



EMC

TEST REPORT

REPORT NO. : F88071902
MODEL NO. : 572X, 462X
DATE OF TEST : July 26, 1999

PREPARED FOR: PROVIEW ELECTRONICS (TAIWAN) CO. LTD.

ADDRESS : 6F, NO. 1, PAU-SHENG RD., YUNG-HO CITY,
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: Aug. 3, 1999

Product : COLOR MONITOR
Trade Name : PROVIEW
Model No. : 572X, 462X
Applicant : PROVIEW ELECTRONICS (TAIWAN) CO. LTD.
Standard : FCC Part 15, Subpart B, Class B
ANSI C63.4-1992
CISPR 22: 1993+A1: 1995+A2: 1996, Class B

We hereby certify that one sample of the designation has been tested in our facility on July 26, 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 : Ken Liu , DATE: 8/3/99
(Ken Liu)

CHECKED BY : Sharon Hsiung , DATE: 8/3/99
(Sharon Hsiung)

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

ADVANCE DATA TECHNOLOGY CORPORATION

Accredited Laboratory



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product : Color Monitor
Model No. : 572X, 462X
Power Supply Type : Switching
Power Cord of monitor : Nonshielded (1.8 m)
Data Cable of monitor : Shielded (1.2 m)

Note: The EUT has two model numbers which are using the same Video board and CRT board except for the following:

MODEL	BRAND	CRT SIZE
572X	PROVIEW	15"
462X	PROVIEW	14"

Both models were tested separately and their test data are recorded in this report. The "X" in the above models could be A~Z, 0~9 or blank according to customer's requirement.

The EUT has a pair of external speakers attached to its sides. The EUT has a resolution up to 1280 x 1024.

There is a ferrite core on the video cable outside both of the monitors.

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 (1.4 m)
3	PRINTER	HP	2225C+	DSI6XU2225	Shielded Signal (1.2m) Nonshielded Power (1.2m)
4	MODEM	ACEEX	1414	IFAXDM1414	Shielded Signal (1.2m) Nonshielded Power (1.2m)
5	MOUSE	DEXIN	A2P800A	NIYA2P800A	Shielded Signal (1.5m)
6	VGA CARD	CARDEX	CD-GX2A44T	ICUVGA-GW710	NA
7	SPEAKER	AUDIO-TECHNICA	AT-SP25	NA	Shielded Signal (1.5m) Nonshielded Power of power adapter (1.8m)
8	EARPHONE	GAMMA	LH115	NA	Shielded Signal (2.4m)
9	SOUND CARD	YA SHIN	AUDIO 1869	FCC DoC Approved	NA

Note 1: There is an audio cable (1.5m) connected between PC and the external speakers of EUT

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 7, 2000
ROHDE & SCHWARZ Spectrum Monitor	EZM	893787/013	July 8, 2000
ROHDE & SCHWARZ Artificial Mains Network	ESH3-Z5	839135/006	July 7, 2000
EMCO-L.I.S.N.	3825/2	9204-1964	July 7, 2000
Shielded Room	Site 2	ADT-C02	NA

- Note: 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS 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	Jan. 12, 2000
HP Preamplifier	8347A	3307A01088	Sept. 9, 1999
ROHDE & SCHWARZ TEST RECEIVER	ESVP	893496/030	July 13, 2000
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 25, 1999
CHASE Bilog Antenna	CBL6112A	2329	Sept. 19, 1999
EMCO Double Ridged Guide Antenna	3115	9312-4192	April 5, 2000
EMCO Turn Table	1060	1195	NA
EMCO Tower	1051	1163	NA
Open Field Test Site	Site 2	ADT-R02	Sept. 18, 1999

- Note: 1. The measurement uncertainty is less than +/- 3dB, which is calculated as per NAMAS 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 - 1000 MHz (Radiated Emission)
 Input Voltage : 120 Vac, 60 Hz
 Temperature : 25 °C
 Humidity : 67 %
 Atmospheric Pressure : 982 mbar

TEST RESULT	Remarks
PASS	Minimum passing margin of conducted emission: -16.5 dB at 0.200 MHz Minimum passing margin of radiated emission: -4.1 dB at 134.15 MHz

Note:

1. The EUT, model: 572X was pre-tested under the following resolution & horizontal synchronization speed mode:

- ♦ 1280 x 1024 (64 kHz)
- ♦ 1024 x 768 (69 kHz)
- ♦ 640 x 480 (31.5 kHz)

The worst emission levels were found under 1280 x 1024 (64 kHz) and therefore test data of this mode is recorded.

2. The EUT, model: 462X was pre-tested under the following resolution & horizontal synchronization speed mode:

- ♦ 1024 x 768 (48 kHz)
- ♦ 800 x 600 (54 kHz)
- ♦ 640 x 480 (31.5 kHz)

The worst emission levels were found under 1024 x 768 (48 kHz) and therefore test data of this mode is recorded.

4.2 EUT OPERATION CONDITION

1. Turn on the power of all equipment.
2. PC runs 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 displays "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. PC sends audio messages to speaker.
8. Repeat steps 3-8.

