

EA 95574
MKES99-F020

**MATSUSHITA-KOTOBUKI
ELECTRONICS INDUSTRIES LTD.**

SAIJO DIVISION

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Date: Sept. 30, 1999

Report of Measurements (Part I)

REQUIRED IN () SUBPART B (TV INTERFACE DEVICE)

(X) SUBPART B (CLASS B PERIPHERALS)

EXHIBIT # : 3-1
FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D
Sheet 1 of 10 Sheets

Name of Manufacturer: Matsushita-Kotobuki Electronics Industries Ltd.

Address of Manufacturer: 247 Fukutake, Saijo, Ehime, Japan.

Device Under Measurement

FCC ID : ACJ927127K
Model No. : PV-L850D
Trade Name : Panasonic
Applicant : Matsushita Electric Ind. Co., Ltd.

Certification

On the basis of the measurement data contained in Part II, all devices bearing the aforementioned FCC ID (model No., chassis No., and trade names) are stated by the undersigned to be capable of complying with the applicable sections of Part 15 of the FCC rules governing restricted radiation devices at the time of manufacture and may be expected to continue to comply under normal conditions and with usual maintenance. The undersigned also states that the device measured was an engineering prototype, pre-production, or production unit. If changes are applied to future units and such changes adversely alter spurious radiation, an amended report of measurements will be supplied to the FCC.



Richard Mullen
Matsushita Electric Corp. of America
One Panasonic Way, Panazip 4B-8
Secaucus, NJ 07094



K. Ishikawa
Sr. Engineer

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EXHIBIT # : 3-1
 FCC ID : ACJ927127K
 OUR REF. : MKES99-F020
 MODEL NO. : PV-DV1L850D
 Sheet 2 of 10 Sheets

Part 15 Subpart B. (Class B Peripherals) - Part II

1) 15.107 Power Line Conducted Voltage

Freq. (MHz)	Limits (dBuV)	Interference (dBuV)	
		1-end & Grounded	The other- End & Gro.
0.51	48.0	30.6	33.1
0.58	48.0	27.5	29.7
0.67	48.0	26.5	29.6
0.75	48.0	22.8	26.6
2.55	48.0	21.5	24.9
5.73	48.0	21.4	24.1

(Refer to Sheet 3, 5, 8 of 10 Sheets)

2) 15.109 Radiated Emission

Freq. (MHz)	Limits (dBuV/m)	Emission (dBuV/m)	
		Horiz.	Vert.
85.91	40.0	35.0	29.6
100.23	43.5	37.0	31.9
114.55	43.5	36.5	24.7
128.86	43.5	37.8	24.7
257.73	46.0	39.9	33.8
329.32	46.0	41.0	34.3

(Refer to Sheet 4, 6, 7, 9, 10 of 10 Sheets)

MEASUREMENT SITE : MKS SITE

MEASUREMENT PROCEDURE : ANSI C63.4-1992

Note:

(1) Detailed report: Refer to attached sheets.

I HEREBY STATE THAT: The measurements shown in Part II of this form were made in accordance with The procedures indicated and the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the Qualifications of all persons taking them.

I FURTHER STATE THAT: On the basis of the measurements made, the device tested is capable of operation in compliance with the requirements of Part 15 of the FCC Rules under normal use and maintenance.



T. Watanabe
Engineer

EXHIBIT # : 3-1
 FCC ID : ACJ927127K
 OUR REF. : MKES99-F020
 MODEL NO. : PV-L850D

Sheet 3 of 10 Sheets

1) 15.107 Power Line Conducted Voltage

Freq. (MHz)	Meter Reading (dBuV)		LISN Factor (dB)	Matching Pad Loss (dB)	Interference (dBuV)	
	1-end & Grounded	The other-End & Gro.			1-end & Grounded	The other-End & Gro
0.51	24.3	26.8	0.1	6.2	30.6	33.1
0.58	21.2	23.4	0.1	6.2	27.5	29.7
0.67	20.2	23.3	0.1	6.2	26.5	29.6
0.75	16.5	20.3	0.1	6.2	22.8	26.6
2.55	15.0	18.4	0.3	6.2	21.5	24.9
5.73	14.8	17.5	0.4	6.2	21.4	24.1

