

FCC Radio Test Report FCC ID: YJYWR207NA

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

Issued Date : Oct. 31, 2011 **Project No.** : 1108C007B

Equipment: 150Mbps Wireless N Router **Model Name**: FWR-614N;FWR-634N

Applicant: Shanghai Feixun Communication Co., Ltd.

Address: Wing B, 15/F, GDC Building, NO.9 Gaoxinzhong

3rd Ave., Nanshan, Shenzhen, Guangdong, China

Manufacturer: Shanghai Feixun Communication Co., Ltd.

Address: Wing B, 15/F, GDC Building, NO.9 Gaoxinzhong

3rd Ave., Nanshan, Shenzhen, Guangdong, China

Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Oct. 20, 2011

Date of Test:

Oct. 20, 2011 ~ Oct. 30, 2011

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Report No.: NEI-FCCP-1-1108C007B Page 1 of 174



Declaration

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Report No.: NEI-FCCP-1-1108C007B Page 2 of 174

	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 DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTE	D 12
	3.5 DESCRIPTION OF SUPPORT UNITS (RADIATED MODE)	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	15 45
	4.1.4 DEVIATION FROM TEST STANDARD 4.1.5 TEST SETUP	15 15
	4.1.6 EUT OPERATING CONDITIONS	15
	4.1.7 TEST RESULTS	16
	4.2 RADIATED EMISSION MEASUREMENT	18
	4.2.1 RADIATED EMISSION LIMITS	18
	4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING	19
	4.2.3 TEST PROCEDURE	20
	4.2.4 DEVIATION FROM TEST STANDARD 4.2.5 TEST SETUP	20 21
	4.2.6 EUT OPERATING CONDITIONS	21
	4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ) –FOR FWR-614N	22
	4.2.8 TEST RESULTS (BETWEEN 30 – 1000 MHZ) –FOR FWR-634N	24
	4.2.9 TEST RESULTS (ABOVE 1000 MHZ)-FOR FWR-614N	26
	4.2.10 TEST RESULTS (ABOVE 1000 MHZ)-FOR FWR-634N	74
5	. BANDWIDTH TEST	122
	5.1 APPLIED PROCEDURES / LIMIT	122
	5.1.1 MEASUREMENT INSTRUMENTS LIST 5.1.2 TEST PROCEDURE	122 122
	5.1.3 DEVIATION FROM STANDARD	122
	5.1.4 TEST SETUP	122

Report No.: NEI-FCCP-1-1108C007B Page 3 of 174

Table of Contents	Page
5.1.5 EUT OPERATION CONDITIONS 5.1.6 TEST RESULTS	122 123
6 . MAXIMUM OUTPUT POWER TEST	131
6.1 APPLIED PROCEDURES / LIMIT 6.1.1 MEASUREMENT INSTRUMENTS LIST 6.1.2 TEST PROCEDURE 6.1.3 DEVIATION FROM STANDARD 6.1.4 TEST SETUP 6.1.5 EUT OPERATION CONDITIONS 6.1.6 TEST RESULTS	131 131 131 131 131 131
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	132
7.1 APPLIED PROCEDURES / LIMIT 7.1.1 MEASUREMENT INSTRUMENTS LIST 7.1.2 TEST PROCEDURE 7.1.3 DEVIATION FROM STANDARD 7.1.4 TEST SETUP 7.1.5 EUT OPERATION CONDITIONS 7.1.6 TEST RESULTS	140 140 140 140 140 140
8 . POWER SPECTRAL DENSITY TEST	161
8.1 APPLIED PROCEDURES / LIMIT 8.1.1 MEASUREMENT INSTRUMENTS LIST 8.1.2 TEST PROCEDURE 8.1.3 DEVIATION FROM STANDARD 8.1.4 TEST SETUP 8.1.5 EUT OPERATION CONDITIONS 8.1.6 TEST RESULTS	161 161 161 161 161 162
9 . EUT TEST PHOTO	170

Report No.: NEI-FCCP-1-1108C007B Page 4 of 174

1. CERTIFICATION

Equipment: 150Mbps Wireless N Router

Brand Name: PHICOMM

Model Name: FWR-614N; FWR-634N

Applicant: Shanghai Feixun Communication Co., Ltd.

F a c t o r y: Shanghai WDK Technology Co., Ltd.

A d d r e s s: No.1-10 , Lane 2100, Songzheng Road, Shi hudang Town, Songjiang ,

Shanghai

Date of Test: Oct. 20, 2011 ~ Oct. 30, 2011 Test Item: ENGINEERING SAMPLE

Standards: FCC Part15, Subpart C(15.247) / ANSI C63.4: 2003

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-1-1108C007B) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Report No.: NEI-FCCP-1-1108C007B Page 5 of 174

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)	15.247(a)(2) 6dB Bandwidth						
15.247(b)(3)	Peak Output Power	PASS					
15.209/15.205	Radiated Spurious Emission	PASS					
15.247(e)	15.247(e) Power Spectral Density						
15.203	Antenna Requirement	PASS					

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

Report No.: NEI-FCCP-1-1108C007B Page 6 of 174

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-CB03/DG-C02** 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
	CISPR	30MHz ~ 200MHz	V	3.82	
DG-CB03		30MHz ~ 200MHz	Н	3.60	
DG-CB03		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	

Report No.: NEI-FCCP-1-1108C007B Page 7 of 174



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	150Mbps Wireless N Router			
Brand Name	PHICOMM			
Model Name	FWR-614N;FWR-634N			
OEM Brand/Model Name	N/A			
Model Difference	Differences are appearance and antenna, model FWR-614N is Dipole ANT, model FWR-634N is Integral PCB ANT (RF Modular is the same)			
	The EUT is a 150Mbps \			
	Operation Frequency:	2412~2462 MHz		
	Modulation Type:	802.11b:CCK, DQPSK, DBPSK 802.11g:OFDM 802.11n:OFDM		
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps Draft 802.11n:up to 150Mbps		
	Number of Channel	11 CH, Please see Note 2.		
Product Description		(please see page 9)		
·	Antenna Designation:	Please see Note 3.		
	Antenna Gain(Peak)	(please see page 9)		
	Output Power:	802.11b: 21.91dBm		
		802.11g: 21.88dBm		
		802.11n(20MHz): 21.78dBm		
		802.11n(40MHz): 19.98 dBm		
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.			
Power Source	DC Voltage supplied from AC/DC adapter Model name:TL01C-120050U			
Power Rating	I/P 100-240V~ 0.32A 50/60Hz O/P 12V 500mA			
Connecting I/O Port(s)	Please refer to the User	s Manual		
Products Covered	N/A			
Products Covered	N/A			

Note:

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

Report No.: NEI-FCCP-1-1108C007B Page 8 of 174



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

Channel List

Onaline 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

Model	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
FWR-614N	WDK	K601-240012-A	Dipole Antenna	N/A	3.53
FWR-634N	WDK	K601-360019-A	Integral PCB Antenna	N/A	3.88

Report No.: NEI-FCCP-1-1108C007B Page 9 of 174

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	Normal Link

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	Normal Link		

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 highest, middle, lowest available channels.
- (2) During the output power test, all data rates have been investigated and the highest output powers were recorded are as follows:

802.11b mode: DBPSK (1Mbps) 802.11g mode: OFDM (6Mbps)

802.11n HT20/HT40 mode: MCS0 (6Mbps)

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

(3) Worst-case mode and channel used for 30-1000 MHz radiated and power line conducted emissions was the mode and channel with the highest output power, that was determined to be 11B Channel 01

Report No.: NEI-FCCP-1-1108C007B Page 10 of 174

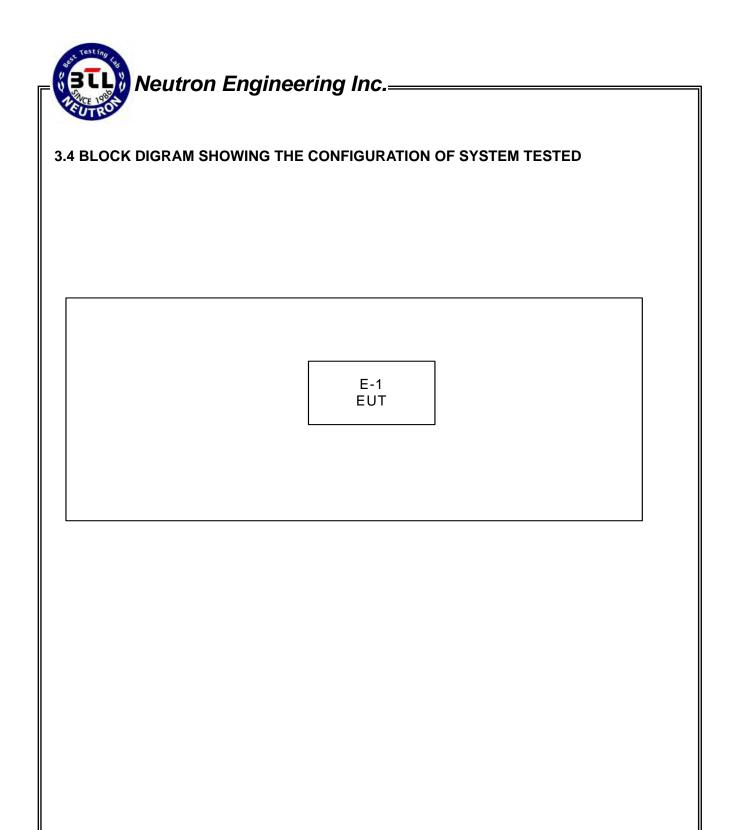
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	Test Program: RALINK			
Frequency	2412 MHz	2437 MHz	2462 MHz	
IEEE 802.11b DSSS	18	19	1A	
IEEE 802.11g OFDM	1F	1F	1F	

Test software Version	Test Program: RALINK			
Frequency (MHz)	2412 MHz 2437 MHz 2462 MHz			
IEEE 802.11n (20MHz)	1F	1F	1F	
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz	
IEEE 802.11n (40MHz)	1F	1F	1F	

Report No.: NEI-FCCP-1-1108C007B Page 11 of 174



Report No.: NEI-FCCP-1-1108C007B Page 12 of 174

3.5 DESCRIPTION OF SUPPORT UNITS (RADIATED MODE)

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	150Mbps Wireless N Router	PHICOMM	FWR-614N;FW R-634N	YJYWR207N A	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

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

Report No.: NEI-FCCP-1-1108C007B Page 13 of 174

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard	
TREQUENCT (MHZ)	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.	Calibrated until
1	LISN	EMCO	3816/2SH	00052766	May.26.2012
2	LISN	R&S	ENV216	100526	May.26.2012
3	Test Cable	N/A	RG400 12m	N/A	Mar.18.2012
4	EMI TEST RECEIVER	R&S	ESCI	100895	May.26.2012
5	50Ω Terminator	SHX	TF2-3G-A	08122901	May.26.2012

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

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-1-1108C007B Page 14 of 174

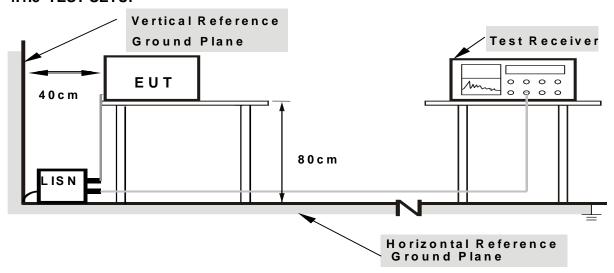
4.1.3 TEST PROCEDURE

- 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-1-1108C007B Page 15 of 174

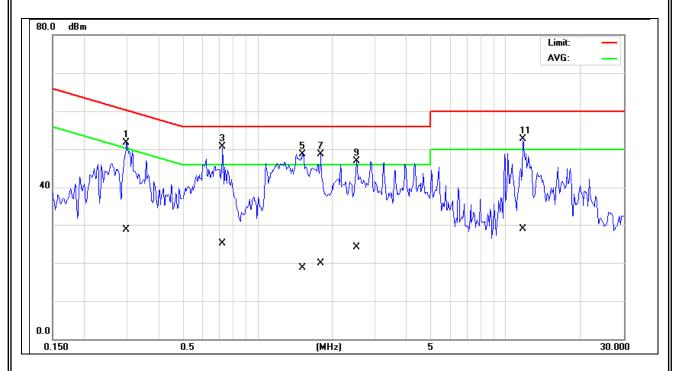
4.1.7 TEST RESULTS

EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	20 ℃	Relative Humidity:	50%
Pressure:	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	Normal Link		

Freq.	Terminal	Measure	ed(dBuV)	Limits	(dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOTE
0.30	Line	51.69	28.63	60.33	50.33	-8.64	(QP)
0.72	Line	50.72	25.08	56.00	46.00	-5.28	(QP)
1.51	Line	48.76	18.77	56.00	46.00	-7.24	(QP)
1.80	Line	48.65	19.91	56.00	46.00	-7.35	(QP)
2.53	Line	46.99	24.03	56.00	46.00	-9.01	(QP)
11.74	Line	52.72	28.86	60.00	50.00	-7.28	(QP)

Remark

- (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 In this case, a " * " marked in AVG Mode column of Interference Voltage Measured •
- (2) Measuring frequency range from 150KHz to 30MHz \circ



Report No.: NEI-FCCP-1-1108C007B Page 16 of 174

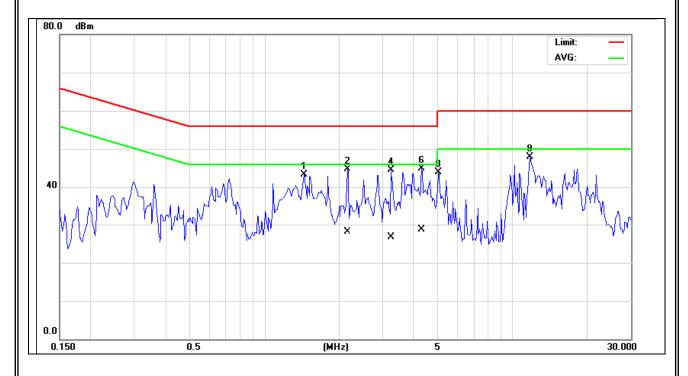


EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	20 ℃	Relative Humidity:	50%
Pressure:	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	Normal Link		

Freq.	Terminal	Measure	ed(dBuV)	Limits	(dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
1.44	Neutral	43.35	*	56.00	46.00	-12.65	(QP)
2.16	Neutral	44.68	28.06	56.00	46.00	-11.32	(QP)
3.24	Neutral	44.57	26.80	56.00	46.00	-11.43	(QP)
4.31	Neutral	44.94	28.71	56.00	46.00	-11.06	(QP)
5.03	Neutral	43.96	*	60.00	50.00	-16.04	(QP)
11.74	Neutral	47.98	*	60.00	50.00	-12.02	(QP)

Remark

- (1) All readings are QP Mode value unless otherwise stated AVG in column of Note ... If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform on this case, a " * " marked in AVG Mode column of Interference Voltage Measured on the North Republic State of the North Republic St
- (2) Measuring frequency range from 150KHz to 30MHz o



Report No.: NEI-FCCP-1-1108C007B Page 17 of 174

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), then the 15.209(a) 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
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	(dBuV/n	n) (at 3m)
FREQUENCT (IVITIZ)	PEAK	AVERAGE
Above 1000	74	54

Notes:

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

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

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

Report No.: NEI-FCCP-1-1108C007B Page 18 of 174

4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Horn Antenna	ETS	3115	00075789	May.11.2012
2	Amplifier	Agilent	8449B	3008A02274	May.25.2012
3	Spectrum	Agilent	E4408B	US39240143	Nov.15.2011
4	Test Cable	HUBER+SUHNER	CB03 High Fre	N/A	May.02.2012
5	Bi-log Antenna	Schwarbeck	VULB9160	9160-3232	May.25.2012
6	Amplifier	HP	8447D	2944A09673	May.25.2012
7	Test Receiver	R&S	ESCI	100895	May.25.2012
8	Test Cable	N/A	C-01_CB03	N/A	Jul.04.2012
9	Controller	СТ	SC100	N/A	N/A
10	Triple Loop Antenna	R&S	HFH2-Z2	830749/020	May.26.2012
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	May.11.2012

Remark: "N/A" denotes No Model Name / Serial No. and No Calibration specified.

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

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

Report No.: NEI-FCCP-1-1108C007B Page 19 of 174



4.2.3 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. 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.
- 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

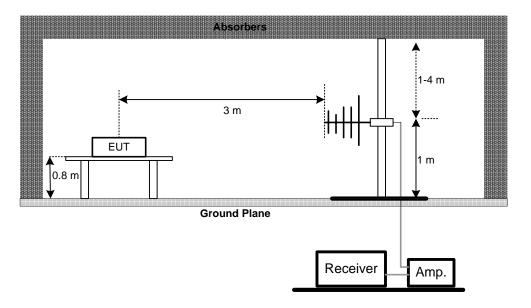
No deviation

Report No.: NEI-FCCP-1-1108C007B Page 20 of 174

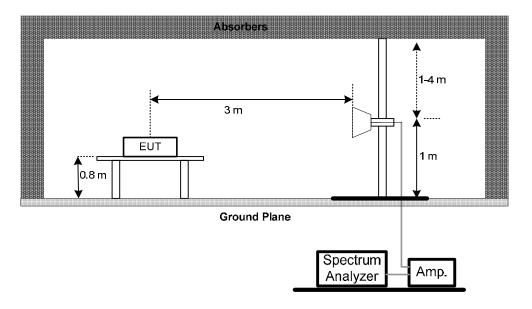


4.2.5 TEST SETUP

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



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



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-1-1108C007B Page 21 of 174

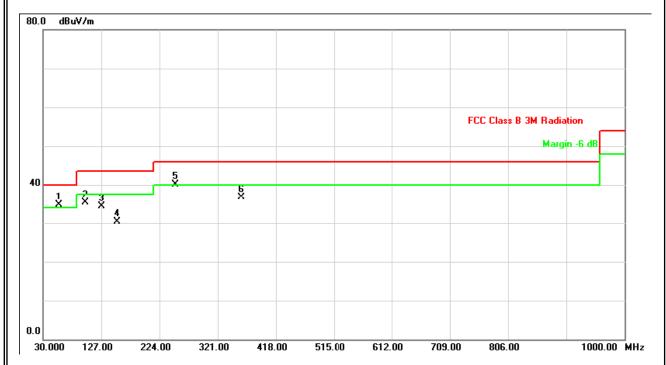
4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ) –FOR FWR-614N

EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 01		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
56.68	V	52.30	-17.59	34.71	40.00	- 5.29	
100.33	V	53.75	-18.41	35.34	43.50	- 8.16	
127.00	V	52.45	-18.16	34.29	43.50	- 9.21	
153.68	V	47.96	-17.58	30.38	43.50	- 13.12	
250.68	V	54.67	-14.51	40.16	46.00	- 5.84	·
359.80	V	47.15	-10.49	36.66	46.00	- 9.34	

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 $_{
 m l}$. 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-1-1108C007B Page 22 of 174

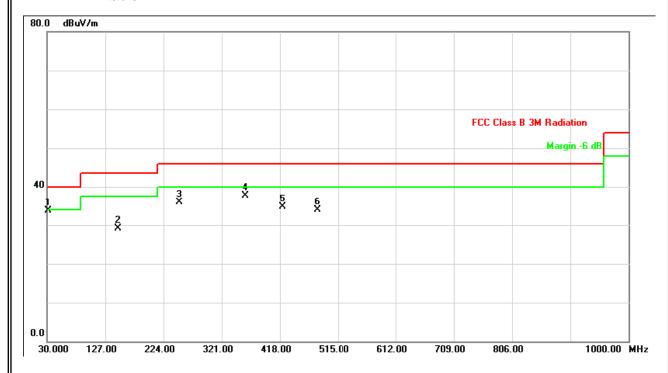


EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 01		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
32.43	Н	50.19	-16.50	33.69	40.00	- 6.31	
148.83	Н	46.63	-17.58	29.05	43.50	- 14.45	
250.68	Н	50.38	-14.51	35.87	46.00	- 10.13	
359.80	Н	48.14	-10.49	37.65	46.00	- 8.35	
422.85	Η	43.34	-8.61	34.73	46.00	- 11.27	
481.05	Н	41.48	-7.64	33.84	46.00	- 12.16	

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



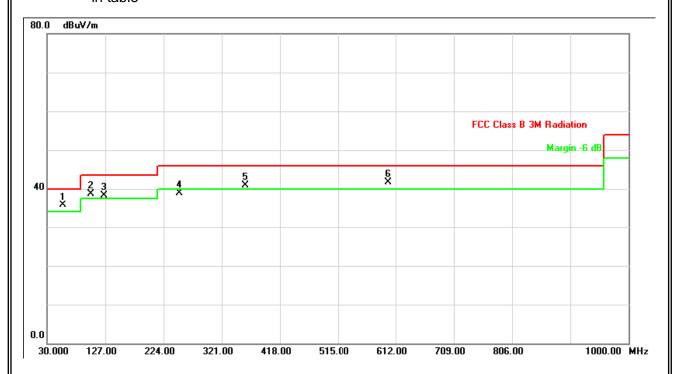
4.2.8 TEST RESULTS (BETWEEN 30 - 1000 MHZ) -FOR FWR-634N

EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 01		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
56.68	V	53.21	-17.59	35.62	40.00	- 4.38	
102.75	V	57.10	-18.39	38.71	43.50	- 4.79	
124.58	V	56.58	-18.20	38.38	43.50	- 5.12	
250.68	V	53.43	-14.51	38.92	46.00	- 7.08	
359.80	V	51.43	-10.49	40.94	46.00	- 5.06	
599.88	V	46.00	-4.27	41.73	46.00	- 4.27	

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-1-1108C007B Page 24 of 174

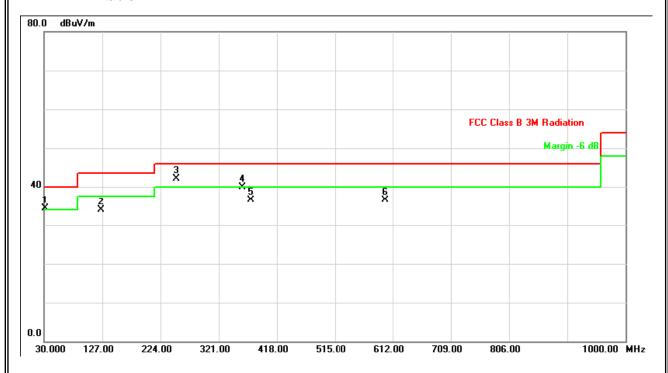


EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 01		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
32.43	Η	50.79	-16.50	34.29	40.00	- 5.71	
124.58	Ι	52.04	-18.20	33.84	43.50	- 9.66	
250.68	Н	56.67	-14.51	42.16	46.00	- 3.84	
359.80	Н	50.46	-10.49	39.97	46.00	- 6.03	
374.35	Ι	46.46	-9.95	36.51	46.00	- 9.49	
599.88	Н	40.76	-4.27	36.49	46.00	- 9.51	

