

### FCC Radio Test Report

### FCC ID: YJYWR203OA

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

Issued Date	: Sep. 27, 2011
Project No.	: 1108C062B
Equipment	: 300Mbps Wireless N Router
Model Name	FWR-714N; FWR-734N
Applicant	: Shanghai Feixun Communication Co., Ltd
Address	: Wing B, 15/F, GDC Building, NO.9 Gaoxinzhong 3rd Ave., Nanshan, Shenzhen, Guangdong, China
Manufacture	Shanghai WDK Technology Co., Ltd.
Address	: No.1-10, Lane 2100, Songzheng Road, Shi hudang Town, Songjiang, Shanghai

#### Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Sep. 07, 2011

Date of Test:

Sep. 07, 2011 ~ Sep. 26, 2011

Testing Engineer

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Authorized Signatory

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#### Declaration

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#### **1. CERTIFICATION**

	300Mbps Wireless N Router
Brand Name :	Feixun
Model Name :	FWR-714N; FWR-734N
Applicant:	Shanghai Feixun Communication Co., Ltd
Factory:	Shanghai WDK Technology Co., Ltd.
Address:	No.1-10, Lane 2100, Songzheng Road, Shi hudang Town, Songjiang, Shanghai
Date of Test:	Sep. 07, 2011 ~ Sep. 26, 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-1-1108C062B) 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).

#### 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C				
Standard Section	Test Item	Judgment	Remark	
15.207	Conducted Emission	PASS		
15.247(d)	Antenna conducted Spurious Emission	PASS		
15.247(a)(2)	6dB Bandwidth	PASS	Note (2)	
15.247(b)(3)	Peak Output Power	PASS	Note (2)	
15.209/15.205	Radiated Spurious Emission	PASS	Note (2)	
15.247(e)	Power Spectral Density	PASS	Note (2)	
15.203	Antenna Requirement	PASS	Note (2)	

#### NOTE:

- (1)" N/A" denotes test is not applicable in this Test Report
- (2) Model FWR-734N was found to be the worst case during the pre-scanning test, Ant Gain=3.88 dBi.



#### 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
		30MHz ~ 200MHz	V	3.82	
DG-CB03	CISPR	30MHz ~ 200MHz	Н	3.60	
DG-CB03	CISER	200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	Н	3.94	

#### **3. GENERAL INFORMATION**

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	300Mbps Wireless N Router		
Brand Name	Feixun		
Model Name	FWR-714N; FWR-734N		
OEM Brand/Model Name	N/A		
Model Difference	Differences are appearance and antenna, model FWR-714N is Dipole ANT, model FWR-734N is Integral PCB ANT (RF Modular is the same)		
	The EUT is a 300Mbps \		
	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 300Mbps	
	Number of Channel	11 CH, Please see Note 2. (please see page 9)	
Product Description	Antenna Designation:	Please see Note 3.	
	Antenna Gain(Peak)	(please see page 9)	
	Output Power:	802.11b: 18.56dBm	
		802.11g: 20.35dBm	
		802.11n(20MHz): 19.46 dBm(ANT 1+ANT 2)	
		802.11n(40MHz): 19.25	
		dBm(ANT 1+ANT 2)	
	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:TL01-120050E		
Power Rating	I/P 100-240VAC 50/60H	z, 0.32A Max O/P 12V, 500mA	
Co necting I/O Port(s)	Please refer to the User'	s Manual	
Products Covered	N/A		

Note:

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

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

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

#### 3. Table for Filed Antenna

Model	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
FWR-714N	WDK	K601-240012-A	Dipole Antenna	N/A	3.52
FWR-734N	WDK	K601-360019-A	Integral PCB Antenna	N/A	3.88

4. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R).

Operating Mode TX Mode	1TX	2TX
802.11b	V (ANT1 or ANT2)	-
802.11g	V (ANT1 or ANT2)	-
802.11n(20MHz)	-	V (ANT1 & ANT2)
802.11n(40MHz)	-	V (ANT1 & ANT2)

#### **3.2 DESCRIPTION OF TEST MODES**

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

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

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

For Conducted Test				
Final Test Mode	Description			
Mode 5	TX MODE			

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

Note:

- (1) The measurements are performed at the 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 (6.5Mbps)/MCS8(13MHz)

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 11G Channel 06

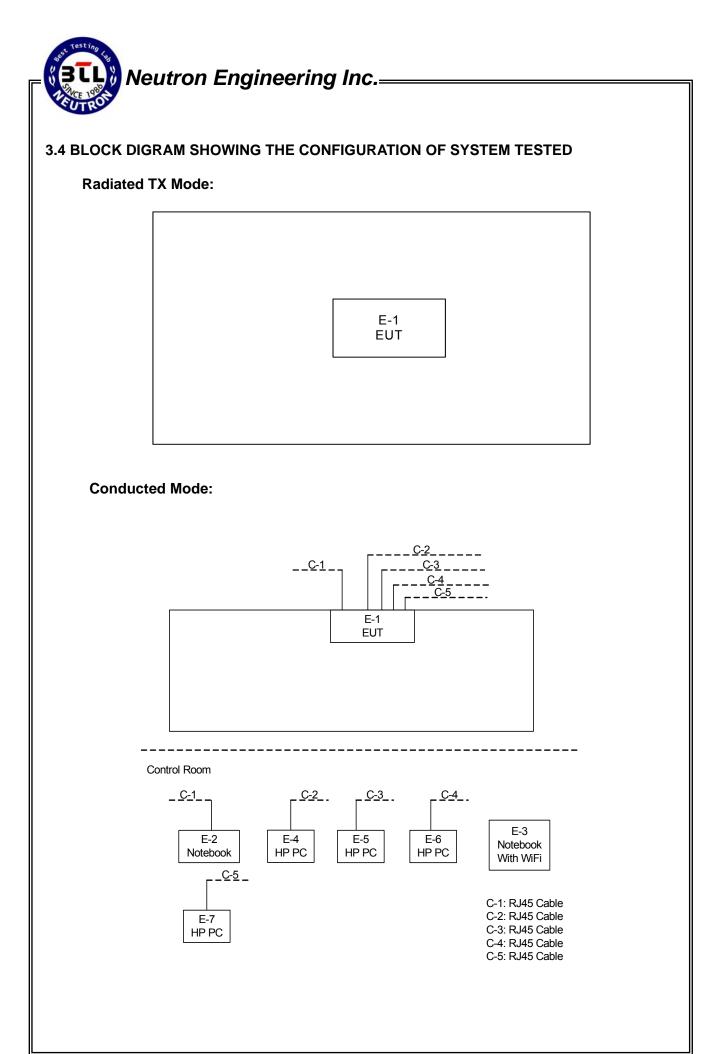


#### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	Te	est Program: RALIN	IK
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b DSSS	10	10	10
IEEE 802.11g OFDM	17	17	18

Test software Version	Test Program: RALINK				
Frequency (MHz)	2412 MHz	2437 MHz	2462 MHz		
IEEE 802.11n (20MHz)	0F(ANT1)	0F(ANT1)	10(ANT1)		
	0F(ANT2)	0F(ANT2)	10(ANT2)		
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz		
IEEE 802.11n (40MHz)	0A(ANT1)	0A(ANT1)	0A(ANT1)		
	0A(ANT2)	0A(ANT2)	0A(ANT2)		





#### **3.5 DESCRIPTION OF SUPPORT UNITS**

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	300Mbps Wireless N Router	Feixun	FWR-714N; FWR-734N	YJYWR203OA	N/A	EUT
E-2	NOTEBOOK	DELL	INSPIRON 1420	DOC	NA	
E-3	NOTEBOOK	DELL	INSPIRON 1420	DOC	NA	
E-4	PC	HP	Dx7400	DOC	CNG7430PX0	
E-5	PC	HP	Dx7400	DOC	CNG7430PWL	
E-6	PC	HP	G3321Cx	DOC	CNX8120R16	
E-7	PC	IBM	8705	DOC	L3G4741	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10M	
C-2	NO	NO	10M	
C-3	NO	NO	10M	
C-4	NO	NO	10M	
C-5	NO	NO	10M	

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

(2) For detachable type I/O cable should be specified the length in cm in <sup>[]</sup>Length <sup>[]</sup> column.



#### 4. EMC EMISSION TEST

#### 4.1 CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	Class A	(dBuV)	Class B	Standard	
FREQUENCT (MILZ)	Quasi-peak	Average	Quasi-peak	Average	Stanuaru
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	3816/2	00052765	May.26.2012
2	LISN	R&S	ENV216	100087	May.26.2012
3	Test Cable	N/A	C_17	N/A	Mar.30.2012
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	May.26.2012
5	50Ω Terminator	SHX	TF2-3G-A	08122902	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

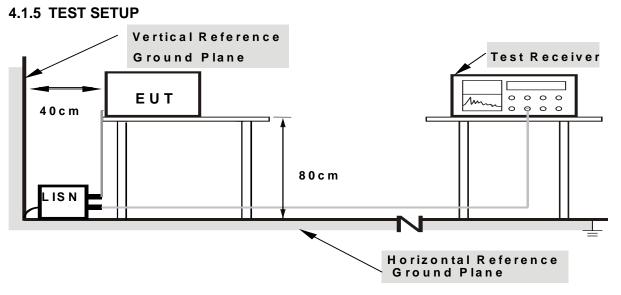


#### 4.1.3 TEST PROCEDURE

- 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



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.

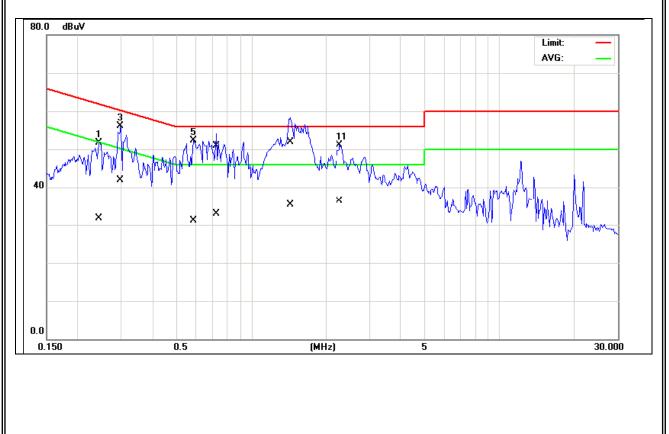
The EUT was programmed to be in continuously transmitting mode.

#### 4.1.7 TEST RESULTS

EUT :		300Mbps Wireless N Router			Model Nam	e :	FWF	R-714N; FW	R-734N
Temperatu	ure :	25	°C		Relative Hu	midity:	58%		
Pressure :		101	0hPa		Test Power	:	AC 1	120V/60Hz	
Test Mode : TX MODE									
Freq.	Termir	nal	Measure	d(dBuV)	Limits	Limits (dBuV)		Margin	Note
(MHz)	L/N		QP-Mode	AV-Mode	QP-Mode	AV-Mo	ode	(dB)	NOLE
0.24	Line		51.67	31.80	61.99	51.9	9	-10.32	(QP)
0.30	Line		56.09	41.83	60.33	50.3	3	-4.24	(QP)
0.59	Line		52.24	31.13	56.00	46.0	0	-3.76	(QP)
0.72	Line		50.81	32.81	56.00	46.0	0	-5.19	(QP)
1.43	Line		51.92	35.22	56.00	46.0	0	-4.08	(QP)
2.27	Line		51.16	36.31	56.00	46.0	0	-4.84	(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  $\circ$

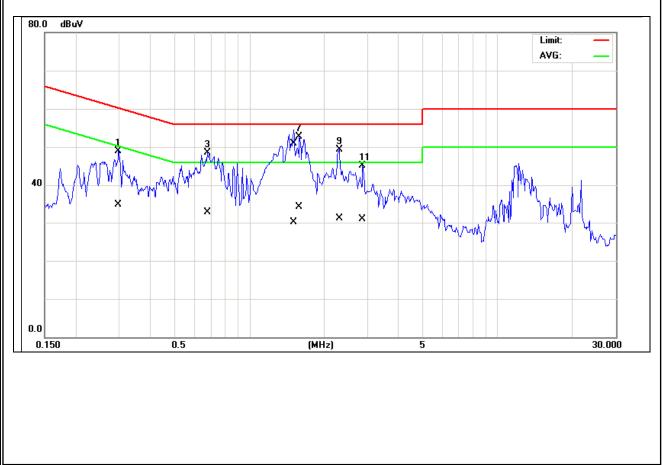




EUT:		300Mbps Wireless N Router			Model Nam	e :	FWF	R-714N; FW	R-734N
Temperati	ure :	25	°C		Relative Hu	midity:	58%		
Pressure :		101	I0hPa		Test Power	:	AC 1	120V/60Hz	
Test Mode : TX MODE									
Freq.	Termir	nal	Measure	d(dBuV)	Limits	Limits (dBuV)			Note
(MHz)	L/N		QP-Mode	AV-Mode	QP-Mode	AV-Mo	ode	(dB)	NOLE
0.30	Neutr	al	48.99	34.79	60.33	50.3	3	-11.34	(QP)
0.68	Neutr	al	48.46	32.63	56.00	46.0	0	-7.54	(QP)
1.50	Neutr	al	50.81	30.14	56.00	46.0	0	-5.19	(QP)
1.59	Neutr	al	52.71	34.14	56.00	46.0	0	-3.29	(QP)
2.31	Neutr	al	49.31	31.17	56.00	46.0	0	-6.69	(QP)
2.87	Neutr	al	45.12	30.87	56.00	46.0	0	-10.88	(QP)

#### Remark

- (1) All readings are QP Mode value unless otherwise stated AVG in column of <sup>ℂ</sup>Note <sub>J</sub>. 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 •





#### 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)

	(dBuV/m) (at 3m)		
PEAK	AVERAGE		
74	54		

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

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

#### 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.26.2012
2	Amplifier	Agilent	8449B	3008A02274	May.26.2012
3	Spectrum	Agilent	E4408B	US39240143	Nov.26.2011
4	Test Cable	HUBER+SUHNER	C-45	N/A	May.04.2012
5	Bi-log Antenna	Schwarbeck	VULB9160	9160-3232	Jun .04.2012
6	Amplifier	HP	8447D	2944A09673	May.26.2012
7	Test Receiver	R&S	ESCI	100382	May.26.2012
8	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2012
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	1MHz / 1MHz for Dook, 1 MHz / 10Hz 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



#### 4.2.3 TEST PROCEDURE

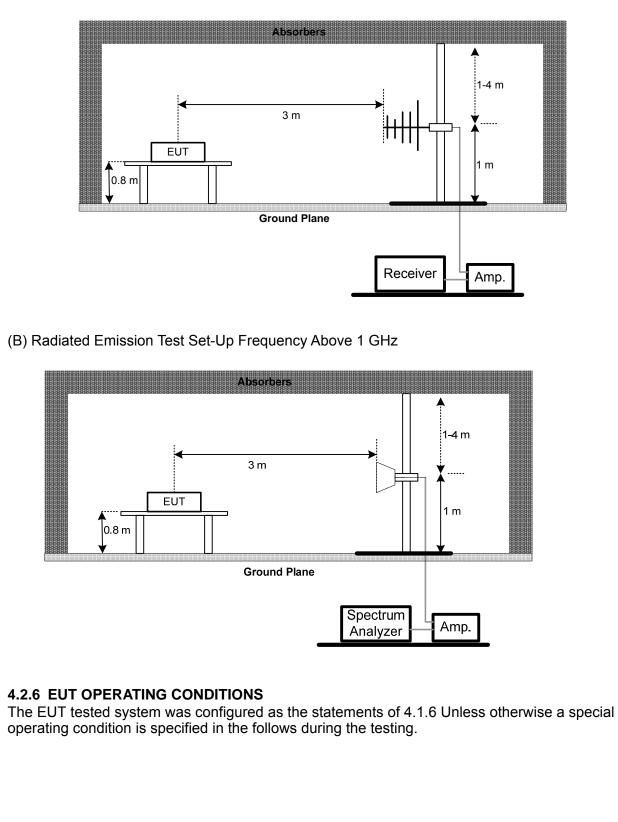
- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 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

#### 4.2.5 TEST SETUP

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

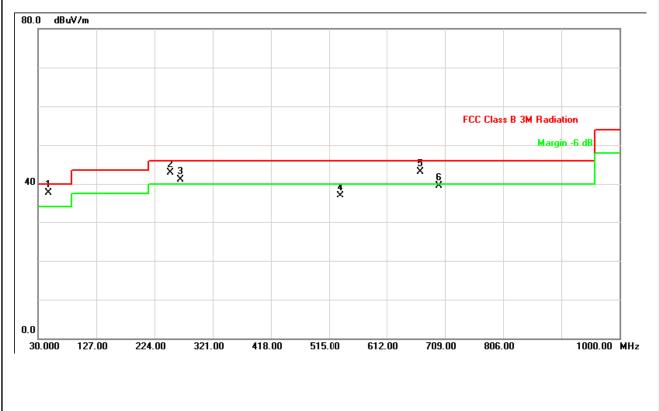


#### 4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ)-FOR FWR-714N

EUT:	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE CHANNEL 06		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOIC
46.98	V	54.87	-17.09	37.78	40.00	- 2.22	
250.68	V	57.35	-14.51	42.84	46.00	- 3.16	QP
267.65	V	54.59	-13.42	41.17	46.00	- 4.83	
534.40	V	42.90	-6.07	36.83	46.00	- 9.17	
667.78	V	46.31	-3.28	43.03	46.00	- 2.97	
699.30	V	42.59	-3.17	39.42	46.00	- 6.58	

- (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 ∘
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (3) Measuring frequency range from 30MHz to 1000MHz  $\circ$
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table  $\circ$

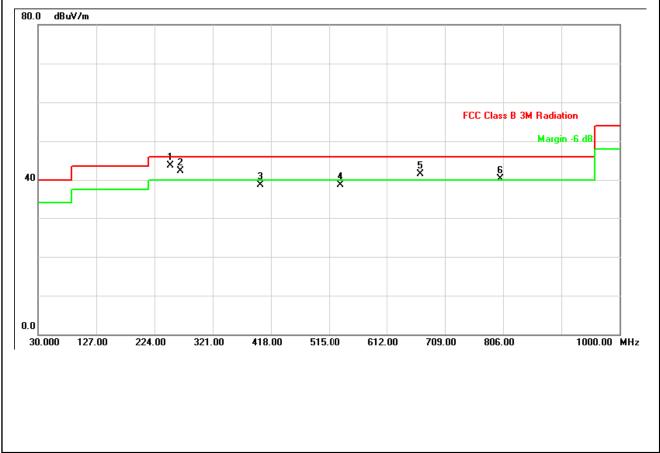




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE CHANNEL 06	·	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
250.68	H	58.25	-14.51	43.74	46.00	- 2.26	QP
267.65	Н	55.69	-13.42	42.27	46.00	- 3.73	
401.03	Н	47.79	-9.01	38.78	46.00	- 7.22	
534.40	Н	44.71	-6.07	38.64	46.00	- 7.36	
667.78	Н	44.87	-3.28	41.59	46.00	- 4.41	
801.15	Н	42.19	-1.86	40.33	46.00	- 5.67	

- (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 ∘
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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-734N

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE CHANNEL 06		

Freq. (MHz		Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
114.88	3 V	55.77	-18.32	37.45	43.50	- 6.05	
250.68	3 V	57.68	-14.51	43.17	46.00	- 2.83	QP
401.03	3 V	47.54	-9.01	38.53	46.00	- 7.47	
534.40	) V	46.40	-6.07	40.33	46.00	- 5.67	
667.78	3 V	44.31	-3.28	41.03	46.00	- 4.97	
699.30	) V	43.59	-3.17	40.42	46.00	- 5.58	

- (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 ∘
- (2) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (3) Measuring frequency range from 30MHz to 1000MHz  $\circ$
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table  $\circ$

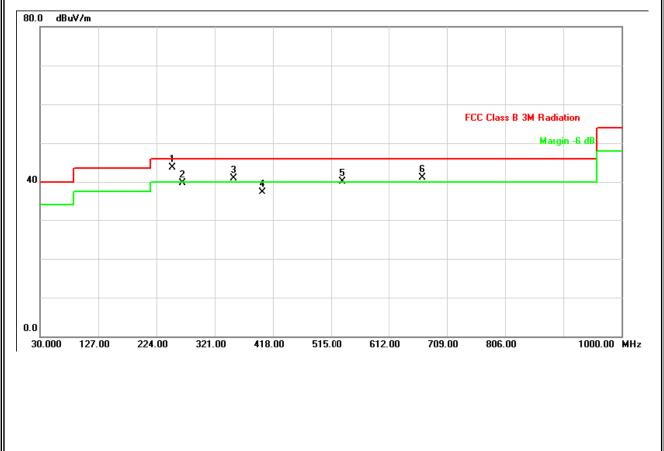




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE CHANNEL 06	·	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
250.68	Н	58.12	-14.51	43.61	46.00	- 2.39	QP
267.65	Н	53.19	-13.42	39.77	46.00	- 6.23	
352.53	Н	51.67	-10.75	40.92	46.00	- 5.08	
401.03	Н	46.29	-9.01	37.28	46.00	- 8.72	
534.40	Н	46.21	-6.07	40.14	46.00	- 5.86	
667.78	Н	44.37	-3.28	41.09	46.00	- 4.91	

- (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 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (3) Measuring frequency range from 30MHz to 1000MHz  $\circ$
- (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-714N

EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

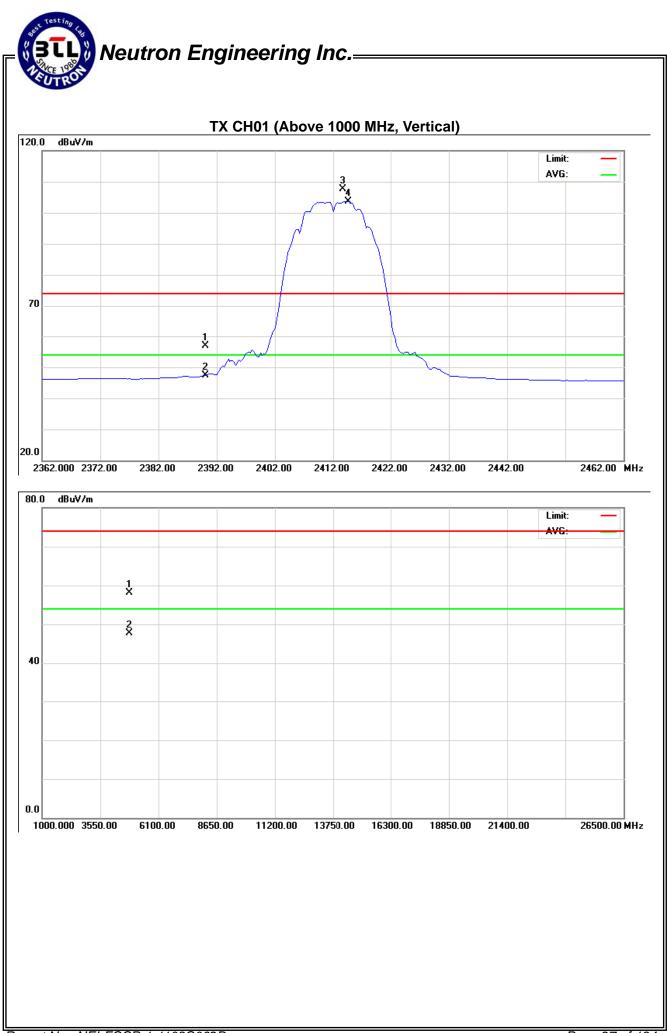
Freq. Ant.Pol.	Reading		Ant./CF	Act		Lir			
TTEQ.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	25.36	15.72	31.61	56.97	47.33	74.00	54.00	X/E
2413.62	V	75.99	72.14	31.58	107.57	103.72			X/F
4823.88	V	51.87	41.36	6.25	58.12	47.61	74.00	54.00	X/H

Remark :

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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-1-1108C062B

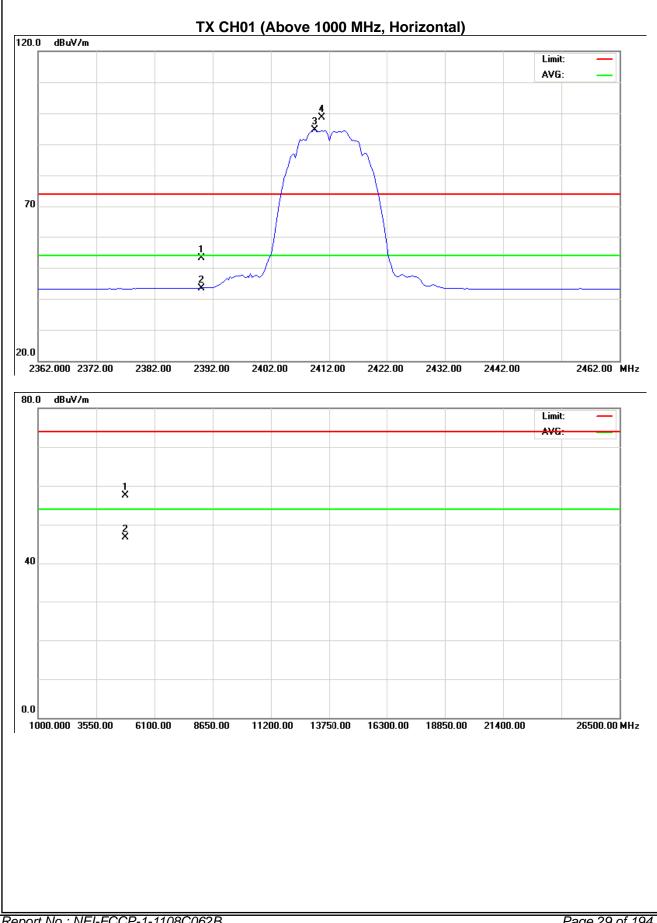


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz	·	

Freq. Ant.Pol.	Ant Pol	Reading		Ant./CF	A	Act		Limit		
пец		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	Н	21.42	11.87	31.61	53.03	43.48	74.00	54.00	X/E	
2409.50	Н	67.02	63.04	31.59	98.61	94.63			X/F	
4823.88	Н	51.20	40.45	6.25	57.45	46.70	74.00	54.00	X/H	

- (1) All readings are Peak unless otherwise stated QP in column of  $\[\]$  Note $\]$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\[\circ\]$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency<sup>o</sup>"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

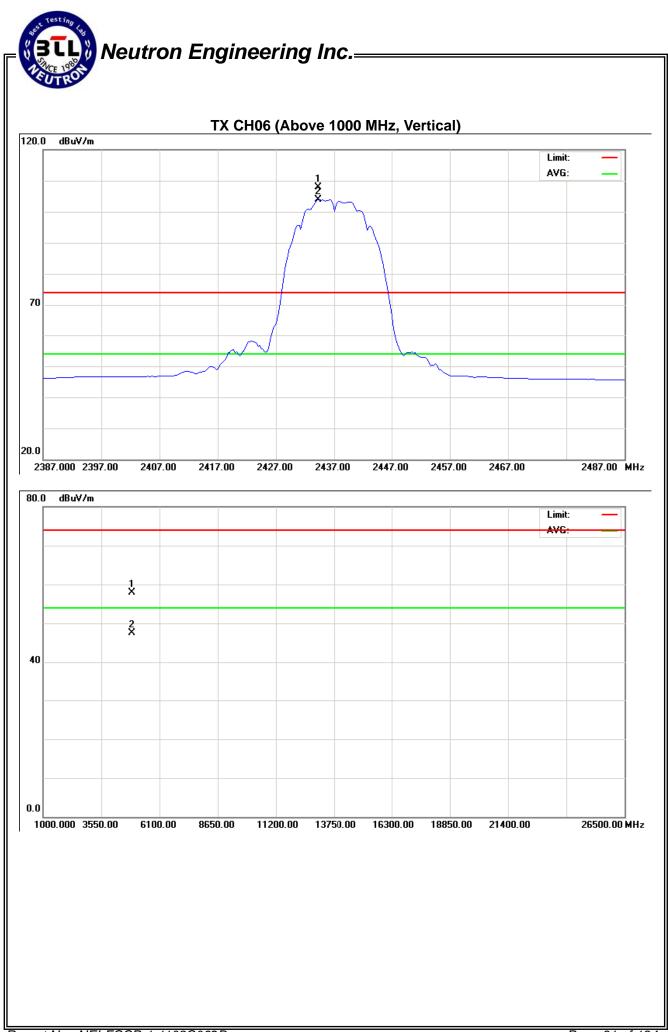




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq. Ant.Pol	Ant Pol	Reading		Ant./CF	A	Act.		Limit		
rreq.		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2434.25	V	76.33	72.41	31.56	107.89	103.97			X/F	
4874.01	V	51.53	41.02	6.43	57.96	47.45	74.00	54.00	X/H	

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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



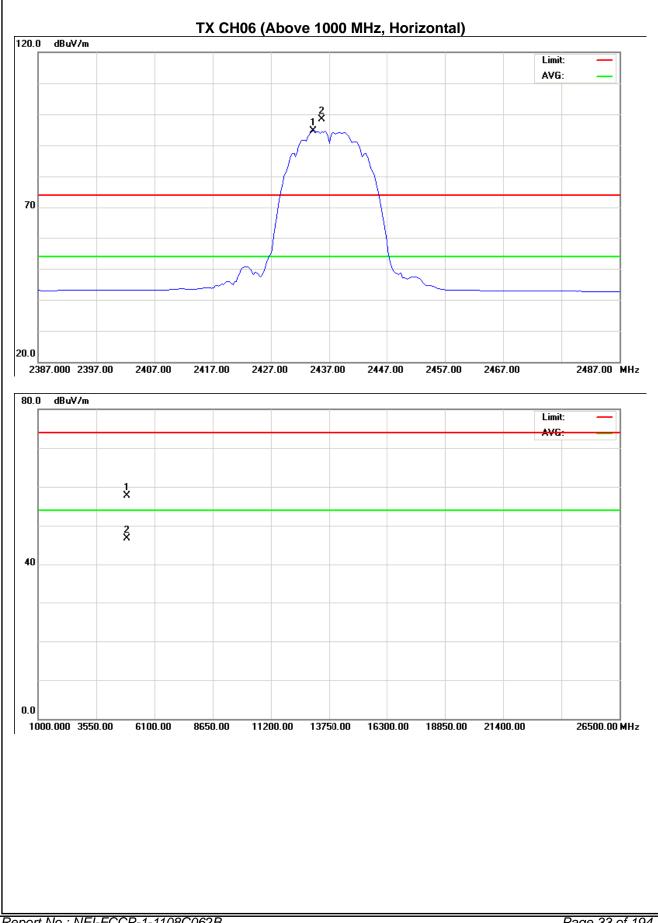


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq. An	Ant.Pol.	Reading Ant./CF		Ant./CF	Act.		Limit		
rreq.		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	66.77	63.19	31.56	98.33	94.75			X/F
4874.01	Н	51.23	40.25	6.43	57.66	46.68	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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





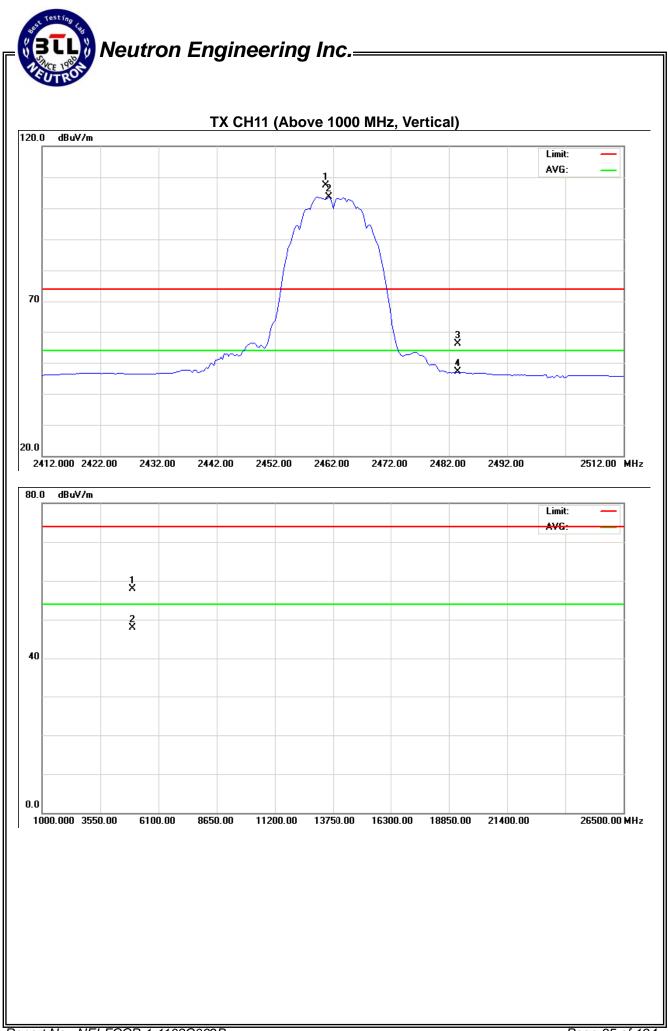


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz	·	

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)	
2460.66	V	75.86	72.02	31.53	107.39	103.55			X/F
2483.50	V	24.56	15.51	31.50	56.06	47.01	74.00	54.00	X/E
4924.21	V	51.26	41.32	6.61	57.87	47.93	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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





