



MEASUREMENT REPORT

FCC Part 15B

FCC ID: QISAP4130DN
APPLICANT: HUAWEI TECHNOLOGIES CO., LTD

Application Type: Certification
Product: Wireless LAN Access Point
Model No.: AP4130DN
FCC Classification: FCC Class B Digital Device (JBP)
FCC Rule Part(s): FCC Part 15 Subpart B
Test Procedure(s): ANSI C63.4: 2014
Test Date: November 13, 2015 ~ February 03, 2016

Reviewed By : Robin Wu
(Robin Wu)
Approved By : Marlin Chen
(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 ANSI C63.4-2014. 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.

Revision History

Report No.	Version	Description	Issue Date
1501RSU02803	Rev. 01	Initial report	02-03-2016

CONTENTS

Description	Page
§2.1033 General Information	4
1. INTRODUCTION	5
1.1. Scope	5
1.2. MRT Test Location	5
2. PRODUCT INFORMATION	6
2.1. Equipment Description.....	6
2.2. Device Capabilities	6
2.3. Test Configuration	7
2.4. Test System Details.....	8
2.5. EMI Suppression Device(s)/Modifications	8
2.6. Labeling Requirements.....	8
3. DESCRIPTION OF TEST	9
3.1. Evaluation Procedure	9
3.2. AC Line Conducted Emissions	9
3.3. Radiated Emissions.....	10
4. TEST EQUIPMENT CALIBRATION DATE	11
5. MEASUREMENT UNCERTAINTY.....	12
6. TEST RESULT	13
6.1. Summary	13
6.2. Conducted Emission Measurement	14
6.2.1. Test Limit	14
6.2.2. Test Setup.....	14
6.2.3. Test Result of Conducted Emissions.....	15
6.3. Radiated Emission Measurement	17
6.3.1. Test Limit	17
6.3.2. Test Setup.....	17
6.3.3. Test Result of Radiated Emissions.....	19
7. CONCLUSION.....	27

§2.1033 General Information

Applicant:	HUAWEI TECHNOLOGIES CO., LTD
Applicant Address:	Administration Building, Huawei Base, Bantian, Longgang District, Shenzhen
Manufacturer:	HUAWEI TECHNOLOGIES CO., LTD.
Manufacturer Address:	Administration Building, Huawei Base, Bantian, Longgang District, Shenzhen
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 FCC Registration No.:	809388
Model No.:	AP4030DN, AP4130DN, AP3030DN
FCC ID:	QISAP4130DN
Test Device Serial No.:	N/A <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering
FCC Classification:	FCC Class B Digital Device (JBP)

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.



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	Wireless LAN Access Point
Model No.	AP4130DN
Frequency Range	<u>2.4GHz Band:</u> For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz <u>5GHz Band:</u> For 802.11a/n-HT20: 5180~5320MHz, 5500~5700MHz, 5745~5825MHz For 802.11ac-VHT20: 5180~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40: 5190~5310MHz, 5510~5670MHz, 5755~5795MHz For 802.11ac-VHT40: 5190~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz
Type of Modulation	802.11b: DSSS 802.11a/g/n/ac: OFDM

2.2. Device Capabilities

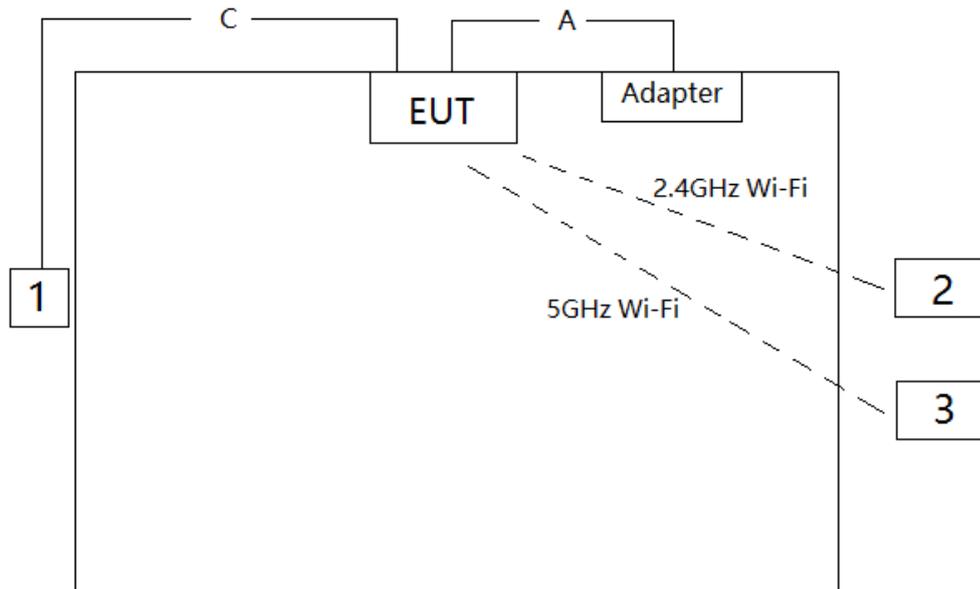
This device contains the following capabilities:

2.4GHz Wi-Fi Device (DTS) & 5GHz Wi-Fi Device (UNII)

