



Test Report

Product Name : Wireless LAN PC Card

Model No. : WEN-2015, DW-655C

FCC ID.: PSL-WEN-2015

Applicant : W-Link Systems Inc.

Address : 1F, No. 20, Park Ave. II, Science-based industrial Park,
Hsin Chu, Taiwan, R.O.C.

Date of Receipt : Dec. 5, 2001

Date of Test : Dec. 14, 2001

Report No. : 01CH021FI

The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.
This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Test Report Certification

Test Date : Dec. 14, 2001
Report No. : 01CH021FI



Accredited by NIST (NVLAP)
NVLAP Lab Code: 200347-0

Product Name : Wireless LAN PC Card
Applicant : W-Link Systems Inc.
Address : 1F, No. 20, Park Ave. II, Science-based industrial Park, Hsin Chu, Taiwan, R.O.C.
Manufacturer : W-Link Systems Inc.
Model No. : WEN-2015, DW-655C
FCC ID. : PSL-WEN-2015
Rated Voltage : DC 5V(Power by PC)
Trade Name : W-Link
Measurement Standard : FCC Part 15 Subpart C Paragraph 15.247
Measurement Procedure : ANSI C63.4:1992
Test Result : Complied

The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuiTek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By :

A handwritten signature in black ink, appearing to read "Kim Hung".

(Kim Hung)

Tested By :

A handwritten signature in black ink, appearing to read "Kenny Jwo".

(Kenny Jwo)

Approved By :

A handwritten signature in black ink, appearing to read "Kevin Wang".

(Kevin Wang)

TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION.....	5
1.1. EUT Description.....	5
1.2. Operation Description	5
1.3. Tested System Details.....	6
1.4. Configuration of Tested System	6
1.5. EUT Exercise Software	7
1.6. Test Facility	7
2. Conducted Emission.....	8
2.1. Test Equipment List.....	8
2.2. Test Setup	8
2.3. Limits	8
2.4. Test Procedure	9
2.5. Test Result of Conducted Emission.....	10
3. Peak Power Output	11
3.1. Test Equipment.....	11
3.2. Test Setup	11
3.3. Test Condition	11
3.4. Minimum Standard.....	11
3.5. Test Result of Peak Power Output.....	12
4. RF Exposure Evaluation.....	13
4.1. Friis Formula	13
4.2. EUT Operation condition	13
4.3. Test Result of RF Exposure Evaluation.....	14
5. Radiated Emission.....	15
5.1. Test Equipment.....	15
5.2. Test Setup	15
5.3. Test Condition	16
5.4. Limits	16
5.5. Test Procedure	17
5.6. Test Result of Radiated Emission.....	18
5.7. Test Result of Band Edge	30
6. Occupied Bandwidth	34
6.1. Test Equipment.....	34
6.2. Test Setup	34
6.3. Test Condition	34
6.4. Standard Reqirement	34
6.5. Test Result of Occupied Bandwidth	35
7. Transmitter Power Density.....	38
7.1. Test Equipment.....	38
7.2. Test Setup	38
7.3. Test Condition	38
7.4. Standard Reqirement	38

7.5.	Test Result of Transmitter Power Density.....	39
8.	Processing Gain	42
8.1.	Test Condition	42
8.2.	Minimum Standard.....	42
8.3.	Test Procedure & Result.....	42
9.	EMI Reduction Method During Compliance Testing	43
10.	Attachment.....	44

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	: Wireless LAN PC Card		
Trade Name	: W-Link		
FCC ID.	: PSL-WEN-2015		
Model No.	: WEN-2015, DW-655C		
Frequency Range	: 2412MHz to 2462MHz		
Channel Number	: 11		
Frequency of Each Channel (Working Frequency)	Channel 01: 2412MHz	Channel 07: 2442MHz	Channel 08: 2447MHz
	Channel 02: 2417 MHz	Channel 09: 2452MHz	Channel 10: 2457MHz
	Channel 03: 2422 MHz	Channel 11: 2462MHz	
	Channel 04: 2427MHz		
	Channel 05: 2432MHz		
	Channel 06: 2437MHz		
Type of Modulation	: Direct Sequence Spread Spectrum		
Selection of Operating Frequency	: Auto		
Antenna type	: External dipole diversity antennas		

Note:

1. This device is a 2.4GHz Wireless LAN PC Card interface included a 2.4GHz receiving function, a 2.4GHz transmitting function.
2. These tests were conducted on a sample of the equipment for the purpose of Demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regards to the different trade name. The model number were shown in the table following:

Model Number	Trade Mark
WEN-2015	W-Link
DW-655C	D-Link

4. This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 01CH021F under Declaration of Conformity.

1.2. Operation Description

The EUT is Wireless LAN PC Card. Four kind of transmission speed 1,2,5.5 and 11Mbps were provide by this RF module. The modulation of RF carrier are DQPSK, DBPSK and CCK. A extender was used during the test to prove the PCMCIA card can pass all the regulation alone Self-shielding and on board power regulator were built in the EUT.

Direct sequence spread spectrum modulation was adopted by this module. External dipole diversity antennas provide diversity function to improve the receiving function of module. Data can be transmitted by the radio signal connect to Internet or local network.

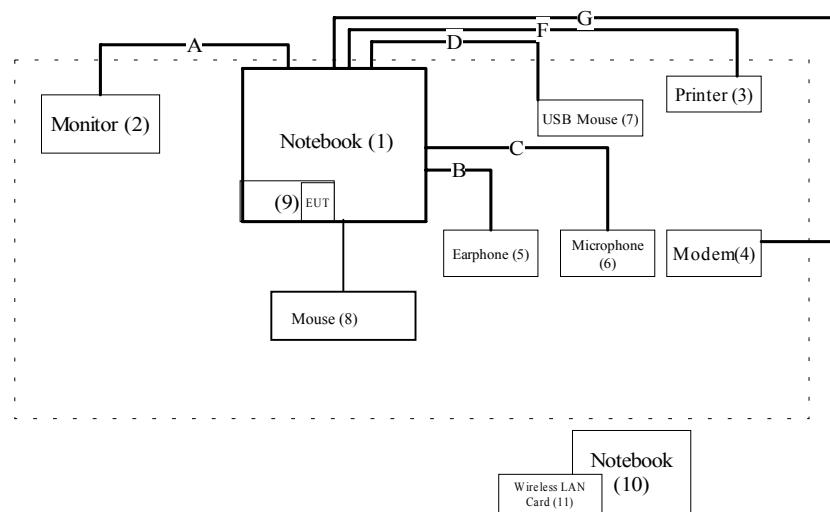
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord	FCC ID
(1)	Notebook	DELL	PPO1L	N/A	Non-shielded,1.5m	DoC
(2)	Monitor	HITACHI	CM752ET-311	T8E004439	Shielded,1.7m	DoC
(3)	Printer	HP	C2642A	MY75N1D2BC	Shielded,1.2m	B94C2642X
(4)	Modem	ACEEX	2814	960018054	Shielded,1.5m	IFAXDM2814
(5)	Earphone	AIWA	N/A	N/A	Non-shielded,1.2m	DoC
(6)	Microphone	AIWA	CD-8000	N/A	Non-shielded,1m	DoC
(7)	USB Mouse	Logitech	M-UE55	DVT-322	Shielded,1.8m	DoC
(8)	Mouse	Logitech	M-M34	LZA824741192	Shielded,1.8m	DZL211029
(9)	Auxiliary	W-Link	N/A	N/A	N/A	N/A
(10)	Notebook	IBM	Think Pad 570	27L8835	Non-shielded,1.5m	DoC
(11)	Wireless LAN Card	Askey	WLL013	N/A	N/A	WLC0100D53

Signal Cable Type		Signal Cable Description
A.	VGA Cable	Shielded, 1.8m, two ferrite cores bonded.
B.	Earphone Cable	Non-shielded, 1.2m
C.	Microphone Cable	Non-shielded, 2.5m
D.	USB Mouse Cable	Shielded, 1m
E.	Mouse Cable	Shielded, 1.8m
F.	Printer Cable	Shielded, 1.8m
G.	Modem Cable	Shielded, 1.6m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- 1.4.1 Setup the EUT and simulators as shown on 1.3.
- 1.4.2 Turn on the power of all equipment.
- 1.4.3 Personal Computer reads data from disk.
- 1.4.4 Data will be transmitted through EUT.
- 1.4.5 The transmission status will be shown on the monitor.
- 1.4.6 Repeat the above procedure 1.4.4 to 1.4.5

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: November 3, 1998 File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Reference 31040/SIT1300F2

September 30, 1998 Accreditation on NVLAP
NVLAP Lab Code: 200347-0



NVLAP Lab Code : 200347-0

Site Name: Quietek Corporation

Site Address: No. 75-1, Wang-Yeh Valley, Yung-Hsing,
Chiung-Lin, Hsin-Chu County,
Taiwa, R.O.C.
TEL : 886-3-592-8858 / FAX : 886-3-592-8859
E-Mail : service@quietek.com

2. Conducted Emission

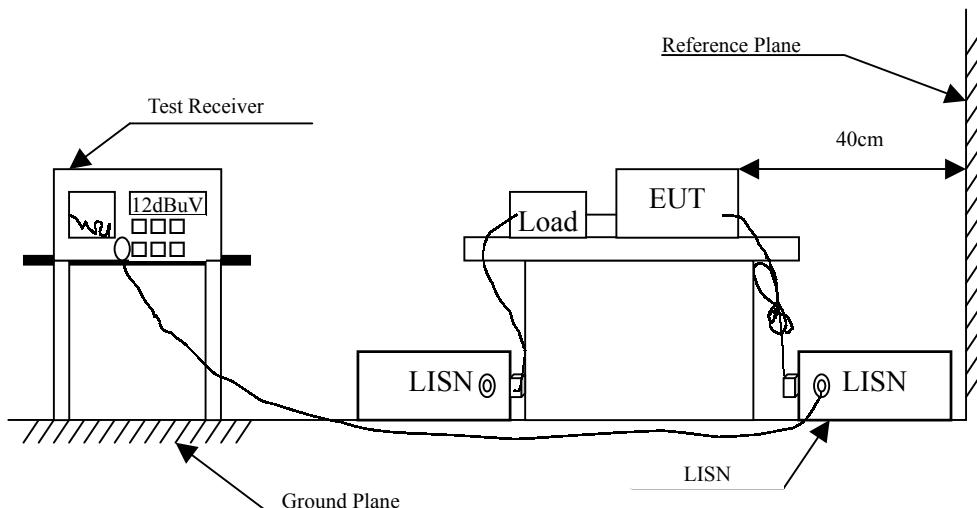
2.1. Test Equipment List

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2001	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2001	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2001	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	N/A	
5	No.2 Shielded Room			N/A	

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Paragraph 15.207 (dBuV)		
Frequency MHz	Limits	
	uV	dBuV
0.45 - 30	250	48.0

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:1992 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.45MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Test Result of Conducted Emission

Product : Wireless LAN PC Card
 Test Item : Conducted Emission Test
 Test Mode : Transmit

Frequency	Cable Loss	LISN Factor	Reading Level	Emission Level	Limits
MHz	dB	dB	dBuV	dBuV	dBuV

Line 1

Quasi-Peak:

0.584	0.07	0.23	23.23	23.53	48.00
1.345	0.12	0.31	20.93	21.36	48.00
2.045	0.14	0.35	21.81	22.30	48.00
*3.564	0.18	0.40	26.09	26.67	48.00
18.068	0.34	0.55	24.03	24.93	48.00
23.087	0.37	0.58	21.45	22.40	48.00

Line 2

Quasi-Peak:

0.525	0.07	0.22	22.15	22.43	48.00
1.521	0.13	0.32	21.27	21.71	48.00
2.689	0.16	0.37	24.09	24.62	48.00
*3.564	0.18	0.40	28.09	28.67	48.00
18.162	0.34	0.55	23.51	24.41	48.00
25.310	0.38	0.58	20.73	21.69	48.00

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Emission Level = Reading Level + LISN Factor + Cable loss

3. Peak Power Output

3.1. Test Equipment

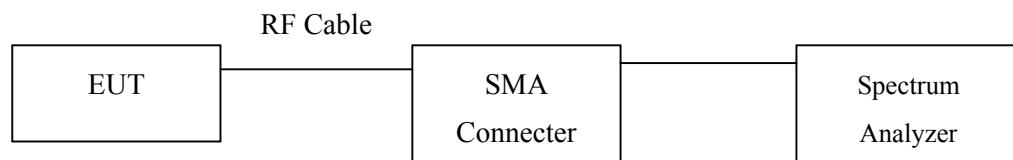
The following test equipments are used during the radiated emission tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Spectrum Analyzer	Advantest	R3272 / 72421194	May, 2001

Note: 1. All equipment upon which need to calibrated are with calibration period of 1 year.
2. Mark "X" test instruments are used to measure the final test results.

3.2. Test Setup

Conduction Power Measurement



3.3. Test Condition

Standard Temperature and Humidity, Standard Test Voltage

3.4. Minimum Standard

The maximum peak power shall be less 1 Watt.

3.5. Test Result of Peak Power Output

Product : Wireless LAN PC Card
Test Item : Peak Power Output Data
Test Site : No.1 OATS
Test Mode : Transmit

Data Speed: 1Mbps

Channel No.	Frequency (MHz)	Measurement	Required Limit	Result
1	2412	16.61 dBm	1Watt= 30 dBm	Pass
6	2437	16.85 dBm	1Watt= 30 dBm	Pass
11	2462	16.09 dBm	1Watt= 30 dBm	Pass

Data Speed: 11Mbps

Channel No.	Frequency (MHz)	Measurement	Required Limit	Result
1	2412	16.54 dBm	1Watt= 30 dBm	Pass
6	2437	16.86 dBm	1Watt= 30 dBm	Pass
11	2462	15.00 dBm	1Watt= 30 dBm	Pass

4. RF Exposure Evaluation

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

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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

F= Frequency in MHz

4.1. Friis Formula

Friis transmission formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

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

4.2. EUT Operation condition

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

4.3. Test Result of RF Exposure Evaluation

Product : Wireless LAN PC Card
Test Item : RF Exposure Evaluation Data
Test Site : No.1 OATS
Test Mode : Transmit

4.3.1 Antenna Gain

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1.6dBi or 1.45in linear scale.

4.3.2 Output Power Into Antenna & RF Exposure Evaluation Distance

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Minimum Allowable Distance ® From Skin(cm)
1 (1Mbps)	2412	16.61	1.909393
1 (11Mbps)	2412	16.54	1.894067
6 (1Mbps)	2437	16.85	1.962887
6 (11Mbps)	2437	16.86	1.965148
11 (1Mbps)	2462	16.09	1.798437
11 (11Mbps)	2462	15.00	1.586336

The distance r (4th column) calculated from the Friis transmission formula is far shorter than 20 cm separation requirement. So, RF exposure limit warning or SAR test are not required.

5. Radiated Emission

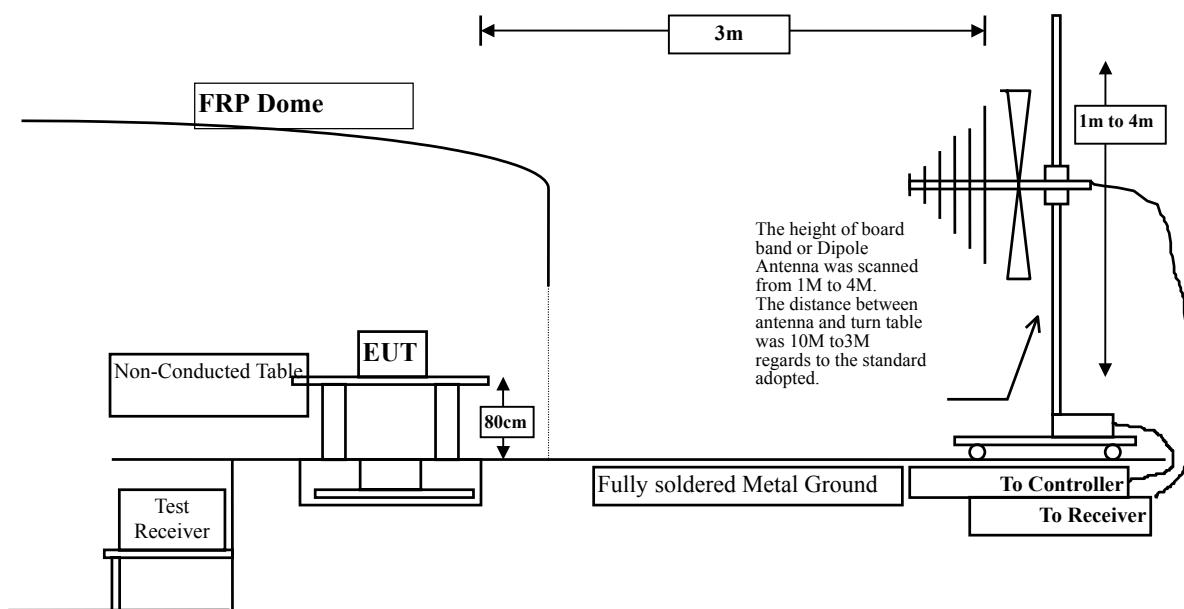
5.1. Test Equipment

The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 1	X	Test Receiver	R & S	ESCS 30 / 825442/14	May, 2001
	X	Spectrum Analyzer	Advantest	R3261C / 71720140	May, 2001
	X	Pre-Amplifier	HP	8447D/3307A01812	May, 2001
	X	Bilog Antenna	Chase	CBL6112B / 12452	Sep., 2001
	X	Horn Antenna	EM	EM6917 / 103325	May, 2001
Site # 2		Test Receiver	R & S	ESCS 30 / 825442/17	May, 2001
		Spectrum Analyzer	Advantest	R3261C / 71720609	May, 2001
		Pre-Amplifier	HP	8447D/3307A01814	May, 2001
		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2001
		Horn Antenna	EM	EM6917 / 103325	May, 2001

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.
 2. Mark "X" test instruments are used to measure the final test results.

5.2. Test Setup



Spurious Emissions
(Band Edge Antenna Radiated)

5.3. Test Condition

Standard Temperature and Humidity, Standard Test Voltage

5.4. Limits**➤ General Radiated Emission Limits**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

Frequency MHz	15.209 Limits (dBuV/m @3m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

- Remarks :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

5.5. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:1992 on radiated measurement.

The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field strength of harmonics measurement.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30)is 120 kHz, above 1GHz are 1 MHz.

The frequency range from 30MHz to 10th harmonics is checked.

5.6. Test Result of Radiated Emission

Product : Wireless LAN PC Card
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Transmit Channel 1(1Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading Level dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
Peak Detector (Horizontal)							
4824.450	6.27	33.50	0.00	17.84	57.61	16.39	74.00
7235.549	8.32	36.24	0.00	17.56	<62.12	11.88	74.00
9647.549	10.18	37.43	0.00	17.59	<65.20	8.80	74.00
Average Detector (Horizontal)							
4824.450	6.27	33.50	0.00	6.34	46.11	7.89	54.00
7235.549	8.32	36.24	0.00	5.01	<49.57	4.43	54.00
9647.549	10.18	37.43	0.00	5.21	<52.82	1.18	54.00
Peak Detector (Vertical)							
4824.150	6.27	33.50	0.00	19.79	59.56	14.44	74.00
7236.050	8.32	36.24	0.00	17.68	<62.24	11.76	74.00
9647.849	10.18	37.43	0.00	17.52	<65.13	8.87	74.00
Average Detector (Vertical)							
4824.150	6.27	33.50	0.00	6.98	46.75	7.25	54.00
7236.050	8.32	36.24	0.00	5.58	<50.14	3.86	54.00
9647.849	10.18	37.43	0.00	5.12	<52.73	1.27	54.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Emission Level = Reading Level + Probe Factor + Cable loss.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Wireless LAN PC Card
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Transmit Channel 6(1Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading Level dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	--------------------------	-----------------------------	--------------	-----------------

Peak Detector (Horizontal)

4837.749	6.29	33.52	0.00	18.67	58.48	15.52	74.00
7311.250	8.38	36.31	0.00	16.72	<61.40	12.60	74.00
9747.649	10.25	37.45	0.00	16.48	<64.18	9.82	74.00

Average Detector (Horizontal)

4873.749	6.32	33.56	0.00	6.26	46.14	7.86	54.00
7311.250	8.38	36.31	0.00	5.09	<49.77	4.23	54.00
9747.649	10.25	37.45	0.00	5.28	<52.98	1.02	54.00

Peak Detector (Vertical)

4874.350	6.32	33.56	0.00	17.91	57.79	16.21	74.00
7311.450	8.38	36.31	0.00	16.34	<61.02	12.98	74.00
9748.250	10.25	37.45	0.00	17.04	<64.74	9.26	74.00

Average Detector (Vertical)

4874.350	6.32	33.56	0.00	6.28	46.16	7.84	54.00
7311.450	8.38	36.31	0.00	5.11	<49.79	4.21	54.00
9748.250	10.25	37.45	0.00	5.16	<52.86	1.14	54.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Emission Level = Reading Level + Probe Factor + Cable loss.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Wireless LAN PC Card
Test Item : Harmonic Radiated Emission Data
Test Mode : Transmit Channel 11(1Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	-----------------	-----------------------------	--------------	-----------------

Peak Detector (Horizontal)

4923.649	6.37	33.62	0.00	17.91	57.90	16.10	74.00
7385.749	8.45	36.39	0.00	16.43	<61.27	12.73	74.00
9848.450	10.33	37.47	0.00	17.55	<65.35	8.65	74.00

Average Detector (Horizontal)

4923.649	6.37	33.62	0.00	6.39	46.38	7.62	54.00
7385.749	8.45	36.39	0.00	5.19	<50.03	3.97	54.00
9848.450	10.33	37.47	0.00	5.14	<52.94	1.06	54.00

Peak Detector (Vertical)

4923.849	6.37	33.62	0.00	17.90	57.89	16.11	74.00
7386.250	8.45	36.39	0.00	17.47	<62.31	11.69	74.00
9848.250	10.33	37.47	0.00	17.33	<65.13	8.87	74.00

Average Detector (Vertical)

4923.849	6.37	33.62	0.00	6.46	46.45	7.55	54.00
7386.250	8.45	36.39	0.00	5.25	<50.09	3.91	54.00
9848.250	10.33	37.47	0.00	5.11	<52.91	1.09	54.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Emission Level = Reading Level + Probe Factor + Cable loss.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Wireless LAN PC Card
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Transmit Channel 1(11Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
Peak Detector (Horizontal)							
4824.450	6.27	33.50	0.00	17.50	57.27	16.73	74.00
7235.549	8.32	36.24	0.00	16.75	<61.31	12.69	74.00
9648.350	10.18	37.43	0.00	16.12	<63.73	10.27	74.00
Average Detector (Horizontal)							
4824.450	6.27	33.50	0.00	6.42	46.19	7.81	54.00
7235.549	8.32	36.24	0.00	4.95	<49.51	4.49	54.00
9648.350	10.18	37.43	0.00	5.19	<52.80	1.20	54.00
Peak Detector (Vertical)							
4824.551	6.27	33.50	0.00	18.67	58.44	15.56	74.00
7236.350	8.32	36.24	0.00	17.31	<61.87	12.13	74.00
9647.749	10.18	37.43	0.00	15.94	<63.55	10.45	74.00
Average Detector (Vertical)							
4824.551	6.27	33.50	0.00	6.37	46.14	7.86	54.00
7236.350	8.32	36.24	0.00	5.05	<49.61	4.39	54.00
9647.749	10.18	37.43	0.00	5.25	<52.86	1.14	54.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Emission Level = Reading Level + Probe Factor + Cable loss.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Wireless LAN PC Card
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Transmit Channel 6(11Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
Peak Detector (Horizontal)							
4874.851	6.32	33.56	0.00	19.20	59.08	14.92	74.00
7310.749	8.38	36.31	0.00	16.34	<61.02	12.98	74.00
9748.250	10.25	37.45	0.00	17.20	<64.90	9.10	74.00
Average Detector (Horizontal)							
4874.851	6.32	33.56	0.00	6.26	46.14	7.86	54.00
7310.749	8.38	36.31	0.00	5.10	<49.78	4.22	54.00
9748.250	10.25	37.45	0.00	5.22	<52.92	1.08	54.00
Peak Detector (Vertical)							
4874.250	6.32	33.56	0.00	17.88	57.76	16.24	74.00
7311.150	8.38	36.31	0.00	16.98	<61.66	12.34	74.00
9747.448	10.25	37.45	0.00	17.61	<65.31	8.69	74.00
Average Detector (Vertical)							
4874.250	6.32	33.56	0.00	6.50	46.38	7.62	54.00
7311.150	8.38	36.31	0.00	5.15	<49.83	4.17	54.00
9747.448	10.25	37.45	0.00	5.28	<52.98	1.02	54.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Emission Level = Reading Level + Probe Factor + Cable loss.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Wireless LAN PC Card
 Test Item : Harmonic Radiated Emission Data
 Test Mode : Transmit Channel 11(11Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
Peak Detector (Horizontal)							
4924.350	6.37	33.62	0.00	18.03	58.02	15.98	74.00
7386.250	8.45	36.39	0.00	17.86	<62.70	11.30	74.00
9848.370	10.33	37.47	0.00	18.28	<66.08	7.92	74.00
Average Detector (Horizontal)							
4924.350	6.37	33.62	0.00	6.34	46.33	7.67	54.00
7386.250	8.45	36.39	0.00	5.15	<49.99	4.01	54.00
9848.370	10.33	37.47	0.00	5.10	<52.90	1.10	54.00
Peak Detector (Vertical)							
4924.150	6.37	33.62	0.00	18.51	58.50	15.50	74.00
7385.849	8.45	36.39	0.00	16.25	<61.09	12.91	74.00
9848.350	10.33	37.47	0.00	16.98	<64.78	9.22	74.00
Average Detector (Vertical)							
4924.150	6.37	33.62	0.00	6.28	46.27	7.73	54.00
7385.849	8.45	36.39	0.00	5.20	<50.04	3.96	54.00
9848.350	10.33	37.47	0.00	5.20	<53.00	1.00	54.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Emission Level = Reading Level + Probe Factor + Cable loss.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Wireless LAN PC Card
 Test Item : General Radiated Emission Data
 Test Mode : Transmit Channel 1(1Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading Level dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	--------------------------	-----------------------------	--------------	-----------------

Horizontal:

54.250	1.12	7.38	26.86	54.60	36.24	3.76	40.00
153.190	1.52	14.17	26.90	50.80	39.59	3.91	43.50
175.500	1.61	13.13	26.90	51.20	39.04	4.46	43.50
*199.750	1.71	12.00	26.91	54.60	41.40	2.10	43.50
721.610	3.86	20.90	26.29	45.40	43.87	2.13	46.00
755.560	4.00	21.38	26.23	43.00	42.14	3.86	46.00

Vertical:

135.730	1.45	12.47	26.89	49.00	36.03	7.47	43.50
456.800	2.77	16.30	26.70	48.80	41.17	4.83	46.00
709.970	3.81	20.75	26.31	41.40	39.65	6.35	46.00
*723.550	3.86	20.93	26.28	43.60	42.11	3.89	46.00
767.200	4.04	21.54	26.22	42.60	41.97	4.03	46.00
808.910	4.22	22.11	26.15	39.20	39.38	6.62	46.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ * ”, means this data is the worst emission level- PreAMP.1.
3. Emission Level = Reading Level + Probe Factor + Cable loss. - PreAMP.

