FCC REPORT (WIFI)

Applicant: GNJ Manufacturing Inc.

Address of Applicant: 205 Ansin Blvd Hallandale Beach, FL 33009,USA

Equipment Under Test (EUT)

Product Name: Mobile Phone-Amazing Series

Model No.: CAPHG10-01

FCC ID: 2AAE9CAPHG10-01

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

Date of sample receipt: 28 May 2013

Date of Test: 29 May to 18 Jun.,2013

Date of report issued: 18 Jun.,2013

Test Result: PASS *

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

Authorized Signature:



Bruce Zhang Laboratory Manager

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

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

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Version

Version No.	Date	Description
00	18 Jun.,2013	Original

Prepared by:	Mila	Date:	18 Jun., 2013
	Report Clerk		
Reviewed by:	Lauley Li	Date:	18 Jun., 2013
	Project Engineer	_	

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

Project No.: CCIS130500155RF

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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
26/6dB Emission 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.

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5 General Information

5.1 Client Information

Applicant:	GNJ Manufacturing Inc.
Address of Applicant:	205 Ansin Blvd Hallandale Beach, FL 33009,USA
Manufacturer:	GNJ Manufacturing Inc.
Address of Manufacturer:	205 Ansin Blvd Hallandale Beach, FL 33009,USA

5.2 General Description of E.U.T.

Product Name:	Mobile Phone-Amazing Series	
Model No.:	CAPHG10-01	
0 11 5	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))	
Operation Frequency:	2422MHz~2452MHz (802.11n(H40))	
Channel numbers:	11 for 802.11b/802.11g/802.11(H20)	
Channel numbers.	7 for 802.11n(H40)	
Channel separation:	5MHz	
Modulation technology:	Direct Sequence Spread Spectrum (DSSS)	
(IEEE 802.11b)		
Modulation technology:	Orthogonal Frequency Division Multiplexing(OFDM)	
(IEEE 802.11g/802.11n)		
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:	-1.1 dBi	
AC adapter:	Input:100-240V AC,50/60Hz 150mA	
AC adapter :	Output:5.0V DC MAX 800mA	
Power supply:	Rechargeable Li-ion Battery DC3.7V	

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Operation	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	Operation Frequency each of channel For 802.11n(H40)						
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 802.11p, 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: 0755-23118282 Fax: 0755-23116366

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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	June 09 2012	June 08 2013
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	May 25 2013	May 24 2014
3	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	May 25 2013	May 24 2014
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
5	Coaxial Cable	CCIS	N/A	CCIS0016	Apr. 01 2013	Mar. 31 2014
6	Coaxial Cable	CCIS	N/A	CCIS0017	Apr. 01 2013	Mar. 31 2014
7	Coaxial cable	CCIS	N/A	CCIS0018	Apr. 01 2013	Mar. 31 2014
8	Coaxial Cable	CCIS	N/A	CCIS0019	Apr. 01 2013	Mar. 31 2014
9	Coaxial Cable	CCIS	N/A	CCIS0087	Apr. 01 2013	Mar. 31 2014
10	Amplifier(10kHz- 1.3GHz)	HP	8447D	CCIS0003	Apr. 01 2013	Mar. 31 2014
11	Amplifier(1GHz- 18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	June 09 2012	June 08 2013
12	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Apr. 01 2013	Mar. 31 2014
13	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2013	Mar. 29 2014
14	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A
15	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A
16	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP	CCIS0023	May. 25 2013	May. 24 2014
17	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	Apr 01 2013	Mar. 31 2014
18	Loop antenna	Laplace instrument	RF300	EMC0701	Aug. 12 2012	Aug. 11 2013
19	Universal radio communication tester	Rhode & Schwarz	CMU200	CCIS0069	May. 25 2013	May. 24 2014
20	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	May. 25 2013	May. 24 2014
21	Spectrum analyzer	Agilent	E4440A	US43362176	Jan.11 2013	Jan.10 2014

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	June 09 2012	June 08 2013	
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	May 25 2013	May 24 2014	
3	LISN	CHASE	MN2050D	CCIS0074	Apr 01 2013	Mar. 31 2014	
4	Coaxial Cable	CCIS	N/A	CCIS0086	Apr. 01 2013	Mar. 31 2014	
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	

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6 Test results and Measurement Data

6.1 Antenna requirement:

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

15.203 requirement:

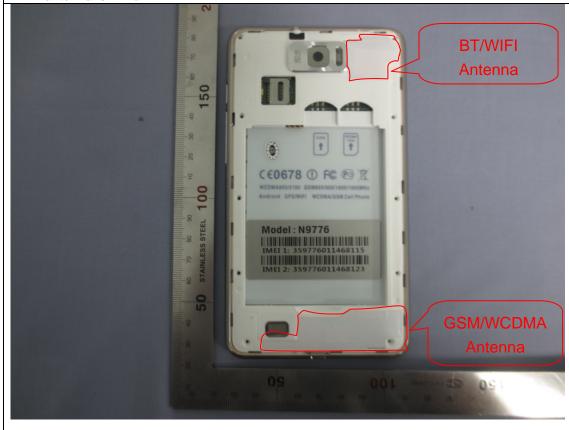
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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-1.1 dBi.



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6.2 Conducted Emission

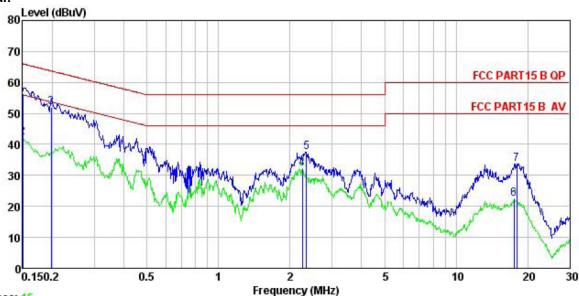
OIZ GOIIGGOLGG ZIIIIGGI	0 11					
Test Requirement:	FCC Part15 C Section 15.207	,				
Test Method:	ANSI C63.4: 2003					
Test Frequency Range:	150 kHz to 30 MHz	150 kHz to 30 MHz				
Class / Severity:	Class B					
Receiver setup:	RBW=9 kHz, VBW=30 kHz					
Limit:	[Limit (d	BuV)			
	Frequency range (MHz)	Quasi-peak	Average			
	0.15-0.5	66 to 56*	56 to 46*			
	0.5-5	56	46			
	5-30	60	50			
	* Decreases with the logarithm					
Test procedure	 The E.U.T and simulators a line impedance stabiliza 50ohm/50uH coupling impedance. The peripheral devices at through a LISN that proving the coupling impedance. 	ation network (L.I.S.N.) pedance for the measure also connected to the	, which provides a iring equipment. e main power			
	with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted					
	interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.					
Test setup:	Refere	ence Plane				
	AUX Equipment E.U.T EMI Receiver					
	Remark: E.U.T: Equipment Under Test LISN: Line Impedence Stabilizatio	nn Network				
	Test table height=0.8m					
Test Instruments:	Test table height=0.8m Refer to section 5.6 for details					
Test Instruments: Test mode: Test results:	Test table height=0.8m					

Measurement Data

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Neutral:



Trace: 15

: CCIS Conducted Test Site : FCC PART15 B QP LISN NEUTRAL Site Condition

155RF

Job No. EUT : Mobile phone : CAPHG10-01 Model Test Mode : Wifi mode Power Rating : AC 120V/60Hz

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

Test Engineer:

4 5

6

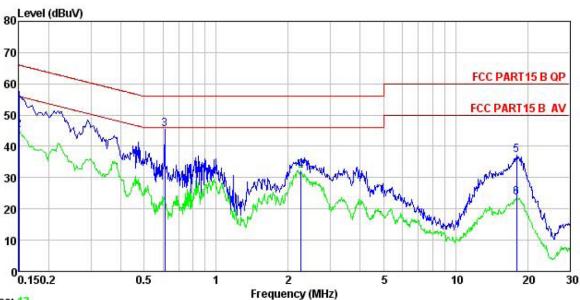
Read LISN Cable Limit Over Freq Level Factor Limit Remark Loss Level Line MHz dBuV ₫B ₫B dBuV ďΒ dBuV 0.7966.00 -9.68 QP 0.150 45.2610.27 56.32 0.150 31.28 10.27 0.7942.34 56.00 -13.66 Average 0.76 52.01 63.71 -11.70 QP 46.00 -13.73 Average 0.198 41.02 10.23 10.27 2.249 21.05 32.27 0.95 10.27 56.00 -18.62 QP 50.00 -27.64 Average 2.346 26.17 0.94 37.38 22.36 33.71 17.475 0.92 11.15 17.94422.49 10.30 0.92 60.00 -26.29 QP

