

# Test Report

## FCC Part15 Subpart E

Product Name : Wi-Fi Module  
Model No. : LW100  
FCC ID : Y2SLW100  
IC : 9452A-LW100

Applicant : LIBRATONE A/S

Address : Marielundvej 43A, DK-2730 Herlev, Denmark

Date of Receipt : Dec. 09, 2015  
Test Date : Dec. 10, 2015~ Dec. 24, 2015  
Issued Date : Jan. 06, 2016  
Report No. : 15C2022R-RF-US-P09V01  
Report Version : V1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by any agency of the government.

The test report shall not be reproduced without the written approval of QuieTek Corporation.

## Test Report Certification

Issued Date : Jan. 06, 2016  
Report No. : 15C2022R-RF-US-P09V01



Product Name : Wi-Fi Module  
Applicant : LIBRATONE A/S  
Address : Marielundvej 43A, DK-2730 Herlev, Denmark  
Manufacturer : Goertek Inc  
Address : No 268 Dongfang Rd., New&high-tech Industry Development  
Zone Weifang Shandong Province 261031, PRC.  
Model No. : LW100  
FCC ID : Y2SLW100  
IC : 9452A-LW100  
EUT Voltage : 3.8V DC  
Brand Name : LIBRATONE  
Applicable Standard : FCC CFR Title 47 Part 15 Subpart E: 2015  
ANSI C63.4:2014;  
ANSI C63.10:2013;  
789033 D02 General UNII Test Procedures New Rules v01  
Industry Canada RSS-Gen Issue 4  
Industry Canada RSS-247 Issue 1  
Test Result : Complied  
Performed Location : Suzhou EMC Laboratory  
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006,  
Jiangsu, China  
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
FCC Registration Number: 800392; IC Lab Code: 4075B  
Documented By : Elaine Wang  
Elaine Wang Senior Engineer  
Reviewed By : Jack Zhang  
Jack Zhang Senior Engineer  
Approved By : Harry Zhao  
Harry Zhao RF Engineering Manager

## Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

<b>Taiwan R.O.C.</b>	<b>:</b>	<b>BSMI, NCC, TAF</b>
<b>USA</b>	<b>:</b>	<b>FCC</b>
<b>Japan</b>	<b>:</b>	<b>VCCI</b>
<b>China</b>	<b>:</b>	<b>CNAS</b>

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :  
<http://www.quietek.com/>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

### **HsinChu Testing Laboratory :**

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.  
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : [service@quietek.com](mailto:service@quietek.com)

### **LinKou Testing Laboratory :**

No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.  
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : [service@quietek.com](mailto:service@quietek.com)

### **Suzhou Testing Laboratory :**

No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006, Jiangsu, China  
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : [service@quietek.com](mailto:service@quietek.com)

## TABLE OF CONTENTS

Description	Page
1. General Information .....	6
1.1. EUT Description .....	6
1.2. Mode of Operation .....	10
1.3. Tested System Details .....	11
1.4. Configuration of Tested System .....	12
1.5. EUT Exercise Software .....	13
2. Technical Test .....	14
2.1. Summary of Test Result .....	14
2.2. Test Environment .....	14
3. Radiated Emission .....	15
3.1. Test Equipment .....	15
3.2. Test Setup .....	16
3.3. Limit .....	17
3.4. Test Procedure .....	17
3.5. Uncertainty .....	18
3.6. Test Result .....	19
4. Power Output .....	27
4.1. Test Equipment .....	27
4.2. Test Setup .....	27
4.3. Limit .....	27
4.4. Test Procedure .....	29
4.5. Uncertainty .....	29
4.6. Test Result .....	30
5. Radiated Emission Band Edge .....	34
5.1. Test Equipment .....	34
5.2. Test Setup .....	34
5.3. Limit .....	34
5.4. Test Procedure .....	37
5.5. Uncertainty .....	37
5.6. Test Result .....	38

## History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
15C2022R-RF-US-P09V01	V1.0	Initial Issued Report	Dec. 25, 2015
15C2022R-RF-US-P06V01	V1.1	Add item of power output	Jan. 06, 2016

## 1. General Information

### 1.1. EUT Description

Product Name	Wi-Fi Module
Brand Name	LIBRATONE
Model No.	LW100
EUT Voltage	3.8V DC
Frequency Range	<b>For 2.4GHz Band</b> 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz <b>For 5GHz Band</b> 802.11a/n(20MHz):5180~5240MHz, 5745~5825MHz 802.11n(40MHz):5190~5230MHz, 5755~5795MHz
Channel Number	<b>For 2.4GHz Band</b> 802.11b/g/n(20MHz): 11 802.11n(40MHz): 9 <b>For 5GHz Band</b> 802.11a/n(20MHz): 9    802.11n(40MHz): 4
Type of Modulation	802.11b: DSSS 802.11a/g/n: OFDM
Data Rate	802.11a/g: 6/9/12/18/24/36/48/54 Mbps 802.11b: 1/2/5.5/11 Mbps 802.11n: up to 150 Mbps
Channel Control	Auto
Antenna Delivery	2*T <sub>x</sub> + 2*R <sub>x</sub>
Antenna Type	Reference to Antenna List
Peak Antenna Gain	Reference to Antenna List

Note: This report was based on Quietek report No: 1560632R. This is to verify the 2<sup>nd</sup> source DDR (model: IC43DR16320D-25DBL, Manufacturer: Integrated Silicon Solution Inc.)

### For 5.0GHz Band

802.11a/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825MHz	N/A	N/A	N/A	N/A	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	151	5755 MHz	159	5795 MHz

### Antenna List

Antenna	Manufacturer	Model No.	Peak Gain
PIFA Antenna	Suzhou Walsin Technology Electronics Co.,Ltd	Z_2.4/5G_R_R4; Z_2.4/5G_L_R4	2.4GHz Band: 3.5 dBi 5GHz Band: 2 dBi

Power Parameter Value of the test software

Test Mode	Test Channel	Ant 0	Ant1	MIMO MODE(Ant1+2)
802.11a	5180	14	14	×
	5220	14	14	×
	5240	14	14	×
	5745	14	14	×
	5785	14	14	×
	5825	14	14	×
802.11n(20MHz)	5180	13	13	×
	5220	13	13	×
	5240	13	13	×
	5745	13	13	×
	5785	13	13	×
	5825	13	13	×
802.11n(40MHz)	5190	11	11	×
	5230	11	11	×
	5755	11	11	×
	5795	11	11	×



The test mode of the test software can support.

Test Mode	Ant 0	Ant 1	MIMO MODE(Ant1+2)
802.11a	√	√	×
802.11n(20MHz)	√	√	×
802.11n(40MHz)	√	√	×

Duty Cycle

Test Mode	Duty Cycle
802.11a	98.2%
802.11n(20MHz)	87.6%
802.11n(40MHz)	85.7%

## 1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11a
Mode 2: Transmit by 802.11n(20MHz)
Mode 3: Transmit by 802.11n(40MHz)

Note:

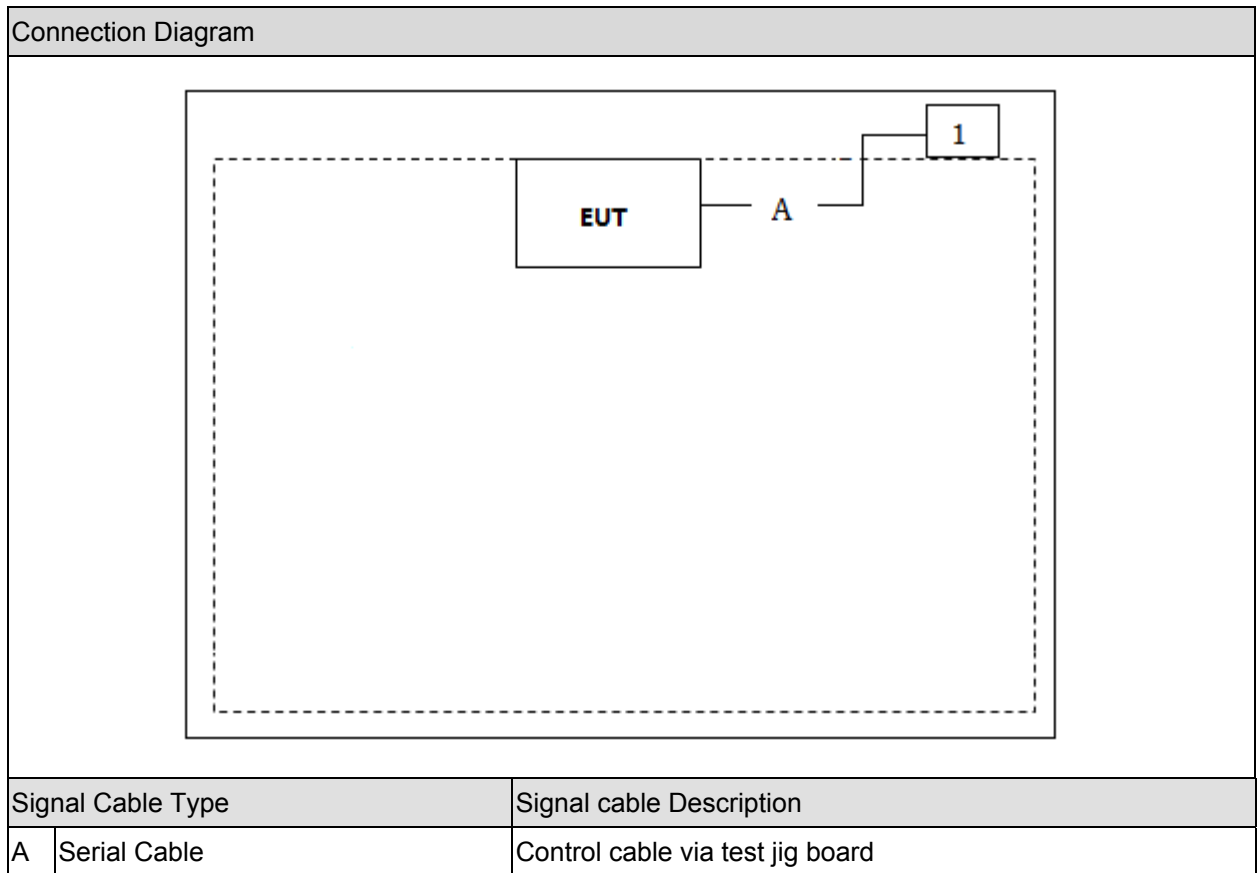
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. The radiation measure measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

### 1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook	Asus	N80V	8BN0AS226971468	N/A

## 1.4. Configuration of Tested System



### 1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Run the RF test software, and set the test mode and channel, then press OK to start to continue transmit or receive.

## 2. Technical Test

### 2.1. Summary of Test Result

- ☒ No deviations from the test standards  
☐ Deviations from the test standards as below description:

#### For FCC

Performed Test Item	Normative References	Test Performed	Deviation
Radiated Emission	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.209	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.407(a)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart E: 2015 Section 15.205, 15.407(b)	Yes	No

#### For IC

Performed Test Item	Normative References	Test Performed	Deviation
Radiated Emission	RSS-247 Issue 1 May 2015 Section 5.5	Yes	No
Power Output	RSS-247 Issue 1 May 2015 Section 6.2	Yes	No
Radiated Emission Band Edge	RSS-Gen Issue 4 November 2014 Section 8.10	Yes	No

### 2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

### 3. Radiated Emission

#### 3.1. Test Equipment

##### Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2016.11.17
Bilog Chainenna	Teseq GmbH	CBL6112D	27611	2016.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.01
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2016.01.08

##### Radiated Emission / AC-5

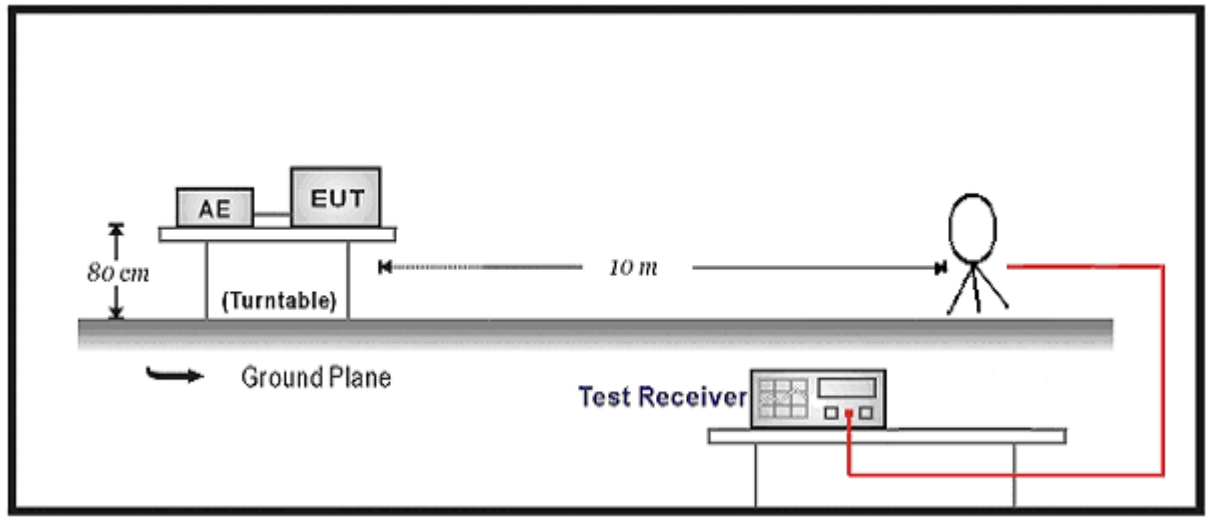
Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2016.03.28
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.05
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.05
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2016.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.08

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

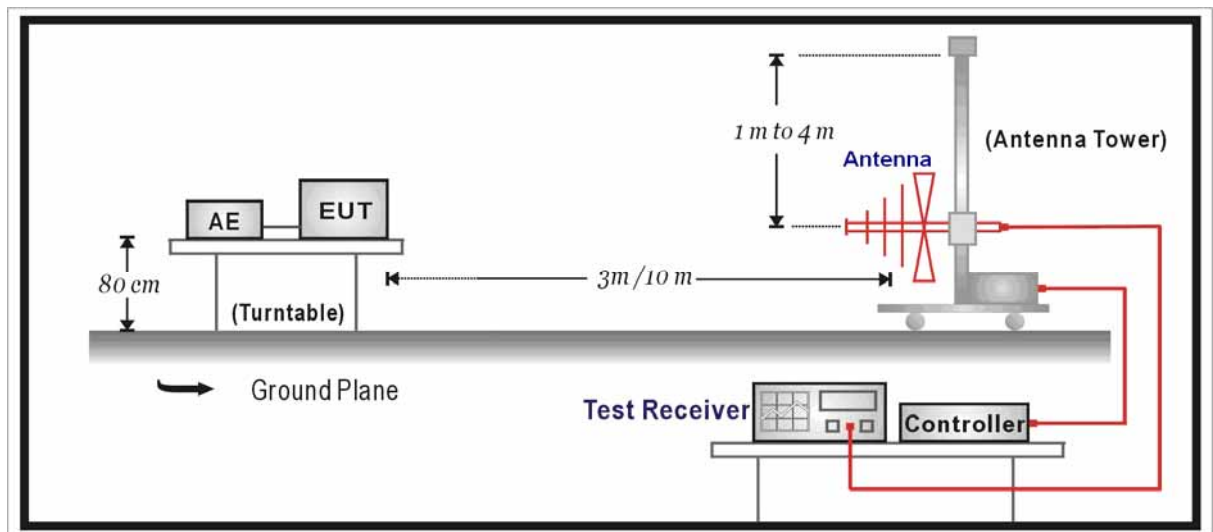
### 3.2. Test Setup

For FCC&IC

Below 30MHz Test Setup:

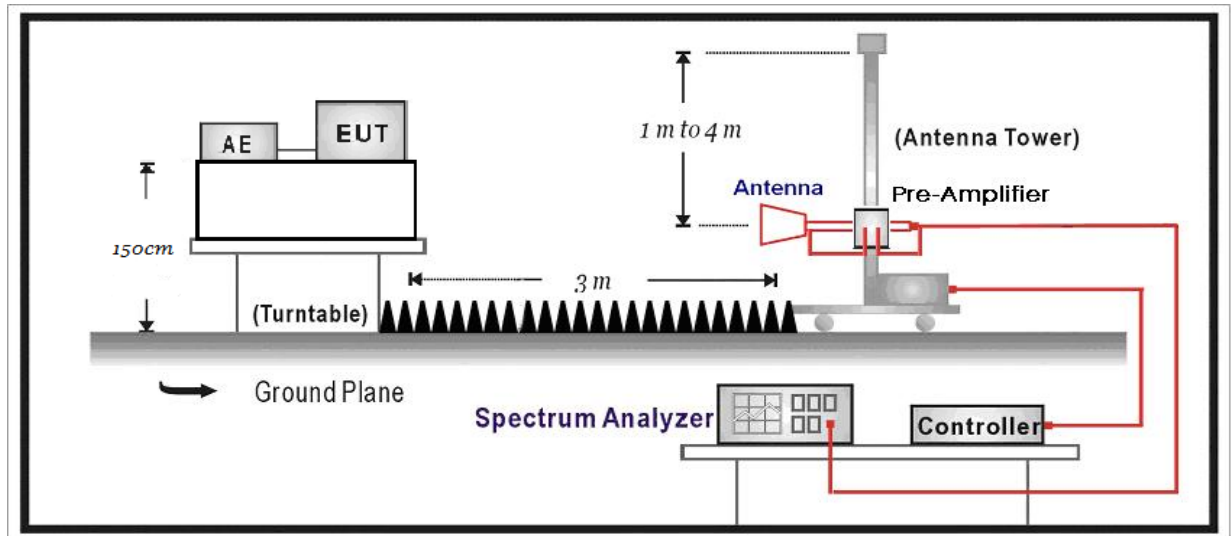


Below 1GHz Test Setup:





### Above 1GHz Test Setup:



### 3.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument Antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

### 3.4. Test Procedure

According to ANSI C63.4:2014& ANSI C63.10:2013&789033 D02 General UNII Test Procedures New Rules v01& FCC CFR Title 47 Part 15 Subpart E: 2014& Industry Canada RSS-Gen Issue 4 Industry Canada RSS-247 Issue 1

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was

positioned such that the distance from Chainenna to the EUT was 3 meters.

The Chainenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the Chainenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2014 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Chainenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the Chainenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60~10 degrees for H-plane and 90~10 degrees for E-plane.

### **3.5. Uncertainty**

The measurement uncertainty above 1GHz is defined as  $\pm 3.9$  dB  
below 1GHz is defined as  $\pm 3.8$  dB

### 3.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Mode1: Transmit by 802.11a Ant 0

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
36	H	10360.0	29.5	17.3	46.8	54(Note3)	-7.2	PK
	H	15540.0	21.5	23.8	45.3	54(Note3)	-8.7	PK
	V	10360.0	29.7	17.3	47.0	54(Note3)	-7.0	PK
	V	15540.0	21.2	23.8	45.0	54(Note3)	-9.0	PK
40	H	10400.0	29.2	18.7	47.9	54(Note3)	-6.1	PK
	H	15600.0	18.3	27.5	45.8	54(Note3)	-8.2	PK
	V	10400.0	29	18.7	47.7	54(Note3)	-6.3	PK
	V	15600.0	18.2	27.5	45.7	54(Note3)	-8.3	PK
48	H	10480.0	30.3	17.2	47.5	54(Note3)	-6.5	PK
	H	15720.0	17.5	26.4	43.9	54(Note3)	-10.1	PK
	V	10480.0	30.1	17.2	47.3	54(Note3)	-6.7	PK
	V	15720.0	17.9	26.4	44.3	54(Note3)	-9.7	PK
149	H	11490.0	27.5	21.7	49.2	54(Note3)	-4.8	PK
	H	17235.0	22.4	26.1	48.5	54(Note3)	-5.5	PK
	V	11490.0	30.9	21.7	52.6	54(Note3)	-1.4	PK
	V	11492.4	18.3	21.7	40.0	54(Note3)	-14.0	PK
157	H	11570.0	30.4	22.4	52.8	54(Note3)	-1.2	PK
	H	17355.0	21.4	25.8	47.2	54(Note3)	-6.8	PK
	V	11570.0	30.1	22.4	52.5	54(Note3)	-1.5	PK
	V	17355.0	20.9	25.8	46.7	54(Note3)	-7.3	PK
165	H	11650.0	25.4	23.2	48.6	54(Note3)	-5.4	PK
	H	17475.0	20.6	25.9	46.5	54(Note3)	-7.5	PK
	V	11650.0	29.9	23.2	53.1	54(Note3)	-0.9	PK
	V	17475.0	20.5	25.9	46.4	54(Note3)	-7.6	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode1: Transmit by 802.11a Ant 1

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
36	H	10360.0	30.5	17.3	47.8	54(Note3)	-6.2	PK
	H	15540.0	21.1	23.8	44.9	54(Note3)	-9.1	PK
	V	10360.0	29.7	17.3	47.0	54(Note3)	-7.0	PK
	V	15540.0	21.0	23.8	44.8	54(Note3)	-9.2	PK
40	H	10400.0	29.8	18.7	48.5	54(Note3)	-5.5	PK
	H	15600.0	18.3	27.5	45.8	54(Note3)	-8.2	PK
	V	10400.0	29.4	18.7	48.1	54(Note3)	-5.9	PK
	V	15600.0	18.2	27.5	45.7	54(Note3)	-8.3	PK
48	H	10480.0	30.1	17.2	47.3	54(Note3)	-6.7	PK
	H	15720.0	17.6	26.4	44.0	54(Note3)	-10.0	PK
	V	10480.0	30.2	17.2	47.4	54(Note3)	-6.6	PK
	V	15720.0	18.4	26.4	44.8	54(Note3)	-9.2	PK
149	H	11490.0	30.6	21.7	52.3	54(Note3)	-1.7	PK
	H	17235.0	21.7	26.1	47.8	54(Note3)	-6.2	PK
	V	11490.0	31.1	21.7	52.8	54(Note3)	-1.2	PK
	V	11492.4	18.5	21.7	40.2	54(Note3)	-13.8	PK
157	H	11570.0	31.1	22.4	53.5	54(Note3)	-0.5	PK
	H	17355.0	20.9	25.8	46.7	54(Note3)	-7.3	PK
	V	11570.0	30.9	22.4	53.3	54(Note3)	-0.7	PK
	V	17355.0	21.4	25.8	47.2	54(Note3)	-6.8	PK
165	H	11650.0	25.0	23.2	48.2	54(Note3)	-5.8	PK
	H	17475.0	20.6	25.9	46.5	54(Note3)	-7.5	PK
	V	11650.0	29.6	23.2	52.8	54(Note3)	-1.2	PK
	V	17475.0	20.4	25.9	46.3	54(Note3)	-7.7	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode2: Transmit by 802.11n(20MHz) Ant 0

