

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC148433

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FCC Radio Test Report FCC ID: 2AIWD-HX9100

Original Grant

Report No. TB-FCC148433

Applicant Hanchang Corporation

Equipment Under Test (EUT)

EUT Name 802.11N Wireless Adapter(USB Wi-Fi dongle)

Model No. HX9100

Series No. N/A

Brand Name N/A

2016-06-03 **Receipt Date**

2016-06-04 to 2016-06-24 **Test Date**

Issue Date 2016-06-25

Standards FCC Part 15, Subpart C (15.247:2015)

ANSI C63.10: 2013 **Test Method**

Conclusions **PASS**

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

The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer

Approved& **Authorized**

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. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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1. General Information about EUT

1.1 Client Information

Applicant: Hanchang Corporation

Address : B-702, Woolim Lion's Valley 371-28 Gasan-Dong, Geumchun-Gu,

Seoul 153-786, Korea

Manufacturer: Hanchang Corporation

Address : B-702, Woolim Lion's Valley 371-28 Gasan-Dong, Geumchun-Gu,

Seoul 153-786, Korea

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	802.11N Wireless Ada	apter(USB Wi-Fi dongle)				
Models No.	4	HX9100	HX9100				
Model Difference	:	N/A	√/A				
Product Description		Operation Frequency 802.11b/g/n(HT20): 2 802.11n(HT40): 2422 Number of Channel: RF Output Power: Antenna Gain: Modulation Type: Bit Rate of Transmitter:	412MHz~2462MHz				
Power Supply		DC Voltage supplied	DC Voltage supplied from Host System by USB Port.				
Power Rating	:	DC 5.0V by USB Port	t. TUDE				
Connecting I/O Port(S)	1	Please refer to the User's Manual					

Note:

(1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r05.



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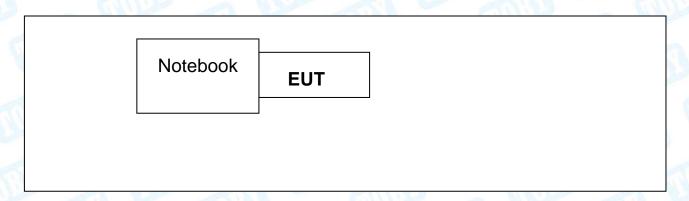
(2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(3) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

- (4) The Antenna information about the equipment is provided by the applicant.
- 1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



1.4 Description of Support Units

Equipment Information						
Name	Model	FCC ID/DOC Manufacturer		Used "√"		
Netbook	T60P	DOC	Thinkpad	√		
		Cable Informat	tion			
Number Shielded Type Ferrite Core Length No				Note		
Cable 1	YES	YES	0.6M			
	Carrier S		B THE			



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1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test					
Final Test Mode Description					
Mode 1	TX B Mode				

For Radiated Test						
Final Test Mode Description						
Mode 2	TX Mode B Mode Channel 01/06/11					
Mode 3	TX Mode G Mode Channel 01/06/11					
Mode 4	TX Mode N(HT20) Mode Channel 01/06/11					
Mode 5 TX Mode N(HT40) Mode Channel 03/06/09						

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK (1 Mbps) 802.11g Mode: OFDM (6 Mbps)

802.11n (HT20) Mode: MCS 0 (6.5 Mbps) 802.11n (HT40) Mode: MCS 0 (13 Mbps)

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



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1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

Test Software Version	REALTEK	11n Single Chip 92C US	B WLAN MP
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	22	21	21
IEEE 802.11g OFDM	27	26	26
IEEE 802.11n (HT20)	27	26	26
COLUMN TO THE PARTY OF THE PART	CH 03	CH 06	CH 09
IEEE 802.11n (HT40)	26	26	26

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
	Level Accuracy:	WY CONTRACTOR OF THE PARTY OF T
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Dedicted Emission	Level Accuracy:	. 4 CO dD
Radiated Emission	9kHz to 30 MHz	±4.60 dB
Dadioted Emission	Level Accuracy:	. 4. 40 dD
Radiated Emission	30MHz to 1000 MHz	±4.40 dB
Dadiated Emission	Level Accuracy:	. 4 20 dD
Radiated Emission	Above 1000MHz	±4.20 dB



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1.7 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.



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2. Test Summary

	FCC Part	: 15 Subpart C(15.247)/ RSS 247	Issue 1		
Standa	rd Section	Tool How	1	Damarila	
FCC	IC	Test Item	Judgment	Remark	
15.203	1	Antenna Requirement	PASS	N/A	
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A	
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A	
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A	
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A	
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A	
15.247(d)	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A	

Note: "/" for no requirement for this test item.

N/A is an abbreviation for Not Applicable.



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3. Test Equipment

Conducted	d Emission Te	st			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Aug. 07, 2015	Aug. 06, 2016
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016
LISN	Rohde & Schwarz	ENV216	101131	Aug. 08, 2015	Aug. 07, 2016
Radiation	Emission Tes	t			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 07, 2015	Aug. 06, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 26, 2016	Mar. 25, 2017
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar. 26, 2016	Mar. 25, 2017
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 26, 2016	Mar. 25, 2017
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar. 26, 2016	Mar. 25, 2017
Pre-amplifier	Sonoma	310N	185903	Mar. 26, 2016	Mar. 25, 2017
Pre-amplifier	HP	8447B	3008A00849	Mar. 26, 2016	Mar. 25, 2017
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 26, 2016	Mar. 25, 2017
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	onducted Em	ission			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 07, 2015	Aug. 06, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016
Power Meter	Anritsu	ML2495A	25406005	Aug.07, 2015	Aug.06, 2016
Power Sensor	Anritsu	ML2411B	25406005	Aug.07, 2015	Aug.06, 2016



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

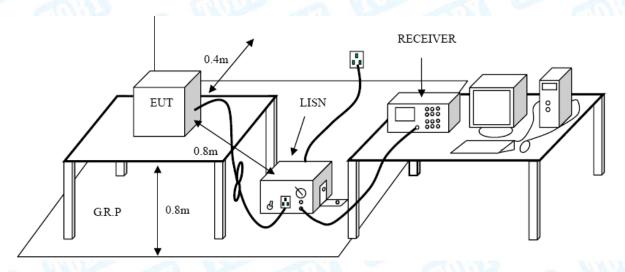
Conducted Emission Test Limit

Fraguency	Maximum RF Lin	e Voltage (dBμV)
Frequency	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.



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I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please see the next page.





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UT:			11N Wireles 3 Wi-Fi dong		Mode	el Name	:	HX9100
emperat	ture:	25 °		jio)	Relat	ive Hum	nidity:	55%
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							AVG:	
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		0.5						
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	lk. Fro	eq.	Reading Level			Limit	Over	
0.150		eq.	Level	Correct Factor	Measure- ment			30.000
0.150 No. M	MI	eq. Hz 740	Level dBu/	Correct Factor	Measure- ment	dBuV	dB	30.000 Detector
0.150 No. M	0.17 0.17	eq. Hz 740	Level dBu√ 47.66 34.91	Correct Factor dB 9.97	Measure- ment dBuV 57.63	dBuV 64.76 54.76	dB -7.13	30.000 Detector
0.150 No. M	Мн 0.17	eq. Hz 740 740 380	dBuV 47.66	Correct Factor dB 9.97 9.97	Measure- ment dBuV 57.63 44.88	dBuV 64.76 54.76 62.16	dB -7.13 -9.88	30.000 Detector QP AVG
0.150 No. M 1 * 2 3	0.17 0.17 0.23	eq. Hz 740 740 380	Level dBuV 47.66 34.91 37.45	Correct Factor dB 9.97 9.97 10.02	Measure- ment dBuV 57.63 44.88 47.47	dBuV 64.76 54.76 62.16 52.16	dB -7.13 -9.88 -14.69	30.000 Detector QP AVG QP
0.150 No. M 1 * 2 3 4	0.17 0.17 0.23 0.23	eq. 740 740 880 880	dBuV 47.66 34.91 37.45 21.64	Correct Factor dB 9.97 9.97 10.02	Measure- ment dBuV 57.63 44.88 47.47 31.66	64.76 54.76 62.16 57.73	dB -7.13 -9.88 -14.69 -20.50	30.000 Detector QP AVG QP AVG
0.150 No. M 1 * 2 3 4 5	0.17 0.17 0.23 0.23 0.40	eq. Hz 740 740 380 380 060	Level dBuV 47.66 34.91 37.45 21.64 27.88	Correct Factor dB 9.97 9.97 10.02 10.02 10.02	Measure- ment dBuV 57.63 44.88 47.47 31.66 37.90 27.76	dBuV 64.76 54.76 62.16 52.16 57.73 47.73	dB -7.13 -9.88 -14.69 -20.50 -19.83	30.000 Detector QP AVG QP AVG QP
0.150 No. M 1 * 2 3 4 5 6 7	0.17 0.17 0.23 0.23 0.40 0.40 2.01	eq. Hz 740 740 380 380 060 060	Level dBuV 47.66 34.91 37.45 21.64 27.88 17.74 22.14	Correct Factor dB 9.97 9.97 10.02 10.02 10.02 10.02	Measure- ment dBuV 57.63 44.88 47.47 31.66 37.90 27.76 32.20	64.76 54.76 62.16 52.16 57.73 47.73 56.00	dB -7.13 -9.88 -14.69 -20.50 -19.83 -19.97 -23.80	30.000 Detector QP AVG QP AVG QP AVG QP
0.150 No. M 1 * 2 3 4 5 6 7 8	0.17 0.17 0.23 0.23 0.40 0.40 2.01	eq. Hz 740 880 880 060 060 140	Level dBuV 47.66 34.91 37.45 21.64 27.88 17.74 22.14 9.50	Correct Factor dB 9.97 9.97 10.02 10.02 10.02 10.06 10.06	Measure- ment dBuV 57.63 44.88 47.47 31.66 37.90 27.76 32.20 19.56	dBuV 64.76 54.76 62.16 52.16 57.73 47.73 56.00 46.00	dB -7.13 -9.88 -14.69 -20.50 -19.83 -19.97 -23.80 -26.44	JOURN
0.150 No. M 1 * 2 3 4 5 6 7 8 9	0.17 0.17 0.23 0.23 0.40 0.40 2.01 2.01 4.03	eq. Hz 740 740 880 880 060 060 140 140	Level dBuV 47.66 34.91 37.45 21.64 27.88 17.74 22.14 9.50 21.26	Correct Factor dB 9.97 9.97 10.02 10.02 10.02 10.06 10.06 9.99	Measure- ment dBuV 57.63 44.88 47.47 31.66 37.90 27.76 32.20 19.56 31.25	64.76 54.76 62.16 52.16 57.73 47.73 56.00 46.00 56.00	dB -7.13 -9.88 -14.69 -20.50 -19.83 -19.97 -23.80 -26.44 -24.75	30.000 Detector QP AVG QP AVG QP AVG QP AVG QP AVG
0.150 No. M 1 * 2 3 4 5 6 7 8 9	0.17 0.17 0.23 0.23 0.40 0.40 2.01 4.03	eq. Hz 740 880 880 060 140 140 800	Level dBuV 47.66 34.91 37.45 21.64 27.88 17.74 22.14 9.50 21.26 15.48	Correct Factor dB 9.97 9.97 10.02 10.02 10.02 10.06 10.06 9.99 9.99	Measure- ment dBuV 57.63 44.88 47.47 31.66 37.90 27.76 32.20 19.56 31.25 25.47	dBuV 64.76 54.76 62.16 52.16 57.73 47.73 56.00 46.00 46.00	dB -7.13 -9.88 -14.69 -20.50 -19.83 -19.97 -23.80 -26.44 -24.75 -20.53	JOURN
0.150 No. M 1 * 2 3 4 5 6 7 8 9	0.17 0.17 0.23 0.23 0.40 0.40 2.01 2.01 4.03	eq. Hz 740 380 380 060 060 140 140 300 660	Level dBuV 47.66 34.91 37.45 21.64 27.88 17.74 22.14 9.50 21.26	Correct Factor dB 9.97 9.97 10.02 10.02 10.02 10.06 10.06 9.99	Measure- ment dBuV 57.63 44.88 47.47 31.66 37.90 27.76 32.20 19.56 31.25	64.76 54.76 62.16 52.16 57.73 47.73 56.00 46.00 56.00 46.00	dB -7.13 -9.88 -14.69 -20.50 -19.83 -19.97 -23.80 -26.44 -24.75	30.000 Detector QP AVG QP AVG QP AVG QP AVG QP AVG





