



MEASUREMENT REPORT

FCC PART 15.407 WLAN 802.11a/n

FCC ID:	SFK-WF0613A
APPLICANT:	CIG Shanghai Co., Ltd

Application Type: Certification
Product: 2.4GHz&5GHz 3x3 Outdoor AP
Model No.: WF-0613A
FCC Classification: Unlicensed National Information Infrastructure (UNII)
FCC Rule Part(s): Part 15.407
Test Procedure(s): ANSI C63.10-2009
 KDB 789033 D01v01r03, KDB 662911 D01v02r01
Test Date: October 19 ~November 28, 2013

Reviewed By : Robin Wu
 (Supervisor: Robin Wu)
Approved By : Marlin Chen
 (Manager: Marlin Chen)

The test results relate only to the samples tested.
This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 789033 D01v01r03. Test results reported herein relate only to the item(s) tested.
The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

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Revision History

Report No.	Version	Description	Issue Date
1311RSU00102	Rev. 01	Initial report	11-29-2013

§2.1033 General Information

Applicant:	CIG Shanghai Co., Ltd
Applicant Address:	F/23, No.889 yishan Road, Xuhui District, Shanghai
Manufacturer:	CIG Shanghai Co., Ltd
Manufacturer Address:	F/23, No.889 yishan Road, Xuhui District, Shanghai
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
MRT Registration No.:	809388
FCC Rule Part(s):	Part 15.407
Model Name:	WF-0613A
FCC ID:	SFK-WF0613A
Test Device Serial No.:	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering
FCC Classification:	Unlicensed National Information Infrastructure (UNII)
Date(s) of Test:	October 19 ~November 28, 2013
Test Report S/N:	1311RSU00102

1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	2.4GHz&5GHz 3x3 Outdoor AP
Model No.	WF-0613A
Frequency Range	802.11a/n: 5180 ~ 5240MHz
Maximum Output Power	802.11a/n: 802.11a: 6.44dBm 802.11n-HT20: 6.33dBm 802.11n-HT40: 7.89dBm
Type of Modulation	802.11a/n: OFDM

2.2. Description of Available Antennas

Frequency Band (GHz)	Antenna Gain (dBi)			Uncorrelated Gain (dBi)
	Chain A	Chain B	Chain C	
2.4	13	13	13	13
5.2	15	15	15	15
5.8	15	15	15	15

2.3. Frequency / Channel Operation

Channel for 802.11a/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	N/A	N/A	N/A	N/A

Channel for 802.11n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	N/A	N/A

2.4. Device Capabilities

This device contains the following capabilities:

802.11a/n WLAN (NII)

Note: 5GHz WLAN (NII) operation is possible in 20MHz, and 40MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = peak per the guidance of Section B)2)b) of KDB 789033 D01v01r03. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

- 802.11a/n 20MHz Bandwidth - 100%
- 802.11n 40MHz Bandwidth - 100%

2.5. Test Configuration

The 2.4GHz&5GHz 3x3 Outdoor AP FCC ID: SFK-WF0613A was tested per the guidance of KDB 789033 D01v01r03. ANSI C63.10-2009 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.6. Test Software

The test utility software used during testing was ART2 Version 2.28.6.

Power Parameter Value of the test software setting:

Test Mode	Test Channel	Chain A	Chain B	Chain C	Chain A+B	Chain A+B+C
802.11a	5180	5	5	6	--	--
	5220	6	4	6	--	--
	5240	6	5	6	--	--
802.11n-HT20	5180	5	5	6	3	3
	5220	6	4	6	4	4
	5240	6	5	6	4	4
802.11n-HT40	5190	7	7	8	6	6
	5230	7	7	8	6	6

2.7. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

2.8. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase.

However, when the device is so small wherein placement of the label with specified statement is not practical, only the trade name and FCC ID must be displayed on the device per Section 15.19(a)(5).

Please see attachment for FCC ID label and label location.

3. DESCRIPTION OF TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2009), and the guidance provided in KDB 789033 D01v01r03 were used in the measurement of the **2.4GHz&5GHz 3x3 Outdoor AP FCC ID: SFK-WF0613A**.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. The shielding effectiveness of the shielded room is in accordance with MIL-Std-285. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or resolution, clock or data exchange speed, scrolling H pattern to the EUT and/or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions is used for final measurements on the same test site. Line conducted emissions test results are shown in Section 7.9.

3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. An MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up was placed on top of the 0.8 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beamwidth of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the Tablet PC is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The **2.4GHz&5GHz 3x3 Outdoor AP FCC ID: SFK-WF0613A** unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATA

AC Conducted Emissions Test Equipment

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESR7	101209	2014/07/16
Two-Line V-Network	R&S	ENV216	101683	2014/07/21
Two-Line V-Network	R&S	ENV216	101684	2014/07/21
Temperature/ Meter Humidity	Anymetre	TH101B	SR2-01	2014/08/15

Radiated Test Equipment

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4447A	MY45300136	2014/08/15
Preamplifier	MRT	AP01G18	1310002	2014/10/08
Preamplifier	MRT	AP18G40	1310003	2014/10/08
Loop Antenna	Schwarzbeck	FMZB1519	1519-041	2014/09/12
TRILOG Antenna	Schwarzbeck	VULB9162	9162-047	2014/09/12
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1167	2014/09/12
Broadband Horn Antenna	Schwarzbeck	BBHA9170	9170-549	2014/09/12
Temperature/Humidity Meter	Anymetre	TH101B	AC1-01	2014/08/15

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MY51440164	2014/08/15
Power Meter	Anritsu	ML2495A	0905006	2014/11/01
Power Sensor	Anritsu	MA2411B	0846014	2014/11/01
Temperature & Humidity Chamber	BAOYT	BYH-150CL	1309W043	2014/10/08
AC Power Supply	APECC	CVCF-11005PIM3	00002015	2014/10/08
Temperature/Humidity Meter	Anymetre	TH101B	TR3-01	2014/08/15

6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 150kHz~30MHz: $\pm 2.04\text{dB}$
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 9kHz ~ 1GHz: $\pm 3.5\text{dB}$ 1GHz ~ 40GHz: $\pm 3.7\text{dB}$

7. TEST RESULT

7.1. Summary

Company Name: CIG Shanghai Co., Ltd
FCC ID: SFK-WF0613A
FCC Classification: Unlicensed National Information Infrastructure (UNII)
Data Rate(s) Tested: 6Mbps ~ 54Mbps (a)
6.5/7.2Mbps ~ 195/216.7Mbps (n - 20MHz)
13.5/15Mbps ~ 405/450Mbps (n - 40MHz)

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)	26dB Bandwidth	N/A	Conducted	Pass	Section 7.2
15.407(a)(1)	Maximum Conducted Output Power	$< 4 + 10\log_{10}(BW)$ dBm (5150-5250MHz)		Pass	Section 7.3
15.407(a)(1), (5)	Peak Power Spectral Density	< 4 dBm/MHz (5150-5250MHz)		Pass	Section 7.4
15.407(a)(6)	Peak Excursion	< 13 dB/MHz maximum difference		Pass	Section 7.5
15.407(g)	Frequency Stability	N/A		Pass	Section 7.6
15.407(b)(1)	Undesirable Emissions	< -27 dBm/MHz EIRP (5150-5350MHz)	Radiated	Pass	Section 7.7 & 7.8
15.205 15.407(b)(1), (5), (6)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		Pass	
15.207	AC Conducted Emissions 150kHz - 30MHz	$< \text{FCC 15.207 limits}$	Line Conducted	Pass	Section 7.9

Notes:

- 1) All channels, modes, and modulations/data rates were investigated among all UNII bands. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.

7.2. 26dB Bandwidth Measurement

7.2.1. Test Limit

N/A

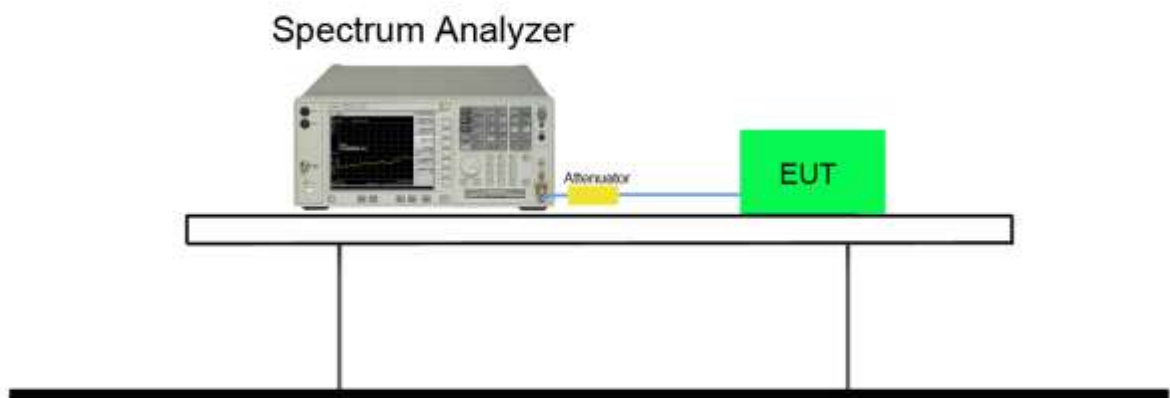
7.2.2. Test Procedure used

KDB 789033 D01v01r03 – Section C

7.2.3. Test Setting

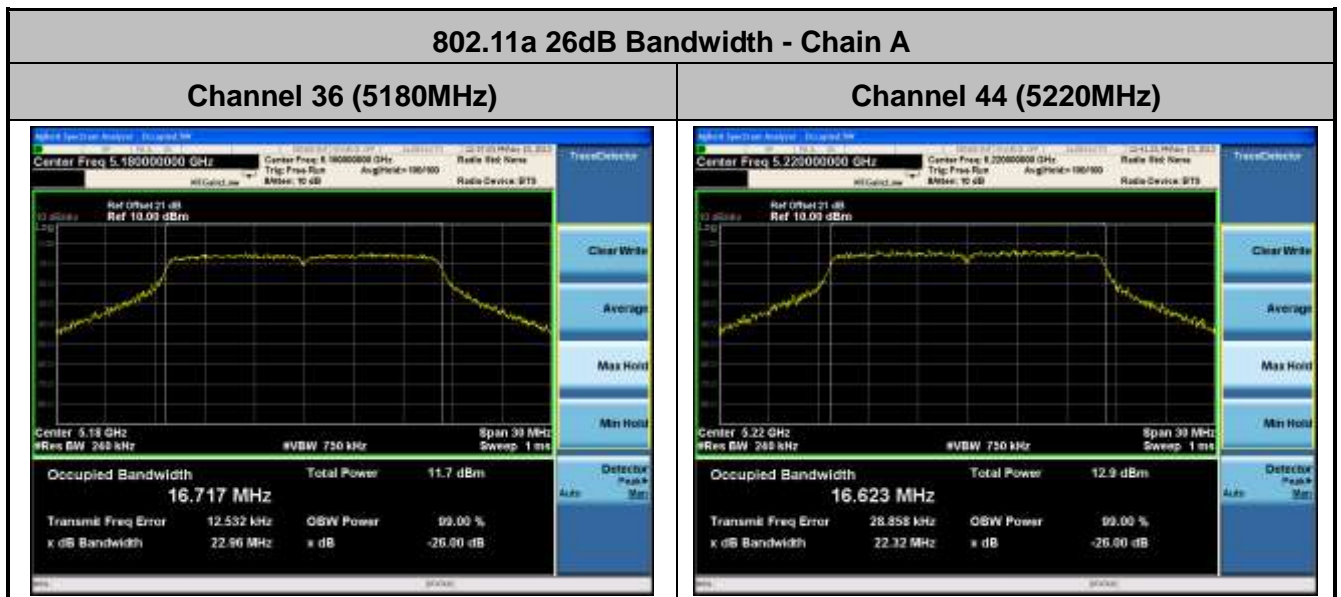
1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 26$. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediated power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth.
3. $VBW \geq 3 \times RBW$
4. Detector = Peak
5. Trace mode = max hold

7.2.4. Test Setup



7.2.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Limit	Result
Chain A						
802.11a	6	36	5180	22.96	--	Pass
802.11a	6	44	5220	22.32	--	Pass
802.11a	6	48	5240	22.13	--	Pass
Chain B						
802.11a	6	36	5180	22.17	--	Pass
802.11a	6	44	5220	22.30	--	Pass
802.11a	6	48	5240	22.02	--	Pass
Chain C						
802.11a	6	36	5180	22.08	--	Pass
802.11a	6	44	5220	21.54	--	Pass
802.11a	6	48	5240	22.06	--	Pass

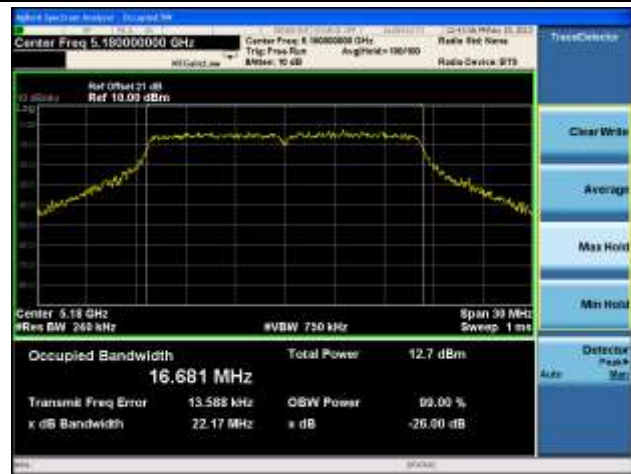


Channel 48 (5240MHz)



802.11a 26dB Bandwidth - Chain B

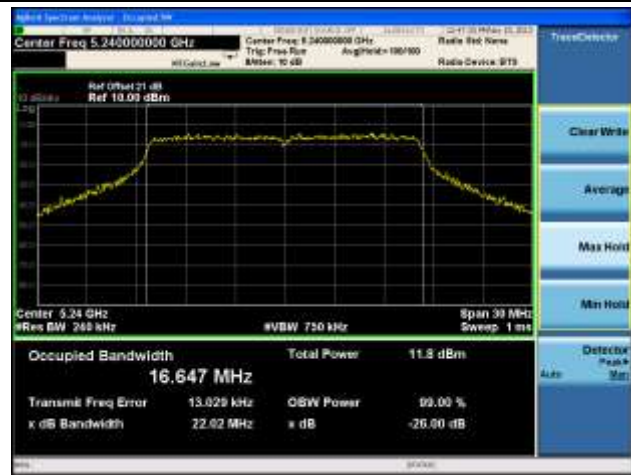
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



802.11a 26dB Bandwidth - Chain C

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Limit	Result
Chain A						
802.11n-HT20	6.5/7.2	36	5180	22.44	--	Pass
802.11n-HT20	6.5/7.2	44	5220	22.91	--	Pass
802.11n-HT20	6.5/7.2	48	5240	23.06	--	Pass
Chain B						
802.11n-HT20	6.5/7.2	36	5180	22.74	--	Pass
802.11n-HT20	6.5/7.2	44	5220	22.23	--	Pass
802.11n-HT20	6.5/7.2	48	5240	22.33	--	Pass
Chain C						
802.11n-HT20	6.5/7.2	36	5180	23.19	--	Pass
802.11n-HT20	6.5/7.2	44	5220	22.70	--	Pass
802.11n-HT20	6.5/7.2	48	5240	22.89	--	Pass
Chain A / Chain A + B						
802.11n-HT20	13/14.4	36	5180	21.60	--	Pass
802.11n-HT20	13/14.4	44	5220	21.97	--	Pass
802.11n-HT20	13/14.4	48	5240	21.84	--	Pass
Chain B / Chain A + B						
802.11n-HT20	13/14.4	36	5180	21.69	--	Pass
802.11n-HT20	13/14.4	44	5220	21.87	--	Pass
802.11n-HT20	13/14.4	48	5240	21.87	--	Pass
Chain A / Chain A + B + C						
802.11n-HT20	19.5/21.7	36	5180	23.11	--	Pass
802.11n-HT20	19.5/21.7	44	5220	22.98	--	Pass
802.11n-HT20	19.5/21.7	48	5240	22.75	--	Pass
Chain B / Chain A + B + C						
802.11n-HT20	19.5/21.7	36	5180	22.16	--	Pass
802.11n-HT20	19.5/21.7	44	5220	22.04	--	Pass
802.11n-HT20	19.5/21.7	48	5240	22.59	--	Pass
Chain C / Chain A + B + C						
802.11n-HT20	19.5/21.7	36	5180	21.93	--	Pass
802.11n-HT20	19.5/21.7	44	5220	22.29	--	Pass
802.11n-HT20	19.5/21.7	48	5240	22.85	--	Pass

802.11n-HT20 26dB Bandwidth – Chain A

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



802.11n-HT20 26dB Bandwidth – Chain B

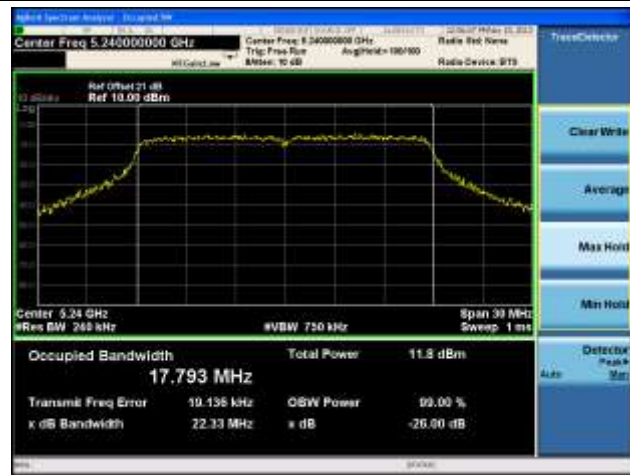
Channel 36 (5180MHz)



Channel 44 (5220MHz)

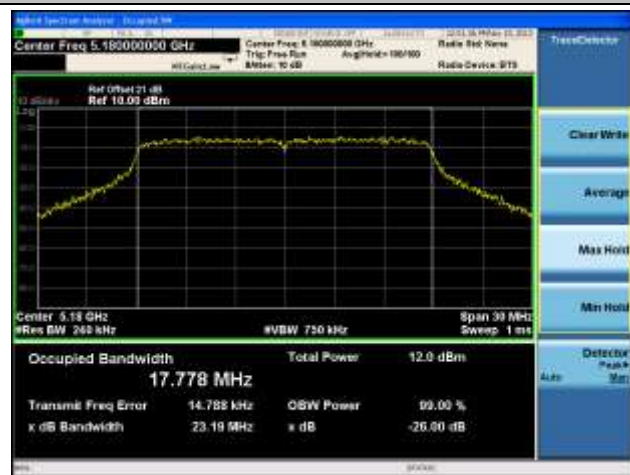


Channel 48 (5240MHz)

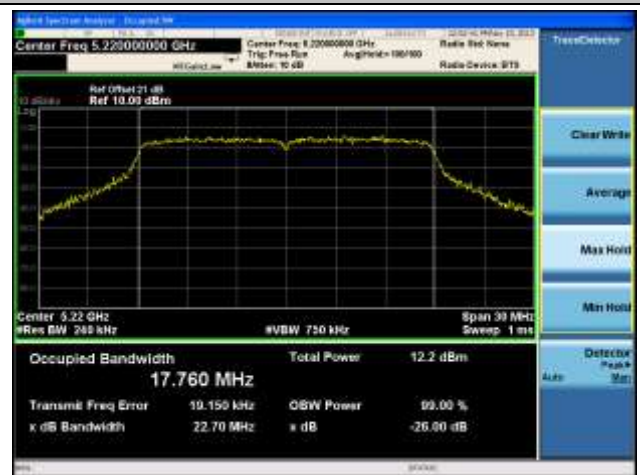


802.11n-HT20 26dB Bandwidth – Chain C

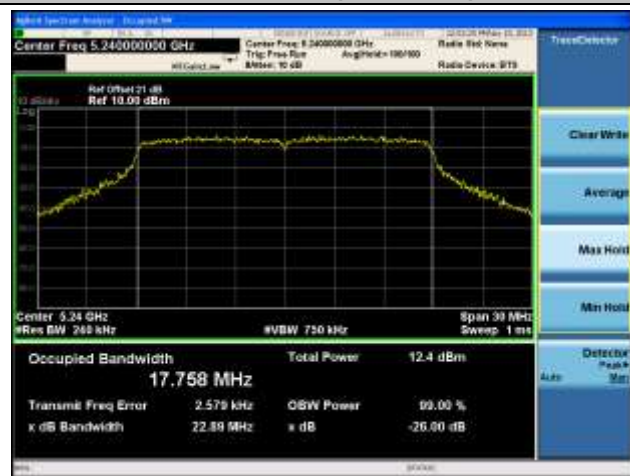
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)

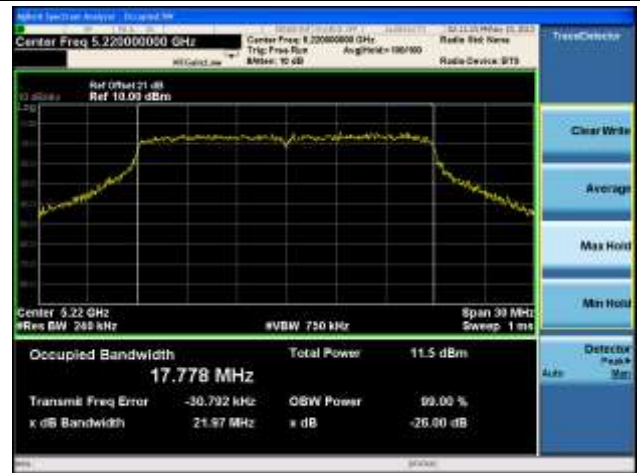


802.11n-HT20 26dB Bandwidth – Chain A / Chain A + B

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



802.11n-HT20 26dB Bandwidth – Chain B / Chain A + B

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)

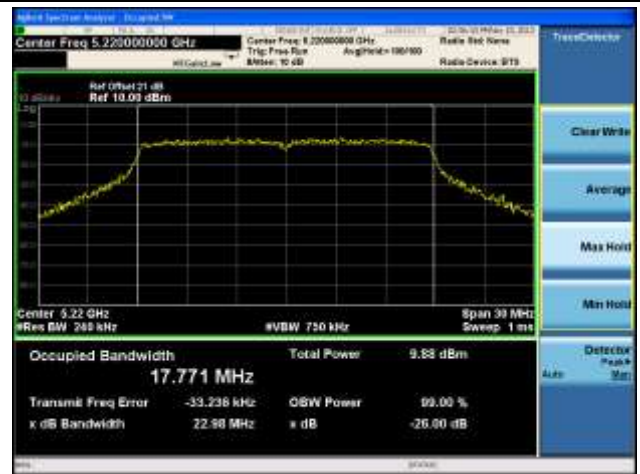


802.11n-HT20 26dB Bandwidth – Chain A / Chain A + B + C

Channel 36 (5180MHz)



Channel 44 (5220MHz)

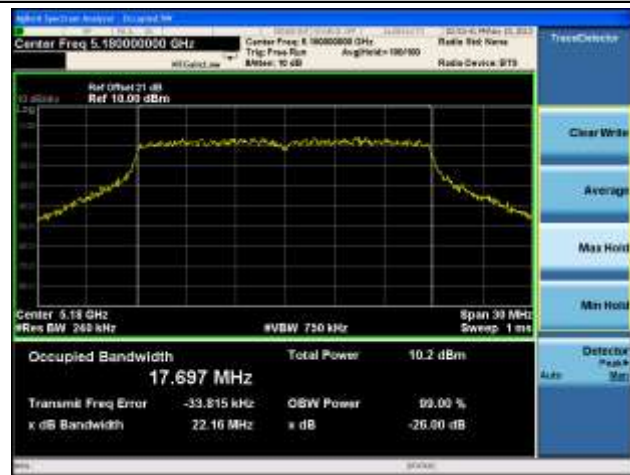


Channel 48 (5240MHz)

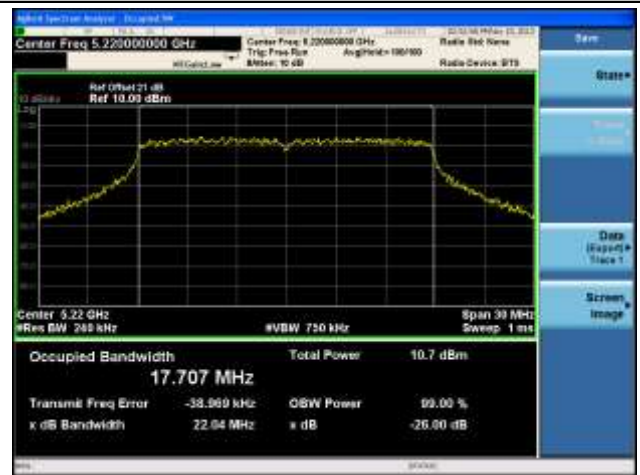


802.11n-HT20 26dB Bandwidth – Chain B / Chain A + B + C

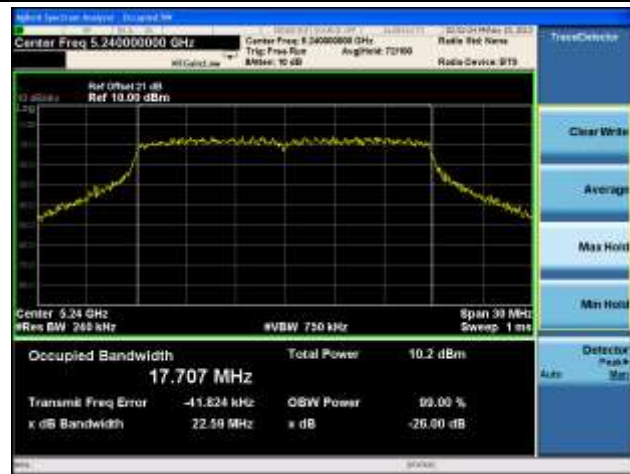
Channel 36 (5180MHz)



Channel 44 (5220MHz)

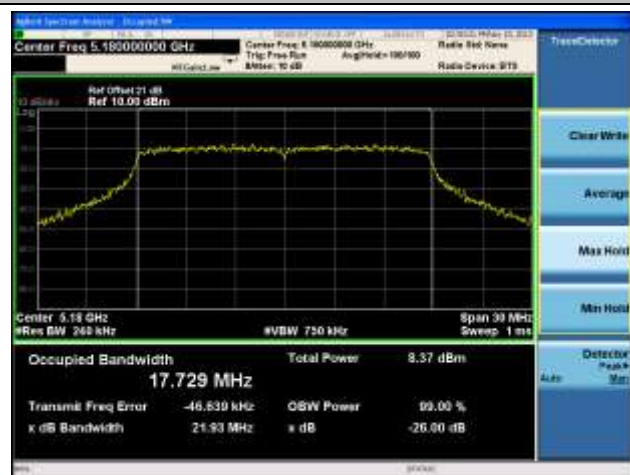


Channel 48 (5240MHz)

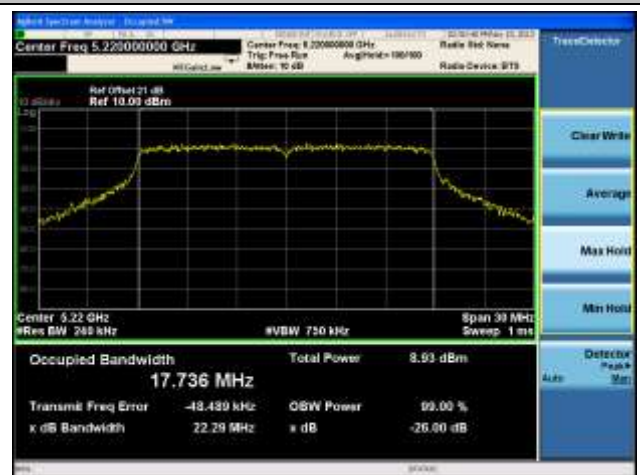


802.11n-HT20 26dB Bandwidth – Chain C / Chain A + B + C

Channel 36 (5180MHz)



Channel 44 (5220MHz)



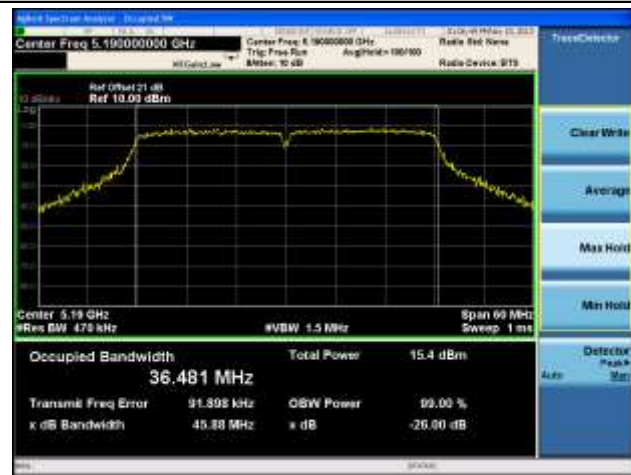
Channel 48 (5240MHz)

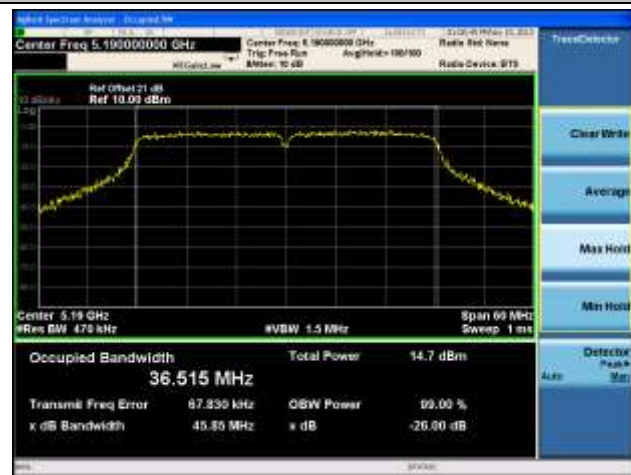


Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Limit	Result
Chain A						
802.11n-HT40	13.5/15	38	5190	46.81	--	Pass
802.11n-HT40	13.5/15	46	5230	45.62	--	Pass
Chain B						
802.11n-HT40	13.5/15	38	5190	45.88	--	Pass
802.11n-HT40	13.5/15	46	5230	46.10	--	Pass
Chain C						
802.11n-HT40	13.5/15	38	5190	45.85	--	Pass
802.11n-HT40	13.5/15	46	5230	46.20	--	Pass
Chain A / Chain A + B						
802.11n-HT40	27/30	38	5190	42.74	--	Pass
802.11n-HT40	27/30	46	5230	43.85	--	Pass
Chain B / Chain A + B						
802.11n-HT40	27/30	38	5190	44.23	--	Pass
802.11n-HT40	27/30	46	5230	44.08	--	Pass
Chain A / Chain A + B + C						
802.11n-HT40	40.5/45	38	5190	44.20	--	Pass
802.11n-HT40	40.5/45	46	5230	46.01	--	Pass
Chain B / Chain A + B + C						
802.11n-HT40	40.5/45	38	5190	42.82	--	Pass
802.11n-HT40	40.5/45	46	5230	43.62	--	Pass
Chain C / Chain A + B + C						
802.11n-HT40	40.5/45	38	5190	43.62	--	Pass
802.11n-HT40	40.5/45	46	5230	44.65	--	Pass