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



4.2.9 TEST RESULTS (ABOVE 1000 MHZ)-FOR FWR-614N

EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

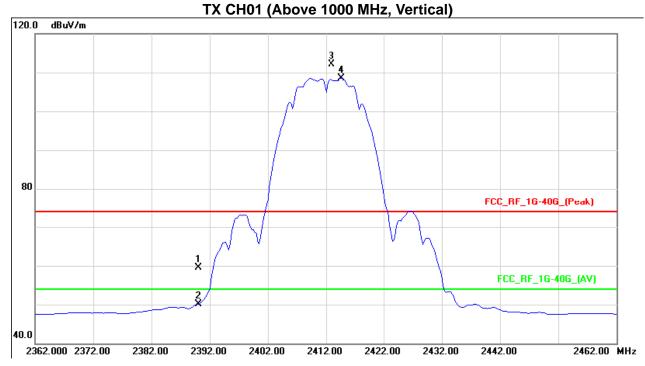
Freq. Ant.Pol.		Rea	ding	Ant./CF	A	ct.	Lir	mit	
1164.	All.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	27.58	18.21	31.91	59.49	50.12	74.00	54.00	X/E
2413.00	V	80.13	76.60	31.88	112.01	108.48			X/F
4823.89	V	50.54	46.61	5.29	55.83	51.90	74.00	54.00	X/H

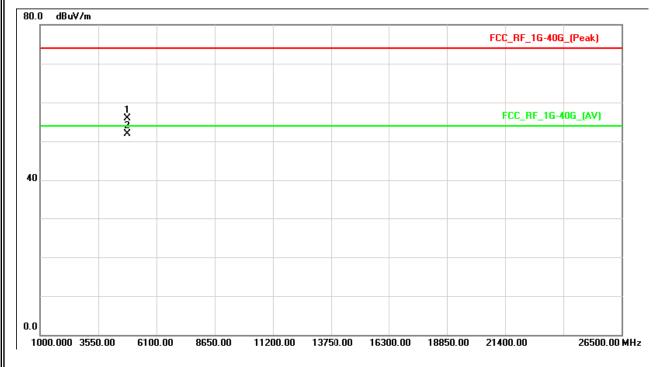
Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 26 of 174

Neutron Engineering Inc.= TX CH01 (Above 1000





Report No.: NEI-FCCP-1-1108C007B Page 27 of 174

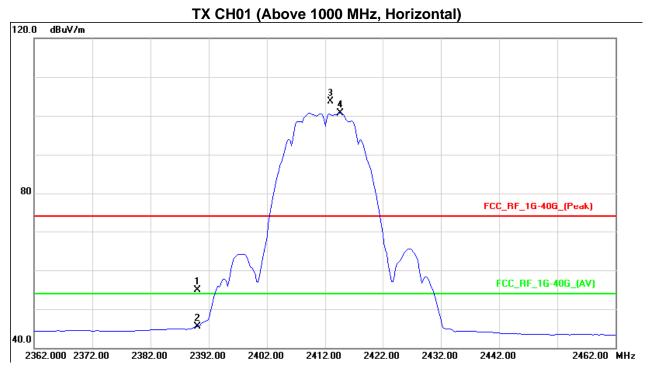
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

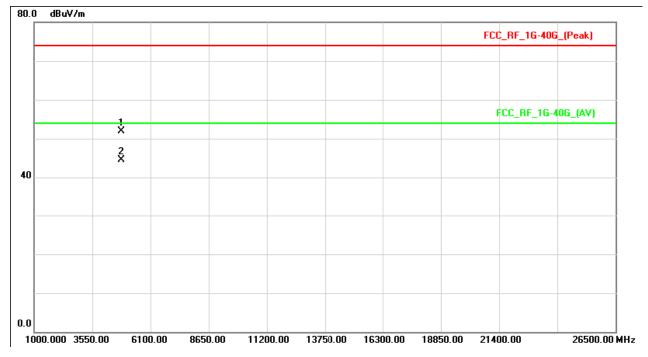
Freq. Ant.Pol.		Rea	ding	Ant./CF	A	ct	Lit	mit	
1164.	All.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	22.97	13.50	31.91	54.88	45.41	74.00	54.00	X/E
2413.00	Н	71.85	68.79	31.88	103.73	100.67			X/F
4823.79	Н	46.56	39.12	5.29	51.85	44.41	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-1-1108C007B Page 28 of 174





Report No.: NEI-FCCP-1-1108C007B Page 29 of 174

EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

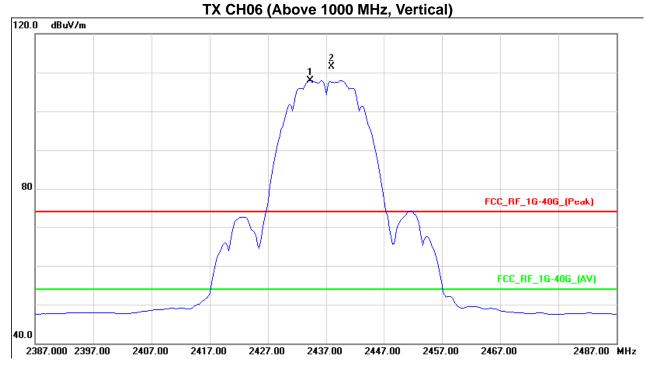
Freg. Ant.Pol.		Rea	ding	Ant./CF	A	ct.	انا	mit	
1164.	All.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.25	٧	79.65	76.08	31.86	111.50	107.94			Χ/F
4873.89	V	49.54	45.65	5.47	55.01	51.12	74.00	54.00	X/H

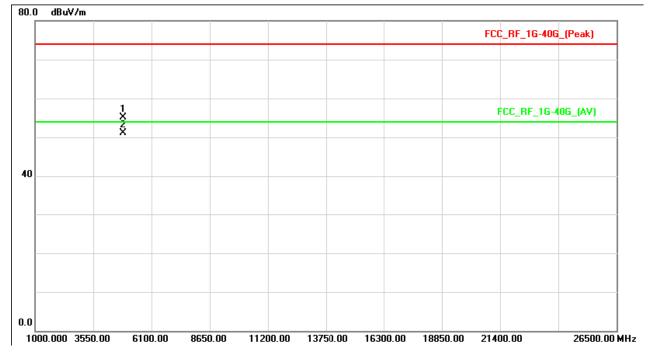
Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 30 of 174

Neutron Engineering Inc.= TX CH06 (Above 1000





Report No.: NEI-FCCP-1-1108C007B Page 31 of 174

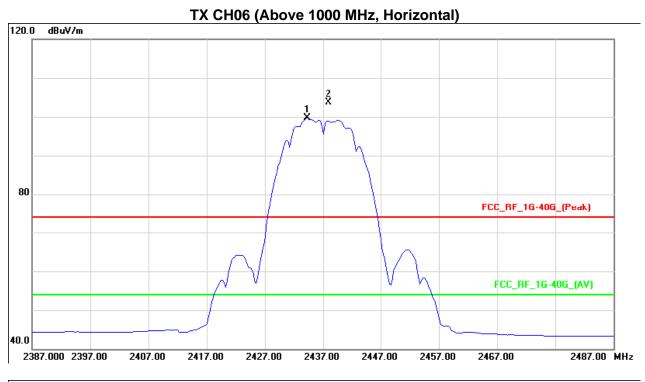
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

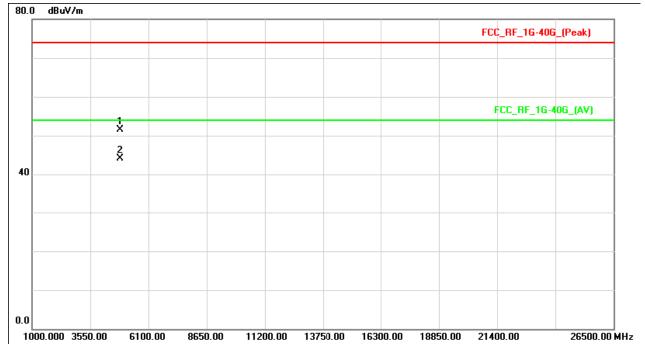
Freq. Ant.Pol.		Rea	ding	Ant./CF	A	ct.	Lir	mit	
1164.	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.25	Н	71.84	67.75	31.85	103.69	99.61			X/F
4874.04	Н	46.00	38.54	5.47	51.47	44.01	74.00	54.00	X/H

Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 32 of 174





Report No.: NEI-FCCP-1-1108C007B Page 33 of 174

EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

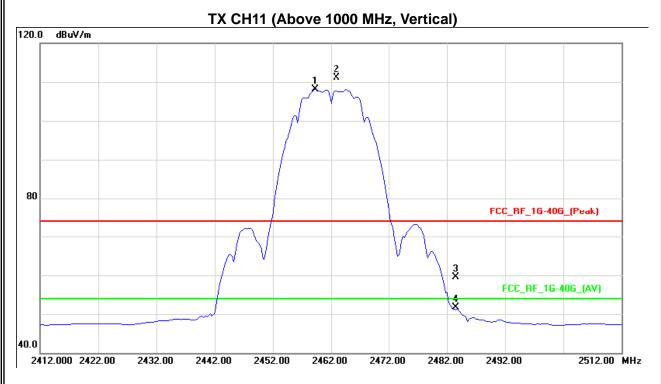
Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	mit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	V	79.23	76.22	31.83	111.05	108.05			X/F
2483.50	V	27.65	19.89	31.80	59.45	51.69	74.00	54.00	X/E
4924.02	V	48.61	45.07	5.65	54.26	50.72	74.00	54.00	X/H

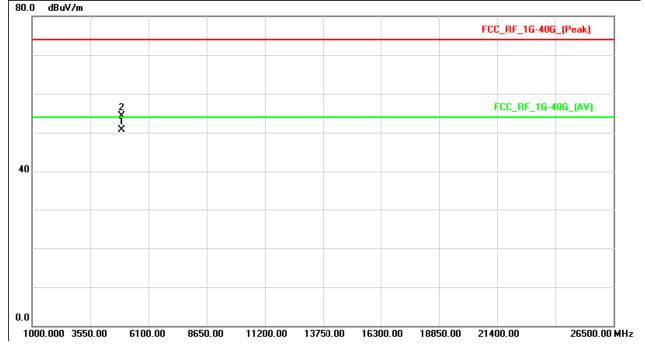
Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 34 of 174

Neutron Engineering Inc.=





Report No.: NEI-FCCP-1-1108C007B Page 35 of 174

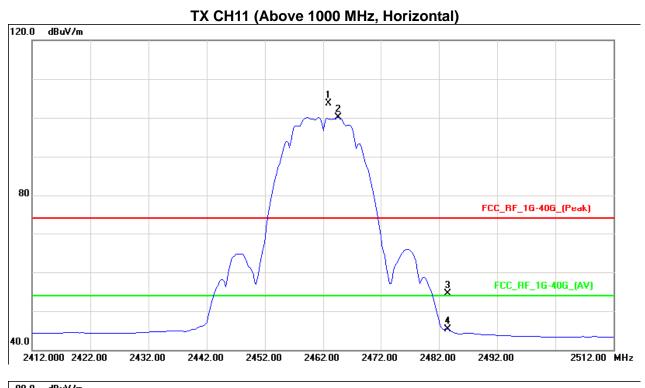
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

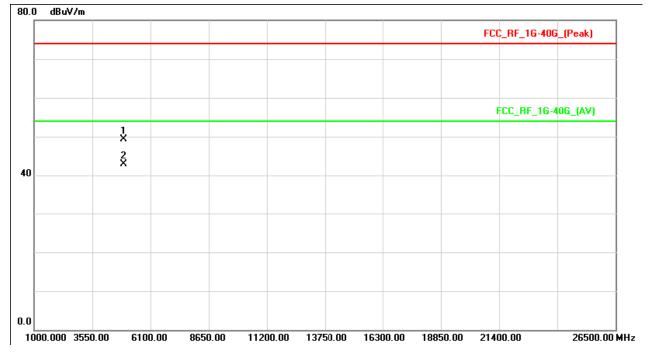
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	Н	71.89	68.30	31.82	103.71	100.12			X/F
2483.50	Н	22.62	13.52	31.80	54.42	45.32	74.00	54.00	X/E
4923.79	Н	43.59	37.22	5.65	49.24	42.87	74.00	54.00	X/H

Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 36 of 174





Report No.: NEI-FCCP-1-1108C007B Page 37 of 174

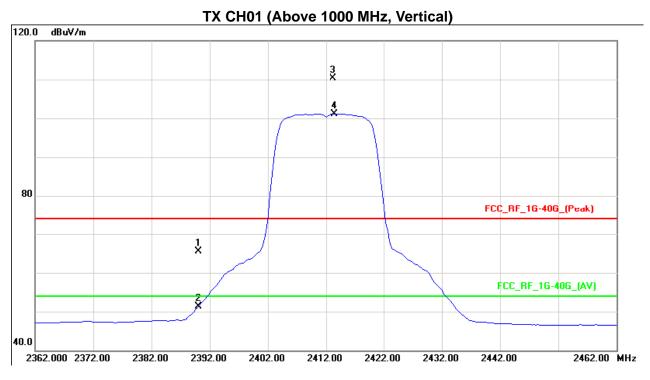
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

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	33.69	19.32	31.91	65.60	51.23	74.00	54.00	X/E
2413.25	٧	78.34	69.31	31.88	110.22	101.19			X/F
4823.89	V	44.93	38.97	5.29	50.22	44.26	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-1-1108C007B Page 38 of 174

Neutron Engineering Inc.=





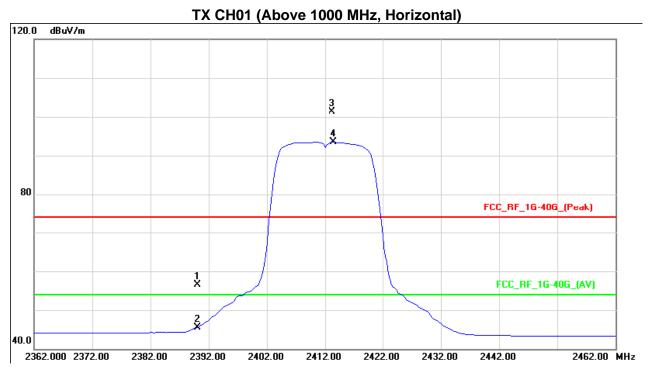
Report No.: NEI-FCCP-1-1108C007B Page 39 of 174

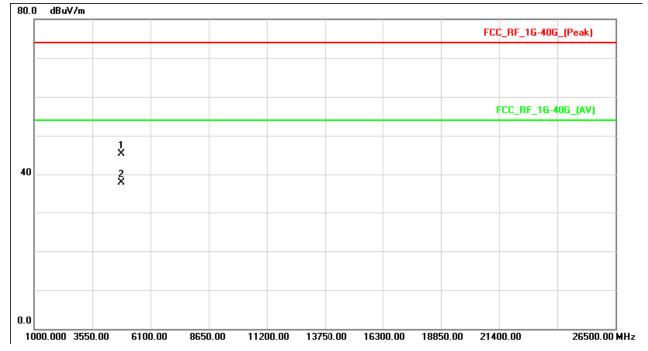
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	A	Act.		Limit		
		Peak	ΑV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	Н	24.53	13.65	31.91	56.44	45.56	74.00	54.00	X/E	
2413.25	Н	69.48	61.56	31.88	101.36	93.44			X/F	
4823.82	Н	39.98	32.69	5.29	45.27	37.98	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-1-1108C007B Page 40 of 174





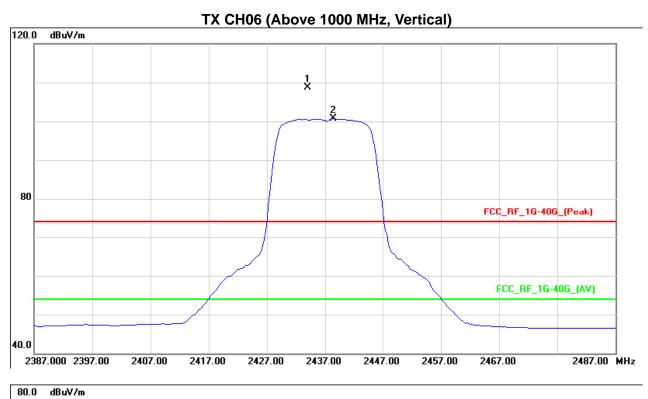
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

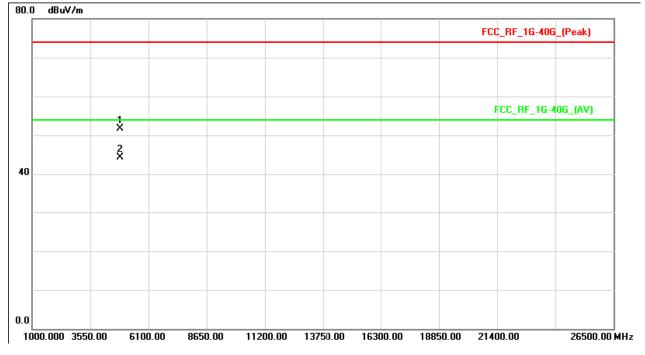
Freq. Ant.Pol.	Ant Dol	Reading Ant./CF		Ant./CF	Act.		Lir		
	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.00	٧	76.77	68.78	31.86	108.63	100.63			X/F
4873.87	V	46.25	38.83	5.47	51.72	44.30	74.00	54.00	X/H

- (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-1-1108C007B Page 42 of 174

Neutron Engineering Inc.=



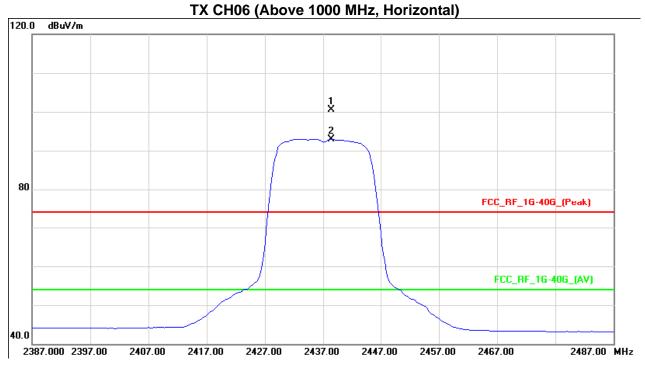


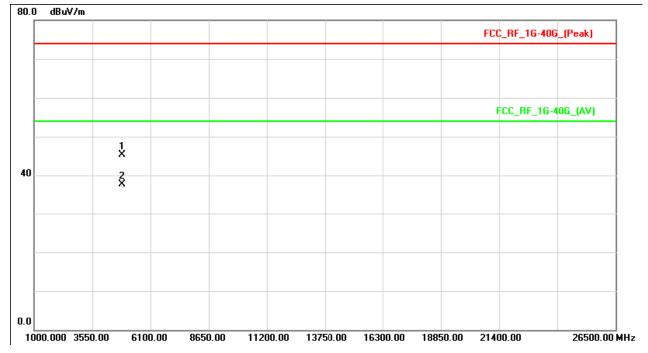
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq. Ant.Pol.	Ant Pol	Ant Pol Reading Ant./Cl		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)	
2	2438.50	Н	68.65	61.08	31.85	100.50	92.93			X/F
4	1874.05	Н	39.75	32.14	5.47	45.22	37.61	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-1-1108C007B Page 44 of 174





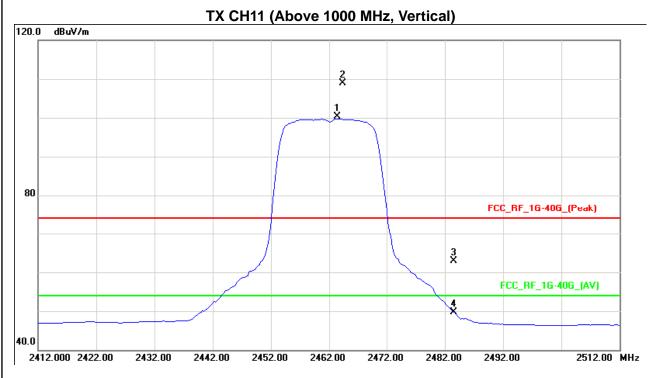
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Ad	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2463.50	٧	77.10	68.39	31.82	108.92	100.21			X/F	
2483.50	V	31.19	17.99	31.80	62.99	49.79	74.00	54.00	X/E	
4924.01	V	44.52	37.39	5.65	50.17	43.04	74.00	54.00	X/H	

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

Report No.: NEI-FCCP-1-1108C007B Page 46 of 174

Neutron Engineering Inc.





