



Test Report No.:  
**FCC2022-0012-RF3**

## RF Test Report

**EUT** : **WIFI Module**  
**MODEL** : **WF-U21DS-SSA1,WF-U21DS-SSA2**  
**BRAND NAME** : **N/A**  
**CLIENT** : **Sichuan AI-Link Technology Co.,Ltd.**  
**Classification Of Test** : **N/A**

**CVC Testing Technology Co., Ltd.**



<b>Client</b>	Name : Sichuan AI-Link Technology Co.,Ltd. Address : Anzhou Industrial Park, Mianyang, Sichuan, P.R.C		
<b>Manufacturer</b>	Name : Sichuan AI-Link Technology Co.,Ltd. Address : Anzhou Industrial Park, Mianyang, Sichuan, P.R.C		
<b>Equipment Under Test</b>	Name : WIFI Module Model/Type: WF-U21DS-SSA1,WF-U21DS-SSA2 Trade mark : N/A Serial NO.:N/A Sample NO.:2-1,2-2		
Date of Receipt.	2022.02.21	Date of Testing	2022.02.21~2022.08.17
<b>Test Specification</b>		<b>Test Result</b>	
FCC Part 15, Subpart E (15.407)		PASS	
<b>Evaluation of Test Result</b>	The equipment under test was found to comply with the requirements of the standards applied.  <b>Issue Date: 2022.08.22</b>		
Tested by:  Xu ZhenFei Name      Signature	Reviewed by:  Liu YongHai Name      Signature	Approved by:  Chen HuaWen Name      Signature	
<b>Other Aspects: NONE.</b>			
Abbreviations:OK, Pass= passed      Fail = failed      N/A= not applicable      EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



## TABLE OF CONTENTS

<b>RELEASE CONTROL RECORD .....</b>	<b>5</b>
<b>1 SUMMARY OF TEST RESULTS .....</b>	<b>6</b>
1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS .....	7
1.2 MEASUREMENT UNCERTAINTY .....	8
1.3 TEST LOCATION .....	8
<b>2 GENERAL INFORMATION .....</b>	<b>9</b>
2.1 GENERAL PRODUCT INFORMATION .....	9
2.2 CARRIER FREQUENCY AND CHANNEL .....	11
2.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL .....	14
2.4 DESCRIPTION OF SUPPORT UNITS .....	15
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS .....	15
<b>3 TEST TYPES AND RESULTS .....</b>	<b>16</b>
3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT .....	16
3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT .....	16
3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS .....	17
3.1.3 TEST PROCEDURES .....	18
3.1.4 TEST SETUP .....	19
3.1.5 TEST RESULTS - BELOW 1GHz .....	20
3.1.6 TEST RESULTS - Band 1 (5180-5240MHz): .....	22
3.1.7 TEST RESULTS - Band 2 (5260-5320MHz): .....	43
3.1.8 TEST RESULTS - Band 3 (5500-5720MHz): .....	64
3.1.9 TEST RESULTS - Band 4 (5745-5825MHz): .....	93
3.2 CONDUCTED EMISSION MEASUREMENT .....	114
3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....	114
3.2.2 TEST PROCEDURES .....	114
3.2.3 TEST SETUP .....	114
3.2.4 TEST RESULTS .....	115
3.3 26DB EMISSION BANDWIDTH .....	117
3.3.1 LIMITS OF 26DB EMISSION BANDWIDTH .....	117
3.3.2 TEST PROCEDURES .....	117
3.3.3 TEST SETUP .....	117
3.3.4 TEST RESULTS .....	117
3.4 6DB EMISSION BANDWIDTH .....	118
3.4.1 LIMITS OF 6DB EMISSION BANDWIDTH .....	118
3.4.2 TEST PROCEDURES .....	118
3.4.3 TEST SETUP .....	118
3.4.4 TEST RESULTS .....	118
3.5 TRANSMIT POWER MEASUREMENT .....	119
3.5.1 LIMITS OF TRANSMIT POWER MEASUREMENT .....	119
3.5.2 TEST PROCEDURES .....	120
3.5.3 TEST SETUP .....	120
3.5.4 TEST RESULTS .....	120
3.6 POWER SPECTRAL DENSITY MEASUREMENT .....	121
3.6.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT .....	121
3.6.2 TEST PROCEDURE .....	122
3.6.3 TEST SETUP .....	122
3.6.4 TEST RESULT .....	122
3.7 FREQUENCY STABILITY .....	123
3.7.1 LIMITS OF FREQUENCY STABILITY .....	123
3.7.2 TEST PROCEDURES .....	123
3.7.3 TEST SETUP .....	123



3.7.4 TEST RESULTS .....	124
<b>4 PHOTOGRAPHS OF TEST SETUP .....</b>	<b>125</b>
<b>5 APPENDIX .....</b>	<b>126</b>
5.1 APPENDIX A: 26DB EMISSION BANDWIDTH .....	126
5.1.1 Test Result .....	126
5.1.2 Test Graphs .....	128
5.2 APPENDIX B: 6DB EMISSION BANDWIDTH .....	162
5.2.1 Test Result .....	162
5.2.2 Test Graphs .....	163
5.3 APPENDIX D: TRANSMIT POWER MEASUREMENT .....	171
5.3.1 Test Result .....	171
5.4 APPENDIX E: POWER SPECTRAL DENSITY MEASUREMENT .....	174
5.4.1 Test Result .....	174
5.4.2 Test Graphs .....	177
5.5 APPENDIX F: FREQUENCY STABILITY .....	241
5.5.1 Test Result .....	241



## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2022-0012-RF3	Original release	2022.08.22



## 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.207	Conducted Emissions	PASS	Meet the requirement of limit.
15.403(i)	6dB&26dB Emission Bandwidth	PASS	Meet the requirement of limit.
15.407(b)	Radiated Emissiont and Bandedge	PASS	Meet the requirement of limit.
15.407(a)	Transmit Power	PASS	Meet the requirement of limit.
15.407(a)	Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203 15.407(a)	Antenna Requirement	PASS	No antenna connector is used

Note: refer to DFS report (Report No. FCC2022-0012-RF4)



## 1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
WIFI & Bluetooth Test System 1					/
Communication Shielded Room 1	4m*3m*3m	CRTDSWKS44301	VGDS-0699	CRT	2024/04/24
Spectrum Analyzer	FSV30	104337	DZ-000235	R&S	2022/11/03
Comprehensive Test Instrument	CMW500	137779	DZ-000220	R&S	2023/07/10
Comprehensive Test Instrument	CMW500	169888	DZ-000342	R&S	2022/12/01
LTE Comprehensive Test Instrument	E7515A	MY58010639	DZ-000173	KEYSIGHT	2023/04/07
Analog Signal Generator	SMA100B	103663	DZ-000239-2	R&S	2023/07/10
Vector Signal Generator	SMBV100B	101757	DZ-000239-1	R&S	2023/06/22
Programmable DC Power Supply	E3644A	MY58036222	DZ-000178	KEYSIGHT	2023/04/21
Radiation Spurious Test System					/
3m Semi-Anechoic Chamber	FACT-4	ST08035	WKNA-0024	ETS	2024/12/12
Spectrum Analyzer	N9010B	MY57470323	DZ-000174	KEYSIGHT	2023/03/02
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2023/03/02
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2023/06/25
Waveguide Horn Antenna	HF906	360306/008	WKNA-0024-8	R&S	2023/03/04
Waveguide Horn Antenna	BBHA9170	00949	DZ-000209-2	SCHWARZBECK	2023/07/31
Preamplifier	BBV 9721	9721-050	DZ-000209-1	SCHWARZBECK	2023/06/05
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	1	DZ-000186	WI	2022/12/20
Comprehensive tester	CMW500	159000	DZ-000240-2	R&S	2022/12/20
Conducted emission					/
EMI Test Receiver	ESCI	100857	WKNB-0081	R&S	2022-12-08
EMI Test Receiver	ESR3	102394	VG DY-0705	R&S	2023-03-04
LISN	NSLK 8127	8127644	VG DY-0150	SCHWARZBECK	2023-09-04
DC LISN	PVDC8301-017	PVDC8301#17	VG DY-0692	SCHWARZBECK	2022-10-09
LISN	NSLK 8129	8129-268	EM-000388	SCHWARZBECK	2023-09-04
Plus Limiter (#1)	VTSD 9561 F-N	00515	VG DY-0808	SCHWARZBECK	2023-03-04
Impedance Stabilization Network	ISN T800	27095	WKNE-0195	TESEQ	2023-09-04
Impedance Stabilization Network	NTFM8158	8158-0092	VG DY-0356	SCHWARZBECK	2023-06-07
Impedance Stabilization Network	NTFM8131	#184	EM-000498	SCHWARZBECK	2023-06-07
Voltage Probe	TK9420	9420-499	VG DY-0128	SCHWARZBECK	2023-03-04
Power Divider	4901.17.B	22643830	DB-0016	HUBER+SUHNER	2023-09-01
Video Signal Generator	GV-798+	151064920001	VGDS-0215	PROMAX	2023-05-30
Audio Signal Generator	GAG-810	EK871591	EM-000309	GW	2022-12-08
Shielding Room(#1)	GP1A	001	WKNF-0001	LEINING	2024-08-08



## 1.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

No.	ITEM	FREQUENCY	UNCERTAINTY
1	Conducted emissions	9kHz~30MHz	±2.66dB
2	Radiated emissions	9KHz ~ 30MHz	±0.769dB
		30MHz ~ 1GMHz	±0.877dB
		1GHz ~ 18GHz	±0.777dB
		18GHz ~ 40GHz	±1.315dB

## 1.3 TEST LOCATION

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Testing Technology Co., Ltd.

Address: No.3,TiantaiyiRoad,KaitaiAvenue,ScienceCity,Guangzhou,China

Post Code: 510663 Tel: 020-32293888

FAX: 020-32293889 E-mail: office@cvc.org.cn





## 2 GENERAL INFORMATION

### 2.1 GENERAL PRODUCT INFORMATION

PRODUCT	WIFI Module
BRAND	N/A
MODEL NO.	WF-U21DS-SSA1,WF-U21DS-SSA2
FCC ID	2AOKI-AL5621D
POWER SUPPLY	DC 3.3V
MODULATION TECHNOLOGY	OFDM,OFDMA
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM,256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
TRANSFER RATE	802.11a: up to 54Mbps 802.11n : up to 300Mbit/s 802.11ac: up to 1733.3Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz,5260 ~ 5320MHz, 5500 ~ 5720MHz (Remark 5), 5745 ~ 5825MHz
NUMBER OF CHANNEL	See item 2.2
CONDUCTED OUTPUT POWER	20.29 dBm for 5180 ~ 5240MHz (Maximum AVG Power) 19.72 dBm for 5260 ~ 5320MHz (Maximum AVG Power) 20.71 dBm for 5500 ~ 5720MHz (Maximum AVG Power) 20.19 dBm for 5745 ~ 5825MHz (Maximum AVG Power)
ANTENNA TYPE (Remark 6)	ANT0 5180 ~ 5240MHz: External antenna with 3.37dBi gain 5260 ~ 5320MHz: External antenna with 3.37dBi gain 5500 ~ 5720MHz: External antenna with 3.37dBi gain 5745 ~ 5825MHz: External antenna with 3.37dBi gain ANT1 5180 ~ 5240MHz: External antenna with 3.37dBi gain 5260 ~ 5320MHz: External antenna with 3.37dBi gain 5500 ~ 5720MHz: External antenna with 3.37dBi gain 5745 ~ 5825MHz: External antenna with 3.37dBi gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A



**NOTE:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. EUT photo refer to report (Report NO.: FCC2022-0012-E).
4. The EUT incorporates a MIMO function. Physically, the EUT provides 2 completed transmitter and 2 receiver.
5. Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.

MODULATION MODE	TX FUNCTION
802.11a	2TX/2RX
802. 11n 20MHz	2TX/2RX
802. 11n 40MHz	2TX/2RX
802.11ac 80MHz	2TX/2RX



## 2.2 Carrier Frequency and Channel

### FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) :

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	40	5200 MHz
44	5220 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210MHz	--	--

### WLAN 5.26 ~ 5.32GHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) :

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260MHz	56	5280MHz
60	5300MHz	64	5320MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270MHz	62	5310MHz

1 channels are provided for 802.11ac (VHT80)::

CHANNEL	FREQUENCY
58	5290MHz

## WLAN 5.50 ~ 5.72GHz

9 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) ::

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
<b>100</b>	<b>5500MHz</b>	124	5620MHz
104	5520MHz	128	5640MHz
108	5540MHz	132	5660MHz
112	5560MHz	136	5680MHz
<b>116</b>	<b>5580MHz</b>	<b>140</b>	<b>5700MHz</b>
120	5600MHz	<b>144</b>	<b>5720MHz</b>

4 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
<b>102</b>	<b>5510MHz</b>	126	5630MHz
<b>110</b>	<b>5550MHz</b>	<b>134</b>	<b>5670MHz</b>
118	5590MHz	<b>142</b>	<b>5710MHz</b>

2 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
<b>106</b>	<b>5530MHz</b>	<b>138</b>	<b>5690MHz</b>
<b>122</b>	<b>5610MHz</b>		

## FOR 5745 ~ 5825MHz

5 channels are provided for 802.11a, 802.11a c 20MHz, 802.11n (20MHz) :

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
<b>149</b>	<b>5745MHz</b>	153	5765MHz
<b>157</b>	<b>5785MHz</b>	161	5805MHz
<b>165</b>	<b>5825MHz</b>	--	--

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40),:

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
<b>151</b>	<b>5755MHz</b>	<b>159</b>	<b>5795MHz</b>

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
<b>155</b>	<b>5775MHz</b>	--	--

1. The channels which were indicated in bold type of the above channel list were selected as representative test channel. Therefore only the data of the test channels were recorded in this report.
2. By means of test software which provided by manufacture, the power levels during the tests were set according to the following codes:



Operated in 5180 ~ 5240MHz band							
802.11a		802.11n(HT20)		802.11n(HT40)		802.11ac (VHT80)	
FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING
5180	14	5180	12	5190	12	5210	12
5200	14	5200	12	5230	12		
5240	14	5240	12				
Operated in 5260 ~ 5320MHz band							
802.11a		802.11n(HT20)		802.11n(HT40)		802.11ac (VHT80)	
FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING
5260	14	5260	12	5270	12	5290	12
5280	14	5280	12	5310	12		
5320	14	5320	12				
Operated in 5500 ~ 5720MHz band							
802.11a		802.11n(HT20)		802.11n(HT40)		802.11ac (VHT80)	
FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING	FREQUENCY(MHZ)	POWER SETTING
5500	14	5500	12	5510	12	5530	12
5580	14	5580	12	5550	12	5610	12
5700	14	5700	12	5670	12	5690	12
5720	14	5720	12	5710	12		
Operated in 5745 ~ 5825MHz band							
802.11a		802.11n(HT20)		802.11n(HT40)		802.11ac (VHT80)	
CHANNEL	POWER SETTING	CHANNEL	POWER SETTING	CHANNEL	POWER SETTING	CHANNEL	POWER SETTING
5745	14	5745	12	5755	12	5755	12
5785	14	5785	12	5795	12		
5825	14	5825	12				



## 2.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	Powered by host unit with wifi(5G) link

Where **RE≥1G**: Radiated Emission above 1GHz

**RE<1G**: Radiated Emission below 1GHz

**PLC**: Power Line Conducted Emission

**APCM**: Antenna Port Conducted Measurement

### NOTE:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.

**NOTE**: “-” means no effect.

MODULATION	DATA RATE
802.11a	6Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20(Covered by HT20)	MCS0
802.11ac VHT40(Covered by HT40)	MCS0
802.11ac VHT80	MCS0

### TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
<b>RE&lt;1G</b>	25deg. C, 54%RH	DC 3.3V From USB Host Unit	Liu ShiWei
<b>RE≥1G</b>	25deg. C, 54%RH	DC 3.3V From USB Host Unit	Liu ShiWei
<b>PLC</b>	20deg. C, 56%RH	DC 3.3V From USB Host Unit	Liu ShiWei
<b>APCM</b>	20deg. C, 55%RH	DC 3.3V From USB Host Unit	Liu ShiWei



## 2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support Equipment							
NO	Description	Brand	Model No.	Serial Number	Supplied by		
Support Cable							
NO	Description	Quantity (Number)	Length (m)	Detachable (Yes/ No)	Shielded (Yes/ No)	Cores (Number)	Supplied by
-	-	-	-	-	-	-	-

## 2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

**FCC Part 15, Subpart E (15.407)**

**KDB 789033 D02 General UNII Test Procedures New Rules v02r01**

**KDB 662911 D01 Multiple Transmitter Output v02r01**

**ANSI C63.10-2020**

All test items have been performed and recorded as per the above standards



## 3 TEST TYPES AND RESULTS

### 3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

#### 3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 30dB under any condition of modulation.





## 3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
KDB 789033 D02 General UNII Test Procedures New Rules v02r01	FIELD STRENGTH AT 3m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

### NOTE:

For transmitters operating in the 5.725-5.85 GHz band:Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

### 3.1.3 TEST PROCEDURES

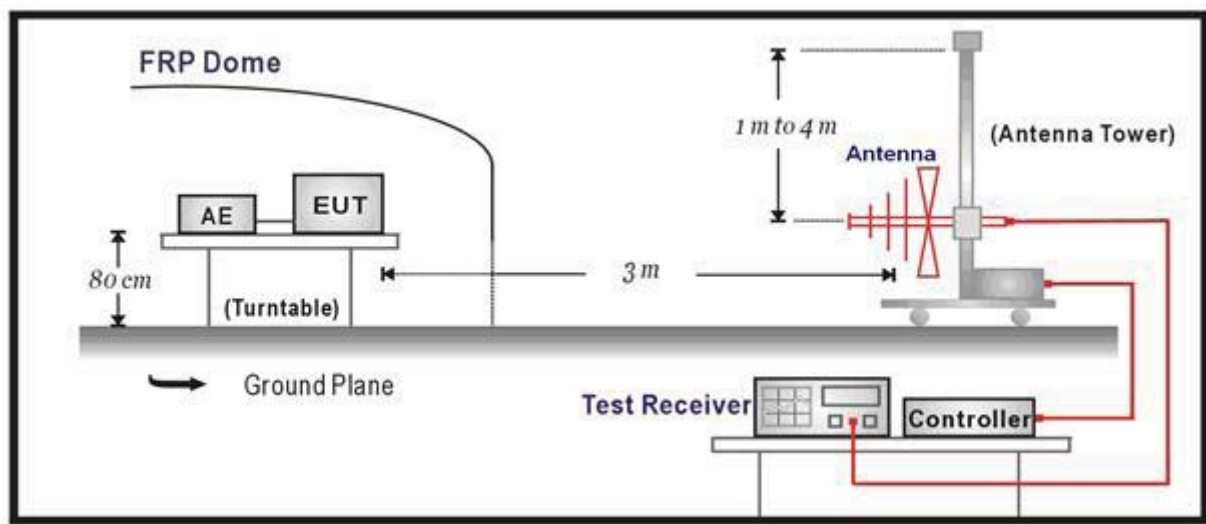
- a. The EUT was placed on the top of a rotating table 1.5 meters(above 1GHz) and 0.8 meters(below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

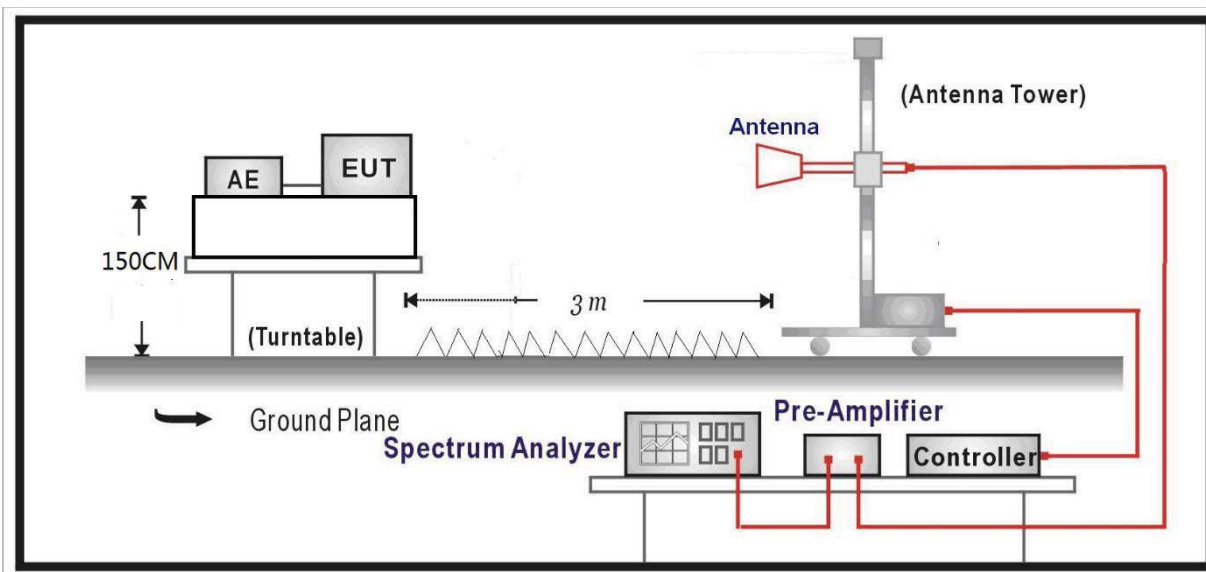
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

## 3.1.4 TEST SETUP

Below 1GHz Test Setup:



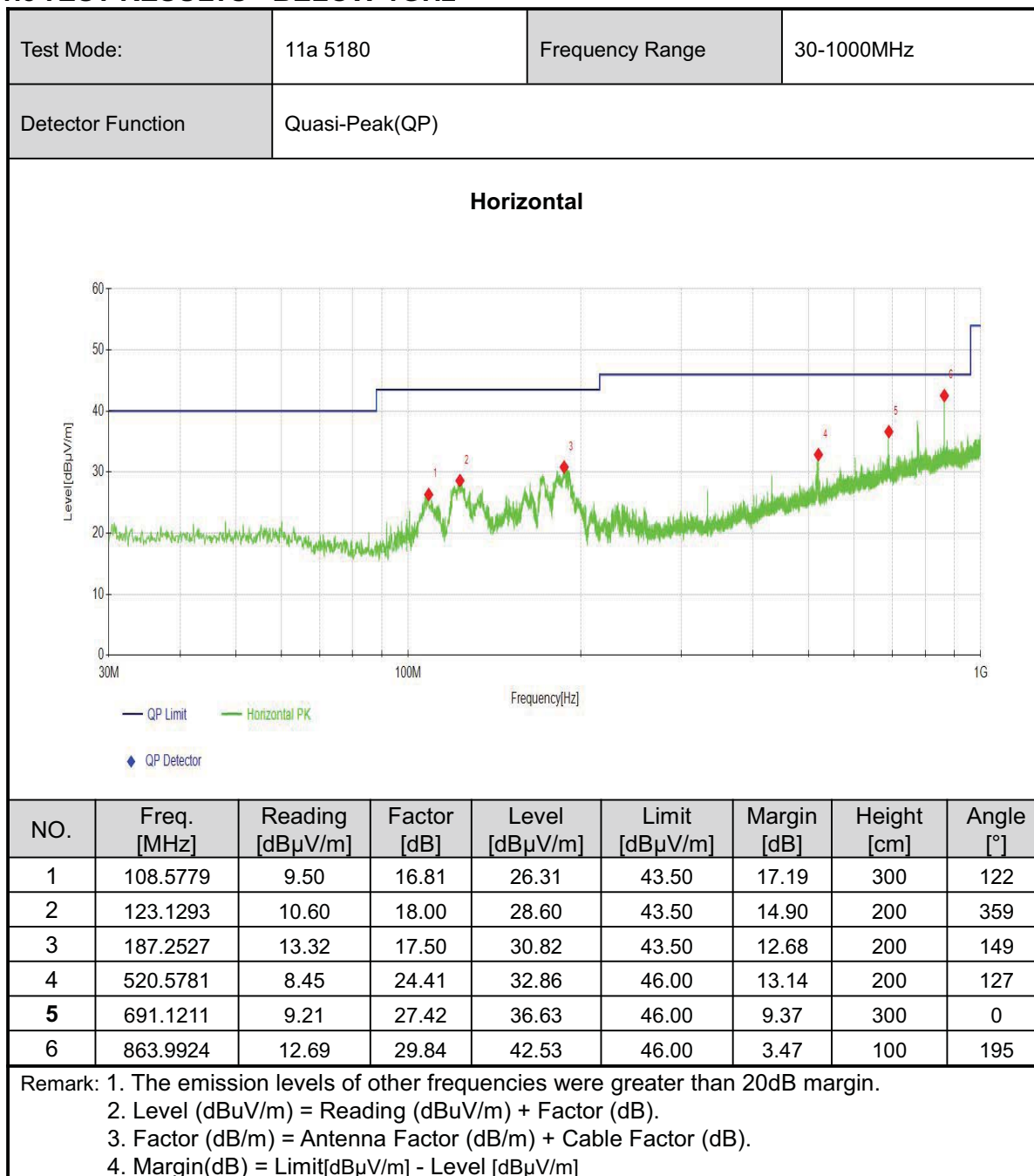
Above 1GHz Test Setup:

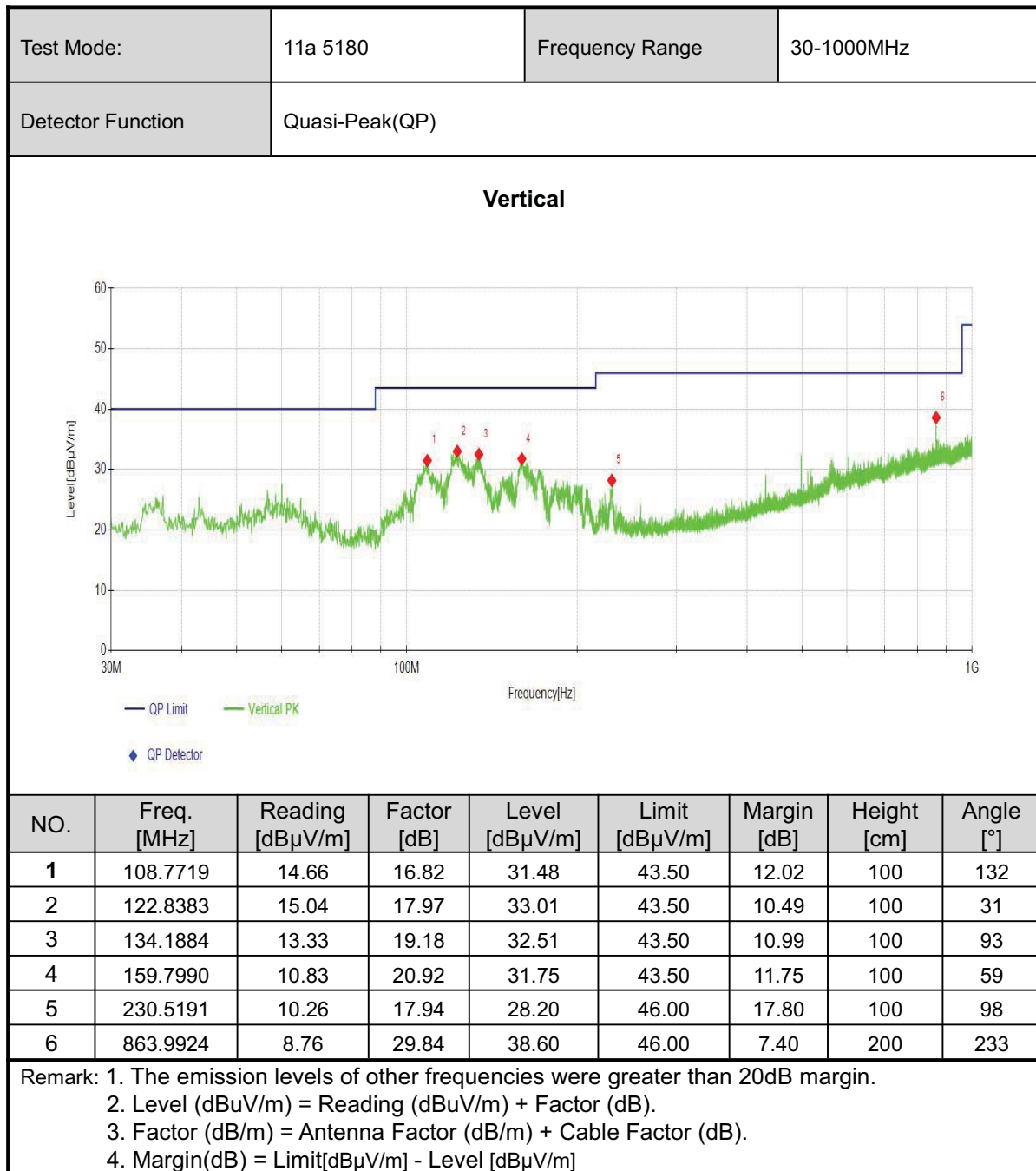


**Note:** For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Setup)



## 3.1.5 TEST RESULTS - BELOW 1GHz







## 3.1.6 TEST RESULTS - Band 1 (5180-5240MHz):

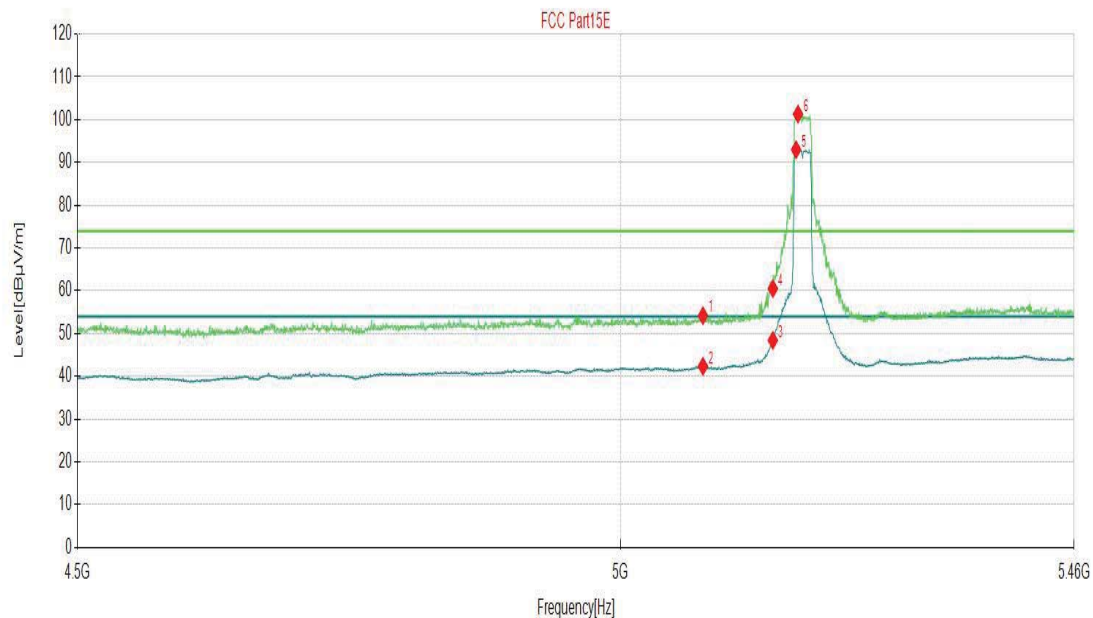
ABOVE 1GHz DATA

MODEL:WF-U21DS-SSA1

Channel	802.11a CH36	Frequency	5180 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

### Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5080.6103	46.38	7.80	54.18	74.00	19.82	150	283	PK
2	5080.6103	34.55	7.80	42.35	54.00	11.65	150	171	AV
3	5150.0000	40.37	8.03	48.40	54.00	5.60	150	175	AV
4	5150.0000	52.50	8.03	60.53	74.00	13.47	150	173	PK
5	5173.2966	85.14	7.85	92.99			150	175	AV
6	5175.2176	93.44	7.87	101.31			150	178	PK
7	10360.0000	41.93	14.09	56.02	68.20	12.18	150	360	PK
8	10360.0000	33.51	14.09	47.60	54.00	6.40	150	360	AV
9	15540.0000	25.59	19.38	44.97	74.00	29.03	150	192	PK
10	15540.0000	16.45	19.38	35.83	54.00	18.17	150	324	AV



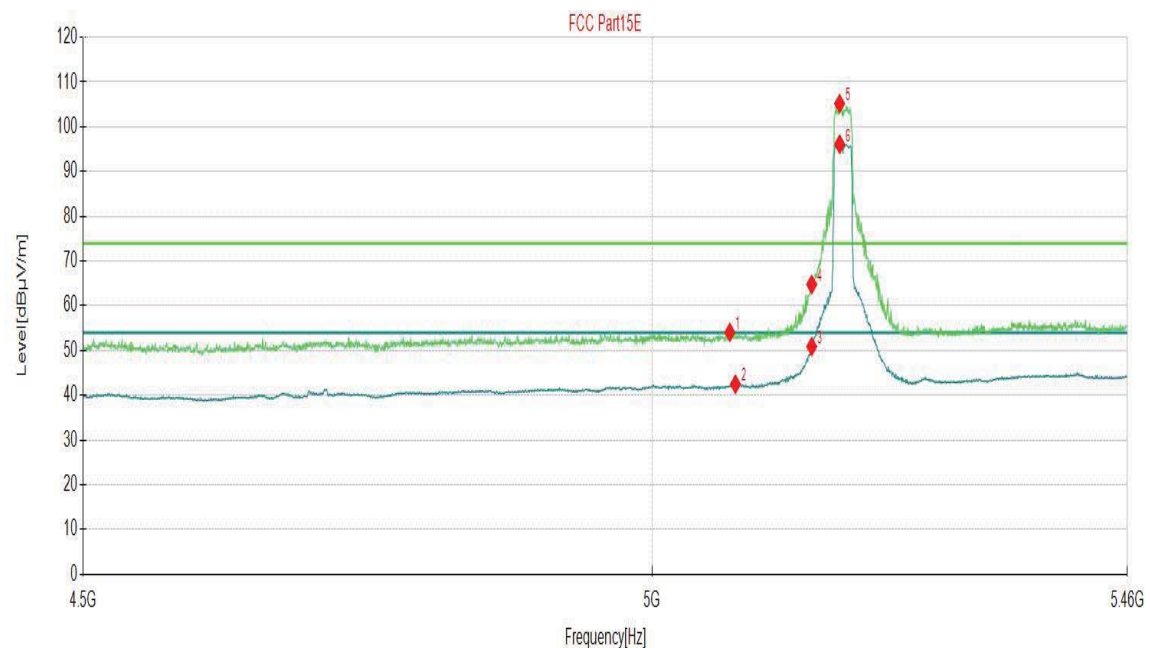
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH36	Frequency	5180 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5072.4462	46.56	7.50	54.06	74.00	19.94	150	232	PK
2	5077.7289	34.77	7.72	42.49	54.00	11.51	150	175	AV
3	5150.0000	42.86	8.03	50.89	54.00	3.11	150	198	AV
4	5150.0000	56.75	8.03	64.78	74.00	9.22	150	200	PK
5	5176.6583	97.30	7.89	105.19			150	198	PK
6	5176.6583	88.20	7.89	96.09			150	198	AV
7	10360.3060	36.65	14.09	50.74	54.00	3.26	150	1	AV
8	10360.3060	45.41	14.09	59.50	68.20	8.70	150	360	PK
9	15539.2439	33.28	19.37	52.65	74.00	21.35	150	221	PK
10	15540.4140	23.59	19.38	42.97	54.00	11.03	150	221	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

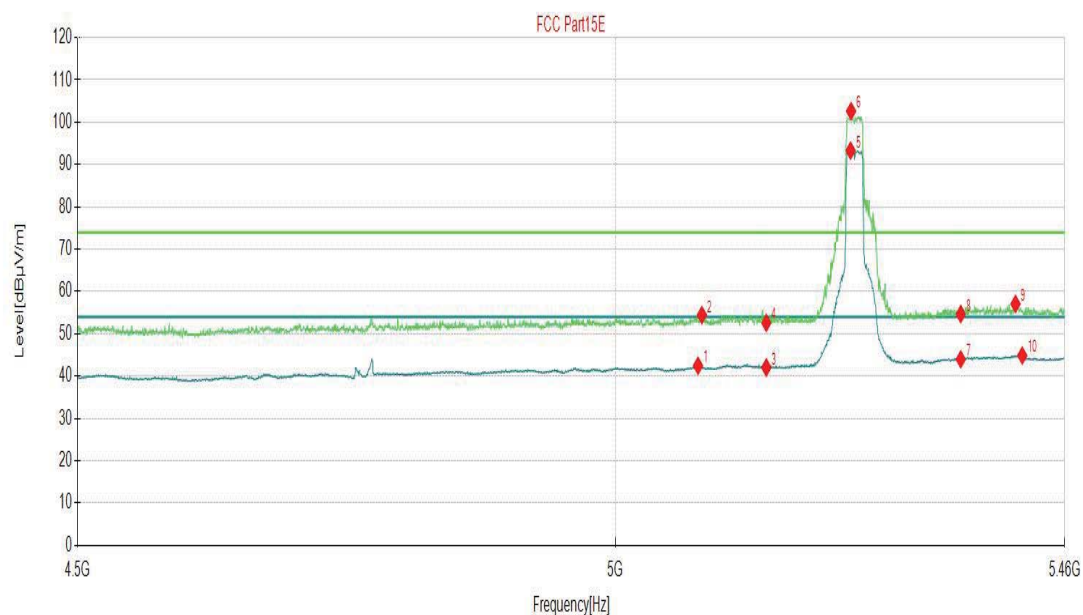


Channel		802.11a CH 40		Frequency		5200MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10400.0000	42.23	14.30	56.53	68.20	11.67	150	1	PK
2	10400.0000	33.53	14.30	47.83	54.00	6.17	150	1	AV
3	15600.0000	24.78	19.58	44.36	74.00	29.64	150	184	PK
4	15600.0000	16.47	19.58	36.05	54.00	17.95	150	184	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	10402.4302	36.17	14.30	50.47	54.00	3.53	150	1	PK
2	10407.1107	45.24	14.29	59.53	68.20	8.67	150	1	AV
3	15598.9199	32.24	19.59	51.83	74.00	22.17	150	193	PK
4	15601.2601	22.80	19.61	42.41	54.00	11.59	150	200	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									





Channel			802.11a CH48		Frequency		5240 MHz		
Frequency Range			Above 1G		Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5081.5708	34.67	7.78	42.45	54.00	11.55	150	139	AV
2	5085.4127	46.71	7.70	54.41	74.00	19.59	150	22	PK
3	5150.0000	34.01	8.03	42.04	54.00	11.96	150	196	AV
4	5150.0000	44.57	8.03	52.60	74.00	21.40	150	223	PK
5	5235.7279	85.08	8.21	93.29			150	171	AV
6	5236.2081	94.40	8.21	102.61			150	171	PK
7	5350.0000	34.01	9.96	43.97	54.00	10.03	150	351	AV
8	5350.0000	44.72	9.96	54.68	74.00	19.32	150	245	PK
9	5407.6538	46.83	10.23	57.06	74.00	16.94	150	345	PK
10	5414.8574	34.84	10.03	44.87	54.00	9.13	150	156	AV
11	10480.0000	35.42	14.45	49.87	68.20	18.33	150	72	PK
12	10480.0000	27.00	14.45	41.45	54.00	12.55	150	359	AV
13	15720.0000	24.57	20.55	45.12	74.00	28.88	150	244	PK
14	15720.0000	14.31	20.55	34.86	54.00	19.14	150	154	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH48	Frequency	5240 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5080.1301	46.47	7.82	54.29	74.00	19.71	150	339	PK
2	5080.1301	34.70	7.82	42.52	54.00	11.48	150	200	AV
3	5150.0000	34.19	8.03	42.22	54.00	11.78	150	277	AV
4	5150.0000	46.36	8.03	54.39	74.00	19.61	150	215	PK
5	5242.4512	88.27	8.23	96.50			150	198	AV
6	5243.8919	96.53	8.23	104.76			150	198	PK
7	5350.0000	45.48	9.96	55.44	74.00	18.56	150	196	PK
8	5350.0000	34.21	9.96	44.17	54.00	9.83	150	309	AV
9	5407.1736	34.83	10.22	45.05	54.00	8.95	150	100	AV
10	5418.2191	46.90	9.85	56.75	74.00	17.25	150	139	PK
11	10477.3177	42.89	14.49	57.38	68.20	10.82	150	360	PK
12	10479.6580	32.59	14.47	47.06	54.00	6.94	150	1	AV
13	15717.1017	31.50	20.55	52.05	74.00	21.95	150	225	PK
14	15720.0000	19.43	20.55	39.98	54.00	14.02	150	241	AV

FCC Part15E

Level[dBμV/m]

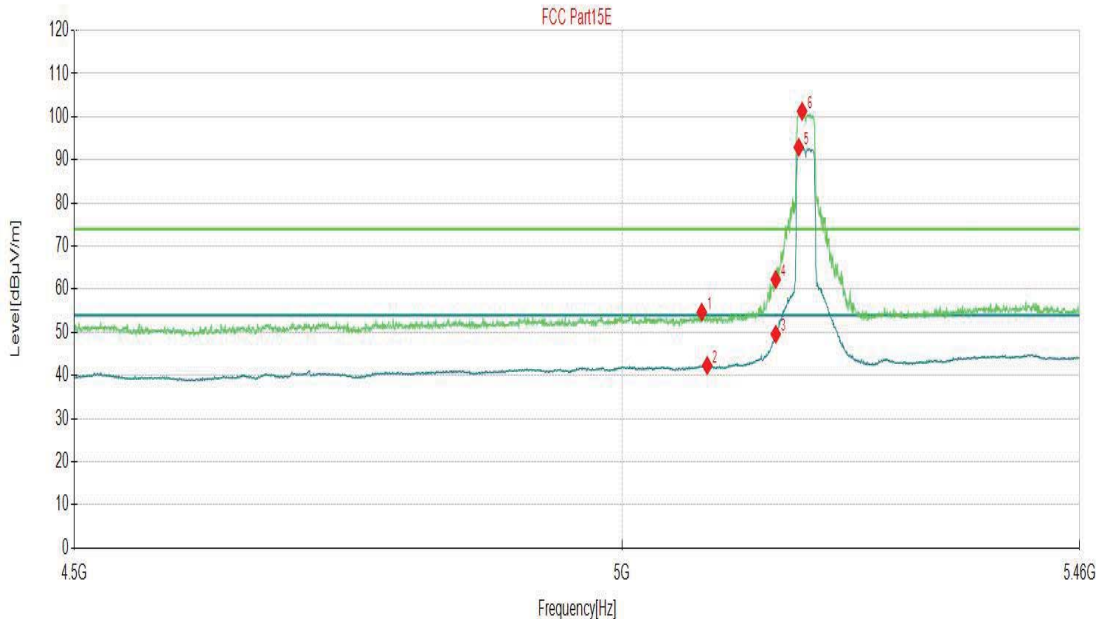
Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH36			Frequency	5180 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5077.2486	46.99	7.70	54.69	74.00	19.31	150	357	PK
2	5082.5313	34.53	7.76	42.29	54.00	11.71	150	176	AV
3	5150.0000	41.56	8.03	49.59	54.00	4.41	150	169	AV
4	5150.0000	54.24	8.03	62.27	74.00	11.73	150	120	PK
5	5172.8164	85.07	7.85	92.92			150	174	AV
6	5176.1781	93.40	7.88	101.28			150	174	PK
7	10360.0000	39.88	14.09	53.97	68.20	14.23	150	359	PK
8	10360.0000	32.93	14.09	47.02	54.00	6.98	150	359	AV
9	15540.0000	24.43	19.38	43.81	74.00	30.19	150	186	PK
10	15540.0000	15.80	19.38	35.18	54.00	18.82	150	186	AV

FCC Part15E

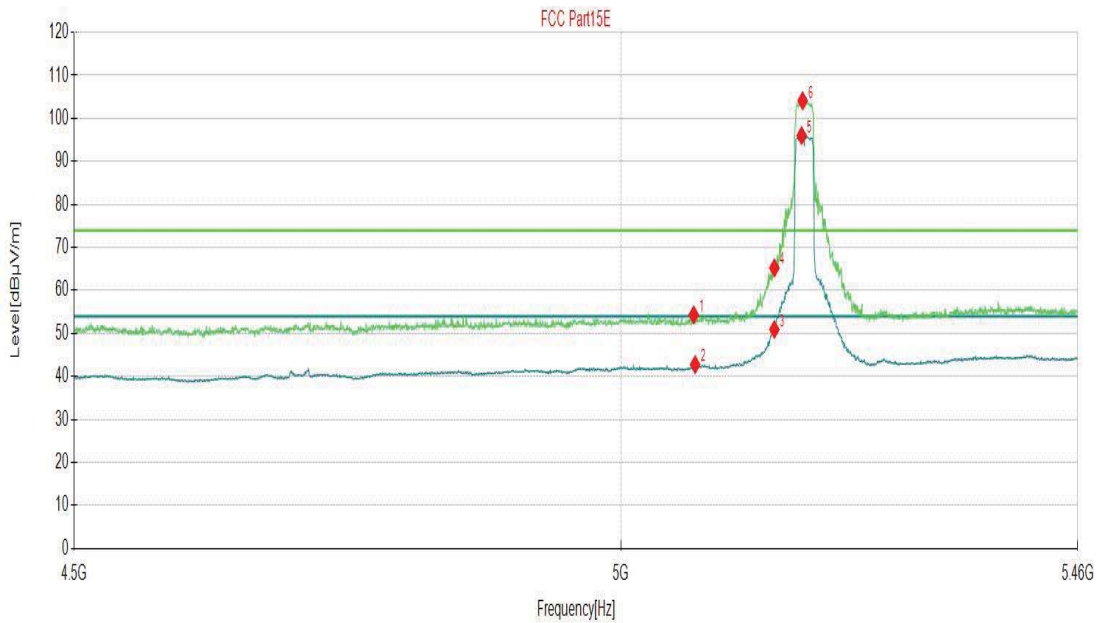


Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH36			Frequency	5180 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5070.5253	46.90	7.42	54.32	74.00	19.68	150	173	PK
2	5071.9660	35.28	7.48	42.76	54.00	11.24	150	184	AV
3	5150.0000	42.91	8.03	50.94	54.00	3.06	150	202	AV
4	5150.0000	57.21	8.03	65.24	74.00	8.76	150	173	PK
5	5177.1386	88.11	7.89	96.00			150	200	AV
6	5178.0991	96.19	7.90	104.09			150	198	PK
7	10360.0000	42.01	14.09	56.10	68.20	12.10	150	3	PK
8	10360.0000	34.47	14.09	48.56	54.00	5.44	150	334	AV
9	15540.0000	31.57	19.38	50.95	74.00	23.05	150	221	PK
10	15540.0000	21.26	19.38	40.64	54.00	13.36	150	218	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11n20 CH 40			Frequency		5200MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10400.0900	35.93	14.30	50.23	54.00	3.77	150	245	AV
2	10403.6004	45.21	14.30	59.51	68.20	8.69	150	245	PK
3	15602.4302	27.69	19.64	47.33	74.00	26.67	150	216	PK
4	15602.4302	18.99	19.64	38.63	54.00	15.37	150	219	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	10400.0900	36.38	14.30	50.68	54.00	3.32	150	22	AV
2	10404.7705	45.50	14.29	59.79	68.20	8.41	150	104	PK
3	15594.2394	33.60	19.63	53.23	74.00	20.77	150	100	PK
4	15598.9199	23.78	19.59	43.37	54.00	10.63	150	97	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11n20 CH48			Frequency	5240 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5037.3887	34.46	7.57	42.03	54.00	11.97	150	237	AV
2	5039.7899	46.20	7.66	53.86	74.00	20.14	150	285	PK
3	5150.0000	44.84	8.03	52.87	74.00	21.13	150	359	PK
4	5150.0000	34.47	8.03	42.50	54.00	11.50	150	177	AV
5	5236.6883	84.88	8.21	93.09			150	171	AV
6	5247.7339	93.17	8.24	101.41			150	171	PK
7	5350.0000	34.11	9.96	44.07	54.00	9.93	150	310	AV
8	5350.0000	45.75	9.96	55.71	74.00	18.29	150	270	PK
9	5409.0945	34.79	10.27	45.06	54.00	8.94	150	355	AV
10	5412.4562	46.74	10.16	56.90	74.00	17.10	150	353	PK
11	10480.0000	36.38	14.45	50.83	68.20	17.37	150	359	PK
12	10480.0000	26.39	14.45	40.84	54.00	13.16	150	1	AV
13	15720.0000	23.55	20.55	44.10	74.00	29.90	150	347	PK
14	15720.0000	14.90	20.55	35.45	54.00	18.55	150	6	AV

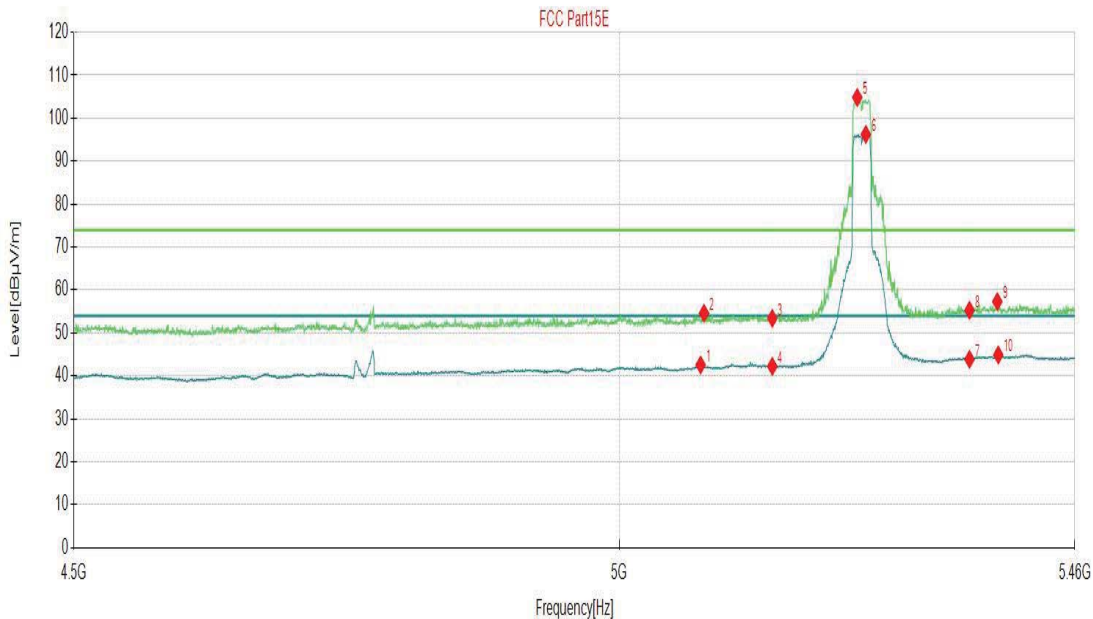
FCC Part15E

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]



Channel	802.11n20 CH48			Frequency	5240 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5079.1696	34.78	7.78	42.56	54.00	11.44	150	255	AV
2	5082.5313	46.82	7.76	54.58	74.00	19.42	150	213	PK
3	5150.0000	45.38	8.03	53.41	74.00	20.59	150	278	PK
4	5150.0000	34.20	8.03	42.23	54.00	11.77	150	1	AV
5	5235.2476	96.64	8.21	104.85			150	198	PK
6	5243.8919	88.01	8.23	96.24			150	198	AV
7	5350.0000	33.92	9.96	43.88	54.00	10.12	150	170	AV
8	5350.0000	45.33	9.96	55.29	74.00	18.71	150	291	PK
9	5378.8394	47.20	10.10	57.30	74.00	16.70	150	99	PK
10	5379.7999	34.77	10.12	44.89	54.00	9.11	150	164	AV
11	10480.0000	42.61	14.45	57.06	68.20	11.14	150	360	PK
12	10480.0000	30.82	14.45	45.27	54.00	8.73	150	1	AV
13	15720.0000	28.42	20.55	48.97	74.00	25.03	150	224	PK
14	15720.0000	18.72	20.55	39.27	54.00	14.73	150	234	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

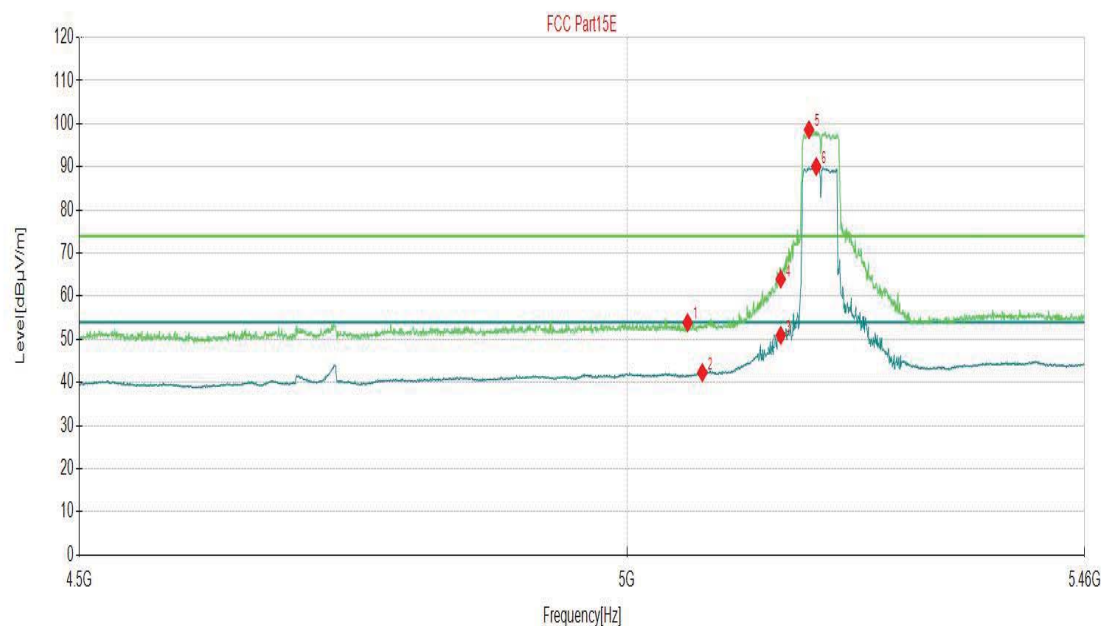
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH38	Frequency	5190 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5058.5193	46.54	7.33	53.87	74.00	20.13	150	305	PK
2	5072.9265	34.77	7.52	42.29	54.00	11.71	150	123	AV
3	5150.0000	42.90	8.03	50.93	54.00	3.07	150	174	AV
4	5150.0000	55.94	8.03	63.97	74.00	10.03	150	167	PK
5	5178.0991	90.70	7.90	98.60			150	116	PK
6	5185.3027	82.30	7.77	90.07			150	118	AV
7	10380.0000	39.58	14.14	53.72	68.20	14.48	150	1	PK
8	10380.0000	32.39	14.14	46.53	54.00	7.47	150	360	AV
9	15570.0000	24.66	19.64	44.30	74.00	29.70	150	352	PK
10	15570.0000	15.25	19.64	34.89	54.00	19.11	150	184	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

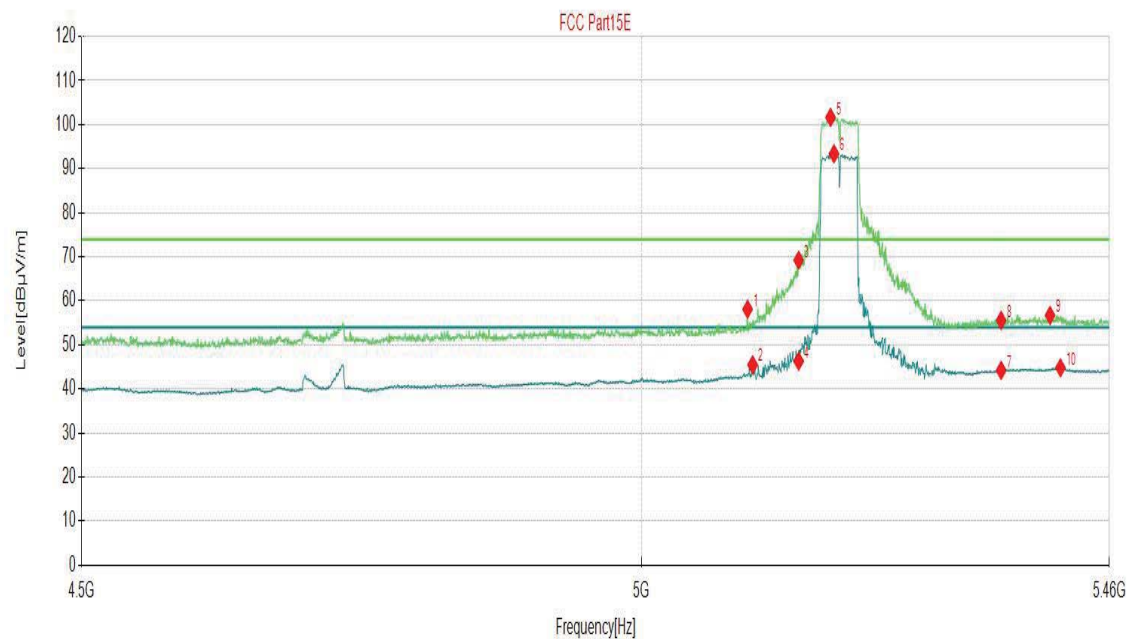




Channel	802.11n40 CH38	Frequency	5190 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5100.7804	50.50	7.59	58.09	74.00	15.91	150	200	PK
2	5105.5828	37.66	7.84	45.50	54.00	8.50	150	200	AV
3	5150.0000	61.19	8.03	69.22	74.00	4.78	150	200	PK
4	5150.0000	38.30	8.03	46.33	54.00	7.67	150	200	AV
5	5180.9805	93.75	7.89	101.64			150	200	PK
6	5184.3422	85.58	7.80	93.38			150	200	AV
7	10380.0000	41.45	14.14	55.59	68.20	12.61	150	3	PK
8	10380.0000	32.93	14.14	47.07	54.00	6.93	150	177	AV
9	15570.0000	27.70	19.64	47.34	74.00	26.66	150	190	PK
10	15570.0000	19.32	19.64	38.96	54.00	15.04	150	220	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

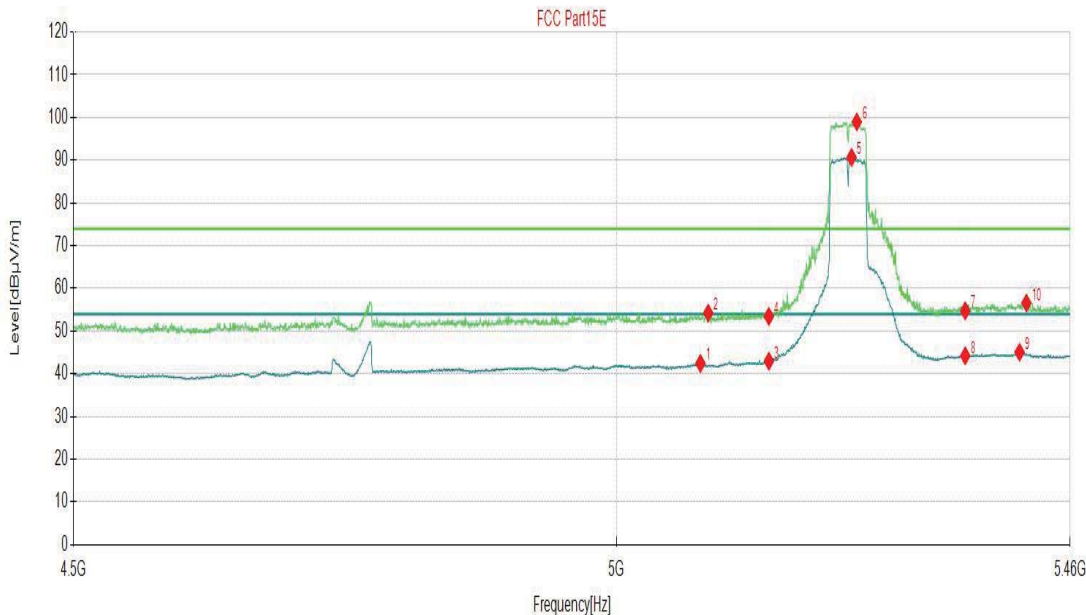
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH46			Frequency		5230 MHz <sub>z</sub>			
Frequency Range	Above 1G			Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5082.0510	34.65	7.77	42.42	54.00	11.58	150	174	AV
2	5089.7349	46.62	7.61	54.23	74.00	19.77	150	210	PK
3	5150.0000	34.94	8.03	42.97	54.00	11.03	150	168	AV
4	5150.0000	45.40	8.03	53.43	74.00	20.57	150	130	PK
5	5233.3267	82.47	8.20	90.67			150	172	AV
6	5238.6093	90.78	8.21	98.99			150	174	PK
7	5350.0000	44.79	9.96	54.75	74.00	19.25	150	111	PK
8	5350.0000	34.25	9.96	44.21	54.00	9.79	150	115	AV
9	5406.6933	34.87	10.20	45.07	54.00	8.93	150	347	AV
10	5413.8969	46.48	10.09	56.57	74.00	17.43	150	263	PK
11	10460.0000	33.02	14.59	47.61	68.20	20.59	150	1	PK
12	10460.0000	24.48	14.59	39.07	54.00	14.93	150	1	AV
13	15690.0000	15.03	20.46	35.49	54.00	18.51	150	86	AV
14	15690.0000	23.35	20.46	43.81	74.00	30.19	150	20	PK

