

TEST REPORT CERTIFICATION

Applicant : (1)Matsushita Electric Industrial Co., Ltd. (2)ViewSonic Corporation
 Manufacturer : Matsushita Electric Industrial Co., Ltd.
 FCC ID : (1)ACJ93312137 (2)GSS17027
 EUT Description : 17" Color CRT Display Monitor
 (A) MODEL NO. : (1)TX-D7S55NM (2)TX-D7S55
 (3)TX-D7S55***** (4)VCDTS21419-1*
 (B) SERIAL NO. : FP8420003
 (C) POWER SUPPLY : AC 120V/60Hz

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 1996
 AND FCC / ANSI C63.4-1992

The device described above was tested by TAIWAN TOKIN EMC ENG. CORP. to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15B Class B limits both radiated and conducted emissions.

The measurement results were contained in this test report and TAIWAN TOKIN EMC ENG. CORP. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report showed that the EUT to be technically compliance with the FCC official limits. TAIWAN TOKIN EMC ENG. CORP. recommend that this data was submitted for FCC certification purposes if a 6dB margin below FCC limits was obtained. This report applied to above tested sample only. This report shall not be reproduced in part without written approval of Taiwan Tokin EMC Eng. corp.

Date of Test : Aug. 04 / 06, 1998

Prepared by : Monica Chang 8/5 98'
 (MONICA CHANG)

Test Engineer : Allen Wang 8/9 98'
 (ALLEN WANG)

Approve & Authorized Signer : Steven Chang 8-29-98
 (STEVEN CHANG)

APPLICATION FOR CERTIFICATION

On Behalf of

(1)Matsushita Electric Industrial Co., Ltd. (2)ViewSonic Corporation
17" Color CRT Display Monitor

Model : (1)TX-D7S55NM (2)TX-D7S55
(3)TX-D7S55***** (4)VCDTS21419-1*

FCC ID : (1)ACJ93312137 (2)GSS17027

Prepared for #1 : Matsushita Electric Industrial Co., Ltd.
6-4-1, Tsujidomotomachi, Fujisawa,
Kanagawa, 251, Japan

#2 : ViewSonic Corporation
381 Brea Canyon RD., Walnut,
CA 91789, U.S.A.

Prepared By : Taiwan Tokin EMC Eng. Corp.
No. 53-11, Tin-Fu Tsun, Lin-Kou,
Taipei Hsien, Taiwan, R.O.C.

Tel : (02) 2609-9301, 2609-2133

File Number : ATM-G98405
Report Number : TTEMC-F98138
Date of Test : Aug. 04 / 06, 1998
Date of Report : Aug. 27, 1998

STATEMENT:

The applicant Matsushita Electric Industrial Co., Ltd. with model No. TX-D7S55NM, TX-D7S55, TX-D7S55***** with ID No. of ACJ93312137, and the applicant ViewSonic Corporation with VCDTS21419-1* with ID No. of GSS17027 are identical except for different applicant, trade name/brand, model number and FCC ID.

TABLE OF CONTENTS

Description	Page
Test Report Certification.....	3
1. GENERAL INFORMATION	4
1.1. Description of Device (EUT).....	4
1.2. Tested Supporting System Details	5
1.3. Description of Test Facility	7
2. POWERLINE CONDUCTED TEST.....	8
2.1. Test Equipment	8
2.2. Block Diagram of Test Setup.....	8
2.3. Powerline Conducted Emission Limit (CLASS B).....	8
2.4. EUT's Configuration during Compliance Measurement.....	9
2.5. Operating Condition of EUT.....	9
2.6. Test Procedure.....	10
2.7. Test Results	10
2.8. Line Conducted RF Voltage Measurement Results.....	11
3. RADIATED EMISSION TEST	14
3.1. Test Equipment	14
3.2. Block Diagram of Test Setup.....	14
3.3. Radiation Limit (CLASS B)	15
3.4. EUT Configuration on Measurement.....	15
3.5. Operating Condition of EUT.....	15
3.6. Test Procedure.....	16
3.7. Test Results	16
3.8. Radiated Emission Measurement Results.....	17
4. DEVIATIONS TO TEST SPECIFICATIONS	21
5. PHOTOGRAPHS.....	22
5.1. Photos of Powerline Conducted Measurement.....	22
5.2. Photos of Radiated Measurement at Open Field Test Site	23
APPENDIX I (Conducted Test Data)	
APPENDIX II (Radiated Test Data)	

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description : 17" Color CRT Display Monitor

Model Number : (1)TX-D7S55NM (2)TX-D7S55
(3)TX-D7S55***** (4)VCDTS21419-1*

The model TX-D7S55NM is No Brand; the TX-D7S55 is for Panasonic Brand; the TX-D7S55***** means the future OEM brand model; the VCDTS21419-1* is ViewSonic Brand, and “* or ***” may be followed by suffix alphanumeric character or blank. The differences with each model are brand name, and front panel and rear cabinet cosmetic

Serial Number : FP8420003

Applicant : (1)Matsushita Electric Industrial Co., Ltd.