Product : Wireless LAN PC Card
 Test Item : General Radiated Emission Data
 Test Mode : Transmit Channel 6(1Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	-----------------	-----------------------------	--------------	-----------------

Horizontal:

199.750	1.71	12.00	26.91	54.60	41.40	2.10	43.50
*722.580	3.86	20.91	26.29	45.60	44.09	1.91	46.00
766.230	4.04	21.53	26.22	43.20	42.55	3.45	46.00
809.880	4.22	22.13	26.15	42.60	42.80	3.20	46.00
854.500	4.40	22.71	26.08	39.20	40.24	5.76	46.00
898.150	4.58	23.28	26.01	39.20	41.05	4.95	46.00

Vertical:

*55.220	1.12	7.35	26.86	54.60	36.21	3.79	40.00
456.800	2.77	16.30	26.70	49.20	41.57	4.43	46.00
721.610	3.86	20.90	26.29	43.60	42.07	3.93	46.00
767.200	4.04	21.54	26.22	42.40	41.77	4.23	46.00
896.210	4.57	23.25	26.01	39.00	40.81	5.19	46.00
940.830	4.76	23.50	25.94	37.60	39.92	6.08	46.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ * ”, means this data is the worst emission level- PreAMP.
3. Emission Level = Reading Level + Probe Factor + Cable loss. - PreAMP.

Product : Wireless LAN PC Card
 Test Item : General Radiated Emission Data
 Test Mode : Transmit Channel 11(1Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading Level dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	--------------------------	-----------------------------	--------------	-----------------

Horizontal:

54.250	1.12	7.38	26.86	53.80	35.44	4.56	40.00
*199.750	1.71	12.00	26.91	55.00	41.80	1.70	43.50
457.770	2.77	16.32	26.70	51.60	43.99	2.01	46.00
721.610	3.86	20.90	26.29	44.80	43.27	2.73	46.00
767.200	4.04	21.54	26.22	43.60	42.97	3.03	46.00
809.880	4.22	22.13	26.15	42.40	42.60	3.40	46.00

Vertical:

*59.100	1.14	7.24	26.86	55.40	36.91	3.09	40.00
456.800	2.77	16.30	26.70	49.80	42.17	3.83	46.00
586.780	3.30	18.60	26.50	44.00	39.41	6.59	46.00
722.580	3.86	20.91	26.29	44.00	42.49	3.51	46.00
767.200	4.04	21.54	26.22	42.60	41.97	4.03	46.00
810.850	4.22	22.14	26.15	40.00	40.22	5.78	46.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ * ”, means this data is the worst emission level
3. Emission Level = Reading Level + Probe Factor + Cable loss. - PreAMP.

Product : Wireless LAN PC Card
 Test Item : General Radiated Emission Data
 Test Mode : Transmit Channel 1(11Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading Level dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	--------------------------	-----------------------------	--------------	-----------------

Horizontal:

153.190	1.52	14.17	26.90	50.80	39.59	3.91	43.50
199.750	1.71	12.00	26.91	55.40	41.20	2.30	43.50
*458.740	2.78	16.35	26.70	52.60	44.02	1.98	46.00
721.610	3.86	20.90	26.29	45.00	43.47	2.53	46.00
767.200	4.04	21.54	26.22	42.80	42.17	3.83	46.00
809.880	4.22	22.13	26.15	40.60	40.80	5.20	46.00

Vertical:

*456.800	2.77	16.30	26.70	49.80	42.17	3.83	46.00
710.940	3.81	20.76	26.30	41.00	39.27	6.73	46.00
723.550	3.86	20.93	26.28	43.00	41.51	4.49	46.00
767.200	4.04	21.54	26.22	41.40	40.77	5.23	46.00
809.880	4.22	22.13	26.15	40.60	40.80	5.20	46.00
896.210	4.57	23.25	26.01	38.00	39.81	6.19	46.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “*”, means this data is the worst emission level- PreAMP.
3. Emission Level = Reading Level + Probe Factor + Cable loss. - PreAMP.

Product : Wireless LAN PC Card
 Test Item : General Radiated Emission Data
 Test Mode : Transmit Channel 6(11Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	-----------------	-----------------------------	--------------	-----------------

Horizontal:

54.250	1.12	7.38	26.86	52.80	34.44	5.56	40.00
154.160	1.53	14.12	26.90	51.00	39.75	3.75	43.50
*200.720	1.72	12.01	26.91	55.40	42.21	1.29	43.50
721.610	3.86	20.90	26.29	45.60	44.07	1.93	46.00
766.230	4.04	21.53	26.22	44.40	43.75	2.25	46.00
810.850	4.22	22.14	26.15	42.00	42.22	3.78	46.00

Vertical:

*54.250	1.12	7.38	26.86	57.40	38.04	1.96	40.00
456.800	2.77	16.30	26.70	49.00	41.37	4.63	46.00
722.580	3.86	20.91	26.29	44.00	42.49	3.51	46.00
767.200	4.04	21.54	26.22	42.80	42.17	3.83	46.00
809.880	4.22	22.13	26.15	41.20	41.40	4.60	46.00
897.180	4.58	23.27	26.01	39.40	41.23	4.77	46.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ * ”, means this data is the worst emission level- PreAMP.
3. Emission Level = Reading Level + Probe Factor + Cable loss. - PreAMP.

Product : Wireless LAN PC Card
 Test Item : General Radiated Emission Data
 Test Mode : Transmit Channel 11(11Mbps)

Freq. MHz	Cable Loss dB	Probe Factor dB/m	PreAMP dB	Reading dBuV	Emission Level dBuV/m	Margin dB	Limit dBuV/m
--------------	---------------------	-------------------------	--------------	-----------------	-----------------------------	--------------	-----------------

Horizontal:

154.160	1.53	14.12	26.90	51.80	40.55	2.95	43.50
*201.690	1.72	12.02	26.91	55.00	41.82	1.68	43.50
457.770	2.77	16.32	26.70	51.20	43.59	2.41	46.00
722.580	3.86	20.91	26.29	45.80	44.29	1.71	46.00
767.200	4.04	21.54	26.22	43.20	42.57	3.43	46.00
808.910	4.22	22.11	26.15	42.60	42.78	3.22	46.00

Vertical:

*56.190	1.12	7.32	26.86	56.40	37.99	2.01	40.00
455.830	2.76	16.28	26.70	48.80	41.14	4.86	46.00
722.580	3.86	20.91	26.29	44.20	42.69	3.31	46.00
767.200	4.04	21.54	26.22	43.00	42.37	3.63	46.00
809.880	4.22	22.13	26.15	40.60	40.80	5.20	46.00
897.180	4.58	23.27	26.01	38.20	40.03	5.97	46.00

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. “ * ”, means this data is the worst emission level- PreAMP.
3. Emission Level = Reading Level + Probe Factor + Cable loss. - PreAMP.

5.7. Test Result of Band Edge

Product : Wireless LAN PC Card
 Test Item : Band Edge Data
 Test Site : No.1 OATS
 Test Mode : Channel 1 (1Mbps)

RF Radiated Measurement:

Channel No.	Frequency (MHz)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Result
1(Horizontal)	2397.17	43.55	41.69	54	Pass
1 (Vertical)	2397.27	54.44	52.58	54	Pass

Figure Channel 1: 1Mbps(Horizontal)

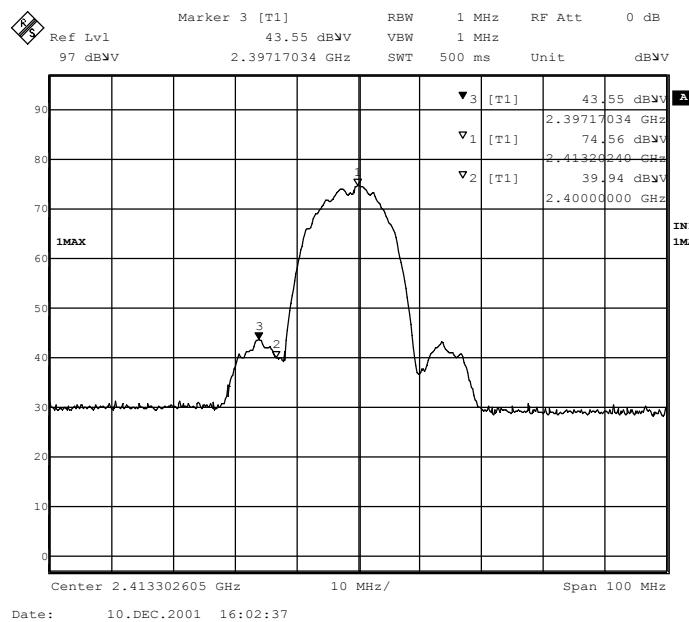
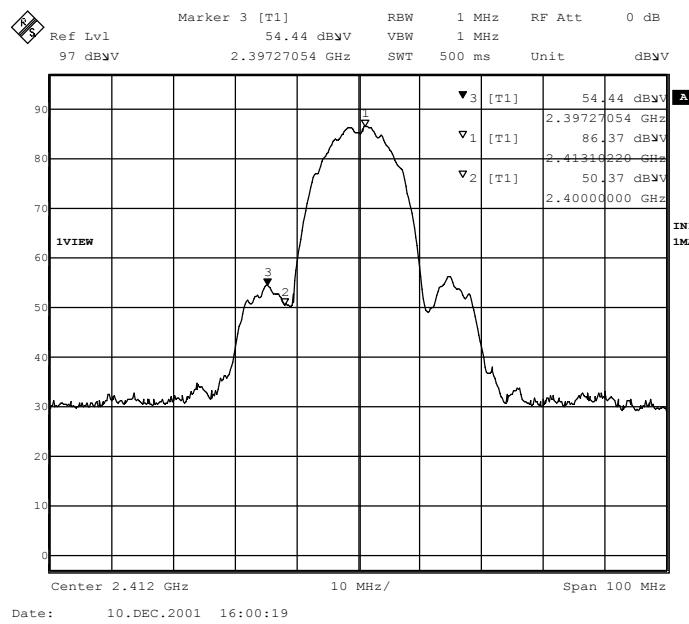


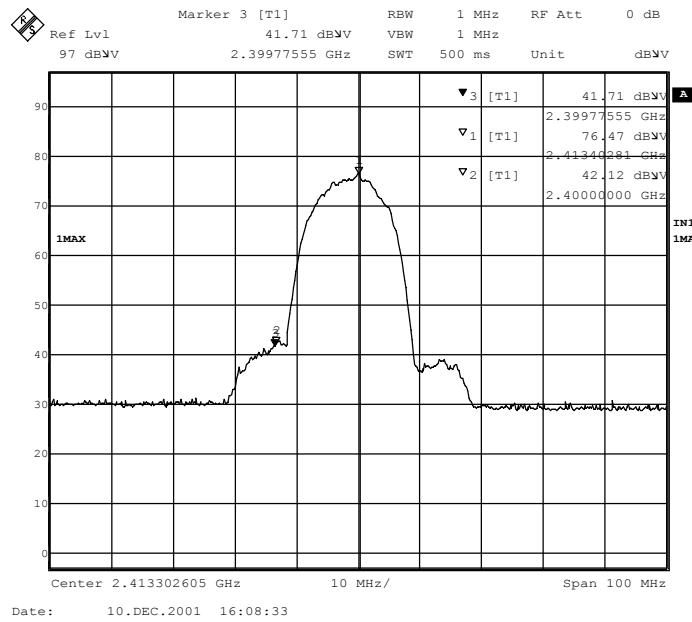
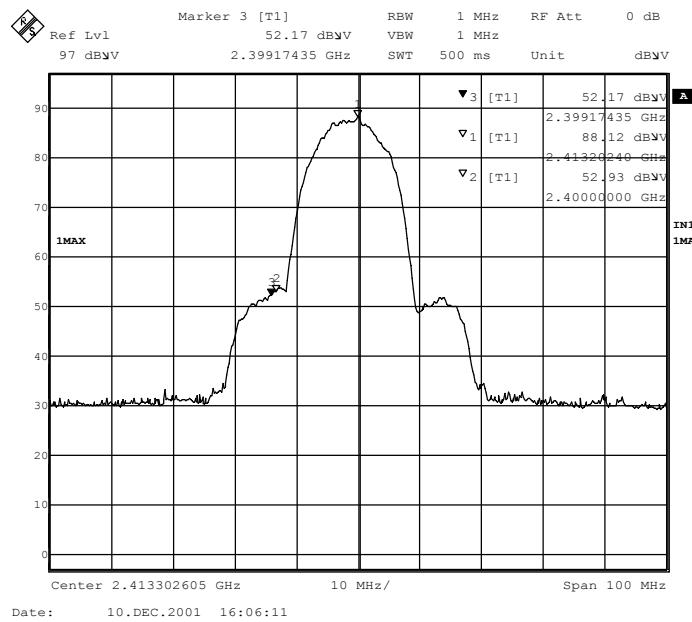
Figure Channel 1:1Mbps(Vertical)



Product : Wireless LAN PC Card
 Test Item : Band Edge Data
 Test Site : No.1 OATS
 Test Mode : Channel 1 (11Mbps)

RF Radiated Measurement:

Channel No.	Frequency (MHz)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Result
1(Horizontal)	2399.755	41.71	39.85	54	Pass
1 (Vertical)	2399.174	52.17	50.31	54	Pass

Figure Channel 1: 11Mbps(Horizontal)**Figure Channel 1:11Mbps(Vertical)**

Product : Wireless LAN PC Card

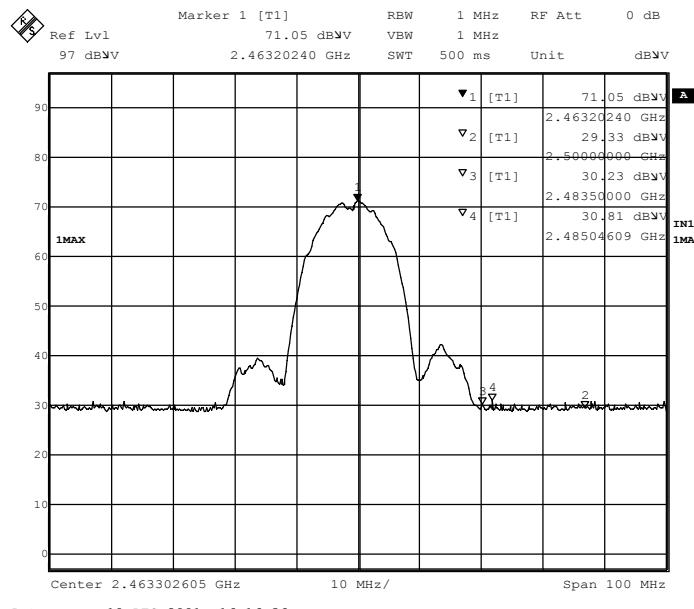
Test Item : Band Edge Data

Test Site : No.1 OATS

Test Mode : Channel 11

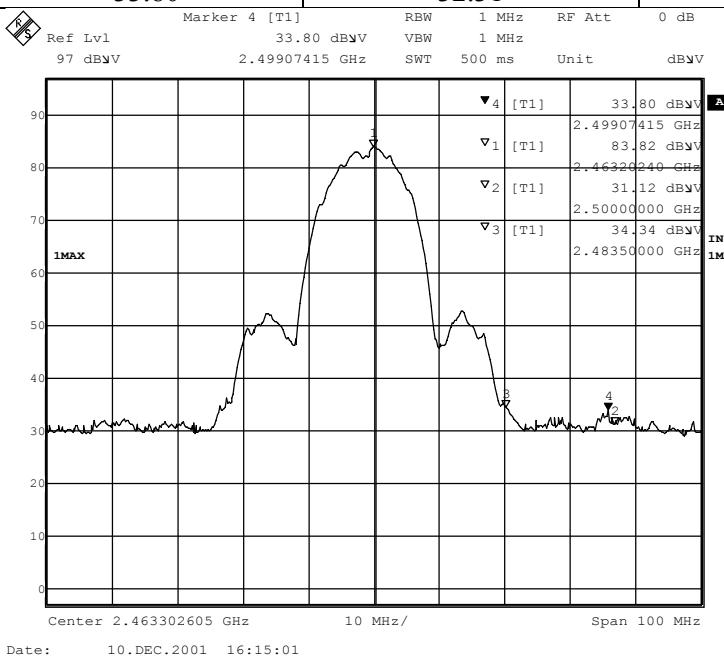
Band Edge-1 Mbps (Horizontal)

Frequency (MHz)	Reading (dBuV)	Measure (dBuV/m)	Result
2485.046	30.81	29.26	Pass



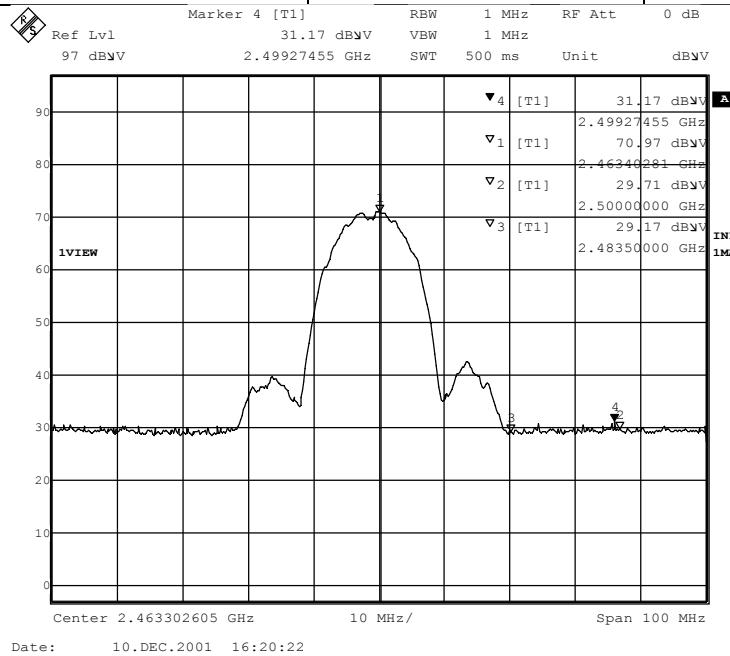
Band Edge-1 Mbps (Vertical)

Frequency (MHz)	Reading (dBuV)	Measure (dBuV/m)	Result
2499.074	33.80	32.31	Pass

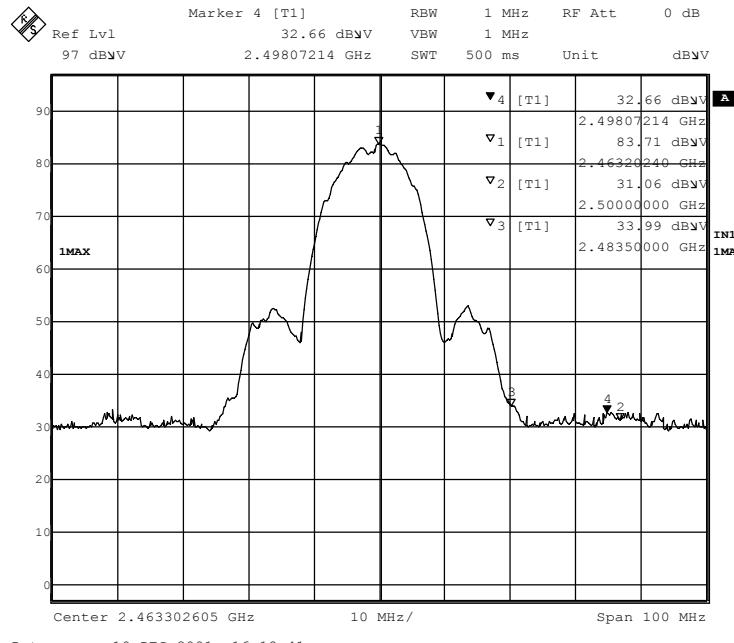


Band Edge-11 Mbps (Horizontal)

Frequency (MHz).	Reading (dBuV)	Measure (dBuV/m)	Result
2499.274	31.17	29.68	Pass

**Band Edge-11 Mbps (Vertical)**

Frequency (MHz).	Reading (dBuV)	Measure (dBuV/m)	Result
2498.072	32.66	31.17	Pass



6. Occupied Bandwidth

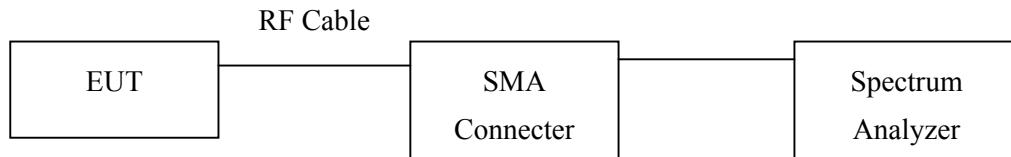
6.1. Test Equipment

The following test equipments are used during the radiated emission tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Spectrum	Advantest	R3261C / 71720140	May, 2001

Note: 1. All equipment upon which need to calibrated are with calibration period of 1 year.
2. Mark "X" test instruments are used to measure the final test results.

6.2. Test Setup



6.3. Test Condition

Standard Temperature and Humidity, Standard Test Voltage

6.4. Standard Requirement

The minimum bandwidth shall be at least 500kHz.