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
36	H	10360.0	29.9	17.3	47.2	54(Note3)	-6.8	PK
	H	15540.0	19.9	23.8	43.7	54(Note3)	-10.3	PK
	V	10360.0	30.5	17.3	47.8	54(Note3)	-6.2	PK
	V	15540.0	19.8	23.8	43.6	54(Note3)	-10.4	PK
40	H	10400.0	28.4	18.7	47.1	54(Note3)	-6.9	PK
	H	15600.0	18.3	27.5	45.8	54(Note3)	-8.2	PK
	V	10400.0	30.3	18.7	49.0	54(Note3)	-5.0	PK
	V	15600.0	17.3	27.5	44.8	54(Note3)	-9.2	PK
48	H	10480.0	30.9	17.2	48.1	54(Note3)	-5.9	PK
	H	15720.0	17.7	26.4	44.1	54(Note3)	-9.9	PK
	V	10480.0	30.5	17.2	47.7	54(Note3)	-6.3	PK
	V	15720.0	18.6	26.4	45.0	54(Note3)	-9.0	PK
149	H	11490.0	29.3	21.7	51.0	54(Note3)	-3.0	PK
	H	17235.0	21.2	26.1	47.3	54(Note3)	-6.7	PK
	V	11490.0	26.0	21.7	47.7	54(Note3)	-6.3	PK
	V	17235.0	22.6	26.1	48.7	54(Note3)	-5.3	PK
157	H	11570.0	30.4	22.4	52.8	54(Note3)	-1.2	PK
	H	17355.0	20.9	25.8	46.7	54(Note3)	-7.3	PK
	V	11570.0	30.5	22.4	52.9	54(Note3)	-1.1	PK
	V	17355.0	20.5	25.8	46.3	54(Note3)	-7.7	PK
165	H	11650.0	23.7	23.2	46.9	54(Note3)	-7.1	PK
	H	17475.0	20.5	25.9	46.4	54(Note3)	-7.6	PK
	V	11650.0	29.5	23.2	52.7	54(Note3)	-1.3	PK
	V	17475.0	21.2	25.9	47.1	54(Note3)	-6.9	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode2: Transmit by 802.11n(20MHz) Ant 1

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
36	H	10360.0	30.1	17.3	47.4	54(Note3)	-6.6	PK
	H	15540.0	20.0	23.8	43.8	54(Note3)	-10.2	PK
	V	10360.0	30.4	17.3	47.7	54(Note3)	-6.3	PK
	V	15540.0	20.3	23.8	44.1	54(Note3)	-9.9	PK
40	H	10400.0	28.4	18.7	47.1	54(Note3)	-6.9	PK
	H	15600.0	18.0	27.5	45.5	54(Note3)	-8.5	PK
	V	10400.0	30.3	18.7	49.0	54(Note3)	-5.0	PK
	V	15600.0	17.5	27.5	45.0	54(Note3)	-9.0	PK
48	H	10480.0	30.9	17.2	48.1	54(Note3)	-5.9	PK
	H	15720.0	18.1	26.4	44.5	54(Note3)	-9.5	PK
	V	10480.0	31.0	17.2	48.2	54(Note3)	-5.8	PK
	V	15720.0	19.3	26.4	45.7	54(Note3)	-8.3	PK
149	H	11490.0	29.9	21.7	51.6	54(Note3)	-2.4	PK
	H	17235.0	21.7	26.1	47.8	54(Note3)	-6.2	PK
	V	11490.0	27.0	21.7	48.7	54(Note3)	-5.3	PK
	V	17235.0	21.7	26.1	47.8	54(Note3)	-6.2	PK
157	H	11570.0	29.6	22.4	52.0	54(Note3)	-2.0	PK
	H	17355.0	20.9	25.8	46.7	54(Note3)	-7.3	PK
	V	11570.0	30.0	22.4	52.4	54(Note3)	-1.6	PK
	V	17355.0	20.3	25.8	46.1	54(Note3)	-7.9	PK
165	H	11650.0	25.1	23.2	48.3	54(Note3)	-5.7	PK
	H	17475.0	20.2	25.9	46.1	54(Note3)	-7.9	PK
	V	11650.0	29.5	23.2	52.7	54(Note3)	-1.3	PK
	V	17475.0	21.0	25.9	46.9	54(Note3)	-7.1	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode3: Transmit by 802.11n(40MHz) Ant0

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
38	H	10380.0	43.0	3.9	46.9	54(Note3)	-7.1	PK
	H	15570.0	35.2	14.0	49.2	54(Note3)	-4.8	PK
	V	10380.0	42.8	3.9	46.7	54(Note3)	-7.3	PK
	V	15570.0	35.4	14.0	49.4	54(Note3)	-4.6	PK
46	H	10460.0	42.6	3.0	45.6	54(Note3)	-8.4	PK
	H	15690.0	38.8	10.3	49.1	54(Note3)	-4.9	PK
	V	10460.0	43.4	3.0	46.4	54(Note3)	-7.6	PK
	V	15690.0	38.0	10.3	48.3	54(Note3)	-5.7	PK
151	H	11510.0	42.5	6.9	49.4	54(Note3)	-4.6	PK
	H	17265.0	38.3	11.7	50.0	54(Note3)	-4.0	PK
	V	11510.0	41.5	6.9	48.4	54(Note3)	-5.6	PK
	V	17265.0	37.8	11.7	49.5	54(Note3)	-4.5	PK
159	H	11590.0	42.4	6.5	48.9	54(Note3)	-5.1	PK
	H	17385.0	36.7	13.3	50.0	54(Note3)	-4.0	PK
	V	11590.0	43.0	6.5	49.5	54(Note3)	-4.5	PK
	V	17385.0	37.0	13.3	50.3	54(Note3)	-3.7	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode3: Transmit by 802.11n(40MHz) Ant 1

CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
38	H	10380.0	42.3	3.9	46.2	54(Note3)	-7.8	PK
	H	15570.0	35.7	14.0	49.7	54(Note3)	-4.3	PK
	V	10380.0	42.5	3.9	46.4	54(Note3)	-7.6	PK
	V	15570.0	35.4	14.0	49.4	54(Note3)	-4.6	PK
46	H	10460.0	43.1	3.0	46.1	54(Note3)	-7.9	PK
	H	15690.0	38.1	10.3	48.4	54(Note3)	-5.6	PK
	V	10460.0	42.7	3.0	45.7	54(Note3)	-8.3	PK
	V	15690.0	38.8	10.3	49.1	54(Note3)	-4.9	PK
151	H	11510.0	42.5	6.9	49.4	54(Note3)	-4.6	PK
	H	17265.0	37.5	11.7	49.2	54(Note3)	-4.8	PK
	V	11510.0	42.4	6.9	49.3	54(Note3)	-4.7	PK
	V	17265.0	38.2	11.7	49.9	54(Note3)	-4.1	PK
159	H	11590.0	43.0	6.5	49.5	54(Note3)	-4.5	PK
	H	17385.0	37.1	13.3	50.4	54(Note3)	-3.6	PK
	V	11590.0	42.8	6.5	49.3	54(Note3)	-4.7	PK
	V	17385.0	37.2	13.3	50.5	54(Note3)	-3.5	PK

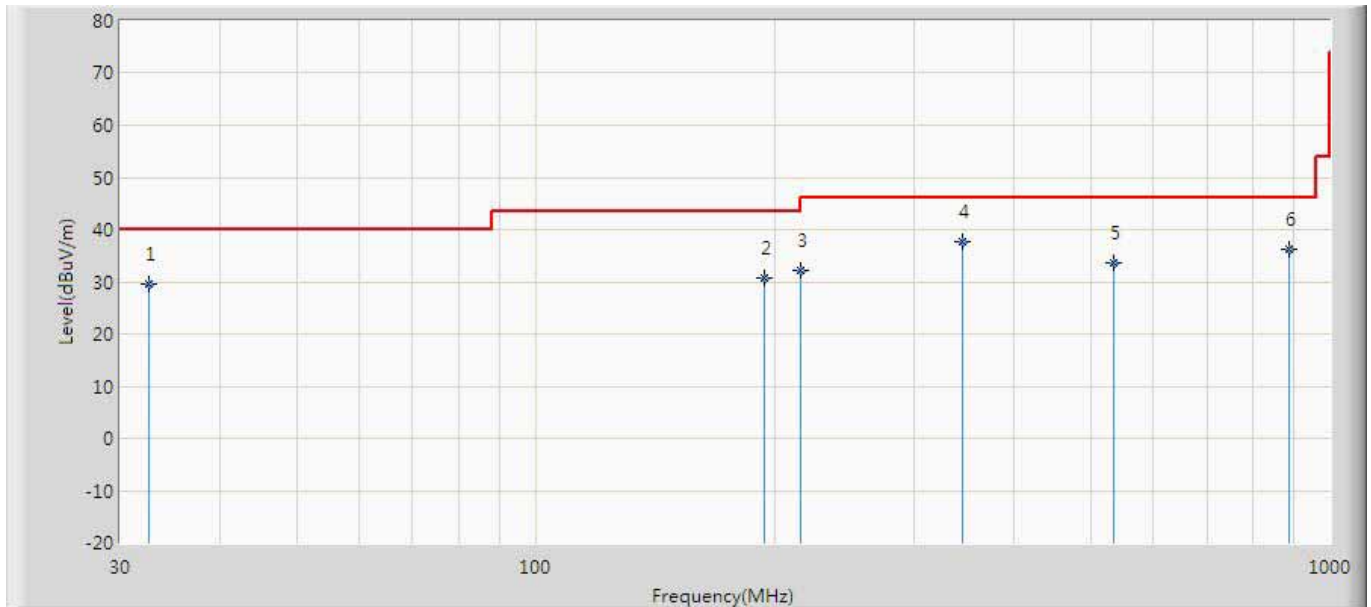
Note: 1. Measure Level = Reading Level + Factor.

2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.



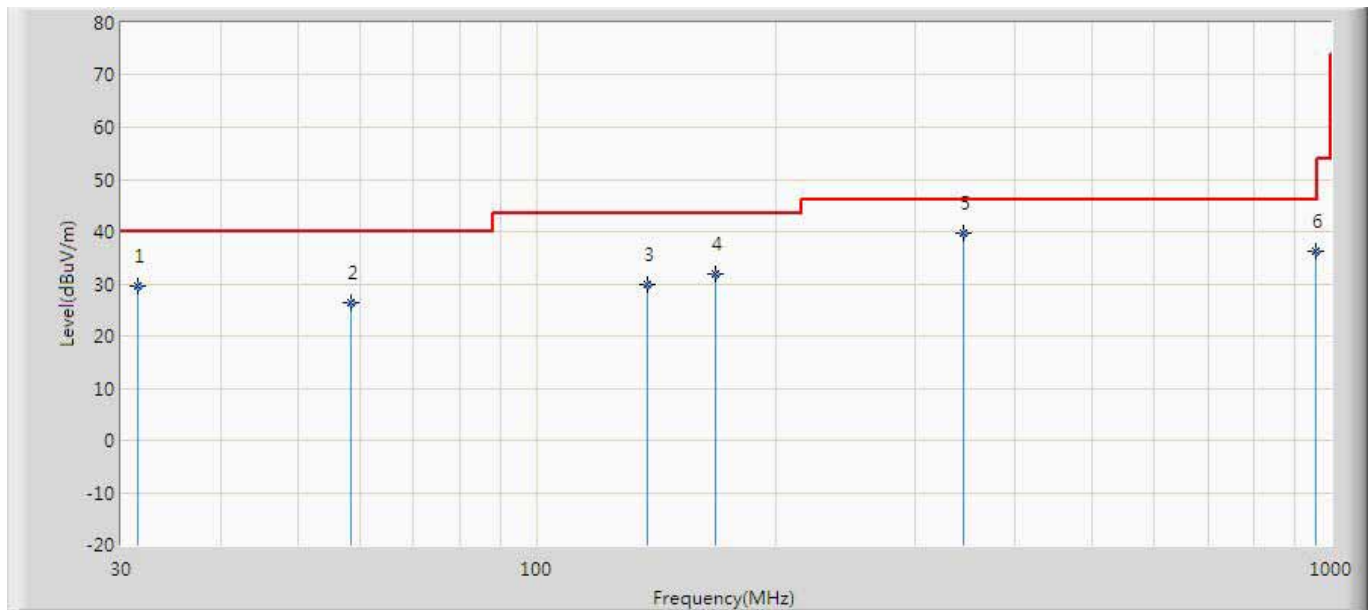
### The worst case of Radiated Emission below 1GHz:

Engineer: Scott	
Site: AC2	Time: 2015/12/16 - 09:57
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_10M(30-1000M)20150408	Polarity: Horizontal
EUT: WiFi Module	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		32.545	29.489	2.300	-10.511	40.000	27.189	QP
2		194.352	30.687	13.200	-12.813	43.500	17.487	QP
3		215.625	32.169	15.100	-11.331	43.500	17.069	QP
4	*	345.124	37.789	15.800	-8.211	46.000	21.989	QP
5		533.241	33.674	5.600	-12.326	46.000	28.074	QP
6		887.968	36.362	4.200	-9.638	46.000	32.162	QP

Engineer: Scott	
Site: AC2	Time: 2015/12/16 - 09:57
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_10M(30-1000M)20150408	Polarity: Vertical
EUT: WiFi Module	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		31.425	29.564	5.900	-10.436	40.000	23.664	QP
2		58.285	26.463	9.800	-13.537	40.000	16.663	QP
3		137.865	29.857	11.100	-13.643	43.500	18.757	QP
4		168.325	31.795	12.600	-11.705	43.500	19.195	QP
5	*	345.236	39.815	15.800	-6.185	46.000	24.015	QP
6		956.758	36.114	3.200	-9.886	46.000	32.914	QP

## 4. Power Output

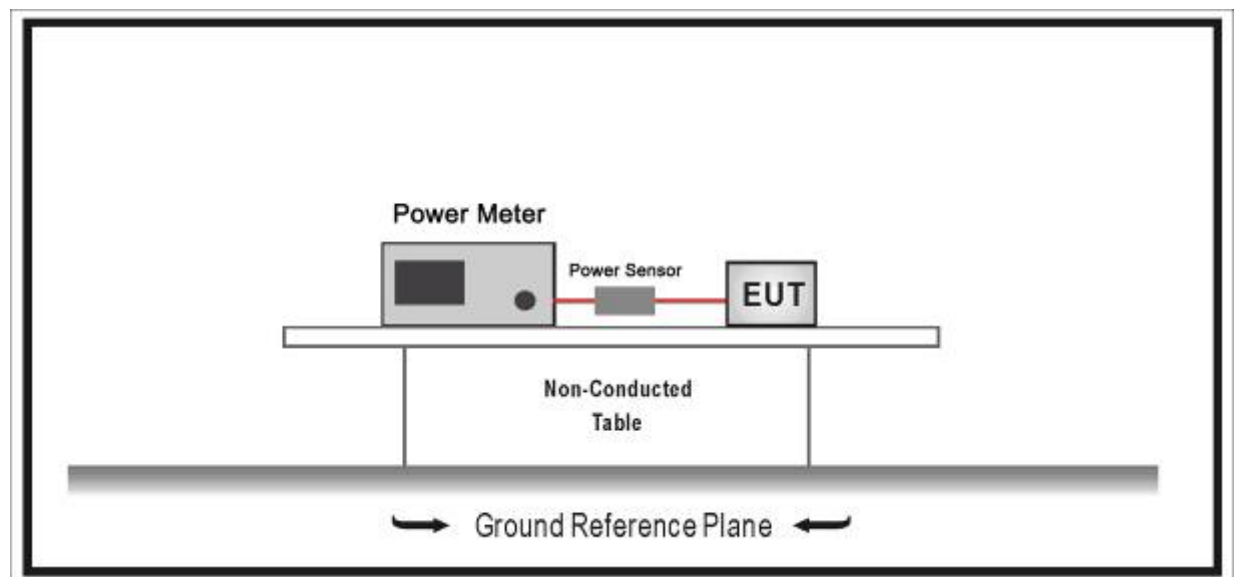
### 4.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

### 4.2. Test Setup



### 4.3. Limit

#### For FCC

- For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm +

10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

- For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

#### For IC

- For the Frequency Band 5150-5250MHz, the maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band..
- For the Frequency Band 5250-5350MHz, the maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.  
The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.
- For the Frequency Band 5470-5600, 5650-5725MHz, The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.  
The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

- For the Frequency Band 5725-5850MHz, The maximum conducted output power shall not exceed 1 W. The power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipointFootnote3 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

#### 4.4. Test Procedure

According to ANSI C63.4:2014& ANSI C63.10:2013&789033 D02 General UNII Test Procedures New Rules v01& FCC CFR Title 47 Part 15 Subpart E: 2014& Industry Canada RSS-Gen Issue 4 Industry Canada RSS-247 Issue 1

Use the wideband power meter to test RMS power and record the result.

#### 4.5. Uncertainty

The measurement uncertainty is defined as  $\pm 1.27$  dB

#### 4.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

Power output at various data rates:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate	Average Power (dBm)
802.11a	20	5180	36	6	21.88
				24	21.73
				54	21.61
802.11n(20MHz)	20	5180	36	MCS0	21.39
				MCS4	21.33
				MCS7	21.21
802.11n(40MHz)	40	5190	38	MCS0	21.31
				MCS4	21.25
				MCS7	21.22

Product	:	WiFi Module
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11a

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		IC Limit (dBm)	FCC Limit (dBm)
		Ant 1	Ant 2		
36	5180	21.69	21.88	23	24
44	5220	21.66	21.65	23	24
48	5240	21.81	21.92	23	24
149	5745	26.88	26.01	30	30
157	5785	26.73	26.21	30	30
165	5825	27.21	26.24	30	30

Product	:	WiFi Module
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11n(20MHz)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		IC Limit (dBm)	FCC Limit (dBm)
		Ant 1	Ant 2		
36	5180	21.39	21.29	24	23
44	5220	21.43	21.42	24	23
48	5240	21.82	21.77	24	23
149	5745	25.95	25.21	30	30
157	5785	25.98	25.32	30	30
165	5825	25.52	25.22	30	30



Product	:	WiFi Module
Test Item	:	Power Output
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(40MHz)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		IC Limit (dBm)	FCC Limit (dBm)
		Ant 1	Ant 2		
38	5190	21.31	21.21	24	23
46	5230	21.40	21.25	24	23
151	5755	25.65	25.61	30	30
159	5795	25.31	25.26	30	30

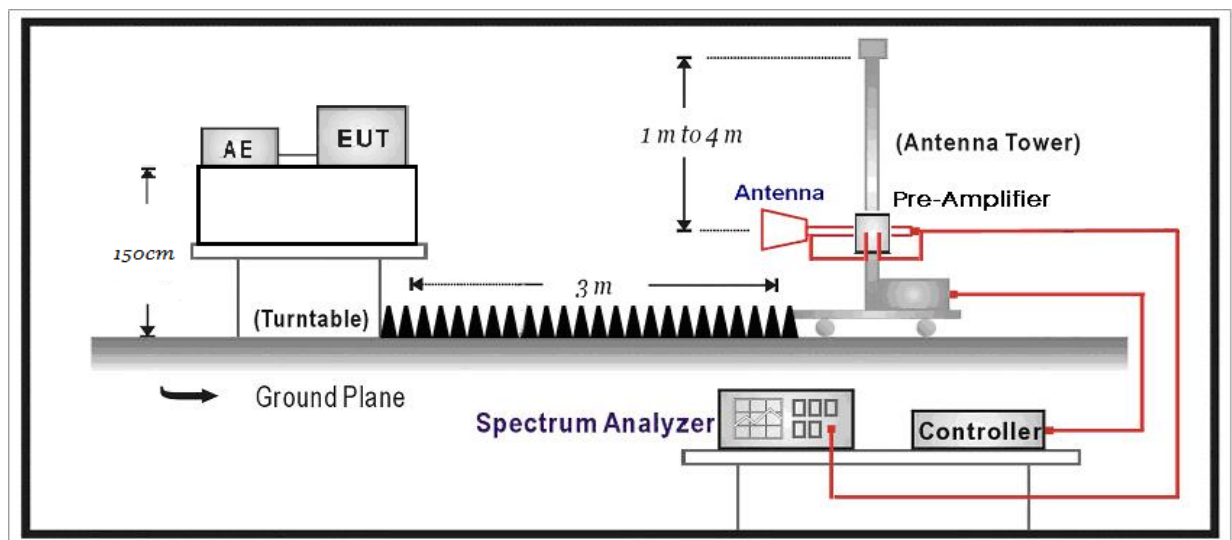
## 5. Radiated Emission Band Edge

### 5.1. Test Equipment

☒ Radiated Emission Band Edge / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.10
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.03
Preamplifier	Quietek	AP-040G	CHM-0906001	2016.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2016.10.15
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.07
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.08

### 5.2. Test Setup



### 5.3. Limit

For IC

#### For RSS Gen requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS Gen, must also comply with the radiated emission limits specified in Section 8.10.

MHz	MHz	GHz
0.090-0.110	74.8-75.2	9.0-9.2
2.1735-2.1905	108-138	9.3-9.5
3.020-3.026	156.52475-156.52525	10.6-12.7
4.125-4.128	156.7-156.9	13.25-13.4
4.17725-4.17775	240-285	14.47-14.5
4.20725-4.20775	322-335.4	15.35-16.2
5.677-5.683	399.9-410	17.7-21.4
6.215-6.218	608-614	22.01-23.12
6.26775-6.26825	960-1427	23.6-24.0
6.31175-6.31225	1435-1626.5	31.2-31.8
8.291-8.294	1645.5-1646.5	36.43-36.5
8.362-8.366	1660-1710	Above 38.6
8.37625-8.38675	1718.8-1722.2	
8.41425-8.41475	2200-2300	
12.29-12.293	2310-2390	
12.51975-12.52025	2655-2900	
12.57675-12.57725	3260-3267	
13.36-13.41	3332-3339	
16.42-16.423	3345.8-3358	
16.69475-16.69525	3500-4400	
16.80425-16.80475	4500-5150	
25.5-25.67	5350-5460	
37.5-38.25	7250-7750	
73-74.6	8025-8500	

For FCC

**For 15.205 requirement:**

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	( <sup>2</sup> )

**For 15.407(b) requirement:**

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of  $-17$  dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.

Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dBuV/m)
5150 - 5250	-27	68.3
5250 - 5350	-27	68.3
5470 - 5725	-27	68.3
5725 - 5825	-27 [Note(1)]	68.3
	-17 [Note(2)]	78.3
Note(1): Outside the frequency range 5715 - 5835MHz. Note(2): Within the frequency range from the band edge to 10MHz below or above the band edge, 5715 – 5725MHz and 5825 - 5835MHz.		

## 5.4. Test Procedure

According to ANSI C63.4:2014& ANSI C63.10:2013&789033 D02 General UNII Test Procedures New Rules v01& FCC CFR Title 47 Part 15 Subpart E: 2014& Industry Canada RSS-Gen Issue 4 Industry Canada RSS-247 Issue 1.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4: 2009 on radiated measurement.

