

Report No: CCISE170807403

FCC REPORT

(WIFI)

Applicant: Interglobe Connection Corp

Address of Applicant: 8228 NW 30th Terrace. Doral, Miami, FL 33122

Equipment Under Test (EUT)

Product Name: Mobile Phone

Model No.: Omega Q47

Trade mark: EKO

FCC ID: 2AC7IEKOOQ47

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

Date of sample receipt: 28 Jun., 2017

Date of Test: 29 Jun., to 11 Jul., 2017

Date of report issued: 12 Jul., 2017

Test Result: PASS*

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.

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





2 Version

Version No.	Date	Description
00	12 Jul., 2017	Original

Tested by:

Zora Lee Date: 12 Jul., 2017

Test Engineer

Reviewed by: Date: 12 Jul., 2017

Project Engineer



3 Contents

			Page
1	COV	/ER PAGE	1
2	VER	SION	2
3	CON	ITENTS	3
4	TES	T SUMMARY	4
5	GEN	IERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2	GENERAL DESCRIPTION OF E.U.T.	
	5.3	TEST ENVIRONMENT AND MODE	
	5.4	MEASUREMENT UNCERTAINTY	
	5.5	LABORATORY FACILITY	
	5.6	LABORATORY LOCATION	
	5.7	TEST INSTRUMENTS LIST	
6	TES	T RESULTS AND MEASUREMENT DATA	9
	6.1	ANTENNA REQUIREMENT	9
	6.2	CONDUCTED EMISSION	
	6.3	CONDUCTED OUTPUT POWER	
	6.4	OCCUPY BANDWIDTH	
	6.5	Power Spectral Density	24
	6.6	BAND EDGE	28
	6.6.1	Conducted Emission Method	28
	6.6.2	Radiated Emission Method	31
	6.7	Spurious Emission	
	6.7.1		
	6.7.2	Radiated Emission Method	48
7	TES	T SETUP PHOTO	55
8	EUT	CONSTRUCTIONAL DETAILS	56





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
Conducted Peak Output Power	15.247 (b)(3)	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Pass
Power Spectral Density	15.247 (e)	Pass
Band Edge	15.247(d)	Pass
Conducted and Radiated Spurious Emission	15.205/15.209	Pass

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





5 General Information

5.1 Client Information

Applicant:	Interglobe Connection Corp		
Address of Applicant:	8228 NW 30th Terrace. Doral, Miami, FL 33122		
Manufacturer/Factory:	Interglobe Connection Limited		
Address of Manufacturer/Factory:	UNIT 1302(A),13/F,PROSPERITY COMMERCIAL CENTRE,982 CANTON ROAD,MONGKOK,KOWLOON,HONG KONG		

5.2 General Description of E.U.T.

Product Name:	Mobile Phone	
Model No.:	Omega Q47	
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))	
Channel numbers:	11 for 802.11b/802.11g/802.11(H20)	
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 72.Mbps	
Antenna Type:	Internal Antenna	
Antenna gain:	-3.0 dBi	
Power supply:	Rechargeable Li-ion Battery DC3.8V-1850mAh	
AC adapter: Model: 853-5010 Input: AC100-240V, 50/60Hz, 0.15A Output: DC 5.0V, 1.0A		





Operation Frequency each of channel For 802.11b/g/n(H20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	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:

802.11b/802.11g/802.11n (H20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz



5.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Operation 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 in lowest channel, and found the follow list which it was worst case.				
Mode	Data rate			
802.11b	1Mbps			

802.11b	1Mbps	
802.11g	6Mbps	
802.11n(H20)	6.5Mbps	

Final Test Mode:

According to ANSI C63.10 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.

5.4 Measurement Uncertainty

Items	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 30MHz)	2.14 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	4.24 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	4.35 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	4.44 dB (k=2)
Radiated Emission (18GHz ~ 26.5GHz)	4.56 dB (k=2)

5.5 Laboratory Facility

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

• FCC - Registration No.: 817957

Shenzhen Zhongjian Nanfang Testing Co., Ltd. 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 out files. Registration 817957, February 27, 2012.

• 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.

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
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Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366 Page 7 of 56

Report No: CCISE1707403



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5.6 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

5.7 Test Instruments list

Radia	Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
1	3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	07-22-2017	07-22-2020	
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	02-25-2017	02-24-2018	
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	02-25-2017	02-24-2018	
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	02-25-2017	02-24-2018	
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	02-25-2017	02-24-2018	
6	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	02-25-2017	02-24-2018	
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	02-25-2017	02-24-2018	
8	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	02-25-2017	02-24-2018	
9	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	02-25-2017	02-24-2018	
10	Loop antenna	Laplace instrument	RF300	EMC0701	02-25-2017	02-24-2018	
11	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
12	Coaxial Cable	N/A	N/A	CCIS0018	02-25-2017	02-24-2018	
13	Coaxial Cable	N/A	N/A	CCIS0020	02-25-2017	02-24-2018	

Cond	Conducted Emission:								
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)			
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	07-22-2017	07-22-2020			
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	02-25-2017	02-24-2018			
3	LISN	CHASE	MN2050D	CCIS0074	02-25-2017	02-24-2018			
4	Coaxial Cable	CCIS	N/A	CCIS0086	02-25-2017	02-24-2018			
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A			



6 Test results and Measurement Data

6.1 Antenna requirement

Standard requirement: FCC Part 15 C Section 15.203 /247(c)

15.203 requirement:

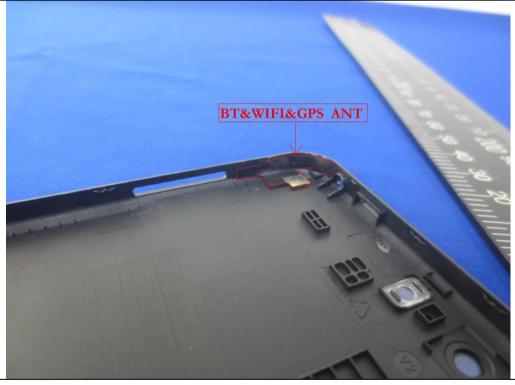
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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 -3.0 dBi.





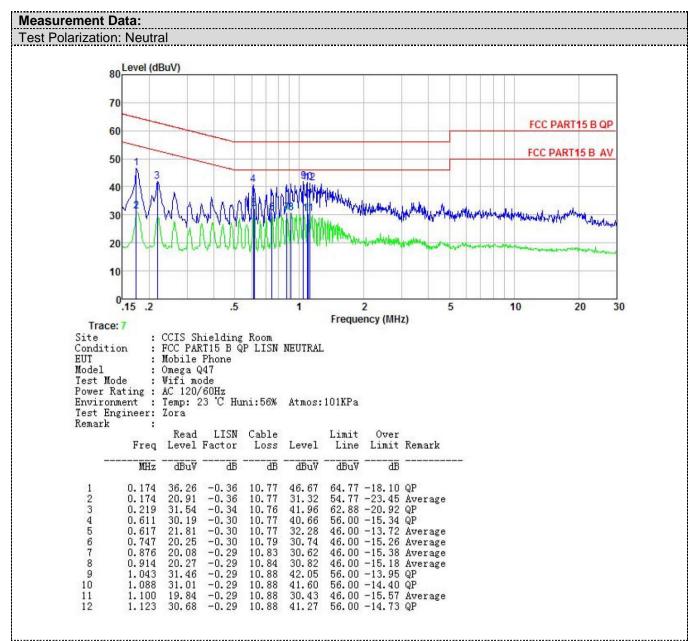


6.2 Conducted Emission

	·					
Test Requirement:	FCC Part 15 C Section 1	5.207				
Test Method:	ANSI C63.10: 2013					
Test Frequency Range:	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)			
Ziiiii.	(MHz)	Average				
	0.15-0.5	66 to 56*	56 to 46*			
	0.5-5	56	46			
	5-30	60	50			
	* Decreases with the log	arithm of the frequency.				
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:		Reference Plane				
	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 5.6 for d	letails				
Test mode:	Refer to section 5.3 for d	letails				
Test results:	Passed					
l est results:	Passed					





