FCC Radio Test Report FCC ID: Y5SIT-G100RD

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

Issued Date : Jan. 26, 2011
Project No. : 1012C120

Equipment : wireless router wizard

Model Name: IT-G100RD: IT-G101R:IT-G102R:IT-G103R:

IT-G300R;IT-G301R

Applicant : WISE TRADE TRADING LIMITED

Address : 26A, Tianmian City Tower, Middle shennan

Road, Shenzhen China

Manufacturer: WISE TRADE TRADING LIMITED

Address : 26A, Tianmian City Tower, Middle shennan

Road, Shenzhen China

Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Jan. 06, 2011

Date of Test:

Jan. 06, 2011 ~ Jan. 25, 2011

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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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Report No.: NEI-FCCP-1-1012C120 Page 2 of 72

	Table of Contents	Page
1.	. CERTIFICATION	5
2	. SUMMARY OF TEST RESULTS	6
2		
	2.1 TEST FACILITY	7
	2.2 MEASUREMENT UNCERTAINTY	7
3	. GENERAL INFORMATION	8
	3.1 GENERAL DESCRIPTION OF EUT	8
	3.2 DESCRIPTION OF TEST MODES	10
	3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	11
	3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTE	D 12
	3.5 DESCRIPTION OF SUPPORT UNITS (RADIATED MODE)	13
4	. EMC EMISSION TEST	14
	4.1 CONDUCTED EMISSION MEASUREMENT	14
	4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	14
	4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING 4.1.3 TEST PROCEDURE	14 15
	4.1.4 DEVIATION FROM TEST STANDARD	15 15
	4.1.5 TEST SETUP	15
	4.1.6 EUT OPERATING CONDITIONS	15
	4.1.7 TEST RESULTS	16
	4.2 RADIATED EMISSION MEASUREMENT	18
	4.2.1 RADIATED EMISSION LIMITS 4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING	18 19
	4.2.3 TEST PROCEDURE	20
	4.2.4 DEVIATION FROM TEST STANDARD	20
	4.2.5 TEST SETUP	21
	4.2.6 EUT OPERATING CONDITIONS	21
	4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ) 4.2.8 TEST RESULTS (ABOVE 1000 MHZ)	22 24
5 .	. BANDWIDTH TEST	48
	5.1 APPLIED PROCEDURES / LIMIT	48
	5.1.1 MEASUREMENT INSTRUMENTS LIST	48
	5.1.2 TEST PROCEDURE	48
	5.1.3 DEVIATION FROM STANDARD	48
	5.1.4 TEST SETUP 5.1.5 EUT OPERATION CONDITIONS	48 48
	5.1.6 TEST RESULTS	49

Report No.: NEI-FCCP-1-1012C120 Page 3 of 72

Table of Contents	Page
6 . PEAK OUTPUT POWER TEST	53
6.1 APPLIED PROCEDURES / LIMIT	53
6.1.1 MEASUREMENT INSTRUMENTS LIST	53
6.1.2 TEST PROCEDURE	53
6.1.3 DEVIATION FROM STANDARD	53
6.1.4 TEST SETUP	53
6.1.5 EUT OPERATION CONDITIONS	53
6.1.6 TEST RESULTS	54
7. ANTENNA CONDUCTED SPURIOUS EMISSION	55
7.1 APPLIED PROCEDURES / LIMIT	55
7.1.1 MEASUREMENT INSTRUMENTS LIST	55
7.1.2 TEST PROCEDURE	55
7.1.3 DEVIATION FROM STANDARD	55
7.1.4 TEST SETUP	55
7.1.5 EUT OPERATION CONDITIONS	55
7.1.6 TEST RESULTS	56
8. POWER SPECTRAL DENSITY TEST	66
8.1 APPLIED PROCEDURES / LIMIT	66
8.1.1 MEASUREMENT INSTRUMENTS LIST	66
8.1.2 TEST PROCEDURE	66
8.1.3 DEVIATION FROM STANDARD	66
8.1.4 TEST SETUP	66
8.1.5 EUT OPERATION CONDITIONS	66
8.1.6 TEST RESULTS	67
9 FUT TEST PHOTO	71

Report No.: NEI-FCCP-1-1012C120 Page 4 of 72

1. CERTIFICATION

Equipment: wireless router wizard

Brand Name: INTEX

Model Name: IT-G100RD; IT-G101R;IT-G102R;IT-G103R;IT-G300R;IT-G301R

Applicant: WISE TRADE TRADING LIMITED Date of Test: Jan. 06, 2011 ~ Jan. 25, 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-1-1012C120) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Report No.: NEI-FCCP-1-1012C120 Page 5 of 72

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

Report No.: NEI-FCCP-1-1012C120 Page 6 of 72

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-CB03/DG-C03** 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-C03	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)	NOTE
	CISPR	30MHz ~ 200MHz	V	3.82	
DG-CB03		30MHz ~ 200MHz	Н	3.60	
DG-CB03		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	Н	3.94	

Report No.: NEI-FCCP-1-1012C120 Page 7 of 72



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	wireless router wizard				
Brand Name	INTEX	INTEX			
Model Name	IT-G100RD; IT-G101R;IT-G102R;IT-G103R; IT-G300R;IT-G301R				
OEM Brand/Model Name	N/A				
Model Difference	Different models for diffe	rent customers.			
	The EUT is a wireless ro	uter wizard.			
	Operation Frequency:	2412~2462 MHz			
	Modulation Type:	802.11b:CCK, DQPSK, DBPSK 802.11g:OFDM			
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps			
	Number of Channel	11 CH, Please see Note 2.			
Product Description		(please see page 9)			
1 roudet Boompton	Antenna Designation:	Please see Note 3.			
	Antenna Gain(Peak) (please see page 9)				
	Conducted Peak Output Power:	802.11b: 15.45 dBm 802.11g: 21.47 dBm			
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.				
Power Source DC Voltage supplied from AC/DC adapter Manufacturer:SHENZHENSHI HONGBEN ELECTRO CO.,LTD Model name:HB12-090080SPA					
Power Rating	I/P 100-240VAC~ 50/60Hz, 0.4A O/P 9.0V, 0.8A				
Connecting I/O Port(s)	Please refer to the User's Manual				
Products Covered	N/A				
Products Covered	N/A				

Note:

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

Report No.: NEI-FCCP-1-1012C120 Page 8 of 72



2. CH 01 – CH 11 for 802.11b, 802.11g

	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)
1	HuaDeChang	H1002	Dipole	R-SMA	2.0

Report No.: NEI-FCCP-1-1012C120 Page 9 of 72

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	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 3	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			

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 -Maximum Ant Gain(2dBi):

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

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

(3) Worst-case mode and channel used for 30-1000 MHz radiated and power line conducted emissions was the mode and channel with the highest output power, that was determined to be 11B Channel 11/Maximum Ant Gain (2dBi).

Report No.: NEI-FCCP-1-1012C120 Page 10 of 72

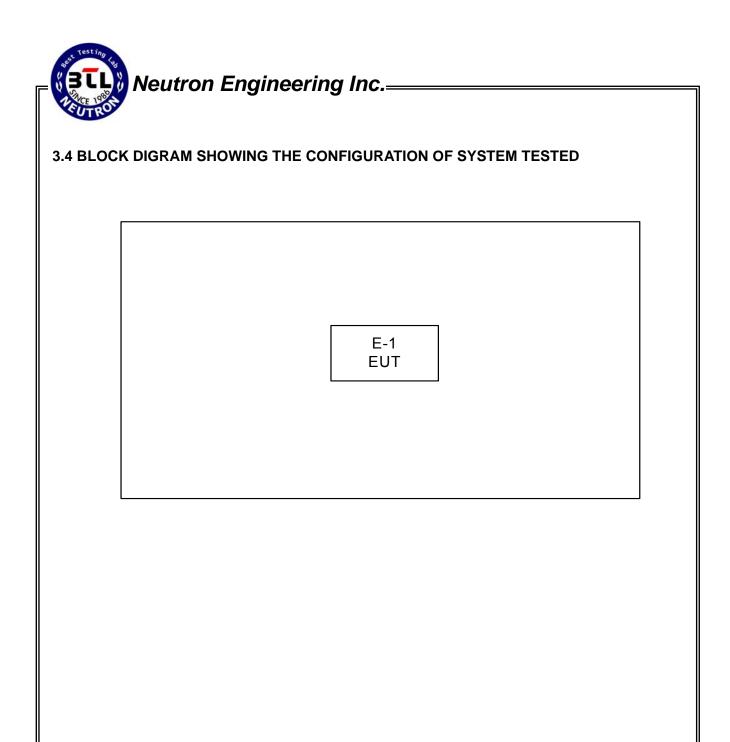


3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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: MP_TEST			
Frequency	2412 MHz 2437 MHz 2462 MHz			
IEEE 802.11b DSSS	2	3	3	
IEEE 802.11g OFDM	15	15	15	

Report No.: NEI-FCCP-1-1012C120 Page 11 of 72



Report No.: NEI-FCCP-1-1012C120 Page 12 of 72



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 router wizard	INTEX	IT-G100RD	Y5SIT-G100RD	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

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

Report No.: NEI-FCCP-1-1012C120 Page 13 of 72

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	Class A (dBuV)		Class B (dBuV)		
TREQUENCT (MITZ)	Quasi-peak	Average	Quasi-peak	Average	Standard	
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.26.2011
2	LISN	Rolf Heine	NNB-2-16Z	99044	May.26.2011
3	50Ω Terminator	SHX	TF2-3G-A	08122901	May.26.2011
4	Transient Limiter	Agilent	11947A	3107A03668	May.26.2011
5	Test Cable	N/A	C-06_C03	N/A	Nov.15.2011
6	Test Receiver	R&S	ESCI	100382	May.26.2011

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

The following table is the setting of the receiver

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

Report No.: NEI-FCCP-1-1012C120 Page 14 of 72

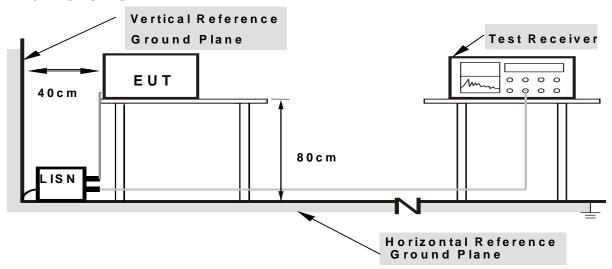
4.1.3 TEST PROCEDURE

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

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



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

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

4.1.6 EUT OPERATING CONDITIONS

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

The EUT was programmed to be in continuously transmitting mode.

