

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCIS14080073403

FCC REPORT (WIFI)

Applicant: Nexpro International Limitada

Address of Applicant: Guadalupe, Barrio Tournon, Frente Al Hotel Villas Oficinas Del

Bufete Facio Y Canas

Equipment Under Test (EUT)

Product Name: 3G smartphone

Model No.: WINK

FCC ID: ZYPWINK

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

Date of sample receipt: 29 Aug., 2014

Date of Test: 29 Aug., to 03 Nov., 2014

Date of report issued: 04 Nov., 2014

Test Result: PASS *

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

Authorized Signature:



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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Version

Version No.	Date	Description
00	04 Nov., 2014	Original

Zuna Gan Report Clerk Prepared by: 04 Nov., 2014 Date:

Reviewed by: 04 Nov., 2014 Date:

Project Engineer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
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.





5 General Information

5.1 Client Information

Applicant:	Nexpro International Limitada
Address of Applicant:	Guadalupe, Barrio Tournon, Frente Al Hotel Villas Oficinas Del Bufete Facio Y Canas

5.2 General Description of E.U.T.

Product Name:	3G smartphone
Model No.:	WINK
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:	-4.5 dBi
AC adapter:	Input: AC 100-240V 50/60Hz 0.2A Output: DC 5.0V, 500mA
Power supply:	Rechargeable Li-ion Battery DC3.7V-1600mAh



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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		

Operation Frequency each of channel For 802.11n(H40)									
Channel	Channel Frequency Channel Frequency Channel Frequency Channel Frequency								
		4	2427MHz	7	2442MHz				
		5	2432MHz	8	2447MHz				
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		

802.11n (H40)

Channel	Frequency		
The lowest channel	2422MHz		
The middle channel	2437MHz		
The Highest channel	2452MHz		



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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 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			
802.11g	6Mbps			
802.11n(H20)	6.5Mbps			
802.11n(H40)	13.5Mbps			

Final Test Mode:

According to ANSI C63.4 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) and 13.5 Mbps for 802.11n(H40). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.



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5.4 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.

5.5 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





5.6 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 Semi- Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	Aug 23 2014	Aug 22 2017		
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	Apr 19 2014	Apr 19 2015		
3	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	Apr 19 2014	Apr 19 2015		
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
5	Amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	Apr. 01 2014	Mar. 31 2015		
6	Amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	June 09 2014	June 08 2015		
7	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Apr. 01 2014	Mar. 31 2015		
8	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2014	Mar. 29 2015		
9	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A		
10	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A		
11	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP	CCIS0023	Apr 19 2014	Apr 19 2015		
12	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	Apr 01 2014	Mar. 31 2015		
13	Loop antenna	Laplace instrument	RF300	EMC0701	Apr 01 2014	Mar. 31 2015		
14	Universal radio communication tester	Rhode & Schwarz	CMU200	CCIS0069	May. 29 2014	May. 28 2015		
15	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	Apr 19 2014	Apr 19 2015		

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	Oct 10 2012	Oct 09 2015
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	Apr 10 2014	Apr 09 2015
3	LISN	CHASE	MN2050D	CCIS0074	Apr 10 2014	Apr 10 2015
4	Coaxial Cable	CCIS	N/A	CCIS0086	Apr. 01 2014	Mar. 31 2015
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 Part15 C Section 15.203 /247(c)

15.203 requirement:

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

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

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

E.U.T Antenna:

The antenna is an internal antenna which cannot replace by end-user, the best case gain of the antenna is -4.5 dBi.







6.2 Conducted Emission

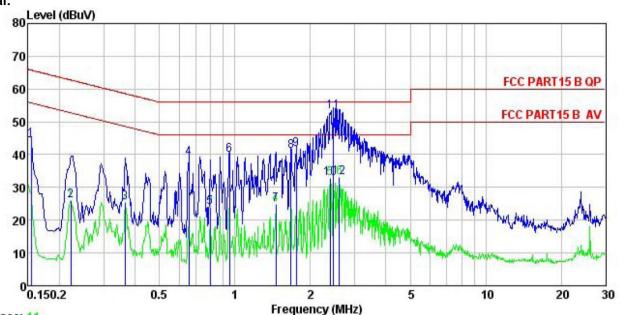
Last Paguiromont:	E00 D 44E 0 0 11 4E 55=				
Test Requirement:	FCC Part15 C Section 15.207				
Test Method:	ANSI C63.4: 2003				
Test Frequency Range:	150 kHz to 30 MHz				
Class / Severity:	Class B				
Receiver setup:	RBW=9 kHz, VBW=30 kHz				
Limit:	Frequency range (MHz)	Limit (c	lBuV)		
	Quasi-peak Avera				
	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5	56	46		
	5-30 * Decreases with the logarithm	60	50		
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: 2003 on conducted measurement. 				
Test setup:	LISN 40cm		er — AC power		
Test Instruments:	Refer to section 5.6 for details				
Test mode:	Refer to section 5.3 for details				
i est illoue.					

Measurement Data





Neutral:



Trace: 11

Site

: CCIS Shielding Room : FCC PART15 B QP LISN NEUTRAL : 734RF Condition

Job No.

EUT : 3G smartphone

lest Mode : WIFI mode
Power Rating : AC 120V/60Hz
Environment : Temp: 23 °C Huni:56% Atmos:101KPa
Test Engineer: Colin
Remark

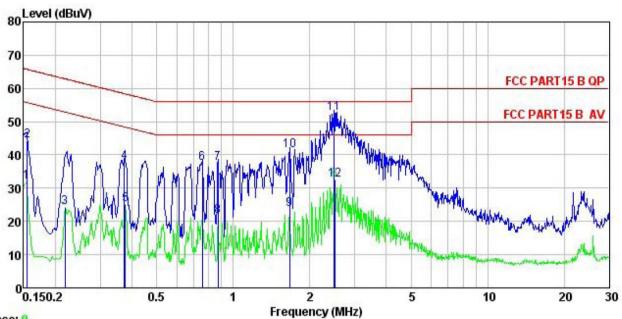
Remark

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
-	MHz	dBu∜	d₿	₫B	dBu∜	dBu∀	dB	
1	0.154	33.53	0.25	10.78	44.56	65.78	-21.22	QP
1 2 3	0.222	14.83	0.25	10.75	25.83	52.74	-26.91	Average
3	0.365	14.46	0.25	10.73	25.44	48.61	-23.17	Average
4	0.654	27.92	0.20	10.77	38.89	56.00	-17.11	QP
4 5 6 7 8 9	0.796	12.91	0.19	10.81	23.91	46.00	-22.09	Average
6	0.953	28.64	0.21	10.86	39.71	56.00	-16.29	QP
7	1.456	13.60	0.26	10.92	24.78	46.00	-21.22	Average
8	1.671	29.70	0.27	10.94	40.91	56.00	-15.09	QP
9	1.753	30.31	0.28	10.94	41.53	56.00	-14.47	QP
10	2.396	21.57	0.29	10.94	32.80	46.00	-13.20	Average
11	2.474	42.04	0.29	10.94	53.27	56.00	-2.73	QP
12	2.608	21.98	0.29	10.93	33.20	46.00	-12.80	Average





Line:



