

FCC TEST REPORT

REPORT NO.: RF940831L06

MODEL NO.: WET54G v3

RECEIVED: Aug. 31, 2005

TESTED: Sep. 05 ~ Sep. 29, 2005

ISSUED: Oct. 06, 2005

APPLICANT: Cisco-Linksys LLC

ADDRESS: 121 Theory Drive Irvine, CA 92617 (USA)

ISSUED BY: Advance Data Technology Corporation

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang

244, Taipei Hsien, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen, Kwei

Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This test report consists of 73 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, A2LA or any government agencies. The test results in the report only apply to the tested sample.





No. 2177-01



TABLE OF CONTENTS

1.	CERTIFICATION	
2.	SUMMARY OF TEST RESULTS	5
2.1	MEASUREMENT UNCERTAINTY	5
3.	GENERAL INFORMATION	
3.1	GENERAL DESCRIPTION OF EUT	6
3.2	DESCRIPTION OF TEST MODES	7
3.2.1	CONFIGURATION OF SYSTEM UNDER TEST	7
3.2.2	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	9
3.2.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	11
3.2.4	DESCRIPTION OF SUPPORT UNITS	
4.	TEST TYPES AND RESULTS	12
4.1	CONDUCTED EMISSION MEASUREMENT	
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	12
4.1.2	TEST INSTRUMENTS	
4.1.3	TEST PROCEDURES	
4.1.4	DEVIATION FROM TEST STANDARD	13
4.1.5	TEST SETUP	14
4.1.6	EUT OPERATING CONDITIONS	
4.1.7	TEST RESULTS	
4.2	RADIATED EMISSION MEASUREMENT	
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	
4.2.2	TEST INSTRUMENTS	
4.2.3	TEST PROCEDURES	
4.2.4	DEVIATION FROM TEST STANDARD	
4.2.5	TEST SETUP	30
4.2.6	EUT OPERATING CONDITIONS	
4.2.7	TEST RESULTS	
4.3	6dB BANDWIDTH MEASUREMENT	39
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	
4.3.2	TEST PROCEDURE	
4.3.3 4.3.4	TEST PROCEDURE DEVIATION FROM TEST STANDARD	
4.3.4	TEST SETUP	_
4.3.6	EUT OPERATING CONDITIONS	
	TEST RESULTS	
4.4	MAXIMUM PEAK OUTPUT POWER	
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	
4.4.2	INSTRUMENTS	
4.4.3	TEST PROCEDURES	
	DEVIATION FROM TEST STANDARD	
	TEST SETUP	
	EUT OPERATING CONDITIONS	
4.4.7	TEST RESULTS	
4.5	POWER SPECTRAL DENSITY MEASUREMENT	
	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	
	TEST INSTRUMENTS	
	TEST PROCEDURE	

FCC ID: Q87-WET54GV3



4.5.4	DEVIATION FROM TEST STANDARD	51
4.5.5	TEST SETUP	
4.5.6	EUT OPERATING CONDITION	51
4.5.7	TEST RESULTS	
4.6	BAND EDGES MEASUREMENT	
4.6.1	LIMITS OF BAND EDGES MEASUREMENT	58
4.6.2	TEST INSTRUMENTS	58
4.6.3	TEST PROCEDURE	
4.6.4	DEVIATION FROM TEST STANDARD	
4.6.5	EUT OPERATING CONDITION	58
4.6.6	TEST RESULTS	59
4.7	ANTENNA REQUIREMENT	
4.7.1	STANDARD APPLICABLE	67
4.7.2	ANTENNA CONNECTED CONSTRUCTION	67
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION	
6.	INFORMATION ON THE TESTING LABORATORIES	72
APPE	NDIX-A	A-1



1. CERTIFICATION

PRODUCT: Wireless-G Ethernet Bridge

MODEL: WET54G v3

BRAND: Linksys

APPLICANT: Cisco-Linksys LLC

TESTED: Sep. 05 ~ Sep. 29, 2005

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart C (Section 15.247),

ANSI C63.4-2003

The above equipment have been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _______, DATE: Oct. 06, 2005

Andrea Hsia

TECHNICAL

ACCEPTANCE: _____ Gay Unay , DATE: Oct. 06, 2005

Responsible for RF Gary Chang

APPROVED BY: (v-thang, DATE: Oct. 06, 2005

Cody Chang / Deputy Manager



2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C								
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK					
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –8.07dB at 0.365MHz					
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.					
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.					
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -2.02dB at 45.55MHz					
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.					
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.					

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz ~ 30MHz	2.44 dB
	30MHz ~ 200MHz	3.73 dB
Radiated emissions	200MHz ~1000MHz	3.74 dB
Radiated emissions	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Wireless-G Ethernet Bridge
MODEL NO.	WET54G v3
POWER SUPPLY	5.0Vdc from AC adapter
TOWER SOFT ET	48.0Vdc from POE
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS
MODULATION TITLE	64QAM, 16QAM, QPSK, BPSK for OFDM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps
TRANSI ER RAI E	802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	50.933mW
ANTENNA TYPE	Dipole antenna with 2dBi gain
DATA CABLE	NA
I/O PORTS	RJ45
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT was tested with the following adapter:

BRAND:	LINKSYS
MODEL:	M1-10S05
INPUT:	100-120Vac, 4763 Hz, 0.5A
OUTPUT:	5.0Vdc, 2.0A
POWER LINE:	DC 1.6m non-shielded cable with one core

- 2. The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g or IEEE 802.11b devices to the network. With its high-speed data transmissions of up to 54Mbps.
- 3. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.



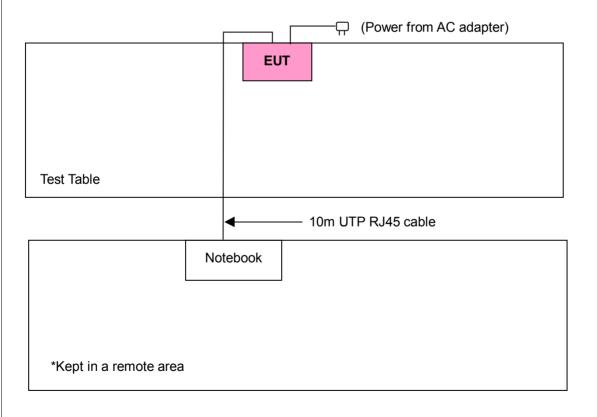
3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to this EUT.

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

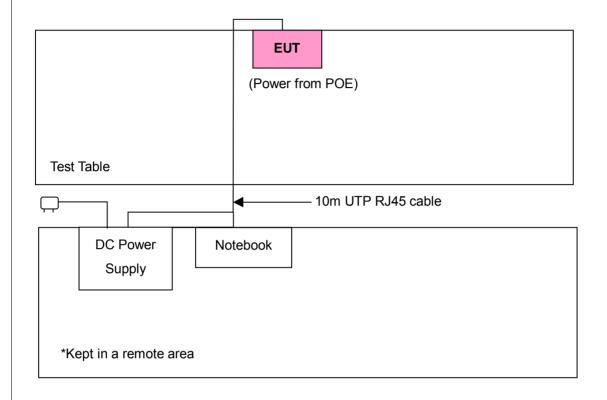
3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

Test Mode A





Test Mode B





3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE	APPLICABLE TO			BLE TO DESCRIPTION	
MODE	PLC	RE<1G	RE≥1G	APCM	DESCRIPTION
А	√	√	√	V	Power from AC Adapter
В	V	√	-	-	Power from POE

Where PLC: Power Line Conducted Emission

RE<1G: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

Note: "-" means no effect.

POWER LINE CONDUCTED EMISSION TEST:

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
А	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
В	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

RADIATED EMISSION TEST (BELOW 1 GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
А	802.11g	1 to 11	11	OFDM	BPSK	6
В	802.11g	1 to 11	11	OFDM	BPSK	6



RADIATED EMISSION TEST (ABOVE 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
Α	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
Α	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

BANDEDGE MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 11	DSSS	ССК	11
802.11g	1 to 11	1, 11	OFDM	BPSK	6

ANTENNA PORT CONDUCTED MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	ССК	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6



3.2.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)

ANSI C63.4-2003

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.2.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP05L	12130898320	E2K24CLNS
2	DC POWER SUPPLY	Topward	6603D	713072	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS						
1	NA						
2	1.0m Shielded cable.						

NOTE: All power cords of the above support units are non shielded (1.8m).



4. TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)			
	Quasi-peak	Average		
0.15-0.5	66 to 56	56 to 46		
0.5-5	56	46		
5-30	60	50		

- **NOTE**: 1. The lower limit shall apply at the transition frequencies.
 - 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
 - 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 06, 2005
RF signal cable Woken	5D-FB	Cable-HyC02-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 20, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jan. 20, 2006
Software ADT	ADT_Cond_V3	NA	NA

- NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 - 2. The test was performed in HwaYa Shielded Room 3.
 - 3. The VCCI Site Registration No. is C-2047.



4.1.3 TEST PROCEDURES

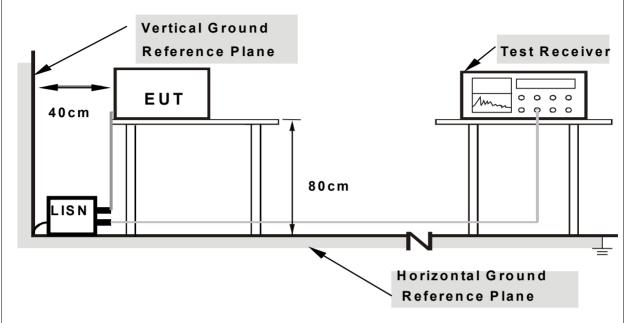
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit 20dB) was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation



4.1.5 TEST SETUP



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

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

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

- a. Placed the EUT on the testing table.
- b. Prepared another notebook system to act as a communication partner and placed it outside of testing area.
- c. The communication partner run a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency via an RJ45 cable.
- d. The communication partner sent data to EUT by command "PING".



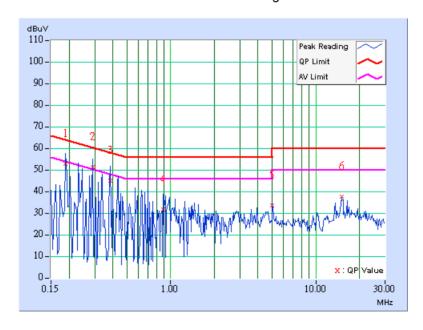
4.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA (Power from AC Adapter)

	,	. ,		
EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 1	
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	24deg. C, 64%RH,	
TYPE	DF SK	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	A	TESTED BY	Brad Wu	

	Freq.	Corr.	Readin	g Value	Emis Le	sion vel	Lin	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	52.41	-	52.52	-	64.08	54.08	-11.56	-
2	0.291	0.11	50.91	33.34	51.02	33.45	60.51	50.51	-9.48	-17.05
3	0.384	0.12	44.76	-	44.88	-	58.18	48.18	-13.31	-
4	0.892	0.21	31.13	-	31.34	-	56.00	46.00	-24.66	-
5	5.020	0.32	33.14	-	33.46	-	60.00	50.00	-26.54	-
6	15.063	0.56	37.07	-	37.63	-	60.00	50.00	-22.37	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

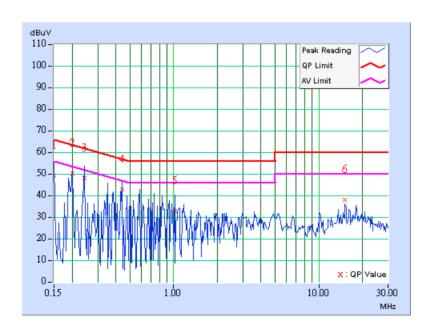




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL			
MODEL	WET54G v3	PHASE	Line 2		
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz		
MODULATION	BPSK	ENVIRONMENTAL	24deg. C, 64%RH,		
TYPE	DESI	CONDITIONS	991hPa		
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz		
TEST MODE	A	TESTED BY	Brad Wu		

	Freq.	Corr.	Readin	g Value	Emis Le	sion vel	Lir	mit	Mar	gin
No		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	48.55	-	48.66	-	66.00	56.00	-17.34	-
2	0.201	0.11	49.89	-	50.00	-	63.58	53.58	-13.58	-
3	0.244	0.11	47.45	-	47.56	-	61.97	51.97	-14.41	-
4	0.443	0.13	42.32	-	42.45	-	57.01	47.01	-14.56	-
5	1.023	0.23	32.37	-	32.60	-	56.00	46.00	-23.40	-
6	15.066	0.65	37.41	-	38.06	-	60.00	50.00	-21.94	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

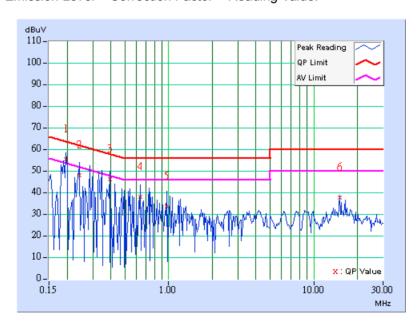




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 1	
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz	
MODULATION	LATION BPSK ENVIRONMENTAL		24deg. C, 64%RH,	
TYPE	Bron	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	A	TESTED BY	Brad Wu	

	Freq.	Corr.	Readin	g Value		sion vel	Lir	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.11	54.90	39.29	55.01	39.40	63.74	53.74	-8.73	-14.34
2	0.244	0.11	47.75	-	47.86	-	61.97	51.97	-14.11	-
3	0.392	0.12	45.67	-	45.79	-	58.02	48.02	-12.23	-
4	0.638	0.16	37.60	-	37.76	-	56.00	46.00	-18.24	-
5	0.970	0.22	33.19	-	33.41	-	56.00	46.00	-22.59	-
6	15.059	0.56	37.05	-	37.61	-	60.00	50.00	-22.39	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

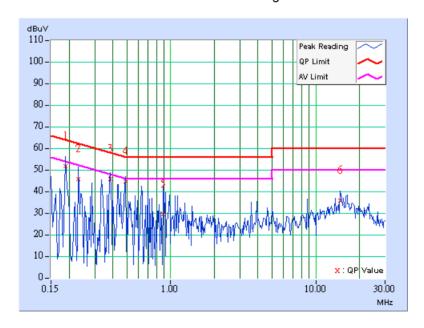




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL			
MODEL	WET54G v3	PHASE	Line 2		
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz		
MODULATION	BPSK	ENVIRONMENTAL	24deg. C, 64%RH,		
TYPE	DFOR	CONDITIONS	991hPa		
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz		
TEST MODE	A	TESTED BY	Brad Wu		

	Freq.	Corr.	Readin	g Value	Emis Le		Lin	mit	Mar	gin
No		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(dl	3)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	51.04	-	51.15	-	64.08	54.08	-12.93	-
2	0.232	0.11	45.30	-	45.41	-	62.38	52.38	-16.97	-
3	0.384	0.12	45.24	-	45.36	-	58.18	48.18	-12.83	-
4	0.486	0.14	44.07	-	44.21	-	56.24	46.24	-12.03	-
5	0.892	0.21	29.05	-	29.26	-	56.00	46.00	-26.74	-
6	14.699	0.64	35.39	-	36.03	-	60.00	50.00	-23.97	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

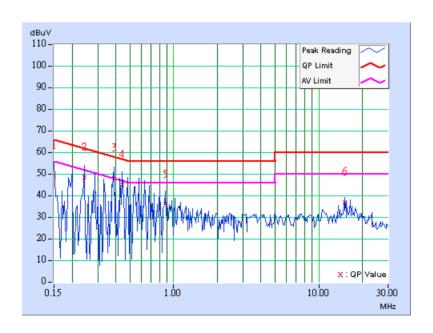




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 1	
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	24deg. C, 64%RH,	
TYPE	DF 3N	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	A	TESTED BY	Brad Wu	

	Freq.	Corr.	Readin	g Value	Emis Le	sion vel	Lit	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(dl	В)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	48.79	-	48.90	-	66.00	56.00	-17.10	-
2	0.244	0.11	48.02	-	48.13	-	61.97	51.97	-13.84	-
3	0.388	0.12	47.62	-	47.74	-	58.10	48.10	-10.36	-
4	0.439	0.13	44.66	-	44.79	-	57.08	47.08	-12.29	-
5	0.873	0.21	35.39	-	35.60	-	56.00	46.00	-20.40	-
6	15.051	0.55	36.31	-	36.86	-	60.00	50.00	-23.14	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

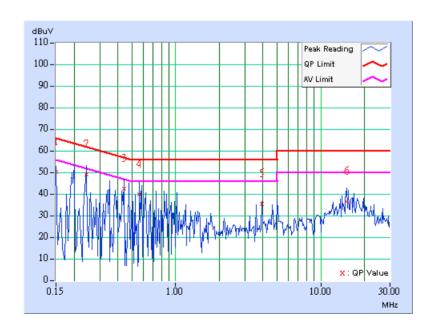




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 2	
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	24deg. C, 64%RH,	
TYPE	DI SIK	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	А	TESTED BY	Brad Wu	

	Freq.	Corr.	Readin	g Value	Emis Le		Lit	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(dl	3)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	49.80	-	49.91	-	66.00	56.00	-16.09	-
2	0.244	0.11	48.62	-	48.73	-	61.97	51.97	-13.24	-
3	0.443	0.13	42.02	-	42.15	-	57.01	47.01	-14.86	-
4	0.560	0.15	39.19	-	39.34	ı	56.00	46.00	-16.66	-
5	3.941	0.29	34.95	-	35.24	ı	56.00	46.00	-20.76	-
6	15.051	0.65	36.07	-	36.72	Ī	60.00	50.00	-23.28	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.



