

EXHIBIT 4
RFI/EMI TEST REPORT



EMC

TEST REPORT

REPORT NO. : F88030203
MODEL NO. : X-996
DATE OF TEST : March 05, 1999

PREPARED FOR: ROYAL INFORMATION ELECTRONICS CO., LTD.

ADDRESS : NO. 3, LANE 11, TZU-CHANG ST., TU-CHENG IND.
DISTRICT TAIPEI HSIEN, TAIWAN, R.O.C.

PREPARED BY: ADVANCE DATA TECHNOLOGY CORPORATION



Accredited Laboratory

11F, NO.1, SEC.4, NAN-KING EAST RD.,
TAIPEI, TAIWAN, R.O.C.

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1.

CERTIFICATION

Issue Date: March 08, 1999

Product : COLOR MONITOR
Trade Name : TRL, RIC
Model No. : X-996
Applicant : ROYAL INFORMATION ELECTRONICS CO., LTD.
Standard : FCC Part 15, Subpart B, Class B
ANSI C63.4-1992
CISPR 22:1993+A1:1995+A2:1996

We hereby certify that one sample of the designation has been tested in our facility on March 05, 1999. The test record, data evaluation and Equipment Under Test (EUT) configurations represent herein are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

The test results show that the EUT as described in this report is in compliance with the Class B limits of conducted and radiated emission of applicable standards.

TESTED BY : John Liao , DATE: 03/08/99
(John Liao)

CHECKED BY : Yemmy Soong , DATE: 03/08/99
(Yemmy Soong)

APPROVED BY : Mike Su , DATE: 3/8/99
(Mike Su)

ADVANCE DATA TECHNOLOGY CORPORATION

NVLAP[®]

Accredited Laboratory



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product	:	COLOR MONITOR
Model No.	:	X-996
Power Supply Type	:	Switching
Power Cord	:	Nonshielded (1.8m)
Data Cable	:	Shielded (1.8m)

Note: The EUT is a 19" color monitor with resolution up to 1600x1200.

The EUT has future plans to provide Universal Serial Bus (USB) to connect with the USB cable or device. This USB function is still in the design stage and upon accomplishment, the EUT will apply for FCC Class II Permissive Change. However, this function is already mentioned in the User's Manual of EUT as an optional function.

There are two ferrite cores on the video cable outside the monitor.

For more detailed features description, please refer to Manufacturer's Specification or User's Manual.



2.2 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories are used to form representative test configuration during the tests.

No.	Product	Brand	Model No.	FCC ID	I/O Cable
1	PERSONAL COMPUTER	NTI	PII-233T	FCC Doc Approved	Nonshielded Power (1.8m)
2	KEYBOARD	FORWARD	FDA-104GA	F4ZDA-104G	Shielded signal (1.4m)
3	PRINTER	HP	2225C+	DSI6XU2225	Shielded Signal (1.2m) Nonshielded Power (1.2m)
4	MODEM	DATATRONICS	1200CK	E2050V1200CK	Shielded signal (1.2m) Nonshielded Power (1.2m)
5	MOUSE	LOGITECH	M-S34	DZL210472	Shielded signal (1.8m)
6	VGA CARD	CARDEX	CD-GX2A44T	GHG11902	N/A

2.3 TEST METHODOLOGY AND CONFIGURATION

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4:1992. Radiated testing was performed at an antenna to EUT distance of 10 m on an open area test site.

Please refer to the photos of test configuration in Item 5.



3. TEST INSTRUMENTS

3.1 TEST INSTRUMENTS (EMISSION)

CONDUCTED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ Test Receiver	ESH3	893495/006	July 15, 1999
ROHDE & SCHWARZ Spectrum Monitor	EZM	893787/013	July 16, 1999
ROHDE & SCHWARZ Artificial Mains Network	ESH3-Z5	839135/006	July 14, 1999
EMCO-L.I.S.N.	3825/2	9204-1964	July 14, 1999
Shielded Room	Site 2	ADT-C02	N/A

Note: 1. The measurement uncertainty is less than ± 2.6 dB, which is calculated as per NAMA's document NIS81.

2. The calibration interval of the above test instruments is 12 months.

And the calibrations are traceable to NML/ROC and NIST/USA.

RADIATED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
HP Spectrum Analyzer	8594A	3144A00308	Sept. 3, 1999
HP Preamplifier	8447D	2944A08119	July 20, 1999
HP Preamplifier	8347A	3307A01088	Sept. 9, 1999
ROHDE & SCHWARZ TEST RECEIVER	ESVP	893496/030	July 15, 1999
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 25, 1999
CHASE Bilog Antenna	CBL6112A	2329	Sept. 19, 1999
EMCO Turn Table	1060	1195	N/A
EMCO Tower	1051	1163	N/A
Open Field Test Site	Site 2	ADT-R02	Sept. 18, 1999

Note: 1. The measurement uncertainty is less than ± 3 dB, which is calculated as per NAMA's document NIS81.

2. The calibration interval of the above test instruments is 12 months.

And the calibrations are traceable to NML/ROC and NIST/USA.



3.2 LIMITS OF CONDUCTED AND RADIATED EMISSION

LIMIT OF RADIATED EMISSION OF CISPR 22

FREQUENCY (MHz)	Class A (at 10m) *	Class B (at 10m) *
	dBuV/m	dBuV/m
30 - 230	40	30
230 - 1000	47	37

* Detector Function: Quasi-Peak

LIMIT OF RADIATED EMISSION OF FCC PART 15, SUBPART B FOR FREQUENCY ABOVE 1000 MHz

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	Peak	Average	Peak	Average
Above 1000	80.0	60.0	74.0	54.0

Note: (1) The lower limit shall apply at the transition frequencies.