Trace: 9

Site

: CCIS Shielding Room : FCC PART15 B QP LISN LINE Condition

Job No. 734RF

EUT 3G smartphone

Model WINK

Test Mode : WIFI mode Power Rating : AC 120V/60Hz

Environment : Temp: 23 °C Huni:56% Atmos:101KPa Test Engineer: Colin

Remark

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBu∜	₫B	₫B	dBu₹	dBu∜	<u>dB</u>	
1	0.154	20.78	0.27	10.78	31.83	55.78	-23.95	Average
2	0.155	33.14	0.27	10.78	44.19	65.74	-21.55	QP
3	0.219	13.10	0.28	10.76	24.14	52.88	-28.74	Average
4 5	0.373	26.89	0.28	10.73	37.90	58.43	-20.53	QP
5	0.377	14.12	0.28	10.72	25.12	48.34	-23.22	Average
6 7 8	0.755	26.42	0.23	10.79	37.44	56.00	-18.56	QP
7	0.871	26.54	0.24	10.83	37.61	56.00	-18.39	QP
8	0.871	10.49	0.24	10.83	21.56	46.00	-24.44	Average
9	1.662	12.56	0.26	10.94	23.76	46.00	-22.24	Average
10	1.671	30.06	0.26	10.94	41.26	56.00	-14.74	QP
11	2.487	41.20	0.27	10.94	52.41	56.00	-3.59	QP
12	2.500	21.12	0.27	10.94	32.33	46.00	-13.67	Average

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

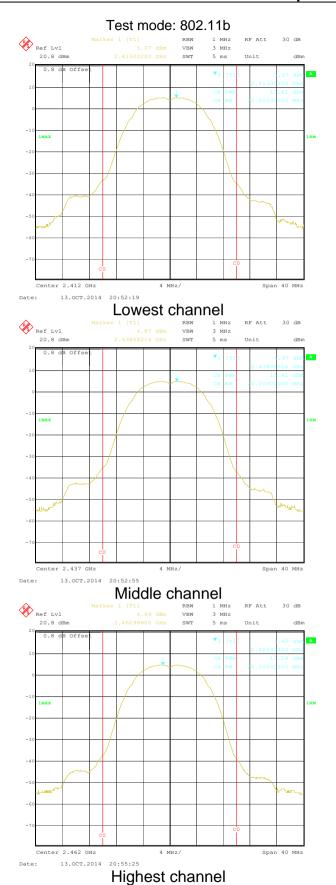
Test Requirement:	FCC Part15 C Section 15.247 (b)(3)			
Test Method:	ANSI C63.4:2003 and KDB558074			
Limit:	30dBm			
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane			
Test Instruments:	Refer to section 5.6 for details			
Test mode:	Refer to section 5.3 for details			
Test results:	Passed			
Remark:	Test method refer to KDB558074 (DTS Measure Guidance) section 8.2, option 1.			

Measurement Data

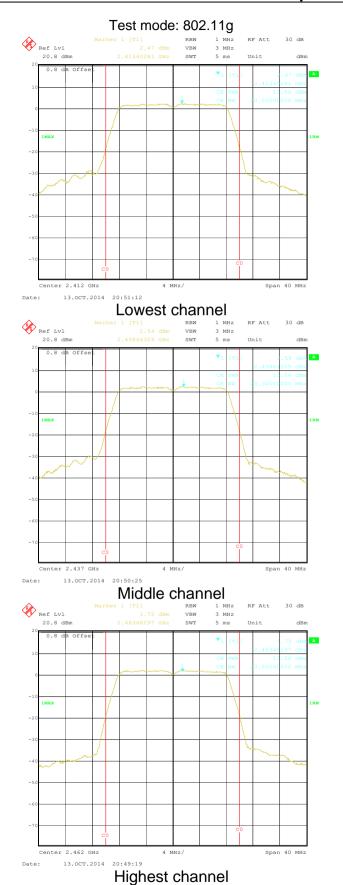
	Ma	aximum Conduct		5		
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(dBm)	Result
Lowest	13.61	13.50	11.33	11.55		
Middle	13.41	13.56	11.62	11.31	30.00	Pass
Highest	13.14	13.36	11.27	11.27		

Test plot as follows:





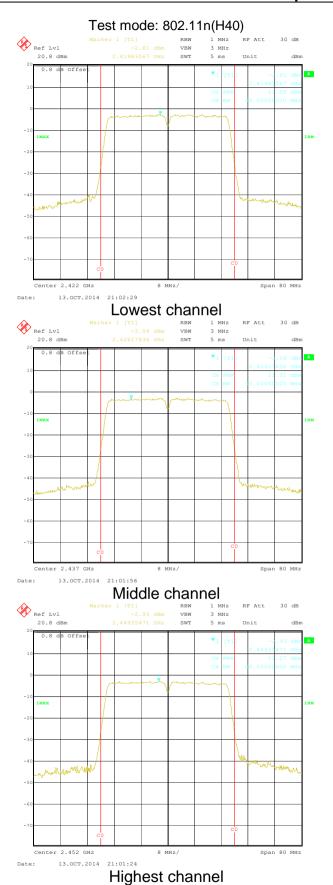
















6.4 Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)		
Test Method:	ANSI C63.4:2003 and KDB558074		
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

		6dB Emission				
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(kHz)	Result
Lowest	9.70	16.75	17.96	36.71		
Middle	9.46	16.75	17.96	36.71	>500	Pass
Highest	9.54	16.75	17.96	36.71		

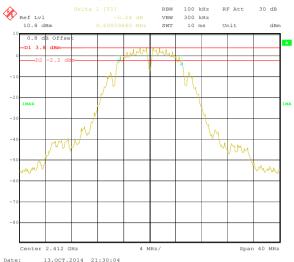
T		99% Occupy				
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(kHz)	Result
Lowest	12.51	16.67	17.80	36.23		
Middle	12.42	16.59	17.72	36.23	N/A	N/A
Highest	12.42	16.59	17.72	36.39		

Test plot as follows:

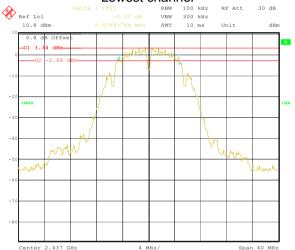


6dB EBW



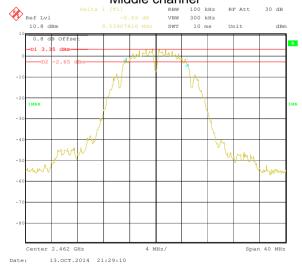


Lowest channel



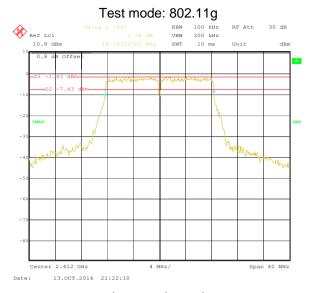
Middle channel

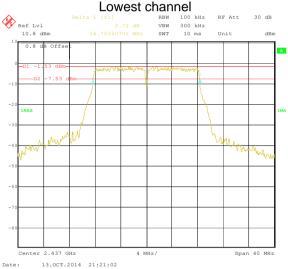
13.OCT.2014 22:20:30

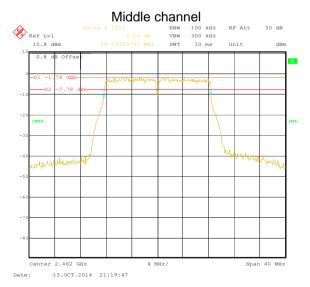


Highest channel



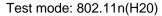


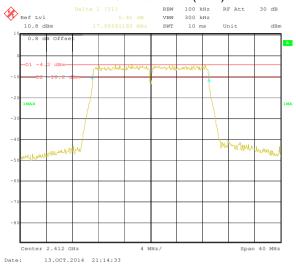




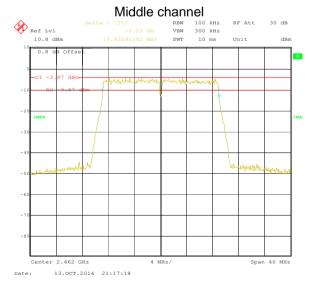
Highest channel







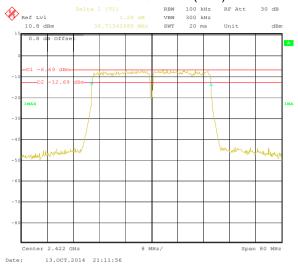




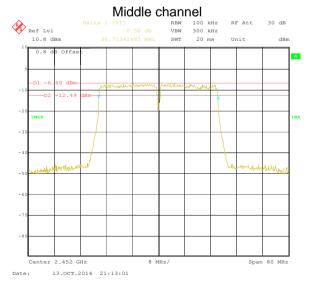
Highest channel



Test mode: 802.11n(H40)





