

SPORTON LAB. SPORTON INTERNATIONAL INC.

CE EMI TEST REPORT
European Standard EN 55022 CLASS A ITE

E U T : COMPACT SIZE FLAT-PANEL INDUSTRIAL WORKSTATION

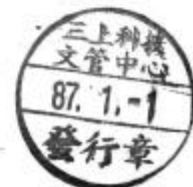
MODEL NO. : AMB-610

FILE NO. : C680503

DATE OF TEST : 02 Aug. 1996

PREPARED FOR : ASTECH TECHNOLOGY CO., LTD.
6F-4, No. 351, Chung-Shan Rd., Sec. 2,
Chung-Ho City, Taipei, Taiwan R.O.C.

PREPARED BY : SPORTON INTERNATIONAL INC.
No. 38, Alley 119, Lane 30, Yung Gi
Road, Taipei 10541, Taiwan, R.O.C.



August 21, 1996

CE EMS & Harmonics TEST REPORT

EQUIPMENT: COMPACT SIZE FLAT-PANEL
INDUSTRIAL WORKSTATION

MODEL NO: AMB-610

APPLICANT: ASTECH TECHNOLOGY CO., LTD.

ADDRESS: 6F-4, No. 351, Chung-Shan Rd., Sec. 2,
Chung-Ho City, Taipei, Taiwan, R.O.C.

TRADE MARK: ASTECH

FILE NO. : C680503

STANDARDS: EN 50 082-1(1992), EN 61000-3-2(1995),
EN 61000-3-3(1995)
IEC 801-2(1984)
IEC 801-3(1984)
IEC 801-4(1988)

TEST RESULT: PASS

DATE OF TEST: August 09, 1996

PREPARE BY: *SPORTON INTERNATIONAL INC.*
No. 38, Alley 119, Lane 30, Yung Gi
Road, Taipei 10541, Taiwan, R.O.C.
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SPORTON LAB. SPORTON INTERNATIONAL INC.

FILE: C680503

CERTIFICATE OF COMPLIANCE

APPLICABLE SPECIFICATION: European Standard EN 55022 TEST REPORT FOR
CLASS A ITE

EQUIPMENT : COMPACT SIZE FLAT-PANEL INDUSTRIAL WORKSTATION

MODEL : AMB-610

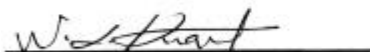
COMPANY : ASTECH TECHNOLOGY CO., LTD.

6F-4, No. 351, Chung-Shan Rd., Sec. 2,

Chung-Ho City, Taipei, Taiwan R.O.C.

I **HEREBY** CERTIFY THAT:

THE MEASUREMENTS SHOWN IN THIS REPORT WERE MADE IN ACCORDANCE WITH
THE PROCEDURES GIVEN IN European Standard EN 55022 AND THE ENERGY EMITTED
BY THIS EQUIPMENT WAS PASSED BOTH RADIATED AND CONDUCTED EMISSIONS
LIMITS. TESTING WAS PERFORMED ON 02 August 1996 AT SPORTON INTERNATIONAL
INC. LAB. IN NEI HWU.



W. L. Haung,
GENERAL MANGER

SPORTON INTERNATIONAL INC.

No.38 , Alley 119 , Lane 30 , Yung Gi

Road, Taipei 10541, Taiwan R.O.C.

