

FACTORY CONTROL NO. : FVD-99-F002
FCC ID. : ACJ93312141

COSMOS

FACTORY CONTROL NO. : FVD-99-F003
FCC ID. : GSS19005

NVLAP LAB CODE: 200151-0

Page 1 of 23

Test Report No. E19958

MEASUREMENT/TECHNICAL REPORT

FCC PART 15, Class B (ANSI C63.4:1992)

Issued: December 24, 1998

Name and Address of: Matsushita Electric Industrial Co., Ltd.
the Client 6-4-1 Tsujidomotomachi, Fujisawa-shi, Kanagawa-ken, 251-0043 Japan
Phone / Fax 0466-35-1303 / 0466-35-5557

Test Item: CRT Display Monitor / USB Pedestal

Identification: TX-D9S55U / TY-LD67AZ

Serial No.: FX8640003 / None

FCC ID: ACJ93312141 & GSS19005

Sample No.: 1 / 2

Sample Receipt Date: December 22, 1998

Test Result: PASS

Report Prepared by: Cosmos Corporation
319 Akeno, Obata-cho, Watarai-gun, Mie-ken, 519-0501 JAPAN
Phone: +81-596-37-0190 Fax: +81-596-37-3609
Cosmos EMC Lab.
543 Shimesasu, Watarai-cho, Watarai-gun, Mie-ken, 516-2119 Japan
Phone: +81-5966-4-0888 Fax: +81-5966-4-0895

Tested by: Hiroshi Wakabayashi December 24, 1998
H. Wakabayashi Date

Reviewed by: K. Shibata December 24, 1998
K. Shibata Date

- Note:
1. This report should not be reproduced except in full without the written approval of Cosmos Corporation.
 2. This test report is issued by private test house (Cosmos Corp.), therefore NVLAP or US government does not endorse a reliability of this report.
 3. All measurement data contained in this report may have uncertainty. A judgement for the Limitation should be taken into the count. Refer to the Appendix for the model calculation.

Table of Contents	Page
1 GENERAL INFORMATION	3 to 5
1.1 Product Description	3
1.2 Related Submittal(s)/Grant(s)	3
1.3 Tested System Details	3 to 4
1.4 Test Methodology	5
1.5 Test Facility	5
 2 SYSTEM TEST CONFIGURATION	 6 to 12
2.1 Justification	6
2.2 EUT Exercise Software	6
2.3 Special Accessories	6
2.4 Equipment Modifications	6
2.5 Configuration of Tested System	7 to 12
 3 CONDUCTED AND RADIATED MEASUREMENT PHOTOS	 13 to 14
 4 CONDUCTED EMISSION DATA	 15
 5 RADIATED EMISSION DATA	 16 to 17
 6 LIST OF TEST AND MEASUREMENT INSTRUMENT	 18
 7 THE TREATMENT OF UNCERTAINTY IN EMC MEASUREMENT	 19 to 22
7.1 Radiated Emission	20 to 21
7.2 Conducted Emission	22
 8 ATTACHMENT	 23

1. General Information

1.1 Product Description

The Matsushita Electric Industrial Co., Ltd., Model TX-D9S55U and TY-LD67AZ (referred to as the EUT1 and EUT2 in this report) is a CRT Display Monitor and USB Pedestal.

Rated input voltage is AC 120V.

EUT is featuring a 10 MHz processor.

We chose and measured TX-D9S55U as representative model in family machines because it was the same circuit construction and performance as them.

The following was family machines.

Model TX-D9S55NM, TX-D9S55, TX-D9S55*****, VCDTS21476-1*

1.2 Related Submittal(s)/Grant(s)

Related Submittal Grant is not conered in this report.

1.3 Tested System Details

The FCC IDs for all equipment, plus descriptions of all cables used in the tested system(including inserted cards, which have grants) are:

Model No.	Serial No.	FCC ID	Description	Cable Description
TX-D9S55U	FX8640003	ACJ93312141 GSS19005 (Doc)	EUT1	AC Power Cord 0.6m Unshielded (3P) Video I/F Cable 1.8m Shielded (D-Sub = BNC) Monitor Control Cable 0.65m Shielded
TY-LD67AZ	None	Doc	EUT2	AC Power Cord 1.8m Unshielded (3P) USB Data Cable 1.8m Shielded
D4553A	SG71403712	Doc	Personal Computer	AC Power Cord 1.8m Unshielded (3P)

