

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 : July 13,2005

Report Number : OF-05010

- 1.Applicant : TOSHIBA TEC CORPORATION
Document Processing & Telecommunication Systems
Company
6-78 Minami-cho,Mishima-shi,Shizuoka-ken
411-8520,Japan
- 2.Manufacture : TOSHIBA TEC CORPORATION
Document Processing & Telecommunication Systems
Company
6-78 Minami-cho,Mishima-shi,Shizuoka-ken
411-8520,Japan
- 3.Produtc Tested : Dot Printer
- 4.Data of Application received : July 13,2005
- 5.Data of Measurement : July 7,2005 (Completed)
- 6.Regulations Applied : FCC Part 15 Subpart B
- 7.Mesurement Procedure : ANSI C63.4-2003
- 8.Place of Measurement : TOSHIBA TEC CORPORATION FUNABARA SITE
696-3,Kami-Funabara,Amagi-Yugashima-cho
Tagata-gun,Shizuoka-ken,410-3621,Japan
Registration Number :157527



Masaaki Masuda, Group Manager

Power Supply Group

Key Components Mounting Dept.

Document Processing & Telecommunication Systems

Company

I HEREBY CERTIFY THAT : The data shown in this report were made in coordinate with the procedures given in ANSI C63.4-2003 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 | : TOSHIBATEC |
| 3) Model No. | : 5040MSR-H |
| 4) Serial No | : Technological confirmation machine |
| 5) FCC-ID | : QRTS-0501 |
| 6) Power-Rating | : 120V 60Hz |
| 7) Type of EUT | : Desktop |

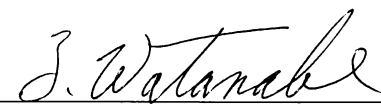
TEST CONDITION OF EQUIPMENT UNDER TEST(EUT)

- | | |
|----------------------------------|---|
| 1) Test Configuration of the EUT | : Refer to Page Nos. 10 and 11. |
| 2) Operating Mode | : Printing With the Program Prepared by the applicant |
| 3) Power Supply | : 120V 60Hz |
| 4) EUT Grounding | : Grounded at the plug end of line cord. |
| 5) EUT Warm-up Time | : 5 minutes |
| 6) Temp/Humi. | : Temp. 30 °C Humi. 32 % |

SUMMARY OF THE TEST RESULTS

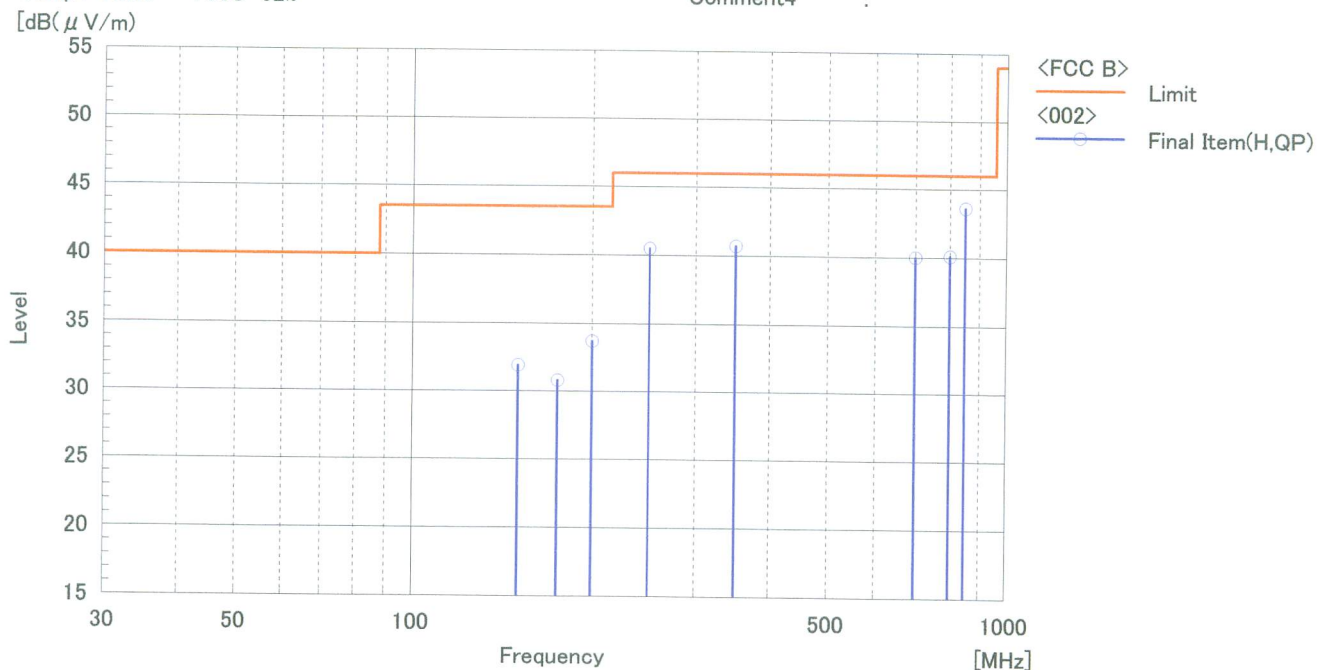
- | | |
|-------------------------------------|----------|
| 1).Radiated Radio Noise Measurement | : Passed |
| 2).Line Conducted RF Voltage | : Passed |