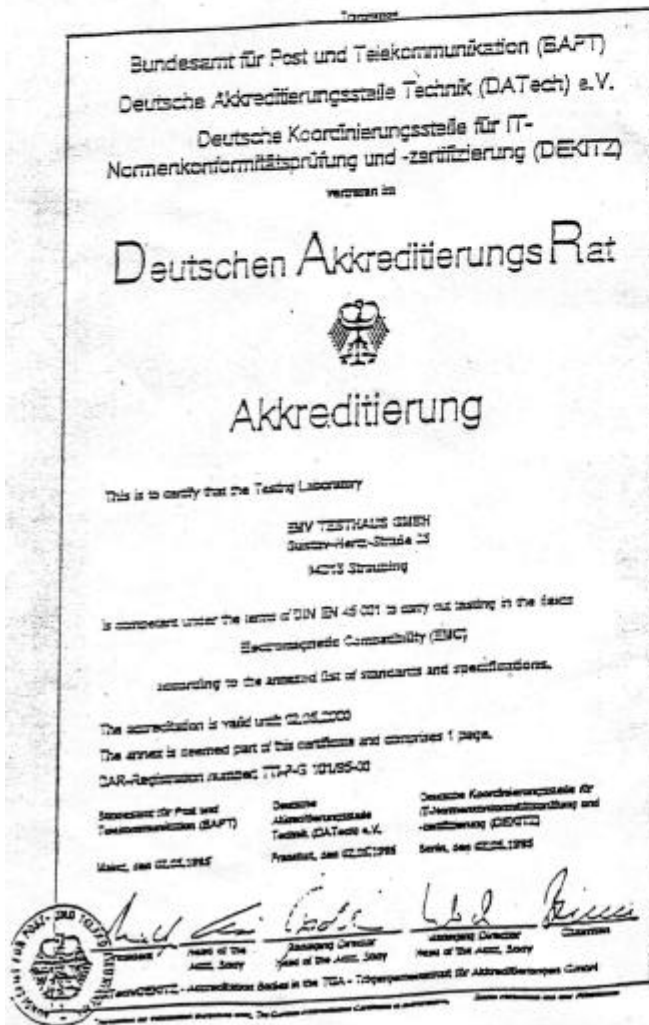


Get CE Certificate issued by German EMV TESTHAUS GMBH from
 _____ **SPORTON LAB.**

In order for domestic factories to obtain EMC Test Report and CE Certificate issued by a laboratory recognized by BAPT more rapidly, SPORTON LAB. established a sound cooperative relationship with the German Lab. EMV TESTHAUS GMBH in 1994. During this time of cooperation, EMV TESTHAUS GMBH had sent its personnel to SPORTON LAB. for EMC Test Site recognition, training of SPORTON LAB. test personnel, and understanding of its test methods and work flow. After more than one year's cooperation and counseling, the German EMV TESTHAUS GMBH believed SPORTON LAB.'s test quality has reached a professional level, conforming to the requirement of EMC testing. For products tested by SPORTON LAB., EMV

TESTHAUS GMBH would conduct paper review directly and also issue its Test Report and CE Certificate. Besides, SPORTON LAB. also sends its designated personnel to EMV TESTHAUS GMBH in Germany for EMC professional test technology training and better understanding of related rules and regulations.

SPORTON LAB. is knows for its first-class professional know-how, test quality, superb staff, and extraordinary equipment. These, adding that SPORTON LAB. has been cooperating with the German EMV TESTHAUS GMBH, evidence that SPORTON LAB. is your best



CERTIFICATION OF COMPLIANCE

APPLICABLE SPECIFICATION:EN50 082-1

EQUIPMENT: COMPACT SIZE FLAT-PANEL
INDUSTRIAL WORKSTATION

MODEL NO.: AMB-610

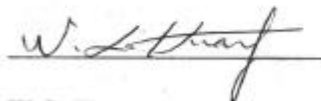
APPLICANT: ASTECH TECHNOLOGY CO., LTD.

ADDRESS: 6F-4, No. 351, Chung-Shan Rd., Sec. 2,
Chung-Ho City, Taipei, Taiwan, R.O.C.

TESTED ACCORDING TO: EN 50082-1(1992), EN 61000-3-2(1995),
EN 61000-3-3(1995)
IEC 801-2(1984)
IEC 801-3(1984)
IEC 801-4(1988)

I H E R E B Y CERTIFY THAT:

THE MEASUREMENT SHOWN IN THIS REPORT WAS MADE IN ACCORDANCE WITH THE PROCEDURES GIVEN IN EUROPEAN COUNCIL DIRECTIVE 89/336/EEC AND THE EQUIPMENT UNDER TEST WAS PASSED THE EN50 082-1, EN61000-3-2 AND EN61000-3-3. TESTING WAS PERFORMED ON July , August 09, 1996 AT SPORTON INTERNATIONAL INC. LAB. IN LIN KO.



W. L. Huang
GENERAL MANAGER

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1. DESCRIPTION OF THE EQUIPMENT UNDER TEST

1.1. GENERAL DESCRIPTION OF EQUIPMENT UNDER TEST

APPLICANT: **ASTECH TECHNOLOGY CO.,LTD.**

ADDRESS: **6F-4, No. 351, Chung-Shan Rd., Sec. 2,**
Chung-Ho City, Taipei, Taiwan, R.O.C.

EQUIPMENT: **COMPACT SIZE FLAT-PANEL**
INDUSTRIAL WORKSTATION

MODEL NO: **AMB-610**

TRADE MARK: **ASTECH**

POWER CORD: **NON-SHIELDED**

DATA CABLE: **SHIELDED**

POWER SUPPLY: **SWITCHING**

FEATURE: * **ISA-Bus.**
 * **19" Rack panel mounting.**
 * **9.4" color TFT LCD display, color STN_DD LCD, B/W LCD or EL display.**
 * **14-slot passive backplane or mother-board.**
 * **Card hold-down clamp protects cards against vibration.**

2. MEASUREMENT CONDITIONS

2.1. CONFIGURATION OF EQUIPMENT UNDER TEST

The DELL keyboard, HP monitor, HP printer, HP mouse, KINGDATA mouse, and LIGHT SPEED modem were connected to the EUT.