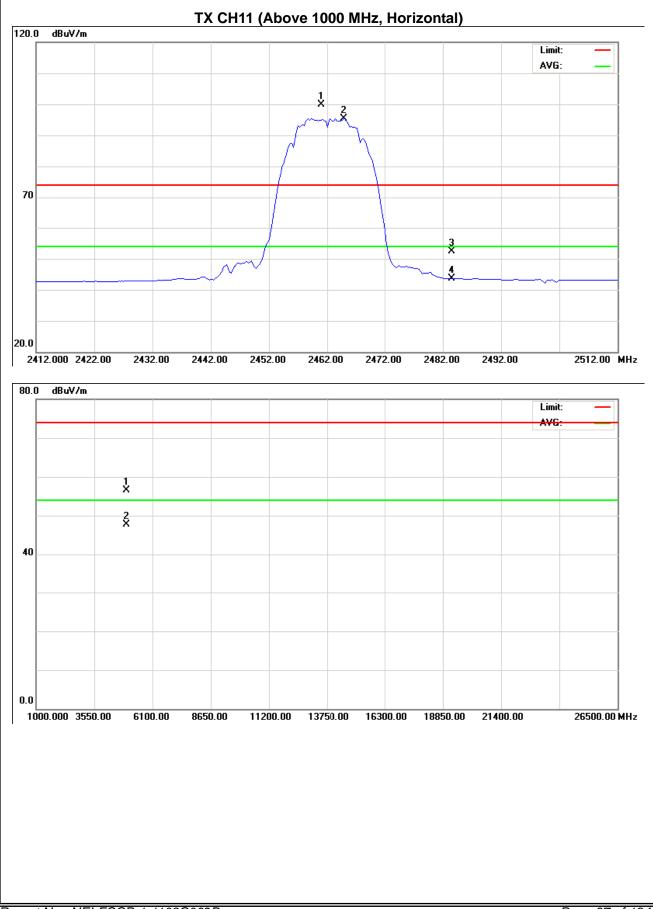
EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz	·	

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)	
2460.99	Н	68.36	63.92	31.53	99.89	95.44			X/F
2483.50	Н	20.76	12.23	31.50	52.26	43.73	74.00	54.00	X/E
4924.21	Н	49.98	41.13	6.61	56.59	47.74	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



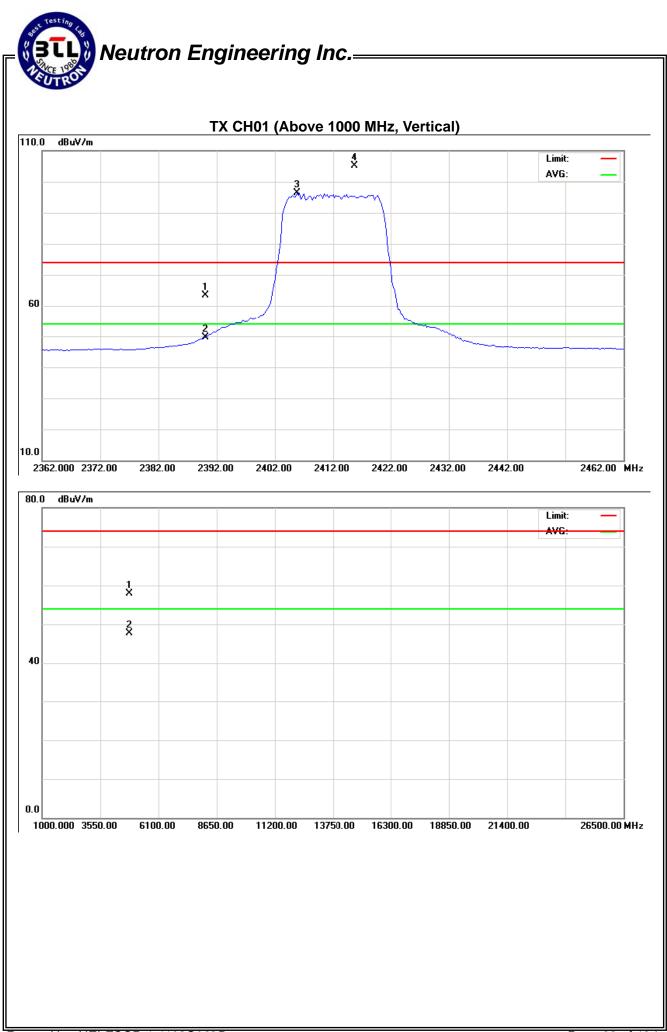




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

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	31.86	18.08	31.61	63.47	49.69	74.00	54.00	X/E
2405.75	V	73.56	64.85	31.60	105.14	96.45			X/F
4823.96	V	51.65	41.53	6.25	57.90	47.78	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> °C	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz	·	

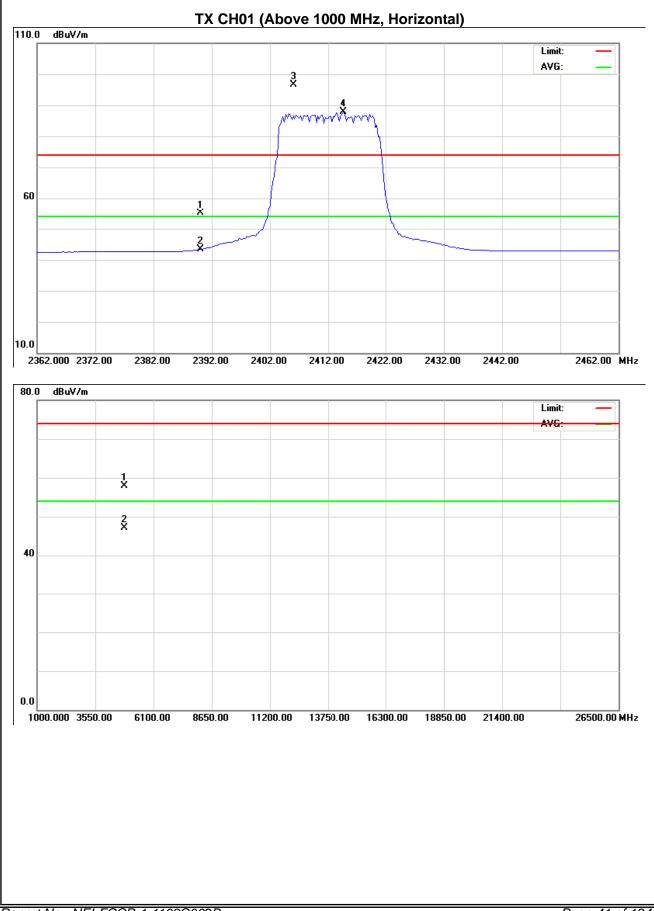
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	23.53	11.66	31.61	55.14	43.27	74.00	54.00	X/E
2414.75	Н	65.12	56.27	31.60	96.72	87.85			X/F
4823.96	Н	51.63	40.85	6.25	57.88	47.10	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



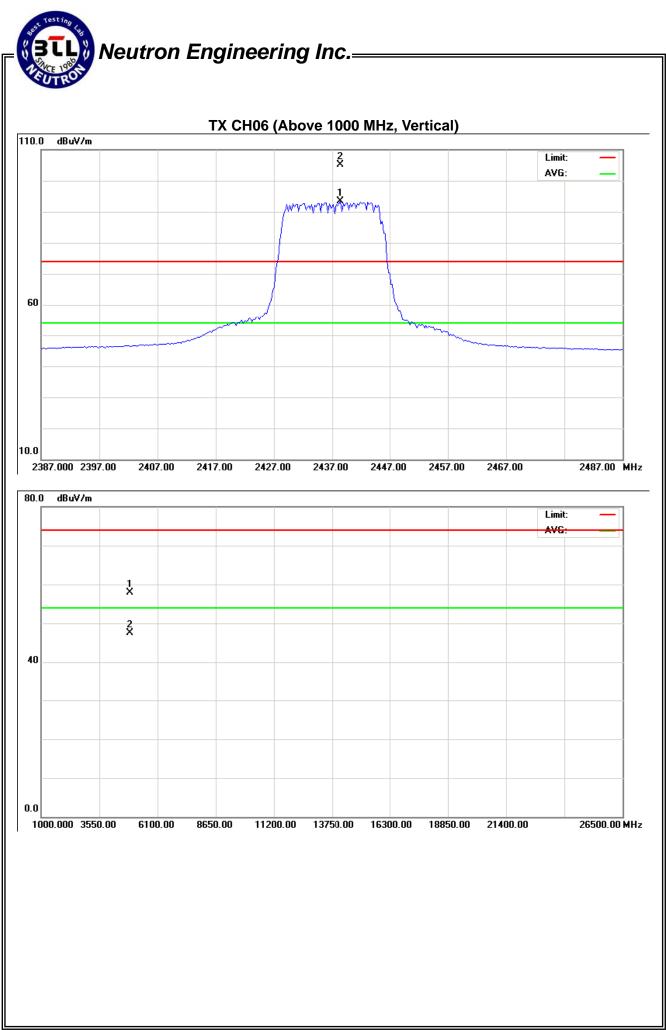




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Reading Ant.		Ant./CF	Act.		Limit		
rreq.	Ant.1 01.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.50	V	61.73	73.56	31.55	105.11	93.28			X/F
4874.12	V	51.50	41.13	6.43	57.93	47.56	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



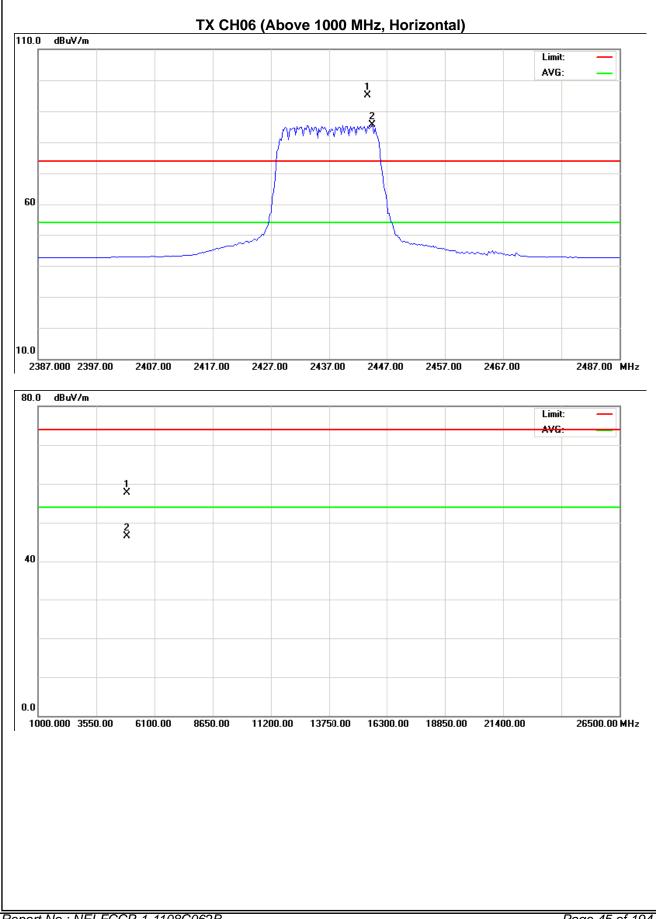


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq	Freq. Ant.Pol.	Reading		Ant./CF	A	Act.		Limit		
TTEQ.		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2444.50	Н	63.68	54.12	31.55	95.23	85.67			X/F	
4874.12	Н	51.20	40.03	6.43	57.63	46.46	74.00	54.00	X/H	

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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:
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- (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



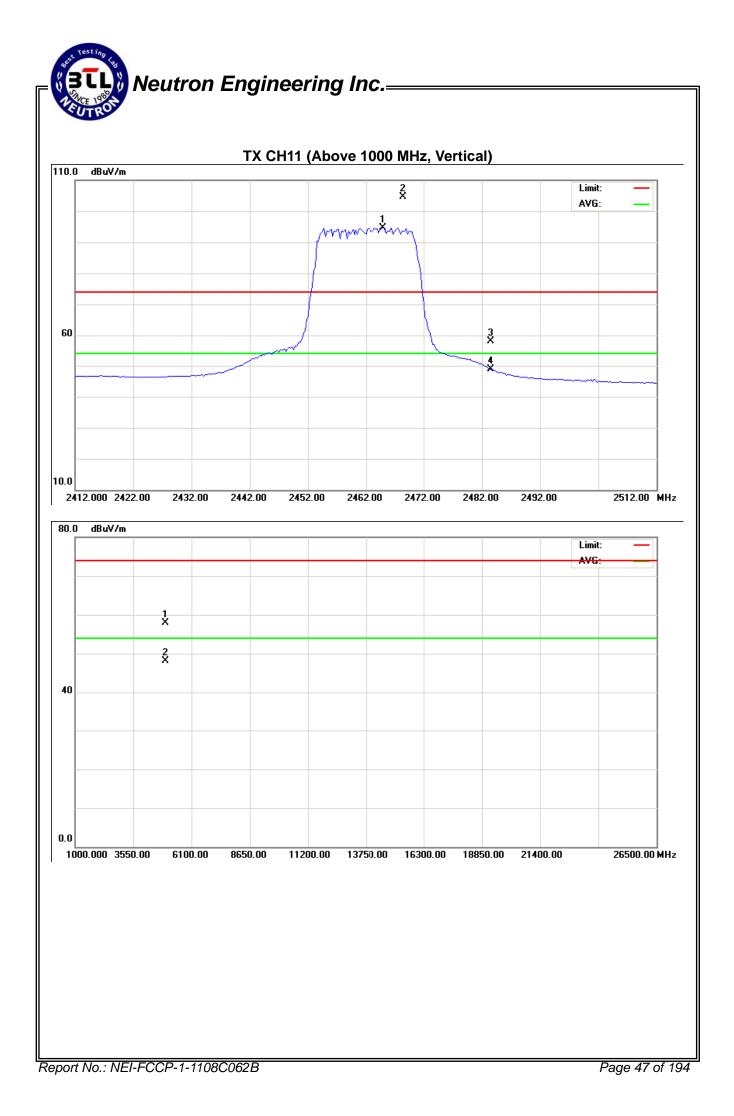




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

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)	
2468.26	V	73.01	63.19	31.52	104.53	94.71			X/F
2483.50	V	26.63	17.45	31.50	58.13	48.95	74.00	54.00	X/E
4924.03	V	51.26	41.53	6.61	57.87	48.14	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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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- (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





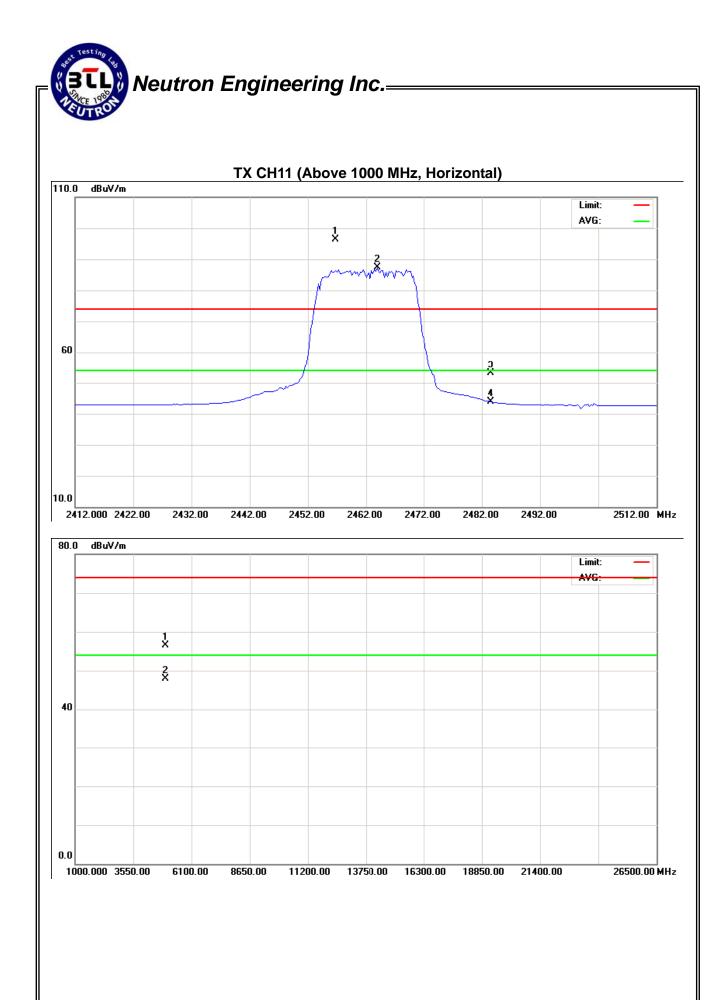
EUT:	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	A	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2464.00	Н	64.87	55.81	31.54	96.41	87.33			X/F	
2483.50	Н	21.55	12.48	31.50	53.05	43.98	74.00	54.00	X/E	
4924.03	Н	49.86	41.36	6.61	56.47	47.97	74.00	54.00	X/H	

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- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency<sup>o</sup>"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

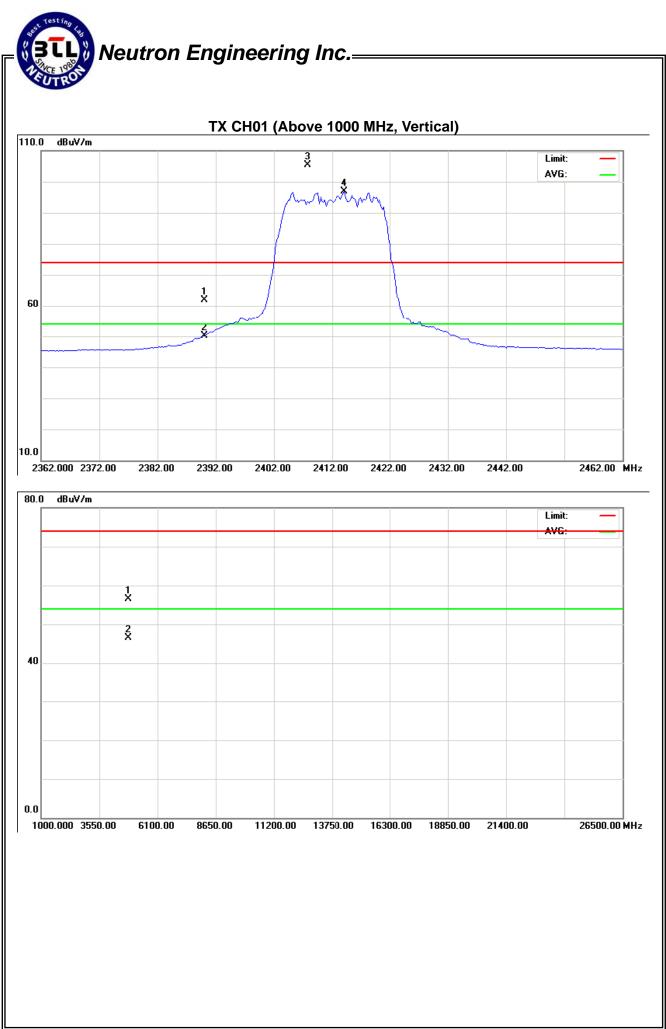




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

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	30.25	18.55	31.61	61.86	50.16	74.00	54.00	X/E
2407.86	V	73.68	65.41	31.58	105.27	96.99			X/F
4824.02	V	50.25	40.25	6.25	56.50	46.50	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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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  - "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



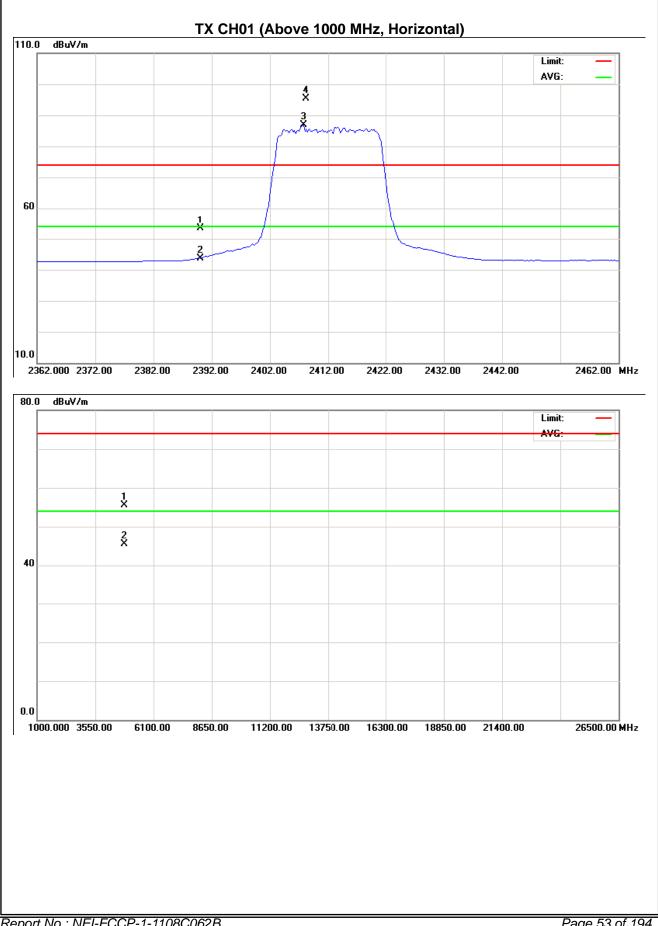


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz	·	

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	21.86	12.06	31.61	53.47	43.67	74.00	54.00	X/E
2407.75	Н	63.81	55.27	31.59	95.40	86.86			X/F
4824.02	Н	49.25	39.35	6.25	55.50	45.60	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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- (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



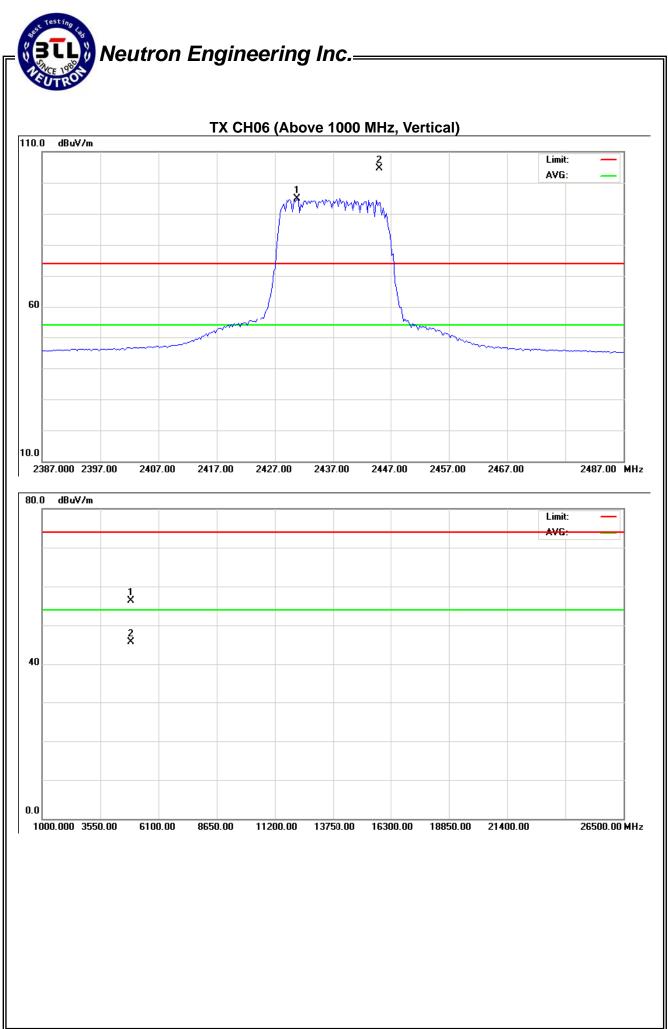




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq.	Ant Pol	Ant.Pol. Reading Ant./CF		Act.		Limit			
rieq.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2430.75	V	73.12	63.42	31.57	104.67	94.99			X/F
4874.03	V	49.86	39.35	6.43	56.29	45.78	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
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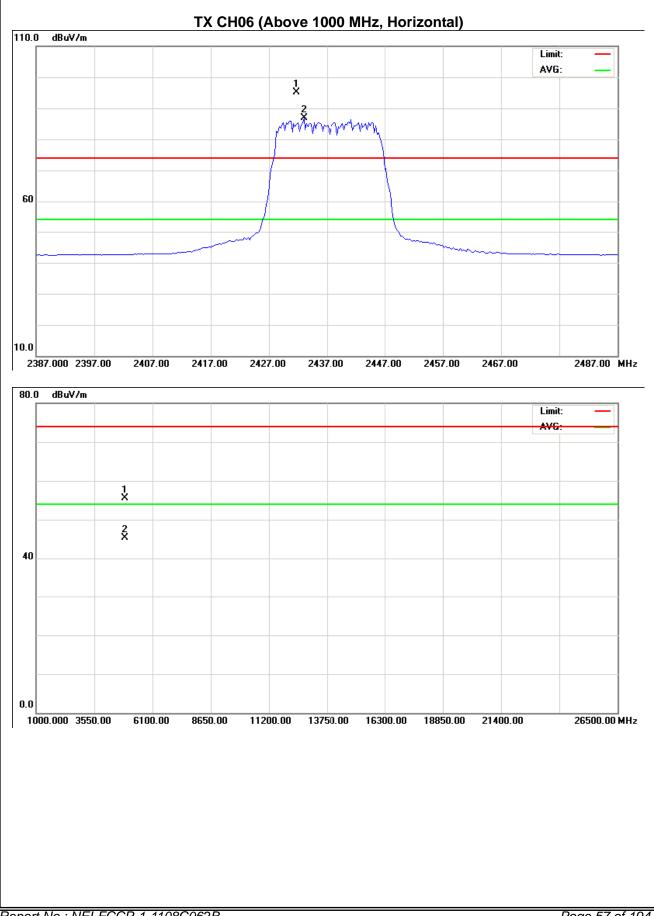


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Reading Ant./C		Ant./CF	Act.		Limit		
rreq.	Ant.P OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2431.55	Н	63.52	55.28	31.57	95.09	86.84			X/F
4874.03	Н	49.01	38.86	6.43	55.44	45.29	74.00	54.00	X/H

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- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency<sup>o</sup>"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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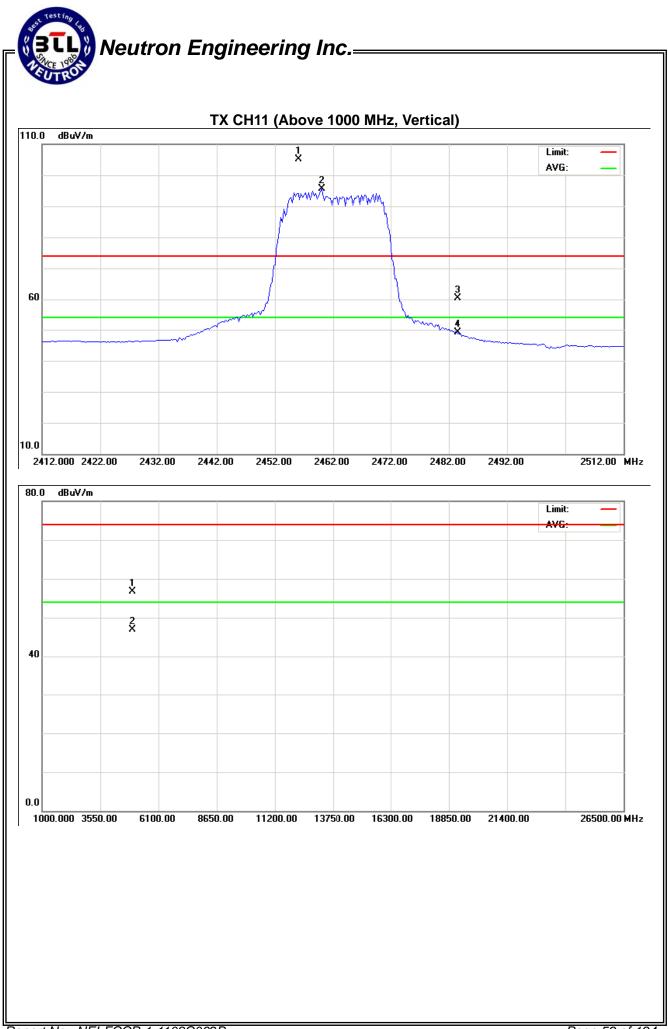




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz	·	

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)	
2460.00	V	73.51	64.07	31.54	105.05	95.60			X/F
2483.50	V	28.87	17.57	31.50	60.37	49.07	74.00	54.00	X/E
4924.11	V	50.01	40.35	6.61	56.62	46.96	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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- (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





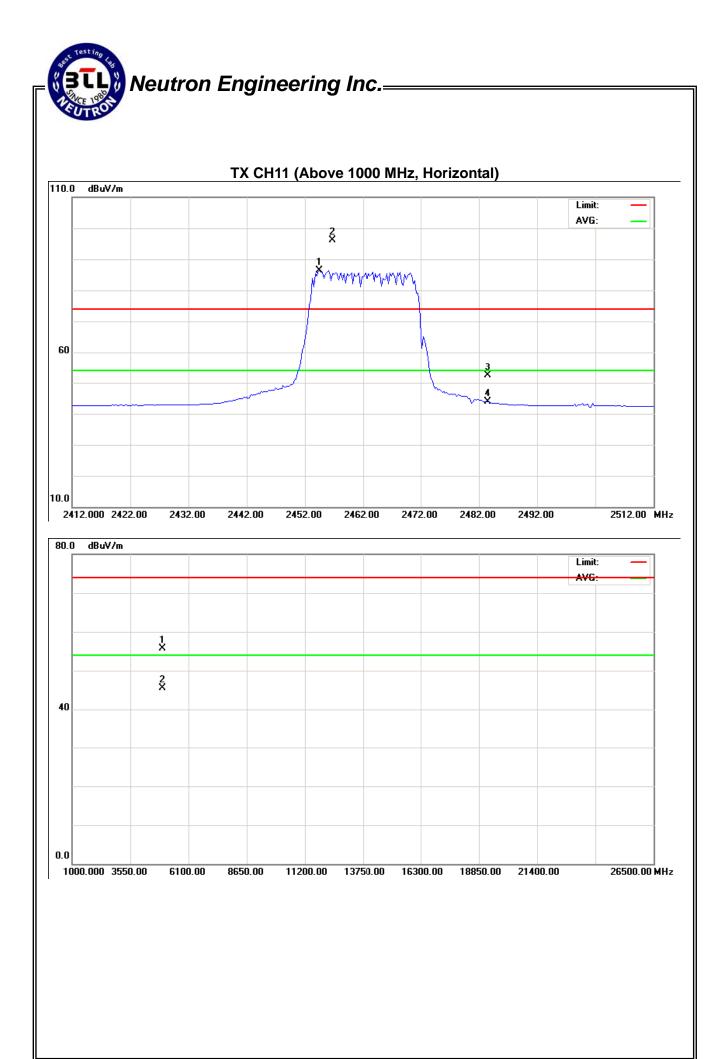
EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

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)	
2454.50	Н	64.71	54.95	31.54	96.25	86.48			X/F
2483.50	Н	20.87	12.33	31.50	52.37	43.83	74.00	54.00	X/E
4824.11	Н	49.02	38.98	6.61	55.63	45.59	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) Data of measurement within this frequency range shown " \* " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
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- (6) EUT Orthogonal Axis:

"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

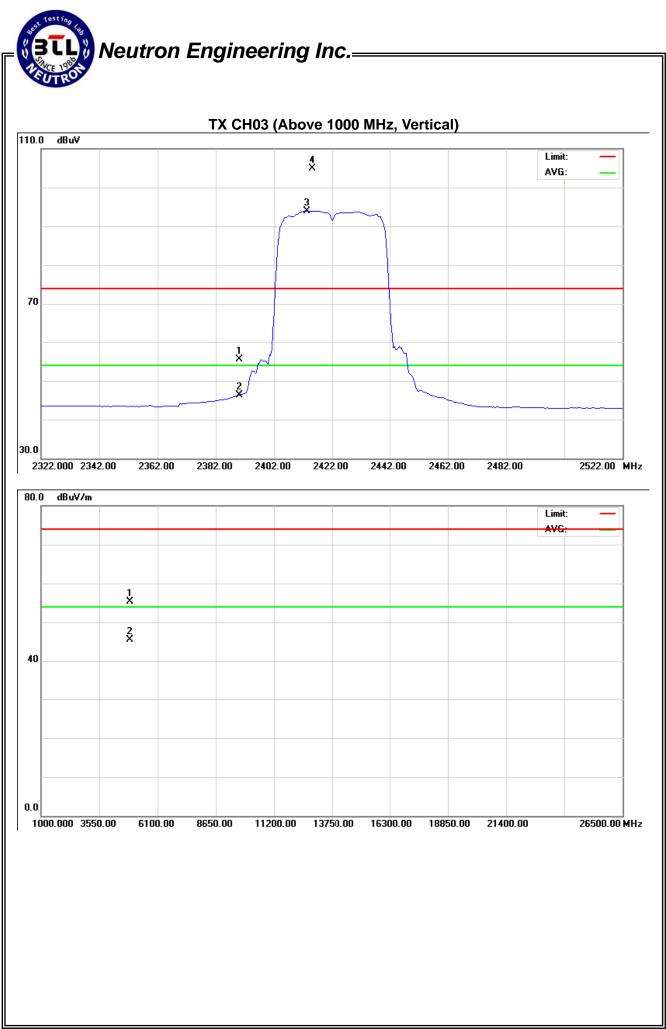


Neutron Engineering Inc.=

EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	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	23.64	14.35	31.91	55.55	46.26	74.00	54.00	X/E
2413.20	V	73.01	62.06	31.88	104.89	93.94			X/F
4844.10	V	49.02	39.12	6.32	55.34	45.44	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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- (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





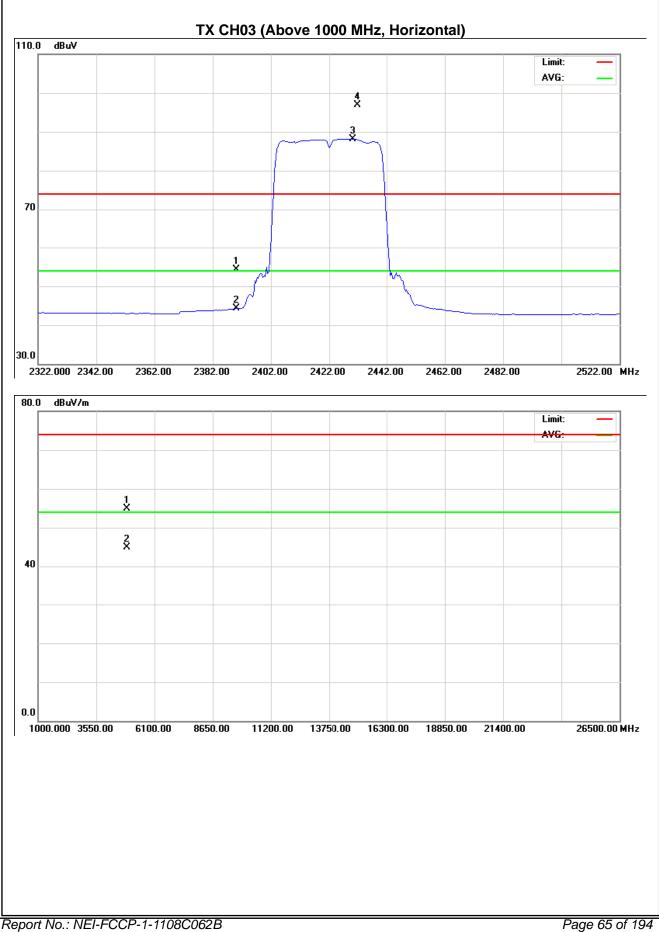
EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz	·	

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	22.35	12.31	31.91	54.26	44.22	74.00	54.00	X/E
2430.40	Н	65.01	56.25	31.87	96.88	88.12			X/F
4844.10	Н	48.68	38.65	6.32	55.00	44.97	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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.
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- (6) EUT Orthogonal Axis : "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



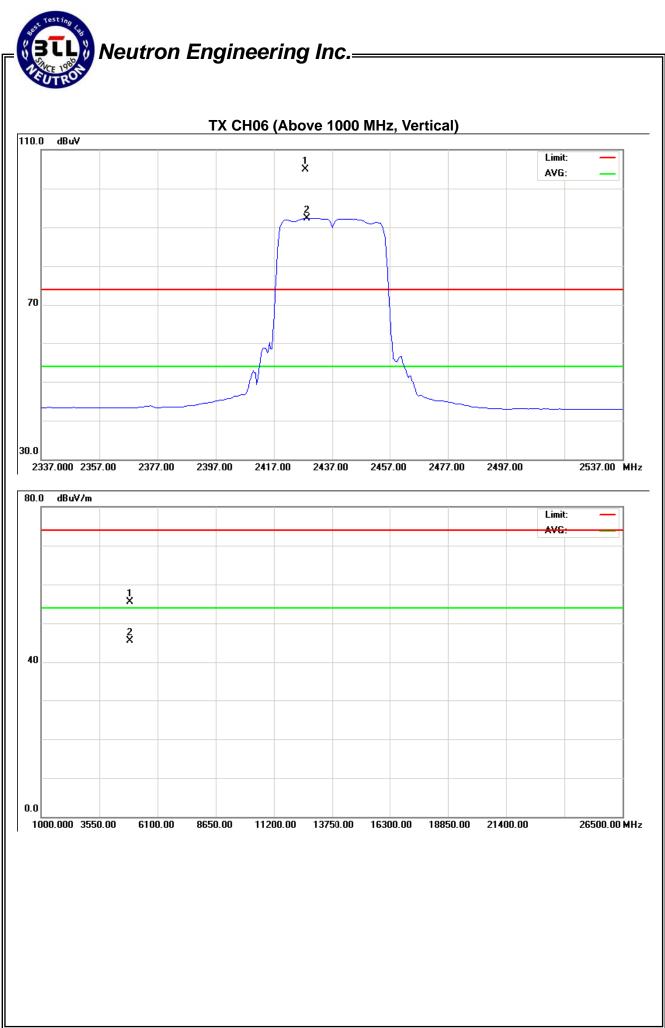




EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freq. A	Ant.Pol.	Reading Ant.		Ant./CF	A	ct.	Lir		
rieq.	Ant.P OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2427.41	V	73.12	60.52	31.86	104.99	92.38			X/F
4874.10	V	49.02	39.12	6.43	55.45	45.55	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



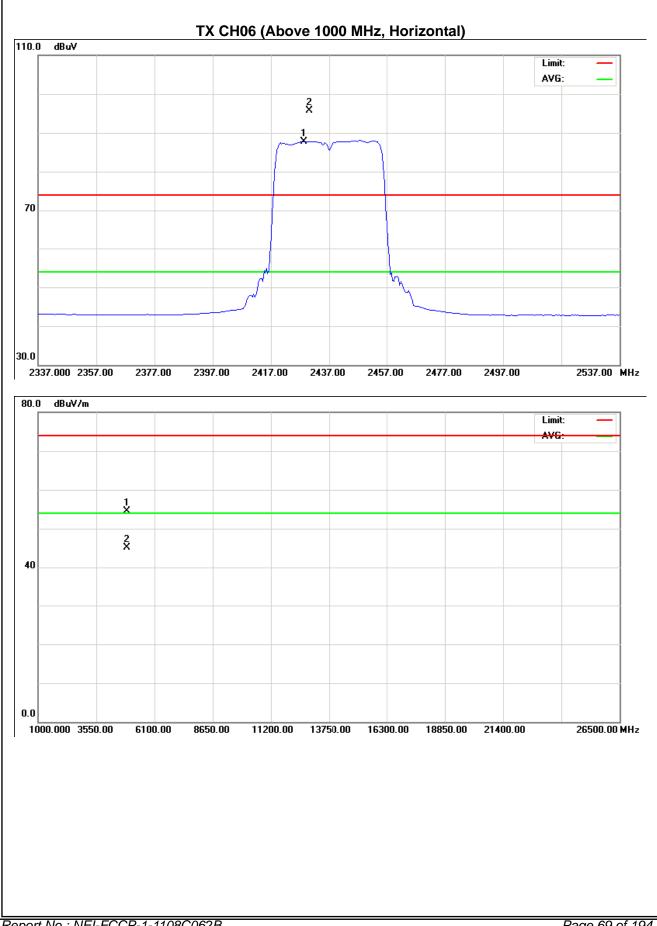


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz	·	

Freq. Ant.Po	Ant.Pol. Reading		Ant./CF	Act.		Lir			
TTEQ.	Ant.P 01.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2428.20	Н	63.86	55.91	31.86	95.73	87.77			X/F
4874.10	Н	48.02	38.61	6.43	54.45	45.04	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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





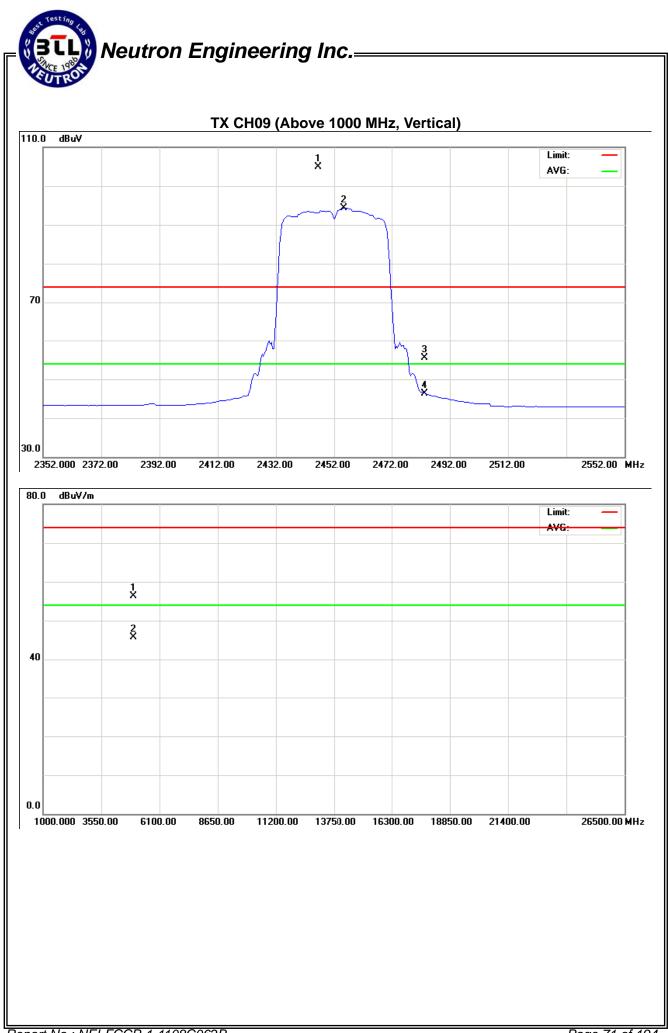


EUT :	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz	·	

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)	
2446.02	V	73.12	62.51	31.84	104.97	94.35			X/F
2483.50	V	23.68	14.55	31.80	55.48	46.35	74.00	54.00	X/E
4904.02	V	49.68	39.13	6.54	56.22	45.67	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





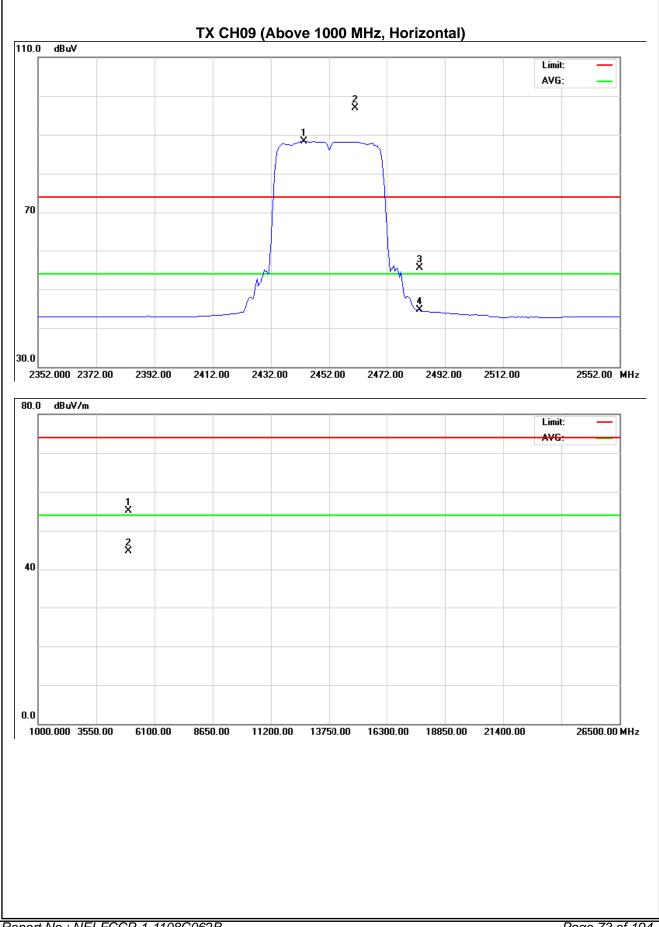
EUT:	300Mbps Wireless N Router	Model Name :	FWR-714N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

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)	
2443.20	Н	65.12	56.47	31.85	96.95	88.32			X/F
2483.50	Н	23.61	12.81	31.80	55.41	44.61	74.00	54.00	X/E
4904.02	Н	48.61	38.12	6.54	55.15	44.66	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





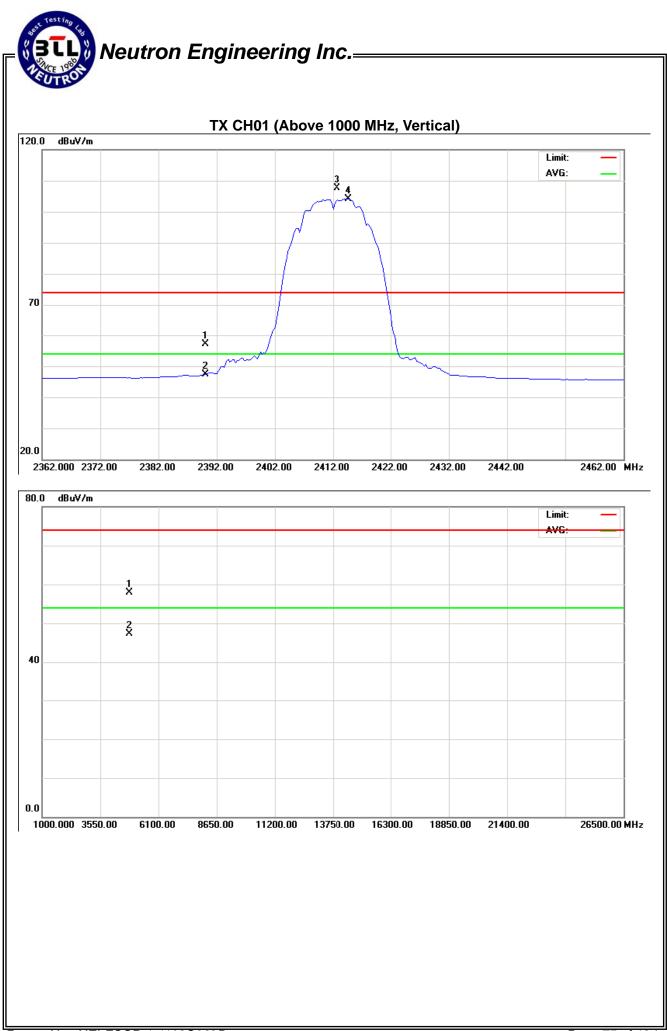
Neutron Engineering Inc.=

# 4.2.10 TEST RESULTS (ABOVE 1000 MHZ)-FOR FWR-734N

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq. Ant.Pol.	Reading		Ant./CF	A	Act		Limit		
TTEQ.		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	25.56	15.75	31.61	57.17	47.36	74.00	54.00	X/E
2412.56	V	76.02	72.64	31.58	107.60	104.22			X/F
4824.21	V	51.67	41.02	6.25	57.92	47.27	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

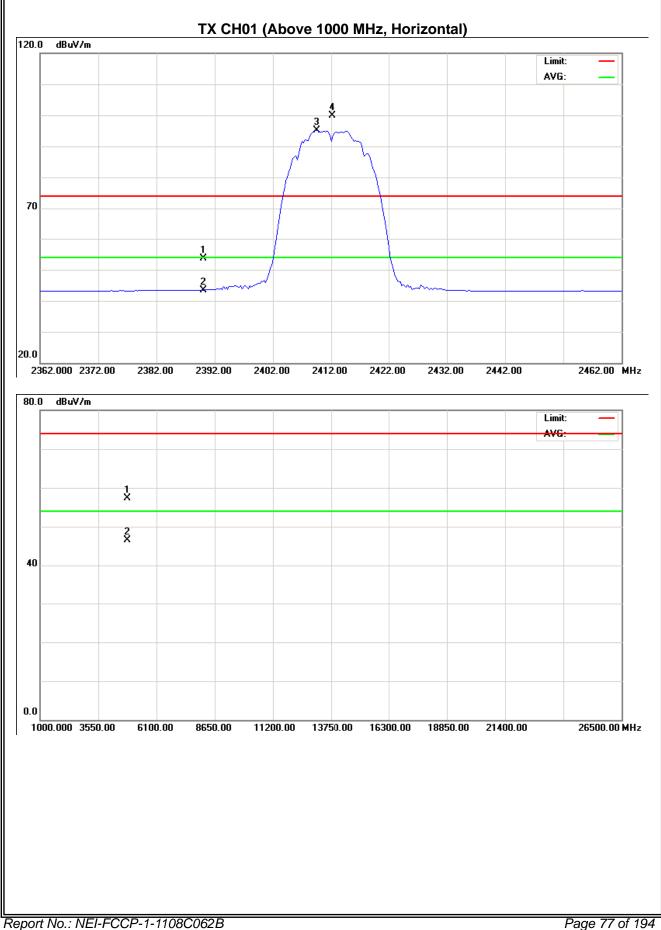
Freq. Ant.Pol.	Reading		Ant./CF	Act		Lir			
пец		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	22.01	11.89	31.61	53.62	43.50	74.00	54.00	X/E
2409.50	Н	68.26	63.54	31.59	99.85	95.13			X/F
4824.21	Н	51.02	40.16	6.25	57.27	46.41	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\[\]$  Note $\]$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\[\circ\]$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency<sup>o</sup>"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



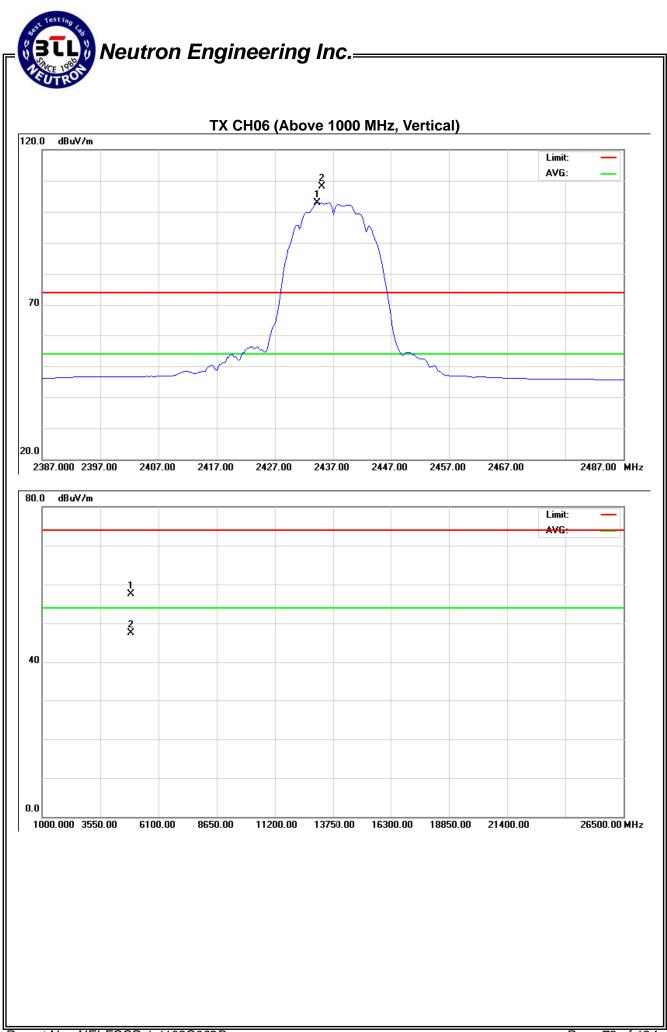


# Neutron Engineering Inc.=

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	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			
rreq.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2434.25	V	76.53	71.41	31.56	108.09	102.97			Х/F
4874.12	V	51.02	41.13	6.43	57.45	47.56	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



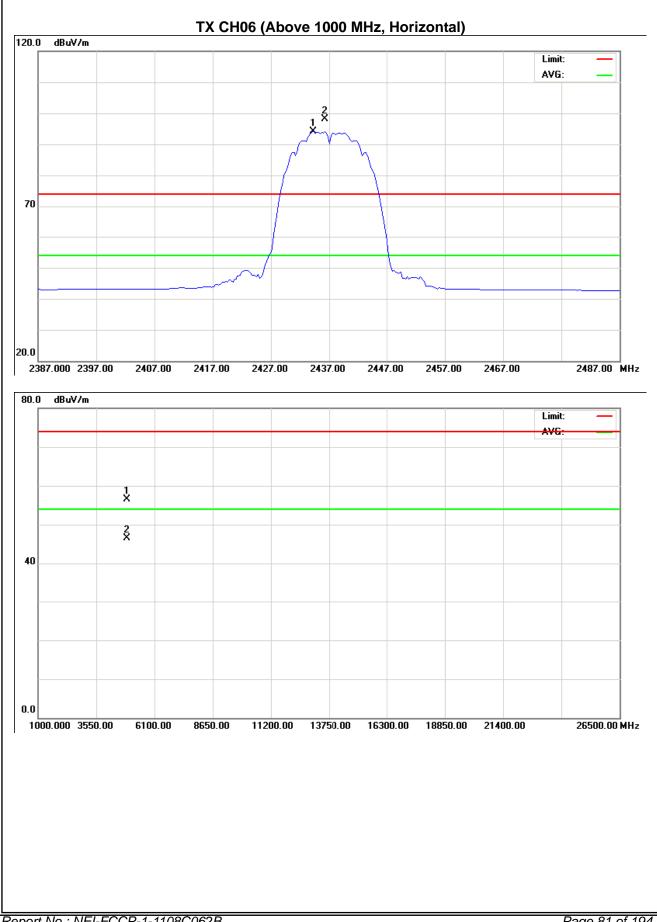


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz	·	

Freq.	Ant.Pol.	Reading A		Ant./CF	Act.		Limit		
rieq.	Ant.POI.	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	66.53	62.69	31.56	98.09	94.25			X/F
4874.12	Н	50.02	40.01	6.43	56.45	46.44	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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





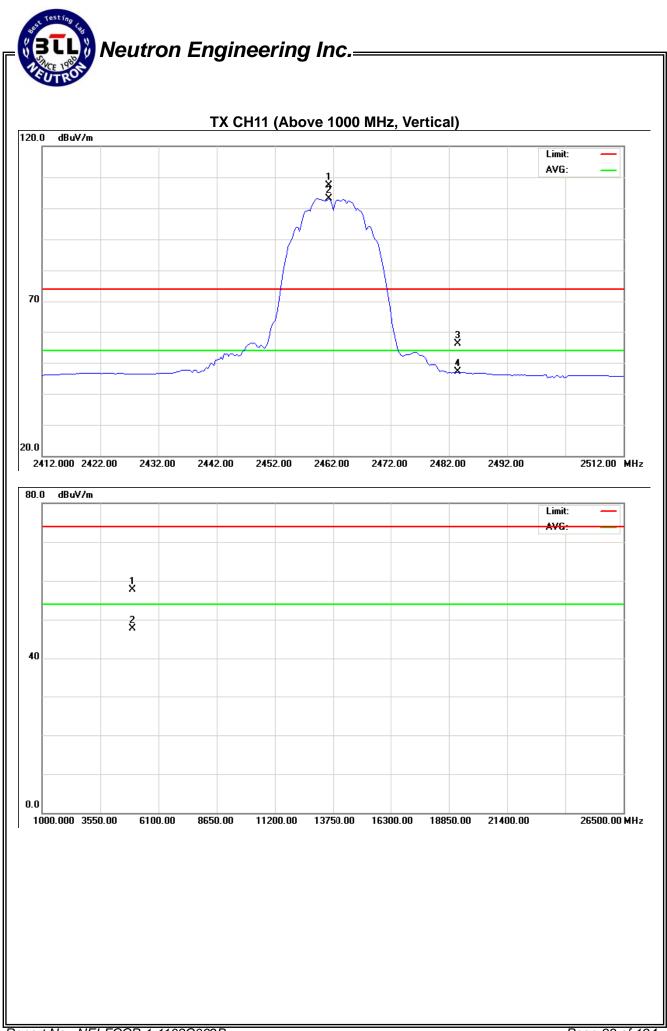


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

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)	
2461.24	V	75.81	71.52	31.53	107.34	103.05			X/F
2483.50	V	24.61	15.53	31.50	56.11	47.03	74.00	54.00	X/E
4924.10	V	51.13	41.05	6.61	57.74	47.66	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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.
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- (6) EUT Orthogonal Axis : "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

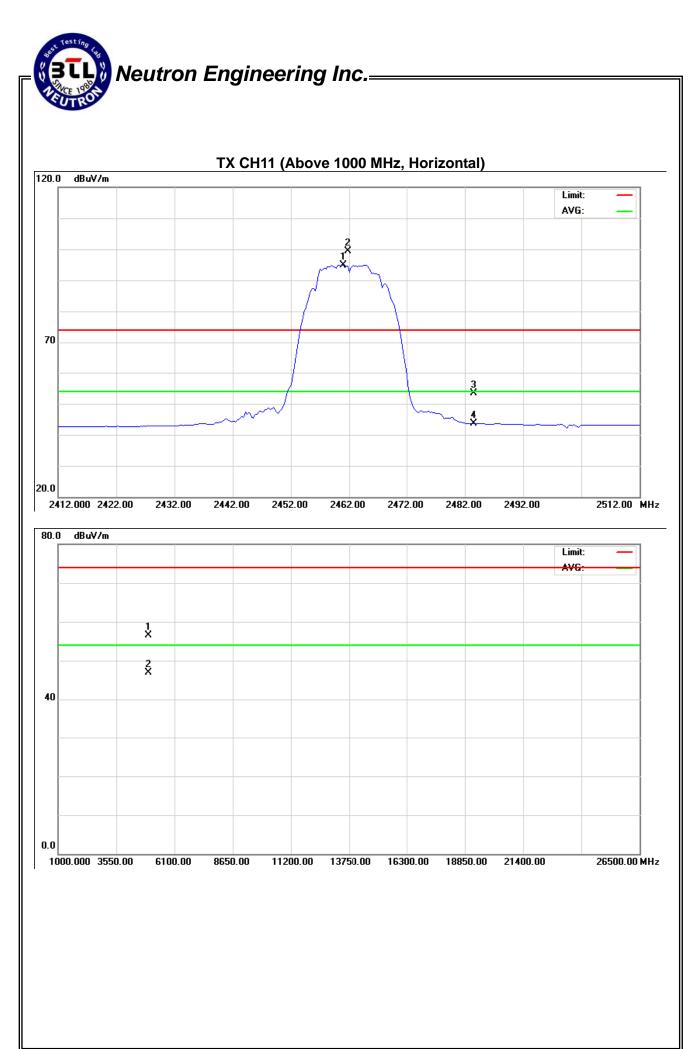




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

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)	
2461.00	Н	67.86	63.46	31.53	99.39	94.99			X/F
2483.50	Н	21.81	12.25	31.50	53.31	43.75	74.00	54.00	X/E
4924.10	Н	49.99	40.26	6.61	56.60	46.87	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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

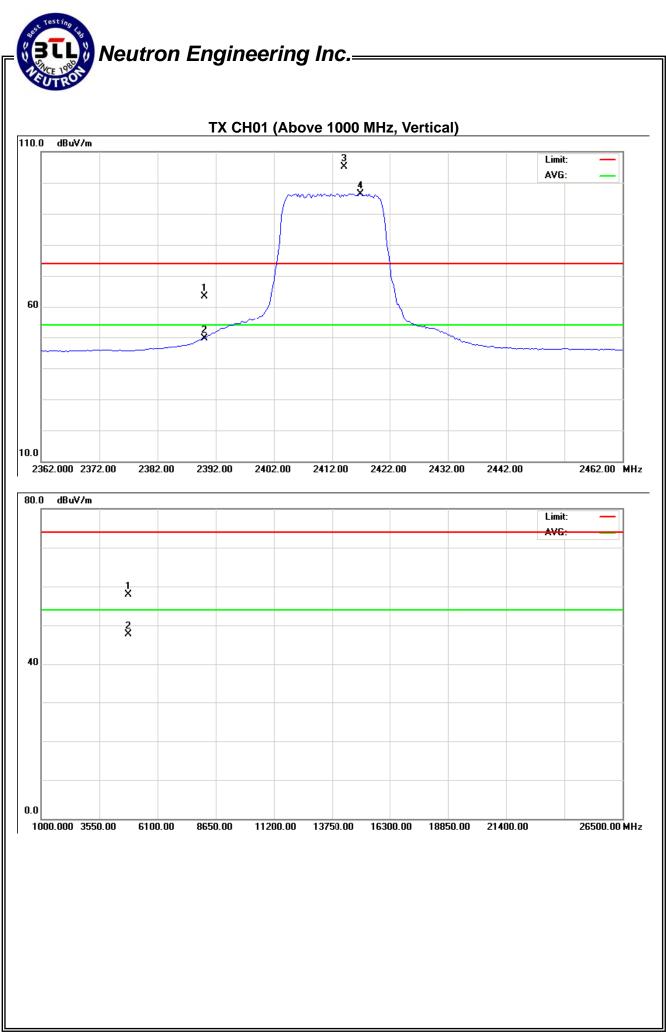




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

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	31.87	18.09	31.61	63.48	49.70	74.00	54.00	X/E
2414.22	V	73.51	64.90	31.58	105.09	96.49			X/F
4824.01	V	51.66	41.43	6.25	57.91	47.68	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





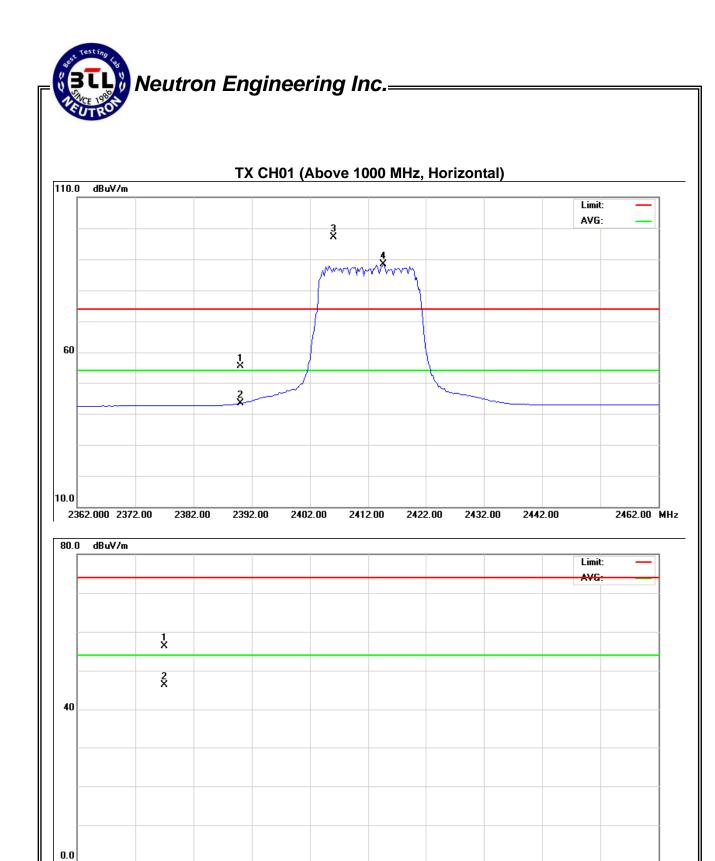
EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> °C	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

