

# FCC Radio Test Report FCC ID: V7TN150

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

**Issued Date** : Sep. 12, 2013 **Project No.** : 1308C213

**Equipment**: Wireless N150 Easy Setup Router

Model Name : N150

**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: Aug. 22, 2013

Date of Test: Aug. 22, 2013~ Sep. 11, 2013

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Report No.: NEI-FCCP-1-1308C213 Page 1 of 125



#### **Declaration**

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#### Limitation

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.

Report No.: NEI-FCCP-1-1308C213 Page 2 of 125

Table of Contents	Page
1. CERTIFICATION	5
2 . SUMMARY OF TEST RESULTS	6
2.1 TEST FACILITY	7
2.2 MEASUREMENT UNCERTAINTY	7
	_
3 . GENERAL INFORMATION	8
3.1 GENERAL DESCRIPTION OF EUT	8
3.2 DESCRIPTION OF TEST MODES	10
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	11
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TE	STED 12
3.5 DESCRIPTION OF SUPPORT UNITS	13
4 . EMC EMISSION TEST	14
4.1 CONDUCTED EMISSION MEASUREMENT	14
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	14
4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING	14
4.1.3 TEST PROCEDURE 4.1.4 DEVIATION FROM TEST STANDARD	15 15
4.1.5 TEST SETUP	15
4.1.6 EUT OPERATING CONDITIONS	15
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	19
4.2.1 RADIATED EMISSION LIMITS	19
4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING 4.2.3 TEST PROCEDURE	20 21
4.2.4 DEVIATION FROM TEST STANDARD	21
4.2.5 TEST SETUP	22
4.2.6 EUT OPERATING CONDITIONS	23
4.2.7 TEST RESULTS (BELOW 30MHZ)	24
4.2.8 TEST RESULTS (BETWEEN 30 – 1000 MHZ)	25 32
4.2.9 TEST RESULTS (ABOVE 1000 MHZ)	
5 . BANDWIDTH TEST	80
5.1 APPLIED PROCEDURES / LIMIT	80
5.1.1 MEASUREMENT INSTRUMENTS LIST	80 80
5.1.2 TEST PROCEDURE 5.1.3 DEVIATION FROM STANDARD	80 80
5.1.4 TEST SETUP	80
5.1.5 EUT OPERATION CONDITIONS	80
5.1.6 TEST RESULTS	81

Report No.: NEI-FCCP-1-1308C213 Page 3 of 125

# Neutron Engineering Inc.

Tab	le of Contents	Page
6 . MAXIMUM OUTPUT POWE	R TEST	89
6.1 APPLIED PROCEDURES /	LIMIT	89
6.1.1 MEASUREMENT INS	TRUMENTS LIST	89
6.1.2 TEST PROCEDURE		89
6.1.3 DEVIATION FROM ST	TANDARD	89
6.1.4 TEST SETUP		89
6.1.5 EUT OPERATION CO	NDITIONS	89
6.1.6 TEST RESULTS		90
7 . ANTENNA CONDUCTED SE	PURIOUS EMISSION	92
7.1 APPLIED PROCEDURES /	LIMIT	92
7.1.1 MEASUREMENT INS	TRUMENTS LIST	92
7.1.2 TEST PROCEDURE		92
7.1.3 DEVIATION FROM ST	ΓANDARD	92
7.1.4 TEST SETUP		92
7.1.5 EUT OPERATION CO	NDITIONS	92
7.1.6 TEST RESULTS		93
8 . POWER SPECTRAL DENSI	TY TEST	113
8.1 APPLIED PROCEDURES /	LIMIT	113
8.1.1 MEASUREMENT INS	TRUMENTS LIST	113
8.1.2 TEST PROCEDURE		113
8.1.3 DEVIATION FROM ST	TANDARD	113
8.1.4 TEST SETUP		113
8.1.5 EUT OPERATION CO	NDITIONS	113
8.1.6 TEST RESULTS		114
9 . EUT TEST PHOTO		122

Report No.: NEI-FCCP-1-1308C213 Page 4 of 125

#### 1. CERTIFICATION

Equipment : Wireless N150 Easy Setup Router

Brand Name: Tenda Model Name: N150

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 : Aug. 22, 2013~ Sep. 11, 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-1-1308C213) 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).

Report No.: NEI-FCCP-1-1308C213 Page 5 of 125

# 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (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)

Report No.: NEI-FCCP-1-1308C213 Page 6 of 125

#### 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 :

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	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	

Report No.: NEI-FCCP-1-1308C213 Page 7 of 125



# 3. GENERAL INFORMATION

# 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless N150 Easy Setup Router			
Brand Name	Tenda			
Model Name	N150			
Model Difference	N/A			
Product Description	User's Manual.	2412~2462 MHz  802.11b:DSSS  802.11g:OFDM  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  13 CH, Please see note 2.(Page 9)  Please see note 3.(Page 9)  802.11b: 16.73 dBm  802.11g: 20.25 dBm  802.11n(20MHz): 20.50 dBm  802.11n(40MHz): 20.12dBm		
Power Source	Supplied from AC/DC adapter.  Model Name: TEA09U-09060			
Power Rating	I/P AC 100-240V~50/60Hz 0.3A O/P DC 9V 0.6A			
Connecting I/O Port(s)	Please refer to the User's	s Manual		

#### Note:

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

Report No.: NEI-FCCP-1-1308C213 Page 8 of 125



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
1	Tenda	Q5098	Dipole	N/A	5.00	

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

Report No.: NEI-FCCP-1-1308C213 Page 9 of 125

#### 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.

Report No.: NEI-FCCP-1-1308C213 Page 10 of 125

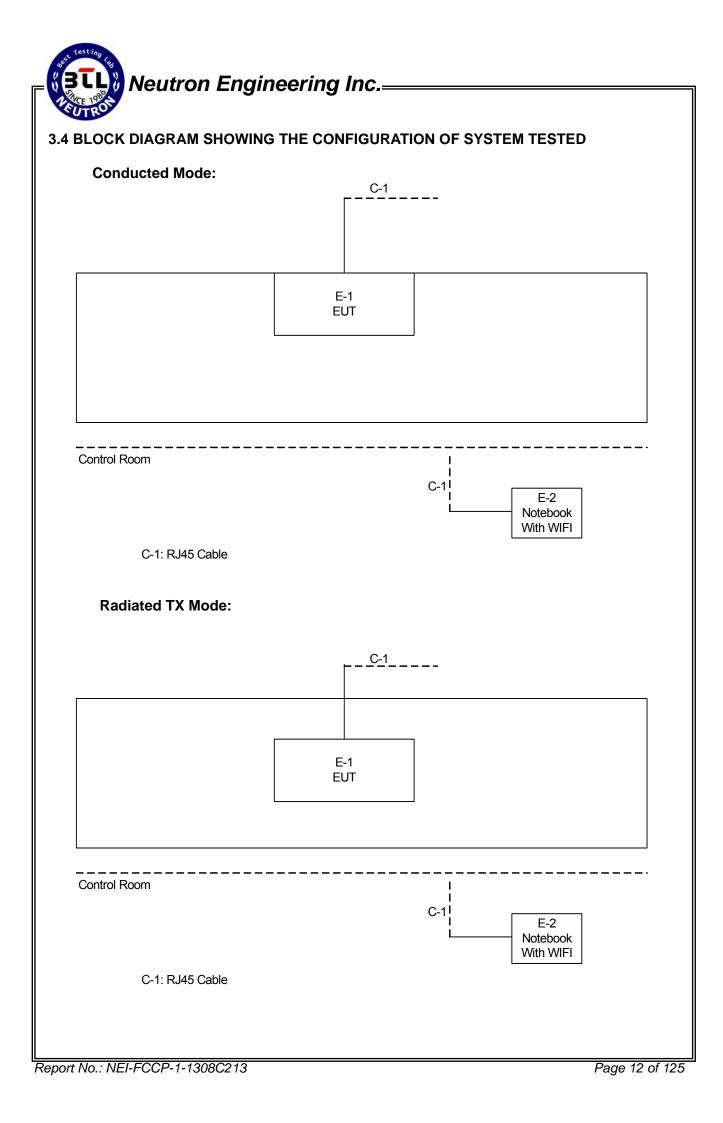
#### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	54	54	54		
IEEE 802.11g OFDM	50	54	48		

Test software version	RT3x7xQA				
Frequency (MHz)	2412 MHz	2437 MHz	2462 MHz		
IEEE 802.11n (20MHz)	50	54	48		
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz		
IEEE 802.11n (40MHz)	45	53	45		

Report No.: NEI-FCCP-1-1308C213 Page 11 of 125



#### 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	Wireless N150 Easy Setup Router	Tenda	N150	V7TN150	N/A	EUT
E-2	NOTEBOOK	DELL	INSPIRON 1420	DOC	NA	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10m	

#### 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.

Report No.: NEI-FCCP-1-1308C213 Page 13 of 125

# 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	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

Report No.: NEI-FCCP-1-1308C213 Page 14 of 125

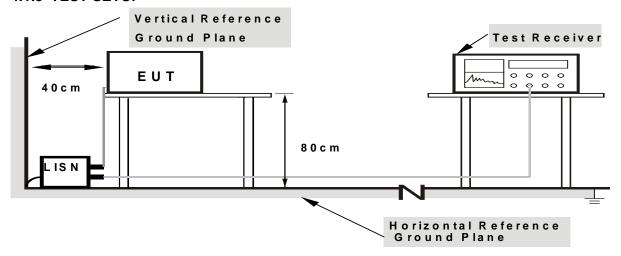
#### 4.1.3 TEST PROCEDURE

- 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.

The EUT was programmed to be in continuously transmitting mode.

Report No.: NEI-FCCP-1-1308C213 Page 15 of 125

#### 4.1.7 TEST RESULTS

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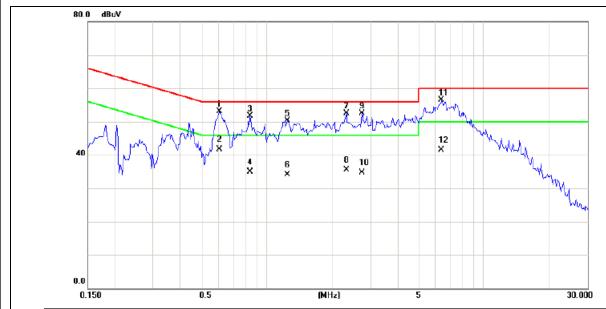
(1) All readings are QP Mode value unless otherwise stated AVG in column of Note. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform on In this case,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

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

Report No.: NEI-FCCP-1-1308C213 Page 16 of 125



-	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode		

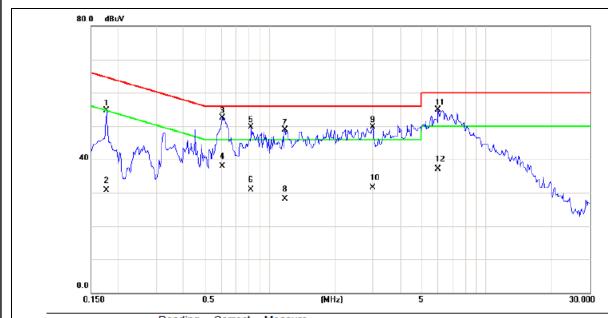


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBu∀	dBuV	dB	Detector	Comment
1	*	0.6070	43.48	9.56	53.04	56.00	-2.96	peak	
2		0.6070	32.20	9.56	41.76	46.00	-4.24	AVG	
3		0.8414	42.12	9.56	51.68	56.00	-4.32	peak	
4		0.8414	25.30	9.56	34.86	46.00	-11.14	AVG	
5		1.2437	40.69	9.57	50.26	56.00	-5.74	peak	
6		1.2437	24.60	9.57	34.17	46.00	-11.83	AVG	
7		2.3258	42.97	9.59	52.56	56.00	-3.44	peak	
8		2.3258	25.90	9.59	35.49	46.00	-10.51	AVG	
9		2.7360	42.83	9.60	52.43	56.00	-3.57	peak	
10		2.7360	25.20	9.60	34.80	46.00	-11.20	AVG	
11		6.3633	46.81	9.64	56.45	60.00	-3.55	peak	
12		6.3633	31.80	9.64	41.44	50.00	-8.56	AVG	

Report No.: NEI-FCCP-1-1308C213 Page 17 of 125



EUT:	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode :	TX Mode		



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∀	dB	dBu∨	dBuV	dB	Detector	Comment
1	0.1773	45.17	9.59	54.76	64.61	-9.85	peak	
2	0.1773	21.20	9.59	30.79	54.61	-23.82	AVG	
3 *	0.6070	42.91	9.59	52.50	56.00	-3.50	peak	
4	0.6070	28.30	9.59	37.89	46.00	-8.11	AVG	
5	0.8220	40.03	9.59	49.62	56.00	-6.38	peak	
6	0.8220	21.30	9.59	30.89	46.00	-15.11	AVG	
7	1.1734	39.36	9.60	48.96	56.00	-7.04	peak	
8	1.1734	18.50	9.60	28.10	46.00	-17.90	AVG	
9	2.9820	40.17	9.63	49.80	56.00	-6.20	peak	
10	2.9820	21.90	9.63	31.53	46.00	-14.47	AVG	
11	5.9805	45.14	9.67	54.81	60.00	-5.19	peak	
12	5.9805	27.50	9.67	37.17	50.00	-12.83	AVG	

Report No.: NEI-FCCP-1-1308C213 Page 18 of 125

#### **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 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower

Report No.: NEI-FCCP-1-1308C213 Page 19 of 125

# 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	СТ	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		

Report No.: NEI-FCCP-1-1308C213 Page 20 of 125

#### **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 STANDARD
------------------------------------

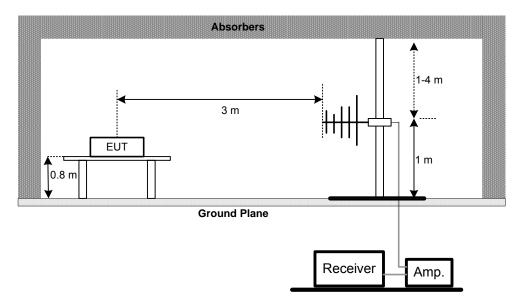
No deviation

Report No.: NEI-FCCP-1-1308C213 Page 21 of 125

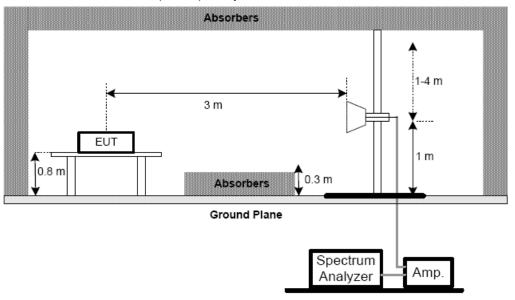


# 4.2.5 TEST SETUP

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



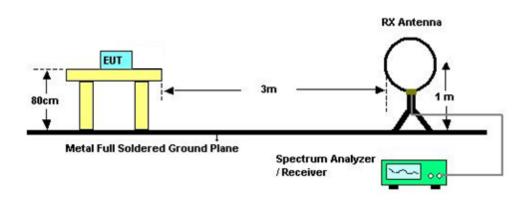
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



Report No.: NEI-FCCP-1-1308C213 Page 22 of 125



(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.

Report No.: NEI-FCCP-1-1308C213 Page 23 of 125

# 4.2.7 TEST RESULTS (BELOW 30MHZ)

ICUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	54 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	` ,	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
0.00935	0°	17.25	24.30	41.55	128.19	-86.64	AVG
0.00935	0°	19.91	24.30	44.21	148.19	-103.98	PK
0.01574	0°	18.04	24.30	42.34	123.66	-81.32	AVG
0.01574	0°	20.54	24.30	44.84	143.66	-98.82	PK
0.02476	0°	18.1	24.00	42.10	119.73	-77.63	AVG
0.02476	0°	20.17	24.00	44.17	139.73	-95.56	PK
0.03645	0°	17.54	23.26	40.80	116.37	-75.57	AVG
0.03645	0°	19.86	23.26	43.12	136.37	-93.25	PK
0.4275	0°	18.05	19.97	38.02	94.99	-56.96	AVG
0.4275	0°	20.78	19.97	40.75	114.99	-74.23	PK
1.4345	0°	18.67	19.56	38.23	64.47	-26.24	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.00945	90°	17.65	24.30	41.95	128.10	-86.15	AVG
0.00945	90°	21.12	24.30	45.42	148.10	-102.68	PK
0.02342	90°	17.02	24.08	41.10	120.21	-79.11	AVG
0.02342	90°	19.64	24.08	43.72	140.21	-96.49	PK
0.03174	90°	17.45	23.56	41.01	117.57	-76.57	AVG
0.03174	90°	20.35	23.56	43.91	137.57	-93.67	PK
0.05365	90°	18.04	22.33	40.37	113.01	-72.65	AVG
0.05365	90°	20.72	22.33	43.05	133.01	-89.97	PK
0.2435	90°	17.54	20.41	37.95	99.87	-61.92	AVG
0.2435	90°	20.39	20.41	40.80	119.87	-79.07	PK
1.6854	90°	17.58	19.53	37.11	63.07	-25.96	QP

#### Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 c below the permissible value has no need to be reported  $\circ$
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB); •
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.  $\circ$

Report No.: NEI-FCCP-1-1308C213 Page 24 of 125

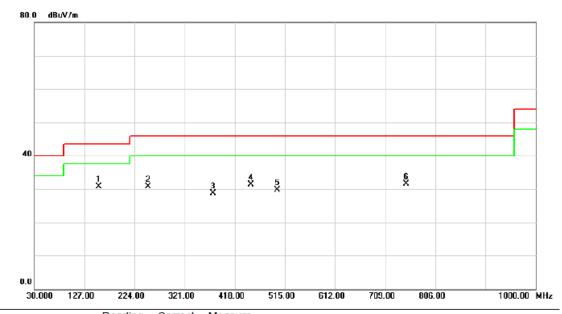
# 4.2.8 TEST RESULTS (BETWEEN 30 - 1000 MHZ)

