

FCC Radio Test Report FCC ID: V7TUH151

This report concerns (check one): Original Grant Class II Change

Issued Date : Dec. 18, 2013 **Project No.** : 1307C119-1-r1

Equipment: High Power Wireless N150 USB Adapter

Model Name : UH150; UH151

Applicant: SHENZHEN TENDA TECHNOLOGY

CO.,LTD.

Address: Tenda Industrial Park, No.34-1, Shilong

Rd, Shiyan Town, Bao'an District, Shenzhen, P.R. China 518108

Tested by: Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Jul. 11, 2013

Date of Test: Jul. 11, 2013~ Aug. 13, 2013

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Declaration

Neutron represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

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For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FCCP-1-1307C119-1	Original Issue.	Dec. 11, 2013
NIEI_E(Both test results of peak and average output	Dec. 18, 2013
NEI-1 COI -1-1307 C 119-1-11	power have been added to the report	Dec. 10, 2013

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1. CERTIFICATION

Equipment : High Power Wireless N150 USB Adapter

Brand Name: Tenda

Model Name: UH150; UH151

Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD. Manufacturer : SHENZHEN TENDA TECHNOLOGY CO.,LTD.

Address : Tenda Industrial Park, No.34-1, Shilong Rd, Shiyan Town, Bao'an District,

Shenzhen, P.R. China 518108

Factory : SHENZHEN TENDA TECHNOLOGY CO.,LTD.

Address : Tenda Industrial Park, No.34-1, Shilong Rd, Shiyan Town, Bao'an District,

Shenzhen, P.R. China 518108

Date of Test : Jul. 11, 2013~ Aug. 13, 2013
Test Item : ENGINEERING SAMPLE

Standard(s): FCC Part15(2012), Subpart C(15.247) / ANSI C63.4-2009

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1307C119-1) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

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2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC P	art15 (15.247) , Subpart C		
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
15.209/15.205	Transmitter Radiated Emissions	PASS	

NOTE:

- (1)" N/A" denotes test is not applicable in this test report.
- (2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r01 (Measurement Guidelines of DTS)

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2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792 Neutron's test firm number is 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

A. Conducted Measurement:

Te	st Site	Method	Measurement Frequency Range	U, (dB)	NOTE
DO	G-C02	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	y Ant. H / V U , (dB) NOTE		
		9K~30MHz	V	3.79	
		9K~30MHz	Н	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.86	
DG-CB03	CISER	200MHz ~ 1,000MHz	Н	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Н	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	Н	4.14	

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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	High Power Wireless N150 USB Adapter				
Brand Name	Tenda				
Model Name	UH150; UH151				
Model Difference	UH150 with detachable antenna, UH151 with non-detachable antenna, the rest are the same.				
	Operation Frequency	2412~2462 MHz			
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM			
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 150 Mbps			
	Number Of Channel	11 CH, Please see note 2.(Page 9)			
Product Description	Antenna Designation Antenna Gain(Peak)	Please see note 3.(Page 9)			
	Peak Output Power (Max.)	802.11b: 20.40 dBm 802.11g: 23.70 dBm 802.11n(20MHz):23.80 dBm 802.11n(40MHz):19.50 dBm			
	AVG Output Power (Max)	802.11b: 17.56 dBm 802.11g: 14.62 dBm 802.11n(20MHz):14.80 dBm 802.11n(40MHz):10.50 dBm			
	More details of EUT technical specification, please refer to the User's Manual.				
Power Source	Supplied from USB port.				
Power Rating	I/P: AC 120V/60Hz O/P: DC 5V 0.5A				
Connecting I/O Port(s)	Please refer to the User's Manual				

Note:

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

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2. CH 01 – CH 11 for 802.11b, 802.11g, 802.11n(20MHz) CH 03 – CH 09 for 802.11n(40MHz)

Channel List

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	80	2447	11	2462
03	2422	06	2437	09	2452		

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
Α	Tenda	50000967	Dipole	SMA	4.94	Detachable antenna for model UH150
В	Tenda	50000966	Dipole	N/A	4.94	Non-detachable antenna for model UH151

Note: The antenna of EUT could be rotated, but the Antenna Polarity vertical is max.

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3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test		
Final Test Mode	Description	
Mode 5	TX Mode	

For Radiated Test				
Final Test Mode	Description			
Mode 1	TX B MODE CHANNEL 01/06/11			
Mode 2	TX G MODE CHANNEL 01/06/11			
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11			
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09			

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)

802.11g mode: OFDM (6Mbps)

802.11n HT20 mode : BPSK (6.5Mbps) 802.11n HT40 mode : BPSK (13.5Mbps)

For radiated emission tests, the highest output powers were set for final test.

- (3) The EUT was pre-tested on positioned of each 3 axis. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.
- (4) UH150 with detachable antenna is the worst case and include in the test report.
- (5) For radiated below 1G test, the 802.11b mode is found to be the worst case and recorded.

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3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	RT3x7xQA		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b DSSS	00	00	00
IEEE 802.11g OFDM	00	00	00

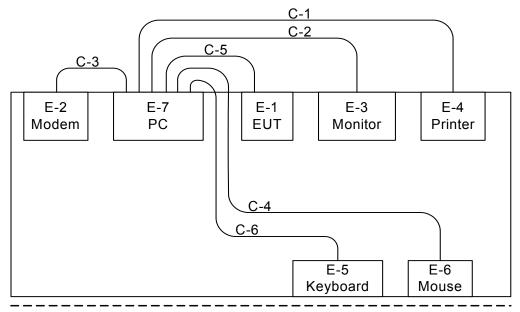
Test software version		RT3x7xQA	
Frequency (MHz)	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11n (20MHz)	00	00	00
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz
IEEE 802.11n (40MHz)	00	00	00

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3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Mode:



Control Room

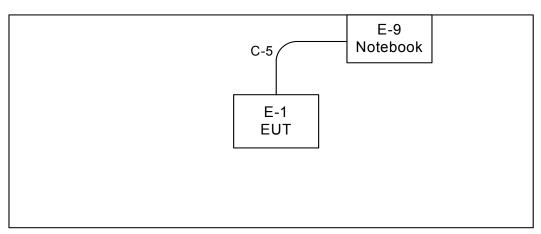
C-1: Parallel Cable C-2: D-Sub Cable

C-3: RS232 Cable C-4: USB Cable C-5: USB Cable C-6: USB Cable

E-8

Router

Radiated TX Mode:



C-5: USB Cable

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3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	High Power Wireless N150 USB Adapter	Tenda	UH150	V7TUH151	N/A	EUT
E-2	Modem	ACEEX	DM-1414V	IFAXDM1414	0603002131	
E-3	LCD monitor	DELL	E177FPc	DOC	CNOFJ179-64180-6 AG-1WNS	
E-4	Printer	SII	DPU-414	DOC	3018507 B	
E-5	USB Keyboard	DELL	SK-8115	DOC	MY-0DJ325-71619- 77N-1526	
E-6	USB Mouse	DELL	MO56UC	DOC	G0R000XN	
E-7	PC	DELL	745	DOC	G7K832X	
E-8	Router	Net.Core	NW705S	DOC	NA	_
E-9	NOTEBOOK	DELL	INSPIRON 1420	DOC	JX193A01SDC2	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	ОИ	1.5m	
C-2	YES	YES	1.5m	
C-3	YES	NO	0.9m	
C-4	YES	NO	1.5m	
C-5	YES	NO	0.8m	
C-6	YES	YES	1.8m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in m in <code>[Length]</code> column.

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4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A	(dBuV)	Class B	(dBuV)	Standard
PREQUENCT (MINZ)	Quasi-peak	Average	Quasi-peak	Average	Statiuatu
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	LISN	EMCO	3816/2	00052765	May.04.2013	Apr. 25, 2014
2	LISN	R&S	ENV216	100087	Nov.17.2012	Nov.16.2013
3	Test Cable	N/A	C_17	N/A	Mar.28.2013	Mar.15.2014
4	EMI TEST RECEIVER	R&S	ESCS30	826547/02 2	May.04.2013	Apr. 25, 2014
5	50Ω Terminator	SHX	TF2-3G-A	08122902	May.04.2013	Apr. 25, 2014

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

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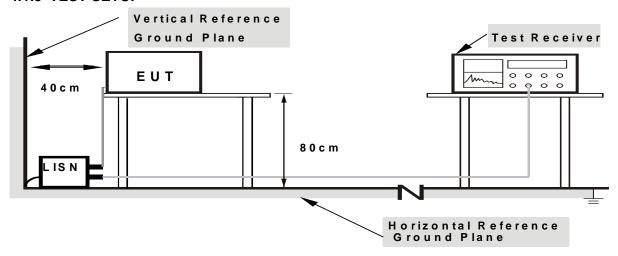
4.1.3 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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The EUT was programmed to be in continuously transmitting mode.

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4.1.7 TEST RESULTS

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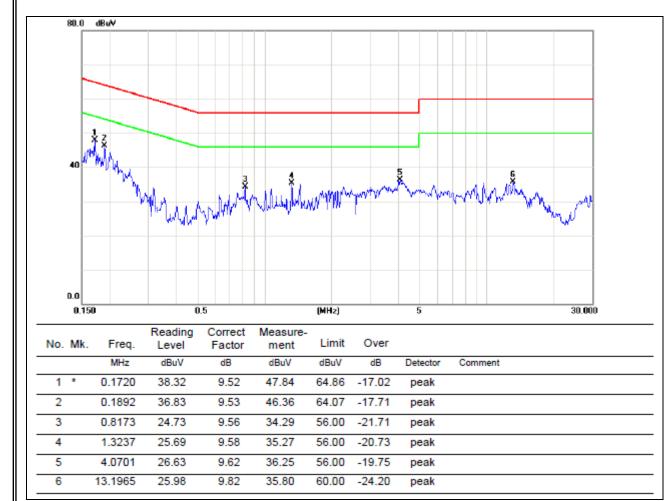
(1) All readings are QP Mode value unless otherwise stated AVG in column of Note. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform on this case, a " * " marked in AVG Mode column of Interference Voltage Measured on the Note of

	((2)	Measuring	frequency	y range from	150KHz to	30MHz.
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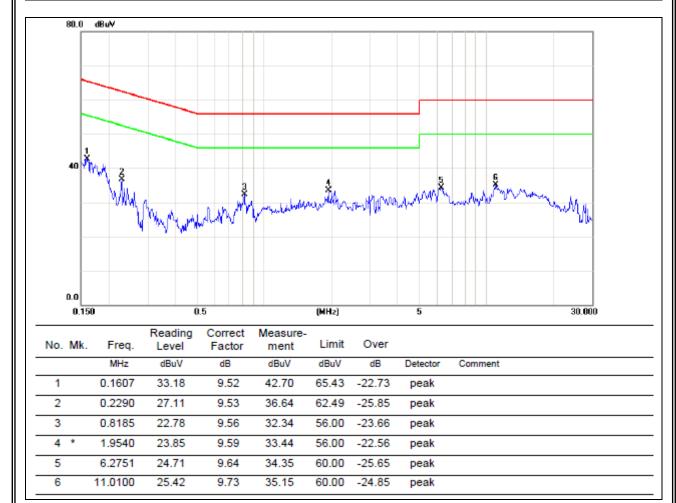


HILLI.	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode		





IEIII'	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode :	TX Mode		



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9KHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a) & RSS-210 section 2.2&A8.5, then the 15.209(a)& RSS-Gen limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

EDEOLIENCY (MH-)	(dBuV/m) (at 3m)		
FREQUENCY (MHz)	PEAK	AVERAGE	
Above 1000	74	54	

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

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4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Antenna	Schwarbeck	VULB9160	9160-3232	May.25.2013	Apr. 25, 2014
2	Amplifier	HP	8447D	2944A09673	May.04.2013	Apr. 25, 2014
3	Test Receiver	R&S	ESCI	100382	May.04.2013	Apr. 25, 2014
4	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2012	Jul. 02, 2014
5	Antenna	ETS	3115	00075789	May.25.2013	Apr. 25, 2014
6	Amplifier	Agilent	8449B	3008A02274	May.04.2013	Apr. 25, 2014
7	Spectrum	Agilent	E4408B	US39240143	Nov.24.2012	Nov. 16.2013
8	Test Cable	HUBER+SUH NER	C-45	N/A	May.02.2013	Apr. 30, 2014
9	Controller	CT	SC100	N/A	N/A	N/A
10	Horn Antenna	EMCO	3115	9605-4803	May.25.2013	Apr. 25, 2014
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	May.04.2013	Apr. 25, 2014
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct.13.2012	Oct.12.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

Spectrum Parameter	Setting				
Attenuation	Auto				
Start Frequency	1000 MHz				
Stop Frequency	10th carrier harmonic				
RB / VB	AND I AND I for Dook A MI I AND I for Average				
(Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average				

Receiver Parameter	Setting			
Attenuation	Auto			
Start ~ Stop Frequency	9kHz~90kHz for PK/AVG detector			
Start ~ Stop Frequency	90kHz~110kHz for QP detector			
Start ~ Stop Frequency	110kHz~490kHz for PK/AVG detector			
Start ~ Stop Frequency	490kHz~30MHz for QP detector			
Start ~ Stop Frequency	30MHz~1000MHz for QP detector			

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4.2.3 TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

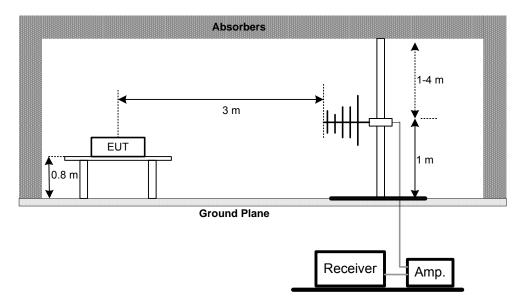
4.2.4 DEVIATION FROM TEST STANDARDNo deviation

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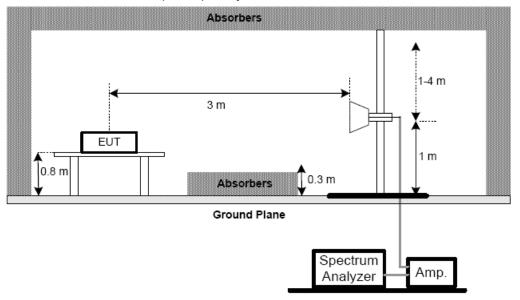


4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



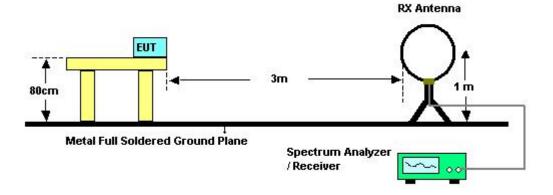
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



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(C) For radiated emissions below 30MHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

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4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

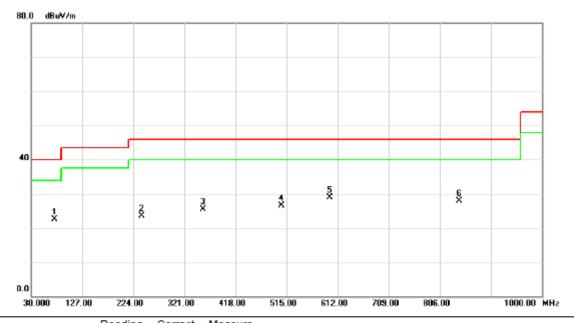
Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = $0.3 \text{ sec./MHz} \circ$
- (2) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (3) Measuring frequency range from 30MHz to 1000MHz o
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table \circ

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	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 01		

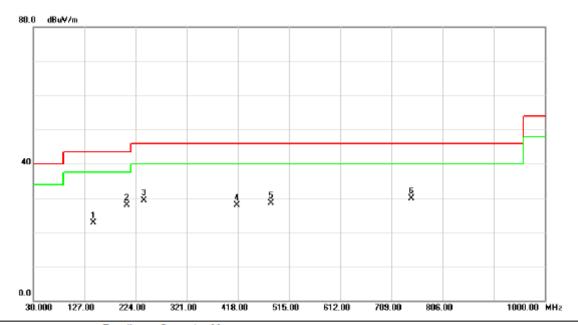


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		74.6645	41.52	-18.93	22.59	40.00	-17.41	peak	
2	- :	240.7007	39.19	-15.66	23.53	46.00	-22.47	peak	
3	;	356.2461	36.78	-11.32	25.46	46.00	-20.54	peak	
4	;	504.8048	34.73	-8.22	26.51	46.00	-19.49	peak	
5	* (597.0470	34.39	-5.57	28.82	46.00	-17.18	peak	
6	(842.7027	30.72	-2.85	27.87	46.00	-18.13	peak	

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	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 01		

