
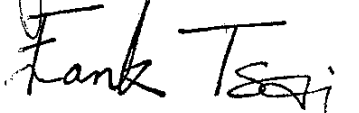


EXHIBIT B

Test Report

Report No.	C0915388	
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, 221 Taiwan	
Applicant	CIS TECHNOLOGY, INC.	
Items Tested	ITeX Apollo II ADSL Modem	
Model No.	WS-AD35PSI (Sample # C15388)	
Results	Compliance (As detailed within this report)	
Sample received date	02/22/2000 (month / day / year)	
Prepared by		project engineer
Authorized by		General Manager (Frank Tsai)
Issue date	Mar. 04, 2000	(month / day / year)
Modifications	None	
Tested by	Training Research Co., Ltd.	
Office at	2, Lane 194, Huan-Ho Street, Hsichih, Taipei Hsien 221, Taiwan	
Open Site at	No. 15, Lane 530, Pa-Lian RD., Sec. 1, Hsichih City, Taipei Hsien, Taiwan, R.O.C.	

Conditions of issue:

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★ FCC ID: L4OWSAD35PSI

Report No.: C0915388, ITeX Apollo II ADSL Modem, FCC Part 15, Class B

Test date: 02/29/2000, Training Research Co., Ltd., TEL: 886-2-26935155, Fax: 886-2-26934440

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Chapter 1 Introduction

Description of EUT:

This ADSL interface card is a data communication device. It is designed to install in the personal computer and makes data transmission available via the public telephone network.

Connections of EUT:

- (1) Install the EUT into a personal computer's PCI bus and screw it.
- (2) Line jack of EUT is connected with a line cable to the PABX located remotely.

Test method:

The applicant provides the test program

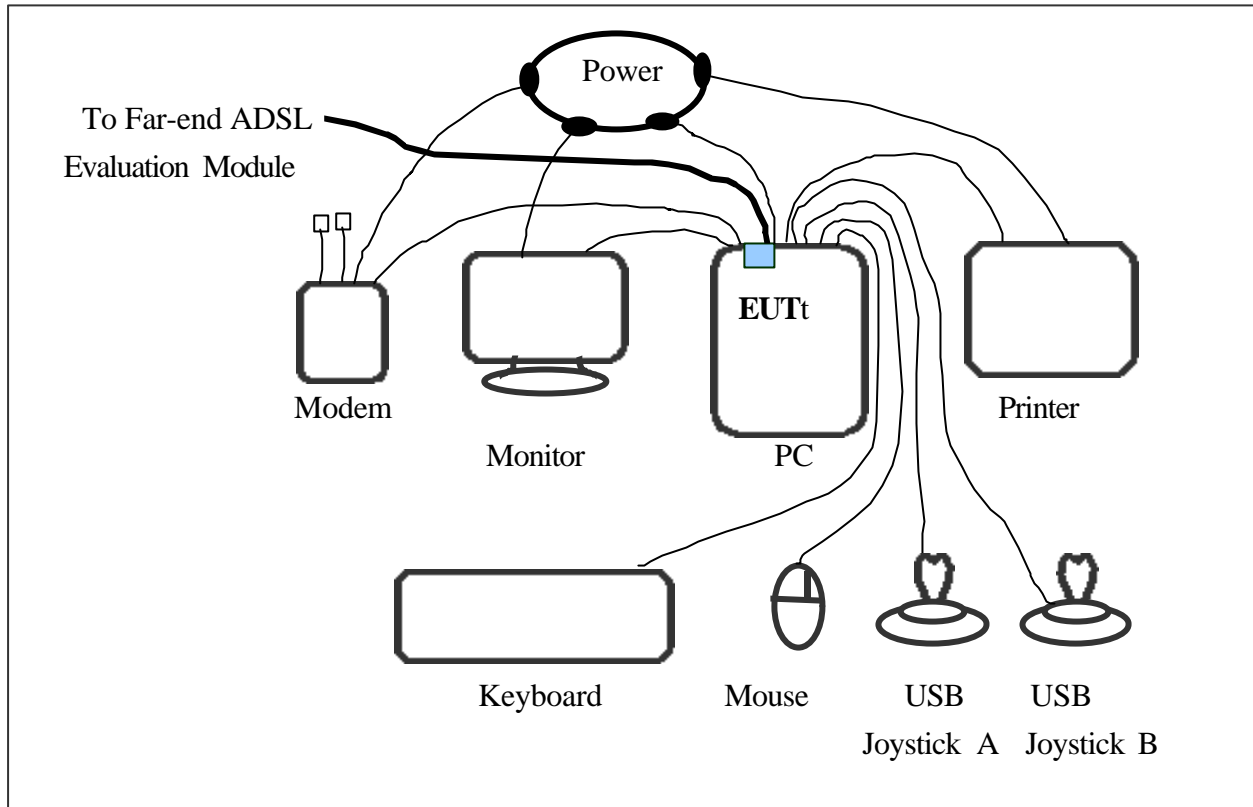
Pretest was found that the emission of operating mode is worse than standby mode. So, The final test is made at the operating mode.

