TEST Report (WIFI)

Applicant:	Dragino Technology Co., Limited.
Address of Applicant:	Room 202,BaoChengTai industrial park,No.8 CaiYun LongCheng Street,LongGang District, Shenzhen 518116, China
Manufacturer/Factory:	Dragino Technology Co., Limited.
Address of Manufacturer/Factory:	Room 202,BaoChengTai industrial park,No.8 CaiYun LongCheng Street,LongGang District, Shenzhen 518116, China

Equipment Under Test (EUT)

Product Name:	Wireless IoT Module
Model No.:	HE
Trade Mark:	Dragino
FCC ID:	ZHZHE
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.247
Date of sample receipt:	November 22, 2019
Date of Test:	November 22, 2019-December 05, 2019
Date of report issued:	December 06, 2019
Test Result :	PASS *

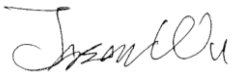
* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

2 Version

Report No.	Version No.	Date	Description
GTSE15010000701	*00*	*January 20, 2015*	*Original*
GTS201911000136F01	*01*	*December 06, 2019*	*Change antenna; Add trade mark*

Prepared By:  ***Date:*** *December 06, 2019*

Project Engineer

Check By:  ***Date:*** *December 06, 2019*

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Band Edge	15.247(d)	Pass
Spurious Emission	15.205/15.209	Pass

Remarks：

1. Test according to ANSI C63.10:2013.

2. Pass: The EUT complies with the essential requirements in the standard.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

Product Name:	Wireless IoT Module
Model No.:	HE
Test sample(s) ID:	GTS201911000136-1
Sample(s) Status:	Engineer sample
Serial No.:	YunG170003
Hardware version:	A2
Software version:	v1.3.4
Operation Frequency:	2412MHz~2462MHz(802.11b/802.11g/802.11n(HT20)) 2422MHz~2452MHz(802.11n(HT40))
Channel numbers:	802.11b/802.11g /802.11n(HT20):11 802.11n(HT40):7
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n(H20)/802.11n(HT40): Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	See Note 1
Antenna gain:	See Note 1
Power supply:	DC 3.3V

Note 1:
Integral antenna: (original antenna)
Model: ATW-102-0009-010
Manufacturer: Ante intelligent Communications(shenzhen)CO.,Ltd
Antenna gain: 1.5dBi

External antenna with reversed polarity non standard antenna port: (add new additional antenna)
Model: AN2400-5701SM
Manufacturer: Dongguan meimei electronics factory
Antenna gain: 2dBi
Integral antenna: (add new additional antenna)
Model: NB004-113B-125IX
Manufacturer: Dongguan honuo electronics co. LTD
Antenna gain: 2dBi

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)	
	802.11b/802.11g/802.11n(HT20)	802.11n(HT40)
Lowest channel	2412MHz	2422MHz
Middle channel	2437MHz	2437MHz
Highest channel	2462MHz	2452MHz

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode

Remark: During the test, the dutycycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)
Data rate	1Mbps	6Mbps	6.5Mbps	13Mbps

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
APPLE	USB Charger	A1399	N/A

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383.

● **IC —Registration No.: 9079A**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

5.7 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
Address: No. 123- 128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102
Tel: 0755-27798480
Fax: 0755-27798960

6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 26 2019	June. 25 2020
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 26 2019	June. 25 2020
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 26 2019	June. 25 2020
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 26 2019	June. 25 2020
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 26 2019	June. 25 2020
9	Coaxial Cable	GTS	N/A	GTS211	June. 26 2019	June. 25 2020
10	Coaxial cable	GTS	N/A	GTS210	June. 26 2019	June. 25 2020
11	Coaxial Cable	GTS	N/A	GTS212	June. 26 2019	June. 25 2020
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 26 2019	June. 25 2020
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 26 2019	June. 25 2020
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 26 2019	June. 25 2020
15	Band filter	Amindeon	82346	GTS219	June. 26 2019	June. 25 2020
16	Power Meter	Anritsu	ML2495A	GTS540	June. 26 2019	June. 25 2020
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 26 2019	June. 25 2020
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 26 2019	June. 25 2020
19	Splitter	Agilent	11636B	GTS237	June. 26 2019	June. 25 2020
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 26 2019	June. 25 2020
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 19 2019	Oct. 18 2020
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 19 2019	Oct. 18 2020
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 19 2019	Oct. 18 2020
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 26 2019	June. 25 2020

Conducted Emission						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2019	May.14 2022
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 26 2019	June. 25 2020
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 26 2019	June. 25 2020
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 26 2019	June. 25 2020
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	June. 26 2019	June. 25 2020
9	ISN	SCHWARZBECK	NTFM 8158	GTD565	June. 26 2019	June. 25 2020

RF Conducted Test:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 26 2019	June. 25 2020
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 26 2019	June. 25 2020
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 26 2019	June. 25 2020
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 26 2019	June. 25 2020
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 26 2019	June. 25 2020
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 26 2019	June. 25 2020
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 26 2019	June. 25 2020

General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 26 2019	June. 25 2020
2	Barometer	ChangChun	DYM3	GTS255	June. 26 2019	June. 25 2020

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

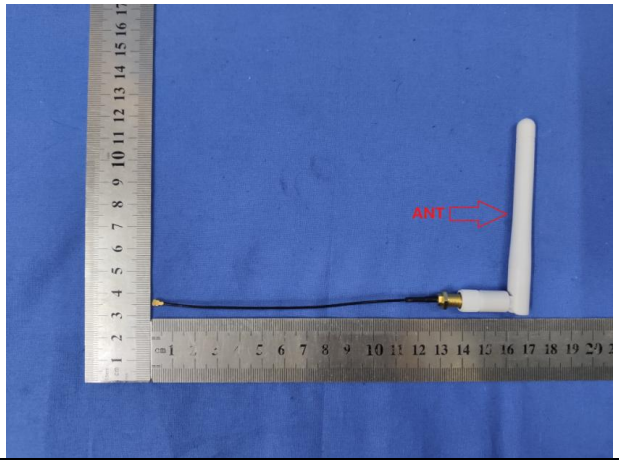
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

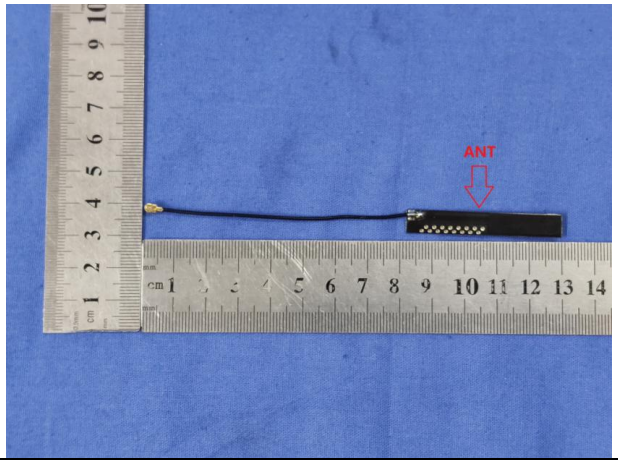
15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

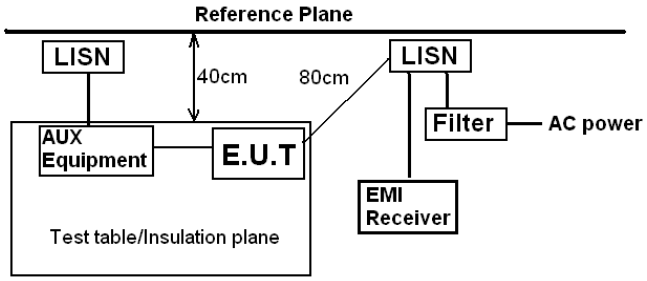
EUT Antenna:

The antennas are ANT 1 external antenna, ANT 2 PCB antenna, the best case gain of the antennas are 2dBi

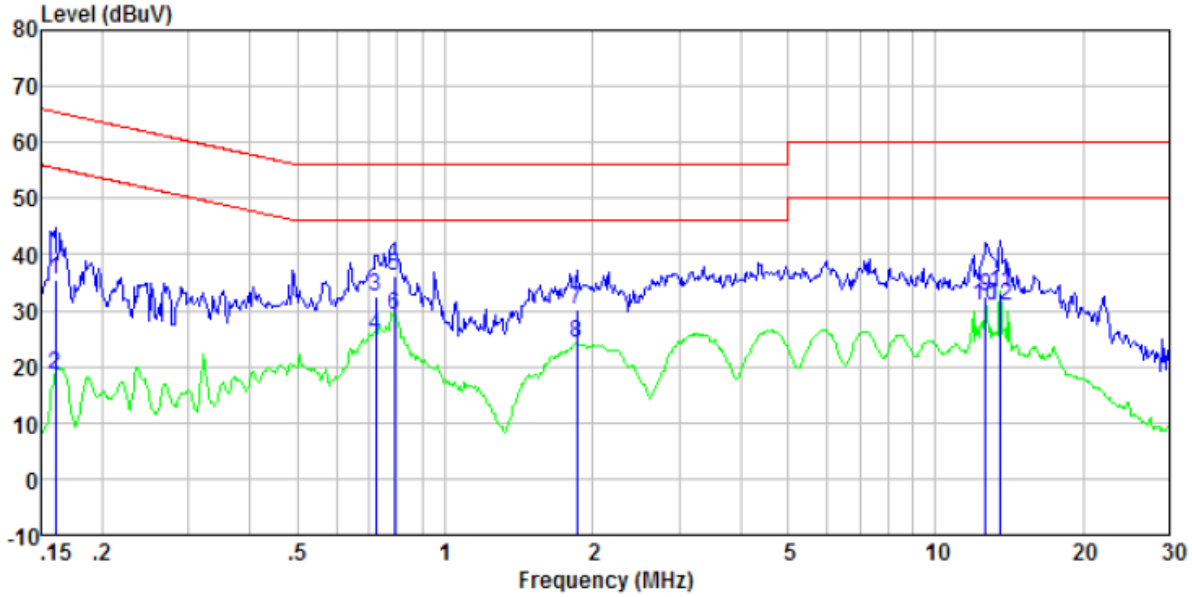




7.2 Conducted Emissions

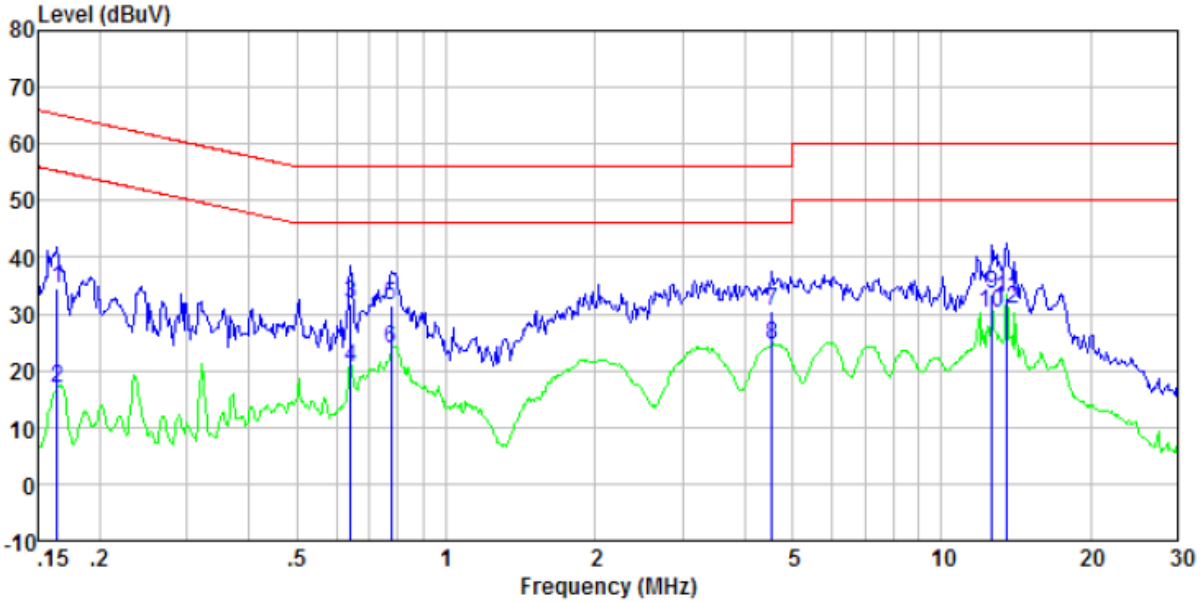
Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test setup:	 *Remark:* *E.U.T: Equipment Under Test* *LISN: Line Impedence Stabilization Network* *Test table height=0.8m*
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test environment:	Temp.: 25 °C / Humid.: 52% / Press.: 1012mbar
Test voltage:	AC 120V, 60Hz
Test results:	Pass

