February 3, 2000 FCC ID: EUNA430



FCC CLASS B COMPLIANCE REPORT

for

Electromagnetic Emissions

of

Notebook PC

Trade Name: FIC **Model Number**: A430

FCC ID : EUNA430

Serial Number: N/A

Report Number: 000031-F

Date : February 3, 2000

Prepared for:

First International Computer, Inc. 6F., Formosa Plastics Rear Building 201-24, Tung Hwa N. Rd., Taipei, Taiwan, R.O.C.

Prepared by:



C&C LABORATORY, CO., LTD.

1st Fl., No. 344, Fu Ching Street, Taipei, Taiwan, R.O.C.

> TEL: (02)2746-8584 FAX: (02)2763-2154

This report shall not be reproduced, except in full, without the written approval of C&C Laboratory, Co., Ltd.



TABLE OF CONTENTS

	DESCRIPTION	PAGE
VERIFICATIO	N OF COMPLIANCE	3
SYSTEM DESC	CRIPTION	4
PRODUCT INF	ORMATION	5
SUPPORT EQU		7
MEASUREME EMISSION	NT PROCEDURE & LIMIT (LINE CONDUCTED TEST)	8
MEASUREME EMISSION	NT PROCEDURE & LIMIT (RADIATED TEST)	10
SUMMARY DA	ATA	13
APPENDIX 1	LETTER OF AGENT AUTHORIZATION	41
APPENDIX 2	LETTER OF MODIFICATION	43
APPENDIX 3	FCC ID LABEL & LOCATION	45
APPENDIX 4	TEST FACILITY	47
APPENDIX 5	TEST EQUIPMENT	49
APPENDIX 6	BLOCK DIAGRAM OF TEST SETUP	53
APPENDIX 7	PHOTOGRAPHS OF TEST SETUP	55
APPENDIX 8	PHOTOGRAPHS OF EUT (EXTERNAL)	64
APPENDIX 9	PHOTOGRAPHS OF EUT (INTERNAL)	76



VERIFICATION OF COMPLIANCE

Equipment Under Test: Notebook PC

Trade Name: FIC

FCC ID: EUNA430

Model Number: A430

Serial Number: N/A

Applicant: First International Computer, Inc.

6F., Formosa Plastics Rear Building 201-24, Tung Hwa N. Rd.,

Taipei, Taiwan, R.O.C.

Manufacturer: First International Computer, Inc.

122, Nan-Lin Rd., Taishan Hsiang, 243,

Taipei, Taiwan, R.O.C.

Type of Test: FCC Class B

Measurement Procedure: ANSI C63.4: 1992

File Number: 000031-F

Date of test: Jan. 18 ~ 28, 2000

Tested by: Tony Tsai & Allen Wang

Deviation: None

Condition of Test Sample: Normal

The above equipment was tested by C&C Laboratory, Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, Subpart B and the measurement procedure according to ANSI C63.4, 1992. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Charles Wang / Director

Chartes War

SYSTEM DESCRIPTION



EUT Test Program:

- 1. The CD-ROM driver was exercised to play music.
- 2. Communication driver was load and executed to communiate with remote equipment.
- 3. EMI test program was loaded and executed in Windows mode.
- 4. Data was sent to the Panel of EUT and monitor filling the screens with upper case of "H" patterns.
- 5. Test program sequentially exercised all related I/O's of EUT and sent "H" patterns to all applicable output ports of EUT.
- 6. Repeat 2 to 4. Test program is self-repeating throughout the test.



PRODUCT INFORMATION

Plastic Housing Type:

EUT Power Rating: DCV from Power Adapter

AC power during Test: 120VAC/60Hz (to Power Adapter)

AC Power Adapter Manufacturer: LITEON **AC Power Adapter Model Number:** AD57

AC Power Rating: Input: 100-240Vac, 1.5A, 50-60Hz

Output; 19Vdc, 3.16A

AC Power Cord Type: Unshielded, 1.8m (Detachable) to power adapter **DC Power Cable Type:** Unshielded, 1.8m (Non-Detachable) with a core

OSC/Clock Frequencies: 100MHz

CPU Manufacturer: Intel **Model:** Pentium III 500MHz FC-PGA 370

> **Model:** Pentium III 550MHz FC-PGA 370 **Model:** Pentium III 600MHz FC-PGA 370

Installed: 64MB; 128MB **Memory Capacity:**

12.1" TFT LCD Panel Manufacturer: LG Model: LP121S3-A

12.1" HPA LCD Panel Manufacturer: Panasonic Model: EDMGRB6KAF

13.3" TFT LCD Panel Manufacturer: ADT **Model:** L133X1-3

14.1" TFT LCD Panel Manufacturer: LG Model: LP141XA-A1NA

HDD Manufacturer: Hitachi **Model:** DK23AA-60 (6.0GB)

> Hitachi **Model:** DK23AA-12 (12GB) Hitachi **Model:** DK22AA-18 (18GB)

FDD Manufacturer: Mitsubishi Model: MF355H-347MN

LS-120 Manufacturer: Model: LKM-FB33-5 **MKE CD-ROM Manufacturer: Model:** CD-224E-A92 TEAC (24X) **DVD-ROM Manufacturer:** MKE(6X)Model: SR-8174-BXX **Touch Pad Manufacturer: ALPS** Model: KGDDHO941A **Modem Card Manufacturer:** Model: 1456VOL19R-1

Askey

(Internal Cable with a core)

LAN Card Manufacturer: AMBIT Model: T90L020100

(Internal Cable with a core)

Modem Card Manufacturer: Askey **Model:** 1456VQL19R-1 **LAN Card Manufacturer: AMBIT Model:** T90L020100 Panasonic **Battery (Ni-MH) Manufacturer:** Type: 4500mAH Panasonic **Battery (Li-Ion) Manufacturer:** Type: 3000mAH



I/O PORT OF EUT:

I/O PORT TYPES	Q'TY	TESTED WITH
Parallel Port	1	1
Serial Port	1	1
Video Port	1	1
PS/2 Keyboard	1	1
Microphone Port	1	1
Earphone Port	1	1
Line-in Port	1	1
TV-Out Port	1	1
Line or LAN Port	1	1
USB Port	2	2

Report Number: 000031-F February 3, 2000

FCC ID: EUNA430



SUPPORT EQUIPMENT

	Equipment	Model	Serial	FCC	Trade	Data	Power
		#	#	ID	Name	Cable	Cord
1.	Monitor	GDM-17SE2T	7138048	AK8GDM17SE2T	SONY	Shielded, 1.6m	Unshielded, 1.8m
2.	TV	21S3	70332865	N/A	TOSHIBA	S Terminal Cable	Unshielded 1.8m
						Shielded, 2.0m	
3.	Modem	2400	94-364-176285	DK467GSM24	Computer	Shielded, 1.8m	Unshielded, 1.8m
					Peripherals		
4.	Printer	C2642A	MY8251C3GQ	B94C2642X	HP	Shielded, 1.8m	AC:
							Unshielded, 1.0m
							DC:
							Unshielded, 2.0m
5.	PS/2 Keyboard	5201-P	H94201823	E5XKB5121WTH0110	SYNNEX	Shielded, 1.5m	N/A
6.	USB Mouse	M-BB48	LZE93050159	FCC DoC	LOGITECH	Shielded, 1.8m	N/A
7.	USB Mouse	M-BB48	LZE93050187	FCC DoC	LOGITECH	Shielded, 1.8m	N/A
8.	Multimedia	SX-M	A5-1	N/A	TOKYO	Unshielded, 1.4m	N/A
	Headset						
9	Walk Man	YX-328	W2	N/A	YINE-KO	Unshielded, 1.8m	N/A
10	Notebook PC	365	N/A	FCC DoC	ACER	Unshielded, 5m	N/A
	(Remote)						