# 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 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  $\circ$

Report No.: NEI-FCCP-1-1308C213 Page 25 of 125

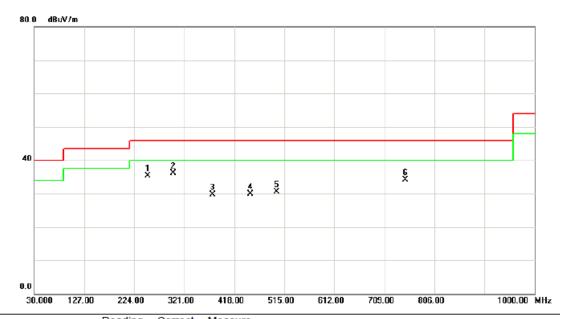
HUII:	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 01		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	154.1600	44.35	-13.70	30.65	43.50	-12.85	peak		
2		250.1900	45.70	-14.97	30.73	46.00	-15.27	peak		
3		375.3200	39.38	-10.66	28.72	46.00	-17.28	peak		
4		450.0100	40.29	-8.91	31.38	46.00	-14.62	peak		
5		500.4500	39.96	-10.31	29.65	46.00	-16.35	peak		
6		749.7400	36.41	-4.91	31.50	46.00	-14.50	peak		

Report No.: NEI-FCCP-1-1308C213 Page 26 of 125

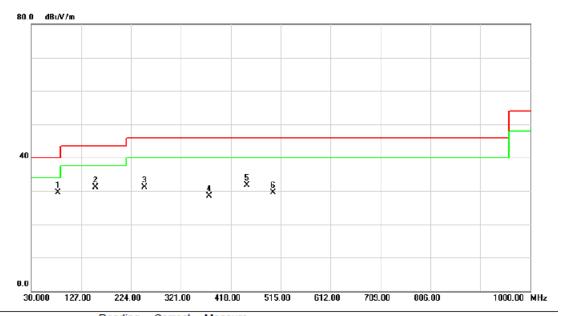
HUII:	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 01		



	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		250.1900	50.37	-14.97	35.40	46.00	-10.60	peak	
	2	*	299.6600	47.30	-11.27	36.03	46.00	-9.97	peak	
	3		375.3200	40.38	-10.66	29.72	46.00	-16.28	peak	
	4		450.0100	38.73	-8.91	29.82	46.00	-16.18	peak	
	5		500.4500	40.82	-10.31	30.51	46.00	-15.49	peak	
	6		749.7400	39.08	-4.91	34.17	46.00	-11.83	peak	
-										

Report No.: NEI-FCCP-1-1308C213 Page 27 of 125

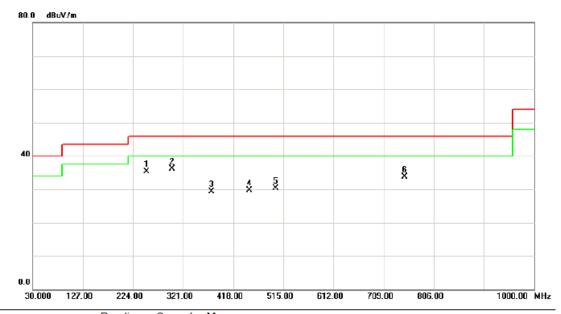
	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 06		



MHz         dBuV         dB         dBuV/m         dBuV/m         dB         Detector         Comment           1 * 82.3800         47.11         -17.68         29.43         40.00         -10.57         peak           2 155.1300         44.81         -13.69         31.12         43.50         -12.38         peak           3 250.1900         46.16         -14.97         31.19         46.00         -14.81         peak		Freq. Level Factor ment L	Limit Over
2 155.1300 44.81 -13.69 31.12 43.50 -12.38 peak		MHz dBuV dB dBuV/m dB	IBuV/m dB Detector Comment
	1	2.3800 47.11 -17.68 29.43 40	40.00 -10.57 peak
3 250.1900 46.16 -14.97 31.19 46.00 -14.81 peak	2	5.1300 44.81 -13.69 31.12 43	43.50 -12.38 peak
	3	0.1900 46.16 -14.97 31.19 46	46.00 -14.81 peak
4 375.3200 39.24 -10.66 28.58 46.00 -17.42 peak	4	5.3200 39.24 -10.66 28.58 46	46.00 -17.42 peak
5 450.0100 40.53 -8.91 31.62 46.00 -14.38 peak	5	0.0100 40.53 -8.91 31.62 46	46.00 -14.38 peak
6 500.4500 39.72 -10.31 29.41 46.00 -16.59 peak	6	0.4500 39.72 -10.31 29.41 46	46.00 -16.59 peak

Report No.: NEI-FCCP-1-1308C213 Page 28 of 125

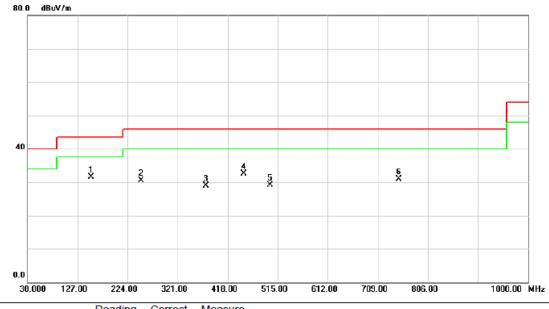
FUI:	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 06		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1		250.1900	50.33	-14.97	35.36	46.00	-10.64	peak		
2	*	299.6600	47.45	-11.27	36.18	46.00	-9.82	peak		
3		375.3200	40.05	-10.66	29.39	46.00	-16.61	peak		
4		450.0100	38.61	-8.91	29.70	46.00	-16.30	peak		
5		500.4500	40.70	-10.31	30.39	46.00	-15.61	peak		
6		749.7400	38.70	-4.91	33.79	46.00	-12.21	peak		

Report No.: NEI-FCCP-1-1308C213 Page 29 of 125

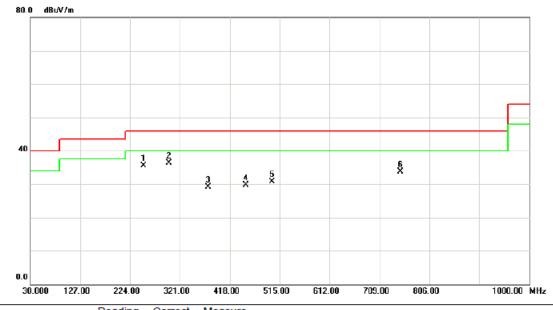
HUII:	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 11		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	153.1900	45.15	-13.71	31.44	43.50	-12.06	peak		
2		250.1900	45.53	-14.97	30.56	46.00	-15.44	peak		
3		375.3200	39.55	-10.66	28.89	46.00	-17.11	peak		
4		450.0100	41.37	-8.91	32.46	46.00	-13.54	peak		
5		500.4500	39.41	-10.31	29.10	46.00	-16.90	peak		
6		749.7400	35.76	-4.91	30.85	46.00	-15.15	peak		

Report No.: NEI-FCCP-1-1308C213 Page 30 of 125

HUII:	Wireless N150 Easy Setup Router	Model Name:	N150
Temperature:	<b>24</b> ℃	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	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
Ī	1		250.1900	50.50	-14.97	35.53	46.00	-10.47	peak	
	2	*	299.6600	47.63	-11.27	36.36	46.00	-9.64	peak	
Ī	3		375.3200	39.83	-10.66	29.17	46.00	-16.83	peak	
	4		450.0100	38.60	-8.91	29.69	46.00	-16.31	peak	
Ī	5		500.4500	40.97	-10.31	30.66	46.00	-15.34	peak	
	6		749.7400	38.55	-4.91	33.64	46.00	-12.36	peak	
_										-

Report No.: NEI-FCCP-1-1308C213 Page 31 of 125

# 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

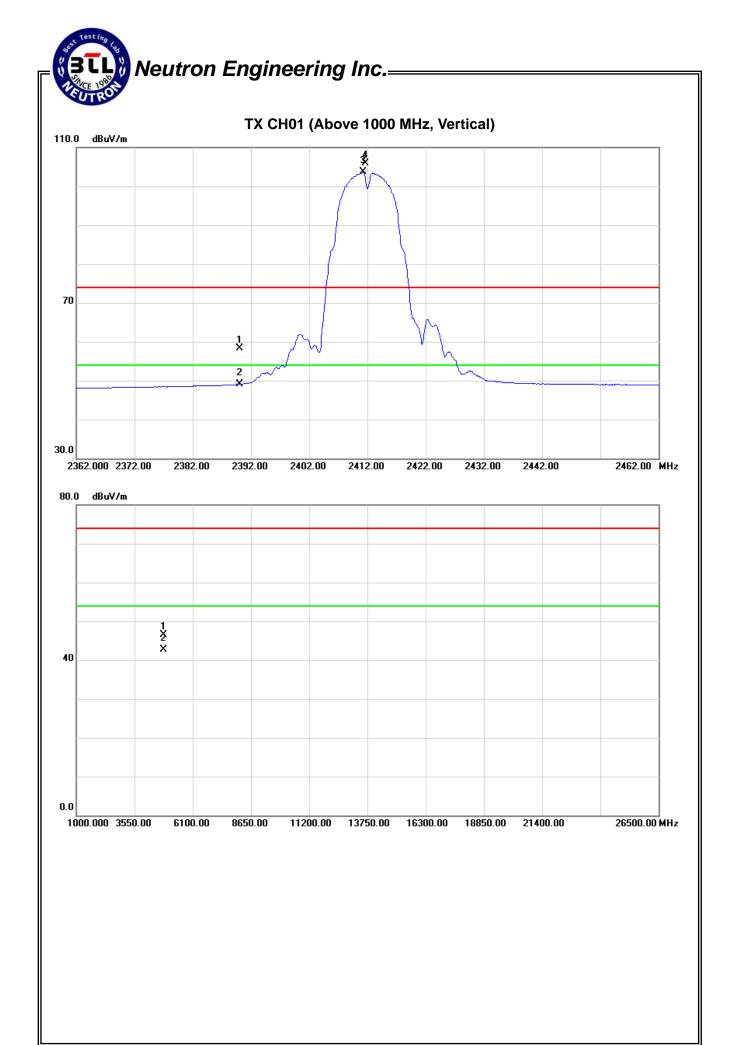
HUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq.	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	V	24.14	14.99	34.09	58.23	49.08	74.00	54.00	X/E
2411.60	V	71.81	69.49	34.16	105.97	103.65			X/F
4823.99	V	40.28	36.42	6.19	46.47	42.61	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

Report No.: NEI-FCCP-1-1308C213 Page 32 of 125





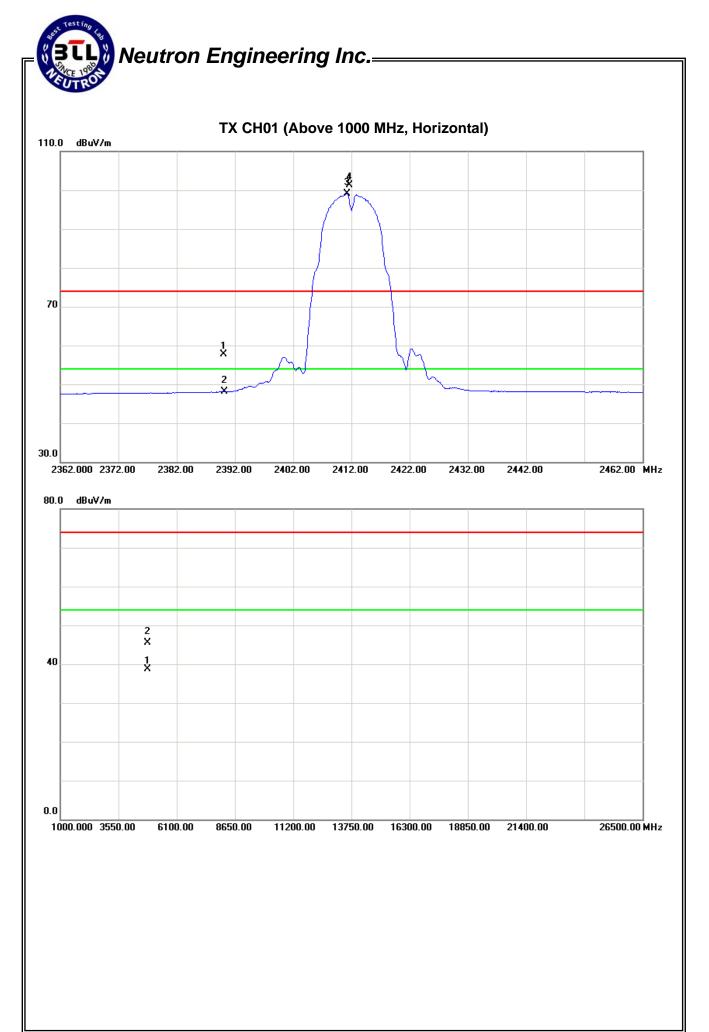
IFUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV	Alic./Oi	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	23.67	19.97	34.09	57.76	54.06	74.00	54.00	X/E
2411.60	Н	67.18	64.94	34.16	101.34	99.10			X/F
4824.00	Н	39.40	32.54	6.19	45.59	38.73	74.00	54.00	X/H

#### Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ∘
- (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

Report No.: NEI-FCCP-1-1308C213 Page 34 of 125



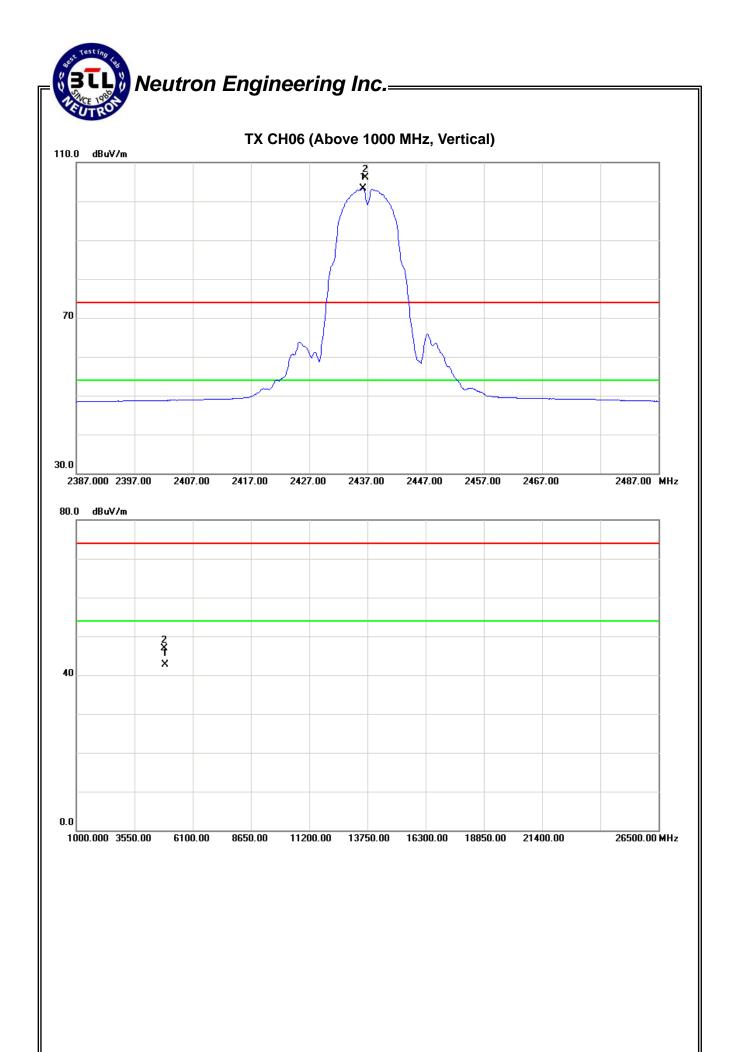
EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV	AIIL./CI	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.60	V	71.86	69.13	34.23	106.09	103.36			X/F
4874.00	V	40.59	36.27	6.39	46.98	42.66	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

Report No.: NEI-FCCP-1-1308C213 Page 36 of 125

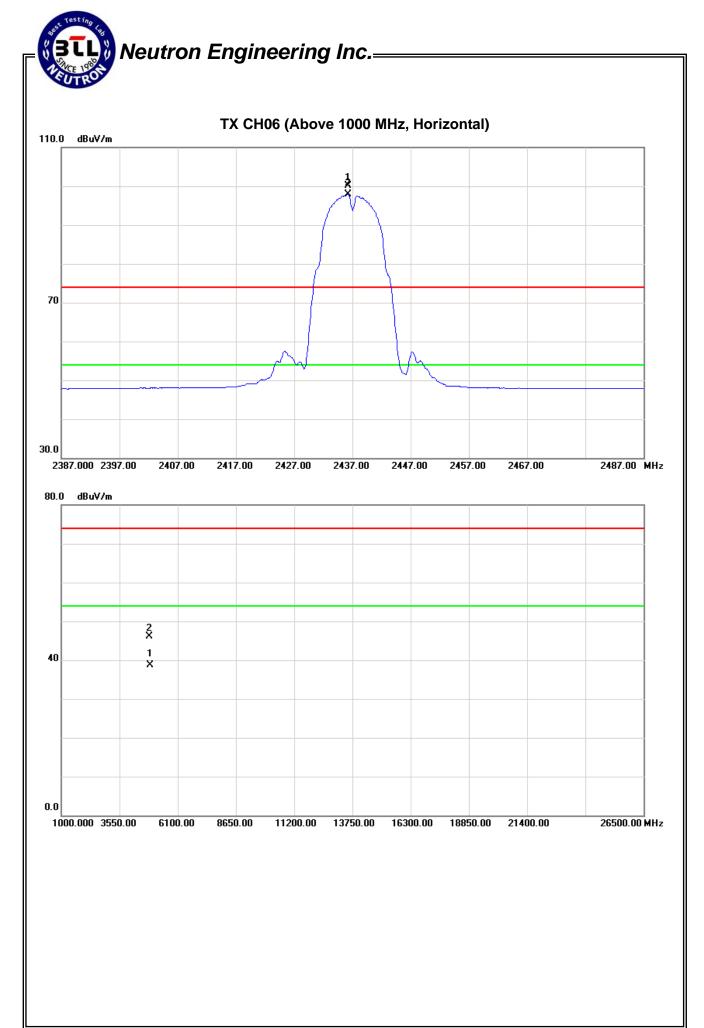


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq. Ant.Pol.	Rea	ading Ant./CF		Act.		Limit			
i ieq.	AIIL.FUI.	Peak	AV	Ant./O	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.20	Н	65.94	63.70	34.23	100.17	97.93			X/F
4874.00	Н	39.62	32.38	6.39	46.01	38.77	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