Measurement data
ANT 1:
Line



Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.16	34.91	0.40	0.08	35.39	65.43	-30.04	QP
0.16	18.15	0.40	0.08	18.63	55.43	-36.80	Average
0.72	31.98	0.25	0.13	32.36	56.00	-23.64	QP
0.72	25.06	0.25	0.13	25.44	46.00	-20.56	Average
0.79	35.89	0.24	0.14	36.27	56.00	-19.73	QP
0.79	28.78	0.24	0.14	29.16	46.00	-16.84	Average
1.86	29.72	0.20	0.17	30.09	56.00	-25.91	QP
1.86	23.97	0.20	0.17	24.34	46.00	-21.66	Average
12.65	32.24	0.20	0.21	32.65	60.00	-27.35	QP
12.65	30.53	0.20	0.21	30.94	50.00	-19.06	Average
13.55	32.74	0.20	0.21	33.15	60.00	-26.85	QP
13.55	30.51	0.20	0.21	30.92	50.00	-19.08	Average

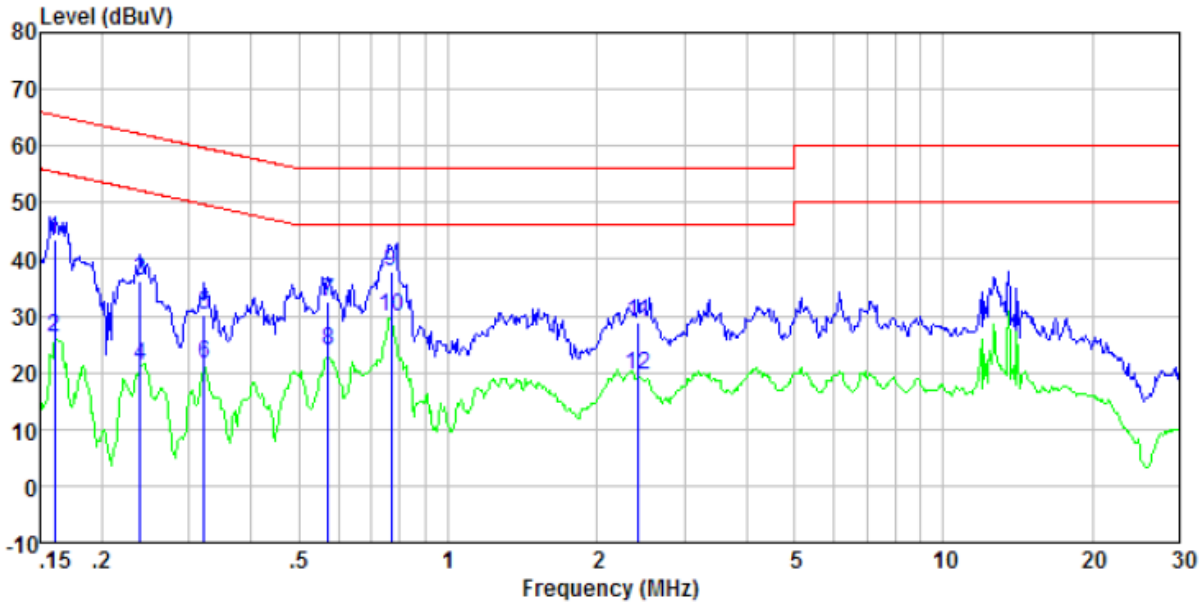
Neutral



Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.16	33.89	0.40	0.08	34.37	65.25	-30.88	QP
0.16	16.44	0.40	0.08	16.92	55.25	-38.33	Average
0.64	31.41	0.27	0.12	31.80	56.00	-24.20	QP
0.64	20.02	0.27	0.12	20.41	46.00	-25.59	Average
0.78	31.15	0.24	0.14	31.53	56.00	-24.47	QP
0.78	23.49	0.24	0.14	23.87	46.00	-22.13	Average
4.55	30.10	0.20	0.17	30.47	56.00	-25.53	QP
4.55	24.18	0.20	0.17	24.55	46.00	-21.45	Average
12.65	32.94	0.20	0.21	33.35	60.00	-26.65	QP
12.65	29.90	0.20	0.21	30.31	50.00	-19.69	Average
13.55	32.32	0.20	0.21	32.73	60.00	-27.27	QP
13.55	30.47	0.20	0.21	30.88	50.00	-19.12	Average

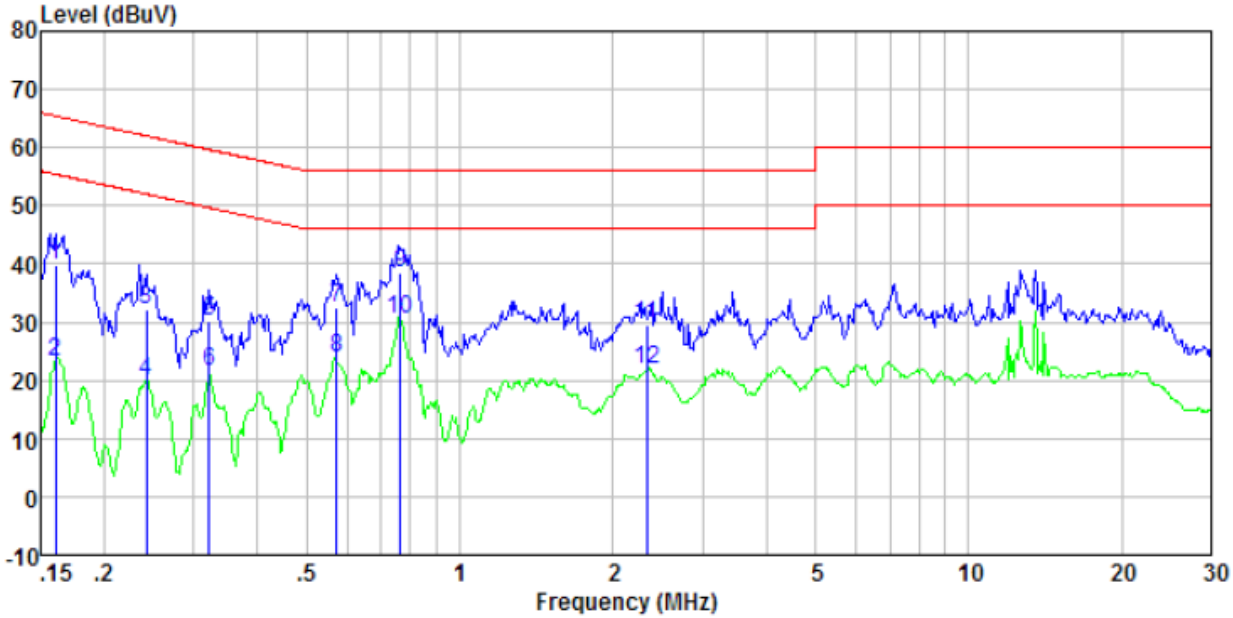
ANT 2:

Line



Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.16	43.08	0.40	0.08	43.56	65.43	-21.87	QP
0.16	25.69	0.40	0.08	26.17	55.43	-29.26	Average
0.24	35.67	0.40	0.11	36.18	62.13	-25.95	QP
0.24	20.87	0.40	0.11	21.38	52.13	-30.75	Average
0.32	29.72	0.39	0.10	30.21	59.66	-29.45	QP
0.32	20.92	0.39	0.10	21.41	49.66	-28.25	Average
0.57	31.97	0.29	0.12	32.38	56.00	-23.62	QP
0.57	23.54	0.29	0.12	23.95	46.00	-22.05	Average
0.77	37.30	0.24	0.13	37.67	56.00	-18.33	QP
0.77	29.39	0.24	0.13	29.76	46.00	-16.24	Average
2.42	28.43	0.20	0.18	28.81	56.00	-27.19	QP
2.42	19.02	0.20	0.18	19.40	46.00	-26.60	Average

Neutral



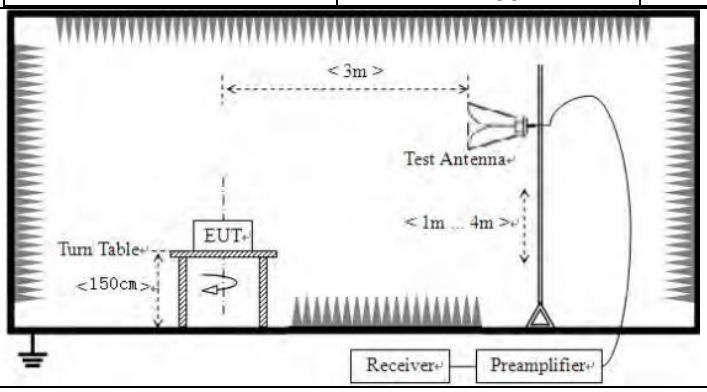
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.16	39.19	0.40	0.08	39.67	65.43	-25.76	QP
0.16	22.79	0.40	0.08	23.27	55.43	-32.16	Average
0.24	31.64	0.40	0.11	32.15	62.04	-29.89	QP
0.24	19.45	0.40	0.11	19.96	52.04	-32.08	Average
0.32	29.80	0.39	0.10	30.29	59.66	-29.37	QP
0.32	20.94	0.39	0.10	21.43	49.66	-28.23	Average
0.57	32.06	0.29	0.12	32.47	56.00	-23.53	QP
0.57	23.59	0.29	0.12	24.00	46.00	-22.00	Average
0.76	38.08	0.25	0.13	38.46	56.00	-17.54	QP
0.76	30.18	0.25	0.13	30.56	46.00	-15.44	Average
2.33	29.07	0.20	0.18	29.45	56.00	-26.55	QP
2.33	21.62	0.20	0.18	22.00	46.00	-24.00	Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss
4. *If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.*

7.3 Band edges

7.3.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10:2013
Test Frequency Range:	All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.
Test site:	Measurement Distance: 3m
Receiver setup:	Frequency / Detector / RBW / VBW / Value Above 1GHz / Peak / 1MHz / 3MHz / Peak Above 1GHz / RMS / 1MHz / 3MHz / Average
Limit:	Frequency / Limit (dBuV/m @3m) / Value Above 1GHz / 54.00 / Average Above 1GHz / 74.00 / Peak
Test setup:	
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 6.0 for details

Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

ANT 1:

Test mode:	802.11b	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	39.33	27.61	5.36	34.01	38.29	74.00	-35.71	Horizontal
2390.00	52.29	27.59	5.38	34.01	51.25	74.00	-22.75	Horizontal
2310.00	39.59	27.61	5.36	34.01	38.55	74.00	-35.45	Vertical
2390.00	54.47	27.59	5.38	34.01	53.43	74.00	-20.57	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	32.36	27.61	5.36	34.01	31.32	54.00	-22.68	Horizontal
2390.00	38.53	27.59	5.38	34.01	37.49	54.00	-16.51	Horizontal
2310.00	32.97	27.61	5.36	34.01	31.93	54.00	-22.07	Vertical
2390.00	40.32	27.59	5.38	34.01	39.28	54.00	-14.72	Vertical

Test mode:	802.11b	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	51.98	27.53	5.47	33.92	51.06	74.00	-22.94	Horizontal
2500.00	47.88	27.55	5.49	29.93	50.99	74.00	-23.01	Horizontal
2483.50	54.20	27.53	5.47	33.92	53.28	74.00	-20.72	Vertical
2500.00	50.35	27.55	5.49	29.93	53.46	74.00	-20.54	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	38.58	27.53	5.47	33.92	37.66	54.00	-16.34	Horizontal
2500.00	34.73	27.55	5.49	29.93	37.84	54.00	-16.16	Horizontal
2483.50	40.51	27.53	5.47	33.92	39.59	54.00	-14.41	Vertical
2500.00	36.60	27.55	5.49	29.93	39.71	54.00	-14.29	Vertical