Note: When doing emission measurement above 1GHz, the horn Chainenna will be bended down a little (as horn Chainenna has the narrow beamwidth) in order to keeping the Chainenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

## 5.5. Uncertainty

The measurement uncertainty above 1GHz is defined as  $\pm 3.9$  dB

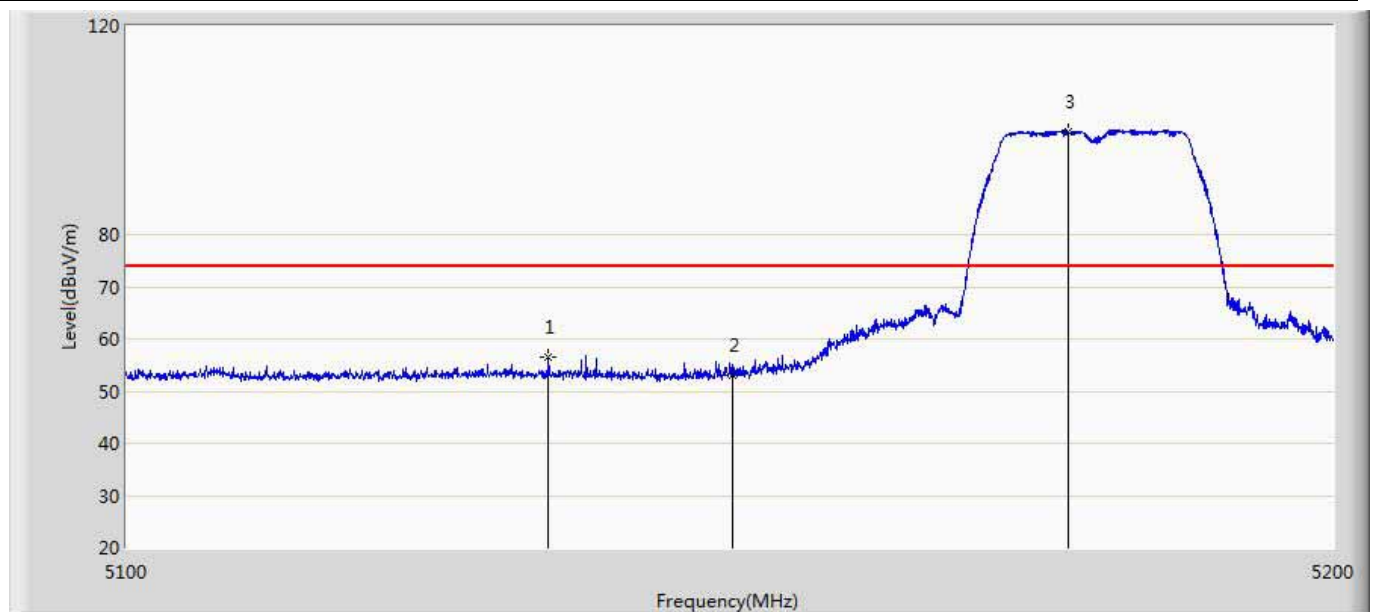
## 5.6. Test Result

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

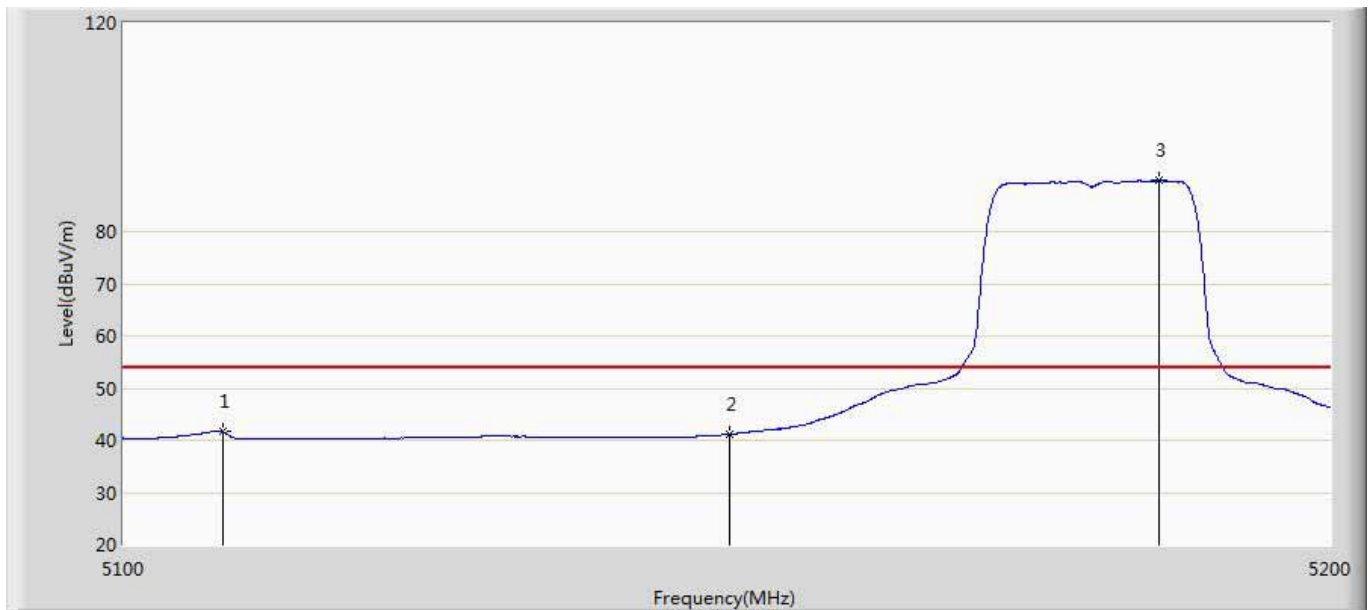
Note: when the duty cycle is less than 98%, VBW should  $\geq 1/T$  where T is the minimum duration of continue transmitting time.

Site: AC5	Time: 2015/12/19 - 13:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant0	



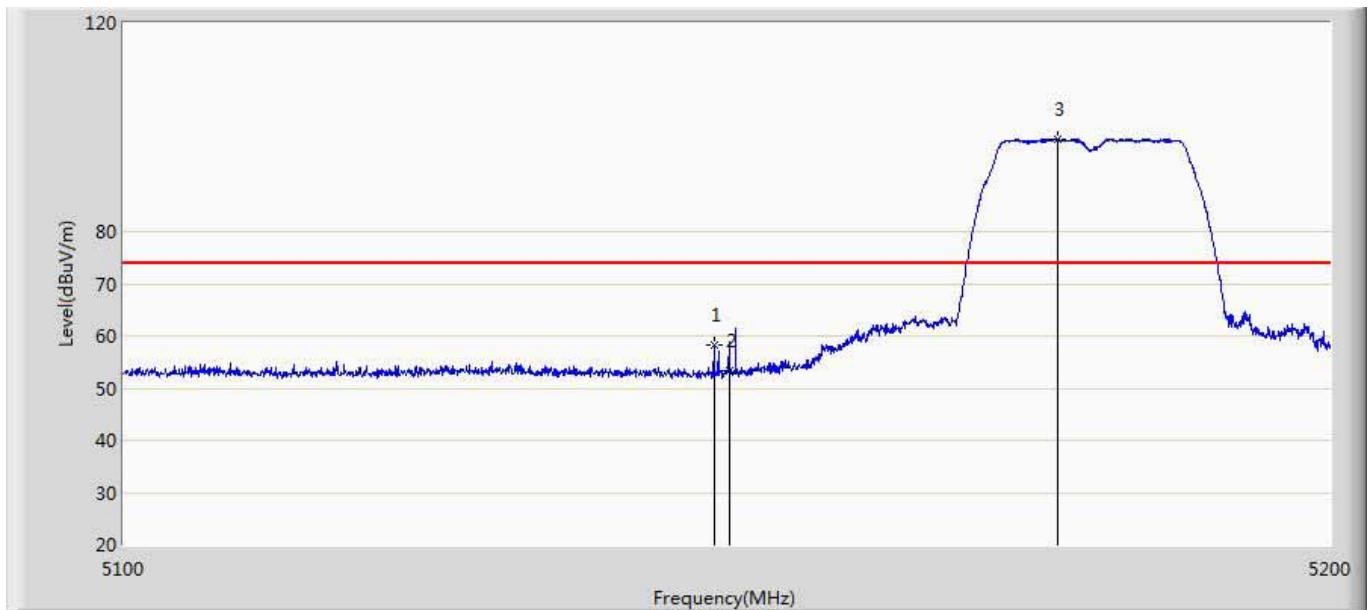
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5134.800	56.559	14.368	-17.441	74.000	42.192	PK
2		5150.000	53.161	11.146	-20.839	74.000	42.015	PK
3	*	5177.850	99.775	57.630	25.775	74.000	42.146	PK

Site: AC5	Time: 2015/12/19 - 13:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5108.150	41.611	-0.343	-12.389	54.000	41.954	AV
2		5150.000	41.163	-0.852	-12.837	54.000	42.015	AV
3	*	5185.750	89.806	47.685	35.806	54.000	42.122	AV

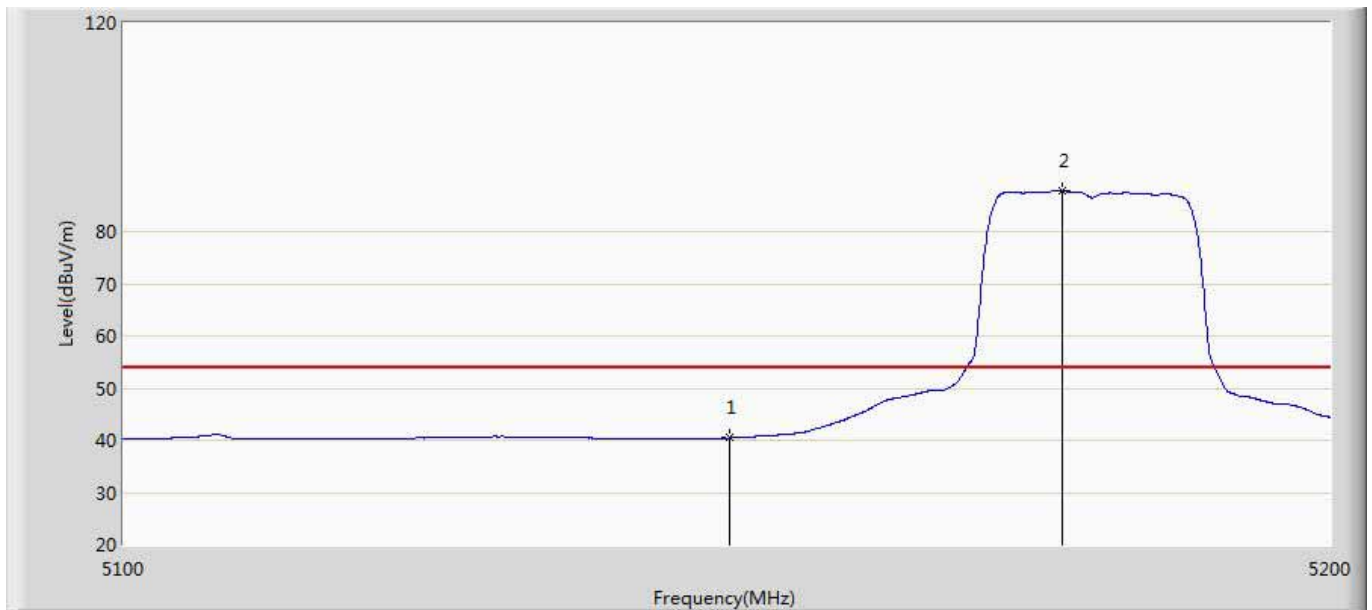
Site: AC5	Time: 2015/12/19 - 13:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5148.700	58.131	16.127	-15.869	74.000	42.004	PK
2		5150.000	53.220	11.205	-20.780	74.000	42.015	PK
3	*	5177.250	97.694	55.549	23.694	74.000	42.145	PK

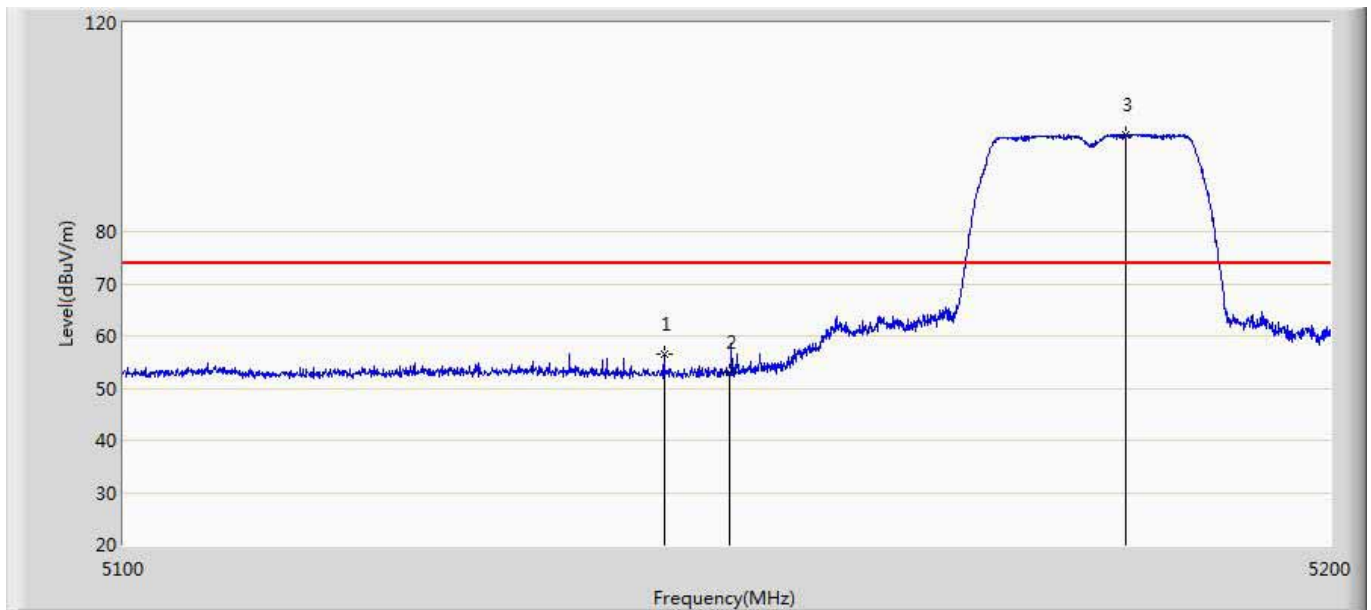


Site: AC5	Time: 2015/12/19 - 13:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant0	



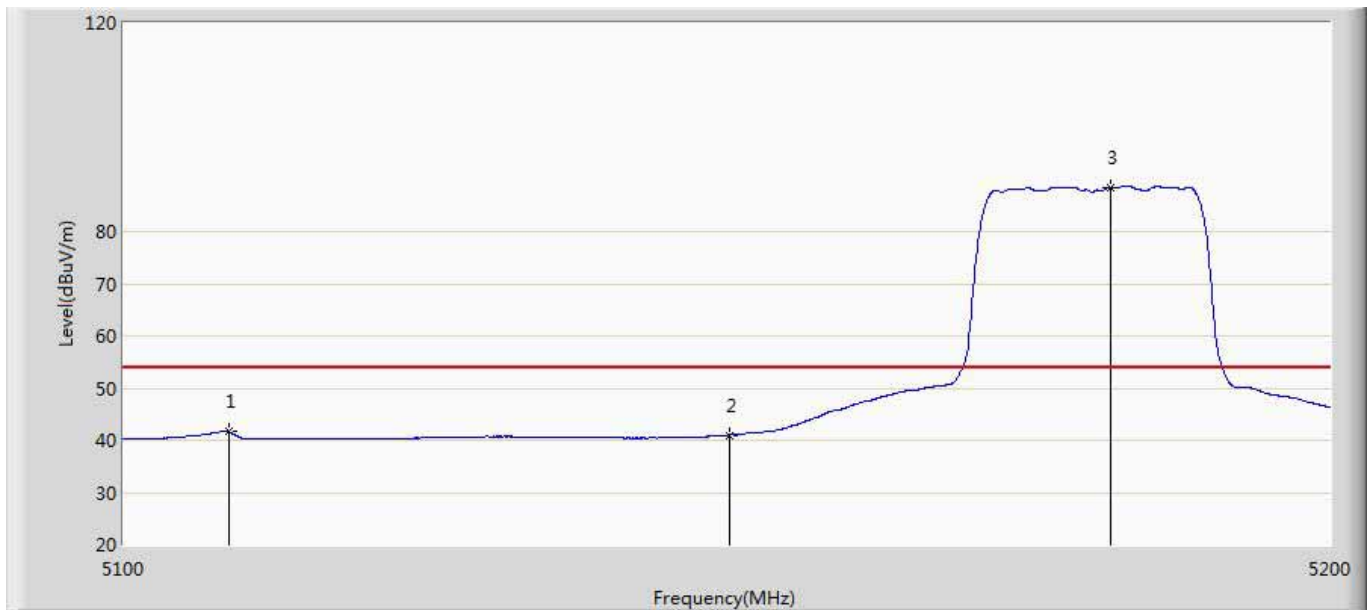
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	40.442	-1.573	-13.558	54.000	42.015	AV
2	*	5177.700	87.904	45.759	33.904	54.000	42.146	AV

Site: AC5	Time: 2015/12/19 - 13:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant0	



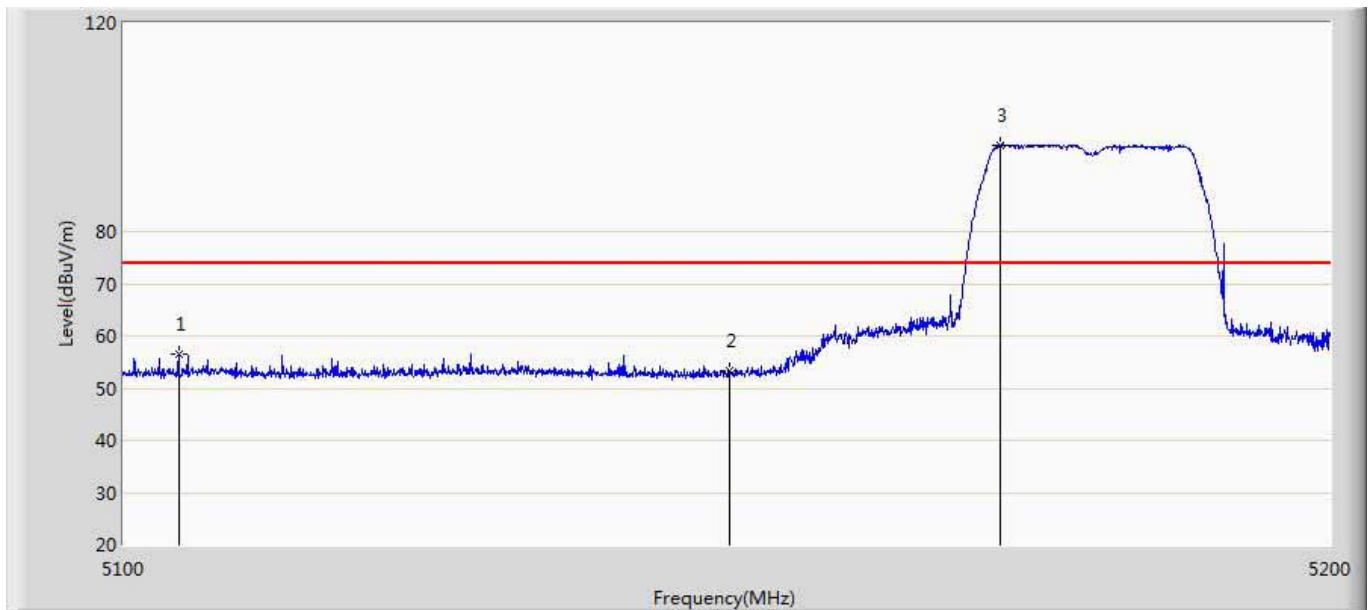
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5144.600	56.593	14.545	-17.407	74.000	42.048	PK
2		5150.000	53.101	11.086	-20.899	74.000	42.015	PK
3	*	5182.900	98.467	56.327	24.467	74.000	42.140	PK

Site: AC5	Time: 2015/12/19 - 13:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant0	



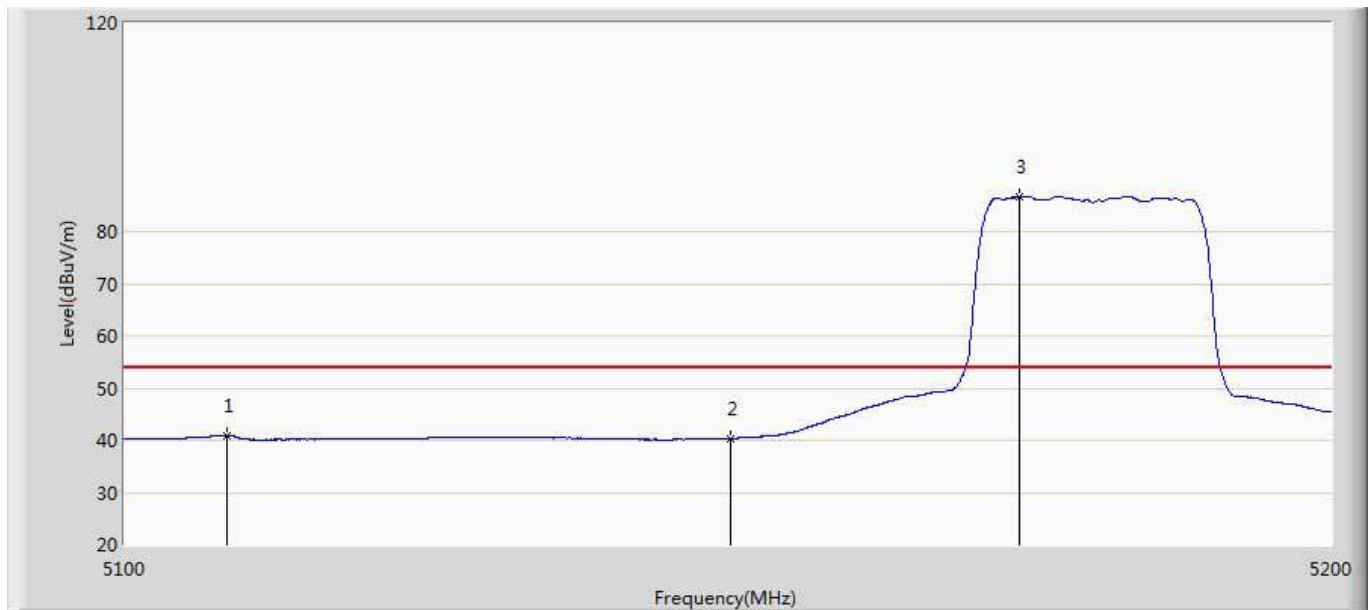
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5108.650	41.700	-0.262	-12.300	54.000	41.962	AV
2		5150.000	41.009	-1.006	-12.991	54.000	42.015	AV
3	*	5181.650	88.484	46.339	34.484	54.000	42.146	AV

Site: AC5	Time: 2015/12/19 - 13:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant0	