FCC Part15E



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = |imit[dBμV/m] - | level [dBμV/m]



Channel	802.11n40 CH46			Frequency	5230 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5083.9720	46.39	7.73	54.12	74.00	19.88	150	26	PK
2	5089.2546	34.73	7.62	42.35	54.00	11.65	150	198	AV
3	5150.0000	35.35	8.03	43.38	54.00	10.62	150	202	AV
4	5150.0000	45.51	8.03	53.54	74.00	20.46	150	217	PK
5	5231.8859	93.48	8.20	101.68			150	198	PK
6	5233.8069	85.62	8.20	93.82			150	198	AV
7	5350.0000	46.16	9.96	56.12	74.00	17.88	150	146	PK
8	5350.0000	34.09	9.96	44.05	54.00	9.95	150	144	AV
9	5398.0490	46.88	10.03	56.91	74.00	17.09	150	316	PK
10	5407.1736	35.09	10.22	45.31	54.00	8.69	150	322	AV
11	10460.0000	38.21	14.59	52.80	68.20	15.40	150	13	PK
12	10460.0000	30.96	14.59	45.55	54.00	8.45	150	1	AV
13	15690.0000	18.90	20.46	39.36	54.00	14.64	150	233	AV
14	15690.0000	27.01	20.46	47.47	74.00	26.53	150	233	PK

FCC Part15E

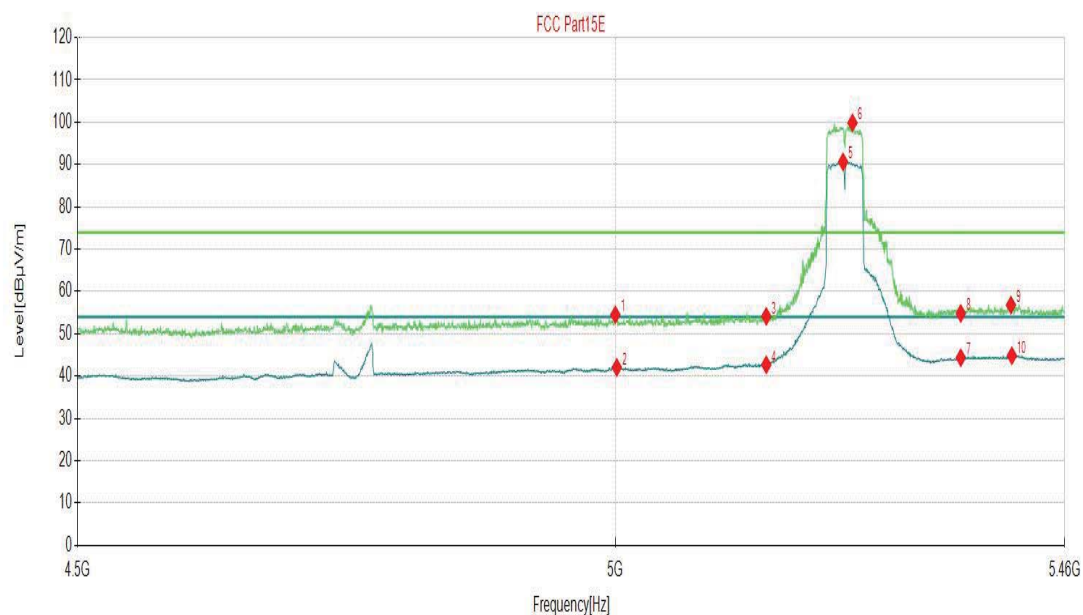
Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel			802.11ac80 CH42		Frequency		5210 MHz		
Frequency Range			Above 1G		Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	4999.9300	46.95	7.54	54.49	74.00	19.51	150	69	PK
2	5001.3707	34.54	7.52	42.06	54.00	11.94	150	316	AV
3	5150.0000	46.08	8.03	54.11	74.00	19.89	150	186	PK
4	5150.0000	34.67	8.03	42.70	54.00	11.30	150	175	AV
5	5228.0440	82.44	8.20	90.64			150	171	AV
6	5237.6488	91.65	8.21	99.86			150	171	PK
7	5350.0000	34.40	9.96	44.36	54.00	9.64	150	240	AV
8	5350.0000	44.88	9.96	54.84	74.00	19.16	150	340	PK
9	5402.8514	46.68	10.10	56.78	74.00	17.22	150	137	PK
10	5403.8119	34.70	10.12	44.82	54.00	9.18	150	346	AV
11	10451.5752	35.24	14.53	49.77	68.20	18.43	150	360	PK
12	10459.7660	26.80	14.59	41.39	54.00	12.61	150	343	AV
13	15630.0000	23.64	20.00	43.64	74.00	30.36	150	314	PK
14	15630.0000	14.21	20.00	34.21	54.00	19.79	150	274	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

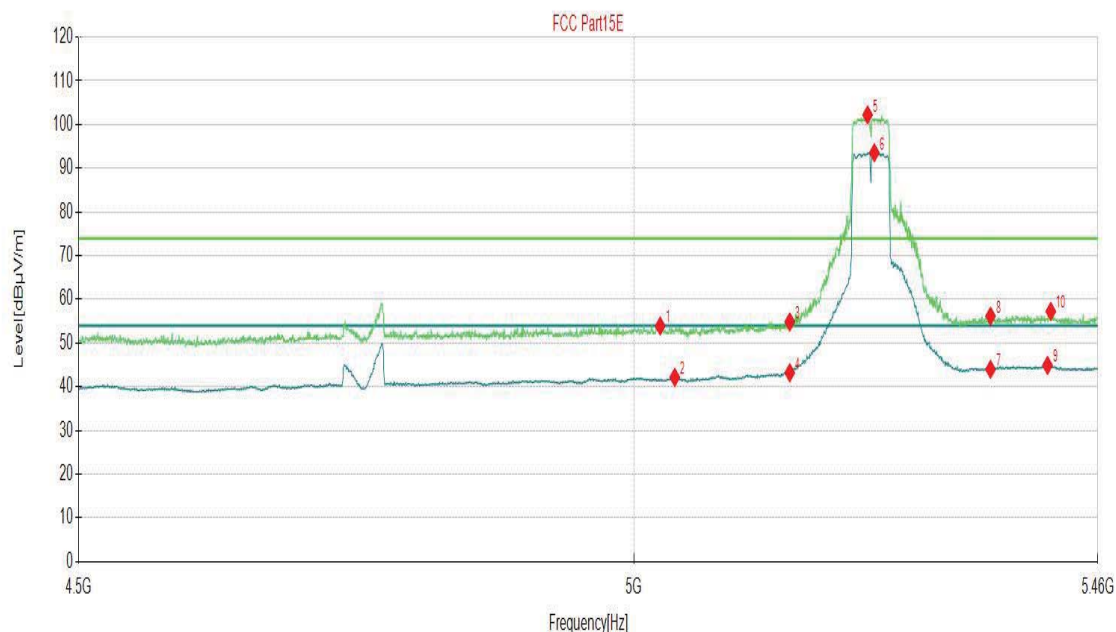
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH42	Frequency	5210 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

**Vertical**

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5024.9025	46.57	7.35	53.92	74.00	20.08	150	242	PK
2	5038.8294	34.56	7.62	42.18	54.00	11.82	150	217	AV
3	5150.0000	46.82	8.03	54.85	74.00	19.15	150	276	PK
4	5150.0000	35.18	8.03	43.21	54.00	10.79	150	202	AV
5	5226.6033	94.01	8.20	102.21			150	200	PK
6	5233.3267	85.35	8.20	93.55			150	198	AV
7	5350.0000	34.02	9.96	43.98	54.00	10.02	150	263	AV
8	5350.0000	46.20	9.96	56.16	74.00	17.84	150	354	PK
9	5408.1341	34.66	10.24	44.90	54.00	9.10	150	263	AV
10	5411.4957	47.03	10.21	57.24	74.00	16.76	150	151	PK
11	10459.7660	31.32	14.59	45.91	54.00	8.09	150	3	AV
12	10462.1062	40.30	14.58	54.88	68.20	13.32	150	3	PK
13	15630.0000	22.71	20.00	42.71	74.00	31.29	150	1	PK
14	15630.0000	14.03	20.00	34.03	54.00	19.97	150	234	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m].



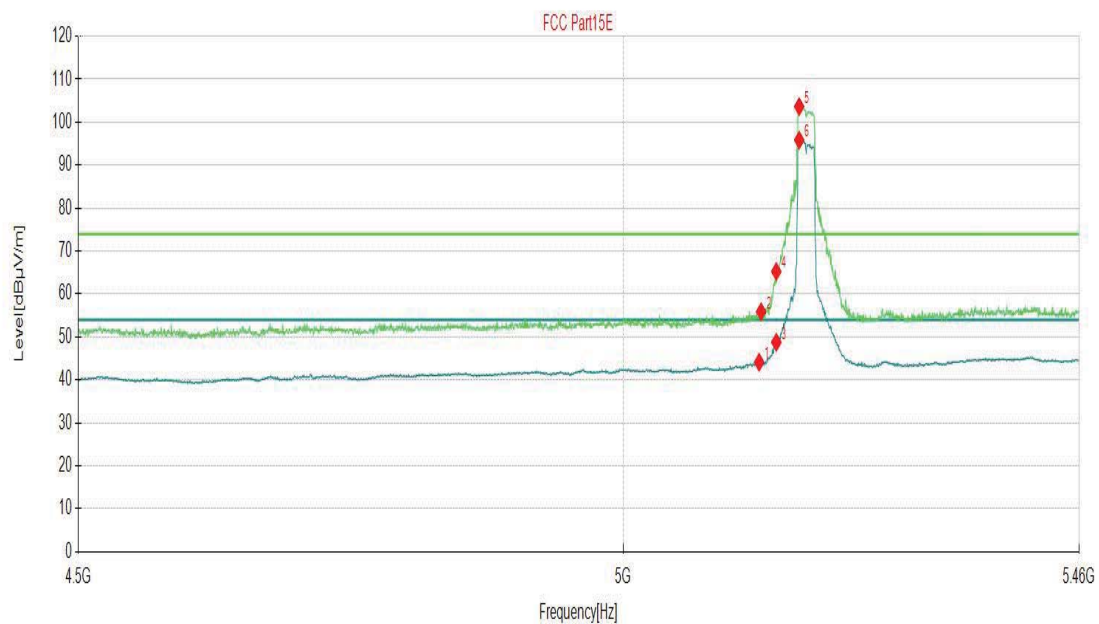
MODEL:WF-U21DS-SSA2

## WORST-CASE DATA

Channel	802.11a CH36	Frequency	5180 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5132.9565	35.95	8.16	44.11	54.00	9.89	116	215	AV
2	5134.8774	47.76	8.10	55.86	74.00	18.14	107	213	PK
3	5150.0000	40.74	8.03	48.77	54.00	5.23	137	213	AV
4	5150.0000	57.21	8.03	65.24	74.00	8.76	247	210	PK
5	5172.8164	95.78	7.85	103.63			253	213	PK
6	5172.8164	87.99	7.85	95.84			233	213	AV
7	10360.0000	41.95	14.09	56.04	68.20	12.16	221	280	PK
8	10360.0000	32.65	14.09	46.74	54.00	7.26	123	262	AV
9	15540.0000	24.49	19.38	43.87	74.00	30.13	275	283	PK
10	15540.0000	15.74	19.38	35.12	54.00	18.88	307	276	AV

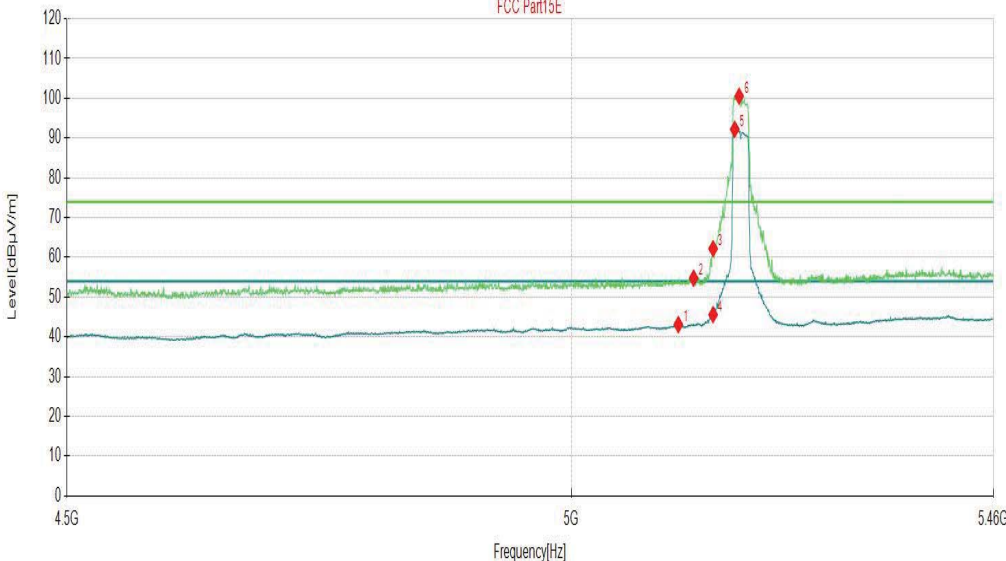


Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH36			Frequency	5180 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5112.7864	35.09	7.99	43.08	54.00	10.92	143	154	AV
2	5129.1146	46.55	8.21	54.76	74.00	19.24	266	297	PK
3	5150.0000	54.18	8.03	62.21	74.00	11.79	301	70	PK
4	5150.0000	37.55	8.03	45.58	54.00	8.42	165	321	AV
5	5173.2966	84.37	7.85	92.22			161	318	AV
6	5178.0991	92.62	7.90	100.52			241	318	PK
7	10360.0000	39.81	14.09	53.90	68.20	14.30	168	337	PK
8	10360.0000	31.40	14.09	45.49	54.00	8.51	305	337	AV
9	15540.0000	28.75	19.38	48.13	74.00	25.87	266	175	PK
10	15540.0000	18.99	19.38	38.37	54.00	15.63	252	175	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]



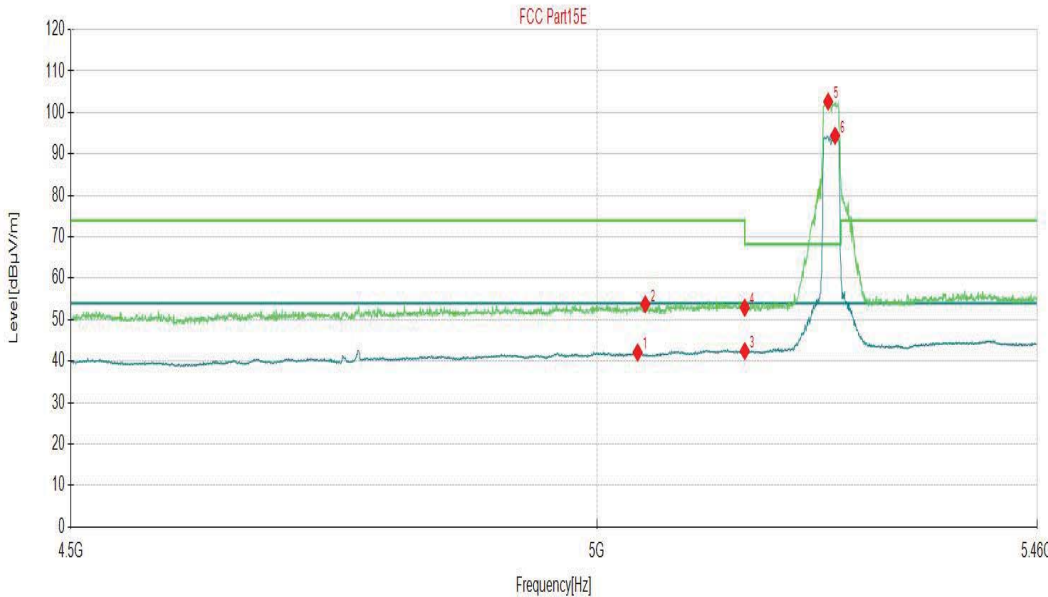
Channel		802.11a CH 40		Frequency		5200MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10400.0000	41.24	14.30	55.54	68.20	12.66	185	279	PK
2	10400.0000	34.04	14.30	48.34	54.00	5.66	264	283	AV
3	15600.0000	23.71	19.58	43.29	74.00	30.71	198	101	PK
4	15600.0000	14.67	19.58	34.25	54.00	19.75	183	256	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	10400.0000	32.69	14.30	46.99	54.00	7.01	252	337	AV
2	10400.0000	41.13	14.30	55.43	68.20	12.77	375	256	PK
3	15600.0000	18.73	19.58	38.31	54.00	15.69	390	148	AV
4	15600.0000	29.04	19.58	48.62	74.00	25.38	249	144	PK
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									





Channel	802.11a CH48			Frequency		5240 MHz			
Frequency Range	Above 1G			Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5040.7504	34.46	7.64	42.10	54.00	11.90	190	358	AV
2	5048.4342	46.41	7.32	53.73	74.00	20.27	345	212	PK
3	5150.0000	34.41	8.03	42.44	54.00	11.56	266	267	AV
4	5150.0000	44.89	8.03	52.92	68.20	15.28	358	318	PK
5	5236.6883	94.43	8.21	102.64			287	19	PK
6	5243.8919	86.18	8.23	94.41			323	212	AV
7	10480.0000	24.77	14.45	39.22	54.00	14.78	379	303	AV
8	10480.0000	33.78	14.45	48.23	68.20	19.97	259	27	PK
9	15720.0000	14.30	20.55	34.85	54.00	19.15	296	310	AV
10	15720.0000	23.06	20.55	43.61	74.00	30.39	135	219	PK

FCC Part15E



Level[dBuV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

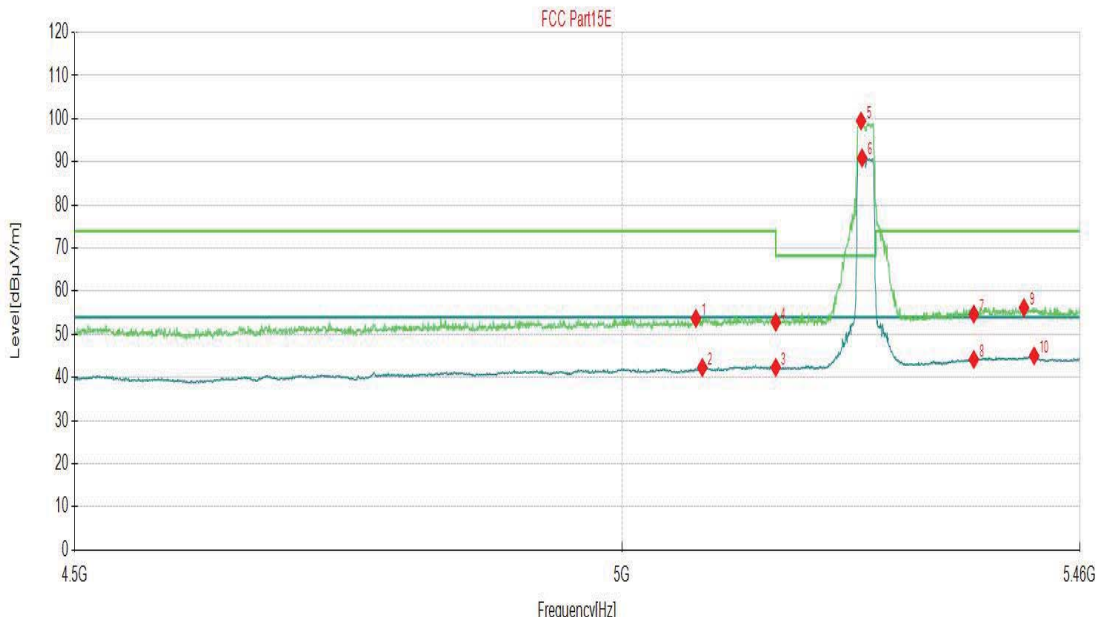
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]



Channel	802.11a CH48	Frequency	5240 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5071.4857	46.23	7.46	53.69	74.00	20.31	298	264	PK
2	5077.7289	34.58	7.72	42.30	54.00	11.70	295	303	AV
3	5150.0000	34.31	8.03	42.34	54.00	11.66	123	140	AV
4	5150.0000	44.79	8.03	52.82	68.20	15.38	257	174	PK
5	5235.2476	91.28	8.21	99.49			235	346	PK
6	5236.2081	82.71	8.21	90.92			145	346	AV
7	5350.0000	44.73	9.96	54.69	74.00	19.31	352	268	PK
8	5350.0000	34.21	9.96	44.17	54.00	9.83	340	217	AV
9	5401.8909	46.13	10.07	56.20	74.00	17.80	101	285	PK
10	5412.4562	34.86	10.16	45.02	54.00	8.98	392	299	AV
11	10480.0000	35.95	14.45	50.40	68.20	17.80	116	87	PK
12	10480.0000	27.80	14.45	42.25	54.00	11.75	115	336	AV
13	15720.0000	25.03	20.55	45.58	74.00	28.42	101	336	PK
14	15720.0000	15.20	20.55	35.75	54.00	18.25	352	330	AV

FCC Part15E



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



## 3.1.7 TEST RESULTS - Band 2 (5260-5320MHz):

ABOVE 1GHz DATA

MODEL:WF-U21DS-SSA1

Channel	802.11a CH52	Frequency	5260 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5071.4857	46.72	7.46	54.18	74.00	19.82	150	247	PK
2	5078.2091	34.59	7.74	42.33	54.00	11.67	150	264	AV
3	5150.0000	34.28	8.03	42.31	54.00	11.69	150	108	AV
4	5150.0000	44.94	8.03	52.97	74.00	21.03	150	349	PK
5	5256.3782	85.32	8.95	94.27			150	171	AV
6	5263.1016	93.40	9.14	102.54			150	171	PK
7	5350.0000	44.59	9.96	54.55	74.00	19.45	150	328	PK
8	5350.0000	34.15	9.96	44.11	54.00	9.89	150	135	AV
9	5397.0885	47.22	10.03	57.25	74.00	16.75	150	93	PK
10	5408.6143	34.68	10.26	44.94	54.00	9.06	150	101	AV
11	10520.0000	32.30	14.32	46.62	68.20	21.58	150	1	PK
12	10520.0000	23.27	14.32	37.59	54.00	16.41	150	1	AV
13	15780.0000	23.48	20.63	44.11	74.00	29.89	150	195	PK
14	15780.0000	13.86	20.63	34.49	54.00	19.51	150	297	AV

FCC Part15E

Level [dBμV/m]

Frequency [Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

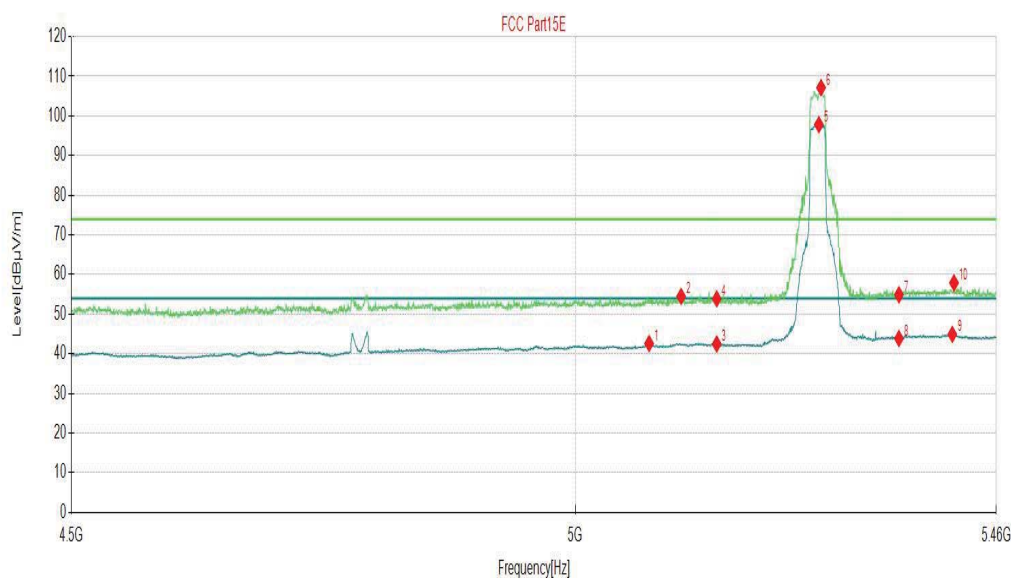
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH52	Frequency	5260 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5077.7289	34.87	7.72	42.59	54.00	11.41	150	131	AV
2	5111.8259	46.45	8.02	54.47	74.00	19.53	150	298	PK
3	5150.0000	34.45	8.03	42.48	54.00	11.52	150	182	AV
4	5150.0000	45.84	8.03	53.87	74.00	20.13	150	201	PK
5	5261.1806	88.53	9.27	97.80			150	199	AV
6	5263.5818	98.04	9.10	107.14			150	197	PK
7	5350.0000	44.94	9.96	54.90	74.00	19.10	150	323	PK
8	5350.0000	33.89	9.96	43.85	54.00	10.15	150	214	AV
9	5410.0550	34.62	10.29	44.91	54.00	9.09	150	201	AV
10	5411.9760	47.72	10.19	57.91	74.00	16.09	150	275	PK
11	10520.0000	38.10	14.32	52.42	68.20	15.78	150	360	PK
12	10520.0000	30.04	14.32	44.36	54.00	9.64	150	1	AV
13	15780.0000	25.43	20.63	46.06	74.00	27.94	150	197	PK
14	15780.0000	15.88	20.63	36.51	54.00	17.49	150	211	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

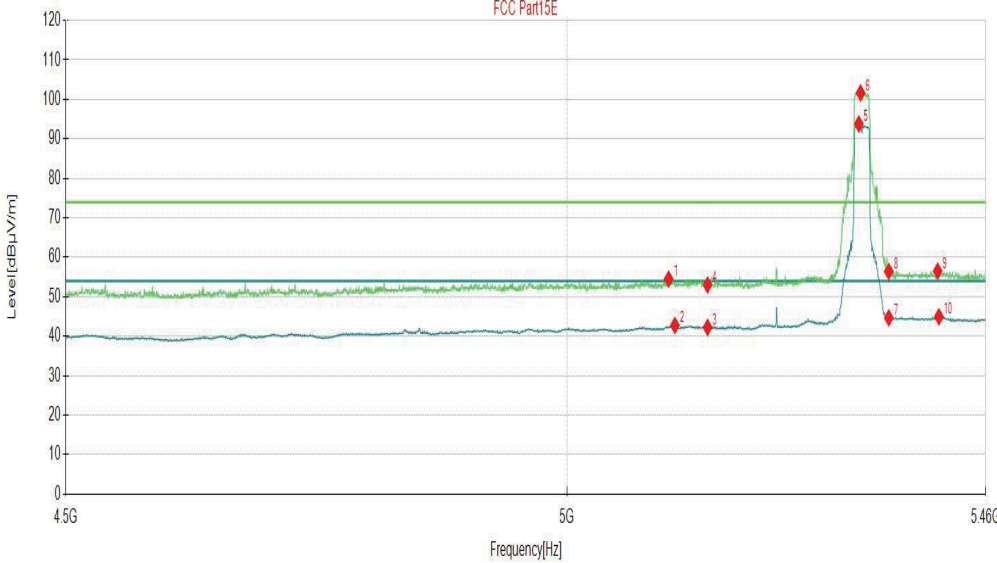


Channel		802.11a CH 56		Frequency		5280MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10560.0000	31.59	14.32	45.91	68.20	22.29	150	342	PK
2	10560.0000	23.09	14.32	37.41	54.00	16.59	150	345	AV
3	15840.0000	22.97	20.59	43.56	74.00	30.44	150	13	PK
4	15840.0000	14.60	20.59	35.19	54.00	18.81	150	164	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	10560.0000	36.28	14.32	50.60	68.20	17.60	150	1	PK
2	10560.0000	26.78	14.32	41.10	54.00	12.90	150	360	AV
3	15840.0000	26.88	20.59	47.47	74.00	26.53	150	223	PK
4	15840.0000	17.04	20.59	37.63	54.00	16.37	150	223	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11a CH64			Frequency		5320 MHz <sub>z</sub>			
Frequency Range	Above 1G			Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5316.4082	84.71	9.06	93.77			150	172	AV
2	5318.3292	92.61	9.01	101.62			150	176	PK
3	5350.0000	34.70	9.96	44.66	54.00	9.34	150	274	AV
4	5350.0000	46.45	9.96	56.41	74.00	17.59	150	346	PK
5	5405.2526	46.31	10.16	56.47	74.00	17.53	150	0	PK
6	5406.6933	34.73	10.20	44.93	54.00	9.07	150	123	AV
7	10639.9640	26.89	14.17	41.06	54.00	12.94	150	358	AV
8	10640.0000	31.49	14.17	45.66	74.00	28.34	150	346	PK
9	15960.0000	13.88	21.31	35.19	54.00	18.81	150	3	AV
10	15960.0000	22.84	21.31	44.15	74.00	29.85	150	313	PK