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	23.72	11.68	31.61	55.33	43.29	74.00	54.00	X/E
2406.24	н	65.52	56.77	31.60	97.12	88.35			X/F
4824.01	Н	50.12	39.98	6.25	56.37	46.23	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



11200.00 13750.00 16300.00 18850.00

6100.00

8650.00

1000.000 3550.00

26500.00 MHz

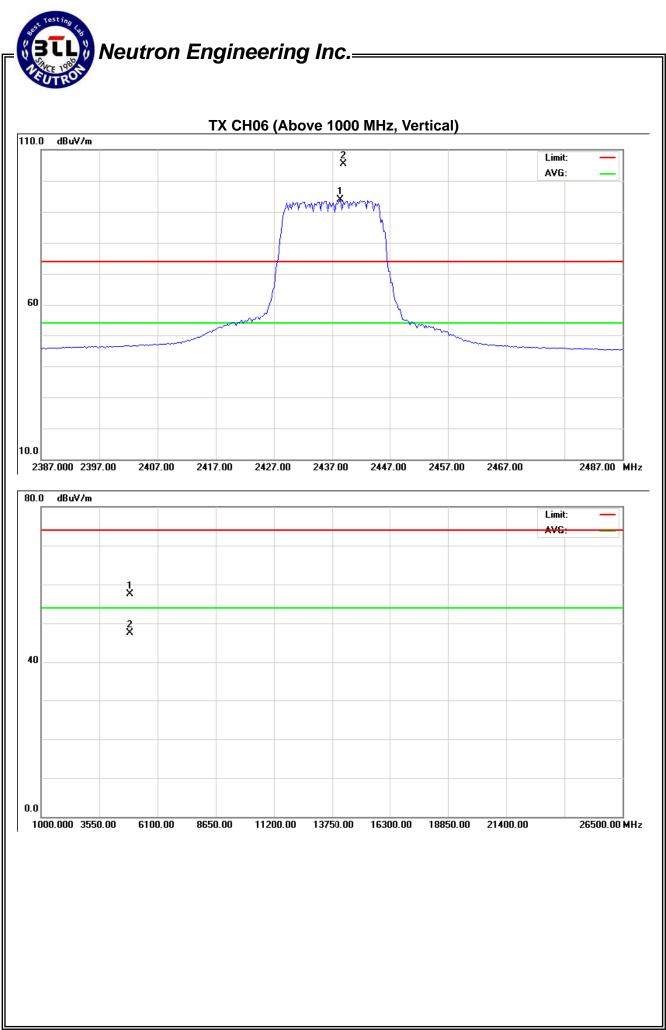
21400.00



EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Reading Ant./CF		Act.		Limit			
rreq.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.50	V	73.82	62.23	31.55	105.37	93.78			X/F
4873.98	V	51.12	41.06	6.43	57.55	47.49	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



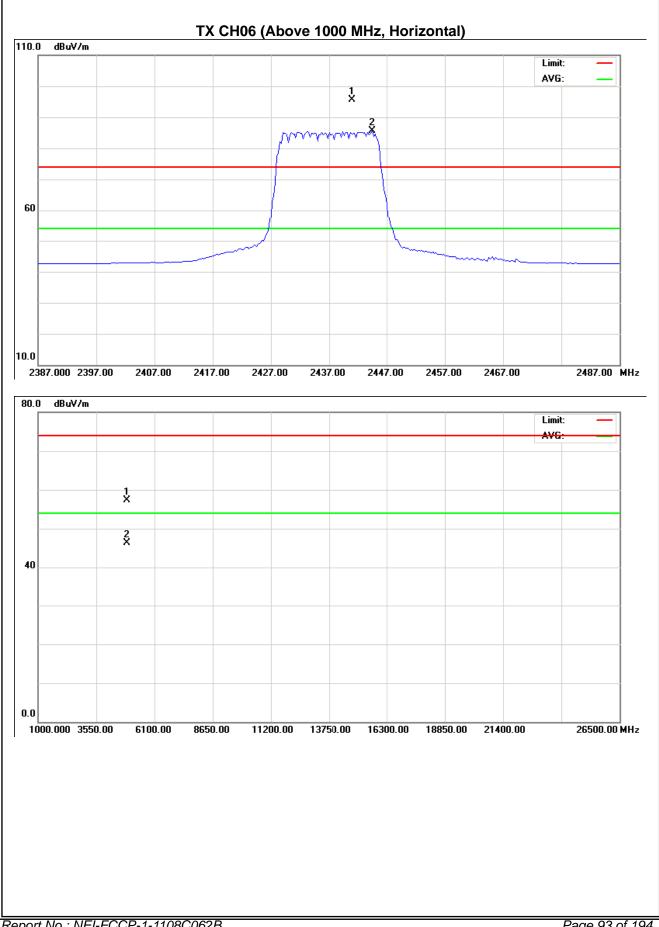


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Reading Ant./CF		Act.		Limit			
rreq.	Ant.P OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2441.02	Н	64.02	54.12	31.55	95.57	85.67			X/F
4873.98	Н	50.87	39.91	6.43	57.30	46.34	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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.
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- (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



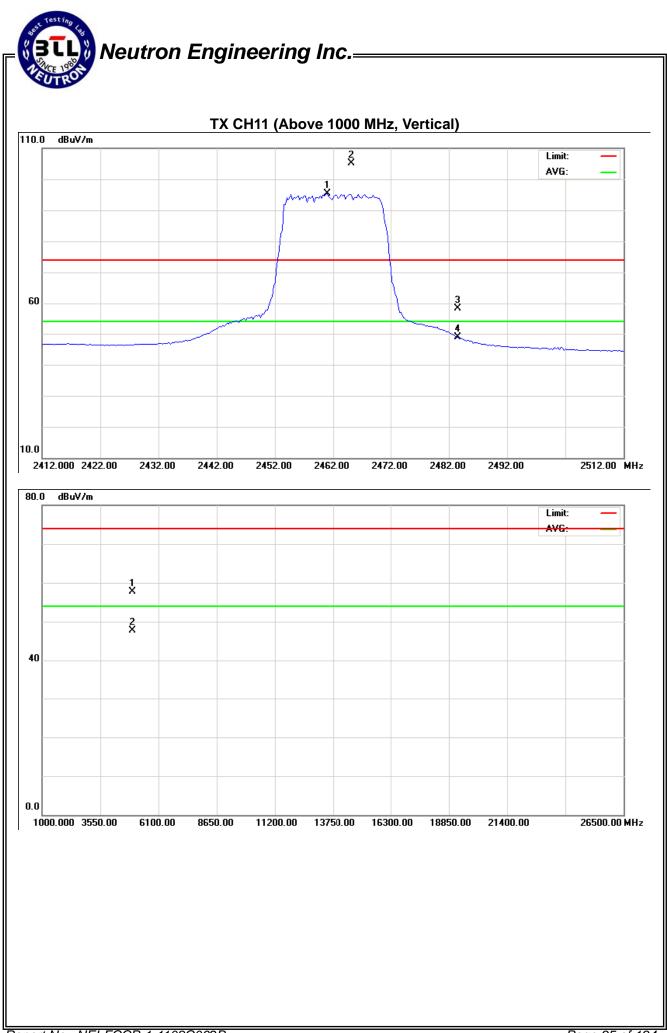




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

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)	
2461.00	V	73.68	63.73	31.53	105.20	95.26			X/F
2483.50	V	26.99	17.48	31.50	58.49	48.98	74.00	54.00	X/E
4924.10	V	51.13	41.02	6.61	57.74	47.63	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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- (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





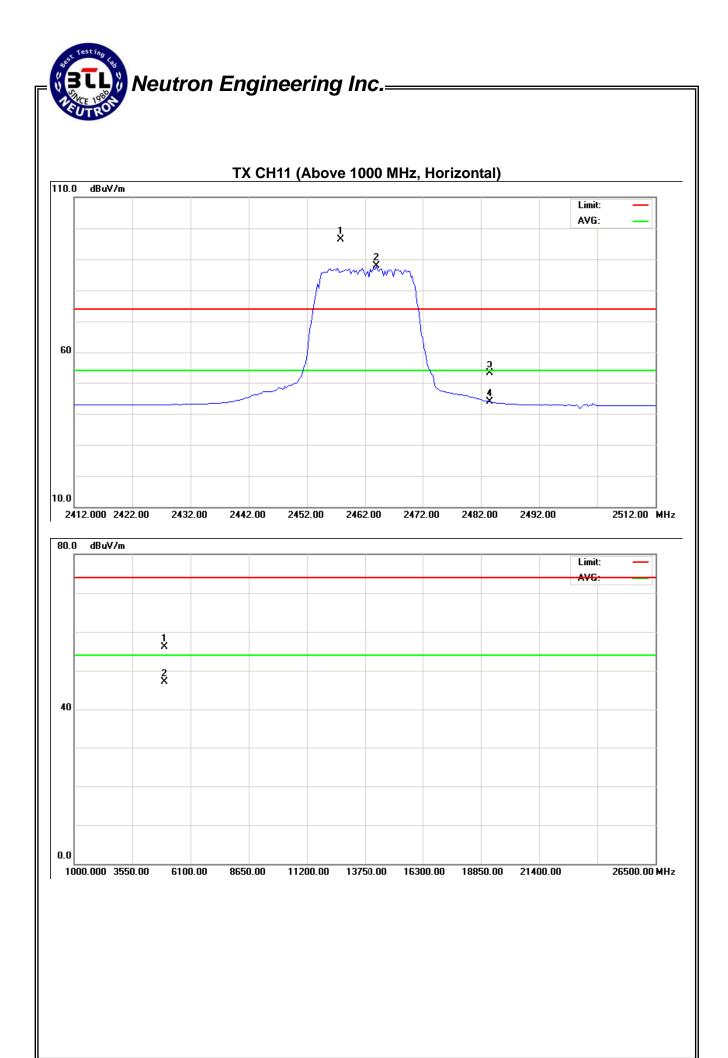
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

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)	
2464.00	Н	64.91	56.31	31.53	96.44	87.83			X/F
2483.50	Н	21.73	12.50	31.50	53.23	44.00	74.00	54.00	X/E
4924.10	Н	49.52	40.58	6.61	56.13	47.19	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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.
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- (6) EUT Orthogonal Axis:

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(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

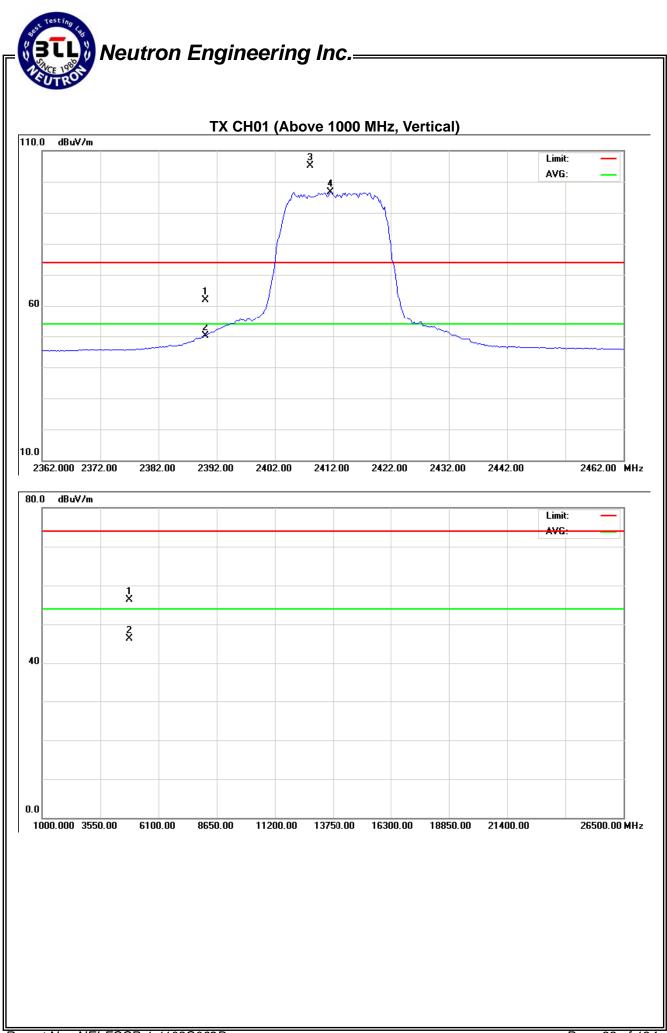




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

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	30.29	18.57	31.61	61.90	50.18	74.00	54.00	X/E
2408.11	V	73.56	65.16	31.59	105.15	96.75			X/F
4824.11	V	50.12	40.02	6.25	56.37	46.27	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\[\]$  Note $\]$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\[\circ\]$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency<sup>o</sup>"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.
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Report No.: NEI-FCCP-1-1108C062B



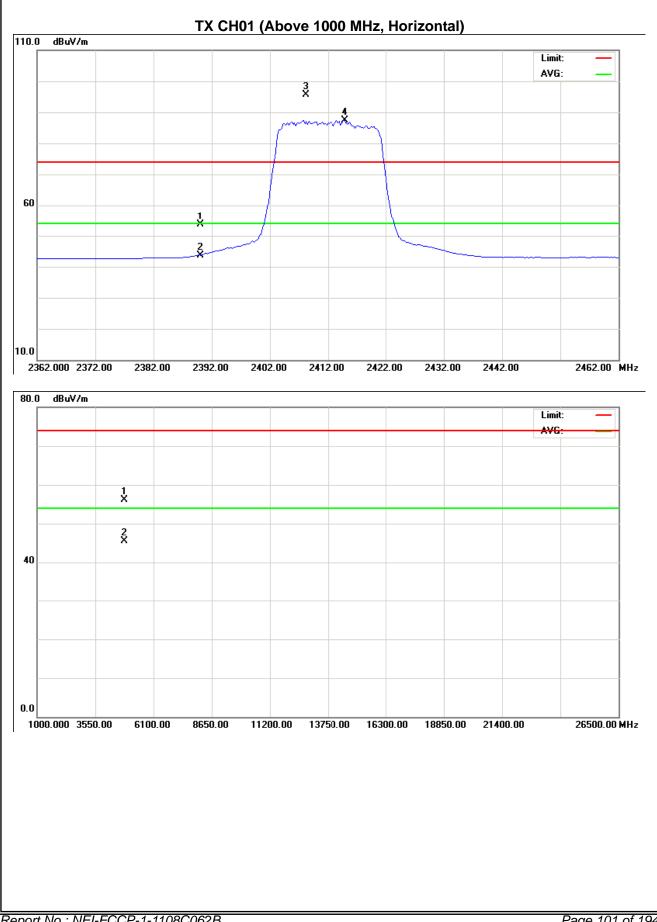
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2412MHz		

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	21.93	12.08	31.61	53.54	43.69	74.00	54.00	X/E
2408.01	Н	64.01	55.91	31.59	95.60	87.49			X/F
4824.11	Н	49.86	39.24	6.25	56.11	45.49	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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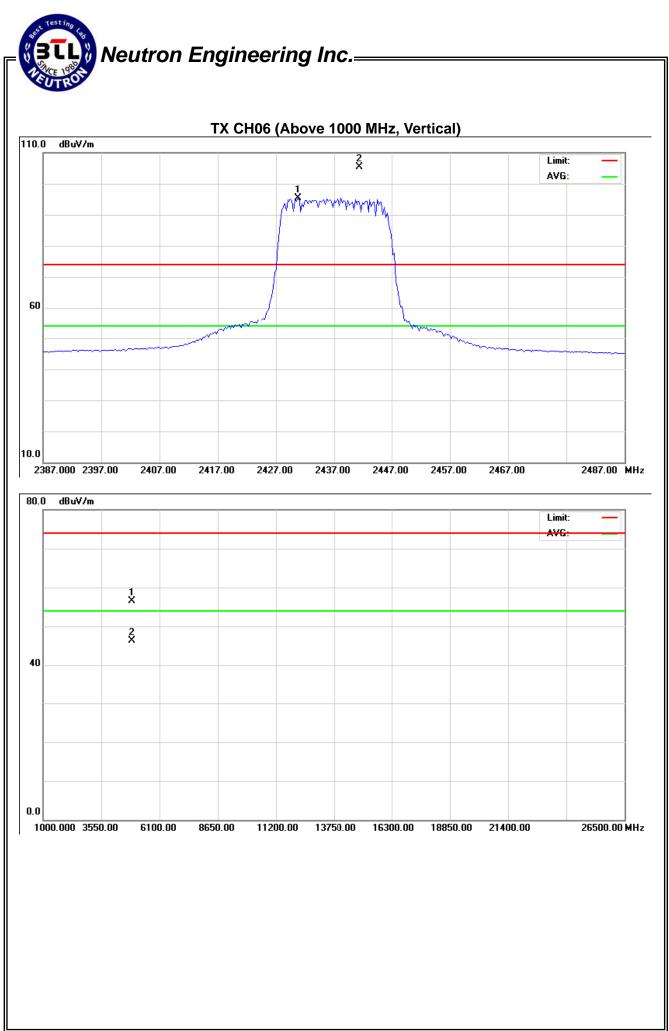




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz		

Freg. Ant	Ant.Pol.	Reading Ant./CF		Ant./CF	Act.		Limit		
i i eq.	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)	
2430.75	V	73.86	63.92	31.57	105.41	95.49			X/F
4874.13	V	49.99	39.86	6.43	56.42	46.29	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>"Note\_"</code>. 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<sup>o</sup>"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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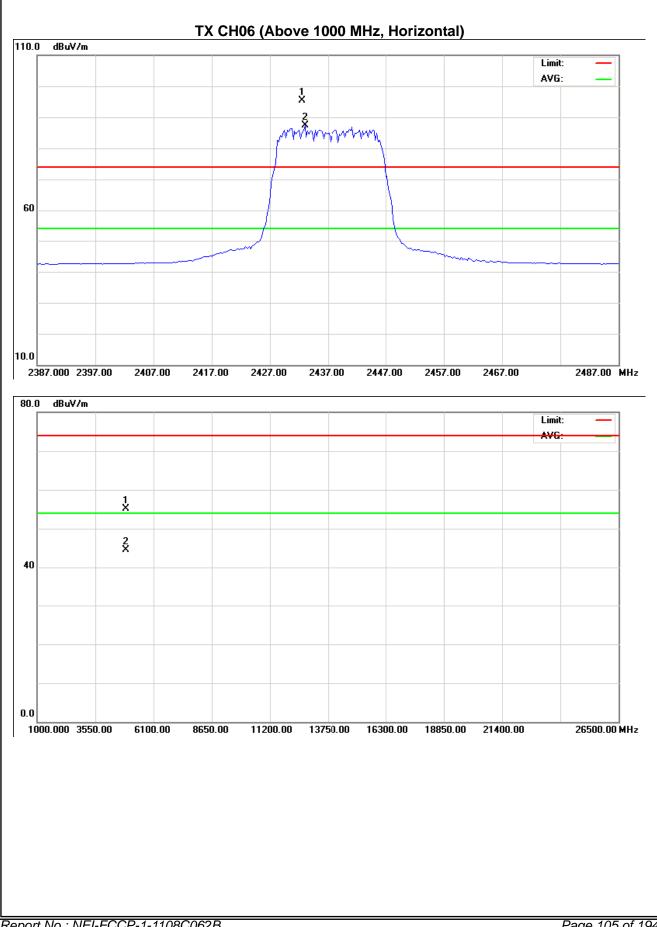


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2437MHz	·	

Freq.	Ant.Pol.	Reading Ant./CF		Act.		Limit			
rreq.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2433.00	Н	63.89	55.78	31.57	95.46	87.34			X/F
4874.13	Н	48.68	38.13	6.43	55.11	44.56	74.00	54.00	X/H

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- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency<sup>o</sup>"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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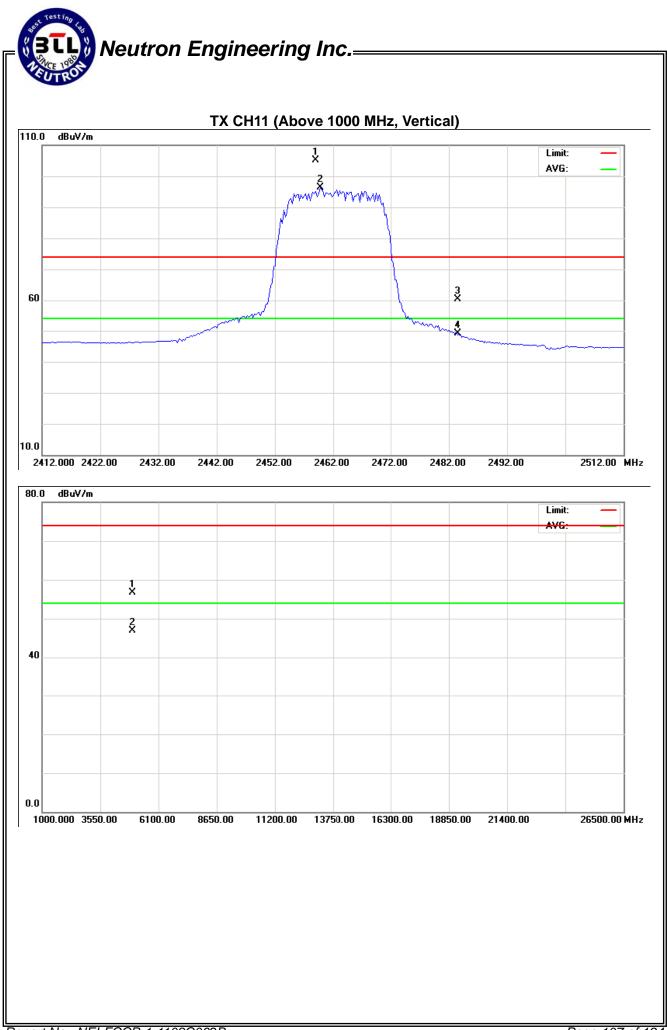




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz	·	

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)	
2459.07	V	73.62	64.95	31.53	105.15	96.48			X/F
2483.50	V	28.93	17.59	31.50	60.43	49.09	74.00	54.00	X/E
4924.02	V	50.13	40.21	6.61	56.74	46.82	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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- (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

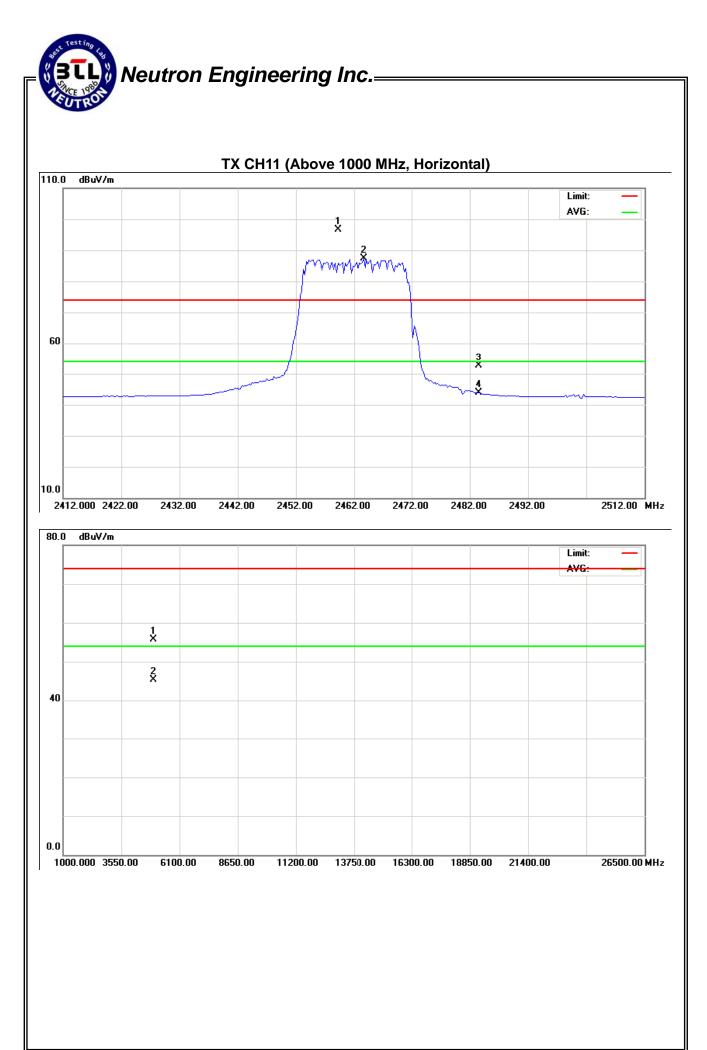




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE 2462MHz		

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)	
2463.75	Н	64.99	55.90	31.53	96.52	87.42			X/F
2483.50	Н	21.13	12.35	31.50	52.63	43.85	74.00	54.00	X/E
4924.02	Н	49.01	38.65	6.61	55.62	45.26	74.00	54.00	X/H

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

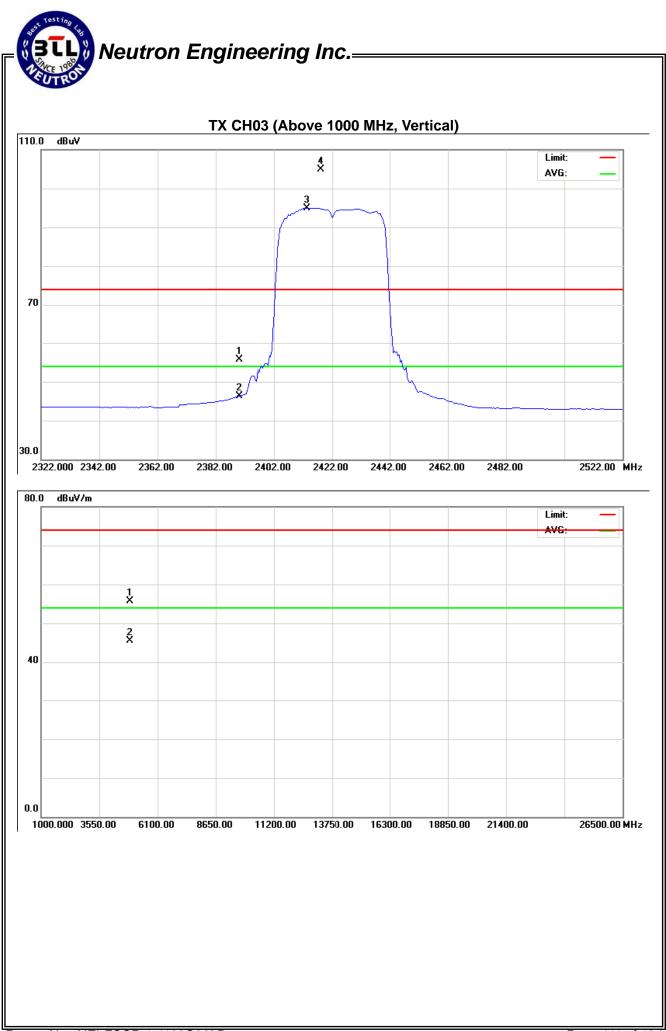




EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

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	23.83	14.38	31.91	55.74	46.29	74.00	54.00	X/E
2413.20	V	73.02	63.06	31.88	104.90	94.94			X/F
4844.03	V	49.32	39.21	6.32	55.64	45.53	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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- (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





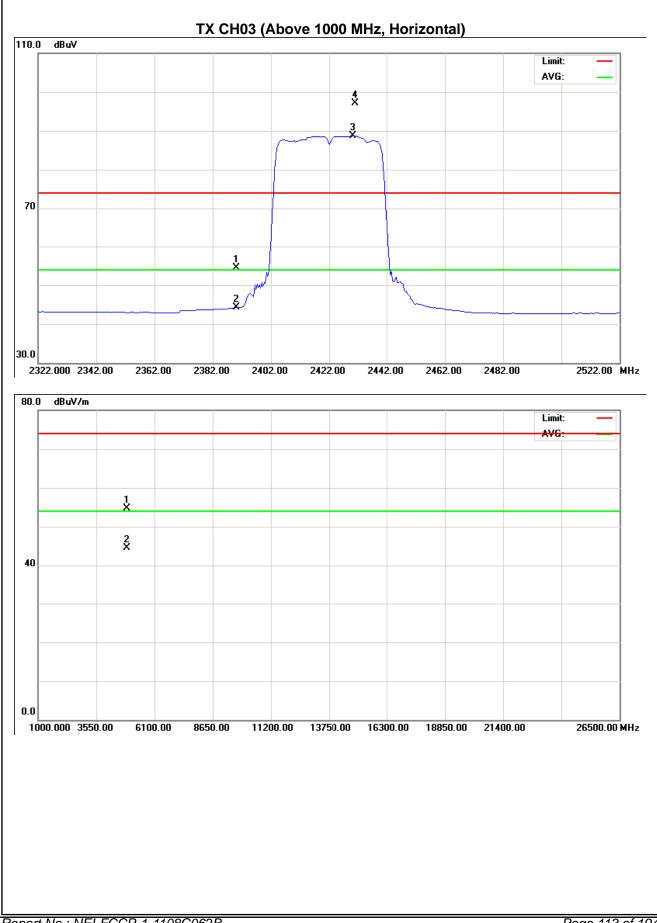
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz	·	

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	22.56	12.33	31.91	54.47	44.24	74.00	54.00	X/E
2430.40	Н	65.32	56.75	31.87	97.19	88.62			X/F
4844.03	Н	48.35	38.26	6.32	54.67	44.58	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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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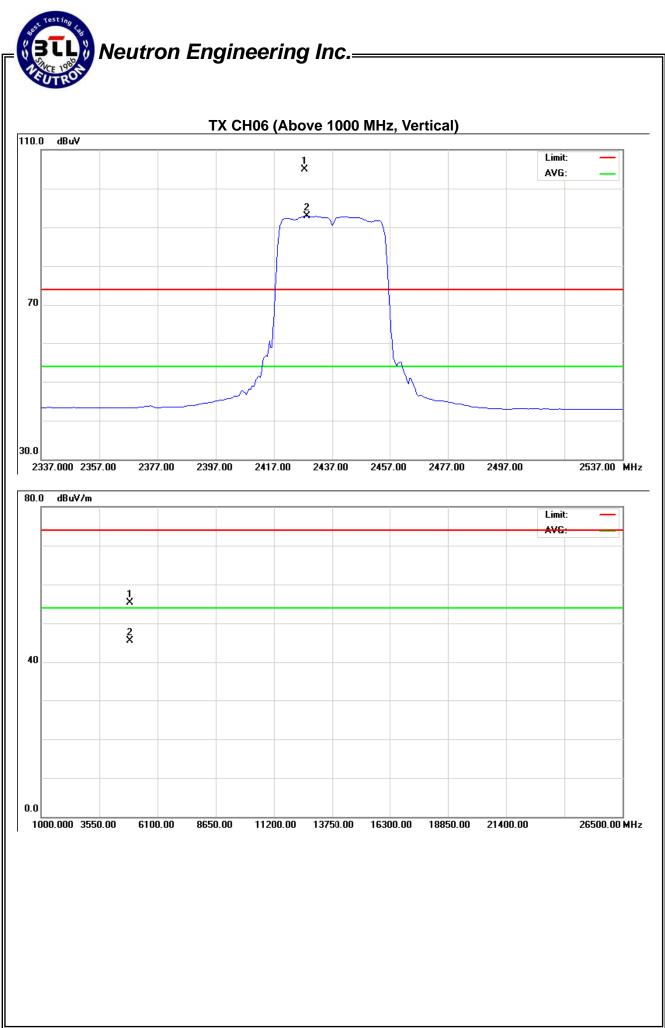




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freg. Ant.F	Ant.Pol. Rea		ding	Ant./CF	Act.		Limit		
TTEQ.	Ant.P OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2427.11	V	73.02	61.02	31.86	104.89	92.88			X/F
4874.03	V	48.87	39.01	6.43	55.30	45.44	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



