

TDK CORPORATION
QUALITY ASSURANCE DEPARTMENT
2-15-7 HIGASHI-OWADA, ICHIKAWA-SHI
CHIBA 272-0026, JAPAN

TDK EMC CENTER CHIKUMAGAWA OPEN SITE

543 OTAI SAKU-CITY NAGANO JAPAN

REPORT OF MEASUREMENTS ON DIGITAL DEVICE

Date : February 27, 2001

Issued in : Saku-city, JAPAN

TDK APPLICATION No.: TDC-01-0204

1. Applicant : FUJI PHOTO FILM CO., LTD
13-45, SENZUI 3 - CHOME, ASAKA - SHI, SAITAMA
351 - 8585 JAPAN
2. Factory : FUJI FILM PHOTONIX CO., LTD
1 - 6, MATSUZAKADAIRA TAIWA - CHO,
KUROKAWA - GUN, MIYAGI - KEN, 981 - 3492 JAPAN
3. Description of Equipment Under Test (EUT)
 - 3-1. EUT : DIGITAL CAMERA
 - 3-2. Category : FCC Class B Digital Device
 - 3-3. FCC ID No. : F5GFP-4800
 - 3-4. Trade Name : FUJIFILM
 - 3-5. Model No. : Fine Pix 4800ZOOM
 - 3-6. Serial No. : RU0008
 - 3-7. Date of Manufacture : February, 2001
 - 3-8. Power Supply : 120 V AC, 60Hz
4. Regulation Applied : FCC Part 15 Subpart B CLASS B 3m
5. Measurement Procedure Used : ANSI C63.4 - 1992
6. Place of Measurement : TDK EMC CENTER CHIKUMAGAWA OPEN SITE
7. Date of Measurement : February 19, 2001
8. Measurement Results : The test results show that EUT conform to regulations
applied as shown in the attached sheets.

Note : (1) The test results relate only to items tested.

(2) This report shall not be reproduced except in full without the written approval of testing
laboratory.


Fumio Suga

Chief of TDK CHIKUMAGAWA OPEN SITE

Phone : 047-378-9470

TDK Application No. : TDC-01-0204

MEASUREMENT RESULTS OF RADIATED RADIO NOISE at 3m

Date : February 19, 2001

Temp. : 15 °C ; Humi. : 56 %

Test Receiver : Rohde & Schwarz ESCS 30
 Operation Mode : Detector function : CISPR Quasi-Peak
 6dB Band width : 120kHz External Attenuator : none

Description of Equipment : DIGITAL CAMERA

Model No. : Fine Pix 4800ZOOM

Test Condition of Equipment Under Test (EUT)

1) Configuration of EUT : Refer to sheet No.5, 6 and .7

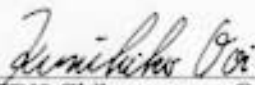
2) EUT Grounding : None.

3) Operating Condition : CAMERA Mode.

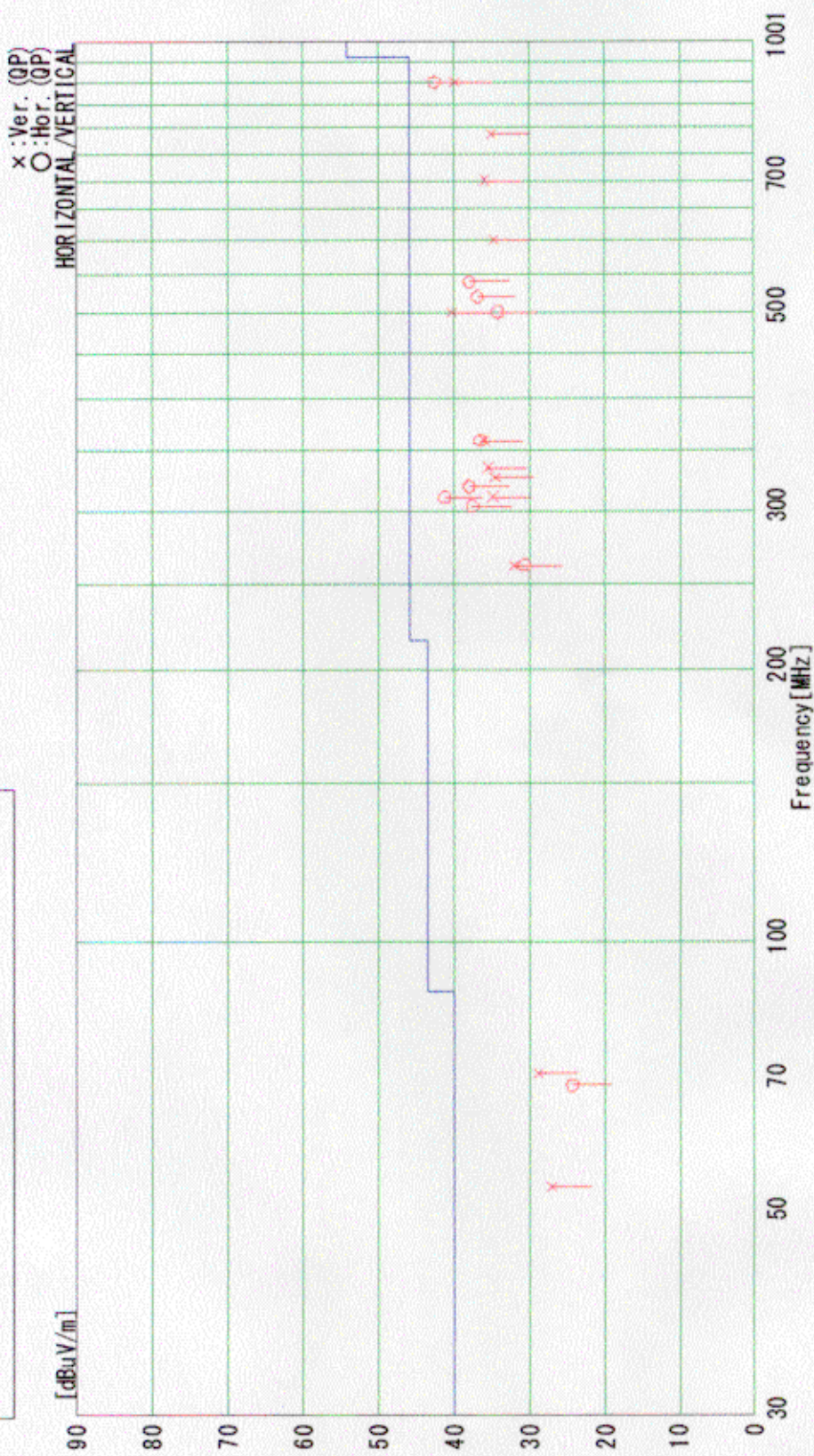
Frequency (MHz)	Correction Factor (dB)	Meter Reading (dB μ V/m)		Limit (dB μ V/m)	Emission Level (dB μ V/m)		Margin (dB)
		Hor.	Ver.		Hor.	Ver.	
53.640	11.3	---	27.0	40.0	---	27.0	13.0
69.550	7.8	24.3	---	40.0	24.3	---	15.7
71.660	7.7	---	28.7	40.0	---	28.7	11.3
261.820	21.1	30.6	32.0	46.0	30.6	32.0	14.0
304.260	19.7	37.5	---	46.0	37.5	---	8.5
311.420	19.8	41.2	34.8	46.0	41.2	34.8	4.8
320.050	20.0	37.9	---	46.0	37.9	---	8.1
327.280	20.2	---	34.5	46.0	---	34.5	11.5
336.020	20.3	---	35.4	46.0	---	35.4	10.6
360.000	20.8	36.5	36.0	46.0	36.5	36.0	9.5
499.810	23.6	34.1	40.2	46.0	34.1	40.2	5.8
520.070	24.0	36.8	---	46.0	36.8	---	9.2
540.080	24.4	37.9	---	46.0	37.9	---	8.1
600.980	26.0	---	34.7	46.0	---	34.7	11.3
699.780	27.6	---	35.9	46.0	---	35.9	10.1
787.500	28.5	---	34.9	46.0	---	34.9	11.1
899.830	31.8	42.5	39.8	46.0	42.5	39.8	3.5

