

Marstech Limited

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TEST REPORT

REPORT DATE:	15 February 2000	REPORT NO:	20042D
CONTENTS:	See Table of Contents		
SUBMITTOR:	TOSHIBA TEC CORPORATION 6-78 Minami-Cho Mishima-Shi, Shizuoka-Ken 411-8520 JAPAN		
SUBJECT:	Model Nos:	XTC6/DP85F	
	FCC ID:	BJIOH-99001	
TEST SPECIFICATION	FCC CFR 47 Sections: 15, Subpart B NOTE: Tests Conducted Are "Type" Tests.		
DATE SAMPLE RECEIVED:	N/A	DATE TESTED:	8 December 1999
RESULTS:	Equipment tested complies with referenced specification.		
ALTERATIONS	None		
Tested By:	Japan Quality Assurance Organization (JQA)	Approved by:	<i>R.G. Marshall</i> Robert G. Marshall, P. Eng.
		Date:	16 th Feb. 2000.

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Authorized by:

Professional Engineer
Ontario

Engineering &
Administrative



Testing For FCC

Submissions/Verifications

Approved Test Facility



TECHNICAL REPORT - FCC 2.1033(b)

Applicant

Toshiba TEC Corporation
6-78 Minami-Cho, Mishima-Shi
Shizuoka-Ken
411-8520 JAPAN

FCC Identifier

BJIOH-99001

Manufacturer

TIM Electronics SDN BHD
Bayan Lepas, Penang
MALAYSIA

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C	Block and Schematic Diagrams Block Diagram & Wiring Diagram Schematic Diagram	2.1033(b)(5)	Exhibit C Exhibit C(1)-1 to -2 Exhibit C(2)-1 to -20
D	Report of Measurements/Test Facility/ Test Equipment List	2.1033(b)(6)	Exhibit D Exhibit D(1)-1 to -12
E	Photographs Label Equipment	2.1033(b)(7)	Exhibit E Exhibit E(1)-1 to -2 Exhibit E(2)-1 to -21

EXHIBIT D

(FCC Ref. 2.1033(b)(6))

"Report of Measurements/Test Facility/Test Equipment List"

TOSHIBA TEC CORPORATION

570,OHITO,OHITO-CHO,TAGATA-GUN,SHIZUOKA-KEN,410-2392,JAPAN

PHONE:0558-76-9607 FAX 0558-76-9844

REPORT OF MEASUREMENT ON DIGITAL DEVICE

Data : December 22, 1999

Report Number : OF-99040

- 1.Applicant : TOSHIBA TEC CORPORATION
Document Processing & Telecommunication Company
6-78 Minami-cho,Mishima-shi,Shizuoka-ken
- 2.Manufacture : TOSHIBA TEC CORPORATION
Document Processing & Telecommunication Company
6-78 Minami-cho,Mishima-shi,Shizuoka-ken
- 3.Produtc Tested : Facsimile
- 4.Data of Application received : December 22, 1999
- 5.Data of Measurement : December 8, 1999 (Completed)
- 6.Regulations Applied : FCC Part 15 Subpart B
- 7.Mesurement Procedure : ANSI C63.4-1992
- 8.Place of Measurement : TOSHIBA TEC CORPORATION FUNABARA SITE
696-3,Kami-Funabara,Amagi-Yugashima-cho
Tagata-gun,Shizuoka-ken,410-3621,Japan
Site No.31040/SIT 1300F2



Shinichi Akimoto, Group Manager
Production Engineering Dpt.
Components Business Group

FCC ID: BJIOH-99001
Marstech Report No. 20042D
EXHIBIT D(1)-1

I HEREBY CERTIFY THAT : The data shown in this report were made in coordinate with the procedures given in ANSI C63.4-1992 and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

Note : These results are deemed satisfactory evidence of compliance with ICES-003 of the Canadian Interference-Causing Equipment Regulation.

GENERAL EQUIPMENT INFORMATION :

DESCRIPTION OF EQUIPMENT :

- 1) Category : Class B
- 2) Trade Name : XEROX / TOSHIBA
- 3) Model No. : XTC6 / DP85F
- 4) FCC-ID : BJIOH-99001
- 5) Power-Rating : 120V 60Hz
- 6) Type of EUT : Desktop

TEST CONDITION OF EQUIPMENT UNDER TEST(EUT)

- 1) Test Configuration of the EUT : Refer to Page Nos. 9 to 11.
- 2) Operating Mode :
 - 1) Stand-by Mode
 - 2) Copy Mode
 - 3) Transmit Mode
 - 4) Receipt Mode
 - 5) PC Print Mode
- 3) Power Supply : 120V 60Hz / 230V 50Hz
- 4) EUT Grounding : Grounded at the plug end of line cord.
- 5) EUT Warm-up Time : 5 minutes
- 6) Temp/Humi. : (December 7) Temp. 20 °C Humi. 35 %
(December 8) Temp. 12 °C Humi. 45 %

