MEASUREMENT REPORT

FCC PART 15.407 / RSS-247 WLAN 802.11a/n/ac

FCC ID:	H8N-AP6356S
IC:	1353A-AP6356S
Applicant:	Askey Computer Corp
Application Type:	CLASS II PERMISSIVE CHANGE
Product:	WIFI+BT Combo Module
Model No.:	AP6356S
Brand Name:	ASKEY
FCC Classification:	Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s):	Part15 Subpart E (Section 15.407)
IC Rule(s):	RSS-247 Issue 2, RSS-GEN Issue 5
Test Procedure(s):	ANSI C63.10-2013, KDB 789033 D02v02r01, KDB 662911 D01v02r01
Test Date:	July 20 ~ August 03, 2019

Reviewed By: (Kevin Guo)

Approved By: (Robin Wu)

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 C63.10-2013. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
1905RSU034-U5	Rev. 01	Initial Report	08-23-2019	Valid

Note: This report is prepared for FCC Class II permissive change supplement to MRT original "1902RSU013-U4" report adding a PIFA antenna and RF output power & Radiated Emission Data.

CONTENTS

§2.1033General Information

Applicant:	Askey Computer Corp.
Applicant Address:	10F, No.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY, TAIWAN
Manufacturer:	Askey Computer Corp.
Manufacturer Address:	10F, No.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY, TAIWAN
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
Test Device Serial No.:	N/A ☐ Production ☒ Pre-Production ☐ Engineering

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. 893164) test facility with the site description report on file and has met all the requirements specified in ANSI C63.4-2014.**
- **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-20025, G-20034, C-20020, T-20020) 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, Radio and SAR testing.**

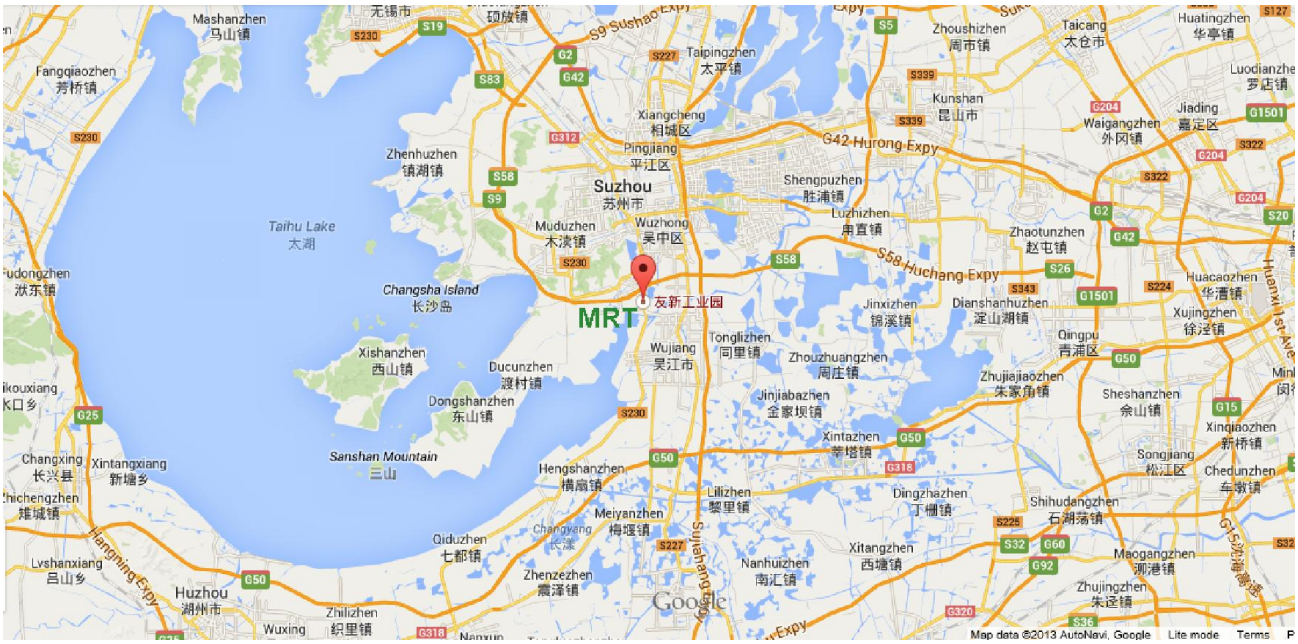
1. INTRODUCTION

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, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The measurement facility compliant with the test site requirements specified in ANSI C63.4-2014.



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name:	WIFI+BT Combo Module
Model No.:	AP6356S
Brand Name:	ASKEY
Wi-Fi Specification:	802.11a/b/g/n/ac
Bluetooth Specification:	V4.2 dual mode
Power Type:	VBAT: 3.3V DC; VDDIO: 1.8V DC

2.2. Product Specification Subjective to this Report

Frequency Range:	For 802.11a/n-HT20/ac-VHT20: 5180~5240MHz, 5260~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5230MHz, 5270~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5690MHz, 5775MHz
Type of Modulation:	802.11a/n/ac: OFDM
Data Rate:	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.6Mbps
Antenna Information	Refer to section 2.4

Note: For other features of this EUT, test report will be issued separately.

2.3. Working Frequencies for this report

802.11a/n-HT20/ac-VHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz
128	5640 MHz	132	5660 MHz	136	5680 MHz
140	5700 MHz	144	5720 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	--	--	--	--

802.11n-HT40/ac-VHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz
62	5310 MHz	102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz	134	5670 MHz
142	5710 MHz	151	5755 MHz	159	5795 MHz

802.11ac-VHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz
122	5610 MHz	138	5690 MHz	155	5775 MHz

Note: The frequencies that fall in the 5600MHz to 5650MHz band will not be used in Canada.

2.4. Description of Available Antenna

Antenna Type	Frequency Band (GHz)	T_X Paths	Per Chain Max Antenna Gain (dBi)		Directional Gain(dBi)	
			Ant 0	Ant 1	For Power	For PSD
Wi-Fi Internal Antenna						
PIFA	2412 ~ 2462	2	1.98	2.40	2.40	5.41
	5150 ~ 5825	2	3.14	4.34	4.34	7.35
Bluetooth Internal Antenna						
PIFA	2402 ~ 2480	1	1.98		--	

Note:

The EUT supports Cyclic Delay Diversity (CDD) technology on 802.11a/b/g mode, and CDD signals are correlated.

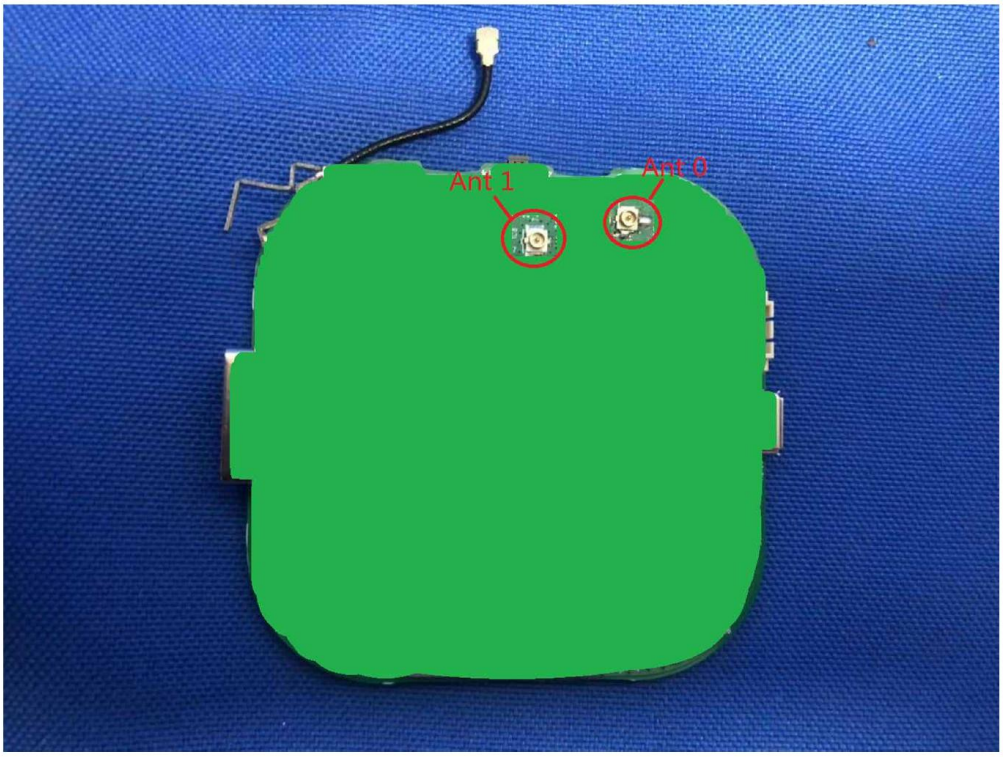
For CDD transmissions, directional gain is calculated as follows, N_{ANT} = 2, N_{SS} = 1.

If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,
  Array Gain = 10 log (N_{ANT}/ N_{SS}) dB = 3.01;
- For power measurements on IEEE 802.11 devices,
  Array Gain = 0 dB for $N_{ANT} \leq 4$;

If antenna gains are not equal, Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.

2.5. Description of Antenna RF Port

Antenna RF Port		
--	2.4GHz & 5GHz & Bluetooth RF Port	
Software Control Port	Ant 0 (support Bluetooth)	Ant 1
		
Note: Ant 0 is a temporary RF connector to test conveniently.		

2.6. Test Mode

Test Mode	Mode 1: Transmit by 802.11a (6Mbps)
	Mode 2: Transmit by 802.11n-HT20 (MCS0)
	Mode 3: Transmit by 802.11n-HT40 (MCS0)
	Mode 4: Transmit by 802.11ac-VHT20 (MCS0)
	Mode 5: Transmit by 802.11ac-VHT40 (MCS0)
	Mode 6: Transmit by 802.11ac-VHT80 (MCS0)

2.7. Description of Test Software

The test utility software used during testing was the command provided by the customer.

2.8. Device Capabilities

This device contains the following capabilities:
802.11a/b/g/n/ac WLAN, Bluetooth EDR & LE

2.9. Test Configuration

The device was tested per the guidance of KDB 789033 D02v02r01. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

2.10. EMI Suppression Device(s)/Modifications

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

2.11. 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.

RSP-100 Issue 11 Section 3

The manufacturer, importer or distributor shall meet the labelling requirements set out in this section for every unit:

(i) prior to marketing in Canada, for products manufactured in Canada

(ii) prior to importation into Canada, for imported products

For information regarding the e-labelling option, see Notice 2014–DRS1003. The label for the certified product represents the manufacturer's or importer's compliance with Innovation, Science and Economic Development Canada's (ISED) regulatory requirements.

Please see attachment for IC 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 C63.10-2013), and the guidance provided in KDB 789033 D02v02r01 were used in the measurement.

Deviation from measurement procedure…….....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an8'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. 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 data exchange speed, 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. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

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. A 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. An80cm 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 for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 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 Beam-Width 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."

Conclusion:

The unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATE

Conducted Emissions - SR2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2020/04/15
Two-Line V-Network	R&S	ENV 216	MRTSUE06002	1 year	2020/06/13
Two-Line V-Network	R&S	ENV 216	MRTSUE06003	1 year	2020/06/13
Thermohygrometer	Testo	608-H1	MRTSUE06404	1 year	2019/08/14
Shielding Room	MIX-BEP	Chamber-SR2	MRTSUE06215	N/A	N/A

Radiated Emissions - AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2020/08/01
PXA Signal Analyzer	Keysight	9030B	MRTSUE06395	1 year	2019/09/25
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2019/11/09
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2020/03/31
Broad Band Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2019/10/19
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06024	1 year	2019/12/17
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2019/11/16
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2020/06/11
Thermohygrometer	Testo	608-H1	MRTSUE06403	1 year	2019/08/14
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2020/04/30

Radiated Emission - AC2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Keysight	N9038A	MRTSUE06125	1 year	2020/08/01
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2019/11/09
Bilog Period Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2019/10/19
Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06171	1 year	2019/11/09
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06024	1 year	2019/12/17
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2019/11/16
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2020/06/11
Temperature/Humidity Meter	Minggao	ETH529	MRTSUE06170	1 year	2019/12/13
Anechoic Chamber	RIKEN	Chamber-AC2	MRTSUE06213	1 year	2020/04/30

Conducted Test Equipment - TR3

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2020/04/15
EXA Signal Analyzer	Keysight	N9010B	MRTSUE06452	1 year	2020/07/11
Signal Analyzer	R&S	FSV40	MRTSUE06218	1 year	2020/04/15
Power Meter	Agilent	U2021XA	MRTSUE06030	1 year	2019/11/16
USB wideband power sensor	Keysight	U2021XA	MRTSUE06446	1 year	2020/06/30
USB wideband power sensor	Keysight	U2021XA	MRTSUE06447	1 year	2020/06/30
Bluetooth Test Set	Anritsu	MT8852B-042	MRTSUE06389	1 year	2020/06/13
Audio Analyzer	Agilent	U8903B	MRTSUE06143	1 year	2020/06/13
Modulation Analyzer	HP	8901A	MRTSUE06098	1 year	2019/10/18
Wideband Radio Communication Tester	R&S	CMW 500	MRTSUE06243	1 year	2019/11/16
DC Power Supply	GWINSTEK	DPS-3303C	MRTSUE06064	N/A	N/A
Temperature & Humidity Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2019/11/16
Thermohygrometer	testo	608-H1	MRTSUE06401	1 year	2019/08/14

Software	**Version**	**Function**
EMI Software	V3	EMI Test Software

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.

Conducted Emission Measurement - SR2
The maximum measurement uncertainty is evaluated as: 9kHz~150kHz: 3.84dB 150kHz~30MHz: 3.46dB
Radiated Emission Measurement - AC1
The maximum measurement uncertainty is evaluated as: Horizontal: 30MHz~300MHz: 4.07dB 300MHz~1GHz: 3.63dB 1GHz~18GHz: 4.16dB Vertical: 30MHz~300MHz: 4.18dB 300MHz~1GHz: 3.60dB 1GHz~18GHz: 4.76dB
Radiated Emission Measurement - AC2
The maximum measurement uncertainty is evaluated as: Horizontal: 30MHz~300MHz: 3.75dB 300MHz~1GHz: 3.53dB 1GHz~18GHz: 4.28dB Vertical: 30MHz~300MHz: 3.86dB 300MHz~1GHz: 3.53dB 1GHz~18GHz: 4.33dB

7. TEST RESULT

7.1. Summary

FCC Section(s)	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)(1)(iv), (2), (3)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	Maximum Conducted Output Power	≤ 24dBm U-NII-1 & U-NII-2 ≤ 30dBm U-NII-3	Conducted	Pass	Section 7.2
15.407(b)(1), (2), (3), (4)(i)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	Undesirable Emissions	≤ -27dBm/MHz EIRP Detail see section 7.9	Radiated	Pass	Section 7.3 & 7.4
15.205, 15.209 15.407(b)(5), (6), (7)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		Pass	

Notes:

1) 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.
2) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.

7.2. Output Power Measurement

7.2.1.Test Limit

FCC Limit

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

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.