Report No.: NEI-FCCP-1-1012C120 Page 15 of 72

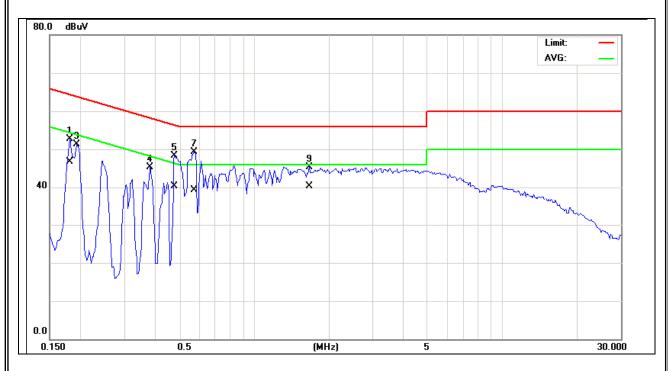
4.1.7 TEST RESULTS

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	21 ℃	Relative Humidity:	50%
Pressure:	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	Normal Link		

Freq.	Terminal	Measure	d(dBuV)	Limits	(dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	Note
0.18	Line	52.67	46.62	64.43	54.43	-7.81	(AV)
0.19	Line	51.34	*	63.91	53.91	-12.57	(QP)
0.38	Line	45.35	*	58.27	48.27	-12.92	(QP)
0.48	Line	48.35	40.24	56.37	46.37	-6.13	(AV)
0.58	Line	49.38	39.34	56.00	46.00	-6.62	(QP)
1.67	Line	45.24	40.30	56.00	46.00	-5.70	(AV)

Remark

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

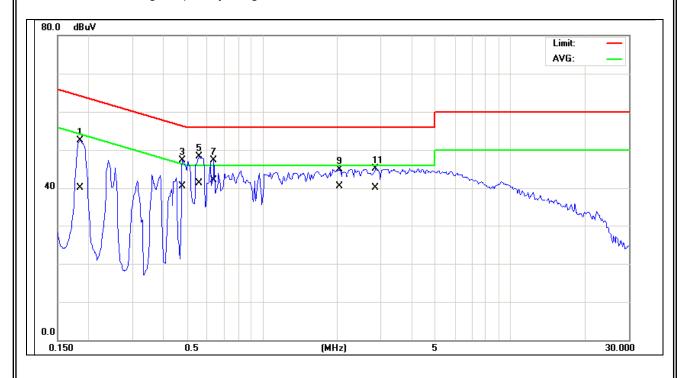


Report No.: NEI-FCCP-1-1012C120 Page 16 of 72

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	21 ℃	Relative Humidity:	50%
Pressure:	1010hPa	Test Power :	AC 120V/60Hz
Test Mode :	Normal Link		

Freq.	Terminal	Measure	d(dBuV)	Limits((dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	Note
0.19	Neutral	52.58	40.09	64.25	54.25	-11.67	(QP)
0.48	Neutral	47.26	40.50	56.37	46.37	-5.87	(AV)
0.56	Neutral	48.39	41.40	56.00	46.00	-4.60	(AV)
0.64	Neutral	47.39	42.10	56.00	46.00	-3.90	(AV)
2.05	Neutral	44.95	40.44	56.00	46.00	-5.56	(AV)
2.88	Neutral	45.04	40.17	56.00	46.00	-5.83	(AV)

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



Report No.: NEI-FCCP-1-1012C120 Page 17 of 72

4.2 RADIATED EMISSION MEASUREMENT

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

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

Report No.: NEI-FCCP-1-1012C120 Page 18 of 72

4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Triple Loop Antenna	R&S	HFH2-Z2	830749/020	May.27.2011
2	Bi-log Antenna	Schwarbeck	VULB9160	9160-3232	May.26.2011
3	Horn Antenna	ETS	3115	00075789	May.12.2011
4	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170340	Dec.15.2011
5	Amplifier	HP	8447D 2944A09673		May.26.2011
6	Amplifier	Agilent	8449B	3008A02274	May.26.2011
7	Amplifier	EMC	EMC265404 5	980039	Aug.12.2011
8	Test Receiver	R&S	ESCI	100895	May.26.2011
9	Spectrum Analyzer	R&S	FSP 40	100185	Nov.26.2011
10	Test Cable	N/A	C-01_CB03	N/A	Jul.05.2011
11	Test Cable	HUBER+SUHNER	SUCOFLEX_ 8m	313794/4	Apr.12.2011
12	Controller	СТ	SC100	N/A	N/A

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	ANUL / ANUL for Dook A MUL / ADUL for Average			
(Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average			

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

Report No.: NEI-FCCP-1-1012C120 Page 19 of 72



4.2.3 TEST PROCEDURE

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

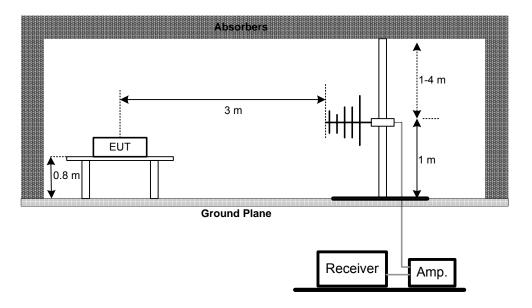
4.2.4 DEVIATION FROM TEST STANDARD
No deviation

Report No.: NEI-FCCP-1-1012C120 Page 20 of 72

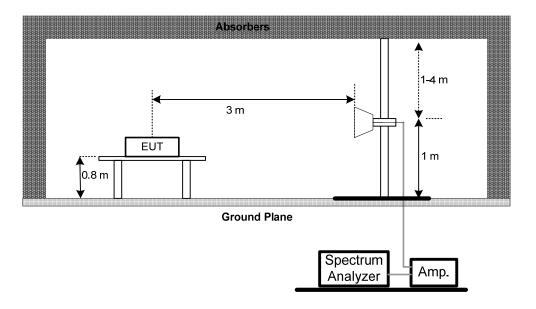


4.2.5 TEST SETUP

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



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



4.2.6 EUT OPERATING CONDITIONS

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

Report No.: NEI-FCCP-1-1012C120 Page 21 of 72

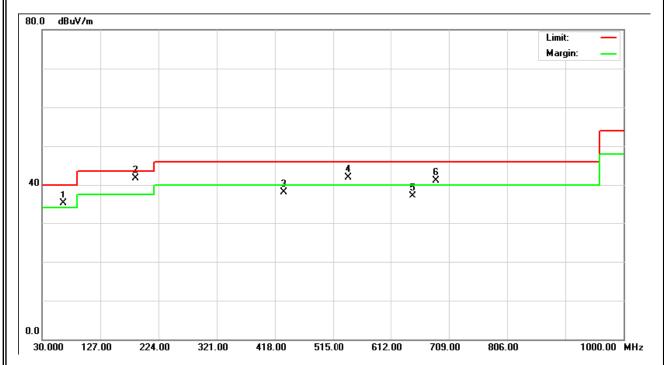
4.2.7 TEST RESULTS (BETWEEN 30 - 1000 MHZ)

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
64.39	V	52.64	-17.58	35.06	40.00	- 4.94	
185.06	V	58.55	-16.81	41.74	43.50	- 1.76	(QP)
432.33	V	46.50	-8.44	38.06	46.00	- 7.94	
540.85	V	47.68	-5.83	41.85	46.00	- 4.15	
648.19	V	40.56	-3.37	37.19	46.00	- 8.81	
687.04	V	44.24	-3.22	41.02	46.00	- 4.98	

Remark:

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

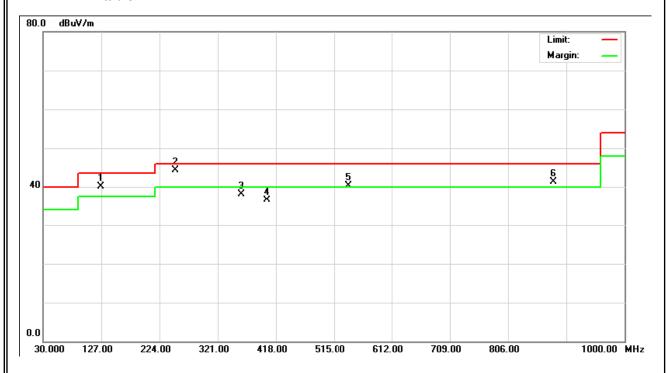


Report No.: NEI-FCCP-1-1012C120 Page 22 of 72

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
125.49	Н	58.35	-18.20	40.15	43.50	- 3.35	
249.35	Н	59.00	-14.61	44.39	46.00	- 1.61	
359.86	Н	48.50	-10.48	38.02	46.00	- 7.98	
402.18	Н	45.47	-8.98	36.49	46.00	- 9.51	
540.11	Н	46.11	-5.86	40.25	46.00	- 5.75	
881.47	Н	41.71	-0.38	41.33	46.00	- 4.67	

- (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 = $0.3 \text{ sec./MHz} \circ$
- (2) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (3) Measuring frequency range from 30MHz to 1000MHz \circ
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table \circ



Report No.: NEI-FCCP-1-1012C120 Page 23 of 72

4.2.8 TEST RESULTS (ABOVE 1000 MHZ)

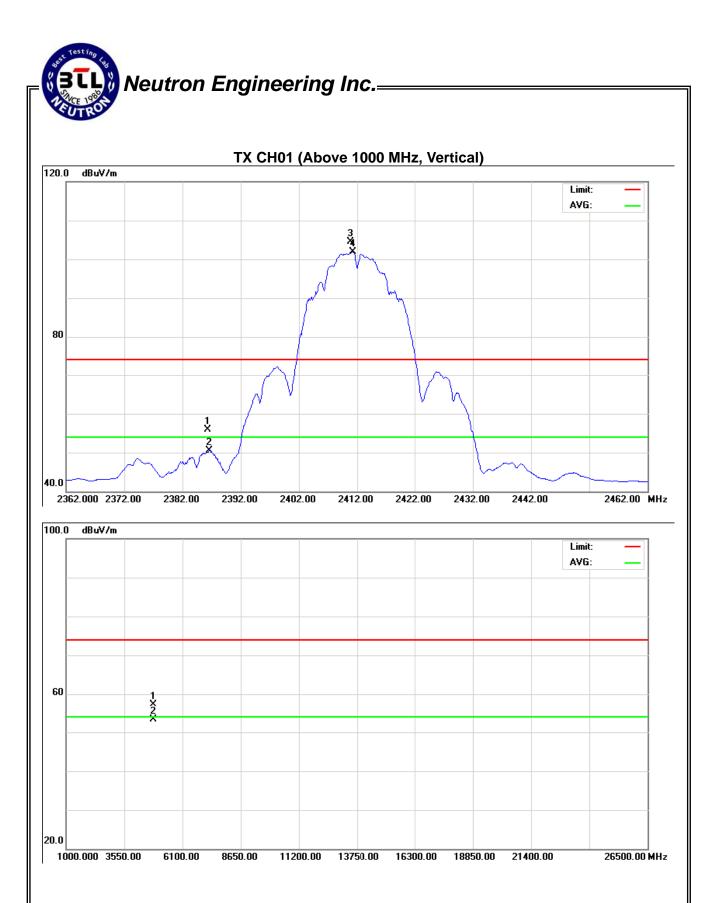
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

Fred	Freg. Ant.Pol.		ding	Ant./CF	A	ct.	Lir	mit	
1 164.	AII.FUI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2386.30	V	24.48	19.12	31.39	55.87	50.51	74.00	54.00	XΈ
2411.20	V	73.13	70.54	31.37	104.50	101.91			X/F
4824.16	V	52.00	48.11	5.28	57.28	53.39	74.00	54.00	X/H

Remark:

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

Report No.: NEI-FCCP-1-1012C120 Page 24 of 72



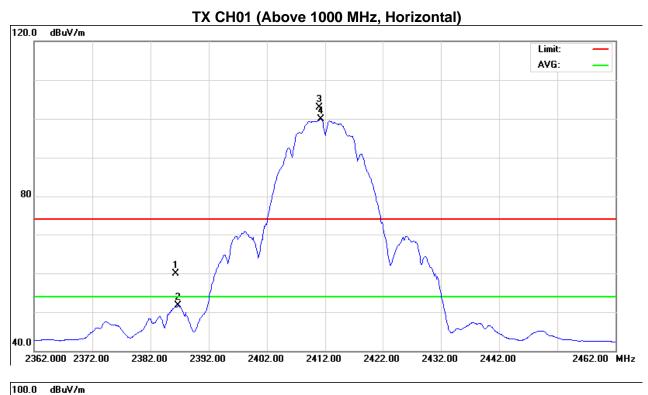
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2412MHz		

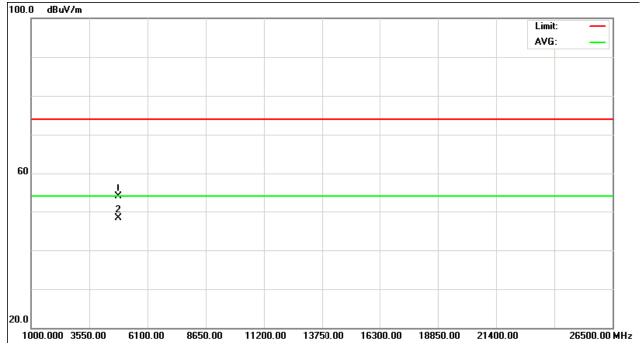
Freq.	reg. Ant.Pol.		ding	Ant./CF	A	ct.	Liı	mit	
1 164.	AIII.FUI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2386.30	Н	28.56	20.36	31.39	59.95	51.75	74.00	54.00	X/E
2411.00	Н	71.53	68.55	31.37	102.90	99.92			X/F
4824.18	Н	48.68	42.97	5.28	53.96	48.25	74.00	54.00	X/H

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

Report No.: NEI-FCCP-1-1012C120 Page 26 of 72

Neutron Engineering Inc.





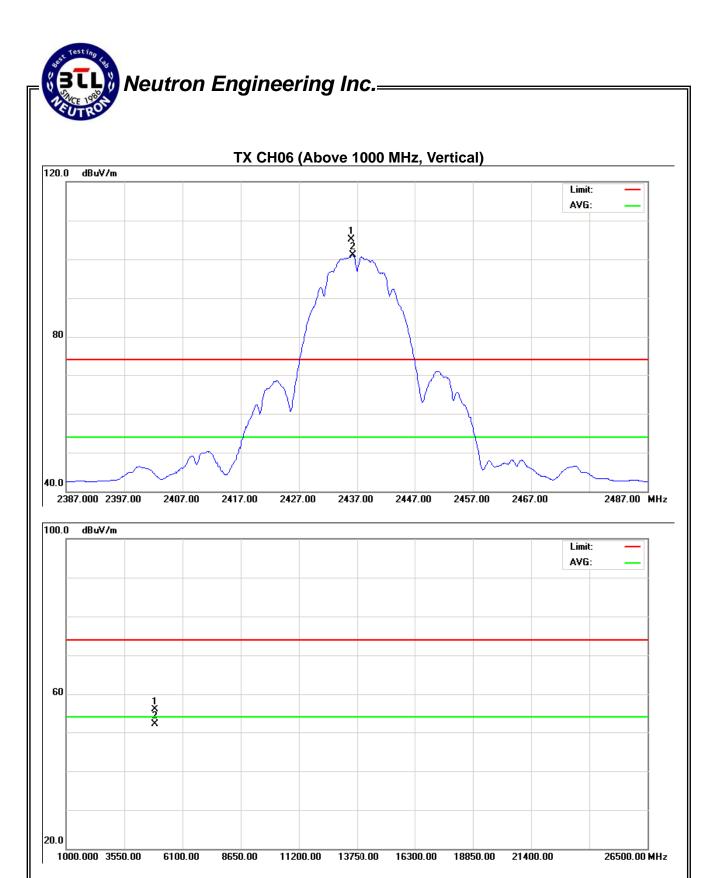
Report No.: NEI-FCCP-1-1012C120 Page 27 of 72

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

Freg. Ant.Pol.	Reading		Ant./CF	Act.		Liı			
r req.	AII.FUI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.00	V	73.76	69.69	31.36	105.12	101.05			X/F
4874.25	V	50.34	46.66	5.52	55.86	52.18	74.00	54.00	X/H

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

Report No.: NEI-FCCP-1-1012C120 Page 28 of 72



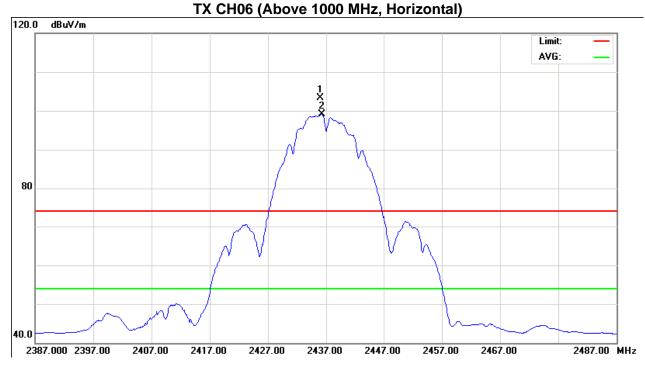
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2437MHz		