2.2. SUPPORT EQUIPMENT

SUPPORT UNIT 1. --- MONITOR (HP)

MODEL NO. : D2807A
POWER SUPPLY TYPE : SWITCHING
POWER CORD : NON-SHIELDED
DATA CABLE : SHIELDED, 150CM LENGTH METALLIC CONNECTOR

SUPPORT UNIT 2. --- KEYBOARD (DELL)

MODEL NO. : AT101
DATA CABLE : SHIELDED

SUPPORT UNIT 3. --- MOUSE (HP)

MODEL NO. : M-S34
DATA CABLE : NON-SHIELDED

SUPPORT UNIT 4. --- MOUSE (KINGDATA)

MODEL NO. : MOUSE 1300
DATA CABLE : NON-SHIELDED

SUPPORT UNIT 5. --- MODEM (LIGHT SPEED)

MODEL NO. : 1414LS
DATA CABLE : SHIELDED

SUPPORT UNIT 6. --- PRINTER (HEWLETT PACKARD)

MODEL NO. : 2225C+
POWER SUPPLY TYPE : LINEAR, AC ADAPTER
POWER CORD : NON-SHIELDED
DATA CABLE : SHIELDED, 137CM LENGTH, METALLIC CONNECTOR

2.3. TEST SOFTWARE

Use a batch program to run all equipments that connect to the EUT.

2.4. TEST ENGINEERS**2.4.1. SUSCEPTIBILITY TO ELECTROSTATIC DISCHARGES(ESD)**

TEST BY C.W. Lee

2.4.2. SUSCEPTIBILITY TO FREQUENCY ELECTROMAGNETIC FIELDS (RS)

TEST BY Jones Tam

2.4.3. SUSCEPTIBILITY TO FAST TRANSIENT INTERFERENCE (BURSTS)

TEST BY Monk Chen

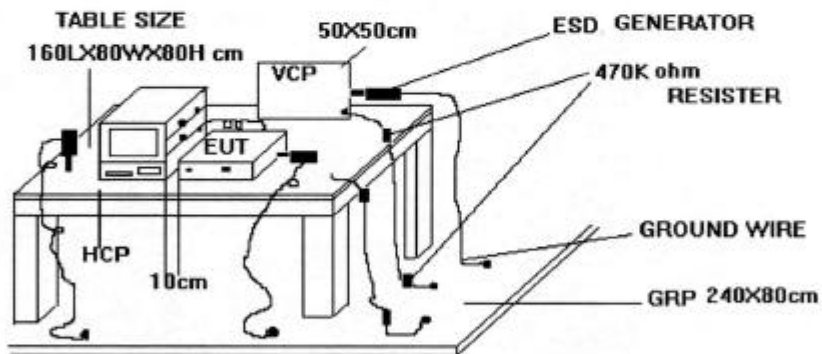
2.4.4. SUSCEPTIBILITY TO FAST TRANSIENT INTERFERENCE (HARMONIC)

TEST BY Jack Dong

3. SUSCEPTIBILITY TO ELECTROSTATIC DISCHARGES(ESD)

BASIC STANDARD:	IEC 801-2
PRODUCT STANDARD:	EN 50082-1
PERFORMANCE CRITERIA:	B
LEVEL:	2
TESTED VOLTAGE:	8 KV FOR AIR DISCHARGE 4 KV FOR CONTACT DISCHARGE
TEMPERATURE:	27 ° C
REACTIVE HUMIDITY:	43 %

3.1 TEST SETUP



The test setup consists of the test generator, EUT and auxiliary instrumentation necessary to perform DIRECT and INDIRECT application of discharges to the EUT as applicable, in the following manner:

- a) CONTACT DISCHARGE to the conductive surfaces and to coupling plane;
- b) AIR DISCHARGE at insulating surfaces.

The preferred test method is that of type tests performed in laboratories and the only accepted method of demonstrating conformance with this standard. The EUT was arranged as closely as possible to arrangement in final installed conditions.

3.2 TEST SETUP FOR TESTS PERFORMED IN LABORATORIES

A ground reference plane was provided on the floor of the test site.

It was a metallic sheet (copper or aluminum) of 0.25mm minimum thickness; other metallic may be used but they shall have at least 0.65mm thickness. In the SPORTON EMC LAB. we provided 1mm thickness aluminum ground reference plane or 1mm thickness stainless steel ground reference plane. The minimum size of the ground reference plane is 1m x 1m, the exact size depending on the dimensions of the EUT. It was connected to the protective grounding system.