(2) Emission level (dBuV/m) = 20 log Emission level (uV/m).

(3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

LIMIT OF CONDUCTED EMISSION OF CISPR 22

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz

(3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.



4. TEST RESULTS (EMISSION)

4.1 RADIO DISTURBANCE

Frequency Range	:	0.15 - 30 MHz (Conducted Emission) 30 - 2000 MHz (Radiated Emission)
Input Voltage	:	120 Vac, 60 Hz
Temperature	:	25 °C
Humidity	:	76 %
Atmospheric Pressure	:	1000 mbar

TEST RESULT	Remarks
PASS	Minimum passing margin of conducted emission: -10.4 dB at 0.374 MHz Minimum passing margin of radiated emission: -3.0 dB at 40.51 MHz

Note: The EUT was pretested under the following resolution & horizontal synchronization speed mode:

- ♦ 1600 x 1200 (93.7 kHz)
- ♦ 1280 x 1024 (91.1 kHz)
- ♦ 640 x 480 (31.5 kHz)

The worst emission levels were found under 1600 x 1200 (93.7 kHz) and therefore test data of this mode is recorded.

4.2 EUT OPERATION CONDITION

1. Turn on the power of all equipments.
2. PC reads a test program to enable all functions.
3. PC reads and writes messages from FDD and HDD.
4. PC sends "H" messages to monitor (EUT) and monitor display "H" patterns on screen.
5. PC sends "H" messages to modem.
6. PC sends "H" messages to printer, and the printer prints them on paper.
7. Repeat steps 3-7.



4.3 TEST DATA OF CONDUCTED EMISSION

EUT: COLOR MONITOR

MODEL: X-996

MODE: 1600x1200 (93.7 kHz)

6 dB Bandwidth: 10 kHz

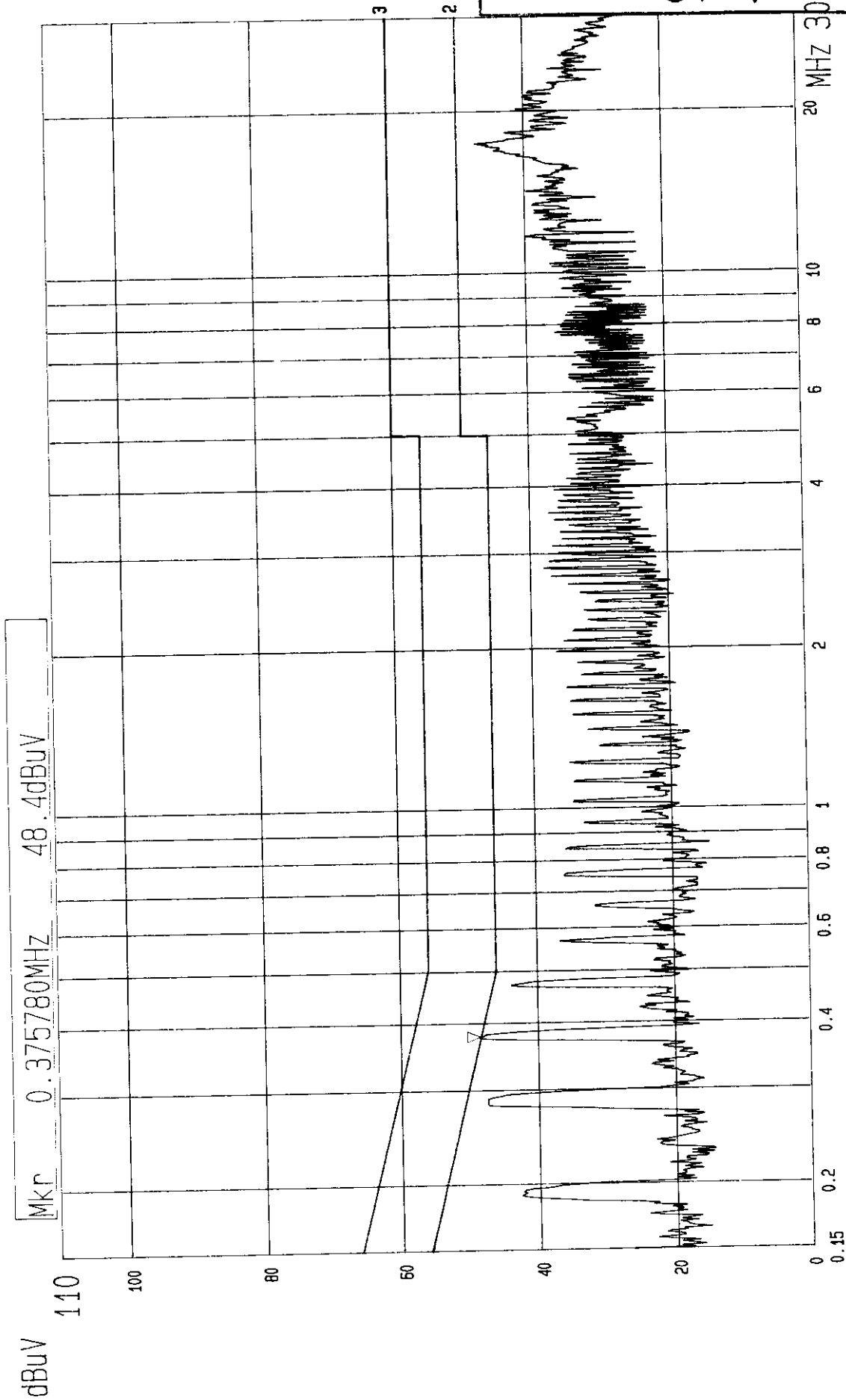
Freq.	L Level		N Level		Limit		Margin [dB (μV)]			
[MHz]	[dB (μV)]		[dB (μV)]		[dB (μV)]		L		N	
	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
0.279	47.8	-	47.3	-	60.8	50.8	-13.0	-	-13.5	-
0.374	48.0	-	46.8	-	58.4	48.4	-10.4	-	-11.6	-
0.467	43.7	-	45.2	-	56.5	46.5	-12.8	-	-11.3	-
0.749	38.6	-	34.9	-	56.0	46.0	-17.4	-	-21.1	-
2.810	38.0	-	36.1	-	56.0	46.0	-18.0	-	-19.9	-
17.718	42.9	-	41.6	-	60.0	50.0	-17.1	-	-18.4	-

