



FUJI PHOTO FILM CO., LTD.

26-30, NISHIAZABU 2-CHOME,
MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934

Facsimiles: (03) 3406-9967

page 5 of 7

FCC ID: F5GCX-400

Part 15 Sub.part B Class B Digital Device

6. TESTED SYSTEM DETAILS

6.1 Peripherals and Others :

<i>Description</i>	<i>Model Name</i>	<i>Serial No.</i>	<i>Manufacturer</i>	<i>FCC ID</i>
Personal Computer	12XL212	1V08FHNJE1N5	Compaq Computer Co., Ltd.	DOC
Mouse	M-BB48	LZE01271677	Logitech	DOC
PC Monitor	M2978	CY52401HF3CV	LG Electronics, Inc.	BEJCA500
Scanner	AS-1	0009	Fuji Photo Film Co., Ltd.	F5GAS-1
AC Adapter (for PC)	LE-9702B-01	177625-001	Compaq Computer Co., Ltd.	N/A
Video Monitor	PVM-8042Q	2013288	Sony Corp.	N/A

Note:

*DOC: Declaration of Conformity by Manufacturer, Compaq Computer Co., Ltd., or Logitech.

* N/A: Equipment required for the Verification.

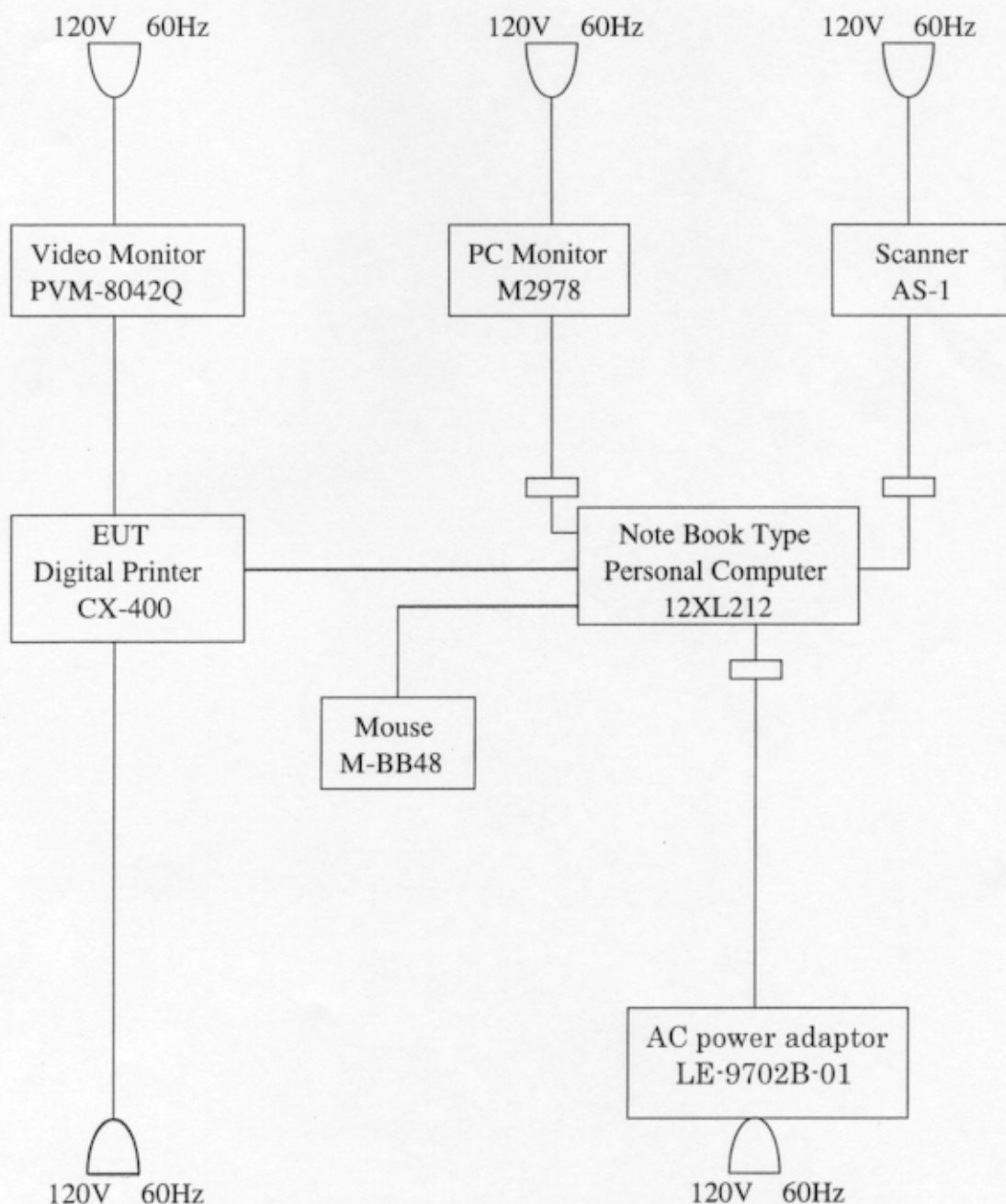
6.2 List of Cables :

