



EMC COMPLIANCE TEST REPORT

FOR

Industrial Panel PC

MODEL: AMB-2457HTT

REPORT NUMBER: 02E9958

ISSUE DATE: February 22, 2002

Prepared for

**AAEON Technology Inc.
5F, No. 135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei,
Taiwan, R. O. C.**

Prepared by

**COMPLIANCE ENGINEERING SERVICES, INC.
No. 199, CHUNG SHENG ROAD
HSIN TIEN CITY, TAIPEI, TAIWAN R.O.C.
TEL: (02) 2217-0894
FAX: (02) 2217-1254**

NVLAP[®]
LAB CODE: SL2-IN-E-0005



EC-Declaration of Conformity

For the following equipment:

Industrial Panel PC

(Product Name)

AMB-2457HTT

(Model Designation / Trade name)

AAEON Technology Inc.

(Manufacturer Name)

5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei, Taiwan, R. O. C.

(Manufacturer Address)

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive (89/336/EEC, Amended by 92/31/EEC, 93/68/EEC & 98/13/EC), For the evaluation regarding the Electromagnetic Compatibility (89/336/EEC, Amended by 92/31/EEC, 93/68/EEC & 98/13/EC), the following standards are applied:

EN 55022: 1997

EN55024: 1998

IEC 61000-4-2: 1995 + A2: 2000; IEC 61000-4-3: 1995; IEC 61000-4-4: 1995;

IEC 61000-4-5: 1995; IEC 61000-4-6: 1996

The following manufacturer / importer or authorized representative established within the EUT is responsible for this declaration:

(Company Name)

(Company Address)

Person responsible for making this declaration:

(Name, Surname)

(Position / Title)

(Place)

(Date)

(Legal Signature)

TABLE OF CONTENTS

DESCRIPTION	PAGE
VERIFICATION OF COMPLIANCE	3
GENERAL INFORMATION	4
SYSTRM DESCRIPTION	5
PRODUCT INFORMATION	6
SUPPORT EQUIPMENT	7
TEST EQUIPMENT	8
SECTION 1 EN 55022(LINE CONDUCTED & RADIATED EMISSION)	11
MEASUREMENT PROCEDURE & LIMIT (LINE CONDUCTED EMISSION TEST)	11
MEASUREMENT PROCEDURE & LIMIT (RADIATED EMISSION TEST)	13
BLOCK DIAGRAM OF TEST SETUP	15
SUMMARY DATA	16
SECTION 2 EN 61000-3-2 & EN 61000-3-3 (POWER HARMONICS & VOLTAGE FLUCTUATION/FLICKER)	18
BLOCK DIAGRAM OF TEST SETUP	18
RESULT	18
SECTION 3 IEC 61000-4-2 (ELECTROSTATIC DISCHARGE)	19
BLOCK DIAGRAM OF TEST SETUP	19
TEST PROCEDURE	20
PERFORMANCE & RESULT	20
SECTION 4 IEC 61000-4-3 (RADIATED ELECTROM AGNETIC FIELD)	21
BLOCK DIAGRAM OF TEST SETUP	21
TEST PROCEDURE	22
PERFORMANCE & RESULT	23
SECTION 5 IEC 61000-4-4 (FAST TRANSIENTS/BURST)	24
BLOCK DIAGRAM OF TEST SETUP	24
TEST PROCEDURE	25
PERFORMANCE & RESULT	25

DESCRIPTION	PAGE
SECTION 6 IEC 61000-4-5 (SURGE IMMUNITY)	26
BLOCK DIAGRAM OF TEST SETUP	26
TEST PROCEDURE	27
PERFORMANCE & RESULT	27
SECTION 7 IEC 61000-4-6 (CONDUCTED DISTURBANCE, INDUCED BY RADIO-FREQUENCY FIELDS)	28
BLOCK DIAGRAM OF TEST SETUP	
TEST PROCEDURE	29
PERFORMANCE & RESULT	30
SECTION 8 IEC 61000-4-8 (Power Frequency Magnetic Field)	31
BLOCK DIAGRAM OF TEST SETUP	31
TEST PROCEDURE	32
PERFORMANCE & RESULT	33
SECTION 9 IEC 61000-4-11 (VOLTAGE DIP/INTERRUPTION)	34
BLOCK DIAGRAM OF TEST SETUP	34
TEST PROCEDURE	35
PERFORMANCE & RESULT	35
APPENDIX 1 PHOTOGRAPHS OF TEST SETUP	36
EN 55022 TEST EN 61000-3-2 TEST EN 61000-3-3 TEST IEC 61000-4-2 TEST IEC 61000-4-3 TEST IEC 61000-4-4 TEST IEC 61000-4-5 TEST IEC 61000-4-6 TEST	
APPENDIX 2 PHOTOGRAPHS OF EUT	44
APPENDIX 3 CONDUCTED EMISSION PLOT & RADIATED EMISSION DATA	49

VERIFICATION OF COMPLIANCE

Equipment Under Test: Industrial Panel PC
Trade Name: N/A
Model Number: AMB-2457HTT
Agency Series: N/A
Applicant: **AAEON Technology Inc.**
5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City,
Taipei, Taiwan, R. O. C.


Manufacturer: **AAEON Technology Inc.**
5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City,
Taipei, Taiwan, R. O. C.

Type of Test: EMC Directive 89/336/EEC for CE Marking
Technical Standards: EN 55022: 1997
EN 55024: 1998 (IEC 61000-4-2: 1995 + A2: 2000, IEC 61000-4-3: 1995,
IEC 61000-4-4: 1995, IEC 61000-4-5: 1995,
IEC 61000-4-6: 1996)

File Number: 02E9958
Date of test: February 18, 2002 ~ February 21, 2002
Deviation: N/A
Condition of Test Sample: Normal

The above equipment was tested by Compliance Engineering Services, Inc. for compliance with the requirements set forth in EMC Directive 89/336/EEC and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Approved by Authorized Signatory: 
RICK YEO / EMC MANAGER

GENERAL INFORMATION

Applicant: **AAEON Technology Inc.**
5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City,
Taipei, Taiwan, R. O. C.

Contact Person: Milo Wang / Q. E. Dept. Engineer

Manufacturer: **AAEON Technology Inc.**
5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City,
Taipei, Taiwan, R. O. C.

File Number: 02E9958

Date of Test: February 18, 2002 ~ February 21, 2002

Equipment Under Test: Industrial Panel PC

Model Number: AMB-2457HTT

Agency Series: N/A

Type of Test: EMC Directive 89/336/EEC for CE Marking

Technical Standards: EN 55022: 1997
EN 55024: 1998 (IEC 61000-4-2: 1995 + A2: 2000, IEC 61000-4-3: 1995,
IEC 61000-4-4: 1995, IEC 61000-4-5: 1995,
IEC 61000-4-6: 1996)

**Frequency Range
(EN 55022):** 150kHz to 30MHz for Line Conducted Test
30MHz to 1000MHz for Radiated Emission Test

Test Site: **Compliance Engineering Services, Inc.**
No. 199, Chung Sheng Road
Hsin Tien City, Taipei
Taiwan, R. O. C.

SYSTEM DESCRIPTION

EUT Test Procedure:

1. Windows 98 Boots System.
2. Run Winemc.Exe To Activate All Peripherals And Display “H” Pattern On Monitor Screen.
3. Data Through the EUT and Transmit Between Server Notebook and EUT Via RJ45 Cable.

PRODUCT INFORMATION

Housing Type:	METAL
EUT Power Rating:	DC 5V/12 to DC Power Supply
AC power during Test:	230VAC / 50Hz From DC Power Supply
DC Power Supply Manufacturer:	Magic Power Technology Co., Ltd.
DC Power Supply Model Number:	MDP-425C
AC Power Cord Type:	Un-shielded, 1.8m (Detachable)
DC Cable Type:	Un-Shielded, 1.6m (Detachable)
EUT I/O Cable:	Shielded, 0.25m (Detachable)
OSC/Clock Frequencies :	Y1= 14.318MHz

I/O Port of EUT:

I/O PORT TYPES	Q'TY	TESTED WITH
1. PS/2 Port	3	3
2. RJ45 Port	1	1
3. DB25 (Parallel)	1	1
1). DB9 Port (Serial)	1	1
2). Ext Display Port	1	1
3). DB15 (VGA)	1	1

Note: N/A

SUPPORT EQUIPMENT

Host Computer:

Equipment	Model#	Serial#	Trade Name
CPU	CELERON-533	N/A	INTEL
Main Board	CI7ZS-1.00	N/A	N/A
LCD Panel (15")	FLC38XGC6V-06	N/A	FUJITSU
BackPlane	HPC175	N/A	N/A
HDD	MPC3043AT	N/A	FUJITSU
LVDS Transfer Board	TB-908D	N/A	N/A
LVDS Board	LVDS-T2000	N/A	N/A
VGA Board	DVL68-B1	N/A	N/A
RAM	SDRAM 64M	N/A	N/A

External Peripheral Devices:

No	Equipment	Model #	Serial #	FCC ID	Trade Name	Data Cable	Power Cord
1.	PS/2 Keyboard	6311-TW4C/6	N/A	N/A	ACER	Shielded, 1.7m	N/A
2.	Mouse	M-M35	LZA74982707	DZL210365	LOGITECH	Shielded, 1.9m	N/A
3.	Mouse	M-S34	LZED1303050	DZL211029	LOGITECH	Shielded, 1.9m	N/A
4.	Keyboard	KB-8923	3373140	E8HKB-5923	IBM	Shielded, 1.8m	N/A
5.	DC Power	MPD-425C	N/A	N/A	Magic Power	Unshielded, 1.6m	Unshielded, 1.8m
6.	Monitor	PN19LT	N/A	DoC	SAMSUNG	Shielded, 1.8m With two cores	Unshielded, 1.8m
7.	Printer	C6464A	TH12SE129W	DoC	HP	Shielded, 1.9 m	Unshielded, 1.8m
8.	Server Notebook	PS181L-03T08	12089097J	N/A	Toshiba	Unshielded, 30m (RJ45)	Unshielded, 1.8m

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals.

Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

TEST EQUIPMENT LIST (EMISSION)

Instrumentation: The following list contains equipment used at Compliance Engineering Services, Inc. for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2-1988 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 9kHz to 1.0 / 2.0 GHz.

Equipment used during the tests:

Open Area Test Site: #E

Equipment	Manuf.	Model No.	Serial No.	Cal Date	Due Date
SPECTRUM ANALYZER	H.P.	8566B	2937A06102	06/06/01	06/05/02
SPECTRUM DISPLAY	H.P.	85662A	2848A18276	06/06/01	06/05/02
QUASI-PEAK DETECTOR	H.P.	85650A	2811A01439	06/07/01	06/06/02
AMPLIFIER	H.P.	8447D B	1644A02328	05/07/01	05/06/02
ANTENNA	EMCO	3142	1310	06/30/01	06/29/02
CABLE	BELDEN	9913	N-TYPE07	01/02/02	01/01/03
CABLE (1-18GHz)	JYEBAO	N30-L142-1/9	N/A	05/02/01	05/02/02
AMPLIFIER (1-26GHz)	MITEQ	NSP2600-44	646455	10/24/01	10/23/02

Conducted Area Test Site: Conducted Room

Equipment	Manuf.	Model No.	Serial No.	Cal Date	Due Date
TEST RECEIVER	R&S	ESHS20	840455/006	03/15/01	03/14/02
LISN	SOLAR	8012-50-R-24-BNC	8305114	07/23/01	07/22/02
LISN(EUT)	EMCO	3825/2	1435	01/16/02	01/15/03

The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.