The EUT was arranged and connected according to its functional requirements.

A distance of 1m minimum was provided between the EUT and the wall of the lab. and any other metallic structure. In cases where this length exceeds the length necessary to apply the discharges to the selected points, the excess length shall, where possible, be placed non-inductively off the ground reference plane and shall not come closer than 0.2m to other conductive parts in the test setup.

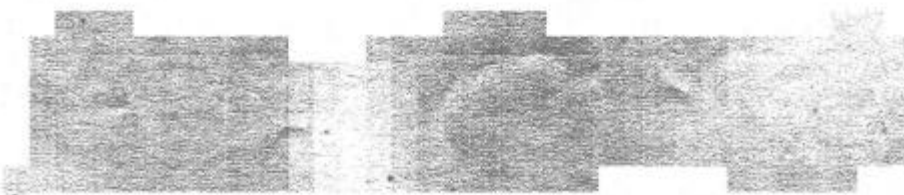
Where the EUT is installed on a metal table, the table was connected to the reference plane via a cable with a 470k ohm resistor located at each end, to prevent a build-up of charge.

The test setup was consist a wooden table, 0.8m high, standing on the ground reference plane.

A HCP, 1.6m x 0.8m, was placed on the table. The EUT and cables was isolated from the HCP by an insulating support 0.5mm thick. The VCP size, 0.5m x 0.5m.

3.3 ESD TEST PROCEDURE

- a. In the case of air discharge testing the climatic conditions shall be within the following ranges:
 - ambient temperature : 15°C to 35°C;
 - relative humidity : 30% to 60%;
 - atmospheric pressure : 68 KPa (680 mbar) to 106 KPa (1060 mbar).
- b. Test programs and software shall be chosen so as to exercise all normal modes of operation of the EUT. The use of special exercising software is encouraged, but permitted only where it can be shown that the EUT is being comprehensively exercised.
- c. The test voltage shall be increased from the minimum to the selected test severity level, in order to determine any threshold of failure. The final severity level should not exceed the product specification value in order to avoid damage to the equipment.
- d. The test shall be performed with single discharges. On preselected points at least ten single discharges (in the most sensitive polarity) shall be applied.
- e. For the time interval between successive single discharges an initial value of one second is recommended. Longer intervals may be necessary to determine whether a system failure has occurred.
- f. In the case of contact discharges, the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.
- g. In the case of painted surface covering a conducting substrate, the following procedure shall be adopted:
 - If the coating is not declared to be an insulating coating by the equipment manufacturer, then the pointed tip of the generator shall penetrate the coating so as to make contact with the conducting substrate.
 - Coating declared as insulating by the manufacturer shall only be submitted to the air discharge.
 - The contact discharge test shall not be applied to such surfaces.
- h. In the case of air discharges, the round discharge tip of the discharge electrode shall be approached as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator (discharge electrode) shall be removed from the EUT. The generator is then retriggered for a new single discharge. This procedure shall be repeated until the discharges are completed. In the case of an air discharge test, the discharge switch, which is used for contact discharge, shall be closed.



3.4 TEST POINTS

3.4.1 TEST RESULT OF AIR DISCHARGE

POINT	VOLTAGE	TESTED NO.	OBSERVATION	RESULT
CASE	2/4/8	+/-BY 10	NORMAL	PASS
SCREW	2/4/8	+/-BY 10	NORMAL	PASS
BRACKET	2/4/8	+/-BY 10	NORMAL	PASS
PRINTER CONNECTOR	2/4/8	+/-BY 10	NORMAL	PASS
COM1 PORT	2/4/8	+/-BY 10	NORMAL	PASS
COM2 PORT	2/4/8	+/-BY 10	NORMAL	PASS
PS/2 PORT	2/4/8	+/-BY 10	NORMAL	PASS
VGA CONNECTOR	2/4/8	+/-BY 10	NORMAL	PASS
KEYBOARD CONNECTOR	2/4/8	+/-BY 10	NORMAL	PASS
BRIGHT VR	2/4/8	+/-BY 10	NORMAL	PASS
FLOPPY	2/4/8	+/-BY 10	NORMAL	PASS
LCD	2/4/8	+/-BY 10	NORMAL	PASS
PANEL OF BUTTON	2/4/8	+/-BY 10	NORMAL	PASS
AC SOCKET	2/4/8	+/-BY 10	NORMAL	PASS
POWER SWITCH	2/4/8	+/-BY 10	NORMAL	PASS

3.4.2 TEST RESULT OF CONTACT DISCHARGE

POLARITY	VOLTAGE	TESTED NO.	OBSERVATION	RESULT
HORIZONTAL(AT FRONT)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
HORIZONTAL (AT LEFT)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
HORIZONTAL (AT RIGHT)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
HORIZONTAL (AT REAR)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
VERTICAL (AT FRONT)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
VERTICAL (AT LEFT)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
VERTICAL (AT RIGHT)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>
VERTICAL (AT REAR)	2/4/6	+/- BY 10	NORMAL	<u>PASS</u>

3.5 TEST SEVERITY LEVELS

3.5.1 Contact discharge

Level	Test Voltage (kV) of Contact discharge
1	2
2	4
3	6
4	8
X	Special

Remark : "X" is an open level.