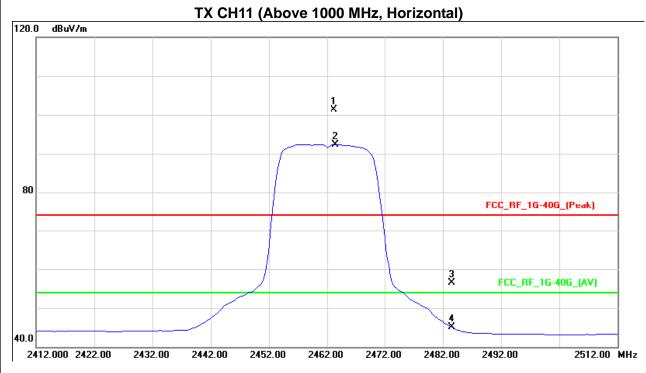
Report No.: NEI-FCCP-1-1108C007B Page 47 of 174

EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	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)	
2463.25	Н	69.57	60.58	31.82	101.39	92.40			X/F
2483.50	Н	24.69	13.32	31.80	56.49	45.12	74.00	54.00	X/E
4923.91	Н	41.42	33.54	5.65	47.07	39.19	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-1-1108C007B Page 48 of 174





Report No.: NEI-FCCP-1-1108C007B Page 49 of 174

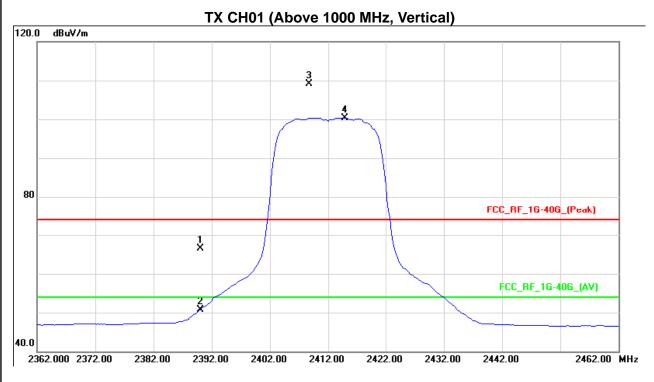
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

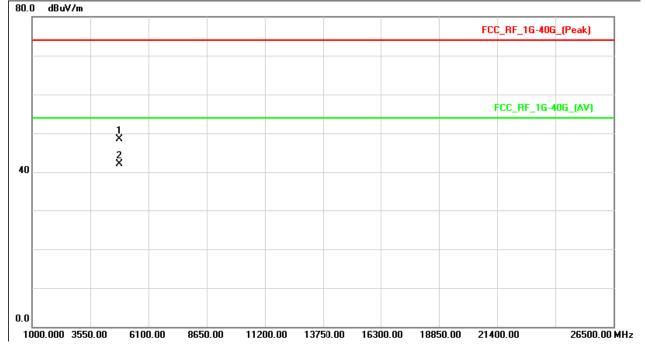
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	34.57	18.84	31.91	66.48	50.75	74.00	54.00	X/E
2408.75	٧	77.28	68.49	31.89	109.17	100.37			X/F
4823.86	V	43.23	36.74	5.29	48.52	42.03	74.00	54.00	X/H

- (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-1-1108C007B Page 50 of 174

Neutron Engineering Inc.=





Report No.: NEI-FCCP-1-1108C007B Page 51 of 174

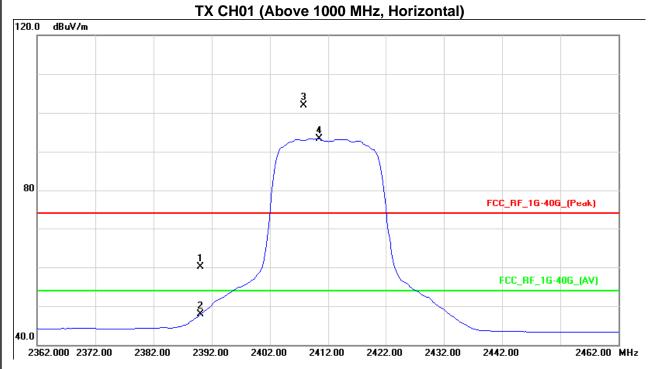
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

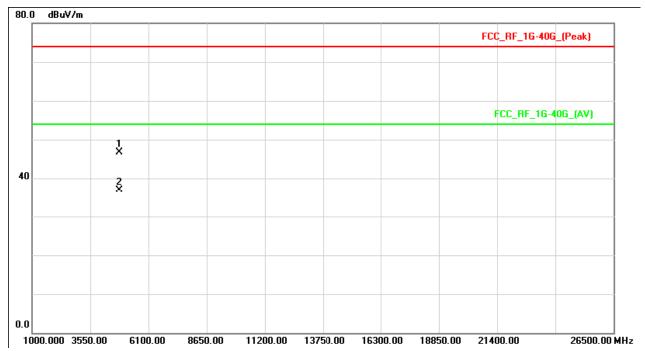
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	28.20	15.93	31.91	60.11	47.84	74.00	54.00	X/E
2407.75	Н	69.95	61.38	31.89	101.84	93.27			X/F
4823.81	Н	41.38	31.69	5.29	46.67	36.98	74.00	54.00	X/H

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

Report No.: NEI-FCCP-1-1108C007B Page 52 of 174

Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1108C007B Page 53 of 174

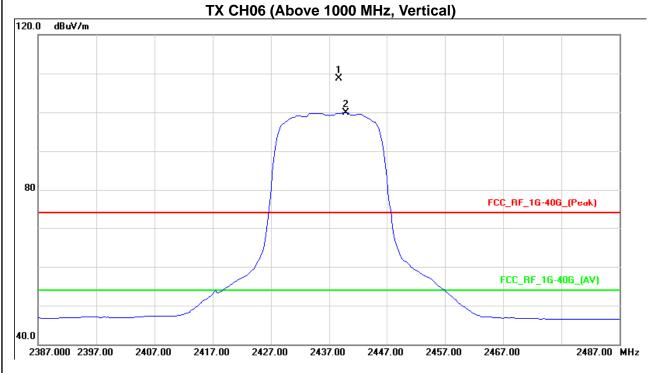
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

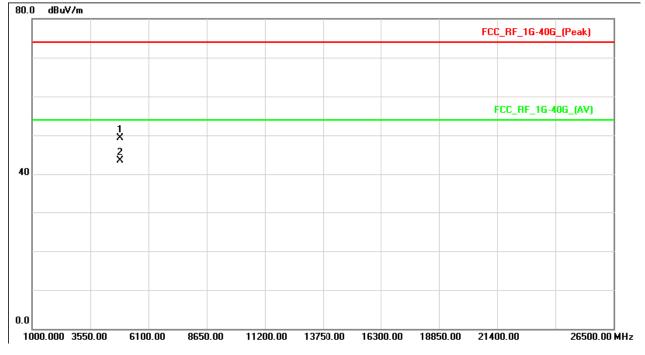
Freq. Ant.Po	Ant.Pol.	nt Pol Reading		Ant./CF	A	Act.		Limit		
1164.	Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2438.75	V	76.85	68.02	31.85	108.70	99.87			X/F	
4873.82	V	43.79	38.05	5.47	49.26	43.52	74.00	54.00	X/H	

- (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.)
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- (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-1-1108C007B Page 54 of 174

Neutron Engineering Inc.=



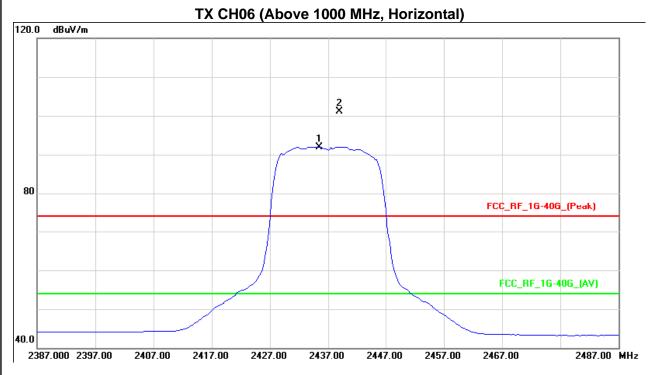


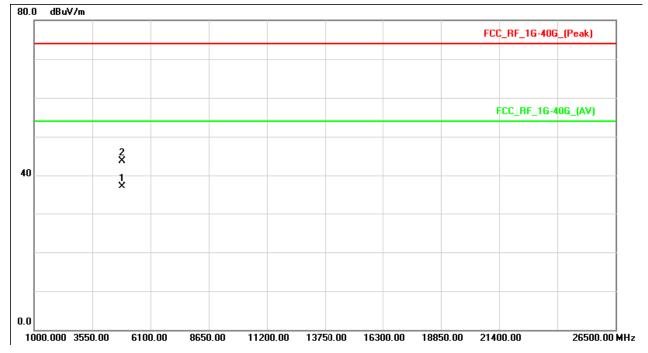
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq. Ant	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
r req.	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.50	Н	69.20	60.11	31.86	101.05	91.97			X/F
4874.15	Н	38.30	31.54	5.47	43.77	37.01	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 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-1-1108C007B Page 56 of 174





Report No.: NEI-FCCP-1-1108C007B Page 57 of 174

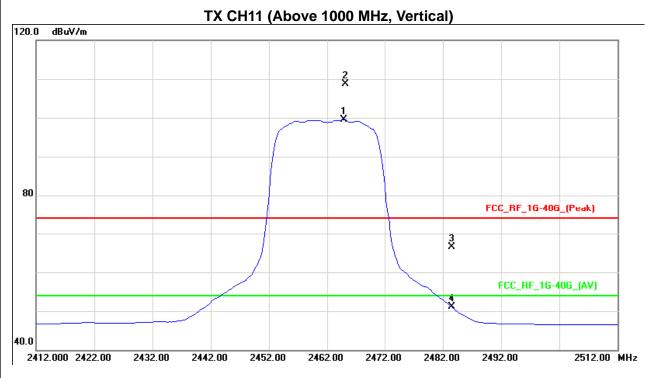
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

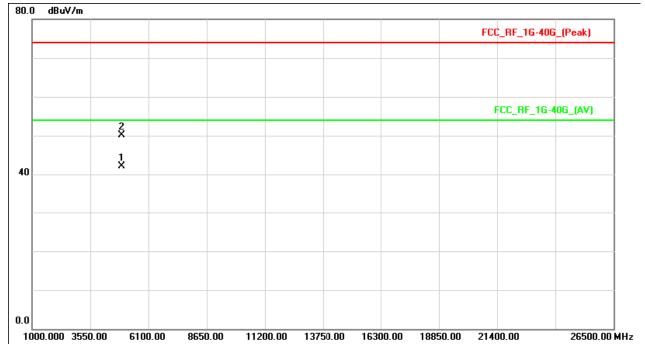
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2465.00	V	76.94	67.62	31.82	108.76	99.44			X/F
2483.50	V	34.65	19.27	31.80	66.45	51.07	74.00	54.00	X/E
4924.01	V	44.45	36.45	5.65	50.10	42.10	74.00	54.00	X/H

- (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.)
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- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

Report No.: NEI-FCCP-1-1108C007B Page 58 of 174

Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1108C007B Page 59 of 174

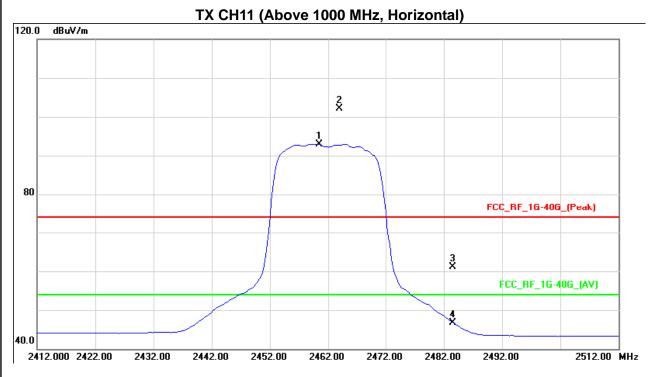
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

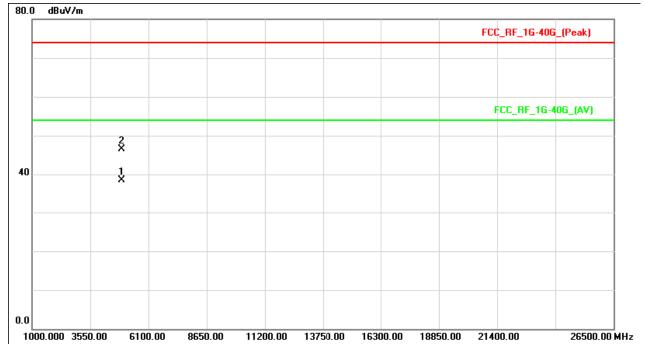
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.50	Н	70.26	61.10	31.82	102.08	92.93			X/F
2483.50	Н	29.30	15.00	31.80	61.10	46.80	74.00	54.00	X/E
4923.91	Н	40.77	32.87	5.65	46.42	38.52	74.00	54.00	X/H

- (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 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
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- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

Report No.: NEI-FCCP-1-1108C007B Page 60 of 174

Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1108C007B Page 61 of 174

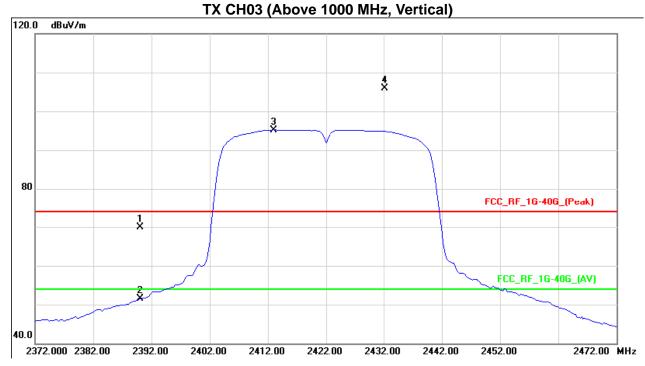
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

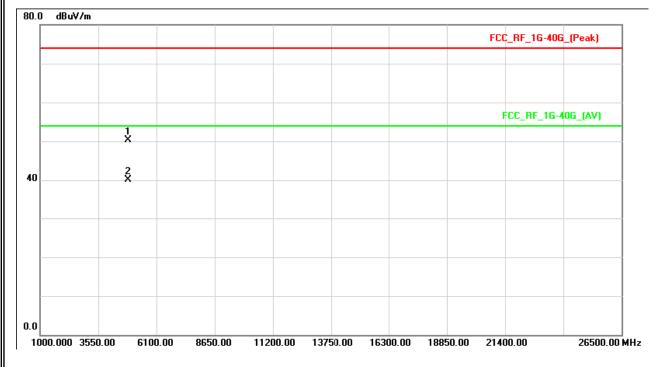
Freq.	Ant.Pol.	Rea	ding	Ant./CF	Ant./CF Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	38.05	19.52	31.91	69.96	51.43	74.00	54.00	X/E
2413.00	٧	73.98	63.32	31.88	105.85	95.20			X/F
4844.06	V	44.90	34.82	5.36	50.26	40.18	74.00	54.00	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 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-1-1108C007B Page 62 of 174

Neutron Engineering Inc.





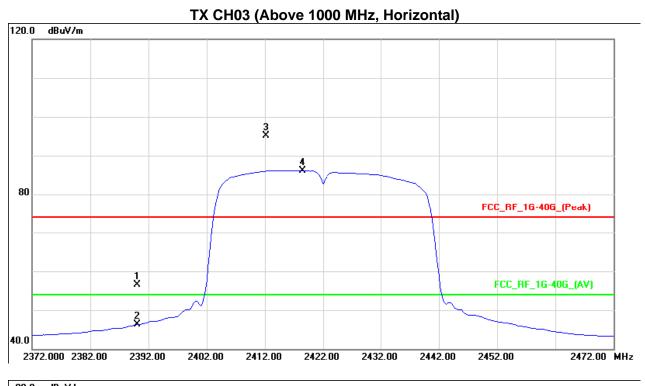
Report No.: NEI-FCCP-1-1108C007B

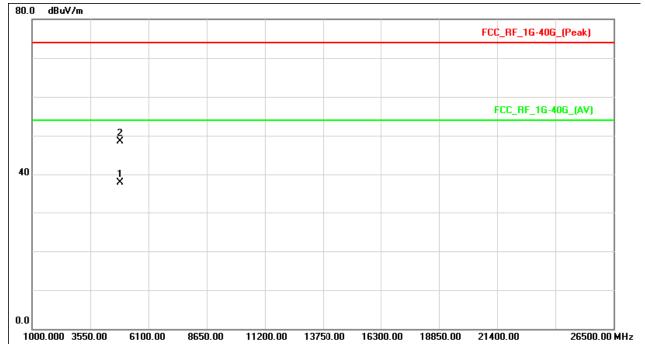
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

Freq.	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)	
2390.00	Н	24.64	14.31	31.91	56.55	46.22	74.00	54.00	X/E
2412.25	Н	63.15	54.31	31.89	95.04	86.19			X/F
4843.95	Н	43.15	32.56	5.36	48.51	37.92	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-1-1108C007B Page 64 of 174





Report No.: NEI-FCCP-1-1108C007B Page 65 of 174

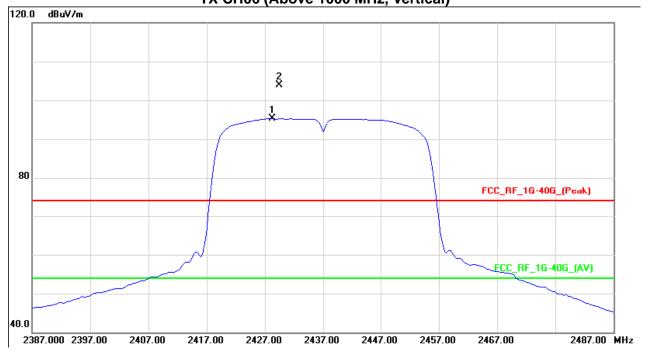
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

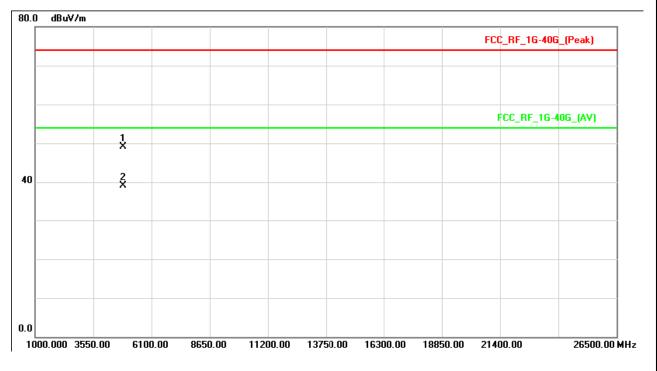
Freq. A	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
1164.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2428.25	V	72.12	63.36	31.86	103.99	95.22			X/F
4873.92	V	43.59	33.56	5.47	49.06	39.03	74.00	54.00	X/H

- (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-1-1108C007B Page 66 of 174

Neutron Engineering Inc. TX CH06 (Above 1000 MHz, Vertical)



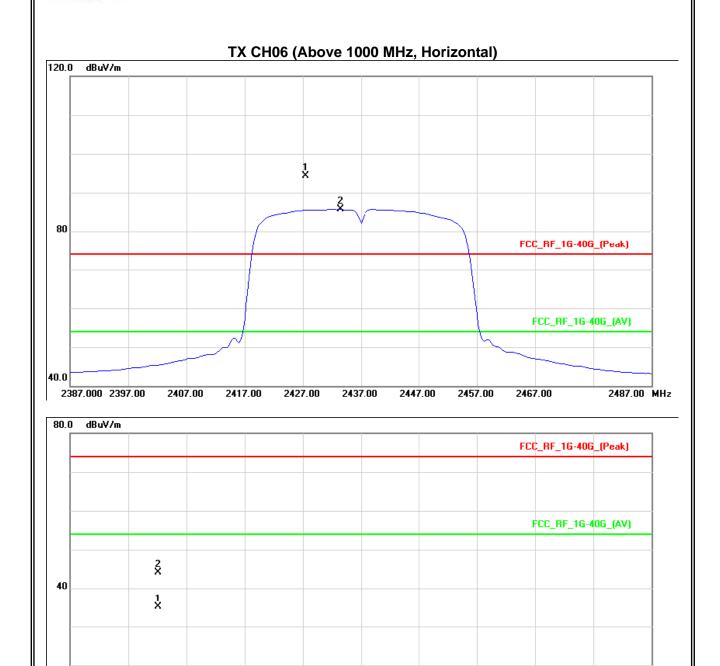


EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freq. Ant.P	Ant.Pol. Read		ding	Ant./CF	Act.		Lir			
	1164.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
	2427.50	Н	62.53	53.80	31.87	94.40	85.66			X/F
	4874.09	Н	38.60	29.54	5.47	44.07	35.01	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-1-1108C007B Page 68 of 174



11200.00 13750.00 16300.00 18850.00 21400.00

0.0

1000.000 3550.00

6100.00

8650.00

26500.00 MHz

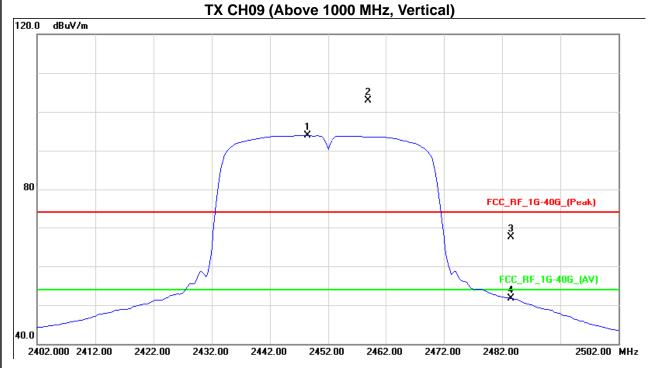
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	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)	
2448.50	V	71.05	62.08	31.84	102.88	93.92			X/F
2483.50	V	35.79	19.83	31.80	67.59	51.63	74.00	54.00	X/E
4903.88	V	43.14	34.68	5.58	48.72	40.26	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-1-1108C007B Page 70 of 174

Neutron Engineering Inc.— TX CH09 (Above 1000 M





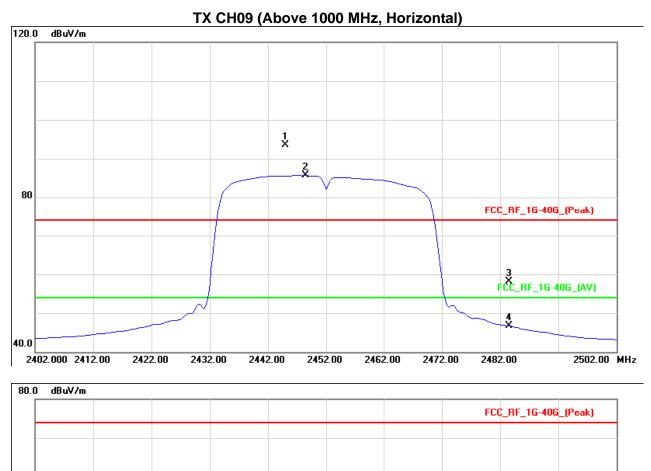
Report No.: NEI-FCCP-1-1108C007B Page 71 of 174

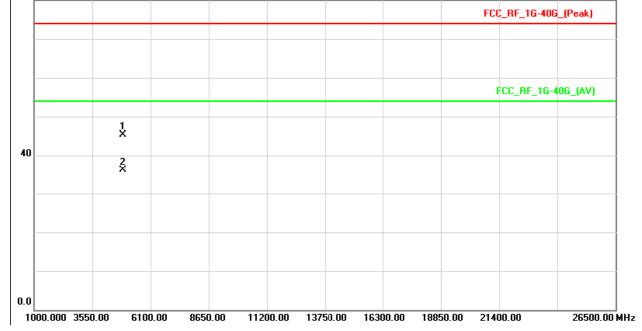
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	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)	
2445.00	Н	61.70	53.82	31.85	93.55	85.66			X/F
2483.50	Н	26.29	14.82	31.80	58.09	46.62	74.00	54.00	X/E
4903.95	Н	39.78	30.50	5.58	45.36	36.08	74.00	54.00	X/H

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

Report No.: NEI-FCCP-1-1108C007B Page 72 of 174





4.2.10 TEST RESULTS (ABOVE 1000 MHZ)-FOR FWR-634N

EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

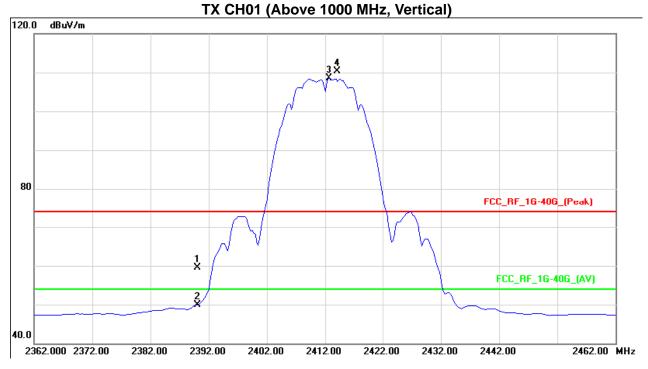
Freq. A	Ant.Pol.	Reading		Ant./CF	A	Act.		Limit		
1104.	Alk.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	V	27.52	17.95	31.91	59.43	49.86	74.00	54.00	Z/E	
2412.76	V	78.48	76.57	31.88	110.36	108.45			Z/F	
4823.86	V	50.27	46.21	5.29	55.56	51.50	74.00	54.00	Z/H	