6-4-1, Tsujidomotomachi, Fujisai,
Kanagai, 251, Japan

(2)ViewSonic Corporation

381 Brea Canyon RD., Walnut,
CA 91789, U.S.A.

Manufacturer : Matsushita Electric Industrial Co., Ltd.

6-4-1, Tsujidomotomachi, Fujisai,
Kanagai, 251, Japan

CRT : Panasonic, M/N M41LJV007X

Data Cable # 1 (D-Sub) : Shielded, Detachable, 1.5m
Bonded two ferrite cores

Data Cable # 2 (D-Sub) : Shielded, Detachable, 1.8m
Bonded two ferrite cores

* Data Cable # 3 (BNC) : Shielded, Detachable, 1.8m
Bonded two ferrite cores

* Information on the cable can be provided by the cable ferrite

USB HUB Unit	:	USB Hub Stand, Panasonic Model TY-LD65A Series FCC ID: ACJ93312138
		Cable : Non-Shielded, Undetachable, 0.8m Bonded a ferrite core
USB Data Cable (Link PC)	:	Shielded, Detachable, 1.8m * Bonded a ferrite core
Power Cord	:	Non-Shielded, Detachable, 1.8m
Date of Test	:	Aug. 04 / 06 , 1998

1.2. Tested Supporting System Details

1.2.1. PERSONAL COMPUTER

Model Number	:	D4228A
Serial Number	:	SG708000664
FCC ID	:	HCJVECTRAVL5
Manufacturer	:	Hewlett Packard
VGA Card	:	Diamond Multimedia System, Inc M/N Stealth 3D 3000/DIAMOND FCC ID FTUPCI30208
USB Data Cable	:	Shielded, Detachable, 1.8m
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.2. KEYBOARD

Model Number	:	C4729A#ABJ
Serial Number	:	21270027
FCC ID	:	AQ6-MTN4C15
Manufacturer	:	Hewlett Packard
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.3. PRINTER

Model Number	:	BS46XU2225C
Serial Number	:	2225C
FCC ID	:	2540S40948
Manufacturer	:	Hewlett Packard
Power Cord	:	Non-shielded, Detachable, 1.8m
Data Cable	:	Shielded, Detachable, 1.8m

* This test report is prepared with the help of the
 test data provided by the manufacturer.

1.2.4. MODEM #1

Model Number	:	1414
Serial Number	:	970024519
FCC ID	:	IFAXDM1414
Manufacturer	:	Aceex
Data Cable	:	Shielded, Detachable, 1.2m
Power Adapter	:	Amigo, Model AM-91000A Non-Shielded, Undetachable, 1.8m

1.2.5. MODEM #2

Model Number	:	1414
Serial Number	:	970024522
FCC ID	:	IFAXDM1414
Manufacturer	:	Aceex
Data Cable	:	Shielded, Detachable, 1.2m
Power Adapter	:	Amigo, Model AM-91000A Non-Shielded, Undetachable, 1.8m

1.2.6. MOUSE (PS2 MOUSE)

Model Number	:	C3751B
Serial Number	:	LZA72258684
FCC ID	:	DZL211029
Manufacturer	:	Hewlett Packard
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.7. MOUSE (USB MOUSE) #1

Model Number	:	EMC-S3906
Serial Number	:	0000031
FCC ID	:	EW4ECM-S3906
Manufacturer	:	Mitsumi Electronics Corp.
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.8. MOUSE (USB MOUSE) #2

Model Number	:	EMC-S3906
Serial Number	:	0000036
FCC ID	:	EW4ECM-S3906
Manufacturer	:	Mitsumi Electronics Corp.
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.9. MOUSE (USB MOUSE) #3

Model Number	:	EMC-S3906
Serial Number	:	0000052
FCC ID	:	EW4ECM-S3906
Manufacturer	:	Mitsumi Electronics Corp.
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.10. MOUSE (USB MOUSE) #4

Model Number	:	EMC-S3906
Serial Number	:	0000065
FCC ID	:	EW4ECM-S3906
Manufacturer	:	Mitsumi Electronics Corp.
Data Cable	:	Shielded, Undetachable, 1.8m

