EXHIBIT B

Test Report

Report No.

C0915476

Specifications

FCC Part 15.109(g), Class B

Test Method

ANSI C63.4 1992

Applicant address

16F, No. 75 Hsin Tai Wu RD., Sec. 1 Bldg #A

Hsi-Chih, Taipei Hsien, Taiwan

Applicant

Items tested

Model No.

CIS TECHNOLOGY INC.

USB/10Base-T Ethernet Adapter

WS-U001T (Sample # C09476)

Results

Sample received

data

Compliance (As detailed within this report)

06/29/1999 (month / day / year)

Prepared by

Authorized by

Issue date

project engineer

Vice General Manager

(Jacob Lin)

(month / day / year)

Modifications

Tested by

Office and

Open site at

None

Training Research Co., Ltd.

No. 15, Lane 530, Pa-Lian RD., Sec. 1, Hsichih City,

Taipei Hsien, Taiwan, R.O.C.

Conditions of issue:

- (1) This test report shall not be reproduced except in full, without written approval of TRC. And the test result contained within this report only relate to the sample submitted for testing.
- (2) This report must not be used by the client to claim product endorsement by NVLAP or any agency of U.S. Government.

FCC ID: L40U001T

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Chapter 1 Introduction

Description of EUT:

The EUT is a data transmission / receiver facility. It is designed to connect with the IBM PC or compatible computer and makes your data equipment available to transmit / receive data via the EUT. During testing the EUT was operated at Tx or Rx mode for each emission measured. This was done in order to insure that maximum emission levels were attained.

Connections of EUT:

- (1) The USB connector of EUT was connected with the USB port of notebook computer.
- (2) The RJ-45 jack of EUT was connected with a Lan card installed in a PC located remotely.

Test method:

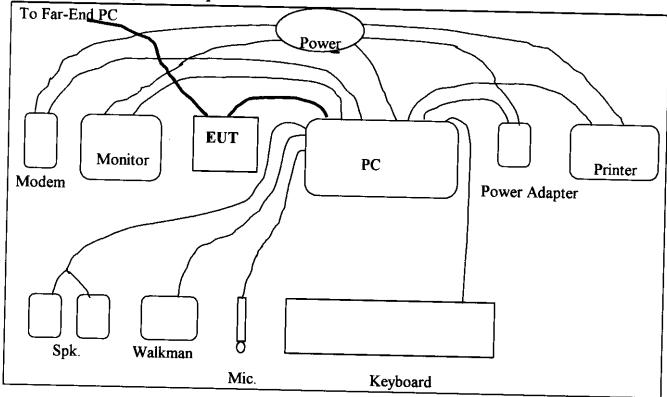
Pretest was found that the emission of operating mode is worse than standby mode. So, The final test is made at the operating mode.

During testing, the EUT was operated at "transmitting" and "receiving" mode simultaneously.

The test placement as the photographs showed is the worst case emission placed. (If the emission is close to the ambient, the resolution BW and view resolution will be reduced and the data will be recorded by detection of maximum hold peak mode.)

The testing configuration of test setup is showing in the next page.

Configuration of test setup



Connections:

PC:

- *Serial port --- a external modem with 76 cm shielded RS-232 cable
- *Printer port --- a Printer with 1.2m length data cable
- *Keyboard port --- a Keyboard with 1m length data cable
- *Monitor port --- a monitor with 1m length data cable
- *USB port --- EUT
- *Spk. jack --- a pairs of speakers with 1.2 m long wire
- *Mic. Jack --- a dynamic microphone with 3 m long wire
- *Line in jack --- a walkman with 1.2m long, shielded cable.

(Each port on PC is connected with suitable device)

EUT:

- *USB connector --- via a 0.65m long, shielded, no ferrite core, USB A to B cable to the USB port of notebook computer.
- *RJ-45 jack --- via a 20m long, non-shielded, no ferrite core, RJ45 cable to a Lan card installed in a PC located remotely.

List of support equipment

Conducted (Radiated) test:

Notebook

IBM ---Thinkpad

Model

Type 2611-41T

FCC ID

DoC Approval

Power type

Please refer to the power adapter

Power adapter:

IBM

Model No.

12J0539

Serial No.

CG842015960

Input power

100~240VAC, 1.4/0.7A, 50/60Hz

Out power

19VDC, 2.4A

Power cord

2.95m long, shielded, no ferrite bead

Monitor

HP

Model No.

D2821

Serial No.

TW 73512262 (TW 73147163)

FCC ID

A3KMO64

Power type

AC 110~120 / 220~240 VAC, Switching

Power cord

Non-Shielded, 3m long, no ferrite core

Data cable

Shielded, 1.8m long, with ferrite core

Keyboard

Digital

Model No.