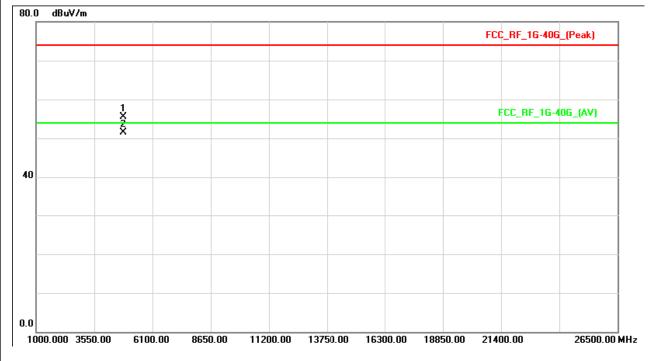
Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 74 of 174

Neutron Engineering Inc.= TX CH01 (Above 1000



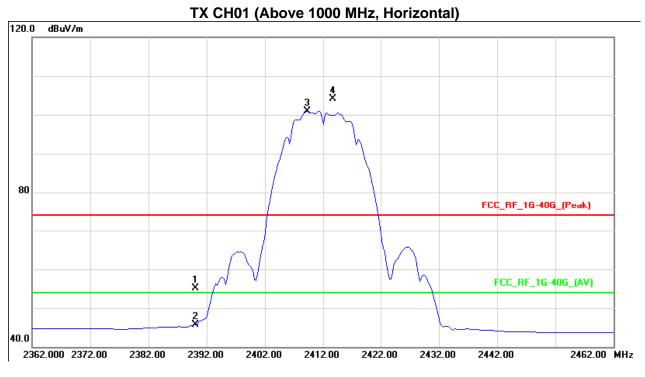


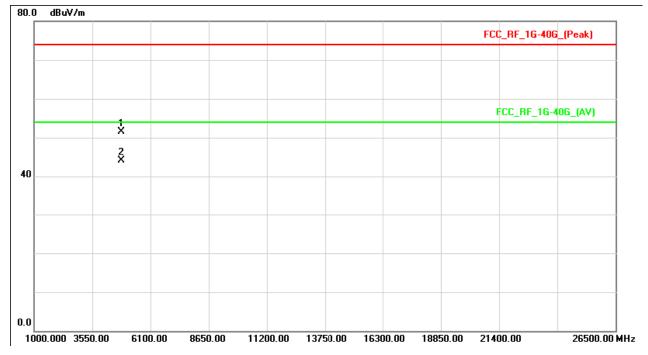
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Ant Pol Reading		Ant./CF	A	Act.		Limit		
1164.	Ali.FOI.	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	Н	23.25	13.78	31.91	55.16	45.69	74.00	54.00	Z/E	
2413.80	Н	7213	69.00	31.89	104.01	100.89			Z/F	
4823.76	Н	46.22	38.91	5.29	51.51	44.20	74.00	54.00	Z/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-1-1108C007B Page 76 of 174





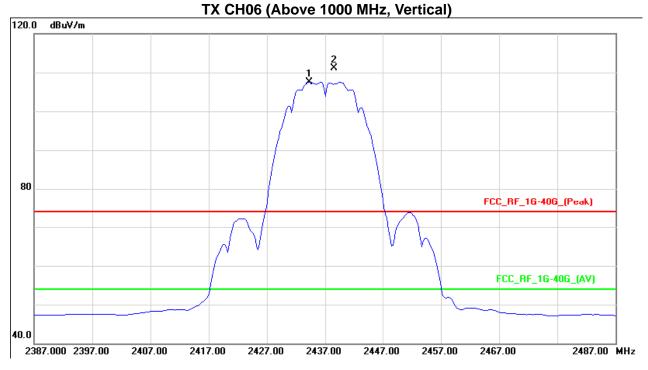
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading Ant./CF		Act.		Limit			
1 164.	ALILIT OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.28	٧	79.19	75.72	31.86	111.04	107.58			Z/F
4873.90	V	49.34	44.55	5.47	54.81	50.02	74.00	54.00	Z/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 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 o
- (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-1-1108C007B Page 78 of 174

Neutron Engineering Inc.= TX CH06 (Above 1000





Report No.: NEI-FCCP-1-1108C007B

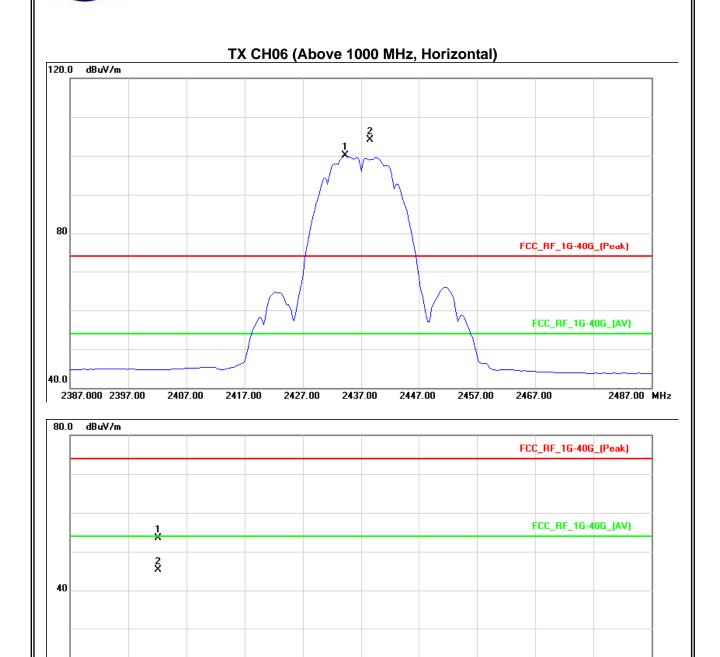
Page 79 of 174

EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq. Ant.F	Ant.Pol. Readi		ding	Ant./CF	Act.		Limit		
r req.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.21	Н	72.27	68.18	31.85	104.12	100.04			Z/F
4874.05	Н	48.00	39.79	5.47	53.47	45.26	74.00	54.00	Z/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-1-1108C007B Page 80 of 174



11200.00 13750.00 16300.00 18850.00

0.0

1000.000 3550.00

6100.00

8650.00

26500.00 MHz

21400.00

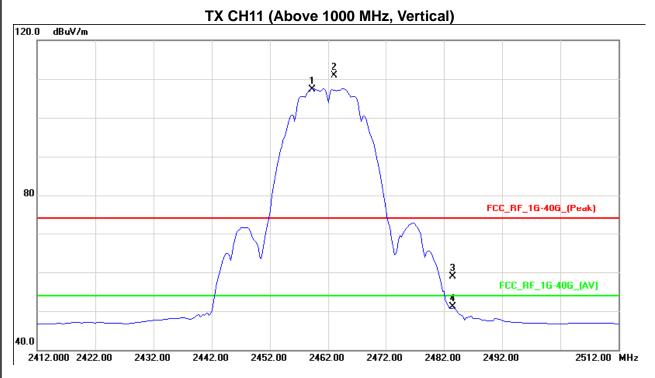
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

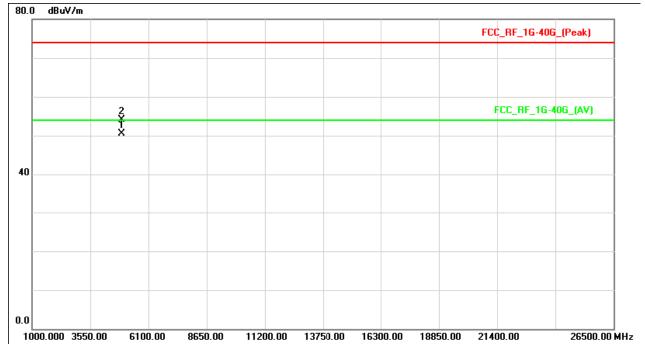
Freq.	Ant.Pol.	Rea	ding	Ant./CF	t./CF Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.07	٧	79.02	75.51	31.83	110.84	107.34			Z/F
2483.50	V	27.14	19.38	31.80	58.94	51.18	74.00	54.00	Z/E
4924.02	V	48.41	44.77	5.65	54.06	50.42	74.00	54.00	Z/H

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

Report No.: NEI-FCCP-1-1108C007B Page 82 of 174

Neutron Engineering Inc.=





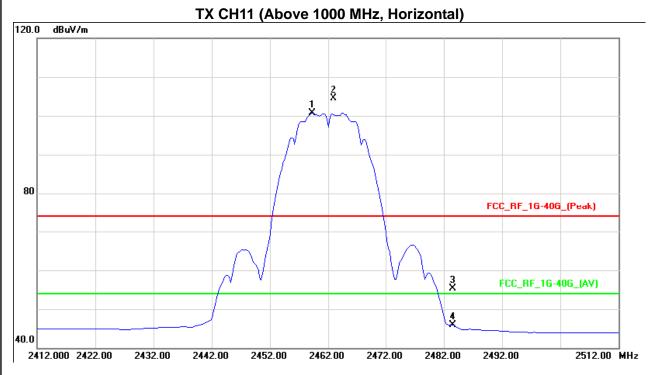
Report No.: NEI-FCCP-1-1108C007B Page 83 of 174

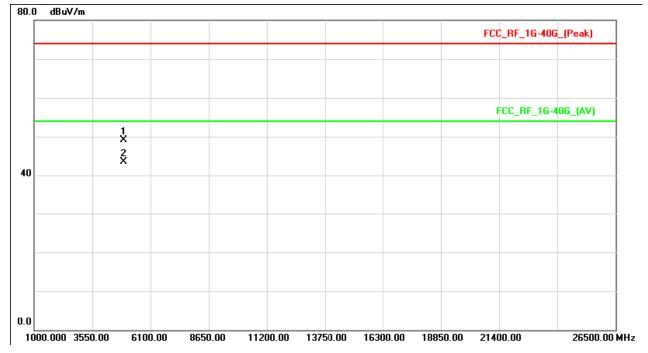
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freq.	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)	
2463.05	Н	72.68	68.81	31.82	104.50	100.64			Z/F
2483.50	Н	23.46	14.06	31.80	55.26	45.86	74.00	54.00	Z/E
4923.75	Н	43.55	37.76	5.65	49.20	43.41	74.00	54.00	Z/H

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

Report No.: NEI-FCCP-1-1108C007B Page 84 of 174





Report No.: NEI-FCCP-1-1108C007B Page 85 of 174

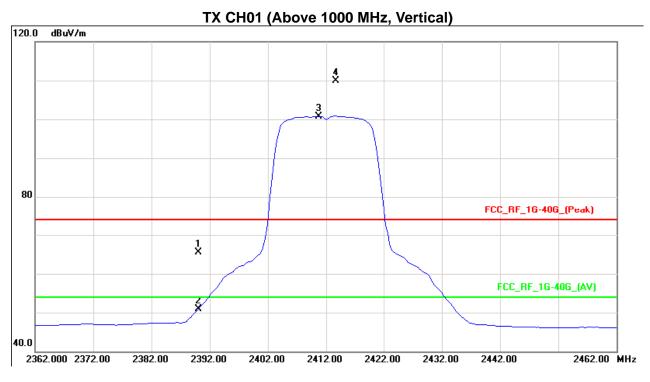
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

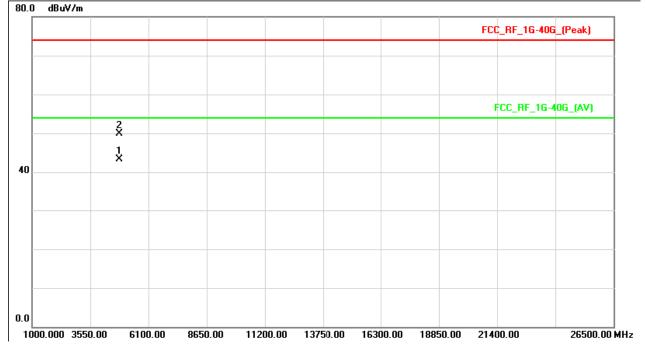
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	33.51	18.94	31.91	65.42	50.85	74.00	54.00	Z/E
2410.75	٧	77.96	68.81	31.89	109.84	100.70			Z/F
4823.76	V	44.57	38.01	5.29	49.86	43.30	74.00	54.00	Z/H

- (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-1-1108C007B Page 86 of 174

Neutron Engineering Inc.=





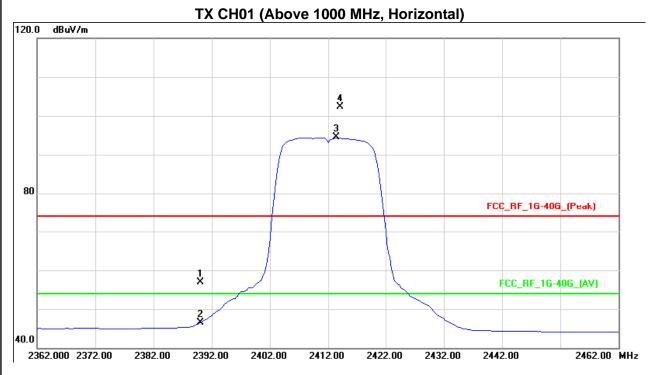
Report No.: NEI-FCCP-1-1108C007B Page 87 of 174

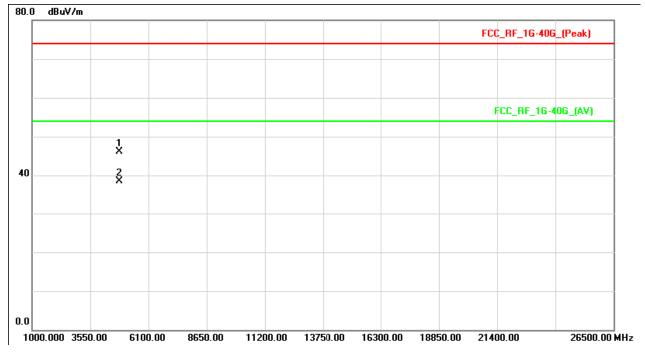
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq.	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)	
2390.00	Н	25.04	14.56	31.91	56.95	46.47	74.00	54.00	Z/E
2413.50	Н	70.39	62.57	31.88	102.27	94.45			Z/F
4823.72	Н	40.73	33.27	5.29	46.02	38.56	74.00	54.00	Z/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-1-1108C007B Page 88 of 174





Report No.: NEI-FCCP-1-1108C007B Page 89 of 174

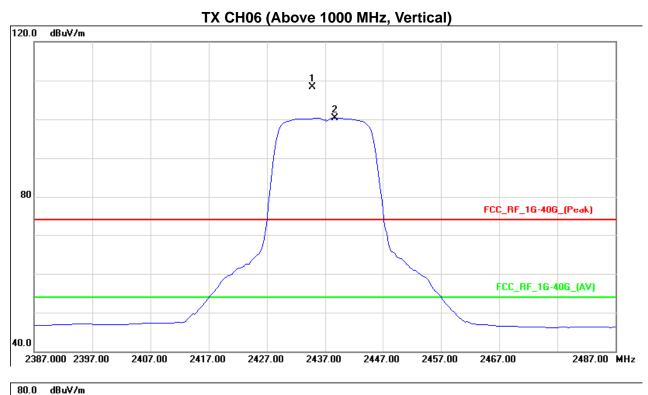
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

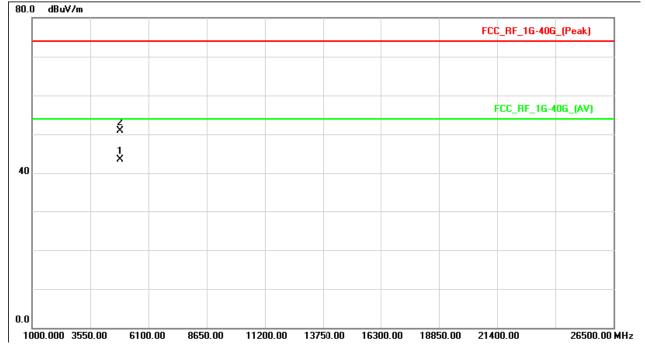
Freq. Ant.Pol.	Ant Pol Re	Rea	ading Ant./CF		Act.		Limit		
	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.80	٧	76.49	68.50	31.86	108.35	100.35			Z/F
4873.99	V	45.35	38.03	5.47	50.82	43.50	74.00	54.00	Z/H

- (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-1-1108C007B Page 90 of 174

Neutron Engineering Inc.=





Report No.: NEI-FCCP-1-1108C007B Page 91 of 174

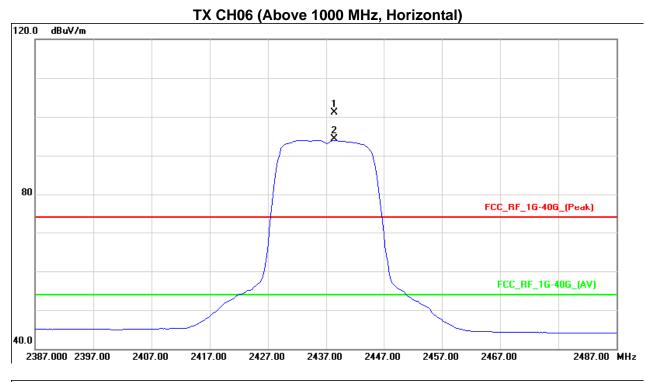
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

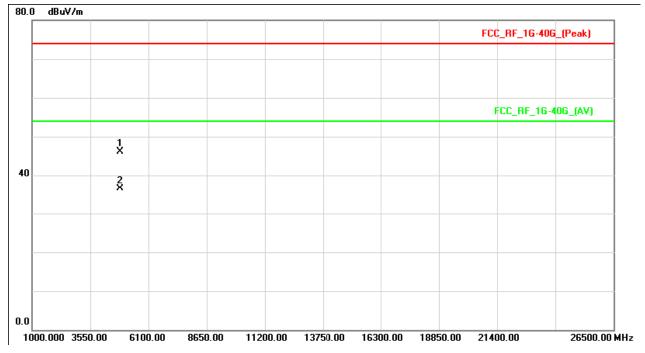
Freq. Ant.F	Ant.Pol. Readi		ding	Ant./CF	A	Act.		Limit	
1164.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.50	Н	69.23	62.46	31.85	101.08	94.31			Z/F
4874.08	Н	40.55	31.11	5.47	46.02	36.58	74.00	54.00	Z/H

- (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-1-1108C007B Page 92 of 174

Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1108C007B Page 93 of 174

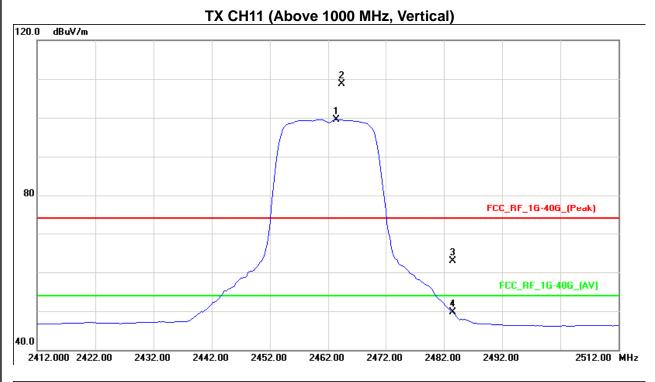
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

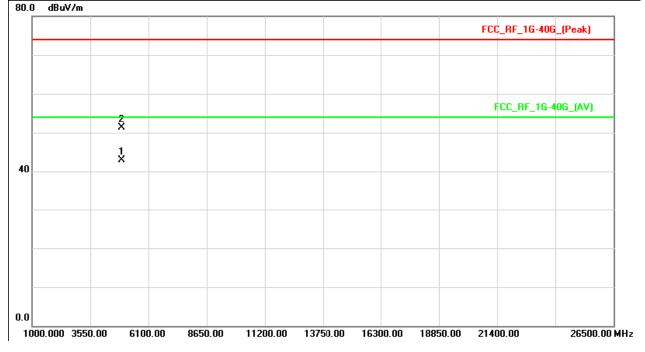
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.50	V	76.92	67.71	31.82	108.74	99.53			Z/F
2483.50	V	31.01	17.81	31.80	62.81	49.61	74.00	54.00	Z/E
4924.01	V	45.62	37.19	5.65	51.27	42.84	74.00	54.00	Z/H

- (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 o
- (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-1-1108C007B Page 94 of 174

Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1108C007B Page 95 of 174

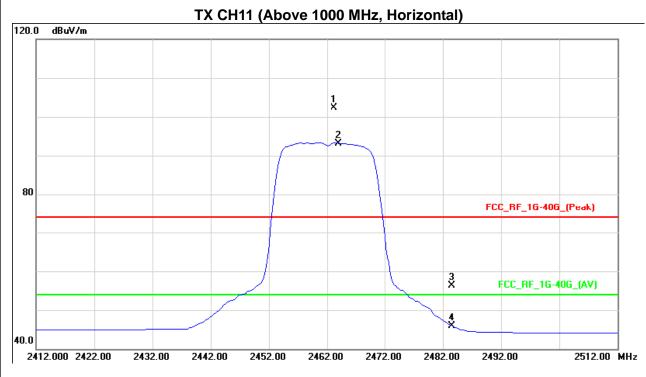
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	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)	
2463.29	Н	70.45	61.26	31.82	102.27	93.08			Z/F
2483.50	Н	24.57	14.20	31.80	56.37	46.00	74.00	54.00	Z/E
4923.90	Н	40.99	32.44	5.65	46.64	38.09	74.00	54.00	Z/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-1-1108C007B Page 96 of 174

Neutron Engineering Inc.





