

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCISE180802101

FCC REPORT

Applicant: Baicells Technologies Co., Ltd.

Address of Applicant: 3F, Hui Yuan Development Building, No.1 Shangdi Information

Industry Base, Haidian Dist., Beijing, China

Equipment Under Test (EUT)

Product Name: mobile wifi

Model No.: R700

FCC ID: 2AG32R700A

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: 07 Aug., 2018

Date of Test: 07 Aug., to 22 Aug., 2018

Date of report issued: 23 Aug., 2018

Test Result: PASS*

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

Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No: CCISE180802101

2 Version

Version No.	Date	Description
00	23 Aug., 2018	Original

Tested by: Over (her Date: 23 Aug., 2018

Test Engineer

Reviewed by: 23 Aug., 2018

Project Engineer



3 Contents

			Page
1	CO	VER PAGE	1
2	VEF	RSION	2
3		NTENTS	
			_
4		ST SUMMARY	
5	GEN	NERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2	GENERAL DESCRIPTION OF E.U.T	5
	5.3	TEST ENVIRONMENT AND TEST MODE	6
	5.4	DESCRIPTION OF SUPPORT UNITS	6
	5.5	MEASUREMENT UNCERTAINTY	
	5.6	LABORATORY FACILITY	6
	5.7	LABORATORY LOCATION	
	5.8	TEST INSTRUMENTS LIST	7
6	TES	ST RESULTS AND MEASUREMENT DATA	8
	6.1	Antenna requirement	8
	6.2	CONDUCTED EMISSION	9
	6.3	CONDUCTED OUTPUT POWER	12
	6.4	OCCUPY BANDWIDTH	17
	6.5	POWER SPECTRAL DENSITY	23
	6.6	BAND EDGE	28
	6.6.	1 Conducted Emission Method	28
	6.6.	2 Radiated Emission Method	32
	6.7	Spurious Emission	
	6.7.		
	6.7.	2 Radiated Emission Method	61
7	TES	ST SETUP PHOTO	72
Ω	FU	CONSTRUCTIONAL DETAILS	7.4





Test Summary

Section in CFR 47	Result
15.203 & 15.247 (c)	Pass
15.207	Pass
15.247 (b)(3)	Pass
15.247 (a)(2)	Pass
15.247 (e)	Pass
15.247 (d)	Pass
15.205 & 15.209	Pass
	15.203 & 15.247 (c) 15.207 15.247 (b)(3) 15.247 (a)(2) 15.247 (e) 15.247 (d)

N/A: N/A: Not Applicable.





5 General Information

5.1 Client Information

Applicant:	Baicells Technologies Co., Ltd.
Address:	3F, Hui Yuan Development Building, No.1 Shangdi Information Industry Base, Haidian Dist., Beijing, China
Manufacturer:	Baicells Technologies Co., Ltd.
Address:	3F, Hui Yuan Development Building, No.1 Shangdi Information Industry Base, Haidian Dist., Beijing, China

5.2 General Description of E.U.T.

-	
Product Name:	mobile wifi
Model No.:	R700
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20)) 2422MHz~2452MHz (802.11n(H40))
Channel numbers:	11 for 802.11b/802.11g/802.11(H20) 7 for 802.11n(H40)
Channel separation:	5MHz
Modulation technology: (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Modulation technology: (IEEE 802.11g/802.11n)	Orthogonal Frequency Division Multiplexing(OFDM)
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps
Data speed (IEEE 802.11n):	Up to 150Mbps
Antenna Type:	Internal Antenna
Antenna gain:	0.5 dBi
Power supply:	DC3.7V,2000mA
AC adapter :	Model: TPA-5950100UU Input: AC100-240V, 50/60Hz, 0.2A Output: DC 5.0V, 1A

Operation Frequency each of channel for 802.11b/g/n(H20)							
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:

- 1. For 802.11n-HT40 mode, the channel number is from 3 to 9;
- 2. Channel 1, 6 & 11 selected for 802.11b/g/n-HT20 as Lowest, Middle and Highest channel, Channel; 3, 6 & 9 selected for 802.11n-HT40 as Lowest, Middle and Highest channel, Channel.

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366



Peport No: CCISE180802101

5.3 Test environment and test mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	

Transmitting mode Keep the EUT in continuous transmitting with modulation

The sample was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

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:

Per-scan all kind of data rate, the follow list were the worst case.			
Mode Data rate			
802.11b	1Mbps		
802.11g	6Mbps		
802.11n(H20)	6.5Mbps		
802.11n(H40) 13.5Mbps			

5.4 Description of Support Units

The EUT has been tested as an independent unit.

5.5 Measurement Uncertainty

Parameters	Expanded Uncertainty	
Conducted Emission (9kHz ~ 30MHz)	±2.22 dB (k=2)	
Radiated Emission (9kHz ~ 30MHz)	±2.76 dB (k=2)	
Radiated Emission (30MHz ~ 1000MHz)	±4.28 dB (k=2)	
Radiated Emission (1GHz ~ 18GHz)	±5.72 dB (k=2)	
Radiated Emission (18GHz ~ 40GHz)	±2.88 dB (k=2)	

5.6 Laboratory Facility

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

FCC - Registration No.: 727551

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551.

• IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366



Report No: CCISE180802101

5.7 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

5.8 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-16-2018	03-15-2019
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-16-2018	03-15-2019
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-16-2018	03-15-2019
EMI Test Software	AUDIX	E3	Version: 6.110919b		b
Pre-amplifier	HP	8447D	2944A09358	03-07-2018	03-06-2019
Pre-amplifier	CD	PAP-1G18	11804	03-07-2018	03-06-2019
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-07-2018	03-06-2019
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-07-2018	03-06-2019
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-07-2018	03-06-2019
Cable	MICRO-COAX	MFR64639	K10742-5	03-07-2018	03-06-2019
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-07-2018	03-06-2019
RF Switch Unit	MWRFTEST	MW200	N/A	N/A	N/A
Test Software	MWRFTEST	MTS8200	Version: 2.0.0.0		

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-07-2018	03-06-2019
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-07-2018	03-06-2019
LISN	CHASE	MN2050D	1447	03-19-2018	03-18-2019
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	07-21-2018	07-20-2019
Cable	HP	10503A	N/A	03-07-2018	03-06-2019
EMI Test Software	AUDIX	E3	Version: 6.110919b		



6 Test results and Measurement Data

6.1 Antenna requirement

Standard requirement: FCC F

FCC Part 15 C Section 15.203 /247(c)

15.203 requirement:

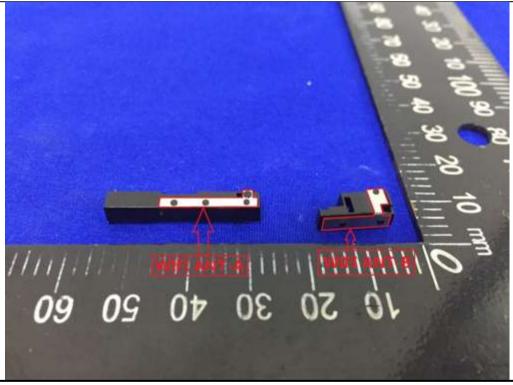
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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.

E.U.T Antenna:

The WiFi antenna is an Internal antenna which cannot replace by end-user, the best case gain of the antenna is 0.5 dBi.







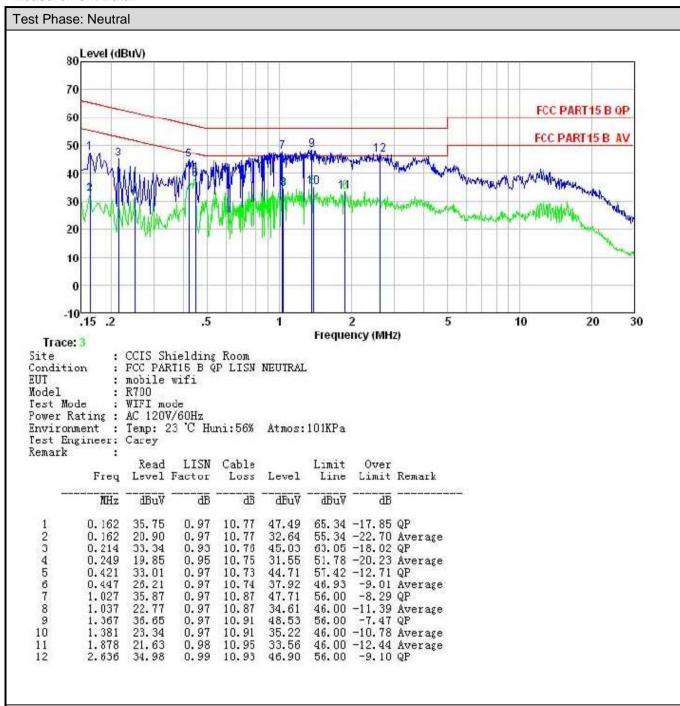
6.2 Conducted Emission

Test Requirement:	FCC Part 15 C Section 1	FCC Part 15 C Section 15.207			
Test Method:	ANSI C63.10: 2013				
Test Frequency Range:	150 kHz to 30 MHz	150 kHz to 30 MHz			
Class / Severity:	Class B	Class B			
Receiver setup:	RBW=9 kHz, VBW=30 k	Hz			
Limit:	Frequency range	Limit (dBuV)		
	(MHz)	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 log				
Test procedure	 The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.), which provides a 50ohm/50uH coupling impedance for the measuring equipment. 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). 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 C63.4: 2014 on conducted measurement. 				
Test setup:	AUX Equipment Test table/Insula Remark E U.T: Equipment Under LISN Line Impedence St. Test table height=0 8m	E.U.T EMI Receiver	Ilter — AC power		
Test Instruments:	Refer to section 5.8 for d	letails			
Test mode:	Refer to section 5.3 for details				
Test results:	Passed	Passed			
·		·			





Measurement Data:

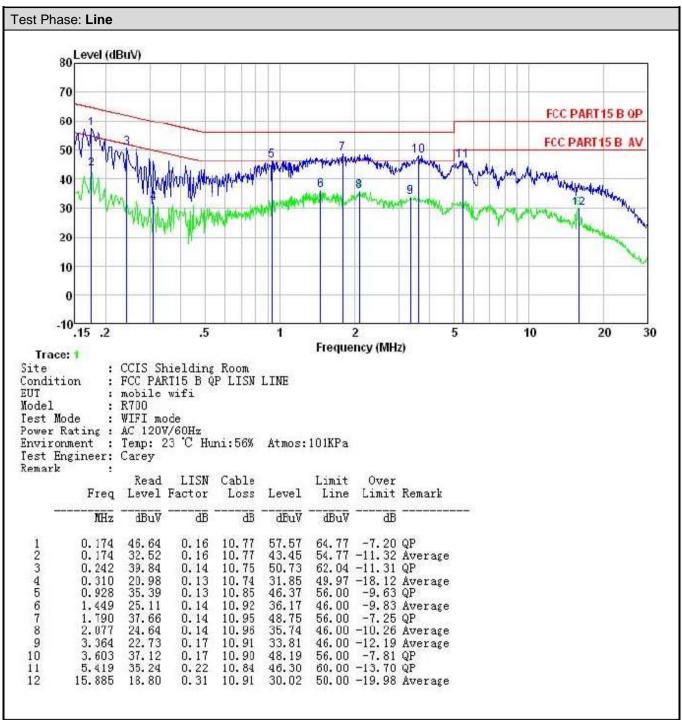


Notes:

- 1. An initial pre-scan was performed on the live and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- Final Level =Receiver Read level + LISN Factor + Cable Loss.







Notes

- 1. An initial pre-scan was performed on the live and neutral lines with peak detector.
- Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss.



