

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCISE180711004

FCC REPORT

Applicant: PCD, LLC

Address of Applicant: 1500 Tradeport Drive, ORLANDO, Florida, 32824. United States

Equipment Under Test (EUT)

Product Name: Jaguar PRO LTE

Model No.: PL570

Trade mark: PCD

FCC ID: 2ALJJPL570

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

Date of sample receipt: 27 Jul., 2018

Date of Test: 27 Jul., to 27 Aug., 2018

Date of report issued: 28 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.

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2 Version

Version No.	Date	Description		
00	28 Aug., 2018	8 Original		

Tested by: 28 Aug., 2018

Test Engineer

Reviewed by: 28 Aug., 2018

Project Engineer



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Test Summary

Test Items	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		
Spurious Emission	15.205 & 15.209 Pass			
Pass: The EUT complies with the essential requirements in the standard.				

N/A: Not Applicable.





5 General Information

5.1 Client Information

Applicant:	PCD, LLC
Address:	1500 Tradeport Drive, ORLANDO, Florida, 32824. United States
Manufacturer:	PCD, LLC
Address:	1500 Tradeport Drive, ORLANDO, Florida, 32824. United States

5.2 General Description of E.U.T.

Product Name:	Jaguar PRO LTE		
Model No.:	PL570		
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 72.2Mbps		
Antenna Type:	External Antenna		
Antenna gain:	-1 dBi		
Power supply:	Rechargeable Li-ion Battery DC3.8V2800mAh		
AC adapter:	Model: PL570 Input: AC100-240V, 50/60Hz, 0.2A 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	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

1. Channel 1, 6 & 11 selected for 802.11b/g/n-HT20 as Lowest, Middle and Highest channel.



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5.3 Test environment and test mode

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

Transmitting mode Ke	ep 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			

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



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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 Part 15 C

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 External antenna which cannot replace by end-user, the best case gain of the antenna is -1 dBi.







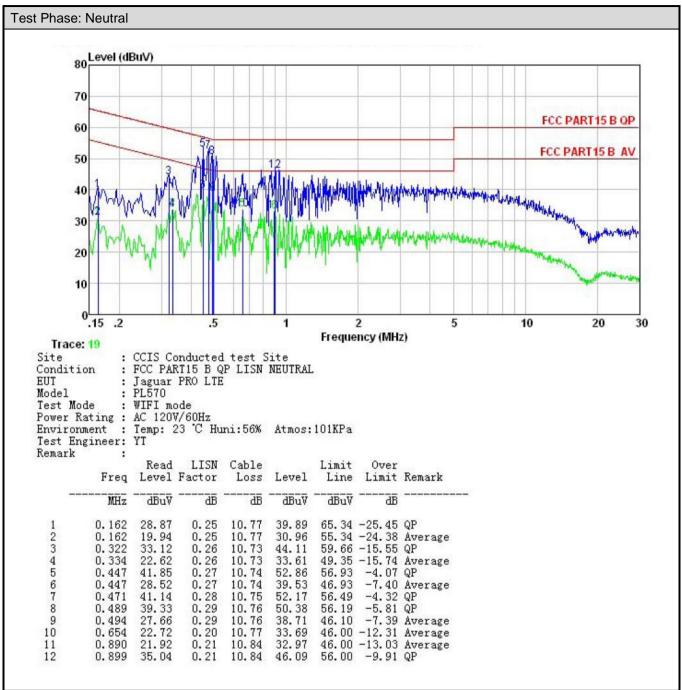
6.2 Conducted Emission

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						
•							
Receiver setup:	,	RBW=9 kHz, VBW=30 kHz					
Limit:	Frequency range (MHz)	Limit (c 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	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:	AUX Equipment Test table/Insula Remark: E.U.T. Equipment Under LISN: Line Impedence State Test table height=0.8m	E.U.T EMI Receiver	I Ilter — AC power				
Test Instruments:	Refer to section 5.8 for d	etails					
Test mode:	Refer to section 5.3 for d	etails					
Test results:	Passed						





Measurement Data:

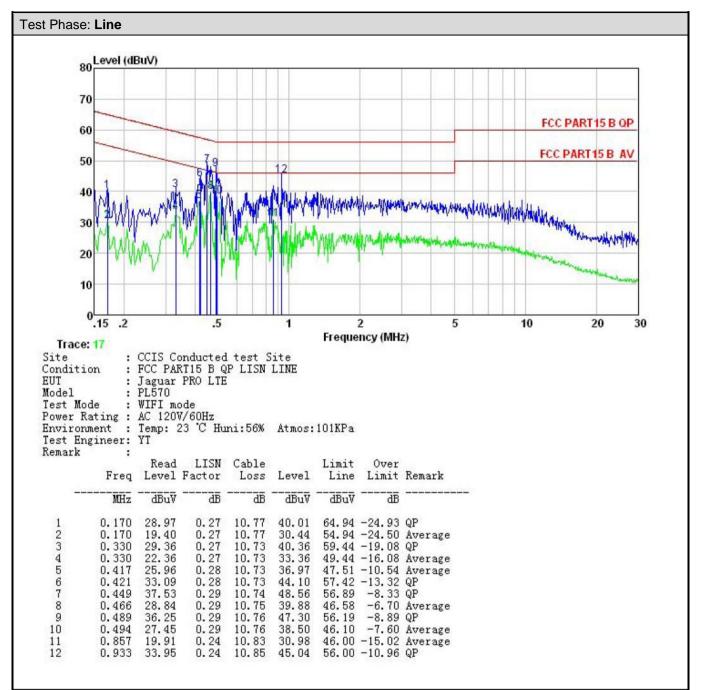


Notes:

- 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.





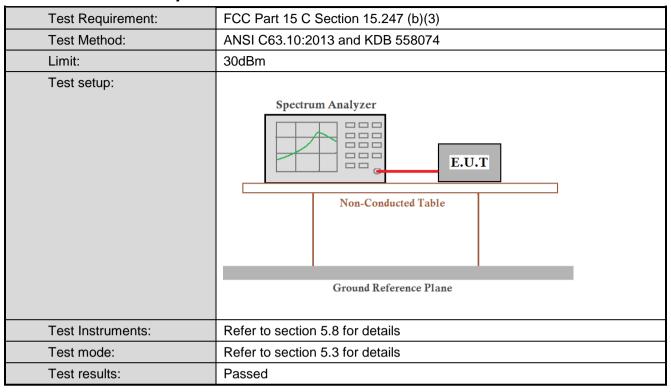


Notes:

- 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



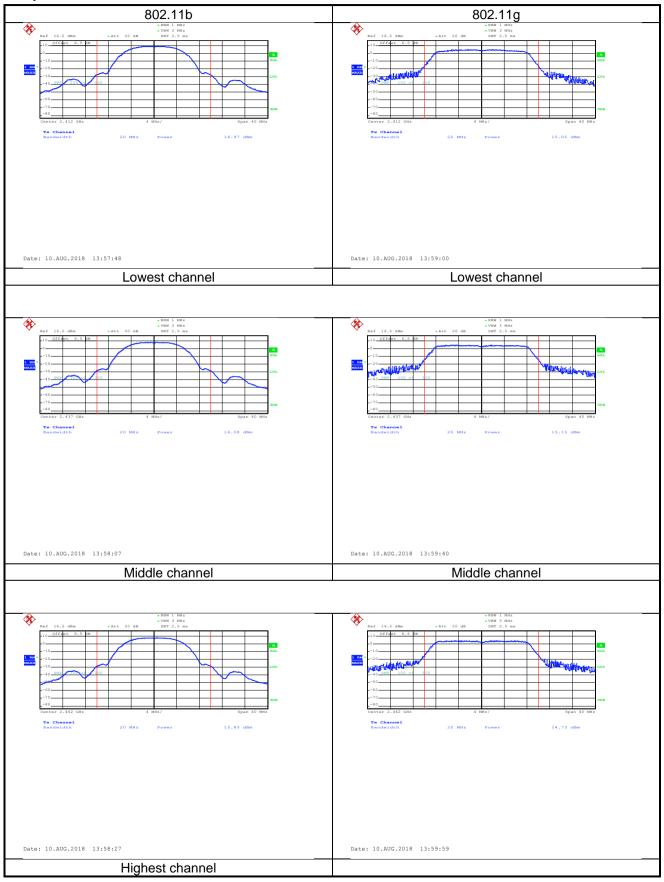
Measurement Data:

Test CH	Maximum	Conducted Output P	ower (dBm)	Limit(dBm)	Popult	
Test Cn	802.11b	02.11b 802.11g 802.11n(H20)		Limit(abin)	Result	
Lowest	16.97	15.05	14.65			
Middle	16.08	15.15	14.99	30.00	Pass	
Highest	15.85	14.73	14.63			

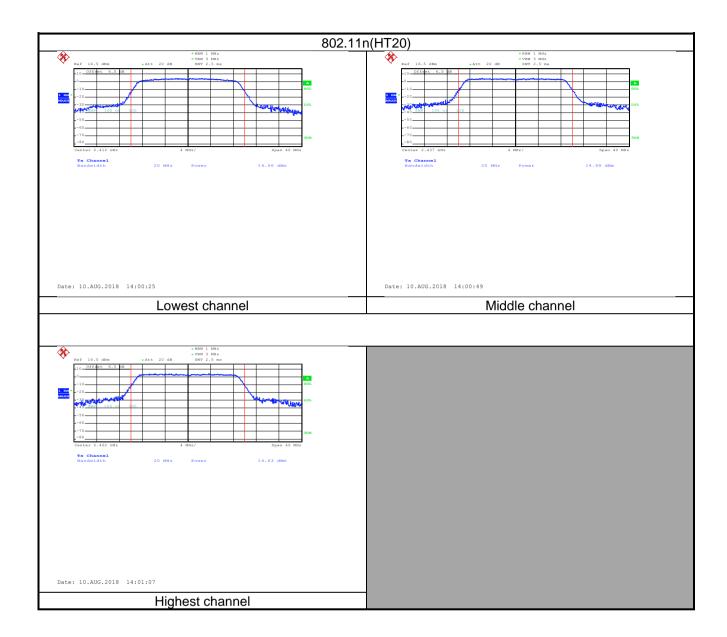




Test plot as follows:









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			

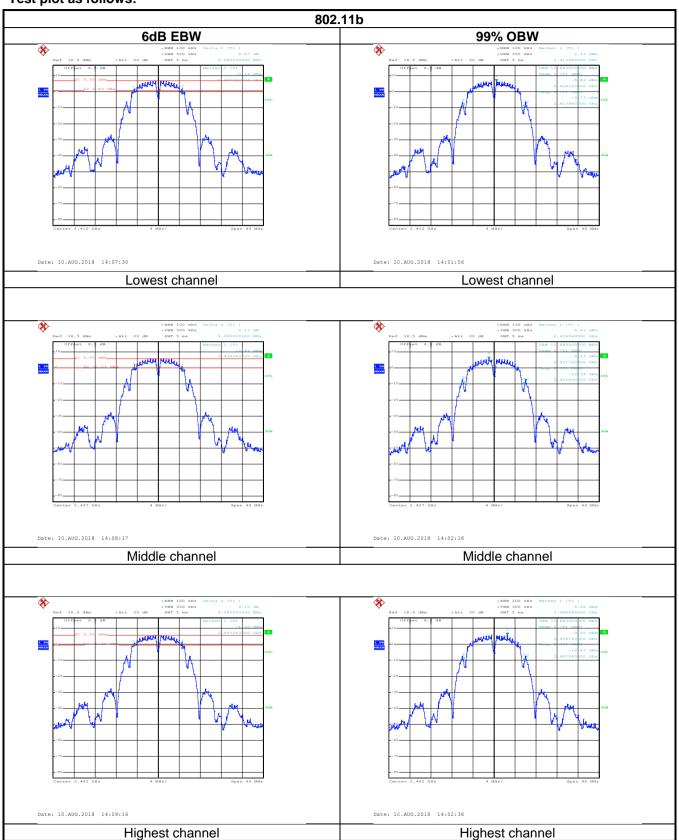
Measurement Data:

Toot CU	6dB E	mission Bandwidth	(MHz)	Limit(kHz) Result		
reston	Test CH 802.11b 802.11g 802.11		802.11n(H20)	Liffiit(KHZ)	Result	
Lowest	9.28	15.36	15.68			
Middle	9.28	16.48	17.76	>500	Pass	
Highest	9.28	16.64	17.76			
Test CH	99% Occupy Bandwidth (MHz)		(MHz)	Limit/IsUz)	Result	
rest Cn	802.11b	802.11g	802.11n(H20)	Limit(kHz)	Result	
Lowest	11.68	16.48	17.60			
Middle	11.68	16.64	17.76	N/A	N/A	
Highest	11.68	16.64	17.76			