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

February 3, 2000 FCC ID: EUNA430



MEASUREMENT PROCEDURE (PRELIMINARY LINE CONDUCTED EMISSION TEST)

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4: 1992 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4: 1992.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4: 1992.
- 4) The EUT received AC power through a Line Impedance Stabilization Network (LISN) which supplied power source of 120VAC/60Hz and was grounded to the ground plane.
- 5) All support equipment received power from a second LISN supplying power of 110VAC/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test:

Mode(s):

	CPU's available	LCD Panel	SDRAM	HDD's available	FDD/ LS-120	CD-ROM/ DVD-ROM	Adapter	Battery	LAN/ Modem
1.	Pentium III 550	12.1" TFT LG	64MB	6.0GB	FDD	CD-ROM	LITEON	Li-Ion	LAN
2.	Pentium III 550	12.1" HPA Panasonic	64MB	6.0GB	FDD	CD-ROM	LITEON	Ni-MH	Modem
3.	Pentium III 500	13.3" TFT ADT	64MB	6.0GB	LS-120	CD-ROM	LITEON	Ni-MH	LAN
4.	Pentium III 600	14.1" TFT LG	128MB	18GB	FDD	DVD-ROM	LITEON	Li-Ion	Modem

10) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

Mode: 1. 2. 3. 4.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

Report Number: 000031-F

February 3, 2000 FCC ID: EUNA430



MEASUREMENT PROCEDURE (FINAL LINE CONDUCTED EMISSION TEST)

- 1) EUT and support equipment was set up on the test bench as per step 10 of the preliminary test.
- 2) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Q.P. mode, then the emission signal was re-checked using an A.V. detector.
- 3) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Freq.	Q.P.	Average	Q.P.	Average	Q.P.	Average	Note
MHz	Raw	Raw	Limit	Limit	Margin	Margin	
	dBuV	dBuV	dBuV	dBuV	dB	dB	
x.xx	43.95		56	46	-12.05		L1

= Emission frequency in MHz Freq.

Raw dBuV = Uncorrected Analyzer/Receiver reading

Limit dBuV = Limit stated in standard = Reading in reference to limit Margin dB

= Current carrying line of reading Note

"___" = The emission level complied with the Average limit,

LINE CONDUCTED EMISSION LIMIT

Frequency	Maximum RF Line Voltage			
	Q.P.	AVERAGE		
150kHz-500kHz	66-56dBuV	56-46dBuV		
500kHz-5MHz	56dBuV	46dBuV		
5MHz-30MHz	60dBuV	50dBuV		

Note: The lower limit shall apply at the transition frequency.

Report Number: 000031-F

February 3, 2000 FCC ID: EUNA430



MEASUREMENT PROCEDURE (PRELIMINARY RADIATED EMISSION TEST)

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4: 1992 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4: 1992.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4: 1992.
- 4) The EUT received 120VAC/60Hz power source from the outlet socket under the turntable. All support equipment received 110VAC/60Hz power from another socket under the turntable, if any.
- 5) The antenna was placed at 10 meter away from the EUT as stated in ANSI C63.4: 1992. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 5000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7) The following test mode(s) were scanned during the preliminary test:

Mode(s):

	CPU's available	LCD Panel	SDRAM	HDD's available	FDD/ LS-120	CD-ROM/ DVD-ROM	Adapter	Battery	LAN/ Modem
1.	Pentium III 550	12.1" TFT LG	64MB	6.0GB	FDD	CD-ROM	LITEON	Li-Ion	LAN
2.	Pentium III 550	12.1" HPA Panasonic	64MB	6.0GB	FDD	CD-ROM	LITEON	Ni-MH	Modem
3.	Pentium III 500	13.3" TFT ADT	64MB	6.0GB	LS-120	CD-ROM	LITEON	Ni-MH	LAN
4.	Pentium III 600	14.1" TFT LG	128MB	18GB	FDD	DVD-ROM	LITEON	Li-Ion	Modem

8) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

Mode: 1. 2. 3. 4.

Then, the EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for reference of final testing.



MEASUREMENT PROCEDURE (FINAL RADIATED EMISSION TEST)

- 1) EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.
- 2) The Analyzer / Receiver scanned from 30MHz to 5000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 3) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit, and only Q.P. reading will record in this report.
- 4) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Fred (MF	Dat	a Factor	Emiss Level (. Limits	Margin) (dB)	
XX.X	x 14.0) 11.2	26.2	30	-3.8	

Freq. = Emission frequency in MHz

Raw Data (dBuV/m) = Uncorrected Analyzer / Receiver reading

Corr. Factor (dB) = Correction factors of antenna factor and cable loss

Emiss. Level = Raw reading converted to dBuV and CF added

Limit dBuV/m = Limit stated in standard

Margin dB = Reading in reference to limit



RADIATED EMISSION LIMIT

Frequency	Distance	Maximum Field Strength Limit				
(MHz)	(m)	(dBu V/m)				
		Q.P.	AVERAGE	PEAK		
30-230	10	30	/	/		
230-1000	10	37	/	/		
Above 1000	3	/	53.9	73.9		

^{**}Note: "/ "means the limit line isn't applicable.



SUMMARY DATA (LINE CONDUCTED TEST)

Model Number: A430 Location: Site # 4

Tested by: Tony Tsai

Test Mode: Mode 1

Test Results: Passed

Temperature: 16 °C **Humidity:** 70%RH

(The chart below shows the highest readings taken from the final data)

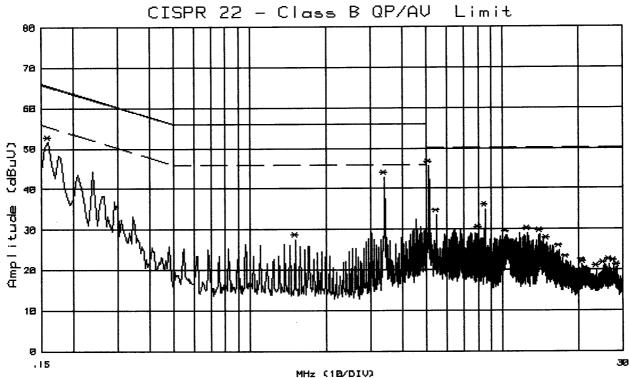
FREQ	Q.P.	AVG	Q.P.	AVG	Q.P.	AVG	NOTE
MHz	Raw dBuV	Raw dBuV	Limit dBuV	Limit dBuV	Margin dB	Margin dB	
		ubuv				uБ	
0.160	49.8		65.4	55.4	-15.6		L1
1.511	26.4		56.0	46.0	-29.6		L1
3.400	41.7		56.0	46.0	-14.3		L1
5.112	43.8		60.0	50.0	-16.2		L1
5.500	31.5		60.0	50.0	-28.5		L1
8.510	32.9		60.0	50.0	-27.1		L1
0.152	41.6		65.8	55.8	-24.2		L2
1.369	25.8		56.0	46.0	-30.2		L2
3.400	36.7		56.0	46.0	-19.3		L2
5.112	37.5		60.0	50.0	-22.5		L2
6.810	29.3		60.0	50.0	-30.7		L2
8.510	33.4		60.0	50.0	-26.6		L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