TEST EQUIPMENT LIST

For Power Harmonic & Voltage Fluctuation/Flicker Measurement:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
HP / Harmonic & Flicker Tester	6842A	3531A-000142	06/15/2001	06/14/2002

For ESD test:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
HAEFELY TRENCH / ESD Generator	PESD 1600	H710203	09/01/2001	08/31/2002

For Radiated Electromagnetic Field immunity Measurement:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
R&S / Signal Generator	SMY 02	DE13751	01/10/2002	01/09/2003
IFI / "E" Field sensor/ Light Modulator Transmitter	EFS-5	713-0695	06/29/2001	06/28/2002
IFI / Combination Amplifier	SMX100	2067-1196	06/28/2001	06/27/2002
IFI / Leveling Pre-Amplifier	LPA-5B	714-0695	05/01/2001	04/30/2002
EMCO / Biconilog Antenna	3142	9609-1087	No Calibration Required	No Calibration Required

For Fast Transients/Burst test:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
KeyTek Instruments / EFT Generator	E421	9502326	11/01/2001	10/31/2002
KeyTek Instruments / Capacitive Clamp	CCL-4	9503290	No Calibration Required	No Calibration Required
HAEFELY TRENCH / Fast Transients/Burst Generator	PEFT- JUNIOR	583 333-117	08/21/2001	08/20/2002
HAEFELY TRENCH / Clamp	093 506.1	080 421.13	N/A	N/A

For Surge Immunity test:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
Surger Generator KeyTek Instruments	E501	9502324	11/01/2001	10/31/2002
Telecom Lines Coupler DECOUPLER KeyTek Instruments	CM-TELCD	0104399	05/01/2001	04/30/2002
I/O Signal Line DECOUPLER KeyTek Instruments	CM-I/OCD	0103234	05/01/2001	04/30/2002
HAEFELY TRENCH / Surge Tester	PSUGER 4010	583 334-71	09/01/2001	08/31/2002

For CS test:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
R&S / Signal Generator	SMY 02	DE13751	01/10/2002	01/09/2003
IFI / Combination Amplifier	SMX100	2067-1196	06/28/2001	06/27/2002
IFI / Leveling Pre-Amplifier	LPA-5B	714-0695	05/01/2001	04/30/2002
FISCHER / Power Line Coupling Decoupling Network	FCC-801-M3-16A	99122	10/27/2001	10/26/2002
FISCHER / Bulk Current Injection Probe	F-120-9B	54	10/30/2001	10/29/2002
Narda / High Power Attenuator	769-6	02541	10/26/2001	10/25/2002

For Power Frequency Magnetic Field test :

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
Haefely / Magic Field Tester	MAG 100.1	081436-02	No Calibration Required	No Calibration Required
Extech Electronics / Frequency Converter	CFC-105	810390	No Calibration Required	No Calibration Required
CHY/ AC/DC Clamp Meter	932C	2K0900285	10/25/2001	10/24/2002

For Voltage Dips/Short Interruption and Voltage Variation Immunity test:

Manufacturer/Type	Model No.	Serial No.	Last Cal.	Cal. Due
Haefely / Dips/Inerruption/Variations Tester	PLINE 1610	081568-06	08/06/2001	08/05/2002
FLUKE / 79 Series Ii Multimeter	79-II	66400868	07/03/2001	07/02/2002

SECTION 1 EN 55022 (LINE CONDUCTED & RADIATED EMISSION)

MEASUREMENT PROCEDURE (PRELIMINARY LINE CONDUCTED EMISSION TEST)

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per EN 55022 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per EN 55022.
- 3) All I/O cables were positioned to simulate typical actual usage as per EN 55022.
- 4) The EUT received DC 5V/12V power through DC Power Supply and Line Impedance Stabilization Network (LISN) which supplied power source of 230VAC/ 50Hz and was grounded to the ground plane.
- 5) All support equipment received power from a second LISN supplying power of 110VAC/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode were scanned during the preliminary test:

Mode:

No.	Mode of operation	Date	Data Report/ Plot No.
1	1024X768	02/21/2002	9958F#(08,32)
2	800X600	02/21/2002	9958F#(16)
3	640X480	02/21/2002	9462F#(24)

- 10) After the preliminary scan, we found the following test mode producing the highest emission level.

Mode: 1

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

MEASUREMENT PROCEDURE (FINAL LINE CONDUCTED EMISSION TEST)

- 1) EUT and support equipment was set up on the test bench as per step 10 of the preliminary test.
- 2) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Q.P. mode, then the emission signal was re-checked using an A.V. detector.
- 3) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Freq (MHz)	Meter Reading (dBuV)	C.F. (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Margin (dB)	Reading Type (P/Q/A)	Line (L1/L2)
x.xx	x.xx	x.xx	48.38	66.00	-17.62	A	L1

C.F.(Correction Factor)=Insertion Loss + Cable Loss

Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading - Limits

P=Peak Reading

L1=Hot

Q=Quasi-peak

L2=Neutral

A=Average Reading

Comments: N/A

LINE CONDUCTED EMISSION LIMIT (EN 55022)

Frequency	Maximum RF Line Voltage	
	Q.P.	AVERAGE
150kHz-500kHz	79dBuV	66dBuV
500kHz-5MHz	73dBuV	60dBuV
5MHz-30MHz	73dBuV	60dBuV

Note: The lower limit shall apply at the transition frequency.

MEASUREMENT PROCEDURE (PRELIMINARY RADIATED EMISSION TEST)

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per EN 55022 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per EN 55022.
- 3) All I/O cables were positioned to simulate typical actual usage as per EN 55022.
- 4) The EUT received DC 5V/12V power source from DC Power Supply (AC 230V/50Hz) to the outlet socket under the turntable. All support equipment received 110VAC/60Hz power from another socket under the turntable, if any.
- 5) The antenna was placed at 10 meter away from the EUT as stated in EN 55022. The antenna connected to the analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7) The following test mode were scanned during the preliminary test:

Mode:

No.	Mode of operation	Date	Data Report/ Plot No.
1	640X480	02/19/2002	9462F#(40)
2	800X600	02/19/2002	9462F#(38)
3	1024X768	02/19/2002	9462F#(33, 35)
4	1-5G	02/18/2002	9958G#(02, 08)

- 8) After the preliminary scan, we found the following test mode producing the highest emission level.

Mode: 3.

Then, the EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for final testing.

MEASUREMENT PROCEDURE (FINAL RADIATED EMISSION TEST)

- 1) EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.
- 2) The Analyzer / Receiver scanned from 30MHz to 1000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 3) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Peak reading is presented. If EUT emission level was less-2dB to the limit, then the emission signal was re-checked using a Q.P. detector.
- 4) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Freq (MHz)	Meter Reading (dBuV)	C.F. (dB/m)	Corrected Reading (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading Type P/Q/A	Pol. H/V
x.xx	x.xx	x.xx	40.82	47.00	-6.18	P	V

C.F.(Correction Factor)=Antenna Factor + Cable Loss + Attenuator(6dB) - Amplifier Gain

Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading – Limits

P=Peak Reading

H=Horizontal Polarization/Antenna

Q=Quasi-peak

V=Vertical Polarization/Antenna

A=Average Reading

Comments: N/A

RADIATED EMISSION LIMIT

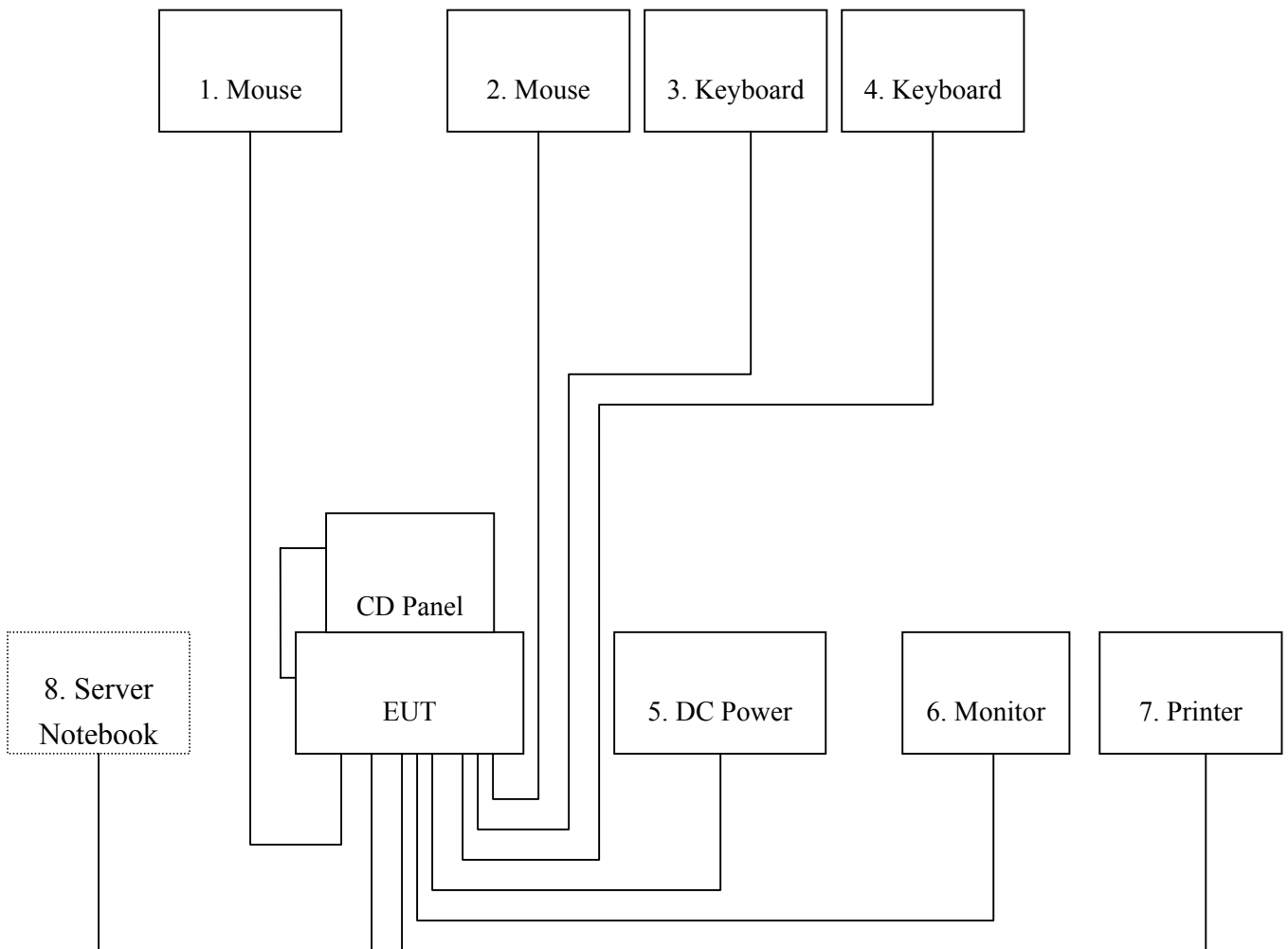
Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBu V/m/ Q.P.)
30-230	10	40
230-1000	10	47

Note: The lower limit shall apply at the transition frequency.

BLOCK DIAGRAM OF TEST SETUP

System Diagram of Connections between EUT and Simulators

EUT: Industrial Panel PC
Model Number: AMB-2457HTT



SUMMARY DATA

(LINE CONDUCTED TEST)

Model Number: AMB-2457HTT
Tested by: James Liao

Location: Conducted Room

Test Mode: Mode 1

Test Results: Passed

Temperature: 17°C

Humidity: 79%RH

(The chart below shows the highest readings taken from the final data)

Six Highest Conducted Emission Readings							
Frequency Range Investigated				150 kHz TO 30 MHz			
Freq (MHz)	Meter Reading (dBuV)	C.F. (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Margin (dB)	Reading Type (P/Q/A)	Line (L1/L2)
23.018	46.03	0.48	46.51	73.00	-26.49	P	L1
28.755	52.23	0.53	52.76	73.00	-20.24	P	L1
0.153	55.67	0.02	55.69	79.00	-23.31	P	L2
0.213	55.13	0.02	55.15	79.00	-23.85	P	L2
0.516	46.99	0.05	47.04	73.00	-25.96	P	L2
28.755	50.83	0.53	51.36	73.00	-21.64	P	L2

C.F.(Correction Factor)=Insertion Loss + Cable Loss

Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading - Limits

P=Peak Reading

L1=Hot

Q=Quasi-peak

L2=Neutral

A=Average Reading

Comments: N/A

SUMMARY DATA (RADIATED EMISSION TEST)

Model Number: AMB-2457HTT**Location:** Site # E**Tested by:** Vince Chiang**Polar:** Vertical / Horizontal– 10m**Test Mode:** Mode 3**Test Results:** Passed**Temperature:** 17°C**Humidity:** 79%RH

(The chart below shows the highest readings taken from the final data)

Frequency Range Investigated (30 MHz TO 1000 MHz)							
Freq (MHz)	Meter Reading (dBuV)	C.F. (dB/m)	Corrected Reading (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading Type P/Q/A	Pol. H/V
43.820	49.01	-13.05	35.96	40.00	-4.04	Q	V
51.980	51.03	-14.52	36.51	40.00	-3.49	Q	V
178.810	49.20	-12.45	36.75	40.00	-3.25	P	V
181.980	46.20	-12.22	33.98	40.00	-6.02	P	H
200.450	46.80	-11.75	35.05	40.00	-4.95	P	H
207.960	48.00	-11.16	36.84	40.00	-3.16	P	H

C.F.(Correction Factor)=Antenna Factor + Cable Loss - Amplifier Gain (+ Attenuator 3dB)

Corrected Reading = Metering Reading + C.F.