Test mode:	802.11g	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	38.59	27.61	5.36	34.01	37.55	74.00	-36.45	Horizontal
2390.00	51.30	27.59	5.38	34.01	50.26	74.00	-23.74	Horizontal
2310.00	38.80	27.61	5.36	34.01	37.76	74.00	-36.24	Vertical
2390.00	53.29	27.59	5.38	34.01	52.25	74.00	-21.75	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	31.83	27.61	5.36	34.01	30.79	54.00	-23.21	Horizontal
2390.00	37.92	27.59	5.38	34.01	36.88	54.00	-17.12	Horizontal
2310.00	32.38	27.61	5.36	34.01	31.34	54.00	-22.66	Vertical
2390.00	39.66	27.59	5.38	34.01	38.62	54.00	-15.38	Vertical

Test mode:	802.11g	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	50.93	27.53	5.47	33.92	50.01	74.00	-23.99	Horizontal
2500.00	47.06	27.55	5.49	29.93	50.17	74.00	-23.83	Horizontal
2483.50	52.99	27.53	5.47	33.92	52.07	74.00	-21.93	Vertical
2500.00	49.39	27.55	5.49	29.93	52.50	74.00	-21.50	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.94	27.53	5.47	33.92	37.02	54.00	-16.98	Horizontal
2500.00	34.23	27.55	5.49	29.93	37.34	54.00	-16.66	Horizontal
2483.50	39.80	27.53	5.47	33.92	38.88	54.00	-15.12	Vertical
2500.00	36.07	27.55	5.49	29.93	39.18	54.00	-14.82	Vertical

Test mode:	802.11n(HT20)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	38.58	27.61	5.36	34.01	37.54	74.00	-36.46	Horizontal
2390.00	51.29	27.59	5.38	34.01	50.25	74.00	-23.75	Horizontal
2310.00	38.79	27.61	5.36	34.01	37.75	74.00	-36.25	Vertical
2390.00	53.27	27.59	5.38	34.01	52.23	74.00	-21.77	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	31.82	27.61	5.36	34.01	30.78	54.00	-23.22	Horizontal
2400.00	37.91	27.58	5.39	34.01	36.87	54.00	-17.13	Horizontal
2310.00	32.37	27.61	5.36	34.01	31.33	54.00	-22.67	Vertical
2400.00	39.65	27.58	5.39	34.01	38.61	54.00	-15.39	Vertical

Test mode:	802.11n(HT20)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	50.91	27.53	5.47	33.92	49.99	74.00	-24.01	Horizontal
2500.00	47.05	27.55	5.49	29.93	50.16	74.00	-23.84	Horizontal
2483.50	52.97	27.53	5.47	33.92	52.05	74.00	-21.95	Vertical
2500.00	49.38	27.55	5.49	29.93	52.49	74.00	-21.51	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.93	27.53	5.47	33.92	37.01	54.00	-16.99	Horizontal
2500.00	34.22	27.55	5.49	29.93	37.33	54.00	-16.67	Horizontal
2483.50	39.79	27.53	5.47	33.92	38.87	54.00	-15.13	Vertical
2500.00	36.06	27.55	5.49	29.93	39.17	54.00	-14.83	Vertical

Test mode:	802.11n(HT40)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	37.86	27.61	5.36	34.01	36.82	74.00	-37.18	Horizontal
2390.00	50.32	27.59	5.38	34.01	49.28	74.00	-24.72	Horizontal
2310.00	38.02	27.61	5.36	34.01	36.98	74.00	-37.02	Vertical
2390.00	52.11	27.59	5.38	34.01	51.07	74.00	-22.93	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	31.31	27.61	5.36	34.01	30.27	54.00	-23.73	Horizontal
2390.00	37.32	27.59	5.38	34.01	36.28	54.00	-17.72	Horizontal
2310.00	31.80	27.61	5.36	34.01	30.76	54.00	-23.24	Vertical
2390.00	39.00	27.59	5.38	34.01	37.96	54.00	-16.04	Vertical

Test mode:	802.11n(HT40)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	49.88	27.53	5.47	33.92	48.96	74.00	-25.04	Horizontal
2500.00	46.25	27.55	5.49	29.93	49.36	74.00	-24.64	Horizontal
2483.50	51.79	27.53	5.47	33.92	50.87	74.00	-23.13	Vertical
2500.00	48.44	27.55	5.49	29.93	51.55	74.00	-22.45	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.31	27.53	5.47	33.92	36.39	54.00	-17.61	Horizontal
2500.00	33.73	27.55	5.49	29.93	36.84	54.00	-17.16	Horizontal
2483.50	39.10	27.53	5.47	33.92	38.18	54.00	-15.82	Vertical
2500.00	35.55	27.55	5.49	29.93	38.66	54.00	-15.34	Vertical

ANT 2:

Test mode:	802.11b	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	39.22	27.61	5.36	34.01	38.18	74.00	-35.82	Horizontal
2390.00	52.13	27.59	5.38	34.01	51.09	74.00	-22.91	Horizontal
2310.00	39.47	27.61	5.36	34.01	38.43	74.00	-35.57	Vertical
2390.00	54.28	27.59	5.38	34.01	53.24	74.00	-20.76	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	32.28	27.61	5.36	34.01	31.24	54.00	-22.76	Horizontal
2390.00	38.43	27.59	5.38	34.01	37.39	54.00	-16.61	Horizontal
2310.00	32.87	27.61	5.36	34.01	31.83	54.00	-22.17	Vertical
2390.00	40.22	27.59	5.38	34.01	39.18	54.00	-14.82	Vertical

Test mode:	802.11b	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	51.82	27.53	5.47	33.92	50.90	74.00	-23.10	Horizontal
2500.00	47.75	27.55	5.49	29.93	50.86	74.00	-23.14	Horizontal
2483.50	54.01	27.53	5.47	33.92	53.09	74.00	-20.91	Vertical
2500.00	50.20	27.55	5.49	29.93	53.31	74.00	-20.69	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	38.48	27.53	5.47	33.92	37.56	54.00	-16.44	Horizontal
2500.00	34.65	27.55	5.49	29.93	37.76	54.00	-16.24	Horizontal
2483.50	40.40	27.53	5.47	33.92	39.48	54.00	-14.52	Vertical
2500.00	36.51	27.55	5.49	29.93	39.62	54.00	-14.38	Vertical

Test mode:	802.11g	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	38.51	27.61	5.36	34.01	37.47	74.00	-36.53	Horizontal
2390.00	51.20	27.59	5.38	34.01	50.16	74.00	-23.84	Horizontal
2310.00	38.72	27.61	5.36	34.01	37.68	74.00	-36.32	Vertical
2390.00	53.16	27.59	5.38	34.01	52.12	74.00	-21.88	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	31.78	27.61	5.36	34.01	30.74	54.00	-23.26	Horizontal
2390.00	37.86	27.59	5.38	34.01	36.82	54.00	-17.18	Horizontal
2310.00	32.32	27.61	5.36	34.01	31.28	54.00	-22.72	Vertical
2390.00	39.59	27.59	5.38	34.01	38.55	54.00	-15.45	Vertical

Test mode:	802.11g	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	50.81	27.53	5.47	33.92	49.89	74.00	-24.11	Horizontal
2500.00	46.97	27.55	5.49	29.93	50.08	74.00	-23.92	Horizontal
2483.50	52.86	27.53	5.47	33.92	51.94	74.00	-22.06	Vertical
2500.00	49.29	27.55	5.49	29.93	52.40	74.00	-21.60	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.87	27.53	5.47	33.92	36.95	54.00	-17.05	Horizontal
2500.00	34.17	27.55	5.49	29.93	37.28	54.00	-16.72	Horizontal
2483.50	39.73	27.53	5.47	33.92	38.81	54.00	-15.19	Vertical
2500.00	36.01	27.55	5.49	29.93	39.12	54.00	-14.88	Vertical

Test mode:	802.11n(HT20)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	38.47	27.61	5.36	34.01	37.43	74.00	-36.57	Horizontal
2390.00	51.13	27.59	5.38	34.01	50.09	74.00	-23.91	Horizontal
2310.00	38.67	27.61	5.36	34.01	37.63	74.00	-36.37	Vertical
2390.00	53.08	27.59	5.38	34.01	52.04	74.00	-21.96	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	31.74	27.61	5.36	34.01	30.70	54.00	-23.30	Horizontal
2400.00	37.82	27.58	5.39	34.01	36.78	54.00	-17.22	Horizontal
2310.00	32.28	27.61	5.36	34.01	31.24	54.00	-22.76	Vertical
2400.00	39.54	27.58	5.39	34.01	38.50	54.00	-15.50	Vertical

Test mode:	802.11n(HT20)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	50.74	27.53	5.47	33.92	49.82	74.00	-24.18	Horizontal
2500.00	46.92	27.55	5.49	29.93	50.03	74.00	-23.97	Horizontal
2483.50	52.78	27.53	5.47	33.92	51.86	74.00	-22.14	Vertical
2500.00	49.23	27.55	5.49	29.93	52.34	74.00	-21.66	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.83	27.53	5.47	33.92	36.91	54.00	-17.09	Horizontal
2500.00	34.14	27.55	5.49	29.93	37.25	54.00	-16.75	Horizontal
2483.50	39.68	27.53	5.47	33.92	38.76	54.00	-15.24	Vertical
2500.00	35.98	27.55	5.49	29.93	39.09	54.00	-14.91	Vertical

Test mode:	802.11n(HT40)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	37.80	27.61	5.36	34.01	36.76	74.00	-37.24	Horizontal
2390.00	50.25	27.59	5.38	34.01	49.21	74.00	-24.79	Horizontal
2310.00	37.96	27.61	5.36	34.01	36.92	74.00	-37.08	Vertical
2390.00	52.02	27.59	5.38	34.01	50.98	74.00	-23.02	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	31.27	27.61	5.36	34.01	30.23	54.00	-23.77	Horizontal
2390.00	37.28	27.59	5.38	34.01	36.24	54.00	-17.76	Horizontal
2310.00	31.75	27.61	5.36	34.01	30.71	54.00	-23.29	Vertical
2390.00	38.95	27.59	5.38	34.01	37.91	54.00	-16.09	Vertical

Test mode:	802.11n(HT40)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	49.80	27.53	5.47	33.92	48.88	74.00	-25.12	Horizontal
2500.00	46.19	27.55	5.49	29.93	49.30	74.00	-24.70	Horizontal
2483.50	51.70	27.53	5.47	33.92	50.78	74.00	-23.22	Vertical
2500.00	48.37	27.55	5.49	29.93	51.48	74.00	-22.52	Vertical

Average value:

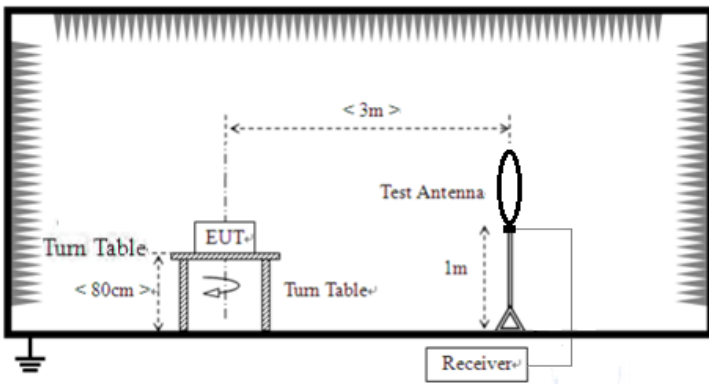
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	37.26	27.53	5.47	33.92	36.34	54.00	-17.66	Horizontal
2500.00	33.70	27.55	5.49	29.93	36.81	54.00	-17.19	Horizontal
2483.50	39.05	27.53	5.47	33.92	38.13	54.00	-15.87	Vertical
2500.00	35.51	27.55	5.49	29.93	38.62	54.00	-15.38	Vertical