Note : 1) Meter Readings include Correction Factor (Antenna factor , Cable loss).

2) Margin = Limit - Emission Level.

Tested by : 
 Engineer of TDK Chikumagawa Open Site

FCC 15B CLASS B RADIATED 3m
EUT : Fine Pix 4800ZOOM 120V/60Hz
MODE : CAMERA Mode
Frequency : 30 ~ 1000 MHz



TDK Application No. : TDC-01-0204

MEASUREMENT RESULTS OF RADIATED RADIO NOISE at 3m

Date : February 19, 2001

Temp. : 15 °C ; Humi. : 56 %

Test Receiver :	Rohde & Schwarz ESCS 30		
Operation Mode :	Detector function : CISPR Quasi-Peak		
	6dB Band width : 120kHz	External Attenuator : none	

Description of Equipment :	DIGITAL CAMERA		
Model No. :	Fine Pix 4800ZOOM		

Test Condition of Equipment Under Test (EUT)

1) Configuration of EUT : Refer to sheet No.5, 6 and .7

2) EUT Grounding : None.

3) Operating Condition : USB Mode .

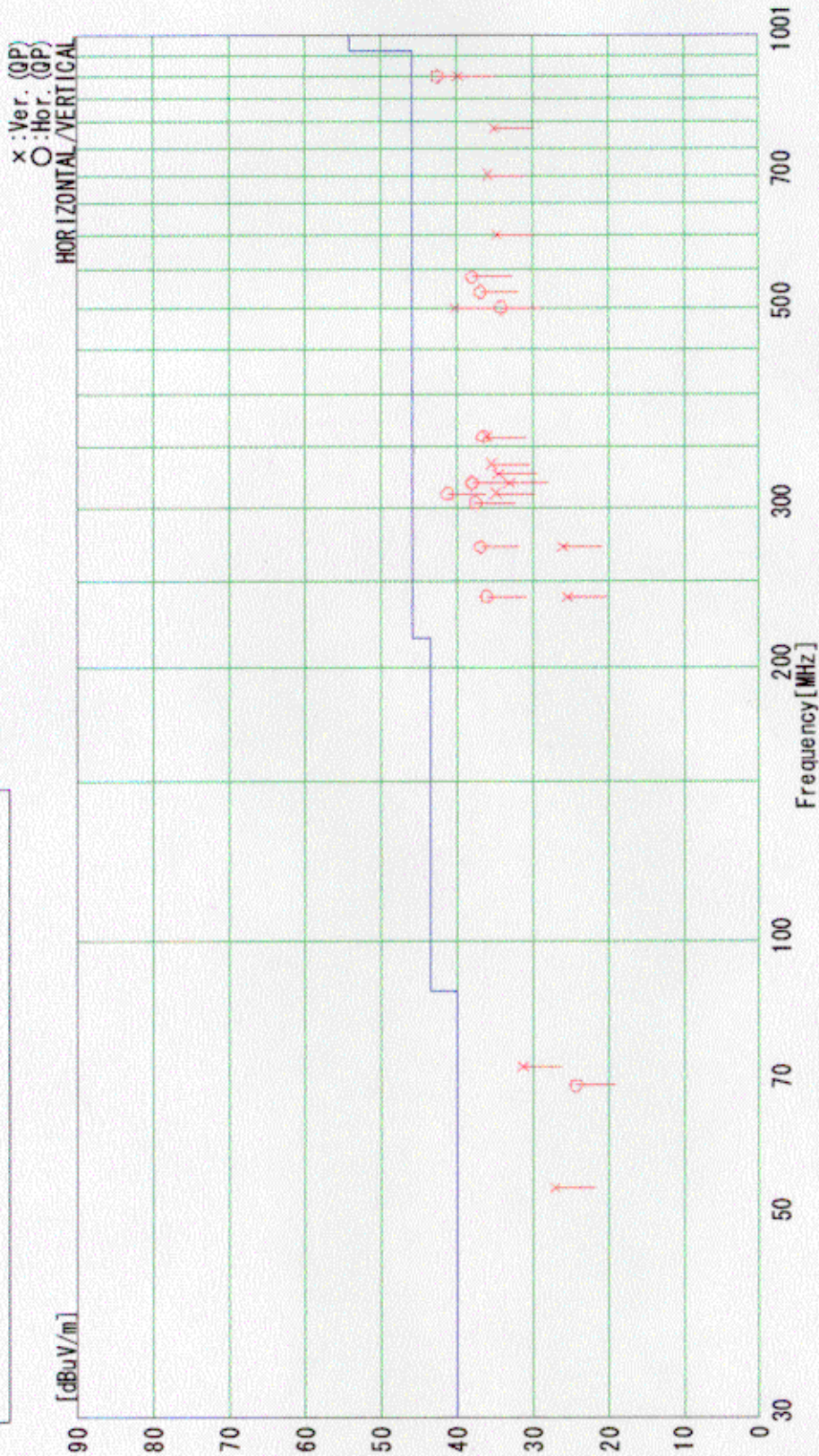
Frequency (MHz)	Correction Factor (dB)	Meter Reading (dB μ V/m)		Limit (dB μ V/m)	Emission Level (dB μ V/m)		Margin (dB)