Report No.: NEI-FCCP-1-1308C213 Page 38 of 125



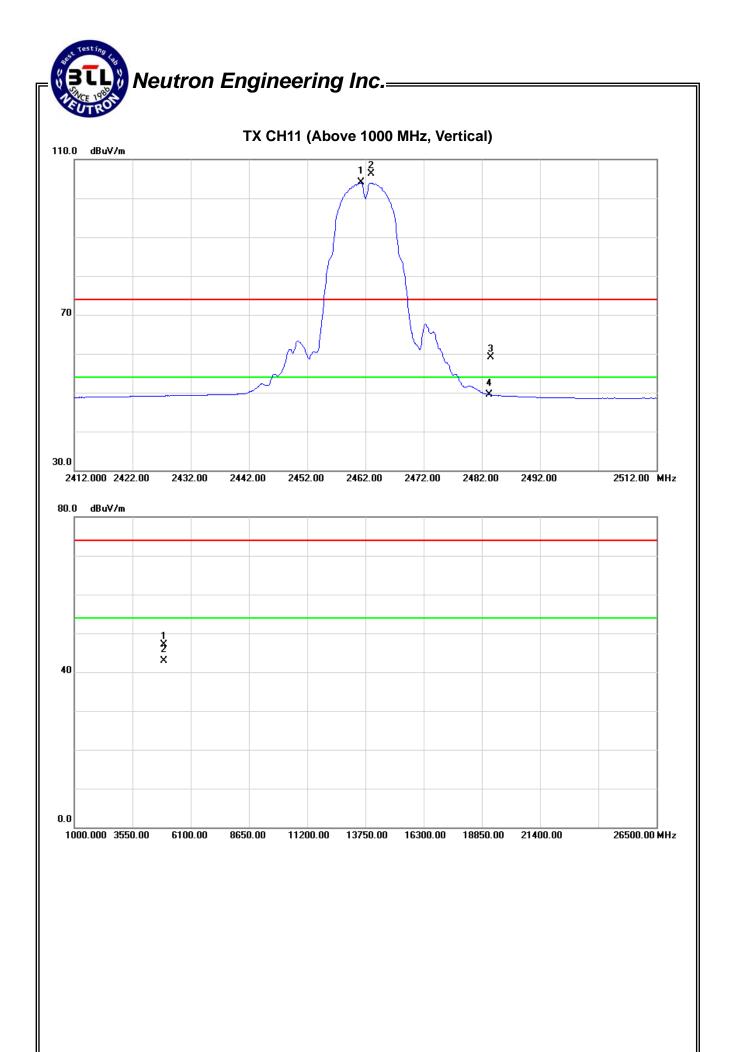


IFUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freq. Ant.Pol.	Ant Pol	Reading		Ant./CF	Act.		Limit		
rieq.	AIIL.FUI.	Peak	AV	Ant./Or	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	V	71.93	69.71	34.31	106.24	104.02			X/F
2483.50	V	24.81	15.05	34.37	59.18	49.42	74.00	54.00	X/E
4924.00	V	40.49	36.32	6.59	47.08	42.91	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

Report No.: NEI-FCCP-1-1308C213 Page 40 of 125

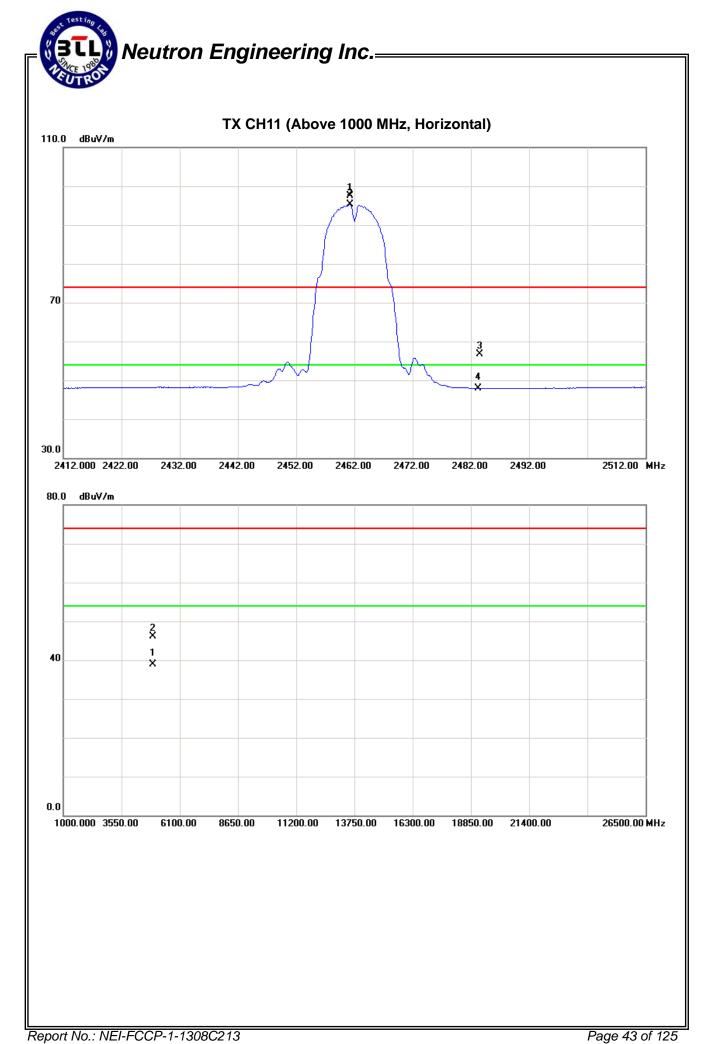


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freq. Ant.Pol.	Reading		Ant./CF	Act.		Limit			
r req.	Ant.i oi.	Peak	AV	K111./O1	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2461.20	Н	63.20	60.97	34.37	97.57	95.34			X/F
2483.50	Н	22.40	13.57	34.37	56.77	47.94	74.00	54.00	X/E
4924.01	Н	39.57	32.41	6.59	46.16	39.00	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

Report No.: NEI-FCCP-1-1308C213 Page 42 of 125

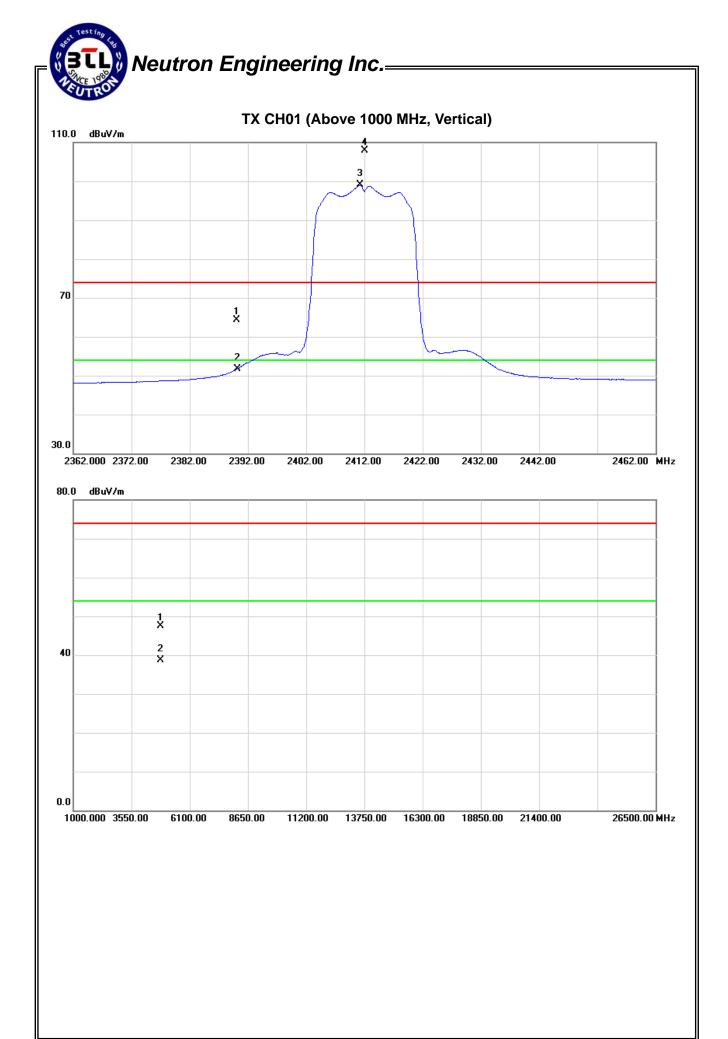


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freg. Ant.Pol.		Reading		Ant./CF	Act.		Limit		
r req.	Ant.i oi.	Peak	AV	Ant./O	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	30.13	17.52	34.09	64.22	51.61	74.00	54.00	X/E
2412.10	V	73.69	64.96	34.16	107.85	99.12			X/F
4823.95	V	41.35	32.48	6.19	47.54	38.67	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

Report No.: NEI-FCCP-1-1308C213 Page 44 of 125

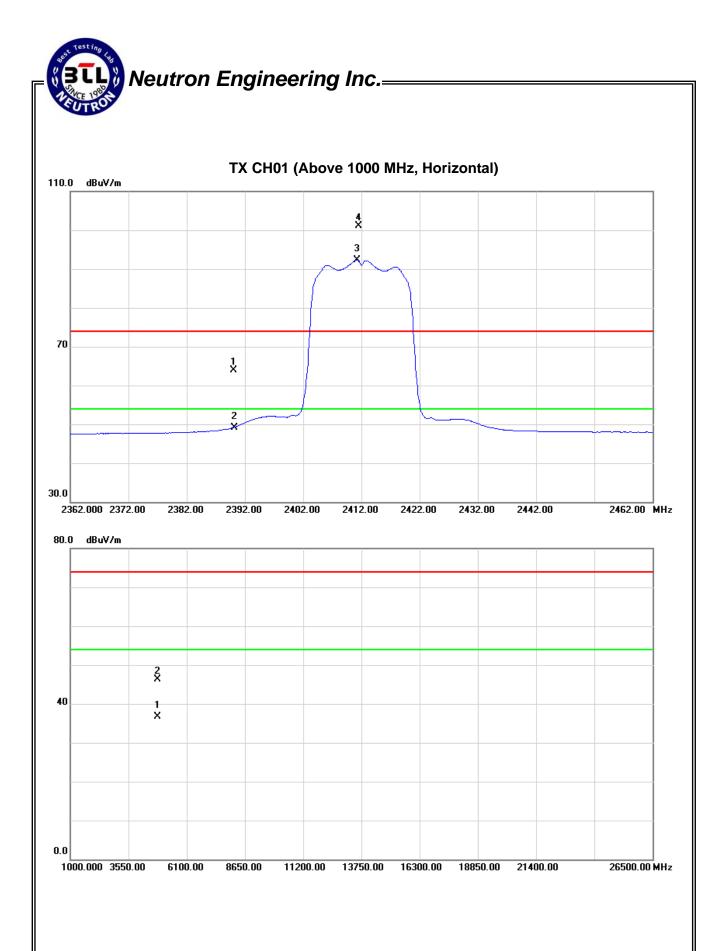


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freg. Ant.Pol.		Reading		Ant./CF	A	Act.		Limit	
r req.	Ant.i oi.	Peak	AV	Ant./O	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	29.78	15.10	34.09	63.87	49.19	74.00	54.00	X/E
2411.50	Н	66.86	58.20	34.16	101.02	92.36			X/F
4824.03	Н	40.12	30.42	6.19	46.31	36.61	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

Report No.: NEI-FCCP-1-1308C213 Page 46 of 125

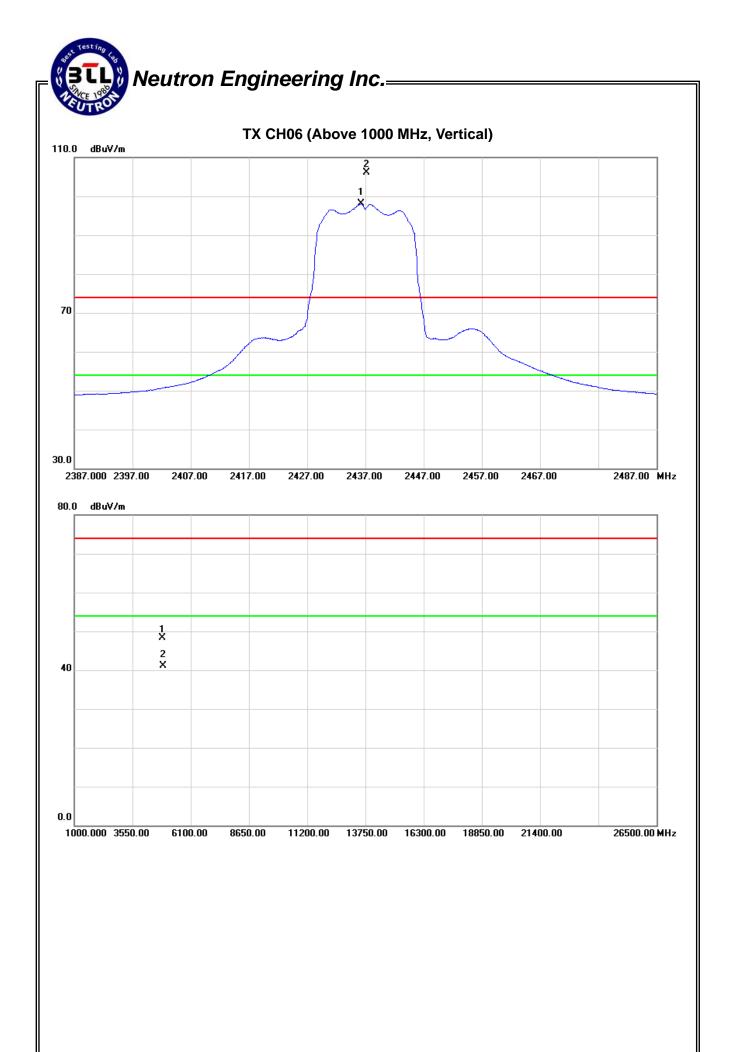


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq. Ant.Po	Ant.Pol.	Reading		Ant./CF	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)	
2437.20	V	71.83	63.78	34.23	106.06	98.01			X/F
4873.96	V	41.84	34.78	6.39	48.23	41.17	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ∘
- (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

Report No.: NEI-FCCP-1-1308C213 Page 48 of 125

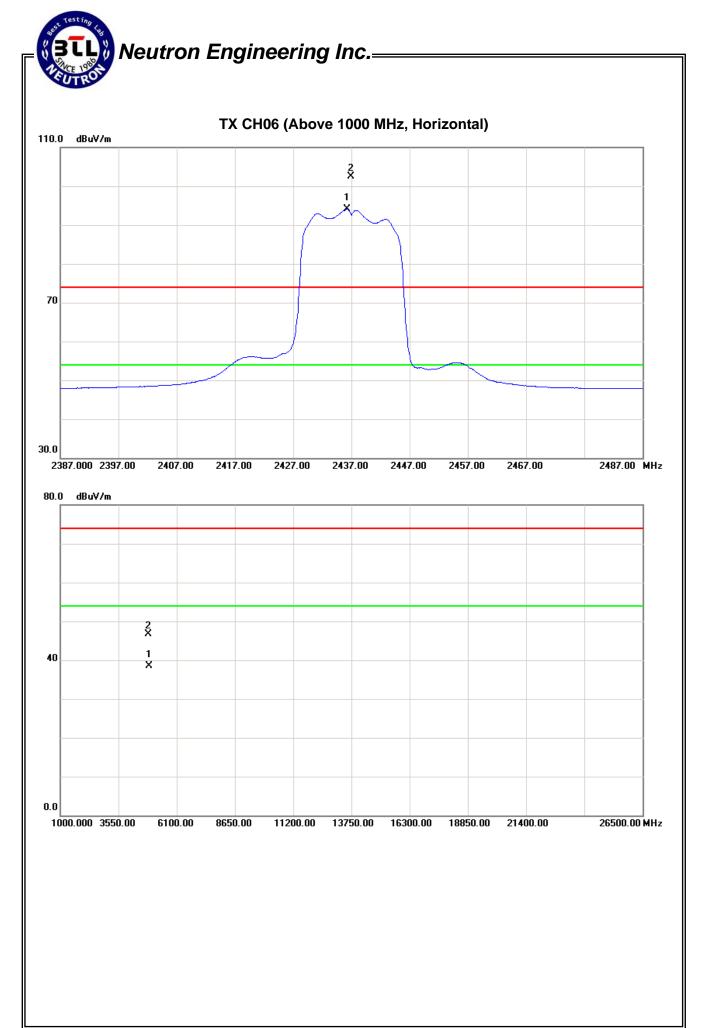


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq. A	Ant.Pol.	Reading		Ant./CF	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)	
2436.90	Н	68.26	59.83	34.23	102.49	94.06			X/F
4874.02	Н	40.37	32.15	6.39	46.76	38.54	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ∘
- (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