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	N Wireless Vi-Fi dongl	The second secon	Model	Name :	HX9100
25 °C	r dorigit		Relativ	ve Humidity:	55%
	0V/60Hz	OHIT S	7101011		
Only w	orse case i	s reported		Million I	
				QF AV	
Min a fi					
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				anuv a	B Detector
					B Detector
1700 1700	45.74 34.32	10.12	55.86 44.44	64.96 -9.1 54.96 -10.	10 QP
1700	45.74	10.12 10.12	55.86 44.44	64.96 -9.1	10 QP 52 AVG
1700 1700	45.74 34.32	10.12 10.12 10.11	55.86	64.96 -9.1 54.96 -10.	10 QP 52 AVG 74 QP
1700 1700 2260	45.74 34.32 37.74	10.12 10.12 10.11 10.11	55.86 44.44 47.85	64.96 -9.1 54.96 -10. 62.59 -14.	10 QP 52 AVG 74 QP 28 AVG
1700 1700 2260 2260	45.74 34.32 37.74 26.20	10.12 10.12 10.11 10.11 10.07	55.86 44.44 47.85 36.31	64.96 -9.1 54.96 -10. 62.59 -14. 52.59 -16.	10 QP 52 AVG 74 QP 28 AVG 68 QP
1700 1700 2260 2260 3379	45.74 34.32 37.74 26.20 27.50	10.12 10.12 10.11 10.11 10.07 10.07	55.86 44.44 47.85 36.31 37.57	64.96 -9.1 54.96 -10. 62.59 -14. 52.59 -16. 59.25 -21.	10 QP 52 AVG 74 QP 28 AVG 68 QP 07 AVG
1700 1700 2260 2260 23379	45.74 34.32 37.74 26.20 27.50 15.11	10.12 10.12 10.11 10.11 10.07 10.07	55.86 44.44 47.85 36.31 37.57 25.18	64.96 -9.1 54.96 -10. 62.59 -14. 52.59 -16. 59.25 -21. 49.25 -24.	10 QP 52 AVG 74 QP 28 AVG 68 QP 07 AVG
1700 1700 2260 2260 3379 3379	45.74 34.32 37.74 26.20 27.50 15.11 21.20	10.12 10.12 10.11 10.11 10.07 10.07 10.07	55.86 44.44 47.85 36.31 37.57 25.18 31.27	64.96 -9.1 54.96 -10. 62.59 -14. 52.59 -16. 59.25 -21. 49.25 -24. 56.00 -24.	10 QP 52 AVG 74 QP 28 AVG 68 QP 07 AVG 73 QP 31 AVG
1700 1700 2260 2260 3379 3379 9140	45.74 34.32 37.74 26.20 27.50 15.11 21.20 9.62	10.12 10.12 10.11 10.11 10.07 10.07 10.07 10.07	55.86 44.44 47.85 36.31 37.57 25.18 31.27 19.69	64.96 -9.1 54.96 -10. 62.59 -14. 52.59 -16. 59.25 -21. 49.25 -24. 56.00 -24. 46.00 -26.	10 QP 52 AVG 74 QP 28 AVG 68 QP 07 AVG 73 QP 31 AVG
1700 1700 2260 2260 3379 3379 9140 9140	45.74 34.32 37.74 26.20 27.50 15.11 21.20 9.62 22.13	10.12 10.12 10.11 10.11 10.07 10.07 10.07 10.07 10.06	55.86 44.44 47.85 36.31 37.57 25.18 31.27 19.69 32.19	64.96 -9.1 54.96 -10. 62.59 -14. 52.59 -16. 59.25 -21. 49.25 -24. 56.00 -24. 46.00 -26. 56.00 -23.	10 QP 52 AVG 74 QP 28 AVG 68 QP 07 AVG 73 QP 31 AVG 81 QP 35 AVG
	AC 120 Neutra TX B N Only w	AC 120V/60Hz Neutral TX B Mode Only worse case i	AC 120V/60Hz Neutral TX B Mode Only worse case is reported Only worse case is reported Reading Correct Notes of the fractor of the following states and the fractor of the fractor o	AC 120V/60Hz Neutral TX B Mode Only worse case is reported 0.5 (MHz) 5 Reading Correct Measure-req. Level Factor ment	AC 120V/60Hz Neutral TX B Mode Only worse case is reported Only worse case is reported Reading Correct Measure-freq. Level Factor ment Limit Over the content of the c



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EU	JT:			802.1 (USE				Adap e)	ter		Mode	el Nar	ne		HX9	100	1
Те	mper	ature:		25 °C	C						Relat	ive H	um	idity:	55%		
Те	st Vo	ltage:		AC 2	40V/	60F	łz	111			1	1			46	185	
Te	rmina	al:		Line		1	MI			(7)	MA				1/1/	la serie	
Те	st Mo	de:		TX B	Mod	le			10	V		BETT STATE		AU.		_ (
Re	mark	:		Only	wors	e c	ase	is repo	orted		CA				1	1	
9	D.O dBu	N															
														QP: AVG	i:		
		_	-														
	o Mary	Mos															
١.	10	**************************************	me														
1		0		Mym	x			بالد بي	MUMUM.		×			man Jakoba .			
	+H	Λ		1,1,4	N. A.	Whyph	MUY WH	hally hadle	AMA MIN	en en el de profesione	Marin	of market and and	CAN'TY	W W \	Valet ⁱ	**	
	4	AA	4 11	7 M.m.	De Ale		ΛX	M. M.J	h. Marka	Paul Paylonger	HARANA MARINA	p.~.	-	~~~~\\	M	V peak	ķ
		2 A	VV	11/	~~\ ~~\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		MALL.	M. M.	M. n. it							AVG	i
				'													
-10																	
	0.150			0.5				(MI	Hz)		5					30.000	
_					D-	1:		0									_
	No.	Mk.	Fr	req.		adi eve		Con	rect ctor		asure- ent	Lin	nit	Over			
-			М	Hz	d	BuV	/	dE	3	dB	uV	dBı	ιV	dB	De	etector	-
-	1	*	0.1	660	3	7.22	2	9.	95	47	.17	65.	15	-17.98		QP	-
	2		0.1	660	19	9.20	0	9.	95	29	.15	55.	15	-26.00		AVG	_
	3		0.2	700	2	7.5	5	10.	02	37	.57	61.	12	-23.55		QP	
	4		0.2	700	,	1.43	3	10.	02	11.	.45	51.	12	-39.67		AVG	_
	5		0.7	780	18	8.6	7	10.	10	28	.77	56.	00	-27.23		QP	
	6		0.7	780		7.50		10.			.60			-28.40		AVG	_
	7		2.4	420	16	6.30	0	10.	05	26	.35	56.	00	-29.65		QP	
	8			420		6.0		10.			.13			-29.87		AVG	_
	9			860		0.99			99		.98			-25.02		QP	
	10			860		4.0			99		.06			-21.94		AVG	_ [
	11		16.0			1.04		10.			.28			-28.72		QP	_ [
	12		16.0	419	14	4.09	9	10.	24	24	.33	50.	00	-25.67		AVG	1

*:Maximum data x:Over limit !:over margin





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EUT:			N Wireless Vi-Fi dongle		Model	Name :	H	-IX9100
Tempera	ature:	25 ℃	A Brown		Relativ	e Humi	dity:	55%
Test Vol	Itage:	AC 240	V/60Hz	AND				die on
Termina	al:	Neutral			CHILD		a N	MUL
Test Mo	de:	TXBM	lode		C		100	
Remark	· ·	Only wo	orse case is	s reported		MIN'S		THE PARTY
90.0 dBu	v							
Ţ.	7						QP: AVG:	
40		ANAMAN MANAMA	Mary Mary	h ^{lin} hearthachtainn	programme Market Stranger and Stranger	Carrier and American		peak
-10 0.150		0.5		MHz)	propried to the second	agent the second		AVG
-10 0.150		0.5	Reading Level	(NHz)	Measure- ment	Limit	Over	30.000
-10 0.150	Mk. F	0.5		Correct	Measure-	Limit	Over	30.000
-10 0.150	Mk. F	0.5	Level	Correct Factor	Measure- ment			30.000
-10 0.150 No.	Mk. F	0.5	Level dBuV	Correct Factor	Measure- ment	dBu∨ 64.96	dB	30.000 Detector
-10 0.150 No.	Mk. F	0.5 Freq. MHz 1700	dBuV 43.30	Correct Factor dB 10.12	Measure- ment dBuV 53.42	dBu∨ 64.96	dB -11.54	30.000 Detector QP AVG
-10 0.150 No.	Mk. F * 0.: 0.:	0.5 Freq. MHz 1700	Level dBuV 43.30 28.07	Correct Factor dB 10.12 10.12	Measure- ment dBuV 53.42 38.19	dBuV 64.96 54.96	dB -11.54 -16.77	30.000 Detector QP AVG QP
No. 12 3	Mk. F * 0.: 0.: 0.:	0.5 Freq. MHz 1700 1700 2340	dBuV 43.30 28.07 34.73	Correct Factor dB 10.12 10.12	Measure- ment dBuV 53.42 38.19 44.84	dBuV 64.96 54.96 62.30	dB -11.54 -16.77 -17.46	30.000 Detector QP AVG QP
-10 0.150 No. 1 2 3 4	Mk. F * 0.: 0.: 0.: 0.:	0.5 Freq. MHz 1700 1700 2340 2340	dBuV 43.30 28.07 34.73 23.13	Correct Factor dB 10.12 10.12 10.11	Measure- ment dBuV 53.42 38.19 44.84 33.24	dBuV 64.96 54.96 62.30 52.30	dB -11.54 -16.77 -17.46 -19.06	30.000 Detector QP AVG QP AVG

10.06

10.06

10.06

10.07

10.07

18.55

31.02

24.14

30.42

24.10

8.49

20.96

14.08

20.35

14.03

*:Maximum data x:Over limit !:over margin

2.2900

4.0820

4.0820

14.4060

14.4060

9

10

11

12

Emission Level= Read Level+ Correct Factor

AVG

AVG

QP

QΡ

AVG

46.00 -27.45

56.00 -24.98

46.00 -21.86

60.00 -29.58

50.00

-25.90



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

Frequency	Class A (dBu	V/m)(at 3 M)	Class B (dBuV/m)(at 3 M)		
(MHz)	Peak	Average	Peak	Average	
Above 1000	80	60	74	54	

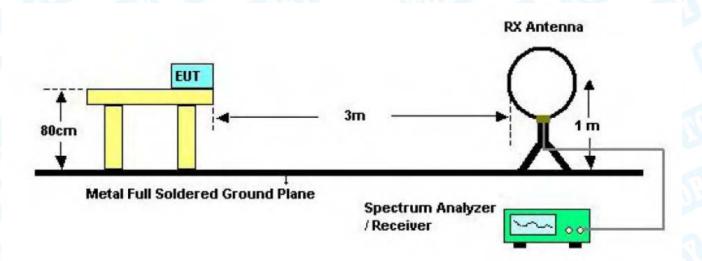
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

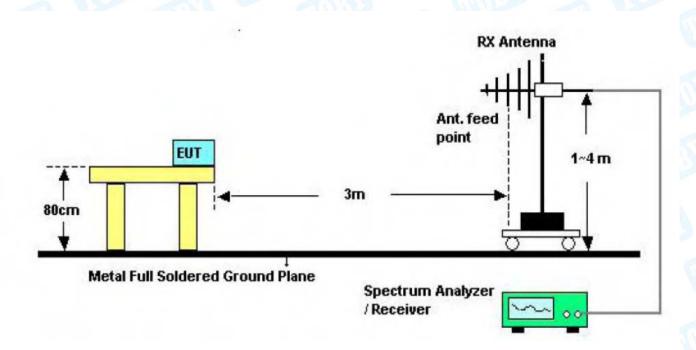


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5.2 Test Setup



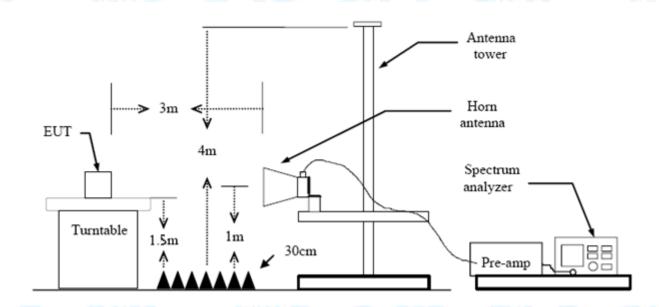
Below 30MHz Test Setup



Below 1000MHz Test Setup



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Above 1GHz Test Setup

5.3 Test Procedure

- (1) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (3) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (5) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (6) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (7) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.