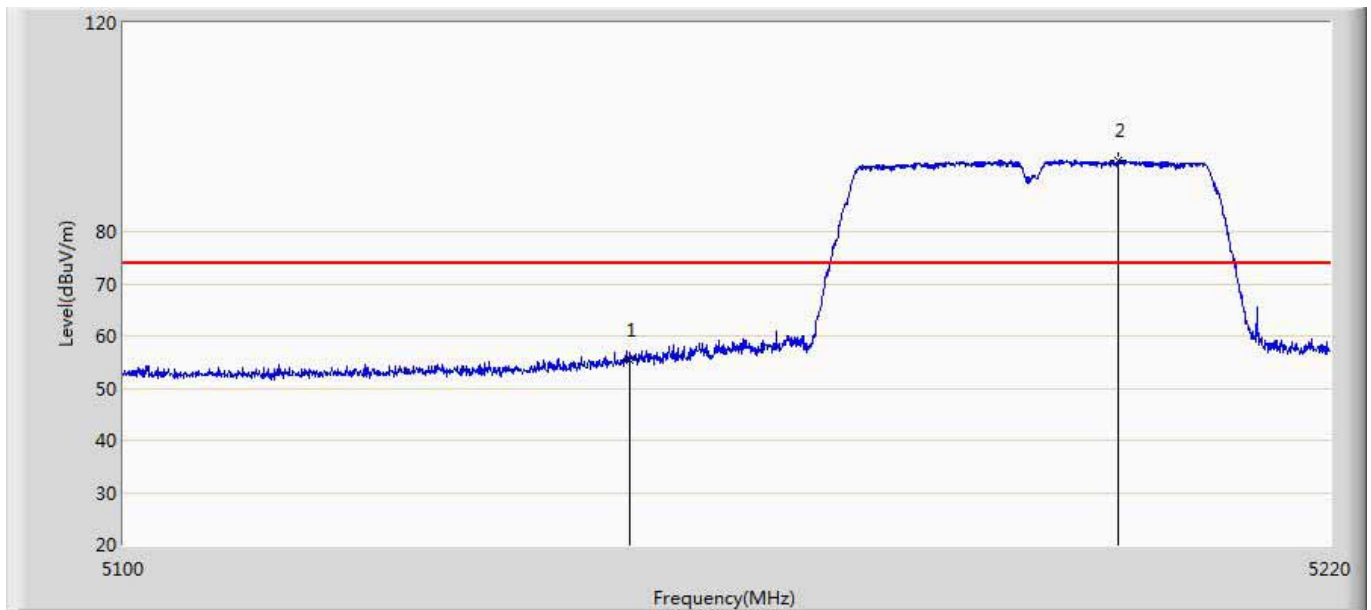
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5104.550	56.491	14.593	-17.509	74.000	41.899	PK
2		5150.000	53.373	11.358	-20.627	74.000	42.015	PK
3	*	5172.500	96.614	54.469	22.614	74.000	42.145	PK

Site: AC5	Time: 2015/12/19 - 13:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant0	



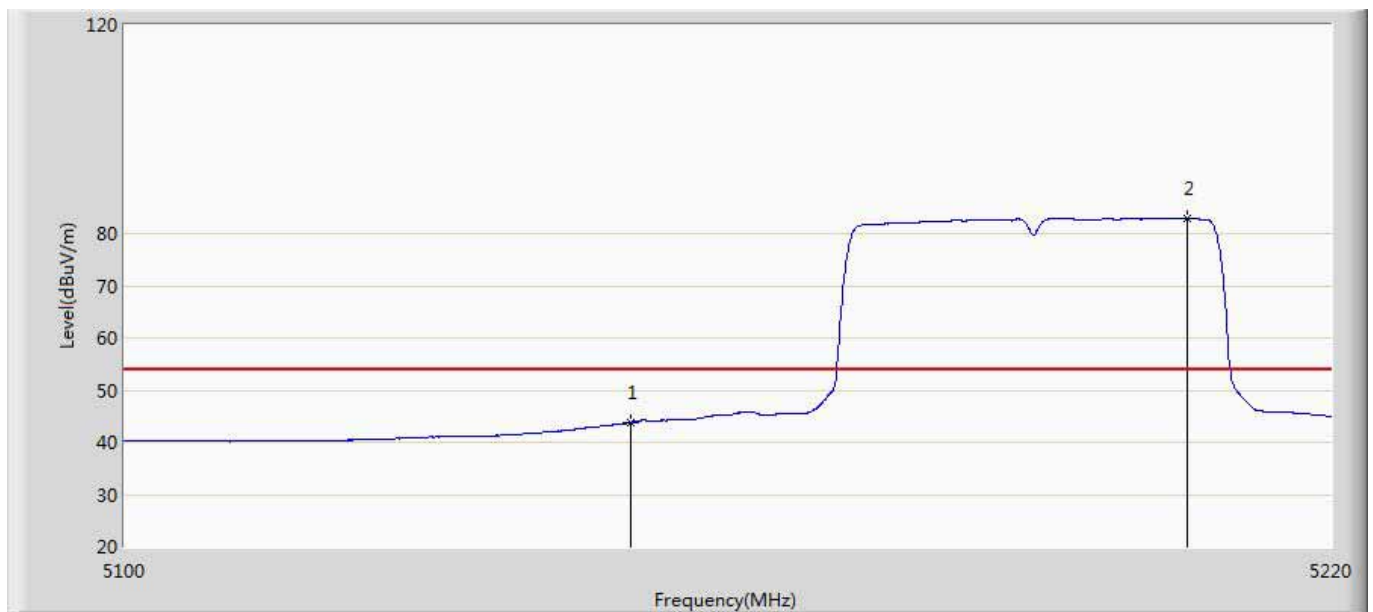
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5108.500	40.987	-0.972	-13.013	54.000	41.959	AV
2		5150.000	40.410	-1.605	-13.590	54.000	42.015	AV
3	*	5174.000	86.622	44.477	32.622	54.000	42.145	AV

Site: AC5	Time: 2015/12/19 - 13:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant0	



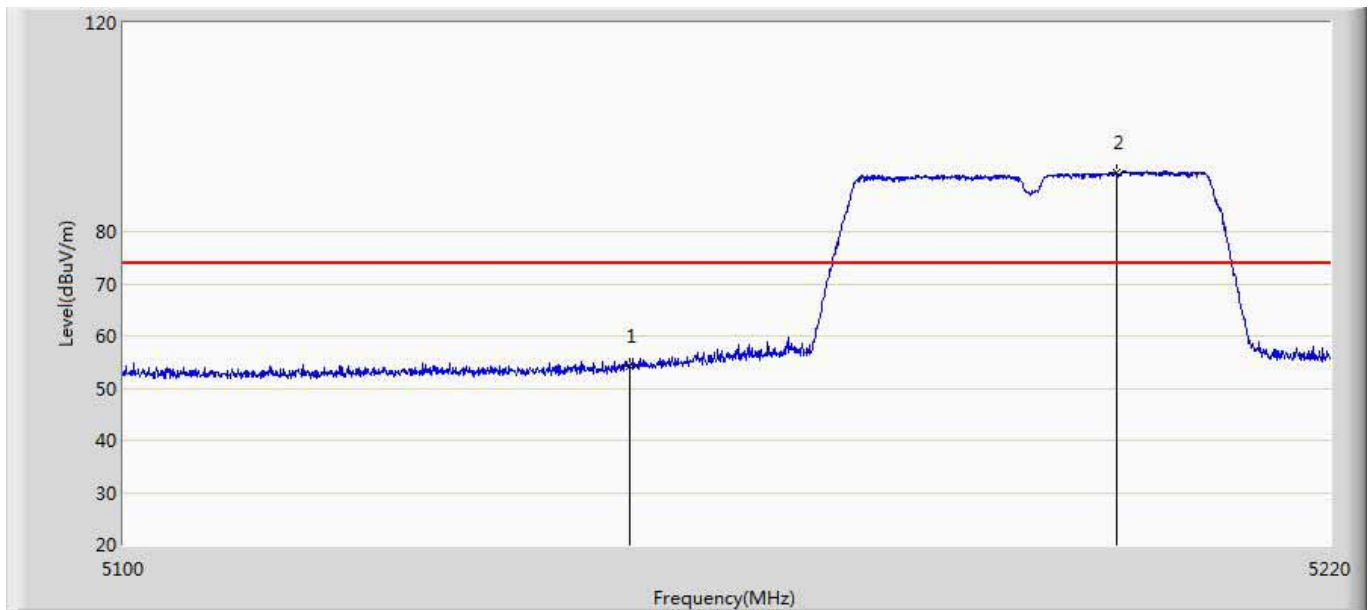
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	55.490	13.475	-18.510	74.000	42.015	PK
2	*	5198.700	93.517	51.479	19.517	74.000	42.039	PK

Site: AC5	Time: 2015/12/19 - 13:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	43.770	1.755	-10.230	54.000	42.015	AV
2	*	5205.540	82.864	40.848	28.864	54.000	42.016	AV

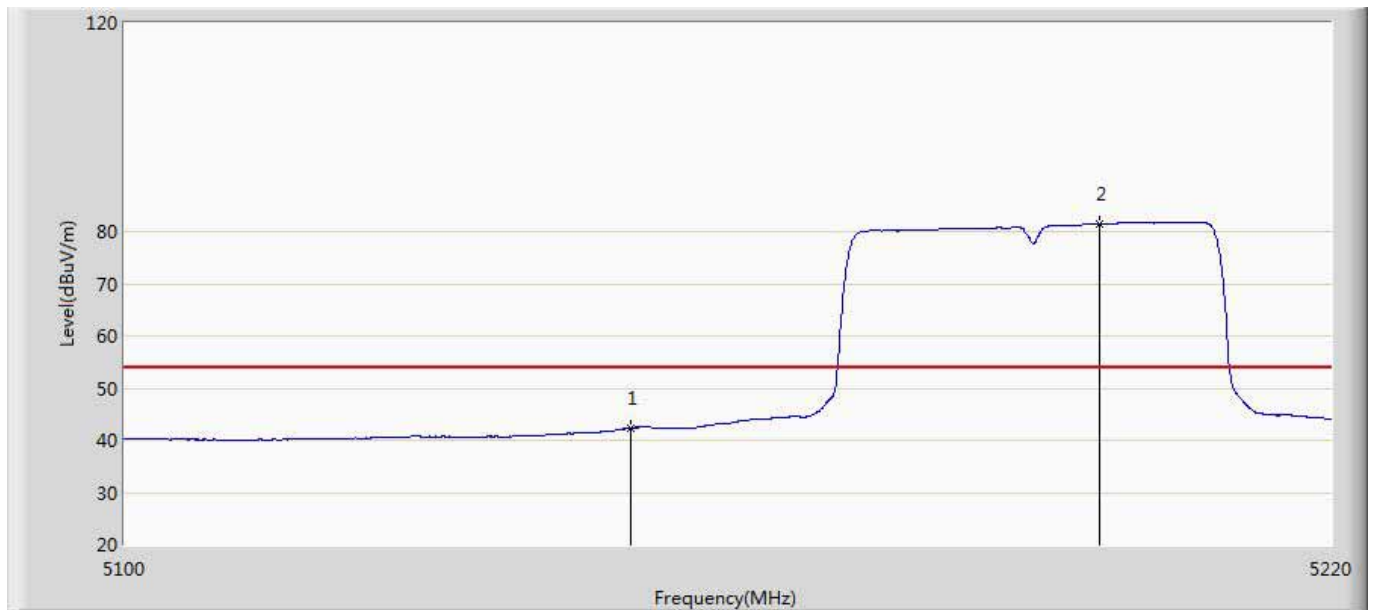
Site: AC5	Time: 2015/12/19 - 13:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	54.119	12.104	-19.881	74.000	42.015	PK
2	*	5198.580	91.403	49.364	17.403	74.000	42.040	PK

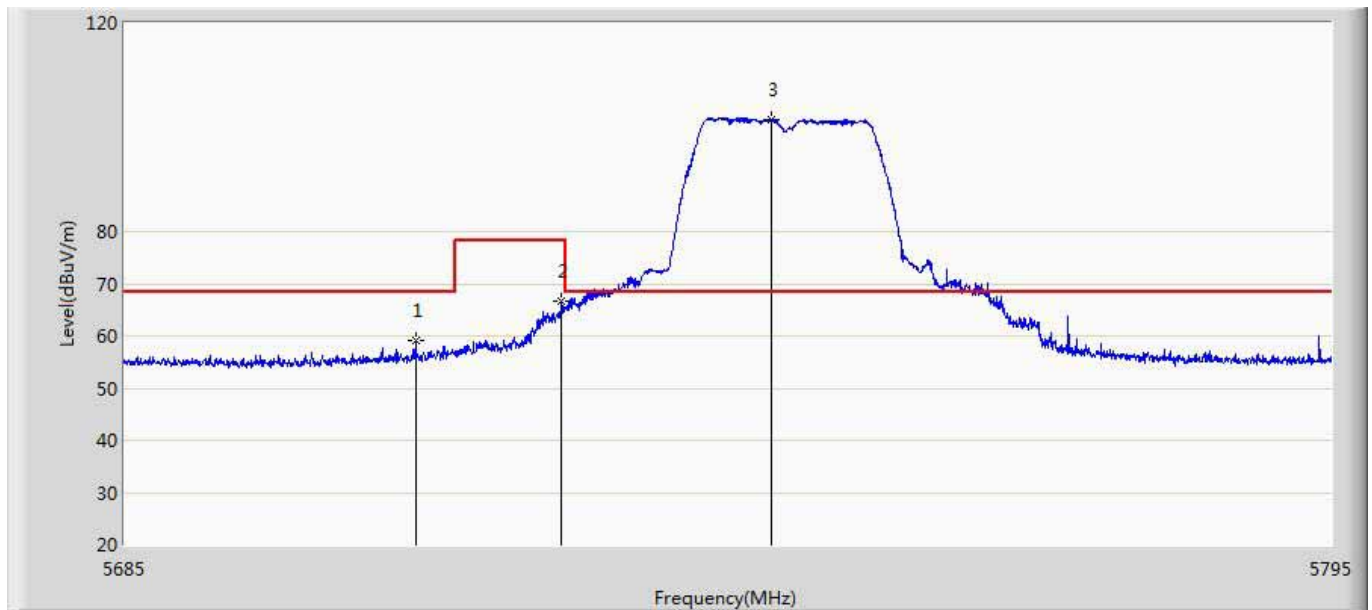


Site: AC5	Time: 2015/12/19 - 13:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant0	



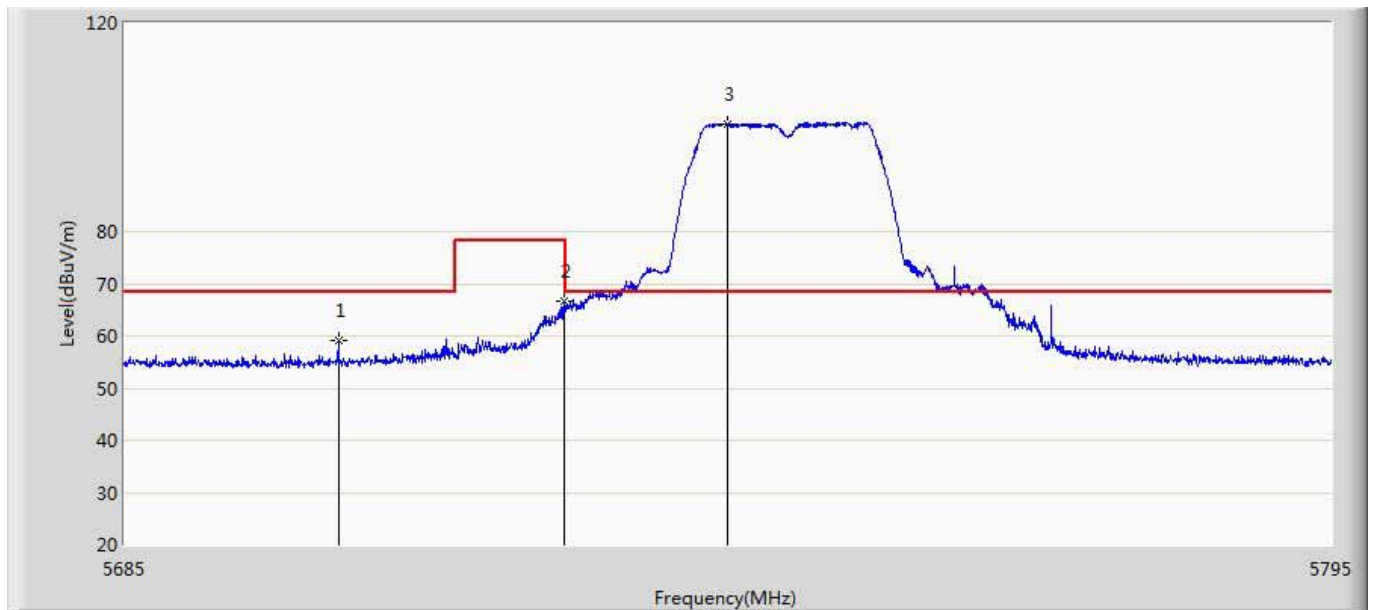
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	42.292	0.277	-11.708	54.000	42.015	AV
2	*	5196.840	81.411	39.361	27.411	54.000	42.050	AV

Site: AC5	Time: 2015/12/19 - 13:54
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5745 by 802.11a ant0	



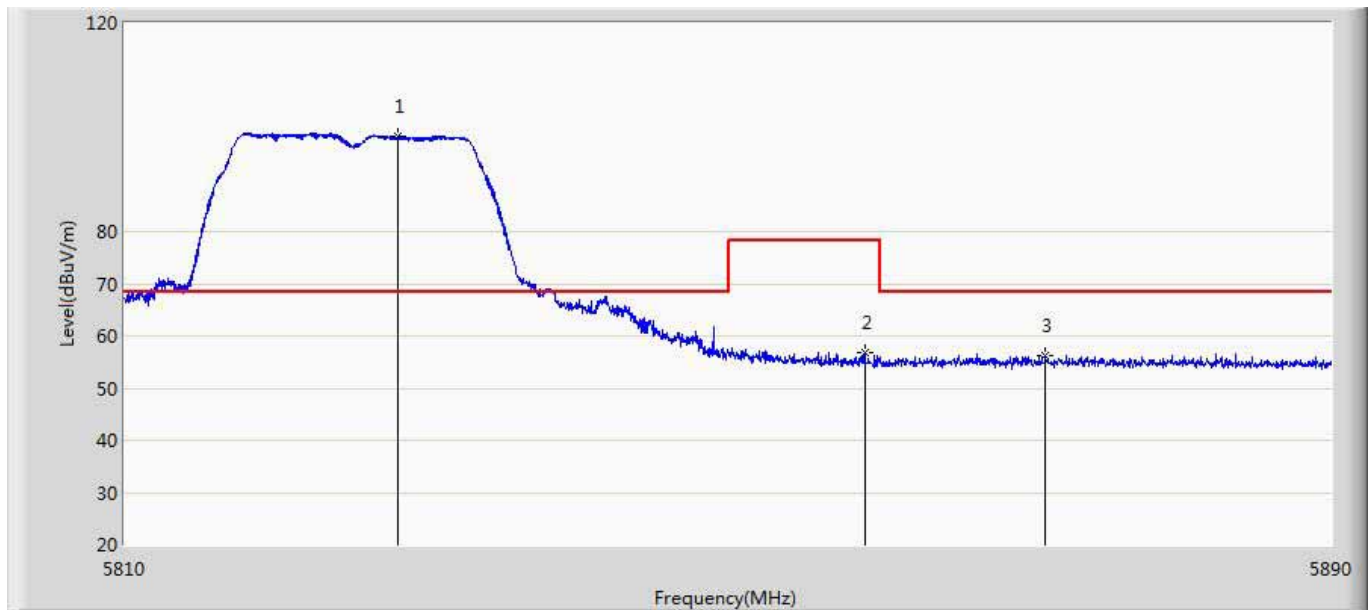
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5711.345	59.067	15.755	-9.233	68.300	43.312	PK
2		5724.600	66.773	23.506	-11.527	78.300	43.267	PK
3	*	5743.685	101.546	58.246	33.246	68.300	43.300	PK

Site: AC5	Time: 2015/12/19 - 13:57
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5745 by 802.11a ant0	



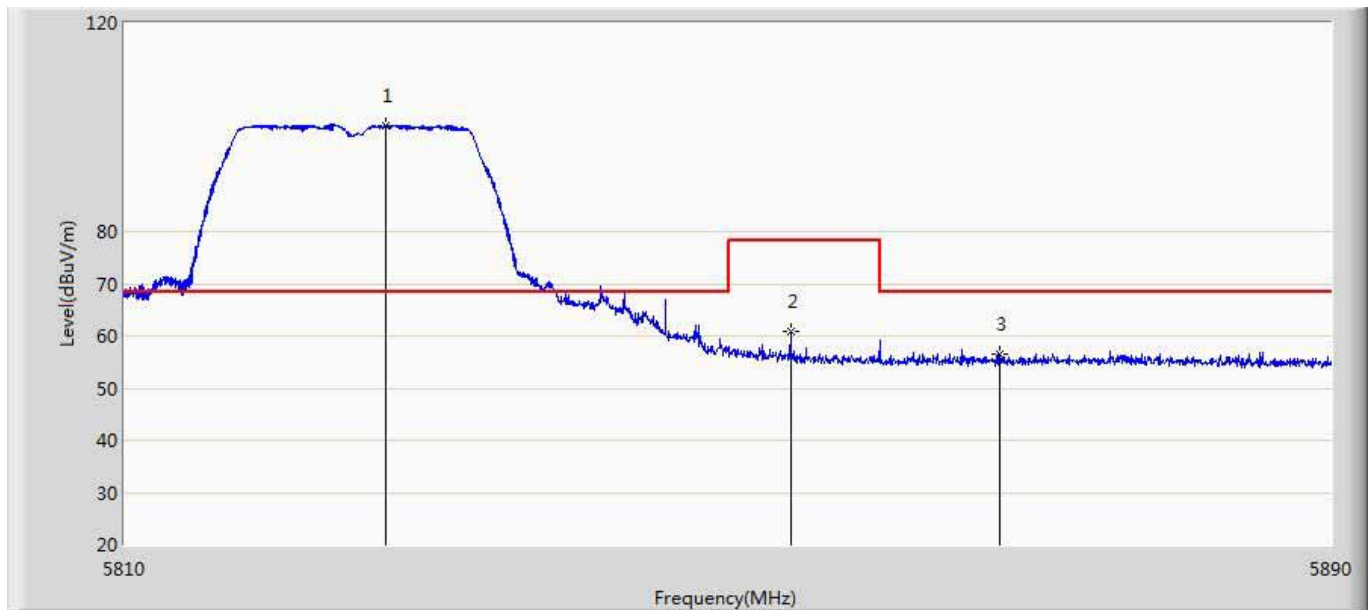
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5704.360	59.142	15.836	-9.158	68.300	43.305	PK
2		5724.875	66.633	23.367	-11.667	78.300	43.266	PK
3	*	5739.670	100.623	57.328	32.323	68.300	43.295	PK

Site: AC5	Time: 2015/12/19 - 13:59
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5825 by 802.11a ant0	