**NOTE: "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.



C&C Lab. Co. Shielded Room 4



Date :27 Jan 2000 15:08:35 Temp. :16 (C) Customer:FIC

File#: 4123 Humd.:70 (%) Model :A430 :FULL SYSTEM Port :L1 Tester: TONY TSAI Mode

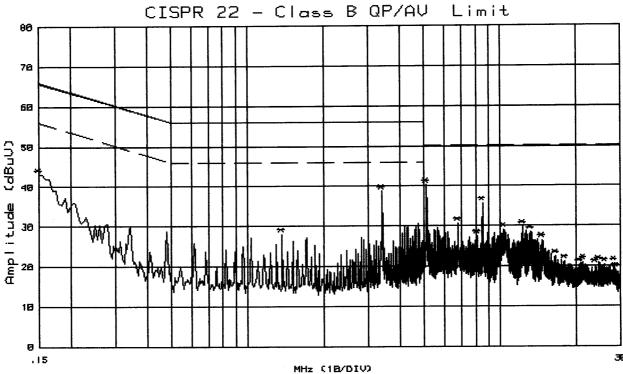
Reading :Peak(R&S Receiver)

Remark :LITEON ADAPTER LG 12.1+PIII 550MHz

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2 3 4 5 6 7	.160 1.510 3.400 5.110 5.490 8.030 8.510 10.290	51.5 27.3 42.6 45.3 33.2 29.2 34.6 28.0	.1 .2 .2 .3 .3 .3	51.6 27.5 42.8 45.6 33.5 29.5 34.9 28.4	65.5 56.0 56.0 60.0 60.0 60.0	-13.8 -28.5 -13.2 -14.4 -26.5 -30.5 -25.1 -31.6	
9 10 11 12 13 14	12.550 14.060 14.950 16.800 17.900 20.570	28.7 28.2 26.3 24.3 21.6 20.8	.4 .4 .5 .5	29.1 28.6 26.7 24.8 22.1 21.3	60.0 60.0 60.0 60.0 60.0	-30.9 -31.4 -33.3 -35.2 -37.9 -38.7	



C&C Lab. Co. Shielded Room 4



Customer:FIC Model

File#: 4130

Date :27 Jan 2000 Temp. :16 (C)

17:33:51

Mode

:A430

:FULL SYSTEM

Humd.:70 (%)
Port :L2

Tester: TONY TSAI

Reading :Peak(R&S Receiver)
Remark :LITEON ADAPTER LG 12.1+PIII 550MHz

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2 3 4 5 6 7 8 9 10 11 12 13	.150 1.370 3.400 5.110 6.810 8.090 8.510 10.350 12.270 13.160 14.670 16.660 18.100	42.9 27.7 38.4 39.8 30.1 26.9 35.1 28.3 29.1 27.8 25.8 21.6 20.4	.1 .2 .3 .5 .5 .5 .5 .6 .6 .6	43.0 27.9 38.7 40.3 30.6 27.4 35.6 28.9 29.7 28.4 26.4 22.3 21.1	66.0 56.0 56.0 60.0 60.0 60.0 60.0 60.0	-23.0 -28.1 -17.3 -19.7 -29.4 -32.6 -24.4 -31.1 -30.3 -31.6 -33.6 -37.7 -38.9	
14	20.700	19.5	. 7	20.2	60.0	-39.8	



SUMMARY DATA (LINE CONDUCTED TEST)

Model Number: A430 Location: Site # 4

Tested by: Tony Tsai

Test Mode: Mode 2

Test Results: Passed

Temperature: 18 °C **Humidity:** 69%RH

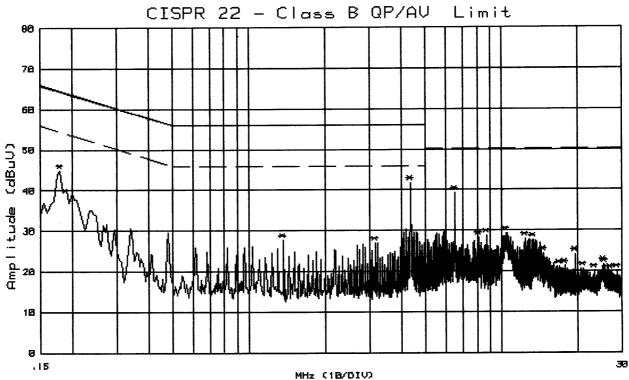
FREQ	Q.P.	AVG	Q.P.	AVG	Q.P.	AVG	NOTE
MHz	Raw	Raw	Limit	Limit	Margin	Margin	
	dBuV	dBuV	dBuV	dBuV	dB	dB	
0.181	42.5		64.4	54.4	-21.9		L1
1.370	25.8		56.0	46.0	-30.2		L1
3.152	24.9		56.0	46.0	-31.1		L1
4.358	39.6	-	56.0	46.0	-16.4		L1
6.530	37.4		60.0	50.0	-22.6		L1
10.410	26.3		60.0	50.0	-33.7		L1
0.175	43.6		64.7	54.7	-39.4		L2
0.961	25.3		56.0	46.0	-30.7		L2
2.810	24.7	-	56.0	46.0	-31.3		L2
4.360	41.1		56.0	46.0	-14.9		L2
6.530	37.4		60.0	50.0	-22.6		L2
10.410	29.5		60.0	50.0	-30.5		L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

^{**}NOTE: "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.







