

FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

Rosewill Inc.

Wireless High Gain USB Adapter

Model No.: RNX-N150HG

FCC ID: W6RRNX-N150HG

Prepared for: Rosewill Inc.

17708 Rowland Street, City of Industry, CA91748, USA

Prepared By: Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block,

Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

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Report Number : ACS-F11150

Date of Test : Jul.03~17, 2011

Date of Report : Jul.19, 2011



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AUDIX Technology (Shenzhen) Co., Ltd.

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TEST REPORT CERTIFICATION

Applicant : Rosewill Inc.

Manufacturer : Rosewill Inc.

EUT Description : Wireless High Gain USB Adapter

FCC ID : W6RRNX-N150HG

(A) MODEL NO. : RNX-N150HG

(B) SERIAL NO. : N/A (C) POWER SUPPLY : DC 5V

(D) TEST VOLTAGE: DC 5V From PC Input, AC 120/60Hz

Tested for comply with:

FCC Rules and Regulations Part 15 Subpart C: 2008

Test procedure used: ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test:	Jul.03~17,2011	Report of date:	Jul.19, 2011
Prepared by:	Sala Yang	Reviewer by ;	4 Jun
	Sala Yang /Senior Assist	Audix Technology EMC 部門報告	Sunny Lu / Senior Assistant y (Shenzhen) Co., Ltd.
Approved & Au	thorized Signer :	Stamp only for EMC Signature:	Dept. Report
		Ken Lu / Mar	nager



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1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION					
Description of Test Item	Standard	Results			
Power Line Conducted Emission	FCC Part 15: 15.207	PASS			
Power Line Conducted Emission	ANSI C63.10: 2009	rass			
Radiated Emission	FCC Part 15: 15.209	PASS			
Radiated Emission	ANSI C63.10: 2009	rass			
Dand Edge Compliance	FCC Part 15: 15.247	PASS			
Band Edge Compliance	ANSI C63.10: 2009	rass			
Conducted annuious emissions	FCC Part 15: 15.247	PASS			
Conducted spurious emissions	ANSI C63.10: 2009	PASS			
CdD Don don't deb	FCC Part 15: 15.247				
6dB Bandwidth	ANSI C63.10: 2009	PASS			
Posts Contract Process	FCC Part 15: 15.247				
Peak Output Power	ANSI C63.10: 2009	PASS			
Decree Constant Decreits	FCC Part 15: 15.247	DAGG			
Power Spectral Density	ANSI C63.10: 2009	PASS			
Antenna requirement	FCC Part 15: 15.203	PASS			



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2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : Wireless High Gain USB Adapter

Model Number : RNX-N150HG

FCC ID : W6RRNX-N150HG

Operation Frequency : IEEE 802.11b: 2412MHz—2462MHz

IEEE 802.11g: 2412MHz—2462MHz

IEEE802.11n HT20: 2412MHz—2462MHz IEEE802.11n HT40: 2422MHz—2452MHz

Channel Number : IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels

IEEE 802.11n HT40: 7Channels

Modulation Technology: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)

IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,

QPSK,BPSK)

Output Power : IEEE 802.11b: 18.06dBm

IEEE 802.11g: 22.37dBm

IEEE 802.11n HT20: 21.89dBm IEEE 802.11n HT40: 20.67dBm

Antenna and Gain : One PCB antenna (Only used for Receive), One Dipole

Antenna (Used for Receive and Transmit), 2dBi gain for

Dipole antenna.

Applicant : Rosewill Inc.

17708 Rowland Street, City of Industry, CA91748, USA

Manufacturer : Rosewill Inc.

17708 Rowland Street, City of Industry, CA91748, USA

USB Cable : Unshielded, Detachable, 1m

Date of Test : Jul.03~17, 2011

Date of Receipt : Jul.03, 2011

Sample Type : Prototype production



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2.2.Test Information

A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel	, and data rate informa	ation	
Mode	data rate	Channel	Frequency
	(Mpbs)(see Note)		(MHz)
IEEE 802.11b	11	Low:CH1	2412
	11	Middle: CH6	2437
	11	High: CH11	2462
IEEE 802.11g	54	Low:CH1	2412
	54	Middle: CH6	2437
	54	High: CH11	2462
IEEE 802.11n HT20	6.5	Low:CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low:CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452

Note1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.

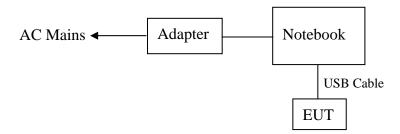


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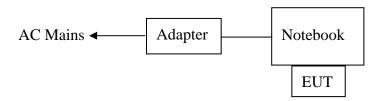
2.3. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type	
1	Notebook	N/A	DELL	PP09S	N/A	☑FCC DoC ☑BSMI ID: R41108	
1.		Power Cord: Unshielded, Detachabled, 1.8m Power Adapter: Manufacturer: DELL, M/N: LA65NS1-00 Cable: Unshielded, Detachabled, 4.0m(Bond one ferrite core)					

2.4. Block diagram of connection between the EUT and simulators USB Line:



No USB Line:



Note: This product will be connected to computer USB port with 1m line USB cable or direct connected to USB port of computer, and according exploratory test when connected to computer with USB cable will have worse radiated spurious emissions, so the below final spurious emissions test was chose with USB cable.

(EUT: Wireless High Gain USB Adapter)



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2.5. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen

Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

3m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 90454 Valid Date: Mar.31, 2012

3m & 10m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 794232 Valid Date: Dec.30, 2012

EMC Lab. : Certificated by Industry Canada

Registration Number: IC 5183A-1

Valid Date: Jul. 02, 2011

: Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Valid Date: Feb. 01, 2014

Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2012

2.6. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty		
Uncertainty for Conduction emission test in No. 1 Conduction	3.2 dB(150kHz to 30MHz)		
	3.6 dB(30~200MHz, Polarize: H)		
Uncertainty for Radiation Emission test	3.7 dB(30~200MHz, Polarize: V)		
in 3m chamber	4.0 dB(200M~1GHz, Polarize: H)		
	3.7 dB(200M~1GHz, Polarize: V)		
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57dB		
Uncertainty for Conduction Spurious emission test	2.00 dB		
Uncertainty for Output power test	0.73 dB		
Uncertainty for Power density test	2.00 dB		
Uncertainty for Frequency range test	$7x10^{-8}$		
Uncertainty for Bandwidth test	83 kHz		
Uncertainty for DC power test	0.038 %		
Uncertainty for test site temperature and	$0.6^{\circ}\mathbb{C}$		
humidity	3%		

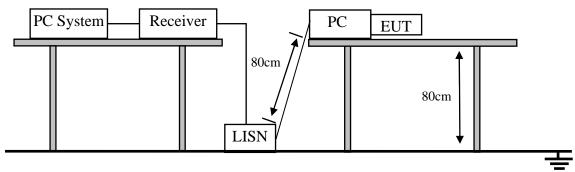


3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Nov.05, 11	1 Year
3.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 11	1 Year
4.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 11	1Year
5.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 11	1 Year
6.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 11	1 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 11	1 Year

3.2.Block Diagram of Test Setup



 \square :50 Ω Terminator

3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage				
Frequency	Quasi-Peak Level	Average Level			
	$dB(\mu V)$	$dB(\mu V)$			
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*			
500kHz ~ 5MHz	56	46			
5MHz ~ 30MHz	60	50			

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.





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3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Wireless High Gain USB Adapter (EUT)

Model Number : RNX-N150HG

Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.3.

3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 2.4.
- 3.5.2. Turned on the power of all equipment.
- 3.5.3. Notebook run test software to control EUT work in Tx mode.

3.6. Test Procedure

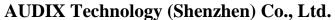
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

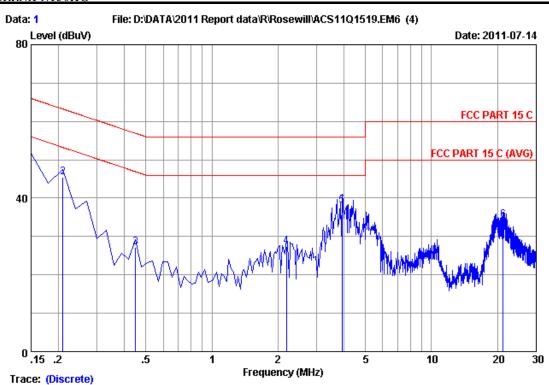
PASS. (All emissions not reported below are too low against the prescribed limits.)





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FCC ID:W6RRNX-N150HG



Data No

:1

Site no :1#conduction

Dis./Ant. :** 2011 ESH2-Z5 LINE

Limit :FCC PART 15 C

Env./Ins. :29.5*C/55% Engineer :Leo_Li

EUT :Wireless High Gain USB Adapter Power Rating :DC 5V From PC Input AC 120V/60Hz

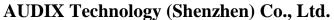
Test Mode :Tx Mode

M/N:RNX-N150HG With USB Cable

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.17	9.98	38.61	48.76	66.00	17.24	QP
2	0.20970	0.17	9.98	35.33	45.48	63.22	17.74	QP
3	0.44850	0.19	9.98	17.04	27.21	56.90	29.69	QP
4	2.180	0.31	9.96	17.04	27.31	56.00	28.69	QP
5	3.911	0.35	9.94	27.72	38.01	56.00	17.99	QP
6	21.194	1.05	10.03	23.32	34.40	60.00	25.60	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

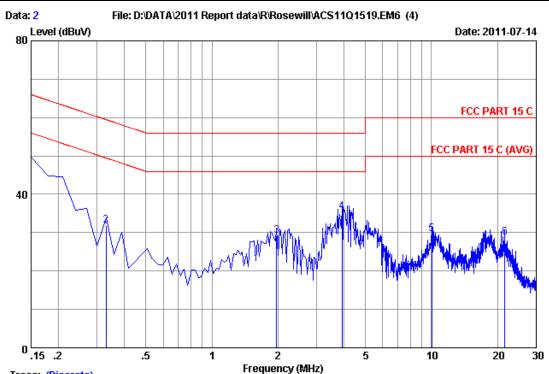
^{2.}If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





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FCC ID:W6RRNX-N150HG



Data No

:2

Trace: (Discrete)

Dis./Ant.

Site no :1#conduction

:** 2011 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 C

Env./Ins. :29.5*C/55% Engineer :Leo_Li

EUT :Wireless High Gain USB Adapter Power Rating :DC 5V From PC Input AC 120V/60Hz

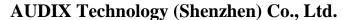
Test Mode :Tx Mode

M/N:RNX-N150HG With USB Cable

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.21	9.98	36.47	46.66	66.00	19.34	QP
2	0.32910	0.22	9.98	21.77	31.97	59.47	27.50	QP
3	1.971	0.27	9.96	18.98	29.21	56.00	26.79	QP
4	3.911	0.31	9.94	25.18	35.43	56.00	20.57	QP
5	10.030	0.45	9.90	19.31	29.66	60.00	30.34	QP
6	21.552	0.81	10.03	17.98	28.82	60.00	31.18	QP

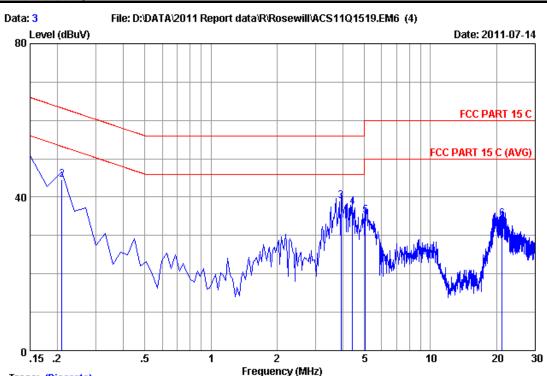
Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

^{2.}If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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Data No

:3

Trace: (Discrete) Site no :1#conduction

Dis./Ant. :** 2011 ESH2-Z5 LINE

:FCC PART 15 C Limit

Env./Ins. :29.5*C/55%

Engineer :Leo_Li

:Wireless High Gain USB Adapter Power Rating :DC 5V From PC Input AC 120V/60Hz

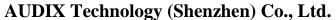
Test Mode :Tx Mode

M/N:RNX-N150HG No USB Cable

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio: Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.17	9.98	37.61	47.76	66.00	18.24	QP
2	0.20970	0.17	9.98	34.33	44.48	63.22	18.74	QP
3	3.911	0.35	9.94	28.72	39.01	56.00	16.99	QP
4	4.419	0.36	9.93	27.21	37.50	56.00	18.50	QP
5	5.045	0.37	9.93	24.91	35.21	60.00	24.79	QP
6	21.194	1.05	10.03	23.32	34.40	60.00	25.60	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

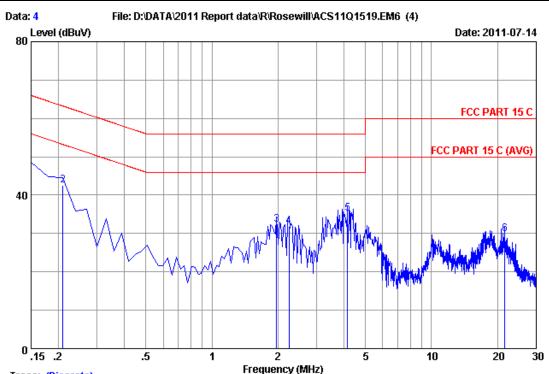
^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





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FCC ID:W6RRNX-N150HG



Trace: (Discrete)

Site no :1#conduction Data No

Dis./Ant. :** 2011 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 C

Env./Ins. :29.5*C/55% Engineer :Leo_Li

EUT :Wireless High Gain USB Adapter Power Rating :DC 5V From PC Input AC 120V/60Hz

Test Mode :Tx Mode

M/N:RNX-N150HG No USB Cable

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.21	9.98	34.47	44.66	66.00	21.34	QP
2	0.20970	0.21	9.98	32.27	42.46	63.22	20.76	QP
3	1.971	0.27	9.96	21.98	32.21	56.00	23.79	QP
4	2.240	0.27	9.96	21.74	31.97	56.00	24.03	QP
5	4.150	0.31	9.94	24.85	35.10	56.00	20.90	QP
6	21.552	0.81	10.03	18.98	29.82	60.00	30.18	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

^{2.}If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



4. RADIATED EMISSION TEST

4.1.Test Equipment

Frequency rang: 30~1000MHz

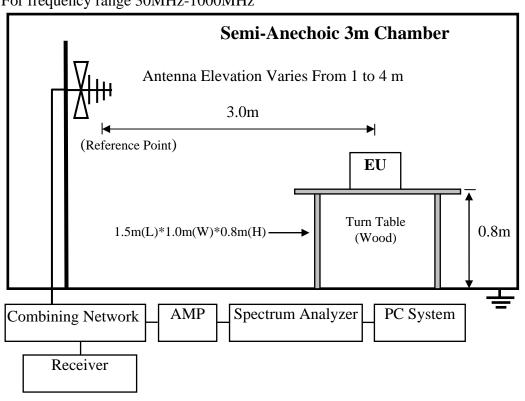
	. , ,					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.06,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 11	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 11	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 11	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 11	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 11	1 Year

Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 11	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May.25, 11	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 11	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28622/2	May.08, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 11	1 Year

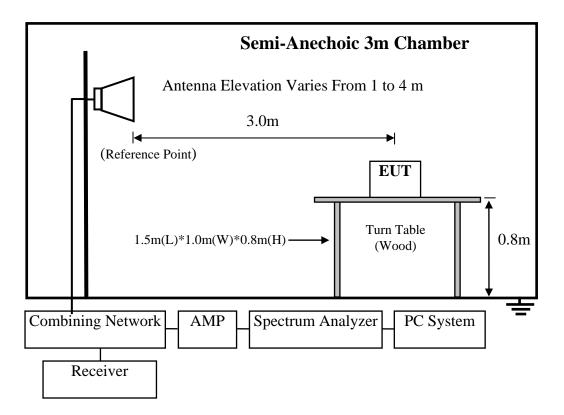
4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz





For frequency range 1GHz-25GHz



4.3. Radiated Emission Limit

4.3.1.15.209 limits

FREQUENCY	DISTANCE	FIELD STREM	NGTHS LIMIT	
MHz	Meters	μV/m	$dB(\mu V)/m$	
30 ~ 88	3	100	40.0	
88 ~ 216	3	150	43.5	
216 ~ 960	3	200	46.0	
960 ~ 1000	3	500	54.0	
Above 1000	3	74.0 dB(μV)/m (Peak)		
		54.0 dB(μV	V)/m (Average)	

Remark : (1) Emission level $dB\mu V = 20 \log Emission level \mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



4.3.2.15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 4.2.

4.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

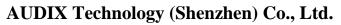
The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

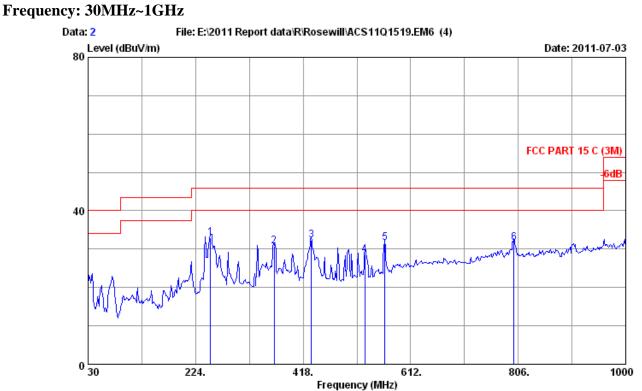


AUDIX Technology (Shenzhen) Co., Ltd.

page 4-10 FCC ID:W6RRNX-N150HG 4.7. Radiated Emission Test Results PASS. All the emissions from 30MHz to 25 GHz were comply with 15.209 limits. Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit. Remark: The worst case axes of the EUT (Horizontal)was reported in the this report.







Site no. : 3m Chamber Data no. : 2

Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/56% Engineer : Gary

EUT : Wireless High Gain USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

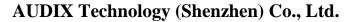
Test Mode : Tx Mode

M/N:RNX-N150HG With USB Cable

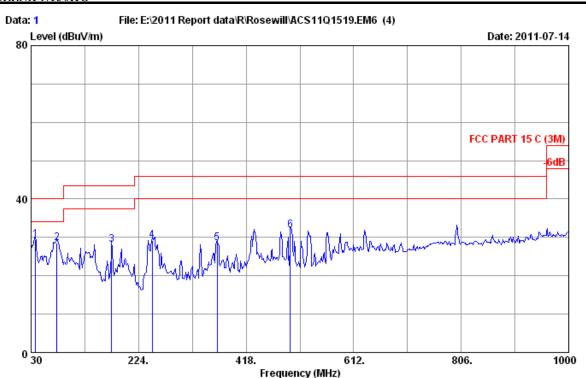
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	251.160	12.90	2.43	17.60	32.93	46.00	13.07	QP
2	365.620	15.55	3.22	11.96	30.73	46.00	15.27	QP
3	432.550	17.42	3.55	11.25	32.22	46.00	13.78	QP
4	529.550	18.30	4.15	6.05	28.50	46.00	17.50	QP
5	565.440	19.61	4.32	7.70	31.63	46.00	14.37	QP
6	798.240	22.02	5.49	4.14	31.65	46.00	14.35	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 1

Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/56% Engineer : Gary

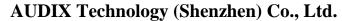
EUT : Wireless High Gain USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

Test Mode : Tx Mode

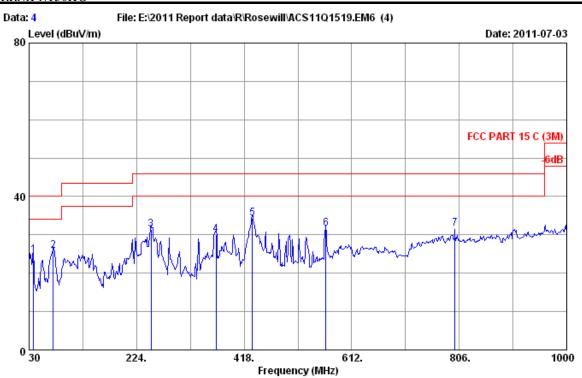
M/N:RNX-N150HG With USB Cable

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
	1	37.760	15.58	0.68	13.20	29.46	40.00	10.54	QP	
	2	76.560	7.47	1.01	20.06	28.54	40.00	11.46	QP	
	3	175.500	9.65	1.66	16.85	28.16	43.50	15.34	QP	
	4	248.250	12.56	2.39	14.22	29.17	46.00	16.83	QP	
	5	365.620	15.55	3.22	9.70	28.47	46.00	17.53	QP	
	6	497.540	18.27	3.99	9.54	31.80	46.00	14.20	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 4

Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/56% Engineer : Gary

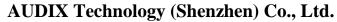
EUT : Wireless High Gain USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

Test Mode : Tx Mode

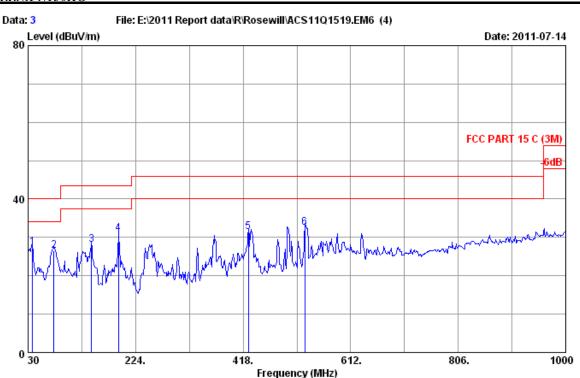
M/N:RNX-N150HG No USB Cable

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	37.760	15.58	0.68	8.39	24.65	40.00	15.35	QP	
2	73.650	7.16	0.99	17.71	25.86	40.00	14.14	QP	
3	250.190	12.80	2.41	16.24	31.45	46.00	14.55	QP	
4	367.560	15.53	3.22	11.42	30.17	46.00	15.83	QP	
5	432.550	17.42	3.55	13.25	34.22	46.00	11.78	QP	
6	565.440	19.61	4.32	7.70	31.63	46.00	14.37	QP	
7	798.240	22.02	5.49	4.14	31.65	46.00	14.35	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 3

Dis. / Ant. : 3m 2010 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/56% Engineer : Gary

