Measurement Report

FCC ID: N7ZRT-900W

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

Issued Date: Mar. 09, 2006

Project No.: 0602004

Equipment: Wireless AP

Model No.: RT-900W; RG3500A

Applicant: TURBOCOMM TECH. INC

2F, No. 19-8, San Chong Road, Nan-Kang,

Taipei 115, Taiwan, R.O.C.

Tested by:

Neutron Engineering Inc. EMC Laboratory

Data of Test:

Feb. 06, 2006 ~ Mar. 06, 2006

Testing Engineer

(Alan Liu)

Technical Manager

(Jeff Yang)

Authorized Signatory:

NEUTRON ENGINEERING INC.

(Andy Chiu)

No. 132-1, *L*ane 329, Sec. 2, Palain Rd., Shijr City, Taipei, Taiwan

TEL: (02) 2646-5426 FAX: (02) 2646-6815







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.**

Neutron's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

Neutron's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **Neutron-self**, extracts from the test report shall not be reproduced except in full with **Neutron**'s authorized written approval.

Neutron's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report. Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Assessment Authorities







Test Standard/Scope/Item Acceptance

FCC Part 15 Subpart B IEC/CISPR22 AS/NZS CISPR 22 CNS 13438

FCC Part 15 Subpart B
CISPR 22/EN 55022
AS/NZS CISPR 22
VCCI -Technical Requirement
CNS 13438
SS IEC/CISPR 22
IEC/EN 61000-3-2
IEC/EN 61000-4-5
IEC/EN 61000-4-6
IEC/EN 61000-4-3
IEC/EN 61000-4-8
IEC/EN 61000-4-3
IEC/EN 61000-4-11

IEC/EN 61000-4-4

Table of Contents	Page
1 . General Information	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Equipment Under Tested	5
1.4 OEM Brand/Model	5
1.5 Model Difference	5
1.6 Product Descriptions	6
1.7 Connecting I/O Port(s)	6
1.8 Power Supplied	6
1.9 Products Covered (if applicable)	6
1.10 Description of Test Mode(s)	6
2 . RFI Emissions Measurement	7
2.1 Test Facility	7
2.2 Standard Compliance	7
2.4 Test Methodolog	7
2.5 Deviations from Standard Test Method	8
2.6 Sample(s) Tested	8
2.7 Measurement Instruments	8
2.8 Measurement Uncertainty	8
2.9 Tested System Set-Up/Configuration Details	8
2.10 EUT Operating Conditions	12
3 . Justification	13
3.1 Limitations	13
3.1.1 Power Line Conducted Emission	13
3.1.2 Radiated Emission Limits	13
3.2 Measurement Justification 3.2.1 Conducted Emission	14 14
3.2.2 Radiated Emission	14
3.2.3 Field Strength Calculation	15
3.3 Measurement Data	15
Table 4 Conducted Emission Data Table 5 Radiated Emission Data	17 23

Table of Contents	Page
4 . Bandwidth	37
4.1 Applied procedures / limit	37
4.2 Test Setup	37
4.3 Test Result	37
5 . Peak Output Power	38
5.1 Applied procedures / limit	38
5.2 Test Setup	38
5.3 Test Result	38
6 . Antenna conducted Spurious Emission	39
6.1 Applied procedures / limit	39
6.2 Test Setup	39
6.3 Test Result	39
7 . Power Spectral Density	40
7.1 Applied procedures / limit	40
7.2 Test Setup	40
7.3 Test Result	40
8 . RF Exposure	41
8.1 Applied procedures / limit	41
8.2 Test Result	41
Attachment	42
Attachment - A	43
Attachment - B	46
Attachment - C	48
Attachment - D	52
Attachment - E	56
Attachment - F	63
Attachment - G	67

Λ	IEI	JTRO	Λ		10	IAD
/\	IEL	IIKU	/V	E IV	ı	LAD

1. General Information

1.1 Applicant

Name: TURBOCOMM TECH. INC

Address: 2F, No. 19-8, San Chong Road, Nan-Kang, Taipei 115, Taiwan, R.O.C.

1.2 Manufacturer

Name : N/A Address : N/A

1.3 Equipment Under Tested

Name : Wireless AP

Model No. : RT-900W; RG3500A

1.4 OEM Brand/Model (if applicable)

OEM Brand(s)/Model(s) except the basic model in sub-clause 1.3 is (are) the follows:

OEM Brand: N/A Model No.: N/A

1.5 Model Difference (Series, Versions, if any)

Except the basic model no. (model designation of the sample tested in this test report), additional model no. covered is(are):

Model RG3500A is identical to model RT-900W except the model designation.

$\Lambda I \Gamma I$	ITDO	N EMC	1 10
ME	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N/ I - N/II .	1 4 1

1.6 Product Descriptions (Application/Features/Specification)

The EUT is a Wireless AP. A major technical descriptions of EUT is described as following:

Operation Frequency	2400~2483.5 MHz
Modulation Type	DSSS
Bit Rate of Transmitter	11Mbps(CCK)/802.11b & 54Mbps(OFDM)/802.11g
Number Of Channel	11 Channel
Antenna Gain(Peak)	5dBi(INVAX/AN2400-1901RS), 2dBi(INVAX/AN2400-0301RS)
Antenna Type	1) Dipole Antenna
	2) The antenna isn't standard connector that is reversed polarity
	and if you want to use the standard connector is not allowed.

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.

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

1.7 Connecting I/O Port(s)

Please refer to the User's Manual.

1.8 Power Supplied

Power Source: DC Voltage supplied from AC/DC adapter.

Power Cord : Detachable, non-shielded type.

Power Rating: AC I/P 100-240V, 50-60Hz, 0.5A / DC O/P 12V, 1.0A

1.9 Products Covered (if applicable)

The sample tested including the following sub-system/module/accessory:

Sub-system/ Module/ Accessory Model/Type No. Int. Inst./ Ext. Cont. ADAPTOR ADS10-W 120100 Ext. Cont.

1.10 Description of Test Mode(s)

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) was pre-scanning test under the following mode(s):

Mode 1 : CH 1 (2412 MHz) with Antenna: INVAX/AN2400-1901RS Mode 2 : CH 6 (2437 MHz) with Antenna: INVAX/AN2400-1901RS Mode 3 : CH 11 (2462 MHz) with Antenna: INVAX/AN2400-1901RS Mode 4 : CH 1 (2412 MHz) with Antenna: INVAX/AN2400-0301RS Mode 5 : CH 6 (2437 MHz) with Antenna: INVAX/AN2400-0301RS Mode 6 : CH 11 (2462 MHz) with Antenna: INVAX/AN2400-0301RS

The EUT system operated Mode 1/2/3, mentioned above was found to be the worst case during the pre-scanning test.

These operation modes were used for final testing and collecting test data included in this report.

$\Lambda I \Gamma I$	<i>JTRO</i>	A / FA	$A \cap A$	
MEI	,,,,,	/// <i>F</i> //	// /	U AK

2. RFI Emissions Measurement

2.1Test Facility

The test facilities used to collect the test data in this report located at No.132-1, Lane 329, Sec. 2, Palain Road, Shijr City, Taipei, Taiwan.

2.2 Standard Compliance

The test data contained in this report relate only to the item(s) listed below:

FCC Part15, Subpart C / ANCI C63.4: 2003

The composite system (including receiver and transmitter) in compliance with Subpart B is authorized under a DoC procedure.

2.3 Test Conditions and Channel

		NOTE:(1)
Test Mode	EUT Channel	Test Frequency(MHz)
1	CH 1	2412
2	CH 6	2437
3	CH 11	2462

Note:

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

2.4 Test Methodolog

Both conducted and radiated testing were performed during the max. EMI emission evaluation.

Test procedures according to the technical standards: (Antenna to EUT distance is 3 m)

FCC Part15 (15.247), Subpart C						
Section	Test Item	Equipment test requirement	Result			
15.207	Conducted Emission	Applicable	PASS			
15.247 (c)	Antenna conducted Spurious Emission	Applicable	PASS			
15.247 (a)(2)	6dB Bandwidth	Applicable	PASS			
15.247 (b)	Peak Output Power	Applicable	PASS			
15.247 (c)	Radiated Spurious Emission	Applicable	PASS			
15.247 (d)	Power Spectral Density	Applicable	PASS			
15.203	Antenna Requirement	Applicable	PASS			
1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	Applicable	PASS			

NFI	JTRO	M = M	1C I	ΔR
/V/_L	<i>J I</i> N L <i>J</i>	<i>, , , , , , , , , , , , , , , , , , , </i>	/\ / L	

2.5 Deviations from Standard Test Method

N/A

2.6 Sample(s) Tested

The representative sample tested in this reports is(are): RT-900W

Test results in this test report relate only to the sample(s) tested.

The EUT has been tested according to the following environmental condition:

Input Power	120V/60Hz
Environmental Conditions	Please refer to the measurement data.

2.7 Measurement Instruments

Valid measurement instruments used in this report refer to Table-1 enclosed.