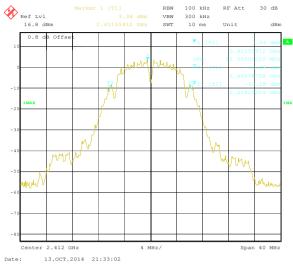


Highest channel

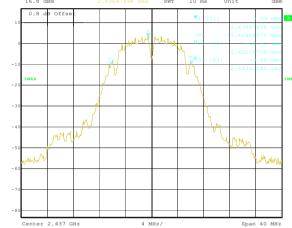


99% **OBW**

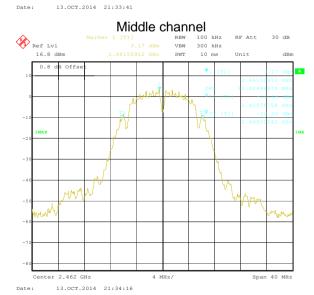




Lowest channel Marker 1 (T1) RNW 100 k Ref Lv1 3.39 dBm VBW 300 k 16.8 dBm 2.43647896 GHz SWT 10 m 0.8 db Offset v

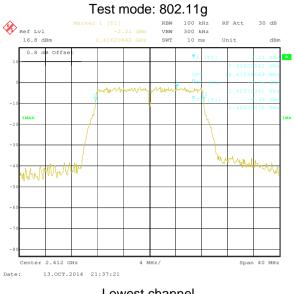


RF Att

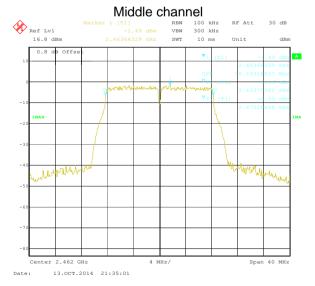


Highest channel





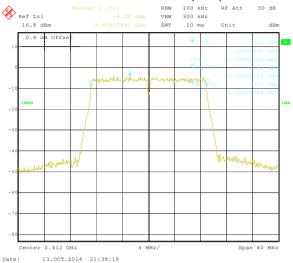




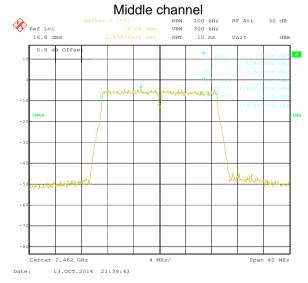
Highest channel





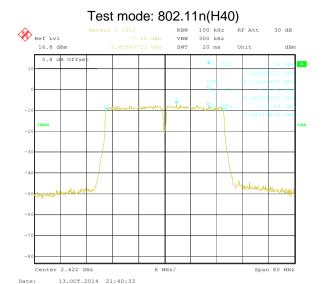


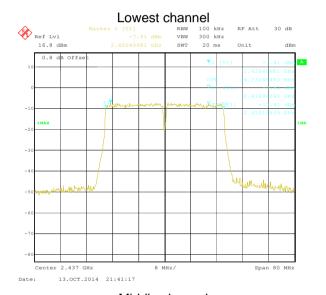


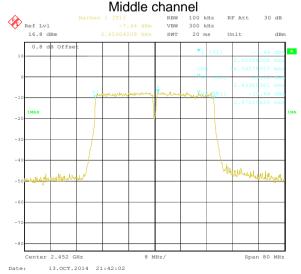


Highest channel









Highest channel





6.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)		
Test Method:	ANSI C63.4:2003 and KDB558074		
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

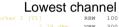
T O		Power Spec		5		
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(dBm)	Result
Lowest	2.80	-0.53	-4.46	-6.98		
Middle	2.79	-0.75	-4.10	-6.81	8.00	Pass
Highest	2.38	-1.19	-3.57	-7.19		

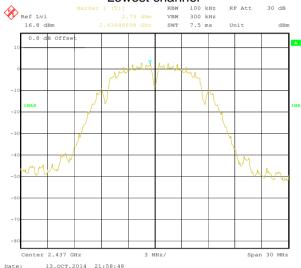
Test plot as follows:



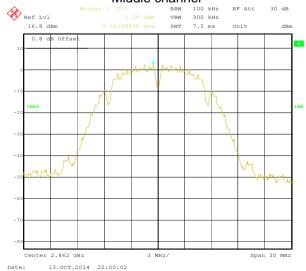






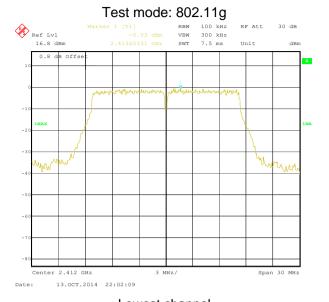


Middle channel



Highest channel





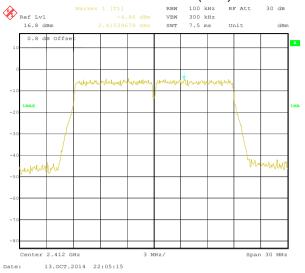


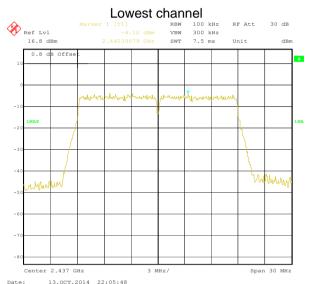


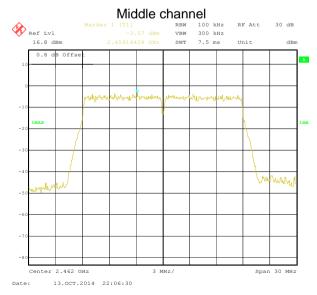
Highest channel



Test mode: 802.11n(H20)



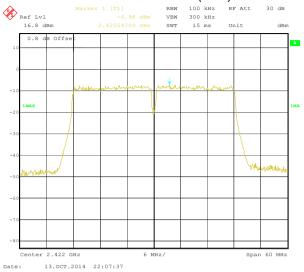




Highest channel



Test mode: 802.11n(H40)







Highest channel





6.6 Band Edge

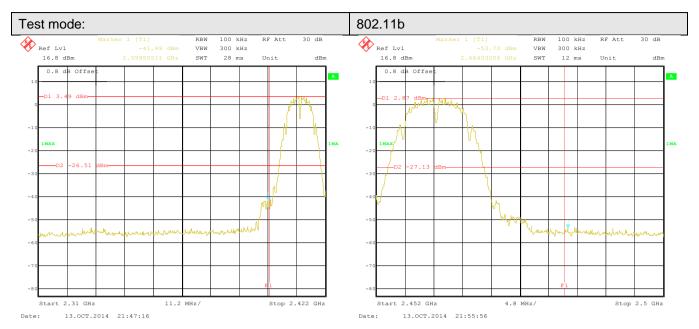
6.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)			
Test Method:	ANSI C63.4:2003 and KDB558074			
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			