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Project No.: CCIS130500155RF

Line:



Trace: 13

Site : CCIS Conducted Test Site
Condition : FCC PART15 B QP LISN LINE

Job No. : 155RF
EUT : Mobile phone
Model : CAPHG10-01
Test Mode : Wifi mode
Power Rating : AC 120V/60Hz

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

Test Engineer:

SA.722	Freq		LISN Factor				Limit Line	Over Limit	Remark
	MHz	dBu∜	<u>d</u> B		<u>ab</u>	dBu₹	dBu₹	<u>d</u> B	
1	0.150	46.40	10.25	0.79		57.44		-8.56	
2	0.150	34.13	10.25	0.79	0.00	45.17	56.00	-10.83	Average
3	0.611	34.36	10.22	0.77	0.00	45.35	56.00	-10.65	QP
4	2.261	20.95	10.28	0.95	0.00	32.18	46.00	-13.82	Average
2 3 4 5	17.944	25.90	10.29	0.92	0.00	37.11	60.00	-22.89	QP
6	17.944	12.33	10.29	0.92	0.00	23.54	50.00	-26.46	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

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Project No.: CCIS130500155RF

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.		

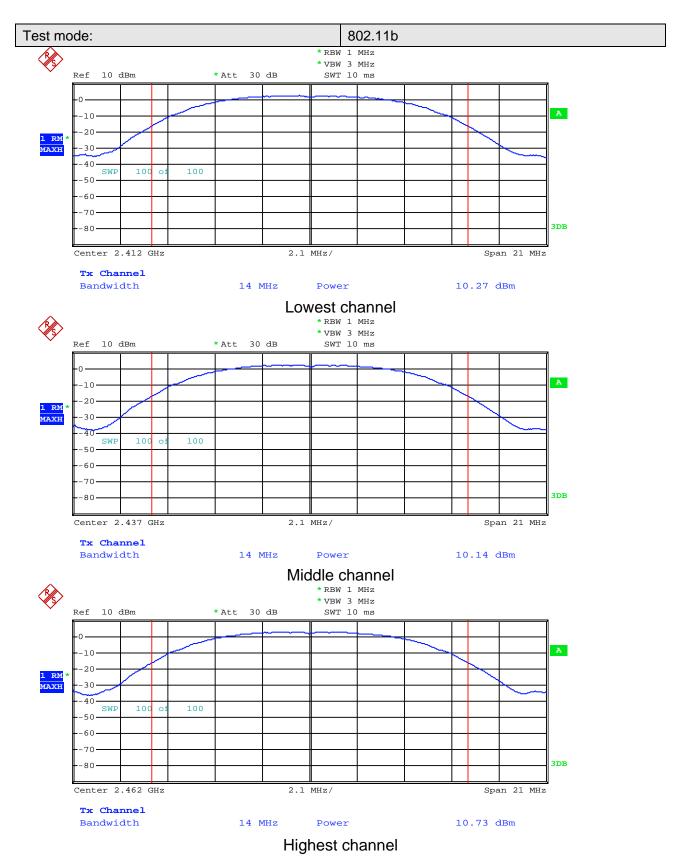
Measurement Data

T O	Max	kimum Conduct	1: ://ID \			
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(dBm)	Result
Lowest	10.27	9.69	10.22	6.01		
Middle	10.14	10.16	9.77	5.85	30.00	Pass
Highest	10.73	9.86	10.03	6.47		

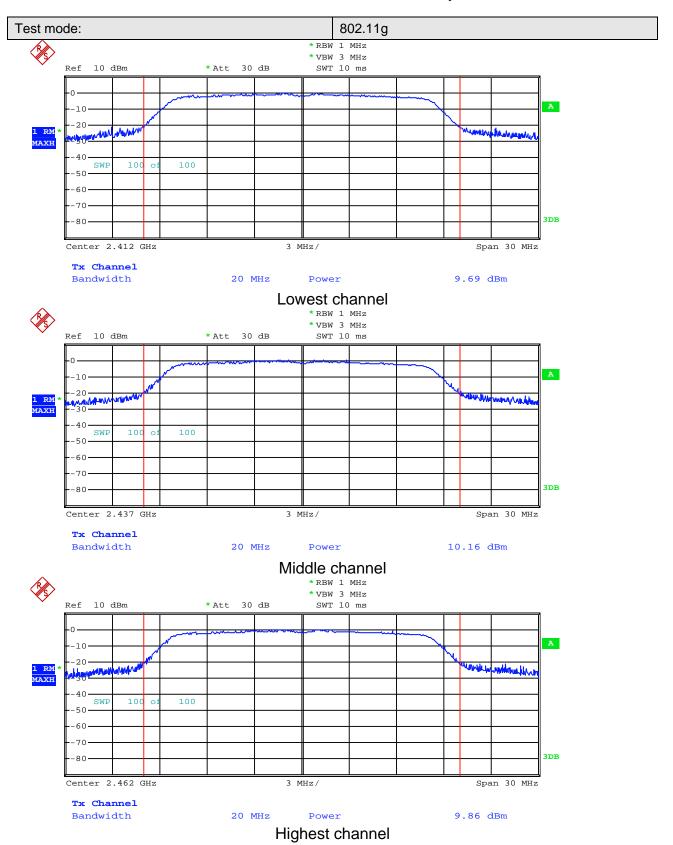
Test plot as follows:

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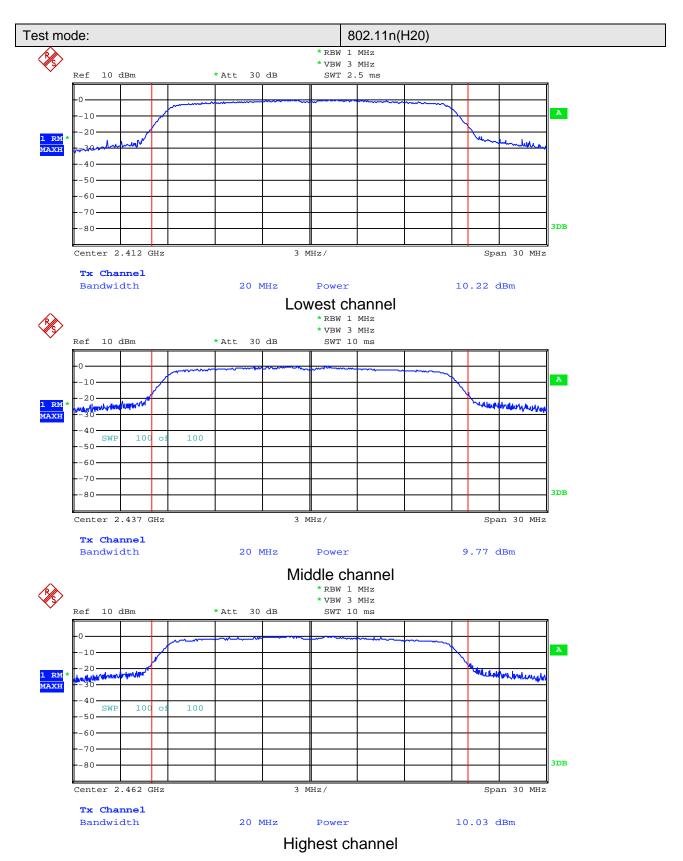