3.5.2 Air discharge

Level	Test Voltage (kV) of Air Discharge
1	2
2	4
3	8
4	15
X	Special

Remark : "X" is an open level.

3.6 TEST RESULT

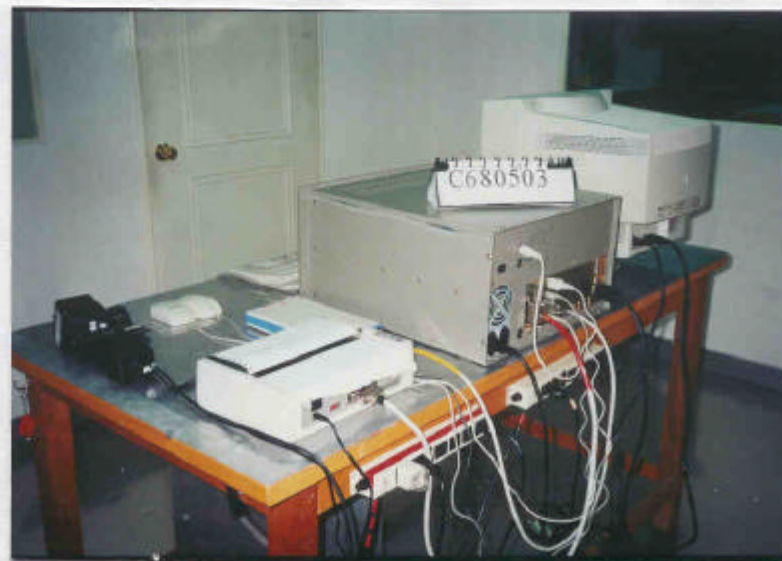
Test Result : PASSED

3.7. PHOTOGRAPHS OF THE TEST CONFIGURATION (ESD)

FRONT VIEW



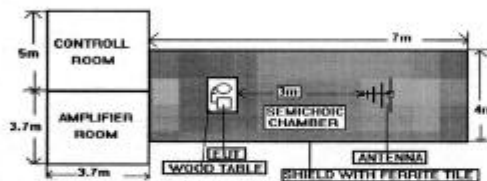
REAR VIEW



4. SUSCEPTIBILITY TO FREQUENCY ELECTROMAGNETIC FIELDS (RS)

BASIC STANDARD:	IEC 801-2
PRODUCT STANDARD:	EN 50082-1
PERFORMANCE CRITERIA:	A
LEVEL:	3
FREQUENCY RANGE:	27 TO 500 MHz
FIELD STRENGTH:	10 V/m (UNMODULATED)
TEMPERATURE:	27° C
REACTIVE HUMIDITY:	43 %

4.1 TEST SETUP



Important: The SPORTON 7m x 4m x 4m anechoic chamber is compliance with the sixteen points uniform field requirement as stated in IEC 1000-4-3 Section 6.2

The procedure defined in this part requires the generation of electromagnetic fields within which the test sample is placed and its operation observed. To generate fields that are useful for simulation of actual (field) conditions may require significant antenna drive power and the resultant high field strength levels. To comply with local regulations and to prevent biological hazards to the testing personnel, it is recommended that these tests be carried out in a shielded enclosure or anchor chamber.

4.2 TEST PROCEDURE

- a. The equipment to be tested is placed in the center of the enclosure on a wooden table. The equipment is then connected to power and signal leads according to pertinent installation instructions.
- b. The biconical antenna and the log-spiral antenna are placed 1m away from the equipment, thus enabling the complete frequency range of 30 MHz to 1000 MHz to be traversed without having to change the position of the antennae at the 200 MHz crossover frequency. The required field strength is determined by placing the field strength meter(s) on top of or directly alongside the equipment under test and monitoring the field strength meter via a remote field strength indicator outside the enclosure while adjusting the continuous-wave to the applicable antennae.
- c. The test is normally performed with the antenna facing the most sensitive side of the EUT. The polarization of the field generated by the biconical antenna necessitates testing each position twice, once with the antenna positioned vertically and again with the antenna positioned horizontally. The circular polarization of the field from the log-spiral antenna makes a change of position of the antenna unnecessary.
- d. At each of the above conditions, the frequency range is swept from 30 MHz to 1000 MHz, pausing to adjust the R.F. signal level or to switch oscillators and antenna. The rate of sweep is in the order of 1.5×10^{-3} decades/s. The sensitive frequencies or frequencies of dominant interest may be discretely analyzed.