- Remarks:
1. "*": Undetectable
 2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 3. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 4. The emission level of other frequencies were very low against the limit.
 5. Margin value = Emission level - Limit value

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Tested by John Liao



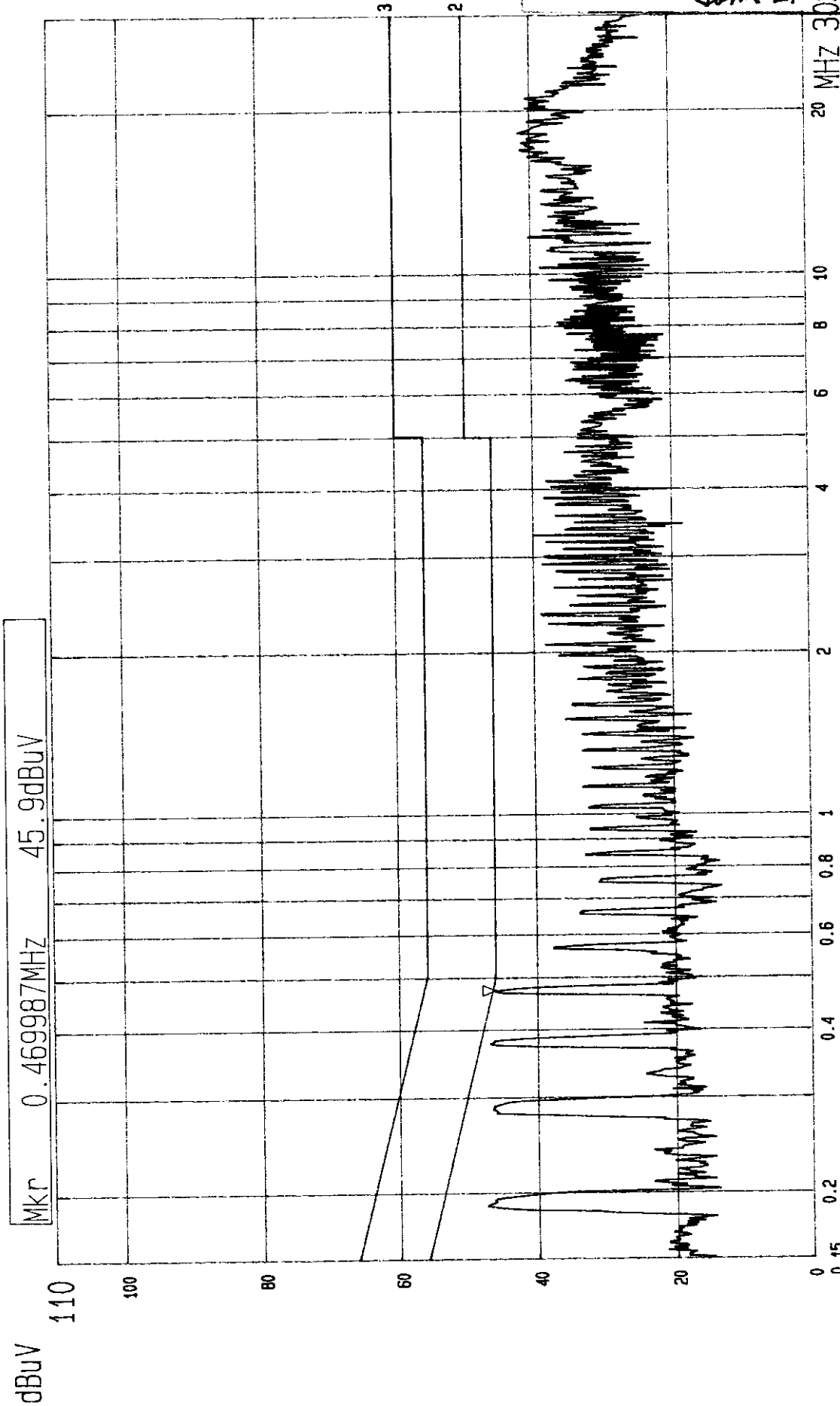
--- Date 05.MAR.'99 Time 13:57:48
CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE)
MODEL: X-996 1600X1200 75Hz/93.7kHz

ADT CORP
LISN: L

Report No F88030203

Page 9-2

Tested by John Liao



---- Date 05.MAR.'99 Time 14:07:08
CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE)
MODEL: X-996 1600X1200 75Hz/93.7kHz

ADT CORP
LISN: N



4.4 TEST DATA OF RADIATED EMISSION

EUT: COLOR MONITORMODEL: X-996MODE: 1600x1200 (93.7 kHz)ANT. POLARITY: HorizontalDETECTOR FUNCTION AND BANDWIDTH: Quasi peak, 120 kHz (30-1000 MHz)
Peak, 1 MHz (1000 MHz-2000 MHz)FREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 MFREQUENCY RANGE: 1000-2000 MHzMEASURED DISTANCE: 3 M