Report No.: NEI-FCCP-1-1108C007B Page 97 of 174

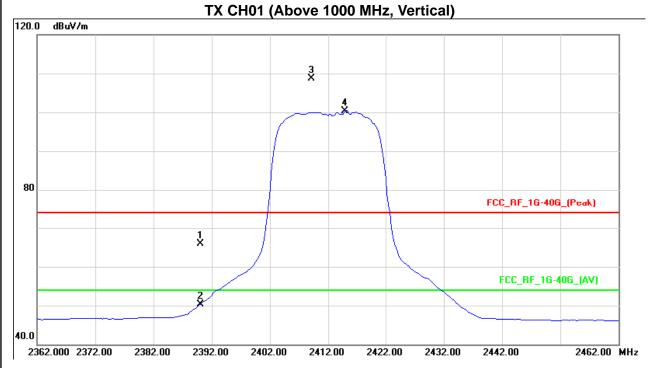
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

Freq.	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)	
2390.00	V	34.09	18.46	31.91	66.00	50.37	74.00	54.00	Z/E
2409.13	٧	76.90	68.41	31.89	108.79	100.29			Z/F
4823.84	V	43.67	35.95	5.29	48.96	41.24	74.00	54.00	Z/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 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
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- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

Report No.: NEI-FCCP-1-1108C007B Page 98 of 174

Neutron Engineering Inc.=



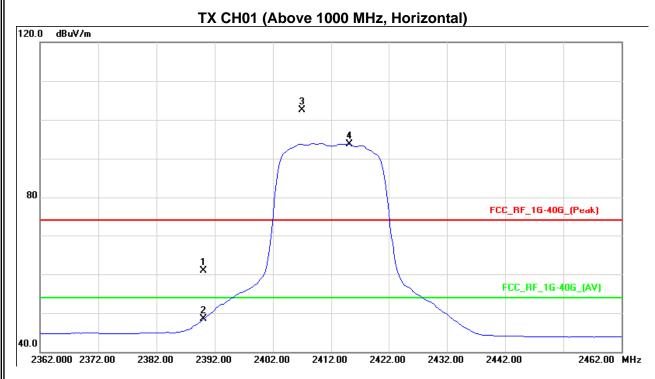


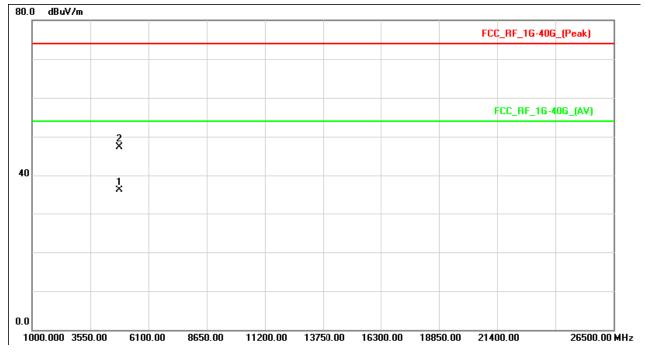
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

Freq.	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)	
2390.00	Н	28.97	16.52	31.91	60.88	48.43	74.00	54.00	Z/E
2407.05	Н	70.53	61.86	31.90	102.43	93.74			Z/F
4823.90	Н	41.97	30.79	5.29	47.26	36.08	74.00	54.00	Z/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.)
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- (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-1-1108C007B Page 100 of 174





Report No.: NEI-FCCP-1-1108C007B Page 101 of 174

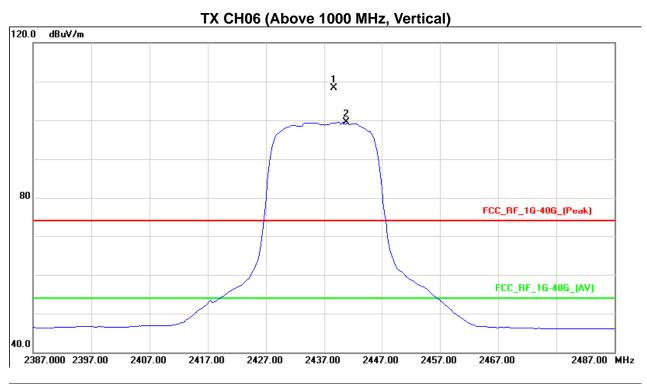
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq. Ant.Po	Ant Pol	Ant.Pol. Reading		Ant./CF	A	Act.		Limit	
1164.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.79	V	76.45	67.62	31.85	108.30	99.47			Z/F
4873.79	V	42.79	34.55	5.47	48.26	40.02	74.00	54.00	Z/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-1-1108C007B Page 102 of 174

Neutron Engineering Inc.=



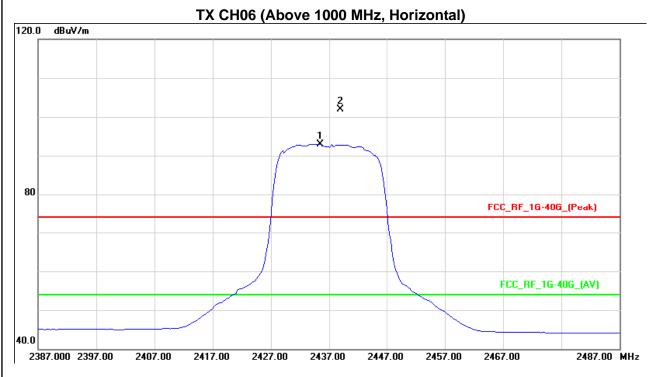


EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq. Ant.Po	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
1164.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.53	Н	70.12	61.03	31.86	101.97	92.89			Z/F
4874.15	Н	39.70	31.78	5.47	45.17	37.25	74.00	54.00	Z/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-1-1108C007B Page 104 of 174





Report No.: NEI-FCCP-1-1108C007B Page 105 of 174

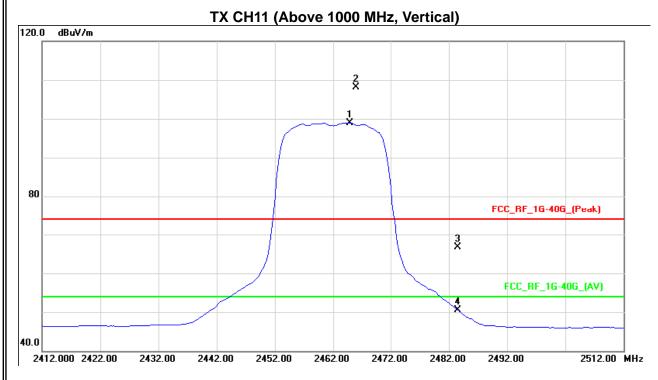
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

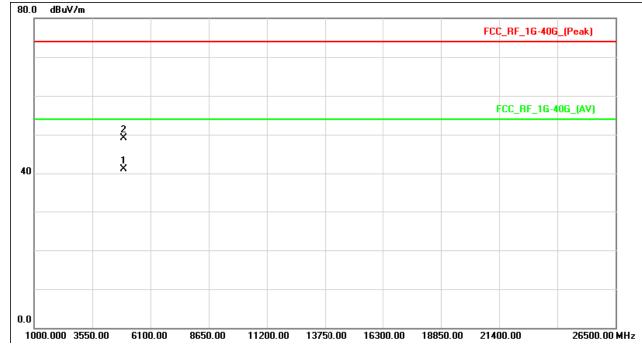
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2465.00	V	76.21	67.09	31.82	108.03	98.91			Z/F
2483.50	V	34.84	18.74	31.80	66.64	50.54	74.00	54.00	Z/E
4924.01	V	43.47	35.45	5.65	49.12	41.10	74.00	54.00	Z/H

- (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-1-1108C007B Page 106 of 174

Neutron Engineering Inc.





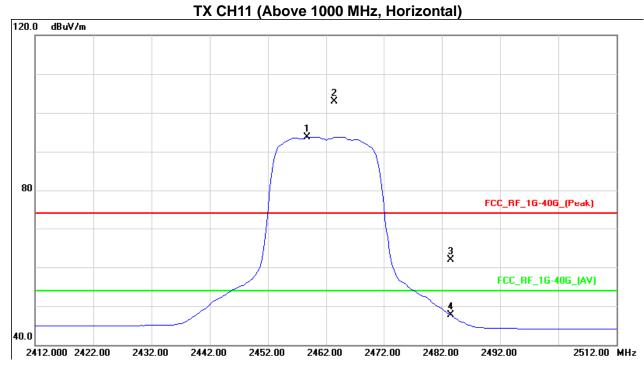
Report No.: NEI-FCCP-1-1108C007B Page 107 of 174

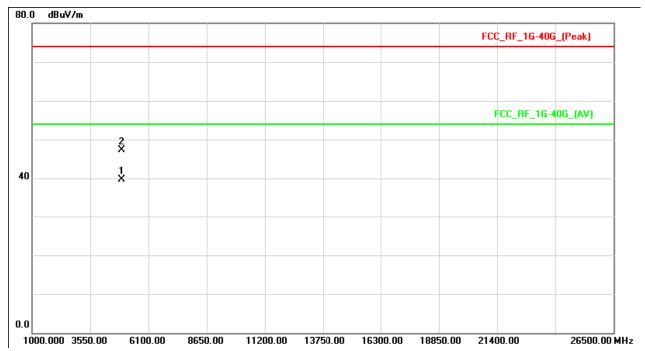
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

Freq.	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)	
2458.75	Н	71.09	61.88	31.82	102.91	93.71			Z/F
2483.50	Н	30.13	15.83	31.80	61.93	47.63	74.00	54.00	Z/E
4923.91	Н	41.71	33.97	5.65	47.36	39.62	74.00	54.00	Z/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 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-1-1108C007B Page 108 of 174





Report No.: NEI-FCCP-1-1108C007B Page 109 of 174

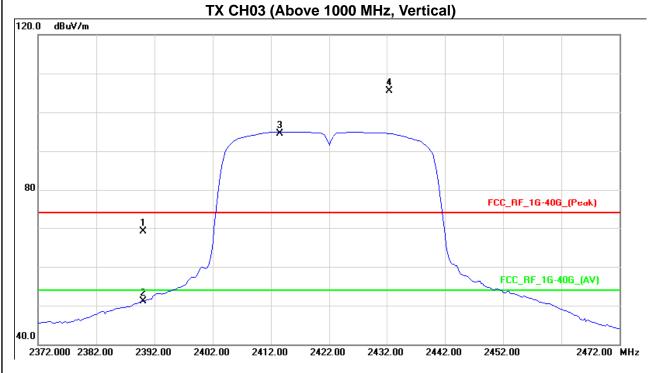
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

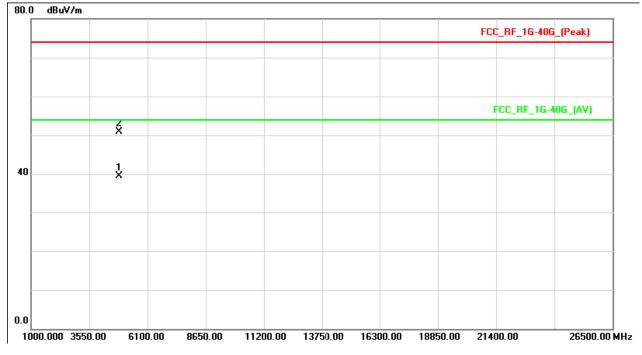
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	37.17	19.24	31.91	69.08	51.15	74.00	54.00	Z/E
2413.50	٧	73.70	62.64	31.88	105.57	94.52			Z/F
4844.02	V	45.50	34.12	5.36	50.86	39.48	74.00	54.00	Z/H

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-1-1108C007B Page 110 of 174





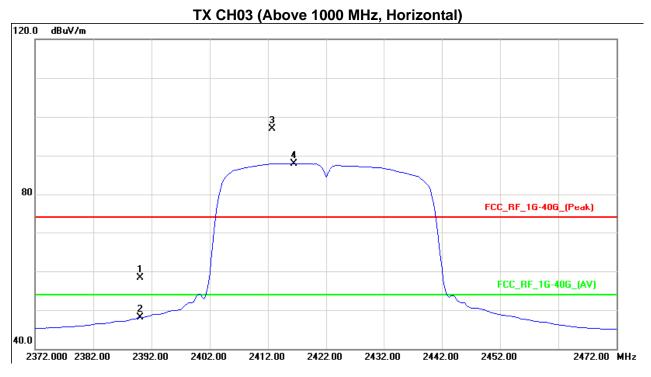
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

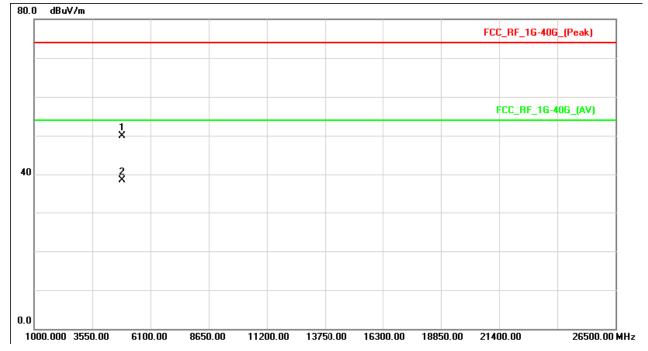
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	26.44	16.11	31.91	58.35	48.02	74.00	54.00	Z/E
2412.78	Н	64.96	56.09	31.88	96.84	87.97			Z/F
4843.91	Н	44.48	33.16	5.36	49.86	38.52	74.00	54.00	Z/H

Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 112 of 174





Report No.: NEI-FCCP-1-1108C007B Page 113 of 174

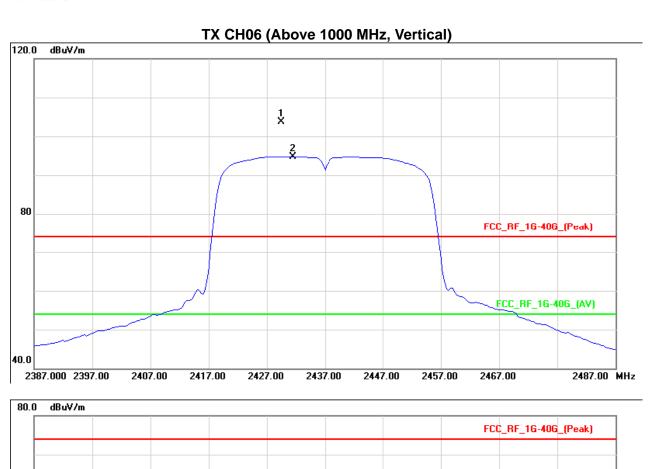
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

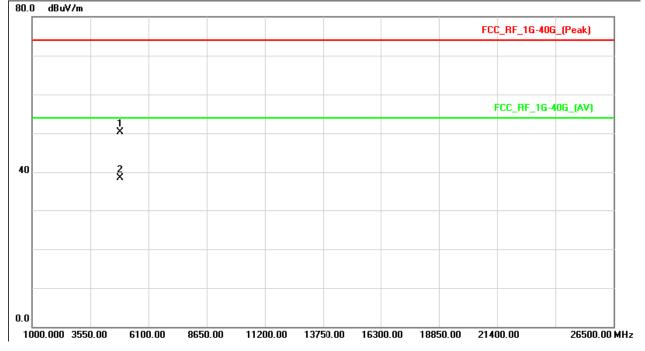
Freq. Ant.Pol.	Reading		Ant./CF	Act.		Limit			
1164.	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2429.48	V	71.87	62.84	31.86	103.73	94.71			Z/F
4873.92	V	44.79	33.06	5.47	50.26	38.53	74.00	54.00	Z/H

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-1-1108C007B Page 114 of 174





Report No.: NEI-FCCP-1-1108C007B Page 115 of 174

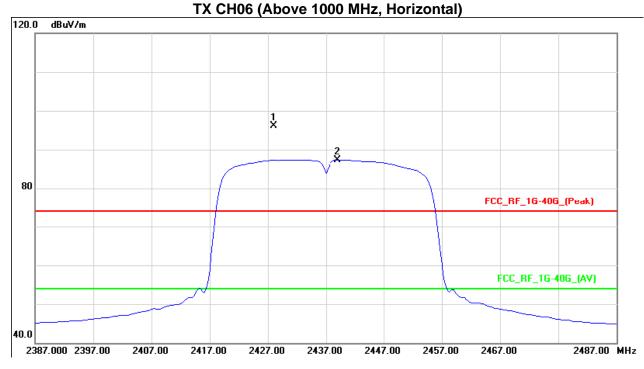
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

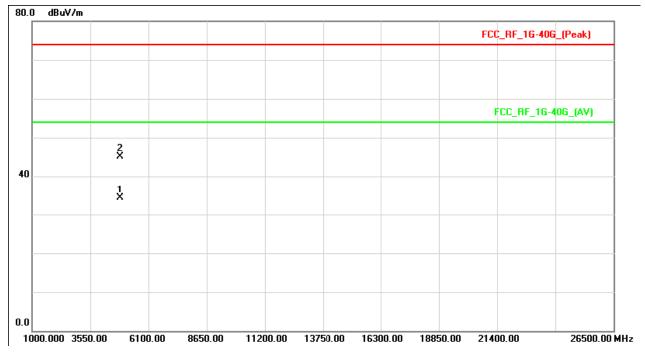
Freq. Ant.	Ant.Pol. Rea		ding	Ant./CF	Act.		Limit		
1164.	Ant.i Oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2427.96	Н	64.26	55.47	31.86	96.10	87.32			Z/F
4874.09	Н	39.60	28.74	5.47	45.07	34.21	74.00	54.00	Z/H

Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 116 of 174





Report No.: NEI-FCCP-1-1108C007B Page 117 of 174

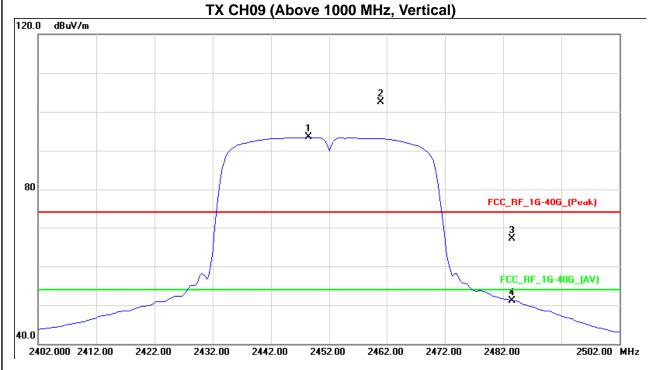
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	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)	
2448.50	V	70.58	61.60	31.84	102.41	93.44			Z/F
2483.50	V	35.32	19.36	31.80	67.12	51.16	74.00	54.00	Z/E
4903.81	V	44.13	35.08	5.58	49.71	40.66	74.00	54.00	Z/H

Remark:

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

Report No.: NEI-FCCP-1-1108C007B Page 118 of 174





Report No.: NEI-FCCP-1-1108C007B Page 119 of 174

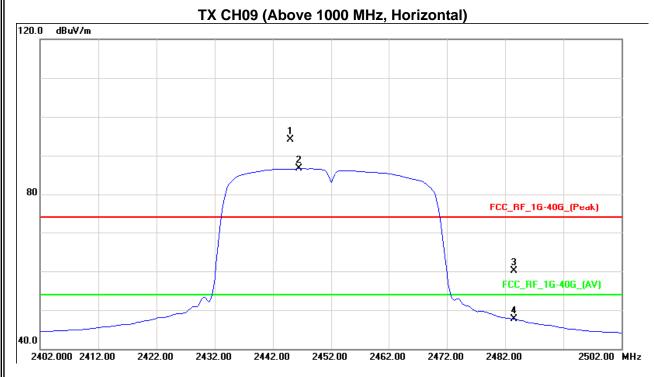
EUT:	150Mbps Wireless N Router	Model Name :	FWR-634N
Temperature:	28 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

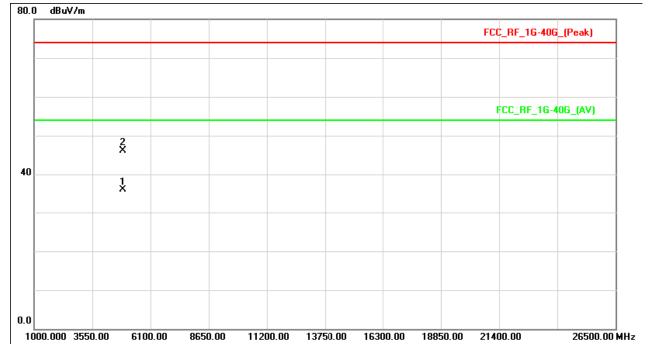
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2445.00	Н	62.29	54.78	31.85	94.14	86.63			Z/F
2483.50	Н	28.28	15.81	31.80	60.08	47.61	74.00	54.00	Z/E
4903.92	Н	40.50	30.33	5.58	46.08	35.91	74.00	54.00	Z/H

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-1-1108C007B Page 120 of 174





Report No.: NEI-FCCP-1-1108C007B Page 121 of 174

5. BANDWIDTH TEST

5.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C					
Section Test Item Limit			Frequency Range (MHz)	Result	
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS	

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 04, 2012

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

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=100KHz, Sweep time = 5 ms.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

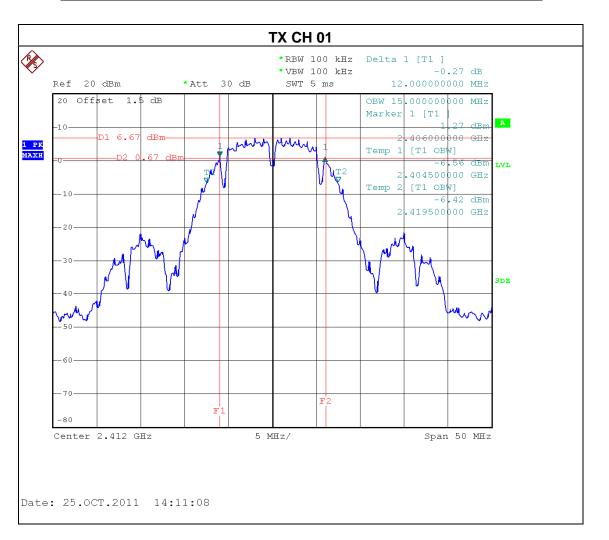
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Report No.: NEI-FCCP-1-1108C007B Page 122 of 174

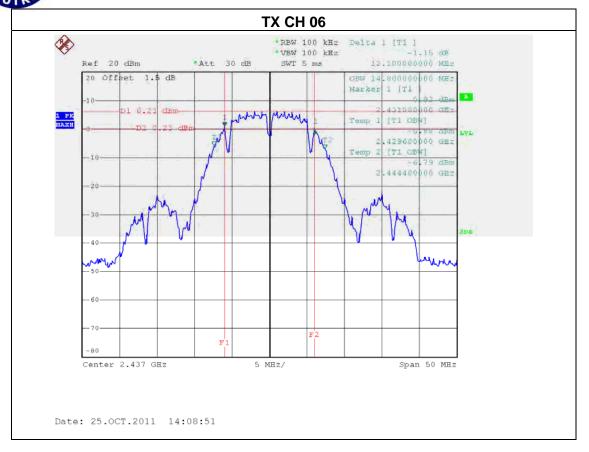
5.1.6 TEST RESULTS

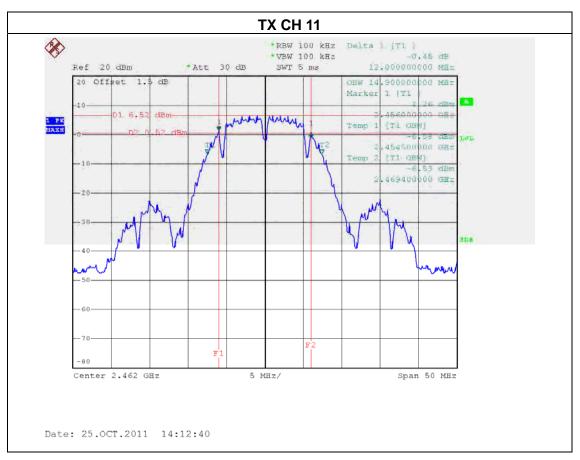
EUT:	150Mbps Wireless N Router	Model Name. :	FWR-614N	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX B MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	12.00	>=500KHz
CH06	2437	12.10	>=500KHz
CH11	2462	12.00	>=500KHz



