TEST REPORT

Product Name ：Wireless Broadband Router
Model Number ：WIC228
FCC ID ：PBLWIC228

Applicant ：Advance Multimedia Internet Technology Inc.
Address ：No. 32, Hwan-Gong Rd, Yung Kang City, Tainan Hsien, Taiwan

Received Date：February 02, 2005
Tested Date ：March 11 ~ April 12, 2005

Issued by

Compliance Certification Services Inc.
Tainan Lab.
No. 8, Jiu Ceng Ling, Jiaokeng Village,Sinhua Township, Tainan Hsien 712, Taiwan R.O.C.
TEL : (06)580-2201
FAX : (06)580-2202

Notes：
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2. This report refers only to the specimen(s) submitted to testing, and be invalid as seperately used.
3. This report is invalid without examination stamp and signature of this institute.
4. The tested specimen(s) will be preserved for thirty days from the data issued.
5. The report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

1109 ILAC MRA

NVLAP LAB CODE 200627-0

Test Report Certification

Product Name ：Wireless Broadband Router
Model Number ：WIC228
FCC ID ：PBLWIC228
Applicant ：Advance Multimedia Internet Technology Inc.

Measurement Standard :

FCC 47 C.F.R. Part 15, Subpart B and Subpart C (2004)
ANSI C63.4 (2003)

Tested By ：Jeter Wu , **Date :** April 18, 2005
(Jeter Wu Section Manager)

Approved By：Alex Chiu , **Date :** April 18, 2005
(Alex Chiu Manager)

WE HEREBY CERTIFY THAT: The measurements shown in the attachment were made in accordance with the procedures indicated, and the energy emitted by the equipment was found to be within the limits applicable. We assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.

TABLE OF CONTENTS

TITLE PAGE NO.

1. GENERAL INFORMATION

1.1 General Statement

MEASUREMENT DEVIATION：Comply with standard in full

TRACEABILITY ：This test result is traceable to National or International std.

1.2 General Description of EUT & Power

Product Name	Wireless Broadband Router
Model Number	WIC228
Frequency Range	2400MHz to 2483.5MHz
Frequency Channel	2412MHz + 5×n (MHz), n＝0, 1, 2,……10
Channel Number	11
Channel Spacing	5MHz
Air Data Rate	54Mbps (802.11g Mode), 11Mbps(802.11b Mode)
Type of Modulation	802.11b：DSSS(CCK, DQPSK, DBPSK) 802.11g：OFDM(64QAM, 16QAM, QPSK, BPSK)
Frequency Selection	by software / firmware
Transmitter Classification	Mobile device
EUT Description	2.4GHz (Direct Sequence Spread Spectrum and Orthogonal Frequency Division Multiplex) Data Transceiver for WLAN application
Antenna Type	Dipole、Printed, Antenna Gain : 1.8dBi
Power Source	12VAC (From Adapter)

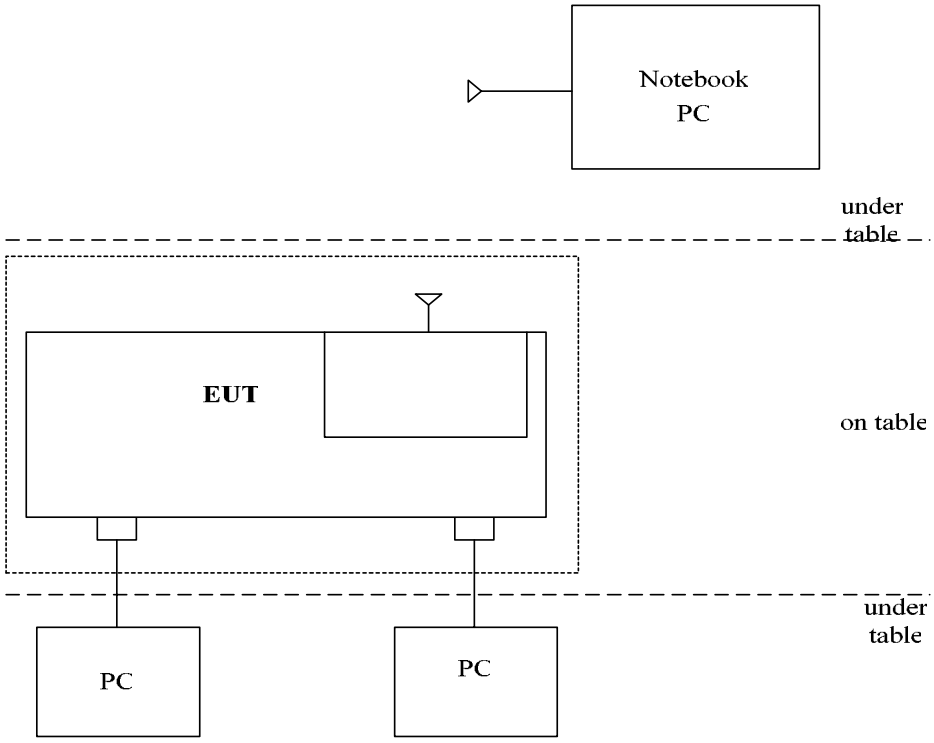
Power Adapter :

No.	Manufacturer	Model No.	Input Power	Output Power
1	OEM	AM-121000A	120V/60Hz	12VAC, 1A

1.3 Description of Peripherals

No.		Product	Manufacturer	Model No.	FCC ID	Signal cable
1	ˇ	PC	HP	d330uT	DOC	N/A
2	ˇ	PC	HP	d330uT	DOC	N/A
3	ˇ	Note Book	HP	CNC 6000	CNTPP2090	N/A
4	ˇ	LCD Monitor	HP	1502	DOC	VGA cable,shd,1.5m
5	ˇ	LCD Monitor	SAMPO	SL7003	DOC/R4AA03	VGA cable,shd,1.5m
6		LCD Monitor	BenQ	QTT3	DOC	VGA cable,shd,1.8m
7	ˇ	Keyboard(PS2)	HP	KB-0133	DOC	Keyboard cable,shd,1.9m
8	ˇ	Keyboard(PS2)	HP	KB-0133	DOC	Keyboard cable,shd,1.9m
9	ˇ	Mouse(PS2)	HP	M-S69	JNZ211443	Mouse cable,shd,1.8m
10	ˇ	Mouse(PS2)	HP	M-S69	JNZ211443	Mouse cable,shd,1.8m
11		Modem	LEMEL	MD-56K	DOC	RS232 cable,shd,1.1m

1.4 EUT & Peripherals Setup Diagram



The indicated numbers (1)(2)…..,please refer to item 1.3

1.5 EUT Operating Procedure

1. Set up all computers like the setup diagram.
2. According to test item , set TX & RX mode from CH1 to CH11.

1.6 Description of Laboratory

SITE DESCRIPTION：

FCC certificate NO. : 228014

BSMI certificate NO. : SL2-IN-E-0039

NVLAP Lab code : 200627-0

CNLA certificate NO. : CNLA-ZL03116

VCCI certificate NO. : R-1989, C-2142

NAME OF SITE ：Compliance Certification Services Inc. (Tainan Lab.)

SITE LOCATION ： No. 8, Jiu Ceng Ling, Jiaokeng Village, Sinhua Township, Tainan Hsien 712, Taiwan R.O.C.

1.7 Summary of Test Results

The EUT has been tested according to the following specifications :

APPLIED STANDARD： FCC 47 C.F.R. Part 15, Subpart B and Subpart C			
Standard Section	**Test Item and Limit**	**Result**	**REMARK**
15.107 15.207	AC Power Conducted Emission Limit : Sec 15.107	PASS	Meet the requirement of limit
15.247(a)(2)	Spectrum Bandwidth of a Orthogonal Frequency Division Multiplex System Limit : 6dB bandwidth > 500KHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit : max. 30dBm	PASS	Meet the requirement of limit
15.109 15.205 15.209	Transmitter Radiated Emissions Limit : Table 15.209	PASS	Meet the requirement of limit
15.247(e)	Power Spectral Density Limit : max. 8dBm	PASS	Meet the requirement of limit
15.247(d)	Out of Band Emission and Restricted Band Radiation Limit:20dB less than peak value of fundamental frequency Restricted band Limit:Table 15.209	PASS	Meet the requirement of limit

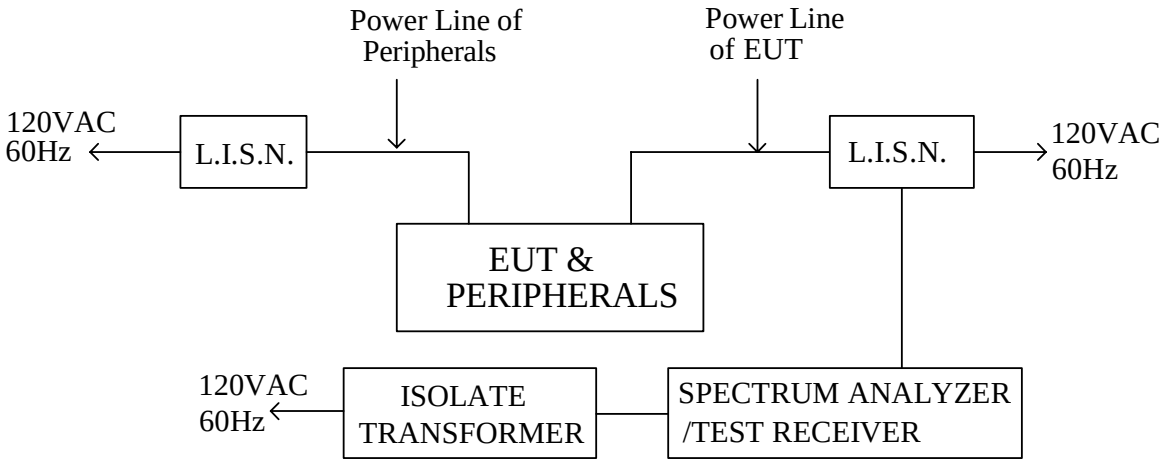
2. CONDUCTED POWERLINE TEST

2.1 Test Equipments

The following test equipments are used during the conducted powerline tests：

Manufacturer or Type	Model No.	Serial No.	Date of Calibration	Calibration Period	Remark
SCHWARZBECK L.I.S.N.	NNLK 8121	8121-446	SEP. 29, 2004 For Insertion loss	1 YEAR	FINAL
		8121-308	DEC. 09, 2004 For Insertion loss	1 YEAR	FINAL
R & S TEST RECEIVER	ESHS 10	832970/010	FEB. 02, 2005	1 YEAR	FINAL
R & S PULSE LIMIT	ESH3-Z2	100110	DEC. 27, 2004	1 YEAR	FINAL
TYPE N COAXIAL CABLE	--------	----------	DEC. 26, 2004	1 YEAR	FINAL

2.2 Test Setup



2.3 Conducted Power Line Emission Limit

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following：

Frequency (MHz)	Maximum RF Line Voltage (dBμv)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56	56-46
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

For intentional device, according to § 15.207(a) Line Conducted Emission Limit is same as above table.