1.3. Description of Test Facility

Site Description (No. 2 Open Site)	:	Jul. 15, 1996 Re-file on Federal Communication Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, U.S.A.
Anechoic Chamber Description	:	Aug. 22, 1997 Re-file on Federal Communication Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, U.S.A.
Name of Firm	:	Taiwan Tokin EMC Eng. Corp.
Site Location	:	No. 53-11, Tin-Fu Tsun, Lin-Kou, Taipei Hsien, Taiwan, R.O.C.
NVLAP lab. Code	:	200077-0

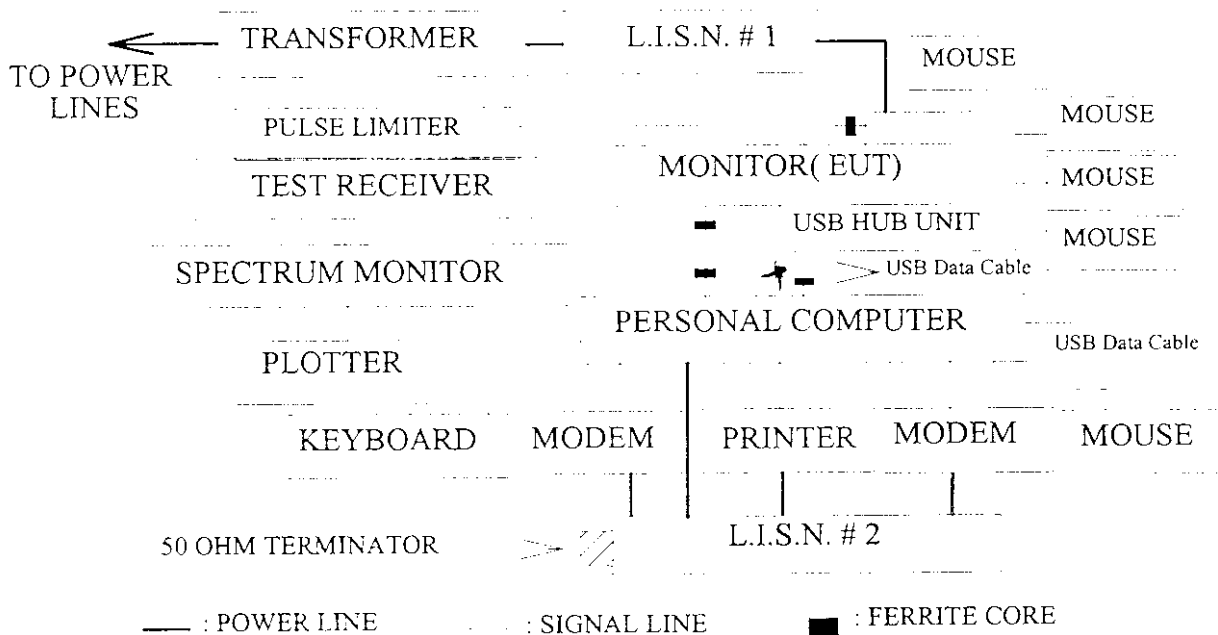
2. POWERLINE CONDUCTED TEST

2.1. Test Equipment

The following test equipments were used during the power line conducted tests :

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESH3	880647/035	Jun.24, 98'	1 Year
2.	L.I.S.N. # 1	Kyoritsu	KNW-407	8-855-9	Apr.14, 98'	1 Year
3.	L.I.S.N. # 2	Kyoritsu	KNW-407	8-881-13	Apr.14, 98'	1 Year

2.2. Block Diagram of Test Setup



2.3. Powerline Conducted Emission Limit (CLASS B)

Frequency	Maximum RF Line Voltage	
	uV	dBuV
0.45MHz ~ 30Mhz	250	48

REMARKS : RF LINE VOLTAGE (dBuV) = 20 log RF LINE VOLTAGE (uV)

* $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{1}{2} \frac{d^3}{dt^3}$ $\frac{1}{2} \frac{d^3}{dt^3} = \frac{1}{2} \frac{d^3}{dt^3}$

2.4. EUT's Configuration during Compliance Measurement

The following equipments were installed on RF LINE VOLTAGE measurement to meet the Commission requirement and operating in a manner which tend to maximize its emission characteristics in a normal application.