		Hor.	Ver.		Hor.	Ver.	
53.640	11.3	---	27.0	40.0	---	27.0	13.0
69.550	7.8	24.3	---	40.0	24.3	---	15.7
72.870	7.7	---	31.3	40.0	---	31.3	8.7
240.020	20.7	36.1	25.3	46.0	36.1	25.3	9.9
272.040	21.5	36.8	25.9	46.0	36.8	25.9	9.2
304.260	19.7	37.5	---	46.0	37.5	---	8.5
311.420	19.8	41.2	34.8	46.0	41.2	34.8	4.8
320.050	20.0	37.9	33.0	46.0	37.9	33.0	8.1
327.280	20.2	---	34.5	46.0	---	34.5	11.5
336.020	20.3	---	35.4	46.0	---	35.4	10.6
360.000	20.8	36.5	36.0	46.0	36.5	36.0	9.5
499.810	23.6	34.1	40.2	46.0	34.1	40.2	5.8
520.070	24.0	36.8	---	46.0	36.8	---	9.2
540.080	24.4	37.9	---	46.0	37.9	---	8.1
600.980	26.0	---	34.7	46.0	---	34.7	11.3
699.780	27.6	---	35.9	46.0	---	35.9	10.1
787.500	28.5	---	34.9	46.0	---	34.9	11.1
899.830	31.8	42.5	39.8	46.0	42.5	39.8	3.5

Note : 1) Meter Readings include Correction Factor (Antenna factor , Cable loss).

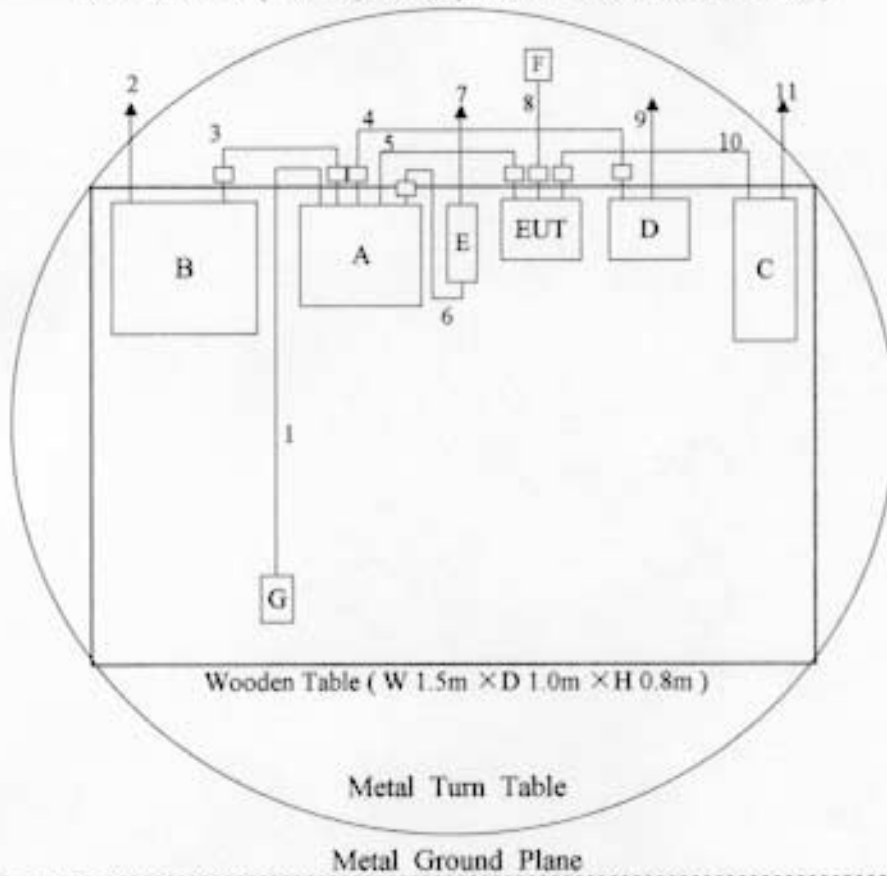
2) Margin = Limit - Emission Level.