IC Limit

For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW (23.01dBm) or 10 + 10 $\log_{10}$ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

For the 5.25 - 5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed 250 mW (23.98dBm) or 11 + 10 $\log_{10}$ B, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W (30dBm) or 17 + 10 $\log_{10}$ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

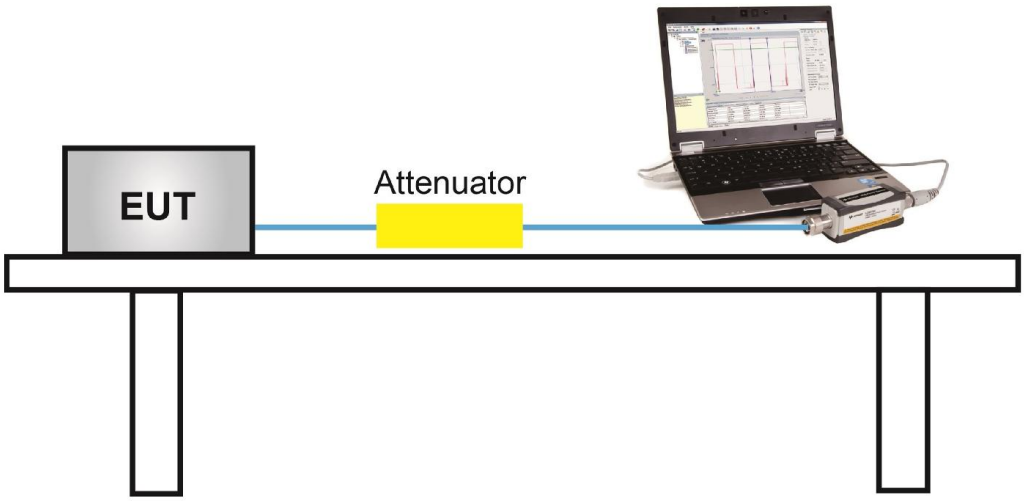
7.2.2.Test Procedure Used

KDB 789033D02v01r04- Section E)3)b) Method PM-G

7.2.3.Test Setting

Average power measurements were perform 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.

7.2.4.Test Setup



7.2.5.Test Result

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

Output power at various data rates for Ant 0 / Ant 0 + 1 port:

Test Mode	Bandwidth	Channel	Frequency (MHz)	Data Rate/ MCS	Average Power (dBm)
802.11a	20	36	5180	6Mbps	11.87
				24Mbps	11.28
				54Mbps	10.75
802.11n	20	36	5180	MCS0	11.29
				MCS4	10.82
				MCS8	10.08
802.11n	40	38	5190	MCS0	9.64
				MCS4	9.03
				MCS9	8.67
802.11ac	20	36	5180	MCS0	11.62
				MCS4	11.10
				MCS8	10.37
802.11ac	40	38	5190	MCS0	10.29
				MCS4	9.64
				MCS9	9.19
802.11ac	80	42	5210	MCS0	7.41
				MCS4	7.03
				MCS9	6.52

Product	WIFI+BT Combo Module	Temperature	24°C
Test Engineer	Messiah Li	Relative Humidity	59%
Test Site	TR3	Test Date	2019/03/01

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit(dBm)	Max E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
For IC U-NII 1										
11a	6Mbps	36	5180	7.81	7.57	10.70	--	15.04	≤ 22.26	Pass
11a	6Mbps	44	5220	7.88	7.92	10.91	--	15.25	≤ 22.26	Pass
11a	6Mbps	48	5240	8.29	7.91	11.11	--	15.45	≤ 22.26	Pass
11n-HT20	MCS0	36	5180	7.79	7.54	10.68	--	15.02	≤ 22.55	Pass
11n-HT20	MCS0	44	5220	8.37	8.20	11.30	--	15.64	≤ 22.55	Pass
11n-HT20	MCS0	48	5240	8.15	8.28	11.23	--	15.57	≤ 22.55	Pass
11n-HT40	MCS0	38	5190	10.51	10.49	13.51	--	17.85	≤ 23.01	Pass
11n-HT40	MCS0	46	5230	11.16	11.01	14.10	--	18.44	≤ 23.01	Pass
11ac-VHT20	MCS0	36	5180	7.55	7.84	10.71	--	15.05	≤ 22.54	Pass
11ac-VHT20	MCS0	44	5220	8.34	8.16	11.26	--	15.60	≤ 22.54	Pass
11ac-VHT20	MCS0	48	5240	7.56	7.75	10.67	--	15.01	≤ 22.54	Pass
11ac-VHT40	MCS0	38	5190	11.13	10.88	14.02	--	18.36	≤ 23.01	Pass
11ac-VHT40	MCS0	46	5230	11.44	10.98	14.23	--	18.57	≤ 23.01	Pass
11ac-VHT80	MCS0	42	5210	6.78	6.19	9.51	--	13.85	≤ 23.01	Pass

Note 1: Total Average Power (dBm) = $10*\log\{10^{(\text{Ant 0 Average Power }/10)} + 10^{(\text{Ant 1 Average Power }/10)}\}$.

Note 1: Max E.I.R.P (dBm) = Total Average Power (dBm) + Antenna Gain (dBi), Antenna Gain = 4.34dBi.

Note 2: EIRP Limit Calculation as below:

For 5150-5250MHz

802.11a: 10 + 10 log10 (16.83MHz) = 22.26dBm < 23dBm;

802.11n-HT20: 10 + 10 log10 (17.99MHz) = 22.55dBm < 23dBm;

802.11ac-VHT20: 10 + 10 log10 (17.96MHz) = 22.54dBm < 23dBm;

802.11n-HT40/ac-VHT40/ac-VHT80: 10 + 10 log10 B > 23.01dBm.

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit(dBm)	Result
For FCC U-NII 1								
11a	6Mbps	36	5180	11.87	12.25	17.16	≤ 23.98	Pass
11a	6Mbps	44	5220	12.02	12.49	17.33	≤ 23.98	Pass
11a	6Mbps	48	5240	11.93	12.43	17.34	≤ 23.98	Pass
11n-HT20	MCS0	36	5180	11.29	11.76	14.54	≤ 23.98	Pass
11n-HT20	MCS0	44	5220	11.48	12.01	14.76	≤ 23.98	Pass
11n-HT20	MCS0	48	5240	11.87	12.27	15.08	≤ 23.98	Pass
11n-HT40	MCS0	38	5190	9.64	10.48	13.09	≤ 23.98	Pass
11n-HT40	MCS0	46	5230	12.49	13.31	15.93	≤ 23.98	Pass
11ac-VHT20	MCS0	36	5180	11.62	12.07	14.86	≤ 23.98	Pass
11ac-VHT20	MCS0	44	5220	12.11	12.54	15.34	≤ 23.98	Pass
11ac-VHT20	MCS0	48	5240	12.52	12.92	15.73	≤ 23.98	Pass
11ac-VHT40	MCS0	38	5190	10.29	10.70	13.51	≤ 23.98	Pass
11ac-VHT40	MCS0	46	5230	11.06	11.84	14.48	≤ 23.98	Pass
11ac-VHT80	MCS0	42	5210	7.41	7.61	10.52	≤ 23.98	Pass

Note: Total Average Power (dBm) = $10*\log\{10^{(\text{Ant 0 Average Power }/10)} + 10^{(\text{Ant 1 Average Power }/10)}\}$.

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit(dBm)	Max E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
For FCC & IC U-NII2a & U-NII 2c & U-NII 3										
11a	6Mbps	52	5260	10.56	11.74	14.20	≤ 23.26	18.54	≤ 29.26	Pass
11a	6Mbps	60	5300	11.39	12.47	14.97	≤ 23.26	19.31	≤ 29.26	Pass
11a	6Mbps	64	5320	11.36	12.41	14.93	≤ 23.26	19.27	≤ 29.26	Pass
11a	6Mbps	100	5500	12.30	13.12	15.74	≤ 23.26	20.08	≤ 29.26	Pass
11a	6Mbps	116	5580	11.96	12.94	15.49	≤ 23.26	19.83	≤ 29.26	Pass
11a	6Mbps	120	5600	11.48	12.61	15.09	≤ 23.26	19.43	≤ 29.26	Pass
11a	6Mbps	140	5700	11.14	12.46	14.86	≤ 23.26	19.20	≤ 29.26	Pass
11a	6Mbps	144	5720	11.30	12.63	15.03	≤ 23.26	19.37	≤ 29.26	Pass
11a	6Mbps	149	5745	12.24	12.85	15.57	≤ 30.00	--	--	Pass
11a	6Mbps	157	5785	12.19	12.89	15.56	≤ 30.00	--	--	Pass
11a	6Mbps	165	5825	12.01	12.52	15.28	≤ 30.00	--	--	Pass
11n-HT20	MCS0	52	5260	11.28	12.30	14.83	≤ 23.54	19.17	≤ 29.54	Pass
11n-HT20	MCS0	60	5300	11.69	12.76	15.27	≤ 23.54	19.61	≤ 29.54	Pass
11n-HT20	MCS0	64	5320	11.29	12.63	15.02	≤ 23.54	19.36	≤ 29.54	Pass
11n-HT20	MCS0	100	5500	12.40	13.45	15.97	≤ 23.54	20.31	≤ 29.54	Pass
11n-HT20	MCS0	116	5580	12.34	13.05	15.72	≤ 23.54	20.06	≤ 29.54	Pass
11n-HT20	MCS0	120	5600	12.73	13.58	16.19	≤ 23.54	20.53	≤ 29.54	Pass
11n-HT20	MCS0	140	5700	11.39	12.65	15.08	≤ 23.54	19.42	≤ 29.54	Pass
11n-HT20	MCS0	144	5720	11.84	12.85	15.38	≤ 23.54	19.72	≤ 29.54	Pass
11n-HT20	MCS0	149	5745	12.13	12.83	15.50	≤ 30.00	--	--	Pass
11n-HT20	MCS0	157	5785	11.81	12.69	15.28	≤ 30.00	--	--	Pass
11n-HT20	MCS0	165	5825	12.35	12.97	15.68	≤ 30.00	--	--	Pass
11n-HT40	MCS0	54	5270	10.85	12.20	14.59	≤ 23.98	18.93	≤ 30.00	Pass
11n-HT40	MCS0	62	5310	10.67	12.19	14.51	≤ 23.98	18.85	≤ 30.00	Pass
11n-HT40	MCS0	102	5510	10.51	11.73	14.17	≤ 23.98	18.51	≤ 30.00	Pass
11n-HT40	MCS0	110	5550	12.10	13.14	15.66	≤ 23.98	20.00	≤ 30.00	Pass
11n-HT40	MCS0	118	5590	11.92	13.14	15.58	≤ 23.98	19.92	≤ 30.00	Pass
11n-HT40	MCS0	134	5670	11.32	12.87	15.17	≤ 23.98	19.51	≤ 30.00	Pass
11n-HT40	MCS0	142	5710	11.82	12.74	15.31	≤ 23.98	19.65	≤ 30.00	Pass
11n-HT40	MCS0	151	5755	12.56	13.37	15.99	≤ 30.00	--	--	Pass
11n-HT40	MCS0	159	5795	12.76	13.29	16.04	≤ 30.00	--	--	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit(dBm)	Max E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Result
11ac-VHT20	MCS0	52	5260	10.74	11.93	14.39	≤ 23.54	18.73	≤ 29.54	Pass
11ac-VHT20	MCS0	60	5300	11.52	12.45	15.02	≤ 23.54	19.36	≤ 29.54	Pass
11ac-VHT20	MCS0	64	5320	11.34	12.43	14.93	≤ 23.54	19.27	≤ 29.54	Pass
11ac-VHT20	MCS0	100	5500	11.80	12.77	15.32	≤ 23.54	19.66	≤ 29.54	Pass
11ac-VHT20	MCS0	116	5580	11.80	12.81	15.34	≤ 23.54	19.68	≤ 29.54	Pass
11ac-VHT20	MCS0	120	5600	11.28	12.63	15.02	≤ 23.54	19.36	≤ 29.54	Pass
11ac-VHT20	MCS0	140	5700	11.34	12.64	15.05	≤ 23.54	19.39	≤ 29.54	Pass
11ac-VHT20	MCS0	144	5720	11.87	12.77	15.35	≤ 23.54	19.69	≤ 29.54	Pass
11ac-VHT20	MCS0	149	5745	12.10	12.79	15.47	≤ 30.00	--	--	Pass
11ac-VHT20	MCS0	157	5785	12.09	12.60	15.36	≤ 30.00	--	--	Pass
11ac-VHT20	MCS0	165	5825	12.16	12.62	15.41	≤ 30.00	--	--	Pass
11ac-VHT40	MCS0	54	5270	11.62	12.43	15.05	≤ 23.98	19.39	≤ 30.00	Pass
11ac-VHT40	MCS0	62	5310	7.96	9.65	11.90	≤ 23.98	16.24	≤ 30.00	Pass
11ac-VHT40	MCS0	102	5510	7.71	9.57	11.75	≤ 23.98	16.09	≤ 30.00	Pass
11ac-VHT40	MCS0	110	5550	12.64	13.25	15.97	≤ 23.98	20.31	≤ 30.00	Pass
11ac-VHT40	MCS0	118	5590	12.06	13.36	15.77	≤ 23.98	20.11	≤ 30.00	Pass
11ac-VHT40	MCS0	134	5670	12.46	13.38	15.95	≤ 23.98	20.29	≤ 30.00	Pass
11ac-VHT40	MCS0	142	5710	11.75	12.96	15.41	≤ 23.98	19.75	≤ 30.00	Pass
11ac-VHT40	MCS0	151	5755	12.35	12.91	15.65	≤ 30.00	--	--	Pass
11ac-VHT40	MCS0	159	5795	12.15	12.61	15.40	≤ 30.00	--	--	Pass
11ac-VHT80	MCS0	58	5290	8.92	8.42	11.69	≤ 23.98	16.03	≤ 30.00	Pass
11ac-VHT80	MCS0	106	5530	6.35	8.38	10.49	≤ 23.98	14.83	≤ 30.00	Pass
11ac-VHT80	MCS0	122	5610	10.11	11.50	13.87	≤ 23.98	18.21	≤ 30.00	Pass
11ac-VHT80	MCS0	138	5690	10.29	11.62	14.02	≤ 23.98	18.36	≤ 30.00	Pass
11ac-VHT80	MCS0	155	5775	11.14	11.68	14.43	≤ 30.00	--	--	Pass

Note 1: Total Average Power (dBm) = $10*\log\{10^{(\text{Ant 0 Average Power }/10)} +10^{(\text{Ant 1 Average Power }/10)}\}$.

Note 1: Max E.I.R.P (dBm) = Total Average Power (dBm) + Antenna Gain (dBi), Antenna Gain = 4.34dBi.