2.4.1. 17" Color CRT Display Monitor (EUT)

Model Number	:	(1)TX-D7S55NM (2)TX-D7S55 (3)TX-D7S55***** (4)VCDTS21419-1*
Serial Number	:	FP8420003
Manufacturer	:	Matsushita Electric Industrial Co., Ltd.
CRT	:	Panasonic, M/N M41LJV007X
Data Cable # 1 (D-Sub)	:	Shielded, Detachable, 1.5m Bonded two ferrite cores
Data Cable # 2 (D-Sub)	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
Data Cable # 3 (BNC)	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
USB HUB Unit	:	USB Hub Stand, Panasonic Model TY-LD65A Series FCC ID: ACJ93312138 <i>TV-LD65 Series</i>
		Cable : Non-Shielded, Undetachable, 0.8m * Bonded a ferrite core
USB Data Cable	:	Shielded, Detachable, 1.8m Bonded a ferrite core <i>used as data cable</i>
Power Cord	:	Non-Shielded, Detachable, 1.8m

2.4.2. Supporting System : As in section 1.2

2.5. Operating Condition of EUT

- 2.5.1. Setup the EUT and simulator as shown on 2.2.
- 2.5.2. Turn on the power of all equipments.
- 2.5.3. Personal Computer read data from disk.
- 2.5.4. Personal Computer sent "H" character to monitor (EUT) and the screen displayed and full with "H" pattern.
- 2.5.5. The other peripheral devices were drone and operated in turn during all testing.

* *TESTED w/ 7.1 USB key cable with no
distortion in signal. Core was bonded properly.*

2.6. Test Procedure

The EUT was connected to the power mains through a line impedance stabilization network (L.I.S.N.# 1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N. # 2). This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to FCC ANSI C63.4-1992 on conducted measurement.

The bandwidth of the R&S Test Receiver ESH3 was set at 10KHz.

The frequency range from 450KHz to 30MHz was checked.

Two kinds of horizontal working frequency with three kinds of data cables were investigated during pre-scanning and reported the worst test mode (93.7KHz with 1.5m D-Sub Data Cable) in section 2.8., the others test data were attached within Appendix I. The detail of test modes are as follows :

Two kinds of display frequency :

	640 x 480 (Hf : 31.5KHz)	1600 x 1200 (Hf : 93.7KHz)
(a) Dot Clock Frequency	25.17 MHz	202.50 MHz
(b) Vertical Frequency	60 Hz	75.0 Hz
(c) Horizontal Frequency	31.5 KHz	93.7 KHz

Three kinds of data cable :

- (1) 1.5m D-Sub data cable with two ferrite cores
- (2) 1.8m D-Sub data cable with two ferrite cores
- (3) 1.8m BNC data cable with two ferrite cores

2.7. Test Results

PASSED. Please refer to the following pages.

2.8. Line Conducted RF Voltage Measurement Results

The frequency range 450KHz to 30 MHz was investigated.

All emissions not reported below were too low against the prescribed limits.

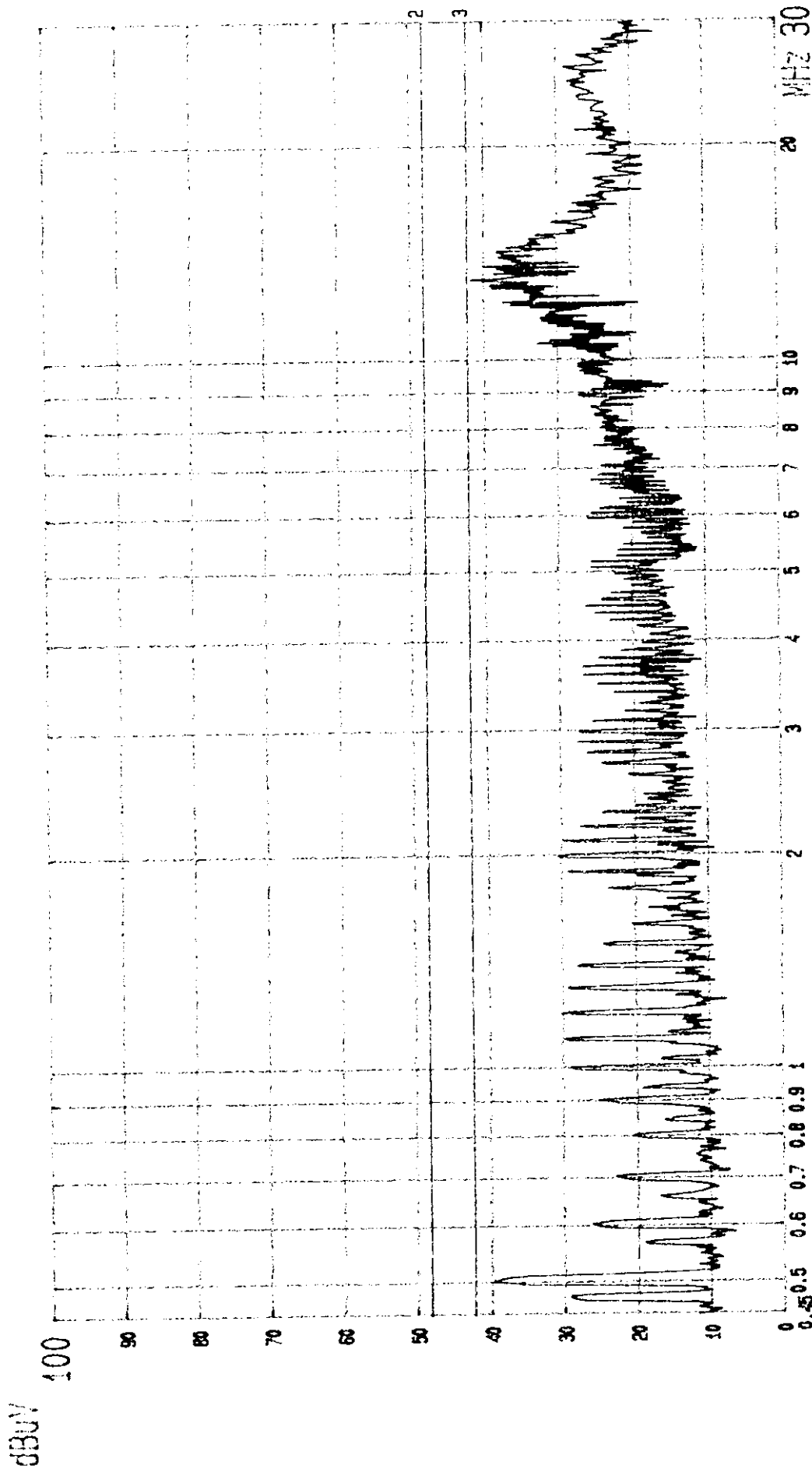
Date of Test : Aug. 04, 1998 Temperature : 27 °C