Remarks:

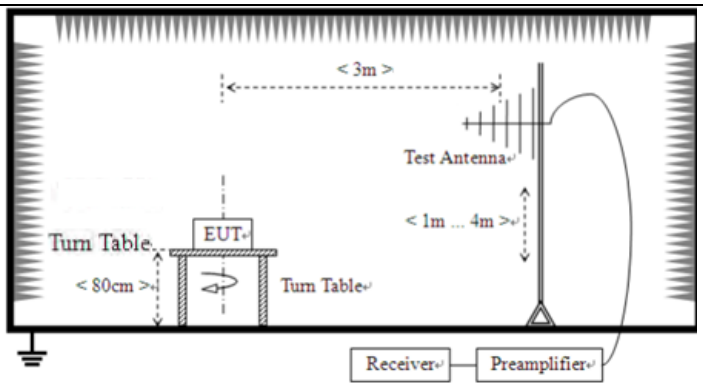
1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*

7.4 Spurious Emission

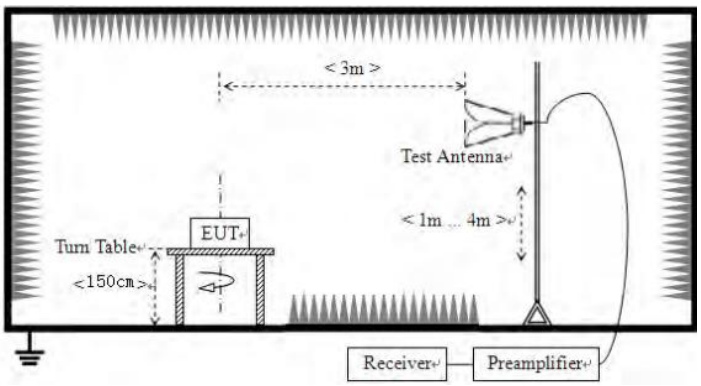
7.4.1 Radiated Emission Method

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>9kHz to 25GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Value</th></tr>
<tr><td>9KHz-150KHz</td><td>Quasi-peak</td><td>200Hz</td><td>600Hz</td><td>Quasi-peak</td></tr>
<tr><td>150KHz-30MHz</td><td>Quasi-peak</td><td>9KHz</td><td>30KHz</td><td>Quasi-peak</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</td><td>300KHz</td><td>Quasi-peak</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th>Frequency</th><th>Limit (uV/m)</th><th>Value</th><th>Measurement Distance</th></tr>
<tr><td>0.009MHz-0.490MHz</td><td>2400/F(KHz)</td><td>QP</td><td>300m</td></tr>
<tr><td>0.490MHz-1.705MHz</td><td>24000/F(KHz)</td><td>QP</td><td>30m</td></tr>
<tr><td>1.705MHz-30MHz</td><td>30</td><td>QP</td><td>30m</td></tr>
<tr><td>30MHz-88MHz</td><td>100</td><td>QP</td><td rowspan="6">3m</td></tr>
<tr><td>88MHz-216MHz</td><td>150</td><td>QP</td></tr>
<tr><td>216MHz-960MHz</td><td>200</td><td>QP</td></tr>
<tr><td>960MHz-1GHz</td><td>500</td><td>QP</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>500</td><td>Average</td></tr>
<tr><td>5000</td><td>Peak</td></tr>
</table>
</td></tr>
<tr><td>Test setup:</td><td>For radiated emissions from 9kHz to 30MHz
 

For radiated emissions from 30MHz to1GHz</td></tr>
</table>



For radiated emissions above 1GHz



Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 6.0 for details

Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement data:

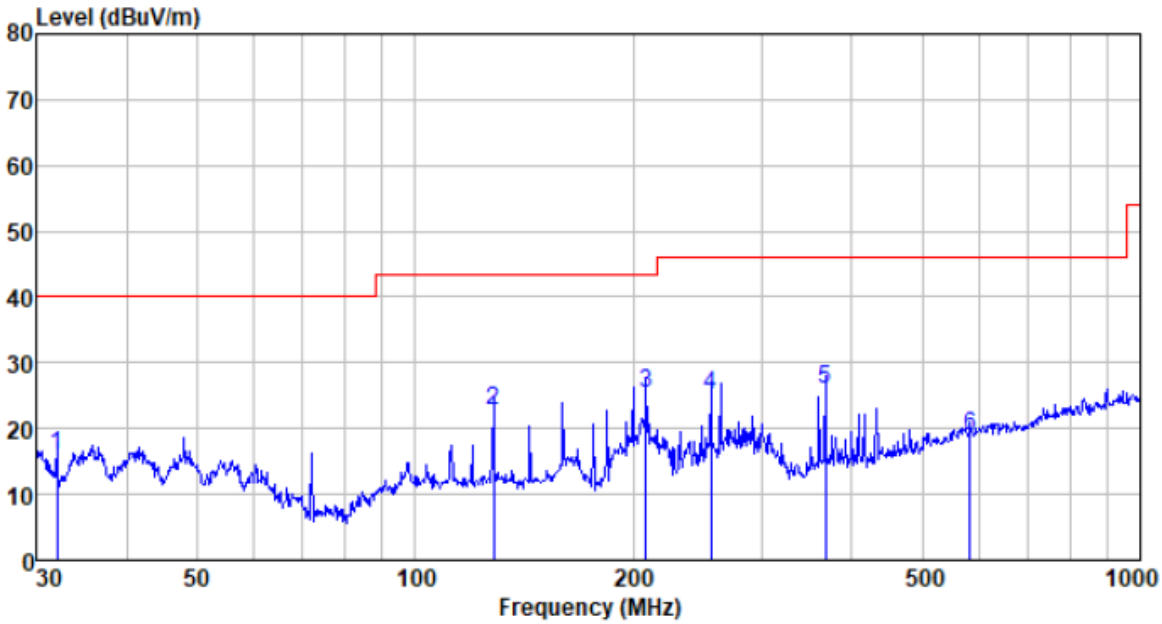
■ **9kHz~30MHz**

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

■ **Below 1GHz**

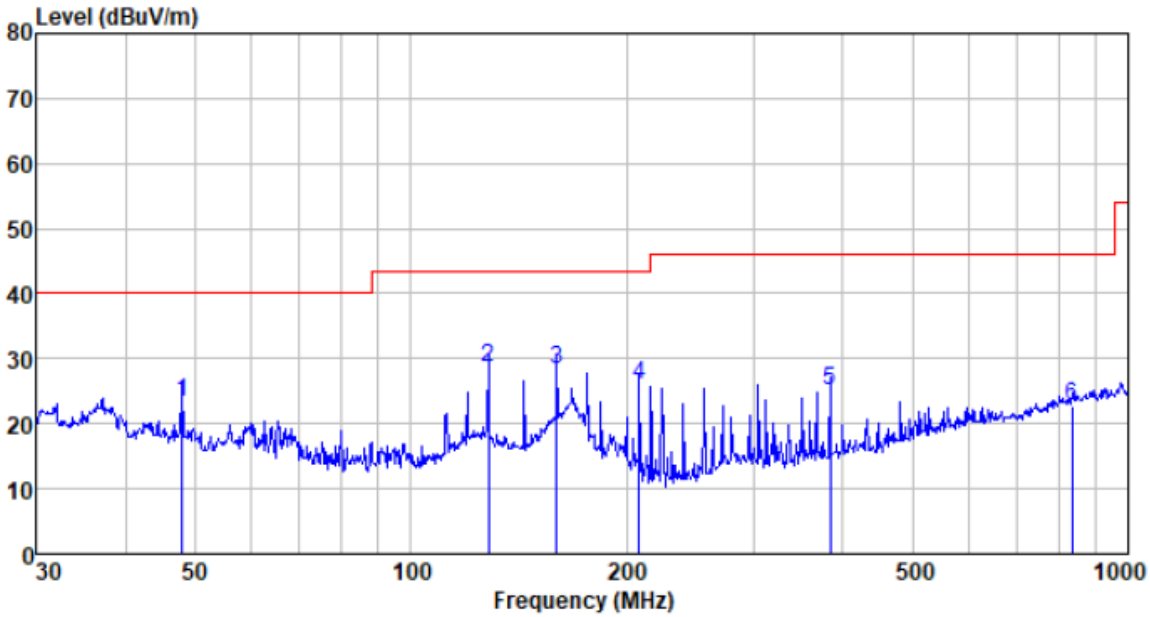
Pre-scan all test modes, found worst case at 802.11b 2462MHz, and so only show the test result of 802.11b 2462MHz

ANT 1:
Horizontal



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
32.067	39.23	11.24	0.57	35.15	15.89	40.00	-24.11	QP
128.113	49.85	8.43	1.42	36.94	22.76	43.50	-20.74	QP
207.850	50.11	10.69	1.89	37.34	25.35	43.50	-18.15	QP
255.623	47.93	12.33	2.15	37.38	25.03	46.00	-20.97	QP
368.112	45.92	14.81	2.71	37.49	25.95	46.00	-20.05	QP
582.743	33.61	19.11	3.66	37.54	18.84	46.00	-27.16	QP

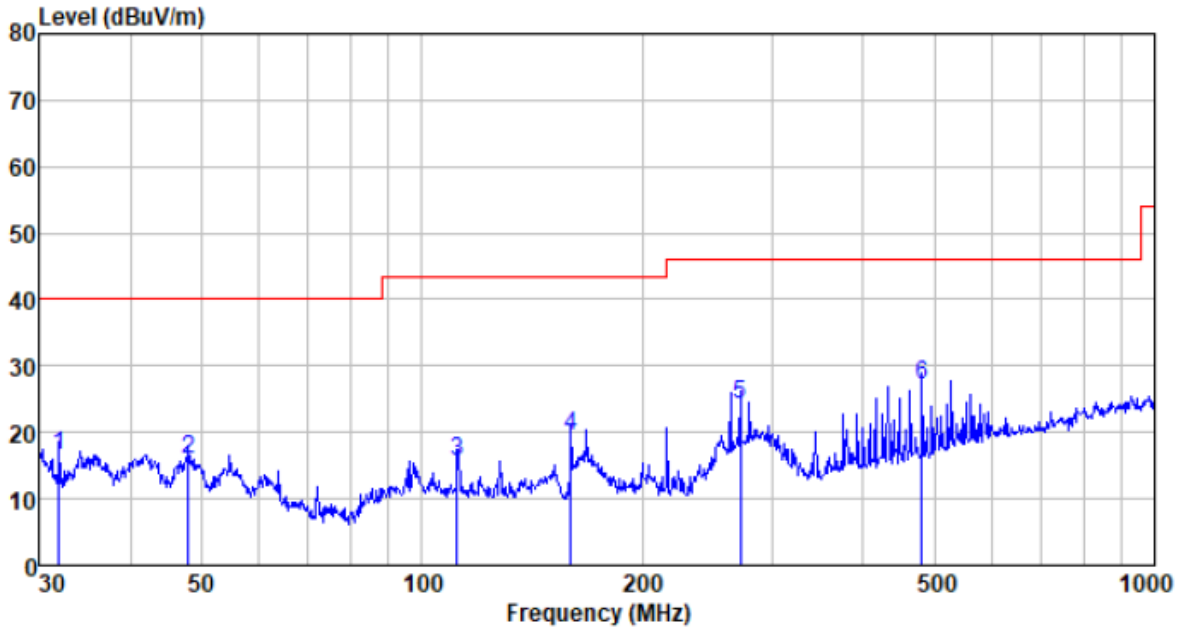
Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV	dBuV/m	dB	
47.994	46.43	12.28	0.75	36.09	23.37	40.00	-16.63	QP
128.113	55.72	8.43	1.42	36.94	28.63	43.50	-14.87	QP
159.784	55.57	8.30	1.63	37.13	28.37	43.50	-15.13	QP
207.850	50.62	10.69	1.89	37.34	25.86	43.50	-17.64	QP
383.932	44.76	15.08	2.78	37.51	25.11	46.00	-20.89	QP
836.244	34.07	21.75	4.60	37.61	22.81	46.00	-23.19	QP