Note 2: EIRP Limit Calculation as below:

For 5150-5250MHz

802.11a: 10 + 10 log10 (16.83MHz) = 22.26dBm < 23dBm;

802.11n-HT20: 10 + 10 log10 (17.99MHz) = 22.55dBm < 23dBm;

802.11ac-VHT20: 10 + 10 log10 (17.96MHz) = 22.54dBm < 23dBm;

802.11n-HT40/ac-VHT40/ac-VHT80: 10 + 10 log10 B > 23.01dBm;

For 5250-5350MHz, 5470-5725MHz

802.11a: 17 + 10 log10 (16.82MHz) = 29.26dBm < 30dBm;

802.11n-HT20: 17 + 10 log10 (17.93MHz) = 29.54dBm < 30dBm;

802.11ac-VHT20: 17 + 10 log10 (17.94MHz) = 29.54dBm < 30dBm;

802.11n-HT40/ac-VHT40/ac-VHT80: 17 + 10 log10 B > 30dBm;

Note 3: Max Conducted Output Power Limit Calculation as below:

For 5250-5350MHz, 5470-5725MHz

802.11a: 11 + 10 log10 (16.82MHz) = 23.26dBm < 30dBm;

802.11n-HT20: 11 + 10 log10 (17.93MHz) = 23.54dBm < 30dBm;

802.11ac-VHT20: 11 + 10 log10 (17.94MHz) = 23.54dBm < 30dBm;

802.11n-HT40/ac-VHT40/ac-VHT80: 11 + 10 log10 B > 23.98dBm;

7.3. Radiated Spurious Emission Measurement

7.3.1.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

7.3.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.3.3.Test Setting

Peak Field Strength Measurements

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

Table 1 - RBW as a function of frequency

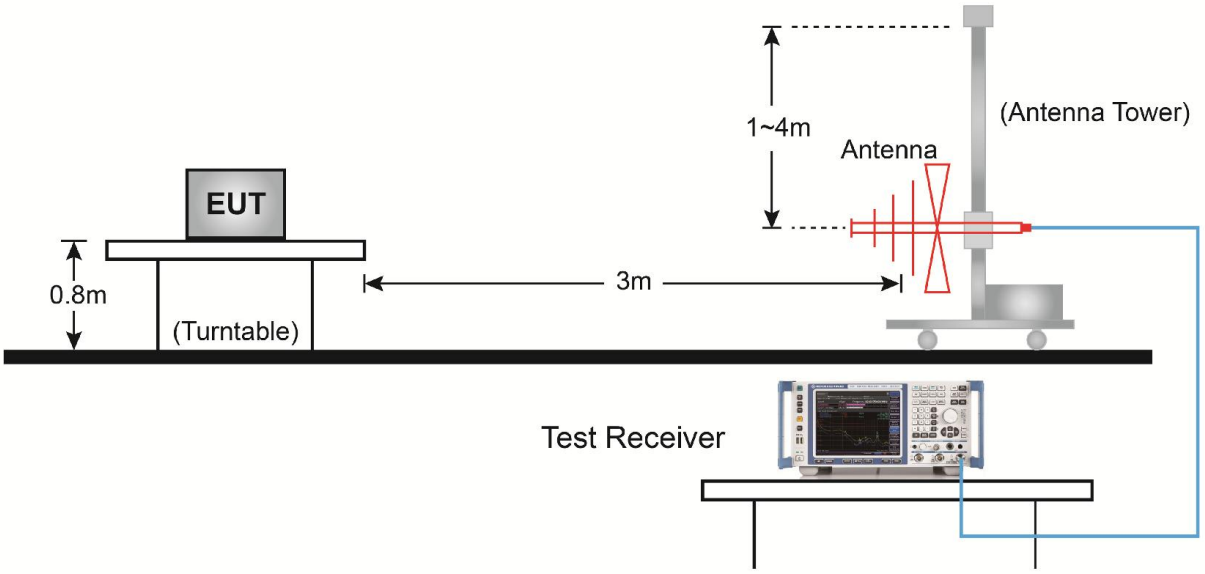
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

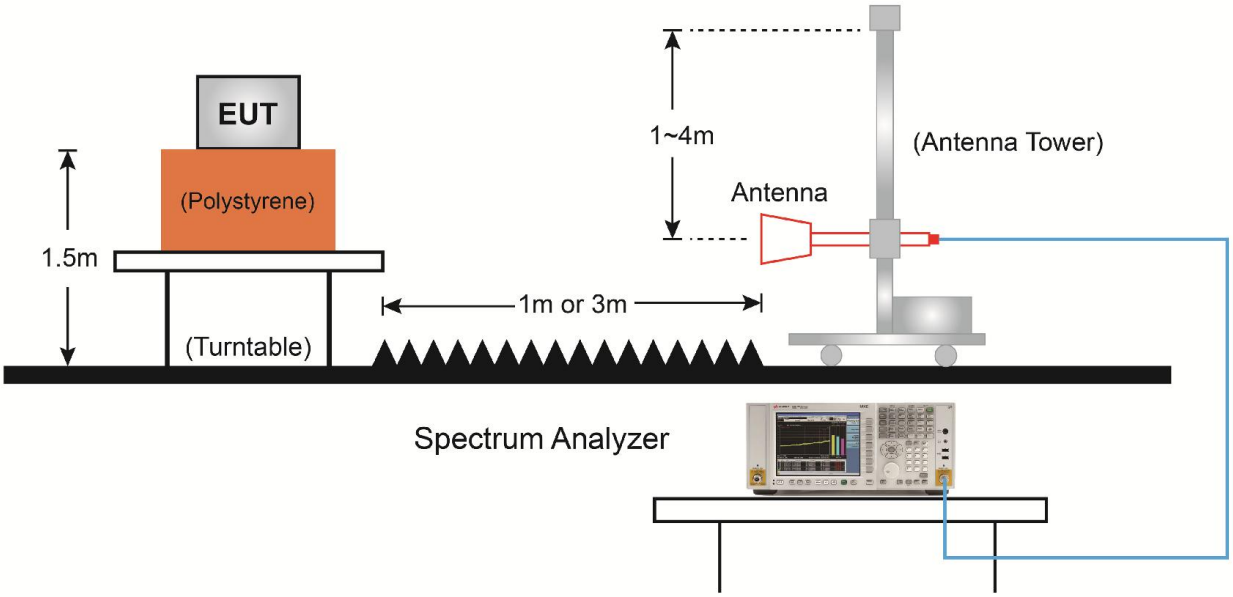
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.3.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



7.3.5.Test Result

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56%
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	36
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	36.2	11.9	48.1	74.0	-25.9	Peak	Horizontal
	8327.0	34.0	12.2	46.2	74.0	-27.8	Peak	Horizontal
*	9755.0	33.6	15.9	49.5	68.2	-18.7	Peak	Horizontal
*	13019.0	34.0	18.0	52.0	68.2	-16.2	Peak	Horizontal
	7468.5	35.6	11.8	47.4	74.0	-26.6	Peak	Vertical
	8267.5	34.9	12.1	47.0	74.0	-27.0	Peak	Vertical
*	8650.0	36.2	13.1	49.3	68.2	-18.9	Peak	Vertical
*	10180.0	34.4	16.3	50.7	68.2	-17.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56%
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	44
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	35.8	11.8	47.6	74.0	-26.4	Peak	Horizontal
	8259.0	36.5	12.2	48.7	74.0	-25.3	Peak	Horizontal
*	8590.5	36.4	12.9	49.3	68.2	-18.9	Peak	Horizontal
*	10503.0	34.5	17.3	51.8	68.2	-16.4	Peak	Horizontal
	7655.5	36.3	11.6	47.9	74.0	-26.1	Peak	Vertical
	8259.0	36.3	12.2	48.5	74.0	-25.5	Peak	Vertical
*	8556.5	36.0	12.8	48.8	68.2	-19.4	Peak	Vertical
*	9857.0	35.1	16.0	51.1	68.2	-17.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56%
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	48
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7417.5	36.0	11.8	47.8	74.0	-26.2	Peak	Horizontal
	8174.0	36.0	12.4	48.4	74.0	-25.6	Peak	Horizontal
*	8913.5	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	9925.0	34.2	16.0	50.2	68.2	-18.0	Peak	Horizontal
	7468.5	35.8	11.8	47.6	74.0	-26.4	Peak	Vertical
	8233.5	36.5	12.3	48.8	74.0	-25.2	Peak	Vertical
*	8675.5	34.2	13.1	47.3	68.2	-20.9	Peak	Vertical
*	10358.5	35.6	16.8	52.4	68.2	-15.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	52
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7519.5	36.2	11.9	48.1	74.0	-25.9	Peak	Horizontal
	8276.0	35.3	12.0	47.3	74.0	-26.7	Peak	Horizontal
*	8633.0	35.1	13.1	48.2	68.2	-20.0	Peak	Horizontal
*	10010.0	34.4	16.1	50.5	68.2	-17.7	Peak	Horizontal
	7485.5	35.2	11.9	47.1	74.0	-26.9	Peak	Vertical
	8208.0	35.2	12.3	47.5	74.0	-26.5	Peak	Vertical
*	8837.0	35.6	13.3	48.9	68.2	-19.3	Peak	Vertical
*	10265.0	34.5	16.6	51.1	68.2	-17.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	60
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7494.0	35.3	12.0	47.3	74.0	-26.7	Peak	Horizontal
	8157.0	35.7	12.4	48.1	74.0	-25.9	Peak	Horizontal
*	8684.0	35.6	13.1	48.7	68.2	-19.5	Peak	Horizontal
*	9874.0	34.3	16.1	50.4	68.2	-17.8	Peak	Horizontal
	7392.0	35.1	11.7	46.8	74.0	-27.2	Peak	Vertical
	8216.5	34.0	12.3	46.3	74.0	-27.7	Peak	Vertical
*	8641.5	34.9	13.1	48.0	68.2	-20.2	Peak	Vertical
*	9933.5	34.3	16.1	50.4	68.2	-17.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	64
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7477.0	35.4	11.9	47.3	74.0	-26.7	Peak	Horizontal
	8216.5	35.5	12.3	47.8	74.0	-26.2	Peak	Horizontal
*	8922.0	34.6	13.4	48.0	68.2	-20.2	Peak	Horizontal
*	9746.5	34.8	15.8	50.6	68.2	-17.6	Peak	Horizontal
	7383.5	35.7	11.7	47.4	74.0	-26.6	Peak	Vertical
	8225.0	36.3	12.2	48.5	74.0	-25.5	Peak	Vertical
*	8633.0	33.6	13.1	46.7	68.2	-21.5	Peak	Vertical
*	10112.0	32.1	16.3	48.4	68.2	-19.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	100
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7502.5	34.3	12.0	46.3	74.0	-27.7	Peak	Horizontal
	8182.5	35.1	12.4	47.5	74.0	-26.5	Peak	Horizontal
*	8913.5	34.2	13.4	47.6	68.2	-20.6	Peak	Horizontal
*	9712.5	33.7	15.4	49.1	68.2	-19.1	Peak	Horizontal
	7502.5	34.9	12.0	46.9	74.0	-27.1	Peak	Vertical
	8140.0	34.5	12.5	47.0	74.0	-27.0	Peak	Vertical
*	8675.5	34.6	13.1	47.7	68.2	-20.5	Peak	Vertical
*	10367.0	34.8	16.9	51.7	68.2	-16.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	116
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7494.0	36.0	12.0	48.0	74.0	-26.0	Peak	Horizontal
	8182.5	34.2	12.4	46.6	74.0	-27.4	Peak	Horizontal
*	8675.5	34.5	13.1	47.6	68.2	-20.6	Peak	Horizontal
*	10367.0	34.4	16.9	51.3	68.2	-16.9	Peak	Horizontal
	7426.0	36.4	11.9	48.3	74.0	-25.7	Peak	Vertical
	8174.0	36.1	12.4	48.5	74.0	-25.5	Peak	Vertical
*	8820.0	35.7	13.4	49.1	68.2	-19.1	Peak	Vertical
*	9976.0	33.8	15.9	49.7	68.2	-18.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	120
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7519.5	35.4	11.9	47.3	74.0	-26.7	Peak	Horizontal
	8191.0	35.2	12.5	47.7	74.0	-26.3	Peak	Horizontal
*	8752.0	33.7	13.3	47.0	68.2	-21.2	Peak	Horizontal
*	9865.5	34.4	16.1	50.5	68.2	-17.7	Peak	Horizontal
	7647.0	34.9	11.6	46.5	74.0	-27.5	Peak	Vertical
	8327.0	34.4	12.2	46.6	74.0	-27.4	Peak	Vertical
*	8905.0	35.1	13.3	48.4	68.2	-19.8	Peak	Vertical
*	10528.5	34.3	17.2	51.5	68.2	-16.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	140
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7400.5	35.8	11.7	47.5	74.0	-26.5	Peak	Horizontal
	8335.5	35.9	12.1	48.0	74.0	-26.0	Peak	Horizontal
*	8794.5	34.0	13.3	47.3	68.2	-20.9	Peak	Horizontal
*	9670.0	33.5	15.3	48.8	68.2	-19.4	Peak	Horizontal
	7426.0	36.1	11.9	48.0	74.0	-26.0	Peak	Vertical
	8072.0	35.6	12.7	48.3	74.0	-25.7	Peak	Vertical
*	8658.5	35.9	13.0	48.9	68.2	-19.3	Peak	Vertical
*	10350.0	34.4	16.8	51.2	68.2	-17.0	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	144
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7562.0	36.0	11.9	47.9	74.0	-26.1	Peak	Horizontal
	8327.0	33.8	12.2	46.0	74.0	-28.0	Peak	Horizontal
*	8752.0	33.5	13.3	46.8	68.2	-21.4	Peak	Horizontal
*	9933.5	32.7	16.1	48.8	68.2	-19.4	Peak	Horizontal
	7460.0	35.8	11.8	47.6	74.0	-26.4	Peak	Vertical
	8327.0	33.9	12.2	46.1	74.0	-27.9	Peak	Vertical
*	8675.5	34.6	13.1	47.7	68.2	-20.5	Peak	Vertical
*	9848.5	33.0	16.1	49.1	68.2	-19.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	149
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	35.9	11.9	47.8	74.0	-26.2	Peak	Horizontal
	8148.5	35.9	12.4	48.3	74.0	-25.7	Peak	Horizontal
*	8828.5	35.2	13.4	48.6	68.2	-19.6	Peak	Horizontal
*	10180.0	34.9	16.3	51.2	68.2	-17.0	Peak	Horizontal
	7443.0	35.9	11.9	47.8	74.0	-26.2	Peak	Vertical
	8191.0	35.2	12.5	47.7	74.0	-26.3	Peak	Vertical
*	8607.5	36.0	12.9	48.9	68.2	-19.3	Peak	Vertical
*	10486.0	34.3	17.1	51.4	68.2	-16.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	157
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	35.0	11.9	46.9	74.0	-27.1	Peak	Horizontal
	8208.0	35.9	12.3	48.2	74.0	-25.8	Peak	Horizontal
*	8675.5	34.0	13.1	47.1	68.2	-21.1	Peak	Horizontal
*	10333.0	34.9	16.8	51.7	68.2	-16.5	Peak	Horizontal
	7392.0	37.1	11.7	48.8	74.0	-25.2	Peak	Vertical
	8437.5	35.7	12.4	48.1	74.0	-25.9	Peak	Vertical
*	8641.5	35.5	13.1	48.6	68.2	-19.6	Peak	Vertical
*	9967.5	35.4	16.0	51.4	68.2	-16.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11a	Test Channel	165
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7655.5	35.8	11.6	47.4	74.0	-26.6	Peak	Horizontal
	8327.0	35.2	12.2	47.4	74.0	-26.6	Peak	Horizontal
*	8633.0	33.8	13.1	46.9	68.2	-21.3	Peak	Horizontal
*	9712.5	33.4	15.4	48.8	68.2	-19.4	Peak	Horizontal
	7596.0	36.8	11.8	48.6	74.0	-25.4	Peak	Vertical
	8216.5	36.2	12.3	48.5	74.0	-25.5	Peak	Vertical
*	8573.5	36.1	12.8	48.9	68.2	-19.3	Peak	Vertical
*	10375.5	35.2	16.9	52.1	68.2	-16.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	36
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7315.5	36.2	11.7	47.9	74.0	-26.1	Peak	Horizontal
	8301.5	36.4	12.2	48.6	74.0	-25.4	Peak	Horizontal
*	8633.0	34.0	13.1	47.1	68.2	-21.1	Peak	Horizontal
*	10341.5	35.2	16.8	52.0	68.2	-16.2	Peak	Horizontal
	7383.5	35.9	11.7	47.6	74.0	-26.4	Peak	Vertical
	8182.5	34.7	12.4	47.1	74.0	-26.9	Peak	Vertical
*	8735.0	35.2	13.2	48.4	68.2	-19.8	Peak	Vertical
*	9865.5	34.6	16.1	50.7	68.2	-17.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	44
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7672.5	36.1	11.7	47.8	74.0	-26.2	Peak	Horizontal
	8335.5	36.6	12.1	48.7	74.0	-25.3	Peak	Horizontal
*	8752.0	33.2	13.3	46.5	68.2	-21.7	Peak	Horizontal
*	10027.0	33.7	16.0	49.7	68.2	-18.5	Peak	Horizontal
	7426.0	36.0	11.9	47.9	74.0	-26.1	Peak	Vertical
	8191.0	36.0	12.5	48.5	74.0	-25.5	Peak	Vertical
*	8871.0	34.9	13.5	48.4	68.2	-19.8	Peak	Vertical
*	10222.5	35.4	16.5	51.9	68.2	-16.3	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	48
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7519.5	36.1	11.9	48.0	74.0	-26.0	Peak	Horizontal
	8199.5	35.7	12.4	48.1	74.0	-25.9	Peak	Horizontal
*	8633.0	35.2	13.1	48.3	68.2	-19.9	Peak	Horizontal
*	10452.0	34.7	16.7	51.4	68.2	-16.8	Peak	Horizontal
	7434.5	35.5	11.9	47.4	74.0	-26.6	Peak	Vertical
	8106.0	34.6	12.6	47.2	74.0	-26.8	Peak	Vertical
*	8675.5	34.4	13.1	47.5	68.2	-20.7	Peak	Vertical
*	9899.5	34.0	16.1	50.1	68.2	-18.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	52
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7494.0	35.4	12.0	47.4	74.0	-26.6	Peak	Horizontal
	8123.0	34.9	12.6	47.5	74.0	-26.5	Peak	Horizontal
*	8582.0	35.7	12.9	48.6	68.2	-19.6	Peak	Horizontal
*	10367.0	34.6	16.9	51.5	68.2	-16.7	Peak	Horizontal
	7494.0	35.4	12.0	47.4	74.0	-26.6	Peak	Vertical
	8123.0	34.9	12.6	47.5	74.0	-26.5	Peak	Vertical
*	8582.0	35.7	12.9	48.6	68.2	-19.6	Peak	Vertical
*	10367.0	34.6	16.9	51.5	68.2	-16.7	Peak	Vertical