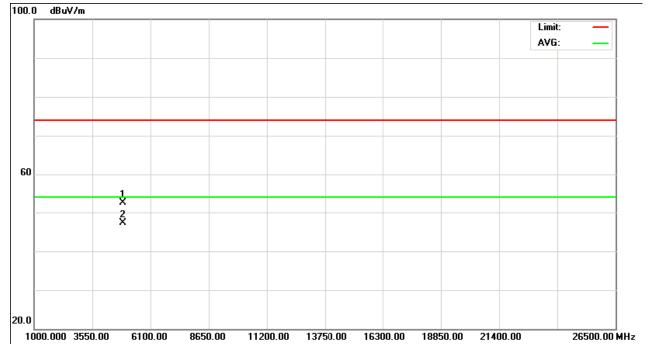
Freq. Ant.Pol.	Reading		Ant./CF	Α	Act.		Limit		
	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2436.00	Н	71.86	67.73	31.36	103.22	99.09			X/F
4874.25	Н	46.95	41.70	5.52	52.47	47.22	74.00	54.00	X/H

- (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 o
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

Report No.: NEI-FCCP-1-1012C120 Page 30 of 72

Neutron Engineering Inc.— TX CH06 (Above 1000 Mills 120.0 dBuV/m





Report No.: NEI-FCCP-1-1012C120 Page 31 of 72

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

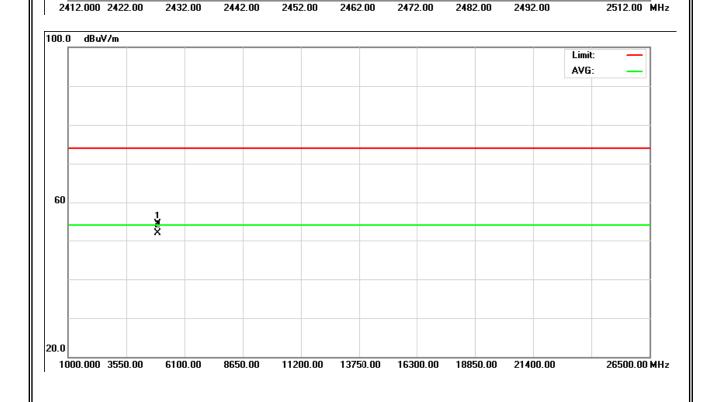
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	٧	72.21	69.42	31.34	103.55	100.76			X/F
2483.50	V	24.29	14.08	31.33	55.62	45.41	74.00	54.00	X/E
4923.94	V	48.53	46.07	5.76	54.29	51.83	74.00	54.00	X/H

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

Report No.: NEI-FCCP-1-1012C120 Page 32 of 72

TX CH11 (Above 1000 MHz, Vertical) Limit AVG:

40.0



EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	20 ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2461.20	Н	70.81	66.83	31.34	102.15	98.17			X/F
2483.50	Н	23.01	13.00	31.33	54.34	44.33	74.00	54.00	X/E
4923.94	Н	43.87	40.25	5.76	49.63	46.01	74.00	54.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of ${}^{\mathbb{F}}$ Note ${}_{\mathbb{F}}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ${}^{\circ}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (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-1-1012C120 Page 34 of 72

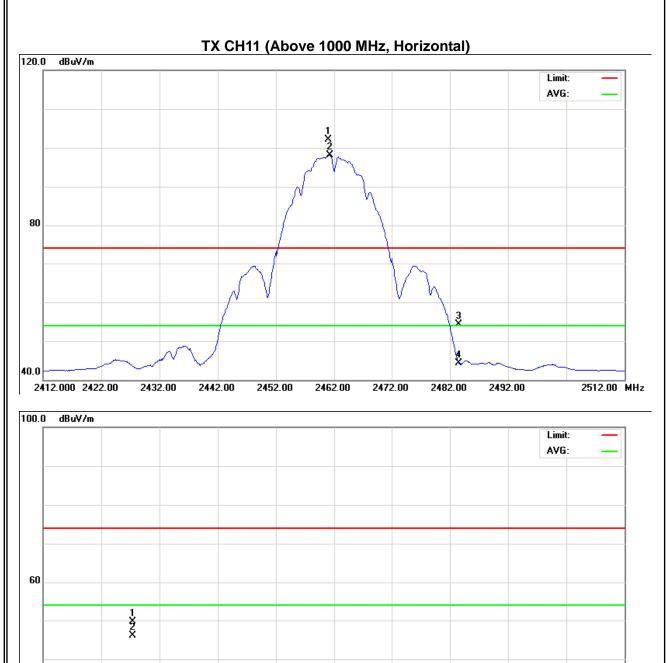
Neutron Engineering Inc.

20.0

1000.000 3550.00

6100.00

8650.00



11200.00 13750.00 16300.00 18850.00

21400.00

26500.00 MHz

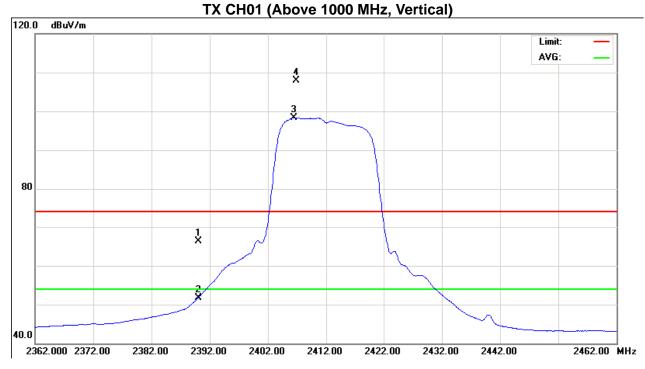
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

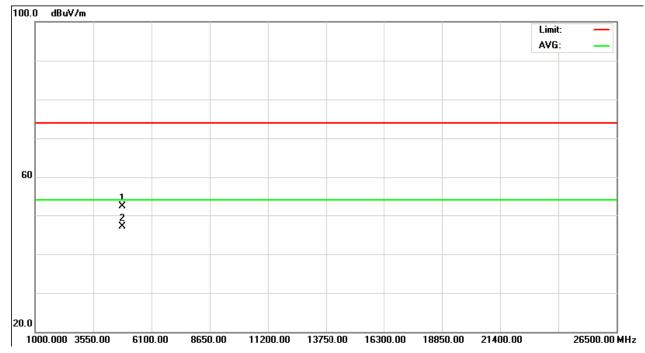
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	34.92	20.29	31.38	66.30	51.67	74.00	54.00	X/E
2406.50	V	76.58	66.96	31.38	107.96	98.34			X/F
4823.94	V	47.11	41.87	5.28	52.39	47.15	74.00	54.00	X/H

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

Report No.: NEI-FCCP-1-1012C120 Page 36 of 72

Neutron Engineering Inc.= TX CH01 (Above 1000





Report No.: NEI-FCCP-1-1012C120 Page 37 of 72

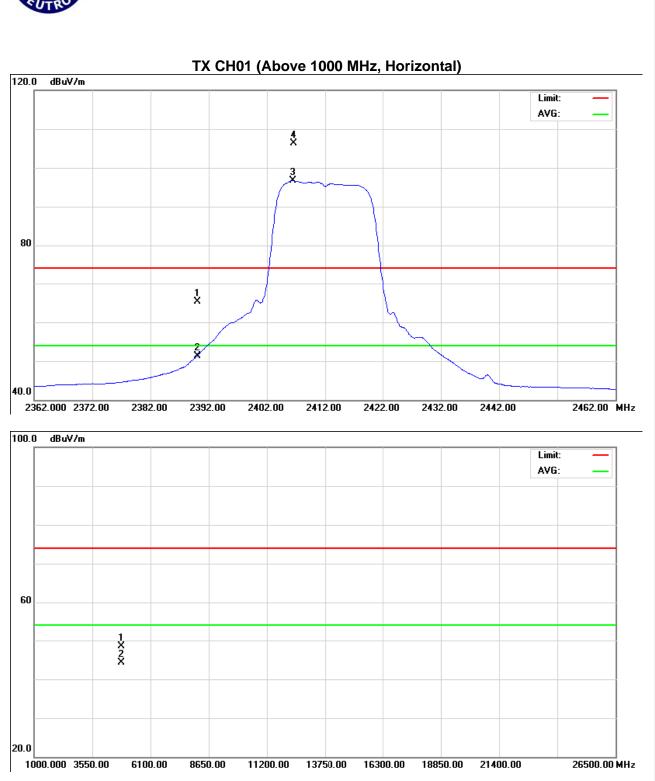
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	Н	33.99	19.99	31.38	65.37	51.37	74.00	54.00	X/E
2406.40	Н	74.98	65.25	31.38	106.36	96.63			X/F
4823.94	Н	43.29	39.08	5.28	48.57	44.36	74.00	54.00	X/H

Remark:

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

Report No.: NEI-FCCP-1-1012C120 Page 38 of 72



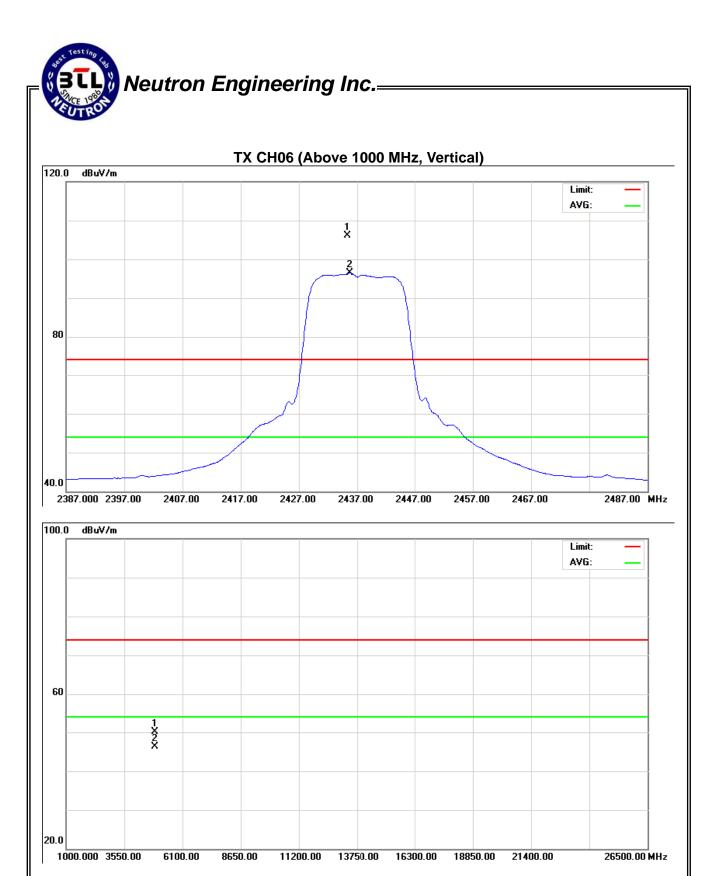
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq.	Ant.Pol. Reading		Ant./CF	Act.		Limit			
i req.	Ant.i oi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.30	٧	74.69	65.09	31.36	106.05	96.45			X/F
4874.33	V	44.66	40.77	5.52	50.18	46.29	74.00	54.00	X/H

Remark:

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

Report No.: NEI-FCCP-1-1012C120 Page 40 of 72



EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	mit	
Freq.	AIIL.FUI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.40	Н	73.30	63.74	31.36	104.66	95.10			X/F
4874.33	Н	43.14	38.23	5.52	48.66	43.75	74.00	54.00	X/H

Remark:

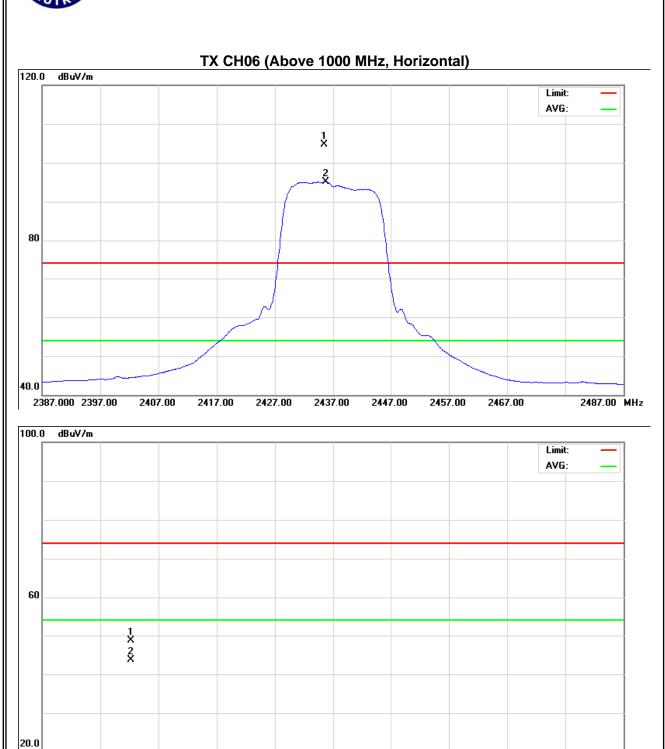
- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m J}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental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

Report No.: NEI-FCCP-1-1012C120 Page 42 of 72

1000.000 3550.00

6100.00

8650.00



11200.00 13750.00 16300.00 18850.00

21400.00

26500.00 MHz

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

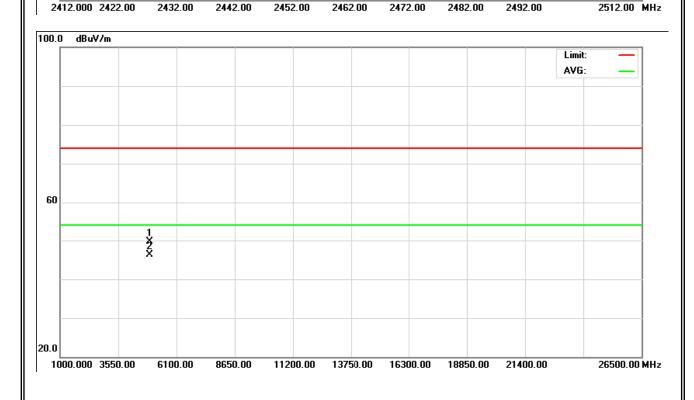
Freq.	Ant.Pol.	Rea	eading Ant./CF Act. Limit		Act.				
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.80	٧	75.41	65.64	31.34	106.75	96.98			X/F
2483.50	V	32.64	19.04	31.33	63.97	50.37	74.00	54.00	X/E
4924.08	V	43.91	40.61	5.76	49.67	46.37	74.00	54.00	X/H

Remark:

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

Report No.: NEI-FCCP-1-1012C120 Page 44 of 72

TX CH11 (Above 1000 MHz, Vertical) Limit: AVG: 3 40.0



Report No.: NEI-FCCP-1-1012C120 Page 45 of 72

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	23 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		nt.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)	
2460.10	Н	72.11	62.68	31.34	103.45	94.02			X/F
2483.50	Н	30.77	17.03	31.33	62.10	48.36	74.00	54.00	X/E
4924.08	Н	41.57	36.41	5.76	47.33	42.17	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m l}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m o}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (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-1-1012C120 Page 46 of 72

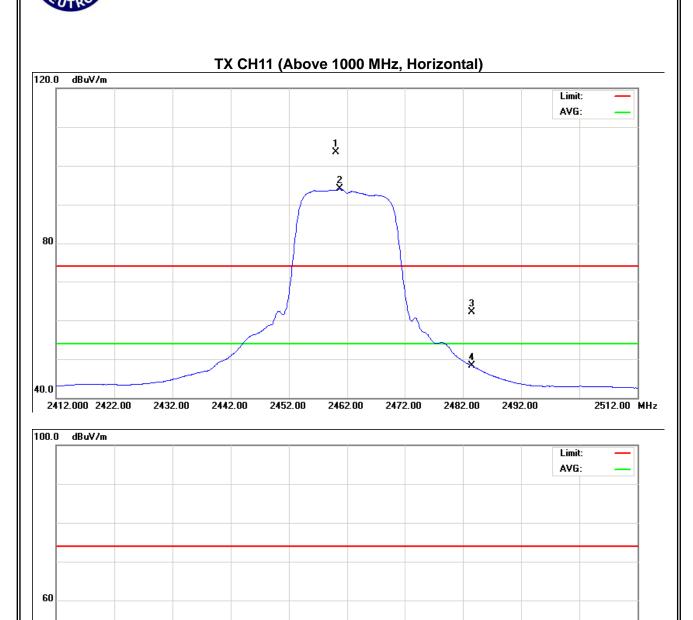
1 X 2 X

6100.00

8650.00

20.0

1000.000 3550.00



11200.00 13750.00 16300.00 18850.00

21400.00

26500.00 MHz

5. BANDWIDTH TEST

5.1 Applied procedures / limit

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

5.1.1 MEASUREMENT INSTRUMENTS LIST

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

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

5.1.2 TEST PROCEDURE

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

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

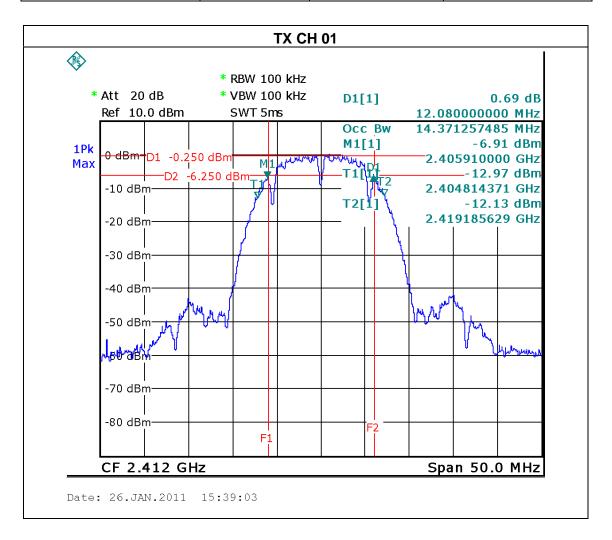
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Report No.: NEI-FCCP-1-1012C120 Page 48 of 72