Margin=Corrected Reading - Limits

P=Peak Reading

H=Horizontal Polarization/Antenna

Q=Quasi-peak

V=Vertical Polarization/Antenna

A=Average Reading

Comments: N/A

Comments: N/A

SECTION 2 EN 61000-3-2 & EN 61000-3-3 (POWER HARMONICS & VOLTAGE FLUCTUATION/FLICKER)

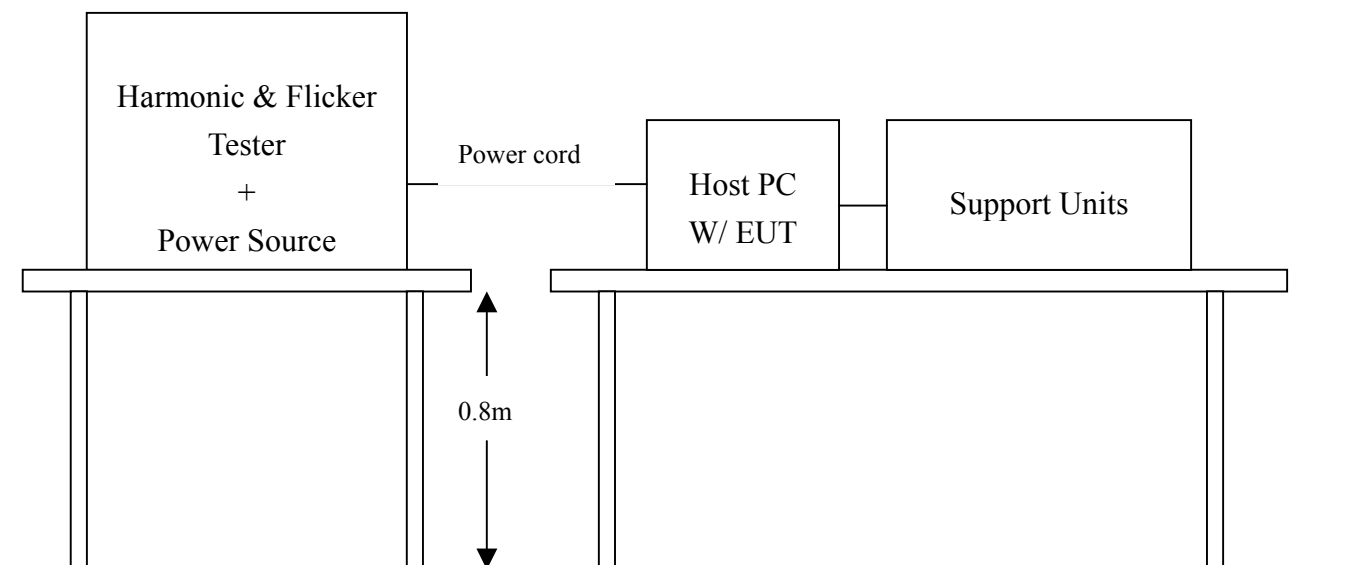
POWER HARMONICS MEASUREMENT

Mode Type	: AC Power Source
Port	: AC mains
Basic Standard	: EN 61000-3-2: 1995 + A1: 1998 + A2: 1998 + A14: 2000
Limits	: CLASS D
Tester	: N/A
Temperature	: N/A
Humidity	: N/A

VOLTAGE FLUCTUATION/FLICKER MEASUREMENT

Mode Type	: AC Power Source
Port	: AC mains
Basic Standard	: EN 61000-3-3 : 1995
Limits	: Section 5 of EN 61000-3-3
Tester	: N/A
Temperature	: N/A
Humidity	: N/A

Block Diagram of Test Setup:



Result: EUT NO Any AC Power Source.

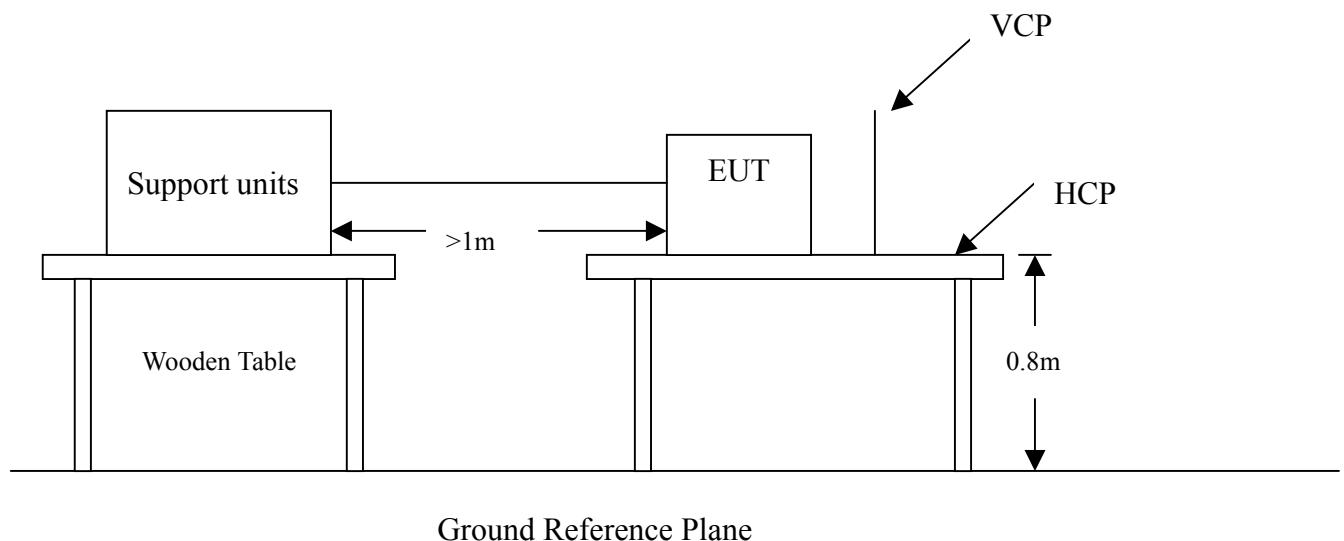
SECTION 3 IEC 61000-4-2 (ELECTROSTATIC DISCHARGE)

ELECTROSTATIC DISCHARGE (ESD) IMMUNITY TEST

Port	: Enclosure
Basic Standard	: IEC 61000-4-2
Requirements	: $\pm 8\text{kV}$ (Air Discharge) $\pm 4\text{kV}$ (Contact Discharge) $\pm 4\text{kV}$ (Indirect Discharge)
Performance Criteria	: B (Standard require)
Tested by	: Bill Huang
Temperature/Humidity:	: 19°C /60%

Block Diagram of Test Setup:

(The 470 k ohm resistors are installed per standard requirement)



Test Procedure:

1. The EUT was located 0.1 m minimum from all side of the HCP.
2. The support units were located 1 m minimum away from the EUT.
3. A communication test program was loaded and executed in Windows mode.
4. PC sent transmit data to remote side via EUT.
5. As per the requirement of EN 55024; applying direct contact discharge at the sides other than front of EUT at minimum 50 discharges (25 positive and 25 negative) if applicable, can't be applied direct contact discharge side of EUT then the indirect discharge shall be applied. One of the test points shall be subjected to at least 50 indirect discharge (contact) to the front edge of horizontal coupling plane.
6. Other parts of EUT where it is not possible to perform contact discharge then selecting appropriate points of EUT for air discharge, a minimum of 10 single air discharges shall be applied.
7. The application of ESD to the contact of open connectors is not required.
8. Putting a mark on EUT to show tested points. The following test condition was followed during the tests.

The electrostatic discharges were applied as follows:

Amount of Discharges	Voltage	Coupling	Result (Pass/Fail)
Mini 25 /Point	±4kV	Contact Discharge	Pass
Mini 25 /Point	±4kV	Indirect Discharge HCP (Front)	Pass
Mini 25 /Point	±4kV	Indirect Discharge VCP (Back)	Pass
Mini 25 /Point	±4kV	Indirect Discharge VCP (Left)	Pass
Mini 25 /Point	±4kV	Indirect Discharge VCP (Right)	Pass
Mini 10 /Point	±8kV	Air Discharge	Pass

Performance & Result:

- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the functions self recoverable or can be restored by the operation of controls.

PASS

FAILED

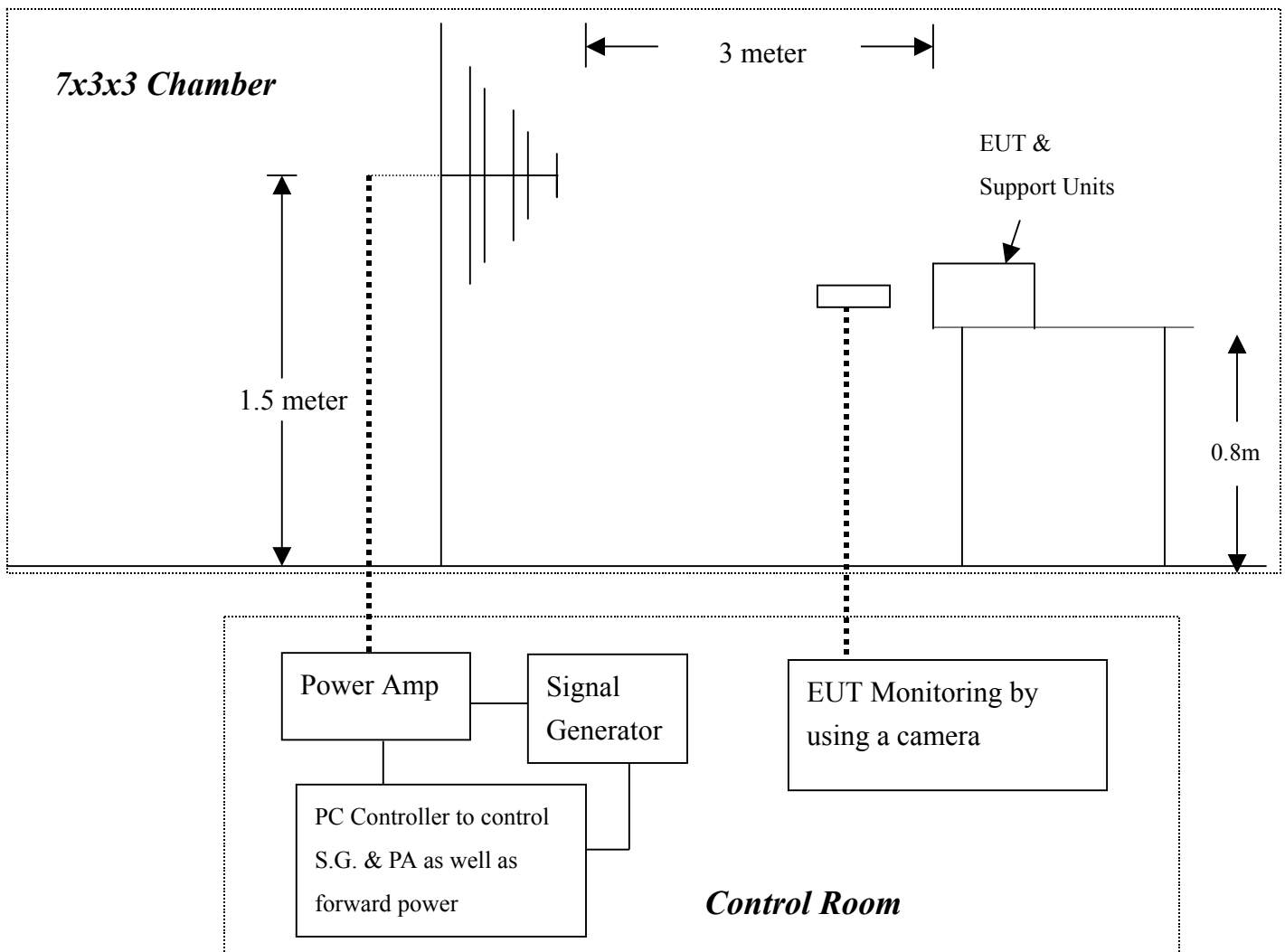
Observation: No any function degraded during the tests.