2.4 Test Procedure

The test procedure is performed in a 12ft×12ft×8ft(L×W×H) shielded room. The EUT along with its peripherals were placed on a 1.0m(W)× 1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chasis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chasis ground also bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

2.5 Uncertainty of Conducted Emission

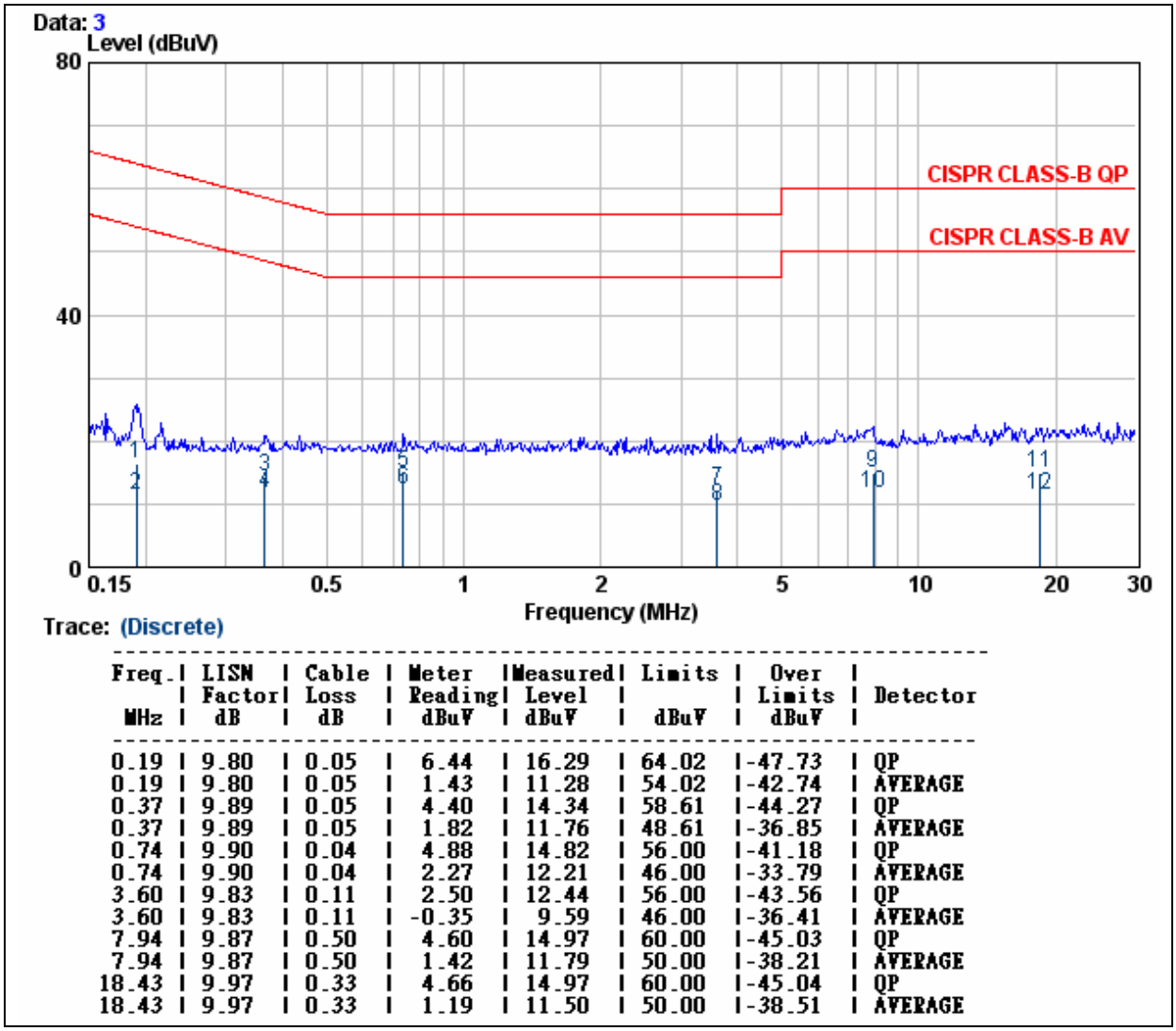
The uncertainty of conducted emission is ±2.1dB.

2.6 Conducted RF Voltage Measurement

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

LINE



Freq. MHz	LISN Factor dB	Cable Loss dB	Meter Reading dBuV	Measured Level dBuV	Limits dBuV	Over Limits dBuV	Detector
0.19	9.80	0.05	6.44	16.29	64.02	-47.73	QP
0.19	9.80	0.05	1.43	11.28	54.02	-42.74	AVERAGE
0.37	9.89	0.05	4.40	14.34	58.61	-44.27	QP
0.37	9.89	0.05	1.82	11.76	48.61	-36.85	AVERAGE
0.74	9.90	0.04	4.88	14.82	56.00	-41.18	QP
0.74	9.90	0.04	2.27	12.21	46.00	-33.79	AVERAGE
3.60	9.83	0.11	2.50	12.44	56.00	-43.56	QP
3.60	9.83	0.11	-0.35	9.59	46.00	-36.41	AVERAGE
7.94	9.87	0.50	4.60	14.97	60.00	-45.03	QP
7.94	9.87	0.50	1.42	11.79	50.00	-38.21	AVERAGE
18.43	9.97	0.33	4.66	14.97	60.00	-45.04	QP
18.43	9.97	0.33	1.19	11.50	50.00	-38.51	AVERAGE

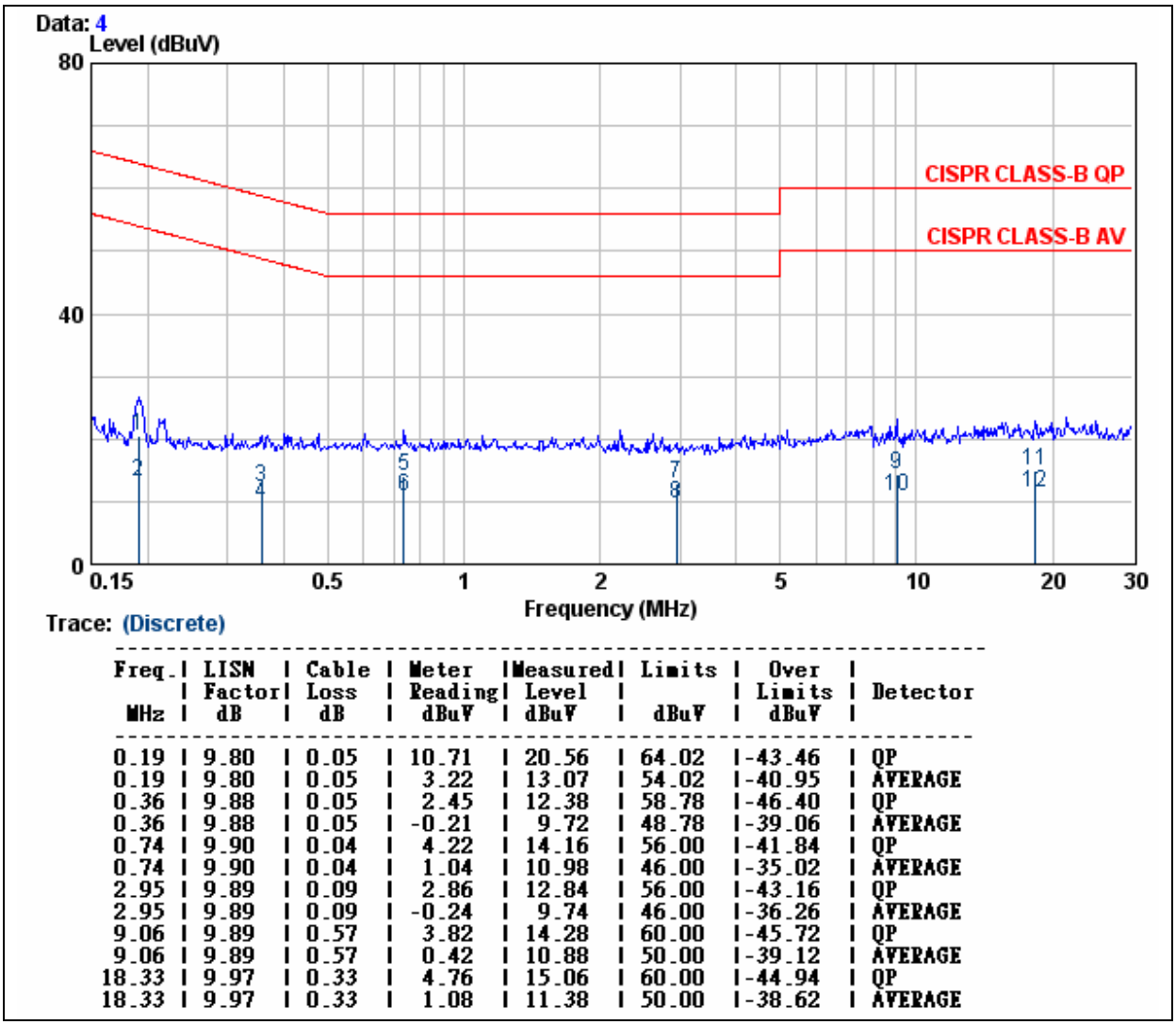
REMARKS：

1. Correction Factor = Insertion loss + cable loss
2. Margin value = Emission level – Limit value

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All emissions not reported are much lower than the prescribed limits.

Company	Advance Multimedia Internet Technology Inc.	Test Date	2005/04/06
Product Name	Wireless Broadband Router	Test By	Jerry Chang
Model Name	WIC228	TEMP & Humidity	27℃, 58%

NEUTRAL



Freq MHz	LISN Factor dB	Cable Loss dB	Meter Reading dBuV	Measured Level dBuV	Limits dBuV	Over Limits dBuV	Detector
0.19	9.80	0.05	10.71	20.56	64.02	-43.46	QP
0.19	9.80	0.05	3.22	13.07	54.02	-40.95	AVERAGE
0.36	9.88	0.05	2.45	12.38	58.78	-46.40	QP
0.36	9.88	0.05	-0.21	9.72	48.78	-39.06	AVERAGE
0.74	9.90	0.04	4.22	14.16	56.00	-41.84	QP
0.74	9.90	0.04	1.04	10.98	46.00	-35.02	AVERAGE
2.95	9.89	0.09	2.86	12.84	56.00	-43.16	QP
2.95	9.89	0.09	-0.24	9.74	46.00	-36.26	AVERAGE
9.06	9.89	0.57	3.82	14.28	60.00	-45.72	QP
9.06	9.89	0.57	0.42	10.88	50.00	-39.12	AVERAGE
18.33	9.97	0.33	4.76	15.06	60.00	-44.94	QP
18.33	9.97	0.33	1.08	11.38	50.00	-38.62	AVERAGE

REMARKS：

1. Correction Factor = Insertion loss + cable loss
2. Margin value = Emission level – Limit value

2.7 Photos of Conduction Test

3. RADIATED EMISSION TEST

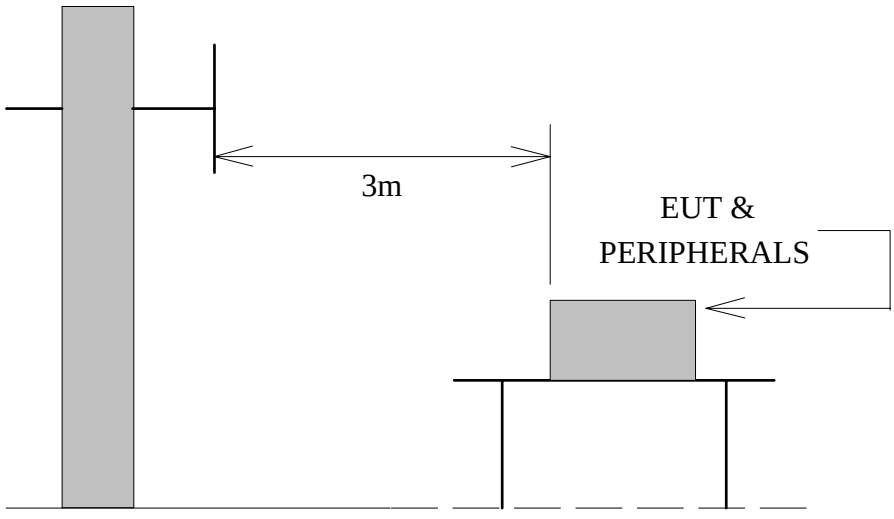
3.1 Test Equipments

The following test equipments are utilized in making the measurements contained in this report.

Manufacturer or Type	Model No.	Serial No.	Date of Calibration	Calibration Period	Remark
CHASE BI-LOG Antenna	CBL6112B	2341	May 07, 2004	1 Year	FINAL
R&S Spectrum Analyzer	FSEM	829054/017	March 18, 2005	1 Year	FINAL
R&S Test Receiver	ESHS 10	833206/012	February 24, 2005	1 Year	FINAL
O.A.T.S	----------	No.6	September 12, 2004	1 Year	FINAL
TYPE N COAXIAL CABLE	CHA9525	4	June 03, 2004	1 Year	FINAL
Horn Antenna	AH-118	071033	August 02, 2004	1 Year	FINAL
HP Pre-amplifier	8447F	2944A03817	May 24, 2004	1 Year	FINAL

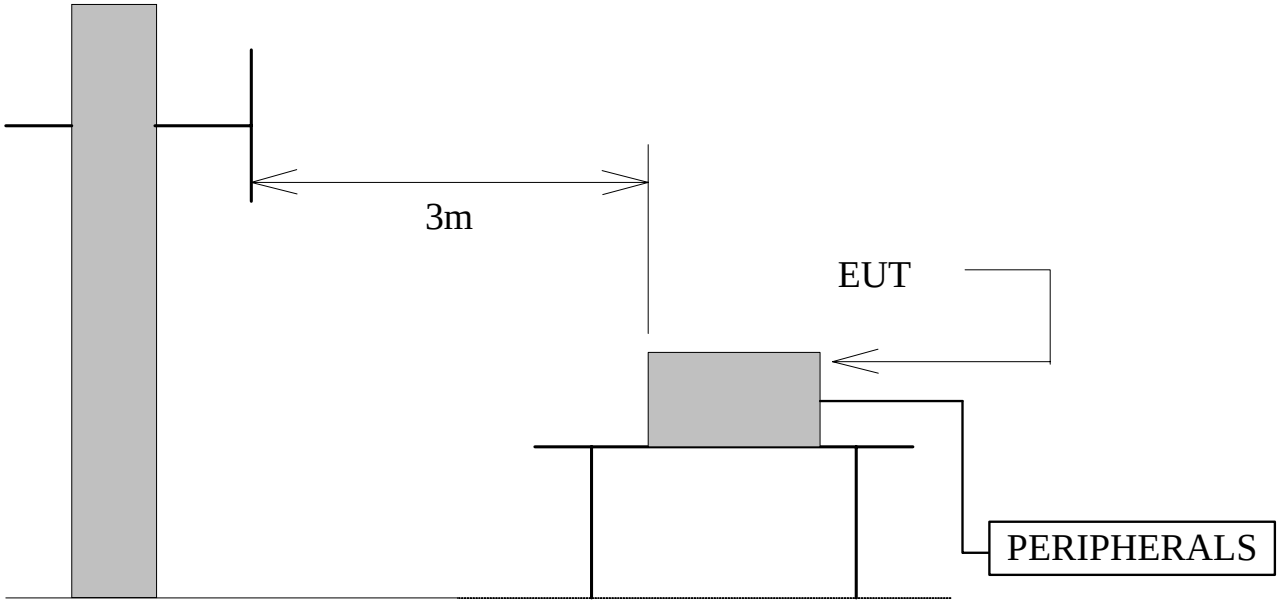
3.2 Test Setup

The diagram below shows the test setup that is utilized to make the measurements for emission below 1GHz.