4.3 TEST SEVERITY LEVELS

Frequency Band : 30 MHz to 1000 MHz

Level	Test field strength (V/m)
1	1
2	3
3	10
X	Special

Remark : "X" is an open class.

4.4 TEST RESULT

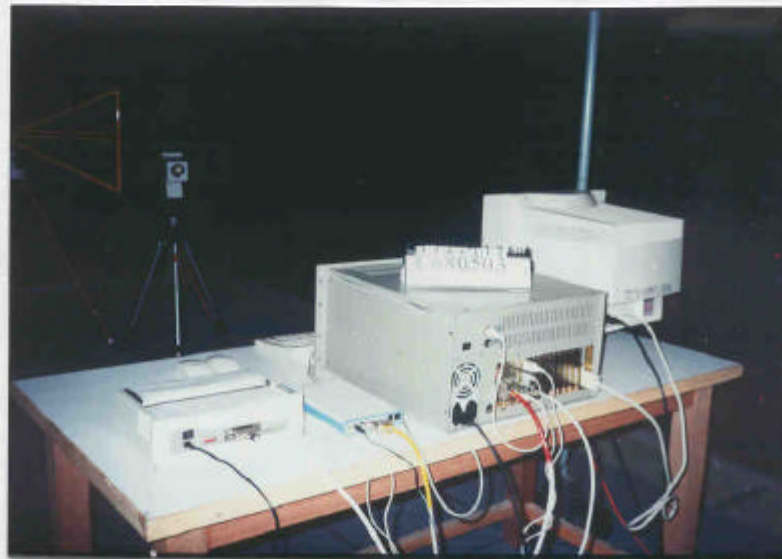
Test Result : PASSED

4.5. PHOTOGRAPHS OF THE TEST CONFIGURATION (RS)

FRONT VIEW



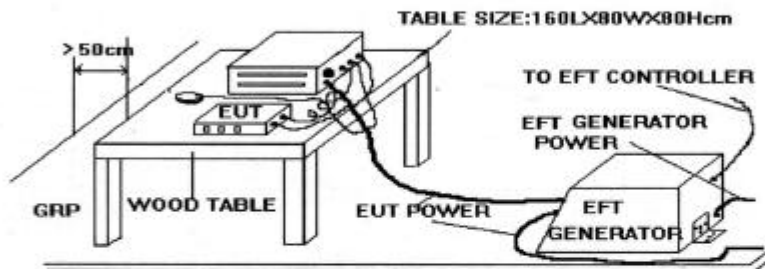
REAR VIEW



5. SUSCEPTIBILITY TO FAST TRANSIENT INTERFERENCE (BURSTS)

BASIC STANDARD	IEC 801-4
PRODUCT STANDARD:	EN 50082-1
PERFORMANCE CRITERIA:	B
LEVEL	3
TESTED VOLTAGE:	2 KV
TEMPERATURE:	27 ° C
REACTIVE HUMIDITY:	43 %

5.1 TEST SETUP



The EUT's was placed on a ground reference plane and was insulated from it by an insulating support about 0.1m thick. If the EUT is table-top equipment, it was located approximately 0.8m above the GRP..

The GRP. was a metallic sheet (copper or aluminum) of 0.25mm ,minimum thickness; other metallic may be used but they shall have at least 0.65mm thickness. It shall project beyond the EUT by at least 0.1m on all sides and connected to the protective earth.

In the SPORTON EMC LAB. we provided 1mm thickness aluminum ground reference plane or 1mm thickness stainless steel ground reference plane.

The minimum size of the ground reference plane is 1mx1m, the exact size depending on the dimensions of the EUT. It was connected to the protective grounding system.

The EUT was arranged and connected according to its functional requirements.

The minimum distance between the EUT and other conductive structures, except the GRP. beneath the EUT, was more than 0.5m.

Using the coupling clamp, the minimum distance between the coupling plates and all other conductive structures, except the GRP. beneath the EUT, was more than 0.5m.

The length of the signal and power lines between the coupling device and the EUT was 1m or less.

5.2 TEST ON POWER LINE

- a. The EFT/B-generator was located on the GRP.. The length from the EFT/B-generator to the EUT as not exceed 1m.
- b. The EFT/B-generator provides the ability to apply the test voltage in a non-symmetrical condition to the power supply input terminals of the EUT.