SECTION 4 IEC 61000-4-3 (RADIATED ELECTROMAGNETIC FIELD)

RADIATED ELECTROMAGNETIC FIELD IMMUNITY TEST

Port	: Enclosure
Basic Standard	: IEC 61000-4-3
Requirements	: 3 V/m / with 80% AM. 1kHz Modulation
Performance Criteria	: A (Standard require)
Tester	: Bill Huang
Temperature	: 19°C
Humidity	: 60%
Note	: The EUT not have acoustic interfaces, the annex A of EN 55024 should not be applied.

Block Diagram of Test Setup:



Test Procedure:

1. The EUT and support units were located at the edge of supporting table keep 3 meter away from transmitting antenna, it just the calibrated square area of field uniformity.
2. Adjusting the cables to be exposed to the electromagnetic field as possible.
3. Performing a Radiated Emission Scan in range of 30 to 1000 MHz prior to do RS test and records the more higher emission frequencies for the reference of RS test, due to antenna effectiveness.
4. Adjusting the monitoring camera to monitor the “H” message as clear as possible.
5. Setting the testing parameters of RS test software per IEC 61000-4-3.
6. Referring to the tested data of step 3 to performing the RS test from 80 to 1000 MHz.
7. Recording the test result in following table.
8. Changing the EUT to the other side and repeat step 3 to 6, until 4 sides of EUT were verified.

IEC 61000-4-3 Final test conditions:

Test level : 3V/m
 Steps : 1 % of fundamental
 Dwell Time : 3 sec

Range (MHz)	Field	Modulation	Polarity	Position (°)	Result (Pass/Fail)
80-1000	3V	Yes	H	Front	Pass
80-1000	3V	Yes	V	Front	Pass
80-1000	3V	Yes	H	Right	Pass
80-1000	3V	Yes	V	Right	Pass
80-1000	3V	Yes	H	Back	Pass
80-1000	3V	Yes	V	Back	Pass
80-1000	3V	Yes	H	Left	Pass
80-1000	3V	Yes	V	Left	Pass

Performance & Result:

- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the functions self recoverable or can be restored by the operation of controls.

 PASS **FAILED**

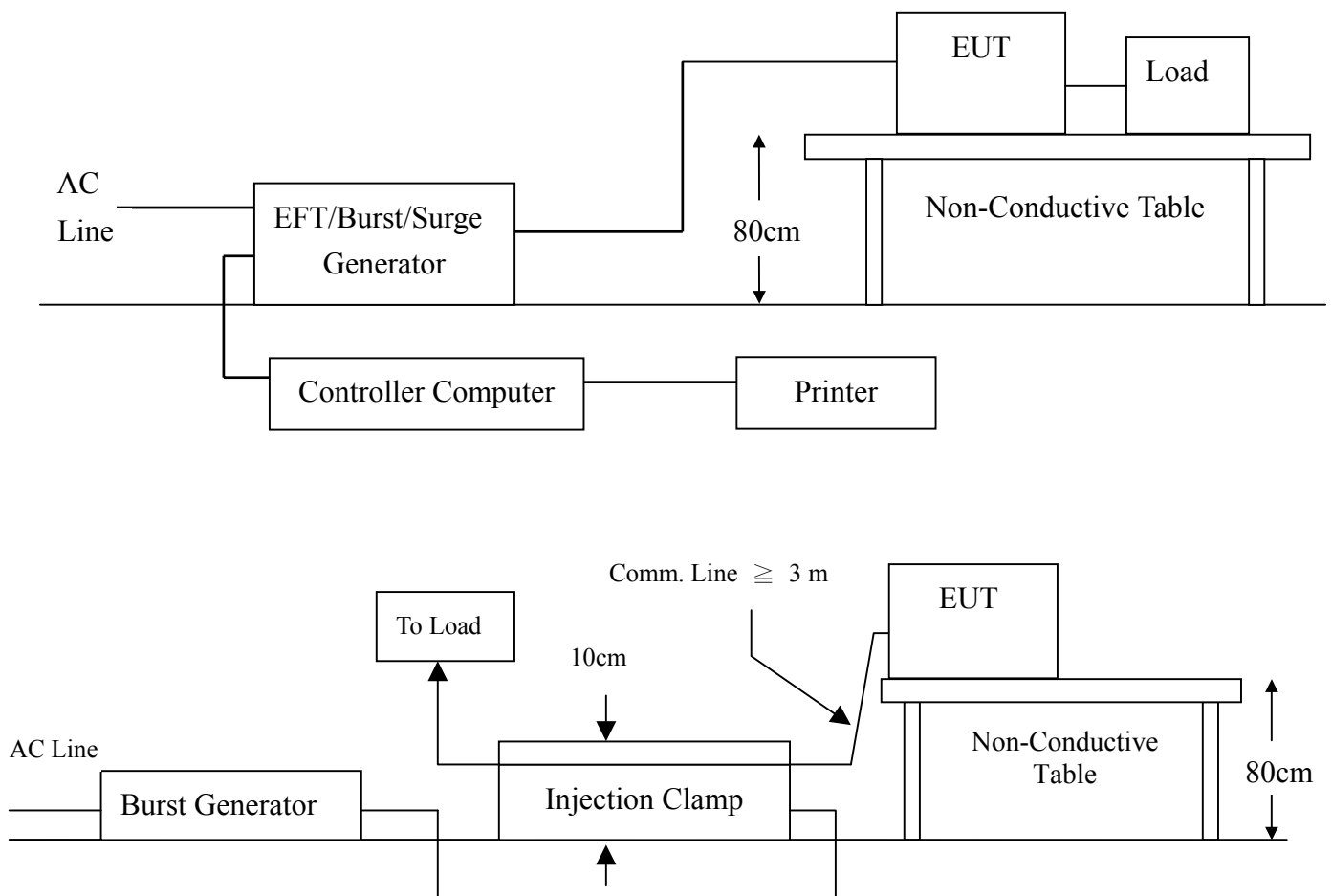
Observation: No any function degraded during the tests.

SECTION 5 IEC 61000-4-4 (FAST TRANSIENTS/BURST)

FAST TRANSIENTS/BURST IMMUNITY TEST

Port	: On Power Lines and Data Line
Basic Standard	: IEC 61000-4-4
Requirements	: $\pm 0.5\text{kV}$ for Power Supply Lines & Data Line
Performance Criteria	: B (Standard require)
Tested by	: Bill Huang
Temperature	: 17°C
Humidity	: 50%

Block Diagram of Test Setup:



Test Procedure:

1. The EUT and support units were located on a wooden table 0.8 m away from ground reference plane.
2. A 1.0 meter long power cord was attached to EUT during the test.
3. The length of communication cable between communication port and clamp was keeping within 1 meter.
4. A test program was loaded and executed in Windows mode.
5. The data was display on the monitor and filling the screens.
6. The test program exercised related support units sequentially.
7. Repeating step 3 to 6 through the test.
8. Recording the test result as shown in following table.

Impulse Frequency: 5kHz

Tr/Th: 5/50ns

Burst Duration: 15ms

Burst Period: 300mS

Inject Line	Voltage kV	Inject Method	Result (Pass/Fail)
L1	±0.5	Direct	Pass
L2	±0.5	Direct	Pass
L1+L2	±0.5	Direct	Pass
RJ11	±0.5	Clamp	Pass

Performance & Result:

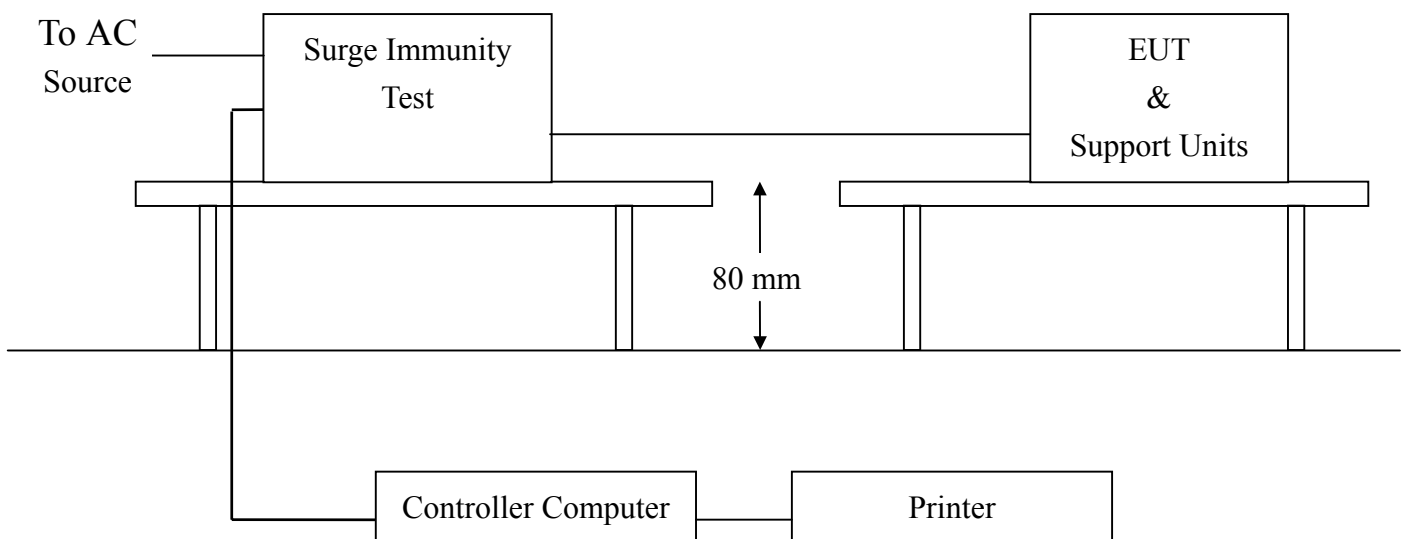
- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the functions self recoverable or can be restored by the operation of controls.

PASS **FAILED**

Observation: No any function degraded during the tests.

SECTION 6 IEC 61000-4-5 (SURGE IMMUNITY)**SURGE IMMUNITY TEST**

Port	:	Power Cord
Basic Standard	:	IEC 61000-4-5
Requirements	:	+/- 0.5kV (Line to Line of DC Power)
Performance Criteria	:	B (Standard require)
Tester	:	Lung Tsai
Temperature	:	17°C
Humidity	:	50%

Block Diagram of Test Setup:

Test Procedure:

1. The EUT and support units were located on a wooden table 0.8 m away from ground floor.
2. A test program was loaded and executed in Windows mode.
3. The data was display on the monitor and filling the screens.
4. The test program exercised related support units sequentially.
5. Repeating step 3 to 4 through the test.
6. Recording the test result as shown in following table.

Test conditions:

Voltage Waveform : 1.2/50 us
 Current Waveform : 8/20 us
 Polarity : Positive/Negative
 Phase angle : 0°, 90°, 270°
 Number of Test : 5

Coupling Line	Voltage (kV)	Polarity	Coupling Method	Result (Pass/Fail)
L1-L2	0.5	Positive	Capacitive	Pass
L1-L2	0.5	Negative	Capacitive	Pass

Performance & Result:

- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the functions self recoverable or can be restored by the operation of controls.

PASS **FAILED**

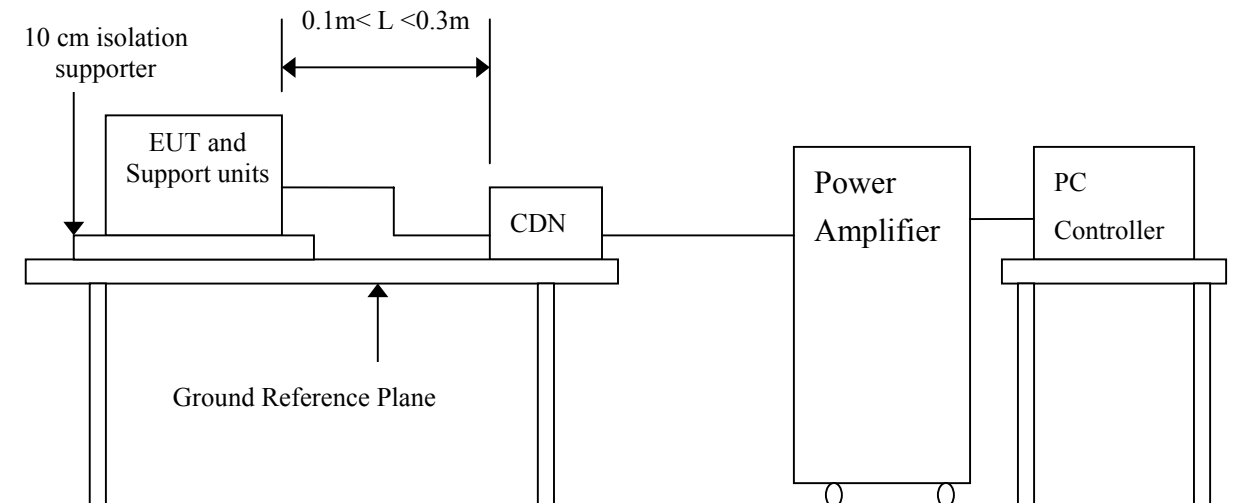
Observation: No any function degraded during the tests.