Note:

1. Sample calculation at

1-end & Gro., 0.51 MHz ; $24.3 + 0.1 + 6.2 = 30.6$ (dBuV)

2. Measuring Instruments:

- a) Field strength meter - Kyoritsu Electric Work Co., Ltd.
 Model : KNM-402C
 (1) Detector function : CISPR Q-PEAK
 (2) IF band width : 9 kHz
 (3) Input impedance : 75 ohms
- b) Line impedance stabilized network (LISN)
 - Kyoritsu Electric Work Co., Ltd.
 Model : KNW-406, KNW-407
 50 ohms / 50 uH network
- c) Matching pad - Kyoritsu Electric Work Co., Ltd.
 Model : KPD-401

3. The spectrum was checked from 0.45 MHz to 30 MHz and the six highest emissions relative to the appropriate limit were measured and reported.

EXHIBIT # : 3-1

FCC ID : ACJ927127K

OUR REF. : MKES99-F020

MODEL NO. : PV-L850D

Sheet 4 of 10 Sheets

2) 15.109 Radiated Emission

Freq. (MHz)	Meter Reading Open Volt. (dBuV)		Correction Factor (Db) Open Vol.	Emission at 3 meters (dBuV)	
	Horiz.	Vert.		Horiz.	Vert.
85.91	25.7	20.3	9.3	35.0	29.6
100.23	24.6	19.5	12.4	37.0	31.9
114.55	22.2	10.4	14.3	36.5	24.7
128.86	21.8	8.7	16.0	37.8	24.7
257.73	18.8	12.7	21.1	39.9	33.8
329.32	20.9	14.2	20.1	41.0	34.3

Note:

1. Sample calculation at

Horiz., 85.91 MHz ; $25.7 + 9.3 = 35.0$ (dBuV/m)

2. Measuring Instruments:

a) Field strength meter

- Rohde & Schwarz

(for 30 MHz to 1 GHz)

Model : ESVP

(1) Frequency range : 20 MHz to 1300 MHz

(2) RF Input : 50 ohms

(3) IF band width : 7.5 kHz / 12 kHz/
120 kHz / 1 MHz

(4) Detector function: Average/

CISPR Q-PERK/PERK

c) Receiving antenna

- Schwarzbeck

Model : VHA9103 30 - 300 MHz

Model : UHALP9107 300 - 1000 MHz

- The Electro-Mechanics Company

Model : 3115 1 - 18 GHz

3. The Spectrum was checked from 30 MHz to 1000 MHz and the six highest emissions relative to the appropriate limit were measured and reported.

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FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D

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15.107 POWER LINE CONDUCTED VOLTAGE

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -

(Arrangement of interface cable on the test table)

