

FCC Radio Test Report FCC ID: YJYWR401NA

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

Issued Date	: Mar. 13, 2012
Project No.	: 1202C179
Equipment	: Wireless Nano Router
Model Name	: M1
Applicant	: Shanghai Feixun Communication Co., Ltd.
Address	: Wing B, 15/F, GDC Building, NO.9 Gaoxinzhong 3rd Ave., Nanshan, Shenzhen, Guangdong, China
Manufacturer	: Shanghai Feixun Communication Co., Ltd.
Address	: Wing B, 15/F, GDC Building, NO.9 Gaoxinzhong 3rd Ave., Nanshan, Shenzhen, Guangdong, China

Tested by: Neutron Engineering Inc. EMC Laboratory Date of Receipt: Feb. 28, 2012 Date of Test: Feb. 28, 2012 ~ Mar. 12, 2012

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Neutron Engineering Inc.

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Declaration

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

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1. CERTIFICATION

Equipment: Wireless Nano Router Brand Name: PHICOMM Model Name: M1 Applicant: Shanghai Feixun Communication Co., Ltd. Factory: Shanghai WDK Technology Co., Ltd. Address: No.1-10, Lane2100, Songzheng Road, Shi hudang Town, Songjiang, Shanghai Date of Test: Feb. 28, 2012 ~ Mar. 12, 2012 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-1-1202C179) 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).

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2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

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

NOTE:

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



2.1 TEST FACILITY

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

2.2 MEASUREMENT UNCERTAINTY

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

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

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	
		30MHz ~ 200MHz	Н	3.60	
DG-CB03	DG-CB03 CISPR	200MHz ~ 1,000MHz	V	3.86	
DG-CB03	CIOPK	200MHz ~ 1,000MHz	Н	3.94	
	1GHz~18GHz	V	3.12		
		1GHz~18GHz	Н	3.68	

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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Nano Router		
Brand Name	PHICOMM		
Model Name	M1		
OEM Brand/Model Name	N/A		
Model Difference	N/A		
	The EUT is a Wireless N Operation Frequency:	lano Router. 2412~2462 MHz	
	Modulation Type:	802.11b:CCK, DQPSK, DBPSK 802.11g:OFDM 802.11n:OFDM	
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps Draft 802.11n:up to 150Mbps	
Product Description	Number of Channel	11 CH, Please see Note 2. (please see page 9)	
	Antenna Designation: Antenna Gain(Peak)	Please see Note 3. (please see page 9)	
	Output Power:	802.11b: 20.90dBm 802.11g: 23.67dBm 802.11n(20MHz): 22.96dBm 802.11n(40MHz): 23.98 dBm	
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.		
Power Source	AC Mains.		
Power Rating	I/P 100-240V~ 50/60Hz		
Connecting I/O Port(s)	Please refer to the User	s Manual	

Note:

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

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

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

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	N/A	N/A	Printed	N/A	1.97



3.2 DESCRIPTION OF TEST MODES

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

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

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

For Conducted Test		
Final Test Mode	Description	
Mode 5	Normal Link	

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

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

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

802.11b mode: DBPSK (1Mbps) 802.11g mode: OFDM (6Mbps) 802.11n HT20 mode : BPSK (6.5Mbps) 802.11n HT40 mode : BPSK (13.5Mbps)

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

(3) The EUT was pre-tested on positioned of each 3 axis. The worst cas was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

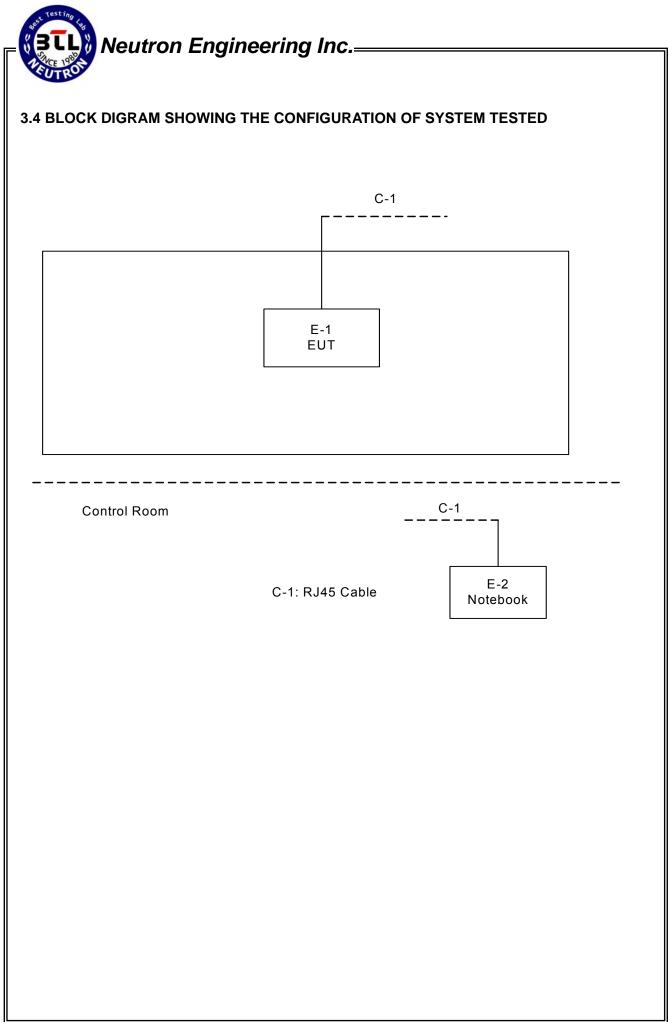


3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software Version	Test Program: Hyper Terminal				
Frequency	2412 MHz	2437 MHz	2462 MHz		
IEEE 802.11b DSSS	54	55	56		
IEEE 802.11g OFDM	54	55	55		

Test software Version	Test Program: Hyper Terminal					
Frequency (MHz)	2412 MHz	2437 MHz	2462 MHz			
IEEE 802.11n (20MHz)	48	49	50			
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz			
IEEE 802.11n (40MHz)	58	59	59			





3.5 DESCRIPTION OF SUPPORT UNITS (RADIATED MODE)

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Wireless Nano Router	PHICOMM	M1	YJYWR401N A	N/A	EUT
E-2	Notebook	Compaq	SERIES PP2150	DOC	1V32LDL2W1D6	

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

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in $\[$ Length $\]$ 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	
	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.	Last Calibration	Next Calibration
1	LISN	EMCO	3816/2SH	00052766	May.26.2011	May.26.2012
2	LISN	R&S	ENV216	100526	May.26.2011	May.26.2012
3	Test Cable	N/A	RG400 12m	N/A	Mar.18.2012	Mar.18.2013
4	EMI TEST RECEIVER	R&S	ESCI	100895	May.26.2011	May.26.2012
5	50Ω Terminator	SHX	TF2-3G-A	08122901	May.26.2011	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

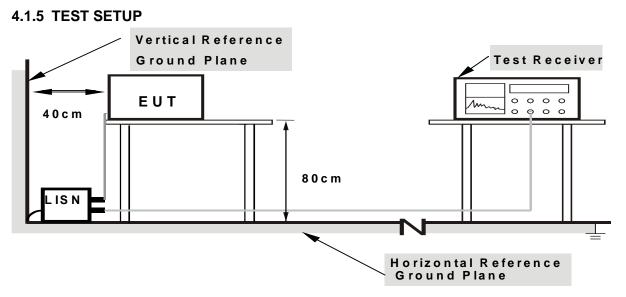


4.1.3 TEST PROCEDURE

- 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.

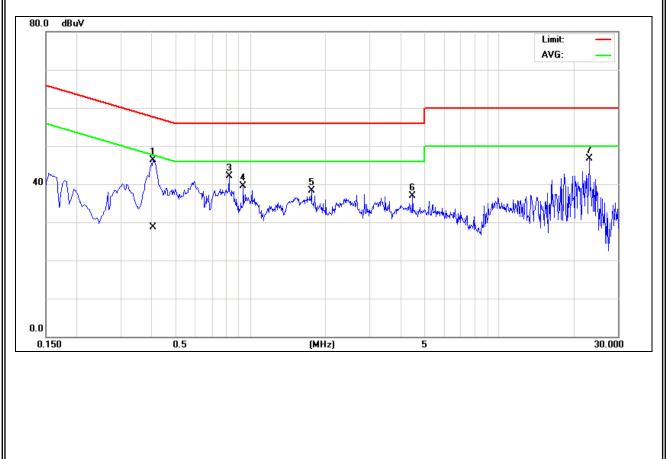
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4.1.7 TEST RESULTS

EUT :		Wireless Nano Router			Model Nam	e :	M1		
Temperatu	ure :	25	°C		Relative Hu	Relative Humidity : 50%			
Pressure :		101	0hPa		Test Power	:	AC 1	20V/60Hz	
Test Mode	t Mode : Normal Link								
Freq.	Termir	nal	Measure	d(dBuV)	Limits((dBuV)		Margin	Note
(MHz)	L/N		QP-Mode	AV-Mode	QP-Mode	AV-Mo	ode	(dB)	NOLE
0.41	Line		46.35	28.80	57.73	47.7	3	-11.38	(QP)
0.82	Line		42.19	*	56.00	46.0	0	-13.81	(QP)
0.93	Line		39.44	*	56.00	46.0	0	-16.56	(QP)
1.76	Line		38.40	*	56.00	46.0	0	-17.60	(QP)
4.49	Line		36.96	*	56.00	46.0	0	-19.04	(QP)
23.13	Line		46.75	*	60.00	50.0	0	-13.25	(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.





EUT :		Wireless Nano Router			Model Nam	e :	M1		
Temperate	ure :	25	°C		Relative Hu	imidity:	50%)	
Pressure :		101	0hPa		Test Power	:	AC 1	120V/60Hz	
Test Mode	ə :	Nor	mal Link						
Freq.	Termir	nal	Measure	d(dBuV)	Limits	(dBuV)		Margin	Note
(MHz)	L/N		QP-Mode	AV-Mode	QP-Mode	AV-Mo	ode	(dB)	NOLE
0.40	Neutra	al	47.16	34.59	57.95	47.9	5	-10.79	(QP)
0.53	Neutra	al	43.93	*	56.00	46.0	0	-12.07	(QP)
1.44	Neutra	al	42.28	*	56.00	46.0	0	-13.72	(QP)
4.51	Neutra	al	41.93	*	56.00	46.0	0	-14.07	(QP)
17.69	Neutra	al	42.19	*	60.00	50.0	0	-17.81	(QP)
21.66	Neutra	al	42.89	*	60.00	50.0	0	-17.11	(QP)

Remark

- (1) All readings are QP Mode value unless otherwise stated AVG in column of ^rNote ... 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)

(ubuv/ii	n) (at 3m)
PEAK	AVERAGE
74	54
	PEAK

Notes:

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

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

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

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

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

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4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Antenna	Schwarbeck	VULB9160	9160-3232	Jun .04.2011	Jun .04.2012
2	Amplifier	HP	8447D	2944A09673	May.26.2011	May.26.2012
3	Test Receiver	R&S	ESCI	100382	May.26.2011	May.26.2012
4	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2011	Jul.01.2012
5	Antenna	ETS	3115	00075789	May.26.2011	May.26.2012
6	Amplifier	Agilent	8449B	3008A02274	May.26.2011	May.26.2012
7	Spectrum	Agilent	E4408B	US39240143	Nov.25.2011	Nov.26.2012
8	Test Cable	HUBER+SUH NER	C-45	N/A	May.04.2011	May.04.2012
9	Controller	СТ	SC100	N/A	N/A	N/A
10	Active Loop Antenna	R&S	HFH2-Z2	830749/020	May.26.2011	May.26.2012
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct.13.2011	Oct.13.2012

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

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

Spectrum Parameter	Setting		
Attenuation	Auto		
Start Frequency	1000 MHz		
Stop Frequency	10th carrier harmonic		
RB / VB	1ML = / 1ML = for Dools, 1 ML = / 10L = for Average		
(Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average		



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.

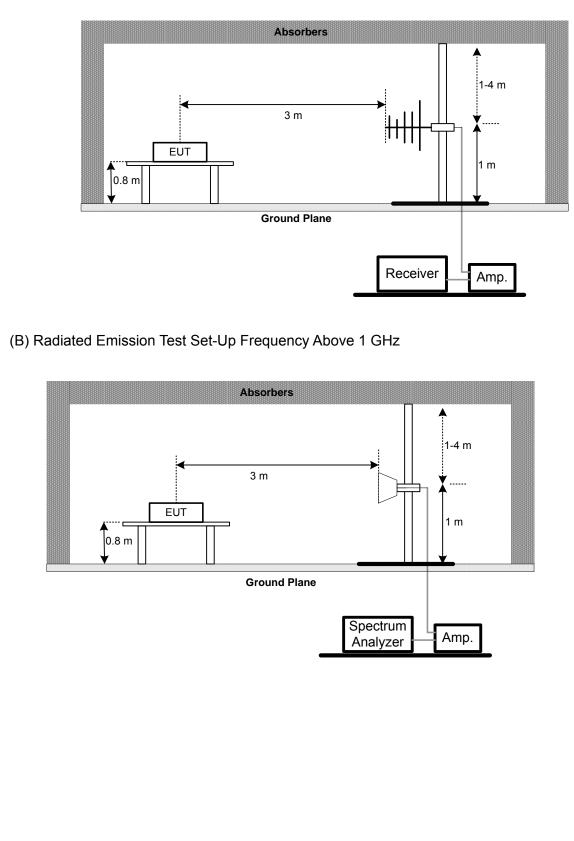
4.2.4 DEVIATION FROM TEST STANDARD

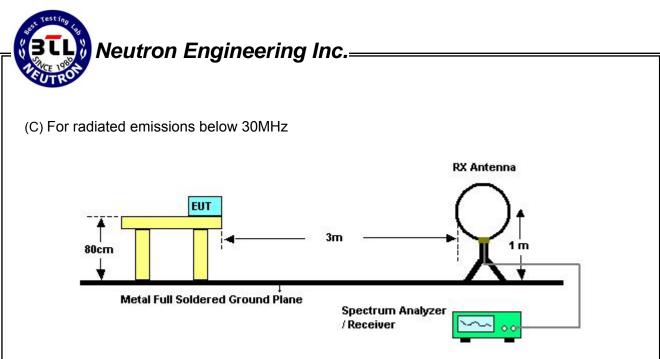
No deviation

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4.2.5 TEST SETUP

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





4.2.6 EUT OPERATING CONDITIONS

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

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4.2.7 TEST RESULTS (BELOW 30MHZ)

EUT :	Wireless(Receiver)	Model Name :	SW-R
Temperature :	25 ℃	Relative Humidity :	53 %
Pressure :	1009 hPa	Test Power :	AC 120V/60Hz
Test Mode :	TX Mode		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
0.09	0°	20.35	21.58	41.93	108.42	-66.49	QP
0.52	0°	31.25	19.88	51.13	73.22	-22.10	QP
0.57	0°	22.67	20.04	42.71	72.43	-29.72	QP
0.70	0°	20.72	20.43	41.15	70.74	-29.59	QP
1.18	0°	24.36	19.58	43.94	66.15	-22.21	QP
1.27	0°	20.58	19.57	40.15	65.55	-25.40	QP

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
0.10	90°	20.14	21.46	41.60	107.89	-66.28	QP
0.51	90°	31.35	19.83	51.18	73.45	-22.27	QP
0.57	90°	25.87	20.02	45.89	72.50	-26.61	QP
0.69	90°	31.35	20.40	51.75	70.86	-19.11	QP
0.89	90°	27.36	20.02	47.38	68.58	-21.19	QP
1.27	90°	22.35	19.57	41.92	65.55	-23.63	QP

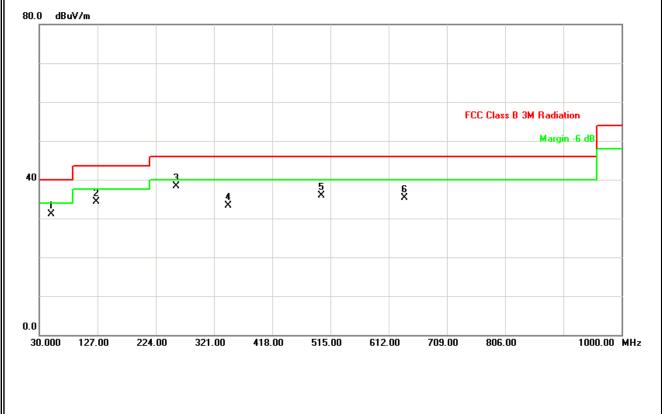
- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported $_{\circ}$
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB); •
- (3) Limit line = specific limits (dBuV) + distance extrapolation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

4.2.8 TEST RESULTS (BETWEEN 30 - 1000 MHZ)

EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	55 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 01		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
49.40	V	48.44	-17.27	31.17	40.00	- 8.83	
124.58	V	52.41	-18.20	34.21	43.50	- 9.29	
257.95	V	52.22	-14.00	38.22	46.00	- 7.78	
345.25	V	44.30	-10.96	33.34	46.00	- 12.66	
500.45	V	43.31	-7.34	35.97	46.00	- 10.03	
638.68	V	38.86	-3.55	35.31	46.00	- 10.69	

- (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 ^rNote . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.





EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	55 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 01		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	N (
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
141.55	Н	52.40	-17.70	34.70	43.50	- 8.80	
231.28	Н	54.43	-15.56	38.87	46.00	- 7.13	
253.10	Н	54.36	-14.34	40.02	46.00	- 5.98	
401.03	Н	45.67	-9.01	36.66	46.00	- 9.34	
449.53	Н	46.53	-8.13	38.40	46.00	- 7.60	
750.23	Н	40.47	-2.56	37.91	46.00	- 8.09	

- (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.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.

80.0 dBuV/m



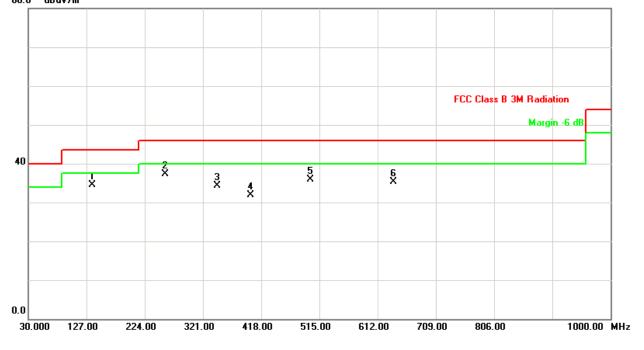


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 °C	Relative Humidity :	55 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 06		

	1	1					
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOLE
136.70	V	52.30	-17.86	34.44	43.50	- 9.06	
257.95	V	51.22	-14.00	37.22	46.00	- 8.78	
345.25	V	45.30	-10.96	34.34	46.00	- 11.66	
401.03	V	40.94	-9.01	31.93	46.00	- 14.07	
500.45	V	43.31	-7.34	35.97	46.00	- 10.03	
638.68	V	38.86	-3.55	35.31	46.00	- 10.69	

- (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.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.