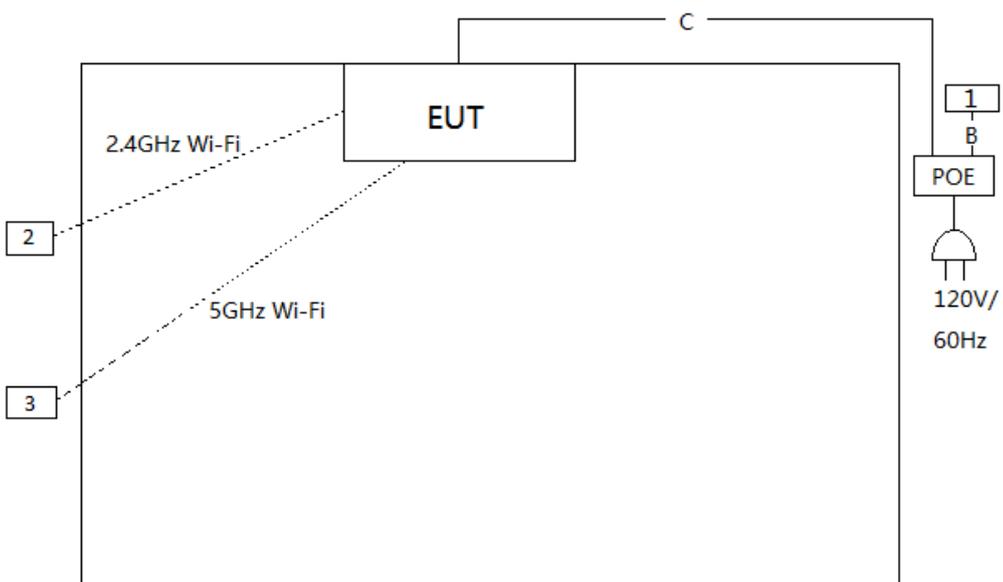
2.3. Test Configuration

The **Wireless LAN Access Point FCC ID: QISAP4130DN** was tested per the guidance FCC Part 15 Subpart B: 2014 and ANSI C63.4: 2014 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

Test Mode 1 Connection Diagram



Test Mode 2 Connection Diagram



Signal Cable Type		Signal Cable Description
A	Power Cable	Non-Shielding, 2m
B	LAN Cable	Non-Shielding, 1m
C	LAN Cable	Non-Shielding, 10m

2.4. Test System Details

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

Product	Manufacturer	Model No.	Serial No.	Power Cord	
1	Notebook	Lenovo	E430c	MP-4CFX213/10	Non-Shielded, 1.8m
2	Notebook	Lenovo	X201	3626AM3	Non-Shielded, 1.8m
3	Notebook	Lenovo	E431	OC17836	Non-Shielded, 1.8m

2.5. EMI Suppression Device(s)/Modifications

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

2.6. 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 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 Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical Equipment in the Range of 9kHz to 18GHz (ANSI C63.4-2014) was used in the measurement of the **Wireless LAN Access Point FCC ID: QISAP4130DN**.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. 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 150 kHz to 30 MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9 kHz. 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 are used for final measurements on the same test site. Line conducted emissions test results are shown in Section 6.2.

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 30 MHz 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 30 MHz, 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, mode of operation, 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 beam-width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. TEST EQUIPMENT CALIBRATION DATE

Conducted Emissions - SR2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2016/11/03
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2016/11/03
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2016/11/03
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06114	1 year	2016/11/20

Radiated Emissions - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	E4447A	MRTSUE06028	1 year	2016/06/23
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2016/11/03
Preamplifier	Agilent	83017A	MRTSUE06020	1 year	2016/03/29
TRILOG Antenna	Schwarzbeck	VULB9168	MRTSUE06172	1 year	2016/12/11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2016/11/07
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06115	1 year	2016/11/20

Software	Version	Function
e3	V8.3.5	EMI Test Software

5. 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 - SR2
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 150kHz~30MHz: 3.5dB
Radiated Emission Measurement - AC1
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): Horizontal: 30MHz~1GHz: 4.07dB 1GHz~18GHz: 4.16 dB Vertical: 30MHz~1GHz: 4.18 dB 1GHz~18GHz: 4.76 dB

6. TEST RESULT

6.1. Summary

Product Name: Wireless LAN Access Point

FCC ID: QISAP4130DN

FCC Classification: FCC Class B Digital Device (JBP)

Test Mode: Test Mode 1: Power on with Adapter and Communication with Notebook

Test Mode 2: Power on with POE and Communication with Notebook

FCC Part Section(s)	Test Description	Test Result
15.107	Conducted Emissions	Pass
15.109	Radiated Emissions	Pass

6.2. Conducted Emission Measurement

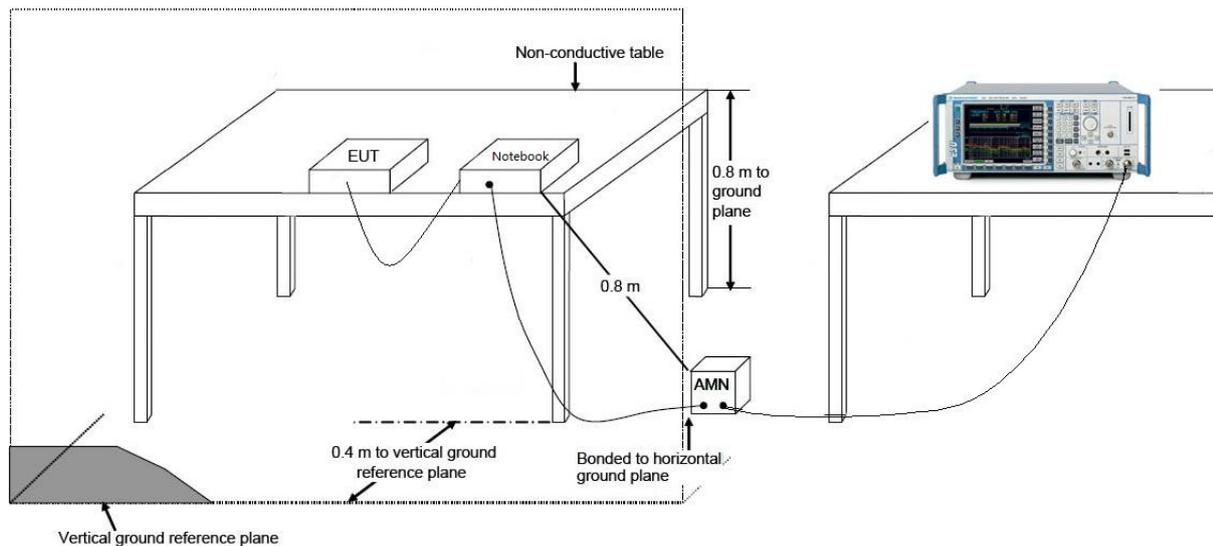
6.2.1. Test Limit

FCC Part 15.107 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.