Date :28 Jan 2000 14:56:03 Temp. :18 (C) Customer:FIC File#: 4156

Humd.:69 (%)
Port :L1 Model :A430 Tester:TONY TSAI Mode :FULL SYSTEM

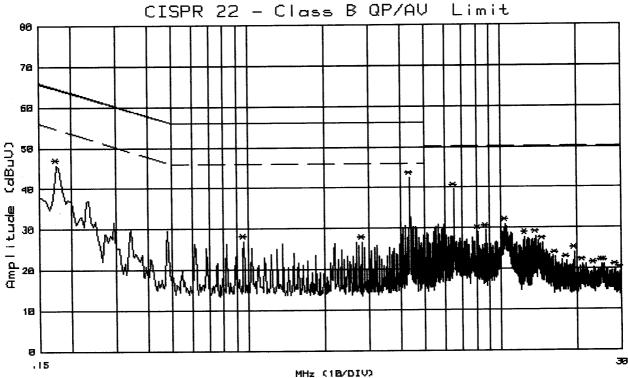
Reading :Peak(R&S Receiver)

Remark :LITEON ADAPTER HPA 12.1+PIII 550MHz

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2 3 4 5 6 7 8 9 10 11 12	.180 1.370 3.150 4.360 6.530 8.090 8.700 10.410 12.400 13.290 14.660 16.990 17.880	44.8 27.4 26.7 41.5 38.9 27.9 28.4 28.8 27.5 27.2 23.9 20.5	.1 .2 .2 .3 .3 .3 .3 .4 .4 .4 .4	44.9 27.6 26.9 41.8 39.2 28.2 28.7 29.2 27.9 27.6 24.3 21.0	64.5 56.0 56.0 56.0 60.0 60.0 60.0 60.0 60	-19.6 -28.4 -29.1 -14.2 -20.8 -31.8 -31.3 -30.8 -32.1 -32.4 -35.7 -39.0 -38.8	
14	19.660	23.6	.5	24.1	60.0	-35.9	







Customer:FIC File#: 4157 Date :28 Jan 2000 15:13:35

Model :A430 Humd.:69 (%) Temp. :18 (C)
Mode :FULL SYSTEM Port :L2 Tester:TONY TSAI

Reading : Peak (R&S Receiver)

Remark :LITEON ADAPTER HPA 12.1+PIII 550MHz ______ Total QP.Lmt Margin Warning Reading I_Loss No. Freq. (dB) Mark (dBuV) (dB) (dBuV) (MHz) (dBuV) _____ _____ -19.0 .175 .960 .1 45.8 64.7 45.7 1 -29.0 27.0 56.0 . 2 26.8 .3 26.7 56.0 -29.3 2.810 26.4 3 -13.5 56.0 42.0 .5 42.5 4 4.360 -20.5 39.5 60.0 39.0 . 5 5 6.530 -31.1 . 5 28.9 60.0 6 8.090 28.4 29.4 .5 60.0 -30.6 7 8.720 28.9 .6 31.0 60.0 -29.0 30.4 8 10.410 -32.3 27.7 60.0 27.1 . 6 9 12.470 60.0 -32.0 13.770 28.0 27.4 .6 10 -33.7 60.0 25.7 26.3 14.660 . 6 11 -37.2 .7 22.8 60.0 12 16.440 22.1 . 7 21.8 60.0 -38.2 18.150 21.1 13 24.0 -36.0 60.0 .7 19.660 23.3 14



SUMMARY DATA (LINE CONDUCTED TEST)

Model Number: A430 Location: Site # 4

Tested by: Tony Tsai

Test Mode: Mode 3

Test Results: Passed

Temperature: 16 °C **Humidity:** 70%RH

(The chart below shows the highest readings taken from the final data)

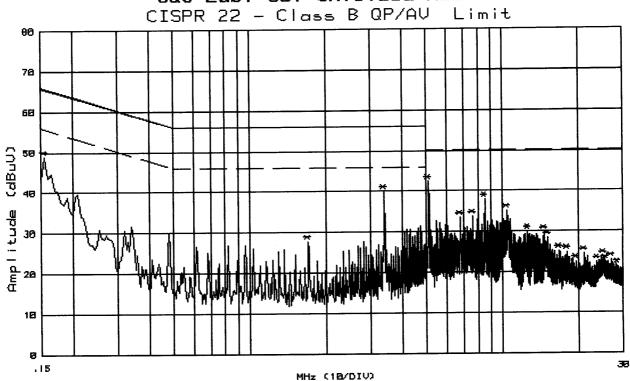
FREQ	Q.P.	AVG	Q.P.	AVG	Q.P.	AVG	NOTE
MHz	Raw	Raw	Limit	Limit	Margin	Margin	
	dBuV	dBuV	dBuV	dBuV	dB	dB	
0.156	46.9		65.6	55.6	-18.7		L1
3.400	37.6		56.0	46.0	-18.4		L1
5.113	40.7		60.0	50.0	-19.3		L1
7.610	31.7		60.0	50.0	-28.3		L1
8.512	35.5		60.0	50.0	-24.5		L1
10.419	33.2		60.0	50.0	-26.8		L1
0.161	40.6		65.4	55.4	-24.8		L2
3.400	36.4		56.0	46.0	-19.6		L2
5.113	37.7		60.0	50.0	-22.3		L2
5.490	28.5		60.0	50.0	-31.5		L2
8.512	33.6		60.0	50.0	-26.4		L2
10.419	29.3		60.0	50.0	-30.7		L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

**NOTE: "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.



C&C Lab. Co. Shielded Room 4



Customer:FIC

File#: 4138 Humd.:70 (%) Port :L1

Date :27 Jan 2000 Temp. :16 (C) 20:27:56

Model :A430 :FULL SYSTEM Mode

Tester: TONY TSAI

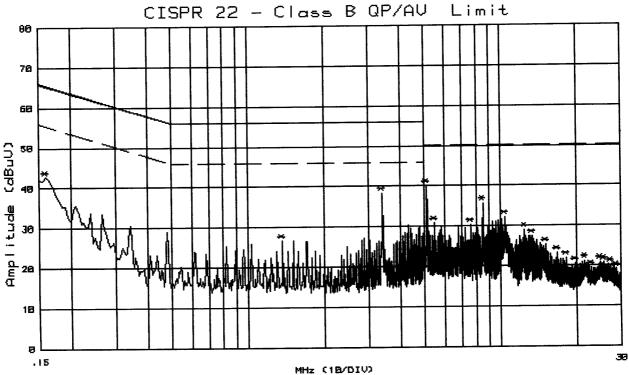
Reading :Peak(R&S Receiver)

Remark :LITEON ADAPTER ADT 13.3+PIII 500MHz

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2 3 4 5 6 7 8 9 10 11 12 13 14	.155 1.700 3.400 5.110 6.810 7.610 8.510 10.420 12.610 14.600 15.080 16.790 17.960 19.530	48.7 27.4 39.8 42.1 33.1 33.4 37.6 34.7 29.5 29.3 27.9 24.6 24.4 22.0	.1 .2 .2 .3 .3 .3 .3 .4 .4 .4 .5 .5	48.8 27.6 40.0 42.4 33.4 33.7 37.9 35.1 29.9 29.7 28.4 25.1 24.9 22.5	65.7 56.0 56.0 60.0 60.0 60.0 60.0 60.0 60.0	-16.9 -28.4 -16.0 -17.6 -26.3 -22.1 -24.9 -30.1 -30.3 -31.6 -34.9 -35.1 -37.5	



C&C Lab. Co. Shielded Room 4



Customer:FIC Model

File#: 4133 Humd.:70 (%) Date :27 Jan 2000 18:38:35 Temp. :16 (C) Tester:TONY TSAI