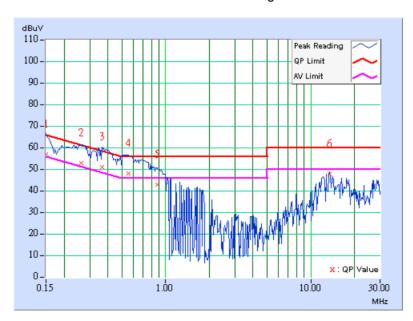


CONDUCTED WORST-CASE DATA (Power from POE)

EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 1	
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	25deg. C, 65%RH,	
TYPE	B1 610	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Jay Hsu	

	Freq.	Corr.	Readin	g Value	Emis Le	sion vel	Lit	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	56.59	27.10	56.70	27.21	66.00	56.00	-9.30	-28.79
2	0.263	0.11	52.33	20.51	52.44	20.62	61.33	51.33	-8.88	-30.70
3	0.365	0.12	50.43	19.72	50.55	19.84	58.62	48.62	-8.07	-28.78
4	0.556	0.15	47.67	17.33	47.82	17.48	56.00	46.00	-8.18	-28.52
5	0.873	0.21	42.46	-	42.67	-	56.00	46.00	-13.33	-
6	13.418	0.52	47.19	-	47.71	-	60.00	50.00	-12.29	_

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

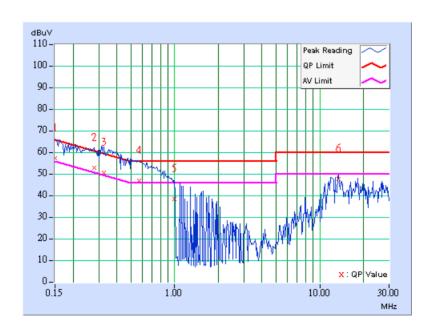




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 2	
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	25deg. C, 65%RH,	
TYPE	Bron	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Jay Hsu	

	Freq.	Corr.	Readin	g Value	Emission Level		Limit		Margin	
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	56.79	26.14	56.90	26.25	66.00	56.00	-9.10	-29.75
2	0.279	0.11	52.27	20.49	52.38	20.60	60.85	50.85	-8.46	-30.24
3	0.326	0.12	50.03	18.71	50.15	18.83	59.56	49.56	-9.41	-30.73
4	0.572	0.15	46.32	16.52	46.47	16.67	56.00	46.00	-9.53	-29.33
5	0.998	0.23	38.03	-	38.26	-	56.00	46.00	-17.74	-
6	13.418	0.62	47.20	-	47.82	-	60.00	50.00	-12.18	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

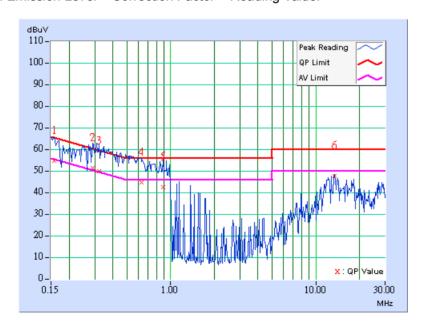




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 1	
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	25deg. C, 65%RH,	
TYPE	DI SIC	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Jay Hsu	

	Freq.	Corr.	Readin	g Value		ssion vel	Lit	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.11	54.38	-	54.49	-	65.58	55.58	-11.09	-
2	0.291	0.11	51.03	20.86	51.14	20.97	60.51	50.51	-9.36	-29.53
3	0.322	0.12	49.48	-	49.60	-	59.66	49.66	-10.06	-
4	0.627	0.16	44.17	-	44.33	-	56.00	46.00	-11.67	-
5	0.892	0.21	42.08	-	42.29	-	56.00	46.00	-13.71	-
6	13.418	0.52	47.09	-	47.61	-	60.00	50.00	-12.39	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

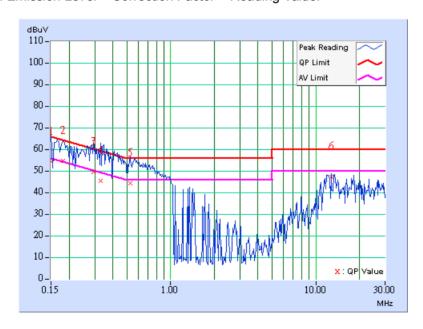




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 2	
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	25deg. C, 65%RH,	
TYPE	Bron	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Jay Hsu	

	Freq.	Corr.	Readin	ding Value Emission Level		Limit		Margin		
No		Factor	[dB	(uV)]	V)] [dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	53.86	-	53.97	-	66.00	56.00	-12.03	-
2	0.181	0.11	54.14	-	54.25	-	64.43	54.43	-10.18	-
3	0.295	0.11	48.98	-	49.09	-	60.40	50.40	-11.30	-
4	0.330	0.12	45.10	-	45.22	-	59.46	49.46	-14.24	-
5	0.525	0.14	43.90	-	44.04	-	56.00	46.00	-11.96	-
6	12.746	0.60	46.94	-	47.54	-	60.00	50.00	-12.46	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

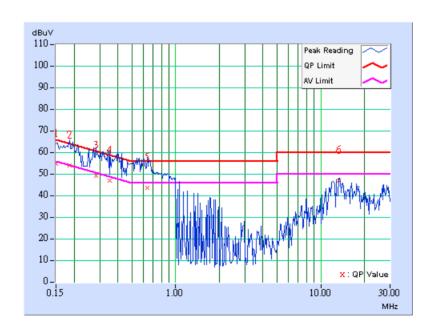




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 1	
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	25deg. C, 65%RH,	
TYPE	Bron	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Jay Hsu	

	Freq.	Corr.	Readin	g Value	Emission Level		Limit		Margin	
No		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(dl	В)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	54.18	-	54.29	-	66.00	56.00	-11.71	-
2	0.185	0.11	53.52	-	53.63	-	64.25	54.25	-10.62	-
3	0.283	0.11	48.69	-	48.80	-	60.73	50.73	-11.93	-
4	0.353	0.12	46.64	-	46.76	-	58.89	48.89	-12.13	-
5	0.638	0.16	43.12	-	43.28	-	56.00	46.00	-12.72	-
6	13.359	0.51	46.57	-	47.08	-	60.00	50.00	-12.92	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.

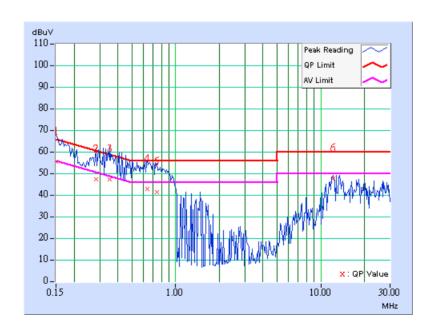




EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	PHASE	Line 2	
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz	
MODULATION	BPSK	ENVIRONMENTAL	25deg. C, 65%RH,	
TYPE	DI SIC	CONDITIONS	991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Jay Hsu	

	Freq.	Corr.	Reading Value		Emis Le		Limit		Margin	
No		Factor	[dB	[dB (uV)] [d		(uV)]	[dB	(uV)]	(dl	В)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	55.02	-	55.13	-	66.00	56.00	-10.87	-
2	0.283	0.11	46.95	-	47.06	-	60.73	50.73	-13.67	-
3	0.353	0.12	46.80	-	46.92	-	58.89	48.89	-11.97	-
4	0.638	0.16	42.25	-	42.41	-	56.00	46.00	-13.59	-
5	0.748	0.18	40.76	-	40.94	-	56.00	46.00	-15.06	-
6	12.199	0.59	47.11	-	47.70	-	60.00	50.00	-12.30	-

- 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
- 3. The emission levels of other frequencies were very low against the limit.
- 4. Margin value = Emission level Limit value
- 5. Correction factor = Insertion loss + Cable loss
- 6. Emission Level = Correction Factor + Reading Value.