6.5. Test Result of Occupied Bandwidth

Product : Wireless LAN PC Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.1 OATS
 Test Mode : Channel 1

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (1Mbps)	2412	11300	>500	Pass
1 (11Mbps)	2412	11400	>500	Pass

Figure Channel 1: 1Mbps

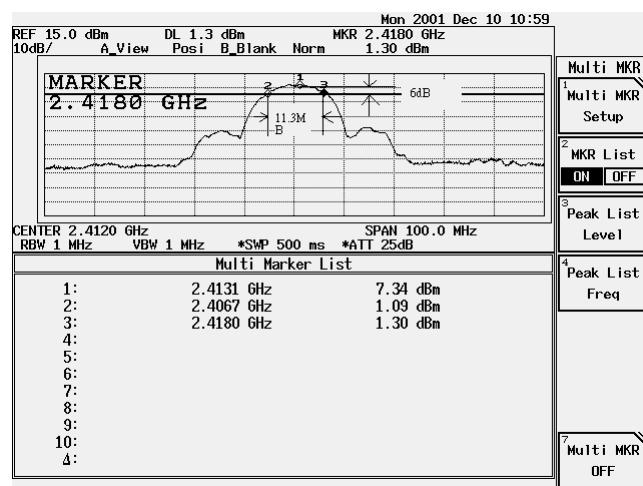
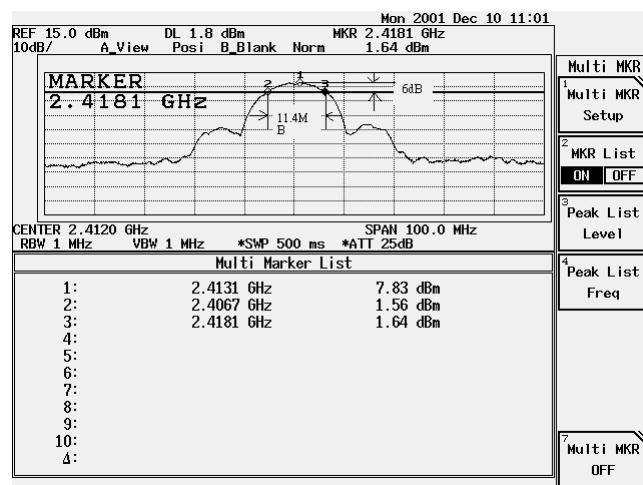


Figure Channel 1: 11Mbps



Product : Wireless LAN PC Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.1 OATS
 Test Mode : Channel 6

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (1Mbps)	2437	11700	>500	Pass
6 (11Mbps)	2437	11300	>500	Pass

Figure Channel 6: 1Mbps

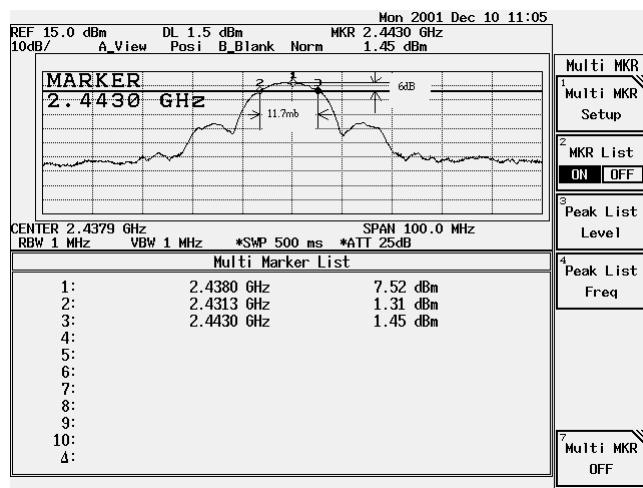
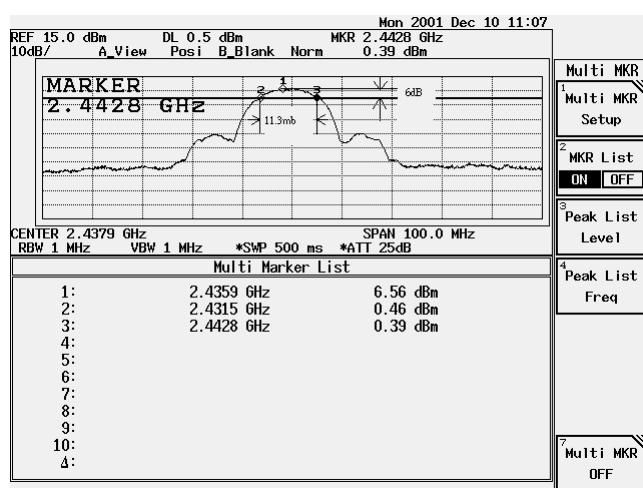


Figure Channel 6: 11Mbps



Product : Wireless LAN PC Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.1 OATS
 Test Mode : Channel 11

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (1Mbps)	2462	11400	>500	Pass
11 (11Mbps)	2462	11300	>500	Pass

Figure Channel 11: 1Mbps

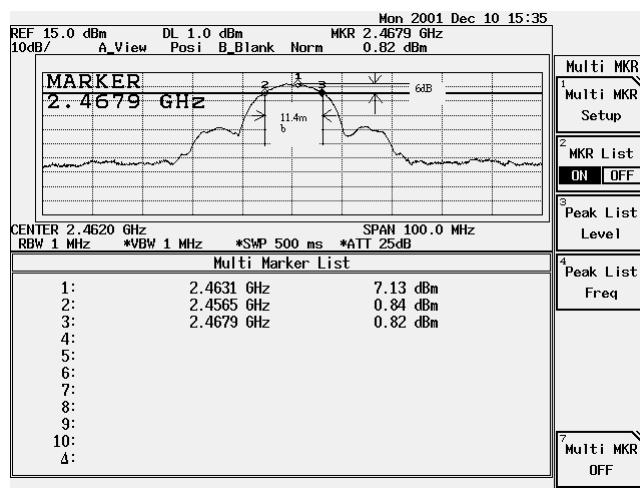
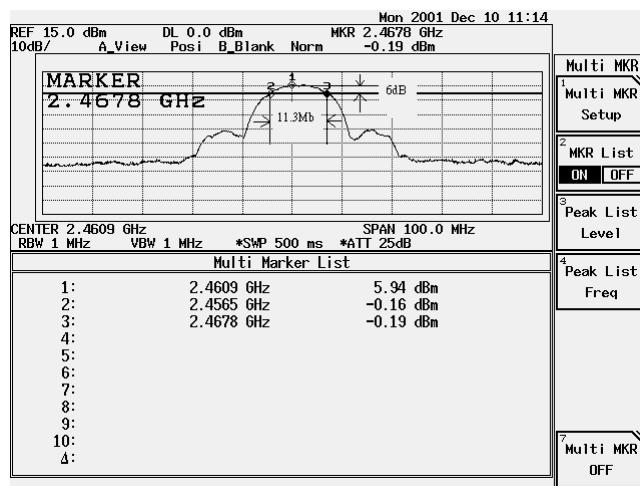


Figure Channel 11: 11Mbps



7. Transmitter Power Density

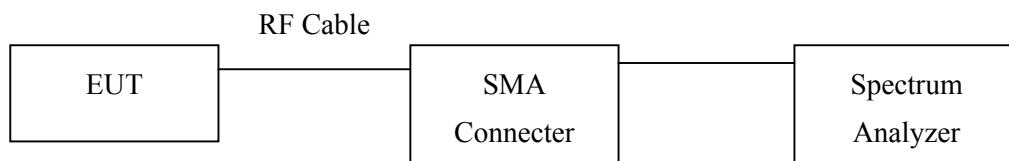
7.1. Test Equipment

The following test equipments are used during the radiated emission tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Spectrum	Advantest	R3272 / 72421194	May, 2001

Note: 1. All equipment upon which need to calibrated are with calibration period of 1 year.
2. Mark "X" test instruments are used to measure the final test results.

7.2. Test Setup



7.3. Test Condition

Standard Temperature and Humidity, Standard Test Voltage

7.4. Standard Requirement

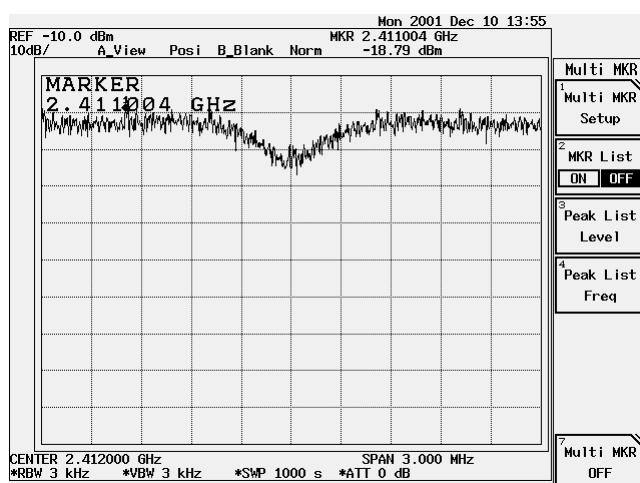
The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

7.5. Test Result of Transmitter Power Density

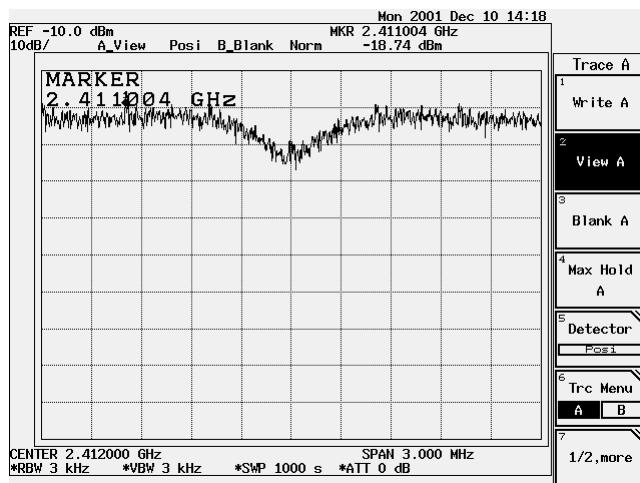
Product : Wireless LAN PC Card
 Test Item : Transmitter Power Density Data
 Test Site : No.1 OATS
 Test Mode : Channel 1

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
1 (1Mbps)	2411.004	-18.79	< 8dBm	Pass
1 (11Mbps)	2411.004	-18.74	< 8dBm	Pass

1Mbps



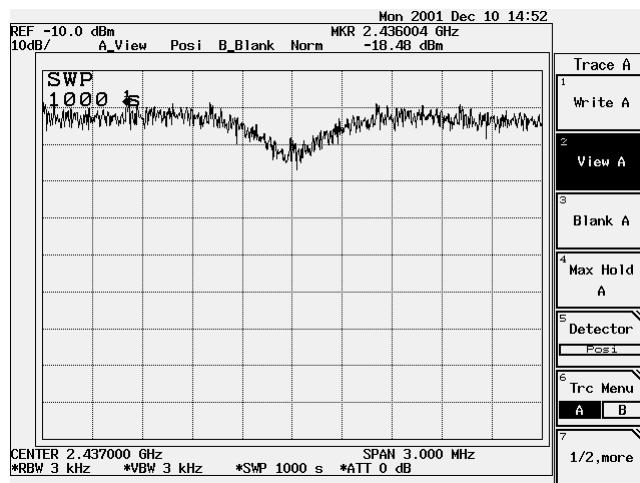
11Mbps



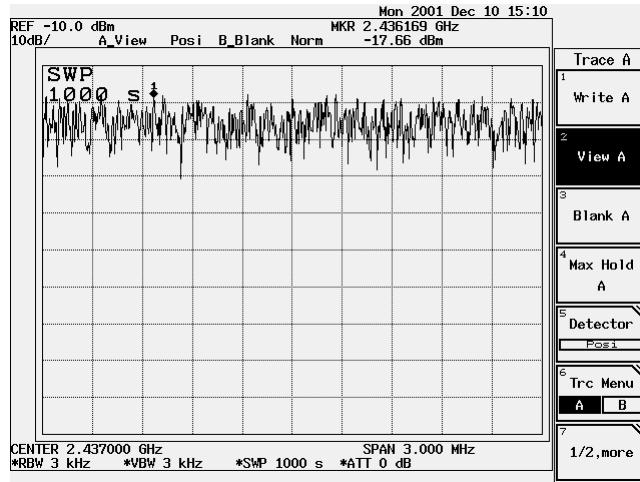
Product : Wireless LAN PC Card
 Test Item : Transmitter Power Density Data
 Test Site : No.1 OATS
 Test Mode : Channel 6

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (1Mbps)	2436.004	-18.48	< 8dBm	Pass
6 (11Mbps)	2436.169	-17.66	< 8dBm	Pass

1Mbps



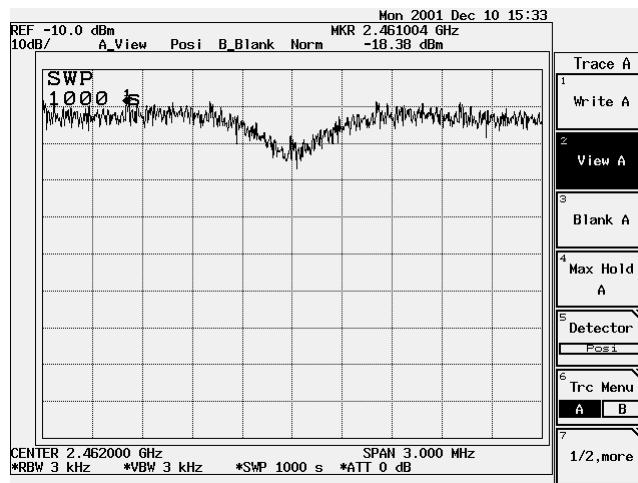
11Mbps



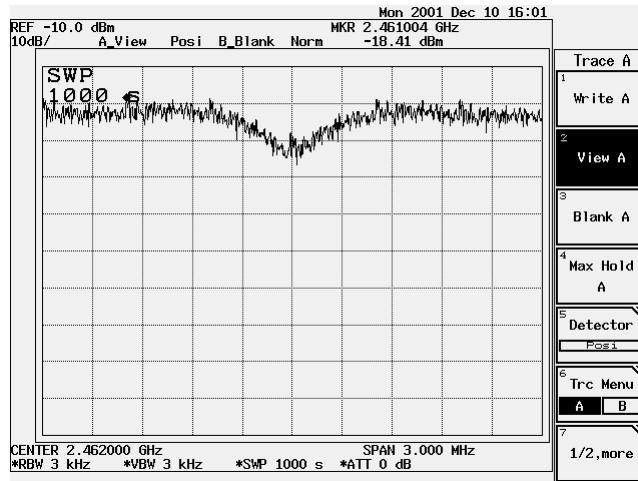
Product : Wireless LAN PC Card
 Test Item : Transmitter Power Density Data
 Test Site : No.1 OATS
 Test Mode : Channel 11

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (1Mbps)	2461.004	-18.38	< 8dBm	Pass
11 (11Mbps)	2461.004	-18.41	< 8dBm	Pass

1Mbps



11Mbps



8. Processing Gain**8.1. Test Condition**

Standard Temperature and Humidity, Standard Test Voltage

8.2. Minimum Standard

The processing gain shall be at least 10 dB.

8.3. Test Procedure & Result

About the test procedure and result of processing gain are shown as below:

Testing for compliance with FCC rules 15-247e

Scope

This report presents the test procedure, test configuration and test data associated with a FCC Part 15.247 (e) Jamming Margin test for the indirect measurement of processing gain.

Applicable Reference Documents.

1. “Operation within the bands 902-928 MHz, 2400-2483.5, and 5725-5850 MHz” ***Title 47 Part 15 section 247 (e) Code of Federal Regulations. (47 CFR 15.247).***
2. “Report and Order: Amendment of Parts 2 and 15 of the Commission’s Rules Regarding Spread Spectrum Transmitters. Appendix C: ‘Guidance on Measurements for Direct Sequence Spread Spectrum Systems’ **FCC 97-114. ET Docket No. 96-8, RM-8435, RM-8608, RM-8609.**
3. “HFA3861A Direct Sequence Spread Spectrum Baseband Processor” ***Harris Corporation Semiconductor Sector Preliminary Data Sheet***, Melbourne FL, July 1999.
4. “M-ary Orthogonal Keying BER Curve”,

Test Background and Procedure.

According to FCC regulations [1], a direct sequence spread spectrum system must have a processing gain, G_p of at least 10 dB. Compliance to this requirement can be shown by demonstrating a relative bit-error-ratio (BER) performance improvement (and corresponding signal to noise ratio per symbol improvement of at least 10 dB) between the case where spread spectrum processes (coding, modulation) are engaged relative to the processes being bypassed. In some practical systems, the spread spectrum processing cannot simply be bypassed. In these cases, the processing gain can be indirectly measured by a jamming margin test [2]. In accordance with the new NPRM 99-231, if the vendor has a system with less than 10 chips per symbol, the CW jamming results must be supported by a theoretical explanation of the system processing gain.

Theoretical calculations

The processing gain is related to the jamming margin as follows [2]:

$$G_p = \left(\frac{S}{N} \right)_{\text{output}} + \left(\frac{J}{S} \right) + L_{\text{system}}$$

Where $\text{BER}_{\text{REFERENCE}}$ is the reference bit error ratio with its corresponding, theoretical output signal to noise ratio per symbol, $(S/N)_{\text{output}}$, (J/S) is the jamming margin (jamming signal power relative to desired signal power), and L_{system} are the system implementation losses.

The maximum allowed total system implementation loss is 2 dB.

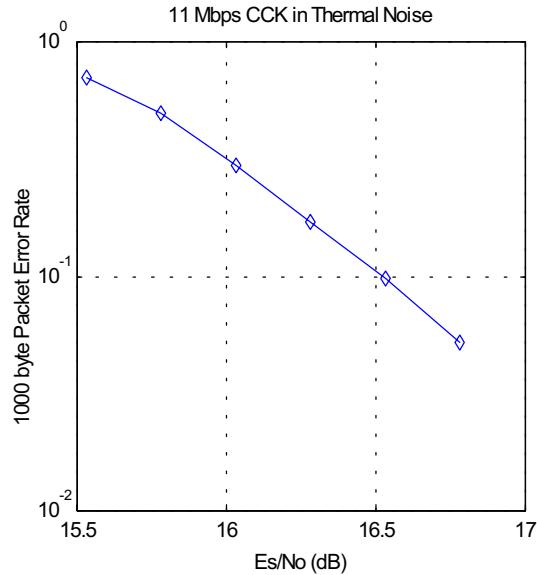
The HFA3861A direct sequence spread spectrum baseband processor uses CCK modulation which is a form of M-ary Orthogonal Keying. The BER performance curve is given by [5]:

“ The probability of error for generalized M-ary Orthogonal signaling using coherent demodulation is given by:

$$P_e = 1 - P_{c1} = 1 - \frac{1}{\sqrt{2\pi}} \int_{-\frac{S_{01}}{N_0}}^{\infty} \left[2(1 - Q\left\{ z + \sqrt{2 \frac{E_b}{\eta}} \right\}) \right]^{\frac{M}{2}-1} \exp\left\{ -\frac{z^2}{2} \right\} dz$$

This integral cannot be solved in closed form, and numerical integration must be used. There are error rate extensions for differential decoding and descrambling that are also to be accounted for. This is done in a MATHCAD environment and is displayed in graphical format below.

1.1 1000 byte PER vs. Es/No



The reference PER is specified as 8%. The corresponding Es/No (signal to noise ratio per symbol) is 16.4 dB. The Es/No required to achieve the desired BER with maximum system implementation losses is 18.4 dB. The minimum processing gain is again, 10 dB, therefore:

$$G_p = \left(\frac{E_s}{N_o} \right)_{output} + \left(\frac{J}{S} \right) + L_{system} = 16.4 dB + 2.0 dB + \left(\frac{J}{S} \right) \geq 10 dB$$

$$G_p = 18.4 dB + \left(\frac{J}{S} \right) \geq 10 dB$$

The minimum jammer to signal ratio is as follows:

$$\left(\frac{J}{S} \right) \geq -8.4 dB$$

For the case of the HFA3861A, the bit rates are 1, 2, 5.5, and 11 Mbps. The corresponding symbol rates are 1, 1, 1.375, and 1.375 MSps. The chip rate is always 11 MCps, so the ratio of chip rate to symbol rate is 11:1 for the 1 and 2 Mbps rates and 8:1 for the 5.5 and 11 Mbps rates. Since the symbol rate to bit rate is less than 10 for the higher rates, we supply the theoretical processing gain calculation for these cases where spread spectrum processing gain with embedded coding gain is utilized. This is reasonable in that they

D-LINK WLAN PC Card radio Jamming Margin Test

cannot be separated in the demodulation process. If a separable FEC coding scheme were used, we would not be comfortable making this assertion.

As can be seen from the curve of figure 1, the Es/N0 is 16.4 dB at the PER of 8%. This PER can be related to a BER of 1e-5 on 1000 byte packets. With 8 bits per symbol, the Eb/N0 is then 7.4 dB or 9 dB less than the Es/N0. It is well known that the Eb/N0 of BPSK is 9.6 dB for 1e-5 BER, so therefore the coding gain of CCK over BPSK is 2.2 dB. We add this to the processing gain of 9 dB to get 11.2 dB overall processing gain for the CW jammer test.

Taking the calculations above, if the $\left(\frac{J}{S}\right) \geq -8.4 \text{ dB}$ then the equipment passes the CW jamming test.

Test Configuration: CW Jamming Margin (15.247) (e)

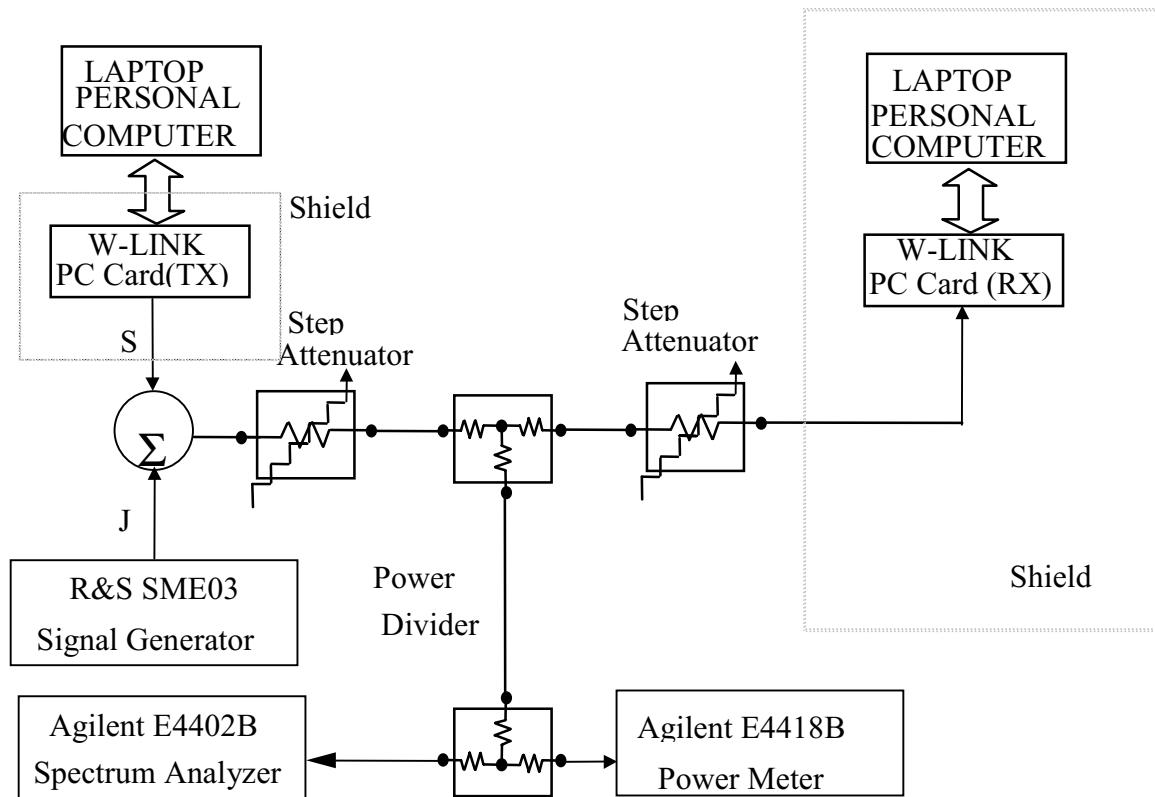
Test Instruments

Manufacturer & Description	Model Number
Agilent Spectrum Analyzer, 9KHz to 3GHz	E4402B
Agilent Power Meter	E4418B
Agilent Power Sensor, -70 to 20dBm	E4412A
Agilent Step Attenuator, 10dB steps, DC to 4GHz	8496A
Agilent Step Attenuator, 1dB steps, DC to 4GHz	8494A
Anaren Power Divider, 2 Way, 2 to 4GHz	40266
ROHDE & SCHWARZ Signal Generator, 5KHz to 3GHz	SME03
Compaq Laptop Computer, Pentium III 700, Windows ME	Presario 1700
Dell Laptop Computer, Pentium III 700, Windows 98	PP01L

Test Environment

25°C, 70%RH.