EUT : Wireless High Gain USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

Test Mode : Tx Mode

M/N:RNX-N150HG No USB Cable

No	. Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	37.760	15.58	0.68	11.20	27.46	40.00	12.54	QP	
2	76.560	7.47	1.01	18.06	26.54	40.00	13.46	QP	
3	144.460	11.92	1.46	14.63	28.01	43.50	15.49	QP	
4	192.960	9.58	1.78	19.56	30.92	43.50	12.58	QP	
5	427.700	17.40	3.52	10.47	31.39	46.00	14.61	QP	
6	529.550	18.30	4.15	10.13	32.58	46.00	13.42	QP	
6	529.550	18.30	4.15	10.13	32.58	46.00	13.42	QP	

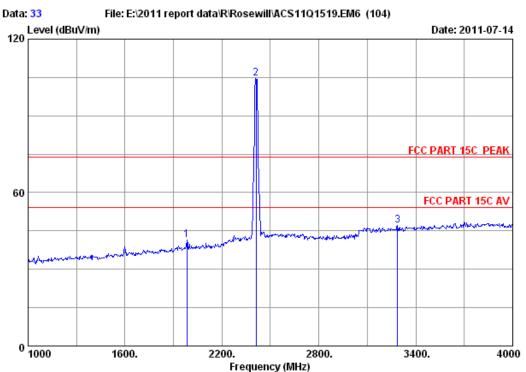
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG





Site no. : 3m Chamber Data no. : 33

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

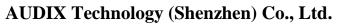
: Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

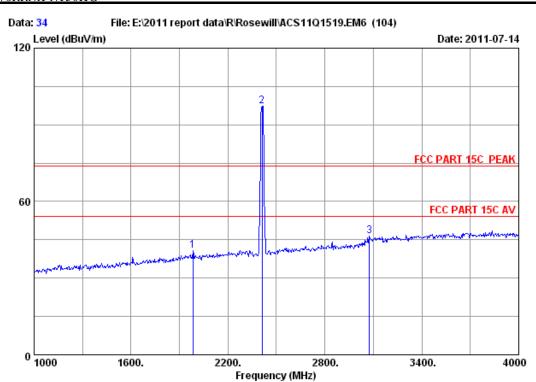
: RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)		
1	1984.000	27.83	7.76	36.06	41.79	41.32	74.00 32.68	Peak	
2	2412.000	28.48	8.60	35.95	103.47	104.60	74.00 -30.60	Peak	
3	3286.000	30.97	10.26	35.79	41.79	47.23	74.00 26.77	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 34

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

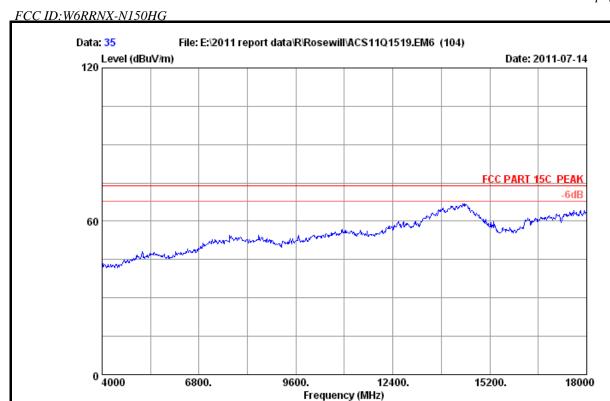
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission		
	Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	1984.000	27.83	7.76	36.06	41.18	40.71	74.00 33.29	Peak
2	2412.000	28.48	8.60	35.95	96.12	97.25	74.00 -23.25	Peak
3	3076.000	30.39	9.96	35.90	41.99	46.44	74.00 27.56	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 35

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

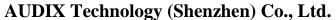
Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

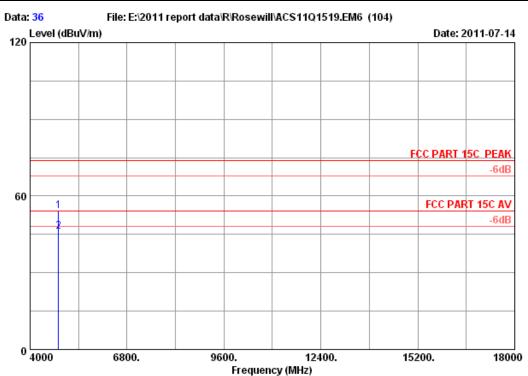
Test mode : IEEE802.11b CH1 2412MHz

M/N : RNX-N150HG





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 36

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

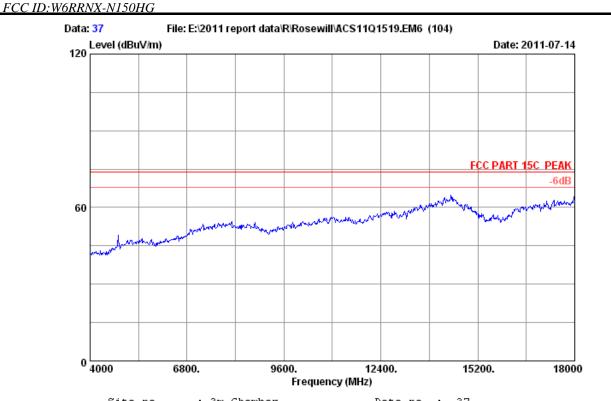
M/N : RNX-N150HG

	-	Factor	Factor	_	Emission Level (dBuV/m)		_	Remark
_	4824.000 4824.000		 	42.47 34.27	54.27 46.07	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 37

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

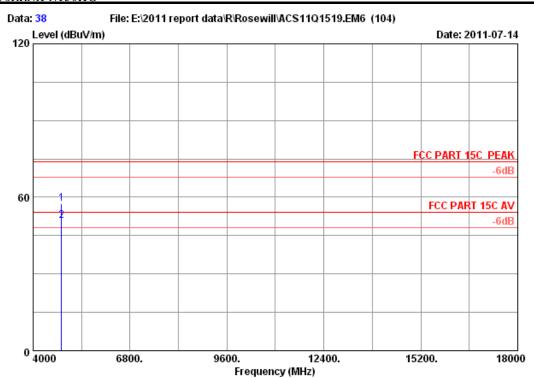
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : RNX-N150HG



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 38

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

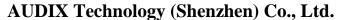
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11b CH1 2412MHz

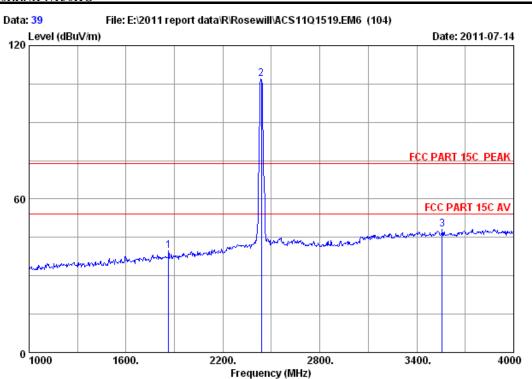
M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	34.47	12.58	35.25	45.63	57.43	74.00	16.57	Peak
2	4824.000	34.47	12.58	35.25	38.99	50.79	54.00	3.21	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

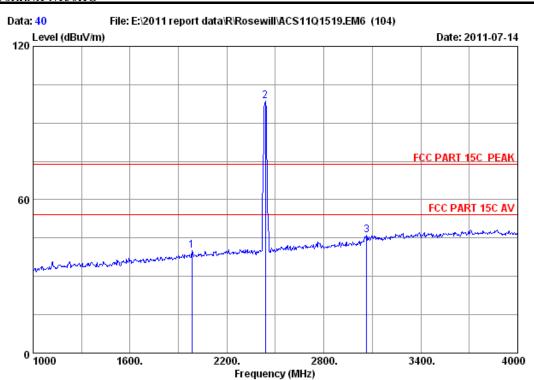
Test mode : IEEE802.11b CH6 2437MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission		
	Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	1864.000	27.37	7.57	36.22	41.16	39.88	74.00 34.12	Peak
2	2437.000	28.53	8.60	36.06	105.94	107.01	74.00 -33.01	Peak
3	3556.000	31.67	10.62	35.58	41.51	48.22	74.00 25.78	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 40

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz

M/N : RNX-N150HG

	Ant.	Cable	Amp.		Emission				
	Freq. Facto	r loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz) (dB/r	n) (dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)		
1	1984.000 27.8	33 7.76	36.06	40.59	40.12	74.00	33.88	Peak	
2	2437.000 28.5	8.60	36.06	97.65	98.72	74.00	-24.72	Peak	
3	3064.000 30.3	4 9.96	35.84	41.64	46.10	74.00	27.90	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

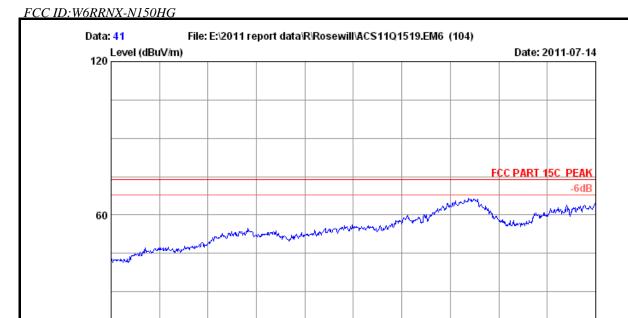


0 4000

page 4-23

18000

15200.



Site no. : 3m Chamber Data no. : 41

9600.

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Frequency (MHz)

12400.

Limit : FCC PART 15C PEAK

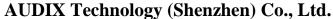
Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz

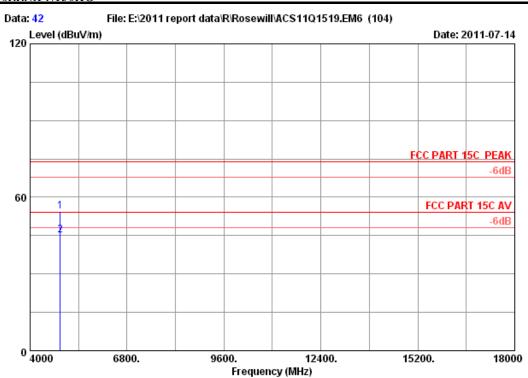
M/N : RNX-N150HG

6800.





FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 42

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

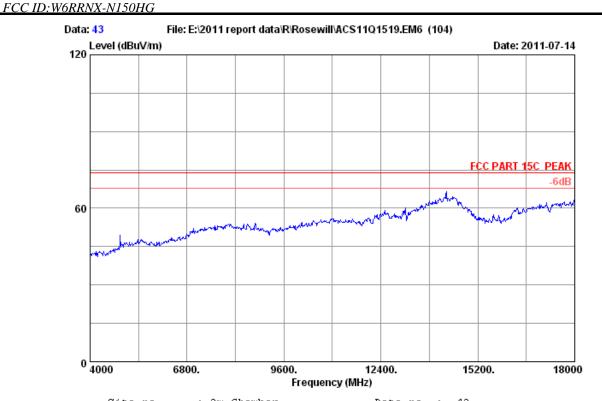
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11b CH6 2437MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	34.78	12.23	35.36	42.67	54.32	74.00	19.68	Peak
2	4874.000	34.78	12.23	35.36	33.56	45.21	54.00	8.79	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 43

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

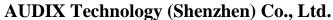
Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

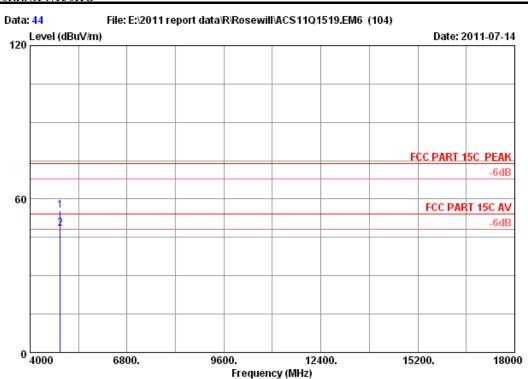
Test mode : IEEE802.11b CH6 2437MHz

M/N : RNX-N150HG





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 44

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

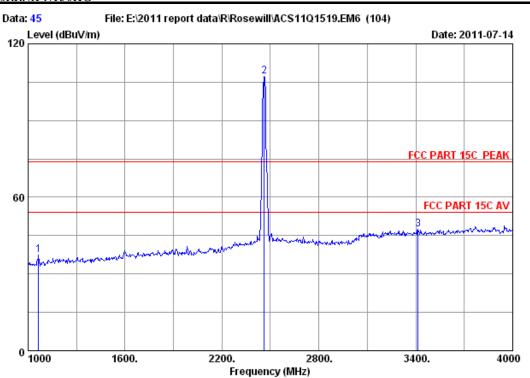
Test mode : IEEE802.11b CH6 2437MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	-				_	Level (dBuV/m)		_	Remark
_	4874.000 4874.000					55.49 48.61	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





: 3m Chamber Site no. Data no.: 45

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11b CH11 2462MHz

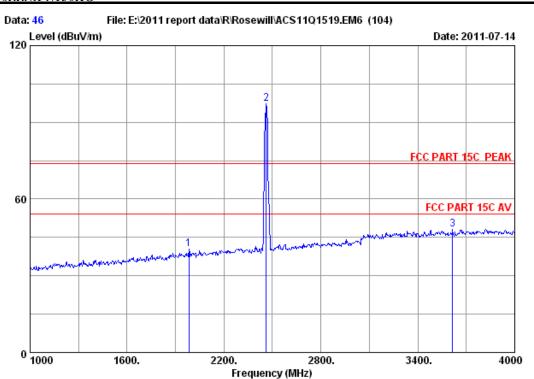
M/N : RNX-N150HG

	-	Factor	loss		_		Limits Margin (dBuV/m) (dB)	Remark
1	1066.000	25.30	5.74	37.26	43.80	37.58	74.00 36.42	Peak
2	2462.000	28.55	8.76	36.02	106.11	107.40	74.00 -33.40	Peak
3	3415.000	31.36	10.44	35.89	41.69	47.60	74.00 26.40	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 46

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission		
	Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	1984.000	27.83	7.76	36.06	41.07	40.60	74.00 33.40	Peak
2	2462.000	28.55	8.76	36.02	96.06	97.35	74.00 -23.35	Peak
3	3616.000	31.77	10.53	35.56	41.49	48.23	74.00 25.77	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

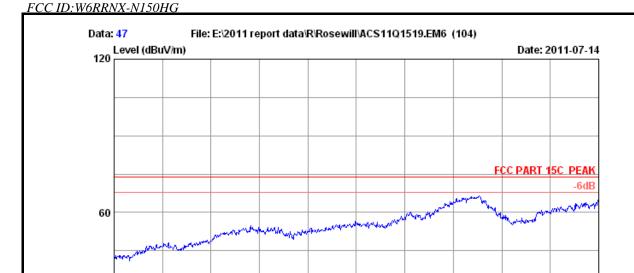


0 4000

page 4-29

18000

15200.



Site no. : 3m Chamber Data no. : 47

9600.

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Frequency (MHz)

12400.

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

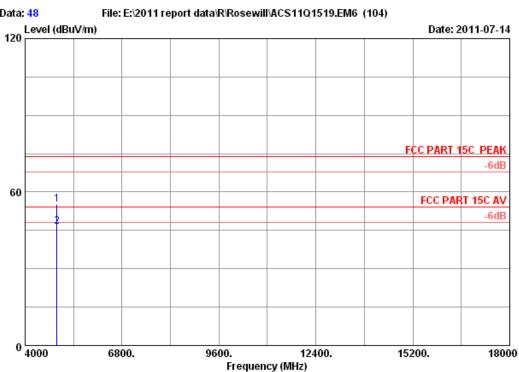
M/N : RNX-N150HG

6800.









Site no. : 3m Chamber Data no. : 48

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

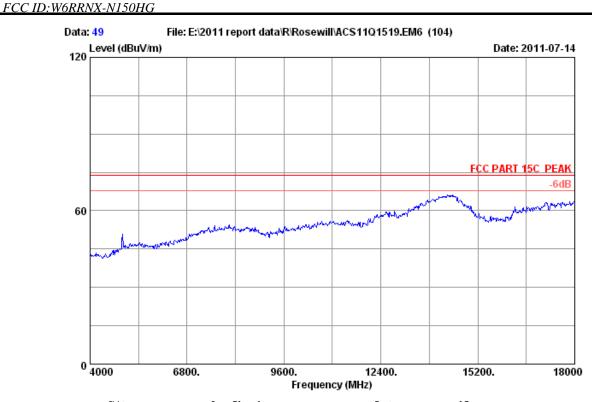
Test mode : IEEE802.11b CH11 2462MHz

M/N : RNX-N150HG

	-	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	4924.000 4924.000		 	42.69 33.98	55.02 46.31	74.00 54.00	18.98 7.69	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 49

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

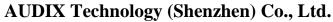
Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

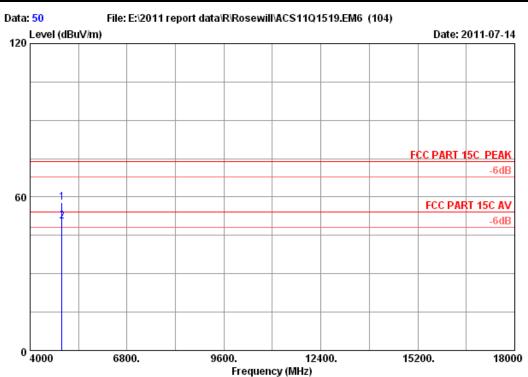
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : RNX-N150HG







: 3m Chamber Site no. Data no. : 50 Dis. / Ant. : 3m Ant. pol. : VERTICAL 3115 (0905)

: FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

: IEEE802.11b CH11 2462MHz Test mode

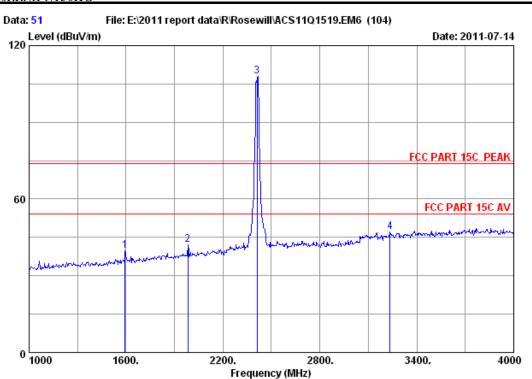
: RNX-N150HG M/N

	-	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	4924.000 4924.000		 	45.39 38.20	57.72 50.53	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 51

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

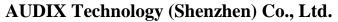
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : RNX-N150HG

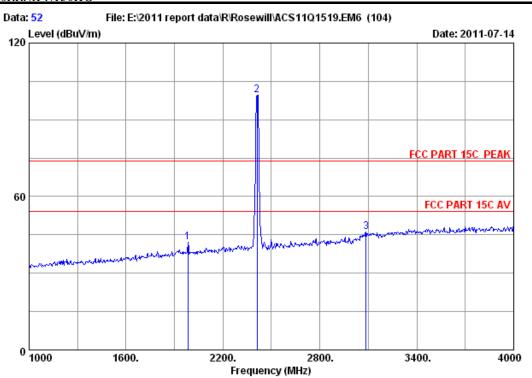
		Ant. Factor (dB/m)	loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1	1594.000	26.30	7.09	36.43	42.70	39.66	74.00 34.34	Peak
2	1984.000	27.83	7.76	36.06	42.68	42.21	74.00 31.79	Peak
3	2412.000	28.48	8.60	35.95	106.96	108.09	74.00 -34.09	Peak
4	3235.000	30.83	10.04	35.77	42.10	47.20	74.00 26.80	Peak

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 52

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

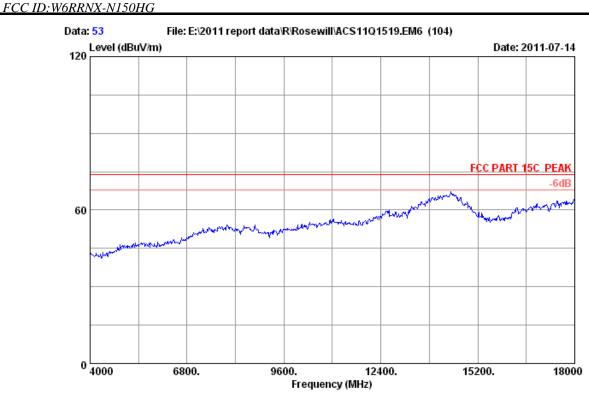
Test mode : IEEE802.11g CH1 2412MHz

M/N : RNX-N150HG

	eq. Factor	loss		_		Limits Margin (dBuV/m) (dB)	Remark
2 2412	.000 27.83 .000 28.48 .000 30.44	8.60	35.95	98.42	42.17 99.55 46.21	74.00 31.83 74.00 -25.55 74.00 27.79	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 53

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

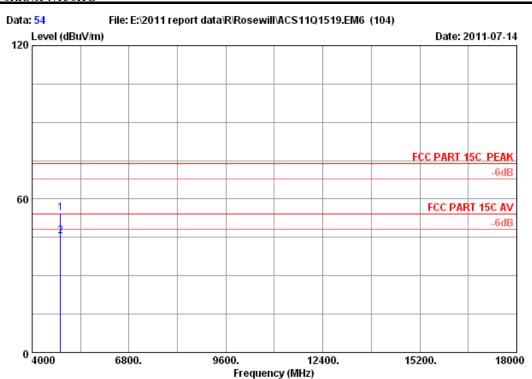
Test mode : IEEE802.11g CH1 2412MHz

M/N : RNX-N150HG





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 54

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

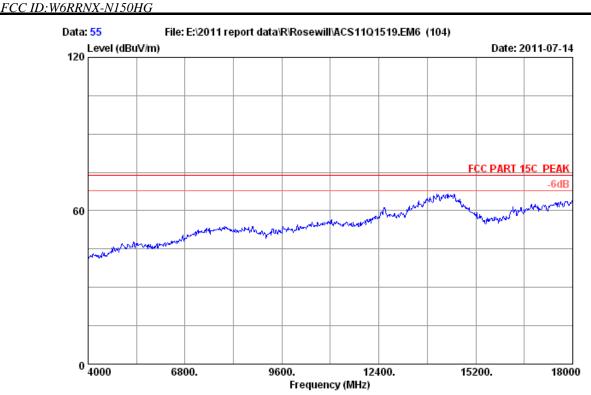
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : RNX-N150HG

	-	Factor	Factor	_	Emission Level (dBuV/m)		_	Remark
_	4824.000 4824.000		 		54.56 45.46	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 55

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

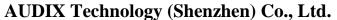
Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