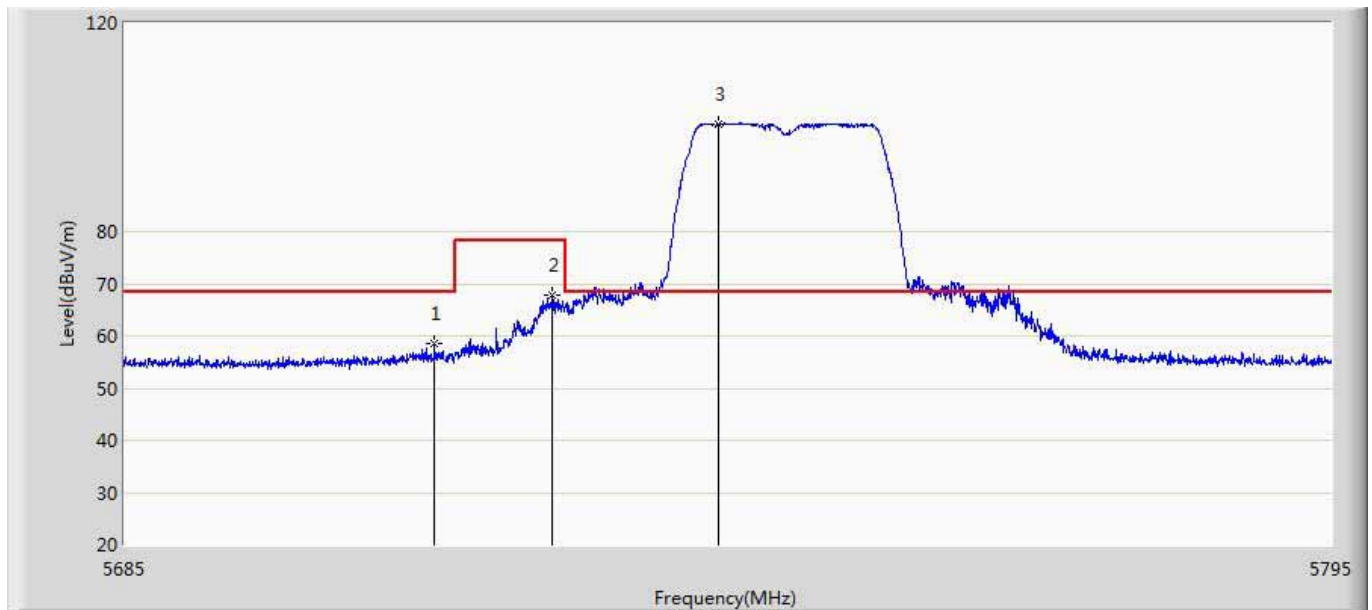
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5828.000	98.139	54.729	29.839	68.300	43.410	PK
2		5859.000	56.930	13.392	-21.370	78.300	43.538	PK
3		5871.000	56.215	12.626	-12.085	68.300	43.590	PK

Site: AC5	Time: 2015/12/19 - 14:01
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5825 by 802.11a ant0	



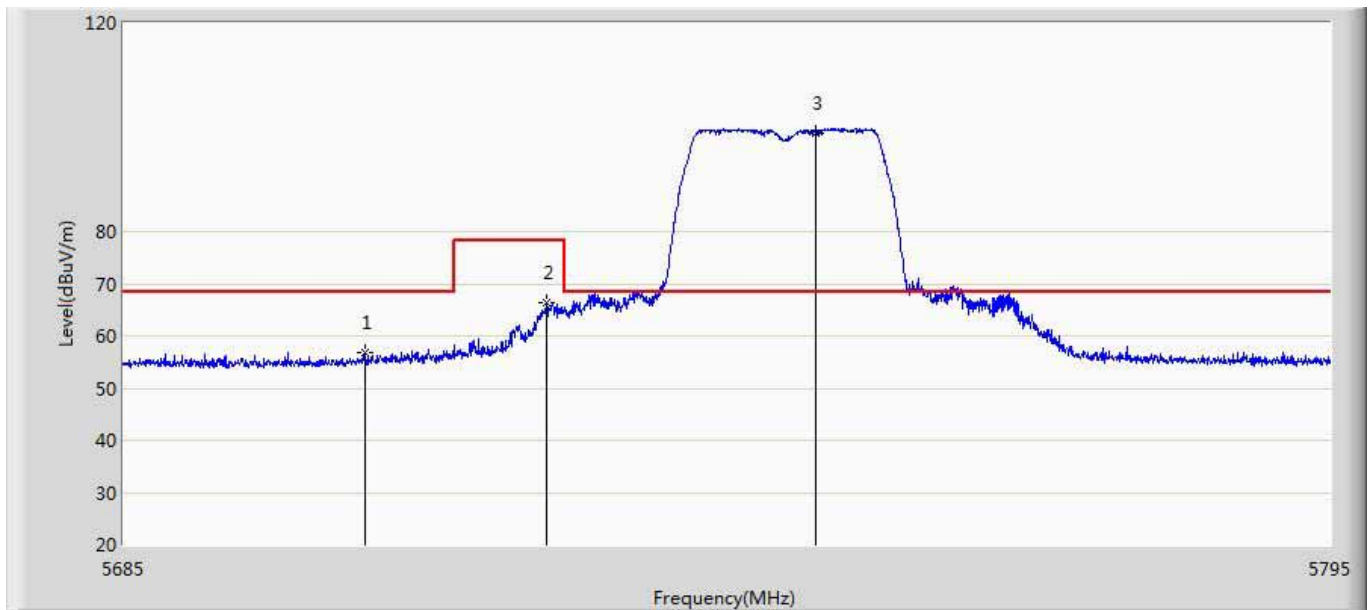
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5827.280	100.341	56.933	32.041	68.300	43.408	PK
2		5854.040	60.990	17.490	-17.310	78.300	43.500	PK
3		5867.920	56.572	12.992	-11.728	68.300	43.579	PK

Site: AC5	Time: 2015/12/19 - 14:02
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5745 by 802.11n(20MHz) ant0	



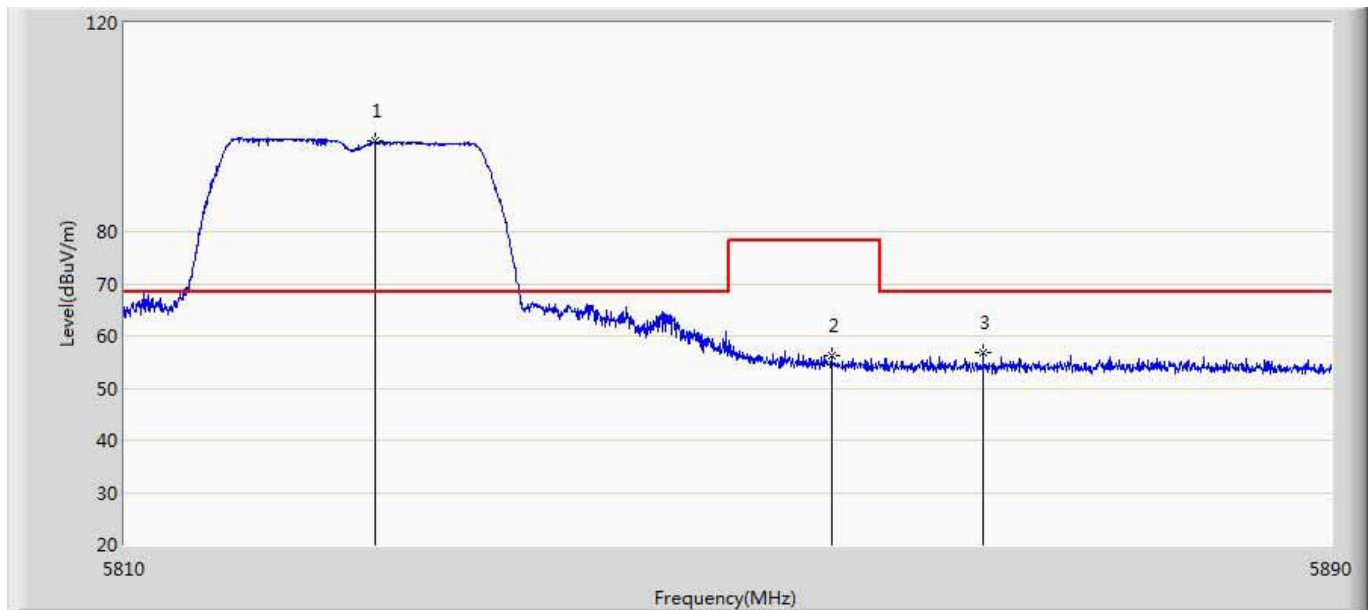
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5713.105	58.515	15.209	-9.785	68.300	43.307	PK
2		5723.830	67.709	24.439	-10.591	78.300	43.270	PK
3	*	5738.900	100.593	57.300	32.293	68.300	43.293	PK

Site: AC5	Time: 2015/12/19 - 14:05
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5745 by 802.11n(20MHz) ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5706.835	56.815	13.501	-11.485	68.300	43.314	PK
2		5723.390	66.405	23.134	-11.895	78.300	43.271	PK
3	*	5747.865	98.865	55.579	30.565	68.300	43.286	PK

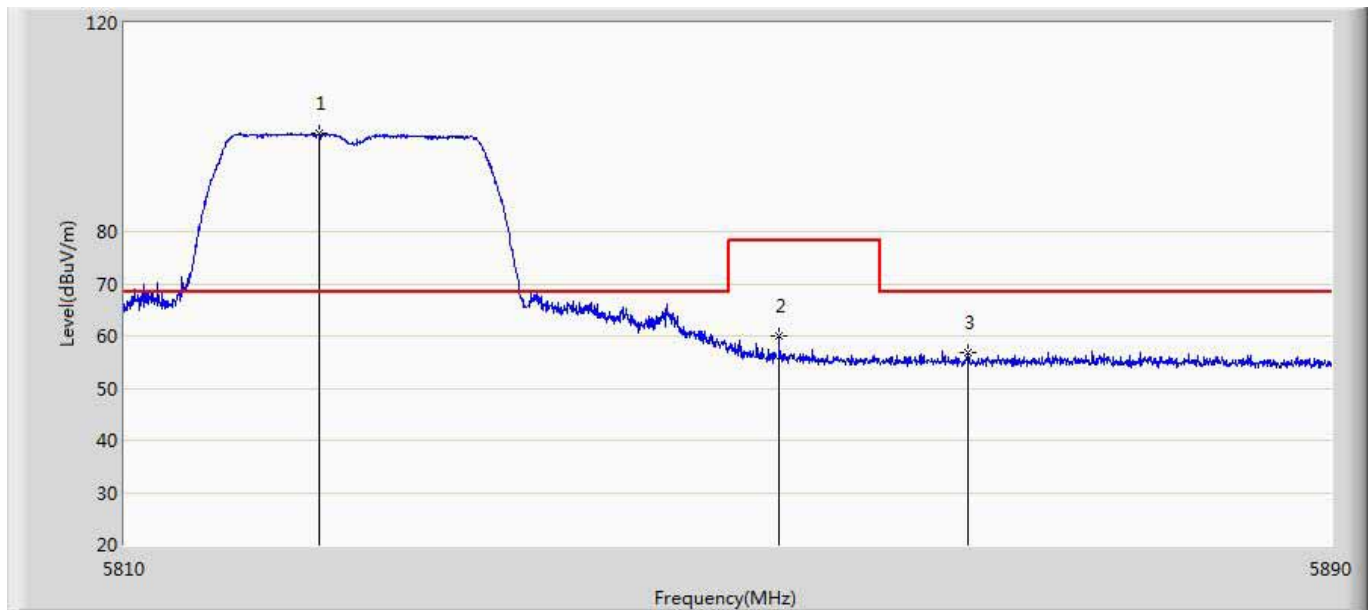
Site: AC5	Time: 2015/12/19 - 14:06
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5825 by 802.11n(20MHz) ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5826.560	97.289	53.883	28.989	68.300	43.406	PK
2		5856.760	56.356	12.835	-21.944	78.300	43.521	PK
3		5866.840	56.826	13.250	-11.474	68.300	43.576	PK

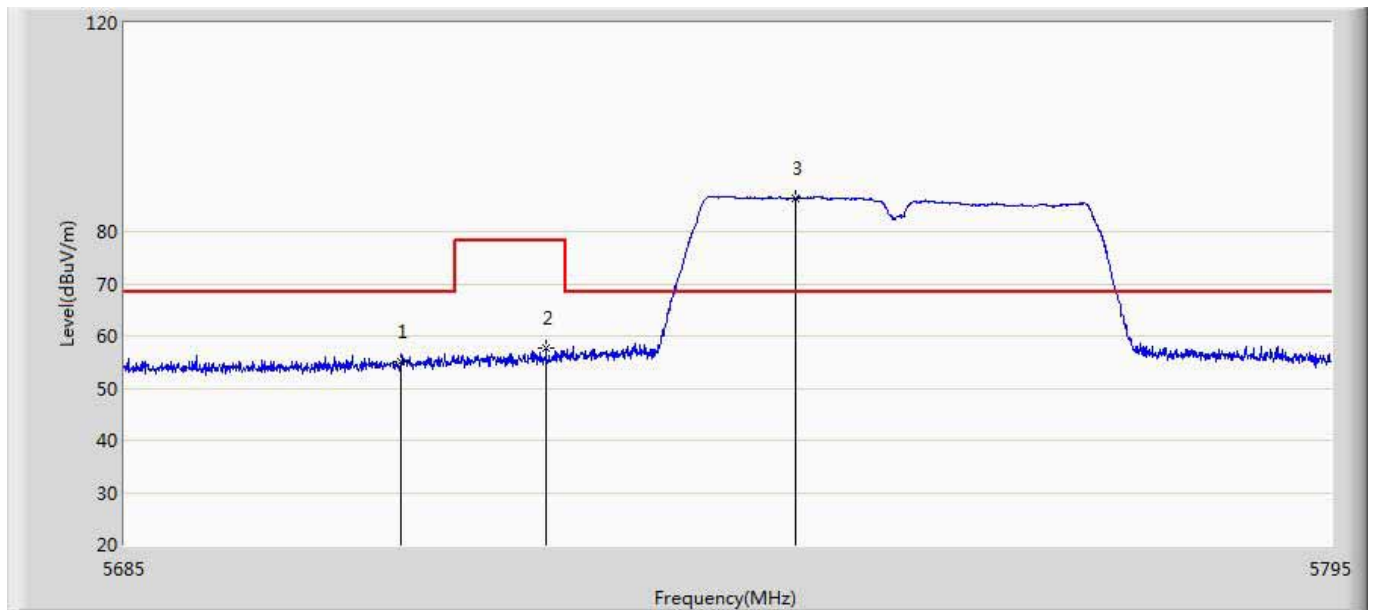


Site: AC5	Time: 2015/12/19 - 14:08
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5825 by 802.11n(20MHz) ant0	



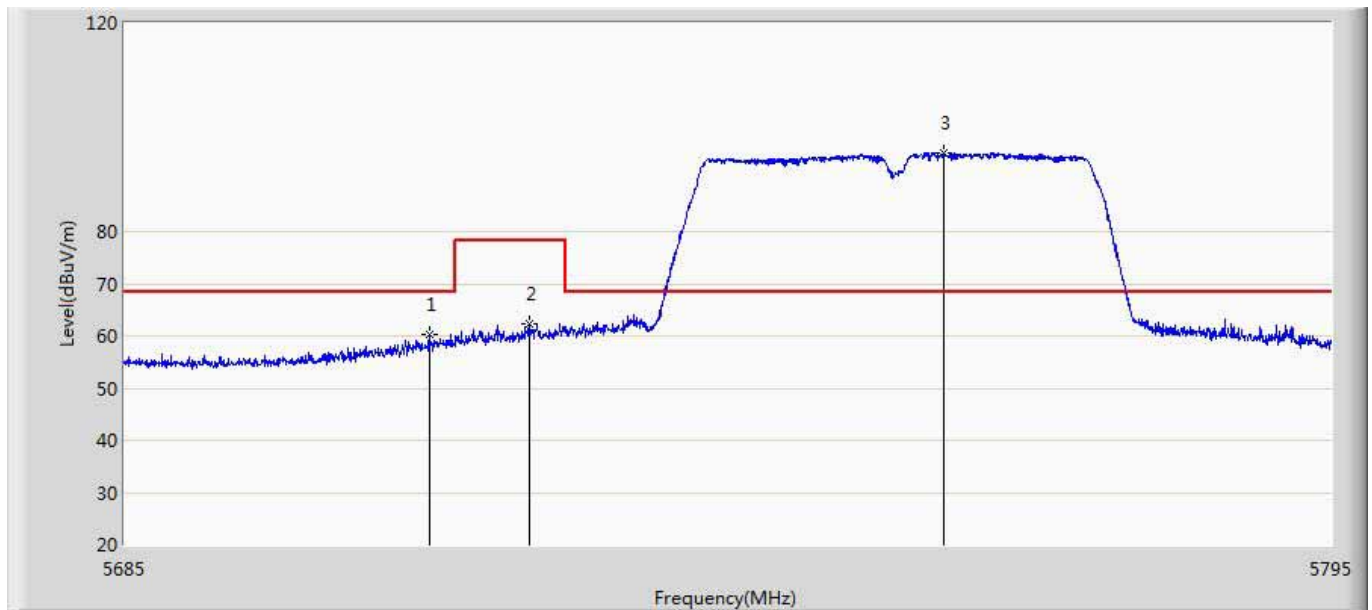
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5822.880	98.784	55.386	30.484	68.300	43.398	PK
2		5853.280	60.051	16.557	-18.249	78.300	43.495	PK
3		5865.800	56.893	13.320	-11.407	68.300	43.573	PK

Site: AC5	Time: 2015/12/19 - 14:09
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5755 by 802.11n(40MHz) ant0	



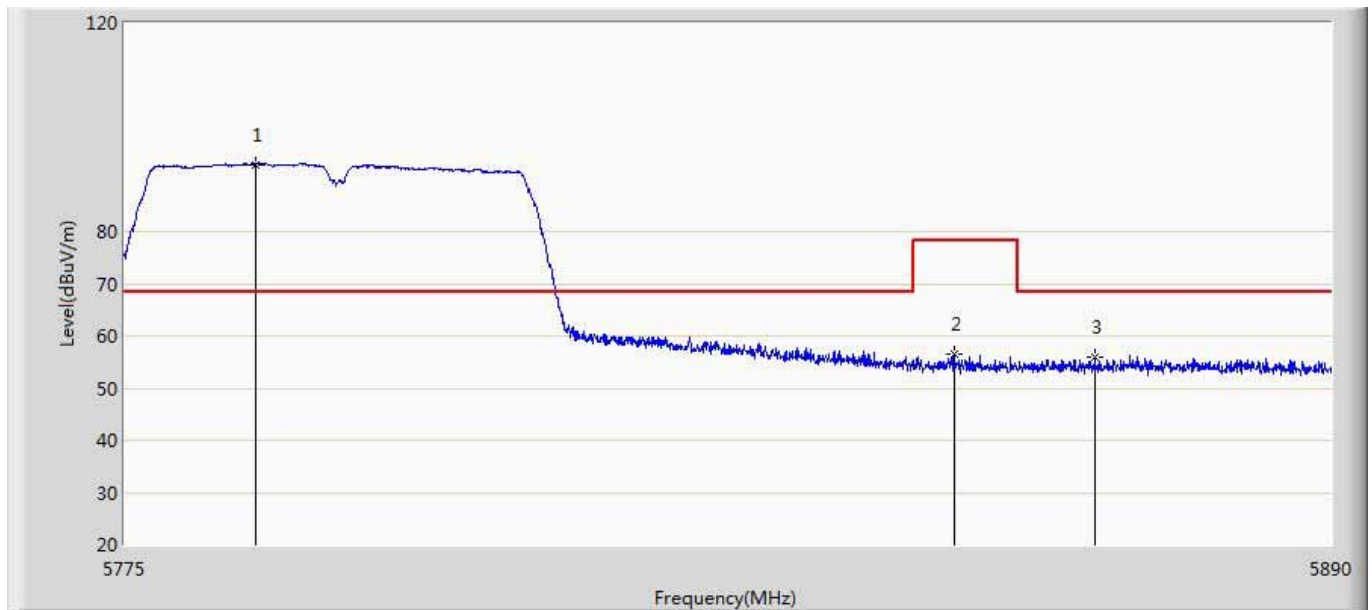
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5710.025	55.014	11.697	-13.286	68.300	43.317	PK
2		5723.225	57.671	14.399	-20.629	78.300	43.272	PK
3	*	5745.940	86.460	43.168	18.160	68.300	43.292	PK

Site: AC5	Time: 2015/12/19 - 14:12
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5755 by 802.11n(40MHz) ant0	



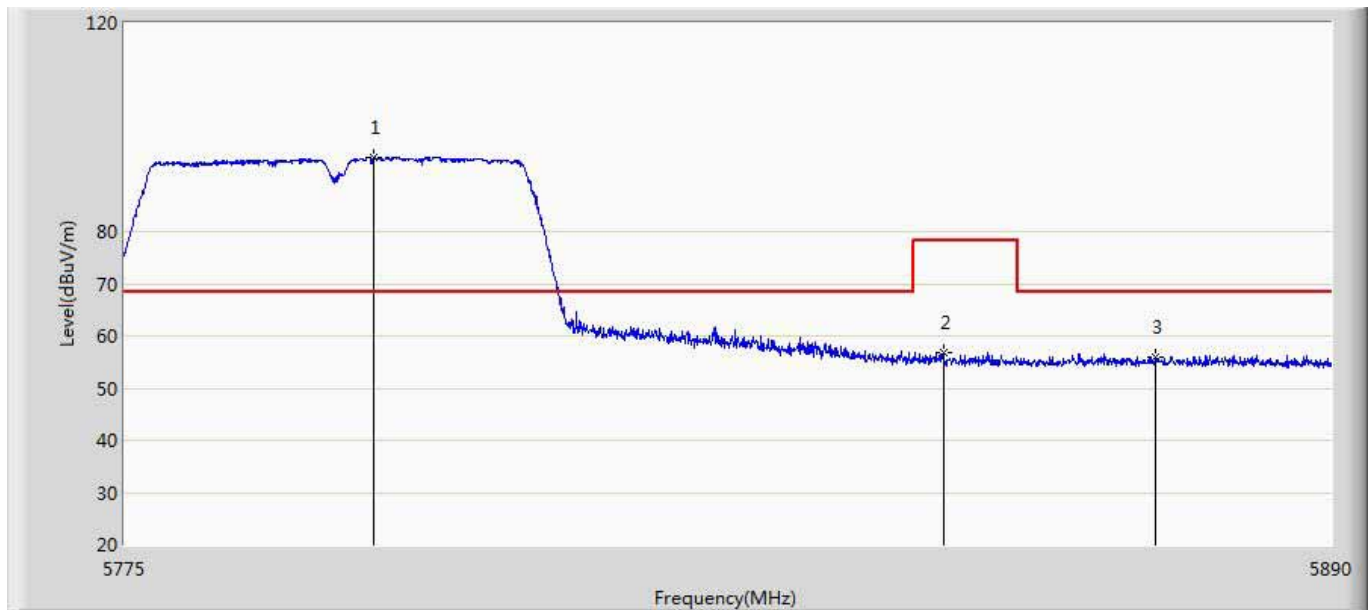
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5712.610	60.267	16.959	-8.033	68.300	43.308	PK
2		5721.685	62.407	19.130	-15.893	78.300	43.277	PK
3	*	5759.525	95.021	51.777	26.721	68.300	43.244	PK

Site: AC5	Time: 2015/12/19 - 14:13
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5795 by 802.11n(40MHz) ant0	