Antenna Elevation Variable

The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



Antenna Elevation Variable

3.3 Radiation Limit

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/M)	Radiated (μV/M)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table. According to § 15.247(d), in any 100kHz bandwidth outside the frequency bard in which the EUT is operating, the radiofrequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of desired power.

3.4 Test Procedures

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. During performing radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. During performing radiated emission above 1GHz, the EUT was set 1 meters away from the interference-receiving antenna.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE：

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.

2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.

3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

3.5 Uncertainty of Radiated Emission

The uncertainty of radiated emission is ±3.2dB.

3.6 Radiated RF Noise Measurement

The frequency spectrum from 30 MHz to 1000 MHz was investigated. All emissions not reported are much lower than the prescribed limits.
All readings are quasi-peak values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

HORIZONTAL

Freq-	Antenna	Cable	Meter Reading	Limits	Emission Level	Antenna	Turntable	Margin
Uency	Factor	Loss	at 3 m(dB μ V/M)		at 3 m(dB μ V/M)	Height(cm)		
(MHz)	(dB)	(dB)	Horizontal	(dB μ V/M)	Horizontal	Horizontal	Angle	H
30.00	20.02	0.60	*	39.00	*	*	*	*
125.00	12.35	1.05	13.60	43.50	27.00	105	114	-16.50
200.00	9.98	1.24	20.50	43.50	31.72	138	360	-11.78
300.00	13.73	1.60	12.70	46.40	28.03	100	203	-18.37
400.00	14.36	2.31	13.30	46.40	29.97	100	70	-16.43
500.00	17.63	2.60	8.50	46.40	28.73	119	127	-17.67
800.10	21.13	3.50	9.80	46.40	34.43	119	127	-11.97

VERTICAL

Freq-	Antenna	Cable	Meter Reading	Limits	Emission Level	Antenna	Turntable	Margin
Uency	Factor	Loss	at 3 m(dB μ V/M)		at 3 m(dB μ V/M)	Height(cm)		
(MHz)	(dB)	(dB)	Horizontal	(dB μ V/M)	Horizontal	Horizontal	Angle	V
30.00	20.02	0.60	*	39.00	*	*	*	*
125.00	12.35	1.05	13.60	43.50	27.00	105	114	-16.50
200.00	9.98	1.24	20.50	43.50	31.72	138	360	-11.78
300.00	13.73	1.60	12.70	46.40	28.03	100	203	-18.37
400.00	14.36	2.31	13.30	46.40	29.97	100	70	-16.43
500.00	17.63	2.60	8.50	46.40	28.73	119	127	-17.67
800.10	21.13	3.50	9.80	46.40	34.43	119	127	-11.97

REMAR：

1. * Undetectable
2. Emission level (dBμV/m) = Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBμV).
3. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz, so that the channel 1 was chosen as representative in finial test.
4. The test data marked in gray background means the EUT emission data islocated in the margin uncertainty range of emission limits.

The frequency spectrum above 1 GHz for Receiver was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

CH1 RX				Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
1200.08	46.54	25.20	4.23	31.22	0.00	0.00	44.76	74	-29.24	P	1.0
1200.08	42.50	25.20	4.23	31.22	0.00	0.00	40.72	54	-13.28	A	1.0
2038.08	42.25	29.08	5.56	31.91	0.00	0.00	44.98	74	-29.02	P	1.0
2038.08	34.69	29.08	5.56	31.91	0.00	0.00	37.42	54	-16.58	A	1.0
4075.82	41.08	30.45	7.68	32.95	0.00	0.00	46.26	74	-27.74	P	1.0
4075.82	30.36	30.45	7.68	32.95	0.00	0.00	35.54	54	-18.46	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain.
2. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
4. The test limit is 3M limit.
5. The frequency was searched to 18GHz.
6. The other emission levels were very low against the limit.

The frequency spectrum above 1 GHz for Receiver was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

CH1 RX				Measurement Distance at 3m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
1200.15	44.87	25.20	4.23	31.22	0.00	0.00	43.09	74	-30.91	P	1.0
1200.15	39.50	25.20	4.23	31.22	0.00	0.00	37.72	54	-16.28	A	1.0
2038.03	45.46	29.08	5.56	31.91	0.00	0.00	48.19	74	-25.81	P	1.0
2038.03	40.52	29.08	5.56	31.91	0.00	0.00	43.25	54	-10.75	A	1.0
4075.82	41.78	30.45	7.68	32.95	0.00	0.00	46.96	74	-27.04	P	1.0
4075.82	32.56	30.45	7.68	32.95	0.00	0.00	37.74	54	-16.26	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain.
2. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
4. The test limit is 3M limit.
5. The frequency was searched to 18GHz.
6. The other emission levels were very low against the limit.

The frequency spectrum above 1 GHz for Receiver was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

CH6 RX				Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
1200.00	46.17	25.20	4.23	31.22	0.00	0.00	44.39	74	-29.61	P	1.0
1200.00	42.18	25.20	4.23	31.22	0.00	0.00	40.40	54	-13.60	A	1.0
2063.06	44.15	29.13	5.59	31.90	0.00	0.00	46.96	74	-27.04	P	1.0
2063.06	37.14	29.13	5.59	31.90	0.00	0.00	39.95	54	-14.05	A	1.0
4125.75	39.52	30.75	7.72	32.92	0.00	0.00	45.07	74	-28.93	P	1.0
4125.75	29.39	30.75	7.72	32.92	0.00	0.00	34.94	54	-19.06	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain.
2. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
4. The test limit is 3M limit.
5. The frequency was searched to 18GHz.
6. The other emission levels were very low against the limit.

The frequency spectrum above 1 GHz for Receiver was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

CH6 RX				Measurement Distance at 3m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
1199.99	45.43	25.20	4.23	31.22	0.00	0.00	43.65	74	-30.35	P	1.0
1199.99	40.52	25.20	4.23	31.22	0.00	0.00	38.74	54	-15.26	A	1.0
2063.19	45.60	29.13	5.59	31.90	0.00	0.00	48.41	74	-25.59	P	1.0
2063.19	40.71	29.13	5.59	31.90	0.00	0.00	43.52	54	-10.48	A	1.0
4126.11	42.57	30.76	7.72	32.92	0.00	0.00	48.12	74	-25.88	P	1.0
4126.11	33.03	30.76	7.72	32.92	0.00	0.00	38.58	54	-15.42	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain.
2. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
4. The test limit is 3M limit.
5. The frequency was searched to 18GHz.
6. The other emission levels were very low against the limit.

The frequency spectrum above 1 GHz for Receiver was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

CH11 RX				Measurement Distance at 3m Horizontal polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
1200.06	45.62	25.20	4.23	31.22	0.00	0.00	43.84	74	-30.16	P	1.0
1200.06	41.35	25.20	4.23	31.22	0.00	0.00	39.57	54	-14.43	A	1.0
2088.03	45.13	29.18	5.62	31.90	0.00	0.00	48.02	74	-25.98	P	1.0
2088.03	38.94	29.18	5.62	31.90	0.00	0.00	41.83	54	-12.17	A	1.0
4176.11	39.16	32.49	4.88	32.89	0.00	0.00	43.64	74	-30.36	P	1.0
4176.11	28.67	32.49	4.88	32.89	0.00	0.00	33.15	54	-20.85	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain.
2. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
4. The test limit is 3M limit.
5. The frequency was searched to 18GHz.
6. The other emission levels were very low against the limit.

The frequency spectrum above 1 GHz for Receiver was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

CH11 RX				Measurement Distance at 3m Vertical polarity							
Freq. (MHz)	Reading (dBμV)	AF (dBμV)	Cable (dB)	Pre-amp (dB)	Dist (dB)	Filter (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Mark (P/Q/A)	Height (Meter)
1200.01	45.45	25.20	4.23	31.22	0.00	0.00	43.67	74	-30.33	P	1.0
1200.01	40.99	25.20	4.23	31.22	0.00	0.00	39.21	54	-14.79	A	1.0
2088.03	46.57	29.18	5.62	31.90	0.00	0.00	49.46	74	-24.54	P	1.0
2088.03	42.42	29.18	5.62	31.90	0.00	0.00	45.31	54	-8.69	A	1.0
4176.05	42.34	32.49	4.88	32.89	0.00	0.00	46.82	74	-27.18	P	1.0
4176.05	31.80	32.49	4.88	32.89	0.00	0.00	36.28	54	-17.72	A	1.0

1. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain.
2. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz,VBW=10Hz
3. The result basic equation calculation as follow :
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
4. The test limit is 3M limit.
5. The frequency was searched to 18GHz.
6. The other emission levels were very low against the limit.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH1 TX				Measurement Distance at 3m Horizontal polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
*	2389.90	25.79	30.00	5.98	0.00	0.00	0.00	61.77	74.00	-12.23	P	1.00
*	2389.90	13.48	30.00	5.98	0.00	0.00	0.00	49.46	54.00	-4.54	A	1.00
	2399.90	29.42	29.80	5.99	0.00	0.00	0.00	65.21	80.48	-15.27	P	1.00
	2399.90	17.00	29.80	5.99	0.00	0.00	0.00	52.79	73.46	-20.67	A	1.00
	2408.94	64.66	29.82	6.00	0.00	0.00	0.00	100.48	Fundamental Frequency		P	1.00
	2408.94	57.64	29.82	6.00	0.00	0.00	0.00	93.46			A	1.00
	2038.15	44.18	29.08	5.56	31.91	0.00	0.00	46.91	80.48	-33.57	P	1.00
	2038.15	40.75	29.08	5.56	31.91	0.00	0.00	43.48	73.46	-29.98	A	1.00
	2448.15	46.54	29.90	6.05	31.86	0.00	0.00	50.63	80.48	-29.85	P	1.00
	2448.15	40.71	29.90	6.05	31.86	0.00	0.00	44.80	73.46	-28.66	A	1.00
*	4823.89	43.23	33.65	8.29	32.80	0.00	2.00	54.38	74.00	-19.62	P	1.00
*	4823.89	30.10	33.65	8.29	32.80	0.00	2.00	41.25	54.00	-12.75	A	1.00
	7236.00	------	------	------	------	0.00	2.00	------	------	------	------	1.00
	7236.00	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12044.70	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14453.64	------	------	------	------	0.00	0.64	------	------	------	------	1.00
	16862.58	------	------	------	------	0.00	0.65	------	------	------	------	1.00
*	19271.52	------	------	------	------	0.00	2.47	------	------	------	------	1.00
	21680.46	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24089.40	------	------	------	------	0.00	2.17	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11b mode at 11Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH1 TX				Measurement Distance at 1m Vertical polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
*	2389.90	26.87	29.78	5.98	0.00	0.00	0.00	62.63	74.00	-11.37	P	1.00
*	2389.90	13.48	29.78	5.98	0.00	0.00	0.00	49.24	54.00	-4.76	A	1.00
	2399.90	32.94	29.80	5.99	0.00	0.00	0.00	68.73	88.64	-19.91	P	1.00
	2399.90	20.52	29.80	5.99	0.00	0.00	0.00	56.31	82.13	-25.82	A	1.00
	2408.94	72.82	29.82	6.00	0.00	0.00	0.00	108.64	Fundamental Frequency		P	1.00
	2408.94	66.31	29.82	6.00	0.00	0.00	0.00	102.13			A	1.00
	2038.15	46.93	29.08	5.56	31.91	0.00	0.00	49.66	88.64	-38.98	P	1.00
	2038.15	43.16	29.08	5.56	31.91	0.00	0.00	45.89	82.13	-36.24	A	1.00
	2447.95	51.05	29.90	6.05	31.86	0.00	0.00	55.14	88.64	-33.50	P	1.00
	2447.95	47.06	29.90	6.05	31.86	0.00	0.00	51.15	82.13	-30.98	A	1.00
*	4824.05	42.16	33.65	8.29	32.80	0.00	2.00	53.31	74.00	-20.69	P	1.00
*	4824.05	31.55	33.65	8.29	32.80	0.00	2.00	42.70	54.00	-11.30	A	1.00
	7236.05	------	------	------	------	0.00	2.00	------	------	------	------	1.00
	7236.05	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12044.70	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14453.64	------	------	------	------	0.00	0.64	------	------	------	------	1.00
	16862.58	------	------	------	------	0.00	0.65	------	------	------	------	1.00
*	19271.52	------	------	------	------	0.00	2.47	------	------	------	------	1.00
	21680.46	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24089.40	------	------	------	------	0.00	2.17	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11b mode at 11Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH6 TX				Measurement Distance at 3m Horizontal polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2438.05	63.44	29.88	6.04	0.00	0.00	0.00	99.35	Fundamental Frequency		P	1.00
	2438.05	56.87	29.88	6.04	0.00	0.00	0.00	92.78			A	1.00
	2036.08	45.35	29.07	5.55	31.91	0.00	0.00	48.07	79.35	-31.28	P	1.00
	2036.08	40.52	29.07	5.55	31.91	0.00	0.00	43.24	72.78	-29.54	A	1.00
*	2493.86	45.13	29.99	6.10	31.85	0.00	0.00	49.37	74.00	-24.63	P	1.00
*	2493.86	31.80	29.99	6.10	31.85	0.00	0.00	36.04	54.00	-17.96	A	1.00
*	4873.95	43.21	33.75	8.34	32.81	0.00	1.80	54.29	74.00	-19.71	P	1.00
*	4873.95	37.32	33.75	8.34	32.81	0.00	1.80	48.40	54.00	-5.60	A	1.00
*	7311.15	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7311.15	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12190.25	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14628.30	------	------	------	------	0.00	0.60	------	------	------	------	1.00
	17066.35	------	------	------	------	0.00	0.75	------	------	------	------	1.00
*	19504.40	------	------	------	------	0.00	2.73	------	------	------	------	1.00
	21942.45	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24380.50	------	------	------	------	0.00	1.77	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11b mode at 11Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH6 TX				Measurement Distance at 3m Vertical polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2438.05	72.22	29.88	6.04	0.00	0.00	0.00	108.13	Fundamental Frequency		P	1.00
	2438.05	65.37	29.88	6.04	0.00	0.00	0.00	101.28			A	1.00
	2063.01	47.08	29.13	5.59	31.90	0.00	0.00	49.89	88.13	-38.24	P	1.00
	2063.01	42.95	29.13	5.59	31.90	0.00	0.00	45.76	81.28	-35.52	A	1.00
*	2362.99	49.02	29.73	5.95	31.87	0.00	0.00	52.83	74.00	-21.17	P	1.00
*	2362.99	39.05	29.73	5.95	31.87	0.00	0.00	42.86	54.00	-11.14	A	1.00
*	4873.85	45.22	33.75	8.34	32.81	0.00	1.80	56.30	74.00	-17.70	P	1.00
*	4873.85	38.55	33.75	8.34	32.81	0.00	1.80	49.63	54.00	-4.37	A	1.00
*	7311.54	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7311.54	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12190.25	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14628.30	------	------	------	------	0.00	0.60	------	------	------	------	1.00
	17066.35	------	------	------	------	0.00	0.75	------	------	------	------	1.00
*	19504.40	------	------	------	------	0.00	2.73	------	------	------	------	1.00
	21942.45	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24380.50	------	------	------	------	0.00	1.77	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11b mode at 11Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH11 TX				Measurement Distance at 3m Horizontal polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2460.54	65.14	29.92	6.06	0.00	0.00	0.00	101.12	Fundamental Frequency		P	1.00
	2460.54	58.56	29.92	6.06	0.00	0.00	0.00	94.54			A	1.00
*	2483.50	25.43	29.97	6.09	0.00	0.00	0.00	61.49	74.00	-12.51	P	1.00
*	2483.50	10.98	29.97	6.09	0.00	0.00	0.00	47.04	54.00	-6.96	A	1.00
*	2483.60	26.00	29.97	6.09	0.00	0.00	0.00	62.06	74.00	-11.94	P	1.00
*	2483.60	10.98	29.97	6.09	0.00	0.00	0.00	47.04	54.00	-6.96	A	1.00
	2088.16	45.20	29.18	5.62	31.90	0.00	0.00	48.09	81.12	-33.03	P	1.00
	2088.16	39.50	29.18	5.62	31.90	0.00	0.00	42.39	74.54	-32.15	A	1.00
	2151.93	44.60	29.30	5.69	31.89	0.00	0.00	47.70	81.12	-33.42	P	1.00
	2151.93	31.80	29.30	5.69	31.89	0.00	0.00	34.90	74.54	-39.64	A	1.00
*	4924.19	40.13	33.85	8.39	32.83	0.00	1.60	51.14	74.00	-22.86	P	1.00
*	4924.19	28.28	33.85	8.39	32.83	0.00	1.60	39.29	54.00	-14.71	A	1.00
*	7386.33	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7386.33	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12302.70	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14763.24	------	------	------	------	0.00	0.49	------	------	------	------	1.00
	17223.78	------	------	------	------	0.00	0.88	------	------	------	------	1.00
*	19684.32	------	------	------	------	0.00	3.90	------	------	------	------	1.00
*	22144.86	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24605.40	------	------	------	------	0.00	1.58	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11b mode at 11Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH11 TX				Measurement Distance at 3m Vertical polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2458.94	73.01	29.92	6.06	0.00	0.00	0.00	108.99	Fundamental Frequency		P	1.00
	2458.94	66.23	29.92	6.06	0.00	0.00	0.00	102.21			A	1.00
*	2483.50	25.85	29.97	6.09	0.00	0.00	0.00	61.91	74.00	-12.09	P	1.00
*	2483.50	10.98	29.97	6.09	0.00	0.00	0.00	47.04	54.00	-6.96	A	1.00
*	2483.60	26.24	29.97	6.09	0.00	0.00	0.00	62.30	74.00	-11.70	P	1.00
*	2483.60	10.98	29.97	6.09	0.00	0.00	0.00	47.04	54.00	-6.96	A	1.00
	2087.88	46.15	29.18	5.62	31.90	0.00	0.00	49.04	88.99	-39.95	P	1.00
	2087.88	41.69	29.18	5.62	31.90	0.00	0.00	44.58	82.21	-37.63	A	1.00
	2151.43	47.88	29.30	5.69	31.89	0.00	0.00	50.98	88.99	-38.01	P	1.00
	2151.43	33.90	29.30	5.69	31.89	0.00	0.00	37.00	82.21	-45.21	A	1.00
*	4924.15	42.11	33.85	8.39	32.83	0.00	1.60	53.12	74.00	-20.88	P	1.00
*	4924.15	28.28	33.85	8.39	32.83	0.00	1.60	39.29	54.00	-14.71	A	1.00
*	7386.12	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7386.12	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12294.70	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14753.64	------	------	------	------	0.00	0.50	------	------	------	------	1.00
	17212.58	------	------	------	------	0.00	0.87	------	------	------	------	1.00
*	19671.52	------	------	------	------	0.00	3.81	------	------	------	------	1.00
*	22130.46	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24589.40	------	------	------	------	0.00	1.58	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11b mode at 11Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH1 TX				Measurement Distance at 3m Horizontal polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
*	2389.90	27.94	29.78	5.98	0.00	0.00	0.00	63.70	74.00	-10.30	P	1.00
*	2389.90	13.48	29.78	5.98	0.00	0.00	0.00	49.24	54.00	-4.76	A	1.00
	2399.90	26.95	29.80	5.99	0.00	0.00	0.00	62.74	78.83	-16.09	P	1.00
	2399.90	13.46	29.80	5.99	0.00	0.00	0.00	49.25	69.07	-19.82	A	1.00
	2404.73	63.02	29.81	6.00	0.00	0.00	0.00	98.83	Fundamental Frequency		P	1.00
	2404.73	53.26	29.81	6.00	0.00	0.00	0.00	89.07			A	1.00
	2037.93	46.45	29.08	5.56	31.91	0.00	0.00	49.18	78.83	-29.65	P	1.00
	2037.93	42.10	29.08	5.56	31.91	0.00	0.00	44.83	69.07	-24.24	A	1.00
	2447.53	44.83	29.90	6.05	31.86	0.00	0.00	48.92	78.83	-29.91	P	1.00
	2447.53	31.54	29.90	6.05	31.86	0.00	0.00	35.63	69.07	-33.44	A	1.00
*	4824.03	45.86	33.65	8.29	32.80	0.00	2.00	57.01	74.00	-16.99	P	1.00
*	4824.03	33.15	33.65	8.29	32.80	0.00	2.00	44.30	54.00	-9.70	A	1.00
	7235.87	------	------	------	------	0.00	2.00	------	------	------	------	1.00
	7235.87	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12023.65	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14428.38	------	------	------	------	0.00	0.61	------	------	------	------	1.00
	16833.11	------	------	------	------	0.00	0.63	------	------	------	------	1.00
*	19237.84	------	------	------	------	0.00	2.44	------	------	------	------	1.00
	21642.57	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24047.30	------	------	------	------	0.00	2.23	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11g mode at 6Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH1 TX				Measurement Distance at 3m Vertical polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
*	2389.90	32.30	29.78	5.98	0.00	0.00	0.00	68.06	74.00	-5.94	P	1.00
*	2389.90	17.16	29.78	5.98	0.00	0.00	0.00	52.92	54.00	-1.08	A	1.00
	2399.90	27.77	29.80	5.99	0.00	0.00	0.00	63.56	85.79	-22.23	P	1.00
	2399.90	13.48	29.80	5.99	0.00	0.00	0.00	49.27	76.16	-26.89	A	1.00
	2404.93	69.98	29.81	6.00	0.00	0.00	0.00	105.79	Fundamental Frequency		P	1.00
	2404.93	60.35	29.81	6.00	0.00	0.00	0.00	96.16			A	1.00
	2038.03	45.50	29.08	5.56	31.91	0.00	0.00	48.23	85.79	-37.56	P	1.00
	2038.03	40.80	29.08	5.56	31.91	0.00	0.00	43.53	76.16	-32.63	A	1.00
	2447.89	49.97	29.90	6.05	31.86	0.00	0.00	54.06	85.79	-31.73	P	1.00
	2447.89	44.42	29.90	6.05	31.86	0.00	0.00	48.51	76.16	-27.65	A	1.00
*	4824.05	44.28	34.44	5.08	32.80	0.00	2.00	53.01	74.00	-20.99	P	1.00
*	4824.05	31.26	34.44	5.08	32.80	0.00	2.00	39.99	54.00	-14.01	A	1.00
	7236.11	------	------	------	------	0.00	2.00	------	------	------	------	1.00
	7236.11	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12024.65	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14429.58	------	------	------	------	0.00	0.62	------	------	------	------	1.00
	16834.51	------	------	------	------	0.00	0.63	------	------	------	------	1.00
*	19239.44	------	------	------	------	0.00	2.44	------	------	------	------	1.00
	21644.37	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24049.30	------	------	------	------	0.00	2.23	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11g mode at 6Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH6 TX				Measurement Distance at 3m Horizontal polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2444.46	59.26	29.89	6.04	0.00	0.00	0.00	95.19	Fundamental Frequency		P	1.00
	2444.46	50.16	29.89	6.04	0.00	0.00	0.00	86.09			A	1.00
	2062.98	46.51	29.13	5.59	31.90	0.00	0.00	49.32	75.19	-25.87	P	1.00
	2062.98	42.72	29.13	5.59	31.90	0.00	0.00	45.53	66.09	-20.56	A	1.00
*	2493.92	46.48	29.99	6.10	31.85	0.00	0.00	50.72	74.00	-23.28	P	1.00
*	2493.92	37.69	29.99	6.10	31.85	0.00	0.00	41.93	54.00	-12.07	A	1.00
*	4873.56	45.28	34.77	5.10	32.81	0.00	1.81	54.14	74.00	-19.86	P	1.00
*	4873.56	32.66	34.77	5.10	32.81	0.00	1.81	41.52	54.00	-12.48	A	1.00
*	7311.77	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7311.77	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12222.30	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14666.76	------	------	------	------	0.00	0.57	------	------	------	------	1.00
	17111.22	------	------	------	------	0.00	0.79	------	------	------	------	1.00
*	19555.68	------	------	------	------	0.00	3.06	------	------	------	------	1.00
	22000.14	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24444.60	------	------	------	------	0.00	1.68	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11g mode at 6Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH6 TX				Measurement Distance at 3m Vertical polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2438.45	68.34	29.88	6.04	0.00	0.00	0.00	104.25	Fundamental Frequency		P	1.00
	2438.45	58.92	29.88	6.04	0.00	0.00	0.00	94.83			A	1.00
	2063.04	47.49	29.13	5.59	31.90	0.00	0.00	50.30	84.25	-33.95	P	1.00
	2063.04	43.71	29.13	5.59	31.90	0.00	0.00	46.52	74.83	-28.31	A	1.00
*	2493.85	39.18	29.99	6.10	31.85	0.00	0.00	43.42	74.00	-30.58	P	1.00
*	2493.85	31.26	29.99	6.10	31.85	0.00	0.00	35.50	54.00	-18.50	A	1.00
*	4874.09	44.66	34.77	5.10	32.81	0.00	1.80	53.52	74.00	-20.48	P	1.00
*	4874.09	30.19	34.77	5.10	32.81	0.00	1.80	39.05	54.00	-14.95	A	1.00
*	7310.97	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7310.97	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12192.25	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14630.70	------	------	------	------	0.00	0.60	------	------	------	------	1.00
	17069.15	------	------	------	------	0.00	0.76	------	------	------	------	1.00
*	19507.60	------	------	------	------	0.00	2.75	------	------	------	------	1.00
	21946.05	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24384.50	------	------	------	------	0.00	1.76	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11g mode at 6Mbps.