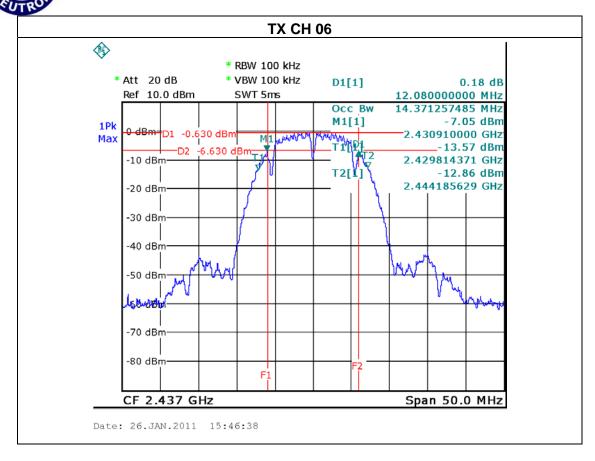
5.1.6 TEST RESULTS

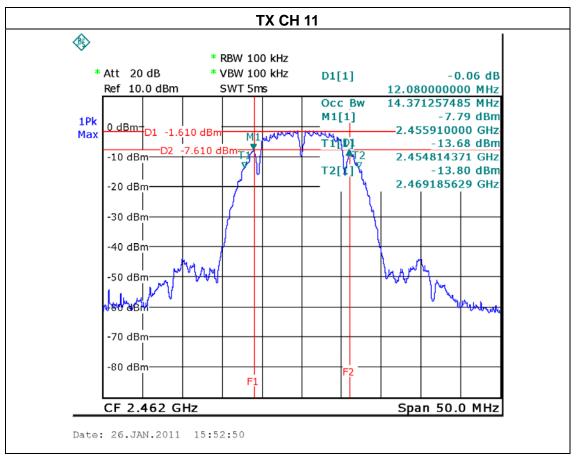
EUT:	wireless router wizard	Model Name. :	IT-G100RD
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency	20 dBc Bandwidth	99% Occupied BW
rest Chamilei	(MHz)	(MHz)	(MHz)
CH01	2412	12.08	14.37
CH06	2437	12.08	14.37
CH11	2462	12.08	14.37



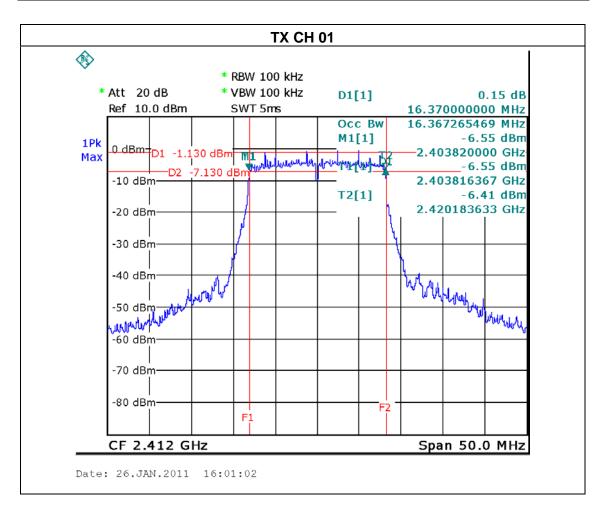
Report No.: NEI-FCCP-1-1012C120 Page 49 of 72



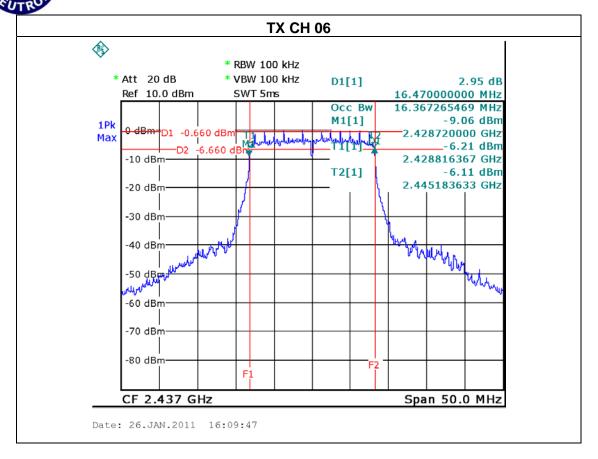


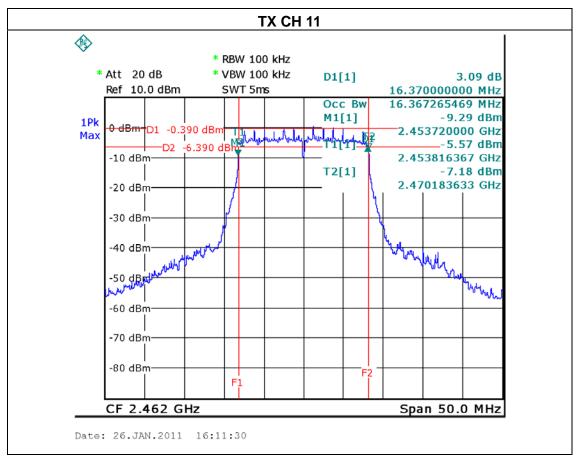
EUT:	wireless router wizard	Model Name. :	IT-G100RD
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency	20 dBc Bandwidth	99% Occupied BW
rest Chamilei	(MHz)	(MHz)	(MHz)
CH01	2412	16.37	16.37
CH06	2437	16.47	16.37
CH11	2462	16.37	16.37



Report No.: NEI-FCCP-1-1012C120 Page 51 of 72





6. PEAK OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

Iten	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	Feb. 10, 2011
2	Power Meter Sensor	Anritsu	MA2491A	34138	Feb. 10, 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,

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP

EUT	POWER	METER
	OULK	IIIL I LIX

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.

Report No.: NEI-FCCP-1-1012C120 Page 53 of 72

6.1.6 TEST RESULTS

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Peak Output Power

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	15.39	30	1
CH06	2437 MHz	15.45	30	1
CH11	2462 MHz	15.41	30	1

EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Peak Output Power

Test Channel	Frequency	Peak Output Power	LIMIT	LIMIT
rest orialine	(MHz)	(dBm)	(dBm)	(W)
CH01	2412 MHz	21.06	30	1
CH06	2437 MHz	21.47	30	1
CH11	2462 MHz	21.35	30	1

Report No.: NEI-FCCP-1-1012C120 Page 54 of 72

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

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

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

7.1.2 TEST PROCEDURE

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

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

7.1.5 EUT OPERATION CONDITIONS

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

Report No.: NEI-FCCP-1-1012C120 Page 55 of 72

7.1.6 TEST RESULTS

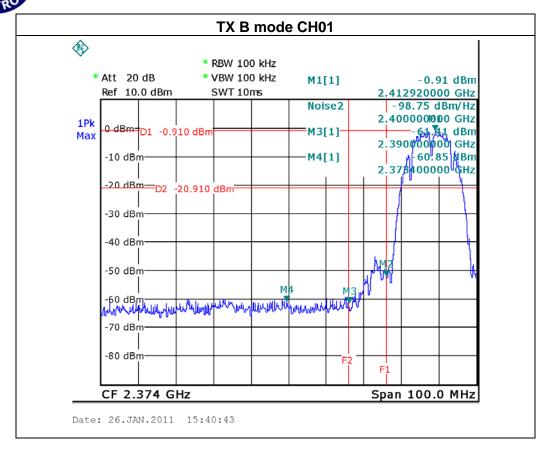
EUT:	wireless router wizard	Model Name :	IT-G100RD
Temperature:	24 ℃	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06 , CH11		

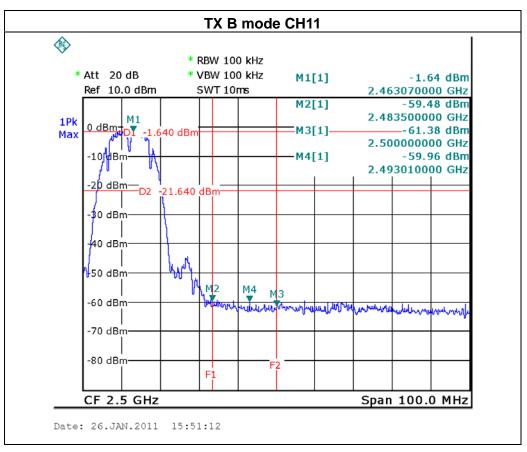
Channel of Worst Data: CH11					
The max. radio frequent bandwidth outside to	, ,	The max. radio frequence bandwidth within the	cy power in any 100 kHz ne frequency band.		
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2373.40 -60.85 2483.50 -59.48					
Result					

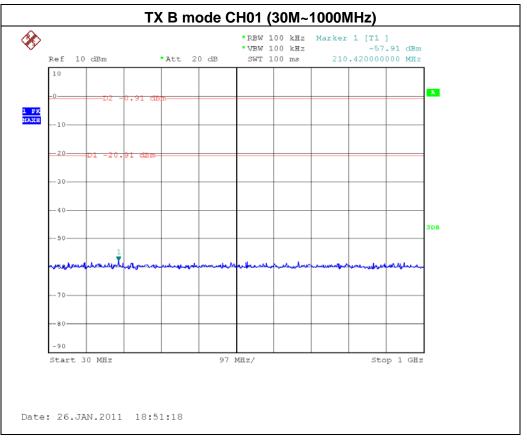
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired

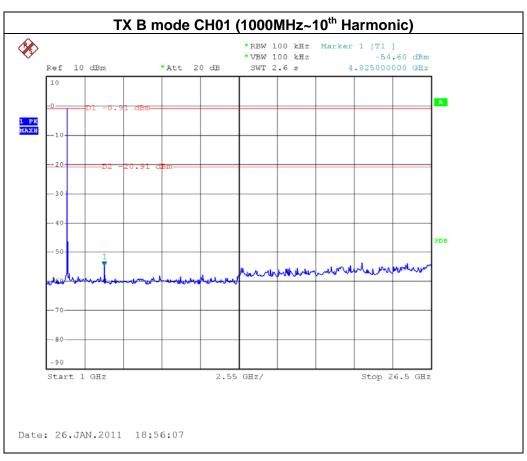
power.