6.3 Conducted Output Power

Test Requirement:	FCC Part 15 C Section 15.247 (b)(3)		
Test Method:	ANSI C63.10:2013 and KDB 558074		
Limit:	30dBm		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.8 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

Measurement Data:

Mode	Test CH	Ant. Port	Conducted Output power (dBm)	Total power (dBm)	Limit (dBm)	Result
	Lowest	ANT A	16.60	,		Pass
	Lowest	ANT B	15.28	/		
802.11b	Middle	ANT A	16.40	,	30.00	
602.110	Middle	ANT B	15.96	/	30.00	F a 5 5
	∐ighoct	ANT A	15.75	/		
	Highest	ANT B	15.54	/		
	Lowest	ANT A	10.98	,		
	Lowest	ANT B	10.85	/		Pass
902.11a	Middle	ANT A	12.61	,	30.00	
802.11g	Middle	ANT B	12.69	/	30.00	
	Lighoot	ANT A	12.21	1		
	Highest	ANT B	11.60	/		
	Lowest	ANT A	10.96	13.95	30.00	Pass
		ANT B	10.92	13.93		
802.11n20	Middle	ANT A	12.52	15.65		
002.111120	Middle	ANT B	12.76	15.65		
	Llighoot	ANT A	12.04	14.80		
	Highest	ANT B	11.53	14.60		
	1	ANT A	11.05	14.06	30.00	Door
802.11n40	Lowest	ANT B	11.05	14.06		
	Middle	ANT A	11.19	14.30		
002.111140		ANT B	11.38	14.30		Pass
	Highest	ANT A	11.47	14.07		
		ANT B	11.03	14.27		

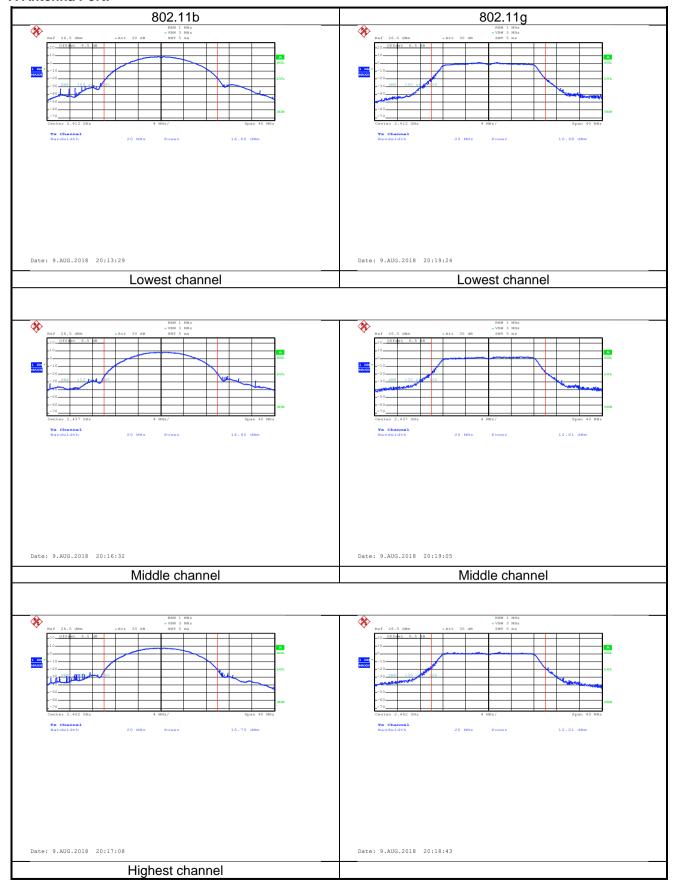
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366





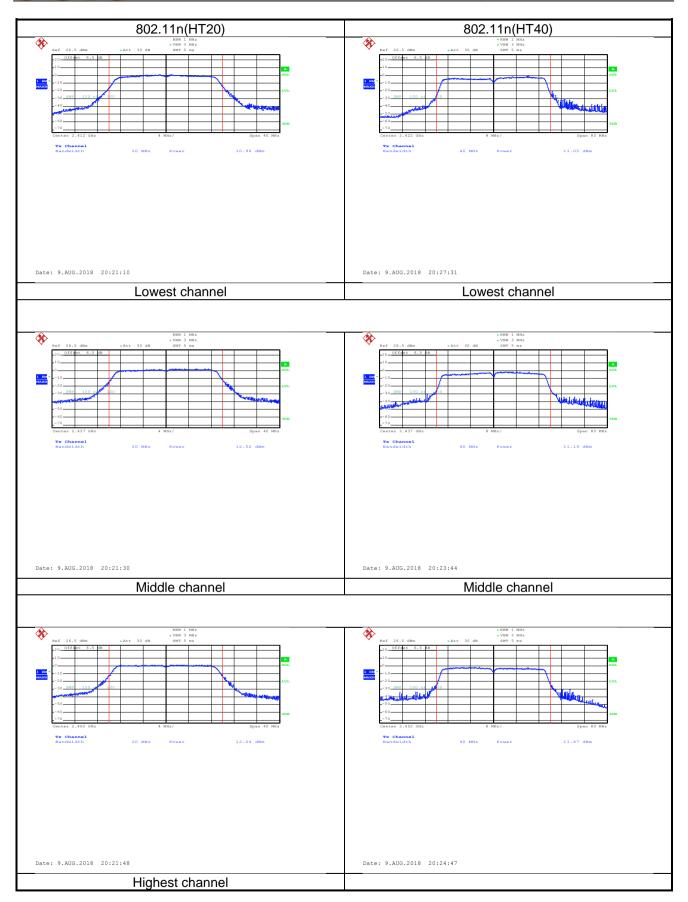
Test plot as follows:

A Antenna Port:







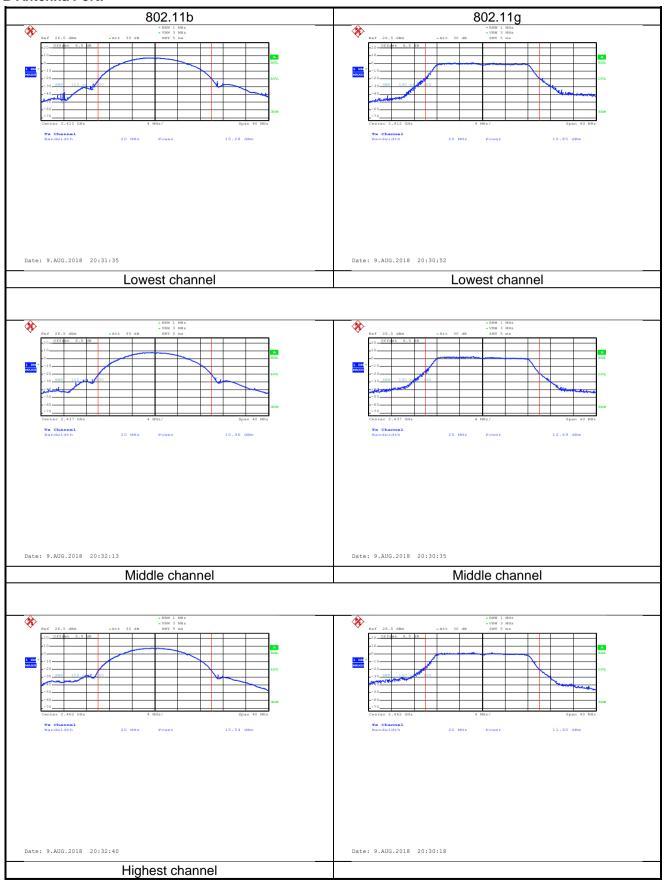






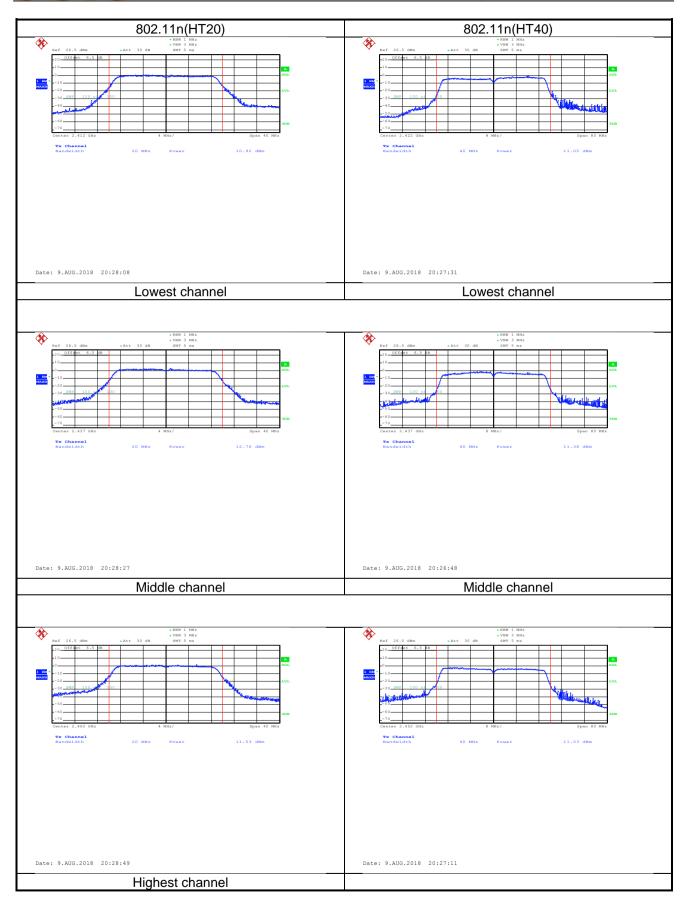
Test plot as follows:

B Antenna Port:













6.4 Occupy Bandwidth

Test Requirement:	FCC Part 15 C Section 15.247 (a)(2)		
Test Method:	ANSI C63.10:2013 and KDB 558074		
Limit:	>500kHz		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.8 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		





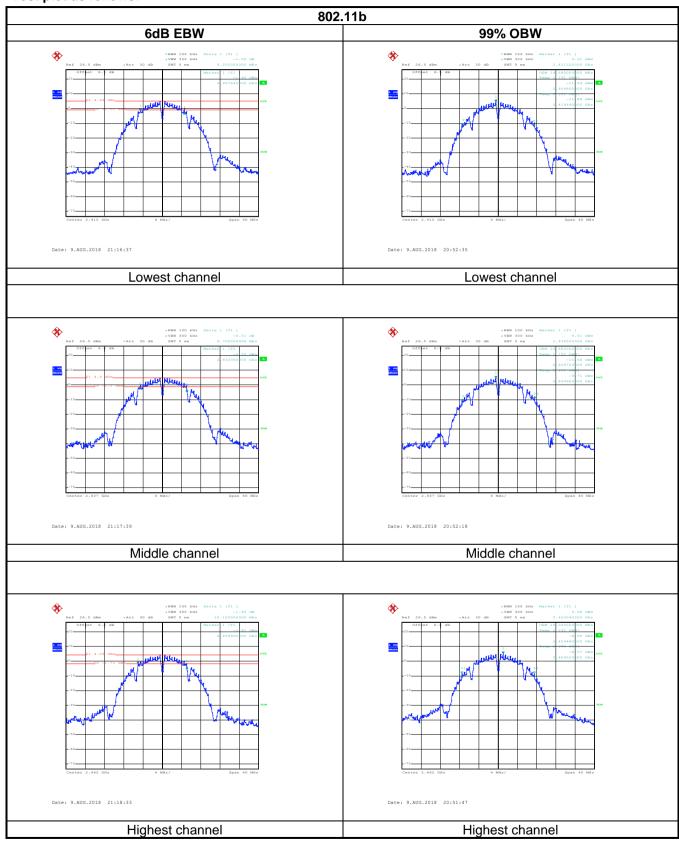
Measurement Data:

Toot CH		6dB Emission B		Dooult		
Test CH 8	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(kHz)	Result
Lowest	9.20	16.56	17.52	36.16		Pass
Middle	9.76	16.48	17.56	35.68	>500	
Highest	10.12	16.56	17.76	36.32		
Test CH	99% Occupy Bandwidth (MHz)				Limit/IsLI=\	Decult
rest Cn	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(kHz)	Result
Lowest	14.64	16.40	17.68	36.16		
Middle	14.88	16.56	17.68	36.16	N/A	N/A
Highest	15.04	16.48	17.76	36.16		



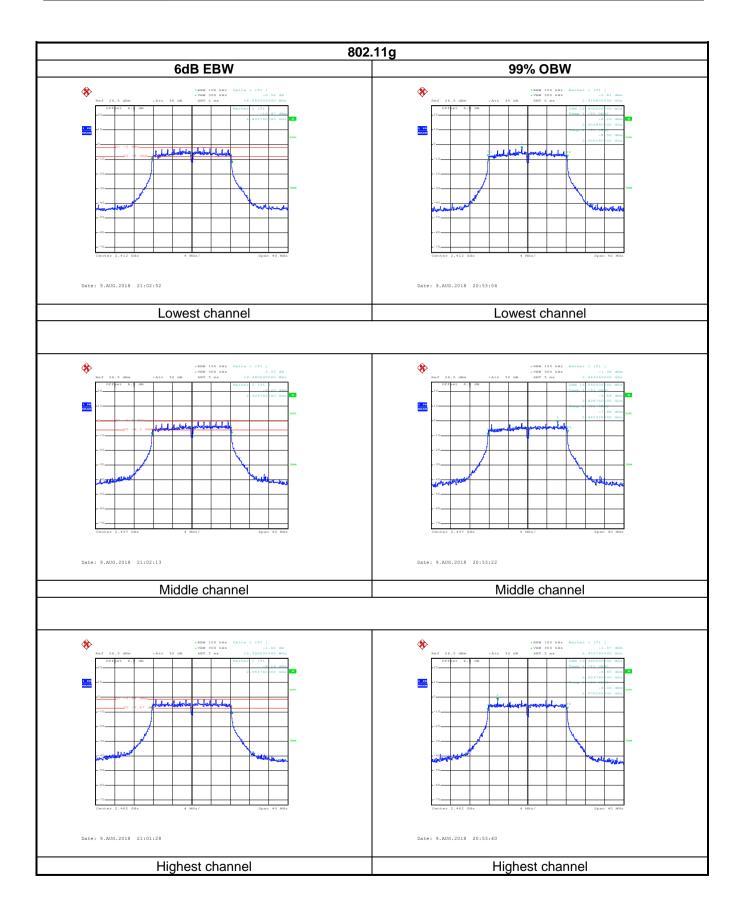


Test plot as follows:



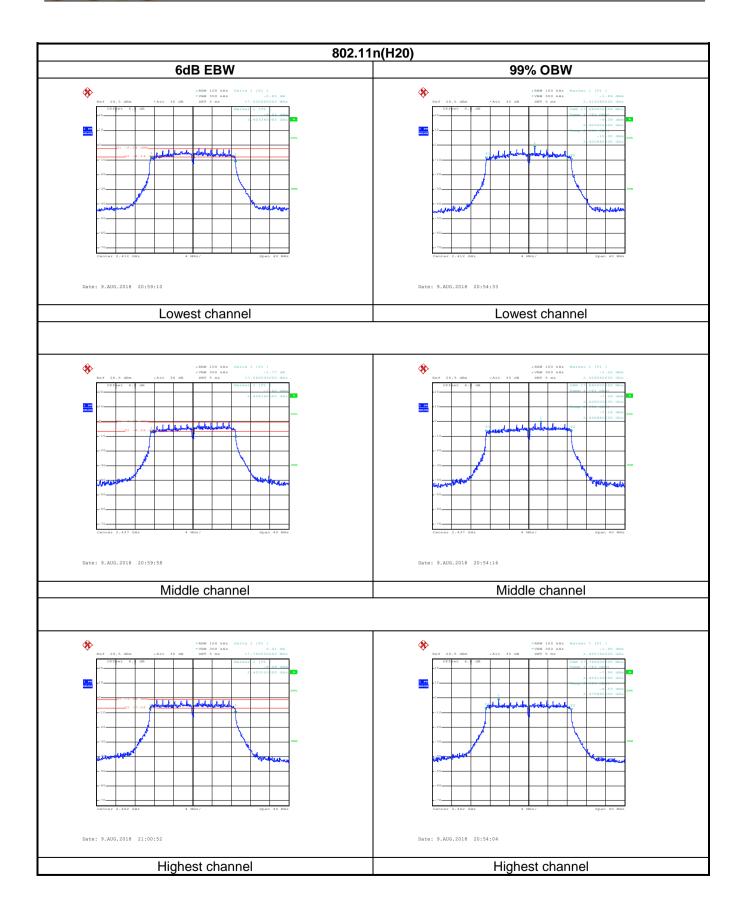






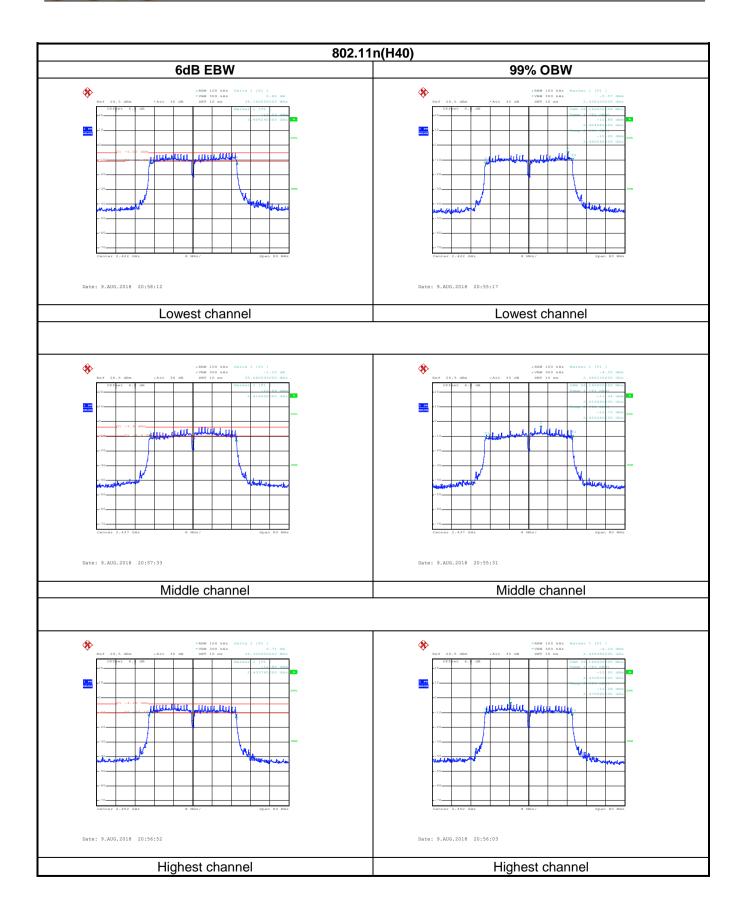














6.5 Power Spectral Density

Test Requirement:	FCC Part 15 C Section 15.247 (e)		
Test Method:	ANSI C63.10:2013 and KDB 558074		
Limit:	8dBm		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.8 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

Measurement Data:

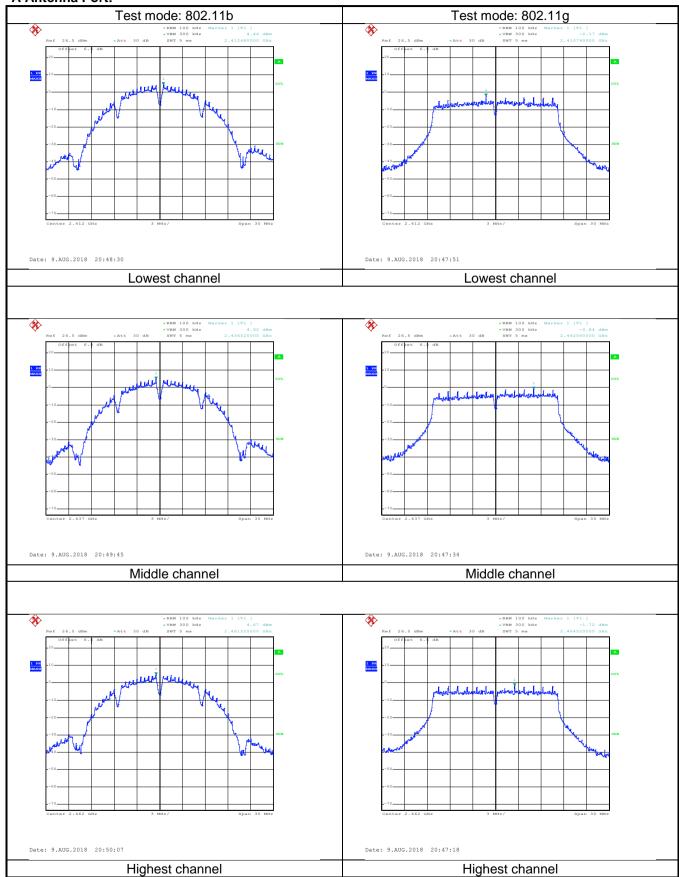
Mode	Test CH	Ant. Port	PSD (dBm)	Total PSD (dBm)	Limit (dBm)	Result
	Laurant	ANT A	4.44	,		Pass
	Lowest	ANT B	4.46	/		
802.11b	Middle	ANT A	4.92	,	8.00	
002.110	ivildule	ANT B	4.57	,	0.00	
	Highest	ANT A	4.67	,		
	riigiiest	ANT B	4.38	,		
	Lowest	ANT A	-2.17	,		
	Lowest	ANT B	-2.20	,		Pass
802.11g	Middle	ANT A	-0.84	,	8.00	
602.11g	Middle	ANT B	-0.43	/	8.00	
	Highest	ANT A	-1.72	/		
	Highest	ANT B	-1.61	,		
	Lowest	ANT A	-2.36	0.53	8.00	Pass
		ANT B	-2.57	0.55		
802.11n20	Middle	ANT A	-0.71	2.36		
002.111120	ivildule	ANT B	-0.59	2.30		
	Highest	ANT A	-1.92	1.14		
	nignesi	ANT B	-1.80	1.14		
802.11n40	Lowest	ANT A	-5.11	-1.67	8.00	Pass
	Lowest	ANT B	-4.28			
	Middle	ANT A	-4.05	-0.97		
002.111140		ANT B	-3.86	-0.91		F 455
	Highest	ANT A	-4.15	-1.31		
		ANT B	-4.50	-1.01		





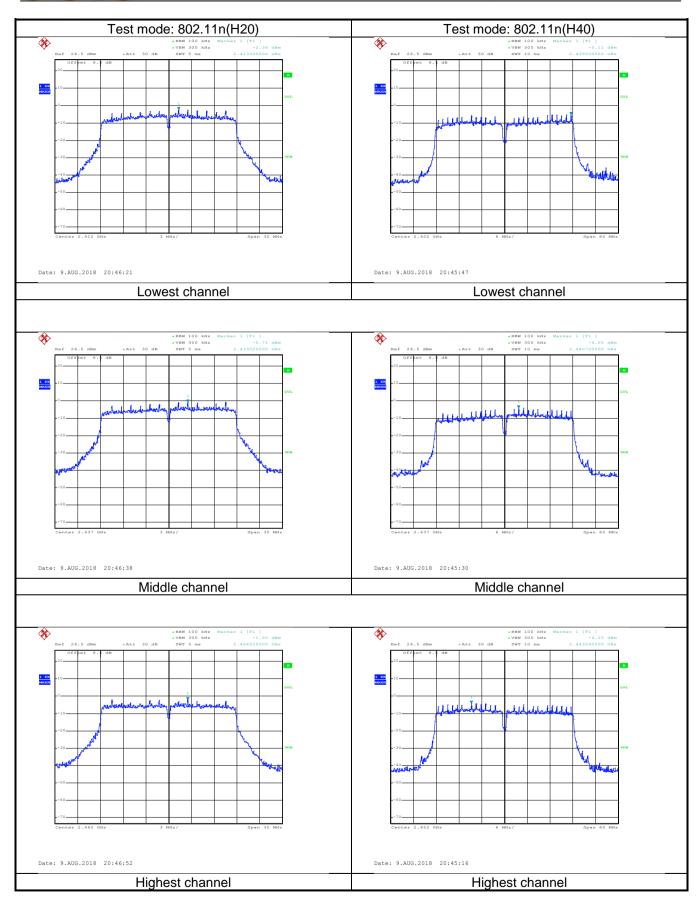
Test plot as follows:

A Antenna Port:





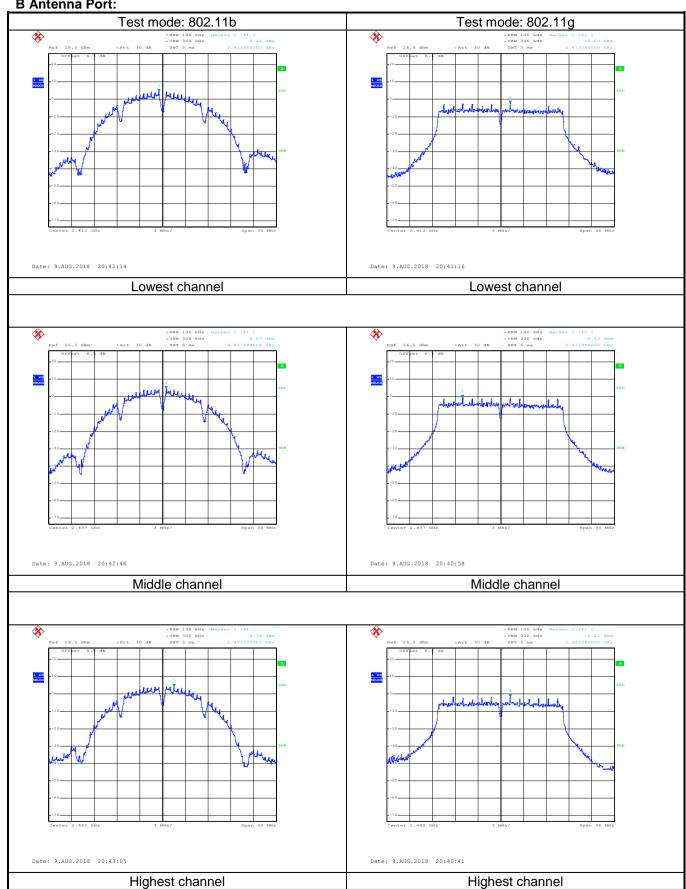






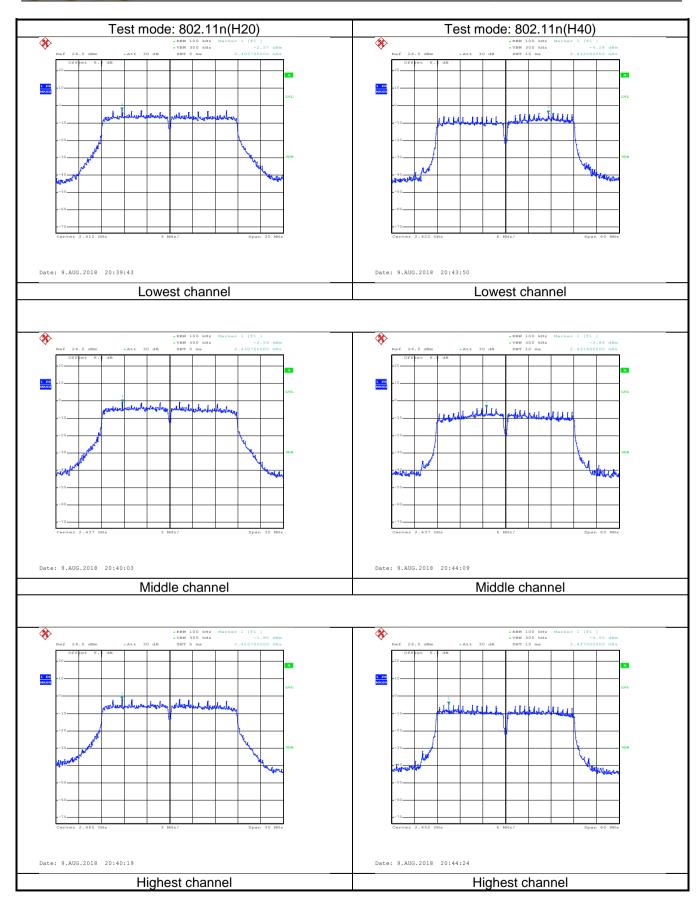


B Antenna Port:













6.6 Band Edge

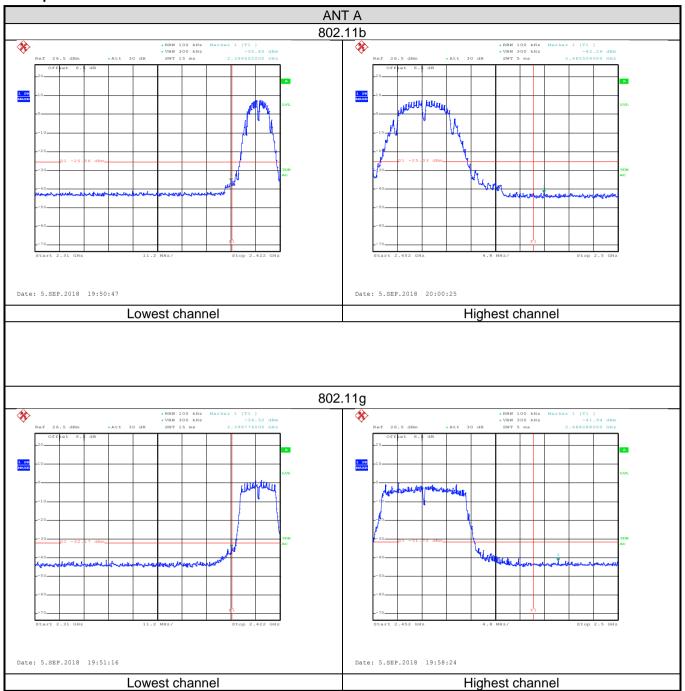
6.6.1 Conducted Emission Method

0.0.1 Conducted Linission	inctiou .
Test Requirement:	FCC Part 15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB 558074
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed



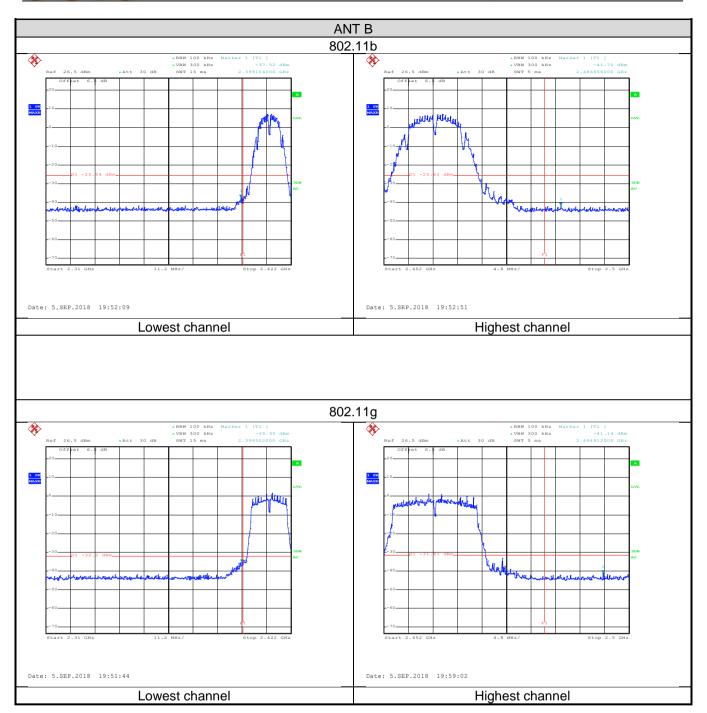


Test plot as follows:



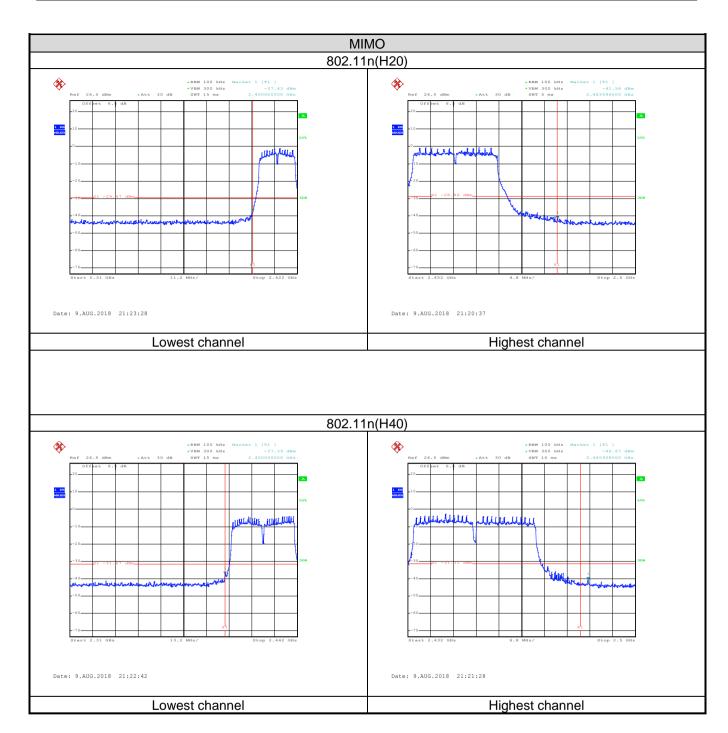














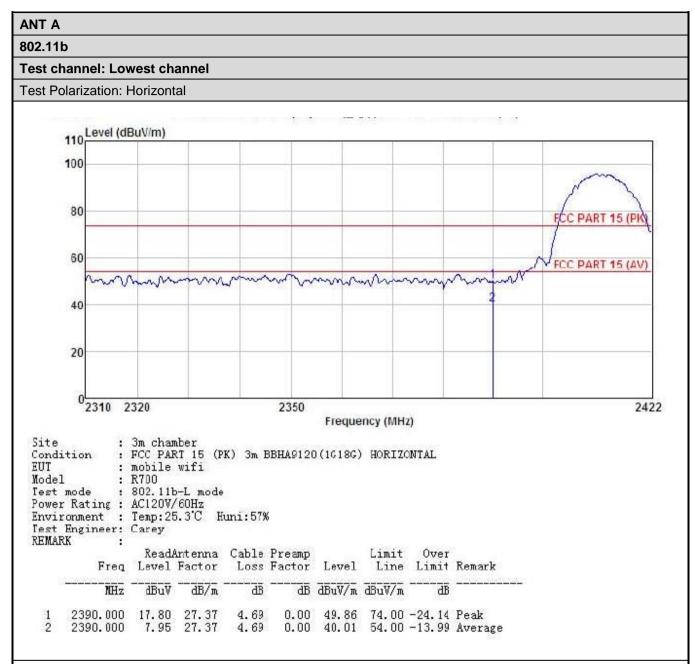


6.6.2 Radiated Emission Method

6.6.2 Radiated Emission	Wethou							
Test Requirement:	FCC Part 15 C	FCC Part 15 C Section 15.209 and 15.205						
Test Method:	ANSI C63.10: 2	ANSI C63.10: 2013 and KDB 558074						
Test Frequency Range:	2.3GHz to 2.5G	2.3GHz to 2.5GHz						
Test Distance:	3m	3m						
Receiver setup:	Frequency	Detector	RBW	1	BW	Remark		
	Above 1GHz	Peak RMS	1MHz 1MHz		MHz MHz	Peak Value Average Value		
Limit:	Frequenc		mit (dBuV/m @		VII 12	Remark		
	Above 1GH	17	54.00			verage Value		
To the transfer of			74.00	tating		Peak Value 5 meters above		
Test Procedure:	the ground to determin 2. The EUT wantenna, watower. 3. The antennathe ground Both horizon make the make the make the maters and to find the material find	 the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 						
Test setup:	150cm	AE EUT (Turntable)	3m Ground Reference Plane	Pre-	Antenna Tox	wer		
Test Instruments:	Refer to section	Refer to section 5.8 for details						
Test mode:	Refer to section	Refer to section 5.3 for details						
Test results:	Passed	Passed						







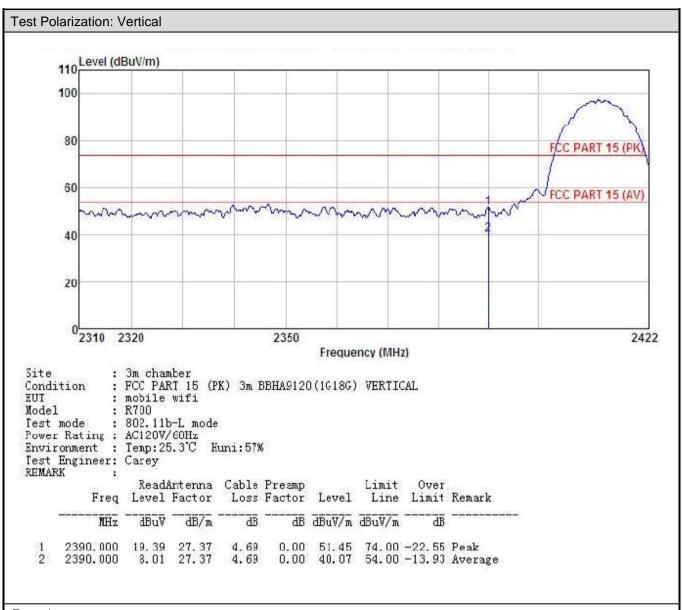
1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366





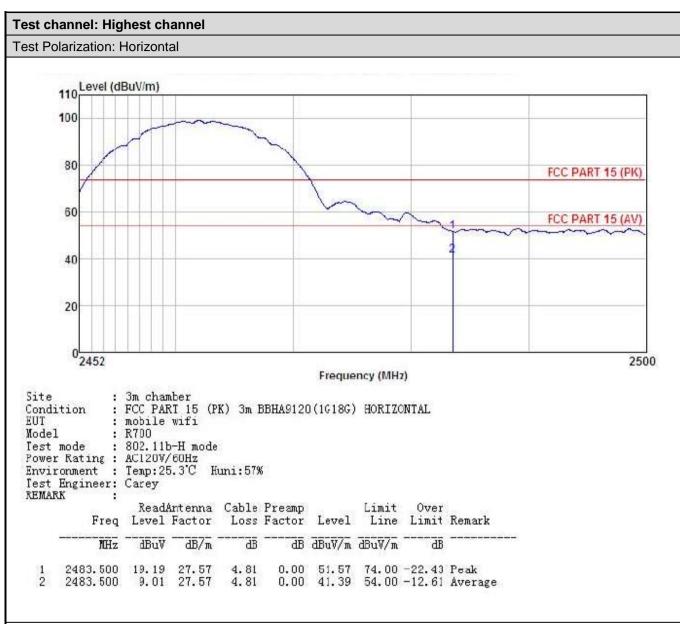


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





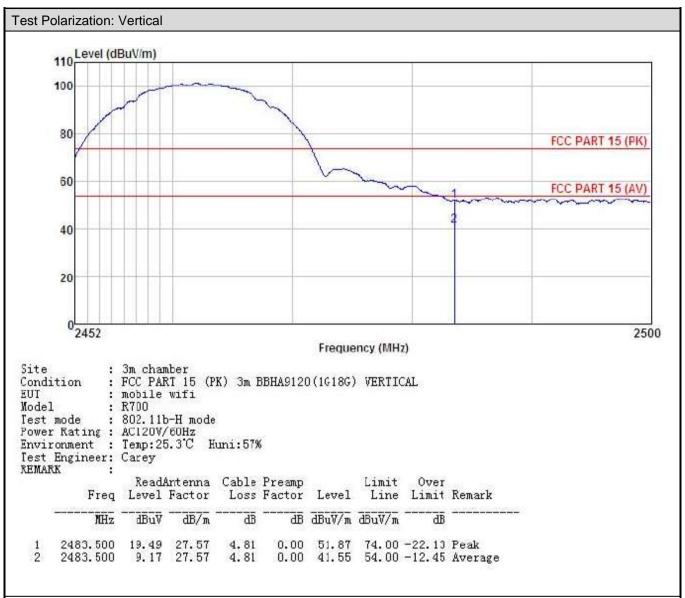


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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