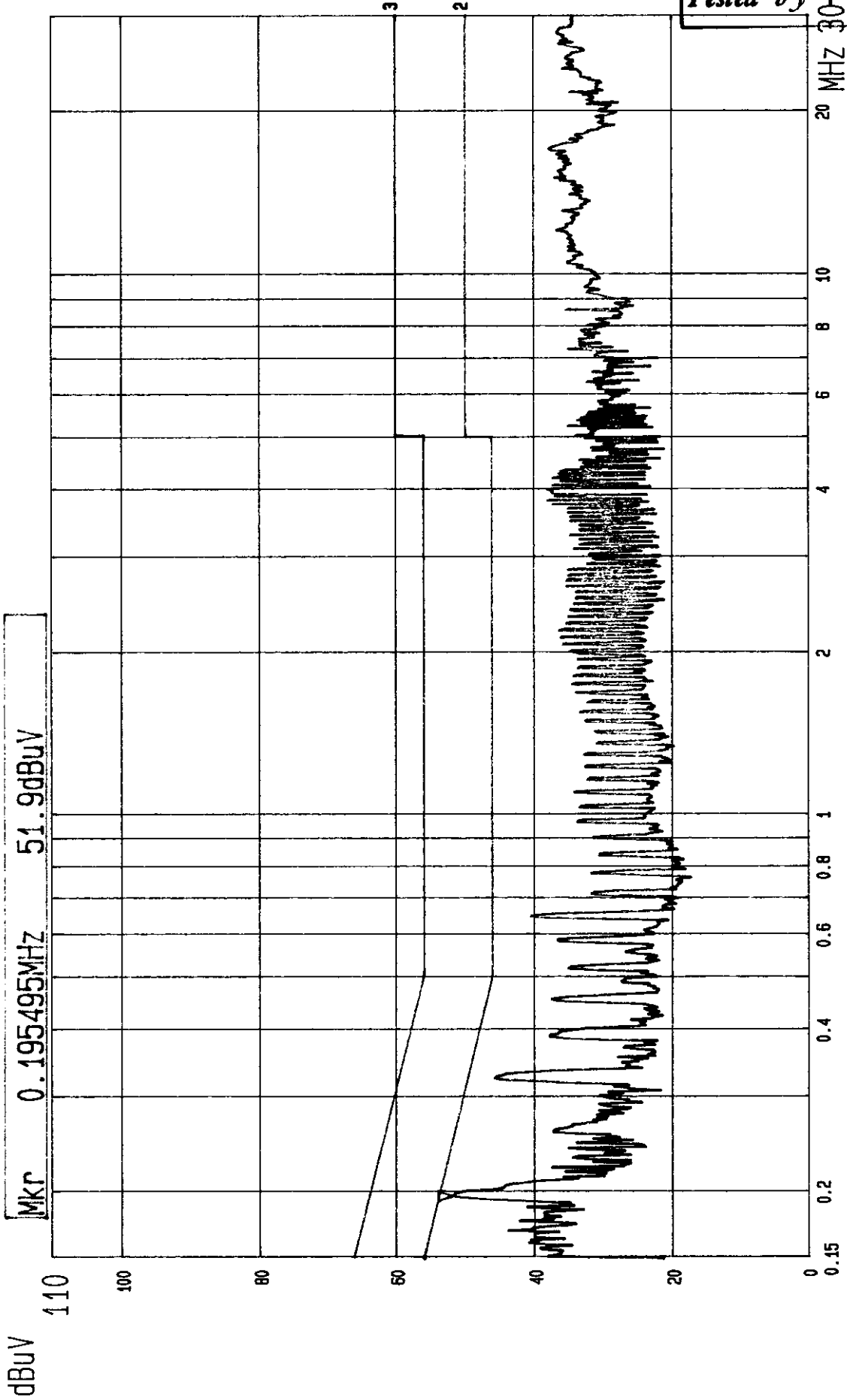


4.3 TEST DATA OF CONDUCTED EMISSION (A)

EUT: COLOR MONITORMODEL: 572XMODE: 1280x1024 (64 kHz)6 dB Bandwidth: 10 kHzPHASE: LINE (L)

Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.200	0.2	46.9	-	47.1	-	63.6	53.6	-16.5	-
0.260	0.2	40.6	-	40.8	-	61.4	51.4	-20.6	-
0.580	0.2	35.4	-	35.6	-	56.0	46.0	-20.4	-
3.799	0.3	32.9	-	33.2	-	56.0	46.0	-22.8	-
12.116	0.8	31.5	-	32.3	-	60.0	50.0	-27.7	-
17.254	1.0	32.6	-	33.6	-	60.0	50.0	-26.4	-

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



Date 26.JUL.'99 Time 10:04:35
 CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE)
 MODEL: 572X 1280X1024 60HZ/64KHZ
 ADT CORP.
 LISN: L