Tested by :


Jyunichi Yoshikawa

TOSHIBA TEC CORPORATION

FCC ID: BJIOH-99001
Marstech Report No. 20042D
EXHIBIT D(1)-2

RADIATED RADIO NOISE MEASUREMENT

Description of Device : Facsimile Model No. : XTC6 / DP85F

Test Condition of Equipment under Test (EUT)

Configuration of EUT : Refer to sheet No.7

Operating Condition : Refer to sheet No.2

Date : December 7,1999 : 20°C 35%

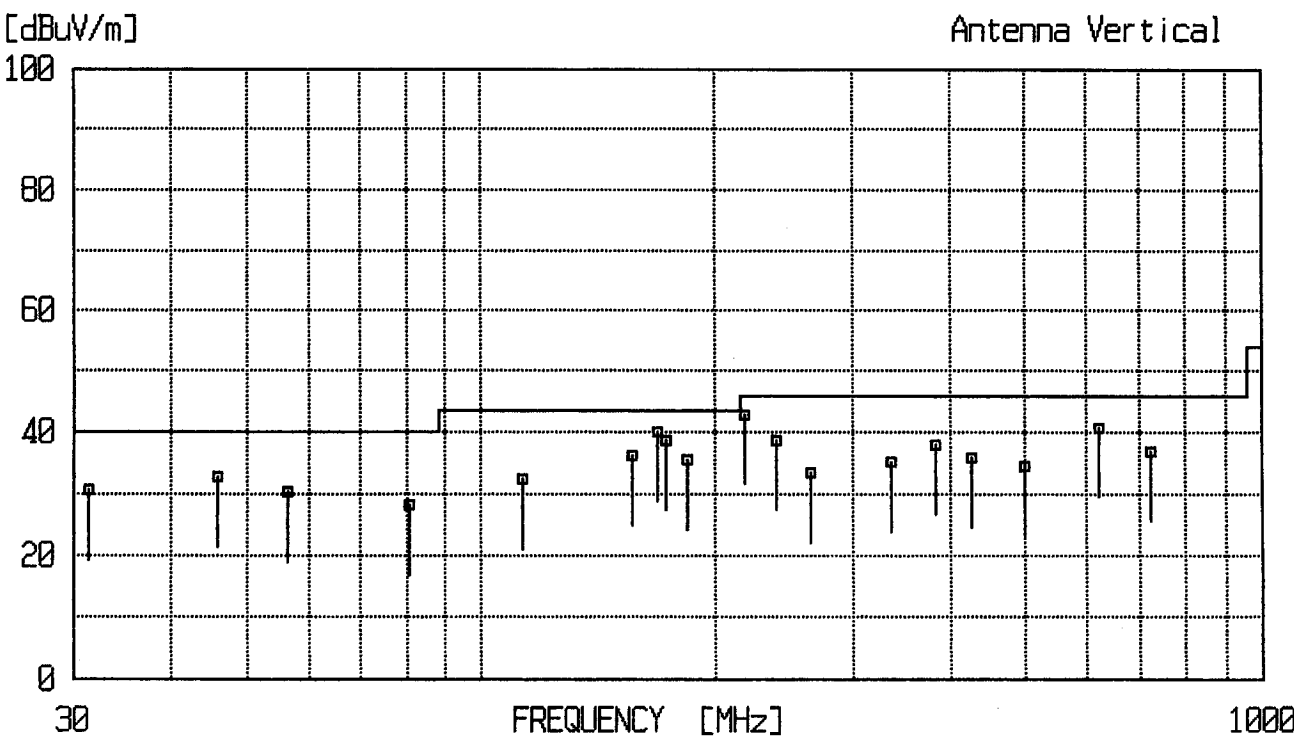
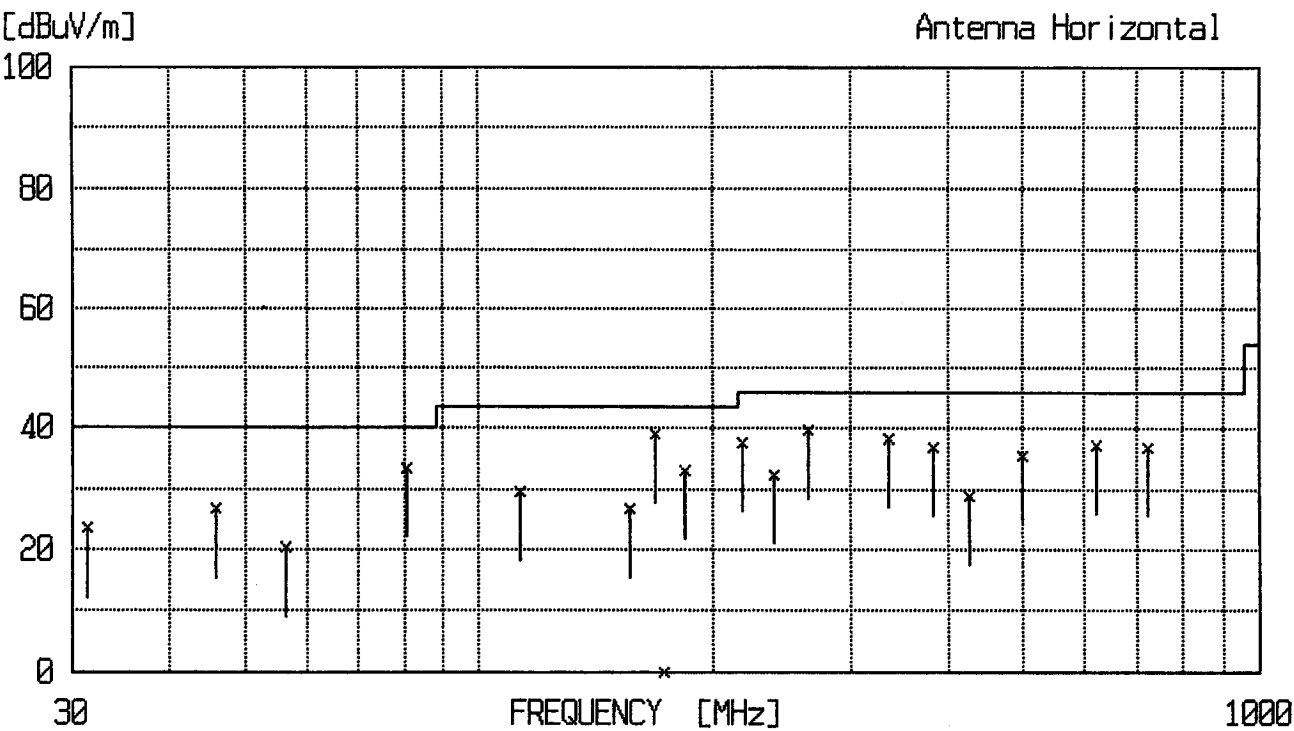
December 8,1999 : 12°C 45%