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5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.



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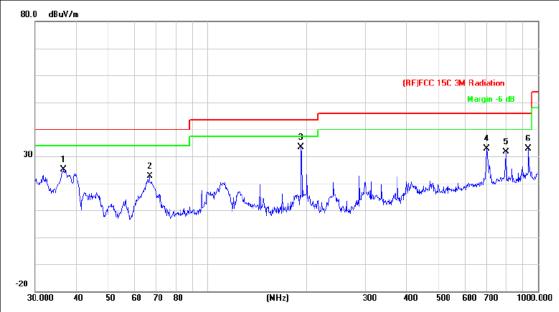
	EU1	Γ:				802 (US					Adap e)	oter		Model:					Н	X9′	100		
	Tem	per	atu	re:		25	$^{\circ}$ C	1		Į.				Re	elativ	ve H	lum	idit	y:	5	5%		
	Tes	t Vol	taç	je:		DC	5V			À	1	Mil					W				K		
	Ant	. Po				Hor	izoı	ntal					(1117		Ø		A			y	3	
	Test	t Mo	de			TX	ΒN	1ode	e 24	121	ИНz	100							9				
	Ren	nark	:			Onl	y w	orse	e ca	se i	is rep	orted			N				8	K	W		V
	80.0	0 dB	νZm																			_	_
The second second second	30	Milhouse of	Λγ.	word.	الربيدة مراجع والمالية	1	*Man			waya ruhi	Managara Jana	2 *	3 ×	Mulu	Malaka	(F	RFJFCI	C 15C			-6 dB	6	1
	-20 30	0.000	4	D	50	60	70	80			(MHz)			300	4	00	500	600	70	0	100	 0.000
		No.	M	k.	Fre	eq.		Le	adir evel	<u> </u>		rect ctor	ı	easur ment 1BuV/n		Lir	nit uv/r		Ov		D	ete	ctor
	1			6	31.3	463		42	2.22	2	-24	.40	,	17.82	2	40	0.00)	-22	.18		pe	ak
l	2			1	91.7	450)	48	3.50)	-20	.81		27.69)	43	3.50)	-15	.81		pe	
l	3			1	99.9	856)	42	2.85	5	-20	.39		22.46)	43	3.50)	-21	.04	.	pe	ak
	4			7	01.7	610)	33	3.85	5	-6.	88		26.97	,	46	6.00)	-19	.03		pe	ak
	5		*	8	01.7	863	3	38	3.89)	-6.	49	,	32.40)	46	6.00)	-13	.60		pe	ak
	6			8	72.1	832)	29	9.31		-6.	10		23.21		46	6.00)	-22	.79		pe	ak

*:Maximum data x:Over limit !:over margin



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical	The same of the sa	MAN
Test Mode:	TX B Mode 2412MHz	an:N	
Remark:	Only worse case is reported		



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		36.6375	43.08	-18.07	25.01	40.00	-14.99	peak
2		66.7325	46.52	-23.91	22.61	40.00	-17.39	peak
3	*	191.7450	54.12	-20.81	33.31	43.50	-10.19	peak
4		699.3046	39.70	-6.89	32.81	46.00	-13.19	peak
5		801.7863	38.03	-6.49	31.54	46.00	-14.46	peak
6		935.5463	37.70	-4.82	32.88	46.00	-13.12	peak

^{*:}Maximum data x:Over limit !:over margin



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5.0V		
Ant. Pol.	Horizontal	CHILD IN	ALIAN SERVICE
Test Mode:	TX B Mode 2412MHz		
Remark:	No report for the emission which prescribed limit.	ch more than 10 dB below	w the

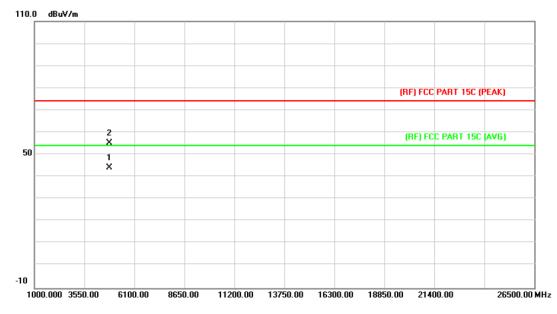


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.435	30.69	13.50	44.19	54.00	-9.81	AVG
2		4824.507	42.88	13.50	56.38	74.00	-17.62	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5.0V		
Ant. Pol.	Vertical	CHILD IN	AMO
Test Mode:	TX B Mode 2412MHz	W.F.	
Remark:	No report for the emission wh prescribed limit.	ich more than 10 dB belo	ow the

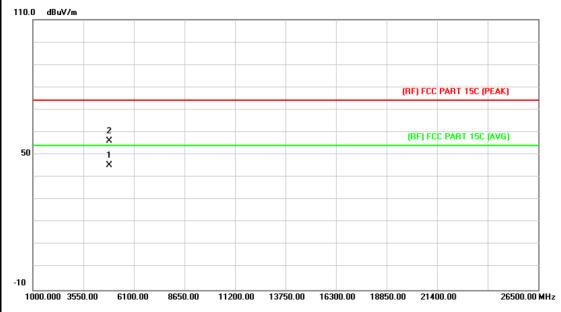


No	o. Mk	c. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.010	30.66	13.50	44.16	54.00	-9.84	AVG
2		4824.528	41.81	13.50	55.31	74.00	-18.69	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle) Model:		HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Horizontal		AMO				
Test Mode:	TX B Mode 2437MHz						
Remark: No report for the emission which more than 10 dB below prescribed limit.							



N	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.454	31.45	13.86	45.31	54.00	-8.69	AVG
2		4873.688	42.26	13.86	56.12	74.00	-17.88	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Vertical	CIII D	HILL				
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						



No.	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.072	41.45	13.86	55.31	74.00	-18.69	peak
2	*	4875.047	30.25	13.87	44.12	54.00	-9.88	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)		HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal	CILIDA	A PARTY			
Test Mode:	TX B Mode 2462MHz					
Remark: No report for the emission which more than 10 dB below the prescribed limit.						



N	o. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.526	31.76	14.15	45.91	54.00	-8.09	AVG
2		4924.732	42.97	14.15	57.12	74.00	-16.88	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:			
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 5.0V				
Ant. Pol.	Vertical	CILIDED IN	THU		
Test Mode:	TX B Mode 2462MHz	THE PARTY OF THE P	9 _ 0		
Remark: No report for the emission which more than 10 dB below the prescribed limit.					

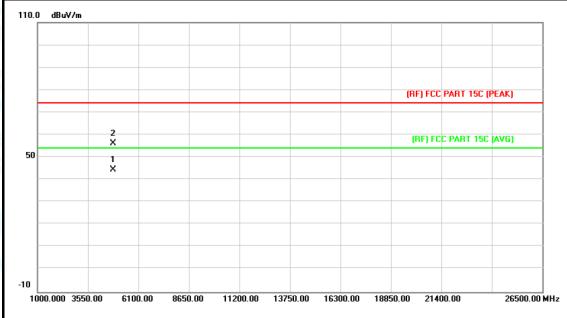


No.	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.081	43.48	14.15	57.63	74.00	-16.37	peak
2	*	4924.240	31.23	14.15	45.38	54.00	-8.62	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal		A PINCE			
Test Mode:	TX G Mode 2412MHz					
Remark:						



N	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4824.387	30.78	13.56	44.34	54.00	-9.66	AVG
2			4825.194	42.57	13.57	56.14	74.00	-17.86	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	. Model.				
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage: DC 5.0V						
Ant. Pol.	Vertical	CIII DE	A HILL			
Test Mode:	TX G Mode 2412MHz		3 _ (
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					
110.0 dBuV/m						

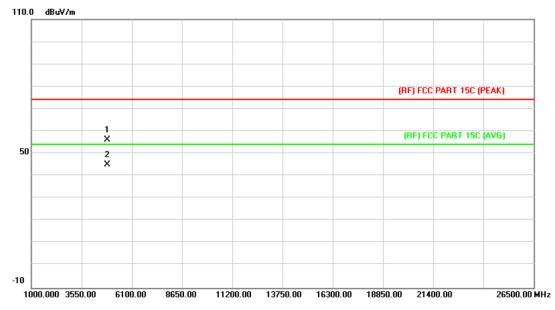


No	o. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.435	30.69	13.50	44.19	54.00	-9.81	AVG
2		4824.507	42.88	13.50	56.38	74.00	-17.62	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:					
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Horizontal		a HIVE				
Test Mode:	TX G Mode 2437MHz						
Remark:	No report for the emission v prescribed limit.	No report for the emission which more than 10 dB below the					

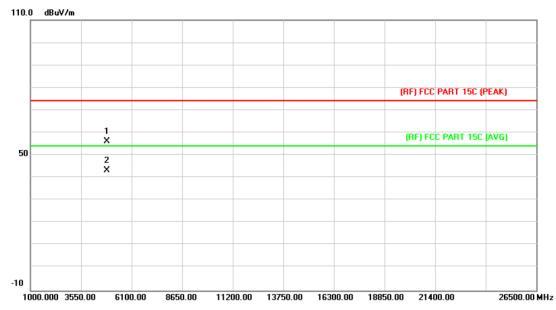


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.318	42.28	13.86	56.14	74.00	-17.86	peak
2	*	4875.029	31.23	13.87	45.10	54.00	-8.90	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:					
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Vertical		HIVE				
Test Mode:	TX G Mode 2437MHz		3 _ 0				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						



No	. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4872.539	42.25	13.85	56.10	74.00	-17.90	peak
2	*	4874.942	29.35	13.86	43.21	54.00	-10.79	AVG



Page: 33 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal	CIII)				
Test Mode:	TX G Mode 2462MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					



No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.667	42.95	14.15	57.10	74.00	-16.90	peak
2	*	4925.494	30.05	14.16	44.21	54.00	-9.79	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Vertical		a HIVE				
Test Mode:	TX G Mode 2462MHz		7 0				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						

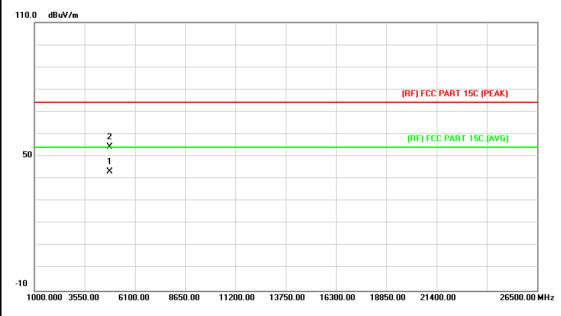


No	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.274	41.97	14.15	56.12	74.00	-17.88	peak
2	*	4923.892	31.16	14.15	45.31	54.00	-8.69	AVG



Page: 35 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	mperature: 25 °C Relative Humid		55%				
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Horizontal		All				
Test Mode:	TX N(HT20) Mode 2412MHz		2				
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						

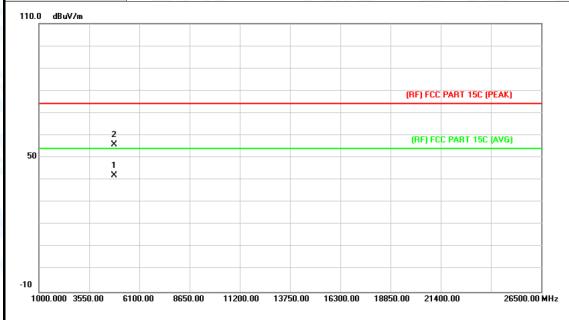


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.342	29.65	13.56	43.21	54.00	-10.79	AVG
2		4824.588	40.75	13.56	54.31	74.00	-19.69	peak



Page: 36 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	· Model· HX9100					
Temperature:	25 ℃	Relative Humidity:					
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Vertical		A PINCE				
Test Mode:	TX N(HT20) Mode 2412MH	z					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.		CHILD STORY				

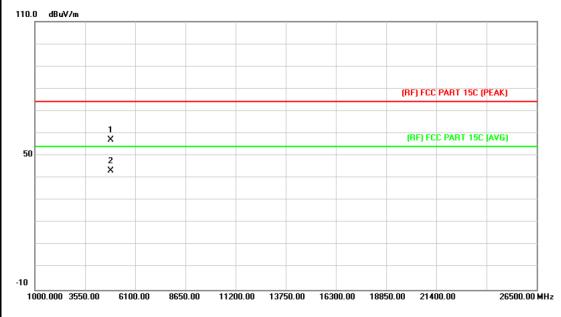


N	o. I	Иk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*		4823.016	28.45	13.56	42.01	54.00	-11.99	AVG
2			4824.027	42.42	13.56	55.98	74.00	-18.02	peak



Page: 37 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	perature: 25 °C Relative Humidity:		55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal		Allu			
Test Mode:	TX N(HT20) Mode 2437MHz		3 _ 0			
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					

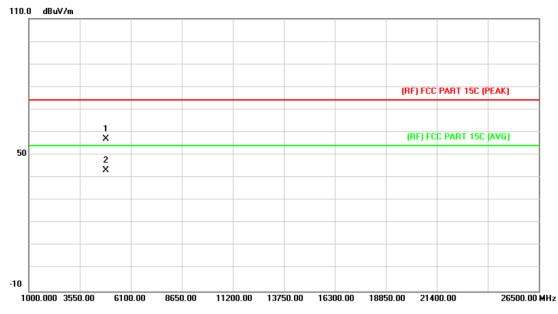


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.726	43.12	13.86	56.98	74.00	-17.02	peak
2	*	4874.882	29.33	13.86	43.19	54.00	-10.81	AVG



Page: 38 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle) Model:		HX9100		
Temperature:	ature: 25 °C Relative Humidity:		55%		
Test Voltage:	DC 5.0V				
Ant. Pol.	Vertical				
Test Mode:	TX N(HT20) Mode 2437MHz				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.				