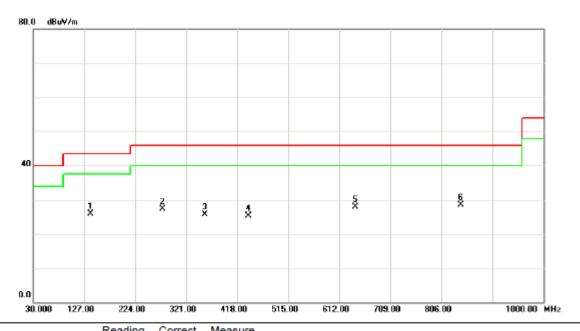


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		144.5745	40.64	-17.92	22.72	43.50	-20.78	peak	
2	*	207.6876	44.64	-16.80	27.84	43.50	-15.66	peak	
3		240.7007	45.06	-15.66	29.40	46.00	-16.60	peak	
4		415.4753	37.44	-9.56	27.88	46.00	-18.12	peak	
5		480.5305	37.20	-8.63	28.57	46.00	-17.43	peak	
6		747.5475	34.12	-4.25	29.87	46.00	-16.13	peak	

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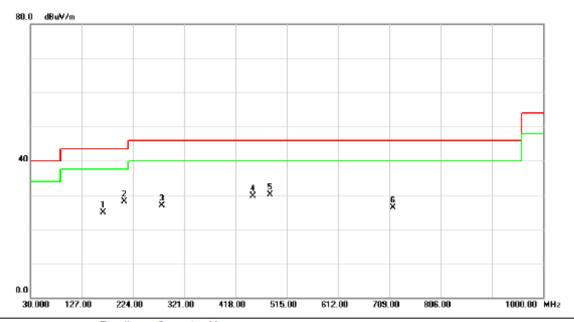
F() 1	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 06		



No.	Mk	. Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		139.7196	43.90	-18.01	25.89	43.50	-17.61	peak	
2		276.6265	40.76	-13.39	27.37	46.00	-18.63	peak	
3		356.2461	36.94	-11.32	25.62	46.00	-20.38	peak	
4		438.7787	34.49	-9.19	25.30	46.00	-20.70	peak	
5		642.6825	32.64	-4.79	27.85	46.00	-18.15	peak	
6	*	842.7027	31.38	-2.85	28.53	46.00	-17.47	peak	

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	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 06		

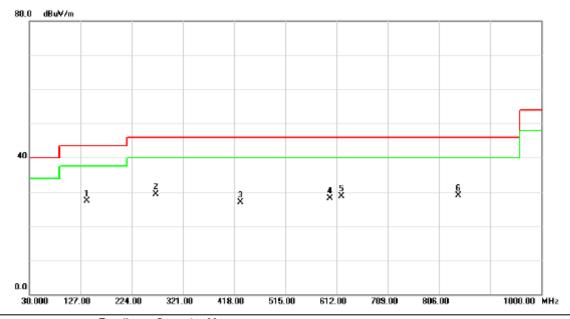


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		167.8778	42.65	-17.69	24.96	43.50	-18.54	peak	
2	*	207.6876	44.92	-16.80	28.12	43.50	-15.38	peak	
3		278.5683	40.12	-13.26	26.86	46.00	-19.14	peak	
4		451.4014	38.66	-8.98	29.68	46.00	-16.32	peak	
5		483.4433	38.67	-8.60	30.07	46.00	-15.93	peak	
6		715.5054	30.74	-4.53	26.21	46.00	-19.79	peak	

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	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 11		

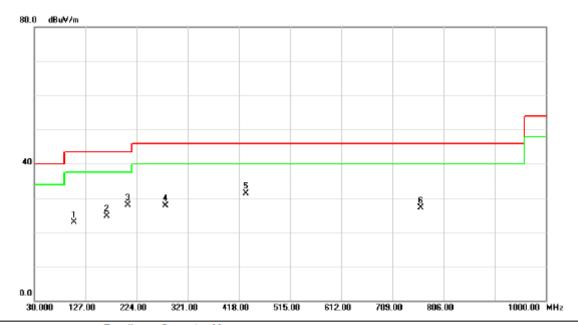


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	138.7487	45.30	-18.04	27.26	43.50	-16.24	peak	
2		269.8297	43.16	-13.83	29.33	46.00	-16.67	peak	
3		430.0400	36.32	-9.33	26.99	46.00	-19.01	peak	
4		599.9600	33.65	-5.50	28.15	46.00	-17.85	peak	
5		622.2921	33.91	-5.12	28.79	46.00	-17.21	peak	
6		842.7027	31.74	-2.85	28.89	46.00	-17.11	peak	

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	High Power Wireless N150 USB Adapter	Model Name:	UH150
Temperature:	24 ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 11		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		105.7356	41.49	-18.63	22.86	43.50	-20.64	peak	
2		167.8778	42.44	-17.69	24.75	43.50	-18.75	peak	
3		207.6876	44.71	-16.80	27.91	43.50	-15.59	peak	
4		278.5683	40.91	-13.26	27.65	46.00	-18.35	peak	
5	*	431.9820	40.55	-9.30	31.25	46.00	-14.75	peak	
6		763.0830	31.26	-4.08	27.18	46.00	-18.82	peak	

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4.2.8 TEST RESULTS (ABOVE 1000 MHZ)

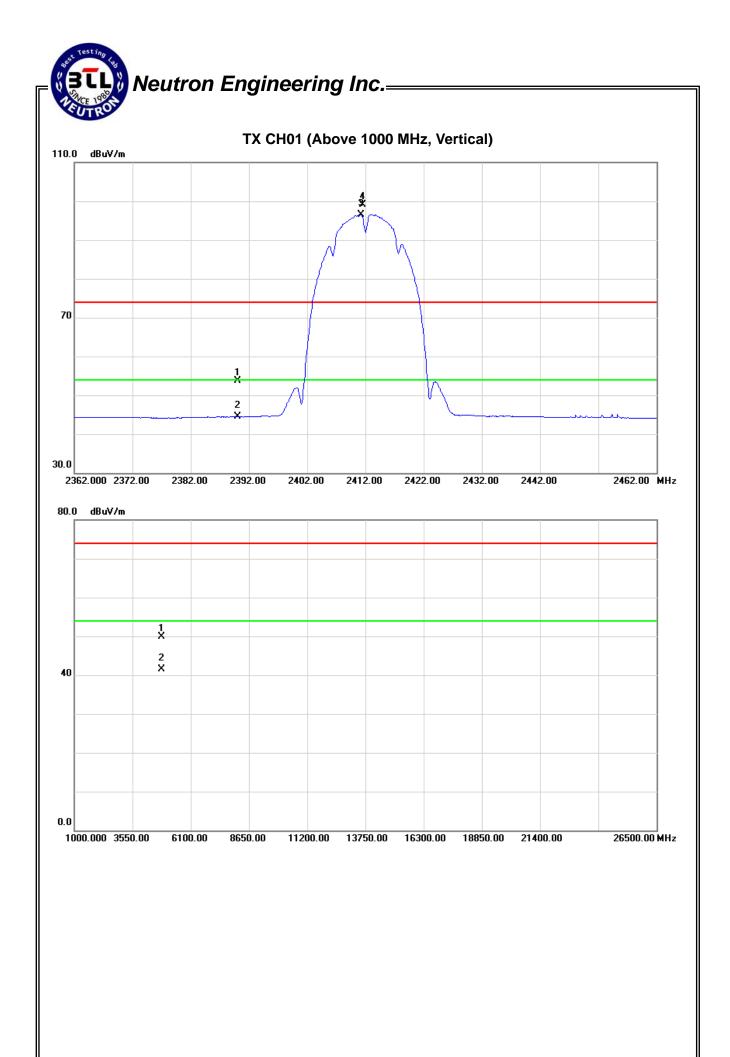
EUT:	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Liı	mit	
1 164.	AILI OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	21.44	12.15	32.28	53.72	44.43	74.00	54.00	X/E
2411.50	V	66.82	64.33	32.26	99.08	96.59			X/F
4823.90	V	43.80	35.41	6.19	49.99	41.60	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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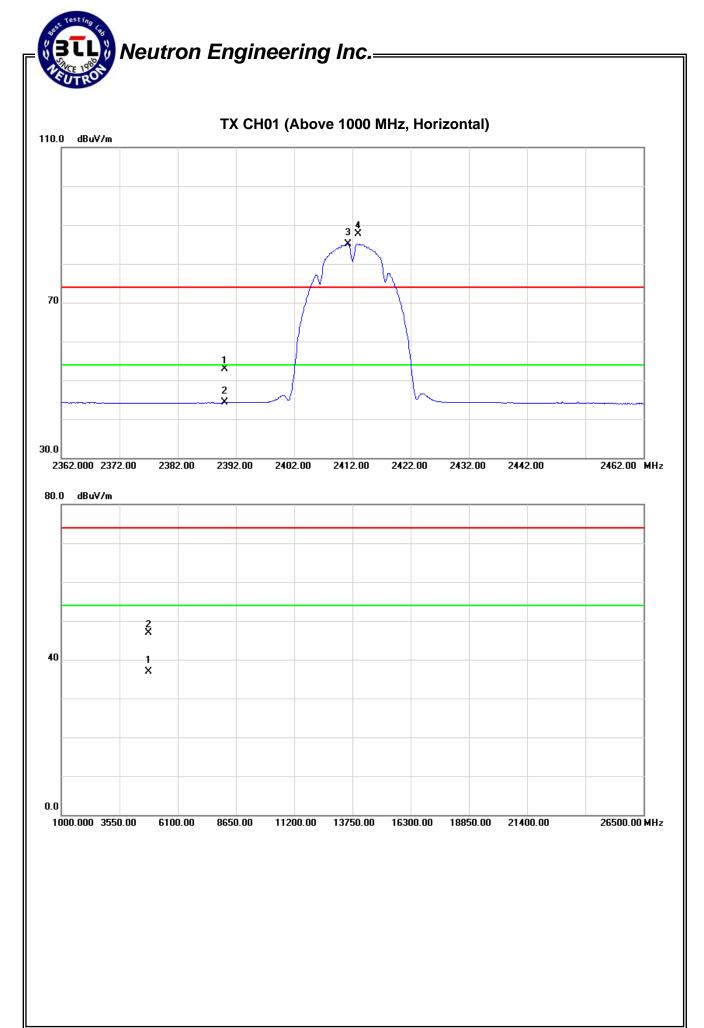
HUI.	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq.	Ant.Pol. Reading		ding	Ant./CF	Act.		Lir		
1 164.	All.I OI.	Peak	AV	Λι IL./CI	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	20.54	11.94	32.28	52.82	44.22	74.00	54.00	X/E
2413.00	Н	55.36	52.85	32.25	87.61	85.10			X/F
4824.07	Н	40.75	30.62	6.19	46.94	36.81	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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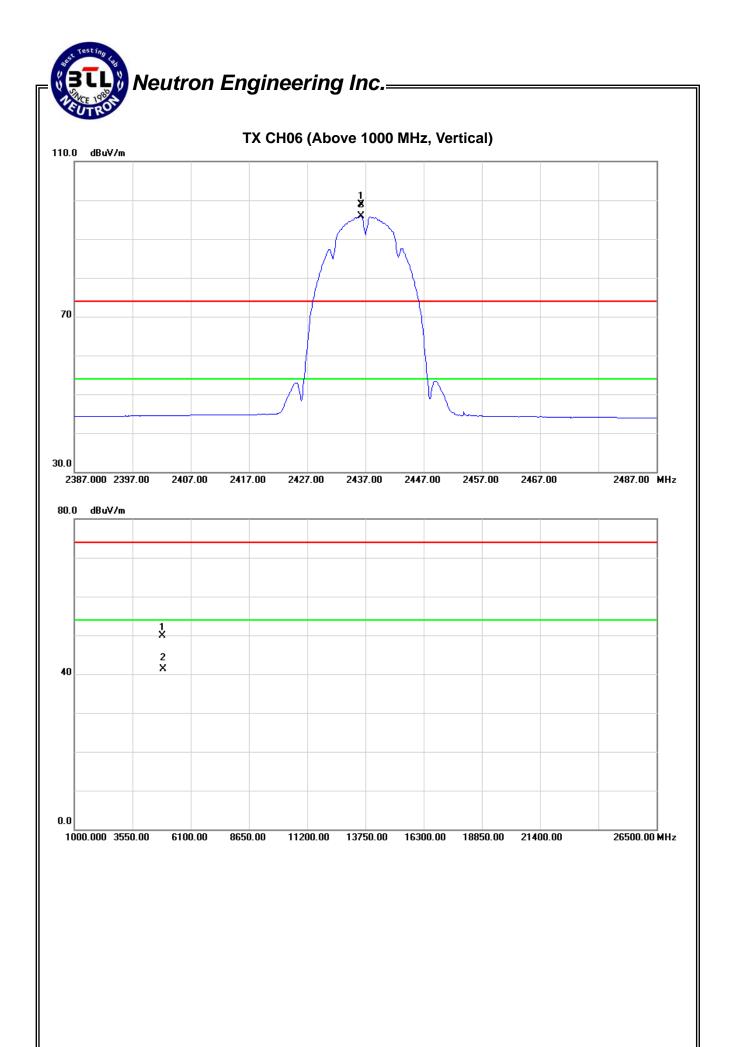
	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.20	V	66.58	63.63	32.23	98.81	95.86			X/F
4873.85	V	43.52	34.85	6.39	49.91	41.24	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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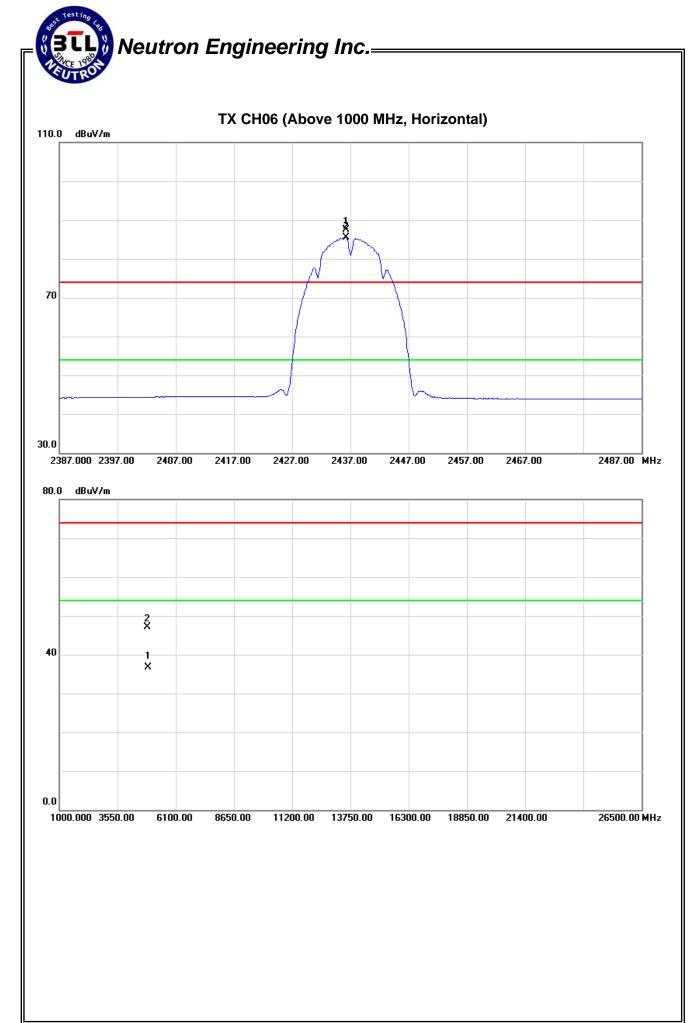


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq. Ant.Pol.	Ant Pol	Ant Pol Reading		Ant./CF	Act.		Lir		
	Peak	AV	Peak		AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.20	Н	55.36	53.28	32.23	87.59	85.51			X/F
4874.10	Н	40.75	30.30	6.39	47.14	36.69	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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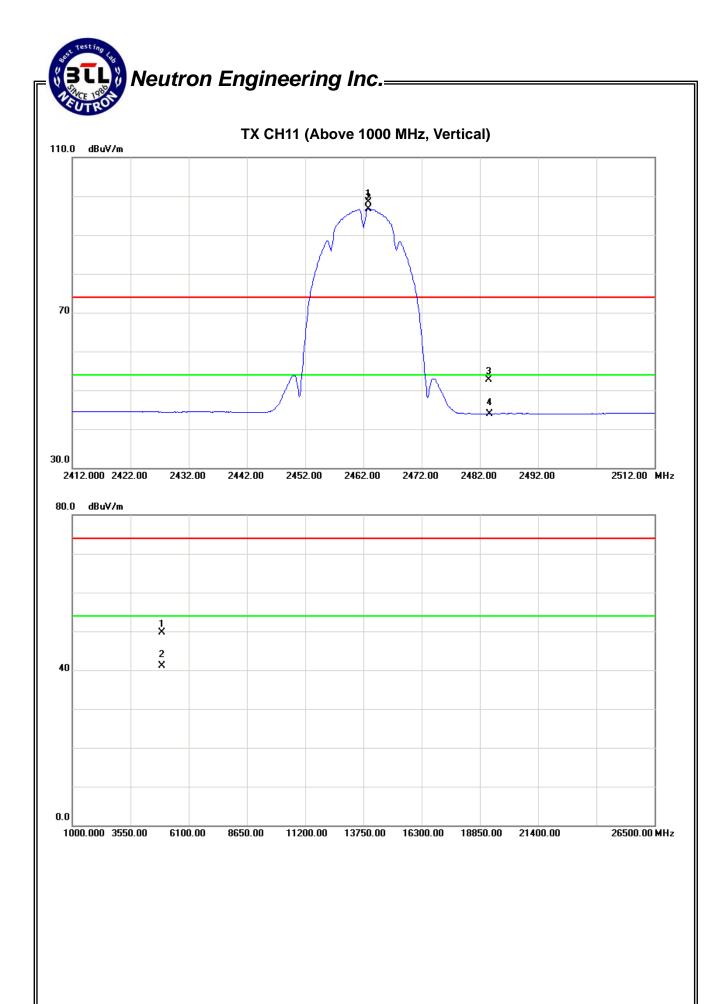