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
50.53	10.2	6.1	16.3	30.0	-13.7
60.79	7.5	11.3	18.8	30.0	-11.2
121.52	14.3	8.1	22.4	30.0	-7.6
141.87	13.4	9.5	22.9	30.0	-7.1
162.07	11.3	10.0	21.3	30.0	-8.7
182.43	11.6	10.1	21.7	30.0	-8.3
202.81	12.1	11.4	23.5	30.0	-6.5
223.05	13.5	7.0	20.5	30.0	-9.5
243.01	15.0	17.0	32.0	37.0	-5.0
263.45	16.6	16.3	32.9	37.0	-4.1

- REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) + Meter Reading (dBuV).
 2. Correction Factor(dB/m) = Ant. Factor(dB/m) + Cable loss(dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value



TEST DATA OF RADIATED EMISSION

EUT: COLOR MONITORMODEL: X-996MODE: 1600x1200 (93.7 kHz)ANT. POLARITY: Vertical
 DETECTOR FUNCTION AND BANDWIDTH: Quasi peak, 120 kHz (30-1000 MHz)
Peak, 1 MHz (1000 MHz-2000 MHz)
FREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 MFREQUENCY RANGE: 1000-2000 MHzMEASURED DISTANCE: 3 M

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
40.51	16.1	10.9	27.0	30.0	-3.0
60.79	6.7	18.5	25.2	30.0	-4.8
81.09	7.8	15.2	23.0	30.0	-7.0
101.35	10.7	12.3	23.0	30.0	-7.0
141.86	13.8	10.1	23.9	30.0	-6.1
162.15	11.6	10.8	22.4	30.0	-7.6
182.24	11.5	9.7	21.2	30.0	-8.8
202.48	12.7	11.5	24.2	30.0	-5.8
223.04	13.7	7.1	20.8	30.0	-9.2
243.40	14.7	16.2	30.9	37.0	-6.1
263.21	16.1	12.1	28.2	37.0	-8.8

- REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) + Meter Reading (dBuV).
 2. Correction Factor(dB/m) = Ant. Factor(dB/m)+Cable loss(dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value



6. APPENDIX - INFORMATION OF THE TESTING LABORATORY

Information of the testing laboratory

We, ADT Corp., is founded in 1988, to provide our best service in EMC and Safety consultation. Our laboratory is accredited by the following approval agencies according to ISO/IEC Guide 25 or EN 45001:

- | | |
|---------------|--------------------------------------|
| ● USA | FCC, UL, NVLAP |
| ● Germany | TUV Rheinland
TUV Product Service |
| ● Japan | VCCI |
| ● New Zealand | RFS |
| ● Norway | NEMKO, DNV |
| ● U.K. | INCHCAPE, SGS |
| ● R.O.C. | BSMI |

Enclosed please find some certificates of our laboratory obtained from approval agencies. If you have any comments, please feel free to contact us with the following:

Lin Kou EMC Lab.:
Tel: 886-2-26032180
Fax: 886-2-26022943

Hsin Chu EMC Lab:
Tel: 886-35-935343
Fax: 886-35-935342

Lin Kou Safety Lab.:
Tel: 886-2-26093195
Fax: 886-2-26093184

Design Center:
Tel: 886-2-26093195
Fax: 886-2-26093184

E-mail: service@mail.adt.com.tw
<http://www.adt.com.tw>

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21048
Telephone: 301-725-1588 (ext-2118)
Facsimile: 301-344-3090

October 21, 1998

IN REPLY REFER TO
31040/SIT
1300F2

Advance Data Technology Corporation
12F, No. 1, Sec. 4
Nan-King East Rd.
Taipei, Taiwan, R.O.C.

Attention: Harris W. Lai

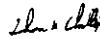
Re: Measurement facility located at above address, Site No. 1
(3 and 10 meters)

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 published periodically and is also available on the Laboratory's Public Access Link as described in the enclosed Public Notice.

Sincerely,



Thomas W. Phillips
Electronics Engineer
Customer Service Branch

Enclosure:
PAL PN

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21048
Telephone: 301-725-1588 (ext-2118)
Facsimile: 301-344-3090

September 15, 1998

IN REPLY REFER TO
31040/SIT
1300F2

Advance Data Technology Corporation
12F, No. 1, Sec. 4
Nan-King E. Rd.
Taipei, Taiwan, R.O.C.

Attention: Harris Lai

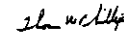
Re: Measurement facility located at Lin Kou, Sites 2 & 3
(3 & 10 meters)

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. 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. An up-to-date list is available on the Internet at the FCC Website www.fcc.gov under Electronic Filing.

Sincerely,



Thomas W. Phillips
Electronics Engineer
Customer Service Branch

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21048
Telephone: 301-725-1588 (ext-2118)
Facsimile: 301-344-3090

April 17, 1998

IN REPLY REFER TO
31040/SIT
1300F2

Advance Data Technology Corporation
12F, No. 1, Sec. 4
Nan-King E. Rd.
Taipei, Taiwan, R.O.C.

Attention: Harris W. Lai

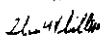
Re: Measurement facility located at above address
Site No. 4 (3 and 10 meters)

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 published periodically and is also available on the Laboratory's Public Access Link as described in the enclosed Public Notice.

Sincerely,



Thomas W. Phillips
Electronics Engineer
Customer Service Branch

Enclosure:
PAL PN

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21048
Telephone: 301-725-1588 (ext-2118)
Facsimile: 301-344-3090

October 21, 1998

IN REPLY REFER TO
31040/SIT
1300F2

Advance Data Technology Corporation
12F, No. 1, Sec. 4
Nan-King East Rd.
Taipei, Taiwan, R.O.C.

