

FCC CLASS A COMPLIANCE REPORT

for

Electromagnetic Emissions

of

LCD PANEL PC

Trade Name : N/A

Model Number : ONYX-151

Serial Number : N/A

Report Number: 000932-F

Date

: December 18, 2000

Prepared for:

AAEON Technology Inc. 5F, No. 135, Lane 235, Pao Chiao Rd., Hsin Tien, Taipei Shian, Taiwan, R.O.C.

Prepared by:



C&C LABORATORY, CO., LTD.

#B1, 1st Fl., Universal Center, No. 183, Sec. 1, Tatung Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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Accredited Lab. of NEMKO, A2LA, BSMI Listed Lab. of FCC, VCCI, MOC

A2LA Certificate #: 824.01 (for Emission) NEMKO Authorization #: ELA 124 (for EMC) Page 1 of 28

Rev. 00



VERIFICATION OF COMPLIANCE

Equipment Under Test: LCD PANEL PC

Trade Name: N/A

Model Number: ONYX-151

Serial Number: N/A

Applicant: AAEON Technology Inc.

5F, No. 135, Lane 235, Pao Chiao Rd., Hsin Tien,

Taipei Shian, Taiwan, R.O.C.

Manufacturer: AAEON Technology Inc.

5F, No. 135, Lane 235, Pao Chiao Rd., Hsin Tien,

Taipei Shian, Taiwan, R.O.C.

Type of Test: FCC Class A

Measurement Procedure: ANSI C63.4: 1992

File Number: 000932-F

Date of test: December 11 ~ 12, 2000

Deviation: According applicant declaration this EUT is a class A product and

to be marketed in industrial environment only.

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. 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.

Responsible Party

N: A: Clary

Authorized Signatory

Officer of the Responsible Party

Accredited Lab. of NEMKO, A2LA, BSMI

Listed Lab. of FCC, VCCI, MOC A2L

A2LA Certificate #: 824.01 (for Emission) NEMKO Authorization #: ELA 124 (for EMC) Page3 Rev. 00



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SYSTEM DESCRIPTION

EUT Test Program:

- 1. Turn on all of test equipment.
- 2. EMI test program was loaded and executed in Windows 98 mode.
- $3. \;\;$ Data was sent to monitor and filling the screens with Test patterns.
- 4. Test program sequentially exercised all related I/O's of EUT.
- 5. Repeat 2 to 4. Test program is self-repeating throughout the test.

PRODUCT INFORMATION



Housing Type: Plastic w/metal plate
EUT Power Rating: 100-240VAC, 50-60Hz

AC Power during Test 120VAC/60Hz
Power Supply Manufacturer: Power Add
Power Supply Model Number: PPS100-31

AC Power Cord Type: Unshielded, 1.8m

OSC/Clock Frequencies: 66MHz

CPU Manufacture: Intel Type: Celeron 533MHz

Memory Capacity: Install: 64MB

15" LCD Panel Manufacturer: Hyundai Model: HT15X22-100

HDD Manufacturer: Fujitsu **Model:** MHH2032AT (3.2GB)

FDD Manufacturer: NEC Model: FD1238T-GRP

CD-ROM Manufacturer: NEC Model: CD-2800D

VGA Card Type: On Board

I/O Port of EUT

I/O PORT TYPES	Q'TY	TESTED WITH
1). Parallel Port	1	1
2). Serial Port	3	3
3). PS/2 Keyboard Port	1	1
4). PS/2 Mouse Port	1	1
5). Video Port	1	1
6). Line-in Port	1	1
7). Line-out Port	1	1
8). Speaker-out Port	1	1
1) LAN Port	1	1
2) USB Port	2	2



SUPPORT EQUIPMENT

No.	Equipment	Model #	Serial #	FCC ID	Trade Name	Data Cable	Power Cord
1.	Monitor	GDM-17SE2T	7138048	AK8GDM17SE2T	SONY	Shielded, 1.8m	Unshielded,
2.	Modem	2400	94-364-176281	DK467GSM24	Computer Peripherals	Shielded, 1.8m	Unshielded, 1.8m
3.	Modem	2400	94-364-176276	DK467GSM24	Computer Peripherals	Shielded, 1.8m	Unshielded, 1.8m
4.	Printer	C2642A	TH86K1M14P	B94C2642X	НР	Shielded, 1.8m	AC I/P: Unshielded, 0.9m DC O/P: Unshielded, 1.9m
5.	PS/2 Keyboard	SK-2502C	M99043551	FCC DoC	HP	Shielded, 1.8m	N/A
6.	PS/2 Mouse	M-S34	LZC84445540	DZL211029	HP	Shielded, 1.8m	N/A
7.	Serial Mouse	M-MM43	LZE94052791	DoC	Logitech	Shielded, 1.9m	N/A
8.	USB Mouse	M-BB48	LZE93050162	FCC DoC	Logitech	Shielded, 1.8m	N/A
9.	USB Mouse	M-BB48	LZE1450642	FCC DoC	Logitech	Shielded, 1.8m	N/A
10.	Multimedia Headset	SX-M	A5-3	N/A	токуо	Unshielded, 1.8m	N/A
11.	Walkman	YX-328	W2	N/A	YING-KO	Unshielded, 1.2m	N/A
12.	Notebook PC (Remote)	365	TZ30518	FCC D₀C	Acer	Shielded, 10m	AC I/P: Unshielded, 0.9m DC O/P: Unshielded, 1.9m

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.



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 (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.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 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.
- 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): (customer defined)

- 1. 1600 x 1200 Resolution
- 10) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

Mode(s): 1.

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

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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 Average 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		L 1

Freq. = Emission frequency in MHz

Raw dBuV = Uncorrected Analyzer/Receiver reading

Limit dBuV = Limit stated in standard

Margin dB = Reading in reference to limit

Note = Current carrying line of reading

= The emission level complied with the Average limits, with at least 2 dB margin, so no further recheck.

LINE CONDUCTED EMISSION LIMIT

Frequency	Maximum RF Line Voltage				
	Q.P.	AVERAGE			
150kHz-500kHz	79dBuV	66dBuV			
500kHz-5MHz	73dBuV	60dBuV			
5MHz-30MHz	73dBuV	60dBuV			

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

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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 (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.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 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.
- 5) The antenna was placed at 10 meter away from the EUT as stated in ANSI C63.4. 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 2000MHz. 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): (customer defined)

1. 1600 x 1200 Resolution

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

Mode(s): 1

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 RAIDATED 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 2000MHz. 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, were recorded into a computer (The antenna position, polarization and turntable position were kept in raw data file) in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- 4) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m	Limits	Margin (dB)
xx.xx	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/m 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)	(dBuV/m)				
		Q.P. AVERAGE PEAK				
30-230	10	40	/	/		
230-1000	10	47	/	/		
Above 1000	3	/ 60 80				

^{**}Note: "/" means the limit line is not applicable.