Test plot as follows:

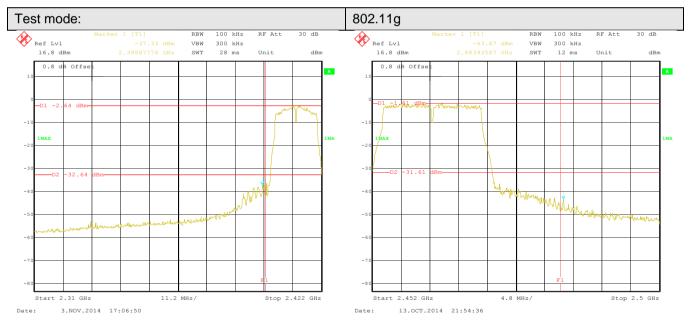
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Lowest channel

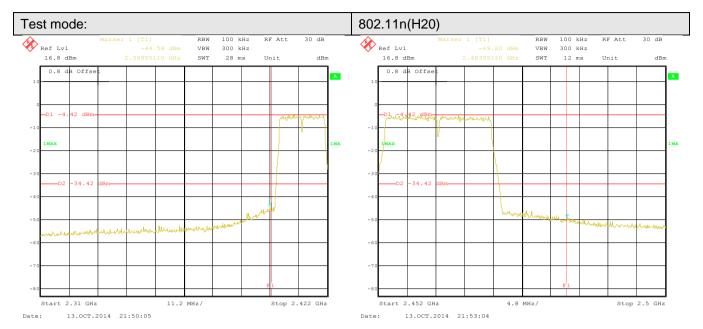
Highest channel



Lowest channel

Highest channel





Lowest channel

Highest channel



Lowest channel

Highest channel





6.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.4: 2003				
Test Frequency Range:	2.3GHz to 2.5GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:					
receiver cotup.	Frequency	Detector	RBW	VBW	Remark
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
	7	Peak	1MHz	10Hz	Average Value
Limit:	Freque	Frequency Limit (dBuV/m @3m)			
			54.00		Remark Average Value
	Above 1	Above 1GHz		0	Peak Value
Test setup:	 The EUT was placed on the top of a rotating table 0.8 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 sheet. 				
Test Instruments:	Refer to section 5.6 for details Refer to section 5.3 for details				
Test mode:					
Test results:	Passed				

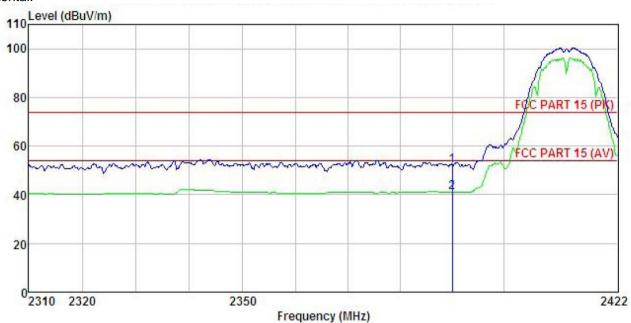




802.11b

Test channel: Lowest

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : 734RF Condition

Jobi NO.

EUT : 3G Smart phone

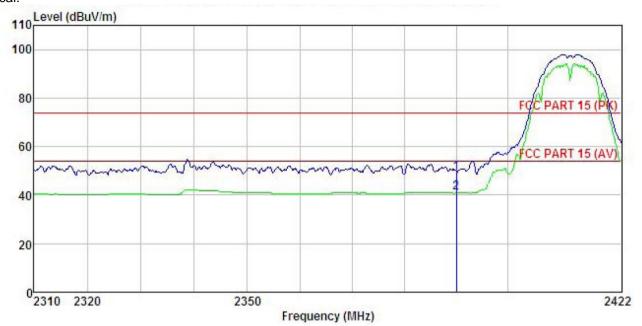
Model : WINK

Test mode : Wifi-B-L mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

	Freq		Antenna Factor						
	MHz	dBu₹	-dB/m	₫B	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2390.000 2390.000								







Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

Jobi NO. EUT

: 734RF : 3G Smart phone : WINK Model Test mode : Wifi-B-L mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

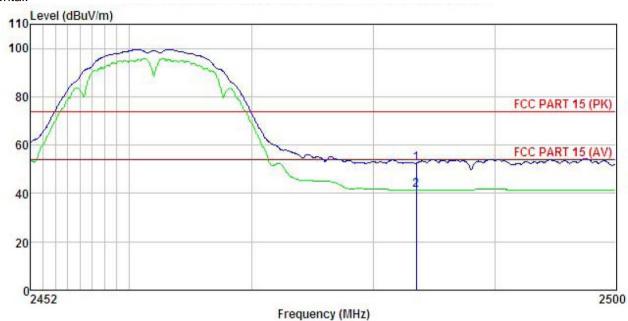
3.	PRETROCT.		Antenna	Cable	Preamn		Limit	Over		
	Freq		Factor						Remark	
	MHz	dBu∜	<u>dB</u> /m	dB	<u>dB</u>	$\overline{dBuV/m}$	dBu√/m	<u>dB</u>		
1	2390.000	16.06	27.58	5.67	0.00	49.31	74.00	-24.69	Peak	
2	2390, 000	7, 58	27, 58	5, 67	0.00	40, 83	54,00	-13.17	Average	





Test channel: Highest

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

Jobi NO.

: 734RF : 3G Smart phone EUT

: WINK Model

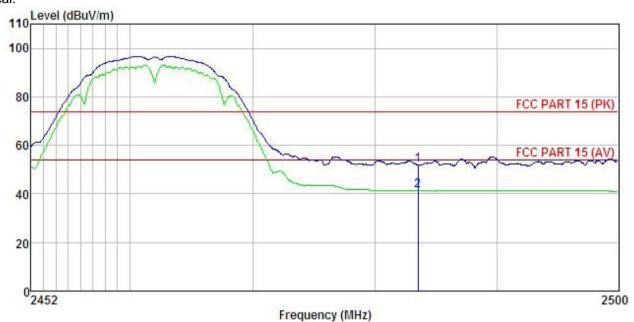
Test mode : Wifi-B-H mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%

Test Engineer: Colin

	Freq		Antenna Factor						
	MHz	Hz dBuV	dB/m	<u>d</u> B	<u>ab</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500						74.00 54.00		







Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : 734RF Condition

Jobi NO.

EUT : 3G Smart phone

Model : WINK

: Wifi-B-H mode Test mode Power Rating: AC 120V/60Hz Environment: Temp: 25.5°C Huni: 55% Test Engineer: Colin

	Freq	ReadAntenna Ca Level Factor L							
	MHz	—dBuV	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>d</u> B	
1 2	2483,500 2483,500								