1. General Information (Continued)**1.3 Tested System Details (Continued)**

The FCC IDs for all equipment, plus descriptions of all cables used in the tested system(including inserted cards, which have grants) are:

Model No.	Serial No.	FCC ID	Description	Cable Description
C4565A	SG73I140TZ	B94C4555X	Printer	AC Power Cord 1.8m Unshielded (3P) Printer I/F Cable 3.0m Shielded
RT6656TWJP	52971785	AQ6-MTN4C15	Keyboard	Keyboard I/F Cable 1.8m Shielded
M-S34	LZB74709274	DZL211029	Mouse	Mouse I/F Cable 1.8m Shielded
FM-9648	None	DK4FM9648R	Modem	Modem I/F Cable 2.4m Shielded
AM-12830	None	N/A	AC Adaptor	AC Power Cord 1.9m Unshielded (2P)
EMC-S3906	0000031	EW4ECM-S3906	USB Mouse	USB Mouse Cable 1.8m Shielded
EMC-S3906	0000036	EW4ECM-S3906	USB Mouse	USB Mouse Cable 1.8m Shielded
EMC-S3906	0000052	EW4ECM-S3906	USB Mouse	USB Mouse Cable 1.8m Shielded
EMC-S3906	0000065	EW4ECM-S3906	USB Mouse	USB Mouse Cable 1.8m Shielded
Stealth 3D 3400XL/ DIAMOND	5160800003131	FTUPCI30208	Video Card	None

1. General Information (Continued)

1.4 Test Methodology

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 meters. Final Result was converted in 3m, using $20 \log 10m / 3m$.

1.5 Test Facility

The open area test site, Cosmos EMC Lab., and conducted measurement facility used to the radiated data is located at 543 Shimesasu, Watarai-cho, Watarai-gun, Mie-ken, 516-2119, Japan. This site has been fully described in a report dated May 23, 1996 submitted to FCC, and accepted in a letter dated July 10, 1996 (31040/SIT 1300F2).

2. System Test Configuration

2.1 Justification

EUT was measured by max radiation mode user specified. ("H" Pattern)

The measurement was conducted for the resolution 640×480 (Dot Clock Frequency: 25.17 MHz, Horizontal Frequency: 31.5 kHz, Vertical Frequency: 60 Hz) and 1600×1200 (Dot Clock Frequency: 202.5 MHz, Horizontal Frequency: 93.8 kHz, Vertical Frequency: 75 Hz).

The Video I/F Cable was conducted in D-Sub = D-Sub 1.5m length and

D-Sub = D-Sub 1.8m length D-Sub = D-Sub 3.0m length and D-Sub = BNC 1.8m length.

Following was the worst condition;

	Resolution	Video I/F Cable
Conducted Emission	640×480 Dot Clock Frequency: 25.17 MHz, Horizontal Frequency: 31.5 kHz, Vertical Frequency: 60 Hz	D-Sub = BNC 1.8m length
Radiated Emission	1600×1200 Dot Clock Frequency: 202.5 MHz, Horizontal Frequency: 93.8 kHz, Vertical Frequency: 75 Hz	D-Sub = BNC 1.8m length

2.2 EUT Exercise Software

EUT did not exercise program during radiated and conducted testing.

2.3 Special Accessories

This cable model and part numbers are instructed with their installation manual.

2.4 Equipment Modifications

No equipment modification to achieve compliance to Class B levels was done during test.