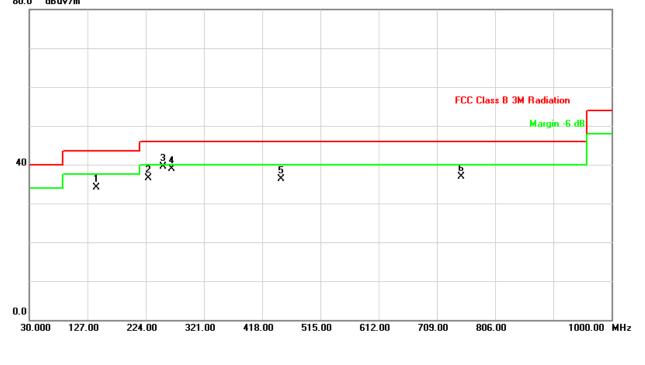


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	55 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 06		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	
	-		()	· · ·	· · /	•	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
141.55	Н	51.90	-17.70	34.20	43.50	- 9.30	
228.85	Н	52.15	-15.63	36.52	46.00	- 9.48	
253.10	Н	53.86	-14.34	39.52	46.00	- 6.48	
267.65	Н	52.23	-13.42	38.81	46.00	- 7.19	
449.53	Н	44.53	-8.13	36.40	46.00	- 9.60	
750.23	Н	39.47	-2.56	36.91	46.00	- 9.09	

- (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 ^rNote . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.





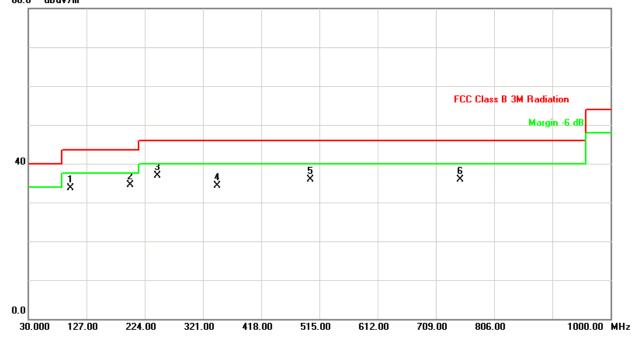


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	55 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 11		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Nete
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
100.33	V	52.11	-18.41	33.70	43.50	- 9.80	
199.75	V	51.05	-16.57	34.48	43.50	- 9.02	
245.83	V	51.65	-14.82	36.83	46.00	- 9.17	
245.25	V	45.30	-10.96	34.34	46.00	- 11.66	
500.45	V	43.31	-7.34	35.97	46.00	- 10.03	
750.23	V	38.39	-2.56	35.83	46.00	- 10.17	

- (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.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.





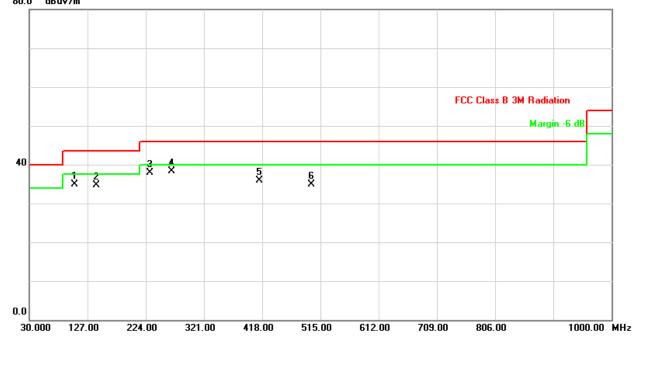


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 °C	Relative Humidity :	55 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE CHANNEL 11		

Frog	Ant	Deeding (DA)	Corr Footor(CF)		Limite(OD)	Marain	
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
105.18	Н	53.24	-18.38	34.86	43.50	- 8.64	
141.55	H	52.40	-17.70	34.70	43.50	- 8.80	
231.28	H	53.43	-15.56	37.87	46.00	- 8.13	
267.65	Н	51.73	-13.42	38.31	46.00	- 7.69	
413.15	Н	44.77	-8.79	35.98	46.00	- 10.02	
500.45	Н	42.16	-7.34	34.82	46.00	- 11.18	

- (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.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.

80.0 dBuV/m

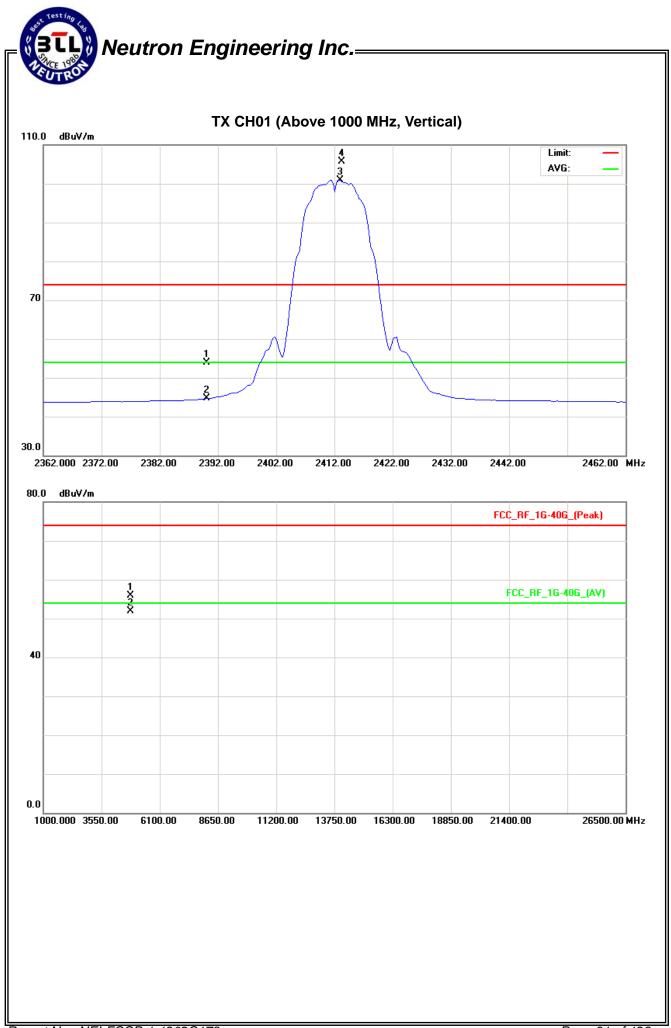


4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq. Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit		
1164.		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	22.03	12.71	31.91	53.94	44.62	74.00	54.00	X/E
2413.25	V	73.80	69.09	31.88	105.68	100.97			X/F
4824.01	V	50.53	46.65	5.29	55.82	51.94	74.00	54.00	X/H

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

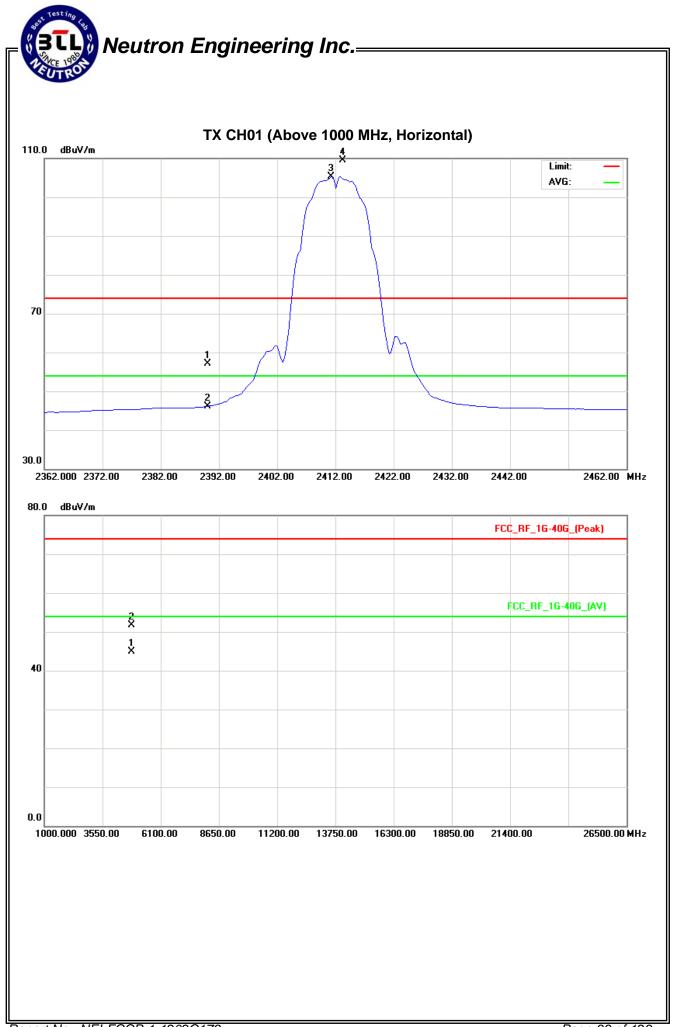




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq	Freq. Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
TTCq.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	25.19	14.24	31.91	57.1	46.15	74.00	54.00	X/E
2413.25	Н	77.64	73.43	31.88	109.52	105.31			X/F
4824.13	Н	46.45	39.52	5.29	51.74	44.81	74.00	54.00	X/H

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

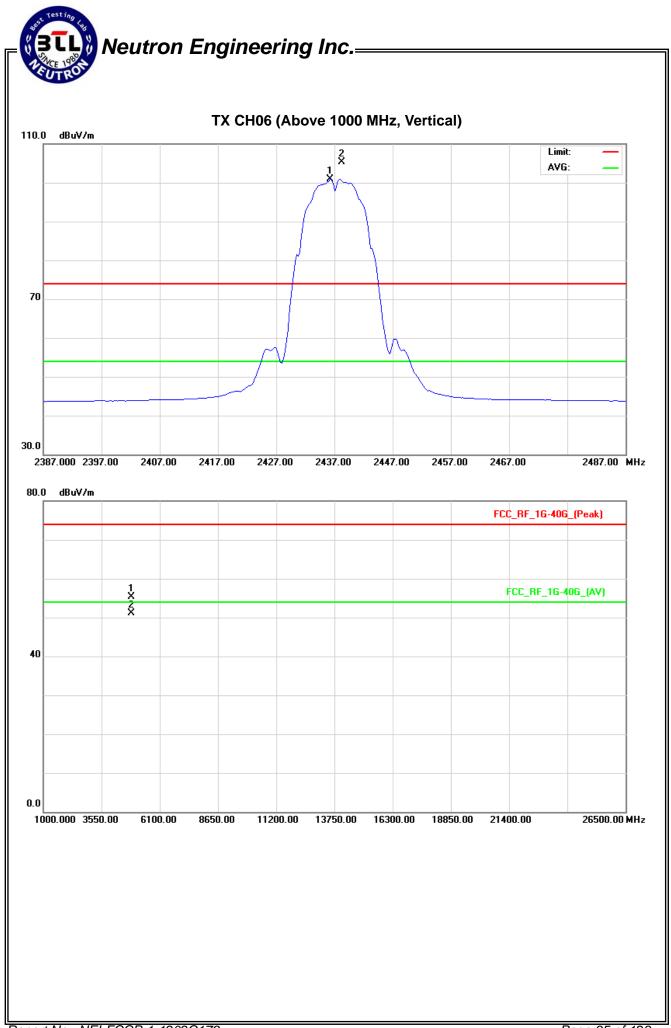




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.25	V	73.52	68.97	31.85	105.37	100.82			X/F
4874.04	V	49.74	45.60	5.47	55.21	51.07	74.00	54.00	X/H

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

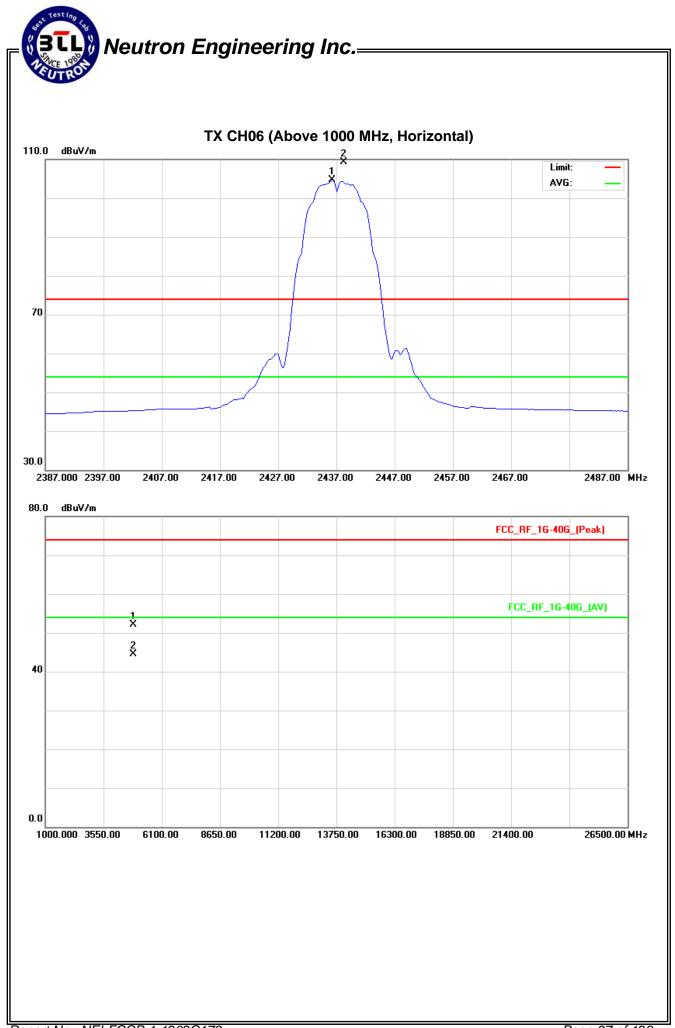




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading Ant./CF		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)	
2438.25	Н	77.51	72.81	31.85	109.36	104.66			X/F
4874.02	Н	46.58	39.09	5.47	52.05	44.56	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ^rNote₁. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



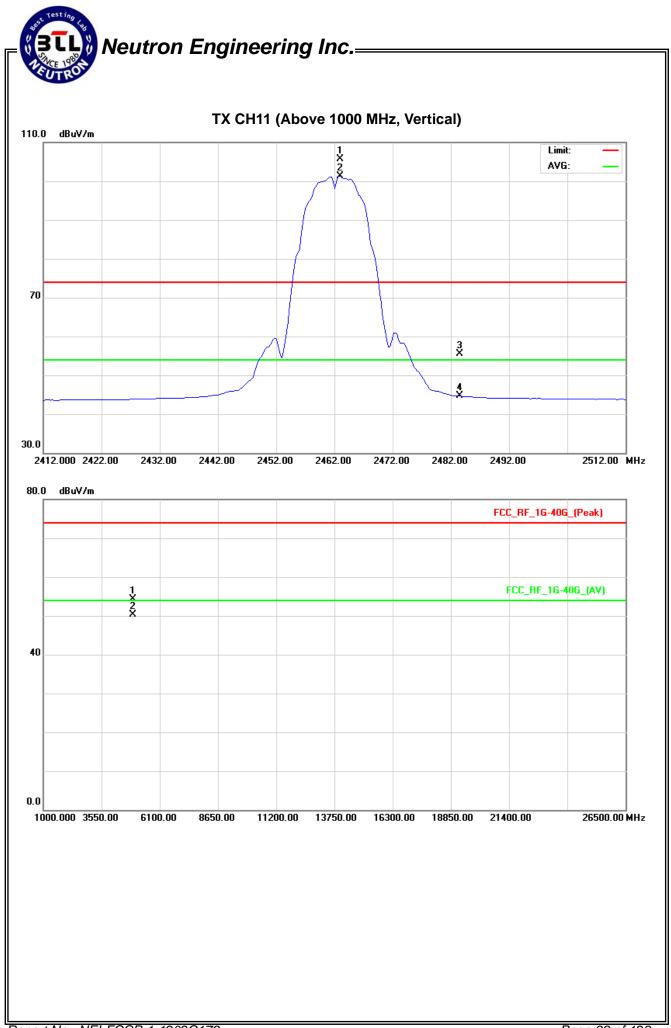


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	V	73.81	69.52	31.82	105.63	101.34			X/F
2483.50	V	23.61	12.83	31.80	55.41	44.63	74.00	54.00	X/E
4924.26	V	48.75	44.71	5.65	54.40	50.36	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ^TNote ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:

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

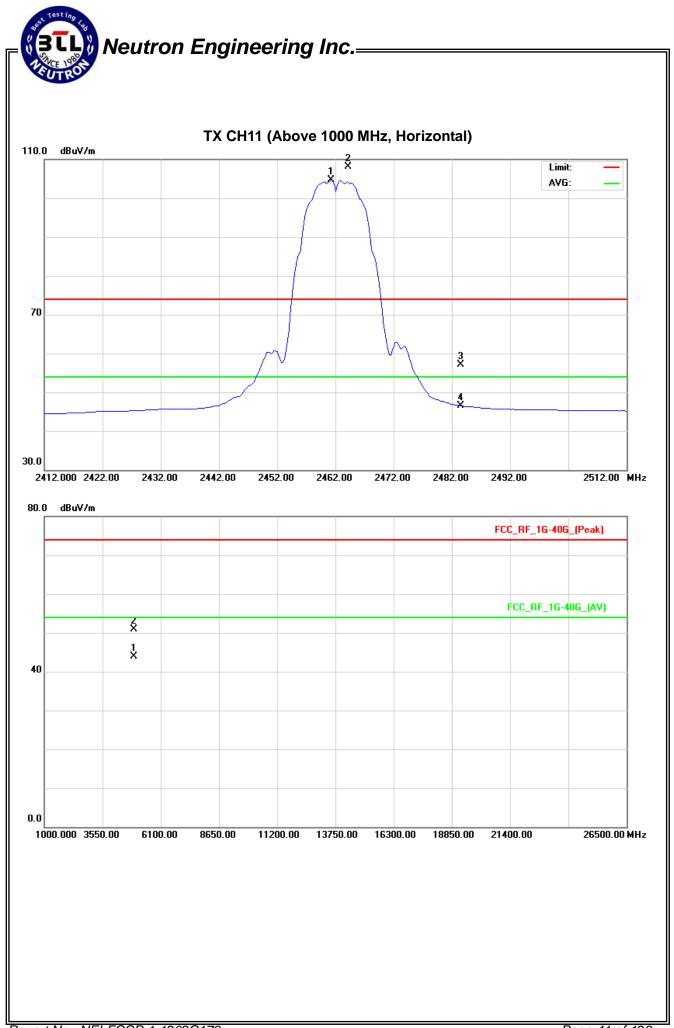




EUT:	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

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)		
2464.25	Н	76.24	72.89	31.82	108.06	104.71			X/F	
2483.50	Н	25.31	14.73	31.80	57.11	46.53	74.00	54.00	X/E	
4924.23	Н	45.27	38.31	5.65	50.92	43.96	74.00	54.00	X/H	