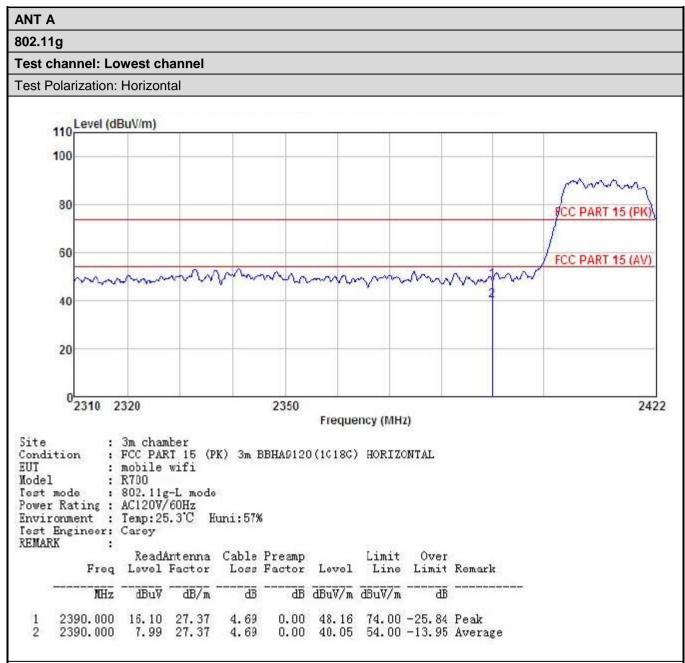




- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





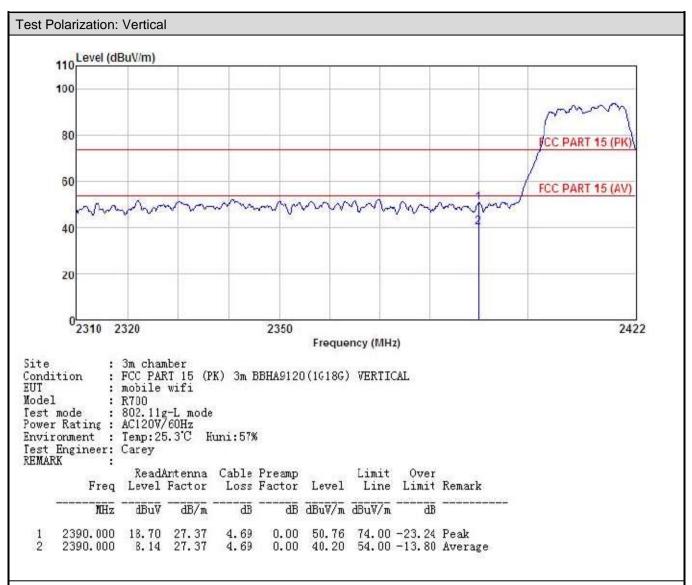


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





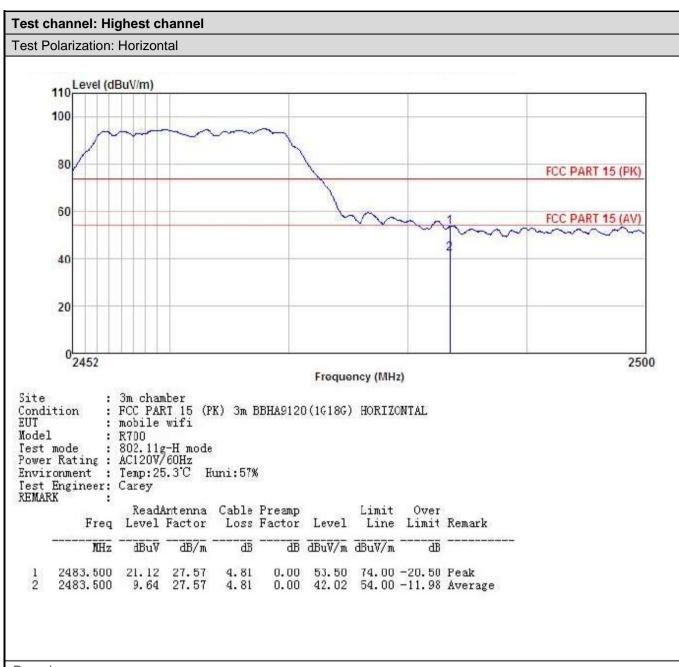


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





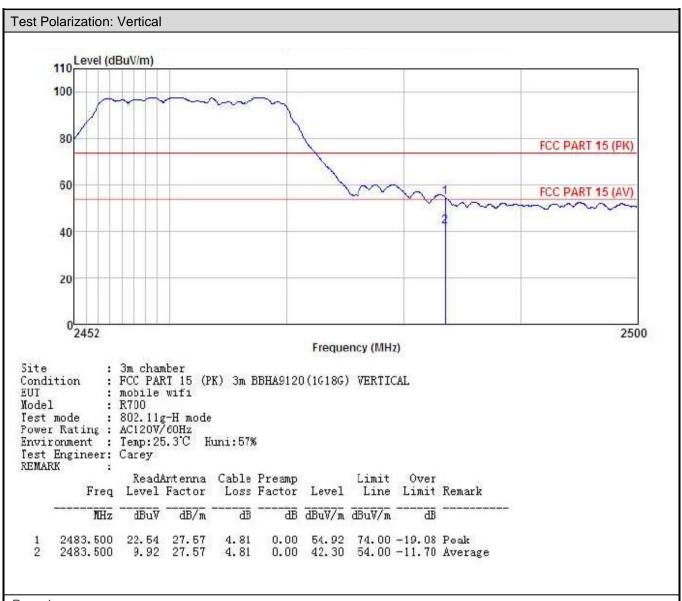


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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







- 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.





ANT B 802.11b Test channel: Lowest channel Test Polarization: Horizontal 110 Level (dBuV/m) 100 80 FC PART 15 (P 60 PCC PART 15 (AV) 40 20 0²³¹⁰ 2320 2350 2422 Frequency (MHz) : 3m chamber Site : FCC PART 15 (PK) 3m BBHA9120(1G18G) HORIZONTAL Condition EUT : mobile wifi : R700A Model Test mode : 802.11b-L mode Power Rating : AC120V/60Hz Environment : Temp: 25.3°C Huni: 57% Test Engineer: Carey REMARK ReadAntenna Cable Preamp Limit Over Freq Level Factor Loss Factor Level Line Limit Remark MHz dBuV dB/m dB dB dBuV/m dBuV/m dB 4.69 2390.000 19.40 27.37 0.00 51.46 74.00 -22.54 Peak 2390.000 8.02 27.37 4.69 0.00 40.08 54.00 -13.92 Average

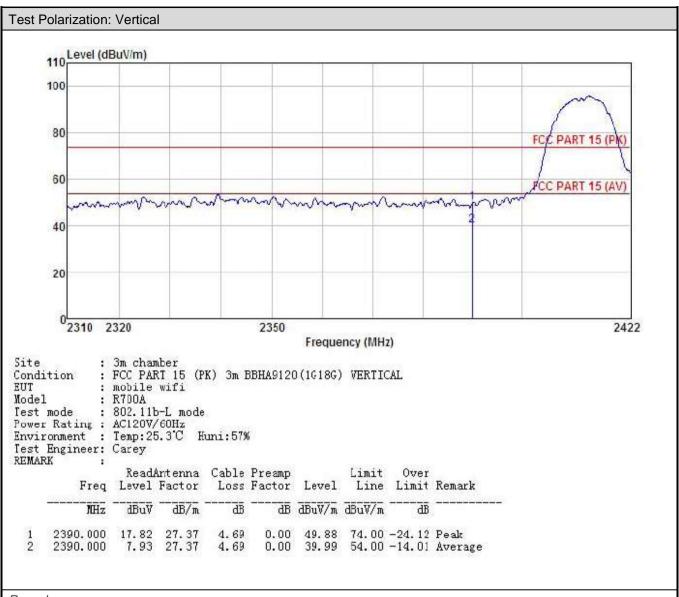
Remark:

3. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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



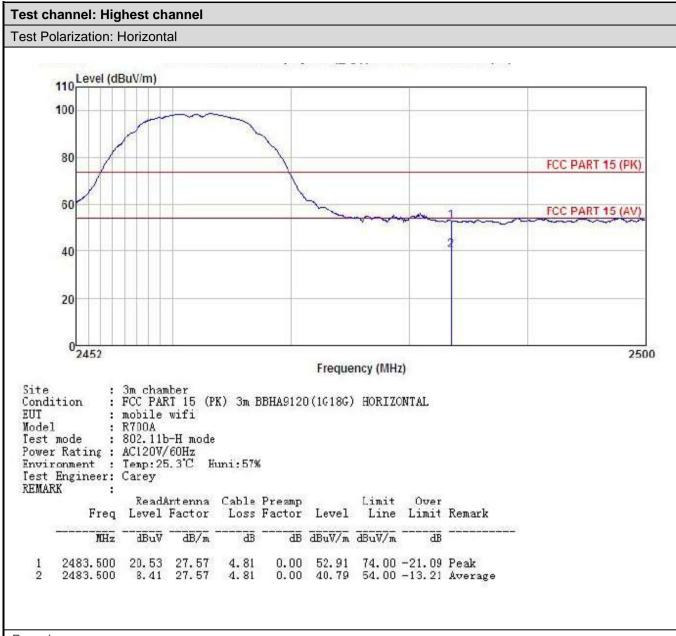




- 3. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.





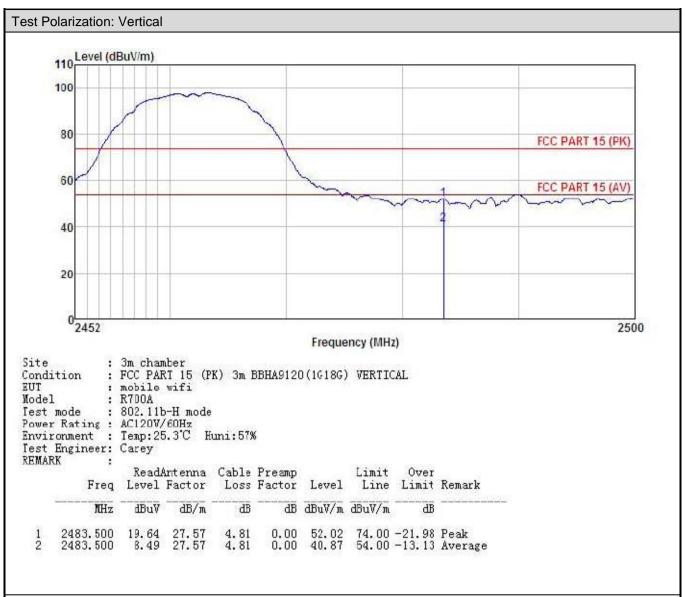


3. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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







5. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





ANT B 802.11g Test channel: Lowest channel Test Polarization: Horizontal 110 Level (dBuV/m) 100 80 CC PART 15 (PK) 60 FCC PART 15 (AV) 40 20 2310 2320 2350 2422 Frequency (MHz) : 3m chamber Site : FCC PART 15 (PK) 3m BBHA9120(1G18G) HORIZONTAL Condition EUT : mobile wifi Model : R700A Test mode : 802.11g-L mode Power Rating : AC120V/60Hz Environment : Temp:25.3°C Huni:57% Test Engineer: Carey REMARK ReadAntenna Cable Preamp Limit Over Loss Factor Level Freq Level Factor Line Limit Remark MHz dBuV dB/m dB dB dBuV/m dBuV/m 4.69 0.00 49.50 74.00 -24.50 Peak 2390.000 17.44 27.37 8.13 27.37 2390.000 4.69 0.00 40.19 54.00 -13.81 Average

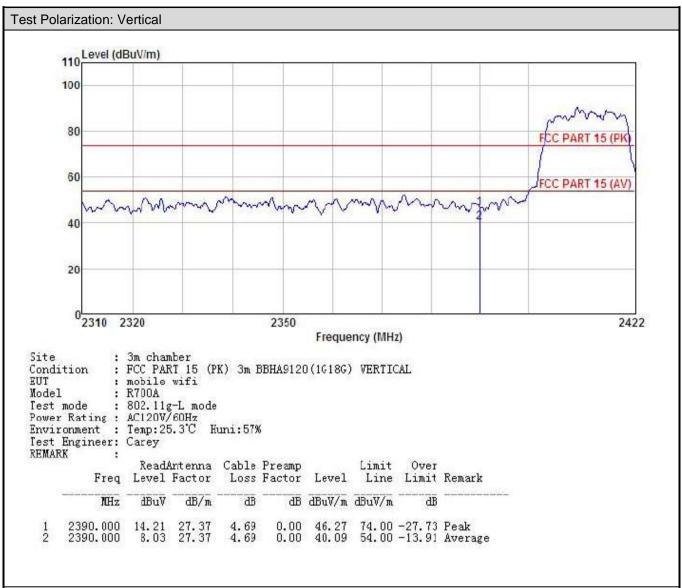
Remark:

5. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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



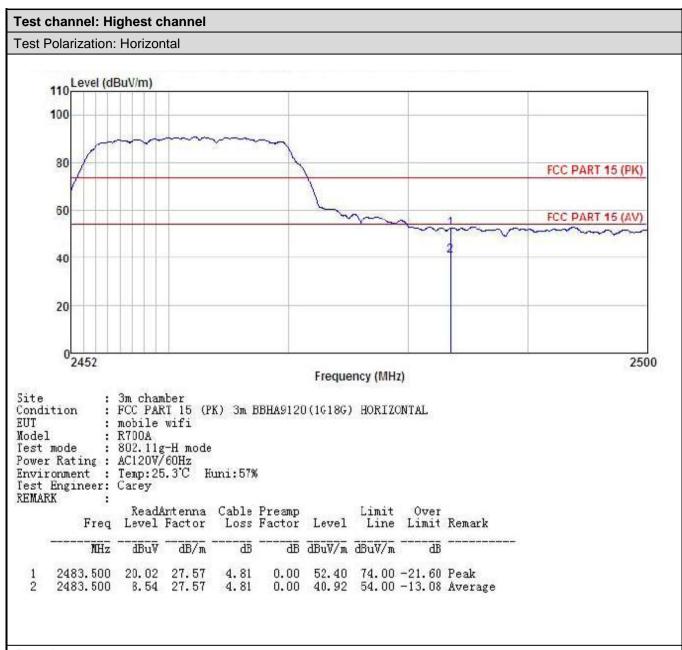




- 7. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 8. The emission levels of other frequencies are very lower than the limit and not show in test report.





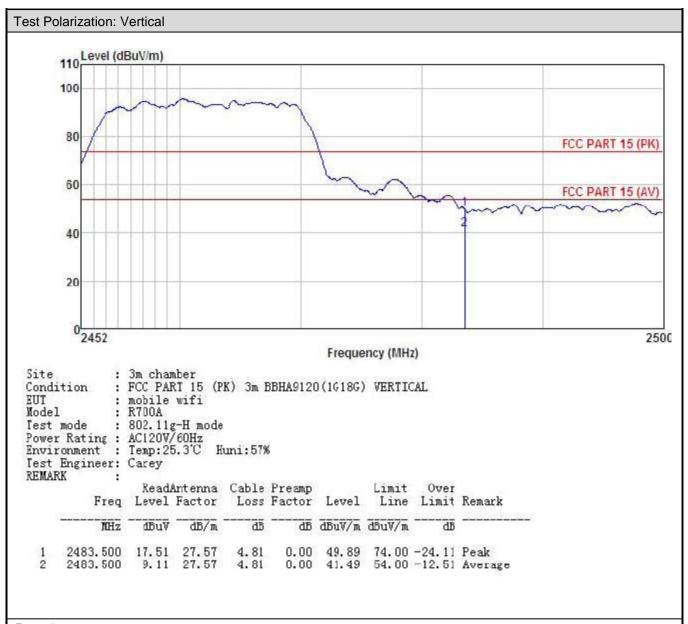


5. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





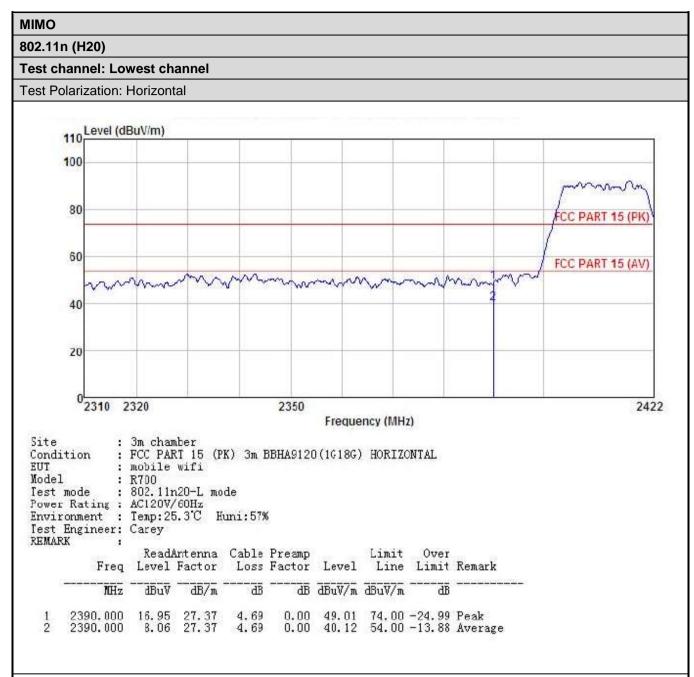


9. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





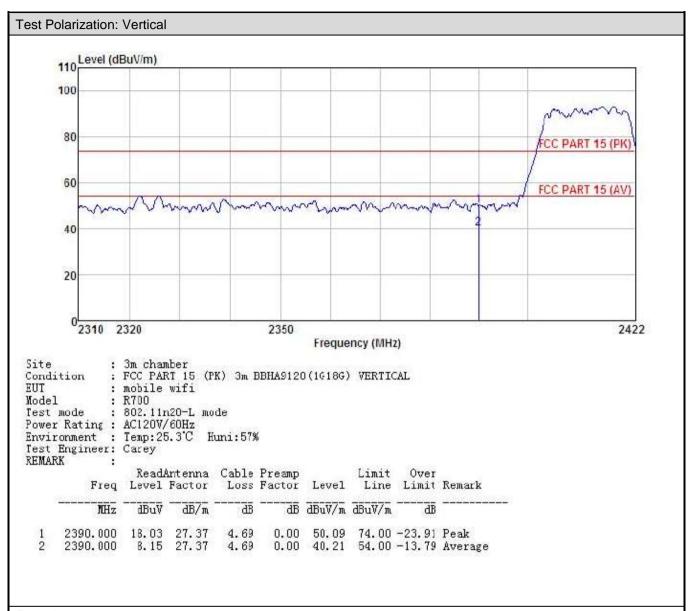


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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



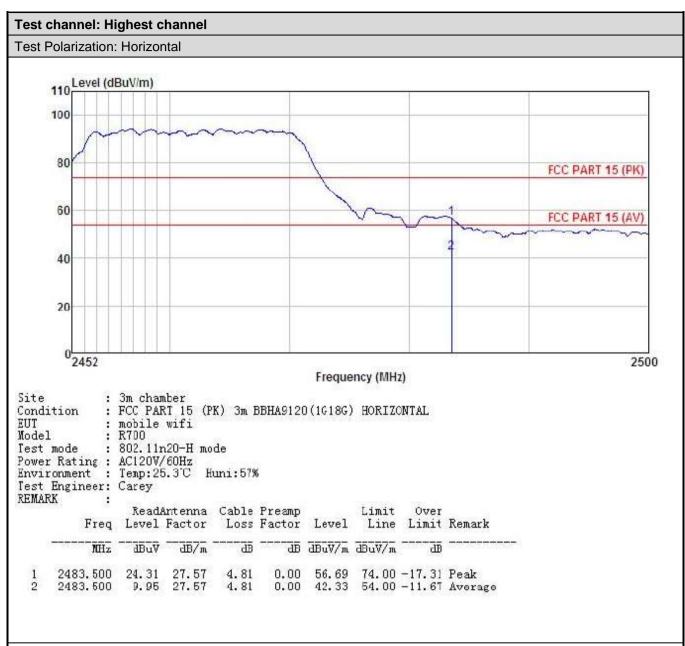




- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





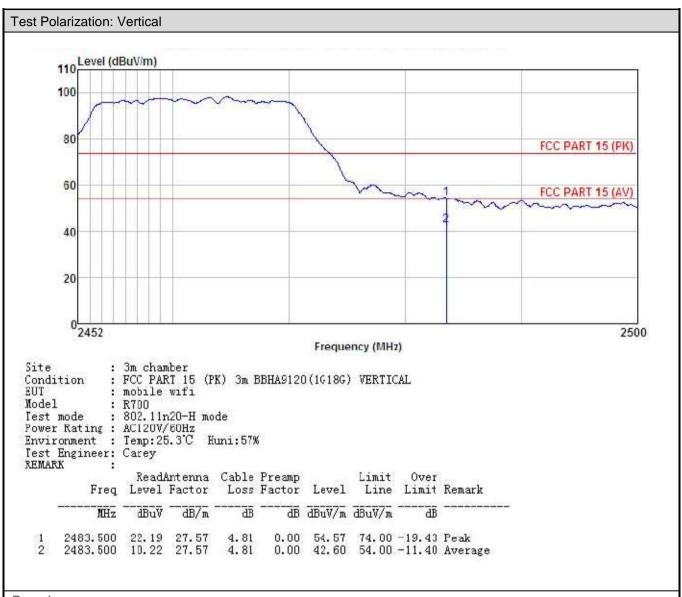


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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