2. System Test Configuration (Continued)

2.5 Configuration of Tested System (Continued)

Conducted Emission

- 1) EUT2 was put on the Personal Computer.
- 2) EUT1 was put on the EUT2.
- 3) Video Card was inserted in Personal Computer.
- 4) Personal Computer and Printer located at 0.1m intervals.
- 5) Personal Computer and Modem located at 0.1m intervals.
- 6) Keyboard and Mouse located at 0.1m intervals.
- 7) Keyboard and USB Mouse (S/N: 0000031) located at 0.1m intervals.
- 8) USB Mouse (S/N: 0000031) and USB Mouse (S/N: 0000036) located at 0.1m intervals.
- 9) USB Mouse (S/N: 0000036) and USB Mouse (S/N: 0000052) located at 0.1m intervals.
- 10) USB Mouse (S/N: 0000052) and USB Mouse (S/N: 0000065) located at 0.1m intervals.
- 11) EUT2 was connected to Artificial-Mains Network (Model ESH2-Z5) by the AC Power Cord.
Extended Cord was folded at the center of Cord by 0.3m length,
and the Cord was hung in the middle between ground and table.
- 12) EUT1 was connected to EUT2 by the AC Power Cord.
- 13) Personal Computer was connected to Artificial-Mains Network (Model MN2050B)
by the AC Power Cord.
- 14) Printer was connected to Artificial-Mains Network (Model MN2050B)
by the AC Power Cord.
Extended Cord was folded at the center of Cord by 0.4m length,
and the Cord was hung in the middle between ground and table.
- 15) AC Adaptor was connected to Artificial-Mains Network (Model MN2050B).
- 16) Modem was connected to AC Adaptor by the AC Power Cord.
- 17) EUT2 was connected to Video Card by the Video I/F Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.
- 18) Personal Computer was connected to Printer by the Printer Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.
- 19) Personal Computer was connected to Modem by the Modem I/F Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.
- 20) Personal Computer was connected to Keyboard by the Keyboard I/F Cable.
- 21) Personal Computer was connected to Mouse by the Mouse I/F Cable.
- 22) EUT1 was connected to EUT2 by the Monitor Control Cable.
- 23) EUT2 was connected to Personal Computer by the USB Data Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.

2. System Test Configuration (Continued)

2.5 Configuration of Tested System (Continued)

Conducted Emission (Continued)

- 24) EUT2 was connected to USB Mouse (S/N: 0000031) by the USB Mouse Cable.
- 25) EUT2 was connected to USB Mouse (S/N: 0000036) by the USB Mouse Cable.
- 26) EUT2 was connected to USB Mouse (S/N: 0000052) by the USB Mouse Cable.
- 27) EUT2 was connected to USB Mouse (S/N: 0000065) by the USB Mouse Cable.

Radiated Emission

- 1) EUT2 was put on the Personal Computer.
- 2) EUT1 was put on the EUT2.
- 3) Video Card was inserted in Personal Computer.
- 4) Personal Computer and Printer located at 0.1m intervals.
- 5) Personal Computer and Modem located at 0.1m intervals.
- 6) Keyboard and Mouse located at 0.1m intervals.
- 7) Keyboard and USB Mouse (S/N: 0000031) located at 0.1m intervals.
- 8) USB Mouse (S/N: 0000031) and USB Mouse (S/N: 0000036) located at 0.1m intervals.
- 9) USB Mouse (S/N: 0000036) and USB Mouse (S/N: 0000052) located at 0.1m intervals.
- 10) USB Mouse (S/N: 0000052) and USB Mouse (S/N: 0000065) located at 0.1m intervals.
- 11) EUT2 was connected to Power Supply by the AC Power Cord.
Extended Cord was folded at the center of Cord by 0.3m length,
and the Cord was hung in the middle between ground and table.
- 12) EUT1 was connected to EUT2 by the AC Power Cord.
- 13) Personal Computer was connected to Power Supply by the AC Power Cord.
Extended Cord was folded at the center of Cord by 0.4m length,
and the Cord was hung in the middle between ground and table.
- 14) Printer was connected to Power Supply by the AC Power Cord.
Extended Cord was folded at the center of Cord by 0.4m length,
and the Cord was hung in the middle between ground and table.
- 15) AC Adaptor was connected to Power Supply.
- 16) Modem was connected to AC Adaptor by the AC Power Cord.
Extended Cord was folded at the center of Cord by 0.4m length,
and the Cord was hung in the middle between ground and table.
- 17) EUT2 was connected to Video Card by the Video I/F Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.
- 18) Personal Computer was connected to Printer by the Printer Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.
- 19) Personal Computer was connected to Modem by the Modem I/F Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.

2. System Test Configuration (Continued)

2.5 Configuration of Tested System (Continued)

Radiated Emission (Continued)

- 20) Personal Computer was connected to Keyboard by the Keyboard I/F Cable.
- 21) Personal Computer was connected to Mouse by the Mouse I/F Cable.
- 22) EUT1 was connected to EUT2 by the Monitor Control Cable.
- 23) EUT2 was connected to Personal Computer by the USB Data Cable.
Extended Cable was folded at the center of Cable by 0.4m length,
and the Cable was hung in the middle between ground and table.
- 24) EUT2 was connected to USB Mouse (S/N: 0000031) by the USB Mouse Cable.
- 25) EUT2 was connected to USB Mouse (S/N: 0000036) by the USB Mouse Cable.
- 26) EUT2 was connected to USB Mouse (S/N: 0000052) by the USB Mouse Cable.
- 27) EUT2 was connected to USB Mouse (S/N: 0000065) by the USB Mouse Cable.