When the measurement was taken, the EUT was operated at "transmitting" and "receiving" mode simultaneously.

While testing, the transmitting rate was set to "AUTO" which means it transmitted the test file depending on the telephone line condition, normally the operating rate is the highest speed. 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 76cm shielded RS-232 cable
 - Printer port --- a Printer with 1.2m length data cable
 - Keyboard port --- a Keyboard with 1m length data cable
 - Mouse port --- a Mouse with 0.7m long of data cable
 - USB A port --- a joystick with 1.5m long, shielded, no ferrite bead, data cable
 - USB B port --- a joystick with 1.5m long, shielded, no ferrite bead, data cable
 - Monitor port --- a monitor with 1m length data cable
- (Each port on PC is connected with suitable device)

EUT:

- Line jack --- via 15m long, non-shielded, no ferrite bead, RJ-11 cable to the ADSL evaluation module located remotely

List of support equipment

Conducted (Radiated) test:

PC : **HP Brio 85xx 6/350**
Model No. : D6928A
Serial No. : SG91801443 (TW90400174)
FCC ID : N/A, Doc Approved
檢磁 : 3872H013
Power type : 100 ~ 230VAC / 50 ~ 60Hz, 5A, Switching
Power cord : Non-shielded, 2.30m long, Plastic, No ferrite core

Monitor : **HP 15' Color Monitor**
Model No. : D2827A (D2832A)
Serial No. : KR91161716 (MY90615892)
FCC ID : C5F7NFCMC1518X (N/A, Doc Approved)
檢磁 : 3872B039 (4872A167)
Power type : 110 ~ 240 VAC / 50 ~ 60 Hz, Switching
Power cord : Shielded, 1.80m long, No ferrite core
Data cable : Shielded, 1.50m long, with two ferrite cores

Keyboard : **HP**
Model No. : SK-2501K
Serial No. : M990308795 (M981216213)
FCC ID : GYUR38SK
檢磁 : 3862A621
Power type : By PC
Data cable : Shielded, 1.70m long, with ferrite core

Mouse : **HP**
Model No. : M-S34
Serial No. : LZC84446151 (LZB90910462)
FCC ID : DZL211029
檢磁 : 4862A011
Power type : By PC
Power cord : Non-shielded, 1.80m long, No ferrite core

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

ADSL Evaluation Module : **Texas Instruments**
Model No : EVM2 ATU-C POTS ATM
Serial No. : B078584
Production No. : 99-7443-01
Power type : 12VDC, 2Amps
Power cord : Non-shielded

Printer : **HP**
Model No. : C2642A
Serial No. : SG69A196GV
FCC ID : B94C2642X
Power type : 220VAC, 50Hz
Power cord : Non-shielded, 2m long, no ferrite core
Data cable : Shielded, 1.84m long, no ferrite core (1.7m)

USB Joysticks : **Padix**
Model No. : QF-305U, QF-606U
Serial No. : N/A
FCC ID : Doc Approved
檢磁 : N/A
Power type : Powered by PC
Power Cable : Shielded. 1.8M (1.5M) long, Plastic hoods, No ferrite bead

Chapter 2 Conducted Emission Test

Test condition and setup:

All the equipment is placed and setup according to the ANSI C63.4 1992.