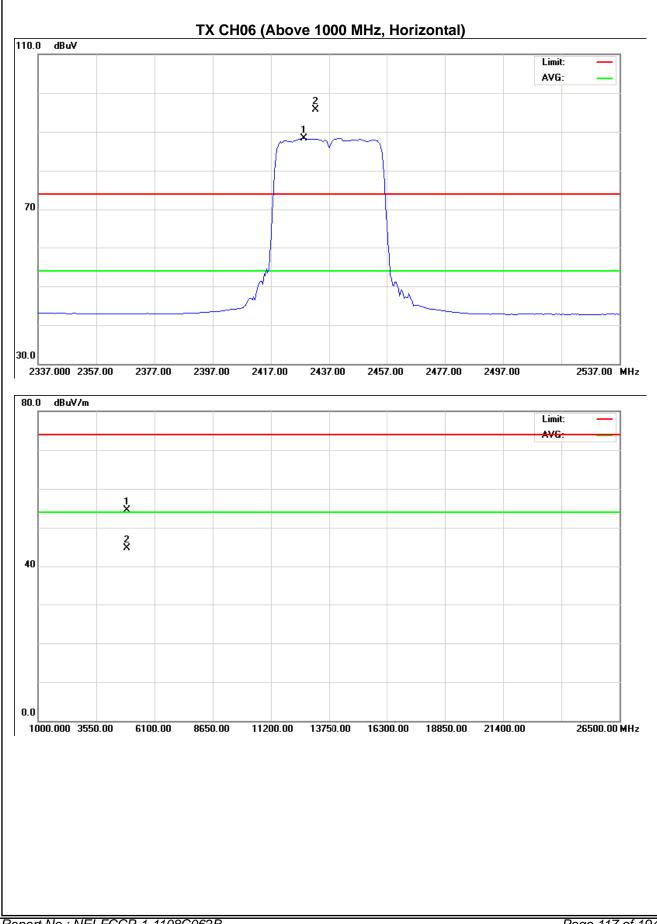


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freg. A	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
TTEQ.	Ant.P OI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2428.20	Н	63.89	56.41	31.86	95.76	88.27			X/F
4874.03	Н	48.01	38.26	6.43	54.44	44.69	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





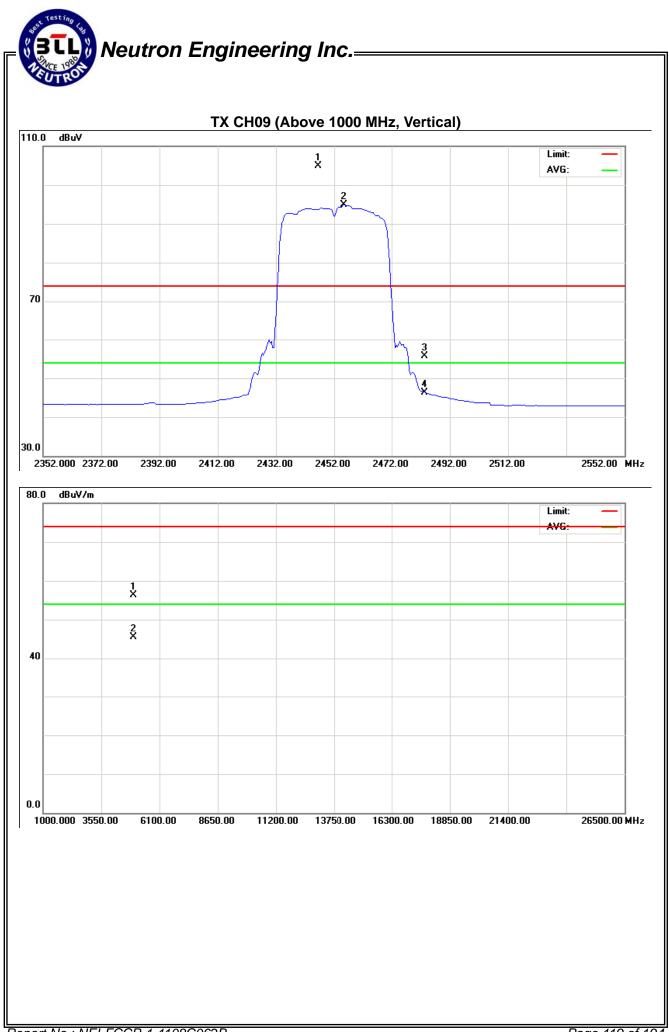


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

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)	
2455.60	V	73.01	63.01	31.84	104.86	94.85			X/F
2483.50	V	23.89	14.57	31.80	55.69	46.37	74.00	54.00	X/E
4904.10	V	49.72	39.02	6.54	56.26	45.56	74.00	54.00	X/H

(1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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



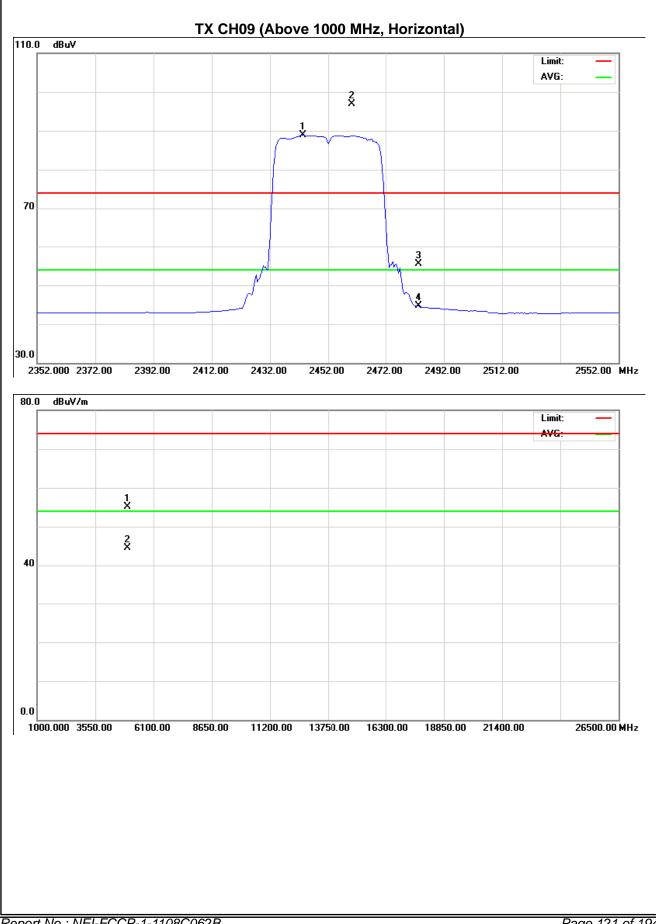


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>25</b> ℃	Relative Humidity:	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

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)	
2460.11	Н	65.03	56.97	31.85	96.86	88.82			X/F
2483.50	Н	23.78	12.83	31.80	55.58	44.63	74.00	54.00	X/E
4904.10	Н	48.52	38.01	6.54	55.06	44.55	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. 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<sup>o</sup>"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





#### 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	100185	Nov.26.2011

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

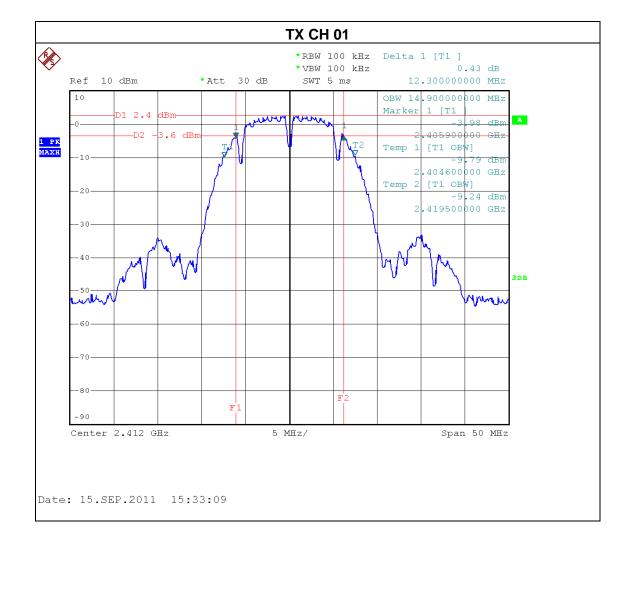
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

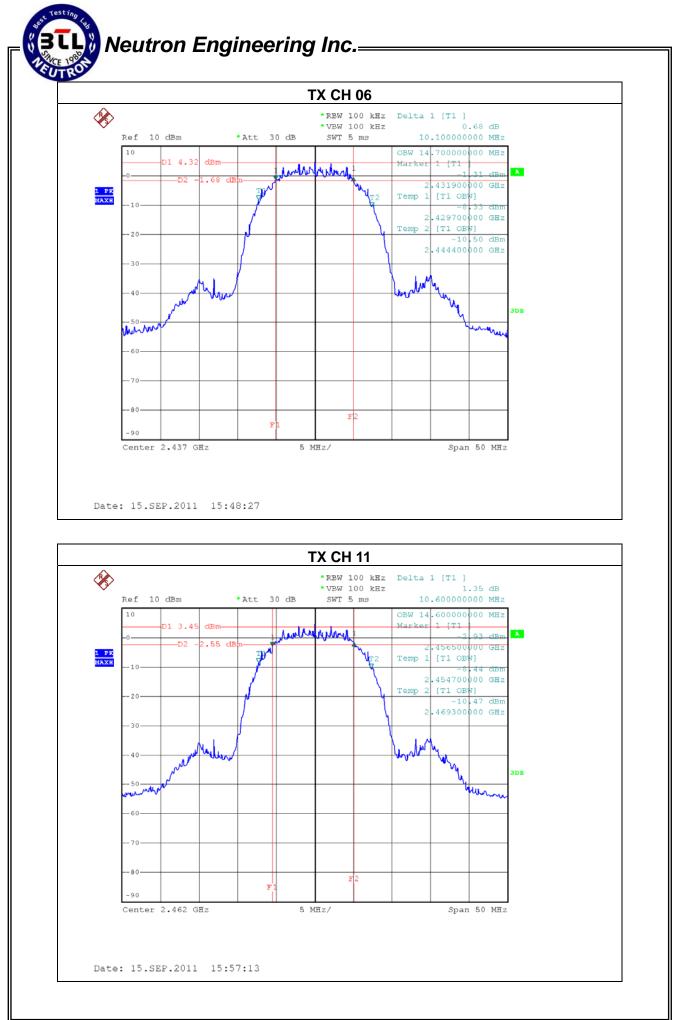


#### 5.1.6 TEST RESULTS

EUT :	300Mbps Wireless N Router	Model Name. :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX B MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	12.30	>=500KHz
CH06	2437	10.10	>=500KHz
CH11	2462	10.60	>=500KHz

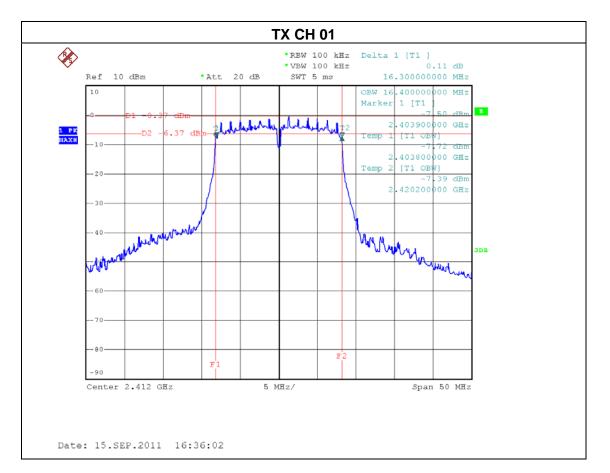


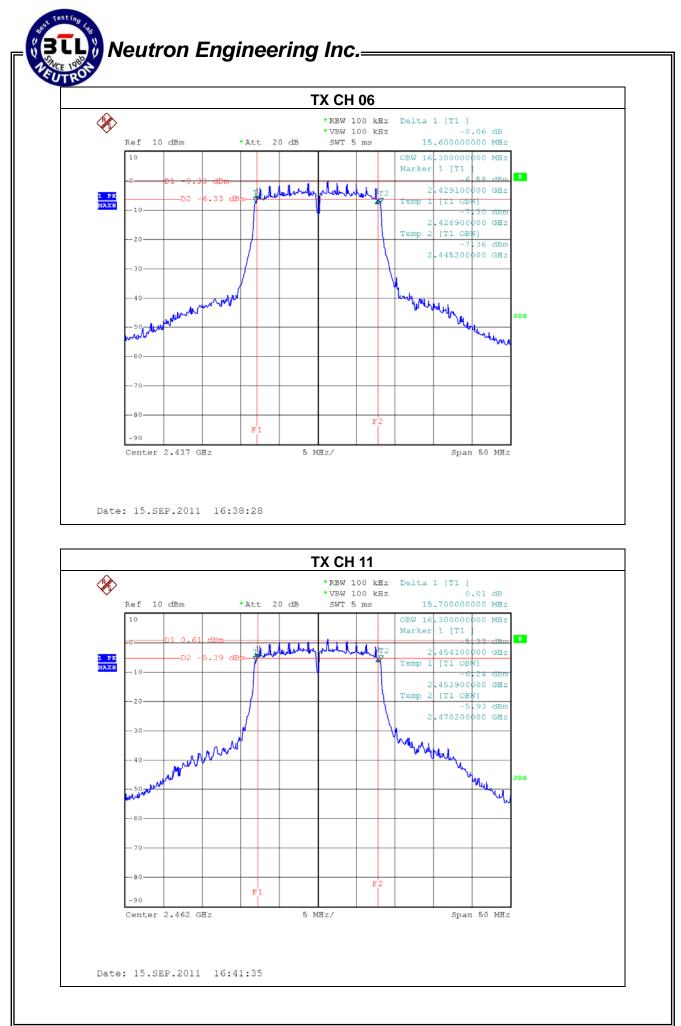




EUT :	300Mbps Wireless N Router	Model Name. :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX G MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	16.30	>=500KHz
CH06	2437	15.60	>=500KHz
CH11	2462	15.70	>=500KHz

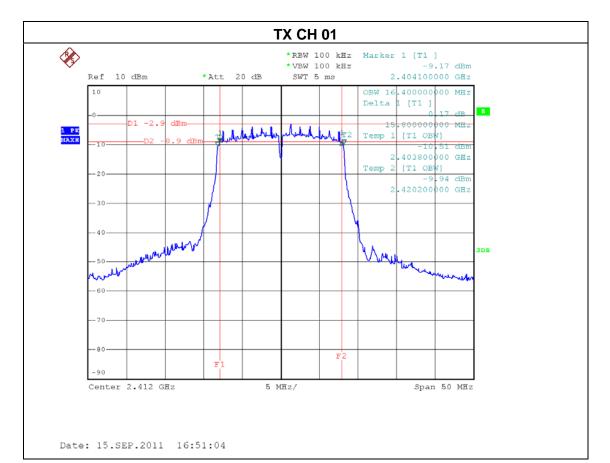


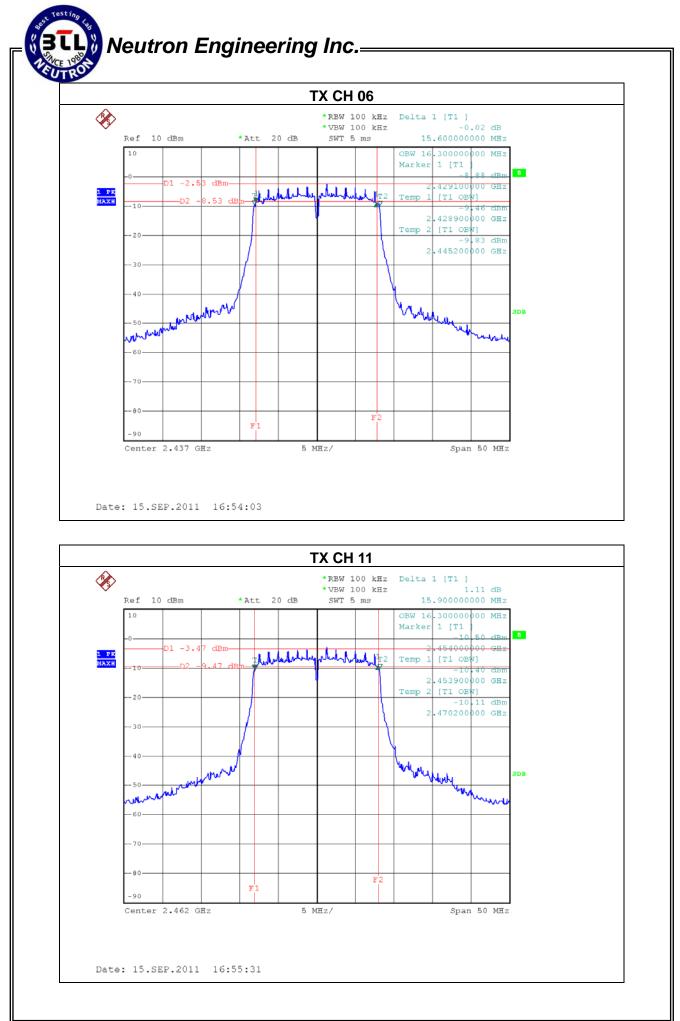




EUT :	300Mbps Wireless N Router	Model Name. :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	15.80	>=500KHz
CH06	2437	15.60	>=500KHz
CH11	2462	15.90	>=500KHz

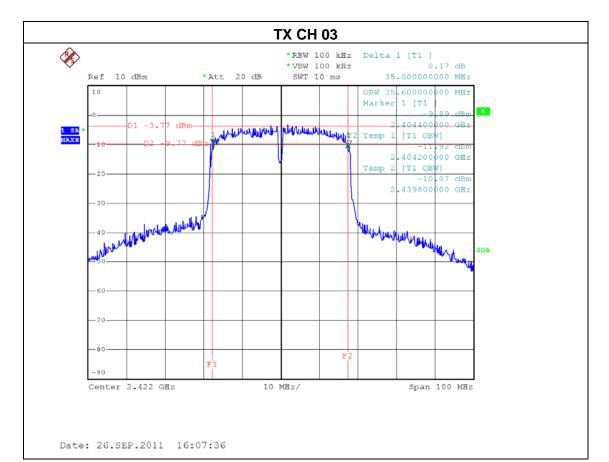


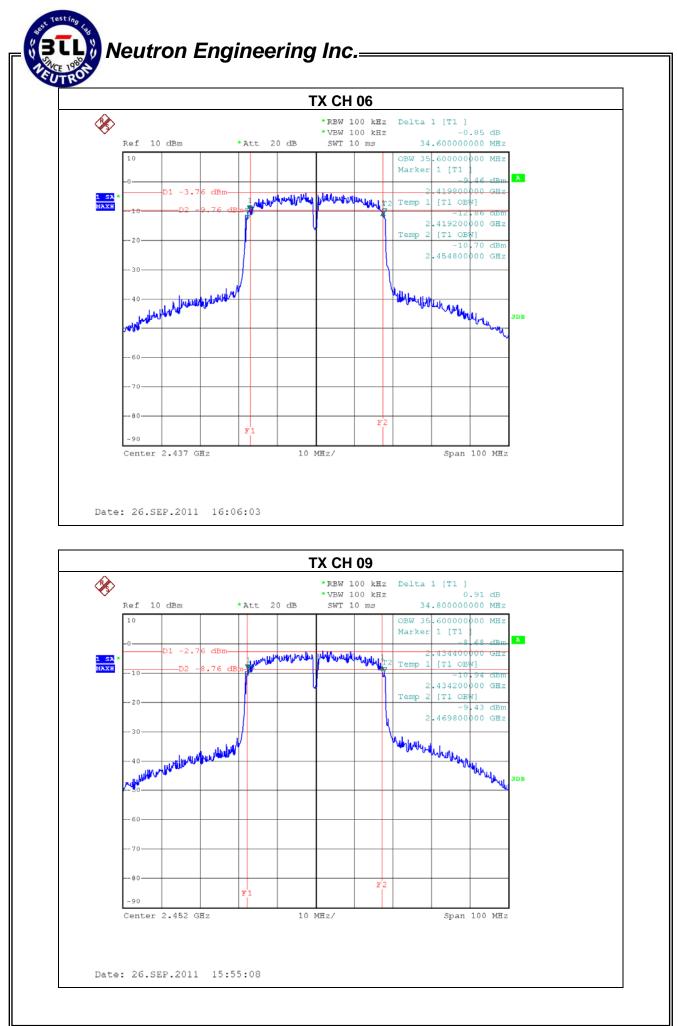




EUT :	300Mbps Wireless N Router	Model Name. :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -40MHz/ CH03, CH06, CH09			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH03	2422	35.00	>=500KHz
CH06	2437	34.60	>=500KHz
CH09	2452	34.80	>=500KHz





#### 6. MAXIMUM OUTPUT POWER TEST

#### 6.1 Applied procedures / limit

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

#### 6.1.1 MEASUREMENT INSTRUMENTS LIST

Iter	m Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.26.2011

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



#### 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.

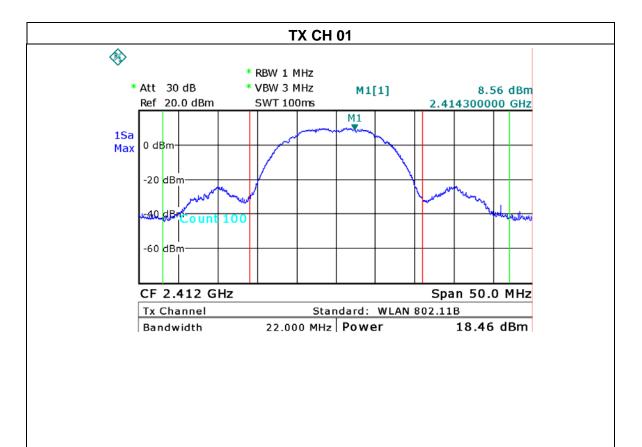
Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

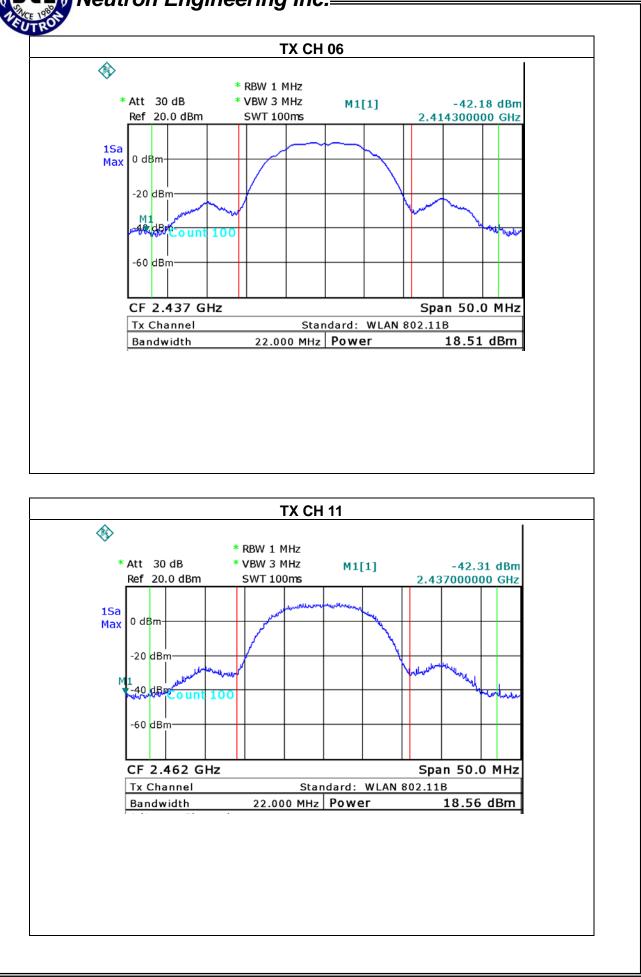


#### 6.1.6 TEST RESULTS

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	18.46	30	1
CH06	2437 MHz	18.51	30	1
CH11	2462 MHz	18.56	30	1

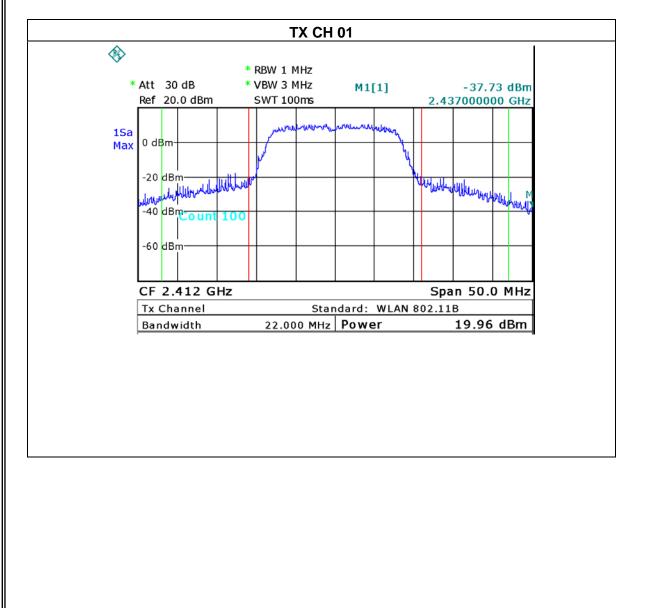


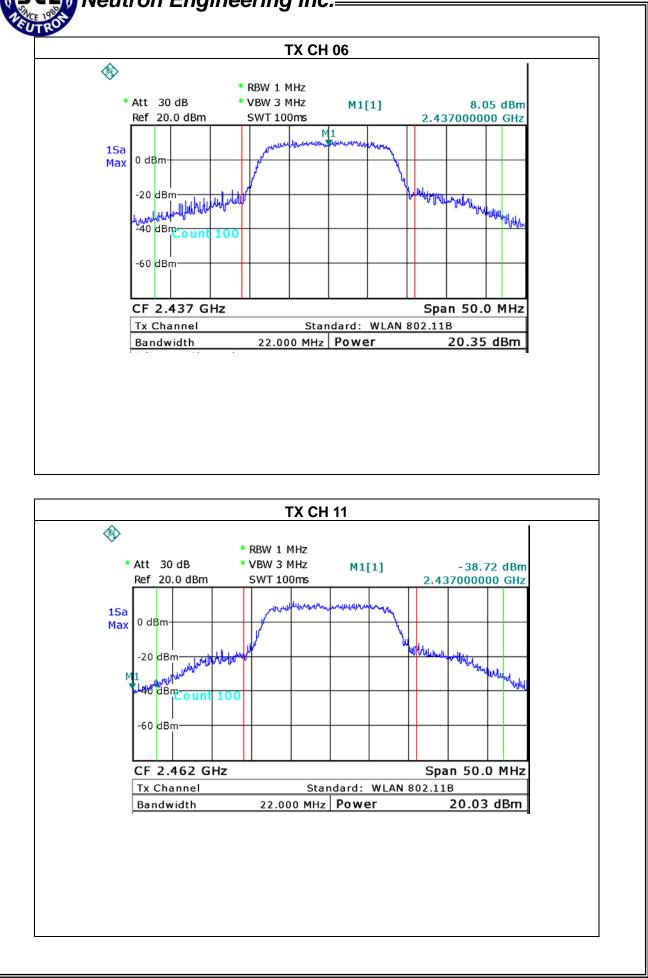




EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX G MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	19.96	30	1
CH06	2437 MHz	20.35	30	1
CH11	2462 MHz	20.03	30	1

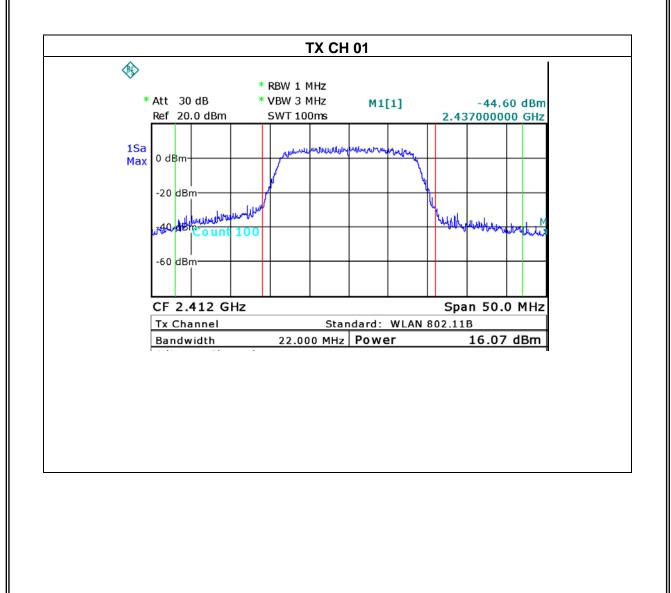


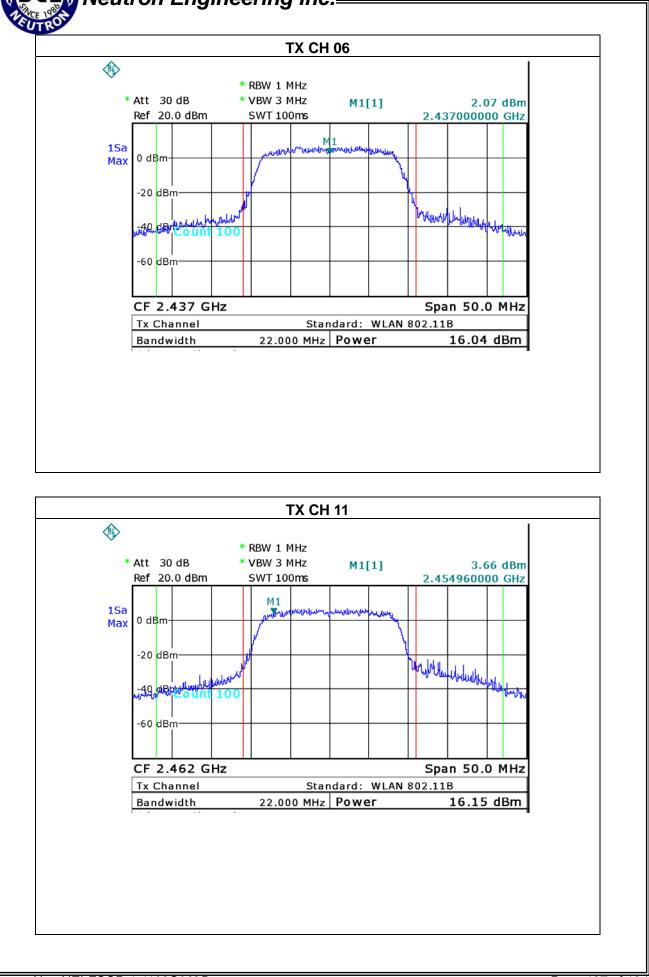




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-20M MODE /CH01, CH06, CH11-ANT1			

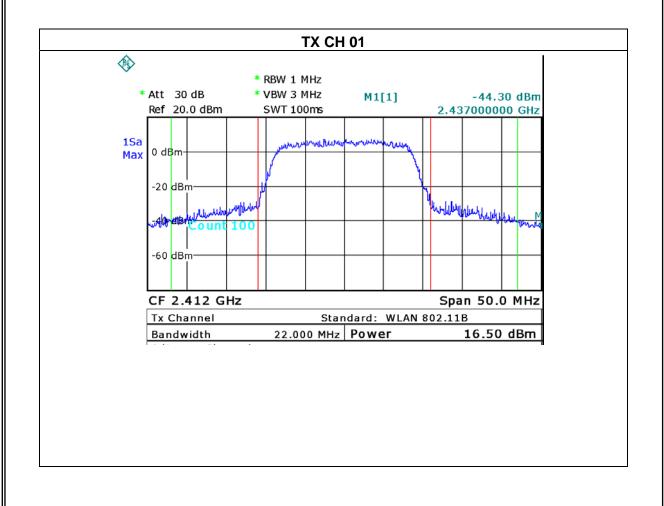
Test Channel	Frequency	Output Power	LIMIT	LIMIT
	(MHz)	(dBm)	(dBm)	(W)
CH01	2412 MHz	16.07	30	1
CH06	2437 MHz	16.04	30	1
CH11	2462 MHz	16.15	30	1