4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)		
0.009 ~ 0.490	2400/F(kHz)	300		
0.490 ~ 1.705	24000/F(kHz)	30		
1.705 ~ 30.0	30	30		
30 ~ 88	100	3		
88 ~ 216	150	3		
216 ~ 960	200	3		
Above 960	500	3		

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL	
Test Receiver	ESI7	838496/016	Jan. 07, 2006	
ROHDE & SCHWARZ	2017	000+00/010	Jan. 07, 2000	
Spectrum Analyzer	FSP40	100041	Nov. 29, 2005	
ROHDE & SCHWARZ				
BILOG Antenna	VULB9168	9168-155	Jan. 22, 2006	
SCHWARZBECK	V0220100	0100 100	0011. 22, 2000	
HORN Antenna	BBHA 9120D	9120D-404	Jan. 05, 2006	
SCHWARZBECK	DB11/10120D	01200 404	0011. 00, 2000	
HORN Antenna	BBHA 9170	BBHA 9170242	Jan. 23, 2006	
SCHWARZBECK	DDIIA 9170	DDI IA 9170242	Jan. 20, 2000	
Preamplifier	8447D	2944A10631	Nov. 17, 2005	
Agilent	04470	2944/10001	1407. 17, 2005	
Preamplifier	8449B	3008A01960	Nov. 14, 2005	
Agilent	04490	3000A01900	1101. 11, 2000	
RF signal cable	SUCOFLEX 104	219272/4	Jan. 26, 2006	
HUBER+SUHNNER	30001 LLX 104	21921214		
RF signal cable	SUCOFLEX 104	219275/4	Jan. 26, 2006	
HUBER+SUHNNER	30COFLEX 104	219215/4	Jan. 20, 2000	
Software	ADT_Radiated_V5.14	NA	NA	
ADT.	ADT_Radiated_v5.14	NA	INA	
Antenna Tower	MA 4000	010303	NA	
inn-co GmbH	WA 4000	010303	INA	
Antenna Tower Controller	CO2000	019303	NA	
inn-co GmbH	CO2000	019303	INA	
Turn Table	TT100.	TT93021704	NA	
ADT.	11100.	1133021704	INA	
Turn Table Controller	SC100.	SC93021704	NA	
ADT.	30100.	3033021704	NA	

NOTE:

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. The test was performed in HwaYa Chamber 3.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The IC Site Registration No. is IC4924-4.



4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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 polarizations 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 rotatable 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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak method or average method as specified and then reported in data sheet.

NOTE:

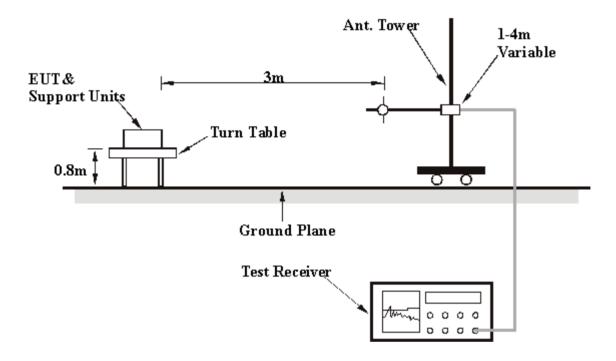
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
- 2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.



4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6



4.2.7 TEST RESULTS

RADIATED WORST-CASE DATA: BELOW 1GHz (Power from AC Adapter)

EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	FREQUENCY RANGE	Below 1000MHz	
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak	
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	A	TESTED BY	Brad Wu	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
I No. I	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction	
	(MHz)	Level	(dBuV/m)	(dB)	(dB) Height	Angle	Value	Factor	
		(dBuV/m)			(m)	(Degree)	(dBuV)	(dB/m)	
1	160.24	33.79 QP	43.50	-9.71	1.00 H	337	18.87	14.92	
2	278.82	37.95 QP	46.00	-8.05	1.25 H	301	23.90	14.05	
3	360.46	36.66 QP	46.00	-9.34	2.00 H	13	20.89	15.77	
4	479.04	37.00 QP	46.00	-9.00	2.00 H	223	18.67	18.33	
5	640.38	38.12 QP	46.00	-7.88	1.25 H	46	16.77	21.35	
6	799.78	37.88 QP	46.00	-8.12	2.00 H	118	14.42	23.46	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.	•	Level	(dBuV/m)	_	Height	Angle	Value	Factor		
	(MHz)	(dBuV/m)	(ubuv/III)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)		
1	62.26	37.90 QP	40.00	-2.10	1.24 V	9	24.55	13.35		
2	101.92	35.37 QP	43.50	-8.13	1.25 V	82	24.27	11.10		
3	160.24	35.85 QP	43.50	-7.65	1.00 V	64	20.94	14.92		
4	278.82	37.28 QP	46.00	-8.72	1.25 V	175	23.23	14.05		
5	360.46	36.88 QP	46.00	-9.12	1.00 V	16	21.11	15.77		
6	799.78	38.17 QP	46.00	-7.83	1.25 V	349	14.71	23.46		

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.



RADIATED WORST-CASE DATA: BELOW 1GHz (Power from POE)

EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	FREQUENCY RANGE	Below 1000MHz	
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak	
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH, 991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TEST MODE	В	TESTED BY	Morgan Chen	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level	Limit	Margin	Antenna Height	Table	Raw Value	Correction Factor	
		(dBuV/m)	(dBuV/m)	(dB)	(m)	Angle (Degree)	(dBuV)	(dB/m)	
1	43.61	32.20 QP	40.00	-7.80	1.00 H	352	17.45	14.75	
2	249.66	38.16 QP	46.00	-7.84	1.25 H	121	25.55	12.61	
3	319.64	42.11 QP	46.00	-3.89	1.00 H	310	25.98	16.13	
4	663.71	38.52 QP	46.00	-7.48	1.00 H	274	15.11	23.41	
5	731.74	38.02 QP	46.00	-7.98	1.25 H	298	12.86	25.16	
6	799.78	39.25 QP	46.00	-6.75	1.00 H	88	12.98	26.27	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	No. Freq. (MHz)	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.		Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor		
		(dBuV/m)	(dBuV/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)		
1	45.55	37.98 QP	40.00	-2.02	1.00 V	61	23.20	14.78		
2	80.54	37.88 QP	40.00	-2.12	1.25 V	28	27.48	10.40		
3	113.59	39.40 QP	43.50	-4.10	1.00 V	316	28.81	10.59		
4	249.66	41.48 QP	46.00	-4.52	1.25 V	280	28.88	12.61		
5	733.69	43.88 QP	46.00	-2.12	1.00 V	313	18.64	25.24		
6	933.91	40.74 QP	46.00	-5.26	1.00 V	328	13.10	27.63		

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.



Report Format Version 2.0.4

802.11b DSSS MODULATION

EUT	Wireless-G Ethernet Bridge	MEASUREMENT DE	TAIL
MODEL	WET54G v3	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	ССК	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Brad Wu		

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
	No. Freq. (MHz)	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.		Level	-	(dB)	Height	Angle	Value	Factor		
		(dBuV/m)	(dBuV/m)		(m)	(Degree)	(dBuV)	(dB/m)		
1	1600.00	46.57 PK	74.00	-27.43	1.01 H	259	17.23	29.34		
2	2388.00	43.55 PK	74.00	-30.45	1.36 H	273	11.69	31.86		
3	*2412.00	101.15 PK			1.36 H	273	69.19	31.96		
3	*2412.00	93.38 AV			1.36 H	273	61.42	31.96		
4	4824.00	49.88 PK	74.00	-24.12	1.12 H	21	12.05	37.83		

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction			
No.	(MHz)	Level	(dBuV/m)	_	Height	Angle	Value	Factor			
	(IVIHZ)	(dBuV/m)	(ubuv/III)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)			
1	1600.00	47.83 PK	74.00	-26.17	1.25 V	163	18.49	29.34			
2	2388.00	57.07 PK	74.00	-16.93	1.09 V	15	25.21	31.86			
2	2388.00	49.01 AV	54.00	-4.99	1.09 V	15	17.15	31.86			
3	*2412.00	114.66 PK			1.09 V	15	82.70	31.96			
3	*2412.00	106.61 AV			1.09 V	15	74.65	31.96			
4	4824.00	57.40 PK	74.00	-16.60	1.20 V	2	19.57	37.83			
4	4824.00	45.30 AV	54.00	-8.70	1.20 V	2	7.47	37.83			

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



EUT	Wireless-G Ethernet Bridge	MEASUREMENT DE	TAIL	
MODEL	WET54G v3	FREQUENCY RANGE	1 ~ 25GHz	
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK)	
			Average (AV) 24deg. C, 64%RH,	
MODULATION TYPE	ССК	ENVIRONMENTAL CONDITIONS	991hPa	
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TESTED BY	Brad Wu			