Attention: Harris W. Lai

Re: Measurement facility located at above address, Site No. 5
(3 and 10 meters)

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 published periodically and is also available on the Laboratory's Public Access Link as described in the enclosed Public Notice.

Sincerely,



Thomas W. Phillips
Electronics Engineer
Customer Service Branch

Enclosure:
PAL PN

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21046
Telephone: 301-725-1585 (ext-218)
Facsimile: 301-344-8200

February 25, 1998

AS REPLY REFER TO
31040/SIT
1300F2

Advance Data Technology Corporation
12F, No. 1, Sec. 4, Nan-King E. Rd.
Taipei, Taiwan

Attention: Hsin W. Lai

Re: Measurement facility located at above address, Site No. 8
(3 and 10 meters)

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 related and AC line conducted test site criteria in ANSI C83.4-1992. 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/ces/information/essetests.html.

Sincerely,

Thomas W. Phillips

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: 301-344-8200

July 16, 1998

AS REPLY REFER TO
31040/SIT
1300F2

Advance Data Technology Corporation
12F, No. 1, Sec. 4
Nan-King East Rd.
Taipei, Taiwan, R.O.C.

Attention: Hsin W. Lai

Re: Measurement facility located at Hsin Chu (3 & 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 related and AC line conducted test site criteria in ANSI C83.4-1992. 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 also been added to our list of those who perform these measurement services for the public on a fee basis. An up-to-date list is available on the internet at the FCC Website www.fcc.gov under Electronic Filing.

Sincerely,

Thomas W. Phillips

Thomas W. Phillips
Electronics Engineer
Customer Service Branch

FEDERAL COMMUNICATIONS COMMISSION

Equipment Authorization Division
7435 Oakland Mills Road
Columbia, MD 21046

December 23, 1998

Registration Number: 92753

Advance Data Technology Corporation
12F, No. 1, Sec. 4
Nan-King East Road
Taipei
Taiwan, R.O.C.

Attention: Hsin W. Lai

Re: Measurement facility located at Hsin-Chu, Site 8
3 & 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 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 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 at the FCC Website at WWW.FCC.GOV, Electronic Filing, OET Equipment Authorization Electronic Filing.

Sincerely,

Thomas W. Phillips

Thomas W. Phillips
Electronics Engineer



Technischer Überwachungs-Verein Rheinland

Certificate

of Appointment

No. 1-9763928-9707

The applicant:

Advance Data Technology (ADT) Corporation
No. 47, 14 Ling, Chia Pao Tsuen, Lio Kou Hsiang, Taipei Hsien,
Taiwan, R.O.C.

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

CISPR16, EN 55 011:1991, EN 55 014:1993, EN 55 015:1993, EN 55 022:1994/A1,
EN 55 034:1995, EN 60 525-2:1987, EN 61 000-3-2:1993, EN 61 000-3-3:1995,
EN 50 081-1:1992, EN 50 082-1:1992, EN 50 081-2:1993, EN 50 082-2:1995,
IEC 801-2:1991, IEC 801-3:1984, IEC 801-4:1988, IEC 801-5:1994, EN 61 000-4-1:1995,
ENV 50 140:1993, ENV 50 141:1993, IEC 1 000-4-3:1993, EN 61 000-4-4:1995,
EN 61 000-4-5:1995, EN 61 000-4-6:1993, EN 61 000-4-11:1994, EN 60 601-1-2:1993

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

Audit Report No. P 9763928E01, Rev. A

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

TUV Rheinland Taiwan Ltd.
Taipei, 16.07.1997

Dieter G. Lubben
Dipl.-Ing. G. Lubben
Vice General Manager
Product Safety Department

Dieter U. Meyer
Dipl.-Ing. U. Meyer
Auditor



CERTIFICATE

Facility: NO. 1 SITE

(Radiation 3 and 10 meter site)

Company : Advance Data Technology Corp.

Address : No.47, CHIA PAU TSUEN, LIN KOU HSIANG,
TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures.*

Registration No. : R-236

Date of Registration : July 1, 1998

This Certificate is valid until September 30, 2001

Voluntary Control Council for Interference
Information Technology Equipment



CERTIFICATE

Facility: NO. 2 SITE

(Radiation 3 and 10 meter site)

Company : Advance Data Technology Corp.

Address : No.47, CHIA PAU TSUEN, LIN KOU HSIANG,
TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures.*

Registration No. : R-237

Date of Registration : July 1, 1998

This Certificate is valid until September 30, 2001

Voluntary Control Council for Interference
Information Technology Equipment



CERTIFICATE

Facility: NO. 2 SITE

(Conducted Interference Measurement)

Company : Advance Data Technology Corp.

Address : No.47, CHIA PAU TSUEN, LIN KOU HSIANG,
TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures.*

Registration No. : C-240

Date of Registration : July 1, 1998

This Certificate is valid until September 30, 2001

Voluntary Control Council for Interference
Information Technology Equipment



CERTIFICATE

Facility: No.3 Site

(Radiation 3 and 10 meter site)

Company : Advance Data Technology Corp.