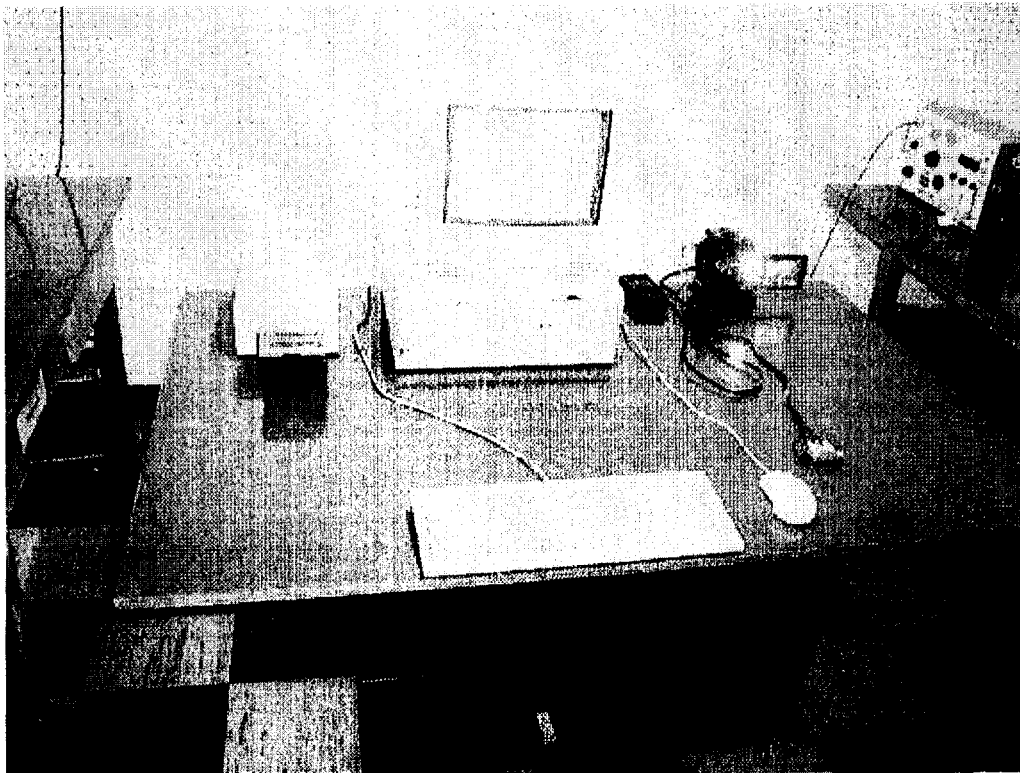


EXHIBIT # : 3-1
FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D

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15.109 RADIATED EMISSION

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -
(Arrangement of interface cable on the test table)

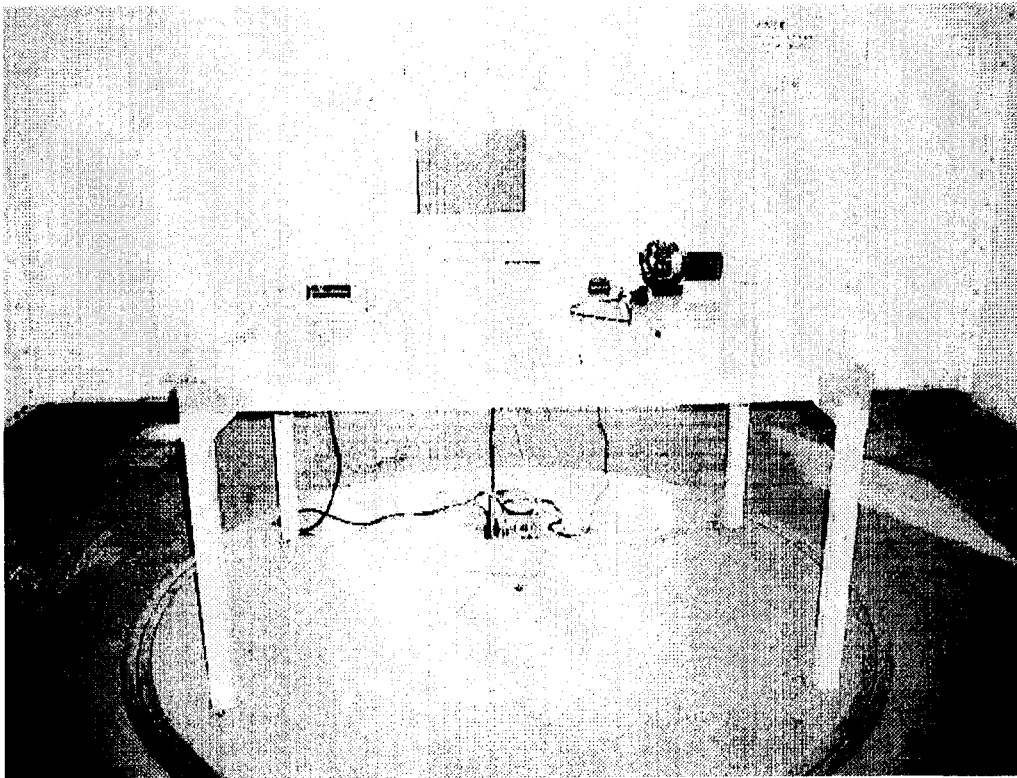


EXHIBIT # : 3-1
FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D

Sheet 7 of 10 Sheets

15.109 RADIATED EMISSION

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -

(Arrangement of interface cable on the test table)