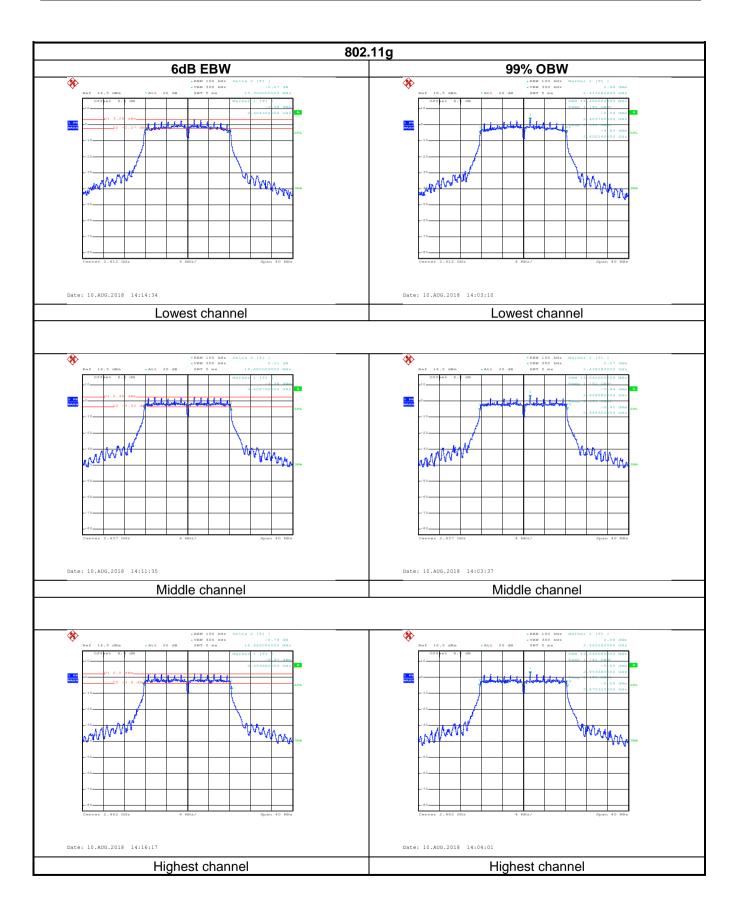


Test plot as follows:



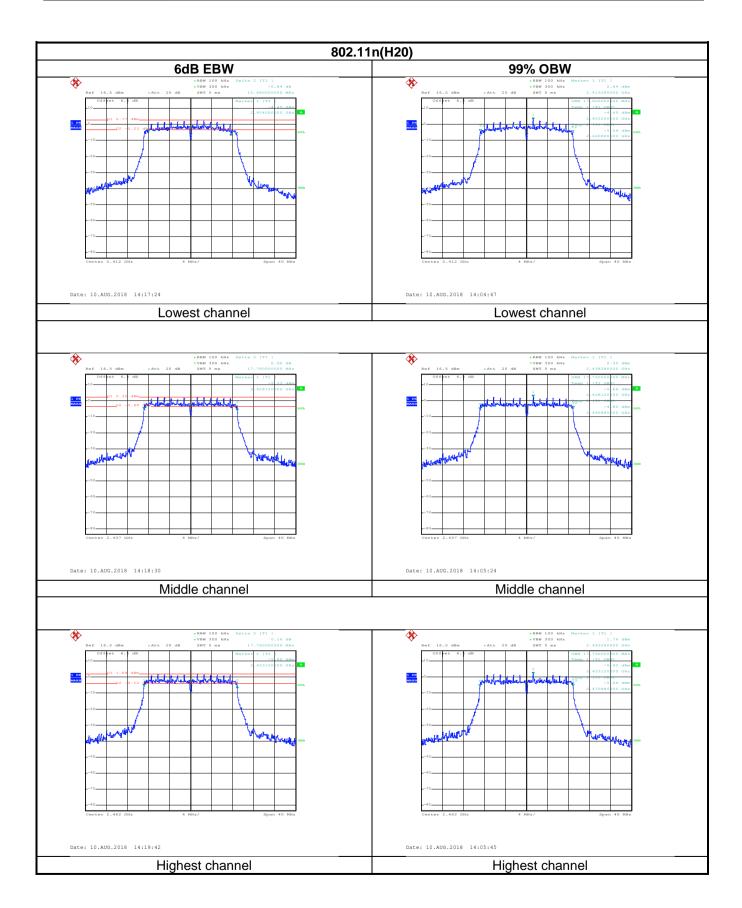














6.5 Power Spectral Density

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			

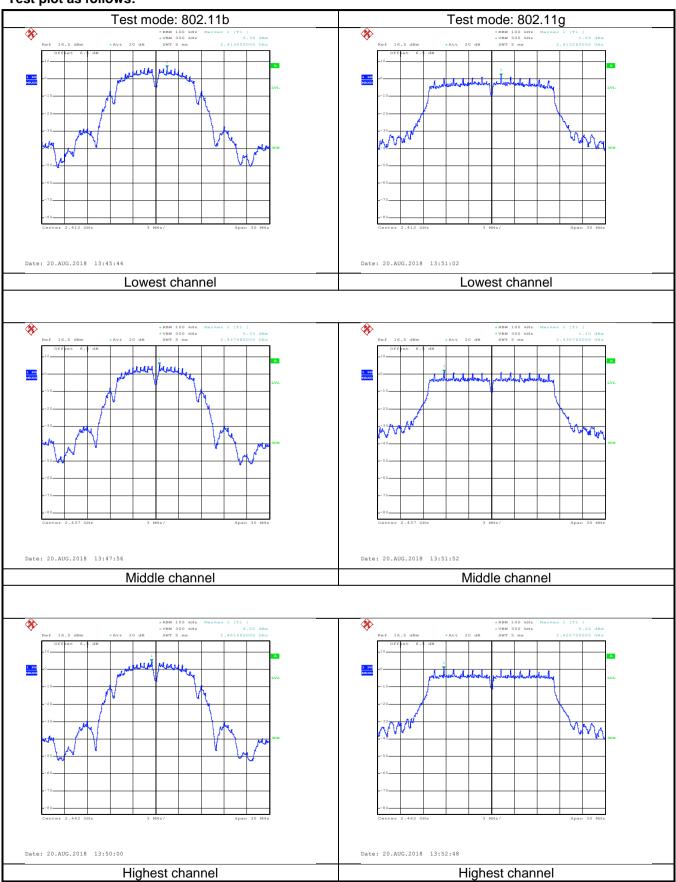
Measurement Data:

Toot CH	Powe	Limit/dDm\			
Test CH	802.11b	802.11g	802.11n(H20)	Limit(dBm)	Result
Lowest	6.38	1.69	1.47		
Middle	5.33	1.10	0.58	8.00	Pass
Highest	4.52	0.26	-0.27		



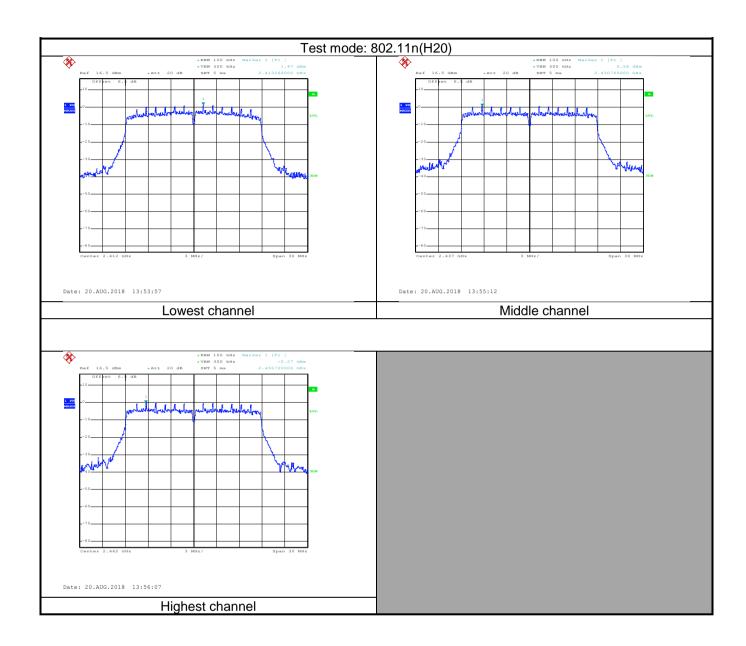


Test plot as follows:











6.6 Band Edge

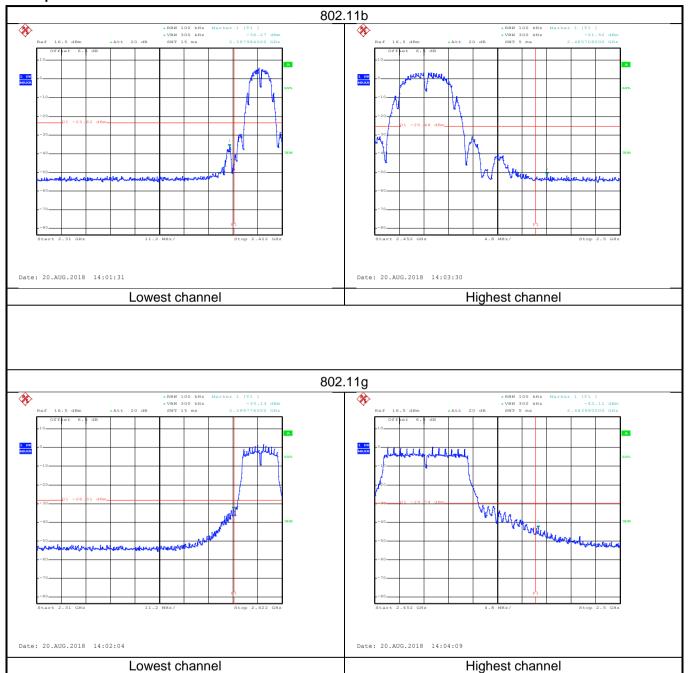
6.6.1 Conducted Emission Method

Oldi Colladotoa Elliloololi	5.1 Conducted Linission Method					
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					



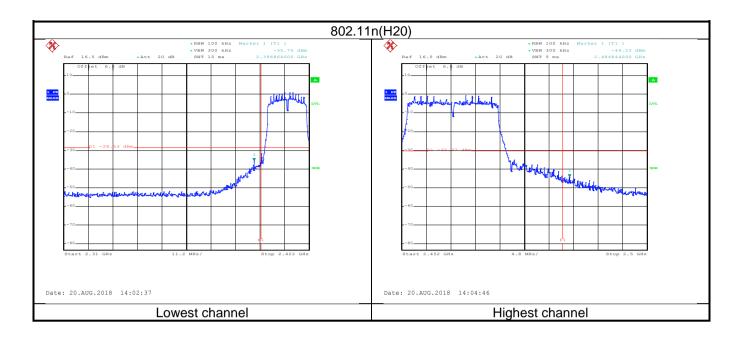


Test plot as follows:











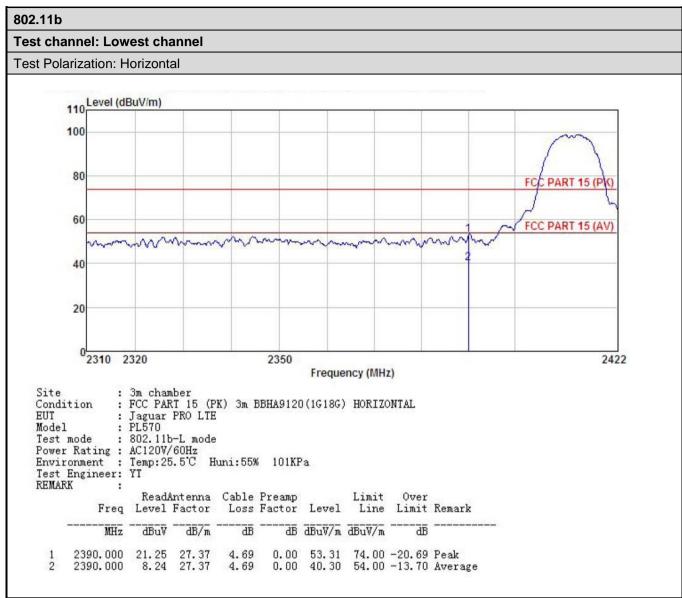


6.6.2 Radiated Emission Method

6.6.2	Radiated Emission Me	ethod							
	Test Requirement:	FCC Part 15 C	Section 15	5.20	9 and 15.205				
	Test Method:	ANSI C63.10: 2	2013 and	KDE	3 558074				
	Test Frequency Range:	2.3GHz to 2.50	SHz						
	Test Distance:	3m							
	Receiver setup:	Frequency	Detecto		RBW		BW	Remark	
		Above 1GHz	Above 1GHz Peak 1MHz			3MHz		Peak Value	
	Limit:	Frequenc	RMS	l in	1MHz nit (dBuV/m @		ИHz Г	Average Valu Remark	ue
	LIIIII.				54.00	0111)	Av	rerage Value	
		Above 1G			74.00		F	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 						es na es t	
	Test setup:	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	AE EU (Turntable)		3m Ground Reference Plane	n Antenna	Antenna Tow	Ner Williams	
	Test Instruments:	Refer to section	n 5.8 for de	etails	S				
	Test mode:	Refer to section	n 5.3 for de	etails	S				
	Test results:	Passed							





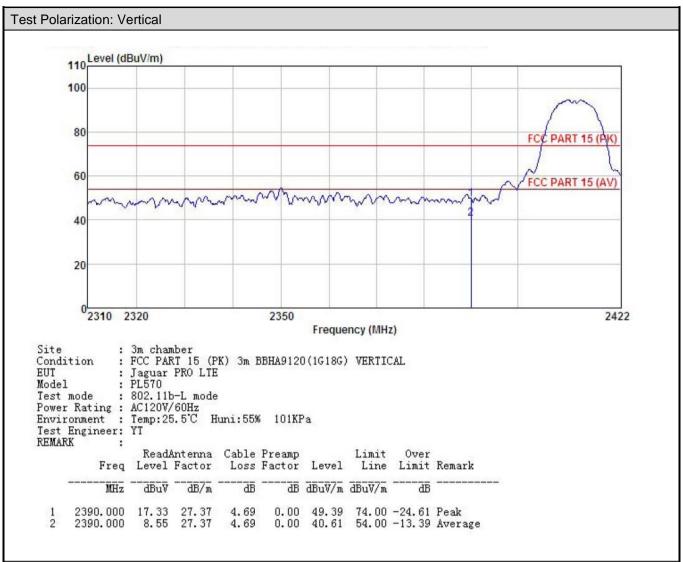


1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor.