Note 1: “*” 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	60
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7613.0	34.5	11.9	46.4	74.0	-27.6	Peak	Horizontal
	8191.0	36.5	12.5	49.0	74.0	-25.0	Peak	Horizontal
*	8879.5	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	9721.0	35.1	15.4	50.5	68.2	-17.7	Peak	Horizontal
	7417.5	36.0	11.8	47.8	74.0	-26.2	Peak	Vertical
	8216.5	35.6	12.3	47.9	74.0	-26.1	Peak	Vertical
*	8675.5	34.9	13.1	48.0	68.2	-20.2	Peak	Vertical
*	10358.5	35.5	16.8	52.3	68.2	-15.9	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	64
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7400.5	36.6	11.7	48.3	74.0	-25.7	Peak	Horizontal
	8386.5	36.6	12.3	48.9	74.0	-25.1	Peak	Horizontal
*	8633.0	34.9	13.1	48.0	68.2	-20.2	Peak	Horizontal
*	10222.5	36.4	16.5	52.9	68.2	-15.3	Peak	Horizontal
	7460.0	36.2	11.8	48.0	74.0	-26.0	Peak	Vertical
	8140.0	34.7	12.5	47.2	74.0	-26.8	Peak	Vertical
*	8845.5	35.4	13.4	48.8	68.2	-19.4	Peak	Vertical
*	10545.5	35.2	17.3	52.5	68.2	-15.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	100
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	35.3	11.8	47.1	74.0	-26.9	Peak	Horizontal
	8114.5	36.2	12.6	48.8	74.0	-25.2	Peak	Horizontal
*	8820.0	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	9908.0	35.2	16.0	51.2	68.2	-17.0	Peak	Horizontal
	7426.0	36.2	11.9	48.1	74.0	-25.9	Peak	Vertical
	8216.5	36.2	12.3	48.5	74.0	-25.5	Peak	Vertical
*	8624.5	36.1	13.0	49.1	68.2	-19.1	Peak	Vertical
*	9950.5	34.7	16.1	50.8	68.2	-17.4	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	116
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7723.5	35.8	11.8	47.6	74.0	-26.4	Peak	Horizontal
	8293.0	33.6	12.1	45.7	74.0	-28.3	Peak	Horizontal
*	8828.5	34.2	13.4	47.6	68.2	-20.6	Peak	Horizontal
*	10299.0	33.1	16.5	49.6	68.2	-18.6	Peak	Horizontal
	7443.0	36.6	11.9	48.5	74.0	-25.5	Peak	Vertical
	8140.0	33.8	12.5	46.3	74.0	-27.7	Peak	Vertical
*	8828.5	33.7	13.4	47.1	68.2	-21.1	Peak	Vertical
*	9670.0	35.2	15.3	50.5	68.2	-17.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	120
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	35.6	11.9	47.5	74.0	-26.5	Peak	Horizontal
	8140.0	34.5	12.5	47.0	74.0	-27.0	Peak	Horizontal
*	8862.5	35.3	13.4	48.7	68.2	-19.5	Peak	Horizontal
*	9874.0	34.3	16.1	50.4	68.2	-17.8	Peak	Horizontal
	7426.0	36.0	11.9	47.9	74.0	-26.1	Peak	Vertical
	8259.0	35.3	12.2	47.5	74.0	-26.5	Peak	Vertical
*	8599.0	35.6	12.9	48.5	68.2	-19.7	Peak	Vertical
*	10239.5	33.9	16.5	50.4	68.2	-17.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	140
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	35.2	11.9	47.1	74.0	-26.9	Peak	Horizontal
	8216.5	34.7	12.3	47.0	74.0	-27.0	Peak	Horizontal
*	8752.0	33.4	13.3	46.7	68.2	-21.5	Peak	Horizontal
*	10443.5	34.3	16.8	51.1	68.2	-17.1	Peak	Horizontal
	7460.0	35.6	11.8	47.4	74.0	-26.6	Peak	Vertical
	8293.0	34.7	12.1	46.8	74.0	-27.2	Peak	Vertical
*	8650.0	35.5	13.1	48.6	68.2	-19.6	Peak	Vertical
*	9984.5	34.6	16.0	50.6	68.2	-17.6	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	144
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	35.5	11.9	47.4	74.0	-26.6	Peak	Horizontal
	8191.0	35.5	12.5	48.0	74.0	-26.0	Peak	Horizontal
*	8718.0	35.6	13.2	48.8	68.2	-19.4	Peak	Horizontal
*	10333.0	35.2	16.8	52.0	68.2	-16.2	Peak	Horizontal
	7655.5	35.9	11.6	47.5	74.0	-26.5	Peak	Vertical
	8140.0	35.8	12.5	48.3	74.0	-25.7	Peak	Vertical
*	8786.0	35.4	13.3	48.7	68.2	-19.5	Peak	Vertical
*	9916.5	34.3	16.0	50.3	68.2	-17.9	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	149
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7485.5	35.4	11.9	47.3	74.0	-26.7	Peak	Horizontal
	8361.0	35.7	12.2	47.9	74.0	-26.1	Peak	Horizontal
*	8735.0	35.0	13.2	48.2	68.2	-20.0	Peak	Horizontal
*	9687.0	34.6	15.6	50.2	68.2	-18.0	Peak	Horizontal
	7485.5	35.4	11.9	47.3	74.0	-26.7	Peak	Vertical
	8361.0	35.7	12.2	47.9	74.0	-26.1	Peak	Vertical
*	8735.0	35.0	13.2	48.2	68.2	-20.0	Peak	Vertical
*	9687.0	34.6	15.6	50.2	68.2	-18.0	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	157
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7647.0	34.8	11.6	46.4	74.0	-27.6	Peak	Horizontal
	8242.0	35.4	12.3	47.7	74.0	-26.3	Peak	Horizontal
*	8607.5	35.5	12.9	48.4	68.2	-19.8	Peak	Horizontal
*	9865.5	34.3	16.1	50.4	68.2	-17.8	Peak	Horizontal
	7434.5	35.6	11.9	47.5	74.0	-26.5	Peak	Vertical
	8233.5	35.7	12.3	48.0	74.0	-26.0	Peak	Vertical
*	8675.5	33.4	13.1	46.5	68.2	-21.7	Peak	Vertical
*	9627.5	34.3	15.6	49.9	68.2	-18.3	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT20	Test Channel	165
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7417.5	35.7	11.8	47.5	74.0	-26.5	Peak	Horizontal
	8208.0	35.7	12.3	48.0	74.0	-26.0	Peak	Horizontal
*	8607.5	35.6	12.9	48.5	68.2	-19.7	Peak	Horizontal
*	9848.5	35.1	16.1	51.2	68.2	-17.0	Peak	Horizontal
	7570.5	35.7	11.8	47.5	74.0	-26.5	Peak	Vertical
	8463.0	35.9	12.3	48.2	74.0	-25.8	Peak	Vertical
*	8871.0	35.3	13.5	48.8	68.2	-19.4	Peak	Vertical
*	9993.0	34.4	16.1	50.5	68.2	-17.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	38
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7366.5	35.8	11.7	47.5	74.0	-26.5	Peak	Horizontal
	8327.0	36.3	12.2	48.5	74.0	-25.5	Peak	Horizontal
*	8871.0	34.4	13.5	47.9	68.2	-20.3	Peak	Horizontal
*	9933.5	35.3	16.1	51.4	68.2	-16.8	Peak	Horizontal
	7647.0	35.8	11.6	47.4	74.0	-26.6	Peak	Vertical
	8250.5	35.2	12.3	47.5	74.0	-26.5	Peak	Vertical
*	8675.5	33.5	13.1	46.6	68.2	-21.6	Peak	Vertical
*	9797.5	32.6	15.9	48.5	68.2	-19.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	46
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7485.5	35.7	11.9	47.6	74.0	-26.4	Peak	Horizontal
	8250.5	34.5	12.3	46.8	74.0	-27.2	Peak	Horizontal
*	8777.5	35.2	13.3	48.5	68.2	-19.7	Peak	Horizontal
*	9976.0	34.8	15.9	50.7	68.2	-17.5	Peak	Horizontal
	7409.0	36.1	11.7	47.8	74.0	-26.2	Peak	Vertical
	8327.0	34.1	12.2	46.3	74.0	-27.7	Peak	Vertical
*	8956.0	34.1	13.3	47.4	68.2	-20.8	Peak	Vertical
*	10290.5	34.1	16.6	50.7	68.2	-17.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	54
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7460.0	36.1	11.8	47.9	74.0	-26.1	Peak	Horizontal
	8369.5	35.1	12.3	47.4	74.0	-26.6	Peak	Horizontal
*	8684.0	35.1	13.1	48.2	68.2	-20.0	Peak	Horizontal
*	10443.5	34.6	16.8	51.4	68.2	-16.8	Peak	Horizontal
	7511.0	35.6	11.9	47.5	74.0	-26.5	Peak	Vertical
	8225.0	35.5	12.2	47.7	74.0	-26.3	Peak	Vertical
*	8616.0	35.4	12.9	48.3	68.2	-19.9	Peak	Vertical
*	10018.5	34.4	16.1	50.5	68.2	-17.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	62
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7409.0	35.1	11.7	46.8	74.0	-27.2	Peak	Horizontal
	8242.0	35.4	12.3	47.7	74.0	-26.3	Peak	Horizontal
*	8582.0	35.2	12.9	48.1	68.2	-20.1	Peak	Horizontal
*	10205.5	34.8	16.3	51.1	68.2	-17.1	Peak	Horizontal
	7375.0	35.1	11.7	46.8	74.0	-27.2	Peak	Vertical
	8174.0	35.7	12.4	48.1	74.0	-25.9	Peak	Vertical
*	8718.0	35.1	13.2	48.3	68.2	-19.9	Peak	Vertical
*	9891.0	34.4	16.2	50.6	68.2	-17.6	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	102
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7315.5	35.7	11.7	47.4	74.0	-26.6	Peak	Horizontal
	8191.0	36.0	12.5	48.5	74.0	-25.5	Peak	Horizontal
*	8599.0	34.0	12.9	46.9	68.2	-21.3	Peak	Horizontal
*	9950.5	34.5	16.1	50.6	68.2	-17.6	Peak	Horizontal
	7349.5	35.7	11.7	47.4	74.0	-26.6	Peak	Vertical
	8284.5	36.0	12.1	48.1	74.0	-25.9	Peak	Vertical
*	8820.0	35.2	13.4	48.6	68.2	-19.6	Peak	Vertical
*	10027.0	34.4	16.0	50.4	68.2	-17.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	110
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7689.5	36.5	11.7	48.2	74.0	-25.8	Peak	Horizontal
	8242.0	35.7	12.3	48.0	74.0	-26.0	Peak	Horizontal
*	8854.0	35.2	13.4	48.6	68.2	-19.6	Peak	Horizontal
*	10520.0	34.6	17.1	51.7	68.2	-16.5	Peak	Horizontal
	7468.5	35.6	11.8	47.4	74.0	-26.6	Peak	Vertical
	8182.5	35.1	12.4	47.5	74.0	-26.5	Peak	Vertical
*	8752.0	34.2	13.3	47.5	68.2	-20.7	Peak	Vertical
*	9967.5	34.6	16.0	50.6	68.2	-17.6	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode:	802.11n-HT40	Test Channel:	118
Remark:	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7477.0	35.2	11.9	47.1	74.0	-26.9	Peak	Horizontal
	8140.0	33.3	12.5	45.8	74.0	-28.2	Peak	Horizontal
*	8752.0	33.1	13.3	46.4	68.2	-21.8	Peak	Horizontal
*	9712.5	34.4	15.4	49.8	68.2	-18.4	Peak	Horizontal
	7426.0	35.1	11.9	47.0	74.0	-27.0	Peak	Vertical
	8310.0	35.5	12.4	47.9	74.0	-26.1	Peak	Vertical
*	8709.5	33.5	13.2	46.7	68.2	-21.5	Peak	Vertical
*	9874.0	34.7	16.1	50.8	68.2	-17.4	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	134
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7604.5	35.3	11.8	47.1	74.0	-26.9	Peak	Horizontal
	8199.5	36.2	12.4	48.6	74.0	-25.4	Peak	Horizontal
*	8811.5	35.2	13.4	48.6	68.2	-19.6	Peak	Horizontal
*	9942.0	34.4	16.1	50.5	68.2	-17.7	Peak	Horizontal
	7715.0	35.6	11.7	47.3	74.0	-26.7	Peak	Vertical
	8250.5	35.0	12.3	47.3	74.0	-26.7	Peak	Vertical
*	8701.0	35.6	13.2	48.8	68.2	-19.4	Peak	Vertical
*	9942.0	34.9	16.1	51.0	68.2	-17.2	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	142
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7477.0	35.7	11.9	47.6	74.0	-26.4	Peak	Horizontal
	8140.0	35.8	12.5	48.3	74.0	-25.7	Peak	Horizontal
*	8556.5	36.2	12.8	49.0	68.2	-19.2	Peak	Horizontal
*	9806.0	34.4	15.9	50.3	68.2	-17.9	Peak	Horizontal
	7596.0	35.6	11.8	47.4	74.0	-26.6	Peak	Vertical
	8293.0	35.8	12.1	47.9	74.0	-26.1	Peak	Vertical
*	8743.5	36.2	13.3	49.5	68.2	-18.7	Peak	Vertical
*	10392.5	34.6	16.9	51.5	68.2	-16.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	151
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7349.5	35.9	11.7	47.6	74.0	-26.4	Peak	Horizontal
	8242.0	35.6	12.3	47.9	74.0	-26.1	Peak	Horizontal
*	8794.5	33.7	13.3	47.0	68.2	-21.2	Peak	Horizontal
*	9695.5	35.8	15.5	51.3	68.2	-16.9	Peak	Horizontal
	7485.5	35.9	11.9	47.8	74.0	-26.2	Peak	Vertical
	8369.5	35.5	12.3	47.8	74.0	-26.2	Peak	Vertical
*	8709.5	33.8	13.2	47.0	68.2	-21.2	Peak	Vertical
*	9840.0	34.1	16.1	50.2	68.2	-18.0	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11n-HT40	Test Channel	159
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7417.5	36.0	11.8	47.8	74.0	-26.2	Peak	Horizontal
	8420.5	35.3	12.3	47.6	74.0	-26.4	Peak	Horizontal
*	8922.0	35.0	13.4	48.4	68.2	-19.8	Peak	Horizontal
*	10001.5	34.2	16.1	50.3	68.2	-17.9	Peak	Horizontal
	7511.0	35.8	11.9	47.7	74.0	-26.3	Peak	Vertical
	8157.0	36.5	12.4	48.9	74.0	-25.1	Peak	Vertical
*	8828.5	34.0	13.4	47.4	68.2	-20.8	Peak	Vertical
*	9908.0	35.1	16.0	51.1	68.2	-17.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	36
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	35.1	11.9	47.0	74.0	-27.0	Peak	Horizontal
	8250.5	35.1	12.3	47.4	74.0	-26.6	Peak	Horizontal
*	8658.5	35.3	13.0	48.3	68.2	-19.9	Peak	Horizontal
*	9925.0	34.6	16.0	50.6	68.2	-17.6	Peak	Horizontal
	7460.0	35.5	11.8	47.3	74.0	-26.7	Peak	Vertical
	8072.0	36.0	12.7	48.7	74.0	-25.3	Peak	Vertical
*	8641.5	35.5	13.1	48.6	68.2	-19.6	Peak	Vertical
*	10188.5	34.5	16.2	50.7	68.2	-17.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	44
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7672.5	36.3	11.7	48.0	74.0	-26.0	Peak	Horizontal
	8182.5	35.4	12.4	47.8	74.0	-26.2	Peak	Horizontal
*	8675.5	34.0	13.1	47.1	68.2	-21.1	Peak	Horizontal
*	9976.0	34.5	15.9	50.4	68.2	-17.8	Peak	Horizontal
	7460.0	35.5	11.8	47.3	74.0	-26.7	Peak	Vertical
	8106.0	35.9	12.6	48.5	74.0	-25.5	Peak	Vertical
*	8675.5	33.5	13.1	46.6	68.2	-21.6	Peak	Vertical
*	10256.5	32.4	16.5	48.9	68.2	-19.3	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	48
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7494.0	35.6	12.0	47.6	74.0	-26.4	Peak	Horizontal
	8293.0	34.1	12.1	46.2	74.0	-27.8	Peak	Horizontal
*	8752.0	34.3	13.3	47.6	68.2	-20.6	Peak	Horizontal
*	9976.0	33.3	15.9	49.2	68.2	-19.0	Peak	Horizontal
	7460.0	36.3	11.8	48.1	74.0	-25.9	Peak	Vertical
	8140.0	35.8	12.5	48.3	74.0	-25.7	Peak	Vertical
*	8786.0	35.2	13.3	48.5	68.2	-19.7	Peak	Vertical
*	10137.5	35.0	16.2	51.2	68.2	-17.0	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	52
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7417.5	35.2	11.8	47.0	74.0	-27.0	Peak	Horizontal
	8250.5	33.7	12.3	46.0	74.0	-28.0	Peak	Horizontal
*	8633.0	34.0	13.1	47.1	68.2	-21.1	Peak	Horizontal
*	10171.5	34.7	16.4	51.1	68.2	-17.1	Peak	Horizontal
	7468.5	35.2	11.8	47.0	74.0	-27.0	Peak	Vertical
	8174.0	36.0	12.4	48.4	74.0	-25.6	Peak	Vertical
*	8599.0	35.7	12.9	48.6	68.2	-19.6	Peak	Vertical
*	9780.5	34.7	15.8	50.5	68.2	-17.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	60
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7545.0	35.8	11.9	47.7	74.0	-26.3	Peak	Horizontal
	8293.0	33.9	12.1	46.0	74.0	-28.0	Peak	Horizontal
*	8871.0	35.0	13.5	48.5	68.2	-19.7	Peak	Horizontal