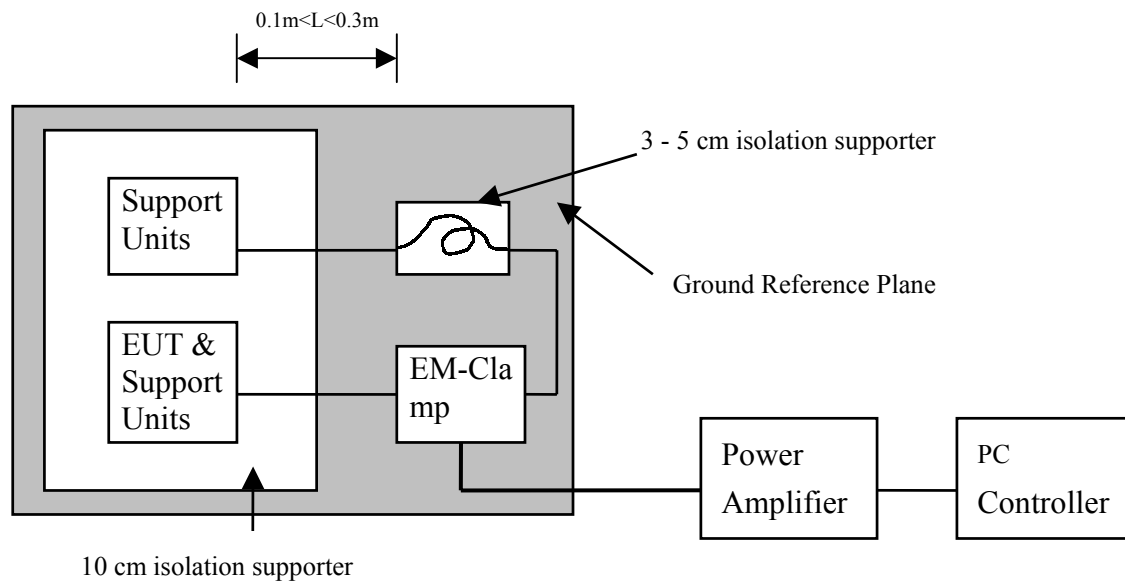
SECTION 7 IEC 61000-4-6 (CONDUCTED DISTURBANCE/INDUCED BY RADIO-FREQUENCY FIELD)

Port	: DC Power and Line Cable
Base Standard	: IEC 61000-4-6
Requirements	: 3 V with 80% AM. Modulation
Injection Method	: CDN for Power Cord Bulk Current Injection Probe for Line Cable
Deviation	:None
Performance Criteria	: A (Standard require)
Tester	: Bill Huang
Temperature	: 19°C
Humidity	: 60%
Note	: The EUT not have acoustic interfaces, the annex A of EN 55024 should not be applied.

Block Diagram of Test Setup:

Side view:



Top view:**Test Procedure:**

1. The EUT and support units were located at a ground reference plane with the interposition of a 0.1 m thickness insulating support and the CDN was located on GRP directly.
2. Transmit data messages were displayed on screen of Monitor.
3. Adjusting the monitoring camera to monitor the transmit data message as clear as possible.
4. Setting the testing parameters of CS test software per EN 61000-4-6.
5. Recording the test result in following table.

Test conditions:

Frequency Range : 0.15MHz-80MHz
 Frequency Step : 1% of fundamental
 Dwell Time : 3 sec

Range (MHz)	Field	Modulation	Result (Pass/Fail)
0.15-80	3V	Yes	Pass

Performance & Result:

- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the functions self-recoverable or can be restored by the operation of controls.

PASS **FAILED**

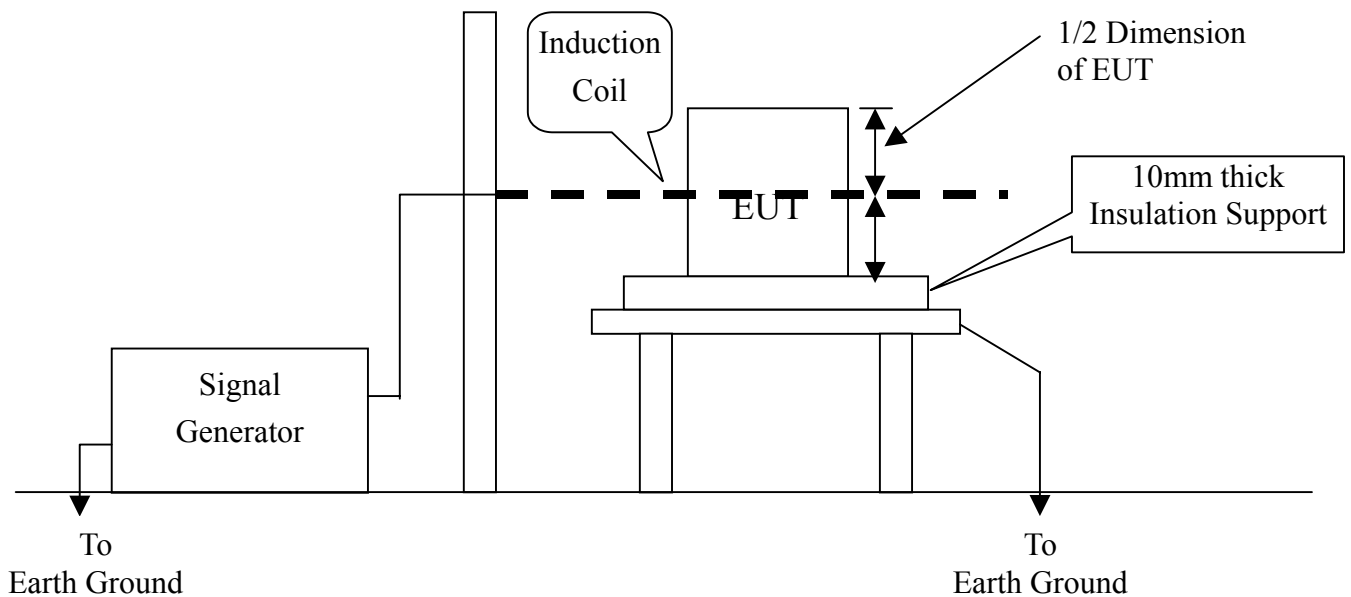
Observation: No any function degraded during the tests.

SECTION 8 IEC 61000-4-8 (POWER FREQUENCY MAGNETIC FIELD IMMUNITY TEST)

POWER FREQUENCY MAGNETIC FIELD IMMUNITY TEST

Port	: Enclosure
Basic Standard	: IEC 61000-4-8
Requirements	: 1 A/m
Performance Criteria	: A (Standard Required)
Tester	: N/A
Temperature	: N/A
Humidity	: N/A

Block Diagram of Test Setup:



Test Procedure:

1. The EUT and support units were located on Ground Reference Plane with the interposition of a 0.1 m thickness insulation support.
2. Putting the induction coil on horizontal direction.(X direction)
3. A test program was loaded and executed in Windows mode.
4. The data was displayed on the screen of Monitor and filling the screen.
5. The test program exercised related support units sequentially.
6. Repeating step 3 to 5 through the test.
7. Recording the test result as shown in following table.
8. Rotating the induction coil by 90° (Y direction) then repeat step 3 to 7.
9. Rotating the induction coil by 90° again (Z direction) then repeat step 3 to 7.

*. Test conditions:

Field Strength: 1A/m

Power Freq.: 50Hz

Orientation: X, Y, Z

Orientation	Field	Result (Pass/Fail)	Remark
X			
Y			
Z			

Performance & Result:

- Criteria A:** The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.
- Criteria B:** The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.
- Criteria C:** Temporary loss of function is allowed, provided the functions self recoverable or can be restored by the operation of controls.

 PASS **FAILED****Observation: N/A(EUT Without any magnetic component)**

SECTION 9 IEC 61000-4-11 (VOLTAGE DIPS, SHORT INTERRUPTIONS AND VOLTAGE VARIATIONS)

VOLTAGE DIPS / SHORT INTERRUPTIONS

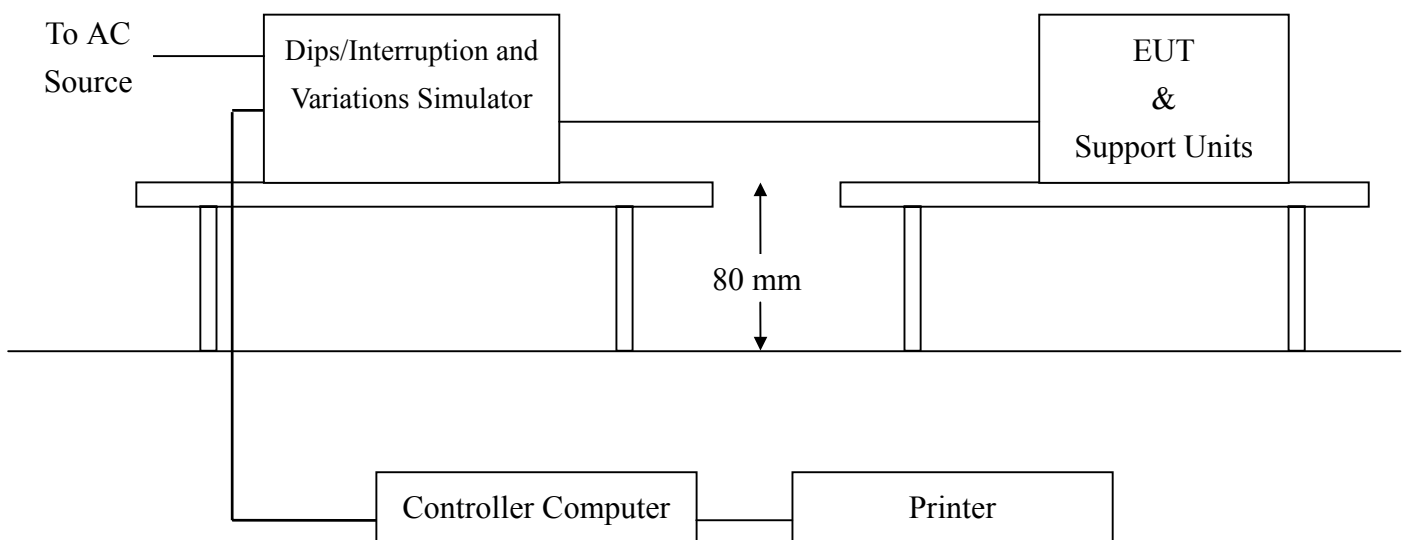
Port : AC mains
Basic Standard : IEC 61000-4-11 (1994)
Requirement : Phase angles 0, 45, 90, 135, 180, 225, 270, 315 degrees.

Voltage Dips	Test Level % U _T	Reduction (%)	Duration (periods)	Performance Criteria
	<5	>95	0.5	B
70	30	25	C	

Voltage Interruptions	Test Level % U _T	Reduction (%)	Duration (periods)	Performance Criteria
	<5	>95	250	C

Test Interval : Min. 10 sec.
Tester : N/A
Temperature : N/A
Humidity : N/A

Block Diagram of Test Setup:



Test Procedure:

1. The EUT and support units were located on a wooden table, 0.8 m away from ground floor.
2. A test program was loaded and executed in Windows mode.
3. The data was displayed on the monitor and filling the screens.
4. The test program exercised related support units sequentially.
5. Setting the parameter of tests and then Perform the test software of test simulator.
6. Conditions changes to occur at 0 degree crossover point of the voltage waveform.
7. Repeating step 3 to 4 through the test.
8. Recording the test result in test record form.

Test conditions:

The duration with a sequence of three dips/interruptions with interval of 10s minimum (between each test events)

Voltage Dips:

Test Level % U _T	Reduction (%)	Duration (periods)	Observation	Meet Performance Criteria

Voltage Interruptions:

Test Level % U _T	Reduction (%)	Duration (periods)	Observation	Meet Performance Criteria

Normal: N/A.