I=()	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freq. Ant.Pol.	Reading		Ant./CF	Act.		Limit			
rieq.	Ant.r or.	Peak	AV	KIII./OI	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.80	V	66.34	64.51	32.20	98.54	96.71			X/F
2483.50	V	20.62	11.79	32.17	52.79	43.96	74.00	54.00	X/E
4923.82	V	43.16	34.49	6.59	49.75	41.08	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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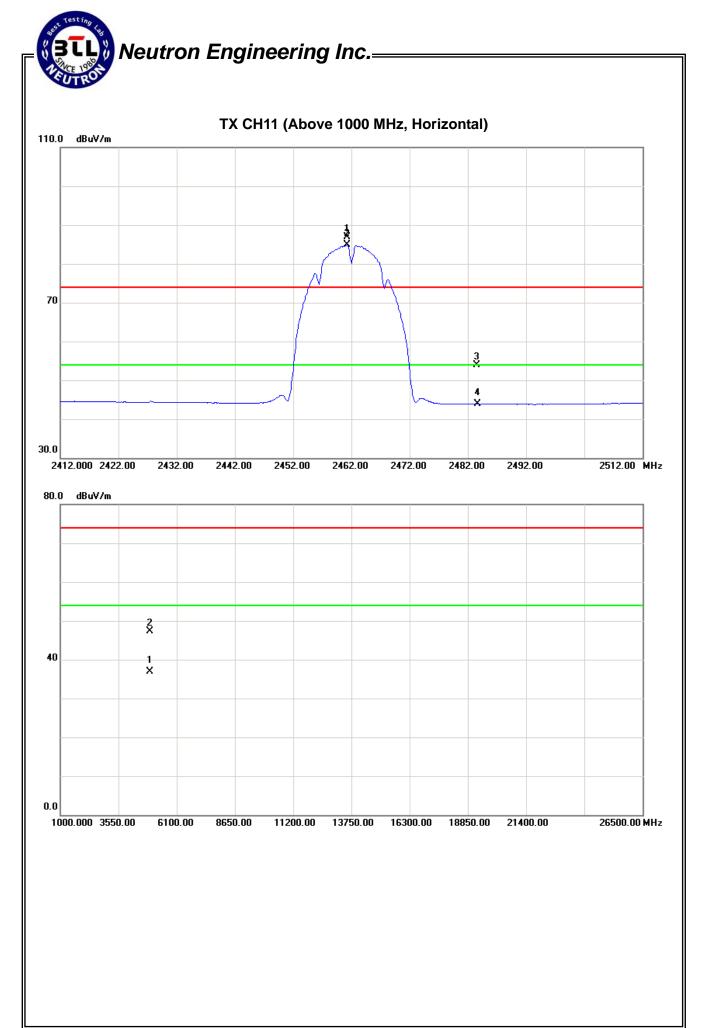


EUT:	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freg. Ant.Pol	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
r req.	Ant.r or.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2461.20	Н	54.79	52.63	32.20	86.99	84.83			X/F
2483.50	Н	21.64	11.71	32.17	53.81	43.88	74.00	54.00	X/E
4924.32	Н	40.76	30.27	6.59	47.35	36.86	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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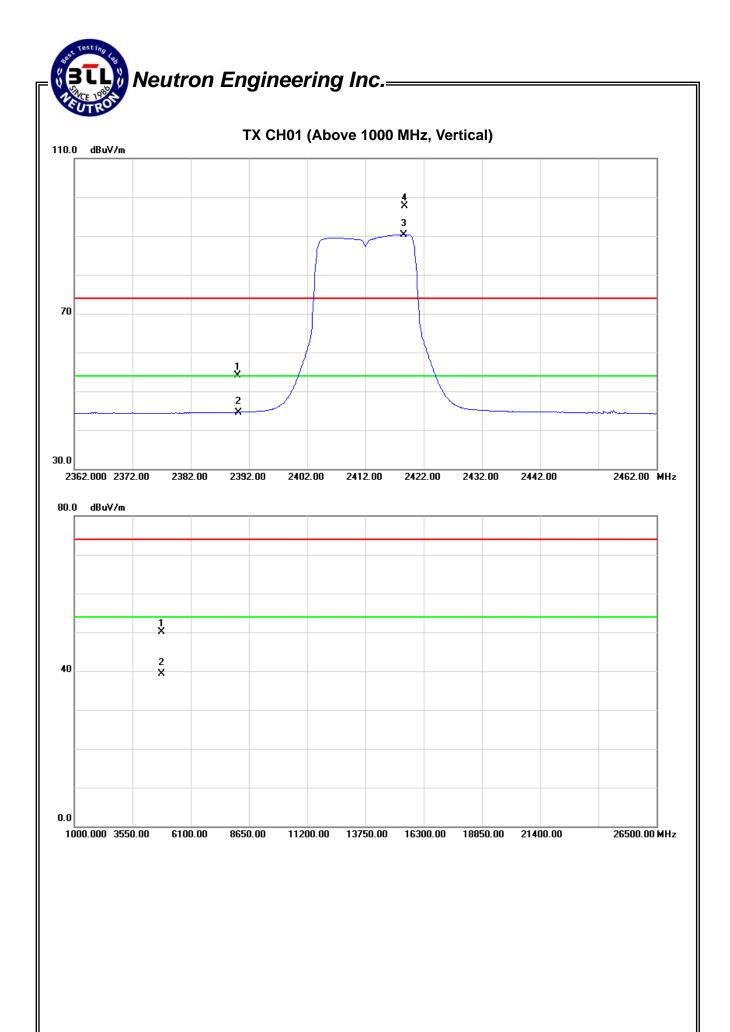


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq. Ant.Pol.		Reading		Ant./CF	A	Act.		Limit	
r req.	Ant.i oi.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	21.89	12.32	32.28	54.17	44.60	74.00	54.00	X/E
2418.70	V	65.48	58.14	32.25	97.73	90.39			X/F
4823.76	V	43.85	33.14	6.19	50.04	39.33	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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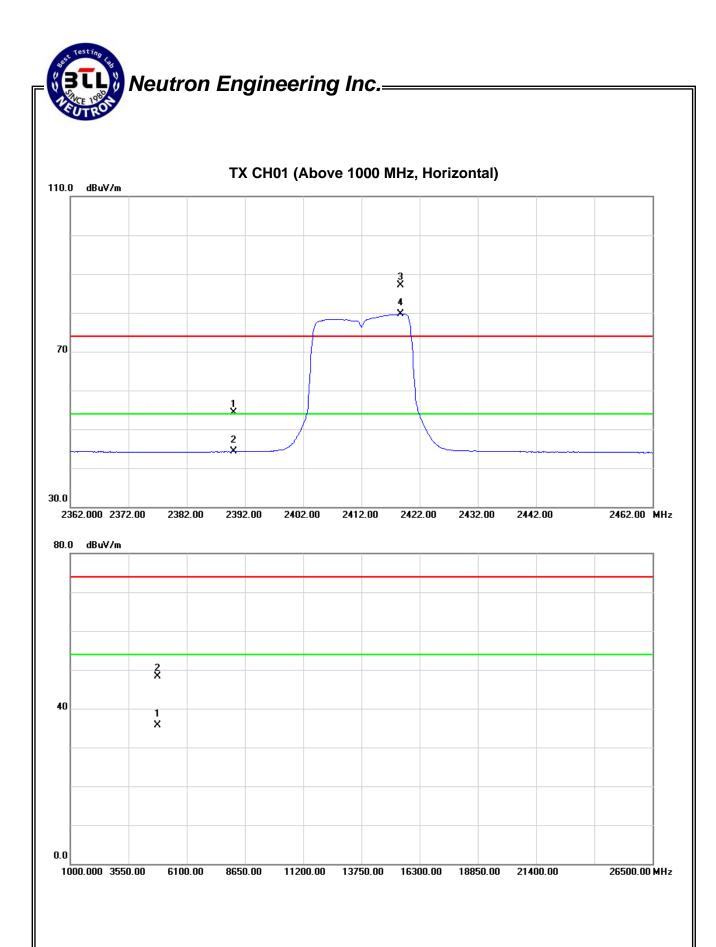


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freg. Ant.Pol.		Reading		Ant./CF	A	Act.		Limit	
r req.	Ant.r or.	Peak	AV	KIII./OI	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	22.01	11.97	32.28	54.29	44.25	74.00	54.00	X/E
2418.70	Н	54.85	47.40	32.25	87.10	79.65			X/F
4824.28	Н	42.06	29.50	6.19	48.25	35.69	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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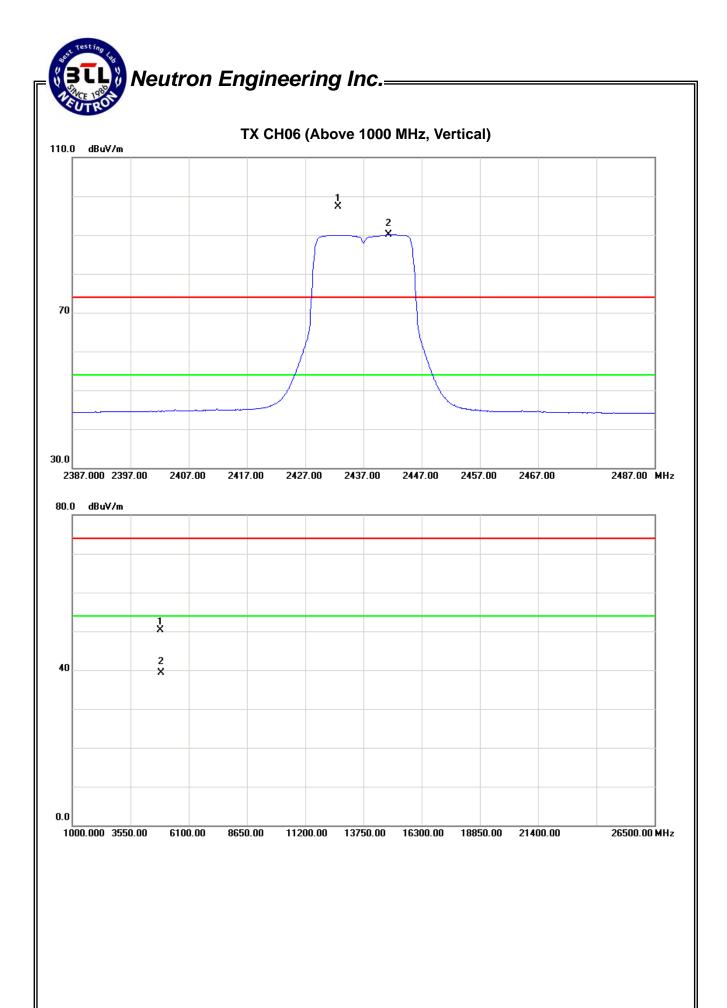


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq. Ant.Pol.	Rea	ding Ant./CF		Act.		Limit			
i ieq.	Ant.i oi.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2432.60	V	65.13	57.80	32.23	97.36	90.03			X/F
4873.78	V	43.87	32.89	6.39	50.26	39.28	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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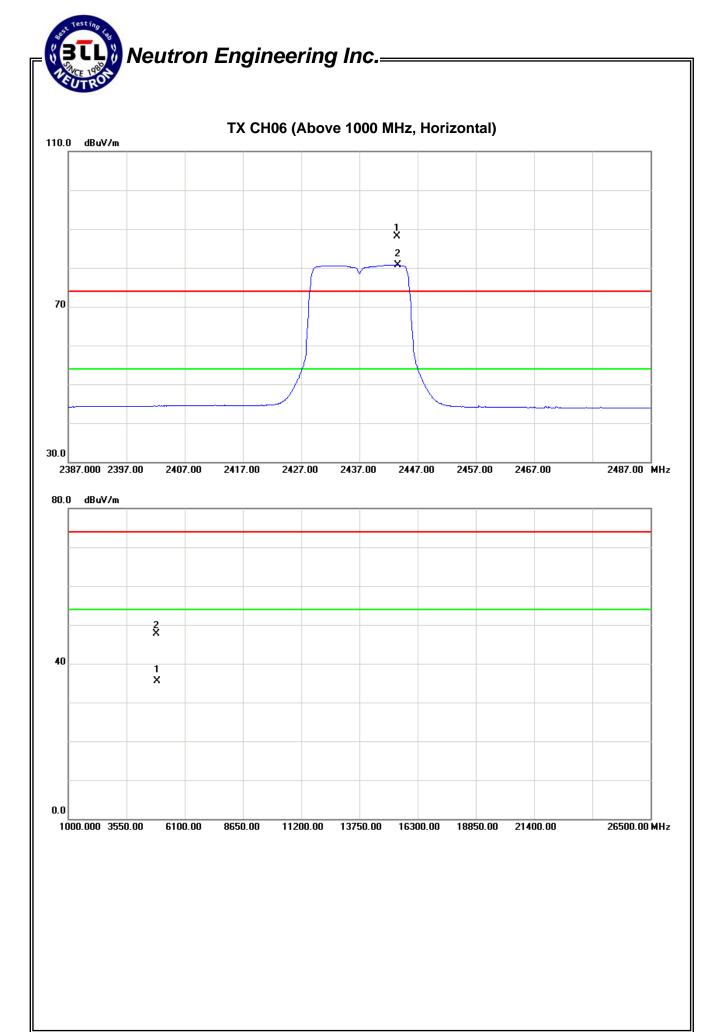


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Rea	ding Ant./CF		Act.		Limit		
		Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2443.40	Н	55.84	48.44	32.22	88.06	80.66			X/F
4874.24	Н	41.27	29.18	6.39	47.66	35.57	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{F}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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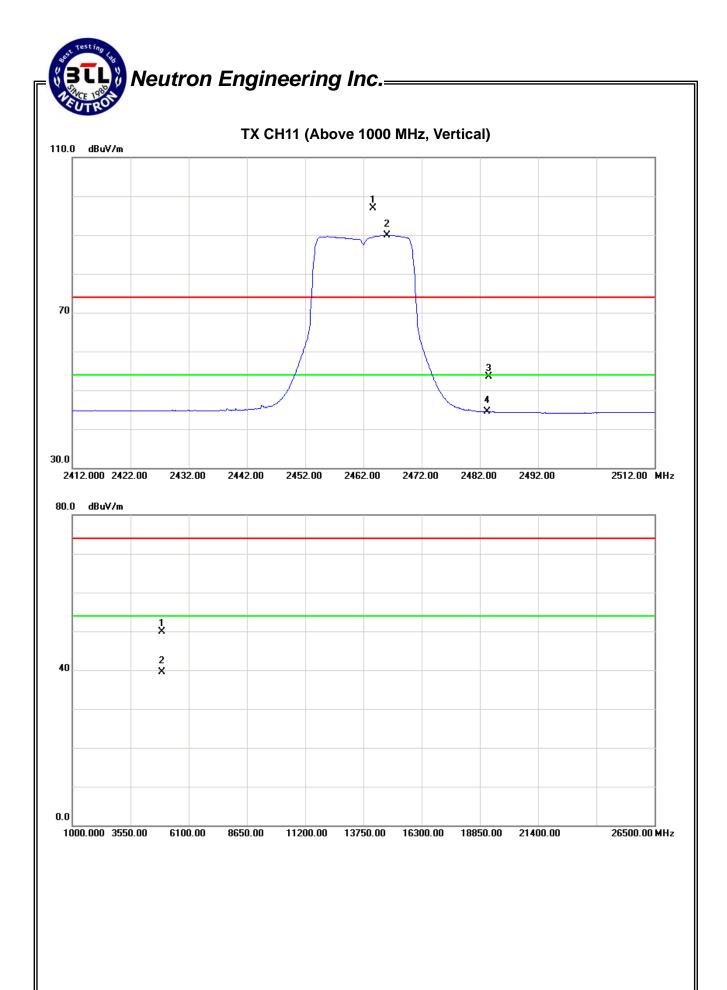