Report No.: NEI-FCCP-1-1308C213 Page 50 of 125



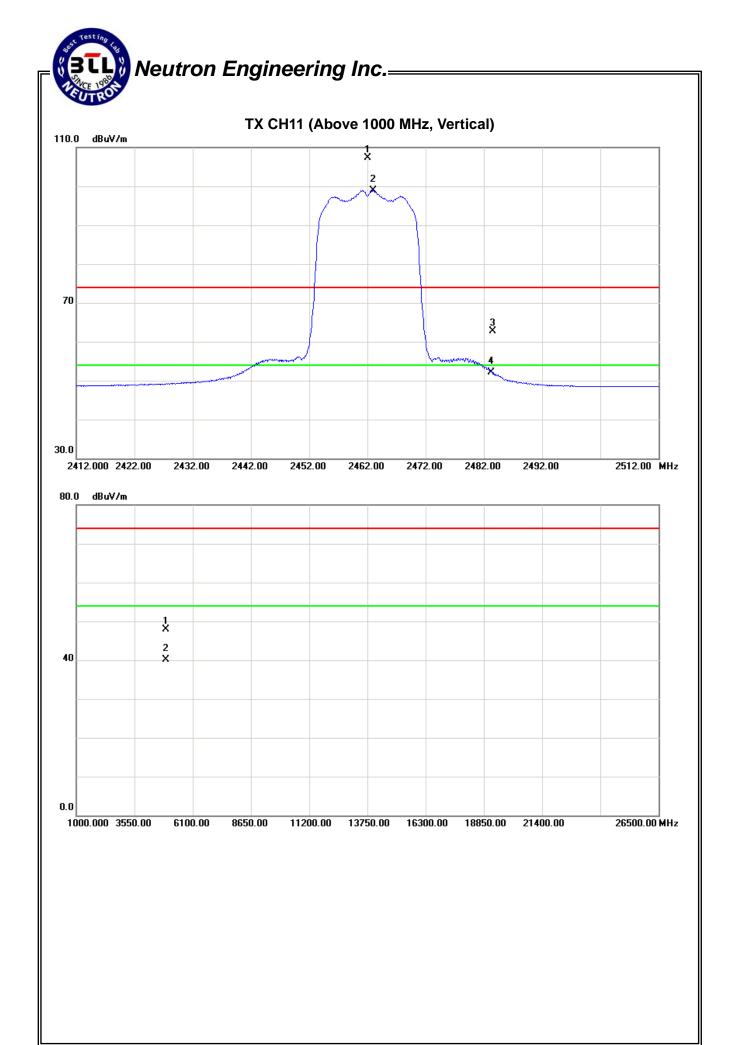


IFUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq. Ant.Po	Ant.Pol.	t Pol Reading		Ant./CF	A	Act.		Limit	
rieq.	AIIL.FUI.	Peak	AV	Ant./Or	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.00	V	73.02	64.63	34.31	107.33	98.94			X/F
2483.50	V	28.42	17.77	34.37	62.79	52.14	74.00	54.00	X/E
4923.98	V	41.25	33.42	6.59	47.84	40.01	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

Report No.: NEI-FCCP-1-1308C213 Page 52 of 125



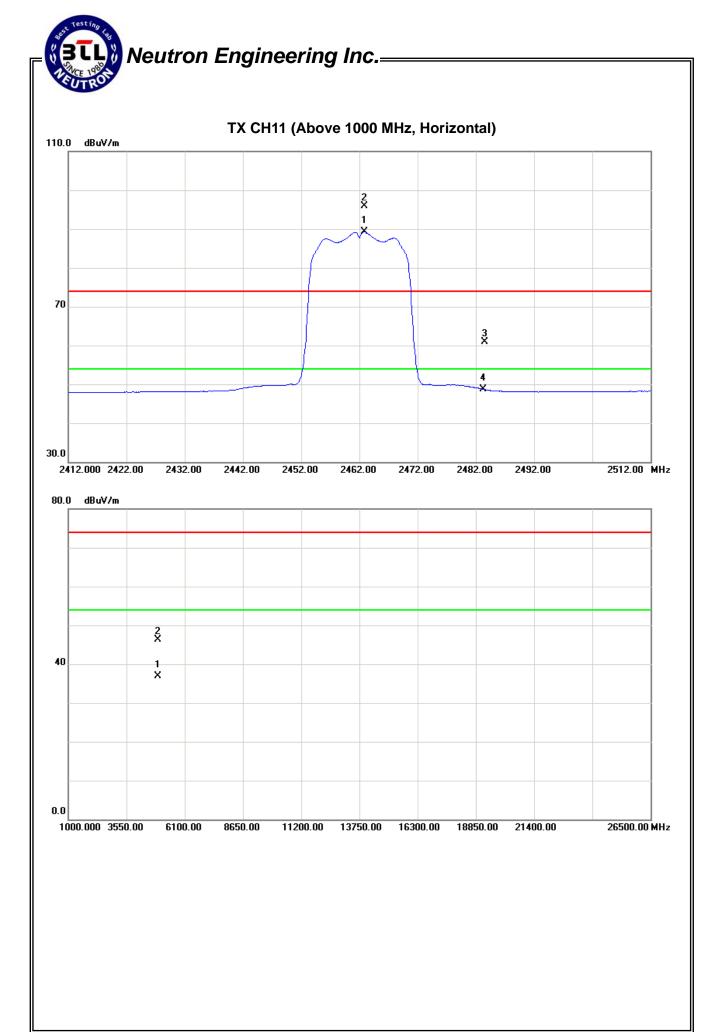


IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq. Ant.P	Ant.Pol.	Reading		Ant./CF	A	Act.		Limit	
rieq.	AIIL.FUI.	Peak	AV	KIII./OF	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.90	Η	61.63	54.94	34.31	95.94	89.25			X/F
2483.50	Н	26.56	14.24	34.37	60.93	48.61	74.00	54.00	X/E
4924.02	Н	39.65	30.28	6.59	46.24	36.87	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

Report No.: NEI-FCCP-1-1308C213 Page 54 of 125

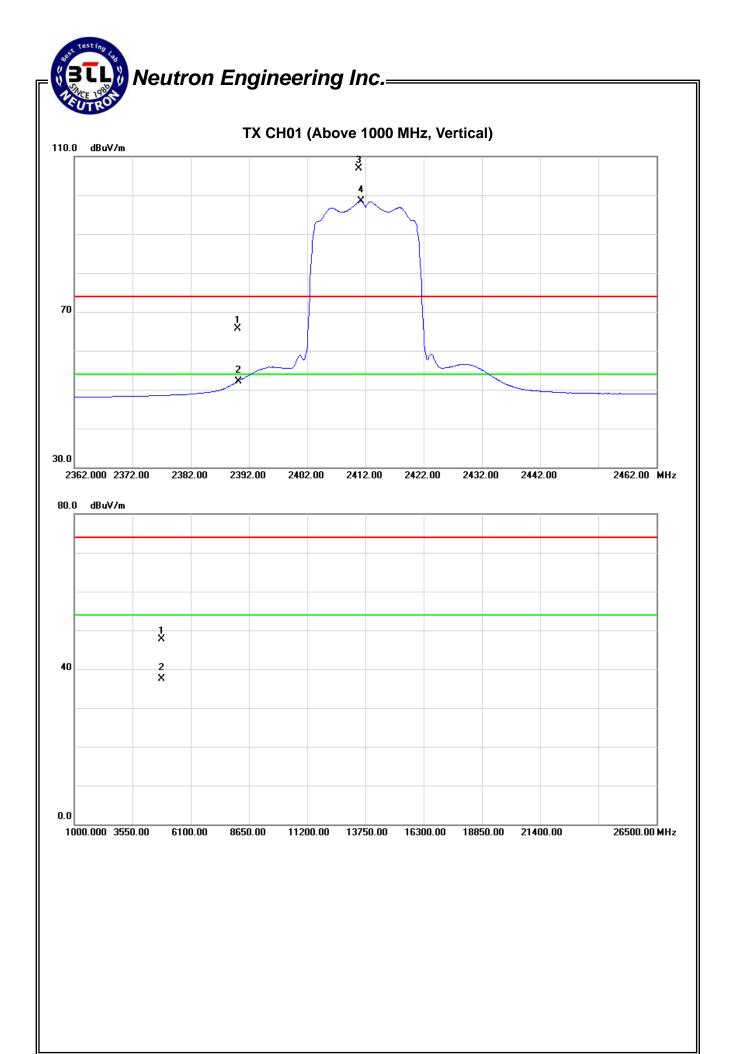


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

Freq. Ant.P	Ant.Pol.	Read Read	ding Ant./CF		Act.		Limit		
r req.	Ant.i oi.	Peak	AV	K111./O1	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	31.57	17.94	34.09	65.66	52.03	74.00	54.00	X/E
2410.80	٧	72.73	64.34	34.16	106.89	98.50			X/F
4823.93	V	41.42	31.28	6.19	47.61	37.47	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

Report No.: NEI-FCCP-1-1308C213 Page 56 of 125



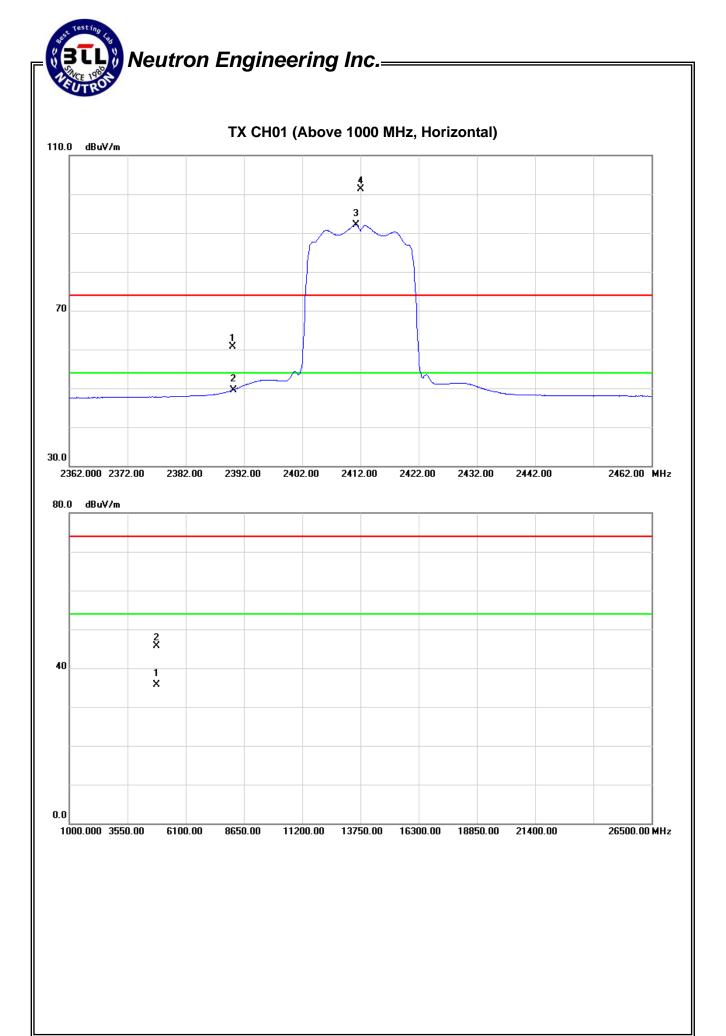


ICUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

Freg. Ant	Ant.Pol.	Ant Pol Rea	ding	Ant./CF	Act.		Limit		
rieq.	AIIL.FUI.	Peak	AV	KIII./OF	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	26.55	15.42	34.09	60.64	49.51	74.00	54.00	X/E
2412.10	Н	67.05	57.95	34.16	101.21	92.11			X/F
4824.04	Н	39.52	29.45	6.19	45.71	35.64	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

Report No.: NEI-FCCP-1-1308C213 Page 58 of 125

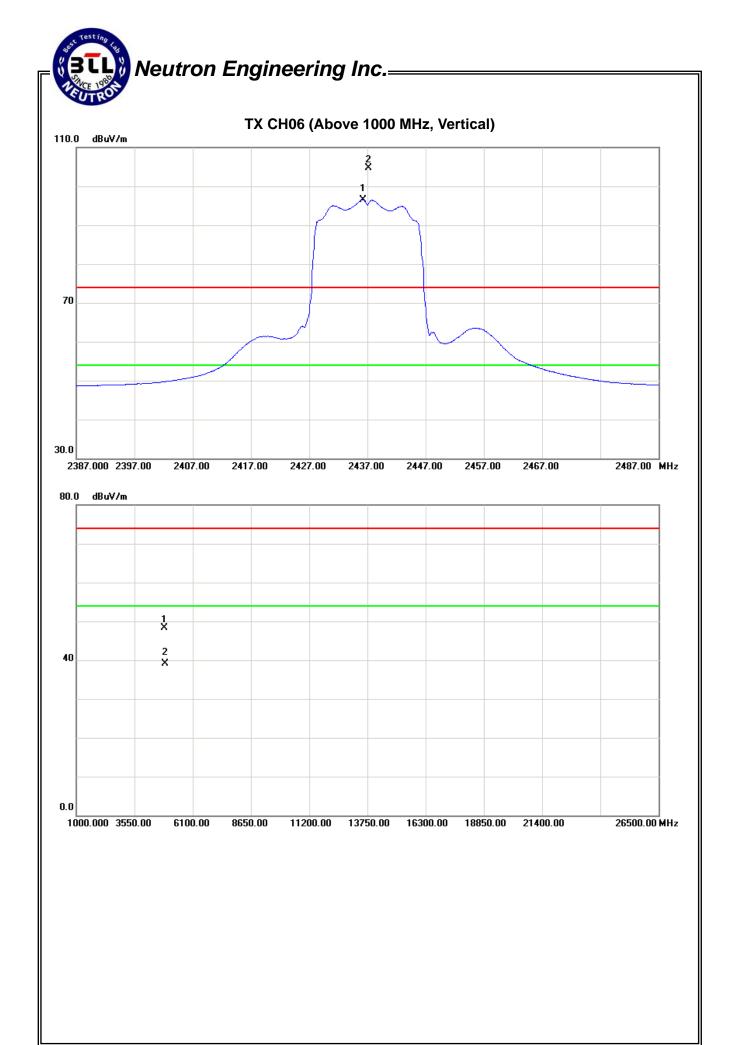


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
1 164.	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)	
2437.20	V	70.54	62.31	34.23	104.77	96.54			X/F
4873.94	V	41.96	32.69	6.39	48.35	39.08	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ∘
- (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

Report No.: NEI-FCCP-1-1308C213 Page 60 of 125



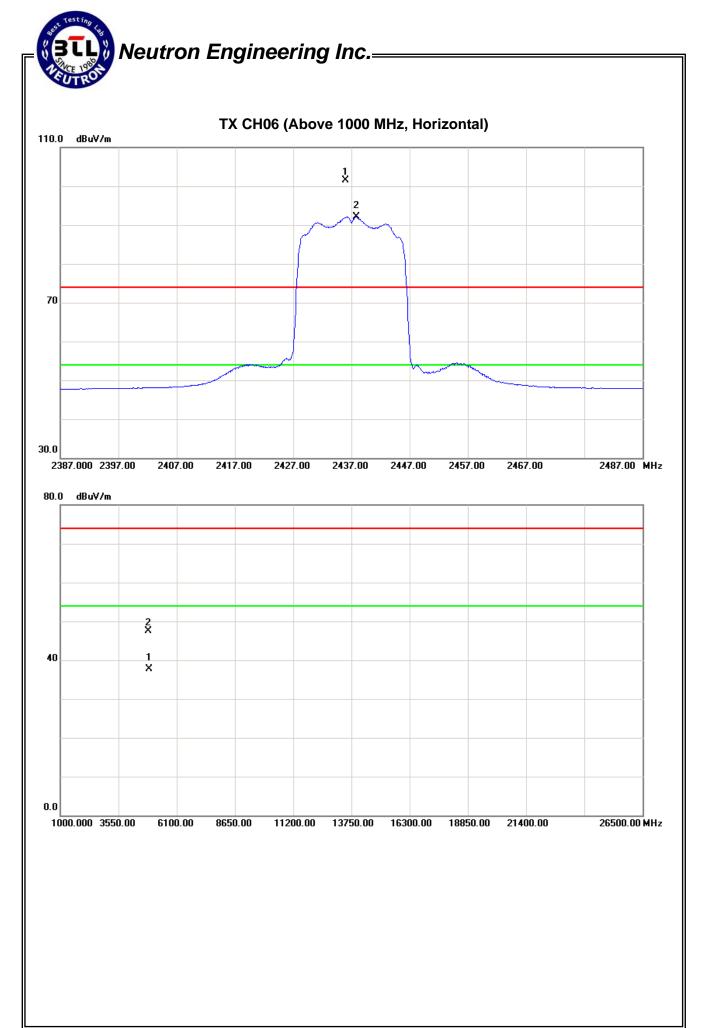


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq. A	Ant.Pol.	Rea	Reading Ant./CF		Act.		Limit		
	AIIL.FUI.	Peak	Peak AV	Ant./Or	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.00	Н	67.26	57.87	34.23	101.49	92.10			X/F
4874.05	Н	41.08	31.24	6.39	47.47	37.63	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