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 or over average limit, it will be measured by average 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 :

Instrument Name	Model No.	Brand	Serial No.	Calibration Date	
				Last time	Next time
Spectrum analyzer	8594EM	H P	3710A00198	01/12/00	01/12/01
LISN (EUT)	3825/2	EMCO	9411-2284	05/15/99	05/15/00
LISN (Support E.)	AC3-001	TRC	-----	05/15/99	05/15/00
Preamplifier	AC3-002	TRC	-----	05/15/99	05/15/00
Line switch box	AC3-003	TRC	-----	05/15/99	05/15/00

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

Test Result : Pass (Appendix A)

Report No.: C0915388, ITeX Apollo II ADSL Modem, FCC, Class B

Test date: 02/29/2000, Training Research Co., Ltd., TEL: 886-2-26935155, Fax: 886-2-26934440

Conducted Test Placement: (Photographs)



Chapter 3 Radiated Emission Test

Test condition and setup:

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

Final test: Final radiation measurements is 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 x 1.5 meter. The placement is according to ANSI C63.4 1992.

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

The M.E. whole range Antenna is used to measure frequency from 30 MHz to 1GHz. The final test is used the spectrum analyzer.

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 that is made by TRC is used for improving sensitivity and precaution 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 shielded room will be taken as the final data.

List of test Instrument:

<u>Instrument Name</u>	<u>Model No.</u>	<u>Brand</u>	<u>Serial No.</u>	<u>Calibration Date</u>	
				<u>Last time</u>	<u>Next time</u>
Spectrum analyzer	8594EM	H P	3710A00279	06/22/99	06/22/00
Spectrum analyzer	8594EM	H P	3710A00198	01/12/00	01/12/01
Antenna (30M-1.5G Hz)	VULB 9160	M.E.	3063	01/18/00	01/18/01
Antenna (30M-2G Hz)	3141	EMCO	9711-1076	05/15/99	05/15/00
RF Pre-selector	AC4-001	TRC	-----	05/15/99	05/15/00
Open test side (Antenna, Amplify, cable calibrated together)				05/15/90	05/15/00

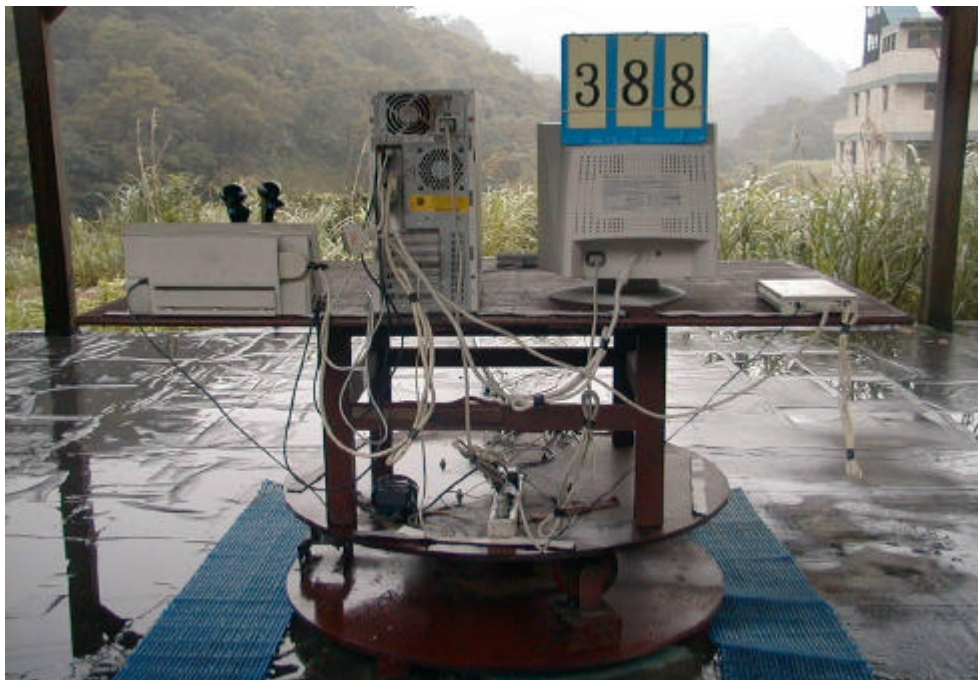
The level of confidence of 95%, the uncertainty of measurement of radiated emission is ± 4.96 dB.