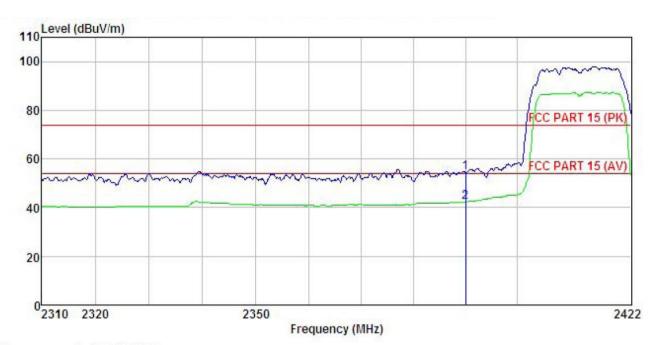




802.11g

Test channel: Lowest

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

Jobi NO. 734RF

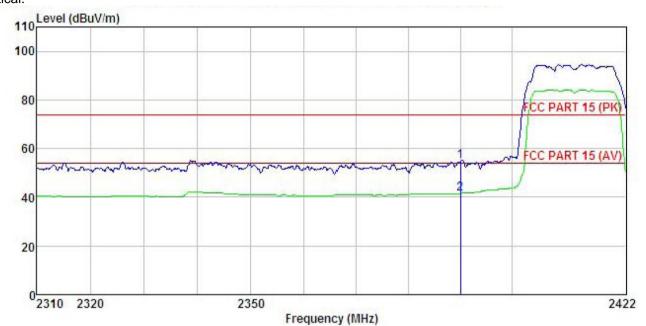
EUT : 3G Smart phone Model : WINK

Test mode : Wifi-G-L mode Power Rating : AC 120V/60Hz Environment : Temp:25.5°C Huni:55% Test Engineer: Colin

	Freq	ReadAntenna Freq Level Factor							
	MHz	dBu∜	dB/m	<u>d</u> B	<u>ab</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2390,000 2390,000				0.00 0.00				







Site : 3m chamber

: FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

Jobi NO. : 734RF

: 3G Smart phone : WINK EUT

Model

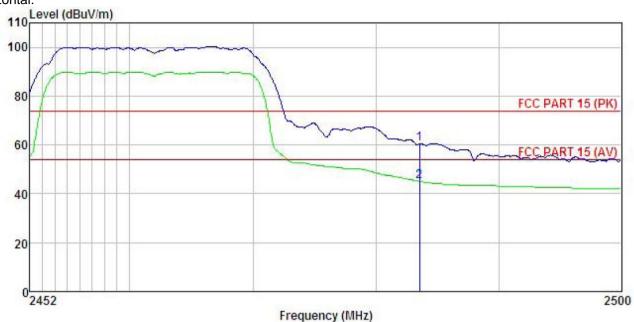
Test mode : Wifi-G-L mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

	Read Freq Level		Antenna Factor						Remark
	MHz	dBu₹		<u>d</u> B	<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>d</u> B	
1 2	2390.000 2390.000								





Test channel: Highest Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : 734RF Condition

Jobi NO.

EUT : 3G Smart phone

: WINK Model

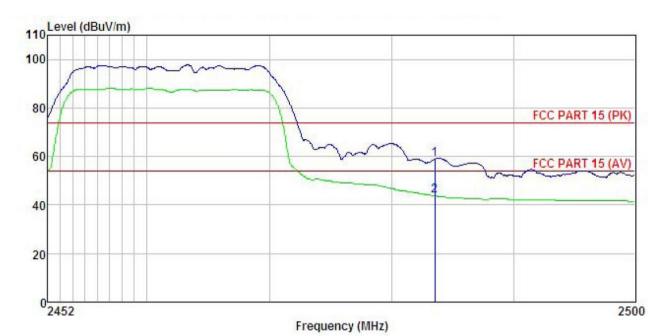
: Wifi-G-H mode Test mode Power Rating : AC 120V/60Hz

Environment : Temp:25.5°C Huni:55% Test Engineer: Colin

051	Freq	Read	Antenna Factor						
	MHz	dBu₹	dB/m	<u>d</u> B	<u>d</u> B	$\overline{dBuV/m}$	dBuV/m	āĒ	
1 2	2483.500 2483.500				0.00 0.00				







Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

Jobi NO. : 734RF

: 3G Smart phone : WINK EUT

Model

Test mode : Wifi-G-H mode Power Rating : AC 120V/60Hz

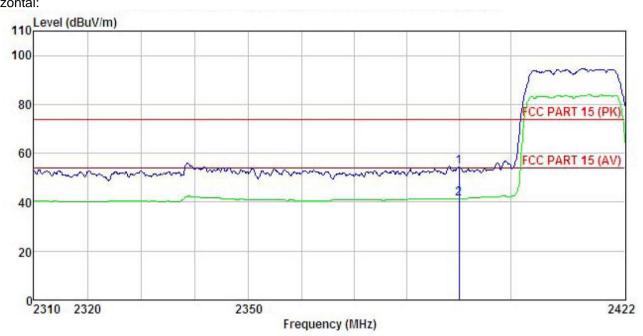
Environment : Temp:25.5°C Huni:55% Test Engineer: Colin

_	Freq	Read	Antenna Factor						
	MHz	dBuV	<u>dB</u> /m	<u>d</u> B	<u>d</u> B	$\overline{dBuV/m}$	dBuV/m	<u>d</u> B	
1 2	2483.500 2483.500								





802.11n (H20) Test channel: Lowest Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

: 734RF Jobi NO.

EUT : 3G Smart phone Model : WINK Test mode : Wifi-N20-L mode

Power Rating : AC 120V/60Hz

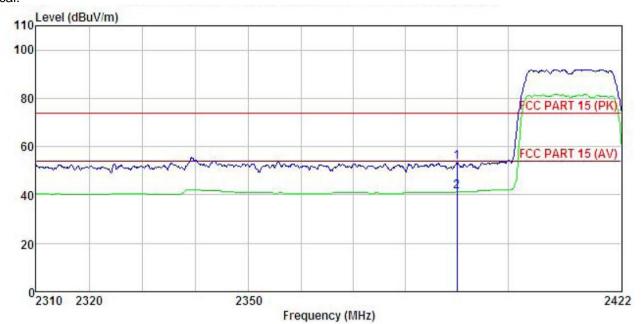
Environment : Temp: 25.5°C Huni: 55%

Test Engineer: Colin

	Freq		Antenna Factor						Remark
	MHz	dBu∀	dB/m	dB	dB	$\overline{dBuV/m}$	dBuV/m	<u>db</u>	
1 2	2390.000 2390.000					54.29 41.53			







Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : 734RF Condition

Jobi NO.

EUT : 3G Smart phone

: WINK Model

Test mode : Wifi-N20-L mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%

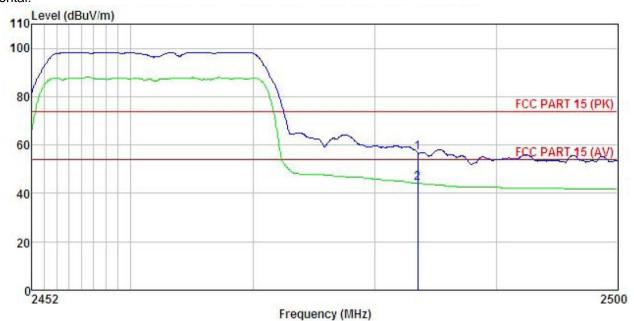
Test Engineer: Colin

	Freq		Antenna Factor						Remark	
	MHz	dBu∇		<u>ab</u>	<u>d</u> B	$\overline{dBuV/m}$	dBuV/m	<u>ab</u>		-
1 2	2390.000 2390.000				0.00 0.00				Peak Average	





Test channel: Highest Horizontal:



: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : 734RF Condition

Jobi NO.