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	1600.00	46.68 PK	74.00	-27.32	1.02 H	325	17.34	29.34		
2	*2437.00	102.21 PK			1.35 H	277	70.15	32.06		
2	*2437.00	94.39 AV			1.35 H	277	62.33	32.06		
3	4874.00	49.57 PK	74.00	-24.43	1.01 H	234	11.59	37.98		

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
No.	No. Freq. (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Antenna Height	Table Angle	Raw Value	Correction Factor			
(1)	(1411 12)	(dBuV/m)	(dDdV/III)	(db)	(m)	(Degree)	(dBuV)	(dB/m)			
1	1600.00	47.82 PK	74.00	-26.18	1.20 V	166	18.48	29.34			
2	*2437.00	115.54 PK			1.06 V	21	83.48	32.06			
2	*2437.00	107.45 AV			1.06 V	21	75.39	32.06			
3	4874.00	58.77 PK	74.00	-15.23	1.05 V	250	20.79	37.98			
3	4874.00	46.53 AV	54.00	-7.47	1.05 V	250	8.55	37.98			

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



EUT	Wireless-G Ethernet Bridge	MEASUREMENT DE	TAIL	
MODEL	WET54G v3	FREQUENCY RANGE	1 ~ 25GHz	
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak (PK)	
		ENVIRONMENTAL	Average (AV) 24deg. C, 64%RH,	
MODULATION TYPE	CCK	CONDITIONS	991hPa	
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TESTED BY	Brad Wu			

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor		
	(IVIF1Z)	(dBuV/m)	(ubuv/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)		
1	1600.00	46.38 PK	74.00	-27.62	1.01 H	169	17.04	29.34		
2	*2462.00	102.23 PK			1.34 H	275	70.07	32.16		
2	*2462.00	94.46 AV			1.34 H	275	62.30	32.16		
3	2483.50	41.64 PK	74.00	-32.36	1.34 H	275	9.40	32.24		
4	4924.00	49.65 PK	74.00	-24.35	1.03 H	257	11.51	38.14		

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	Freg.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.		Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor		
	(MHz)	(dBuV/m)	(ubuv/iii)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)		
1	1600.00	47.92 PK	74.00	-26.08	1.21 V	154	18.58	29.34		
2	*2462.00	115.65 PK			1.07 V	18	83.49	32.16		
2	*2462.00	107.59 AV			1.07 V	18	75.43	32.16		
3	2483.50	55.06 PK	74.00	-18.94	1.07 V	18	22.82	32.24		
3	2483.50	47.00 AV	54.00	-7.00	1.07 V	18	14.76	32.24		
4	4924.00	58.63 PK	74.00	-15.37	1.07 V	249	20.49	38.14		
4	4924.00	46.42 AV	54.00	-7.58	1.07 V	249	8.28	38.14		

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



802.11g OFDM MODULATION

EUT	Wireless-G Ethernet Bridge	MEASUREMENT DE	TAIL
MODEL	WET54G v3	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Brad Wu		

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
	No. Freq. (MHz)	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.		Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor		
		(dBuV/m)	(ubuv/III)		(m)	(Degree)	(dBuV)	(dB/m)		
1	1600.00	46.39 PK	74.00	-27.61	1.02 H	269	17.05	29.34		
2	2390.00	40.55 PK	74.00	-33.45	1.01 H	5	8.68	31.87		
3	*2412.00	92.85 PK			1.01 H	5	60.89	31.96		
3	*2412.00	83.71 AV			1.01 H	5	51.75	31.96		
4	4824.00	48.23 PK	74.00	-25.77	1.10 H	36	10.40	37.83		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission	Limit (dBuV/m)	Margin (dB)	Antenna	Table	Raw	Correction
		Level			Height	Angle	Value	Factor
		(dBuV/m)			(m)	(Degree)	(dBuV)	(dB/m)
1	1600.00	47.69 PK	74.00	-26.31	1.12 V	234	18.35	29.34
2	2390.00	54.54 PK	74.00	-19.46	1.08 V	14	22.67	31.87
2	2390.00	45.73 AV	54.00	-8.27	1.08 V	14	13.86	31.87
3	*2412.00	106.84 PK			1.08 V	14	74.88	31.96
3	*2412.00	98.03 AV			1.08 V	14	66.07	31.96
4	4824.00	53.61 PK	74.00	-20.39	1.32 V	11	15.78	37.83
4	4824.00	40.88 AV	54.00	-13.12	1.32 V	11	3.05	37.83

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	FREQUENCY RANGE	1 ~ 25GHz	
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)	
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TESTED BY	Brad Wu			

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)	
1	1600.00	46.65 PK	74.00	-27.35	1.01 H	251	17.31	29.34	
2	*2437.00	92.77 PK			1.02 H	3	60.71	32.06	
2	*2437.00	83.68 AV			1.02 H	3	51.62	32.06	
3	4874.00	48.22 PK	74.00	-25.78	1.10 H	241	10.24	37.98	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)	
1	1600.00	47.55 PK	74.00	-26.45	1.09 V	321	18.21	29.34	
2	*2437.00	106.82 PK			1.06 V	18	74.76	32.06	
2	*2437.00	97.95 AV			1.06 V	18	65.89	32.06	
3	4874.00	53.52 PK	74.00	-20.48	1.27 V	24	15.54	37.98	
3	4874.00	40.63 AV	54.00	-13.37	1.27 V	24	2.65	37.98	

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



EUT	Wireless-G Ethernet Bridge	MEASUREMENT DETAIL		
MODEL	WET54G v3	FREQUENCY RANGE	1 ~ 25GHz	
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)	
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz	
TESTED BY	Brad Wu			

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)	
1	1600.00	46.41 PK	74.00	-27.59	1.00 H	267	17.07	29.34	
1	1600.00	42.01 AV	54.00	-11.99	1.00 H	267	12.67	29.34	
2	*2462.00	92.94 PK			1.00 H	0	60.78	32.16	
2	*2462.00	83.84 AV			1.00 H	0	51.68	32.16	
3	2483.50	41.36 PK	74.00	-32.64	1.00 H	0	9.12	32.24	
4	4924.00	48.59 PK	74.00	-25.41	1.13 H	34	10.45	38.14	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction	
No.	(MHz)	Level	(dBuV/m)	_	Height	Angle	Value	Factor	
	(IVIIIZ)	(dBuV/m)	(ubuv/III)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)	
1	1600.00	47.46 PK	74.00	-26.54	1.17 V	237	18.12	29.34	
1	1600.00	44.16 AV	54.00	-9.84	1.17 V	237	14.82	29.34	
2	*2462.00	107.10 PK			1.08 V	19	74.94	32.16	
2	*2462.00	98.07 AV			1.08 V	19	65.91	32.16	
3	2483.50	55.52 PK	74.00	-18.48	1.08 V	19	23.28	32.24	
3	2483.50	46.49 AV	54.00	-7.51	1.08 V	19	14.25	32.24	
4	4924.00	53.92 PK	74.00	-20.08	1.31 V	0	15.78	38.14	
4	4924.00	41.09 AV	54.00	-12.91	1.31 V	0	2.95	38.14	

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
SPECTRUM ANALYZER	FSEK 30	100049	Aug. 14, 2006

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.3.3 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 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



4.3.7 TEST RESULTS

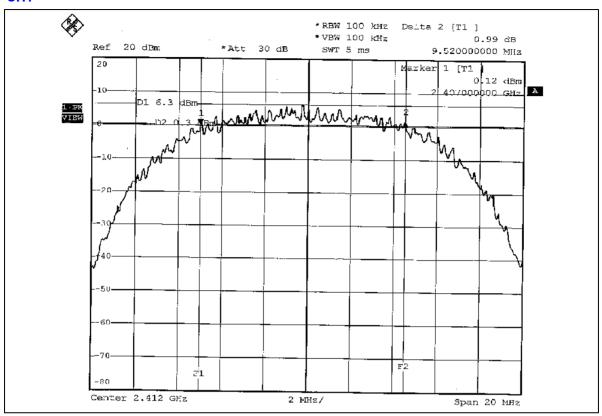
802.11b DSSS MODULATION

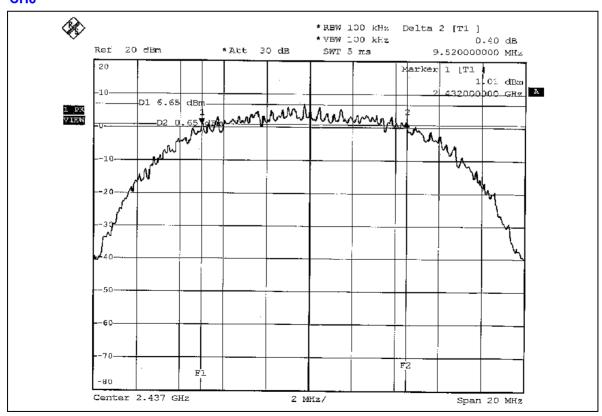
EUT	Wireless-G Ethernet Bridge	MODEL	WET54G v3
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	9.52	0.5	PASS
6	2437	9.52	0.5	PASS
11	2462	9.52	0.5	PASS