Frequency (MHz)	Antenna Factor (dB)	Meter Reading at 3 m (dB/uV)		Class B Limits (dB/uV/m)	Emission Level at 3 m (dB/uV/m)	
		Horizontal	Vertical		Horizontal	Vertical
31.4	19.4	4.0	11.0	40.0	23.4	30.4
46.0	16.6	10.0	16.0	40.0	26.6	32.6
56.5	12.3	8.0	18.0	40.0	20.3	30.3
80.5	11.2	22.0	17.0	40.0	33.2	28.2
112.9	17.3	12.0	15.0	43.5	29.3	32.3
156.8	21.2	5.5	15.0	43.5	26.7	36.2
169.4	22.0	17.0	18.0	43.5	39.0	40.0
172.9	22.2	0.0	16.5	43.5	0.0	38.7
184.1	22.8	10.0	12.5	43.5	32.8	35.3
218.9	24.4	13.0	18.5	46.0	37.4	42.9
240.0	24.8	7.5	14.0	46.0	32.3	38.8
265.5	25.3	14.5	8.0	46.0	39.8	33.3
* 336.0	28.1	10.0	7.0	46.0	38.1	35.1
* 383.5	29.5	7.5	8.5	46.0	37.0	38.0
* 426.5	30.8	-2.0	5.0	46.0	28.8	35.8
* 499.6	33.3	2.0	1.0	46.0	35.3	34.3
* 620.9	36.1	1.0	4.5	46.0	37.1	40.6
* 720.1	38.9	-2.0	-2.0	46.0	36.9	36.9

- NOTES : 1) The cable (53m) loss is included in the antenna factor.
- 2) The symbol of [*] means [With Dipole Antenna] and the rest means [With Broadband Antenna].
- 3) Meter Reading + Antenna Factor = Emission Level
Sample of calculation at 31.4 MHz : 4.0 + 19.4 = 23.4 dB/uV/m

RADIATED RADIO NOISE MEASUREMENT

Description of Device : Facsimile
Model No. : XTC6 / DP85F
Operating Condition : Refer to sheet No.2



TOSHIBA TEC CORPORATION

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EXHIBIT D(1)-4

LINE CONDUCTED RF VOLTAGE MEASURMENT

Description of Device : Facsimile Model No. : XTC6 / DP85F

Test Condition of Equipment under Test (EUT)