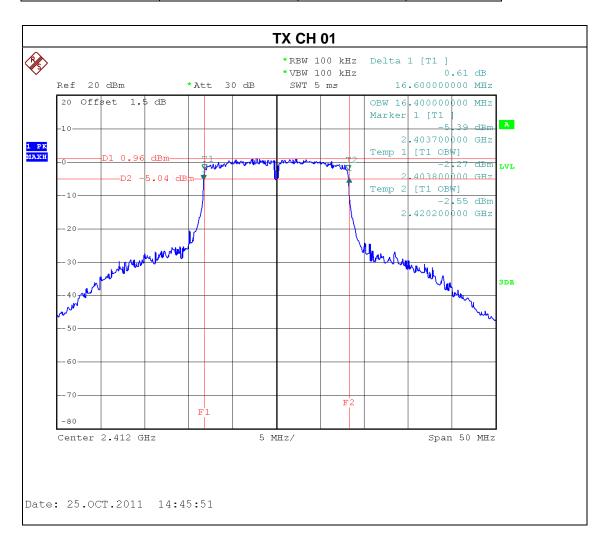
Report No.: NEI-FCCP-1-1108C007B Page 123 of 174



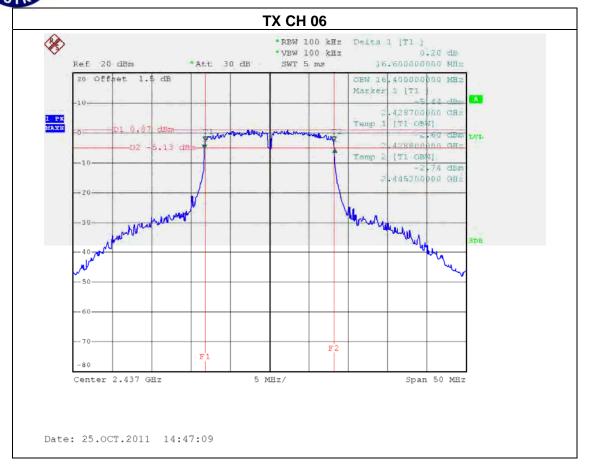


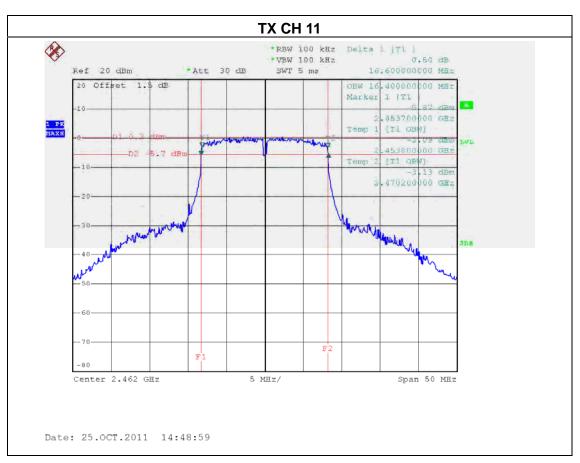
EUT:	150Mbps Wireless N Router	Model Name. :	FWR-614N	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX G MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	16.60	>=500KHz
CH06	2437	16.60	>=500KHz
CH11	2462	16.60	>=500KHz



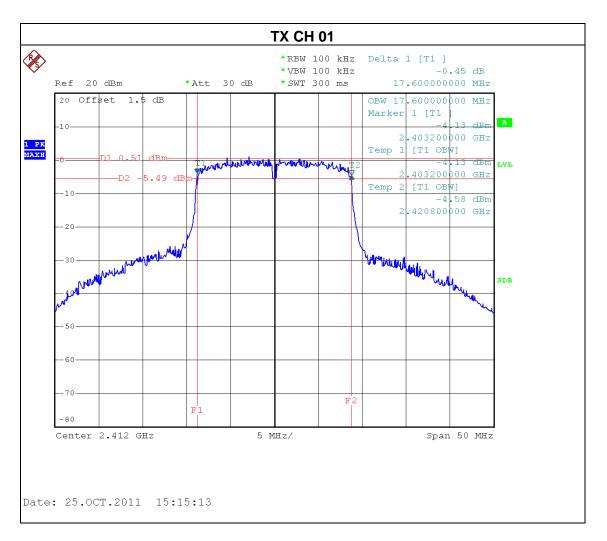
Report No.: NEI-FCCP-1-1108C007B Page 125 of 174



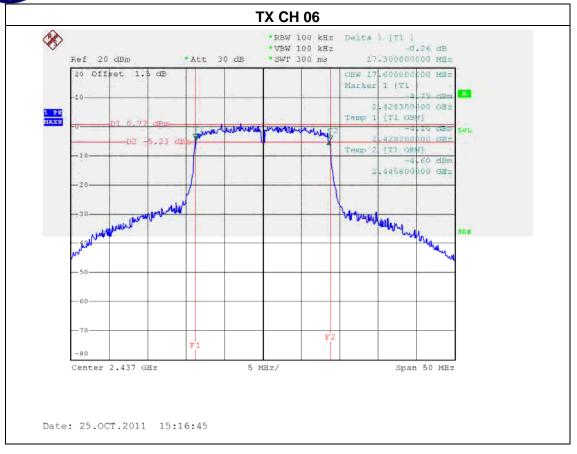


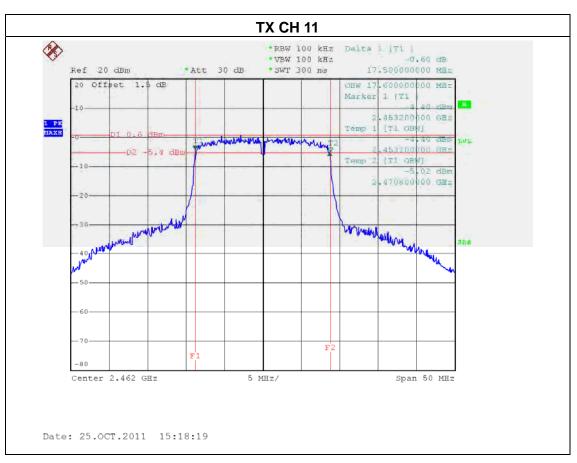
EUT:	150Mbps Wireless N Router	Model Name. :	FWR-614N	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11			

Test Channel	Frequency	Bandwidth	LIMIT
rest orialine	(MHz)	(MHz)	(MHz)
CH01	2412	17.60	>=500KHz
CH06	2437	17.30	>=500KHz
CH11	2462	17.50	>=500KHz



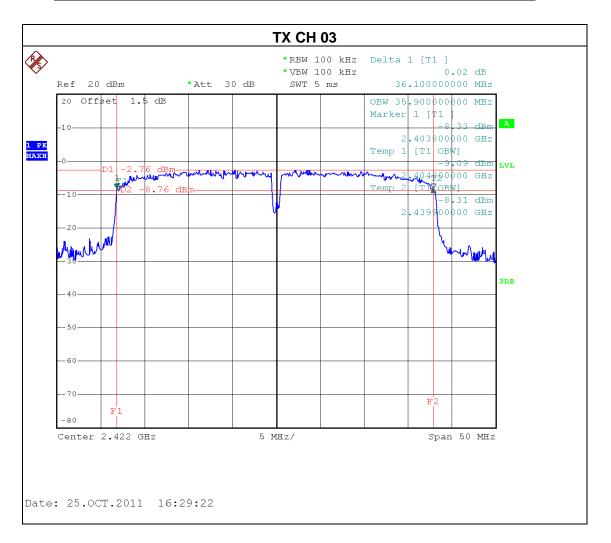
Report No.: NEI-FCCP-1-1108C007B Page 127 of 174



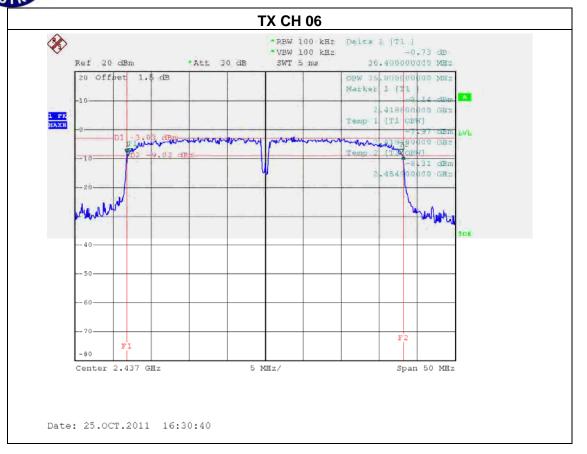


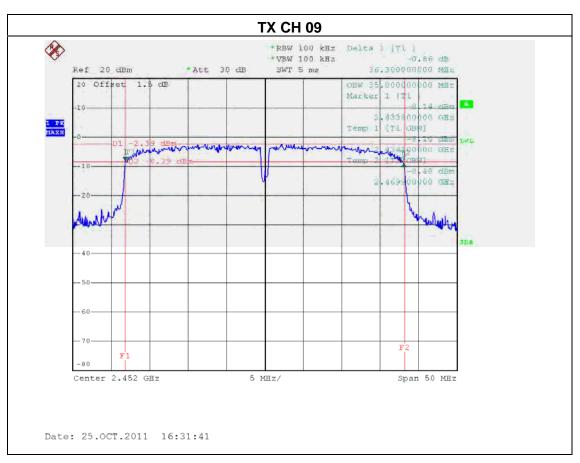
EUT:	150Mbps Wireless N Router	Model Name. :	FWR-614N		
Temperature:	24 ℃	Relative Humidity:	60 %		
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N MODE -40MHz/ CH03, CH06, CH09				

Test Channel	Frequency	Bandwidth	LIMIT
Test Charmer	(MHz)	(MHz)	(MHz)
CH03	2422	36.10	>=500KHz
CH06	2437	36.40	>=500KHz
CH09	2452	36.30	>=500KHz



Report No.: NEI-FCCP-1-1108C007B Page 129 of 174





6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

I	tem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
	1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 04, 2012

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

6.1.2 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= 1MHz, VBW=3MHz, Sample detector, Sweep time = 5 ms.

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

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.

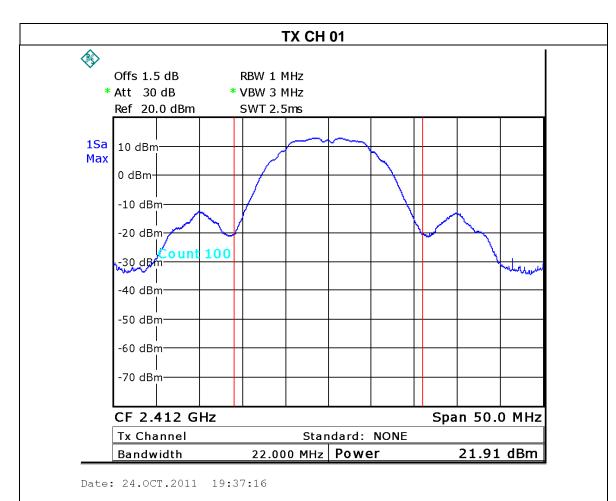
Report No.: NEI-FCCP-1-1108C007B Page 131 of 174

6.1.6 TEST RESULTS

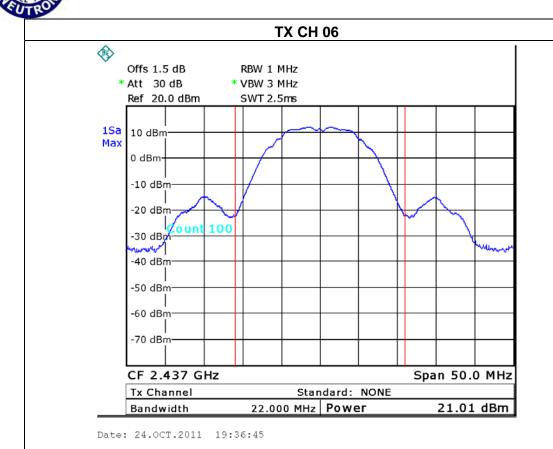
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

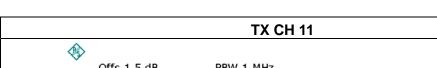
Maximum Output Power

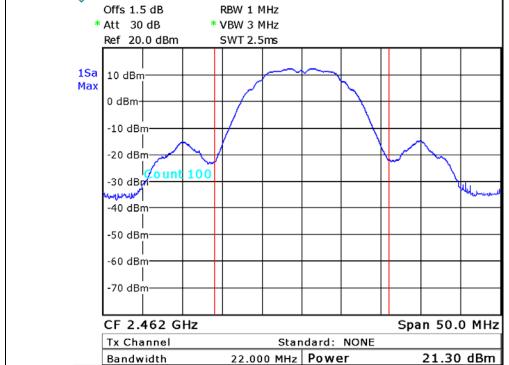
Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	21.91	30	1
CH06	2437 MHz	21.01	30	1
CH11	2462 MHz	21.30	30	1



Report No.: NEI-FCCP-1-1108C007B Page 132 of 174





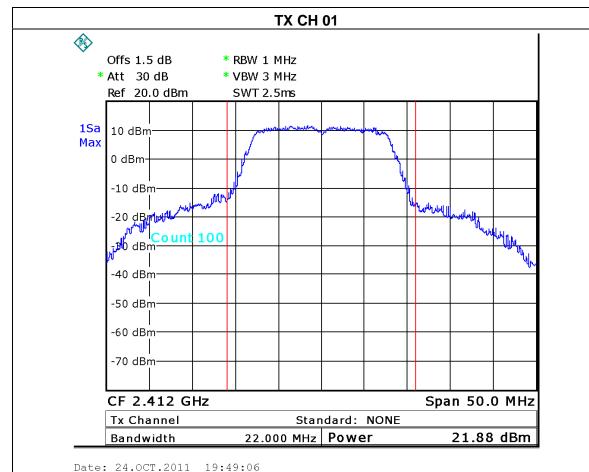


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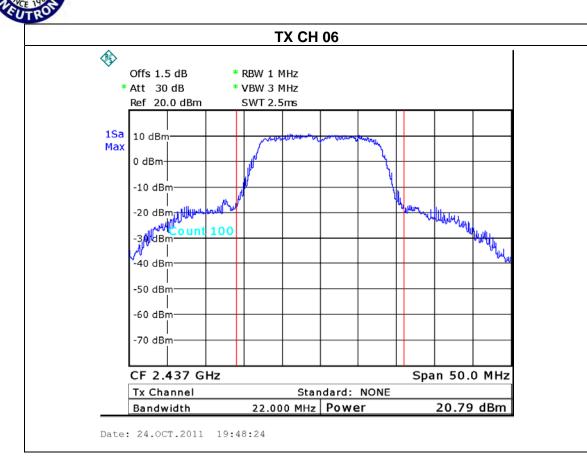
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	AC 120V/60Hz	
Test Mode :	TX G MODE /CH01, CH06, CH11		

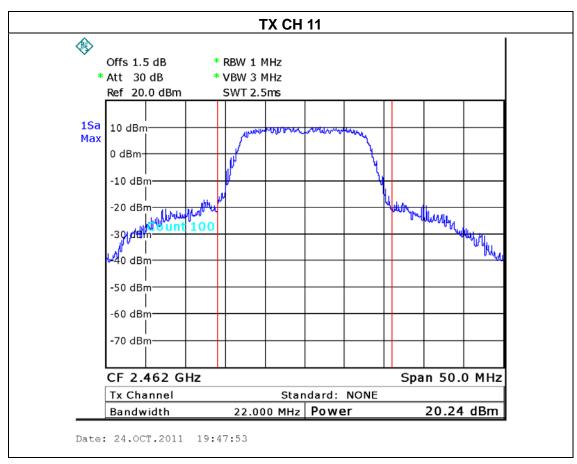
Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	21.88	30	1
CH06	2437 MHz	20.79	30	1
CH11	2462 MHz	20.24	30	1



Report No.: NEI-FCCP-1-1108C007B Page 134 of 174

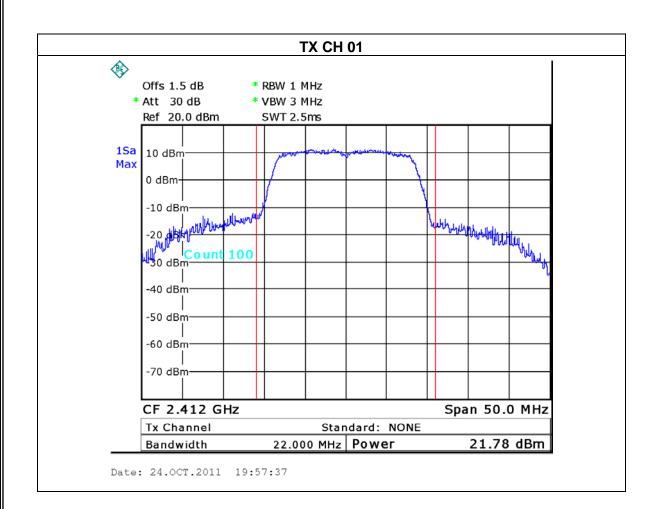




EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa Test Voltage : AC 120V/60Hz		
Test Mode :	TX N-20M MODE /CH01, CH06, CH11		

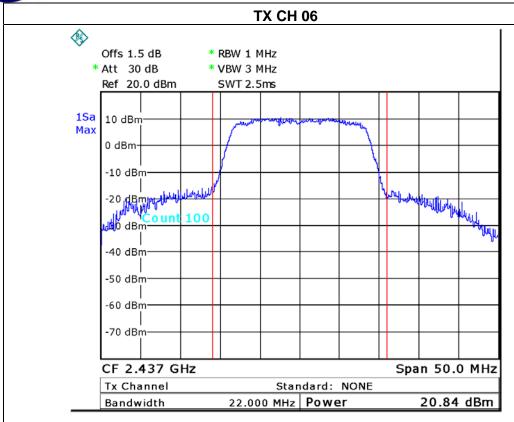
Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	21.78	30	1
CH06	2437 MHz	20.84	30	1
CH11	2462 MHz	20.12	30	1

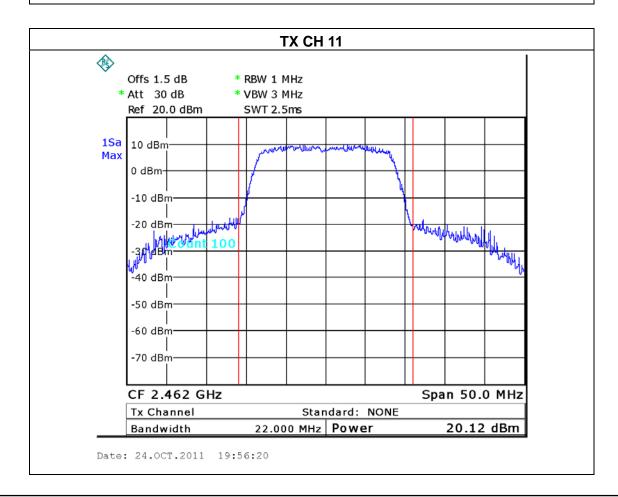


Report No.: NEI-FCCP-1-1108C007B

Page 136 of 174



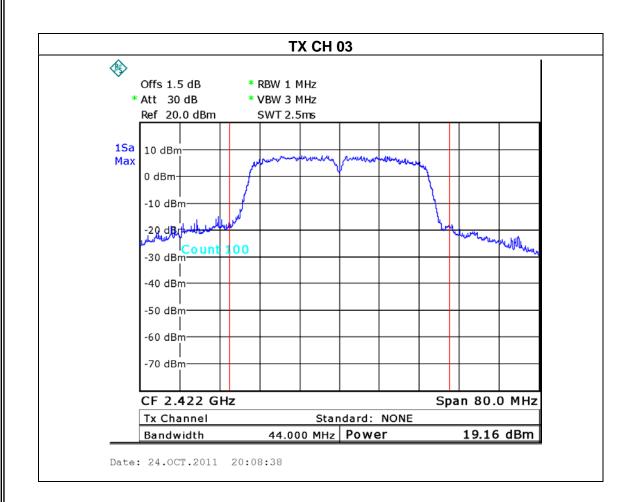
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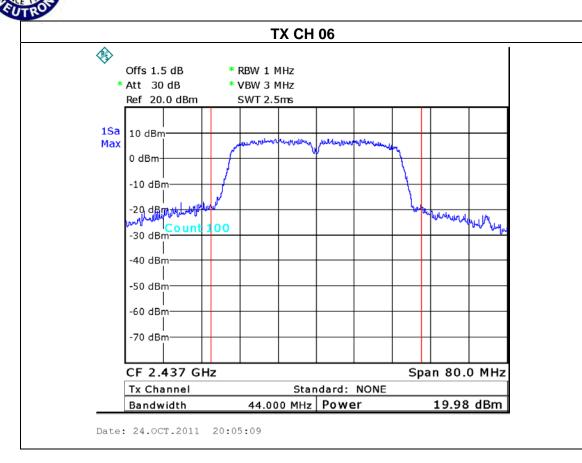
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

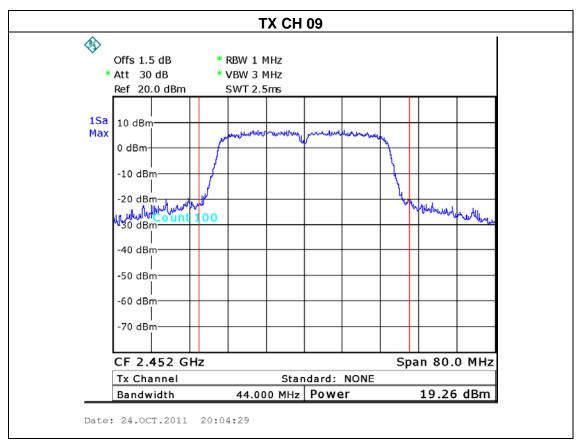
Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH03	2422 MHz	19.16	30	1
CH06	2437 MHz	19.98	30	1
CH09	2452 MHz	19.26	30	1



Report No.: NEI-FCCP-1-1108C007B Page 138 of 174





7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

30dBc 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
Above 960	500	3

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 04, 2012

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

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=100KHz, Sweep time = 10 ms.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

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-1-1108C007B Page 140 of 174