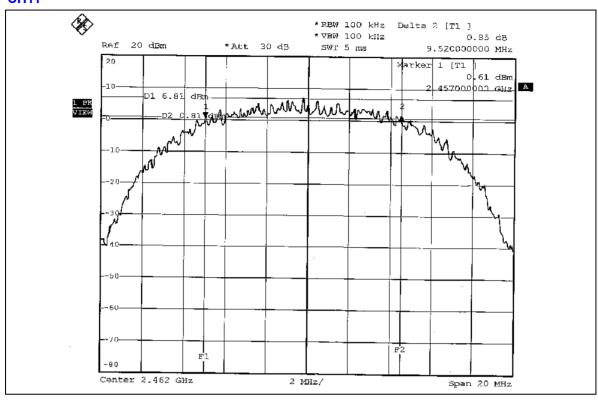


CH1











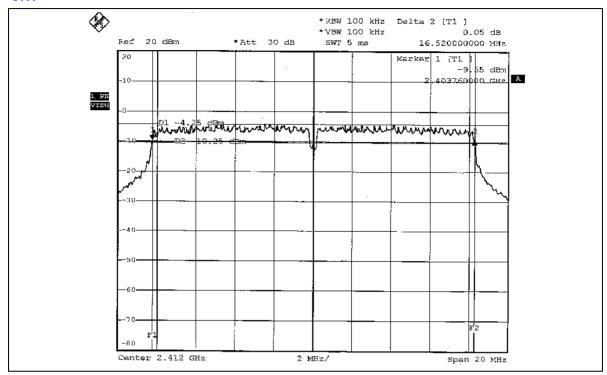
802.11g OFDM MODULATION

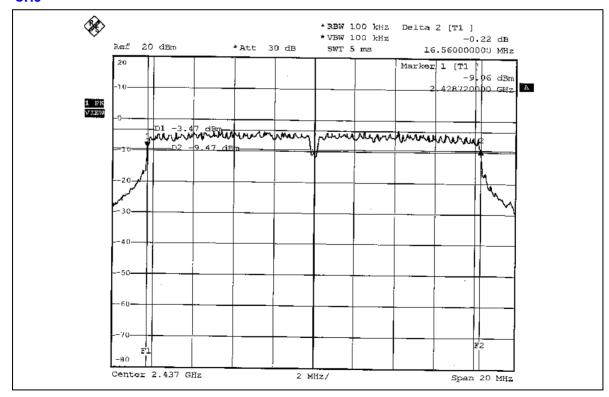
EUT	Wireless-G Ethernet Bridge	MODEL	WET54G v3
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg. C, 64%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.52	0.5	PASS
6	2437	16.56	0.5	PASS
11	2462	16.52	0.5	PASS



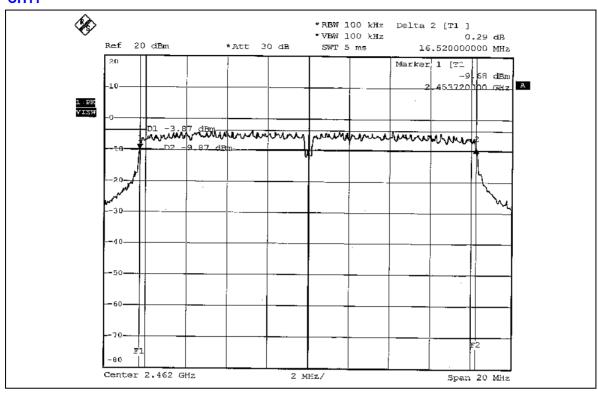
CH1







CH11



46



4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 14, 2006
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 06, 2005
DIGITAL RT OSCILLOSCOPE	TDS1012	C037299	Dec. 07, 2005
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.4.3 TEST PROCEDURES

- 1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
- 2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
- 3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6



4.4.7 TEST RESULTS

802.11b DSSS MODULATION

EUT	Wireless-G Ethernet Bridge	MODEL	WET54G v3
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg. C, 64%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.699	17.05	30	PASS
6	2437	50.933	17.07	30	PASS
11	2462	50.933	17.07	30	PASS

802.11g OFDM MODULATION

EUT	Wireless-G Ethernet Bridge	MODEL	WET54G v3
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	25.293	14.03	30	PASS
6	2437	25.527	14.07	30	PASS
11	2462	25.468	14.06	30	PASS



4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 14, 2006

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.5.3 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.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6



4.5.7 TEST RESULTS

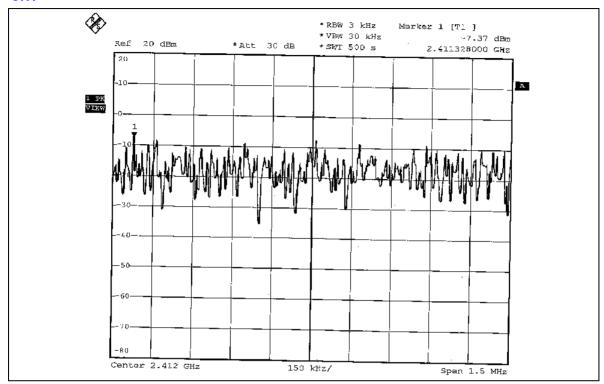
802.11b DSSS MODULATION

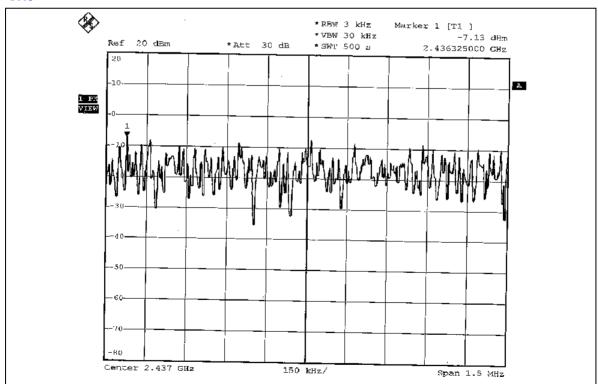
EUT	Wireless-G Ethernet Bridge	MODEL	WET54G v3
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg. C, 64%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.37	8	PASS
6	2437	-7.13	8	PASS
11	2462	-7.12	8	PASS

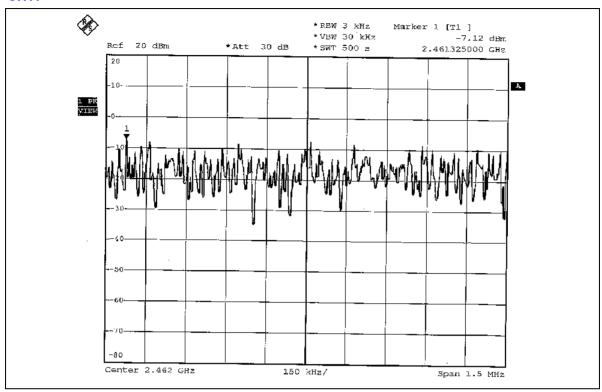


CH1











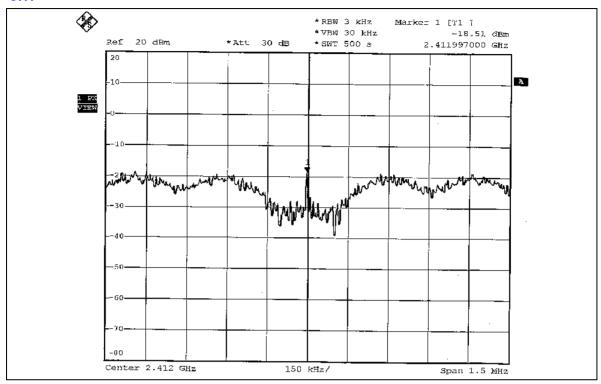
802.11g OFDM MODULATION

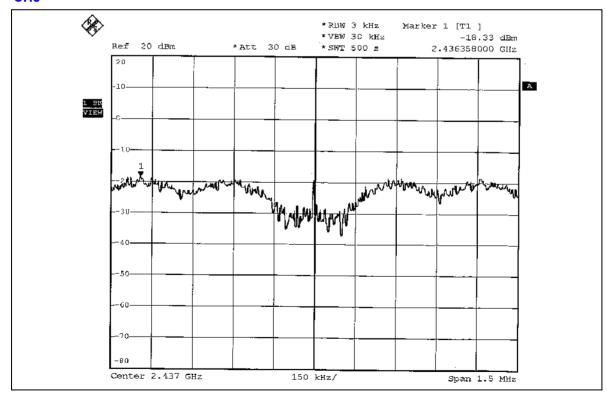
EUT	Wireless-G Ethernet Bridge	MODEL	WET54G v3
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-18.51	8	PASS
6	2437	-18.33	8	PASS
11	2462	-18.65	8	PASS