Measurement

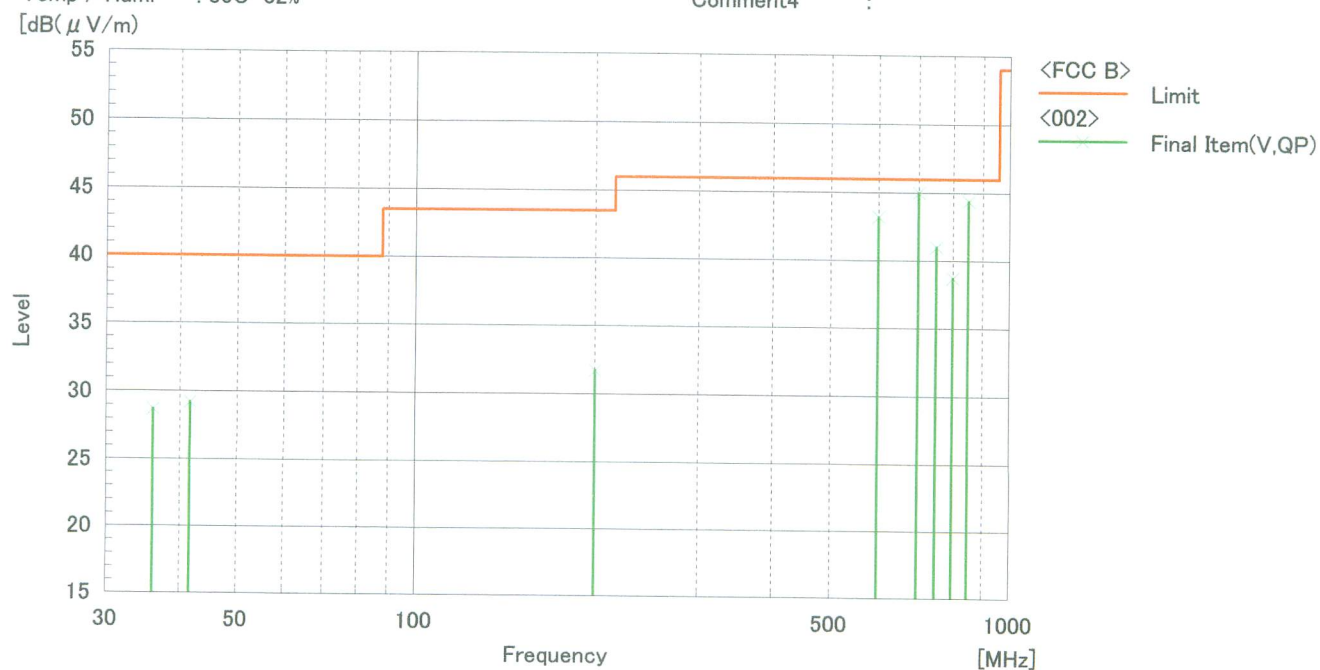
Tested by : 
Tetsuya Watanabe

TOSHIBATEC Corp
FUNABARA EMI SITE

<<OF-05010>>

2005-07-07
002.datModel : 5040MSR-H
Serial No :
Operator :
AC Volt : 120V
Temp / Humi : 30C 32%Limit : FCC Part.15 Class B 3m
Comment1 : Printing
Comment2 :
Comment3 :
Comment4 :TOSHIBATEC Corp
FUNABARA EMI SITE