:A430 Port :L2 :FULL SYSTEM Mode

Reading :Peak(R&S Receiver)
Remark :LITEON ADAPTER ADT 13.3+PIII 500MHz

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2 3 4 5 6 7 8 9 10 11 12 13 14	.160 1.370 3.400 5.110 5.490 7.610 8.510 10.420 12.480 13.370 15.090 16.800 18.240 19.750	42.5 26.3 38.0 39.5 30.3 29.8 35.2 31.6 28.4 26.8 24.6 22.4 21.2 19.8	.1 .2 .3 .5 .5 .5 .6 .6 .6 .7 .7	42.6 26.5 38.3 40.0 30.8 30.3 35.7 32.2 29.0 27.4 25.3 23.1 21.9 20.5	65.5 56.0 56.0 60.0 60.0 60.0 60.0 60.0	-22.8 -29.5 -17.7 -20.0 -29.2 -29.7 -24.3 -27.8 -31.0 -32.6 -34.7 -36.9 -38.1 -39.5	



SUMMARY DATA (LINE CONDUCTED TEST)

Model Number: A430 Location: Site # 4

Tested by: Tony Tsai

Test Mode: Mode 4

Test Results: Passed

Temperature: 18 °C **Humidity:** 69%RH

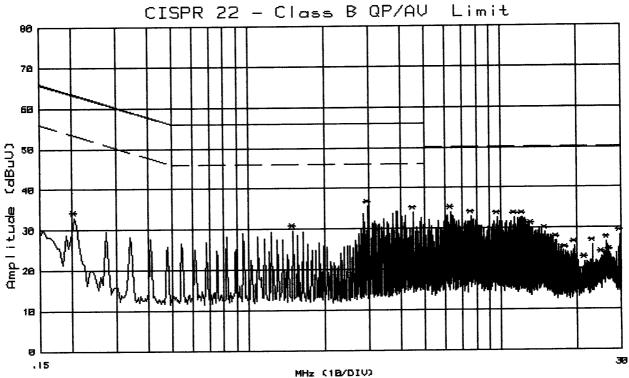
FREQ	Q.P.	AVG	Q.P.	AVG	Q.P.	AVG	NOTE
MHz	Raw	Raw	Limit	Limit	Margin	Margin	
	dBuV	dBuV	dBuV	dBuV	dB	dB	
1.500	26.8		56.0	46.0	-29.2		L1
2.958	33.4		56.0	46.0	-22.6		L1
4.507	31.6		56.0	46.0	-24.4		L1
6.350	31.7	-	60.0	50.0	-28.3		L1
7.652	30.8		60.0	50.0	-29.2		L1
9.700	30.5		60.0	50.0	-29.5		L1
0.204	32.3		63.4	53.4	-31.1		L2
1.640	26.5		56.0	46.0	-29.5		L2
2.959	32.7	-	56.0	46.0	-23.3		L2
4.170	31.8		56.0	46.0	-24.2		L2
6.500	29.5		60.0	50.0	-30.5		L2
8.003	29.4		60.0	50.0	-30.6		L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

^{**}NOTE: "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.



C&C Lab. Co. Shielded Room 4



Customer:FIC

File#: 4243

Date :28 JAN 2000 15:02:07 Temp. :18 (C)

Model :A430

Humd.:69 (%)

:FULL SYSTEM Mode

Port :L1

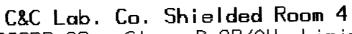
Tester: TONY TSAI

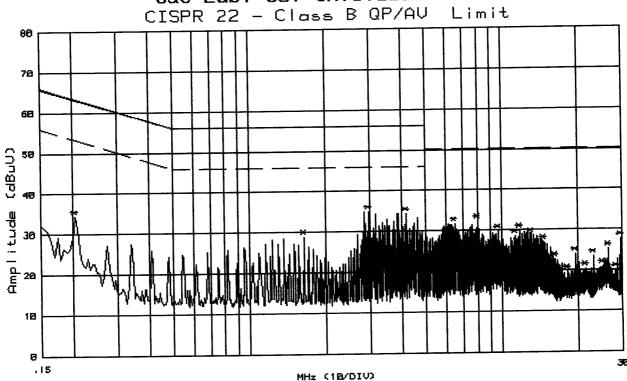
Reading :Peak(R&S Receiver)

Remark :LITEON ADAPTER LG 14.1 CPU PIII 600MHz

No.	Freq.	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2 3 4 5 6 7 8 9 10 11 12 13	.205 1.500 2.960 4.510 6.350 7.650 9.700 11.270 12.160 13.180 14.960 16.530 18.030 19.530	32.9 29.4 35.3 33.7 33.8 32.6 32.4 32.2 32.2 29.7 28.5 26.3 23.7 25.0	.1 .2 .3 .3 .3 .4 .4 .4 .4 .5	33.0 29.6 35.5 34.0 34.1 32.9 32.7 32.6 32.6 30.1 28.9 26.8 24.2 25.5	63.4 56.0 56.0 60.0 60.0 60.0 60.0 60.0 60.0	-30.4 -26.4 -20.5 -22.0 -25.9 -27.1 -27.3 -27.4 -27.4 -29.9 -31.1 -33.2 -35.8 -34.5	







Customer:FIC

File#: 4246

Date :28 JAN 2000 15:29:40

:A430 Model

Humd.:69 (%) Port :L2

Temp. :18 (C) Tester: TONY TSAI

:FULL SYSTEM Mode

Reading : Peak (R&S Receiver)

:LITEON ADAPTER LG 14.1 CPU PIII 600MHz

Remark :LITEON	ADAPTER	LG 14.1 CPU	PIII 600M	lHz		
No. Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 .205 2 1.640 3 2.960 4 4.170 5 6.500 6 8.000 7 9.640 8 11.280 9 11.760 10 13.130 11 14.700 12 16.270 13 18.180 14 19.530	34.2 28.6 34.5 33.7 31.2 31.7 29.2 27.8 29.3 28.1 26.3 22.0 18.9 23.3	.1 .2 .3 .5 .5 .5 .5 .6 .6 .6 .6	34.3 28.8 34.8 34.2 31.7 32.2 29.7 28.4 29.9 28.7 26.9 22.7 19.6 24.0	63.4 56.0 56.0 56.0 60.0 60.0 60.0 60.0 60.0	-29.1 -27.2 -21.2 -21.8 -28.3 -27.8 -30.3 -31.6 -30.1 -31.3 -37.3 -40.4 -36.0	



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Vertical -- 10m

Test Mode: Mode 1

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 20 °C **Humidity:** 60%RH

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dB	Limits suV/m)	Margin (dB)
111.36	13.4	13.4	26.8	30.0	-3.2
122.22	12.5	14.5	27.0	30.0	-3.0
144.42		14.0	27.0	30.0	-3.0
221.40	13.7	13.3	27.0	30.0	-3.0
482.00	11.1	22.8	33.9	37.0	-3.1
562.00	8.8	25.1	33.9	37.0	-3.1



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Horizontal -- 10m

Test Mode: Mode 1

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 20 °C **Humidity:** 60%RH

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dF	Limits BuV/m)	Margin (dB)
127.68	12.1	14.5	26.6	30.0	-3.4
146.28	13.1	13.8	26.9	30.0	-3.1
219.10	13.8	13.1	26.9	30.0	-3.1
403.00	13.0	20.9	33.9	37.0	-3.1
422.00	12.6	21.4	34.0	37.0	-3.0
559.00	8.5	25.1	33.6	37.0	-3.4