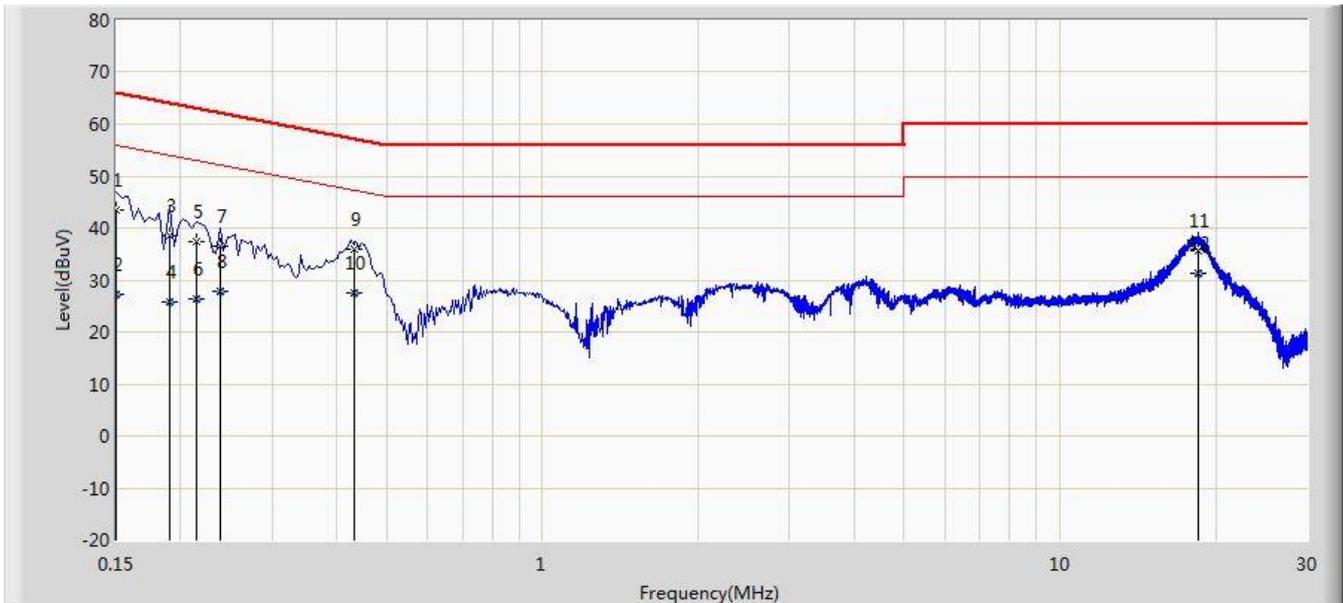
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.2.2. Test Setup



6.2.3. Test Result of Conducted Emissions

Site: SR2	Time: 2016/02/03 - 18:07
Limit: FCC_Part15.107_CE_AC Power_ClassB	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 1	

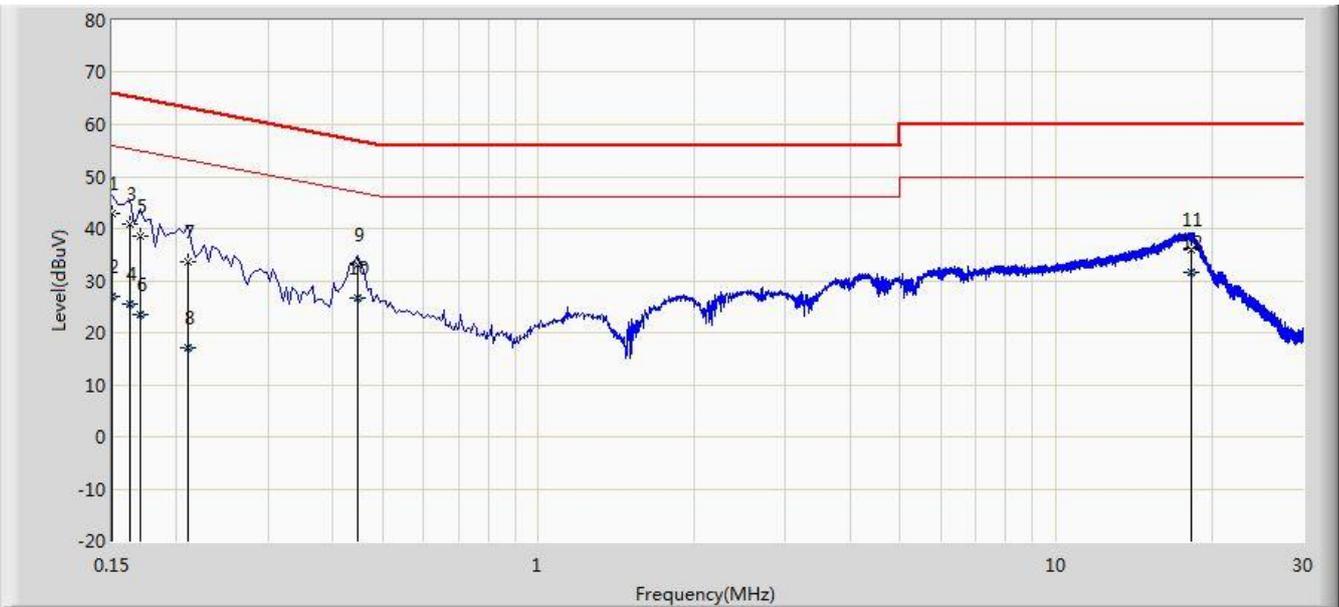


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	43.498	32.330	-22.502	66.000	11.168	QP
2			0.150	27.348	16.180	-28.652	56.000	11.168	AV
3			0.190	38.584	28.555	-25.453	64.037	10.029	QP
4			0.190	25.882	15.853	-28.155	54.037	10.029	AV
5			0.214	37.351	27.394	-25.698	63.049	9.957	QP
6			0.214	26.248	16.292	-26.800	53.049	9.957	AV
7			0.238	36.389	26.435	-25.777	62.166	9.954	QP
8			0.238	27.825	17.871	-24.341	52.166	9.954	AV
9			0.434	35.924	25.811	-21.252	57.176	10.113	QP
10			0.434	27.444	17.330	-19.732	47.176	10.113	AV
11			18.482	35.741	25.637	-24.259	60.000	10.105	QP
12		*	18.482	31.251	21.146	-18.749	50.000	10.105	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SR2	Time: 2016/02/03 - 18:10
Limit: FCC_Part15.107_CE_AC Power_ClassB	Engineer: Vince Yu
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.150	43.041	31.899	-22.959	66.000	11.142	QP
2			0.150	26.813	15.671	-29.187	56.000	11.142	AV
3			0.162	40.950	30.871	-24.411	65.361	10.078	QP
4			0.162	25.473	15.395	-29.887	55.361	10.078	AV
5			0.170	38.667	28.603	-26.293	64.960	10.064	QP
6			0.170	23.490	13.426	-31.471	54.960	10.064	AV
7			0.210	33.610	23.615	-29.596	63.205	9.995	QP
8			0.210	17.118	7.124	-36.087	53.205	9.995	AV
9			0.446	33.070	22.923	-23.879	56.949	10.147	QP
10			0.446	26.659	16.513	-20.290	46.949	10.147	AV
11			18.306	35.941	25.803	-24.059	60.000	10.138	QP
12		*	18.306	31.548	21.410	-18.452	50.000	10.138	AV