Tested by : 
Engineer of TDK Chikumagawa Open Site

FCC 15B CLASS B RADIATED 3m
EUT : Fine Pix 4800ZOOM 120V/60Hz
MODE : USB Mode
Frequency : 30 ~ 1000 MHz



EUT's Test Arrangement of Radiation
Non Metallic (F. R. P.) Dome (W 8.0m × D 6.3m × H 5.5m)



Test Configuration

No.	Device	MODEL No.	FCC ID	S/N	Manufacturer
EUT	DIGITAL CAMERA	Fine Pix 4800Z	F5GFP4800	RU0008	FUJI PHOTO FILM CO., LTD
A	NOTE BOOK COMPUTER	PRESARIO 12XL212	DOC	1V08FHNJE1N5	COMPAQ COMPUTER CO., LTD.
B	PC MONITOR	M2978	BEJCA500	CY32401HF3CV	LG ELECTRONICS
C	VIDEO MONITOR	PVM-8040	-----	2029411	SONY
D	SCANNER	AS1	F5GAS-1	0009	FUJI PHOTO FILM CO., LTD
E	AC ADAPTER (PC)	LE-9702B-01	DOC	177625-001	COMPAQ COMPUTER CO., LTD.
F	AC ADAPTER (EUT)	AC-5VS	-----	9956	FUJI PHOTO FILM CO., LTD
G	MOUSE	M-BB48	DOC	LZE01271677	LOGITECH

Connection Cables

No.	I/F & Power Cable	Model No.	Cable Length	Feraite Core	Manufacturer
1	MOUSE CABLE	-----	1.90 m		SHIELD YES
2	PC MONITOR POWER CABLE	-----	1.70 m		
3	PC MONITOR CABLE	-----	1.65 m	YES	SHIELD YES
4	SCSI CABLE	-----	1.50 m	YES	SHIELD YES
5	USB CABLE	-----	1.50 m	YES	SHIELD YES
6	AC ADAPTOR CABLE	-----	1.50 m	YES	SHIELD YES
7	ADAPTOR POWER CABLE	-----	1.70 m		
8	EUT ADAPTOR CABLE	-----	1.90 m	YES	SHIELD YES
9	AC CABLE(SCANNER)	-----	1.80 m		
10	AV CABLE	-----	1.40 m	YES	SHIELD YES
11	AC CABLE(VIDEO MONITOR)	-----	1.50 m		

RADIATION MEASUREMENT

EUT : DIGITAL CAMERA

MODEL No. Fine Pix 4800ZOOM

CONFIGURATION FRONT VIEW



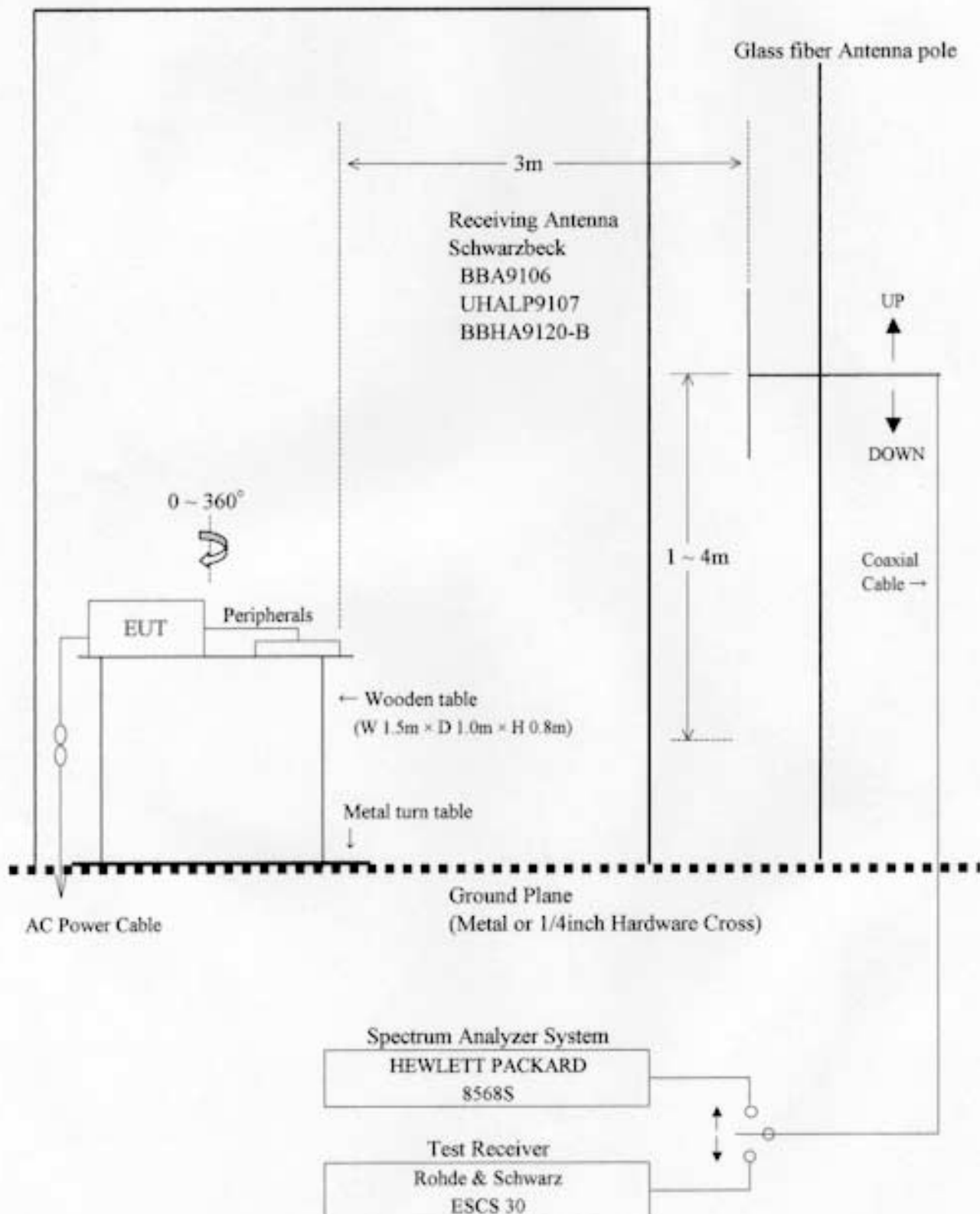
CONFIGURATION REAR VIEW



EUT's Test Arrangement of Radiation

Fig 1

Non metallic (F. R. P.) Dome (W 8.0m × D 6.3m × H 5.5m)