Report No.: NEI-FCCP-1-1308C213 Page 62 of 125



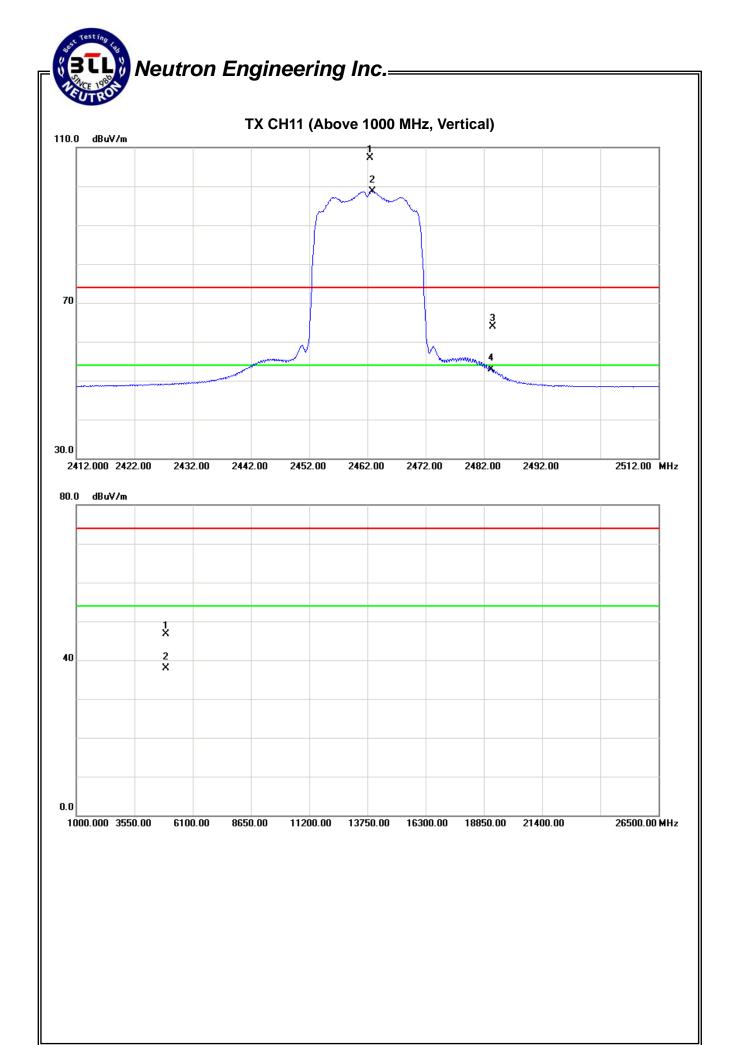


IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

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)	
2462.40	V	72.98	64.43	34.31	107.29	98.74			X/F
2483.50	V	29.56	18.55	34.37	63.93	52.92	74.00	54.00	X/E
4923.93	V	40.02	31.24	6.59	46.61	37.83	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

Report No.: NEI-FCCP-1-1308C213 Page 64 of 125

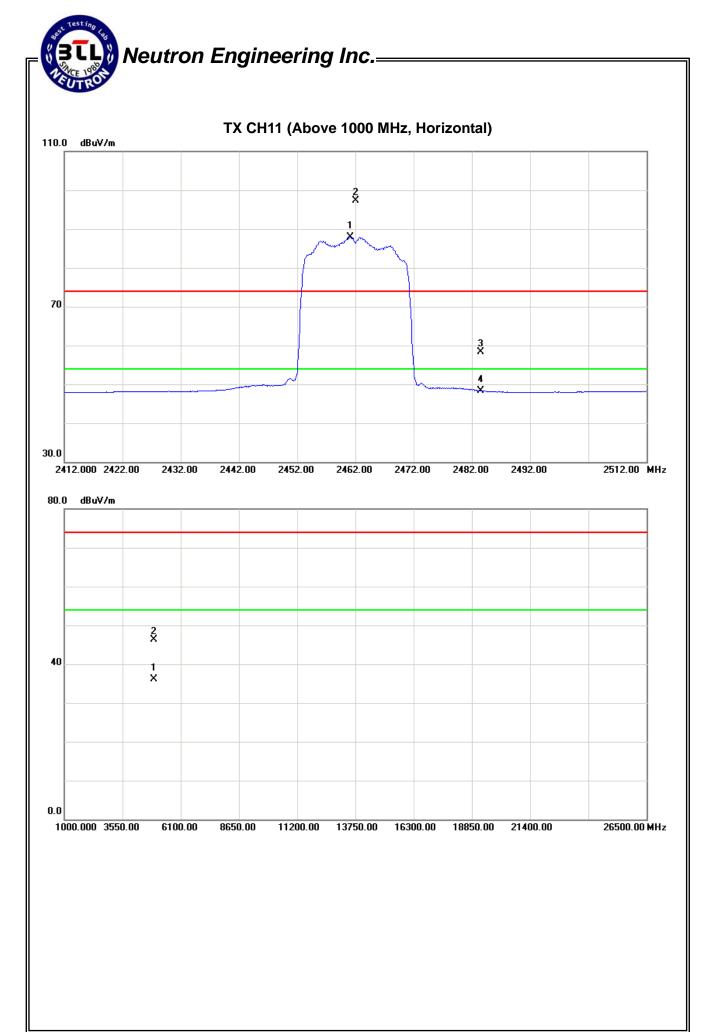


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

Freq. 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)	
2462.10	H	62.93	53.61	34.31	97.24	87.92			X/F
2483.50	Н	23.86	14.00	34.37	58.23	48.37	74.00	54.00	X/E
4924.08	Н	39.72	29.58	6.59	46.31	36.17	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

Report No.: NEI-FCCP-1-1308C213 Page 66 of 125

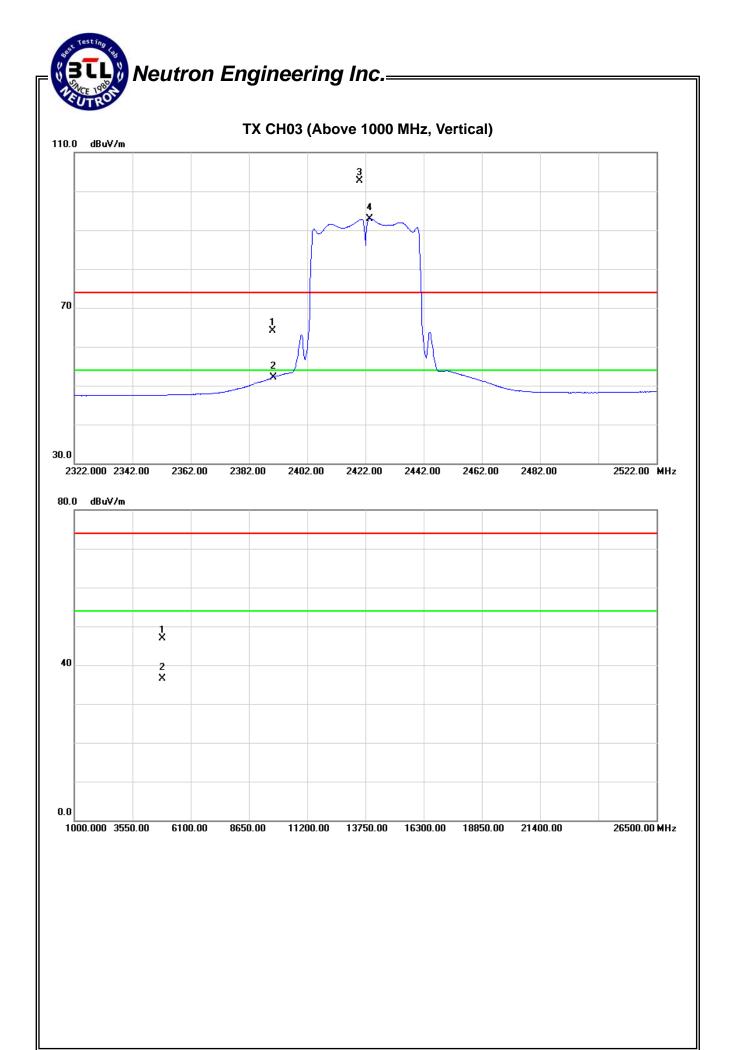


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

Freq. Ant.Pol.	Ant Pol	Rea	eading 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)	
2390.00	V	29.96	18.00	34.09	64.05	52.09	74.00	54.00	X/E
2420.00	٧	68.53	58.80	34.18	102.71	92.98			X/F
4843.87	V	40.62	30.15	6.27	46.89	36.42	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

Report No.: NEI-FCCP-1-1308C213 Page 68 of 125

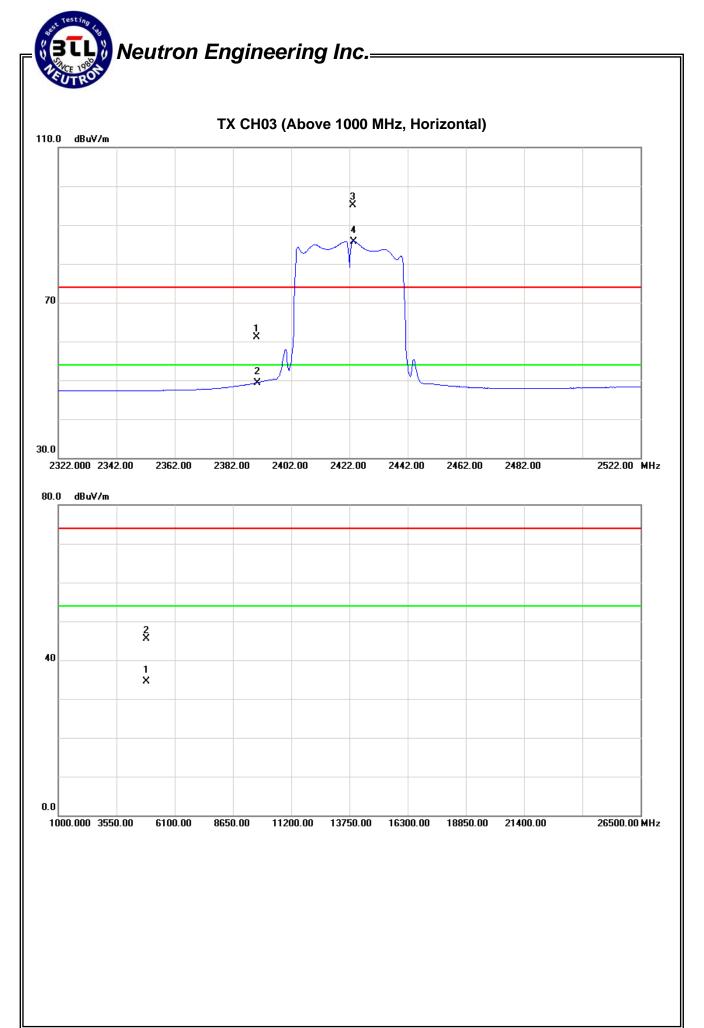


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

Freq. Ant.Pol.	Ant Pol	Reading Ant./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)	
2390.00	Н	26.93	15.30	34.09	61.02	49.39	74.00	54.00	X/E
2423.20	Н	60.84	51.61	34.19	95.03	85.80			X/F
4844.12	Н	39.32	28.20	6.27	45.59	34.47	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

Report No.: NEI-FCCP-1-1308C213 Page 70 of 125

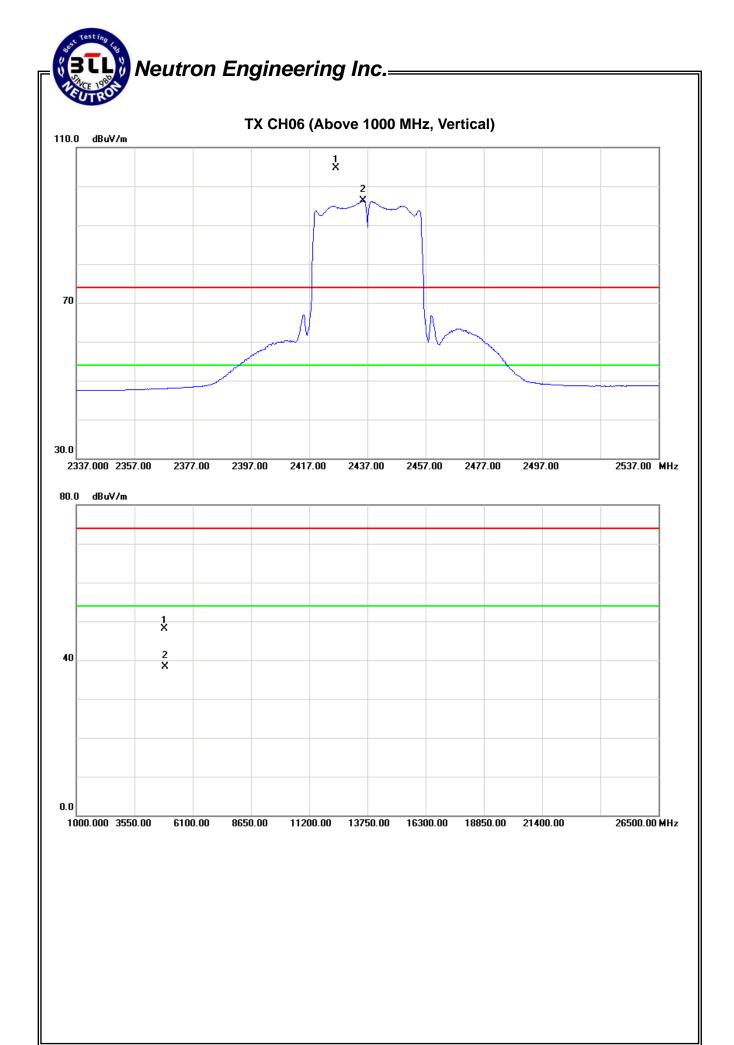


EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freq. Ant	Ant.Pol. Rea	ding	Ant./CF	Act.		Limit			
r req.	Ant.i oi.	Peak	AV	K111.701	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2426.20	V	70.55	62.00	34.20	104.75	96.20			X/F
4873.89	V	41.68	31.82	6.39	48.07	38.21	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

Report No.: NEI-FCCP-1-1308C213 Page 72 of 125



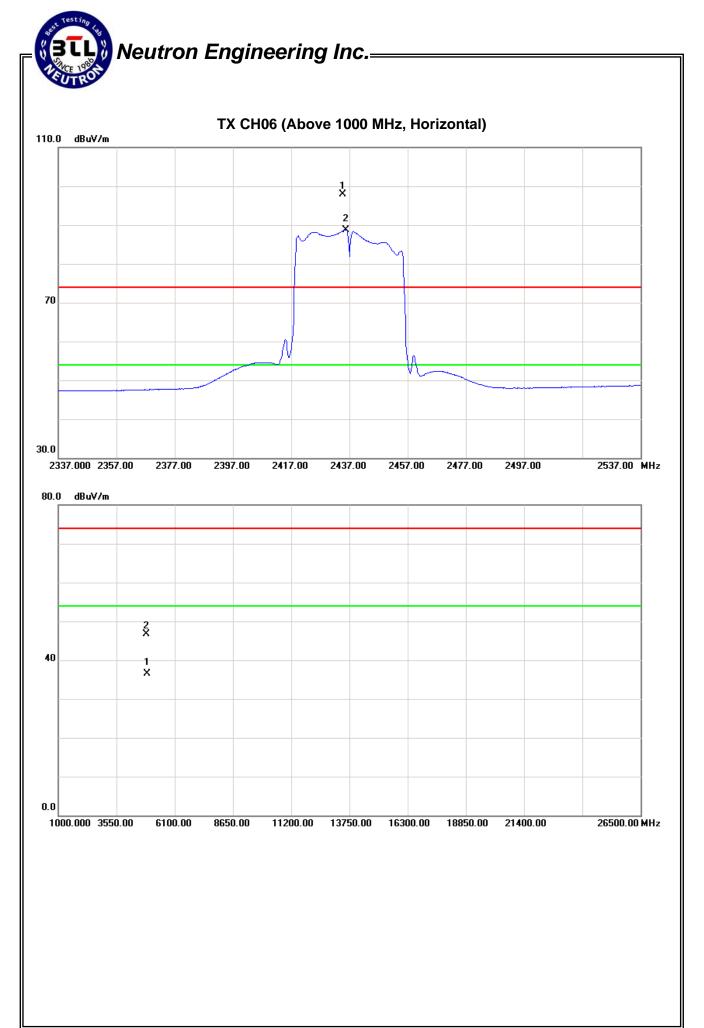
EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freg.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Liı	mit	
r req.	Ant.i 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)	
2434.80	Н	63.71	54.51	34.23	97.94	88.74			X/F
4874.12	Н	40.38	30.07	6.39	46.77	36.46	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

Report No.: NEI-FCCP-1-1308C213 Page 74 of 125





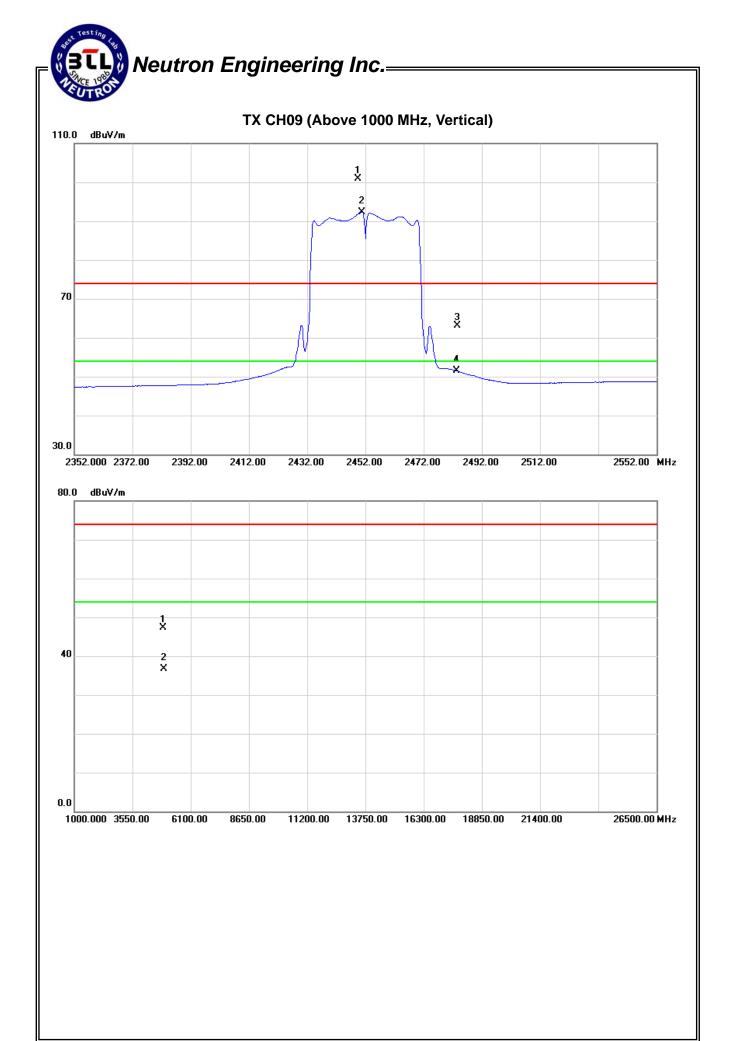
IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Liı	mit	
rieq.	AIIL.FUI.	Peak	AV	KIII./OF	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2449.40	V	66.65	57.97	34.27	100.92	92.24			X/F
2483.50	V	28.64	17.09	34.37	63.01	51.46	74.00	54.00	X/E
4903.88	V	40.78	30.24	6.51	47.29	36.75	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 •
- (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