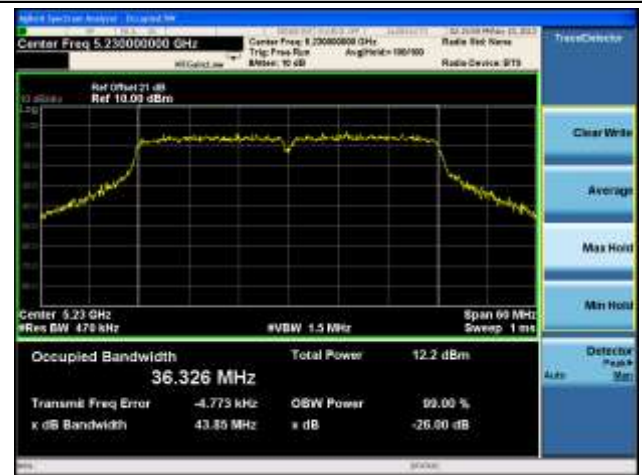
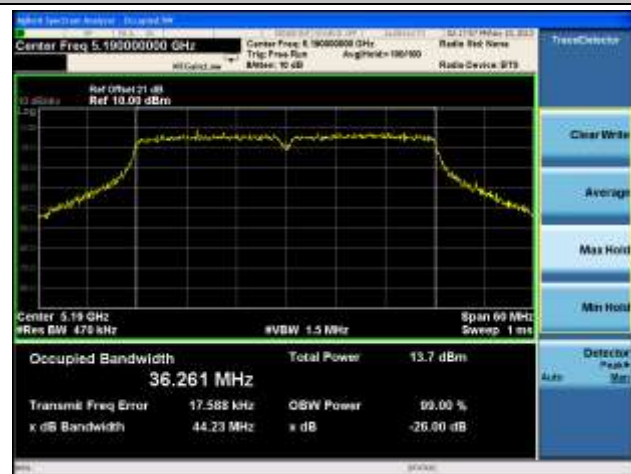
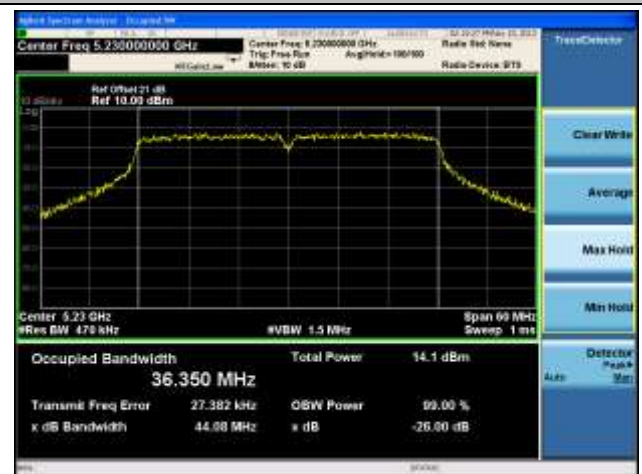
802.11n-HT40 26dB Bandwidth – Chain A
Channel 38 (5190MHz)

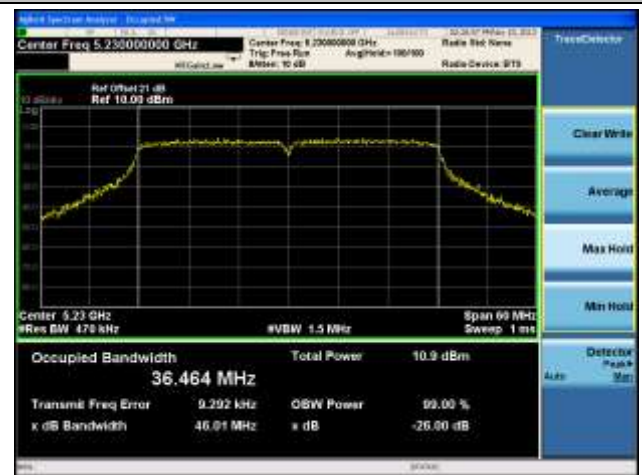
Channel 46 (5230MHz)

802.11n-HT40 26dB Bandwidth – Chain B
Channel 38 (5190MHz)

Channel 46 (5230MHz)

802.11n-HT40 26dB Bandwidth – Chain C
Channel 38 (5190MHz)

Channel 46 (5230MHz)


802.11n-HT40 26dB Bandwidth – Chain A / Chain A + B
Channel 38 (5190MHz)

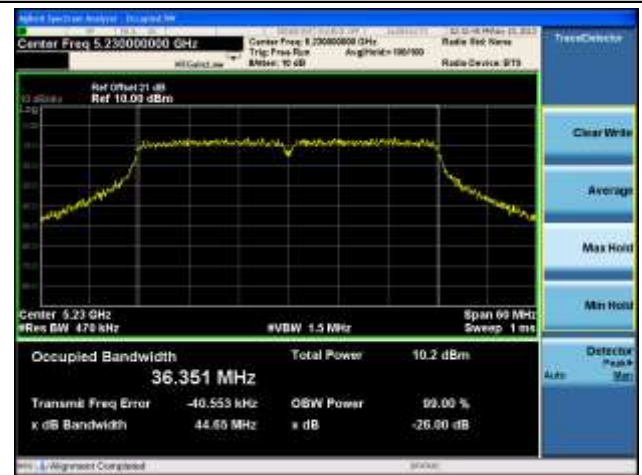
Channel 46 (5230MHz)

802.11n-HT40 26dB Bandwidth – Chain B / Chain A + B
Channel 38 (5190MHz)

Channel 46 (5230MHz)

802.11n-HT40 26dB Bandwidth – Chain A / Chain A + B + C
Channel 38 (5190MHz)

Channel 46 (5230MHz)


802.11n-HT40 26dB Bandwidth – Chain B / Chain A + B + C
Channel 38 (5190MHz)

Channel 46 (5230MHz)

802.11n-HT40 26dB Bandwidth – Chain C / Chain A + B + C
Channel 38 (5190MHz)

Channel 46 (5230MHz)


7.3. Output Power Measurement

7.3.1. Test Limit

In the 5.15-5.25GHz band, the maximum permissible conducted output power is the lesser of 50mW (16.99dBm) and $4\text{dBm} + 10 \cdot \text{Log}(26\text{dB BW}) = 4\text{dBm} + 10\log_{10}(21.54) = 17.33\text{dBm}$

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

$$\text{Limit (dBm)} = 16.99 - (15 - 6) / 1 = 7.99\text{dBm}$$

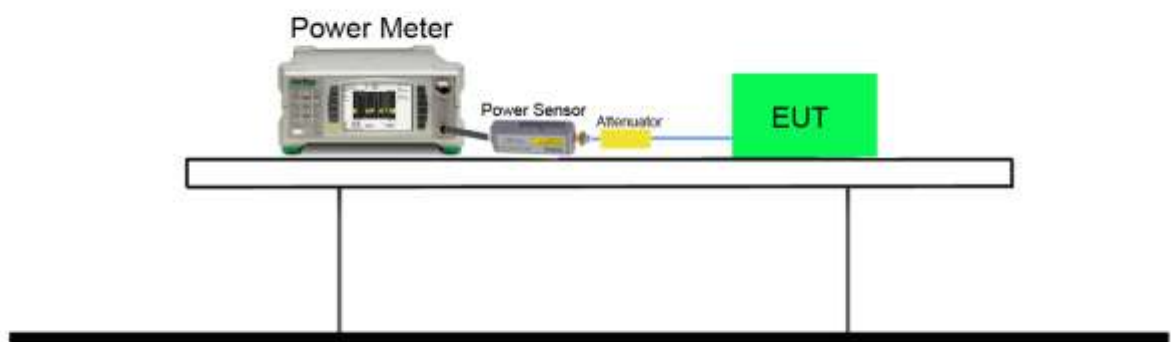
7.3.2. Test Procedure Used

KDB 789033 D01v01r03 - Section E) 3) b) Method PM-G

7.3.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.3.4. Test Setup



7.3.5. Test Result

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

MCS Index for 802.11n	N _{Tx}	Data Rate (Mbps)						
		802.11b	802.11g	802.11a	20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	6	6.5	7.2	13.5	15.0
1	1	2	9	9	13.0	14.4	27.0	30.0
2	1	5.5	12	12	19.5	21.7	40.5	45.0
3	1	11	18	18	26.0	28.9	54.0	60.0
4	1	---	24	24	39.0	43.3	81.0	90.0
5	1	---	36	36	52.0	57.8	108.0	120.0
6	1	---	48	48	58.5	65.0	121.5	135.0
7	1	---	54	54	65.0	72.2	135.0	150.0
8	2	---	---	---	13.0	14.4	27.0	30.0
9	2	---	---	---	26.0	28.9	54.0	60.0
10	2	---	---	---	39.0	43.3	81.0	90.0
11	2	---	---	---	52.0	57.8	108.0	120.0
12	2	---	---	---	78.0	86.7	162.0	180.0
13	2	---	---	---	104.0	115.6	216.0	240.0
14	2	---	---	---	117.0	130.0	243.0	270.0
15	2	---	---	---	130.0	144.0	270.0	300.0
16	3	---	---	---	19.5	21.7	40.5	45.0
17	3	---	---	---	39.0	43.3	81.0	90.0
18	3	---	---	---	58.5	65.0	121.5	135.0
19	3	---	---	---	78.0	86.7	162.0	180.0
20	3	---	---	---	117.0	130.0	243.0	270.0
21	3	---	---	---	156.0	173.3	324.0	360.0
22	3	---	---	---	175.5	195.0	364.5	405.0
23	3	---	---	---	195.0	216.7	405.0	450.0

Output power at various data rates for Chain A:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate (Mbps)	RMS Power (dBm)
802.11a	20	5220	44	6	5.26
				24	5.23
				54	5.14
802.11n	20	5220	44	6.5/7.2(MCS0)	5.83
				39/43.3(MCS4)	5.79
				65/72.2(MCS7)	5.77
802.11n	40	5190	38	13.5/15(MCS0)	7.88
				81/90(MCS4)	7.86
				135/150(MCS7)	7.83

Power Table List

Test Mode	N _{Tx}	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Chain A RMS Power (dBm)	Chain B RMS Power (dBm)	Chain C RMS Power (dBm)	Total RMS Power (dBm)	Limit (dBm)	Result
11a	1	6	36	5180	3.85	--	--	3.85	≤ 7.99	Pass
11a	1	6	44	5220	5.26	--	--	5.26	≤ 7.99	Pass
11a	1	6	48	5240	5.40	--	--	5.40	≤ 7.99	Pass
11a	1	6	36	5180	--	5.58	--	5.58	≤ 7.99	Pass
11a	1	6	44	5220	--	4.24	--	4.24	≤ 7.99	Pass
11a	1	6	48	5240	--	5.17	--	5.17	≤ 7.99	Pass
11a	1	6	36	5180	--	--	5.79	5.79	≤ 7.99	Pass
11a	1	6	44	5220	--	--	6.16	6.16	≤ 7.99	Pass
11a	1	6	48	5240	--	--	6.44	6.44	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	36	5180	4.93	--	--	4.93	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	44	5220	5.83	--	--	5.83	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	48	5240	5.77	--	--	5.77	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	36	5180	--	5.91	--	5.91	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	44	5220	--	4.46	--	4.46	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	48	5240	--	5.27	--	5.27	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	36	5180	--	--	5.74	5.74	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	44	5220	--	--	6.09	6.09	≤ 7.99	Pass
11n-HT20	1	6.5/7.2	48	5240	--	--	6.33	6.33	≤ 7.99	Pass

Test Mode	N _{Tx}	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Chain A RMS Power (dBm)	Chain B RMS Power (dBm)	Chain C RMS Power (dBm)	Total RMS Power (dBm)	Limit (dBm)	Result
11n-HT20	2	13/14.4	36	5180	1.28	1.30	--	4.30	≤ 7.99	Pass
11n-HT20	2	13/14.4	44	5220	2.21	2.91	--	5.58	≤ 7.99	Pass
11n-HT20	2	13/14.4	48	5240	2.17	2.83	--	5.52	≤ 7.99	Pass
11n-HT20	3	19.5/21.7	36	5180	0.53	0.30	-1.10	4.74	≤ 7.99	Pass
11n-HT20	3	19.5/21.7	44	5220	0.91	1.19	0.17	5.55	≤ 7.99	Pass
11n-HT20	3	19.5/21.7	48	5240	0.88	1.05	0.09	5.46	≤ 7.99	Pass
11n-HT40	1	13.5/15	38	5190	7.88	--	--	7.88	≤ 7.99	Pass
11n-HT40	1	13.5/15	46	5230	7.07	--	--	7.07	≤ 7.99	Pass
11n-HT40	1	13.5/15	38	5190	--	7.37	--	7.37	≤ 7.99	Pass
11n-HT40	1	13.5/15	46	5230	--	7.84	--	7.84	≤ 7.99	Pass
11n-HT40	1	13.5/15	38	5190	--	--	6.88	6.88	≤ 7.99	Pass
11n-HT40	1	13.5/15	46	5230	--	--	7.45	7.45	≤ 7.99	Pass
11n-HT40	2	27/30	38	5190	5.09	4.65	--	7.89	≤ 7.99	Pass
11n-HT40	2	27/30	46	5230	4.22	5.34	--	7.83	≤ 7.99	Pass
11n-HT40	3	40.5/45	38	5190	3.09	3.36	2.30	7.71	≤ 7.99	Pass
11n-HT40	3	40.5/45	46	5230	2.42	3.47	1.90	7.42	≤ 7.99	Pass

7.4. Power Spectral Density Measurement

7.4.1. Test Limit

In the 5.15-5.25GHz band, the maximum permissible power spectral density is 4dBm/MHz.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

$$\text{Limit (dBm/MHz)} = 4 - (15 - 6) / 1 = -5 \text{ dBm/MHz}$$

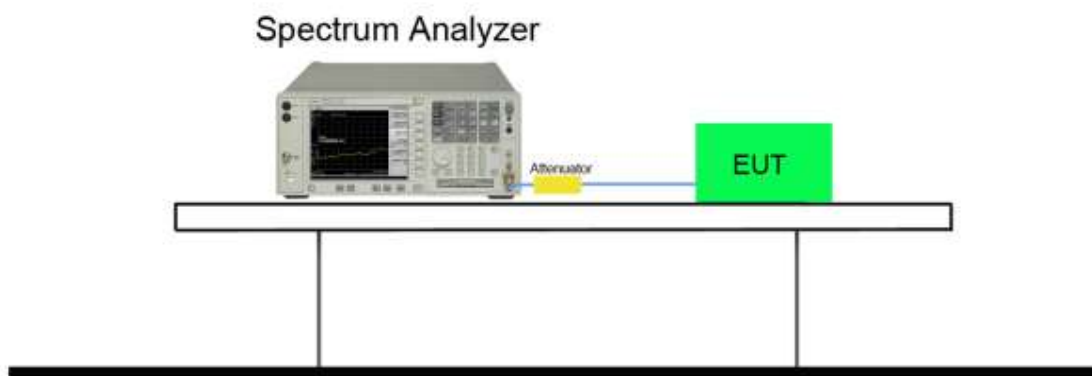
7.4.2. Test Procedure Used

KDB 789033 D01v01r03 - Section F

7.4.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (RMS)
7. Sweep time = auto
8. Trigger was set to free run since the EUT was operating at a duty cycle $\geq 98\%$
9. Trace was averaged over 100 sweeps
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

7.4.4. Test Setup



7.4.5. Test Result

Test Mode	N _{Tx}	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Chain A PSD (dBm)	Chain B PSD (dBm)	Chain C PSD (dBm)	Total PSD (dBm)	Limit (dBm /MHz)	Result
11a	1	6	36	5180	-5.609	--	--	-5.609	≤ -5	Pass
11a	1	6	44	5220	-5.577	--	--	-5.577	≤ -5	Pass
11a	1	6	48	5240	-5.152	--	--	-5.152	≤ -5	Pass
11a	1	6	36	5180	--	-5.144	--	-5.144	≤ -5	Pass
11a	1	6	44	5220	--	-6.862	--	-6.862	≤ -5	Pass
11a	1	6	48	5240	--	-5.599	--	-5.599	≤ -5	Pass
11a	1	6	36	5180	--	--	-5.462	-5.462	≤ -5	Pass
11a	1	6	44	5220	--	--	-5.122	-5.122	≤ -5	Pass
11a	1	6	48	5240	--	--	-5.155	-5.155	≤ -5	Pass
11n-HT20	1	6.5/7.2	36	5180	-6.546	--	--	-6.546	≤ -5	Pass
11n-HT20	1	6.5/7.2	44	5220	-5.730	--	--	-5.730	≤ -5	Pass
11n-HT20	1	6.5/7.2	48	5240	-5.575	--	--	-5.575	≤ -5	Pass
11n-HT20	1	6.5/7.2	36	5180	--	-5.575	--	-5.575	≤ -5	Pass
11n-HT20	1	6.5/7.2	44	5220	--	-6.781	--	-6.781	≤ -5	Pass
11n-HT20	1	6.5/7.2	48	5240	--	-5.686	--	-5.686	≤ -5	Pass
11n-HT20	1	6.5/7.2	36	5180	--	--	-5.799	-5.799	≤ -5	Pass
11n-HT20	1	6.5/7.2	44	5220	--	--	-5.248	-5.248	≤ -5	Pass
11n-HT20	1	6.5/7.2	48	5240	--	--	-5.233	-5.233	≤ -5	Pass
11n-HT20	2	13/14.4	36	5180	-9.408	-9.296	--	-6.341	≤ -5	Pass
11n-HT20	2	13/14.4	44	5220	-9.093	-8.188	--	-5.607	≤ -5	Pass
11n-HT20	2	13/14.4	48	5240	-9.134	-8.255	--	-5.662	≤ -5	Pass
11n-HT20	3	19.5/21.7	36	5180	-10.495	-10.790	-12.156	-6.318	≤ -5	Pass
11n-HT20	3	19.5/21.7	44	5220	-10.338	-9.944	-11.160	-5.680	≤ -5	Pass
11n-HT20	3	19.5/21.7	48	5240	-10.343	-10.132	-11.384	-5.815	≤ -5	Pass
11n-HT40	1	13.5/15	38	5190	-6.529	--	--	-6.529	≤ -5	Pass
11n-HT40	1	13.5/15	46	5230	-6.407	--	--	-6.407	≤ -5	Pass
11n-HT40	1	13.5/15	38	5190	--	-6.096	--	-6.096	≤ -5	Pass
11n-HT40	1	13.5/15	46	5230	--	-5.677	--	-5.677	≤ -5	Pass
11n-HT40	1	13.5/15	38	5190	--	--	-6.139	-6.139	≤ -5	Pass
11n-HT40	1	13.5/15	46	5230	--	--	-5.970	-5.970	≤ -5	Pass
11n-HT40	2	27/30	38	5190	-8.466	-10.260	--	-6.261	≤ -5	Pass
11n-HT40	2	27/30	46	5230	-9.108	-11.270	--	-7.046	≤ -5	Pass

Test Mode	N _{Tx}	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Chain A PSD (dBm)	Chain B PSD (dBm)	Chain C PSD (dBm)	Total PSD (dBm)	Limit (dBm /MHz)	Result
11n-HT40	3	40.5/45	38	5190	-10.260	-10.297	-11.604	-5.906	≤ -5	Pass
11n-HT40	3	40.5/45	46	5230	-11.270	-10.064	-11.630	-6.164	≤ -5	Pass

802.11a PSD – Chain A

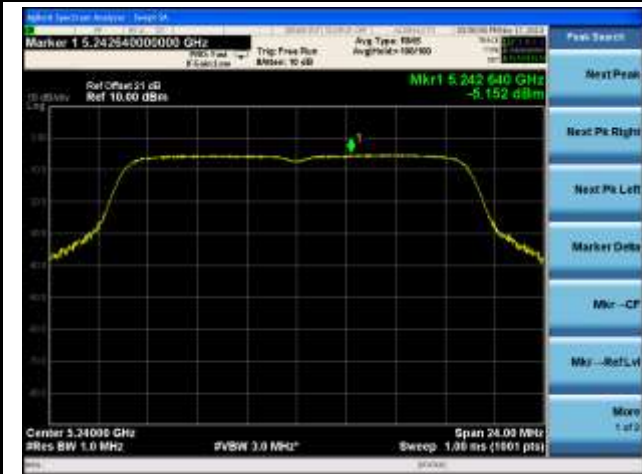
Channel 36 (5180MHz)



Channel 44 (5220MHz)

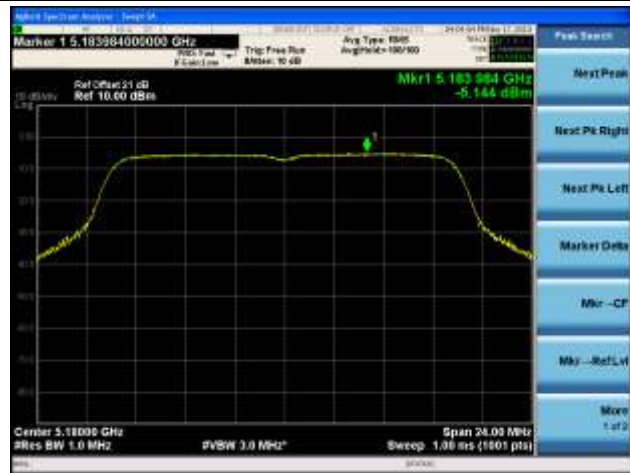


Channel 48 (5240MHz)



802.11a PSD – Chain B

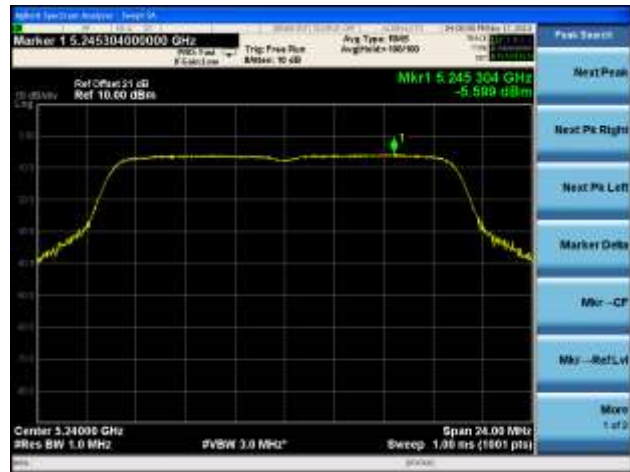
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)

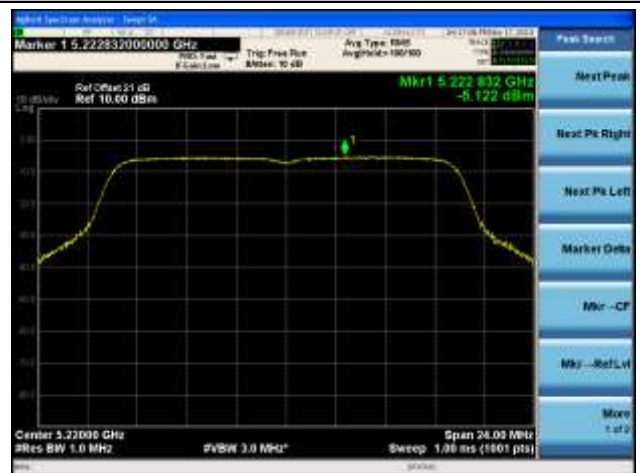


802.11a PSD – Chain C

Channel 36 (5180MHz)



Channel 44 (5220MHz)

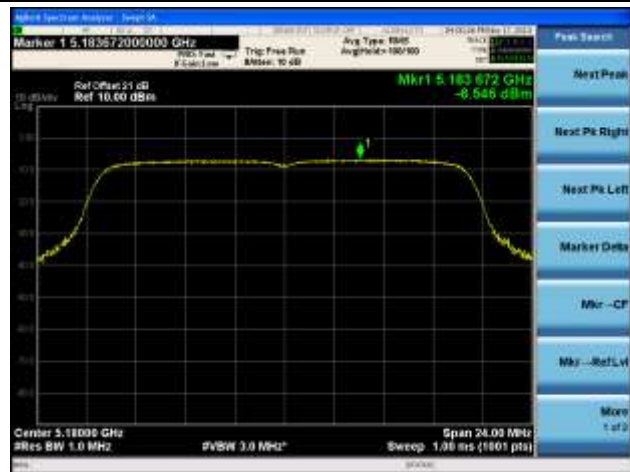


Channel 48 (5240MHz)

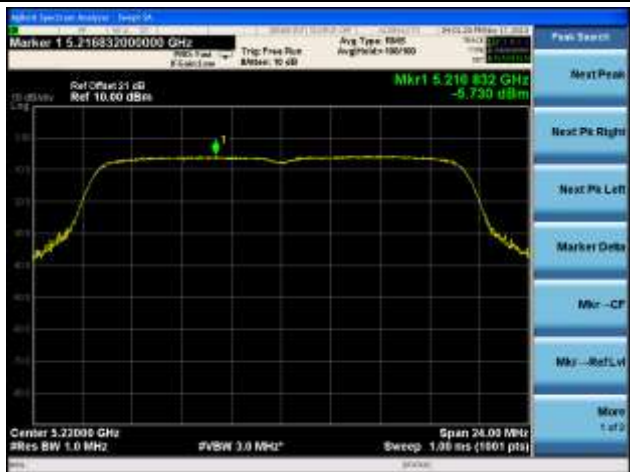


802.11n-HT20 PSD – Chain A

Channel 36 (5180MHz)



Channel 44 (5220MHz)

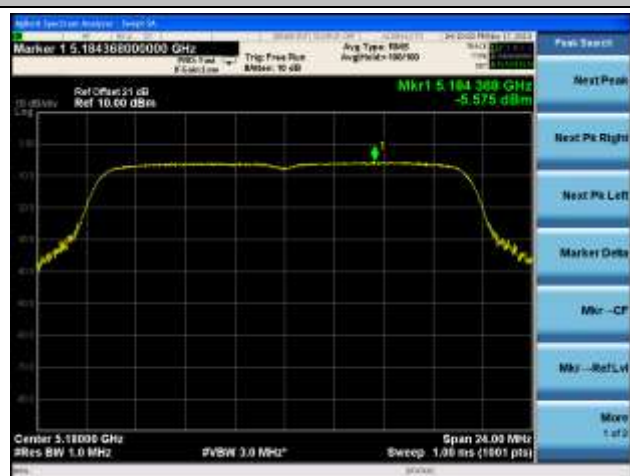


Channel 48 (5240MHz)

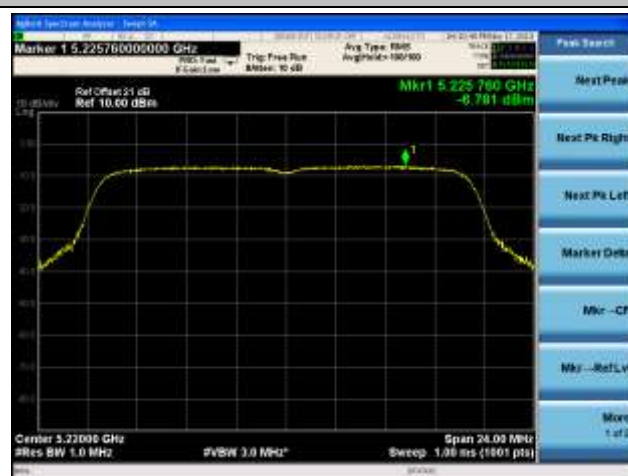


802.11n-HT20 PSD – Chain B

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)

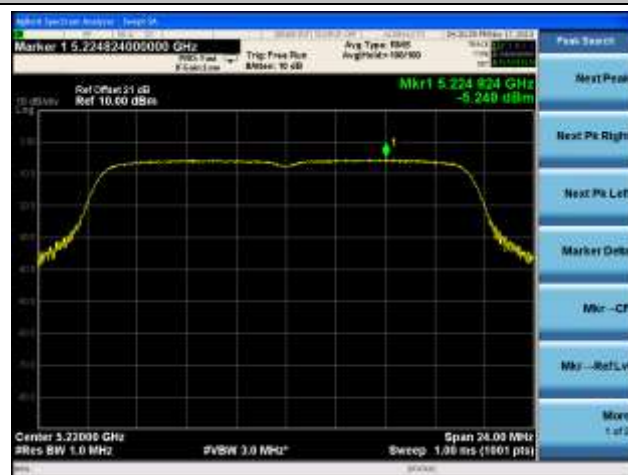


802.11n-HT20 PSD – Chain C

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



802.11n-HT20 PSD – Chain A / Chain A + B

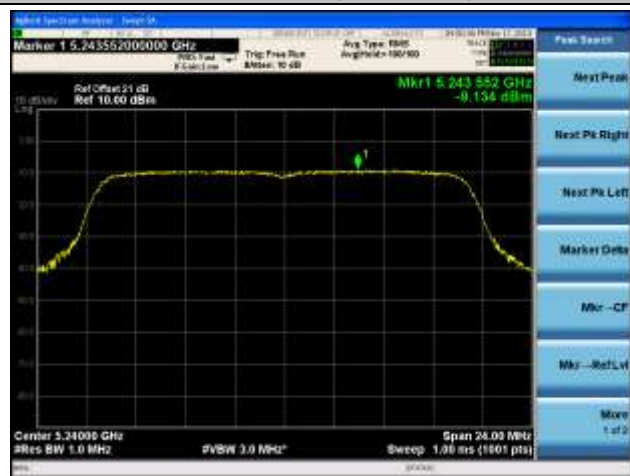
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



802.11n-HT20 PSD – Chain B / Chain A + B

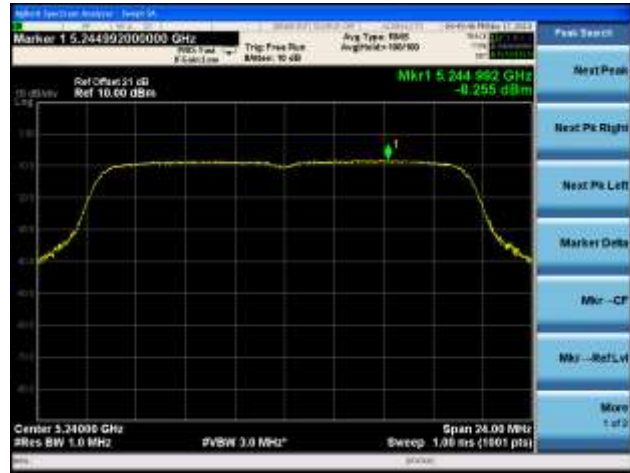
Channel 36 (5180MHz)



Channel 44 (5220MHz)

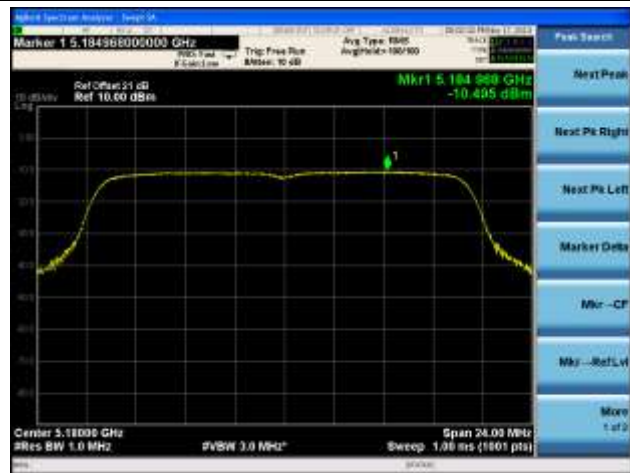


Channel 48 (5240MHz)