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

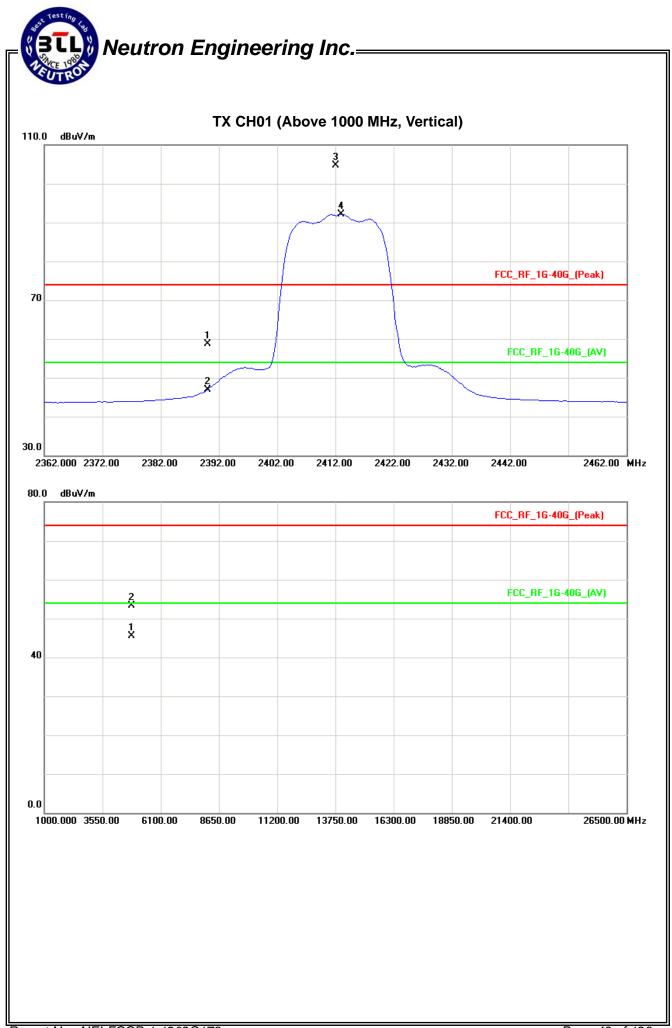




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq.	Ant Pol	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)		
2390.00	V	26.82	15.02	31.91	58.73	46.93	74.00	54.00	X/E	
2412.00	V	72.91	60.32	31.89	104.8	92.21			X/F	
4824.12	V	48.06	40.15	5.29	53.35	45.44	74.00	54.00	X/H	

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

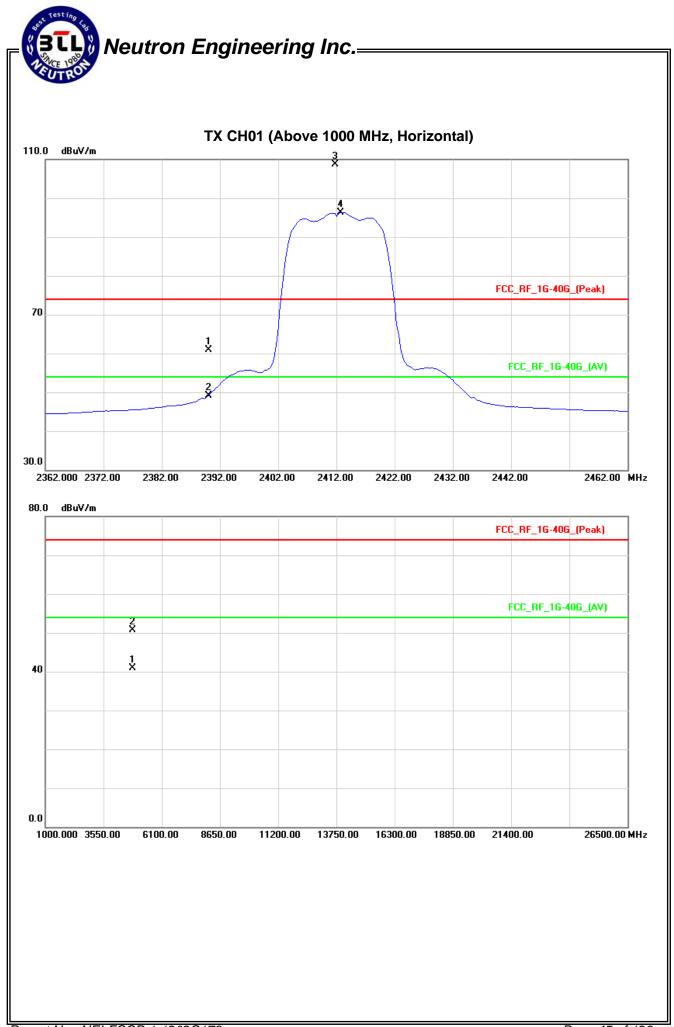




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	A	Act.		Limit		
And And		Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
2390.00	Н	28.91	17.21	31.91	60.82	49.12	74.00	54.00	X/E	
2411.75	Н	76.82	64.47	31.89	108.71	96.36			X/F	
4824.11	Н	45.45	35.52	5.29	50.74	40.81	74.00	54.00	X/H	

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

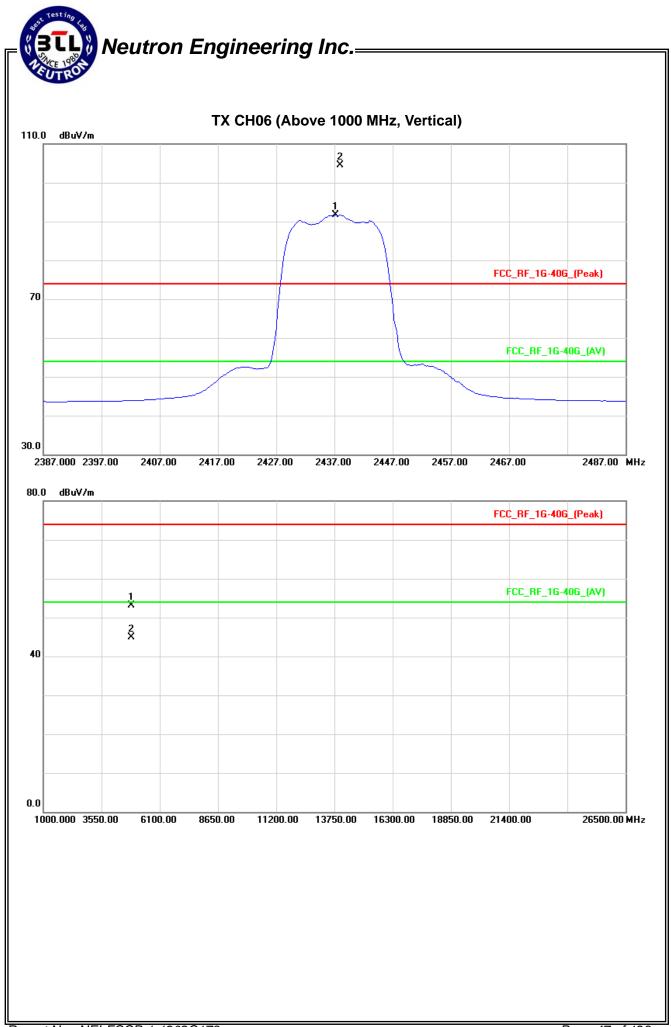




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

ſ	Freq.	Ant.Pol.	Reading Ant		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)	
	2438.00	V	72.67	59.81	31.85	104.52	91.66			X/F
	4874.03	V	47.63	39.47	5.47	53.10	44.94	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
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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

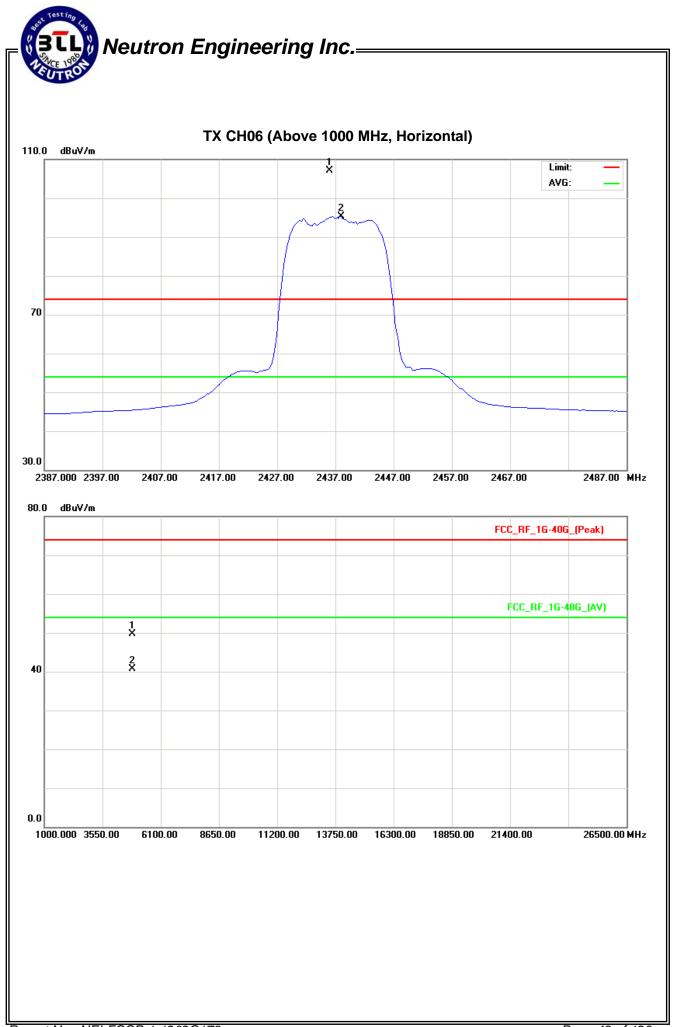




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freg.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
1164.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.00	Н	75.32	63.45	31.86	107.18	95.31			X/F
4874.02	Н	44.33	35.16	5.47	49.80	40.63	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ^rNote ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
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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



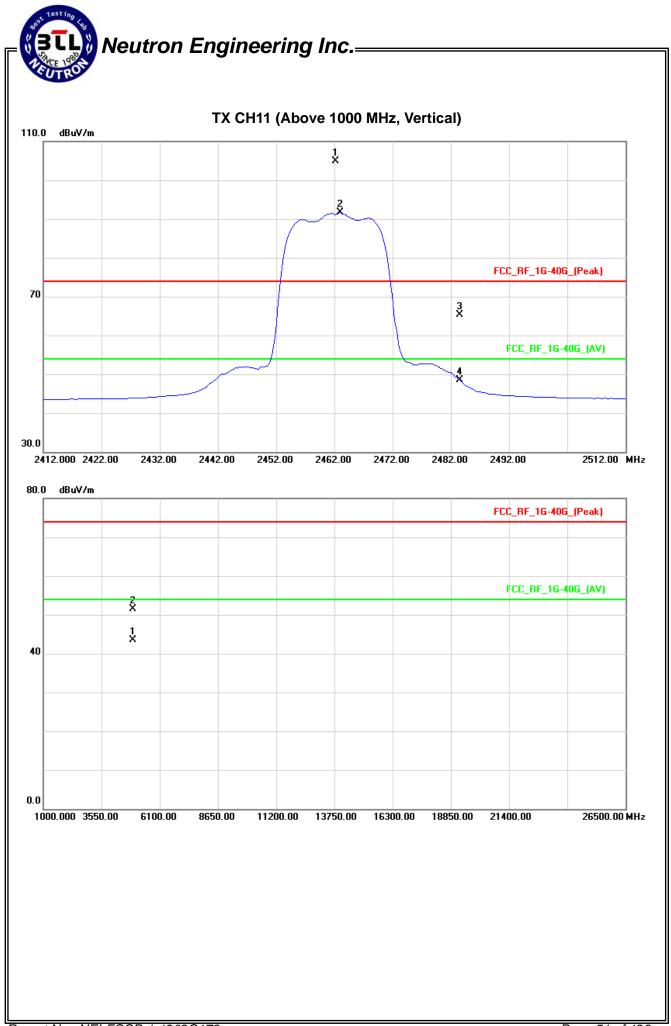


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2462.25	V	72.99	59.85	31.83	104.82	91.68			X/F
2483.50	V	33.57	16.61	31.80	65.37	48.41	74.00	54.00	X/E
4924.28	V	45.85	37.94	5.65	51.50	43.59	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ^TNote ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
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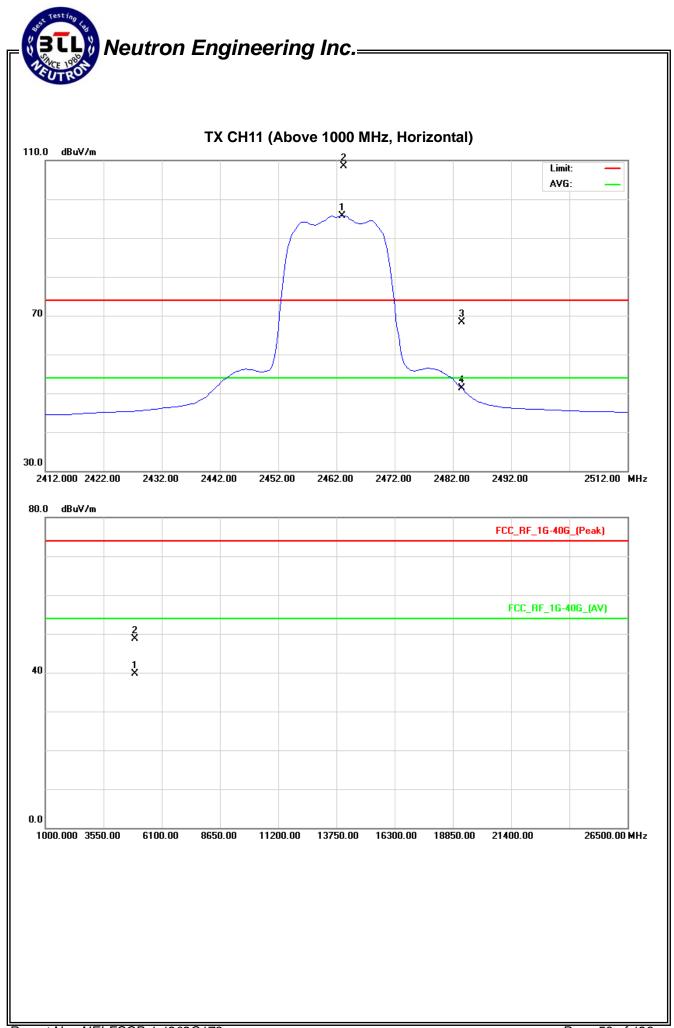




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.25	Н	76.63	63.93	31.82	108.45	95.75			X/F
2483.50	Н	36.52	19.56	31.80	68.32	51.36	74.00	54.00	X/E
4924.23	Н	43.07	34.01	5.65	48.72	39.66	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
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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

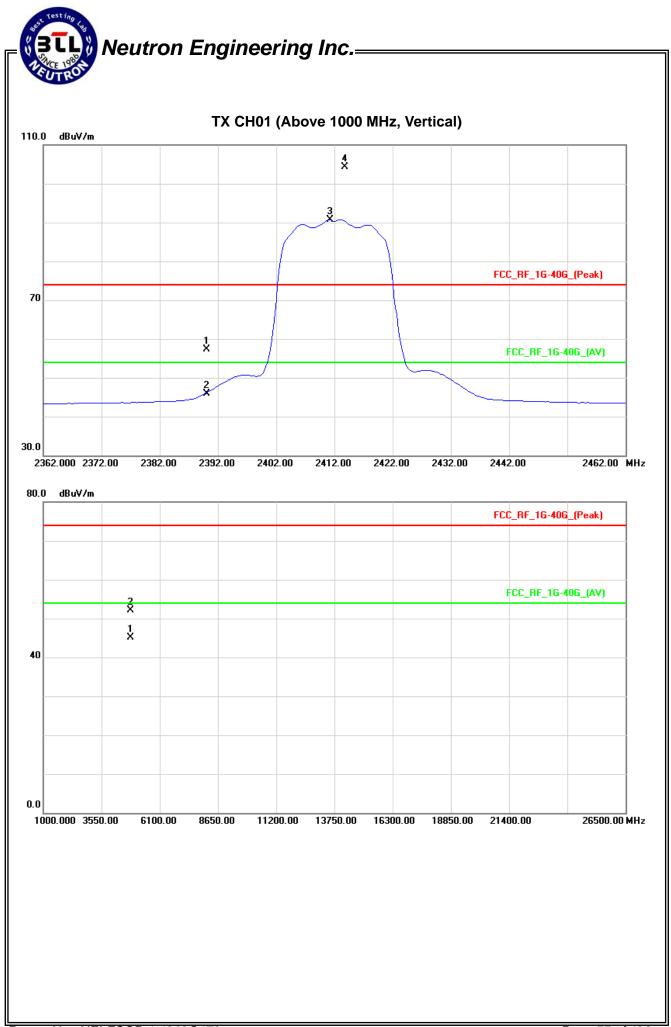




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 MODE 2412MHz		

Freq. Ant.Pol.	Reading		Ant./CF	Act.		Lir			
1164.	Ant.i Ol.	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	25.31	14.09	31.91	57.22	46	74.00	54.00	X/E
2413.75	V	72.42	58.81	31.88	104.3	90.69			X/F
4824.23	V	46.88	39.75	5.29	52.17	45.04	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note]. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
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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

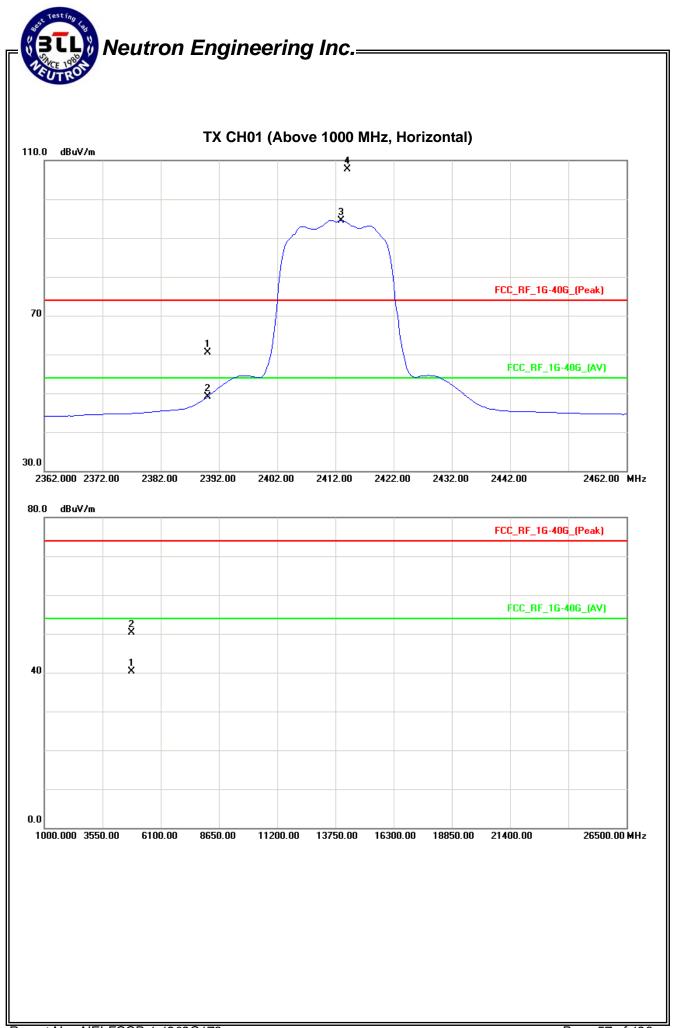




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 MODE 2412MHz		

Freq. Ant.	Ant.Pol.	Ant Pol Rea	ding 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	Н	28.54	17.15	31.91	60.45	49.06	74.00	54.00	X/E
2414.00	Н	75.78	62.65	31.88	107.66	94.53			X/F
4824.23	Н	44.98	35.01	5.29	50.27	40.3	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note]. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
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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