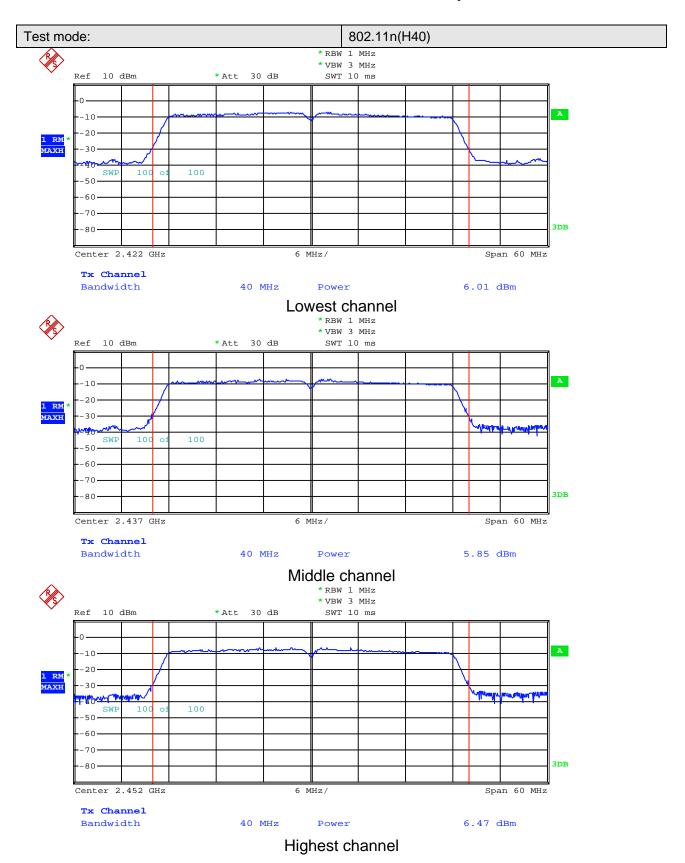














6.4 Occupy Bandwidth

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

T		6dB Occupy				
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(kHz)	Result
Lowest	9.04	16.50	17.70	35.42		
Middle	9.04	16.50	17.70	35.86	>500	Pass
Highest	9.04	16.40	17.70	35.64		

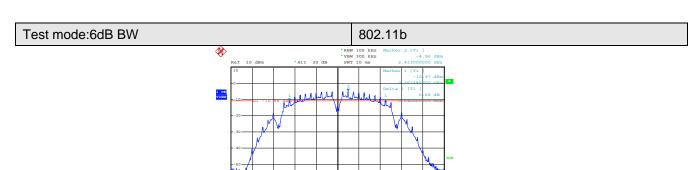
T		99dB Occupy		5		
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(kHz)	Result
Lowest	11.98	16.63	17.74	36.04		
Middle	11.90	16.58	17.74	36.04	N/A	N/A
Highest	11.98	16.58	17.79	36.04		

Test plot as follows:

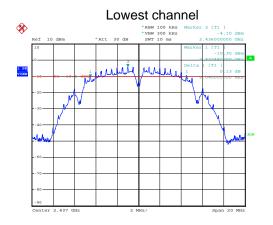
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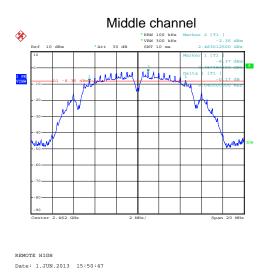




REMOTE HIGH
Date: 1.JUN.2013 15:53:40

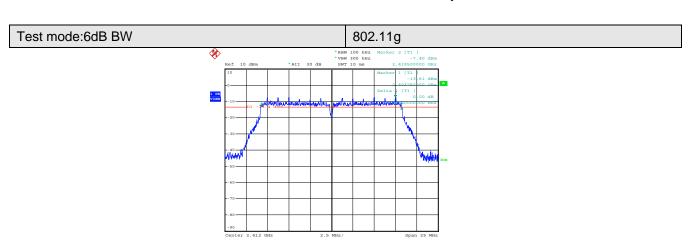


REMOTE HIGH
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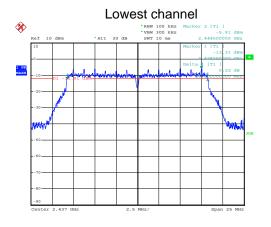


Highest channel

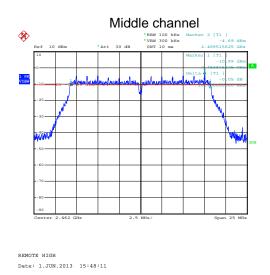




REMOTE HIGH
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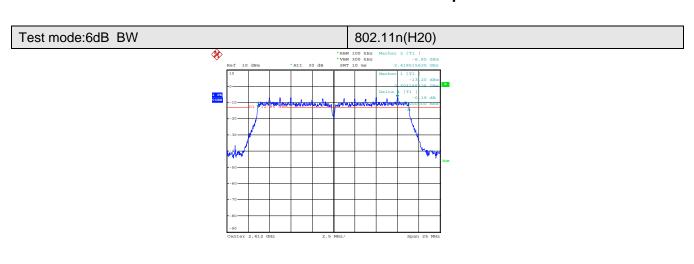