Location: Site #4

(i) SUMMARY DATA (LINE CONDUCTED TEST)

Model Number: ONYX-151

Tested by: Jacky Wang

Test Mode: Mode 1

Test Results: Passed

Temperature: 18^oC **Humidity:** 72%RH

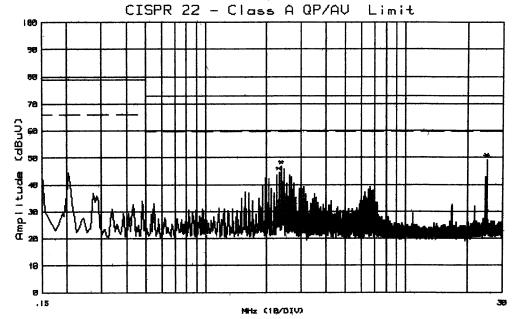
(The chart below shows the highest readings taken from the final data)

FREQ MHz	Q.P. RAW	AVG RAW	Q.P. Limit	AVG Limit	Q.P. Margin	AVG Margin*	None
1, 10	dBuV	dBuV	dBuV	dBuV	dB	dB	
0.220	43.2		79.0	66.0	-35.8		L1
2.350	44.1		73.0	60.0	-28.9		L1
2.380	45.8		73.0	60.0	-27.2		L1
2.410	44.1		73.0	60.0	-28.9		L1
2.520	43.5		73.0	60.0	-29.5		Ll
25.150	47.9		73.0	60.0	-25.1		L1
0.220	45.2		79.0	66.0	-33.8		L2
0.490	43.7		79.0	66.0	-35.3		L2
0.520	46.5		73.0	60.0	-26.5		L2
1.950	44.8		73.0	60.0	-28.2		L2
2.420	42.9		73.0	60.0	-30.1		L2
25.150	47.9		73.0	60.0	-25.1		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 Room4

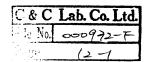


File#: 3801 Humd.:72 (%) Port :L1

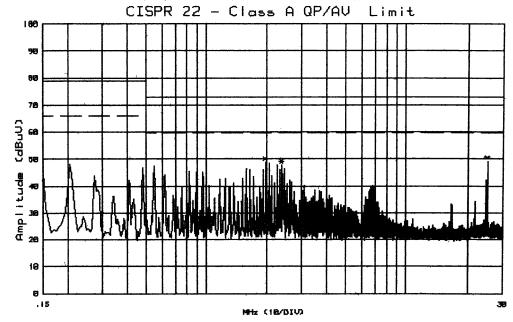
Date :11 Dec 2000 21:59:58 Temp. :18 (C) Tester:JACKY WANG

Customer:NA Model :ONYX-151 Mode :120V 60Hz Reading :Peak(R&S Receiver) Remark :FULL SYSTEM

No.	Freq.	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1 2	2.330 2.400	34.8 37.1	9.7 9.7	44.5 46.8	73.0 73.0	-28.5 -26.2	
3	25.030	39.3	10.0	49.3	73.0	-23.7	



C&C Lab. Co. Shielded Room4



Customer:NA

File#: 3800 Humd.:72 (%) Port :L2

Date :11 Dec 2000 21:41:41 Temp. :18 (C) Tester:JACKY WANG

Model :0NYX-151
Mode :120V 60Hz
Reading :Peak(R&S Receiver)
mark :FULL SYSTEM

No.	Freq.	Reading	I_Loss	Total	QP.Lmt	Margin	Warning
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	Mark
1	1.990	38.9	9.8	48.7	73.0	-24.3	
2	2.400	37.9	9.8	47.7	73.0	-25.3	
3	25.030	39.1	10.1	49.2	73.0	-23.8	

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(RADIATED EMISSION TEST)

Model Number: ONYX-151 Location: Site # 4

Tested by: Jacky Wang

Test Mode: Mode 1 Polar: Vertical -- 10m

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

Temperature: 19⁰C **Humidity:** 70%RH

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

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV		Margin (dB)
49.04	25.6	11.7	37.3	40.0	-2.7
148.04	26.0	11.5	37.5	40.0	-2.5
167.02	26.1	10.8	36.9	40.0	-3.1
201.30	26.0	11.6	37.6	40.0	-2.4
398.05	24.8	19.5	44.3	47.0	-2.7
504.24	23.2	20.1	43.3	47.0	-3.7



(RADIATED EMISSION TEST)

Model Number: ONYX-151 Location: Site #4

Tested by: Jacky Wang

Test Mode: Mode 1 Polar: Horizontal -- 10m

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

Temperature: 19^oC **Humidity:** 70%RH

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

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBu	Limits V/m)	Margin (dB)
49.02	25.1	11.7	36.8	40.0	-3.2
149.34	23.9	11.4	35.3	40.0	-4.7
166.91	25.7	10.8	36.5	40.0	-3.5
198.36	24.2	11.6	35.8	40.0	-4.2
402.69	22.4	19.6	42.0	47.0	-5.0
498.40	21.4	19.9	41.3	47.0	-5.7



(RADIATED EMISSION TEST)

Model Number: ONYX-151 Location: 3 meter chamber

Tested by: Jacky Wang **Polar:** Vertical ---3 m

Test Mode: Mode 1

Detector Function: Pk / A.V. **Test Results:** Passed

Temperature: 23°C **Humidity:** 67%RH

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

Freq.	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV	Limits (A.V.) /m)	Margin (dB)
1006.00	14.3	26.3	40.6(Pk)	53.9	-13.3
1846.00	12.8	29.4	42.2(Pk)	53.9	-11.7
2194.00	10.6	30.7	41.3(P k)	53.9	-12.6
3811.00	9.3	36.8	46.1(Pk)	53.9	-7.8

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



(RADIATED EMISSION TEST)

Model Number: ONYX-151 Location: 3 meter chamber

Tested by: Jacky Wang **Polar:** Horizontal ---3 m

Test Mode: Mode 1

Detector Function: Pk / A.V. **Test Results:** Passed

Temperature: 23°C **Humidity:** 67%RH

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

_	Freq.	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m	Limits (A.V.)	Margin (dB)
	1006.00	16.8	26.3	43.1(Pk)	53.9	-10.8
	1543.00	13.7	28.4	42.1(Pk)	53.9	-11.8
	1846.00	12.0	29.4	41.4(Pk)	53.9	-12.5
	4057.00	8.8	37.4	46.2(Pk)	53.9	-7.7

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

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THE AMERICAN
ASSOCIATION
FOR LABORATORY
ACCREDITATION

ACCREDITED LABORATORY

A2LA has accredited

C & C LABORATORY CO., LTD Taipei, Taiwan, R.O.C

for technical competence in the field of

Electrical (EMC) Testing

The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO/IEC Guide 25-1990 "General Requirements for the Competence of Calibration and Testing Laboratories" (equivalent to relevant requirements of the ISO 9000 series of standards) and any additional program requirements in the identified field of testing.