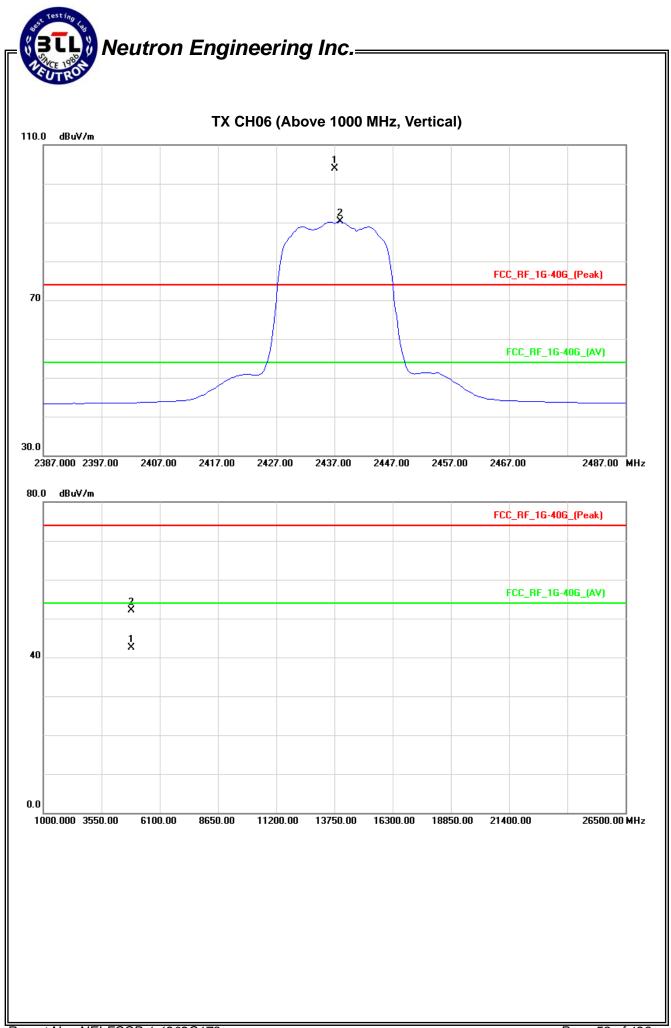




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 °C	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 MODE 2437MHz		

Freq. Ant.Pol.	Ant Pol	Reading		Ant./CF	Act.		Limit		
TTCq.	An. 10.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2437.05	V	72.03	58.37	31.86	103.89	90.23			X/F
4874.17	V	46.54	37.00	5.47	52.01	42.47	74.00	54.00	X/H

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- (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

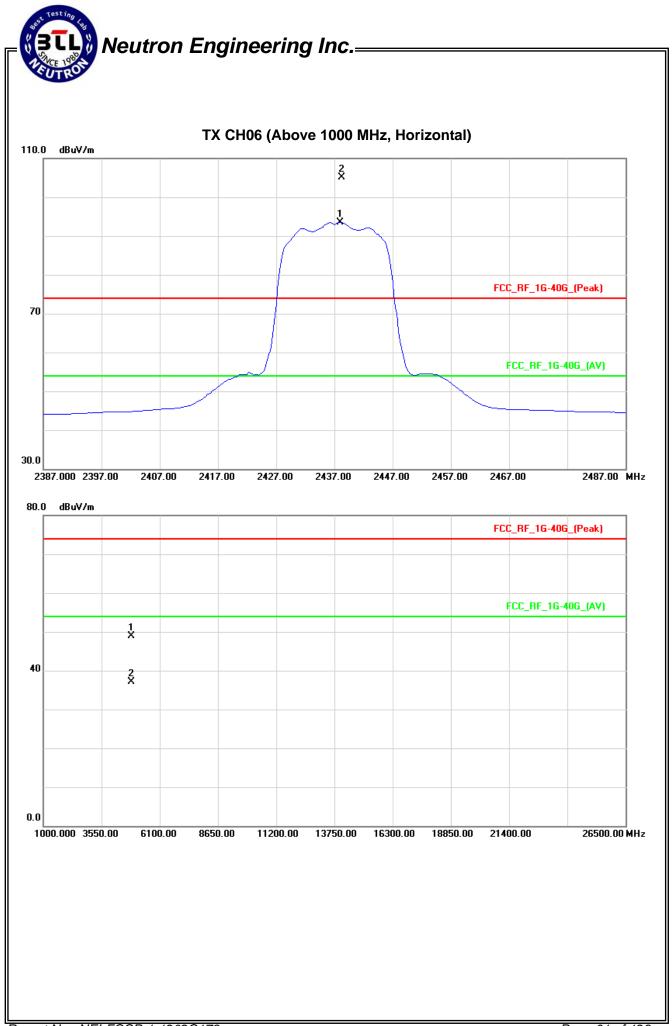




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 MODE 2437MHz		

Freg. Ant.Pol.	Reading		Ant./CF	Act.		Limit			
1164.		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.25	Н	73.29	61.64	31.85	105.14	93.49			X/F
4874.02	Н	43.44	31.55	5.47	48.91	37.02	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ^rNote ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
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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



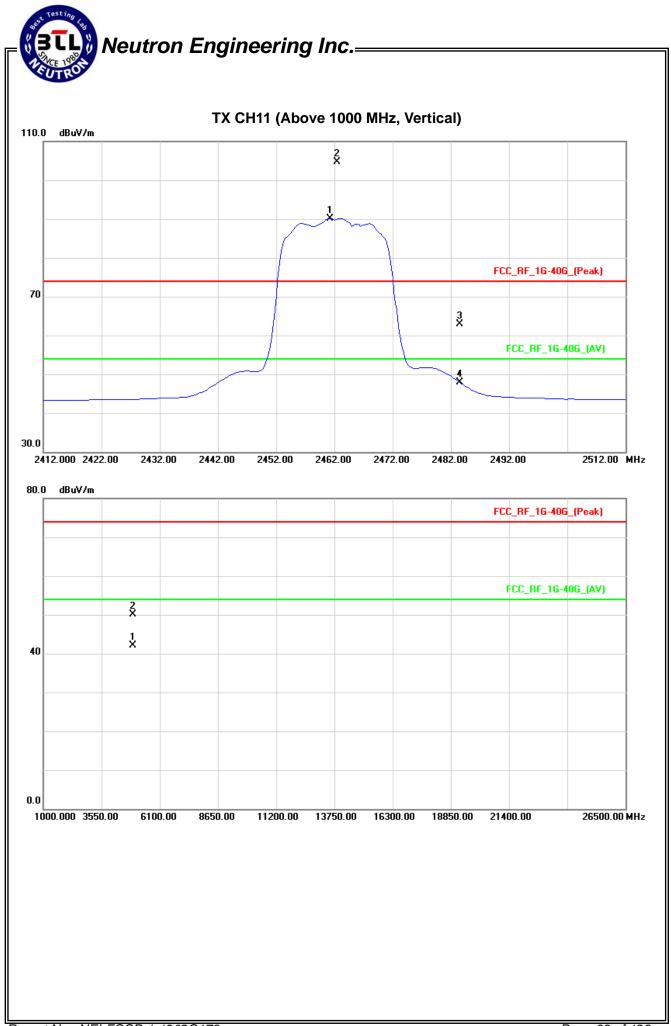


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 MODE 2462MHz		

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)	
2462.50	V	72.78	58.31	31.83	104.61	90.14			X/F
2483.50	V	31.09	16.11	31.80	62.89	47.91	74.00	54.00	X/E
4924.12	V	44.49	36.42	5.65	50.14	42.07	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ^TNote ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
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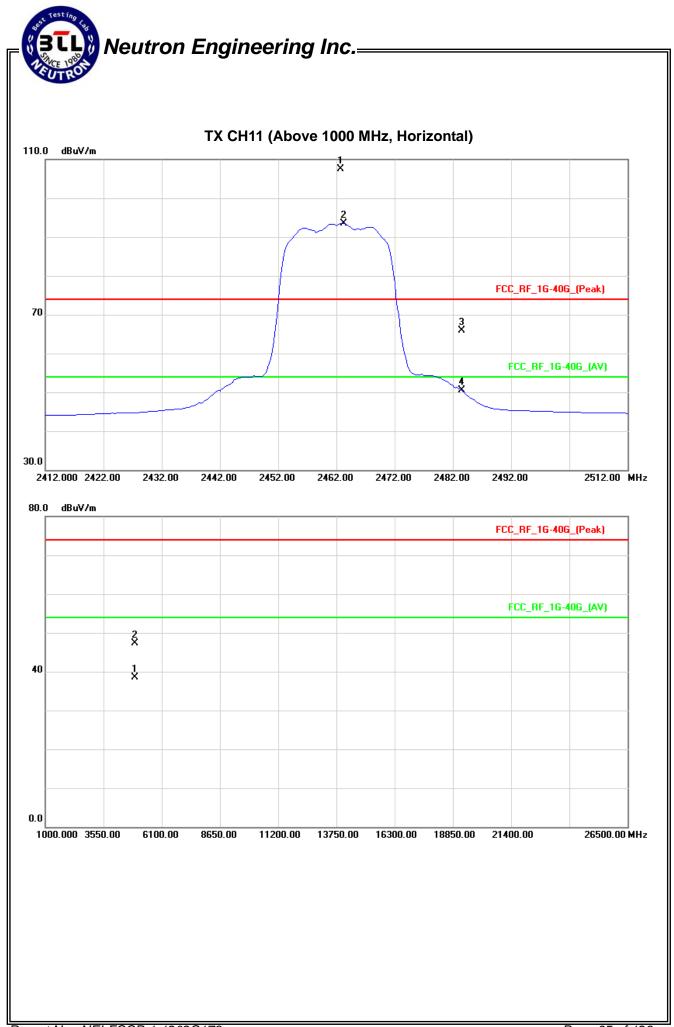




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 MODE 2462MHz		

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)	
2462.75	Н	75.74	61.67	31.82	107.56	93.49			X/F
2483.50	Н	34.17	18.64	31.80	65.97	50.44	74.00	54.00	X/E
4924.12	Н	41.58	32.95	5.65	47.23	38.60	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
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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

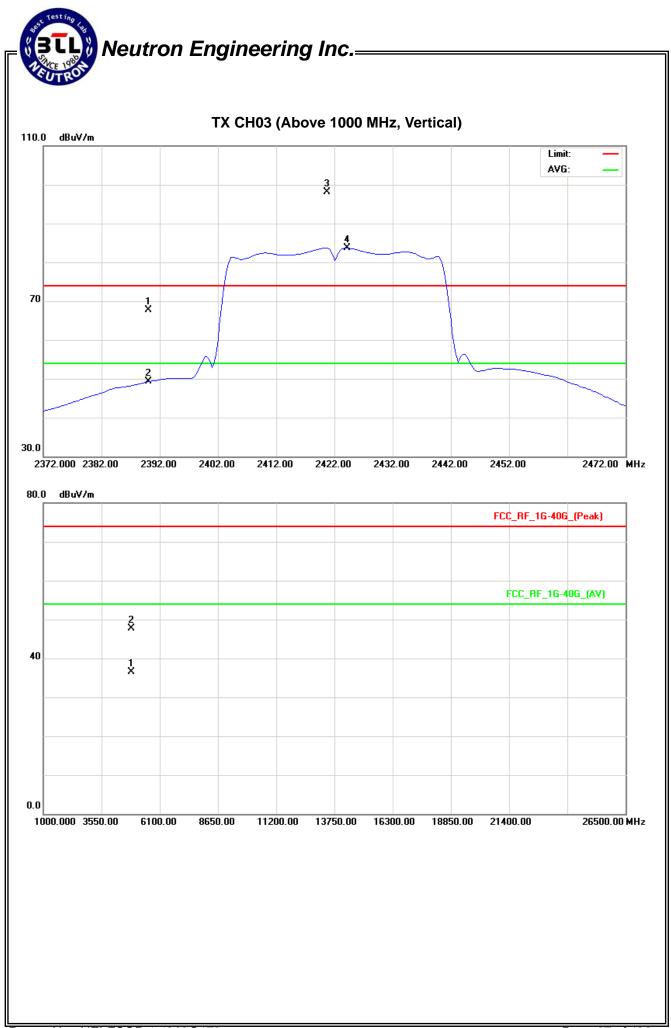




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

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	35.76	17.33	31.91	67.67	49.24	74.00	54.00	X/E
2420.75	V	66.20	51.90	31.88	98.08	83.78			X/F
4844.00	V	42.38	31.23	5.36	47.74	36.59	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency."F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
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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



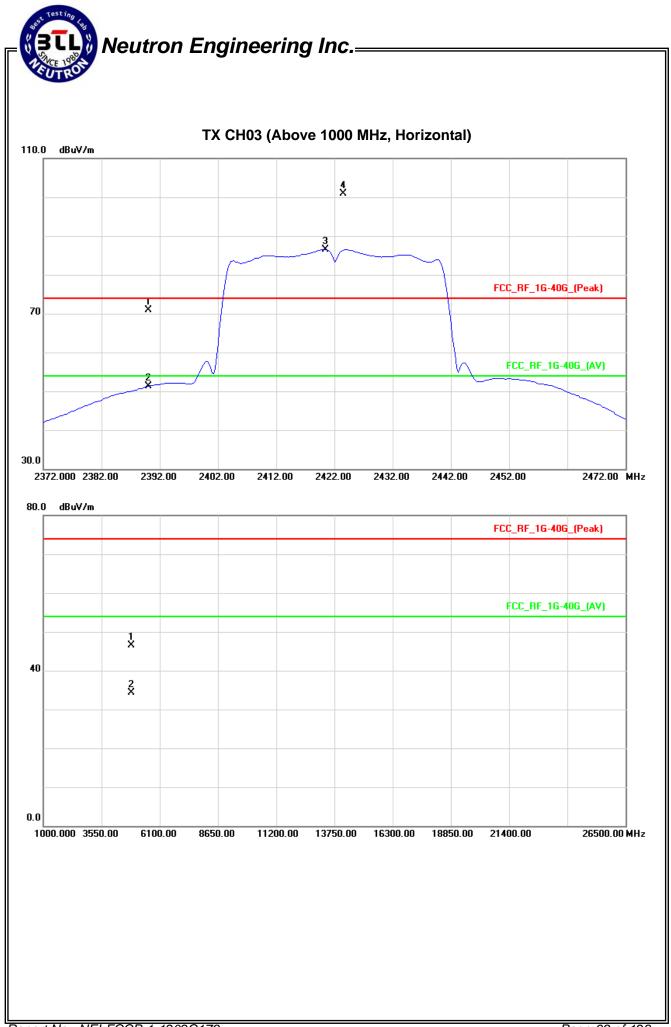


EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2422MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	38.98	19.29	31.91	70.89	51.20	74.00	54.00	X/E
2423.50	Н	69.04	54.63	31.87	100.91	86.50			X/F
4844.00	Н	41.14	28.90	5.36	46.50	34.26	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of "Note ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
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- (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

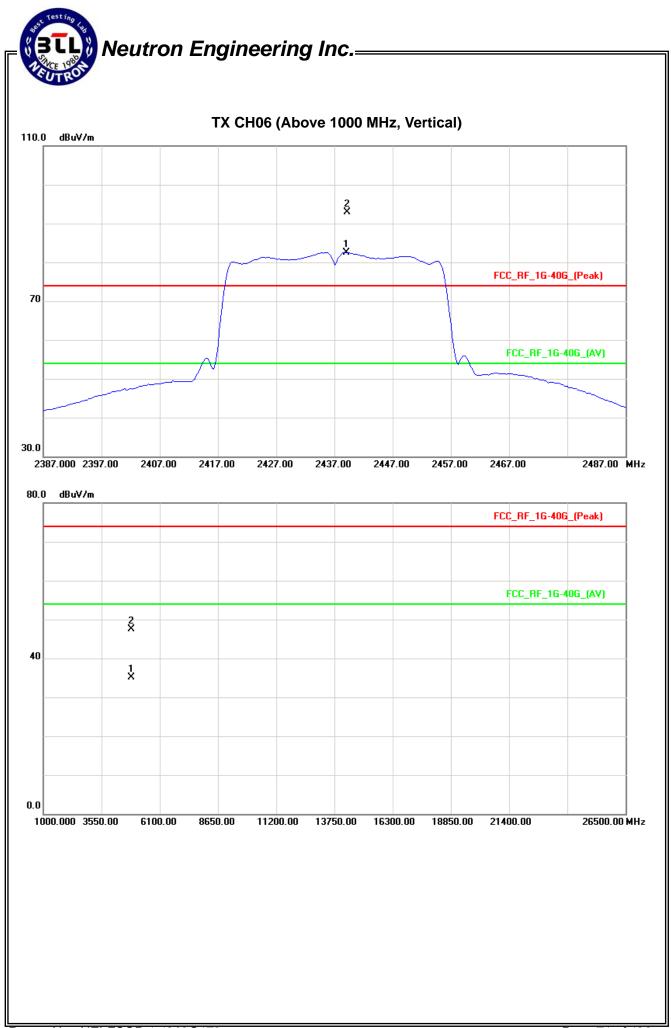




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freq. Ant.Pol.	Ant Pol	Reading		Ant./CF	A	Act.		Limit	
rieq.	Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2439.25	V	61.11	50.65	31.85	92.96	82.50			X/F
4874.02	V	42.01	29.57	5.47	47.48	35.04	74.00	54.00	X/H

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

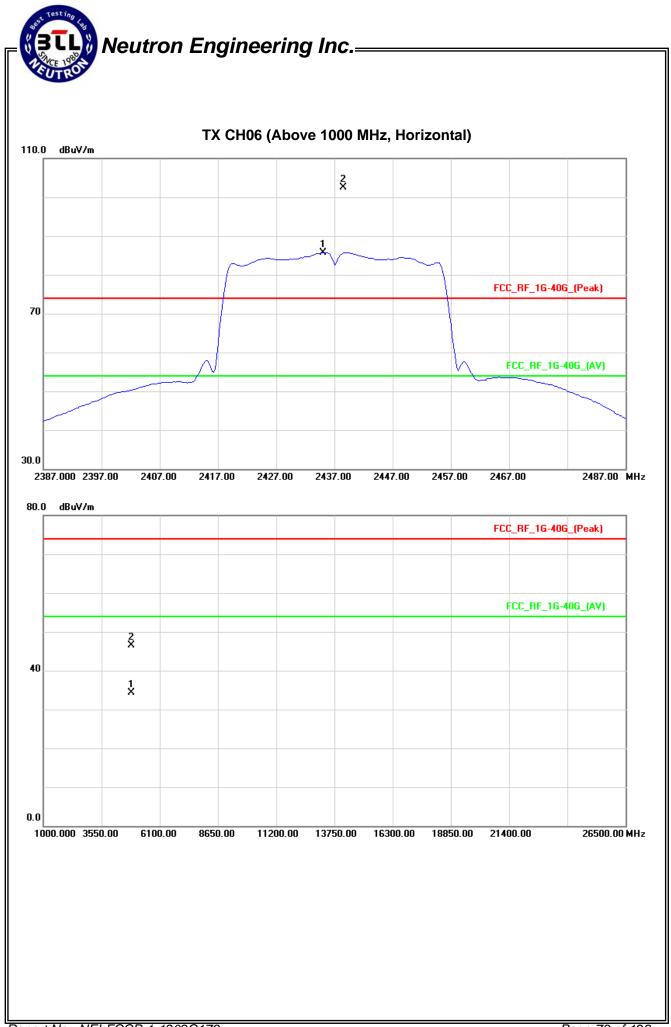




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2437MHz		

Freg. Ant.Pol.	Reading		Ant./CF	Act.		Limit			
TTEQ.	Ant.r oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.50	Н	70.73	53.89	31.85	102.58	85.74			X/F
4874.17	Н	41.03	28.79	5.47	46.50	34.26	74.00	54.00	X/H