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



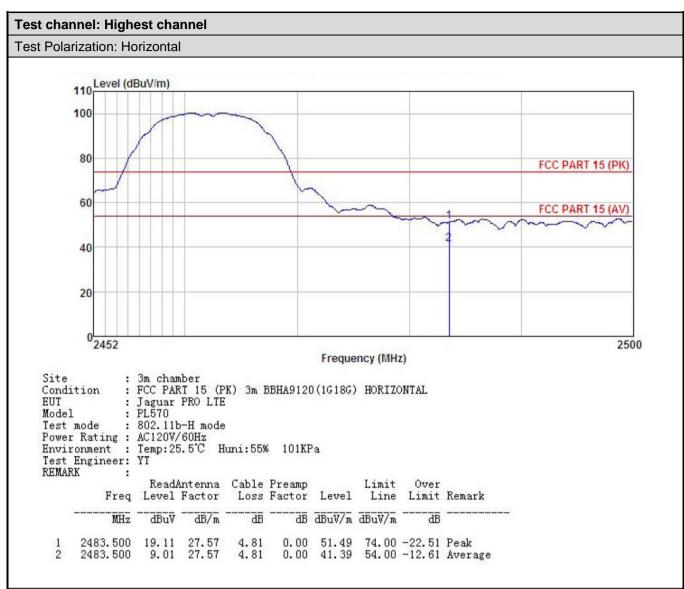




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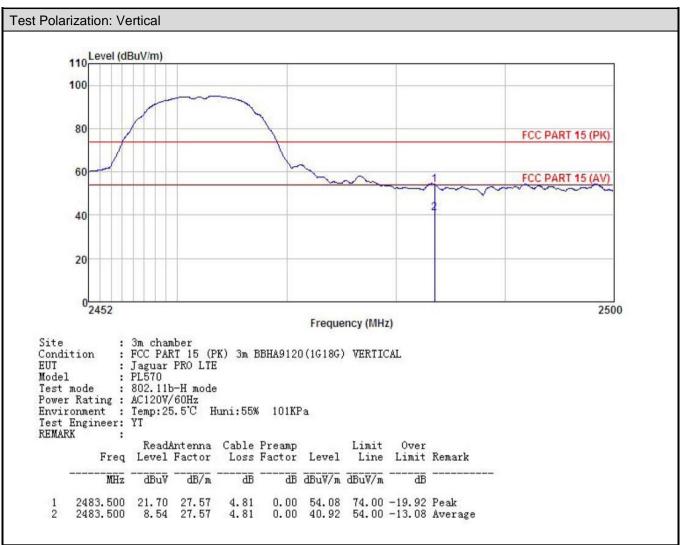


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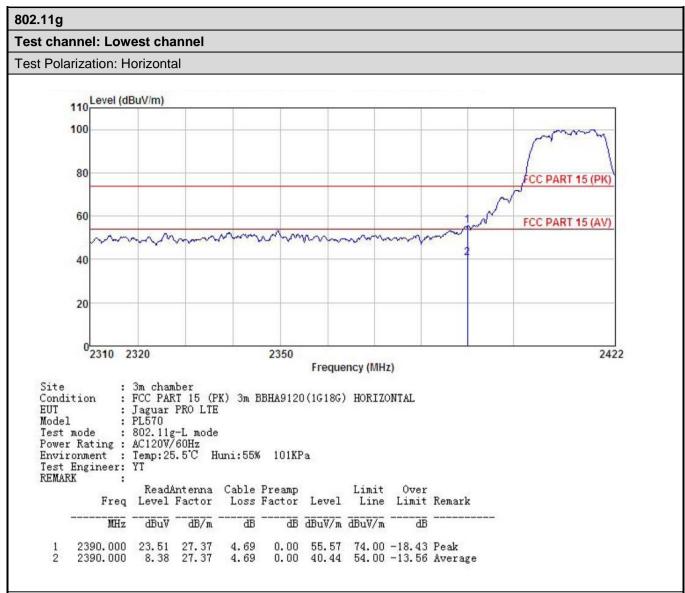




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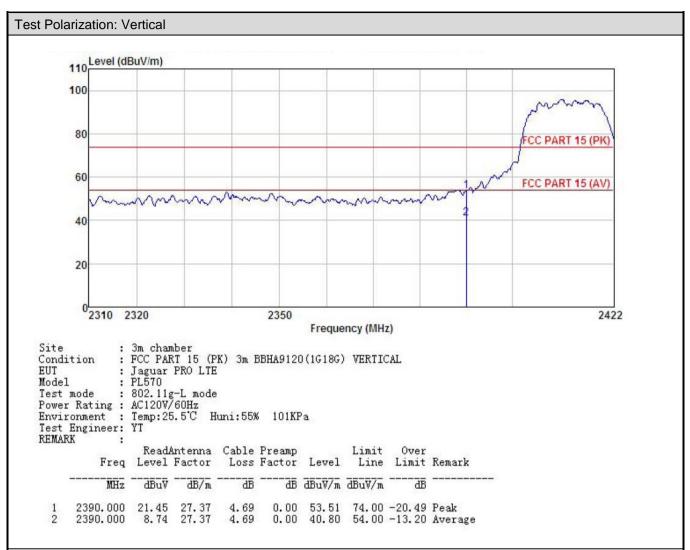


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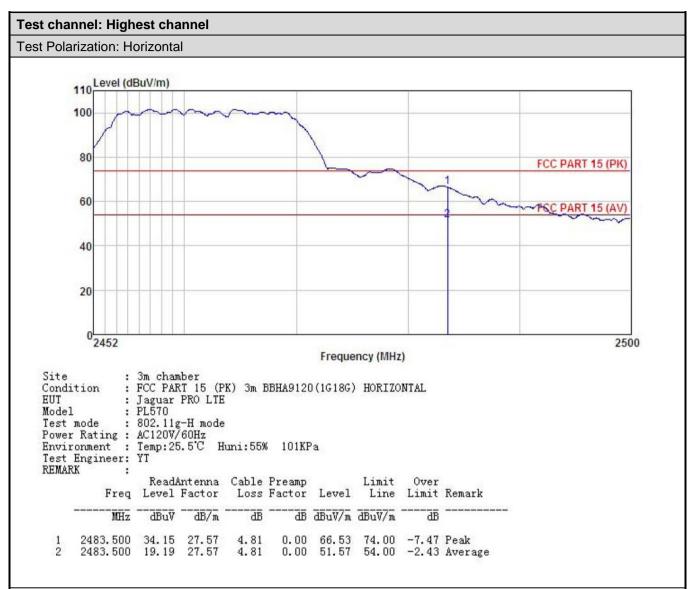