2.8 Measurement Uncertainty

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

A. Conducted Measurement :5.05dB

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)	NOTE
OS-01	ANSI	30MHz ~ 200MHz	Н	4.59	
		30MHz ~ 200MHz	V	4.80	
		200MHz ~ 1,000MHz	Н	4.47	
		200MHz ~ 1,000MHz	V	5.03	

2.9 Tested System Set-Up/Configuration Details

The system was configured for testing in a typical fashion (as a user would normally use) or in-accordance with the operating configuration specified in the user's manual. A Block Diagram(please refer to the Diagram - 1) and Photos(please refer to the attachment - A) showing the set-up/configuration of system tested. In addition, **Table-2** and **Table-3** provide a detail of all equipment items and cables information used in the system tested.

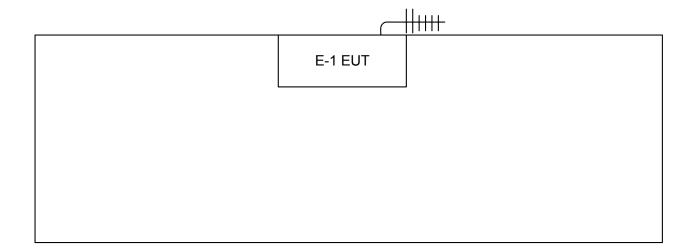
Table -1 Measurement Instruments List

Item	Instruments	Mfr/Brand	Model/Type No.	Serial No.	Calibrated Date	Next Cali. Date	Note
1	Log-Bicon Antenna	MESS-ELEKTRONIK	VULB 9160	3058	2005-11-30	2006-11-29	✓
2	Log-Bicon Antenna	MESS-ELEKTRONIK	VULB 9160	3177	2005-02-07	2007-02-06	
3	Log-Bicon Antenna	MESS-ELEKTRONIK	VULB 9161	4022	2005-08-17	2006-08-16	
4	Test Cable	N/A	10M_OS01	N/A	2005-11-30	2006-11-29	
5	Test Cable	N/A	OS01-1/-2	N/A	2005-11-30	2006-11-29	
6	Test Cable	N/A	10M_OS02	N/A	2005-11-30	2006-11-29	✓
7	Test Cable	N/A	OS02-1/-2/-3	N/A	2005-11-30	2006-11-29	✓
8	RF Switch	Anritsu	MP59B	M65982	2005-11-30	2006-11-29	
9	Pre-Amplifier	Anritsu	MH648A	M09961	2005-11-30	2006-11-29	✓
10	Spectrum Analyzer	ADVAN TEST	R3261C	81720298	2005-09-15	2006-09-14	
11	Spectrum Analyzer	ADVAN TEST	R3132	81700025	2006-02-22	2007-02-21	
12	EMI Test Receiver	R&S	ESCI	100082	2005-02-02	2007-02-01	✓
13	Test Receiver	MEB	SMV41	130	2005-11-23	2006-11-22	
14	Test Receiver	PMM	PMM 9000	4310J01002	2006-02-24	2007-02-23	
15	Absorbing Clamp	R&S	MDS-21	841077/011	2005-09-09	2006-09-08	
16	Voltage Probe	R&S	ESH2-Z3	841.800/023	2005-09-13	2006-09-12	
17	Antenna Mast	Chance Most	CMTB-1.5	N/A	N/A	N/A	✓
18	Turn Table	Chance Most	CMTB-1.5	N/A	N/A	N/A	✓
19	Loop Ant	EMCO	6502	00042960	2005-01-14	2008-01-13	
20	Horn Antenna	EMCO	3115	9605-4803	2005-06-10	2006-06-09	✓
21	Horn Ant	Schwarzbeck	BBHA 9120 D	9120D-325	2005/10/26	2006/10/25	
22	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2005/10/26	2006/10/25	✓
23	Microwave Pre_amplifier	Agilent	8449B	3008A01714	2005/03/13	2006/03/12	✓
24	Microflex Cable	United Microwave	57793	1m	2005/03/13	2006/03/12	✓
25	Microflex Cable	United Microwave	57793	3m	2005/03/13	2006/03/12	✓
26	Microflex Cable	United Microwave	A30A30-5006	4M	2005/07/10	2006/07/09	✓
27	Microflex Cable	United Microwave	A30A30-5006	10M	2005/07/10	2006/07/09	✓
28	ATTENUATOR (11dB)	HP	8494B	3308A38680	2005/05/06	2006/05/05	
29	ATTENUATOR (70dB)	HP	8495B	3308A20487	2005/05/06	2006/05/05	

^{(1)&}quot; √" indicates the instrument used in Test Report.(2)" N/A" denotes No Model No. / Serial No. and No Calibration specified.

NEUTRON EMC LAB.	

Diagram - 1 Block diagram showing the configuration of system tested



NEUTRON EMC LAB.	

Table - 2 Equipments Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Wireless AP	NETGEAR	RT-900W	N7ZRT-900W	N/A	EUT

Note:

- (1) Unless otherwise denoted as EUT in 『Remark』 column , device(s) used in tested system is a support equipment.
- (2) Unless otherwise marked as % in Remark column, Neutron consigns the support equipment to the tested system.
- (3) The support equipment was authorized by Declaration of Confirmation.

Table - 3 Information of Interface Cable

Item	Shielded Type	Ferrite Core	Length	Note
	N/A	N/A	N/A	

Note:

- (1) Unless otherwise marked as ** in ** Remark ** column, Neutron consigns the support equipment to the tested system.
- (2) For detachable type I/O cable should be specified the length in cm in <code>[Length]</code> column.

NEUTRON EMC LAB.	
	Report No. : NEI- FCCP-1-0602004

2.10 EUT Operating Conditions

- (a) Both conducted and radiated testing were performed during the max. EMI emission evaluation.
- (b) 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.

3. Justification

- 3.1 Limitations
- 3.1.1 Power Line Conducted Emission

Measurement	Mains Terminal		Mains Terminals		Note
Frequency	Class A	A Limits	Class E	B Limits	CISPR
Range	(dB	uV)	(dB	uV)	FCC
(MHz)	QP Mode	AV Mode	QP Mode	AV Mode	Std.
0.15 - 0.50	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 - 5.00	73.00	60.00	56.00	46.00	CISPR
5.00 - 30.0	73.00	60.00	60.00	50.00	CISPR
0.15 - 0.50	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 - 5.00	73.00	60.00	56.00	46.00	FCC
5.00 - 30.0	73.00	60.00	60.00	50.00	FCC

Notes:

- (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.

3.1.2 Radiated Emission Limits (Frequency Range 30MHz-1000MHz)

Measurement	Quasi-Peak Mode		Quasi-Peak Mode		Note
Frequency	Class A	A Limits	Class E	3 Limits	CISPR
Range	(dBu	V/m)	(dBu	V/m)	FCC
(MHz)	10m	30m	10m	3m	Std.
30.00 -230.00	40.00	30.00	30.00	40.00	CISPR
230.0 -1000.0	47.00	37.00	37.00	47.00	CISPR
30.00 - 88.00	39.00	N/A	30.00	40.00	FCC
88.00 - 216.0	43.50	N/A	33.50	43.50	FCC
216.0 -960.0	46.00	N/A	36.00	46.00	FCC
above 960.0	49.50	N/A	46.00	54.00	FCC

Notes:

- (1). The tighter limit applies at the band edges.
- (2). Emission level (dBuV/m)=20log Emission level (uV/m).
- (3). A measuring distance 0f 10m is a primary used. However, either 3m or 10m (instead of 10m) distance my be allowed. If the distance is 3m, add 10dB to the QP-limit above. If the distance is 10m, subtract 10dB from the QP-limit above.

NFI	ITRO	N EMC	IΔR
IVL	JIKU	IN EIVIC	LAD.

3.2 Measurement Justification

3.2.1 Conducted Emission

The EUT is a placed on as table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4-2003. Conducted emissions from the EUT measured in the **frequency range between 0.15 MHz and 30MHz** were made with a **Spectrum Analyzer** using **CISPR Quasi-Peak detector mode**.

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 these signals are then Quasi Peak detector mode and/or Average detector mode re-measured.

Data of **Table - 4**. lists the significant emission frequencies, measured levels, limits and safe margins. All readings are Peak Mode measured unless otherwise stated as QP or AV in column of "Remark".

If the Peak Mode measured value lower than both QP Mode and AV Mode Limit, EUT shall be deemed to compliance with both QP & AV Limits and then no additional QP Mode or AV Mode measurement performed.

If additional QP or AV Mode measurement needed, and if the QP Mode measured value compliance with the QP Mode Limit and lower than AV Mode Limit, the EUT shall be deemed to meet both QP & AV Limits and then only QP Mode was measured, but AV Mode was not performed $^{\circ}$

3.2.2 Radiated Emission

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter(EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C63.4-2003.

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, Peak or Average detector mode re-measured.

Data of **Table – 5** lists the significant emission frequencies, measured levels, limits and safe margins. All readings are Peak Mode measured unless otherwise stated as QP or AV in column of "Remark".

If the Peak Mode measured value compliance with and lower than Quasi Peak or Average Mode Limit, the EUT shall be deemed to meet QP/AV Limits and then no additional QP/AV Mode measurement performed.

Λ	IFI	JTRO	\mathcal{M}	FM	CI	AR
•		,,,,,	<i></i>	LIVI	U L	.nu.

