

FCC TEST REPORT

 REPORT NO.:
 RF930311H04

 MODEL NO.:
 WET54GS5

 RECEIVED:
 Mar. 11, 2004

 TESTED:
 Mar. 12 to 16, 2004

APPLICANT: Cisco-Linksys, LLC

ADDRESS: 121 Theory Drive Irvine, CA 92612 (USA)

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien, Taiwan, R.O.C.

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CERTIFICATION 1

PRODUCT :	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5 Port Switch
BRAND NAME :	Linksys
MODEL NO. :	WET54GS5
APPLICANT :	Cisco-Linksys, LLC
STANDARDS :	47 CFR Part 15, Subpart C (Section 15.247),
	ANSI C63.4-1992

We, Advance Data Technology Corporation, hereby certify that one sample (Model: WET54GS5) of the designation has been tested in our facility from Mar. 12 to 16, 2004. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

 PREPARED BY:
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 Mar. 24, 2004

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 DATE:
 Mar. 24, 2004

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 Mar. 24, 2004



2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C									
Standard Section	Test Type and Limit	Result	REMARK						
15.207	AC Power Conducted Emission Limit: 48dBuV	PASS	Meet the requirement of limit Minimum passing margin is –12.09 dBuV at 0.427 MHz						
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(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –2.1 dBuV at 2483.5 MHz						
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit						
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit						



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch
MODEL NO.	WET54GS5
POWER SUPPLY	5VDC from Power Adapter
MODULATION TYPE	CCK, OFDM, DBPSK, DQPSK
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	1/2/5.5/6/9/11/12/18/24/36/48/54Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	17.11dBm
ANTENNA TYPE	Dipole Antenna
DATA CABLE	NA
I/O PORTS	RJ 45 Port x 4 (LAN), RJ 45 Port x 1 (Uplink)
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT was powered by the following power adapter:

Brand:	Linksys
Model No.:	M1-10S05
Input power :	100-120V 47-63Hz 0.5A
Output power :	5VDC 2000mA, 1.8m/unshielded/ w. 1 core

- 2. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
- 3. The EUT complies with IEEE 802.11g draft standards, and backwards compatible with IEEE 802.11b products.
- 4. For a 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 in 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		

NOTE:

- 1. Below 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
- 2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.
- 3. Transfer rate, 11Mbps with CCK technique and 6Mbps with OFDM technique, the worst case, were chosen for final test.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless-G Ethernet Bridge. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

47 CFR Part 15, Subpart C. (15.247) ANSI C63.4 : 1992

All tests 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 47 CFR Part 15, Subpart B, Class B (DoC). The test report has been issued separately.



3.4 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	DELL	PP01L	TW-09C748-12800- 17Q-C504	FCC DoC

	100 ohm	١	
		— UTP (Cable (3mx4)
	EU	IT	
TEST TABLE			
		∢ — เ	ITP Cable (10m)
		BOOK	

NOTE: 1. Support unit 1 was kept in the control room during the test.

2. Please refer to the photos of test configuration in Item 5 also.



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. All emanations from a class 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
ROHDE & SCHWARZ	ESCS 30	847124/029	Dec. 04, 2004
Test Receiver			
ROHDE & SCHWARZ LISN	ESHS-Z5	848773/004	Nov. 04, 2004
(for EUT)			
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 27, 2004
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 03, 2004
Terminator(for KYORITSU)	50	3	Apr. 11, 2004
Software	Cond-V2e	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.

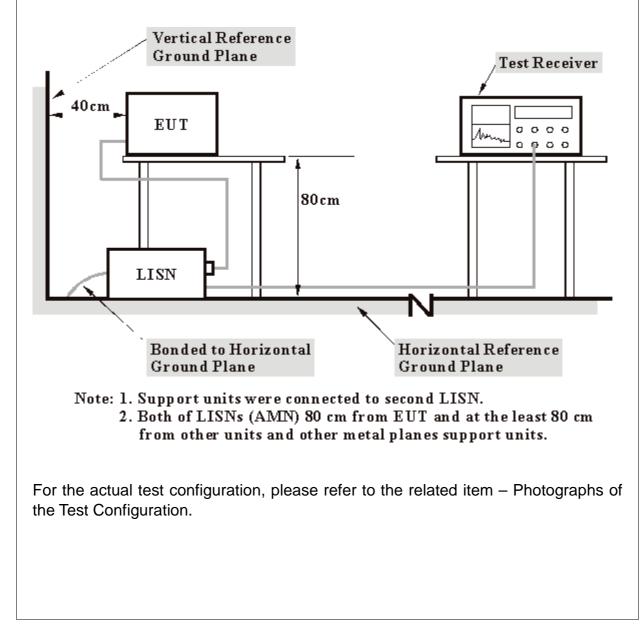
2. The test was performed in ADT Shielded Room No. A.

3. The VCCI Con A Registration No. is C-817.



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 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported



4.1.3 TEST SETUP



4.1.4 EUT OPERATING CONDITIONS

- a. Placed the EUT on the testing table.
- b. The support unit 1 (Notebook computer) to act as a communication partner and placed them outside of testing area.
- c. The communication partner run the test program to enable EUT under transmission/receiving condition continuously via one RJ 45 cable.
- d. The communication partner sent data to EUT by command "PING".

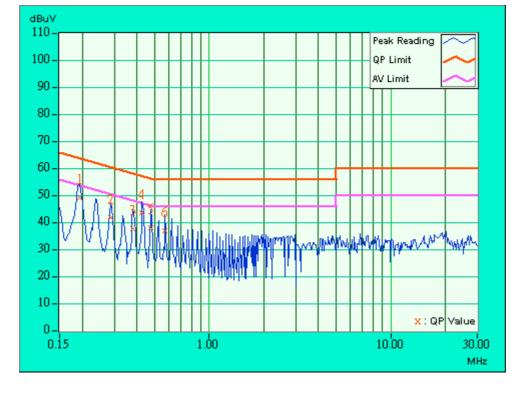


4.1.5 TEST RESULTS

EUT				WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch							
MODEL				WET54GS5							
MODE			Channel 11 6dB BANDWIDTH			DTH S	9 kHz				
INPUT POWER (SYSTEM)			120Vac, 60 Hz			PHASE		L	Line (L)		
ENVIRONMENTAL CONDITIONS				deg. C, 3 hPa	66%RH	Ι,	TESTE	ED BY	٦	Tony Cher	١
No	Freq.	Co	rr.	r. Reading Value Emissio		n Level Limit		nit	Margin		
		Fac	tor	or [dB (uV)] [d		[dB (uV)]	[dB ((uV)]	(d	B)
	FR 41 1 3	/ IF		<u> </u>		<u> </u>		<u> </u>		0.0	

NO	⊢req.	Corr.	Readin	g Value	Emissic	on Level	Lir	nit	Mai	rgin
		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.20	48.98	-	49.18	-	63.91	53.91	-14.73	-
2	0.287	0.20	41.55	-	41.75	-	60.62	50.62	-18.87	-
3	0.380	0.20	37.50	-	37.70	-	58.27	48.27	-20.57	-
4	0.427	0.20	43.54	-	43.74	-	57.30	47.30	-13.56	-
5	0.478	0.21	38.10	-	38.31	-	56.37	46.37	-18.06	-
6	0.572	0.23	36.95	-	37.18	-	56.00	46.00	-18.82	-

6 0.5/2 0.23 30.95 - 37.10 - 30.00 40.00 - 10.0
NOTES: (1) "*": Undetectable
(2) Q.P. and AV. are abbreviations of quasi-peak and average.
(3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
(4) The emission levels of other frequencies were very low against the limit.
(5) Correction Factor = Insertion loss + Cable loss
(6) Margin value = Emission level - Limit value