Performance & Result:

Criteria A: The apparatus continues to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance.

Criteria B: The apparatus continues to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. In some cases the performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.

Criteria C: Temporary loss of function is allowed, provided the functions self recoverable or can be restored by the operation of controls.

<input type="checkbox"/> PASS <input type="checkbox"/> FAILED
Observation: EUT No any AC Power Source.

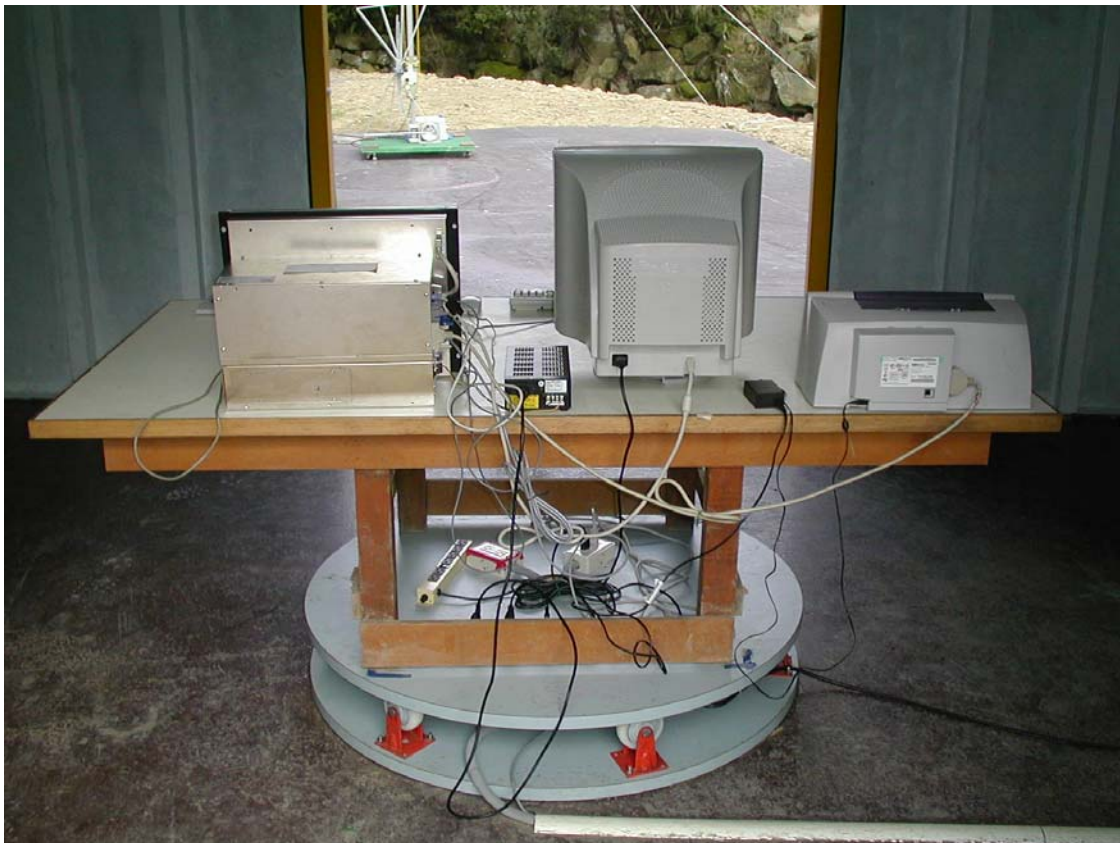
APPENDIX 1

PHOTOGRAPHS OF TEST SETUP

LINE CONDUCTED EMISSION TEST (EN 55022)



RADIATED EMISSION TEST (EN 55022)

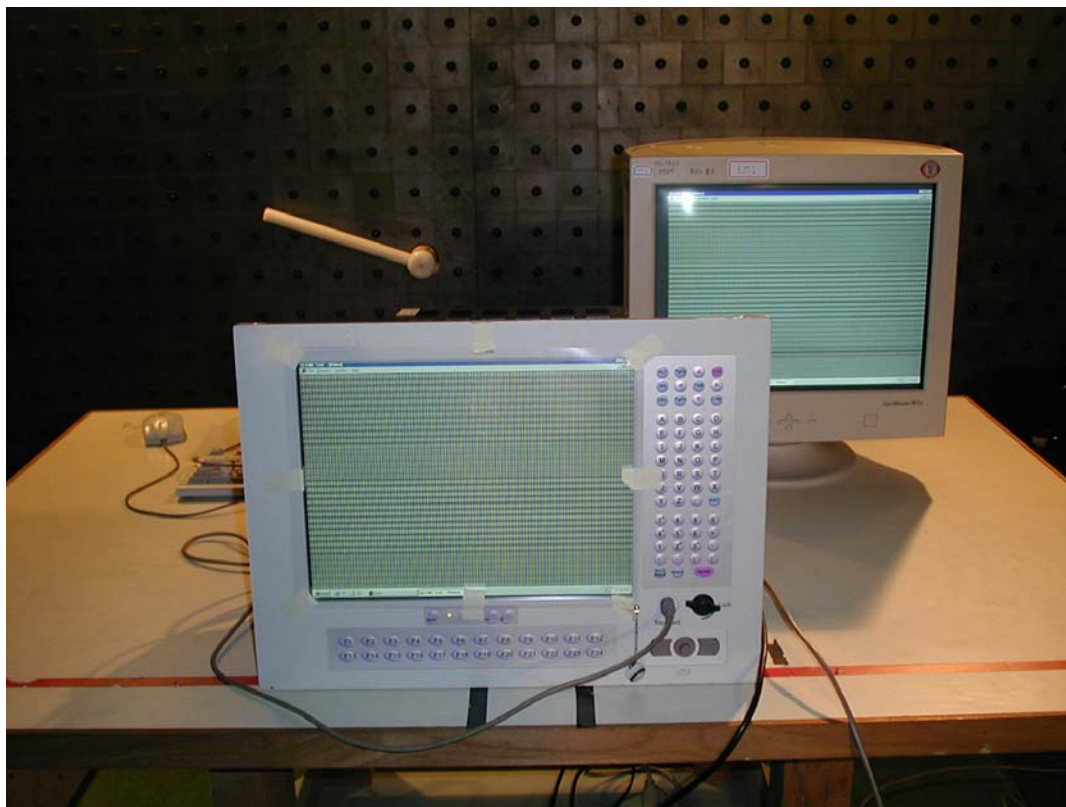


ELECTROSTATIC DISCHARGE TEST (IEC 61000-4-2)

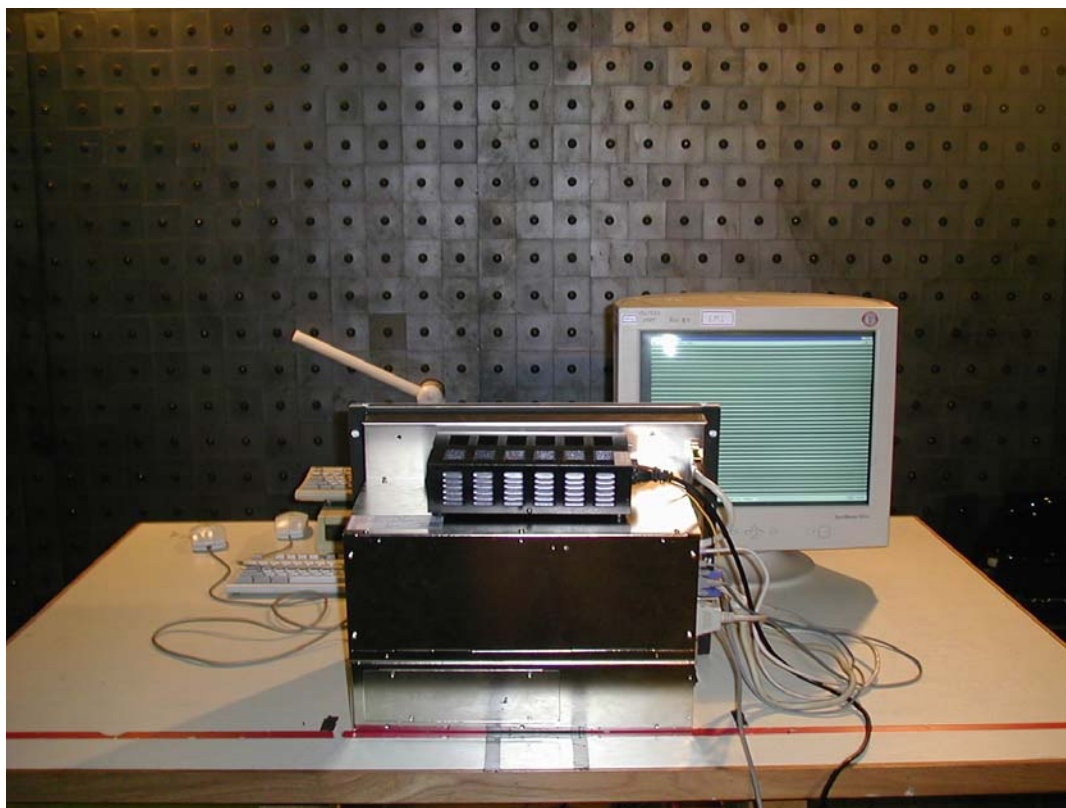


RADIATED ELECTROMAGNETIC FIELD (IEC 61000-4-3)