Test Result : Pass (Appendix B)

Report No.: C0915388, ITeX Apollo II ADSL Modem, FCC, Class B

Test date: 02/29/2000, Training Research Co., Ltd., TEL: 886-2-26935155, Fax: 886-2-26934440

Radiated Test Placement: (Photographs)



Appendix A

Conducted Emission Test Result:

Testing room : Temperature : 15 ° C Humidity : 73 % RH

Line 1

Frequency (KHz)	READING AMPLITUDE			LIMIT		Margin (dB)
	Peak (dBmV/m)	Quasi-Peak (dBmV/m)	Average (dBmV/m)	Quasi-Peak (dBmV/m)	Average (dBmV/m)	
198.00	44.55	***.***	***.***	64.63	54.63	-10.08
203.00	41.60	***.***	***.***	64.49	54.49	-12.89
278.00	36.52	***.***	***.***	64.06	54.06	-17.54
299.00	35.27	***.***	***.***	61.74	51.74	-16.47
316.00	34.78	***.***	***.***	61.26	51.26	-16.48
593.00	28.11	***.***	***.***	56.00	46.00	-17.89
1987.00	27.88	***.***	***.***	56.00	46.00	-18.12
12890.00	34.04	***.***	***.***	60.00	50.00	-15.96
13450.00	32.82	***.***	***.***	60.00	50.00	-17.18
13830.00	32.58	***.***	***.***	60.00	50.00	-17.42

Line 2

Frequency (KHz)	READING AMPLITUDE			LIMIT		Margin (dB)
	Peak (dBmV/m)	Quasi-Peak (dBmV/m)	Average (dBmV/m)	Quasi-Peak (dBmV/m)	Average (dBmV/m)	
197.00	43.74	***.***	***.***	64.66	54.66	-10.92
216.00	40.53	***.***	***.***	64.11	54.11	-13.58
297.00	35.26	***.***	***.***	61.80	51.80	-16.54
314.00	32.90	***.***	***.***	61.31	51.31	-18.41
496.00	26.87	***.***	***.***	56.11	46.11	-19.24
593.00	27.36	***.***	***.***	56.00	46.00	-18.64
839.00	27.68	***.***	***.***	56.00	46.00	-18.32
1987.00	28.17	***.***	***.***	56.00	46.00	-17.83
12710.00	32.50	***.***	***.***	60.00	50.00	-17.50
13260.00	36.04	***.***	***.***	60.00	50.00	-13.96

**The reading amplitudes are all under average limit.*

Appendix B

Radiated Emission Test Result :(Horizontal)

Test Conditions:

Testing room : Temperature : 26 ° C Humidity : 73 % RH
 Testing site : Temperature : 31 ° C Humidity : 75 % RH

Frequency	Reading Amplitude	Ant. Height	Table	Correction Factors	Corrected Amplitude	Class B Limit	Margin
MHz	dBµV	m	degree	dB/m	dBµV/m	dBµV/m	dB

39.693	42.53	0.99	38	-22.25	20.28	30.00	-9.72
43.330	37.14	2.52	241	-22.17	14.97	30.00	-15.03
45.056	40.74	2.51	31	-22.16	18.58	30.00	-11.42
498.821	40.11	0.99	257	-14.47	25.64	37.00	-11.36
565.262	40.29	0.99	284	-17.88	22.41	37.00	-14.59
576.003	43.54	2.52	63	-17.27	26.27	37.00	-10.73
581.964	50.19	0.99	56	-17.01	33.18	37.00	-3.82

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 limit	Margin
MHz	dBμV	m	degree	dB/m	dBμV/m	dBμV/m	dB

38.616	41.15	0.99	279	-22.49	18.66	30.00	-11.34
39.523	40.33	1.00	308	-22.29	18.04	30.00	-11.96
43.140	39.38	0.99	168	-22.17	17.21	30.00	-12.79
45.226	44.97	0.99	257	-22.14	22.83	30.00	-7.17
237.568	43.41	0.99	248	-23.27	20.14	37.00	-16.86
576.005	44.48	2.50	257	-17.27	27.21	37.00	-9.79
581.964	47.63	2.50	105	-17.01	30.62	37.00	-6.38

Final statement:

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