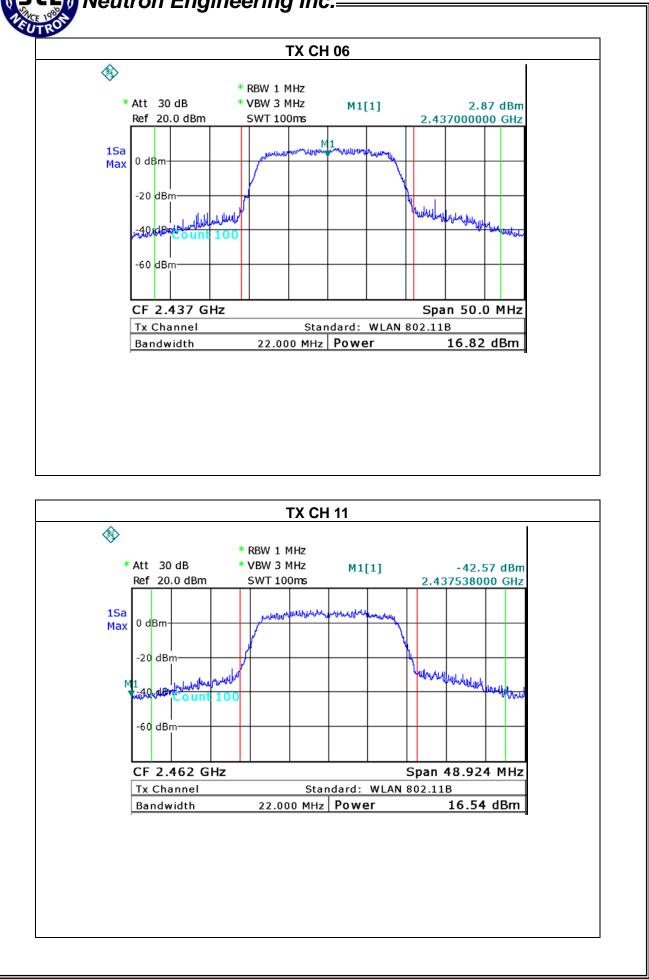




EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	Mode : TX N-20M MODE /CH01, CH06, CH11-ANT2			

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	16.50	30	1
CH06	2437 MHz	16.82	30	1
CH11	2462 MHz	16.54	30	1

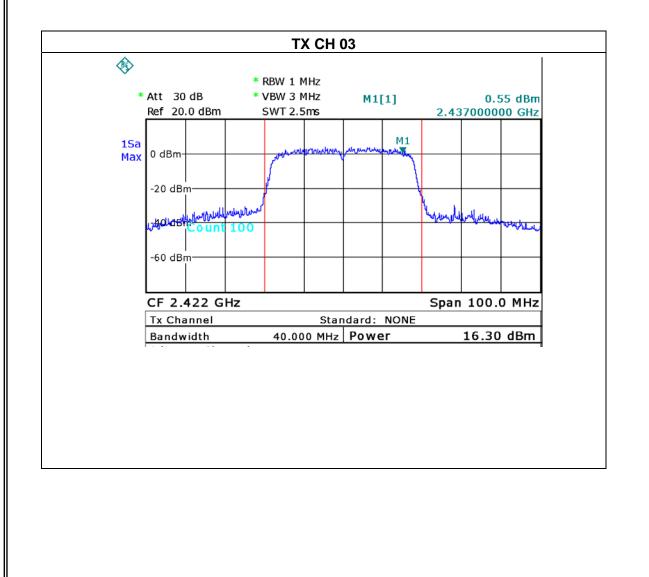


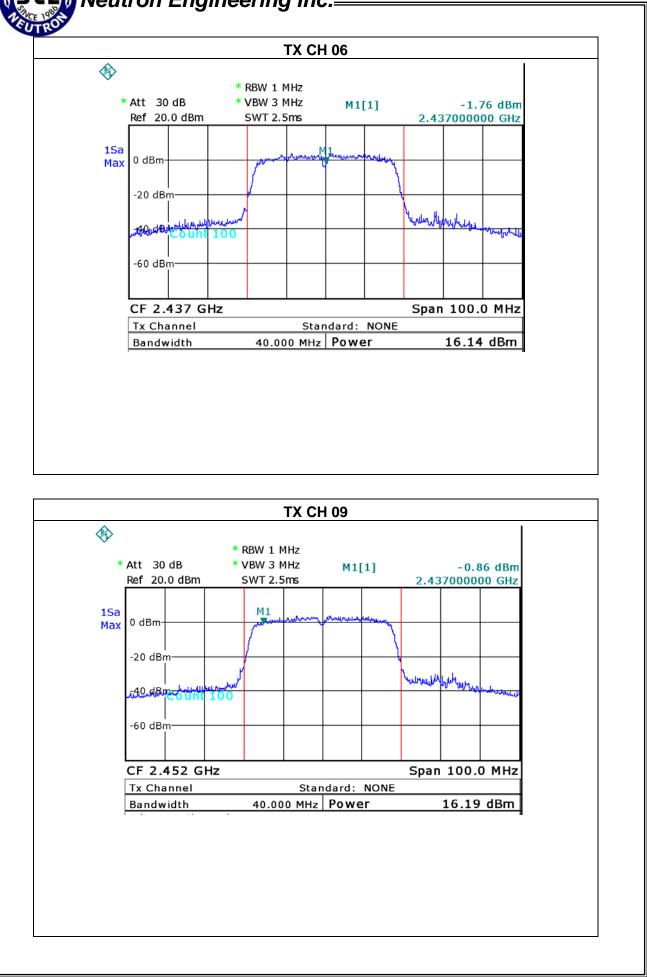




EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT 1			

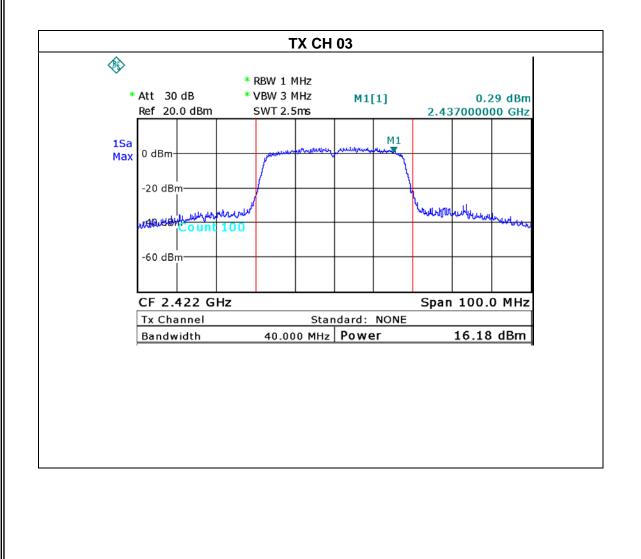
Test Channel	Frequency	Output Power		LIMIT
	(MHz)	(dBm)	(dBm)	(W)
CH03	2422 MHz	16.30	30	1
CH06	2437 MHz	16.14	30	1
CH09	2452 MHz	16.19	30	1

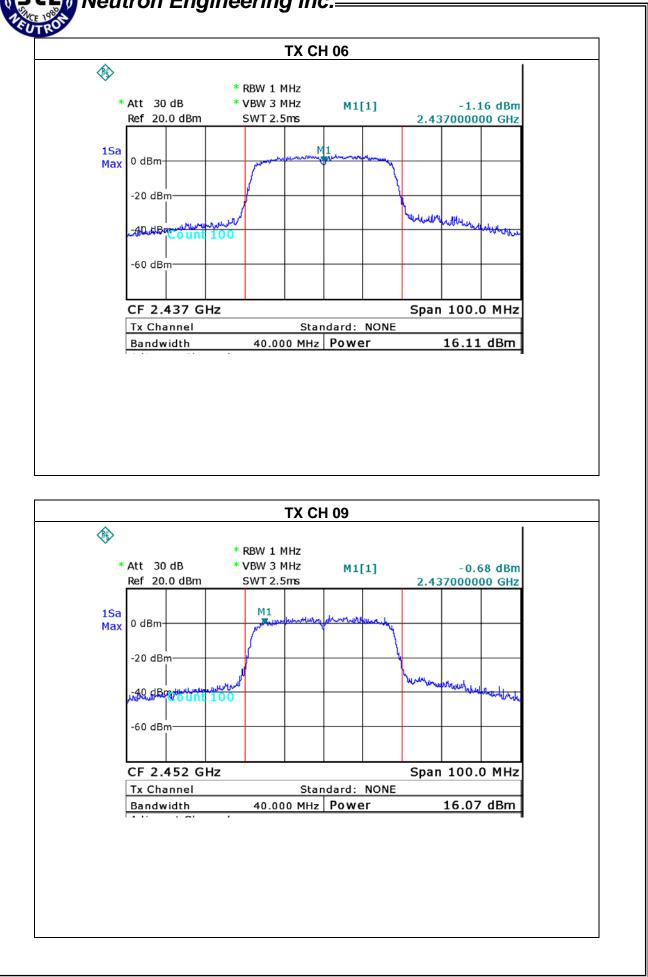




EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT 2			

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH03	2422 MHz	16.18	30	1
CH06	2437 MHz	16.11	30	1
CH09	2452 MHz	16.07	30	1







EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 - ANT 1+ ANT 2		

#### **Maximum Output Power**

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	19.30	30	1
CH06	2437 MHz	19.46	30	1
CH11	2462 MHz	19.36	30	1

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N	
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT 1+ ANT 2			

#### Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH03	2422 MHz	19.25	30	1
CH06	2437 MHz	19.14	30	1
CH09	2452 MHz	19.14	30	1

Note: Each antenna port was measured individually, and the aggregated power was summed up mathematically.

- (1) The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method. And after obtain each individual transmitter chain power, then sum the output power by using the following formula: ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.
  (2) Antenna Gain=3.88 dBi.



# 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	100185	Nov.26.2011

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

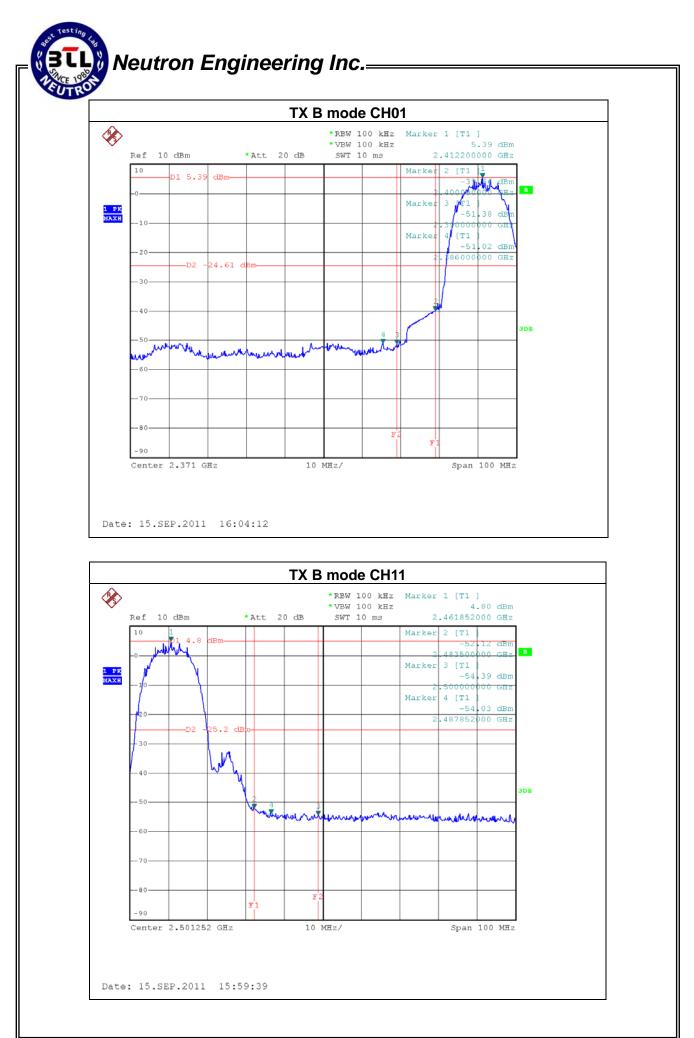
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

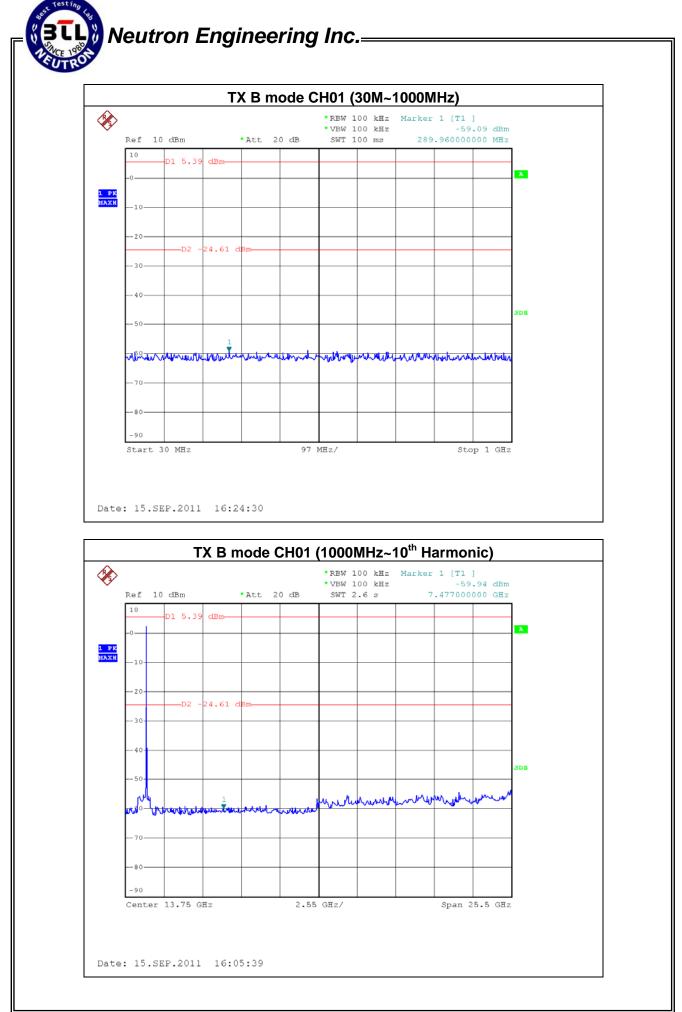


# 7.1.6 TEST RESULTS

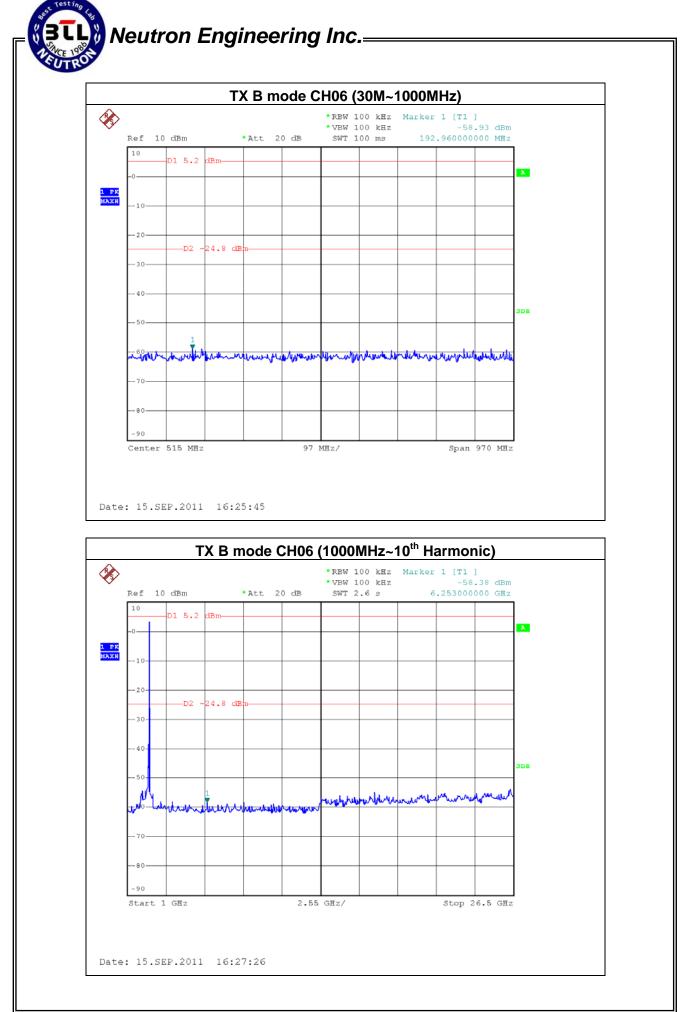
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> °C	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06 , CH11		

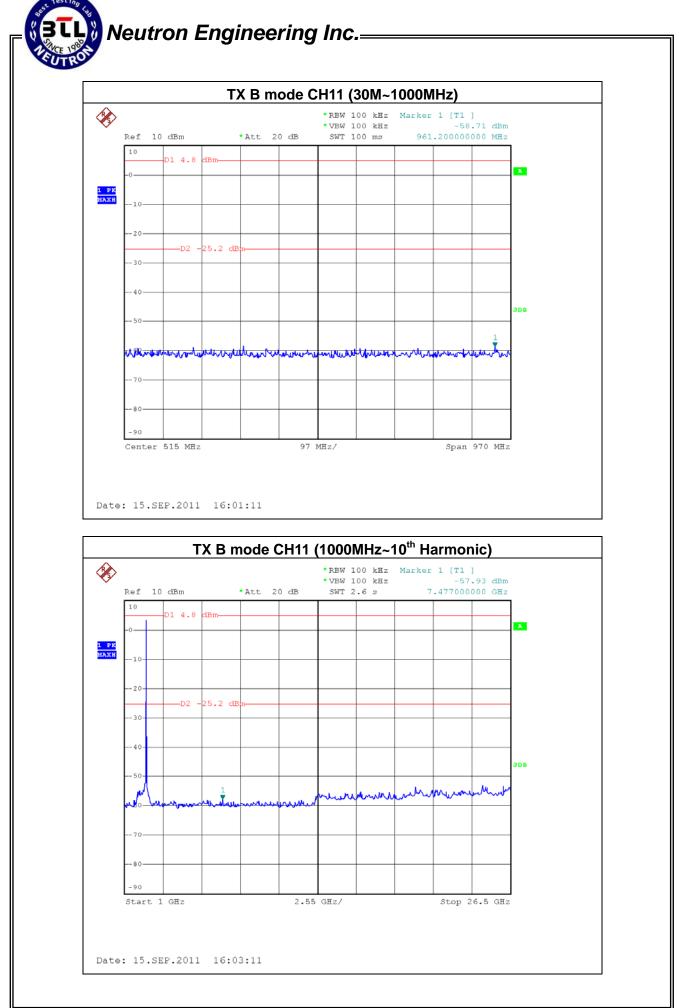
Channel of Worst Data: CH01				
The max. radio frequent bandwidth within the second		The max. radio frequenc bandwidth within th		
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -39.66 2483.50 -52.12				
Result				





Report No.: NEI-FCCP-1-1108C062B



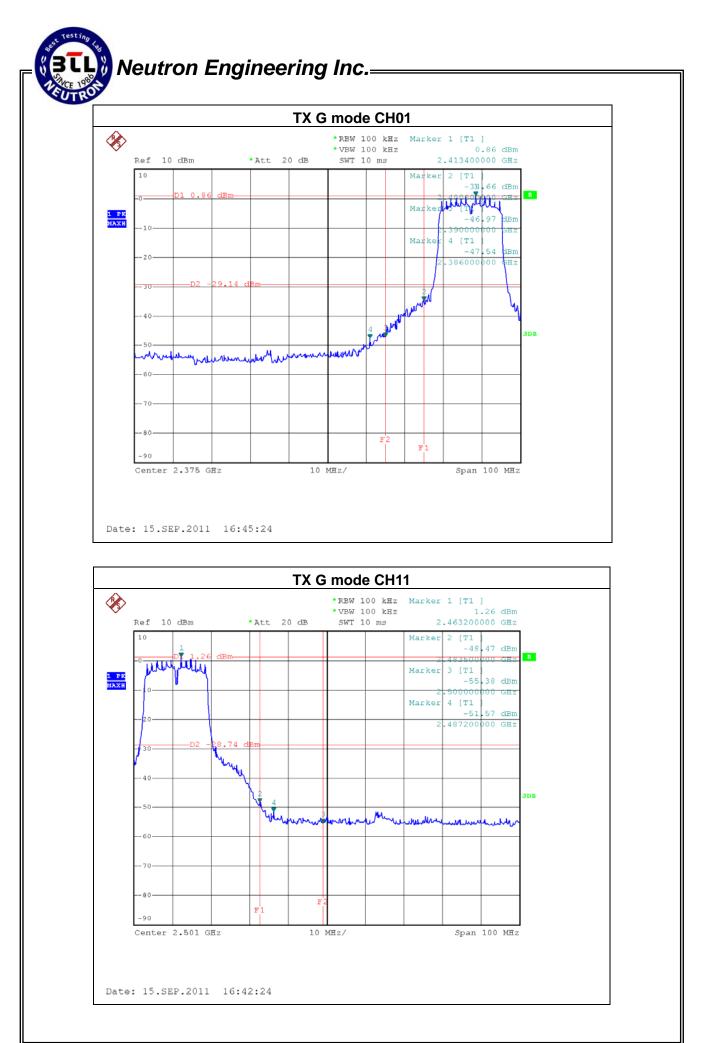


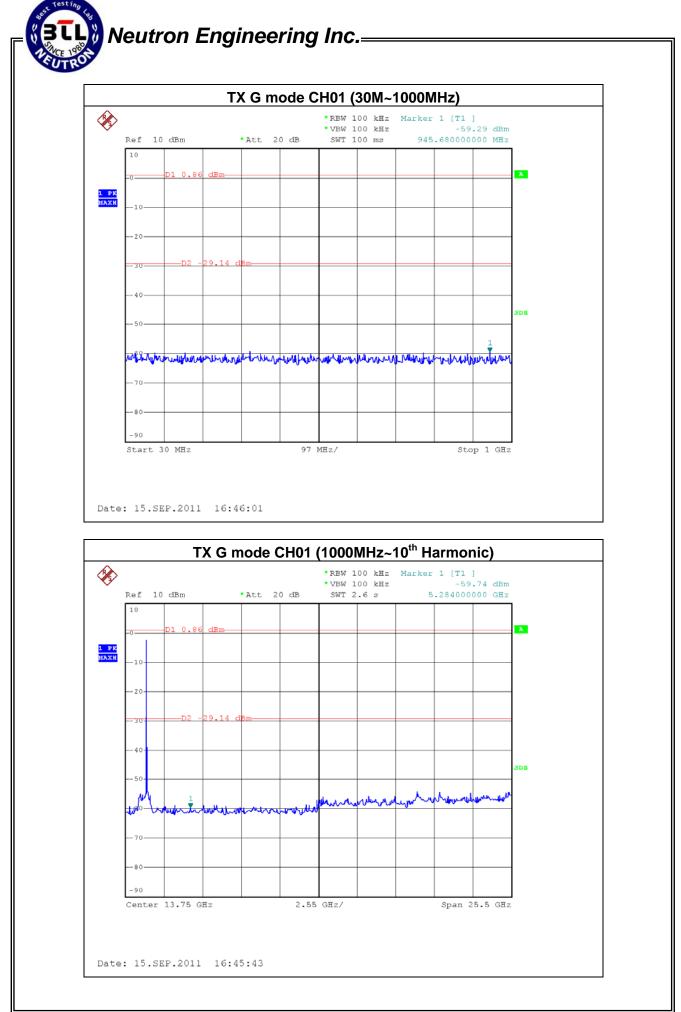
Report No.: NEI-FCCP-1-1108C062B



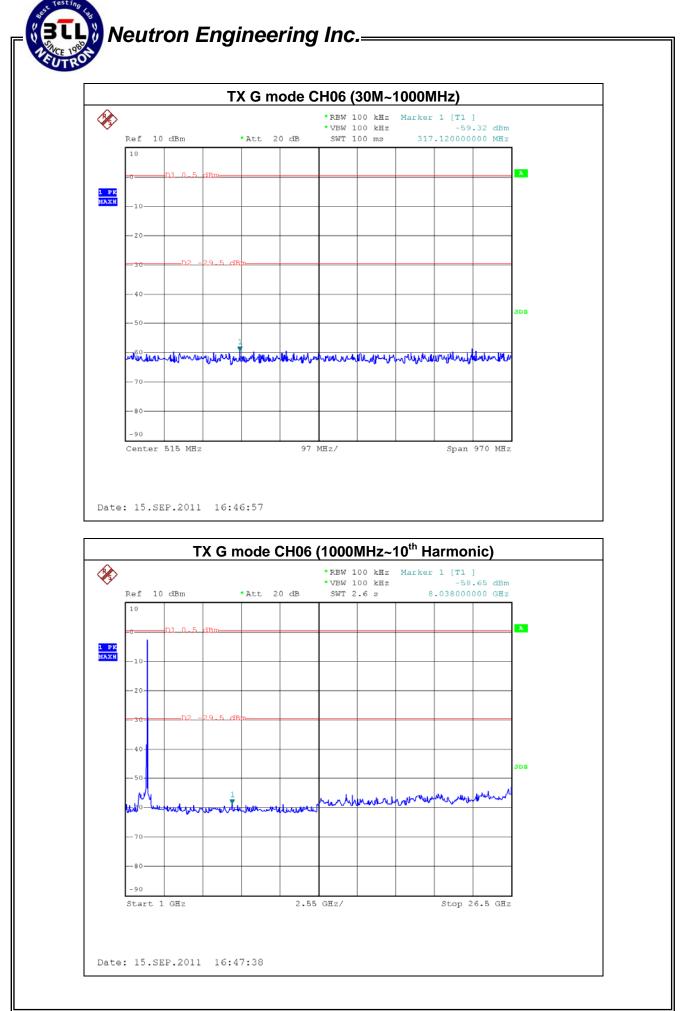
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06 , CH11		

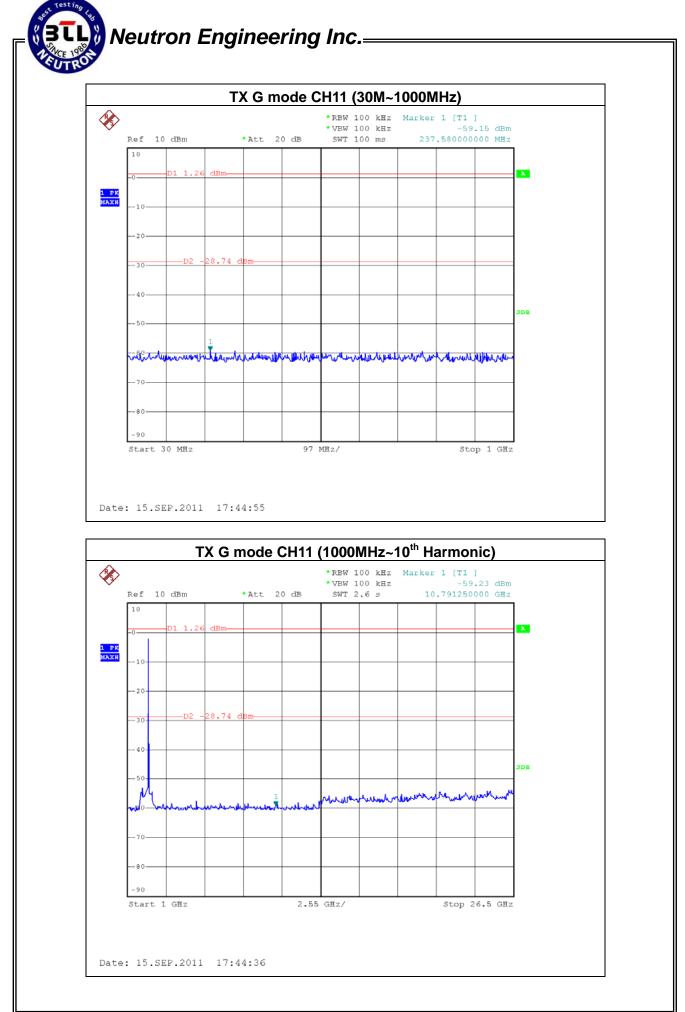
Channel of Worst Data: CH01				
The max. radio frequency power in any 100kHz The max. radio bandwidth within the frequency band bandwidth			cy power in any 100 kHz ne frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -34.66 2483.50 -48.47				
Result				





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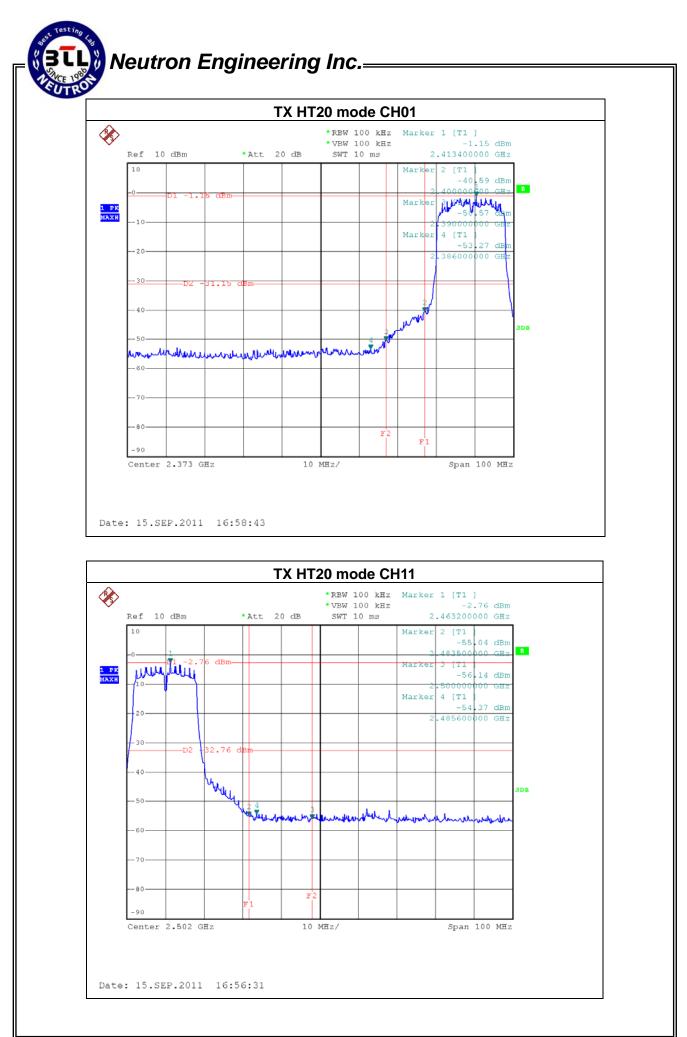


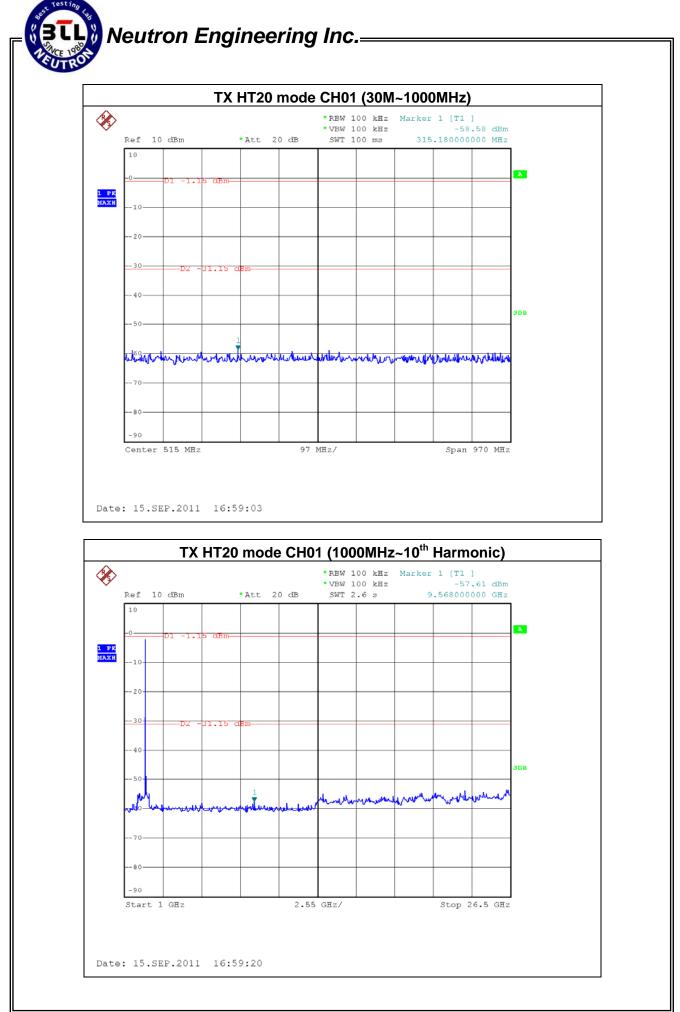




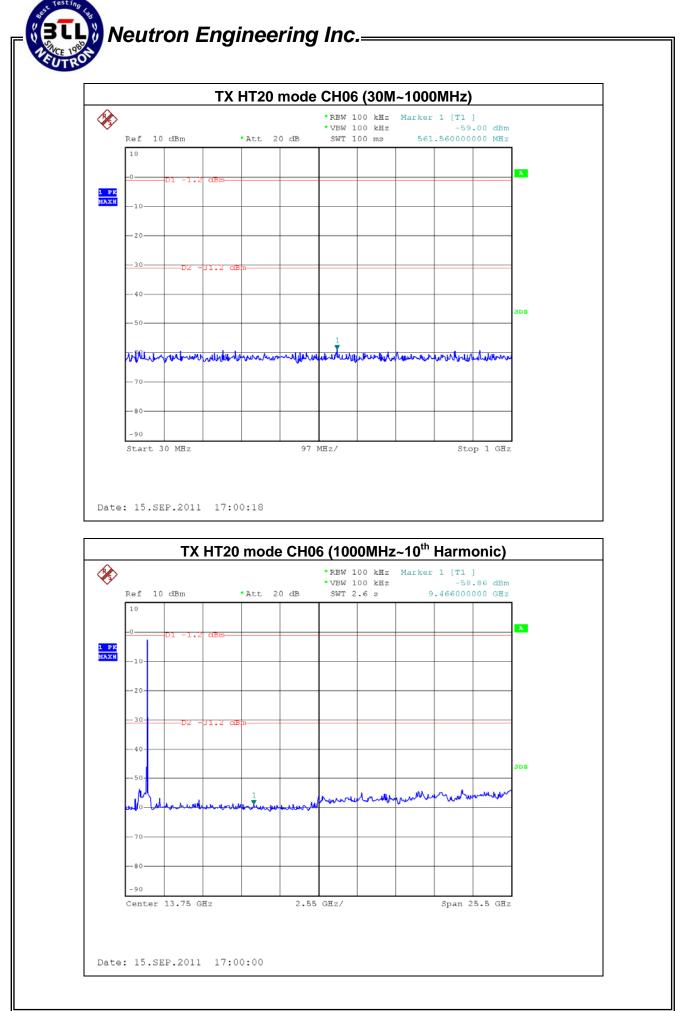
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11 ANT1 (Worst Case)		