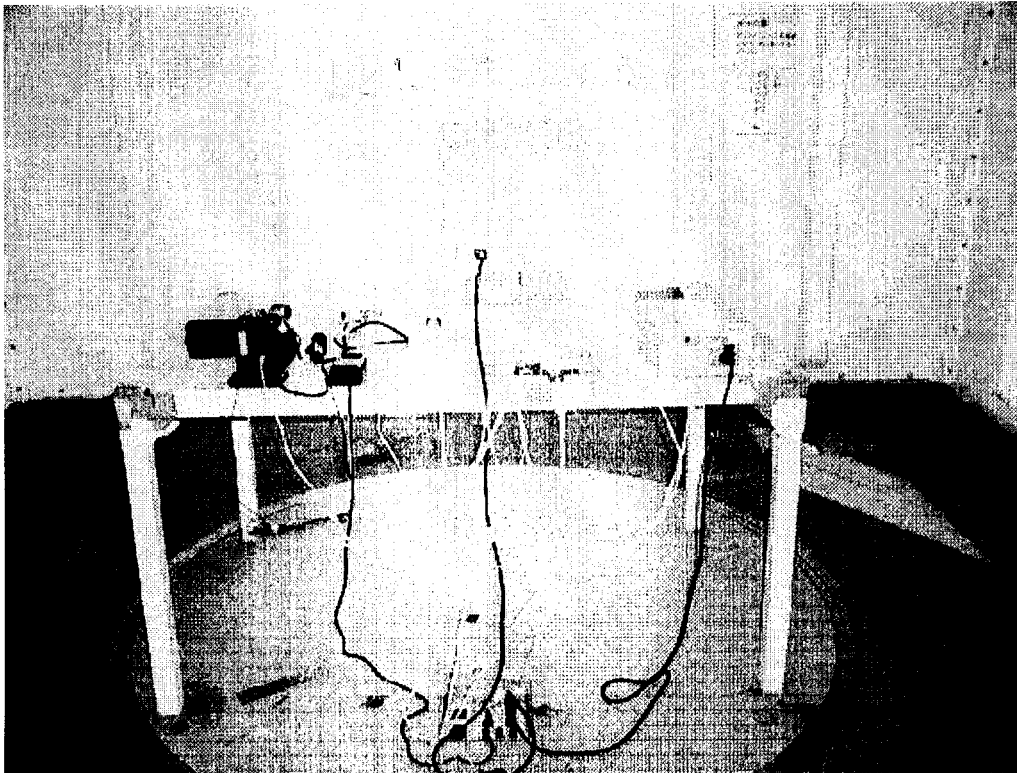


EXHIBIT # : 3-1
FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D

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JIS