Report No.: NEI-FCCP-1-1012C120 Page 56 of 72

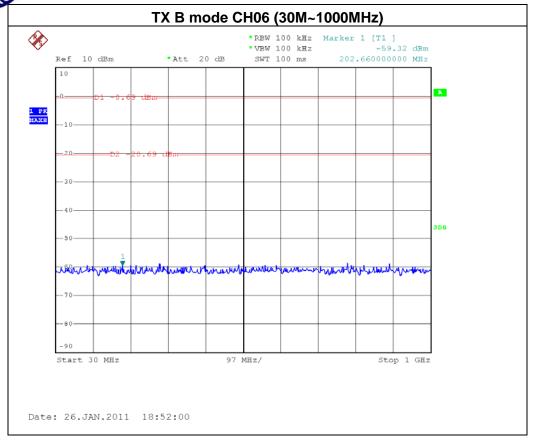


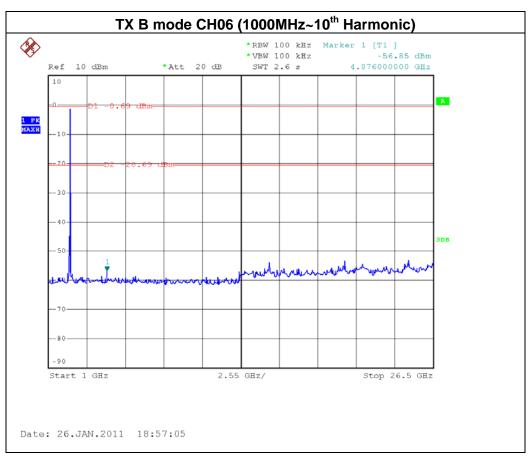


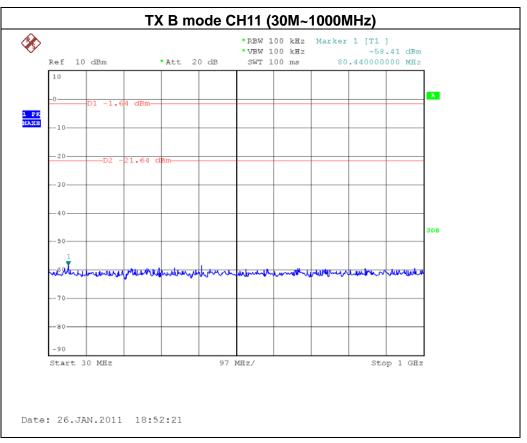


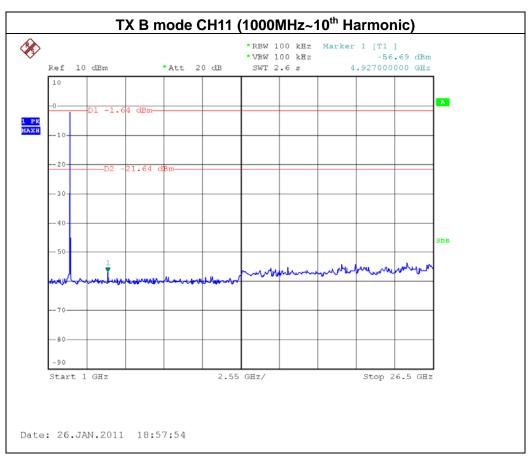


Report No.: NEI-FCCP-1-1012C120 Page 58 of 72









Report No.: NEI-FCCP-1-1012C120 Page 60 of 72



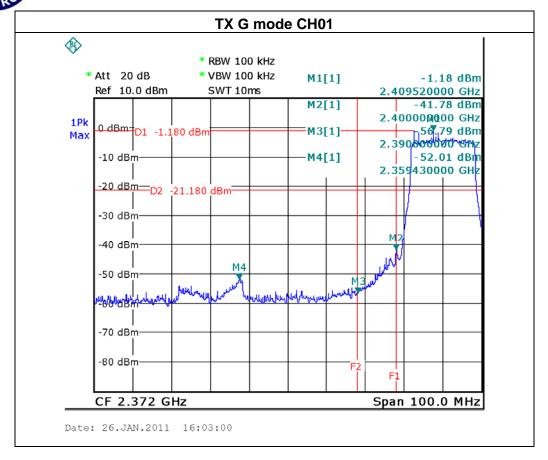
EUT:	wireless router wizard	Model Name :	IT-G100RD	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX G MODE / CH01, CH06, CH11			

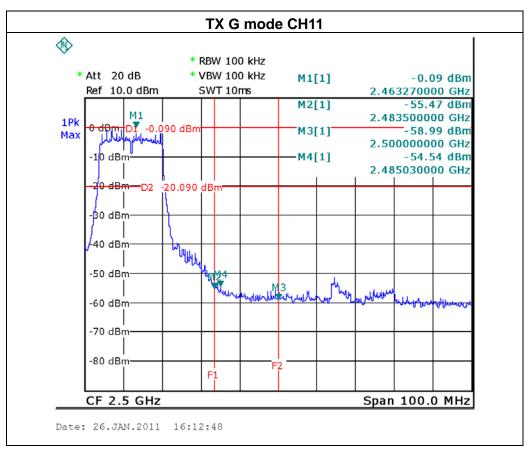
Channel of Worst Data: CH01					
The max. radio frequent bandwidth outside		The max. radio frequence bandwidth within the			
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2359.43 -52.01 2485.03 -54.54					
	Result				

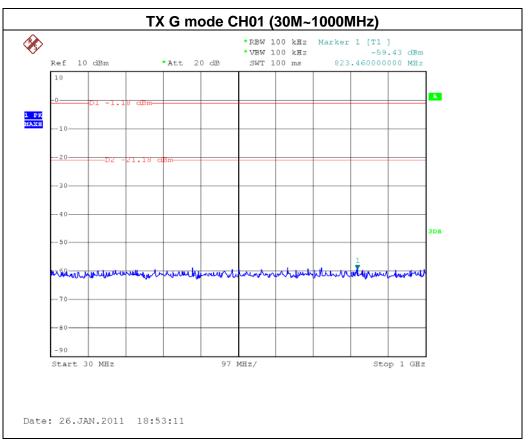
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired

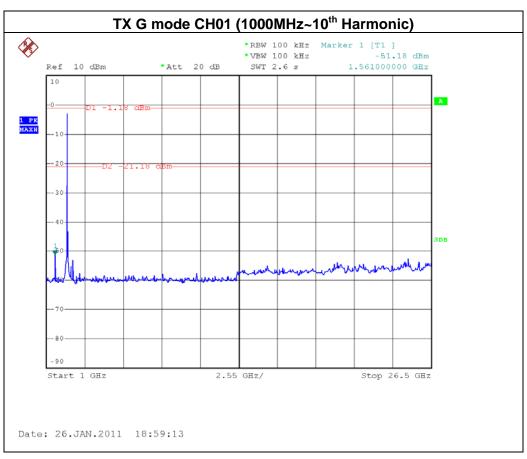
power.