HUI.	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

	Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
			Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2463.60	V	64.79	57.74	32.20	96.99	89.94			X/F
Ī	2483.50	V	21.39	12.25	32.17	53.56	44.42	74.00	54.00	X/E
	4923.75	V	43.29	32.88	6.59	49.88	39.47	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{F}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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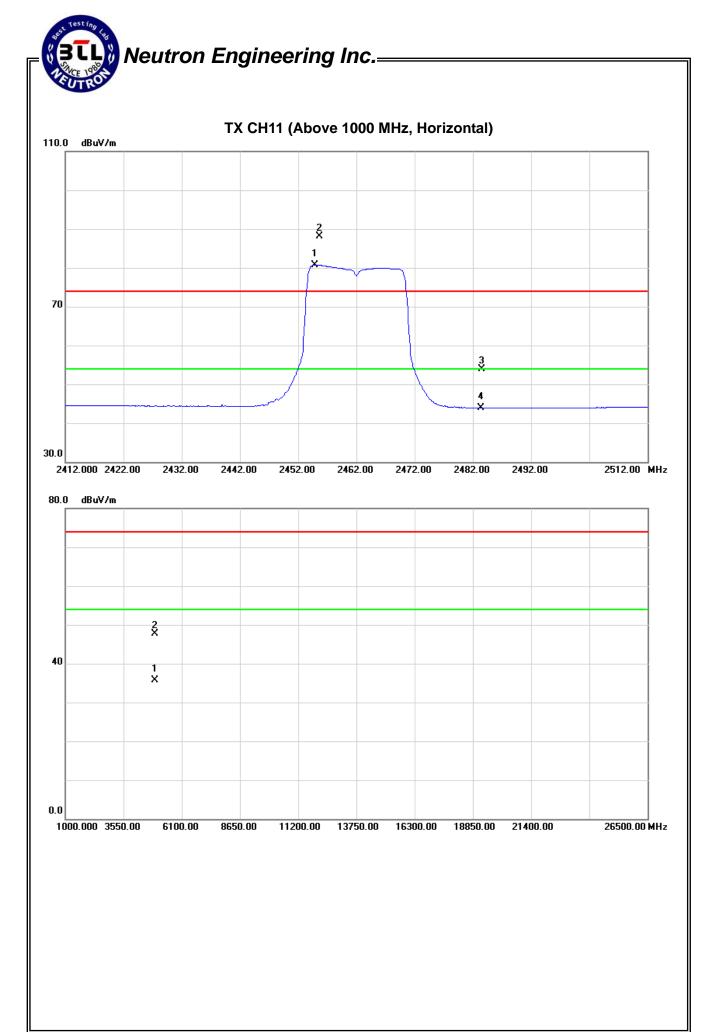


I=()	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq. A	Ant.Pol.	Ant Pol Reading		Ant./CF	Act.		Limit		
	Ant.i oi.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2455.70	Н	55.90	48.48	32.21	88.11	80.69			X/F
2483.50	Н	21.80	11.79	32.17	53.97	43.96	74.00	54.00	X/E
4924.20	Н	41.17	29.05	6.59	47.76	35.64	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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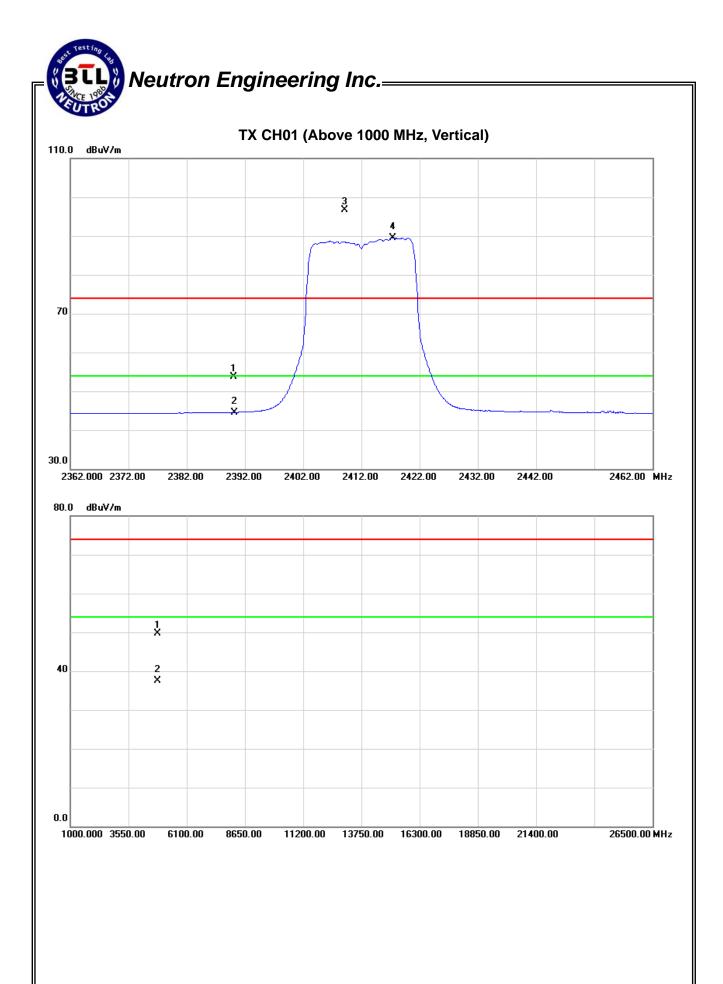


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

Freq.	Ant.Pol.	Reading Ant /CE		Ant./CF	Act.		Limit		
rieq.	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	21.37	12.24	32.28	53.65	44.52	74.00	54.00	X/E
2409.10	V	64.53	57.28	32.26	96.79	89.54			X/F
4823.72	V	43.56	31.24	6.19	49.75	37.43	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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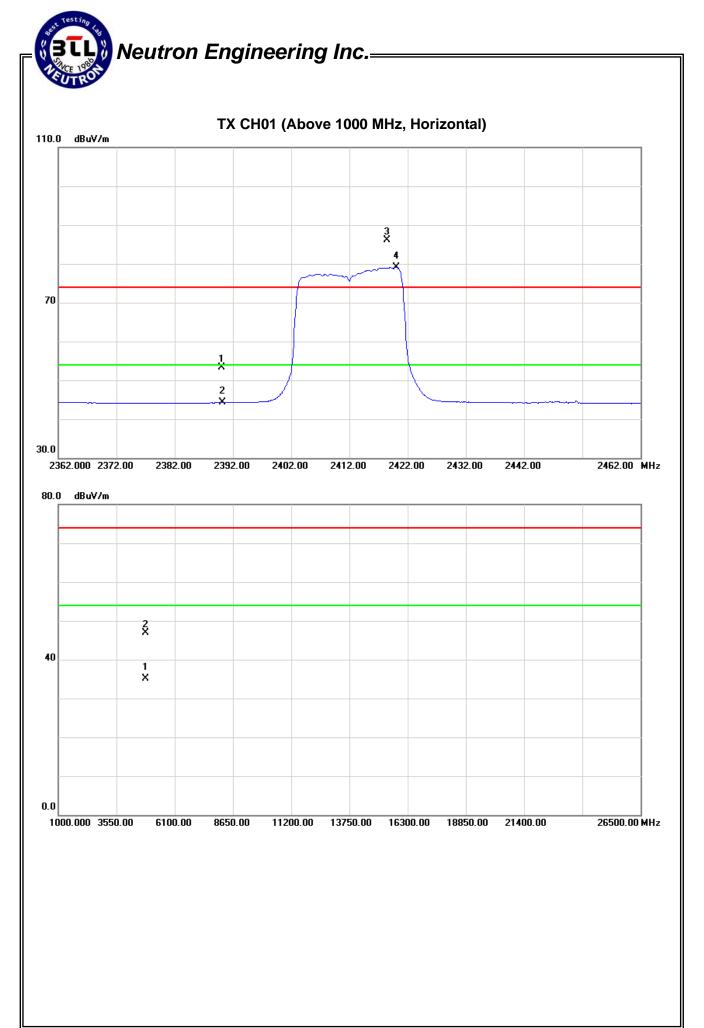


IP () (High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

Freq.	Ant Pol	Ant.Pol. Reading		Ant./CF	Act.		Limit		
r req.	Ant.r or.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	21.07	11.93	32.28	53.35	44.21	74.00	54.00	X/E
2418.50	Н	53.84	46.85	32.25	86.09	79.10			X/F
4824.24	Н	40.68	28.96	6.19	46.87	35.15	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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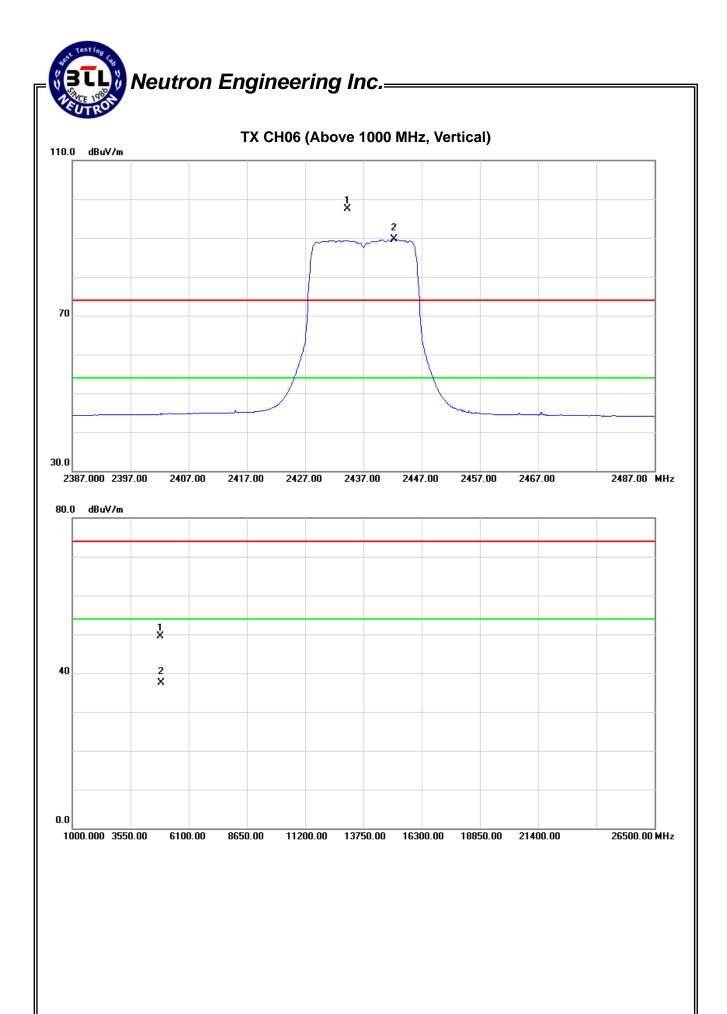


EUT:	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Rea	ding Ant./CF		Act.		Limit		
		Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.20	V	65.19	57.42	32.23	97.42	89.65			X/F
4873.75	V	43.04	31.20	6.39	49.43	37.59	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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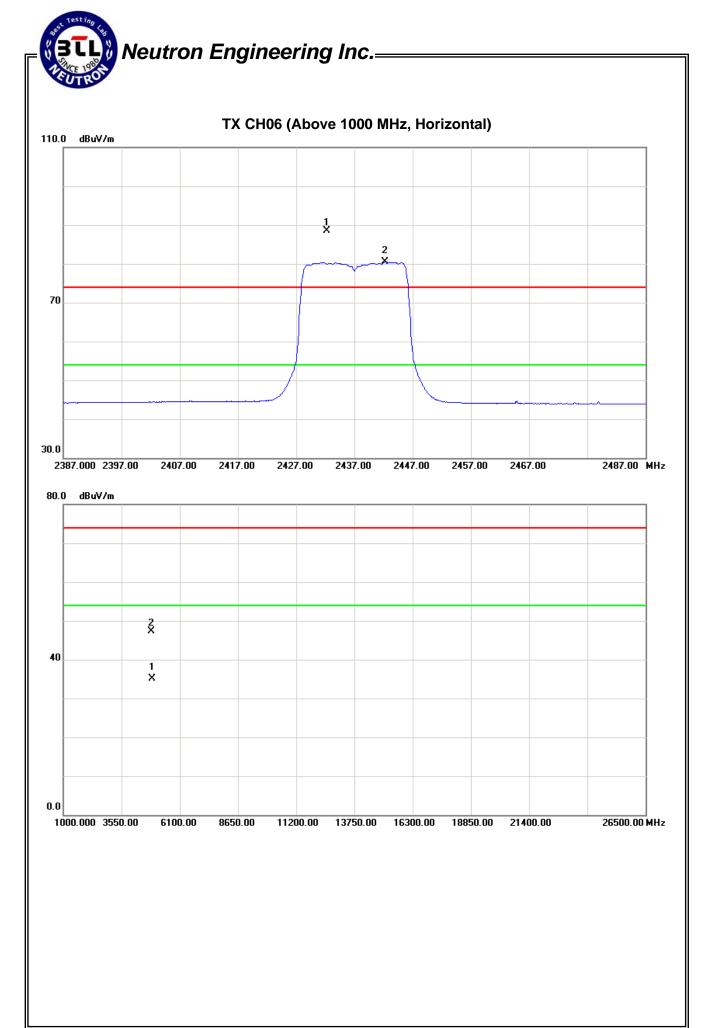


IP () (High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq. Ant.Pol.	Ant Pol	Reading		Ant./CF	Act.		Limit		
	Peak	AV	Peak		AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2432.20	Н	56.26	48.20	32.24	88.50	80.44			X/F
4874.20	Н	40.95	28.79	6.39	47.34	35.18	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m l}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m o}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
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- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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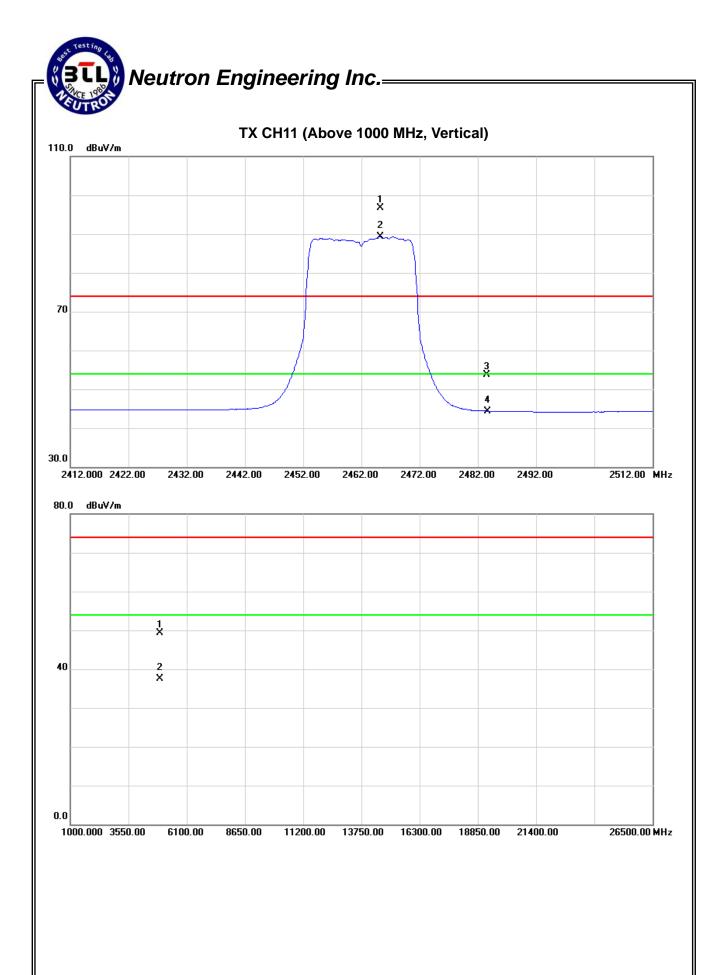


