JAPAN QUALITY ASSURANCE ORGANIZATION
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EMI TEST REPORT

JQA File No.	: **441-50477**
Model No.	: UCA-301
Type of Equipment	: USB ADAPTER
Regulations Applied	: CFR 47 FCC Rules and Regulations Part 15 Subpart B
FCC ID	: TI4-UCA-301
Applicant	: PHOENIX ENGINEERING CORP..
Address	: 466-3, Fujikubo, Miyoshi-machi, Iruma-gun, Saitama 354-0041 Japan
Manufacturer	: Dong Guan My Phone Electronics Co.,Ltd.
Address	: 6th Ind. Development Zone Li-Wu, Wu-Sha, Chang-An DongGuan City, Guan Dong, China
Received date of EUT	: July 27, 2005
Final Judgment	**: Passed**

TEST RESULTS IN THIS REPORT are obtained in use of equipment that is traceable to National Institute of Advanced Industrial Science and Technology (AIST) of Japan and National Institute of Information and Communications Technology (NICT) of Japan.

The test results only responds to the tested sample.
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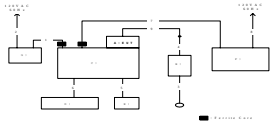
This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.



NVLAP LAB CODE: 200192-0

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1. DOCUMENTATION

1.1 TEST REGULATION

International Electrotechnical Commission ("IEC"), International Special Committee on Radio Interference(CISPR) Pub. 22 (1997), "Information Technology Equipment - Radio Disturbance Characteristics -Limits and Methods of Measurement."

Test procedure :

AC powerline conducted emissions and radiated emissions tests were performed according to the procedures in CISPR Pub. 22 (1997).

1.2 GENERAL INFORMATION

1.2.1 Test facility :

1) Test Facility located at JQA Safety & EMC Center EMC Engineering Department TSURU EMC Branch:
Open Site No.1, No.2, An Anechoic Chamber (3 m and 10 m, on common plane)and a Shielded Room
FCC Registration Number: 342182 (Date of Listing : March 30, 2005)

2) JQA Safety & EMC Center EMC Engineering Department TSURU EMC Branch is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance established in title 15, Part 285 Code of Federal Regulations.
NVLAP Lab Code : 200192-0 (Effective through : June 30, 2006)

1.2.2 Description of the Equipment Under Test (EUT) :

1)	Type of Equipment	: USB ADAPTER
2)	Product Type	: Prototype
3)	Category	: Class B
4)	EUT Authorization	: Certification
5)	FCC ID	: TI4-UCA-301
6)	Trade Name	: PAN COMMUNICATIONS. INC
7)	Model No.	: UCA-301
8)	Serial No.	: -
9)	Fundamental Frequency Generated/Operated In the EUT	: 12 MHz
10)	Highest Frequency Used in the EUT	: 12 MHz
11)	Date of Manufacture	: -
12)	Power Rating	: * 5.0 VDC
13)	EUT Grounding	: None

* The EUT was rated power from Notebook computer.(Model :nx9000)

1.2.3 Definitions for symbols used in this test report :

X - indicates that the listed condition, standard or equipment is applicable for this report.

___ - indicates that the listed condition, standard or equipment is not applicable for this report.

1.3 TEST CONDITION

1.3.1 The measurement of the AC Power Line Conducted Emission

_X_ - was performed in the following test site.
___ - was not applicable.

Test location :

JQA Safety & EMC Center EMC Engineering Department TSURU EMC Branch
2096 Ohata, Tsuru-shi Yamanashi-ken 402-0045, JAPAN

_X_ - Shielded Room A
___ - Shielded Room B
___ - Anechoic Chamber
___ - Open Site No.1
___ - Open Site No.2

Used test instruments :

	Type	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
__ -	Test Receiver (R-3)	ESI7	Rohde & Schwarz	100059	2004/11	1 Year
_X_ -	Test Receiver (R-4)	ESHS30	Rohde & Schwarz	842053/001	2005/2	1 Year
__ -	Test Receiver (R-5)	ESCS30	Rohde & Schwarz	100203	2005/2	1 Year
_X_ -	AMN (L-1) for AE	KNW-407	Kyoritsu Electrical	8-833-5	2004/10	1 Year
_X_ -	AMN (L-2) for EUT	KNW-407	Kyoritsu Electrical	8-680-14	2004/10	1 Year
__ -	AMN (L-3)	KNW-407	Kyoritsu Electrical	8-757-1	2005/6	1 Year
__ -	AMN (L-4)	KNW-242	Kyoritsu Electrical	8-755-1	2005/6	1 Year
__ -	AMN (L-5)	KNW-242C	Kyoritsu Electrical	8-837-14	2005/6	1 Year
__ -	AMN (L-6)	KNW-243C	Kyoritsu Electrical	8-692-5	2004/9	1 Year
__ -	AMN (L-7)	KNW-243C	Kyoritsu Electrical	8-831-3	2005/6	1 Year
__ -	AMN (L-8)	KNW-243C	Kyoritsu Electrical	8-831-4	2005/6	1 Year
__ -	AMN (L-9)	KNW-243C	Kyoritsu Electrical	8-831-2	2004/9	1 Year
__ -	ISN (L-10)	ENY41	Rohde & Schwarz	0830663/046	2005/2	1 Year
__ -	ISN (L-11)	ENY22	Rohde & Schwarz	0830661/029	2005/2	1 Year
__ -	RF Cable (CB-3)	3D-2W	Fujikura	-	2005/5	1 Year
_X_ -	RF Cable (CB-4)	3D-2W	Fujikura	-	2005/5	1 Year
__ -	RF Cable (CB-5)	3D-2W	Fujikura	-	2005/5	1 Year
__ -	Pulse Limiter (PL-3)	ESH3-Z2	Rohde & Schwarz	-	2004/11	1 Year
_X_ -	Pulse Limiter (PL-4)	ESH3-Z2	Rohde & Schwarz	-	2005/2	1 Year
__ -	Pulse Limiter (PL-5)	ESH3-Z2	Rohde & Schwarz	-	2005/2	1 Year
_X_ -	50ohm Termination (TM-1)	BNC-P-1.5	TDC	-	2005/3	1 Year
__ -	50ohm Termination (TM-2)	-	Y&R	-	2005/3	1 Year