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





EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

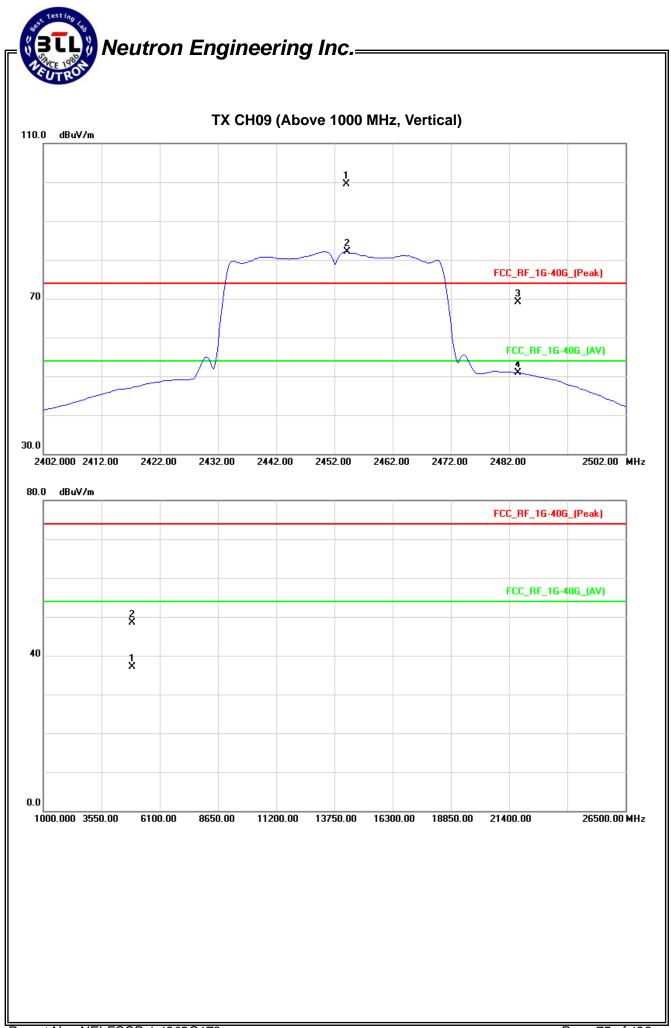
Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2454.00	V	67.62	50.30	31.83	99.45	82.13			X/F
2483.50	V	37.28	19.04	31.80	69.08	50.84	74.00	54.00	X/E
4904.20	V	42.86	31.59	5.58	48.44	37.17	74.00	54.00	X/H

Remark :

- (1) All readings are Peak unless otherwise stated QP in column of ^TNote ... Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency.
 "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:

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

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



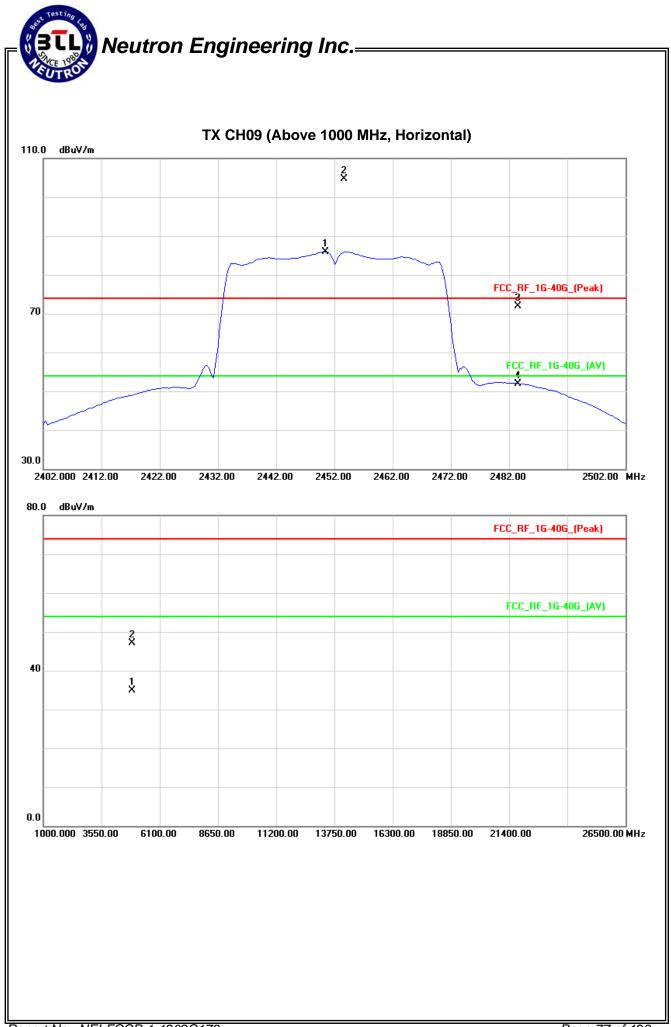


EUT:	Wireless Nano Router	Model Name :	M1
Temperature :	25 ℃	Relative Humidity :	58 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE 2452MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit	
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2453.65	Н	72.96	54.11	31.83	104.79	85.94			X/F
2483.50	Н	40.02	20.18	31.80	71.82	51.98	74.00	54.00	X/E
4904.17	Н	41.54	29.41	5.58	47.12	34.99	74.00	54.00	X/H

Remark :

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



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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.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov.26.2011	Nov.26.2012

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

5.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 5 ms.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

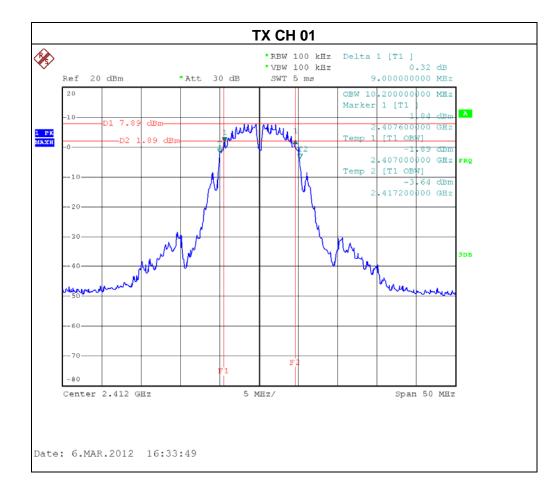
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

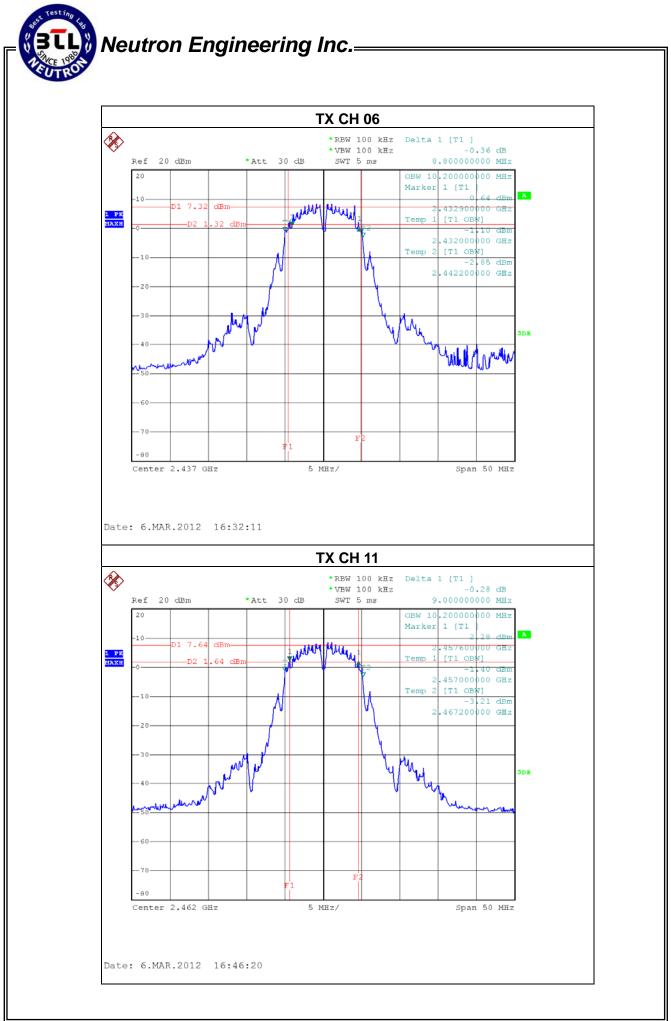


5.1.6 TEST RESULTS

EUT :	Wireless Nano Router	Model Name. :	M1	
Temperature :	24 ℃	Relative Humidity :	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX B MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	9.00	>=500KHz
CH06	2437	8.80	>=500KHz
CH11	2462	9.00	>=500KHz



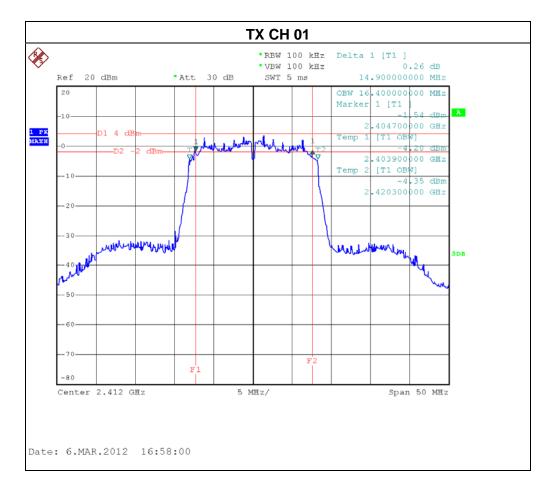


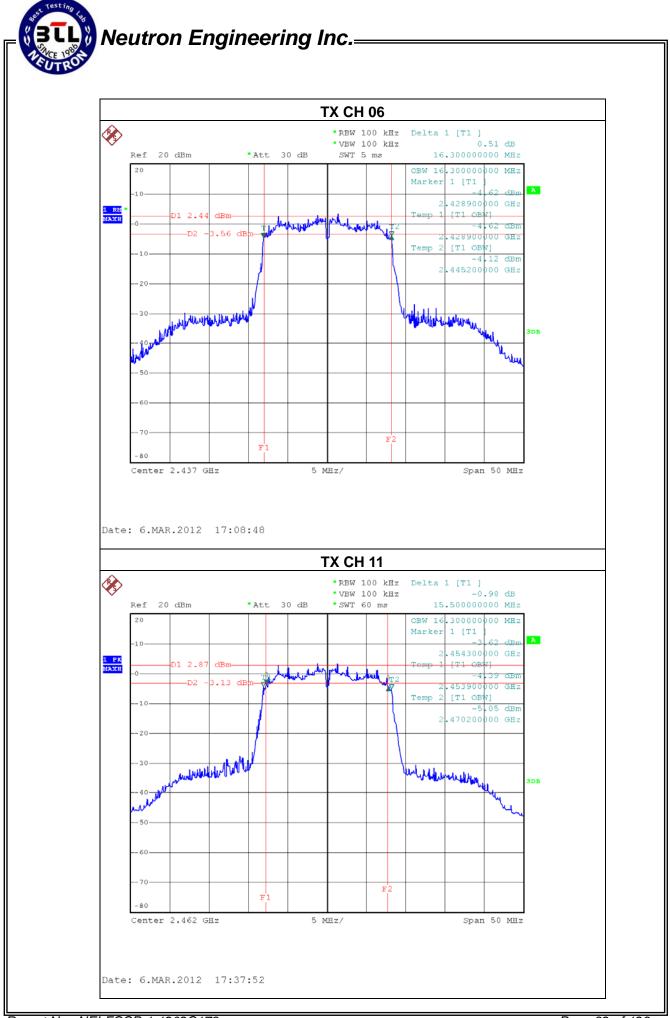
Report No.: NEI-FCCP-1-1202C179



EUT :	Wireless Nano Router	Model Name. :	M1	
Temperature :	24 °C	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	14.90	>=500KHz
CH06	2437	16.30	>=500KHz
CH11	2462	15.50	>=500KHz

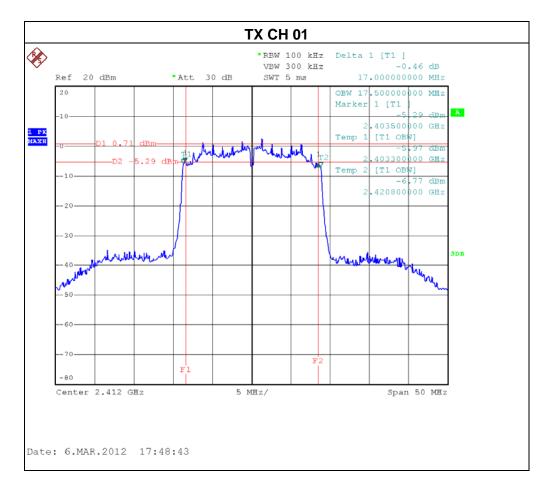


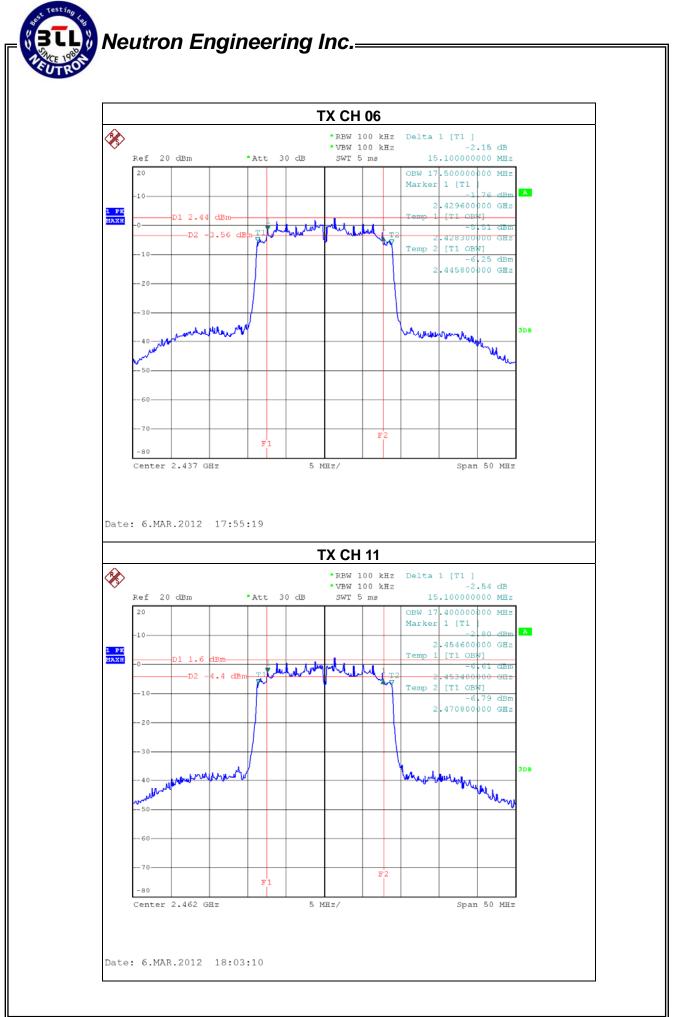




EUT :	Wireless Nano Router	Model Name. :	M1	
Temperature :	24 °C	Relative Humidity :	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH01	2412	17.00	>=500KHz
CH06	2437	15.10	>=500KHz
CH11	2462	15.10	>=500KHz

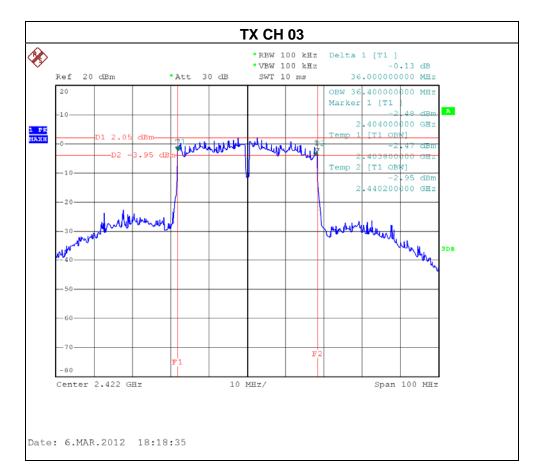


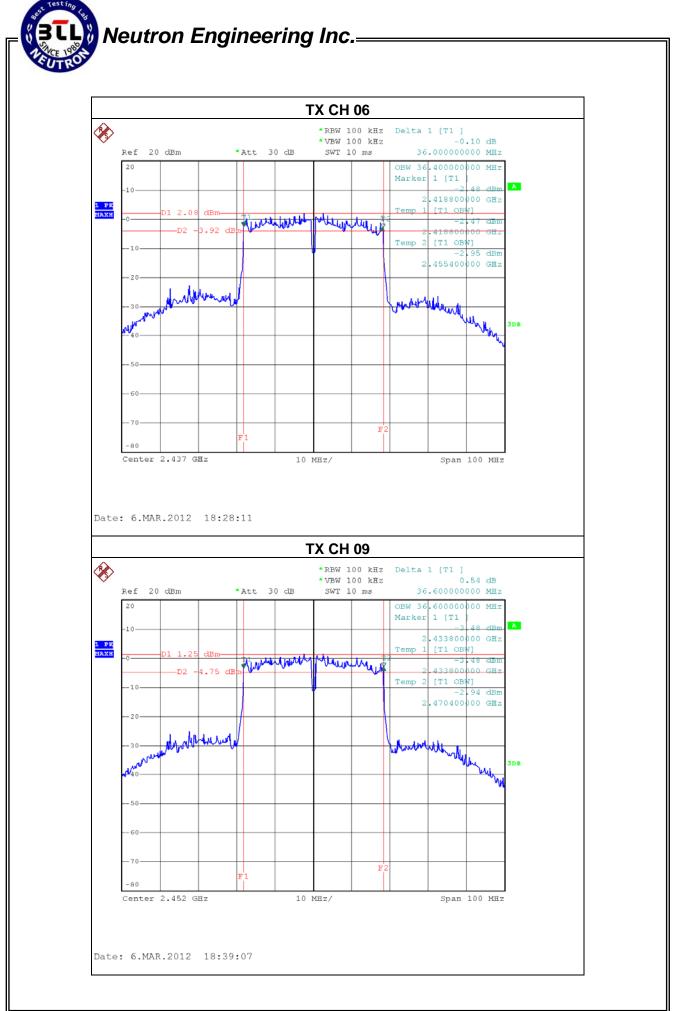




EUT :	Wireless Nano Router	Model Name. :	M1	
Temperature :	24 °C	Relative Humidity :	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N MODE -40MHz/ CH03, CH06, CH09			

Test Channel	Frequency (MHz)	Bandwidth (MHz)	LIMIT (MHz)
CH03	2422	36.00	>=500KHz
CH06	2437	36.00	>=500KHz
CH09	2452	36.60	>=500KHz





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6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Power Meter	Anritsu	ML2495A	1128009	Nov.01.2011	Nov.01.2012
2	Pluse Power Sensor	Anritsu	MA2411B	1128009	Nov.01.2011	Nov.01.2012

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

6.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 1MHz, VBW=3MHz, Sample detector, Sweep time = 100 ms.