Date : February 19, 2001
Temp. : 18 °C ; Humi. : 65 %

Test Receiver :	Rohde & Schwarz ESCS 30		
Operation Mode :	Detector function : CISPR Quasi-Peak		
	6dB Band width :	10kHz	External Attenuator : none

Description of Equipment : DIGITAL CAMERA		
Model No. :	Fine Pix 4800ZOOM	; Type : Desk Top

Test Condition of Equipment Under Test (EUT)

1) Configuration of EUT :	Refer to sheet No.13, 14 and 15.
2) EUT Grounding :	None.
3) Operating Condition :	CAMERA Mode .

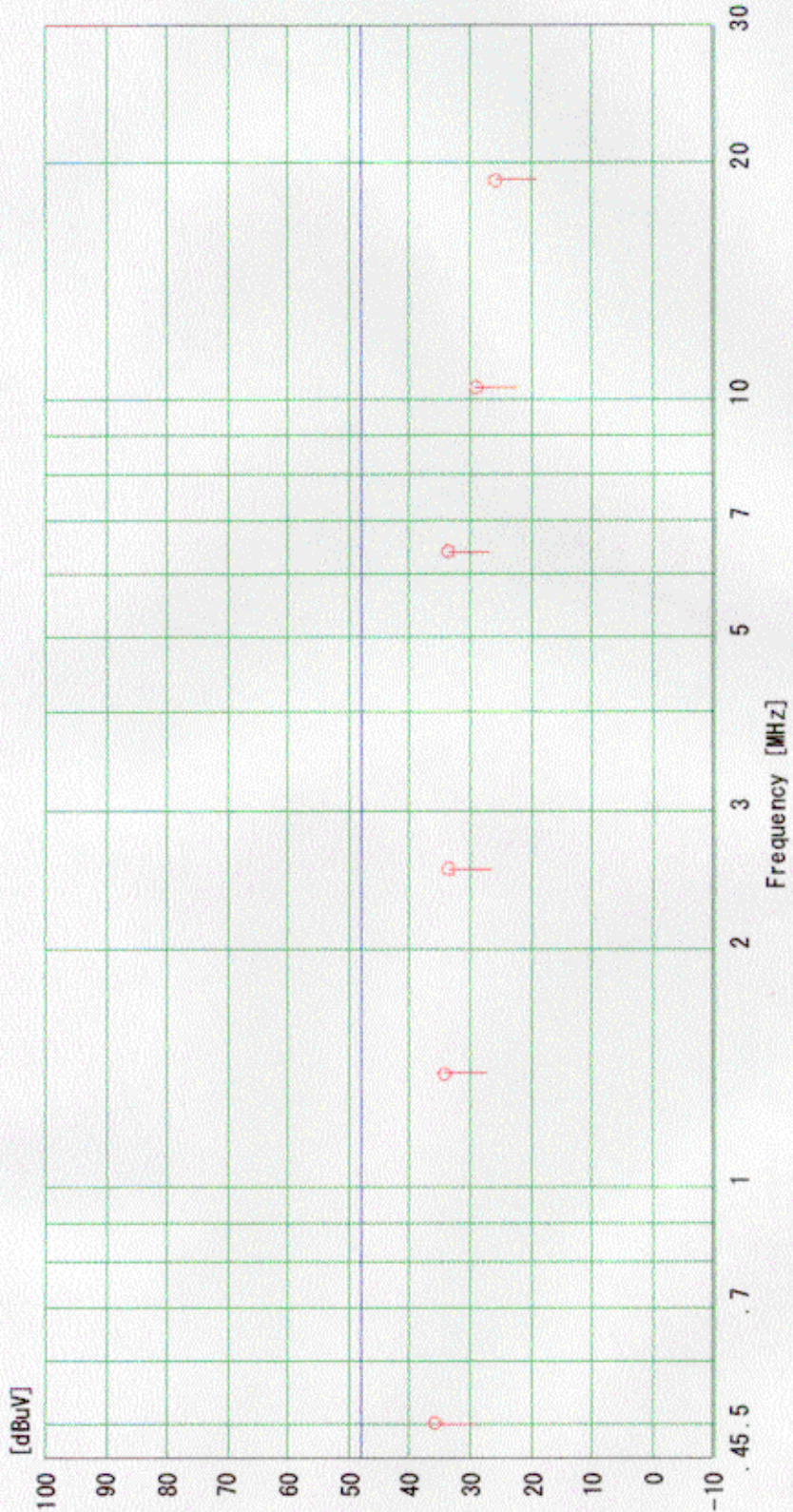
[illegible]

Note :

- 1) Correction Factor include LISN Factor and cable loss for 7 meters.
Meter Readings include Correction Factor.
- 2)VA : Between one end of the power cable and the grounded.
VB : Between the other end of the power cable and the grounded.
- 3)Margin = Limit – Emission Level.