REMOTE HIGH
Date: 1.JUN.2013 15:43:31

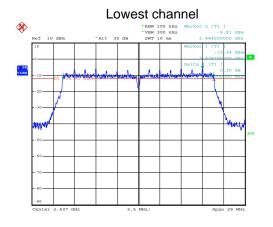


Highest channel

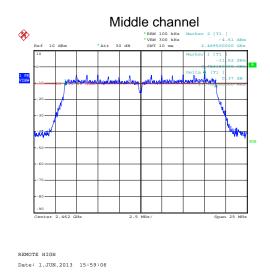




REMOTE HIGH
Date: 1.JUN.2013 15:56:10

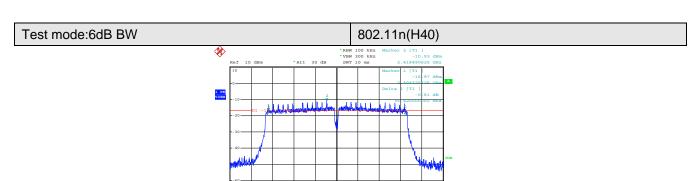


REMOTE HIGH
Date: 1.JUN.2013 15:57:36



Highest channel



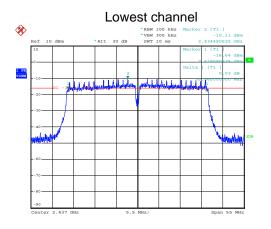


REMOTE HIGH
Date: 1.JUN.2013 16:01:26

REMOTE HIGH

Date: 1.JUN.2013 16:02:51

Date: 1.JUN.2013 16:04:05



Middle channel

**BBM 100 kHz **Narker 2 [71.]

**BBM 300 kHz ** -8.99 dlm

**Ref 10 dBm **Att 30 dB **SWT 10 ms 2.469890625 dBm

**Part 10 ms 2.46989062

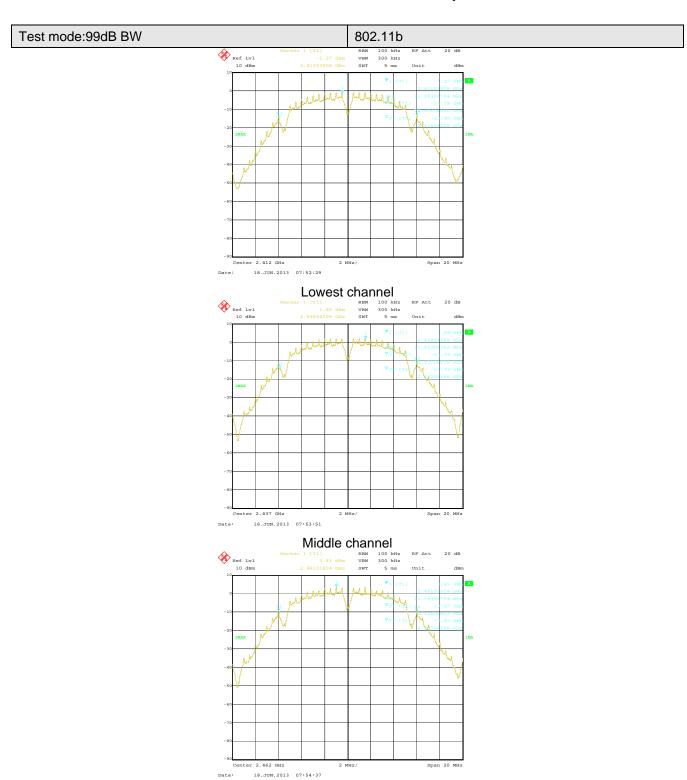
Highest channel

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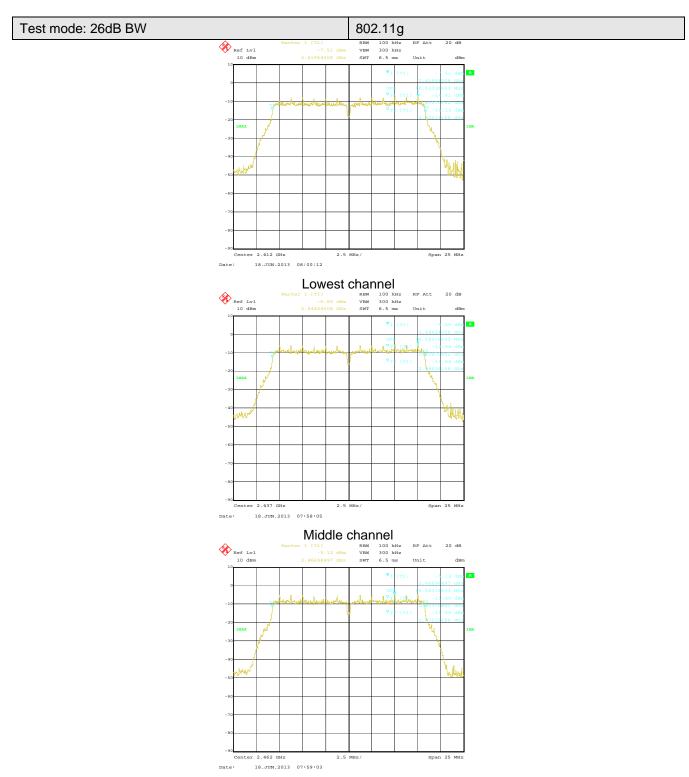




Highest channel

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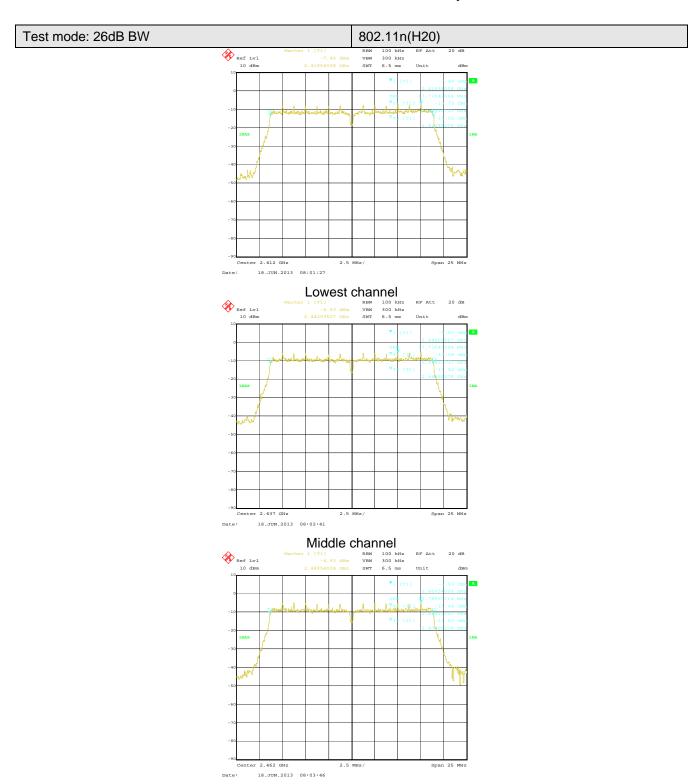




Highest channel

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

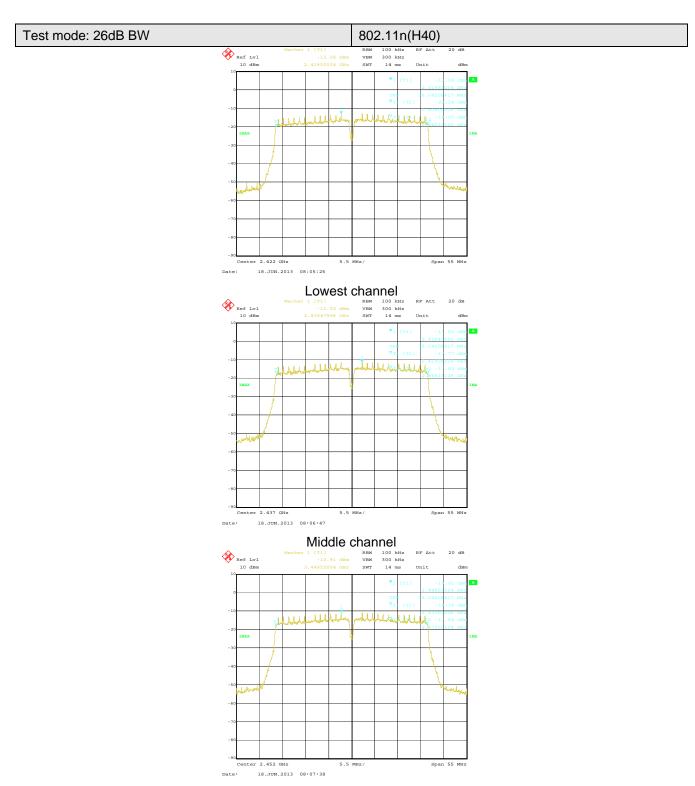




Highest channel

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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 (OL)		Power Spec	L' '(/ ID)	D It		
Test CH	802.11b	802.11g	802.11n(H20)	802.11n(H40)	Limit(dBm)	Result
Lowest	1.90	-2.68	-2.99	-9.69		
Middle	1.72	-2.42	-3.25	-9.57	8.00	Pass
Highest	2.89	-2.78	-2.78	-9.57		

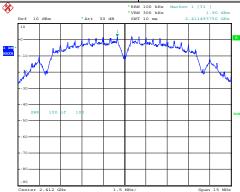
Test plot as follows:

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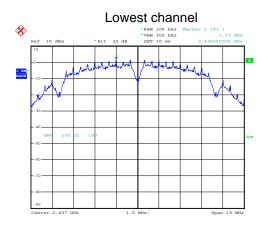
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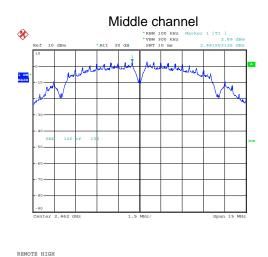