3.2.3 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as FS = RA + AF + CL - AG

Where FS = Field Strength

RA = Receiver Amplitude AF = Antenna Factor (1)

CL = Cable Attenuation Factor(Cable Loss) (1)

AG = Amplifier Gain (1)

Remark:

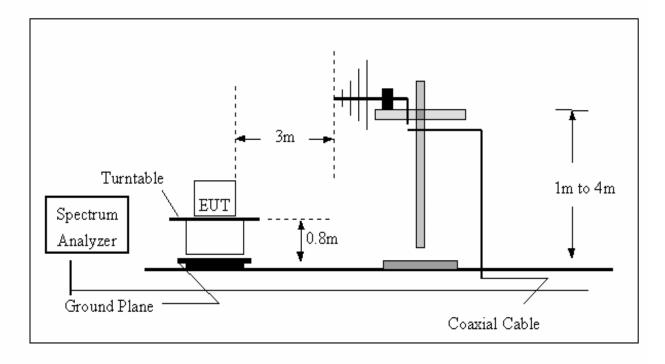
(1) The Correction Factor = AF + CL - AG, as shown in the data tables' Correction Factor column.

3.3 Measurement Data

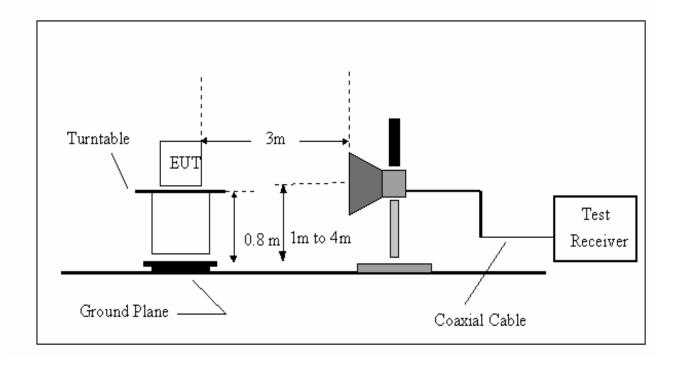
Table - 4. Conducted Emission Data (0.15-30MHz)

Table - 5. Radiated Emission Data (30-1000MHz)

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(B) Radiated Emission Test Set-UP Frequency Over 1 GHz



_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 4 Conducted Emission Data

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 69 % Pressure: 1032 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 1

For 802.11b

Minimum passing margin is -2.91dB at 1.67MHz

Freq.	Terminal	Measured(dBuV)		Limits	Limits(dBuV)		Margins
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note
0.16	Line	54.98	41.08	65.28	55.28	-10.30	(QP)
0.22	Line	49.28	*	62.88	52.88	-13.60	(QP)
0.38	Line	42.02	*	58.20	48.20	-16.18	(QP)
1.67	Line	49.89	43.09	56.00	46.00	-2.91	(AV)
5.82	Line	38.92	*	60.00	50.00	-21.08	(QP)
17.07	Line	50.28	45.92	60.00	50.00	-4.08	(AV)
0.16	Neutral	54.98	41.98	65.34	55.34	-10.36	(QP)
0.22	Neutral	48.27	*	62.82	52.82	-14.55	(QP)
0.39	Neutral	43.32	*	58.11	48.11	-14.79	(QP)
1.68	Neutral	44.48	40.48	56.00	46.00	-5.52	(AV)
2.27	Neutral	43.52	*	56.00	46.00	-12.48	(QP)
16.68	Neutral	49.89	44.78	60.00	50.00	-5.22	(AV)

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz or Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz or Swp. Time =0.3 sec./MHz or
- (2) All readings are QP Mode value unless otherwise stated AVG in column of <code>『Note』</code>. 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 \circ In this case, a " * " marked in AVG Mode column of Interference Voltage Measured \circ
- (3) Measuring frequency range from 150KHz to 30MHz o

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 4 Conducted Emission Data

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 69 % Pressure: 1032 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 2

For 802.11b

Minimum passing margin is -2.21dB at 1.67MHz

Freq.	Terminal	Measured(dBuV)		Limits	Limits(dBuV)		Safe Margins	
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note	
0.16	Line	54.98	41.53	65.28	55.28	-10.30	(QP)	
0.27	Line	46.39	*	61.03	51.03	-14.64	(QP)	
0.39	Line	43.83	*	58.12	48.12	-14.29	(QP)	
0.80	Line	42.58	*	56.00	46.00	-13.42	(QP)	
1.67	Line	48.39	43.79	56.00	46.00	-2.21	(AV)	
17.50	Line	51.10	46.12	60.00	50.00	-3.88	(AV)	
0.17	Neutral	54.88	41.88	64.99	54.99	-10.11	(QP)	
0.27	Neutral	45.28	*	61.01	51.01	-15.73	(QP)	
1.23	Neutral	43.34	*	56.00	46.00	-12.66	(QP)	
1.73	Neutral	45.29	42.83	56.00	46.00	-3.17	(AV)	
2.27	Neutral	43.52	*	56.00	46.00	-12.48	(QP)	
16.68	Neutral	50.39	45.00	60.00	50.00	-5.00	(AV)	

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz or Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz or Swp. Time =0.3 sec./MHz or
- (2) All readings are QP Mode value unless otherwise stated AVG in column of <code>『Note』</code>. 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 \circ In this case, a " * " marked in AVG Mode column of Interference Voltage Measured \circ
- (3) Measuring frequency range from 150KHz to 30MHz •

a ,				\sim	 FI	. <i></i>	~ '		\mathbf{r}
,,,	-	, ,	,,	,,,,	 	.///		71	$\boldsymbol{\vdash}$

Table 4 Conducted Emission Data

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 69 % Pressure: 1032 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 3

For 802.11b

Minimum passing margin is -3.01dB at 1.67MHz

Freq.	Terminal	Measured(dBuV)		Limits	Limits(dBuV)		Safe Margins	
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note	
0.16	Line	54.98	41.75	65.28	55.28	-10.30	(QP)	
0.22	Line	48.78	*	62.88	52.88	-14.10	(QP)	
1.23	Line	42.55	*	56.00	46.00	-13.45	(QP)	
1.67	Line	48.39	42.99	56.00	46.00	-3.01	(AV)	
5.82	Line	40.92	*	60.00	50.00	-19.08	(QP)	
16.86	Line	51.07	45.73	60.00	50.00	-4.27	(AV)	
0.16	Neutral	54.48	41.96	65.34	55.34	-10.86	(QP)	
0.22	Neutral	48.27	*	62.82	52.82	-14.55	(QP)	
0.44	Neutral	41.61	*	57.06	47.06	-15.45	(QP)	
1.73	Neutral	45.29	42.89	56.00	46.00	-3.11	(AV)	
2.27	Neutral	41.52	*	56.00	46.00	-14.48	(QP)	
16.68	Neutral	50.89	45.98	60.00	50.00	-4.02	(AV)	

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz or Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz or Swp. Time =0.3 sec./MHz or
- (2) All readings are QP Mode value unless otherwise stated AVG in column of <code>『Note』</code>. 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 \circ In this case, a " * " marked in AVG Mode column of Interference Voltage Measured \circ
- (3) Measuring frequency range from 150KHz to 30MHz •

NFI	ITRO	M =	ИС.	IAR

Table 4 Conducted Emission Data

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 69 % Pressure: 1032 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 1

For 802.11g

Minimum passing margin is -2.76dB at 1.67MHz

Freq.	Terminal	Measured(dBuV)		Limits(dBuV)		Safe Margins	
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note
0.16	Line	55.48	43.28	65.28	55.28	-9.80	(QP)
0.27	Line	46.89	*	60.98	50.98	-14.09	(QP)
0.79	Line	41.37	*	56.00	46.00	-14.63	(QP)
1.23	Line	42.05	*	56.00	46.00	-13.95	(QP)
1.67	Line	47.89	43.24	56.00	46.00	-2.76	(AV)
16.50	Line	51.85	46.69	60.00	50.00	-3.31	(AV)
0.17	Neutral	54.88	41.93	64.99	54.99	-10.11	(QP)
0.22	Neutral	48.77	*	62.82	52.82	-14.05	(QP)
0.80	Neutral	41.38	*	56.00	46.00	-14.62	(QP)
1.73	Neutral	45.29	43.09	56.00	46.00	-2.91	(AV)
3.38	Neutral	41.58	*	56.00	46.00	-14.42	(QP)
16.68	Neutral	50.39	46.88	60.00	50.00	-3.12	(AV)

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz ∘ Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz ∘
- (2) 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 ∘
- (3) Measuring frequency range from 150KHz to 30MHz o

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 4 Conducted Emission Data

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 69 % Pressure: 1032 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 2

For 802.11g

Minimum passing margin is -2.17dB at 1.68MHz

Freq.	Terminal	Measured(dBuV)		Limits(dBuV)		Safe Margins	
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note
0.17	Line	55.58	41.88	65.16	55.16	-9.58	(QP)
0.27	Line	47.39	*	60.98	50.98	-13.59	(QP)
0.80	Line	43.07	*	56.00	46.00	-12.93	(QP)
1.67	Line	47.39	43.79	56.00	46.00	-2.21	(AV)
6.25	Line	41.94	*	60.00	50.00	-18.06	(QP)
16.86	Line	51.57	46.07	60.00	50.00	-3.93	(AV)
0.16	Neutral	54.98	41.52	65.23	55.23	-10.25	(QP)
0.22	Neutral	47.37	*	62.88	52.88	-15.51	(QP)
0.85	Neutral	40.39	*	56.00	46.00	-15.61	(QP)
1.68	Neutral	45.98	43.83	56.00	46.00	-2.17	(AV)
3.33	Neutral	41.07	*	56.00	46.00	-14.93	(QP)
16.68	Neutral	50.89	45.58	60.00	50.00	-4.42	(AV)