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

6.3. Radiated Emission Measurement

6.3.1. Test Limit

FCC Part 15.109 Limits		
Frequency (MHz)	Distance (m)	Level (dB μ V/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

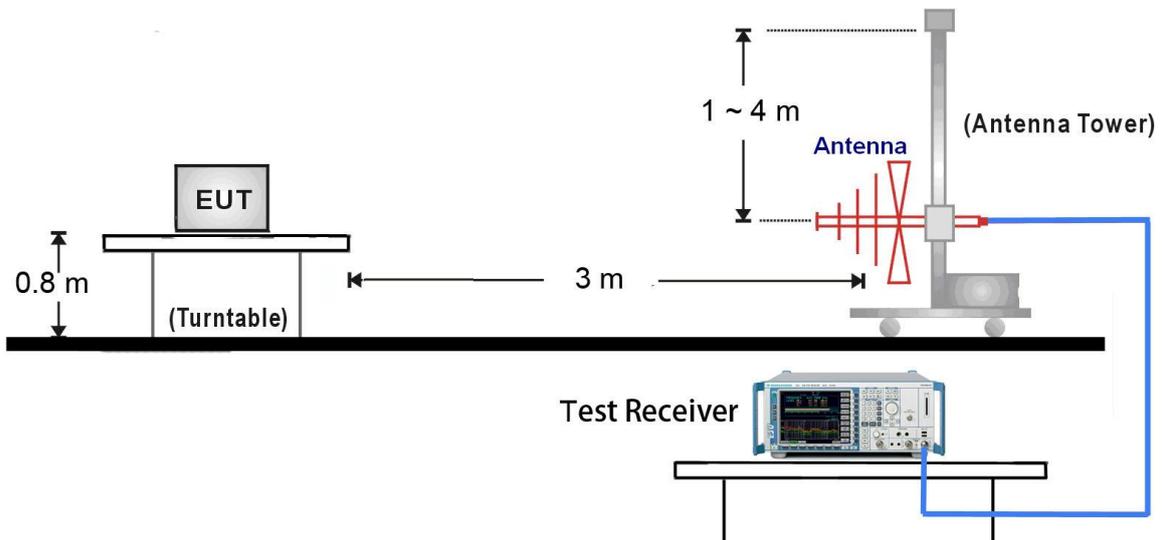
Note 1: The lower limit shall apply at the transition frequency.

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

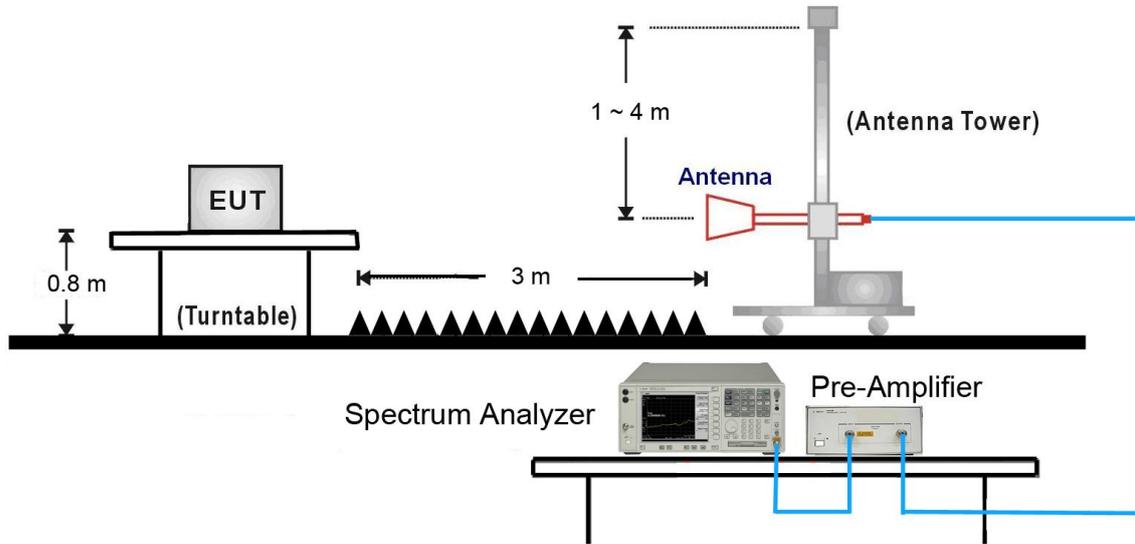
Note 3: E field strength (dB μ V/m) = 20 log E field strength (uV/m)

6.3.2. Test Setup

30MHz ~ 1GHz Test Setup:

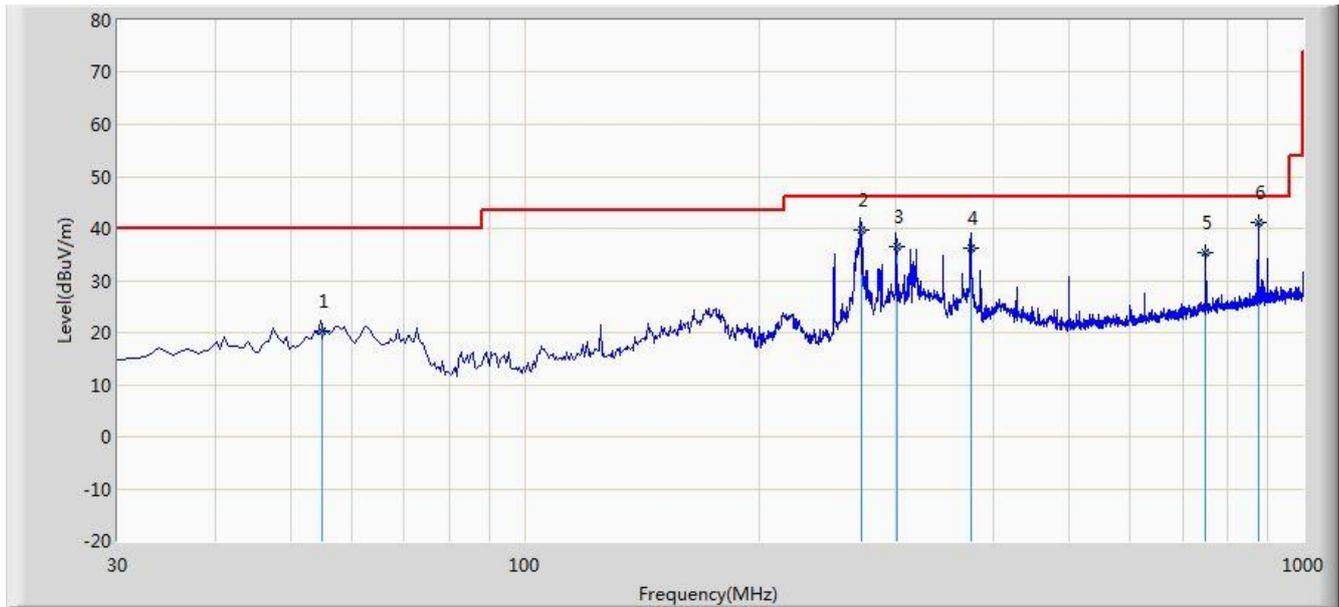


1GHz ~18GHz Test Setup:



6.3.3. Test Result of Radiated Emissions

Site: AC1	Time: 2016/02/03 - 15:48
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 1	

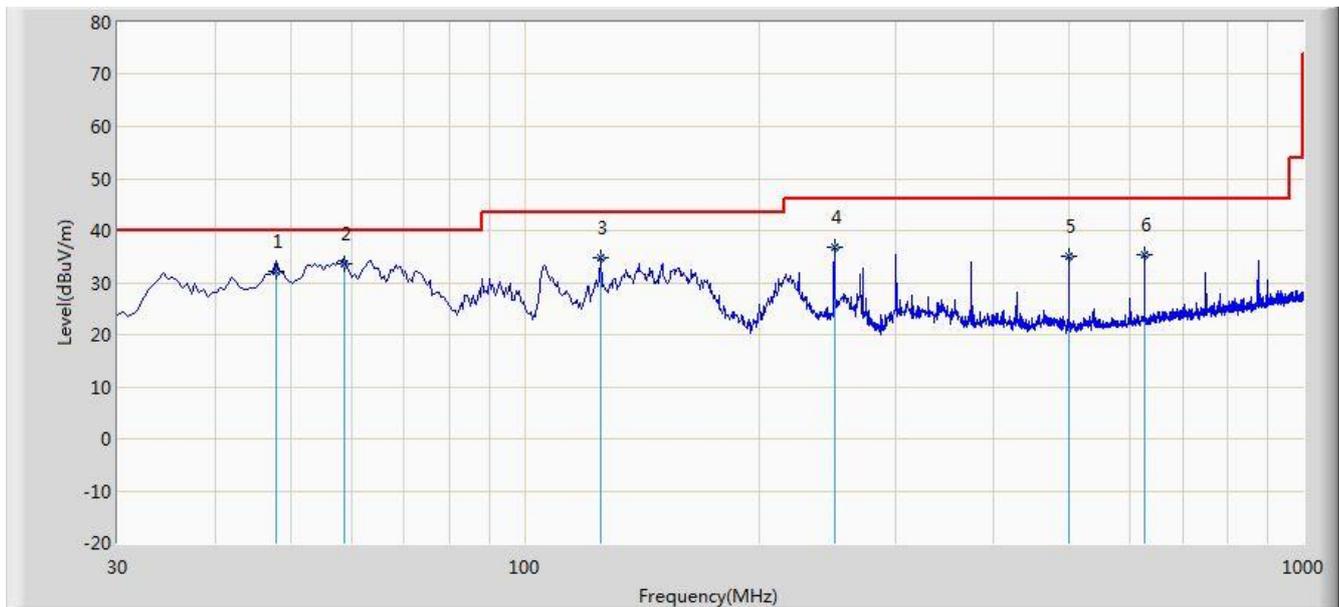


No	Flag	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Over Limit (dB)	Limit (dBμV/m)	Factor (dB)	Type
1			54.833	20.257	6.532	-19.743	40.000	13.725	QP
2			270.535	39.668	26.158	-6.332	46.000	13.510	QP
3			300.269	36.464	22.155	-9.536	46.000	14.309	QP
4			375.032	36.137	20.133	-9.863	46.000	16.004	QP
5			750.187	35.366	12.658	-10.634	46.000	22.708	QP
6		*	875.032	41.231	17.231	-4.769	46.000	24.000	QP

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Site: AC1	Time: 2016/02/03 - 15:52
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 1	