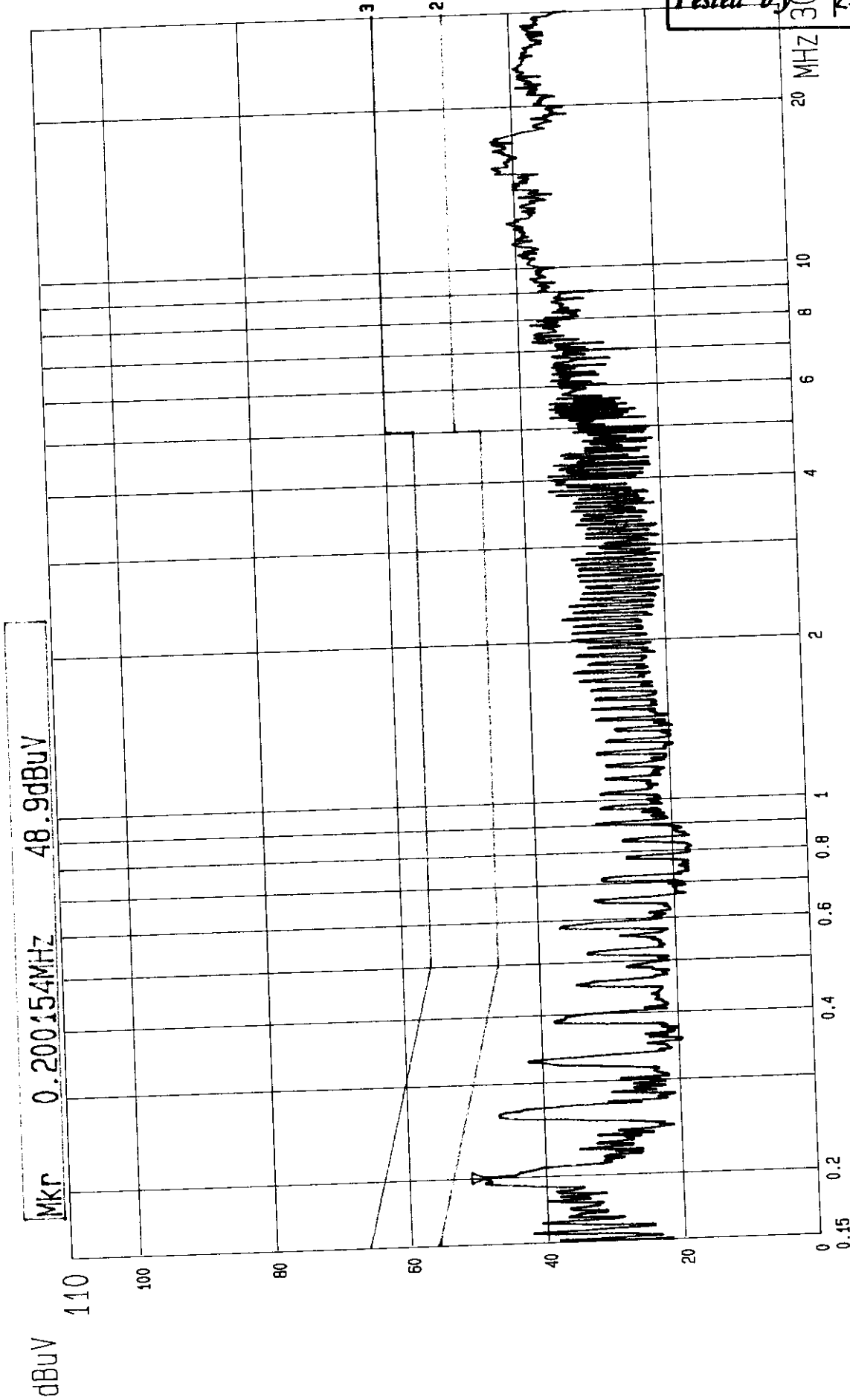


TEST DATA OF CONDUCTED EMISSION (A)

EUT: COLOR MONITORMODEL: 572XMODE: 1280x1024 (64 kHz)6 dB Bandwidth: 10 kHzPHASE: NEUTRAL (N)

Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.200	0.2	43.9	-	44.1	-	63.6	53.6	-19.5	-
0.260	0.2	41.4	-	41.6	-	61.4	51.4	-19.8	-
0.580	0.2	31.8	-	32.0	-	56.0	46.0	-24.0	-
3.799	0.3	31.3	-	31.6	-	56.0	46.0	-24.4	-
12.116	0.7	36.2	-	36.9	-	60.0	50.0	-23.1	-
17.254	0.8	38.1	-	38.9	-	60.0	50.0	-21.1	-

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



ADT CORP.
LISN: N

(PEAK VALUE)