Configuration of EUT : Refer to sheet No.7

Operating Condition : Refer to sheet No.2

Date : December 8,1999 : 12°C 45%

Frequency (MHz)	LISN Factor (dB)	Meter Reading at QP (dB/uV)		QP/AVE -13dB	Class B Limits (dB/uV)	Emission Level (dB/uV)	
		One end & Grd'd	The other end & Grd'd			One end & Grd'd	The other end & Grd'd
0.450	--	36.2	38.3	--	48.0	36.2	38.3
0.584	--	43.7	42.3	--	48.0	43.7	42.3
0.792	--	44.3	44.3	--	48.0	44.3	44.3
1.187	--	41.8	41.9	--	48.0	41.8	41.9
1.980	--	43.2	43.8	--	48.0	43.2	43.8
3.168	--	38.7	40.4	--	48.0	38.7	40.4
7.405	--	34.8	35.4	--	48.0	34.8	35.4
16.702	--	39.7	38.9	--	48.0	39.7	38.9
25.029	--	29.2	28.8	--	48.0	29.2	28.8

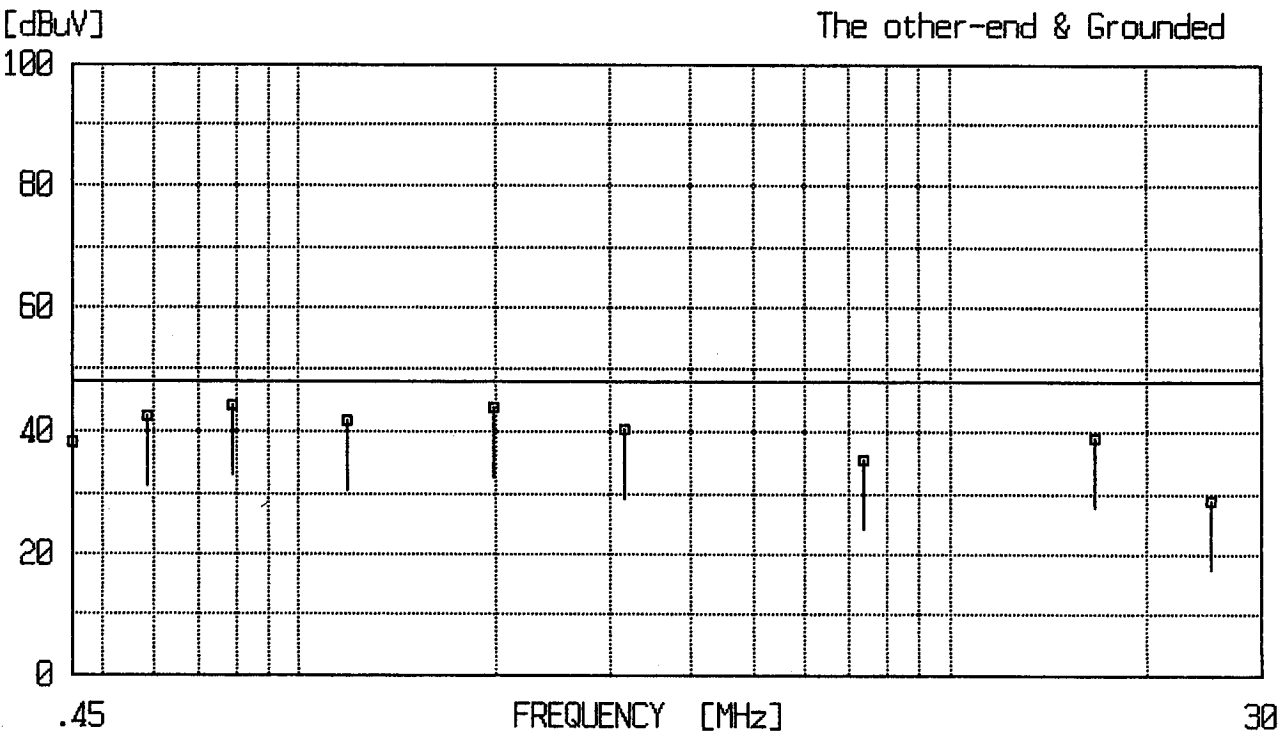
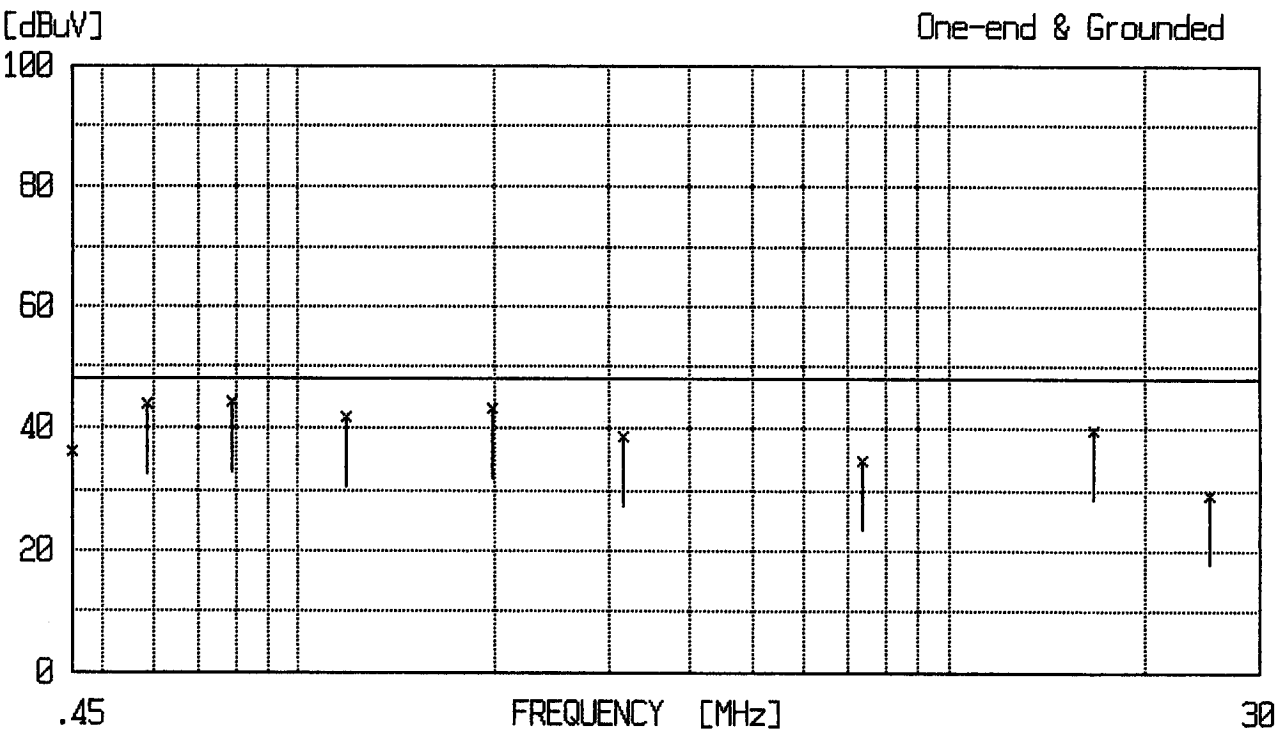
NOTES : There is little or no LISN Factor and cable loss.