KB-5923

Serial No.

9\$74904837 (9\$74904665)

FCC ID

E8HKB-5923

Power type

By PC

Data cable

Shielded, 1.8m long, with ferrite core

Printer

HP

Model No.

C2642A

Serial No.

SG69A196GV

FCC ID

B94C2642X

Power type

220 VAC, 50Hz

Power cord

Non-shielded, 2m long, no ferrite core

Data cable

Shielded, 1.84m long, no ferrite core (1.7m)

Modem

ACEEX

Model No.

XDM-9624

FCC ID

IFAXDM-9624

Power type

220VAC, 50Hz / 9VAC, 1A

Power cord

Non-shielded, 1.9m long, no ferrite cord

Data cable

RS232, Shielded, 1.2m long, no ferrite core

RJ11C x 2, 7' long non-shielded, no ferrite core

Joystick

Padix

Model

QF-606U, QF-707U (DoC Approval)

Power Type

By PC

Microphone:

KOKA

Model

DM-515

Power type

Dynamic

Data cable

non-Shielded, 3m

Speaker

J-S

Model

J-006

Data cable

non-Shielded, 1.2 m

Walkman

Panasonic

Model

RQ-V52

Chapter 2 Conducted emission test

Test condition and setup:

All the equipment is placed and setup according to the CISPR 22.

The EUT is assembled on a wooden table that is 80 cm high, is placed 40 cm from the back-wall that is a vertical conducting plane. One LISN is for EUT, the other LISN is for support equipment. They are all placed on the conductive ground. The EUT's LISN connect a line switch box for selecting L1 or L2, then connect to a preamplifier and spectrum.

The spectrum scans from 150KHz to 30MHz. Conducted emission levels are detected at max. peak mode. But if the max. peak mode failed, it will be measured by CISPR's quasi-peak detection mode.

While testing, there is the worst-emission plot printed at peak detection mode, and there are more than 6 highest emissions relative to limit recorded. The plot is kept as the original data, not included in test report.

List of test Instrument:

				Calibration Date		
Instrument Name	Model No.	Brand	Serial No.	Last time	Next time	
Spectrum analyzer	8594EM	ΗP	3710A00279	01/07/99	01/07/00	
LISN (EUT)	3825/2	EMCO	9411-2284	05/20/99	05/20/00	
LISN (Support E.)	AC3-001	TRC		05/20/99	05/20/00	
Preamplifier	AC3-002	TRC		05/20/99	05/20/00	
Line switch box	AC3-003	TRC		05/20/99	05/20/00	

The level of confidence of 95%, the uncertainty of measurement of conducted emission is ± 2.4 dB.

Test Result: Pass (Appendix A)

Chapter 3 Radiated emission test

Test condition and setup:

Pretest: Prior to the final test (OATS test), the EUT is placed in a anechoic chamber and scan from 30MHz to 1GHz. This is done to ensure the radiation exactly emits form the EUT.

Final test: Final radiation measurements are made on a 10 - meter, open-field test site. The EUT is placed on a nonconductive table that is 0.8m height, the top surface is 1.0×1.5 meter. The placement is according to CISPR 22.

The spectrum is examined from 30 MHz to 1000 MHz measured by HP spectrum.

The EMCO whole range Antenna is used to measure frequency from 30 MHz to 1GHz. The final test is used the spectrum HP 8594EM.

Measure more than six top marked frequencies generated form pretest by computer step by step at each frequency. The EUT is rotated 360 degrees, and antenna is raised and lowered from 1 to 4 meters to find the maximum emission levels. The antenna is used with both horizontal and vertical polarization.

Appropriated preamplifier which is made by TRC is used for improving sensitivity and precautions is taken to avoid overloading. The spectrum analyzer's 6dB bandwidth is set to 120 KHz, and the EUT is measured at quasi-peak mode.

If the emission is close to the frequency band of ambient, the data will be rechecked by the tester and the corrected data will be written in the test data sheet. If the emission is just within the ambient, the data from anechoic chamber will be taken as the final data.

List of test Instrument:

Calibration Date

Instrument Name	Model No.	Brand	Serial No.	Last	Next
Spectrum analyzer	8594EM	ΗP	3619A00198	11/17/98	11/17/99
RF Pre-selector	AC4-001	TRC		05/20/99	05/20/00
Antenna (30M-2G Hz)	3141	EMCO	9711-1076	12/17/98	12/17/99
Open test side (Antenna	, Amplify, cable	e calibrate	d together)	05/20/99	05/20/00

The level of confidence of 95%, the uncertainty of measurement of radiated emission is \pm 4.96 dB.