Presented this 28th day of April, 2000.

SEAL 9

President

For the Accreditation Council Certificate Number 824.01 Valid to January 31, 2002

For tests or types of tests to which this accreditation applies, please refer to the laboratory's Electrical (EMC) Scope of Accreditation



SCOPE OF ACCREDITATION TO ISO/IEC GUIDE 25-1990 and EN 45001-1989

C & C LABORATORY CO., LTD No. 15, 14 Lin, Chin Twu Chi Lu Chu Hsiang, Taoyuan, TAIWAN, R.O.C. Charles Wang Phone: 002 886 3 324 5966 Fax: 002 886 3 324 5235

ELECTRICAL (EMC)

Valid to: January 31, 2002

Certificate Number: 0824-01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests:

Electrical Emissions - Enclosure - 3 & 10 Meters; to 26.5 GHz (Sites 1, 2, 3 and 4) Electrical Emissions – AC Power – 0 - 300 V; 50 - 400 Hz (Sites 1, 2, 3 and 4)
Electrical Immunity – Enclosure – 27 - 80 MHz / 3V/m; 80 MHz - 1 GHz / 10V/m Electrical Immunity - AC Power, DC Power, Signal & Control Electrical Fast Transient (EFT) Electrostatic Discharge (ESD) to 25 kV **Electrical Power Surge** Power Magnetic Field Immunity Voltage Dips, Shots, Variations

On the following products/equipment:

Computer Components and Peripherals; Networking Components; Wireless Communications Components; Electronic Components; Televisions; Home Appliances

Using the following test methods/specifications/standards:

Code of Federal Regulations (CFR) 47, FCC Part 15 using ANSI C63.4 AS/NZS 3548

BSMI CNS: 13438, 13439, 13783, 13803

CISPR: 11, 14, 22

EN: 50081-1, 50082-1, 55011, 55022, 55014, 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6,

61000-4-8, 61000-4-11

VCCI V3 (1999) IEC: 801-2, 801-3, 801-4

Peter Rhyen

FEDERAL COMMUNICATIONS COMMISSION

Equipment Authorization Division 7435 Oakland Mills Road Columbia, MD. 21046

February 01, 1999

Registration Number: 93105

C & C Laboratory Co., Ltd. 1st Fl., No. 344, Fu Ching Street Taipei Taiwan, R.O.C.

Attention:

Charles Wang

Re:

Measurement facility located at Taoyuan, Site No. 4

3 & 10 meters

Date of Listing: February 01, 1999

Gentlemen:

Your submission of the description of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC Rules. The description has, therefore, been placed on file and the name of your organization added to the Commission's list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that this filing must be updated for any changes made to the facility, and at least every three years from the date of listing the data on file must be certified as current.

If requested, the above mentioned facility has been added to our list of those who perform these measurement services for the public on a fee basis. An up-to-date list of such public test facilities is available on the Internet on the FCC Website at WWW.FCC.GOV, Electronic Filing, OET Equipment Authorization Electronic Filing.

Sincerely,

Thomas W Phillips Electronics Engineer

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road Columbia, MD 21046 Telephone: 301-725-1585 (ext-218) Facsimile: 301-344-2050

April 20, 1998

IN REPLY REFER TO 31040/SIT 1300F2

C&C Laboratory Co., Ltd. 1st Fl., No. 344, Fu Ching Street Taipei, Taiwan

Attention:

Charles Wang

Re: Measurement facility located at Taoyuan, Site No. 3 (3 and 10 meter site)

Gentlemen:

Your submission of the description of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC Rules. The description has, therefore, been placed on file and the name of your organization added to the Commission's list of facilities whose measurement data will be accepted in conjunction with applications for certification or notification under Parts 15 or 18 of the Commission's Rules. Our list will also indicate that the facility complies with the radiated and AC line conducted test site criteria in ANSI C63.4-1992. Please note that this filing must be updated for any changes made to the facility, and at least every three years the data on file must be certified as current.

Per your request, the above mentioned facility has been also added to our list of those who perform these measurement services for the public on a fee basis. This list is updated monthly and is available on the Laboratory's Public Access Link (PAL) at 301-725-1072, and also on the Internet at the FCC Website www.fcc.gov/oet/info/database/testsite/.

Sincerely.

2hre " Vluther

Thomas W. Phillips Electronics Engineer

Customer Service Branch

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road Columbia, MD 21046 Telephone: 301-725-1585 (ext-218) Facsimile: 301-344-2050

March 13, 1998

31040/SIT 1300F2

C & C Laboratory Co., Ltd. 1st Fl., No. 344, Fu Ching Street Taipei, Taiwan

Attention:

Ceres Lin

Re: Measurement facility located at Taoyuan (3 and 10 meter site)

Gentlemen:

Your submission of the description of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC Rules. The description has, therefore, been placed on file and the name of your organization added to the Commission's list of facilities whose measurement data will be accepted in conjunction with applications for certification or notification under Parts 15 or 18 of the Commission's Rules. Our list will also indicate that the facility complies with the radiated and AC line conducted test site criteria in ANSI C63.4-1992. Please note that this filing must be updated for any changes made to the facility, and at least every three years the data on file must be certified as current.

Per your request, the above mentioned facility has been also added to our list of those who perform these measurement services for the public on a fee basis. This list is updated monthly and is available on the Laboratory's Public Access Link (PAL) at 301-725-1072, and so on the Internet at the FCC Website www.fcc.gov/oet/info/database/testsite/.

Sincerely

Thomas W. Phillips
Electronics Engineer

Customer Service Branch



ENG 3/9 AJD

22 January 1998

C & C Laboratory Co Ltd 1st FI No. 344 Fu Ching Street Taipei TAIWAN ROC

Attention: Mr Tony Houng

Dear Sir

LABORATORY APPROVAL

Thank you for your submission of 21 January regarding the approval of your testing laboratory to the Ministry of Commerce's laboratory approval criteria. Thank you for your interest in this matter.

I am pleased to advise that your submission has been successful and your laboratory has been added to the list of Ministry-approved laboratories. Your approved status is valid until 31 December 1998. At this time, the Approved Laboratory scheme will cease operation with the implementation of the new radiocommunications regulations. Test reports from your laboratory will be accepted under the new framework. Please find enclosed a copy of the Ministry's discussion paper, DP10, outlining the proposed compliance process from 1 January 1999.

If you have any further questions on this matter please do not hesitate to contact me.

Yours faithfully

Andrew Dyke

Senior Technical Officer(Regulatory)

World-wide Testing and Certification

ELA 4

EMC Laboratory Authorisation

Aut. No. : ELA 124

EMC Laboratory:

C & C Laboratory Co., Ltd.