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

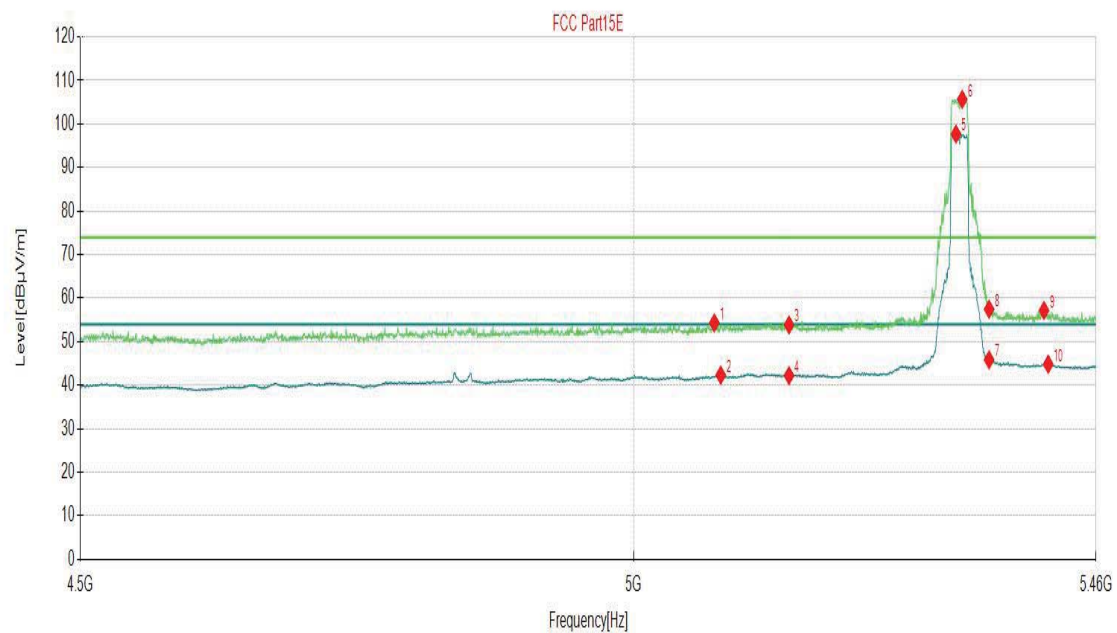
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH64	Frequency	5320 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

**Vertical**

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5316.4082	88.63	9.06	97.69			150	198	AV
2	5322.6513	96.55	9.12	105.67			150	198	PK
3	5350.0000	35.88	9.96	45.84	54.00	8.16	150	198	AV
4	5350.0000	47.49	9.96	57.45	74.00	16.55	150	200	PK
5	5406.2131	46.97	10.19	57.16	74.00	16.84	150	116	PK
6	5410.5353	34.55	10.27	44.82	54.00	9.18	150	260	AV
7	10640.0000	35.14	14.17	49.31	74.00	24.69	150	1	PK
8	10640.0000	26.78	14.17	40.95	54.00	13.05	150	145	AV
9	15960.0000	23.65	21.31	44.96	74.00	29.04	150	1	PK
10	15960.0000	14.78	21.31	36.09	54.00	17.91	150	208	AV

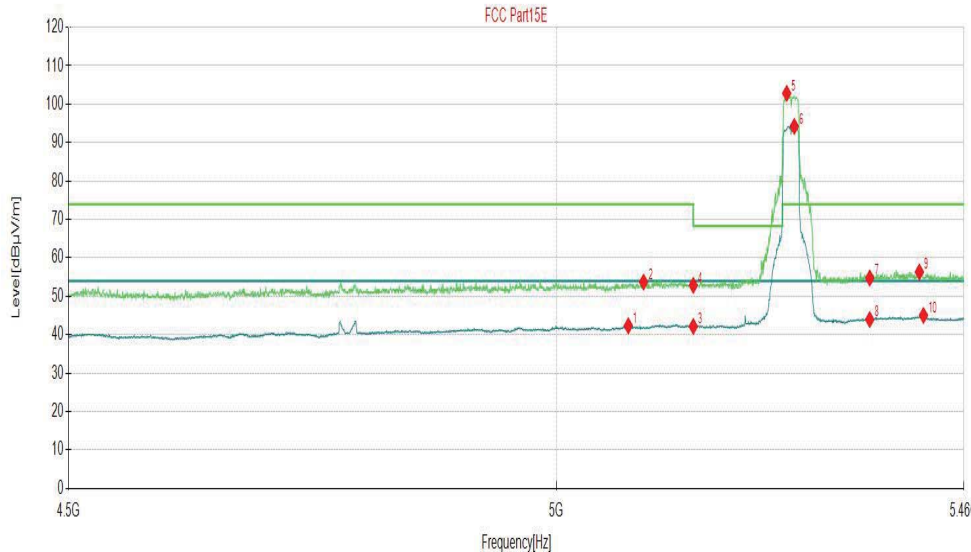


Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH52			Frequency	5260 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5078.2091	34.57	7.74	42.31	54.00	11.69	150	255	AV
2	5095.0175	46.12	7.58	53.70	74.00	20.30	150	268	PK
3	5150.0000	34.14	8.03	42.17	54.00	11.83	150	263	AV
4	5150.0000	44.84	8.03	52.87	68.30	15.43	150	306	PK
5	5254.9375	94.03	8.79	102.82			150	174	PK
6	5263.5818	85.12	9.10	94.22			150	170	AV
7	5350.0000	44.80	9.96	54.76	74.00	19.24	150	42	PK
8	5350.0000	33.99	9.96	43.95	54.00	10.05	150	238	AV
9	5407.6538	46.09	10.23	56.32	74.00	17.68	150	157	PK
10	5412.4562	34.87	10.16	45.03	54.00	8.97	150	212	AV
11	10520.0000	32.05	14.32	46.37	68.20	21.83	150	360	PK
12	10520.0000	22.95	14.32	37.27	54.00	16.73	150	1	AV
13	15780.0000	23.66	20.63	44.29	74.00	29.71	150	138	PK
14	15780.0000	13.91	20.63	34.54	54.00	19.46	150	138	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

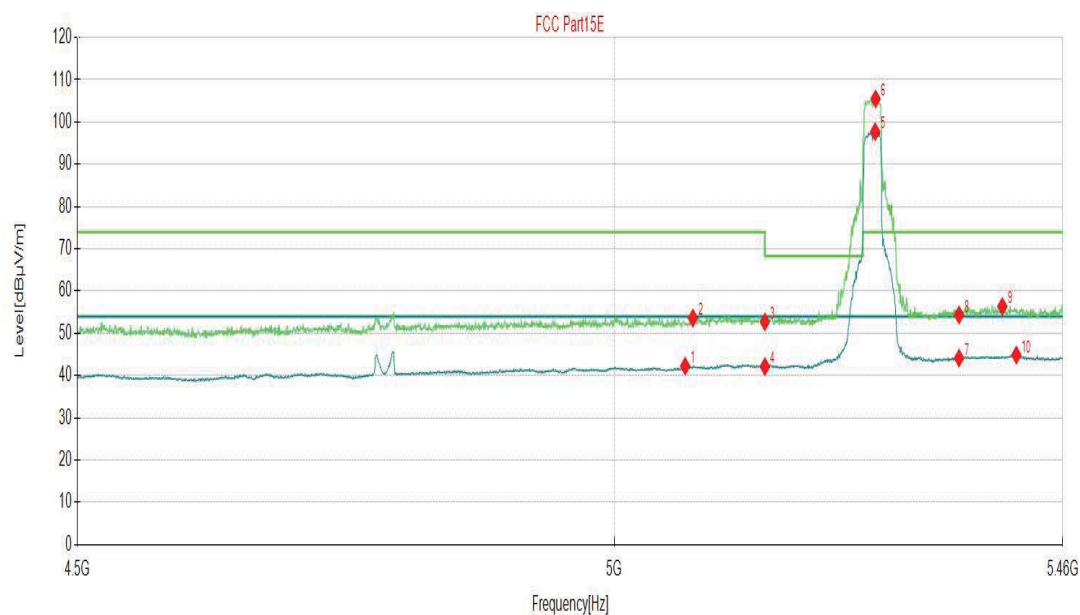
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]





Channel			802.11n20 CH52		Frequency		5260 MHz <sub>z</sub>		
Frequency Range			Above 1G		Detector Function		PK/AV		
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5070.0450	34.83	7.40	42.23	54.00	11.77	150	286	AV
2	5077.7289	45.90	7.72	53.62	74.00	20.38	150	95	PK
3	5150.0000	44.68	8.03	52.71	68.30	15.59	150	116	PK
4	5150.0000	34.09	8.03	42.12	54.00	11.88	150	125	AV
5	5262.6213	88.56	9.17	97.73			150	201	AV
6	5263.1016	96.32	9.14	105.46			150	201	PK
7	5350.0000	34.16	9.96	44.12	54.00	9.88	150	44	AV
8	5350.0000	44.38	9.96	54.34	74.00	19.66	150	357	PK
9	5395.6478	46.31	10.04	56.35	74.00	17.65	150	5	PK
10	5410.5353	34.58	10.27	44.85	54.00	9.15	150	235	AV
11	10520.0000	39.63	14.32	53.95	68.20	14.25	150	360	PK
12	10520.0000	29.14	14.32	43.46	54.00	10.54	150	360	AV
13	15780.0000	24.74	20.63	45.37	74.00	28.63	150	215	PK
14	15780.0000	16.76	20.63	37.39	54.00	16.61	150	208	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

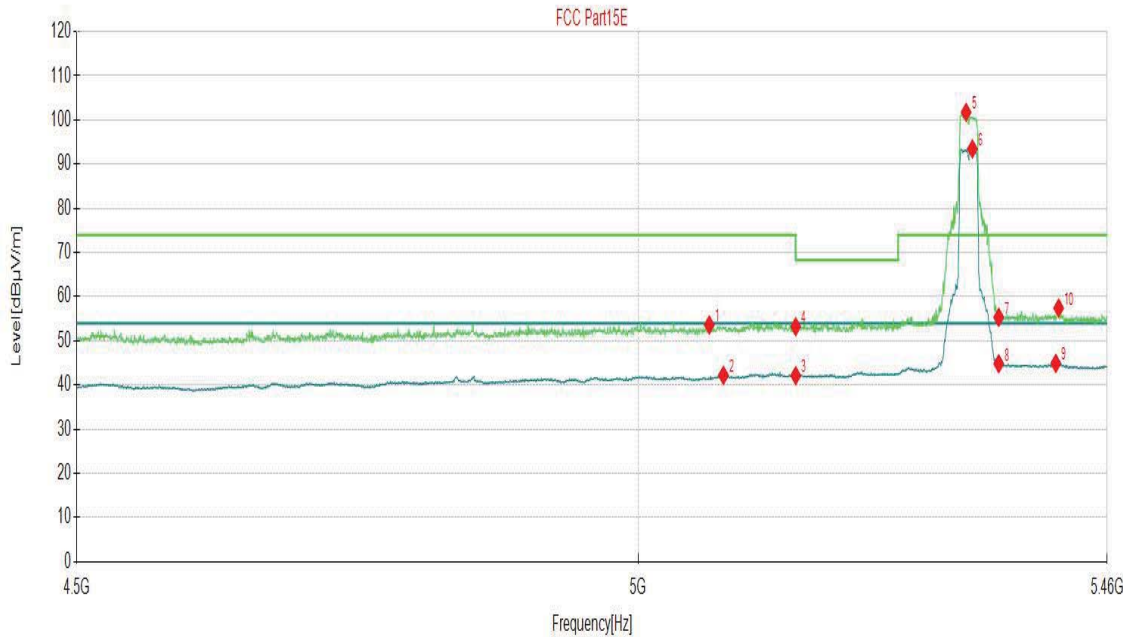


Channel		802.11n20 CH 56			Frequency		5280MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10560.0000	31.40	14.32	45.72	68.20	22.48	150	359	PK
2	10560.0000	22.72	14.32	37.04	54.00	16.96	150	359	AV
3	15840.0000	23.54	20.59	44.13	74.00	29.87	150	353	PK
4	15840.0000	14.46	20.59	35.05	54.00	18.95	150	16	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	10560.0000	35.05	14.32	49.37	68.20	18.83	150	356	PK
2	10560.0000	26.48	14.32	40.80	54.00	13.20	150	1	AV
3	15840.0000	24.10	20.59	44.69	74.00	29.31	150	207	PK
4	15840.0000	16.66	20.59	37.25	54.00	16.75	150	207	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11n20 CH64	Frequency	5320 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5317.3687	92.70	9.04	101.74			150	172	PK
2	5323.6118	84.28	9.17	93.45			150	172	AV
3	5350.0000	45.37	9.96	55.33	74.00	18.67	150	172	PK
4	5350.0000	34.85	9.96	44.81	54.00	9.19	150	168	AV
5	5407.6538	34.66	10.23	44.89	54.00	9.11	150	358	AV
6	5410.5353	47.14	10.27	57.41	74.00	16.59	150	160	PK
7	10639.9640	26.96	14.17	41.13	54.00	12.87	150	43	AV
8	10640.0000	32.24	14.17	46.41	74.00	27.59	150	33	PK
9	15960.0000	14.02	21.31	35.33	54.00	18.67	150	359	AV
10	15960.0000	22.16	21.31	43.47	74.00	30.53	150	139	PK

FCC Part15E



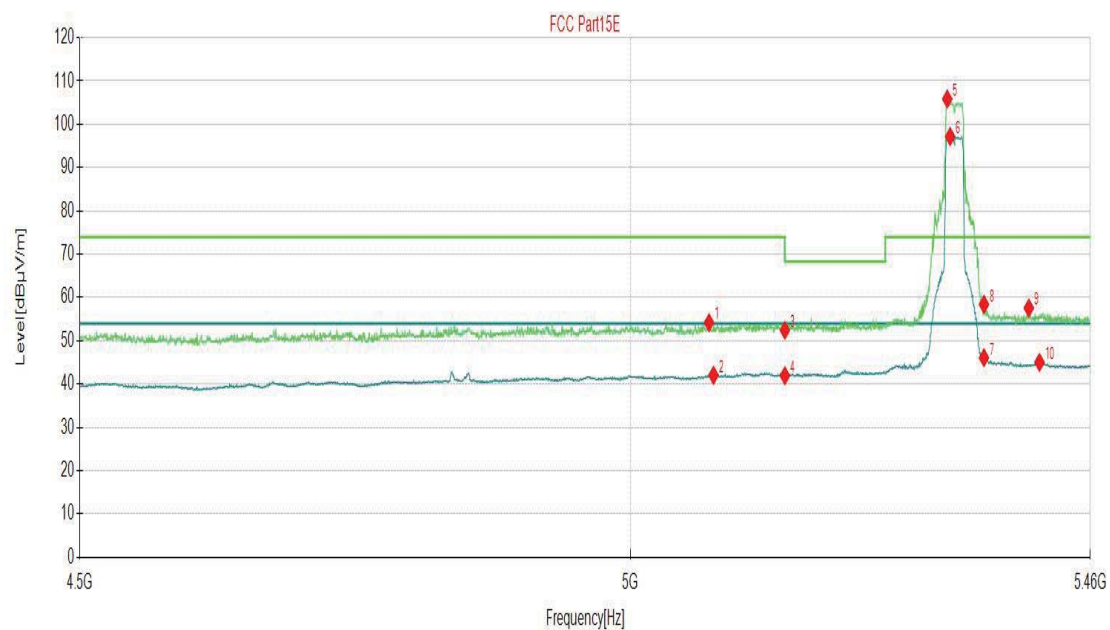
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH64	Frequency	5320 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

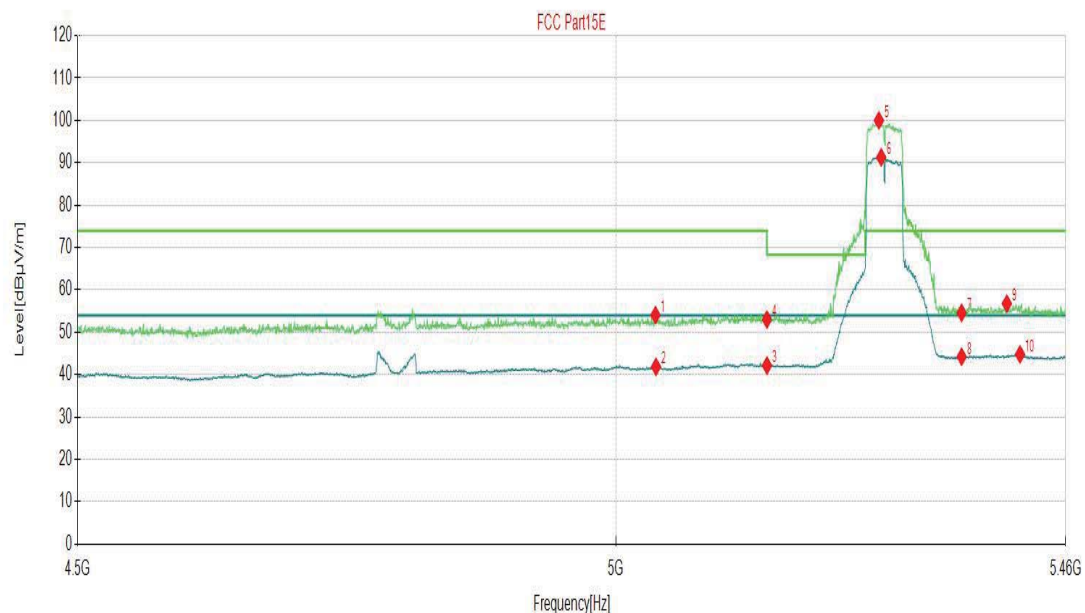
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5312.5663	96.68	9.15	105.83			150	196	PK
2	5315.4477	88.09	9.08	97.17			150	200	AV
3	5350.0000	36.13	9.96	46.09	54.00	7.91	150	200	AV
4	5350.0000	48.46	9.96	58.42	74.00	15.58	150	196	PK
5	5396.1281	47.53	10.03	57.56	74.00	16.44	150	358	PK
6	5407.1736	34.79	10.22	45.01	54.00	8.99	150	124	AV
7	10640.0000	26.48	14.17	40.65	54.00	13.35	150	188	AV
8	10640.0000	35.38	14.17	49.55	74.00	24.45	150	135	PK
9	15960.0000	14.56	21.31	35.87	54.00	18.13	150	228	AV
10	15960.0000	23.85	21.31	45.16	74.00	28.84	150	204	PK



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel			802.11n40 CH54		Frequency		5270 MHz		
Frequency Range			Above 1G		Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5038.8294	46.42	7.62	54.04	74.00	19.96	150	25	PK
2	5039.3097	34.21	7.64	41.85	54.00	12.15	150	1	AV
3	5150.0000	34.12	8.03	42.15	54.00	11.85	150	110	AV
4	5150.0000	44.97	8.03	53.00	68.30	15.30	150	245	PK
5	5264.0620	90.93	9.07	100.00			150	8	PK
6	5266.4632	82.39	8.90	91.29			150	169	AV
7	5350.0000	44.64	9.96	54.60	74.00	19.40	150	42	PK
8	5350.0000	34.27	9.96	44.23	54.00	9.77	150	337	AV
9	5397.5688	46.73	10.03	56.76	74.00	17.24	150	38	PK
10	5411.4957	34.57	10.21	44.78	54.00	9.22	150	228	AV
11	10540.0000	31.08	14.39	45.47	68.20	22.73	150	343	PK
12	10540.0000	22.42	14.39	36.81	54.00	17.19	150	359	AV
13	15810.0000	23.22	20.56	43.78	74.00	30.22	150	251	PK
14	15810.0000	13.65	20.56	34.21	54.00	19.79	150	13	AV



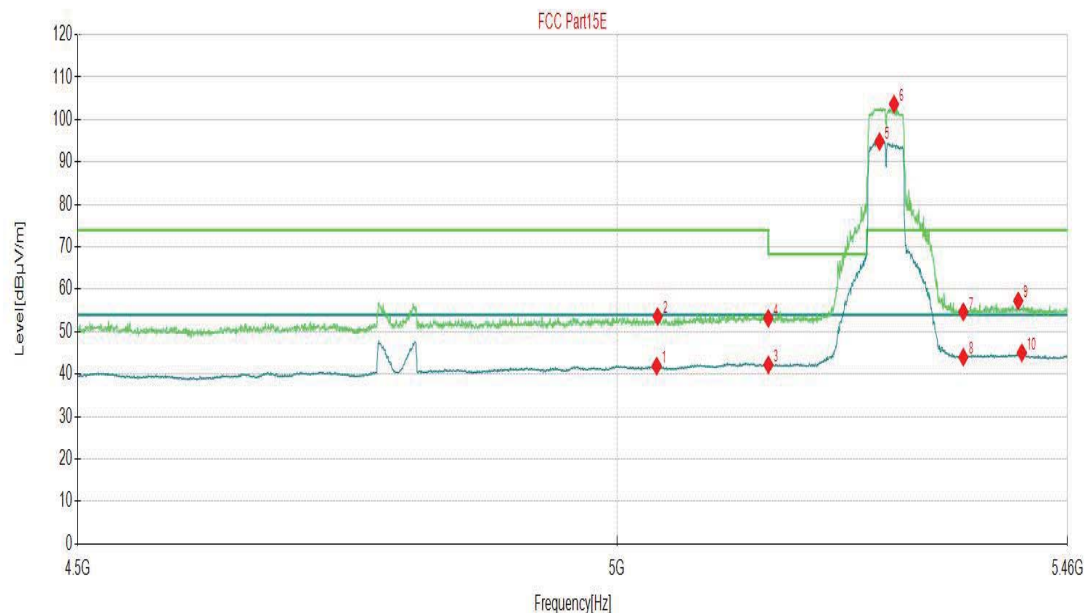
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH54	Frequency	5270 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5038.8294	34.28	7.62	41.90	54.00	12.10	150	13	AV
2	5039.7899	45.93	7.66	53.59	74.00	20.41	150	359	PK
3	5150.0000	34.19	8.03	42.22	54.00	11.78	150	85	AV
4	5150.0000	45.13	8.03	53.16	68.30	15.14	150	13	PK
5	5263.1016	85.67	9.14	94.81			150	199	AV
6	5277.9890	95.07	8.58	103.65			150	195	PK
7	5350.0000	44.71	9.96	54.67	74.00	19.33	150	263	PK
8	5350.0000	34.05	9.96	44.01	54.00	9.99	150	348	AV
9	5407.6538	47.04	10.23	57.27	74.00	16.73	150	43	PK
10	5411.4957	34.84	10.21	45.05	54.00	8.95	150	272	AV
11	10540.0000	34.91	14.39	49.30	68.20	18.90	150	1	PK
12	10540.0000	26.28	14.39	40.67	54.00	13.33	150	1	AV
13	15810.0000	23.50	20.56	44.06	74.00	29.94	150	175	PK
14	15810.0000	15.63	20.56	36.19	54.00	17.81	150	185	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH62	Frequency	5310 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5258.2992	91.17	9.16	100.33			150	171	PK
2	5265.5028	82.27	8.97	91.24			150	171	AV
3	5350.0000	34.18	9.96	44.14	54.00	9.86	150	346	AV
4	5350.0000	44.09	9.96	54.05	74.00	19.95	150	10	PK
5	5400.4502	46.65	10.03	56.68	74.00	17.32	150	356	PK
6	5410.0550	34.48	10.29	44.77	54.00	9.23	150	82	AV
7	10538.1638	30.74	14.36	45.10	68.20	23.10	150	46	PK
8	10539.3339	23.19	14.38	37.57	54.00	16.43	150	358	AV
9	15930.0000	13.51	21.20	34.71	54.00	19.29	150	33	AV
10	15993.2493	24.93	21.34	46.27	74.00	27.73	150	293	PK

FCC Part15E

Level [dBμV/m]

Frequency [Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

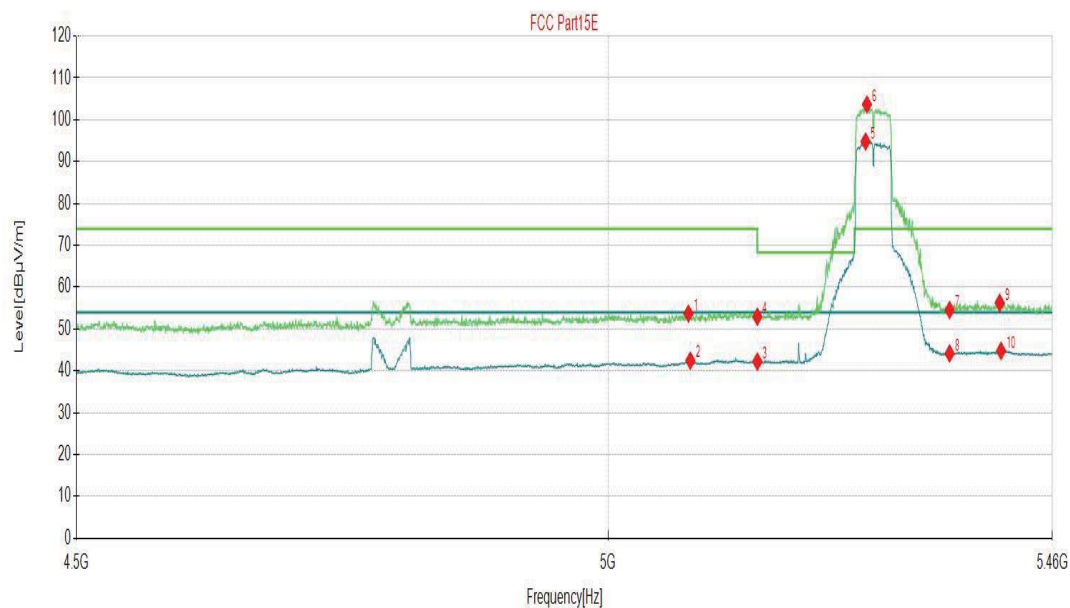
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH62	Frequency	5310 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5261.6608	85.55	9.24	94.79			150	201	AV
2	5263.1016	94.52	9.14	103.66			150	201	PK
3	5350.0000	44.60	9.96	54.56	74.00	19.44	150	150	PK
4	5350.0000	34.21	9.96	44.17	54.00	9.83	150	103	AV
5	5403.3317	46.13	10.11	56.24	74.00	17.76	150	176	PK
6	5404.7724	34.62	10.15	44.77	54.00	9.23	150	197	AV
7	10529.9730	36.45	14.22	50.67	68.20	17.53	150	1	PK
8	10539.3339	27.05	14.38	41.43	54.00	12.57	150	1	AV
9	15930.0000	23.64	21.20	44.84	74.00	29.16	150	289	PK
10	15930.0000	13.00	21.20	34.20	54.00	19.80	150	69	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

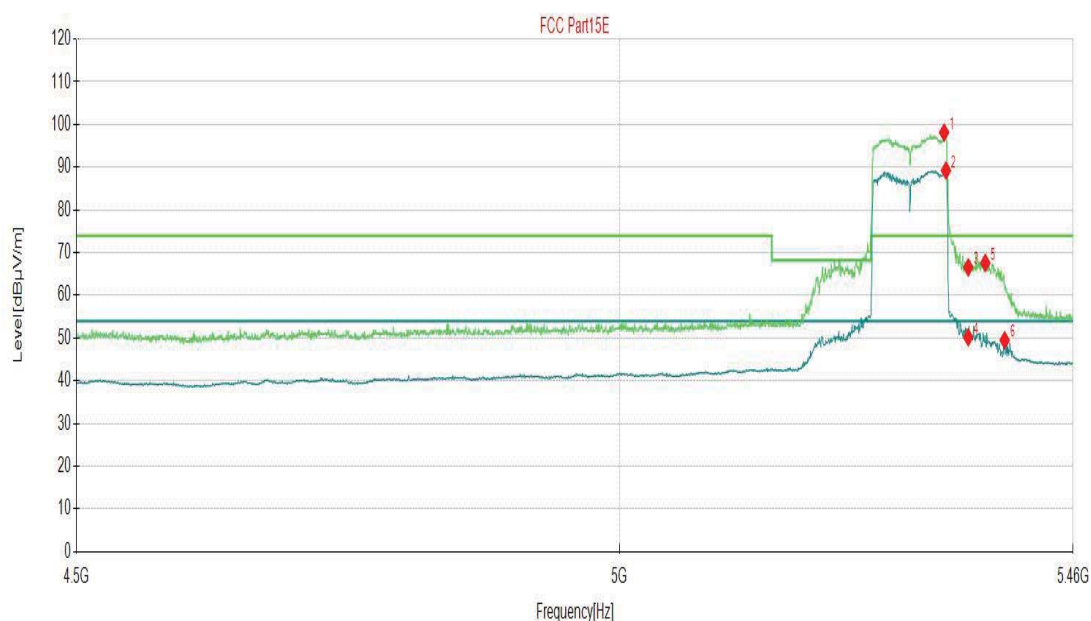




Channel	802.11ac80 CH58	Frequency	5290 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5325.0525	88.89	9.24	98.13			150	256	PK
2	5326.9735	79.89	9.34	89.23			150	168	AV
3	5350.0000	56.58	9.96	66.54	74.00	7.46	150	260	PK
4	5350.0000	40.23	9.96	50.19	54.00	3.81	150	256	AV
5	5367.7939	57.62	9.96	67.58	74.00	6.42	150	286	PK
6	5387.9640	39.43	10.07	49.50	54.00	4.50	150	14	AV
7	10580.0000	28.71	14.11	42.82	68.20	25.38	150	242	PK
8	10580.0000	21.76	14.11	35.87	54.00	18.13	150	242	AV
9	15870.0000	22.25	20.81	43.06	74.00	30.94	150	173	PK
10	15870.0000	13.22	20.81	34.03	54.00	19.97	150	94	AV