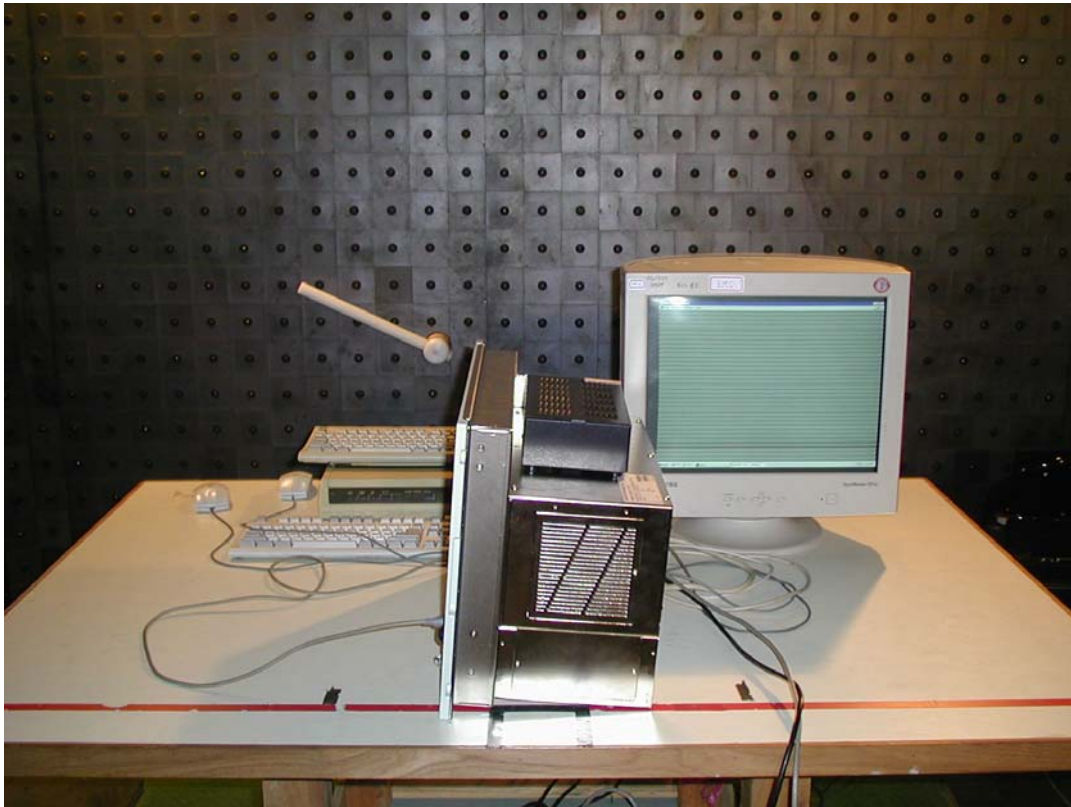
Front View



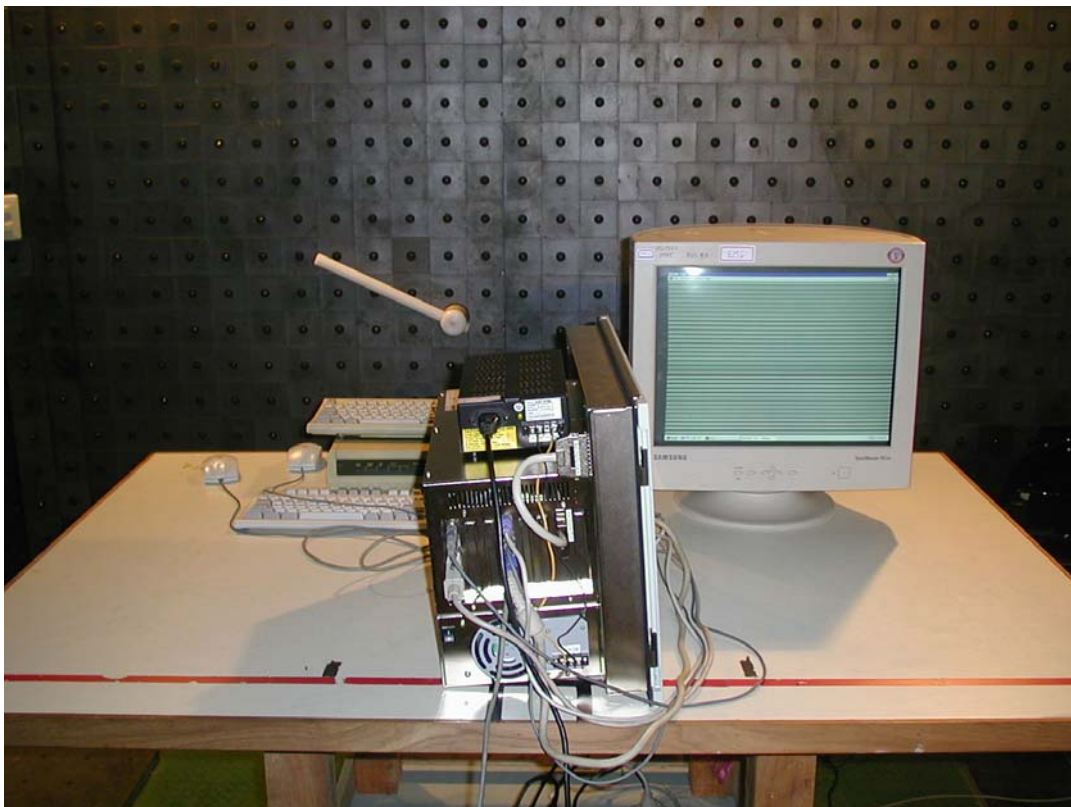
Back View



Right View



Left View



FAST TRANSIENTS/BURST TEST (IEC 61000-4-4 For Power)



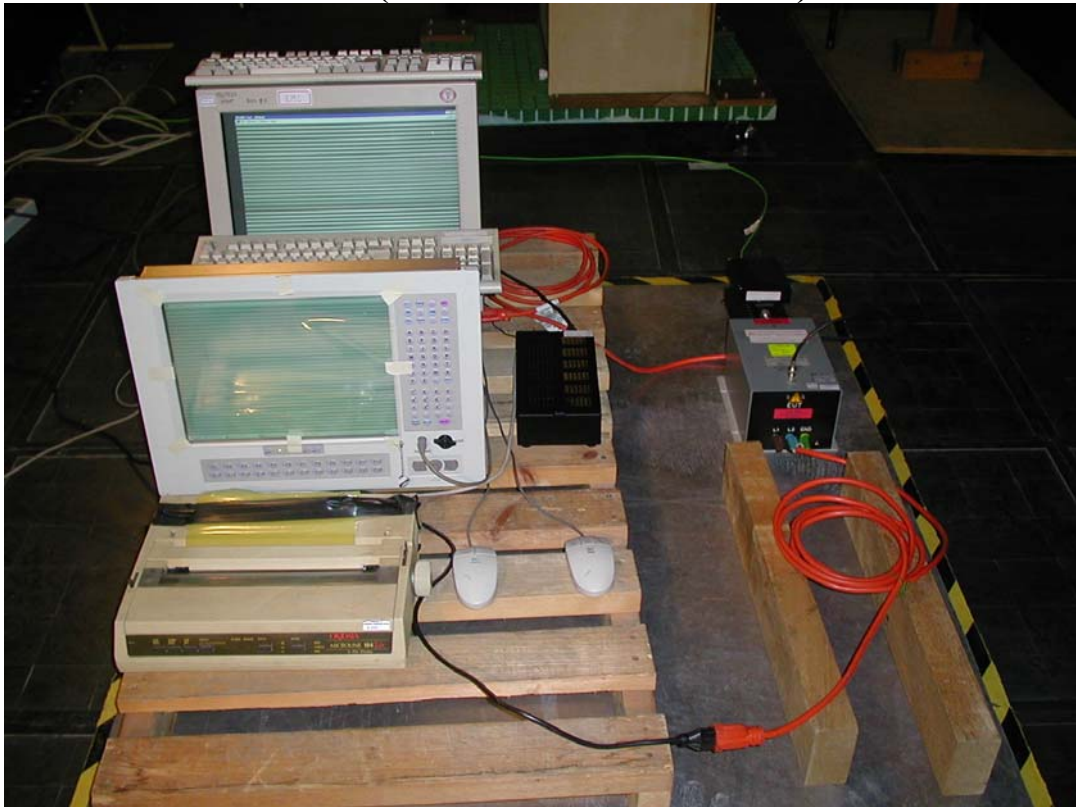
FAST TRANSIENTS/BURST TEST(IEC 61000-4-4 For I/O)



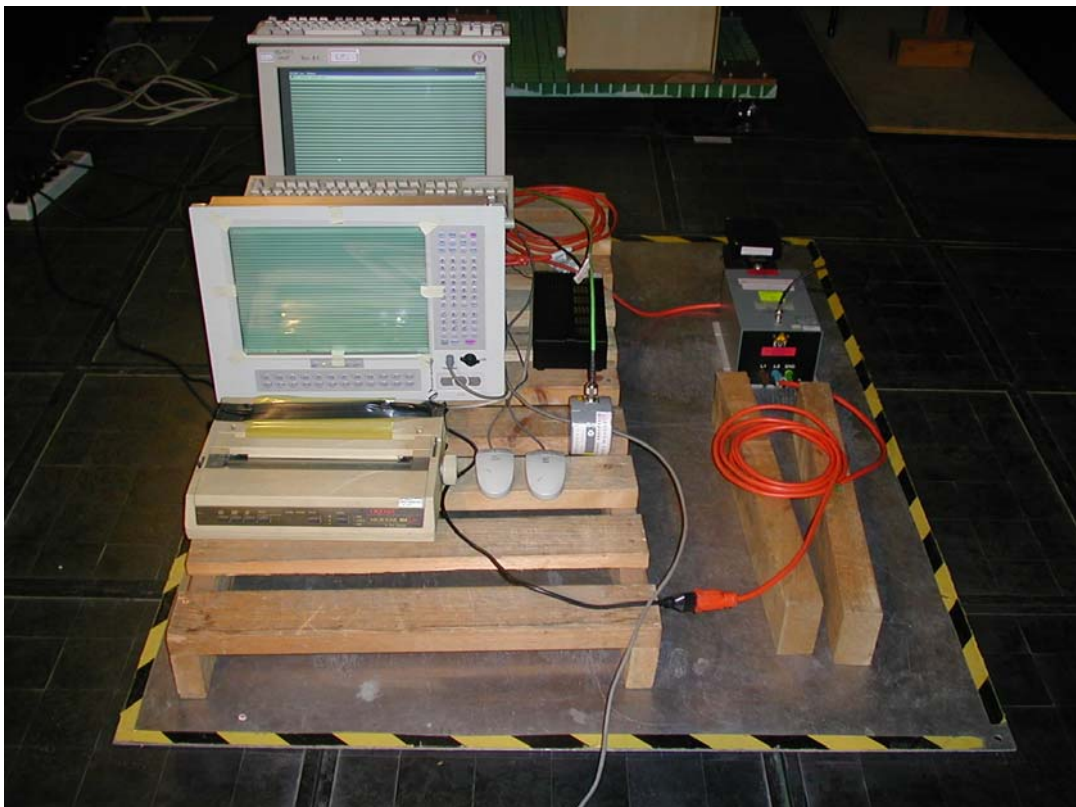
SURGE IMMUNITY TEST(IEC 61000-4-5)



CONDUCTED DISTURBANCE, INDUCED BY RADIO-FREQUENCY FIELDS TEST (IEC 61000-4-6 For Power)

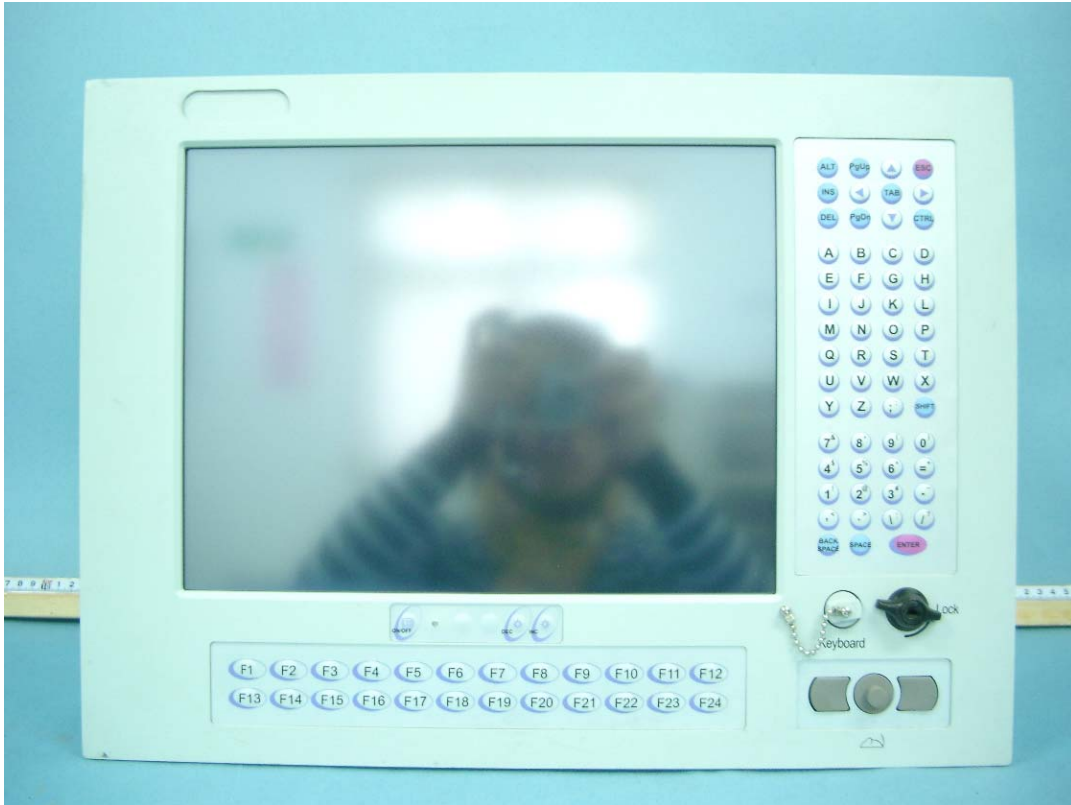


(IEC 61000-4-6 For I/O)