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EXHIBIT D(1)-5

TOSHIBA TEC CORPORATION

LINE CONDUCTED RF VOLTAGE MEASURMENT

Description of Device : Facsimile
Model No. : XTC6 / DP85F
Operating Condition : Refer to sheet No.2



TOSHIBA TEC CORPORATION

FCC ID: BJIOH-99001
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EXHIBIT D(1)-6

TEST CONDITIONS AND CONFIGURATION OF ITE

1.The information technology equipment(ITE) consists of EUT

Description	Manufacturer	Model No.	FCC ID
Facsimile	Toshiba Tec Corporation	XTC6 / DP85F	BJIOH-99001
Hand-Set	Toshiba Tec Corporation	HD-15 XC	-----
Option-Cassette	Toshiba Tec Corporation	Work Center Pro 555/575	
		Auxiliary Paper Tray	

2.The measurement was carried out with the following equipment connected:

Description	Manufacturer	Model No.	FCC ID
Personal Computer	DELL Computer Corp.	MCM	-----
CRT	AXION Electronics co.ltd	CV-1053	ATI9RCV-1053
Keyboard Unit	Digital Equipment Corporation	PCXAJ-AA	-----
Mouse	Logitech,Inc.	M-S48	DZL211092
Facsimile	MINOLTA Co,Ltd,	MINOLTAFAX1600	-----
Telephone	TOSHIBA Corporation	FE-210	-----
PBX		TTC-900	-----
Dot Matrix Printer	Toshiba Tec Corporation	9600	BJI9BUOH-87019

3.Type of interface cable

Description	Shielded Cable	Ferrite core	Length(m)
Facsimile / Hand-Set	No	YES	0.34m
Facsimile / Telephone	No	No	0.93m
Facsimile / PBX	No	No	2.17m
Facsimile / (Parallel)	Yes	No	1.90m
Personal Computer			
Personal Computer / CRT	Yes	Yes	1.10m
Personal Computer / Keyboard	Yes	Yes	1.10m
Personal Computer / Mouse	Yes	Yes	1.75m
Personal Computer(Serial) /	Yes	No	2.10m
Dot Matrix Printer			
Facsimile (MINOLTAFAX1600) /	No	YES	2.17m
PBX			
Facsimile / AC120V	No	No	1.73m
Personal Computer / AC120V	No	No	1.76m
CRT / AC120V	No	No	3.70m
PBX / AC120V	No	No	1.78m
Facsimile (MINOLTAFAX1600) /	No	No	2.92m
AC230V			
Dot Matrix Printer / AC120V	No	No	1.80m

TOSHIBA TEC CORPORATION

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EXHIBIT D(1)-7

4. Configuration of the equipment under test

Refer to Page No. 9 to 11.

The System was configured to maximize emission. The test reflects the worst case with the System active Operating.