Test Block Diagram



Test Procedure

Setup the simplex link shown. Perform all independent instrumentation calibrations prior to this procedure. Set operating power levels using fixed and variable attenuators in system to meet the following objectives:

- Signal Power at receiver approximately -60 dBm (above thermal sensitivity such that thermal noise does not cause bit errors).
- Signal Power at power meter (using high sensitivity probe) between -20 and -40 dBm for optimal linearity.
- Use spectrum analyzer to monitor test.

- Ensure that CW Jammer generator RF output is disabled and measure the power at the power meter port using the power meter. This is the relative signal power, S_r .
- Disable Transmitter, and set CW Jammer generator RF output frequency equal to the carrier frequency and enable generator output. Set reference CW Jammer power level at power meter port 8.4 dB below S_r (minimum J/S, or 10 dB processing gain reference level). Note the power level setting on the generator, this is the reference CW Jammer power setting, J_r .
- Disable CW Jammer, re-establish link. PER test should be operating essentially error-free.
- Adjust the CW Jammer level to that which causes 8% PER and verify that the S/J is less than 8.4 dB.
- Repeat step 7 for uniform steps in frequency increments of 50 kHz across the receiver passband with the CW Jammer. In this case the receiver passband is ± 8.5 MHz.

The number of points where the S/J fails to achieve 8.4 dB (is higher than 8.4 dB) is determined and if this is above 20% of the total, the test is failed otherwise it is passed.

The numerical data associated with the following radio channels is tabulated and presented for:

11Mbps:

Channel 1: 2412MHz
Channel 7: 2442MHz
Channel 11: 2462MHz

2Mbps:

Channel 7: 2442MHz

Test Result

11Mbps Channel 1 (2412MHz) Processing Gain							
Gp=(S/N)o+Lsys+(Jr/Sr)							
Frequency	(S/N)o	Sr	Jr	Jr/Sr	Lsys	FER	Gp
(MHz)	(dB)	(dBm)	(dBm)	(dB)	(dB)	(%)	(dB)
2403.50	16.4	-62	-60.4	1.6	2	5.9	20.0
2403.55	16.4	-62	-61.0	1.0	2	7.0	19.4
2403.60	16.4	-62	-61.2	0.8	2	7.8	19.2
2403.65	16.4	-62	-61.6	0.4	2	5.1	18.8
2403.70	16.4	-62	-61.6	0.4	2	8.0	18.8
2403.75	16.4	-62	-61.6	0.4	2	5.5	18.8
2403.80	16.4	-62	-61.6	0.4	2	5.7	18.8
2403.85	16.4	-62	-61.6	0.4	2	6.2	18.8
2403.90	16.4	-62	-61.4	0.6	2	6.3	19.0
2403.95	16.4	-62	-61.3	0.7	2	4.9	19.1
2404.00	16.4	-62	-61.0	1.0	2	6.8	19.4
2404.05	16.4	-62	-60.6	1.4	2	7.4	19.8
2404.10	16.4	-62	-60.9	1.1	2	7.0	19.5
2404.15	16.4	-62	-61.0	1.0	2	6.2	19.4
2404.20	16.4	-62	-60.9	1.1	2	6.8	19.5
2404.25	16.4	-62	-61.1	0.9	2	7.1	19.3
2404.30	16.4	-62	-61.2	0.8	2	8.0	19.2
2404.35	16.4	-62	-61.1	0.9	2	6.2	19.3
2404.40	16.4	-62	-61.3	0.7	2	5.2	19.1
2404.45	16.4	-62	-61.4	0.6	2	7.5	19.0
2404.50	16.4	-62	-61.5	0.5	2	6.7	18.9
2404.55	16.4	-62	-61.8	0.2	2	5.1	18.6
2404.60	16.4	-62	-62.1	-0.1	2	7.2	18.3
2404.65	16.4	-62	-62.3	-0.3	2	5.0	18.1
2404.70	16.4	-62	-62.3	-0.3	2	7.5	18.1
2404.75	16.4	-62	-62.5	-0.5	2	5.0	17.9
2404.80	16.4	-62	-62.4	-0.4	2	7.9	18.0
2404.85	16.4	-62	-62.5	-0.5	2	5.3	17.9
2404.90	16.4	-62	-62.5	-0.5	2	5.2	17.9
2404.95	16.4	-62	-62.3	-0.3	2	7.5	18.1
2405.00	16.4	-62	-62.0	0.0	2	5.9	18.4

D-LINK WLAN PC Card radio Jamming Margin Test

2405.05	16.4	-62	-62.0	0.0	2	6.7	18.4
2405.10	16.4	-62	-61.9	0.1	2	6.7	18.5
2405.15	16.4	-62	-61.9	0.1	2	7.7	18.5
2405.20	16.4	-62	-62.0	0.0	2	6.6	18.4
2405.25	16.4	-62	-62.3	-0.3	2	6.8	18.1
2405.30	16.4	-62	-62.3	-0.3	2	6.9	18.1
2405.35	16.4	-62	-62.2	-0.2	2	8.0	18.2
2405.40	16.4	-62	-62.4	-0.4	2	4.8	18.0
2405.45	16.4	-62	-62.5	-0.5	2	5.7	17.9
2405.50	16.4	-62	-62.7	-0.7	2	6.6	17.7
2405.55	16.4	-62	-63.2	-1.2	2	7.4	17.2
2405.60	16.4	-62	-63.2	-1.2	2	4.8	17.2
2405.65	16.4	-62	-63.5	-1.5	2	5.1	16.9
2405.70	16.4	-62	-63.5	-1.5	2	7.7	16.9
2405.75	16.4	-62	-63.7	-1.7	2	5.0	16.7
2405.80	16.4	-62	-63.7	-1.7	2	6.7	16.7
2405.85	16.4	-62	-63.9	-1.9	2	7.9	16.5
2405.90	16.4	-62	-63.9	-1.9	2	7.5	16.5
2405.95	16.4	-62	-63.8	-1.8	2	5.7	16.6
2406.00	16.4	-62	-63.8	-1.8	2	6.9	16.6
2406.05	16.4	-62	-63.9	-1.9	2	8.0	16.5
2406.10	16.4	-62	-63.8	-1.8	2	7.8	16.6
2406.15	16.4	-62	-63.8	-1.8	2	4.9	16.6
2406.20	16.4	-62	-64.0	-2.0	2	4.7	16.4
2406.25	16.4	-62	-64.1	-2.1	2	7.9	16.3
2406.30	16.4	-62	-64.6	-2.6	2	5.1	15.8
2406.35	16.4	-62	-64.5	-2.5	2	7.1	15.9
2406.40	16.4	-62	-64.9	-2.9	2	4.8	15.5
2406.45	16.4	-62	-64.8	-2.8	2	7.7	15.6
2406.50	16.4	-62	-65.0	-3.0	2	6.6	15.4
2406.55	16.4	-62	-65.2	-3.2	2	5.1	15.2
2406.60	16.4	-62	-65.2	-3.2	2	4.6	15.2
2406.65	16.4	-62	-65.2	-3.2	2	6.0	15.2
2406.70	16.4	-62	-65.3	-3.3	2	5.3	15.1
2406.75	16.4	-62	-65.4	-3.4	2	6.3	15.0
2406.80	16.4	-62	-65.4	-3.4	2	6.4	15.0
2406.85	16.4	-62	-65.4	-3.4	2	5.1	15.0

D-LINK WLAN PC Card radio Jamming Margin Test

2406.90	16.4	-62	-65.5	-3.5	2	6.2	14.9
2406.95	16.4	-62	-65.6	-3.6	2	4.5	14.8
2407.00	16.4	-62	-65.8	-3.8	2	6.2	14.6
2407.05	16.4	-62	-65.9	-3.9	2	5.6	14.5
2407.10	16.4	-62	-66.2	-4.2	2	5.0	14.2
2407.15	16.4	-62	-66.3	-4.3	2	5.2	14.1
2407.20	16.4	-62	-66.2	-4.2	2	7.4	14.2
2407.25	16.4	-62	-66.4	-4.4	2	5.5	14.0
2407.30	16.4	-62	-66.4	-4.4	2	5.4	14.0
2407.35	16.4	-62	-66.4	-4.4	2	8.0	14.0
2407.40	16.4	-62	-66.5	-4.5	2	4.9	13.9
2407.45	16.4	-62	-66.6	-4.6	2	6.3	13.8
2407.50	16.4	-62	-66.7	-4.7	2	5.9	13.7
2407.55	16.4	-62	-66.9	-4.9	2	5.6	13.5
2407.60	16.4	-62	-66.8	-4.8	2	7.7	13.6
2407.65	16.4	-62	-67.0	-5.0	2	4.6	13.4
2407.70	16.4	-62	-67.1	-5.1	2	6.6	13.3
2407.75	16.4	-62	-67.2	-5.2	2	6.8	13.2
2407.80	16.4	-62	-67.3	-5.3	2	4.7	13.1
2407.85	16.4	-62	-67.4	-5.4	2	7.9	13.0
2407.90	16.4	-62	-67.4	-5.4	2	6.7	13.0
2407.95	16.4	-62	-67.3	-5.3	2	7.3	13.1
2408.00	16.4	-62	-67.4	-5.4	2	4.5	13.0
2408.05	16.4	-62	-67.4	-5.4	2	6.2	13.0
2408.10	16.4	-62	-67.3	-5.3	2	5.9	13.1
2408.15	16.4	-62	-67.4	-5.4	2	5.2	13.0
2408.20	16.4	-62	-67.4	-5.4	2	6.1	13.0
2408.25	16.4	-62	-67.6	-5.6	2	7.9	12.8
2408.30	16.4	-62	-67.9	-5.9	2	7.6	12.5
2408.35	16.4	-62	-67.8	-5.8	2	7.1	12.6
2408.40	16.4	-62	-68.0	-6.0	2	5.7	12.4
2408.45	16.4	-62	-68.0	-6.0	2	7.0	12.4
2408.50	16.4	-62	-68.1	-6.1	2	5.1	12.3
2408.55	16.4	-62	-68.3	-6.3	2	5.3	12.1
2408.60	16.4	-62	-68.2	-6.2	2	7.7	12.2
2408.65	16.4	-62	-68.1	-6.1	2	7.6	12.3
2408.70	16.4	-62	-68.3	-6.3	2	5.4	12.1

D-LINK WLAN PC Card radio Jamming Margin Test

2408.75	16.4	-62	-68.2	-6.2	2	6.6	12.2
2408.80	16.4	-62	-68.3	-6.3	2	6.6	12.1
2408.85	16.4	-62	-68.3	-6.3	2	7.7	12.1
2408.90	16.4	-62	-68.4	-6.4	2	4.9	12.0
2408.95	16.4	-62	-68.6	-6.6	2	7.5	11.8
2409.00	16.4	-62	-68.7	-6.7	2	5.5	11.7
2409.05	16.4	-62	-68.9	-6.9	2	7.6	11.5
2409.10	16.4	-62	-69.1	-7.1	2	7.5	11.3
2409.15	16.4	-62	-69.1	-7.1	2	6.5	11.3
2409.20	16.4	-62	-69.1	-7.1	2	6.3	11.3
2409.25	16.4	-62	-69.3	-7.3	2	7.6	11.1
2409.30	16.4	-62	-69.3	-7.3	2	7.9	11.1
2409.35	16.4	-62	-69.3	-7.3	2	6.4	11.1
2409.40	16.4	-62	-69.2	-7.2	2	5.8	11.2
2409.45	16.4	-62	-69.2	-7.2	2	5.6	11.2
2409.50	16.4	-62	-69.3	-7.3	2	5.2	11.1
2409.55	16.4	-62	-69.1	-7.1	2	5.0	11.3
2409.60	16.4	-62	-69.2	-7.2	2	5.0	11.2
2409.65	16.4	-62	-69.1	-7.1	2	6.4	11.3
2409.70	16.4	-62	-69.2	-7.2	2	5.3	11.2
2409.75	16.4	-62	-69.2	-7.2	2	6.9	11.2
2409.80	16.4	-62	-69.5	-7.5	2	8.0	10.9
2409.85	16.4	-62	-69.4	-7.4	2	5.2	11.0
2409.90	16.4	-62	-69.4	-7.4	2	5.8	11.0
2409.95	16.4	-62	-69.5	-7.5	2	7.1	10.9
2410.00	16.4	-62	-69.5	-7.5	2	4.7	10.9
2410.05	16.4	-62	-69.6	-7.6	2	7.6	10.8
2410.10	16.4	-62	-69.5	-7.5	2	5.7	10.9
2410.15	16.4	-62	-69.5	-7.5	2	5.7	10.9
2410.20	16.4	-62	-69.2	-7.2	2	5.7	11.2
2410.25	16.4	-62	-69.1	-7.1	2	6.3	11.3
2410.30	16.4	-62	-69.3	-7.3	2	6.6	11.1
2410.35	16.4	-62	-69.0	-7.0	2	7.5	11.4
2410.40	16.4	-62	-69.2	-7.2	2	6.5	11.2
2410.45	16.4	-62	-69.2	-7.2	2	7.7	11.2
2410.50	16.4	-62	-69.1	-7.1	2	4.5	11.3
2410.55	16.4	-62	-69.2	-7.2	2	5.6	11.2

D-LINK WLAN PC Card radio Jamming Margin Test

2410.60	16.4	-62	-69.2	-7.2	2	4.9	11.2
2410.65	16.4	-62	-69.3	-7.3	2	4.8	11.1
2410.70	16.4	-62	-69.2	-7.2	2	7.1	11.2
2410.75	16.4	-62	-69.2	-7.2	2	4.8	11.2
2410.80	16.4	-62	-69.1	-7.1	2	5.7	11.3
2410.85	16.4	-62	-69.0	-7.0	2	4.8	11.4
2410.90	16.4	-62	-68.9	-6.9	2	5.9	11.5
2410.95	16.4	-62	-68.9	-6.9	2	6.3	11.5
2411.00	16.4	-62	-68.9	-6.9	2	6.3	11.5
2411.05	16.4	-62	-69.1	-7.1	2	6.4	11.3
2411.10	16.4	-62	-68.9	-6.9	2	7.0	11.5
2411.15	16.4	-62	-68.9	-6.9	2	6.0	11.5
2411.20	16.4	-62	-68.9	-6.9	2	4.9	11.5
2411.25	16.4	-62	-69.0	-7.0	2	4.6	11.4
2411.30	16.4	-62	-69.0	-7.0	2	6.9	11.4
2411.35	16.4	-62	-69.1	-7.1	2	7.2	11.3
2411.40	16.4	-62	-69.1	-7.1	2	4.8	11.3
2411.45	16.4	-62	-69.1	-7.1	2	5.2	11.3
2411.50	16.4	-62	-69.0	-7.0	2	5.8	11.4
2411.55	16.4	-62	-69.1	-7.1	2	5.9	11.3
2411.60	16.4	-62	-68.9	-6.9	2	5.8	11.5
2411.65	16.4	-62	-68.9	-6.9	2	5.7	11.5
2411.70	16.4	-62	-69.0	-7.0	2	5.5	11.4
2411.75	16.4	-62	-69.1	-7.1	2	5.0	11.3
2411.80	16.4	-62	-69.3	-7.3	2	6.5	11.1
2411.85	16.4	-62	-69.4	-7.4	2	5.4	11.0
2411.90	16.4	-62	-69.5	-7.5	2	4.8	10.9
2411.95	16.4	-62	-69.7	-7.7	2	6.8	10.7
2412.00	16.4	-62	-69.7	-7.7	2	4.7	10.7
2412.05	16.4	-62	-69.7	-7.7	2	6.3	10.7
2412.10	16.4	-62	-69.5	-7.5	2	5.4	10.9
2412.15	16.4	-62	-69.1	-7.1	2	5.3	11.3
2412.20	16.4	-62	-68.9	-6.9	2	5.4	11.5
2412.25	16.4	-62	-68.9	-6.9	2	4.8	11.5
2412.30	16.4	-62	-68.8	-6.8	2	4.6	11.6
2412.35	16.4	-62	-68.7	-6.7	2	7.3	11.7
2412.40	16.4	-62	-68.7	-6.7	2	6.8	11.7

D-LINK WLAN PC Card radio Jamming Margin Test

2412.45	16.4	-62	-68.8	-6.8	2	5.2	11.6
2412.50	16.4	-62	-68.9	-6.9	2	5.1	11.5
2412.55	16.4	-62	-68.8	-6.8	2	6.5	11.6
2412.60	16.4	-62	-68.9	-6.9	2	6.3	11.5
2412.65	16.4	-62	-68.8	-6.8	2	6.4	11.6
2412.70	16.4	-62	-68.7	-6.7	2	7.2	11.7
2412.75	16.4	-62	-68.9	-6.9	2	5.2	11.5
2412.80	16.4	-62	-68.8	-6.8	2	6.1	11.6
2412.85	16.4	-62	-68.6	-6.6	2	4.6	11.8
2412.90	16.4	-62	-68.7	-6.7	2	7.6	11.7
2412.95	16.4	-62	-68.6	-6.6	2	7.3	11.8
2413.00	16.4	-62	-68.7	-6.7	2	7.7	11.7
2413.05	16.4	-62	-68.7	-6.7	2	4.9	11.7
2413.10	16.4	-62	-68.6	-6.6	2	7.9	11.8
2413.15	16.4	-62	-68.8	-6.8	2	6.5	11.6
2413.20	16.4	-62	-68.9	-6.9	2	4.6	11.5
2413.25	16.4	-62	-68.8	-6.8	2	5.5	11.6
2413.30	16.4	-62	-69.0	-7.0	2	5.7	11.4
2413.35	16.4	-62	-69.0	-7.0	2	5.4	11.4
2413.40	16.4	-62	-68.9	-6.9	2	7.0	11.5
2413.45	16.4	-62	-69.0	-7.0	2	5.9	11.4
2413.50	16.4	-62	-69.0	-7.0	2	6.5	11.4
2413.55	16.4	-62	-69.0	-7.0	2	6.0	11.4
2413.60	16.4	-62	-68.8	-6.8	2	4.6	11.6
2413.65	16.4	-62	-68.8	-6.8	2	6.7	11.6
2413.70	16.4	-62	-68.9	-6.9	2	6.6	11.5
2413.75	16.4	-62	-68.7	-6.7	2	6.1	11.7
2413.80	16.4	-62	-68.8	-6.8	2	7.1	11.6
2413.85	16.4	-62	-69.0	-7.0	2	6.2	11.4
2413.90	16.4	-62	-69.1	-7.1	2	7.5	11.3
2413.95	16.4	-62	-69.2	-7.2	2	7.1	11.2
2414.00	16.4	-62	-69.3	-7.3	2	6.5	11.1
2414.05	16.4	-62	-69.4	-7.4	2	6.7	11.0
2414.10	16.4	-62	-69.3	-7.3	2	6.2	11.1
2414.15	16.4	-62	-69.2	-7.2	2	6.9	11.2
2414.20	16.4	-62	-69.3	-7.3	2	7.9	11.1
2414.25	16.4	-62	-69.1	-7.1	2	5.3	11.3

D-LINK WLAN PC Card radio Jamming Margin Test

2414.30	16.4	-62	-68.9	-6.9	2	5.6	11.5
2414.35	16.4	-62	-68.9	-6.9	2	7.6	11.5
2414.40	16.4	-62	-69.0	-7.0	2	4.8	11.4
2414.45	16.4	-62	-69.0	-7.0	2	4.5	11.4
2414.50	16.4	-62	-69.1	-7.1	2	6.8	11.3
2414.55	16.4	-62	-69.3	-7.3	2	6.2	11.1
2414.60	16.4	-62	-69.1	-7.1	2	4.7	11.3
2414.65	16.4	-62	-69.3	-7.3	2	6.3	11.1
2414.70	16.4	-62	-69.1	-7.1	2	6.8	11.3
2414.75	16.4	-62	-69.1	-7.1	2	6.7	11.3
2414.80	16.4	-62	-69.1	-7.1	2	5.8	11.3
2414.85	16.4	-62	-68.8	-6.8	2	7.5	11.6
2414.90	16.4	-62	-69.0	-7.0	2	6.2	11.4
2414.95	16.4	-62	-68.7	-6.7	2	7.6	11.7
2415.00	16.4	-62	-68.6	-6.6	2	5.6	11.8
2415.05	16.4	-62	-68.5	-6.5	2	5.2	11.9
2415.10	16.4	-62	-68.3	-6.3	2	5.2	12.1
2415.15	16.4	-62	-68.4	-6.4	2	7.1	12.0
2415.20	16.4	-62	-68.4	-6.4	2	5.1	12.0
2415.25	16.4	-62	-68.5	-6.5	2	4.7	11.9
2415.30	16.4	-62	-68.5	-6.5	2	7.9	11.9
2415.35	16.4	-62	-68.4	-6.4	2	5.8	12.0
2415.40	16.4	-62	-68.5	-6.5	2	5.3	11.9
2415.45	16.4	-62	-68.4	-6.4	2	6.8	12.0
2415.50	16.4	-62	-68.4	-6.4	2	6.3	12.0
2415.55	16.4	-62	-68.1	-6.1	2	7.1	12.3
2415.60	16.4	-62	-68.1	-6.1	2	5.2	12.3
2415.65	16.4	-62	-67.9	-5.9	2	5.8	12.5
2415.70	16.4	-62	-67.8	-5.8	2	7.9	12.6
2415.75	16.4	-62	-67.8	-5.8	2	6.2	12.6
2415.80	16.4	-62	-67.7	-5.7	2	4.6	12.7
2415.85	16.4	-62	-67.7	-5.7	2	6.6	12.7
2415.90	16.4	-62	-67.8	-5.8	2	7.2	12.6
2415.95	16.4	-62	-67.6	-5.6	2	4.6	12.8
2416.00	16.4	-62	-67.8	-5.8	2	7.5	12.6
2416.05	16.4	-62	-67.7	-5.7	2	6.0	12.7
2416.10	16.4	-62	-67.6	-5.6	2	6.1	12.8