EUT : 17" Color CRT Display Monitor Humidity : 45 %

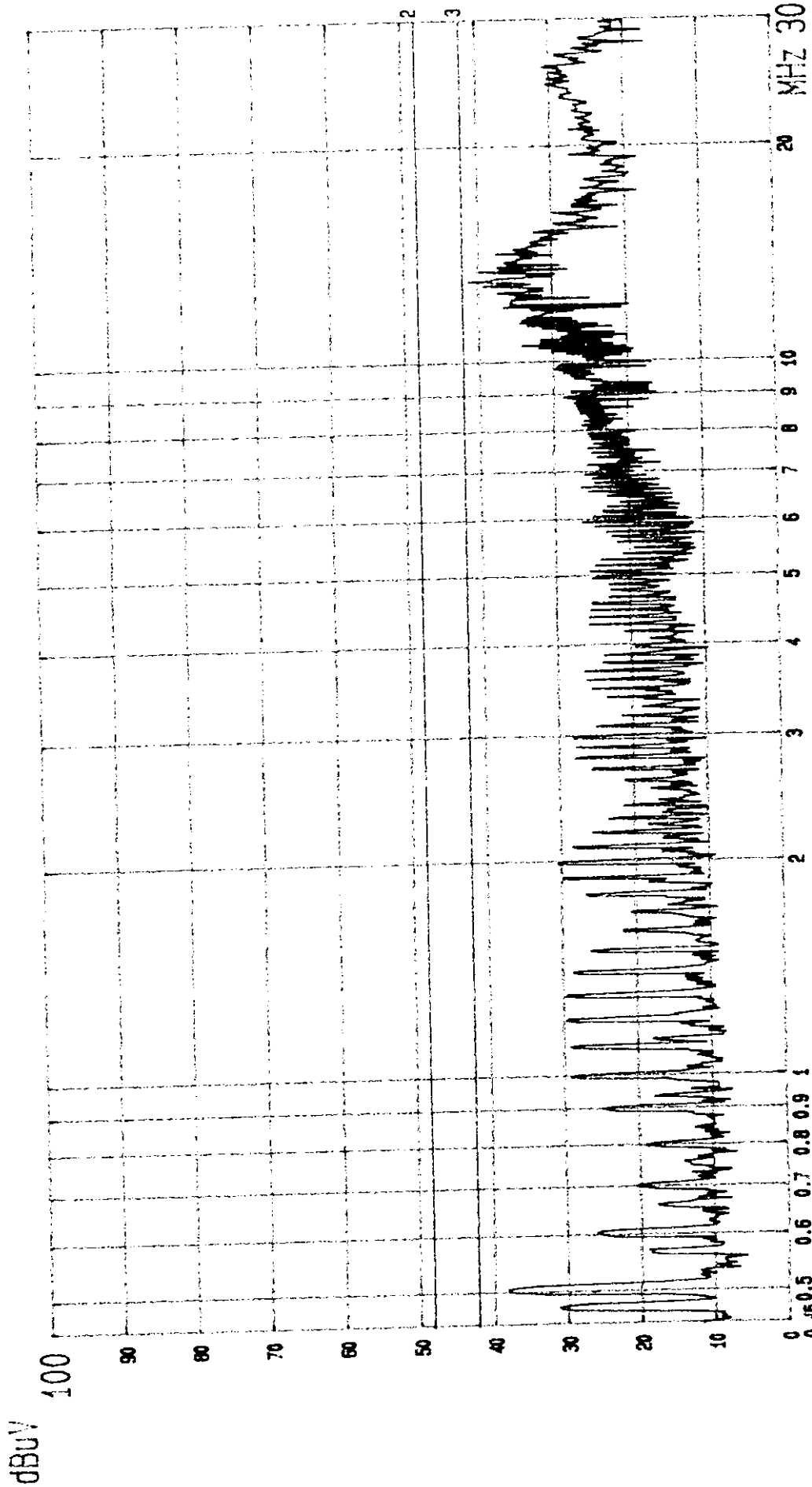
Test Mode : 93.7KHz/1600*1200, 1.5m D-Sub Data Cable