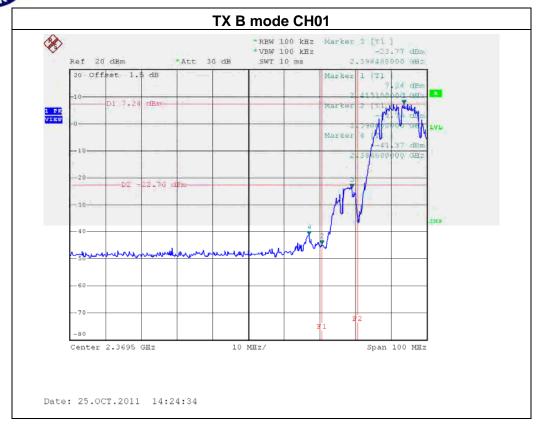
7.1.6 TEST RESULTS

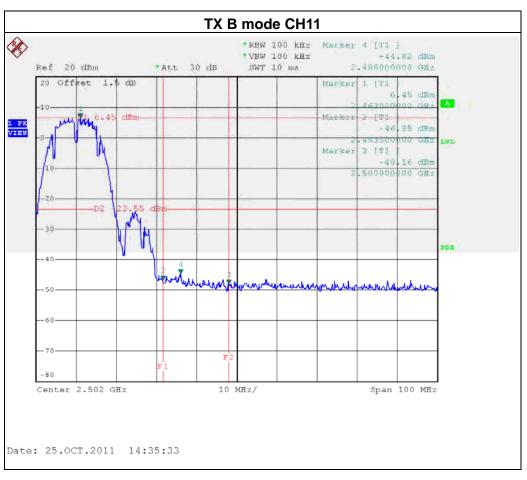
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06 , CH11		

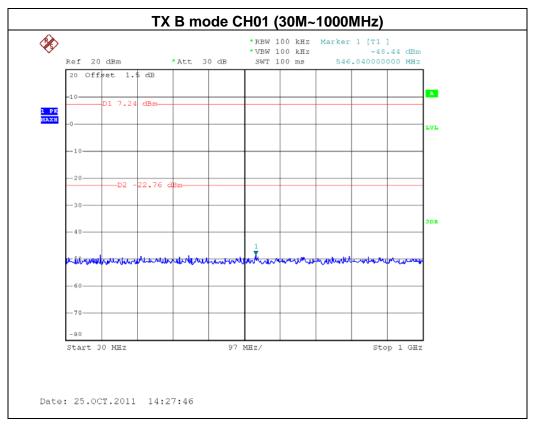
Channel of Worst Data: CH01					
The max. radio frequence bandwidth outside to		The max. radio frequency power in any 100 kHz bandwidth outside the frequency band.			
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2398.40	-23.77	2488.00	-44.82		
Result					

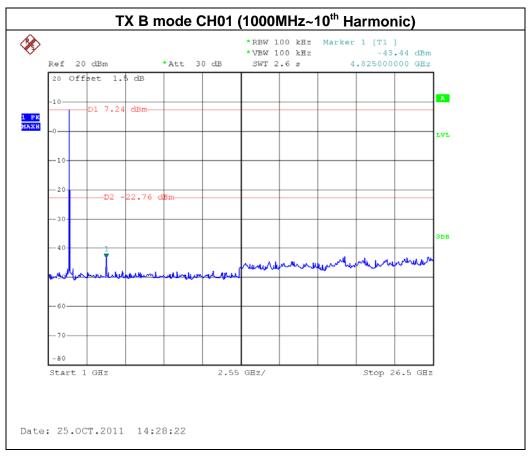
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 30dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

Report No.: NEI-FCCP-1-1108C007B Page 141 of 174

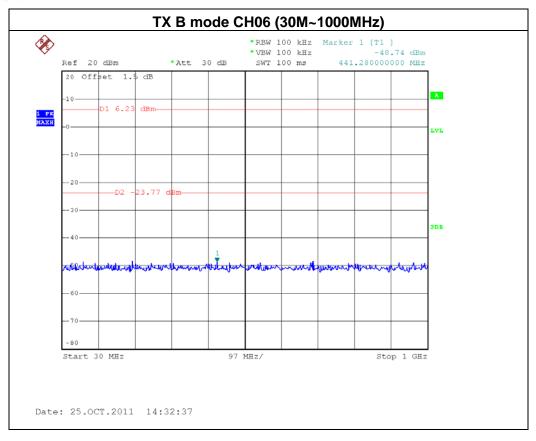


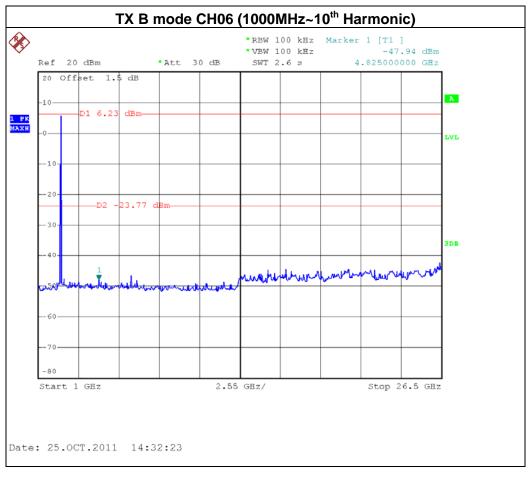






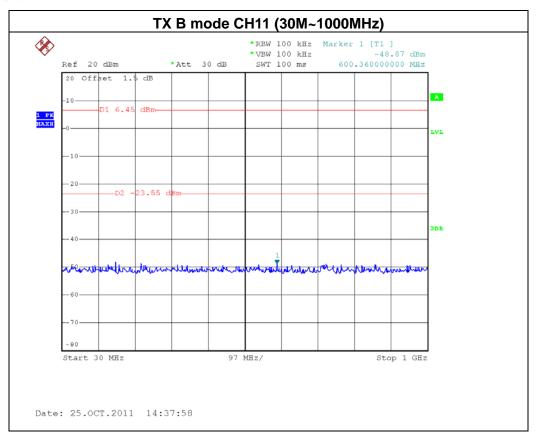
Report No.: NEI-FCCP-1-1108C007B Page 143 of 174

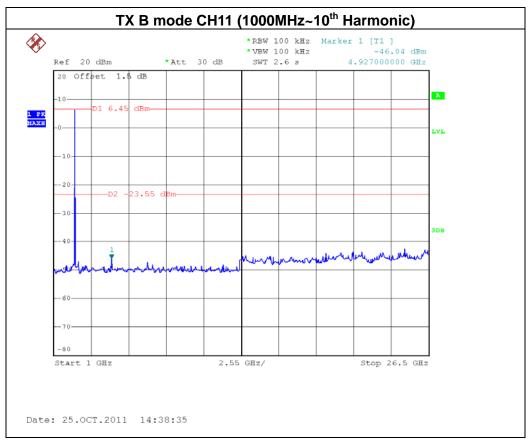




Report No.: NEI-FCCP-1-1108C007B Page 144 of 174







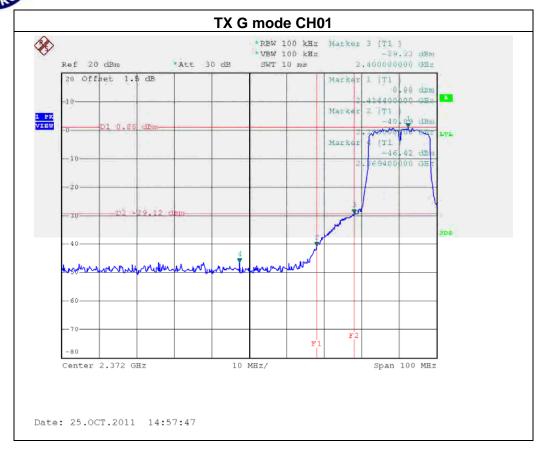
Report No.: NEI-FCCP-1-1108C007B Page 145 of 174

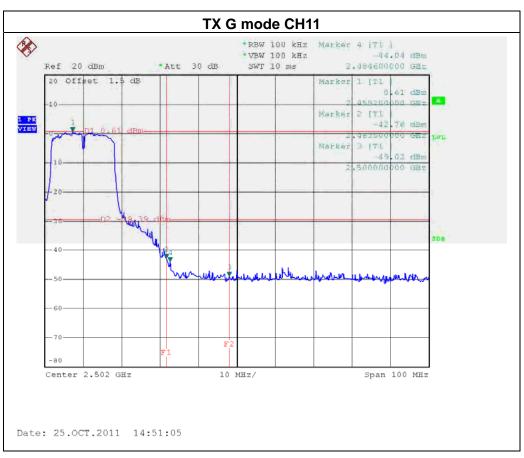
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06, CH11		

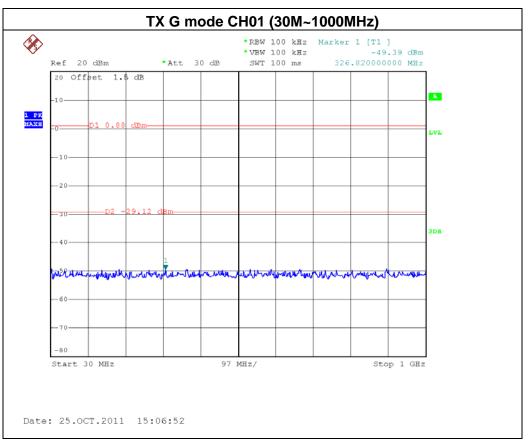
Channel of Worst Data: CH01				
The max. radio frequency power in any 100kHz bandwidth within the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)	
2400.00 -29.23 2483.50 -42.76				
	Result			

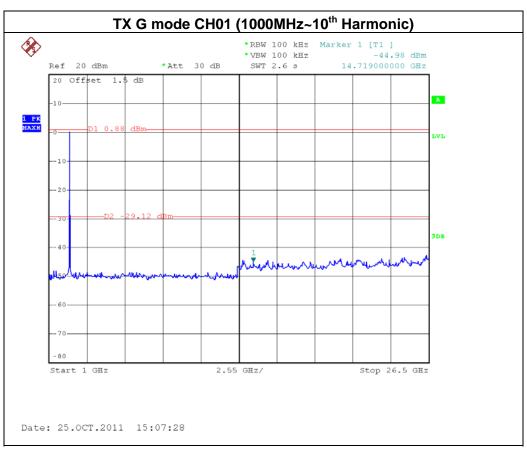
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 30dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

Report No.: NEI-FCCP-1-1108C007B Page 146 of 174

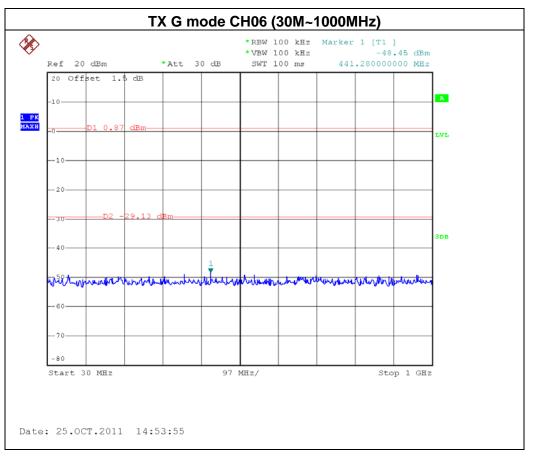


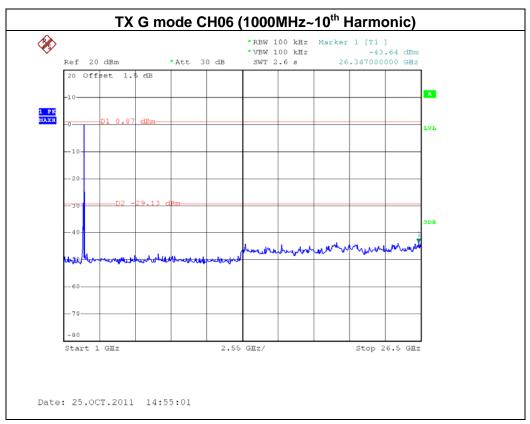




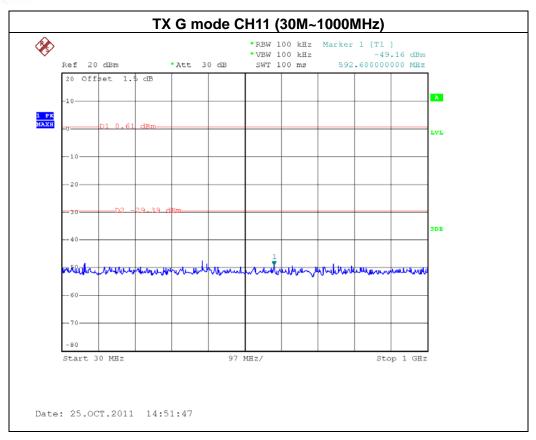


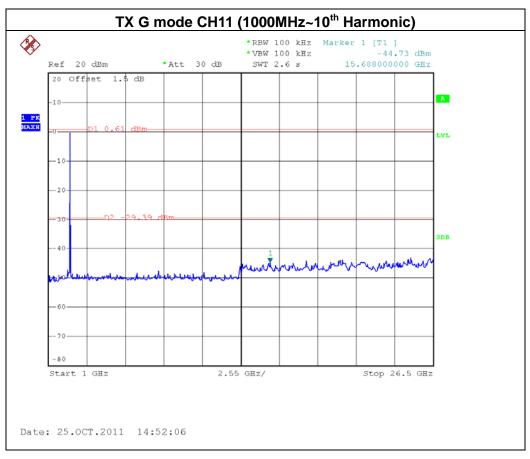
Report No.: NEI-FCCP-1-1108C007B Page 148 of 174





Report No.: NEI-FCCP-1-1108C007B Page 149 of 174





Report No.: NEI-FCCP-1-1108C007B Page 150 of 174

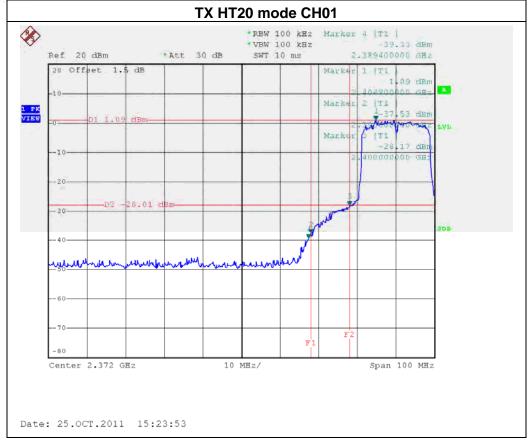


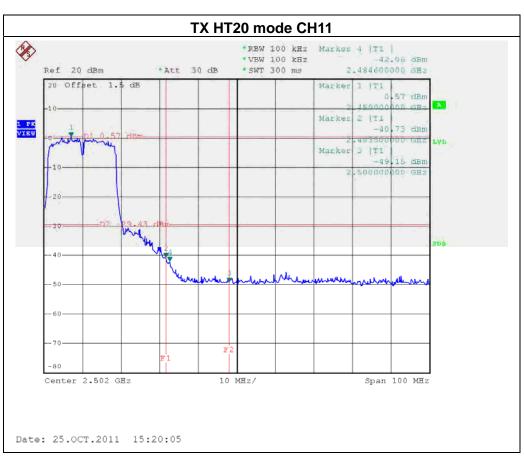
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06, CH11		

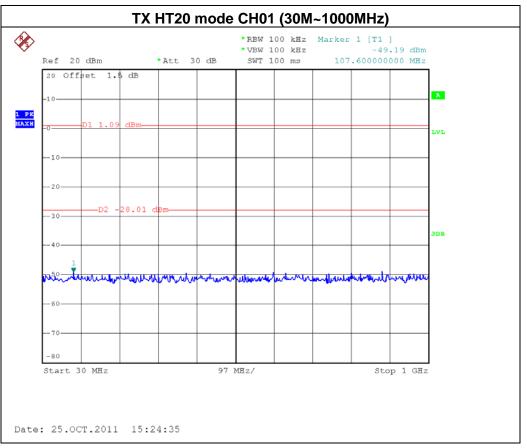
Channel of Worst Data: CH01				
The max. radio frequency power in any 100kHz bandwidth within the frequency band The max. radio frequency power in any 100 kl bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)				
2400.00 -28.17 2483.50 -40.73				
	Result			

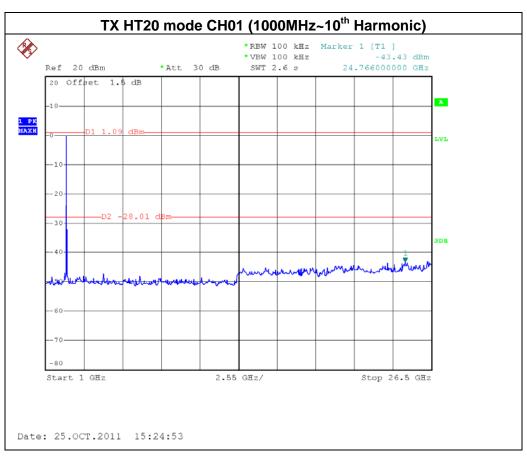
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 30dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

Report No.: NEI-FCCP-1-1108C007B Page 151 of 174

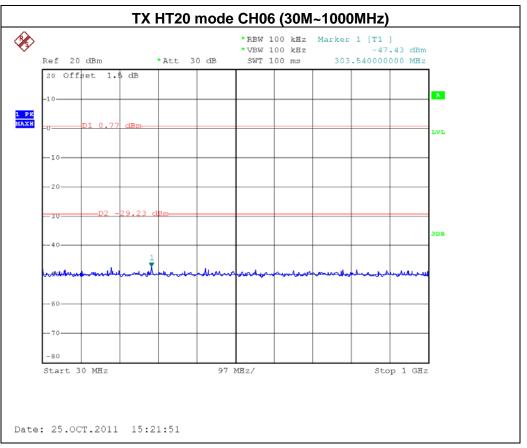


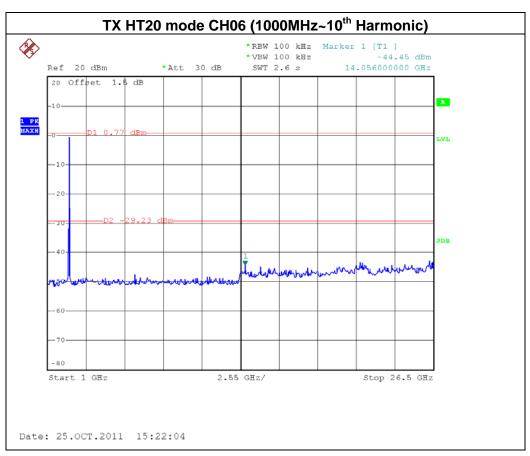




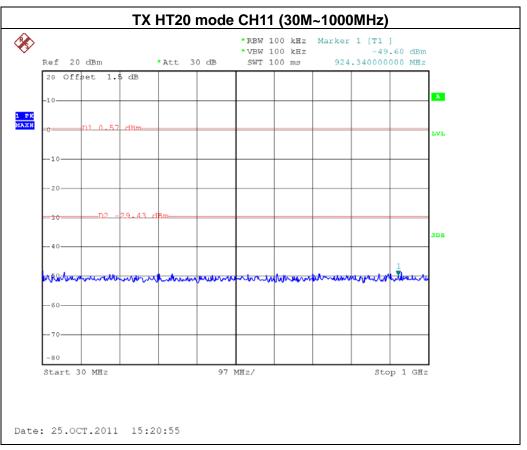


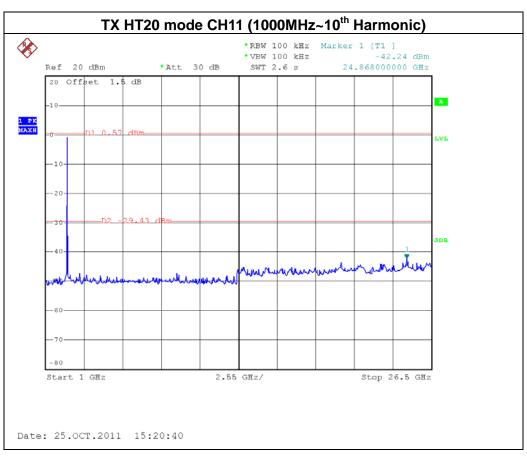
Report No.: NEI-FCCP-1-1108C007B Page 153 of 174





Report No.: NEI-FCCP-1-1108C007B Page 154 of 174





Report No.: NEI-FCCP-1-1108C007B Page 155 of 174

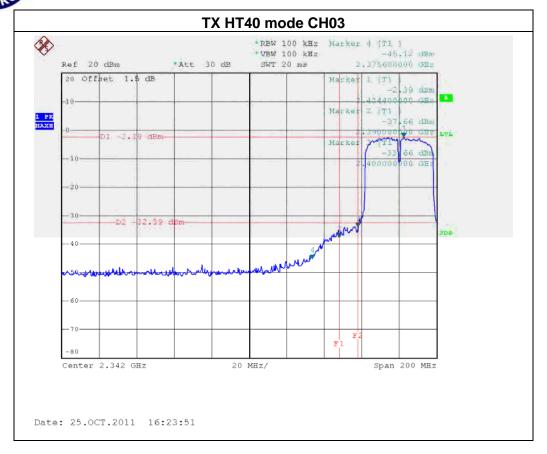


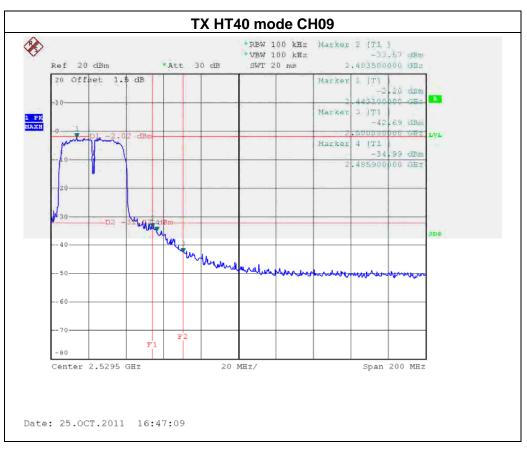
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

	Channel of Worst Data: CH09				
The max. radio frequency power in any 100kHz bandwidth within the frequency band bandwidth within the frequency band.					
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)		
2400.00 -33.66 2483.50 -33.57					
Result					

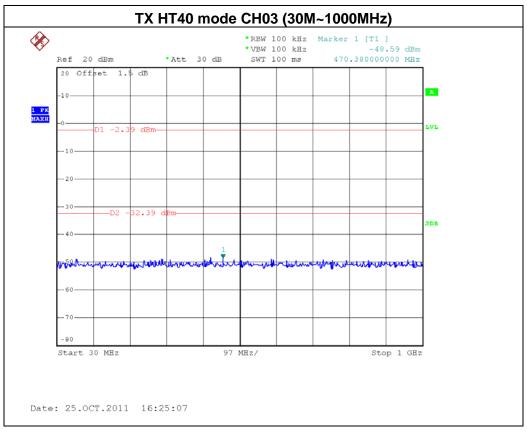
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 30dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

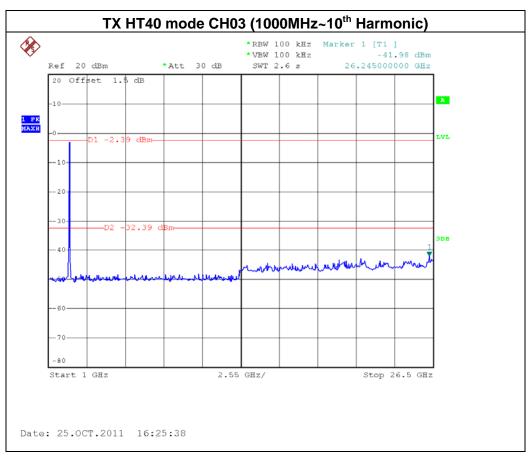
Report No.: NEI-FCCP-1-1108C007B Page 156 of 174