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Vertical -- 10m

Test Mode: Mode 2

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 20 °C **Humidity:** 60%RH

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dI	Limits BuV/m)	Margin (dB)
68.53	19.3	7.5	26.8	30.0	-3.2
112.30	13.2	13.6	26.8	30.0	-3.2
168.42	14.2	12.8	27.0	30.0	-3.0
199.77	15.1	11.6	26.7	30.0	-3.3
216.60	14.1	12.9	27.0	30.0	-3.0
227.70	13.1	13.9	27.0	30.0	-3.0



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 **Location:** Site # 3

Tested by: Allen Wang **Polar:** Horizontal -- 10m

Test Mode: Mode 2

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 20 °C **Humidity:** 60% RH

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (d)	Limits BuV/m)	Margin (dB)
123.18	12.2	14.5	26.7	30.0	-3.3
127.68	12.3	14.5	26.8	30.0	-3.2
184.36	14.5	12.5	27.0	30.0	-3.0
257.00	16.8	17.0	33.8	37.0	-3.2
402.00	12.9	20.9	33.8	37.0	-3.2
895.00	6.3	27.5	33.8	37.0	-3.2



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Vertical -- 10m

Test Mode: Mode 3

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 20 °C **Humidity:** 60%RH

Freq.	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dE	Limits BuV/m)	Margin (dB)
37.29	10.7	16.1	26.8	30.0	-3.2
80.79	17.8	9.1	26.9	30.0	-3.1
137.70	12.6	14.3	26.9	30.0	-3.1
308.00	15.1	18.8	33.9	37.0	-3.1
555.00	8.4	25.0	33.4	37.0	-3.6
752.00	7.9	25.9	33.8	37.0	-3.2



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Horizontal -- 10m

Test Mode: Mode 3

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 20 °C **Humidity:** 60%RH

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dl	Limits BuV/m)	Margin (dB)
111.42	12.9	13.5	26.4	30.0	-3.6
137.52	12.4	14.3	26.7	30.0	-3.3
144.12	12.6	14.0	26.6	30.0	-3.4
199.64	15.1	11.6	26.7	30.0	-3.3
226.73	13.1	13.8	26.9	30.0	-3.1
633.00	7.9	25.7	33.6	37.0	-3.4



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Vertical -- 10m

Test Mode: Mode 4

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 18 °C **Humidity:** 68%RH

Freq. (MHz)	Raw Data (dBuV/m)	Factor	Level	Limits BuV/m)	C	
	11.2			30.0		
	10.5	13.6			-5.9	
254.10	13.5	17.0	30.5	37.0		
298.30	9.9	18.6		37.0		
871.97	4.5	27.6	32.1	37.0	-4.9	
894.81	5.6	27.5	33.1	37.0	-3.9	



SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: A430 Location: Site # 3

Tested by: Allen Wang **Polar:** Horizontal -- 10m

Test Mode: Mode 4

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 18 °C **Humidity:** 68%RH

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dl	Limits BuV/m)	Margin (dB)
124.41	7.4	14.5	21.9	30.0	-8.1
216.90	11.9	12.9	24.8	30.0	-5.2
254.90	15.2	17.0	32.2	37.0	-4.8
298.70	9.3	18.6	27.9	37.0	-9.1
497.96	7.8	23.1	30.9	37.0	-6.1
899.24	5.1	27.5	32.6	37.0	-4.4

SUMMARY DATA



(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Vertical ---3 m

Test Mode: Mode 1

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 19 °C **Humidity:** 70%RH

Freq.	Raw Data (MHz)	Corr. Factor (dBuV/m)	Emiss. Level (dB)	Limits (A.V.) (dBu	Margin V/m)	(dB)
1103.00	17.0	26.4	43.4(Pk)	53.9	-10.5	
1297.00	12.7	27.3	40.0(Pk)	53.9	-13.9	
1394.00	11.6	27.8	39.4(Pk)	53.9	-14.5	
1497.00	15.3	28.3	43.6(Pk)	53.9	-10.3	

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.





(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Horizontal ---3 m

Test Mode: Mode 1

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 19 °C **Humidity:** 70%RH

Freq.	Raw Data (MHz)	Corr. Factor (dBuV/m)	Emiss. Level (dB)	Limits (A.V.) (dBu	Margin V/m) (dB)
1103.00	18.1	26.4	44.5(Pk)	53.9	_9.4
1303.00	12.6	27.3	39.9(Pk)	53.9	-14.0
1400.00	11.3	27.8	39.1(Pk)	53.9	-14.8
1503.00	11.4	28.3	39.7(Pk)	53.9	-14.2
3286.00	9.7	34.7	44.4(Pk)	53.9	_9.5

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.



SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Vertical ---3 m

Test Mode: Mode 2

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 18 °C **Humidity:** 70%RH

Freq.	Raw Data (MHz)	Corr. Factor (dBuV/m)	Emiss. Level (dB)	Limits (A.V.) (dBu	Margin	(dB)
1103.00	16.8	26.4	43.2(Pk)	53.9	-10.7	
1303.00	14.9	27.3	42.2(Pk)	53.9	-11.7	
1497.00	15.0	28.3	43.3(Pk)	53.9	-10.6	
1629.00	12.7	28.9	41.6(Pk)	53.9	-12.3	
3554.00	9.0	35.6	44.6(Pk)	53.9	-9.3	

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.

SUMMARY DATA



(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Horizontal ---3 m

Test Mode: Mode 2

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 18 °C **Humidity:** 69%RH

Freq.	Raw Data (MHz)	Corr. Factor (dBuV/m)	Emiss. Level (dB)	Limits (A.V.) (dBu	Margin V/m) (dB)
1103.00	19.9	26.4	46.3(Pk)	53.9	 _7.6
1297.00	14.5	27.3	41.8(Pk)	53.9	-12.1
1497.00	12.5	28.3	40.8(Pk)	53.9	-13.1
1686.00	9.7	29.2	38.9(Pk)	53.9	-15.0
3394.00	9.3	35.1	44.4(Pk)	53.9	-9.5

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.

SUMMARY DATA



(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Vertical ---3 m

Test Mode: Mode 3

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 18 °C **Humidity:** 70%RH

Freq.	Raw Data (MHz)	Corr. Factor (dBuV/m)	Emiss. Level (dB)	Limits (A.V.) (dBu	Margin V/m)	(dB)
1034.00	14.1	26.1	40.2(Pk)	53.9	-13.7	====
1103.00	18.5	26.4	44.9(Pk)	53.9	-9.0	
1251.00	15.4	27.1	42.5(Pk)	53.9	-11.4	
1377.00	16.9	27.7	44.6(Pk)	53.9	-9.3	
2869.00	9.5	32.9	42.4(Pk)	53.9	-11.5	

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.