Report No.: NEI-FCCP-1-1012C120 Page 61 of 72

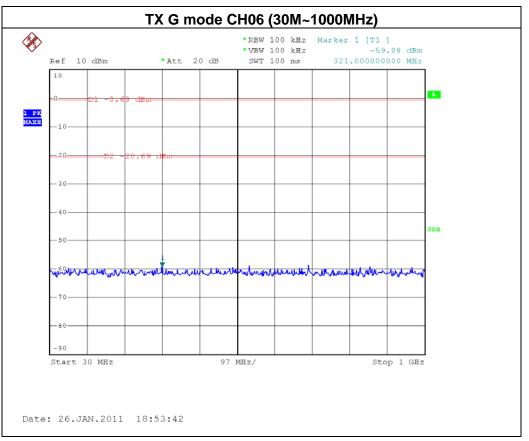


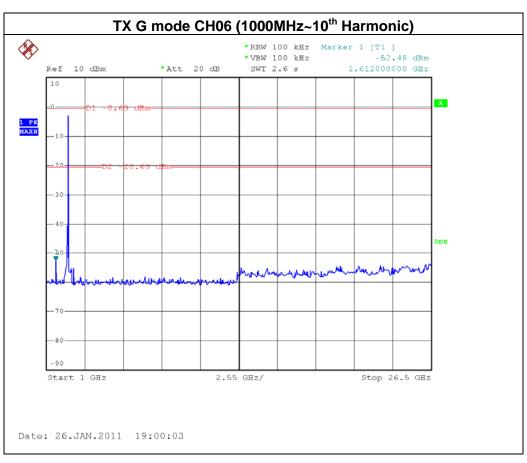




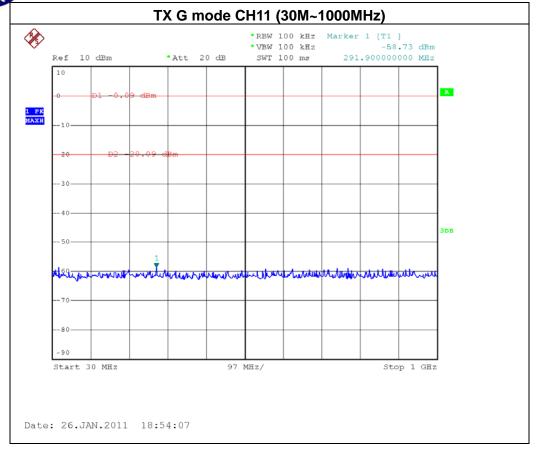


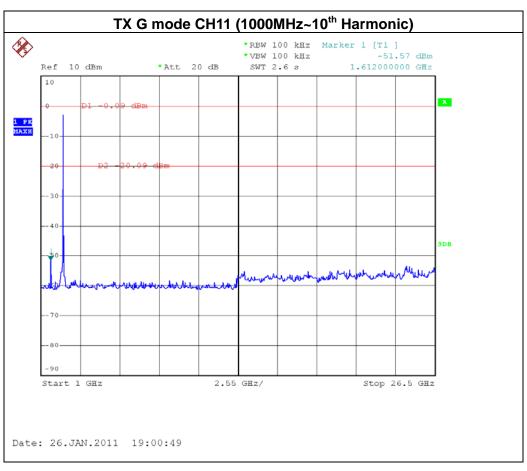
Report No.: NEI-FCCP-1-1012C120 Page 63 of 72





Report No.: NEI-FCCP-1-1012C120 Page 64 of 72





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

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

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

8.1.2 TEST PROCEDURE

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

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.5 EUT OPERATION CONDITIONS

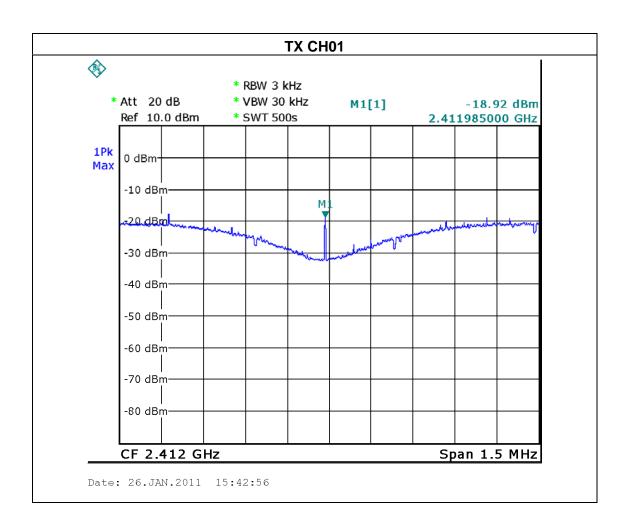
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

Report No.: NEI-FCCP-1-1012C120 Page 66 of 72

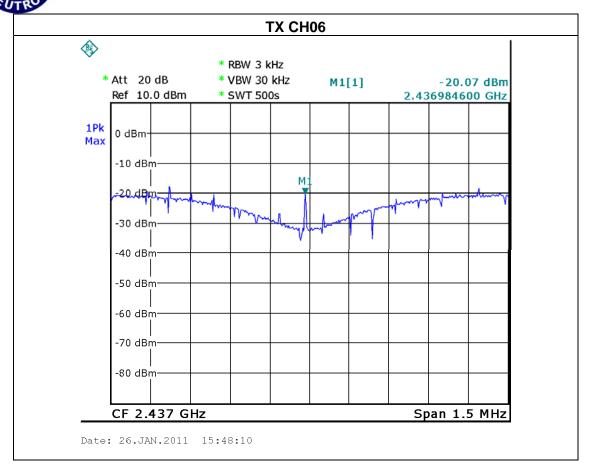
8.1.6 TEST RESULTS

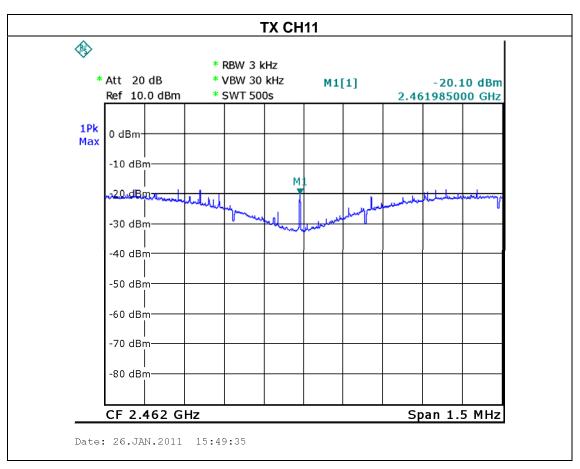
EUT:	wireless router wizard	Model Name :	IT-G100RD	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX B MODE /CH01, CH06, CH11			

Test Channel	Frequency	Power Density	LIMIT
rest onamici	(MHz)	(dBm)	(dBm)
CH01	2412 MHz	-18.92	8
CH06	2437 MHz	-20.07	8
CH11	2462 MHz	-20.10	8



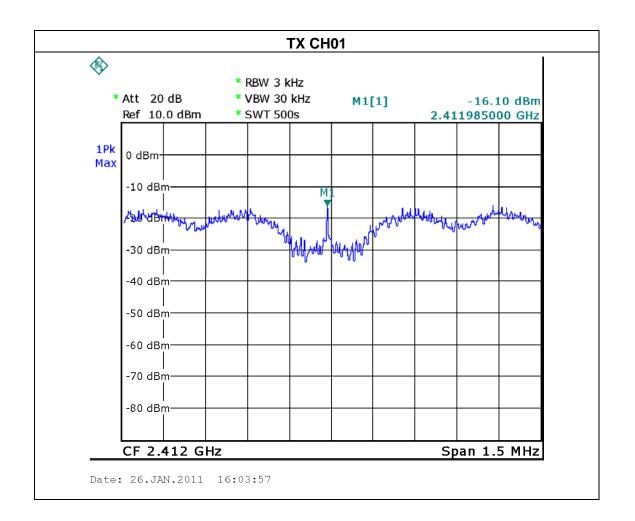
Report No.: NEI-FCCP-1-1012C120 Page 67 of 72



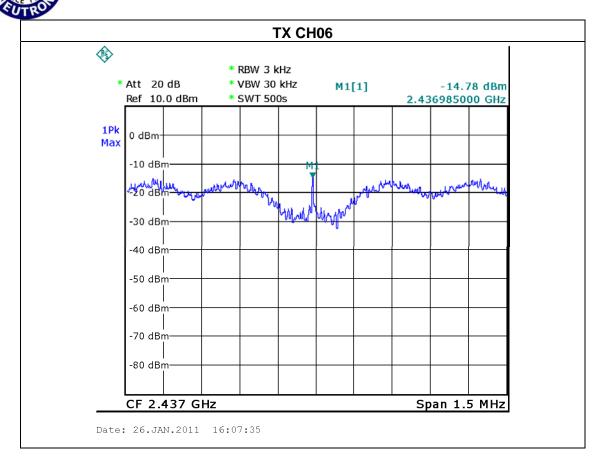


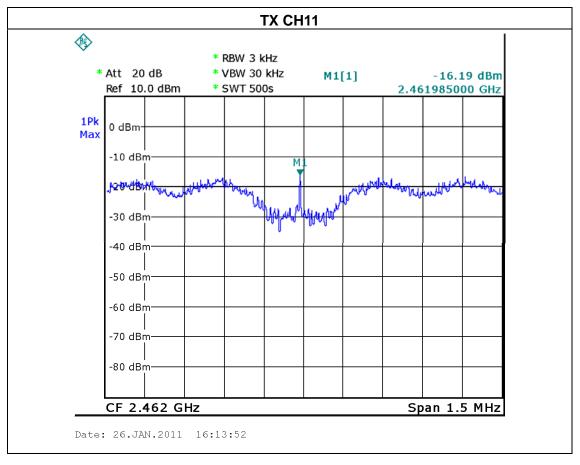
EUT:	wireless router wizard	Model Name :	IT-G100RD	
Temperature:	24 ℃	Relative Humidity:	60 %	
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX G MODE /CH01, CH06, CH11			

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-16.10	8
CH06	2437 MHz	-14.78	8
CH11	2462 MHz	-16.19	8



Report No.: NEI-FCCP-1-1012C120 Page 69 of 72







9. EUT TEST PHOTO

Conducted Measurement Photos





Report No.: NEI-FCCP-1-1012C120 Page 71 of 72



Radiated Measurement Photos





Report No.: NEI-FCCP-1-1012C120 Page 72 of 72