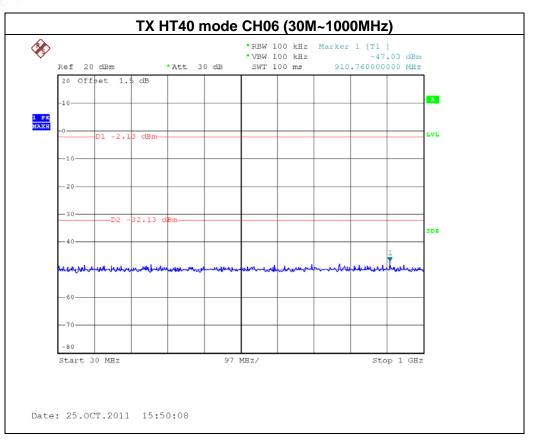


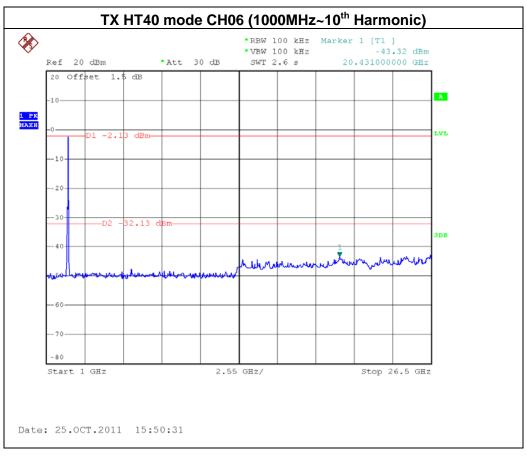




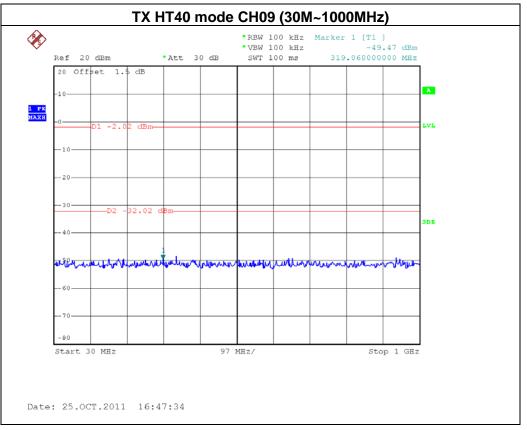
Report No.: NEI-FCCP-1-1108C007B Page 158 of 174

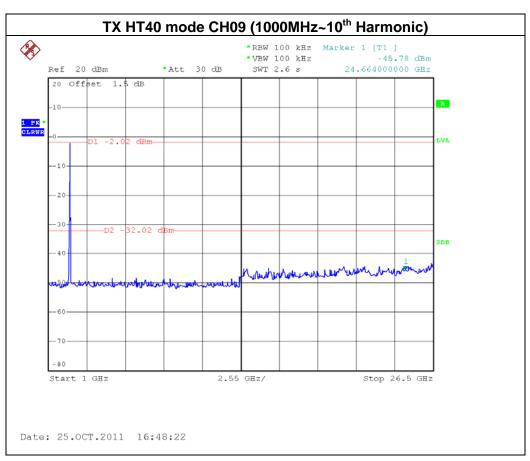






Report No.: NEI-FCCP-1-1108C007B Page 159 of 174





Report No.: NEI-FCCP-1-1108C007B Page 160 of 174

8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

7.1 Applica procedures / lilling						
FCC Part15 (15.247) , Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247(e)	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.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 04, 2012

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

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=30 KHz, Sweep time = 500s.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.5 EUT OPERATION CONDITIONS

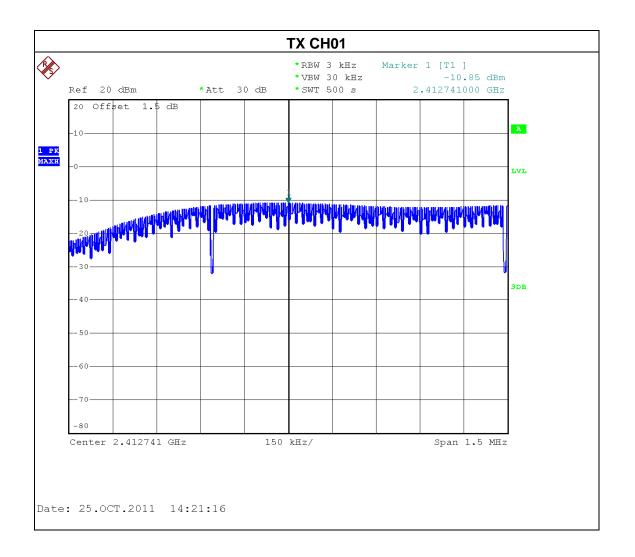
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Report No.: NEI-FCCP-1-1108C007B Page 161 of 174

8.1.6 TEST RESULTS

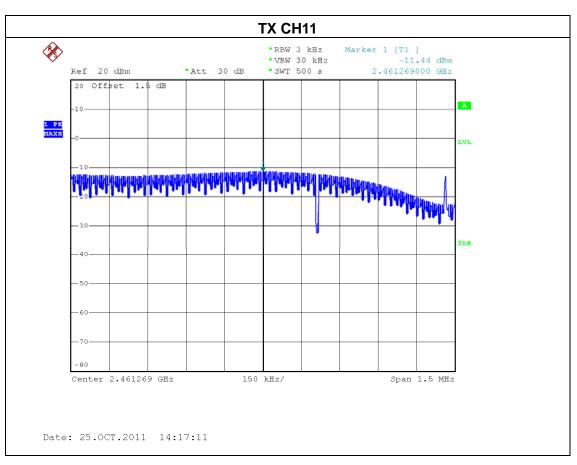
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency	Power Density	LIMIT
rest Grianner	(MHz)	(dBm)	(dBm)
CH01	2412 MHz	-10.85	8
CH06	2437 MHz	-11.96	8
CH11	2462 MHz	-11.44	8



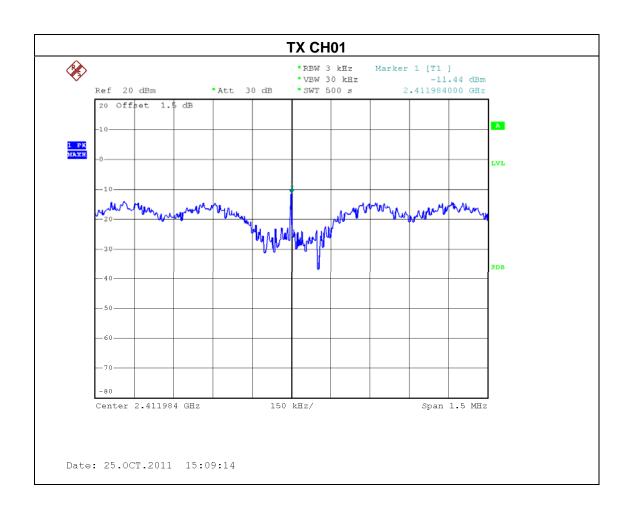
Report No.: NEI-FCCP-1-1108C007B Page 162 of 174



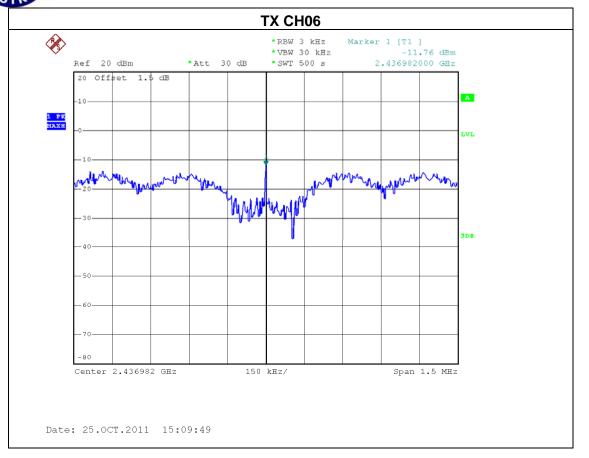


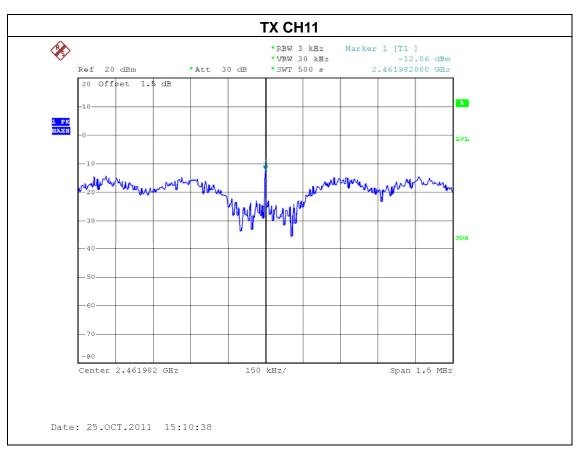
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Test Channel	Test Channel Frequency (MHz)		LIMIT (dBm)
CH01	2412 MHz	-11.44	8
CH06	2437 MHz	-11.76	8
CH11	2462 MHz	-12.06	8



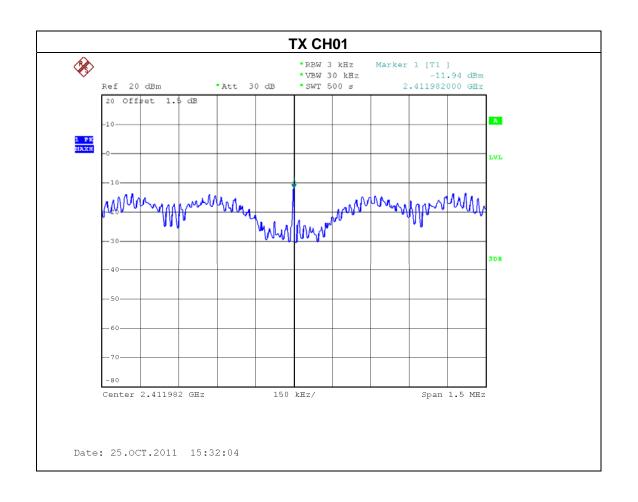
Report No.: NEI-FCCP-1-1108C007B Page 164 of 174





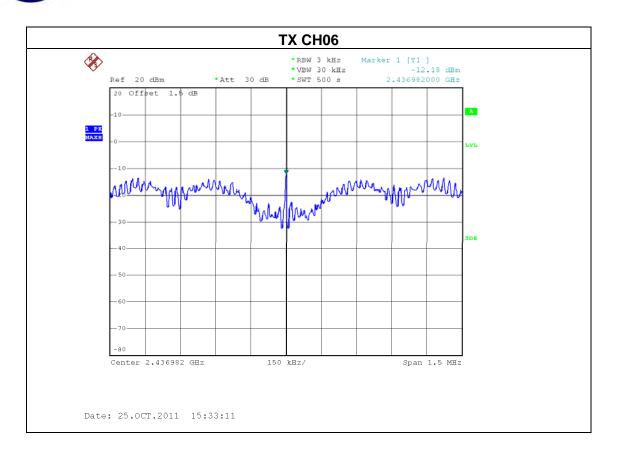
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11		

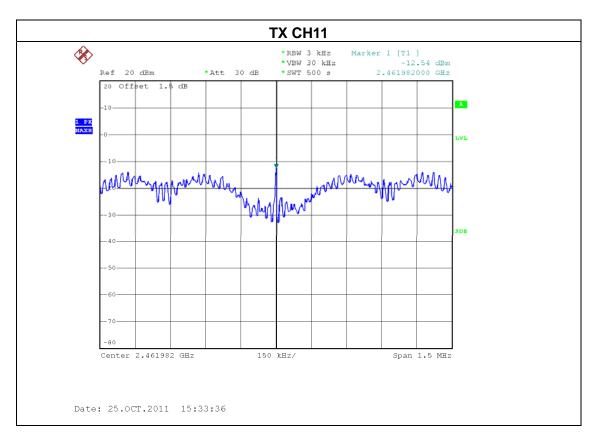
Test Channel	Frequency (MHz)	Power density (dBm)	LIMIT (dBm)	PASS/FAIL
CH01	2412	-11.94	8	PASS
CH06	2437	-12.18	8	PASS
CH11	2462	-12.54	8	PASS



Report No.: NEI-FCCP-1-1108C007B Page 166 of 174



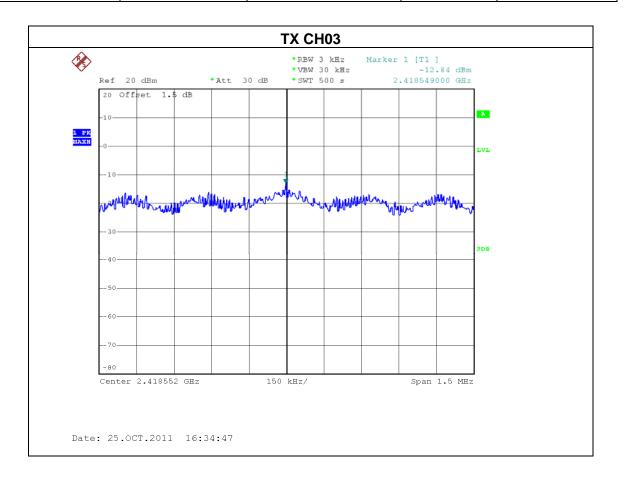




Report No.: NEI-FCCP-1-1108C007B Page 167 of 174

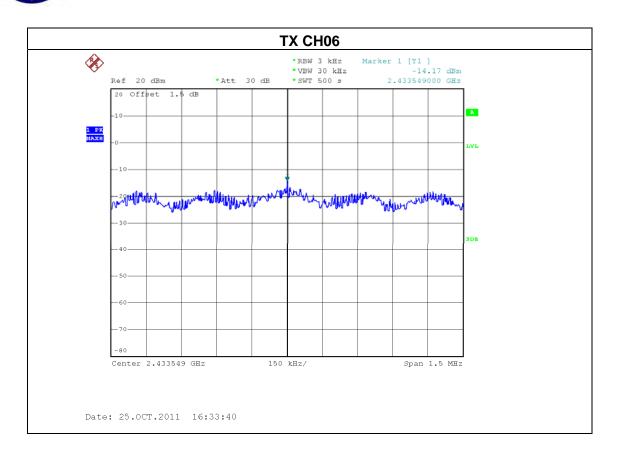
EUT:	150Mbps Wireless N Router	Model Name :	FWR-614N
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1008 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09		

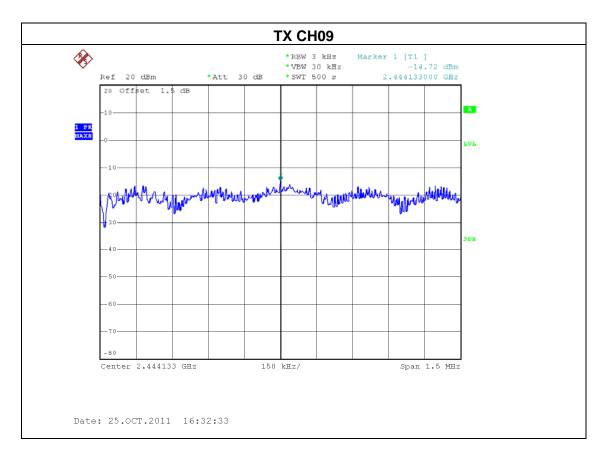
Test Channel	Frequency (MHz)	Power density (dBm)	LIMIT (dBm)	PASS/FAIL
CH03	2422	-12.84	8	PASS
CH06	2437	-14.17	8	PASS
CH09	2452	-14.72	8	PASS



Report No.: NEI-FCCP-1-1108C007B Page 168 of 174



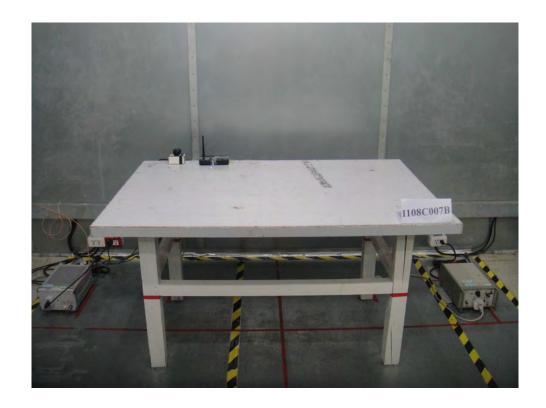




Report No.: NEI-FCCP-1-1108C007B Page 169 of 174

9. EUT TEST PHOTO

Conducted Measurement Photos

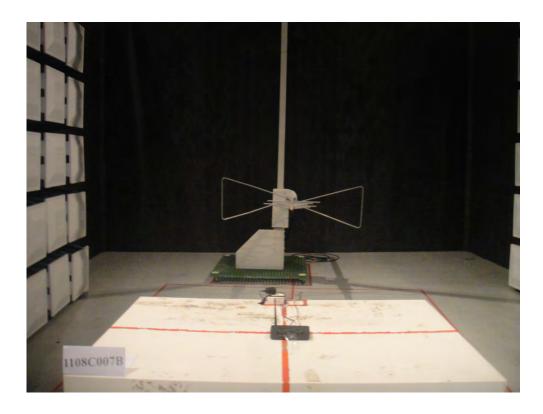


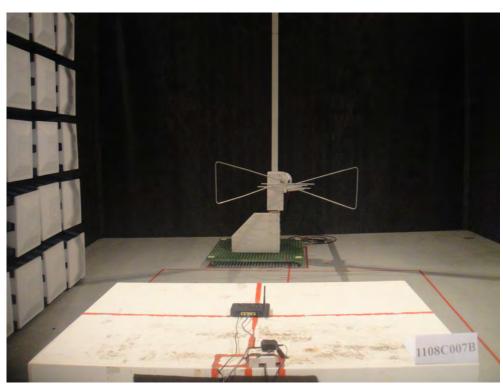


Report No.: NEI-FCCP-1-1108C007B Page 170 of 174



Radiated Measurement Photos 30-1000MHz-For FWR-614N

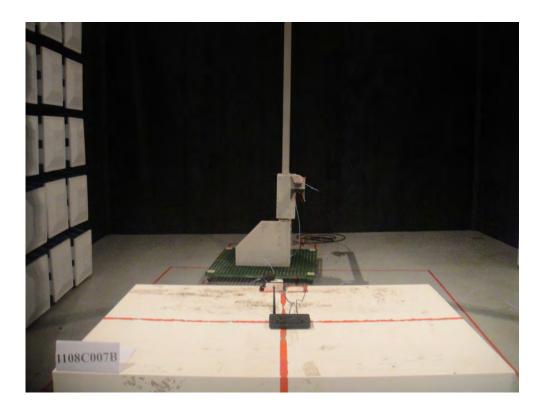


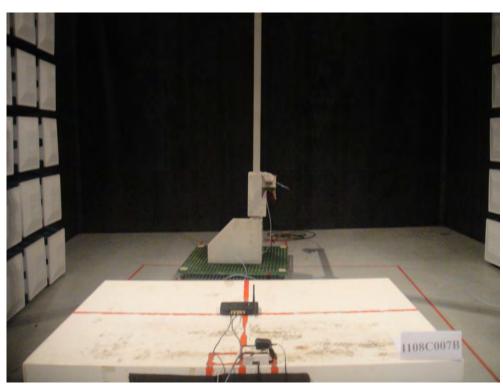


Report No.: NEI-FCCP-1-1108C007B Page 171 of 174



Radiated Measurement Photos Above 1000MHz-For FWR-614N

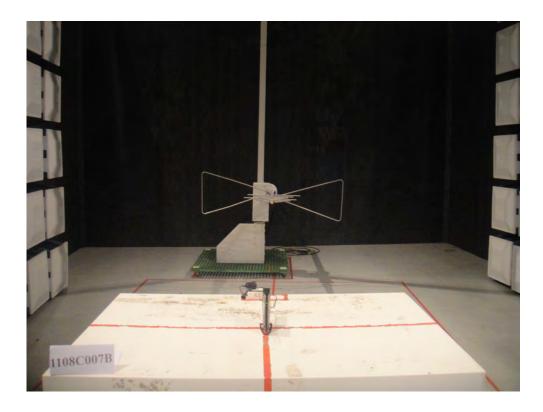


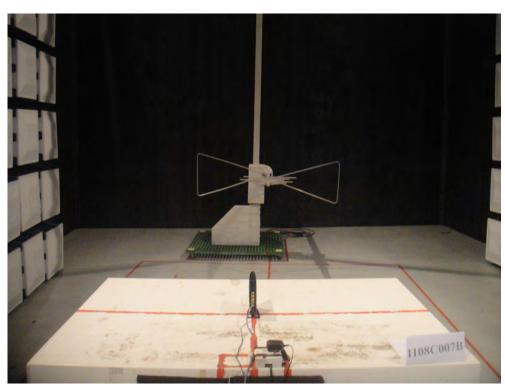


Report No.: NEI-FCCP-1-1108C007B Page 172 of 174



Radiated Measurement Photos 30-1000MHz-For FWR-634N

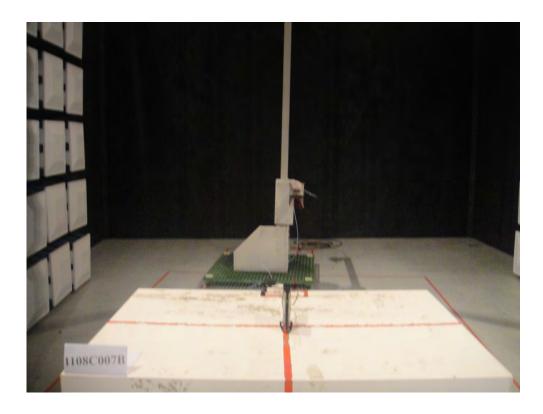


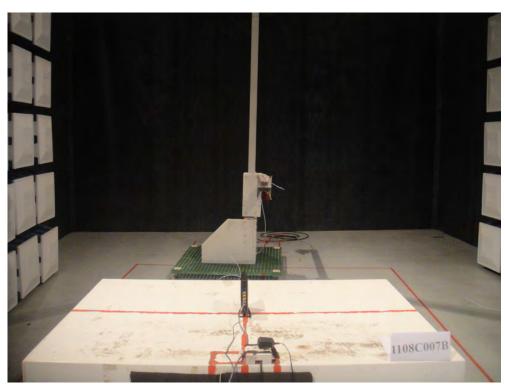


Report No.: NEI-FCCP-1-1108C007B Page 173 of 174



Radiated Measurement Photos Above 1000MHz-For FWR-634N





Report No.: NEI-FCCP-1-1108C007B Page 174 of 174