No. 15, 14 Lin, Chin Twu Chi, Lu Chu Hsiang,

Taoyuan 338, Taiwan R.O.C.

Scope of Authorization: All CENELEC standards [ENs] for EMC that are listed on the accompanying page, and, all of the corresponding CISPR, IEC, and ISO EMC standards that are listed on the

accompanying page.

This Authorisation Document confirms that the above mentioned EMC Laboratory has been validated against EN 45001 and found to be compliant. The laboratory also fulfils the conditions described in Nemko Document ELA 10. During Nemko's visit to the laboratory on 14 and 15 May, 1999, an assessment was made of the relevant parts of your organisation - i.e. facilities, personnel qualifications, test equipment, and testing practices. It was found that the EMC Laboratory is capable of performing tests within the Scope of Authorisation given on the accompanying page. Accordingly, Nemko will accept your test reports as a basis for attesting conformity to these EMC Standards for the products in question under the European Union EMC Directive [89/336/EEC as amended by 92/31/EEC and 98/13/EC].

In case of applications for Product Certification(s) to be issued by Nemko, your EMC Laboratory's test report(s) will be accepted by Nemko if they are enclosed with the Application Form submitted by the manufacturer.

In order to maintain this Authorization, the information given in the enclosed ELA-INFOs (if any) must be carefully followed. Nemko is to be promptly notified about any changes in the situation at your EMC Laboratory which may affect the basis for this Authorization. The Authorization may at any time be withdrawn if the conditions are no longer considered

The Authorisation is valid through 31 December 2001.

Oslo, 13. November 2000

For Nemko AS:

Kell Bergh Kjell Bergh, Nemko Group EMC Co-ordinator

Postal address

P.O.Box 73 100

+47 22 96 95 50

N-6314 OSLO, NORWAY

EMC Laboratory Authorisation

Aut. No.: ELA 124 (Page 2 of 2)

SCOPE OF AUTHORIZATION

GENERIC & PRODUCT-FAMILY STANDARDS

EN 50081-1(1992)	EN 50081-2(1994)	EN 50082-1(1992), EN 50082-1(1997)
EN 50082-2(1995)	EN 50091-2(1995)	EN 50130-4(1995)
CISPR 11(1990), CISPR 11(1997), EN 55011(1991), EN 55011(1998)	CISPR 13(1975)+ A1(1983) EN55013(1990) +A12(1994) + A13(1996)	CISPR 14(1993) + A1 (1993) + Corrigendum(1996) [Excluding Clause 4.2] EN 55014-1(1993) + A1(1997) [Excluding Clause 4.2]
CISPR 14-2(1997), EN 55014-2(1997) EN 55104(1995)	CISPR 15(1992), CISPR 15(1996) +A1(1997), EN 55015(1996) + A1(1997)	CISPR 24(1997), EN 55024(1998)
CISPR 22(1993) +A1(1995) +A2(1997), EN 55022(1994) + A1(195) + A2(1997) CISPR 22(1997) [Excluding Clause 9.5] EN 55022(1998) [Excluding Clause 9.5]	EN 60555-2(1987), EN 61000-3-2(1995)+A1(1998) + A2 (1998)	EN 60555-3(1987) + A1(1991), EN 61000-3-3(1995)
IEC 61326-1(1997), EN 61326-1(1997)		

BASIC STANDARDS

IEC 801-2(1984), IEC 61000-4-2(1991) IEC/EN 61000-4-2(1995)	IEC 801-3(1984), IEC/EN 61000-4-3(1995) ENV 50204(1995)	IEC 801.4(1988), IEC/EN 61000-4-4(1995)
IEC/EN 61000-4-5(1995) [Including Corrigendum]	IEC/EN 61000-4-6(1996)	IEC/EN 61000-4-8(1993/94)
IEC/EN 61000-4-11(1994)		

Oslo, 13. November 2000

Kjell Bergh, Nemko Group EMC Co-ordinator

P.O.Box 73 Blindern

Telephone: +47 22 96 83 30 Fax: +47 22 96 85 50



World-wide Testing and Certification

ELA 4

EMC Laboratory Authorisation

Aut. No. : ELA 160

EMC Laboratory:

C & C Laboratory Co., Ltd.

No. 15, 14 Lin, Chin Twu Chi, Lu Chu Hsiang,

Taoyuan 338, Taiwan R.O.C.

Scope of Authorization:

EN 60601-1-2 and IEC 60601-1-2, the Collateral Standards

for electromedical products, with particular application to

EMC requirements only.

This Authorisation Document confirms that the above mentioned EMC Laboratory has been validated against EN 45001 and found to be compliant. The laboratory also fulfils the conditions described in Nemko Document ELA 10. During Nemko's visit to the laboratory on 14 and 15 May, 1999, an assessment was made of the relevant parts of your organisation - i.e. facilities, personnel qualifications, test equipment, and testing practices. It was found that the EMC Laboratory is capable of performing tests within the Scope of Authorisation listed above. Accordingly, Nemko will accept your test reports as a basis for attesting conformity to these EMC Standards for the products in question under either the European Union Medical Device Directive [MDD], 93/42/EEC, or the European Union Active Implantable Medical Device Directive [AIMD], 90/385/EEC, (as applicable).

In case of applications for Product Certification(s) to be issued by Nemko, your EMC Laboratory's test report(s) will be accepted by Nemko if they are enclosed with the Application Form submitted by the manufacturer.

In order to maintain the Authorisation, the information given in the enclosed ELA-INFOs (if any) must be carefully followed. Nemko is to be promptly notified about any changes in the situation at your EMC Laboratory which may affect the basis for this Authorisation. The Authorisation may at any time be withdrawn if the conditions are no longer considered to be fulfilled.

The Authorisation is valid through 31. December 2001.

Oslo, 13. November 2000

Kjell Bergh, Nemko Group EMC Co-ordinator

P.O.Box 73 Blinders

Telephone: +47 22 96 83 38

N-8314 OSLO, NORWAY



Technischer Überwachungs-Verein Rheinland

Certificate

of

Appointment

No. I 9964142-9906

The applicant:

C & C Laboratory Co., Ltd.

No. 15, 14 Lin, Chin twu Chi, Lu Chu Hsiang, Taoyuan, Taiwan, R.O.C.

has been authorized to carry out EMC tests by order and under supervision of TÜV Rheinland according to

EN 55 011:1991, EN 55 014-1:1993/A1, EN 55 022:1994/A1, EN 55 014-2:1997, EN 60 555-2:1987, EN 61 000-3-2:1995, EN 61 000-3-3:1995
EN 50 081-1:1992, EN 50 082-1:1992, EN 50 082-1:1997, EN 50 081-2:1993
EN 50 082-2:1995, IEC 801-2:1984, IEC 801-2:1991, IEC 801-3:1984
IEC 801-4:1988, IEC 801-5:1990, EN 61 000-4-2:1995, ENV 50 140:1993, ENV 50 141:1993
ENV 50 204:1995, EN 61 000-4-3:1996, EN 61 000-4-4:1995, EN 61 000-4-5:1995
EN 61 000-4-6:1995, EN 61 000-4-8:1993, EN 61 000-4-11:1994

An inspection of the facility was conducted according to the Document "Approval of Test Site" with reference to EN 45 001 by a TÜV Rheinland inspector.