Frequency (MHz)	Factor dB	Measurement (dBuV)		Reading (dBuV)		Limits (dBuV)	Margin (dBuV)	
		VA	VB	VA	VB		VA	VB
0.4992	0.5	*	36.7	*	37.2	48.0	*	10.8
0.4993	0.5	37.6	*	38.1	*	48.0	9.9	*
1.1984	0.5	28.1	*	28.6	*	48.0	19.4	*
1.2982	0.5	*	27.8	*	28.3	48.0	*	19.7
1.9972	0.5	*	28.5	*	29	48.0	*	19
1.9973	0.5	28.3	*	28.8	*	48.0	19.2	*
2.8958	0.5	25.9	*	26.4	*	48.0	21.6	*
2.9957	0.5	*	26.5	*	27	48.0	*	21
10.5846	1.0	29.6	*	30.6	*	48.0	17.4	*
11.4841	1.0	*	31.8	*	32.8	48.0	*	15.2
13.0167	1.0	41.3	*	42.3	*	48.0	5.7	*
13.0168	1.0	*	41.5	*	42.5	48.0	*	5.5

- Remark :
1. All reading were Quasi-Peak values.
 2. Factor = Insertion Loss + Cable Loss
 3. The worst emission was detected at 13.0168MHz with corrected signal level of 42.5dBuV (limit was 48dBuV) when the VB side of the EUT was connected to L.I.S.N.



--- Date 04.AUG '98 Time 17:58:07
 Matsushita EUT: 17 Color CRT Display Monitor M/N: TX-D7S55NM
 LINE: VA. MEMO: 93.7KHz; 1.5m 0-Sub
 (PAK- VALUE) TTEMC. PAGE: 003



--- Date 04.AUG '98 Time 17:56:13
 Matsushita EUT: 17 Color CRT Display Monitor M/N: TX-D7S55NM
 LINE: VB. MEMO: 93.7KHz; 1.5m D-SUB
 (PAKE VALUE) TTEMC. PAGE: 004

3. RADIATED EMISSION TEST

3.1. Test Equipment

The following test equipments are used during the radiated emission tests :

3.1.1. For Anechoic Chamber :

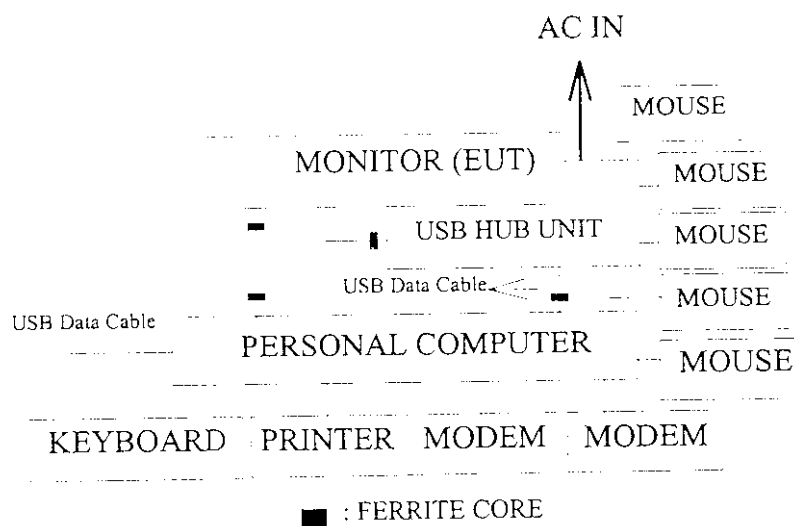
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	HP	8593A	3212A01727	Jul.25, 98'	1 Year
2.	Pre-Amplifier	HP	8447D	2944A06305	May.13,98'	1 Year
3.	Broadband Antenna	Schwarzbeck	BBA 9106	A3L	Dec.24, 97'	1 Year
4.	Broadband Antenna	Schwarzbeck	UHALP 9107	A3H	Dec.24, 97'	1 Year

