



Test Report

Product Name : Wireless LAN PC Card

Model No. : DW-655E, DWL-655H, DWL-660, DW-655H

FCC ID.: KA22001110017-1

Applicant : D-Link Corporation

Address : No. 8, Li-Hsin VII Road, Science-Based Industrial Park,
Hsin-Chu, Taiwan, R.O.C.

Date of Receipt : Nov.22, 2001

Date of Test : Dec.04, 2001

Report No. : 01BH061FI

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.04, 2001

Report No. : 01BH061FI



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

Product Name : Wireless LAN PC Card
 Applicant : D-Link Corporation
 Address : No. 8, Li-Hsin VII Road, Science-Based Industrial
 Park, Hsin-Chu, Taiwan, R.O.C.
 Manufacturer : D-Link Corporation
 Model No. : DW-655E, DWL-655H, DWL-660, DW-655H
 FCC ID. : KA22001110017-1
 Rated Voltage : DC 5V(Power by PC)
 Trade Name : D-Link
 Measurement Standard : FCC Part 15 Subpart C Paragraph 15.247
 Measurement Procedure : ANSI C63.4:1992
 Test Result : Complied

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TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION.....	5
1.1. EUT Description.....	5
1.2. EUT Description.....	5
1.3. Configuration of tested System	7
1.4. EUT Exercise Software	8
1.5. Test Facility	8
2. Conducted Emission.....	9
2.1. Test Equipment List.....	9
2.2. Test Setup	9
2.3. Limits	9
2.4. Test Procedure	10
2.5. Test Result of Conducted Emission.....	11
3. Peak Power Output	12
3.1. Test Equipment.....	12
3.2. Test Setup	12
3.3. Test Condition	12
3.4. Minimum Standard.....	12
3.5. Test Result of Peak Power Output.....	13
4. RF Exposure Evaluation.....	14
4.1. Friis Formula	14
4.2. EUT Operation condition	14
4.3. Test Result of RF Exposure Evaluation.....	15
5. Radiated Emission.....	16
5.1. Test Equipment.....	16
5.2. Test Setup	16
5.3. Test Condition	17
5.4. Limits	17
5.5. Test Procedure	18
5.6. Test Result of Radiated Emission.....	19
5.7. Test Result of Band Edge	31
6. Occupied Bandwidth.....	35
6.1. Test Equipment.....	35
6.2. Test Setup	35
6.3. Test Condition	35
6.4. Standard Requirement	35
6.5. Test Result of Occupied Bandwidth	36
7. Transmitter Power Density.....	39
7.1. Test Equipment.....	39
7.2. Test Setup	39
7.3. Test Condition	39
7.4. Standard Requirement	39
7.5. Test Result of Transmitter Power Density.....	40

8.	Processing Gain	43
8.1.	Test Condition	43
8.2.	Minimum Standard.....	43
8.3.	Method of Measurement	43
8.4.	Calculation of Processing Gain:	43
8.5.	Test Result of Processing Gain.....	44
	Scope	44
	Applicable Reference Documents.....	44
	Test Background and Procedure.	44
	Theoretical calculations	45
1.1	1000 byte PER vs. Es/No	46
	Test Configuration: CW Jamming Margin (15.247) (e).....	47
	Test Instruments	47
	Test Environment.....	47
	Test Block Diagram	48
	<i>Test Procedure</i>	49
	Test Result	50
9.	EMI Reduction Method During Compliance Testing	90
10.	Attachment.....	91

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 : D-Link
 FCC ID. : KA22001110017-1
 Model No. : DW-655E, DWL-655H, DWL-660, DW-655H
 Frequency Range : 2412MHz to 2462MHz
 Channel Number : 11
 Frequency of Each Channel : Channel 01: 2412MHz Channel 07: 2442MHz
 Channel : Channel 02: 2417 MHz Channel 08: 2447MHz
 (Working Frequency) Channel 03: 2422 MHz Channel 09: 2452MHz
 Channel 04: 2427MHz Channel 10: 2457MHz
 Channel 05: 2432MHz Channel 11: 2462MHz
 Channel 06: 2437MHz
 Type of Modulation : Direct Sequence Spread Spectrum
 Selection of
 Operating Frequency : Auto
 Antenna type : Dipole Printed on PCB

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 of the different construction EUT. The model name were shown in the table following:

Model Number	Ext. Antenna	Color
DW-655E	W/O	Black
DWL-655H	W/O	Black
DWL-660	W	Gray
DW-655H	W	Black

When the switch switches to external connector, the internal antenna will be disable.

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 017H012F under Verification.

1.2. EUT Description

EUT is an USB 1.1 interface 2.4GHz wireless LAN PC Card with 11 channels. The spreading code of EUT is 11 chip barker sequence. The antenna is printed on the PCB directly. CCK, DQSK modulation scheme are used to modulate signal.