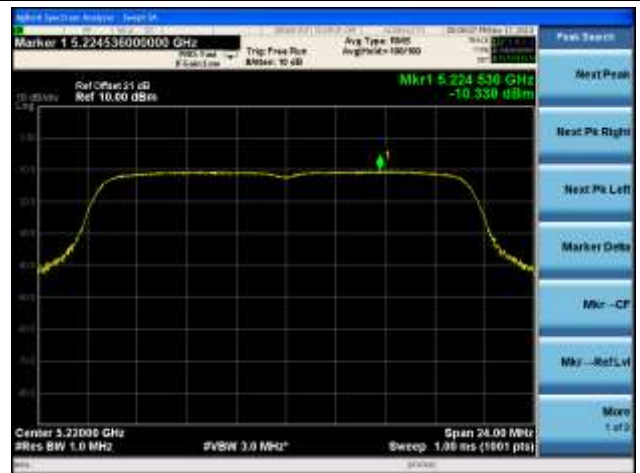


802.11n-HT20 PSD – Chain A / Chain A + B + C

Channel 36 (5180MHz)



Channel 44 (5220MHz)



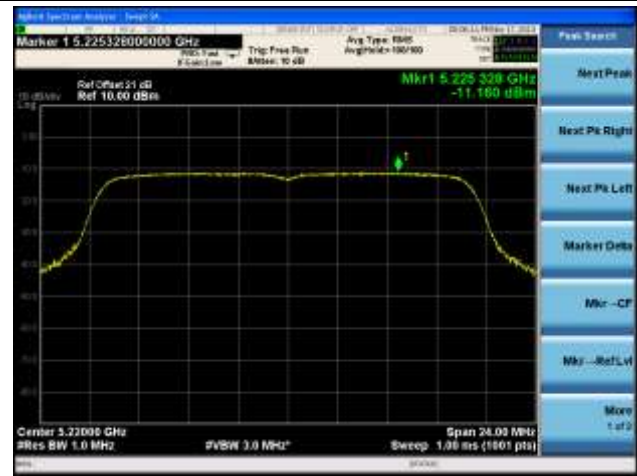
Channel 48 (5240MHz)	
802.11n-HT20 PSD – Chain B / Chain A + B + C	
Channel 36 (5180MHz)	Channel 44 (5220MHz)
Channel 48 (5240MHz)	

802.11n-HT20 PSD – Chain C / Chain A + B + C

Channel 36 (5180MHz)



Channel 40 (5200MHz)

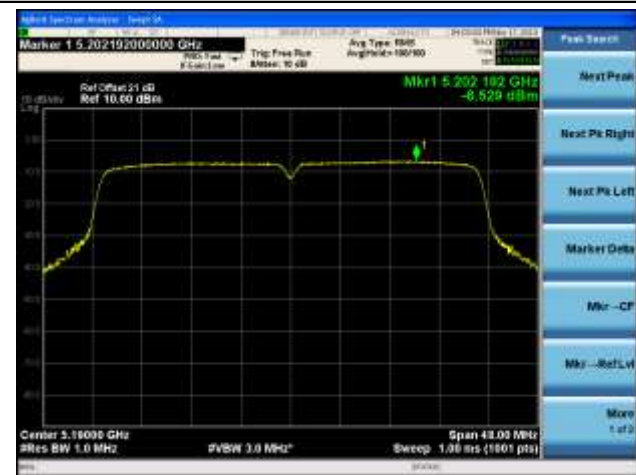


Channel 48 (5240MHz)

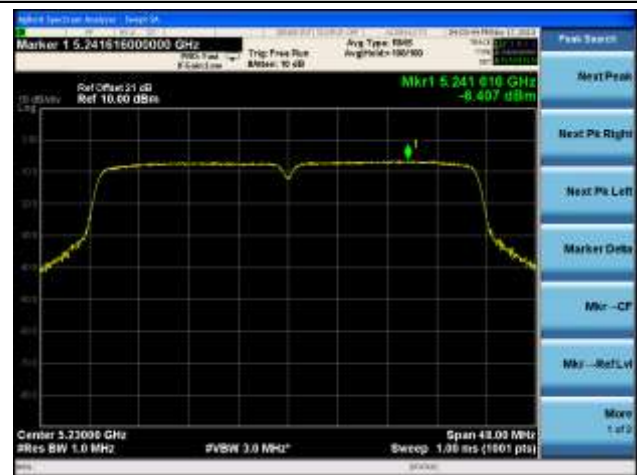


802.11n-HT40 PSD – Chain A

Channel 38 (5190MHz)



Channel 46 (5230MHz)



802.11n-HT40 PSD – Chain B

Channel 38 (5190MHz)



Channel 46 (5230MHz)

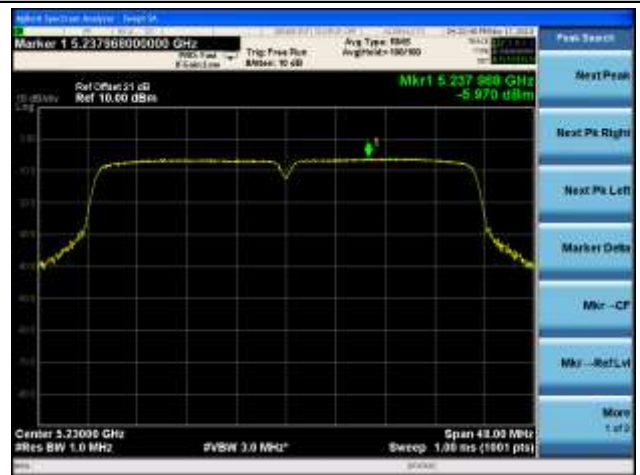


802.11n-HT40 PSD – Chain C

Channel 38 (5190MHz)



Channel 46 (5230MHz)



802.11n-HT40 PSD – Chain A / Chain A + B

Channel 38 (5190MHz)

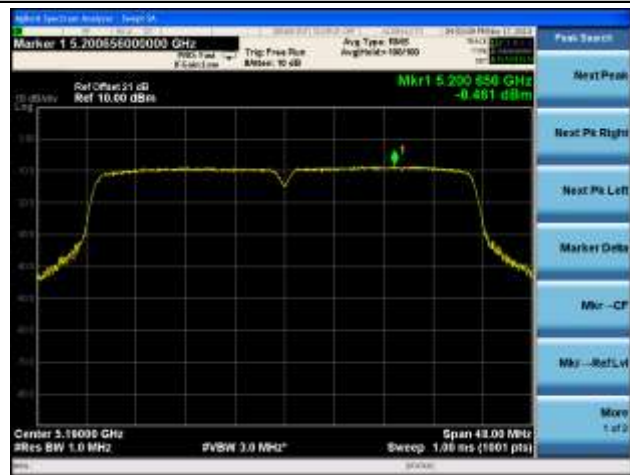


Channel 46 (5230MHz)

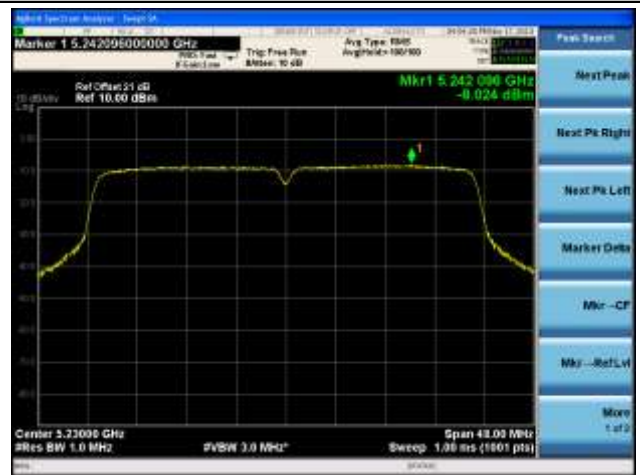


802.11n-HT40 PSD – Chain B / Chain A + B

Channel 38 (5190MHz)



Channel 46 (5230MHz)



802.11n-HT40 PSD – Chain A / Chain A + B + C

Channel 38 (5190MHz)



Channel 46 (5230MHz)



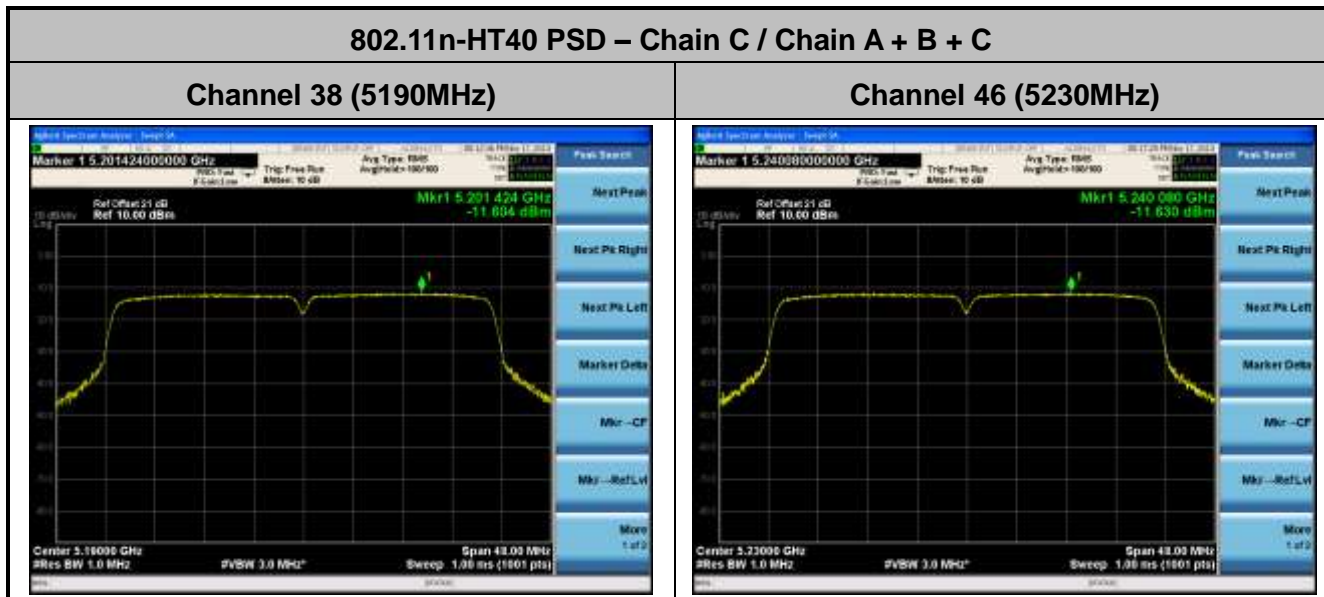
802.11n-HT40 PSD – Chain B / Chain A + B + C

Channel 38 (5190MHz)



Channel 46 (5230MHz)





7.5. Peak Excursion Ratio Measurement

7.5.1. Test Limit

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

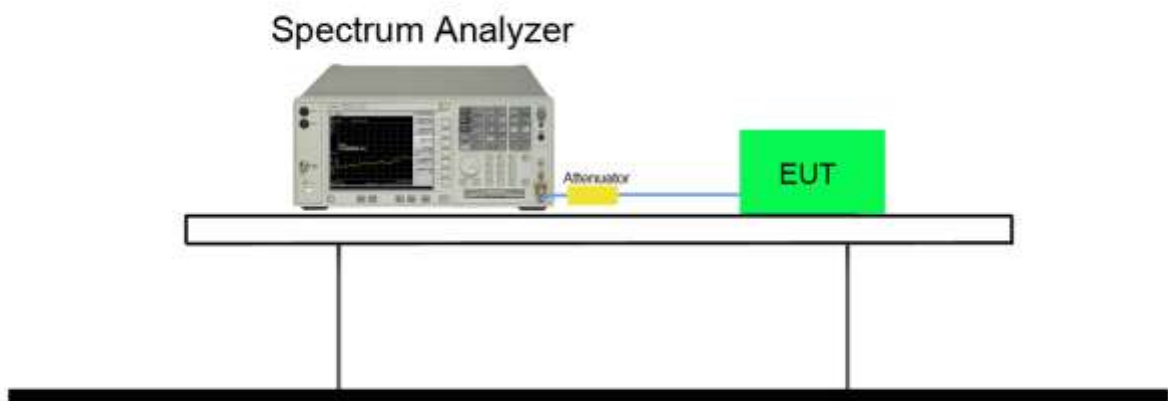
7.5.2. Test Procedure Used

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7.5.3. Test Setting

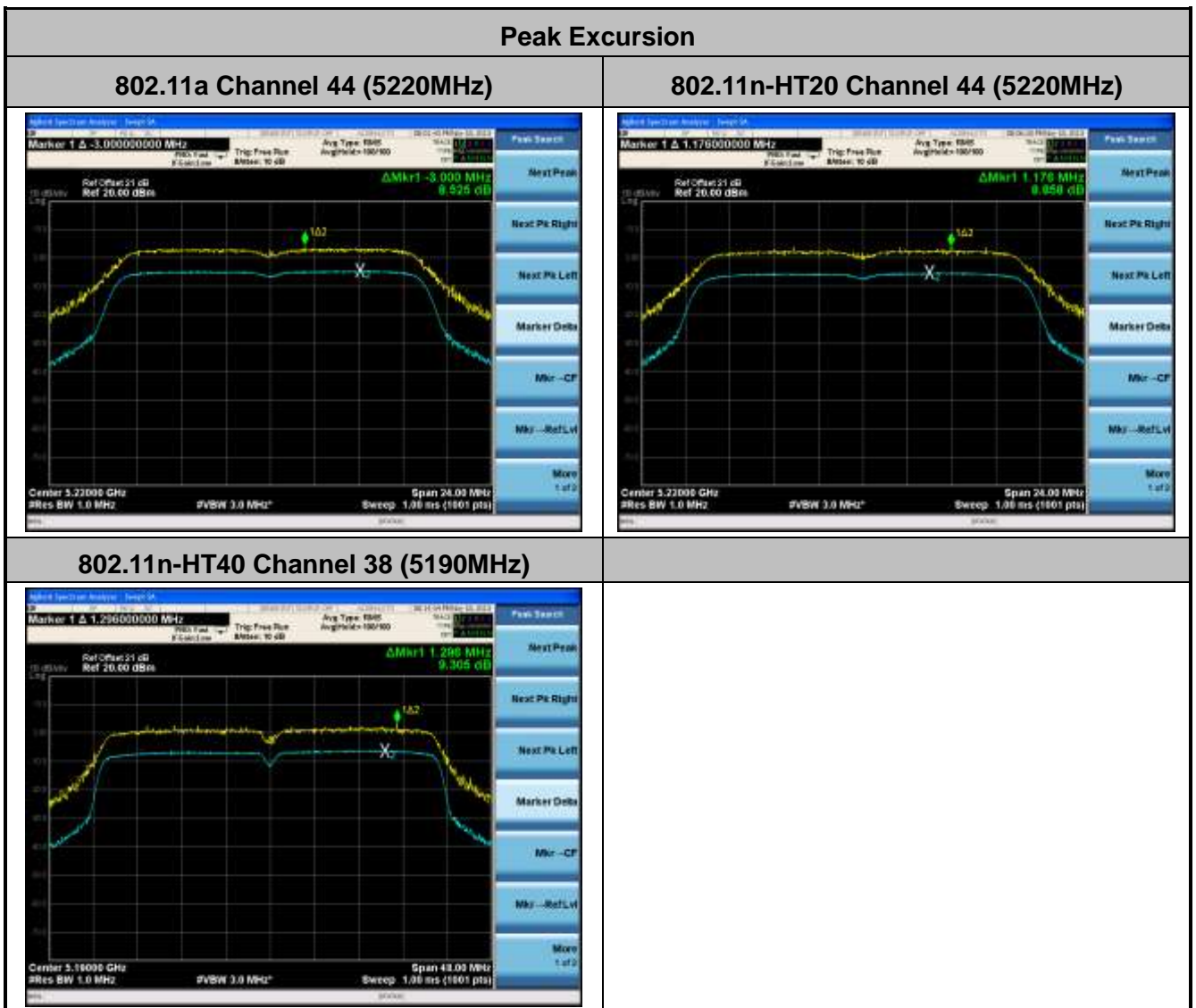
1. Analyzer was set to the center frequency of the UNII channel under investigation
 2. Span was set to encompass the entire emission bandwidth of the signal
 3. RBW = 1MHz
 4. VBW = 3MHz
 5. Detector = Peak
 6. Trace mode = max hold
 7. Trace was allowed to stabilize
 8. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.
- This level was compared to the peak power density level found from the previous section to determine the peak excursion.

7.5.4. Test Setup



7.5.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Peak Excursion Ratio (dB)	Max. Permissible Peak Excursion Ratio (dB)	Result
802.11a	6	44	5220	8.525	13	Pass
802.11n-HT20	6.5/7.2	44	5220	8.585	13	Pass
802.11n-HT40	13.5/15	38	5190	9.305	13	Pass



7.6. Frequency Stability Measurement

7.6.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

7.6.2. Test Procedure Used

Frequency Stability Under Temperature Variations:

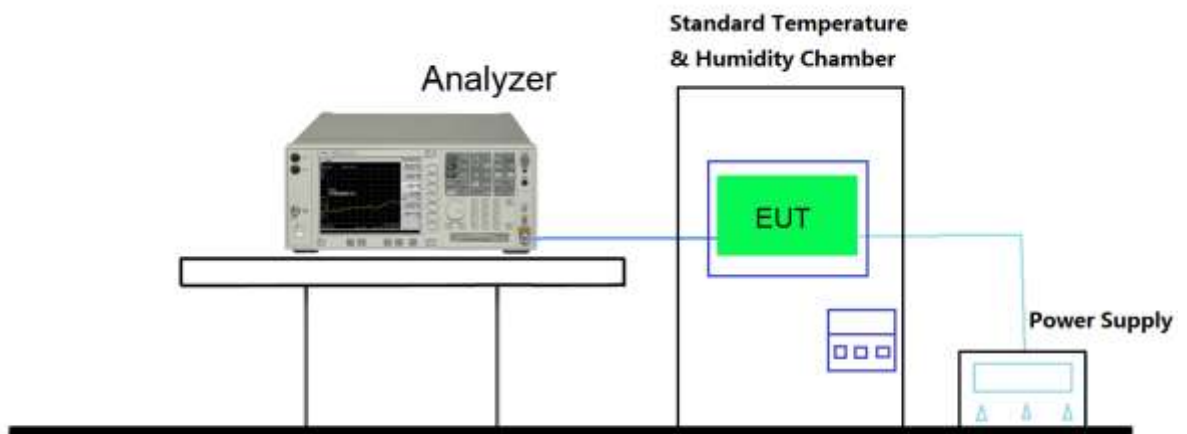
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

7.6.3. Test Setup



7.6.4. Test Result

Test Mode:	802.11a	Test Site:	TR3
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	5220MHz		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100%	120	+ 20 (Ref)	5,220,034,711	34,711	0.00000665
100%		- 30	5,219,956,470	-43,530	-0.00000834
100%		- 20	5,219,982,231	-17,769	-0.00000340
100%		- 10	5,220,010,609	10,609	0.00000203
100%		0	5,220,024,207	24,207	0.00000464
100%		+ 10	5,220,037,021	37,021	0.00000709
100%		+ 20	5,220,034,711	34,711	0.00000665
100%		+ 30	5,220,032,595	32,595	0.00000624
100%		+ 40	5,220,040,192	40,192	0.00000770
100%		+ 50	5,220,054,374	54,374	0.00001042
115%		138	+ 20	5,220,030,142	30,142
85%	102	+ 20	5,220,034,524	34,524	0.00000661



Test Mode:	802.11n-HT20	Test Site:	TR3
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	5220MHz		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100%	120	+ 20 (Ref)	5,220,037,406	37,406	0.00000717
100%		- 30	5,219,958,509	-41,491	-0.00000795
100%		- 20	5,219,984,723	-15,277	-0.00000293
100%		- 10	5,220,008,878	8,878	0.00000170
100%		0	5,220,025,243	25,243	0.00000484
100%		+ 10	5,220,036,205	36,205	0.00000694
100%		+ 20	5,220,037,406	37,406	0.00000717
100%		+ 30	5,220,034,183	34,183	0.00000655
100%		+ 40	5,220,042,327	42,327	0.00000811
100%		+ 50	5,220,056,652	56,652	0.00001085
115%	138	+ 20	5,220,032,473	32,473	0.00000622
85%	102	+ 20	5,220,033,682	33,682	0.00000645

Test Mode:	802.11n-HT40	Test Site:	TR3
Test Channel:	38	Test Engineer:	Roy Cheng
Remark:	5190MHz		

Voltage (%)	Power (VAC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100%	120	+ 20 (Ref)	5,190,035,746	35,746	0.00000689
100%		- 30	5,189,957,770	-42,230	-0.00000814
100%		- 20	5,189,981,980	-18,020	-0.00000347
100%		- 10	5,190,009,296	9,296	0.00000179
100%		0	5,190,023,279	23,279	0.00000449
100%		+ 10	5,190,036,594	36,594	0.00000705
100%		+ 20	5,190,035,746	35,746	0.00000689
100%		+ 30	5,190,035,436	35,436	0.00000683
100%		+ 40	5,190,043,418	43,418	0.00000837
100%		+ 50	5,190,057,234	57,234	0.00001103
115%		138	+ 20	5,190,036,642	36,642
85%	102	+ 20	5,190,038,853	38,853	0.00000749

7.7. Radiated Spurious Emission Measurement

7.7.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.7.2. Test Procedure Used

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7.7.3. Test Setting

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Quasi-Peak Measurements below 1GHz

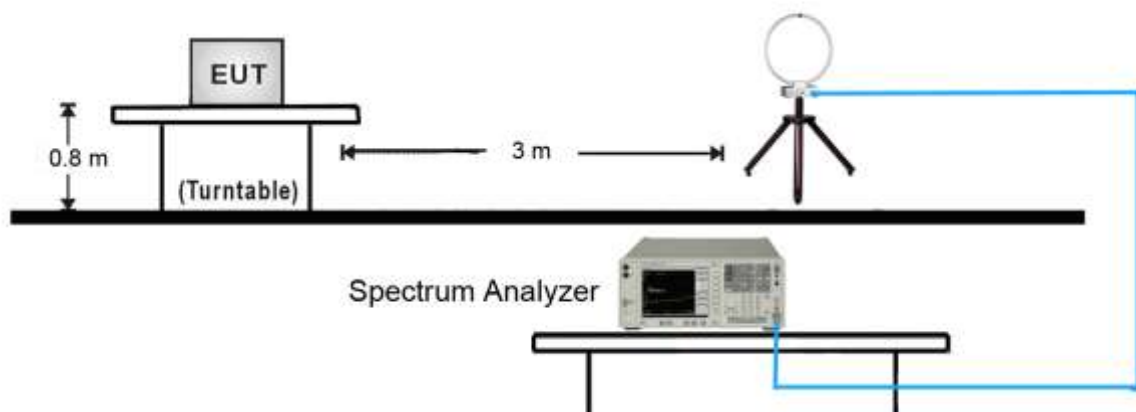
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

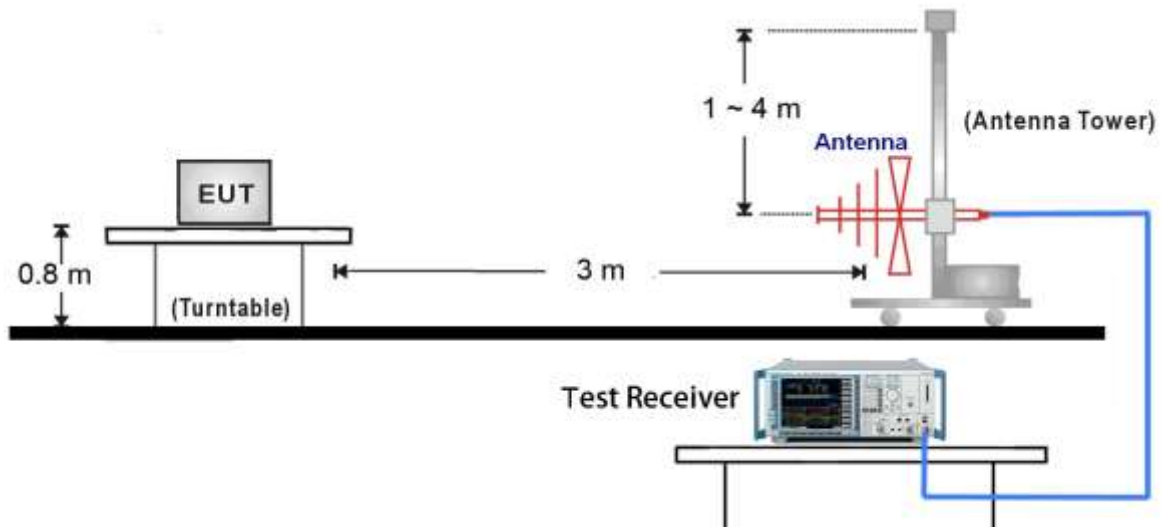
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span}/\text{RBW}$)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

7.7.4. Test Setup

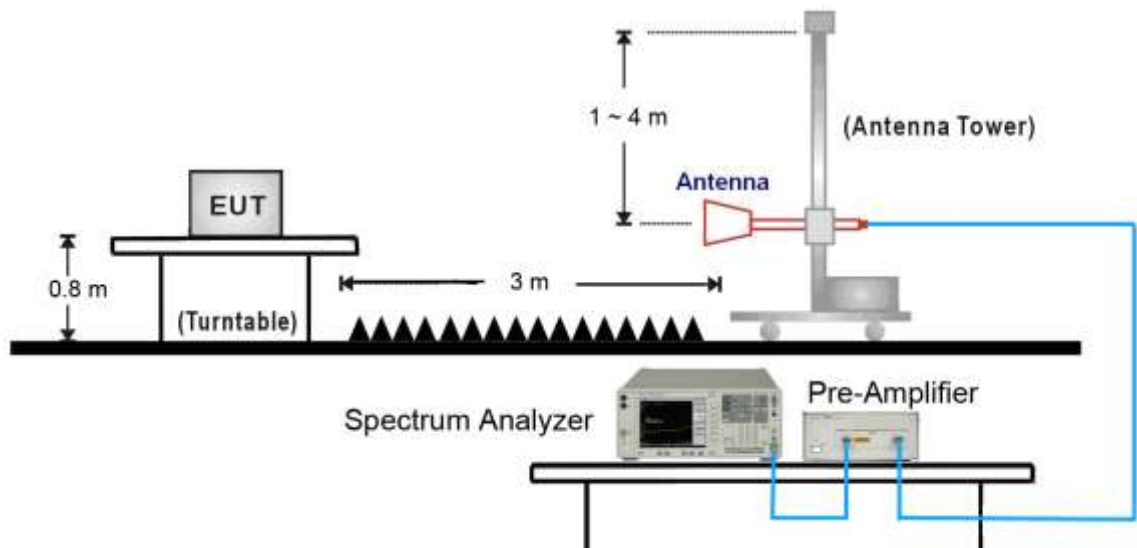
9kHz ~ 30MHz Test Setup:



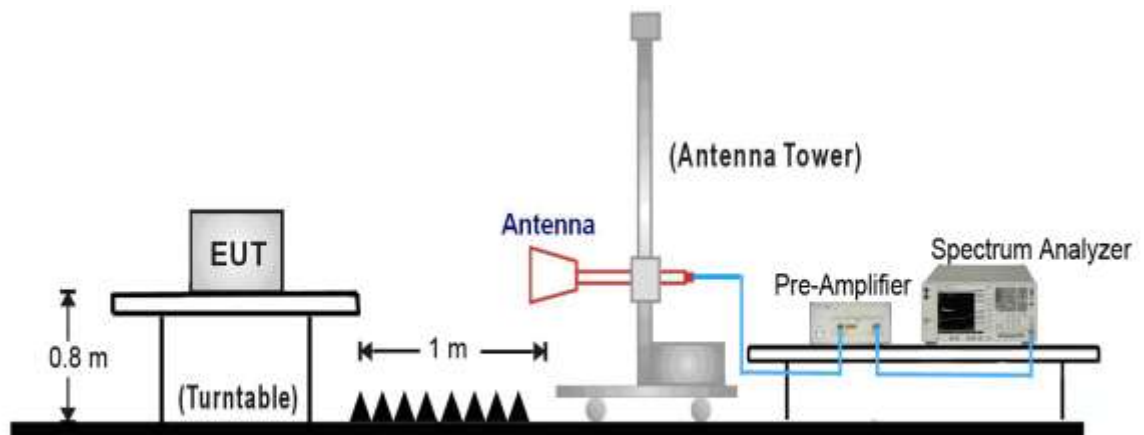
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:



18GHz ~40GHz Test Setup:



7.7.5. Test Result

Test Mode:	802.11a – Chain A	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2620.0	41.4	3.0	44.4	68.2	-23.8	Peak	Horizontal
*	3324.0	40.7	3.1	43.8	68.2	-24.4	Peak	Horizontal
	7375.0	34.9	14.1	49.0	74.0	-25.0	Peak	Horizontal
	9415.0	35.7	15.5	51.0	74.0	-23.0	Peak	Horizontal
*	2160.0	39.6	2.7	42.3	68.2	-25.9	Peak	Vertical
*	3128.0	37.3	3.6	40.9	68.2	-27.3	Peak	Vertical
	8072.0	34.7	15.2	49.9	74.0	-24.1	Peak	Vertical
	9500.0	36.9	15.5	52.4	74.0	-21.6	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11a – Chain A	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2132.0	36.8	2.4	39.2	68.2	-29.0	Peak	Horizontal
*	3328.0	40.4	3.1	43.5	68.2	-24.7	Peak	Horizontal
	7494.0	34.7	14.4	49.1	74.0	-24.9	Peak	Horizontal
	9415.0	35.1	15.5	50.6	74.0	-23.4	Peak	Horizontal
*	2424.0	44.4	2.7	47.1	68.2	-21.1	Peak	Vertical
*	3320.0	38.9	3.1	42.0	68.2	-26.2	Peak	Vertical
	7358.0	36.3	14.0	50.3	74.0	-23.7	Peak	Vertical
	9398.0	36.1	15.4	51.5	74.0	-22.5	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11a – Chain A	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2652.0	38.8	3.1	41.9	68.2	-26.3	Peak	Horizontal
*	3216.0	37.7	3.5	41.2	68.2	-27.0	Peak	Horizontal
	7375.0	34.5	14.1	48.6	74.0	-25.4	Peak	Horizontal
	9425.5	35.4	15.5	50.9	74.0	-23.1	Peak	Horizontal
*	2976.0	36.5	3.4	39.9	68.2	-28.3	Peak	Vertical
*	4476.0	36.4	5.6	42.0	68.2	-26.2	Peak	Vertical
	7353.5	33.8	14.0	47.8	74.0	-26.2	Peak	Vertical
	9152.5	35.1	15.3	50.4	74.0	-23.6	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11a – Chain B	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2964.0	37.2	3.4	40.6	68.2	-27.6	Peak	Horizontal
*	4492.0	36.8	5.6	42.4	68.2	-25.8	Peak	Horizontal
	8021.0	34.8	15.1	49.9	74.0	-24.1	Peak	Horizontal
	9500.0	36.8	15.5	52.3	74.0	-21.7	Peak	Horizontal
*	2936.0	37.3	3.4	40.7	68.2	-27.5	Peak	Vertical
*	4400.0	36.5	5.5	42.0	68.2	-26.2	Peak	Vertical
	8021.0	34.8	15.1	49.9	74.0	-24.1	Peak	Vertical
	9463.1	35.1	15.4	50.5	74.0	-23.5	Peak	Vertical