1.3.2 The measurement of the Radiated Emission(30 MHz - 1000 MHz)

_X_ - was performed in the following test site.
___ - was not applicable.

Test location :

JQA Safety & EMC Center EMC Engineering Department TSURU EMC Branch
2096 Ohata, Tsuru-shi Yamanashi-ken 402-0045, JAPAN

_X_ - Anechoic Chamber
___ - Open Site No.1
___ - Open Site No.2
___ - 3 meters
_X_ - 10 meters
___ - 30 meters

Validation of Site Attenuation :

1) Last Confirmed Date : 2005/5
2) Interval : 1 year

Used test instruments :

	Type	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
__ -	Test Receiver(R-1)	ESVS10	Rohde & Schwarz	84231/004	2005/3	1 Year
__ -	Test Receiver(R-2)	ESVS10	Rohde & Schwarz	843744/018	2005/7	1 Year
X -	Test Receiver(R-3)	ESI7	Rohde & Schwarz	100059	2004/11	1 Year
__ -	Test Receiver(R-5)	ESCS30	Rohde & Schwarz	100203	2005/2	1 Year
__ -	Biconical Antenna(AB-1)	BBA9106	Schwarzbeck	VHA91031741	2005/5	1 Year
__ -	Biconical Antenna(AB-2)	BBA9106	Schwarzbeck	VHA91032349	2005/5	1 Year
X -	Biconical Antenna(AB-3)	BBA9106	Schwarzbeck	VHA11905516	2005/5	1 Year
__ -	Log-Periodic Antenna(AL-1)	UHALP9108A	Schwarzbeck	0678	2005/5	1 Year
__ -	Log-Periodic Antenna(AL-2)	UHALP9108A	Schwarzbeck	0679	2005/5	1 Year
X -	Log-Periodic Antenna(AL-3)	UHALP9108	Schwarzbeck	0278	2005/5	1 Year
__ -	Log-Periodic Antenna(AL-4)	USLP9143	Schwarzbeck	140	2005/6	1 Year
__ -	Dipole Antenna(AD-1)	KBA-511A	Kyoritsu Electrical	0-195-5	2004/9	1 Year
__ -	Dipole Antenna(AD-2)	KBA-511A	Kyoritsu Electrical	0-228-13	2004/9	1 Year
__ -	Dipole Antenna(AD-3)	KBA-611	Kyoritsu Electrical	0-196-8	2004/9	1 Year
__ -	Dipole Antenna(AD-4)	KBA-611	Kyoritsu Electrical	0-230-6	2004/9	1 Year
__ -	RF Cable(CN-1)	20D/5D-2W	Fujikura	-	2005/5	1 Year
__ -	RF Cable(CN-2)	20D/5D-2W	Fujikura	-	2005/5	1 Year
X -	RF Cable(CN-3)	20D/5D-2W	Fujikura	-	2005/5	1 Year

1.4 EUT MODIFICATION / Deviation from Standard

1.4.1 EUT MODIFICATION

_X_ - No modifications were conducted by JQA to achieve compliance to the limitations.
___ - To achieve compliance to the limitations, the following changes were made by JQA
during the compliance test.

The modifications will be implemented in all production models of this equipment.

Applicant : Date :

Typed Name : Position :

1.4.2 Deviation from Standard:

_X_ - No deviations from the standard described in clause 1.1.
___ - The following deviations were employed from the standard described in clause 1.1:

1.5 TEST RESULTS / UNCERTAINTY

AC Powerline Conducted Emissions:

X - Applicable **__ - NOT Applicable** **__ - NOT Tested**

The requirements are **X - PASSED** **__ - NOT PASSED**

Min. Limit Margin(Q.P.)	16.3 dB	at	13.84 MHz
Min. Limit Margin(AVE.)	dB	at	MHz
Max. Limit Exceeding	dB	at	MHz
Uncertainty of Measurement Results	± 2.4 dB(2σ)		

Remarks :

Radiated Emission:

X - Applicable **__ - NOT Applicable** **__ - NOT Tested**

The requirements are **X - PASSED** **__ - NOT PASSED**

Min. Limit Margin	2.9 dB	at	137.2 MHz
Max. Limit Exceeding	dB	at	MHz

Uncertainty of Measurement Results

X - Anechoic Chamber		
__ - 3 meters	30-300 MHz	± 3.8 dB(2σ)
	300 – 9000 MHz	± 4.7 dB(2σ)
X - 10 meters	30-300 MHz	± 3.7 dB(2σ)
	300 – 1000 MHz	± 3.6 dB(2σ)
__ - Open Site		
__ - 3 meters	30-300 MHz	± 4.0 dB(2σ)
	300 – 6000 MHz	± 4.8 dB(2σ)
__ - 10 meters	30-300 MHz	± 4.0 dB(2σ)
	300 – 1000 MHz	± 3.7 dB(2σ)

Remarks : The measurement results is below the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliance based on the 95 % level of confidence. However, the result indicates that compliance is more probable than non-compliance with the specification limit.