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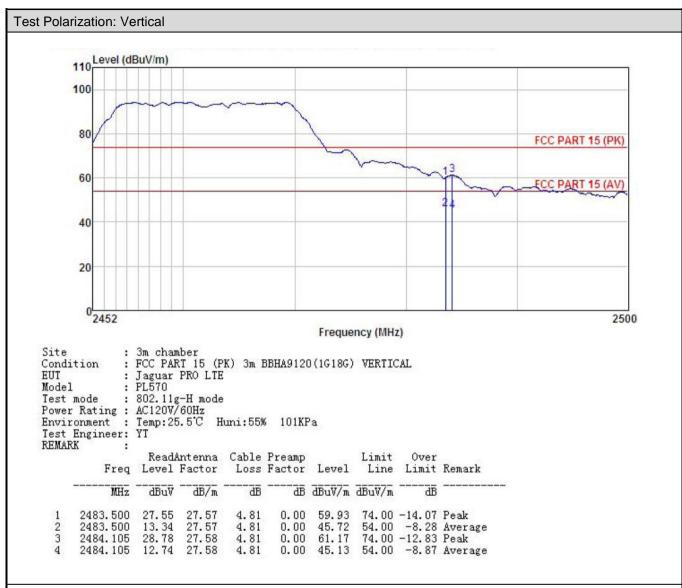


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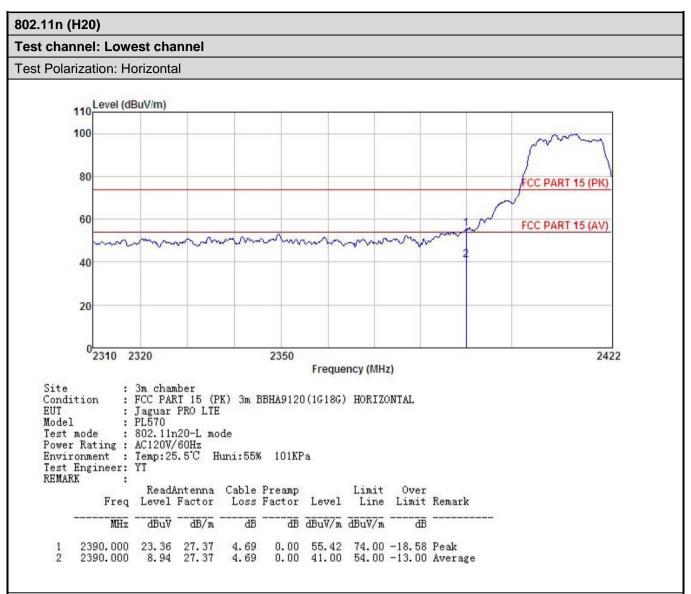




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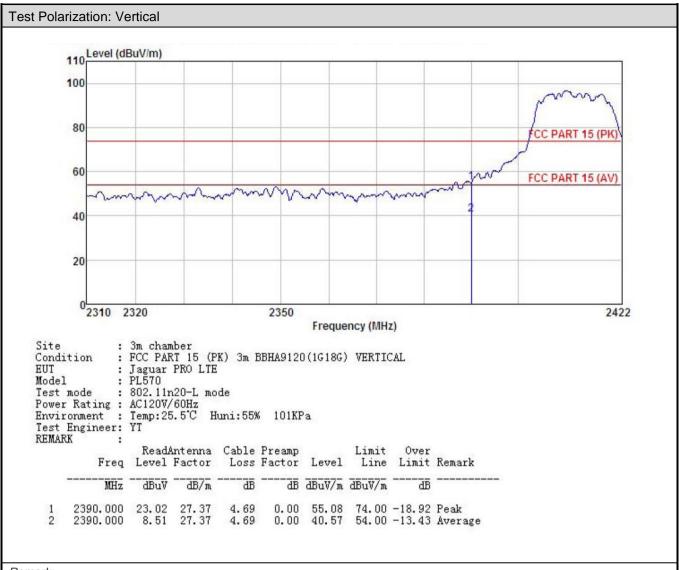


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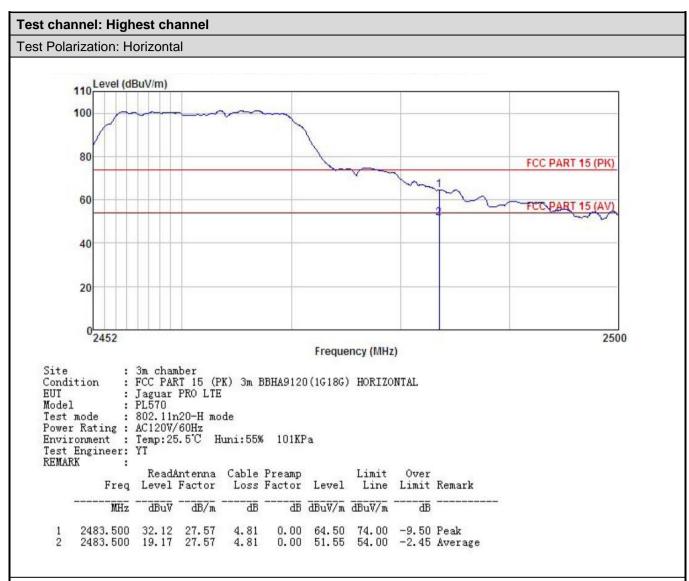




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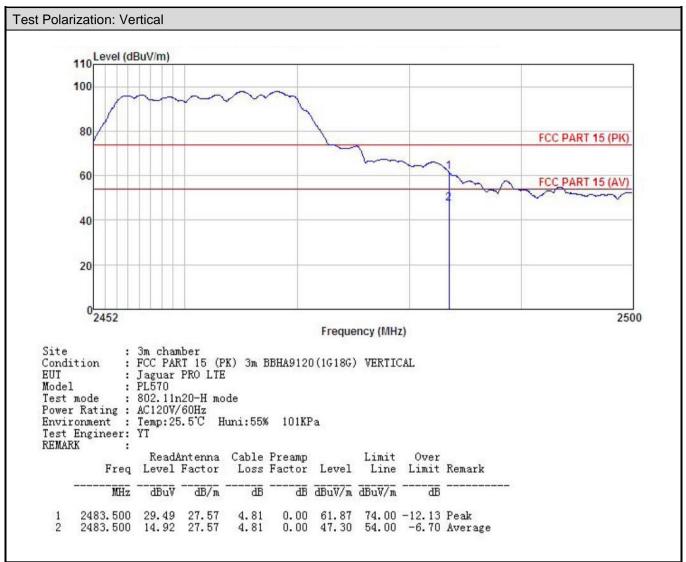




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- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