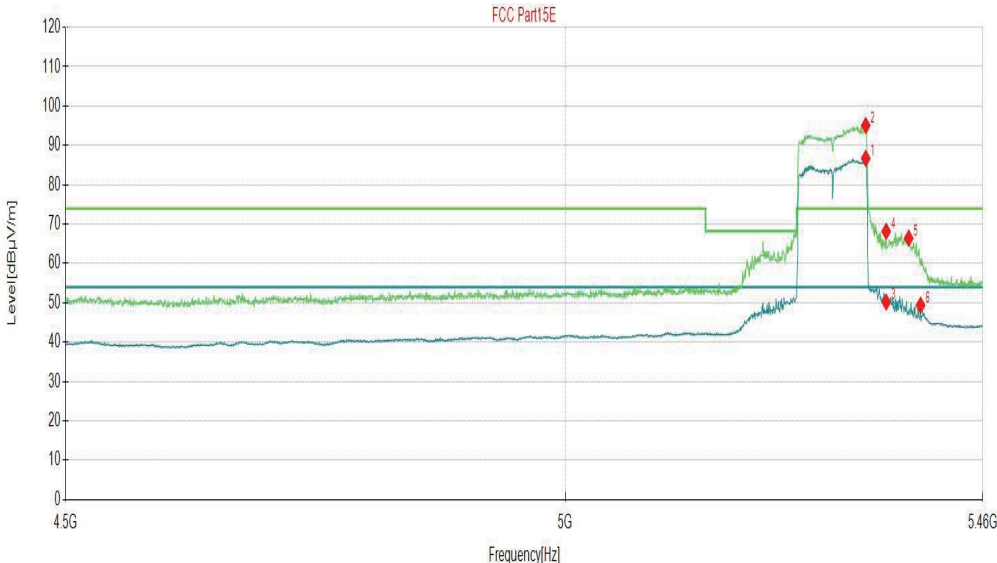


Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH58	Frequency	5290 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5326.9735	77.36	9.34	86.70			150	202	AV
2	5326.9735	85.70	9.34	95.04			150	47	PK
3	5350.0000	40.22	9.96	50.18	54.00	3.82	150	202	AV
4	5350.0000	58.18	9.96	68.14	74.00	5.86	150	52	PK
5	5375.4777	56.38	10.03	66.41	74.00	7.59	150	202	PK
6	5388.9245	39.31	10.06	49.37	54.00	4.63	150	206	AV
7	10580.0000	29.59	14.11	43.70	68.20	24.50	150	14	PK
8	10580.0000	22.89	14.11	37.00	54.00	17.00	150	34	AV
9	15870.0000	22.33	20.81	43.14	74.00	30.86	150	311	PK
10	15870.0000	13.60	20.81	34.41	54.00	19.59	150	181	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

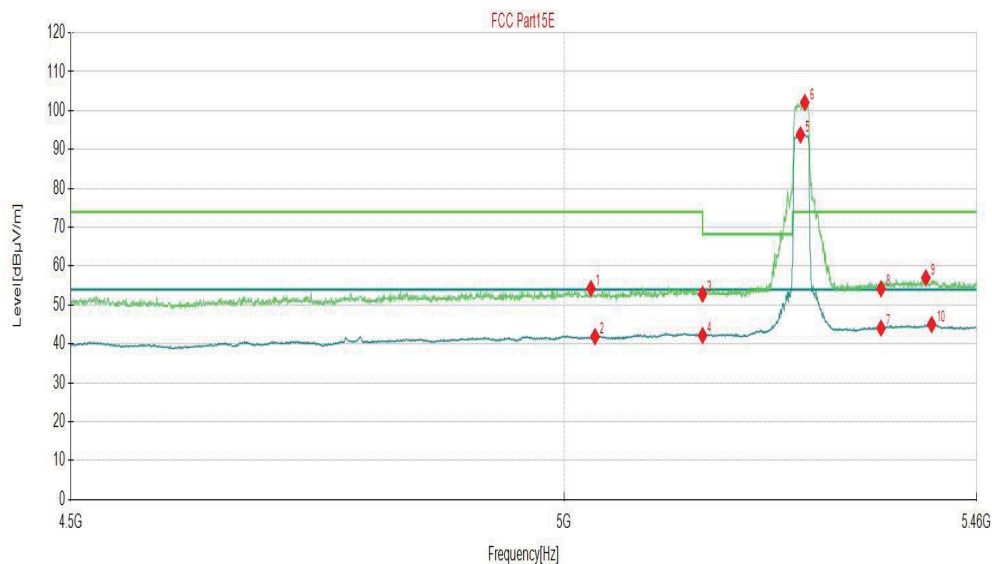
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



MODEL:WF-U21DS-SSA2

## WORST-CASE DATA

Channel			802.11a CH52		Frequency		5260 MHz <sub>z</sub>		
Frequency Range			Above 1G		Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5028.7444	46.94	7.32	54.26	74.00	19.74	184	242	PK
2	5033.0665	34.46	7.42	41.88	54.00	12.12	338	221	AV
3	5150.0000	44.77	8.03	52.80	68.20	15.40	226	255	PK
4	5150.0000	34.15	8.03	42.18	54.00	11.82	256	238	AV
5	5258.7794	84.54	9.22	93.76			350	276	AV
6	5263.5818	92.98	9.10	102.08			335	276	PK
7	5350.0000	34.09	9.96	44.05	54.00	9.95	160	216	AV
8	5350.0000	44.23	9.96	54.19	74.00	19.81	195	264	PK
9	5401.4107	46.93	10.06	56.99	74.00	17.01	380	216	PK
10	5408.1341	34.76	10.24	45.00	54.00	9.00	148	264	AV
11	10520.0000	30.92	14.32	45.24	68.20	22.96	105	340	PK
12	10520.0000	20.70	14.32	35.02	54.00	18.98	382	283	AV
13	15780.0000	22.20	20.63	42.83	74.00	31.17	306	283	PK
14	15780.0000	13.17	20.63	33.80	54.00	20.20	272	105	AV



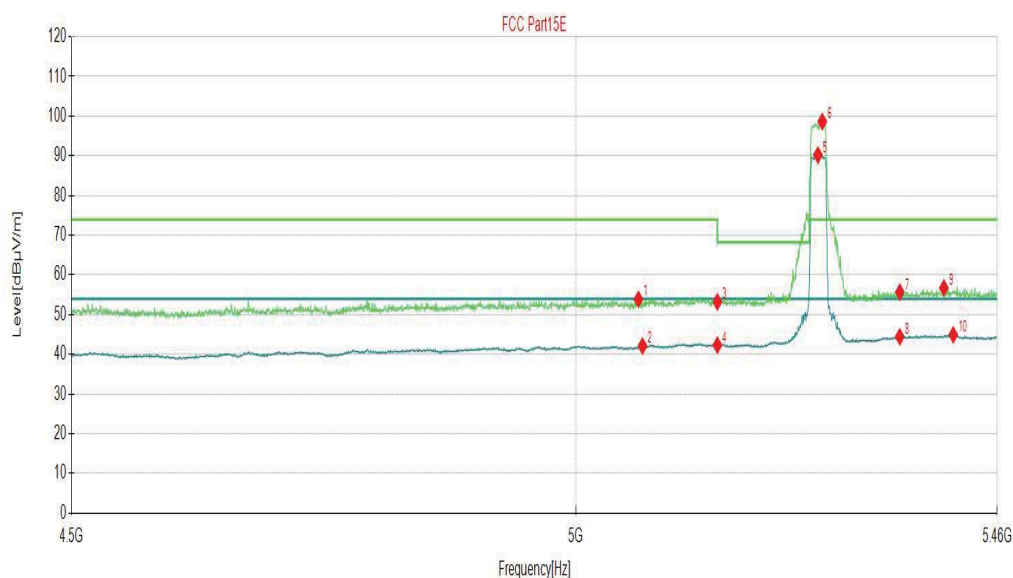
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH52	Frequency	5260 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5065.7229	46.49	7.38	53.87	74.00	20.13	150	44	PK
2	5070.0450	34.70	7.40	42.10	54.00	11.90	150	259	AV
3	5150.0000	45.21	8.03	53.24	68.20	14.96	150	319	PK
4	5150.0000	34.30	8.03	42.33	54.00	11.67	150	48	AV
5	5259.2596	80.93	9.27	90.20			150	349	AV
6	5264.0620	89.57	9.07	98.64			150	315	PK
7	5350.0000	45.70	9.96	55.66	74.00	18.34	150	134	PK
8	5350.0000	34.47	9.96	44.43	54.00	9.57	150	173	AV
9	5399.4897	46.69	10.02	56.71	74.00	17.29	150	336	PK
10	5410.0550	34.62	10.29	44.91	54.00	9.09	150	281	AV
11	10520.0000	34.39	14.32	48.71	68.20	19.49	358	79	PK
12	10520.0000	22.70	14.32	37.02	54.00	16.98	242	96	AV
13	15780.0000	21.99	20.63	42.62	74.00	31.38	336	156	PK
14	15780.0000	13.52	20.63	34.15	54.00	19.85	316	270	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

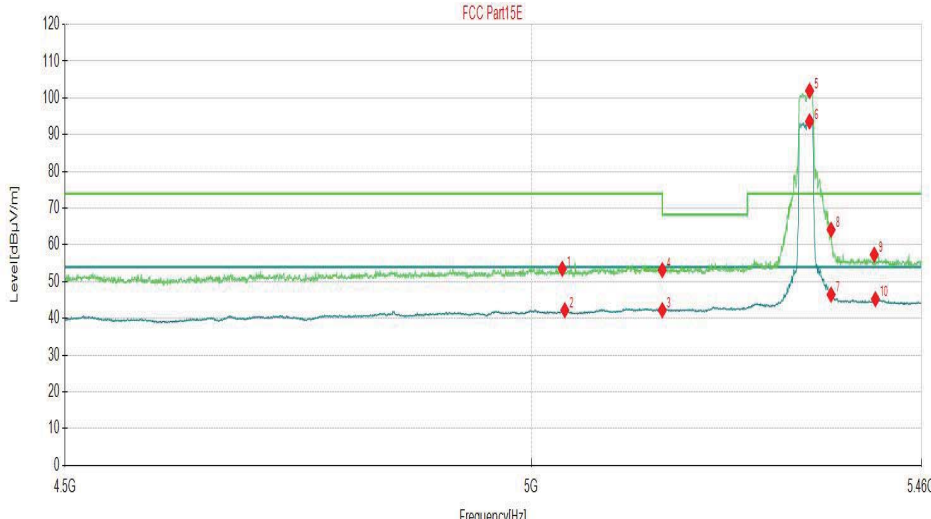


Channel		802.11a CH 56		Frequency		5280MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10560.0000	30.44	14.32	44.76	68.20	23.44	282	326	PK
2	10560.0000	21.58	14.32	35.90	54.00	18.10	341	236	AV
3	15840.0000	22.13	20.59	42.72	74.00	31.28	305	4	PK
4	15840.0000	14.17	20.59	34.76	54.00	19.24	143	48	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	10560.0000	30.76	14.32	45.08	68.20	23.12	227	334	PK
2	10560.0000	22.77	14.32	37.09	54.00	16.91	179	334	AV
3	15840.0000	22.40	20.59	42.99	74.00	31.01	161	266	PK
4	15840.0000	14.56	20.59	35.15	54.00	18.85	196	141	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]									



Channel		802.11a CH64		Frequency		5320 MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5324.0920	92.74	9.19	101.93			213	275	PK
2	5324.0920	84.43	9.19	93.62			372	271	AV
3	5350.0000	36.51	9.96	46.47	54.00	7.53	322	271	AV
4	5350.0000	54.16	9.96	64.12	74.00	9.88	313	211	PK
5	5402.3712	47.25	10.09	57.34	74.00	16.66	222	18	PK
6	5403.8119	35.12	10.12	45.24	54.00	8.76	353	224	AV
7	10639.9640	25.72	14.17	39.89	54.00	14.11	334	296	AV
8	10639.9640	32.40	14.17	46.57	74.00	27.43	118	292	PK
9	15960.0000	22.18	21.31	43.49	74.00	30.51	330	73	PK
10	15960.0000	13.67	21.31	34.98	54.00	19.02	198	228	AV

FCC Part15E



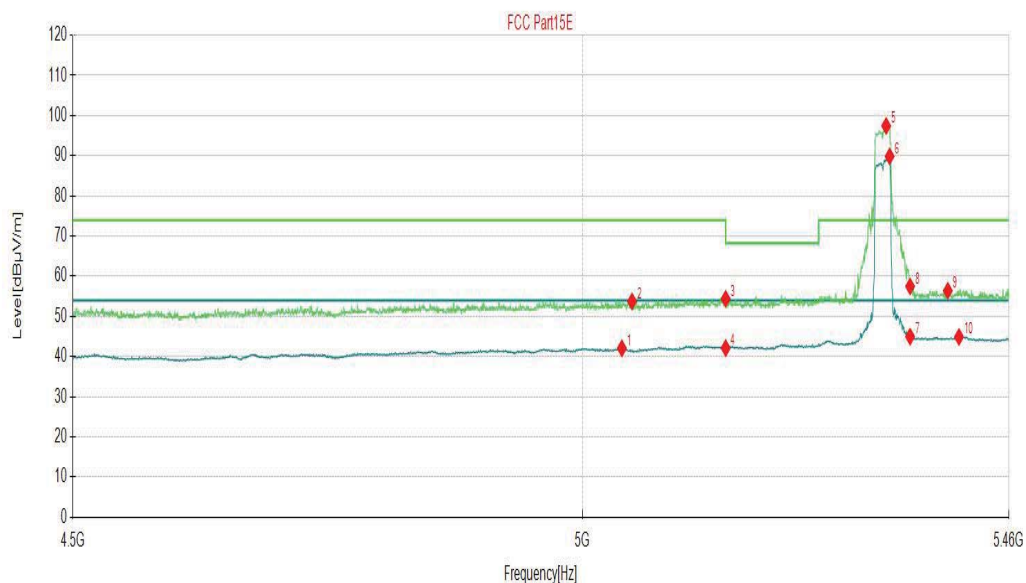
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH64	Frequency	5320 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5323.6118	88.25	9.17	97.42			110	281	PK
2	5327.4537	80.48	9.37	89.85			239	311	AV
3	5350.0000	35.01	9.96	44.97	54.00	9.03	316	126	AV
4	5350.0000	47.51	9.96	57.47	74.00	16.53	386	126	PK
5	5391.8059	46.34	10.05	56.39	74.00	17.61	171	178	PK
6	5404.2921	34.74	10.14	44.88	54.00	9.12	105	96	AV
7	10640.0000	31.08	14.17	45.25	74.00	28.75	173	245	PK
8	10640.0000	22.46	14.17	36.63	54.00	17.37	312	337	AV
9	15960.0000	23.62	21.31	44.93	74.00	29.07	337	83	PK
10	15960.0000	13.99	21.31	35.30	54.00	18.70	134	5	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



## 3.1.8 TEST RESULTS - Band 3 (5500-5720MHz):

ABOVE 1GHz DATA

MODEL:WF-U21DS-SSA1

Channel	802.11a CH100	Frequency	5500 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5447.4237	46.39	9.72	56.11	74.00	17.89	150	175	PK
2	5470.0000	50.61	9.94	60.55	68.30	7.75	150	258	PK
3	5470.0000	36.18	9.94	46.12	54.00	7.88	150	171	AV
4	5496.8234	96.04	9.09	105.13			150	175	PK
5	5501.7009	87.19	9.30	96.49			150	171	AV
6	11000.0000	30.72	14.83	45.55	74.00	28.45	150	336	PK
7	11000.0000	23.58	14.83	38.41	54.00	15.59	150	336	AV
8	16500.0000	21.65	23.16	44.81	68.20	23.39	150	360	PK
9	16500.0000	12.29	23.16	35.45	54.00	18.55	150	154	AV

FCC Part15E

Level [dBμV/m]

Frequency [Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

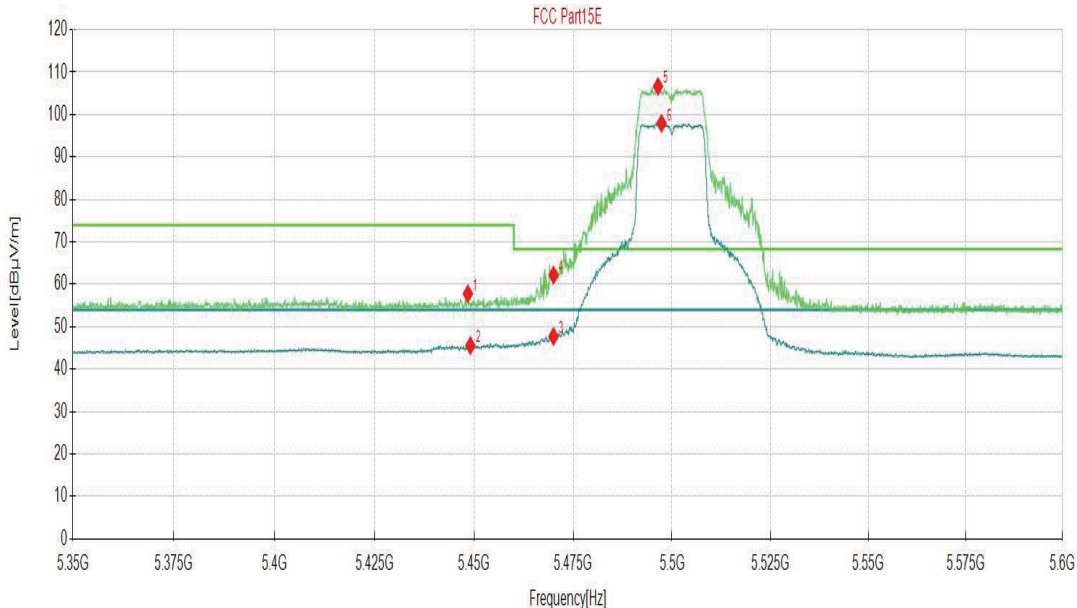
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]





Channel	802.11a CH100	Frequency	5500 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5449.0495	35.84	9.71	45.55	54.00	8.45	150	201	AV
2	5470.0000	37.78	9.94	47.72	54.00	6.28	150	210	AV
3	5470.0000	52.25	9.94	62.19	68.30	6.11	150	227	PK
4	5496.4482	97.56	9.08	106.64			150	197	PK
5	5497.3237	88.83	9.11	97.94			150	214	AV
6	11000.0000	33.16	14.83	47.99	74.00	26.01	150	130	PK
7	11000.0000	24.92	14.83	39.75	54.00	14.25	150	126	AV
8	16500.0000	21.65	23.16	44.81	68.20	23.39	150	48	PK
9	16500.0000	12.58	23.16	35.74	54.00	18.26	150	347	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

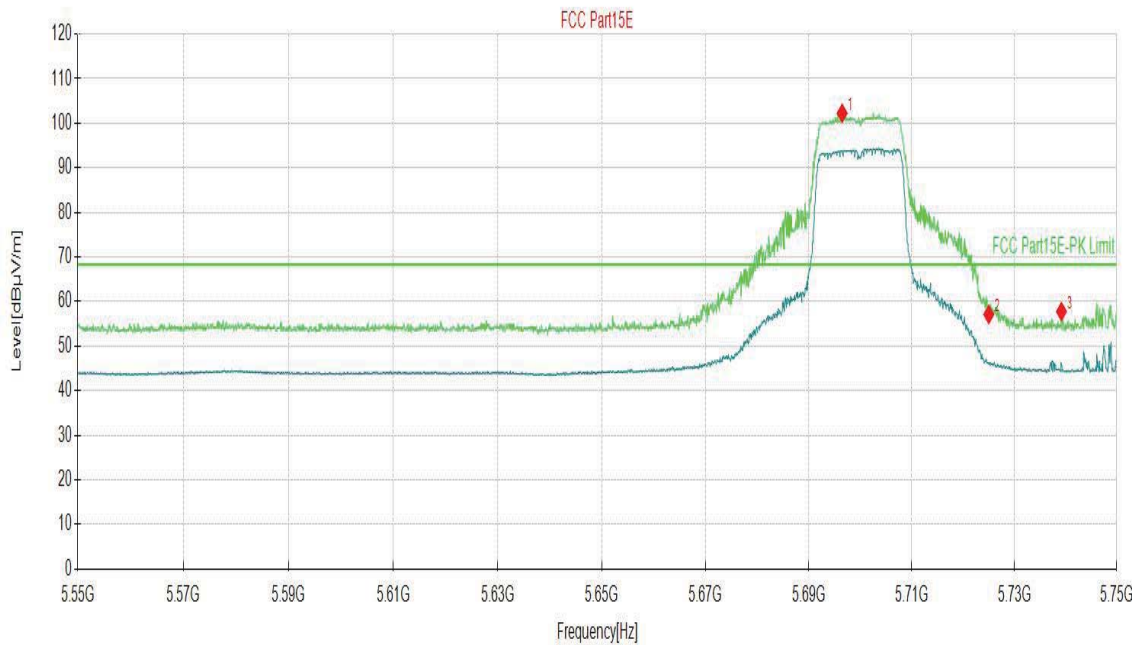


Channel		802.11a CH 116		Frequency		5600MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11160.0000	32.72	15.23	47.95	74.00	26.05	150	354	PK
2	11160.0000	23.05	15.23	38.28	54.00	15.72	150	337	AV
3	16740.0000	20.69	24.45	45.14	68.20	23.06	150	354	PK
4	16740.0000	13.05	24.45	37.50	54.00	16.50	150	41	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11160.0000	35.33	15.23	50.56	74.00	23.44	150	146	PK
2	11160.0000	26.09	15.23	41.32	54.00	12.68	150	136	AV
3	16740.0000	22.39	24.45	46.84	68.20	21.36	150	91	PK
4	16740.0000	12.60	24.45	37.05	54.00	16.95	150	230	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11a CH140		Frequency	5700 MHz					
Frequency Range	Above 1G		Detector Function	PK/AV					
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5696.4732	93.60	8.64	102.24			150	173	PK
2	5725.0000	48.23	8.89	57.12	68.30	11.18	150	195	PK
3	5739.1946	48.84	8.92	57.76	68.30	10.54	150	0	PK
4	11400.0000	33.26	15.09	48.35	74.00	25.65	150	319	PK
5	11400.0000	23.93	15.09	39.02	54.00	14.98	150	336	AV
6	17100.0000	20.85	25.93	46.78	68.20	21.42	150	142	PK
7	17100.0000	11.42	25.93	37.35	54.00	16.65	150	288	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

FCC Part15E-PK Limit

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

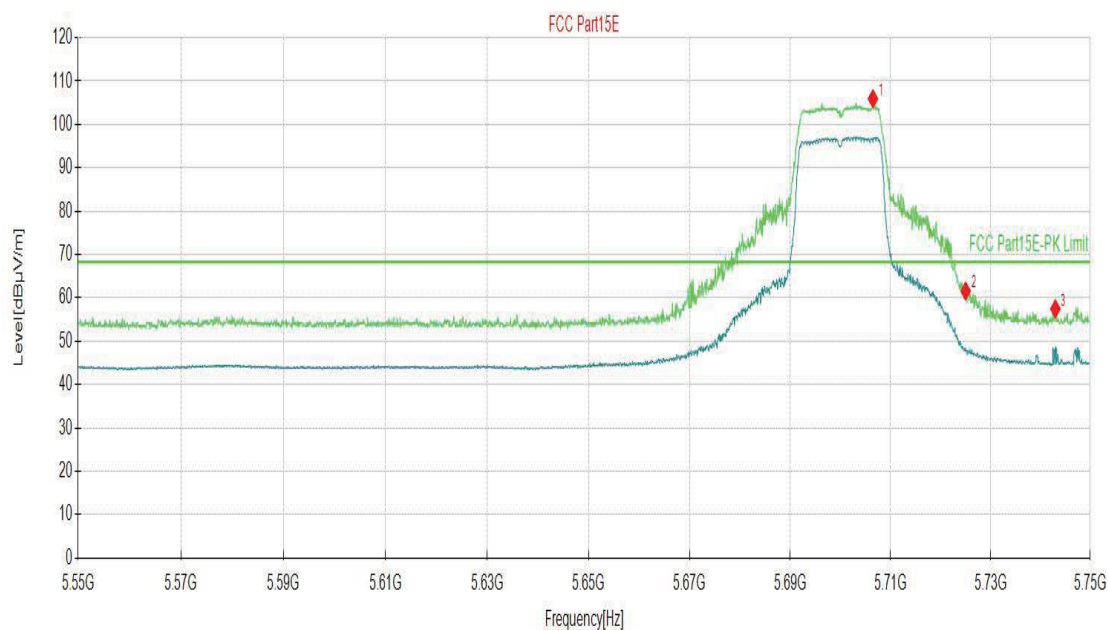
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH140	Frequency	5700 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5706.4782	97.21	8.73	105.94			150	198	PK
2	5725.0000	52.70	8.89	61.59	68.30	6.71	150	194	PK
3	5742.9965	48.53	8.94	57.47	68.30	10.83	150	202	PK
4	11400.0000	35.41	15.09	50.50	74.00	23.50	150	128	PK
5	11400.0000	26.38	15.09	41.47	54.00	12.53	150	138	AV
6	17100.0000	20.78	25.93	46.71	68.20	21.49	150	121	PK
7	17100.0000	10.86	25.93	36.79	54.00	17.21	150	37	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

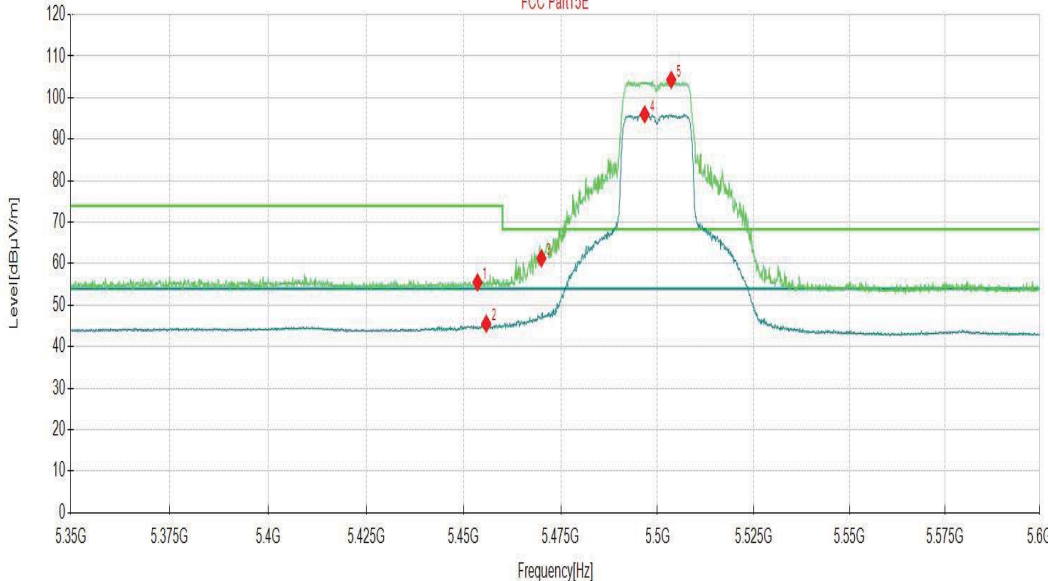


Channel		802.11a CH 144		Frequency		5720MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11440.0000	29.88	15.04	44.92	74.00	29.08	150	333	PK
2	11440.0000	21.39	15.04	36.43	54.00	17.57	150	333	AV
3	17160.0000	19.07	25.86	44.93	68.20	23.27	150	23	PK
4	17160.0000	10.44	25.86	36.30	54.00	17.70	150	148	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11440.0000	32.84	15.04	47.88	74.00	26.12	150	128	PK
2	11440.0000	23.25	15.04	38.29	54.00	15.71	150	210	AV
3	17160.0000	19.76	25.86	45.62	68.20	22.58	150	169	PK
4	17160.0000	10.94	25.86	36.80	54.00	17.20	150	91	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]									



Channel	802.11n20 CH100		Frequency		5500 MHz				
Frequency Range	Above 1G		Detector Function		PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5453.5518	45.69	9.81	55.50	74.00	18.50	150	135	PK
2	5455.8029	35.66	9.87	45.53	54.00	8.47	150	174	AV
3	5470.0000	51.36	9.94	61.30	68.30	7.00	150	179	PK
4	5496.6983	86.90	9.09	95.99			150	174	AV
5	5503.5768	94.92	9.40	104.32			150	174	PK
6	11000.0000	25.70	14.83	40.53	74.00	33.47	134	37	PK
7	11000.0000	17.78	14.83	32.61	54.00	21.39	270	272	AV
8	16500.0000	21.72	23.16	44.88	68.20	23.32	153	268	PK
9	16500.0000	11.75	23.16	34.91	54.00	19.09	165	90	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

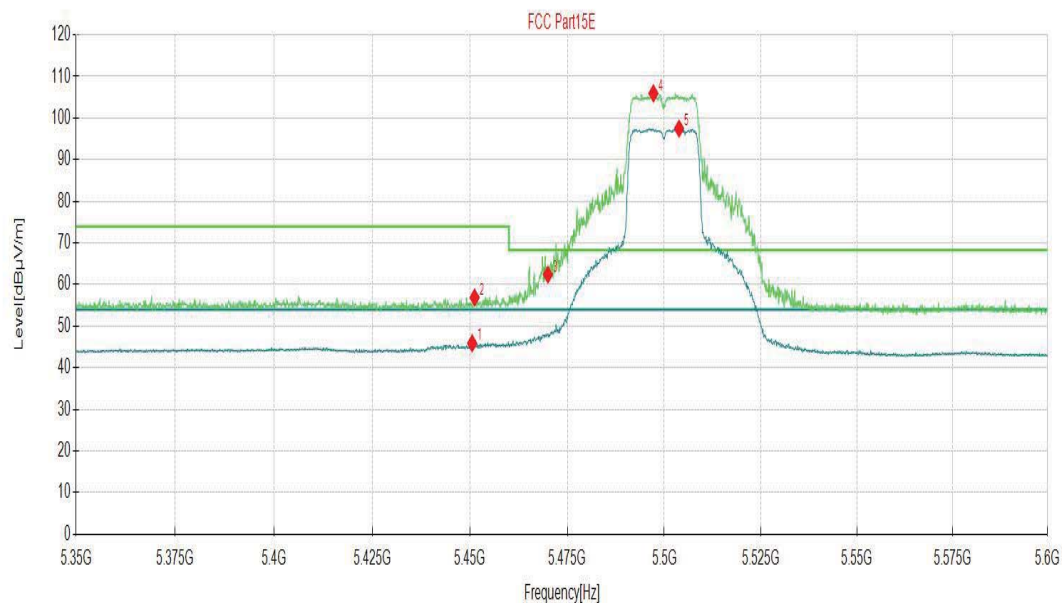
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH100	Frequency	5500 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5450.5503	36.17	9.73	45.90	54.00	8.10	150	196	AV
2	5451.1756	47.10	9.75	56.85	74.00	17.15	150	214	PK
3	5470.0000	52.46	9.94	62.40	68.30	5.90	150	214	PK
4	5497.1986	96.82	9.10	105.92			150	214	PK
5	5503.8269	88.06	9.42	97.48			150	196	AV
6	11000.0000	26.21	14.83	41.04	74.00	32.96	336	244	PK
7	11000.0000	17.42	14.83	32.25	54.00	21.75	390	123	AV
8	16500.0000	20.52	23.16	43.68	68.20	24.52	153	69	PK
9	16500.0000	11.97	23.16	35.13	54.00	18.87	248	100	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