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EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch						
MODEL	WET54GS5						
MODE	Channel 11	6dB BANDWIDTH	9 kHz				
INPUT POWER (SYSTEM)	120Vac, 60 Hz	Iz PHASE					
ENVIRONMENTAL CONDITIONS	23 deg. C, 66%RH, 976 hPa	TESTED BY	Tony Chen				

No	Freq.	Corr.	Readin	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB ((uV)]	[dB ((uV)]	[dB	(uV)]	(d	B)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.193	0.20	50.39	-	50.59	-	63.91	53.91	-13.32	-	
2	0.240	0.20	45.41	-	45.61	-	62.10	52.10	-16.49	-	
3	0.287	0.20	43.57	-	43.77	-	60.62	50.62	-16.85	-	
4	0.334	0.20	46.39	-	46.59	-	59.36	49.36	-12.77	-	
5	0.380	0.20	39.98	-	40.18	-	58.27	48.27	-18.09	-	
6	0.427	0.20	45.01	-	45.21	-	57.30	47.30	-12.09	-	

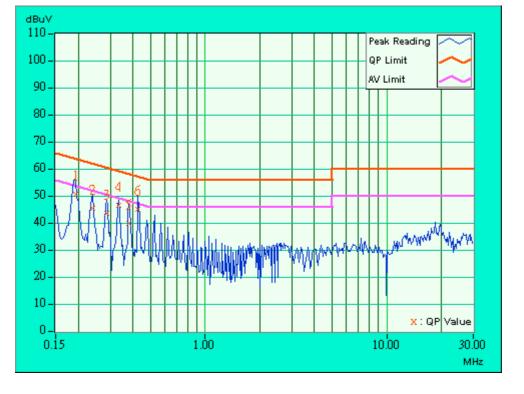
NOTES: (1) "*": Undetectable

(2) Q.P. and AV. are abbreviations of quasi-peak and average.

(3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.

(4) The emission levels of other frequencies were very low against the limit.

- (5) Correction Factor = Insertion loss + Cable loss
- (6) Margin value = Emission level Limit value



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4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Field strength limits are at the distance of 3 meters, 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
HP Spectrum Analyzer	8590L	3467U00646	Jun. 29, 2004
*ADVANTEST Spectrum Analyzer	R3271A	85060311	Jun. 16, 2004
CHASE RF Pre_Amplifier	CPA9232	1056	May 12, 2004
*HP Pre_Amplifier	8449B	3008A01922	Oct. 13, 2004
*ROHDE & SCHWARZ Test Receiver	ESVS 30	841977/002	Sep. 17, 2004
*CHASE Broadband Antenna	CBL6112B	2798	Apr. 16, 2004
*Schwarzbeck Horn_Antenna	BBHA9120-D1	D123	Sep. 24, 2004
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170192	Feb. 16, 2005
SCHWARZBECK Tunable Dipole Antenna	UHAP	897	Mar. 07, 2005
SCHWARZBECK Tunable Dipole Antenna	VHAP	880	Mar. 07, 2005
*RF Switches	MP59B	1-5161-28698	Jul. 31, 2004
*RF Cable(CHASE)	CH A9525	Cable_OB_01	Jul. 31, 2004
*Software	AS60P8	NA	NA
*CHANCE MOST Antenna Tower	AT-100	CM-A007	NA
*CHANCE MOST Turn Table	TC-008	CM-T007	NA
*CORCOM AC Filter	MRI2030	024/019	NA

Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Dipole Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.

2. * = These equipment are used for the final measurement.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

- 4. The test was performed in ADT Open Site No. B.
- 5. The VCCI Site Registration No. is R-847.
- 6. The FCC Site Registration No. is 92753.
- 7. The CANADA Site Registration No. is IC 4824-2.



4.2.3 TEST PROCEDURES

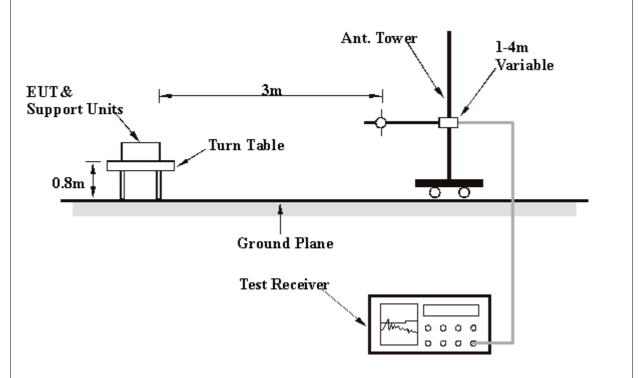
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on 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 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 120kHz 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 at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.



4.2.4 TEST SETUP



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

4.2.5 EUT OPERATING CONDITIONS

Same as 4.1.5.



4.2.6 TEST RESULTS

EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24 deg. C, 68%RH, 976 hPa	TESTED BY	Tony Chen

	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	125.01	36.70 QP	43.50	-6.80	1.58 H	22	24.50	12.10	
2	200.01	35.60 QP	43.50	-7.90	1.25 H	331	24.30	11.20	
3	250.02	37.80 QP	46.00	-8.20	1.10 H	247	24.60	13.20	
4	264.00	41.40 QP	46.00	-4.60	1.06 H	335	27.40	14.00	
5	396.00	35.40 QP	46.00	-10.60	1.00 H	13	17.40	18.00	
6	528.00	27.80 QP	46.00	-18.20	1.06 H	11	6.40	21.40	
7	625.07	29.10 QP	46.00	-16.90	1.29 H	25	5.70	23.50	
8	660.00	35.50 QP	46.00	-10.50	1.39 H	308	11.40	24.10	
9	836.00	30.90 QP	46.00	-15.10	1.50 H	94	4.20	26.70	
10	924.00	32.90 QP	46.00	-13.10	1.36 H	292	4.90	27.90	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Antenna Height	Table Angle	Raw Value	Correction Factor	
	(1112)	(dBuV/m)	(aba v/m)	(42)	(m)	(Degree)	(dBuV)	(dB/m)	
1	73.13	27.60 QP	40.00	-12.40	1.00 V	231	16.30	11.30	
2	125.01	39.90 QP	43.50	-3.60	1.21 V	358	27.80	12.10	
3	175.00	29.50 QP	43.50	-14.00	1.28 V	22	16.20	13.20	
4	200.00	36.60 QP	43.50	-6.90	1.00 V	342	25.30	11.20	
5	250.02	35.40 QP	46.00	-10.60	1.00 V	14	22.20	13.20	
6	375.01	28.40 QP	46.00	-17.60	1.27 V	354	11.00	17.40	
7	396.00	35.80 QP	46.00	-10.20	1.17 V	337	17.80	18.00	
8	475.05	24.00 QP	46.00	-22.00	1.42 V	256	3.80	20.20	
9	660.00	32.30 QP	46.00	-13.70	1.05 V	273	8.20	24.10	
10	924.00	32.80 QP	46.00	-13.20	1.16 V	3	4.80	27.90	

REMARKS: 1. En

- 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
- 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.