Note: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11a – Chain B	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2964.0	38.0	3.4	41.4	68.2	-26.8	Peak	Horizontal
*	4420.0	36.5	5.5	42.0	68.2	-26.2	Peak	Horizontal
	7563.4	33.6	14.7	48.3	74.0	-25.7	Peak	Horizontal
	8445.4	34.2	14.5	48.7	74.0	-25.3	Peak	Horizontal
*	2936.0	36.9	3.4	40.3	68.2	-27.9	Peak	Vertical
*	4476.0	36.3	5.6	41.9	68.2	-26.3	Peak	Vertical
	7511.0	35.1	14.5	49.6	74.0	-24.4	Peak	Vertical
	9472.4	35.4	15.4	50.8	74.0	-23.2	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11a – Chain B	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2928.0	35.9	3.4	39.3	68.2	-28.9	Peak	Horizontal
*	4460.0	36.9	5.5	42.4	68.2	-25.8	Peak	Horizontal
	7562.5	33.5	14.7	48.2	74.0	-25.8	Peak	Horizontal
	9154.1	35.2	15.3	50.5	74.0	-23.5	Peak	Horizontal
*	2944.0	36.9	3.4	40.3	68.2	-27.9	Peak	Vertical
*	4404.0	35.5	5.5	41.0	68.2	-27.2	Peak	Vertical
	7494.0	34.7	14.4	49.1	74.0	-24.9	Peak	Vertical
	9500.0	35.9	15.5	51.4	74.0	-22.6	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11a – Chain C	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2432.0	36.8	2.7	39.5	68.2	-28.7	Peak	Horizontal
*	2960.0	37.3	3.4	40.7	68.2	-27.5	Peak	Horizontal
	7563.4	33.4	14.7	48.1	74.0	-25.9	Peak	Horizontal
	9152.5	35.5	15.3	50.8	74.0	-23.2	Peak	Horizontal
*	2528.0	36.6	2.7	39.3	68.2	-28.9	Peak	Vertical
*	3204.0	37.3	3.5	40.8	68.2	-27.4	Peak	Vertical
	7409.0	34.8	14.2	49.0	74.0	-25.0	Peak	Vertical
	9451.5	35.8	15.5	51.3	74.0	-22.7	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11a – Chain C	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3359.0	35.9	3.1	39.0	68.2	-29.2	Peak	Horizontal
*	3524.0	35.8	3.9	39.7	68.2	-28.5	Peak	Horizontal
	7460.0	35.4	14.2	49.6	74.0	-24.4	Peak	Horizontal
	9375.2	34.0	15.3	49.3	74.0	-24.7	Peak	Horizontal
*	2905.0	35.5	3.4	38.9	68.2	-29.3	Peak	Vertical
*	3258.0	36.2	3.3	39.5	68.2	-28.7	Peak	Vertical
	7460.0	35.8	14.2	50.0	74.0	-24.0	Peak	Vertical
	9372.5	34.4	15.3	49.7	74.0	-24.3	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11a – Chain C	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2395.0	35.7	2.7	38.4	68.2	-29.8	Peak	Horizontal
*	2480.3	35.4	2.7	38.1	68.2	-30.1	Peak	Horizontal
	7256.4	33.2	13.9	47.1	74.0	-26.9	Peak	Horizontal
	8463.5	34.1	14.5	48.6	74.0	-25.4	Peak	Horizontal
*	2397.0	35.3	2.7	38.0	68.2	-30.2	Peak	Vertical
*	3362.0	36.2	3.1	39.3	68.2	-28.9	Peak	Vertical
	7315.5	33.9	14.0	47.9	74.0	-26.1	Peak	Vertical
	9173.4	34.9	15.3	50.2	74.0	-23.8	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2915.0	36.0	3.4	39.4	68.2	-28.8	Peak	Horizontal
*	3372.0	35.5	3.2	38.7	68.2	-29.5	Peak	Horizontal
	7276.5	33.4	13.9	47.3	74.0	-26.7	Peak	Horizontal
	8123.0	34.9	15.0	49.9	74.0	-24.1	Peak	Horizontal
*	3125.0	35.8	3.5	39.3	68.2	-28.9	Peak	Vertical
*	3452.0	36.1	3.6	39.7	68.2	-28.5	Peak	Vertical
	7286.6	33.7	14.0	47.7	74.0	-26.3	Peak	Vertical
	9124.3	35.0	14.9	49.9	74.0	-24.1	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	3248.0	36.3	3.4	39.7	68.2	-28.5	Peak	Horizontal
*	3562.0	36.0	4.1	40.1	68.2	-28.1	Peak	Horizontal
	8038.0	35.3	15.2	50.5	74.0	-23.5	Peak	Horizontal
	9402.0	35.2	15.4	50.6	74.0	-23.4	Peak	Horizontal
*	2453.0	35.1	2.6	37.7	68.2	-30.5	Peak	Vertical
*	3596.0	36.3	4.0	40.3	68.2	-27.9	Peak	Vertical
	7511.0	34.7	14.5	49.2	74.0	-24.8	Peak	Vertical
	9418.7	34.9	15.5	50.4	74.0	-23.6	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT20 – Chain A	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3124.0	35.7	3.5	39.2	68.2	-29.0	Peak	Horizontal
*	3625.0	35.7	3.9	39.6	68.2	-28.6	Peak	Horizontal
	7324.0	34.9	14.0	48.9	74.0	-25.1	Peak	Horizontal
	9421.8	35.3	15.5	50.8	74.0	-23.2	Peak	Horizontal
*	2393.0	34.7	2.7	37.4	68.2	-30.8	Peak	Vertical
*	3254.0	36.3	3.4	39.7	68.2	-28.5	Peak	Vertical
	8089.0	34.8	15.1	49.9	74.0	-24.1	Peak	Vertical
	9468.9	35.7	15.4	51.1	74.0	-22.9	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain B	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3359.0	36.1	3.1	39.2	68.2	-29.0	Peak	Horizontal
*	3659.0	35.7	4.0	39.7	68.2	-28.5	Peak	Horizontal
	7653.5	33.4	14.6	48.0	74.0	-26.0	Peak	Horizontal
	9482.5	35.3	15.4	50.7	74.0	-23.3	Peak	Horizontal
*	3368.0	36.2	3.2	39.4	68.2	-28.8	Peak	Vertical
*	3548.0	36.0	4.1	40.1	68.2	-28.1	Peak	Vertical
	7615.5	33.6	14.6	48.2	74.0	-25.8	Peak	Vertical
	9473.7	35.6	15.4	51.0	74.0	-23.0	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain B	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2910.0	36.4	3.4	39.8	68.2	-28.4	Peak	Horizontal
*	3124.0	36.0	3.5	39.5	68.2	-28.7	Peak	Horizontal
	7256.5	33.6	13.9	47.5	74.0	-26.5	Peak	Horizontal
	8029.5	34.8	15.1	49.9	74.0	-24.1	Peak	Horizontal
*	2395.0	35.0	2.7	37.7	68.2	-30.5	Peak	Vertical
*	3254.0	36.1	3.4	39.5	68.2	-28.7	Peak	Vertical
	7263.8	34.1	13.9	48.0	74.0	-26.0	Peak	Vertical
	8072.0	35.0	15.2	50.2	74.0	-23.8	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain B	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2396.0	35.6	2.7	38.3	68.2	-29.9	Peak	Horizontal
*	3257.0	36.1	3.3	39.4	68.2	-28.8	Peak	Horizontal
	7253.6	32.9	13.9	46.8	74.0	-27.2	Peak	Horizontal
	8038.0	35.0	15.2	50.2	74.0	-23.8	Peak	Horizontal
*	2481.0	35.5	2.7	38.2	68.2	-30.0	Peak	Vertical
*	3254.0	36.0	3.4	39.4	68.2	-28.8	Peak	Vertical
	8106.0	35.5	15.1	50.6	74.0	-23.4	Peak	Vertical
	9482.5	36.3	15.4	51.7	74.0	-22.3	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT20 – Chain C	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2476.0	35.0	2.7	37.7	68.2	-30.5	Peak	Horizontal
*	2908.0	35.5	3.4	38.9	68.2	-29.3	Peak	Horizontal
	8157.0	35.2	14.9	50.1	74.0	-23.9	Peak	Horizontal
	8469.5	34.9	14.6	49.5	74.0	-24.5	Peak	Horizontal
*	3360.0	36.5	3.1	39.6	68.2	-28.6	Peak	Vertical
*	3652.0	35.5	4.0	39.5	68.2	-28.7	Peak	Vertical
	8072.0	34.7	15.2	49.9	74.0	-24.1	Peak	Vertical
	8458.3	33.8	14.5	48.3	74.0	-25.7	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT20 – Chain C	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2915.0	35.5	3.4	38.9	68.2	-29.3	Peak	Horizontal
*	3158.0	36.7	3.6	40.3	68.2	-27.9	Peak	Horizontal
	9177.0	35.4	15.3	50.7	74.0	-23.3	Peak	Horizontal
	9436.6	35.2	15.5	50.7	74.0	-23.3	Peak	Horizontal
*	2399.0	35.2	2.7	37.9	68.2	-30.3	Peak	Vertical
*	3158.0	36.0	3.6	39.6	68.2	-28.6	Peak	Vertical
	7368.8	34.5	14.0	48.5	74.0	-25.5	Peak	Vertical
	9160.0	35.9	15.3	51.2	74.0	-22.8	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT20 – Chain C	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3005.0	35.9	3.4	39.3	68.2	-28.9	Peak	Horizontal
*	3524.0	36.4	3.9	40.3	68.2	-27.9	Peak	Horizontal
	7392.5	34.1	14.1	48.2	74.0	-25.8	Peak	Horizontal
	7579.0	35.1	14.7	49.8	74.0	-24.2	Peak	Horizontal
*	2405.0	34.8	2.7	37.5	68.2	-30.7	Peak	Vertical
*	3596.0	35.5	4.0	39.5	68.2	-28.7	Peak	Vertical
	7725.7	33.2	14.5	47.7	74.0	-26.3	Peak	Vertical
	8154.5	33.6	14.9	48.5	74.0	-25.5	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A + B	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2405.0	35.0	2.7	37.7	68.2	-30.5	Peak	Horizontal
*	3385.0	35.5	3.2	38.7	68.2	-29.5	Peak	Horizontal
	7258.7	34.2	13.9	48.1	74.0	-25.9	Peak	Horizontal
	7562.0	34.8	14.7	49.5	74.0	-24.5	Peak	Horizontal
*	2472.0	35.5	2.6	38.1	68.2	-30.1	Peak	Vertical
*	3024.0	36.8	3.4	40.2	68.2	-28.0	Peak	Vertical
	7375.0	35.1	14.1	49.2	74.0	-24.8	Peak	Vertical
	9425.6	35.3	15.5	50.8	74.0	-23.2	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A + B	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3405.0	35.7	3.3	39.0	68.2	-29.2	Peak	Horizontal
*	3515.0	36.0	3.9	39.9	68.2	-28.3	Peak	Horizontal
	7545.0	34.2	14.7	48.9	74.0	-25.1	Peak	Horizontal
	9487.8	36.4	15.4	51.8	74.0	-22.2	Peak	Horizontal
*	3175.0	35.6	3.6	39.2	68.2	-29.0	Peak	Vertical
*	3578.0	35.5	4.0	39.5	68.2	-28.7	Peak	Vertical
	7545.0	35.0	14.7	49.7	74.0	-24.3	Peak	Vertical
	9473.7	35.9	15.4	51.3	74.0	-22.7	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A + B	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2405.0	36.3	2.7	39.0	68.2	-29.2	Peak	Horizontal
*	3054.0	35.6	3.5	39.1	68.2	-29.1	Peak	Horizontal
	7258.5	33.6	13.9	47.5	74.0	-26.5	Peak	Horizontal
	9483.0	36.4	15.4	51.8	74.0	-22.2	Peak	Horizontal
*	3215.0	36.9	3.5	40.4	68.2	-27.8	Peak	Vertical
*	3594.0	35.8	4.0	39.8	68.2	-28.4	Peak	Vertical
	7263.6	33.7	13.9	47.6	74.0	-26.4	Peak	Vertical
	8245.6	33.4	14.5	47.9	74.0	-26.1	Peak	Vertical

Note: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT20 – Chain A + B + C	Test Site:	AC1
Test Channel:	36	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2472.0	35.9	2.6	38.5	68.2	-29.7	Peak	Horizontal
*	3183.0	36.0	3.6	39.6	68.2	-28.6	Peak	Horizontal
	8173.1	34.4	14.8	49.2	74.0	-24.8	Peak	Horizontal
	9402.0	35.2	15.4	50.6	74.0	-23.4	Peak	Horizontal
*	2468.0	35.0	2.6	37.6	68.2	-30.6	Peak	Vertical
*	3054.0	36.0	3.5	39.5	68.2	-28.7	Peak	Vertical
	7392.0	34.9	14.1	49.0	74.0	-25.0	Peak	Vertical
	9473.7	35.6	15.4	51.0	74.0	-23.0	Peak	Vertical

Note: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A + B + C	Test Site:	AC1
Test Channel:	44	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3171.0	36.3	3.6	39.9	68.2	-28.3	Peak	Horizontal
*	3368.0	35.7	3.2	38.9	68.2	-29.3	Peak	Horizontal
	8038.0	34.8	15.2	50.0	74.0	-24.0	Peak	Horizontal
	9175.0	34.9	15.3	50.2	74.0	-23.8	Peak	Horizontal
*	2458.0	35.1	2.6	37.7	68.2	-30.5	Peak	Vertical
*	3581.0	35.9	4.0	39.9	68.2	-28.3	Peak	Vertical
	7324.0	34.5	14.0	48.5	74.0	-25.5	Peak	Vertical
	9482.5	36.5	15.4	51.9	74.0	-22.1	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT20 – Chain A + B + C	Test Site:	AC1
Test Channel:	48	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2415.0	35.6	2.7	38.3	68.2	-29.9	Peak	Horizontal
*	3057.0	36.0	3.5	39.5	68.2	-28.7	Peak	Horizontal
	7256.8	33.8	13.9	47.7	74.0	-26.3	Peak	Horizontal
	9194.0	36.1	15.2	51.3	74.0	-22.7	Peak	Horizontal
*	3157.0	35.9	3.6	39.5	68.2	-28.7	Peak	Vertical
*	3573.0	36.2	4.0	40.2	68.2	-28.0	Peak	Vertical
	7341.0	34.4	14.0	48.4	74.0	-25.6	Peak	Vertical
	9472.4	35.2	15.4	50.6	74.0	-23.4	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT40 – Chain A	Test Site:	AC1
Test Channel:	38	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2415.0	35.6	2.7	38.3	68.2	-29.9	Peak	Horizontal
*	3057.0	36.0	3.5	39.5	68.2	-28.7	Peak	Horizontal
	7293.5	34.8	14.0	48.8	74.0	-25.2	Peak	Horizontal
	9160.0	35.5	15.3	50.8	74.0	-23.2	Peak	Horizontal
*	3157.0	35.9	3.6	39.5	68.2	-28.7	Peak	Vertical
*	3573.0	36.2	4.0	40.2	68.2	-28.0	Peak	Vertical
	7725.8	32.9	14.5	47.4	74.0	-26.6	Peak	Vertical
	8038.0	34.9	15.2	50.1	74.0	-23.9	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT40 – Chain A	Test Site:	AC1
Test Channel:	46	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	2415.0	35.7	2.7	38.4	68.2	-29.8	Peak	Horizontal
*	3592.0	36.0	4.0	40.0	68.2	-28.2	Peak	Horizontal
	7286.5	33.6	14.0	47.6	74.0	-26.4	Peak	Horizontal
	7596.0	34.8	14.6	49.4	74.0	-24.6	Peak	Horizontal
*	2472.0	35.7	2.6	38.3	68.2	-29.9	Peak	Vertical
*	3183.0	36.2	3.6	39.8	68.2	-28.4	Peak	Vertical
	7596.4	34.6	14.6	49.2	74.0	-24.8	Peak	Vertical
	8123.0	34.6	15.0	49.6	74.0	-24.4	Peak	Vertical

Note: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT40 – Chain B	Test Site:	AC1
Test Channel:	38	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3157.0	36.2	3.6	39.8	68.2	-28.4	Peak	Horizontal
*	3256.0	36.1	3.4	39.5	68.2	-28.7	Peak	Horizontal
	7259.5	33.4	13.9	47.3	74.0	-26.7	Peak	Horizontal
	9483.6	35.7	15.4	51.1	74.0	-22.9	Peak	Horizontal
*	2471.0	35.5	2.6	38.1	68.2	-30.1	Peak	Vertical
*	3218.0	36.4	3.5	39.9	68.2	-28.3	Peak	Vertical
	7256.3	33.2	13.9	47.1	74.0	-27.0	Peak	Vertical
	8225.0	35.0	14.5	49.5	74.0	-24.5	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT40 – Chain B	Test Site:	AC1
Test Channel:	46	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2908.9	35.5	3.4	38.9	68.2	-29.3	Peak	Horizontal
*	3562.3	36.0	4.1	40.1	68.2	-28.1	Peak	Horizontal
	8157.0	34.8	14.9	49.7	74.0	-24.3	Peak	Horizontal
	9466.0	36.3	15.4	51.7	74.0	-22.3	Peak	Horizontal
*	3157.0	36.3	3.6	39.9	68.2	-28.3	Peak	Vertical
*	3589.5	35.8	4.0	39.8	68.2	-28.4	Peak	Vertical
	8055.0	34.7	15.2	49.9	74.0	-24.1	Peak	Vertical
	9457.5	35.6	15.4	51.0	74.0	-23.0	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT40 – Chain C	Test Site:	AC1
Test Channel:	38	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3371.9	36.6	3.2	39.8	68.2	-28.4	Peak	Horizontal
*	3647.4	35.6	4.0	39.6	68.2	-28.6	Peak	Horizontal
	8143.5	33.8	15.0	48.8	74.0	-25.2	Peak	Horizontal
	9436.1	36.1	15.5	51.6	74.0	-22.4	Peak	Horizontal
*	3018.9	36.9	3.4	40.3	68.2	-27.9	Peak	Vertical
*	3578.4	35.7	4.0	39.7	68.2	-28.5	Peak	Vertical
	7596.0	34.8	14.6	49.4	74.0	-24.6	Peak	Vertical
	9420.5	34.7	15.5	50.2	74.0	-23.8	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT40 – Chain C	Test Site:	AC1
Test Channel:	46	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3017.4	36.1	3.4	39.5	68.2	-28.7	Peak	Horizontal
*	3592.6	35.9	4.0	39.9	68.2	-28.3	Peak	Horizontal
	8072.0	34.7	15.2	49.9	74.0	-24.1	Peak	Horizontal
	9147.1	35.5	15.3	50.8	74.0	-23.2	Peak	Horizontal
*	2468.0	35.1	2.6	37.7	68.2	-30.5	Peak	Vertical
*	3482.0	35.6	3.8	39.4	68.2	-28.8	Peak	Vertical
	7392.0	35.6	14.1	49.7	74.0	-24.3	Peak	Vertical
	8089.0	35.0	15.1	50.1	74.0	-23.9	Peak	Vertical

Note: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Test Mode:	802.11n-HT40 – Chain A + B	Test Site:	AC1
Test Channel:	38	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2425.0	35.7	2.7	38.4	68.2	-29.8	Peak	Horizontal
*	3057.4	35.7	3.5	39.2	68.2	-29.0	Peak	Horizontal
	7235.4	34.1	13.8	47.9	74.0	-26.1	Peak	Horizontal
	9151.2	34.9	15.3	50.2	74.0	-23.8	Peak	Horizontal
*	3157.1	35.7	3.6	39.3	68.2	-28.9	Peak	Vertical
*	3571.5	35.5	4.0	39.5	68.2	-28.7	Peak	Vertical
	7358.0	35.2	14.0	49.2	74.0	-24.8	Peak	Vertical
	8421.6	33.6	14.5	48.1	74.0	-25.9	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT40 – Chain A + B	Test Site:	AC1
Test Channel:	46	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2399.5	35.2	2.7	37.9	68.2	-30.3	Peak	Horizontal
*	3376.8	36.1	3.2	39.3	68.2	-28.9	Peak	Horizontal
	7375.0	35.5	14.1	49.6	74.0	-24.4	Peak	Horizontal
	9160.0	35.5	15.3	50.8	74.0	-23.2	Peak	Horizontal
*	2482.4	35.0	2.7	37.7	68.2	-30.5	Peak	Vertical
*	3005.5	35.8	3.4	39.2	68.2	-29.0	Peak	Vertical
	8038.0	35.2	15.2	50.4	74.0	-23.6	Peak	Vertical
	9177.0	35.6	15.3	50.9	74.0	-23.1	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

Test Mode:	802.11n-HT40 – Chain A + B + C	Test Site:	AC1
Test Channel:	38	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dB μ V/m)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
*	2393.7	35.8	2.7	38.5	68.2	-29.7	Peak	Horizontal
*	3183.5	35.5	3.6	39.1	68.2	-29.1	Peak	Horizontal
	7256.5	33.4	13.9	47.3	74.0	-26.7	Peak	Horizontal
	9177.0	36.5	15.3	51.8	74.0	-22.2	Peak	Horizontal
*	3251.7	35.3	3.4	38.7	68.2	-29.5	Peak	Vertical
*	3593.6	36.1	4.0	40.1	68.2	-28.1	Peak	Vertical
	7460.0	34.7	14.2	48.9	74.0	-25.1	Peak	Vertical
	9417.8	34.6	15.5	50.1	74.0	-23.9	Peak	Vertical

Note: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.

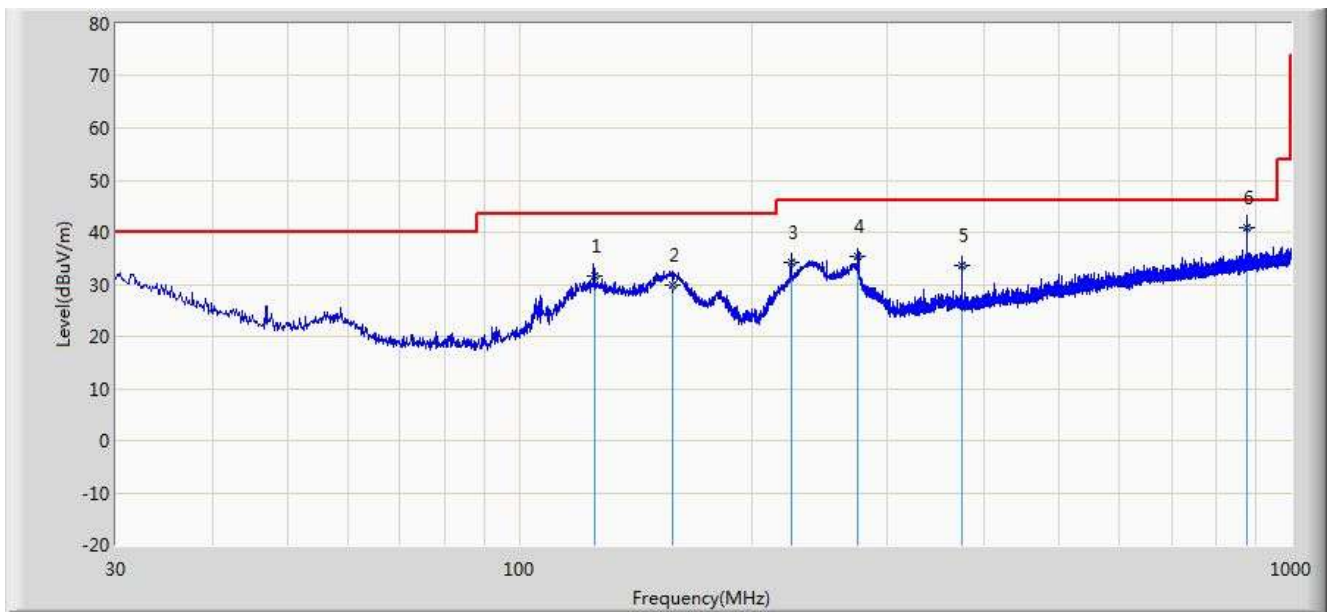
Test Mode:	802.11n-HT40 – Chain A + B + C	Test Site:	AC1
Test Channel:	46	Test Engineer:	Roy Cheng
Remark:	1. There is the ambient noise within frequency range 9kHz~30MHz and 18GHz~40GHz, the permissible value is not show in the report. 2. Average measurement was not performed if peak level lower than average limit.		

Mark	Frequency (MHz)	Reading Level (dBμV/m)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	3183.5	36.5	3.6	40.1	68.2	-28.1	Peak	Horizontal
*	3619.7	35.3	3.9	39.2	68.2	-29.0	Peak	Horizontal
	8106.0	34.5	15.1	49.6	74.0	-24.4	Peak	Horizontal
	9109.0	36.6	14.7	51.3	74.0	-22.7	Peak	Horizontal
*	2408.7	35.1	2.7	37.8	68.2	-30.4	Peak	Vertical
*	3217.1	36.2	3.5	39.7	68.2	-28.5	Peak	Vertical
	8106.0	34.8	15.1	49.9	74.0	-24.1	Peak	Vertical
	9453.7	35.6	15.5	51.1	74.0	-22.9	Peak	Vertical

Note: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

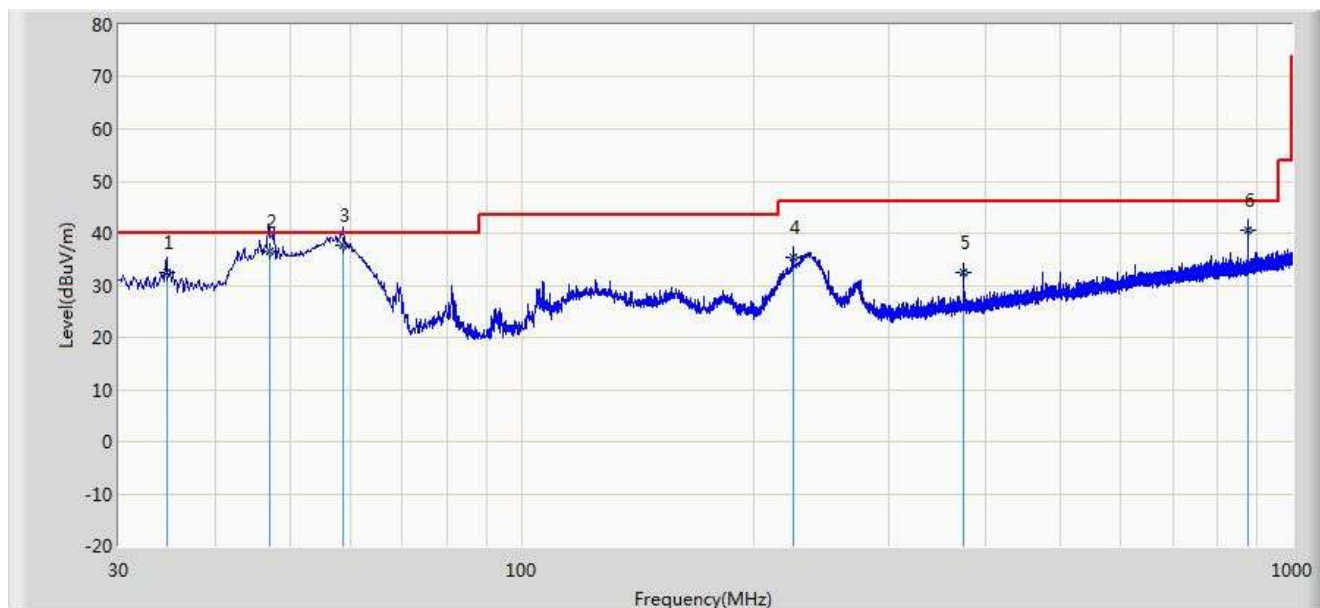
The worst case of Radiated Emission below 1GHz:

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/28 - 17:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Worst Case Mode: 802.11n-HT20 Channel 5220MHz Chain A+B+C	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		125.000	31.476	16.520	-12.024	43.500	14.956	QP
2		158.050	29.737	16.650	-13.763	43.500	13.087	QP
3	*	225.000	34.070	21.550	-11.930	46.000	12.520	QP
4		275.020	35.362	20.540	-10.638	46.000	14.822	QP
5		375.000	33.740	16.840	-12.260	46.000	16.900	QP
6		875.010	40.839	16.684	-5.161	46.000	24.155	QP

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/28 - 17:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Worst Case Mode: 802.11n-HT20 Channel 5220MHz Chain A+B+C	



No	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor	Type
1		34.600	32.397	15.021	-7.603	40.000	17.376	QP
2		47.021	36.446	27.244	-3.554	40.000	9.202	QP
3	*	58.736	37.541	29.863	-2.459	40.000	7.678	QP
4		225.010	35.356	22.934	-10.644	46.000	12.422	QP
5		375.010	32.456	15.665	-13.544	46.000	16.791	QP
6		875.012	40.618	16.866	-5.382	46.000	23.752	QP

7.8. Radiated Restricted Band Edge Measurement

7.8.1. Test Limit

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
¹ 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	(²)

For 15.407(b) requirement:

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 EIRP of -27dBm/MHz.