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz or Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz or Swp. Time =0.3 sec./MHz or
- (2) All readings are QP Mode value unless otherwise stated AVG in column of <code>『Note』</code>. 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 \circ In this case, a " * " marked in AVG Mode column of Interference Voltage Measured \circ
- (3) Measuring frequency range from 150KHz to 30MHz o

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 4 Conducted Emission Data

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 69 % Pressure: 1032 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 3

For 802.11g

Minimum passing margin is -3.50dB at 1.73MHz

Freq.	Terminal	Measured(dBuV)		Limits(dBuV)		Safe Margins	
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dBuV)	Note
0.16	Line	55.98	41.38	65.23	55.23	-9.25	(QP)
0.22	Line	49.78	*	62.88	52.88	-13.10	(QP)
0.80	Line	42.58	*	56.00	46.00	-13.42	(QP)
1.28	Line	43.86	*	56.00	46.00	-12.14	(QP)
1.73	Line	46.60	42.50	56.00	46.00	-3.50	(AV)
16.96	Line	50.58	44.98	60.00	50.00	-5.02	(AV)
0.16	Neutral	55.48	41.78	65.34	55.34	-9.86	(QP)
0.22	Neutral	48.47	*	62.91	52.91	-14.44	(QP)
0.27	Neutral	46.28	*	61.01	51.01	-14.73	(QP)
1.73	Neutral	46.29	42.09	56.00	46.00	-3.91	(AV)
3.28	Neutral	39.77	*	56.00	46.00	-16.23	(QP)
16.68	Neutral	51.38	44.75	60.00	50.00	-5.25	(AV)

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz or Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz or Swp. Time =0.3 sec./MHz or
- (2) All readings are QP Mode value unless otherwise stated AVG in column of <code>『Note』</code>. 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 \circ In this case, a " * " marked in AVG Mode column of Interference Voltage Measured \circ
- (3) Measuring frequency range from 150KHz to 30MHz o

NFI	ITRO	M =	ИС.	IAR

Table 5 Radiated Emission Data (30-1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 18 °C Relative Humidity: 72 % Pressure: 1011 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 1

For 802.11b

Minimum passing margin is -4.84dB at 629.99MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Safe Margins
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m) Note
34.91	V	38.75	- 6.49	32.26	40.00	- 7.74
107.90	V	42.22	- 7.65	34.57	46.00	- 11.43
180.02	V	42.00	- 6.20	35.80	43.50	- 7.70
270.04	Н	41.92	- 5.24	36.68	46.00	- 9.32
359.16	Н	38.00	- 2.77	35.23	46.00	- 10.77
539.98	Н	36.14	1.27	37.41	46.00	- 8.59
629.98	Н	36.00	3.22	39.22	46.00	- 6.78
629.99	V	37.94	3.22	41.16	46.00	- 4.84
720.11	V	32.85	5.31	38.16	46.00	- 7.84
720.98	Н	32.27	5.32	37.59	46.00	- 8.41
810.20	Н	31.59	6.27	37.86	46.00	- 8.14
810.23	V	34.10	6.27	40.37	46.00	- 5.63

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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 ${}_{\circ}$
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency \circ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) 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.

NFI	ITRO	M =	ИС.	IAR

Table 5 Radiated Emission Data (30-1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 18 °C Relative Humidity: 72 % Pressure: 1011 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 2

For 802.11b

Minimum passing margin is -4.46dB at 630.00MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Safe Margins	j
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m) Note	
34.92	V	36.46	- 6.49	29.97	40.00	- 10.03	
108.00	V	40.84	- 7.64	33.20	43.50	- 10.30	
180.10	V	40.75	- 6.21	34.54	43.50	- 8.96	
270.02	Н	41.00	- 5.24	35.76	46.00	- 10.24	
359.44	Н	37.18	- 2.76	34.42	46.00	- 11.58	
539.99	Н	35.70	1.27	36.97	46.00	- 9.03	
629.99	Н	36.14	3.22	39.36	46.00	- 6.64	
630.00	V	38.32	3.22	41.54	46.00	- 4.46	
720.18	V	31.00	5.32	36.32	46.00	- 9.68	
720.88	Н	31.07	5.32	36.39	46.00	- 9.61	
810.10	Н	30.00	6.26	36.26	46.00	- 9.74	
810.17	V	33.40	6.27	39.67	46.00	- 6.33	

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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 ${}_{\circ}$
- (3) 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.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) 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.

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 5 Radiated Emission Data (30-1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 18 °C Relative Humidity: 72 % Pressure: 1011 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 3

For 802.11b

Minimum passing margin is -5.34dB at 629.97MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Safe Margins
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m) Note
34.98	V	36.25	- 6.49	29.76	40.00	- 10.24
108.00	V	41.11	- 7.64	33.47	43.50	- 10.03
180.04	V	41.00	- 6.20	34.80	43.50	- 8.70
270.01	Н	41.09	- 5.24	35.85	46.00	- 10.15
359.30	Н	37.28	- 2.76	34.52	46.00	- 11.48
539.99	Н	36.49	1.27	37.76	46.00	- 8.24
629.97	V	37.44	3.22	40.66	46.00	- 5.34
629.98	Н	36.36	3.22	39.58	46.00	- 6.42
720.16	V	32.71	5.32	38.03	46.00	- 7.97
720.99	Н	31.32	5.32	36.64	46.00	- 9.36
810.21	Н	31.08	6.27	37.35	46.00	- 8.65
810.40	V	33.63	6.27	39.90	46.00	- 6.10

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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 ${}_{\circ}$
- (3) 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.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) 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.

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 5 Radiated Emission Data (30-1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 18 $^{\circ}$ Relative Humidity : 72 $^{\circ}$ Pressure : 1011 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 1

For 802.11g

Minimum passing margin is -5.55dB at 629.99MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Safe Margins
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m) Note
34.74	V	38.00	- 6.49	31.51	40.00	- 8.49
107.65	V	39.74	- 7.69	32.05	43.50	- 11.45
179.68	V	39.89	- 6.16	33.73	43.50	- 9.77
179.99	Н	38.09	- 6.19	31.90	43.50	- 11.60
270.15	Н	40.28	- 5.23	35.05	46.00	- 10.95
540.24	Н	35.44	1.27	36.71	46.00	- 9.29
629.97	Н	37.11	3.22	40.33	46.00	- 5.67
629.99	V	37.23	3.22	40.45	46.00	- 5.55
720.47	V	31.11	5.32	36.43	46.00	- 9.57
720.82	Н	31.00	5.32	36.32	46.00	- 9.68
810.40	Н	31.12	6.27	37.39	46.00	- 8.61
810.71	V	32.20	6.28	38.48	46.00	- 7.52

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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 $_{\circ}$
- (3) 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.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) 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.

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 5 Radiated Emission Data (30-1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 18 °C Relative Humidity: 72 % Pressure: 1011 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 2

For 802.11g

Minimum passing margin is -5.78dB at 629.98MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Safe Margins
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m) Note
34.78	V	36.58	- 6.49	30.09	40.00	- 9.91
179.77	V	40.00	- 6.17	33.83	43.50	- 9.67
270.35	Н	40.56	- 5.23	35.33	46.00	- 10.67
359.84	Н	36.08	- 2.75	33.33	46.00	- 12.67
359.98	V	36.54	- 2.75	33.79	46.00	- 12.21
540.41	Н	35.08	1.27	36.35	46.00	- 9.65
629.98	V	37.00	3.22	40.22	46.00	- 5.78
629.98	Н	36.75	3.22	39.97	46.00	- 6.03
720.57	V	31.32	5.32	36.64	46.00	- 9.36
720.85	Н	30.70	5.32	36.02	46.00	- 9.98
810.43	Н	31.35	6.27	37.62	46.00	- 8.38
810.75	V	32.32	6.28	38.60	46.00	- 7.40

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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 ${}_{\circ}$
- (3) 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.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) 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.

_		"	_	~ ~ .	 1 11 C		AB
	\ <i>I - I</i>	,,,	v	"	 1///	•	$\Delta \kappa$

Table 5 Radiated Emission Data (30-1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 18 °C Relative Humidity: 72 % Pressure: 1011 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 3

For 802.11g

Minimum passing margin is -4.91dB at 629.98MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Safe Margins
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m) Note
34.81	V	37.43	- 6.49	30.94	40.00	- 9.06
107.69	V	39.08	- 7.69	31.39	43.50	- 12.11
179.15	V	39.35	- 6.09	33.26	43.50	- 10.24
179.91	Н	37.00	- 6.18	30.82	43.50	- 12.68
270.22	Н	40.05	- 5.23	34.82	46.00	- 11.18
540.16	Н	35.00	1.27	36.27	46.00	- 9.73
629.98	V	37.87	3.22	41.09	46.00	- 4.91
629.99	Н	36.29	3.22	39.51	46.00	- 6.49
720.82	V	31.45	5.32	36.77	46.00	- 9.23
720.85	Н	31.43	5.32	36.75	46.00	- 9.25
810.36	V	32.67	6.27	38.94	46.00	- 7.06
810.64	Н	30.50	6.28	36.78	46.00	- 9.22

- (1) Spectrum Setting : 30MHz 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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 $_{\circ}$
- (3) 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.
- (4) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission •
- (5) 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.