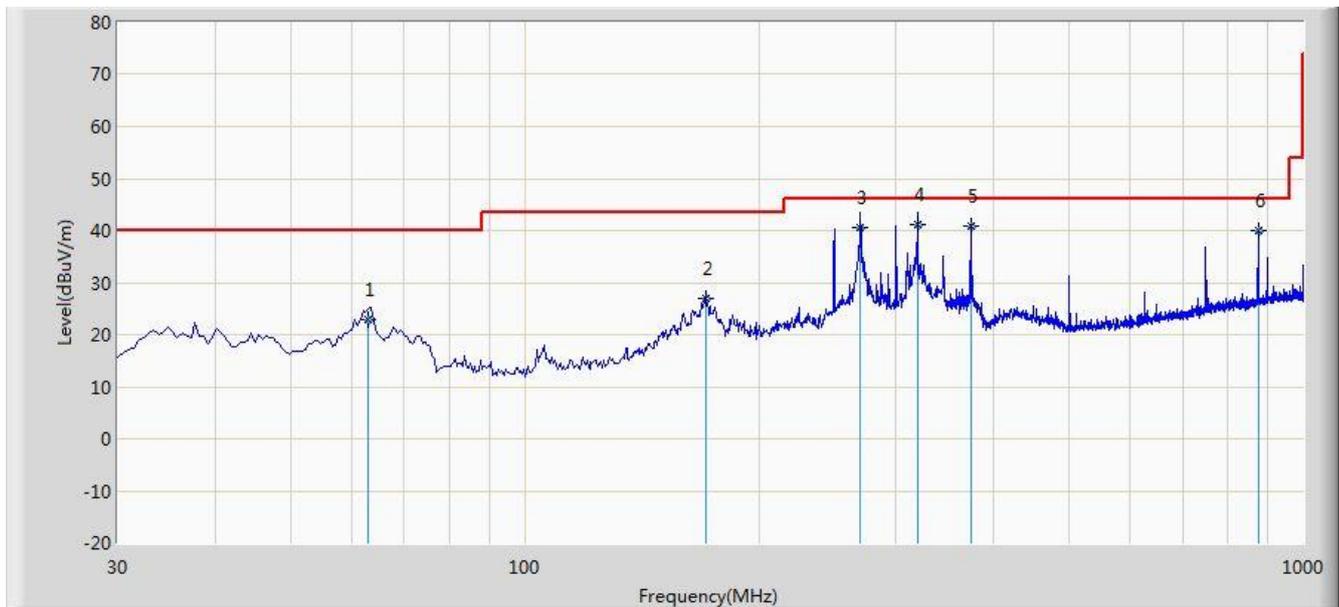


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			48.035	32.287	18.177	-7.713	40.000	14.110	QP
2		*	58.775	33.604	20.158	-6.396	40.000	13.446	QP
3			125.233	34.691	21.233	-8.809	43.500	13.458	QP
4			250.005	36.807	23.877	-9.193	46.000	12.930	QP
5			499.975	35.004	16.522	-10.996	46.000	18.483	QP
6			625.001	35.383	14.357	-10.617	46.000	21.026	QP

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

Site: AC1	Time: 2016/02/03 - 15:55
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 2	

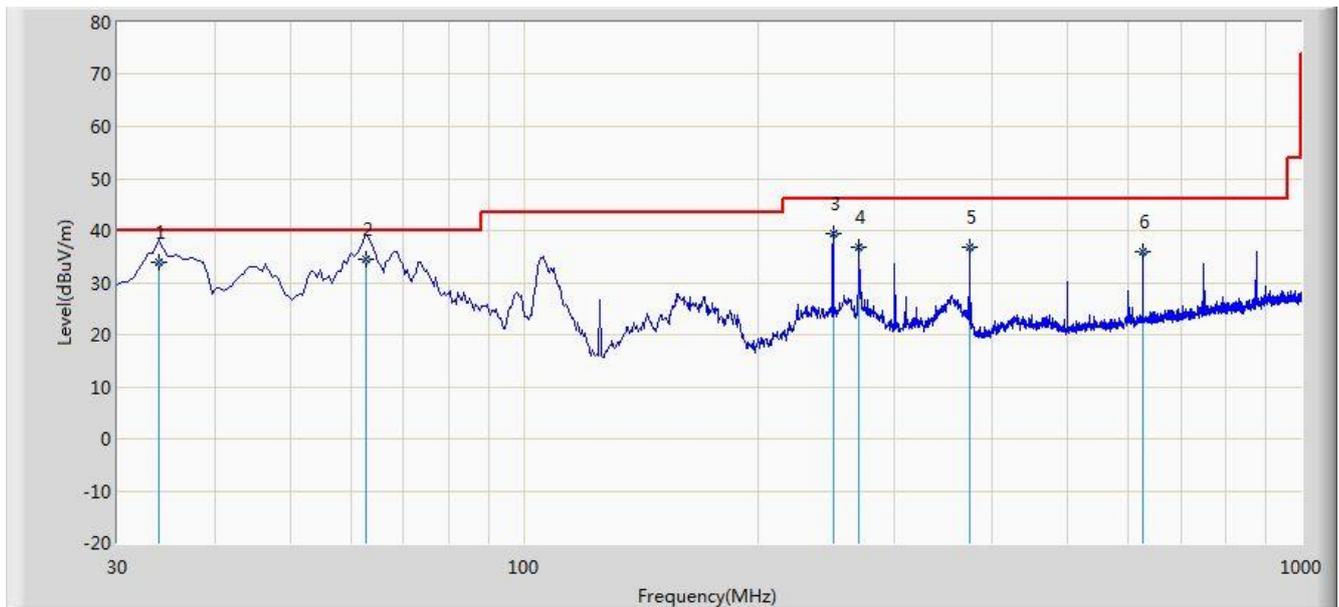


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			62.863	22.970	10.135	-17.030	40.000	12.835	QP
2			170.832	26.846	12.688	-16.654	43.500	14.158	QP
3			270.030	40.664	27.168	-5.336	46.000	13.496	QP
4		*	320.058	41.222	26.368	-4.778	46.000	14.854	QP
5			375.035	41.002	24.998	-4.998	46.000	16.004	QP
6			875.687	39.989	15.968	-6.011	46.000	24.021	QP

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

Site: AC1	Time: 2016/02/03 - 15:56
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 2	