---- Date 26.JUL.'99 Time 09:51:15
CISPR 22 CLASS B CONDUCTION TEST
MODEL: 572X 1280X1024 60HZ/64KHZ

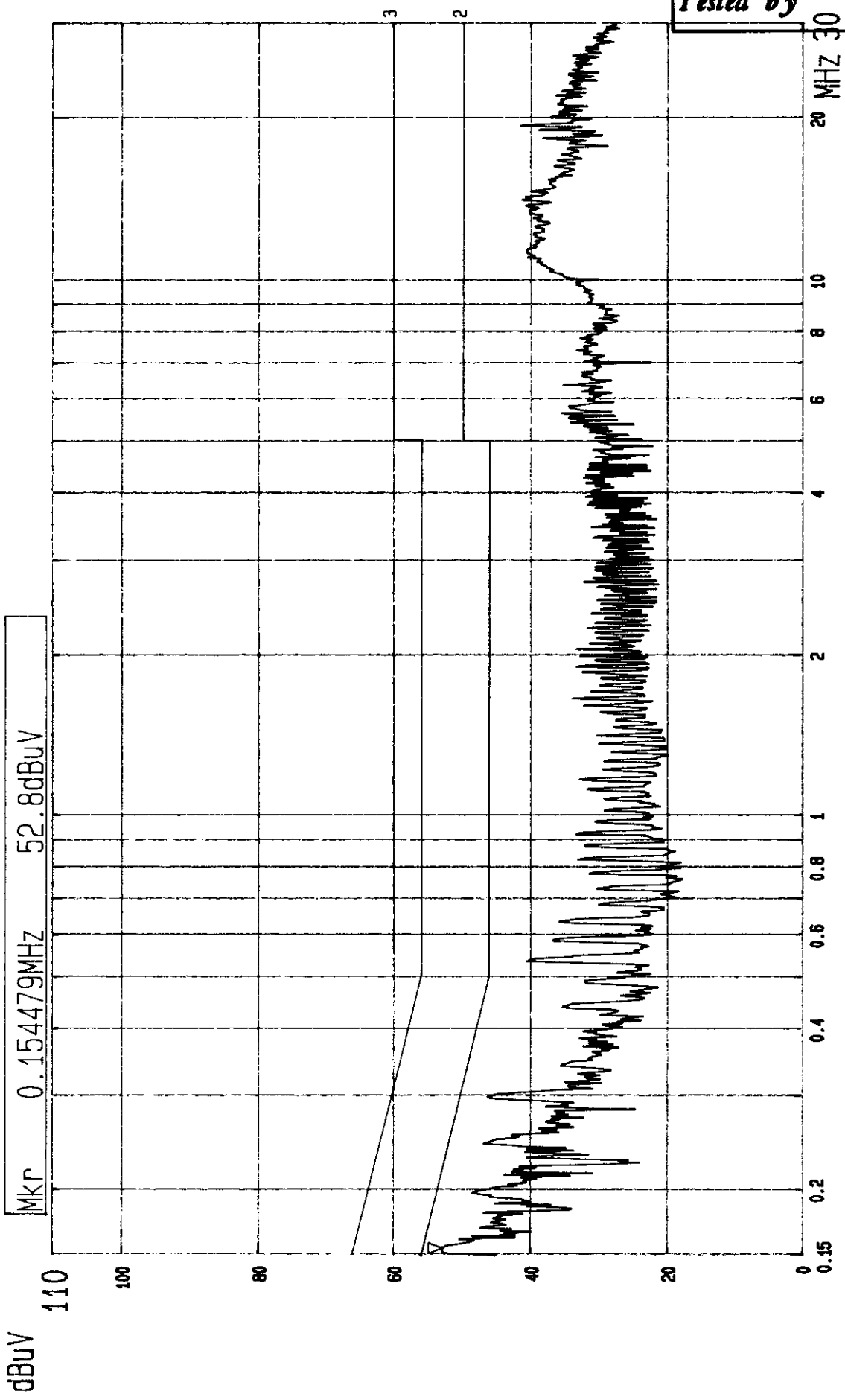


4.4 TEST DATA OF CONDUCTED EMISSION (B)

EUT: COLOR MONITORMODEL: 462XMODE: 1024x768 (48 kHz)6 dB Bandwidth: 10 kHzPHASE: LINE (L)

Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.154	0.2	47.8	-	48.0	-	65.8	55.8	-17.8	-
0.296	0.2	41.2	-	41.4	-	60.4	50.4	-19.0	-
0.531	0.2	35.4	-	35.6	-	56.0	46.0	-20.4	-
1.646	0.2	30.8	-	31.0	-	56.0	46.0	-25.0	-
11.158	0.7	35.4	-	36.1	-	60.0	50.0	-23.9	-
19.291	1.0	36.5	-	37.5	-	60.0	50.0	-22.5	-

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



---- Date 27.JUL.'99 Time 16:27:35
CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE) ADT CORP.
MODEL: 462X 1024X768 60HZ/48KHZ LISN: L