1.6 SUMMARY

General Remarks :

The EUT was tested according to the requirements of FCC Rules and Regulations Part 15 Subpart A and B (CISPR Pub. 22, 1997) under the test configuration, as shown in clause 1.7 to 1.10.
The conclusion for the test items of which are required by the applied regulation is indicated under the final judgment.

Final Judgment :

The "as received" sample;

_X_ - fulfill the test requirements of the regulation mentioned on clause 1.1.

___ - fulfill the test requirements of the regulation mentioned on clause 1.1, but with certain qualifications.

___ - doesn't fulfill the test regulation mentioned on clause 1.1.

Begin of testing : July 27, 2005

End of testing : August 2, 2005

Tested by:

Kazuyuki Makimoto
Engineer
TSURU EMC Branch
JQA EMC Engineering Dept.

- JAPAN QUALITY ASSURANCE ORGANIZATION -

Approved by:

Takaharu Hada
Director
TSURU EMC Branch
JQA EMC Engineering Dept.

Issued by:

Yoichi Nakajima
Manager
TSURU EMC Branch
JQA EMC Engineering Dept.

1.7 TEST CONFIGURATION / OPERATION OF EUT

1.7.1 Test Configuration

The equipment under test (EUT) consists of :

Symbol	Item	Manufacturer	Model No.	Serial No.	FCC ID
A	USB ADAPTER	Dong Guan My Phone Electronics Co.,Ltd.	UCA-301	-	TI4-UCA-301
B	Ubiqui Chat	SHENZHEN DAXIAN DIGITAL TELECOMMUNICATION LTD.	UC-30	-	N/A(DoC)

The measurement was carried out with the following support equipment connected :

Symbol	Item	Manufacturer	Model No.	Serial No.	FCC ID
C	Notebook Computer	HP Compaq	nx9000	CNF3500TZN	N/A(DoC)
D	Keyboard	HP Compaq	KB-0316	B77760AGAQQ15Q	N/A(DoC)
E	Mouse	ELECOM	M-N2URGY	-	N/A(DoC)
F	LCD Monitor	DELL	E15FPb	CN-04W569-46633-36C-18VT	N/A(DoC)
G	AC Adapter	HP Compaq	Series PPP014S	565C50AU4PL2Zk	N/A(DoC)

Type of Cable :

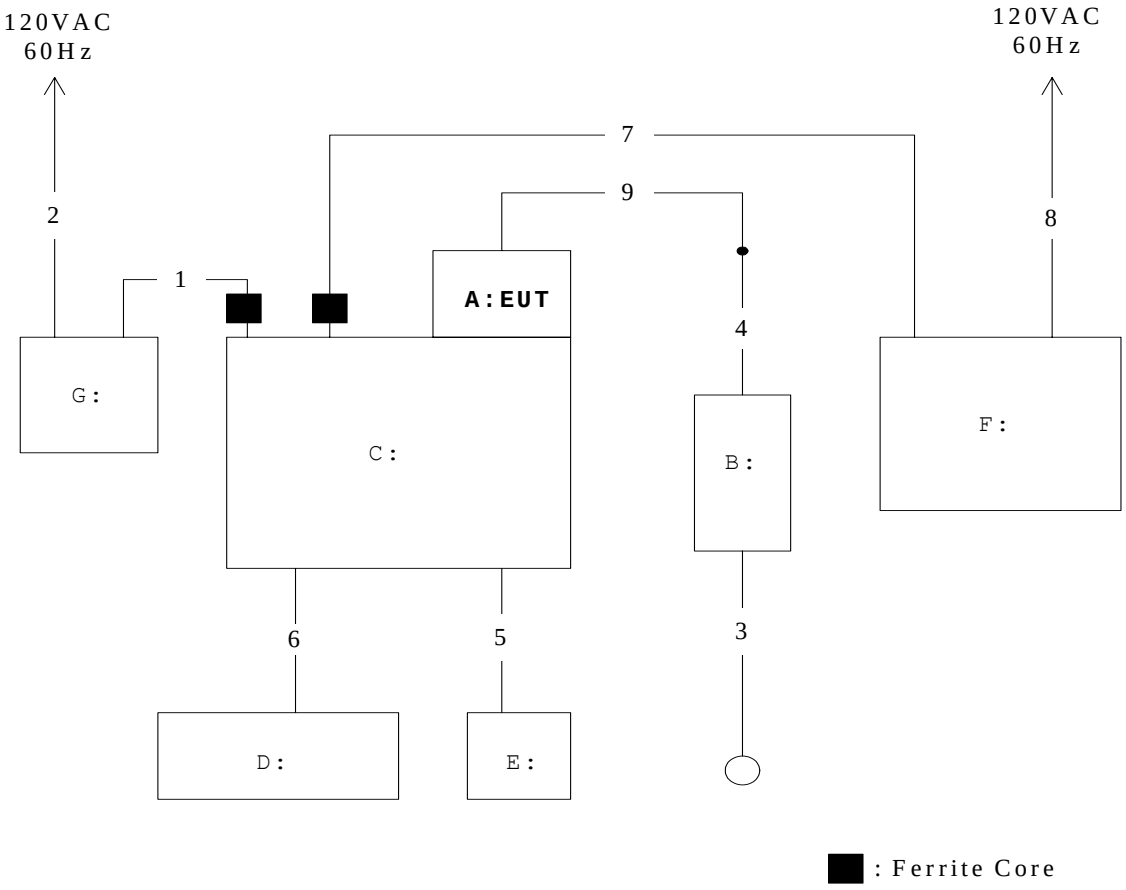
No.	Description	Identification (Manu.e.t.c)	Shielded YES / NO	Ferrite Core YES / NO	Connector Type Shielded YES / NO	Length (m)
1	DC cable	-	NO	YES	NO	1.8
2	AC cable	-	NO	NO	NO	1.7
3	Ear Phone cable	-	NO	NO	NO	1.0
4	Audio cable	-	YES	NO	YES	0.55
6	Keyboard cable	-	YES	NO	YES	1.8
5	Mouse cable	-	YES	NO	YES	1.8
7	RGB cable	-	YES	YES	YES	1.7
8	AC cable	-	NO	NO	NO	1.8
9	Extended Audio cable	-	YES	NO	YES	2.0