Channel of Worst Data: CH01				
The max. radio frequency power in any 100kHz The max. radio frequency power in any 100 l bandwidth within the frequency band				
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -40.59 2485.60 -54.37				
Result				

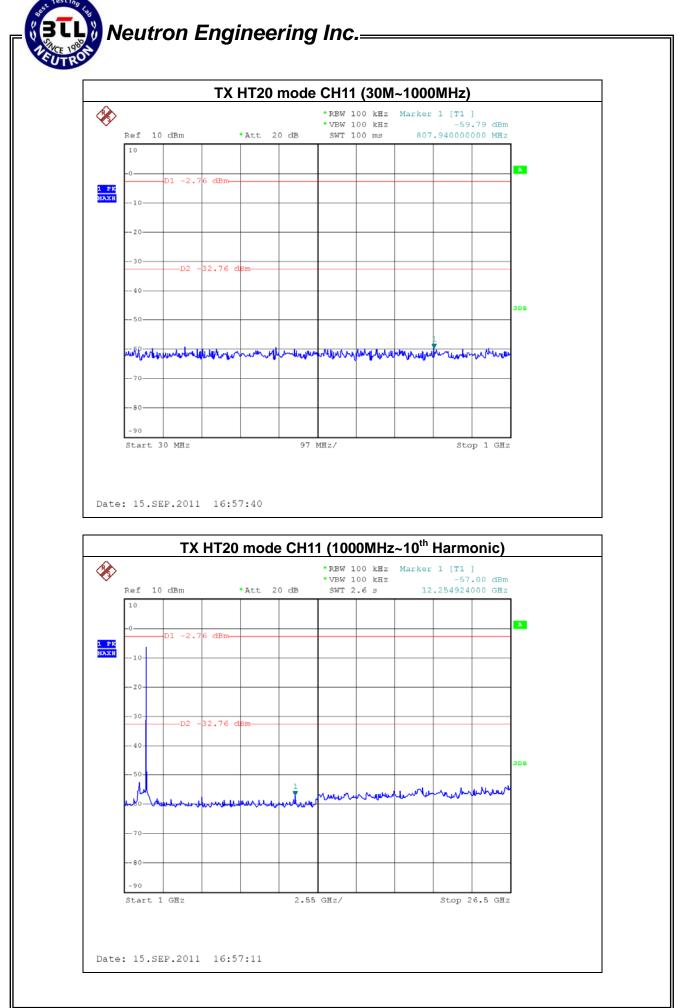




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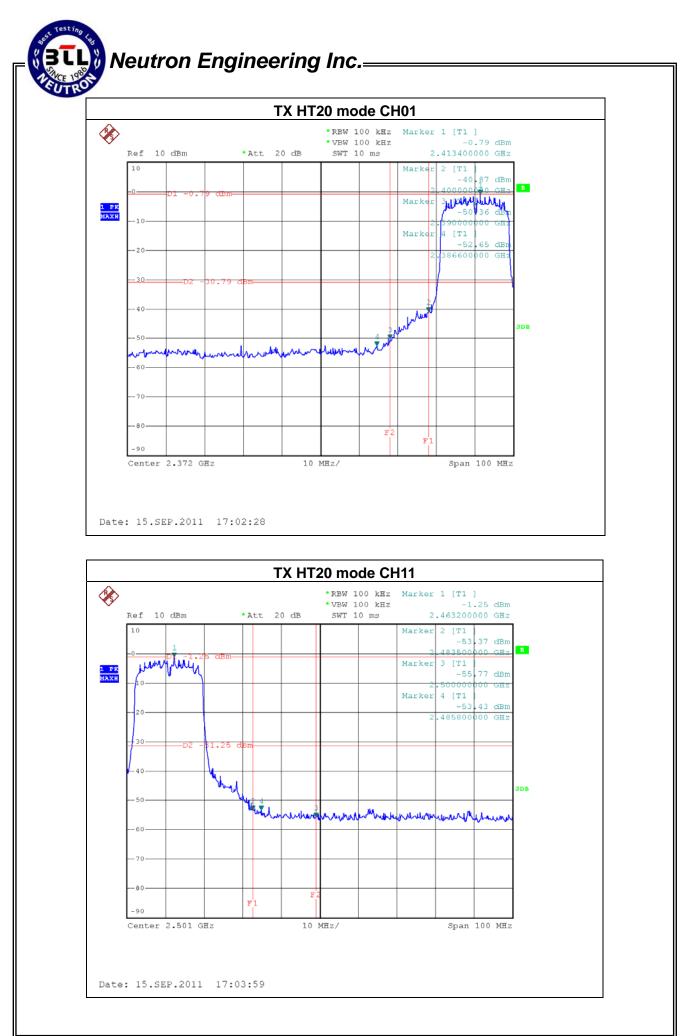


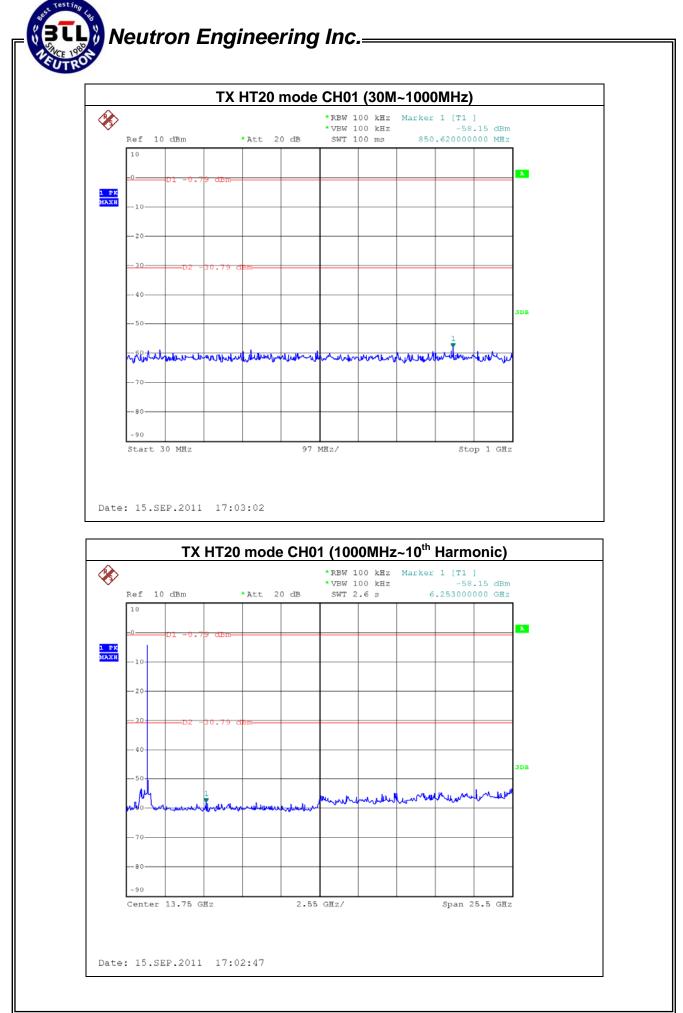
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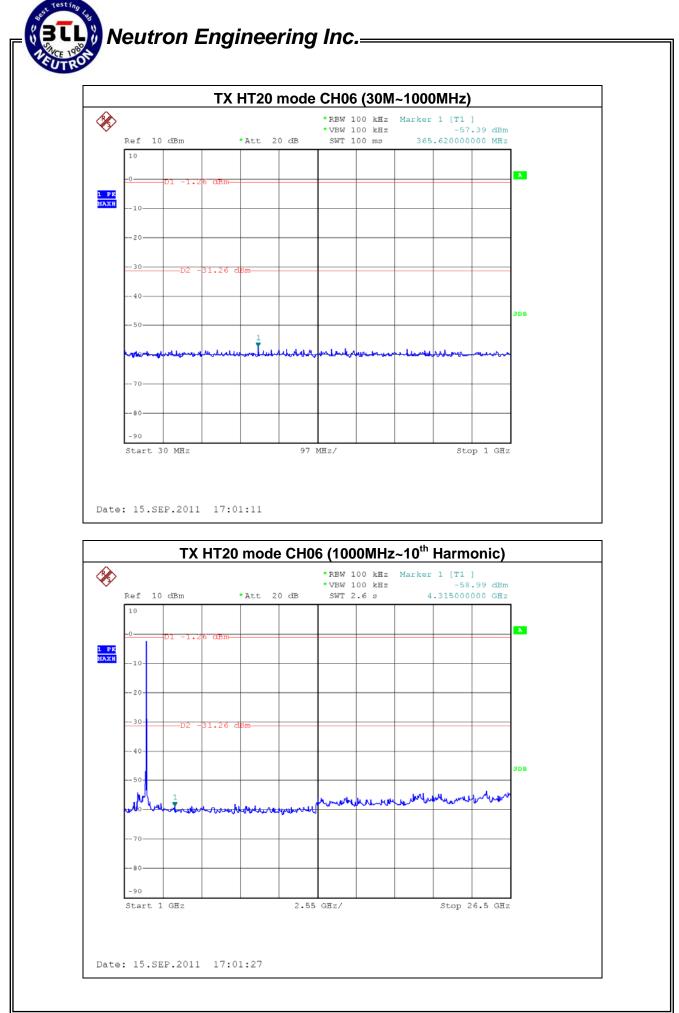


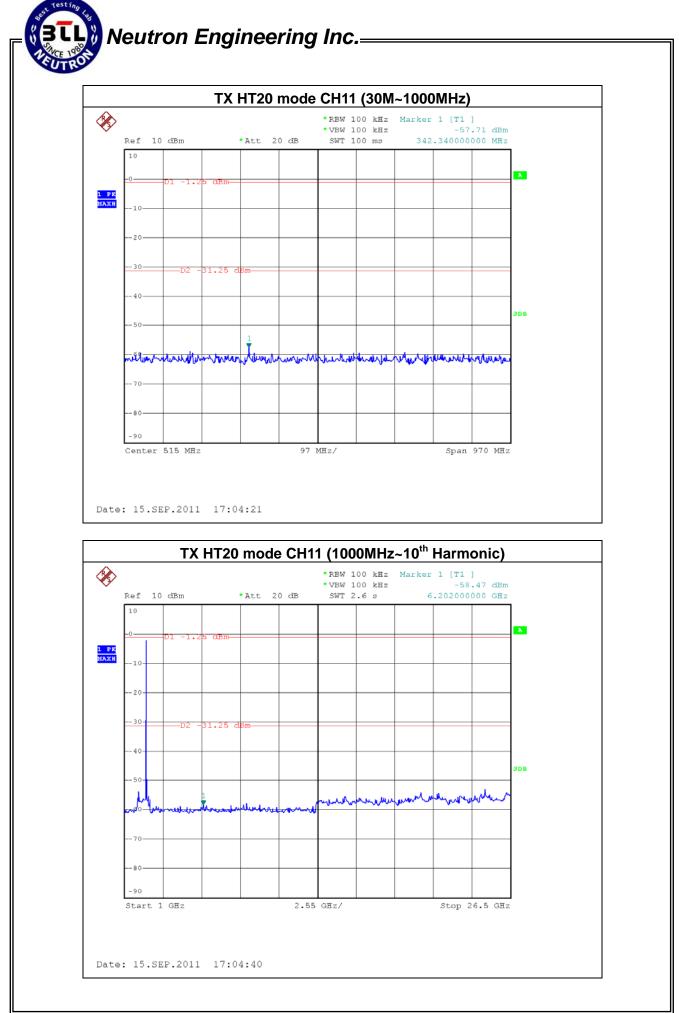
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> °C	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11 ANT2		

Channel of Worst Data: CH01				
•	cy power in any 100kHz ne frequency band	The max. radio frequency power in any 100 kHz bandwidth within the frequency band.		
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
2400.00 -40.87 2483.50 -53.37				
Result				





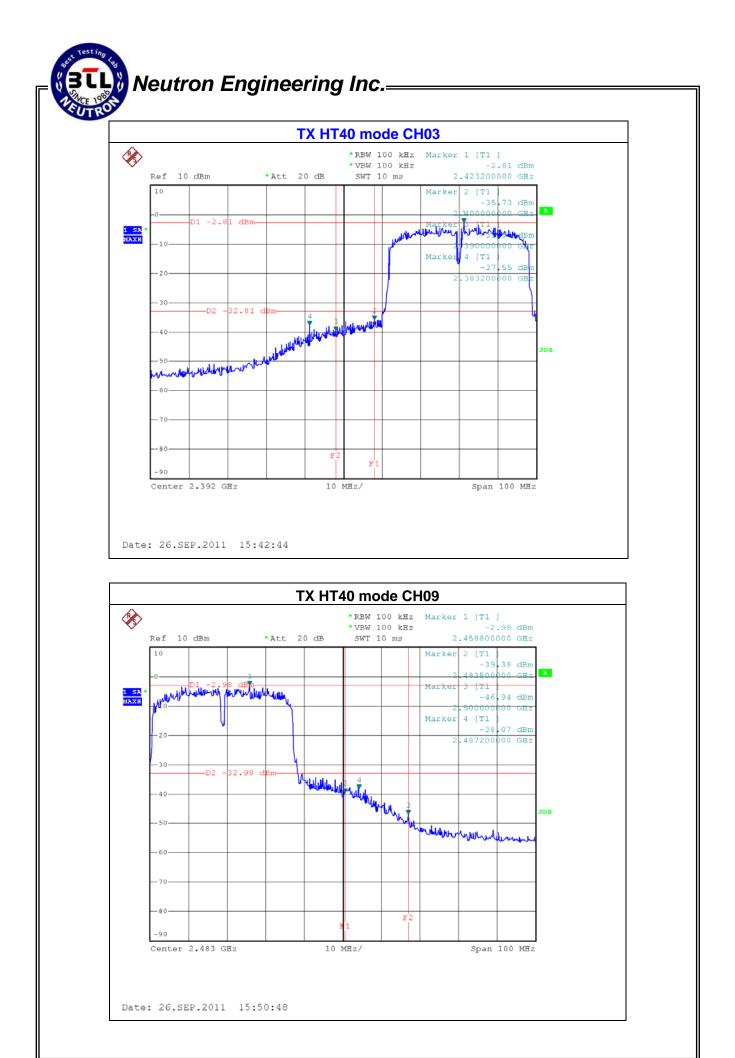




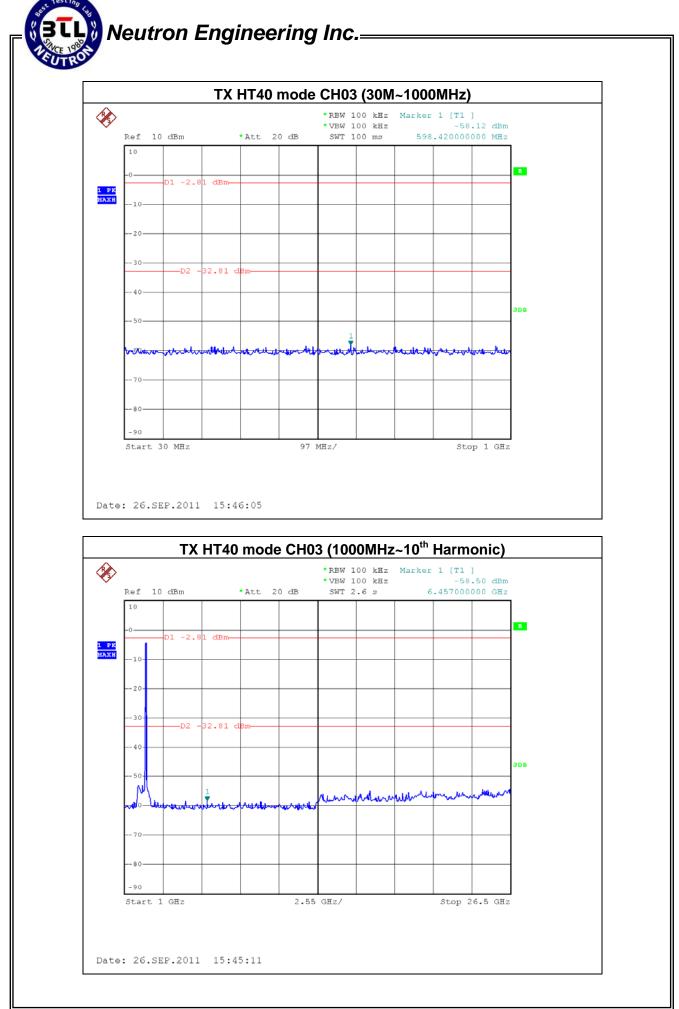


EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> °C	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 ANT1(Worst Case)		

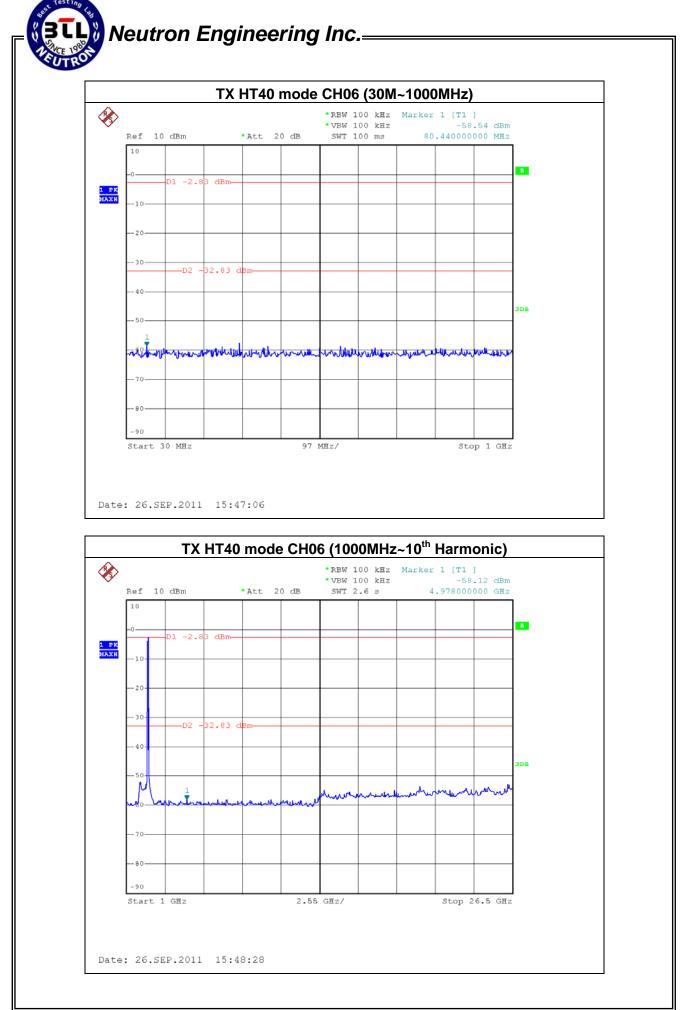
Channel of Worst Data: CH03				
The max. radio frequency power in any 100kHzThe max. radio frequency power in any 100 kHbandwidth within the frequency bandbandwidth outside the frequency band.				
FREQUENCY(MHz)POWER(dBm)FREQUENCY(MHz)POWER(dBm)				
2400.00 -35.73 2487.20 -38.07				
Result				

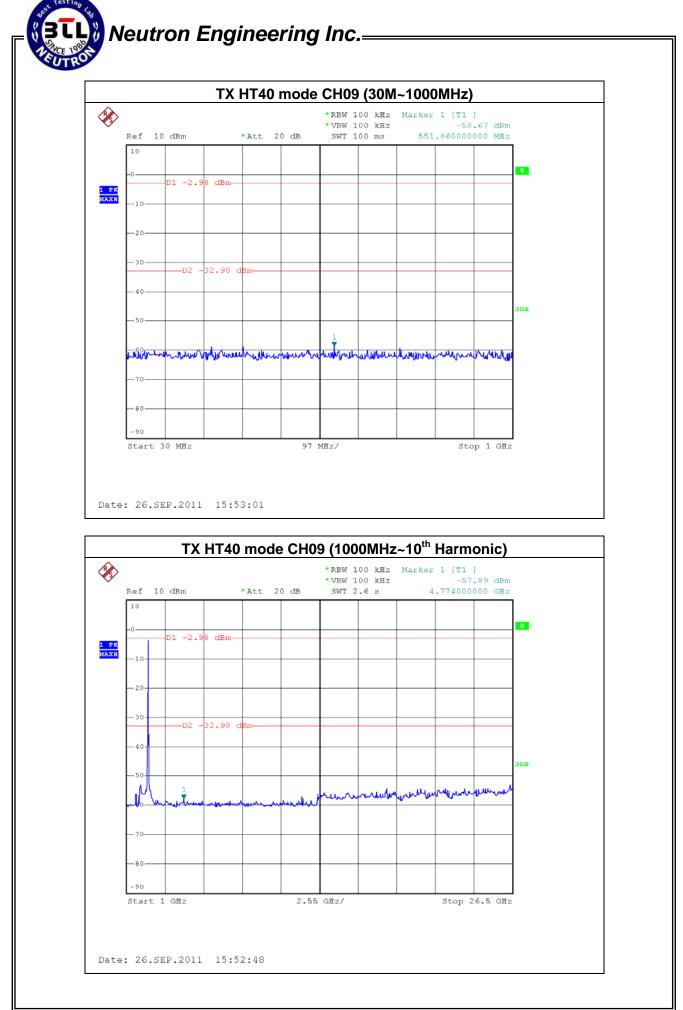


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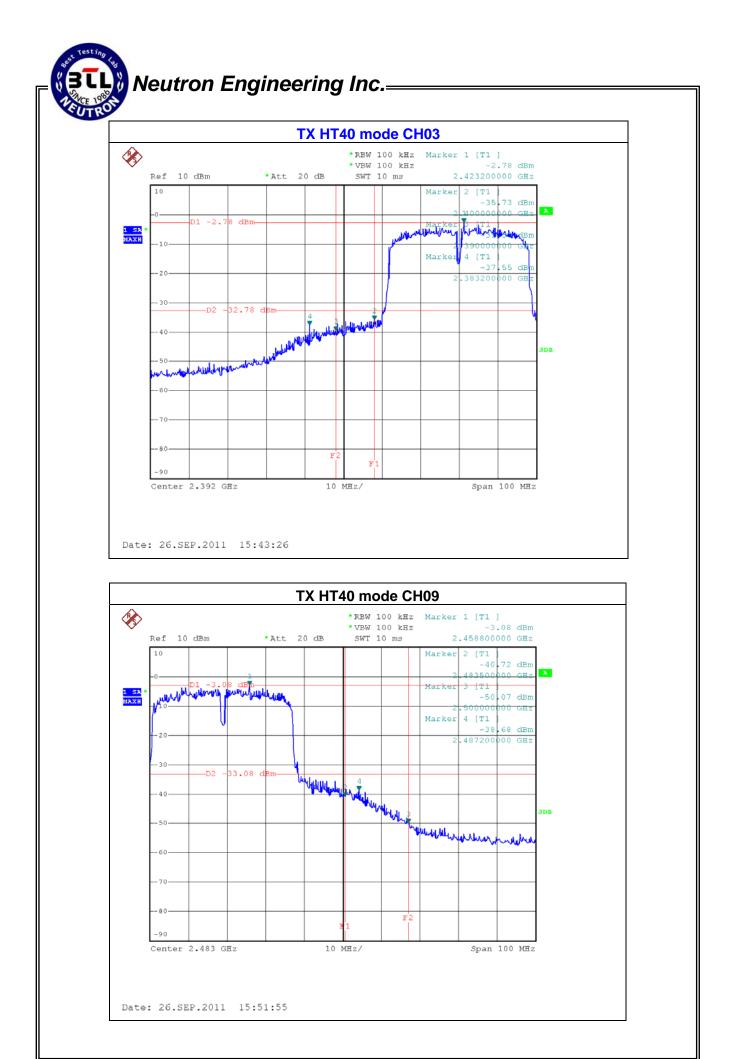


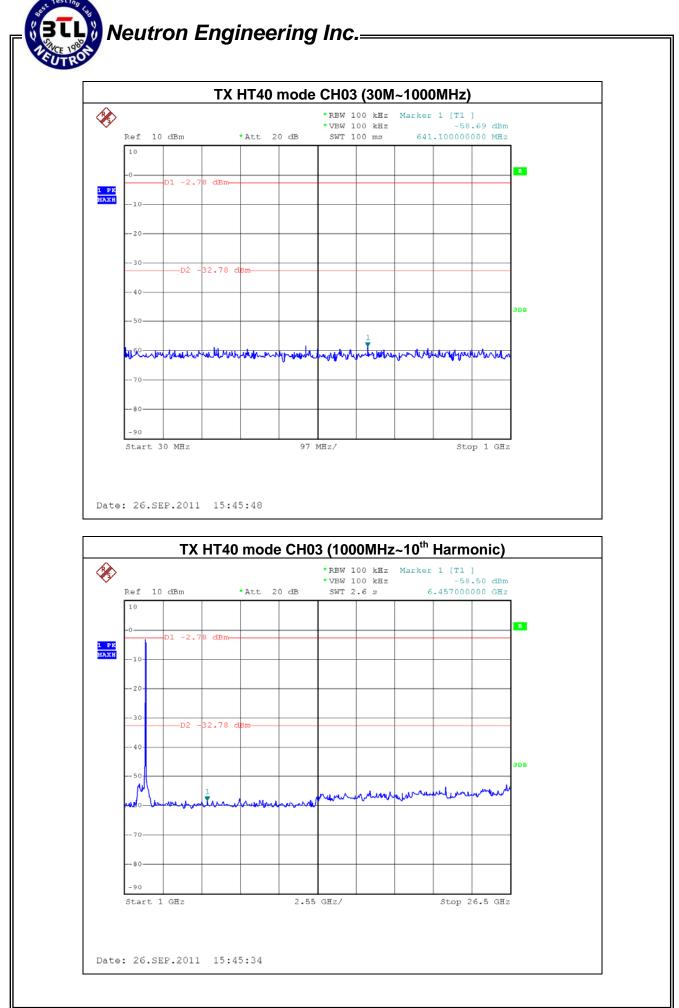




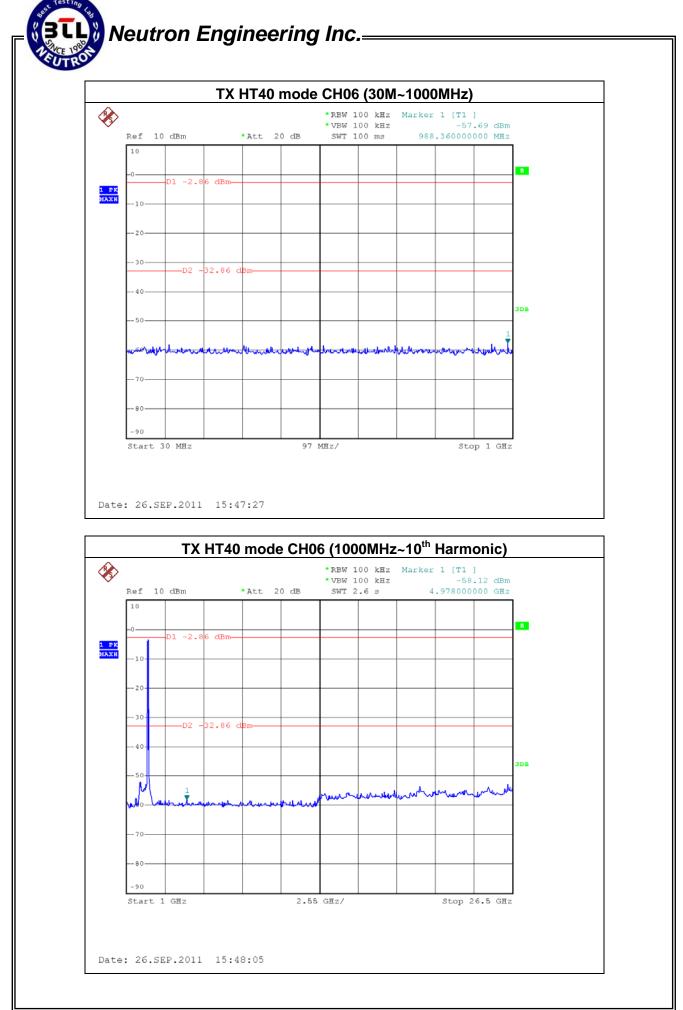
EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 ANT2		

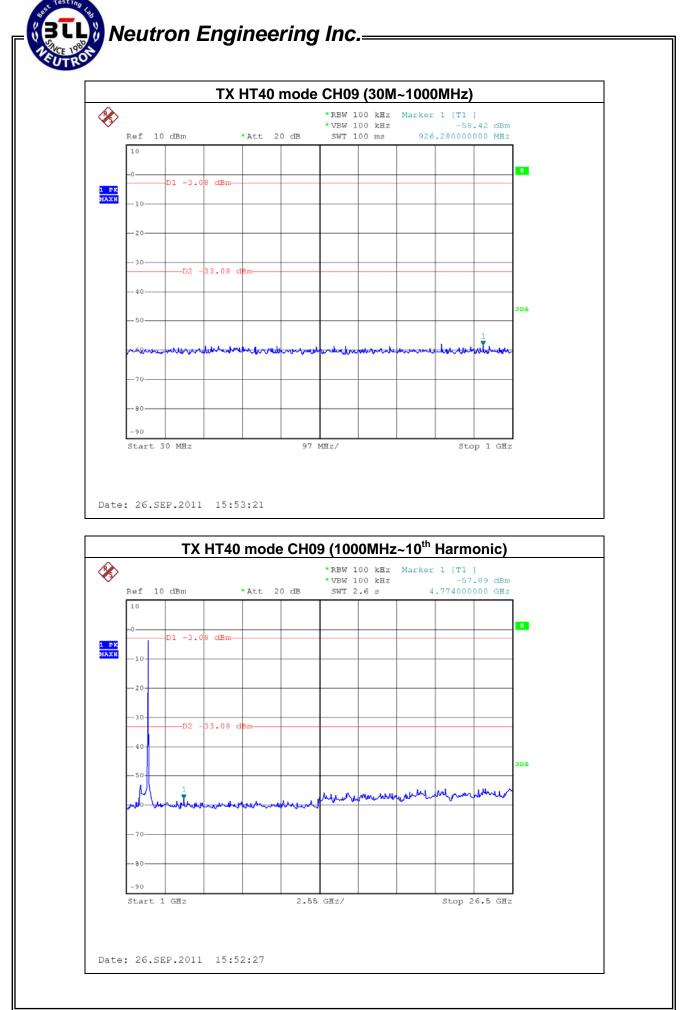
Channel of Worst Data: CH03					
The max. radio frequency power in any 100kHz bandwidth within the frequency band bandwidth outside the frequency band.					
FREQUENCY(MHz)         POWER(dBm)         FREQUENCY(MHz)         POWER(dBm)					
2400.00 -35.73 2487.20 -38.68					
Result					





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# Neutron Engineering Inc.