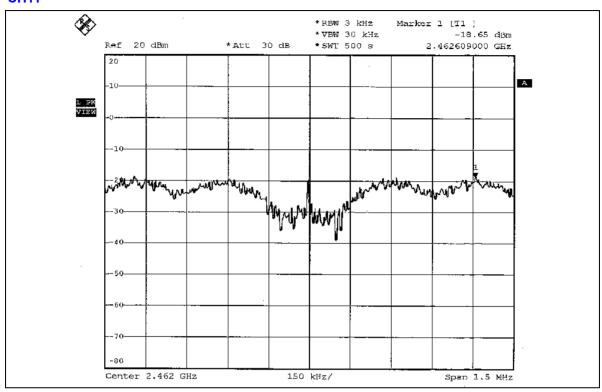


CH1











4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 14, 2006

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz and 100 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW=VBW=100kHz; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6



4.6.6 TEST RESULTS

The spectrum plots are attached on the following 12 images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION

NOTE 1:

The band edge emission plot on page 53 show 54.00 dBc delta between carrier maximum power and local maximum emission in restrict band (2.3868 GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 114.66 dBuV/m (Peak), so the maximum field strength in restrict band is 114.66 - 54.00 = 60.66 dBuV/m, which is under 74 dBuV/m limit.

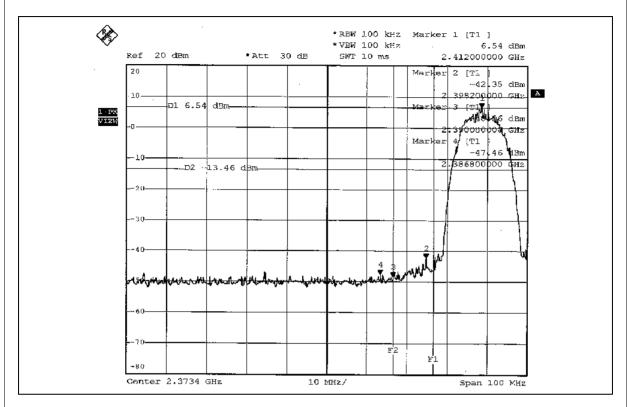
The band edge emission plot on page 53 show 58.85dBc delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.61dBuV/m (Average), so the maximum field strength in restrict band is 106.61 –58.85= 47.76dBuV/m, which is under 54dBuV/m limit.

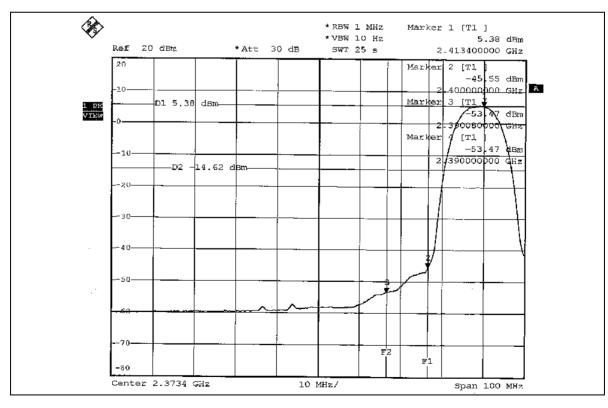
NOTE 2:

The band edge emission plot on the page 54 show 54.17dBc delta between carrier maximum power and local maximum emission in restrict band (2.4880GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 115.65dBuV/m (Peak), so the maximum field strength in restrict band is 115.65–54.17 = 61.48dBuV/m, which is under 74dBuV/m limit.

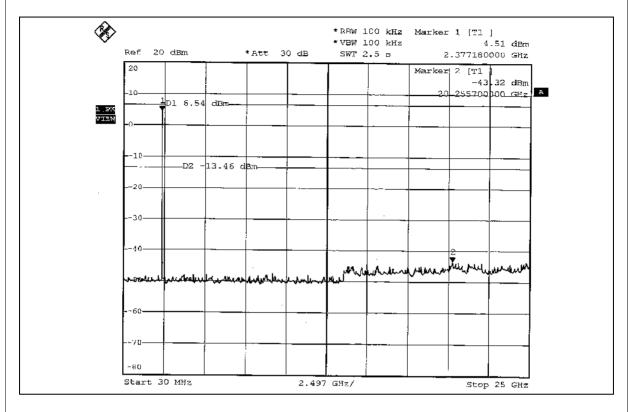
The band edge emission plot on the page 55 show 58.60dBc delta between carrier maximum power and local maximum emission in restrict band (2.4856GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 107.59dBuV/m (Average), so the maximum field strength in restrict band is 107.59 –58.60 = 48.99dBuV/m, which is under 54dBuV/m limit.

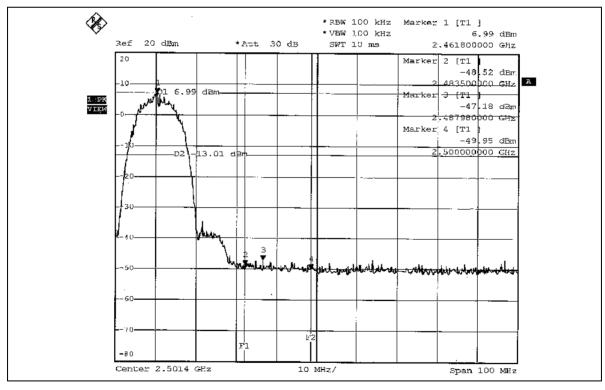




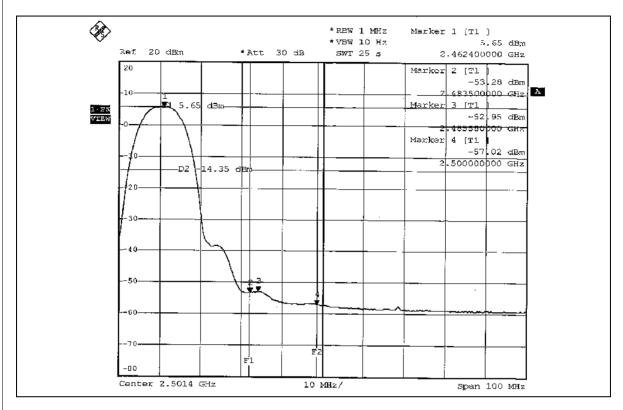


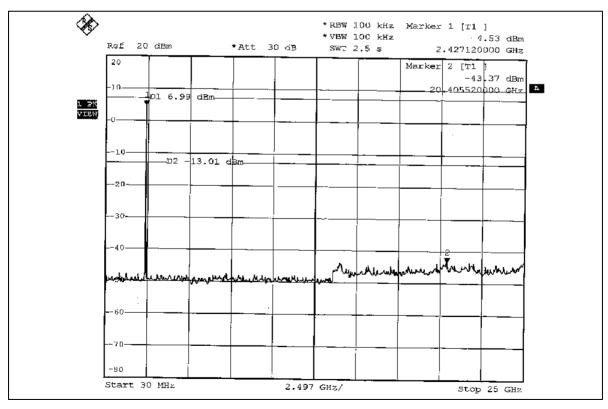














802.11g OFDM MODULATION

NOTE 1:

The band edge emission plot on page 57 show 43.33dBc delta between carrier maximum power and local maximum emission in restrict band (2.3890GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.84dBuV/m (Peak), so the maximum field strength in restrict band is 106.84 – 43.33 = 63.51dBuV/m, which is under 74dBuV/m limit.