4.2.7 **TEST RESULTS - DSSS**

EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5	
MODE Channel 1		FREQUENCY RANGE	1000 ~ 25000 MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average(AV)	
ENVIRONMENTAL CONDITIONS	21 deg. C, 69%RH, 976 hPa	TESTED BY	Tony Chen	

	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	
	(10172)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	
1	2390.00	50.40 PK	74.00	-23.60	1.24 H	143	20.60	29.80	
2	*2412.00	103.10 PK			1.17 H	303	73.20	29.90	
2	*2412.00	95.60 AV			1.17 H	303	65.70	29.90	
3	4824.00	44.80 PK	74.00	-29.20	1.07 H	236	8.60	36.20	
4	7236.00	51.30 PK	74.00	-22.70	1.14 H	201	9.60	41.70	
4	7236.00	40.20 AV	54.00	-13.80	1.14 H	201	-1.50	41.70	
5	9648.00	53.10 PK	74.00	-20.90	1.32 H	198	8.20	44.90	
5	9648.00	42.10 AV	54.00	-11.90	1.32 H	198	-2.80	44.90	

	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	2390.00	59.60 PK	74.00	-14.40	1.16 V	239	29.80	29.80	
1	2390.00	51.50 AV	54.00	-2.50	1.16 V	239	21.70	29.80	
2	*2412.00	112.60 PK			1.13 V	351	82.70	29.90	
2	*2412.00	104.90 AV			1.13 V	351	75.00	29.90	
3	4824.00	51.90 PK	74.00	-22.10	1.13 V	314	15.60	36.20	
3	4824.00	37.00 AV	54.00	-17.00	1.13 V	314	0.80	36.20	
4	7236.00	48.20 PK	74.00	-25.80	1.32 V	30	6.50	41.70	
5	9648.00	57.10 PK	74.00	-16.90	1.47 V	123	12.20	44.90	
5	9648.00	47.60 AV	54.00	-6.40	1.47 V	123	2.70	44.90	

REMARKS:

Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 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. The limit value is defined as per 15.247

6. "*": Fundamental frequency



EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5	
MODE	Channel 6	FREQUENCY RANGE	1000 ~ 25000 MHz	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	21 deg. C, 69%RH, 976 hPa	TESTED BY	Tony Chen	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.		Level	_	•	Height	Angle	Value	Factor		
	(MHz)	(dBuV/m)	(ubuv/m)	(dBuV/m) (dB)		(Degree)	(dBuV)	(dB/m)		
1	*2437.00	101.20 PK			1.15 H	312	71.30	30.00		
1	*2437.00	94.20 AV			1.15 H	312	64.20	30.00		
2	4874.00	43.60 PK	74.00	-30.40	1.20 H	249	7.10	36.50		
3	7311.00	48.60 PK	74.00	-25.40	1.42 H	201	6.80	41.80		
4	9748.00	54.30 PK	74.00	-19.70	1.20 H	269	9.70	44.60		
4	9748.00	43.60 AV	54.00	-10.40	1.20 H	269	-1.00	44.60		

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.	•	Level	(dBuV/m)	•	Height	Angle	Value	Factor		
	(IVIFIZ)	(MHz) (dBuV/m) (dB)	(m)	(Degree)	(dBuV)	(dB/m)				
1	*2437.00	113.00 PK			1.11 V	348	83.00	30.00		
1	*2437.00	105.50 AV			1.11 V	348	75.50	30.00		
2	4874.00	50.50 PK	74.00	-23.50	1.55 V	312	14.00	36.50		
3	7311.00	51.40 PK	74.00	-22.60	1.13 V	360	9.70	41.80		
3	7311.00	38.30 AV	54.00	-15.70	1.13 V	360	-3.50	41.80		
4	9748.00	55.90 PK	74.00	-18.10	1.27 V	29	11.30	44.60		
4	9748.00	46.40 AV	54.00	-7.60	1.27 V	29	1.80	44.60		

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

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. The limit value is defined as per 15.247
- 6. "*": Fundamental frequency



EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5
MODE	Channel 11	FREQUENCY RANGE	1000 ~ 25000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21 deg. C, 69%RH, 976 hPa	TESTED BY	Tony Chen

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
	Бтол	Emission	Limit	Morain	Antenna	Table	Raw	Correction	
No.	Freq.	Level		Margin	Height	Angle	Value	Factor	
	(MHz) (dBuV/m) (dB)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)			
1	*2462.00	102.10 PK			1.14 H	305	72.00	30.10	
1	*2462.00	94.70 AV			1.14 H	305	64.70	30.10	
2	2483.50	49.70 PK	74.00	-24.30	1.12 H	223	19.50	30.10	
3	4924.00	43.70 PK	74.00	-30.30	1.42 H	47	7.00	36.70	
4	7386.00	48.20 PK	74.00	-25.80	1.50 H	23	6.30	41.80	
5	9848.00	56.90 PK	74.00	-17.10	1.34 H	72	12.50	44.40	
5	9848.00	43.00 AV	54.00	-11.00	1.34 H	72	-1.30	44.40	

	ANTEN	NNA POLAF	RITY & T	EST DIS	STANCE	: VERTIO	CAL AT 3	Μ
	Frog	Emission	Limit	Margin	Antenna	Table	Raw	Correction
No.		Level	(dBuV/m)	5	Height	Angle	Value	Factor
	(MHz)	(dBuV/m)	(ubu v/III)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)
1	*2462.00	112.90 PK			1.12 V	344	82.80	30.10
1	*2462.00	105.70 AV			1.12 V	344	75.70	30.10
2	2483.50	60.40 PK	74.00	-13.60	1.13 V	248	30.20	30.10
2	2483.50	51.90 AV	54.00	-2.10	1.13 V	248	21.70	30.10
3	4924.00	51.60 PK	74.00	-22.40	1.16 V	310	14.90	36.70
3	4924.00	39.90 AV	54.00	-14.10	1.16 V	310	3.20	36.70
4	7386.00	48.30 PK	74.00	-25.70	1.19 V	354	6.50	41.80
5	9848.00	54.00 PK	74.00	-20.00	1.51 V	122	9.70	44.40
5	9848.00	45.00 AV	54.00	-9.00	1.51 V	122	0.70	44.40

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

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. The limit value is defined as per 15.247

6. "* ": Fundamental frequency



4.2.8 TEST RESULTS -OFDM

EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5
MODE	Channel 1	FREQUENCY RANGE	1000 ~ 25000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average(AV)
ENVIRONMENTAL CONDITIONS	21 deg. C, 69%RH, 976 hPa	TESTED BY	Tony Chen

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.	(MHz)	Level		•	Height	Angle	Value	Factor		
	(IVIHZ)	(dBuV/m)	(dBuV/m) (dB)		(m)	(Degree)	(dBuV)	(dB/m)		
1	2390.00	46.40 PK	74.00	-27.60	1.20 H	222	16.60	29.80		
2	*2412.00	94.90 PK			1.21 H	302	65.00	29.90		
2	*2412.00	85.60 AV			1.21 H	302	55.70	29.90		
3	4824.00	44.00 PK	74.00	-30.00	1.32 H	360	7.80	36.20		
4	7236.00	47.50 PK	74.00	-26.50	1.20 H	94	5.80	41.70		
5	9648.00	55.10 PK	74.00	-18.90	1.19 H	357	10.20	44.90		
5	9648.00	46.90 AV	54.00	-7.10	1.19 H	357	2.00	44.90		