Address : No.47 CHIA PAU TSUEN, LIN KOU HSIANG, TAIPEI
HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures*

Registration No. : R-269

Date of Registration : January 1, 1999

This Certificate is valid until March 31, 2002

Voluntary Control Council for Interference
Information Technology Equipment





CERTIFICATE

Facility: No.3 Site
 (Conducted Interference Measurement)
 Company : Advance Data Technology Corp.
 Address : No.47 CHIA PAU TSUEN, LIN KOU HSIANG, TAIPEI
 HSIEN, TAIWAN

*This is to certify that the following measuring facility
 has been registered in accordance with the Regulations
 for Voluntary Control Measures*

Registration No. : C-274
 Date of Registration : January 1, 1999
 This Certificate is valid until March 31, 2002

Voluntary Control Council for Interference by
 Information Technology Equipment



CERTIFICATE

Facility: No.4 Site
 (Radiation 3 and 10 meter site)
 Company : ADVANCE DATA TECHNOLOGY
 CORP.
 Address : No.47, CHIA PAU TSUEN, LIN KOU
 HSIANG, TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
 has been registered in accordance with the Regulations
 for Voluntary Control Measures, Article 8.*

Registration No. : R-489
 Date of Registration : December 20, 1996
 This Certificate is valid until December 31, 1999

Voluntary Control Council for Interference by
 Information Technology Equipment



CERTIFICATE

Facility: No.5 Site
 (Radiation 3 and 10 meter site)
 Company : ADVANCE DATA TECHNOLOGY
 CORP.
 Address : No.47, CHIA PAU TSUEN, LIN KOU
 HSIANG, TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
 has been registered in accordance with the Regulations
 for Voluntary Control Measures, Article 8.*

Registration No. : R-490
 Date of Registration : December 20, 1996
 This Certificate is valid until December 31, 1999

Voluntary Control Council for Interference by
 Information Technology Equipment



CERTIFICATE

Facility: ADVANCE DATA TECHNOLOGY
 CORPORATION
 (Conducted Interference Measurement)
 Company : ADVANCE DATA TECHNOLOGY
 CORPORATION
 Address : No.47, CHIA PAU TSUEN, LIN KOU
 HSIANG, TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
 has been registered in accordance with the Regulations
 for Voluntary Control Measures, Article 8.*

Registration No. : C-505
 Date of Registration : December 20, 1996
 This Certificate is valid until December 31, 1999

Voluntary Control Council for Interference by
 Information Technology Equipment





CERTIFICATE

Facility: Advance Data Technology Corp Site 6
(Radiation 3 and 10 meter site)
Company : Advance Data Technology Corp.
Address : No.47, CHIA PAU TSUEN, LIN KOU HSIANG,
TAIPEI HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures.*

Registration No. : R-728
Date of Registration : May 19, 1998
This Certificate is valid until June 30, 2001

Voluntary Control Council for Interference
Information Technology Equipment



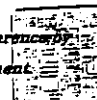
CERTIFICATE

Facility: Advance Data Technology Corp Site A
(Radiation 3 and 10 meter site)
Company : Advance Data Technology Corp.
Address : NO. 81-1, LI LIAO KENG, 9 LING, WU LUNG TSUEN,
CHUNG LIN HSIANG, HSIN CHU HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures*

Registration No. : R-782
Date of Registration : September 29, 1998
This Certificate is valid until September 30, 2001

Voluntary Control Council for Interference
Information Technology Equipment



CERTIFICATE

Facility: Advance Data Technology Corp Shielded Room A
(Conducted Interference Measurement)
Company : Advance Data Technology Corp.
Address : NO. 81-1, LI LIAO KENG, 9 LING, WU LUNG TSUEN,
CHUNG LIN HSIANG, HSIN CHU HSIEN, TAIWAN

*This is to certify that the following measuring facility
has been registered in accordance with the Regulations
for Voluntary Control Measures*

Registration No. : C-817
Date of Registration : September 29, 1998
This Certificate is valid until September 30, 2001

Voluntary Control Council for Interference
Information Technology Equipment





Worldwide Testing and Certification

ELA 4

EMC Laboratory
Authorization

Aut. No.: ELA 112

EMC Laboratory:

ADT Advanced Data Technology Corporation
No. 47, 14 Ling, Chia Pao Tsuen,
Lin Kuo Hsiang, Taipei Hsien,
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 Authorization 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
9. October 1996, an assessment was made of the relevant parts of your organization - 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 Authorization 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 either the
European Union EMC Directive or the European Union Automotive EMC Directive (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 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 to be
fulfilled.

The Authorization is valid through February 28, 1999.

Oslo, 13 March 1998

For Nemko AS:

Kjell Bergh, Head of EMC SectionPostal address:
P.O. Box 19 Blindern
N-0407 OSLO, NORWAYTelephone: +47 22 16 00 00
Fax: +47 22 16 00 00

Worldwide Testing and Certification

ELA 4

EMC Laboratory Authorisation

Aut. No.: ELA 112

(Page 2 of 2)

SCOPE OF AUTHORIZATION

GENERIC & PRODUCT-FAMILY STANDARDS

EN 50081-1, EN 50081-2	EN 50082-1, EN 50082-2	EN 55011, Gr. 1, CISPR 11
EN 55013, CISPR 13	EN 55014-1, CISPR 14-1	EN 55015, CISPR 15
EN 55022	EN 60555-2, IEC 555-2, EN 61000-3-2, IEC 61000-3-2	EN 60555-3, IEC 555-3, EN 61000-3-3, IEC 61000-3-3

BASIC STANDARDS

EN 61000-4-2, IEC 61000-4-2, IEC 901-2	EN 61000-4-3, ENV 50140, ENV 50204, IEC 61000-4-3, IEC 901-3	EN 61000-4-4, IEC 61000-4-4, IEC 901-4
EN 61000-4-5, IEC 61000-4-5	EN 61000-4-6, ENV 50141, IEC 61000-4-6	EN 61000-4-8, IEC 61000-4-8
EN 61000-4-11, IEC 61000-4-11		

Oslo, 13 March 1998

Kjell Bergh, Nemko EMC ServicesPostal address:
P.O. Box 19 Blindern
N-0407 OSLO, NORWAYTelephone: +47 22 16 00 00
Fax: +47 22 16 00 00World-wide Testing and
Certification

ELA 4

EMC Laboratory
AuthorizationAut. No.: ELA 112-b
Hsin Chu EMC Laboratory

EMC Laboratory:

ADT Advanced Data Technology Corporation
Hsin Chu EMC Laboratory
No. 81-1, Lu Liao Keng, 9 Ling,
Wu Lung Tseu, Chiang Lin Hsiang,
Hsin Chu Hsien, 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 Authorization 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. Based on submitted material, an
assessment has been made of the relevant parts of your organization - 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 Authorization 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.