<i>Description</i>	<i>Length</i>	<i>Type of shield</i>	<i>Ferrite Core</i>
<i>Description</i>	<i>Length</i>	<i>Type of shield</i>	<i>Ferrite Core</i>
EUT / Personal Computer	1.0 m	Shielded	N/A
EUT / Video Monitor	2.4 m	Shielded	N/A
DC Power Cord (PC/AC adaptor)	1.55 m	Shielded	Provided
AC Power Cord (Scanner)	1.8 m	Non-shielded	N/A
Scanner / Personal Computer	1.5 m	Shielded	Provided
Mouse / Personal Computer	1.9 m	Shielded	N/A
PC Monitor / Personal Computer	1.65 m	Shielded	Provided
AC Power Cord (Video Monitor)	1.50 m	Non-shielded	N/A
AC Power Cord (EUT)	2.00 m	Non-shielded	N/A
AC Power Cord (PC Monitor)	1.7 m	Non-shielded	N/A

Note:

* Provided: The cable is an accessory for Personal Computer, Scanner or PC Monitor that was attached a ferrite core.

Figure 6-1 System Configuration Diagram :





FUJI PHOTO FILM CO., LTD.

26-30, NISHIAZABU 2-CHOME,

MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934

Facsimiles: (03) 3406-9967

FCC ID: F5GCX-400

Part 15 Sub.part B Class B Digital Device

7. TEST RESULTS

7.1 Conducted Radio Noise Measurement

7.1.1 Measurement Instrumentation Used:

(Model / Serial No. / Manufacturer)

Test Receiver ----- (ESCS 30 / 825788-007 / Rohde & Schwarz)

L. I. S. N ----- (KNW-407 / 8-823-10 / Kyoritsu Electrical)

L. I. S. N ----- (KNW-407 / 8-680-7 / Kyoritsu Electrical)

Spectrum Analyzer System ----- (8568S / 2445A00924 / Hewlett Packard)

7.1.2 Measurement Procedure:

The power line conducted interference measurements were performed in a shield enclosure with peripherals placed on a table, 80cm high over a metal floor.

It was located more than required distance away from the shielded enclosure wall.

The EUT was plugged into the L.I.S.N. and the frequency range of interest scanned.

FCC ID: F5GCX-400
Part 15 Subpart B Class B Digital Device

7.1.3 Test Data

Table 7.1-1 Conducted Radio Noise Measurement Results:

Operating mode: Printing from PC
Test Procedure: ANSI C63.4-1992

Date of measurement: March 11, 2002
Temperature: 19 degree C
Humidity: 33 %

Frequency	Results		Results	Limit	Margin
	Meter Reading.		Emission Level		
	VA.	VB.			
(Mhz)	(dBuV/m)		(dBuV/m)	(dBuV/m)	(dBuV/m)
0.4700	31.8	27.1	31.8	47.9	16.1
0.7300	30.7	30.8	30.8	47.9	17.1
3.0300	27.3	27.8	27.8	47.9	20.1
8.8000	32.6	30.7	32.6	47.9	15.3
12.4000	30.2	27.8	30.2	47.9	17.7
26.1700	26.8	26.0	26.8	47.9	21.1

Note:

- 1) Emission Levels are higher levels of VA or VB of Meter Readings + Correction Factor.
- 2) VA: Between one end of the power cable and the grounded.
VB: Between the other end of power cable and the grounded.
- 3) Margin = Limit - Emission Level

7.1.4 Conducted Radio Noise Calculation

The conducted radio noise is calculated by adding the calibration factor to the measured reading. The basic equation and a sample calculation are as follows:

$$\text{CRN} = \text{TRM} + \text{CF}$$

$$\text{Margin} = \text{Limit} - \text{CRN}$$

where CRN = Conducted Radio Noise (dBuV)

TRM = Test Receiver Reading (dBuV)

CF : Correction Factor (dB/m)

The Correction factor includes cable loss and LISN factor.