IP () (High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

Freq. Ant.Pol.	Ant Pol	Ant Pol Read	ding	Ant./CF	_ Act.		Limit		
	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2465.20	V	64.57	57.04	32.20	96.77	89.24			X/F
2483.50	V	21.63	12.21	32.17	53.80	44.38	74.00	54.00	X/E
4923.74	V	42.79	30.95	6.59	49.38	37.54	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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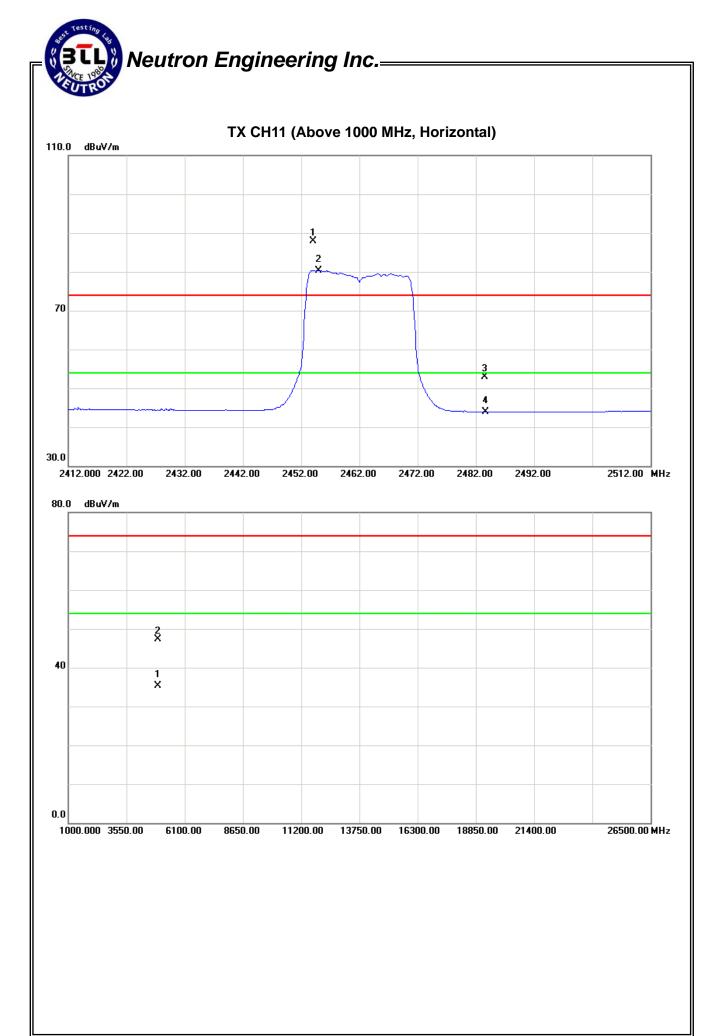


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

Freq. Ant.Pol.	Ant Dal	Reading		Ant./CF	Act.		Limit		
	Peak	AV	Peak		AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2454.10	Н	55.73	48.18	32.21	87.94	80.39			X/F
2483.50	Н	20.79	11.74	32.17	52.96	43.91	74.00	54.00	X/E
4924.25	Н	40.65	28.78	6.59	47.24	35.37	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
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- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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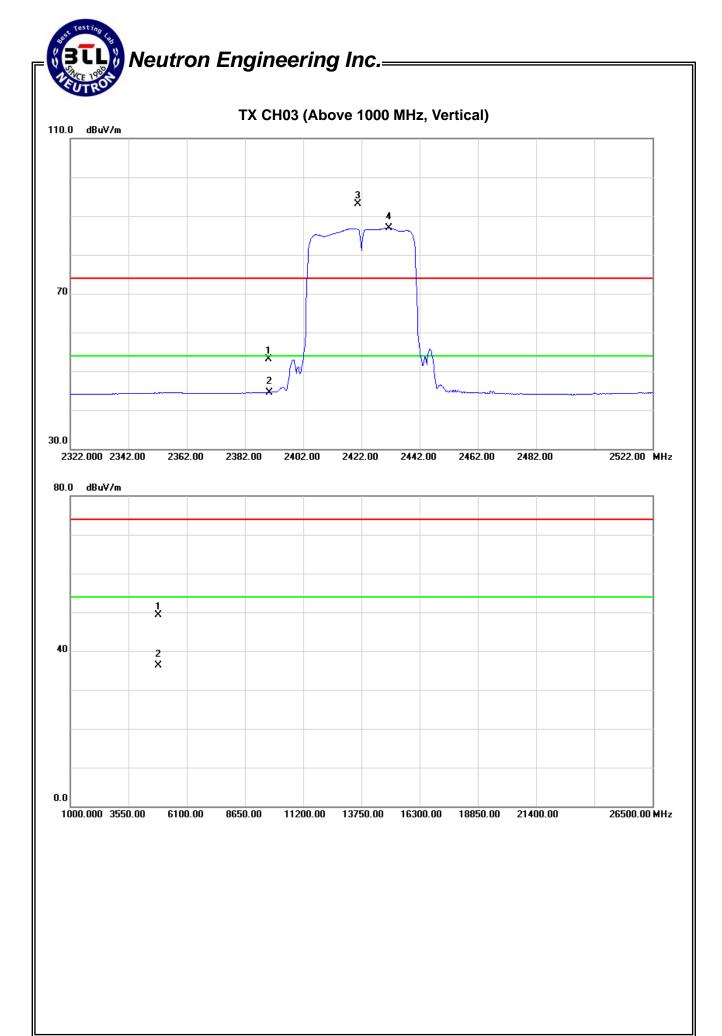


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

Freq. Ant.Pol.	Ant Pol	Reading Ant		Ant./CF	Apt /CE Act.			Limit		
	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note		
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	V	20.84	12.25	32.28	53.12	44.53	74.00	54.00	X/E	
2420.80	V	60.85	54.76	32.25	93.10	87.01			X/F	
4843.79	V	42.98	30.09	6.27	49.25	36.36	74.00	54.00	X/H	

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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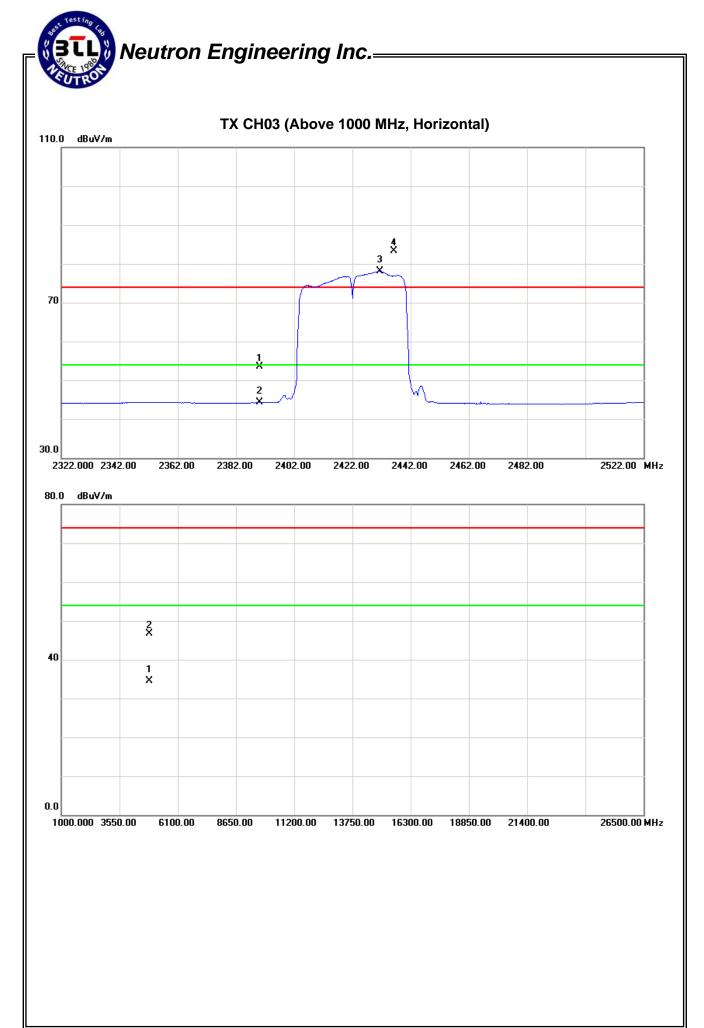


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

Freq. Ant.Pol.	Ant Pol	Ant Pol Reading		Ant./CF	Act.		Limit		
	Peak	AV	Peak		AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	21.29	11.99	32.28	53.57	44.27	74.00	54.00	X/E
2436.20	Н	51.15	45.87	32.23	83.38	78.10			X/F
4844.28	Н	40.53	28.24	6.27	46.80	34.51	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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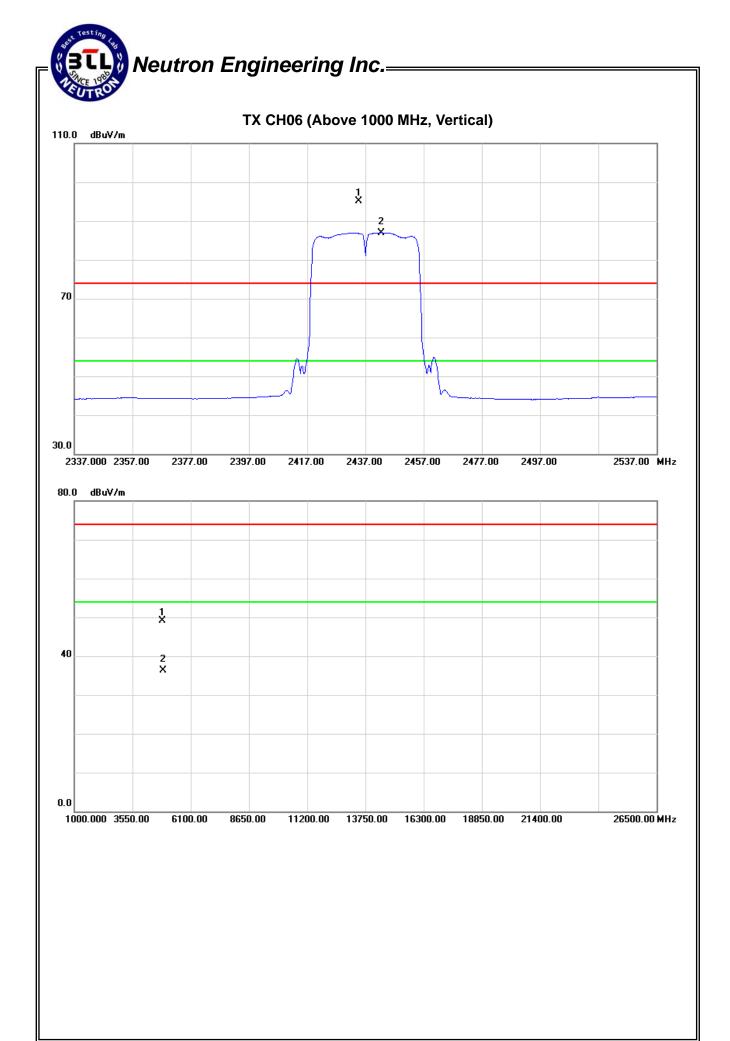


	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freq. Ant.Pol.	Ant Pol Rea	ding	Ant./CF	Act.		Limit			
	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.80	V	62.88	54.78	32.23	95.11	87.01			X/F
4873.82	V	42.76	29.85	6.39	49.15	36.24	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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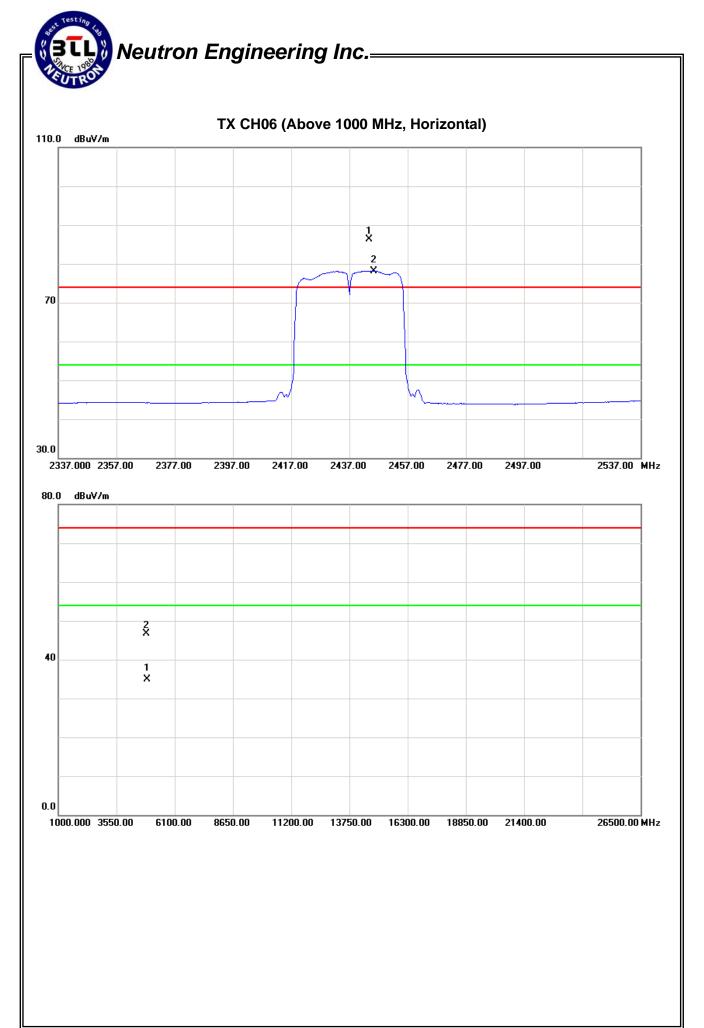
	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
r req.	Ant.r or.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2443.80	Н	54.00	45.96	32.22	86.22	78.18			X/F
4874.19	Н	40.27	28.42	6.39	46.66	34.81	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note $_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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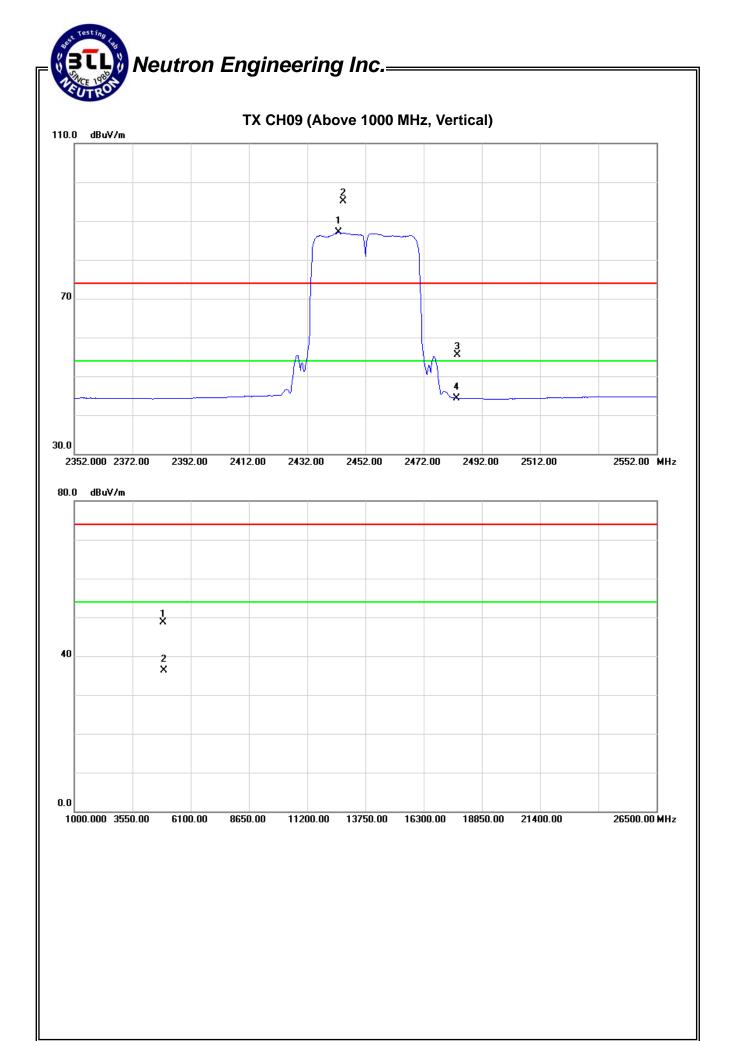
	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	mit	
i ieq.	AIILI OI.	Peak	AV	KIII./OI	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2444.40	V	62.89	54.80	32.22	95.11	87.02			X/F
2483.50	V	23.35	12.23	32.17	55.52	44.40	74.00	54.00	X/E
4903.85	V	42.19	29.80	6.51	48.70	36.31	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{J}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission \circ
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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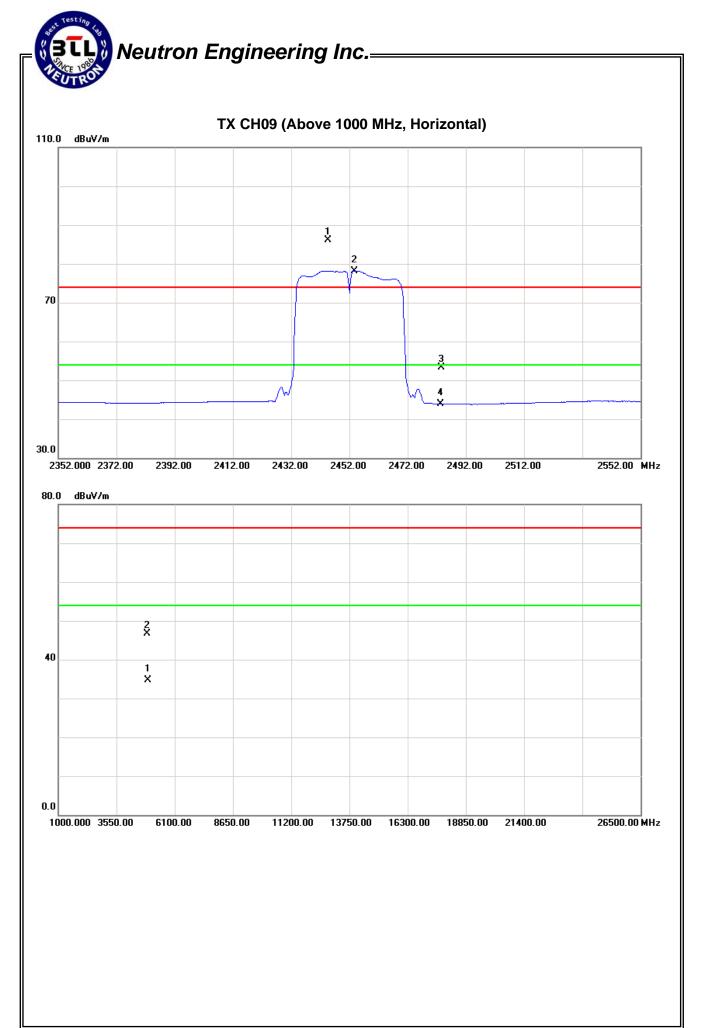
	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	mit	
r req.	Ant.i oi.	Peak	AV	Ant./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2444.60	Н	53.85	45.98	32.22	86.07	78.20			X/F
2483.50	Н	21.23	11.72	32.17	53.40	43.89	74.00	54.00	X/E
4904.12	Н	40.23	28.24	6.51	46.74	34.75	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