	ANTE	NNA POLA	RITY & T	EST DIS	TANCE	: VERTIC	CAL AT 3	Μ
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	2317.00	51.60 PK	74.00	-22.40	1.02 V	309	22.00	29.60
1	2317.00	40.40 AV	54.00	-13.60	1.02 V	309	10.80	29.60
2	2390.00	56.40 PK	74.00	-17.60	1.23 V	239	26.60	29.80
2	2390.00	48.10 AV	54.00	-5.90	1.23 V	239	18.30	29.80
3	*2412.00	106.10 PK			1.15 V	350	76.20	29.90
3	*2412.00	97.20 AV			1.15 V	350	67.30	29.90
4	4824.00	44.00 PK	74.00	-30.00	1.26 V	254	7.80	36.20
5	7236.00	49.70 PK	74.00	-24.30	1.39 V	64	8.00	41.70
6	9648.00	57.60 PK	74.00	-16.40	1.20 V	123	12.70	44.90
6	9648.00	47.70 AV	54.00	-6.30	1.20 V	123	2.80	44.90

REMARKS:

S: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

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. The limit value is defined as per 15.247

6. "* ": Fundamental frequency



EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5
MODE	Channel 6	FREQUENCY RANGE	1000 ~ 25000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21 deg. C, 69%RH, 976 hPa	TESTED BY	Tony Chen

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
No.	Freq. (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Antenna Height	Table Angle	Raw Value	Correction Factor		
1	*2437.00	(dBuV/m) 95.50 PK			(m) 1.16 H	(Degree) 304	(dBuV) 65.50	(dB/m) 30.00		
1	*2437.00	86.30 AV			1.16 H	304	56.30	30.00		
2	4874.00	45.40 PK	74.00	-28.60	1.29 H	258	8.90	36.50		
3	7311.00	48.60 PK	74.00	-25.40	1.08 H	147	6.80	41.80		
4	9748.00	53.20 PK	74.00	-20.80	1.61 H	72	8.60	44.60		
4	9748.00	43.60 AV	54.00	-10.40	1.61 H	72	-1.10	44.60		

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
	. Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction		
No.		Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor		
	(MHz)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)		
1	2387.00	51.30 PK	74.00	-22.70	1.13 V	312	21.50	29.80		
1	2387.00	42.30 AV	54.00	-11.70	1.13 V	312	12.50	29.80		
2	*2437.00	106.30 PK			1.12 V	349	76.30	30.00		
2	*2437.00	97.40 AV			1.12 V	349	67.40	30.00		
3	4874.00	44.70 PK	74.00	-29.30	1.27 V	357	8.20	36.50		
4	7311.00	48.60 PK	74.00	-25.40	1.24 V	120	6.80	41.80		
5	9748.00	54.20 PK	74.00	-19.80	1.36 V	121	9.60	44.60		
5	9748.00	45.60 AV	54.00	-8.40	1.36 V	121	0.90	44.60		

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

- 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. The limit value is defined as per 15.247
- 6. " * " : Fundamental frequency



EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch	MODEL	WET54GS5
MODE	Channel 11	FREQUENCY RANGE	1000 ~ 25000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21 deg. C, 69%RH, 976 hPa	TESTED BY	Tony Chen

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction
No.		Level	(dBuV/m)	•	Height	Angle	Value	Factor
	(MHz)	(dBuV/m)	(ubuv/m)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)
1	*2462.00	95.20 PK			1.11 H	305	65.20	30.10
1	*2462.00	86.40 AV			1.11 H	305	56.30	30.10
2	2483.50	46.90 PK	74.00	-27.10	1.10 H	223	16.70	30.10
3	4924.00	43.90 PK	74.00	-30.10	1.27 H	301	7.20	36.70
4	7386.00	47.60 PK	74.00	-26.40	1.52 H	256	5.80	41.80
5	9848.00	52.50 PK	74.00	-21.50	1.62 H	89	8.20	44.40
5	9848.00	42.70 AV	54.00	-11.30	1.62 H	89	-1.60	44.40

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
	Freq.	Emission	Limit	Limit Margin SuV/m) (dB)	Antenna	Table	Raw	Correction
No.	(MHz)	Level			Height	Angle	Value	Factor
	(IVIFIZ)	(dBuV/m)	(ubu v/III)		(m)	(Degree)	(dBuV)	(dB/m)
1	*2462.00	106.70 PK			1.10 V	355	76.70	30.10
1	*2462.00	97.70 AV			1.10 V	355	67.70	30.10
2	2483.50	57.60 PK	74.00	-16.40	1.11 V	287	27.50	30.10
2	2483.50	48.90 AV	54.00	-5.10	1.11 V	287	18.80	30.10
3	4924.00	43.70 PK	74.00	-30.30	1.20 V	123	7.00	36.70
4	7386.00	48.40 PK	74.00	-25.60	1.17 V	269	6.60	41.80
5	9848.00	52.90 PK	74.00	-21.10	1.67 V	87	8.50	44.40
5	9848.00	44.00 AV	54.00	-10.00	1.67 V	87	-0.30	44.40

REMARKS:

RKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)

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. The limit value is defined as per 15.247

6. " * " : 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
R&S SPECTRUM ANALYZER	FSP40	100037	May. 06, 2004

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.



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

4.3.4 TEST SETUP



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

4.3.5 EUT OPERATING CONDITIONS

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

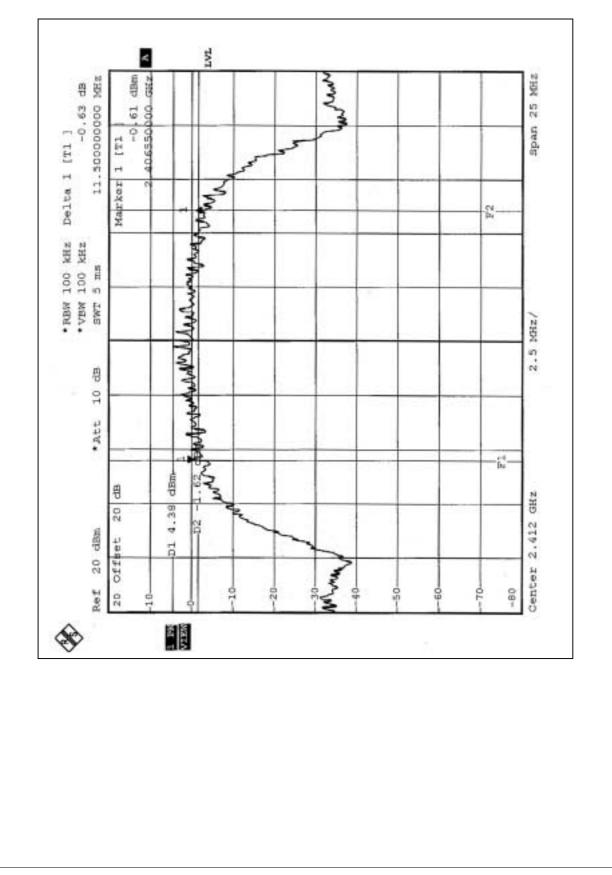


4.3.6 TEST RESULTS-DSSS

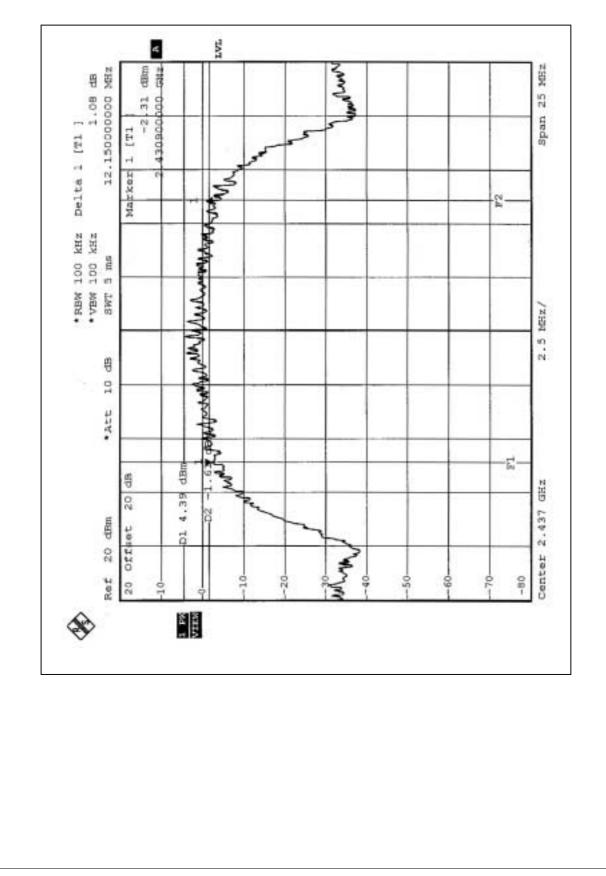
EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch			
MODEL	WET54GS5	ENVIRONMENTAL	21 deg. C, 74 %RH,	
-		CONDITIONS	976 hPa	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Tony Chen	