$\Lambda I \Gamma I$	ITDO	N EMC	1 10
ME	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N/ I - N/II .	1 4 1

Table 5 Radiated Emission Data (above 1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 °C Relative Humidity : 65 % Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 1

For 802.11b

Freq. (MHz)	Ant.Pol. (H/V)	Peak Rea (dBuV)	AV ding (dBuV)	Ant./CF CF(dB)	Peak Ac		Peak Lir (dBuV/m)	AV mit (dBuV/m)	NOTE
(1711 12)	(11/7)	(abav)	(abav)	Ci (db)	(dDd V/III)	(aba v/iii)	(ubuviii)	(dDdV/III)	NOTE
1080.0	V	52.18	-	-17.37	34.81	-	74.00	54.00	X/H
3903.0	V	36.62	-	- 5.55	31.07	-	74.00	54.00	X/H
4824.0	V	51.38	-	- 4.03	47.35	-	74.00	54.00	X/H
7236.0	V	38.57	-	0.97	39.54	-	74.00	54.00	X/H
9648.0	V	43.63	-	3.18	46.81	-	74.00	54.00	X/H
12060.0	V	30.59	-	6.04	36.63	-	74.00	54.00	X/H
1260.0	Н	49.90	-	-16.44	33.46	-	74.00	54.00	X/H
4098.0	Н	33.07	-	- 5.24	27.83	-	74.00	54.00	X/H
4824.0	Н	45.97	-	- 4.03	41.94	-	74.00	54.00	X/H
7236.0	Н	33.43	-	0.97	34.40	-	74.00	54.00	X/H
9648.0	Н	33.91	-	3.18	37.09	-	74.00	54.00	X/H
12060.0	Н	30.73	-	6.04	36.77	-	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz 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 include the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand

$\Lambda I \square I$	$ITD \cap I$	V <i>EMC</i>	$I \Lambda D$
IVEL	IIKUI	V EIVIC	LAD.

Table 5 Radiated Emission Data (above 1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 25 °C Relative Humidity: 65 % Pressure: 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 2

For 802.11b

Freq. (MHz)	Ant.Pol. (H/V)	Peak Rea (dBuV)	AV ding (dBuV)	Ant./CF CF(dB)	Peak Ac (dBuV/m)		Peak Lir) (dBuV/m)	AV nit (dBuV/m)	NOTE
1440.0	V	47.14	_	-15.51	31.63	_	74.00	54.00	X/H
4124.0	V	33.12	_	- 5.24	27.88	_	74.00	54.00	X/H
4874.0	V	49.52	-	- 3.85	45.67	-	74.00	54.00	X/H
7311.0	V	36.91	-	1.34	38.25	-	74.00	54.00	X/H
9748.0	V	41.89	-	3.31	45.20	-	74.00	54.00	X/H
12185.0	V	30.11	-	6.15	36.26	-	74.00	54.00	X/H
1260.0	Н	49.69	_	-16.44	33.25	-	74.00	54.00	Χ/H
3604.0	Н	34.60	-	- 6.49	28.11	-	74.00	54.00	X/H
4874.0	Н	47.36	-	- 3.85	43.51	-	74.00	54.00	X/H
7311.0	Н	31.88	-	1.34	33.22	-	74.00	54.00	X/H
9748.0	Н	36.68	-	3.31	39.99	-	74.00	54.00	X/H
12185.0	Н	31.32	-	6.15	37.47	-	74.00	54.00	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (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 or the 10th harmonic of highest fundamental frequency \circ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
 - (This judgment method include the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand

$\Lambda I \square I$	$ITD \cap I$	V <i>EMC</i>	$I \Lambda D$
IVEL	IIKUI	V EIVIC	LAD.

Table 5 Radiated Emission Data (above 1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 $^{\circ}$ Relative Humidity : 65 $^{\circ}$ Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 3

For 802.11b

Freq. (MHz)	Ant.Pol. (H/V)	Peak Rea (dBuV)	AV ding (dBuV)	Ant./CF CF(dB)	Peak Ac (dBuV/m)		Peak Lir) (dBuV/m)	AV mit (dBuV/m)	NOTE
1760.0	V	47.60		-13.49	34.11	_	74.00	54.00	X/H
3838.0	V	33.80	_	- 5.76	28.04	_	74.00	54.00	X/H
4924.0	V	55.13	_	- 3.66	51.47	_	74.00	54.00	X/H
7386.0	V	36.92	-	1.71	38.63	-	74.00	54.00	X/H
9848.0	V	42.74	-	3.43	46.17	-	74.00	54.00	X/H
12310.0	V	31.86	-	6.26	38.12	-	74.00	54.00	X/H
1260.0	Н	49.38	-	-16.44	32.94	-	74.00	54.00	X/H
4085.0	Н	34.61	-	- 5.24	29.37	-	74.00	54.00	X/H
4924.0	Н	46.86	-	- 3.66	43.20	-	74.00	54.00	X/H
7386.0	Н	32.20	-	1.71	33.91	-	74.00	54.00	X/H
9848.0	Н	34.62	-	3.43	38.05	-	74.00	54.00	X/H
12310.0	Н	32.86	-	6.26	39.12	-	74.00	54.00	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (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 or the 10th harmonic of highest fundamental frequency \circ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
 - (This judgment method include the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand

$\Lambda I \square I$	$ITD \cap I$	V <i>EMC</i>	$I \Lambda D$
IVEL	IIKUI	V EIVIC	LAD.

Table 5 Radiated Emission Data (above 1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 $^{\circ}$ Relative Humidity : 65 $^{\circ}$ Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 1

For 802.11g

Freq. (MHz)	Ant.Pol. (H/V)	Peak Rea (dBuV)	AV ding (dBuV)	Ant./CF CF(dB)	Peak Ac (dBuV/m)		Peak Lir) (dBuV/m)	AV mit (dBuV/m)	NOTE
1720.0	V	47.18		-13.76	33.42	_	74.00	54.00	X/H
3565.0	V	35.43	_	- 6.61	28.82	_	74.00	54.00	X/H
4824.0	V	53.73	-	- 4.03	49.70	-	74.00	54.00	X/H
7236.0	V	40.66	-	0.97	41.63	-	74.00	54.00	X/H
9648.0	V	43.32	-	3.18	46.50	-	74.00	54.00	X/H
12060.0	V	30.98	-	6.04	37.02	-	74.00	54.00	X/H
1260.0	Н	49.06	-	-16.44	32.62	-	74.00	54.00	X/H
4384.0	Н	34.53	-	- 5.23	29.30	-	74.00	54.00	X/H
4824.0	Н	44.60	-	- 4.03	40.57	-	74.00	54.00	X/H
7236.0	Н	34.68	-	0.97	35.65	-	74.00	54.00	X/H
9648.0	Н	34.56	-	3.18	37.74	-	74.00	54.00	X/H
12060.0	Н	30.31	-	6.04	36.35	-	74.00	54.00	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (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 or the 10th harmonic of highest fundamental frequency \circ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
 - (This judgment method include the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand

NEUTRON EMC LAB.

Report No.: NEI-FCCP-1-0602004

Table 5 Radiated Emission Data (above 1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 °C Relative Humidity : 65 % Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 2

For 802.11g

Freq.	Ant.Pol.	Peak Rea	AV ding	Ant./CF	Peak Ac	AV t.	Peak Lir	AV nit	
(MHz)	(H/V)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m) (dBuV/m)	(dBuV/m)	NOTE
1440.0	V	45.63	_	-15.51	30.12	-	74.00	54.00	X/H
3604.0	V	34.94	-	- 6.49	28.45	-	74.00	54.00	X/H
4874.0	V	54.44	-	- 3.85	50.59	-	74.00	54.00	X/H
7311.0	V	38.23	-	1.34	39.57	-	74.00	54.00	X/H
9748.0	V	42.91	-	3.31	46.22	-	74.00	54.00	X/H
12185.0	V	31.13	-	6.15	37.28	-	74.00	54.00	X/H
1260.0	Н	48.42	-	-16.44	31.98	-	74.00	54.00	X/H
3604.0	Н	34.65	-	- 6.49	28.16	-	74.00	54.00	X/H
4874.0	Н	46.65	-	- 3.85	42.80	-	74.00	54.00	X/H
7311.0	Н	32.03	-	1.34	33.37	-	74.00	54.00	X/H
9748.0	Н	36.72	-	3.31	40.03	-	74.00	54.00	X/H
12185.0	Н	30.88	-	6.15	37.03	-	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz-25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz 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 include the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand

NEUTRON EMC LAB.