*	9933.5	33.6	16.1	49.7	68.2	-18.5	Peak	Horizontal
	7451.5	35.5	11.9	47.4	74.0	-26.6	Peak	Vertical
	8208.0	35.3	12.3	47.6	74.0	-26.4	Peak	Vertical
*	8922.0	35.3	13.4	48.7	68.2	-19.5	Peak	Vertical
*	9933.5	34.0	16.1	50.1	68.2	-18.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	64
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	36.1	11.9	48.0	74.0	-26.0	Peak	Horizontal
	8216.5	35.9	12.3	48.2	74.0	-25.8	Peak	Horizontal
*	8905.0	35.1	13.3	48.4	68.2	-19.8	Peak	Horizontal
*	10163.0	34.6	16.5	51.1	68.2	-17.1	Peak	Horizontal
	7681.0	35.8	11.8	47.6	74.0	-26.4	Peak	Vertical
	8437.5	35.6	12.4	48.0	74.0	-26.0	Peak	Vertical
*	8828.5	33.3	13.4	46.7	68.2	-21.5	Peak	Vertical
*	10299.0	32.4	16.5	48.9	68.2	-19.3	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	100
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	35.8	11.9	47.7	74.0	-26.3	Peak	Horizontal
	8182.5	34.7	12.4	47.1	74.0	-26.9	Peak	Horizontal
*	8820.0	34.6	13.4	48.0	68.2	-20.2	Peak	Horizontal
*	9848.5	34.0	16.1	50.1	68.2	-18.1	Peak	Horizontal
	7664.0	35.8	11.7	47.5	74.0	-26.5	Peak	Vertical
	8182.5	35.9	12.4	48.3	74.0	-25.7	Peak	Vertical
*	8828.5	33.4	13.4	46.8	68.2	-21.4	Peak	Vertical
*	10333.0	34.0	16.8	50.8	68.2	-17.4	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	116
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7383.5	35.6	11.7	47.3	74.0	-26.7	Peak	Horizontal
	8216.5	34.6	12.3	46.9	74.0	-27.1	Peak	Horizontal
*	8760.5	35.4	13.3	48.7	68.2	-19.5	Peak	Horizontal
*	9933.5	32.6	16.1	48.7	68.2	-19.5	Peak	Horizontal
	7494.0	35.5	12.0	47.5	74.0	-26.5	Peak	Vertical
	8233.5	35.7	12.3	48.0	74.0	-26.0	Peak	Vertical
*	8565.0	36.0	12.8	48.8	68.2	-19.4	Peak	Vertical
*	9899.5	34.5	16.1	50.6	68.2	-17.6	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	120
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7460.0	35.5	11.8	47.3	74.0	-26.7	Peak	Horizontal
	8199.5	36.0	12.4	48.4	74.0	-25.6	Peak	Horizontal
*	8930.5	36.0	13.4	49.4	68.2	-18.8	Peak	Horizontal
*	10112.0	35.2	16.3	51.5	68.2	-16.7	Peak	Horizontal
	7468.5	36.1	11.8	47.9	74.0	-26.1	Peak	Vertical
	8140.0	35.9	12.5	48.4	74.0	-25.6	Peak	Vertical
*	8794.5	35.3	13.3	48.6	68.2	-19.6	Peak	Vertical
*	10409.5	34.3	16.8	51.1	68.2	-17.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	140
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	36.3	11.8	48.1	74.0	-25.9	Peak	Horizontal
	8148.5	35.7	12.4	48.1	74.0	-25.9	Peak	Horizontal
*	8820.0	34.8	13.4	48.2	68.2	-20.0	Peak	Horizontal
*	10154.5	34.1	16.4	50.5	68.2	-17.7	Peak	Horizontal
	7706.5	36.2	11.7	47.9	74.0	-26.1	Peak	Vertical
	8140.0	36.0	12.5	48.5	74.0	-25.5	Peak	Vertical
*	8675.5	33.6	13.1	46.7	68.2	-21.5	Peak	Vertical
*	9967.5	34.7	16.0	50.7	68.2	-17.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	144
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7485.5	35.8	11.9	47.7	74.0	-26.3	Peak	Horizontal
	8174.0	35.3	12.4	47.7	74.0	-26.3	Peak	Horizontal
*	8752.0	33.6	13.3	46.9	68.2	-21.3	Peak	Horizontal
*	9848.5	32.5	16.1	48.6	68.2	-19.6	Peak	Horizontal
	7494.0	35.3	12.0	47.3	74.0	-26.7	Peak	Vertical
	8267.5	35.4	12.1	47.5	74.0	-26.5	Peak	Vertical
*	8624.5	35.5	13.0	48.5	68.2	-19.7	Peak	Vertical
*	10265.0	34.8	16.6	51.4	68.2	-16.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	149
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7511.0	34.8	11.9	46.7	74.0	-27.3	Peak	Horizontal
	8403.5	35.6	12.2	47.8	74.0	-26.2	Peak	Horizontal
*	8607.5	35.9	12.9	48.8	68.2	-19.4	Peak	Horizontal
*	9942.0	34.8	16.1	50.9	68.2	-17.3	Peak	Horizontal
	7468.5	35.7	11.8	47.5	74.0	-26.5	Peak	Vertical
	8216.5	35.1	12.3	47.4	74.0	-26.6	Peak	Vertical
*	8803.0	34.5	13.3	47.8	68.2	-20.4	Peak	Vertical
*	9959.0	35.0	16.0	51.0	68.2	-17.2	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	157
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7681.0	36.3	11.8	48.1	74.0	-25.9	Peak	Horizontal
	8097.5	36.1	12.6	48.7	74.0	-25.3	Peak	Horizontal
*	8854.0	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	10307.5	34.7	16.6	51.3	68.2	-16.9	Peak	Horizontal
	7732.0	35.8	11.9	47.7	74.0	-26.3	Peak	Vertical
	8225.0	35.6	12.2	47.8	74.0	-26.2	Peak	Vertical
*	8675.5	33.7	13.1	46.8	68.2	-21.4	Peak	Vertical
*	9823.0	34.5	16.0	50.5	68.2	-17.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT20	Test Channel	165
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7477.0	35.2	11.9	47.1	74.0	-26.9	Peak	Horizontal
	8148.5	35.7	12.4	48.1	74.0	-25.9	Peak	Horizontal
*	8871.0	34.8	13.5	48.3	68.2	-19.9	Peak	Horizontal
*	10137.5	34.9	16.2	51.1	68.2	-17.1	Peak	Horizontal
	7613.0	35.5	11.9	47.4	74.0	-26.6	Peak	Vertical
	8369.5	35.7	12.3	48.0	74.0	-26.0	Peak	Vertical
*	8879.5	36.1	13.4	49.5	68.2	-18.7	Peak	Vertical
*	10350.0	34.3	16.8	51.1	68.2	-17.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	38
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7494.0	35.4	12.0	47.4	74.0	-26.6	Peak	Horizontal
	8182.5	35.0	12.4	47.4	74.0	-26.6	Peak	Horizontal
*	8794.5	33.5	13.3	46.8	68.2	-21.4	Peak	Horizontal
*	10027.0	32.8	16.0	48.8	68.2	-19.4	Peak	Horizontal
	7502.5	35.4	12.0	47.4	74.0	-26.6	Peak	Vertical
	8182.5	35.6	12.4	48.0	74.0	-26.0	Peak	Vertical
*	8514.0	35.8	12.5	48.3	68.2	-19.9	Peak	Vertical
*	9891.0	32.8	16.2	49.0	68.2	-19.2	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	46
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	36.0	11.8	47.8	74.0	-26.2	Peak	Horizontal
	8191.0	34.2	12.5	46.7	74.0	-27.3	Peak	Horizontal
*	8888.0	35.2	13.4	48.6	68.2	-19.6	Peak	Horizontal
*	10443.5	35.1	16.8	51.9	68.2	-16.3	Peak	Horizontal
	7460.0	35.6	11.8	47.4	74.0	-26.6	Peak	Vertical
	8199.5	35.0	12.4	47.4	74.0	-26.6	Peak	Vertical
*	8684.0	35.2	13.1	48.3	68.2	-19.9	Peak	Vertical
*	10035.5	34.5	16.1	50.6	68.2	-17.6	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	54
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7443.0	35.8	11.9	47.7	74.0	-26.3	Peak	Horizontal
	8157.0	35.6	12.4	48.0	74.0	-26.0	Peak	Horizontal
*	8675.5	34.3	13.1	47.4	68.2	-20.8	Peak	Horizontal
*	10171.5	35.2	16.4	51.6	68.2	-16.6	Peak	Horizontal
	7545.0	11.9	-26.4	-14.5	74.0	-88.5	Peak	Vertical
	8250.5	12.3	-27.7	-15.4	74.0	-89.4	Peak	Vertical
*	8752.0	13.3	-21.6	-8.3	68.2	-76.5	Peak	Vertical
*	10163.0	16.5	-17.2	-0.7	68.2	-68.9	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	62
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	36.2	11.9	48.1	74.0	-25.9	Peak	Horizontal
	8259.0	35.7	12.2	47.9	74.0	-26.1	Peak	Horizontal
*	8752.0	34.9	13.3	48.2	68.2	-20.0	Peak	Horizontal
*	10333.0	34.3	16.8	51.1	68.2	-17.1	Peak	Horizontal
	7409.0	35.6	11.7	47.3	74.0	-26.7	Peak	Vertical
	8225.0	35.7	12.2	47.9	74.0	-26.1	Peak	Vertical
*	8811.5	35.0	13.4	48.4	68.2	-19.8	Peak	Vertical
*	10265.0	34.7	16.6	51.3	68.2	-16.9	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	102
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7409.0	35.7	11.7	47.4	74.0	-26.6	Peak	Horizontal
	8157.0	37.0	12.4	49.4	74.0	-24.6	Peak	Horizontal
*	8709.5	34.0	13.2	47.2	68.2	-21.0	Peak	Horizontal
*	9712.5	32.9	15.4	48.3	68.2	-19.9	Peak	Horizontal
	7426.0	35.3	11.9	47.2	74.0	-26.8	Peak	Vertical
	8250.5	34.9	12.3	47.2	74.0	-26.8	Peak	Vertical
*	8879.5	34.8	13.4	48.2	68.2	-20.0	Peak	Vertical
*	9865.5	34.2	16.1	50.3	68.2	-17.9	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	110
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	36.0	11.9	47.9	74.0	-26.1	Peak	Horizontal
	8284.5	36.1	12.1	48.2	74.0	-25.8	Peak	Horizontal
*	8752.0	32.9	13.3	46.2	68.2	-22.0	Peak	Horizontal
*	10018.5	34.7	16.1	50.8	68.2	-17.4	Peak	Horizontal
	7545.0	35.4	11.9	47.3	74.0	-26.7	Peak	Vertical
	8250.5	35.4	12.3	47.7	74.0	-26.3	Peak	Vertical
*	8675.5	34.1	13.1	47.2	68.2	-21.0	Peak	Vertical
*	9865.5	35.1	16.1	51.2	68.2	-17.0	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	118
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7417.5	35.9	11.8	47.7	74.0	-26.3	Peak	Horizontal
	8437.5	35.7	12.4	48.1	74.0	-25.9	Peak	Horizontal
*	8675.5	33.9	13.1	47.0	68.2	-21.2	Peak	Horizontal
*	10112.0	35.2	16.3	51.5	68.2	-16.7	Peak	Horizontal
	7562.0	35.4	11.9	47.3	74.0	-26.7	Peak	Vertical
	8191.0	35.4	12.5	47.9	74.0	-26.1	Peak	Vertical
*	8599.0	34.0	12.9	46.9	68.2	-21.3	Peak	Vertical
*	10358.5	34.2	16.8	51.0	68.2	-17.2	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	134
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7451.5	35.6	11.9	47.5	74.0	-26.5	Peak	Horizontal
	8131.5	36.0	12.6	48.6	74.0	-25.4	Peak	Horizontal
*	8879.5	35.1	13.4	48.5	68.2	-19.7	Peak	Horizontal
*	10316.0	34.4	16.6	51.0	68.2	-17.2	Peak	Horizontal
	7681.0	35.5	11.8	47.3	74.0	-26.7	Peak	Vertical
	8378.0	37.4	12.4	49.8	74.0	-24.2	Peak	Vertical
*	8896.5	35.0	13.3	48.3	68.2	-19.9	Peak	Vertical
*	10307.5	34.9	16.6	51.5	68.2	-16.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	142
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7536.5	33.7	11.9	45.6	74.0	-28.4	Peak	Horizontal
	8250.5	35.4	12.3	47.7	74.0	-26.3	Peak	Horizontal
*	8794.5	33.1	13.3	46.4	68.2	-21.8	Peak	Horizontal
*	9942.0	34.5	16.1	50.6	68.2	-17.6	Peak	Horizontal
	7434.5	35.5	11.9	47.4	74.0	-26.6	Peak	Vertical
	8199.5	36.6	12.4	49.0	74.0	-25.0	Peak	Vertical
*	8650.0	35.9	13.1	49.0	68.2	-19.2	Peak	Vertical
*	10350.0	34.6	16.8	51.4	68.2	-16.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	151
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	36.3	11.9	48.2	74.0	-25.8	Peak	Horizontal
	8344.0	36.4	12.0	48.4	74.0	-25.6	Peak	Horizontal
*	8633.0	35.1	13.1	48.2	68.2	-20.0	Peak	Horizontal
*	9865.5	34.5	16.1	50.6	68.2	-17.6	Peak	Horizontal
	7494.0	36.4	12.0	48.4	74.0	-25.6	Peak	Vertical
	8310.0	35.8	12.4	48.2	74.0	-25.8	Peak	Vertical
*	8718.0	35.4	13.2	48.6	68.2	-19.6	Peak	Vertical
*	10256.5	32.9	16.5	49.4	68.2	-18.8	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT40	Test Channel	159
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7434.5	36.0	11.9	47.9	74.0	-26.1	Peak	Horizontal
	8208.0	35.9	12.3	48.2	74.0	-25.8	Peak	Horizontal
*	8590.5	35.5	12.9	48.4	68.2	-19.8	Peak	Horizontal
*	10375.5	34.6	16.9	51.5	68.2	-16.7	Peak	Horizontal
	7519.5	35.3	11.9	47.2	74.0	-26.8	Peak	Vertical
	8182.5	33.9	12.4	46.3	74.0	-27.7	Peak	Vertical
*	8752.0	33.8	13.3	47.1	68.2	-21.1	Peak	Vertical
*	10333.0	34.9	16.8	51.7	68.2	-16.5	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT80	Test Channel	42
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7468.5	35.8	11.8	47.6	74.0	-26.4	Peak	Horizontal
	8369.5	35.1	12.3	47.4	74.0	-26.6	Peak	Horizontal
*	8820.0	35.3	13.4	48.7	68.2	-19.5	Peak	Horizontal
*	9840.0	34.7	16.1	50.8	68.2	-17.4	Peak	Horizontal
	7664.0	36.2	11.7	47.9	74.0	-26.1	Peak	Vertical
	8395.0	36.1	12.2	48.3	74.0	-25.7	Peak	Vertical
*	8828.5	34.7	13.4	48.1	68.2	-20.1	Peak	Vertical
*	10418.0	34.7	16.8	51.5	68.2	-16.7	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT80	Test Channel	58
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7647.0	35.8	11.6	47.4	74.0	-26.6	Peak	Horizontal
	8276.0	35.9	12.0	47.9	74.0	-26.1	Peak	Horizontal
*	8854.0	35.2	13.4	48.6	68.2	-19.6	Peak	Horizontal
*	9797.5	33.3	15.9	49.2	68.2	-19.0	Peak	Horizontal
	7477.0	35.9	11.9	47.8	74.0	-26.2	Peak	Vertical
	8276.0	36.0	12.0	48.0	74.0	-26.0	Peak	Vertical
*	8752.0	33.8	13.3	47.1	68.2	-21.1	Peak	Vertical
*	10197.0	35.1	16.2	51.3	68.2	-16.9	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT80	Test Channel	106
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7570.5	35.2	11.8	47.0	74.0	-27.0	Peak	Horizontal
	8250.5	33.9	12.3	46.2	74.0	-27.8	Peak	Horizontal
*	8607.5	35.5	12.9	48.4	68.2	-19.8	Peak	Horizontal
*	9942.0	34.3	16.1	50.4	68.2	-17.8	Peak	Horizontal
	7409.0	35.3	11.7	47.0	74.0	-27.0	Peak	Vertical
	8463.0	35.7	12.3	48.0	74.0	-26.0	Peak	Vertical
*	8760.5	35.4	13.3	48.7	68.2	-19.5	Peak	Vertical
*	9908.0	34.8	16.0	50.8	68.2	-17.4	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT80	Test Channel	122
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7392.0	36.3	11.7	48.0	74.0	-26.0	Peak	Horizontal
	8250.5	36.0	12.3	48.3	74.0	-25.7	Peak	Horizontal
*	8675.5	34.3	13.1	47.4	68.2	-20.8	Peak	Horizontal
*	10146.0	34.6	16.2	50.8	68.2	-17.4	Peak	Horizontal
	7553.5	35.7	11.9	47.6	74.0	-26.4	Peak	Vertical
	8199.5	35.3	12.4	47.7	74.0	-26.3	Peak	Vertical
*	8675.5	34.5	13.1	47.6	68.2	-20.6	Peak	Vertical
*	10537.0	35.5	17.3	52.8	68.2	-15.4	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT80	Test Channel	138
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7426.0	36.2	11.9	48.1	74.0	-25.9	Peak	Horizontal
	8369.5	33.7	12.3	46.0	74.0	-28.0	Peak	Horizontal
*	8752.0	33.6	13.3	46.9	68.2	-21.3	Peak	Horizontal
*	10010.0	34.2	16.1	50.3	68.2	-17.9	Peak	Horizontal
	7494.0	35.7	12.0	47.7	74.0	-26.3	Peak	Vertical
	8199.5	35.9	12.4	48.3	74.0	-25.7	Peak	Vertical
*	8811.5	35.9	13.4	49.3	68.2	-18.9	Peak	Vertical
*	10171.5	34.7	16.4	51.1	68.2	-17.1	Peak	Vertical