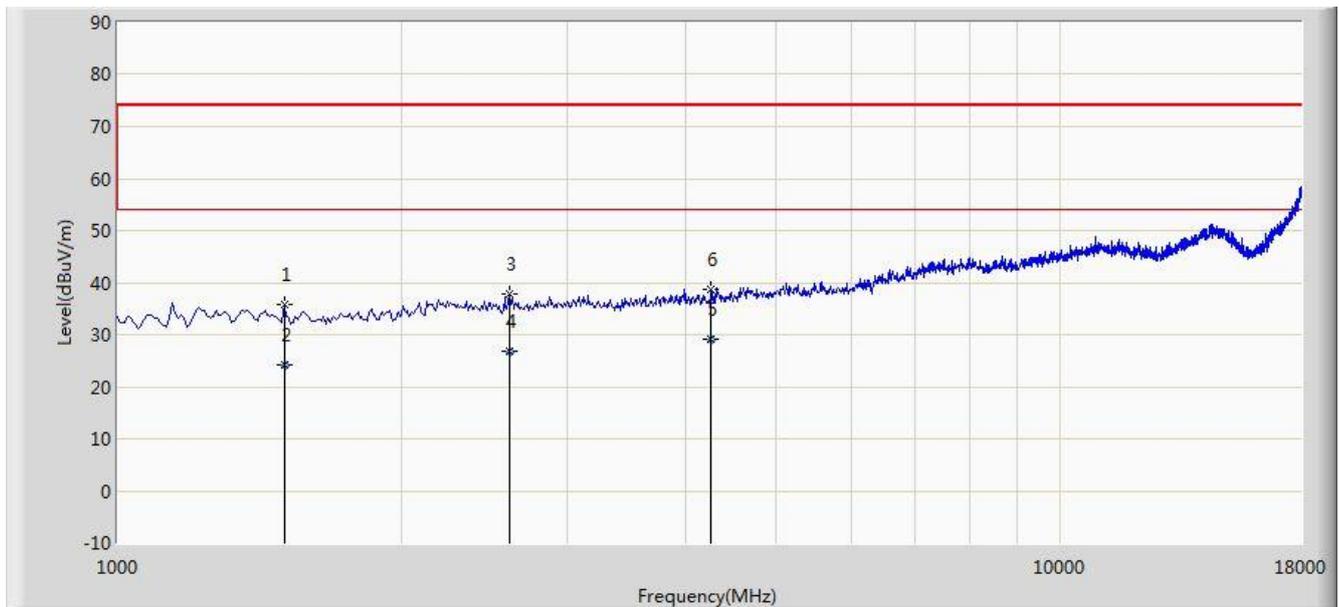


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			33.897	33.935	20.168	-6.065	40.000	13.767	QP
2		*	62.589	34.472	21.587	-5.528	40.000	12.885	QP
3			250.068	39.286	26.354	-6.714	46.000	12.932	QP
4			270.193	36.668	23.167	-9.332	46.000	13.501	QP
5			375.087	36.702	20.697	-9.298	46.000	16.005	QP
6			625.057	35.893	14.867	-10.107	46.000	21.026	QP

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

Site: AC1	Time: 2016/02/03 - 16:51
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 1	

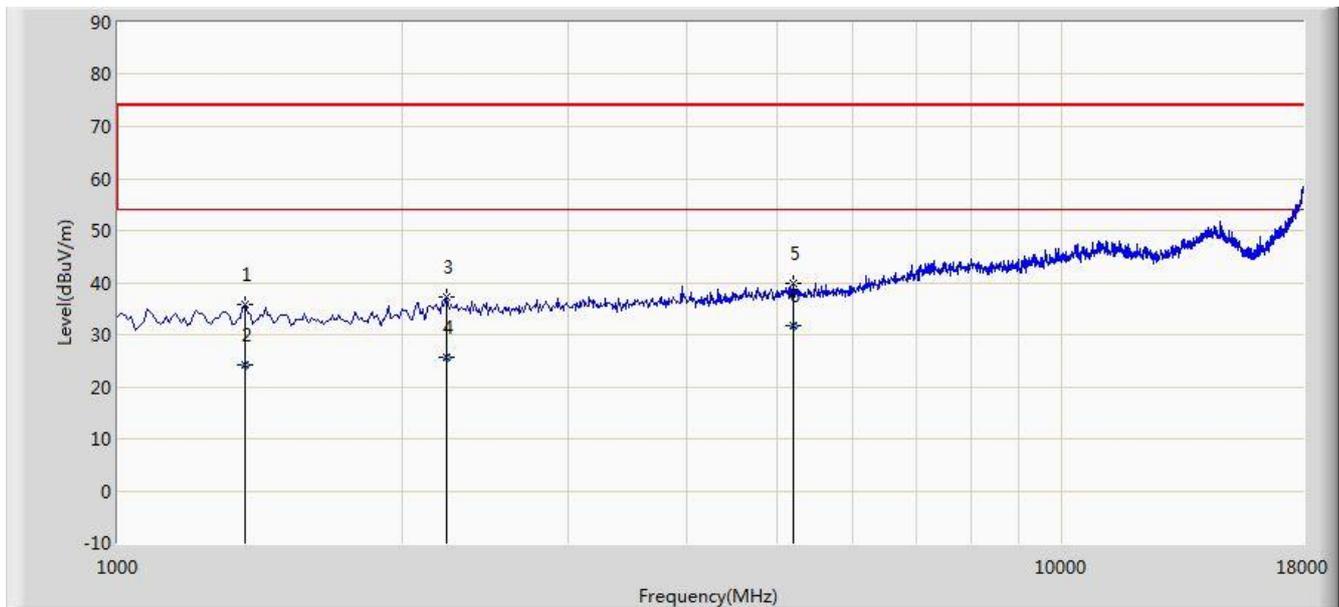


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			1501.500	35.894	43.723	-38.106	74.000	-7.829	PK
2			1501.635	24.327	32.156	-29.673	54.000	-7.829	AV
3			2606.500	37.956	41.228	-36.044	74.000	-3.272	PK
4			2606.835	26.785	30.056	-27.215	54.000	-3.272	AV
5		*	4263.588	29.181	28.135	-24.819	54.000	1.046	AV
6			4264.000	38.678	37.629	-35.322	74.000	1.049	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: AC1	Time: 2016/02/03 - 16:51
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 1	