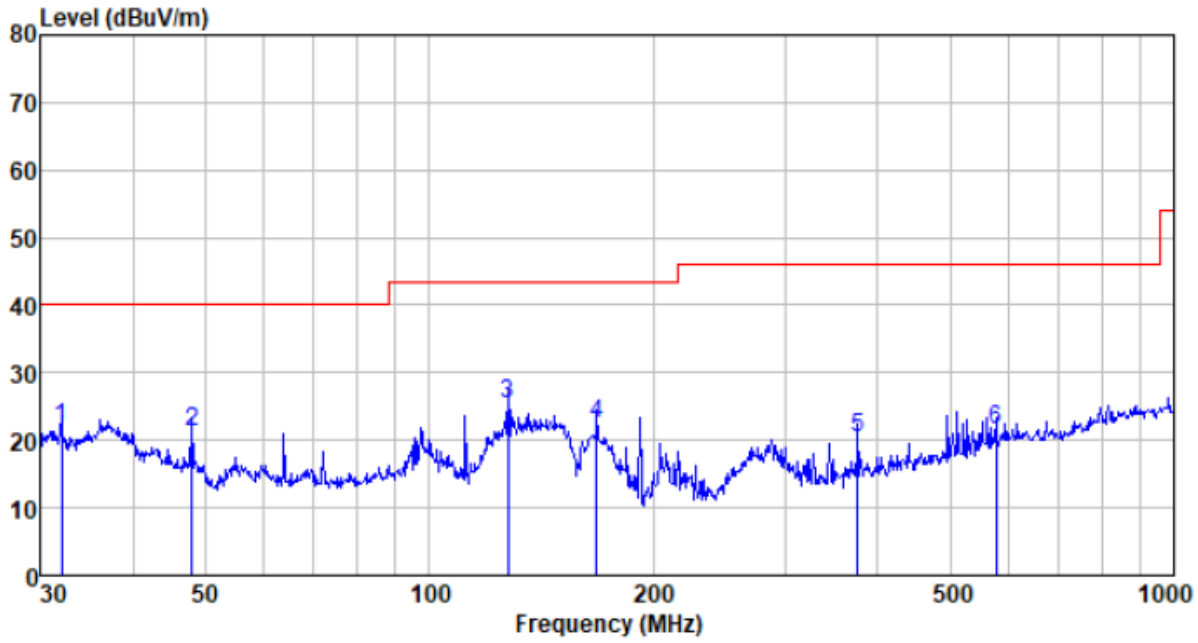
ANT 2:

Horizontal



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
31.955	39.84	11.24	0.57	35.15	16.50	40.00	-23.50	QP
47.994	39.12	12.28	0.75	36.09	16.06	40.00	-23.94	QP
111.738	40.31	10.76	1.29	36.82	15.54	43.50	-27.96	QP
159.784	46.60	8.30	1.63	37.13	19.40	43.50	-24.10	QP
272.278	46.61	12.84	2.24	37.40	24.29	46.00	-21.71	QP
480.528	44.39	16.93	3.22	37.51	27.03	46.00	-18.97	QP

Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV	dBuV/m	dB	
32.067	45.06	11.24	0.57	35.15	21.72	40.00	-18.28	QP
47.994	44.26	12.28	0.75	36.09	21.20	40.00	-18.80	QP
127.665	52.34	8.51	1.42	36.93	25.34	43.50	-18.16	QP
167.824	49.60	8.46	1.67	37.18	22.55	43.50	-20.95	QP
375.939	40.19	14.94	2.75	37.50	20.38	46.00	-25.62	QP
576.644	36.31	19.00	3.63	37.53	21.41	46.00	-24.59	QP

■ **Above 1GHz**

ANT 1:

Test mode:	802.11b	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	39.42	31.79	8.62	32.10	47.73	74.00	-26.27	Vertical
7236.00	33.67	36.19	11.68	31.97	49.57	74.00	-24.43	Vertical
9648.00	32.32	38.07	14.16	31.56	52.99	74.00	-21.01	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	38.23	31.79	8.62	32.10	46.54	74.00	-27.46	Horizontal
7236.00	33.49	36.19	11.68	31.97	49.39	74.00	-24.61	Horizontal
9648.00	31.93	38.07	14.16	31.56	52.60	74.00	-21.40	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	28.58	31.79	8.62	32.10	36.89	54.00	-17.11	Vertical
7236.00	22.56	36.19	11.68	31.97	38.46	54.00	-15.54	Vertical
9648.00	22.68	38.07	14.16	31.56	43.35	54.00	-10.65	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	27.81	31.79	8.62	32.10	36.12	54.00	-17.88	Horizontal
7236.00	22.08	36.19	11.68	31.97	37.98	54.00	-16.02	Horizontal
9648.00	21.69	38.07	14.16	31.56	42.36	54.00	-11.64	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11b	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.63	31.85	8.66	32.12	47.02	74.00	-26.98	Vertical
7311.00	33.84	36.37	11.71	31.91	50.01	74.00	-23.99	Vertical
9748.00	33.41	38.27	14.25	31.56	54.37	74.00	-19.63	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	39.22	31.85	8.66	32.12	47.61	74.00	-26.39	Horizontal
7311.00	32.53	36.37	11.71	31.91	48.70	74.00	-25.30	Horizontal
9748.00	33.32	38.27	14.25	31.56	54.28	74.00	-19.72	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	29.54	31.85	8.66	32.12	37.93	54.00	-16.07	Vertical
7311.00	22.17	36.37	11.71	31.91	38.34	54.00	-15.66	Vertical
9748.00	22.67	38.27	14.25	31.56	43.63	54.00	-10.37	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	29.37	31.85	8.66	32.12	37.76	54.00	-16.24	Horizontal
7311.00	21.63	36.37	11.71	31.91	37.80	54.00	-16.20	Horizontal
9748.00	23.05	38.27	14.25	31.56	44.01	54.00	-9.99	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11b	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	43.64	31.90	8.70	32.15	52.09	74.00	-21.91	Vertical
7386.00	34.18	36.49	11.76	31.83	50.60	74.00	-23.40	Vertical
9848.00	36.47	38.62	14.31	31.77	57.63	74.00	-16.37	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	43.14	31.90	8.70	32.15	51.59	74.00	-22.41	Horizontal
7386.00	33.18	36.49	11.76	31.83	49.60	74.00	-24.40	Horizontal
9848.00	32.68	38.62	14.31	31.77	53.84	74.00	-20.16	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.65	31.90	8.70	32.15	43.10	54.00	-10.90	Vertical
7386.00	24.12	36.49	11.76	31.83	40.54	54.00	-13.46	Vertical
9848.00	24.99	38.62	14.31	31.77	46.15	54.00	-7.85	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	33.57	31.90	8.70	32.15	42.02	54.00	-11.98	Horizontal
7386.00	22.59	36.49	11.76	31.83	39.01	54.00	-14.99	Horizontal
9848.00	21.96	38.62	14.31	31.77	43.12	54.00	-10.88	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11g	Test channel:	lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	39.35	31.79	8.62	32.10	47.66	74.00	-26.34	Vertical
7236.00	33.62	36.19	11.68	31.97	49.52	74.00	-24.48	Vertical
9648.00	32.29	38.07	14.16	31.56	52.96	74.00	-21.04	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	38.17	31.79	8.62	32.10	46.48	74.00	-27.52	Horizontal
7236.00	33.45	36.19	11.68	31.97	49.35	74.00	-24.65	Horizontal
9648.00	31.90	38.07	14.16	31.56	52.57	74.00	-21.43	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	28.51	31.79	8.62	32.10	36.82	54.00	-17.18	Vertical
7236.00	22.51	36.19	11.68	31.97	38.41	54.00	-15.59	Vertical
9648.00	22.65	38.07	14.16	31.56	43.32	54.00	-10.68	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertica
4824.00	27.75	31.79	8.62	32.10	36.06	54.00	-17.94	Horizontal
7236.00	22.04	36.19	11.68	31.97	37.94	54.00	-16.06	Horizontal
9648.00	21.66	38.07	14.16	31.56	42.33	54.00	-11.67	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11g	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.57	31.85	8.66	32.12	46.96	74.00	-27.04	Vertical
7311.00	33.80	36.37	11.71	31.91	49.97	74.00	-24.03	Vertical
9748.00	33.38	38.27	14.25	31.56	54.34	74.00	-19.66	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	39.17	31.85	8.66	32.12	47.56	74.00	-26.44	Horizontal
7311.00	32.50	36.37	11.71	31.91	48.67	74.00	-25.33	Horizontal
9748.00	33.30	38.27	14.25	31.56	54.26	74.00	-19.74	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	29.48	31.85	8.66	32.12	37.87	54.00	-16.13	Vertical
7311.00	22.13	36.37	11.71	31.91	38.30	54.00	-15.70	Vertical
9748.00	22.65	38.27	14.25	31.56	43.61	54.00	-10.39	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	29.32	31.85	8.66	32.12	37.71	54.00	-16.29	Horizontal
7311.00	21.60	36.37	11.71	31.91	37.77	54.00	-16.23	Horizontal
9748.00	23.02	38.27	14.25	31.56	43.98	54.00	-10.02	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11g	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	43.54	31.90	8.70	32.15	51.99	74.00	-22.01	Vertical
7386.00	34.11	36.49	11.76	31.83	50.53	74.00	-23.47	Vertical
9848.00	36.42	38.62	14.31	31.77	57.58	74.00	-16.42	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	43.05	31.90	8.70	32.15	51.50	74.00	-22.50	Horizontal
7386.00	33.12	36.49	11.76	31.83	49.54	74.00	-24.46	Horizontal
9848.00	32.64	38.62	14.31	31.77	53.80	74.00	-20.20	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.56	31.90	8.70	32.15	43.01	54.00	-10.99	Vertical
7386.00	24.06	36.49	11.76	31.83	40.48	54.00	-13.52	Vertical
9848.00	24.95	38.62	14.31	31.77	46.11	54.00	-7.89	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	33.48	31.90	8.70	32.15	41.93	54.00	-12.07	Horizontal
7386.00	22.53	36.49	11.76	31.83	38.95	54.00	-15.05	Horizontal
9848.00	21.92	38.62	14.31	31.77	43.08	54.00	-10.92	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT20)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	39.28	31.79	8.62	32.10	47.59	74.00	-26.41	Vertical
7236.00	33.58	36.19	11.68	31.97	49.48	74.00	-24.52	Vertical
9648.00	32.26	38.07	14.16	31.56	52.93	74.00	-21.07	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	38.11	31.79	8.62	32.10	46.42	74.00	-27.58	Horizontal
7236.00	33.41	36.19	11.68	31.97	49.31	74.00	-24.69	Horizontal
9648.00	31.87	38.07	14.16	31.56	52.54	74.00	-21.46	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	28.45	31.79	8.62	32.10	36.76	54.00	-17.24	Vertical
7236.00	22.47	36.19	11.68	31.97	38.37	54.00	-15.63	Vertical
9648.00	22.62	38.07	14.16	31.56	43.29	54.00	-10.71	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	27.70	31.79	8.62	32.10	36.01	54.00	-17.99	Horizontal
7236.00	22.01	36.19	11.68	31.97	37.91	54.00	-16.09	Horizontal
9648.00	21.63	38.07	14.16	31.56	42.30	54.00	-11.70	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT20)	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.52	31.85	8.66	32.12	46.91	74.00	-27.09	Vertical
7311.00	33.76	36.37	11.71	31.91	49.93	74.00	-24.07	Vertical
9748.00	33.36	38.27	14.25	31.56	54.32	74.00	-19.68	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	39.12	31.85	8.66	32.12	47.51	74.00	-26.49	Horizontal
7311.00	32.47	36.37	11.71	31.91	48.64	74.00	-25.36	Horizontal
9748.00	33.27	38.27	14.25	31.56	54.23	74.00	-19.77	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	29.43	31.85	8.66	32.12	37.82	54.00	-16.18	Vertical
7311.00	22.10	36.37	11.71	31.91	38.27	54.00	-15.73	Vertical
9748.00	22.62	38.27	14.25	31.56	43.58	54.00	-10.42	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	29.28	31.85	8.66	32.12	37.67	54.00	-16.33	Horizontal
7311.00	21.57	36.37	11.71	31.91	37.74	54.00	-16.26	Horizontal
9748.00	23.00	38.27	14.25	31.56	43.96	54.00	-10.04	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT20)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	43.44	31.90	8.70	32.15	51.89	74.00	-22.11	4924.00
7386.00	34.06	36.49	11.76	31.83	50.48	74.00	-23.52	7386.00
9848.00	36.38	38.62	14.31	31.77	57.54	74.00	-16.46	9848.00
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	42.97	31.90	8.70	32.15	51.42	74.00	-22.58	Horizontal
7386.00	33.07	36.49	11.76	31.83	49.49	74.00	-24.51	Horizontal
9848.00	32.60	38.62	14.31	31.77	53.76	74.00	-20.24	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.47	31.90	8.70	32.15	42.92	54.00	-11.08	Vertical
7386.00	24.00	36.49	11.76	31.83	40.42	54.00	-13.58	Vertical
9848.00	24.91	38.62	14.31	31.77	46.07	54.00	-7.93	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	33.41	31.90	8.70	32.15	41.86	54.00	-12.14	Horizontal
7386.00	22.48	36.49	11.76	31.83	38.90	54.00	-15.10	Horizontal
9848.00	21.88	38.62	14.31	31.77	43.04	54.00	-10.96	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT40)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4844.00	38.69	31.81	8.63	32.11	47.02	74.00	-26.98	Vertical
7266.00	33.20	36.28	11.69	31.94	49.23	74.00	-24.77	Vertical
9688.00	31.99	38.13	14.21	31.52	52.81	74.00	-21.19	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4844.00	37.61	31.81	8.63	32.11	45.94	74.00	-28.06	Horizontal
7266.00	33.08	36.28	11.69	31.94	49.11	74.00	-24.89	Horizontal
9688.00	31.62	38.13	14.21	31.52	52.44	74.00	-21.56	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4844.00	27.90	31.81	8.63	32.11	36.23	54.00	-17.77	Vertical
7266.00	22.10	36.28	11.69	31.94	38.13	54.00	-15.87	Vertical
9688.00	22.36	38.13	14.21	31.52	43.18	54.00	-10.82	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4844.00	27.23	31.81	8.63	32.11	35.56	54.00	-18.44	Horizontal
7266.00	21.69	36.28	11.69	31.94	37.72	54.00	-16.28	Horizontal
9688.00	21.39	38.13	14.21	31.52	42.21	54.00	-11.79	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT40)	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.02	31.85	8.66	32.12	46.41	74.00	-27.59	Vertical
7311.00	33.45	36.37	11.71	31.91	49.62	74.00	-24.38	Vertical
9748.00	33.13	38.27	14.25	31.56	54.09	74.00	-19.91	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	38.71	31.85	8.66	32.12	47.10	74.00	-26.90	Horizontal
7311.00	32.20	36.37	11.71	31.91	48.37	74.00	-25.63	Horizontal
9748.00	33.07	38.27	14.25	31.56	54.03	74.00	-19.97	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	28.98	31.85	8.66	32.12	37.37	54.00	-16.63	Vertical
7311.00	21.79	36.37	11.71	31.91	37.96	54.00	-16.04	Vertical
9748.00	22.41	38.27	14.25	31.56	43.37	54.00	-10.63	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	28.89	31.85	8.66	32.12	37.28	54.00	-16.72	Horizontal
7311.00	21.31	36.37	11.71	31.91	37.48	54.00	-16.52	Horizontal
9748.00	22.80	38.27	14.25	31.56	43.76	54.00	-10.24	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT40)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4904.00	42.59	31.88	8.68	32.13	51.02	74.00	-22.98	Vertical
7356.00	33.52	36.45	11.75	31.86	49.86	74.00	-24.14	Vertical
9808.00	35.99	38.43	14.29	31.68	57.03	74.00	-16.97	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4904.00	42.25	31.88	8.68	32.13	50.68	74.00	-23.32	Horizontal
7356.00	32.60	36.45	11.75	31.86	48.94	74.00	-25.06	Horizontal
9808.00	32.24	38.43	14.29	31.68	53.28	74.00	-20.72	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4904.00	33.68	31.88	8.68	32.13	42.11	54.00	-11.89	Vertical
7356.00	23.48	36.45	11.75	31.86	39.82	54.00	-14.18	Vertical
9808.00	24.54	38.43	14.29	31.68	45.58	54.00	-8.42	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4904.00	32.73	31.88	8.68	32.13	41.16	54.00	-12.84	Horizontal
7356.00	22.03	36.45	11.75	31.86	38.37	54.00	-15.63	Horizontal
9808.00	21.54	38.43	14.29	31.68	42.58	54.00	-11.42	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *"*", means this data is the too weak instrument of signal is unable to test.*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