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 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 to be
fulfilled.

The Authorization is valid through February 28, 1999.

Oslo, 15 December 1998

For Nemko AS:

Kjell Bergh, Head of EMC SectionPostal address:
P.O. Box 19 BlindernTelephone: +47 22 16 00 00
Fax: +47 22 16 00 00World-wide Testing and
Certification

ELA 4

EMC Laboratory Authorisation

Aut. No.: ELA 112-b
Hsin Chu EMC Laboratory

(Page 2 of 2)

SCOPE OF AUTHORIZATION

GENERIC & PRODUCT-FAMILY STANDARDS

EN 50081-1, EN 50081-2	EN 50082-1, EN 50082-2	EN 55011, Gr. 1, CISPR 11
EN 55014-1, CISPR 14-1 (except discontinuous modes)	EN 55014-2, CISPR 14-2	EN 55022, CISPR 22
EN 55024, CISPR 24	EN 60555-2, IEC 60555-2, EN 61000-3-2, IEC 61000-3-2	EN 60555-3, IEC 60555-3, EN 61000-3-3, IEC 61000-3-3

BASIC STANDARDS

EN 61000-4-2, IEC 61000-4-2, ENV 50204	EN 61000-4-3, IEC 61000-4-3, ENV 50140	EN 61000-4-4, IEC 61000-4-4, IEC 901-4
EN 61000-4-5, IEC 61000-4-5	EN 61000-4-6, ENV 50141, IEC 61000-4-6	EN 61000-4-8, IEC 61000-4-8
EN 61000-4-11, IEC 61000-4-11		

Oslo, 15 December 1998

Kjell Bergh, Nemko EMC ServicesPostal address:
P.O. Box 19 BlindernTelephone: +47 22 16 00 00
Fax: +47 22 16 00 00

ISO/IEC GUIDE 25:1990
 ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

ELECTROMAGNETIC COMPATIBILITY
 AND TELECOMMUNICATIONS

NVLAP LAB CODE 206182-4

ADVANCE DATA TECHNOLOGY CORPORATION

No. 47, 14 Ling, Chia Pui Tsuen,

Liu Kuo Hsiang

Taipei Hsien

TAIWAN

Mr. Harris W. Liu

Phone: 886-2-6022130 Fax: 886-2-6022943

NVLAP Code Designation / Description

International Special Committee on Radio Interference (CISPR) Methods

12/CIS22 IEC/CISPR 22:1993: Limits and methods of measurement of radio disturbance characteristics of information technology equipment

Federal Communications Commission (FCC) Methods

12/F01 FCC Method - 47 CFR Part 15 - Digital Devices

12/F01a Conducted Emissions, Power Lines, 450 KHz to 30 MHz

12/F01b Radiated Emissions

Australian Standards referred to by clauses in AUSTEL Technical Standards

12/T51 AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment

December 31, 1999

(Effective Through)

[Signature]
 Director, Division of Laboratory Accreditation

NVLAP-015 (11/1/98)

United States Department of Commerce
 National Institute of Standards and Technology



ISO/IEC GUIDE 25:1990
 ISO 9002:1987

Certificate of Accreditation

ADVANCE DATA TECHNOLOGY CORPORATION

TAIPEI HSIEN

TAIWAN

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 15.1 of the Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002:1987, AS/NZS 3548:1993, and ISO 9002:1987 as suppliers of calibration of test results. Accreditation is available for specific services listed on the Scope of Accreditation for

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS
 FCC

December 31, 1999

[Signature]
 Director, Division of Laboratory Accreditation

NVLAP Lab Code 206182-4



ENG 3/9
 A/D

6th January 1998

Advance Data Technology Corporation
 No. 47
 14 Ling
 Chia Pui Tsuen
 Liu Kuo Hsiang
 Taipei
 R.O.C

Attention: Ms Sharon Hsiung

Dear Ms Hsiung

LABORATORY APPROVAL

Thank you for your submission of 5th January regarding the re-certification of your testing laboratory to the Ministry of Commerce's laboratory approval criteria.