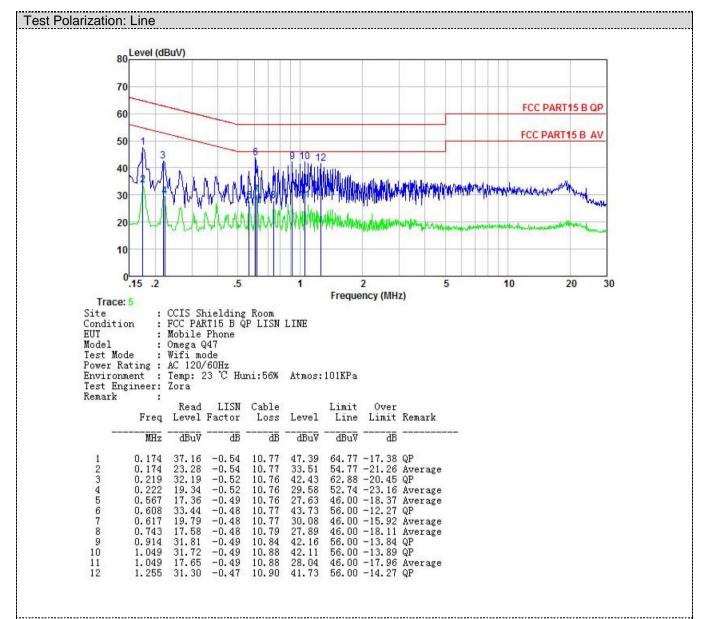


Notes:

- 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.
- 3. 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.
- 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.



6.3 Conducted Output Power

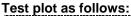
Test Requirement:	FCC Part 15 C Section 15.247 (b)(3)		
Test Method:	ANSI C63.10: 2013 and KDB558074 D01 DTS Meas Guidance v04 section 9.2.2.2		
Limit:	30dBm		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.6 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

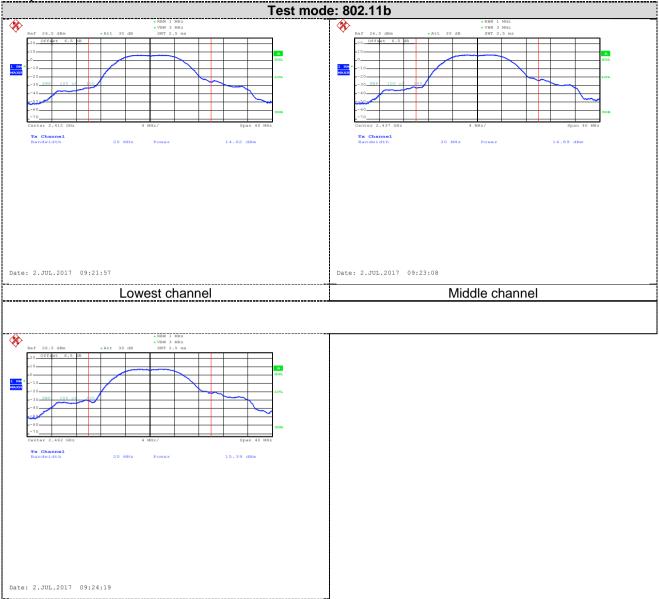
Measurement Data:

Test CH	Maximum	Limit(dBm)	Result		
16St Off	802.11b	Lillit(GBIII)			
Lowest	14.62	13.64	12.29		Pass
Middle	14.89	14.19	12.81	30.00	
Highest	15.39	14.55	13.26		



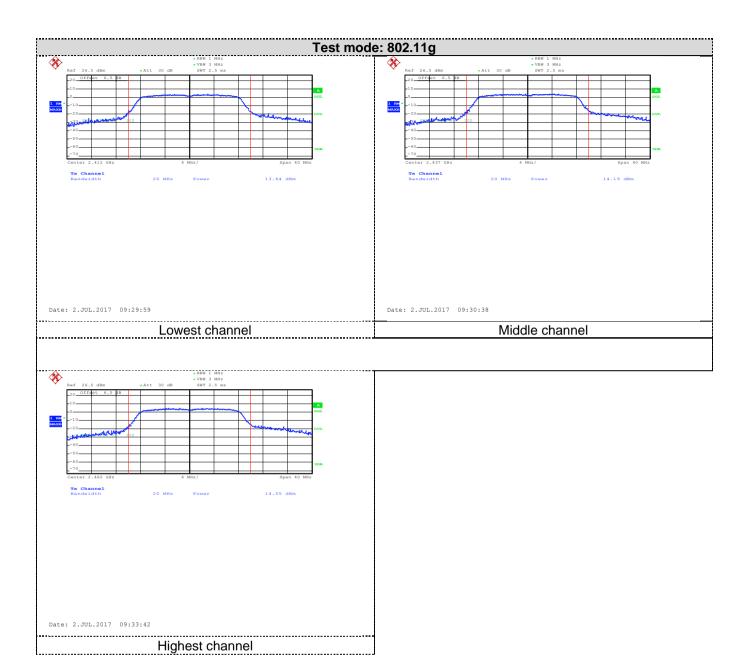




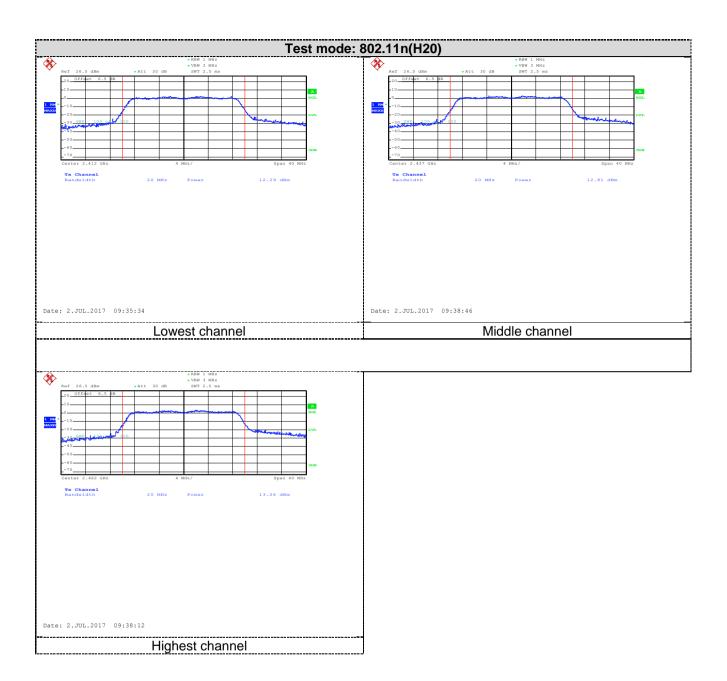


Highest channel













6.4 Occupy Bandwidth

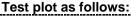
Test Requirement:	FCC Part 15 C Section 15.247 (a)(2)		
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v04 section 8.1		
Limit:	>500kHz		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.6 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

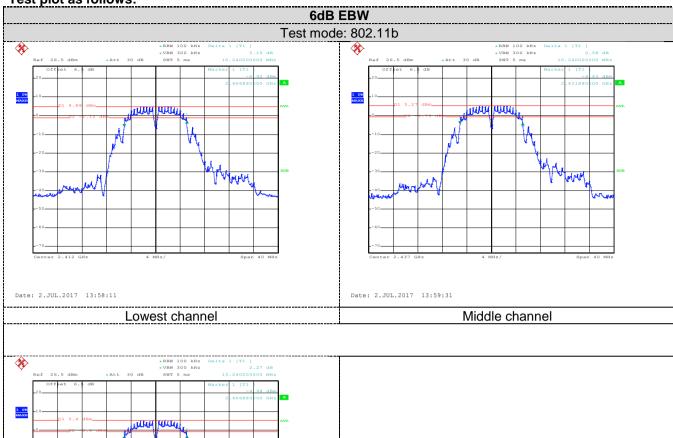
Measurement Data:

Test CH	6dB En	Limit(kHz)	Result			
1631 011	802.11b	802.11g	802.11n(H20)	Liitiit(Ki iz)	rtosuit	
Lowest	10.24	16.48	17.76		Pass	
Middle	10.24	16.48	17.76	>500		
Highest	10.24	16.48	17.76			
Test CH	99% O	Limit(kHz)	Result			
1031 011	802.11b	802.11g	802.11n(H20)	Limit(Kriz)	rtosuit	
Lowest	12.08	16.48	17.68			
Middle	12.16	16.48	17.68	N/A	N/A	
Highest	12.24	16.64	17.68			





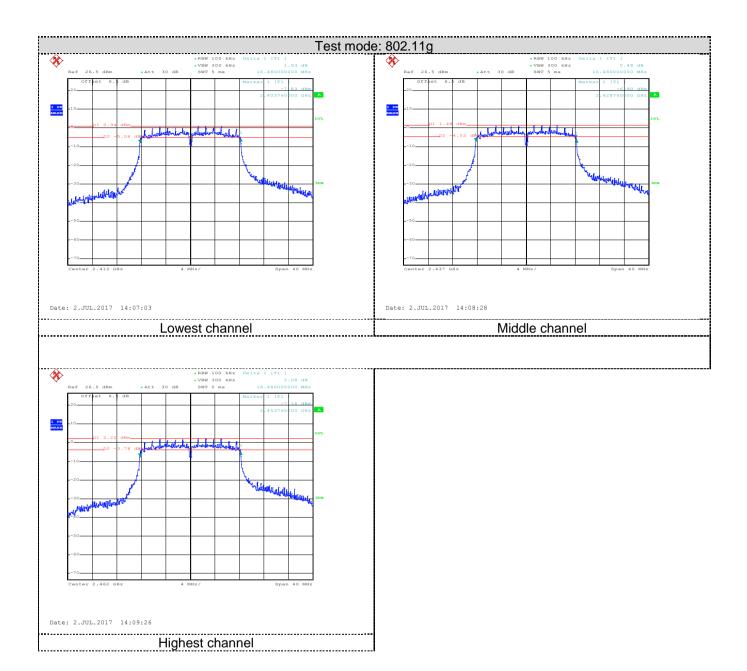






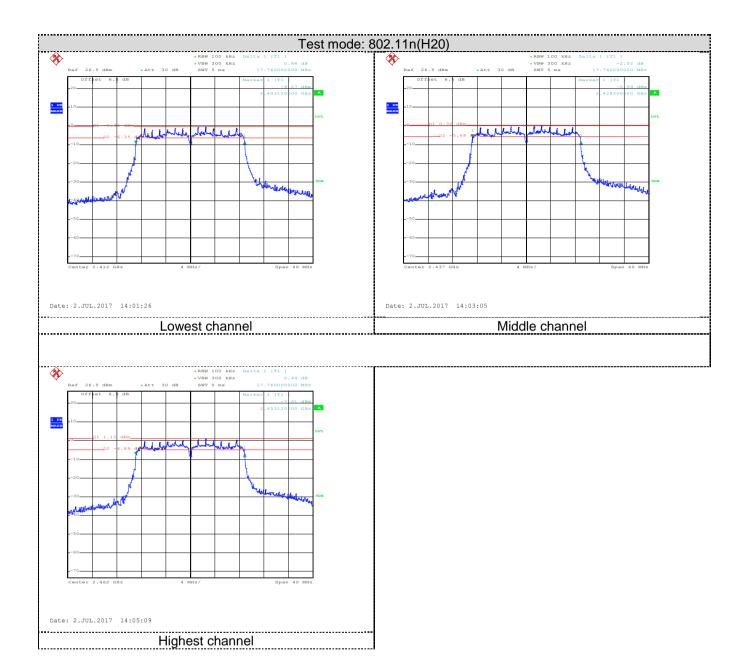






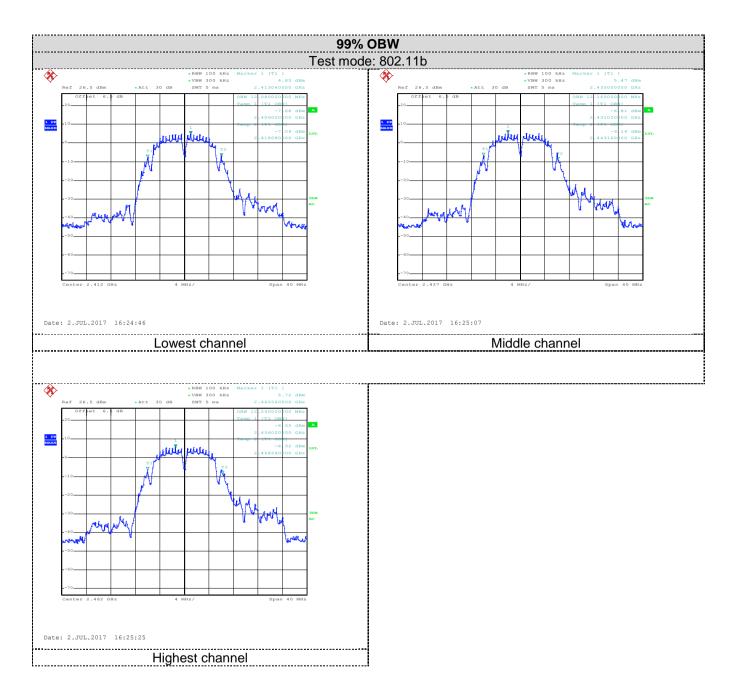






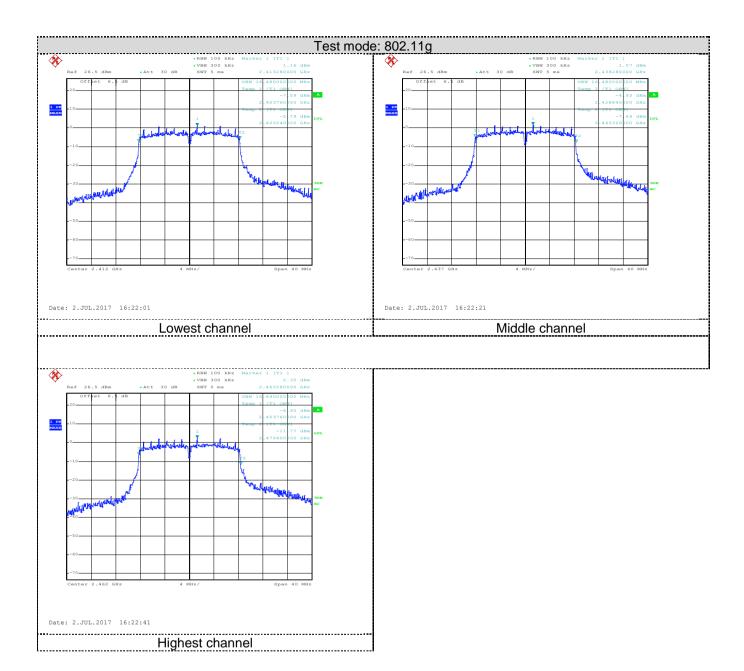






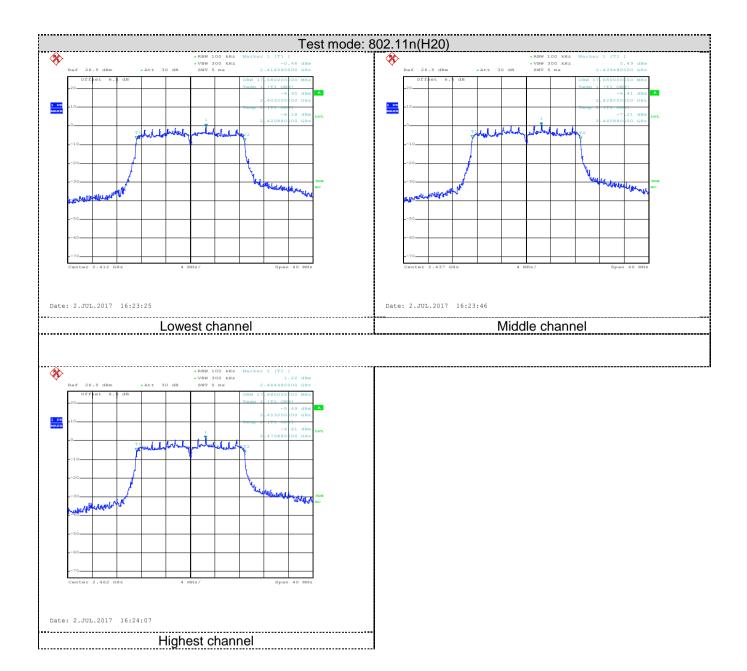














6.5 Power Spectral Density

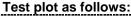
Test Requirement:	FCC Part 15 C Section 15.247 (e)		
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v04 section 10.2		
Limit:	8dBm		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.6 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Passed		