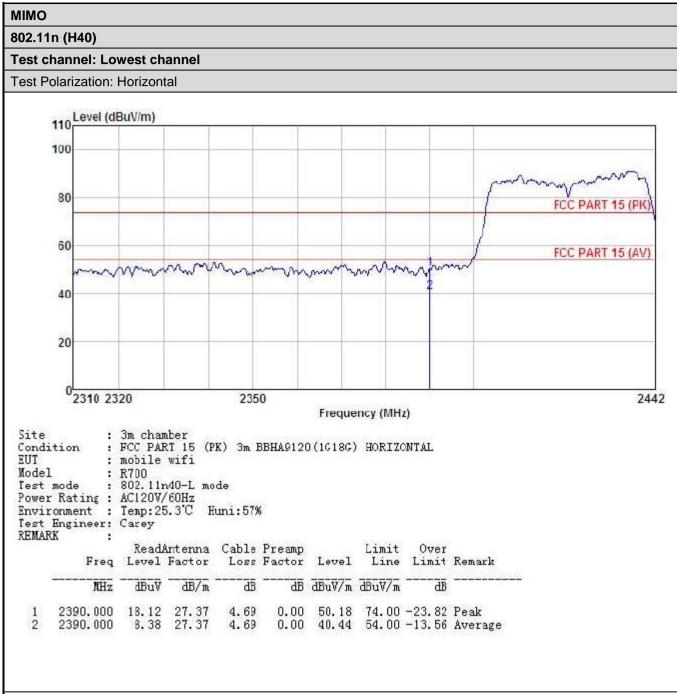




- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



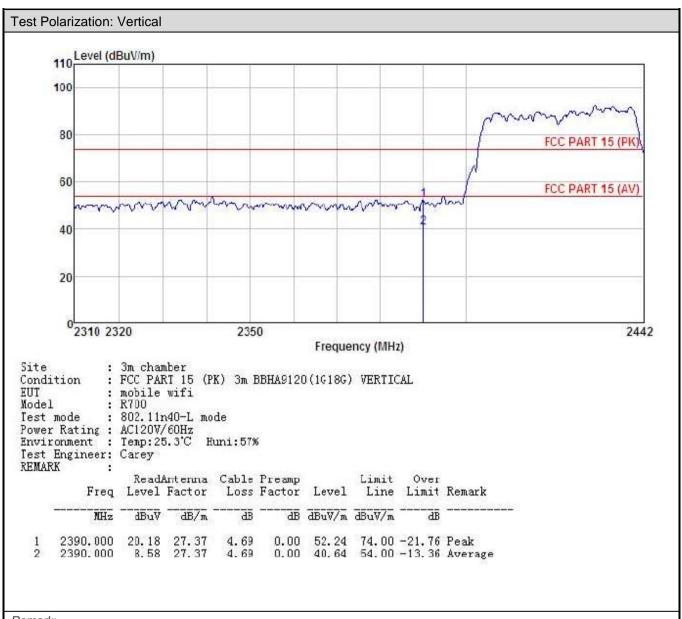




- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



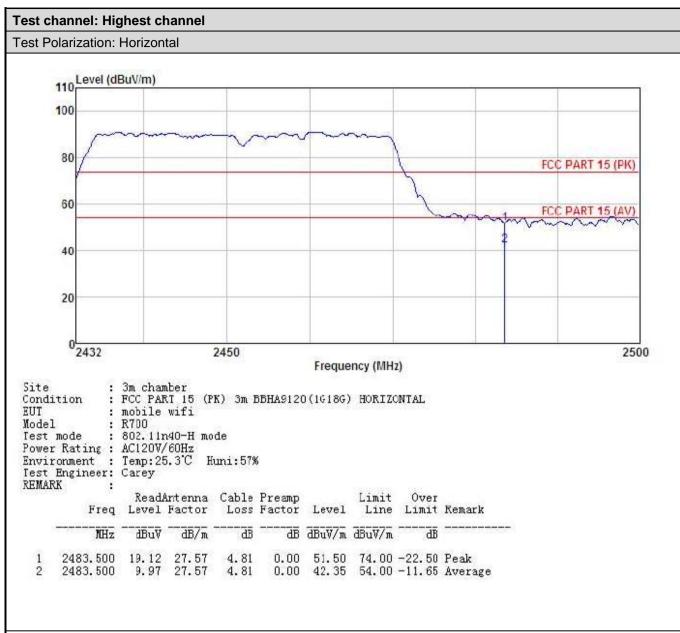




- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



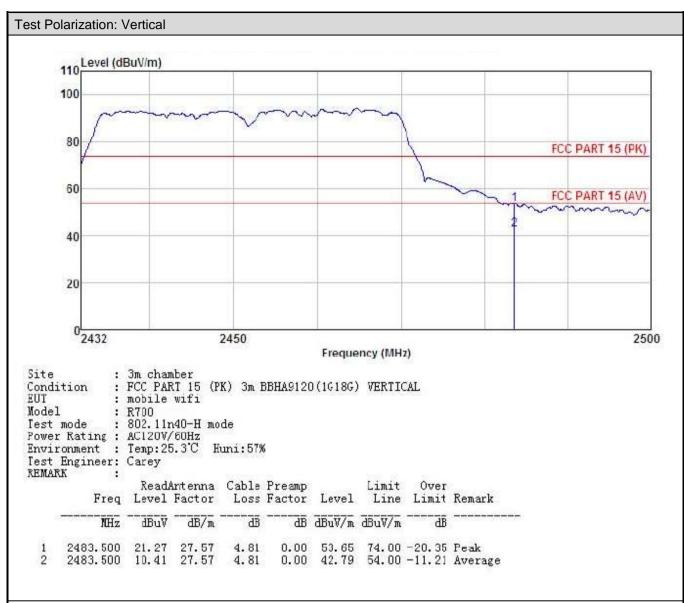




- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.







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.



6.7 Spurious Emission

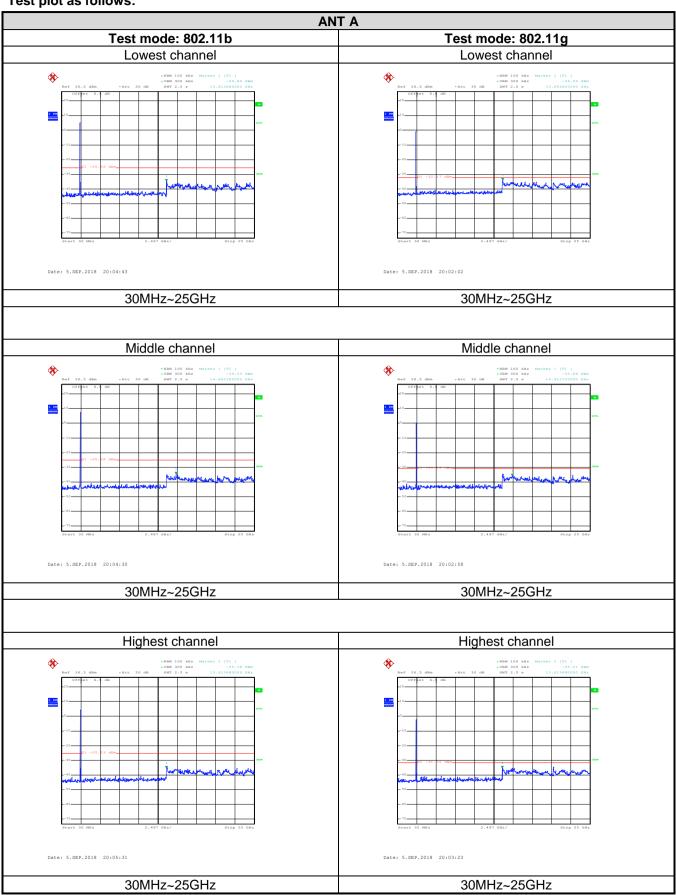
6.7.1 Conducted Emission Method

<u> </u>	Odnadeted Ennission								
	Test Requirement:	FCC Part 15 C Section 15.247 (d)							
	Test Method:	ANSI C63.10:2013 and KDB 558074							
	Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph(b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.							
	Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane							
	Test Instruments:	Refer to section 5.8 for details							
	Test mode:	Refer to section 5.3 for details							
	Test results:	Passed							



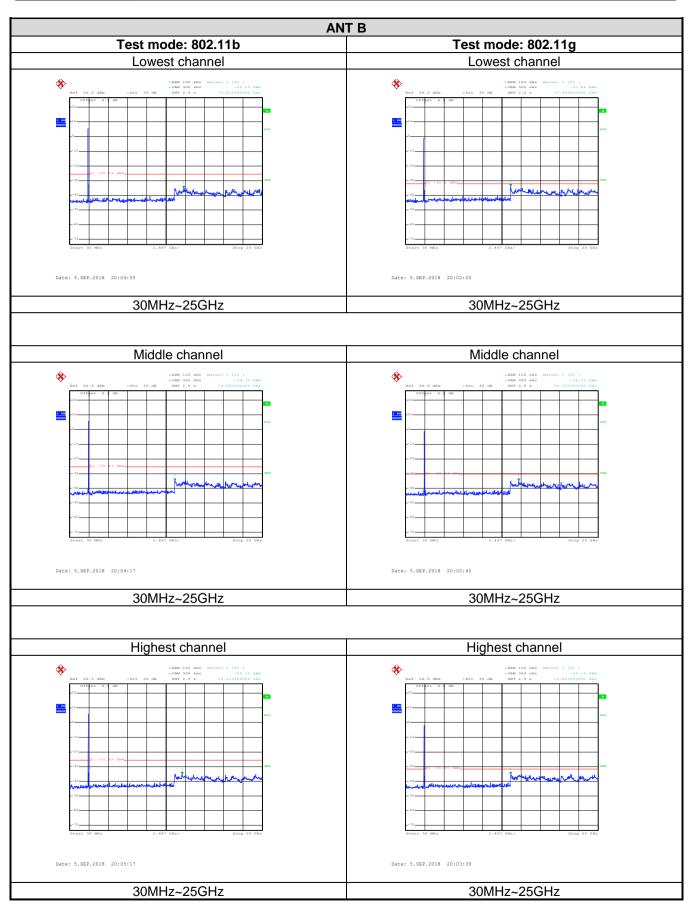


Test plot as follows:



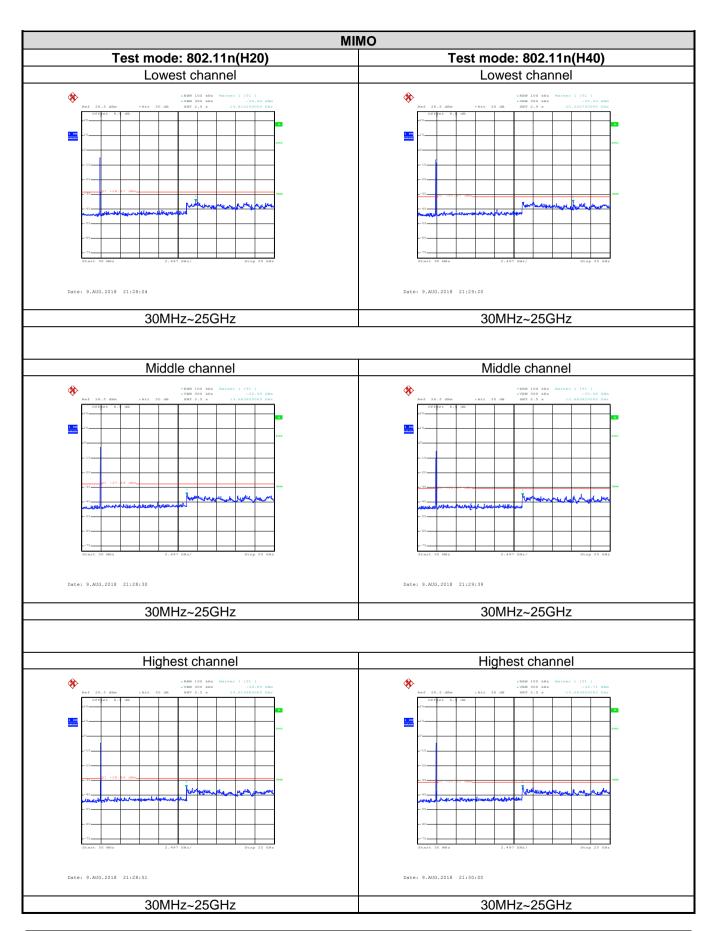
















6.7.2 Radiated Emission Method

6.7.2	Radiated Emission Me	ethod								
	Test Requirement:	FCC Part 15 C Section 15.209 and 15.205								
	Test Method:	ANSI C63.10:201	3							
	Test Frequency Range:	9kHz to 25GHz								
	Test Distance:	3m	3m							
	Receiver setup:	Frequency	Detector		RBW	VI	3W	Remark		
	•	30MHz-1GHz	Quasi-pe	eak	120KHz	300	KHz	Quasi-peak Value		
		Above 1GHz	Peak				/IHz	Peak Value		
	1 to the		RMS		1MHz : (dBuV/m @3r		/lHz	Average Value Remark		
	Limit:	Frequency 30MHz-88MH	7	LIIIIII	. <u>(аваулп @зг</u> 40.0	11)	Oı	uasi-peak Value		
		88MHz-216MH			43.5			uasi-peak Value		
		216MHz-960MI			46.0			uasi-peak Value		
		960MHz-1GH			54.0			uasi-peak Value		
		Above 1GHz			54.0		I	Average Value		
	Test Procedure:				74.0			Peak Value		
		 The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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, quasipeak or average method as specified and then reported in a data 								
	Test setup:	Below 1GHz EUT Turn Table Ground P	0.8m	4m			_			





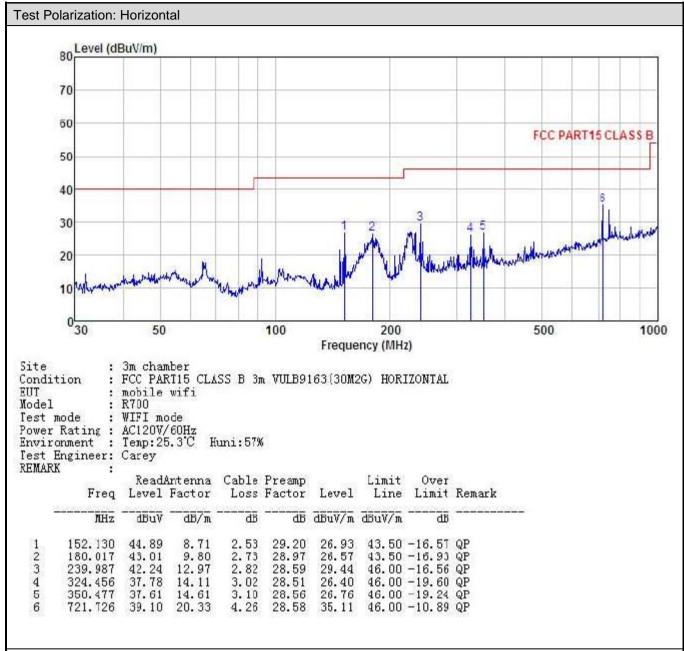
	Above 1GHz
	Harn Antenna Tower Ground Reference Plane Test Receiver Amplier Controller
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	 Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case. 9 kHz to 30MHz is too low, so only shows the data of above 30MHz in this report.





Measurement Data (worst case):

Below 1GHz:



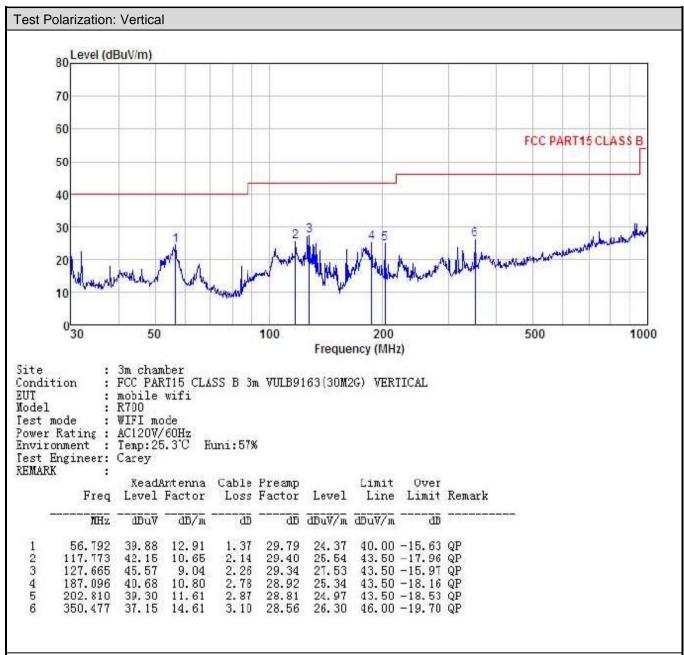
Remark:

^{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.