6.7 Spurious Emission

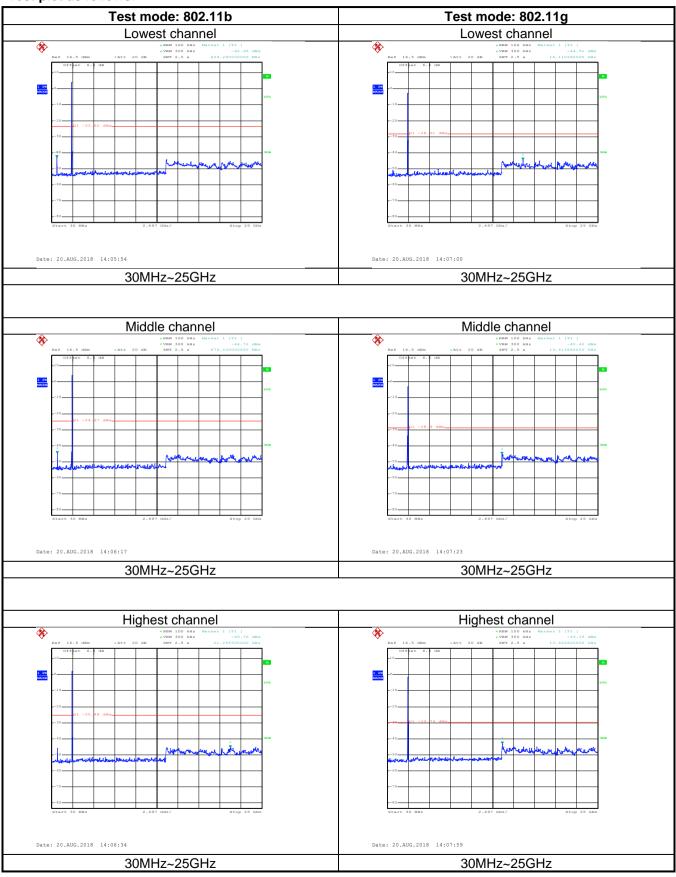
6.7.1 Conducted Emission Method

power that is produced by the intentional radiator shall be at lead below that in the 100 kHz bandwidth within the band that contain highest level of the desired power, based on either an RF conditional radiated measurement. If the transmitter complies with the conditional radiator shall be at lead below that in the 100 kHz bandwidth within the band that contains a simple of the same and the same at lead to the same and the same at lead to th					
Limit: In any 100 kHz bandwidth outside the frequency band in which spread spectrum intentional radiator is operating, the radio freq power that is produced by the intentional radiator shall be at lead below that in the 100 kHz bandwidth within the band that contain highest level of the desired power, based on either an RF conditional radiated measurement. If the transmitter complies with the conditional power limits based on the use of RMS averaging over a time into permitted under paragraph(b)(3) of this section, the attenuation under this paragraph shall be 30 dB instead of 20 dB. Test setup: Spectrum Analyzer E.U.T	ion 15.247 (d)				
spread spectrum intentional radiator is operating, the radio freq power that is produced by the intentional radiator shall be at lead below that in the 100 kHz bandwidth within the band that contain highest level of the desired power, based on either an RF conditional radiated measurement. If the transmitter complies with the conditional power limits based on the use of RMS averaging over a time into permitted under paragraph(b)(3) of this section, the attenuation under this paragraph shall be 30 dB instead of 20 dB. Test setup: Spectrum Analyzer E.U.T	and KDB 558074				
Spectrum Analyzer E.U.T	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				
Ground Reference Plane	Non-Conducted Table				
Test Instruments: Refer to section 5.8 for details	Refer to section 5.8 for details				
Test mode: Refer to section 5.3 for details	for details				
Test results: Passed					



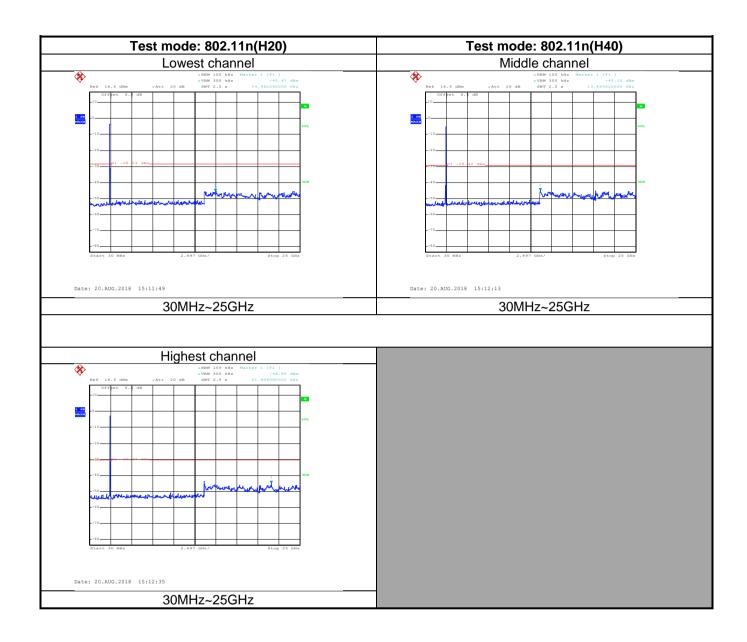


Test plot as follows:













6.7.2 Radiated Emission Method

<u>6.7.2</u>	7.2 Radiated Emission Method								
	Test Requirement:	FCC Part 15 C Section 15.209 and 15.205							
	Test Method:	ANSI C63.10:201	13						
	Test Frequency Range:	9kHz to 25GHz							
	Test Distance:	3m							
	Receiver setup:	Frequency	Dete	ctor	RBW	VBW		Remark	
	•	30MHz-1GHz	Quasi-	peak	120KHz)KHz	Quasi-peak Value	
		Above 1GHz	Pea		 		ЛHz	Peak Value	
	129		RM		1MHz		ЛHz	Average Value	
	Limit:	Frequency 30MHz-88MH	l ₇	Limi	t (dBuV/m @3i 40.0	m)	0	Remark uasi-peak Value	
		88MHz-216MH			43.5			uasi-peak Value	
		216MHz-960Ml			46.0			uasi-peak Value	
		960MHz-1GH			54.0			uasi-peak Value	
		Above 1GHz	,		54.0		,	Average Value	
					74.0	.,		Peak Value	
	Test Procedure:	 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 sheet. 						meter chamber. e position of the nce-receiving le-height antenna meters above field strength. enna are set to ed to its worst m 1 meter to 4 es to 360 degrees unction and 10dB lower than d the peak values ions that did not sing peak, quasi-	
	Test setup:	Below 1GHz EUT Tum Table Ground P	0.8m	4m			_		