Test Result: Pass (Appendix B)

Appendix A

Conducted Emission Test Result:

Testing room: Temperature :

25 ° C

Humidity: 50 % RH

Line 1

	READ	ING AMPLI	TUDE	LIN		
FREQUENCY	Peak	Quasi-peak	Average	Quasi-Peak	Average	MARGIN
(KHz)	$(dB\mu V/m)$	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)
150	45.23	***.**	*** **	66.00	56.00	-10.77
899	30.84	*** **	*** **	56.00	46.00	-15.16
1721	29.97	*** **	*** **	56.00	46.00	-16.03
4038	30.22	*** **	***.**	56.00	46.00	-15.78
5083	32.73	*** **	*** **	60.00	50.00	-17.27
5830	31.09	*** **	*** **	60.00	50.00	-18.91
8290	31.69	*** **	*** **	60.00	50.00	-18.31
10227	32.64	*** **	*** **	60.00	50.00	-17.36
12161	30.83	*** **	*** **	60.00	50.00	-19.17
22468	31.60	*** **	*** **	60.00	50.00	-18.40

Line 2

	READ	ING AMPLI	TUDE	LIN	LIMIT		
FREQUENCY (KHz)	Peak (dBµV/m)	Quasi-peak (dBµV/m)	Average (dBμV/m)	Quasi-Peak (dBµV/m)	Average (dBμV/m)	MARGIN (dB)	
150	45.20		*** **	66.00	56.00	-10.80	
3814	29.12	***,**	*** **	56.00	46.00	-16.88	
4038	30.88	*** **	***	56.00	46.00	-15.12	
5233	32.99	*** **	*** **	60.00	50.00	-17.01	
5382	32.19	*** **	***.**	60.00	50.00	-17.81	
9706	31.63	*** **	***,**	60.00	50.00	-18.37	
10227	29.70	*** **	***,**	60.00	50.00	-20.30	
11640	29.94	*** **	***,**	60.00	50.00	-20.06	
21720	31.05	***.**	*** **	60.00	50.00	-18.95	
22616	29.85	***,**	***.**	60.00	50.00	-20.15	

^{*} The reading amplitudes are all under average limit.

Report No.: C0915476, USB/10Base-T Ethernet Adapter, FCC Class B

Test date: 06/29/99, Training Research Co., Ltd., TEL: 886-2-26461146, Fax: 886-2-26461778

Appendix B

Radiated Emission Test Result: (Horizontal)

Test Conditions:

Testing room: Temperature : 26 ° C Humidity: 36 % RH
Testing site : Temperature : 26 ° C Humidity: 6 % RH

Frequency	Reading Amplitude	Ant. Height	Table	Correction Factors	Corrected Amplitude	Class B limit	Margin
MHz	$dB\mu V$	m	degree	dB/m	dBμV/m	dBμV/m	dB
1	-						
48.000	42.08	4.00	280	-21.94	20.14	30.00	-9.80
144.000	48.59	4.00	151	-20.74	27.85	30.00	-2.1.
599.840	41.18	4.00	251	-16.67	24.51	37.00	-12.49

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	18. 11						

Note:

- 1. Margin = Amplitude limit, if margin is minus means under limit.
- 2. Corrected Amplitude = Reading Amplitude + Correction Factors
- 3. Correction factor = Antenna factor + (Cable Loss Amplitude gain)

(For example: 30MHz correction factor = 15.5 + (-15.26) = 0.24 dB/m)

Radiated Emission Test Result: (Vertical)

Frequency	Reading Amplitude	Ant. Height	Table	Correction Factors	Corrected Amplitude	Class B	Margin
MHz	dΒμV	m	degree	dB/m	dBμV/m	dBμV/m	dB
<u> </u>					<u></u>		
48.000	49.56	0.99	159	-21.94	27.62	30.00	-2.38
78.000	41.83	0.99	14	-24.30	17.53	30.00	-12.47
80.000	44.20	4.00	6	-24.63	19.57	30.00	-10.43
140.000	44.50	0.99	271	-21.15	23.35	30.00	-6.65
144.000	48.73	0.99	253	-20.74	27.99	30.00	-2.01
180.000	45.71	4.01	38	-23.44	22.27	30.00	-7.73
220.000	44.16	0.99	46	-24.24	19.92	30.00	-10.08
221.510	46.11	0.99	273	-24.15	21.96	30.00	-8.04
***		_					
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	"						

Final statement:

This test report, measurements made by TRC are traceable to the NIST.

Test date: 06/29/99, Training Research Co., Ltd., TEL: 886-2-26461146, Fax: 886-2-26461778