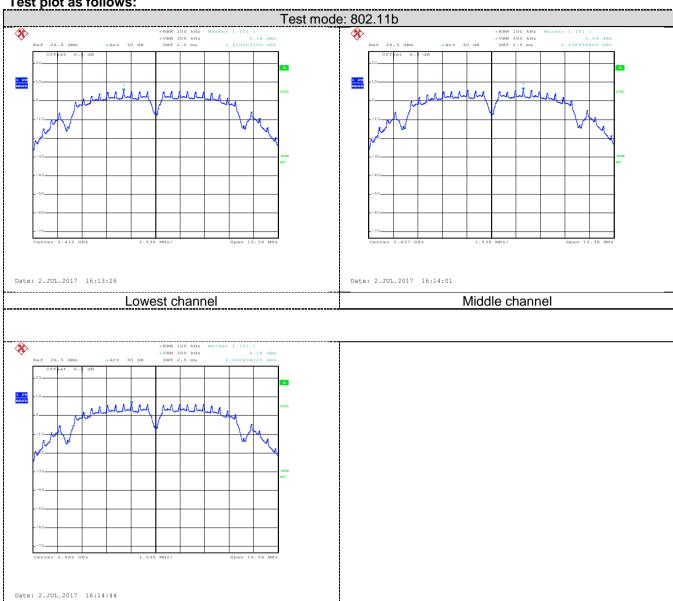
Measurement Data:

medourement buta.								
Test CH	Pow	Limit(dBm)	Result					
1031 011	802.11b	802.11g	802.11n(H20)	Limit(dbin)	resuit			
Lowest	5.18	1.25	0.09		Pass			
Middle	5.64	1.31	0.70	8.00				
Highest	6.18	2.29	1.28					



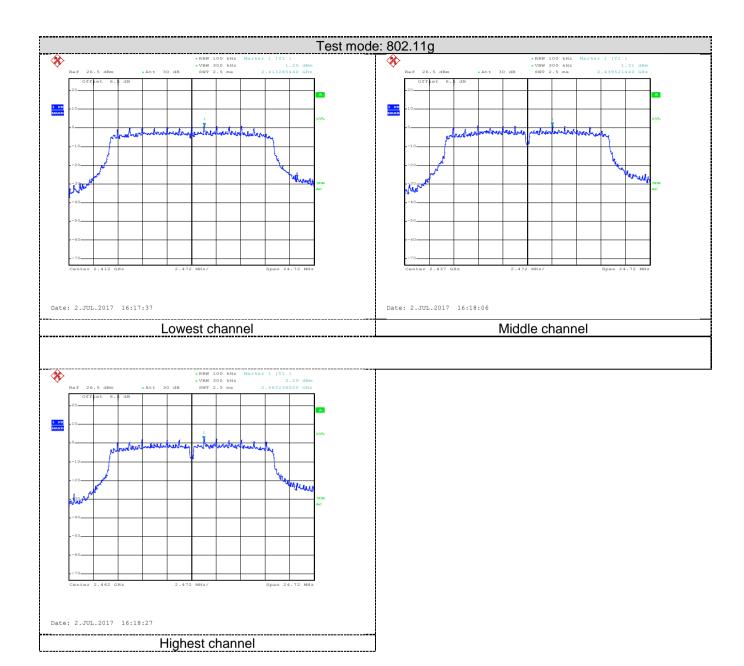




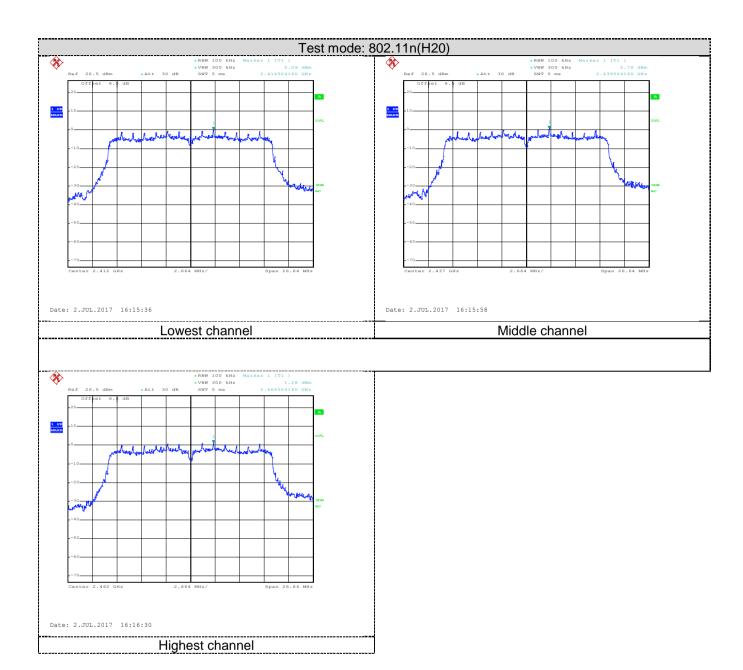


Highest channel













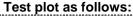
6.6 Band Edge

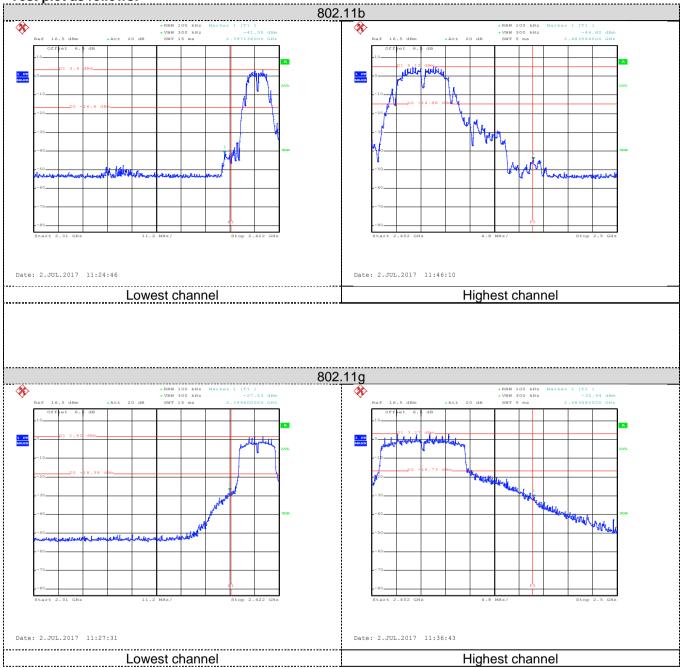
6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)				
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v04 section 13				
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 5.6 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Passed				