APPENDIX 2

PHOTOGRAPHS OF EUT







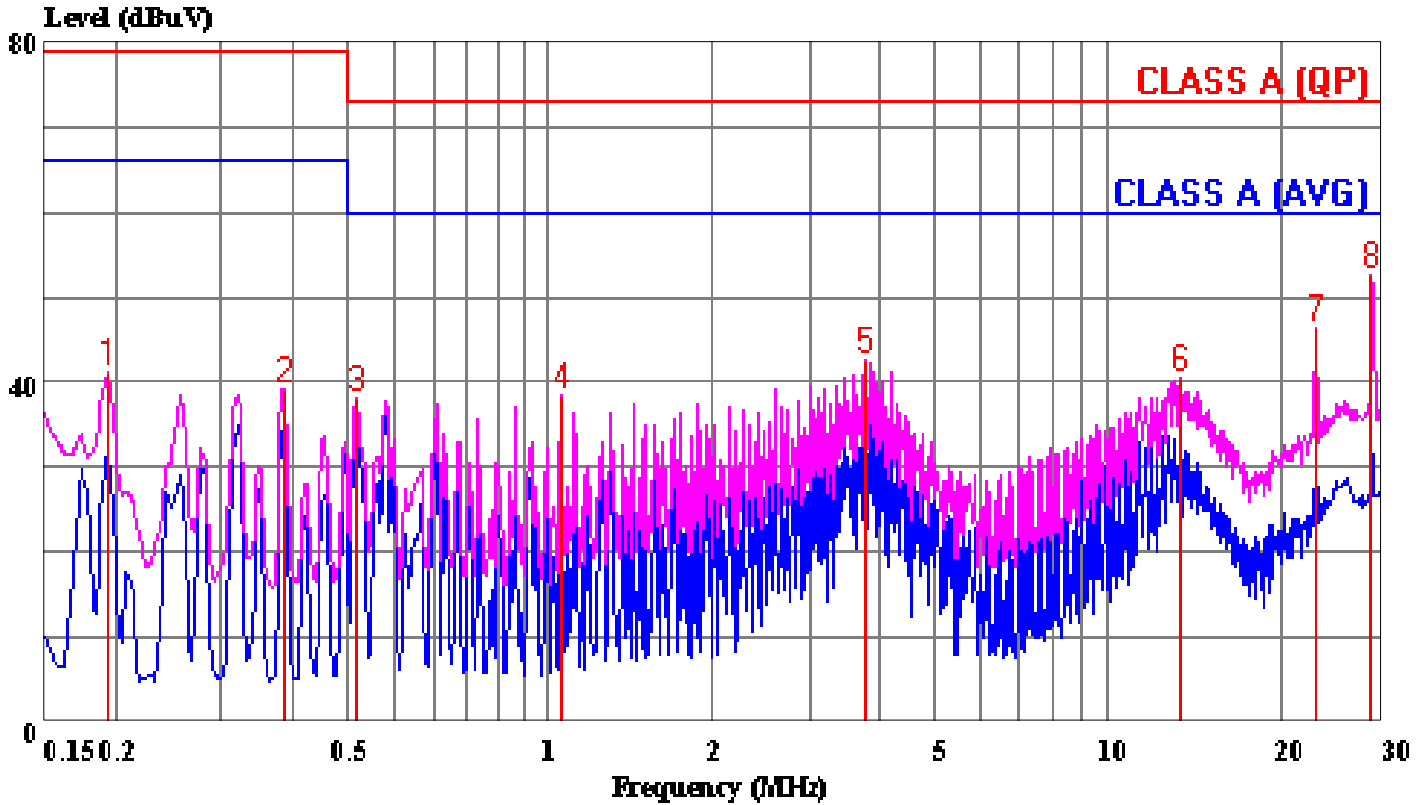


APPENDIX 3

CONDUCTED EMISSION PLOT RADIATED EMISSION DATA

Data#: 37 File#: 9958f.EMI

Date: 2002-02-21 Time: 22:15:32



(CES Conducted)

Trace: 7 8

Ref Trace:

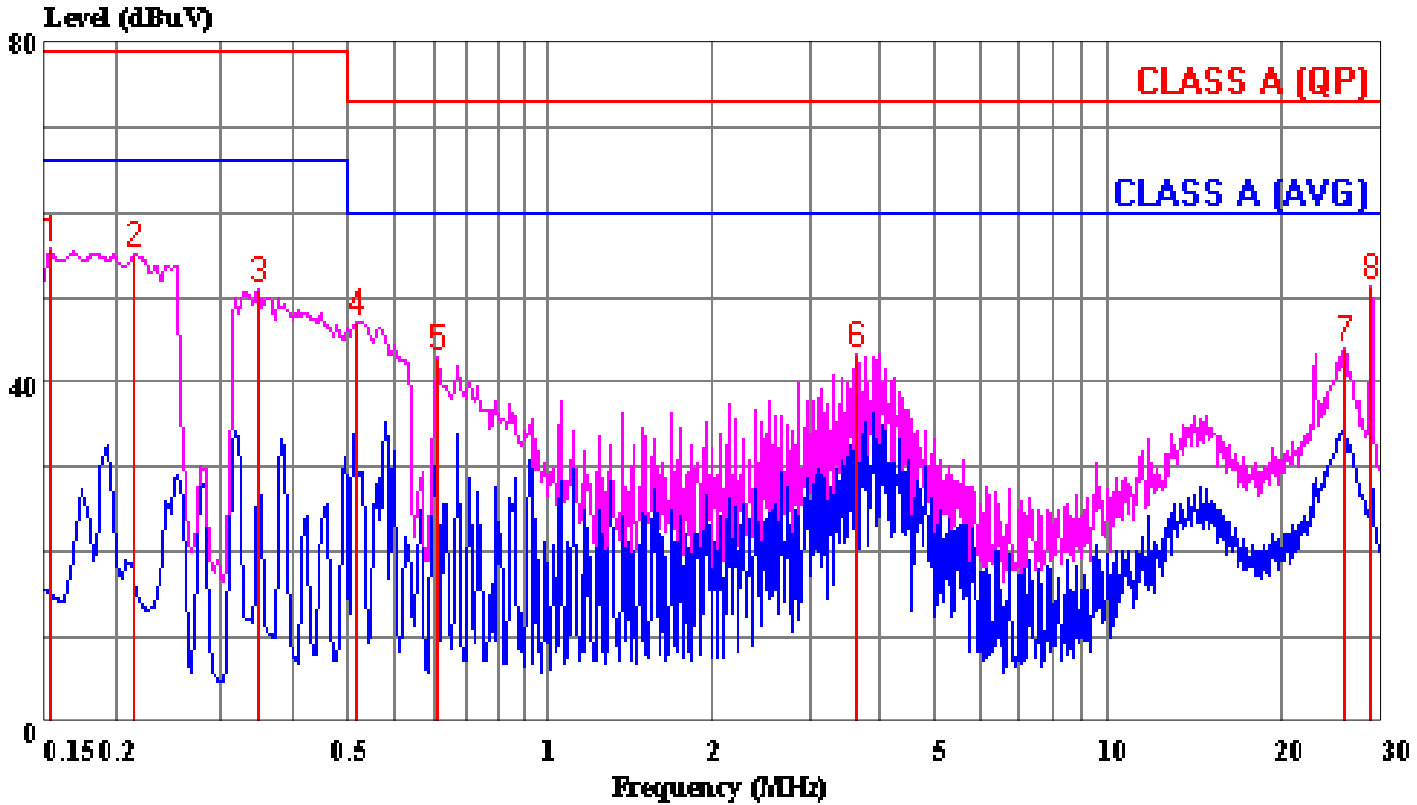
Condition: LINE
Report No. : 02E9958
Test Engr. : JAMES LIAO
Company : AAEON Technology Inc.
EUT : AMB-2457HTT
Test Config : EUT/ALL PERIPHERALS
Type of Test: EN 55022 CLASS A
Mode of Op. : 1024X768(Worst)

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.192	41.32	0.02	41.34	79.00	-37.66	Peak
2	0.389	39.23	0.05	39.28	79.00	-39.72	Peak
3	0.516	37.88	0.05	37.93	73.00	-35.07	Peak
4	1.160	38.38	0.09	38.47	73.00	-34.53	Peak
5	3.881	42.40	0.22	42.62	73.00	-30.38	Peak
6	13.479	40.22	0.38	40.60	73.00	-32.40	Peak
7	23.018	46.03	0.48	46.51	73.00	-26.49	Peak
8	28.755	52.23	0.53	52.76	73.00	-20.24	Peak

Data#: 38 File#: 9958f.EMI

Date: 2002-02-21 Time: 22:43:12



(CES Conducted)

Trace: 31 32

Ref Trace:

Condition: NEUTRAL
Report No. : 02E9958
Test Engr. : JAMES LIAO
Company : AAEON Technology Inc.
EUT : AMB-2457HTT
Test Config : EUT/ALL PERIPHERALS
Type of Test: EN 55022 CLASS A
Mode of Op. : 1024X768(Worst)

Page: 1

	Read		Limit	Over		
Freq	Level	Factor	Line	Limit	Remark	
MHz	dBuV	dB	dBuV	dB		
1	0.153	55.67	0.02	55.69	79.00	-23.31 Peak
2	0.213	55.13	0.02	55.15	79.00	-23.85 Peak
3	0.348	50.98	0.04	51.02	79.00	-27.98 Peak
4	0.516	46.99	0.05	47.04	73.00	-25.96 Peak
5	0.708	43.03	0.06	43.10	73.00	-29.90 Peak
6	3.740	43.12	0.22	43.34	73.00	-29.66 Peak
7	26.001	43.53	0.51	44.04	73.00	-28.96 Peak
8	28.755	50.83	0.53	51.36	73.00	-21.64 Peak

Data#: 33 File#: 9462f.EMI
Compliance E-Site

Date: 2002-02-19 Time: 02:19:34

Condition: VERTICAL / 10m
Report No. : 02E9958
Test Engr. : Vince Chiang
Company : AAEON Technology Inc.
EUT : AMB-2457HTT
Test Config : EUT / ALL PERIPHERALS
Type of Test: EN 55022 CLASS A
Mode of Op. : 1024 X 768(Worst)

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	32.470	41.90	-8.53	33.37	40.00	-6.63	Peak
2	43.820	49.01	-13.05	35.96	40.00	-4.04	QP
3	51.980	51.03	-14.52	36.51	40.00	-3.49	QP
4	71.470	49.00	-17.48	31.52	40.00	-8.48	Peak
5	77.980	50.30	-17.53	32.77	40.00	-7.23	Peak
6	84.460	49.10	-16.95	32.15	40.00	-7.85	Peak
7	110.455	48.40	-15.45	32.95	40.00	-7.05	Peak
8	116.960	46.30	-15.77	30.53	40.00	-9.47	Peak
9	129.980	44.00	-16.25	27.75	40.00	-12.25	Peak
10	149.460	43.60	-14.66	28.94	40.00	-11.06	Peak
11	178.810	49.20	-12.45	36.75	40.00	-3.25	Peak
12	200.460	44.00	-11.75	32.25	40.00	-7.75	Peak
13	207.760	43.90	-11.16	32.74	40.00	-7.26	Peak
14	227.450	38.70	-9.69	29.01	40.00	-10.99	Peak
15	259.900	41.30	-7.78	33.52	47.00	-13.48	Peak
16	305.440	42.00	-7.04	34.96	47.00	-12.04	Peak
17	367.540	38.80	-5.34	33.46	47.00	-13.54	Peak
18	409.350	38.70	-4.33	34.37	47.00	-12.63	Peak
19	467.960	41.50	-3.55	37.95	47.00	-9.05	Peak
20	602.200	35.60	-0.58	35.02	47.00	-11.98	Peak

Data#: 35 File#: 9462f.EMI
Compliance E-Site

Date: 2002-02-19 Time: 02:25:43

Condition: HORIZONTAL / 10m
Report No. : 02E9958
Test Engr. : VINCE CHIANG
Company : AAEON Technology Inc.
EUT : AMB-2457HTT
Test Config : EUT / ALL PERIPHERALS
Type of Test: EN 55022 CLASS A
Mode of Op. : 1024 X 768(Worst)

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	40.200	43.50	-10.89	32.61	40.00	-7.39	Peak
2	46.600	46.80	-13.83	32.98	40.00	-7.02	Peak
3	52.650	45.50	-14.75	30.75	40.00	-9.25	Peak
4	84.490	44.10	-16.95	27.15	40.00	-12.85	Peak
5	110.470	47.90	-15.45	32.45	40.00	-7.55	Peak
6	123.490	43.00	-16.39	26.61	40.00	-13.39	Peak
7	129.980	48.80	-16.25	32.55	40.00	-7.45	Peak
8	149.440	44.60	-14.66	29.94	40.00	-10.06	Peak
9	181.980	46.20	-12.22	33.98	40.00	-6.02	Peak
10	200.450	46.80	-11.75	35.05	40.00	-4.95	Peak
11	207.960	48.00	-11.16	36.84	40.00	-3.16	Peak
12	227.470	40.80	-9.69	31.11	40.00	-8.89	Peak
13	259.960	42.00	-7.78	34.22	47.00	-12.78	Peak
14	305.430	43.10	-7.04	36.06	47.00	-10.94	Peak
15	367.520	33.30	-5.34	27.96	47.00	-19.04	Peak
16	409.410	35.60	-4.33	31.27	47.00	-15.73	Peak
17	467.980	36.30	-3.55	32.75	47.00	-14.25	Peak