Report No.: NEI-FCCP-1-0602004

Table 5 Radiated Emission Data (above 1000MHz)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 $^{\circ}$ Relative Humidity : 65 $^{\circ}$ Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Mode 3

For 802.11g

Freq. (MHz)	Ant.Pol. (H/V)	Peak Rea (dBuV)	AV ding (dBuV)	Ant./CF CF(dB)	Peak Ac (dBuV/m)			AV mit (dBuV/m)	NOTE
1440.0	V	45.11	_	-15.51	29.60	_	74.00	54.00	X/H
3617.0	V	35.71	_	- 6.45	29.26	_	74.00	54.00	X/H
4924.0	V	54.82	-	- 3.66	51.16	-	74.00	54.00	X/H
7386.0	V	35.58	-	1.71	37.29	-	74.00	54.00	X/H
9848.0	V	42.58	-	3.43	46.01	-	74.00	54.00	X/H
12310.0	V	31.12	-	6.26	37.38	-	74.00	54.00	X/H
1170.0	Н	51.96	-	-16.90	35.06	-	74.00	54.00	X/H
3591.0	Н	36.56	-	- 6.53	30.03	-	74.00	54.00	X/H
4924.0	Н	45.76	-	- 3.66	42.10	-	74.00	54.00	X/H
7386.0	Н	31.18	-	1.71	32.89	-	74.00	54.00	X/H
9848.0	Н	33.78	-	3.43	37.21	-	74.00	54.00	X/H
12310.0	Н	30.61	-	6.26	36.87	-	74.00	54.00	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform \circ
- (3) Measuring frequency range from 30MHz to 1000MHz 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 include the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand

NEUTRON EMC LAB.	
------------------	--

Table 5 Radiated Emission Data (Restricted Bands Requirements)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 $^{\circ}$ C Relative Humidity : 65 $^{\circ}$ C Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

The emission of the carrier radiated field strength is measured for channel 1 and channel 11 (Peak and AV) as following: (for 802.11 b)

- 1. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH 11). Then the field strength was measured at 2483.5-2500 MHz.
- 2. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH 01). Then the field strength was measured at 2310-2390 MHz.

Please refer to the Attachment G about the Restricted Bands emission plot.

		Peak	AV		Peak	AV	Peak	AV	
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
(MHz)	(HV)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	NOTE
2387.9	V	54.89	-	-10.94	43.95	-	74.00	54.00	
2488.2	V	55.78	-	-10.68	45.10	-	74.00	54.00	
2314.6	Н	54.44	-	-11.12	43.32	-	74.00	54.00	
2495.5	Н	54.96	-	-10.66	44.30	-	74.00	54.00	

Remark:

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission $\,^\circ$
- (3) EUT Orthogonal Axes:

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

$\Lambda I \Gamma I$	<i>JTRO</i>	A / FA	$A \cap A$	
MEI	,,,,,	/// <i>F</i> //	// /	U AK

Table 5 Radiated Emission Data (Restricted Bands Requirements)

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 $^{\circ}$ C Relative Humidity : 65 $^{\circ}$ C Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

The emission of the carrier radiated field strength is measured for channel 1 and channel 11 (Peak and AV) as following: (for 802.11 g)

- 1 The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH 11). Then the field strength was measured at 2483.5-2500 MHz.
- 2. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH 01). Then the field strength was measured at 2310-2390 MHz.

Please refer to the Attachment G about the Restricted Bands emission plot.

		Peak	AV		Peak	AV	Peak	AV	
Freq.	Ant.Pol.	Rea	ding	Ant./CF	Act.		Limit		
(MHz)	(H/V)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	NOTE
2389.8	V	62.49	-	-10.93	51.56	-	74.00	54.00	
2483.8	V	62.62	-	-10.69	51.93	-	74.00	54.00	
2375.8	Н	54.93	-	-10.97	43.96	-	74.00	54.00	
2485.1	Н	54.35	-	-10.69	43.66	-	74.00	54.00	

Remark:

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = 200 ms
- (2) 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
- (3) EUT Orthogonal Axes:

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

~,_,	ITOO	N FMC) / AD
NIFI	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NI	IAK

4. Bandwidth

4.1 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	

4.2 Test Setup

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- (2) Spectrum Setting: RBW= 100KHz, VBW=100KHz, Sweep time = 20 ms.

EUT	SPECTRUM
	ANALYZER

4.3 Test Result

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 23 °C Relative Humidity: 51 % Pressure: 1012 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Please refer to the Attachment C

For 802.11b				
СП	CH Frequency	Bandwidth	LIMIT	
CH	(MHz)	(MHz)	(MHz)	
1	2412	11.6	>= 500KHz	
6	2437	11.6	>= 500KHz	
11	2462	11.6	>= 500KHz	

For 802.11g				
CH	CH Frequency	Bandwidth	LIMIT	
CH	(MHz)	(MHz)	(MHz)	
1	2412	16.3	>= 500KHz	
6	2437	16.2	>= 500KHz	
11	2462	16.3	>= 500KHz	

~	ITOO		$I \cap I$	
NIFI	<i>JTRO</i>	'// <i> </i> -/	//	NH
/ V /_ L	,,,,,	/V/\	// L	

5. Peak Output Power

5.1 Applied procedures / limit

	FCC Part15 (15.247), Subpart C (for 802.11b device)				
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247 (b)(1)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS	

5.2 Test Setup

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- (2) Spectrum Setting: RBW= 3MHz, VBW= 3MHz, Sweep time = 20 ms.

EUT	SPECTRUM
	ANALYZER

5.3 Test Result

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 23 °C Relative Humidity: 51 % Pressure: 1012 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Please refer to the Attachment D

	For 802.11b					
СП	CH Frequency	Peak Output Power	LIMIT	LIMIT		
CH	(MHz)	(dBm)	(dBm)	(W)		
1	2412	14.46	30	1		
6	2437	14.93	30	1		
11	2462	15.26	30	1		

For 802.11g				
CII	CH Frequency	Peak Output Power	LIMIT	LIMIT
CH	(MHz)	(dBm)	(dBm)	(W)
1	2412	17.80	30	1
6	2437	18.20	30	1
11	2462	18.49	30	1

~			, , ,
NILI	1	I FMC	$I \land L$

6. Antenna conducted Spurious Emission

6.1 Applied procedures / limit

	FCC Part15 (15.247) , Subpart C					
Section	Section Test Item Limit Frequency Range (MHz) Result					
15.247 (c)	Antenna conducted Spurious Emission	20dB less than the peak value of fundamental frequency	30-25000	PASS		

6.2 Test Setup

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- (2) Spectrum Setting: RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.

EUT	SPECTRUM
	ANALYZER

6.3 Test Result

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 25 °C Relative Humidity : 65 % Pressure : 1010 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)
The following table lists worst case data. (Please refer to the Attachment E)

For 802.11b					
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth within the frequency band.					
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
2232	-50.62	2462	2.87		
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.

For 802.11g						
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth within the frequency band.						
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)			
2218	-50.28	2439.4	0.58			
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.

~,_,	ITOO	N FMC) / AD
NIFI	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NI	IAK

7. Power Spectral Density

7.1 Applied procedures / limit

	FCC Part15 (15.247) , Subpart C				
Section Test Item Limit Frequency Range (MHz) Result					
15.247 (d)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS	

7.2 Test Setup

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- (2) Spectrum Setting: RBW=3KHz, VBW=3KHz, Sweep time = 200s.

EUT	SPECTRUM
	ANALYZER

7.3 Test Result

EUT: Wireless AP Model/Type No.: RT-900W

Temperature: 23 °C Relative Humidity: 51 % Pressure: 1012 hPa

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

Please refer to the Attachment F

For 802.11b					
СП	CH Frequency	Peak Output Power	LIMIT		
CH	(MHz)	(dBm)	(dBm)		
1	2412	-14.44	8		
6	2437	-14.09	8		
11	2462	-13.92	8		

For 802.11g					
СП	CH Frequency	Peak Output Power	LIMIT		
CH	(MHz)	(dBm)	(dBm)		
1	2412	-18.41	8		
6	2437	-18.30	8		
11	2462	-17.97	8		

$\Lambda I \square I$	ITRON		IAD
IVIEI	IIKUM	FIVIL.	<i>I</i> AD

8. RF Exposure

8.1 Applied procedures / limit

Based upon the new TCB exclusion list published by FCC on July 2002				
Frequency Range(MHz)	LIMIT			
	(mW/cm^2)			
2402-2480	1			

8.2 Test Result

EUT: Wireless AP Model/Type No.: RT-900W

Temperature : 23 Relative Humidity: 51 % Pressure: 1012 hPa $^{\circ}$ C

Special Notes: (EUT Operation Mode or Test Configuration Mode, if applicable)

For 802.11b					
Peak output power	Ant Gain	EIRF	P (1)	The maximum power density	LIMIT
(dBm)	(dBi)	(dBm)	mW	at 20cm distance: S	(mW/cm ²)
15.26	5	20.26	106.1	0.021<<1	1

For 802.11g					
Peak output power	Ant Gain	EIRF	P (1)	The maximum power density	LIMIT
(dBm)	(dBi)	(dBm)	mW	at 20cm distance: S	(mW/cm ²)
18.49	5	23.49	223.3	0.044<<1	1

NOTE:

⁽¹⁾ EIRP= Peak output power + Ant Gain (2) S (mW/cm^2) = EIRP / $(4\pi R^2)$

$\Lambda I \Gamma I$	<i>JTRO</i>	A/	$\boldsymbol{n} \boldsymbol{\wedge}$	$I \Lambda D$
ME	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N/ F/N/	"	<i>1</i> 4 K

Attachment

Table Contents

- A. EUT Test Photos
- B. Product Labeling
- C. Bandwidth
- D. Peak Output Power
- E. Antenna conducted Spurious Emission
- F. Power Spectral Density
- G. Restricted Bands Requirements

NEUTRON EMC LAB.	
NEUTRUN EING LAB.	