1.7.2 Operating condition

Power Supply Voltage : 5.0 VDC
(The EUT was rated power from Notebook computer.)

Operation Mode : Communicating with Notebook Computer
(1kHz signal wave inputting from Notebook Computer)

1.8 EUT ARRANGEMENT (DRAWINGS)



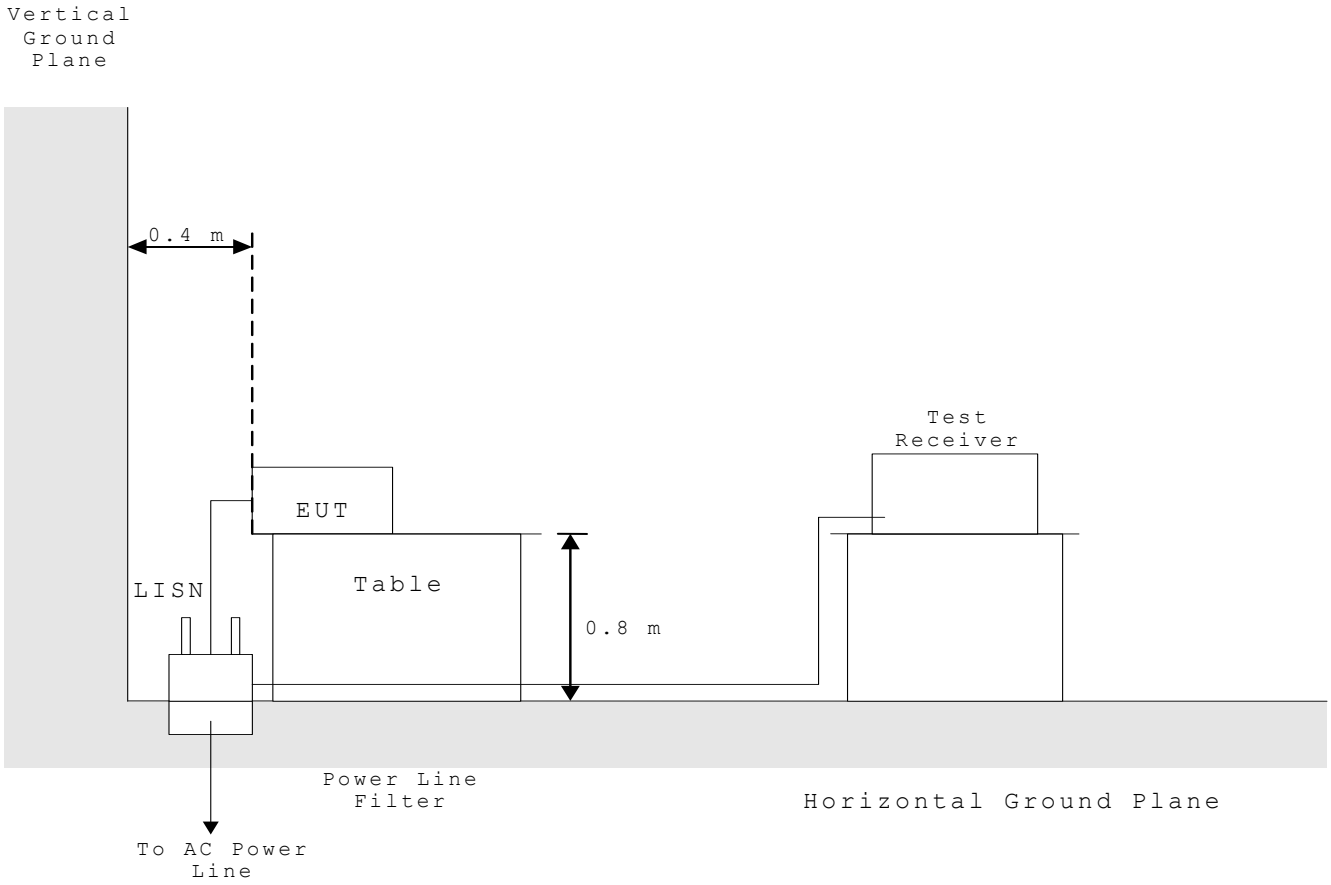
1.9 PRELIMINARY TEST AND TEST-SETUP (DRAWINGS)