D-LINK WLAN PC Card radio Jamming Margin Test

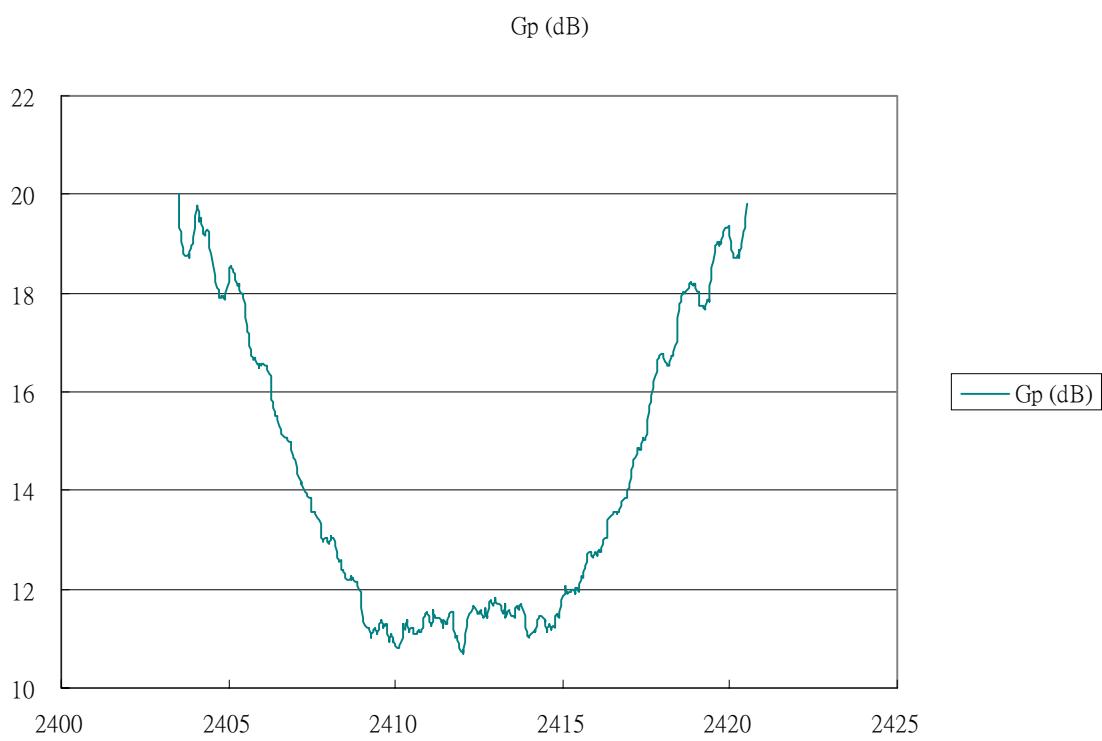
2416.15	16.4	-62	-67.7	-5.7	2	6.7	12.7
2416.20	16.4	-62	-67.4	-5.4	2	7.6	13.0
2416.25	16.4	-62	-67.4	-5.4	2	5.5	13.0
2416.30	16.4	-62	-67.4	-5.4	2	7.5	13.0
2416.35	16.4	-62	-67.1	-5.1	2	7.4	13.3
2416.40	16.4	-62	-66.9	-4.9	2	5.1	13.5
2416.45	16.4	-62	-66.9	-4.9	2	5.1	13.5
2416.50	16.4	-62	-66.8	-4.8	2	5.8	13.6
2416.55	16.4	-62	-66.8	-4.8	2	5.7	13.6
2416.60	16.4	-62	-66.9	-4.9	2	4.6	13.5
2416.65	16.4	-62	-66.9	-4.9	2	6.2	13.5
2416.70	16.4	-62	-66.8	-4.8	2	5.1	13.6
2416.75	16.4	-62	-66.7	-4.7	2	4.8	13.7
2416.80	16.4	-62	-66.6	-4.6	2	4.5	13.8
2416.85	16.4	-62	-66.6	-4.6	2	5.4	13.8
2416.90	16.4	-62	-66.6	-4.6	2	7.6	13.8
2416.95	16.4	-62	-66.4	-4.4	2	6.8	14.0
2417.00	16.4	-62	-66.4	-4.4	2	6.4	14.0
2417.05	16.4	-62	-66.2	-4.2	2	6.5	14.2
2417.10	16.4	-62	-65.9	-3.9	2	6.7	14.5
2417.15	16.4	-62	-65.8	-3.8	2	4.6	14.6
2417.20	16.4	-62	-65.6	-3.6	2	7.4	14.8
2417.25	16.4	-62	-65.6	-3.6	2	5.0	14.8
2417.30	16.4	-62	-65.6	-3.6	2	6.1	14.8
2417.35	16.4	-62	-65.5	-3.5	2	5.3	14.9
2417.40	16.4	-62	-65.4	-3.4	2	7.7	15.0
2417.45	16.4	-62	-65.3	-3.3	2	6.6	15.1
2417.50	16.4	-62	-65.1	-3.1	2	5.1	15.3
2417.55	16.4	-62	-65.1	-3.1	2	5.8	15.3
2417.60	16.4	-62	-64.9	-2.9	2	5.2	15.5
2417.65	16.4	-62	-64.5	-2.5	2	4.6	15.9
2417.70	16.4	-62	-64.3	-2.3	2	6.2	16.1
2417.75	16.4	-62	-64.0	-2.0	2	6.1	16.4
2417.80	16.4	-62	-63.9	-1.9	2	6.4	16.5
2417.85	16.4	-62	-63.7	-1.7	2	6.8	16.7
2417.90	16.4	-62	-63.7	-1.7	2	4.6	16.7
2417.95	16.4	-62	-63.7	-1.7	2	4.7	16.7

D-LINK WLAN PC Card radio Jamming Margin Test

2418.00	16.4	-62	-63.7	-1.7	2	4.9	16.7
2418.05	16.4	-62	-63.8	-1.8	2	6.4	16.6
2418.10	16.4	-62	-63.8	-1.8	2	6.8	16.6
2418.15	16.4	-62	-63.9	-1.9	2	6.8	16.5
2418.20	16.4	-62	-63.9	-1.9	2	4.8	16.5
2418.25	16.4	-62	-63.6	-1.6	2	7.5	16.8
2418.30	16.4	-62	-63.6	-1.6	2	7.0	16.8
2418.35	16.4	-62	-63.5	-1.5	2	5.4	16.9
2418.40	16.4	-62	-63.4	-1.4	2	6.0	17.0
2418.45	16.4	-62	-63.1	-1.1	2	7.3	17.3
2418.50	16.4	-62	-62.6	-0.6	2	5.7	17.8
2418.55	16.4	-62	-62.5	-0.5	2	5.3	17.9
2418.60	16.4	-62	-62.3	-0.3	2	7.8	18.1
2418.65	16.4	-62	-62.3	-0.3	2	5.5	18.1
2418.70	16.4	-62	-62.3	-0.3	2	6.3	18.1
2418.75	16.4	-62	-62.3	-0.3	2	7.0	18.1
2418.80	16.4	-62	-62.3	-0.3	2	7.5	18.1
2418.85	16.4	-62	-62.1	-0.1	2	6.5	18.3
2418.90	16.4	-62	-62.2	-0.2	2	7.4	18.2
2418.95	16.4	-62	-62.2	-0.2	2	6.3	18.2
2419.00	16.4	-62	-62.3	-0.3	2	5.8	18.1
2419.05	16.4	-62	-62.4	-0.4	2	6.9	18.0
2419.10	16.4	-62	-62.6	-0.6	2	7.8	17.8
2419.15	16.4	-62	-62.7	-0.7	2	6.9	17.7
2419.20	16.4	-62	-62.6	-0.6	2	6.6	17.8
2419.25	16.4	-62	-62.7	-0.7	2	6.9	17.7
2419.30	16.4	-62	-62.6	-0.6	2	7.2	17.8
2419.35	16.4	-62	-62.6	-0.6	2	7.8	17.8
2419.40	16.4	-62	-62.4	-0.4	2	6.6	18.0
2419.45	16.4	-62	-62.0	0.0	2	6.1	18.4
2419.50	16.4	-62	-61.7	0.3	2	5.3	18.7
2419.55	16.4	-62	-61.6	0.4	2	6.7	18.8
2419.60	16.4	-62	-61.3	0.7	2	5.3	19.1
2419.65	16.4	-62	-61.5	0.5	2	6.5	18.9
2419.70	16.4	-62	-61.3	0.7	2	6.4	19.1
2419.75	16.4	-62	-61.3	0.7	2	7.0	19.1
2419.80	16.4	-62	-61.2	0.8	2	5.2	19.2

D-LINK WLAN PC Card radio Jamming Margin Test

2419.85	16.4	-62	-61.1	0.9	2	7.2	19.3
2419.90	16.4	-62	-61.0	1.0	2	5.2	19.4
2419.95	16.4	-62	-61.0	1.0	2	5.2	19.4
2420.00	16.4	-62	-61.2	0.8	2	7.7	19.2
2420.05	16.4	-62	-61.3	0.7	2	5.9	19.1
2420.10	16.4	-62	-61.6	0.4	2	7.2	18.8
2420.15	16.4	-62	-61.6	0.4	2	6.2	18.8
2420.20	16.4	-62	-61.6	0.4	2	6.0	18.8
2420.25	16.4	-62	-61.6	0.4	2	7.1	18.8
2420.30	16.4	-62	-61.7	0.3	2	6.8	18.7
2420.35	16.4	-62	-61.4	0.6	2	5.4	19.0
2420.40	16.4	-62	-61.1	0.9	2	5.0	19.3
2420.45	16.4	-62	-61.0	1.0	2	7.0	19.4
2420.50	16.4	-62	-60.7	1.3	2	5.6	19.7
Processing Gain(dB)@20th Percentile=11.3							



D-LINK WLAN PC Card radio Jamming Margin Test

11Mbps Channel 7 (2442MHz) Processing Gain							
Gp=(S/N)o+Lsys+(Jr/Sr)							
Frequency	(S/N)o	Sr	Jr	Jr/Sr	Lsys	FER	Gp
(MHz)	(dB)	(dBm)	(dBm)	(dB)	(dB)	(%)	(dB)
2433.50	16.4	-62	-60.6	1.4	2	6.9	19.8
2433.55	16.4	-62	-61.0	1.0	2	7.9	19.4
2433.60	16.4	-62	-61.2	0.8	2	4.6	19.2
2433.65	16.4	-62	-61.5	0.5	2	6.3	18.9
2433.70	16.4	-62	-61.5	0.5	2	5.4	18.9
2433.75	16.4	-62	-61.7	0.3	2	5.8	18.7
2433.80	16.4	-62	-61.7	0.3	2	4.7	18.7
2433.85	16.4	-62	-61.7	0.3	2	5.0	18.7
2433.90	16.4	-62	-61.4	0.6	2	4.7	19.0
2433.95	16.4	-62	-61.5	0.5	2	6.2	18.9
2434.00	16.4	-62	-61.0	1.0	2	7.6	19.4
2434.05	16.4	-62	-60.7	1.3	2	6.6	19.7
2434.10	16.4	-62	-60.9	1.1	2	5.0	19.5
2434.15	16.4	-62	-60.9	1.1	2	7.2	19.5
2434.20	16.4	-62	-60.8	1.2	2	6.2	19.6
2434.25	16.4	-62	-61.0	1.0	2	6.7	19.4
2434.30	16.4	-62	-61.3	0.7	2	5.2	19.1
2434.35	16.4	-62	-61.3	0.7	2	5.2	19.1
2434.40	16.4	-62	-61.4	0.6	2	6.7	19.0
2434.45	16.4	-62	-61.4	0.6	2	7.6	19.0
2434.50	16.4	-62	-61.5	0.5	2	6.5	18.9
2434.55	16.4	-62	-62.0	0.0	2	4.6	18.4
2434.60	16.4	-62	-62.0	0.0	2	5.4	18.4
2434.65	16.4	-62	-62.4	-0.4	2	7.0	18.0
2434.70	16.4	-62	-62.3	-0.3	2	4.7	18.1
2434.75	16.4	-62	-62.5	-0.5	2	4.8	17.9
2434.80	16.4	-62	-62.4	-0.4	2	4.8	18.0
2434.85	16.4	-62	-62.6	-0.6	2	6.4	17.8
2434.90	16.4	-62	-62.4	-0.4	2	4.7	18.0
2434.95	16.4	-62	-62.3	-0.3	2	4.9	18.1
2435.00	16.4	-62	-62.1	-0.1	2	6.4	18.3
2435.05	16.4	-62	-62.0	0.0	2	7.5	18.4
2435.10	16.4	-62	-62.0	0.0	2	8.0	18.4

D-LINK WLAN PC Card radio Jamming Margin Test

2435.15	16.4	-62	-61.9	0.1	2	7.4	18.5
2435.20	16.4	-62	-62.0	0.0	2	8.0	18.4
2435.25	16.4	-62	-62.2	-0.2	2	7.4	18.2
2435.30	16.4	-62	-62.2	-0.2	2	5.9	18.2
2435.35	16.4	-62	-62.2	-0.2	2	6.2	18.2
2435.40	16.4	-62	-62.3	-0.3	2	8.0	18.1
2435.45	16.4	-62	-62.4	-0.4	2	7.7	18.0
2435.50	16.4	-62	-62.7	-0.7	2	5.4	17.7
2435.55	16.4	-62	-63.2	-1.2	2	4.5	17.2
2435.60	16.4	-62	-63.4	-1.4	2	5.2	17.0
2435.65	16.4	-62	-63.5	-1.5	2	6.4	16.9
2435.70	16.4	-62	-63.6	-1.6	2	5.5	16.8
2435.75	16.4	-62	-63.8	-1.8	2	7.3	16.6
2435.80	16.4	-62	-63.8	-1.8	2	7.3	16.6
2435.85	16.4	-62	-63.8	-1.8	2	5.7	16.6
2435.90	16.4	-62	-63.9	-1.9	2	5.3	16.5
2435.95	16.4	-62	-63.8	-1.8	2	7.2	16.6
2436.00	16.4	-62	-63.8	-1.8	2	4.8	16.6
2436.05	16.4	-62	-63.8	-1.8	2	5.1	16.6
2436.10	16.4	-62	-63.8	-1.8	2	4.7	16.6
2436.15	16.4	-62	-64.0	-2.0	2	6.4	16.4
2436.20	16.4	-62	-64.1	-2.1	2	5.8	16.3
2436.25	16.4	-62	-64.2	-2.2	2	4.7	16.2
2436.30	16.4	-62	-64.4	-2.4	2	6.6	16.0
2436.35	16.4	-62	-64.6	-2.6	2	6.9	15.8
2436.40	16.4	-62	-64.9	-2.9	2	5.0	15.5
2436.45	16.4	-62	-64.9	-2.9	2	6.3	15.5
2436.50	16.4	-62	-65.0	-3.0	2	7.7	15.4
2436.55	16.4	-62	-65.1	-3.1	2	6.4	15.3
2436.60	16.4	-62	-65.2	-3.2	2	5.4	15.2
2436.65	16.4	-62	-65.3	-3.3	2	6.2	15.1
2436.70	16.4	-62	-65.3	-3.3	2	7.6	15.1
2436.75	16.4	-62	-65.4	-3.4	2	6.8	15.0
2436.80	16.4	-62	-65.4	-3.4	2	6.3	15.0
2436.85	16.4	-62	-65.4	-3.4	2	7.1	15.0
2436.90	16.4	-62	-65.5	-3.5	2	7.6	14.9
2436.95	16.4	-62	-65.7	-3.7	2	7.3	14.7

D-LINK WLAN PC Card radio Jamming Margin Test

2437.00	16.4	-62	-65.9	-3.9	2	6.6	14.5
2437.05	16.4	-62	-66.1	-4.1	2	6.1	14.3
2437.10	16.4	-62	-66.0	-4.0	2	5.6	14.4
2437.15	16.4	-62	-66.2	-4.2	2	8.0	14.2
2437.20	16.4	-62	-66.2	-4.2	2	7.0	14.2
2437.25	16.4	-62	-66.4	-4.4	2	7.9	14.0
2437.30	16.4	-62	-66.5	-4.5	2	7.6	13.9
2437.35	16.4	-62	-66.5	-4.5	2	7.3	13.9
2437.40	16.4	-62	-66.5	-4.5	2	7.0	13.9
2437.45	16.4	-62	-66.5	-4.5	2	5.8	13.9
2437.50	16.4	-62	-66.7	-4.7	2	5.8	13.7
2437.55	16.4	-62	-66.8	-4.8	2	5.4	13.6
2437.60	16.4	-62	-67.0	-5.0	2	4.7	13.4
2437.65	16.4	-62	-67.0	-5.0	2	7.8	13.4
2437.70	16.4	-62	-67.1	-5.1	2	7.6	13.3
2437.75	16.4	-62	-67.2	-5.2	2	7.1	13.2
2437.80	16.4	-62	-67.3	-5.3	2	4.6	13.1
2437.85	16.4	-62	-67.3	-5.3	2	5.0	13.1
2437.90	16.4	-62	-67.3	-5.3	2	6.8	13.1
2437.95	16.4	-62	-67.3	-5.3	2	7.0	13.1
2438.00	16.4	-62	-67.4	-5.4	2	7.4	13.0
2438.05	16.4	-62	-67.4	-5.4	2	5.1	13.0
2438.10	16.4	-62	-67.5	-5.5	2	5.5	12.9
2438.15	16.4	-62	-67.3	-5.3	2	5.9	13.1
2438.20	16.4	-62	-67.4	-5.4	2	7.7	13.0
2438.25	16.4	-62	-67.5	-5.5	2	7.7	12.9
2438.30	16.4	-62	-67.9	-5.9	2	8.0	12.5
2438.35	16.4	-62	-67.8	-5.8	2	4.7	12.6
2438.40	16.4	-62	-68.0	-6.0	2	7.0	12.4
2438.45	16.4	-62	-68.2	-6.2	2	7.2	12.2
2438.50	16.4	-62	-68.1	-6.1	2	6.9	12.3
2438.55	16.4	-62	-68.1	-6.1	2	8.0	12.3
2438.60	16.4	-62	-68.3	-6.3	2	5.1	12.1
2438.65	16.4	-62	-68.2	-6.2	2	7.3	12.2
2438.70	16.4	-62	-68.3	-6.3	2	7.9	12.1
2438.75	16.4	-62	-68.3	-6.3	2	4.7	12.1
2438.80	16.4	-62	-68.4	-6.4	2	6.7	12.0

D-LINK WLAN PC Card radio Jamming Margin Test

2438.85	16.4	-62	-68.4	-6.4	2	5.4	12.0
2438.90	16.4	-62	-68.6	-6.6	2	7.2	11.8
2438.95	16.4	-62	-68.5	-6.5	2	4.9	11.9
2439.00	16.4	-62	-68.7	-6.7	2	7.1	11.7
2439.05	16.4	-62	-68.9	-6.9	2	5.0	11.5
2439.10	16.4	-62	-69.1	-7.1	2	6.9	11.3
2439.15	16.4	-62	-69.1	-7.1	2	7.7	11.3
2439.20	16.4	-62	-69.3	-7.3	2	7.0	11.1
2439.25	16.4	-62	-69.4	-7.4	2	8.0	11.0
2439.30	16.4	-62	-69.2	-7.2	2	7.4	11.2
2439.35	16.4	-62	-69.3	-7.3	2	4.9	11.1
2439.40	16.4	-62	-69.2	-7.2	2	4.9	11.2
2439.45	16.4	-62	-69.2	-7.2	2	7.3	11.2
2439.50	16.4	-62	-69.2	-7.2	2	5.7	11.2
2439.55	16.4	-62	-69.1	-7.1	2	6.0	11.3
2439.60	16.4	-62	-69.1	-7.1	2	6.6	11.3
2439.65	16.4	-62	-69.0	-7.0	2	5.6	11.4
2439.70	16.4	-62	-69.1	-7.1	2	6.2	11.3
2439.75	16.4	-62	-69.2	-7.2	2	4.7	11.2
2439.80	16.4	-62	-69.5	-7.5	2	7.5	10.9
2439.85	16.4	-62	-69.3	-7.3	2	6.6	11.1
2439.90	16.4	-62	-69.4	-7.4	2	5.0	11.0
2439.95	16.4	-62	-69.4	-7.4	2	4.8	11.0
2440.00	16.4	-62	-69.5	-7.5	2	7.1	10.9
2440.05	16.4	-62	-69.5	-7.5	2	6.0	10.9
2440.10	16.4	-62	-69.5	-7.5	2	6.1	10.9
2440.15	16.4	-62	-69.4	-7.4	2	5.9	11.0
2440.20	16.4	-62	-69.4	-7.4	2	7.2	11.0
2440.25	16.4	-62	-69.3	-7.3	2	6.1	11.1
2440.30	16.4	-62	-69.1	-7.1	2	7.2	11.3
2440.35	16.4	-62	-69.1	-7.1	2	8.0	11.3
2440.40	16.4	-62	-69.3	-7.3	2	5.1	11.1
2440.45	16.4	-62	-69.2	-7.2	2	5.6	11.2
2440.50	16.4	-62	-69.2	-7.2	2	5.8	11.2
2440.55	16.4	-62	-69.2	-7.2	2	7.0	11.2
2440.60	16.4	-62	-69.4	-7.4	2	7.7	11.0
2440.65	16.4	-62	-69.3	-7.3	2	5.8	11.1

D-LINK WLAN PC Card radio Jamming Margin Test

2440.70	16.4	-62	-69.1	-7.1	2	7.4	11.3
2440.75	16.4	-62	-69.3	-7.3	2	7.5	11.1
2440.80	16.4	-62	-69.0	-7.0	2	5.9	11.4
2440.85	16.4	-62	-69.1	-7.1	2	6.6	11.3
2440.90	16.4	-62	-69.0	-7.0	2	6.2	11.4
2440.95	16.4	-62	-68.8	-6.8	2	7.9	11.6
2441.00	16.4	-62	-69.0	-7.0	2	7.5	11.4
2441.05	16.4	-62	-69.1	-7.1	2	5.8	11.3
2441.10	16.4	-62	-68.9	-6.9	2	4.7	11.5
2441.15	16.4	-62	-69.0	-7.0	2	7.3	11.4
2441.20	16.4	-62	-68.9	-6.9	2	5.8	11.5
2441.25	16.4	-62	-68.9	-6.9	2	4.7	11.5
2441.30	16.4	-62	-69.0	-7.0	2	6.0	11.4
2441.35	16.4	-62	-69.2	-7.2	2	7.6	11.2
2441.40	16.4	-62	-69.1	-7.1	2	5.2	11.3
2441.45	16.4	-62	-69.0	-7.0	2	7.9	11.4
2441.50	16.4	-62	-69.0	-7.0	2	5.3	11.4
2441.55	16.4	-62	-69.2	-7.2	2	7.4	11.2
2441.60	16.4	-62	-68.9	-6.9	2	6.7	11.5
2441.65	16.4	-62	-68.9	-6.9	2	7.4	11.5
2441.70	16.4	-62	-69.1	-7.1	2	5.9	11.3
2441.75	16.4	-62	-69.0	-7.0	2	6.3	11.4
2441.80	16.4	-62	-69.2	-7.2	2	5.6	11.2
2441.85	16.4	-62	-69.4	-7.4	2	4.5	11.0
2441.90	16.4	-62	-69.4	-7.4	2	5.4	11.0
2441.95	16.4	-62	-69.8	-7.8	2	6.4	10.6
2442.00	16.4	-62	-69.6	-7.6	2	7.5	10.8
2442.05	16.4	-62	-69.5	-7.5	2	6.9	10.9
2442.10	16.4	-62	-69.3	-7.3	2	4.7	11.1
2442.15	16.4	-62	-69.0	-7.0	2	7.2	11.4
2442.20	16.4	-62	-68.9	-6.9	2	7.0	11.5
2442.25	16.4	-62	-69.0	-7.0	2	7.8	11.4
2442.30	16.4	-62	-68.8	-6.8	2	5.6	11.6
2442.35	16.4	-62	-68.9	-6.9	2	4.9	11.5
2442.40	16.4	-62	-68.7	-6.7	2	7.8	11.7
2442.45	16.4	-62	-68.8	-6.8	2	6.5	11.6
2442.50	16.4	-62	-68.9	-6.9	2	4.9	11.5

D-LINK WLAN PC Card radio Jamming Margin Test

2442.55	16.4	-62	-68.8	-6.8	2	7.7	11.6
2442.60	16.4	-62	-68.8	-6.8	2	6.3	11.6
2442.65	16.4	-62	-68.9	-6.9	2	6.6	11.5
2442.70	16.4	-62	-68.8	-6.8	2	6.9	11.6
2442.75	16.4	-62	-68.9	-6.9	2	4.9	11.5
2442.80	16.4	-62	-68.6	-6.6	2	4.6	11.8
2442.85	16.4	-62	-68.8	-6.8	2	7.8	11.6
2442.90	16.4	-62	-68.6	-6.6	2	6.1	11.8
2442.95	16.4	-62	-68.6	-6.6	2	5.0	11.8
2443.00	16.4	-62	-68.7	-6.7	2	6.1	11.7
2443.05	16.4	-62	-68.6	-6.6	2	6.1	11.8
2443.10	16.4	-62	-68.7	-6.7	2	6.3	11.7
2443.15	16.4	-62	-68.7	-6.7	2	5.2	11.7
2443.20	16.4	-62	-68.9	-6.9	2	6.8	11.5
2443.25	16.4	-62	-68.8	-6.8	2	6.5	11.6
2443.30	16.4	-62	-68.9	-6.9	2	7.3	11.5
2443.35	16.4	-62	-68.9	-6.9	2	7.9	11.5
2443.40	16.4	-62	-68.8	-6.8	2	5.7	11.6
2443.45	16.4	-62	-69.0	-7.0	2	4.9	11.4
2443.50	16.4	-62	-68.8	-6.8	2	7.3	11.6
2443.55	16.4	-62	-68.8	-6.8	2	5.5	11.6
2443.60	16.4	-62	-68.8	-6.8	2	7.0	11.6
2443.65	16.4	-62	-68.9	-6.9	2	7.9	11.5
2443.70	16.4	-62	-68.8	-6.8	2	5.6	11.6
2443.75	16.4	-62	-68.9	-6.9	2	6.2	11.5
2443.80	16.4	-62	-68.9	-6.9	2	5.0	11.5
2443.85	16.4	-62	-69.0	-7.0	2	4.8	11.4
2443.90	16.4	-62	-69.0	-7.0	2	5.0	11.4
2443.95	16.4	-62	-69.1	-7.1	2	6.0	11.3
2444.00	16.4	-62	-69.3	-7.3	2	6.2	11.1
2444.05	16.4	-62	-69.3	-7.3	2	7.3	11.1
2444.10	16.4	-62	-69.3	-7.3	2	7.5	11.1
2444.15	16.4	-62	-69.3	-7.3	2	6.8	11.1
2444.20	16.4	-62	-69.3	-7.3	2	7.6	11.1
2444.25	16.4	-62	-69.2	-7.2	2	5.9	11.2
2444.30	16.4	-62	-68.9	-6.9	2	7.4	11.5
2444.35	16.4	-62	-68.9	-6.9	2	6.0	11.5