<<OF-05010>>

2005-07-07
002.datModel : 5040MSR-H
Serial No :
Operator :
AC Volt : 120V
Temp / Humi : 30C 32%Limit : FCC Part.15 Class B 3m
Comment1 : Printing
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***** TOSHIBATEC Corp *****
 <<OF-05010>> 2005-07-07
 002.dat

Limit : FCC Part.15 Class B 3m
 Model : 5040MSR-H
 Serial No :
 Operator :
 AC Volt : 120V
 Temp / Humi : 30C 32%
 Comment1 : Printing
 Comment2 :
 Comment3 :
 Comment4 :

 Final Result

--- Horizontal Polarization (QP)---

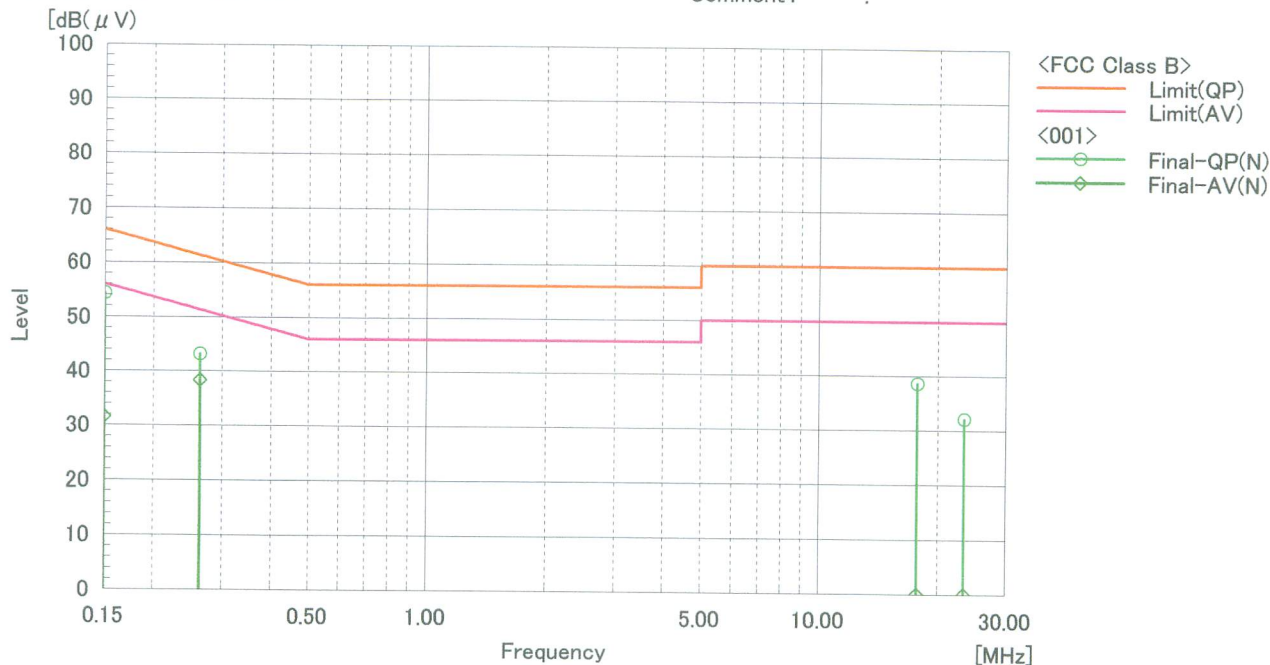
No.	Frequency [MHz]	Reading [dB(μV)]	c. f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	150.142	48.0	-16.1	31.9	43.5	11.6	
2	175.043	45.5	-14.7	30.8	43.5	12.7	
3	200.157	47.0	-13.3	33.7	43.5	9.8	
4	250.126	52.5	-12.0	40.5	46.0	5.5	
5	350.131	56.0	-15.3	40.7	46.0	5.3	
6	700.193	47.5	-7.5	40.0	46.0	6.0	
7	800.279	46.5	-6.4	40.1	46.0	5.9	
8	850.329	48.5	-4.9	43.6	46.0	2.4	