FUJI PHOTO FILM CO., LTD.

26-30, NISHIAZABU 2-CHOME,

MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934

Facsimiles: (03) 3406-9967

FCC ID: **F5GCX-400**

Part 15 Sub.part B Class B Digital Device

7.2 Radiated Radio Noise Measurement

7.2.1 Measurement Instrumentation Used :

(Model / Serial No. / Manufacturer)

Test Receiver ----- (ESCS 30 / 834115-020 / Rohde & Schwarz)

Bi-Conical Antenna ----- (BBA9106 / D-6901 No.2 / Schwarzbeck)

Log-Periodic Antenna ----- (UHALP9107 / 424-517 / Schwarzbeck)

Spectrum Analyzer System ----- (8568S / 2445A00924 / Hewlett Packard)

7.2.2 Measurement Procedure:

The EUT was placed in a 80cm high table along with the peripherals.

The turn table was separated from the antenna at a distance of 3 meter. Cables were placed in a position to produce maximum emission as determined by experimentation, and operation mode was selected for maximum.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities.

FCC ID: F5GCX-400
Part 15 Sub.part B Class B Digital Device

7.2.3 Test Data

Table 7.2-1 Radiated Radio Noise Measurement Results:

Operating mode: Printing from PC

Date of measurement: March 11, 2002

Test Procedure: ANSI C63.4-1992

Temperature: 14 degree C

Humidity: 35%

Frequency	Correction	Results		Results	Limit	Margin
	Factor	Meter Reading.		Emission Level		
(Mhz)	(dB)	(dBuV/m)		(dBuV/m)	(dBuV/m)	(dBuV/m)
		Hori.	Vert.			
38.300	16.5	-	32.4	32.4	40.0	7.6
68.200	8.0	26.4	34.0	34.0	40.0	6.0
83.470	8.7	-	26.0	26.0	40.0	14.0
96.010	11.2	27.8	27.8	27.8	43.5	15.7
120.010	14.9	36.7	-	36.7	43.5	6.8
144.010	16.7	-	23.0	23.0	43.5	20.5
192.010	19.1	40.2	37.6	40.2	43.5	3.3
196.360	19.2	36.3	28.9	36.3	43.5	7.2
311.420	19.8	39.6	-	39.6	46.0	6.4
319.090	20.0	36.8	37.8	37.8	46.0	8.2
340.060	20.4	35.7	-	35.7	46.0	10.3
343.630	20.5	33.6	39.0	39.0	46.0	7.0
368.180	20.9	-	37.9	37.9	46.0	8.1
417.270	21.8	31.2	36.8	36.8	46.0	9.2
490.900	23.4	-	39.2	39.2	46.0	6.8
539.990	24.4	39.3	38.9	39.3	46.0	6.7
564.530	25.0	-	39.1	39.1	46.0	6.9
834.530	29.6	-	35.5	35.5	46.0	10.5
908.160	32.0	36.8	40.5	40.5	46.0	5.5
957.250	32.7	-	38.7	38.7	46.0	7.3

Note: 1) Meter Readings are corrected by all Correction Factors.

2) Emission Levels are higher levels of Hori. or Vert. of Meter Readings.

3) Margin = Limit - Emission Level.



FUJI PHOTO FILM CO., LTD.

26-30, NISHIAZABU 2-CHOME,
MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934

Facsimiles: (03) 3406-9967

FCC ID: F5GCX-400

Part 15 Sub.part B Class B Digital Device

7.2.4 Radiated Radio Noise Calculation

The radiated radio noise is calculated by adding the correction factor to the measured reading. The basic equation and a sample of calculation are as follows;

$$\text{RRN} = \text{TRM} + \text{CF}$$

$$\text{Margin} = \text{Limit} - \text{RRN}$$

where RRN = Radiated Radio Noise (dBuV)

TRM = Test Receiver Reading (dBuV)

CF: Correction Factor (dB/m), The correction factor includes pre-amplifier gain, cable loss and antenna factor.