ANT 2:

Test mode:	802.11b	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	39.55	31.79	8.62	32.10	47.86	74.00	-26.14	Vertical
7236.00	33.75	36.19	11.68	31.97	49.65	74.00	-24.35	Vertical
9648.00	32.38	38.07	14.16	31.56	53.05	74.00	-20.95	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	38.34	31.79	8.62	32.10	46.65	74.00	-27.35	Horizontal
7236.00	33.56	36.19	11.68	31.97	49.46	74.00	-24.54	Horizontal
9648.00	31.98	38.07	14.16	31.56	52.65	74.00	-21.35	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	28.69	31.79	8.62	32.10	37.00	54.00	-17.00	Vertical
7236.00	22.63	36.19	11.68	31.97	38.53	54.00	-15.47	Vertical
9648.00	22.74	38.07	14.16	31.56	43.41	54.00	-10.59	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	27.91	31.79	8.62	32.10	36.22	54.00	-17.78	Horizontal
7236.00	22.15	36.19	11.68	31.97	38.05	54.00	-15.95	Horizontal
9648.00	21.74	38.07	14.16	31.56	42.41	54.00	-11.59	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.74	31.85	8.66	32.12	47.13	74.00	-26.87	Vertical
7311.00	33.90	36.37	11.71	31.91	50.07	74.00	-23.93	Vertical
9748.00	33.46	38.27	14.25	31.56	54.42	74.00	-19.58	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	39.31	31.85	8.66	32.12	47.70	74.00	-26.30	Horizontal
7311.00	32.59	36.37	11.71	31.91	48.76	74.00	-25.24	Horizontal
9748.00	33.37	38.27	14.25	31.56	54.33	74.00	-19.67	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	29.64	31.85	8.66	32.12	38.03	54.00	-15.97	Vertical
7311.00	22.23	36.37	11.71	31.91	38.40	54.00	-15.60	Vertical
9748.00	22.72	38.27	14.25	31.56	43.68	54.00	-10.32	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	29.46	31.85	8.66	32.12	37.85	54.00	-16.15	Horizontal
7311.00	21.69	36.37	11.71	31.91	37.86	54.00	-16.14	Horizontal
9748.00	23.09	38.27	14.25	31.56	44.05	54.00	-9.95	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	43.82	31.90	8.70	32.15	52.27	74.00	-21.73	Vertical
7386.00	34.30	36.49	11.76	31.83	50.72	74.00	-23.28	Vertical
9848.00	36.55	38.62	14.31	31.77	57.71	74.00	-16.29	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	43.29	31.90	8.70	32.15	51.74	74.00	-22.26	Horizontal
7386.00	33.28	36.49	11.76	31.83	49.70	74.00	-24.30	Horizontal
9848.00	32.76	38.62	14.31	31.77	53.92	74.00	-20.08	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.82	31.90	8.70	32.15	43.27	54.00	-10.73	Vertical
7386.00	24.24	36.49	11.76	31.83	40.66	54.00	-13.34	Vertical
9848.00	25.07	38.62	14.31	31.77	46.23	54.00	-7.77	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	33.71	31.90	8.70	32.15	42.16	54.00	-11.84	Horizontal
7386.00	22.69	36.49	11.76	31.83	39.11	54.00	-14.89	Horizontal
9848.00	22.03	38.62	14.31	31.77	43.19	54.00	-10.81	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11g	Test channel:	lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	39.23	31.79	8.62	32.10	47.54	74.00	-26.46	Vertical
7236.00	33.55	36.19	11.68	31.97	49.45	74.00	-24.55	Vertical
9648.00	32.23	38.07	14.16	31.56	52.90	74.00	-21.10	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	38.07	31.79	8.62	32.10	46.38	74.00	-27.62	Horizontal
7236.00	33.38	36.19	11.68	31.97	49.28	74.00	-24.72	Horizontal
9648.00	31.85	38.07	14.16	31.56	52.52	74.00	-21.48	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	28.40	31.79	8.62	32.10	36.71	54.00	-17.29	Vertical
7236.00	22.44	36.19	11.68	31.97	38.34	54.00	-15.66	Vertical
9648.00	22.60	38.07	14.16	31.56	43.27	54.00	-10.73	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertica
4824.00	27.66	31.79	8.62	32.10	35.97	54.00	-18.03	Horizontal
7236.00	21.98	36.19	11.68	31.97	37.88	54.00	-16.12	Horizontal
9648.00	21.61	38.07	14.16	31.56	42.28	54.00	-11.72	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11g	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.47	31.85	8.66	32.12	46.86	74.00	-27.14	Vertical
7311.00	33.73	36.37	11.71	31.91	49.90	74.00	-24.10	Vertical
9748.00	33.34	38.27	14.25	31.56	54.30	74.00	-19.70	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	39.09	31.85	8.66	32.12	47.48	74.00	-26.52	Horizontal
7311.00	32.44	36.37	11.71	31.91	48.61	74.00	-25.39	Horizontal
9748.00	33.26	38.27	14.25	31.56	54.22	74.00	-19.78	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	29.39	31.85	8.66	32.12	37.78	54.00	-16.22	Vertical
7311.00	22.07	36.37	11.71	31.91	38.24	54.00	-15.76	Vertical
9748.00	22.60	38.27	14.25	31.56	43.56	54.00	-10.44	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	29.25	31.85	8.66	32.12	37.64	54.00	-16.36	Horizontal
7311.00	21.55	36.37	11.71	31.91	37.72	54.00	-16.28	Horizontal
9748.00	22.98	38.27	14.25	31.56	43.94	54.00	-10.06	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11g	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	43.37	31.90	8.70	32.15	51.82	74.00	-22.18	Vertical
7386.00	34.01	36.49	11.76	31.83	50.43	74.00	-23.57	Vertical
9848.00	36.34	38.62	14.31	31.77	57.50	74.00	-16.50	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	42.91	31.90	8.70	32.15	51.36	74.00	-22.64	Horizontal
7386.00	33.03	36.49	11.76	31.83	49.45	74.00	-24.55	Horizontal
9848.00	32.57	38.62	14.31	31.77	53.73	74.00	-20.27	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.40	31.90	8.70	32.15	42.85	54.00	-11.15	Vertical
7386.00	23.96	36.49	11.76	31.83	40.38	54.00	-13.62	Vertical
9848.00	24.87	38.62	14.31	31.77	46.03	54.00	-7.97	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	33.35	31.90	8.70	32.15	41.80	54.00	-12.20	Horizontal
7386.00	22.44	36.49	11.76	31.83	38.86	54.00	-15.14	Horizontal
9848.00	21.85	38.62	14.31	31.77	43.01	54.00	-10.99	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11n(HT20)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	39.09	31.79	8.62	32.10	47.40	74.00	-26.60	Vertical
7236.00	33.46	36.19	11.68	31.97	49.36	74.00	-24.64	Vertical
9648.00	32.17	38.07	14.16	31.56	52.84	74.00	-21.16	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	37.95	31.79	8.62	32.10	46.26	74.00	-27.74	Horizontal
7236.00	33.30	36.19	11.68	31.97	49.20	74.00	-24.80	Horizontal
9648.00	31.79	38.07	14.16	31.56	52.46	74.00	-21.54	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	28.27	31.79	8.62	32.10	36.58	54.00	-17.42	Vertical
7236.00	22.35	36.19	11.68	31.97	38.25	54.00	-15.75	Vertical
9648.00	22.54	38.07	14.16	31.56	43.21	54.00	-10.79	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	27.55	31.79	8.62	32.10	35.86	54.00	-18.14	Horizontal
7236.00	21.91	36.19	11.68	31.97	37.81	54.00	-16.19	Horizontal
9648.00	21.56	38.07	14.16	31.56	42.23	54.00	-11.77	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11n(HT20)	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	38.36	31.85	8.66	32.12	46.75	74.00	-27.25	Vertical
7311.00	33.66	36.37	11.71	31.91	49.83	74.00	-24.17	Vertical
9748.00	33.28	38.27	14.25	31.56	54.24	74.00	-19.76	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	38.99	31.85	8.66	32.12	47.38	74.00	-26.62	Horizontal
7311.00	32.38	36.37	11.71	31.91	48.55	74.00	-25.45	Horizontal
9748.00	33.21	38.27	14.25	31.56	54.17	74.00	-19.83	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	29.29	31.85	8.66	32.12	37.68	54.00	-16.32	Vertical
7311.00	22.00	36.37	11.71	31.91	38.17	54.00	-15.83	Vertical
9748.00	22.56	38.27	14.25	31.56	43.52	54.00	-10.48	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	29.16	31.85	8.66	32.12	37.55	54.00	-16.45	Horizontal
7311.00	21.49	36.37	11.71	31.91	37.66	54.00	-16.34	Horizontal
9748.00	22.94	38.27	14.25	31.56	43.90	54.00	-10.10	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11n(HT20)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	43.17	31.90	8.70	32.15	51.62	74.00	-22.38	Vertical
7386.00	33.88	36.49	11.76	31.83	50.30	74.00	-23.70	Vertical
9848.00	36.26	38.62	14.31	31.77	57.42	74.00	-16.58	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	42.74	31.90	8.70	32.15	51.19	74.00	-22.81	Horizontal
7386.00	32.92	36.49	11.76	31.83	49.34	74.00	-24.66	Horizontal
9848.00	32.49	38.62	14.31	31.77	53.65	74.00	-20.35	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.22	31.90	8.70	32.15	42.67	54.00	-11.33	Vertical
7386.00	23.84	36.49	11.76	31.83	40.26	54.00	-13.74	Vertical
9848.00	24.79	38.62	14.31	31.77	45.95	54.00	-8.05	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	33.19	31.90	8.70	32.15	41.64	54.00	-12.36	Horizontal
7386.00	22.34	36.49	11.76	31.83	38.76	54.00	-15.24	Horizontal
9848.00	21.77	38.62	14.31	31.77	42.93	54.00	-11.07	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11n(HT40)	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4844.00	38.45	31.81	8.63	32.11	46.78	74.00	-27.22	Vertical
7266.00	33.05	36.28	11.69	31.94	49.08	74.00	-24.92	Vertical
9688.00	31.88	38.13	14.21	31.52	52.70	74.00	-21.30	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4844.00	37.40	31.81	8.63	32.11	45.73	74.00	-28.27	Horizontal
7266.00	32.95	36.28	11.69	31.94	48.98	74.00	-25.02	Horizontal
9688.00	31.52	38.13	14.21	31.52	52.34	74.00	-21.66	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4844.00	27.67	31.81	8.63	32.11	36.00	54.00	-18.00	Vertical
7266.00	21.96	36.28	11.69	31.94	37.99	54.00	-16.01	Vertical
9688.00	22.26	38.13	14.21	31.52	43.08	54.00	-10.92	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4844.00	27.04	31.81	8.63	32.11	35.37	54.00	-18.63	Horizontal
7266.00	21.56	36.28	11.69	31.94	37.59	54.00	-16.41	Horizontal
9688.00	21.30	38.13	14.21	31.52	42.12	54.00	-11.88	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remarks:

4. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
5. *"*", means this data is the too weak instrument of signal is unable to test.*
6. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Test mode:	802.11n(HT40)	Test channel:	Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	37.82	31.85	8.66	32.12	46.21	74.00	-27.79	Vertical
7311.00	33.32	36.37	11.71	31.91	49.49	74.00	-24.51	Vertical
9748.00	33.04	38.27	14.25	31.56	54.00	74.00	-20.00	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	38.54	31.85	8.66	32.12	46.93	74.00	-27.07	Horizontal
7311.00	32.09	36.37	11.71	31.91	48.26	74.00	-25.74	Horizontal
9748.00	32.98	38.27	14.25	31.56	53.94	74.00	-20.06	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	28.79	31.85	8.66	32.12	37.18	54.00	-16.82	Vertical
7311.00	21.67	36.37	11.71	31.91	37.84	54.00	-16.16	Vertical
9748.00	22.32	38.27	14.25	31.56	43.28	54.00	-10.72	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	28.73	31.85	8.66	32.12	37.12	54.00	-16.88	Horizontal
7311.00	21.20	36.37	11.71	31.91	37.37	54.00	-16.63	Horizontal
9748.00	22.72	38.27	14.25	31.56	43.68	54.00	-10.32	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remarks:

4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11n(HT40)	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4904.00	42.25	31.88	8.68	32.13	50.68	74.00	-23.32	Vertical
7356.00	33.30	36.45	11.75	31.86	49.64	74.00	-24.36	Vertical
9808.00	35.84	38.43	14.29	31.68	56.88	74.00	-17.12	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4904.00	41.96	31.88	8.68	32.13	50.39	74.00	-23.61	Horizontal
7356.00	32.41	36.45	11.75	31.86	48.75	74.00	-25.25	Horizontal
9808.00	32.10	38.43	14.29	31.68	53.14	74.00	-20.86	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4904.00	33.37	31.88	8.68	32.13	41.80	54.00	-12.20	Vertical
7356.00	23.27	36.45	11.75	31.86	39.61	54.00	-14.39	Vertical
9808.00	24.39	38.43	14.29	31.68	45.43	54.00	-8.57	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4904.00	32.46	31.88	8.68	32.13	40.89	54.00	-13.11	Horizontal
7356.00	21.84	36.45	11.75	31.86	38.18	54.00	-15.82	Horizontal
9808.00	21.40	38.43	14.29	31.68	42.44	54.00	-11.56	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remarks:

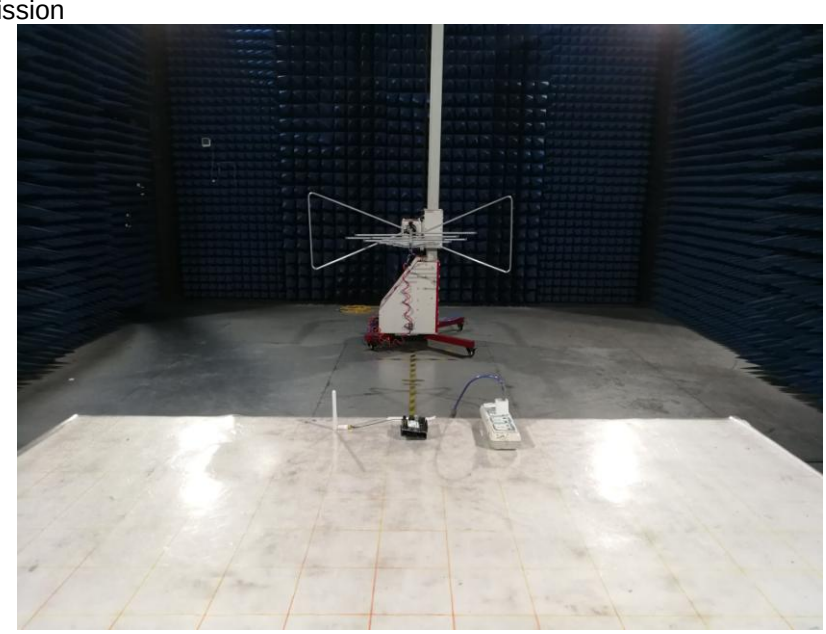
4. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

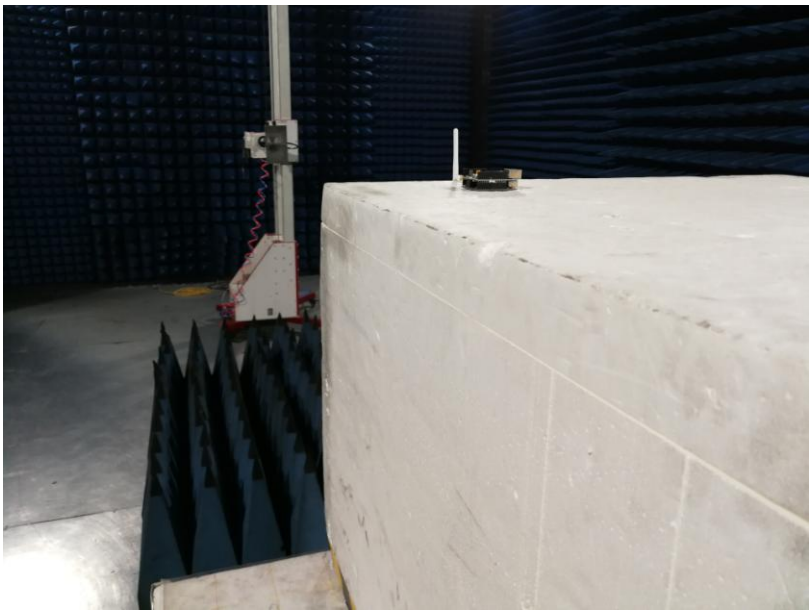
5. "", means this data is the too weak instrument of signal is unable to test.*