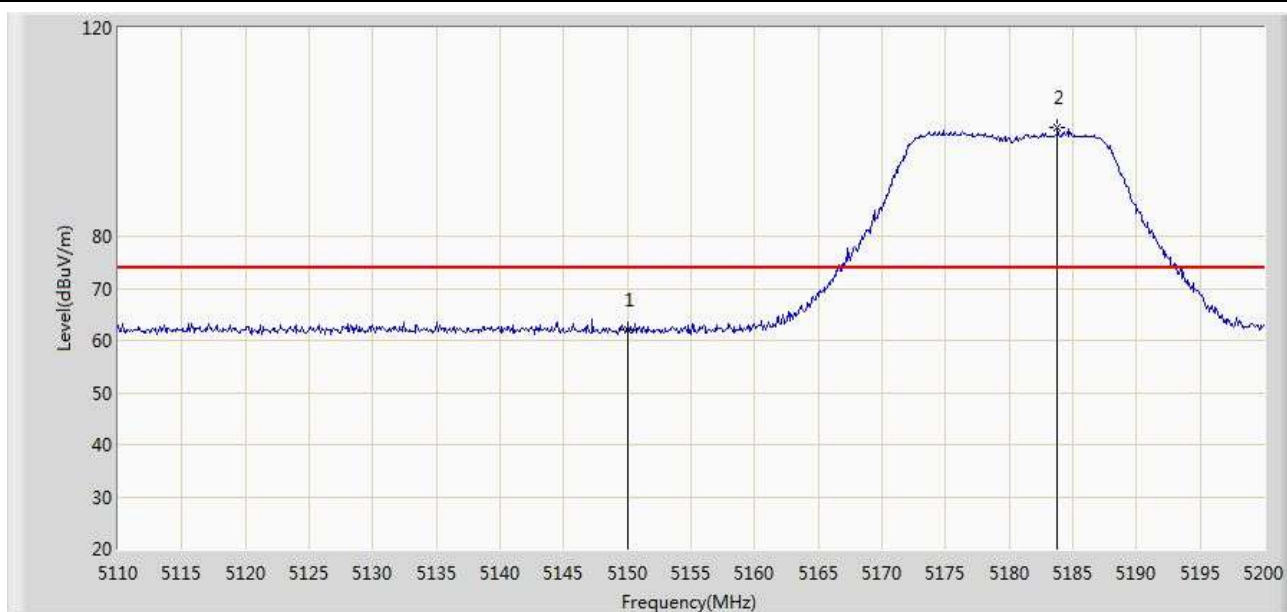
Operating Frequency Band (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dBμV/m)
5150 - 5250	-27	68.2

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

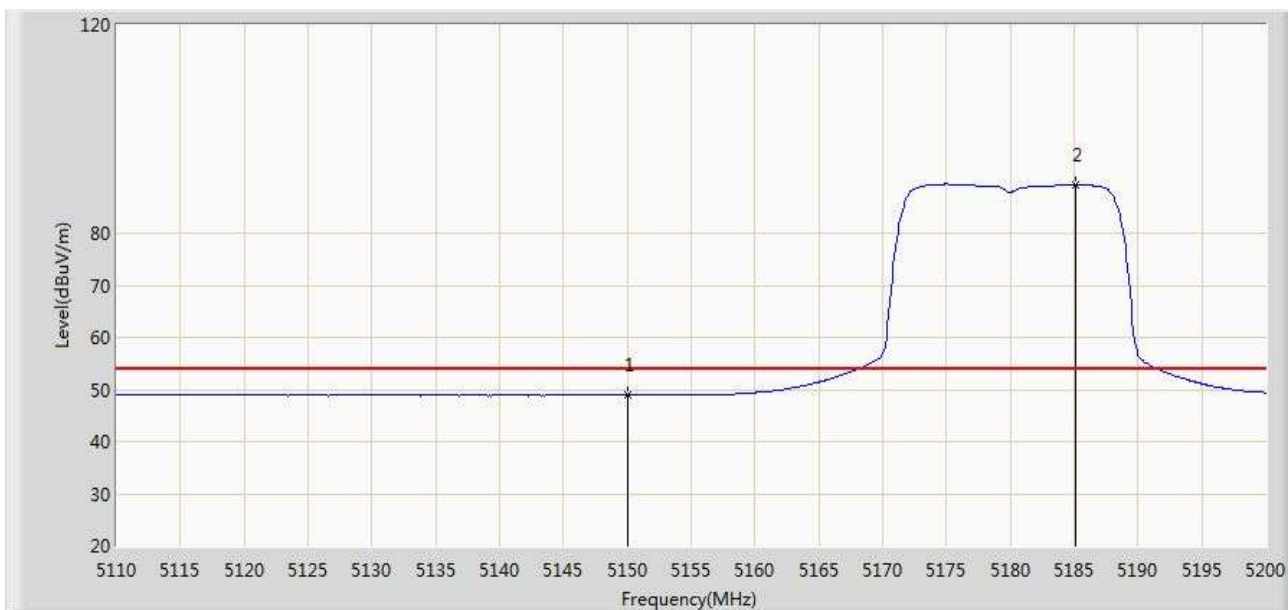
7.8.2. Test Result of Radiated Restricted Band Edge

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain A - Channel 5180MHz	



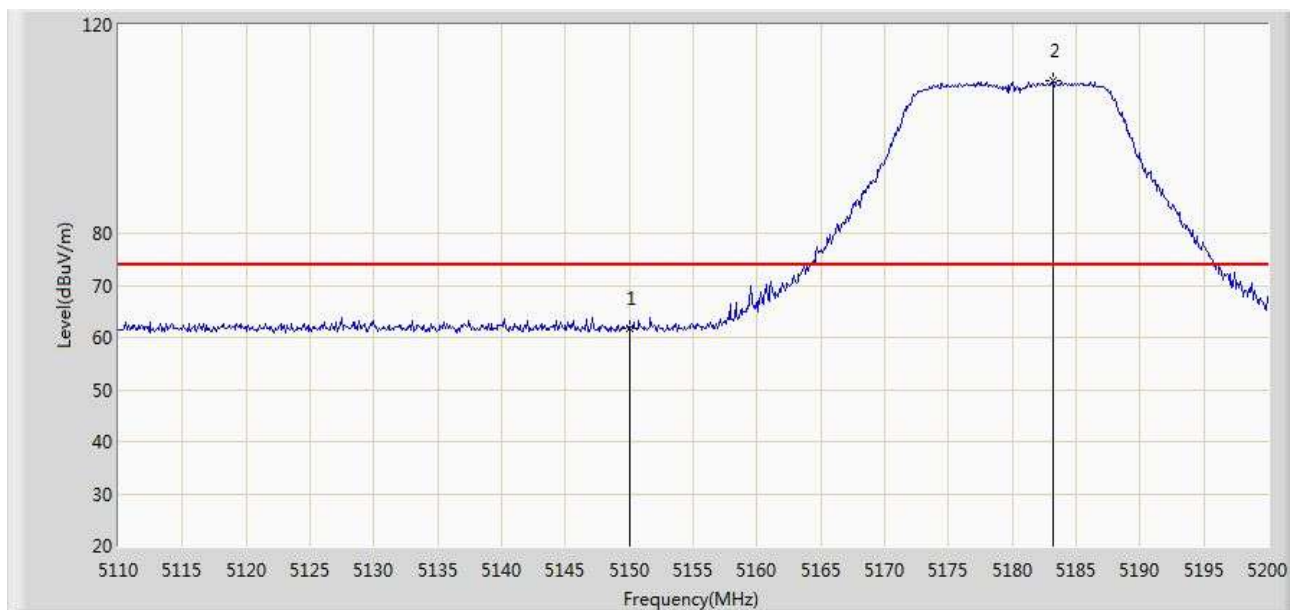
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.163	25.411	-11.837	74.000	36.752	PK
2		*	5183.800	100.946	64.292	N/A	N/A	36.654	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain A - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	48.866	12.114	-5.134	54.000	36.752	AV
2		*	5185.150	89.231	52.580	N/A	N/A	36.650	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain A - Channel 5180MHz	



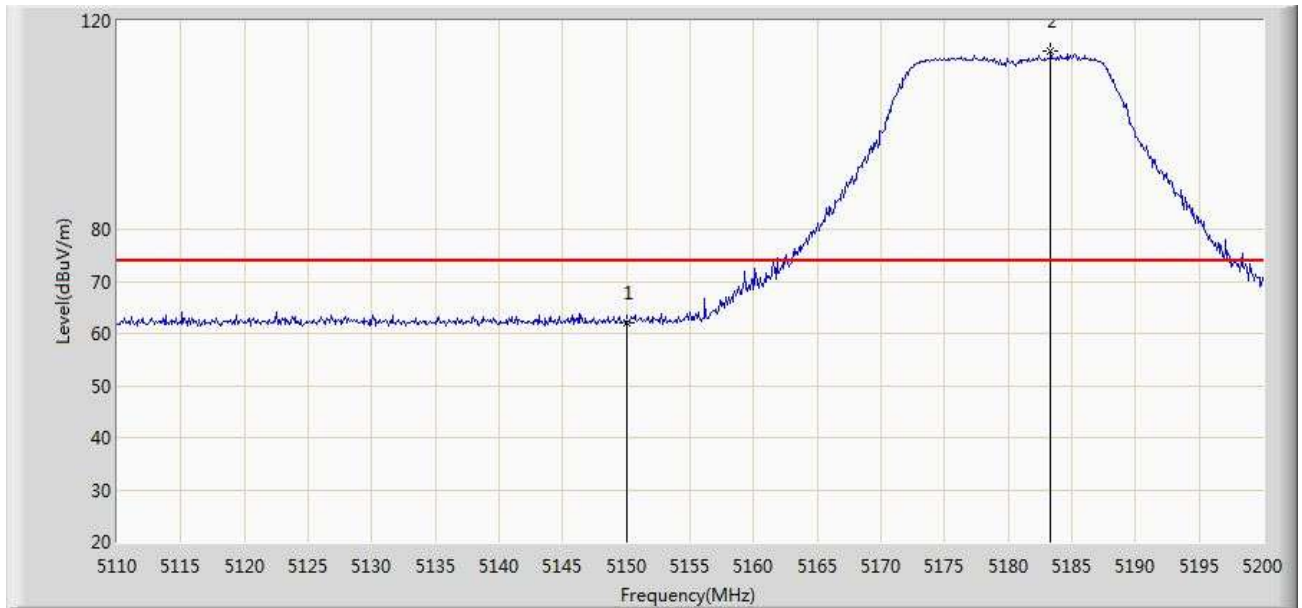
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	61.601	24.849	-12.399	74.000	36.752	PK
2		*	5183.170	109.331	72.675	N/A	N/A	36.656	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain A - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.149	12.397	-4.851	54.000	36.752	AV
2		*	5184.610	98.328	61.676	N/A	N/A	36.652	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain B - Channel 5180MHz	



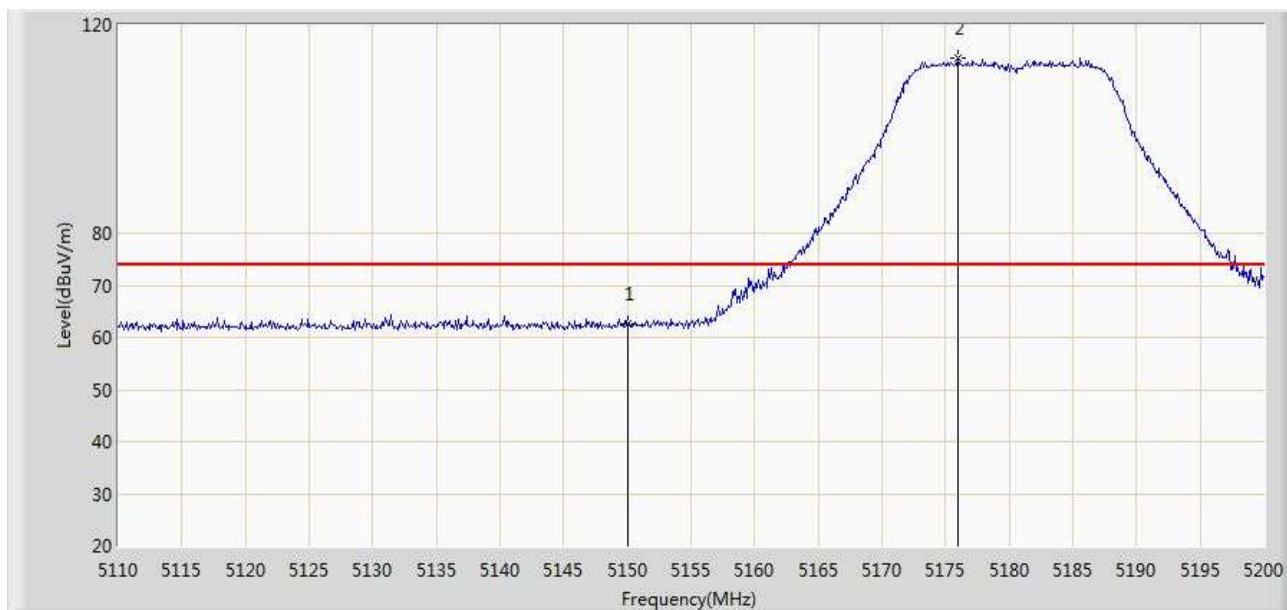
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	61.933	25.181	-12.067	74.000	36.752	PK
2		*	5183.350	114.135	77.480	N/A	N/A	36.656	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain B - Channel 5180MHz	



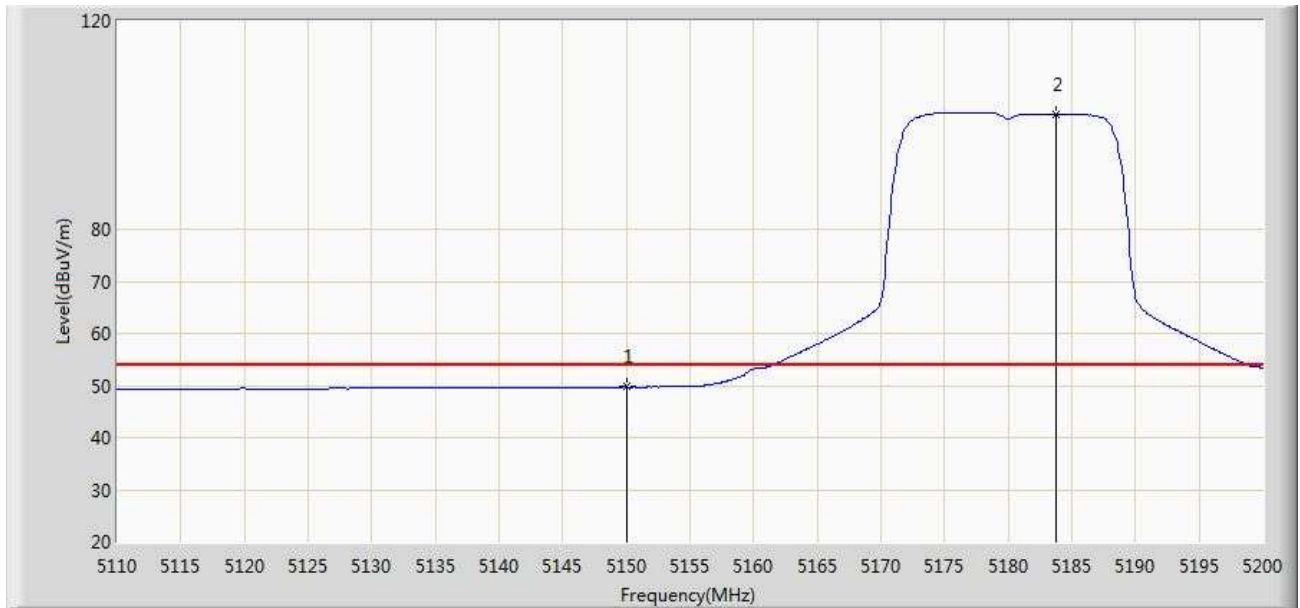
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.882	13.130	-4.118	54.000	36.752	AV
2		*	5184.700	102.795	66.143	N/A	N/A	36.652	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain B - Channel 5180MHz	



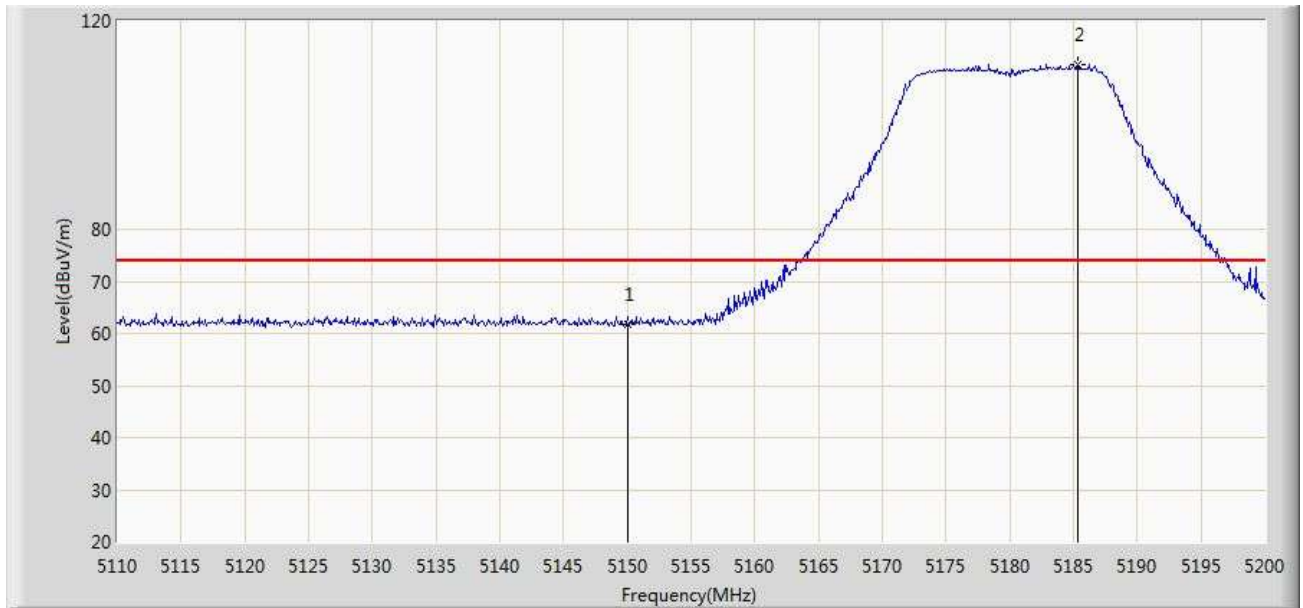
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	62.486	25.734	-11.514	74.000	36.752	PK
2		*	5175.970	113.567	76.889	N/A	N/A	36.678	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain B - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.720	12.968	-4.280	54.000	36.752	AV
2		*	5183.710	102.157	65.502	N/A	N/A	36.654	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain C - Channel 5180MHz	



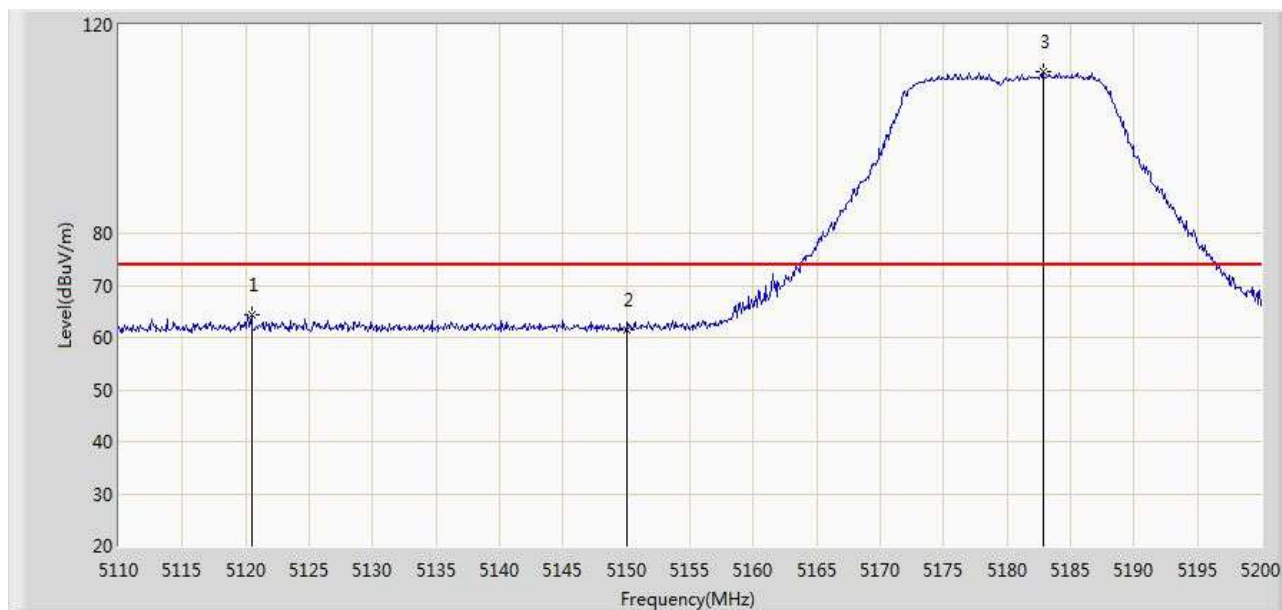
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	61.834	25.082	-12.166	74.000	36.752	PK
2		*	5185.330	111.604	74.954	N/A	N/A	36.650	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain C - Channel 5180MHz	



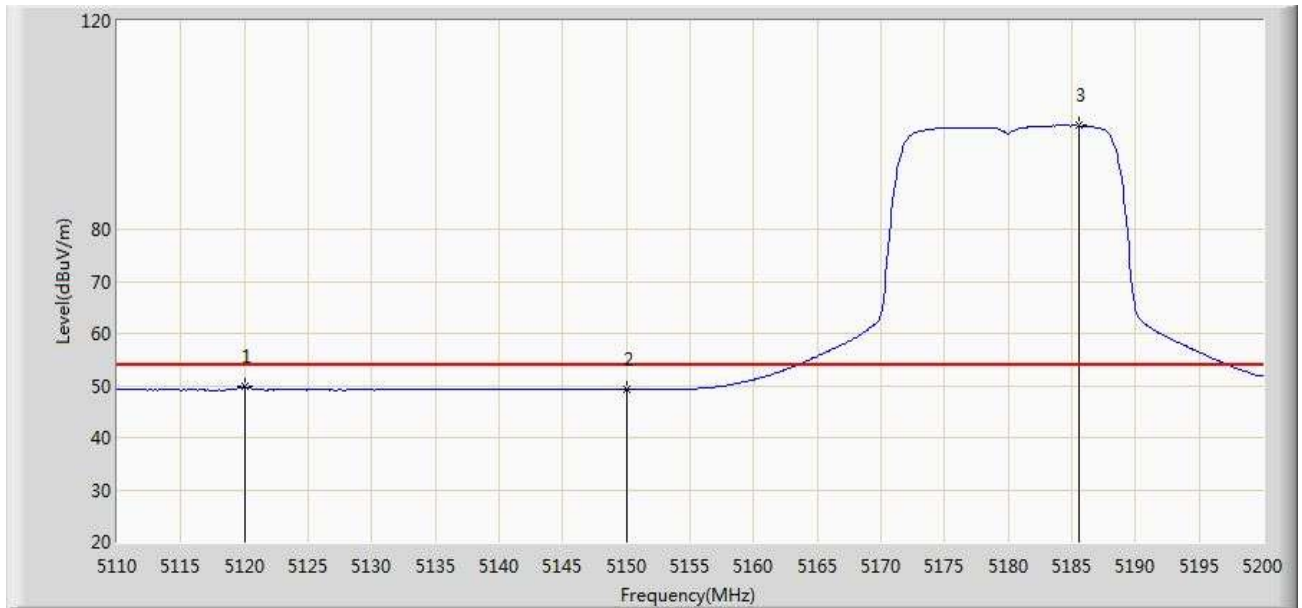
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5120.080	49.915	13.143	-4.085	54.000	36.772	AV
2			5150.000	49.335	12.583	-4.665	54.000	36.752	AV
3		*	5184.340	100.845	64.192	N/A	N/A	36.653	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain C - Channel 5180MHz	



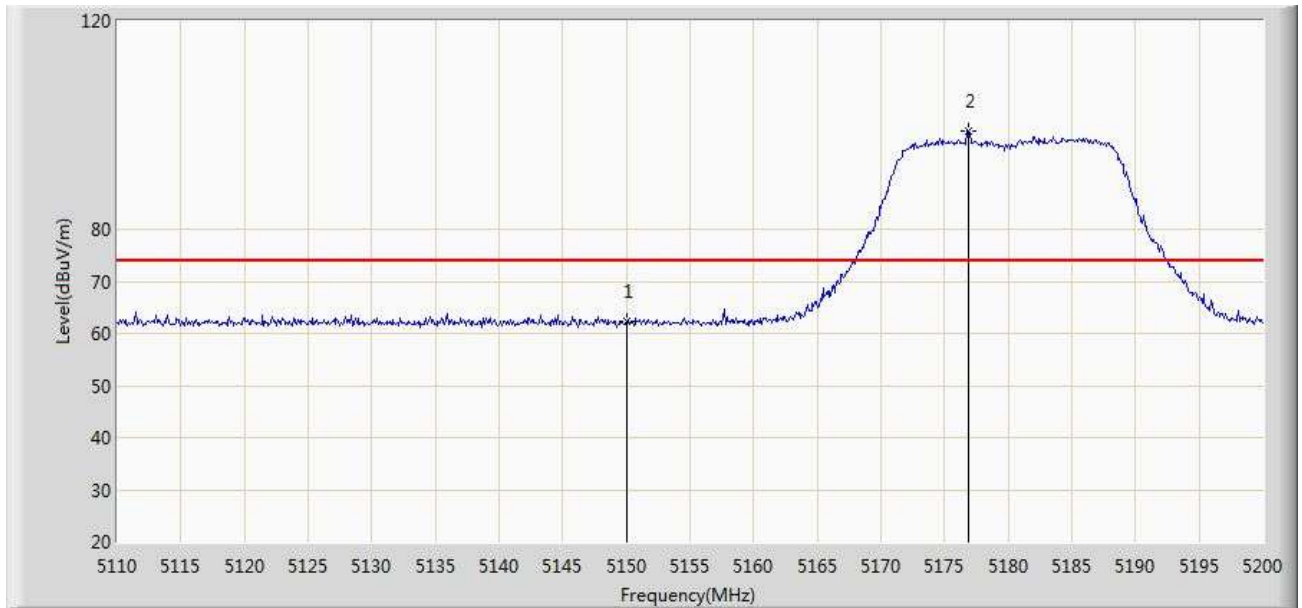
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5120.440	64.396	27.624	-9.604	74.000	36.772	PK
2			5150.000	61.375	24.623	-12.625	74.000	36.752	PK
3		*	5182.810	111.127	74.470	N/A	N/A	36.657	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11a Chain C - Channel 5180MHz	



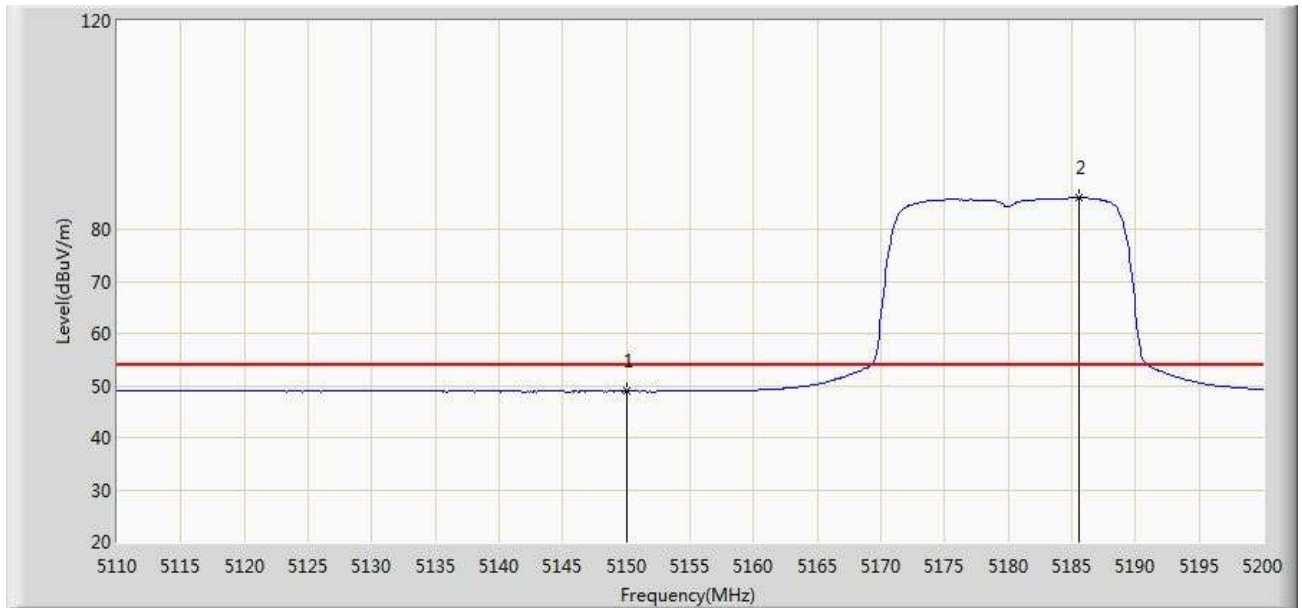
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5120.080	49.722	12.950	-4.278	54.000	36.772	AV
2			5150.000	49.319	12.567	-4.681	54.000	36.752	AV
3		*	5185.600	99.859	63.210	N/A	N/A	36.650	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 14:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A - Channel 5180MHz	



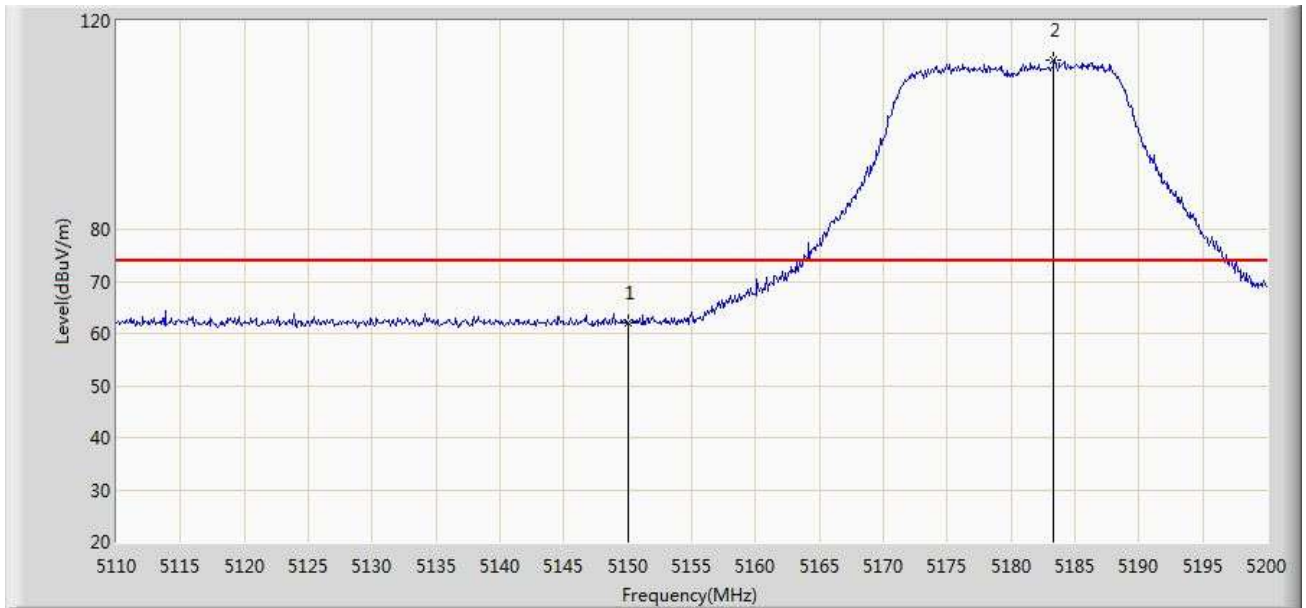
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1			5150.000	62.210	25.458	-11.790	74.000	36.752	PK
2		*	5176.870	98.753	62.078	N/A	N/A	36.675	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 14:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A - Channel 5180MHz	