REMOTE HIGH Date: 1.JUN.2013 16:56:24



REMOTE HIGH
Date: 1.JUN.2013 16:55:54

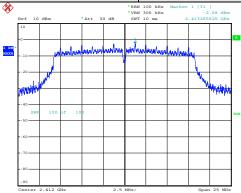
Date: 1.JUN.2013 16:57:04



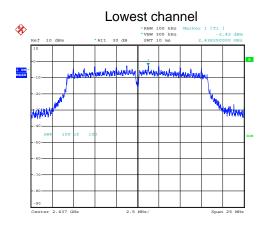
Highest channel





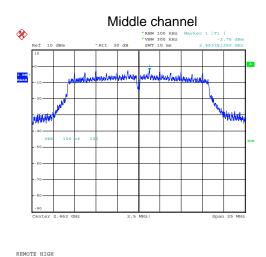


REMOTE HIGH Date: 1.JUN.2013 16:54:14



REMOTE HIGH
Date: 1.JUN.2013 16:51:41

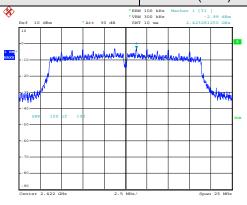
Date: 1.JUN.2013 16:51:05



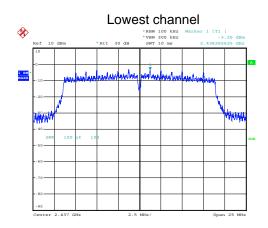
Highest channel





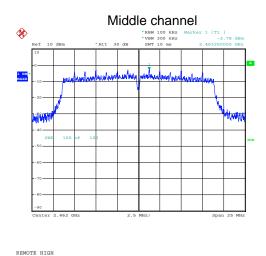


REMOTE HIGH
Date: 1.JUN.2013 16:49:01



Date: 1.JUN.2013 16:49:34

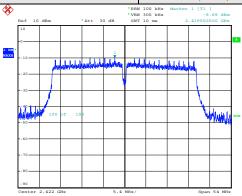
Date: 1.JUN.2013 16:50:18



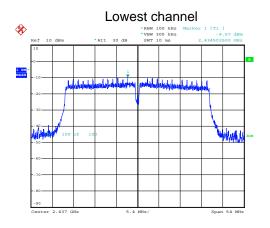
Highest channel





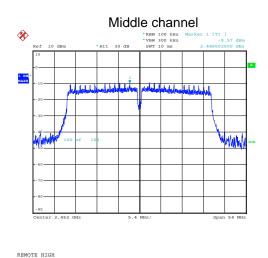


REMOTE HIGH Date: 1.JUN.2013 16:47:56



Date: 1.JUN.2013 16:47:13

Date: 1.JUN.2013 16:46:30



Highest channel



Project No.: CCIS130500155RF

6.6 Band Edge

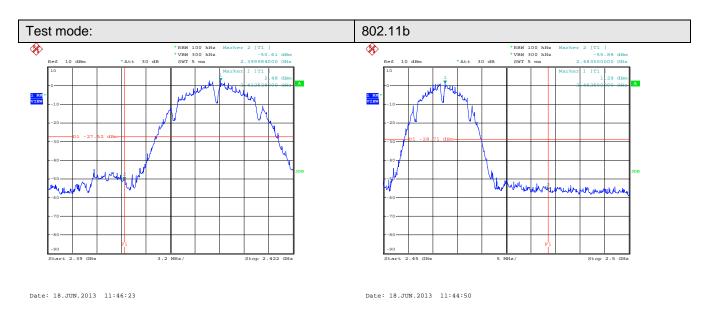
6.6.1 Conducted Emission Method

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:	·		
	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:

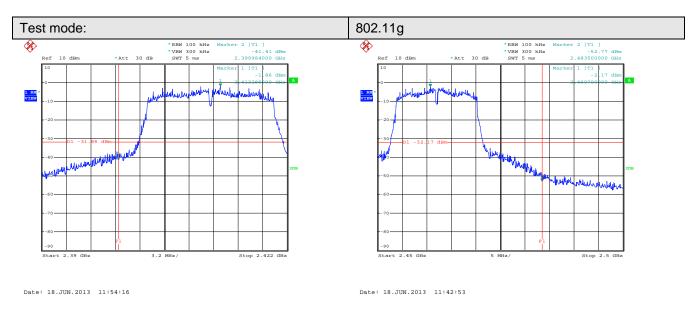
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Lowest channel

Highest channel

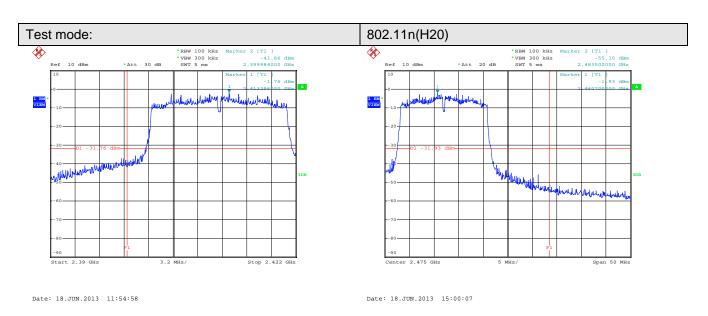


Lowest channel

Highest channel

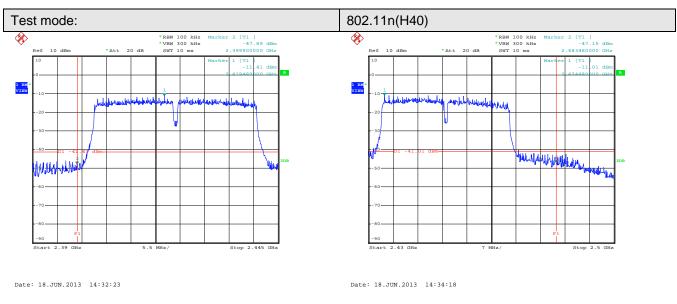
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Lowest channel

Highest channel



Lowest channel

Highest channel

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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:	Frequency Above 1GHz	Detector Peak Peak	RBW 1MHz 1MHz	VBW 3MHz 10Hz	Remark Peak Value Average Value
Limit:	Frequency Above 1GHz		Limit (dBuV/m @3m) 54.00 74.00		Remark Average Value Peak Value
Test Procedure:	 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, quasi-peak or average method as specified and then reported 				
Test setup:	in a data sheet. Antenna Tower Horn Antenna Spectrum Analyzer Amplifier				
Test Instruments:	Refer to section 5.6 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Passed				

Project No.: CCIS130500155RF

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802.11b

Te	est channel:		Lowest			Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Fact (dB	or	Level (dBuV/m)	Limit Line	I I imit	Polarization	
2390.00	24.21	27.58	5.67	0.00)	57.46	74.00	-16.54	Horizontal	
2390.00	23.68	27.58	5.67	0.00)	56.93	74.00	-17.07	Vertical	

Test	channel:		Lowest			Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Fact (dB	or	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarizatio n	
2390.00	16.40	27.58	5.67	0.0	0	49.65	54.00	-4.35	Horizontal	
2390.00	16.96	27.58	5.67	0.0	0	50.21	54.00	-3.79	Vertical	

Test	Test channel: Highest					Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2483.50	24.31	27.52	5.70	0.00)	57.53	74.00	-16.47	Horizontal	
2483.50	23.99	27.52	5.70	0.00)	57.21	74.00	-16.79	Vertical	

Test	channel:		Highest			Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Fact (dB	or .	Level (dBuV/m)	Limit Line	I I imit	Polarization	
2483.50	15.97	27.52	5.70	0.0)	49.19	54.00	-4.81	Horizontal	
2483.50	16.35	27.52	5.70	0.0)	49.57	54.00	-4.43	Vertical	

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CCIS

Report No: CCIS13050015503

802.11g

Te	est channel:		Lowest			Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line	I Limit	Polarization	
2390.00	23.51	27.58	5.67	0.00)	56.76	74.00	-17.24	Horizontal	
2390.00	23.95	27.58	5.67	0.00)	57.20	74.00	-16.80	Vertical	

Tes	Test channel: Lov				Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m	I I imit	Polarization	
2390.00	16.76	27.58	5.67	0.00	50.01	54.00	-3.99	Horizontal	
2390.00	16.19	27.58	5.67	0.00	49.44	54.00	-4.56	Vertical	

Test	channel:		Highest			Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line	I I imit	Polarization	
2483.50	23.63	27.52	5.70	0.0)	56.85	74.00	-17.15	Horizontal	
2483.50	24.06	27.52	5.70	0.0)	57.28	74.00	-16.72	Vertical	

Test	channel:		Highest			Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Fact (dB	or	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2483.50	15.53	27.52	5.70	0.00	0	48.75	54.00	-5.25	Horizontal	
2483.50	15.62	27.52	5.70	0.00	0	48.84	54.00	-5.16	Vertical	

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CCIS

Report No: CCIS13050015503

802.11n (H20)

	Te	st channel:		Lowest			Level:		Peak		
	equency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Facto (dB	or	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
23	390.00	24.28	27.58	5.67	0.00)	57.53	74.00	-16.47	Horizontal	
23	390.00	24.68	27.58	5.67	0.00)	57.93	74.00	-16.07	Vertical	

Test	Test channel: Lowest				Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m	I I imit	Polarization	
2390.00	16.96	27.58	5.67	0.00	50.21	54.00	-3.79	Horizontal	
2390.00	16.59	27.58	5.67	0.00	49.84	54.00	-4.16	Vertical	

Test	channel:		Highest			Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2483.50	25.27	27.52	5.70	0.00)	58.49	74.00	-15.51	Horizontal	
2483.50	25.28	27.52	5.70	0.00)	58.50	74.00	-15.50	Vertical	

Test	channel:		Highest			Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2483.50	15.92	27.52	5.70	0.0	0	49.14	54.00	-4.86	Horizontal	
2483.50	16.30	27.52	5.70	0.00		49.52	54.00	-4.48	Vertical	

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802.11n (H40)

Te	st channel:		Lowest			Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Facto (dB	or	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2390.00	24.44	27.58	5.67	0.00)	57.69	74.00	-16.31	Horizontal	
2390.00	22.91	27.58	5.67	0.00)	56.16	74.00	-17.84	Vertical	

Test	channel:		Lowest		Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line	I I imit	Polarization	
2390.00	16.33	27.58	5.67	0.00	49.58	54.00	-4.42	Horizontal	
2390.08	16.61	27.58	5.67	0.00	49.86	54.00	-4.14	Vertical	

Test	channel:		Highest			Level:		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)	or Or	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2483.50	24.58	27.52	5.70	0.00)	57.80	74.00	-16.20	Horizontal	
2483.50	23.79	27.52	5.70	0.00)	57.01	74.00	-16.99	Vertical	

Test	channel:		Highest			Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Facto (dB	or	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit	Polarization	
2483.50	15.98	27.52	5.70	0.00)	49.20	54.00	-4.80	Horizontal	
2483.50	16.18	27.52	5.70	0.00)	49.40	54.00	-4.60	Vertical	

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.