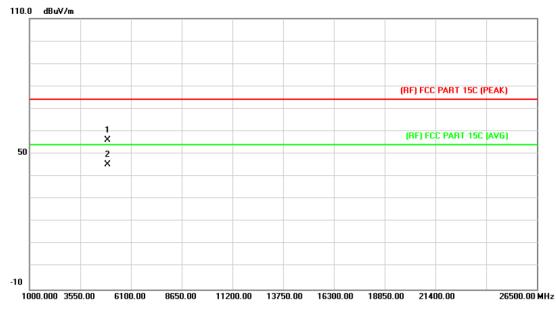


N	o. Mł	c. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4872.503	43.06	13.85	56.91	74.00	-17.09	peak
2	*	4872.503	29.34	13.85	43.19	54.00	-10.81	AVG



Page: 39 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	. Model.				
Temperature:	25 ℃ Relative Humidity: 55%					
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal		A MANAGEMENT			
Test Mode:	TX N(HT20) Mode 2462MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

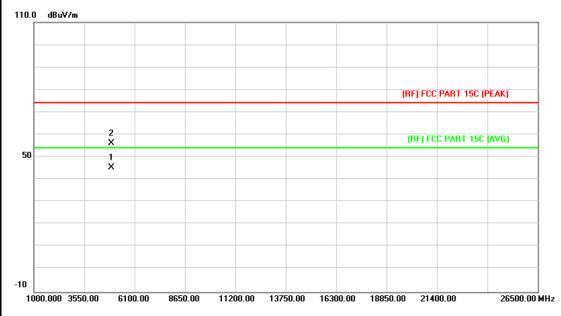


	No.	Mk.	Freq.			Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4922.905	42.15	14.14	56.29	74.00	-17.71	peak
2		*	4924.201	31.21	14.15	45.36	54.00	-8.64	AVG



Page: 40 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Vertical		HILL			
Test Mode:	TX N(HT20) Mode 2462MHz		3			
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					



	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4922.746	31.23	14.14	45.37	54.00	-8.63	AVG
2			4923.274	42.04	14.15	56.19	74.00	-17.81	peak



Page: 41 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal		HAD			
Test Mode:	TX N(HT40) Mode 2422MHz	THE PARTY OF THE P	3 _ 6			
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					



	No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4842.629	30.46	13.67	44.13	54.00	-9.87	AVG
2			4843.889	40.63	13.68	54.31	74.00	-19.69	peak



Page: 42 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Vertical		THU .			
Test Mode:	TX N(HT40) Mode 2422MH:					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					



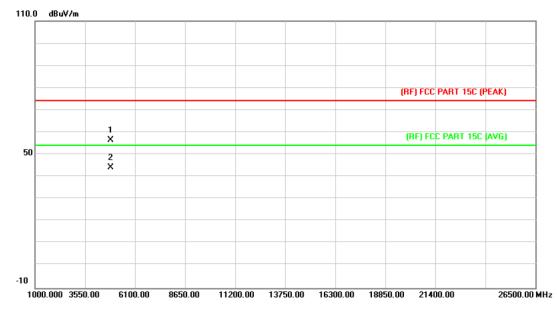
No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4844.012	40.63	13.68	54.31	74.00	-19.69	peak
2	*	4844.990	30.45	13.68	44.13	54.00	-9.87	AVG

Emission Level= Read Level+ Correct Factor



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model: HX9100					
Temperature:	25 ℃	Relative Humidity:					
Test Voltage:	DC 5.0V	DC 5.0V					
Ant. Pol.	Horizontal						
Test Mode:	TX N(HT40) Mode 2437MH	z	70				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						

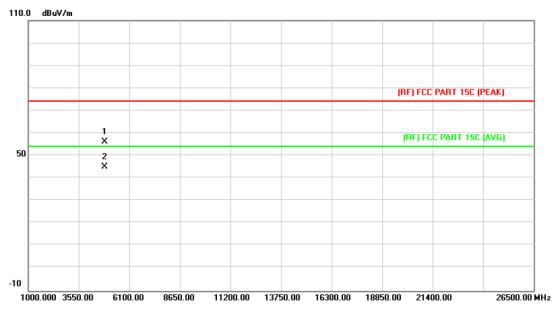


N	o. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.898	42.45	13.86	56.31	74.00	-17.69	peak
2	*	4874.150	30.26	13.86	44.12	54.00	-9.88	AVG



Page: 44 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	: 25 °C Relative Humidity		55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Vertical	COLUMN TO SERVICE STATE OF THE PERSON OF THE	HILL			
Test Mode:	TX N(HT40) Mode 2437MH	z	77 0			
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

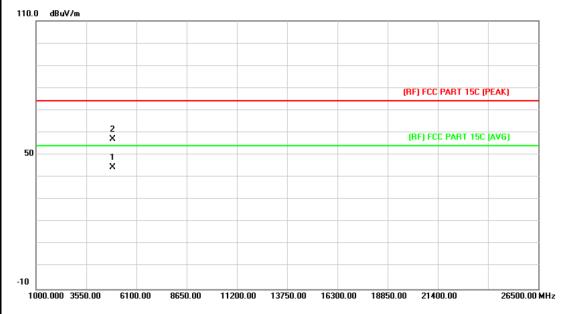


No	. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.493	42.32	13.86	56.18	74.00	-17.82	peak
2	*	4874.024	31.05	13.86	44.91	54.00	-9.09	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model.					
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Horizontal	CIII DE	A HIVE				
Test Mode:	TX N(HT40) Mode 2452MHz		3 _ 0				
Remark:	No report for the emission wh prescribed limit.	No report for the emission which more than 10 dB below the					

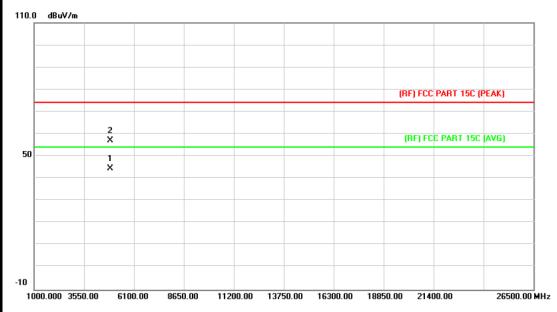


	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4904.483	30.33	14.03	44.36	54.00	-9.64	AVG
2			4905.029	42.94	14.04	56.98	74.00	-17.02	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	. Model: HX9100						
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 5.0V	DC 5.0V						
Ant. Pol.	Vertical	COLUMN TO THE REAL PROPERTY OF THE PERTY OF	AMO					
Test Mode:	TX N(HT40) Mode 2452MHz		3					
Remark:	No report for the emission which more than 10 dB below the							
	prescribed limit.							



N	o. M	k. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4902.500	30.29	14.02	44.31	54.00	-9.69	AVG
2		4904.465	42.95	14.03	56.98	74.00	-17.02	peak



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6. Restricted Bands Requirement

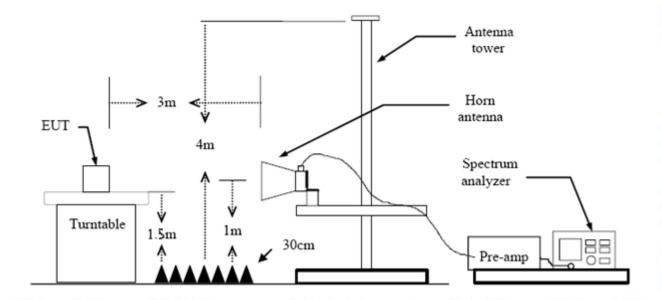
6.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Class B (dB	BuV/m)(at 3 M)
Band (MHz)	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.



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(4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

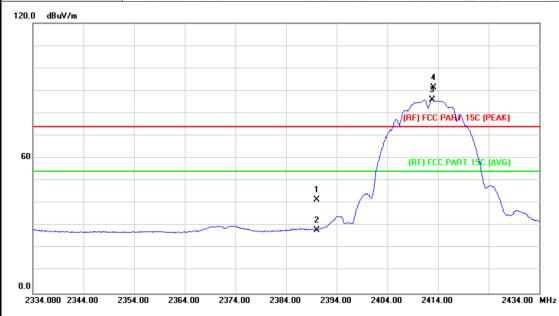
Please see the next page.



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(1) Radiation Test

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal					
Test Mode:	TX B Mode 2412MHz					
Remark:	N/A		din.			

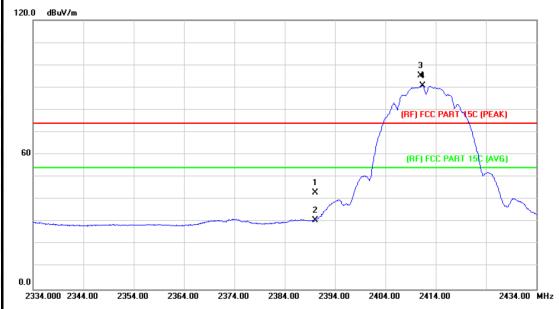


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	40.92	0.77	41.69	74.00	-32.31	peak
2		2390.000	27.37	0.77	28.14	54.00	-25.86	AVG
3	*	2412.800	85.18	0.86	86.04	Fundamental Frequency		AVG
4	X	2413.100	90.36	0.86	91.22	Fundamental	Frequency	peak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5.0V		
Ant. Pol.	Vertical	COLUMN TO THE REAL PROPERTY OF THE PERTY OF	A HIVE
Test Mode:	TX B Mode 2412MHz		3 _ 0
Remark:	N/A		
i			

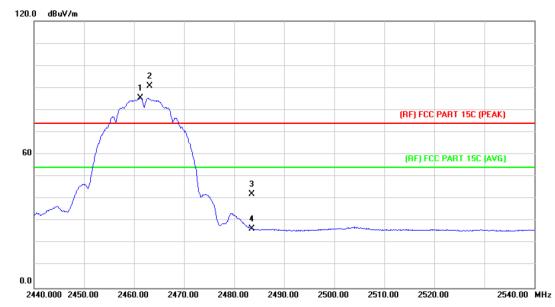


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	42.35	0.77	43.12	74.00	-30.88	peak
2		2390.000	30.03	0.77	30.80	54.00	-23.20	AVG
3	Χ	2411.000	94.50	0.86	95.36	Fundamental Frequency		peak
4	*	2411.400	89.95	0.86	90.81	Fundamenta	Frequency	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2462MHz		3 _ 0				
Remark:	N/A						



N	No. Mk. Freq.		Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*		2461.300	84.27	1.07	85.34	Fundamental Frequency		AVG
2	X		2463.100	89.60	1.08	90.68	Fundamental Frequency		peak
3			2483.500	40.84	1.17	42.01	74.00	-31.99	peak
4			2483.500	25.46	1.17	26.63	54.00	-27.37	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Vertical		AMO			
Test Mode:	TX B Mode 2462MHz		3			
Remark:	N/A	1				