Attachment - A

EUT Test Photos

- 1. Conducted Measurement Photos
- 2. Radiated Measurement Photos

|--|

Attachment - B

Product Labeling

N	EUTRON EMC LAB.	
-		

Attachment - C

Bandwidth

Bandwidth

For 802.11b_CH 1



For 802.11b CH 6



Bandwidth

For 802.11b_CH 11



For 802.11g_CH 1



Bandwidth

For 802.11g_CH 6



For 802.11g_CH 11



|--|

Attachment - D

Peak Output Power

Peak Output Power

For 802.11b_CH 1



For 802.11b CH 6



Peak Output Power

For 802.11b_CH 11



For 802.11g_CH 1

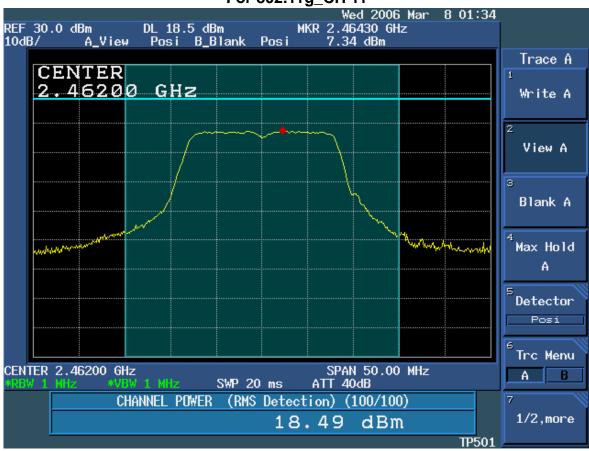


Peak Output Power

For 802.11g_CH 6



For 802.11g_CH 11



_	
NEUTRON EMC LAB.	

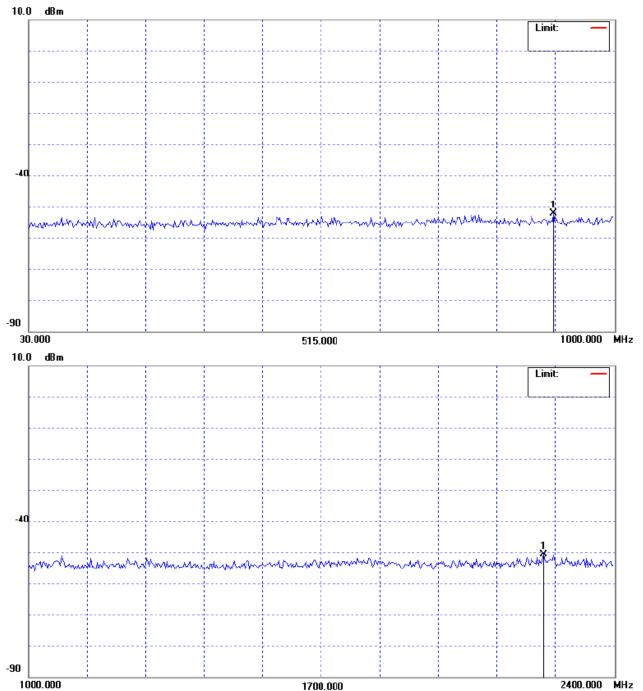
Attachment - E

Antenna conducted Spurious Emission

$\Lambda I \square I$	<i>JTRO</i>)	\mathcal{I}	IΛD
IVE	IIRU	'/V F/\	//(.	I AD

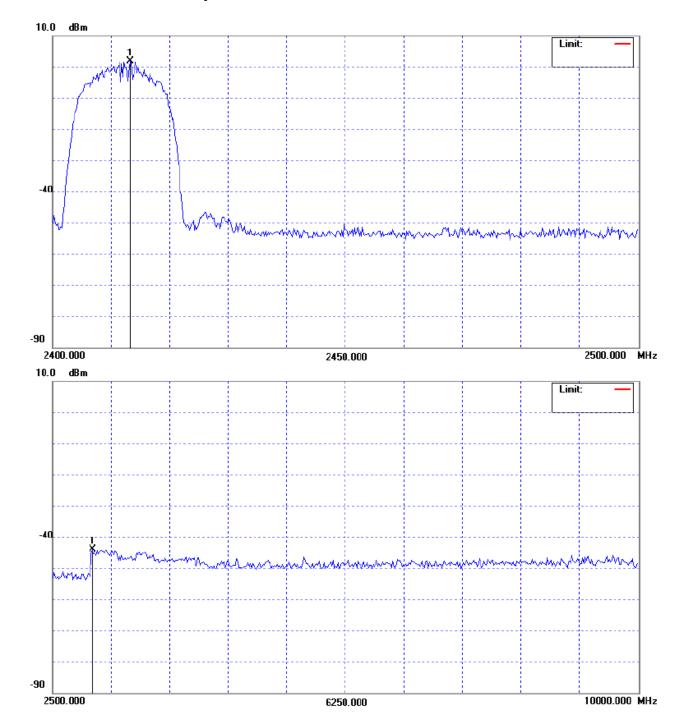
Antenna conducted Spurious Emission

For 802.11b_CH 1



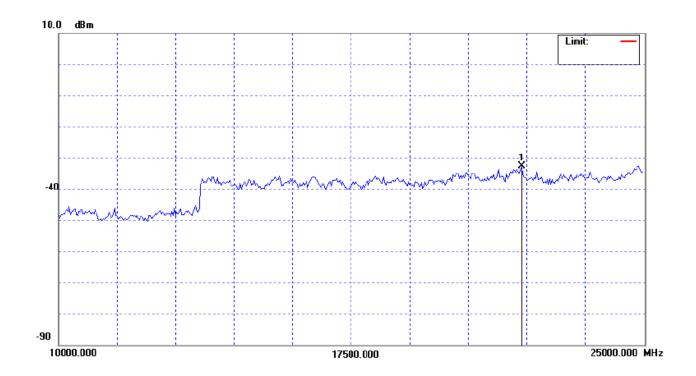
$\Lambda I \square I$	<i>JTRO</i>)	\mathcal{I}	IΛD
IVE	IIRU	'/V F/\	//(.	I AD

Antenna conducted Spurious Emission



$\Lambda I \Gamma I$	<i>JTRO</i>	A / FA	$A \cap A$	
MEI	,,,,,	/// <i>F</i> //	// /	U AK