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.50	0.5	PASS
6	2437	12.15	0.5	PASS
11	2462	12.15	0.5	PASS

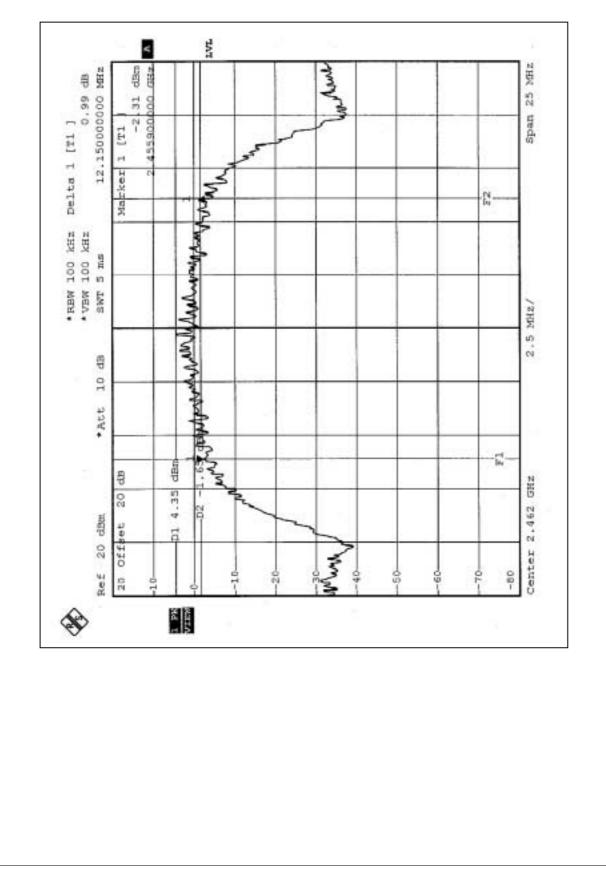












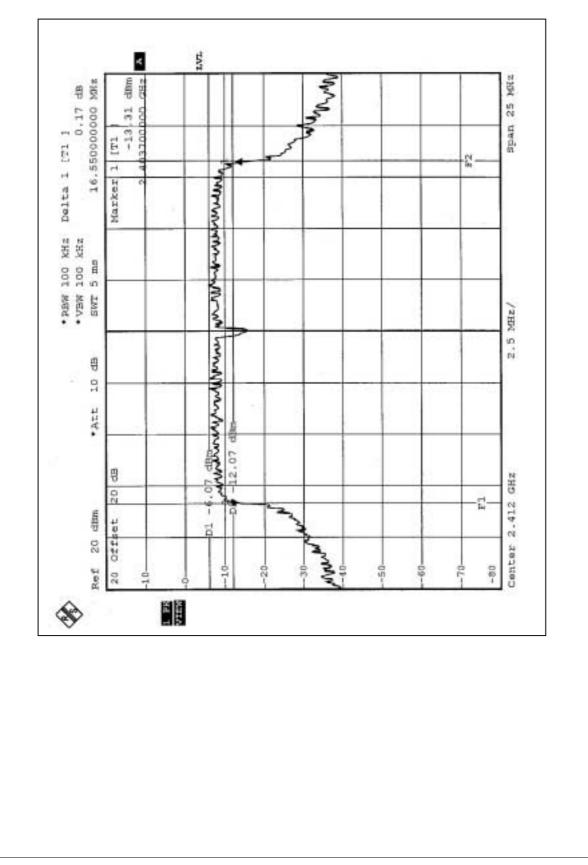


4.3.7 TEST RESULTS-OFDM

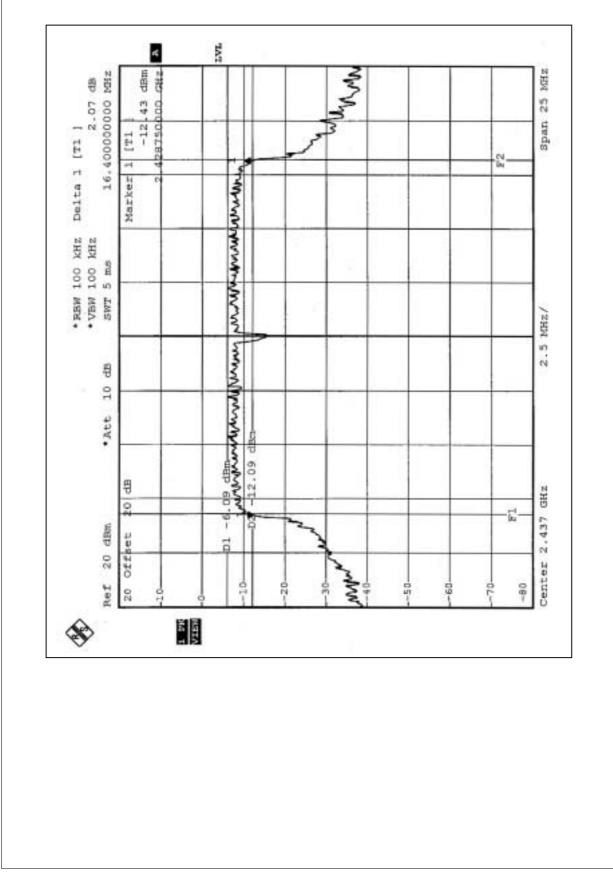
EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch			
MODEL	WET54GS5		21 deg. C, 74 %RH, 976 hPa	
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Tony Chen	

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.55	0.5	PASS
6	2437	16.40	0.5	PASS
11	2462	16.45	0.5	PASS