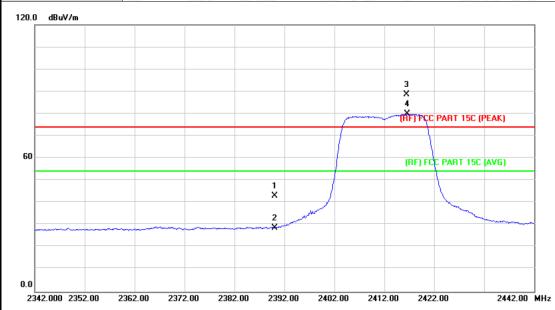


No. Mk. Fre		k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2461.300	90.55	1.07	91.62	Fundamental Frequency		AVG
2	Χ	2462.000	97.55	1.08	98.63	Fundamental Frequency		peak
3		2483.500	43.93	1.17	45.10	74.00	-28.90	peak
4		2483.500	30.14	1.17	31.31	54.00	-22.69	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5.0V					
Ant. Pol.	Horizontal	CHILD	A Aller			
Test Mode:	TX G Mode 2412MHz					
Remark:	N/A					

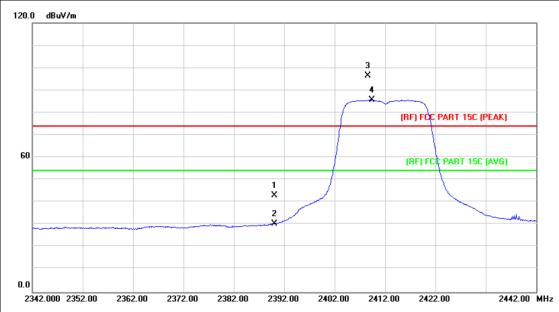


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	42.42	0.77	43.19	74.00	-30.81	peak
2		2390.000	27.94	0.77	28.71	54.00	-25.29	AVG
3	X	2416.500	87.81	0.88	88.69	Fundamental Frequency		peak
4	*	2416.600	78.94	0.88	79.82	Fundamenta	I Frequency	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	dongle) Model:					
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Vertical		AMO				
Test Mode:	TX G Mode 2412MHz		3 0				
Remark:	N/A						



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	42.35	0.77	43.12	74.00	-30.88	peak
2		2390.000	29.66	0.77	30.43	54.00	-23.57	AVG
3	X	2408.600	95.47	0.85	96.32	Fundamental Frequency		peak
4	*	2409.400	84.77	0.85	85.62	Fundamenta	I Frequency	AVG



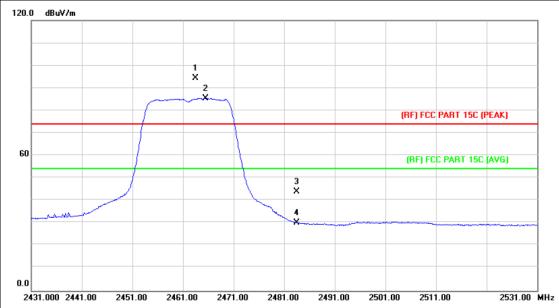
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EUT:				11N Wir Wi-Fi		s Adapte le)	er	Mod	lel:		HX91	100	
Temp	eratu	re:	25 °C				1	Rela	ative H	lumidity	: 55%		
Test \	/oltag	je:	DC 5	.0V		P.A	7)			1 6		1	
Ant. F	Pol.		Horiz	ontal				6	W			تعاللا	
Test I	Mode:		TX G	Mode :	2462	MHz		V		e TIT	333		Û
Rema	ırk:		N/A			DATE:			a	Al Box		E.V	
60	dBuV/m			2 X			3 X 4				PART 15C (PEAK		
0.0													
	. Mk.		•	Readi Leve	el	Corre Facto	or	Meas me	sure- ent	Limit dBuV/n	Over	Dete	
1	*	2459.	600	77.5	5	1.06		78.	61	Fundame	ntal Frequency	A۱	۷G
						1.08		90.			ntal Frequency		ak
2	X	2463	600	00.8						i unuantei	icai i requericy	1-0	
2	X	2463. 2483.		88.9 39.1		1.17		40.	36	74.00	-33.64	ne	eak



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Vertical		A HIVE				
Test Mode:	TX G Mode 2462MHz		3 _ 0				
Remark:	N/A						
120.0 dBuV/m							

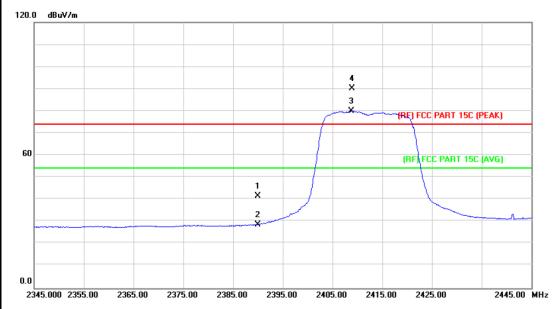


No	No. Mk. Freq.		Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Χ	2463.500	93.28	1.08	94.36	Fundamental Frequency		peak
2	*	2465.400	84.28	1.09	85.37	Fundamental	Frequency	AVG
3		2483.500	42.93	1.17	44.10	74.00	-29.90	peak
4		2483.500	29.01	1.17	30.18	54.00	-23.82	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Horizontal						
Test Mode:	TX N(HT20) Mode 2412MHz						
Remark:	N/A						



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	40.92	0.77	41.69	74.00	-32.31	peak
2		2390.000	28.02	0.77	28.79	54.00	-25.21	AVG
3	*	2408.800	79.05	0.85	79.90	Fundamental	Frequency	AVG
4	Χ	2408.900	89.25	0.85	90.10	Fundamental	Frequency	peak



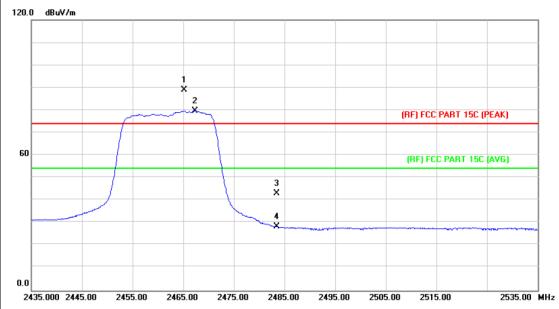
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EUI	Γ:					1N W Wi-Fi		s Adapt gle)	er	M	odel:	HX91			910	00
Ten	pe	ratu	re:	2	5 ℃				1	R	elative	Hum	idity	: 559	%	
Tes	t Vo	ltag	e:	D	C 5.	0V		11/1	الوالا		1	4				100
Ant	. Po	ol.		V	ertic	al		3		6	11/13			a Y	N	Jac.
Tes	t M	ode:		T.	X N(HT20) Mod	de 2412	MHz	V		P.				_ (
Ren	nar	k:		N	/A			LAND.			CA	11.			(T	10
120.0) di	BuV/m														
											3 X	4 X	FCC P	ART 15C (F	PEAK	
60								1 X				(F	RF) FCC	PART 15C	(AVG)
		····						2 X								
0.0 23	345.00	00 235	5.00	2365.	00	2375.00	238	95.00 23	95.00	2405	i.00 24	\$15.00	2425.0	00	2	445.00 MI
N	lo.	Mk.	F	req.		Read Lev	_	Corre			sure- ent	Lim	nit	Over	•	
			N	ИНZ		dBı	ı۷	dB/m		dBu	JV/m	dBu	V/m	dB		Detecto
1			2390	0.00	00	42.	91	0.77	,	43	3.68	74	.00	-30.3	2	peak
2			2390	0.00	00	31.	13	0.77	,	31	.90	54	.00	-22.1	0	AVG
3		X	2408	8.90	00	93.	47	0.85	;	94	.32	Funda	mental	Frequenc	 :y	peak
		*	241			83.		0.89			.79			Frequenc		AVG



Page: 59 of 91

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Horizontal		AND				
Test Mode:	TX N(HT20) Mode 2462MHz						
Remark:	N/A		The state of the s				

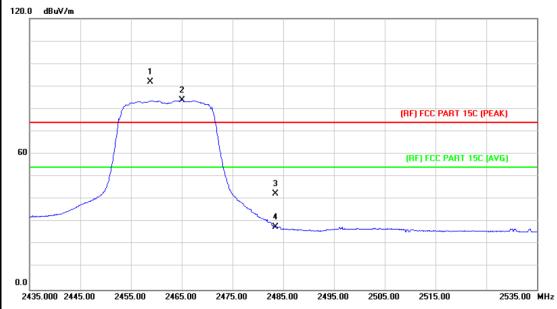


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Χ	2465.200	87.91	1.09	89.00	Fundamental	Frequency	peak
2	*	2467.300	78.58	1.10	79.68	Fundamental	Frequency	AVG
3		2483.500	41.93	1.17	43.10	74.00	-30.90	peak
4		2483.500	27.06	1.17	28.23	54.00	-25.77	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5.0V						
Ant. Pol.	Vertical	CUID DE	A HILL				
Test Mode:	TX N(HT20) Mode 2462MHz						
Remark:	N/A						

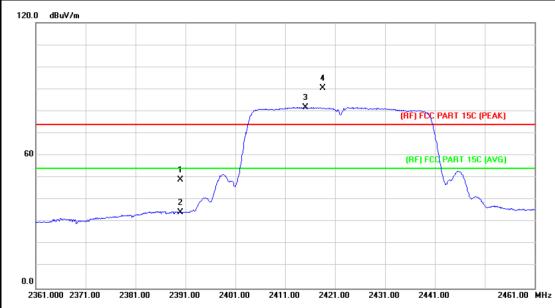


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Χ	2458.800	90.98	1.06	92.04	Fundamenta	al Frequency	peak
2	*	2465.000	82.79	1.09	83.88	Fundamenta	al Frequency	AVG
3		2483.500	41.19	1.17	42.36	74.00	-31.64	peak
4		2483.500	26.60	1.17	27.77	54.00	-26.23	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5.0V		
Ant. Pol.	Horizontal		A LONG
Test Mode:	TX N(HT40) Mode 2422MHz	Time.	0
Remark:	N/A		



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	48.15	0.77	48.92	74.00	-25.08	peak
2		2390.000	33.46	0.77	34.23	54.00	-19.77	AVG
3	*	2415.000	80.87	0.88	81.75	Fundamenta	Frequency	AVG
4	Χ	2418.500	89.47	0.89	90.36	Fundamenta	Frequency	peak



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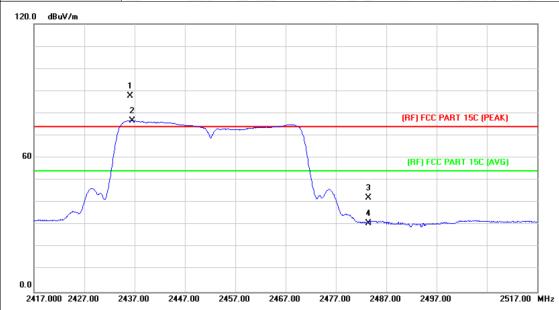
B	3			Page:
	WHITE STATE	CHILD.	2 100	

EUT	:		111111111111111111111111111111111111111	11N Wireless 3 Wi-Fi dong		Model:		HX910	HX9100	
Гет	peratu	ıre:	25 °			Relative I	Humidity:	55%		
	Volta		DC 5	5.0V	CHI.		1 6		STATE	
۹nt.	Pol.		Verti	cal		Call B		2 W	Visco	
Гest	Mode):	TX N	I(HT40) Mod	e 2422MHz	1				
₹em	ark:		N/A				Allen		R'A	
120.0	dBuV/ı	n								
							3 X 4 (RF)\(\frac{4}{2}\)ECC PA	ART 15C (PEA)	K)	
60							(RF) FCC F	ART 15C (AV	G)	
				1 X	1			^		
				2	<i>J</i>		,			
	~			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
0.0										
23	61.000 2	371.00 2	2381.00	2391.00 240	1.00 2411.00	2421.00 24	31.00 2441.0	D :	2461.00 Mi	
N	o. Mk	c. Fre	∍q.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MH	łz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detect	
		2390.	000	43.47	0.77	44.24	Fundamental	Frequency	peal	
1						20.42	Fundamental	Frequency	AVG	
1		2390.	000	29.66	0.77	30.43	· anaamana			
1 2 3	X	2390. 2437.		29.66 84.39	0.77	85.36	74.00	11.36	peal	



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 5.0V							
Ant. Pol.	Horizontal							
Test Mode:	TX N(HT40) Mode 2452MH	z						
Remark:	N/A							
120.0 dBuV/m								