The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27℃, 58%

	CH11 TX				Measurement Distance at 3m Horizontal polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2465.05	60.69	29.93	6.07	0.00	0.00	0.00	96.69	Fundamental Frequency		P	1.00
	2465.05	51.06	29.93	6.07	0.00	0.00	0.00	87.06			A	1.00
*	2483.50	26.00	29.97	6.09	0.00	0.00	0.00	62.06	74.00	-11.94	P	1.00
*	2483.50	10.98	29.97	6.09	0.00	0.00	0.00	47.04	54.00	-6.96	A	1.00
*	2483.60	26.54	29.97	6.09	0.00	0.00	0.00	62.60	74.00	-11.40	P	1.00
*	2483.60	10.98	29.97	6.09	0.00	0.00	0.00	47.04	54.00	-6.96	A	1.00
	2088.08	47.34	29.18	5.62	31.90	0.00	0.00	50.23	76.69	-26.46	P	1.00
	2088.08	43.58	29.18	5.62	31.90	0.00	0.00	46.47	67.06	-20.59	A	1.00
	2543.83	40.62	30.00	6.16	31.86	0.00	0.00	44.92	76.69	-31.77	P	1.00
	2543.83	30.06	30.00	6.16	31.86	0.00	0.00	34.36	67.06	-32.70	A	1.00
*	4924.06	40.12	35.10	5.12	32.83	0.00	1.60	49.11	74.00	-24.89	P	1.00
*	4924.06	28.28	35.10	5.12	32.83	0.00	1.60	37.27	54.00	-16.73	A	1.00
*	7385.96	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7385.96	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12325.25	------	------	------	------	0.00	0.80	------	------	------	------	1.00
	14790.30	------	------	------	------	0.00	0.47	------	------	------	------	1.00
	17255.35	------	------	------	------	0.00	0.90	------	------	------	------	1.00
*	19720.40	------	------	------	------	0.00	4.13	------	------	------	------	1.00
*	22185.45	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24650.50	------	------	------	------	0.00	1.57	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11g mode at 6Mbps.

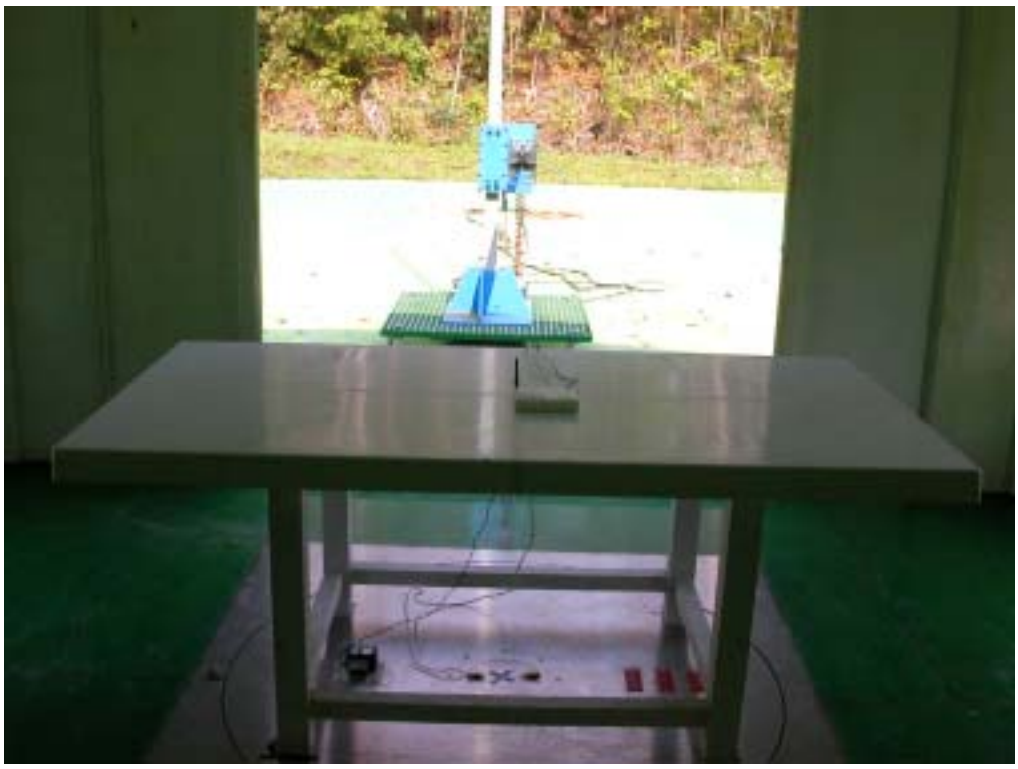
The frequency spectrum above 1 GHz for Transmitter was investigated. All emissions not reported are much lower than the prescribed limits. Readings are both peak and average values.

Company	Advance Multimedia Internet Technology Inc.	**Test Date**	2005/04/06
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	27°C, 58%

	CH11 TX				Measurement Distance at 1m Vertical polarity							
	Freq.	Reading	AF	Closs	Pre-amp	Dist	Filter	Level	Limit	Margin	Mark	Height
	(MHz)	(dBμV)	(dBμV)	(dB)	(dB)	dB	dB	(dBμV/m)	(dBμV/m)	(dB)	(P/Q/A)	(Meter)
	2456.33	70.08	29.91	6.06	0.00	9.50	0.00	96.55	Fundamental Frequency		P	1.00
	2456.33	60.88	29.91	6.06	0.00	9.50	0.00	87.35			A	1.00
*	2483.50	25.85	29.97	6.09	0.00	9.50	0.00	52.41	74.00	-21.59	P	1.00
*	2483.50	10.98	29.97	6.09	0.00	9.50	0.00	37.54	54.00	-16.46	A	1.00
*	2483.60	26.58	29.97	6.09	0.00	9.50	0.00	53.14	74.00	-20.86	P	1.00
*	2483.60	10.98	29.97	6.09	0.00	9.50	0.00	37.54	54.00	-16.46	A	1.00
	2088.46	45.86	29.18	5.62	31.90	9.50	0.00	39.25	76.55	-37.30	P	1.00
	2088.46	41.61	29.18	5.62	31.90	9.50	0.00	35.00	67.35	-32.35	A	1.00
	2543.88	45.99	30.00	6.16	31.86	9.50	0.00	40.79	76.55	-35.76	P	1.00
	2543.88	37.69	30.00	6.16	31.86	9.50	0.00	32.49	67.35	-34.86	A	1.00
*	4924.03	41.23	35.10	5.12	32.83	9.50	1.60	40.72	74.00	-33.28	P	1.00
*	4924.03	30.62	35.10	5.12	32.83	9.50	1.60	30.11	54.00	-23.89	A	1.00
*	7385.98	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	7385.98	------	------	------	------	0.00	2.00	------	------	------	------	1.00
*	12281.65	------	------	------	------	9.50	0.80	------	------	------	------	1.00
	14737.98	------	------	------	------	0.00	0.51	------	------	------	------	1.00
	17194.31	------	------	------	------	0.00	0.86	------	------	------	------	1.00
*	19650.64	------	------	------	------	0.00	3.68	------	------	------	------	1.00
*	22106.97	------	------	------	------	0.00	0.70	------	------	------	------	1.00
	24563.30	------	------	------	------	0.00	1.59	------	------	------	------	1.00

Note :
1. The measurement was searched to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. AF: Antenna Factor, Cable: Cable Loss, Pre-Amp: Preamplifier gain, Filter: High Pass Filter Insertion Loss (3.5GHz)
3. Spectrum analyzer setting P(Peak): RBW=1MHz, VBW=1MHz, A(Average): RBW=1MHz, VBW=10Hz
4. Remark "*" means the Restricted band.
5. The result basic equation calculation is as follow:
   Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
6. The other emission levels were very low against the limit
7. The test limit distance is 3M limit.
8. For 802.11g mode at 6Mbps.

3.7 Photos of Open Site



4. 6dB BANDWIDTH MEASUREMENT

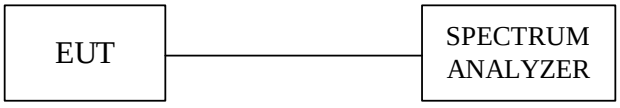
4.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Calibration Period
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEM	830270/015	March 18, 2005	1 Year

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.2 Test Setup



4.3 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500KHz

4.4 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 1MHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 200KHz.

4.6 Test Results

Company	Advance Multimedia Internet Technology Inc	Test Date	2005/04/12
Product Name	Wireless Broadband Router	Test By	Jerry Chang
Model Name	WIC228	TEMP & Humidity	30℃, 55%

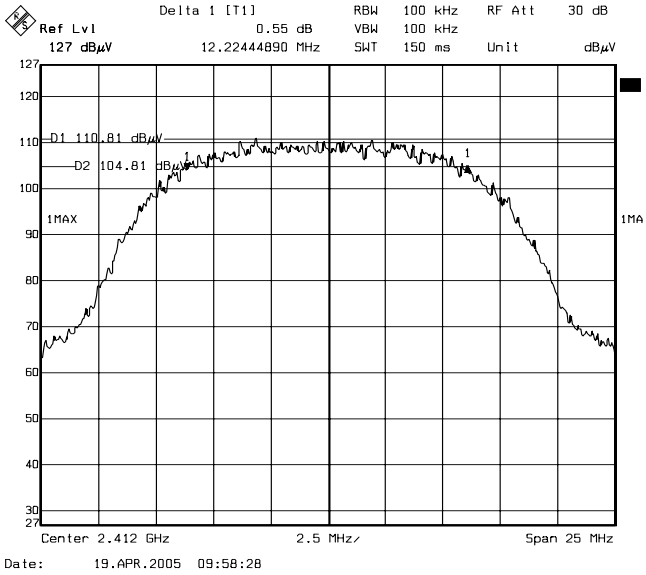
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	12.22	0.5	PASS
6	2437	12.37	0.5	PASS
11	2462	12.52	0.5	PASS

Note : For 802.11b Mode

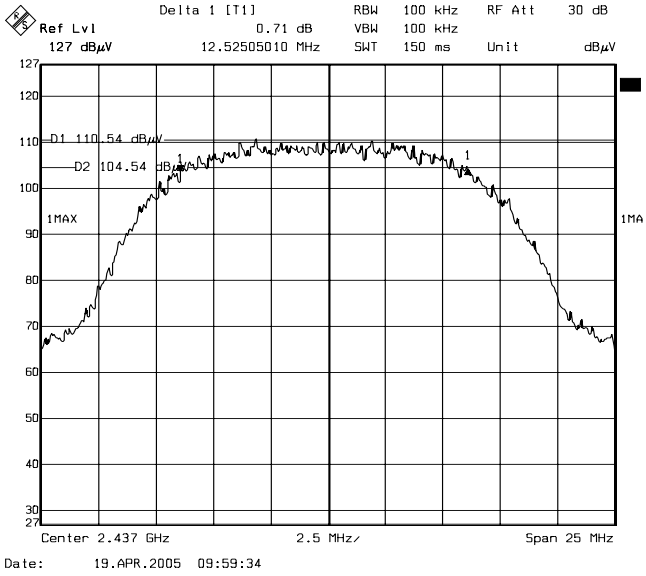
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.53	0.5	PASS
6	2437	16.53	0.5	PASS
11	2462	16.54	0.5	PASS