I am pleased to advise that your submission has been successful and your approval has been extended until 30th June 1999. At this time, the Approved Laboratory scheme will cease operation with the implementation of the new radio communications 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

[Signature]
 Brian Emmett

Technical Officer (Regulatory)
 e-mail: brian.emmett@moc.gov.tw

RADIO SPECTRUM MANAGEMENT GROUP

11, Riverside and 2nd Management Branch, 11th B, 52 Main Road, Singapore, 117602, New Zealand
 P.O. Box 2562, Telephone (07) 345 1240, Fax (07) 345 1219



Certificate of Assessment

This is to Certify

That **ADVANCE DATA TECHNOLOGY CORP.**

Has been approved as a supplier of
"EMC TESTING SERVICES"

and in particular for specifications implemented by

The EC DIRECTIVE on EMC

SGS EMC SERVICES

in accordance with

SGS Laboratory Approval Scheme

The scope of approval is detailed in the

Schedule of Assessment

SGS EMC Services
 South End Rd
 Boreham
 Ch Chelms
 DN9 1AD
 UNITED KINGDOM

Issued
 For and on behalf of
 SGS EMC Services
[Signature]
 J.S. WALEY
 General Manager
 Date: 07/03/98

依照分層負責規定授權單位主管執行

惟願分層負責規定授權單位主管執行



DET NORSKE VERITAS STATEMENT OF RECOGNITION

STATEMENT NO. 413 - 99 - LAB12
The statement consists of 3 pages

This is to confirm that the
EMC AND SAFETY LABORATORIES

within
ADT

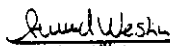
The main office with legal identity
**ADT Corporation, No. 47, 14 Ling, Chiapen Tsuen,
Lin Koo Hsiang, Taipei Hsien, Taiwan, R.O.C.**

*has been found to comply with the requirements of DNV towards subcontractors of EMC
and Safety testing services in conjunction with the EMC and Low Voltage Directives and in
the voluntary field.*

The acceptance is based on a formal Quality Audit and follow-ups according to relevant parts of
EN 45001 and ISO/IEC Guide 25, in accordance with the requirements of the DNV Laboratory
Quality Manual towards subcontractors.

Place and date
Havik, 23 February, 1999
for Det Norske Veritas AS
(Norwegian Body no. 575/434)

This Statement is valid until
23 February, 2000


Arne L. Olsen
Head of Section




Arne L. Olsen
Lead Auditor

Notice: This Statement is subject to written and electronic control. Any significant change in the laboratory facilities or in the quality system must be notified to the relevant DNV Laboratory. The DNV Laboratory will conduct a follow-up audit to verify that the laboratory is still in compliance with the requirements of the DNV Laboratory Quality Manual. The DNV Laboratory will also conduct a follow-up audit to verify that the laboratory is still in compliance with the requirements of the DNV Laboratory Quality Manual. The DNV Laboratory will also conduct a follow-up audit to verify that the laboratory is still in compliance with the requirements of the DNV Laboratory Quality Manual.

DET NORSKE VERITAS AS
Postboks 20, 2005
Tilstand: Oktober 92
Page 1 of 3



Statement No.: 413 - 99 - LAB12

Audit Information

Initial audit:

- Date of Audit: 1998-11-18 and 1998-11-19
- Initial Audit Report: 1998-11-22
- Closing of Non-conformities: 99-02-12

Sites Audited:

Lin Koo EMC Laboratory:
No. 47, 14 Ling, Chiapen Tsuen, Lin Koo Hsiang, Taipei Hsien, Taiwan, R.O.C.

Hsin Chu EMC Laboratory:
No. 21-1, Lu Liao Kang, 9 Ling, Wu Lung Tsuen, Chung Lin Hsiang, Hsin Chu, Hsien,
Taiwan, R.O.C.

Lin Koo Safety Laboratory:
No. 46, Lane 504, Chang Hsiao Road, Lin Koo Hsiang, Taipei, Taiwan, R.O.C.

Scope of recognition

EMC testing according to the following standards:

- EN 50081-1 / -2
- EN 50082-1 / -2
- EN 55011 / CISPR 11
- EN 55013 / CISPR 13
- EN 55014-1/-2 / CISPR 14-1/-2
- EN 55015 / CISPR 15
- EN 55022 / CISPR 22
- EN 61000-3-2 / IEC 1000-3-2 / EN 60555-2 / IEC 555-2
- EN 61000-3-3 / IEC 1000-3-3 / EN 60555-3 / IEC 555-3
- EN 61000-4-2 / IEC 1000-4-2 / IEC 801-2
- EN 61000-4-3 / IEC 1000-4-3 / ENV 50140 / IEC 801-3
- EN 61000-4-4 / IEC 1000-4-4 / IEC 801-4
- EN 61000-4-5 / IEC 1000-4-5 / ENV 50142
- EN 61000-4-6 / IEC 1000-4-6 / ENV 50141
- EN 61000-4-8 / IEC 1000-4-8
- EN 61000-4-11 / IEC 1000-4-11

Safety testing according to the following standards:

- EN 60065 / IEC 65
- EN 60950 / IEC 950

Applications/Limitations

Testing of single- and three phase systems

DET NORSKE VERITAS AS
Postboks 20, 2005
Tilstand: Oktober 92
Page 2 of 3



TEL:(02)2603-2180-3

FAX:(02)2602-2943

TEST REPORT & CERTIFICATION SERVICES QUESTIONNAIRE

We, ADT Corp., would like to provide you a high quality report and certification in a timely manner. To achieve this goal, we would like you to response to the brief questions listed below in this questionnaire. Therefore your feed back is vital to us in order to determine how good our services are, and what areas could be improved.

*Please indicate beside each question what you feel is the rating. Also, feel free to make comments and suggestions directly on this questionnaire, or by attaching separate sheet. The completed form should then be returned by mail or FAX to **Harris W. Lai**, Director. Your cooperation and effort are truly appreciated.*

TEST REPORT NUMBER : _____

	YES	NO
1. Was the information presented clearly	[]	[]
2. Was the report complete ?	[]	[]
3. Was the report timely ?	[]	[]
4. Did the report satisfy your requirement ?	[]	[]
5. Was the Certification (if any) completed in the scheduled time ?	[]	[]
Your working field ?	[] Engineering	[] Manufacturing
	[] Marketing	[] Other

YOUR CONTACT INFORMATION (OPTIONAL) : _____

OPTIONAL COMMENTS : _____