--- Vertical Polarization (QP)---

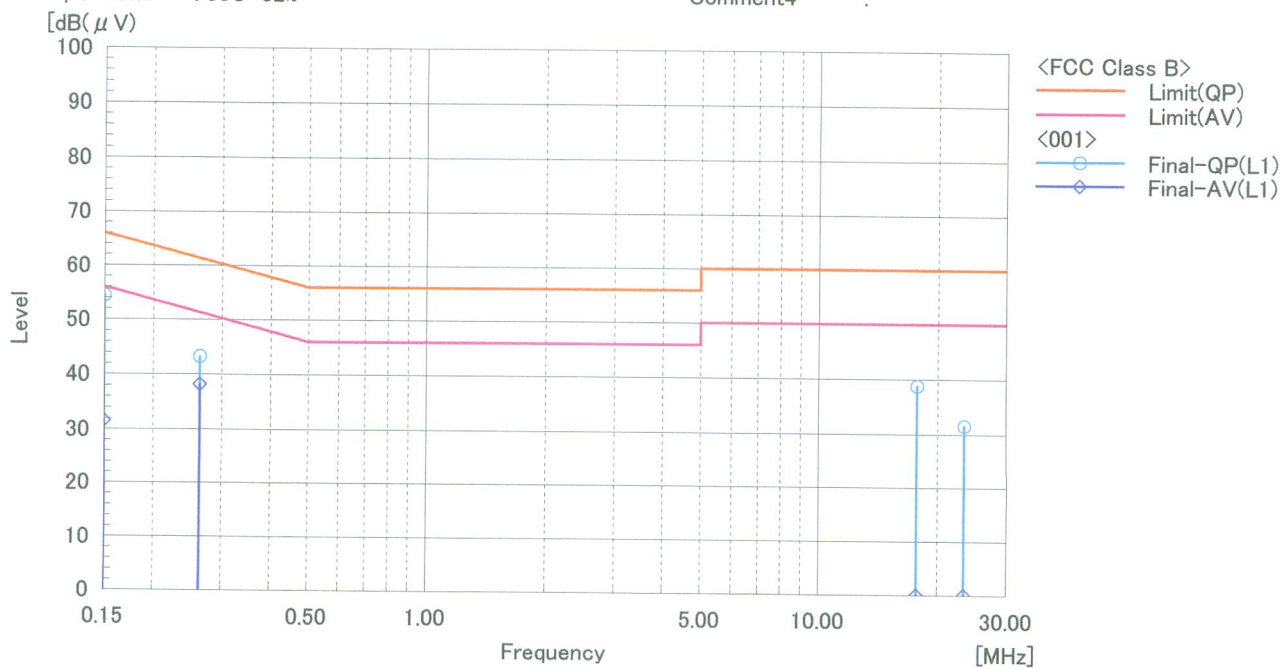
No.	Frequency [MHz]	Reading [dB(μV)]	c. f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Remark
1	36.008	46.0	-17.3	28.7	40.0	11.3	
2	41.608	47.5	-18.3	29.2	40.0	10.8	
3	200.154	45.0	-13.3	31.7	43.5	11.8	
4	600.228	52.5	-9.3	43.2	46.0	2.8	
5	700.257	52.0	-7.0	45.0	46.0	1.0	
6	750.240	47.5	-6.5	41.0	46.0	5.0	
7	800.268	44.5	-5.8	38.7	46.0	7.3	
8	850.291	49.0	-4.6	44.4	46.0	1.6	

TOSHIBATEC Corp
FUNABARA EMI SITE

<<OF-05010>>

2005-07-07
001.datModel : 5040MSR-H
Serial No. :
Operaer :
AC Voigt : 120V
Temp / Humi : 30C 32%Limit : FCC Part.15 ClassB
Comment1 : Printing
Comment2 :
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FUNABARA EMI SITE

<<OF-05010>>

2005-07-07
001.datModel : 5040MSR-H
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Comment3 :
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***** TOSHIBATEC Corp *****
 <<OF-05010>>