D-LINK WLAN PC Card radio Jamming Margin Test

2444.40	16.4	-62	-68.9	-6.9	2	7.2	11.5
2444.45	16.4	-62	-68.9	-6.9	2	6.4	11.5
2444.50	16.4	-62	-69.1	-7.1	2	5.5	11.3
2444.55	16.4	-62	-69.2	-7.2	2	6.6	11.2
2444.60	16.4	-62	-69.3	-7.3	2	5.7	11.1
2444.65	16.4	-62	-69.1	-7.1	2	5.6	11.3
2444.70	16.4	-62	-69.1	-7.1	2	7.3	11.3
2444.75	16.4	-62	-69.1	-7.1	2	6.8	11.3
2444.80	16.4	-62	-69.0	-7.0	2	6.7	11.4
2444.85	16.4	-62	-69.0	-7.0	2	6.8	11.4
2444.90	16.4	-62	-68.9	-6.9	2	6.2	11.5
2444.95	16.4	-62	-68.7	-6.7	2	7.2	11.7
2445.00	16.4	-62	-68.6	-6.6	2	7.0	11.8
2445.05	16.4	-62	-68.5	-6.5	2	4.8	11.9
2445.10	16.4	-62	-68.5	-6.5	2	7.6	11.9
2445.15	16.4	-62	-68.5	-6.5	2	6.8	11.9
2445.20	16.4	-62	-68.3	-6.3	2	5.3	12.1
2445.25	16.4	-62	-68.4	-6.4	2	7.9	12.0
2445.30	16.4	-62	-68.5	-6.5	2	7.5	11.9
2445.35	16.4	-62	-68.4	-6.4	2	7.0	12.0
2445.40	16.4	-62	-68.5	-6.5	2	7.4	11.9
2445.45	16.4	-62	-68.4	-6.4	2	7.7	12.0
2445.50	16.4	-62	-68.3	-6.3	2	6.2	12.1
2445.55	16.4	-62	-68.3	-6.3	2	7.8	12.1
2445.60	16.4	-62	-68.2	-6.2	2	6.7	12.2
2445.65	16.4	-62	-68.0	-6.0	2	5.1	12.4
2445.70	16.4	-62	-67.8	-5.8	2	5.1	12.6
2445.75	16.4	-62	-67.8	-5.8	2	4.8	12.6
2445.80	16.4	-62	-67.7	-5.7	2	4.8	12.7
2445.85	16.4	-62	-67.7	-5.7	2	6.9	12.7
2445.90	16.4	-62	-67.6	-5.6	2	6.1	12.8
2445.95	16.4	-62	-67.6	-5.6	2	7.0	12.8
2446.00	16.4	-62	-67.7	-5.7	2	4.5	12.7
2446.05	16.4	-62	-67.6	-5.6	2	7.5	12.8
2446.10	16.4	-62	-67.7	-5.7	2	6.0	12.7
2446.15	16.4	-62	-67.5	-5.5	2	6.0	12.9
2446.20	16.4	-62	-67.4	-5.4	2	5.4	13.0

D-LINK WLAN PC Card radio Jamming Margin Test

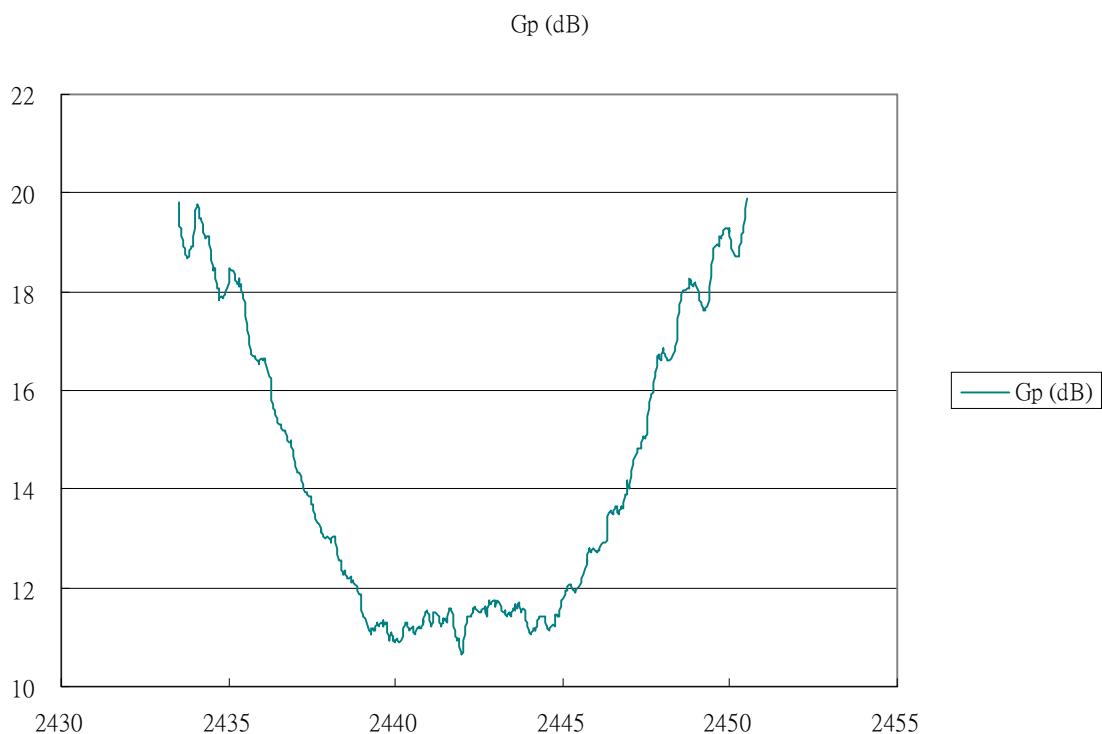
2446.25	16.4	-62	-67.4	-5.4	2	7.8	13.0
2446.30	16.4	-62	-67.3	-5.3	2	4.6	13.1
2446.35	16.4	-62	-67.1	-5.1	2	7.8	13.3
2446.40	16.4	-62	-66.8	-4.8	2	7.8	13.6
2446.45	16.4	-62	-66.8	-4.8	2	6.5	13.6
2446.50	16.4	-62	-67.0	-5.0	2	4.8	13.4
2446.55	16.4	-62	-66.8	-4.8	2	4.6	13.6
2446.60	16.4	-62	-66.7	-4.7	2	5.5	13.7
2446.65	16.4	-62	-66.9	-4.9	2	6.3	13.5
2446.70	16.4	-62	-66.8	-4.8	2	5.4	13.6
2446.75	16.4	-62	-66.7	-4.7	2	5.9	13.7
2446.80	16.4	-62	-66.8	-4.8	2	7.0	13.6
2446.85	16.4	-62	-66.6	-4.6	2	6.3	13.8
2446.90	16.4	-62	-66.5	-4.5	2	4.5	13.9
2446.95	16.4	-62	-66.2	-4.2	2	6.2	14.2
2447.00	16.4	-62	-66.4	-4.4	2	6.1	14.0
2447.05	16.4	-62	-66.1	-4.1	2	8.0	14.3
2447.10	16.4	-62	-66.0	-4.0	2	6.5	14.4
2447.15	16.4	-62	-65.8	-3.8	2	5.6	14.6
2447.20	16.4	-62	-65.5	-3.5	2	5.8	14.9
2447.25	16.4	-62	-65.5	-3.5	2	7.4	14.9
2447.30	16.4	-62	-65.5	-3.5	2	5.6	14.9
2447.35	16.4	-62	-65.5	-3.5	2	6.1	14.9
2447.40	16.4	-62	-65.4	-3.4	2	5.2	15.0
2447.45	16.4	-62	-65.3	-3.3	2	7.8	15.1
2447.50	16.4	-62	-65.2	-3.2	2	8.0	15.2
2447.55	16.4	-62	-65.1	-3.1	2	5.1	15.3
2447.60	16.4	-62	-64.8	-2.8	2	7.7	15.6
2447.65	16.4	-62	-64.5	-2.5	2	7.4	15.9
2447.70	16.4	-62	-64.5	-2.5	2	6.8	15.9
2447.75	16.4	-62	-64.0	-2.0	2	7.6	16.4
2447.80	16.4	-62	-63.9	-1.9	2	6.1	16.5
2447.85	16.4	-62	-63.7	-1.7	2	5.9	16.7
2447.90	16.4	-62	-63.7	-1.7	2	5.1	16.7
2447.95	16.4	-62	-63.8	-1.8	2	7.0	16.6
2448.00	16.4	-62	-63.6	-1.6	2	6.0	16.8
2448.05	16.4	-62	-63.7	-1.7	2	7.5	16.7

D-LINK WLAN PC Card radio Jamming Margin Test

2448.10	16.4	-62	-63.7	-1.7	2	7.5	16.7
2448.15	16.4	-62	-63.8	-1.8	2	5.8	16.6
2448.20	16.4	-62	-63.7	-1.7	2	5.4	16.7
2448.25	16.4	-62	-63.8	-1.8	2	4.9	16.6
2448.30	16.4	-62	-63.6	-1.6	2	4.8	16.8
2448.35	16.4	-62	-63.6	-1.6	2	6.2	16.8
2448.40	16.4	-62	-63.2	-1.2	2	5.8	17.2
2448.45	16.4	-62	-63.1	-1.1	2	7.3	17.3
2448.50	16.4	-62	-62.8	-0.8	2	6.9	17.6
2448.55	16.4	-62	-62.5	-0.5	2	6.9	17.9
2448.60	16.4	-62	-62.3	-0.3	2	5.0	18.1
2448.65	16.4	-62	-62.3	-0.3	2	7.7	18.1
2448.70	16.4	-62	-62.3	-0.3	2	5.5	18.1
2448.75	16.4	-62	-62.4	-0.4	2	6.7	18.0
2448.80	16.4	-62	-62.2	-0.2	2	5.1	18.2
2448.85	16.4	-62	-62.1	-0.1	2	4.9	18.3
2448.90	16.4	-62	-62.2	-0.2	2	6.4	18.2
2448.95	16.4	-62	-62.2	-0.2	2	6.3	18.2
2449.00	16.4	-62	-62.3	-0.3	2	6.3	18.1
2449.05	16.4	-62	-62.6	-0.6	2	6.4	17.8
2449.10	16.4	-62	-62.6	-0.6	2	5.4	17.8
2449.15	16.4	-62	-62.7	-0.7	2	5.9	17.7
2449.20	16.4	-62	-62.8	-0.8	2	4.6	17.6
2449.25	16.4	-62	-62.8	-0.8	2	6.1	17.6
2449.30	16.4	-62	-62.7	-0.7	2	5.2	17.7
2449.35	16.4	-62	-62.4	-0.4	2	5.0	18.0
2449.40	16.4	-62	-62.4	-0.4	2	7.3	18.0
2449.45	16.4	-62	-62.2	-0.2	2	6.2	18.2
2449.50	16.4	-62	-61.7	0.3	2	6.7	18.7
2449.55	16.4	-62	-61.4	0.6	2	7.7	19.0
2449.60	16.4	-62	-61.5	0.5	2	5.2	18.9
2449.65	16.4	-62	-61.5	0.5	2	7.6	18.9
2449.70	16.4	-62	-61.3	0.7	2	6.6	19.1
2449.75	16.4	-62	-61.3	0.7	2	4.7	19.1
2449.80	16.4	-62	-61.2	0.8	2	6.8	19.2
2449.85	16.4	-62	-61.2	0.8	2	7.8	19.2
2449.90	16.4	-62	-61.2	0.8	2	6.7	19.2

D-LINK WLAN PC Card radio Jamming Margin Test

2449.95	16.4	-62	-61.1	0.9	2	6.2	19.3
2450.00	16.4	-62	-61.2	0.8	2	4.7	19.2
2450.05	16.4	-62	-61.5	0.5	2	4.7	18.9
2450.10	16.4	-62	-61.5	0.5	2	5.4	18.9
2450.15	16.4	-62	-61.6	0.4	2	5.0	18.8
2450.20	16.4	-62	-61.7	0.3	2	6.1	18.7
2450.25	16.4	-62	-61.6	0.4	2	7.6	18.8
2450.30	16.4	-62	-61.6	0.4	2	7.4	18.8
2450.35	16.4	-62	-61.3	0.7	2	6.2	19.1
2450.40	16.4	-62	-61.2	0.8	2	5.5	19.2
2450.45	16.4	-62	-61.0	1.0	2	7.9	19.4
2450.50	16.4	-62	-60.5	1.5	2	7.0	19.9
Processing Gain(dB)@20th Percentile=11.2							



D-LINK WLAN PC Card radio Jamming Margin Test

11Mbps Channel 11 (2462MHz) Processing Gain							
Gp=(S/N)o+Lsys+(Jr/Sr)							
Frequency	(S/N)o	Sr	Jr	Jr/Sr	Lsys	FER	Gp
(MHz)	(dB)	(dBm)	(dBm)	(dB)	(dB)	(%)	(dB)
2453.50	16.4	-62	-61.3	0.7	2	5.2	19.1
2453.55	16.4	-62	-61.9	0.1	2	5.5	18.5
2453.60	16.4	-62	-62.0	0.0	2	5.8	18.4
2453.65	16.4	-62	-62.3	-0.3	2	7.6	18.1
2453.70	16.4	-62	-62.5	-0.5	2	6.9	17.9
2453.75	16.4	-62	-62.4	-0.4	2	4.8	18.0
2453.80	16.4	-62	-62.5	-0.5	2	4.9	17.9
2453.85	16.4	-62	-62.3	-0.3	2	4.7	18.1
2453.90	16.4	-62	-62.3	-0.3	2	6.4	18.1
2453.95	16.4	-62	-62.1	-0.1	2	5.6	18.3
2454.00	16.4	-62	-61.7	0.3	2	6.3	18.7
2454.05	16.4	-62	-61.7	0.3	2	6.6	18.7
2454.10	16.4	-62	-61.8	0.2	2	6.9	18.6
2454.15	16.4	-62	-61.9	0.1	2	5.9	18.5
2454.20	16.4	-62	-61.8	0.2	2	6.2	18.6
2454.25	16.4	-62	-62.0	0.0	2	5.7	18.4
2454.30	16.4	-62	-61.9	0.1	2	6.6	18.5
2454.35	16.4	-62	-62.0	0.0	2	6.0	18.4
2454.40	16.4	-62	-62.1	-0.1	2	4.8	18.3
2454.45	16.4	-62	-62.2	-0.2	2	7.8	18.2
2454.50	16.4	-62	-62.3	-0.3	2	5.5	18.1
2454.55	16.4	-62	-62.6	-0.6	2	4.6	17.8
2454.60	16.4	-62	-63.0	-1.0	2	6.1	17.4
2454.65	16.4	-62	-63.3	-1.3	2	7.2	17.1
2454.70	16.4	-62	-63.2	-1.2	2	5.4	17.2
2454.75	16.4	-62	-63.3	-1.3	2	6.1	17.1
2454.80	16.4	-62	-63.2	-1.2	2	7.4	17.2
2454.85	16.4	-62	-63.2	-1.2	2	5.5	17.2
2454.90	16.4	-62	-63.1	-1.1	2	5.4	17.3
2454.95	16.4	-62	-63.0	-1.0	2	7.3	17.4
2455.00	16.4	-62	-62.7	-0.7	2	6.3	17.7
2455.05	16.4	-62	-62.7	-0.7	2	5.5	17.7
2455.10	16.4	-62	-62.8	-0.8	2	8.0	17.6

D-LINK WLAN PC Card radio Jamming Margin Test

2455.15	16.4	-62	-62.9	-0.9	2	7.6	17.5
2455.20	16.4	-62	-62.8	-0.8	2	5.2	17.6
2455.25	16.4	-62	-62.8	-0.8	2	6.5	17.6
2455.30	16.4	-62	-63.1	-1.1	2	4.7	17.3
2455.35	16.4	-62	-62.9	-0.9	2	4.8	17.5
2455.40	16.4	-62	-63.0	-1.0	2	4.5	17.4
2455.45	16.4	-62	-63.1	-1.1	2	4.6	17.3
2455.50	16.4	-62	-63.3	-1.3	2	5.2	17.1
2455.55	16.4	-62	-63.7	-1.7	2	7.3	16.7
2455.60	16.4	-62	-63.9	-1.9	2	7.6	16.5
2455.65	16.4	-62	-64.2	-2.2	2	6.4	16.2
2455.70	16.4	-62	-64.3	-2.3	2	7.2	16.1
2455.75	16.4	-62	-64.4	-2.4	2	7.4	16.0
2455.80	16.4	-62	-64.6	-2.6	2	4.6	15.8
2455.85	16.4	-62	-64.6	-2.6	2	5.3	15.8
2455.90	16.4	-62	-64.7	-2.7	2	7.0	15.7
2455.95	16.4	-62	-64.5	-2.5	2	5.4	15.9
2456.00	16.4	-62	-64.5	-2.5	2	7.7	15.9
2456.05	16.4	-62	-64.4	-2.4	2	5.8	16.0
2456.10	16.4	-62	-64.5	-2.5	2	5.9	15.9
2456.15	16.4	-62	-64.5	-2.5	2	4.6	15.9
2456.20	16.4	-62	-64.7	-2.7	2	6.9	15.7
2456.25	16.4	-62	-64.8	-2.8	2	6.2	15.6
2456.30	16.4	-62	-65.1	-3.1	2	6.0	15.3
2456.35	16.4	-62	-65.3	-3.3	2	4.6	15.1
2456.40	16.4	-62	-65.4	-3.4	2	8.0	15.0
2456.45	16.4	-62	-65.5	-3.5	2	6.2	14.9
2456.50	16.4	-62	-65.5	-3.5	2	7.7	14.9
2456.55	16.4	-62	-65.9	-3.9	2	6.0	14.5
2456.60	16.4	-62	-65.7	-3.7	2	5.0	14.7
2456.65	16.4	-62	-65.9	-3.9	2	6.6	14.5
2456.70	16.4	-62	-65.9	-3.9	2	6.8	14.5
2456.75	16.4	-62	-65.8	-3.8	2	7.3	14.6
2456.80	16.4	-62	-65.9	-3.9	2	5.8	14.5
2456.85	16.4	-62	-66.0	-4.0	2	6.7	14.4
2456.90	16.4	-62	-66.1	-4.1	2	7.9	14.3
2456.95	16.4	-62	-66.2	-4.2	2	8.0	14.2

D-LINK WLAN PC Card radio Jamming Margin Test

2457.00	16.4	-62	-66.3	-4.3	2	4.5	14.1
2457.05	16.4	-62	-66.5	-4.5	2	6.6	13.9
2457.10	16.4	-62	-66.6	-4.6	2	5.4	13.8
2457.15	16.4	-62	-66.6	-4.6	2	6.2	13.8
2457.20	16.4	-62	-66.9	-4.9	2	7.6	13.5
2457.25	16.4	-62	-67.0	-5.0	2	5.0	13.4
2457.30	16.4	-62	-67.0	-5.0	2	7.7	13.4
2457.35	16.4	-62	-67.0	-5.0	2	7.0	13.4
2457.40	16.4	-62	-67.0	-5.0	2	4.6	13.4
2457.45	16.4	-62	-66.9	-4.9	2	7.4	13.5
2457.50	16.4	-62	-67.0	-5.0	2	6.5	13.4
2457.55	16.4	-62	-67.3	-5.3	2	4.6	13.1
2457.60	16.4	-62	-67.4	-5.4	2	7.7	13.0
2457.65	16.4	-62	-67.4	-5.4	2	7.8	13.0
2457.70	16.4	-62	-67.6	-5.6	2	7.3	12.8
2457.75	16.4	-62	-67.6	-5.6	2	6.0	12.8
2457.80	16.4	-62	-67.8	-5.8	2	5.1	12.6
2457.85	16.4	-62	-67.9	-5.9	2	4.6	12.5
2457.90	16.4	-62	-67.8	-5.8	2	5.6	12.6
2457.95	16.4	-62	-67.8	-5.8	2	6.4	12.6
2458.00	16.4	-62	-67.8	-5.8	2	7.9	12.6
2458.05	16.4	-62	-67.9	-5.9	2	7.0	12.5
2458.10	16.4	-62	-67.8	-5.8	2	6.9	12.6
2458.15	16.4	-62	-67.9	-5.9	2	5.4	12.5
2458.20	16.4	-62	-67.9	-5.9	2	5.9	12.5
2458.25	16.4	-62	-68.0	-6.0	2	7.3	12.4
2458.30	16.4	-62	-68.2	-6.2	2	7.1	12.2
2458.35	16.4	-62	-68.1	-6.1	2	6.5	12.3
2458.40	16.4	-62	-68.3	-6.3	2	5.9	12.1
2458.45	16.4	-62	-68.4	-6.4	2	6.0	12.0
2458.50	16.4	-62	-68.6	-6.6	2	4.6	11.8
2458.55	16.4	-62	-68.4	-6.4	2	6.0	12.0
2458.60	16.4	-62	-68.6	-6.6	2	7.1	11.8
2458.65	16.4	-62	-68.6	-6.6	2	7.3	11.8
2458.70	16.4	-62	-68.5	-6.5	2	4.9	11.9
2458.75	16.4	-62	-68.5	-6.5	2	6.0	11.9
2458.80	16.4	-62	-68.3	-6.3	2	7.2	12.1

D-LINK WLAN PC Card radio Jamming Margin Test

2458.85	16.4	-62	-68.6	-6.6	2	6.8	11.8
2458.90	16.4	-62	-68.6	-6.6	2	4.6	11.8
2458.95	16.4	-62	-68.6	-6.6	2	7.6	11.8
2459.00	16.4	-62	-68.7	-6.7	2	5.1	11.7
2459.05	16.4	-62	-68.9	-6.9	2	5.8	11.5
2459.10	16.4	-62	-69.1	-7.1	2	6.6	11.3
2459.15	16.4	-62	-69.1	-7.1	2	5.7	11.3
2459.20	16.4	-62	-69.3	-7.3	2	4.7	11.1
2459.25	16.4	-62	-69.2	-7.2	2	4.5	11.2
2459.30	16.4	-62	-69.2	-7.2	2	7.7	11.2
2459.35	16.4	-62	-69.3	-7.3	2	7.1	11.1
2459.40	16.4	-62	-69.3	-7.3	2	4.6	11.1
2459.45	16.4	-62	-69.2	-7.2	2	7.3	11.2
2459.50	16.4	-62	-69.3	-7.3	2	5.3	11.1
2459.55	16.4	-62	-69.1	-7.1	2	5.4	11.3
2459.60	16.4	-62	-69.1	-7.1	2	7.7	11.3
2459.65	16.4	-62	-69.1	-7.1	2	5.9	11.3
2459.70	16.4	-62	-69.3	-7.3	2	5.7	11.1
2459.75	16.4	-62	-69.3	-7.3	2	6.8	11.1
2459.80	16.4	-62	-69.4	-7.4	2	5.8	11.0
2459.85	16.4	-62	-69.5	-7.5	2	5.0	10.9
2459.90	16.4	-62	-69.5	-7.5	2	5.8	10.9
2459.95	16.4	-62	-69.5	-7.5	2	6.5	10.9
2460.00	16.4	-62	-69.6	-7.6	2	7.2	10.8
2460.05	16.4	-62	-69.6	-7.6	2	5.4	10.8
2460.10	16.4	-62	-69.5	-7.5	2	7.4	10.9
2460.15	16.4	-62	-69.5	-7.5	2	7.8	10.9
2460.20	16.4	-62	-69.3	-7.3	2	7.3	11.1
2460.25	16.4	-62	-69.3	-7.3	2	7.2	11.1
2460.30	16.4	-62	-69.3	-7.3	2	7.1	11.1
2460.35	16.4	-62	-69.3	-7.3	2	6.3	11.1
2460.40	16.4	-62	-69.3	-7.3	2	7.5	11.1
2460.45	16.4	-62	-69.4	-7.4	2	7.3	11.0
2460.50	16.4	-62	-69.4	-7.4	2	7.1	11.0
2460.55	16.4	-62	-69.6	-7.6	2	7.0	10.8
2460.60	16.4	-62	-69.4	-7.4	2	7.1	11.0
2460.65	16.4	-62	-69.4	-7.4	2	5.6	11.0