3.1.2. For No. 2 Open Site :

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde&Schwarz	ESVP	893202/001	Jul.24, 98'	1 Year
2.	Broadband Antenna	Chase	VBA6106A	1240	Jan. 14, 98'	1 Year
3.	Broadband Antenna	Schwarzbeck	UHALP 9108-A	0139	Jan. 14, 98'	1 Year

3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Open Field Test Site Setup Diagram

ANTENNA TOWER

ANTENNA ELEVATION VARIES FROM 1METER TO 4 METERS

3 METERS

EUT

0.8
METER

TURN TABLE

GROUND PLANE

3.3. Radiation Limit (CLASS B)

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMITS	
		uV/M	dBuV/M
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0

Remark : (1) Emission level (dBuV/M) = 20 log Emission level (uV/M)

(2) The tighter limit applies at the edge between two frequency bands.

(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.4. EUT Configuration on Measurement

The configuration of EUT and its simulators were same as those used in conducted measurement. Please refer to 2.4.

3.5. Operating Condition of EUT

Same as conducted measurement which was listed in 2.5.

3.6. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above ground. The turn table rotate 360 degrees to determine the position of the maximum emission level. EUT was set 3 meters away from the receiving antenna which were mounted on a antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated biconical and log periodical antenna) and dipole antenna were used as receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4-1992 on radiated measurement.

The bandwidth of the R&S TEST RECEIVER ESVP was set at 120KHz.

The frequency range from 30MHz to 1000MHz was checked.

Two kinds of horizontal working frequency with three kinds of data cable were investigated separately within Anechoic Chamber and all the scanning waveform were attached in Appendix II.

Finally, re-measured the worst operating situation (93.7KHz with 1.5m D-Sub data cable) at No. 2 Open Field Test site and all the test results are listed in section 3.8.

Two kinds of display frequency :

	640 x 480 (Hf : 31.5KHz)	1600 x 1200 (Hf : 93.7KHz)
(a) Dot Clock Frequency	25.17 MHz	202.5 MHz
(b) Vertical Frequency	60 Hz	75 Hz
(c) Horizontal Frequency	31.5 KHz	93.7 KHz

Three kinds of data cable :

- (1) 1.5m D-Sub data cable with two ferrite cores
- (2) 1.8m D-Sub data cable with two ferrite cores
- (3) 1.8m BNC data cable with two ferrite cores

3.7. Test Results

PASSED. Please refer to the following pages.

3.8. Radiated Emission Measurement Results

The frequency spectrum from 30 MHz to 1000MHz was investigated. All the emissions not reported below were too low against the FCC CLASS B limit.

Date of Test : Aug. 05, 1998 Temperature : 29 °C
 EUT : 17" Color CRT Display Monitor Humidity : 64 %
 Test Mode : 93.7KHz/1600*1200, 1.5m D-Sub Data Cable

	Antenna	Cable	Meter Reading Emission Level			
Frequency	Factor	Loss	Horizontal	Horizontal	Limits	Margin
MHz	dB/m	dB	dBuV	dBuV/m	dBuV/m	dBuV/m
58.719	12.53	2.55	3.70	18.78	40.00	21.22
65.277	11.35	2.72	4.90	18.97	40.00	21.03
71.738	11.83	2.87	12.50	27.20	40.00	12.80
84.746	14.48	3.13	10.10	27.71	40.00	12.29
110.971	18.00	3.66	4.60	26.26	43.50	17.24
117.434	18.74	3.74	2.80	25.28	43.50	18.22
123.991	19.43	3.91	11.50	34.84	43.50	8.66
* 130.497	19.94	4.02	12.00	35.96	43.50	7.54
137.013	20.23	4.09	5.20	29.52	43.50	13.98
143.564	20.29	4.24	8.20	32.73	43.50	10.77
150.117	20.38	4.32	5.20	29.90	43.50	13.60
163.133	20.82	4.51	6.00	31.33	43.50	12.17
169.687	20.84	4.61	7.20	32.65	43.50	10.85
182.704	21.68	4.78	6.80	33.26	43.50	10.24
189.260	21.38	4.90	2.80	29.08	43.50	14.42
202.278	21.26	5.06	2.10	28.42	43.50	15.08
221.850	22.36	5.31	7.10	34.77	46.00	11.23
254.530	22.36	5.76	5.80	33.92	46.00	12.08
260.994	22.74	5.82	7.70	36.26	46.00	9.74
274.101	23.43	6.00	8.50	37.93	46.00	8.07
293.672	24.80	6.24	3.60	34.64	46.00	11.36