SUMMARY DATA



(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Horizontal ---3 m

Test Mode: Mode 3

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 18 °C **Humidity:** 70%RH

Freq.	Raw Data (MHz)	Corr. Factor (dBuV/m)	Emiss. Level (dB)	Limits (A.V.) (dBu	Margin V/m) (dB)
1103.00	17.6	26.4	44.0(Pk)	53.9	-9.9
1303.00	15.1	27.3	42.4(Pk)	53.9	-11.5
1371.00	16.2	27.7	43.9(Pk)	53.9	-10.0
1497.00	13.3	28.3	41.6(Pk)	53.9	-12.3
3497.00	9.7	35.5	45.2(Pk)	53.9	-8.7

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.



SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Vertical ---3 m

Test Mode: Mode 4

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 21 °C **Humidity:** 69%RH

Freq.	Raw Data (MHz)		Level	(A.V.)	 Margin V/m)	(dB)
1006.00	12.8	25.9	38.7(Pk)	53.9	-15.2	
1034.00	14.1	26.1	40.2(Pk)	53.9	-13.7	
1103.00	15.4	26.4	41.8(Pk)	53.9	-12.1	
		27.1	, ,			
	16.6	27.3		53.9	-10.0	
		27.7	` ,		-8.9	
	15.0	27.8	42.8(Pk)		-11.1	
	13.7	28.3	, ,	53.9		
	13.7			53.9		

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.

SUMMARY DATA



(RADIATED EMISSION TEST)

Model Number: A430 Location: 3 meter chamber

Tested by: Tony Tsai **Polar:** Horizontal ---3 m

Test Mode: Mode 4

Detector Function: Average/Peak **Test Results:** Passed

Temperature: 21 °C **Humidity:** 69%RH

Freq.	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/1	Limits (A.V.) m)	Margin (dB)
1103.00	17.0	26.4	43.4(Pk)	53.9	-10.5
1251.00	16.6	27.1	43.7(Pk)	53.9	-10.2
1269.00	16.3	27.2	43.5(Pk)	53.9	-10.4
1297.00	18.3	27.3	45.6(Pk)	53.9	-8.3
1377.00	16.8	27.7	44.5(Pk)	53.9	-9.4
1400.00	14.4	27.8	42.2(Pk)	53.9	-11.7

^{**}Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no further measurement with A.V. detector required.



APPENDIX 1

LETTER OF AGENT AUTHORIZATION





大衆電腦股份有限公司FIRST INTERNATIONAL COMPUTER, INC.

台北市敦化北路201號之24 台型大樓後棟6樓 6F., FORMOSA PLASTICS REAR BUILDING 201, TUNG HWA N. ROAD, TAIPEI, TAIWAN TEL: (02)717-4500 (代表錄) TELEX:23056 FAX: (02)712-0231

Federal Communications Commission Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, MD 21046 U.S.A

Gentlemen,

We the undersigned, hereby authorized C&C Laboratory Co., Ltd. to act on our behalf in all matters relating to applications for equipment authorizations, including the signing of all documents relating to these matters. Any and all acts carried out by C&C Laboratory Co., Ltd. on our behalf shall have the same effect as acts of our own.

The applicant certifies that, in the case of an individual applicant is not subject to a denial of federal benefits, that includes FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853 (a), in the case of a non-individual applicant (e.g. corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits, that includes FCC benefits, pursuant to that section.

Sincerely yours,

C. W. Chien / R&D Engineer



APPENDIX 2

LETTER OF MODIFICATION





大衆電腦股份有限公司 FIRST INTERNATIONAL COMPUTER, INC.

台北市敦化北路201號之24 台塑大樓後棟6樓 6F., FORMOSA PLASTICS REAR BUILDING 201, TUNG HWA N. ROAD, TAIPEI, TAIWAN TEL: (02)717-4500 (代表錄) TELEX:23056 FAX: (02)712-0231

Federal Communications Commission Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, MD 21046 U.S.A

FCC ID: EUNA430

Gentlemen:

The following modifications will be installed to our unit (FCC ID: EUNA430) in order to comply with FCC rules for a class B computing device. These modifications will be incorporated in each unit sold under the above FCC ID.

- 1. Add one Ferrite core (BRH 15.5 x 28.5 x 7.3) on Adapter. (Please refer photo on page 67)
- 2. Add one Gasket on Palm rest. (Please refer photo on page 70)
- 3. Add two Conductive tape on Audio Cable. (Please refer photo on page 70)
- 4. Add seven Gaskets on Top Case/Heat Sink. (Please refer photo on page 72)
- 5. Add one Gasket on Top Case/ IO Bracket. (Please refer photo on page 73)
- 6. Add one Ferrite core (K5B T8 x 4 x 4) on Speaker Cable. (Please refer photo on page 76)
- 7. Add two Gaskets on Bottom Case/IO Bracket. (Please refer photo on page 78)
- 8. Add two Ferrite cores [TR-6 x 4 x 10(L8)] on Wire Cable. (Please refer photo on page 79)
- 9. Add two Ferrite cores [TR-6 x 4 x 10(L8)] on Wire Cable. (Please refer photo on page 82)
- 10. Add one Ferrite core (6 x 4 x 10) on Inverter Cable. (Please refer photo on page 82)
- 11. Add one Gasket on TV-Out Port. (Please refer photo on page 95)
- 12. Add one Gasket on USB port. (Please refer photo on page 95)
- 13. Add one Gasket on Mother Board Ground. (Please refer photo on page 97)
- 14. Add one Ferrite core (W5T 9 x 8 x 5) on LAN Cable. (Please refer photo on page 102)
- 15. Add one Ferrite core (W5T 9 x 8 x 5) on Modem Cable. (Please refer photo on page 104)
- 16. Add two Gaskets on Audio Board. (Please refer photo on page 112)

We understand that changes may be made to the product if the product is re-tested and a Class I or Class II permissive changes (as applicable) is applied for. We understand that the Equipment Grant Authorization must be issued before we can marketed our product, or the Class I or Class II change must be approved before we can market our product.

We also understand that peripherals (computer input/output device, modems, printer, etc.) certified to comply with the Class B limits are the only peripherals that may be sold with this computer.

Sincerely yours,

C. W. Chien / R&D Engineer



APPDENDIX 3

FCC ID LABEL & LOCATION



FCC ID LABEL & FCC ID LOCATION

FCC ID: EUNA430



1. LOCATION: BACK SIDE OF EUT.

2. MATERIAL: POLYESTER FILM SILVER MATT LABEL.

COATED: POLYESTER FILM TRANSPARENT LABEL

3. COLOR: BACKGROUND-BLACK, CHARACTER-WHITE

4. SIZE: 121mm x 47mm



APPENDIX 4

TEST FACILITY



TEST FACILITY

Location: No. 15, 14 Line, Chin Twu Chi, Lu Chu Hsiang, Taoyuan, Taiwan,

R.O.C.

Description: There are two 3/10m open area test sites and two line conducted labs

for final test, and one 3/10m open area test site for engineering lab. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:

1992 and CISPR 22/EN 55022 requirements.

Site Filing: A site description is on file with the Federal Communications

Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Registration also was made with Voluntary Control Council for

Interference (VCCI).