D-LINK WLAN PC Card radio Jamming Margin Test

2460.70	16.4	-62	-69.4	-7.4	2	6.7	11.0
2460.75	16.4	-62	-69.3	-7.3	2	6.1	11.1
2460.80	16.4	-62	-69.3	-7.3	2	6.0	11.1
2460.85	16.4	-62	-69.0	-7.0	2	5.6	11.4
2460.90	16.4	-62	-69.0	-7.0	2	4.9	11.4
2460.95	16.4	-62	-68.9	-6.9	2	6.2	11.5
2461.00	16.4	-62	-69.0	-7.0	2	7.0	11.4
2461.05	16.4	-62	-68.9	-6.9	2	6.8	11.5
2461.10	16.4	-62	-69.0	-7.0	2	5.8	11.4
2461.15	16.4	-62	-68.8	-6.8	2	6.1	11.6
2461.20	16.4	-62	-68.7	-6.7	2	6.8	11.7
2461.25	16.4	-62	-68.8	-6.8	2	6.1	11.6
2461.30	16.4	-62	-68.8	-6.8	2	7.2	11.6
2461.35	16.4	-62	-68.8	-6.8	2	6.4	11.6
2461.40	16.4	-62	-68.8	-6.8	2	6.1	11.6
2461.45	16.4	-62	-68.8	-6.8	2	5.3	11.6
2461.50	16.4	-62	-68.7	-6.7	2	5.1	11.7
2461.55	16.4	-62	-68.7	-6.7	2	7.5	11.7
2461.60	16.4	-62	-68.6	-6.6	2	7.0	11.8
2461.65	16.4	-62	-68.6	-6.6	2	6.6	11.8
2461.70	16.4	-62	-68.5	-6.5	2	6.4	11.9
2461.75	16.4	-62	-68.7	-6.7	2	7.3	11.7
2461.80	16.4	-62	-68.7	-6.7	2	7.4	11.7
2461.85	16.4	-62	-68.8	-6.8	2	6.9	11.6
2461.90	16.4	-62	-69.0	-7.0	2	7.7	11.4
2461.95	16.4	-62	-68.8	-6.8	2	4.7	11.6
2462.00	16.4	-62	-69.1	-7.1	2	6.4	11.3
2462.05	16.4	-62	-69.0	-7.0	2	6.6	11.4
2462.10	16.4	-62	-68.8	-6.8	2	7.7	11.6
2462.15	16.4	-62	-68.6	-6.6	2	5.9	11.8
2462.20	16.4	-62	-68.6	-6.6	2	6.0	11.8
2462.25	16.4	-62	-68.6	-6.6	2	6.1	11.8
2462.30	16.4	-62	-68.5	-6.5	2	5.5	11.9
2462.35	16.4	-62	-68.5	-6.5	2	7.7	11.9
2462.40	16.4	-62	-68.6	-6.6	2	7.2	11.8
2462.45	16.4	-62	-68.6	-6.6	2	7.5	11.8
2462.50	16.4	-62	-68.7	-6.7	2	6.9	11.7

D-LINK WLAN PC Card radio Jamming Margin Test

2462.55	16.4	-62	-68.5	-6.5	2	7.0	11.9
2462.60	16.4	-62	-68.6	-6.6	2	6.2	11.8
2462.65	16.4	-62	-68.6	-6.6	2	6.8	11.8
2462.70	16.4	-62	-68.8	-6.8	2	4.8	11.6
2462.75	16.4	-62	-68.6	-6.6	2	7.7	11.8
2462.80	16.4	-62	-68.6	-6.6	2	7.0	11.8
2462.85	16.4	-62	-68.7	-6.7	2	4.7	11.7
2462.90	16.4	-62	-68.7	-6.7	2	7.3	11.7
2462.95	16.4	-62	-68.7	-6.7	2	5.0	11.7
2463.00	16.4	-62	-68.7	-6.7	2	6.1	11.7
2463.05	16.4	-62	-68.9	-6.9	2	7.2	11.5
2463.10	16.4	-62	-68.9	-6.9	2	7.6	11.5
2463.15	16.4	-62	-69.0	-7.0	2	5.9	11.4
2463.20	16.4	-62	-68.9	-6.9	2	6.0	11.5
2463.25	16.4	-62	-69.0	-7.0	2	7.6	11.4
2463.30	16.4	-62	-69.0	-7.0	2	7.1	11.4
2463.35	16.4	-62	-69.3	-7.3	2	6.0	11.1
2463.40	16.4	-62	-69.0	-7.0	2	6.2	11.4
2463.45	16.4	-62	-69.0	-7.0	2	7.6	11.4
2463.50	16.4	-62	-69.1	-7.1	2	4.9	11.3
2463.55	16.4	-62	-68.9	-6.9	2	5.8	11.5
2463.60	16.4	-62	-68.9	-6.9	2	5.8	11.5
2463.65	16.4	-62	-69.0	-7.0	2	6.2	11.4
2463.70	16.4	-62	-68.9	-6.9	2	5.1	11.5
2463.75	16.4	-62	-68.7	-6.7	2	7.5	11.7
2463.80	16.4	-62	-68.9	-6.9	2	7.1	11.5
2463.85	16.4	-62	-68.9	-6.9	2	7.6	11.5
2463.90	16.4	-62	-68.9	-6.9	2	5.8	11.5
2463.95	16.4	-62	-69.2	-7.2	2	7.6	11.2
2464.00	16.4	-62	-69.1	-7.1	2	4.8	11.3
2464.05	16.4	-62	-69.1	-7.1	2	5.7	11.3
2464.10	16.4	-62	-69.1	-7.1	2	6.4	11.3
2464.15	16.4	-62	-69.1	-7.1	2	7.6	11.3
2464.20	16.4	-62	-68.9	-6.9	2	5.0	11.5
2464.25	16.4	-62	-68.9	-6.9	2	6.7	11.5
2464.30	16.4	-62	-68.8	-6.8	2	4.9	11.6
2464.35	16.4	-62	-68.6	-6.6	2	5.6	11.8

D-LINK WLAN PC Card radio Jamming Margin Test

2464.40	16.4	-62	-68.8	-6.8	2	6.8	11.6
2464.45	16.4	-62	-68.7	-6.7	2	6.3	11.7
2464.50	16.4	-62	-68.7	-6.7	2	6.2	11.7
2464.55	16.4	-62	-68.7	-6.7	2	7.2	11.7
2464.60	16.4	-62	-68.9	-6.9	2	7.0	11.5
2464.65	16.4	-62	-68.9	-6.9	2	4.9	11.5
2464.70	16.4	-62	-68.7	-6.7	2	5.4	11.7
2464.75	16.4	-62	-68.9	-6.9	2	5.2	11.5
2464.80	16.4	-62	-68.6	-6.6	2	7.0	11.8
2464.85	16.4	-62	-68.5	-6.5	2	6.4	11.9
2464.90	16.4	-62	-68.6	-6.6	2	5.0	11.8
2464.95	16.4	-62	-68.4	-6.4	2	5.0	12.0
2465.00	16.4	-62	-68.4	-6.4	2	7.9	12.0
2465.05	16.4	-62	-68.1	-6.1	2	5.4	12.3
2465.10	16.4	-62	-68.1	-6.1	2	4.9	12.3
2465.15	16.4	-62	-68.2	-6.2	2	7.8	12.2
2465.20	16.4	-62	-68.2	-6.2	2	7.7	12.2
2465.25	16.4	-62	-68.2	-6.2	2	7.5	12.2
2465.30	16.4	-62	-68.2	-6.2	2	7.7	12.2
2465.35	16.4	-62	-68.2	-6.2	2	8.0	12.2
2465.40	16.4	-62	-68.3	-6.3	2	7.2	12.1
2465.45	16.4	-62	-68.1	-6.1	2	5.3	12.3
2465.50	16.4	-62	-68.2	-6.2	2	7.4	12.2
2465.55	16.4	-62	-68.0	-6.0	2	5.2	12.4
2465.60	16.4	-62	-68.0	-6.0	2	6.1	12.4
2465.65	16.4	-62	-67.8	-5.8	2	5.6	12.6
2465.70	16.4	-62	-67.8	-5.8	2	5.5	12.6
2465.75	16.4	-62	-67.6	-5.6	2	5.5	12.8
2465.80	16.4	-62	-67.7	-5.7	2	5.3	12.7
2465.85	16.4	-62	-67.6	-5.6	2	6.7	12.8
2465.90	16.4	-62	-67.5	-5.5	2	5.7	12.9
2465.95	16.4	-62	-67.5	-5.5	2	5.9	12.9
2466.00	16.4	-62	-67.5	-5.5	2	7.6	12.9
2466.05	16.4	-62	-67.5	-5.5	2	4.7	12.9
2466.10	16.4	-62	-67.4	-5.4	2	7.9	13.0
2466.15	16.4	-62	-67.3	-5.3	2	5.3	13.1
2466.20	16.4	-62	-67.2	-5.2	2	6.6	13.2

D-LINK WLAN PC Card radio Jamming Margin Test

2466.25	16.4	-62	-67.2	-5.2	2	7.2	13.2
2466.30	16.4	-62	-67.0	-5.0	2	5.5	13.4
2466.35	16.4	-62	-66.9	-4.9	2	6.6	13.5
2466.40	16.4	-62	-66.6	-4.6	2	5.6	13.8
2466.45	16.4	-62	-66.7	-4.7	2	6.4	13.7
2466.50	16.4	-62	-66.5	-4.5	2	7.0	13.9
2466.55	16.4	-62	-66.5	-4.5	2	5.6	13.9
2466.60	16.4	-62	-66.6	-4.6	2	7.0	13.8
2466.65	16.4	-62	-66.6	-4.6	2	4.6	13.8
2466.70	16.4	-62	-66.5	-4.5	2	5.4	13.9
2466.75	16.4	-62	-66.4	-4.4	2	7.4	14.0
2466.80	16.4	-62	-66.3	-4.3	2	6.3	14.1
2466.85	16.4	-62	-66.4	-4.4	2	8.0	14.0
2466.90	16.4	-62	-66.2	-4.2	2	7.7	14.2
2466.95	16.4	-62	-65.9	-3.9	2	7.1	14.5
2467.00	16.4	-62	-65.8	-3.8	2	5.3	14.6
2467.05	16.4	-62	-65.8	-3.8	2	4.6	14.6
2467.10	16.4	-62	-65.7	-3.7	2	5.8	14.7
2467.15	16.4	-62	-65.4	-3.4	2	5.4	15.0
2467.20	16.4	-62	-65.2	-3.2	2	6.7	15.2
2467.25	16.4	-62	-65.1	-3.1	2	7.5	15.3
2467.30	16.4	-62	-65.3	-3.3	2	5.3	15.1
2467.35	16.4	-62	-65.2	-3.2	2	4.8	15.2
2467.40	16.4	-62	-65.0	-3.0	2	5.8	15.4
2467.45	16.4	-62	-64.9	-2.9	2	5.3	15.5
2467.50	16.4	-62	-64.7	-2.7	2	7.9	15.7
2467.55	16.4	-62	-64.8	-2.8	2	6.9	15.6
2467.60	16.4	-62	-64.5	-2.5	2	5.9	15.9
2467.65	16.4	-62	-64.3	-2.3	2	7.3	16.1
2467.70	16.4	-62	-64.1	-2.1	2	7.0	16.3
2467.75	16.4	-62	-63.7	-1.7	2	5.4	16.7
2467.80	16.4	-62	-63.5	-1.5	2	5.0	16.9
2467.85	16.4	-62	-63.4	-1.4	2	6.4	17.0
2467.90	16.4	-62	-63.3	-1.3	2	5.9	17.1
2467.95	16.4	-62	-63.4	-1.4	2	6.1	17.0
2468.00	16.4	-62	-63.1	-1.1	2	7.7	17.3
2468.05	16.4	-62	-63.3	-1.3	2	5.3	17.1

D-LINK WLAN PC Card radio Jamming Margin Test

2468.10	16.4	-62	-63.5	-1.5	2	4.6	16.9
2468.15	16.4	-62	-63.4	-1.4	2	5.1	17.0
2468.20	16.4	-62	-63.3	-1.3	2	7.3	17.1
2468.25	16.4	-62	-63.2	-1.2	2	7.6	17.2
2468.30	16.4	-62	-63.2	-1.2	2	6.2	17.2
2468.35	16.4	-62	-63.1	-1.1	2	7.0	17.3
2468.40	16.4	-62	-62.9	-0.9	2	7.0	17.5
2468.45	16.4	-62	-62.5	-0.5	2	6.4	17.9
2468.50	16.4	-62	-62.3	-0.3	2	5.1	18.1
2468.55	16.4	-62	-62.0	0.0	2	4.6	18.4
2468.60	16.4	-62	-61.9	0.1	2	5.9	18.5
2468.65	16.4	-62	-61.9	0.1	2	6.9	18.5
2468.70	16.4	-62	-62.0	0.0	2	6.9	18.4
2468.75	16.4	-62	-61.9	0.1	2	4.7	18.5
2468.80	16.4	-62	-61.8	0.2	2	6.3	18.6
2468.85	16.4	-62	-61.8	0.2	2	5.4	18.6
2468.90	16.4	-62	-61.8	0.2	2	4.6	18.6
2468.95	16.4	-62	-61.7	0.3	2	5.6	18.7
2469.00	16.4	-62	-61.9	0.1	2	5.4	18.5
2469.05	16.4	-62	-62.0	0.0	2	7.2	18.4
2469.10	16.4	-62	-62.2	-0.2	2	6.9	18.2
2469.15	16.4	-62	-62.4	-0.4	2	4.9	18.0
2469.20	16.4	-62	-62.3	-0.3	2	7.5	18.1
2469.25	16.4	-62	-62.3	-0.3	2	6.0	18.1
2469.30	16.4	-62	-62.3	-0.3	2	7.5	18.1
2469.35	16.4	-62	-62.1	-0.1	2	6.3	18.3
2469.40	16.4	-62	-61.8	0.2	2	7.0	18.6
2469.45	16.4	-62	-61.6	0.4	2	6.6	18.8
2469.50	16.4	-62	-61.3	0.7	2	5.5	19.1
2469.55	16.4	-62	-61.1	0.9	2	5.4	19.3
2469.60	16.4	-62	-61.1	0.9	2	5.9	19.3
2469.65	16.4	-62	-61.0	1.0	2	5.8	19.4
2469.70	16.4	-62	-60.9	1.1	2	7.4	19.5
2469.75	16.4	-62	-60.8	1.2	2	7.1	19.6
2469.80	16.4	-62	-60.8	1.2	2	5.4	19.6
2469.85	16.4	-62	-60.7	1.3	2	6.8	19.7
2469.90	16.4	-62	-60.7	1.3	2	6.8	19.7

D-LINK WLAN PC Card radio Jamming Margin Test

2469.95	16.4	-62	-60.7	1.3	2	6.5	19.7
2470.00	16.4	-62	-60.8	1.2	2	7.2	19.6
2470.05	16.4	-62	-60.9	1.1	2	5.7	19.5
2470.10	16.4	-62	-61.1	0.9	2	6.4	19.3
2470.15	16.4	-62	-61.2	0.8	2	6.7	19.2
2470.20	16.4	-62	-61.2	0.8	2	6.4	19.2
2470.25	16.4	-62	-61.2	0.8	2	7.6	19.2
2470.30	16.4	-62	-61.1	0.9	2	4.8	19.3
2470.35	16.4	-62	-61.0	1.0	2	6.1	19.4
2470.40	16.4	-62	-60.7	1.3	2	5.8	19.7
2470.45	16.4	-62	-60.5	1.5	2	5.6	19.9
2470.50	16.4	-62	-60.2	1.8	2	7.2	20.2
Processing Gain(dB)@20th Percentile=11.6							



D-LINK WLAN PC Card radio Jamming Margin Test

2Mbps Channel 7 (2442MHz) Processing Gain							
Gp=(S/N)o+Lsys+(Jr/Sr)							
Frequency	(S/N)o	Sr	Jr	Jr/Sr	Lsys	FER	Gp
(MHz)	(dB)	(dBm)	(dBm)	(dB)	(dB)	(%)	(dB)
2433.50	13.3	-62	-61.3	0.7	2	7.2	16.0
2433.55	13.3	-62	-61.6	0.4	2	4.7	15.7
2433.60	13.3	-62	-61.8	0.2	2	6.1	15.5
2433.65	13.3	-62	-62.1	-0.1	2	7.0	15.2
2433.70	13.3	-62	-62.3	-0.3	2	5.8	15.0
2433.75	13.3	-62	-62.3	-0.3	2	4.8	15.0
2433.80	13.3	-62	-62.2	-0.2	2	7.6	15.1
2433.85	13.3	-62	-62.1	-0.1	2	6.5	15.2
2433.90	13.3	-62	-62.1	-0.1	2	7.0	15.2
2433.95	13.3	-62	-61.7	0.3	2	4.9	15.6
2434.00	13.3	-62	-61.6	0.4	2	6.9	15.7
2434.05	13.3	-62	-61.7	0.3	2	6.6	15.6
2434.10	13.3	-62	-61.6	0.4	2	5.2	15.7
2434.15	13.3	-62	-61.7	0.3	2	6.3	15.6
2434.20	13.3	-62	-61.6	0.4	2	6.2	15.7
2434.25	13.3	-62	-61.7	0.3	2	6.7	15.6
2434.30	13.3	-62	-61.9	0.1	2	6.2	15.4
2434.35	13.3	-62	-61.9	0.1	2	6.9	15.4
2434.40	13.3	-62	-61.8	0.2	2	6.0	15.5
2434.45	13.3	-62	-62.0	0.0	2	5.6	15.3
2434.50	13.3	-62	-62.4	-0.4	2	5.4	14.9
2434.55	13.3	-62	-62.5	-0.5	2	7.0	14.8
2434.60	13.3	-62	-62.8	-0.8	2	6.9	14.5
2434.65	13.3	-62	-63.0	-1.0	2	5.7	14.3
2434.70	13.3	-62	-63.0	-1.0	2	5.9	14.3
2434.75	13.3	-62	-63.1	-1.1	2	6.1	14.2
2434.80	13.3	-62	-63.2	-1.2	2	7.4	14.1
2434.85	13.3	-62	-63.1	-1.1	2	7.8	14.2
2434.90	13.3	-62	-63.2	-1.2	2	6.2	14.1
2434.95	13.3	-62	-62.9	-0.9	2	4.7	14.4
2435.00	13.3	-62	-62.8	-0.8	2	5.6	14.5
2435.05	13.3	-62	-62.6	-0.6	2	4.9	14.7
2435.10	13.3	-62	-62.7	-0.7	2	4.8	14.6

D-LINK WLAN PC Card radio Jamming Margin Test

2435.15	13.3	-62	-62.7	-0.7	2	5.3	14.6
2435.20	13.3	-62	-62.9	-0.9	2	6.7	14.4
2435.25	13.3	-62	-62.8	-0.8	2	4.5	14.5
2435.30	13.3	-62	-62.9	-0.9	2	6.6	14.4
2435.35	13.3	-62	-62.8	-0.8	2	6.2	14.5
2435.40	13.3	-62	-62.9	-0.9	2	7.6	14.4
2435.45	13.3	-62	-63.1	-1.1	2	5.1	14.2
2435.50	13.3	-62	-63.4	-1.4	2	7.5	13.9
2435.55	13.3	-62	-63.7	-1.7	2	5.4	13.6
2435.60	13.3	-62	-64.0	-2.0	2	7.9	13.3
2435.65	13.3	-62	-64.2	-2.2	2	6.0	13.1
2435.70	13.3	-62	-64.3	-2.3	2	5.8	13.0
2435.75	13.3	-62	-64.3	-2.3	2	7.8	13.0
2435.80	13.3	-62	-64.5	-2.5	2	5.1	12.8
2435.85	13.3	-62	-64.5	-2.5	2	7.6	12.8
2435.90	13.3	-62	-64.3	-2.3	2	5.8	13.0
2435.95	13.3	-62	-64.2	-2.2	2	4.5	13.1
2436.00	13.3	-62	-63.8	-1.8	2	5.2	13.5
2436.05	13.3	-62	-63.7	-1.7	2	6.8	13.6
2436.10	13.3	-62	-63.6	-1.6	2	5.7	13.7
2436.15	13.3	-62	-62.7	-0.7	2	7.8	14.6
2436.20	13.3	-62	-62.7	-0.7	2	7.3	14.6
2436.25	13.3	-62	-61.2	0.8	2	6.7	16.1
2436.30	13.3	-62	-61.3	0.7	2	5.1	16.0
2436.35	13.3	-62	-59.8	2.2	2	5.0	17.5
2436.40	13.3	-62	-60.3	1.7	2	7.9	17.0
2436.45	13.3	-62	-60.4	1.6	2	7.8	16.9
2436.50	13.3	-62	-59.7	2.3	2	6.3	17.6
2436.55	13.3	-62	-60.4	1.6	2	6.5	16.9
2436.60	13.3	-62	-60.3	1.7	2	5.9	17.0
2436.65	13.3	-62	-59.8	2.2	2	7.2	17.5
2436.70	13.3	-62	-61.4	0.6	2	5.3	15.9
2436.75	13.3	-62	-61.9	0.1	2	7.1	15.4
2436.80	13.3	-62	-62.6	-0.6	2	5.7	14.7
2436.85	13.3	-62	-63.2	-1.2	2	5.9	14.1
2436.90	13.3	-62	-63.8	-1.8	2	7.4	13.5
2436.95	13.3	-62	-64.1	-2.1	2	5.1	13.2

D-LINK WLAN PC Card radio Jamming Margin Test

2437.00	13.3	-62	-64.0	-2.0	2	4.9	13.3
2437.05	13.3	-62	-64.6	-2.6	2	7.0	12.7
2437.10	13.3	-62	-64.7	-2.7	2	4.6	12.6
2437.15	13.3	-62	-64.6	-2.6	2	5.6	12.7
2437.20	13.3	-62	-64.7	-2.7	2	6.4	12.6
2437.25	13.3	-62	-64.9	-2.9	2	4.6	12.4
2437.30	13.3	-62	-64.8	-2.8	2	4.7	12.5
2437.35	13.3	-62	-64.9	-2.9	2	7.5	12.4
2437.40	13.3	-62	-64.7	-2.7	2	7.6	12.6
2437.45	13.3	-62	-64.6	-2.6	2	5.0	12.7
2437.50	13.3	-62	-64.3	-2.3	2	6.0	13.0
2437.55	13.3	-62	-64.3	-2.3	2	5.9	13.0
2437.60	13.3	-62	-64.4	-2.4	2	5.5	12.9
2437.65	13.3	-62	-64.3	-2.3	2	5.8	13.0
2437.70	13.3	-62	-64.3	-2.3	2	4.9	13.0
2437.75	13.3	-62	-64.3	-2.3	2	6.8	13.0
2437.80	13.3	-62	-64.3	-2.3	2	5.8	13.0
2437.85	13.3	-62	-64.3	-2.3	2	6.5	13.0
2437.90	13.3	-62	-64.4	-2.4	2	5.6	12.9
2437.95	13.3	-62	-64.4	-2.4	2	6.7	12.9
2438.00	13.3	-62	-64.4	-2.4	2	5.8	12.9
2438.05	13.3	-62	-64.5	-2.5	2	5.2	12.8
2438.10	13.3	-62	-64.9	-2.9	2	6.1	12.4
2438.15	13.3	-62	-64.9	-2.9	2	4.6	12.4
2438.20	13.3	-62	-64.9	-2.9	2	5.2	12.4
2438.25	13.3	-62	-64.8	-2.8	2	6.3	12.5
2438.30	13.3	-62	-65.0	-3.0	2	6.0	12.3
2438.35	13.3	-62	-65.1	-3.1	2	6.9	12.2
2438.40	13.3	-62	-65.0	-3.0	2	7.7	12.3
2438.45	13.3	-62	-64.9	-2.9	2	4.6	12.4
2438.50	13.3	-62	-65.0	-3.0	2	7.1	12.3
2438.55	13.3	-62	-64.7	-2.7	2	7.1	12.6
2438.60	13.3	-62	-64.6	-2.6	2	7.2	12.7
2438.65	13.3	-62	-64.6	-2.6	2	5.2	12.7
2438.70	13.3	-62	-64.6	-2.6	2	6.9	12.7
2438.75	13.3	-62	-64.5	-2.5	2	6.2	12.8
2438.80	13.3	-62	-64.6	-2.6	2	7.5	12.7