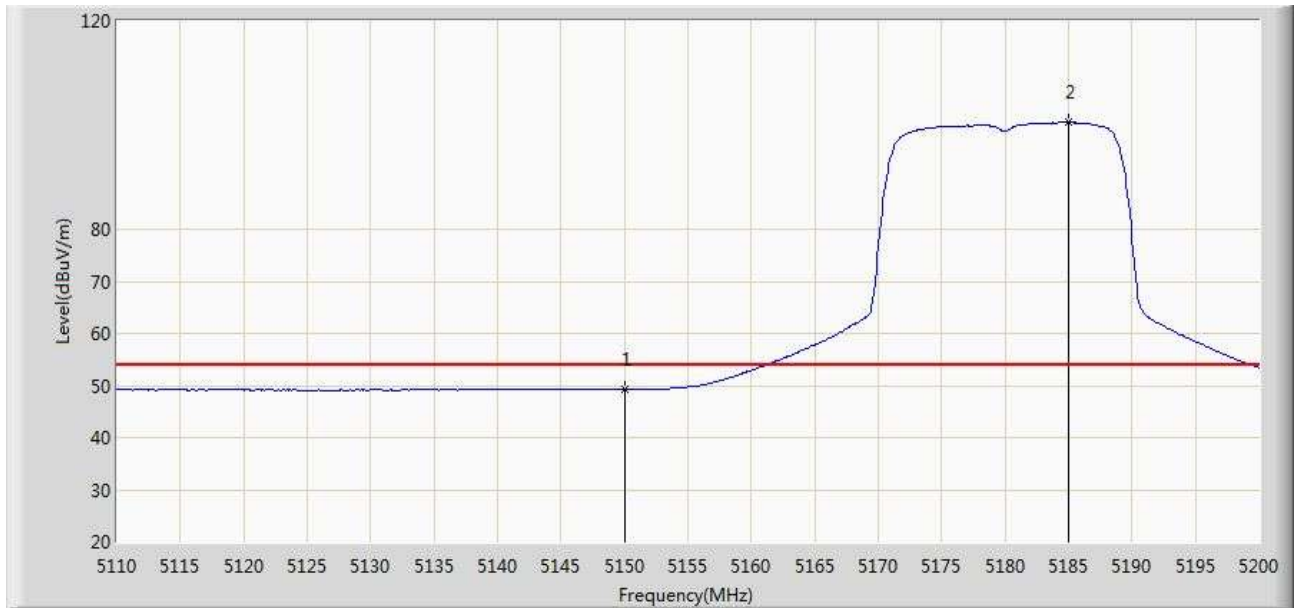
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	48.861	12.109	-5.139	54.000	36.752	AV
2		*	5185.510	85.998	49.348	N/A	N/A	36.649	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 14:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A - Channel 5180MHz	



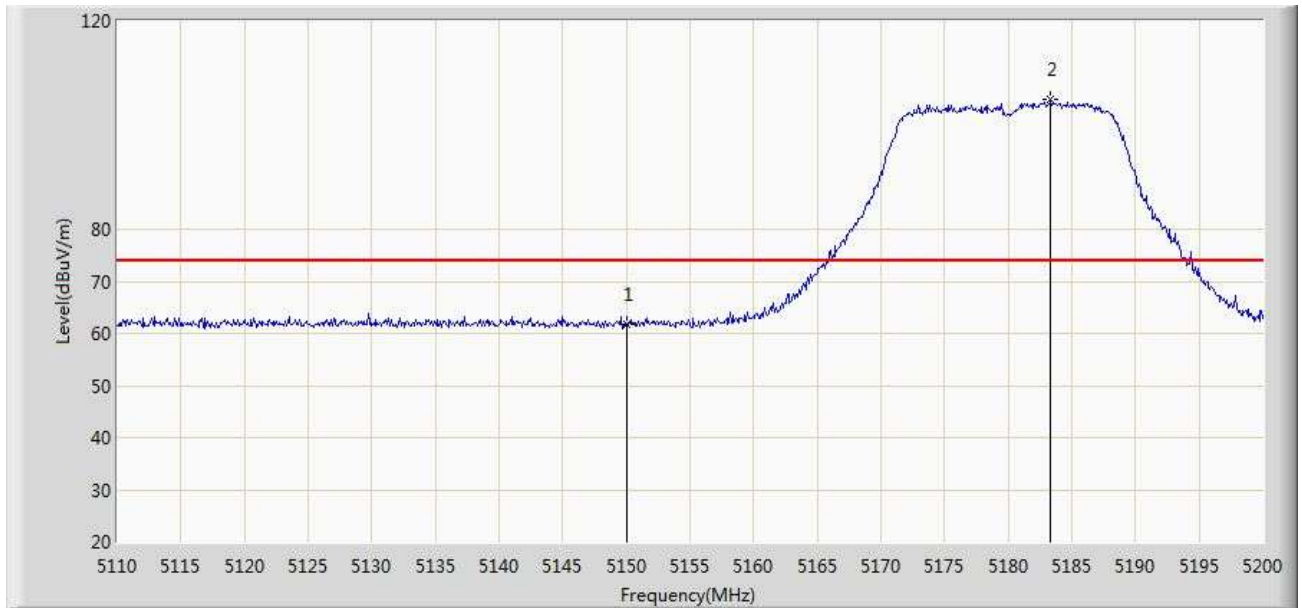
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			5150.000	61.941	25.189	-12.059	74.000	36.752	PK
2		*	5183.350	112.588	75.933	N/A	N/A	36.656	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 14:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.243	12.491	-4.757	54.000	36.752	AV
2		*	5184.970	100.457	63.806	N/A	N/A	36.651	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 14:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain B - Channel 5180MHz	



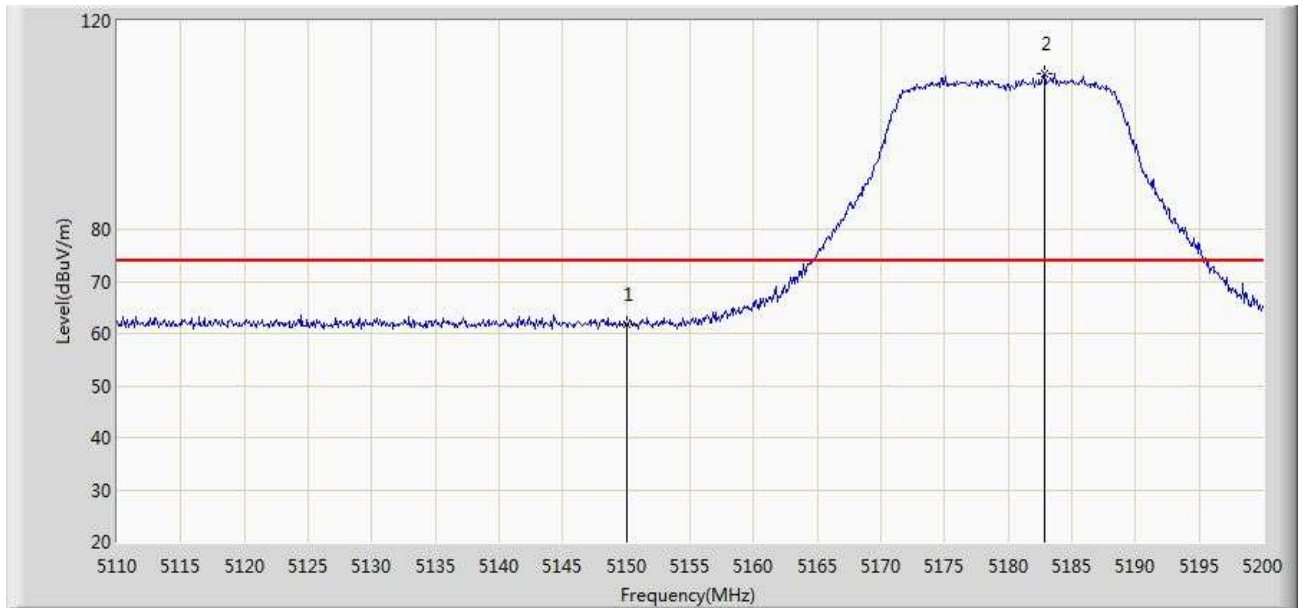
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	61.879	25.127	-12.121	74.000	36.752	PK
2		*	5183.350	104.995	68.340	N/A	N/A	36.656	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain B - Channel 5180MHz	



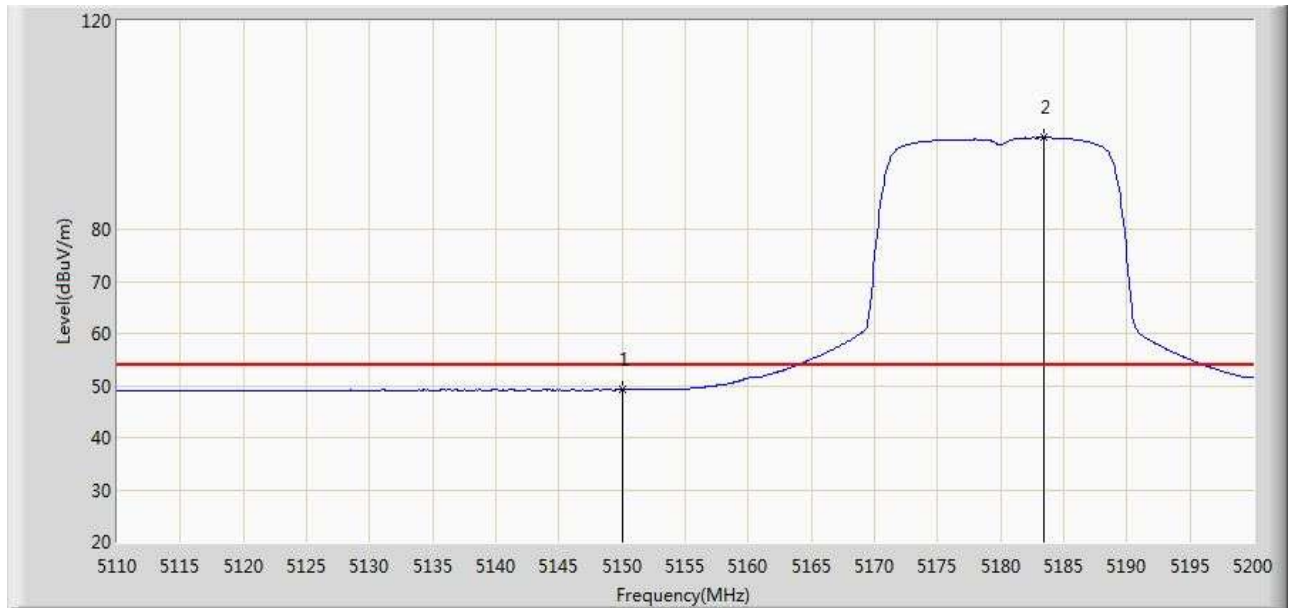
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1			5150.000	48.991	12.239	-5.009	54.000	36.752	AV
2		*	5184.340	93.178	56.525	N/A	N/A	36.653	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain B - Channel 5180MHz	



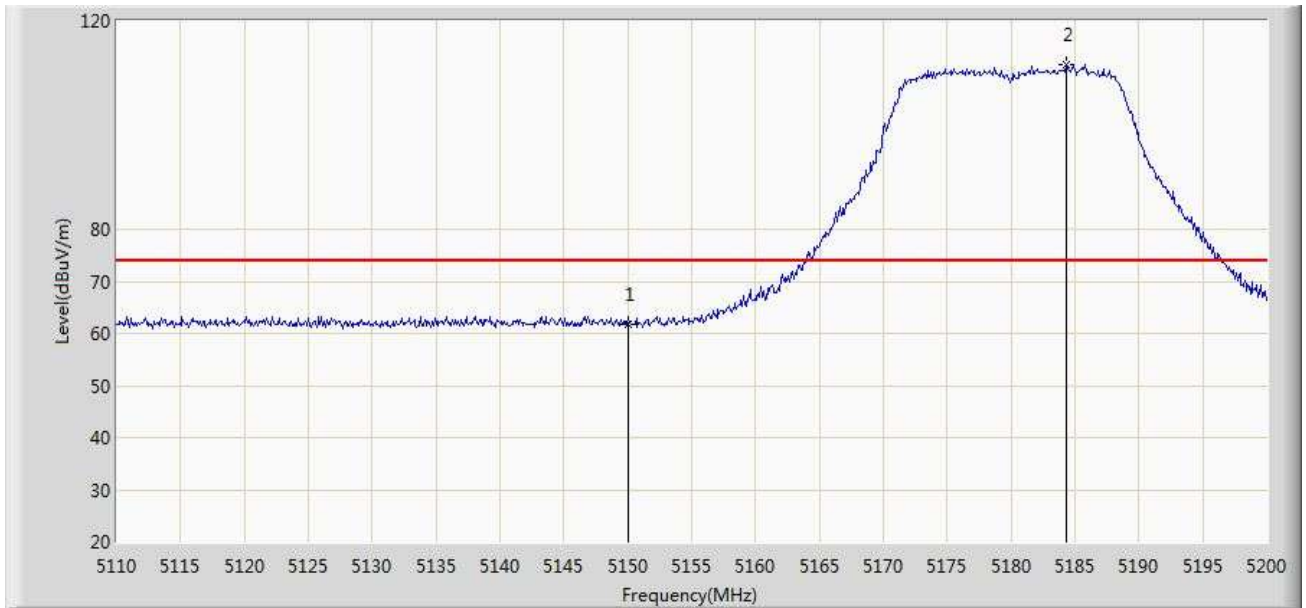
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	61.627	24.875	-12.373	74.000	36.752	PK
2		*	5182.900	109.856	73.199	N/A	N/A	36.657	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain B - Channel 5180MHz	



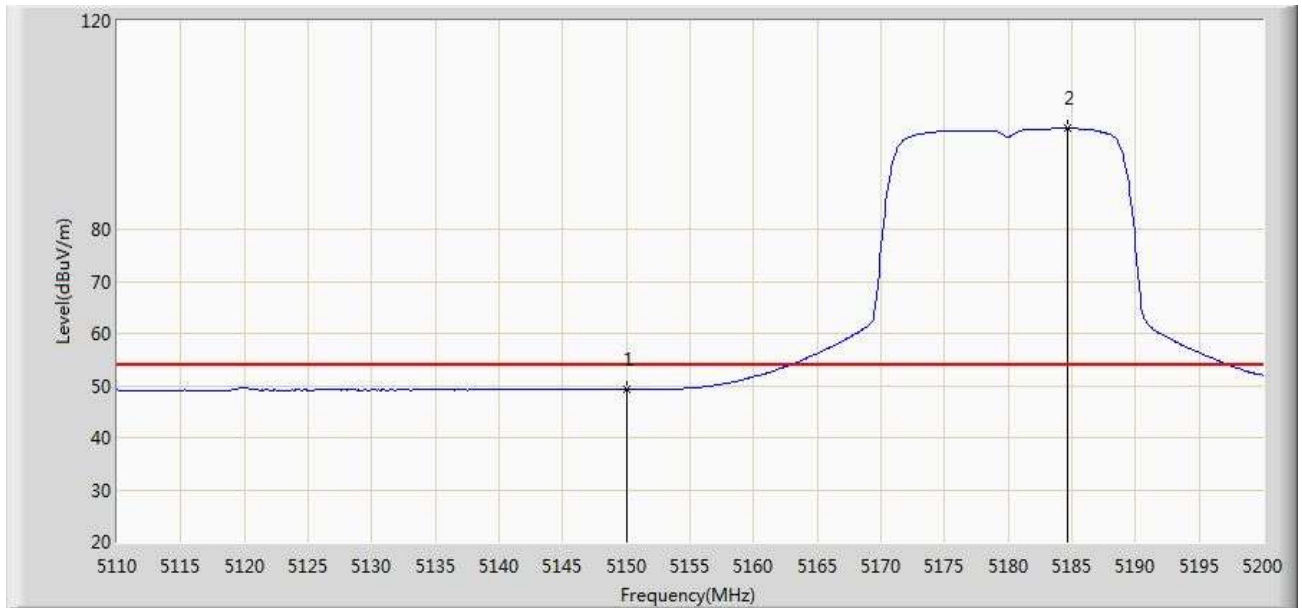
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.165	12.413	-4.835	54.000	36.752	AV
2		*	5183.440	97.553	60.898	N/A	N/A	36.655	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain C - Channel 5180MHz	



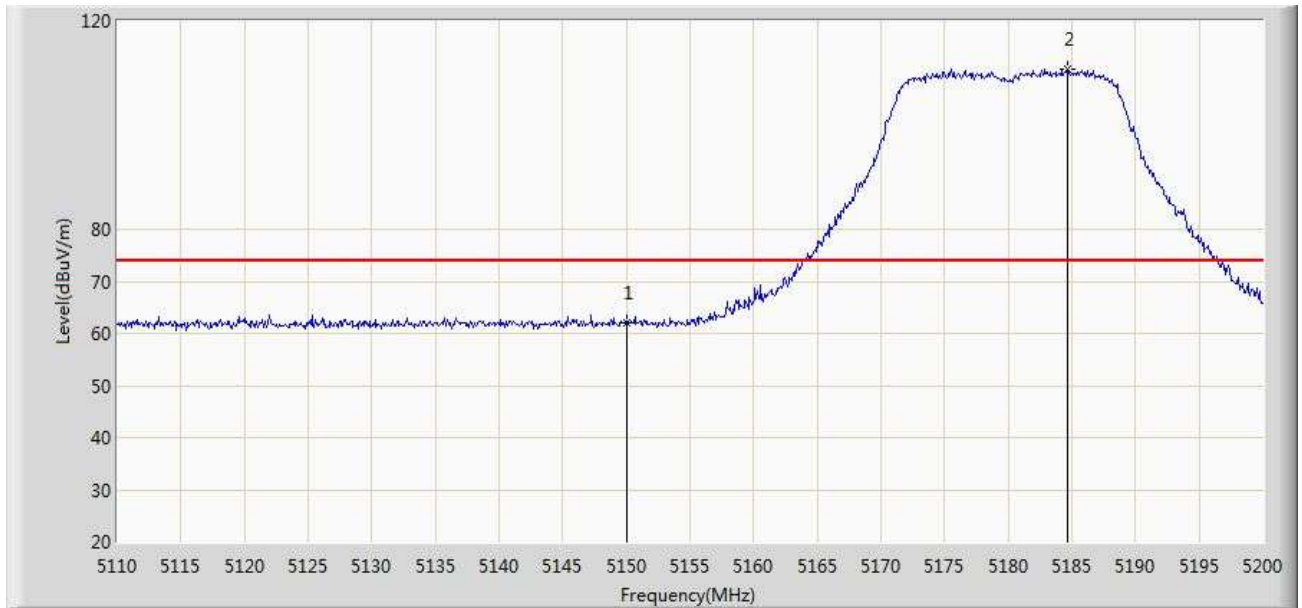
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	61.779	25.027	-12.221	74.000	36.752	PK
2		*	5184.340	111.633	74.980	N/A	N/A	36.653	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain C - Channel 5180MHz	



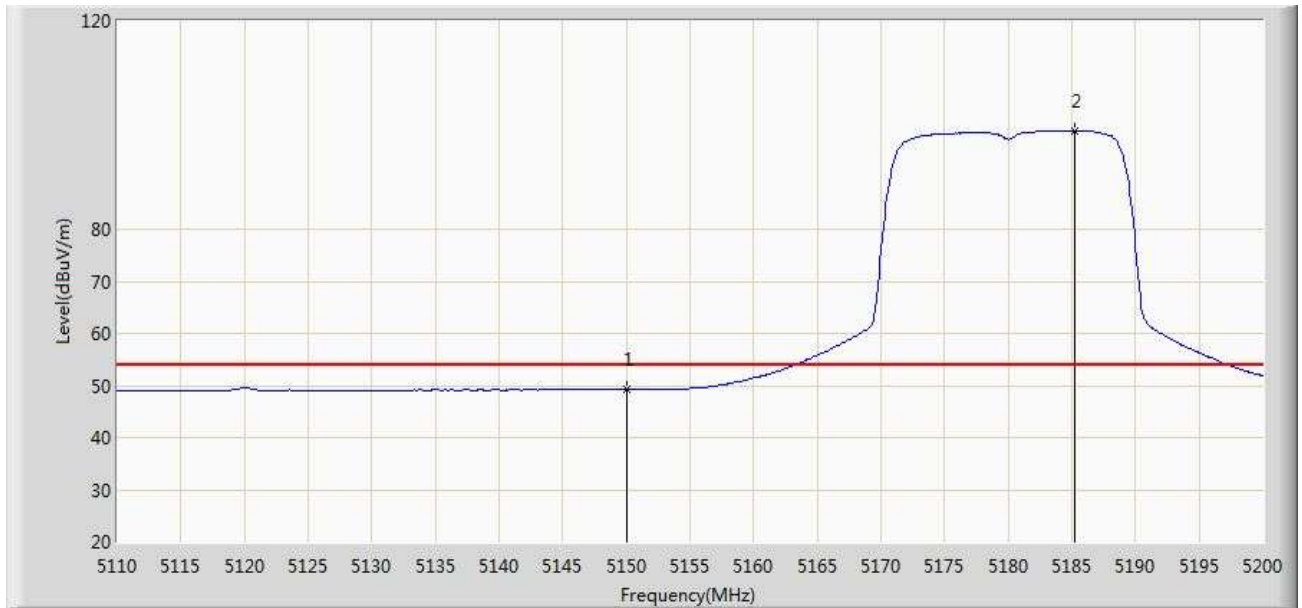
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.261	12.509	-4.739	54.000	36.752	AV
2		*	5184.610	99.369	62.717	N/A	N/A	36.652	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain C - Channel 5180MHz	



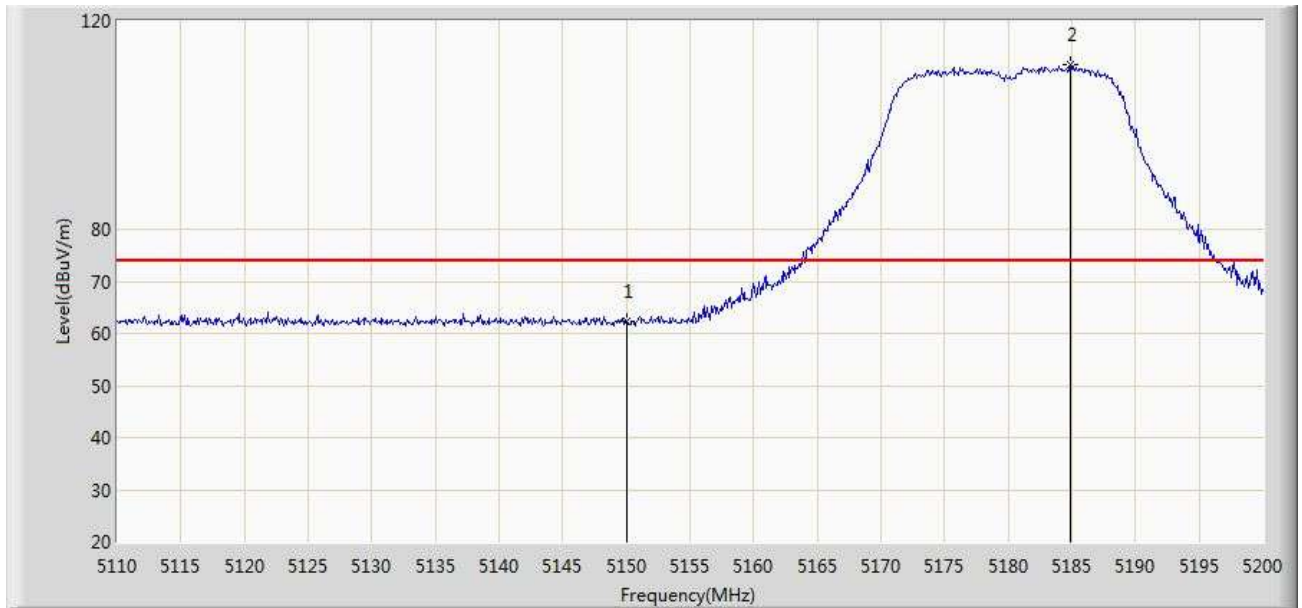
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.080	25.328	-11.920	74.000	36.752	PK
2		*	5184.610	110.698	74.046	N/A	N/A	36.652	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain C - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.173	12.421	-4.827	54.000	36.752	AV
2		*	5185.240	98.904	62.254	N/A	N/A	36.650	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.196	25.444	-11.804	74.000	36.752	PK
2		*	5184.880	111.466	74.815	N/A	N/A	36.651	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B - Channel 5180MHz	



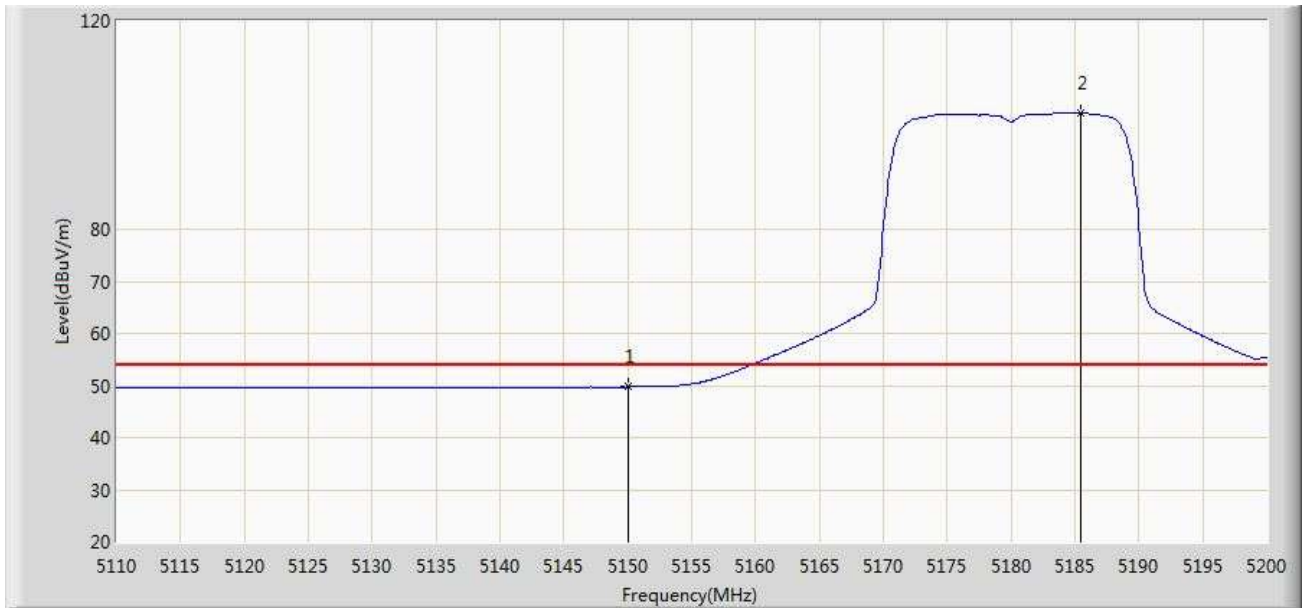
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.305	12.553	-4.695	54.000	36.752	AV
2		*	5185.600	99.045	62.396	N/A	N/A	36.650	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B - Channel 5180MHz	



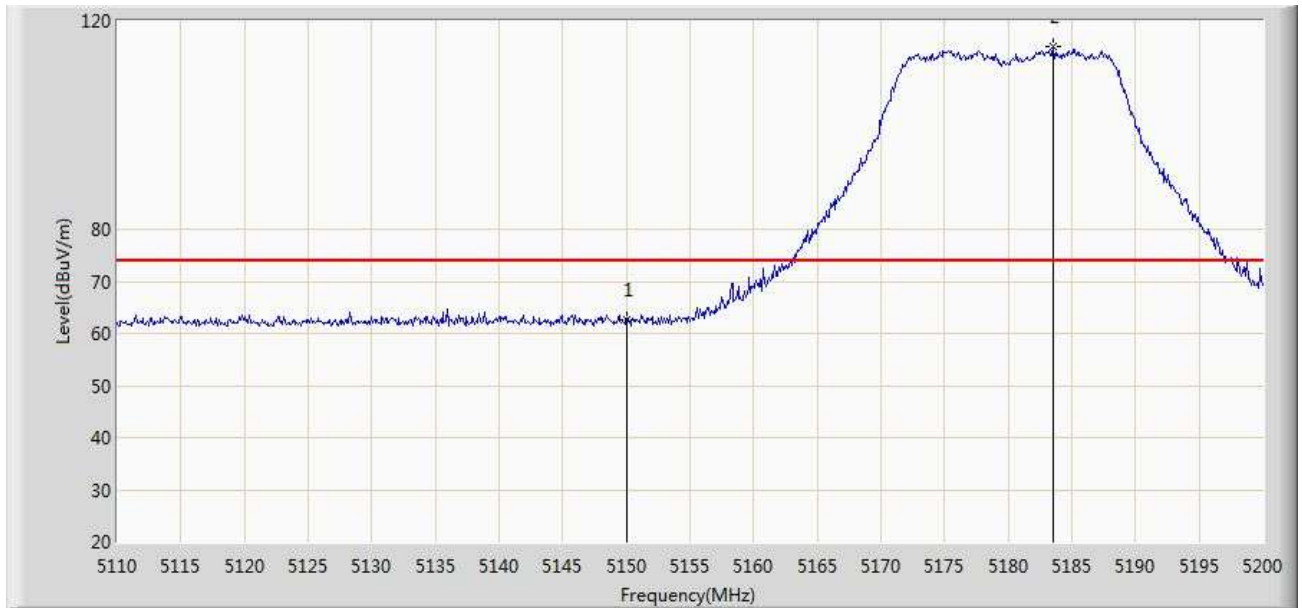
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.621	25.869	-11.379	74.000	36.752	PK
2		*	5183.170	114.426	77.770	N/A	N/A	36.656	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B - Channel 5180MHz	



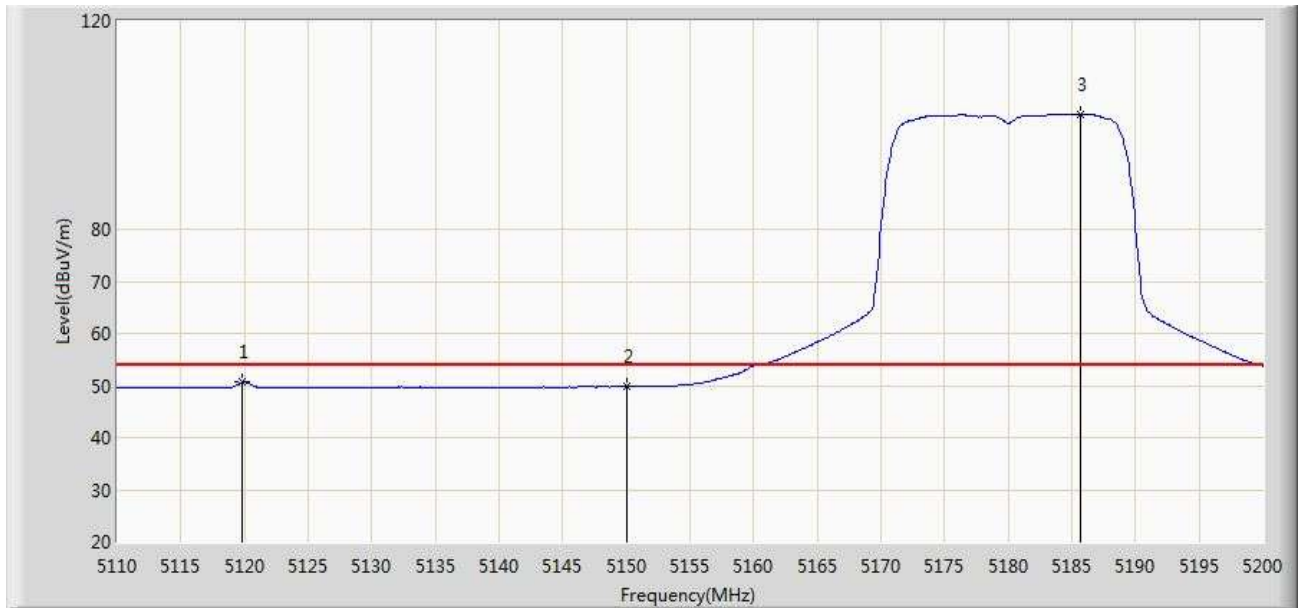
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.723	12.971	-4.277	54.000	36.752	AV
2		*	5185.420	102.293	65.643	N/A	N/A	36.649	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B+C - Channel 5180MHz	