1.9.1 AC Power Line Conducted Emission (150 kHz – 30 MHz) :

According to description of ANSI C63.4-2003 sec.7.2.3, the exploratory AC powerline conducted emissions measurements were carried out.
The exploratory conducted measurements were performed using the spectrum analyzer to observe the emissions characteristics of the EUT.
The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.
This configuration were used for final AC powerline conducted emissions measurements.

Shielded Enclosure

- Side View -

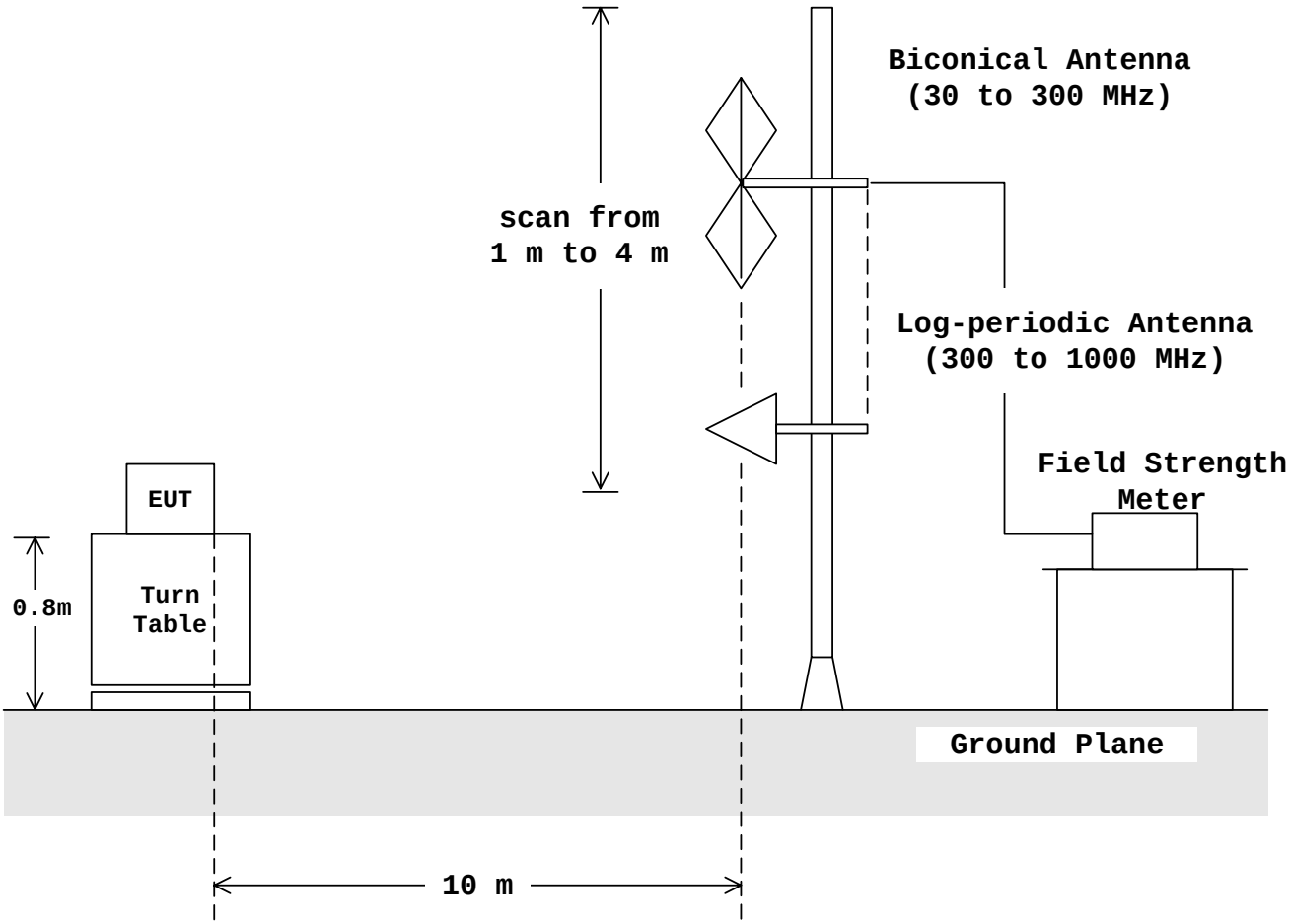


1.9.2 Radiated Emission (30 MHz – 1000 MHz) :

According to description of ANSI C63.4-2003 sec.8.3.1.1, the exploratory radiated emissions measurements were carried out. The exploratory radiated measurements were performed at the measurement distance that specified for compliance to determine the emissions characteristics of the EUT.
The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.
This configuration was used for the final radiated emissions measurements.