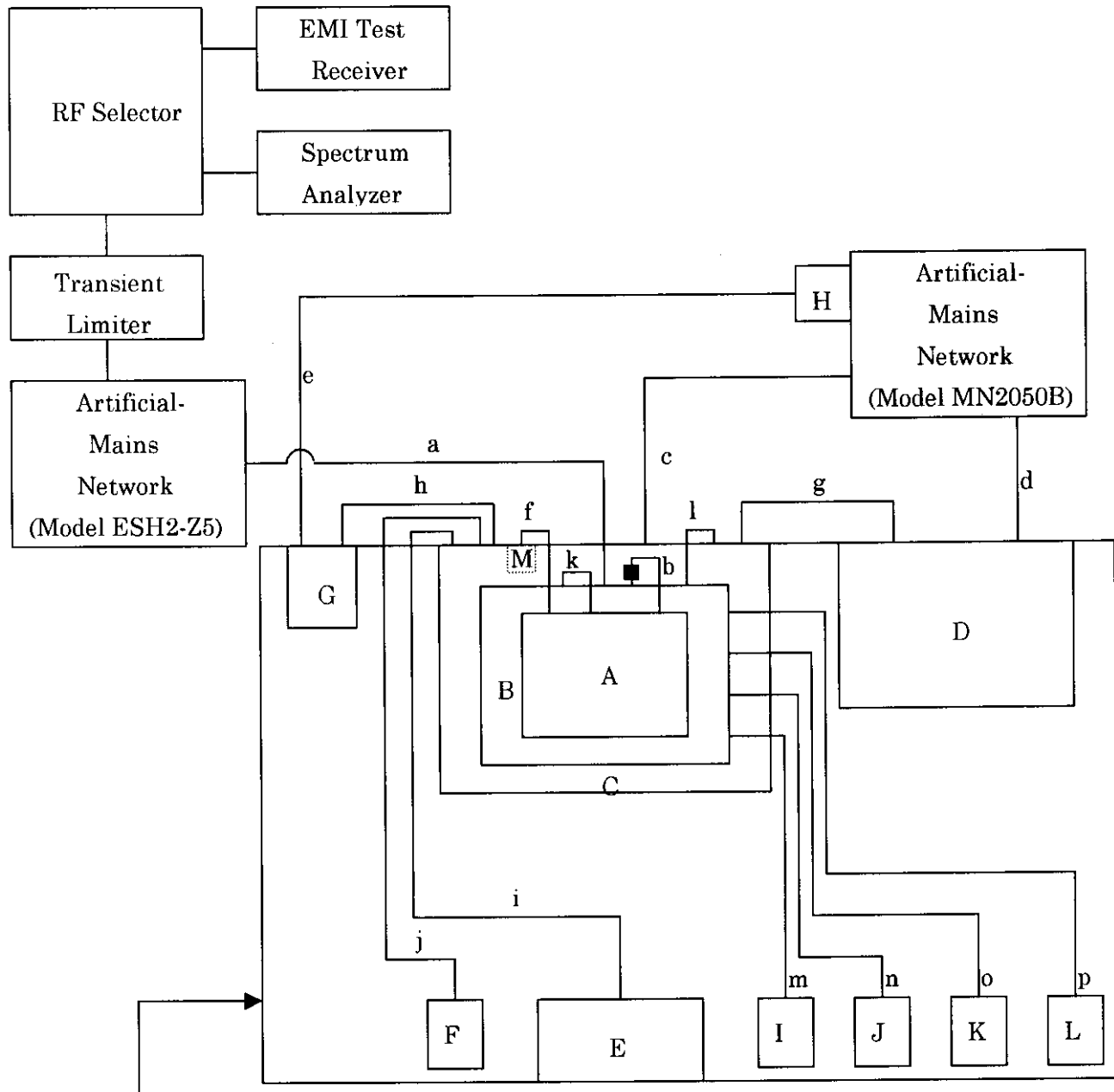
2. System Test Configuration (Continued)**2.5 Configuration of Tested System (Continued)**