5.3 TEST ON COMMUNICATION LINES

- a. The coupling clamp is composed of a clamp unit for housing the cable (length more than 3m), and was placed on the GRP..
- b. The coupling clamp provides the ability of coupling the fast transient/bursts to the cable under test.

5.4 TEST PROCEDURE

- a. In order to minimize the effect of environmental parameters on test results, the climatic conditions when test is carrying out shall comply with the following requirements :
 - ambient temperature : 15°C to 35°C;
 - relative humidity : 45% to 75%;
 - atmospheric pressure : 68 KPa (680 mbar) to 106 KPa (1060 mbar).

- b. In order to minimize the effect of environmental parameters on test results, the electromagnetic environment of the laboratory shall not influence the test results.

- c. The variety and diversity of equipment and systems to be tested make it difficult to establish general criteria for the evaluation of the effects of fast transients/bursts on equipment and systems.

- d. The test results may be classified on the basic of the operating conditions and the functional specification of the equipment under test, according to the following performance criteria :
 - Normal performance within the specification limits.
 - Temporary degradation or loss of function or performance which is selfrecoverable.
 - Temporary degradation or loss of function or performance which requires operator intervention or system reset.
 - Degradation or loss of function which is not recoverable due to damage of equipment (components).

5.5 TEST SEVERITY LEVELS

The following test severity levels are recommended for the fast transient/burst test :

Open circuit output test voltage $\pm 10\%$		
Level	On Power Supply	On I/O signal, data and control line
1	0.5 kV	0.25 kV
2	1.0 kV	0.50 kV
3	2.0 kV	1.00 kV
4	4.0 kV	2.00 kV
X	Special	Special

Remark : "X" is an open level. The level is subject to negotiation between the user and the manufacturer or is specified by the manufacturer.

5.6 TEST RESULT

Test Result : **PASSED**

5.7. PHOTOGRAPHS OF THE TEST CONFIGURATION (BURSTS)

FRONT VIEW



REAR VIEW



6. HARMONICS TEST

6.1 TEST PROCEDURE

The measured values of the harmonics components of the input current, including line current and neutral current, shall be compared with the limits given in **Clause 4**.

6.2 TEST CONDITION

Line Voltage: 230.00 Vac

Line Frequency: 50 Hz

Temperature: 20°C

Relative Humidity: 55%

6.3 VOLTAGE FLUCTUATIONS TEST

	Plt	Pst	dc(%)	dmax(%)	dt(%)
Rdg	0	0	0	0	0
Limit	0.65	1.0	3	4	3

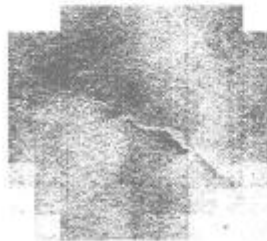
6.4 TEST RESULT

Test Result : PASSED

6.5 TEST RESULT OF HARMONIC

EQUIPMENT: COMPACT SIZE FLAT-PANEL INDUSTRIAL WORKSTATION
MODEL NO.: AMB-610

Harmonic Number	Indicated Values (A rms)	Max. Permiss Harm. Current (A rms)	Harmonic Number	Indicated Values (A rms)	Max. Permiss Harm. Current (A rms)
1	Fund	0.1878	21	0.1070	0.0142
2	1.0800	0.0024	22	0.0840	0.0005
3	2.3000	0.1745	23	0.0980	0.0035
4	0.4300	0.0019	24	0.0770	0.0004
5	1.1400	0.1635	25	0.0900	0.0091
6	0.3000	0.0017	26	0.0710	0.0004
7	0.7700	0.1485	27	0.0830	0.0130
8	0.2300	0.0015	28	0.0660	0.0003
9	0.4000	0.1295	29	0.0780	0.0141
10	0.1840	0.0010	30	0.0610	0.0003
11	0.3300	0.1087	31	0.0730	0.0131
12	0.1530	0.0008	32	0.0580	0.0003
13	0.2100	0.0865	33	0.0680	0.0109
14	0.1310	0.0005	34	0.0540	0.0004
15	0.1500	0.0647	35	0.0640	0.0082
16	0.1150	0.0006	36	0.0510	0.0004
17	0.1320	0.0447	37	0.0610	0.0050
18	0.1020	0.0004	38	0.0480	0.0004
19	0.1180	0.0281	39	0.0580	0.0018
20	0.0920	0.0004	40	0.0460	0.0003