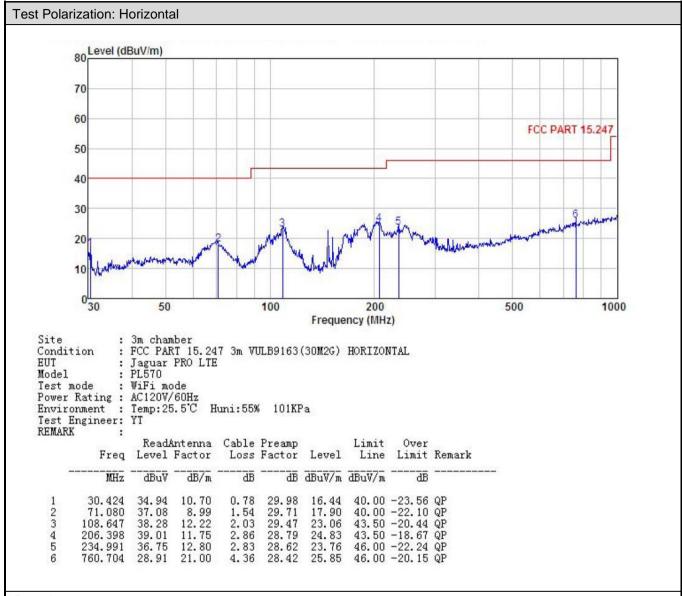
	Above 1GHz
	Horn Anianna Antenna Tower Ground Reference Plane Test Receiver Amptifier Controller
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	 Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis 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:

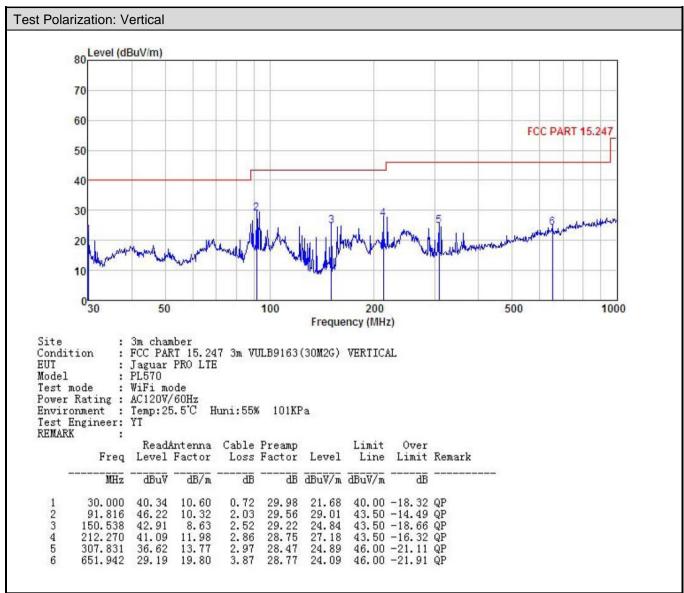


Remark:

- 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

Above 1GHz	bove 1GHz								
	802.11b								
			Test ch	annel: Lowe	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	
4824.00	48.20	30.94	6.81	41.82	44.13	74.00	-29.87	Vertical	
4824.00	50.87	30.94	6.81	41.82	46.80	74.00	-27.20	Horizontal	
			Dete	ctor: Averag	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	39.85	30.94	6.81	41.82	35.78	54.00	-18.22	Vertical	
4824.00	41.27	30.94	6.81	41.82	37.20	54.00	-16.80	Horizontal	
			Test ch	annel: Midd	le channel				
		T	De	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	50.36	31.20	6.85	41.84	46.57	74.00	-27.43	Vertical	
4874.00	50.22	31.20	6.85	41.84	46.43	74.00	-27.57	Horizontal	
			Dete	ctor: Averag	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	
4874.00	39.60	31.20	6.85	41.84	35.81	54.00	-18.19	Vertical	
4874.00	40.77	31.20	6.85	41.84	36.98	54.00	-17.02	Horizontal	
			T (.)	1 1 1 2 1					
				annel: Highe					
				tector: Peak	Value		Ι		
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	51.24	31.46	6.89	41.86	47.73	74.00	-26.27	Vertical	
4924.00	50.79	31.46	6.89	41.86	47.28	74.00	-26.72	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	
4924.00	40.36	31.46	6.89	41.86	36.85	54.00	-17.15	Vertical	
4924.00 Remark:	39.79	31.46	6.89	41.86	36.28	54.00	-17.72	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.





				802.11g				
			Test ch	annel: Lowe	est 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
4824.00	49.60	30.94	6.81	41.82	45.53	74.00	-28.47	Vertical
4824.00	50.75	30.94	6.81	41.82	46.68	74.00	-27.32	Horizontal
			Dete	ctor: Averag	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	39.60	30.94	6.81	41.82	35.53	54.00	-18.47	Vertical
4824.00	40.45	30.94	6.81	41.82	36.38	54.00	-17.62	Horizontal
				annel: Midd				
			De	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	49.25	31.20	6.85	41.84	45.46	74.00	-28.54	Vertical
4874.00	48.87	31.20	6.85	41.84	45.08	74.00	-28.92	Horizontal
			Dete	ctor: Averag	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
4874.00	39.21	31.20	6.85	41.84	35.42	54.00	-18.58	Vertical
4874.00	38.44	31.20	6.85	41.84	34.65	54.00	-19.35	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
4924.00	49.62	31.46	6.89	41.86	46.11	74.00	-27.89	Vertical
4924.00	50.78	31.46	6.89	41.86	47.27	74.00	-26.73	Horizontal
			Dete	ctor: Averaç	je Value			
	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
Frequency (MHz)	(dBuV)	(dB/m)	(dB)	(dB)	· · · · · ·			
		(dB/m) 31.46	(dB) 6.89	(dB) 41.86	36.01	54.00	-17.99	Vertical

^{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.





				802.11n(HT	20)					
				annel: Lowe						
				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		
4824.00	50.82	36.06	6.81	41.82	51.87	74.00	-22.13	Vertical		
4824.00	49.93	36.06	6.81	41.82	50.98	74.00	-23.02	Horizontal		
Detector: Average Value										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
4824.00	39.62	36.06	6.81	41.82	40.67	54.00	-13.33	Vertical		
4824.00	38.51	36.06	6.81	41.82	39.56	54.00	-14.44	Horizontal		
			Test ch	nannel: Mido	lle 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	49.67	36.32	6.85	41.84	51.00	74.00	-23.00	Vertical		
4874.00	48.75	36.32	6.85	41.84	50.08	74.00	-23.92	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	39.62	36.32	6.85	41.84	40.95	54.00	-13.05	Vertical		
4874.00	38.42	36.32	6.85	41.84	39.75	54.00	-14.25	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	50.24	36.58	6.89	41.86	51.85	74.00	-22.15	Vertical		
4924.00	49.19	36.58	6.89	41.86	50.80	74.00	-23.20	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	39.60	36.58	6.89	41.86	41.21	54.00	-12.79	Vertical		
4924.00	38.01	36.58	6.89	41.86	39.62	54.00	-14.38	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.