2005-07-07
 001.dat

Limit : FCC Part.15 ClassB
 Model : 5040MSR-H
 Serial No. :
 Operaer :
 AC Volt : 120V
 Temp / Humi : 30C 32%
 Comment1 : Printing
 Comment2 :
 Comment3 :
 Comment4 :

 Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	[dB]
1	0.150	54.3	31.6	0.0	54.3	31.6	66.0	56.0	11.7	24.4	
2	0.26351	43.2	38.3	0.0	43.2	38.3	61.3	51.3	18.1	13.0	
3	23.37464	32.1		0.0	32.1		60.0	50.0	27.9		
4	17.74176	38.6		0.0	38.6		60.0	50.0	21.4		

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	[dB]
1	0.150	54.4	31.6	0.0	54.4	31.6	66.0	56.0	11.6	24.4	
2	0.26351	43.3	38.2	0.0	43.3	38.2	61.3	51.3	18.0	13.1	
3	17.74176	38.8		0.0	38.8		60.0	50.0	21.2		
4	23.37464	31.6		0.0	31.6		60.0	50.0	28.4		

TEST CONDITIONS AND CONFIGURATION OF ITE

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

Description	Manufacturer	Model No.	Serial. No	FCC ID
Dot Printer	TOSHIBATEC	5040MSR-H	*A:	QRTS-0501

*A: Technological confirmation machine

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

Description	Manufacturer	Model No.	Serial. No	FCC ID
Personal Computer	DELL	MCM	XT7KM	-----
CRT Display	AXION	CV-1053	CA77AAS00126	AT19R3CV-1053
Keyboard	DELL	SK-8000	083DVR-38843-06P	-----
Mouse	Logitech	M-S48a	HCA05201782	JNZ201213

*A: Technological confirmation machine

3.Type of interface cable

Description	Shielded Cable	Ferrite core	Length(m)
Dot Printer / Parallel Personal Computer	Yes	No	2.0m
Dot Printer / Com Personal Computer	Yes	No	1.6m
Dot Printer / USB Personal Computer	Yes	No	2.0m
Personal Computer / CRT Display	Yes	Yes	1.2m
Personal Computer / Keyboard	Yes	Yes	1.8m
Personal Computer / Mouse	No	Yes	1.8m
Dot Printer / AC120V	No	No	1.8m
Personal Computer / AC120V	No	No	1.8m
CRT Display / AC120V	No	No	3.0m

4. Configuration of the equipment under test

Refer to Page No. 10 to 11

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

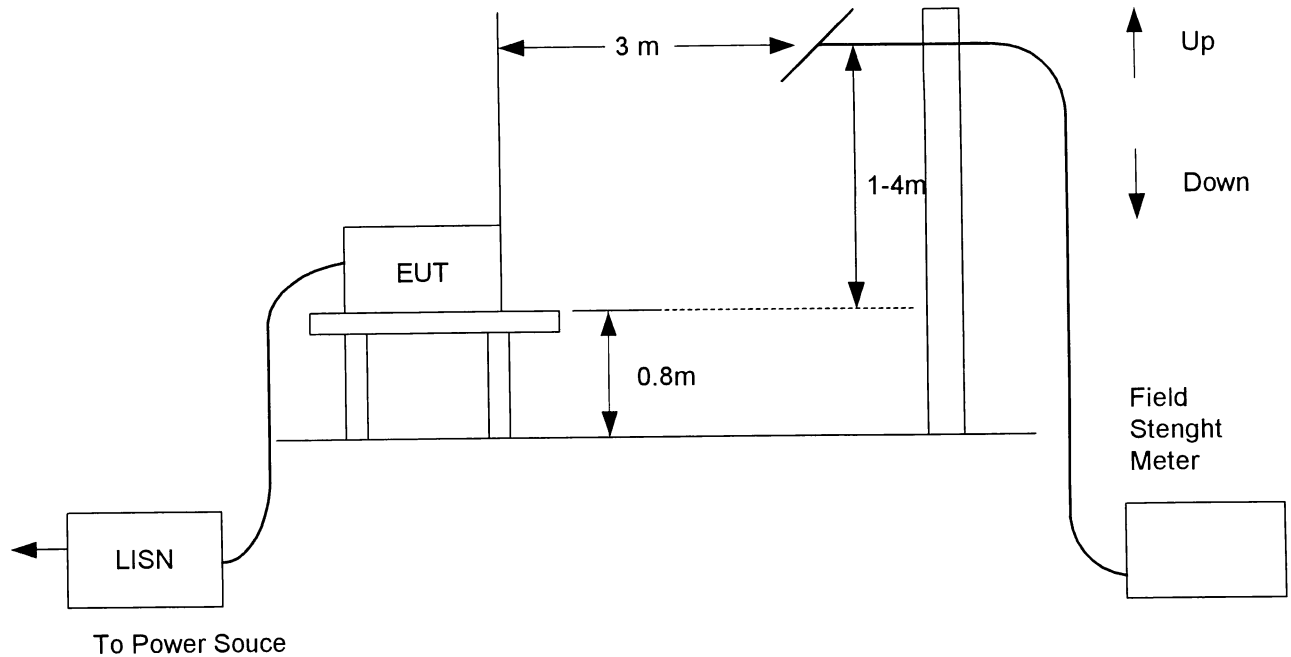
5. Arrangement of the Interface Cable(s)