Site Accreditation: Accredited by NEMKO (Authorization #: ELA 124) for EMC &

A2LA (Certificate #: 824.01) for Emission

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4 and

CISPR22 requirement that meet industry regulatory agency and

accreditation agency requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

Site #1 and # 3 Line Conducted Test Site: Vertical ground plane (2.2m x 2.2m)

Horizontal ground plane (2.5m x 2.5m)

Site #4 Line Conducted Test Site: At Shielding Room



APPENDIX 5

TEST EQUIPMENT



TEST EQUIPMENT LIST (EN 55022)

Instrumentation: The following list contains equipment used at C & C Laboratory, Co., Ltd. for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2-1988 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10kHz to 1.0 / 5.0 GHz.

Equipment used during the tests:

Open Area Test Site: # 3

Open Area Test Site # 1									
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL.				
TYPE		NUMBER	NUMBER	CAL.	DUE				
Spectrum Analyzer	HP	8568B	3001A05004	04/16/1999	04/15/2000				
S.P.A Display	HP	85662A	3104A18846	04/16/1999	04/15/2000				
RF Pre-selector	HP	85685A	2947A01064	04/16/1999	04/15/2000				
Q.P Adaptor	HP	85650A	2811A01399	04/16/1999	04/15/2000				
Precision Dipole	R&S	HZ-12	846932/0004	06/16/1999	06/16/2000				
Precision Dipole	R&S	HZ-13	846556/0008	06/16/1999	06/16/2000				
Horn Antenna	EMCO	3115	9602-4659	04/04/1999	04/04/2000				
Bilog Antenna	CHASE	CBL6112A	2309	04/05/1999	04/05/2000				
Turn Table	EMCO	2081-1.21	N/A	N/A	N/A				
Antenna Tower	EMCO	2075-2	9707-2604	N/A	N/A				
Controller	EMCO	2090	N/A	N/A	N/A				
RF Switch	ANRITSU	MP59B	N/A	N/A	N/A				
Site NSA	C&C	N/A	N/A	11/10/1999	11/09/2000				

Open Area Test Site # 3									
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL.				
ТҮРЕ		NUMBER	NUMBER	CAL.	DUE				
Spectrum Analyzer	ADVANTEST	R3261C	71720533	10/25/1999	10/24/2000				
PRE-AMP.	HP	8447D	2944A08432	11/16/1999	11/15/2000				
EMI Test Receiver	R&S	ESVS20	838804/004	12/24/1999	12/23/2000				
Precision Dipole	R&S	HZ-12	846932/0004	06/16/1999	06/16/2000				
Precision Dipole	R&S	HZ-13	846556/0008	06/16/1999	06/16/2000				
Horn Antenna	EMCO	3115	9602-4659	04/04/1999	04/04/2000				
Bilog Antenna	CHASE	CBL6112A	2179	11/27/1999	11/26/2000				
Turn Table	EMCO	2081-1.21	9709-1885	N/A	N/A				
Antenna Tower	EMCO	2075-2	9707-2060	N/A	N/A				
Controller	EMCO	2090	9709-1256	N/A	N/A				
RF Switch	ANRITSU	MP59B	N/A	N/A	N/A				
Site NSA	C&C	N/A	N/A	01/31/1999	01/31/2000				



Open Area Test Site # 4								
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL.			
ТҮРЕ		NUMBER	NUMBER	CAL.	DUE			
Spectrum Analyzer	ADVANTEST	R3261C	81720301	09/02/1999	09/01/2000			
Pre-Amplifier	HP	8447F	2944A03748	10/22/1999	10/21/2000			
EMI Test Receiver	R&S	ESVS10	846285/016	12/17/1999	12/16/2000			
Precision Dipole	R&S	HZ-12	846932/0004	06/16/1999	06/16/2000			
Precision Dipole	R&S	HZ-13	846556/0008	06/16/1999	06/16/2000			
Horn Antenna	EMCO	3115	9602-4659	04/04/1999	04/04/2000			
Bilog Antenna	CHASE	CBL 6112B	2462	01/13/2000	01/12/2001			
Turn Table	Chance most	N/A	N/A	N/A	N/A			
Antenna Tower	Chance most	N/A	N/A	N/A	N/A			
Controller	Chance most	N/A	N/A	N/A	N/A			
RF Switch	ANRITSU	MP59B	N/A	N/A	N/A			
Site NSA	C&C Lab.	N/A	N/A	12/26/1999	12/25/2000			

3 meter chamber								
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL.			
TYPE		NUMBER	NUMBER	CAL.	DUE			
Spectrum Analyzer	ADVANTEST	R3271A	85060321	01/12/2000	01/11/2001			
Pre-Amplifier	HP	8449B	3008A00965	02/24/1999	02/23/2000			
Low loss cable	ANDREW	LDF-2-50	N/A	04/13/1999	04/12/2000			
Turn Table	HD	DS 415	N/A	N/A	N/A			
Antenna Tower	HD	MA 240	N/A	N/A	N/A			
Controller	HD	HD 100	N/A	N/A	N/A			
Double ridge horn Antenna	EMCO	3115	9602-4659	04/04/1999	04/03/2000			



Conducted Emission Test Site: # 4

Conducted Emission Test Site # 1									
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL.				
ТҮРЕ		NUMBER	NUMBER	CAL.	DUE				
Spectrum Analyzer	HP	8568B	3001A05004	04/16/1999	04/15/2000				
S.P.A Display	HP	85662A	3104A18846	04/16/1999	04/15/2000				
RF Pre-selector	HP	85685A	2947A01064	04/16/1999	04/15/2000				
Q.P Adaptor	HP	85650A	2811A01399	04/16/1999	04/15/2000				
LISN	EMCO	3825/2	9106-1809	07/27/1999	07/26/2000				
LISN	EMCO	3825/2	9106-1810	07/27/1999	07/26/2000				

Conducted Emission Test Site # 3								
EQUIPMENT	EQUIPMENT MFR MODEL SERIAL LAST CAL							
ТҮРЕ		NUMBER	NUMBER	CAL.	DUE			
EMI Test Receiver	R&S	ESCS30	847793/012	11/06/1999	11/05/2000			
LISN	EMCO	3825/2	9003-1628	04/29/1999	04/28/2000			
LISN	R&S	ESH3-Z5	848773/014	10/22/1999	10/21/2000			

Conducted Emission Test Site # 4								
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL.			
TYPE		NUMBER	NUMBER	CAL.	DUE			
EMI Test Receiver	R&S	ESHS10	843743/015	12/10/1999	12/09/2000			
LISN	EMCO	3825/2	1382	01/10/2000	01/09/2001			
LISN	R&S	ESH2-Z5	843250/010	12/06/1999	12/05/2000			

The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.



APPENDIX 6

BLOCK DIAGRAM OF TEST SETUP



BLOCK DIAGRAM OF TEST SETUP

System Diagram of Connections between EUT and Simulators

EUT: Notebook PC
Trade Name: FIC
Model Number: A430
Power Cord: Unshielded, 1.8m

(LINE or LAN Cable 5m)