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6.7 Spurious Emission

6.7.1 Conducted Emission Method

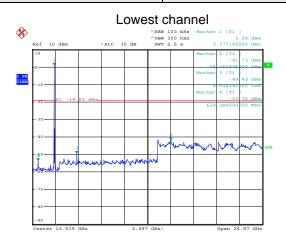
Test Requirement:	FCC Part15 C Section 15.247 (d)						
Test Method:	ANSI C63.4:2003 and KDB558074						
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall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

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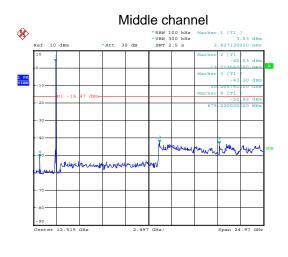


Test mode: 802.11b



REMOTE HIGH
Date: 3.JUN.2013 14:46:56

30MHz~25GHz

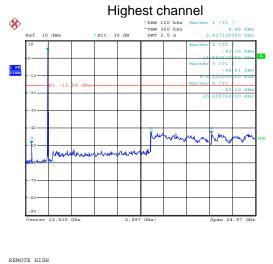


REMOTE HIGH Date: 3.JUN.2013 14:47:42

30MHz~25GHz

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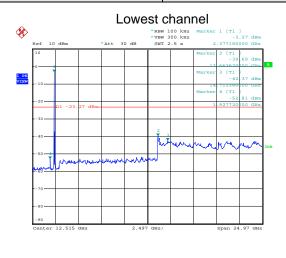




Date: 3.JUN.2013 14:48:42

30MHz~25GHz

Test mode: 802.11g

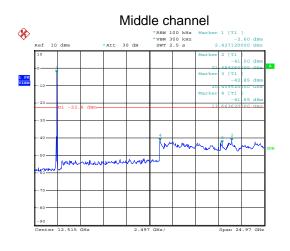


REMOTE HIGH Date: 3.JUN.2013 14:45:25

30MHz~25GHz

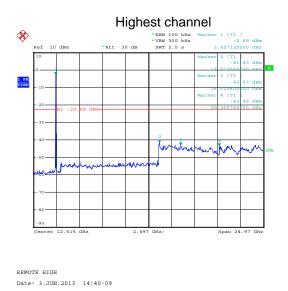
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REMOTE HIGH
Date: 3.JUN.2013 14:43:17

30MHz~25GHz

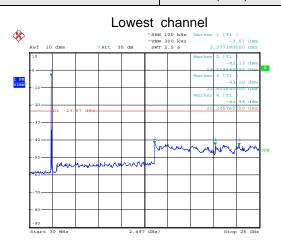


30MHz~25GHz

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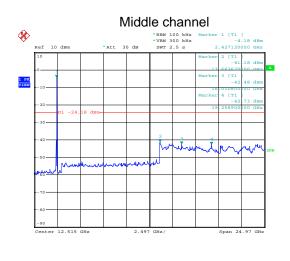


Test mode: 802.11n(H20)



REMOTE HIGH
Date: 3.JUN.2013 14:34:10

30MHz~25GHz



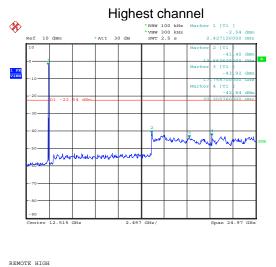
Date: 3.JUN.2013 14:36:28

REMOTE HIGH

30MHz~25GHz

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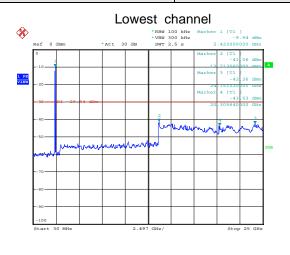




Date: 3.JUN.2013 14:38:08

30MHz~25GHz

Test mode: 802.11n(H40)

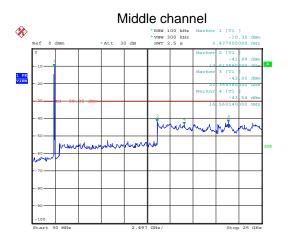


REMOTE HIGH
Date: 3.JUN.2013 14:28:28

30MHz~25GHz

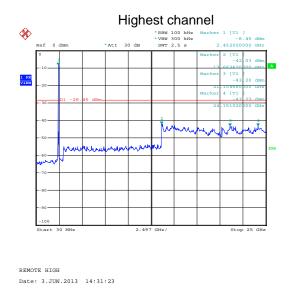
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REMOTE HIGH
Date: 3.JUN.2013 14:30:20

30MHz~25GHz



30MHz~25GHz

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

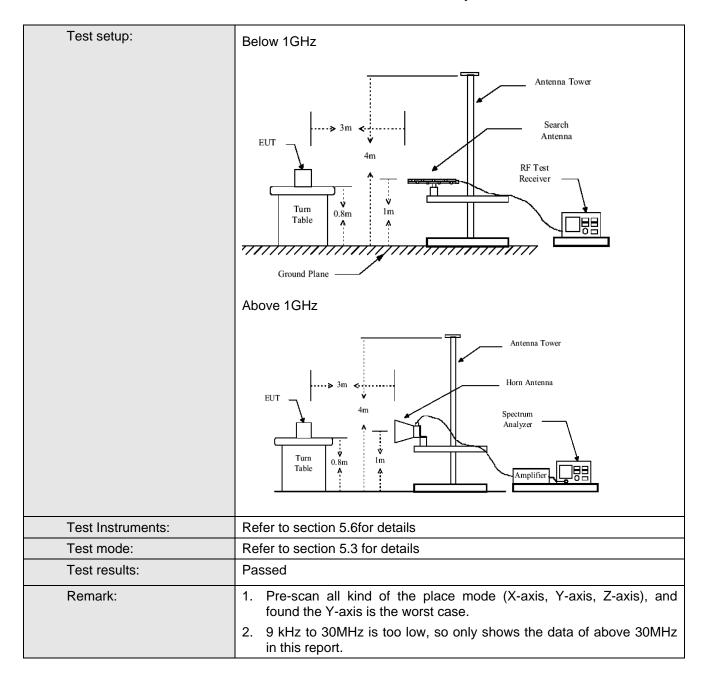


6.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C S	Section 15.209	and 15.205							
Test Method:	FCC Part15 C Section 15.209 and 15.205 ANSI C63.4:2003									
Test Frequency Range:	9KHz to 25GHz									
Test site:	Measurement Distance: 3m									
Receiver setup:										
·	Frequency	Detector	RBW	VBW	Remark					
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value					
	Above 1GHz	Peak	1MHz	3MHz	Peak Value					
	Above Toriz	Peak	1MHz	10Hz	Average Value					
Limit:										
	Freque		Limit (dBuV/		Remark					
	30MHz-8		40.0		Quasi-peak Value					
	88MHz-21		43.5		Quasi-peak Value					
	216MHz-9 960MHz-		46.0		Quasi-peak Value					
	960IVIHZ-	TGHZ	54.0 54.0		Quasi-peak Value 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 limit spualues of the did not have	at a 3 meter cane the position was set 3 meter which was mour that height is varied to determine the contal and vertice measurement. If the rota table maximum read ceiver system and width with sion level of the ecified, then tene EUT would be 10dB margin i-peak or average and width with sion level of the ecified, then the ecified, then the ecified was margin i-peak or average.	he top of a reamber. The too of the highests away from the don the too ied from one he maximum al polarization, the EU a was turned to ing. Was set to Polarize t	otating table table was rest radiation. the interferop of a variation of the analysis of the a	e 0.8 meters above otated 360 degrees rence-receiving able-height antenna our meters above the field strength, intenna are set to anged to its worst from 1 meter to 4 thees to 360 degrees. Function and s 10dB lower than and the peak the strength and the peak the emissions that					