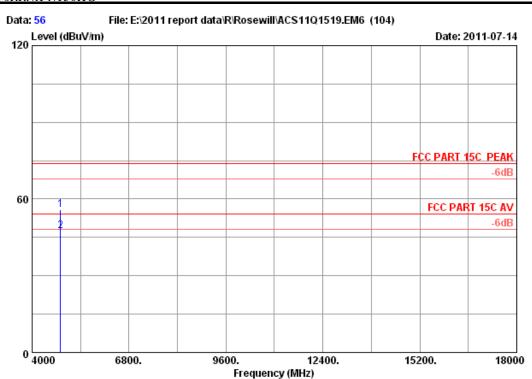
Test mode : IEEE802.11g CH1 2412MHz

M/N : RNX-N150HG





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 56

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

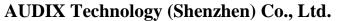
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

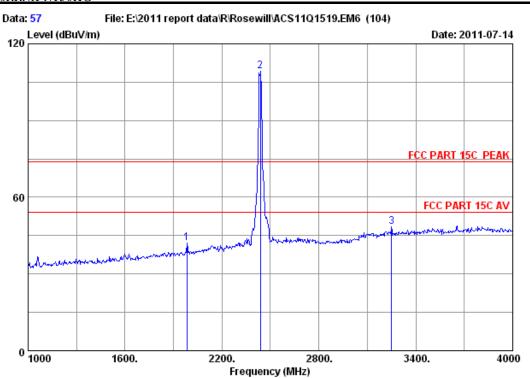
M/N : RNX-N150HG

	-	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	4824.000 4824.000		 	44.17 35.68	55.97 47.48	74.00 54.00	18.03 6.52	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 57

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

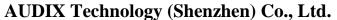
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11g CH6 2437MHz

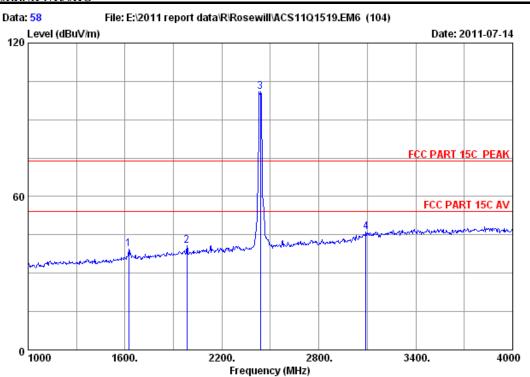
M/N : RNX-N150HG

	-	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark
1	1984.000	27.83	7.76	36.06	42.51	42.04	74.00 31.96	Peak
2	2437.000	28.53	8.60	36.06	108.30	109.37	74.00 -35.37	Peak
3	3250.000	30.88	10.19	35.68	43.04	48.43	74.00 25.57	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 58

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

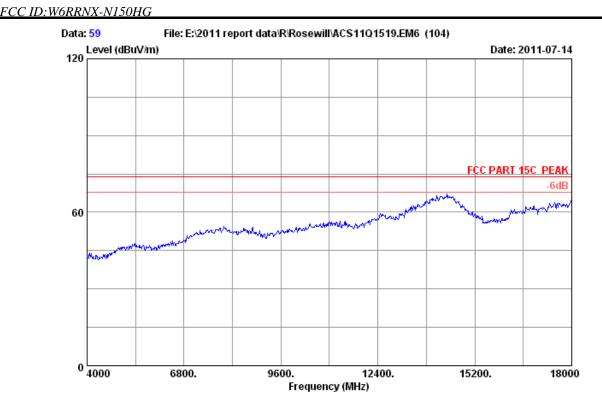
Test mode : IEEE802.11g CH6 2437MHz

M/N : RNX-N150HG

			loss	Factor		Emission Level (dBuV/m)		_	Remark
1	1624.000	26.43	7.15	36.26	41.99	39.31	74.00	34.69	Peak
2	1984.000	27.83	7.76	36.06	41.24	40.77	74.00	33.23	Peak
3	2437.000	28.53	8.60	36.06	99.88	100.95	74.00 -	26.95	Peak
4	3091.000	30.44	9.97	35.71	41.43	46.13	74.00	27.87	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no.: 59

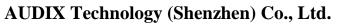
Dis. / Ant. : 3m Ant. pol. : HORIZONTAL 3115 (0905)

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

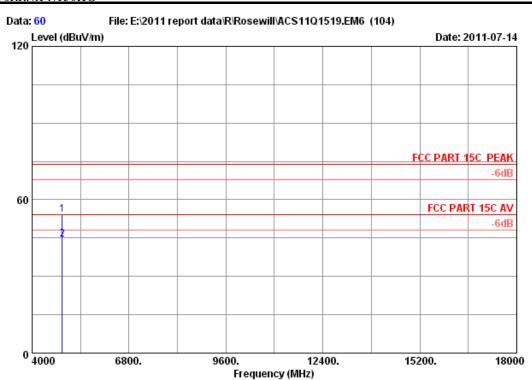
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz

M/N: RNX-N150HG



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 60

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

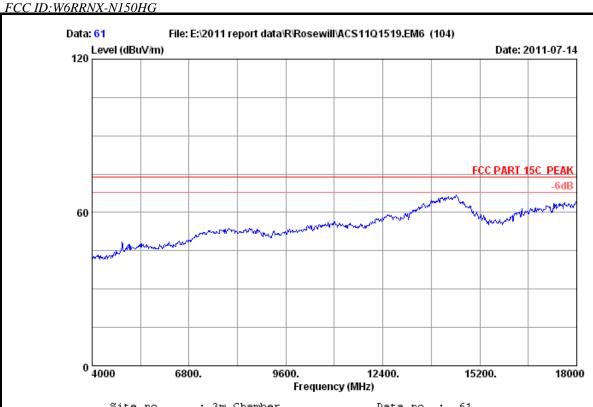
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz

M/N : RNX-N150HG

	-	Factor	Factor	_	Emission Level (dBuV/m)		_	Remark
_	4874.000 4874.000		 	42.62 32.97	54.27 44.62	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 61

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

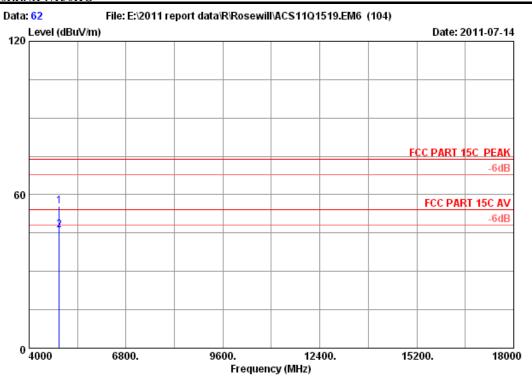
Test mode : IEEE802.11g CH6 2437MHz

: RNX-N150HG M/N



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FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 62

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

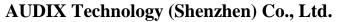
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz

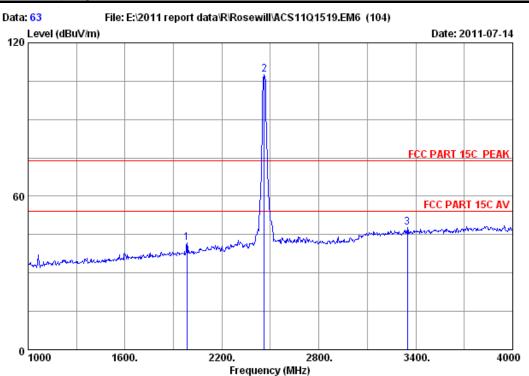
M/N : RNX-N150HG

			Cable	-		Emission				
	-				_	Level		_	Remark	
	(MHZ)	(dB/m)	(aB)	(aB)	(aBuV)	(dBuV/m)	(dBuV/m)) (aB)		
1	4874.000	34.78	12.23	35.36	43.82	55.47	74.00	18.53	Peak	
2	4874.000	34.78	12.23	35.36	34.56	46.21	54.00	7.79	Average	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







: 3m Chamber Site no. Data no.: 63

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

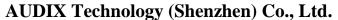
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11g CH11 2462MHz

M/N : RNX-N150HG

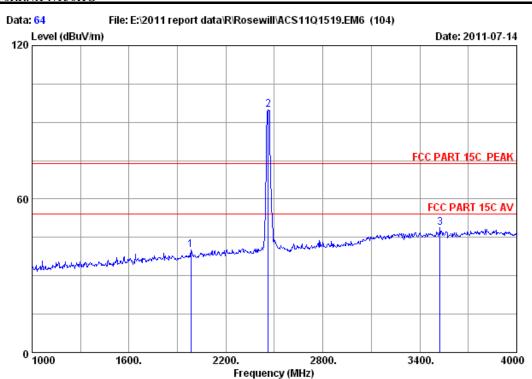
	-	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark
2	1984.000 2462.000 3349.000	28.55	8.76	36.02	106.45	41.76 107.74 47.64	74.00 32.24 74.00 -33.74 74.00 26.36	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 64

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

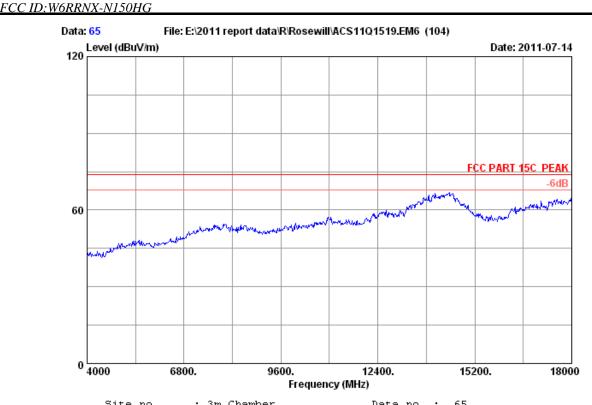
Test mode : IEEE802.11g CH11 2462MHz

M/N : RNX-N150HG

	Ant	. Cable	e Amp.		Emission				
	Freq. Fact (MHz) (dB/			Reading (dBuV)	Level (dBuV/m)		_	Remark	
1	1984.000 27.	83 7.76	36.06	40.71	40.24	74.00	33.76	Peak	
2	2462.000 28.	55 8.76	36.02	93.72	95.01	74.00	-21.01	Peak	
3	3526.000 31.	65 10.56	35.63	42.30	48.88	74.00	25.12	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no.: 65

Dis. / Ant. : 3m Ant. pol. : HORIZONTAL 3115 (0905)

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

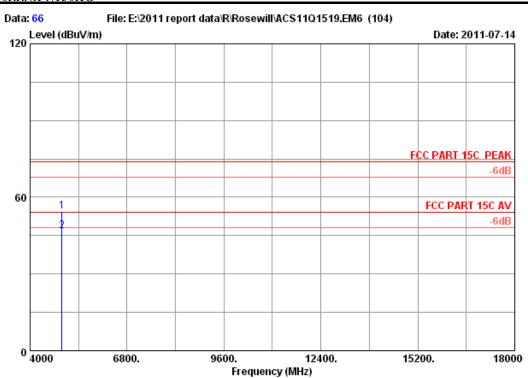
: IEEE802.11g CH11 2462MHz Test mode

M/N : RNX-N150HG



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FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 66

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11g CH11 2462MHz

M/N : RNX-N150HG

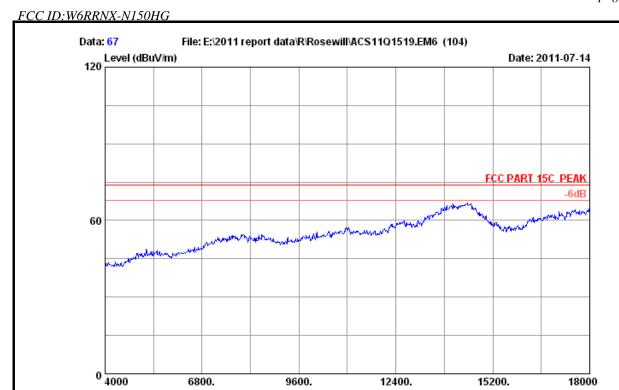
		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	35.09	12.58	35.34	42.31	54.64	74.00	19.36	Peak
2	4924.000	35.09	12.58	35.34	34.58	46.91	54.00	7.09	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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18000

15200.



Site no. : 3m Chamber Data no.: 67

9600.

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Frequency (MHz)

12400.

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Leo-Li

: Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11g CH11 2462MHz

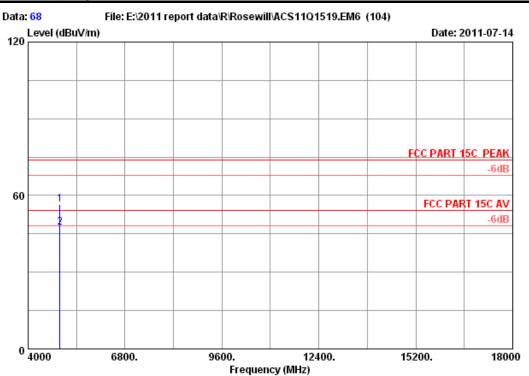
: RNX-N150HG M/N

6800.



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Site no. : 3m Chamber Data no.: 68

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

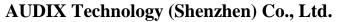
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

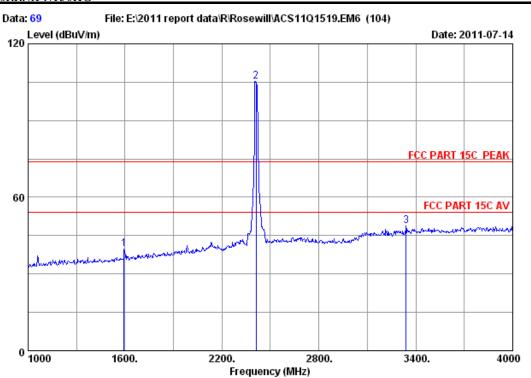
: RNX-N150HG M/N

	-	Factor	•		Emission Level (dBuV/m)	Margin (dB)	Remark
_	4924.000 4924.000		 	44.29 35.24	56.62 47.57	 17.38 6.43	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no.: 69

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

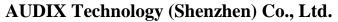
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG

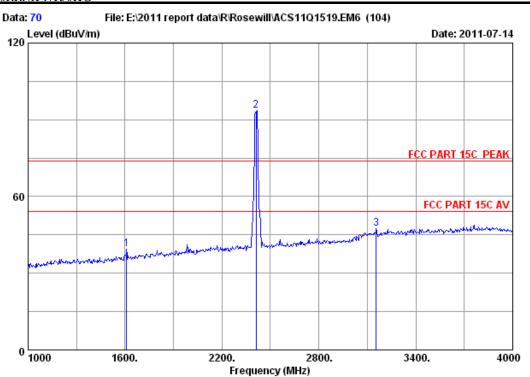
	-	Factor	loss		_		Limits Margin (dBuV/m) (dB)	Remark
2	1594.000 2412.000 3340.000	28.48	8.60	35.95	104.27	39.64 105.40 48.91	74.00 34.36 74.00 -31.40 74.00 25.09	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 70

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

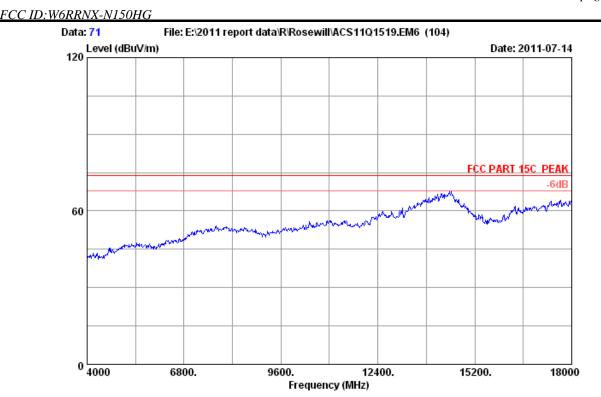
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG

	-	Factor			_		Limits Margin (dBuV/m) (dB)	Remark
2	1609.000 2412.000 3154.000	28.48	8.60	35.95	92.47	39.49 93.60 47.36	74.00 34.51 74.00 -19.60 74.00 26.64	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 71

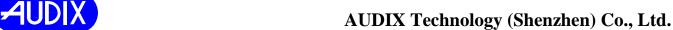
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

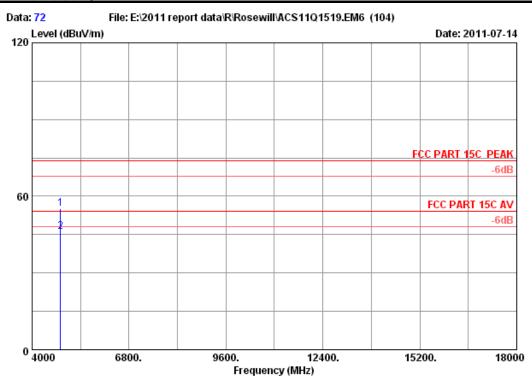
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG







: 3m Chamber Site no. Data no.: 72

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

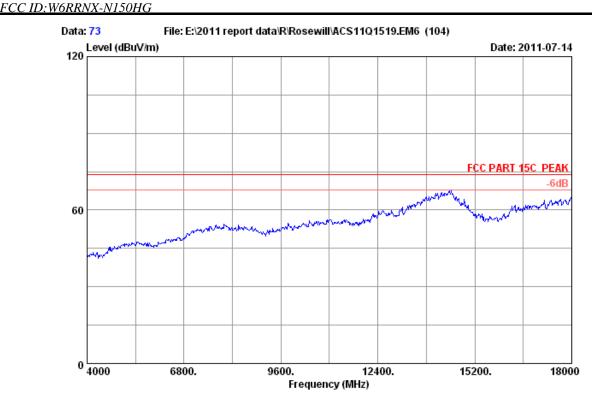
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG

	_			Amp.	_	Emission			
	-				_	Level		_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)) (dB)	
1	4824.000	34.47	12.58	35.25	43.37	55.17	74.00	18.83	Peak
2	4824.000	34.47	12.58	35.25	34.23	46.03	54.00	7.97	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 73

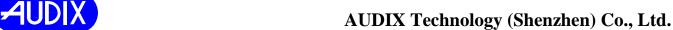
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

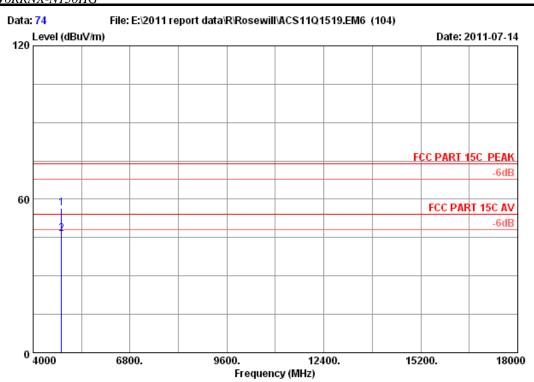
Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG







: 3m Chamber Site no. Data no.: 74

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

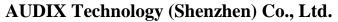
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH1 2412MHz

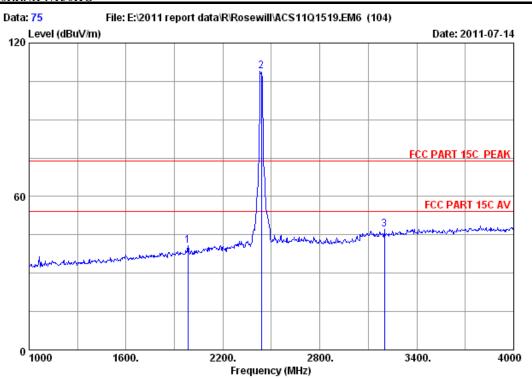
M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	34.47	12.58	35.25	44.61	56.41	74.00	17.59	Peak
2	4824.000	34.47	12.58	35.25	34.63	46.43	54.00	7.57	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 75

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

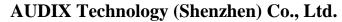
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz

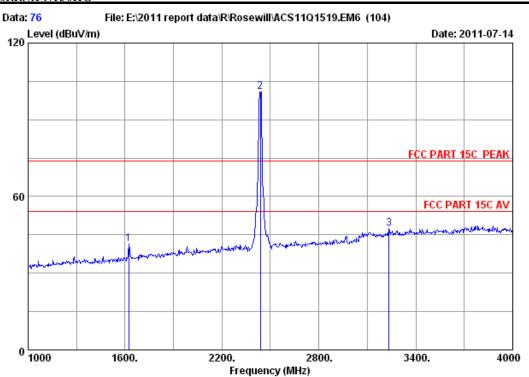
M/N : RNX-N150HG

-	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark	
1 1984.00 2 2437.00 3 3199.00	0 28.53	8.60	36.06	107.80	40.64 108.87 47.05	74.00 33.36 74.00 -34.87 74.00 26.95	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 76

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

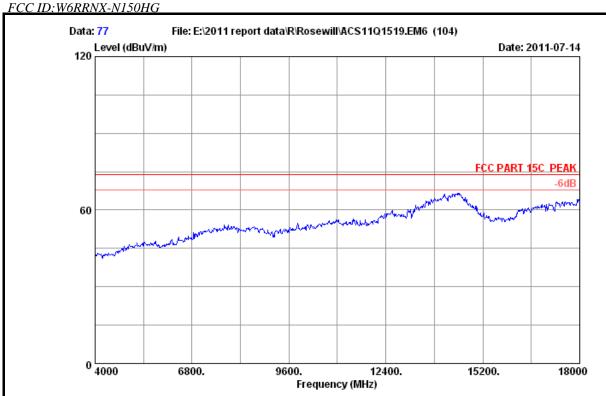
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz

M/N : RNX-N150HG

-	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark	
1 1624.00 2 2437.00 3 3235.00	0 28.53	8.60	36.06	44.28 99.91 42.33	41.60 100.98 47.43	74.00 32.40 74.00 -26.98 74.00 26.57	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 77

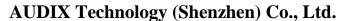
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

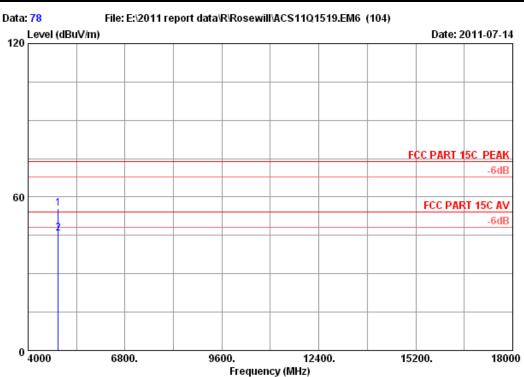
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz

M/N : RNX-N150HG









Site no. : 3m Chamber Data no. : 78

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

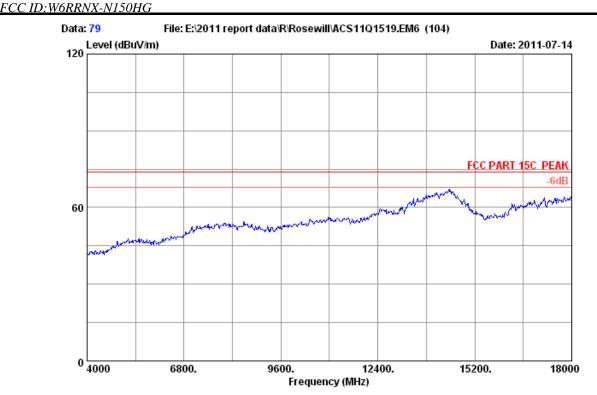
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz

M/N : RNX-N150HG

•	Factor	Factor	_	Emission Level (dBuV/m)		_	Remark
	34.78	35.36 35.36	43.68 34.20	55.33 45.85	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 79

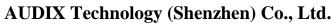
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

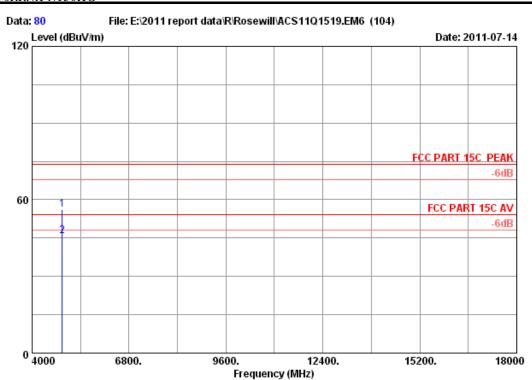
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz

M/N : RNX-N150HG





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 80
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

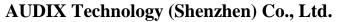
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH6 2437MHz

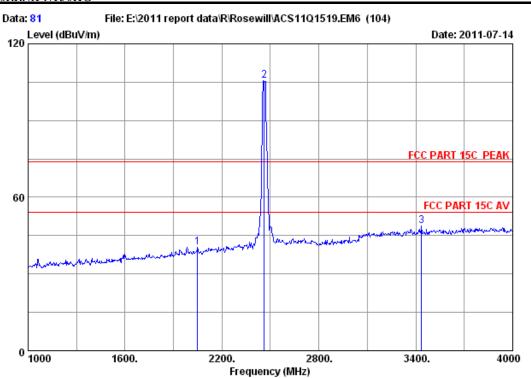
M/N : RNX-N150HG

	-	Factor	Factor	_	Emission Level (dBuV/m)		 Remark	
_	4874.000 4874.000		 	44.66 34.28	56.31 45.93	74.00 54.00	 Peak Average	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 81

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

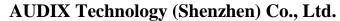
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH11 2462MHz

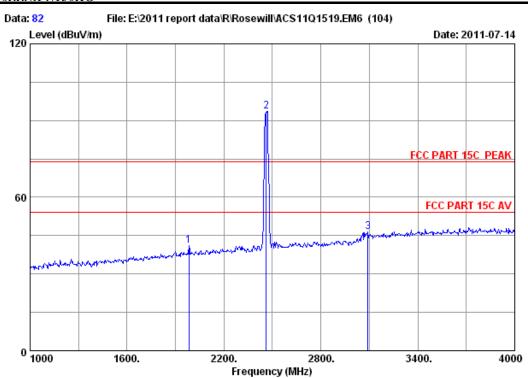
M/N : RNX-N150HG

	-	Factor	loss		_		Limits Margin (dBuV/m) (dB)	Remark
2	2050.000 2462.000 3436.000	28.55	8.76	36.02	104.31	40.52 105.60 48.84	74.00 33.48 74.00 -31.60 74.00 25.16	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 82

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

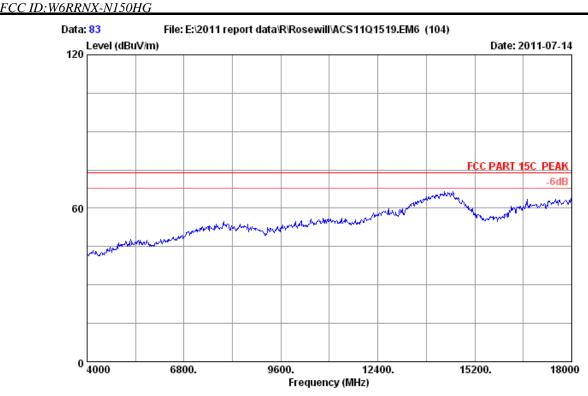
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH11 2462MHz

	Freq. Facto		Factor	Reading		Limits Margin (dBuV/m) (dB)	Remark
_	1984.000 27.8				41.13	74.00 32.87	Peak
_	2462.000 28.5			92.21	93.50	74.00 -19.50	Peak
3	3091.000 30.4	4 9.97	35.71	41.83	46.53	74.00 27.47	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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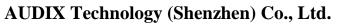
Site no. : 3m Chamber Data no. : 83

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

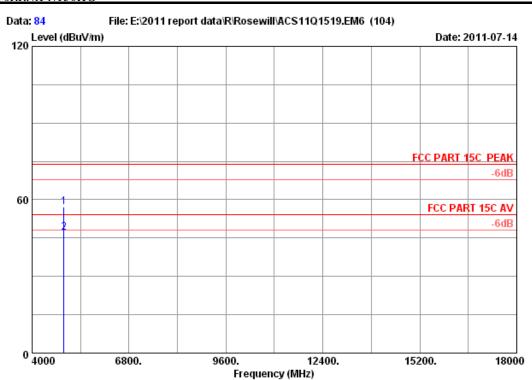
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 84

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

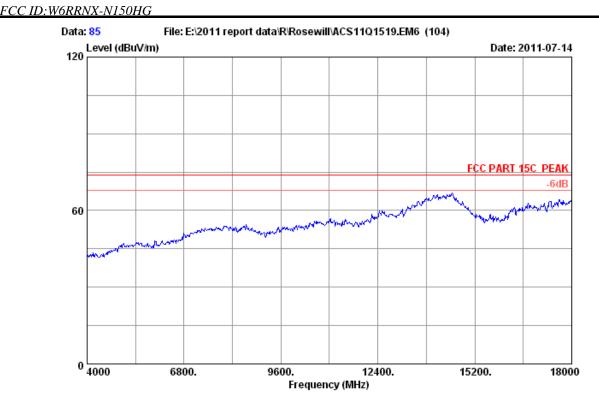
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : RNX-N150HG

	•	Factor	Factor	 Emission Level (dBuV/m)		 Remark	
_	4924.000 4924.000		 	 57.01 46.97	74.00 54.00	 Peak Average	

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 85

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

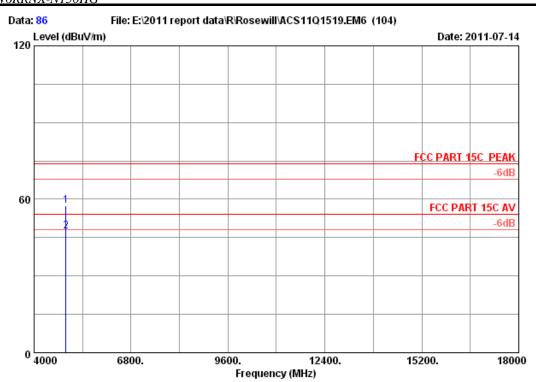
Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz







: 3m Chamber Site no. Data no.: 86

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

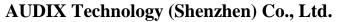
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH11 2462MHz

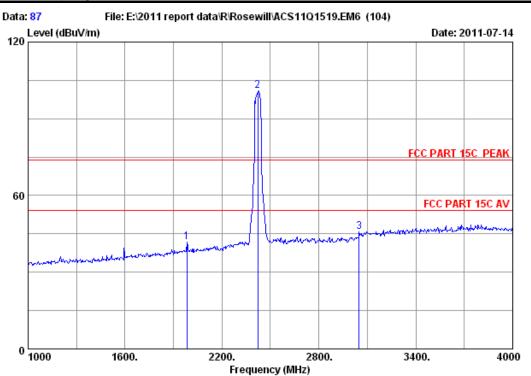
M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	35.09	12.58	35.34	45.21	57.54	74.00	16.46	Peak
2	4924.000	35.09	12.58	35.34	35.24	47.57	54.00	6.43	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no. : 87

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

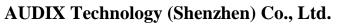
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

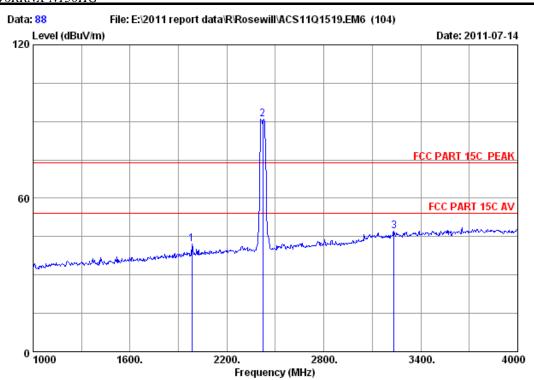
M/N : RNX-N150HG

	-	Factor	loss		_		Limits Margin (dBuV/m) (dB)	Remark
	1984.000 2422.000				42.22 99.80	41.75 100.89	74.00 32.25 74.00 -26.89	Peak Peak
3	3049.000	30.34	9.82	35.84	41.63	45.95	74.00 28.05	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 88

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

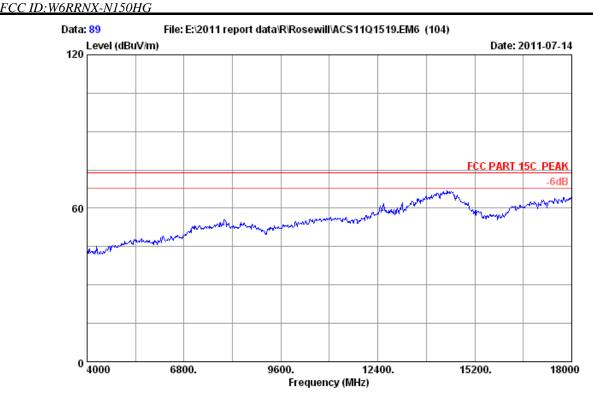
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH1 2422MHz

	-	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark
1	1984.000	 1 27.83	7.76	36.06	42.49	42.02	74.00 31.98	Peak
_	2422.000				89.76	90.85	74.00 -16.85	Peak
3	3235.000	30.83	10.04	35.77	41.94	47.04	74.00 26.96	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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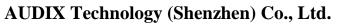


Site no. : 3m Chamber Data no.: 89

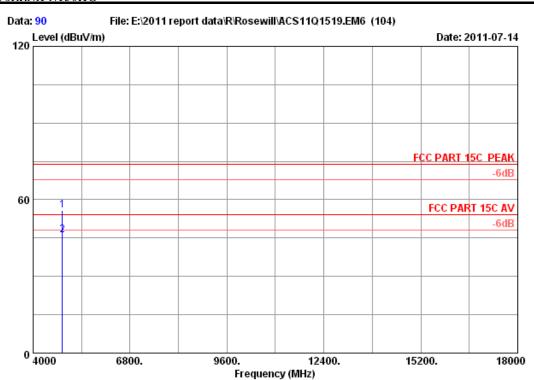
Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH1 2422MHz



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 90

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

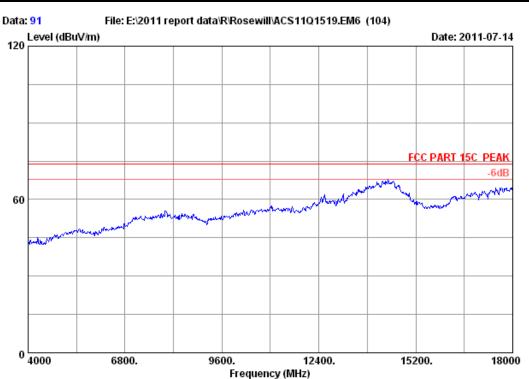
M/N : RNX-N150HG

	-	Factor	Factor		Emission Level (dBuV/m)		_	Remark	
_	4844.000 4844.000		 	43.98 34.27	55.75 46.04	74.00 54.00		Peak Average	

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no. : 91

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

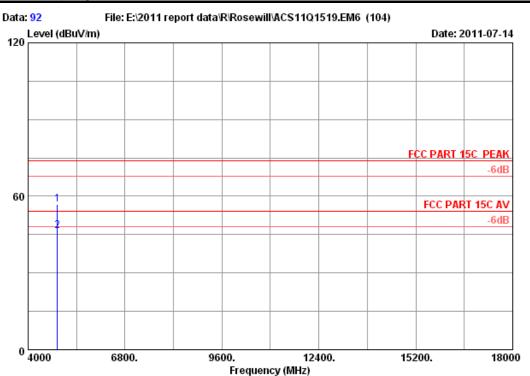
Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz







: 3m Chamber Site no. Data no.: 92

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

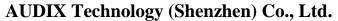
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH1 2422MHz

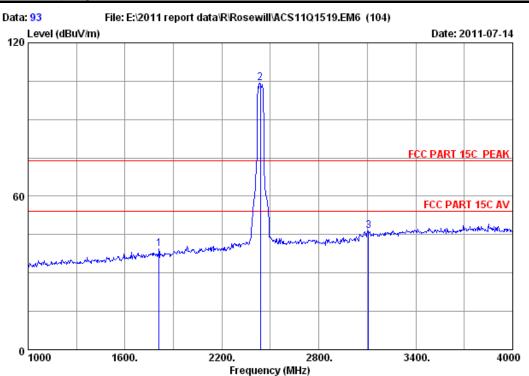
M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	4844.000	34.57	12.45	35.25	44.95	56.72	74.00	17.28	Peak	
2	4844.000	34.57	12.45	35.25	34.61	46.38	54.00	7.62	Average	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







: 3m Chamber Site no. Data no.: 93

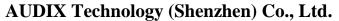
Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

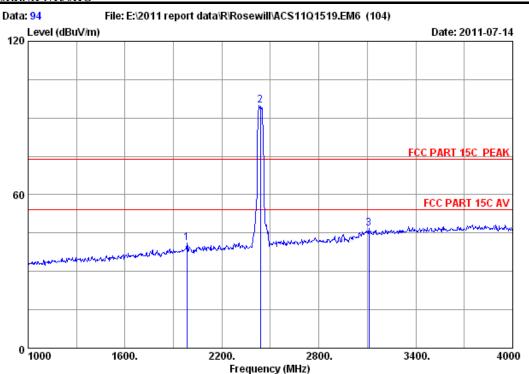
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH4 2437MHz

	•	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark
_	1810.000 2437.000					39.40 104.20	74.00 34.60 74.00 -30.20	Peak Peak
3	3106.000	30.49	9.98	35.73	41.69	46.43	74.00 27.57	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 94

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

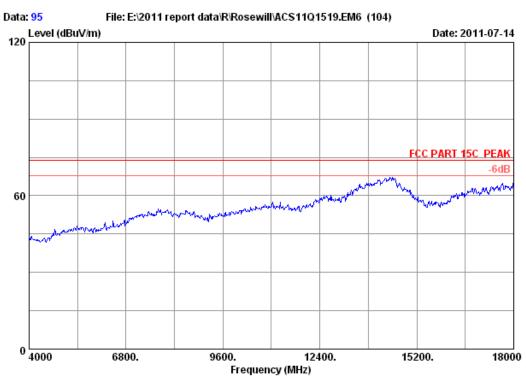
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz

M/N : RNX-N150HG

	-	loss	Factor	_		Limits Margin (dBuV/m) (dB)	Remark
_	1984.000 2437.000	 		41.70 93.76	41.23 94.83	74.00 32.77 74.00 -20.83	Peak Peak
_	3109.000	 		41.95	46.69	74.00 27.31	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 95

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

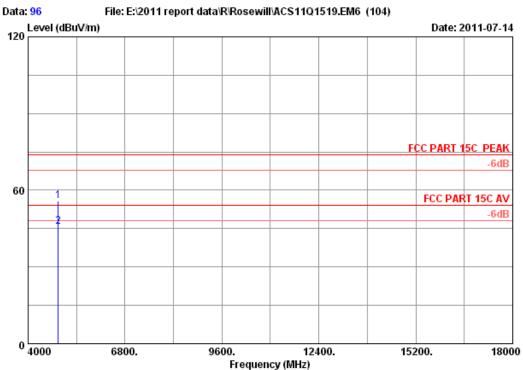
Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz







: 3m Chamber Site no. Data no.: 96

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

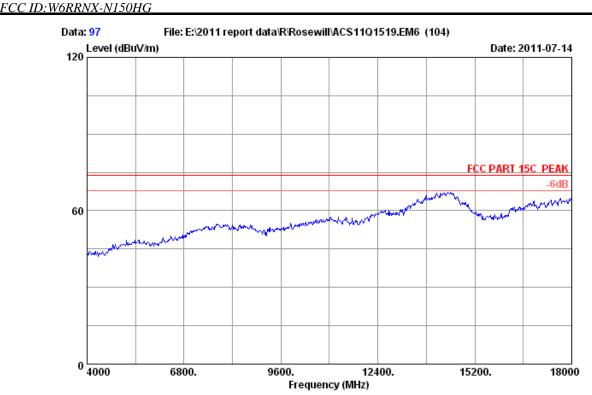
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH4 2437MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	34.78	12.23	35.36	44.01	55.66	74.00	18.34	Peak
2	4874.000	34.78	12.23	35.36	34.04	45.69	54.00	8.31	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 97

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

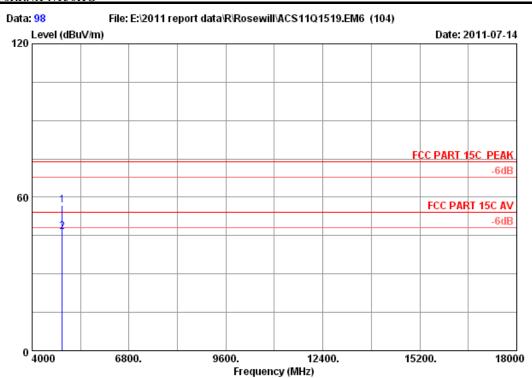
Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH4 2437MHz



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FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 98

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

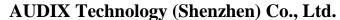
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH4 2437MHz

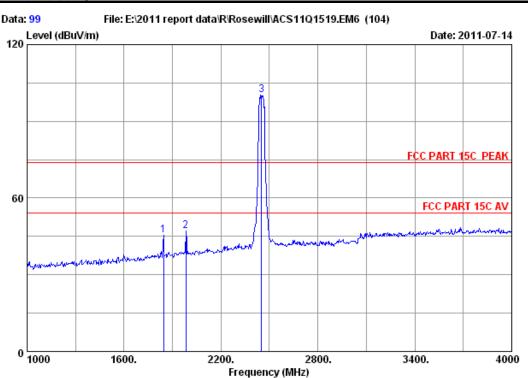
M/N : RNX-N150HG

	-	Factor	loss	_	Emission Level (dBuV/m)	Limits	_	Remark
_	4874.000 4874.000			 	56.67 46.32	74.00 54.00		Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz

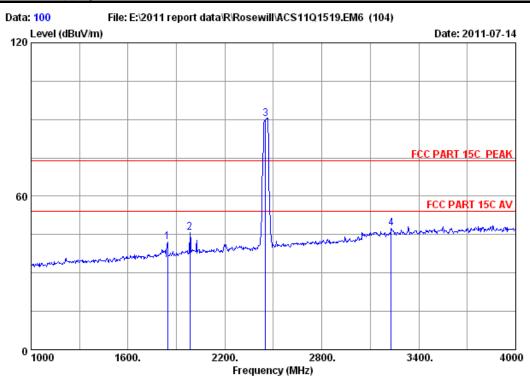
M/N : RNX-N150HG

	Ant.	Cable	Amp.		Emission		
	Freq. Factor	loss	Factor	Reading	Level	Limits Margin	Remark
	(MHz) (dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	1846.000 27.30	7.52	36.23	46.79	45.38	74.00 28.62	Peak
2	1984.000 27.83	7.76	36.06	47.69	47.22	74.00 26.78	Peak
3	2452.000 28.53	8.48	36.06	99.31	100.26	74.00 -26.26	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







: 3m Chamber Site no. Data no. : 100

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

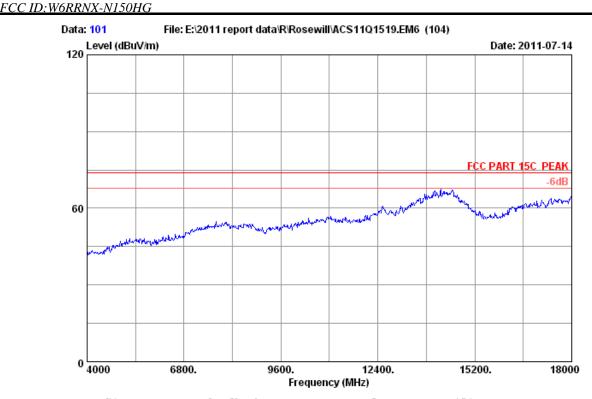
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH7 2452MHz

	-		loss				Limits Margin (dBuV/m) (dB)	Remark
1	1846.000	27.30	7.52	36.23	43.45	42.04	74.00 31.96	Peak
2	1984.000	27.83	7.76	36.06	46.30	45.83	74.00 28.17	Peak
3	2452.000	28.53	8.48	36.06	89.19	90.14	74.00 -16.14	Peak
4	3229.000	30.83	10.04	35.77	42.23	47.33	74.00 26.67	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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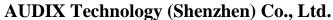


Site no. : 3m Chamber Data no. : 101

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

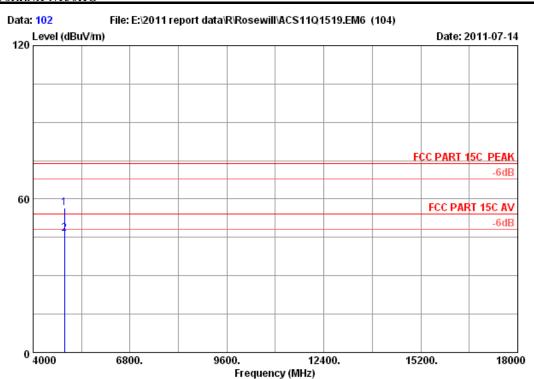
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH7 2452MHz