Report No.: NEI-FCCP-1-1308C213 Page 76 of 125



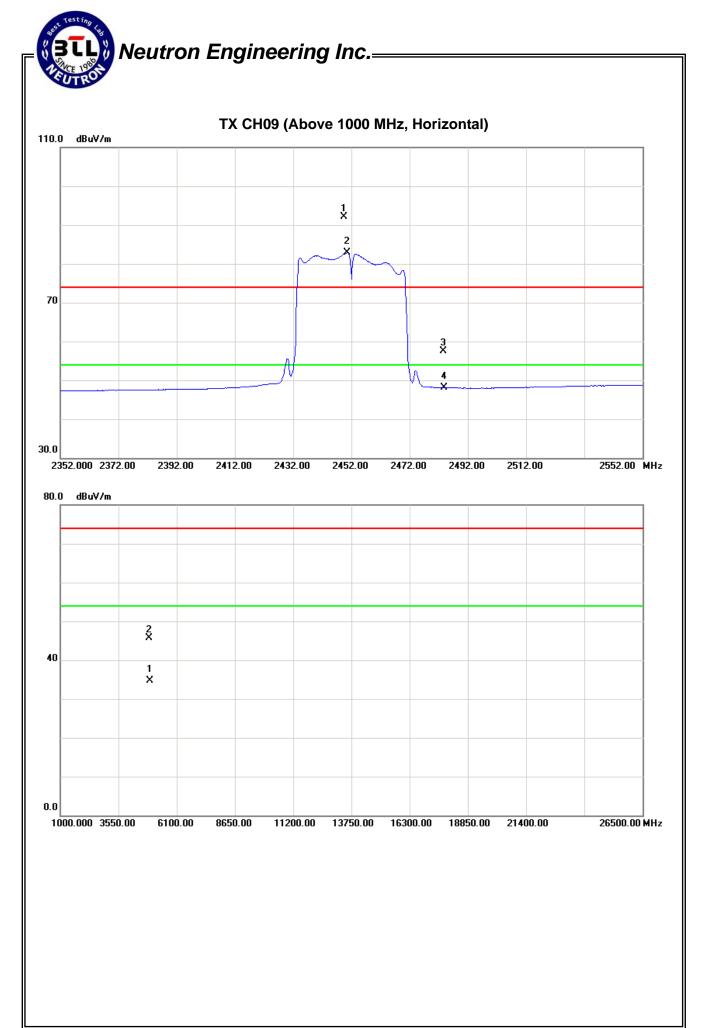
EUT:	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	mit	
r req.	Ant.i oi.	Peak	AV	ζ	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2449.40	Н	57.80	48.57	34.27	92.07	82.84			X/F
2483.50	Н	23.22	13.74	34.37	57.59	48.11	74.00	54.00	X/E
4904.09	Н	39.28	28.15	6.51	45.79	34.66	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 •
- (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

Report No.: NEI-FCCP-1-1308C213 Page 78 of 125



#### 5. BANDWIDTH TEST

5.1 Applied procedures / limit

71 Applied precedured Allinic						
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.

Report No.: NEI-FCCP-1-1308C213 Page 80 of 125

#### **5.1.6 TEST RESULTS**

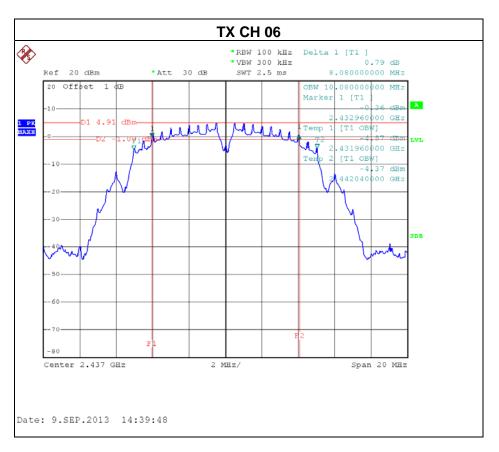
IFUI.	Wireless N150 Easy Setup Router	Model Name. :	N150		
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX B MODE /CH01, CH06, CH11				

Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	8.08	PASS
CH06	2437	8.08	PASS
CH11	2462	8.08	PASS



Report No.: NEI-FCCP-1-1308C213 Page 81 of 125



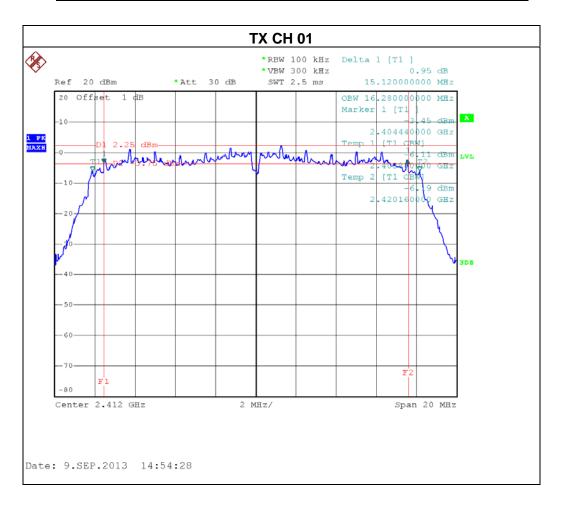






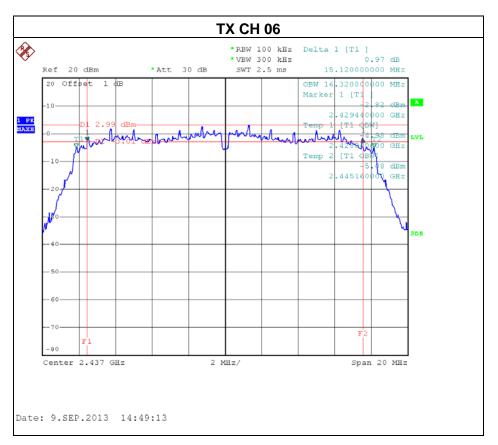
IFUI .	Wireless N150 Easy Setup Router	Model Name. :	N150		
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %		
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX G MODE /CH01, CH06, CH11				

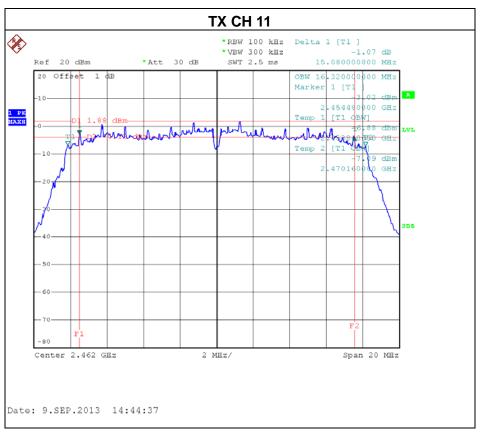
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	15.12	PASS
CH06	2437	15.12	PASS
CH11	2462	15.08	PASS



Report No.: NEI-FCCP-1-1308C213 Page 83 of 125

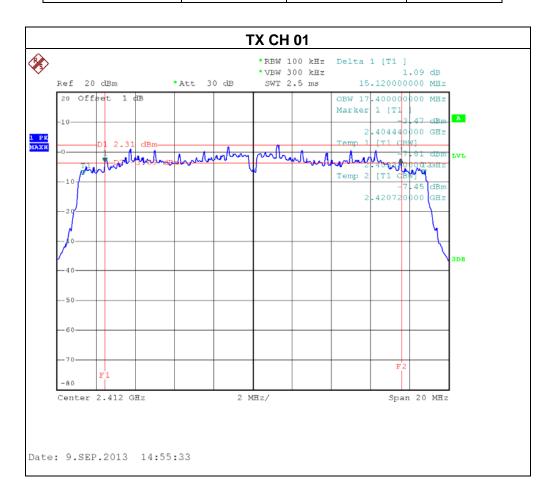






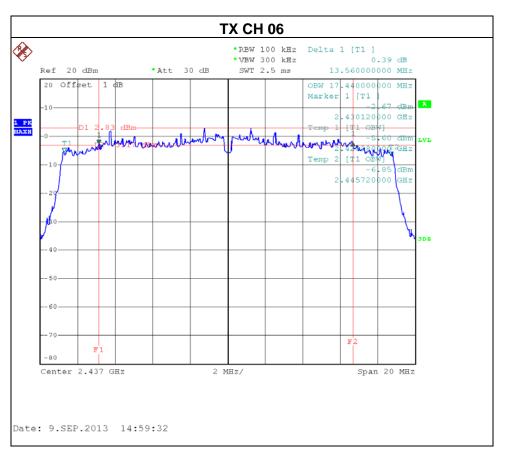
EUI.	Wireless N150 Easy Setup Router	Model Name. :	N150	
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11			

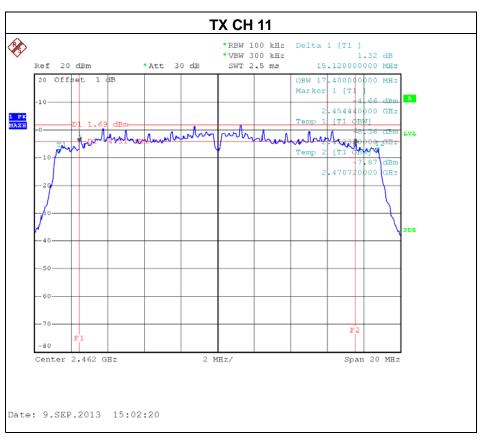
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	15.12	PASS
CH06	2437	13.56	PASS
CH11	2462	15.12	PASS



Report No.: NEI-FCCP-1-1308C213 Page 85 of 125

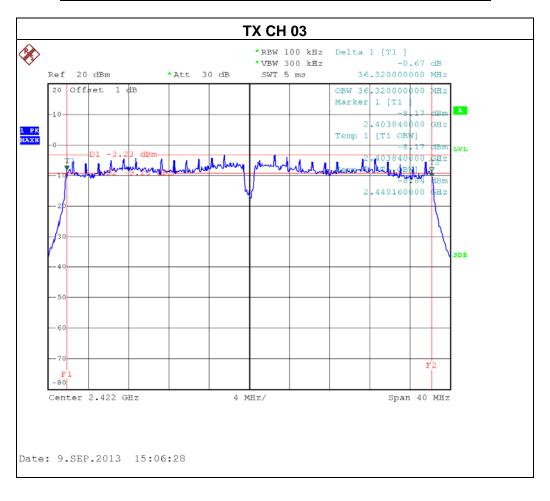






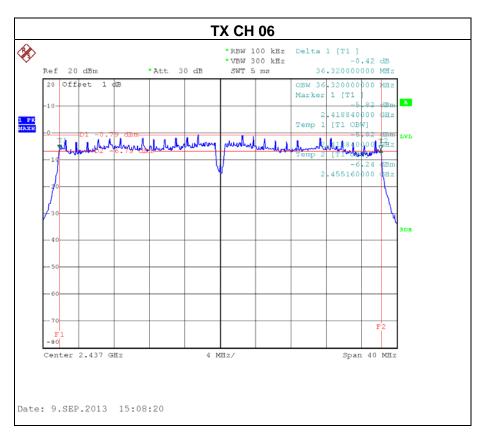
EUI.	Wireless N150 Easy Setup Router	Model Name. :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N MODE -40MHz/ CH03, CH06, CH09			

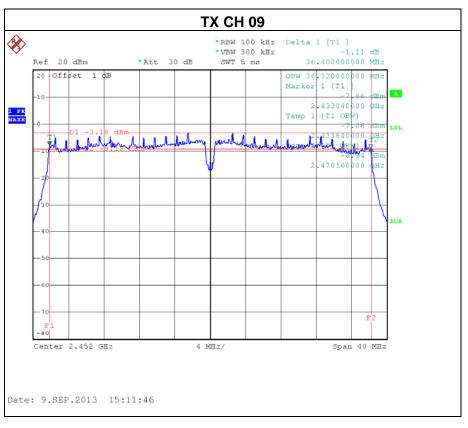
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	36.32	PASS
CH06	2437	36.32	PASS
CH09	2452	36.40	PASS



Report No.: NEI-FCCP-1-1308C213 Page 87 of 125







Report No.: NEI-FCCP-1-1308C213 Page 88 of 125

#### 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.

Report No.: NEI-FCCP-1-1308C213 Page 89 of 125

### 6.1.6 TEST RESULTS

IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	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)	LIMIT (dBm)	LIMIT (W)
2412 MHz	16.73	30	1
2437 MHz	16.42	30	1
2462 MHz	16.28	30	1

IPUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	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)	LIMIT (dBm)	LIMIT (W)
2412 MHz	19.42	30	1
2437 MHz	20.25	30	1
2462 MHz	18.56	30	1

Report No.: NEI-FCCP-1-1308C213 Page 90 of 125



IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	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)	LIMIT (dBm)	LIMIT (W)
2412 MHz	19.56	30	1
2437 MHz	20.50	30	1
2462 MHz	18.67	30	1

IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

Frequency	Peak Output Power	LIMIT	LIMIT
(MHz)	(dBm)	(dBm)	(W)
2422 MHz	17.68	30	1
2437 MHz	20.12	30	1
2452 MHz	17.54	30	1

Report No.: NEI-FCCP-1-1308C213 Page 91 of 125

#### 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.

Report No.: NEI-FCCP-1-1308C213 Page 92 of 125

#### 7.1.6 TEST RESULTS

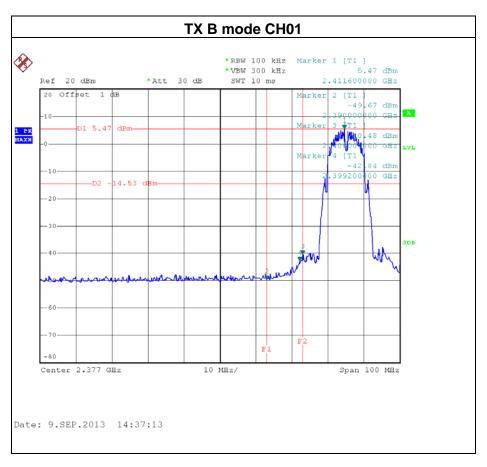
IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

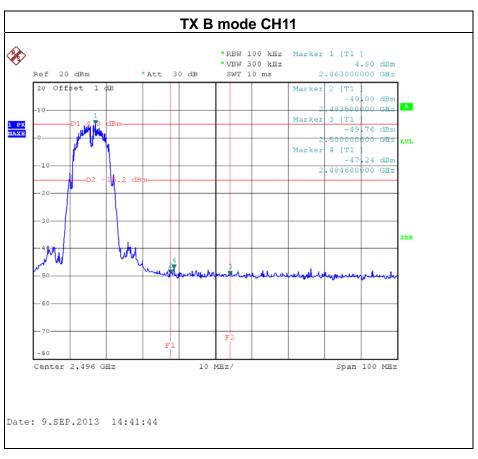
Channel of Worst Data: CH01					
	cy power in any 100kHz the frequency band	The max. radio frequence bandwidth within the			
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2390.00 -49.67 2483.50 -49.09					
	Result				

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.