Tested by : Tsunehiko Ooi
Engineer of TDK Chikumagawa Open Site

FCC 15B CLASS B CONDUCTED
EUT : Fine Pix 4800ZOOM 120V/60Hz
MODE : CAMERA Mode
Frequency : 0.45 ~ 30 MHz



Date : February 19, 2001
Temp. : 18 °C ; Humi. : 65 %

Test Receiver :	Rohde & Schwarz ESCS 30		
Operation Mode :	Detector function : CISPR Quasi-Peak		
	6dB Band width :	10kHz	External Attenuator : none

Description of Equipment :	DIGITAL CAMERA	
Model No. :	Fine Pix 4800ZOOM	; Type : Desk Top

Test Condition of Equipment Under Test (EUT)

- | | |
|---------------------------|----------------------------------|
| 1) Configuration of EUT : | Refer to sheet No.13, 14 and 15. |
| 2) EUT Grounding : | None. |
| 3) Operating Condition : | USB Mode . |

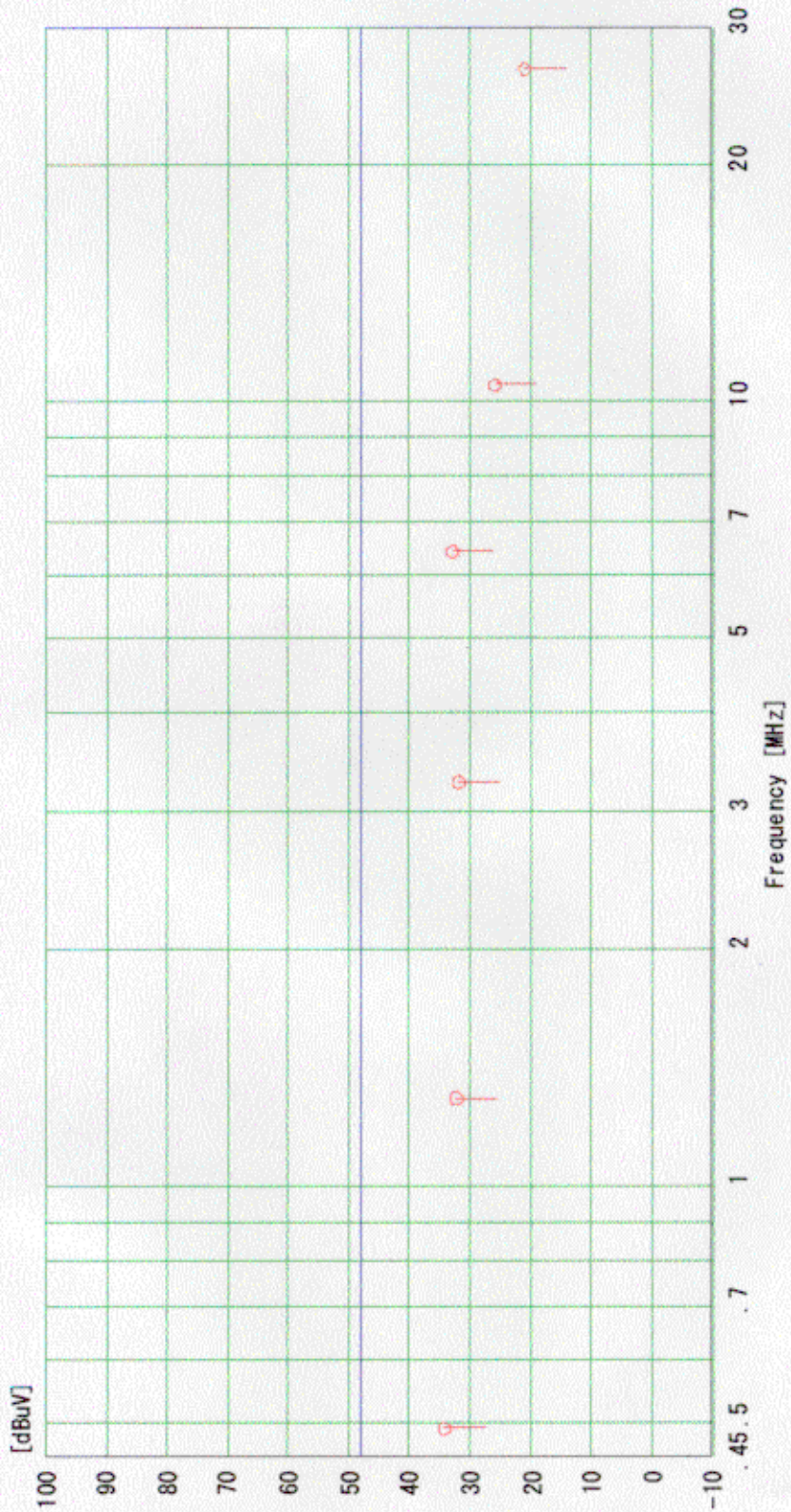
[illegible]

Note :