	Instrument		Cord / Cable
A)	EUT1	a)	AC Power Cord 1.8m Unshielded
B)	EUT2	b)	AC Power Cord 0.6m Unshielded
C)	Personal Computer	c)	AC Power Cord 1.8m Unshielded
D)	Printer	d)	AC Power Cord 1.8m Unshielded
E)	Keyboard	e)	AC Power Cord 1.9m Unshielded
F)	Mouse	f)	Video I/F Cable 1.8m Shielded (D-Sub = BNC)
G)	Modem	g)	Printer I/F Cable 3.0m Shielded
H)	AC Adaptor	h)	Modem I/F Cable 2.4m Shielded
I)	USB Mouse (S/N: 0000031)	i)	Keyboard I/F Cable 1.8m Shielded
J)	USB Mouse (S/N: 0000036)	j)	Mouse I/F Cable 1.8m Shielded
K)	USB Mouse (S/N: 0000052)	k)	Monitor Control Cable 0.65m Shielded
L)	USB Mouse (S/N: 0000065)	l)	USB Data Cable 1.8m Shielded
M)	Video Card	m)	USB Mouse Cable 1.8m Shielded
		n)	USB Mouse Cable 1.8m Shielded
		o)	USB Mouse Cable 1.8m Shielded
		p)	USB Mouse Cable 1.8m Shielded