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Below 1GHz

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
32.86	46.77	12.31	0.91	26.58	33.41	40.00	-6.59	Vertical
38.89	46.21	13.30	1.18	27.16	33.53	40.00	-6.47	Vertical
52.03	51.42	13.17	1.29	28.48	37.40	40.00	-2.60	Vertical
192.42	50.66	10.56	2.82	29.82	34.22	43.50	-9.28	Vertical
578.67	36.46	18.09	3.92	30.55	27.92	46.00	-18.08	Vertical
52.03	37.84	13.17	1.29	28.48	23.82	40.00	-16.18	Horizontal
103.81	40.35	12.78	1.99	30.01	25.11	43.50	-18.39	Horizontal
192.42	49.63	10.56	2.82	29.82	33.19	43.50	-10.31	Horizontal
385.28	40.11	14.73	3.09	29.84	28.09	46.00	-17.91	Horizontal

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Above 1GHz

Test mode:	802.11b		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)	polarization
4824.00	46.38	31.54	8.92	40.22	46.62	74.00	-27.38	Vertical
7236.00	47.07	36.50	10.62	41.22	52.97	74.00	-21.03	Vertical
9648.00	*					74.00		Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	46.61	31.54	8.92	40.22	46.85	74.00	-27.15	Horizontal
7236.00	49.00	36.50	10.62	41.22	54.90	74.00	-19.10	Horizontal
9648.00	*					74.00		Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Test mode:	802.11b		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)	polarization
4824.00	35.57	31.54	8.92	40.22	35.81	54.00	-18.19	Vertical
7236.00	35.65	36.50	10.62	41.22	41.55	54.00	-12.45	Vertical
9648.00	*					54.00		Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	37.27	31.54	8.92	40.22	37.51	54.00	-16.49	Horizontal
7236.00	38.76	36.50	10.62	41.22	44.66	54.00	-9.34	Horizontal
9648.00	*					54.00		Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remark

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

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Test mode:	802.11b		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)	polarization
4874.00	47.32	31.57	8.98	40.15	47.72	74.00	-26.28	Vertical
7311.00	46.90	36.48	10.68	41.16	52.90	74.00	-21.10	Vertical
9748.00	*					74.00		Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	46.30	31.57	8.98	40.15	46.70	74.00	-27.30	Horizontal
7311.00	46.72	36.48	10.68	41.16	52.72	74.00	-21.28	Horizontal
9748.00	*					74.00		Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Test mode:	802.11b		Test	Middle		Remark:	Average	
			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)	polarization
4874.00	35.45	31.57	8.98	40.15	35.85	54.00	-18.15	Vertical
7311.00	37.98	36.48	10.68	41.16	43.98	54.00	-10.02	Vertical
9748.00	*					54.00		Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	35.08	31.57	8.98	40.15	35.48	54.00	-18.52	Horizontal
7311.00	35.87	36.48	10.68	41.16	41.87	54.00	-12.13	Horizontal
9748.00	*					54.00		Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remark:

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

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Test mode:	802.11)	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)	polarization
4924.00	45.72	31.61	9.04	40.08	46.29	74.00	-27.71	Vertical
7386.00	48.23	36.52	10.75	41.09	54.41	74.00	-19.59	Vertical
9848.00	*					74.00		Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	45.83	31.61	9.04	40.08	46.40	74.00	-27.60	Horizontal
7386.00	46.65	36.52	10.75	41.09	52.83	74.00	-21.17	Horizontal
9848.00	*					74.00		Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Test mode:	802.11b		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)	polarization
4924.00	35.28	31.61	9.04	40.08	35.85	54.00	-18.15	Vertical
7386.00	38.51	36.52	10.75	41.09	44.69	54.00	-9.31	Vertical
9848.00	*					54.00		Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4920.75	35.94	31.61	9.04	40.08	36.51	54.00	-17.49	Horizontal
7386.00	37.49	36.52	10.75	41.09	43.67	54.00	-10.33	Horizontal
9848.00	*					54.00		Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remark:

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

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Project No.: CCIS130500155RF

Test mode:	802.11	9	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)	polarization
4824.00	47.04	31.54	8.92	40.22	47.28	74.00	-26.72	Vertical
7236.00	47.74	36.50	10.62	41.22	53.64	74.00	-20.36	Vertical
9648.00	*					74.00		Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	46.51	31.54	8.92	40.22	46.75	74.00	-27.25	Horizontal
7236.00	47.66	36.50	10.62	41.22	53.56	74.00	-20.44	Horizontal
9648.00	*					74.00		Horizontal
12060.00	*					74.00		Horizontal
14472.00	*	·				74.00		Horizontal
16884.00	*	·				74.00		Horizontal

Test mode:	802.11	g	Test	Lowest		Remark:		Average
			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)	polarization
4824.00	38.31	31.54	8.92	40.22	38.55	54.00	-15.45	Vertical
7236.00	38.30	36.50	10.62	41.22	44.20	54.00	-9.80	Vertical
9648.00	*					54.00		Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	44.27	31.54	8.92	40.22	44.51	54.00	-9.49	Horizontal
7236.00	36.85	36.50	10.62	41.22	42.75	54.00	-11.25	Horizontal
9648.00	*					54.00		Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00	_	Horizontal
16884.00	*					54.00		Horizontal

Remark:

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

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Project No.: CCIS130500155RF

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)	polarization
4874.00	46.84	31.57	8.98	40.15	47.24	74.00	-26.76	Vertical
7311.00	46.95	36.48	10.68	41.16	52.95	74.00	-21.05	Vertical
9748.00	*					74.00		Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	45.65	31.57	8.98	40.15	46.05	74.00	-27.95	Horizontal
7311.00	46.85	36.48	10.68	41.16	52.85	74.00	-21.15	Horizontal
9748.00	*					74.00		Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Test mode:	802.11	9	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)	polarization
4874.00	36.44	31.57	8.98	40.15	36.84	54.00	-17.16	Vertical
7311.00	37.57	36.48	10.68	41.16	43.57	54.00	-10.43	Vertical
9748.00	*					54.00		Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	34.18	31.57	8.98	40.15	34.58	54.00	-19.42	Horizontal
7311.00	37.64	36.48	10.68	41.16	43.64	54.00	-10.36	Horizontal
9748.00	*					54.00		Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remark:

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

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Test mode:	802.110	g	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)	polarization
4924.00	46.43	31.61	9.04	40.08	47.00	74.00	-27.00	Vertical
7386.00	46.38	36.52	10.75	41.09	52.56	74.00	-21.44	Vertical
9848.00	*					74.00		Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	46.13	31.61	9.04	40.08	46.70	74.00	-27.30	Horizontal
7386.00	46.64	36.52	10.75	41.09	52.82	74.00	-21.18	Horizontal
9848.00	*					74.00		Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Test mode:	802.11	g	Test	Highest		Remark:	Average)
			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)	polarization
4924.00	36.78	31.61	9.04	40.08	37.35	54.00	-16.65	Vertical
7386.00	36.40	36.52	10.75	41.09	42.58	54.00	-11.42	Vertical
9848.00	*					54.00		Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	34.87	31.61	9.04	40.08	35.44	54.00	-18.56	Horizontal
7386.00	37.51	36.52	10.75	41.09	43.69	54.00	-10.31	Horizontal
9848.00	*					54.00		Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

Remark:

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

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Test mode:	802.11	n(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)	polarization
4824.00	45.28	31.54	8.92	40.22	45.52	74.00	-28.48	Vertical
7236.00	46.28	36.49	10.62	41.22	52.17	74.00	-21.83	Vertical
9648.00	*					74.00		Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	45.08	31.55	8.92	40.22	45.33	74.00	-28.67	Horizontal
7236.00	46.23	36.49	10.62	41.22	52.12	74.00	-21.88	Horizontal
9648.00	*					74.00		Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

Test mode:	802.11	n(H20)	Test channel:	Lowest		Remark:	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)	polarization
4824.00	35.96	31.54	8.92	40.22	36.20	54.00	-17.80	Vertical
7236.00	34.70	36.50	10.62	41.22	40.60	54.00	-13.40	Vertical
9648.00	*					54.00		Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	36.06	31.54	8.92	40.22	36.30	54.00	-17.70	Horizontal
7236.00	37.75	36.50	10.62	41.22	43.65	54.00	-10.35	Horizontal
9648.00	*					54.00		Horizontal
12060.00	*					54.00		Horizontal
14472.00	*		_			54.00		Horizontal
16884.00	*					54.00		Horizontal