Note 1: "*" 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.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Product	WIFI+BT Combo Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	56 %
Test Site	AC1	Test Date	2019/08/03
Test Mode	802.11ac-VHT80	Test Channel	155
Remark	1. Average measurement was not performed if peak level lower than average limit (54dBμV/m). 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7689.5	35.6	11.7	47.3	74.0	-26.7	Peak	Horizontal
	8191.0	35.2	12.5	47.7	74.0	-26.3	Peak	Horizontal
*	8879.5	35.4	13.4	48.8	68.2	-19.4	Peak	Horizontal
*	9891.0	34.3	16.2	50.5	68.2	-17.7	Peak	Horizontal
	7443.0	35.8	11.9	47.7	74.0	-26.3	Peak	Vertical
	8276.0	35.6	12.0	47.6	74.0	-26.4	Peak	Vertical
*	8862.5	36.5	13.4	49.9	68.2	-18.3	Peak	Vertical
*	9610.5	35.3	15.3	50.6	68.2	-17.6	Peak	Vertical

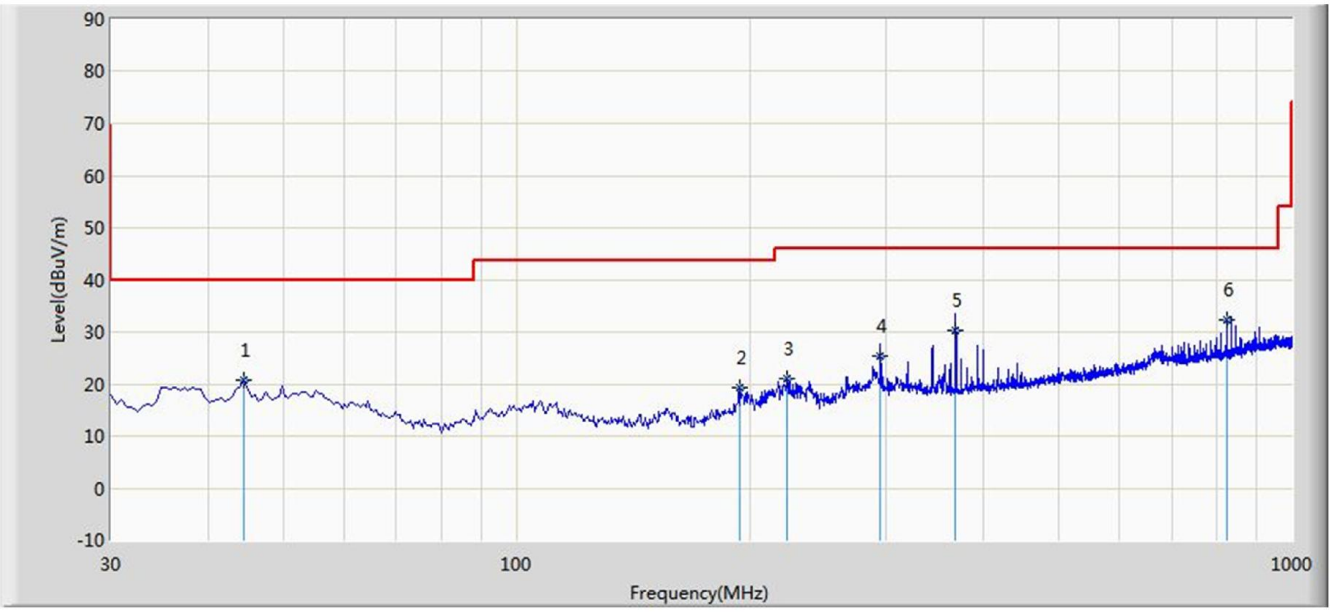
Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2019/08/08 - 22:54
Limit: FCC_Part15.209_RSE(3m)	Engineer: Dillon Diao
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC 120V/60Hz
Worst Case Mode: There is the worst case within frequency range 30MHz~1GHz.	



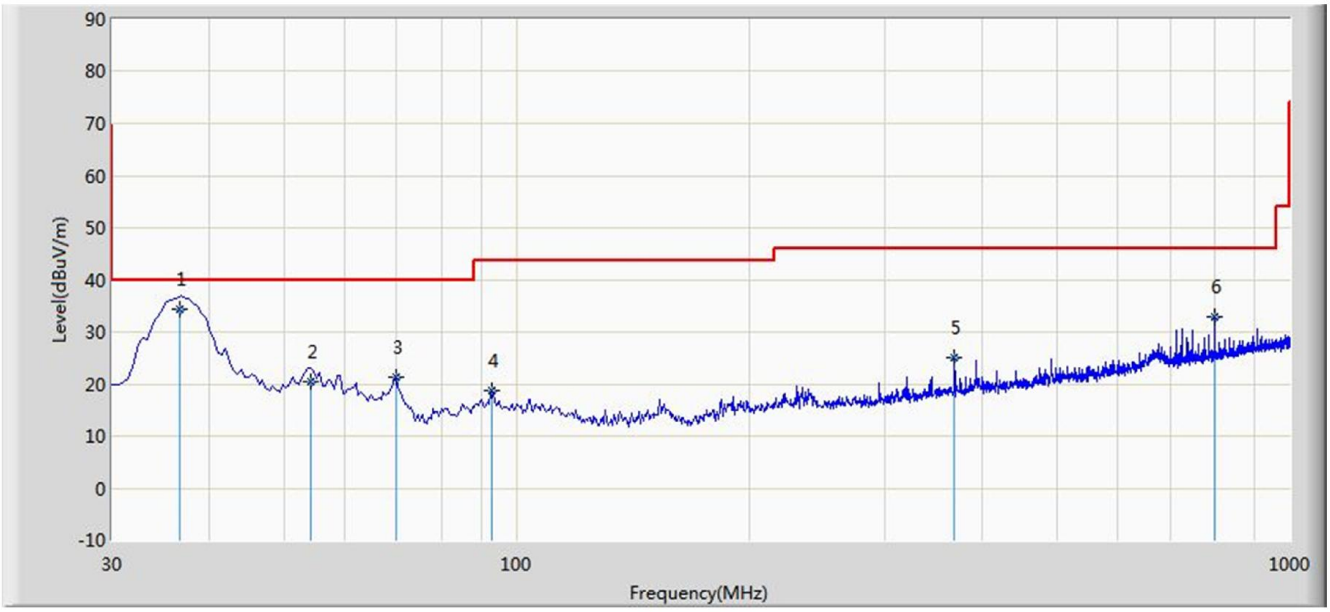
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			44.550	20.839	6.201	-19.161	40.000	14.638	QP
2			193.930	19.175	7.342	-24.325	43.500	11.833	QP
3			223.515	20.962	8.378	-25.038	46.000	12.584	QP
4			294.820	25.423	11.210	-20.577	46.000	14.213	QP
5			368.540	30.356	14.520	-15.644	46.000	15.836	QP
6		*	823.460	32.458	9.730	-13.542	46.000	22.728	QP

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

Site: AC2	Time: 2019/08/08 - 22:55
Limit: FCC_Part15.209_RSE(3m)	Engineer: Dillon Diao
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: WIFI+BT Combo Module	Power: AC 120V/60Hz
Worst Case Mode: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	36.740	34.434	21.240	-5.566	40.000	13.194	QP
2			54.260	20.392	5.680	-19.608	40.000	14.712	QP
3			69.770	21.208	10.356	-18.792	40.000	10.852	QP
4			93.050	18.598	6.728	-24.902	43.500	11.870	QP
5			368.530	24.968	9.132	-21.032	46.000	15.836	QP
6			800.180	32.783	10.406	-13.217	46.000	22.377	QP

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

7.4. Radiated Restricted Band Edge Measurement

7.4.1.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).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (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	156.52475-156.525	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])
13.36-13.41	--	--	--

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 e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing

linearly to a level of 15.6dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

Refer to KDB 789033 D02v01r04 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27dBm/MHz.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR 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

For RSS-Gen Section 8.10 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.525225	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	--
8.37625 - 8.38675	1718.8 -1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 -2390	
12.51975 - 12.52025	2655 - 2900	
12.57675 - 12.57725	3260 - 3267	
13.36 -13.41	3332 -3339	
16.42 - 16.423	334.5 - 3358	
16.69475 - 16.69525	3500 - 4400	
16.80425 - 16.80475	4500 - 5150	
25.5 - 25.67	5350 - 5460	
37.5 - 38.25	7250 - 7750	
73 - 74.6	8025 - 8500	
74.8 - 75.2	--	
108 - 138		

All out of band emissions appearing in a restricted band as specified in Section 8.10 of the RSS-Gen must not exceed the limits shown in Table per Section 8.9.