EUT : 3G Smart phone

: WINK Model

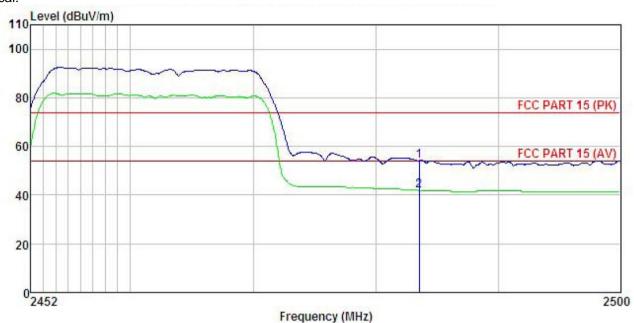
Test mode : Wifi-N20-H mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

			dAntenna Cable P el Factor Loss F						
	MHz	dBu∇	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500				0.00 0.00				Peak Average









Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

Jobi NO. EUT

: 734RF : 3G Smart phone

: WINK Model

: WINK
Test mode : Wifi-N20-H mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

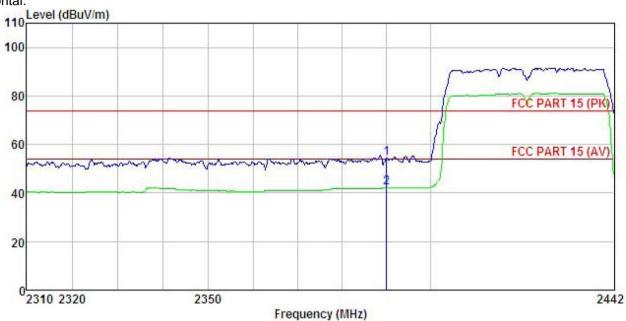
ST	Engineer:		Ant enna	Cable	Presmo		Limit	Over		
	Freq		Factor						Remark	
	MHz	dBu₹	<u>dB</u> /m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>		
1	2483.500	20.83	27.52	5.70	0.00	54.05	74.00	-19.95	Peak	
2	2483, 500	8, 75	27, 52	5, 70	0.00	41.97	54,00	-12.03	Average	





802.11n (H40) Test channel: Lowest





Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : 734RF Condition

Jobi NO.

: 3G Smart phone EUT

Model : WINK

: Wifi-N40-L mode Test mode Power Rating : AC 120V/60Hz

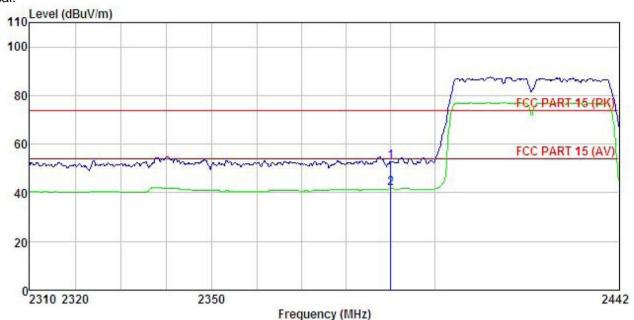
Environment : Temp:25.5°C Huni:55% Test Engineer: Colin

	Freq		Antenna Factor					
	MHz	dBu₹		 <u>dB</u>	dBuV/m	dBuV/m	<u>ab</u>	
1 2	2390.000 2390.000				54.53 42.28			









Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : 734RF Condition

Jobi NO.

: 3G Smart phone EUT

Model : WINK

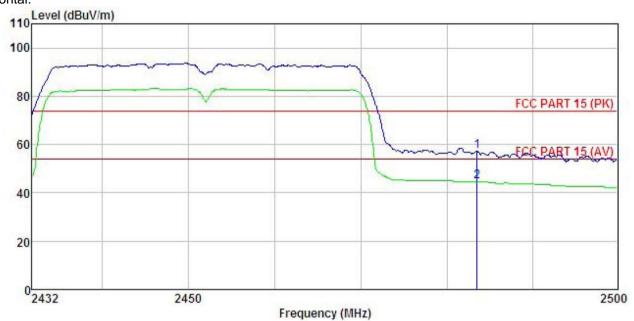
Test mode : Wifi-N40-L mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

050	Freq	Read	Antenna Factor						
	MHz	dBu₹	<u>dB</u> /m	dB	<u>d</u> B	dBuV/m	dBuV/m	<u>d</u> B	
1 2	2390.000 2390.000				0.00 0.00				





Test channel: Highest Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

Jobi NO. : 734RF

EUT : 3G Smart phone

: WINK Model

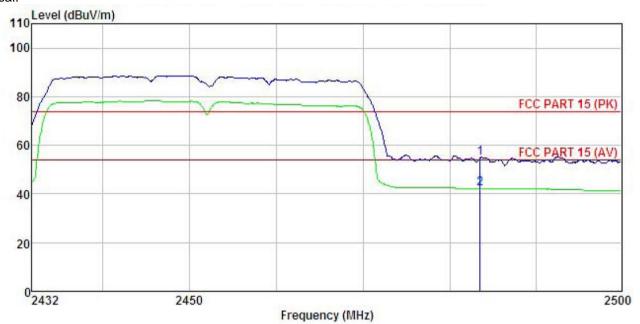
: Wifi-N40-H mode Test mode Power Rating: AC 120V/60Hz Environment: Temp:25.5°C Huni:55% Test Engineer: Colin

	Freq		Antenna Factor						
	MHz	—dBu∇	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	dBuV/m	dBu√/m	<u>dB</u>	
1	2483.500	23.95	27.52	5.70	0.00	57.17	74.00	-16.83	Peak
2	2483.500	11.60	27.52	5.70	0.00	44.82	54.00	-9.18	Average









Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : 734RF Condition

Jobi NO.

EUT : 3G Smart phone

: WINK Model

Test mode : Wifi-N40-H mode Power Rating : AC 120V/60Hz

Environment : Temp:25.5°C Huni:55% Test Engineer: Colin

	rugineer.									
		Read	Ant enna	Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark	
	MHz	dBu₹	dB/m	<u>d</u> B	<u>d</u> B	dBuV/m	dBuV/m	<u>dB</u>		
	2483.500	21.48	27.52	5.70	0.00	54.70	74.00	-19.30	Peak	
)	2483, 500	9. 12	27. 52	5, 70	0.00	42.34	54, 00	-11.66	Average	

Remark:

- 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

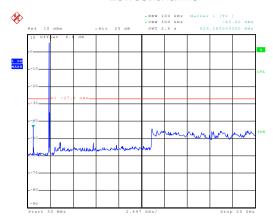
Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	ANSI C63.4:2003 and KDB558074					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall 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.					
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:



Test mode: 802.11b

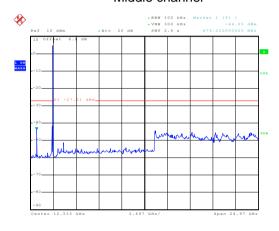
Lowest channel



Date: 3.NOV.2014 18:14:54

30MHz~25GHz

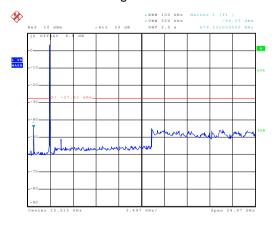
Middle channel



Date: 3.NOV.2014 18:15:58

30MHz~25GHz

Highest channel



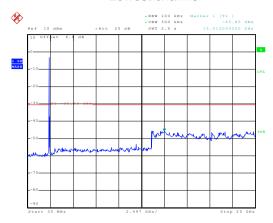
Date: 3.NOV.2014 18:16:56

30MHz~25GHz



Test mode: 802.11g

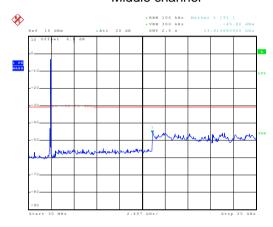
Lowest channel



Date: 13.0CT.2014 22:36:49

30MHz~25GHz

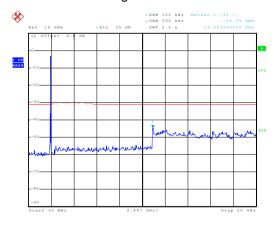
Middle channel



Date: 13.OCT.2014 22:37:35

30MHz~25GHz

Highest channel



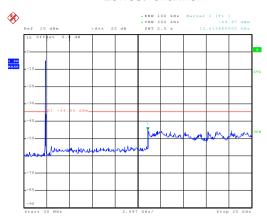
Date: 13.0CT.2014 22:38:20

30MHz~25GHz



Test mode: 802.11n(H20)