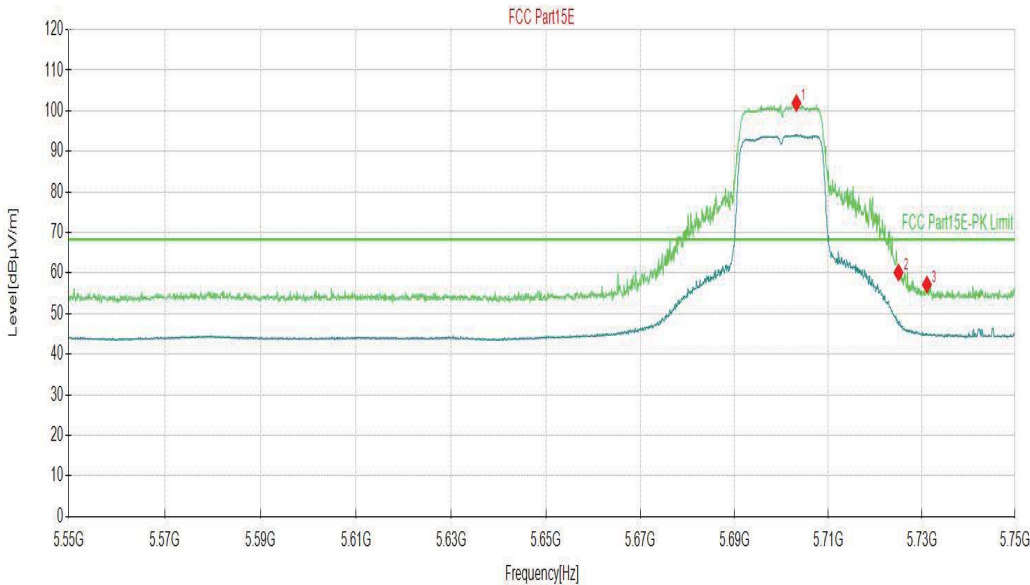
Channel		802.11n20 CH 116			Frequency		5600MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11160.0000	33.57	15.23	48.80	74.00	25.20	150	336	PK
2	11160.0000	24.63	15.23	39.86	54.00	14.14	150	353	AV
3	16740.0000	21.71	24.45	46.16	68.20	22.04	150	141	PK
4	16740.0000	12.25	24.45	36.70	54.00	17.30	150	64	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11160.0000	34.00	15.23	49.23	74.00	24.77	150	121	PK
2	11160.0000	25.24	15.23	40.47	54.00	13.53	150	353	AV
3	16740.0000	21.29	24.45	45.74	68.20	22.46	150	236	PK
4	16740.0000	12.23	24.45	36.68	54.00	17.32	150	27	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									





Channel	802.11n20 CH140			Frequency	5700 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5703.1766	93.04	8.85	101.89	68.30	-33.59	150	176	PK
2	5725.0000	51.24	8.89	60.13	68.30	8.17	150	172	PK
3	5731.0905	48.47	8.70	57.17	68.30	11.13	150	271	PK
4	11400.0000	23.85	15.09	38.94	54.00	15.06	150	330	AV
5	11400.0000	32.40	15.09	47.49	74.00	26.51	150	334	PK
6	17100.0000	10.85	25.93	36.78	54.00	17.22	150	101	AV
7	17100.0000	20.10	25.93	46.03	68.20	22.17	150	155	PK

FCC Part15E



FCC Part15E-PK Limit

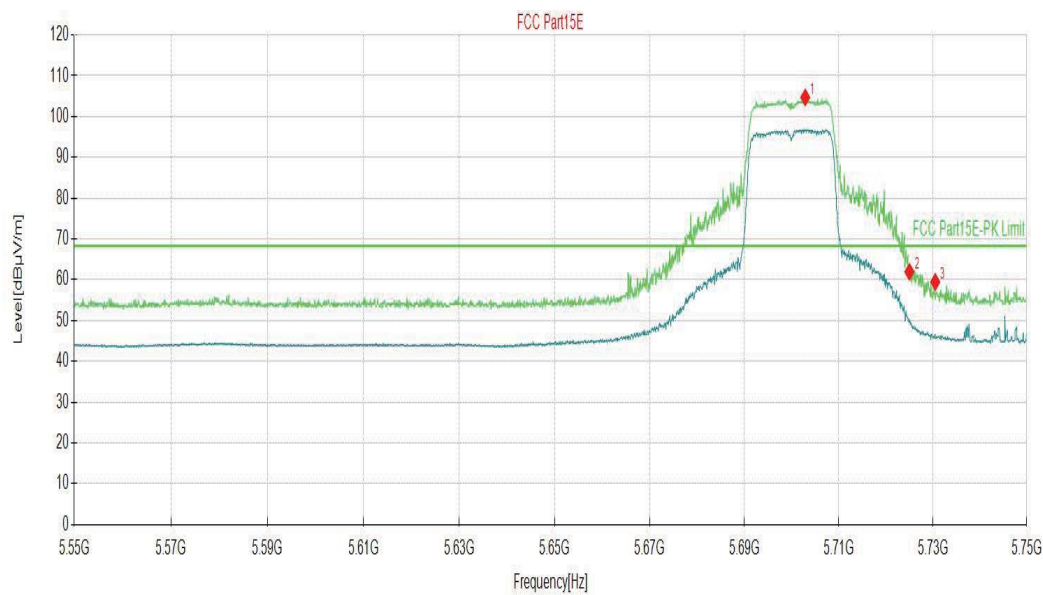
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH140	Frequency	5700 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5702.8764	95.81	8.86	104.67	68.30	-36.37	150	192	PK
2	5725.0000	53.06	8.89	61.95	68.30	6.35	150	248	PK
3	5730.4902	50.76	8.69	59.45	68.30	8.85	150	196	PK
4	11400.0000	34.64	15.09	49.73	74.00	24.27	150	352	PK
5	11400.0000	26.30	15.09	41.39	54.00	12.61	150	129	AV
6	17100.0000	21.07	25.93	47.00	68.20	21.20	150	342	PK
7	17100.0000	11.48	25.93	37.41	54.00	16.59	150	274	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



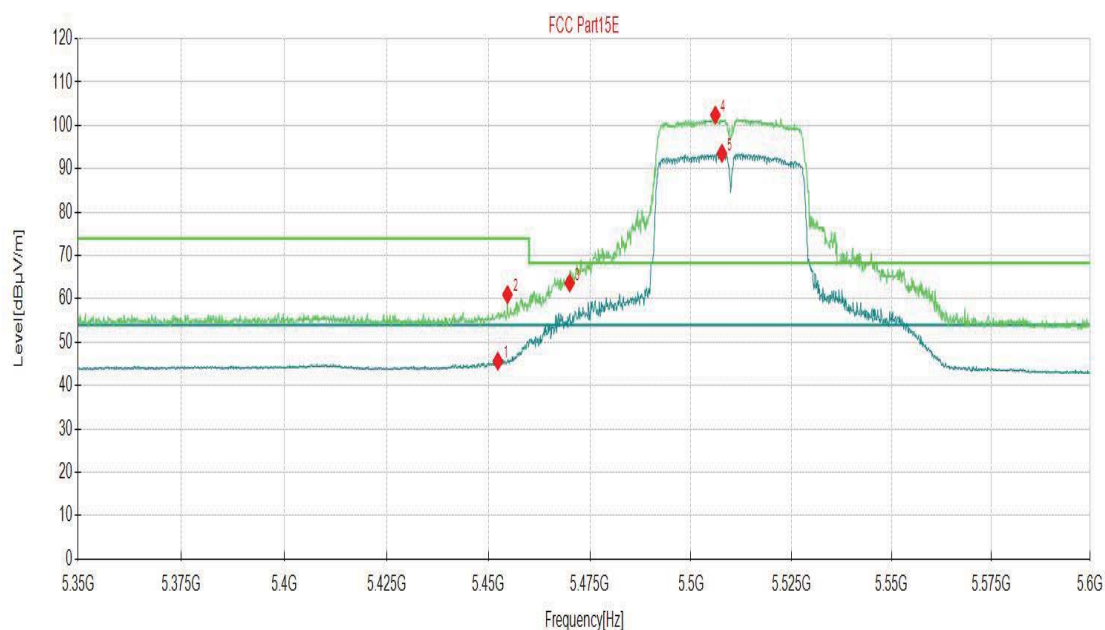
Channel		802.11n20 CH 144			Frequency		5720MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11440.0000	29.59	15.04	44.63	74.00	29.37	150	322	PK
2	11440.0000	21.86	15.04	36.90	54.00	17.10	150	322	AV
3	17160.0000	18.70	25.86	44.56	68.20	23.64	150	274	PK
4	17160.0000	10.71	25.86	36.57	54.00	17.43	150	124	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11440.0000	31.44	15.04	46.48	74.00	27.52	150	118	PK
2	11440.0000	23.30	15.04	38.34	54.00	15.66	150	202	AV
3	17160.0000	20.31	25.86	46.17	68.20	22.03	150	202	PK
4	17160.0000	10.83	25.86	36.69	54.00	17.31	150	270	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]									



Channel	802.11n40 CH102	Frequency	5510 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5452.3012	35.86	9.78	45.64	54.00	8.36	150	176	AV
2	5454.6773	51.14	9.84	60.98	74.00	13.02	150	172	PK
3	5470.0000	53.74	9.94	63.68	68.30	4.62	150	168	PK
4	5506.0780	92.86	9.54	102.40			150	172	PK
5	5507.7039	83.95	9.63	93.58			150	172	AV
6	11020.0000	28.99	14.89	43.88	74.00	30.12	150	351	PK
7	11020.0000	22.19	14.89	37.08	54.00	16.92	150	341	AV
8	16530.0000	21.67	23.21	44.88	68.20	23.32	150	351	PK
9	16530.0000	11.69	23.21	34.90	54.00	19.10	150	44	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

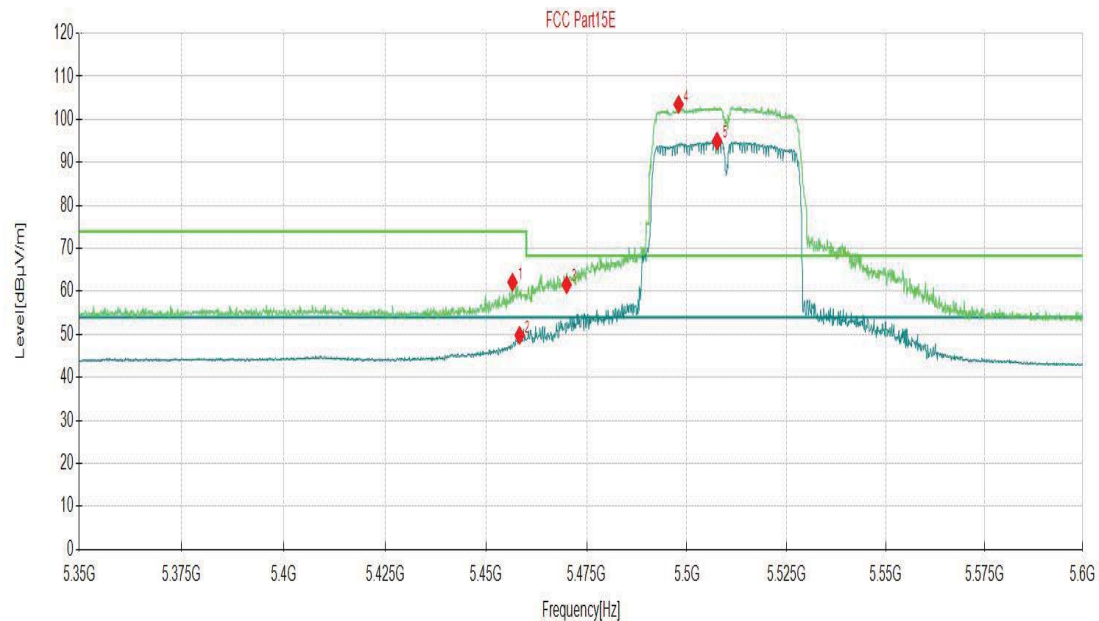
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH102	Frequency	5510 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5454.3022	37.16	9.83	46.99	54.00	7.01	194	295	AV
2	5455.0525	48.48	9.85	58.33	74.00	15.67	108	304	PK
3	5470.0000	47.62	9.94	57.56	68.30	10.74	286	329	PK
4	5508.8294	94.22	9.69	103.91			200	359	PK
5	5511.0805	86.18	9.73	95.91			271	3	AV
6	11020.0000	30.81	14.89	45.70	74.00	28.30	150	179	PK
7	11020.0000	23.13	14.89	38.02	54.00	15.98	150	179	AV
8	16530.0000	20.87	23.21	44.08	68.20	24.12	150	118	PK
9	16530.0000	12.90	23.21	36.11	54.00	17.89	150	95	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11n40 CH 110			Frequency		5630MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11099.8200	32.38	15.26	47.64	74.00	26.36	150	354	PK
2	11099.8200	23.33	15.26	38.59	54.00	15.41	150	354	AV
3	16635.6436	23.31	24.08	47.39	68.20	20.81	150	145	PK
4	16813.5014	12.55	24.91	37.46	54.00	16.54	150	233	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11099.8200	32.91	15.26	48.17	74.00	25.83	150	193	PK
2	11099.8200	25.32	15.26	40.58	54.00	13.42	150	193	AV
3	16701.1701	23.42	24.43	47.85	68.20	20.35	150	230	PK
4	16937.5338	12.52	25.53	38.05	54.00	15.95	150	244	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]									



Channel	802.11n40 CH134				Frequency	5670 MHz			
Frequency Range	Above 1G				Detector Function	PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5672.1611	93.01	9.18	102.19			150	196	PK
2	5725.0000	49.55	8.89	58.44	68.30	9.86	150	196	PK
3	5732.2911	52.19	8.74	60.93	68.30	7.37	150	196	PK
4	11339.6940	26.77	14.88	41.65	54.00	12.35	150	333	AV
5	11340.0000	32.45	14.88	47.33	74.00	26.67	150	337	PK
6	17010.0000	11.46	26.15	37.61	54.00	16.39	150	289	AV
7	17010.0000	21.00	26.15	47.15	68.20	21.05	150	37	PK

FCC Part15E

Level[dBuV/m]

Frequency[Hz]

FCC Part15E-PK Limit

1

2

3

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]



Channel	802.11n40 CH134	Frequency	5670 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5675.0625	90.39	9.15	99.54			150	167	PK
2	5725.0000	48.66	8.89	57.55	68.30	10.75	150	193	PK
3	5738.7944	50.67	8.91	59.58	68.30	8.72	150	184	PK
4	11340.0000	35.87	14.88	50.75	74.00	23.25	150	129	PK
5	11340.0000	25.92	14.88	40.80	54.00	13.20	150	139	AV
6	17010.0000	20.93	26.15	47.08	68.20	21.12	150	122	PK
7	17010.0000	12.33	26.15	38.48	54.00	15.52	150	241	AV

FCC Part15E

Level [dBμV/m]

Frequency [Hz]

FCC Part15E-PK Limit

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]





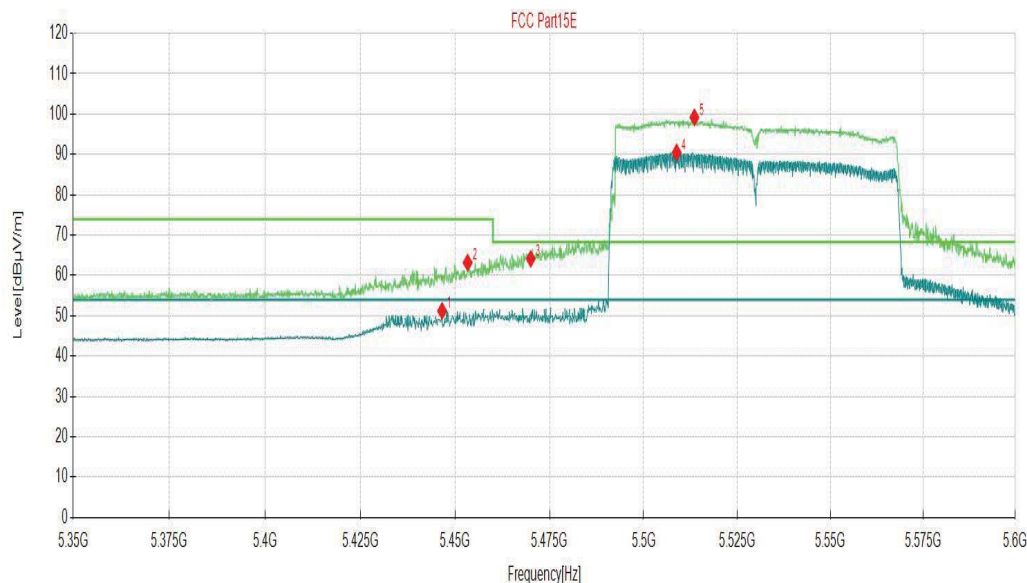
Channel		802.11n40 CH 142			Frequency		5710MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11420.0000	30.54	15.13	45.67	74.00	28.33	150	317	PK
2	11420.0000	21.26	15.13	36.39	54.00	17.61	150	328	AV
3	17130.0000	20.08	26.05	46.13	68.20	22.07	150	179	PK
4	17130.0000	10.19	26.05	36.24	54.00	17.76	150	212	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11420.0000	32.94	15.13	48.07	74.00	25.93	150	179	PK
2	11420.0000	24.80	15.13	39.93	54.00	14.07	150	128	AV
3	17130.0000	20.11	26.05	46.16	68.20	22.04	150	135	PK
4	17130.0000	10.82	26.05	36.87	54.00	17.13	150	98	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]									



Channel	802.11ac80 CH106	Frequency	5530 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5446.5483	41.50	9.72	51.22	54.00	2.78	150	178	AV
2	5453.3017	53.38	9.80	63.18	74.00	10.82	150	173	PK
3	5470.0000	54.19	9.94	64.13	68.30	4.17	150	173	PK
4	5508.8294	80.79	9.69	90.48			150	173	AV
5	5513.5818	89.50	9.68	99.18			150	173	PK
6	11060.0000	20.76	15.05	35.81	54.00	18.19	150	331	AV
7	11060.0000	29.21	15.05	44.26	74.00	29.74	150	317	PK
8	16590.0000	12.37	23.82	36.19	54.00	17.81	150	172	AV
9	16590.0000	21.60	23.82	45.42	68.20	22.78	150	131	PK



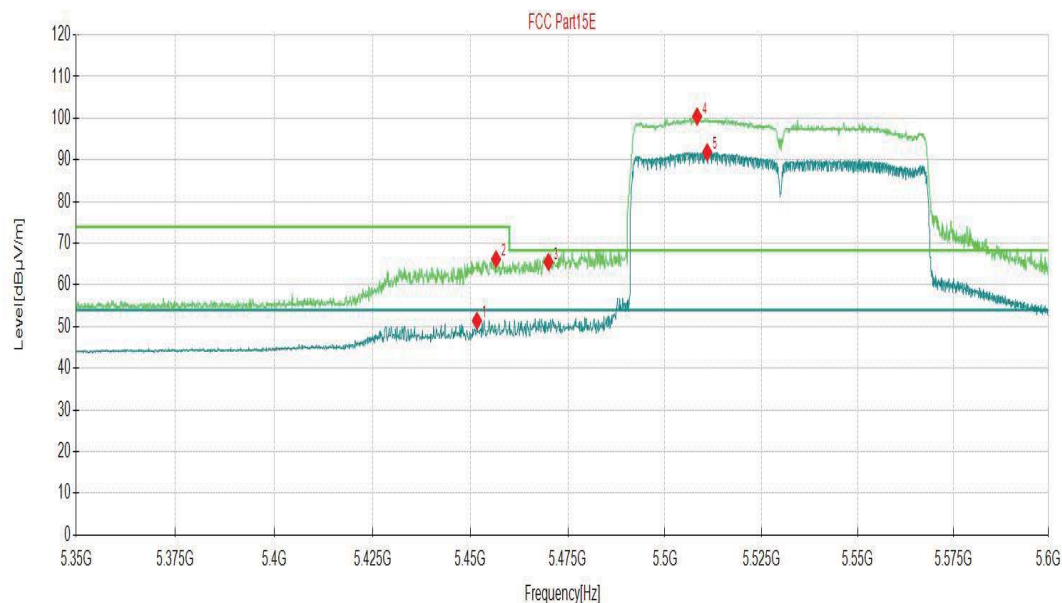
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH106	Frequency	5530 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5451.6758	41.64	9.76	51.40	54.00	2.60	150	200	AV
2	5456.5533	56.27	9.90	66.17	74.00	7.83	150	200	PK
3	5470.0000	55.59	9.94	65.53	68.30	2.77	150	200	PK
4	5508.3292	90.75	9.66	100.41			150	200	PK
5	5510.9555	82.10	9.74	91.84			150	195	AV
6	11060.0000	23.60	15.05	38.65	54.00	15.35	150	192	AV
7	11060.0000	30.17	15.05	45.22	74.00	28.78	150	138	PK
8	16590.0000	21.46	23.82	45.28	68.20	22.92	150	313	PK
9	16590.0000	12.33	23.82	36.15	54.00	17.85	150	317	AV



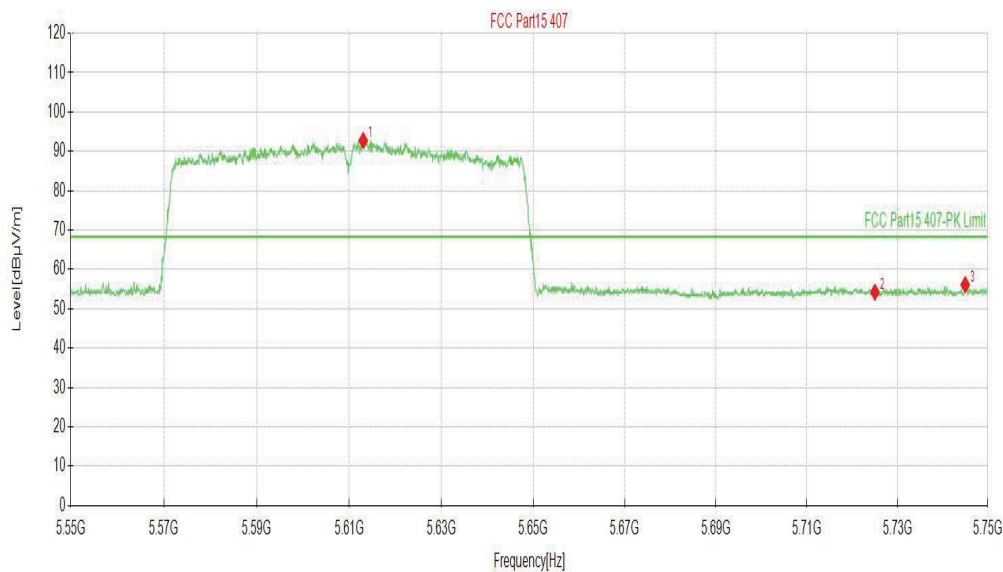
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH122	Frequency	5610 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5613.0315	83.73	9.02	92.75			150	322	PK
2	5725.0000	45.32	8.89	54.21	68.30	14.09	150	3	PK
3	5744.9975	47.18	8.94	56.12	68.30	12.18	150	206	PK
4	11220.0000	29.41	15.03	44.44	74.00	29.56	150	253	PK
5	11220.0000	21.82	15.03	36.85	54.00	17.15	150	97	AV
6	16830.0000	21.23	24.89	46.12	68.20	22.08	150	302	PK
7	16830.0000	11.10	24.89	35.99	54.00	18.01	150	201	AV



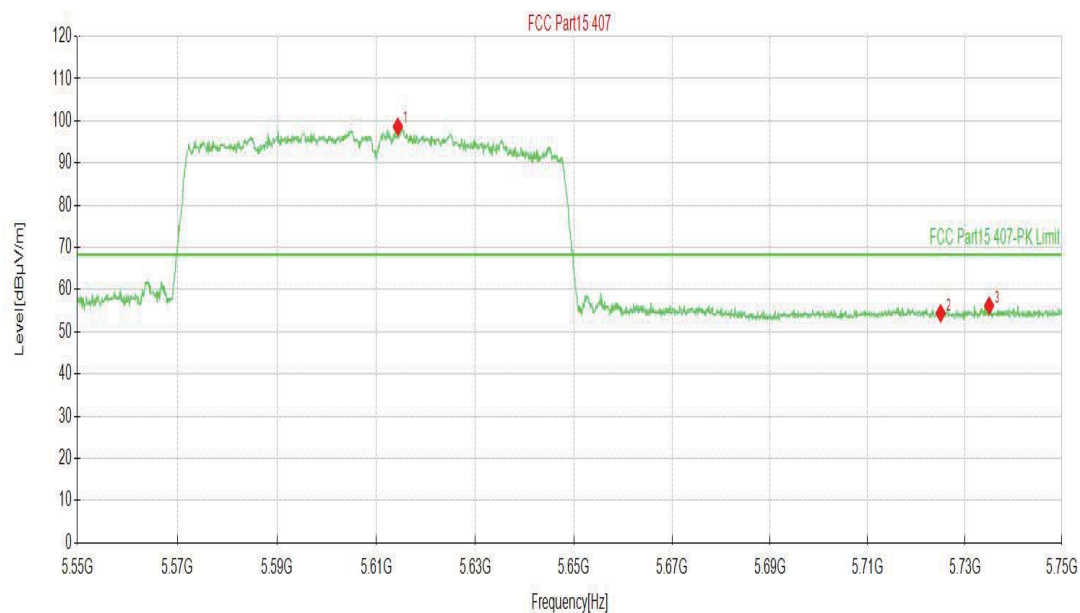
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH122	Frequency	5610 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5614.3322	89.63	9.01	98.64			150	5	PK
2	5725.0000	45.49	8.89	54.38	68.30	13.92	150	260	PK
3	5734.9925	47.39	8.81	56.20	68.30	12.10	150	25	PK
4	11220.0000	30.52	15.03	45.55	74.00	28.45	150	3	PK
5	11220.0000	21.73	15.03	36.76	54.00	17.24	150	268	AV
6	16830.0000	20.56	24.89	45.45	68.20	22.75	150	284	PK
7	16830.0000	11.43	24.89	36.32	54.00	17.68	150	268	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11ac80 CH 138			Frequency		5690MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11379.4779	23.59	14.98	38.57	54.00	15.43	150	334	AV
2	11380.0000	28.76	14.99	43.75	74.00	30.25	150	296	PK
3	17070.0000	11.28	26.26	37.54	54.00	16.46	150	105	AV
4	17070.0000	20.72	26.26	46.98	68.20	21.22	150	129	PK
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11380.0000	32.04	14.99	47.03	74.00	26.97	150	129	PK
2	11380.0000	23.78	14.99	38.77	54.00	15.23	150	129	AV
3	17070.0000	22.38	26.26	48.64	68.20	19.56	150	234	PK
4	17070.0000	11.70	26.26	37.96	54.00	16.04	150	349	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]									



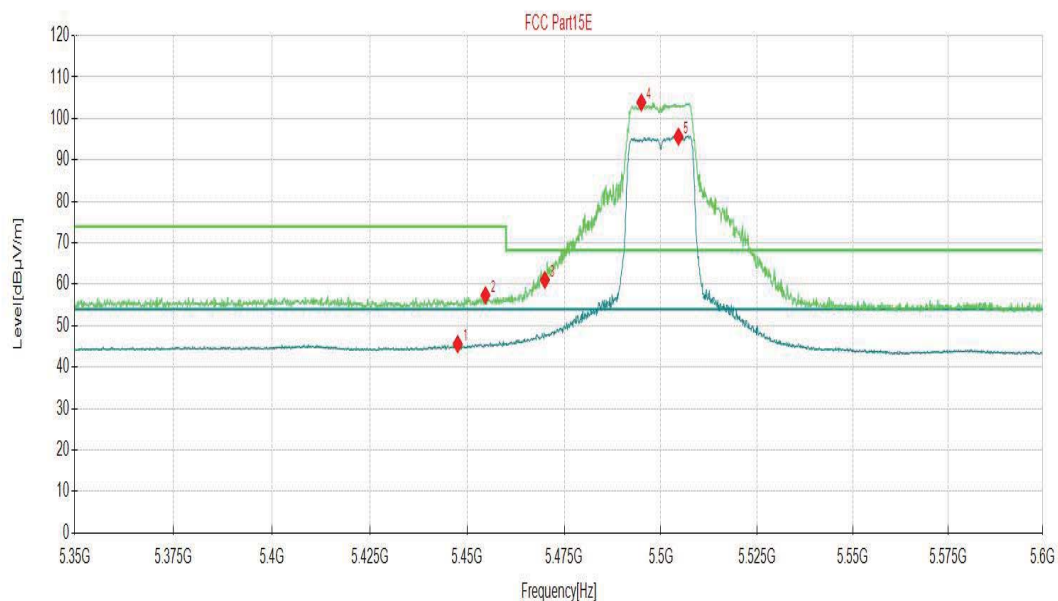
MODEL:WF-U21DS-SSA2

## WORST-CASE DATA

Channel	802.11a CH100	Frequency	5500 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5447.5488	35.85	9.72	45.57	54.00	8.43	150	266	AV
2	5454.6773	47.51	9.84	57.35	74.00	16.65	150	288	PK
3	5470.0000	51.12	9.94	61.06	68.20	7.14	150	305	PK
4	5494.9475	94.84	9.02	103.86			150	266	PK
5	5504.5773	86.17	9.46	95.63			150	266	AV
6	11000.0000	31.71	14.83	46.54	74.00	27.46	308	351	PK
7	11000.0000	24.40	14.83	39.23	54.00	14.77	384	351	AV
8	16500.0000	21.69	23.16	44.85	68.20	23.35	131	325	PK
9	16500.0000	12.09	23.16	35.25	54.00	18.75	184	335	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH100			Frequency		5500 MHz			
Frequency Range	Above 1G			Detector Function		PK/AV			
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5451.8009	35.29	9.76	45.05	54.00	8.95	150	122	AV
2	5454.8024	46.46	9.85	56.31	74.00	17.69	150	341	PK
3	5470.0000	49.57	9.94	59.51	68.20	8.69	150	298	PK
4	5496.1981	92.17	9.07	101.24			150	324	PK
5	5506.5783	83.14	9.57	92.71			150	324	AV
6	11000.0000	30.98	14.83	45.81	74.00	28.19	218	225	PK
7	11000.0000	22.82	14.83	37.65	54.00	16.35	259	174	AV
8	16500.0000	22.12	23.16	45.28	68.20	22.92	156	1	PK
9	16500.0000	13.13	23.16	36.29	54.00	17.71	392	60	AV