Continued

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading		Emission Level		Margin dBuV/m
			Horizontal dBuV		Horizontal dBuV/m	Limits dBuV/m	
306.691	13.69	6.42	14.20		34.31	46.00	11.69
313.245	13.83	6.48	15.20		35.51	46.00	10.49
319.800	14.15	6.57	1.40		22.12	46.00	23.88
326.356	14.46	6.68	3.00		24.14	46.00	21.86
332.911	14.74	6.79	3.40		24.93	46.00	21.07
386.668	16.58	7.38	1.90		25.86	46.00	20.14
425.791	16.52	7.78	0.90		25.20	46.00	20.80
450.245	17.35	8.05	-1.20		24.20	46.00	21.80
456.805	17.10	8.13	-2.60		22.63	46.00	23.37
476.373	17.02	8.31	-1.90		23.43	46.00	22.57
525.259	18.53	8.87	3.60		31.00	46.00	15.00

- Remark :
1. All reading were Quasi-Peak values.
 2. The worst emission was detected at 130.497MHz with corrected signal level of 35.96dBuV/m (limit was 43.5dBuV/m) when the antenna was at horizontal polarization and was at 1.2m high and the turn table was at 180 ° .
 3. 0 ° is the table front facing the antenna. Degree was calculated from 0 ° clockwise facing the antenna.

Date of Test : Aug. 05, 1998 Temperature : 29 °C

EUT : 17" Color CRT Display Monitor Humidity : 64 %

Test Mode : 93.7KHz/1600*1200, 1.5m D-Sub Data Cable

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading		Emission Level		Margin dBuV/m
			Vertical dBuV		Vertical dBuV/m	Limits dBuV/m	
51.985	15.57	2.44	6.10		24.11	40.00	15.89
65.176	12.55	2.72	7.30		22.57	40.00	17.43
71.592	14.36	2.87	8.20		25.43	40.00	14.57
84.848	13.87	3.20	7.30		24.37	40.00	15.63
110.977	16.72	3.66	7.00		27.38	43.50	16.12
117.436	17.21	3.74	6.70		27.65	43.50	15.85
123.974	17.41	3.91	12.10		33.42	43.50	10.08
130.543	17.23	4.02	13.90		35.15	43.50	8.35
137.009	18.04	4.09	7.10		29.23	43.50	14.27
143.625	17.71	4.24	7.19		29.14	43.50	14.36
169.597	20.27	4.61	5.90		30.78	43.50	12.72
182.708	19.19	4.78	7.10		31.07	43.50	12.43
189.266	19.58	4.90	5.50		29.98	43.50	13.52
202.374	20.32	5.06	4.50		29.88	43.50	13.62
222.037	22.86	5.31	4.60		32.77	46.00	13.23
241.434	22.63	5.56	6.30		34.49	46.00	11.51
254.533	20.89	5.76	8.90		35.55	46.00	10.45
260.992	22.18	5.82	10.20		38.20	46.00	7.80
* 274.102	22.82	6.00	12.00		40.82	46.00	5.18
280.565	24.67	6.08	8.70		39.45	46.00	6.55
293.673	24.87	6.24	8.20		39.31	46.00	6.69

Continued

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBuV	Emission Level Vertical dBuV/m	Limits dBuV/m	Margin dBuV/m
306.691	13.87	6.42	12.60	32.89	46.00	13.11
313.245	14.03	6.48	12.60	33.11	46.00	12.89
326.264	15.51	6.68	7.70	29.89	46.00	16.11
332.816	15.92	6.79	6.20	28.91	46.00	17.09
384.981	15.09	7.37	11.70	34.16	46.00	11.84
391.535	15.43	7.42	7.40	30.25	46.00	15.75
404.547	16.09	7.57	4.50	28.16	46.00	17.84
417.663	16.13	7.71	10.90	34.74	46.00	11.26
424.216	16.40	7.84	10.70	34.94	46.00	11.06

- Remark :
1. All reading were Quasi-Peak values.
 2. The worst emission was detected at 274.102MHz with corrected signal level of 40.82dBuV/m (limit was 46dBuV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 220 ° .
 3. 0 ° is the table front facing the antenna. Degree was calculated from 0 ° clockwise facing the antenna.

4. DEVIATIONS TO TEST SPECIFICATIONS

[NONE]