# 8. POWER SPECTRAL DENSITY TEST

# 8.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	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	100185	Nov.26.2011

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



# 8.1.5 EUT OPERATION CONDITIONS

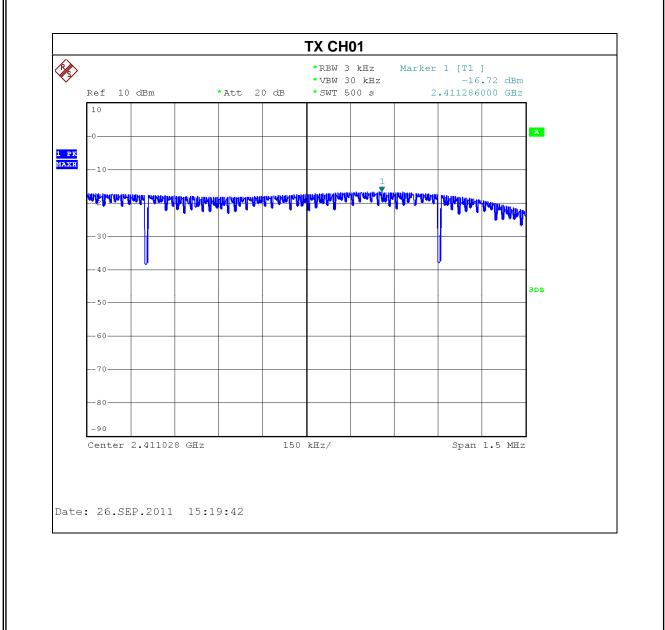
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

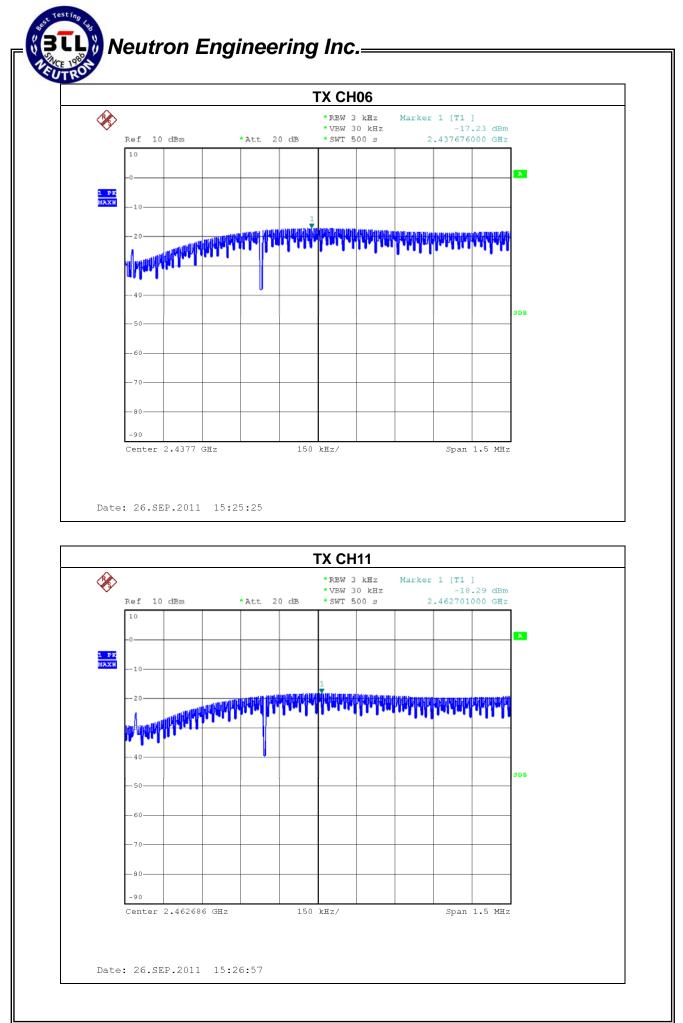


# 8.1.6 TEST RESULTS

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-16.72	8
CH06	2437 MHz	-17.23	8
CH11	2462 MHz	-18.29	8

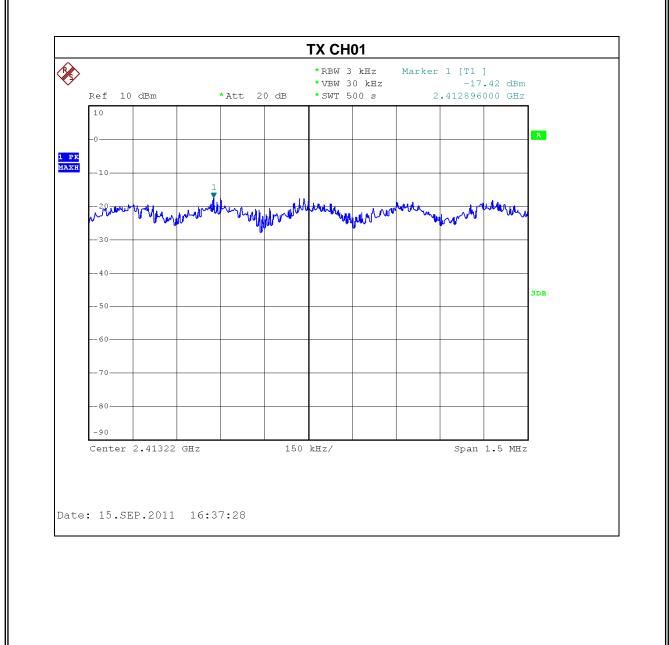


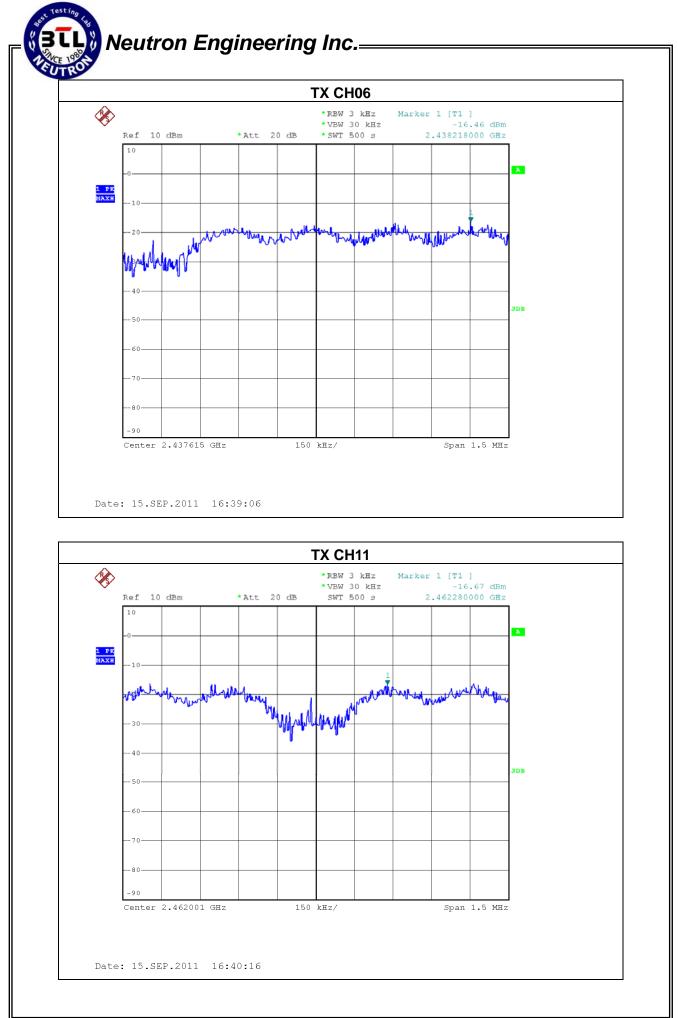




EUT:	300Mbps Wireless N Router	Model Name :	FWR-734N
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-17.42	8
CH06	2437 MHz	-16.46	8
CH11	2462 MHz	-16.67	8







EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N		
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %		
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11				

Ant 1						
Test Channel	ChannelFrequency (MHz)Power density (dBm)			LIMIT (dBm)	PASS/FAIL	
CH01	2412	-19.68	0.01076	8	PASS	
CH06	2437	-19.68	0.01076	8	PASS	
CH11	2462	-19.50	0.01122	8	PASS	

Ant 2							
Test Channel	Frequency Power density (MHz) (dBm) (mW)			LIMIT (dBm)	PASS/FAIL		
CH01	2412	-17.80	0.01660	8	PASS		
CH06	2437	-17.62	0.01730	8	PASS		
CH11	2462	-17.60	0.01738	8	PASS		

Total (Ant 1 + Ant 2)							
Test Channel	Frequency (MHz)	Power (dBm)	<sup>r</sup> density (mW)	LIMIT (dBm)	PASS/FAIL		
CH01	2412	-15.63	0.027361	8	PASS		
CH06	2437	-15.52	0.028063	8	PASS		
CH11	2462	-15.44	0.028598	8	PASS		

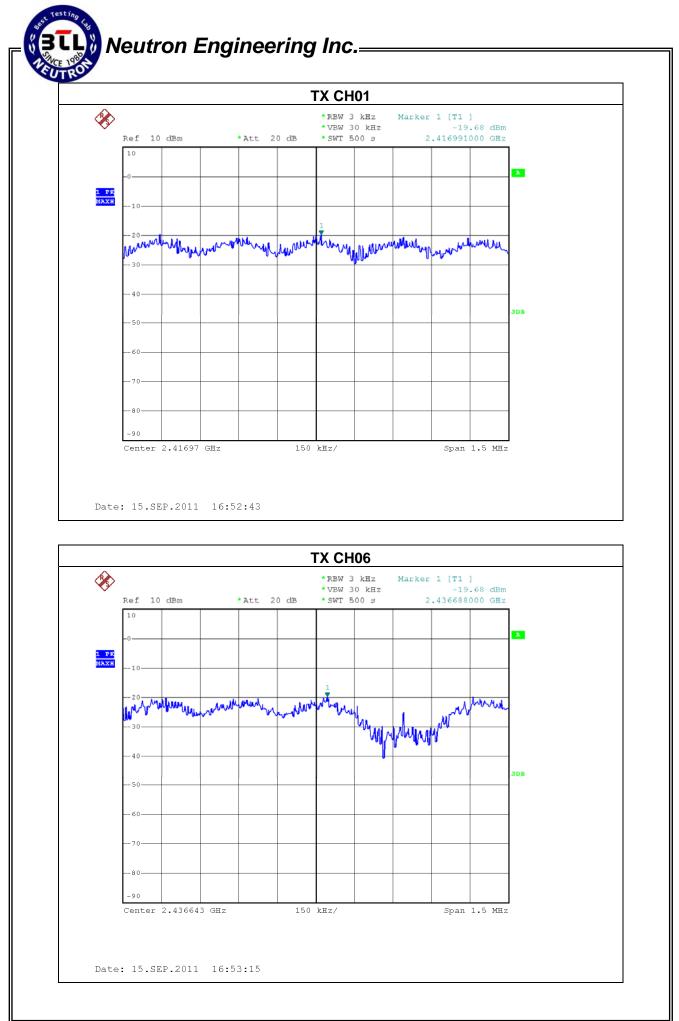
Remark :

(1) The MIMO test requirement, RF power density shall measure each transmitter chain by using channel power density method.

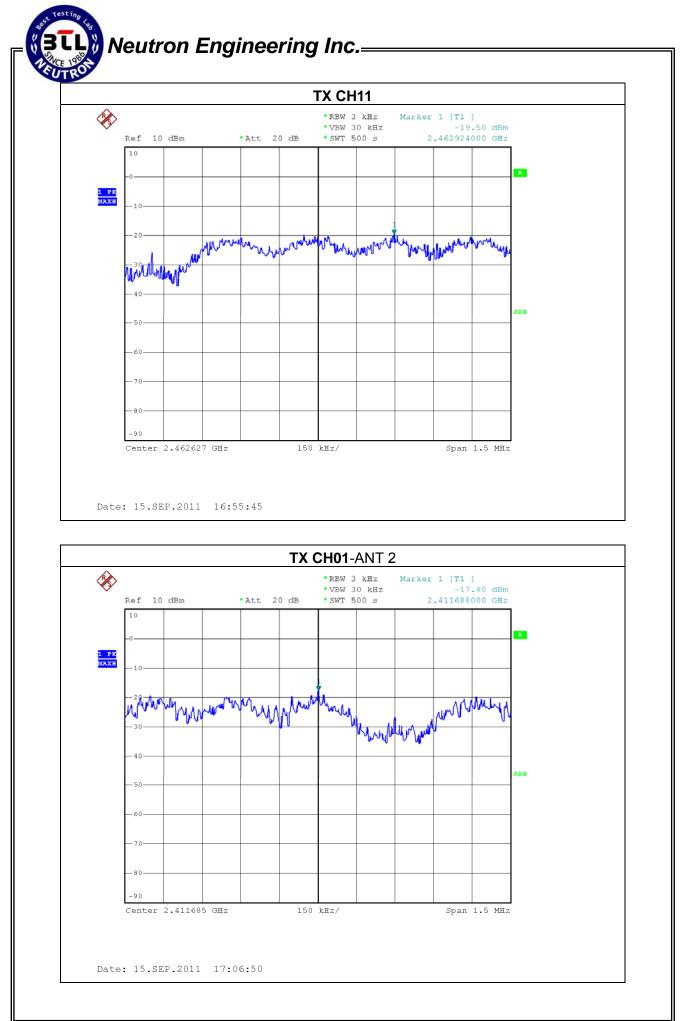
And after obtain each individual transmitter chain power density, then sum the power density by using the following formula:

((dBm/Chain 1)/10<sup>L</sup>og) + ((dBm/Chain 2)/10<sup>l</sup>og) + ((dBm/ChainN)/10<sup>l</sup>og) = Combined power density in mW.

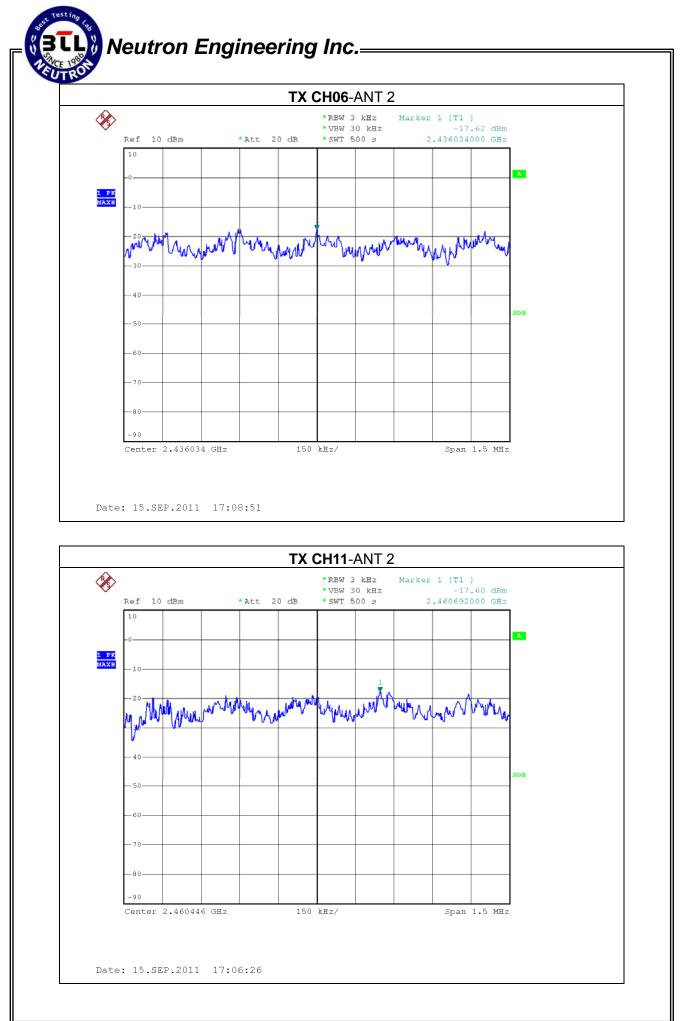
(2) Antenna Gain=3.88 dBi.



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## Neutron Engineering Inc.=

EUT :	300Mbps Wireless N Router	Model Name :	FWR-734N		
Temperature :	<b>24</b> ℃	Relative Humidity:	60 %		
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09				

Ant 1							
Test ChannelFrequencyPower density(MHz)(dBm)(mW)				LIMIT (dBm)	PASS/FAIL		
CH03	2422	-20.77	0.008375	8	PASS		
CH06	2437	-20.65	0.008610	8	PASS		
CH09	2452	-19.81	0.010447	8	PASS		

Ant 2							
Test Channel	Frequency Power density (MHz) (dBm) (mW)			LIMIT (dBm)	PASS/FAIL		
CH03	2422	-20.85	0.008222	8	PASS		
CH06	2437	-20.66	0.008590	8	PASS		
CH09	2452	-19.78	0.010520	8	PASS		

Total (Ant 1 + Ant 2)							
Test Channel	Frequency (MHz)				PASS/FAIL		
CH03	2422	-17.80	0.016598	8	PASS		
CH06	2437	-17.64	0.017200	8	PASS		
CH09	2452	-16.78	0.020967	8	PASS		

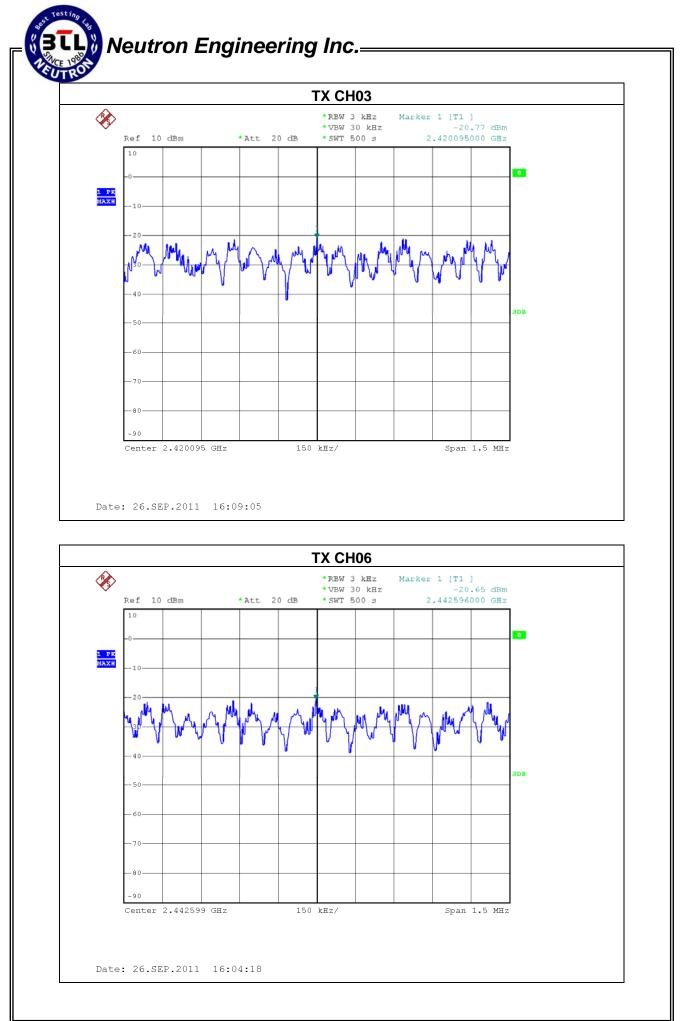
Remark :

(1) The MIMO test requirement, RF power density shall measure each transmitter chain by using channel power density method.

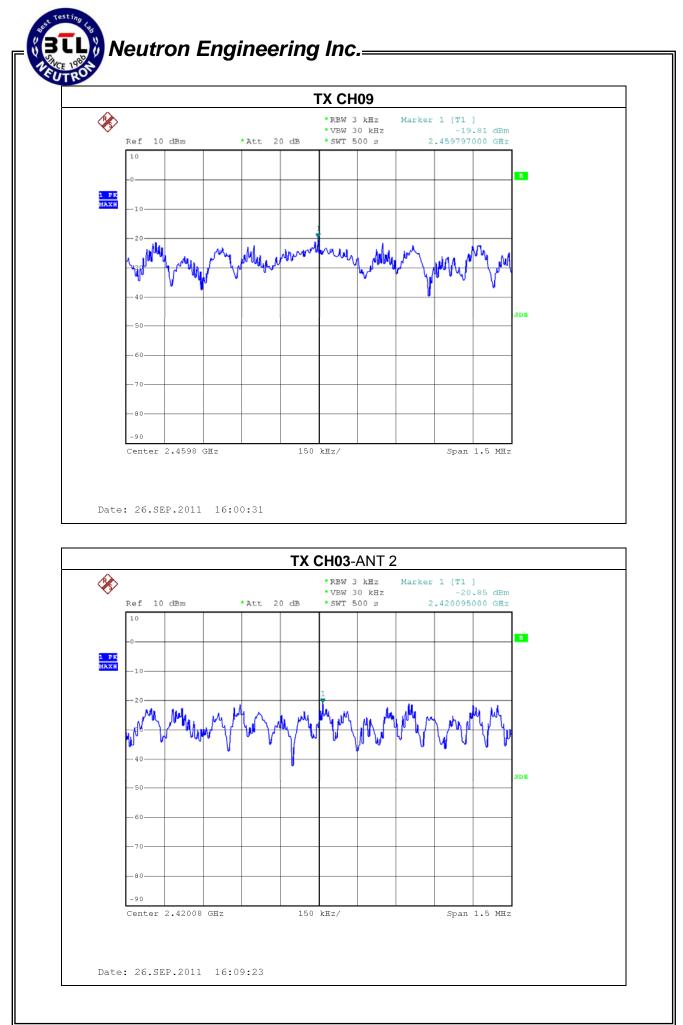
And after obtain each individual transmitter chain power density, then sum the power density by using the following formula:

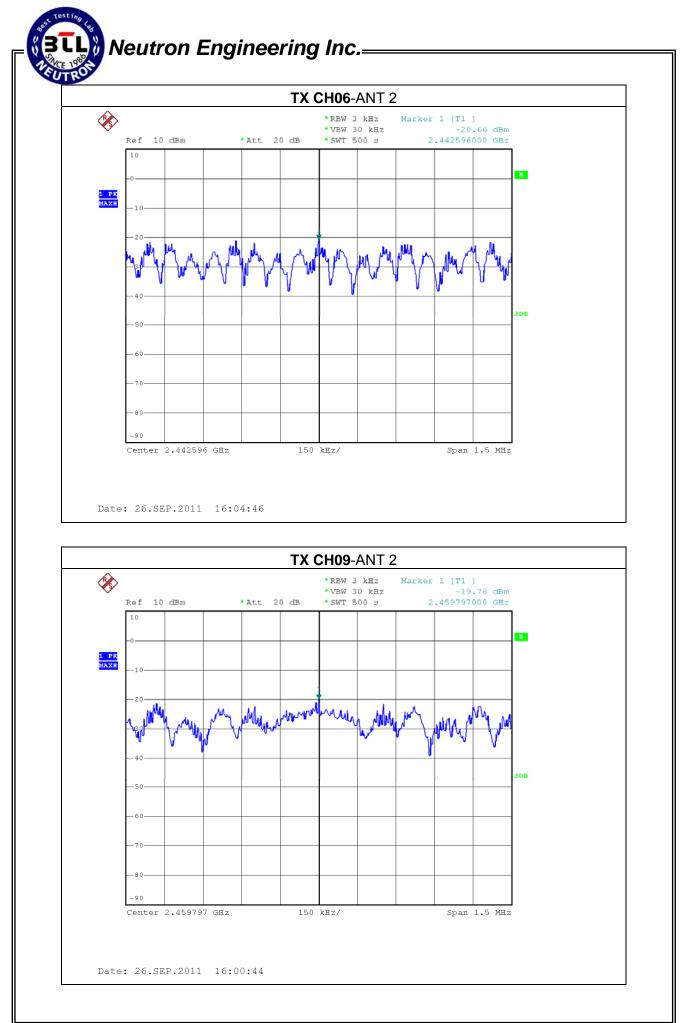
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined power density in mW.

(2) Antenna Gain=3.88 dBi.

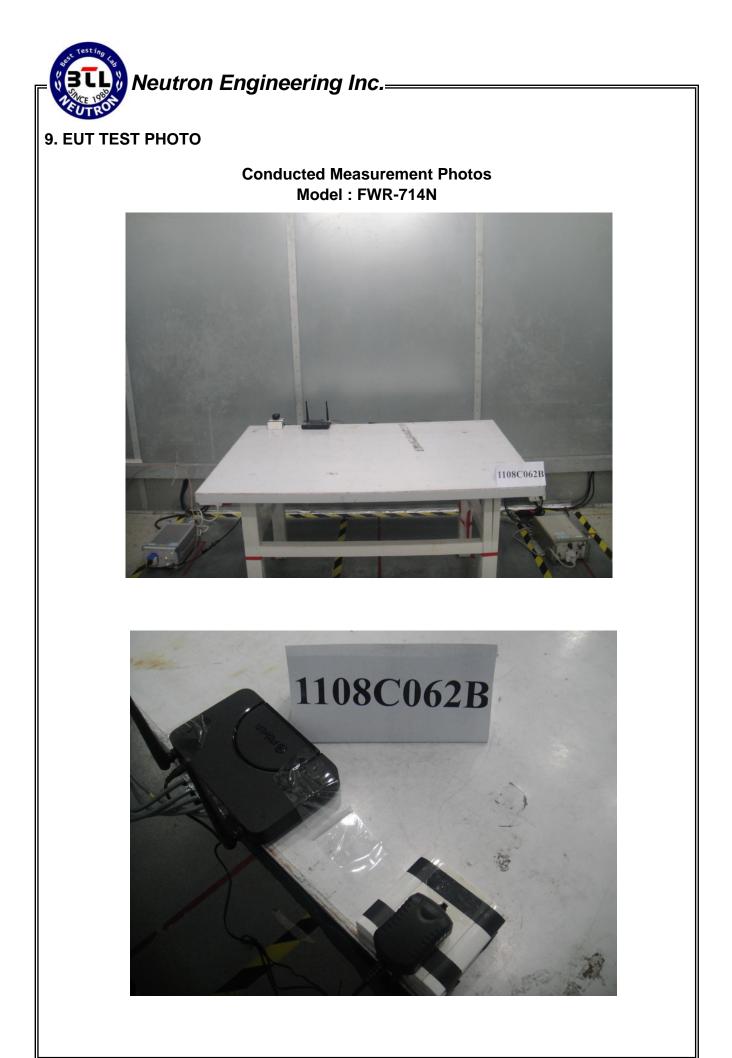


Report No.: NEI-FCCP-1-1108C062B



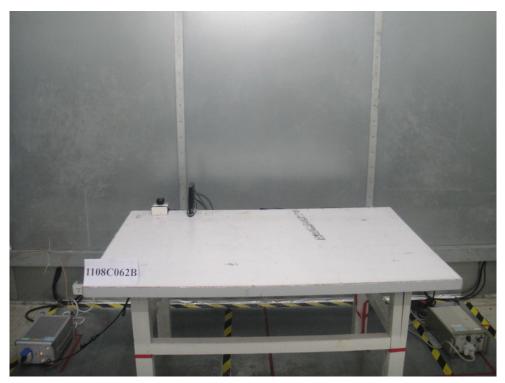


Report No.: NEI-FCCP-1-1108C062B





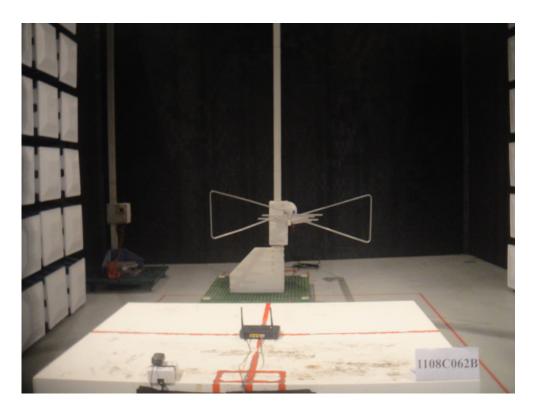
## Conducted Measurement Photos Model : FWR-734N

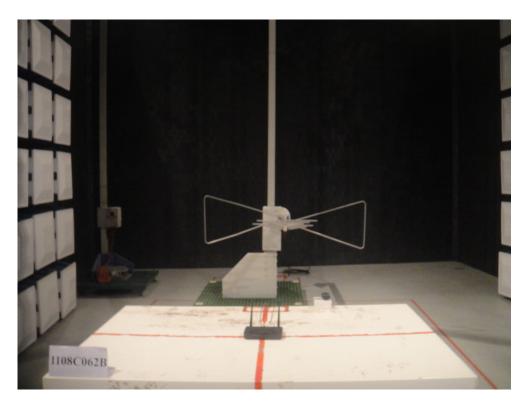






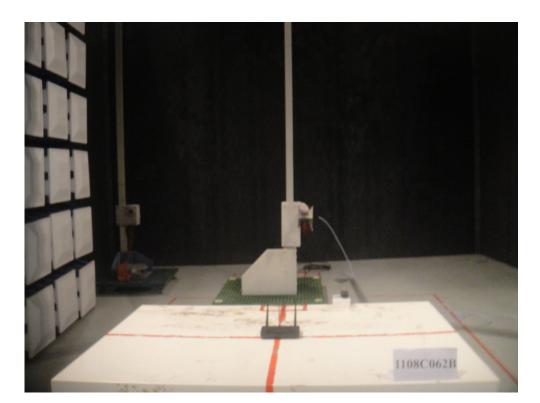
Radiated Measurement Photos 30-1000MHZ (Model : FWR-714N)

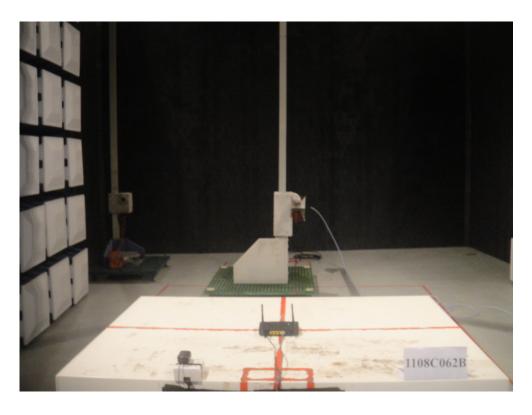






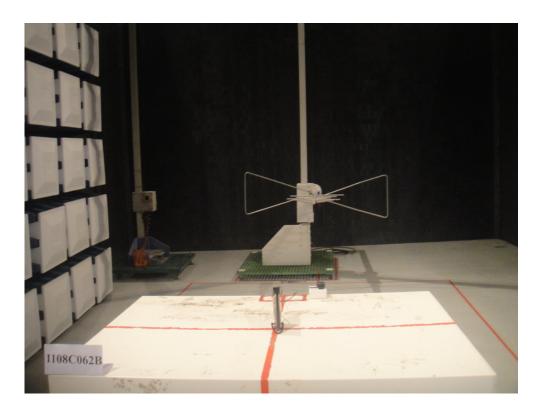
Radiated Measurement Photos Above 1000MHZ (Model : FWR-714N)

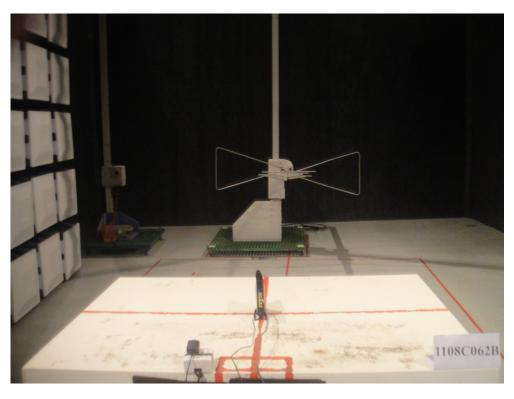






Radiated Measurement Photos 30-1000MHz (Model : FWR-734N)







Radiated Measurement Photos Above 1000MHz (Model : FWR-734N)