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.





Above 1GHz

Read Level (dBuV)	Antenna Factor	De	ANT A 802.11b annel: Lowe	est channel			
Level (dBuV)		De	annel: Lowe	est channel			
Level (dBuV)		De		est channel			
Level (dBuV)			to ata Decil				
Level (dBuV)		Calala	tector: Peak	Value			
40.07	(dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
48.07	36.06	6.81	41.82	49.12	74.00	-24.88	Vertical
47.74	36.06	6.81	41.82	48.79	74.00	-25.21	Horizontal
		Dete	ctor: Averag	je Value			
Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
38.91	36.06	6.81	41.82	39.96	54.00	-14.04	Vertical
37.96	36.06	6.81	41.82	39.01	54.00	-14.99	Horizontal
				Value			
Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
44.68	36.32	6.85	41.84	46.01	74.00	-27.99	Vertical
45.64	36.32	6.85	41.84	46.97	74.00	-27.03	Horizontal
		Dete	ctor: Averag	je Value			
Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
34.89	36.32	6.85	41.84	36.22	54.00	-17.78	Vertical
35.47	36.32	6.85	41.84	36.80	54.00	-17.20	Horizontal
		Test ch	annel: Highe	est channel			
		De	tector: Peak	Value			
Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
45.94	36.58	6.89	41.86	47.55	74.00	-26.45	Vertical
46.09	36.58	6.89	41.86	47.70	74.00	-26.30	Horizontal
		Dete	ctor: Averag	je Value			
Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
35.34	36.58	6.89	41.86	36.95	54.00	-17.05	Vertical
36.81	36.58	6.89	41.86	38.42	54.00	-15.58	Horizontal
	Read Level (dBuV) 34.68 45.64 Read Level (dBuV) 34.89 35.47 Read Level (dBuV) 34.89 35.47	Level (dBuV) Factor (dB/m) 38.91 36.06 37.96 36.06 37.96 36.06 Read Antenna Level (dB/m) 44.68 36.32 Read Antenna Level (dB/m) 34.89 36.32 35.47 36.32 Read Antenna Level (dB/m) 45.94 46.09 36.58 Read Antenna Level (dB/m) 45.94 36.58 Read Antenna Level (dB/m) 45.94 36.58 Read Antenna Level (dB/m) 35.34 36.58	Read Level Antenna Factor (dBuV) Cable Loss (dBuV) 38.91 36.06 6.81 37.96 36.06 6.81 Test ch Der Read Antenna Level Factor (dBuV) (dB/m) (dB) 44.68 36.32 6.85 45.64 36.32 6.85 Dete Factor Loss (dBuV) (dB/m) (dB) 34.89 36.32 6.85 35.47 36.32 6.85 Test character Loss (dBuV) (dB/m) (dB) 45.94 36.58 6.89 Dete Read Level Factor Loss (dBuV) (dB/m) (dB) Cable Loss (dBuV) (dB/m) (dB) 45.94 36.58 6.89 Dete Read Antenna Level Factor Loss (dBuV) (dB/m) (dB) 35.34 36.58 6.89	Read Level Level Factor (dBuV) Antenna Factor (dB/m) Cable Loss Factor (dB) Preamp Factor (dB) 38.91 36.06 6.81 41.82 37.96 36.06 6.81 41.82 Test channel: Midd Detector: Peak Read Antenna Level Factor (dBwV) Cable Preamp Factor (dB) (dBw) (dB) (dB) 44.68 36.32 6.85 41.84 Detector: Average Read Antenna Level Factor (dBwV) Cable Preamp Factor (dB) (dB) (dB) (dBw) 36.32 6.85 41.84 41.84 Test channel: Highe Detector: Peak Read Antenna Level Factor (dBwV) Cable Preamp Factor (dBw) Factor (dB) (dB) (dB) 46.09 36.58 6.89 41.86 41.86 Detector: Average Read Antenna Level Factor Loss Factor (dBw) Cable Preamp Factor Loss Factor (dBw) Cable Preamp Factor Factor Gallow Cable Preamp Factor Factor Gallow Cable Preamp Factor Factor Gallow Antenna Cable Factor Factor Gallow Cable Preamp Factor Factor Gallow Antenna Cable Factor Factor Factor Gallow Cable Factor Factor Factor F	Level (dBuV) (dB/m) (dB) (dB) (dB) (dBuV/m)	Read Level (dBuV) (dB/m) (dB) (dB) (dB) (dBuV/m) Level (dBuV/m) (dB/m) (dB) (dB) (dB) (dBuV/m) Level (dBuV/m) (dBuV/m) 38.91 36.06 6.81 41.82 39.96 54.00 37.96 36.06 6.81 41.82 39.01 54.00	Read Level (dBW) (dB)

Remark:

Bao'an District, Shenzhen, Guangdong, China Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366

^{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.





				ANT A								
802.11g												
	Test channel: Lowest channel											
Detector: Peak Value												
Read Antenna Cable Preamn												
Frequency (MHz)	Level (dBuV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4824.00	46.49	36.06	6.81	41.82	47.54	74.00	-26.46	Vertical				
4824.00	46.86	36.06	6.81	41.82	47.91	74.00	-26.09	Horizontal				
			Dete	ctor: Averag	e 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	36.41	36.06	6.81	41.82	37.46	54.00	-16.54	Vertical				
4824.00	36.25	36.06	6.81	41.82	37.30	54.00	-16.70	Horizontal				
			Tost ch	annel: Midd	lo channol							
				tector: Peak								
	Read	Antenna	Cable	Preamp	value							
Frequency (MHz)	Level (dBuV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4874.00	47.41	36.32	6.85	41.84	48.74	74.00	-25.26	Vertical				
4874.00	47.89	36.32	6.85	41.84	49.22	74.00	-24.78	Horizontal				
			Dete	ctor: Averaç	ge 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	36.55	36.32	6.85	41.84	37.88	54.00	-16.12	Vertical				
4874.00	36.35	36.32	6.85	41.84	37.68	54.00	-16.32	Horizontal				
			Test ch	annel: Highe	est channel							
			De	tector: 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	46.89	36.58	6.89	41.86	48.50	74.00	-25.50	Vertical				
4924.00	46.31	36.58	6.89	41.86	47.92	74.00	-26.08	Horizontal				
			Dete	ctor: Averaç	ge 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	36.51	36.58	6.89	41.86	38.12	54.00	-15.88	Vertical				
4924.00 Remark:	36.16	36.58	6.89	41.86	37.77	54.00	-16.23	Horizontal				

^{1.} Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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





				ANT B							
802.11b											
Test channel: Lowest channel											
Detector: 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	47.92	36.06	6.81	41.82	48.97	74.00	-25.03	Vertical			
4824.00	47.25	36.06	6.81	41.82	48.30	74.00	-25.70	Horizontal			
			Dete	ctor: Averaç	ge Value		T				
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	37.36	36.06	6.81	41.82	38.41	54.00	-15.59	Vertical			
4824.00	37.22	36.06	6.81	41.82	38.27	54.00	-15.73	Horizontal			
			Toot ob	annel: Mido	lla abannal						
				tector: Peak							
	Read	Antenna	Cable	Preamp	value						
Frequency (MHz)	Level (dBuV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
4874.00	46.26	36.32	6.85	41.84	47.59	74.00	-26.41	Vertical			
4874.00	46.21	36.32	6.85	41.84	47.54	74.00	-26.46	Horizontal			
			Dete	ctor: Averaç	ge 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	36.52	36.32	6.85	41.84	37.85	54.00	-16.15	Vertical			
4874.00	36.15	36.32	6.85	41.84	37.48	54.00	-16.52	Horizontal			
				annel: Highe							
		1		tector: Peak	Value		T				
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	44.83	36.58	6.89	41.86	46.44	74.00	-27.56	Vertical			
4924.00	45.28	36.58	6.89	41.86	46.89	74.00	-27.11	Horizontal			
			Dete	ctor: Averaç	ge 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	33.58	36.58	6.89	41.86	35.19	54.00	-18.81	Vertical			
4924.00 Remark:	34.04	36.58	6.89	41.86	35.65	54.00	-18.35	Horizontal			

Shenzhen Zhongjian Nanfang Testing Co., Ltd. No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

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

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

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366





				ANT B							
802.11g											
Test channel: Lowest channel											
	Detector: 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	46.25	36.06	6.81	41.82	47.30	74.00	-26.70	Vertical			
4824.00	46.93	36.06	6.81	41.82	47.98	74.00	-26.02	Horizontal			
			Dete	ctor: Averaç	je 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	36.24	36.06	6.81	41.82	37.29	54.00	-16.71	Vertical			
4824.00	36.57	36.06	6.81	41.82	37.62	54.00	-16.38	Horizontal			
	Test channel: Middle channel										
			De	tector: 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	47.22	36.32	6.85	41.84	48.55	74.00	-25.45	Vertical			
4874.00	47.38	36.32	6.85	41.84	48.71	74.00	-25.29	Horizontal			
			Dete	ctor: Averaç	ge 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	37.24	36.32	6.85	41.84	38.57	54.00	-15.43	Vertical			
4874.00	37.22	36.32	6.85	41.84	38.55	54.00	-15.45	Horizontal			
	Test channel: Highest channel Detector: 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	47.05	36.58	6.89	41.86	48.66	74.00	-25.34	Vertical			
4924.00	47.16	36.58	6.89	41.86	48.77	74.00	-25.23	Horizontal			
			Dete	ctor: Averaç	ge 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			
4004.00	36.82	36.58	6.89	41.86	38.43	54.00	-15.57	Vertical			
4924.00		-									

^{3.} Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

^{4.} The emission levels of other frequencies are very lower than the limit and not show in test report.





				MIMO								
802.11n(HT20)												
	Test channel: Lowest channel											
Detector: 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	46.80	36.06	6.81	41.82	47.85	74.00	-26.15	Vertical				
4824.00	46.24	36.06	6.81	41.82	47.29	74.00	-26.71	Horizontal				
			Dete	ctor: Averaç	ge 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	36.24	36.06	6.81	41.82	37.29	54.00	-16.71	Vertical				
4824.00	36.51	36.06	6.81	41.82	37.56	54.00	-16.44	Horizontal				
				annel: Mido								
				tector: Peak	Value		T .					
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	46.24	36.32	6.85	41.84	47.57	74.00	-26.43	Vertical				
4874.00	46.51	36.32	6.85	41.84	47.84	74.00	-26.16	Horizontal				
			Dete	ctor: Averaç	ge 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	36.04	36.32	6.85	41.84	37.37	54.00	-16.63	Vertical				
4874.00	36.13	36.32	6.85	41.84	37.46	54.00	-16.54	Horizontal				
			Test ch	annel: Highe	est channel							
			De	tector: 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	46.94	36.58	6.89	41.86	48.55	74.00	-25.45	Vertical				
4924.00	46.61	36.58	6.89	41.86	48.22	74.00	-25.78	Horizontal				
			Dete	ctor: Averaç	ge 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	36.80	36.58	6.89	41.86	38.41	54.00	-15.59	Vertical				
4924.00	36.24	36.58	6.89	41.86	37.85	54.00	-16.15	Horizontal				
Remark:												

^{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.









				MIMO							
802.11n(HT40)											
Test channel: Lowest channel											
	Detector: 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	46.82	36.06	6.81	41.82	47.87	74.00	-26.13	Vertical			
4844.00	46.68	36.06	6.81	41.82	47.73	74.00	-26.27	Horizontal			
			Dete	ctor: Averag	ge 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	36.52	36.06	6.81	41.82	37.57	54.00	-16.43	Vertical			
4844.00	36.24	36.06	6.81	41.82	37.29	54.00	-16.71	Horizontal			
			Test ch	annel: Midd	lle channel						
				tector: Peak							
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	46.49	36.32	6.85	41.84	47.82	74.00	-26.18	Vertical			
4874.00	46.92	36.32	6.85	41.84	48.25	74.00	-25.75	Horizontal			
			Dete	ctor: Averag	ge 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	36.18	36.32	6.85	41.84	37.51	54.00	-16.49	Vertical			
4874.00	36.32	36.32	6.85	41.84	37.65	54.00	-16.35	Horizontal			
			Test ch	annel: Highe	est channel						
			De	tector: 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	46.81	36.45	6.87	41.85	48.28	74.00	-25.72	Vertical			
4904.00	46.26	36.45	6.87	41.85	47.73	74.00	-26.27	Horizontal			
			Dete	ctor: Averaç	ge 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	36.27	36.45	6.87	41.85	37.74	54.00	-16.26	Vertical			
4904.00	36.93	36.45	6.87	41.85	38.40	54.00	-15.60	Horizontal			
Remark:											

^{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.