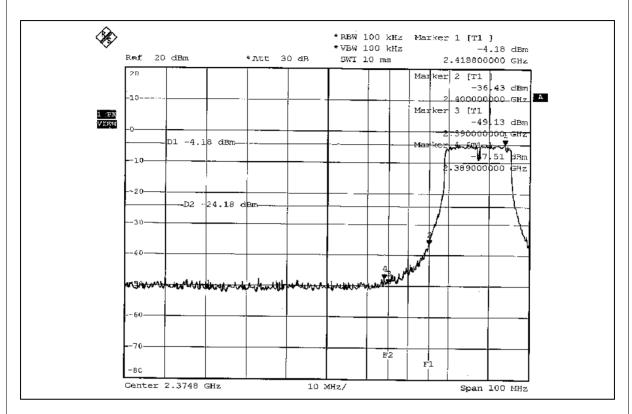
The band edge emission plot on page 57 show 52.17dBc delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 98.03dBuV/m (Average), so the maximum field strength in restrict band is 98.03 – 52.17 = 45.86dBuV/m, which is under 54dBuV/m limit.

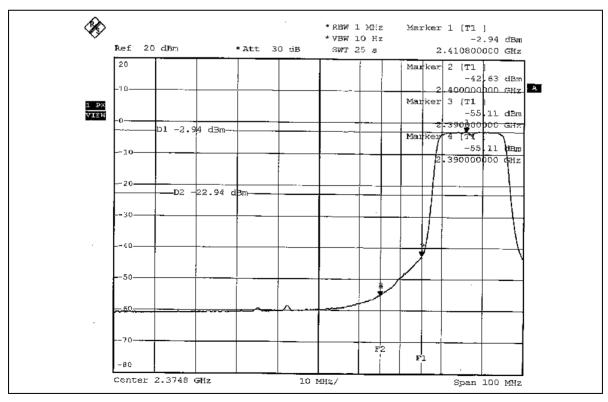
NOTE 2:

The band edge emission plot on the page 58 show 44.52dBc delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 107.10dBuV/m (Peak), so the maximum field strength in restrict band is 107.10 - 44.52 = 62.58dBuV/m, which is under 74dBuV/m limit.

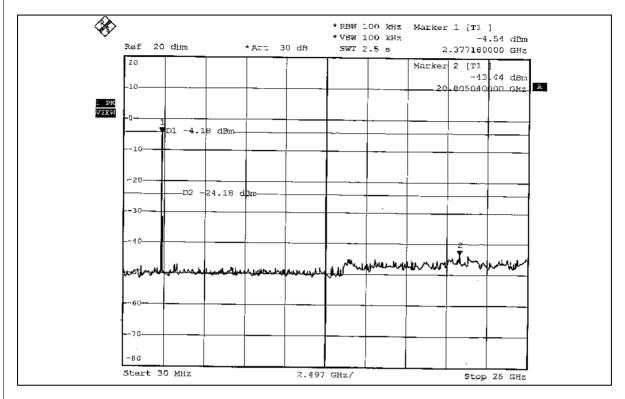
The band edge emission plot on the page 59 show 51.55dBc delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 98.07dBuV/m (Average), so the maximum field strength in restrict band is 98.07 – 51.55 = 46.52dBuV/m, which is under 54dBuV/m limit.

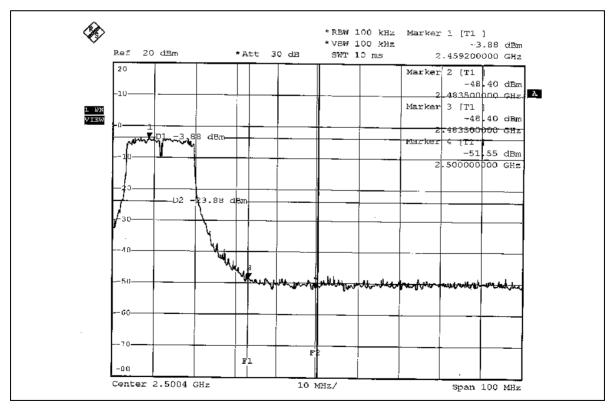




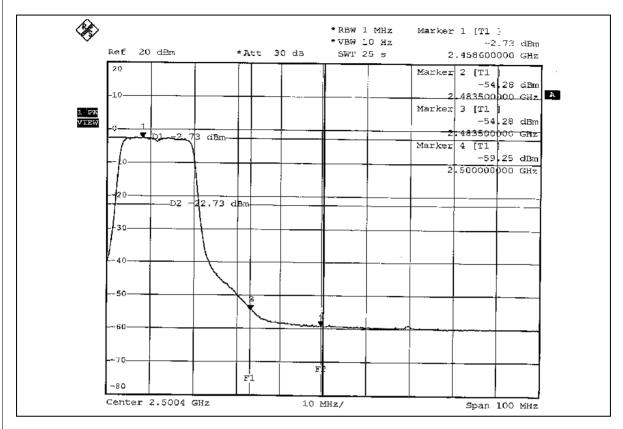


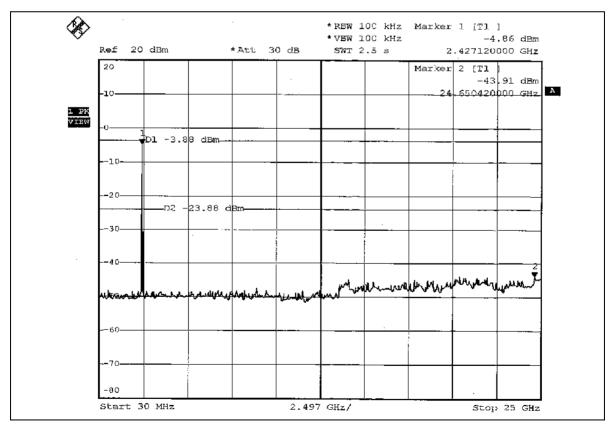














4.7 ANTENNA REQUIREMENT

4.7.1 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 (b), 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.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

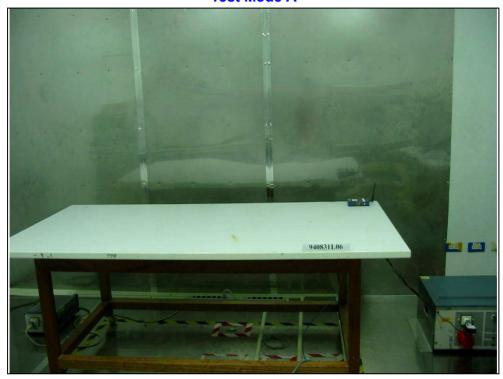
The antenna used in this product is Dipole antenna with RSMA antenna connector. The maximum Gain of the antenna is 2dBi.



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST

Test Mode A







Test Mode B



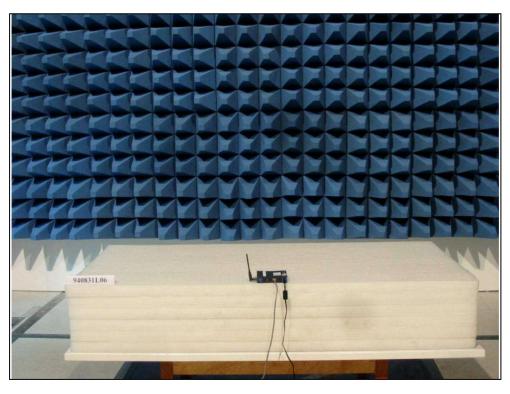




RADIATED EMISSION TEST

Test Mode A

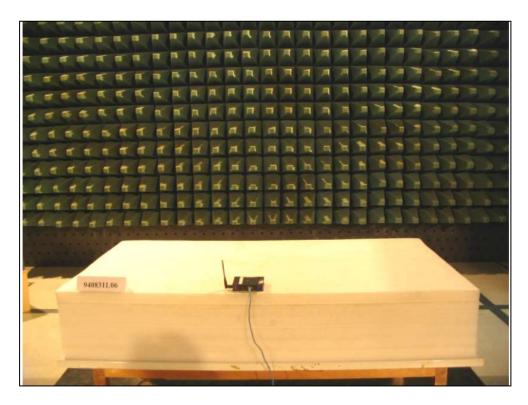






Test Mode B







6. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA FCC, NVLAP, UL, A2LA

Germany TUV Rheinland

Japan VCCI Norway NEMKO

Canada INDUSTRY CANADA, CSA

R.O.C. CNLA, BSMI, DGT

Netherlands Telefication

Singapore PSB, GOST-ASIA(MOU)

Russia CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

<u>www.adt.com.tw/index.5/phtml</u>. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:Hsin Chu EMC/RF Lab:Tel: 886-2-26052180Tel: 886-3-5935343Fax: 886-2-26052943Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab: Linko RF Lab.

Tel: 886-3-3183232 Tel: 886-3-3270910 Fax: 886-3-3185050 Fax: 886-3-3270892

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also



APPENDIX-A

MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO

THE EUT BY THE LAB No any modifications are made to the EUT by the lab during the test.