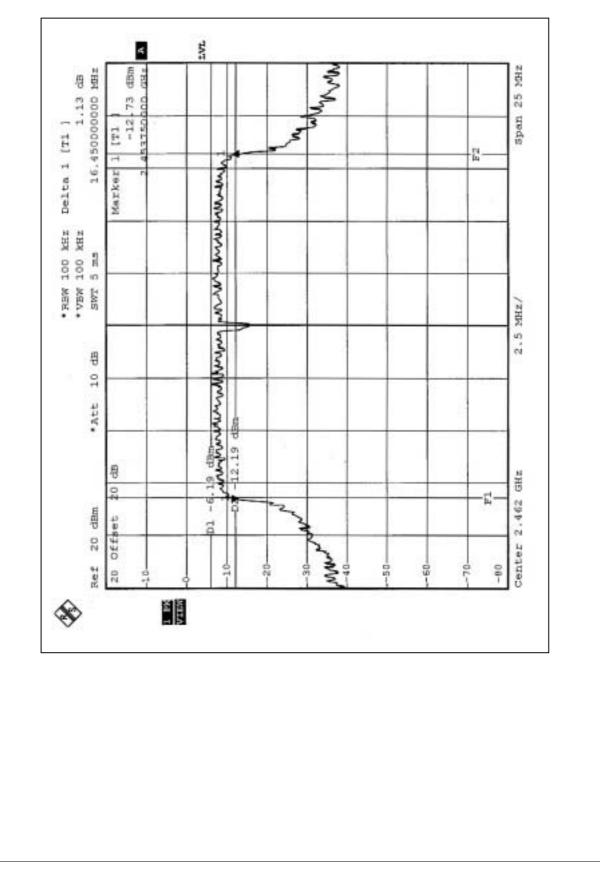














4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100037	May. 06, 2004
R&S SIGNAL GENERATOR	SMP04	100011	May 28, 2004
TEKTRONIX OSCILLOSCOPE	TDS 220	B048470	Mar. 05, 2005
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

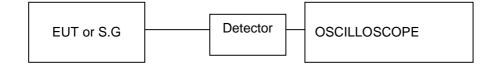
The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.4.3 TEST PROCEDURES

- 1. A detector was used on the output port of the EUT. An oscilloscope was used to read the peak 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 peak reading on oscilloscope. Record the power level.

4.4.4 TEST SETUP



4.4.5 EUT OPERATING CONDITIONS

Same as Item 4.3.5



4.4.6 TEST RESULTS- DSSS

EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch		
MODEL	WET54GS5	ENVIRONMENTAL 21 deg. C, 74	
	WL134665	CONDITIONS	976 hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Tony Chen

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	17.04	30	PASS
6	2437	17.11	30	PASS
11	2462	17.09	30	PASS

4.4.7 TEST RESULTS- OFDM

EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch		
MODEL	WET54GS5	ENVIRONMENTAL CONDITIONS	21 deg. C, 74 %RH, 976 hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Tony Chen

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	13.12	30	PASS
6	2437	13.08	30	PASS
11	2462	13.11	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	FSP40	100037	May. 06, 2004

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.

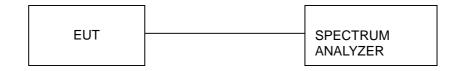


4.5.3 TEST PROCEDURE

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 3 kHz RBW and 30 kHz 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 TEST SETUP



4.5.5 EUT OPERATING CONDITIONS

Same as 4.3.5

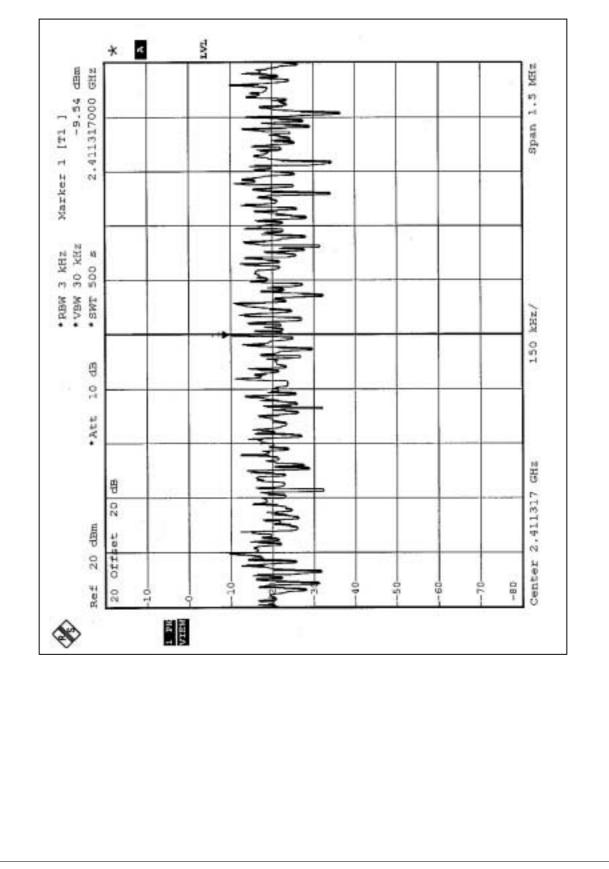


4.5.6 TEST RESULTS-DSSS

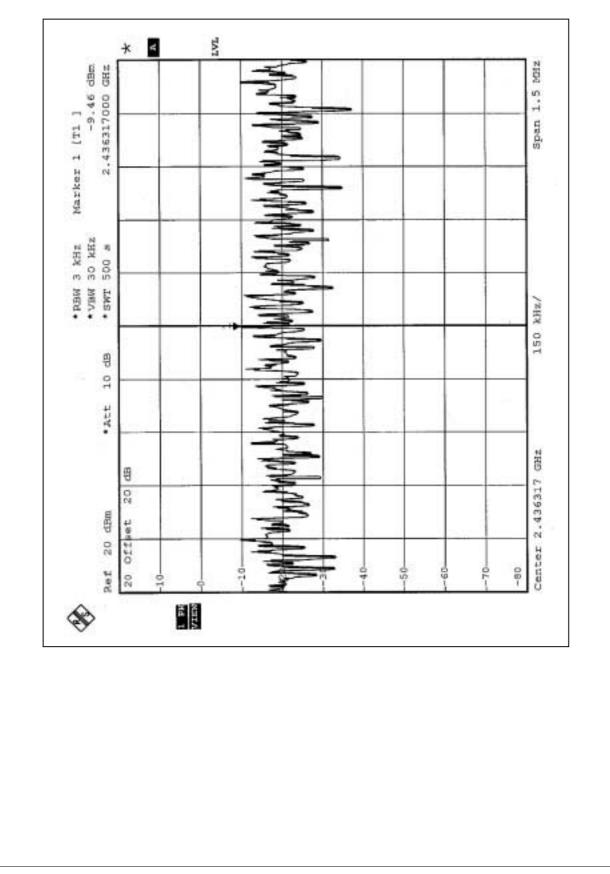
EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch		
MODEL	WET54GS5	ENVIRONMENTAL 21 deg. C, 74	
	WL134665	CONDITIONS	976 hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Tony Chen

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-9.54	8	PASS
6	2437	-9.46	8	PASS
11	2462	-9.54	8	PASS