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 102

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

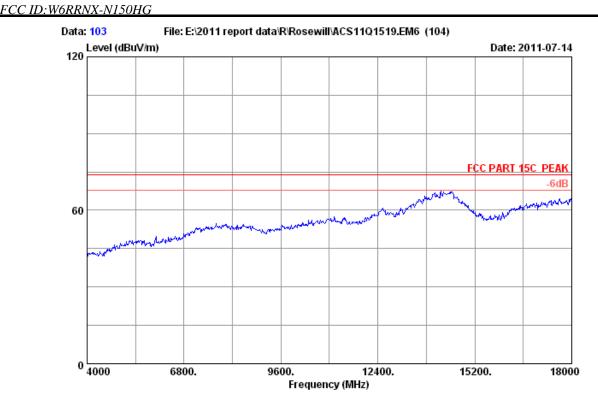
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : RNX-N150HG

-		Factor	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
4904.000 4904.000			44.36 34.22	56.50 46.36	74.00 54.00	17.50 7.64	Peak Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

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Site no. : 3m Chamber Data no. : 103 Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

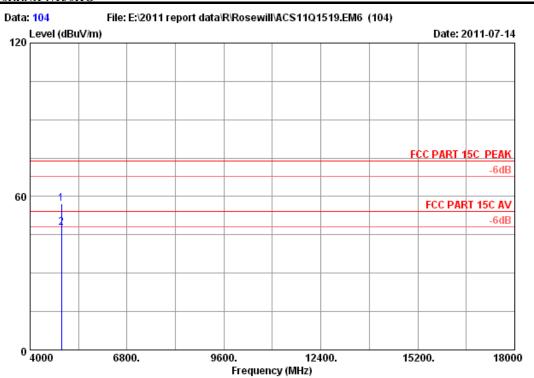
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH7 2452MHz



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FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 104
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission			
	-				_	Level (dBuV/m)		_	Remark
1	4904.000	34.98	12.43	35.27	45.13	57.27	74.00	16.73	Peak
2	4904.000	34.98	12.43	35.27	35.69	47.83	54.00	6.17	Average

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID: W6RRNX-N150HG

page 5-1

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

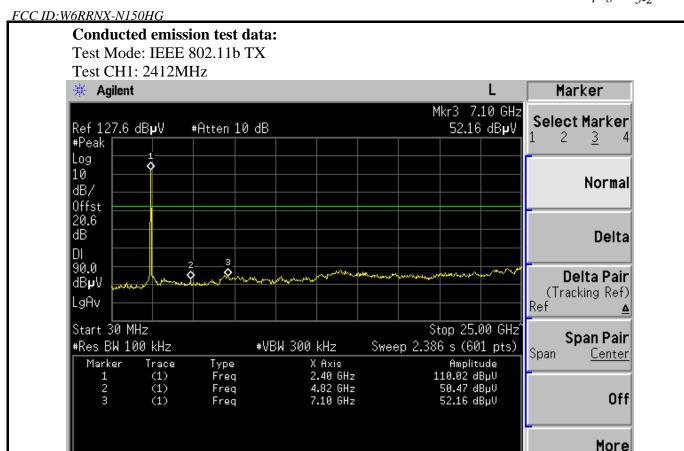
5.4. Test result

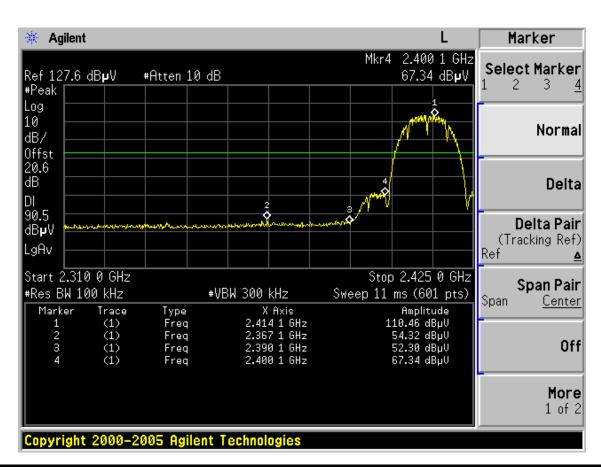
PASS (The testing data was attached in the next pages.)

Unable to save file

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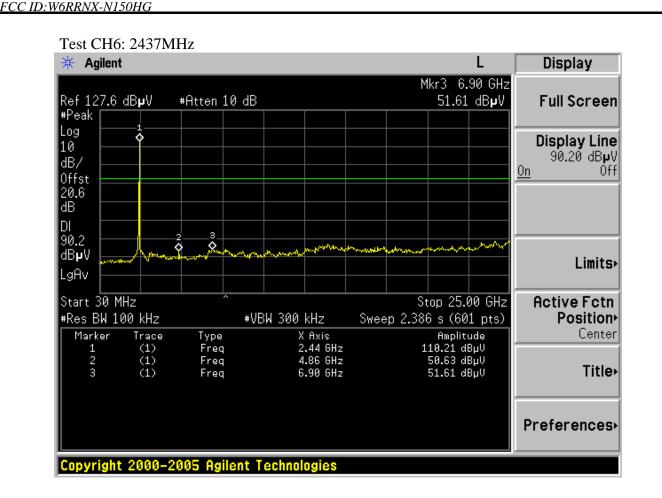
1 of 2

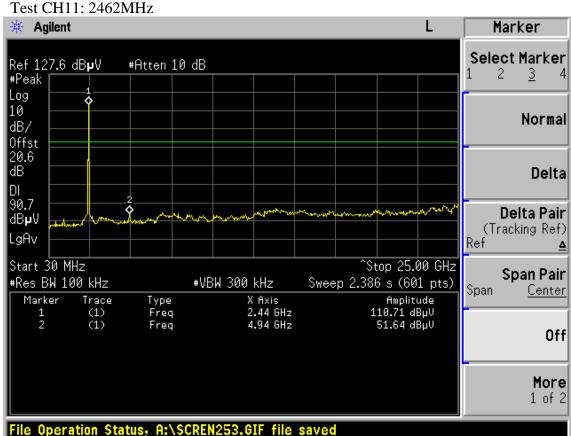




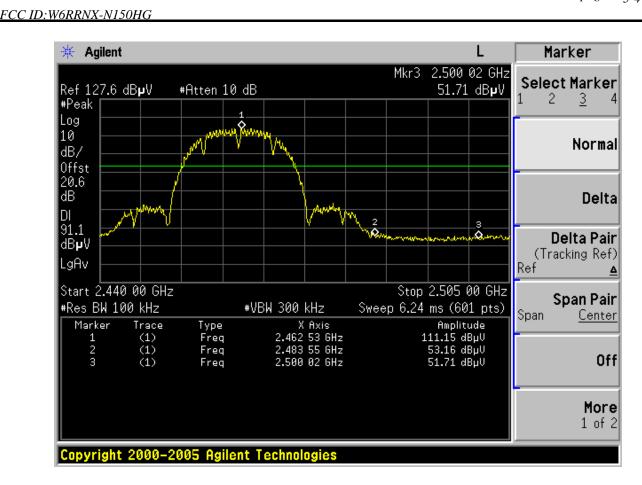






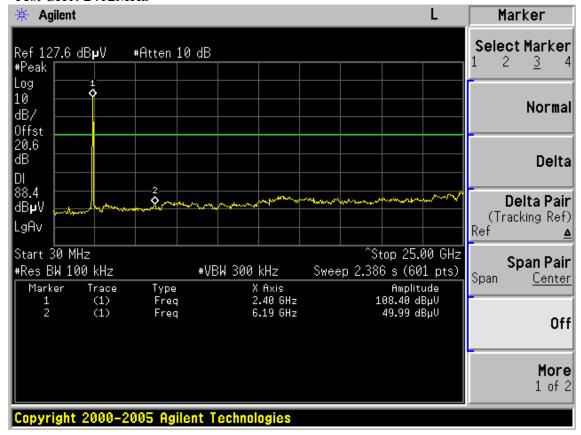


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Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

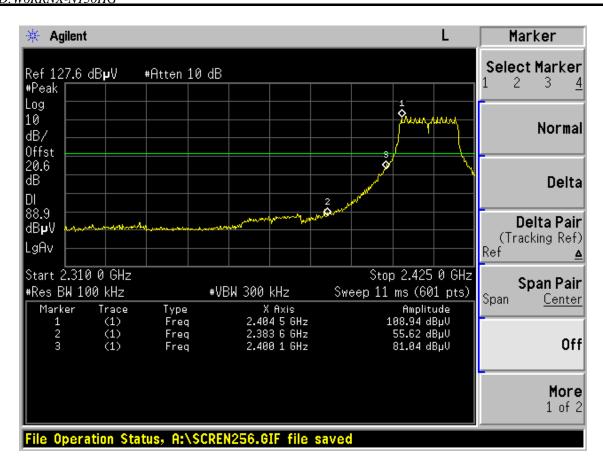




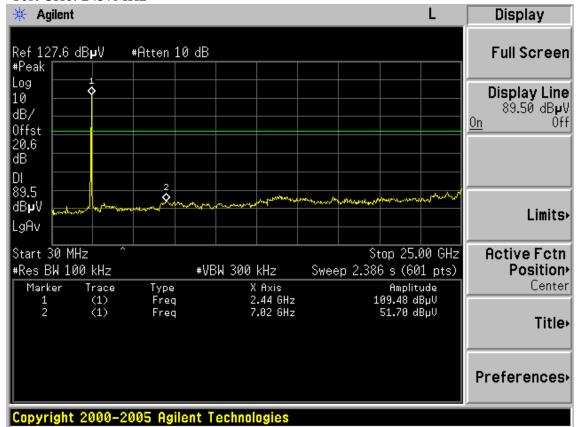




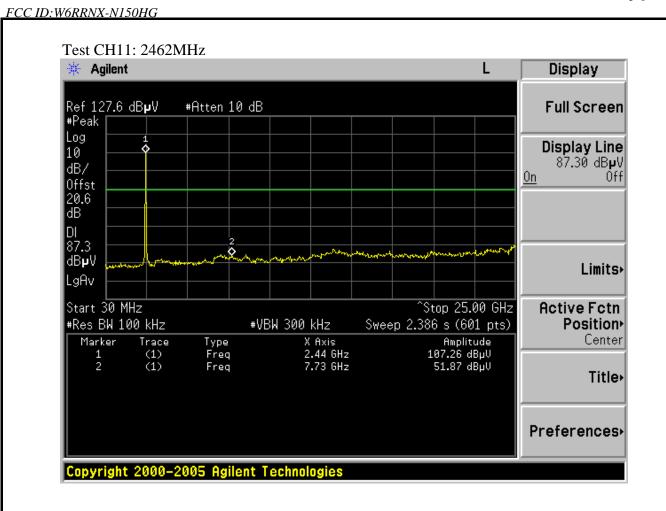
AUDIX

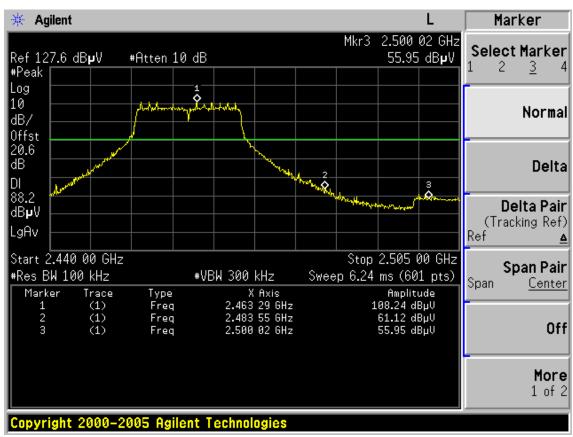


Test CH6: 2437MHz

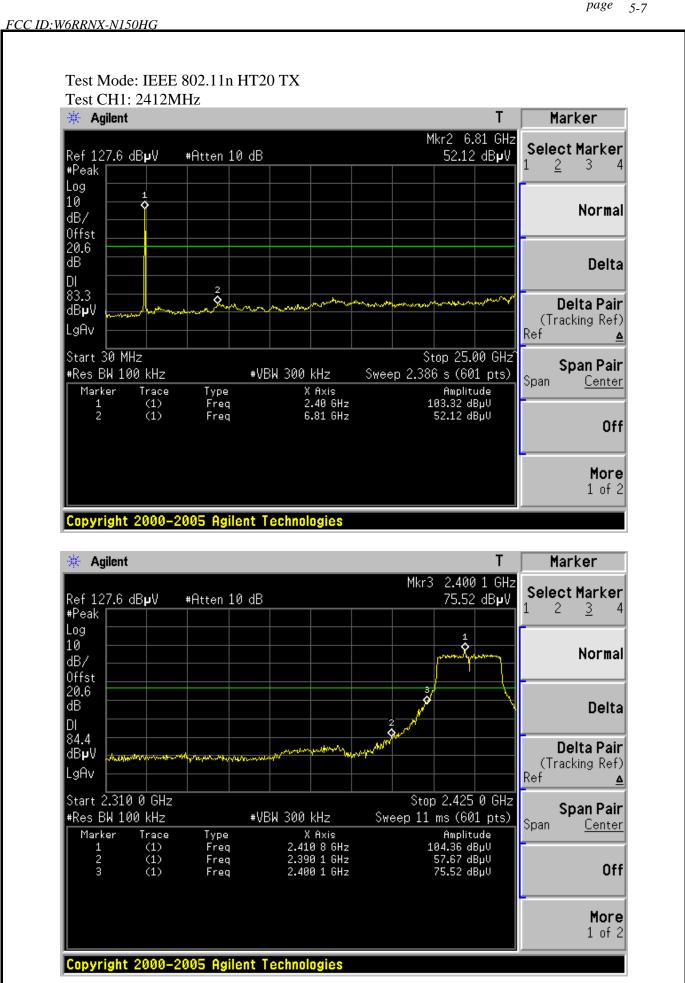




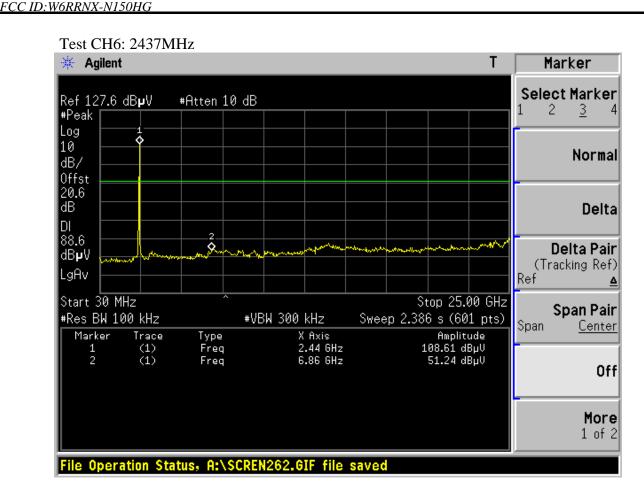


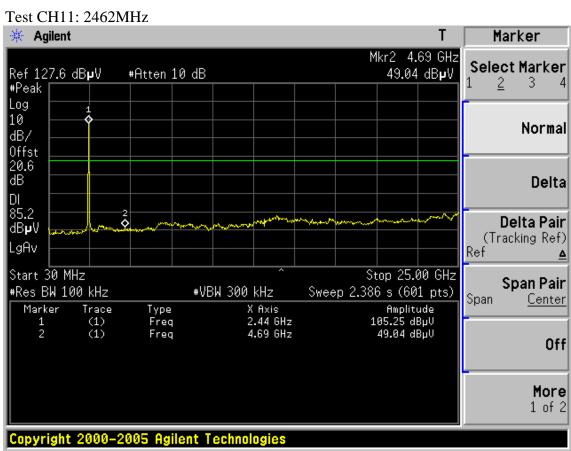




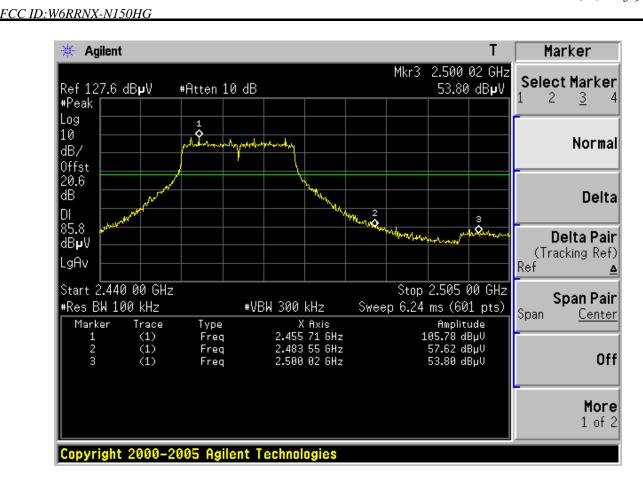






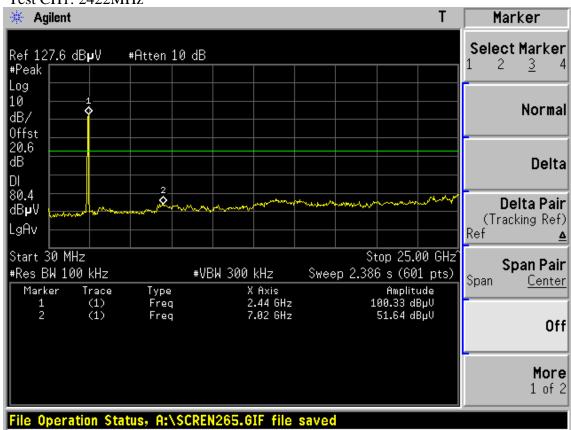




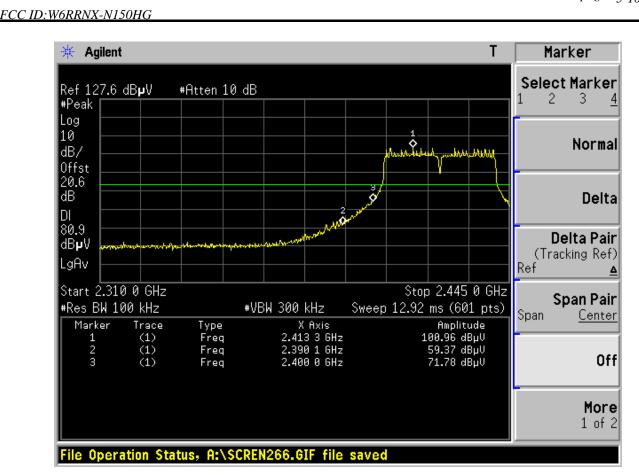


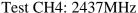
Test Mode: IEEE 802.11n HT40 TX

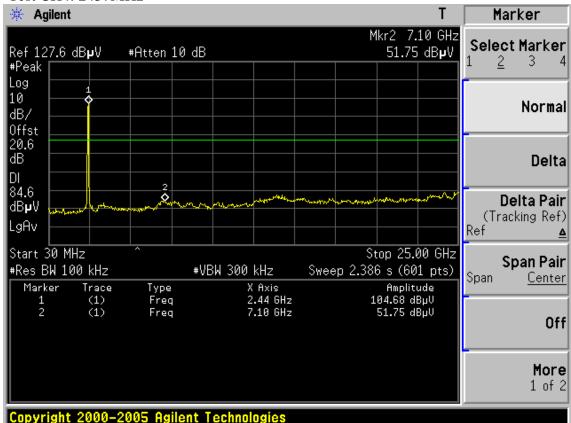
Test CH1: 2422MHz



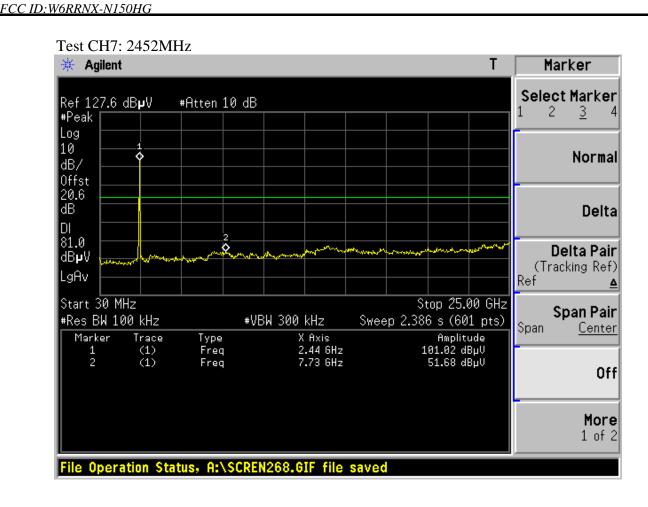


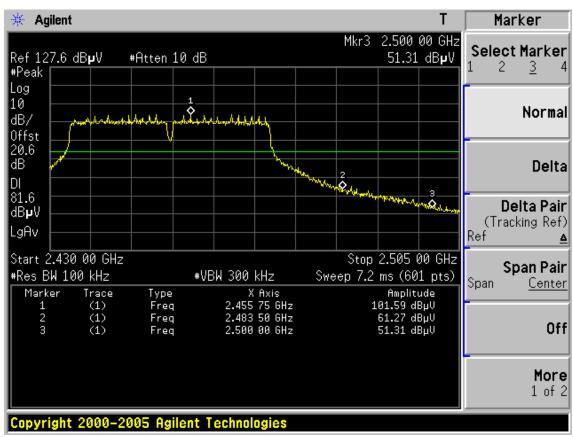














FCC ID: W6RRNX-N150HG

6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 10	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year

6.2.Limit

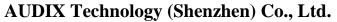
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

6.3. Test Produce

- 1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
- (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

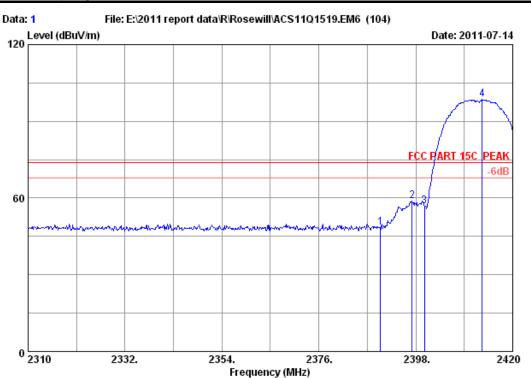
6.4. Test Results

Pass (The testing data was attached in the next pages.)