Anechoic Chamber

- Side View -



1.10 TEST ARRANGEMENT (PHOTOGRAPHS)

PHOTOGRAPHS OF EUT CONFIGURATION FOR CONDUCTED EMISSION MEASUREMENT

Photograph present configuration with maximum emission

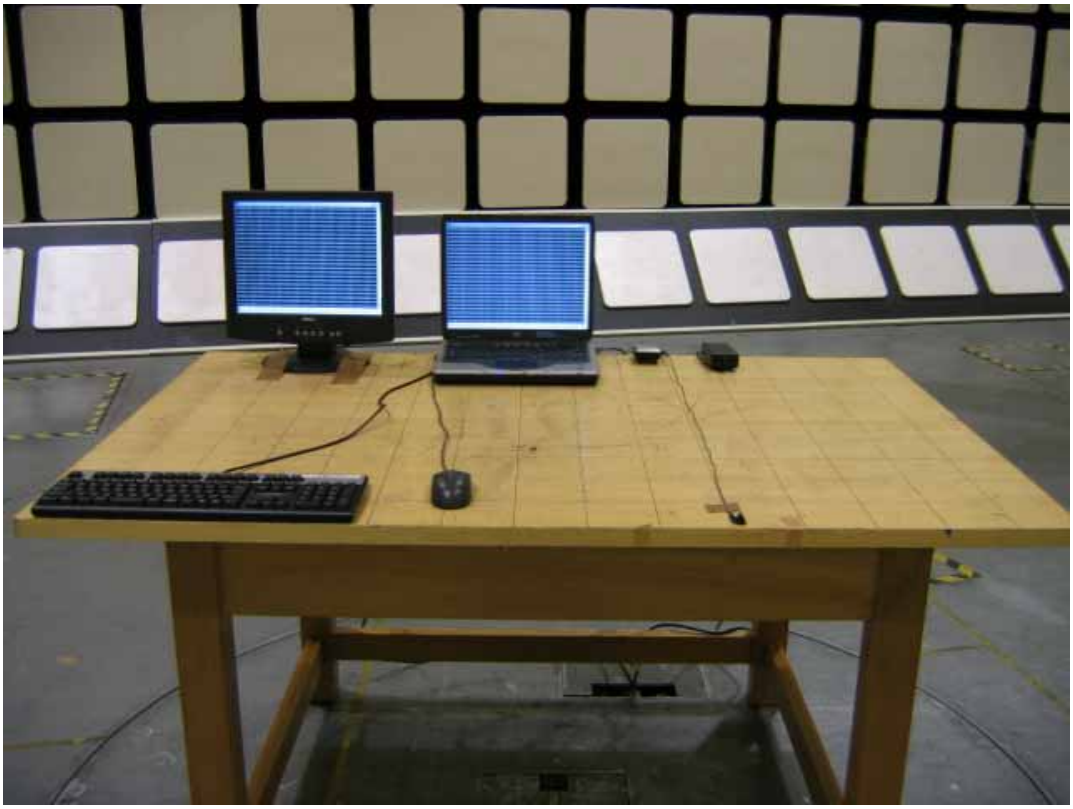
- Front View -

- Side View -

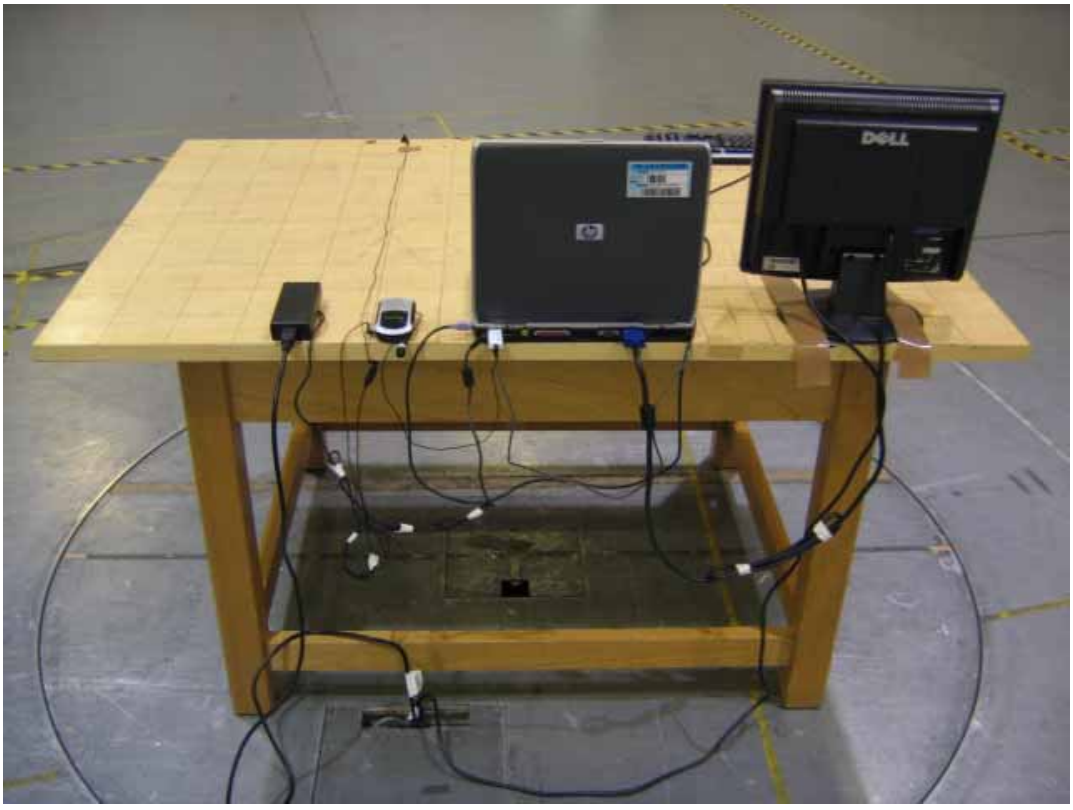