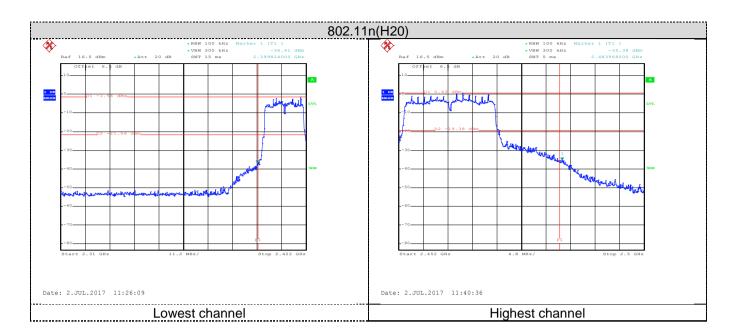












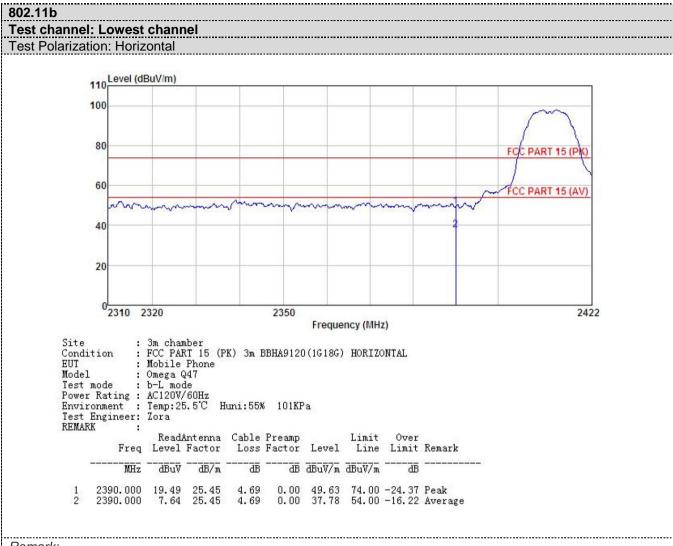


6.6.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205						
Test Method:	ANSI C63.10: 2013 and KDB558074 D01 DTS Meas Guidance v04 section 12.1						
Test Frequency Range:	2.3GHz to 2.5GHz						
Test site:	Measurement Distance: 3m						
Receiver setup:	Frequency Detector RBW VBW Remark						
l i i i i i i i i i i i i i i i i i i i	Above 1GHz	Peak	1MHz	31	ИНz	Peak Value	
		RMS	1MHz		MHz	Average Value	
Limit:	Frequenc	y l	_imit (dBuV/m @	3m)		Remark	
	Above 1Gł	Hz —	54.00 74.00			verage Value Peak Value	
Test Procedure:	 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. 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:	150cm	AE EUT (Turntable)	Ground Reference Plane Test Receiver	rn Antenna Pre- Pre- putfier Co	Antenna Tow	ver V	
Test Instruments:	Refer to section 5.6 for details						
Test mode:	Refer to section	5.3 for deta	ails				
Test results:	Passed						



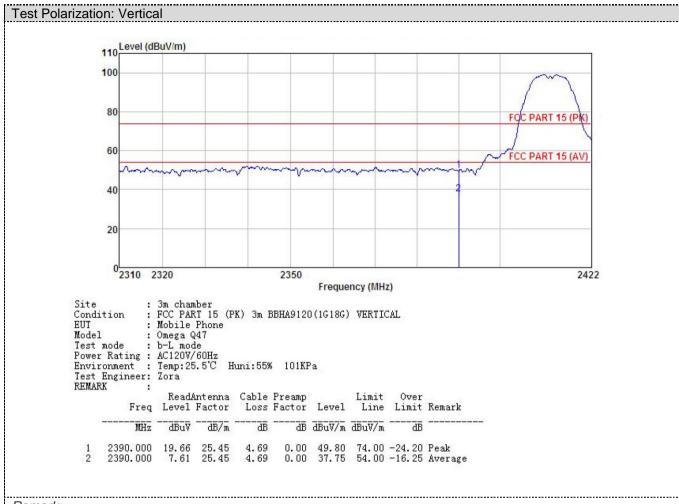




- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



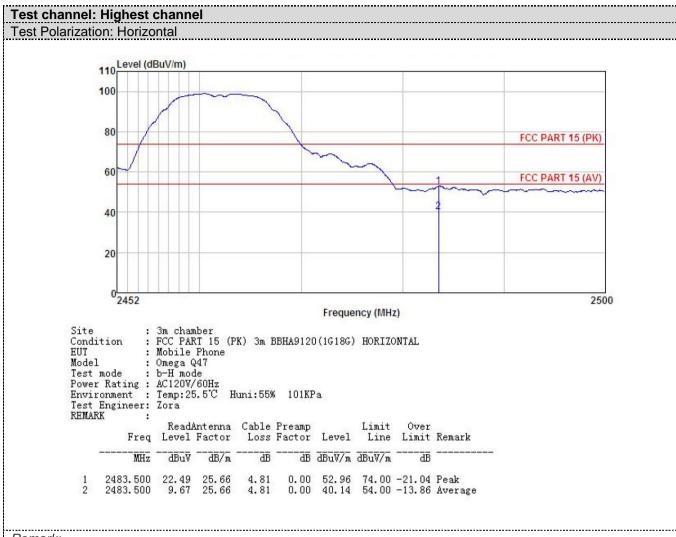




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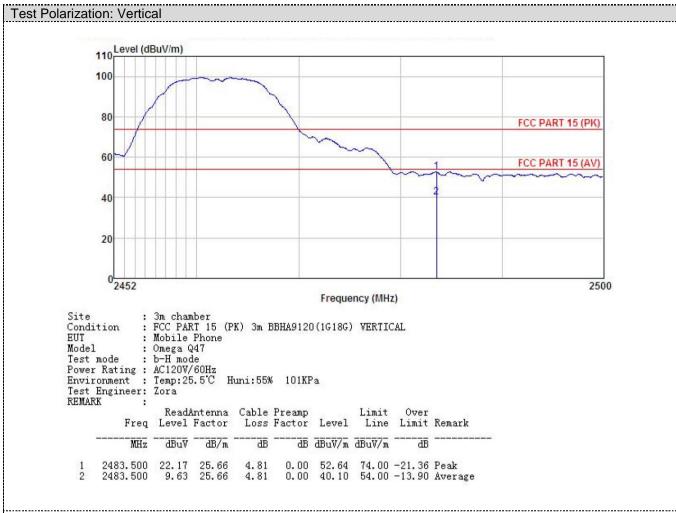




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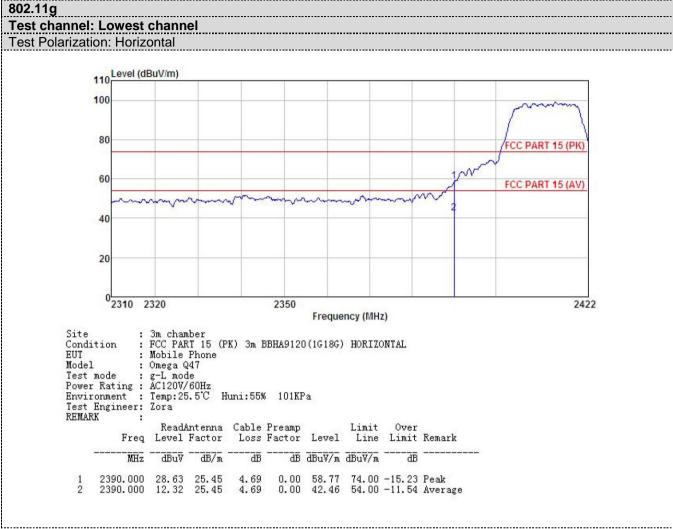




- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



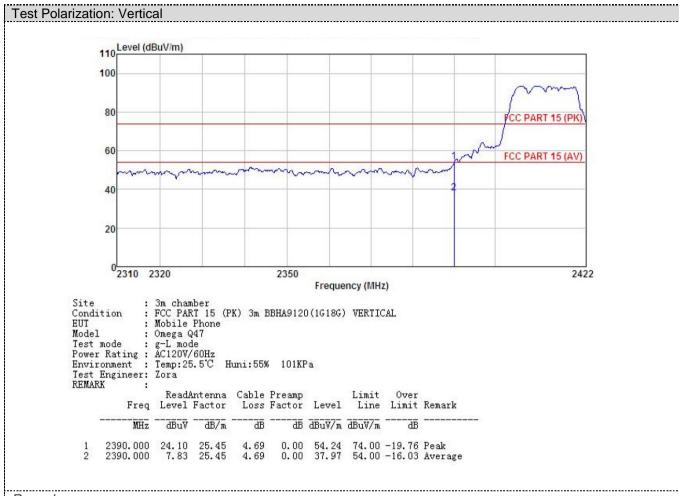




- Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



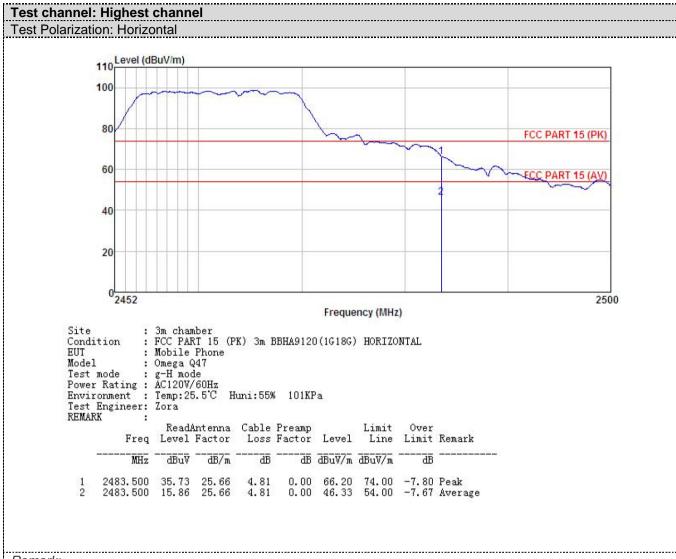




- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



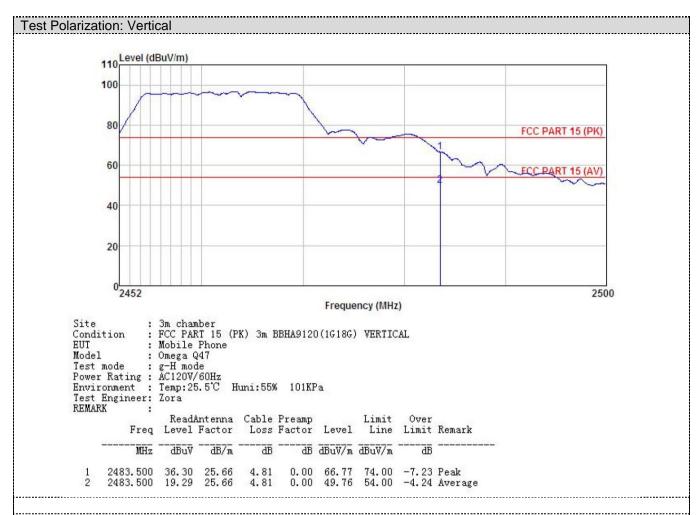




- Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.



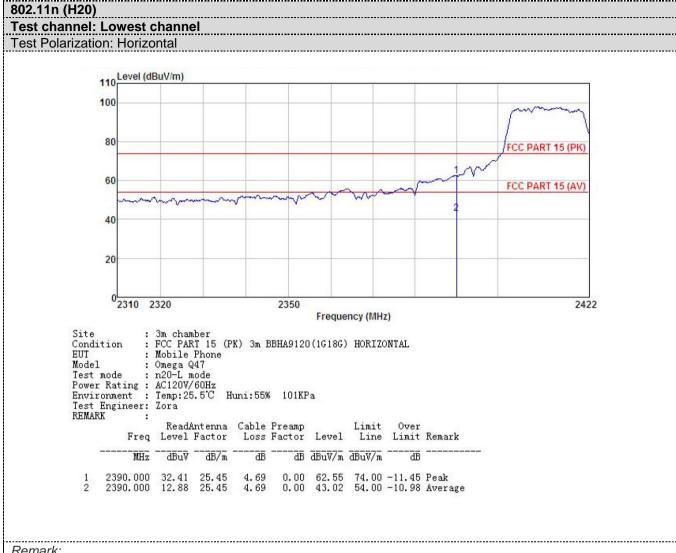




- Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.



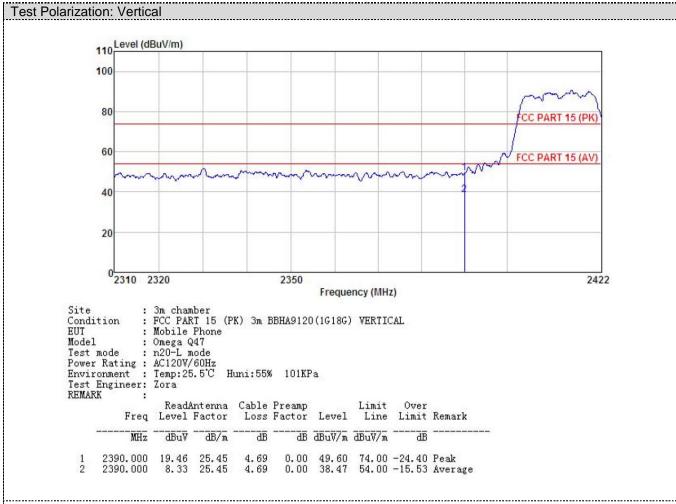




- Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



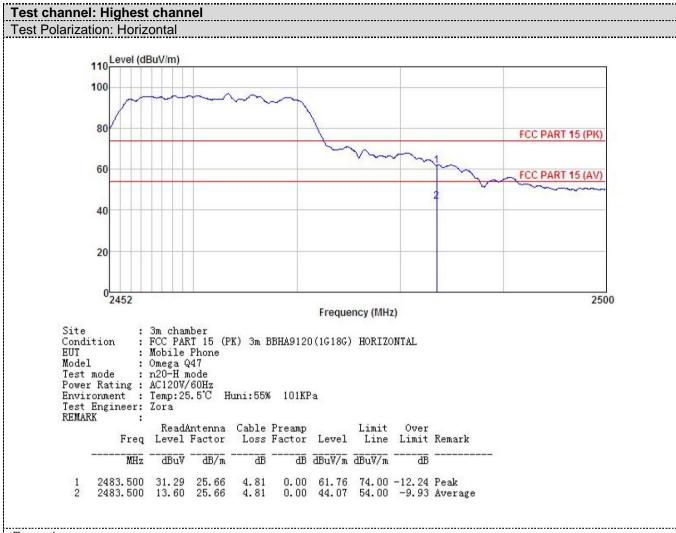




- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



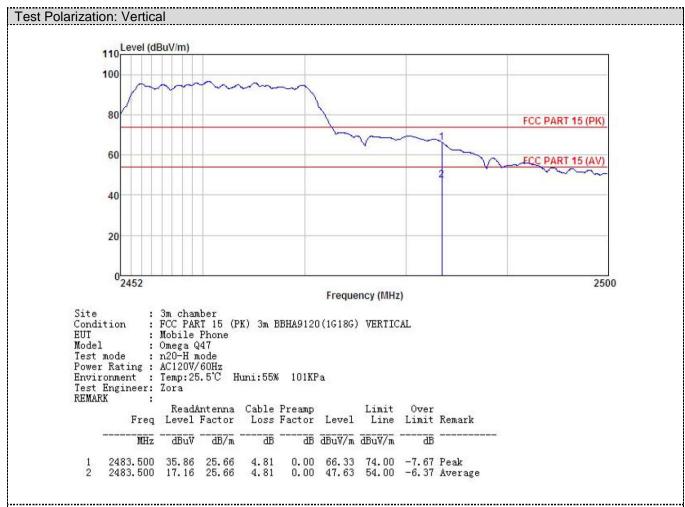




- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.