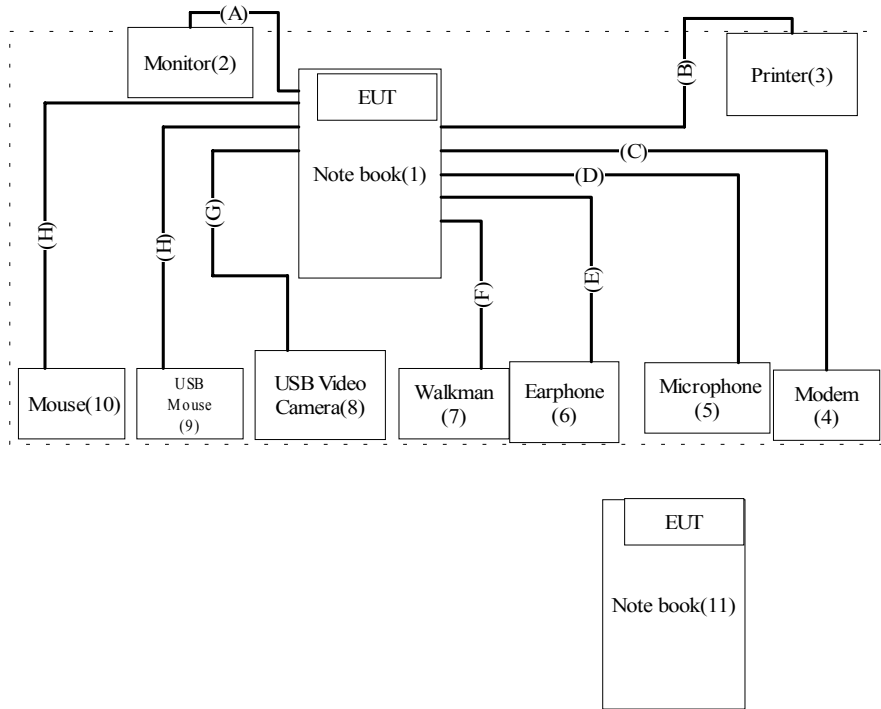
Tested System Details

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	IBM	Think Pad 570	27L8835	Non-shielded, 1.5m	DoC
(2)	Monitor	HITACHI	CM752ET-31 1	T8E004439	Shielded, 1.7m	DoC
(3)	Printer	HP	C2642A	MY75L1D2XN	Non-Shielded, 0.7m	B94C2642X
(4)	Modem	ACEEX	1414	980033041	--	IFAXDM1414
(5)	Microphone	DYNAMIC	DM-35	N/A	--	DoC
(6)	Earphone	AIWA	N/A	N/A	--	--
(7)	Walkman	TOBISHI	TB-21984	N/A	--	DoC
(8)	USB Video Camera	Mustek	Wcam 3X	N/A	--	DoC
(9)	USB Mouse	Logitech	M-UE55	LTC93800397	--	DoC
(10)	Mouse	HP	M-S34	LZB75078478	--	DZL211029
(11)	Notebook	LEO	DESIGNOTE	NB7017260B	Non-shielded, 1.6m	ENUDESIGNO TE3

	Signal Cable Type	Signal Cable Description
A.	Notebook Power out	Non-shielded, 1.8m
B.	VGA Cable	Shielded, 1.8m, two ferrite cores bonded.
C.	Printer Cable	Shielded, 1.2m
D.	Modem Line	Shielded, 1.5m
E.	Microphone Line	Non-shielded, 2.5m
F.	Earphone Line	Non-shielded, 1.5m
G.	Walkman Line	Non-shielded, 1.6m
H.	USB Video Camera Cable	Shielded, 1.5m
I.	USB Mouse Cable	Shielded, 1.0m
J.	Mouse Cable	Shielded, 1.8m

1.3. Configuration of tested System



1.4. 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

1.5. 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



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2. Conducted Emission

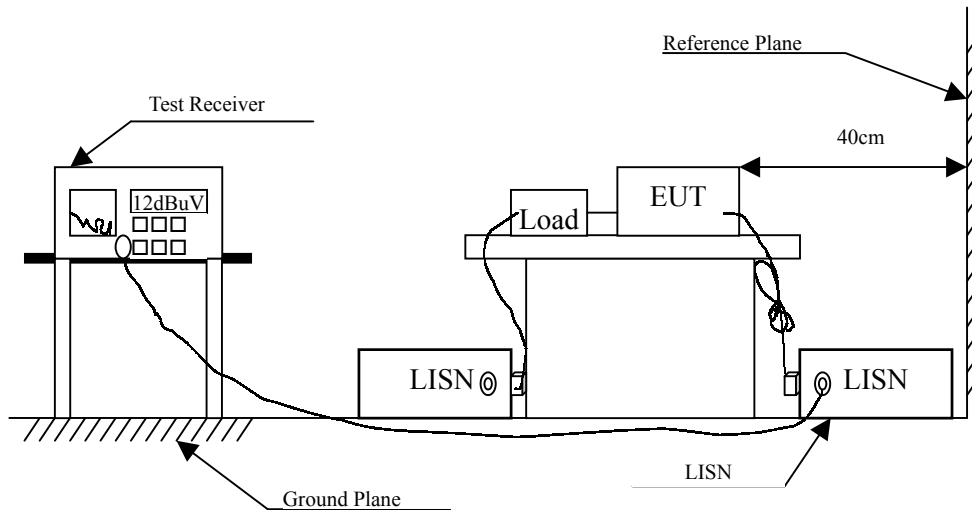
2.1. Test Equipment List

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 investigated over the frequency range from 0.45MHz to 30MHz using a receiver bandwidth of 9kHz.