Remark:

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

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Project No.: CCIS130500155RF

Test mode:	802.11	n(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)	polarization
4874.00	46.59	31.57	8.98	40.15	46.99	74.00	-27.01	Vertical
7311.00	47.80	36.48	10.68	41.16	53.80	74.00	-20.20	Vertical
9748.00	*					74.00		Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	43.45	31.57	8.98	40.15	43.85	74.00	-30.15	Horizontal
7311.00	45.41	36.48	10.68	41.16	51.41	74.00	-22.59	Horizontal
9748.00	*					74.00		Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal

Test mode:	802.11	n(H20)	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)	polarization
4874.00	35.44	31.57	8.98	40.15	35.84	54.00	-18.16	Vertical
7311.00	36.71	36.48	10.68	41.16	42.71	54.00	-11.29	Vertical
9748.00	*					54.00		Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	33.14	31.57	8.98	40.15	33.54	54.00	-20.46	Horizontal
7311.00	36.99	36.48	10.68	41.16	42.99	54.00	-11.01	Horizontal
9748.00	*					54.00		Horizontal
12185.00	*					54.00		Horizontal
14622.00	*		_			54.00		Horizontal
17059.00	*					54.00		Horizontal

Remark:

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

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Test mode:	802.	11n(H20)	Test chann	el: High	est	Remark:	Pe	ak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limi (dB)	polarization
4924.00	46.09	31.61	9.04	40.08	46.66	74.00	-27.34	Vertical
7386.00	46.36	36.52	10.75	41.09	52.54	74.00	-21.46	Vertical
9848.00	*					74.00		Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	46.13	31.61	9.04	40.08	46.70	74.00	-27.30	Horizontal
7386.00	48.05	36.52	10.75	41.09	54.23	74.00	-19.77	Horizontal
9848.00	*					74.00		Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal

Test mode:	mode: 802.11n(H20) Test channel: Highest		est	Remark: Aver		verage		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Lin (dB)	polarization
4924.00	35.07	31.61	9.04	40.08	35.64	54.00	-18.36	Vertical
7386.00	35.37	36.52	10.75	41.09	41.55	54.00	-12.45	Vertical
9848.00	*					54		Vertical
12310.00	*					54		Vertical
14772.00	*					54		Vertical
17234.00	*					54		Vertical
4924.00	35.69	31.61	9.04	40.08	36.26	54.00	-17.74	Horizontal
7386.00	39.77	36.52	10.75	41.09	45.95	54.00	-8.05	Horizontal
9848.00	*					54		Horizontal
12310.00	*					54		Horizontal
14772.00	*					54		Horizontal
17234.00	*					54		Horizontal

Remark:

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

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Test mode:	802.	11n(H40)	Test channel: Lowest		Remark: Pe		Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over (dE		polarizatio n
4844.00	45.21	31.55	8.94	40.19	45.51	74.00	-28.	49	Vertical
7266.00	46.19	36.49	10.63	41.20	52.11	74.00	-21.	.89	Vertical
9688.00	*					74.00			Vertical
12110.00	*					74.00			Vertical
14532.00	*					74.00			Vertical
16954.00	*					74.00			Vertical
4844.00	44.54	31.55	8.94	40.19	44.84	74.00	-29.	16	Horizontal
7266.00	46.42	36.49	10.63	41.20	52.34	74.00	-21.	.66	Horizontal
9688.00	*					74.00			Horizontal
12110.00	*					74.00		•	Horizontal
14532.00	*					74.00		•	Horizontal
16954.00	*					74.00			Horizontal

Test mode: 802.1		.11n(H40)	Test channel: Lowest		owest	Remark: Aver		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)	polarizatio n
4844.00	34.35	31.55	8.94	40.19	34.65	54.00	-19.35	Vertical
7266.00	35.45	36.49	10.65	41.19	41.40	54.00	-12.60	Vertical
9688.00	*					54.00		Vertical
12110.00	*					54.00		Vertical
14532.00	*					54.00		Vertical
16954.00	*					54.00		Vertical
4844.00	34.18	31.55	8.94	40.19	34.48	54.00	-19.52	Horizontal
7266.00	35.84	36.49	10.65	41.19	41.79	54.00	-12.21	Horizontal
9688.00	*					54.00		Horizontal
12110.00	*					54.00		Horizontal
14532.00	*					54.00		Horizontal
16954.00	*					54.00		Horizontal

Remark:

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

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Test mode: 802.11n(H4		11n(H40)	Test channel:		Middle		Remark:		Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prean Facto (dB)	or	Level (dBuV/m)	Limit Line (dBuV/m)	Over (d	Limit B)	polarization
4874.00	44.97	31.57	8.98	40.1	5	45.37	74.00	-28	.63	Vertical
7311.00	46.04	36.48	10.68	41.10	6	52.04	74.00	-21	.96	Vertical
9748.00	*						74.00			Vertical
12185.00	*						74.00			Vertical
14622.00	*						74.00			Vertical
17059.00	*						74.00			Vertical
4874.00	45.34	31.57	8.98	40.1	5	45.74	74.00	-28	.26	Horizontal
7311.00	45.87	36.48	10.68	41.10	6	51.87	74.00	-22	.13	Horizontal
9748.00	*						74.00			Horizontal
12185.00	*						74.00		•	Horizontal
14622.00	*						74.00		•	Horizontal
17059.00	*						74.00		•	Horizontal

Test mode: 802.		802.1	I1n(H40)	Test channel:		Middle		Remark:	A۱	rerage
Frequency (MHz)	Read I (dBu		Antenna Factor (dB/m)	Cable Loss (dB)	Prean Facto (dB)	or	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	33.9	97	31.57	8.98	40.1	5	34.37	54.00	-19.63	Vertical
7311.00	35.3	37	36.48	10.68	41.1	6	41.37	54.00	-12.63	Vertical
9748.00	*							54.00		Vertical
12185.00	*							54.00		Vertical
14622.00	*							54.00		Vertical
17059.00	*							54.00		Vertical
4874.00	34.	72	31.57	8.98	40.1	5	35.12	54.00	-18.88	Horizontal
7311.00	34.9	95	36.48	10.68	41.1	6	40.95	54.00	-13.05	Horizontal
9748.00	*							54.00		Horizontal
12185.00	*						·	54.00		Horizontal
14622.00	*						·	54.00		Horizontal
17059.00	*							54.00		Horizontal

Remark:

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

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Test mode: 802.11n		11n(H40)	Test channel:		Highest	Remark:	Pe	Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preample Factor (dB)	1 4741	Limit Line (dBuV/m)	Over Limi (dB)	polarization	
4904.00	45.02	31.59	9.00	40.12	45.49	74.00	-28.51	Vertical	
7356.00	46.56	36.49	10.72	41.12	52.65	74.00	-21.35	Vertical	
9808.00	*					74.00		Vertical	
12260.00	*					74.00		Vertical	
14712.00	*					74.00		Vertical	
17164.00	*					74.00		Vertical	
4904.00	45.43	31.59	9.00	40.12	45.90	74.00	-28.10	Horizontal	
7356.00	46.60	36.49	10.72	41.12	52.69	74.00	-21.31	Horizontal	
9808.00	*					74.00		Horizontal	
12260.00	*					74.00		Horizontal	
14712.00	*					74.00		Horizontal	
17164.00	*					74.00		Horizontal	

Test mode:	802.	11n(H40)	Test channel: Highest		Remark: Ave		rage	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4904.00	36.08	31.59	9.02	40.10	36.59	54.00	-17.41	Vertical
7356.00	35.30	36.47	10.72	41.12	41.37	54.00	-12.63	Vertical
9808.00	*					54.00		Vertical
12260.00	*					54.00		Vertical
14712.00	*					54.00		Vertical
17164.00	*					54.00		Vertical
4904.00	34.69	31.59	9.02	40.10	35.20	54.00	-18.80	Horizontal
7356.00	35.24	36.47	10.72	41.12	41.31	54.00	-12.69	Horizontal
9808.00	*					54.00		Horizontal
12260.00	*					54.00		Horizontal
14712.00	*					54.00		Horizontal
17164.00	*					54.00		Horizontal

Remark:

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

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