Note : For 802.11g Mode

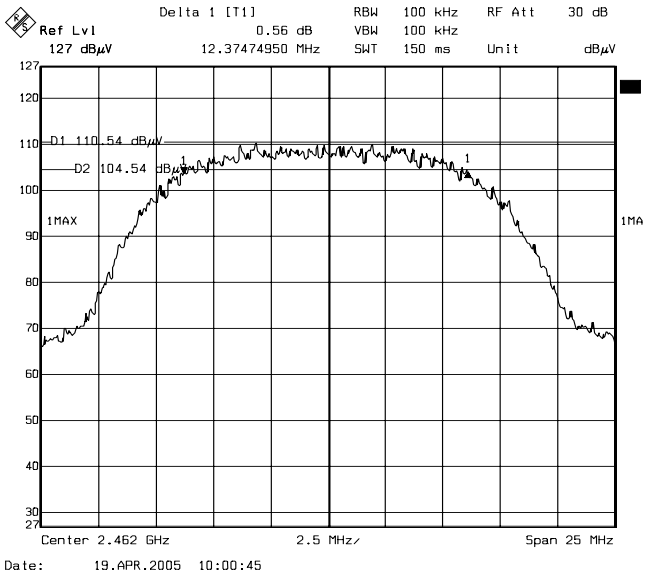
4.7 Photo of 6db Bandwidth Measurement



Channel 1

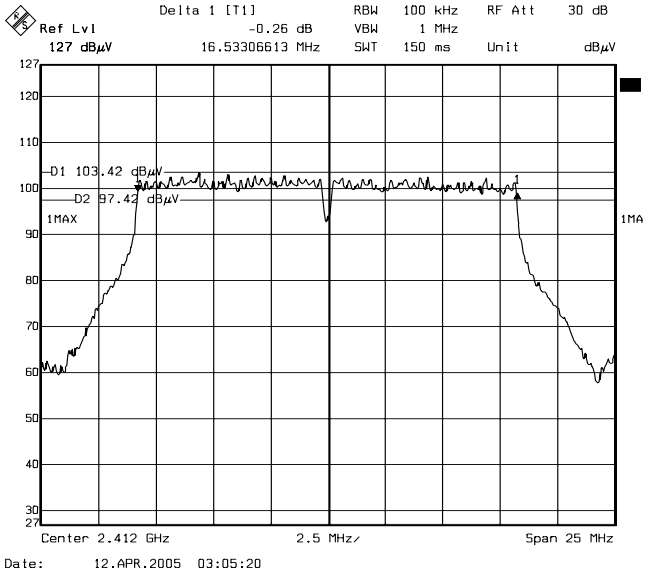


Channel 6

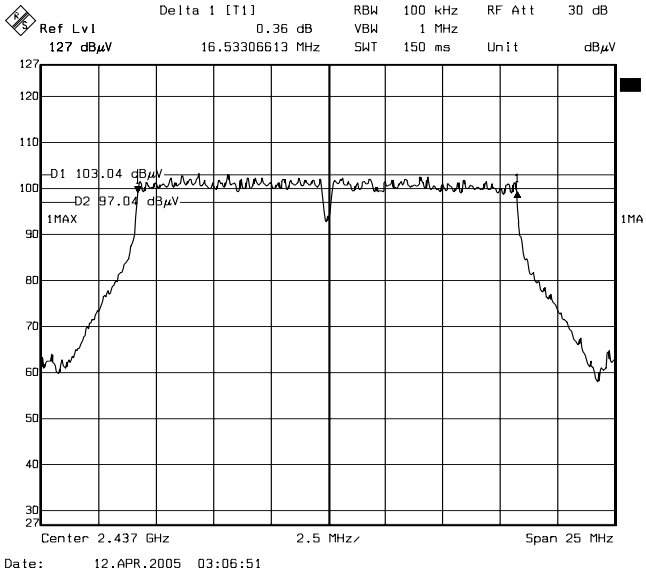


Channel 11

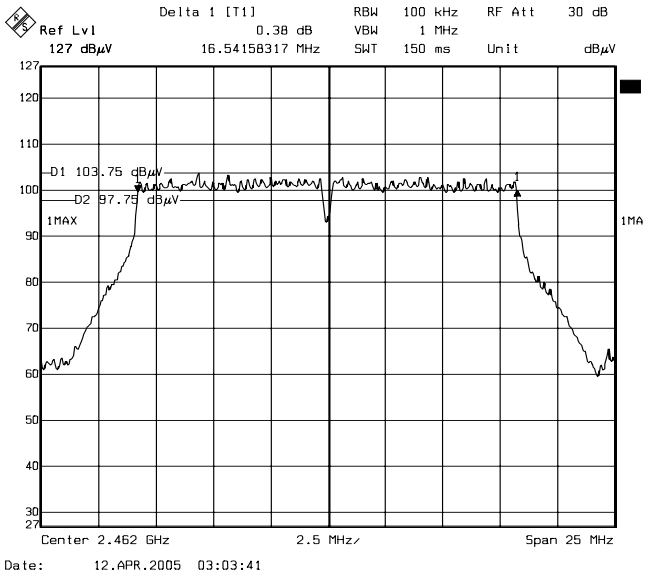
Note: For 802.11b Mode



Channel 1



Channel 6



Channel 11

Note: For 802.11g Mode

5. MAXIMUM PEAK OUTPUT POWER

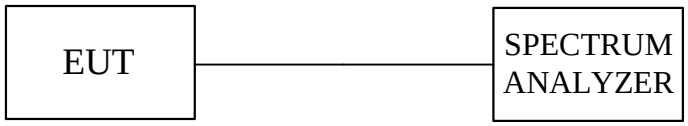
5.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Calibration Period
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEM	830270/015	March 18, 2005	1 Year

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.2 Test Setup



5.3 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

5.4 Test Procedure

1. The spectrum shall be set as follows :
   Span : 1.5 times channel integration bandwidth.
   RBW : 1MHz
   VBW : 3MHz
   Detector : Peak
   Sweep : Single trace
2. Compute the combined power of all signal responses contained in the trace by covering all the data points.
3. For 99% occupied BW, place the markers at the frequency at which 0.5% of the power lies to the right of the right marker and 0.5% of the power lies to the left of the left marker.
4. The peak output power is the channel power integrated over 99% bandwidth.

5.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 1.82dB.

5.6 Test Results

Company	Advance Multimedia Internet Technology Inc	Test Date	2005/04/12
Product Name	Wireless Broadband Router	Test By	Jerry Chang
Model Name	WIC228	TEMP & Humidity	30℃, 55%

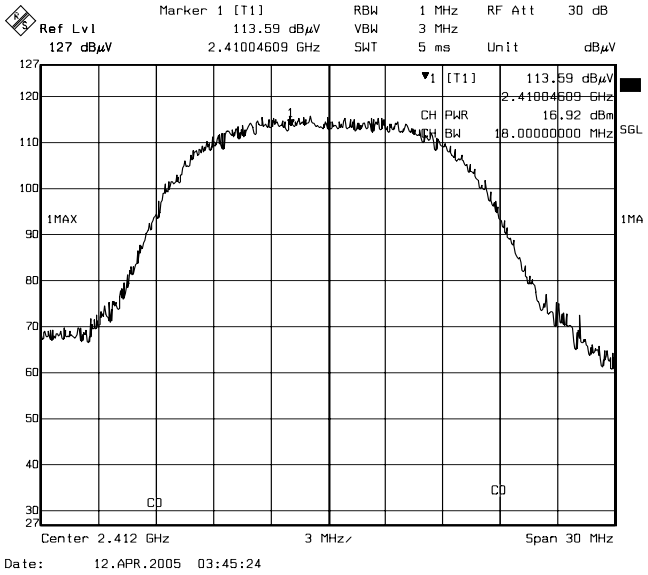
Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	17.49	30	PASS
6	2437	17.61	30	PASS
11	2462	18.08	30	PASS

Note :
1. For 802.11b mode.
2. At finial test to get the worst-case emission at 11Mbps.
3. Cable loss = 0.57dB, Attenuator = 10dB.
4. The results are calculated as the following equation :
   Peak Power Output = Peak Power Reading + Cable loss

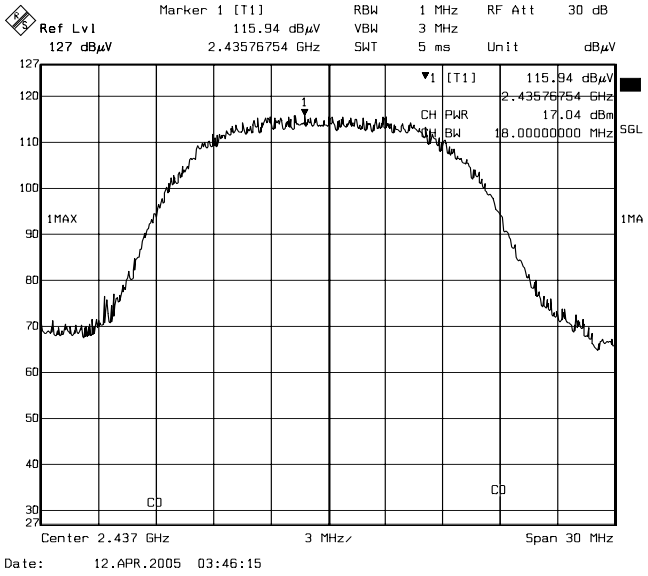
Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
1	2412	14.74	30	PASS
6	2437	14.72	30	PASS
11	2462	15.21	30	PASS

Note :
1. For 802.11g mode.
2. At finial test to get the worst-case emission at 6Mbps.
3. Cable loss = 0.57dB, Attenuator = 10dB.
4. The results are calculated as the following equation :
   Peak Power Output = Peak Power Reading + Cable loss

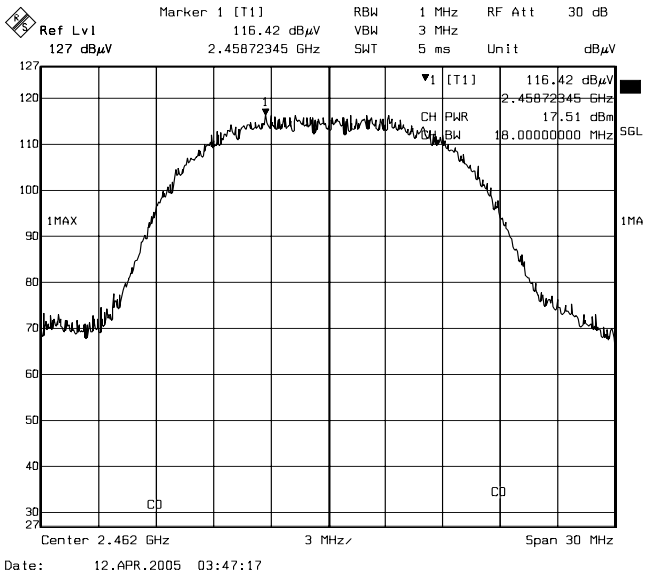
5.7 Photo of Maximum Peak Output Power Measurement