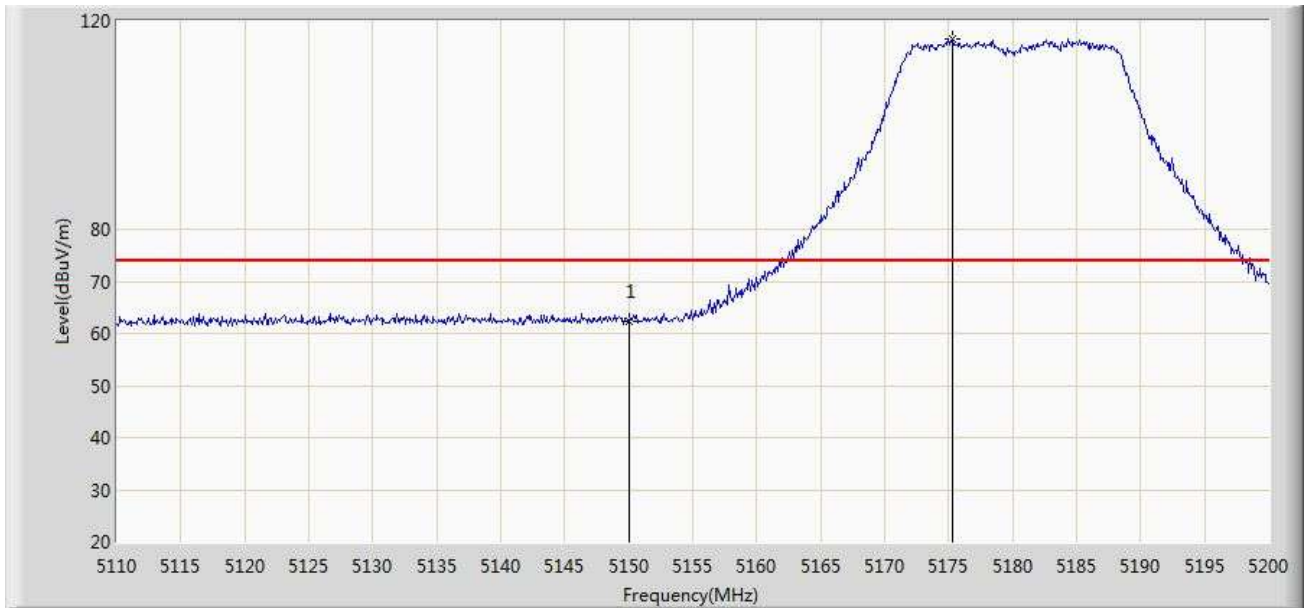
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.519	25.767	-11.481	74.000	36.752	PK
2		*	5183.530	114.958	78.303	N/A	N/A	36.655	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B+C - Channel 5180MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5119.810	50.598	13.826	-3.402	54.000	36.771	AV
2			5150.000	49.740	12.988	-4.260	54.000	36.752	AV
3		*	5185.690	102.061	65.412	N/A	N/A	36.649	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B+C - Channel 5180MHz	



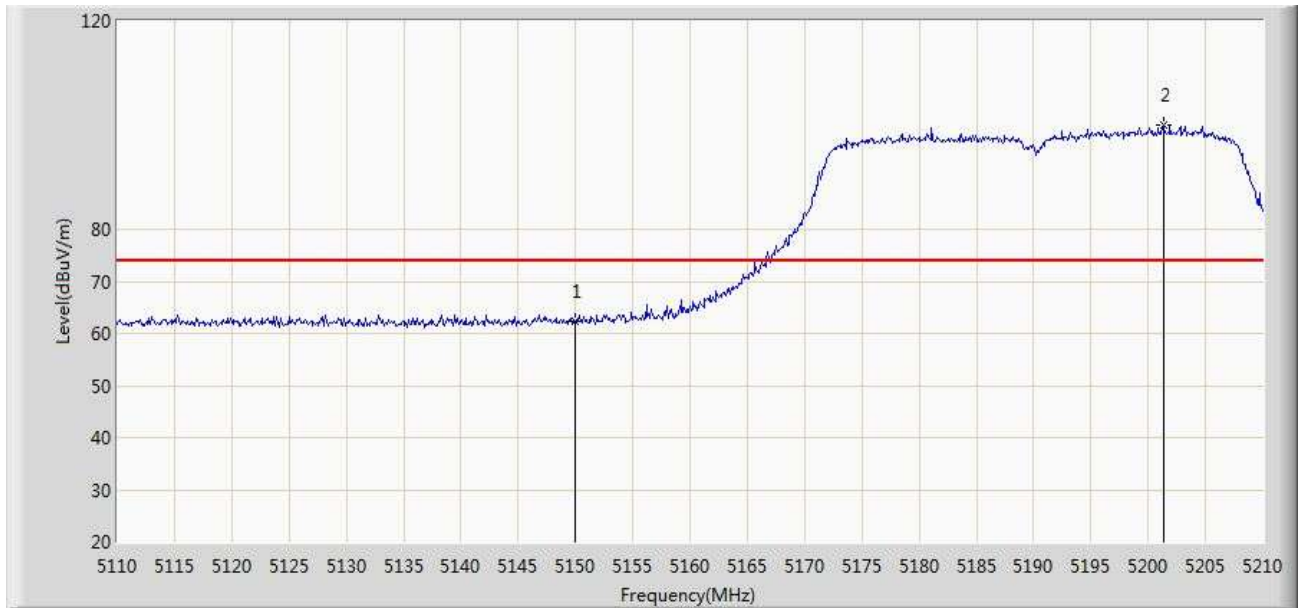
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.380	25.628	-11.620	74.000	36.752	PK
2		*	5175.340	116.620	79.940	N/A	N/A	36.680	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT20 Chain A+B+C - Channel 5180MHz	



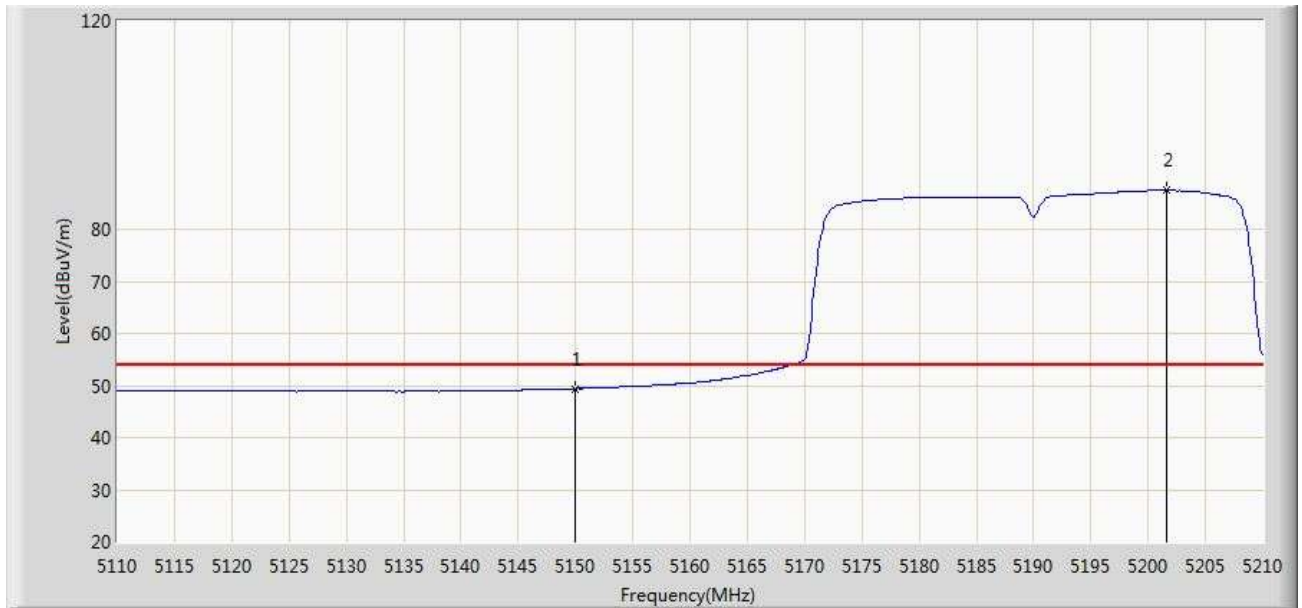
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	50.069	13.317	-3.931	54.000	36.752	AV
2		*	5176.420	103.822	67.145	49.822	54.000	36.676	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A - Channel 5190MHz	



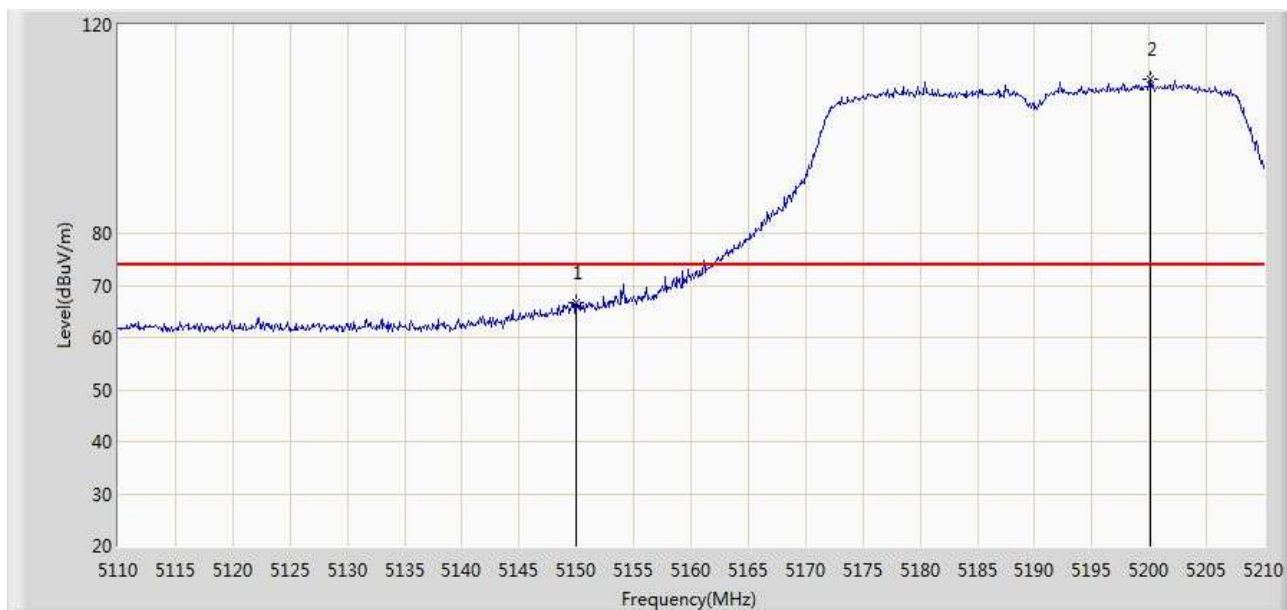
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	62.420	25.668	-11.580	74.000	36.752	PK
2		*	5201.300	99.884	63.274	N/A	N/A	36.610	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A - Channel 5190MHz	



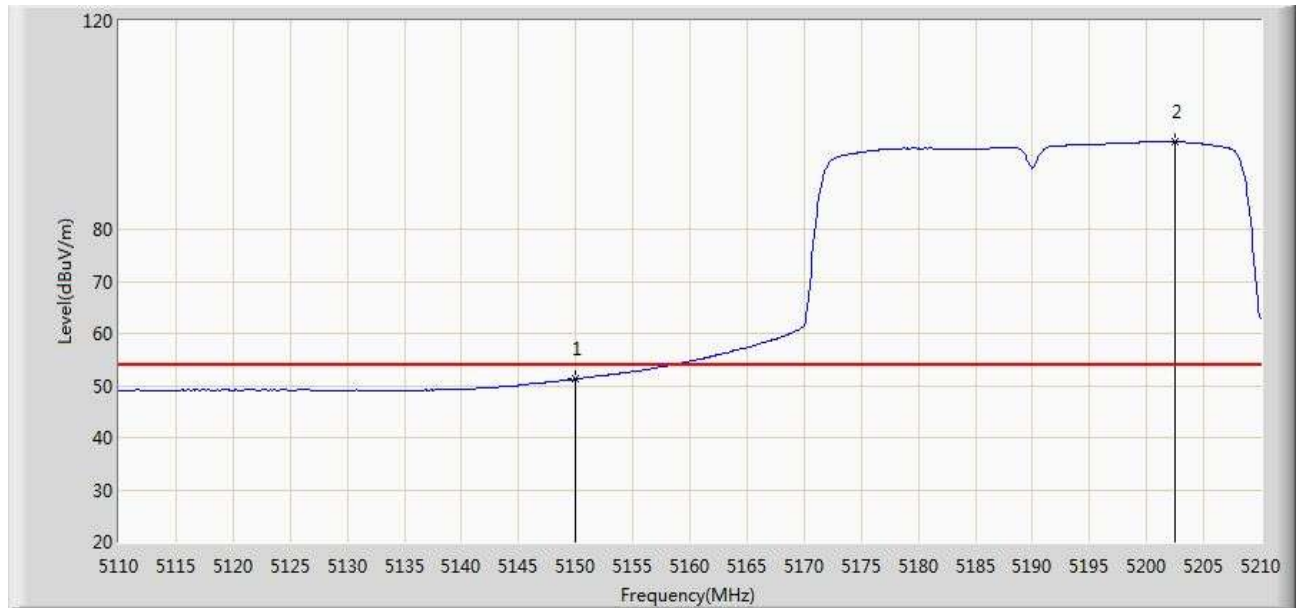
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	49.404	12.652	-4.596	54.000	36.752	AV
2		*	5201.600	87.481	50.872	N/A	N/A	36.609	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A - Channel 5190MHz	



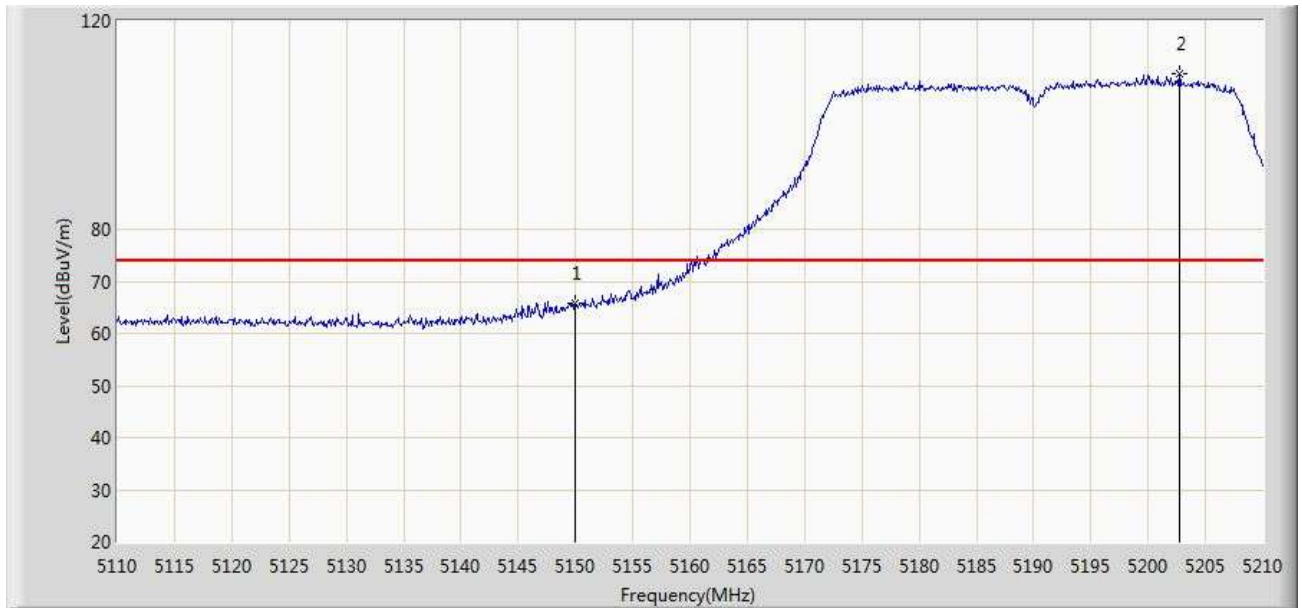
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1			5150.000	66.564	29.812	-7.436	74.000	36.752	PK
2		*	5200.100	109.486	72.874	N/A	N/A	36.612	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A - Channel 5190MHz	



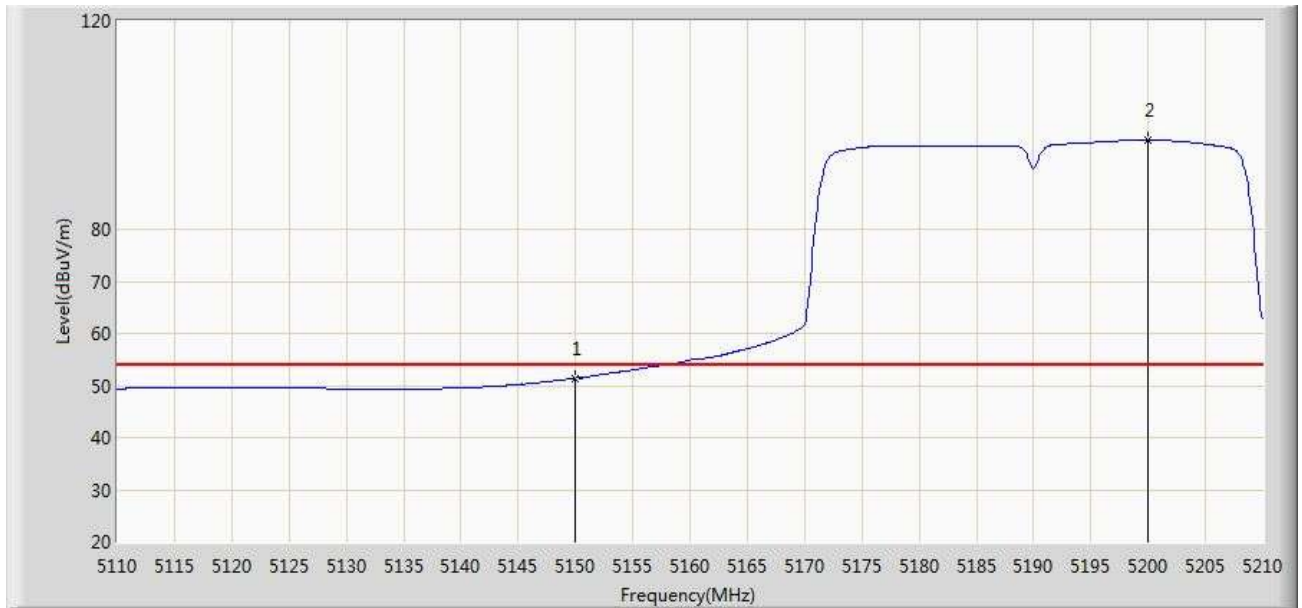
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	51.295	14.543	-2.705	54.000	36.752	AV
2		*	5202.500	96.743	60.135	N/A	N/A	36.607	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain B - Channel 5190MHz	



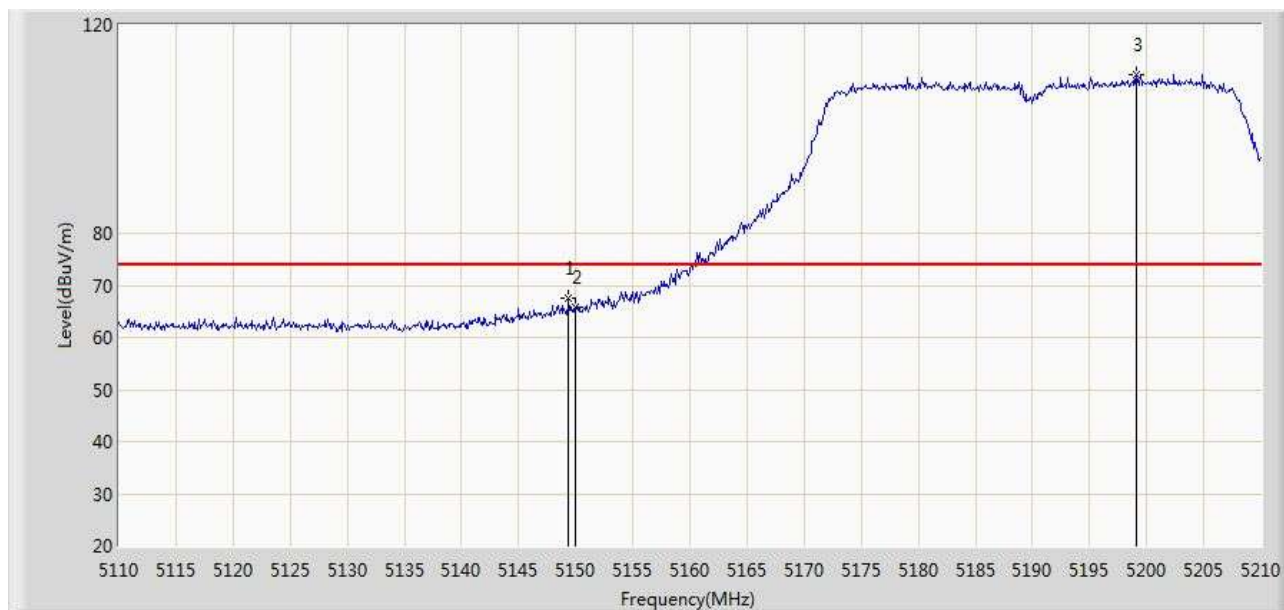
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1			5150.000	65.916	29.164	-8.084	74.000	36.752	PK
2		*	5202.700	109.928	73.321	N/A	N/A	36.607	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain B - Channel 5190MHz	



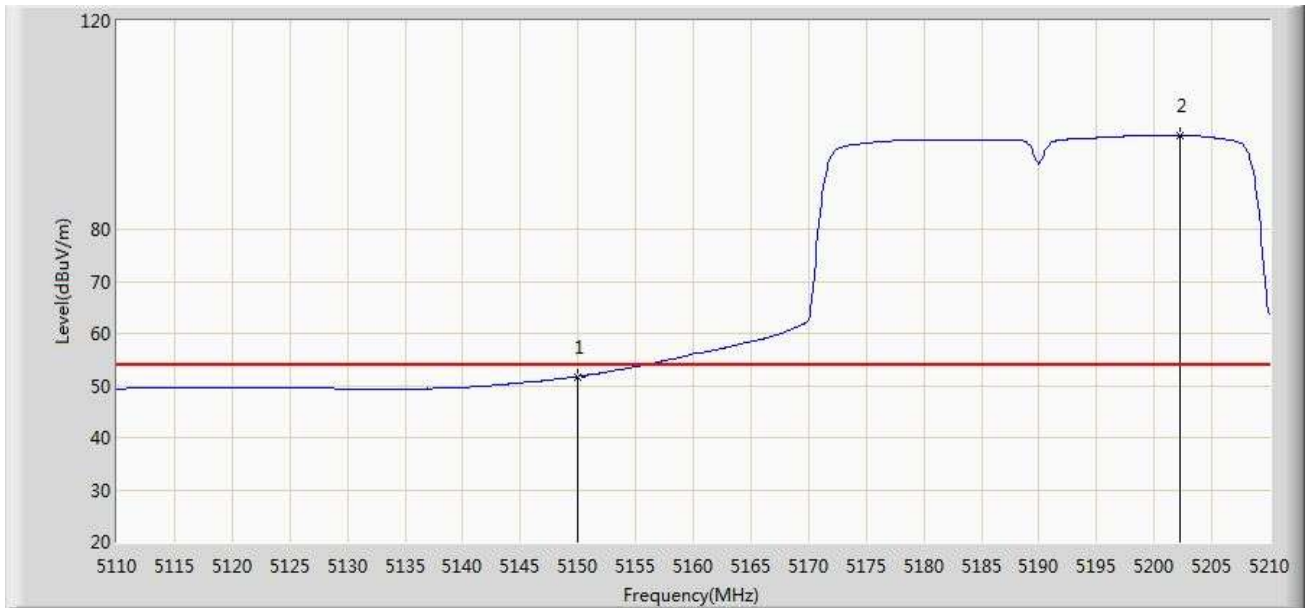
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	51.409	14.657	-2.591	54.000	36.752	AV
2		*	5200.000	97.026	60.413	N/A	N/A	36.613	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain B - Channel 5190MHz	



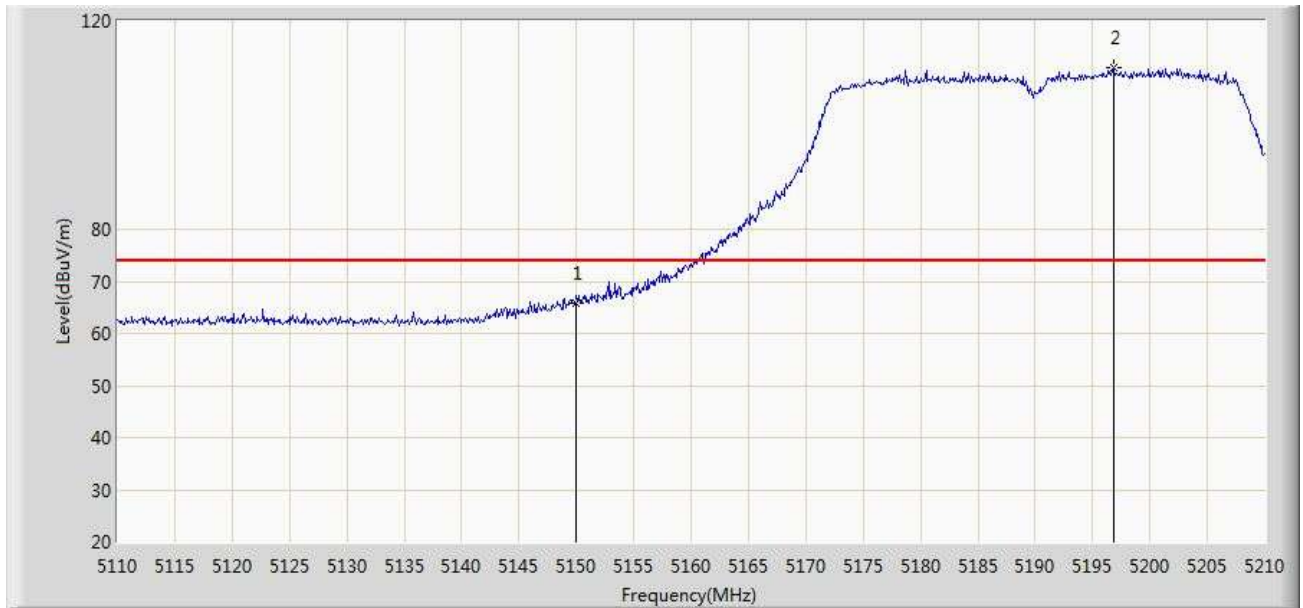
No	Flag	Mark	Frequency (MHz)	Measure Level (dB μ V/m)	Reading Level (dB μ V)	Over Limit (dB)	Limit (dB μ V/m)	Factor	Type
1			5149.400	67.576	30.823	-6.424	74.000	36.753	PK
2			5150.000	65.882	29.130	-8.118	74.000	36.752	PK
3		*	5199.100	110.569	73.954	N/A	N/A	36.614	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain B - Channel 5190MHz	



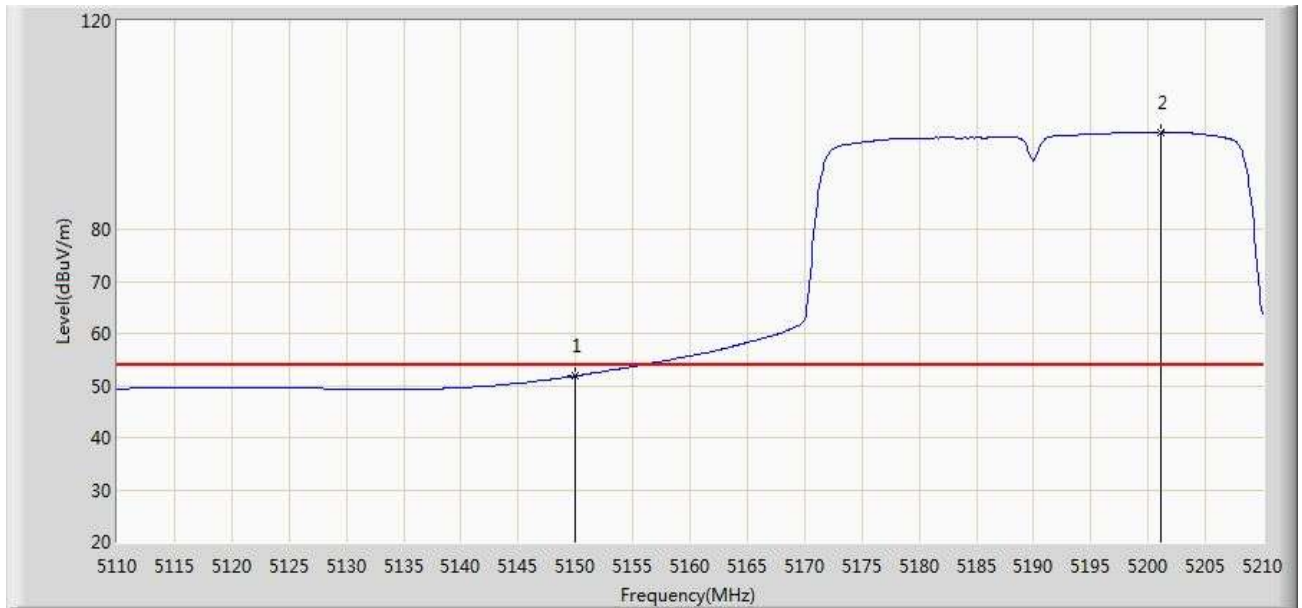
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	51.720	14.968	-2.280	54.000	36.752	AV
2		*	5202.200	98.050	61.442	N/A	N/A	36.608	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain C - Channel 5190MHz	



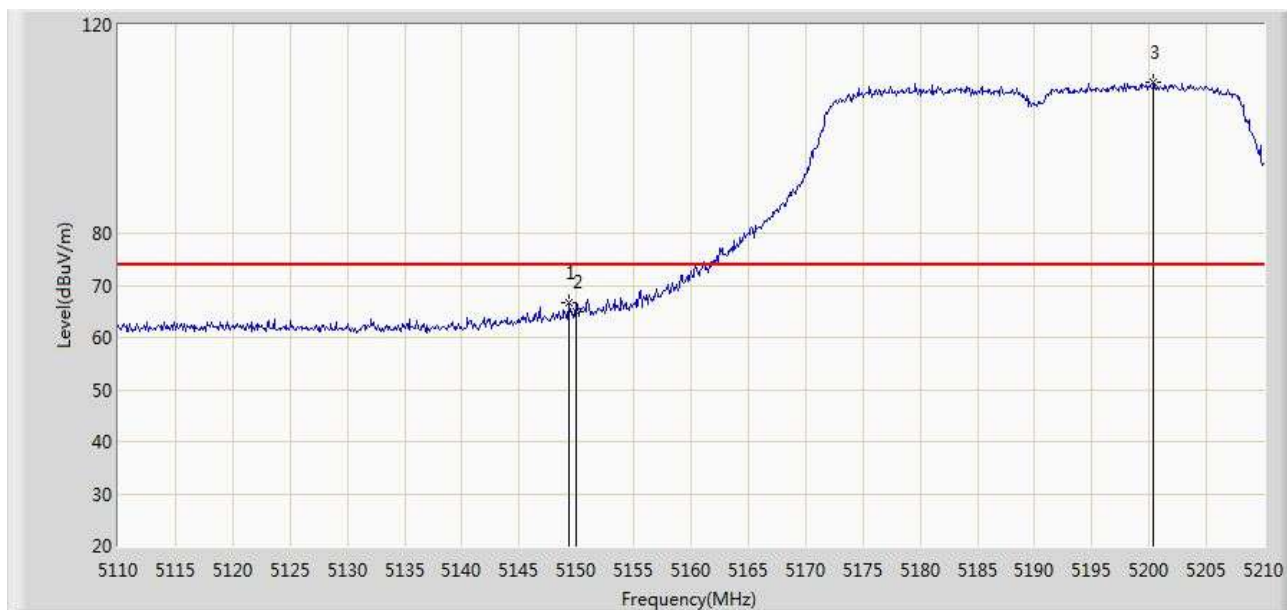
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	65.806	29.054	-8.194	74.000	36.752	PK
2		*	5196.800	110.987	74.367	N/A	N/A	36.620	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain C - Channel 5190MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	51.833	15.081	-2.167	54.000	36.752	AV
2		*	5201.100	98.668	62.058	N/A	N/A	36.610	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain C - Channel 5190MHz	