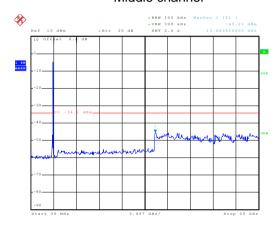
Lowest channel



Date: 13.0CT.2014 22:32:10

30MHz~25GHz

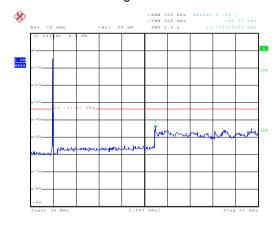
Middle channel



Date: 13.OCT.2014 22:32:47

30MHz~25GHz

Highest channel



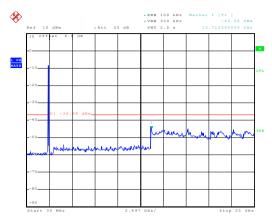
Date: 13.0CT.2014 22:33:23

30MHz~25GHz



Test mode: 802.11n(H40)

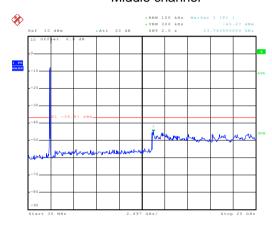
Lowest channel



Date: 13.0CT.2014 22:34:18

30MHz~25GHz

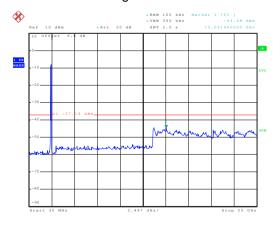
Middle channel



Date: 13.OCT.2014 22:34:57

30MHz~25GHz

Highest channel



Date: 13.0CT.2014 22:35:43

30MHz~25GHz

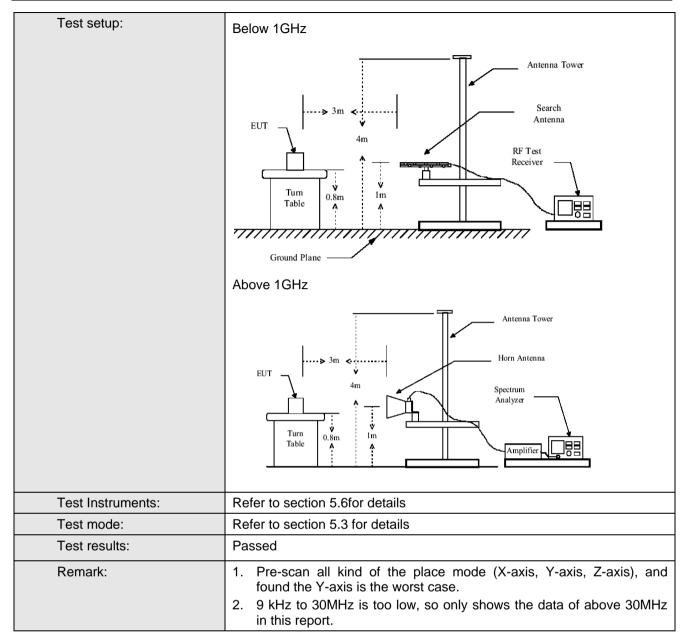


6.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205							
Test Method:	ANSI C63.4:200)3						
Test Frequency Range:	9KHz to 25GHz							
Test site:	Measurement D	istance: 3m						
Receiver setup:								
·	Frequency	Detector	RBW	VBW	Remark			
	30MHz-1GHz Quasi-peak 120KHz 300KHz Quasi-peak \							
	Above 1GHz	Peak	1MHz	3MHz	Peak Value			
	7.5010 1011	Peak	1MHz	10Hz	Average Value			
Limit:	Frequency Limit (dBu)//m @3m) Remark							
	Frequency Limit (dBuV/m @3m) Remark							
	30MHz-8 88MHz-21		40.0 43.5		Quasi-peak Value Quasi-peak Value			
	216MHz-9		46.0		Quasi-peak Value			
	960MHz-		54.0		Quasi-peak Value			
			54.0		Average Value			
	Above 1	GHz	74.0		Peak Value			
Test Procedure:	the ground to determin 2. The EUT wantenna, wantenna, wantenna and the ground Both horizon make the numbers and to find the number of the emission of the EUT have 10dB	at a 3 meter of the the position was set 3 meter which was mount a height is vanto determine ontal and vertineasurement. Uspected emisten the antenial the rota table maximum reacciver system and width with sion level of the cified, then to would be reported to the total and the tot	camber. The is of the highesters away from anted on the touried from one the maximum cal polarization was turned to was turned to was set to Pan Maximum Hale EUT in peasesting could borted. Otherwall be re-tested	table was rost radiation. the interfer op of a variate meter to for a value of the and the control of the and the control of	rence-receiving able-height antenna our meters above the field strength. Intenna are set to aged to its worst from 1 meter to 4 ees to 360 degrees			





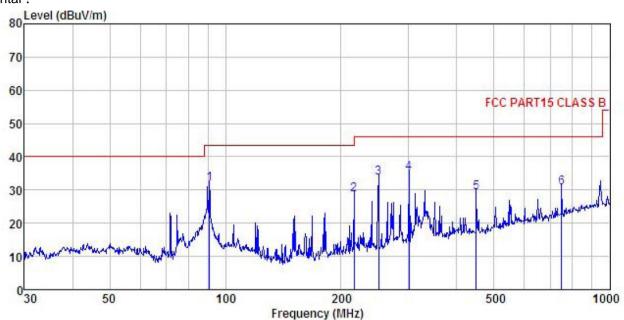






Below 1GHz

Horizontal:



Site : 3m chamber

Condition : FCC PART15 CLASS B 3m VULB9163(30M1G) HORIZONTAL

Jobi NO.

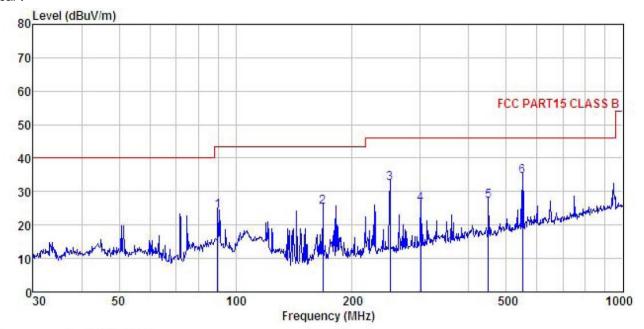
: 734RF : 3G Smart phone EUT

: WINK Model Test mode : Wifi mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Colin

031	Frea	Read	Antenna Factor				Limit Line	Over Limit		
	MHz	dBu∀	<u>d</u> B/m			dBuV/m				
1 2 3 4 5	90.855		12.07	0.91		31.85				
2	216.024	44.90	11.07	1.46		28.70				
3	250 . 301	48.55	12.07	1.62	28.54	33.70	46.00	-12.30	QP	
4	300.367	48.72	13.06	1.77	28.45	35.10	46.00	-10.90	QP	
	449.556	40.13	15.57	2.25	28.87	29.08	46.00	-16.92	QP	
6	750.108	36.63	19.43	3.04	28.48	30.62	46.00	-15.38	QP	







Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) VERTICAL Condition

Jobi NO. : 734RF

: 3G Smart phone : WINK EUT

Model : Wifi mode Test mode

Power Rating: AC 120V/60Hz Environment: Temp:25.5°C Huni:55%

est	Engineer: Freq	Read	Antenna Factor				Limit Line		
	MHz	dBu∜	<u>dB</u> /m	dB	<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>dB</u>	
1	89.905	40.87	11.90	0.91	29.57	24.11	43.50	-19.39	QP
2	167.824	44.08	8.90	1.34	29.07	25.25	43.50	-18.25	QP
2 3 4 5 6	250.301	47.29	12.07	1.62	28.54	32.44	46.00	-13.56	QP
4	300.367	39.98	13.06	1.77	28.45	26.36	46.00	-19.64	QP
5	449.556	38.12	15.57	2.25	28.87	27.07	46.00	-18.93	QP
6	550, 948	43, 42	17.57	2, 54	29, 10	34.43	46,00	-11.57	QΡ



Above 1GHz

Test mode: 80	02.11b		Test channe	el: Lowest		Remark: 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)	Polar.
4824.00	48.76	31.53	8.90	40.24	48.95	74.00	-25.05	Vertical
4824.00	46.93	31.53	8.90	40.24	47.12	74.00	-26.88	Horizontal
Test mode: 80	02.11b		Test channel: Lowest			Remark: A	verage	
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	28.53	31.53	8.90	40.24	28.72	54.00	-25.28	Vertical
4824.00	36.29	31.53	8.90	40.24	36.48	54.00	-17.52	Horizontal

Test mode: 802	2.11b		Test channe	el: Middle		Remark: 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)	Polar.
4874.00	46.69	31.58	8.98	40.15	47.10	74.00	-26.90	Vertical
4874.00	49.16	31.58	8.98	40.15	49.57	74.00	-24.43	Horizontal
Test mode: 802	2.11b		Test channel: Middle			Remark: Av	erage	
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	29.07	31.58	8.98	40.15	29.48	54.00	-24.52	Vertical
4874.00	30.15	31.58	8.98	40.15	30.56	54.00	-23.44	Horizontal

Test mode: 802	2.11b		Test channel: Highest			Remark: 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)	Polar.
4924.00	48.58	31.69	9.08	40.03	49.32	74.00	-24.68	Vertical
4924.00	47.28	31.69	9.08	40.03	48.02	74.00	-25.98	Horizontal
Test mode: 802	2.11b		Test channel: Highest			Remark: A	verage	
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	28.70	31.69	9.08	40.03	29.44	54.00	-24.56	Vertical
4924.00	28.74	31.69	9.08	40.03	29.48	54.00	-24.52	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: 80	2.11g		Test channe	el: Lowest		Remark: 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)	Polar.	
4824.00	46.37	31.53	8.90	40.24	46.56	74.00	-27.44	Vertical	
4824.00	45.77	31.53	8.90	40.24	45.96	74.00	-28.04	Horizontal	
Test mode: 80	2.11g		Test channel: Lowest			Remark: Av	erage		
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	27.35	31.53	8.90	40.24	27.54	54.00	-26.46	Vertical	
4824.00	26.66	31.53	8.90	40.24	26.85	54.00	-27.15	Horizontal	

Test mode: 802.11g			Test channel: Middle			Remark: 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)	Polar.	
4874.00	46.18	31.58	8.98	40.15	46.59	74.00	-27.41	Vertical	
4874.00	46.64	31.58	8.98	40.15	47.05	74.00	-26.95	Horizontal	
Test mode: 80	2.11g		Test channel: Middle			Remark: Average			
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	27.73	31.58	8.98	40.15	28.14	54.00	-25.86	Vertical	
4874.00	27.32	31.58	8.98	40.15	27.73	54.00	-26.27	Horizontal	

Test mode: 802.11g			Test channel: Highest			Remark: 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)	Polar.	
4924.00	46.88	31.69	9.08	40.03	47.62	74.00	-26.38	Vertical	
4924.00	46.63	31.69	9.08	40.03	47.37	74.00	-26.63	Horizontal	
Test mode: 80	2.11g		Test channel: Highest			Remark: Average			
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	26.32	31.69	9.08	40.03	27.06	54.00	-26.94	Vertical	
4924.00	26.67	31.69	9.08	40.03	27.41	54.00	-26.59	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: 802.11n(H20)			Test channel: Lowest			Remark: 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)	Polar.
4824.00	46.37	31.53	8.90	40.24	46.56	74.00	-27.44	Vertical
4824.00	46.04	31.53	8.90	40.24	46.23	74.00	-27.77	Horizontal
Test mode: 8	02.11n(H20)		Test channel: Lowest			Remark: Average		
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	28.35	31.53	8.90	40.24	28.54	54.00	-25.46	Vertical
4824.00	26.42	31.53	8.90	40.24	26.61	54.00	-27.39	Horizontal

Test mode: 802.11n(H20)			Test channel: Middle			Remark: 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)	Polar.
4874.00	46.60	31.58	8.98	40.15	47.01	74.00	-26.99	Vertical
4874.00	46.00	31.58	8.98	40.15	46.41	74.00	-27.59	Horizontal
Test mode: 8	02.11n(H20)		Test channel: Middle			Remark: Av	erage	
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	26.20	31.58	8.98	40.15	26.61	54.00	-27.39	Vertical
4874.00	25.17	31.58	8.98	40.15	25.58	54.00	-28.42	Horizontal

Test mode: 802.11n(H20)		Test channel: Highest			Remark: 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)	Polar.
4924.00	46.80	31.69	9.08	40.03	47.54	74.00	-26.46	Vertical
4924.00	46.88	31.69	9.08	40.03	47.62	74.00	-26.38	Horizontal
Test mode: 8	02.11n(H20)		Test channel: Highest			Remark: Av	rerage	
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	26.11	31.69	9.08	40.03	26.85	54.00	-27.15	Vertical
4924.00	26.80	31.69	9.08	40.03	27.54	54.00	-26.46	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: 802.11n(H40)			Test channel: Lowest			Remark: 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)	Polar.
4844.00	46.74	31.53	8.90	40.24	46.93	74.00	-27.07	Vertical
4844.00	47.12	31.53	8.90	40.24	47.31	74.00	-26.69	Horizontal
Test mode: 8	302.11n(H40)		Test channel: Lowest			Remark: Av	erage	
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.
4844.00	26.88	31.53	8.90	40.24	27.07	54.00	-26.93	Vertical
4844.00	27.80	31.53	8.90	40.24	27.99	54.00	-26.01	Horizontal

Test mode: 802.11n(H40)			Test channel: Middle			Remark: 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)	Polar.
4874.00	45.06	31.58	8.98	40.15	45.47	74.00	-28.53	Vertical
4874.00	46.59	31.58	8.98	40.15	47.00	74.00	-27.00	Horizontal
Test mode: 8	302.11n(H40)		Test channel: Middle			Remark: Av	erage	
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	25.12	31.58	8.98	40.15	25.53	54.00	-28.47	Vertical
4874.00	26.73	31.58	8.98	40.15	27.14	54.00	-26.86	Horizontal

Test mode: 802.11n(H40)		Test channel: Highest			Remark: 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)	Polar.
4904.00	47.58	31.69	9.08	40.03	48.32	74.00	-25.68	Vertical
4904.00	47.06	31.69	9.08	40.03	47.80	74.00	-26.20	Horizontal
Test mode: 8	302.11n(H40)		Test channel: Highest			Remark: Av	erage	
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.
4904.00	30.28	31.69	9.08	40.03	31.02	54.00	-22.98	Vertical
4904.00	27.33	31.69	9.08	40.03	28.07	54.00	-25.93	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.