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5. BANDWIDTH TEST

5.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C						
Section	Test Item	Frequency Range (MHz)	Result			
15.247(a)(2) RSS-GEN section 4.6.1	Bandwidth	2400-2483.5	PASS			

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

5.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

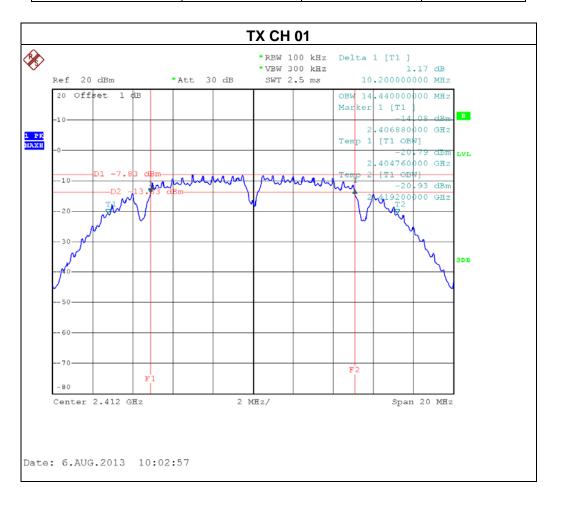
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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5.1.6 TEST RESULTS

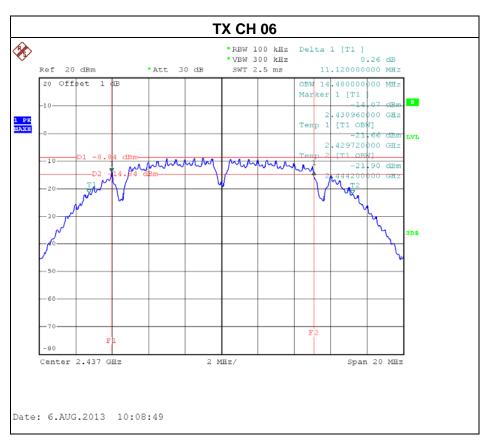
	High Power Wireless N150 USB Adapter	Model Name. :	UH150		
Temperature:	24 ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX B MODE /CH01, CH06, CH11				

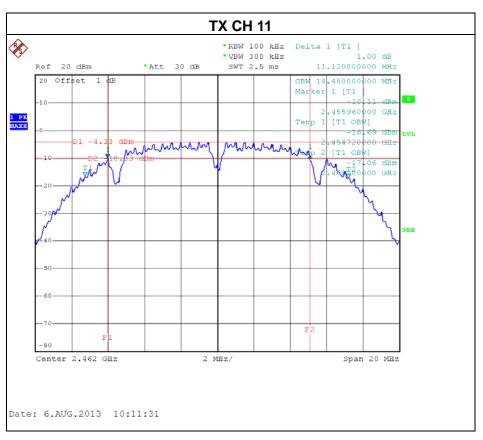
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	10.20	PASS
CH06	2437	11.12	PASS
CH11	2462	11.12	PASS



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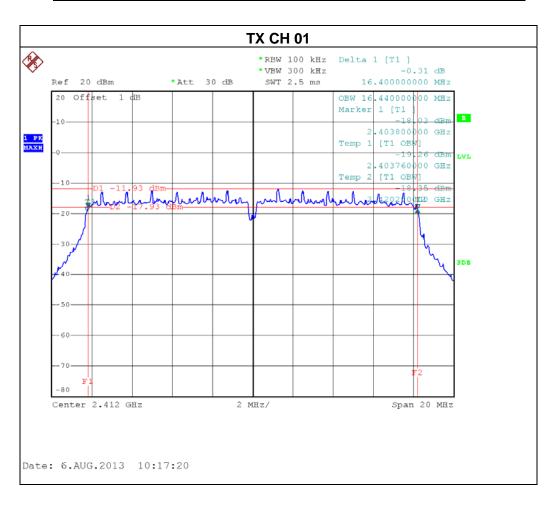






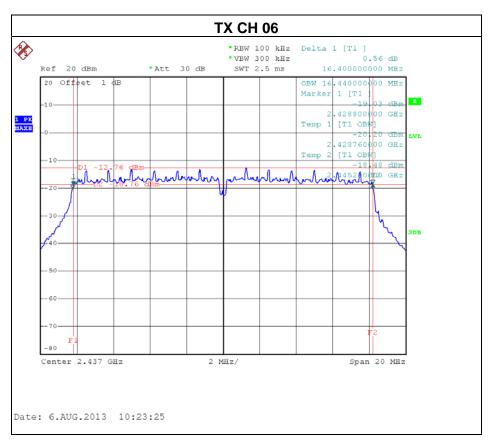
I I I I	High Power Wireless N150 USB Adapter	Model Name. :	UH150		
Temperature:	24 ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX G MODE /CH01, CH06, CH11				

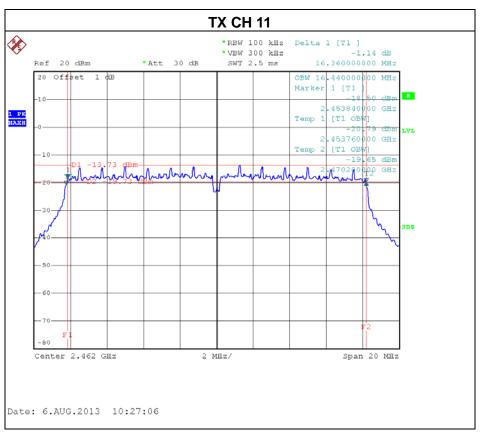
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	16.40	PASS
CH06	2437	16.40	PASS
CH11	2462	16.36	PASS



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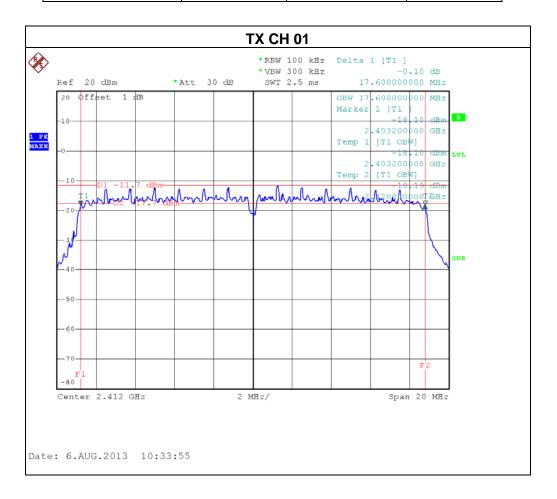






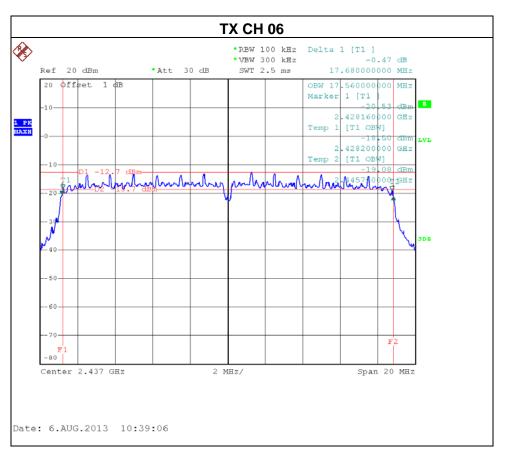
	High Power Wireless N150 USB Adapter	Model Name. :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Mode: TX N MODE -20MHz/ CH01, CH06, CH11		

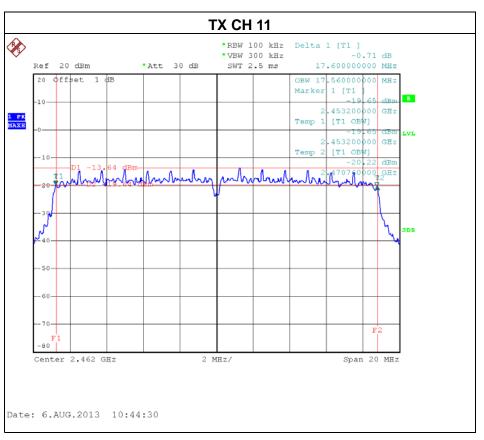
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	17.60	PASS
CH06	2437	17.68	PASS
CH11	2462	17.60	PASS



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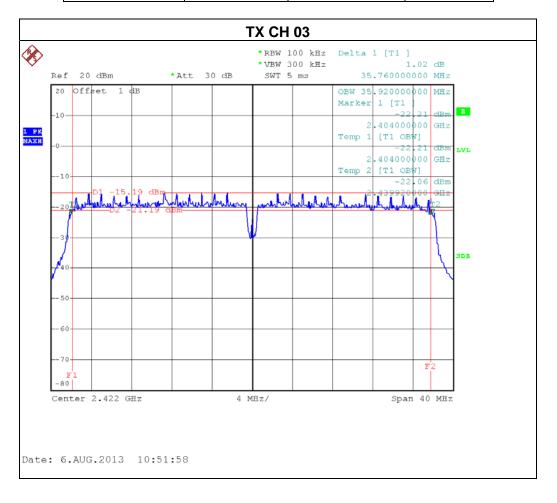






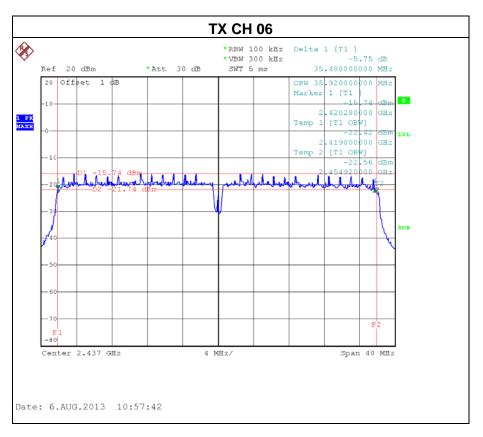
	High Power Wireless N150 USB Adapter	Model Name. :	UH150	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	t Mode : TX N MODE -40MHz/ CH03, CH06, CH09			

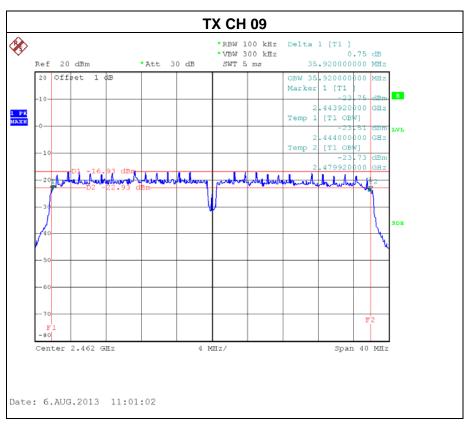
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	35.76	PASS
CH06	2437	35.48	PASS
CH09	2452	35.92	PASS



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6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	2400-2483.5	PASS	

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	P-series Power meter	Agilent	N1911A	MY45100473	May.04.2013	Apr.25.2014
2	Wireband Power sensor	Agilent	N1921A	MY51100041	May.04.2013	Apr.25.2014

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

6.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 9.1.3 of FCC KDB 558074

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP

EUT	Power Meter
	1 Owel Weter

6.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

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6.1.6 TEST RESULTS

HUI.	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Frequency (MHz)	Peak Output Power (dBm)	AVG Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412	20.40	17.56	30	1
2437	19.92	17.56	30	1
2462	19.93	17.42	30	1

IF ()	High Power Wireless N150 USB Adapter	Model Name :	UH150	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX G MODE /CH01, CH06, CH11			

Frequency (MHz)	Peak Output Power (dBm)	AVG Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	23.70	14.62	30	1
2437 MHz	23.50	14.39	30	1
2462 MHz	23.17	14.02	30	1

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 -	High Power Wireless N150 USB Adapter	Model Name :	UH150	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-20M MODE /CH01, CH06, CH11			

Frequency (MHz)	Peak Output Power (dBm)	AVG Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	23.80	14.80	30	1
2437 MHz	23.70	14.66	30	1
2462 MHz	23.22	14.11	30	1

	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

Frequency	Peak Output Power	AVG Output Power	LIMIT	LIMIT
(MHz)	(dBm)	(dBm)	(dBm)	(W)
2422 MHz	19.50	10.50	30	1
2437 MHz	19.20	10.30	30	1
2452 MHz	18.90	9.89	30	1

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7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

7.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = Auto.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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7.1.6 TEST RESULTS

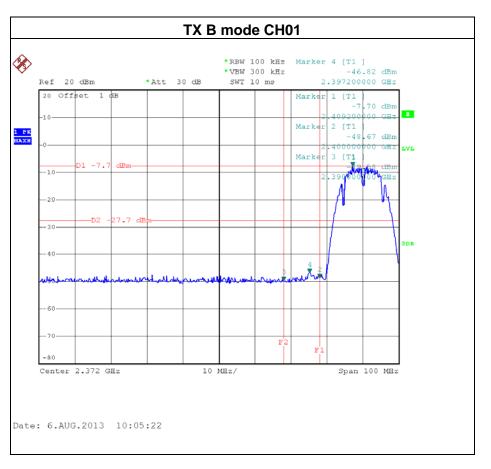
	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

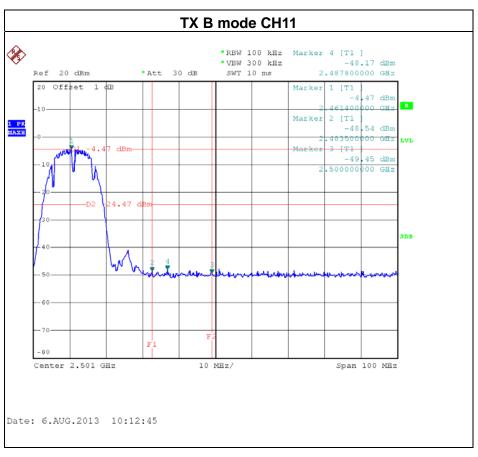
Channel of Worst Data: CH01				
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)	
2397.20 -46.82 2487.80 -48.17				
	Re	sult		

In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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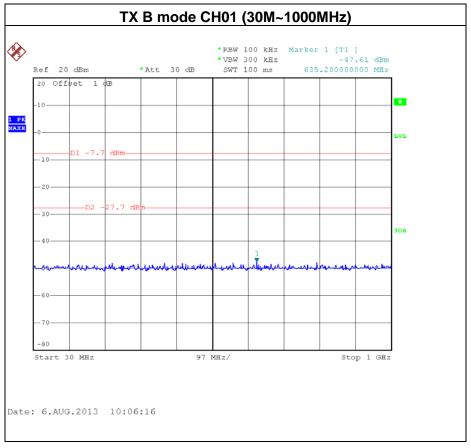


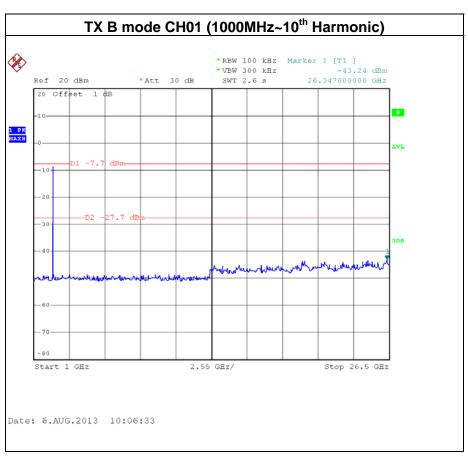




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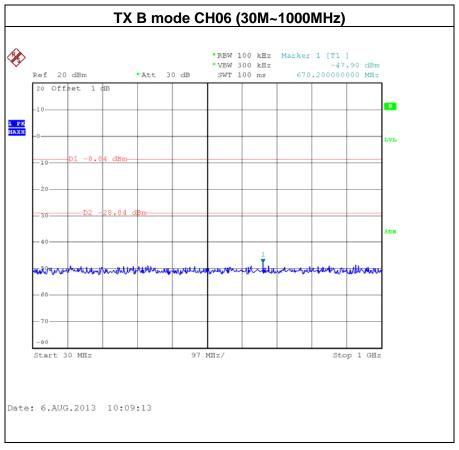