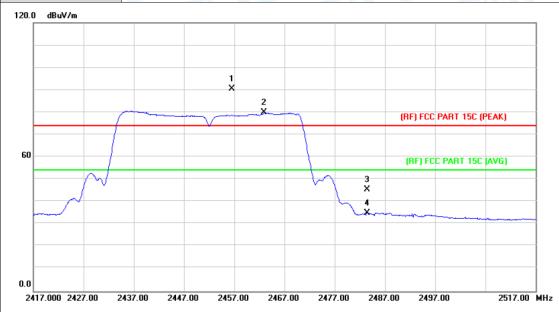


No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2436.100	86.81	0.97	87.78	Fundamental	Frequency	peak
2	*	2436.500	75.74	0.97	76.71	Fundamental	Frequency	AVG
3		2483.500	40.84	1.17	42.01	74.00	-31.99	peak
4		2483.500	29.72	1.17	30.89	54.00	-23.11	AVG



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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 5.0V				
Ant. Pol.	Vertical				
Test Mode:	TX N(HT40) Mode 2452MHz		3		
Remark:	N/A				



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		X	2456.500	89.26	1.05	90.31	Fundamental	Frequency	peak
2		*	2462.900	78.79	1.08	79.87	Fundamental	Frequency	AVG
3			2483.500	44.14	1.17	45.31	74.00	-28.69	peak
4			2483.500	33.69	1.17	34.86	54.00	-19.14	AVG

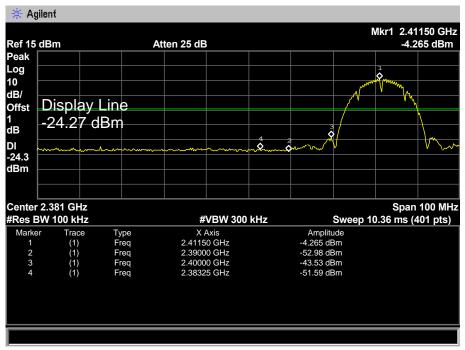


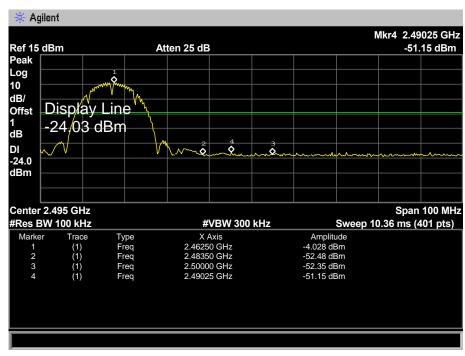


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(2) Conducted Test

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5.0V		MA
Test Mode:	TX B Mode 2412MHz / TX B	B Mode 2462MHz	0
Remark:	The EUT is programed in co	ontinuously transmitting mode	



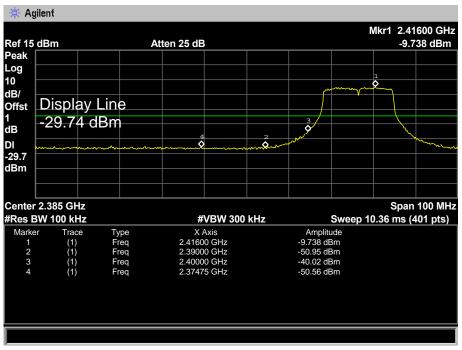


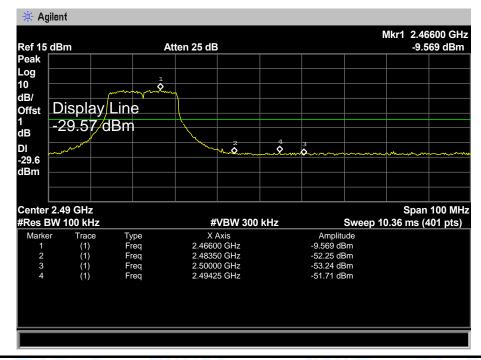




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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	DC 5.0V			
Test Mode:	TX G Mode 2412MHz / TX G Mode 2462MHz			
Remark: The EUT is programed in continuously transmitting mode				



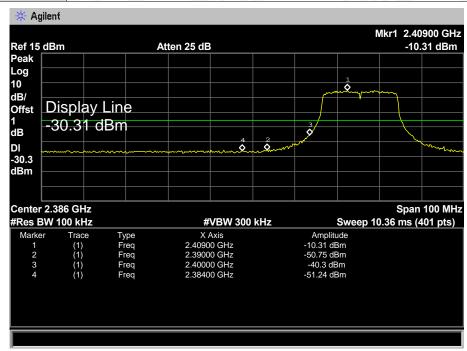


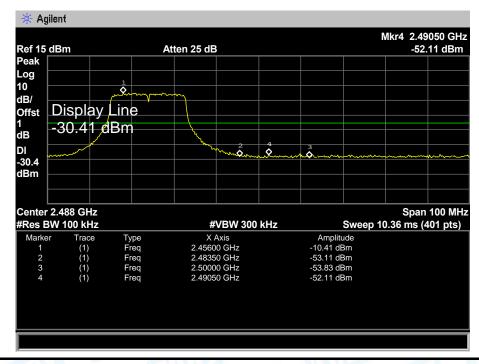




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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	DC 5.0V			
Test Mode:	TX N(HT20) Mode 2412MHz / TX N(HT20) Mode 2462MHz			
Remark: The EUT is programed in continuously transmitting mode				



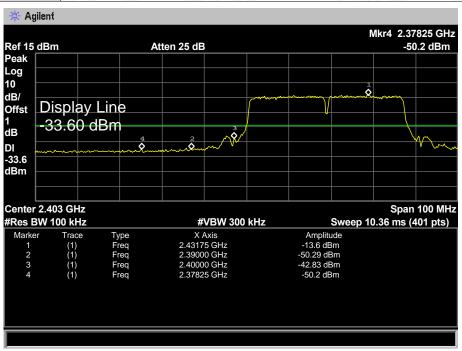


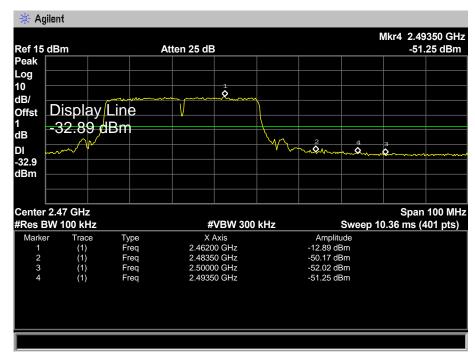




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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	DC 5.0V			
Test Mode:	TX N(HT40) Mode 2422MHz / TX N(HT40) Mode 2452MHz			
Remark:	The EUT is programed in continuously transmitting mode			







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7. Bandwidth Test

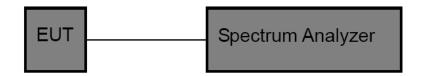
7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(2)

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210						
Test Item	Test Item Limit Frequency Range(M					
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5				

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.



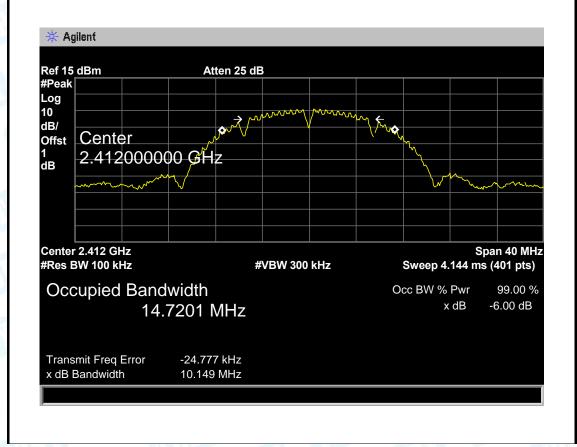
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7.5 Test Data

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	DC 5.0V			
Test Mode:	TX 802.11B Mode			
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit	
(MHz)	(MHz)	(MHz)	(MHz)	
2412	10.149	14.7201		
2437	10.143	14.7270	>=0.5	
2462	10.129	14.6659		

802.11B Mode

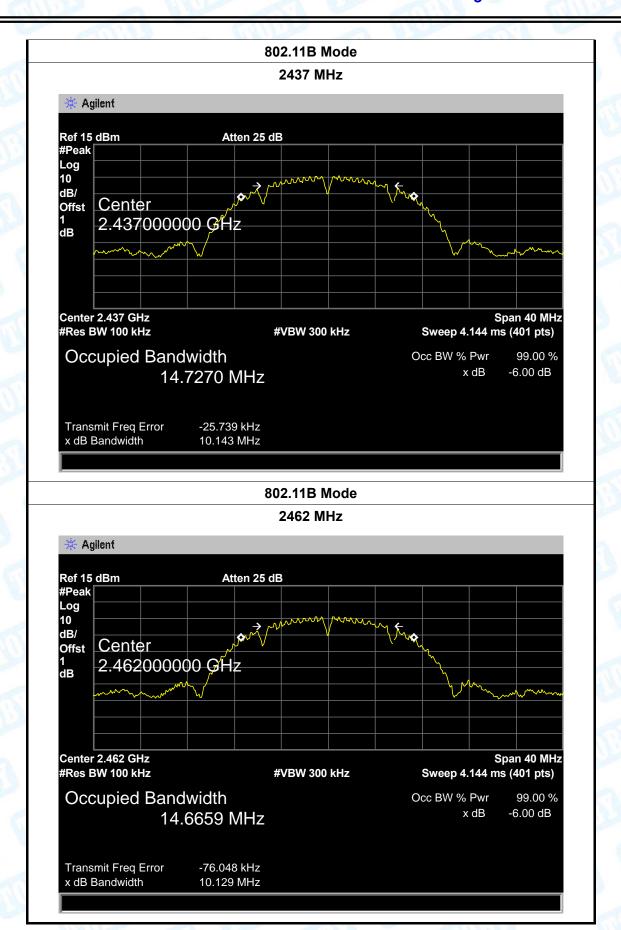
2412 MHz







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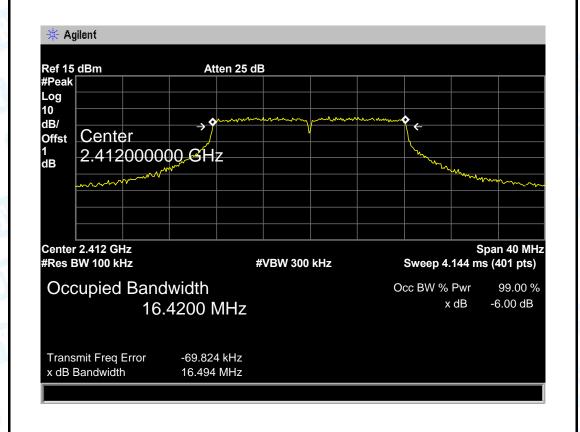




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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 5.0V	COURT OF THE PERSON OF THE PER	A RIVE		
Test Mode:	TX 802.11G Mode		1		
Channel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit		
(MHz)	(MHz)	(MHz)	(MHz)		
2412	16.494	16.4200			
2437	16.492	16.4088	>=0.5		
2462	16.500	16.4215			
802.11G Mode					