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FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 1

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

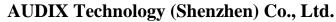
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

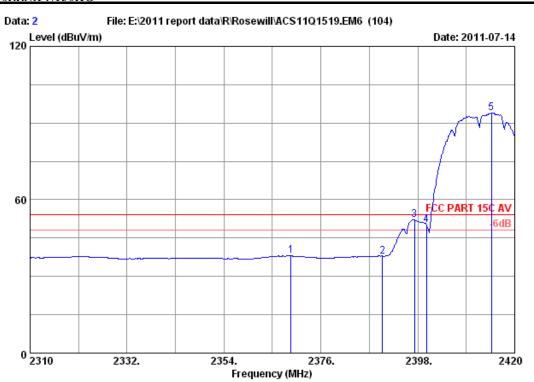
M/N : RNX-N150HG

			loss		Reading (dBuV)	Emission Level (dBuV/m)	Limits M	_	Remark
1	2390.000	28.46	8.41	36.09	47.75	48.53	74.00 2	5.47	Peak
2	2397.120	28.46	8.41	36.09	57.92	58.70	74.00 1	15.30	Peak
3	2400.000	28.46	8.60	36.09	55.74	56.71	74.00 1	17.29	Peak
4	2413.070	28.48	8.60	35.95	97.32	98.45	74.00 -2	4.45	Peak

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 2

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : RNX-N150HG

	Ant. Freq. Factor (MHz) (dB/m)	Cable Amp. loss Factor (dB) (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1	2369.180 28.43	8.44 36.00	37.15	38.02	54.00 15.98	Average
2	2390.000 28.46	8.41 36.09	37.16	37.94	54.00 16.06	Average
3	2397.230 28.46	8.41 36.09	51.29	52.07	54.00 1.93	Average
4	2400.000 28.46	8.60 36.09	49.06	50.03	54.00 3.97	Average
5	2414.720 28.48	8.60 35.95	92.79	93.92	54.00 -39.92	Average

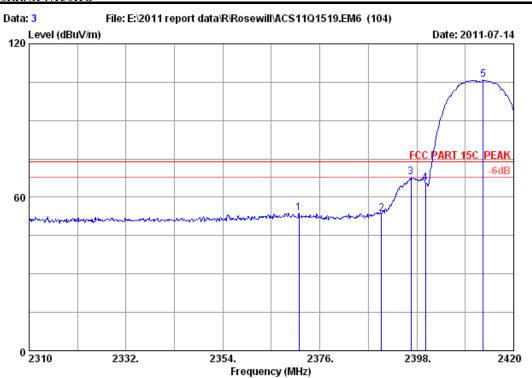
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Technology (Shenzhen) Co., Ltd.

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FCC ID:W6RRNX-N150HG



: 3m Chamber Data no. : 3 Site no.

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

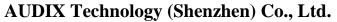
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11b CH1 2412MHz

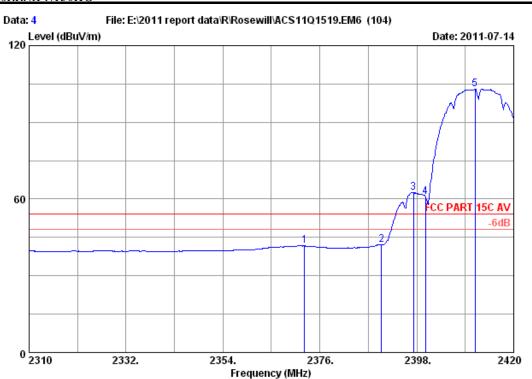
M/N: RNX-N150HG

	-					Lmission Level (dBuV/m)		_	Remark	
1	2371.270	28.43	8.44	36.00	53.09	53.96	74.00	20.04	Peak	
2	2390.000	28.46	8.41	36.09	52.67	53.45	74.00	20.55	Peak	
3	2396.680	28.46	8.41	36.09	67.08	67.86	74.00	6.14	Peak	
4	2400.000	28.46	8.60	36.09	64.48	65.45	74.00	8.55	Peak	
5	2413.070	28.48	8.60	35.95	104.71	105.84	74.00	-31.84	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 4

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

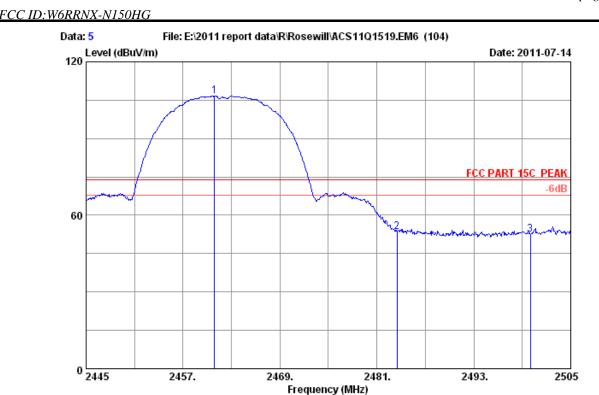
M/N : RNX-N150HG

τ
age

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







: 3m Chamber Site no. Data no.: 5

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

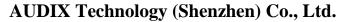
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

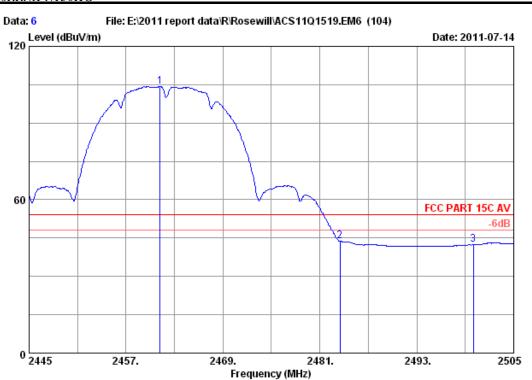
Test mode : IEEE802.11b CH11 2462MHz

	eq. Fac	Factor	_	Emission Level (dBuV/m)		_	Remark	
2 2483	3.500 28	 35.97	105.37 51.92 51.07	106.66 53.47 52.56	74.00 74.00 74.00	20.53	Peak Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 6

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : RNX-N150HG

	Ant.	Cable	Amp.		Emission			
	Freq. Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz) (dB/m	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2461.200 28.5	8.76	36.02	103.09	104.38	54.00	-50.38	Average
2	2483.500 28.5	8.94	35.97	42.12	43.67	54.00	10.33	Average
3	2500.000 28.6	8.89	36.00	40.90	42.39	54.00	11.61	Average

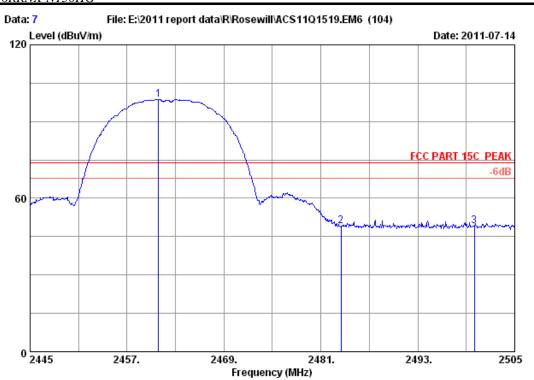
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



AUDIX Technology (Shenzhen) Co., Ltd.

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FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 7

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

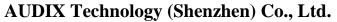
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

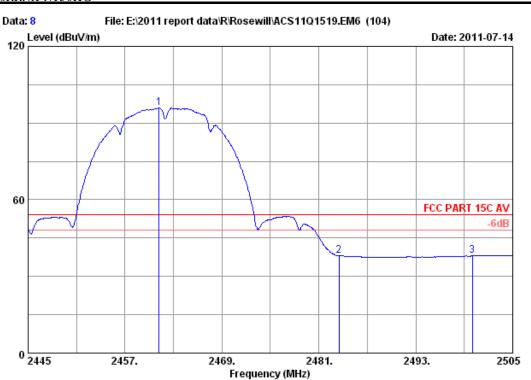
Test mode : IEEE802.11b CH11 2462MHz

	Freq. Fact		Factor	_	Emission Level (dBuV/m)		_	Remark	
2	2460.900 28. 2483.500 28. 2500.000 28.	58 8.94	35.97	97.38 47.46 47.62	98.67 49.01 49.11	74.00 74.00 74.00	24.99	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 8

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

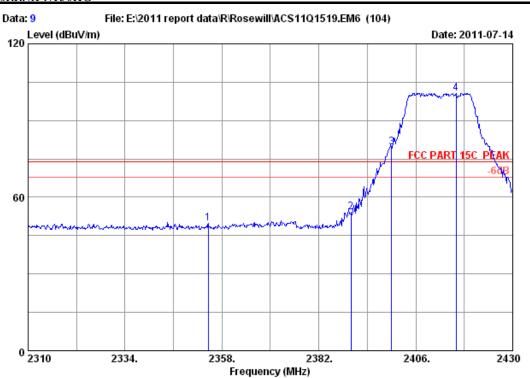
M/N : RNX-N150HG

	An	t. Cable	e Amp.		Emission			
	Freq. Fac	tor loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz) (dB,	/m) (dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2461.200 28	.55 8.76	36.02	94.64	95.93	54.00 -	-41.93	Average
2	2483.500 28	.58 8.94	35.97	36.53	38.08	54.00	15.92	Average
3	2500.000 28	.60 8.89	36.00	36.47	37.96	54.00	16.04	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no.: 9

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115 (0905)

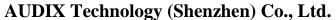
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

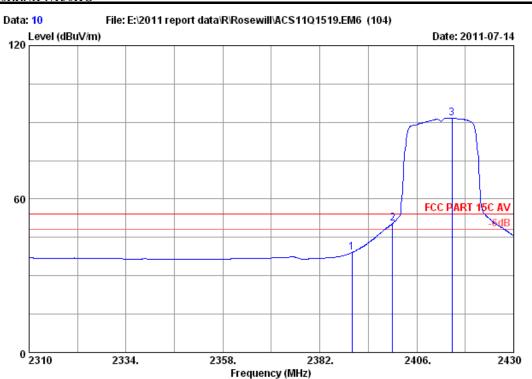
Test mode : IEEE802.11g CH1 2412MHz

-		loss		Reading (dBuV)	Emission Level (dBuV/m)		_	Remark	
1 2354.64 2 2390.00 3 2400.00 4 2415.96	0 28.46 0 28.46	8.41 8.60	36.09 36.09	48.81 53.34 78.73 99.65	49.88 54.12 79.70 100.78	74.00 74.00	24.12 19.88 -5.70 -26.78	Peak Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 10

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

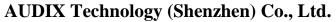
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

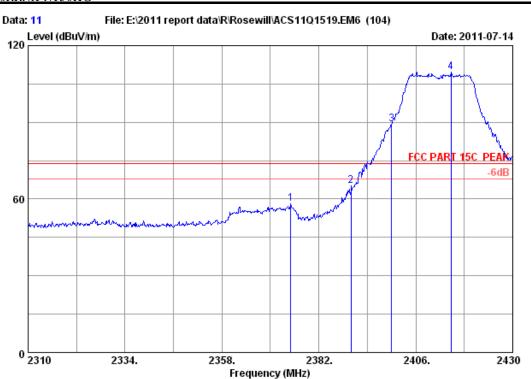
M/N : RNX-N150HG

	j	Ant. (Cable	Amp.		Emission			
	Freq. Fa	actor .	loss	Factor 1	Reading	Level	Limits	Margin	Remark
	(MHz) (c	dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000 2	28.46	3.41	36.09	38.37	39.15	54.00	14.85	Average
2	2400.000 2	28.46	3.60	36.09	49.45	50.42	54.00	3.58	Average
3	2414.760 2	28.48	3.60	35.95	90.49	91.62	54.00 -	37.62	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 11
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

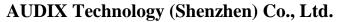
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

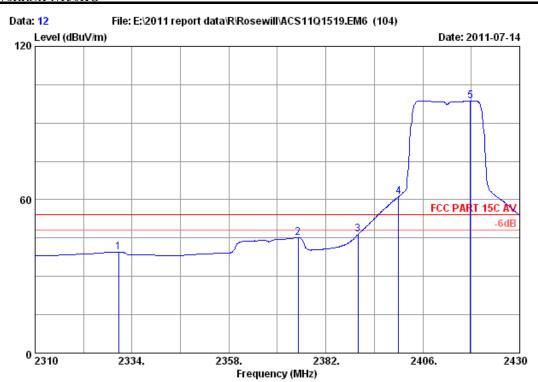
M/N : RNX-N150HG

			loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1	2375.040	28.43	8.44	36.00	57.19	58.06	74.00 15.94	Peak
2	2390.000	28.46	8.41	36.09	64.45	65.23	74.00 8.77	Peak
3	2400.000	28.46	8.60	36.09	88.26	89.23	74.00 -15.23	Peak
4	2414.760	28.48	8.60	35.95	108.39	109.52	74.00 -35.52	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

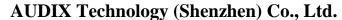
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

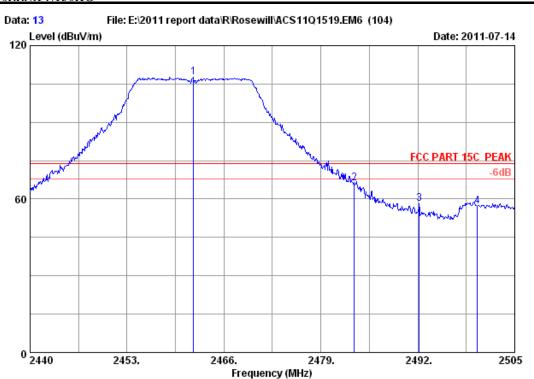
M/N : RNX-N150HG

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin) (dB)	Remark
2 23 3 23 4 24	375.160 390.000 400.000	28.36 28.43 28.46 28.46 28.46	8.41 8.60	36.06 36.00 36.09 36.09 35.95	38.61 44.28 45.68 60.18 97.61	39.55 45.15 46.46 61.15 98.74	54.00 54.00 54.00 54.00	14.45 8.85 7.54 -7.15	Average Average Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 13
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

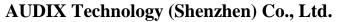
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

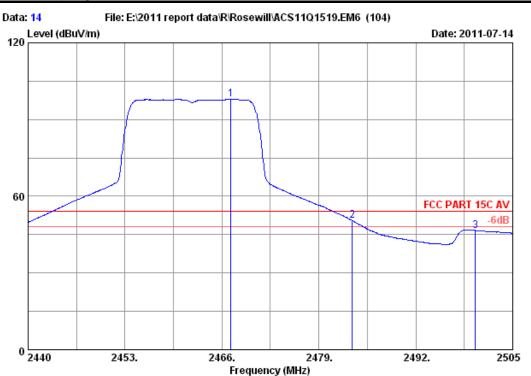
M/N : RNX-N150HG

	-		loss				Limits Margin (dBuV/m) (dB)	Remark
1	2461.905	28.55	8.76	36.02	106.33	107.62	74.00 -33.62	Peak
2	2483.500	28.58	8.94	35.97	64.53	66.08	74.00 7.92	Peak
3	2492.195	5 28.60	8.94	36.00	56.59	58.13	74.00 15.87	Peak
4	2500.000	28.60	8.89	36.00	55.82	57.31	74.00 16.69	Peak

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no.: 14

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

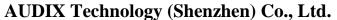
Limit : FCC PART 15C AV Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

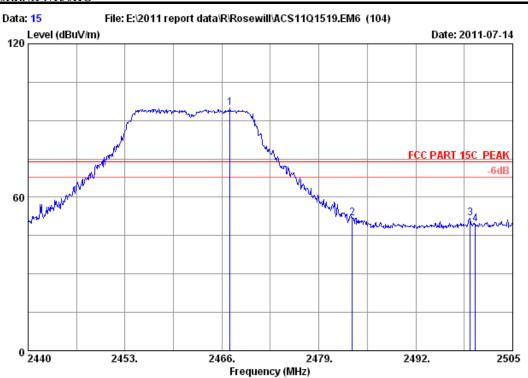
Test mode : IEEE802.11g CH11 2462MHz

		Cable Amp. loss Factor (dB) (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1	2467.170 28.55	8.76 36.02	96.54	97.83	54.00 -43.83	Average
2	2483.500 28.58	8.94 35.97	48.93	50.48	54.00 3.52	Average
3	2500.000 28.60	8.89 36.00	45.11	46.60	54.00 7.40	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no.: 15

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

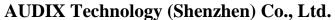
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power

Test mode : IEEE802.11g CH11 2462MHz

	-		loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1	2467.105	28.55	8.76	36.02	93.52	94.81	74.00 -20.81	Peak
2	2483.500	28.58	8.94	35.97	50.41	51.96	74.00 22.04	Peak
3	2499.280	28.60	8.89	36.00	50.20	51.69	74.00 22.31	Peak
4	2500.000	28.60	8.89	36.00	47.82	49.31	74.00 24.69	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 16

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

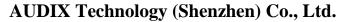
EUT : Wireless High Gain USB Adapter Power : DC 5V From PC Input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

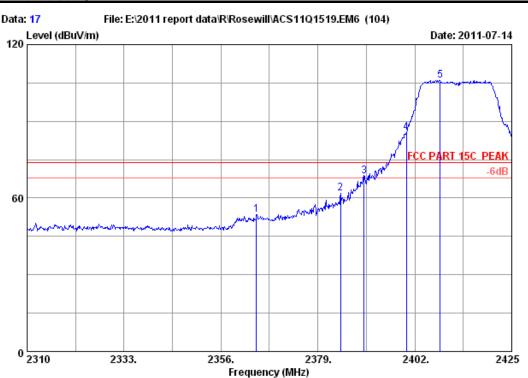
M/N : RNX-N150HG

	Ant.	Cable Amp.		Emission		
	Freq. Factor	loss Factor	Reading	Level	Limits Margin	Remark
	(MHz) (dB/m)	(dB) (dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2467.820 28.55	8.76 36.02	83.52	84.81	54.00 -30.81	Average
2	2483.500 28.58	8.94 35.97	37.14	38.69	54.00 15.31	Average
3	2500.000 28.60	8.89 36.00	36.09	37.58	54.00 16.42	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no. : 17

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Leo-Li

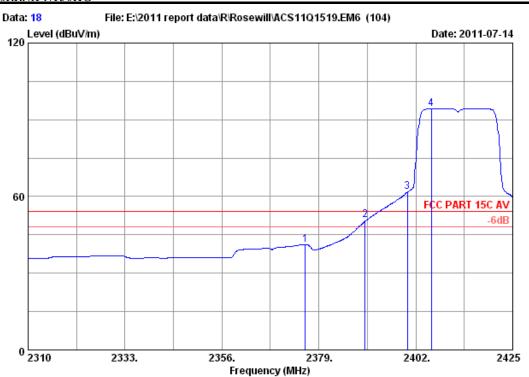
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG

	Ant. Freq. Factor (MHz) (dB/m)		or Reading	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	. Remark
2	2364.395 28.41 2384.405 28.43	8.41 36.0	00 60.94	53.61 61.78	74.00 20.39 74.00 12.22	Peak Peak
4	2390.000 28.46 2400.000 28.46 2407.980 28.48	8.60 36.0	9 84.69	68.45 85.66 105.92	74.00 5.55 74.00 -11.66 74.00 -31.92	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 18

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

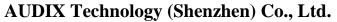
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

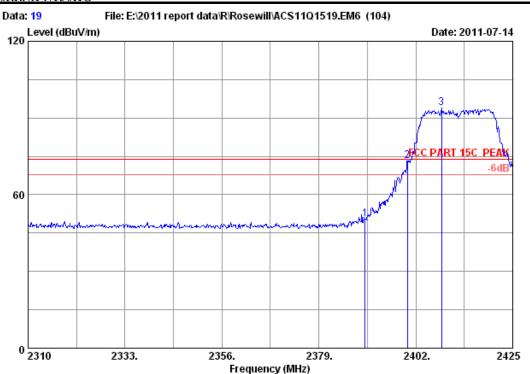
M/N : RNX-N150HG

	Ant. eq. Factor (z) (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin) (dB)	Remark	
2 2390. 3 2400.	780 28.43 000 28.46 000 28.46 680 28.48	8.41 8.60	36.09 36.09	40.38 49.98 60.71 93.25	41.25 50.76 61.68 94.38	54.00 54.00 54.00	12.75 3.24 -7.68 -40.38	Average Average Average Average	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 19

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

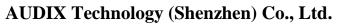
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

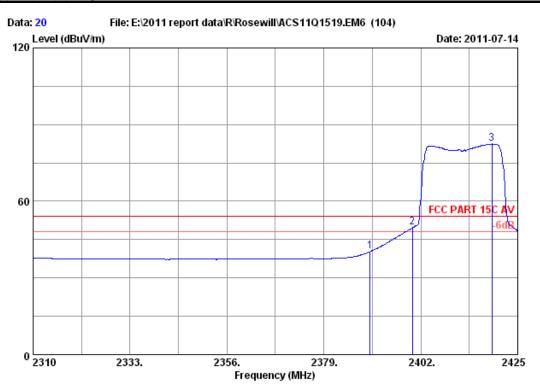
M/N : RNX-N150HG

	Freq. Factor		Factor	_		Limits Margin (dBuV/m) (dB)	Remark
2	2390.000 28.40 2400.000 28.40	8.60	36.09	49.80 72.18	50.58 73.15	74.00 23.42 74.00 0.85	Peak Peak
3	2408.095 28.48	8.60	35.95	92.76	93.89	74.00 -19.89	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no. : 20

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

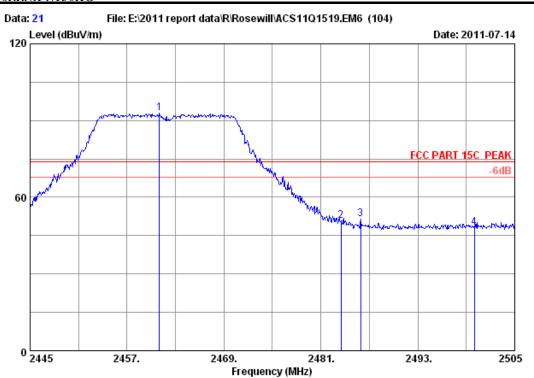
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : RNX-N150HG

		Ant.	Cable	Amp.		Emission		
	Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2390.000	28.46	8.41	36.09	39.58	40.36	54.00 13.64	Average
2	2400.000	28.46	8.60	36.09	48.69	49.66	54.00 4.34	Average
3	2418.905	5 28.48	8.60	35.95	81.27	82.40	54.00 -28.40	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