PHOTOGRAPHS OF EUT CONFIGURATION FOR RADIATED EMISSION MEASUREMENT

Photograph present configuration with maximum emission

- Front View -



- Rear View -



2. TEST DATA

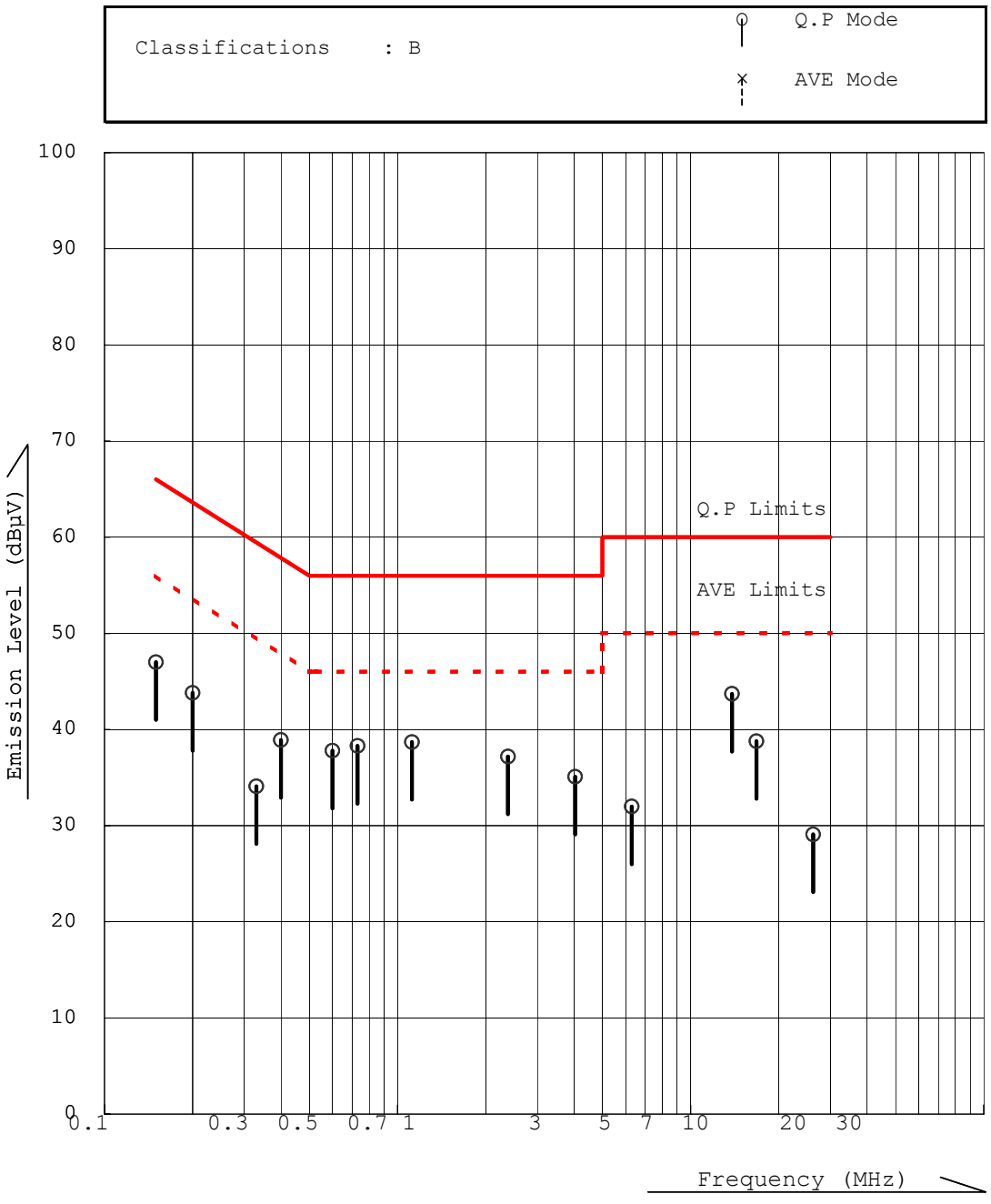
2.1. AC Powerline Conducted Emission Measurements (0.15 MHz - 30 MHz)