2. System Test Configuration (Continued)

2.5 Configuration of Tested System (Continued)

Conducted Emission



Non-conductive table

The height of this

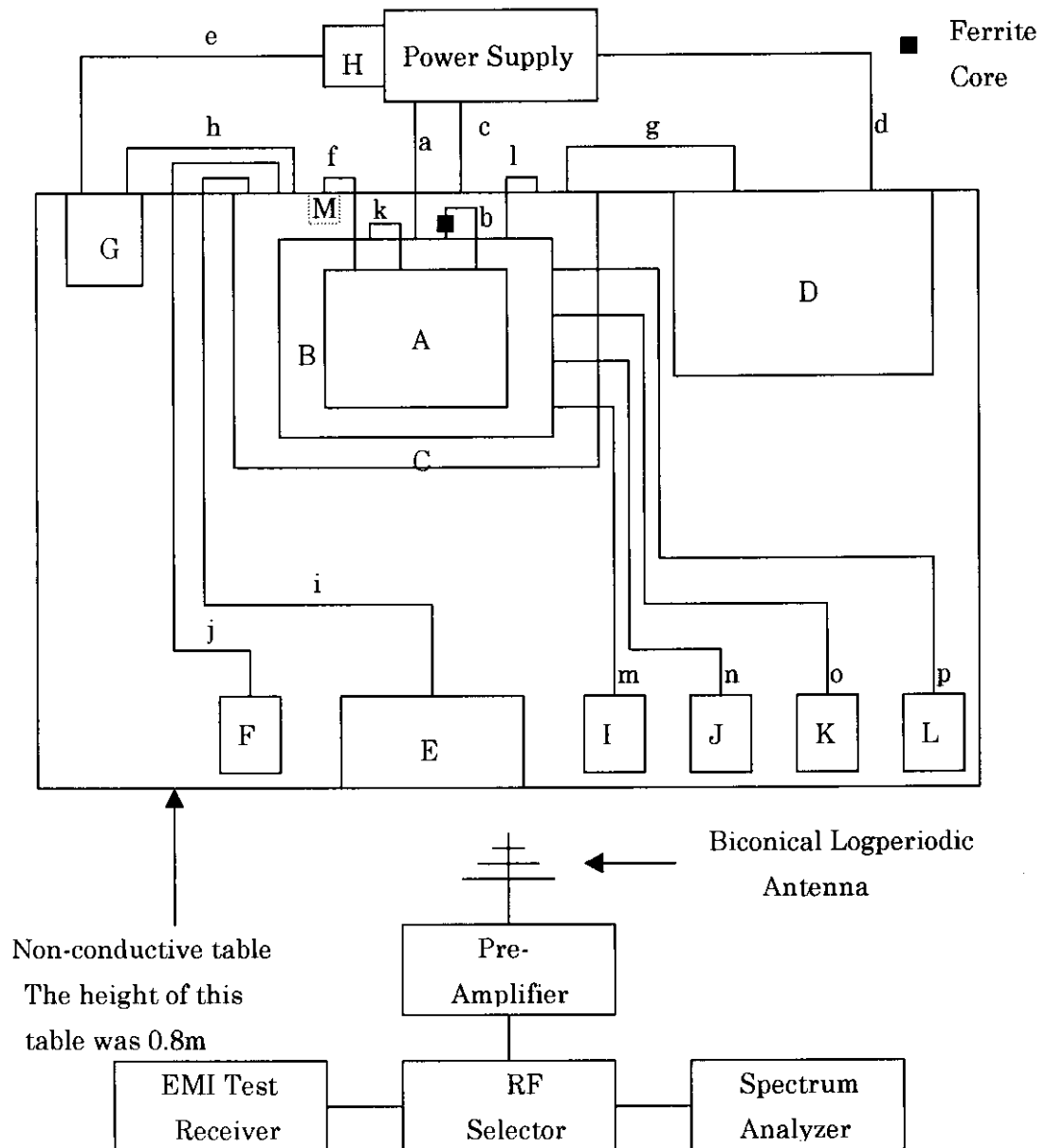
table was 0.8m

■ Ferrite
Core

2. System Test Configuration (Continued)

2.5 Configuration of Tested System (Continued)

Radiated Emission



4. Conducted Emission Data

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

	Frequency (MHz)	Measured * (dB μ V)	Limit (dB μ V)
Neutral Line	0.50867	41.8	48.0
Neutral Line	2.03105	35.1	48.0
Neutral Line	11.88092	37.7	48.0
Neutral Line	14.31562	37.7	48.0
Neutral Line	15.63648	38.3	48.0
Neutral Line	17.26055	38.4	48.0
L Line	0.50729	41.5	48.0
L Line	0.91212	30.9	48.0
L Line	2.03106	35.3	48.0
L Line	16.33848	39.6	48.0
L Line	17.15161	39.1	48.0
L Line	27.80360	34.2	48.0

* All readings are quasi-peak unless stated otherwise.

Environment:

Temperature 15 °C

Humidity 30 %

Tested Personnel:

Tester Signature Hiroshi Wakabayashi

Typed/Printed Name Hiroshi Wakabayashi

5. Radiated Emission Data

The following data lists the significant emission frequencies, measured levels, correction factor (includes cable and antenna corrections), the corrected reading, plus the limit. Explanation of the Correction Factor is given in paragraph.

Frequency (MHz)	Polarity (H/V)	Receiver * Reading (dB μ V)	Correction Factor (dB/m)	Corrected Reading (dB μ V/m)	3 Meter Limit (dB μ V/m)
47.999	Vertical	49.9	-18.1	31.8	40.0
119.985	Vertical	49.0	-15.6	33.4	43.5
202.180	Vertical	49.2	-17.8	31.4	43.5
248.815	Vertical	49.1	-14.5	34.6	46.0
310.994	Vertical	50.1	-12.7	37.4	46.0
326.539	Vertical	49.8	-12.3	37.5	46.0

*All readings are quasi-peak unless stated otherwise, with an IF bandwidth of 120 kHz, along with an 1 S sweep time. A video filter was not used.

Environment:

Temperature 15 °C
Humidity 30 %

Tested Personnel:

Tester Signature Hiroshi Wakabayashi

Typed/Printed Name Hiroshi Wakabayashi

5. Radiated Emission Data (Continued)

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

where FS = Field Strength

RA = Receiver Amplitude

AF = Antenna Factor

CF = Cable Attenuation Factor

AG = Amplifier Gain

Assume a receiver reading of 52.5 dBuV is obtained. The Antenna Factor of 7.4 and a Cable Factor of 1.1 is added. The Amplifier Gain of 29 dB is subtracted, giving a field strength of 32 dBuV/m. The 32 dBuV/m value was mathematically converted to its corresponding level in uV/m.

$$FS = 52.5 + 7.4 + 1.1 - 29 = 32 \text{ dBuV/m}$$

$$\text{Level in uV/m} = \text{Common Antilogarithm} [(32 \text{ dBuV/m})/20] = 39.8 \text{ uV/m}$$