D-LINK WLAN PC Card radio Jamming Margin Test

2438.85	13.3	-62	-64.7	-2.7	2	5.0	12.6
2438.90	13.3	-62	-65.0	-3.0	2	5.4	12.3
2438.95	13.3	-62	-64.9	-2.9	2	4.5	12.4
2439.00	13.3	-62	-64.7	-2.7	2	6.5	12.6
2439.05	13.3	-62	-64.9	-2.9	2	4.9	12.4
2439.10	13.3	-62	-65.0	-3.0	2	6.4	12.3
2439.15	13.3	-62	-65.0	-3.0	2	5.5	12.3
2439.20	13.3	-62	-65.3	-3.3	2	5.4	12.0
2439.25	13.3	-62	-65.1	-3.1	2	5.0	12.2
2439.30	13.3	-62	-65.0	-3.0	2	6.1	12.3
2439.35	13.3	-62	-65.2	-3.2	2	7.5	12.1
2439.40	13.3	-62	-65.4	-3.4	2	5.2	11.9
2439.45	13.3	-62	-65.0	-3.0	2	6.4	12.3
2439.50	13.3	-62	-65.5	-3.5	2	6.0	11.8
2439.55	13.3	-62	-65.0	-3.0	2	7.3	12.3
2439.60	13.3	-62	-64.6	-2.6	2	6.2	12.7
2439.65	13.3	-62	-64.6	-2.6	2	6.4	12.7
2439.70	13.3	-62	-64.7	-2.7	2	7.5	12.6
2439.75	13.3	-62	-64.7	-2.7	2	7.7	12.6
2439.80	13.3	-62	-64.5	-2.5	2	6.1	12.8
2439.85	13.3	-62	-65.2	-3.2	2	7.6	12.1
2439.90	13.3	-62	-65.5	-3.5	2	5.2	11.8
2439.95	13.3	-62	-64.9	-2.9	2	5.6	12.4
2440.00	13.3	-62	-65.0	-3.0	2	6.6	12.3
2440.05	13.3	-62	-65.1	-3.1	2	5.4	12.2
2440.10	13.3	-62	-65.2	-3.2	2	7.8	12.1
2440.15	13.3	-62	-65.2	-3.2	2	6.3	12.1
2440.20	13.3	-62	-65.5	-3.5	2	6.2	11.8
2440.25	13.3	-62	-65.4	-3.4	2	6.8	11.9
2440.30	13.3	-62	-65.2	-3.2	2	5.9	12.1
2440.35	13.3	-62	-65.6	-3.6	2	5.5	11.7
2440.40	13.3	-62	-66.0	-4.0	2	6.4	11.3
2440.45	13.3	-62	-65.5	-3.5	2	6.1	11.8
2440.50	13.3	-62	-66.1	-4.1	2	6.6	11.2
2440.55	13.3	-62	-65.2	-3.2	2	5.3	12.1
2440.60	13.3	-62	-64.9	-2.9	2	6.1	12.4
2440.65	13.3	-62	-64.7	-2.7	2	7.6	12.6

D-LINK WLAN PC Card radio Jamming Margin Test

2440.70	13.3	-62	-64.7	-2.7	2	6.3	12.6
2440.75	13.3	-62	-64.9	-2.9	2	7.8	12.4
2440.80	13.3	-62	-64.7	-2.7	2	5.5	12.6
2440.85	13.3	-62	-65.6	-3.6	2	5.4	11.7
2440.90	13.3	-62	-65.9	-3.9	2	6.0	11.4
2440.95	13.3	-62	-65.1	-3.1	2	7.3	12.2
2441.00	13.3	-62	-65.2	-3.2	2	5.9	12.1
2441.05	13.3	-62	-65.1	-3.1	2	7.4	12.2
2441.10	13.3	-62	-65.1	-3.1	2	6.7	12.2
2441.15	13.3	-62	-65.2	-3.2	2	4.6	12.1
2441.20	13.3	-62	-65.6	-3.6	2	6.5	11.7
2441.25	13.3	-62	-65.5	-3.5	2	6.3	11.8
2441.30	13.3	-62	-65.5	-3.5	2	5.7	11.8
2441.35	13.3	-62	-66.0	-4.0	2	7.3	11.3
2441.40	13.3	-62	-66.5	-4.5	2	4.8	10.8
2441.45	13.3	-62	-66.0	-4.0	2	6.6	11.3
2441.50	13.3	-62	-66.4	-4.4	2	5.0	10.9
2441.55	13.3	-62	-65.1	-3.1	2	7.2	12.2
2441.60	13.3	-62	-64.4	-2.4	2	7.8	12.9
2441.65	13.3	-62	-64.0	-2.0	2	7.1	13.3
2441.70	13.3	-62	-63.5	-1.5	2	4.6	13.8
2441.75	13.3	-62	-62.5	-0.5	2	7.8	14.8
2441.80	13.3	-62	-62.0	0.0	2	4.5	15.3
2441.85	13.3	-62	-61.4	0.6	2	4.7	15.9
2441.90	13.3	-62	-61.6	0.4	2	7.4	15.7
2441.95	13.3	-62	-61.4	0.6	2	7.5	15.9
2442.00	13.3	-62	-61.1	0.9	2	6.3	16.2
2442.05	13.3	-62	-61.3	0.7	2	4.8	16.0
2442.10	13.3	-62	-61.2	0.8	2	5.3	16.1
2442.15	13.3	-62	-61.6	0.4	2	5.8	15.7
2442.20	13.3	-62	-62.2	-0.2	2	6.5	15.1
2442.25	13.3	-62	-62.7	-0.7	2	5.1	14.6
2442.30	13.3	-62	-63.7	-1.7	2	6.2	13.6
2442.35	13.3	-62	-64.1	-2.1	2	5.9	13.2
2442.40	13.3	-62	-64.9	-2.9	2	7.6	12.4
2442.45	13.3	-62	-64.9	-2.9	2	7.4	12.4
2442.50	13.3	-62	-66.0	-4.0	2	6.1	11.3

D-LINK WLAN PC Card radio Jamming Margin Test

2442.55	13.3	-62	-65.5	-3.5	2	5.8	11.8
2442.60	13.3	-62	-65.5	-3.5	2	5.2	11.8
2442.65	13.3	-62	-65.6	-3.6	2	6.9	11.7
2442.70	13.3	-62	-65.6	-3.6	2	4.6	11.7
2442.75	13.3	-62	-65.9	-3.9	2	6.0	11.4
2442.80	13.3	-62	-65.5	-3.5	2	7.9	11.8
2442.85	13.3	-62	-66.6	-4.6	2	7.6	10.7
2442.90	13.3	-62	-66.4	-4.4	2	6.1	10.9
2442.95	13.3	-62	-65.4	-3.4	2	7.9	11.9
2443.00	13.3	-62	-65.1	-3.1	2	5.3	12.2
2443.05	13.3	-62	-65.0	-3.0	2	6.1	12.3
2443.10	13.3	-62	-64.8	-2.8	2	6.7	12.5
2443.15	13.3	-62	-64.7	-2.7	2	5.8	12.6
2443.20	13.3	-62	-64.8	-2.8	2	4.7	12.5
2443.25	13.3	-62	-64.8	-2.8	2	6.6	12.5
2443.30	13.3	-62	-64.8	-2.8	2	6.0	12.5
2443.35	13.3	-62	-65.0	-3.0	2	7.1	12.3
2443.40	13.3	-62	-65.7	-3.7	2	6.0	11.6
2443.45	13.3	-62	-65.1	-3.1	2	5.4	12.2
2443.50	13.3	-62	-65.8	-3.8	2	4.9	11.5
2443.55	13.3	-62	-65.3	-3.3	2	6.4	12.0
2443.60	13.3	-62	-65.3	-3.3	2	6.5	12.0
2443.65	13.3	-62	-65.4	-3.4	2	5.4	11.9
2443.70	13.3	-62	-65.3	-3.3	2	5.1	12.0
2443.75	13.3	-62	-65.5	-3.5	2	5.4	11.8
2443.80	13.3	-62	-65.3	-3.3	2	4.6	12.0
2443.85	13.3	-62	-66.0	-4.0	2	7.4	11.3
2443.90	13.3	-62	-66.0	-4.0	2	4.8	11.3
2443.95	13.3	-62	-65.2	-3.2	2	8.0	12.1
2444.00	13.3	-62	-64.8	-2.8	2	4.6	12.5
2444.05	13.3	-62	-64.8	-2.8	2	7.0	12.5
2444.10	13.3	-62	-64.7	-2.7	2	7.3	12.6
2444.15	13.3	-62	-64.7	-2.7	2	7.3	12.6
2444.20	13.3	-62	-64.9	-2.9	2	7.6	12.4
2444.25	13.3	-62	-64.8	-2.8	2	6.3	12.5
2444.30	13.3	-62	-64.8	-2.8	2	5.8	12.5
2444.35	13.3	-62	-65.1	-3.1	2	4.7	12.2

D-LINK WLAN PC Card radio Jamming Margin Test

2444.40	13.3	-62	-65.2	-3.2	2	7.5	12.1
2444.45	13.3	-62	-65.1	-3.1	2	4.5	12.2
2444.50	13.3	-62	-65.6	-3.6	2	4.6	11.7
2444.55	13.3	-62	-65.1	-3.1	2	7.2	12.2
2444.60	13.3	-62	-65.2	-3.2	2	5.2	12.1
2444.65	13.3	-62	-65.4	-3.4	2	5.4	11.9
2444.70	13.3	-62	-65.4	-3.4	2	7.6	11.9
2444.75	13.3	-62	-65.5	-3.5	2	5.2	11.8
2444.80	13.3	-62	-65.3	-3.3	2	4.6	12.0
2444.85	13.3	-62	-65.5	-3.5	2	7.0	11.8
2444.90	13.3	-62	-65.7	-3.7	2	5.3	11.6
2444.95	13.3	-62	-65.3	-3.3	2	4.9	12.0
2445.00	13.3	-62	-64.8	-2.8	2	4.6	12.5
2445.05	13.3	-62	-65.0	-3.0	2	7.1	12.3
2445.10	13.3	-62	-65.0	-3.0	2	5.6	12.3
2445.15	13.3	-62	-64.8	-2.8	2	7.8	12.5
2445.20	13.3	-62	-64.9	-2.9	2	4.9	12.4
2445.25	13.3	-62	-64.9	-2.9	2	6.6	12.4
2445.30	13.3	-62	-64.9	-2.9	2	4.8	12.4
2445.35	13.3	-62	-64.7	-2.7	2	7.1	12.6
2445.40	13.3	-62	-64.9	-2.9	2	6.5	12.4
2445.45	13.3	-62	-65.0	-3.0	2	7.1	12.3
2445.50	13.3	-62	-65.2	-3.2	2	4.7	12.1
2445.55	13.3	-62	-65.1	-3.1	2	5.9	12.2
2445.60	13.3	-62	-65.1	-3.1	2	6.2	12.2
2445.65	13.3	-62	-65.1	-3.1	2	6.2	12.2
2445.70	13.3	-62	-65.1	-3.1	2	4.9	12.2
2445.75	13.3	-62	-65.1	-3.1	2	7.4	12.2
2445.80	13.3	-62	-64.9	-2.9	2	7.7	12.4
2445.85	13.3	-62	-65.0	-3.0	2	5.8	12.3
2445.90	13.3	-62	-64.9	-2.9	2	5.4	12.4
2445.95	13.3	-62	-64.7	-2.7	2	5.7	12.6
2446.00	13.3	-62	-64.5	-2.5	2	5.4	12.8
2446.05	13.3	-62	-64.4	-2.4	2	7.0	12.9
2446.10	13.3	-62	-64.5	-2.5	2	7.6	12.8
2446.15	13.3	-62	-64.2	-2.2	2	6.4	13.1
2446.20	13.3	-62	-64.4	-2.4	2	5.4	12.9

D-LINK WLAN PC Card radio Jamming Margin Test

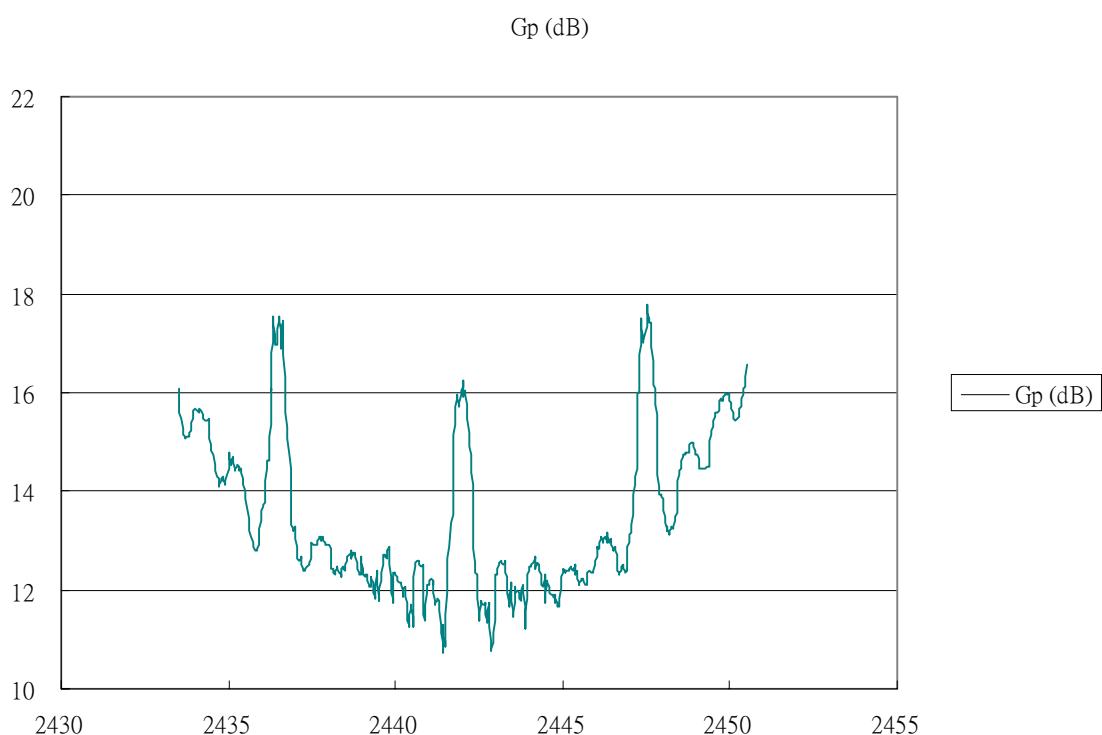
2446.25	13.3	-62	-64.2	-2.2	2	6.8	13.1
2446.30	13.3	-62	-64.4	-2.4	2	5.2	12.9
2446.35	13.3	-62	-64.2	-2.2	2	5.6	13.1
2446.40	13.3	-62	-64.3	-2.3	2	6.8	13.0
2446.45	13.3	-62	-64.2	-2.2	2	8.0	13.1
2446.50	13.3	-62	-64.4	-2.4	2	5.8	12.9
2446.55	13.3	-62	-64.5	-2.5	2	5.0	12.8
2446.60	13.3	-62	-64.8	-2.8	2	5.9	12.5
2446.65	13.3	-62	-64.8	-2.8	2	7.6	12.5
2446.70	13.3	-62	-64.9	-2.9	2	6.8	12.4
2446.75	13.3	-62	-64.8	-2.8	2	7.1	12.5
2446.80	13.3	-62	-64.8	-2.8	2	7.7	12.5
2446.85	13.3	-62	-64.9	-2.9	2	6.4	12.4
2446.90	13.3	-62	-64.8	-2.8	2	5.6	12.5
2446.95	13.3	-62	-64.7	-2.7	2	6.1	12.6
2447.00	13.3	-62	-64.3	-2.3	2	6.2	13.0
2447.05	13.3	-62	-64.1	-2.1	2	7.0	13.2
2447.10	13.3	-62	-63.7	-1.7	2	7.1	13.6
2447.15	13.3	-62	-62.9	-0.9	2	5.3	14.4
2447.20	13.3	-62	-62.6	-0.6	2	5.8	14.7
2447.25	13.3	-62	-61.3	0.7	2	6.9	16.0
2447.30	13.3	-62	-61.3	0.7	2	7.3	16.0
2447.35	13.3	-62	-59.8	2.2	2	7.9	17.5
2447.40	13.3	-62	-60.2	1.8	2	7.3	17.1
2447.45	13.3	-62	-60.1	1.9	2	4.7	17.2
2447.50	13.3	-62	-59.8	2.2	2	4.8	17.5
2447.55	13.3	-62	-59.5	2.5	2	6.5	17.8
2447.60	13.3	-62	-59.9	2.1	2	5.9	17.4
2447.65	13.3	-62	-59.9	2.1	2	7.8	17.4
2447.70	13.3	-62	-60.8	1.2	2	7.6	16.5
2447.75	13.3	-62	-61.4	0.6	2	6.7	15.9
2447.80	13.3	-62	-62.1	-0.1	2	7.6	15.2
2447.85	13.3	-62	-62.5	-0.5	2	5.8	14.8
2447.90	13.3	-62	-63.3	-1.3	2	5.0	14.0
2447.95	13.3	-62	-63.4	-1.4	2	6.2	13.9
2448.00	13.3	-62	-63.5	-1.5	2	7.8	13.8
2448.05	13.3	-62	-64.0	-2.0	2	5.2	13.3

D-LINK WLAN PC Card radio Jamming Margin Test

2448.10	13.3	-62	-64.0	-2.0	2	4.8	13.3
2448.15	13.3	-62	-64.1	-2.1	2	6.1	13.2
2448.20	13.3	-62	-64.2	-2.2	2	5.9	13.1
2448.25	13.3	-62	-64.0	-2.0	2	5.4	13.3
2448.30	13.3	-62	-64.1	-2.1	2	4.6	13.2
2448.35	13.3	-62	-63.8	-1.8	2	4.7	13.5
2448.40	13.3	-62	-63.6	-1.6	2	5.1	13.7
2448.45	13.3	-62	-63.2	-1.2	2	7.2	14.1
2448.50	13.3	-62	-62.9	-0.9	2	7.0	14.4
2448.55	13.3	-62	-62.9	-0.9	2	5.7	14.4
2448.60	13.3	-62	-62.6	-0.6	2	4.9	14.7
2448.65	13.3	-62	-62.6	-0.6	2	7.6	14.7
2448.70	13.3	-62	-62.6	-0.6	2	4.6	14.7
2448.75	13.3	-62	-62.6	-0.6	2	6.2	14.7
2448.80	13.3	-62	-62.5	-0.5	2	7.5	14.8
2448.85	13.3	-62	-62.4	-0.4	2	6.7	14.9
2448.90	13.3	-62	-62.3	-0.3	2	7.8	15.0
2448.95	13.3	-62	-62.4	-0.4	2	6.3	14.9
2449.00	13.3	-62	-62.5	-0.5	2	6.7	14.8
2449.05	13.3	-62	-62.6	-0.6	2	5.9	14.7
2449.10	13.3	-62	-62.8	-0.8	2	7.9	14.5
2449.15	13.3	-62	-62.8	-0.8	2	5.7	14.5
2449.20	13.3	-62	-62.9	-0.9	2	6.2	14.4
2449.25	13.3	-62	-62.9	-0.9	2	5.1	14.4
2449.30	13.3	-62	-62.9	-0.9	2	5.8	14.4
2449.35	13.3	-62	-62.7	-0.7	2	5.0	14.6
2449.40	13.3	-62	-62.5	-0.5	2	6.9	14.8
2449.45	13.3	-62	-62.1	-0.1	2	5.7	15.2
2449.50	13.3	-62	-61.9	0.1	2	6.9	15.4
2449.55	13.3	-62	-61.7	0.3	2	6.7	15.6
2449.60	13.3	-62	-61.6	0.4	2	7.3	15.7
2449.65	13.3	-62	-61.5	0.5	2	5.4	15.8
2449.70	13.3	-62	-61.5	0.5	2	7.2	15.8
2449.75	13.3	-62	-61.4	0.6	2	6.1	15.9
2449.80	13.3	-62	-61.4	0.6	2	7.8	15.9
2449.85	13.3	-62	-61.3	0.7	2	6.0	16.0
2449.90	13.3	-62	-61.4	0.6	2	5.9	15.9

D-LINK WLAN PC Card radio Jamming Margin Test

2449.95	13.3	-62	-61.3	0.7	2	7.0	16.0
2450.00	13.3	-62	-61.5	0.5	2	7.3	15.8
2450.05	13.3	-62	-61.5	0.5	2	6.6	15.8
2450.10	13.3	-62	-61.7	0.3	2	7.0	15.6
2450.15	13.3	-62	-61.8	0.2	2	6.5	15.5
2450.20	13.3	-62	-61.8	0.2	2	5.9	15.5
2450.25	13.3	-62	-61.7	0.3	2	7.7	15.6
2450.30	13.3	-62	-61.7	0.3	2	6.5	15.6
2450.35	13.3	-62	-61.5	0.5	2	5.8	15.8
2450.40	13.3	-62	-61.2	0.8	2	7.0	16.1
2450.45	13.3	-62	-61.1	0.9	2	5.6	16.2
2450.50	13.3	-62	-60.8	1.2	2	4.8	16.5
Processing Gain(dB)@20th Percentile=12.2							



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

10. Attachment

Attachment 1: EUT Test Photographs Number of Pages : 3

Attachment 2: EUT Detailed Photographs Number of Pages : 3

Attachment 1 : EUT Test Photographs

Attachment 1: EUT Test Setup Photographs

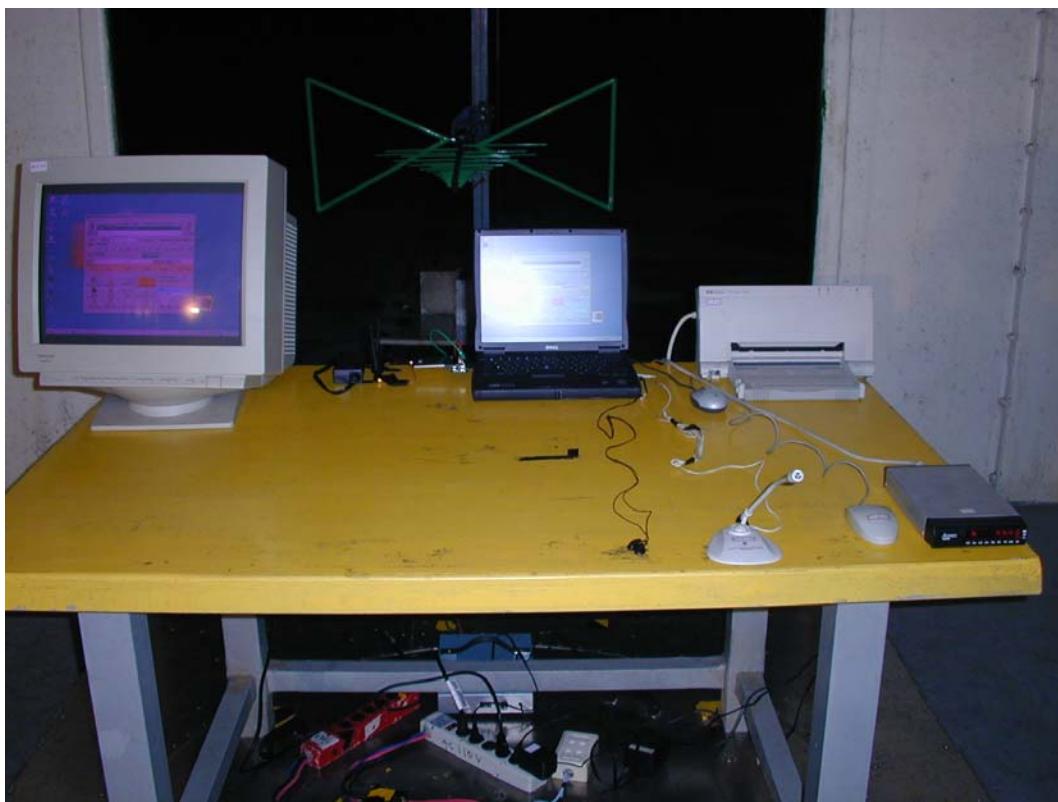
Front View of Conducted Test



Back View of Conducted Test



Front View of Radiated Test



Back View of Radiated Test



Front View of Radiated Test (Horn)