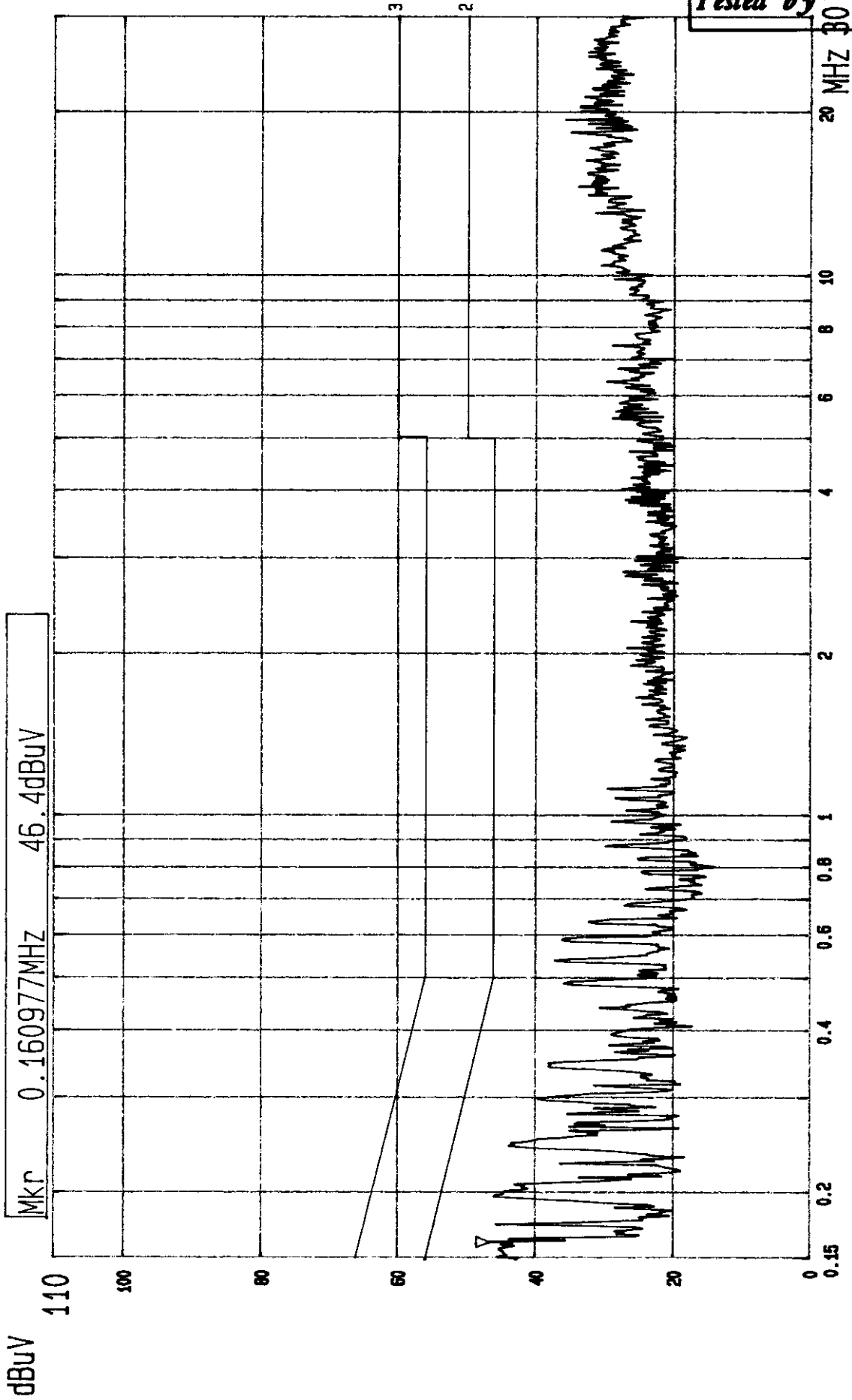


TEST DATA OF CONDUCTED EMISSION (B)

EUT: COLOR MONITORMODEL: 462XMODE: 1024x768 (48 kHz)6 dB Bandwidth: 10 kHzPHASE: NEUTRAL (N)

Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.154	0.2	44.2	-	44.4	-	65.8	55.8	-21.4	-
0.296	0.2	38.4	-	38.6	-	60.4	50.4	-21.8	-
0.531	0.2	31.8	-	32.0	-	56.0	46.0	-24.0	-
1.646	0.2	20.8	-	21.0	-	56.0	46.0	-35.0	-
11.158	0.6	24.1	-	24.7	-	60.0	50.0	-35.3	-
19.291	0.9	31.5	-	32.4	-	60.0	50.0	-27.6	-

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



Date 27.JUL.'99 Time 16:35:59
 CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE) ADT CORP.
 MODEL: 462X 1024X768 60HZ/48KHZ LISN: N



4.5 TEST DATA OF RADIATED EMISSION (A)

EUT: **COLOR MONITOR**

MODEL: **572X**

MODE: **1280x1024 (64 kHz)**

ANT. POLARITY: Horizontal

DETECTOR FUNCTION: Quasi-peak

6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz

MEASURED DISTANCE: 10 M

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
65.00	7.2	15.6	22.8	30.0	-7.2	314	326
75.88	7.8	13.5	21.3	30.0	-8.7	400	5
126.99	13.6	6.3	19.9	30.0	-10.1	400	12
184.24	10.8	9.0	19.8	30.0	-10.2	400	241
195.04	11.0	8.6	19.6	30.0	-10.4	400	36
216.74	12.1	7.7	19.8	30.0	-10.2	400	294
227.47	12.8	7.8	20.6	30.0	-9.4	400	253
238.37	13.5	8.1	21.6	37.0	-15.4	400	290
249.19	14.2	9.3	23.5	37.0	-13.5	400	258

- REMARKS:
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB) + 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 (A)

EUT: COLOR MONITORMODEL: 572XMODE: 1280x1024 (64 kHz)ANT. POLARITY: VerticalDETECTOR FUNCTION: Quasi-peak6 dB BANDWIDTH: 120 kHzFREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 M

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
75.90	6.8	18.5	25.3	30.0	-4.7	191	228
86.76	8.5	12.9	21.4	30.0	-8.6	100	173
113.90	12.8	9.4	22.2	30.0	-7.8	100	264
140.86	13.3	6.4	19.7	30.0	-10.3	100	146
184.21	10.8	9.0	19.8	30.0	-10.2	100	193
195.05	11.5	11.4	22.9	30.0	-7.1	100	340
227.55	12.8	9.9	22.7	30.0	-7.3	100	85
238.40	13.3	9.5	22.8	37.0	-14.2	100	241
249.18	13.7	9.7	23.4	37.0	-13.6	100	5

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



4.6 TEST DATA OF RADIATED EMISSION (B)

EUT: COLOR MONITORMODEL: 462XMODE: 1024x768 (48 kHz)ANT. POLARITY: HorizontalDETECTOR FUNCTION: Quasi-peak6 dB BANDWIDTH: 120 kHzFREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 M

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
132.83	13.3	8.4	21.7	30.0	-8.3	400	169
143.27	12.6	7.3	19.9	30.0	-10.1	400	237
182.44	10.8	6.0	16.8	30.0	-13.2	400	208
208.44	11.6	12.6	24.2	30.0	-5.8	400	261
215.04	12.0	11.1	23.1	30.0	-6.9	400	279
227.99	12.8	6.0	18.8	30.0	-11.2	400	285
227.99	12.8	6.3	19.1	30.0	-10.9	400	219
248.29	14.1	7.9	22.0	37.0	-15.0	400	61
268.23	15.3	4.6	19.9	37.0	-17.1	400	279

- REMARKS:
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+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 (B)

EUT: **COLOR MONITOR**MODEL: **462X**MODE: **1024x768 (48 kHz)**ANT. POLARITY: VerticalDETECTOR FUNCTION: Quasi-peak6 dB BANDWIDTH: 120 kHzFREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 M