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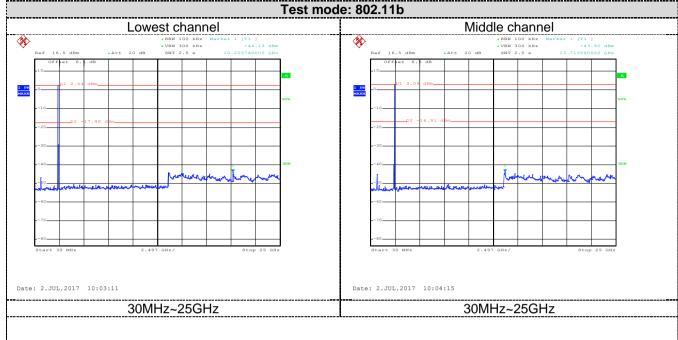
6.7 Spurious Emission

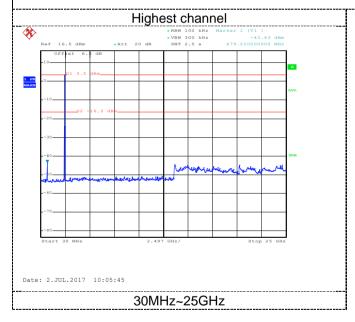
6.7.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)						
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v04 section 11						
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 5.6 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Passed						

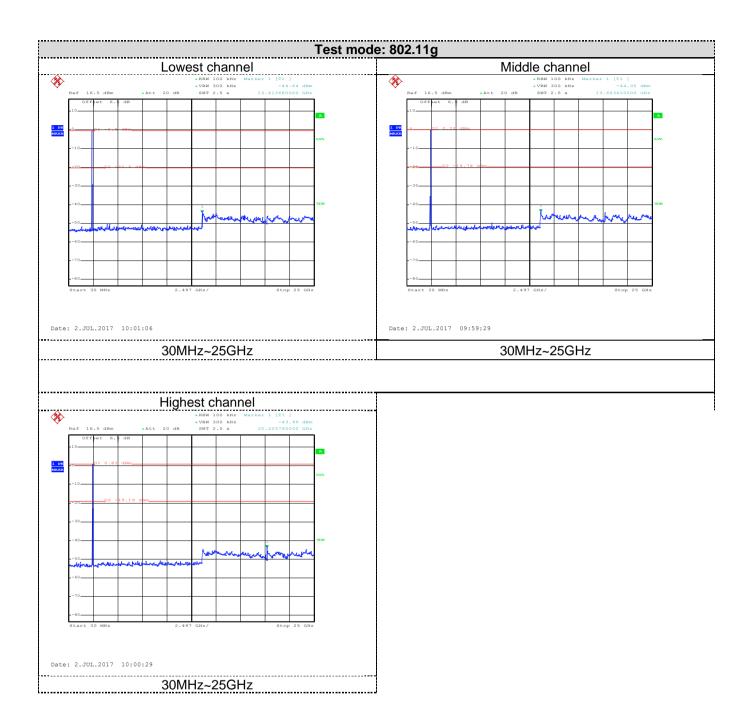


Test plot as follows:

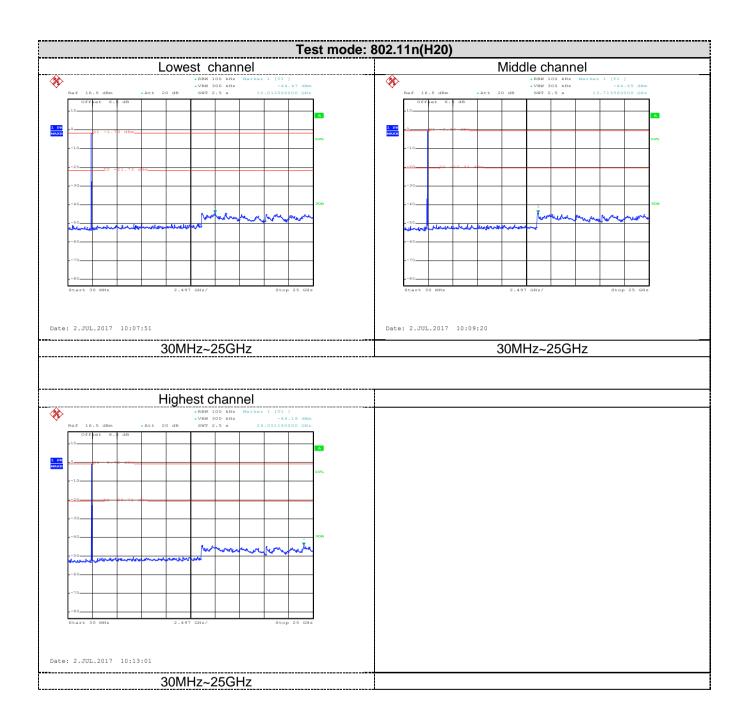














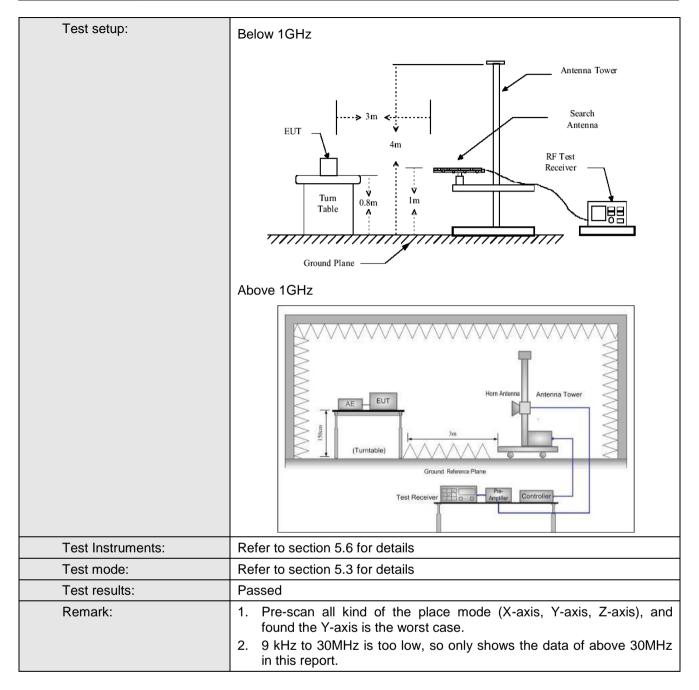


6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C S	ection 15	5.209 a	and 15.205				
Test Method:	ANSI C63.10:201	13						
Test Frequency Range:	9kHz to 25GHz							
Test site:	Measurement Distance: 3m							
Receiver setup:	Frequency	Detect	tor	RBW	V	BW	Remark	
·	30MHz-1GHz	Quasi-pe	eak	120KHz	300)KHz	Quasi-peak Value	
	Above 1GHz	Peak RMS		1MHz		ИHz	Peak Value	
				1MHz		ИHz	Average Value	
Limit:	Frequency		Limit	(dBuV/m @3	m)	_	Remark	
	30MHz-88MH			40.0			uasi-peak Value	
	88MHz-216MH			43.5			uasi-peak Value	
							•	
	960MHz-1GH	Z					•	
	Above 1GHz	: -				•		
Test Procedure:	216MHz-960MHz 46.0 Quasi-peak Value 960MHz-1GHz 54.0 Quasi-peak Value Above 1GHz 74.0 Peak Value 1. 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. 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, quasipeak or average method as specified and then reported in a data							