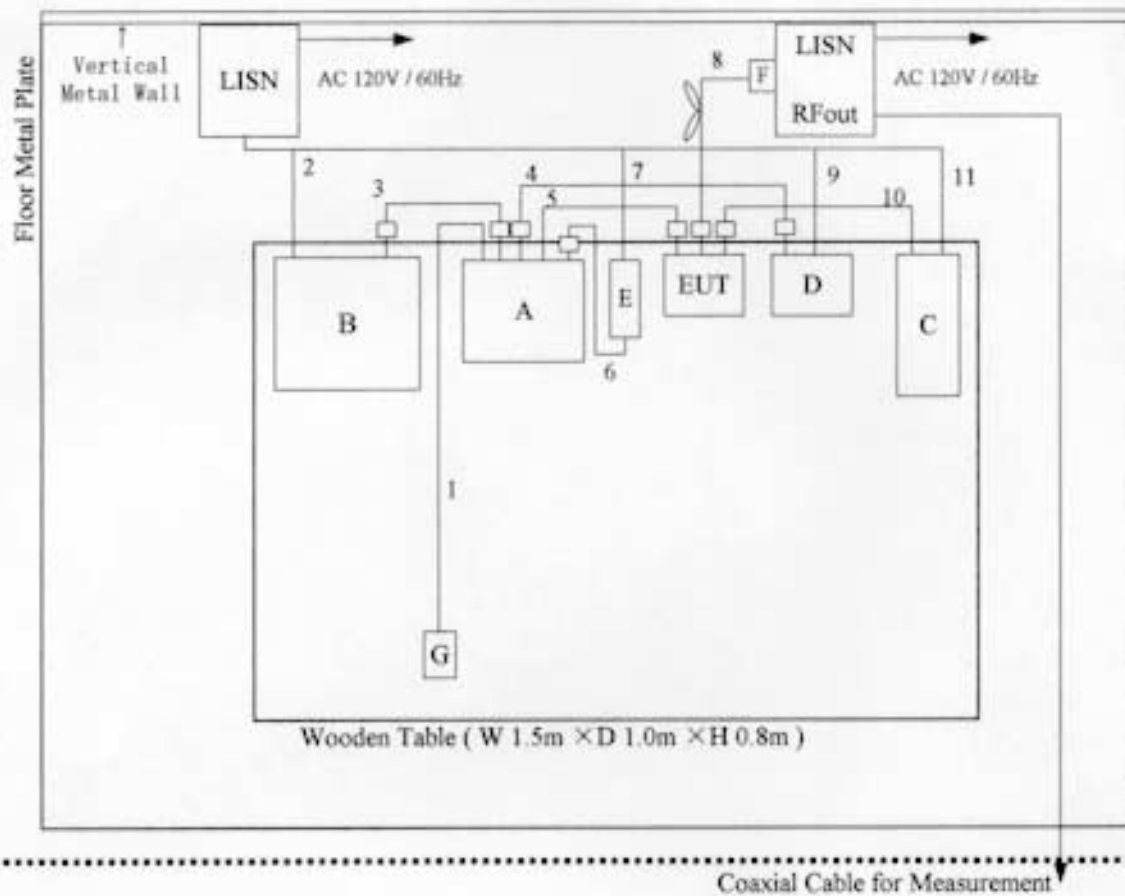
- 1) Correction Factor include LISN Factor and cable loss for 7 meters.
Meter Readings include Correction Factor.
- 2)VA : Between one end of the power cable and the grounded.
VB : Between the other end of the power cable and the grounded.
- 3)Margin = Limit – Emission Level.

Tested by : Jun-ichi Gori
Engineer of TDK Chikumagawa Open Site

FCC 15B CLASS B CONDUCTED
EUT : Fine Pix 4800ZOOM 120V/60Hz
MODE : USB Mode
Frequency : 0.45 ~ 30 MHz



EUT's Test Arrangement of Conduction
Compact Anechoic Chamber (W 3.0m × D 7.0m × H 3.0m)



Test Configuration

No.	Device	MODEL No.	FCC ID	S/N	Manufacturer
EUT	DIGITAL CAMERA	Fine Pix 4800Z	F5GFP4800	RU0008	FUJI PHOTO FILM CO., LTD.
A	NOTE BOOK COMPUTER	PRESARIO 12XL212	DOC	1V08FHNJE1N5	COMPAQ COMPUTER CO., LTD.
B	PC MONITOR	M2978	BEJCA500	CY52401HF3CV	LG ELECTRONICS
C	VIDEO MONITOR	PVM-8040	----	2029411	SONY
D	SCANNER	AS1	F5GAS-1	0009	FUJI PHOTO FILM CO., LTD.
E	AC ADAPTER (PC)	LE-9702B-01	DOC	177625-001	COMPAQ COMPUTER CO., LTD.
F	AC ADAPTER (EUT)	AC-5VS	----	9956	FUJI PHOTO FILM CO., LTD.
G	MOUSE	M-BB48	DOC	LZE01271677	LOGITECH

Connection Cables

No.	I/F & Power Cable	Model No.	Cable Length	Feraite Core	Manufacturer
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4	SCSI CABLE	-----	1.50 m	YES	SHIELD YES
5	USB CABLE	-----	1.50 m	YES	SHIELD YES
6	AC ADAPTOR CABLE	-----	1.50 m	YES	SHIELD YES
7	ADAPTOR POWER CABLE	-----	1.70 m		
8	EUT ADAPTOR CABLE	-----	1.90 m	YES	SHIELD YES
9	AC CABLE(SCANNER)	-----	1.80 m		
10	AV CABLE	-----	1.40 m	YES	SHIELD YES
11	AC CABLE(VIDEO MONITOR)	-----	1.50 m		