Channel 1

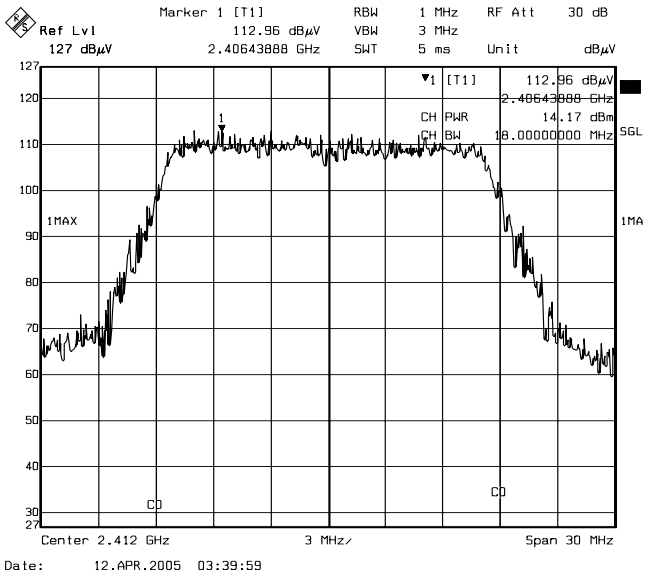


Channel 6

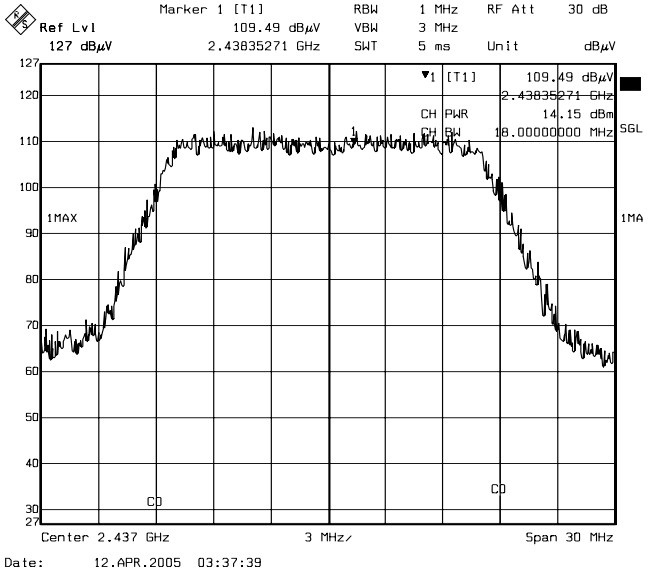


Channel 11

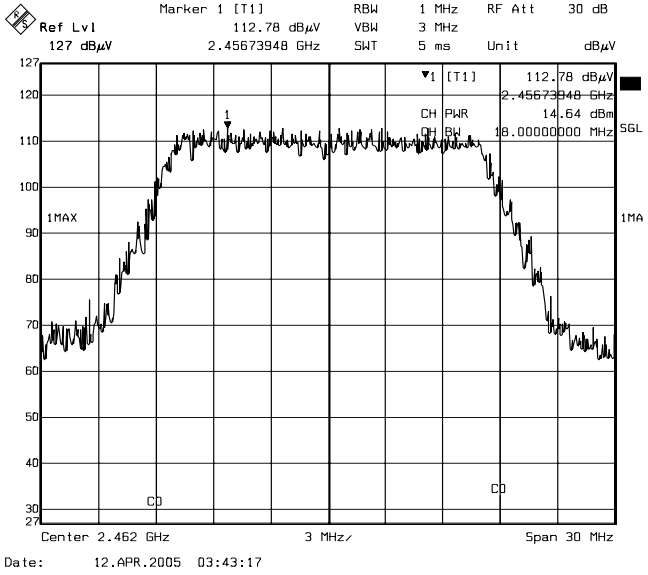
Note: For 802.11b Mode



Channel 1



Channel 6



Channel 11

Note: For normal 802.11g Mode

6. POWER SPECTRAL DENSITY MEASUREMENT

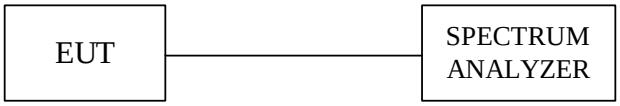
6.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Calibration Period
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEM	830270/015	March 18, 2005	1 Year

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

6.2 Test Setup



6.3 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm/3KHz.

6.4 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3KHz RBW and 30KHz VBW, set sweep time=span / 3KHz.
The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span / 3KHz for a full response of the mixer in the spectrum analyzer.

6.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 1.82dB.

6.6 Test Results

Company	Advance Multimedia Internet Technology Inc	**Test Date**	2005/04/12
Product Name	Wireless Broadband Router	**Test By**	Jerry Chang
Model Name	WIC228	**TEMP & Humidity**	30℃, 55%

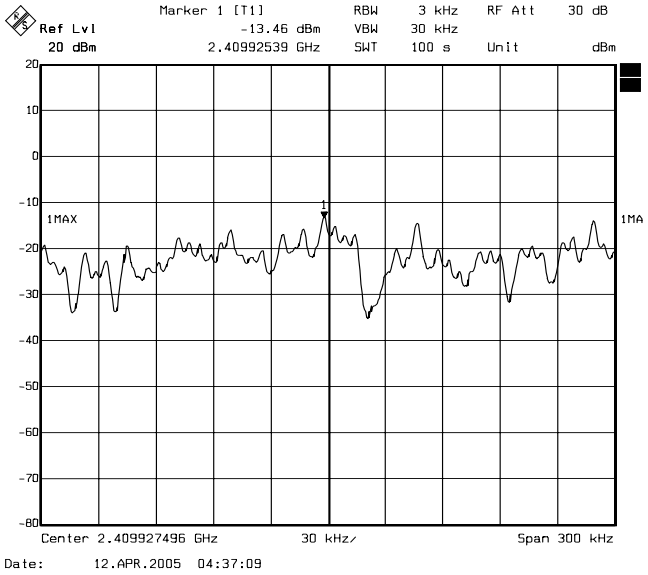
Channel	**Channel Frequency (MHz)**	**Final RF Power Level in 3KHz BW (dBm)**	**Maxmum Limit (dBm)**	**Pass / Fail**
1	2412	-13.45	8	PASS
6	2437	-12.83	8	PASS
11	2462	-12.36	8	PASS

Note：For 11Mbps (802.11b mode) at finial test to get the worst-case emission at 11Mbps.

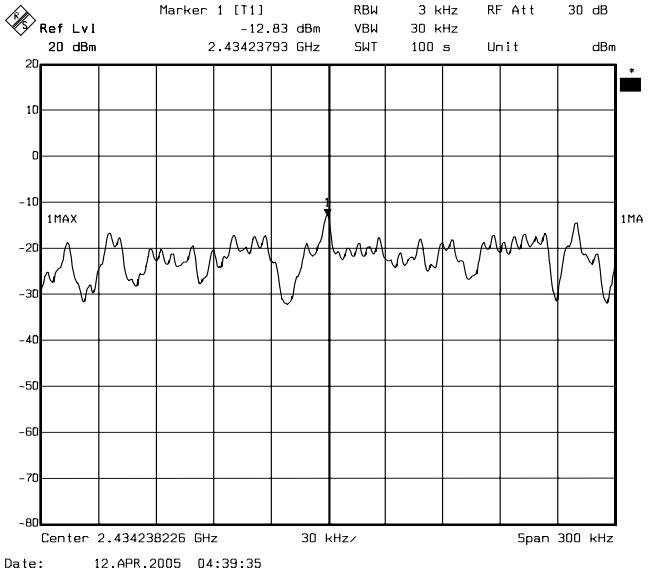
Channel	**Channel Frequency (MHz)**	**Final RF Power Level in 3KHz BW (dBm)**	**Maxmum Limit (dBm)**	**Pass / Fail**
1	2412	-19.40	8	PASS
6	2437	-18.56	8	PASS
11	2462	-19.30	8	PASS

Note：For 54Mbps (802.11g mode) at finial test to get the worst-case emission at 6Mbps.

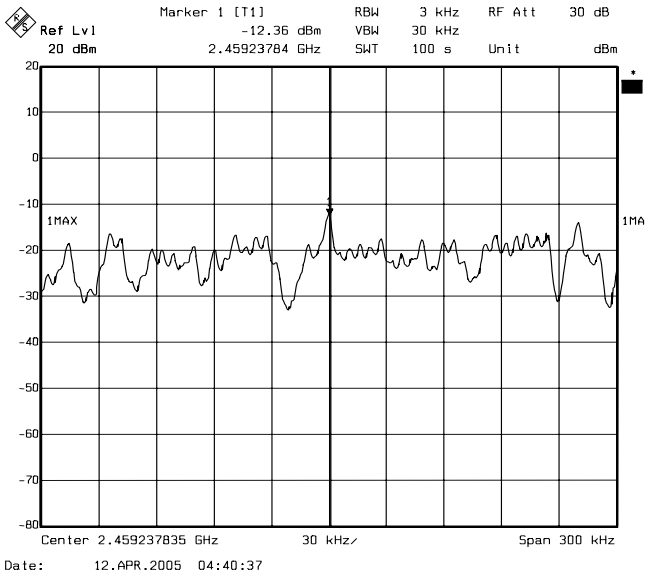
6.7 Photo of Power Spectral Density Measurement



Channel 1

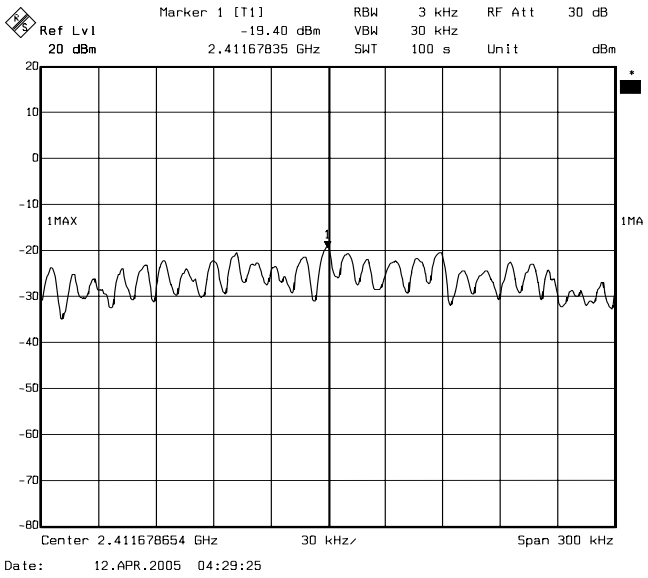


Channel 6

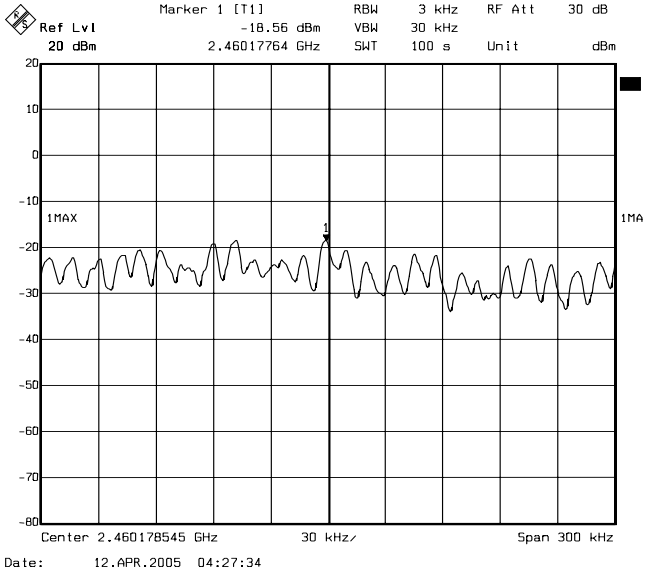


Channel 11

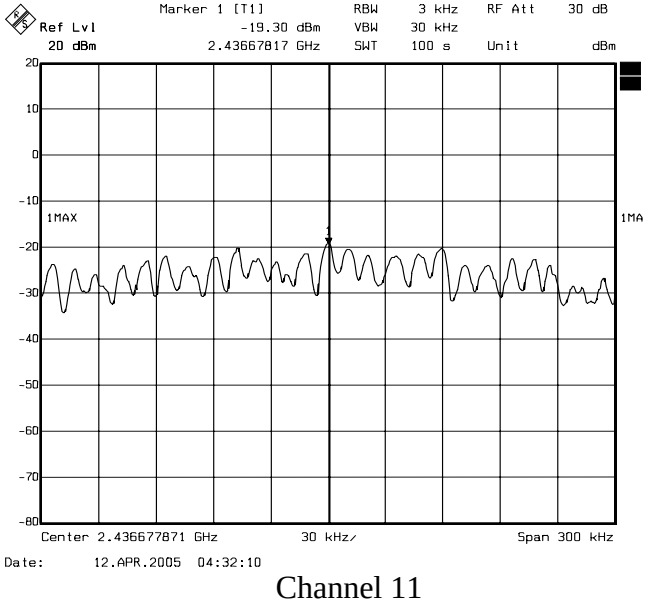
Note: For 802.11b Mode



Channel 1



Channel 6



Channel 11

Note: For 802.11g Mode

7. BAND EDGE MEASUREMENT

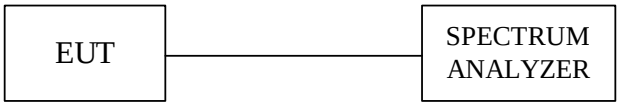
7.1 Test Equipments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Calibration Period
ROHDE & SCHWARZ SPECTRUM ANALYZER	FSEM	830270/015	March 18, 2005	1 Year

Note：

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

7.2 Test Setup



7.3 Limits of Band Edge Emissions Measurement

1. Below –20dB of the highest emission level in operating band.
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

7.4 Test Procedure

Section 15.247(d): Spurious emissions. The following tests are required:
Set the span wide enough to capture the peak level of the emission operating on the channel closest to the band edge. Set the RBW and VBW and maxhold the trace. Allow the trace to stabilize. Enable the marker-delta function, then use the marker-delta value function to move the marker to the peak of the in-band emission submit the plot.