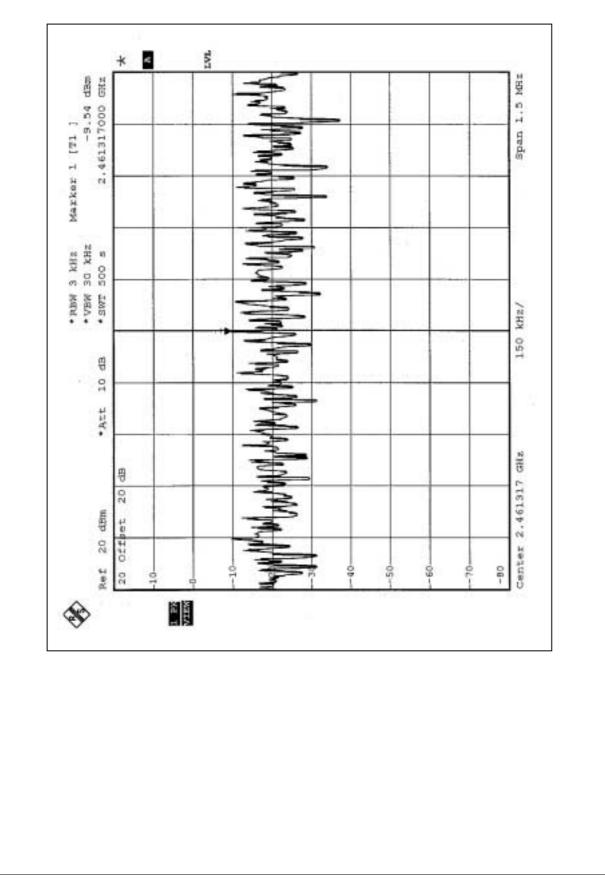












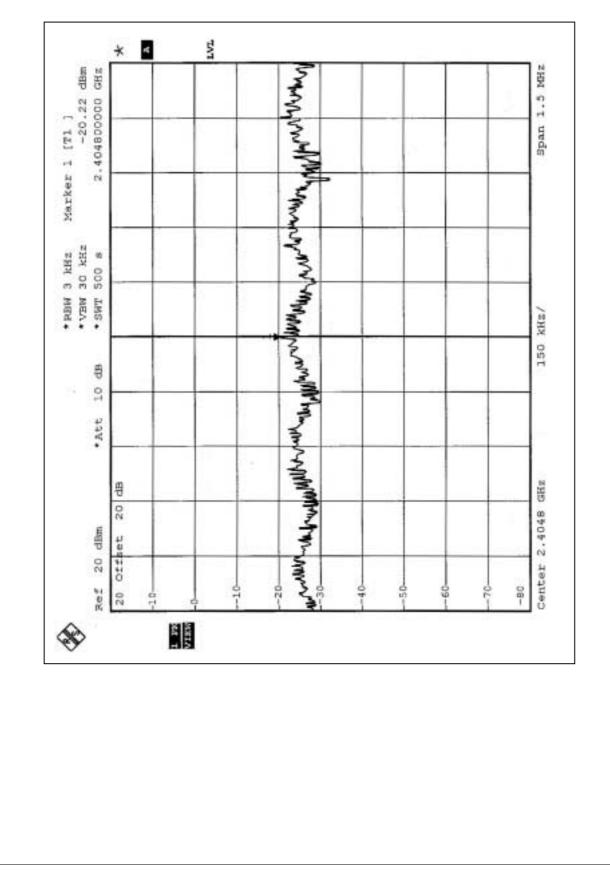


4.5.7 TEST RESULTS-OFDM

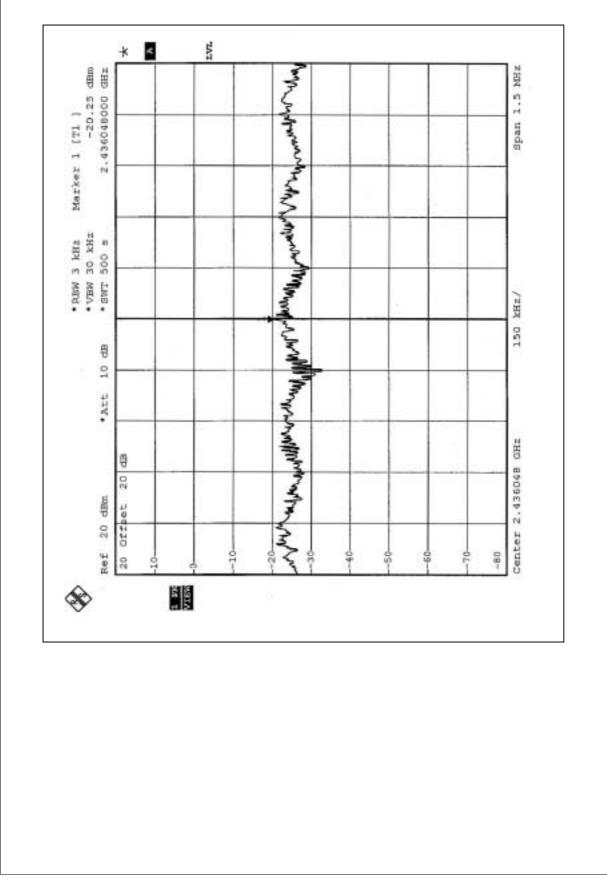
EUT	WET54GS5 Linksys Wireless-G Ethernet Bridge with 5-Port Switch		
MODEL	WET54GS5	ENVIRONMENTAL 21 deg. C, 74	
	WL134665	CONDITIONS	976 hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Tony Chen

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-20.22	8	PASS
6	2437	-20.25	8	PASS
11	2462	-20.11	8	PASS

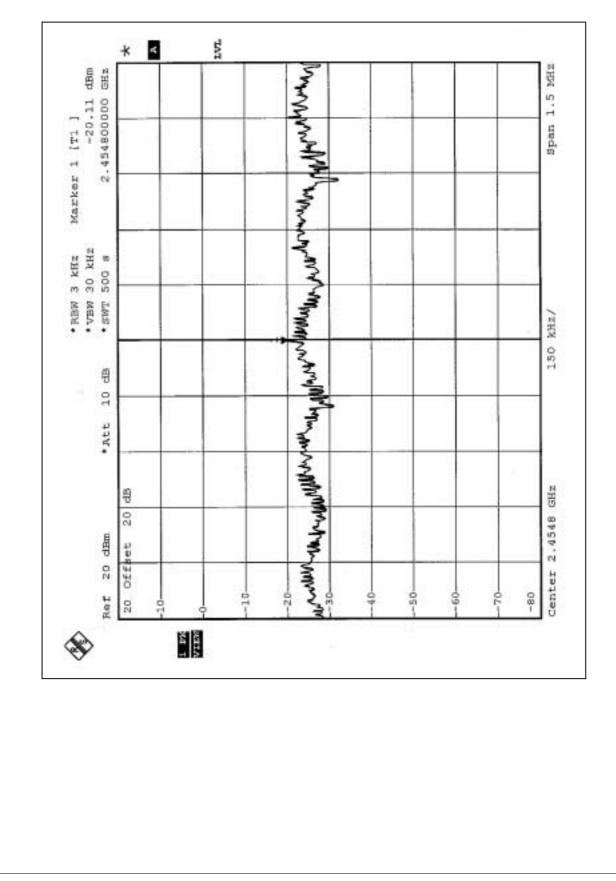














4.6 BAND EDGES MEASUREMENT

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	FSP40	100037	May. 06, 2004

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.

4.6.3 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 with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.

4.6.4 EUT OPERATING CONDITION

Same as Item 4.3.5



4.6.5 TEST RESULTS - DSSS

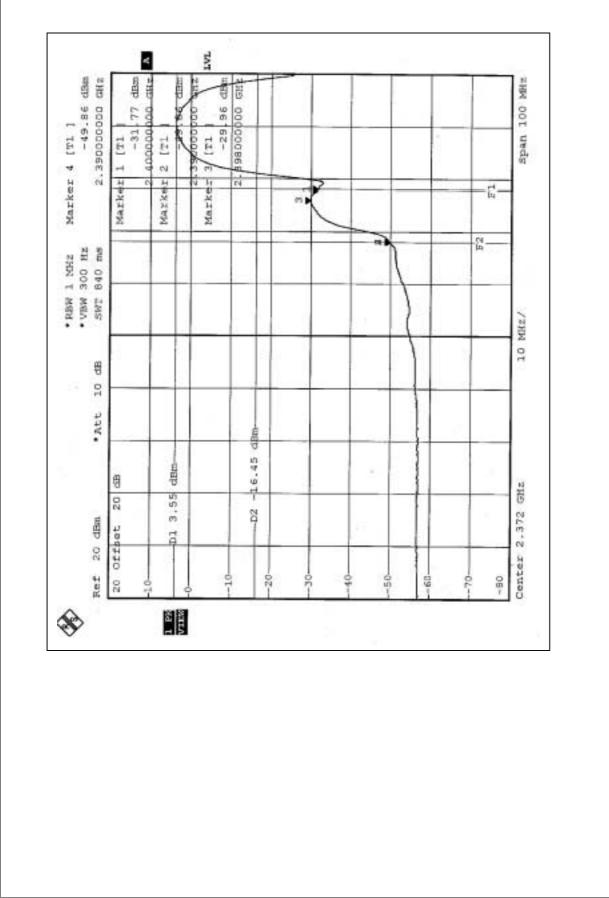
The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.7.