Audit Report No. P 9964142E01, Rev.-

This certificate is valid until the next scheduled inspection or up to 15 month, at the discretion of TÜV Rheinland.

TÜV Rheinland Taiwan Ltd. Taipei, 24. June 1999

Dipl.-Ing. A. Klinker

b

Dipl.-Ing. R. Charton

Auditor



中華民國經濟部標準檢驗局

臺北市海南路一段四號 BUREAU OF STANDARDS, METROLOGY AND INSPECTION MINISTRY OF ECONOMIC AFFAIRS. REPUBLIC OF CHINA 4, SEC, 1, CHINAN ROAD, TAIPEI, TAIWAN, R. O. C. Tel: 886-2-23431700 FAX: 886-2-23932324

To: C&C Laboratory Co., Ltd

IN REPLY REFER TO 87-2-01386

1 Fl.No.344, Fu Ching St., Taipei, Taiwan

This Designation Document confirms that your subject measurement facility has been validated according to the ISO/IEC Guide 25-1990 and found to be in compliance with the requirements of "Operation Guidelines of the Approval and Management of Designated EMC Laboratories."

The description of your facility has, therefore, been placed on file and the name of your organization added to the Bureau's list of facilities whose measurement data and test reports will be accepted as a basis for attesting conformity to CNS13438-1994 / CISPR22-1993, CNS13783-1-1996/ CISPR14 - 1993, CNS13439-1997 / CISPR13-1990 for Information Technology Equipment - household appliances/tools - broadcast receivers and related equipments.

It is located at: http://www

Please reference the file numbers below in the body of all containing measurements made on the corresponding facility.

For your <u>EMI Testing Lab</u>, use reference "SL2-IN-E-001 2-A1-E-0014, SL2-R1-E-0014, SL2-R2-E-0014."

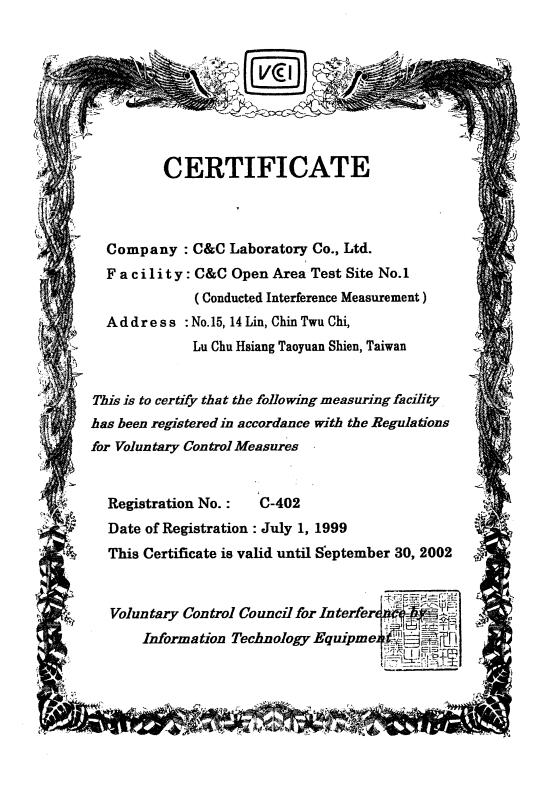
Note that this filing must be updated for any changes your documentation and / or facility and whenever major your documentation or major construction or repairs to your facility are completed, re-submission of the related information or the site attenuation characteristics will be required within 2 weeks.

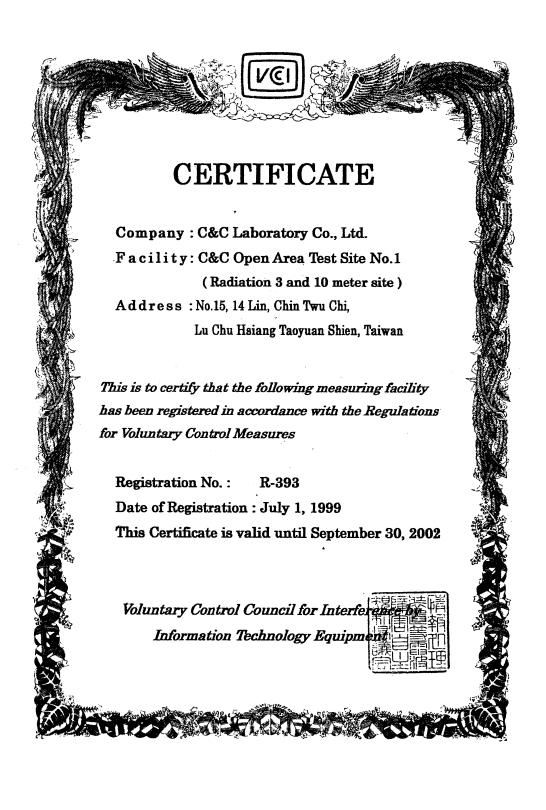
The Designation is valid through January 16, 2001.