6. List of Test and Measurement Instruments**Conducted Emission**

Manufacturer	Instruments	Model / Type	Serial No.	Calibration Date Next Calibration
ROHDE & SCHWARZ	Spectrum Analyzer	FSB / DISPLAY	838497/005 / 838301/009	May, 1998 May, 1999
ROHDE & SCHWARZ	EMI Test Receiver	ESHS10	842121/012	May, 1998 May, 1999
ROHDE & SCHWARZ	Artificial-Mains Network	ESH2-Z5	842210/010	May, 1998 May, 1999
CHASE ELECTRONICS LIMITED	Artificial-Mains Network	MN2050B	1140	May, 1998 May, 1999

Radiated Emission

Manufacturer	Instruments	Model / Type	Serial No.	Calibration Date Next Calibration
ROHDE & SCHWARZ	Spectrum Analyzer	FSB / DISPLAY	838497/005 / 838301/009	May, 1998 May, 1999
ROHDE & SCHWARZ	EMI Test Receiver	ESVS10	842122/014	May, 1998 May, 1999
CHASE ELECTRONICS LIMITED	Pre-Amplifier	CPA9231	3045	February, 1998 February, 1999
CHASE ELECTRONICS LIMITED	Biconical Logperiodic Antenna	CBL6111A	1732	May, 1998 May, 1999

7. The Treatment of Uncertainty In EMC Measurement

Uncertainty Budget

CONTENTS	Page
SECTION	
7.1 RADIATED EMISSION	20 to 21
7.2 CONDUCTED EMISSION	22

7.1 Radiated Emission

Measurement of vertically polarised field strength between 30 dB μ V/m and 60 dB μ V/m over the frequency range 30 MHz to 1 GHz on an open area test site at 10m and 30m

Contribution	Probability Distribution	Uncertainty $\pm$ [dB]	
		Logperiodic Antenna	
		10m	30m
Ambient Signals		—	—
Antenna factor calibration	normal [k = 2]	1.0	1.0
Cable loss calibration	normal [k = 2]	0.5	0.8
Receiver specification	rectangular	1.5	1.5
Antenna directivity	rectangular	0.2	0
Antenna factor variation with height	rectangular	1.0	1.0
Antenna phase centre variation	rectangular	0.2	0.1
Antenna factor frequency interpolation	rectangular	0.2	0.2
Measurement distance variation	rectangular	0.4	0.2
Site imperfections	rectangular	1.5	1.5
Mismatch Receiver VRC: $\Gamma_1 = 0.2$ Antenna VRC: $\Gamma_g = 0.67$ [Bi] 0.3 [Lp] Uncertainty limits $20\text{Log} [1 \pm \Gamma_1 \Gamma_g]$	U-shaped	0.5	0.5
System repeatability [previous assessment of $s(q_k)$ from 5 repeats, 1 reading on EUT]	Std Deviation	0.5	0.5
Repeatability of EUT*		—	—
Combined standard uncertainty u_c [y]	normal	1.617	1.612
Expanded uncertainty U	normal [k = 2]	3.234	3.224

7.1 Radiated Emission (Continued)

Calculation for 10m biconical Logperiodic antenna, positive value:

$$u_c [y] = \sqrt{\left(\frac{1.0}{2}\right)^2 + \left(\frac{0.7}{2}\right)^2 + \frac{1.5^2 + 0.3^2 + 1.0^2 + 0.1^2 + 0.2^2 + 0.2^2 + 1.5^2}{3} + \frac{1.1^2}{2} + 0.5^2}$$

k=2:

$$U = 2 u_c [y] = 2 \times \pm 1.617 = \pm 3.234\text{dB}$$

7.2 Conducted Emission

Measurement of conducted emissions between 30 dB μ V and 60 dB μ V over the frequency range 9 kHz to 30 MHz .

Contribution	Probability Distribution	Uncertainty ($\pm$ dB)	
		9 kHz - 150 kHz	150 kHz - 30 MHz
Receiver specification	rectangular	1.3	1.3
LISN coupling specification	rectangular	1.3	1.3
Cable and input attenuator calibration	normal [k = 2]	0.3	0.5
Mismatch Receiver VRC: $\Gamma_1 = 0.03$ LISN VRC: $\Gamma_g = 0.8$ [9 kHz] 0.2 [30 MHz] Uncertainty limits $20\text{Log} [1 \pm \Gamma_1 \Gamma_g]$	U-shaped	0.2	0.05
System repeatability (previous assessment of $s(q_k)$ from 10 repeats, 1 reading on EUT)	Standard dev.	0.2	0.35
Repeatability of EUT*		—	—
Combined standard uncertainty u_c [y]	normal	1.12	1.13
Expanded uncertainty U	normal [k = 2]	2.24	2.26