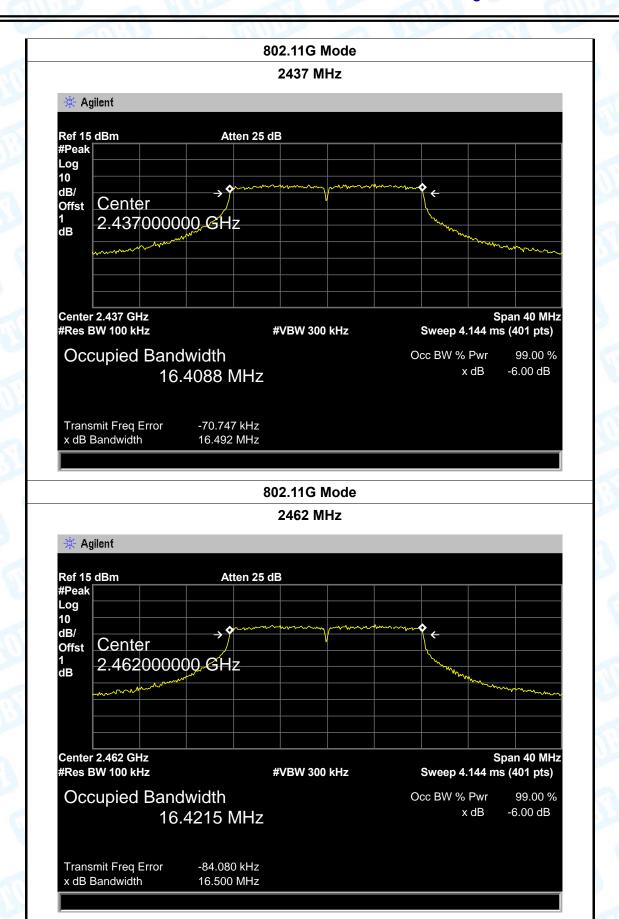
2412 MHz







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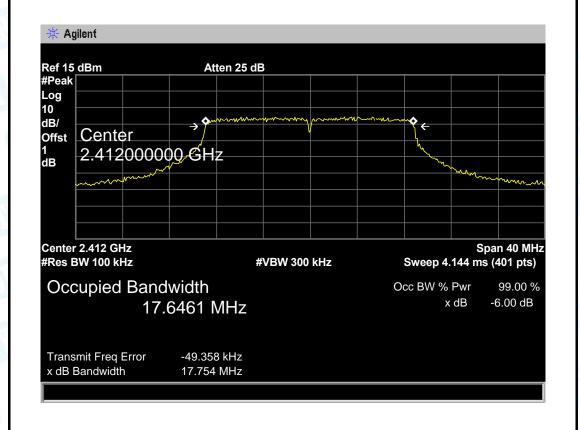






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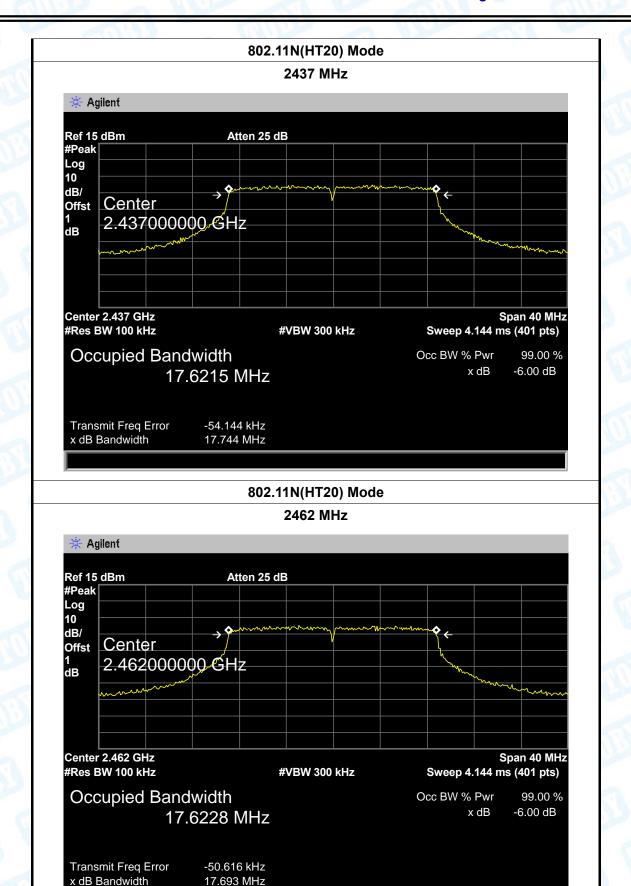
EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	DC 5.0V		CALL STATE	
Test Mode:	TX 802.11N(HT20) Mode			
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit	
(MHz)	(MHz)	(MHz)	(MHz)	
2412	17.754	17.6461		
2437	17.744	17.6215	>=0.5	
2462	17.693	17.6228		
802.11N(HT20) Mode				







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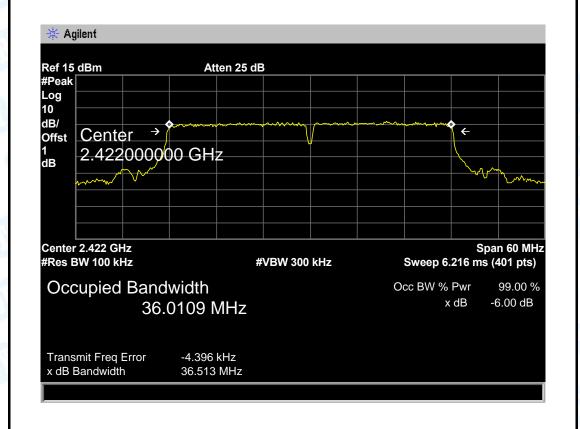


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4	0	BY

EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 5.0V				
Test Mode:	TX 802.11N(HT40) Mode				
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit		
(MHz)	(MHz)	(MHz)	(MHz)		
2422	36.513	36.0109			
2437	36.457	35.9600	>=0.5		
2452	36.458	35.9570			
802.11N(HT40) Mode					

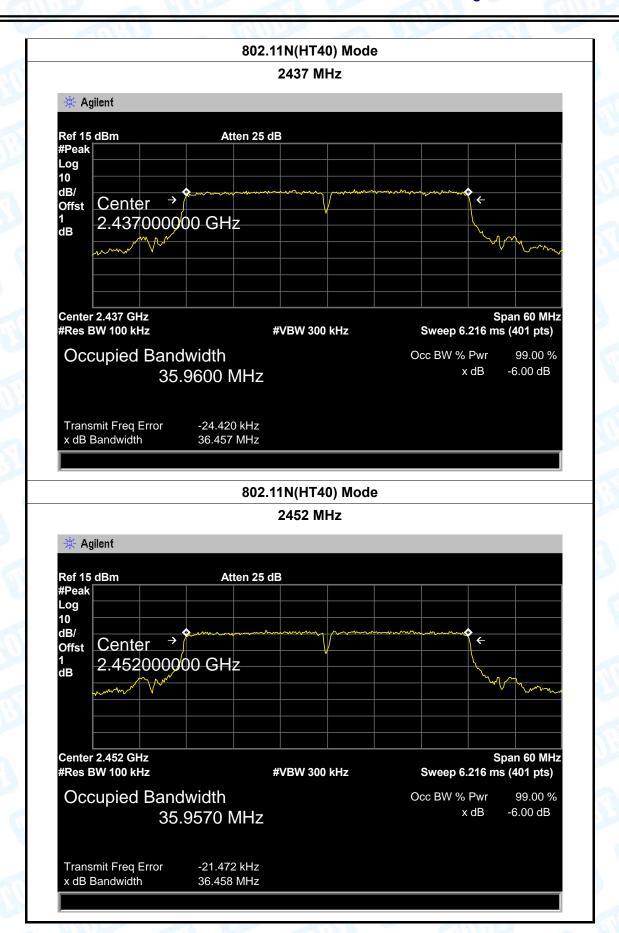
2422 MU-







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8. Peak Output Power Test

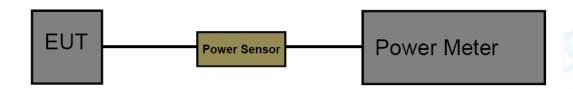
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210				
Test Item Limit Frequency Range(MHz)				
Peak Output Power	1 Watt or 30 dBm	2400~2483.5		

8.2 Test Setup



8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v03r05.

The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.



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8.5 Test Data

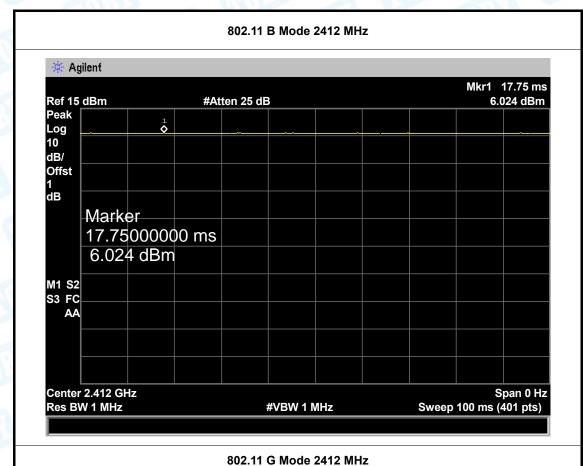
EUT:	802.11N Wireless Ada (USB Wi-Fi dongle)	Model:		HX9100	
Temperature:	25 ℃	Relative H	lumidity:	55%	
Test Voltage:	DC 5.0V	THU		F. Commission	
Mode	Channel frequency (MHz)	Test Result (dBm) L	.imit (dBm)	
	2412	9.23			
802.11b	2437	9.24		1	
	2462	9.19			
	2412	9.13			
802.11g	2437	9.18			
	2462	9.14		30	
000 44	2412	9.08		30	
802.11n (HT20)	2437	9.07			
(11120)	2462	9.10			
902 44	2422	9.02			
802.11n (HT40)	2437	9.00			
(11140)	2452	9.04			
	Resu	ılt: PASS			

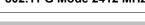
	Duty Cycle	
Mode	Channel frequency (MHz)	Test Result
	2412	
802.11b	2437	
	2462	
	2412	
802.11g	2437	
	2462	>000/
000.44	2412	>98%
802.11n	2437	
(HT20)	2462	
000.44	2422	
802.11n	2437	
(HT40)	2452	

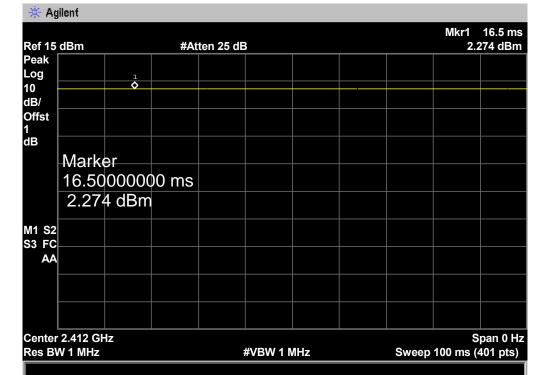




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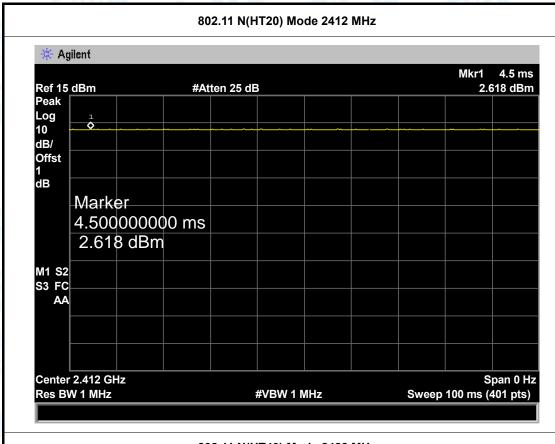




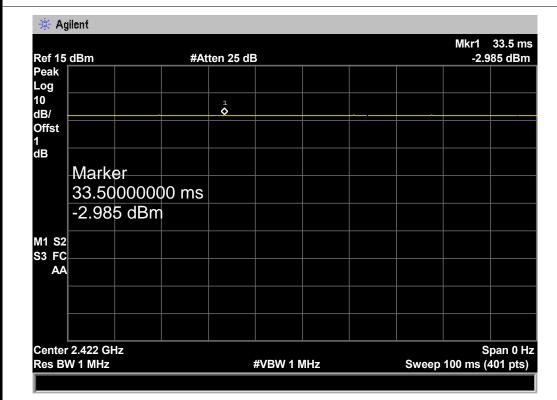




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802.11 N(HT40) Mode 2422 MHz





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9. Power Spectral Density Test

9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (e)

9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)				
Test Item Limit Frequency Range(MHz)				
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5		

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r05.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz(5) Set the VBW to: 10 kHz
- (6) Detector: peak
- (7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

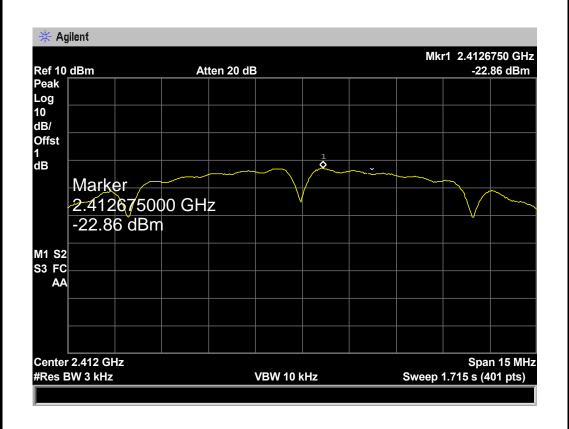


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9.5 Test Data

EUT:		Wireless Adapter Fi dongle)	Model:		HX9100
Temperature:	25 ℃	Relative Humidity:		55%	
Test Voltage:	DC 5.0V	7:33	CHIT!		J. Williams
Test Mode:	TX 802.11B Mode			2 / 0	
Channel Frequency	Channel Frequency		Power Density Lir		nit (dBm)
(MHz)		(3 kHz/dBr	n)		
2412		-22.86			
2437		-23.02		8	
2462		-23.27			