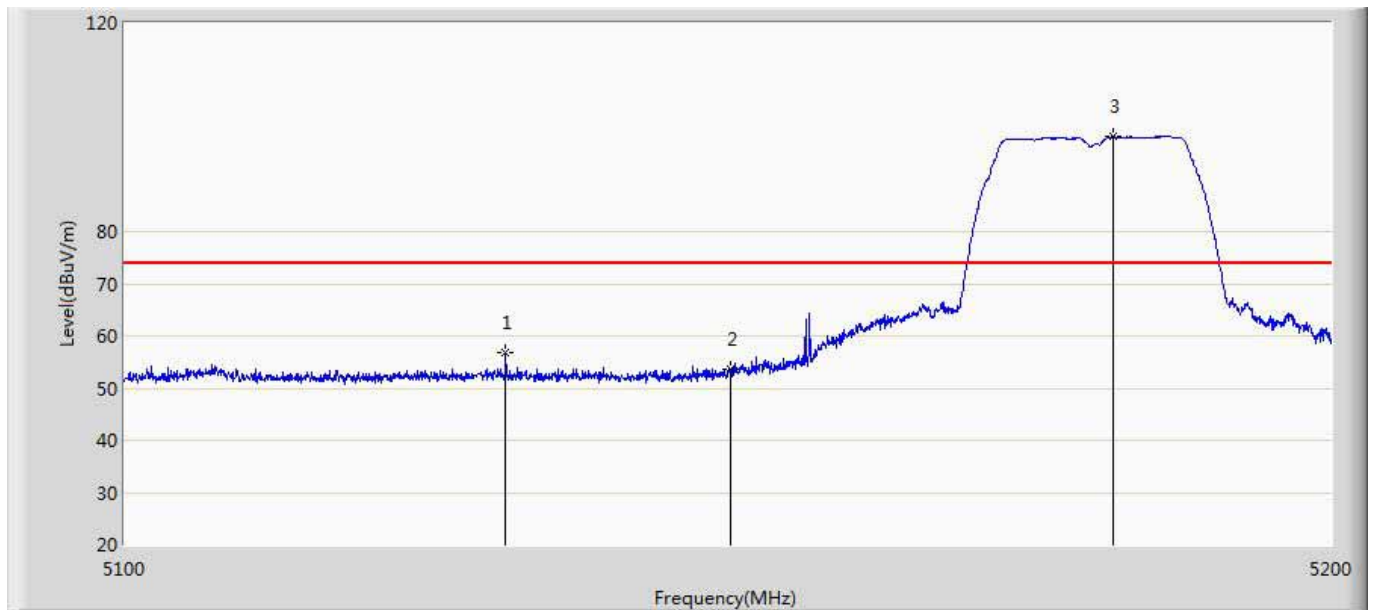
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5787.420	92.879	49.572	24.579	68.300	43.308	PK
2		5853.833	56.487	12.988	-21.813	78.300	43.498	PK
3		5867.345	55.892	12.314	-12.408	68.300	43.578	PK

Site: AC5	Time: 2015/12/19 - 14:16
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5795 by 802.11n(40MHz) ant0	



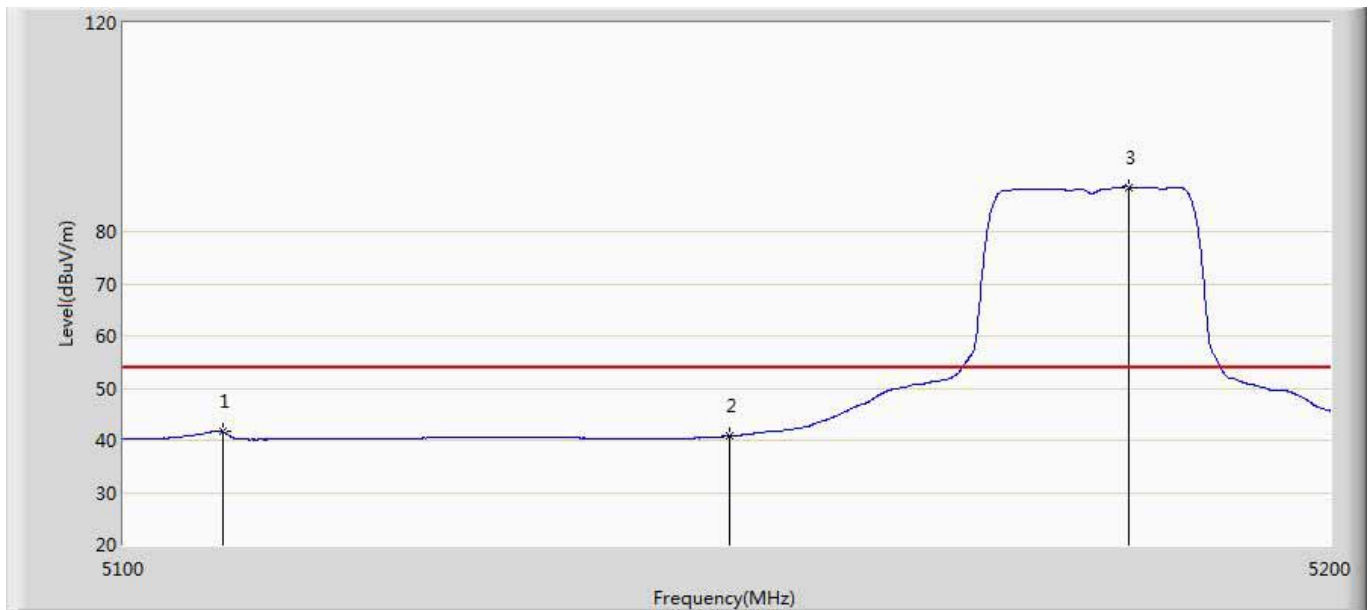
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5798.575	94.087	50.778	25.787	68.300	43.309	PK
2		5852.797	56.944	13.453	-21.356	78.300	43.491	PK
3		5873.095	55.993	12.397	-12.307	68.300	43.596	PK

Site: AC5	Time: 2015/12/19 - 14:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant1	



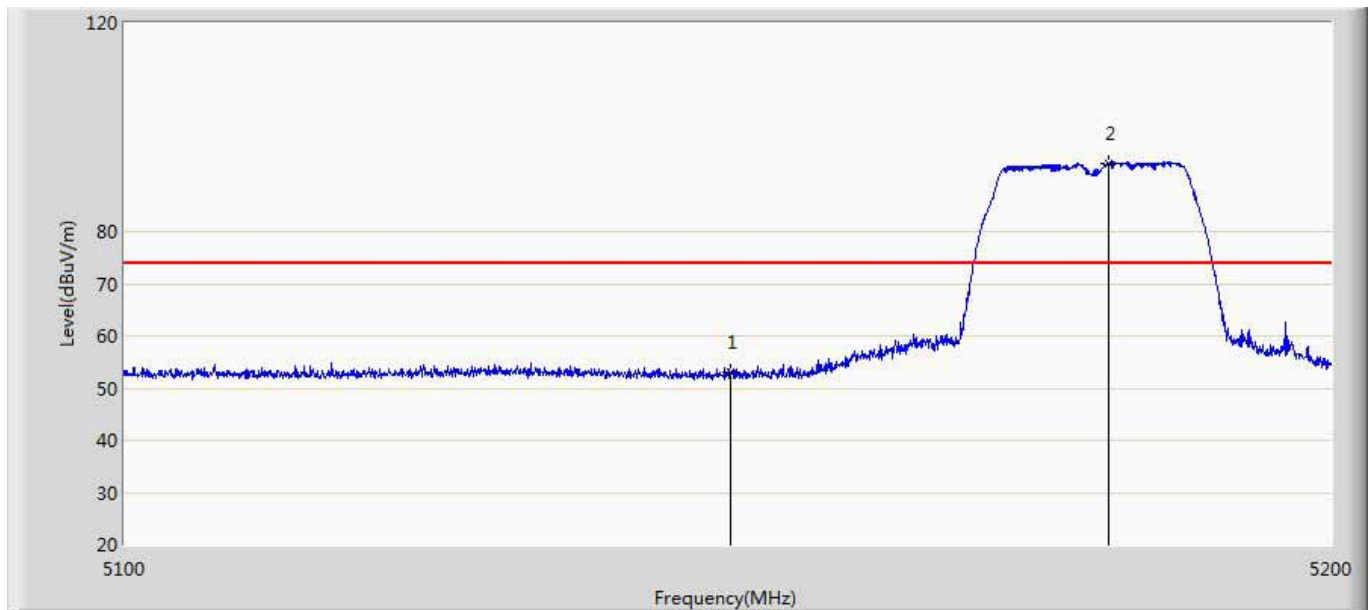
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5131.400	56.821	14.580	-17.179	74.000	42.241	PK
2		5150.000	53.578	11.563	-20.422	74.000	42.015	PK
3	*	5181.850	98.124	55.979	24.124	74.000	42.145	PK

Site: AC5	Time: 2015/12/19 - 14:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5108.150	41.651	-0.303	-12.349	54.000	41.954	AV
2		5150.000	40.771	-1.244	-13.229	54.000	42.015	AV
3	*	5183.200	88.518	46.380	34.518	54.000	42.137	AV

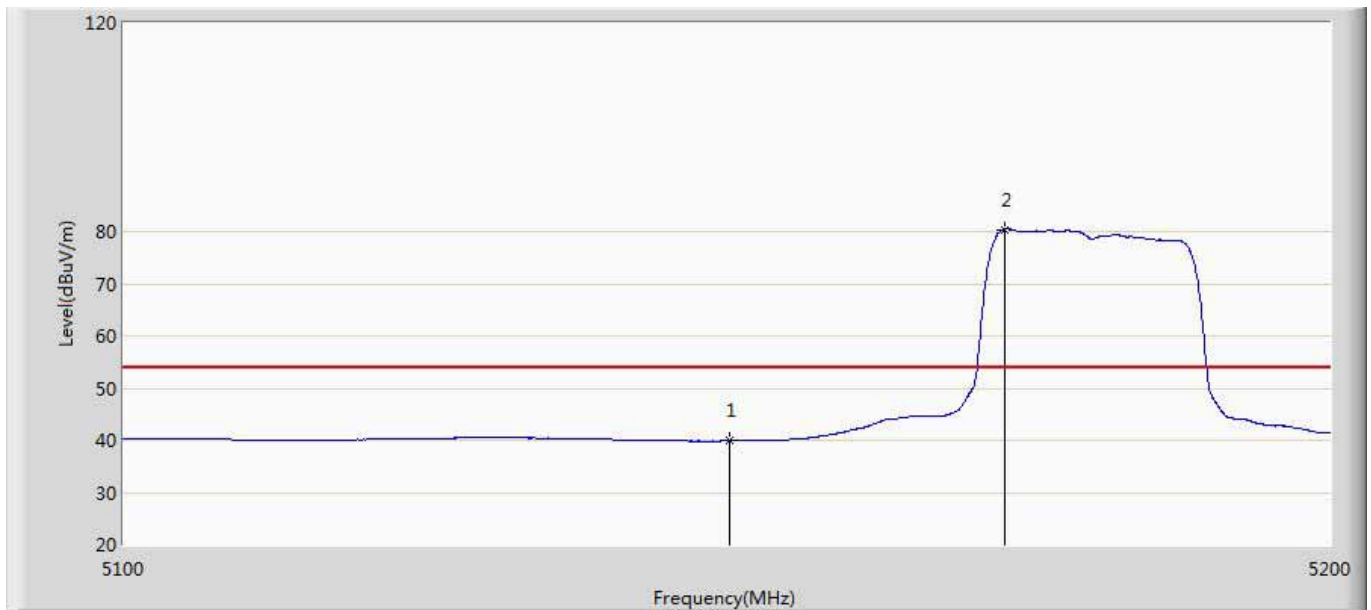
Site: AC5	Time: 2015/12/19 - 14:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	52.972	10.957	-21.028	74.000	42.015	PK
2	*	5181.400	93.167	51.022	19.167	74.000	42.145	PK

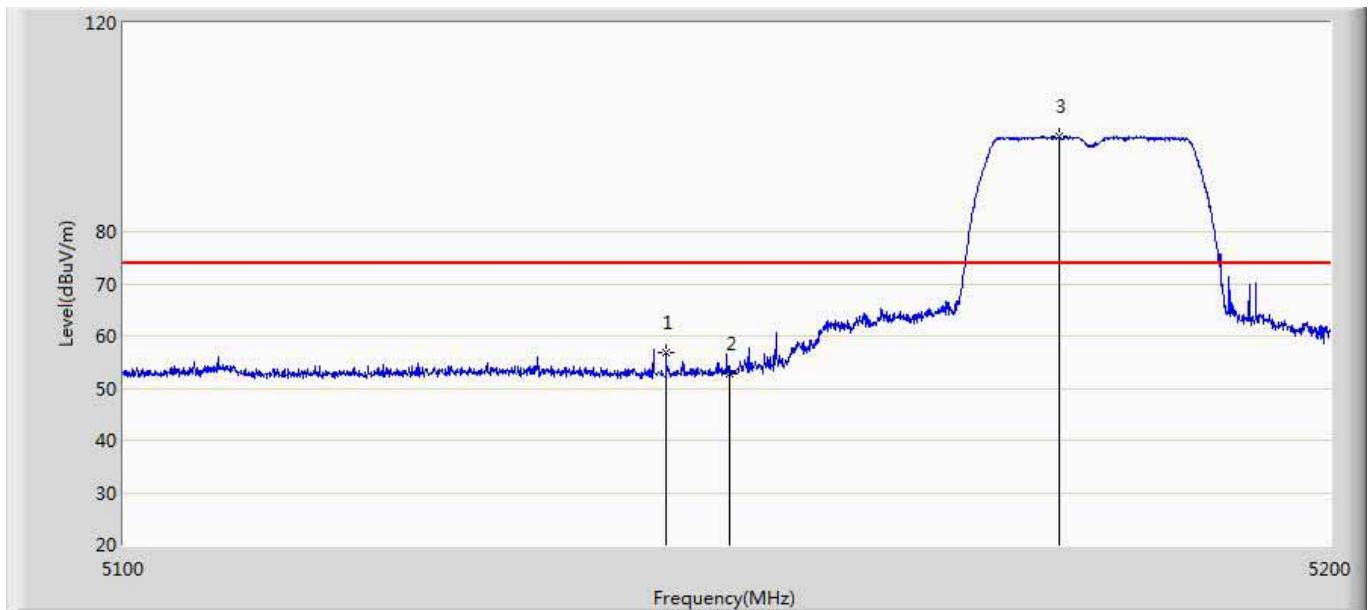


Site: AC5	Time: 2015/12/19 - 14:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5180 by 802.11a ant1	



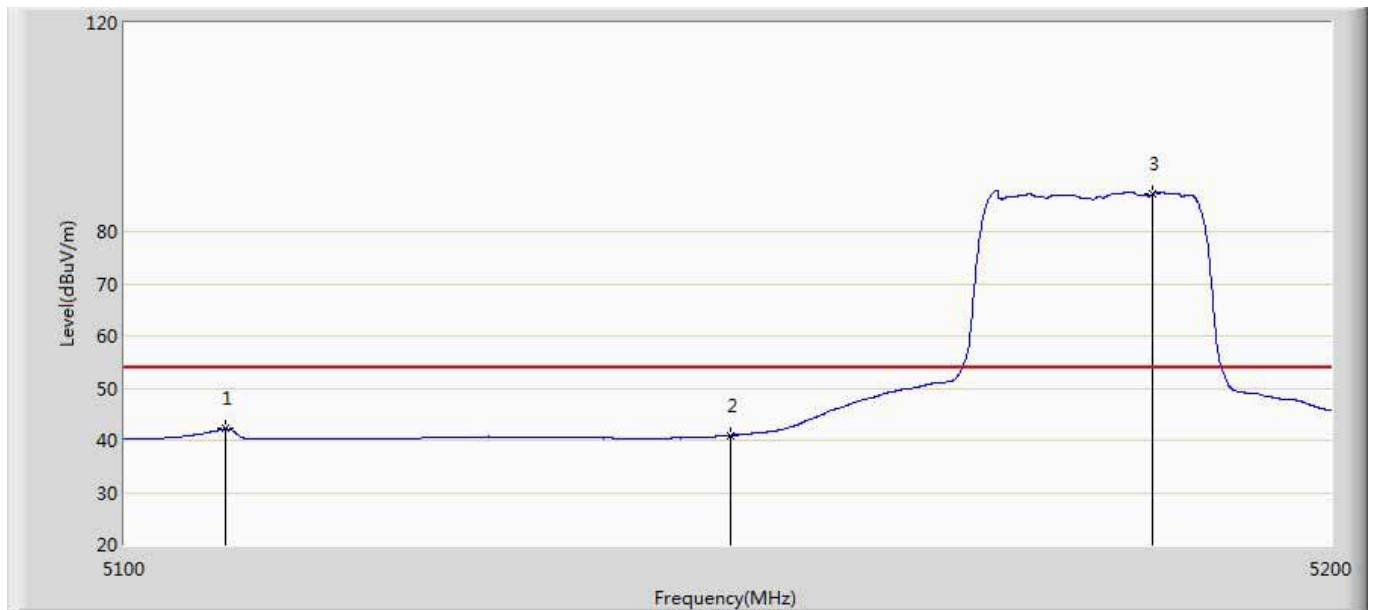
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	39.896	-2.119	-14.104	54.000	42.015	AV
2	*	5172.850	80.415	38.270	26.415	54.000	42.146	AV

Site: AC5	Time: 2015/12/19 - 14:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant1	



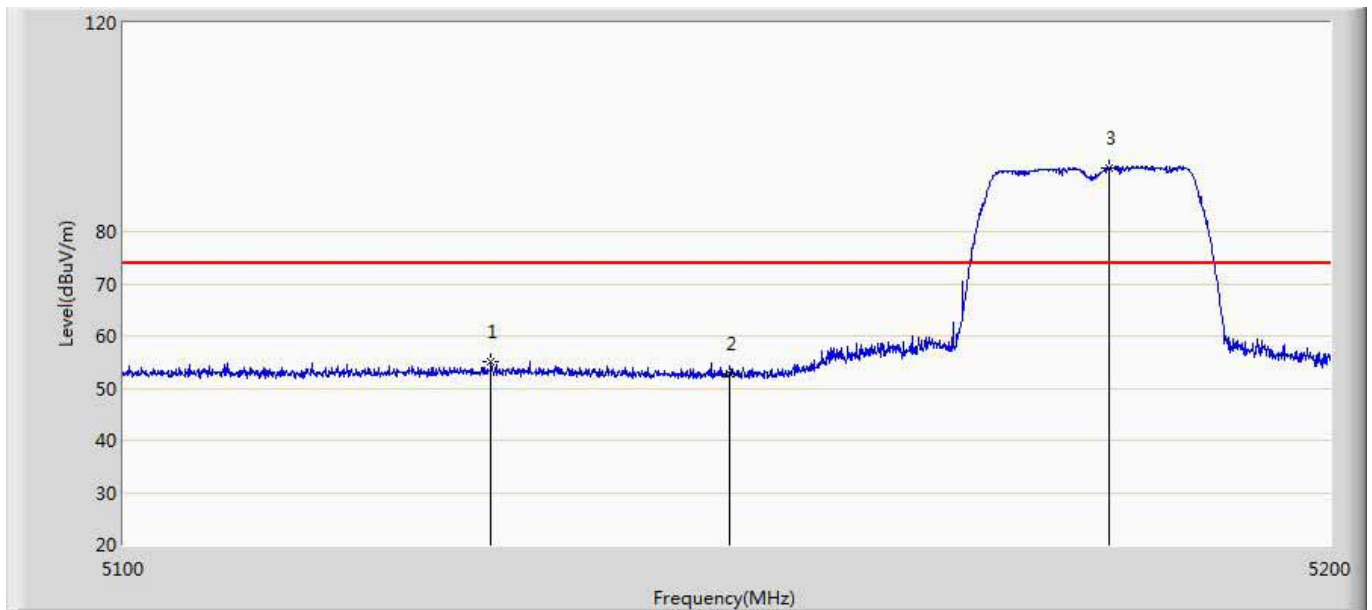
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5144.750	56.885	14.840	-17.115	74.000	42.046	PK
2		5150.000	52.691	10.676	-21.309	74.000	42.015	PK
3	*	5177.450	98.156	56.011	24.156	74.000	42.145	PK

Site: AC5	Time: 2015/12/19 - 14:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant1	



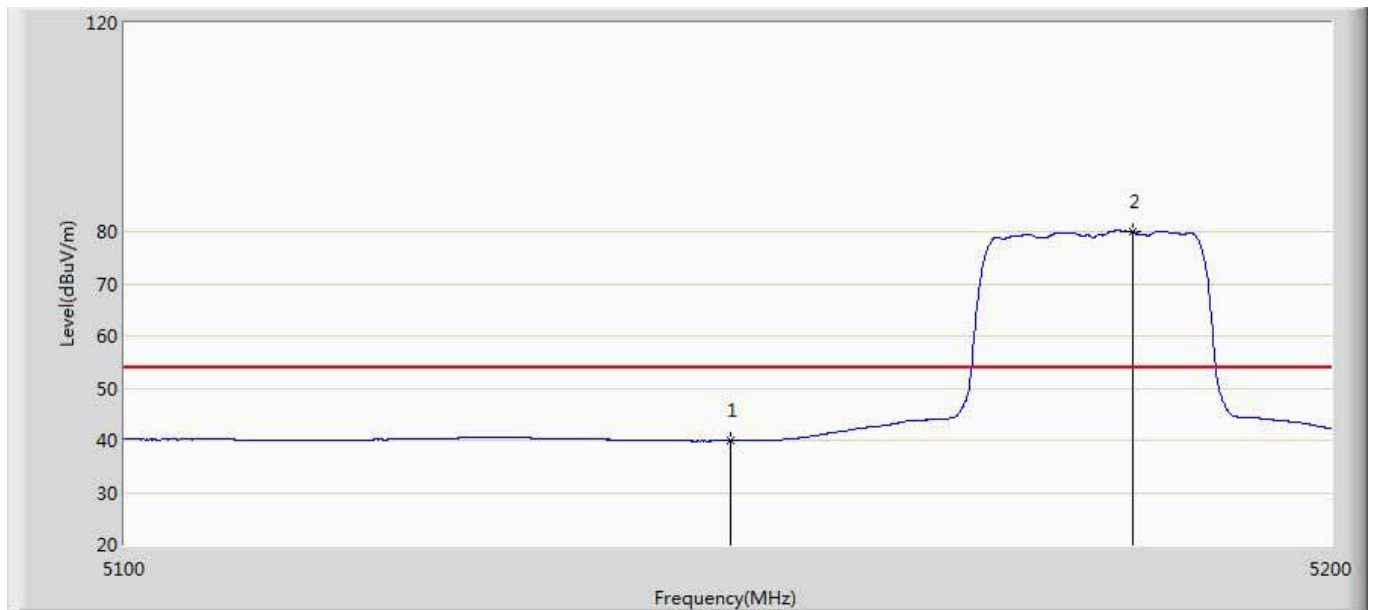
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5108.300	42.218	0.262	-11.782	54.000	41.956	AV
2		5150.000	40.961	-1.054	-13.039	54.000	42.015	AV
3	*	5185.100	87.243	45.118	33.243	54.000	42.125	AV

Site: AC5	Time: 2015/12/19 - 14:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant1	