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
134.15	13.6	12.3	25.9	30.0	-4.1	100	262
143.30	13.0	8.9	21.9	30.0	-8.1	100	137
169.66	10.7	5.4	16.1	30.0	-13.9	100	344
182.40	10.7	8.8	19.5	30.0	-10.5	100	217
195.41	11.5	9.0	20.5	30.0	-9.5	100	54
208.46	12.1	11.3	23.4	30.0	-6.6	100	78
215.01	12.4	7.1	19.5	30.0	-10.5	100	203
228.02	12.9	4.9	17.8	30.0	-12.2	100	325

- REMARKS:
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+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., are 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 |
| ● 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 21046
Telephone: 301-725-1596 (ext-218)
Facsimile: 301-344-2030

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: Hams 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 21046
Telephone: 301-725-1596 (ext-218)
Facsimile: 301-344-2030

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: Hams Lai

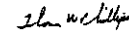
Re: Measurement facility located at Lin Kou, Sites 2 & 3
(3 & 10 meters)

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 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
Electronics Engineer
Customer Service Branch

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21046
Telephone: 301-725-1596 (ext-218)
Facsimile: 301-344-2030

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: Hams 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 21046
Telephone: 301-725-1596 (ext-218)
Facsimile: 301-344-2030

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: Hams W. Lai

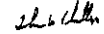
Re: Measurement facility located at above address, Site No. 5
(3 and 10 meters)

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: 301-725-1988 (ext-2119)
Facsimile: 301-344-3280

February 25, 1998

IN REPLY REFER TO
31040/SIT
1300F2

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

Attention: Hsin W. Lai

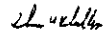
Re: Measurement facility located at above address, Site No. 6
(3 and 10 meters)

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 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/oei/info/database/testsite.

Sincerely,



Thomas W. Phillips
Electronics Engineer
Customer Service Branch

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21046
Telephone: 301-725-1988 (ext-2119)
Facsimile: 301-344-3280

July 18, 1998

IN REPLY REFER TO
31040/SIT
1300F2

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

Attention: Hsin W. Lai

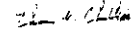
Re: Measurement facility located at Hsin Chu (3 & 10 meter site)

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 radiated 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
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
Taichung
Taiwan, R.O.C.

Attention: Hsin W. Lai

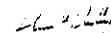
Re: Measurement facility located at Hsin-Chu, Site B
3 & 10 meter site

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 on the FCC Website at WWW.FCC.GOV Electronic Filing, EET Equipment Authorization Electronic Filing.

Sincerely,



Thomas W. Phillips
Electronics Engineer



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 by
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 by
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 by
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 by
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 8
(Radiation 3 and 10 meter site)
Company : Advance Data Technology Corp.
Address : No.47, CHIA PAU TSUEN, LIN KOU HSIAANG,
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 by
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, LU LIAO KENG, 9 LING, WU LIANG TSUEN,
CHIUNG 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 by
Information Technology Equipment



CERTIFICATE

Facility: Advance Data Technology Corp Shielded Room A
(Conducted Interference Measurement)
Company : Advance Data Technology Corp.
Address : NO. 81-1, LU LIAO KENG, 9 LING, WU LIANG TSUEN,
CHIUNG 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 by
Information Technology Equipment



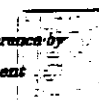
CERTIFICATE

Facility: ADVANCE DATA TECHNOLOGY CORPORATION OPEN SITE B
(Radiation 3 and 10 meter site)
Company : ADVANCE DATA TECHNOLOGY CORPORATION
Address : NO. 81-1, LU LIAO KENG, 9 LING, WU LIANG TSUEN,
CHIUNG 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-847
Date of Registration : March 1, 1999
This Certificate is valid until March 31, 2002

Voluntary Control Council for Interference by
Information Technology Equipment





Worldwide Testing and Certification

ELA 4

**EMC Laboratory
Authorization**
Aut. No. : ELA 112

EMC Laboratory: ADT Advance Data Technology Corporation
No. 47, 14 Ling, Chia Pau Tsuen,
Lin Kou 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 55001 and found to be compliant. The laboratory also fulfills 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 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 Authorization given on the accompanying page. Accordingly, Nemko will accept your test reports as a basis for assessing 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
Kjell Bergh, Head of EMC Section

Printed address: Tel.: +47 22 16 00 00
P.O. Box 17 Blindern Fax: +47 22 16 00 00
NEMKO AS, NORWAY



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 801-2	EN 61000-4-3, ENV 50140, ENV 50204, IEC 61000-4-3, IEC 801-3	EN 61000-4-4, IEC 61000-4-4, IEC 801-4
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
Kjell Bergh, Nemko EMC Services

Printed address: Tel.: +47 22 16 00 00
P.O. Box 17 Blindern Fax: +47 22 16 00 00
NEMKO AS, NORWAY

World-wide Testing and
Certification

ELA 4

**EMC Laboratory
Authorization**
Aut. No. : ELA 112-b
Bia Chu EMC Laboratory

EMC Laboratory: ADT Advance Data Technology Corporation
Bia Chu EMC Laboratory
No. 81-1, Le Liao Kang, 9 Ling,
We Lang Tsuen, Chung Lin Hsiang,
Bia 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 55001 and found to be compliant. The laboratory also fulfills the conditions described in Nemko Document ELA 10. Based on submitted material, an assessment has been 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 Authorization given on the accompanying page. Accordingly, Nemko will accept your test reports as a basis for assessing 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
Kjell Bergh, Head of EMC Section