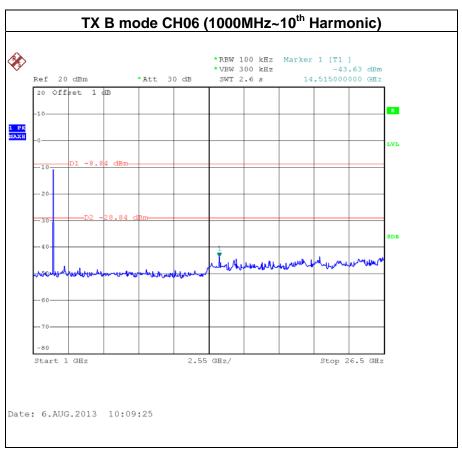




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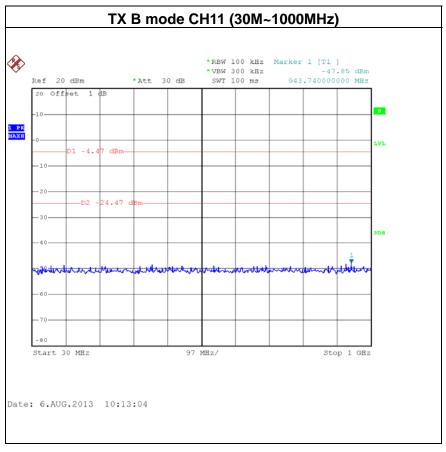


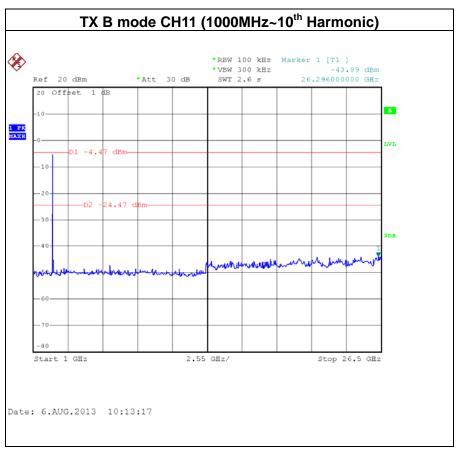




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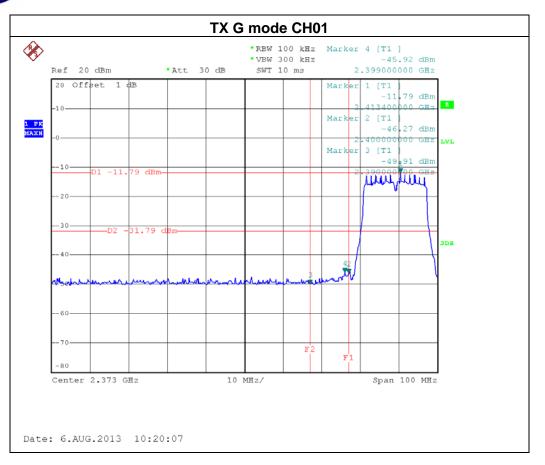


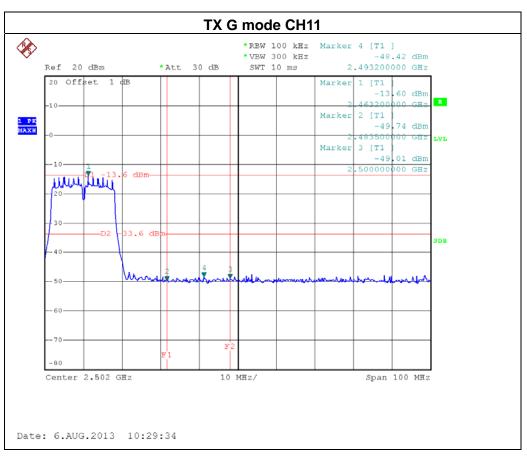
I I I I	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06, CH11		

Channel of Worst Data: CH01				
•	cy power in any 100kHz the frequency band	The max. radio frequence bandwidth within the	, , , , , , , , , , , , , , , , , , ,	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2399.00 -45.92 2493.20 -48.42				
Result				

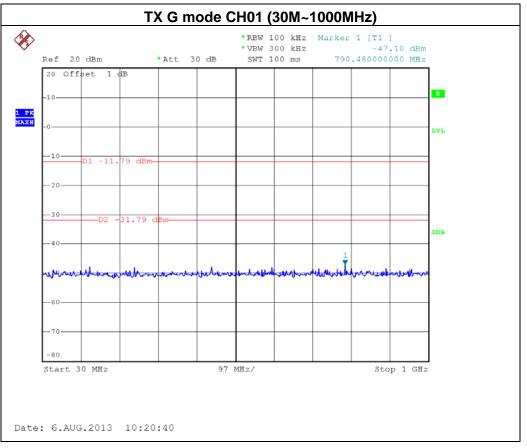
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

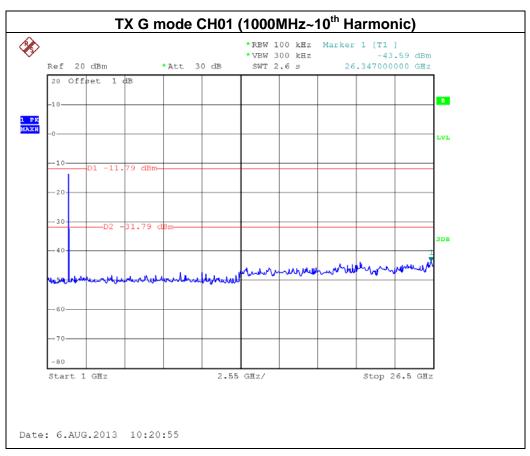
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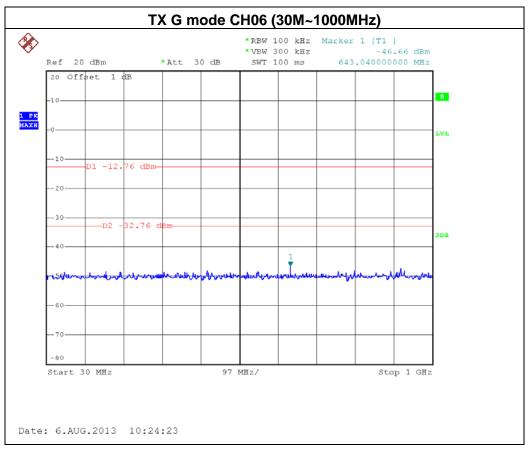


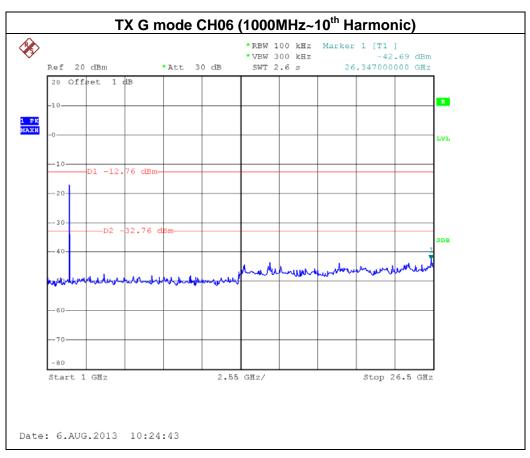
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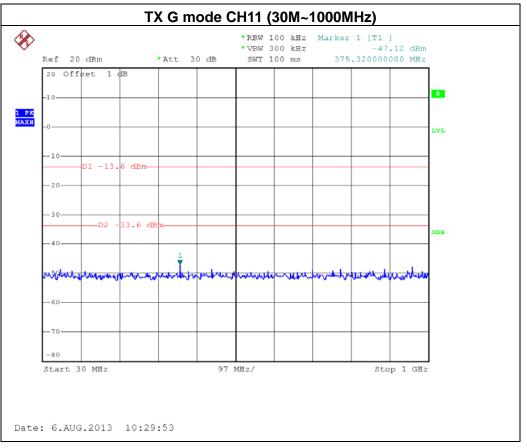


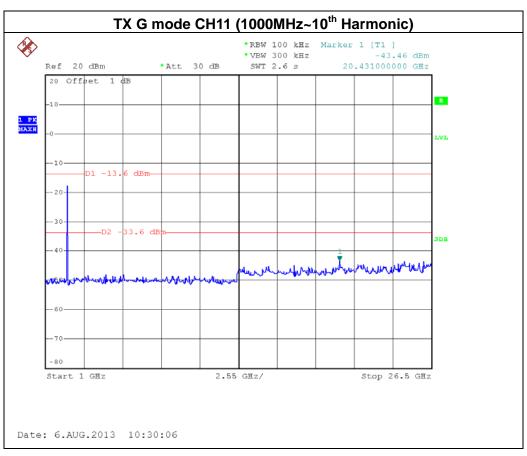
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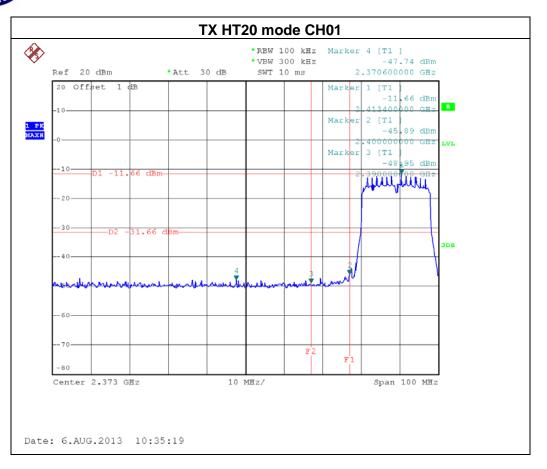
IP [] [High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11		

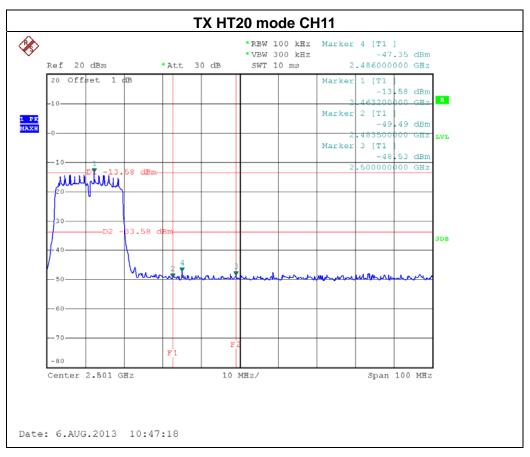
Channel of Worst Data: CH01				
•	cy power in any 100kHz the frequency band	The max. radio frequence bandwidth within the	cy power in any 100 kHz ne frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -45.89 2486.00 -47.35				
Result				

In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

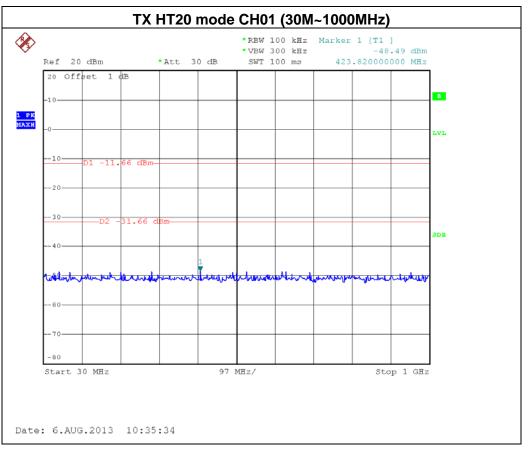
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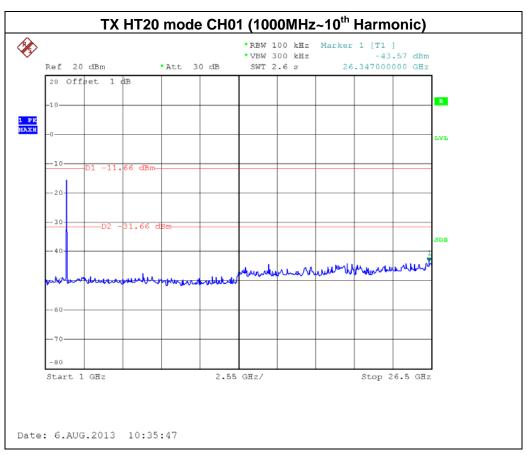




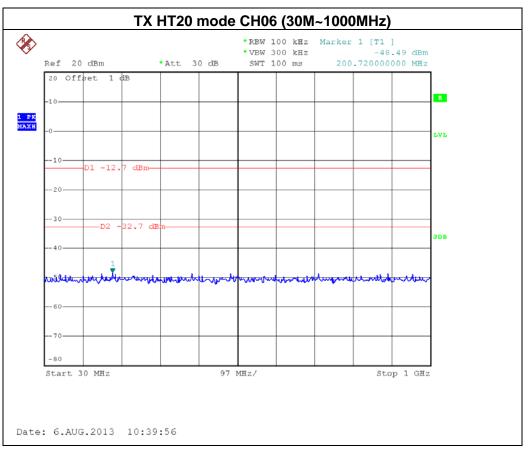


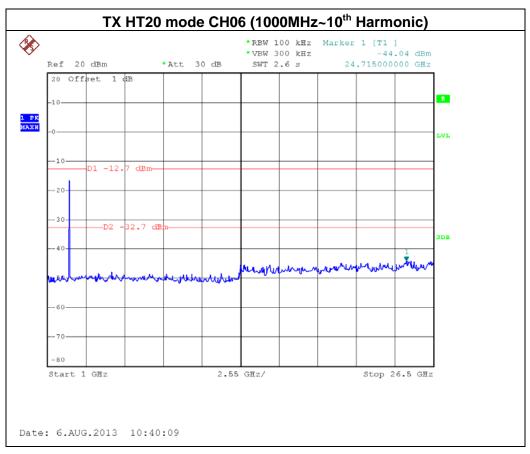
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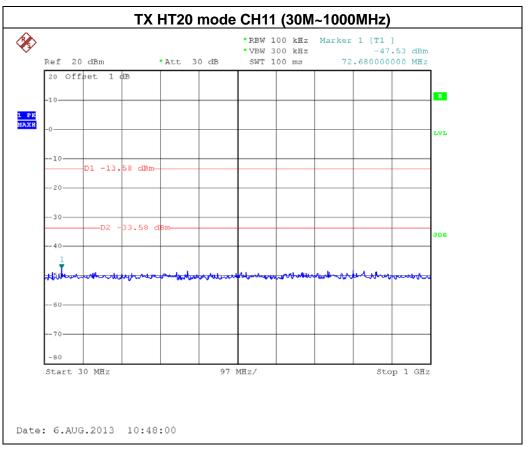


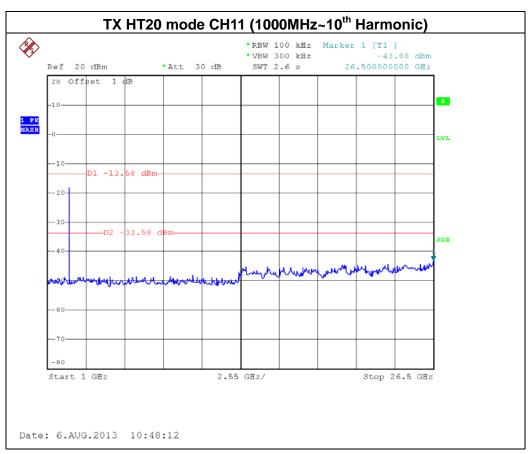
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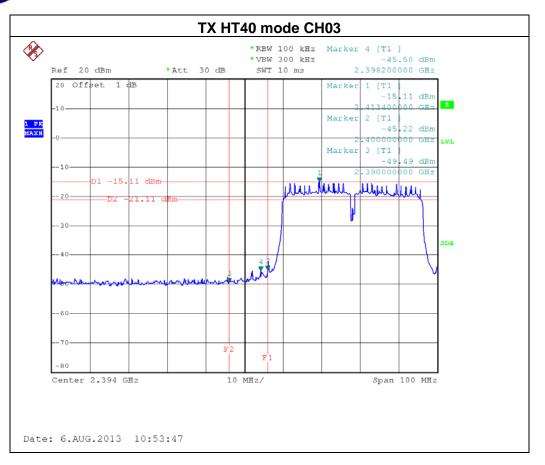
I=()	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE / CH03, CH06 , CH09		