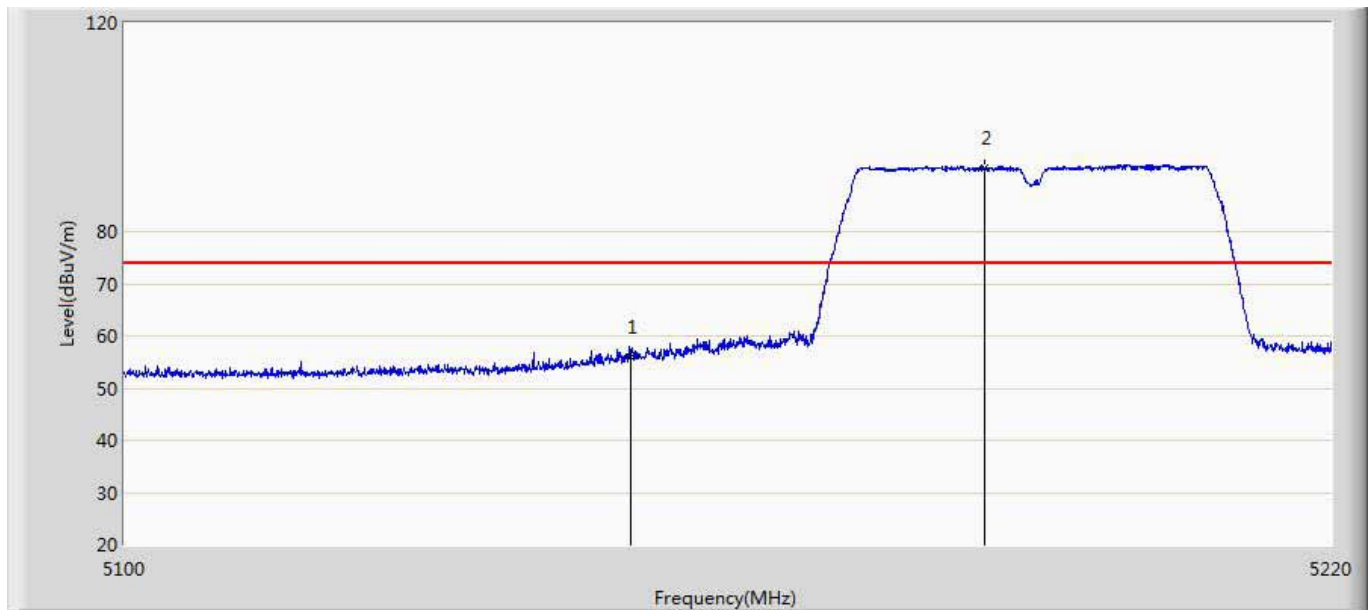
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5130.300	54.976	12.737	-19.024	74.000	42.239	PK
2		5150.000	52.867	10.852	-21.133	74.000	42.015	PK
3	*	5181.600	92.238	50.093	18.238	74.000	42.146	PK

Site: AC5	Time: 2015/12/19 - 14:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5180 by 802.11n(20MHz) ant1	



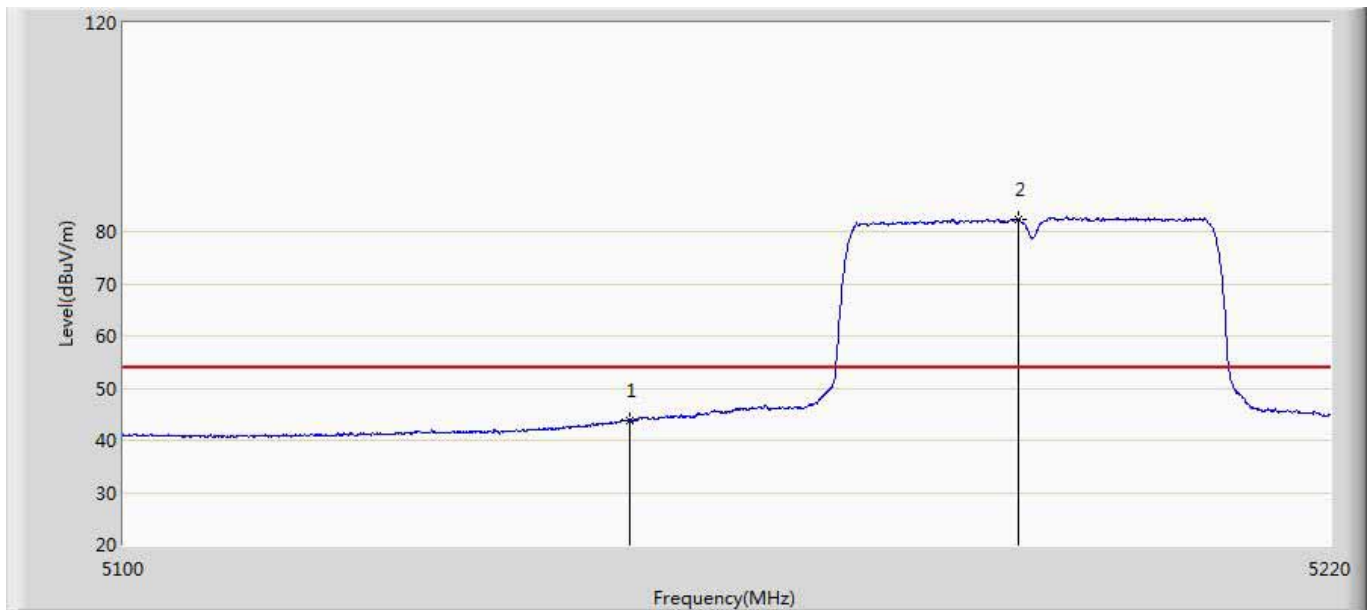
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	39.952	-2.063	-14.048	54.000	42.015	AV
2	*	5183.400	80.103	37.967	26.103	54.000	42.136	AV

Site: AC5	Time: 2015/12/19 - 14:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant1	



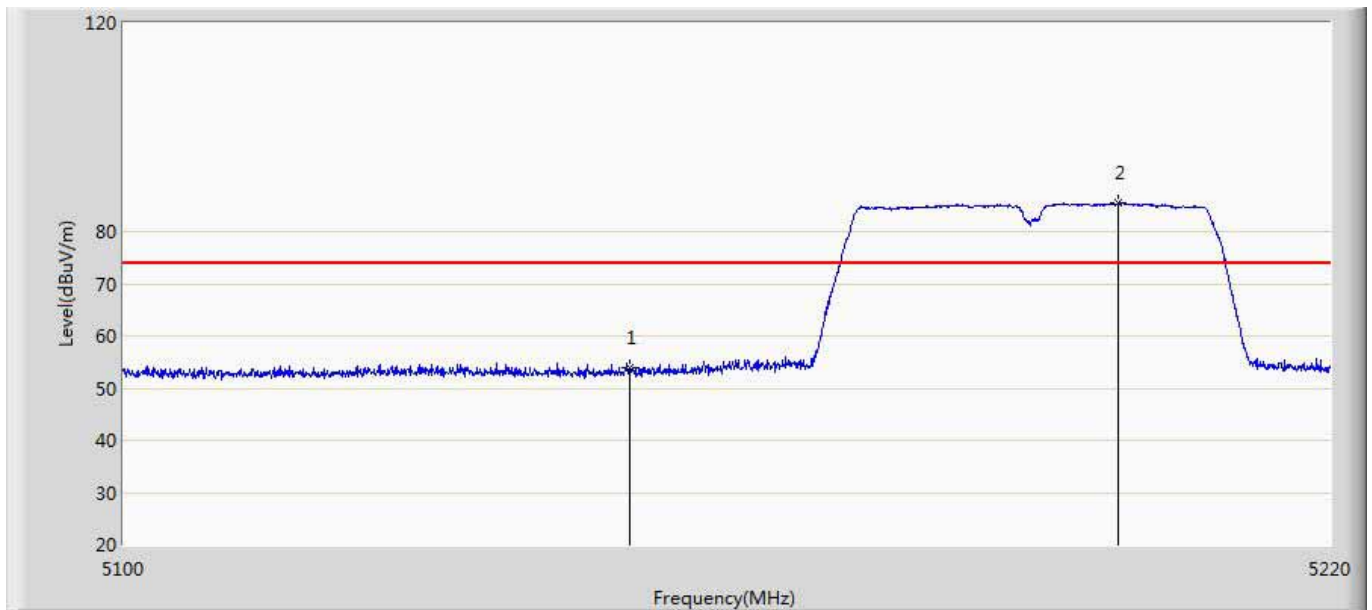
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	55.952	13.937	-18.048	74.000	42.015	PK
2	*	5185.320	92.282	50.158	18.282	74.000	42.124	PK

Site: AC5	Time: 2015/12/19 - 14:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	43.625	1.610	-10.375	54.000	42.015	AV
2	*	5188.680	82.400	40.297	28.400	54.000	42.103	AV

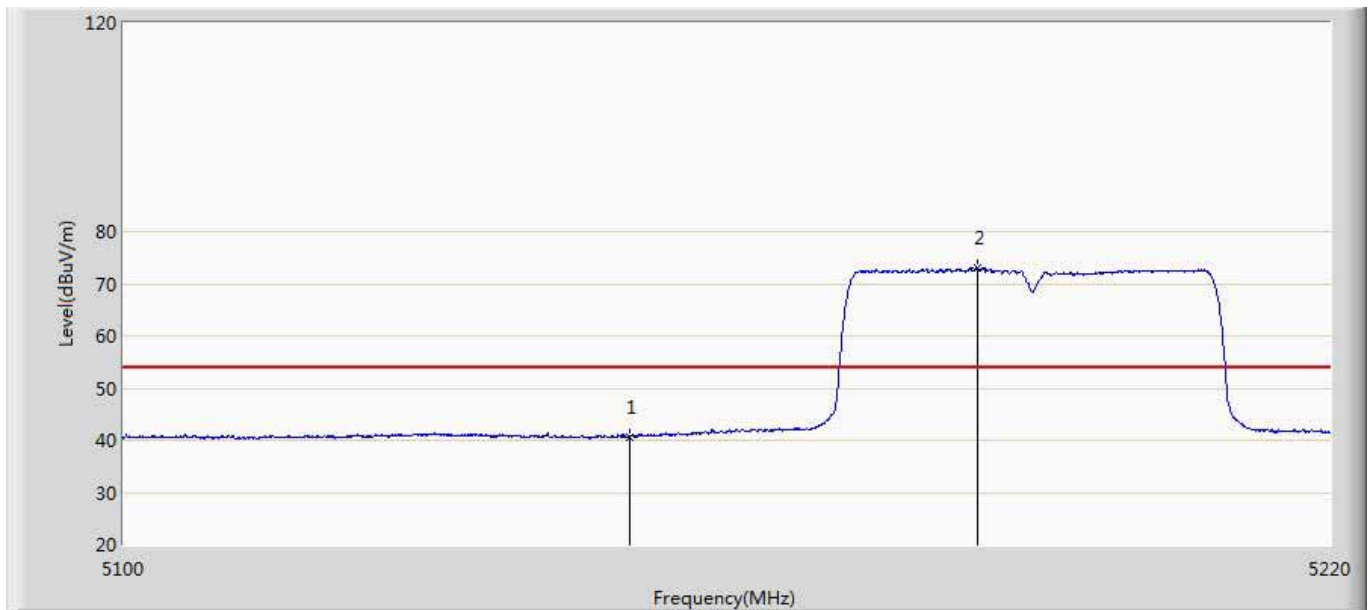
Site: AC5	Time: 2015/12/19 - 14:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	54.002	11.987	-19.998	74.000	42.015	PK
2	*	5198.700	85.424	43.386	11.424	74.000	42.039	PK

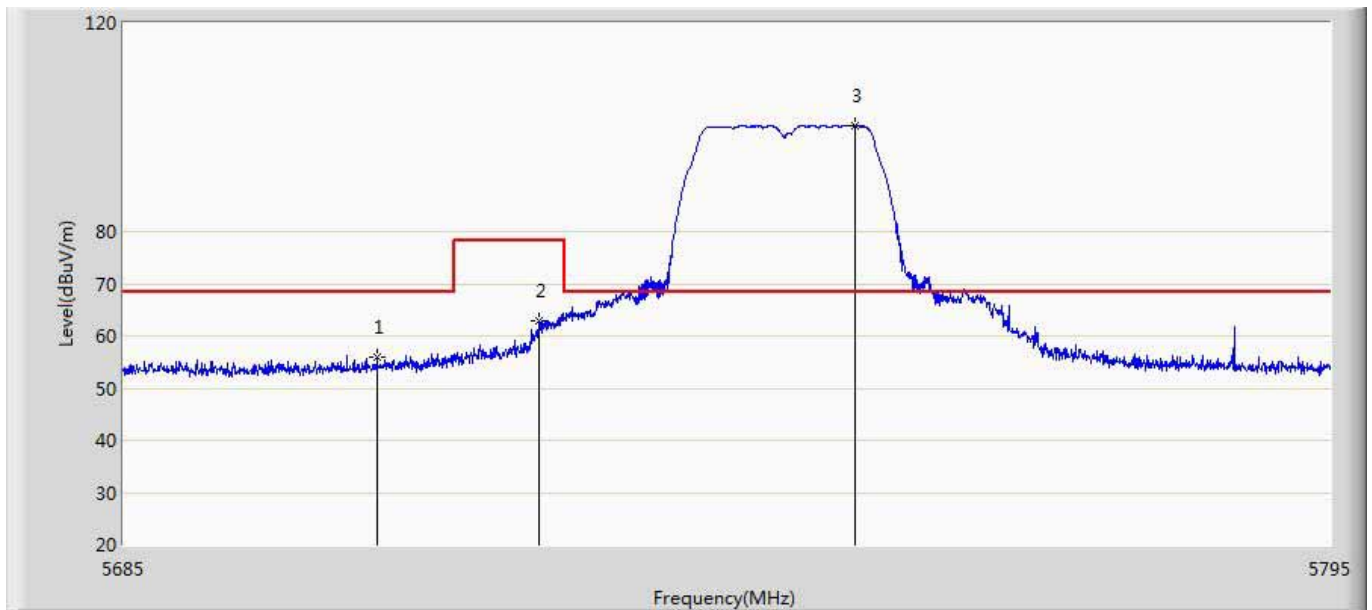


Site: AC5	Time: 2015/12/19 - 14:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5190 by 802.11n(40MHz) ant1	



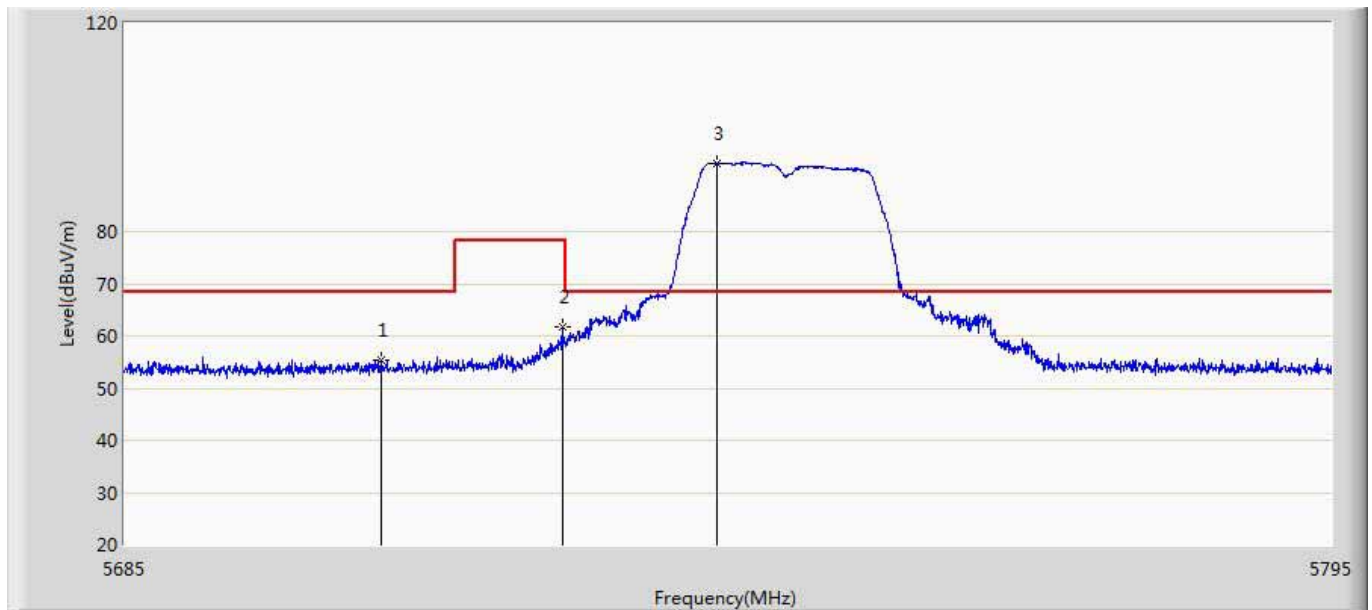
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5150.000	40.613	-1.402	-13.387	54.000	42.015	AV
2	*	5184.720	72.952	30.824	18.952	54.000	42.128	AV

Site: AC5	Time: 2015/12/19 - 14:45
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5745 by 802.11a ant1	



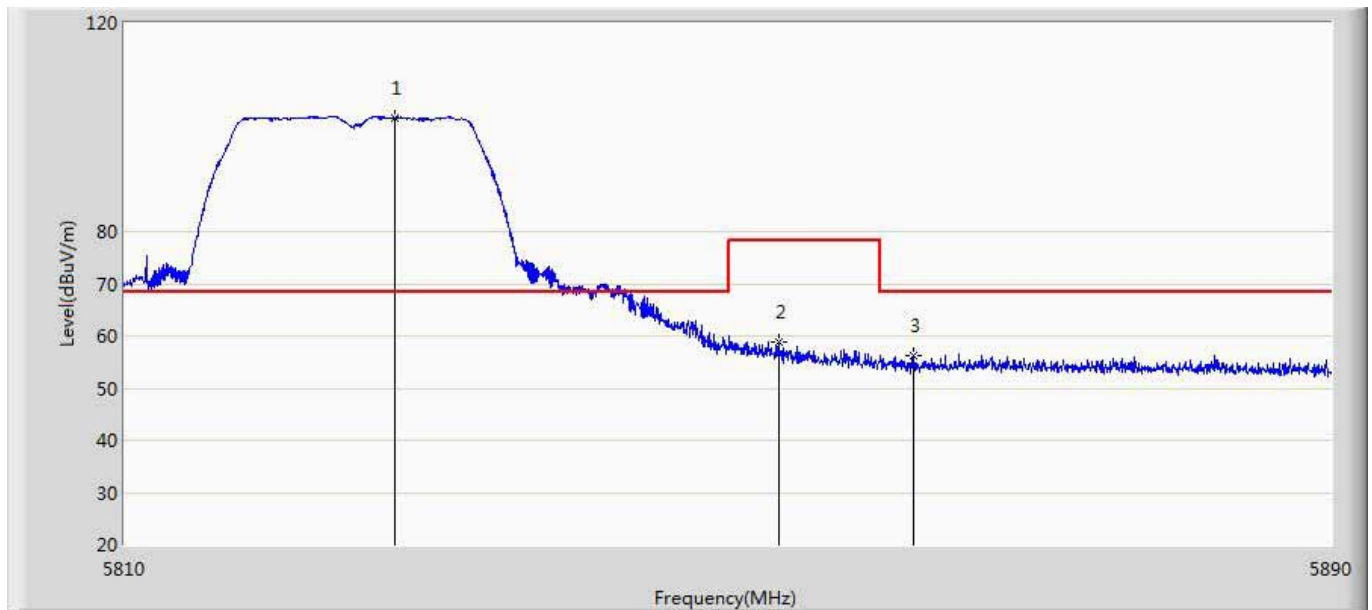
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5707.990	55.947	12.630	-12.353	68.300	43.318	PK
2		5722.730	62.769	19.495	-15.531	78.300	43.274	PK
3	*	5751.495	100.381	57.108	32.081	68.300	43.273	PK

Site: AC5	Time: 2015/12/19 - 14:47
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5745 by 802.11a ant1	



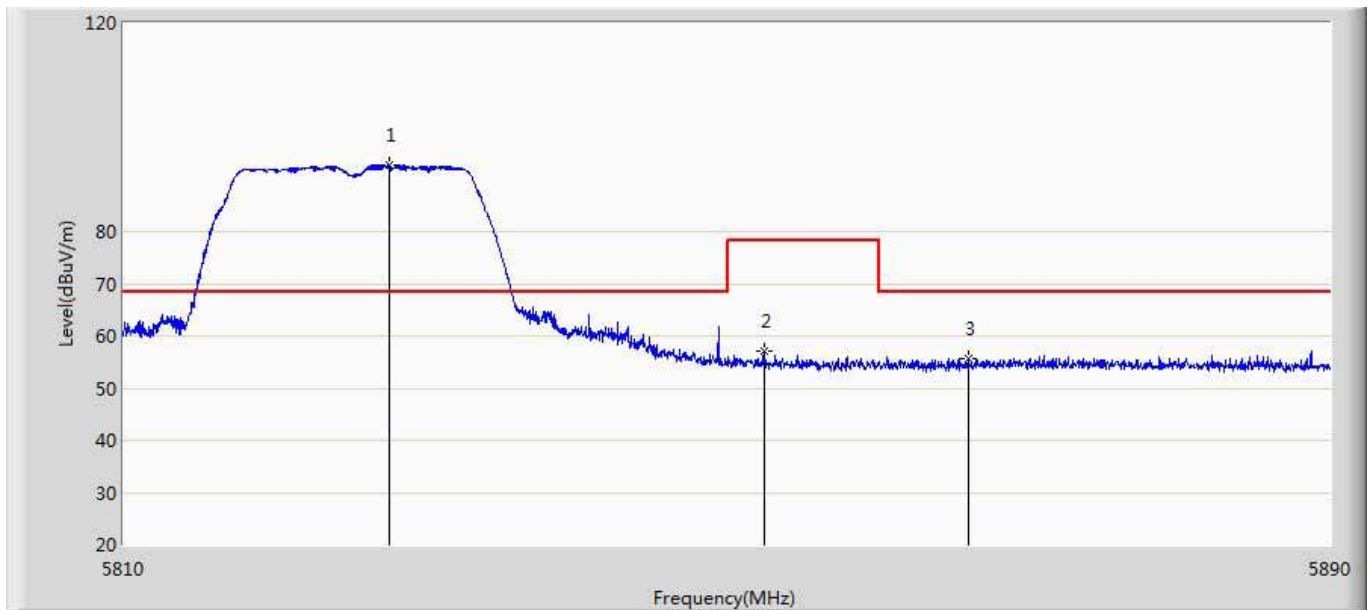
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5708.210	55.395	12.077	-12.905	68.300	43.318	PK
2		5724.710	61.845	18.578	-16.455	78.300	43.267	PK
3	*	5738.790	93.146	49.853	24.846	68.300	43.293	PK

Site: AC5	Time: 2015/12/19 - 14:49
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5825 by 802.11a ant1	