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP

EUT	Power Meter

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 :	Wireless Nano Router	Model Name :	M1
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	20.90	30	1
CH06	2437 MHz	20.76	30	1
CH11	2462 MHz	20.58	30	1

EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa Test Voltage : AC 120V/60Hz		
Test Mode :	TX G MODE /CH01, CH06, CH11		

Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	23.67	30	1
CH06	2437 MHz	23.52	30	1
CH11	2462 MHz	23.62	30	1



EUT :	Wireless Nano Router	Model Name :	M1	
Temperature :	24 ℃	Relative Humidity :	60 %	
Pressure :	016 hPa Test Voltage : AC 120V/60Hz			
Test Mode :	TX N-20M MODE /CH01, CH06, CH11			

Maximum Output Power

Test Channel	Frequency	Output Power	LIMIT	LIMIT
rest Ghanner	(MHz)	(dBm)	(dBm)	(W)
CH01	2412 MHz	22.96	30	1
CH06	2437 MHz	22.35	30	1
CH11	2462 MHz	21.97	30	1

EUT :	Wireless Nano Router	Model Name :	M1	
Temperature :	24 ℃	Relative Humidity :	60 %	
Pressure :	1016 hPa Test Voltage : AC 120V/60Hz			
Test Mode :	TX N-40M MODE /CH03, CH06, CH09			

Maximum Output Power

Test Channel	Frequency	Output Power	LIMIT	LIMIT
	(MHz)	(dBm)	(dBm)	(W)
CH03	2422 MHz	23.98	30	1
CH06	2437 MHz	23.6	30	1
CH09	2452 MHz	23.21	30	1



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.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov.26.2011	Nov.26.2012

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

7.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 10 ms.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

7.1.5 EUT OPERATION CONDITIONS

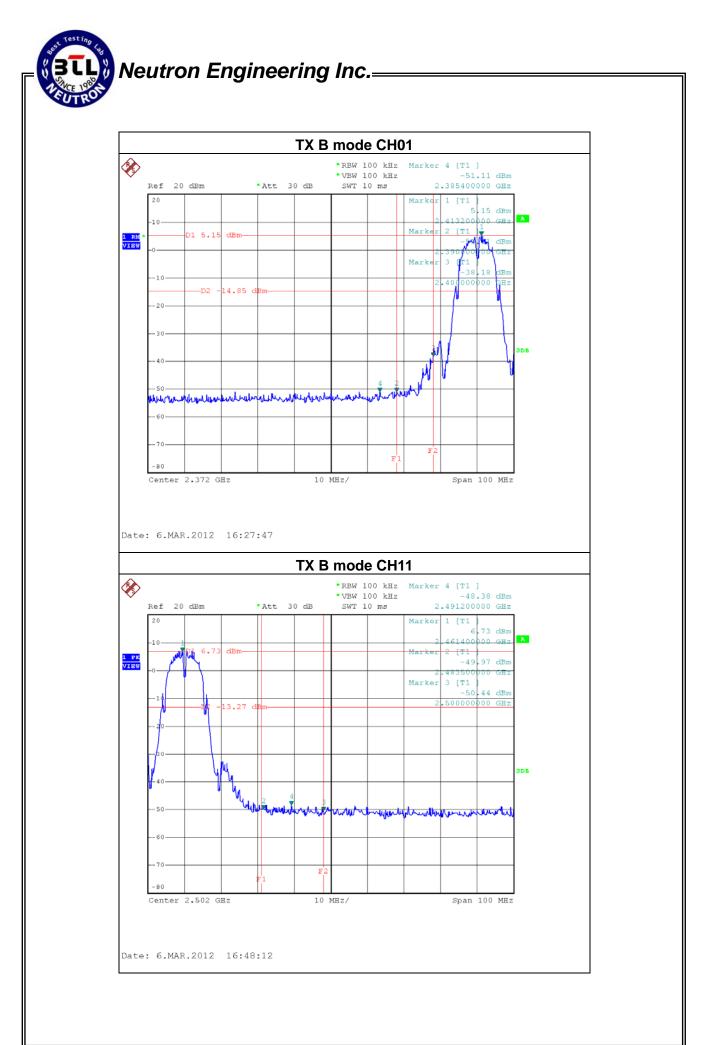
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

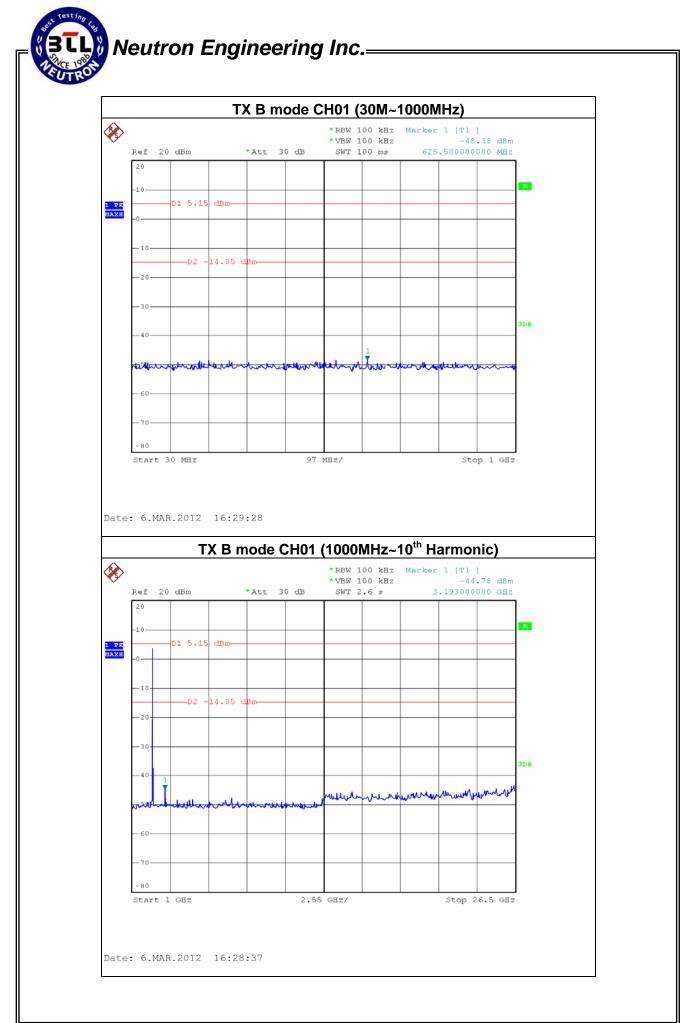


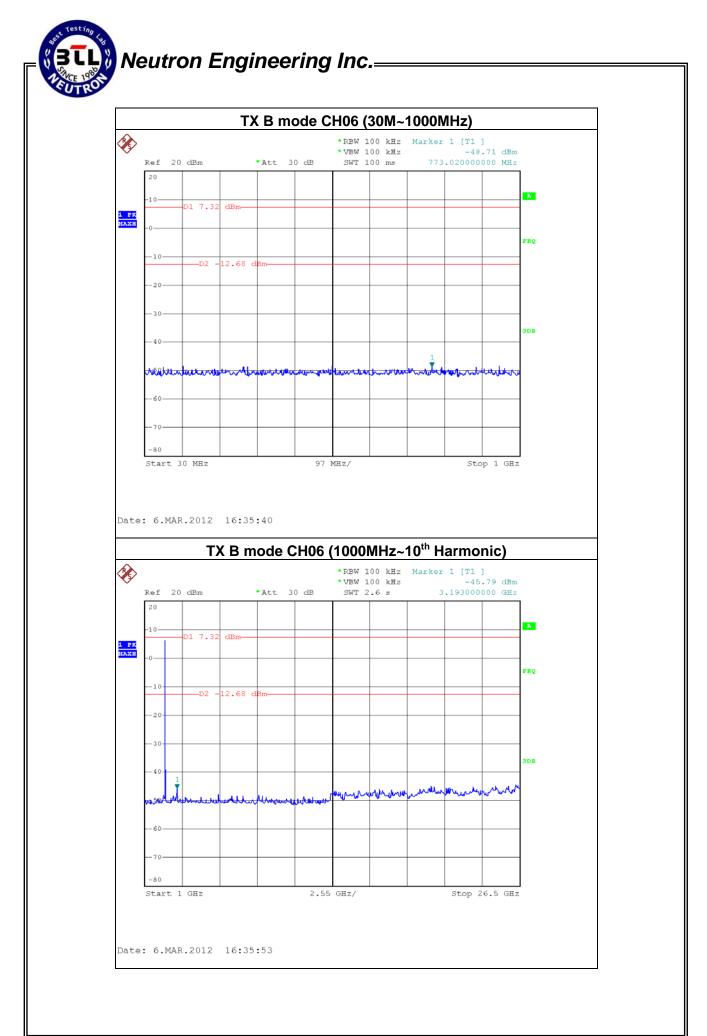
7.1.6 TEST RESULTS

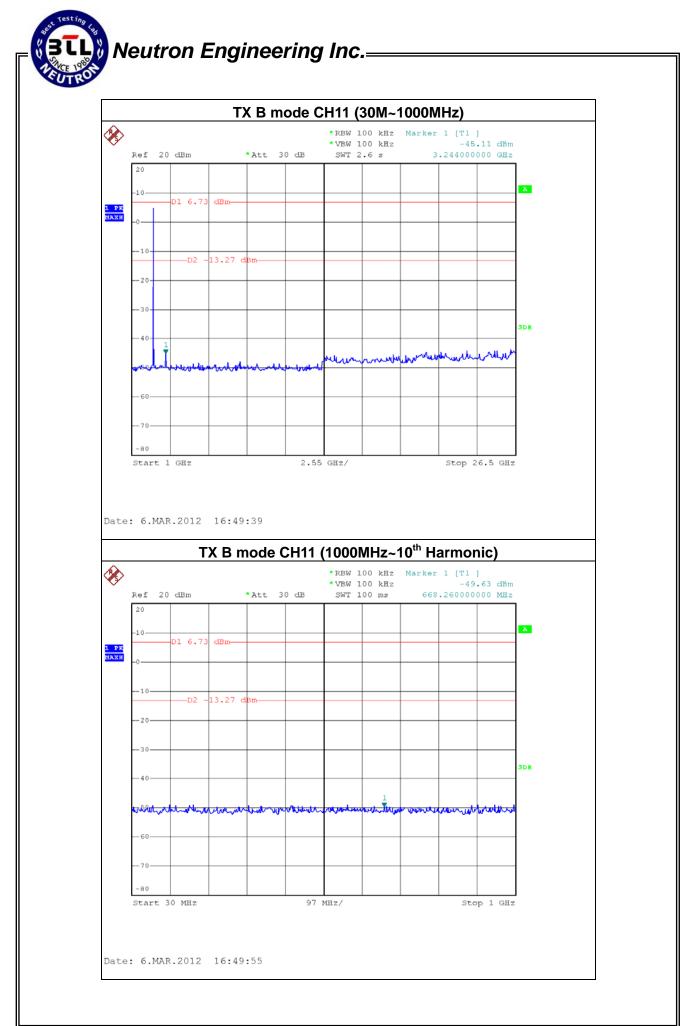
EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06 , CH11		

Channel of Worst Data: CH01					
The max. radio frequency power in any 100kHz The max. radio frequency power in any 100 kHz bandwidth within the frequency band bandwidth within the frequency band.					
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2400.00 -38.18 2491.20 -48.38					
Result					







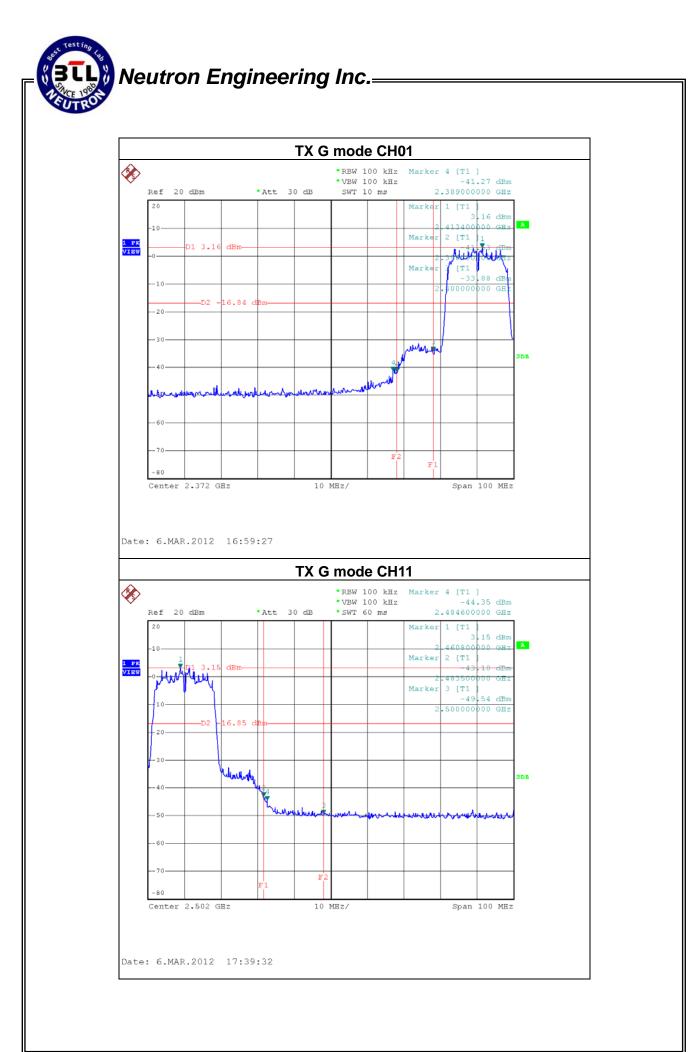


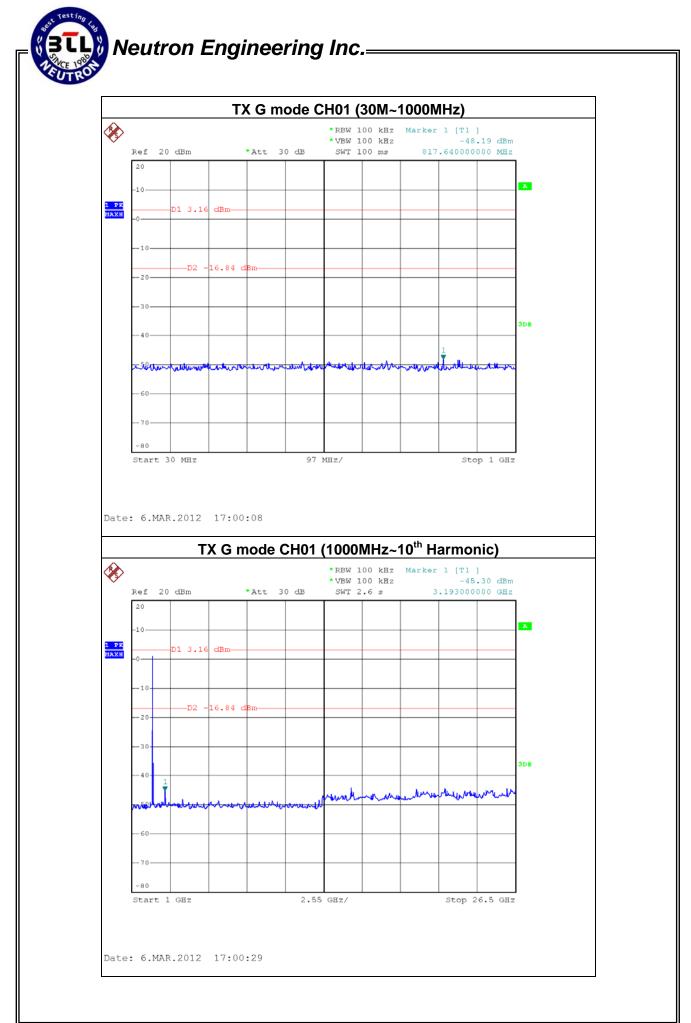


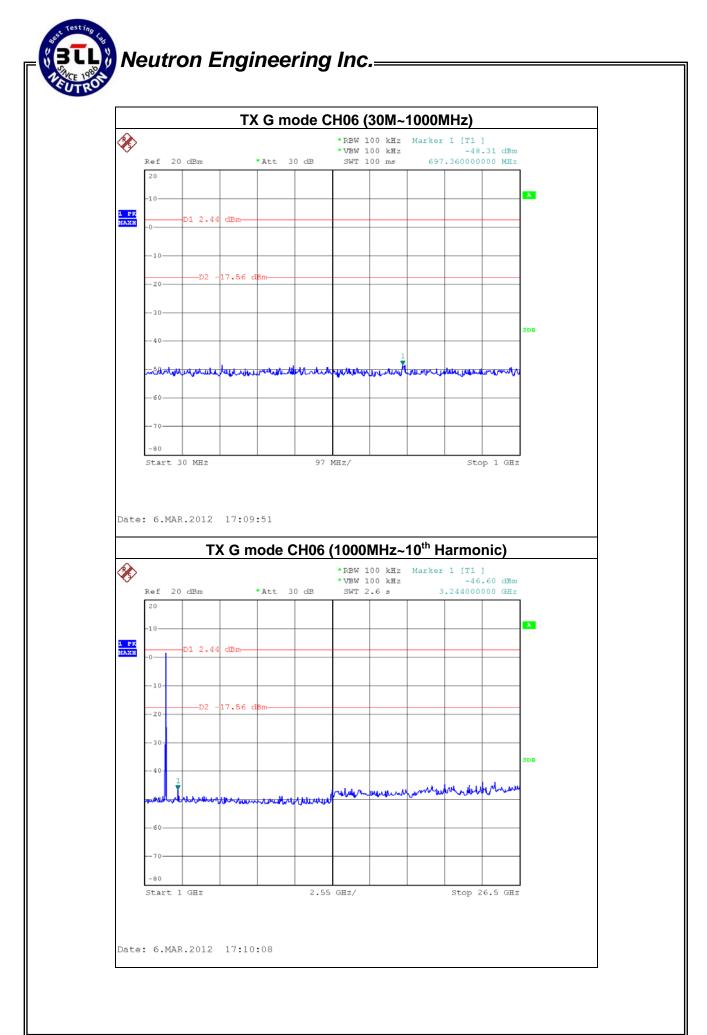
EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06 , CH11		