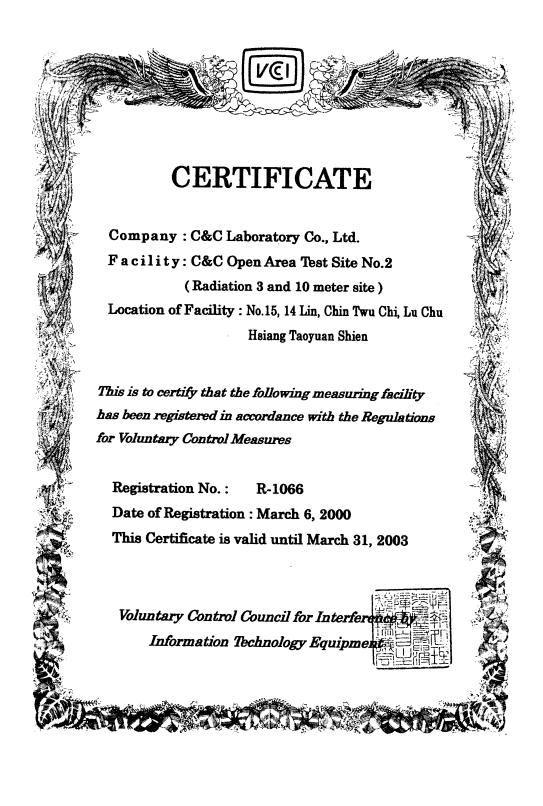
hen Jeo Ch

Taipei, October 5, 1999 For BSMI, MOEA

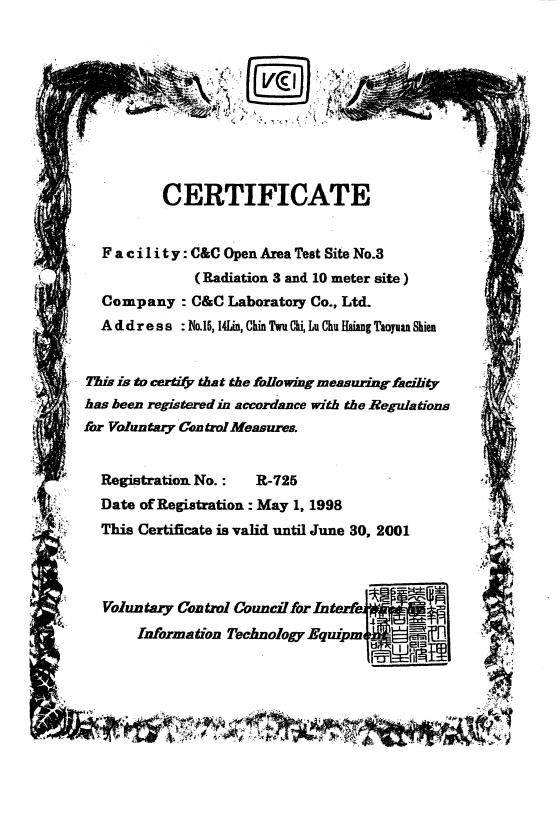
Chen Tso-Chen

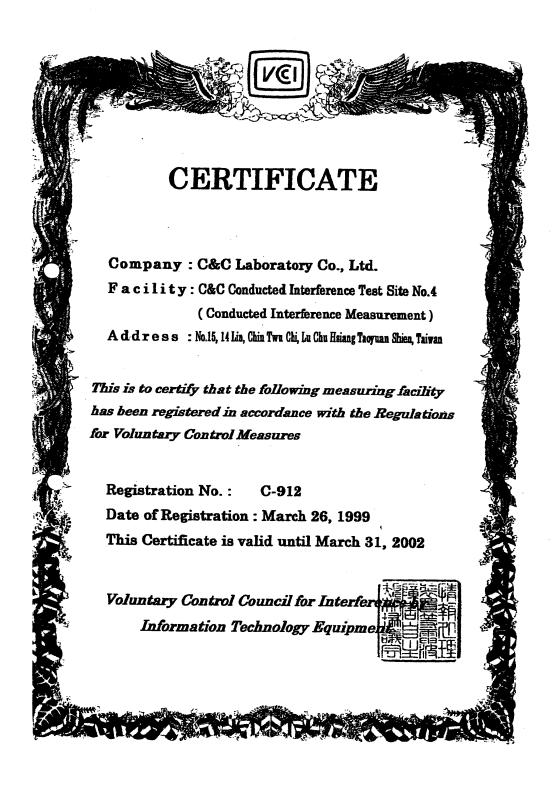


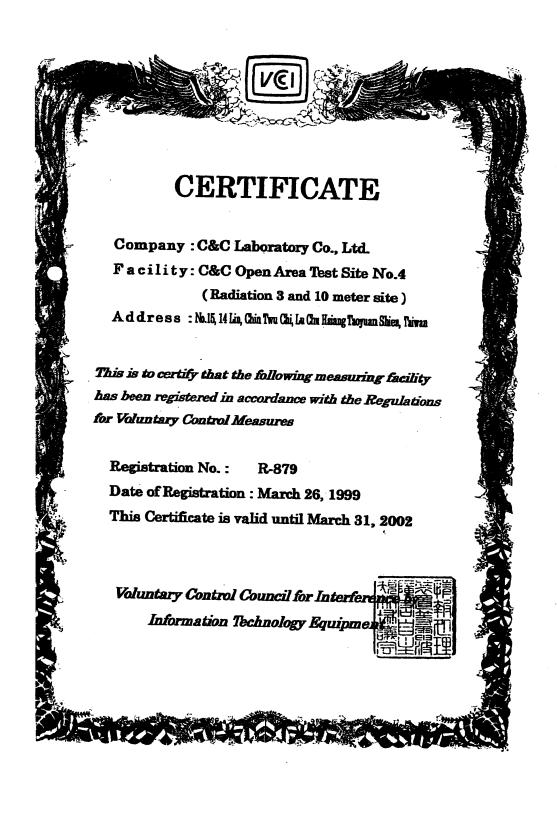














中華民國實驗室總確體系認可證書 Chimese National Laboratory Accreditation Certificate ROC

CNLA-ZL98078

Page 1 of 5

程智科技殿份有限公司程智科技電磁相容實驗室之電性測試觸端經評鑑認可十三項發給本證 核汉

書有效期限至九十年十一月十四日 此艦

of the scape of accreditation are described Co., List has been recognized by the Council my. The taboratory has been registered for This is to certify that C & C Laboratary Co. thirteen specific tests within the field of in the following pages and this pertilipate of Chinese National Laboratory Agana

中華民國實驗宣認證委員會 林 化 主 任 奏 員

Neng-Jong Lin

The Chairman of Chinese Mational Laboratory Accreditation Council

中華 年 民 國八十九年十一月十五日 (本世書共三東,分神徒原典故 This document is invalid unless accompanied by all 5 pages) CNE.A.ZL98678 Page 2 of 5

C&CLaboratory Co., Ltd. Organization

程**智科協設份有限公司** 程**智科技權協村的實驗**室 0363

王原籍 電性激詞 1998.11.15 2008.11.15

Laboratory Registration

. 0363 . WANG, Charles Electrical Testing Laboratory Head

. 2080.11.15 Testing Field :
Date of Registration:
Live of Revised ::

備註	Remarks						
縣可之最佳測試能力	capability recognized						
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簡減を兼		プリー	\	W 1995)	(7604.7)	1995)	
185		(67.9)		MEC 1000-5-2(1995)	FEC 1098. 1. 37.1094.)	EN 64000-3-3(1995)	* **********
御歌件 Test fens	And the state of t	Low power	radiators/receivers	评职概要共享的 ITE and peripheral products	育形態 及基標路臺灣品	BB製動與閃爍干錘 ITE and peripheral oltage	
器可項目 Registration	items		Low power R.F. equipment	E10102 器效電流干擾 Harmonic current	emissions EJ0103	HK.	flicker
認 可 Registr	iten	EEU280 医功率射線	Low power equipment	EJ0102 器依電流干 Harmonic c	emissions EJØ103	電腦變動與 Voltage	flicker