Report No.: NEI-FCCP-1-1308C213 Page 93 of 125

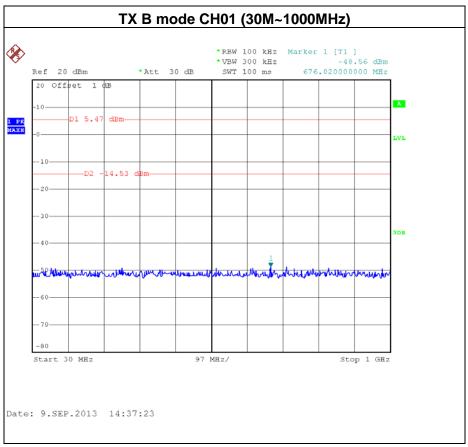


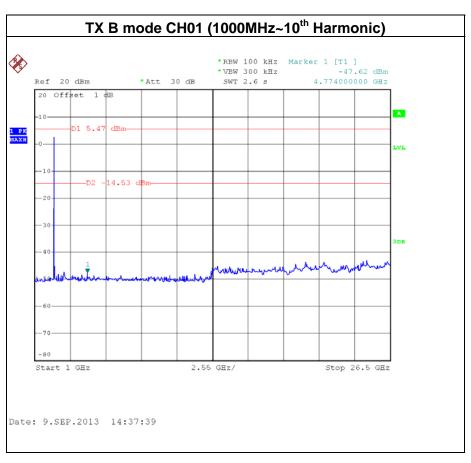




Report No.: NEI-FCCP-1-1308C213 Page 94 of 125

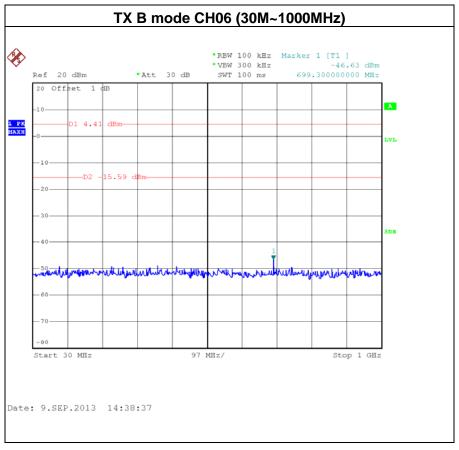


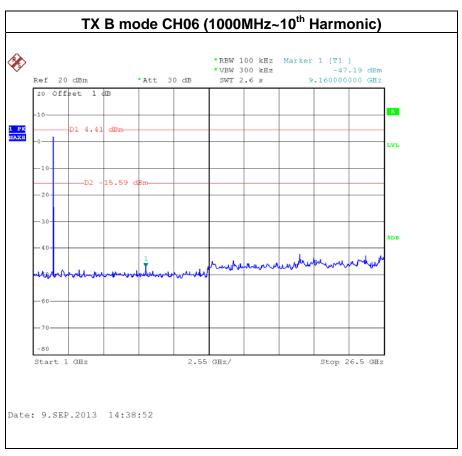




Report No.: NEI-FCCP-1-1308C213 Page 95 of 125

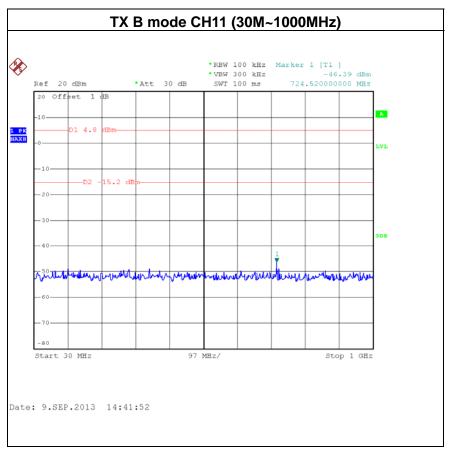


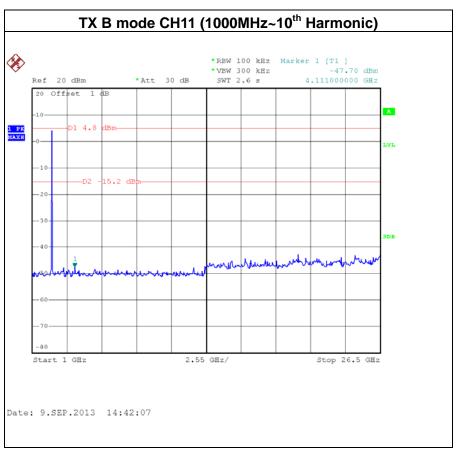




Report No.: NEI-FCCP-1-1308C213 Page 96 of 125







Report No.: NEI-FCCP-1-1308C213 Page 97 of 125

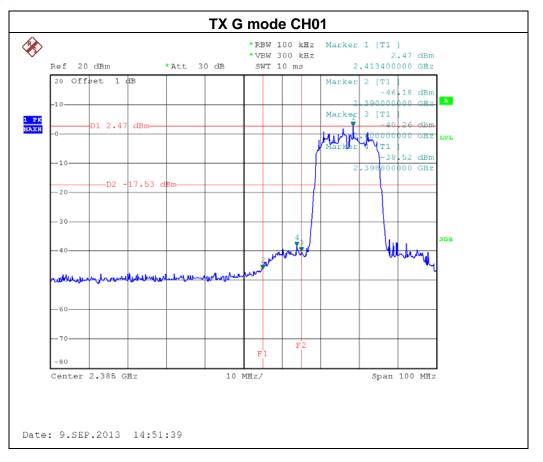


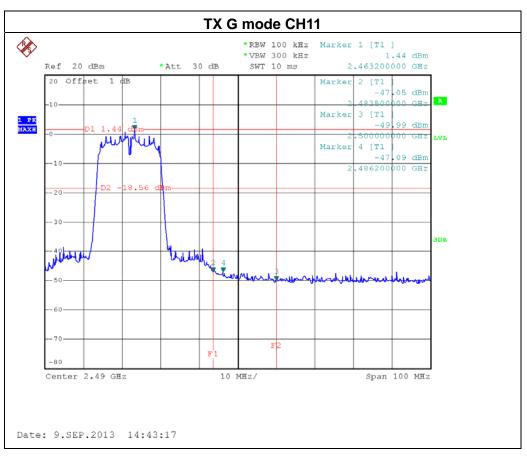
IFUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06, CH11		

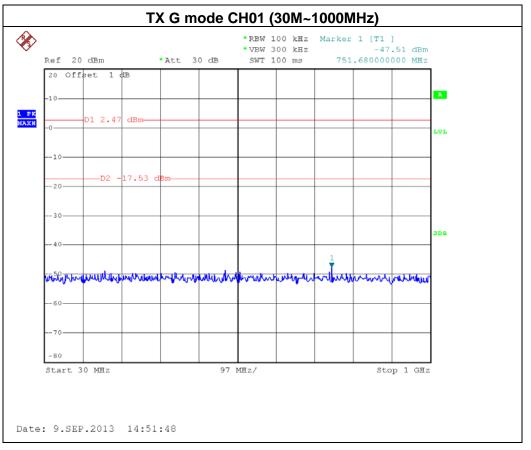
Channel of Worst Data: CH01					
	cy power in any 100kHz the frequency band	The max. radio frequence bandwidth within the			
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2390.00 -46.18 2483.50 -47.05					
Result					

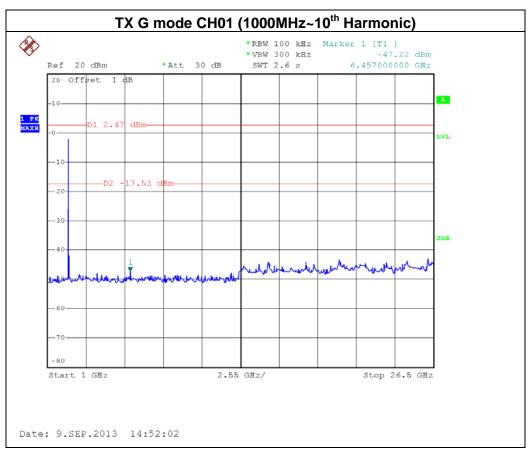
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

Report No.: NEI-FCCP-1-1308C213 Page 98 of 125

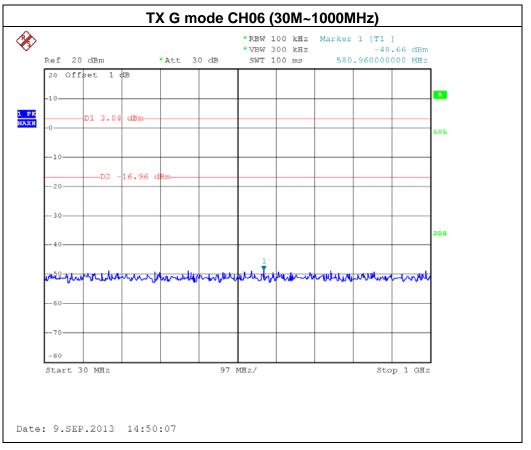


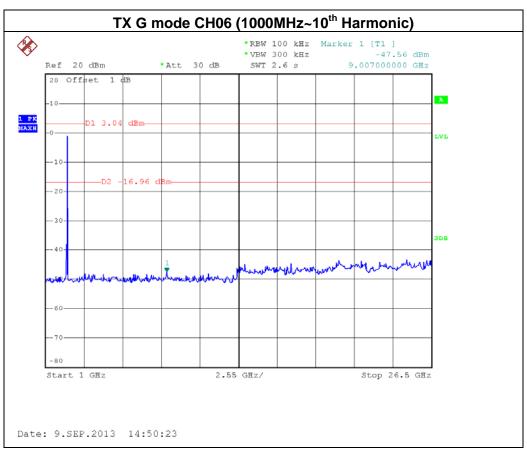




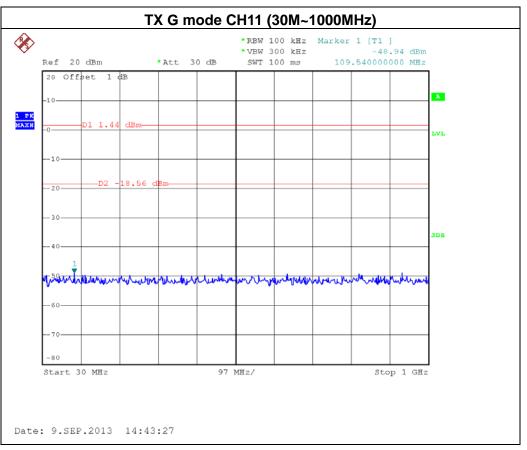


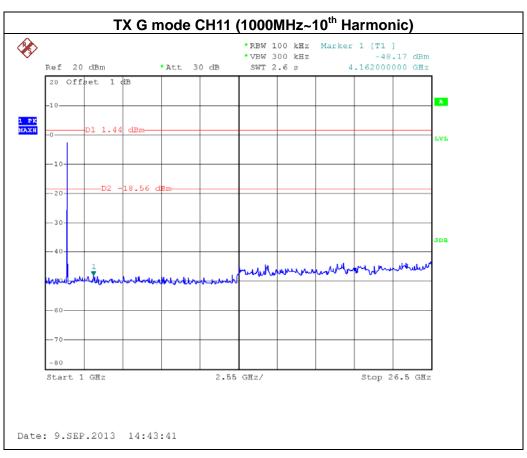
Report No.: NEI-FCCP-1-1308C213 Page 100 of 125





Report No.: NEI-FCCP-1-1308C213 Page 101 of 125





Report No.: NEI-FCCP-1-1308C213 Page 102 of 125



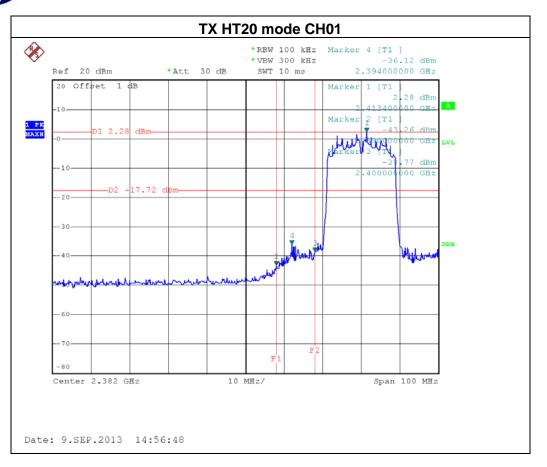
IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N-20M MODE / CH01, CH06 , CH11			

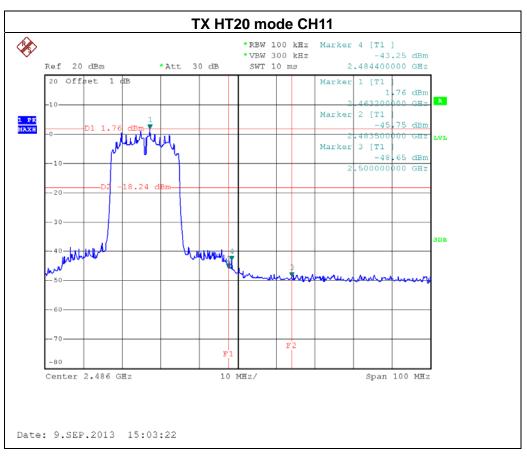
Channel of Worst Data: CH01				
•	cy power in any 100kHz the frequency band	The max. radio frequence bandwidth within the	<b>,</b> .	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2394.00 -36.12 2484.40 -43.25				
Result				

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.

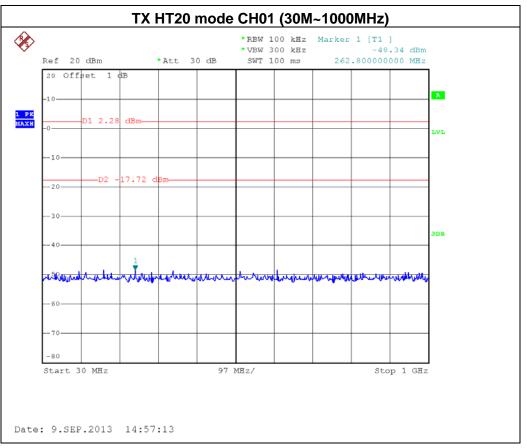
Report No.: NEI-FCCP-1-1308C213 Page 103 of 125

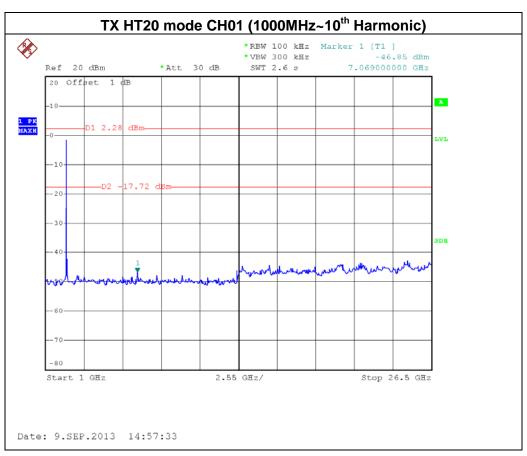




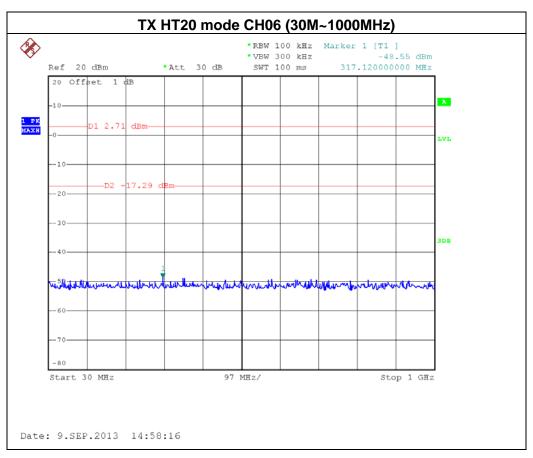


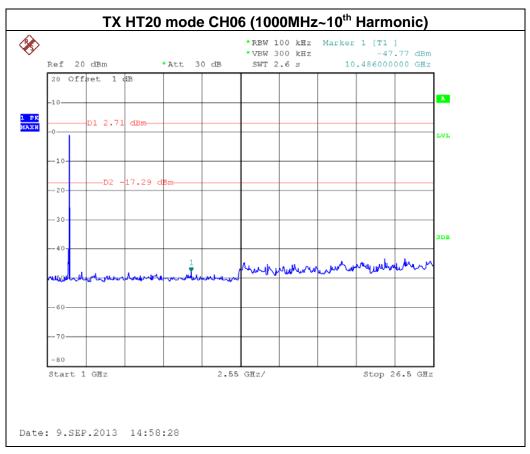
Report No.: NEI-FCCP-1-1308C213 Page 104 of 125



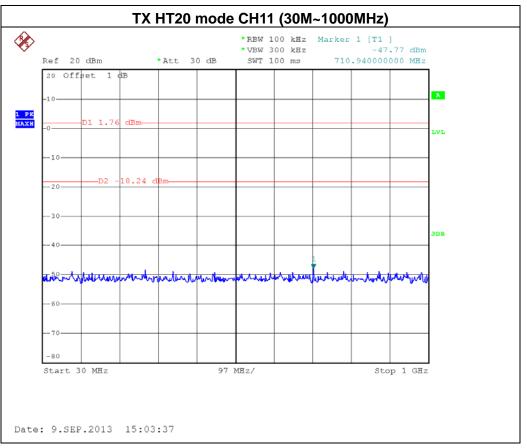


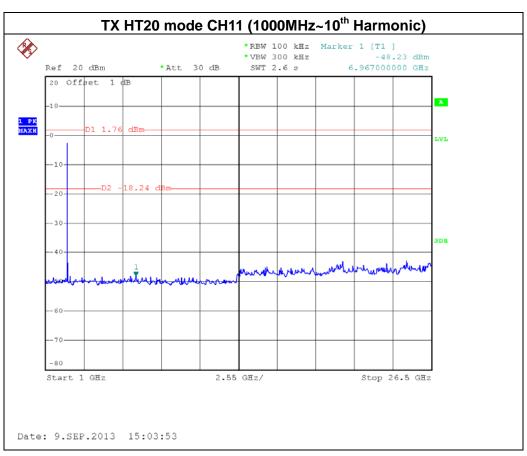
Report No.: NEI-FCCP-1-1308C213 Page 105 of 125





Report No.: NEI-FCCP-1-1308C213 Page 106 of 125





Report No.: NEI-FCCP-1-1308C213 Page 107 of 125



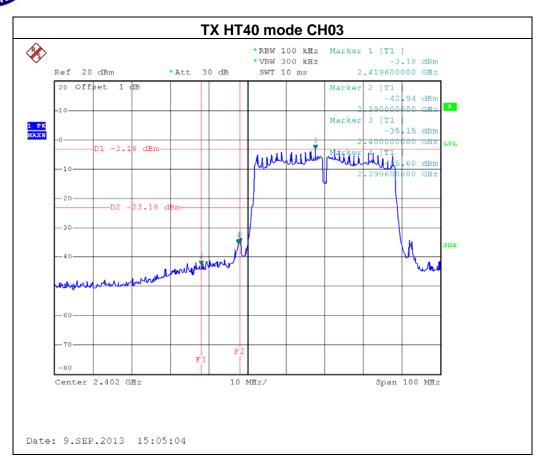
IFUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE / CH03, CH06 , CH09		

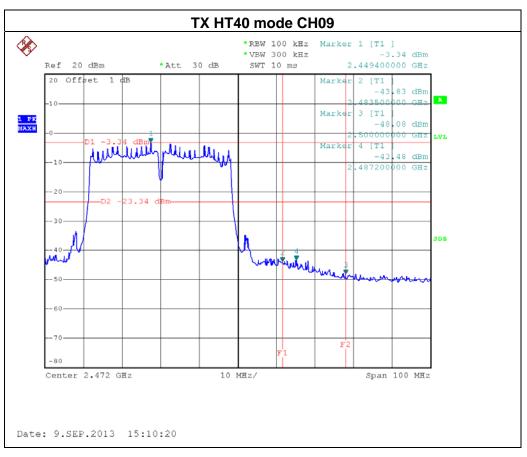
Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2390.00	-42.94	2483.50	-43.83
Result			

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.