RSS-Gen Section 8.9		
Frequency [MHz]	Field Strength [uV/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

7.4.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.4.3.Test Setting

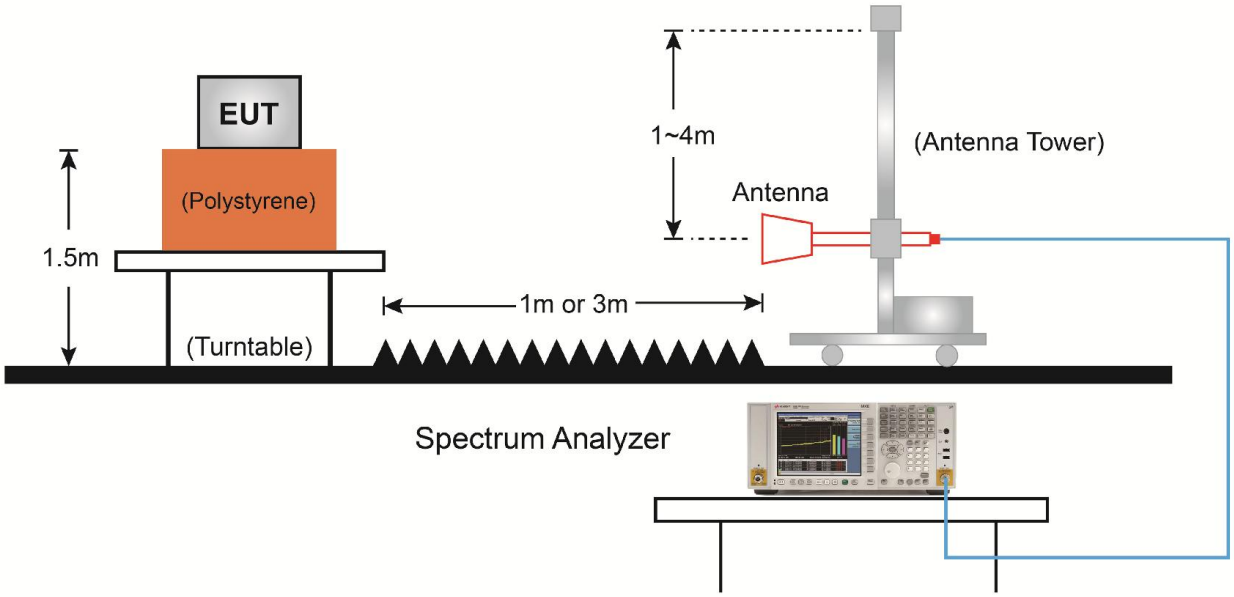
Peak Measurements above 1GHz

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

Average Measurements above 1GHz (Method AD)

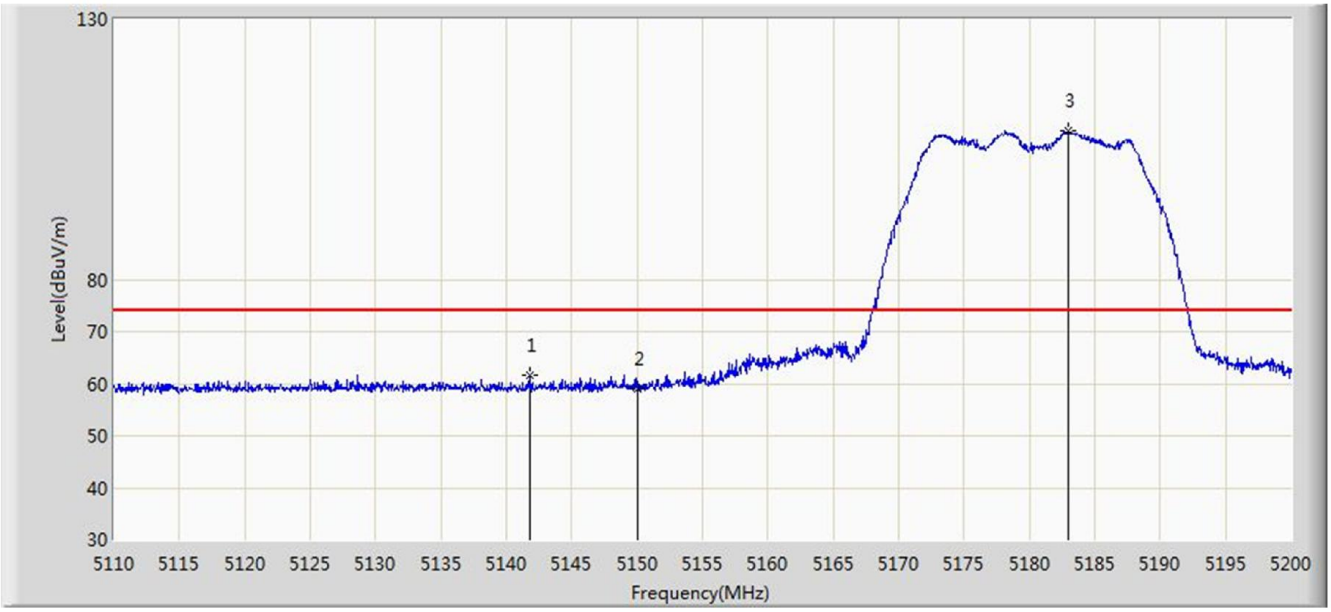
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. If duty cycle ≥ 98%, VBW ≤ RBW/100 but not less than 10Hz; If duty cycle < 98%, set VBW≥1/T.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

7.4.4.Test Setup



7.4.5.Test Result

Site: AC1	Time: 2019/08/02 - 19:23
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz	

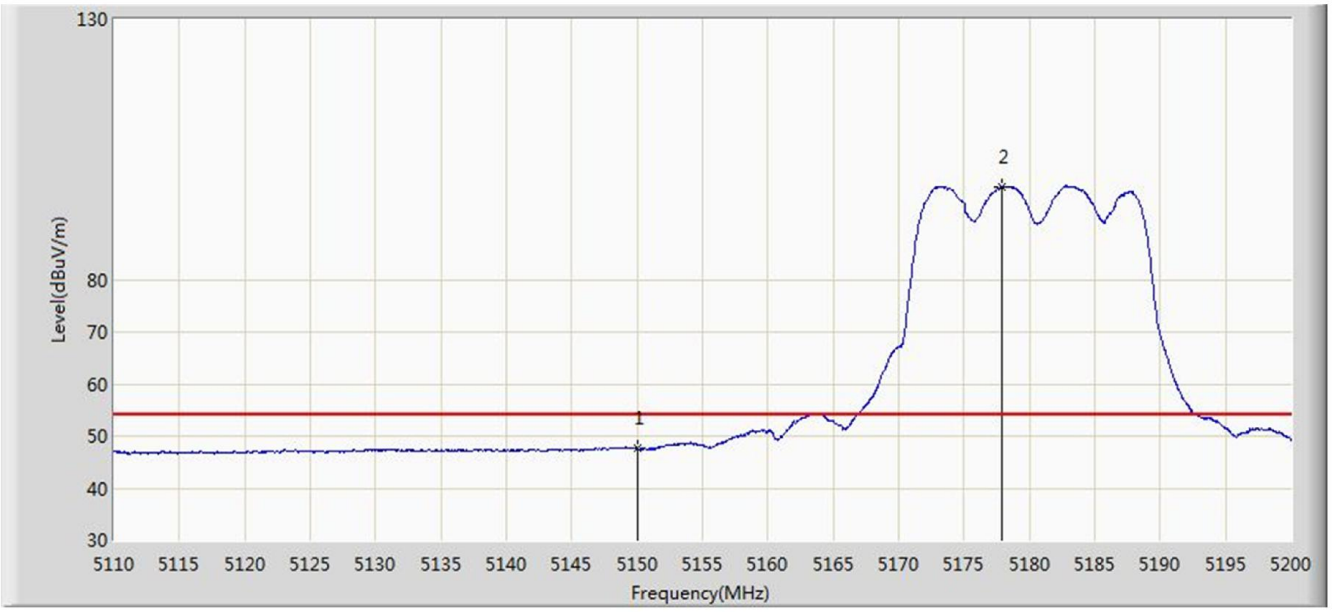


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5141.860	61.464	54.981	-12.536	74.000	6.482	PK
2			5150.000	59.082	52.685	-14.918	74.000	6.398	PK
3		*	5182.945	108.656	102.076	N/A	N/A	6.580	PK

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

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

Site: AC1	Time: 2019/08/02 - 19:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz	

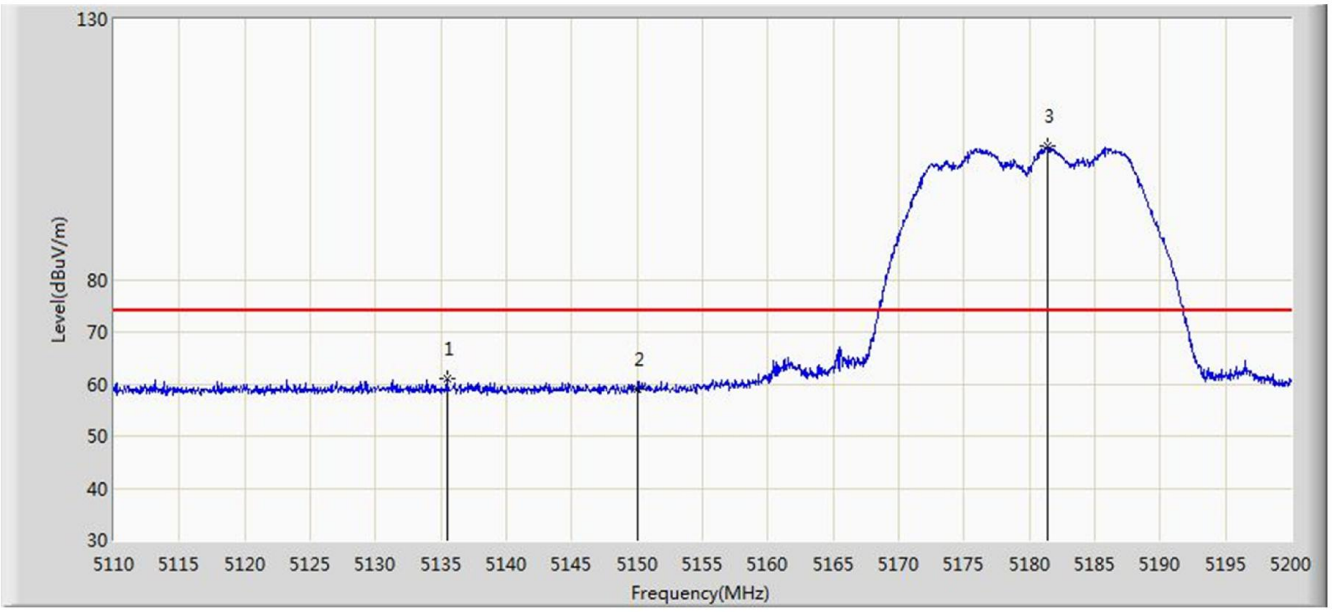


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.640	41.243	-6.360	54.000	6.398	AV
2		*	5177.950	97.876	91.326	N/A	N/A	6.550	AV

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

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

Site: AC1	Time: 2019/08/02 - 19:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz	

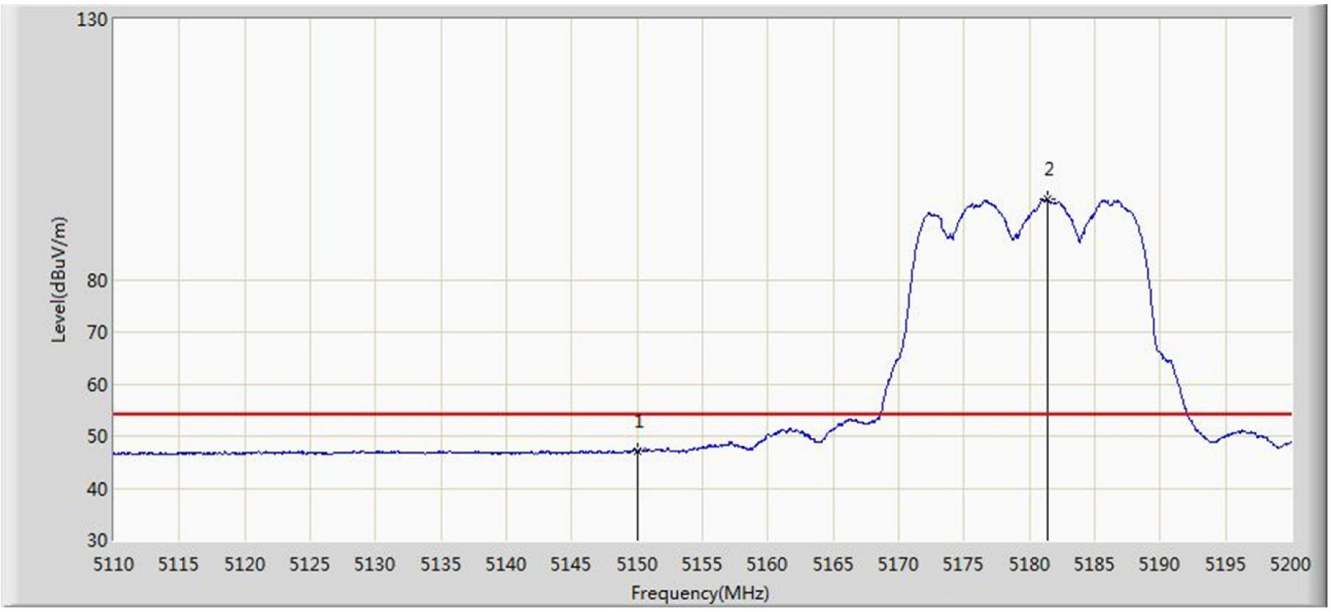


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5135.470	61.041	54.462	-12.959	74.000	6.579	PK
2			5150.000	59.130	52.733	-14.870	74.000	6.398	PK
3		*	5181.370	105.571	98.988	N/A	N/A	6.583	PK