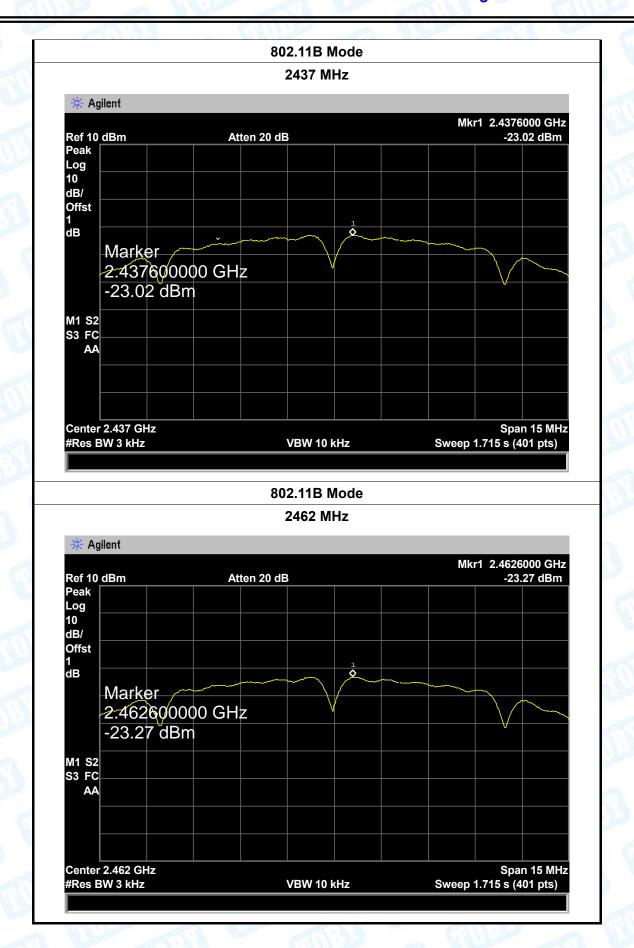
802.11B Mode 2412 MHz







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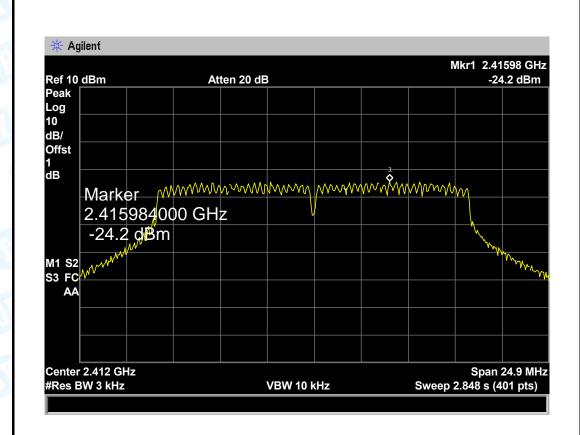


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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100		
Temperature:	25 ℃	Temperature:	25 ℃		
Test Voltage:	DC 5.0V				
Test Mode:	TX 802.11G Mode		A WILLIAM		

Channel Frequency	Power Density	Limit (dBm)
(MHz)	(3 kHz/dBm)	
2412	-24.20	
2437	-24.05	8
2462	-24.75	

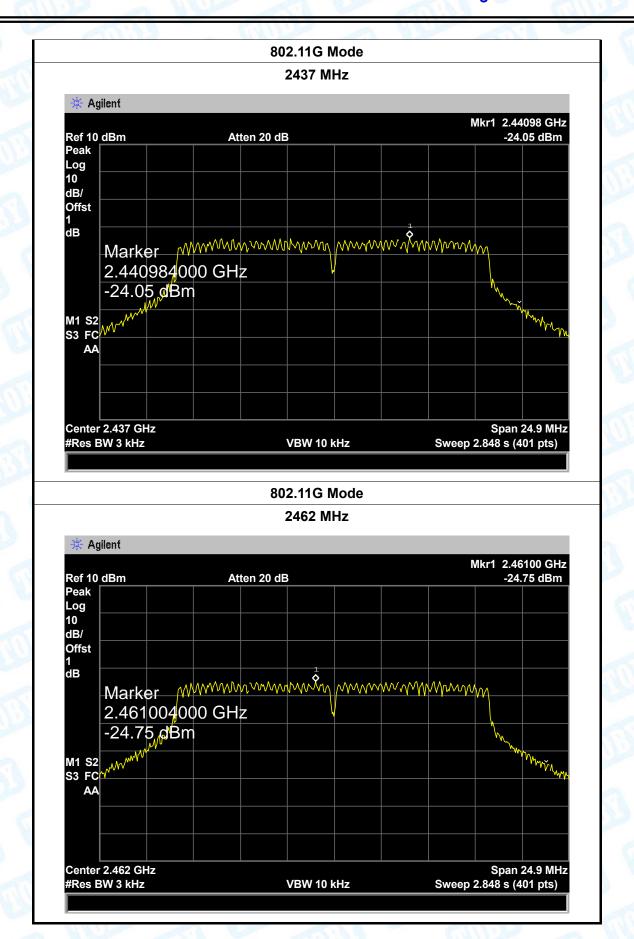
802.11G Mode







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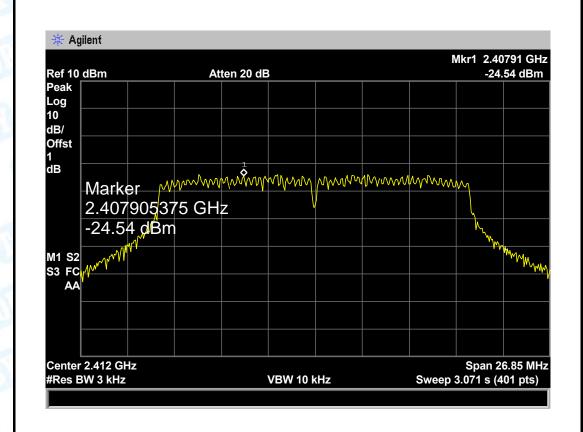




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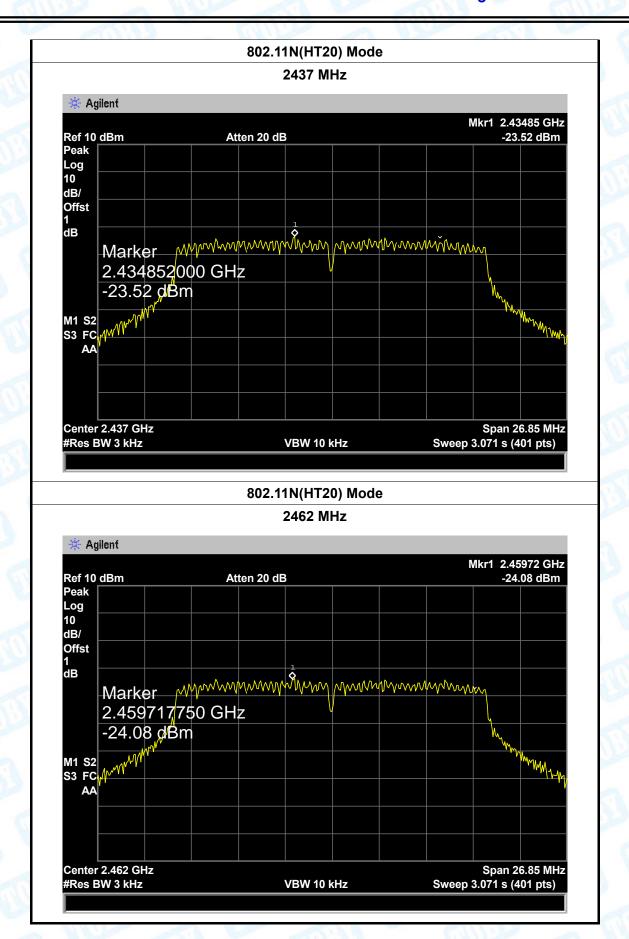
			1.12.27		
EUT:	802.11N \ (USB Wi-	Wireless Adapter Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	The same of the sa	Temperature:	25 ℃	
Test Voltage:	DC 5.0V				
Test Mode:	TX 802.11	11N(HT20) Mode			
Channel Frequency		Power Density		Limit (dBm)	
(MHz)		(3 kHz/dBi	n)		
2412		-24.54			
2437		-23.52			
2462		-24.08			
		802.11N(HT20)	Mode		
	0.440 MILE				







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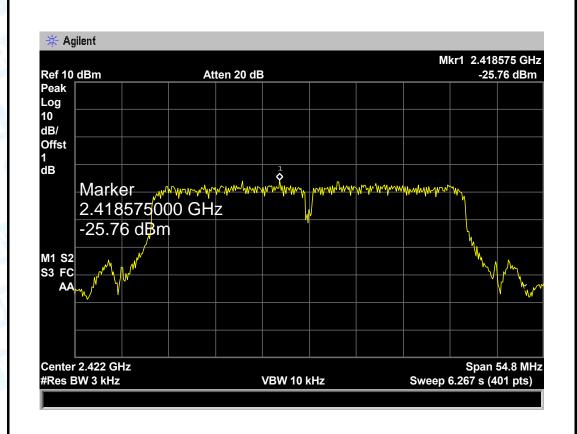
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EUT:	802.11N Wireless Adapter (USB Wi-Fi dongle)	Model:	HX9100	
Temperature:	25 ℃	Temperature:	25 ℃	
Test Voltage:	DC 5.0V			

Test Mode: TX 802.11N(HT40) Mode

	1001040.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	t(i i i i o) iliouo	
	Channel Frequency		Power Density	Limit (dBm)
	(MHz)		(3 kHz/dBm)	
	2422		-25.76	
	2437		-26.61	8
١	2452		-23.95	

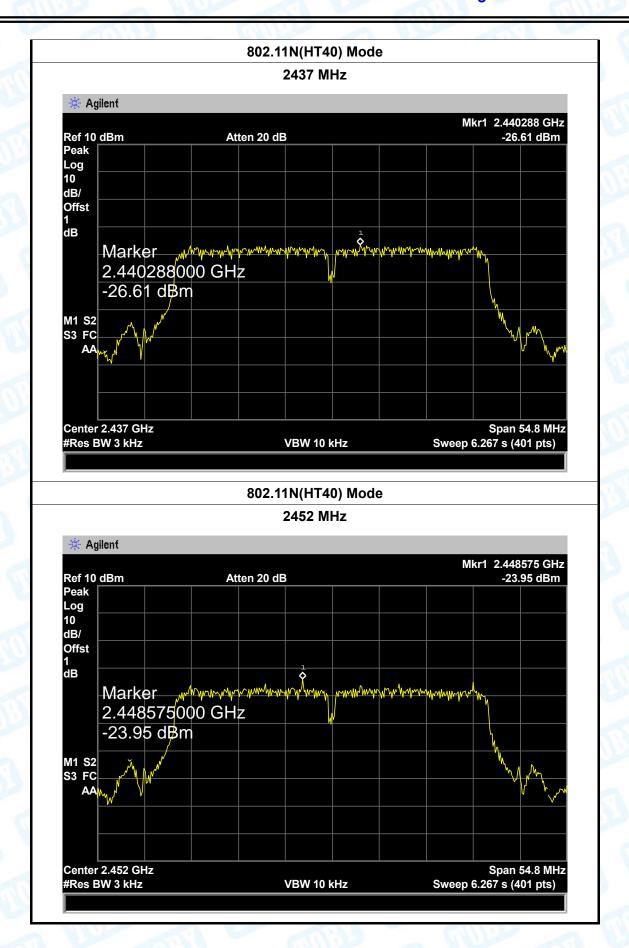
802.11N(HT40) Mode







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10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard FCC Part 15.203

10.1.2 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 shall be considered sufficient to comply with the provisions of this Section. 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.

10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 2 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

The EUT antenna is a Dipole Antenna. It complies with the standard requirement.

Antenna Type				
	☐ Permanent attached antenna			
Marie Land	☑ Unique connector antenna			
	□ Professional installation antenna			

-----End of report-----