6.6 PHOTOGRAHS OF THE TEST CONFIGURATION (HARMONICS)

FRONT VIEW



REAR VIEW



7.LIST OF MEASUREMENT INSTRUMENTS USED

No.	Instrument	Manufacture	Model	Characteristics	Calibration Date
1	ESD SIMULATOR	KEYTEK	MZ-15/EC	0KV TO 15KV	MAR 7 ,96
2	OMNI-TIP	KEYTEK	TPC-2	0KV TO 15KV	MAR 7 ,96
3	EFT GENERATOR	KEYTEK	CE-40	0KV TO 4.4KV	MAY 12,96
4	CAPACITIVE CLAMP	KEYTEK	CE40-CCL	0KV TO 2KV	MAY 12,96
5	AMPLIFIER	AR	100W 1000M3	80MHz TO 1GHz	JUNE 15,96
6	ISOTROPIC FIELD PROBE	AR	FP3000A	10KHz TO 1GHz	JUNE 21,96
7	IEEE-488 INTERFACE	AR	CP3000	N/A	N/A
8	SYSTEM INTERFACE	EMC Automation	200	HP-IB INTERFACE	N/A
9	POWER METER	EMC Automation	438A	100KHz To 4.2GHz	N/A
10	VIDEO CAMERA CONTROLLER	EMC Automation	VCC-01	N/A	N/A
11	SIGNAL GENERATOR	H P	8648A	100KHz To 1GHz	SEP 11,95
12	SIGNAL GENERATOR	R&S	SMX	100KHz To 1GHz	SEP 11,95
13	TURN TABLE	EMCO	1060	N/A	N/A
14	POSITIONING CONTROLLER	EMCO	1060	N/A	N/A
15	ANTENNA MAST	EMCO	1050	N/A	N/A
16	ANTENNA STAND	AR	TP1000	N/A	N/A
17	ANTENNA	CHASE	CBL6111	30MHz TO 1GHz	APR 27,96
18	ANTENNA	AR	AT1000	80MHz TO 1GHz	SEP 11,95
19	AMPLIFIER	AR	100W 1000M7	25MHz TO 1GHz	JUNE 15,96

8. DECLARATION OF CONFORMITY AND THE CE MARK

* There are three possible procedures pertaining to the declaration of conformity:

A) **Conformity testing and declaration of conformity by the manufacturer** or his authorized representative established within the Community or by an importer.

- Article 10 (1) of the EMC Directive,

- § 3 (1) no. 2a of the EMC Act.

B) Declaration of conformity issued by the manufacturer or his authorized representative established within the Community or by an importer following testing of the product and issued of an **EC certificate of conformity by a competent body**.

- Article 10 (2) of the EMC Directive,

- § 3 (1) no. 2b of the EMC Act.

C) Declaration of conformity issued by the manufacturer or his authorized representative established within the Community or by an importer following **testing and certification of the product by a notified body**.

- Article 10 (5) of the EMC Directive,

- § 3 (1) no. 2b of the EMC Act (radio transmitting installations).

* **Specimen For The CE Marking Of Electrical / Electronical Equipment**



* **The components of the CE marking shall have substantially the same vertical dimension, which may not be less than 5 mm.**

EC Declaration of Conformity

This certifies that the following designated product

.....
產品名稱及 MODEL No.
.....
.....

complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This declaration applies to all specimens manufactured in accordance with the attached manufacturing drawings which form part of this declaration.

Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards:

.....
EN 50081-1 (EN 55022 class A)
.....

.....
EN 50082-1 (IEC 801 Teil 2:3.4)
.....

This declaration is the responsibility of the manufacturer / importer

.....
廠內的製造商或進口商公司名稱
.....

(Name)

.....
地址
.....

(Address)

and was made by 上述公司代表人姓名

.....
(Surname, forename)

職銜

.....
(Position in manufacturer's company)

.....
地點
.....

(Place)

.....
日期
.....

(Date)

.....
簽名
.....

(Legally valid signature)

EC Declaration of Conformity

This certifies that the following designated product

產品名稱及 MODEL No.

complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This declaration applies to all specimens manufactured in accordance with the attached manufacturing drawings which form part of this declaration. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards:

EN 50081-1 (EN 55022 class A)

EN 50082-1 (IEC 801 Teil 2, F.4)

This declaration is the responsibility of the manufacturer / importer

或國內的製造商或進口商公司名稱

(Name)

地址

(Address)

and was made by 上述公司代表人姓名

(Surname, forname)

職稱

(Position in manufacturer's company)

地點

(Place)

日期

(Date)

簽名

(Legally valid signature)

Notice

本份報告若有錯誤，請直接傳真通知本公司總經理黃文亮先生，
謝謝！

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恆興科技有限公司

SPORTON LAB. SPORTON INTERNATIONAL INC.