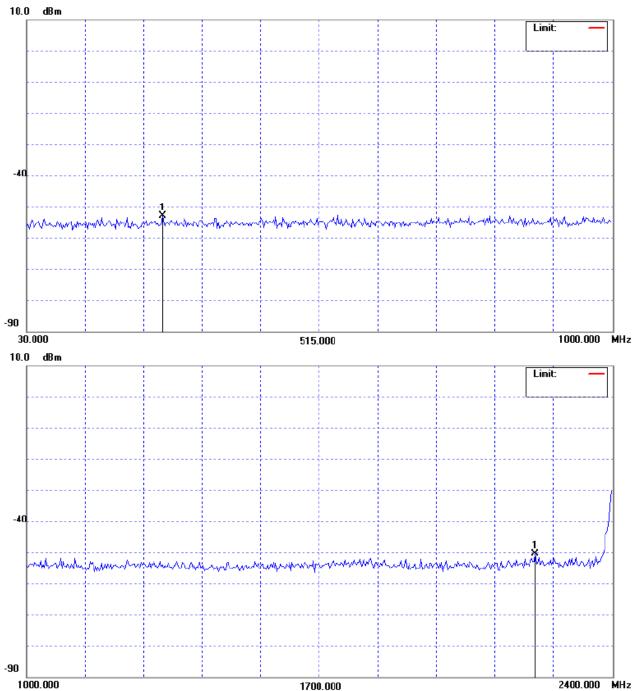
Antenna conducted Spurious Emission



$\Lambda I \square I$	<i>ITRO</i> .	A1 6 7/	·	IΛD
IVI-L	IIKU	IV F IV	IC - 1	IAB

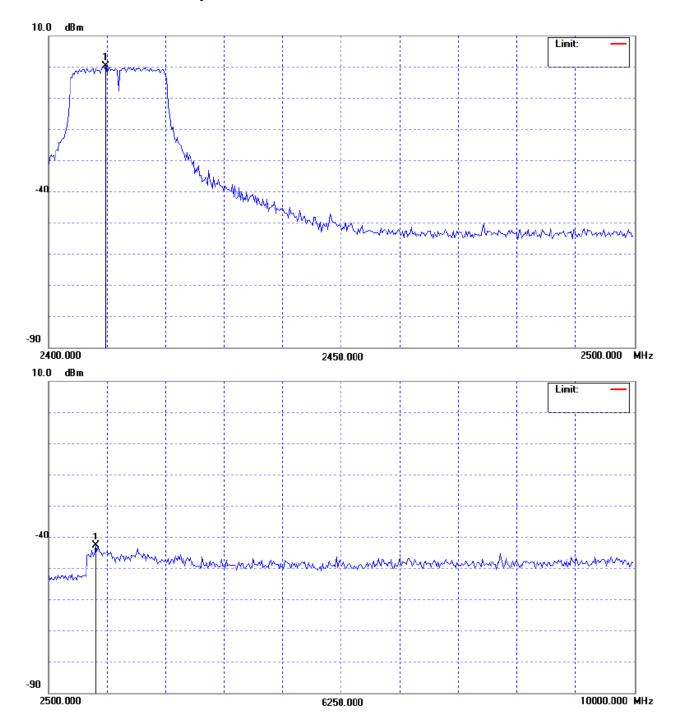
Antenna conducted Spurious Emission

For 802.11g_CH 1



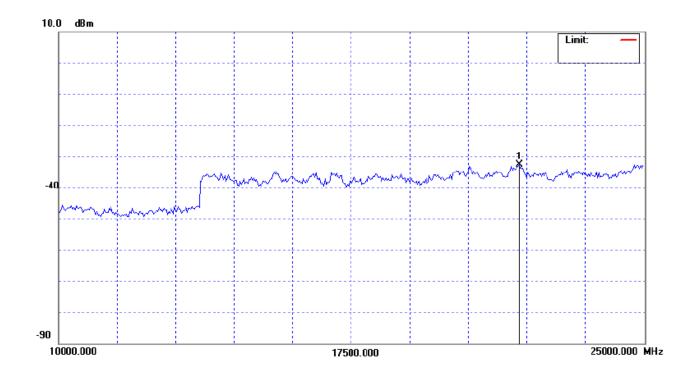
$\Lambda I \square I$	<i>ITRO</i> .	A1 6 7/	·	IΛD
IVI-L	IIKU	IV F IV	IC - 1	IAB

Antenna conducted Spurious Emission



~	ITOO		$I \cap I$	
NIFI	<i>JTRO</i>	'// <i> </i> -/	//	NH
/ V /_ L	,,,,,	/V/\	// L	

Antenna conducted Spurious Emission



|--|

Attachment - F

For 802.11b CH 1



For 802.11b_CH 6



For 802.11b_CH 11



For 802.11g_CH 1



For 802.11g_CH 6



For 802.11g_CH 11



<u>.</u>	
NEUTRON EMC LAB.	

Attachment - G

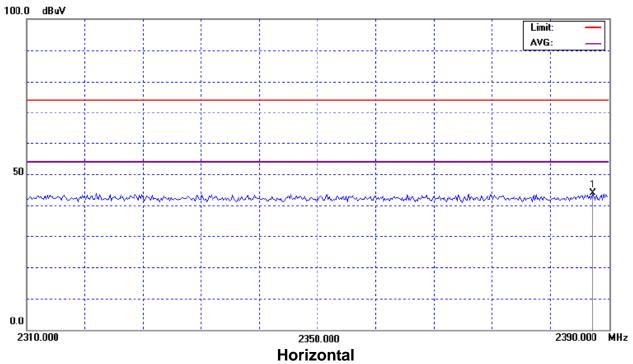
Restricted Bands Requirements

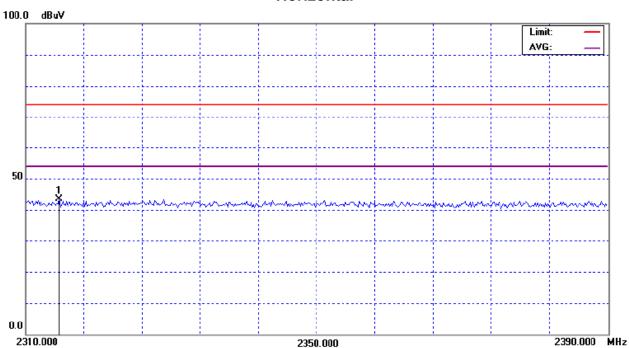
NEUTRON EMC LAB.	
------------------	--

Restricted Bands Requirements

Report No.: NEI- FCCP-1-0602004

For 802.11b_CH 1 Vertical

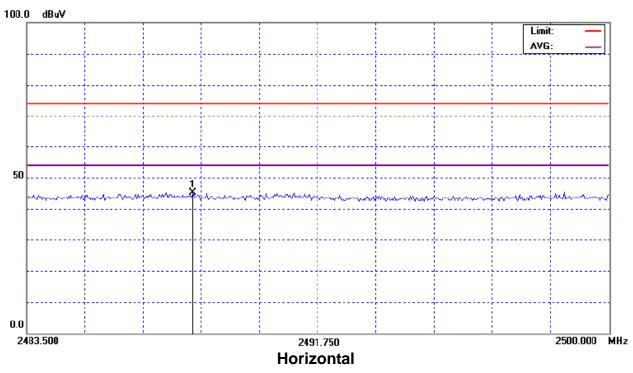


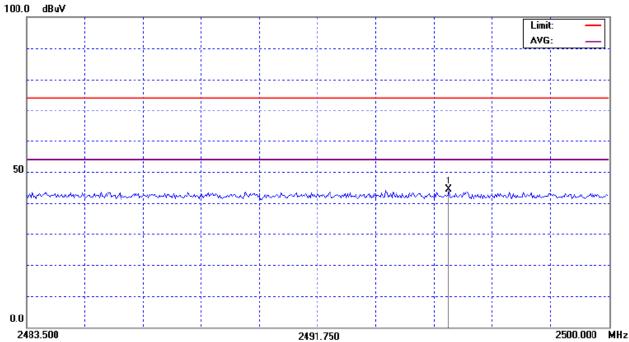


$\Lambda I \Gamma I$	<i>JTRO</i>	A/	<i>1</i>	ΛD
ME	,,,,,	NI F N	"	$\Delta \kappa$

Restricted Bands Requirements

For 802.11b_CH 11 Vertical

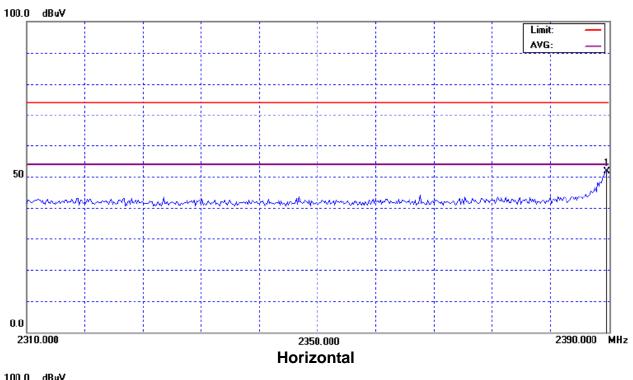


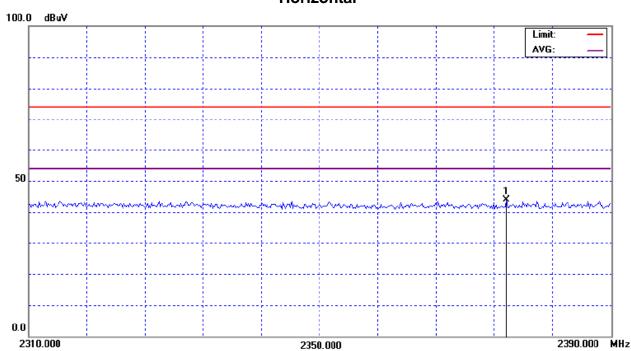


$\Lambda I \Gamma I$	<i>JTRO</i>	A / FA	$A \cap A$	
MEI	,,,,,	/// <i>F</i> //	// /	U AK

Restricted Bands Requirements

For 802.11g_CH 1 Vertical





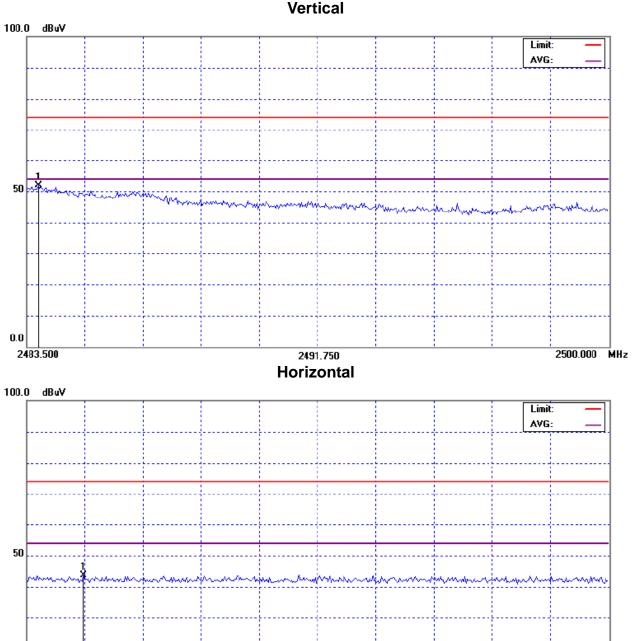
~			
NILI	1	I FMC	$I \land L$

2500.000 MHz

Restricted Bands Requirements

0.0 2483.500

For 802.11g_CH 11 Vertical



2491.750

~	ITOO		$I \cap I$	
NIFI	<i>JTRO</i>	'// <i> </i> -/	//	NH
/ V /_ L	,,,,,	/V/\	// L	

Project No. : 0602004

ATTACHMENT

0602004

PHOTOGRAPHS OF EUT