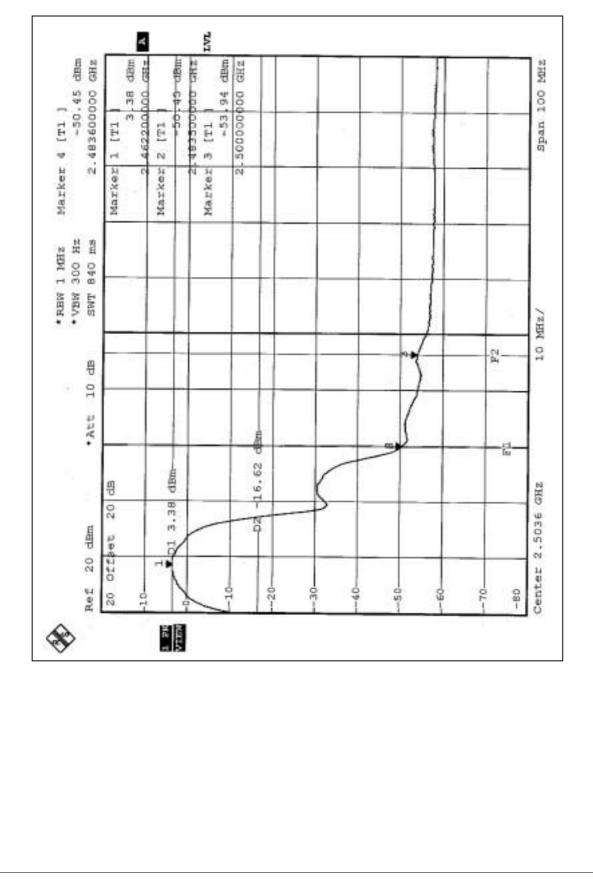
NOTE (1): The band edge emission plot on the following first page shows 53.41dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 104.90dBuV/m, so the maximum field strength in restrict band is 104.90-53.41=51.49dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 50.45dB delta between carrier maximum power and local maximum emission in restrict band (2.4836GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 105.7dBuV/m, so the maximum field strength in restrict band is 105.7-53.83=51.87dBuV/m which is under 54 dBuV/m limit.











4.6.6 TEST RESULTS-OFDM

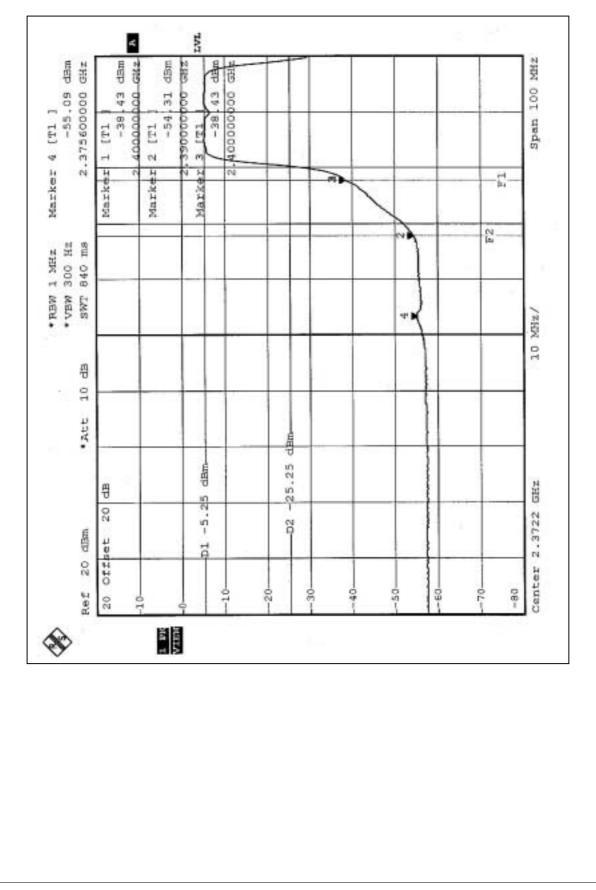
The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.8.

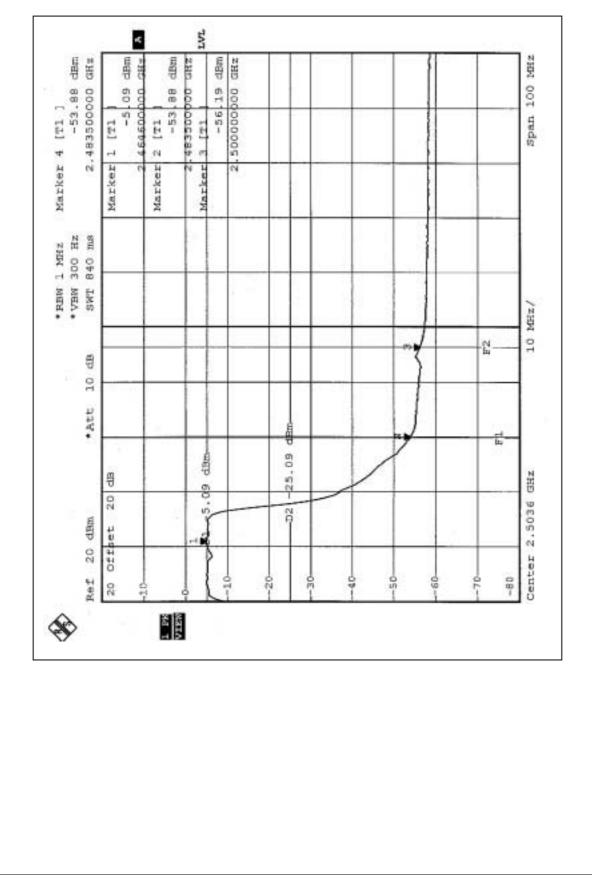
NOTE (1): The band edge emission plot on the following first page shows 49.06dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 97.2dBuV/m, so the maximum field strength in restrict band is 97.2-49.06=48.14dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 48.79dB delta between carrier maximum power and local maximum emission in restrict band (2.48.5GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 97.7dBuV/m, so the maximum field strength in restrict band is 97.7-48.79=48.91dBuV/m which is under 54 dBuV/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

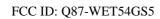
The antenna type used in this product is Dipole Antenna with Reversed SMA connector. And the maximum Gain of this antenna is only 3.5dBi.



5 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST













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, Guide 25 or EN 45001:

USA	FCC, NVLAP, UL
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: Tel: 886-2-26052180 Fax: 886-2-26052943 Hsin Chu EMC/RF Lab: Tel: 886-3-5935343 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab: Tel: 886-3-3183232 Fax: 886-3-3185050 Linko RF & Telecom Lab. Tel: 886-3-3270910 Fax: 886-3-3270892

Email: <u>service@mail.adt.com.tw</u> Web Site: <u>www.adt.com.tw</u>

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