A4 190 x 250 mm

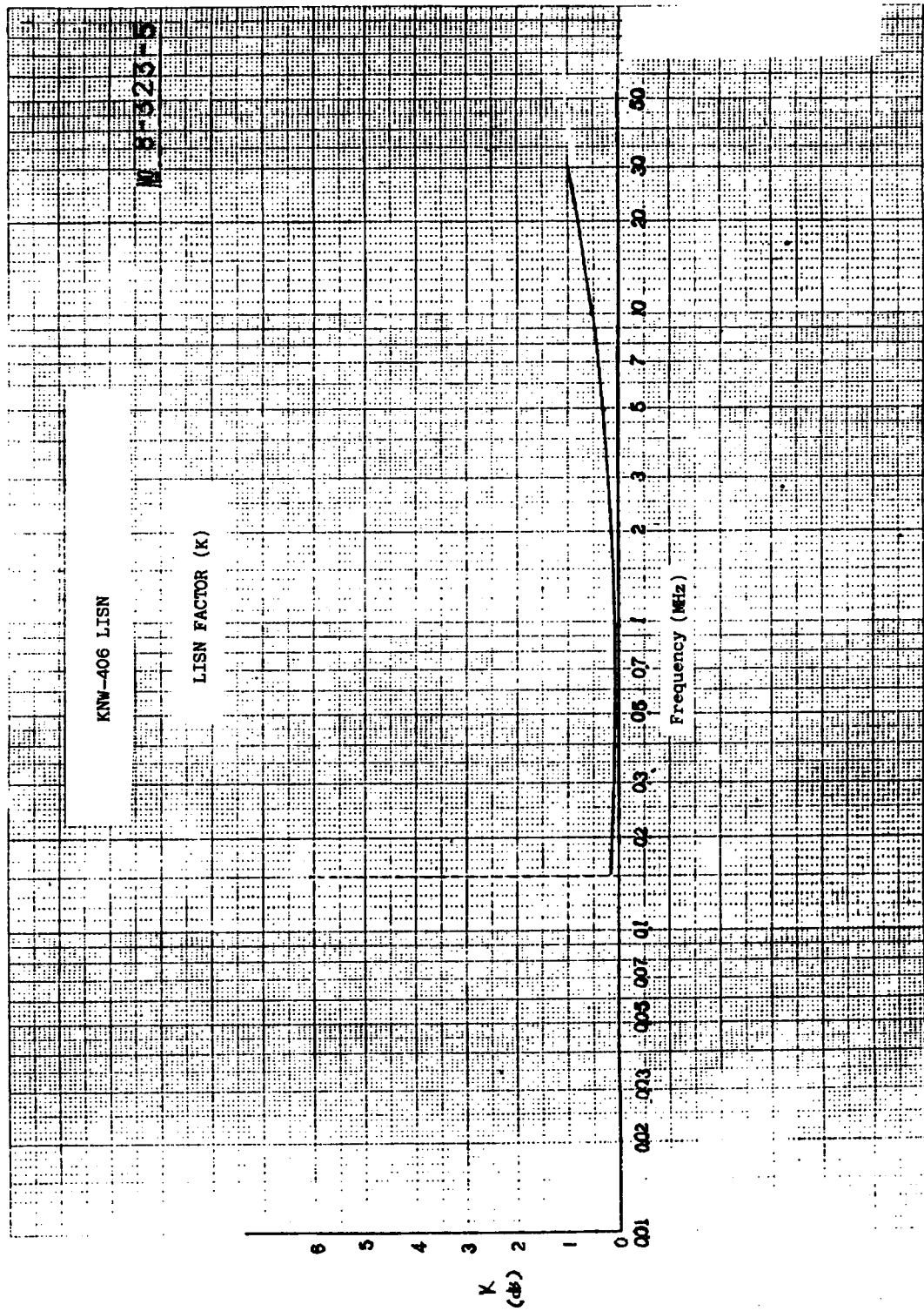
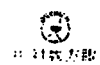
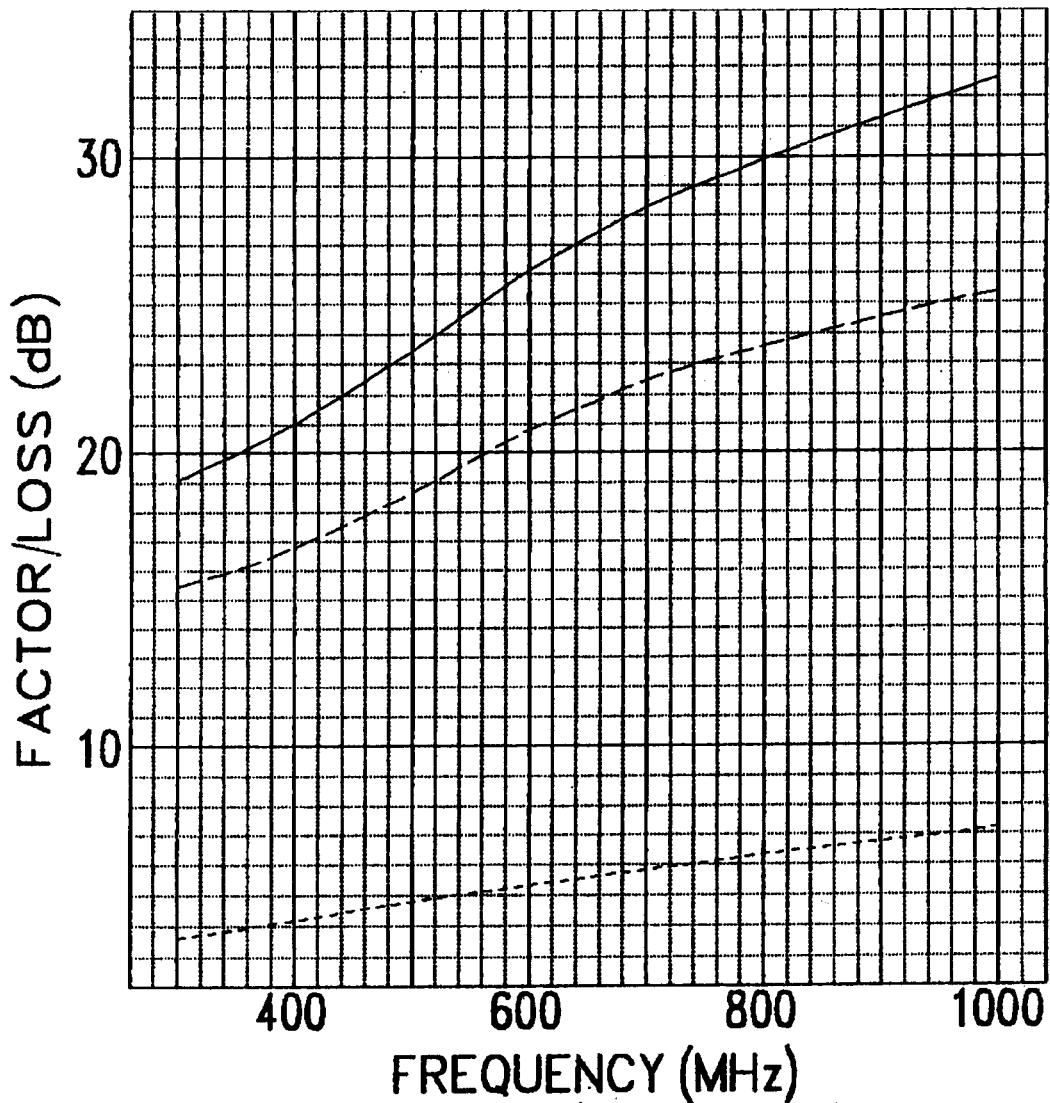