Calculation for 9 kHz to 150 kHz range:

$$u_c [y] = \pm \sqrt{\frac{1.3^2 + 1.3^2}{3} + \left(\frac{0.3}{2}\right)^2 + \frac{0.2^2}{2} + 0.2^2} = \pm 1.12 \text{ dB}$$

k=2:

$$U = 2 \times u_c [y] = 2 \times \pm 1.12 = \pm 2.24 \text{ dB}$$

Model : TX-D9S55U

Serial No. : FX8640003

Standard : FCC Part 15 Class B

Condition File : FCC-B

Remark : Operated ("H" Pattern)

: EUT2; M/N: TY-LD67AZ, S/N: None, AC 120 V, 60 Hz

: 640 X 480, fH:31.5 kHz, fV: 60 Hz

: Video I/F Cable: D-Sub=BNC 1.8m length

AC Power : 120 V 60 Hz

Temperature : 15 deg.

Humidity : 30 %

Operator : H. Wakabayashi

----- Results -----

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV]	Limit [dBuV]	Margin [dB]
Phase N						
1	0.50867	31.0	10.8	41.8	48.0	6.2
2	2.03105	24.5	10.6	35.1	48.0	12.9
3	11.88092	27.1	10.6	37.7	48.0	10.3
4	14.31562	26.7	11.0	37.7	48.0	10.3
5	15.63648	27.1	11.2	38.3	48.0	9.7
6	17.26055	26.9	11.5	38.4	48.0	9.6

***** Cosmos Corp. *****

<<< Conducted Emission >>>

24 December, 1998 09:58

Page 1

Model : TX-D9S55U
Serial No. : FX8640003
Standard : FCC Part 15 Class B
Condition File : FCC-B
Remark : Operated ("H" Pattern)
: EUT2; M/N: TY-LD67AZ, S/N: None, AC 120 V, 60 Hz
: 640 X 480, fH:31.5 kHz, fV: 60 Hz
: Video I/F Cable: D-Sub=BNC 1.8m length
AC Power : 120 V 60 Hz
Temperature : 15 deg.
Humidity : 30 %
Operator : H. Wakabayashi

----- Results -----

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV]	Limit [dBuV]	Margin [dB]
1	0.50729	30.7	10.8	41.5	48.0	6.5
2	0.91212	20.1	10.8	30.9	48.0	17.1
3	2.03106	24.7	10.6	35.3	48.0	12.7
4	16.33848	28.2	11.4	39.6	48.0	8.4
5	17.15161	27.6	11.5	39.1	48.0	8.9
6	27.80360	21.3	12.9	34.2	48.0	13.8

*****Cosmos Corp*****
<<< Radiated Emission >>>

23 December, 1998 12:54
Page 1

Model : TX-D9S55U
Serial No. : FX8640003
Standard : FCC Part 15 Class B 10m
Condition File : 10m
Condition : Operated ("H" Pattern)
Remarks : EUT2; M/N: TY-LD67AZ, S/N: None, AC 120 V, 60 Hz
: 1600 X 1200, fH: 93.8 kHz, fV: 75 Hz
: Video I/F Cable: D-Sub=BNC 1.8m length
AC Power : 120 V 60 Hz
Temperature : 15 deg.
Humidity : 30 %
Operator : H. Wakabayashi

----- Final Result -----

Q P

- Horizontal Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
1	159.996	35.6	-16.6	19.0	33.5	14.5

- Vertical Polarization -

No.	Frequency [MHz]	Reading [dBuV]	c.f. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2	47.999	39.9	-18.1	21.8	30.0	8.2
3	119.985	39.0	-15.6	23.4	33.5	10.1
4	202.180	39.2	-17.8	21.4	33.5	12.1
5	233.270	38.6	-15.7	22.9	36.0	13.1
6	248.815	39.1	-14.5	24.6	36.0	11.4
7	295.449	36.4	-13.1	23.3	36.0	12.7
8	310.994	40.1	-12.7	27.4	36.0	8.6
9	326.539	39.8	-12.3	27.5	36.0	8.5