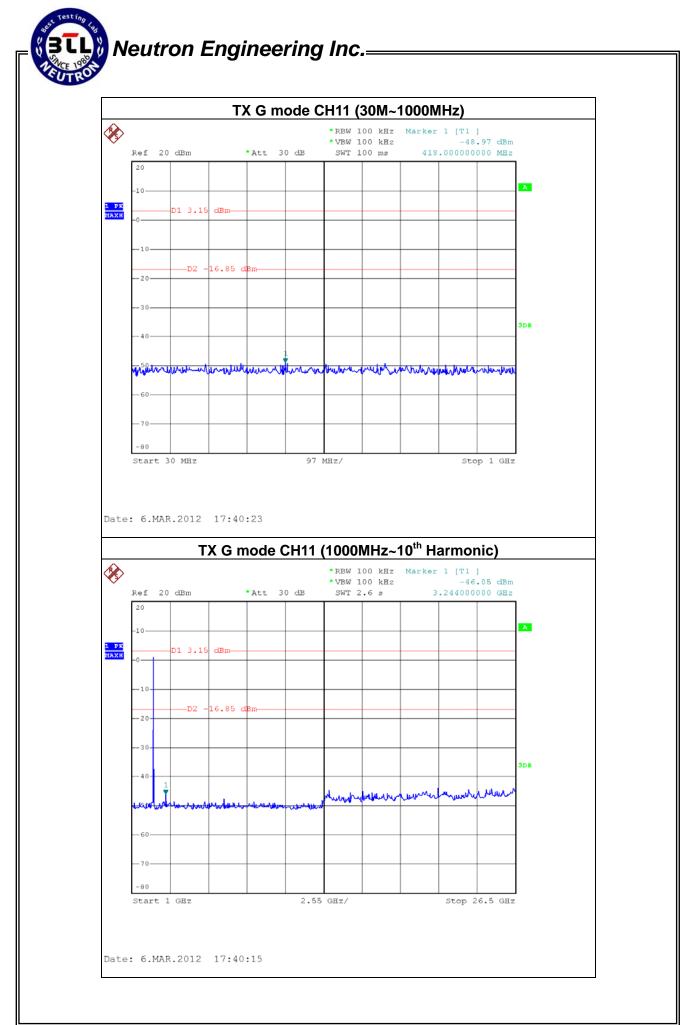
Channel of Worst Data: CH01

The max. radio frequent bandwidth within the time the second seco	5 1 5	The max. radio frequend bandwidth outside t	cy power in any 100 kHz
FREQUENCY(MHz) POWER(dBm)		FREQUENCY(MHz)	POWER(dBm)
2400.00	-33.88	2483.50	-43.10
Result			







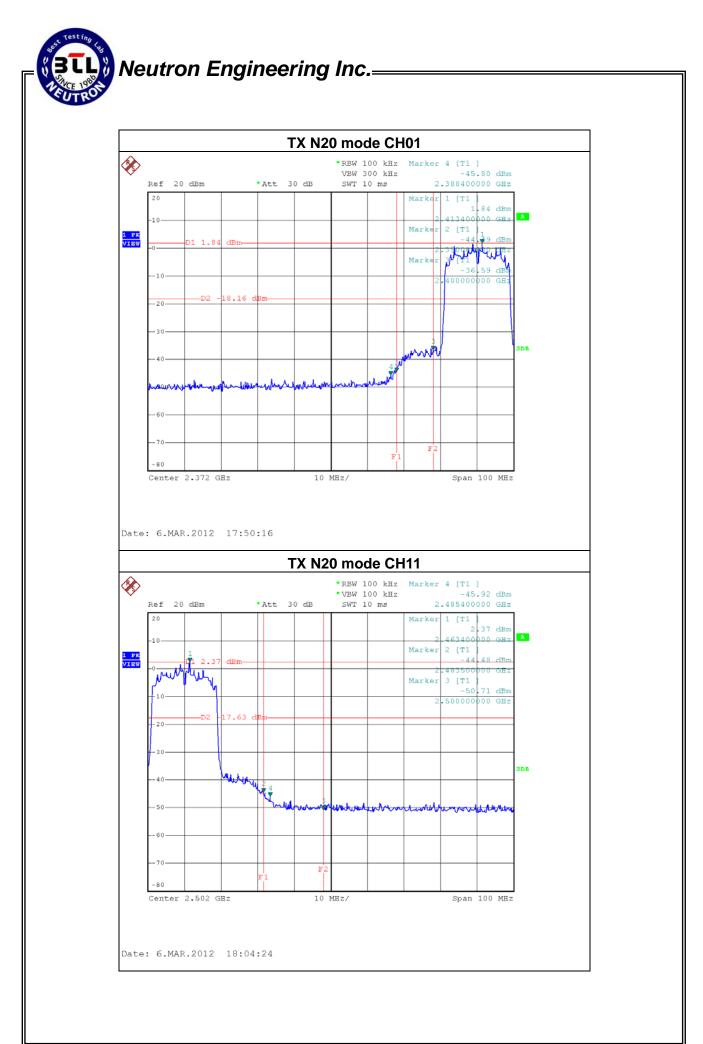


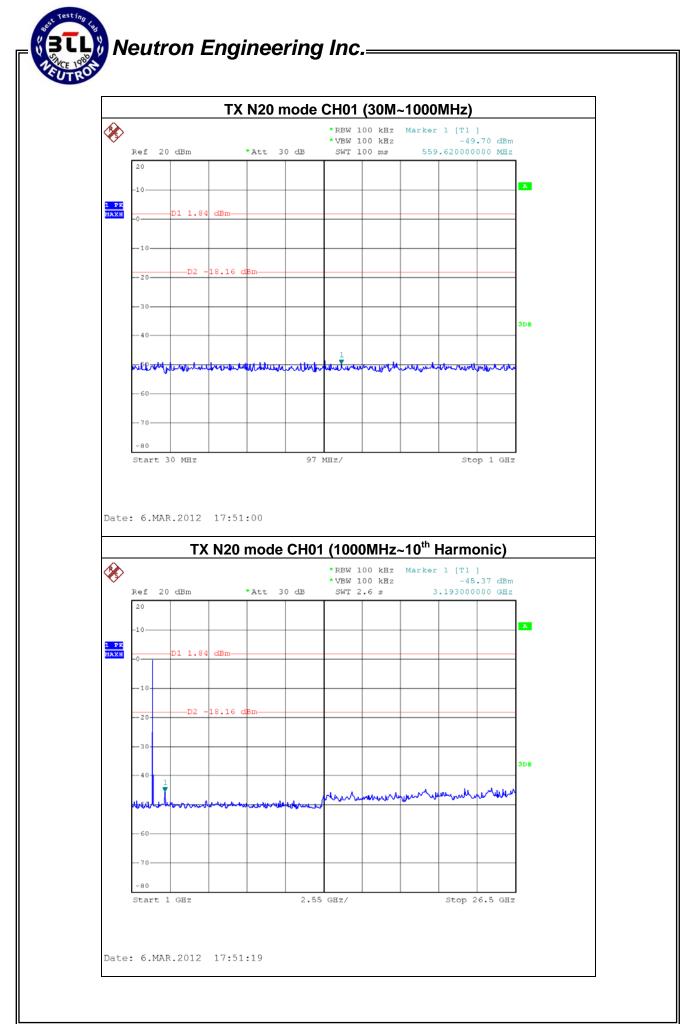


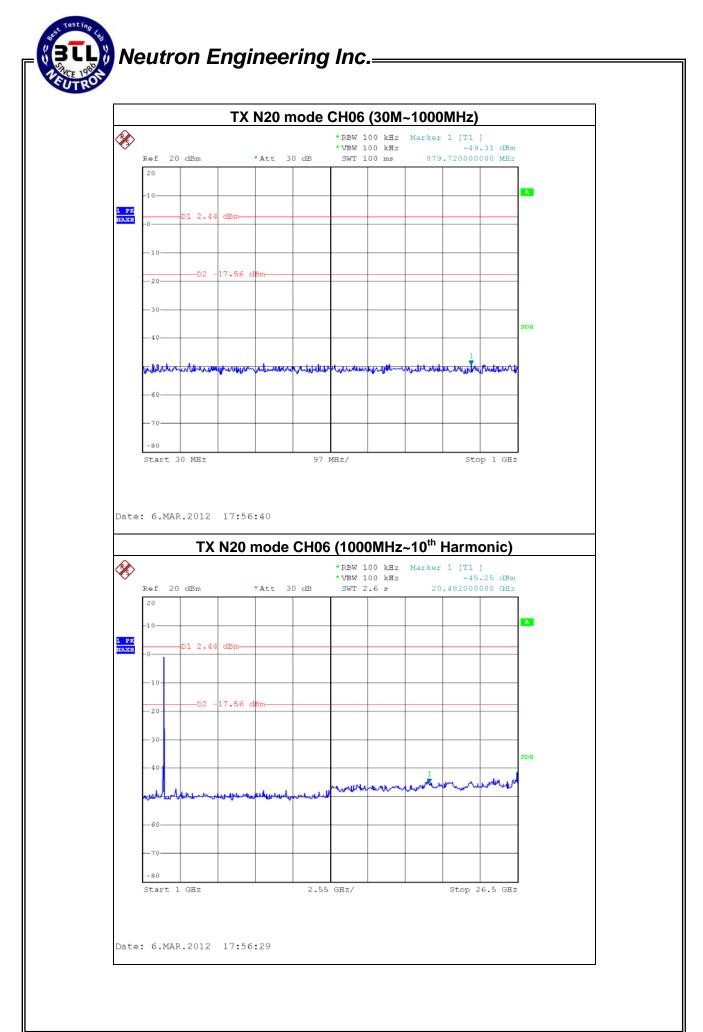
EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11		

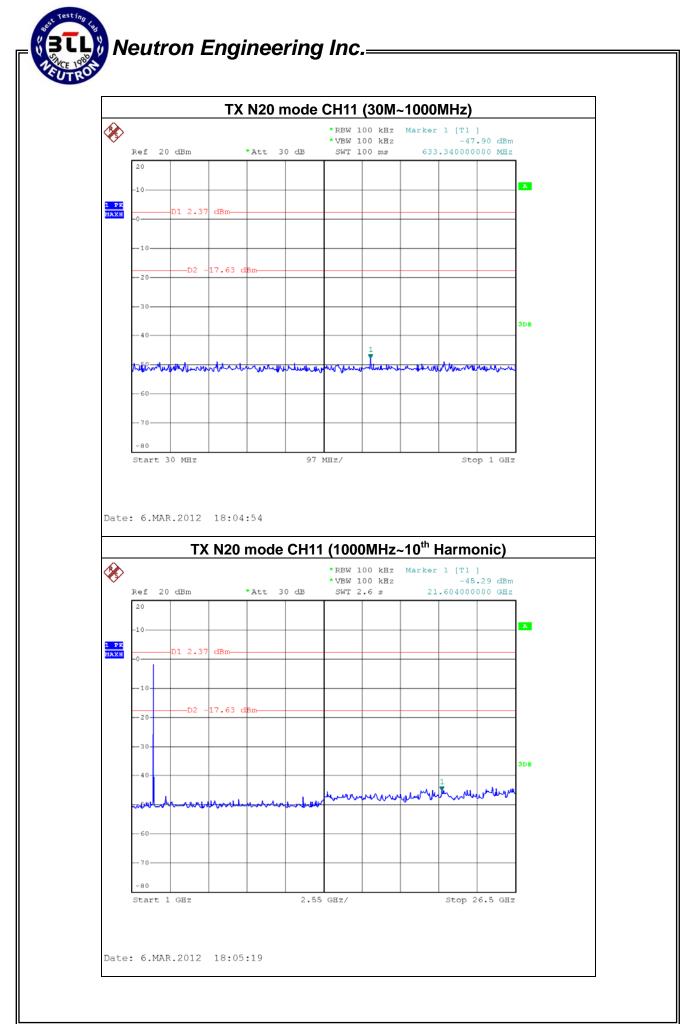
Channel of Worst Data: CH01

The max. radio frequency power in any 100kHz bandwidth within the frequency band			cy power in any 100 kHz ne frequency band.
FREQUENCY(MHz) POWER(dBm)		FREQUENCY(MHz)	POWER(dBm)
2400.00	-36.59	2483.50	-44.48
Result			







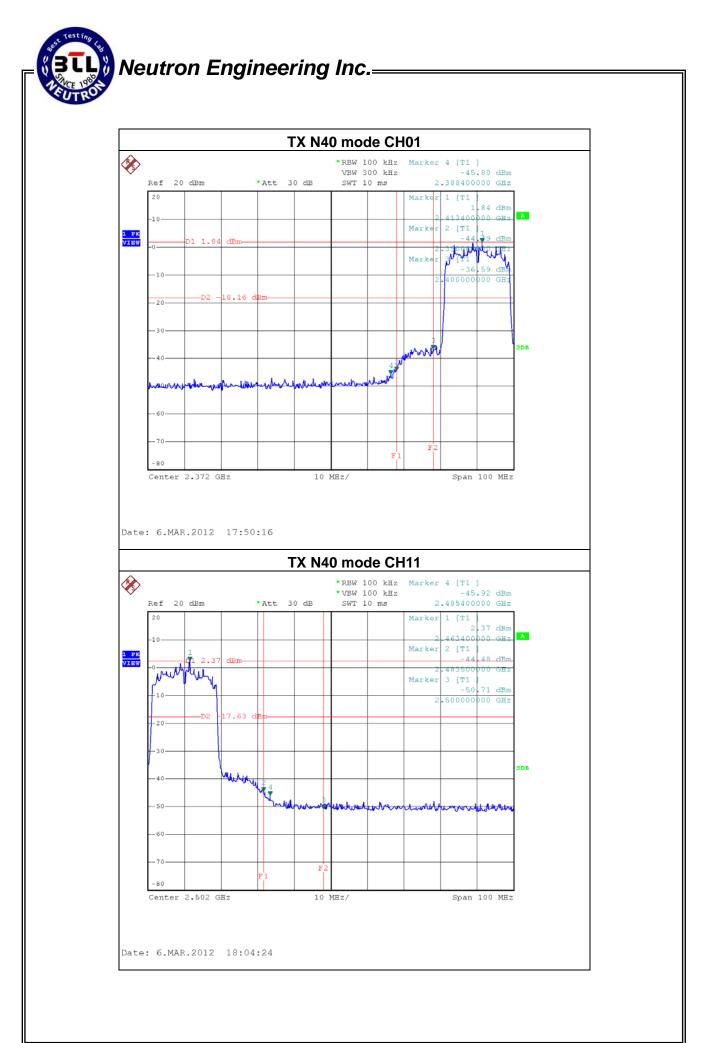


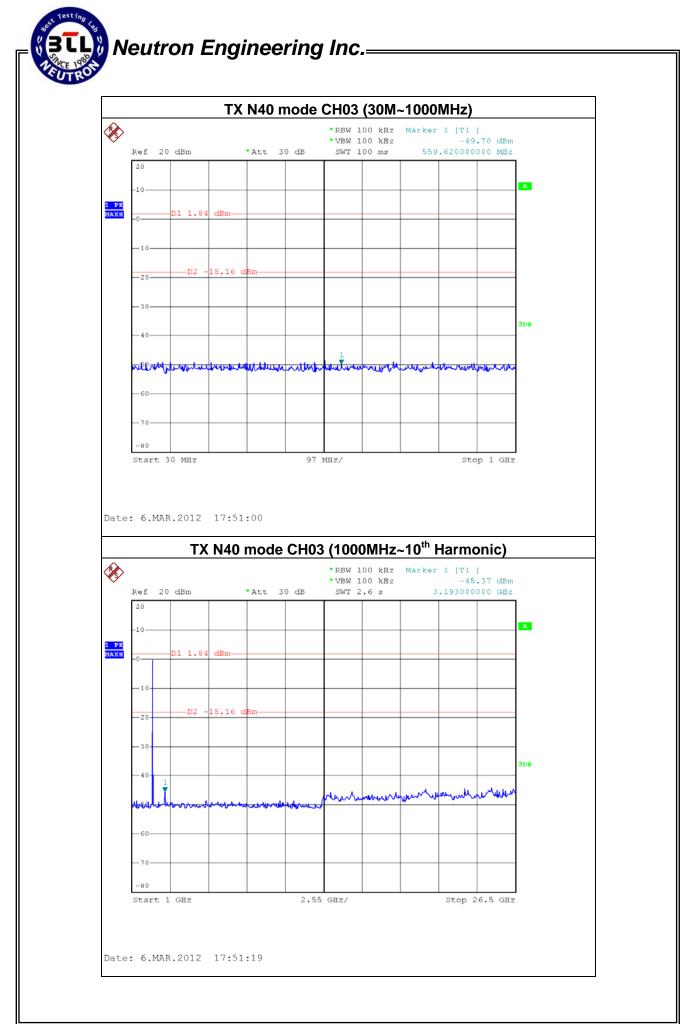


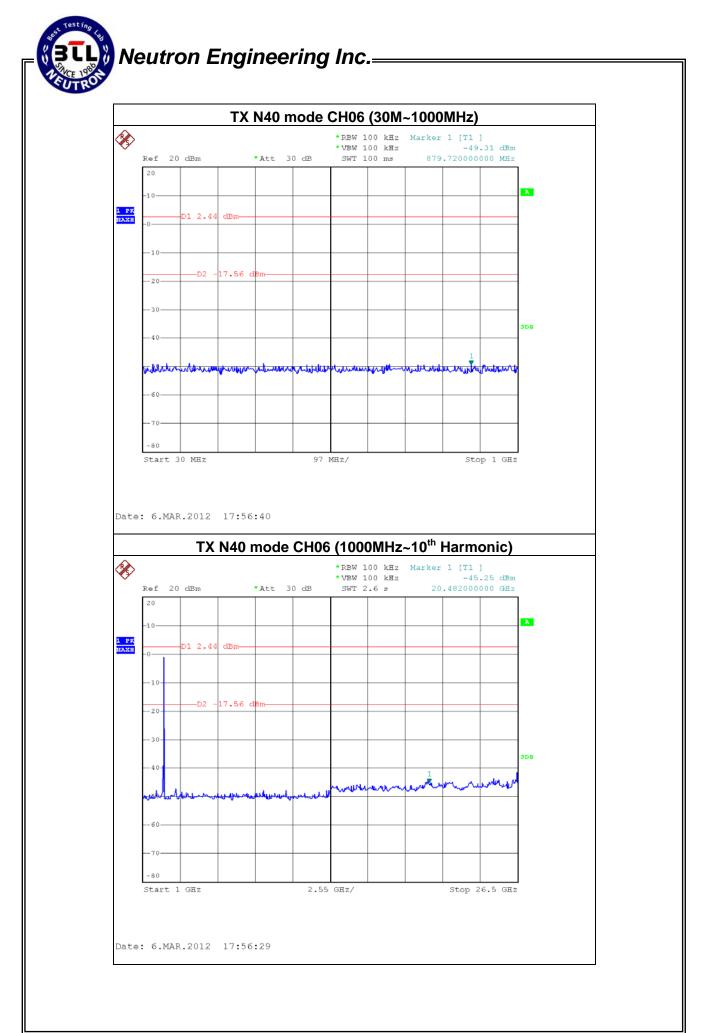
EUT :	Wireless Nano Router	Model Name :	M1	
Temperature :	24 ℃	Relative Humidity :	60 %	
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N-40M MODE /CH03, CH06, CH09			