Date : August 2, 2005
Temp. : 23°C Humi.: 52% Atom.:953hPa

Frequency (MHz)	AMN Factor (dB)	Meter Reading (dBµV) V-A Q.P	V-A AVE	V-B Q.P	V-B AVE	Limits (dBµV) Q.P	Limits AVE	Emission Level (dBµV) Q.P	Emission Level AVE	Margin (dB) Q.P	Margin AVE	Comment
0.15	0.1	46.1	-	46.9	-	66.0	56.0	47.0	-	19.0	-	
0.20	0.1	43.7	-	43.3	-	63.6	53.6	43.8	-	19.8	-	
0.33	0.1	34.0	-	34.0	-	59.5	49.5	34.1	-	25.4	-	
0.40	0.1	35.0	-	38.8	-	57.9	47.9	38.9	-	19.0	-	
0.60	0.1	29.3	-	37.7	-	56.0	46.0	37.8	-	18.2	-	
0.73	0.1	31.4	-	38.2	-	56.0	46.0	38.3	-	17.7	-	
1.12	0.1	31.7	-	38.6	-	56.0	46.0	38.7	-	17.3	-	
2.38	0.1	34.2	-	37.1	-	56.0	46.0	37.2	-	18.8	-	
4.04	0.1	32.9	-	35.0	-	56.0	46.0	35.1	-	20.9	-	
6.29	0.1	31.5	-	31.9	-	60.0	50.0	32.0	-	28.0	-	
13.84	0.3	42.6	-	43.4	-	60.0	50.0	43.7	-	16.3	-	
16.75	0.3	36.6	-	38.5	-	60.0	50.0	38.8	-	21.2	-	
26.21	0.5	25.0	-	28.6	-	60.0	50.0	29.1	-	30.9	-	

Notes: 1) Test Location : Shielded Room
2) The spectrum was checked from 0.15 MHz to 30 MHz
3) AMN(Artificial Mains Network) factor includes the cable loss for 5 meter.
4) The symbol of "<" means "or less".
5) The symbol of ">" means "more than".
6) The symbol of "-" means "Not applicable".
7) V-A : One end & Ground V-B : The other end & Ground
8) Q.P : Quasi-Peak Detector AVE : Average Detector
9) A sample calculation was made at 0.15 MHz
Amn + Mr = 0.1 + 46.9 = 47.0 dBµV
Amn : AMN Factor Mr : Meter Reading
10) Setting of measuring instrument :
Detector Function : CISPR Quasi-Peak / Average
IF Bandwidth : 9 kHz / 10 kHz (0.15 MHz - 30 MHz)

AC Powerline Conducted Emissions Measurements (0.15 MHz - 30 MHz)



2.2. Radiated Emissions Measurements (30 MHz - 1000 MHz)

Date : July 27, 2005
Temp. : 25°C Humi.: 54% Atmo.: 949hPa

Frequency (MHz)	Antenna Factor (dB/m)	Meter Reading (dBµV) Horiz.	Meter Reading (dBµV) Ver.	Limits (dBµV/m)	Emission Level (dBµV/m) Horiz.	Emission Level (dBµV/m) Ver.	Margin (dB) Horiz.	Margin (dB) Ver.	Comment
30.3	18.0	< -2.0	2.3	30.0	< 16.0	20.3	> 14.0	9.7	
36.4	16.8	< -2.0	3.2	30.0	< 14.8	20.0	> 15.2	10.0	
43.2	14.6	< -2.0	5.9	30.0	< 12.6	20.5	> 17.4	9.5	
56.8	10.0	< -2.0	9.4	30.0	< 8.0	19.4	> 22.0	10.6	
66.7	7.8	8.7	7.6	30.0	16.5	15.4	13.5	14.6	
78.8	7.3	14.4	7.8	30.0	21.7	15.1	8.3	14.9	
90.8	9.0	10.4	12.0	30.0	19.4	21.0	10.6	9.0	
137.2	15.7	3.7	11.4	30.0	19.4	27.1	10.6	2.9	
184.3	18.0	7.0	7.2	30.0	25.0	25.2	5.0	4.8	
200.0	18.4	3.3	7.0	30.0	21.7	25.4	8.3	4.6	
260.6	20.0	4.4	8.8	37.0	24.4	28.8	12.6	8.2	
299.6	21.6	8.4	9.0	37.0	30.0	30.6	7.0	6.4	
325.7	16.7	4.0	8.4	37.0	20.7	25.1	16.3	11.9	
431.8	19.6	9.9	3.2	37.0	29.5	22.8	7.5	14.2	
498.6	20.9	8.7	4.2	37.0	29.6	25.1	7.4	11.9	
570.6	22.2	9.0	4.6	37.0	31.2	26.8	5.8	10.2	
711.9	24.3	8.1	4.8	37.0	32.4	29.1	4.6	7.9	
783.9	25.4	7.2	3.7	37.0	32.6	29.1	4.4	7.9	
1000.0	28.5	< -2.0	< -2.0	37.0	< 26.5	< 26.5	> 10.5	> 10.5	

Notes: 1) Test Location : Anechoic Chamber
2) Test Distance : 10 m
3) The spectrum was checked from 30 MHz to 1000 MHz.
4) Antenna factor includes cable for 23 meter
5) The symbol of "<" means "or less".
6) The symbol of ">" means "more than".
7) A sample calculation was made at 30.3 MHz
Af + Mr = 18.0 + 2.3 = 20.3 dBµV/m
Af : Antenna Factor Mr : Meter Reading
8) Setting of measuring instrument :
Detector Function : CISPR Quasi-Peak
IF Bandwidth : 120 kHz

Radiated Emissions Measurements (30 MHz - 1000 MHz)

Measuring Distance : 10 m — Horizontal

Classifications : B — Vertical