FCC Part15E

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



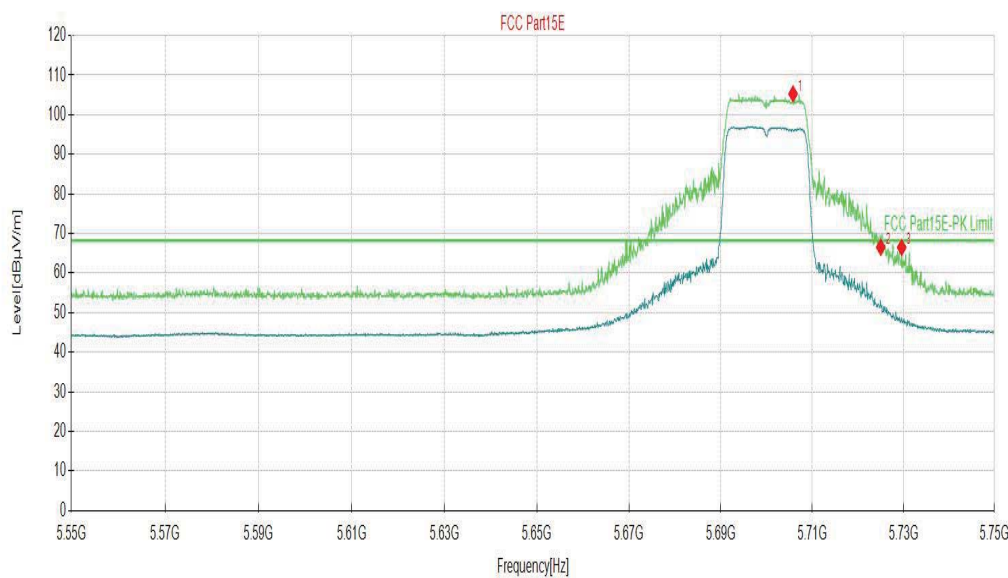


Channel		802.11a CH 116			Frequency		5600MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11160.0000	32.00	15.23	47.23	74.00	26.77	325	345	PK
2	11160.0000	23.35	15.23	38.58	54.00	15.42	230	295	AV
3	16740.0000	21.26	24.45	45.71	68.20	22.49	280	275	PK
4	16740.0000	12.71	24.45	37.16	54.00	16.84	315	268	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11160.0000	33.59	15.23	48.82	74.00	25.18	178	63	PK
2	11160.0000	24.37	15.23	39.60	54.00	14.40	299	346	AV
3	16740.0000	21.28	24.45	45.73	68.20	22.47	331	360	PK
4	16740.0000	12.50	24.45	36.95	54.00	17.05	178	342	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11a CH140				Frequency	5700 MHz			
Frequency Range	Above 1G				Detector Function	PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5705.7779	96.52	8.75	105.27			150	281	PK
2	5725.0000	57.66	8.89	66.55	68.20	1.65	150	170	PK
3	5729.5898	57.81	8.69	66.50	68.20	1.70	150	277	PK
4	11400.0000	30.74	15.09	45.83	74.00	28.17	147	199	PK
5	11400.0000	23.01	15.09	38.10	54.00	15.90	149	347	AV
6	17100.0000	20.16	25.93	46.09	68.20	22.11	325	165	PK
7	17100.0000	10.98	25.93	36.91	54.00	17.09	216	202	AV

FCC Part15E



Level [dBμV/m]

Frequency [Hz]

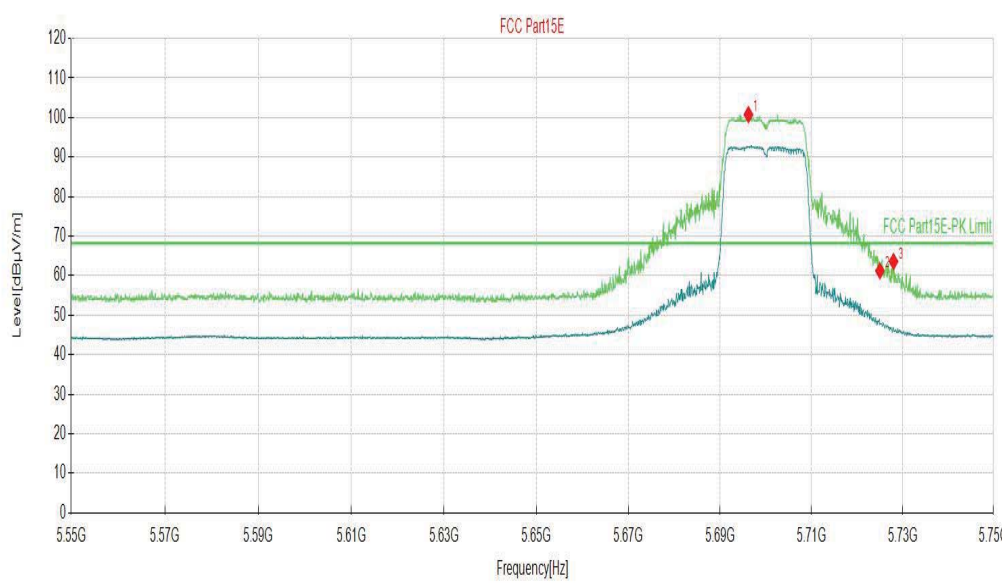
FCC Part15E-PK Limit

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11a CH140		Frequency		5700 MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5696.1731	92.13	8.62	100.75			150	291	PK
2	5725.0000	52.35	8.89	61.24	68.20	6.96	150	346	PK
3	5727.9890	54.84	8.76	63.60	68.20	4.60	150	321	PK
4	11400.0000	32.22	15.09	47.31	74.00	26.69	242	339	PK
5	11400.0000	23.81	15.09	38.90	54.00	15.10	149	339	AV
6	17100.0000	20.44	25.93	46.37	68.20	21.83	160	360	PK
7	17100.0000	11.69	25.93	37.62	54.00	16.38	182	64	AV

FCC Part15E



Level[dBμV/m]

Frequency[Hz]

FCC Part15E-PK Limit

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11a CH 144		Frequency		5720MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11440.0000	29.85	15.04	44.89	74.00	29.11	297	348	PK
2	11440.0000	22.68	15.04	37.72	54.00	16.28	178	344	AV
3	17160.0000	19.30	25.86	45.16	68.20	23.04	112	293	PK
4	17160.0000	11.34	25.86	37.20	54.00	16.80	213	156	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11440.0000	29.85	15.04	44.89	74.00	29.11	142	13	PK
2	11440.0000	21.45	15.04	36.49	54.00	17.51	219	155	AV
3	17160.0000	20.77	25.86	46.63	68.20	21.57	165	81	PK
4	17160.0000	11.04	25.86	36.90	54.00	17.10	116	81	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									

## 3.1.9 TEST RESULTS - Band 4 (5745-5825MHz):

ABOVE 1GHz DATA

MODEL:WF-U21DS-SSA1

Channel	802.11a CH149	Frequency	5745 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5626.2631	47.32	9.03	56.35	68.20	11.85	100	18	PK
2	5742.7589	90.25	8.94	99.19	122.20	23.01	100	166	PK
3	5941.4207	46.90	10.65	57.55	68.20	10.65	100	292	PK
4	11490.0000	21.05	15.04	36.09	54.00	17.91	150	108	AV
5	11490.0000	28.46	15.04	43.50	74.00	30.50	150	331	PK
6	17235.0000	13.68	25.53	39.21	54.00	14.79	150	210	AV
7	17235.0000	19.77	25.53	45.30	68.20	22.90	150	338	PK

FCC Part15E

Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

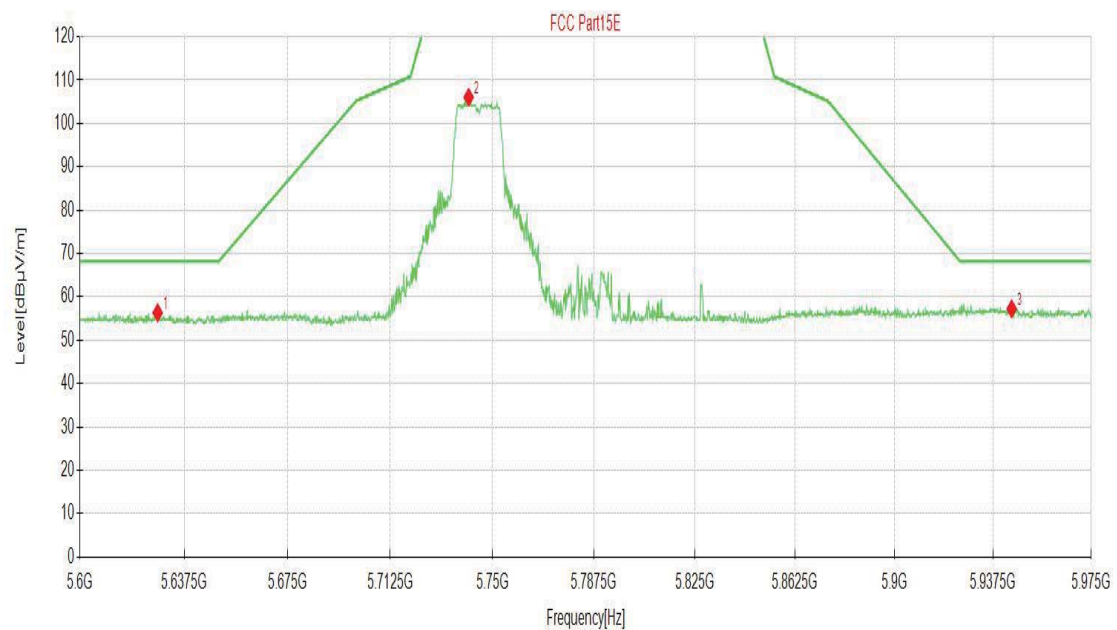
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH149	Frequency	5745 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.9515	47.29	9.04	56.33	68.20	11.87	100	337	PK
2	5741.2581	97.08	8.94	106.02	122.20	16.18	100	211	PK
3	5944.6098	46.94	10.30	57.24	68.20	10.96	100	243	PK
4	11490.0000	29.88	15.04	44.92	74.00	29.08	150	216	PK
5	11490.0000	22.34	15.04	37.38	54.00	16.62	150	216	AV
6	17235.0000	21.11	25.53	46.64	68.20	21.56	150	196	PK
7	17235.0000	12.73	25.53	38.26	54.00	15.74	150	155	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11a CH 157		Frequency		5785MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11570.0000	34.47	15.34	49.81	74.00	24.19	150	323	PK
2	11570.0000	27.64	15.34	42.98	54.00	11.02	150	323	AV
3	17355.0000	20.42	26.30	46.72	68.20	21.48	150	309	PK
4	17355.0000	12.52	26.30	38.82	54.00	15.18	150	87	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11570.0000	35.08	15.34	50.42	74.00	23.58	150	111	PK
2	11570.0000	28.16	15.34	43.50	54.00	10.50	150	111	AV
3	17355.0000	20.73	26.30	47.03	68.20	21.17	150	165	PK
4	17355.0000	12.35	26.30	38.65	54.00	15.35	150	297	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11a CH165			Frequency	5825 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.9515	47.45	9.04	56.49	68.20	11.71	100	210	PK
2	5828.6768	93.36	8.75	102.11	122.20	20.09	100	2	PK
3	5943.8594	47.53	10.39	57.92	68.20	10.28	100	172	PK
4	11650.0000	33.10	15.21	48.31	74.00	25.69	150	323	PK
5	11650.0000	25.89	15.21	41.10	54.00	12.90	150	320	AV
6	17475.0000	19.99	26.05	46.04	68.20	22.16	150	172	PK
7	17475.0000	11.55	26.05	37.60	54.00	16.40	150	24	AV

FCC Part15E

Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

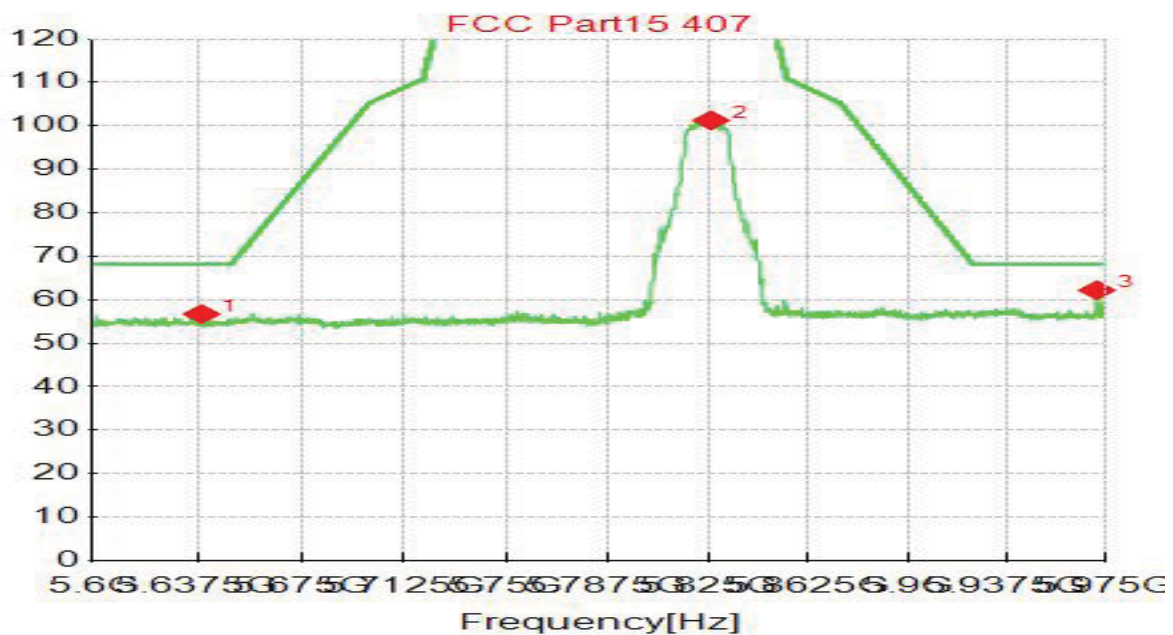




Channel	802.11a CH165	Frequency	5825 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.9515	47.10	9.04	56.14	68.20	12.06	100	175	PK
2	5820.6103	95.32	8.85	104.17	122.20	18.03	100	194	PK
3	5939.9200	47.69	10.81	58.50	68.20	9.70	100	118	PK
4	11650.0000	34.18	15.21	49.39	74.00	24.61	150	121	PK
5	11650.0000	26.57	15.21	41.78	54.00	12.22	150	121	AV
6	17475.0000	20.68	26.05	46.73	68.20	21.47	150	326	PK
7	17475.0000	11.43	26.05	37.48	54.00	16.52	150	184	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

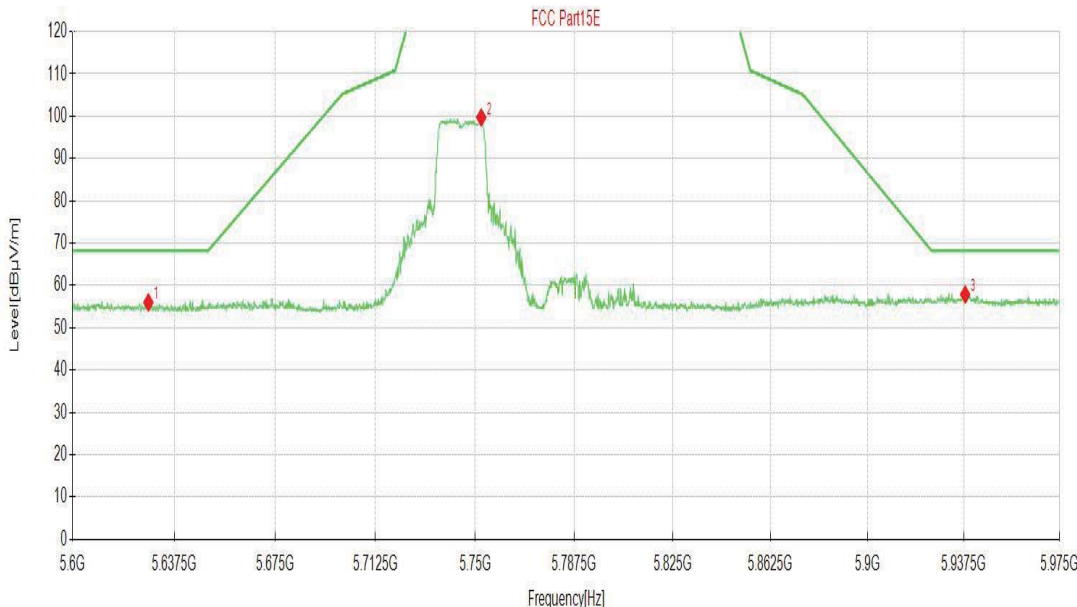
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n20 CH149	Frequency	5745 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.9515	46.95	9.04	55.99	68.20	12.21	100	231	PK
2	5752.3262	90.68	9.03	99.71	122.20	22.49	100	168	PK
3	5938.0440	47.14	10.75	57.89	68.20	10.31	100	152	PK
4	11490.0000	28.29	15.04	43.33	74.00	30.67	150	335	PK
5	11490.0000	21.34	15.04	36.38	54.00	17.62	150	335	AV
6	17235.0000	20.19	25.53	45.72	68.20	22.48	150	217	PK
7	17235.0000	12.44	25.53	37.97	54.00	16.03	150	231	AV

FCC Part15E



Level[dBuV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

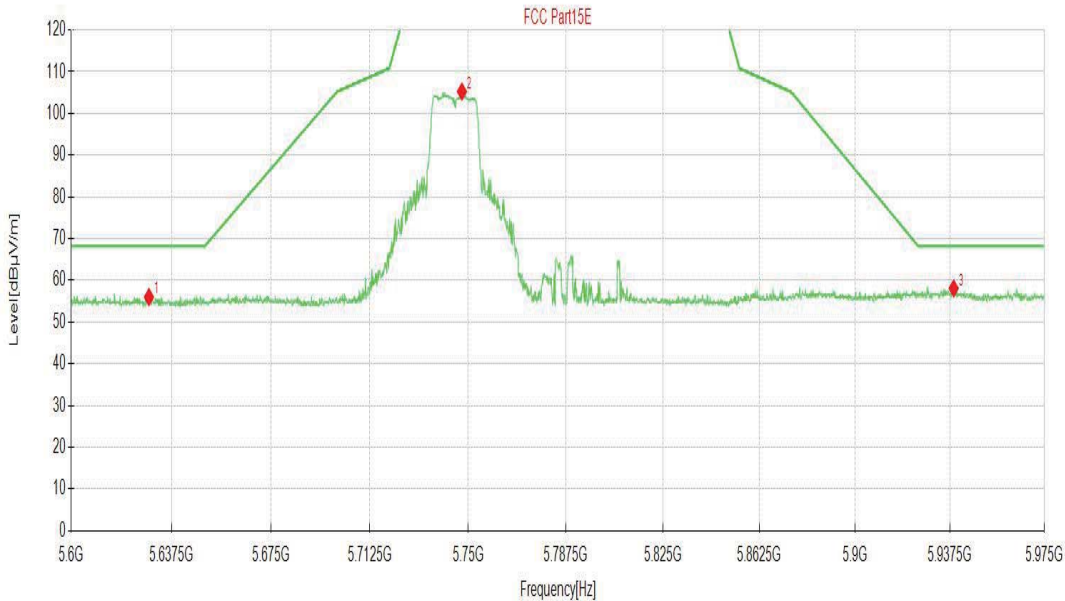
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]



Channel		802.11n20 CH149		Frequency		5745 MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5629.0770	46.95	9.04	55.99	68.20	12.21	100	224	PK
2	5747.6363	96.29	8.93	105.22	122.20	16.98	100	192	PK
3	5938.9820	47.30	10.78	58.08	68.20	10.12	100	5	PK
4	11490.0000	30.64	15.04	45.68	74.00	28.32	150	214	PK
5	11490.0000	23.14	15.04	38.18	54.00	15.82	150	200	AV
6	17235.0000	20.68	25.53	46.21	68.20	21.99	150	187	PK
7	17235.0000	13.46	25.53	38.99	54.00	15.01	150	43	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel		802.11n20 CH 157			Frequency		5785MHz		
Frequency Range		Above 1G			Detector Function		PK/AV		
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11570.0000	35.31	15.34	50.65	74.00	23.35	150	334	PK
2	11570.0000	29.29	15.34	44.63	54.00	9.37	150	331	AV
3	17355.0000	19.61	26.30	45.91	68.20	22.29	150	341	PK
4	17355.0000	13.22	26.30	39.52	54.00	14.48	150	250	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11570.0000	35.45	15.34	50.79	74.00	23.21	150	197	PK
2	11570.0000	28.63	15.34	43.97	54.00	10.03	150	197	AV
3	17355.0000	20.00	26.30	46.30	68.20	21.90	150	319	PK
4	17355.0000	12.39	26.30	38.69	54.00	15.31	150	105	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11n20 CH165			Frequency	5825 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5630.3902	47.53	9.03	56.56	68.20	11.64	100	108	PK
2	5827.7389	93.17	8.76	101.93	122.20	20.27	100	4	PK
3	5941.9835	47.52	10.59	58.11	68.20	10.09	100	108	PK
4	11649.7750	27.22	15.20	42.42	54.00	11.58	150	320	AV
5	11649.7750	34.91	15.20	50.11	74.00	23.89	150	320	PK
6	17475.0000	19.50	26.05	45.55	68.20	22.65	150	200	PK
7	17475.0000	11.36	26.05	37.41	54.00	16.59	150	240	AV

FCC Part15E

Level[dBμV/m]

Frequency[Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

Channel		802.11n20 CH165		Frequency		5825 MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5633.3917	46.98	8.84	55.82	68.20	12.38	100	106	PK
2	5830.7404	95.36	8.74	104.10	122.20	18.10	100	212	PK
3	5937.6688	47.38	10.74	58.12	68.20	10.08	100	49	PK
4	11648.6049	28.49	15.19	43.68	54.00	10.32	150	124	AV
5	11649.7750	34.96	15.20	50.16	74.00	23.84	150	188	PK
6	16912.9613	14.84	25.45	40.29	54.00	13.71	150	353	AV
7	17055.7156	22.36	26.06	48.42	68.20	19.78	150	343	PK

FCC Part15E

Level [dBμV/m]

Frequency [Hz]

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

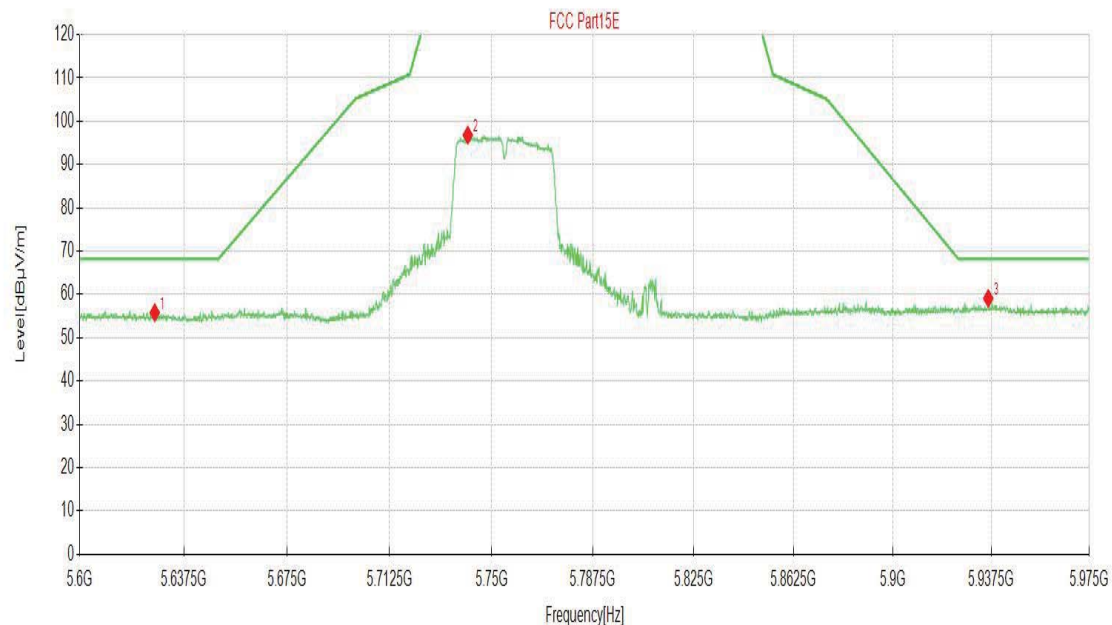
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH151	Frequency	5755 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.0135	46.76	9.03	55.79	68.20	12.41	100	18	PK
2	5741.2581	87.87	8.94	96.81	122.20	25.39	100	165	PK
3	5936.3557	48.40	10.70	59.10	68.20	9.10	100	124	PK
4	11510.0000	28.54	15.12	43.66	74.00	30.34	150	334	PK
5	11510.0000	22.59	15.12	37.71	54.00	16.29	150	320	AV
6	17265.0000	20.63	25.62	46.25	68.20	21.95	150	216	PK
7	17265.0000	13.01	25.62	38.63	54.00	15.37	150	135	AV



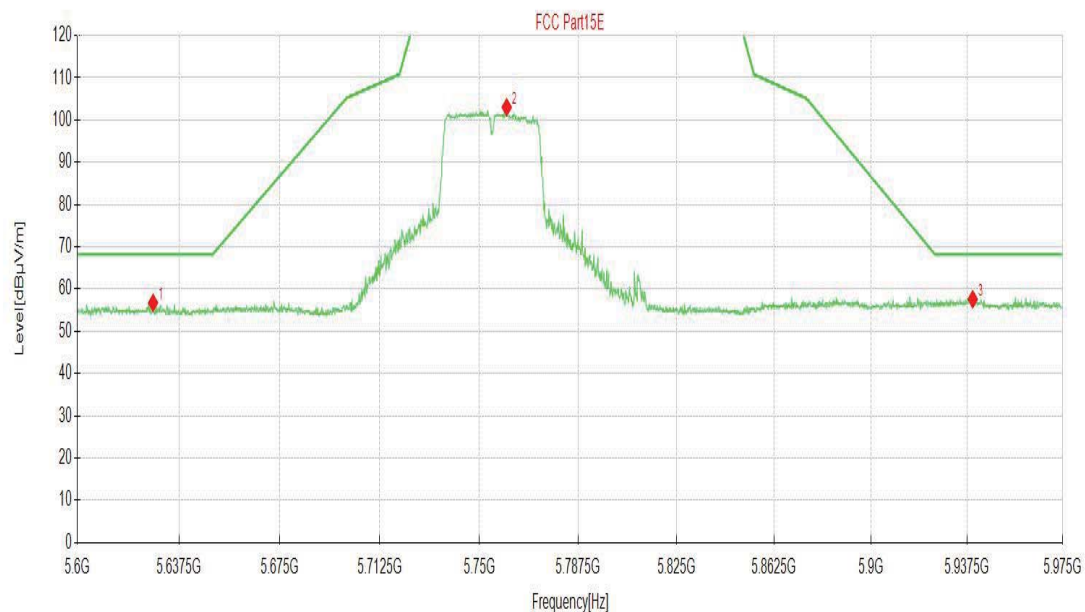
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11n40 CH151	Frequency	5755 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.9515	47.70	9.04	56.74	68.20	11.46	100	207	PK
2	5760.3927	93.69	9.34	103.03	122.20	19.17	100	210	PK
3	5939.7324	46.79	10.80	57.59	68.20	10.61	100	30	PK
4	11510.0000	31.32	15.12	46.44	74.00	27.56	150	208	PK
5	11510.0000	23.97	15.12	39.09	54.00	14.91	150	195	AV
6	17265.0000	20.69	25.62	46.31	68.20	21.89	150	316	PK
7	17265.0000	12.10	25.62	37.72	54.00	16.28	150	104	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]





Channel	802.11n40 CH159			Frequency		5795 MHz			
Frequency Range	Above 1G			Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5627.9515	47.13	9.04	56.17	68.20	12.03	100	40	PK
2	5811.7934	88.28	9.22	97.50	122.20	24.70	100	1	PK
3	5937.6688	47.67	10.74	58.41	68.20	9.79	100	330	PK
4	11590.0000	32.75	15.17	47.92	74.00	26.08	150	312	PK
5	11590.0000	27.93	15.17	43.10	54.00	10.90	150	322	AV
6	17385.0000	19.54	26.14	45.68	68.20	22.52	150	91	PK
7	17385.0000	13.09	26.14	39.23	54.00	14.77	150	206	AV

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.

2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).