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Kegistration items	rest items	Test Methods	Ranges	Capability recognized	Remarks
Ы0113 音響及電視廣播接收 機與相關設備	原播接收機及其相關產品 Broadcast receivers and associated equipment	唐指按收機及共開機器指取 55943:19964412:1994443:1996 Broadcast receivers and CISPR 13:1975441:1983 associated equipment (CNS 13459 (86.5)	9 kHz-1.75 GHz		
Audio and television broadcast receivers and					
associated equipment		>	<u> </u>		
n及系統 cal ices and	版 2.0	EN 55814-1: 1997 A1: 1977-12 CERR 14: 1998-22: 1998 CERR 13783-1 (87-8)	Zee - See		
systems	tools and stmilar apparatus	<i>></i>	<u>></u>		
EJ0122 電信及資訊技術系統 及儀器 Systems and apparatus of the	東部親及其際基本品 ITE and peripheral products	Crepr 12(1996) [Br 55022(1995) [Crepr 13436(1997) AG MIZZ 5446(1997)	第24子後: 150 kHz~30 kHz 第20子後: 30 kHz~1.0 GHz		
telecommunication and information technology		FCC Part 15(1996)	1等等于经:450 kHz~30 kHz 1隔岭干级:30 kHz~2.0 GHz		

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CMLA-ZL 88678 Page 4 of 5

100 Test Herrs 120 1000-4 11E and peripheral 120 1000-4 11E and peripheral 120 1302-1312 120 1302-1312 1302 1302-1312 1302 1302-1312 1302 1302-1312	Test Methods C 1000-4-2(1995) S 13022-1(1992) C 801-3(1984) E 801-3(1984) i 64806-4-3(1995) N 39284(1995)	Ranges 空間放電: 8.2 kV~16.5 kW(+/-) 羧酮放電:0.2 kV~9.8 kW(+/-)	Best Test capability recognized	Remarks
文形等及美速速态的 TIE and peripheral products ITE and peripheral products TE and peripheral products TE and peripheral TE and peripheral Ast TIE and peripheral Ast TIE and peripheral products TIE and peripheral	C 1800-4-2(1895) 64808-4-2(1895) 5 1302-1(1992) C 801-3(1994) 66806-4-3(1995) N 59204(1895)	2階的第: 2 kV~16.5 kW+/-) 数層防衛:0.2 kV~9.8 kV+/-)	- 1	
東京地域及美球電機能	C 1000-4-2(1995) 62088-4-2(1995) 5 1302-1(1992) C 804-3(1984) E 1688-4-3(1995) V 5828-4(1995)	空間放電: 1.2 kV~16.5 kV(+/-) 数据放電:0.2 kV~9.8 kV(+/-)		
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資影線及美麗電電品 ITE and serisheral ng products 資影線及美麗電船	1088170 00861 3			
資訊機及美國機構品 ITE and perighteral products 資配額及與總體體品		>		
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ITE and peripheral products 實別類及與總值品	F 8800.4-5/19051	新数件事業・100~370 VAC 選		
ng products 實際機能工品	W SONATH PROCES	AUDI JUNA		
東部海域市場 自由	16001 34 1000 1	このアンマング シャンの 一番		
資訊額及其機構品	(acce)	Market Market 10 1 4 2 14		
文明知及共產組織				
資別類及其個性品				
	C 1000-4-6(1993)	福建町間:150 対5~230 場7		
(本学的文色版 [1]E and peripheral De ober 1-6(1996)	64000-4-6(1996)	(指編: 10 V. AR 翻樂)		
Conducted products				
susceptibility				

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備 Remarks **認可之最佳測試能力 Bast Test** capebility recognized 簡 配 Ranges 1 A/m~100 A/m 避 試 方 法 Test Methods IEC 1998-4-11 (144) EN 64690-4-11 (194) IEC 1000-4-8 (1993) EN 61000-4-8 (1993) E10211 黄形類及其體基底 電壓下降,瞬斷和微 ITE and perigheral 製劑受強配 Voltage dips, short interruptions and voltage variations immunity tests E10208 資訊源及其應過產品 電源頻率磁場耐受網 | ITE and peripheral 試 测試件 Test items 認可項目 Registration (以下空白) Power frequency magnetic field immunity test items tests

CNLA-ZL88878 Page 5 of 5



TEST EQUIPMENT LIST

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 / 2.0 GHz. **Equipment used during the tests:**

Open Area Test Site:		#1;		#2;		#3;	\boldsymbol{V}	#4
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4. 1822	Оре	en Area Test	Site # 1	1232 ma 134	
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
Q.P Adaptor	HP	85650A	2811A01399	05/05/2000	05/04/2001
RF Pre-selector	HP	85685A	2947A01064	05/05/2000	05/04/2001
Spectrum Analyzer	HP	8568B	3001A05004	05/05/2000	05/04/2001
S.P.A Display	HP	8568B	3014A18846	05/05/2000	05/04/2001
Precision Dipole	R&S	HZ-12	846932/0004	07/14/2000	07/13/2001
Precision Dipole	R&S	HZ-13	846556/0008	07/14/2000	07/13/2001
Bilog Antenna	CHASE	CBL6112A	2309	02/13/2000	02/12/2001
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2604	N.C.R	N.C.R
Controller	EMCO	2090	N/A	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M54367	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	11/05/2000	11/04/2001

	Оре	n Area Test	Site # 2	ili in the state of	11.4 T. 12.44
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
Spectrum Analyzer	ADVANTEST	R3261A	N/A	03/08/2000	03/07/2001
Pre-Amplifier	HP	8447D	2944A08432	11/28/2000	11/27/2001
EMI Test Receiver	R&S	ESVS10	834468/006	03/24/2000	03/23/2001
Precision Dipole	R&S	HZ-12	846932/0004	07/14/2000	07/13/2001
Precision Dipole	R&S	HZ-13	846556/0008	07/14/2000	07/13/2001
Bilog Antenna	CHASE	CBL 6112B	2635	12/01/2000	11/30/2001
Turn Table	Chance Most	CM-T003-1	T807-6	N.C.R	N.C.R
Antenna Tower	Chance Most	CM-A003-1	A807-6	N.C.R	N.C.R
Controller	Chance Most	N/A	N/A	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M76890	N.C.R	N.C.R
Site NSA	C&C Lab.	N/A	N/A	11/11/2000	11/10/2001



	Ope	n Area Test	Site#3	the area	
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
Spectrum Analyzer	ADVANTEST	R3261A	21720279	08/15/2000	08/14/2001
Pre-Amplifier	HP	8447D	2944A09173	02/01/2000	01/31/2001
EMI Test Receiver	R&S	ESVS20	838804/004	12/24/1999	12/23/2000
Precision Dipole	R&S	HZ-12	846932/0004	07/14/2000	07/13/2001
Precision Dipole	R&S	HZ-13	846556/0008	07/14/2000	07/13/2001
Bilog Antenna	CHASE	CBL6112A	2179	12/01/2000	11/30/2001
Turn Table	EMCO	2081-1.21	9709-1885	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2060	N.C.R	N.C.R
Controller	EMCO	2090	9709-1256	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M53867	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	01/29/2000	01/28/2001