Refer to sheet No 10 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.

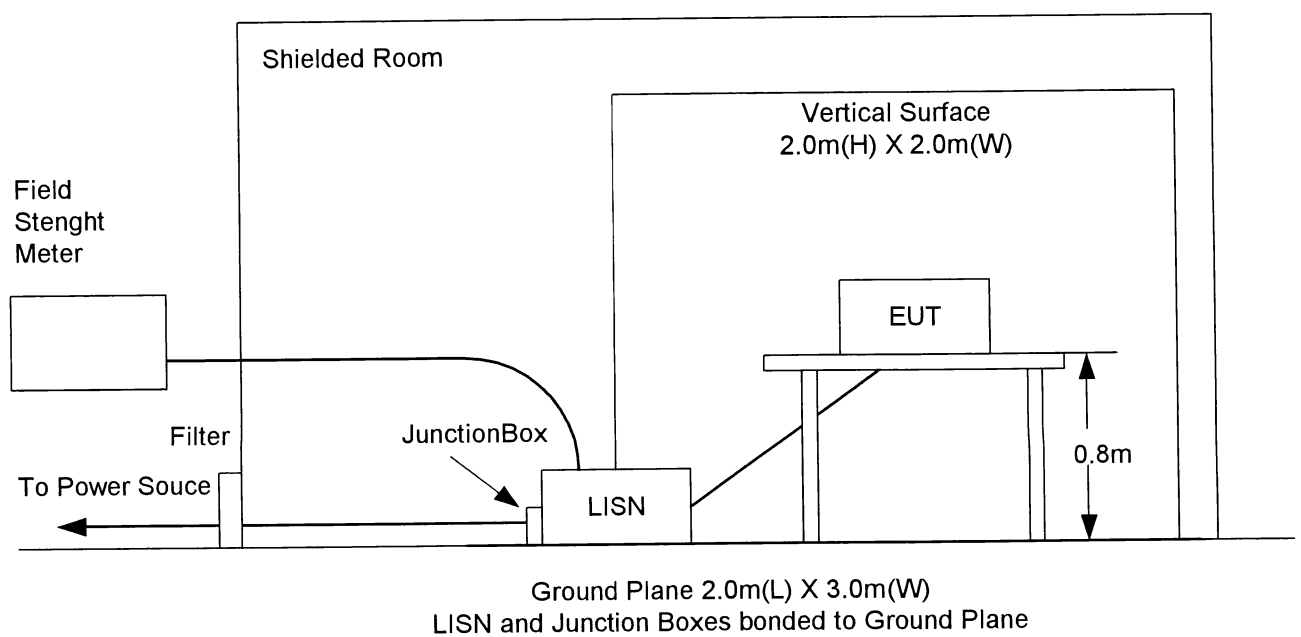
RADIATED RADIO NOISE MEASUREMENT

TEST SET-UP SKETCH

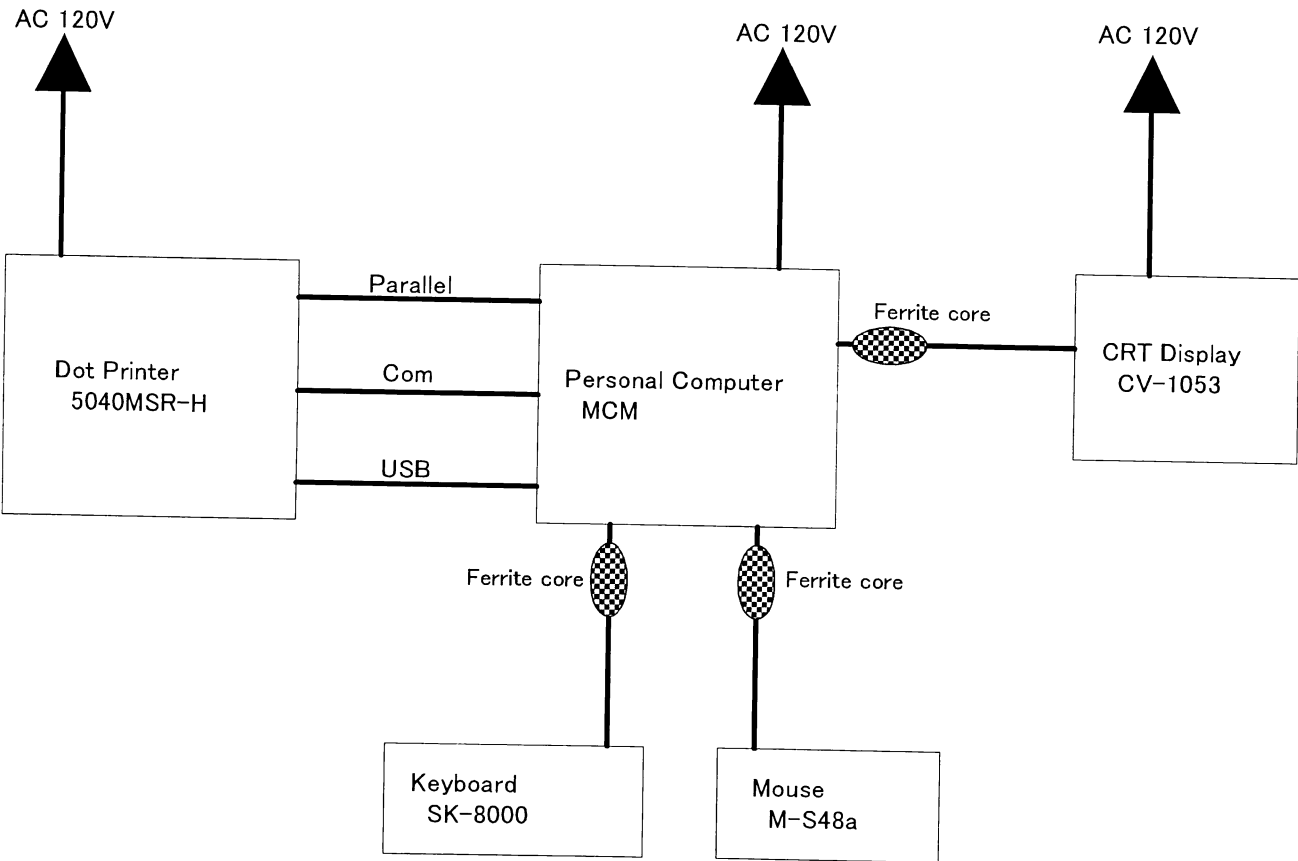


LINE CONDUCTED RF VOLTAGE MEASUREMENT

TEST SET-UP SKETCH



TEST CONDITIONS AND CONFIGURATION OF EUT



TEST CONDITIONS AND CONFIGURATION OF EUT



TOSHIBA TEC CORPORATION

TEST INSTRUMENT:

Instrument Manufacturer	Model No. [Serial No.]	Specification	List Calibration [Cal. Interval]
Test Receiver Rohde&Schwarz	ESCS30	0.009-2750MHz CISPR Q.P and Ave.	[1 year]
Test Receiver Rohde&Schwarz	ESV [89493/004]	30-1000MHz CISPR Q.P	[1 year]
Spectrum Analyzer Advantest	R3132	0.01-3000MHz	[1 year]
Line Impedance Stabilization 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	UHALP9108A1	250-1000MHz	[1 year]