6. The emission levels of other frequencies are very lower than the limit and not show in test report.

8 Test Setup Photo

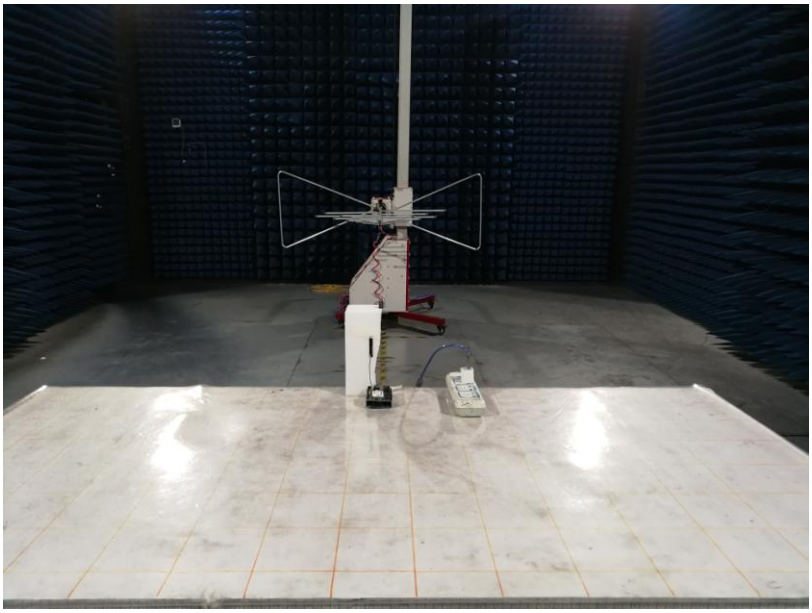
ANT 1:
Radiated Emission





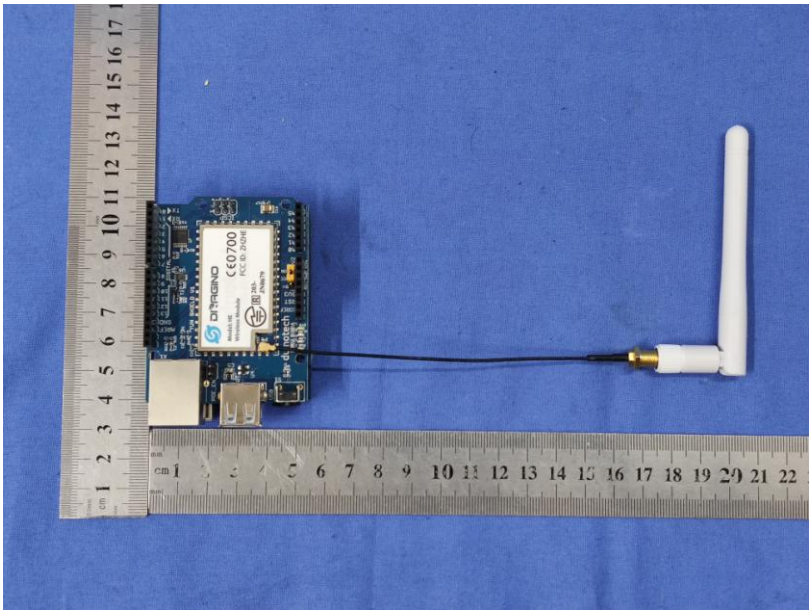
Conducted Emission

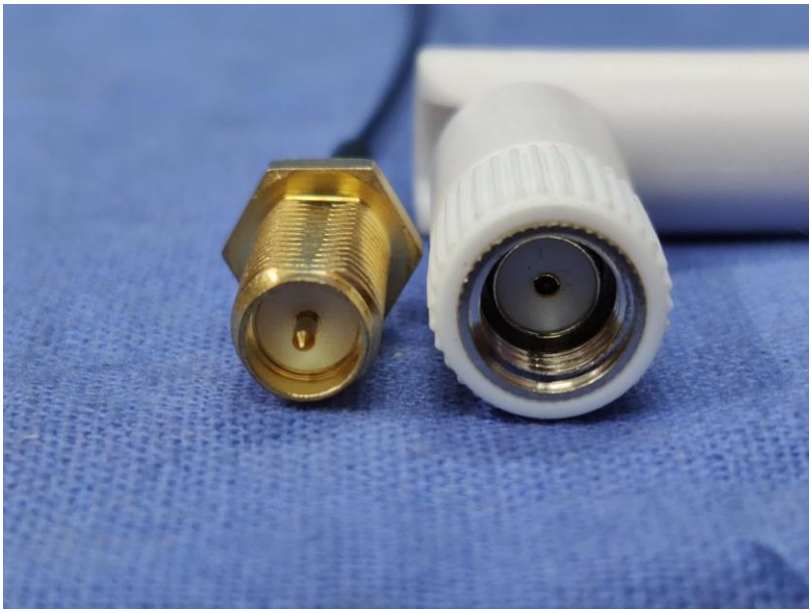
ANT 2:
Radiated Emission

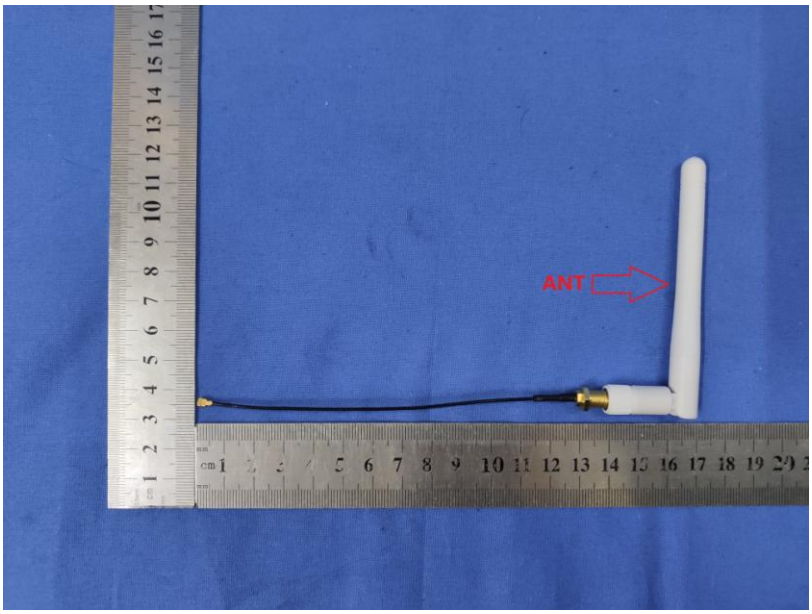


Conducted Emission

9 EUT Constructional Details



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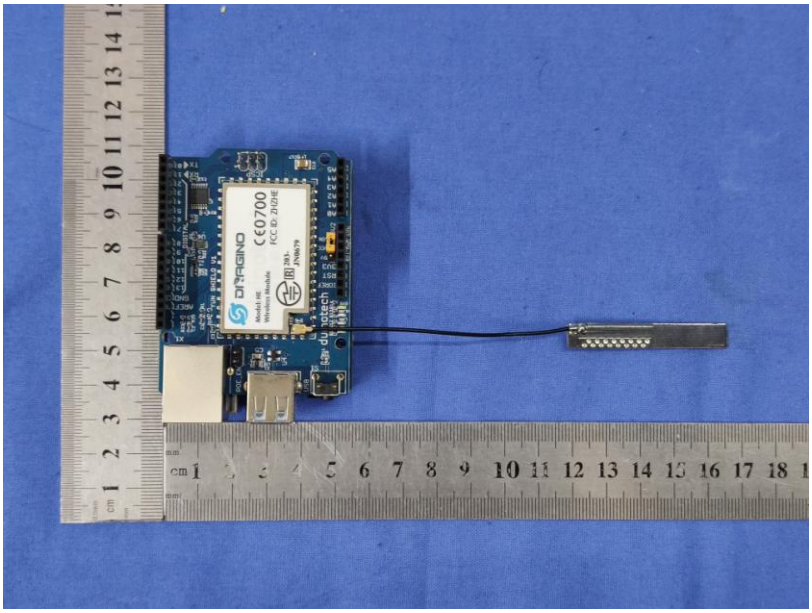

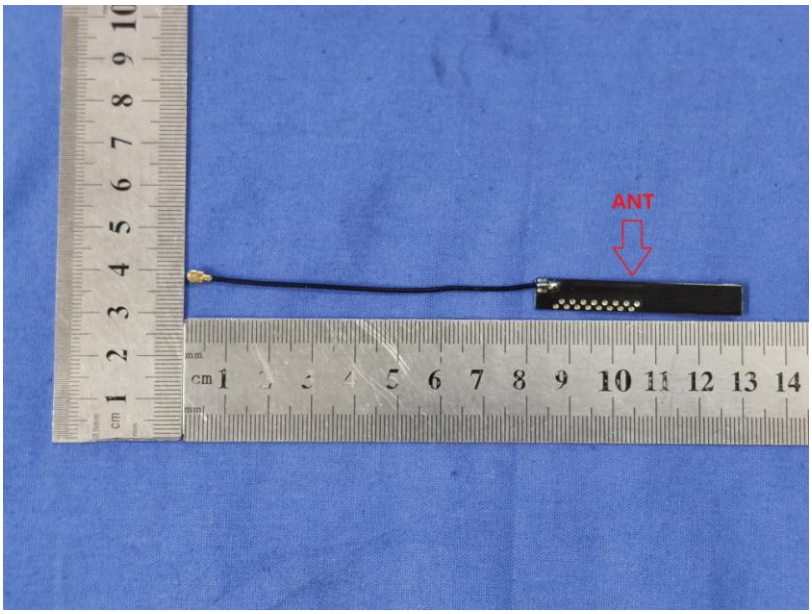
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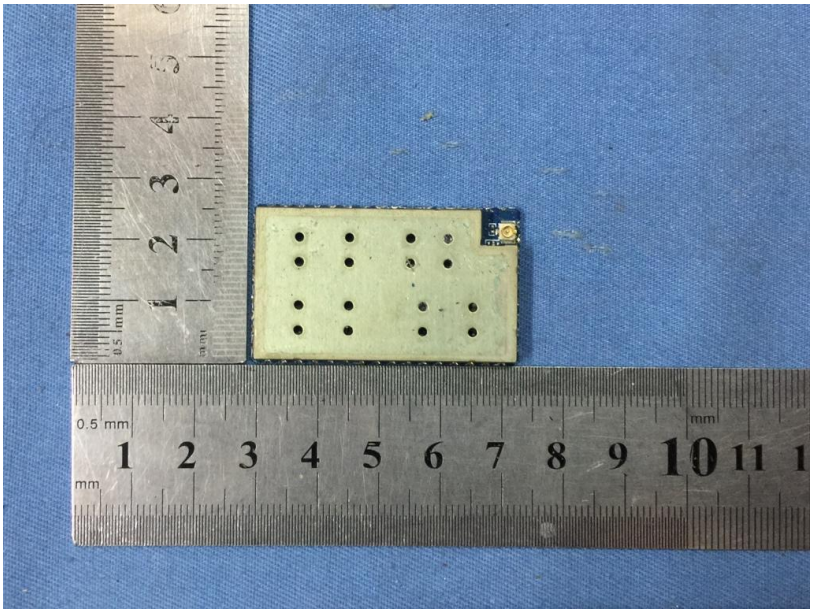

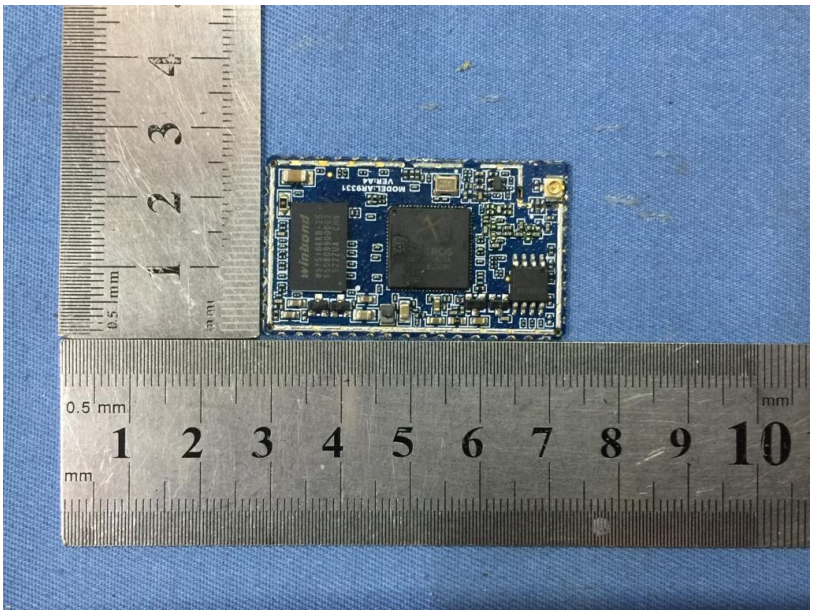

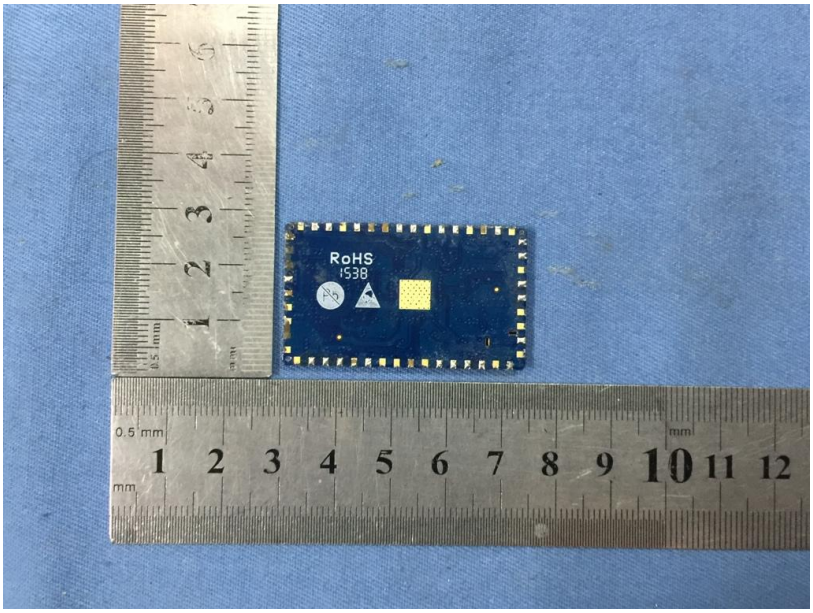

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