THE MESSAGE SECTION	— Оро	en Area Test	Site#4		radio Rich
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
Spectrum Analyzer	ADVANTEST	R3132	91700456	02/15/2000	02/14/2001
EMI Test Receiver	R&S	ESCS30	847793/012	11/10/2000	11/09/2001
Precision Dipole	R&S	HZ-12	846932/0004	07/14/2000	07/13/2001
Precision Dipole	R&S	HZ-13	846556/0008	07/14/2000	07/13/2001
Bilog Antenna	CHASE	CBL 6112B	2462	01/13/2000	01/12/2001
Turn Table	Chance most	N/A	N/A	N.C.R	N.C.R
Antenna Tower	Chance most	N/A	N/A	N.C.R	N.C.R
Controller	Chance most	N/A	N/A	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M51067	N.C.R	N.C.R
Site NSA	C&C Lab.	N/A	N/A	12/26/1999	12/25/2000

	Liver to	3 meter cha	mber	100	A CAMBE
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
Spectrum Analyzer	ADVANTEST	R3271A	85060321	10/04/2000	10/03/2001
Pre-Amplifier	HP	8449B	3008A00965	10/03/2000	10/02/2001
Horn Antenna	EMCO	3115	9602-4659	04/06/2000	04/05/2001
Coaxial Cable	ANOREW	LDF-2-50	79027	09/22/2000	09/21/2001
Turn Table	HD	DS 415	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA 240	N/A	N.C.R	N.C.R
Controller	HD	HD 100	N/A	N.C.R	N.C.R



Conducted Emission Test Site:

#	

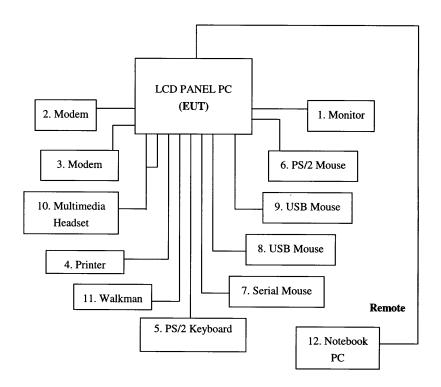
	Condu	cted Emission	r Test Site # 4		11 25 22
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
EMI Test Receiver	R&S	ESCS30	845552/030	12/07/2000	12/06/2001
LISN	EMCO	3825/2	9003/1382	01/10/2000	01/09/2001
LISN	R&S	ENV 4200	8303261016	11/18/2000	11/17/2001

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.



BLOCK DIAGRAM OF TEST SETUP SYSTEM DIAGRAM OF CONNECTIONS BETWEEN EUT AND SIMULATORS

EUT: LCD PANEL PC
Trade Name: N/A
Model Number: ONYX-151
Power Cord: Unshielded, 1.8m



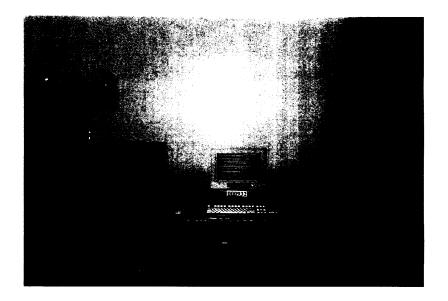


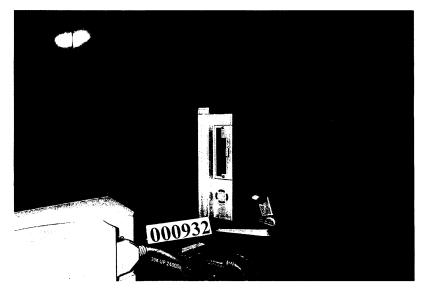
APPENDIX 1

PHOTOGRAPHS (TEST SETUP OF LINE CONDUCTED EMISSION TEST)



LINE CONDUCTED EMISSION TEST





Accredited Lab. of NEMKO, A2LA, BSMI Listed Lab. of FCC, VCCI, MOC

A2LA Certificate #: 824.01 (for Emission)
NEMKO Authorization # ELA 124 (for EMC)

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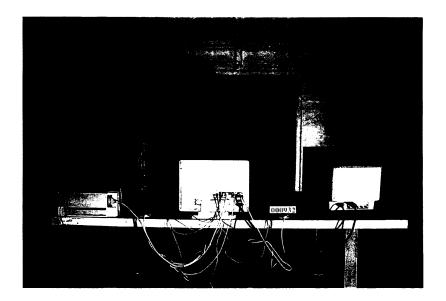
APPDENDIX 2

PHOTOGRAPHS (TEST SETUP OF RADIATED EMISSION TEST)



TEST SETUP OF RADIATED EMISSION TEST





Accredited Lab. of NEMKO, A2LA, BSMI Listed Lab. of FCC, VCCI, MOC

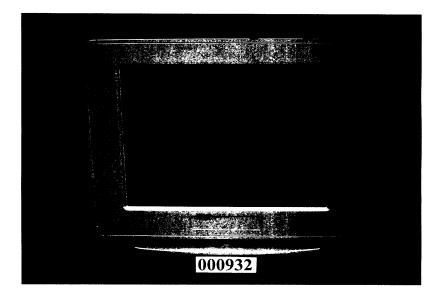
A2LA Certificate #: 824.01 (for Emission) NEMKO Authorization #: ELA 124 (for EMC) Page25

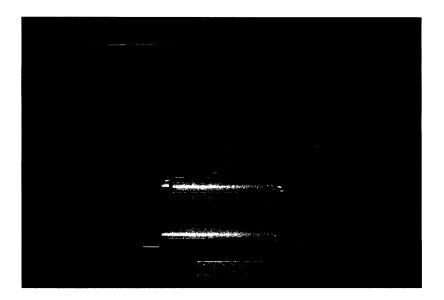


APPENDIX 3

PHOTOGRAPHS OF EUT



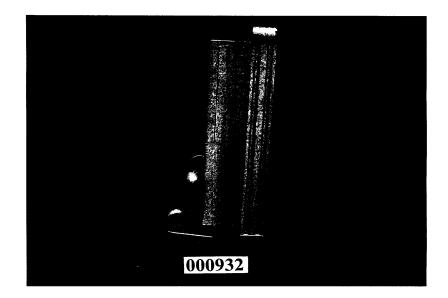




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A2LA Certificate #: 824.01 (for Emission)
NEMKO Authorization #: ELA 124 (for EMC)

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