5. Arrangement of the Interface Cable(s)

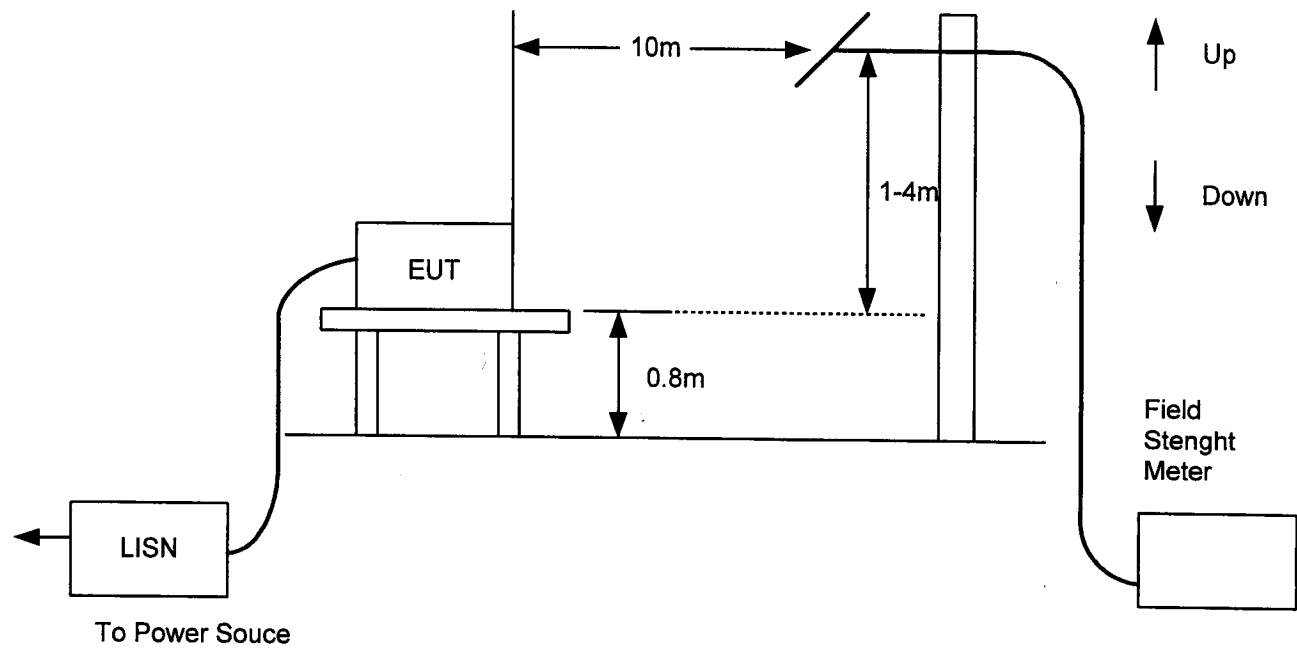
Refer to sheet No 9 To 11.

These interface cables were positioned so as to produce the highest maximum at every frequency between 30 MHz and 1000MHz, being within the manner assumed to be a typical operating condition.

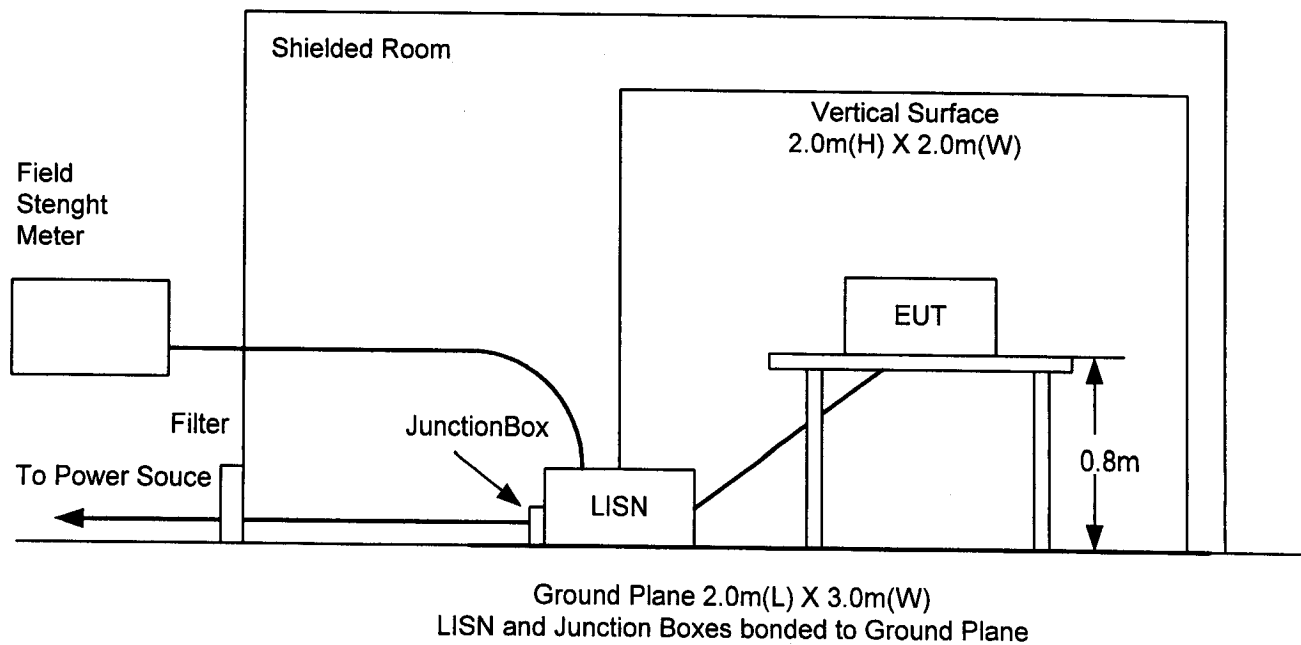
FCC ID: BJI0H-99001
Marstech Report No. 20042D
EXHIBIT D(1)-8