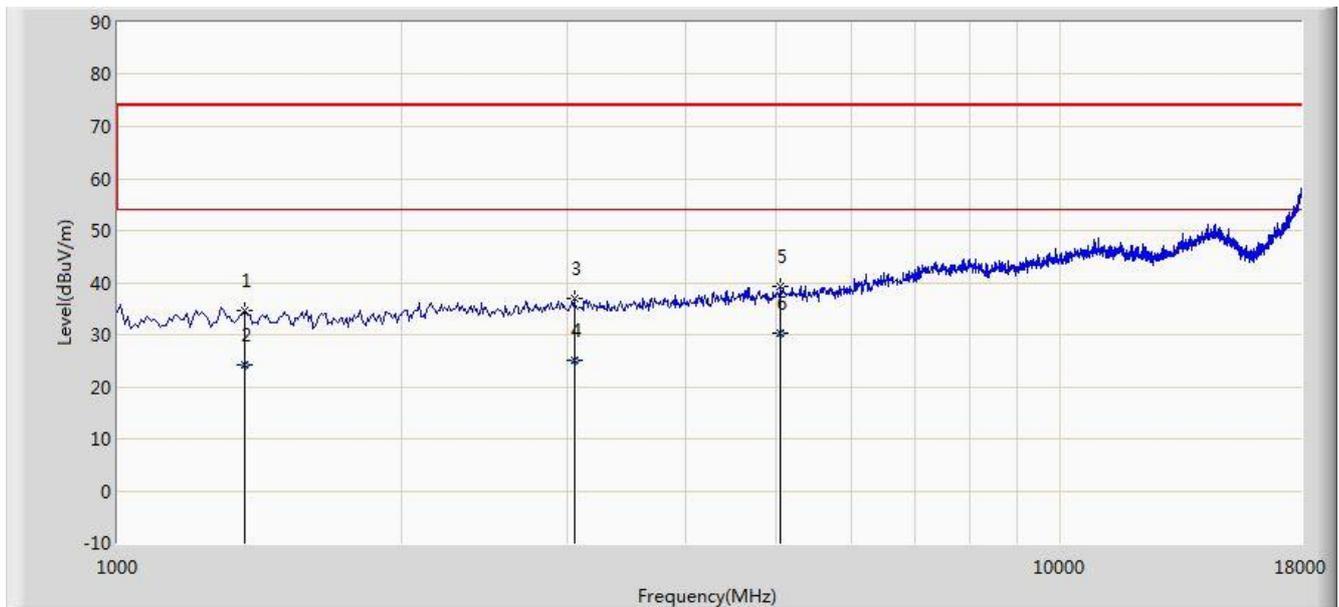


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			1365.500	35.884	43.772	-38.116	74.000	-7.888	PK
2			1365.865	24.270	32.158	-29.730	54.000	-7.888	AV
3			2232.500	37.187	40.689	-36.813	74.000	-3.503	PK
4			2233.254	25.658	29.158	-28.342	54.000	-3.499	AV
5			5190.500	39.807	36.547	-34.193	74.000	3.260	PK
6		*	5190.638	31.625	28.365	-22.375	54.000	3.261	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: AC1	Time: 2016/02/03 - 16:52
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 2	

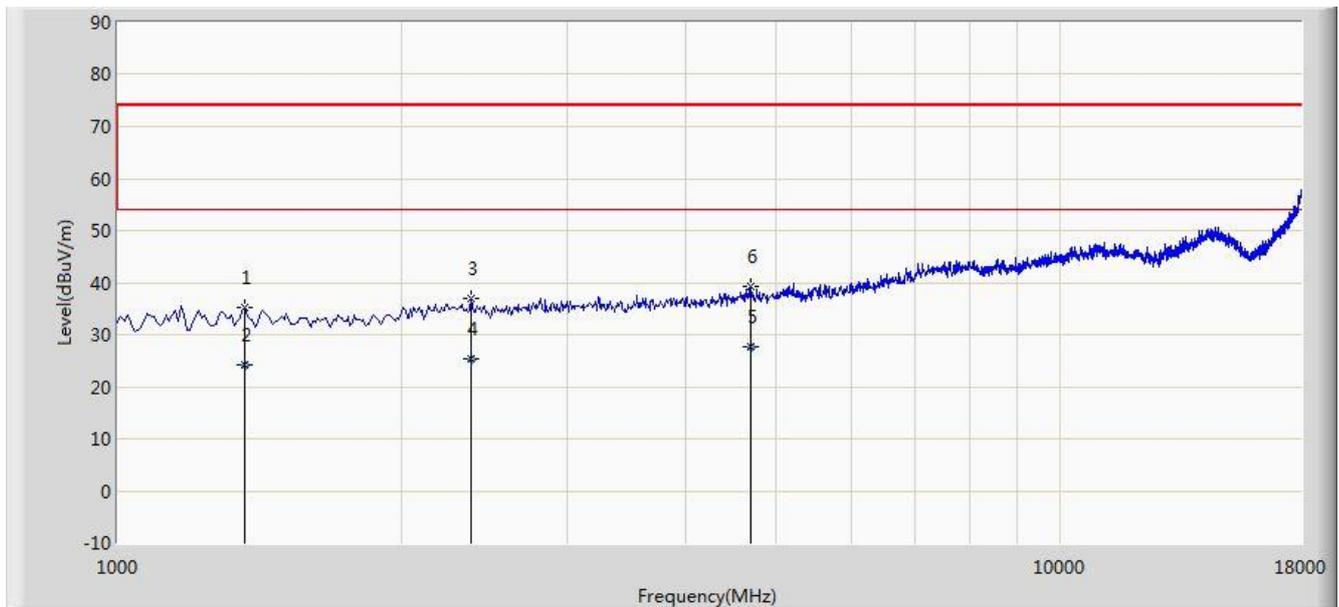


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			1365.500	34.773	42.661	-39.227	74.000	-7.888	PK
2			1365.897	24.268	32.156	-29.732	54.000	-7.888	AV
3			3048.500	36.812	38.787	-37.188	74.000	-1.975	PK
4			3048.886	25.183	27.156	-28.817	54.000	-1.974	AV
5			5054.500	39.391	36.259	-34.609	74.000	3.132	PK
6		*	5055.035	30.302	27.168	-23.698	54.000	3.133	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: AC1	Time: 2016/02/03 - 16:52
Limit: FCC_Part15.109_RE(3m)_ClassB	Engineer: Roy Cheng
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Wireless LAN Access Point	Power: AC 120V/60Hz
Test Mode 2	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			1365.500	35.176	43.064	-38.824	74.000	-7.888	PK
2			1365.688	24.269	32.157	-29.731	54.000	-7.888	AV
3			2368.500	36.898	40.622	-37.102	74.000	-3.724	PK
4			2368.625	25.431	29.155	-28.569	54.000	-3.725	AV
5		*	4697.337	27.717	25.395	-26.283	54.000	2.322	AV
6			4697.500	39.278	36.955	-34.722	74.000	2.323	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

7. CONCLUSION

The data collected relate only the item(s) tested and show that the **Wireless LAN Access Point FCC ID: QISAP4130DN** has been tested to comply with the requirements specified in §15.107 and §15.109 of the FCC Rules.

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