3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

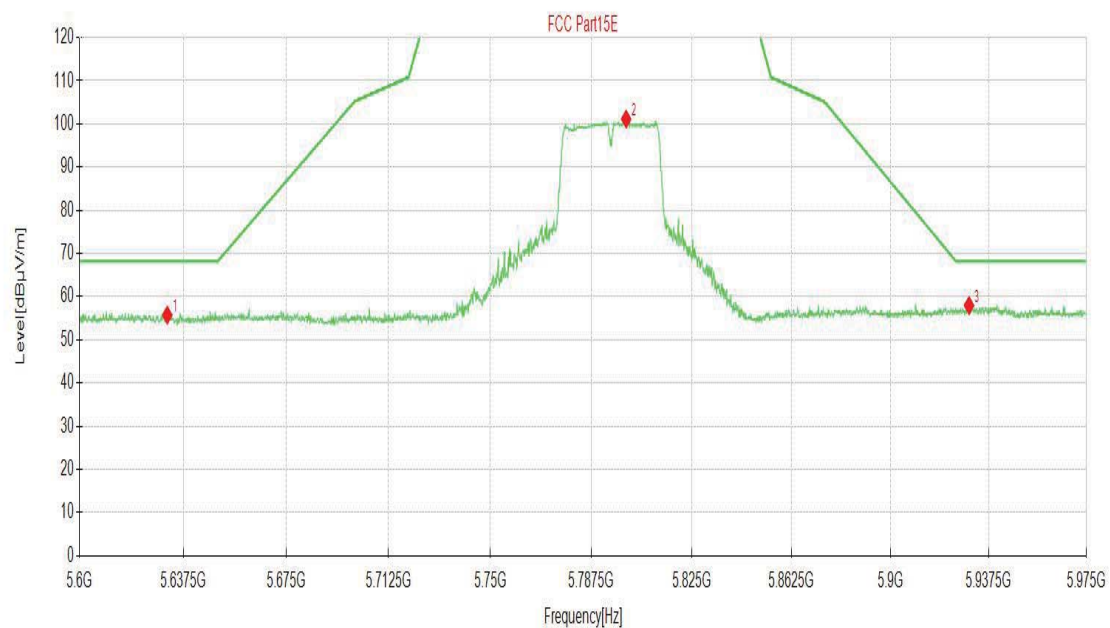
4. Margin(dB) = Limit[dBuV/m] - Level [dBuV/m]



Channel	802.11n40 CH159	Frequency	5795 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5631.7034	46.77	8.95	55.72	68.20	12.48	100	333	PK
2	5800.5378	92.49	8.63	101.12	122.20	21.08	100	212	PK
3	5929.9775	47.48	10.50	57.98	68.20	10.22	100	132	PK
4	11590.0000	33.69	15.17	48.86	74.00	25.14	150	115	PK
5	11590.0000	28.63	15.17	43.80	54.00	10.20	150	186	AV
6	17385.0000	19.81	26.14	45.95	68.20	22.25	150	169	PK
7	17385.0000	12.75	26.14	38.89	54.00	15.11	150	297	AV

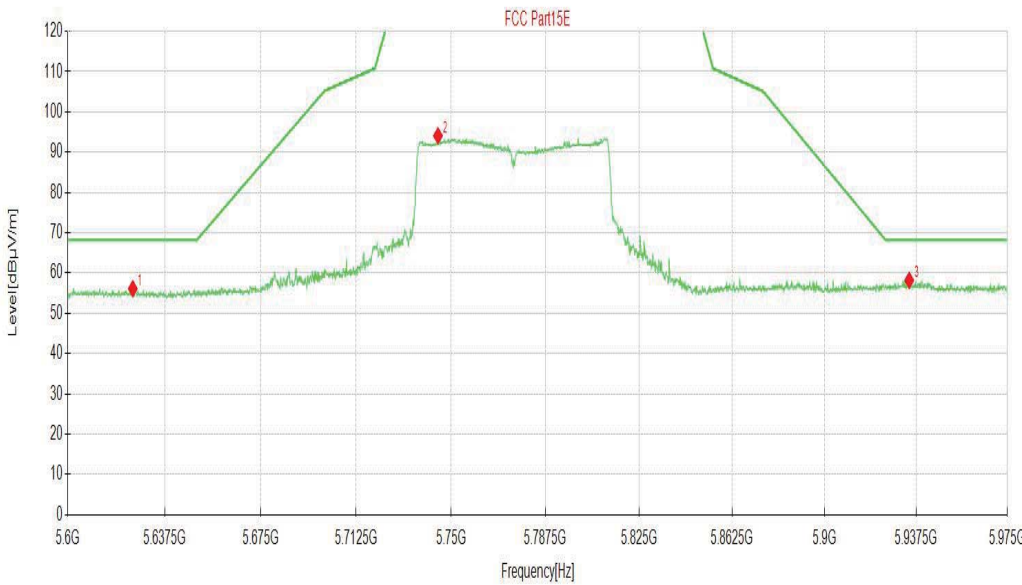


Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH155			Frequency	5775 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5625.1376	47.09	9.02	56.11	68.20	12.09	100	130	PK
2	5744.8224	85.15	8.94	94.09	122.20	28.11	100	17	PK
3	5934.6673	47.55	10.64	58.19	68.20	10.01	100	274	PK
4	11550.0000	30.39	15.40	45.79	74.00	28.21	150	336	PK
5	11550.0000	23.85	15.40	39.25	54.00	14.75	150	319	AV
6	17325.0000	19.03	26.20	45.23	68.20	22.97	150	265	PK
7	17325.0000	12.25	26.20	38.45	54.00	15.55	150	336	AV

FCC Part15E



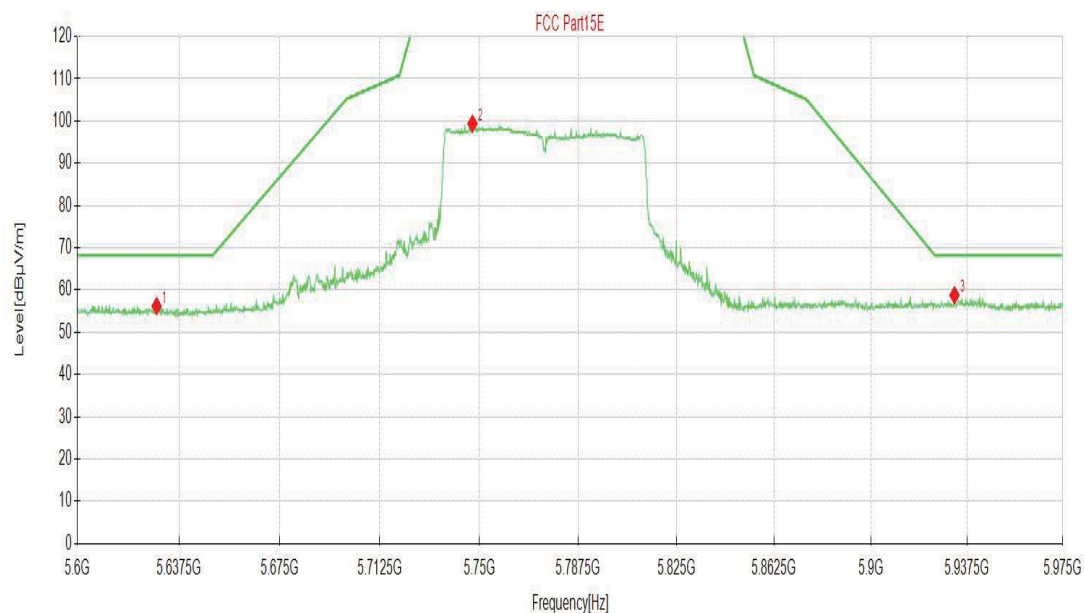
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11ac80 CH155	Frequency	5775 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5629.2646	47.15	9.05	56.20	68.20	12.00	100	196	PK
2	5747.4487	90.44	8.93	99.37	122.20	22.83	100	194	PK
3	5932.6038	48.20	10.58	58.78	68.20	9.42	100	191	PK
4	11550.0000	31.90	15.40	47.30	74.00	26.70	150	224	PK
5	11550.0000	26.11	15.40	41.51	54.00	12.49	150	196	AV
6	17325.0000	19.60	26.20	45.80	68.20	22.40	150	268	PK
7	17325.0000	13.01	26.20	39.21	54.00	14.79	150	261	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



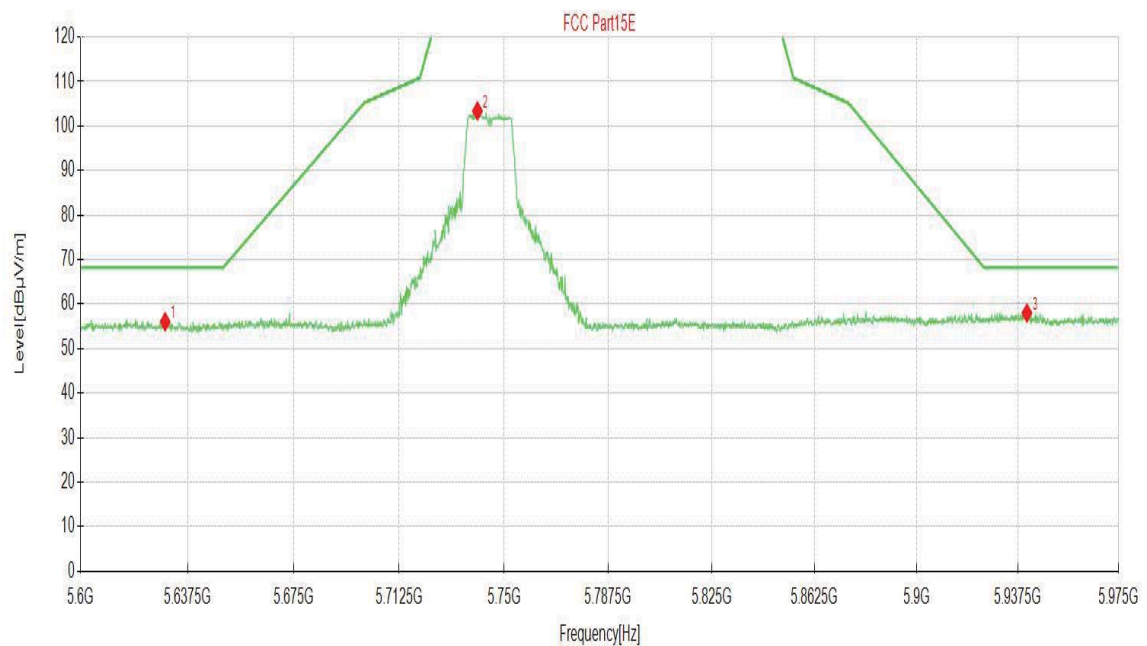
MODEL:WF-U21DS-SSA2

## WORST-CASE DATA

Channel	802.11a CH149	Frequency	5745 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

### Horizontal

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5629.6398	46.98	9.05	56.03	68.20	12.17	150	157	PK
2	5740.5078	94.45	8.94	103.39	122.20	18.81	150	280	PK
3	5940.8579	47.29	10.72	58.01	68.20	10.19	150	146	PK
4	11490.0000	28.94	15.04	43.98	74.00	30.02	204	345	PK
5	11490.0000	23.82	15.04	38.86	54.00	15.14	283	345	AV
6	17235.0000	20.27	25.53	45.80	68.20	22.40	277	148	PK
7	17235.0000	12.82	25.53	38.35	54.00	15.65	224	243	AV



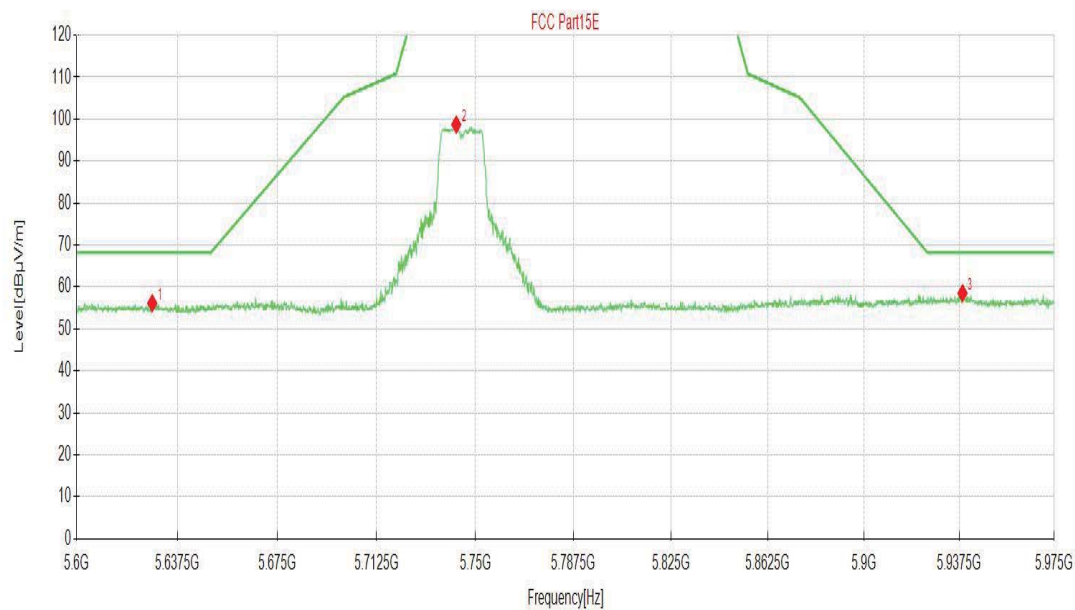
Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]



Channel	802.11a CH149	Frequency	5745 MHz
Frequency Range	Above 1G	Detector Function	PK/AV

## Vertical

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5628.1391	47.10	9.04	56.14	68.20	12.06	150	125	PK
2	5742.7589	89.76	8.94	98.70	122.20	23.50	150	291	PK
3	5938.7944	47.76	10.77	58.53	68.20	9.67	150	136	PK
4	11490.0000	28.73	15.04	43.77	74.00	30.23	382	159	PK
5	11490.0000	23.37	15.04	38.41	54.00	15.59	364	112	AV
6	17235.0000	20.58	25.53	46.11	68.20	22.09	233	74	PK
7	17235.0000	13.77	25.53	39.30	54.00	14.70	241	40	AV



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

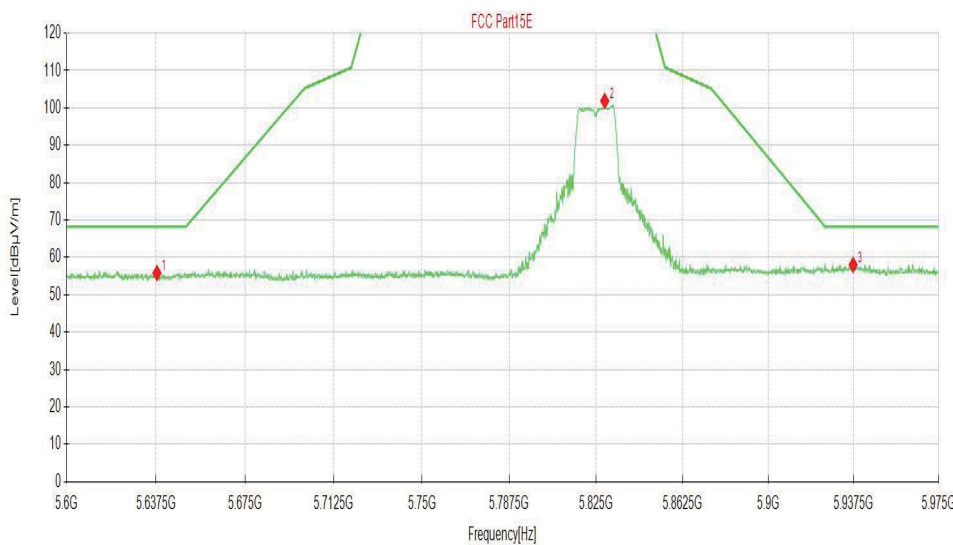


Channel		802.11a CH 157		Frequency		5785MHz			
Frequency Range		Above 1G		Detector Function		PK/AV			
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11570.0000	34.78	15.34	50.12	74.00	23.88	150	344	PK
2	11570.0000	28.94	15.34	44.28	54.00	9.72	189	344	AV
3	17355.0000	20.29	26.30	46.59	68.20	21.61	286	17	PK
4	17355.0000	11.94	26.30	38.24	54.00	15.76	206	350	AV
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	11570.0000	34.66	15.34	50.00	74.00	24.00	290	351	PK
2	11570.0000	29.00	15.34	44.34	54.00	9.66	382	351	AV
3	17355.0000	20.07	26.30	46.37	68.20	21.83	155	169	PK
4	17355.0000	12.57	26.30	38.87	54.00	15.13	374	236	AV
Remark: 1. The emission levels of other frequencies were greater than 20dB margin. 2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB). 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB). 4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]									



Channel	802.11a CH165	Frequency	5825 MHz						
Frequency Range	Above 1G	Detector Function	PK/AV						
Horizontal									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5637.8939	47.25	8.56	55.81	68.20	12.39	367	15	PK
2	5828.6768	93.12	8.75	101.87	122.20	20.33	283	272	PK
3	5937.2936	47.30	10.73	58.03	68.20	10.17	144	149	PK
4	11650.0000	32.67	15.21	47.88	74.00	26.12	157	309	PK
5	11650.0000	26.55	15.21	41.76	54.00	12.24	102	346	AV
6	17475.0000	19.80	26.05	45.85	68.20	22.35	141	112	PK
7	17475.0000	11.99	26.05	38.04	54.00	15.96	159	149	AV

FCC Part15E



Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBμV/m) = Reading (dBμV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]





Channel	802.11a CH165			Frequency	5825 MHz				
Frequency Range	Above 1G			Detector Function	PK/AV				
Vertical									
NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5624.9500	47.28	9.02	56.30	68.20	11.90	334	216	PK
2	5828.3017	87.35	8.75	96.10	122.20	26.10	330	290	PK
3	5937.6688	47.48	10.74	58.22	68.20	9.98	205	312	PK
4	11650.0000	33.90	15.21	49.11	74.00	24.89	268	10	PK
5	11650.0000	28.25	15.21	43.46	54.00	10.54	184	351	AV
6	17475.0000	20.83	26.05	46.88	68.20	21.32	394	279	PK
7	17475.0000	12.60	26.05	38.65	54.00	15.35	269	146	AV

FCC Part15E

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.  
2. Level (dBuV/m) = Reading (dBuV/m) + Factor (dB).  
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).  
4. Margin(dB) = Limit[dBμV/m] - Level [dBμV/m]

## 3.2 CONDUCTED EMISSION MEASUREMENT

### 3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

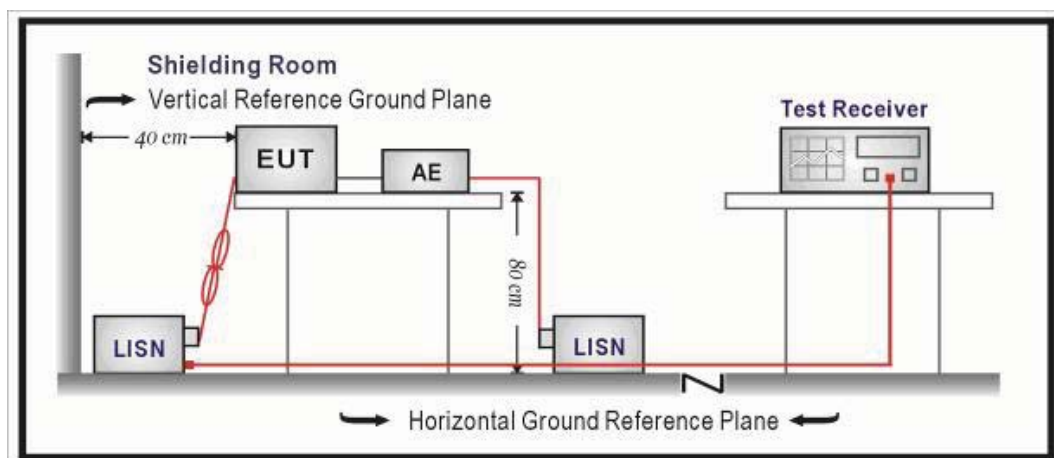
- NOTE:** 1. The lower limit shall apply at the transition frequencies.  
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.  
 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 3.2.2 TEST PROCEDURES

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

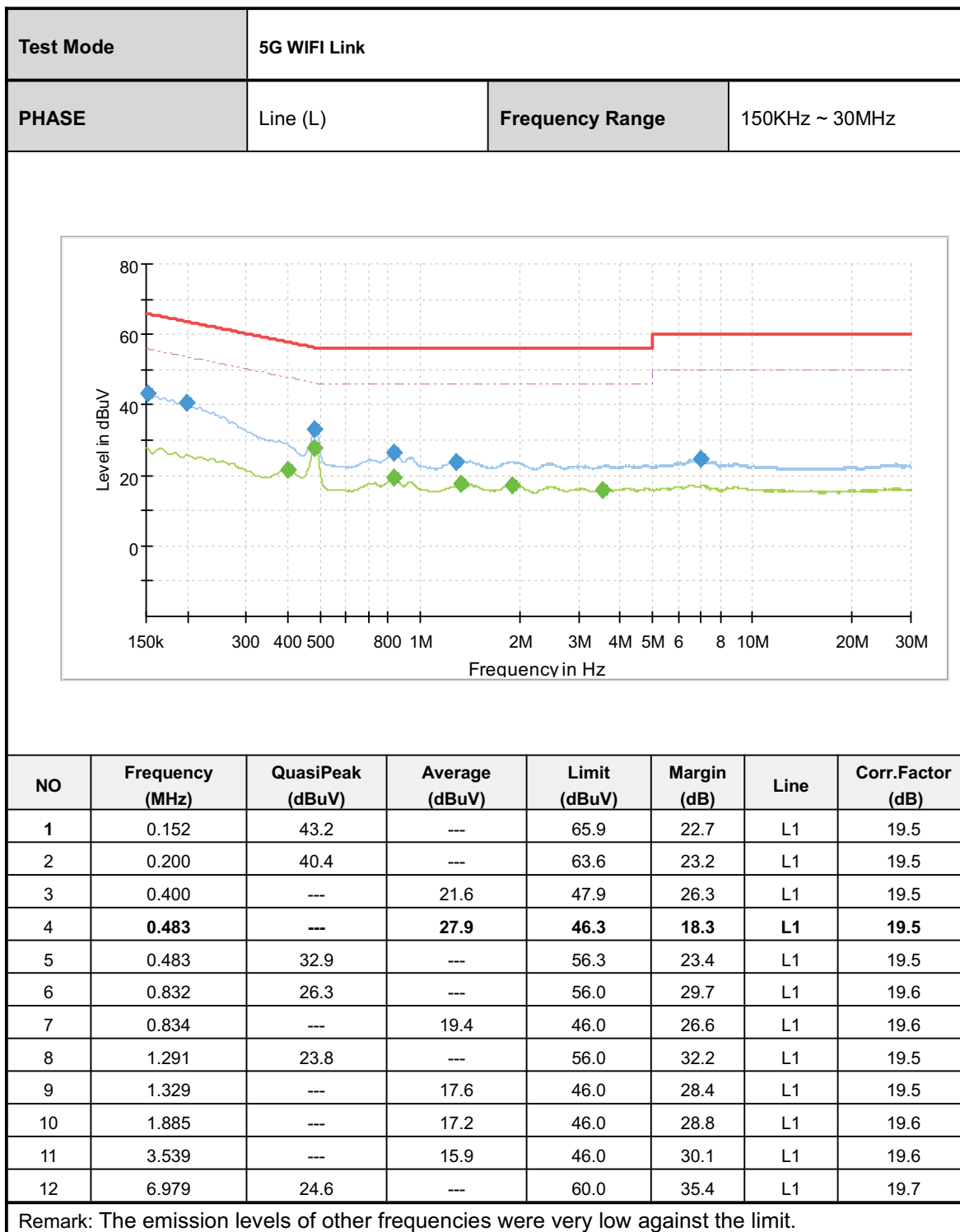
**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.

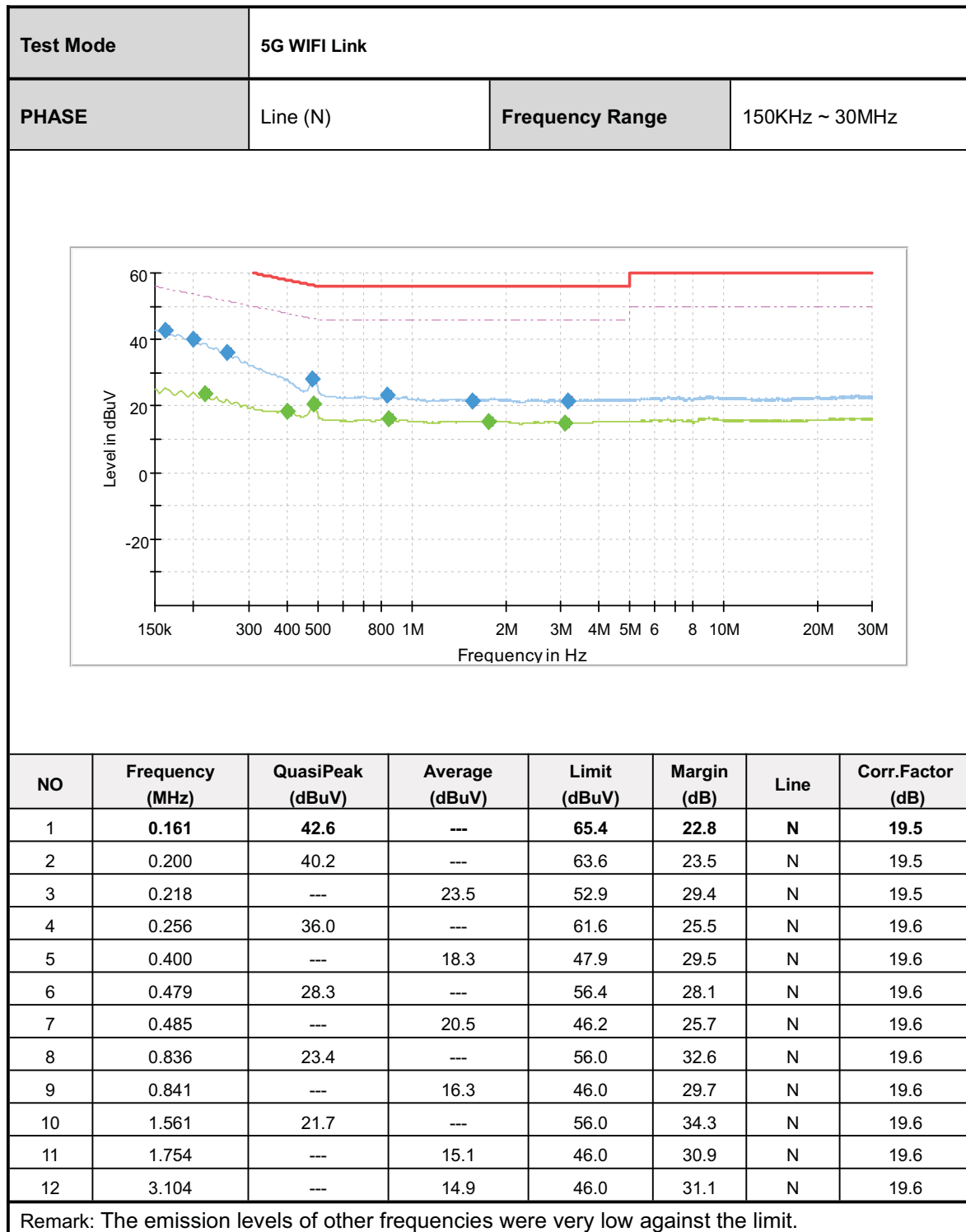
### 3.2.3 TEST SETUP



**NOTE:** For the actual test configuration, please refer to the attached file (Test Setup Photo).

## 3.2.4 TEST RESULTS







## 3.3 26DB EMISSION BANDWIDTH

### 3.3.1 LIMITS OF 26DB EMISSION BANDWIDTH

This section is for reporting purpose only, there is on restriction limit of bandwidth

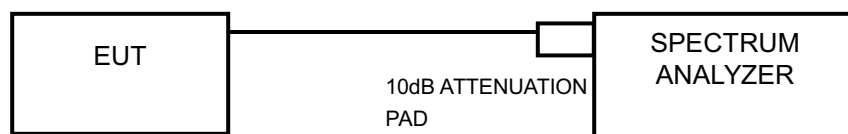
### 3.3.2 TEST PROCEDURES

#### FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

### 3.3.3 TEST SETUP

#### FOR 26dB BANDWIDTH



### 3.3.4 TEST RESULTS

Refer to Appendix A

### 3.4 6DB EMISSION BANDWIDTH

#### 3.4.1 LIMITS OF 6DB EMISSION BANDWIDTH

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

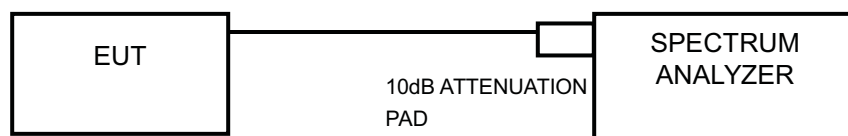
#### 3.4.2 TEST PROCEDURES

##### FOR 6dB BANDWIDTH

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

#### 3.4.3 TEST SETUP

##### FOR 6dB BANDWIDTH



#### 3.4.4 TEST RESULTS

Refer to Appendix B



## 3.5 TRANSMIT POWER MEASUREMENT

### 3.5.1 LIMITS OF TRANSMIT POWER MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√		250mW(24dBm) or 11 dBm+10LogB*
U-NII-2C	√		250mW(24dBm) or 11 dBm+10LogB*
U-NII-3	√		1 Watt (30 dBm)

**NOTE:** 1. Where B is the 26dB emission bandwidth in MHz.

**Directional gain and the maximum output power limit:**

Operation Band	Chain 0 Antenna Gain(dBi)	Chain 1 Antenna Gain(dBi)	DG For Power (dBi)	Power Limit Reduction
U-NII-1	3.37	3.37	6.38	0.38
U-NII-2A	3.37	3.37	6.38	0.38
U-NII-2C	3.37	3.37	6.38	0.38
U-NII-3	3.37	3.37	6.38	0.38

Refer to KDB662911 D01 Multiple Transmitter Output v02r01.

d) *Unequal antenna gains, with equal transmit powers.* For antenna gains given by  $G_1, G_2, \dots, G_N$  dBi

(i) If transmit signals are *correlated*, then

Directional gain =  $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$  dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

(ii) If all transmit signals are *completely uncorrelated*, then

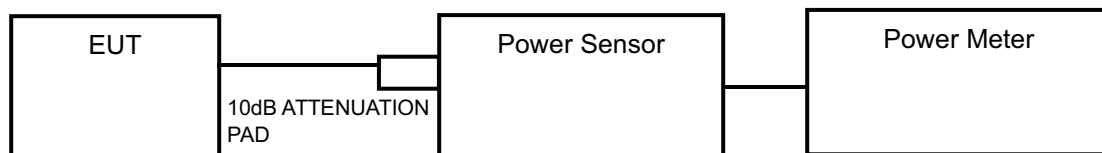
Directional gain =  $10 \log[(10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_N/10}) / N_{ANT}]$  dBi

## 3.5.2 TEST PROCEDURES

### FOR AVERAGE POWER MEASUREMENT

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

## 3.5.3 TEST SETUP



## 3.5.4 TEST RESULTS

Refer to Appendix D