TOSHIBA TEC CORPORATION

RADIATED RADIO NOISE MEASUREMENT
TEST SET-UP SKETCH



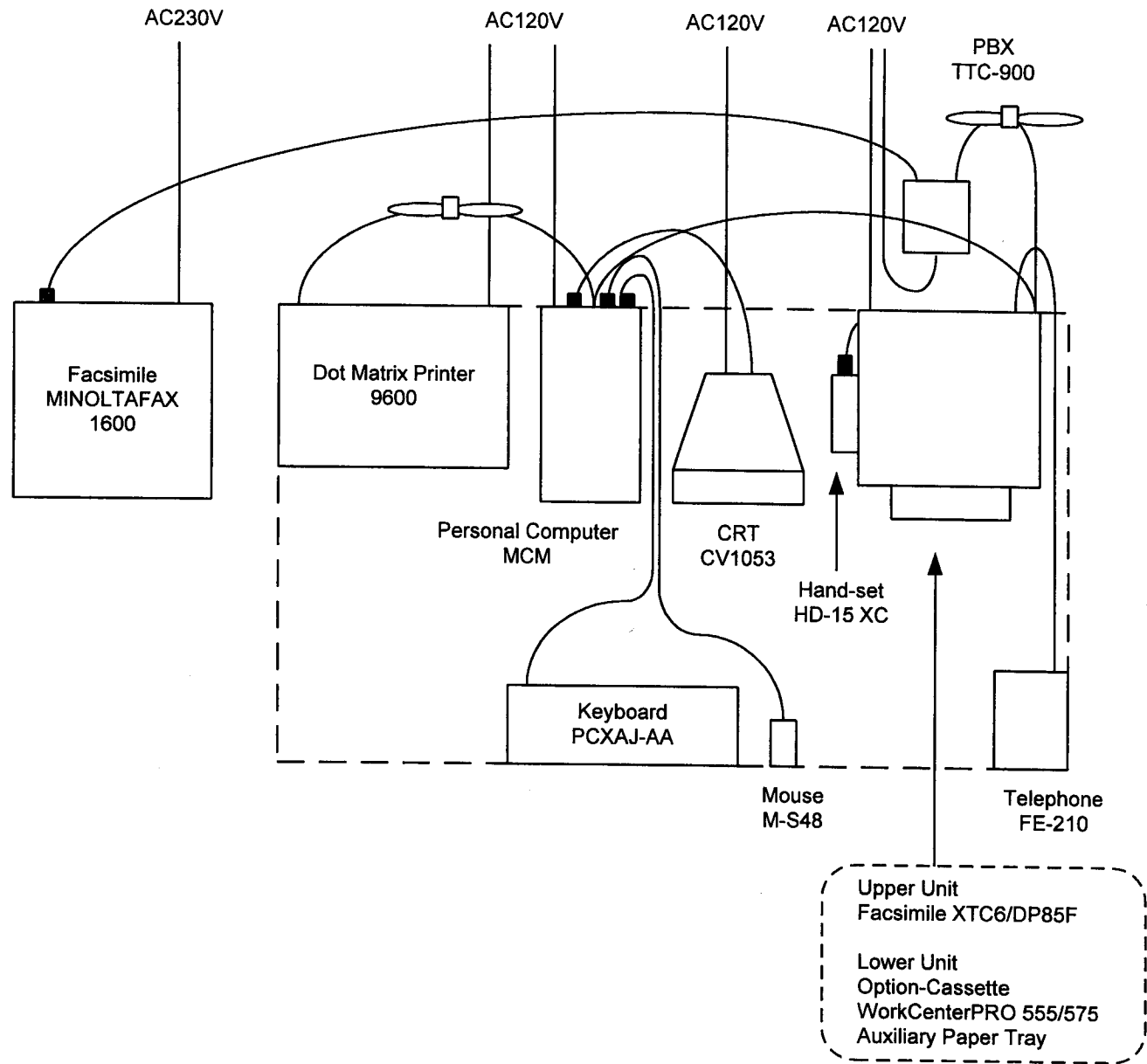
LINE CONDUCTED RF VOLTAGE MEASUREMENT
TEST SET-UP SKETCH



TOSHIBA TEC CORPORATION

FCC ID: BJIOH-99001
Marstech Report No. 20042D
EXHIBIT D(1)-9

TEST CONDITIONS AND CONFIGURATION OF EUT

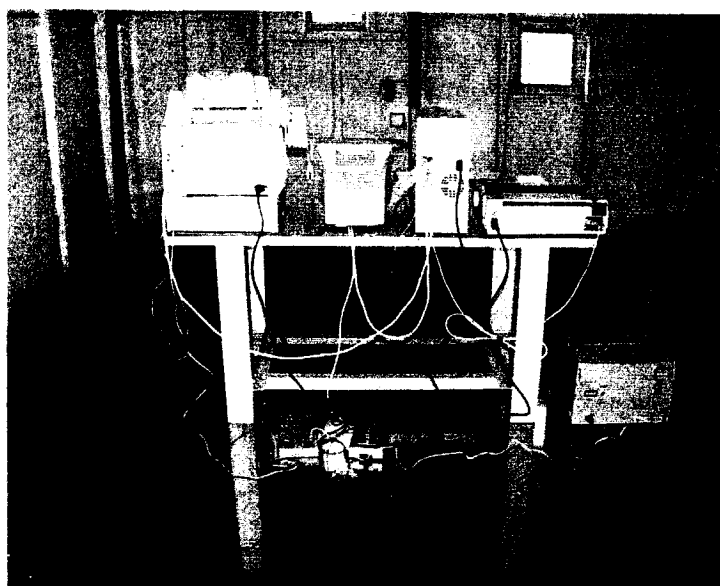
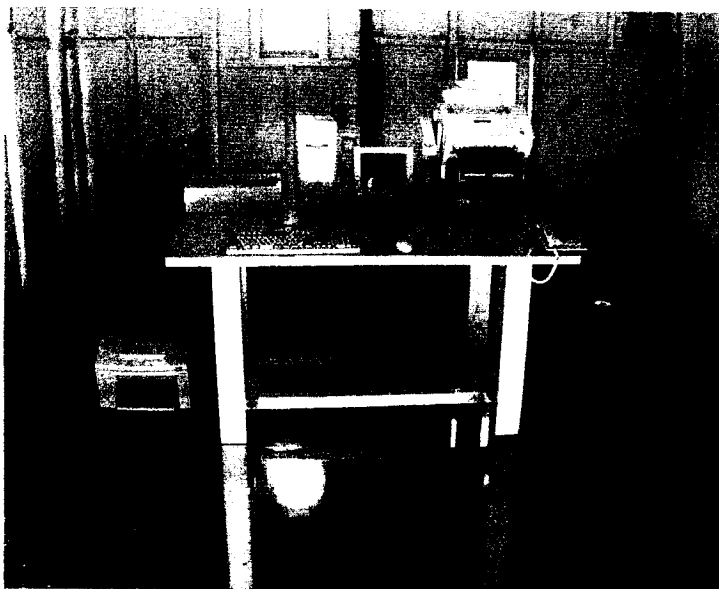


Note. "■" in the figure shows a ferrite core.

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EXHIBIT D(1)-10

TOSHIBA TEC CORPORATION

TEST CONDITIONS AND CONFIGURATION OF EUT



FCC ID: BJIOH-99001
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EXHIBIT D(1)-11

TOSHIBA TEC CORPORATION

TEST INSTRUMENT:

Instrument Manufactuere	Model No. [Serial No.]	Specifcation	List Calibration [Cal. Intarval]
Test Receiver Rohde&Schwarz	ESH3 [892378/021]	0.01-30MHz CISPR Q.P and Ave.	[1 year]
Test Receiver Rohde&Schwarz	ESU2	30-1000MHz CISPR Q.P	[1 year]
Test Receiver Rohde&Schwarz	ESV [89493/004]	30-1000MHz CISPR Q.P	[1 year]
Spectrum Analyzer Hewlett Packrd	8568B [2542A12456]	0.1-1500MHz	[1 year]
Spectrum Analyzer Advantest	TR-4135 [87800094]	0.01-3600MHz	[1 year]
Line ImpedanceStabilization Network (LISN) Rohde&Schwarz	ESH2-Z5 [892107/016]	50 Ω//50 μ H	[1 year]
Dipole Antenna Schwarzbeck	VHA9103	30-300MHz	[1 year]
Dipole Antenna Schwarzbeck	UHA9105	300-1000MHz	[1 year]
Broabband Antenna Schwarzbeck	BBA9106	30-300MHz	[1 year]
Broabband Antenna Schwarzbeck	UHALP9107 [9107795]	300-1000MHz	[1 year]

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EXHIBIT D(1)-12

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