: 3m Chamber Site no. Data no.: 21

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

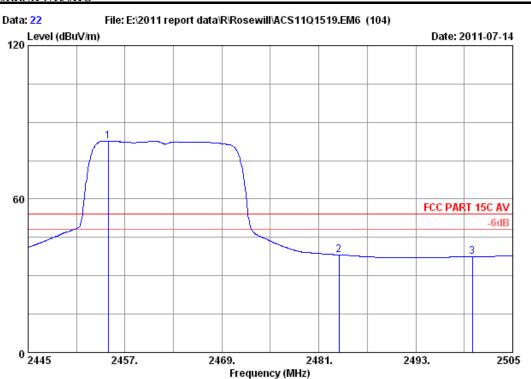
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH11 2462MHz

	-		loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2	2461.020 2483.500 2485.920	28.58	8.94	35.97	91.52 49.16 50.07	92.81 50.71 51.62	74.00 -18.81 74.00 23.29 74.00 22.38	Peak Peak Peak
4	2500.000	28.60	8.89	36.00	46.63	48.12	74.00 25.88	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 22

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Leo-Li

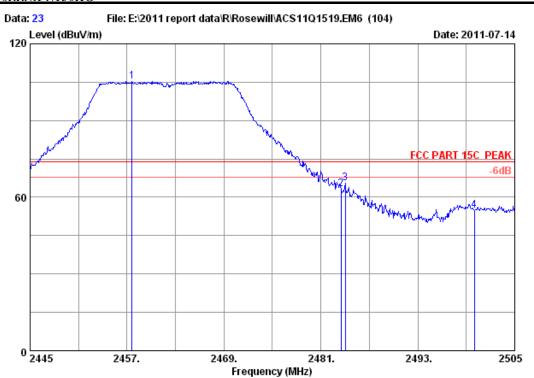
EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : RNX-N150HG

	Ant.	Cable Amp.		Emission		
	Freq. Factor	loss Factor	Reading	Level	Limits Margin	Remark
	(MHz) (dB/m)	(dB) (dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2454.900 28.55	8.48 36.02	81.62	82.63	54.00 -28.63	Average
2	2483.500 28.58	8.94 35.97	36.58	38.13	54.00 15.87	Average
3	2500.000 28.60	8.89 36.00	35.99	37.48	54.00 16.52	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





: 3m Chamber Site no. Data no.: 23

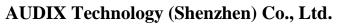
Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

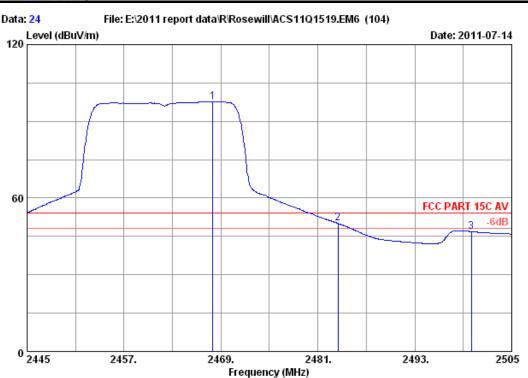
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT20 CH11 2462MHz

	Freq. Factor	Cable Amp. loss Factor (dB) (dB)	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1	2457.600 28.55	8.48 36.02	104.38	105.39	74.00 -31.39	Peak
2	2483.500 28.58	8.94 35.97	61.75	63.30	74.00 10.70	Peak
3	2484.000 28.58	8.94 35.97	64.11	65.66	74.00 8.34	Peak
4	2500.000 28.60	8.89 36.00	53.40	54.89	74.00 19.11	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no. : 24

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

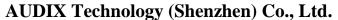
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : RNX-N150HG

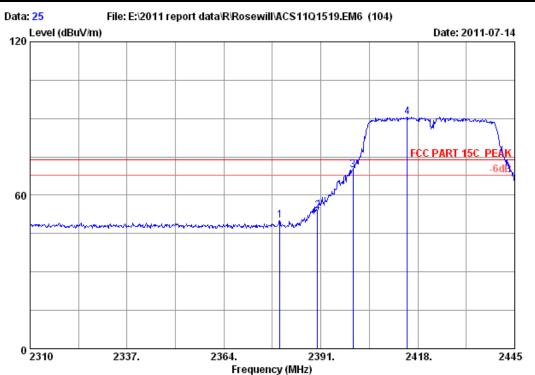
	Ant.	Cable Am	p.	Emission			
	Freq. Factor	loss Fac	tor Reading	Level	Limits	Margin	Remark
	(MHz) (dB/m)	(dB) (dB) (dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2467.980 28.55	8.76 36.	02 96.28	97.57	54.00	-43.57	Average
2	2483.500 28.58	8.94 35.	97 48.53	50.08	54.00	3.92	Average
3	2500.000 28.60	8.89 36.	00 45.34	46.83	54.00	7.17	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.









: 3m Chamber Site no. Data no.: 25

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

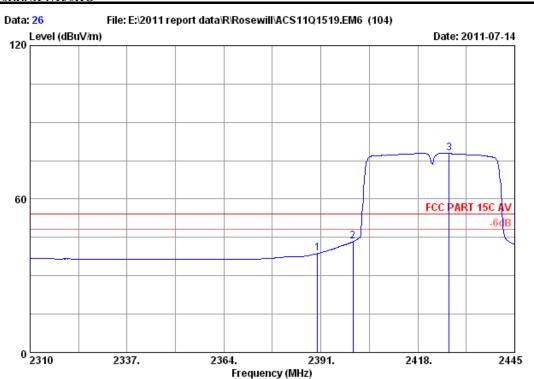
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH1 2422MHz

	-	Factor	loss		Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
_	2379.525				49.45	50.29	74.00		Peak
2	2390.000	28.46	8.41	36.09	53.07	53.85	74.00	20.15	Peak
3	2400.000	28.46	8.60	36.09	68.99	69.96	74.00	4.04	Peak
4	2415.030	28.48	8.60	35.95	89.59	90.72	74.00 -	16.72	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 26

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

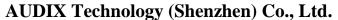
Env. / Ins. : 23 *C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

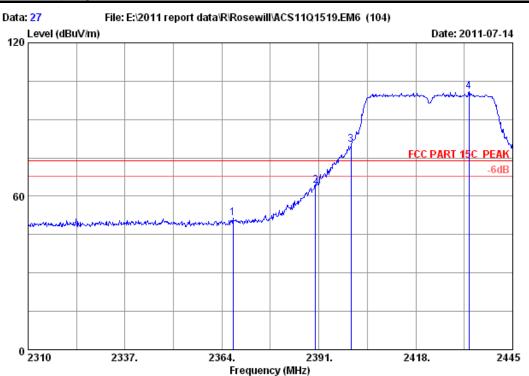
M/N : RNX-N150HG

	Ant.	Cable Amp.		Emission		
	Freq. Factor	loss Factor	Reading	Level	Limits Margin	Remark
	(MHz) (dB/m)	(dB) (dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2390.000 28.46	8.41 36.09	37.89	38.67	54.00 15.33	Average
2	2400.000 28.46	8.60 36.09	42.45	43.42	54.00 10.58	Average
3	2426.775 28.50	8.60 36.01	76.85	77.94	54.00 -23.94	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







Site no. : 3m Chamber Data no.: 27

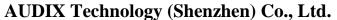
Dis. / Ant. : 3m 3115 (0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

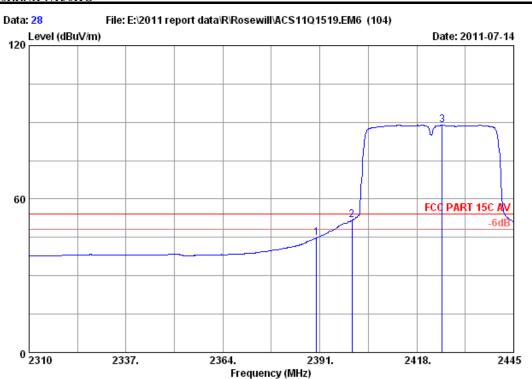
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH1 2422MHz

•		loss		Reading (dBuV)			Margin	Remark	
1 2367.10 2 2390.00 3 2400.00 4 2432.85	0 28.46 0 28.46	8.41 8.60	36.09 36.09	50.69 63.26 79.18 99.75	51.63 64.04 80.15 100.84	74.00 74.00	22.37 9.96 -6.15 -26.84	Peak Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 28
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

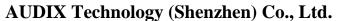
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : RNX-N150HG

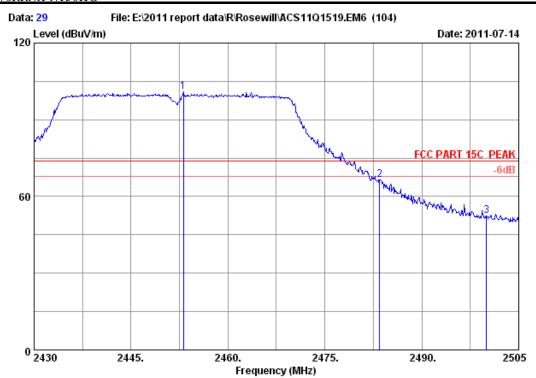
	Ant.	Cable Amp		Emission			
	Freq. Factor	loss Fact	or Reading	Level	Limits	Margin	Remark
	(MHz) (dB/m)	(dB) (dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2390.000 28.46	8.41 36.0	9 44.03	44.81	54.00	9.19	Average
2	2400.000 28.46	8.60 36.0	9 50.70	51.67	54.00	2.33	Average
3	2425.020 28.50	8.60 36.0	1 87.99	89.08	54.00	-35.08	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 29

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

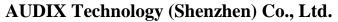
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : RNX-N150HG

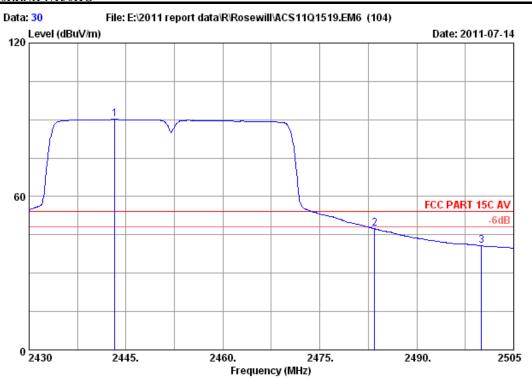
	Iz) (dB/m)	(dB)		_		Limits Margin (dBuV/m) (dB)	NCMOL K	
2 2483.	100 28.53 500 28.58 000 28.60	8.94	35.97	99.88 65.03 50.98	100.83 66.58 52.47	74.00 -26.83 74.00 7.42 74.00 21.53	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





FCC ID:W6RRNX-N150HG



Site no. : 3m Chamber Data no. : 30

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

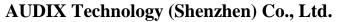
Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter
Power : DC 5V From PC Input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH7 2452MHz

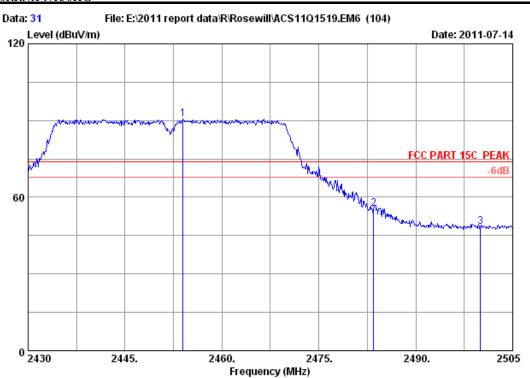
M/N : RNX-N150HG

	Ant. q. Factor z) (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
2 2483.	275 28.53 500 28.58 000 28.60	8.94	35.97	89.22 45.79 39.23	90.17 47.34 40.72	54.00 -36.17 54.00 6.66 54.00 13.28	Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



FCC ID:W6RRNX-N150HG



: 3m Chamber Site no. Data no. : 31

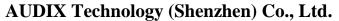
Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Leo-Li

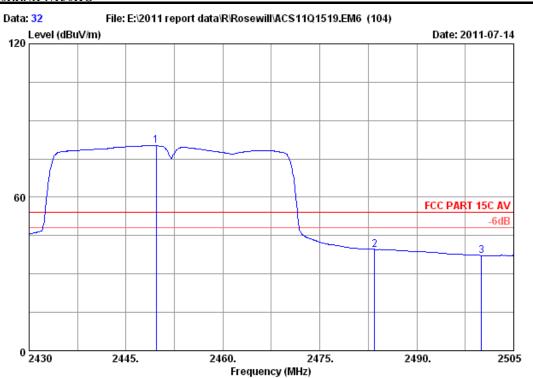
EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH7 2452MHz

	Freq. Factor	loss		_		Limits Margin (dBuV/m) (dB)	Remark
2	2454.000 28.55 2483.500 28.58 2500.000 28.60	8.94	35.97	89.47 53.99 46.88	90.48 55.54 48.37	74.00 -16.48 74.00 18.46 74.00 25.63	Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.







: 3m Chamber Site no. Data no.: 32

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV Env. / Ins. : 23*C/54% Engineer : Leo-Li

EUT : Wireless High Gain USB Adapter : DC 5V From PC Input AC 120V/60Hz Power Test mode : IEEE802.11n HT40 CH7 2452MHz

					Limits Margin (dBuV/m) (dB)	Remark
1	2449.650 28.53	8.48 36.06	79.23	80.18	54.00 -26.18	Average
2	2483.500 28.58	8.94 35.97	38.05	39.60	54.00 14.40	Average
3	2500.000 28.60	8.89 36.00	35.77	37.26	54.00 16.74	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



7. 6dB Bandwidth Test

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

7.2.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

7.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

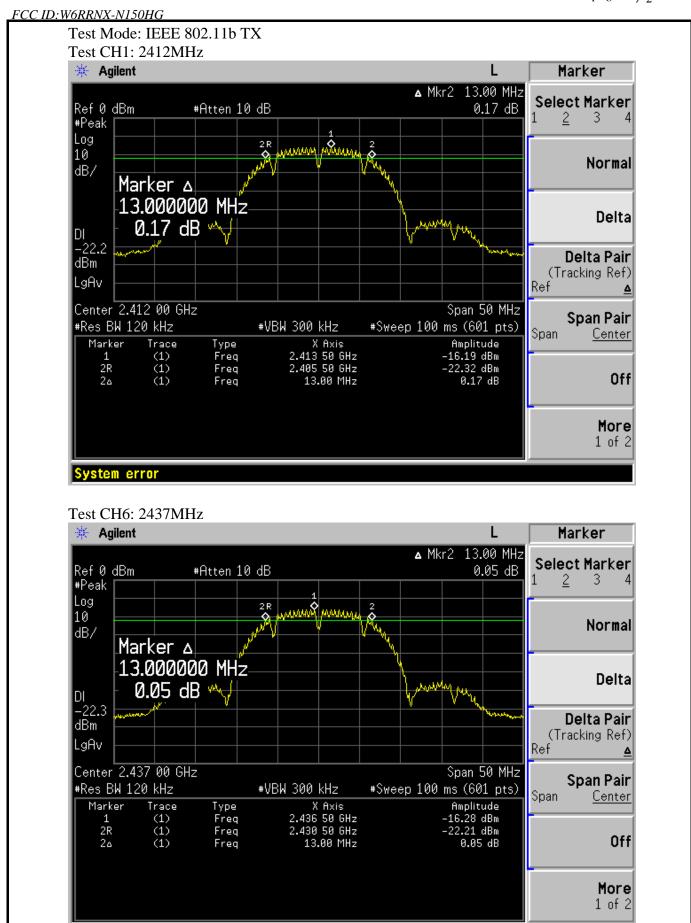
7.4.Test Results

EUT: Wireless High Gain USB Adapter							
M/N: RNX-N150HG							
Test date:2011-07-17	Pressure: 101.5kpa	Humidity: 55%					
Tested by: Leo-Li	Test site: RF Site	Temperature : 25 °C					

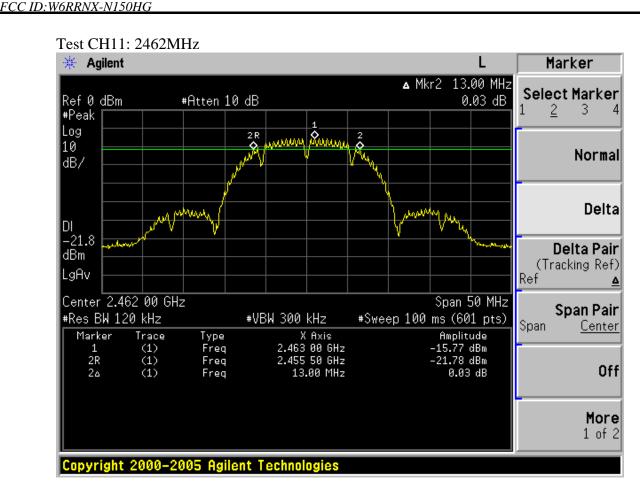
Cable loss: 1 dB		Attenuator loss: 20 dB					
Test Mode	СН	6dB bandwidth (MHz)	Limit (KHz)				
	CH1	13.00	>500				
11b	СН6	13.00	>500				
	CH11	13.00	>500				
	CH1	16.50	>500				
11g	СН6	16.50	>500				
	CH11	16.50	>500				
4.4	CH1	17.67	>500				
11n HT20	СН6	17.67	>500				
11120	CH11	17.67	>500				
	CH1	36.12	>500				
11n HT40	CH4	36.48	>500				
11140	CH7	36.30	>500				
Conclusion: PASS							