EXHIBIT # : 3-1
 FCC ID : ACJ927127K
 OUR REF. : MKES99-F020
 MODEL NO. : PV-L850D

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CORRECTION FACTOR OF UHALP9107



$E = V + K$

E : Field Strength

V : Correction Factor (dB)

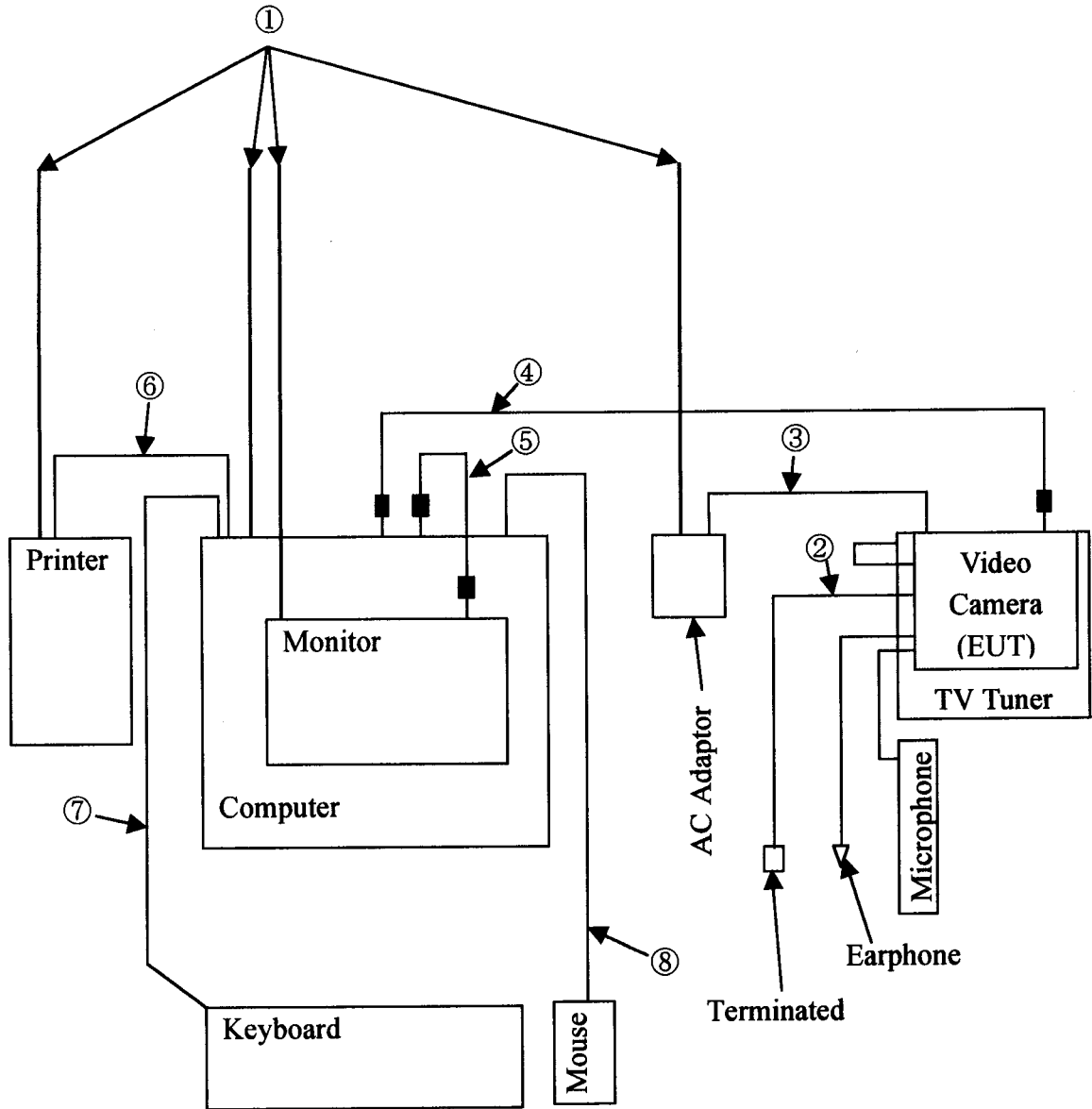
———— : Correction Factor

----- : Antenna Factor

-·-·-·-· : Cable Loss

Block Diagram of System for Measurements

EXHIBIT # : 3-2
FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D



Type of Interface Cable

1. Power Cord
2. Audio/Video Cable (1.5 m) : Shielded Cable ; Circular Cable
3. DC Cable (2.0 m) : Circular Cable
4. PC Interface cable (2.0 m) : Shielded Cable with²Ferrite Cores ; Circular Cable
(Serial Cable)
5. Monitor Cable (1.5 m) : Shielded Cable with Ferrite Cores ; Circular Cable
(Permanently attached to the Monitor)
6. Printer Cable (1.5 m) : Shielded Cable ; Circular Cable
(Parallel Cable)
7. Keyboard Cable (1.7 m) : Shielded Cable ; Circular Cable
(Permanently attached to the Keyboard)
8. Mouse Cable (1.8 m) : Shielded Cable ; Circular Cable
(Permanently attached to the Mouse)

EXHIBIT # : 3-2
FCC ID : ACJ927127K
OUR REF. : MKES99-F020
MODEL NO. : PV-L850D
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Description

Video Camera (Application Device)	Model No. : PV-L850D Trade Name : Panasonic FCC ID : ACJ927127K
TV tuner Adaptor (For Video Camera. Verified Device)	Model No. : LSSQ0184 Trade Name : Panasonic
AC Adaptor (For Video Camera)	Model No. : PV-A18 Trade Name : Panasonic
Microphone	Model No. : ECM-K57 Trade Name : SONY
Monitor (Certified Device)	Model No. : 500-069EV Trade Name : Gateway FCC ID : BEJCS592
Computer (DoC Device)	Model No. : DCM Trade Name : DELL Computer Corporation
Keyboard (Certified Device)	Model No. : SK-1000REW Trade Name : DELL Computer Corporation FCC ID : GYUR36SK
Mouse (Certified Device)	Model No. : 90741 Trade Name : Microsoft Corporation FCC ID : C3KKMP3
Printer (Certified Device)	Model No. : P-200JD Trade Name : Panasonic FCC ID : IUO5LU0002