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

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

Site: AC1	Time: 2019/08/02 - 19:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5180MHz	

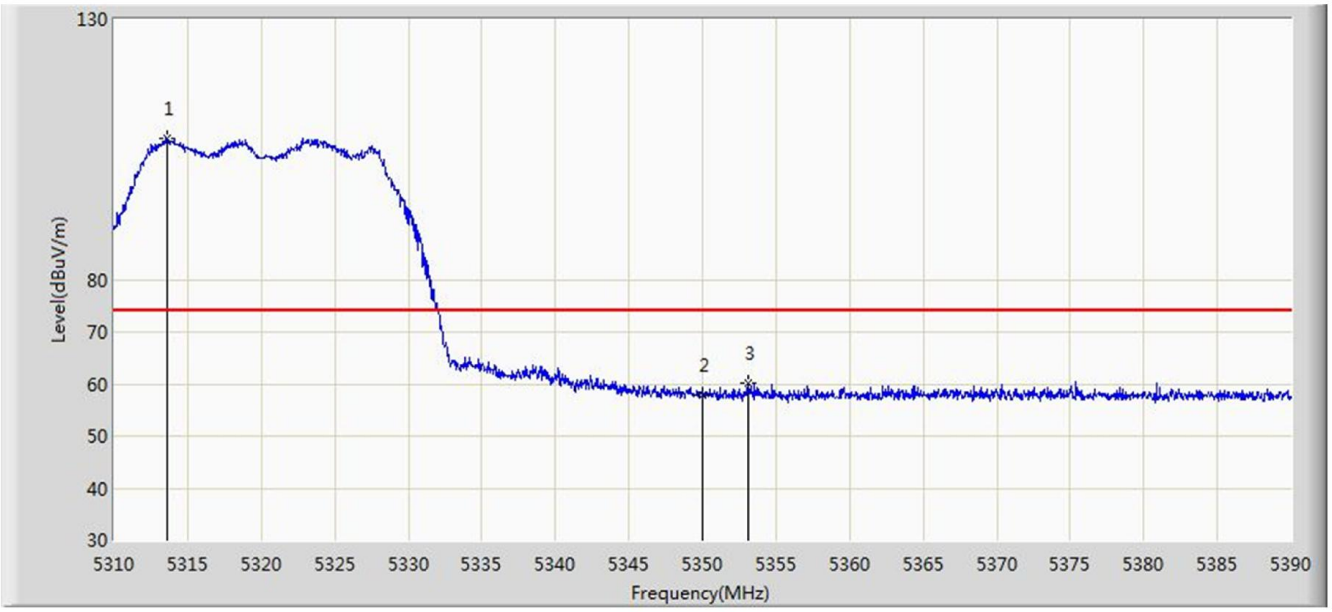


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5150.000	47.113	40.716	-6.887	54.000	6.398	AV
2		*	5181.415	95.624	89.040	N/A	N/A	6.583	AV

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

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

Site: AC1	Time: 2019/08/02 - 19:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	

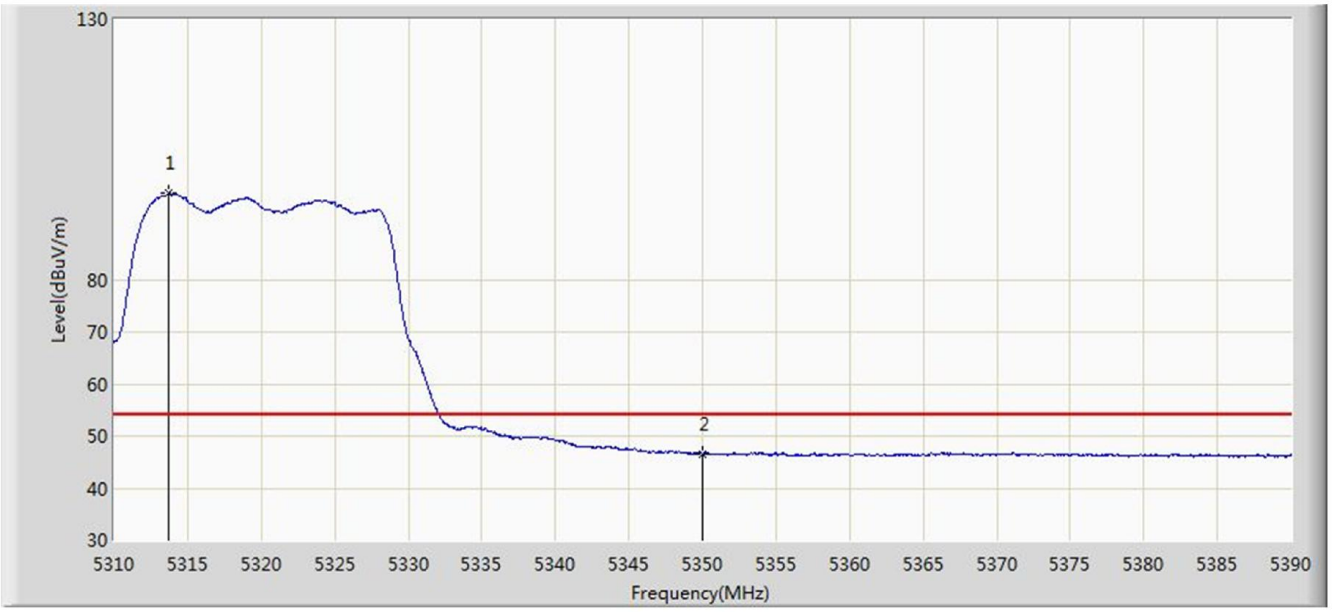


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5313.600	107.204	100.873	N/A	N/A	6.331	PK
2			5350.000	57.889	51.562	-16.111	74.000	6.327	PK
3			5353.120	60.265	53.930	-13.735	74.000	6.335	PK

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

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

Site: AC1	Time: 2019/08/02 - 19:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	

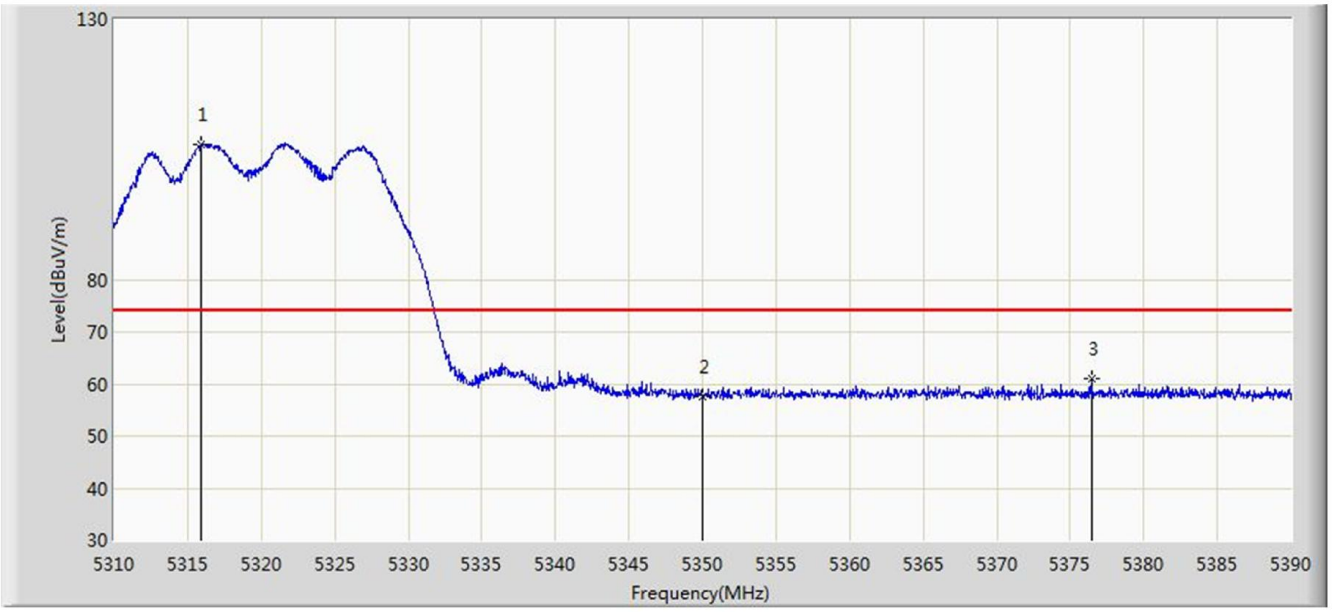


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5313.720	96.548	90.216	N/A	N/A	6.331	AV
2			5350.000	46.556	40.229	-7.444	54.000	6.327	AV

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

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

Site: AC1	Time: 2019/08/02 - 19:34
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	

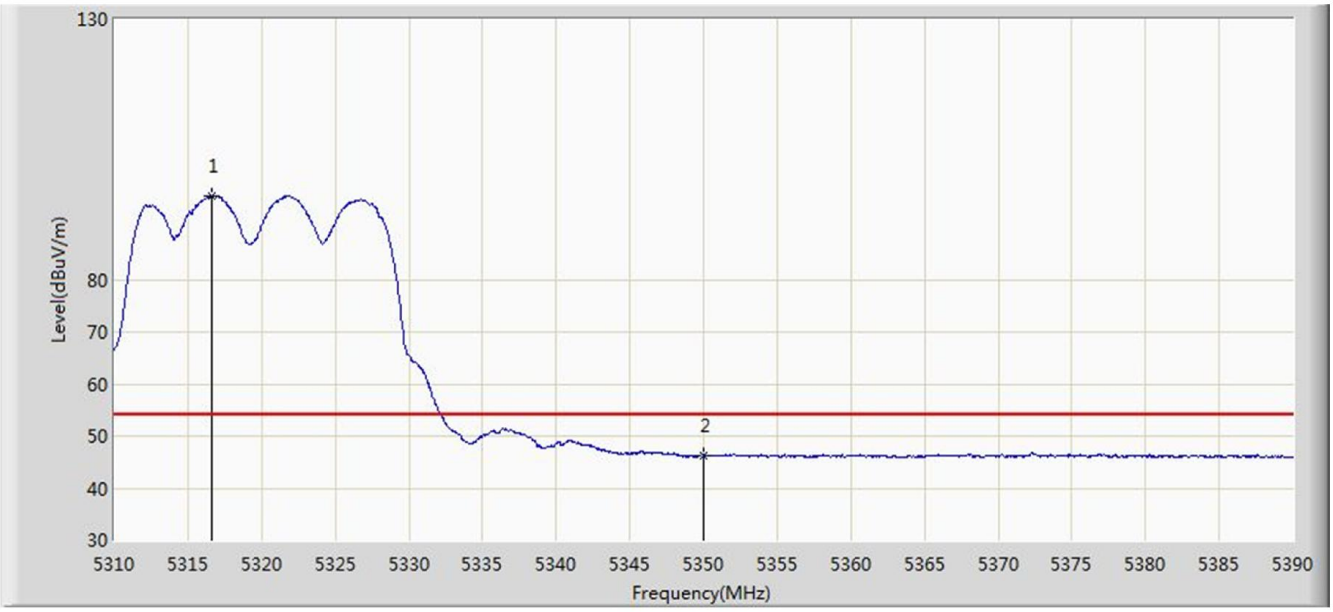


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5315.960	106.010	99.669	N/A	N/A	6.340	PK
2			5350.000	57.392	51.065	-16.608	74.000	6.327	PK
3			5376.440	60.887	54.418	-13.113	74.000	6.470	PK

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

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

Site: AC1	Time: 2019/08/02 - 19:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	

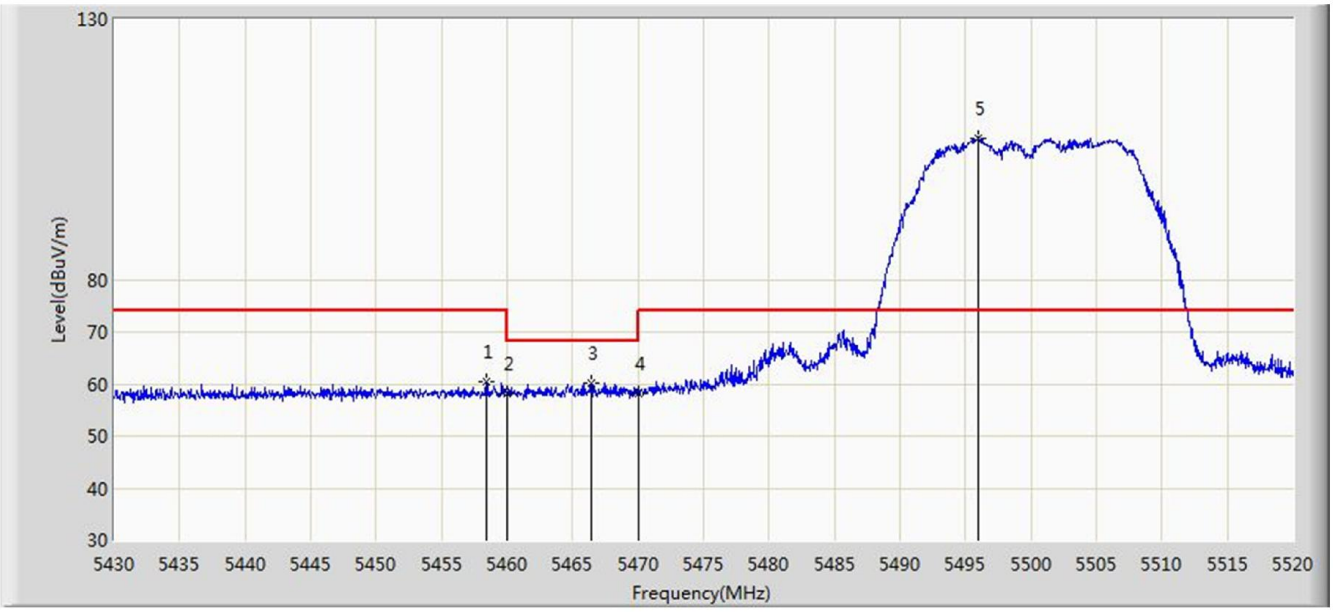


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	5316.640	96.134	89.790	N/A	N/A	6.344	AV
2			5350.000	46.249	39.922	-7.751	54.000	6.327	AV

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

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

Site: AC1	Time: 2019/08/02 - 19:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC120V/60Hz
Test Mode: Transmit by 802.11a at channel 5500MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			5458.440	60.344	53.724	-13.656	74.000	6.619	PK
2			5460.000	58.209	51.597	-15.791	74.000	6.612	PK
3			5466.450	60.279	53.696	-7.921	68.200	6.583	PK
4			5470.000	58.191	51.624	-10.009	68.200	6.567	PK
5		*	5495.925	107.138	100.460	N/A	N/A	6.679	PK

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

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