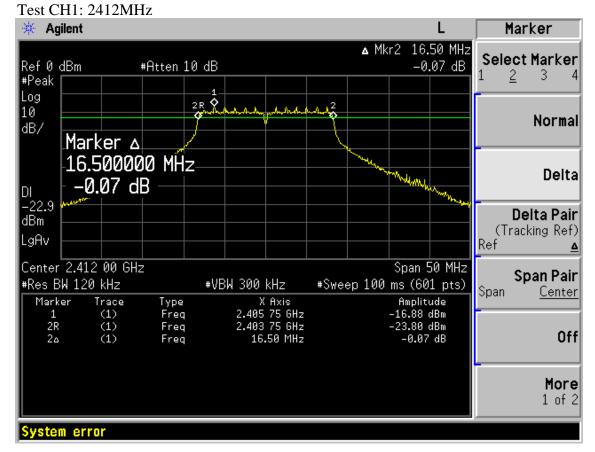
System error



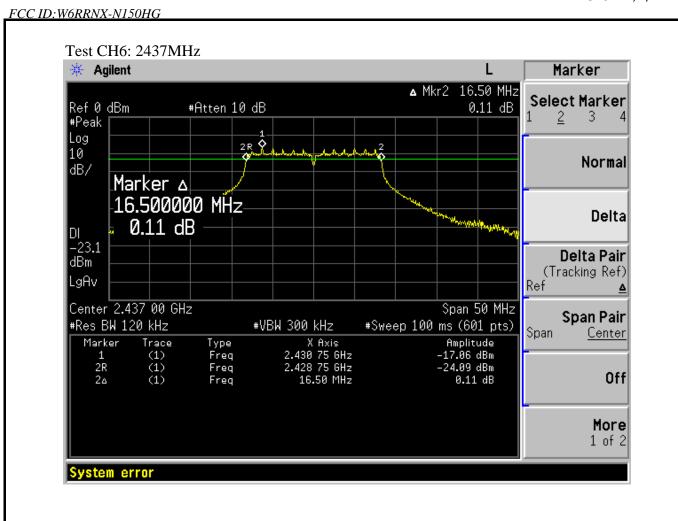


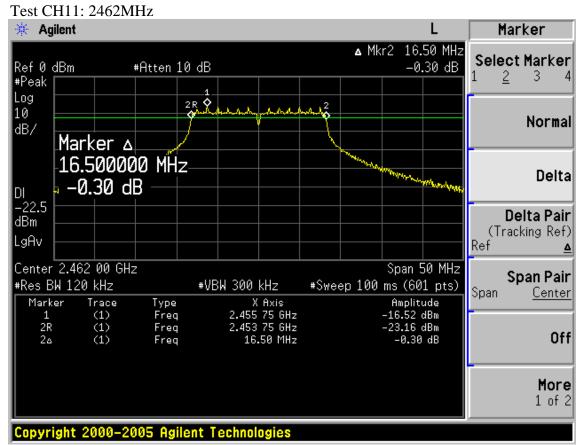


Test Mode: IEEE 802.11g TX



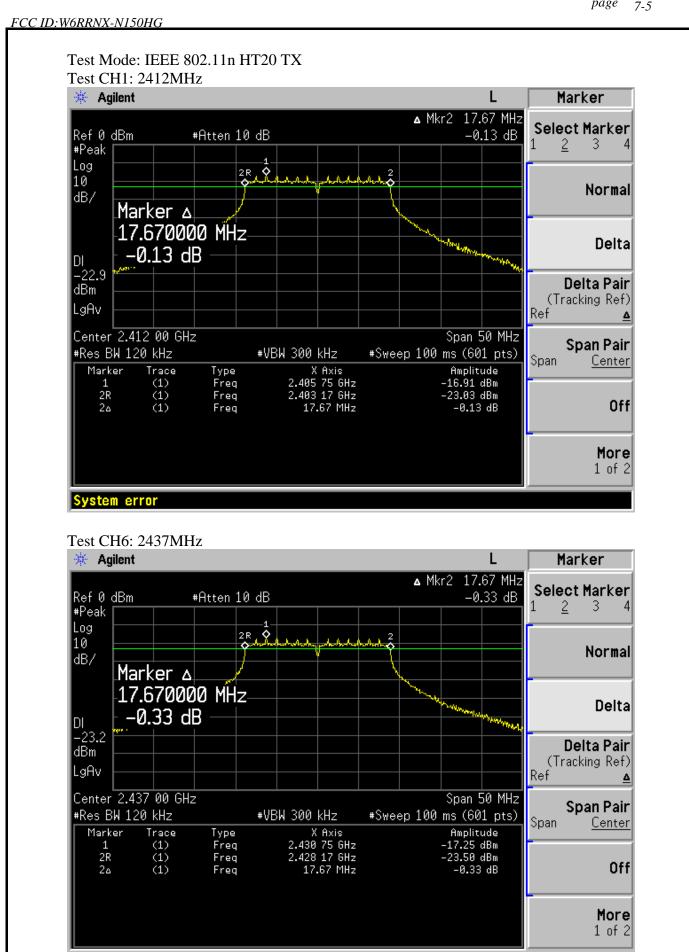




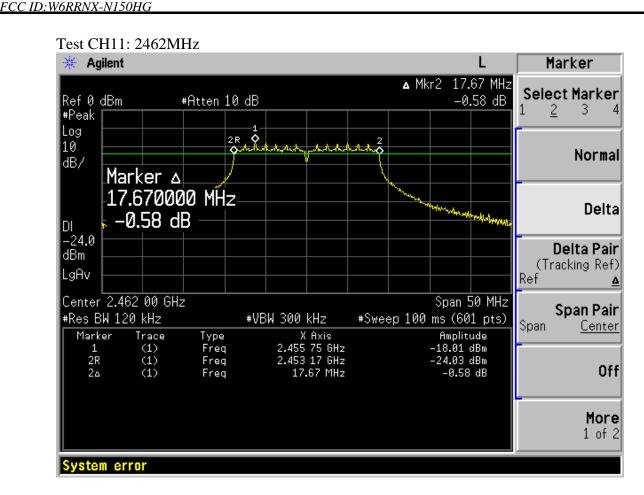




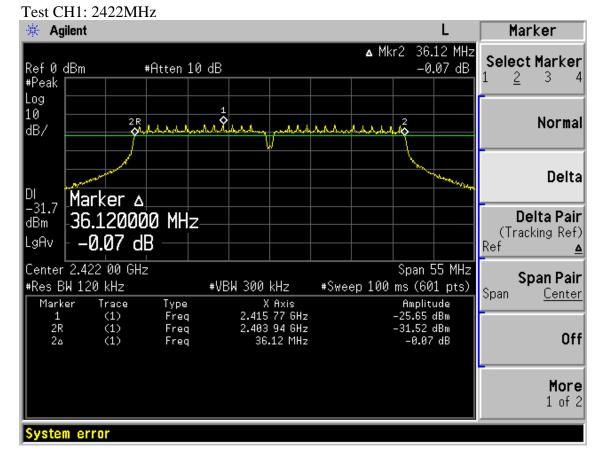
System error



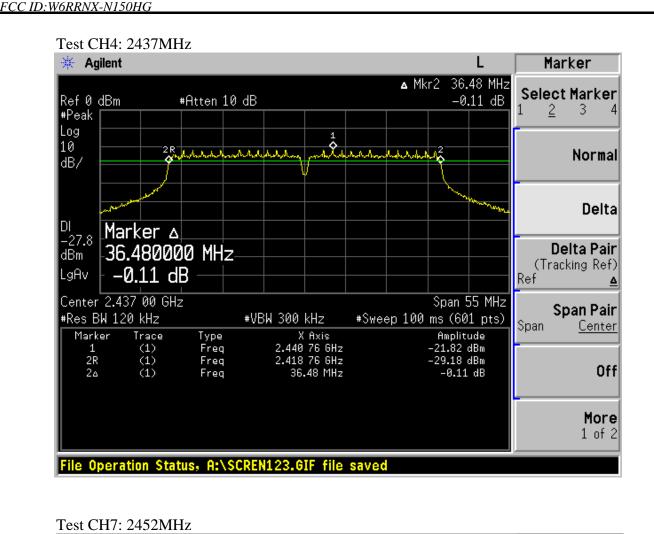


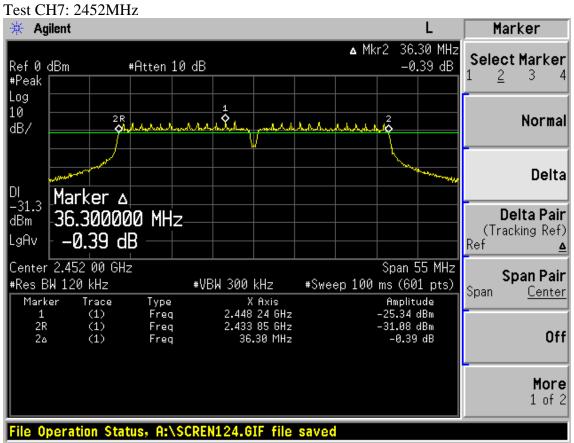


Test Mode: IEEE 802.11n HT40 TX











8. OUTPUT POWER TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power meter	Anritsu	ML2487A	6K00002472	May.08,11	1Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,11	1Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

8.2.Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

8.3.Test Procedure

- 1, Connected the EUT's antenna port to measure device by 20dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 6dB bandwidth of signal to measure out each test modes' PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
 - 1) Set the RBW=3MHz and VBW =8MHz
 - 2) Turn averaging off
 - 3) Set sweep to automatic
 - 4) Set the span just large enough to capture the emission
 - 5) Use a peak detector on max hold
 - 6) Record the measured power
 - 7) Calculate Output power of EUT use the formula:

Peak output power = measured power+ 10log[(6dB bandwidth of emission)/(analyzer RBW)]

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

30

30

30

30

30

30

30



11g

11n

HT20

FCC ID:W6RRNX-N150HG

8.4.Test Results

EUT: Wir	eless High Gain USB	Adapter							
M/N: RN	X-N150HG								
Test date: 2011-07-17		Pressur	re: 101.3 kpa	Humidity: 57 %					
Tested by: Leo-Li		Test site: RF site		Temperature: 24.8 °C					
Cable loss: 0.6 dB			Attenuator loss: 20 dB						
Test Mode			Peak output Power (dBm)	Limit (dBm)					
	CH1		17.84	30					
11b	11b CH6		17.76	30					

18.06

22.31

22.37

21.15

18.35

21.89

18.70

		F	Result	Limit
Test Mode	СН	Measured power(dBm)/3MHz	PK Output power (dBm)	(dBm)
11n	CH1	6.00	16.85	30
HT40	CH4	9.82	20.67	30
	CH7	6.86	17.71	30

6dB Bandwidth for 11n HT40: 36.48MHz

CH11

CH1

CH6

CH11

CH1

CH6

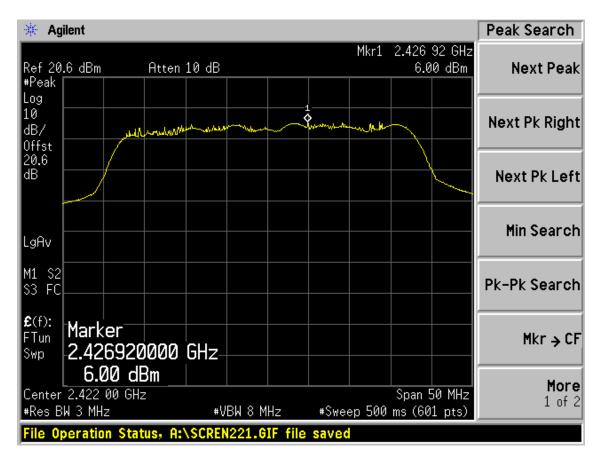
CH11

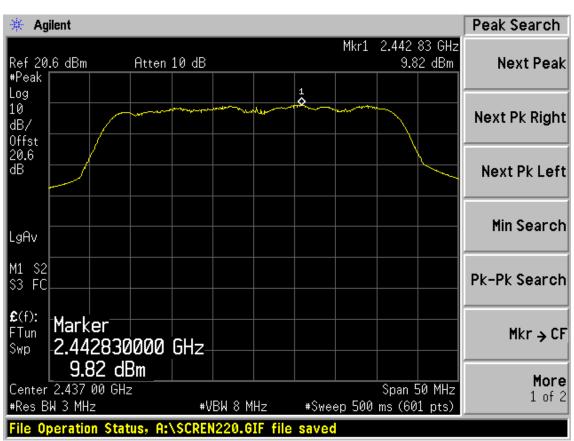
BW correction factor = $\overline{10\log[(36.48\text{MHz})/(3\text{MHz})]} = 10.85\text{dB}$

Conclusion: PASS

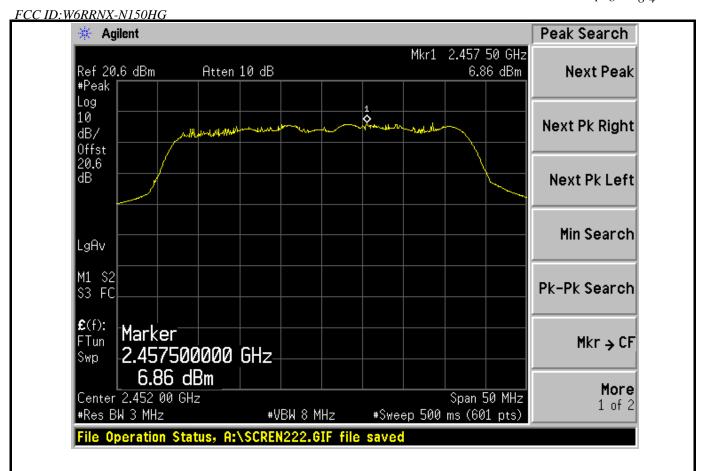








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page 9-1

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 11	1Year

9.2.Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

9.3.Test Procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 3kHz RBW and 30kHz VBW, sweep time=span/3kHz.



9.4.Test Results

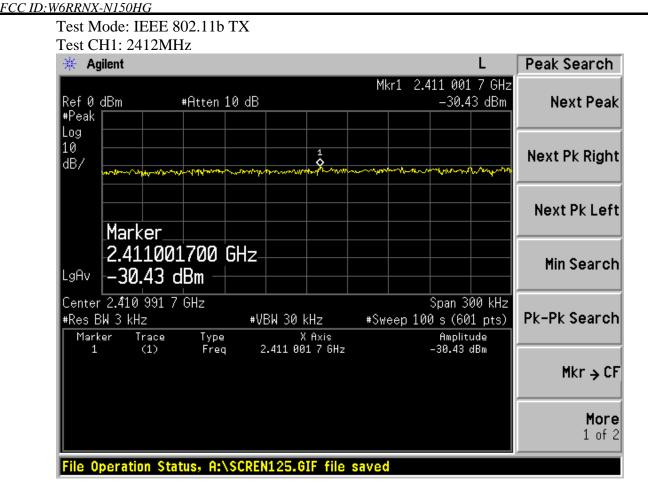
EUT: Wire	less High C	Gain USB Ad	apter M/	N: RNX-N15	50HG			
Power: DC	5V From I	PC input AC	120V/60Hz					
Data Rate: 1	11b: 1Mbps	s; 11g: 6Ml	ops 11n H	T20: 6.5Mb	ps 11n H	T40: 13.5Mbp	os (Note 1)	
Ambient Temperature:23°C Relative Humidity: 60%								
Test date:2011-07-03 Test site: RF site Tested By: Leo-Li								
Test CH	11b 11g 11	n HT20	CH1:2412N	MHz CH6:2	2437MHz	CH11:2462MI	Hz	
Test CH	11n HT40		CH1:2422N	MHz CH4:2	2437MHz	CH7:2452MH	Z	
Mode	СН	Read(dBm)	Cable loss (dB)	Attenuator (dB)	Result (dBm)	Limit(dBm)	Conclusion	
	CH1	-30.43	0.6	20.0	-9.83	8.00	Pass	
11b	СН6	-34.09	0.6	20.0	-13.49	8.00	Pass	
	CH11	-32.27	0.6	20.0	-11.67	8.00	Pass	
	CH1	-31.35	0.6	20.0	-10.75	8.00	Pass	
11g	СН6	-32.22	0.6	20.0	-11.62	8.00	Pass	
	CH11	-33.41	0.6	20.0	-12.81	8.00	Pass	
	CH1	-35.37	0.6	20.0	-14.77	8.00	Pass	
11n HT20	СН6	-31.16	0.6	20.0	-10.56	8.00	Pass	
	CH11	-34.14	0.6	20.0	-13.54	8.00	Pass	
11n HT40	CH1	-40.76	0.6	20.0	-20.16	8.00	Pass	
	CH4	-34.81	0.6	20.0	-14.21	8.00	Pass	
	СН7	-38.42	0.6	20.0	-17.82	8.00	Pass	

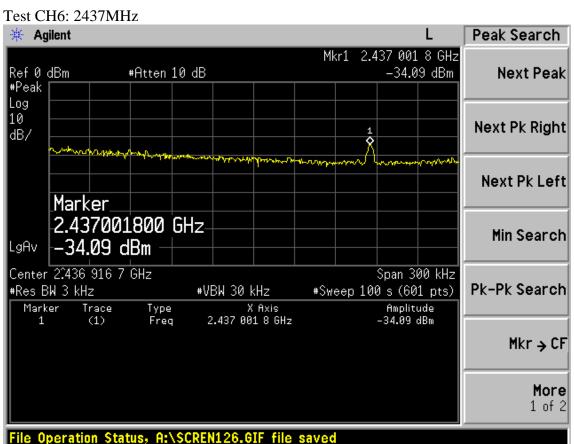
Note1:According Exploratory test, These data rate have the maximum output power

Note2:Result=Read+Cable loss+Attenuator



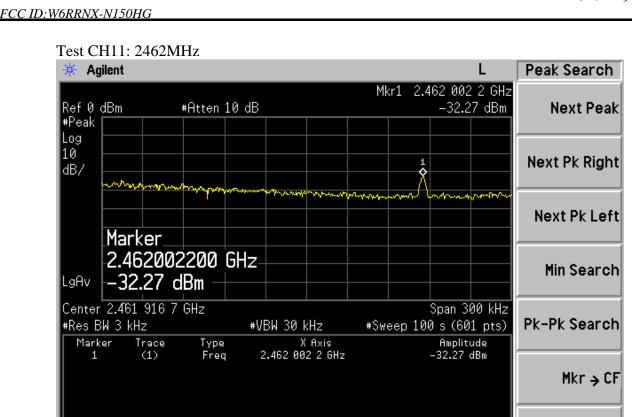






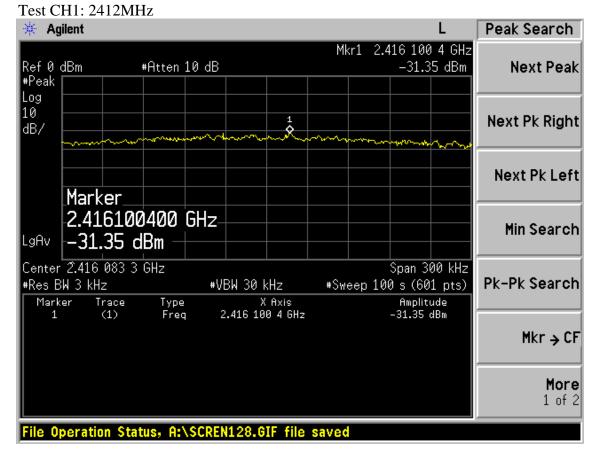
More 1 of 2



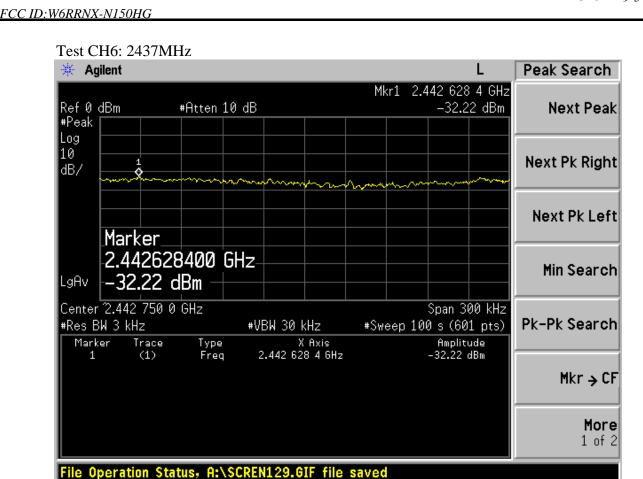


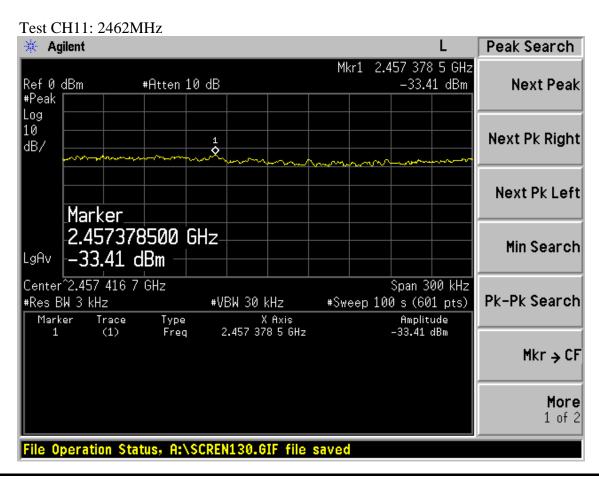
Test Mode: IEEE 802.11g TX

File Operation Status, A:\SCREN127.GIF file saved





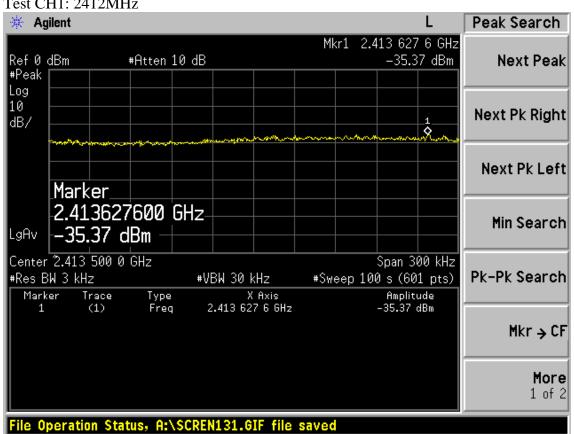




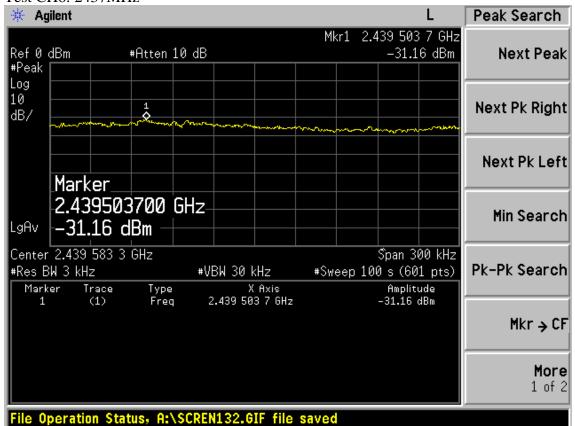




Test CH1: 2412MHz

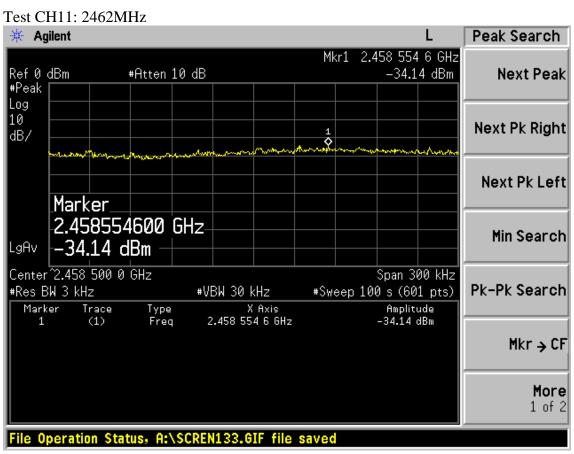


Test CH6: 2437MHz



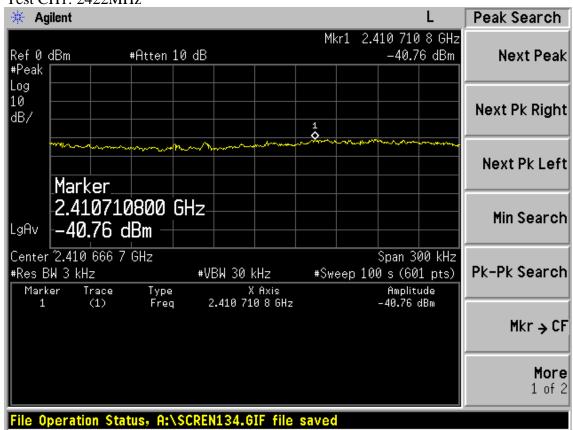




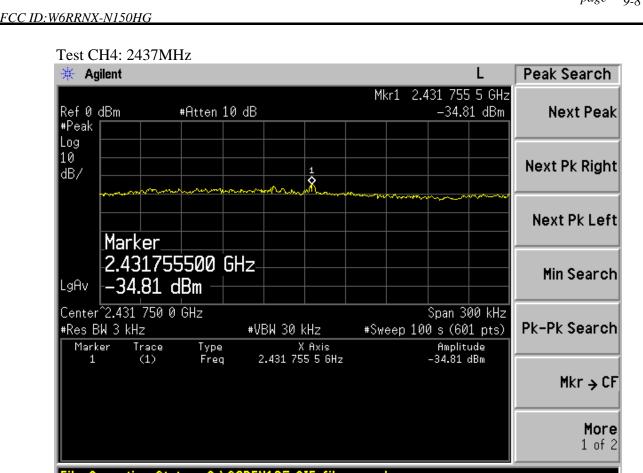


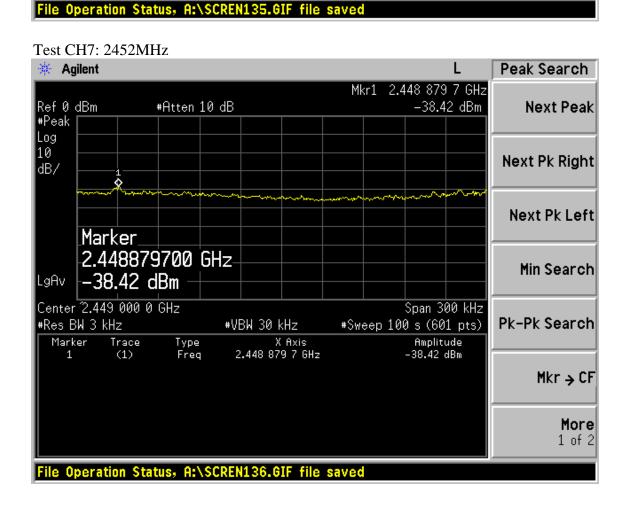
Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz













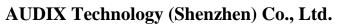
10. ANTENNA REQUIREMENT

10.1. STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product is integrated PCB antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 0dBi.





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FCC ID:W6RRNX-N150HG				
11.DEVIATION	N TO TEST SPI	ECIFICATI(DNS	
[NONE]				