7.5 Uncertainty of Conducted Emission

The uncertainty of conducted emission is ± 1.82dB.

7.6 Test Results

A. Conducted

Refer to 7.7 photo of out band Emission measurement

B. Radiated

Company	Advance Multimedia Internet Technology Inc	Test Date	2005/04/12
Product Name	Wireless Broadband Router	Test By	Jerry Chang
Model Name	WIC228	TEMP & Humidity	28℃, 55%

For 802.11b mode

Refer to the section 3.6, the measured radiated band edge emissions are listed below :

Band edge Frequency (MHz)		Measured radiated band edge field strength (dBuV/m)		Radiated band edge field strength limit (dBuV/m)		Test result
		Horizontal	Vertical	Horizontal	Vertical	
2399.90	PK	65.21	68.73	80.48	88.64	PASS
	AV	52.79	56.31	73.46	82.13	
2483.50	PK	61.49	61.91	74.00	74.00	PASS
	AV	47.04	47.04	54.00	54.00	

For 802.11g mode

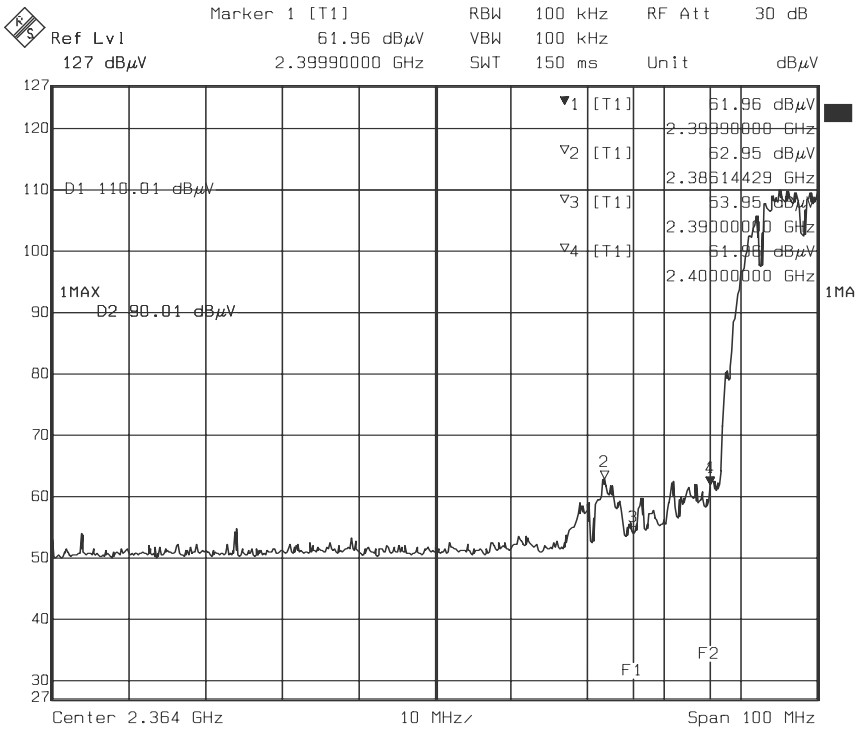
Refer to the section 3.6, the measured radiated band edge emissions are listed below :

Band edge Frequency (MHz)		Measured radiated band edge field strength (dBuV/m)		Radiated band edge field strength limit (dBuV/m)		Test result
		Horizontal	Vertical	Horizontal	Vertical	
2399.90	PK	62.74	63.56	78.83	85.79	PASS
	AV	49.25	49.27	69.07	76.16	
2483.50	PK	62.06	52.41	74.00	74.00	PASS
	AV	47.04	37.54	54.00	54.00	

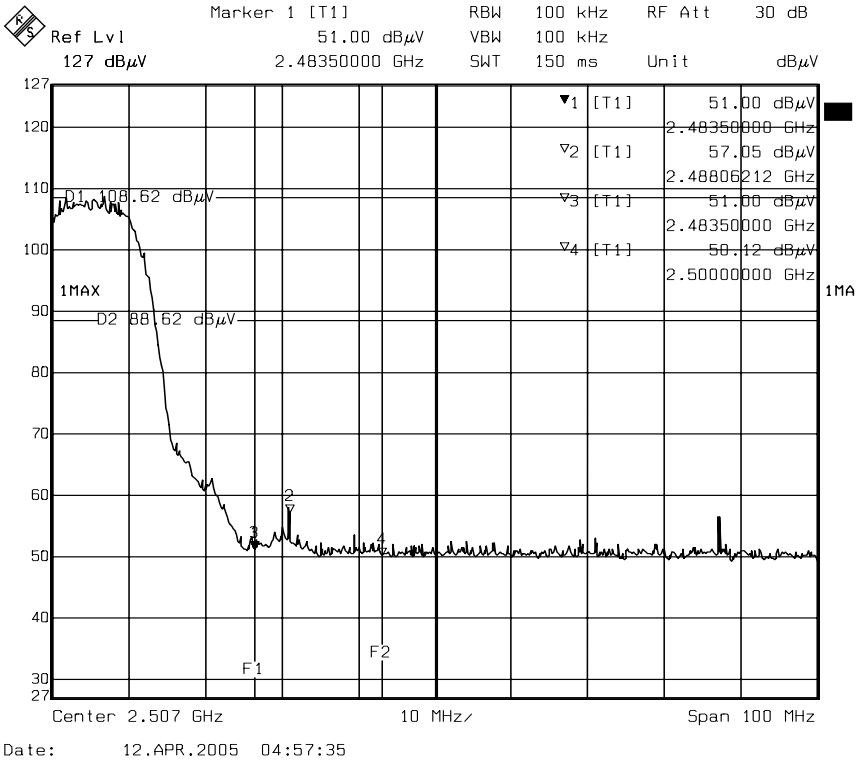
Note :

1. Radiated band edge field strength is measured with FCC recommended mark-delta method.
2. Measured radiated band edge field strength Test Results＝Radiated fundamental emission field strength - DELTA.
3. DELTA＝Relative measurement between conducted measured peak level of fundamental emission and relevant band edge emission. Please refer to 7.7 photo of Band Edge Measurement.

7.7 Photo of Band edge Measurement

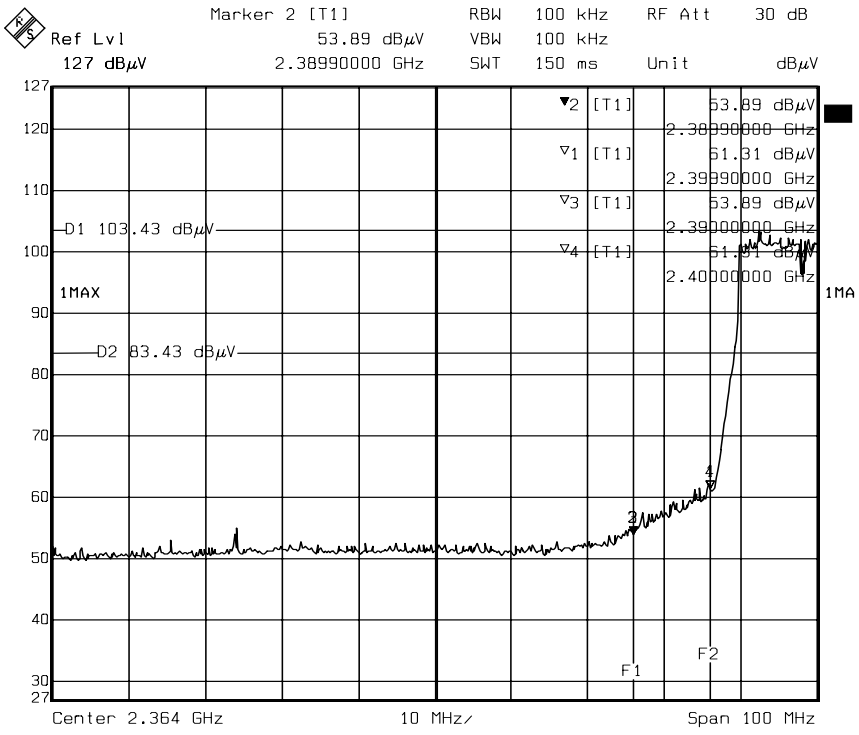


Lower Band edge (Peak)

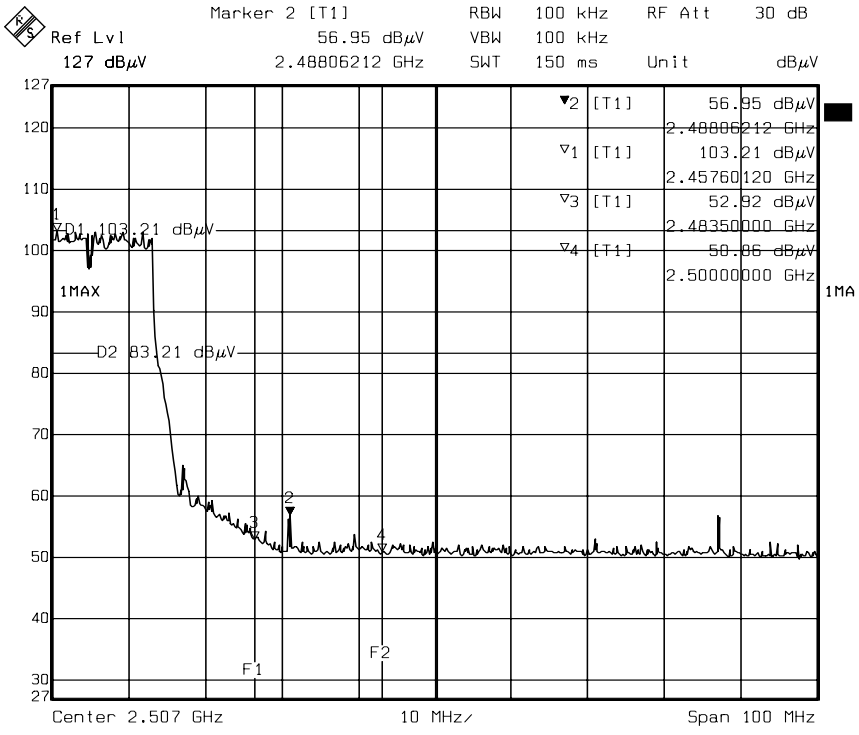


Higher Band edge (Peak)

Note: For 802.11b Mode



Lower Band edge (Peak)



Higher Band edge (Peak)

Note: For 802.11g Mode

8. ANTENNA REQUIREMENT

8.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.2 Antenna Connected Construction

The antenna used in this product is Dipole antenna. The maximum Gain of this antenna are 1.8dBi.

9. RF EXPOSURE EVALUATION

According to FCC 1.1310 : The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time
(A) Limits for Occupational / Control Exposures				
300-1,500	--	--	F/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Population / Uncontrol Exposures				
300-1,500	--	--	F/1500	6
1,500-100,000	--	--	1	30

9.1 Friis Formula

Friis transmission formula : $P_d = (P_{out}*G)/(4*p_i*r^2)$

Where

P_d = power density in mW/cm^2

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

P_i = 3.1416

r = distance between observation point and center of the radiator in cm

P_d is the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance “r” where the MPE limit is reached.

9.2 EUT Operating Condition

A software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

9.3 Test Result of RF Exposure Evaluation

Test Item ： RF Exposure Evaluation Data
Test Mode ： Normal Operation

9.3.1 Antenna Gain

Antenna Gain：The maximum Gain measured in fully anechoic chamber is 1.514 linear scale.

9.3.2 Output Power into Antenna & RF Exposure Evaluation Distance

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density at 20cm (mW/cm^2)	LIMITS (mW/cm^2)
1	2412	17.49	0.016894	1
6	2437	17.61	0.017367	1
11	2462	18.08	0.019352	1

Note :

1. For 802.11b mode (11Mbps).
2. The power density Pd (4th column) at a distance of 20cm calculated from the friis transmission formula is far below the limit of 1 mW/cm^2 . The EUT is classified as mobile product. So, RF exposure limit warning or SAR test are not required.
3. The EUT is classified as mobile module. RF exposure evaluation will be evaluated after the EUT is installed with the host.

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density at 20cm (mW/cm^2)	LIMITS (mW/cm^2)
1	2412	14.74	0.008969	1
6	2437	14.72	0.008928	1
11	2462	15.21	0.009994	1

Note :

1. For 802.11g mode (6Mbps).
2. The power density Pd (4th column) at a distance of 20cm calculated from the friis transmission formula is far below the limit of 1 mW/cm^2 . The EUT is classified as mobile product. So, RF exposure limit warning or SAR test are not required.
3. The EUT is classified as mobile module. RF exposure evaluation will be evaluated after the EUT is installed with the host.