CONDUCTION MEASUREMENT

EUT : DIGITAL CAMERA

MODEL No. Fine Pix 4800ZOOM

CONFIGURATION FRONT VIEW



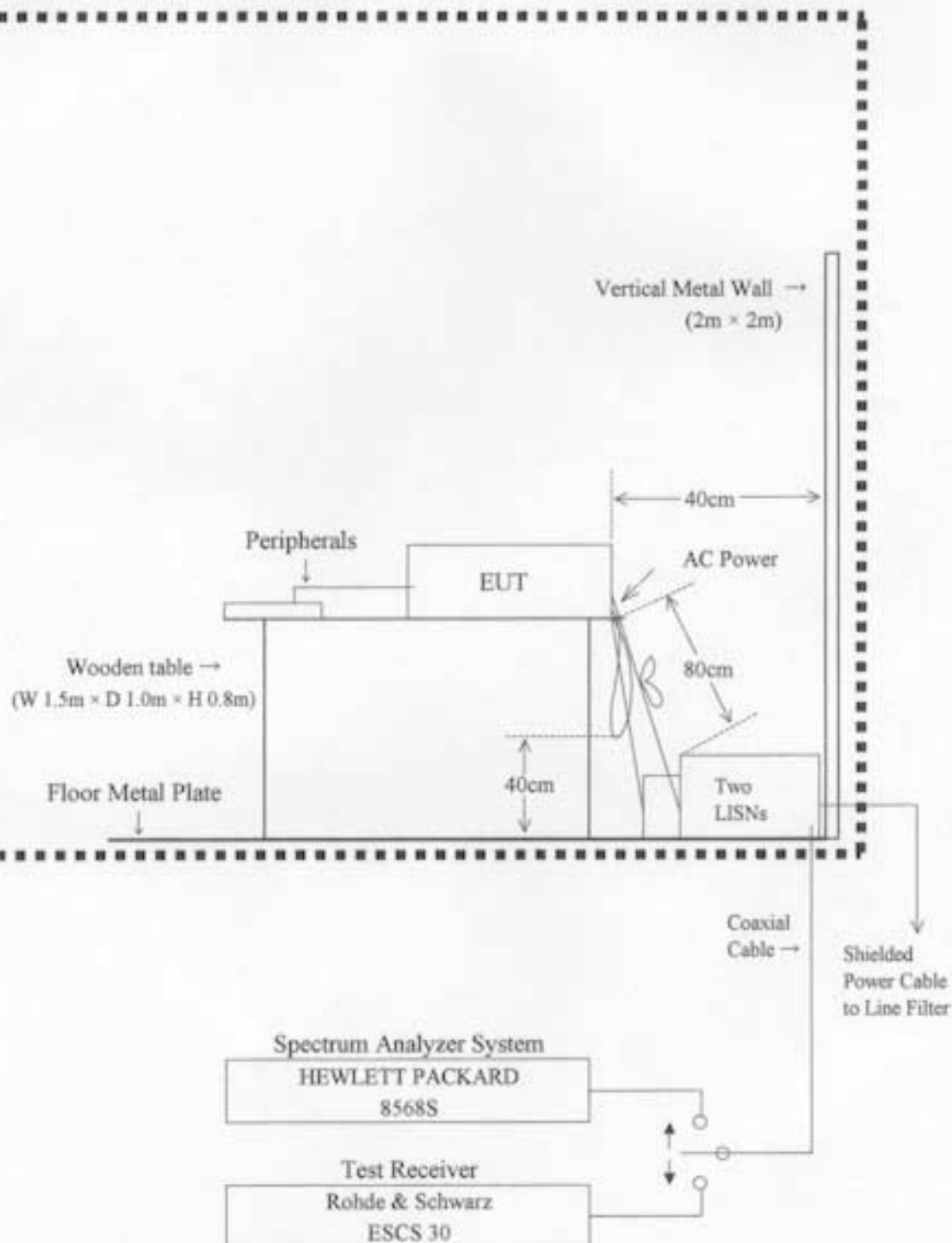
CONFIGURATION SIDE VIEW



EUT's Test Arrangement of Conduction

Fig 2

Compact Anechoic Chamber (W 3.0m × D 7.0m × H 3.0m)



TDK Application No. : TDC-01-0204

MEASURING INSTRUMENT USED

TDK APPLICATION No. : TDC-01-0204

☐	<u>Instrument</u>	<u>Model No.</u>	<u>Manufacturer</u>	<u>ID No.</u>	<u>Last Calibration Date</u>	<u>Period</u>
☒	Spectrum Analyzer	8568B	Hewlett-Packard	2445A00924	Apr. 2000	1 year
☒	RF-Preselector	85685A	Hewlett-Packard	2648A00481	Apr. 2000	1 year
☒	Field Strength Meter	ESCS 30	Rohde & Schwarz	825788/007	Feb. 2001	1 year
☒	Field Strength Meter	ESCS 30	Rohde & Schwarz	834115/020	Feb. 2001	1 year
☐	Field Strength Meter	ESMI	Rohde & Schwarz	61360008	Oct. 2000	1 year
☒	Pre - Amplifier	8447D	Hewlett-Packard	2443A04539	Mar. 2000	1 year
☐	Pre - Amplifier	8449B	Hewlett-Packard	3008A01391	Apr. 2000	1 year
☒	Biconical Antenna	BBA9106	Schwarzbeck	D-6901 No.2	Apr. 2000	1 year
☒	Log-Periodic Antenna	UHALP9107	Schwarzbeck	424/517	Apr. 2000	1 year
☐	Dipole Antenna	VHA9103	Schwarzbeck	D-6901 No.3	Apr. 2000	1 year
☐	Dipole Antenna	UHA9105	Schwarzbeck	29-14066	Apr. 2000	1 year
☒	LISN (50 μ H/50 Ω)	KNW-407	Kyoritsu Electrical Works	8-680-7	Mar. 2000	1 year
☒	LISN (50 μ H/50 Ω)	KNW-407	Kyoritsu Electrical Works	8-823-10	Mar. 2000	1 year
☐	LISN (50 μ H/50 Ω)	KNW-408	Kyoritsu Electrical Works	8-652-35	Mar. 2000	1 year
☐	LISN (50 μ H/50 Ω)	ESH2-Z5	Rohde & Schwarz	881 362/011	Apr. 2000	1 year
☒	Open Test Site	TCO-10	TDK Corporation	GD-0043-5	Apr. 2000	1 year
☒	Co-axial Cable	AK9513	Schwarzbeck	N-C007	Mar. 2000	1 year
☐	Co-axial Cable	8D-2V	Shinagawa Densen	N-C012	Mar. 2000	1 year
☐	Co-axial Cable	8D-2V	Shinagawa Densen	N-C013	Mar. 2000	1 year
☒	Co-axial Cable	8D-2V	Shinagawa Densen	N-C014	Mar. 2000	1 year
☒	Co-axial Cable	8D-2V	Shinagawa Densen	N-C016	Mar. 2000	1 year
☒	Co-axial Cable	5D-2W	Shinagawa Densen	N-C017	Mar. 2000	1 year
☒	RF Switch (EMI Interface)	MP59B	Anritsu	N-C025	Mar. 2000	1 year