Report No.: NEI-FCCP-1-1308C213 Page 108 of 125

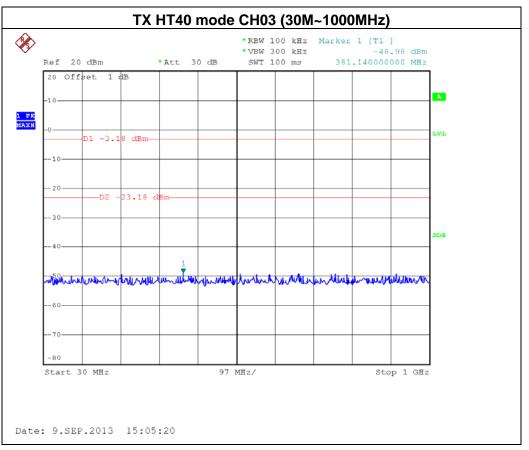


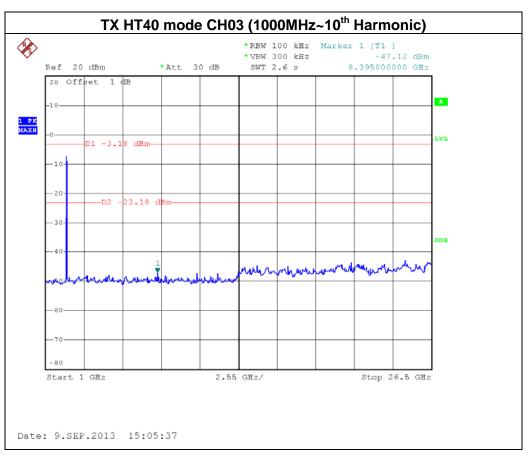




Report No.: NEI-FCCP-1-1308C213 Page 109 of 125

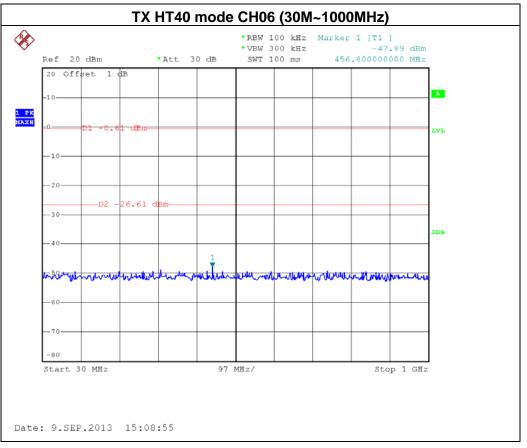
# Neutron Engineering Inc.

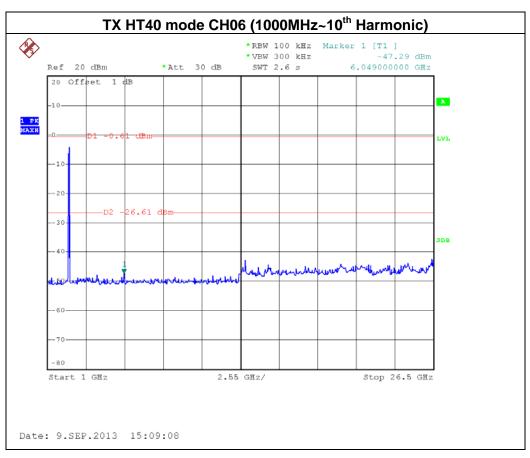




Report No.: NEI-FCCP-1-1308C213 Page 110 of 125

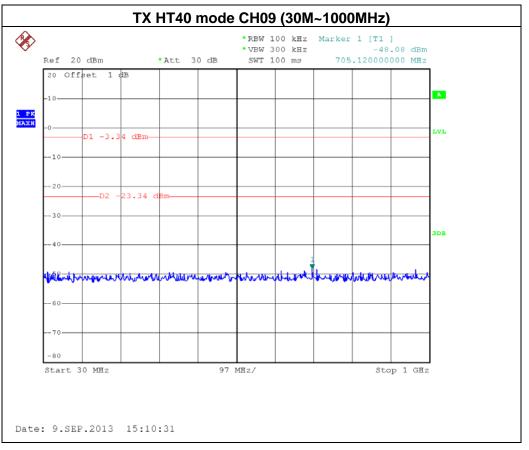
# Neutron Engineering Inc.

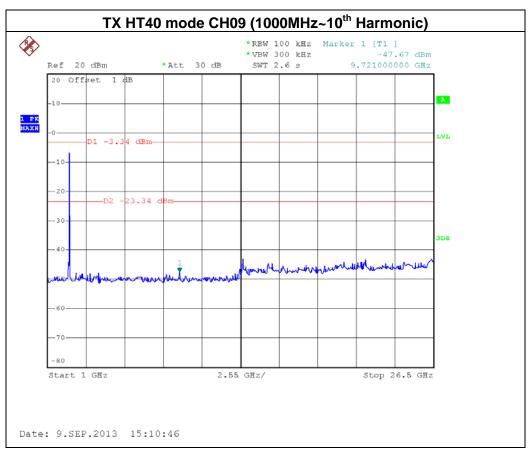




Report No.: NEI-FCCP-1-1308C213 Page 111 of 125

# Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1308C213 Page 112 of 125

#### 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**

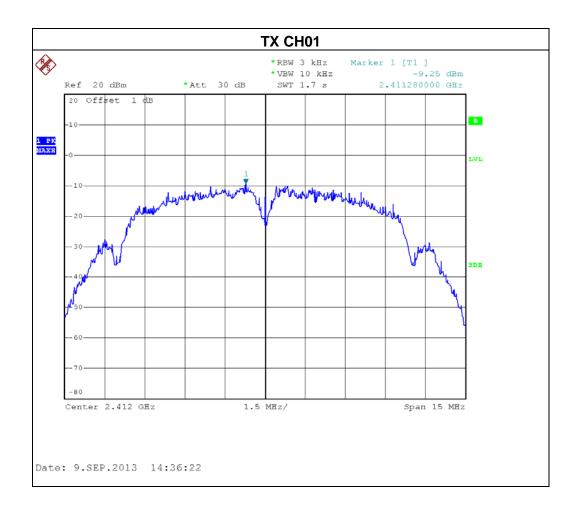
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Report No.: NEI-FCCP-1-1308C213 Page 113 of 125

#### 8.1.6 TEST RESULTS

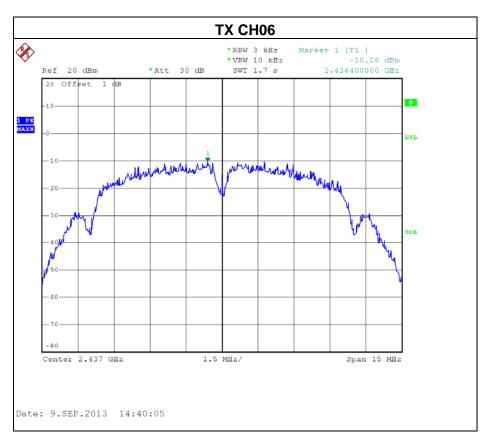
IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

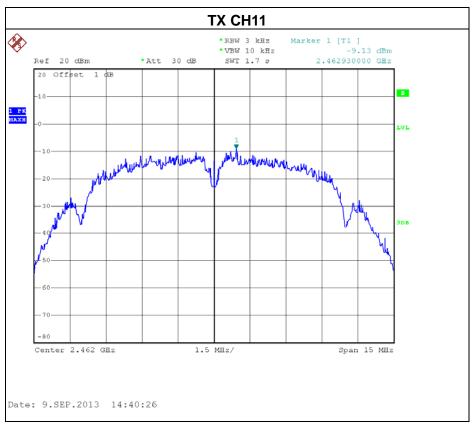
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-9.25	8
CH06	2437 MHz	-10.28	8
CH11	2462 MHz	-9.13	8



Report No.: NEI-FCCP-1-1308C213 Page 114 of 125





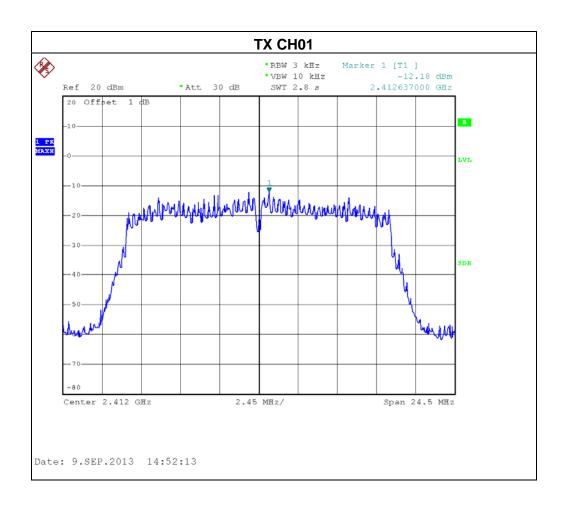


Report No.: NEI-FCCP-1-1308C213



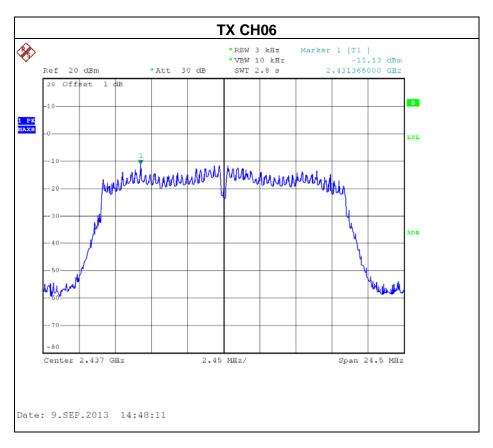
IFUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

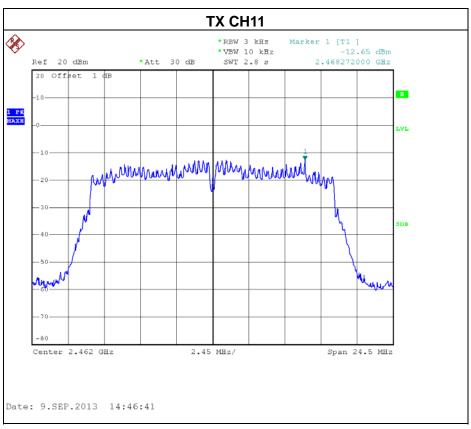
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-12.18	8
CH06	2437 MHz	-11.13	8
CH11	2462 MHz	-12.65	8



Report No.: NEI-FCCP-1-1308C213 Page 116 of 125



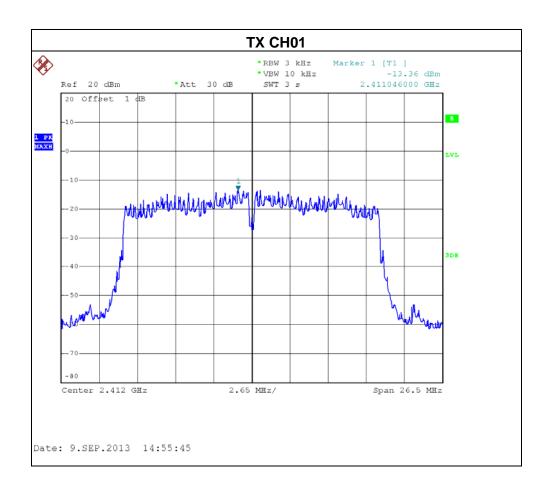






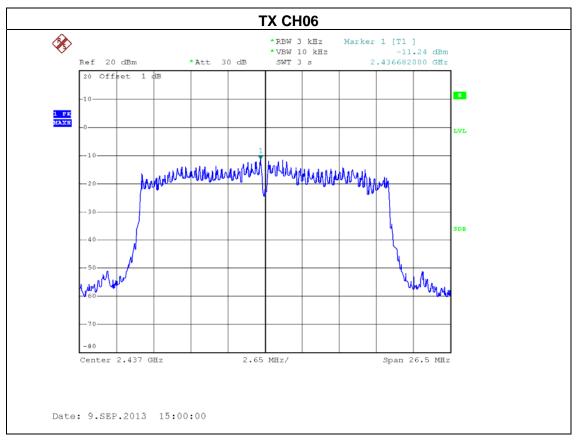
IFUI.	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N MODE-20MHz /CH01, CH06, CH11			

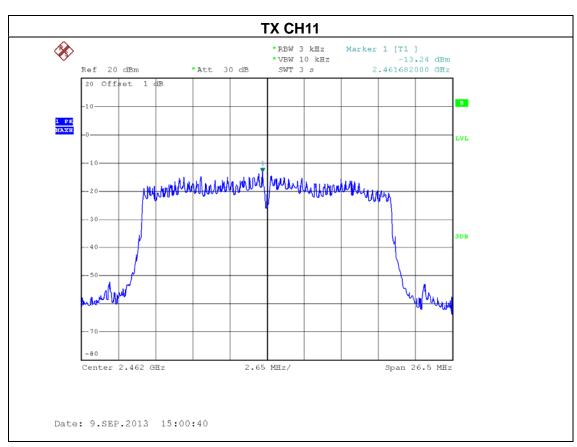
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-13.36	8
CH06	2437 MHz	-11.24	8
CH11	2462 MHz	-13.24	8



Report No.: NEI-FCCP-1-1308C213 Page 118 of 125

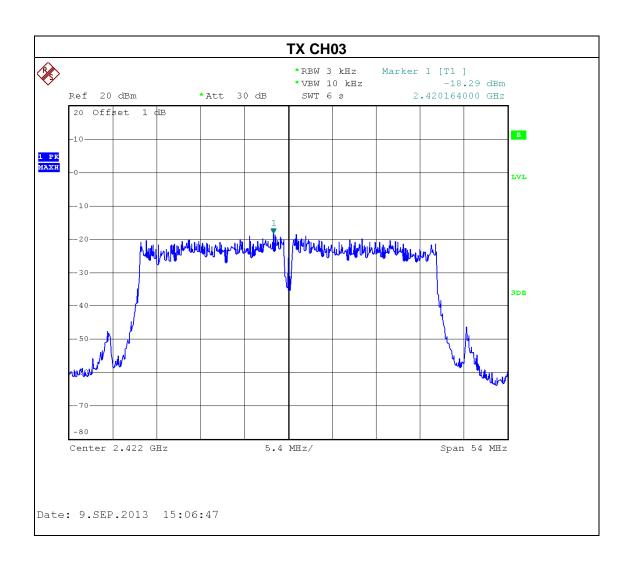






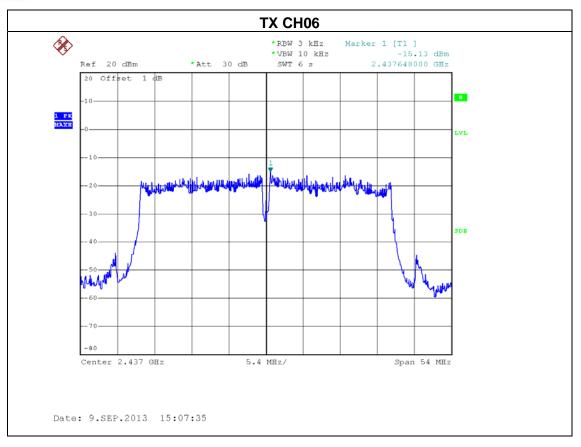
IEUI .	Wireless N150 Easy Setup Router	Model Name :	N150
Temperature:	<b>24</b> ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N MODE-40MHz /CH03, CH06, CH09			

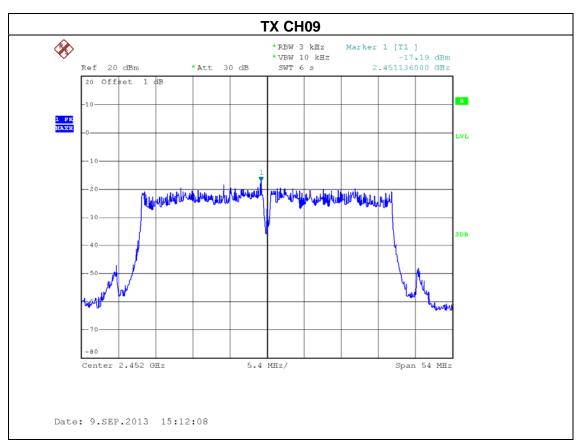
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-18.29	8
CH06	2437 MHz	-15.13	8
CH09	2452 MHz	-17.19	8



Report No.: NEI-FCCP-1-1308C213 Page 120 of 125









### 9. EUT TEST PHOTO

### **Conducted Measurement Photos**





Report No.: NEI-FCCP-1-1308C213 Page 122 of 125



## Radiated Measurement Photos 9K~30MHz

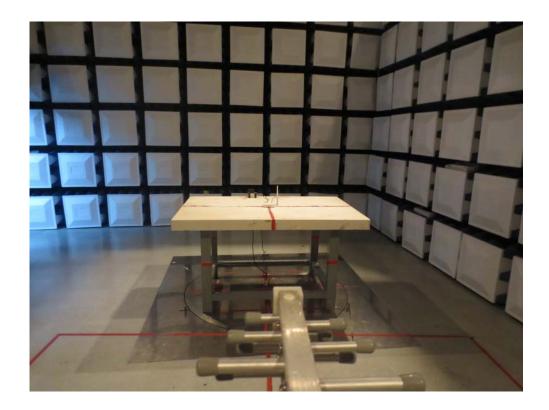


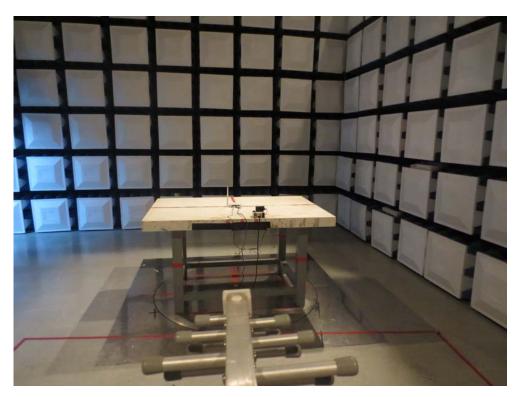


Report No.: NEI-FCCP-1-1308C213 Page 123 of 125



## Radiated Measurement Photos 30~1000MHz





Report No.: NEI-FCCP-1-1308C213 Page 124 of 125



### Radiated Measurement Photos Above 1000MHz





Report No.: NEI-FCCP-1-1308C213 Page 125 of 125