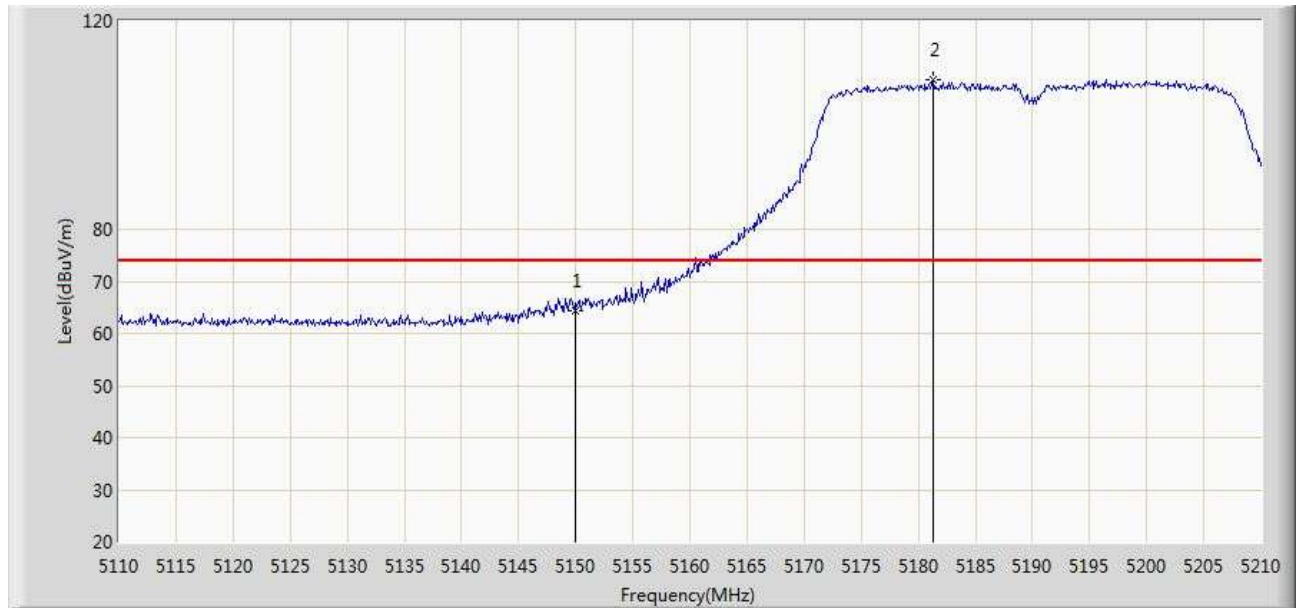
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5149.300	66.773	30.020	-7.227	74.000	36.753	PK
2			5150.000	64.889	28.137	-9.111	74.000	36.752	PK
3		*	5200.400	108.842	72.230	N/A	N/A	36.612	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain C - Channel 5190MHz	



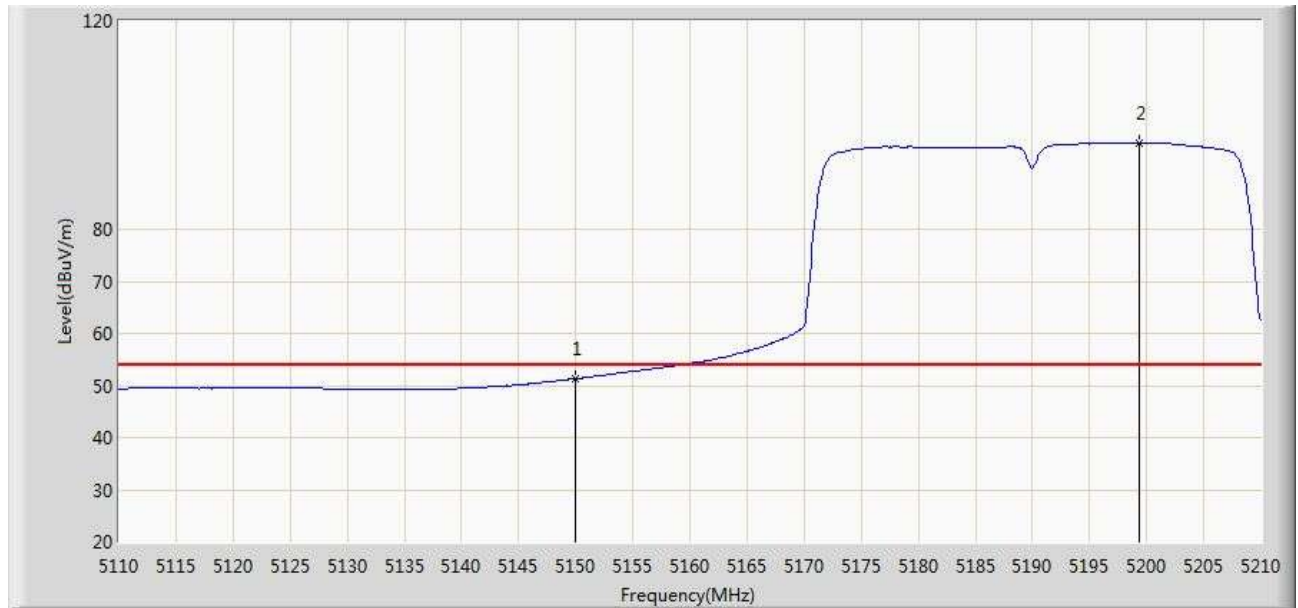
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	51.181	14.429	-2.819	54.000	36.752	AV
2		*	5201.400	96.974	60.364	N/A	N/A	36.610	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A+B - Channel 5190MHz	



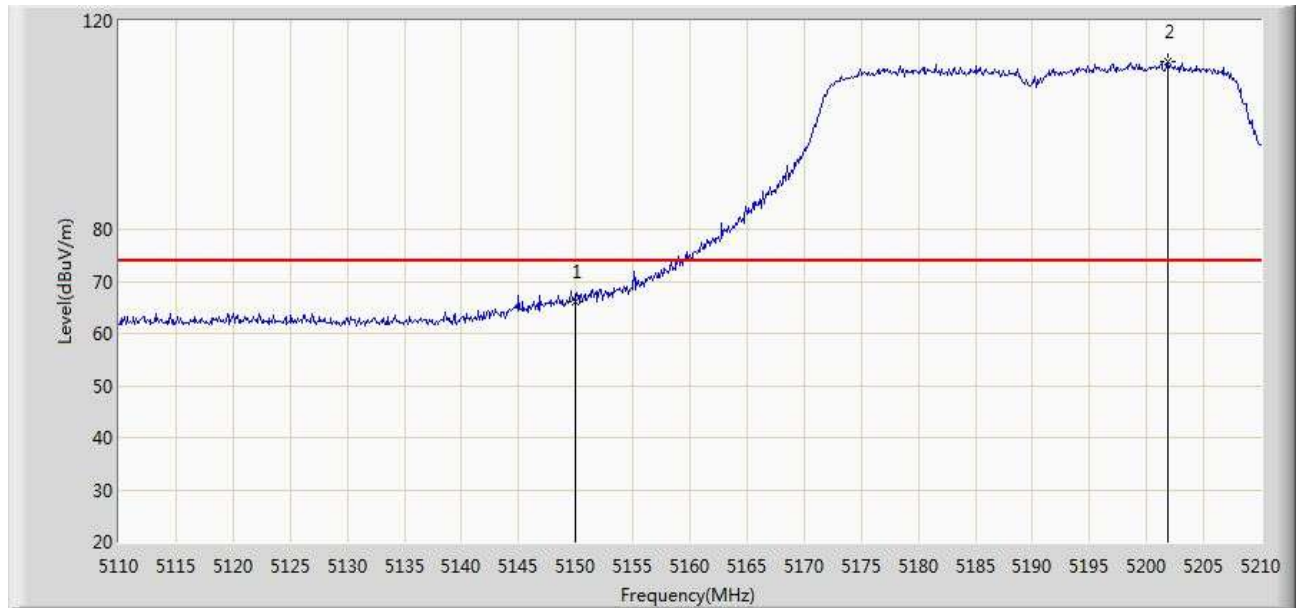
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	64.278	27.526	-9.722	74.000	36.752	PK
2		*	5181.300	108.676	72.015	N/A	N/A	36.662	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A+B - Channel 5190MHz	



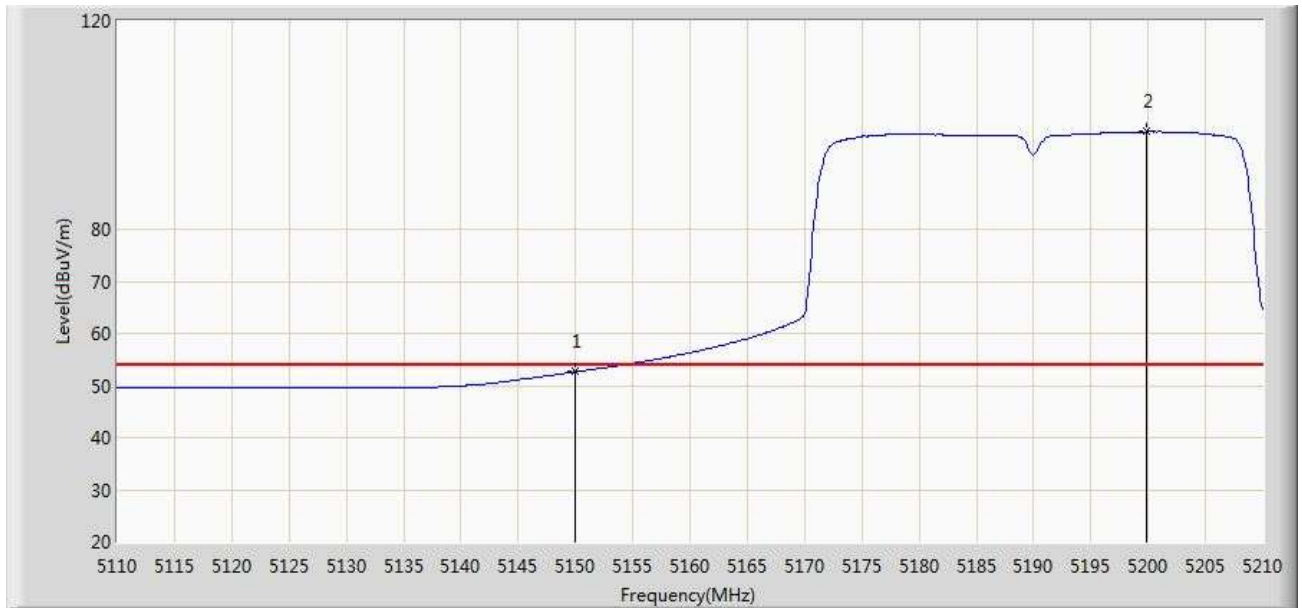
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	51.308	14.556	-2.692	54.000	36.752	AV
2		*	5199.400	96.627	60.013	N/A	N/A	36.613	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A+B - Channel 5190MHz	



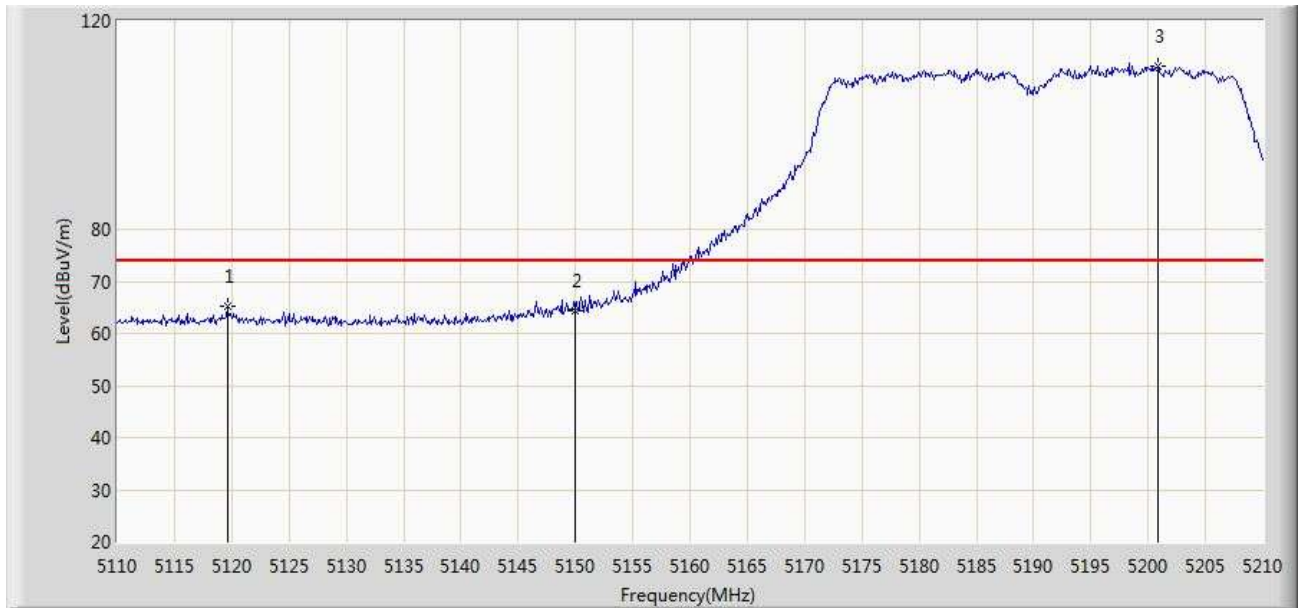
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	66.070	29.318	-7.930	74.000	36.752	PK
2		*	5201.800	112.203	75.594	N/A	N/A	36.609	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A+B - Channel 5190MHz	



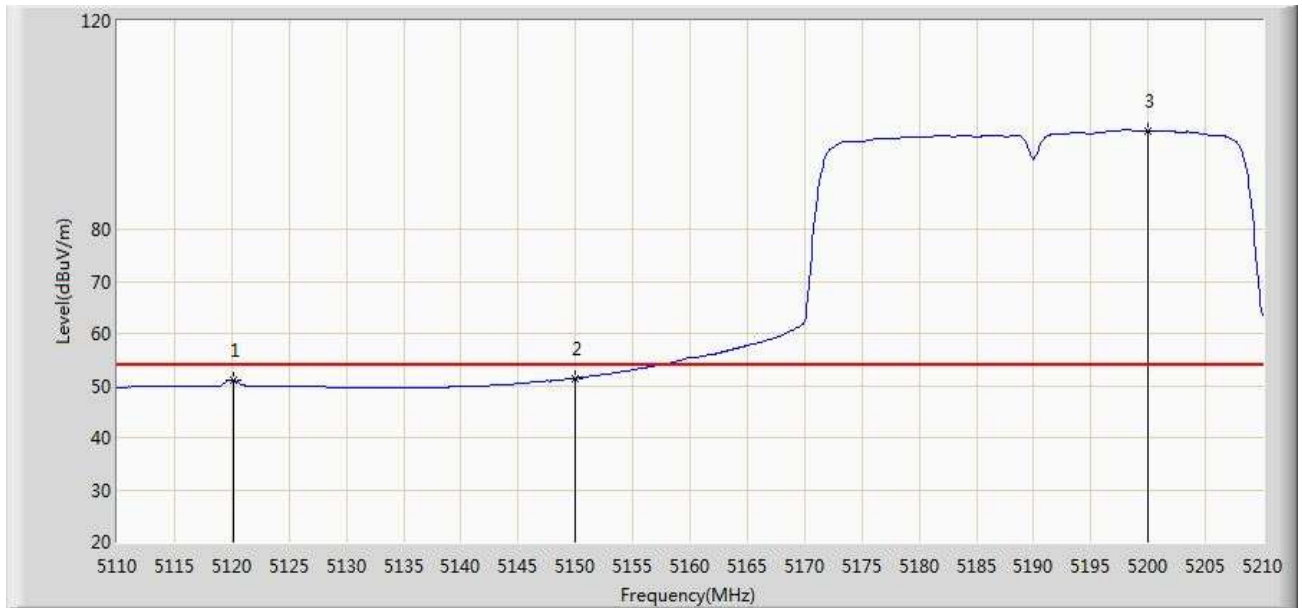
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	52.653	15.901	-1.347	54.000	36.752	AV
2		*	5199.900	98.727	62.114	N/A	N/A	36.613	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A+B+C - Channel 5190MHz	



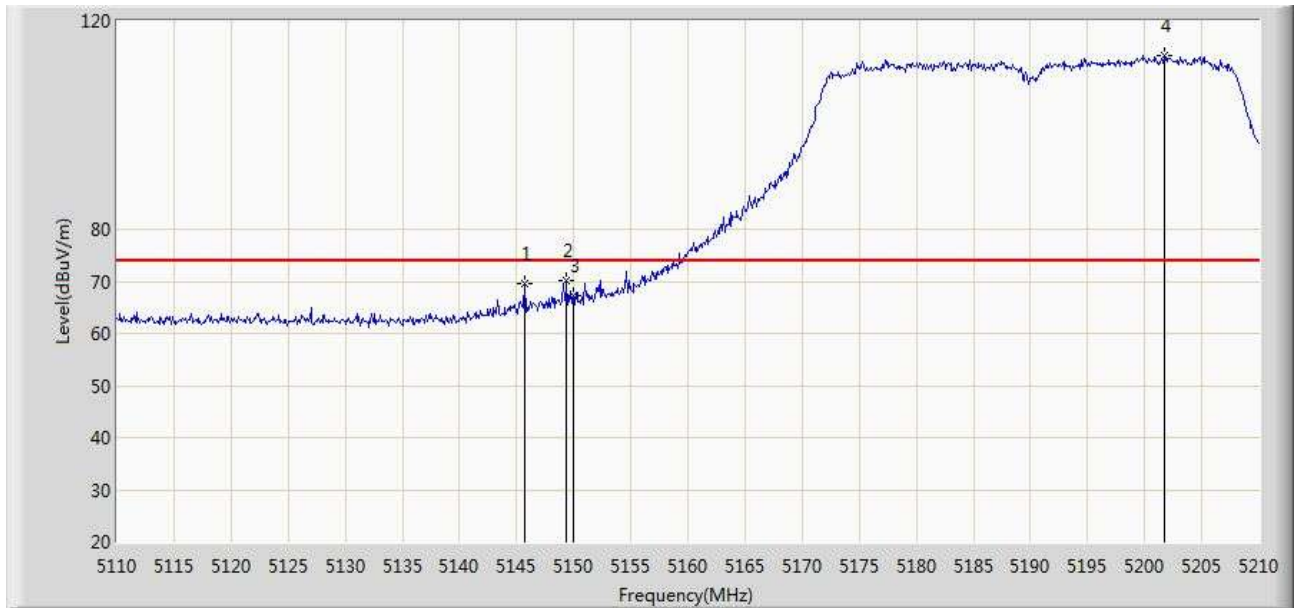
No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5119.600	65.316	28.544	-8.684	74.000	36.771	PK
2			5150.000	64.338	27.586	-9.662	74.000	36.752	PK
3		*	5200.900	111.300	74.689	N/A	N/A	36.611	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: 802.11n-HT40 Chain A+B+C - Channel 5190MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5120.200	51.042	14.270	-2.958	54.000	36.772	AV
2			5150.000	51.385	14.633	-2.615	54.000	36.752	AV
3		*	5200.000	98.745	62.132	N/A	N/A	36.613	AV

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: Transmit at Channel 5190MHz by 802.11n-HT40 Chain A+B+C	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5145.700	69.556	32.798	-4.444	74.000	36.758	PK
2			5149.400	70.213	33.460	-3.787	74.000	36.753	PK
3			5150.000	67.229	30.477	-6.771	74.000	36.752	PK
4		*	5201.700	113.467	76.858	N/A	N/A	36.609	PK

Test Engineer: Roy Cheng	
Test Site: AC1	Time: 2013/11/04 - 15:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT Model: WF-0613A	Power: AC 120V/60Hz
Test Mode: Transmit at Channel 5190MHz by 802.11n-HT40 Chain A+B+C	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor	Type
1			5150.000	52.722	15.970	-1.278	54.000	36.752	AV
2		*	5202.500	100.701	64.093	N/A	N/A	36.607	AV

7.9. AC Conducted Emissions Measurement

7.9.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

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

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

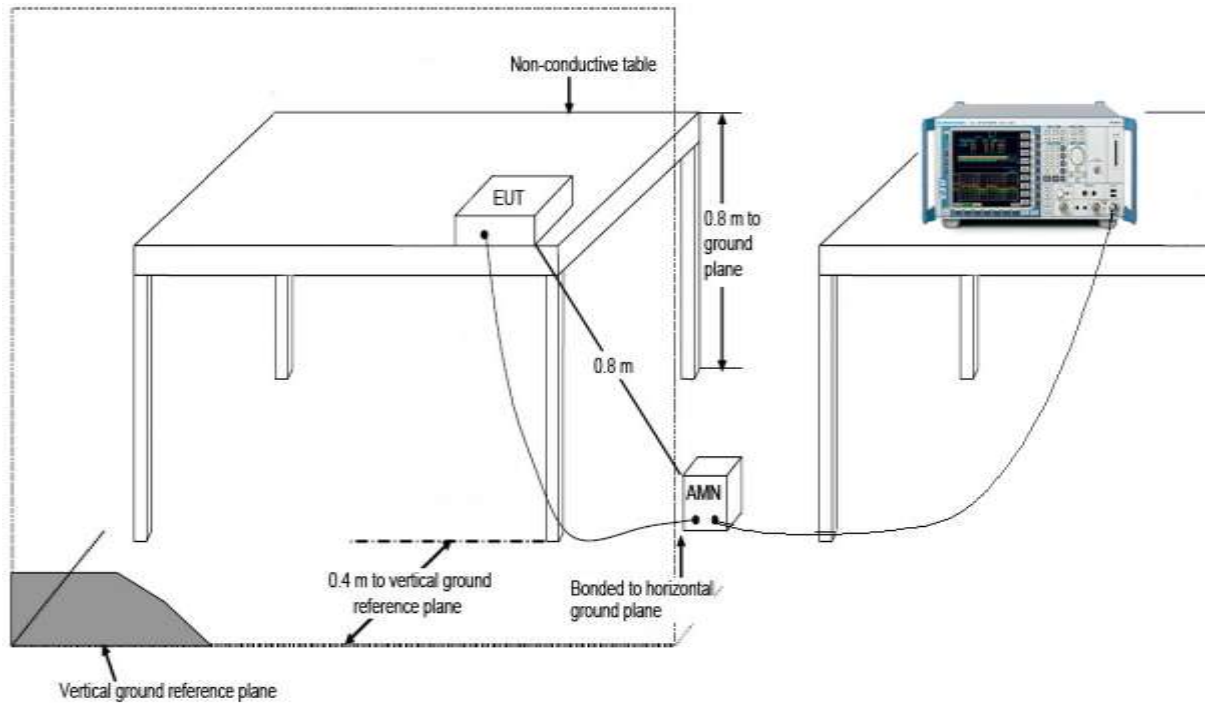
7.9.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

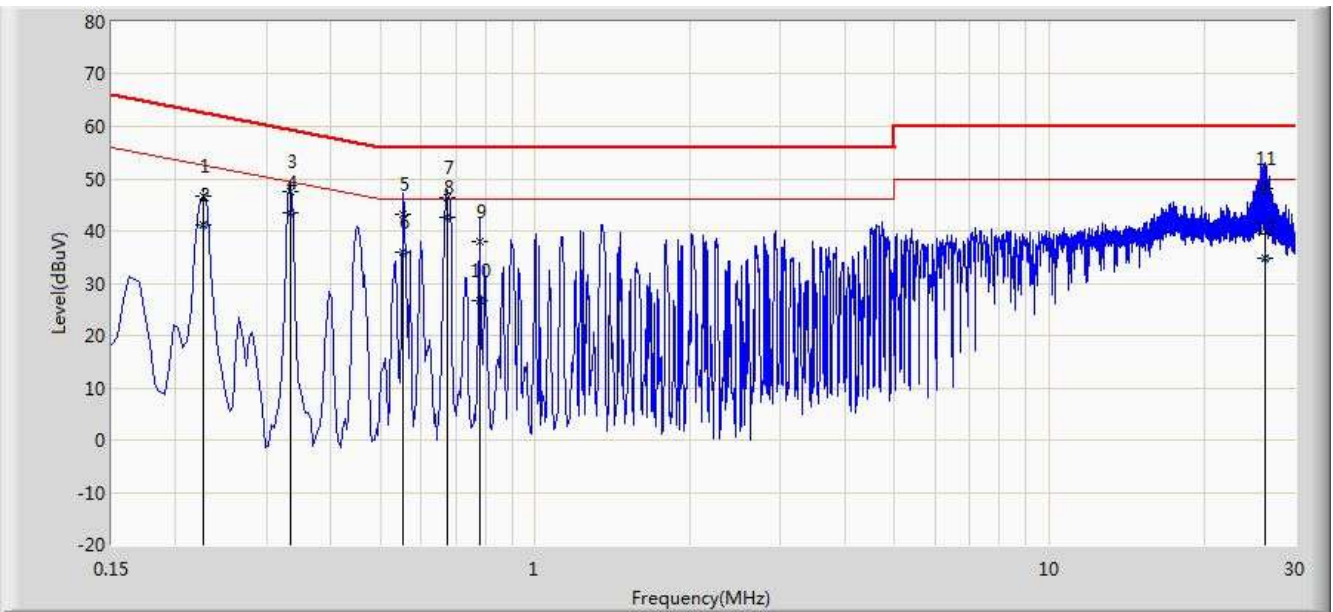
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

7.9.3. Test Setup



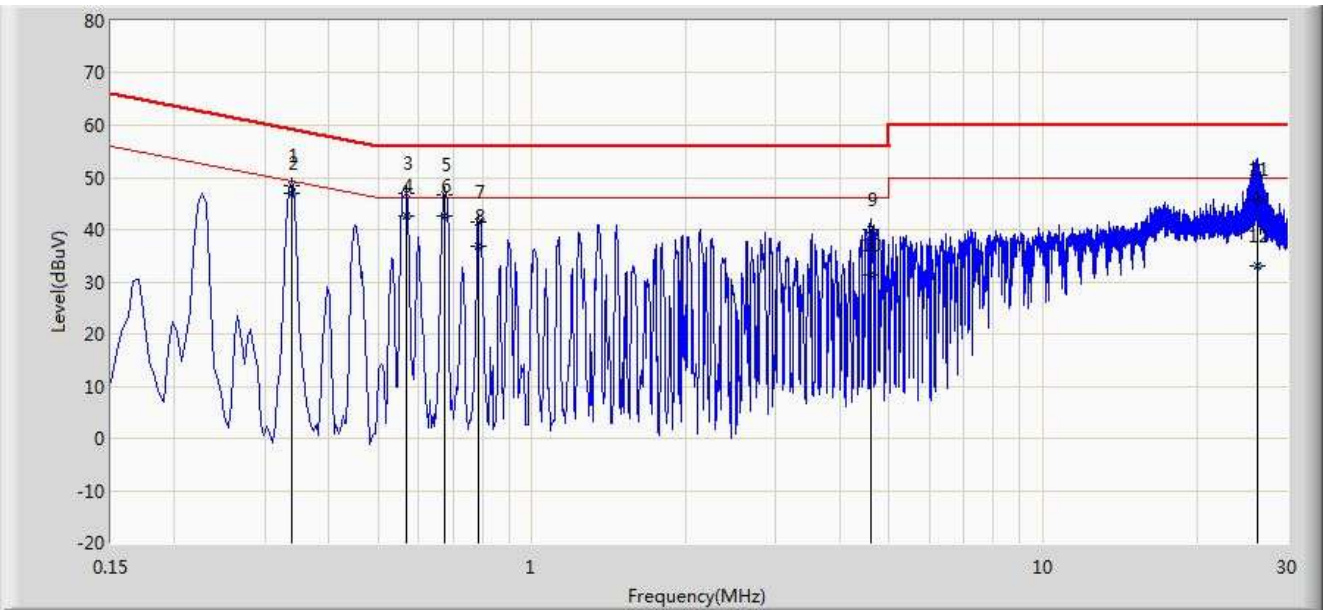
7.9.4. Test Result

Test Engineer: Roy Cheng	
Test Site: TR 2	Time: 2013/11/27 - 11:07
Limit: FCC_Part15.207	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Line
EUT Model: WF-0613A	Power: AC 120V/60Hz
Note: Normal Operation	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor	Type
1			0.226	46.658	36.714	-15.938	62.595	9.944	QP
2			0.226	41.154	31.210	-11.441	52.595	9.944	AV
3			0.334	47.430	37.398	-11.921	59.351	10.031	QP
4			0.334	43.557	33.526	-5.794	49.351	10.031	AV
5			0.554	43.123	32.985	-12.877	56.000	10.139	QP
6			0.554	35.809	25.670	-10.191	46.000	10.139	AV
7			0.674	46.448	36.371	-9.552	56.000	10.077	QP
8		*	0.674	42.667	32.591	-3.333	46.000	10.077	AV
9			0.778	37.968	27.946	-18.032	56.000	10.022	QP
10			0.778	26.760	16.737	-19.240	46.000	10.022	AV
11			26.230	48.032	37.802	-11.968	60.000	10.230	QP
12			26.230	34.914	24.684	-15.086	50.000	10.230	AV

Test Engineer: Roy Cheng	
Test Site: TR 2	Time: 2013/11/27 - 11:07
Limit: FCC_Part15.207	Margin: 0
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT Model: WF-0613A	Power: AC 120V/60Hz
Note: Normal Operation	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor	Type
1			0.338	48.374	38.308	-10.878	59.252	10.066	QP
2		*	0.338	46.882	36.816	-2.371	49.252	10.066	AV
3			0.566	46.941	36.791	-9.059	56.000	10.150	QP
4			0.566	42.614	32.464	-3.386	46.000	10.150	AV
5			0.674	46.523	36.434	-9.477	56.000	10.090	QP
6			0.674	42.739	32.649	-3.261	46.000	10.090	AV
7			0.786	41.568	31.541	-14.432	56.000	10.027	QP
8			0.786	36.818	26.791	-9.182	46.000	10.027	AV
9			4.590	40.004	29.999	-15.996	56.000	10.005	QP
10			4.590	31.282	21.276	-14.718	46.000	10.005	AV
11			26.198	45.752	35.413	-14.248	60.000	10.339	QP
12			26.198	32.920	22.581	-17.080	50.000	10.339	AV

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **2.4GHz&5GHz 3x3 Outdoor AP FCC ID: SFK-WF0613A** is in compliance with Part 15E of the FCC Rules.

_____ The End _____