Printed address: Tel.: +47 22 16 00 00
P.O. Box 17 Blindern Fax: +47 22 16 00 00

World-wide Testing and
Certification

ELA 4

EMC Laboratory Authorisation
Aut. No. : ELA 112-b
Bia 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 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, ENV 50204	EN 61000-4-3, IEC 61000-4-3, ENV 50141	EN 61000-4-4, IEC 61000-4-4, IEC 801-4
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
Kjell Bergh, Nemko EMC Services

Printed address: Tel.: +47 22 16 00 00
P.O. Box 17 Blindern Fax: +47 22 16 00 00

NVLAP[®]
National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1996
ISO 9002:1997

Scope of Accreditation

Page: 1 of 1
NVLAP LAB CODE 200102-0

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

ADVANCE DATA TECHNOLOGY CORPORATION
No. 47, 14 Ling, Chia Pau Tseu,
Lin Kou Hsiang
Taipei Hsien
TAIWAN
Mr. Harris W. Liu
Phone: 886-2-6032180 Fax: 886-2-6032943

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/T31 AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment

December 31, 1999

(Effective through)

NVLAP 015 (11) 350

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]
National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1996
ISO 9002:1997

Certificate of Accreditation

Page: 1 of 1
NVLAP LAB CODE 200102-0

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 255.6 of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ISO 9002:1997) as suppliers of calibration of test results. Accreditation is awarded for specific services listed on the Scope of Accreditation for

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS
FCC

December 31, 1999

(Effective through)

NVLAP Lab Code 200102-0

NVLAP[®]
National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1996
ISO 9002:1997

Scope of Accreditation

Page: 1 of 1
NVLAP LAB CODE 200376-0

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

ADVANCE DATA TECHNOLOGY CORPORATION HSIN CHU EMC LABORATORY
No. 31-1, Lu Liao Kang, 9 Ling, Wu Lung
Tsoen, Chung Lin Hsiang
Hsin Chu Hsien
TAIWAN
Mr. Harris W. Liu
Phone: 886-2-26032180 Fax: 886-2-26032943
E-Mail: harris@msl.adt.com.tw

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 ACA Technical Standards

12/T31 AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment

March 31, 2000

(Effective through)

NVLAP 015 (11) 350

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]
National Voluntary Laboratory Accreditation Program

ISO/IEC GUIDE 25:1996
ISO 9002:1997

Certificate of Accreditation

Page: 1 of 1
NVLAP LAB CODE 200376-0

ADVANCE DATA TECHNOLOGY CORPORATION HSIN CHU EMC LABORATORY
HSIN CHU HSIEN
TAIWAN

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 255.6 of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ISO 9002:1997) as suppliers of calibration of test results. Accreditation is awarded for specific services listed on the Scope of Accreditation for

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS
FCC

March 31, 2000

(Effective through)

NVLAP Lab Code 200376-0

經濟部商品檢驗局(函)

中華民國四十六年 九月 號
檢字(八十五)字第 號

附件如文

受文者：誠信科技股份有限公司
行文單位：正本：誠信科技股份有限公司

副本：本局第二(二)份、第三組、秘書室(檢四科)、檢驗處、各分局(均無附件)

主旨：有關 貴公司電磁相容性測試實驗室申請本局電磁相容性測試認可案，業經實地

說明：

一、查 貴公司八十五年十月四日未列字號函。

二、認可範圍如下：

實驗室名稱：誠信科技股份有限公司電磁相容性測試實驗室
實驗室地址：台北縣林口鄉馬厝村二鄰二號

認可代號	認可產品類別	核准負責人
5211E-02	(一)資訊設備	楊輝煌
5211E-03	(二)家庭用電器產品	楊輝煌
5211E-03	(三)玩具產品	楊輝煌

評核標準：ISO Guide 25 (1990年版)

三、本實驗室認可期限三年，自八十五年十月二十二日起至八十八年十月二十一日止，評核逾期後，得視需要增加檢查次數，惟首次檢查作業於六個月內執行。

四、上開已認可領域如有變更事項，請於變更日起二週內函送相關資料至本局辦理。

五、貴公司執行本局指定之檢驗業務，依「商品檢驗法」第二十六條規定以執行公務。

六、檢送「商品電磁相容性實驗室評核認可管理作業要點」乙份。

七、檢送「商品電磁相容性試驗報告」格式乙份，請自行印製使用。

八、檢送「商品電磁相容性試驗報告」格式乙份，請自行印製使用。

局長許鵬翔

檢閱分局負責規定檢驗單位主管執行

經濟部商品檢驗局(函)

中華民國四十六年 九月 號
檢字(八十六)字第 號

受文者：誠信科技股份有限公司 附件如文

行文單位：正本：誠信科技股份有限公司

副本：本局第二(二)份、第三組、秘書室(檢四科)、檢驗處、各分局(均無附件)

主旨：有關 貴公司電磁相容性測試實驗室申請本局電磁相容性測試認可案，業經實地

說明：

一、查 貴公司八十六年二月二十一日未列字號函。

二、認可範圍如下：

實驗室名稱：誠信科技股份有限公司電磁相容性測試實驗室
實驗室地址：台北縣林口鄉馬厝村二鄰二號

認可代號	認可產品類別	核准負責人
5211E-02	(一)資訊設備與相關產品(電視、錄影機)	楊輝煌
5211E-03	(二)廣播接收機與相關產品(收音機)	楊輝煌
5211E-03	(三)玩具產品	楊輝煌

評核標準：ISO Guide 25 (1990年版)