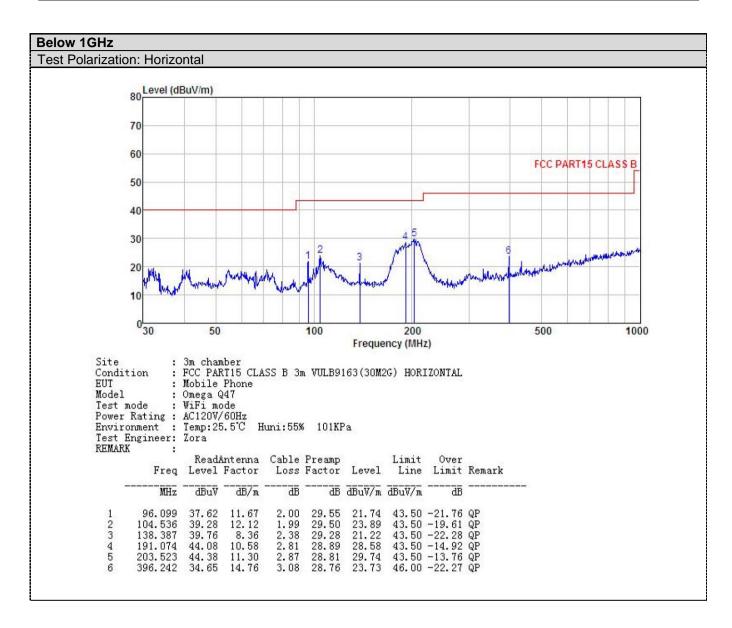






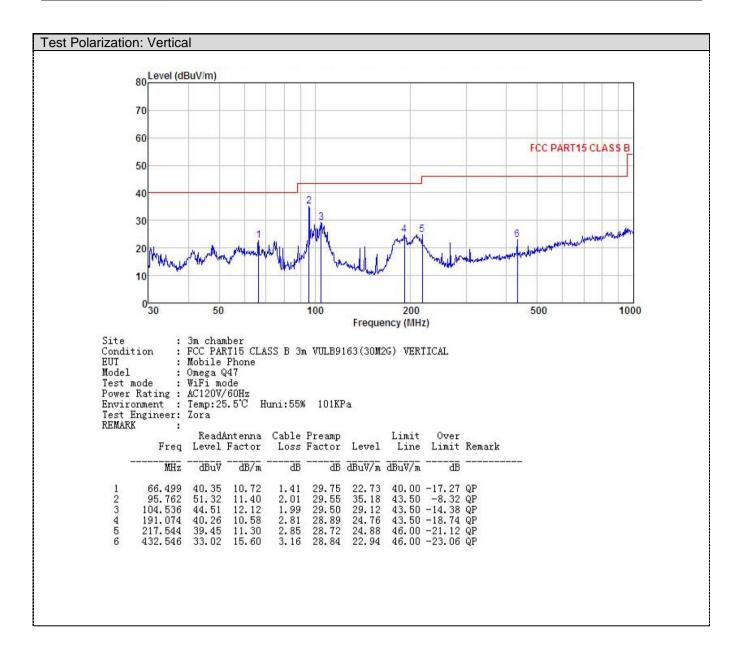














Above 1GHz

	Test mode: 802.11b										
	Test channel: Lowest channel										
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)	Polar.			
4824.00	47.08	36.06	6.81	41.82	48.13	74.00	-25.87	Vertical			
4824.00	46.48	36.06	6.81	41.82	47.53	74.00	-26.47	Horizontal			
			А	verage 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)	Polar.			
4824.00	38.57	36.06	6.81	41.82	39.62	54.00	-14.38	Vertical			
4824.00	37.82	36.06	6.81	41.82	38.87	54.00	-15.13	Horizontal			

	Test channel: Middle channel										
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)	Polar.			
4874.00	46.46	36.32	6.85	41.84	47.79	74.00	-26.21	Vertical			
4874.00	46.45	36.32	6.85	41.84	47.78	74.00	-26.22	Horizontal			
			А	verage 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)	Polar.			
4874.00	37.57	36.32	6.85	41.84	38.90	54.00	-15.10	Vertical			
4874.00	37.82	36.32	6.85	41.84	39.15	54.00	-14.85	Horizontal			

			Test char	nnel: Highest	channel					
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)	Polar.		
4924.00	46.28	36.58	6.89	41.86	47.89	74.00	-26.11	Vertical		
4924.00	48.51	36.58	6.89	41.86	50.12	74.00	-23.88	Horizontal		
			А	verage 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)	Polar.		
4924.00	37.49	36.58	6.89	41.86	39.10	54.00	-14.90	Vertical		
4924.00	39.27	36.58	6.89	41.86	40.88	54.00	-13.12	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.



	Test mode: 802.11g										
Test channel: Lowest channel											
Peak Value											
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.			
4824.00	46.83	36.06	6.81	41.82	47.88	74.00	-26.12	Vertical			
4824.00	47.12	36.06	6.81	41.82	48.17	74.00	-25.83	Horizontal			
			Av	verage Value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.			
4824.00	37.19	36.06	6.81	41.82	38.24	54.00	-15.76	Vertical			
4824.00	38.05	36.06	6.81	41.82	39.10	54.00	-14.90	Horizontal			

	Test channel: Middle channel										
Peak Value											
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.			
4874.00	46.88	36.32	6.85	41.84	48.21	74.00	-25.79	Vertical			
4874.00	46.72	36.32	6.85	41.84	48.05	74.00	-25.95	Horizontal			
			Av	erage Value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/)	Limit Line (dBuV/m)	Over Limit (dB)	Polar.			
4874.00	37.62	36.32	6.85	41.84	38.95	54.00	-15.05	Vertical			
4874.00	37.45	36.32	6.85	41.84	38.78	54.00	-15.22	Horizontal			

	Test channel: Highest channel										
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)	Polar.			
4924.00	46.75	36.58	6.89	41.86	48.36	74.00	-25.64	Vertical			
4924.00	46.23	36.58	6.89	41.86	47.84	74.00	-26.16	Horizontal			
			Av	erage 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)	Polar.			
4924.00	37.24	36.58	6.89	41.86	38.85	54.00	-15.15	Vertical			
4924.00	38.53	36.58	6.89	41.86	40.14	54.00	-13.86	Horizontal			

- 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.



			Test m	ode: 802.11n	(H20)			
			Test char	nnel: Lowest	channel			
				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)	Polar.
4824.00	46.57	36.06	6.81	41.82	47.62	74.00	-26.38	Vertical
4824.00	47.22	36.06	6.81	41.82	48.27	74.00	-25.73	Horizontal
			Α	verage 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)	Polar.
4824.00	37.25	36.06	6.81	41.82	38.30	54.00	-15.70	Vertical
4824.00	37.86	36.06	6.81	41.82	38.91	54.00	-15.09	Horizontal
				nnel: Middle Peak Value	channel			
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)	Polar.
4874.00	46.59	36.32	6.85	41.84	47.92	74.00	-26.08	Vertical
4874.00	47.23	36.32	6.85	41.84	48.56	74.00	-25.44	Horizontal
			A	verage Value	9			
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)	Polar.
4874.00	37.12	36.32	6.85	41.84	38.45	54.00	-15.55	Vertical
4874.00	38.02	36.32	6.85	41.84	39.35	54.00	-14.65	Horizontal
				nnel: Highest	channel			
				Peak Value				
F=====================================	Read	Antenna	Cable	Preamp	Lavial	limait lima	Over	

	r est channel: Highest channel										
Peak Value											
Fraguenay	Read	Antenna	Cable	Preamp	Level	Limit Line	Over				
Frequency (MHz)	Level	Factor	Loss	Factor	(dBuV/m)		Limit	Polar.			
(IVITIZ)	(dBuV)	(dB/m)	(dB)	(dB)	(dDd V/III)	(dBuV/m)	(dB)				
4924.00	46.55	36.58	6.89	41.86	48.16	74.00	-25.84	Vertical			
4924.00	46.38	36.58	6.89	41.86	47.99	74.00	-26.01	Horizontal			
			А	verage Value)						
Fraguenov	Read	Antenna	Cable	Preamp	Level	Limit Line	Over				
Frequency	Level	Factor	Loss	Factor			Limit	Polar.			
(MHz)	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)				
4924.00	37.45	36.58	6.89	41.86	39.06	54.00	-14.94	Vertical			
4924.00	37.62	36.58	6.89	41.86	39.23	54.00	-14.77	Horizontal			

- 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.