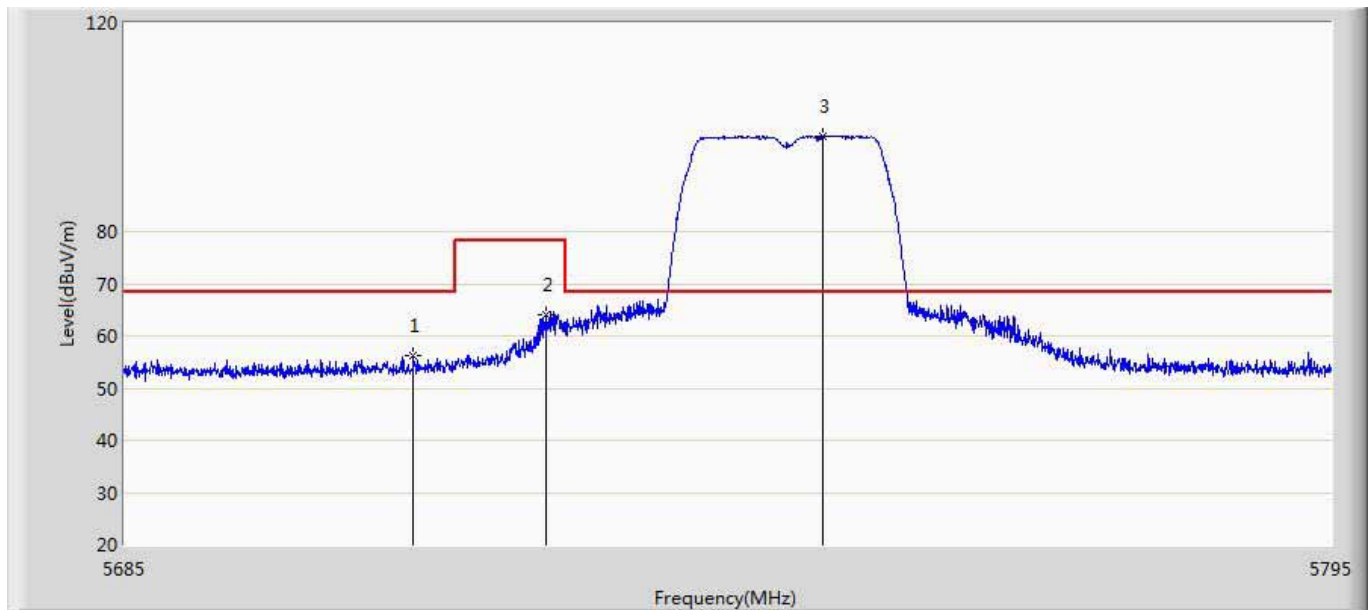
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5827.880	101.863	58.454	33.563	68.300	43.410	PK
2		5853.240	58.720	15.226	-19.580	78.300	43.494	PK
3		5862.240	56.338	12.776	-11.962	68.300	43.562	PK

Site: AC5	Time: 2015/12/19 - 14:52
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 1: Transmit at CH5825 by 802.11a ant1	



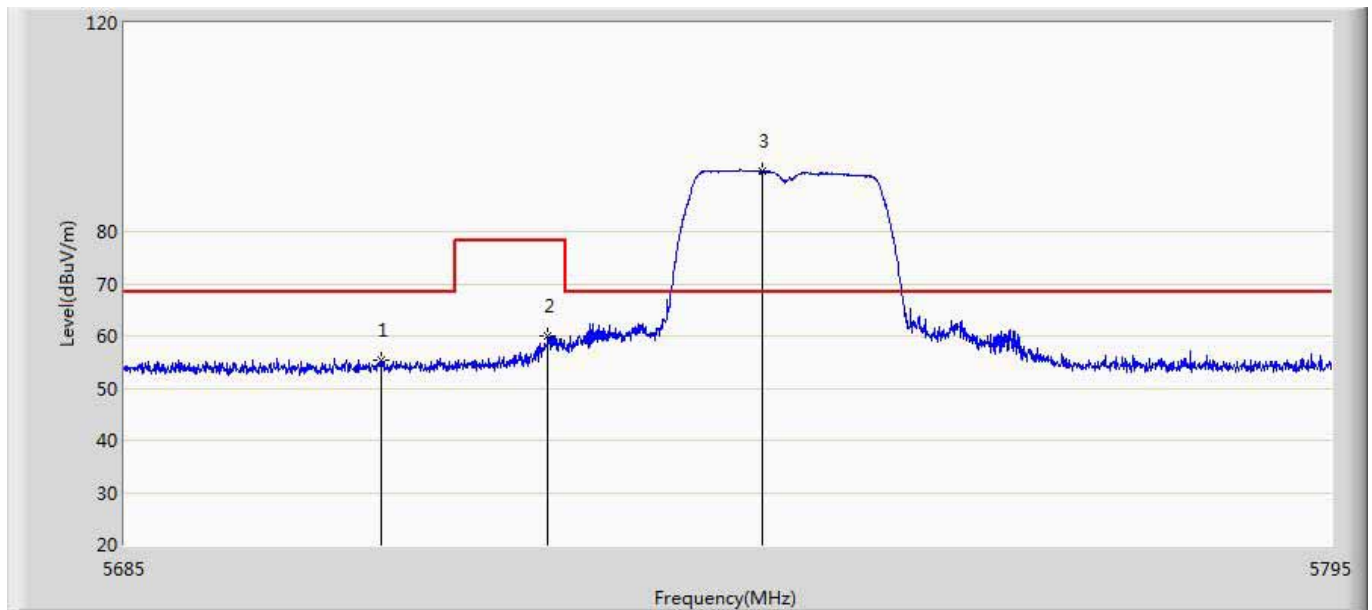
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5827.520	92.636	49.227	24.336	68.300	43.408	PK
2		5852.360	57.094	13.607	-21.206	78.300	43.487	PK
3		5865.880	55.611	12.038	-12.689	68.300	43.573	PK

Site: AC5	Time: 2015/12/19 - 14:54
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5745 by 802.11n(20MHz) ant1	



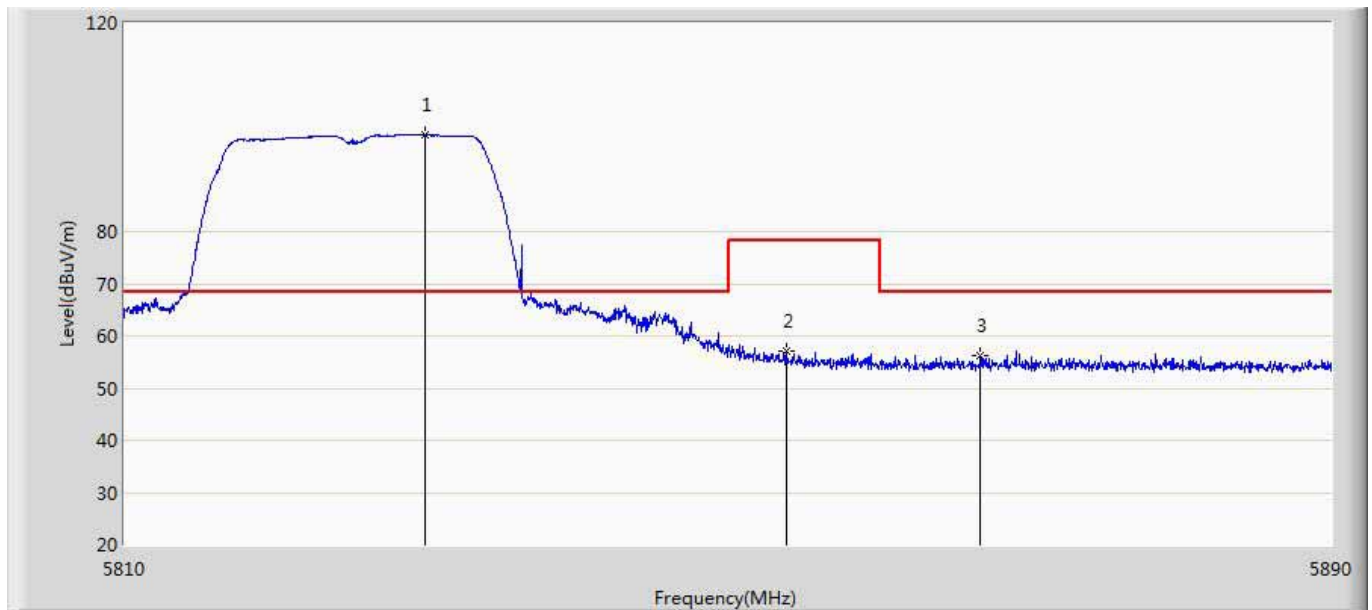
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5711.180	56.165	12.852	-12.135	68.300	43.313	PK
2		5723.225	64.047	20.775	-14.253	78.300	43.272	PK
3	*	5748.415	98.263	54.979	29.963	68.300	43.284	PK

Site: AC5	Time: 2015/12/19 - 14:56
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5745 by 802.11n(20MHz) ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5708.210	55.262	11.944	-13.038	68.300	43.318	PK
2		5723.390	60.048	16.777	-18.252	78.300	43.271	PK
3	*	5742.860	91.596	48.294	23.296	68.300	43.303	PK

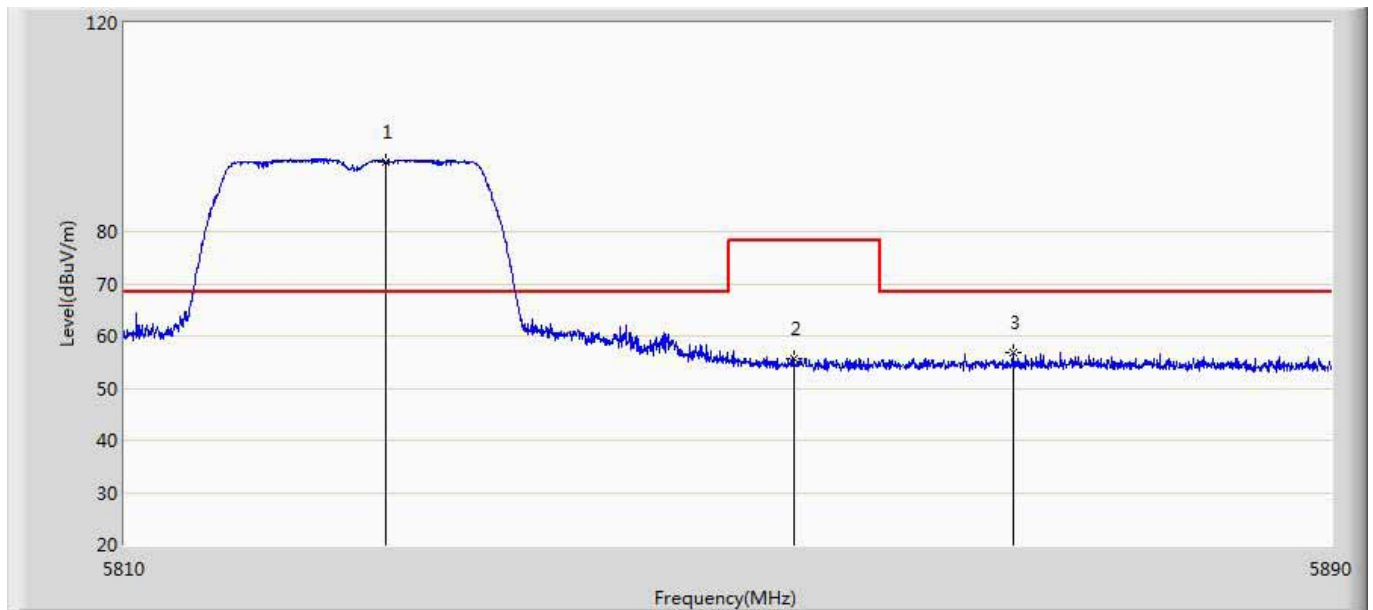
Site: AC5	Time: 2015/12/19 - 14:58
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5825 by 802.11n(20MHz) ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5829.880	98.453	55.041	30.153	68.300	43.412	PK
2		5853.760	57.175	13.677	-21.125	78.300	43.498	PK
3		5866.640	56.121	12.545	-12.179	68.300	43.576	PK

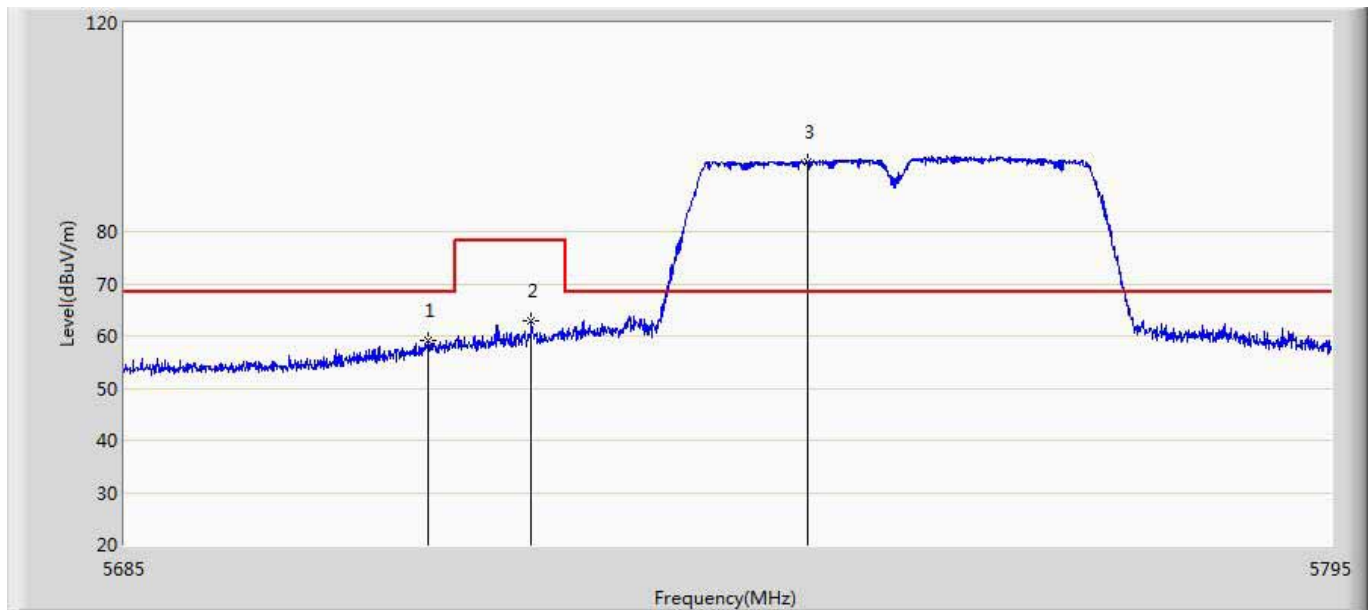


Site: AC5	Time: 2015/12/19 - 15:03
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 2: Transmit at CH5825 by 802.11n(20MHz) ant1	



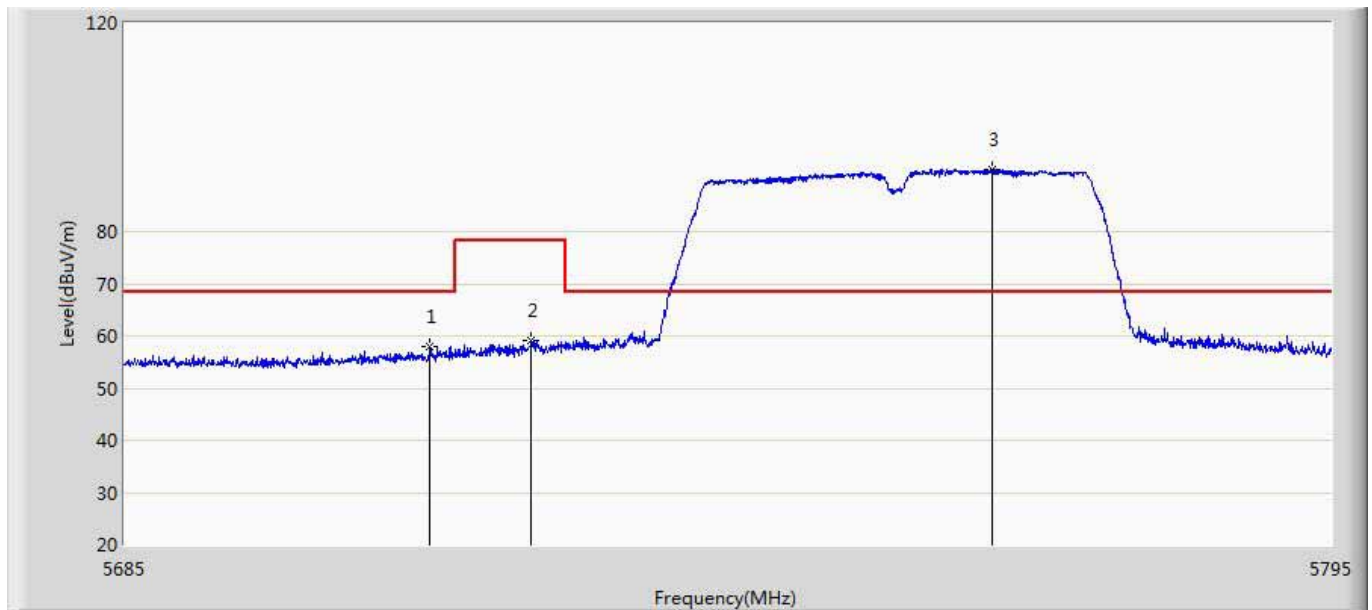
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5827.280	93.372	49.964	25.072	68.300	43.408	PK
2		5854.240	55.588	12.086	-22.712	78.300	43.502	PK
3		5868.800	56.918	13.336	-11.382	68.300	43.583	PK

Site: AC5	Time: 2015/12/19 - 15:07
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5755 by 802.11n(40MHz) ant1	



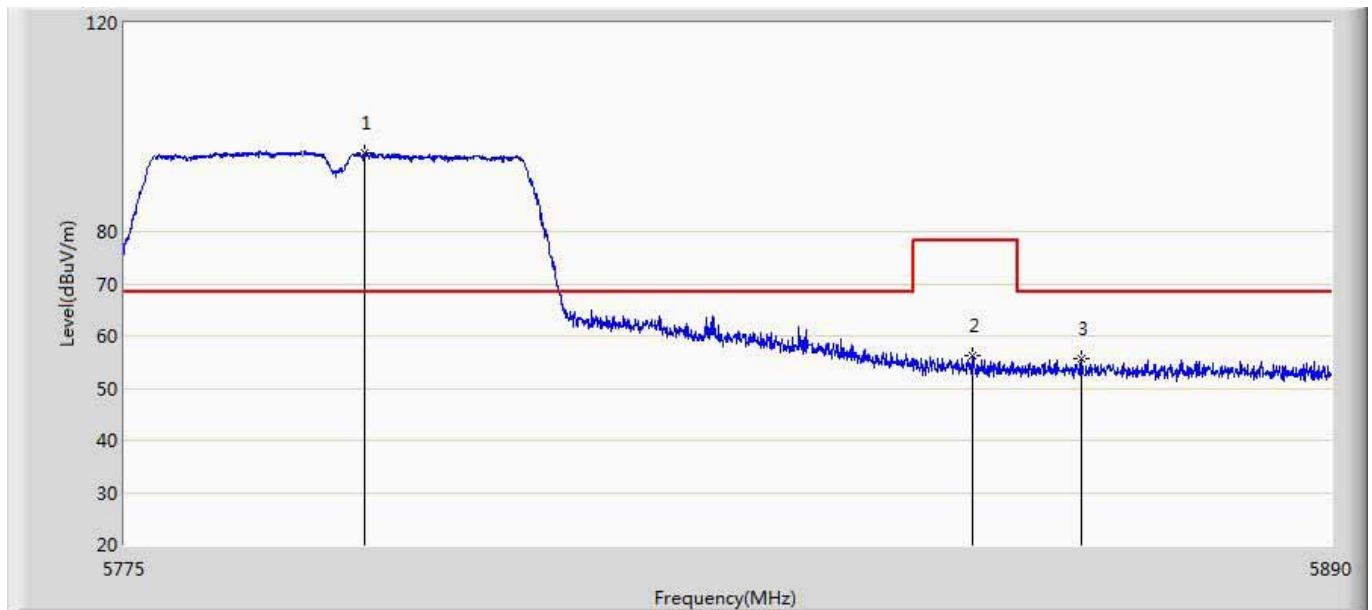
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5712.445	59.177	15.868	-9.123	68.300	43.309	PK
2		5721.850	62.926	19.649	-15.374	78.300	43.276	PK
3	*	5747.040	93.459	50.171	25.159	68.300	43.289	PK

Site: AC5	Time: 2015/12/19 - 15:09
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5755 by 802.11n(40MHz) ant1	



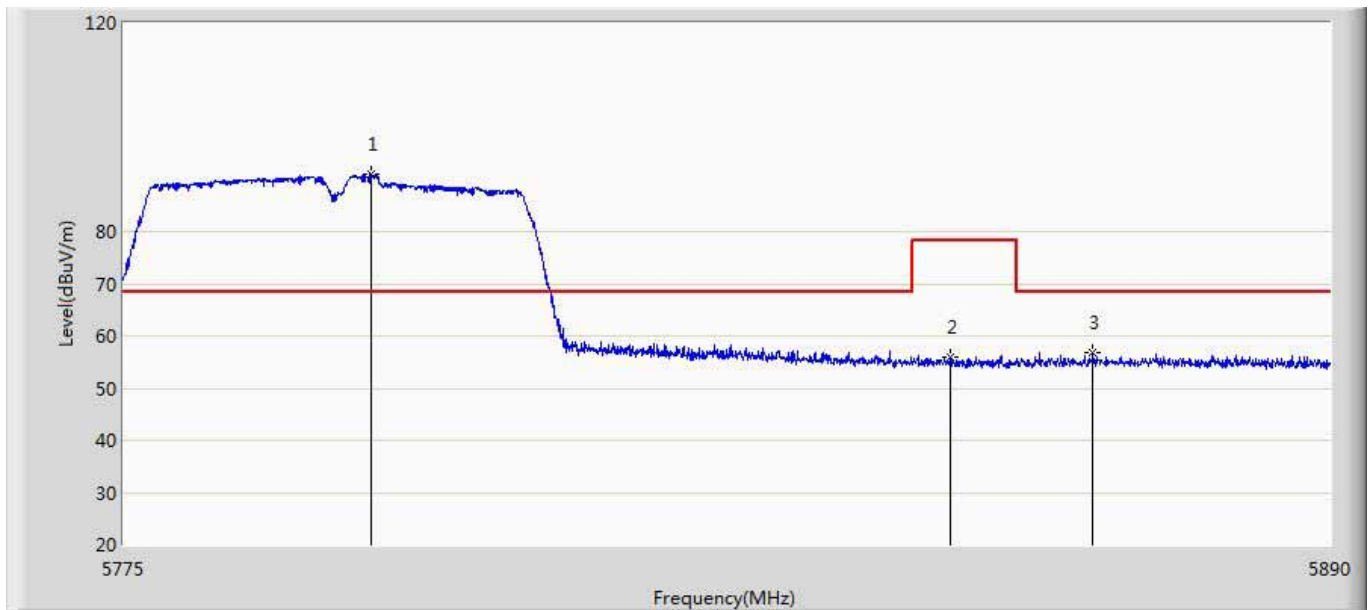
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		5712.665	57.950	14.642	-10.350	68.300	43.308	PK
2		5721.905	59.188	15.912	-19.112	78.300	43.276	PK
3	*	5763.925	91.947	48.682	23.647	68.300	43.266	PK

Site: AC5	Time: 2015/12/19 - 15:12
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5795 by 802.11n(40MHz) ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5797.712	95.029	51.724	26.729	68.300	43.305	PK
2		5855.615	56.114	12.602	-22.186	78.300	43.512	PK
3		5866.080	55.661	12.087	-12.639	68.300	43.574	PK

Site: AC5	Time: 2015/12/19 - 15:16
Limit: FCC-15.407 new	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Wi-Fi Module	Power: AC 120V/60Hz
Note: Mode 3: Transmit at CH5795 by 802.11n(40MHz) ant1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	5798.518	90.979	47.670	22.679	68.300	43.309	PK
2		5853.603	55.819	12.322	-22.481	78.300	43.497	PK
3		5867.230	56.721	13.144	-11.579	68.300	43.577	PK

\_\_\_\_\_ The End \_\_\_\_\_