.28	30.56	15.16	Average	---	---
7	11060.00	56.51	74.00	-17.49	41.35	15.16	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

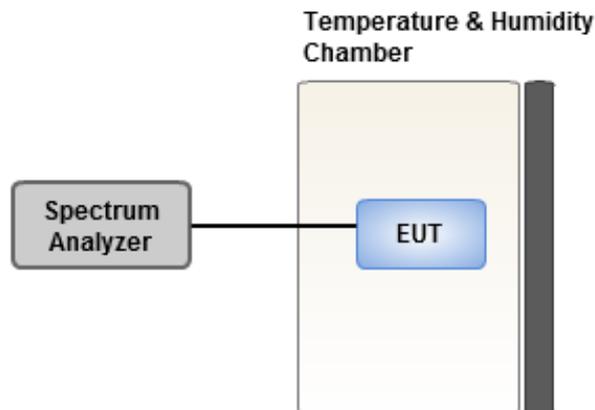
### 3.7.1 Limit of Frequency Stability

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
Temperature (°C)				
T20°C Vmax	0.69	1.22	1.33	0.90
T20°C Vmin	2.59	2.49	2.52	1.96
T50°C Vnom	1.48	1.24	1.70	1.51
T40°C Vnom	-0.77	-0.06	-0.36	-0.20
T30°C Vnom	0.00	0.23	-0.11	0.15
T20°C Vnom	2.15	1.38	1.91	1.85
T10°C Vnom	2.03	1.49	2.11	2.06
T0°C Vnom	1.86	1.40	2.24	1.80
T-10°C Vnom	1.01	0.87	0.64	0.98
T-20°C Vnom	1.72	1.77	1.89	0.80
T-30°C Vnom	0.77	0.02	0.14	-0.32
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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No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

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

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC\_Service@icertifi.com.tw

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