三、本實驗室認可期限自八十六年七月七日起至八十八年十月二十一日止，評核逾期後，得視需要增加檢查次數，惟首次檢查作業於六個月內執行。

四、上開已認可領域如有變更事項，請於變更日起二週內函送相關資料至本局辦理。

五、貴公司執行本局指定之檢驗業務，依「商品檢驗法」第二十六條規定以執行公務。

六、檢送「商品電磁相容性試驗報告」格式乙份，請自行印製使用。

局長陳佐鎮

檢閱分局負責規定檢驗單位主管執行



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, Chiapas Tsuen,
Lin Kou Hsiang, Taipei Hsien, Taiwan, R.O.C.

has been found to comply with the requirements of DNV towards manufacturers 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-up 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
Havre, 23 February, 1999
for Det Norske Veritas AS
(Notified Body no. 175/43-4)

This Statement is valid until
23 February, 2000

Arvid Wessén
Arvid Wessén
Head of Section



Jon L. Olsen
Jon L. Olsen
Local Auditor

Notes: This document is subject to change and modification without notice. Any modification shall be notified to the relevant parties of the DNV system and shall be available to all interested parties. The document is the property of Det Norske Veritas AS and shall not be reproduced or used in any way without the written consent of Det Norske Veritas AS. The document is valid only for the purpose and scope stated on the cover page. The document is valid only for the purpose and scope stated on the cover page. The document is valid only for the purpose and scope stated on the cover page.

DET NORSKE VERITAS AS
Postboks 25, 2007
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

Site Audited:

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

Hsin Chu EMC Laboratory:
No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu, Hsien,
Taiwan, R.O.C.

Lin Kou Safety Laboratory:
No. 46, Lane 504, Chung Hsiao Road, Lin Kou 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 55012 / 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 / EN 50140 / IEC 801-3
- EN 61000-4-4 / IEC 1000-4-4 / IEC 801-4
- EN 61000-4-5 / IEC 1000-4-5 / EN 50142
- EN 61000-4-6 / IEC 1000-4-6 / EN 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 55
- EN 60950 / IEC 950

Applications/Limitations

Testing of single- and three phase systems

DET NORSKE VERITAS AS
Postboks 25, 2007
Page 2 of 3



SNG 39
A/D

6th January 1998

Advance Data Technology Corporation
No. 47
14 Ling
Chiapas Tsuen
Lin Kou Hsiang
Taiwan
R.O.C.

Attention: Mr Sharon Hsiung

Dear Mr 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 1998. 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 1998.

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

Yours faithfully

Brian Emmett
Brian Emmett

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

RADIO SPECTRUM MANAGEMENT GROUP

Administration and Radio Management Branch, 2nd R/C, Manulife Tower, 100 Queen's Road Central, Hong Kong
Tel: 2534 4567 Fax: 2534 4568



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
Susan Ind. Est.
Bosworth
Gt. Dunham
DNB 5AD
UNITED KINGDOM

Assessed
For and on behalf of
SGS EMC Services
J.R. WILLEY
General Manager
Date: 02/03/98



Technischer Überwachungs-Verein Rheinland

Certificate

of Appointment

No. I-9763928-9707

The applicant:

Advance Data Technology (ADT) Corporation
No. 47, 14 Ling, Chia Pau Tsuen, Lin 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 55 104:1995, EN 68 555-2:1987, EN 61 000-3-2:1995, EN 61 000-3-3:1995,
EN 50 081-1:1992, EN 50 082-1:1992, EN 50 081-2:1993, EN 50 082-2:1995,
IEC 801-2:1991, IEC 801-3:1984, IEC 801-4:1988, IEC 801-5:1990, EN 61 000-4-2:1995,
ENV 50 148:1993, ENV 50 141:1993, IEC 1 000-4-3:1995, EN 61 000-4-4:1995,
EN 61 000-4-5:1995, EN 61 000-4-8:1993, EN 61 000-4-11:1994, EN 68 601-1-2:1993

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 month,
at the discretion of TUV Rheinland.

TUV Rheinland Taiwan Ltd.
Taipei, 16.07.1997

Dipl.-Ing. G. Lübken
Vice General Manager
Product Safety Department

Dipl.-Ing. U. Meyer
Auditor

The contents of the Testing and Certification Agreements are an integral part of this certificate.



Technischer Überwachungs-Verein Rheinland

Certificate

of Appointment

No. I 9863711-9905

The applicant:

Advance Data Technology (ADT) Corporation
Hsin Chu EMC Laboratory
No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chung Lin Hsiang,
Hsin Chu Hsien, Taiwan, R.O.C.

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

EN 55 011:1991, EN 55 014:1993, ENV 55 015:1993, with Amendment, EN 55 022:1994/A1,
EN 55 014-2:1997, EN 68 555-2:1987, EN 61 000-3-2:1995, EN 61 000-3-3:1995,
EN 50 081-1:1992, EN 50 082-1:1992, EN 50 081-2:1993, EN 50 082-2:1995,
IEC 801-2:1991, IEC 801-3:1984, IEC 801-4:1988, IEC 801-5:1990, EN 61 000-4-2:1995,
ENV 50 148:1993, ENV 50 141:1993, IEC 1 000-4-3:1995, EN 61 000-4-4:1995,
ENV 50 148:1993, EN 61 000-4-5:1995, EN 61 000-4-8:1993, EN 61 000-4-11:1994, EN 68 601-1-2:1993

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 9863711E01, Rev. -

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

TUV Rheinland Taiwan Ltd.
Taipei, 25. May 1999

Dipl.-Ing. A. Klinker



Dipl.-Ing. R. Chanton
Auditor