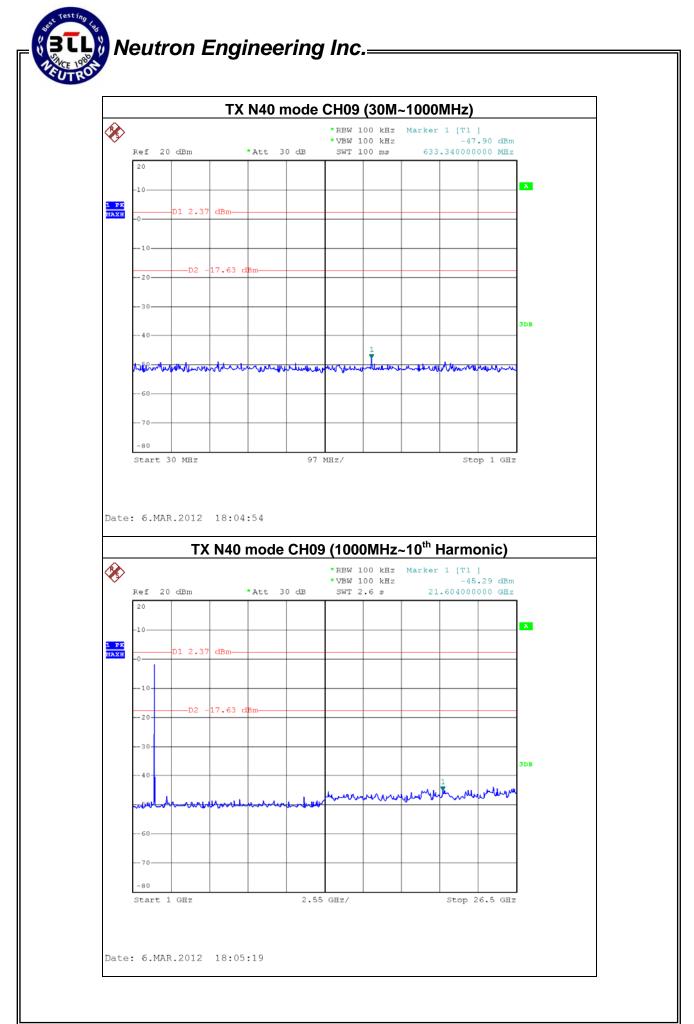
Channel of Worst Data: CH03

The max. radio frequency power in any 100kHz bandwidth outside the frequency band			cy power in any 100 kHz ne frequency band.
FREQUENCY(MHz) POWER(dBm)		FREQUENCY(MHz)	POWER(dBm)
2390.00	-23.51	2483.50	-29.84
Result			









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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.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov.26.2011	Nov.26.2012

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

8.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW=3KHz, VBW=30 KHz, Sweep time = 500s.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP



8.1.5 EUT OPERATION CONDITIONS

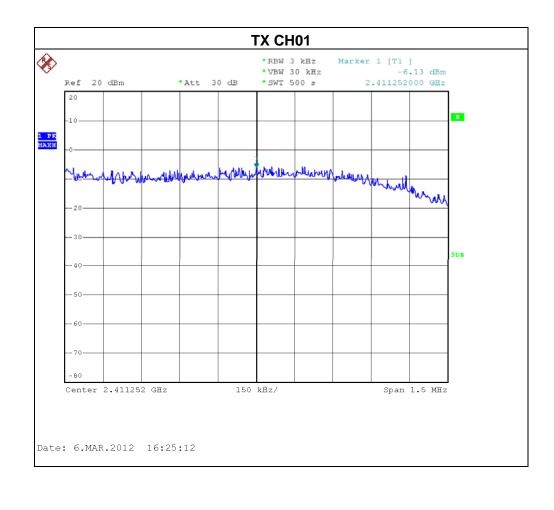
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

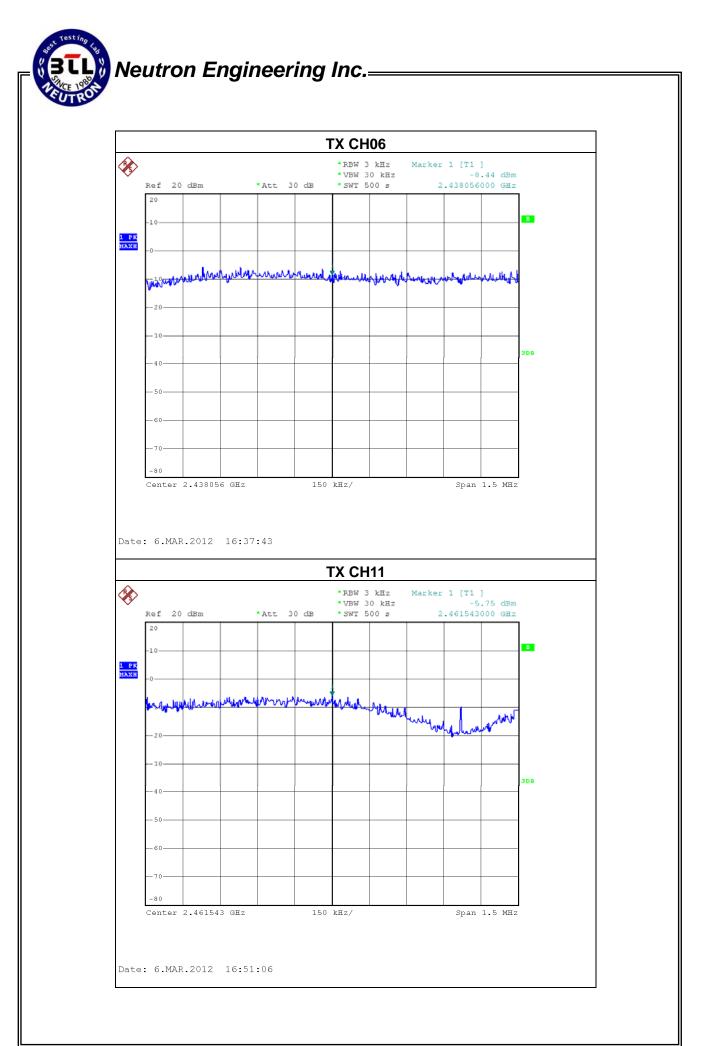


8.1.6 TEST RESULTS

EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-6.23	8
CH06	2437 MHz	-8.44	8
CH11	2462 MHz	-5.75	8

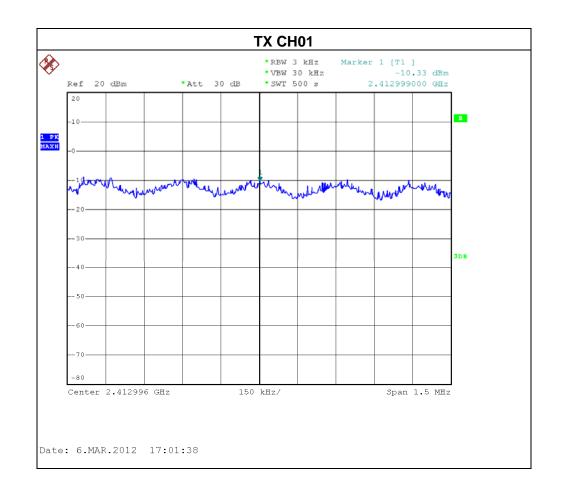


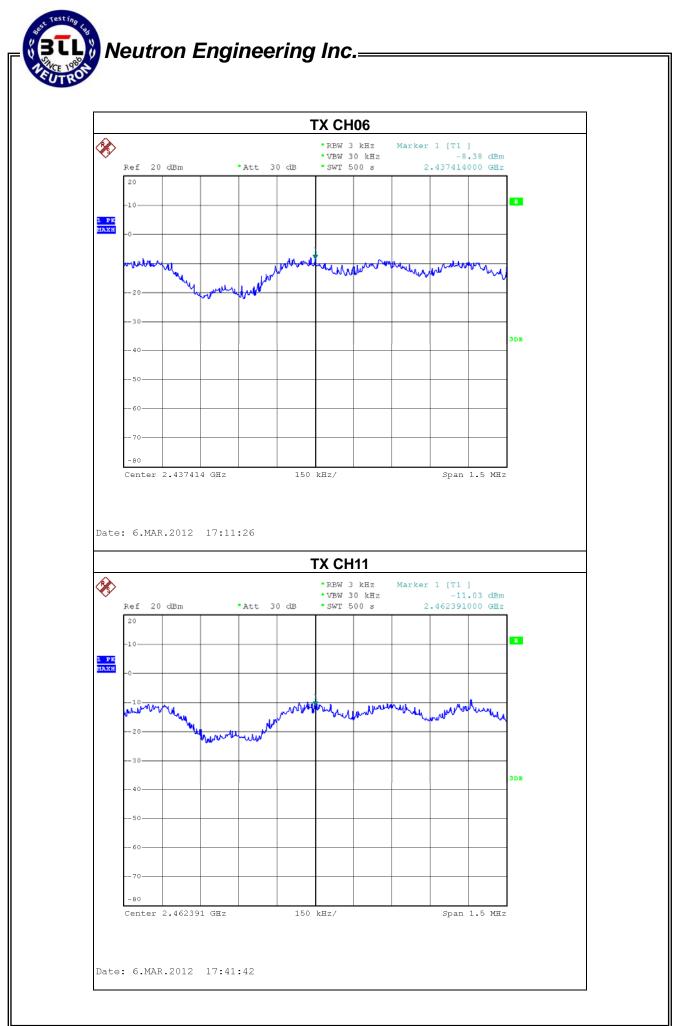




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-10.33	8
CH06	2437 MHz	-8.38	8
CH11	2462 MHz	-11.03	8

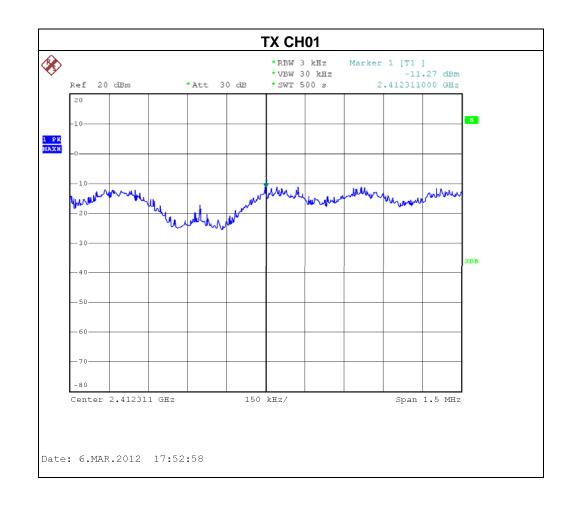


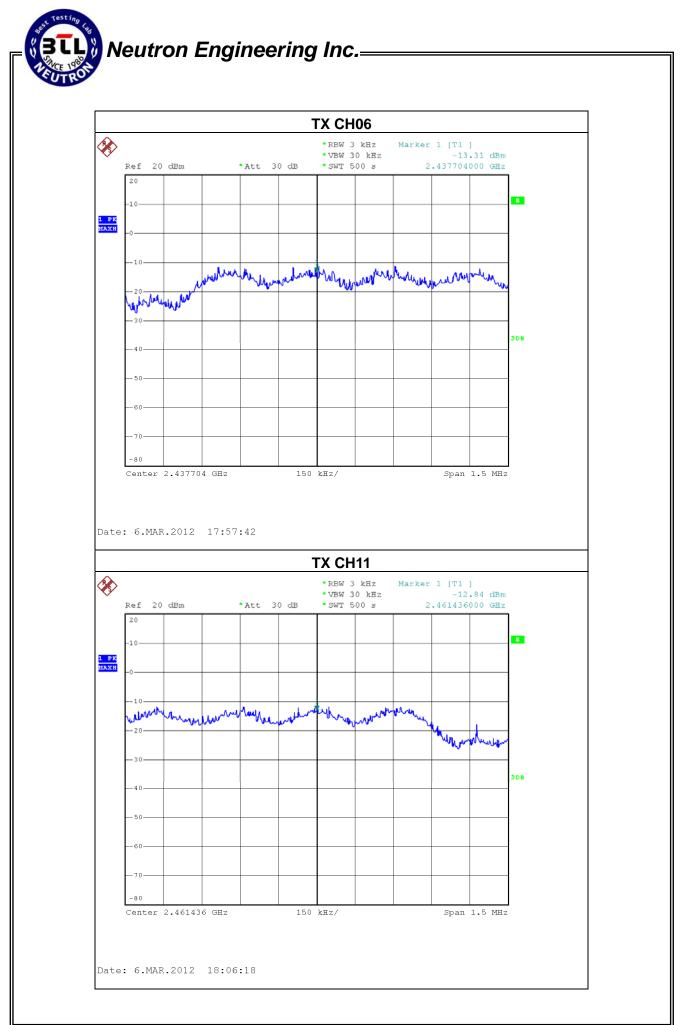




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 ℃	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power density (dBm)	LIMIT (dBm)	PASS/FAIL
CH01	2412	-11.27	8	PASS
CH06	2437	-13.31	8	PASS
CH11	2462	-12.84	8	PASS

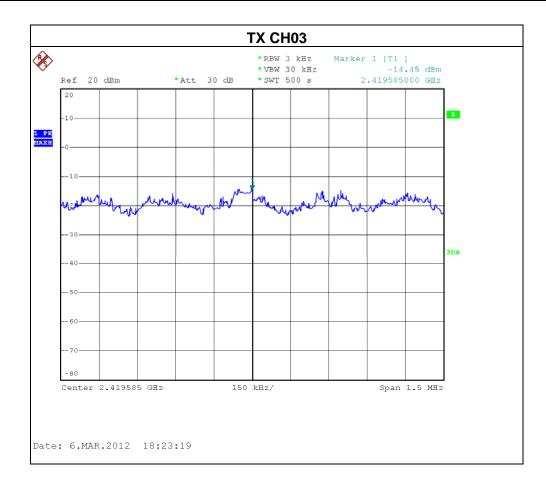


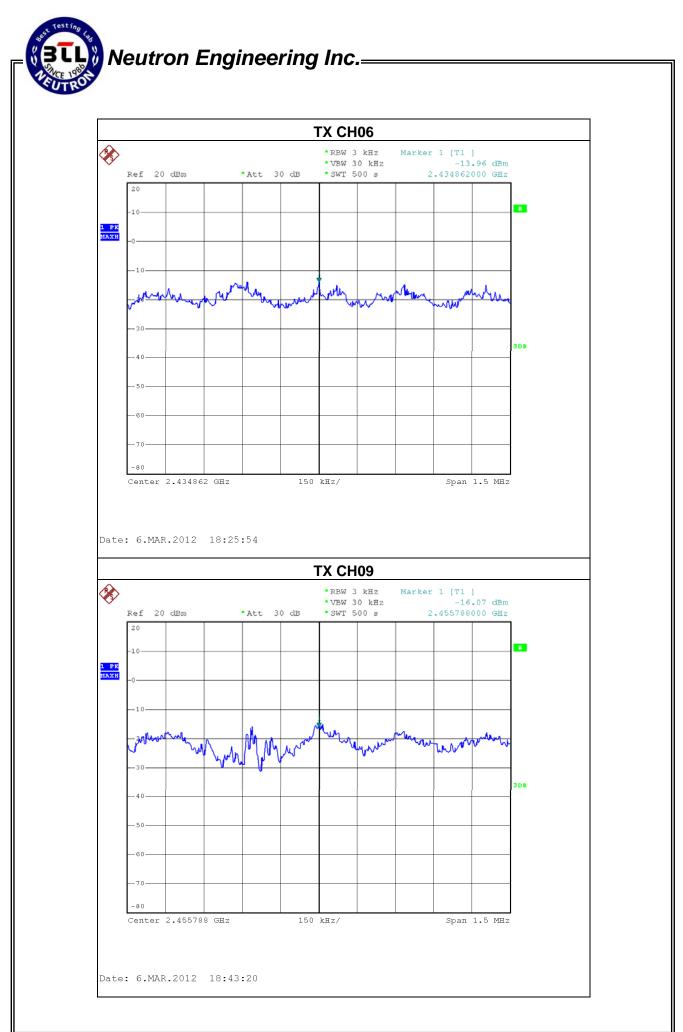




EUT :	Wireless Nano Router	Model Name :	M1
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09		

Test Channel	Frequency (MHz)	Power density (dBm)	LIMIT (dBm)	PASS/FAIL
CH03	2422	-14.45	8	PASS
CH06	2437	-13.96	8	PASS
CH09	2452	-16.07	8	PASS





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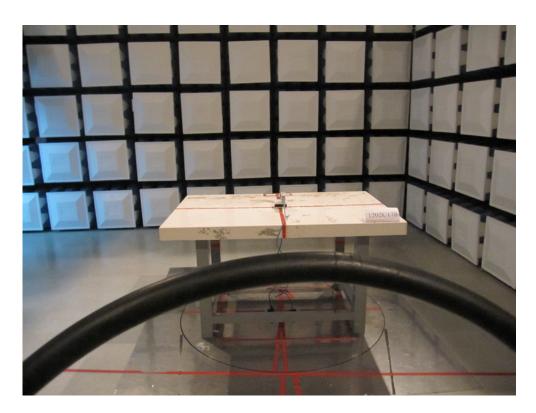
Conducted Measurement Photos

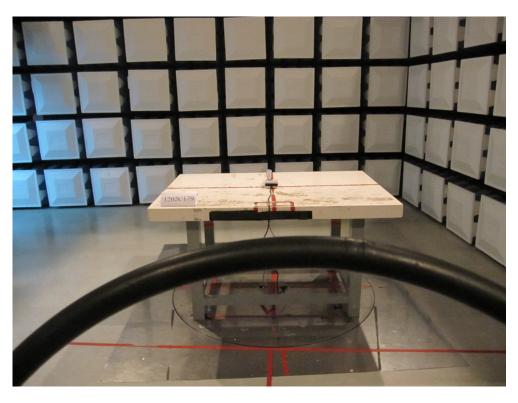






Radiated Measurement Photos 9K~30MHz

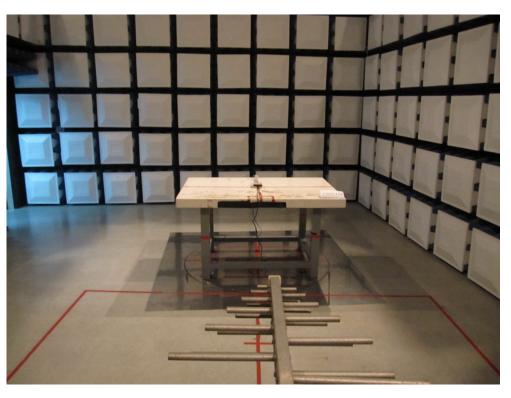






Radiated Measurement Photos 30MHz~1000MHz







Radiated Measurement Photos Above 1000MHz