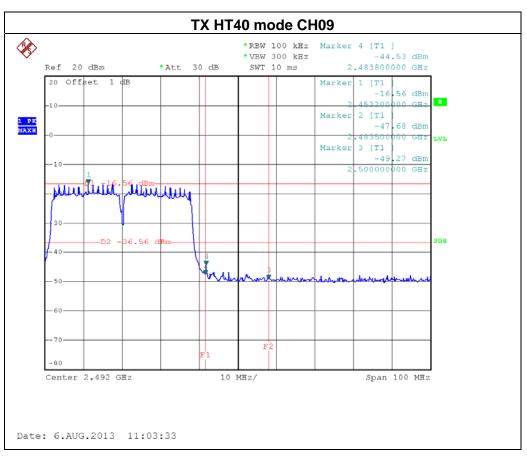
Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-45.22	2483.80	-44.53
Result			

In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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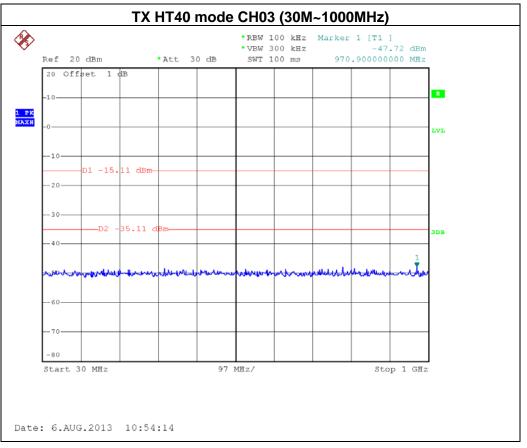


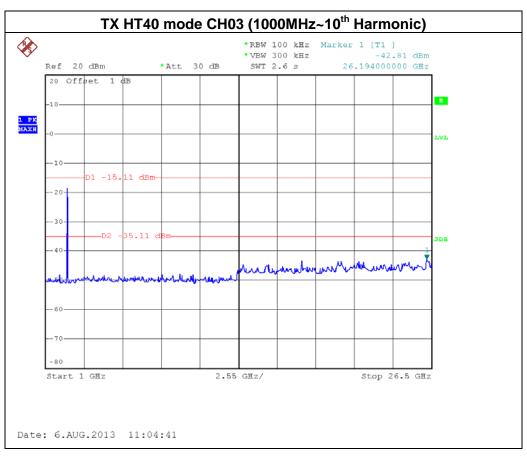




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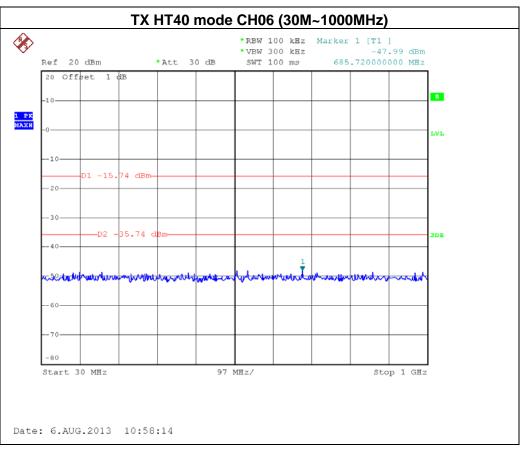
Neutron Engineering Inc.

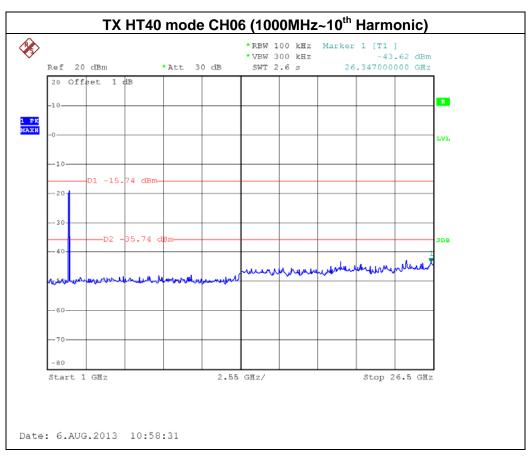




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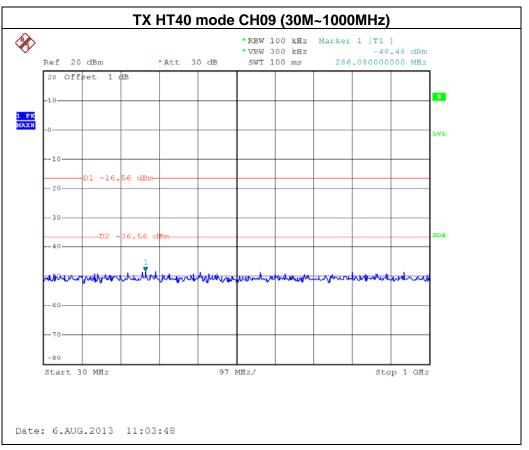
Neutron Engineering Inc.

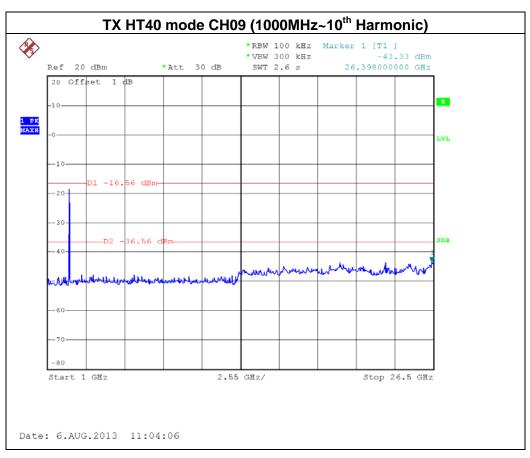




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Neutron Engineering Inc.





8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

	FCC Part15 (15.247) , Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247(e) RSS-210 A8.2(b)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS		

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

8.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10 KHz, Sweep time = Auto.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.5 EUT OPERATION CONDITIONS

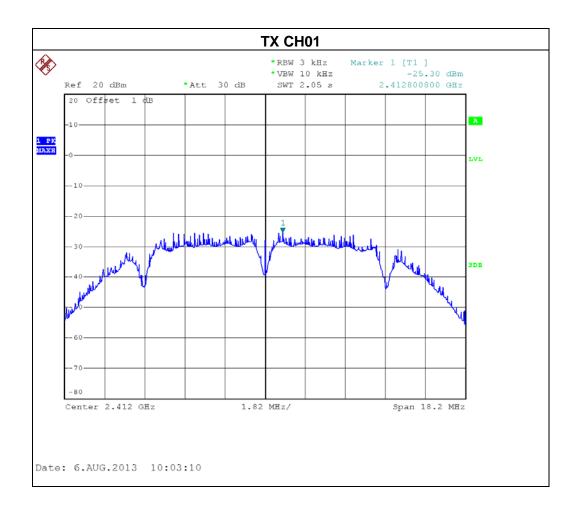
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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8.1.6 TEST RESULTS

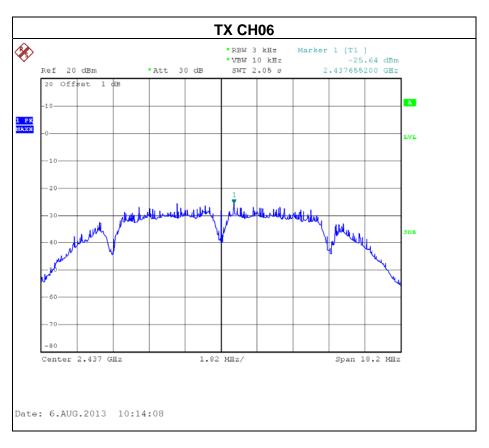
HUI.	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX B MODE /CH01, CH06, CH11			

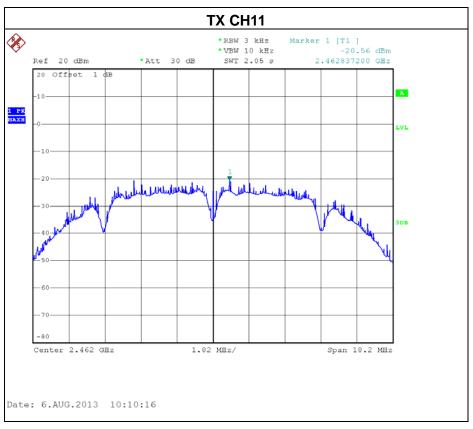
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-25.30	8
CH06	2437 MHz	-25.64	8
CH11	2462 MHz	-20.56	8



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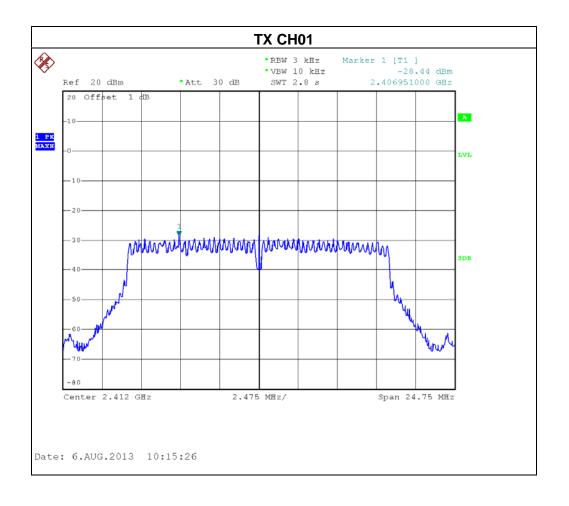






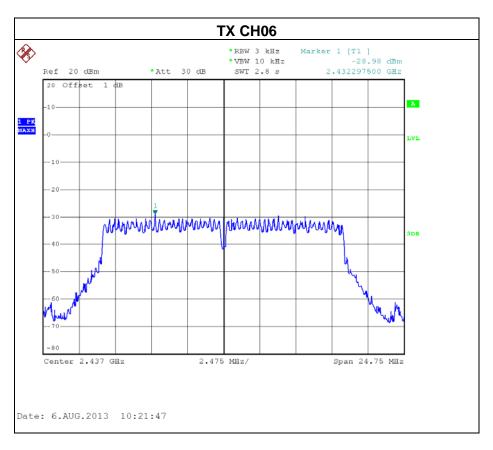
IP () (High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX G MODE /CH01, CH06, CH11			

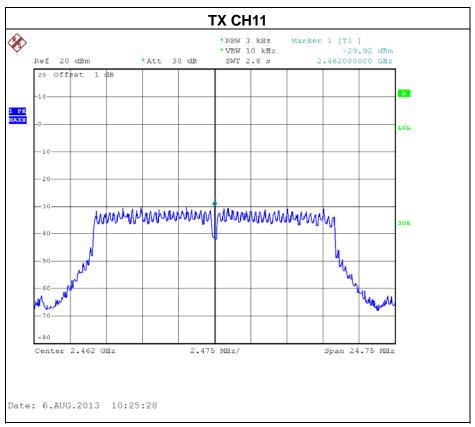
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-28.44	8
CH06	2437 MHz	-28.98	8
CH11	2462 MHz	-29.92	8



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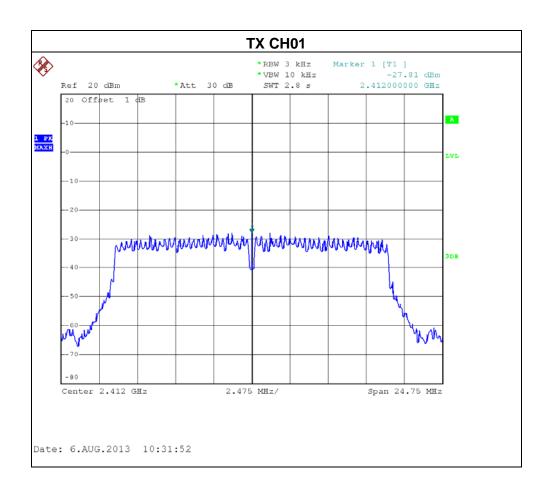






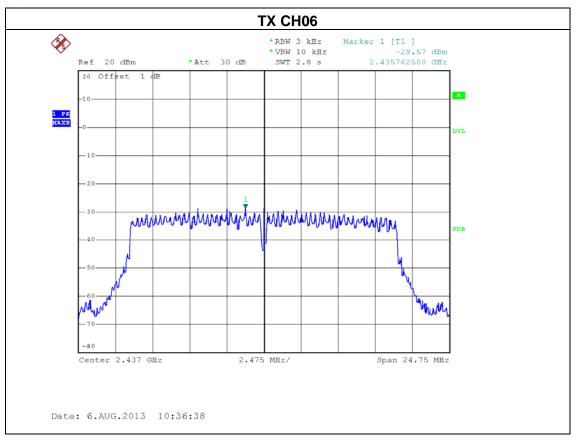
I I I I	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	est Mode : TX N MODE-20MHz /CH01, CH06, CH11		

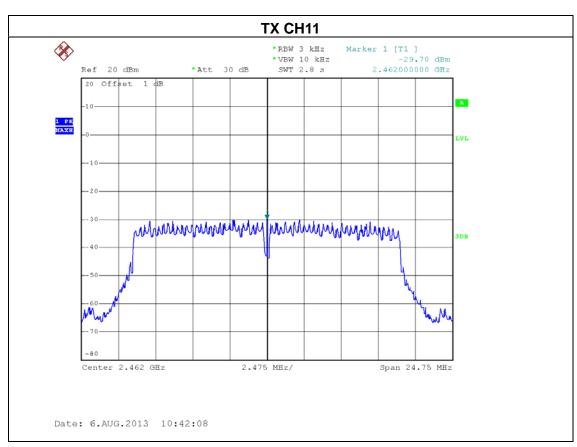
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-27.81	8
CH06	2437 MHz	-28.57	8
CH11	2462 MHz	-29.70	8



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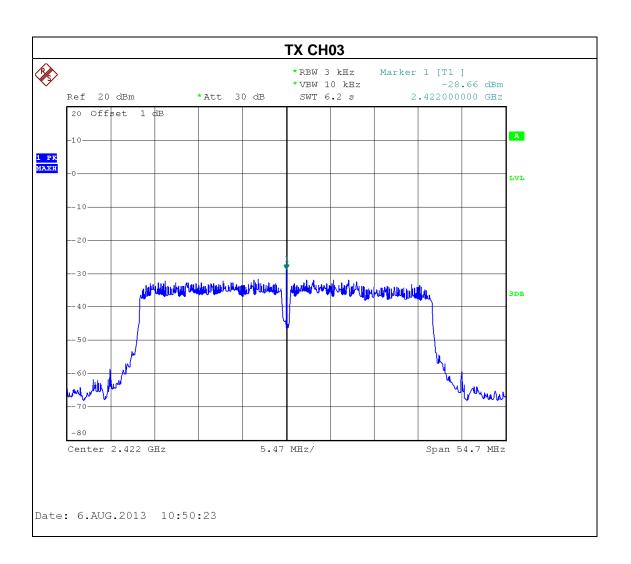






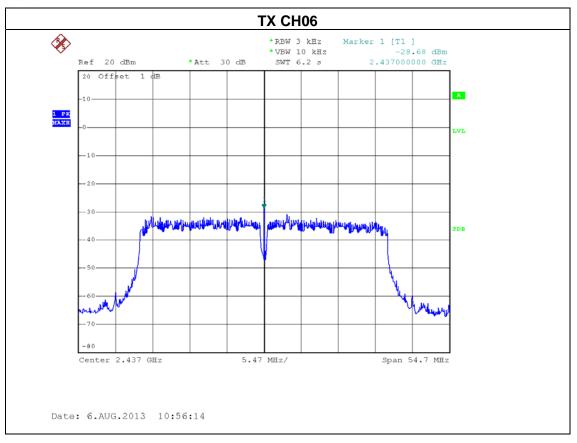
	High Power Wireless N150 USB Adapter	Model Name :	UH150
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N MODE-40MHz /CH03, CH06, CH09			

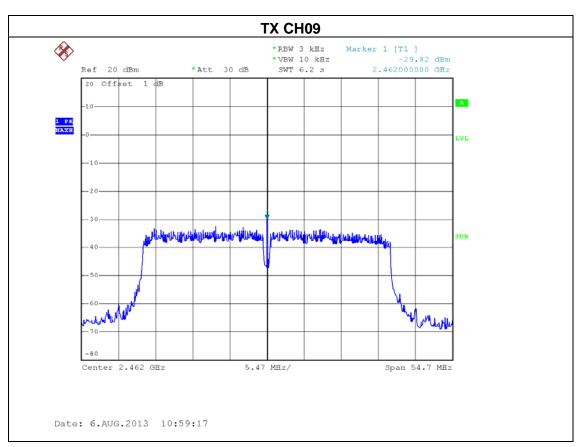
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-28.66	8
CH06	2437 MHz	-28.68	8
CH09	2452 MHz	-29.82	8



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9. EUT TEST PHOTO

Conducted Measurement Photos





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Radiated Measurement Photos





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