

TRC
Certificate of Compliance

Training Research Co., Ltd.

hereby certifies that

EMC TEST

**10/100/1000Mbps Gigabit Ethernet Adapter
Model No.: TE100-PCITXR**

Made by

TRENDWare International Inc.

3135 Kashiwa Street Torrance, CA 90505, U.S.A.

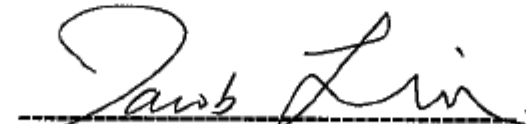
is fulfilled

**EMI: EN 55022:1998, EN61000-3-2: 2000, EN61000-3-3: 1995+A1: 2001
EMS: EN 61000-6-1/2001→ EN 61000-4-2/1995, EN 61000-4-3/1996, EN 61000-4-4/1995
EN 61000-4-5/1995, EN 61000-4-6/1996, EN 61000-4-8/1993, EN 61000-4-11/1994**

Test Date: October 1, 2003

Verification Registration No.: C51CE264


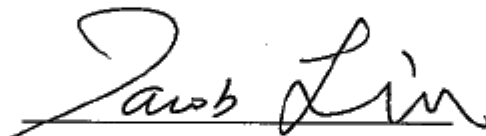
October 30, 2003



V. General Manager, Jacob Lin

CE CE CE CE CE

Training Research Co., Ltd. (NVLAP LAB CODE: 200174-0)

| | | |
|-----------------------------|---|-----------------------------------|
| Report No. | C51CE264 | |
| Directives Standard | 89/336/EEC EMC, Class B EN 50081-1/EN 55024 (CE), ICES-003 (Canada) | |
| Applicant Applicant address | TRENDWare International Inc. 3135 Kashiwa Street Torrance, CA 90505, U.S.A. | |
| Items tested Model No. | 10/100/1000Mbps Gigabit Ethernet Adapter TE100-PCITXR (Sample # C51133) | |
| Results Date | Compliance (As detailed within this report) 09/22/2003 (month / day / year)(Sample received) 10/01/2003 (month / day / year)(Tested) | |
| Prepared by |  | Project Engineer |
| Authorized by |  | V. General Manager (Jacob Lin) |
| Issue date | October 30, 2003 | (month / day / year) |
| Modifications | None | |
| Tested by | Training Research Co., Ltd. (Accredited by NVLAP) | |
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Conditions of issue :

- *This test report shall not be reproduced except in full, without written approval of TRC. And the test result contained within this report only relate to the sample submitted for testing.*
- *The test data in this test report are following the procedures in accordance with the terms of accreditation.*
- *This test report and measurements made by TRC are traceable to the NIST only Conducted and Radiated Method (TRC is accredited by NVLAP, code No.: 200174-0).*
- *The device has been tested is fully complied with the requirements the Directive 89/336/EEC (CE), AS/NZS CISPR 22: 2002 (C-Tick) and ICES-003 (Canada).*

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Chapter 0 Emission and Susceptibility Standards

Emission Standards

| Emission Standard | European Standard | International Standard |
|-------------------|--------------------------------------|---|
| (X) | EN 50081-1/1992 | |
| () | EN 50081-1/8.93 | |
| () | EN 55014/4.93 | CISPR 14: 1993 |
| () | EN 55015/12.93 | CISPR 15: 1992 |
| () | EN 55011/91 | CISPR 11: 1990 |
| (X) | EN 55022/1998 | CISPR 22: 1997 |
| (X) | EN61000-3-2:1995+A1:1998 +A2:1998 | IEC 61000-3-2: 1995 /A1:1997/A2:1998 |
| (X) | EN 61000-3-3/1995 | IEC 61000-3-3: 1994 |

Susceptibility Standards

| Susceptibility Standard | European Standard | International Standard |
|-------------------------|--------------------|-------------------------|
| () | EN 50082-1/1997 | |
| (X) | EN 55024/1998 | |
| () | EN 50082-2/1994 | |
| () | | IEC 801-2/1984 |
| () | | IEC 801-3/1984 |
| () | | IEC 801-4/1988 |
| () | | IEC 804-5 |
| (X) | EN 61000-4-2:1995 | IEC 61000-4-2:1995 |
| (X) | EN 61000-4-3:1996 | IEC 61000-4-3:1995(mod) |
| (X) | EN 61000-4-4:1995 | IEC 61000-4-4:1995 |
| (X) | EN 61000-4-5:1995 | IEC 61000-4-5:1995 |
| (X) | EN 61000-4-6:1996 | IEC 61000-4-6:1996 |
| (X) | EN 61000-4-8:1993 | IEC 61000-4-8:1993 |
| (X) | EN 61000-4-11:1994 | IEC 61000-4-11:1994 |
| () | EN 55014-2:1993 | CISPR/F (Sec) 159 |
| () | | |

Chapter 1 Introduction

Description of EUT:

The EUT is a data transmission / receiver facility. It is designed to install in the PC or compatible computer and makes your data equipment available to transmit / receive data via the EUT. During testing the EUT was operated at Tx or Rx mode for each emission measured. This was done in order to insure that maximum emission levels were attained.

Test method:

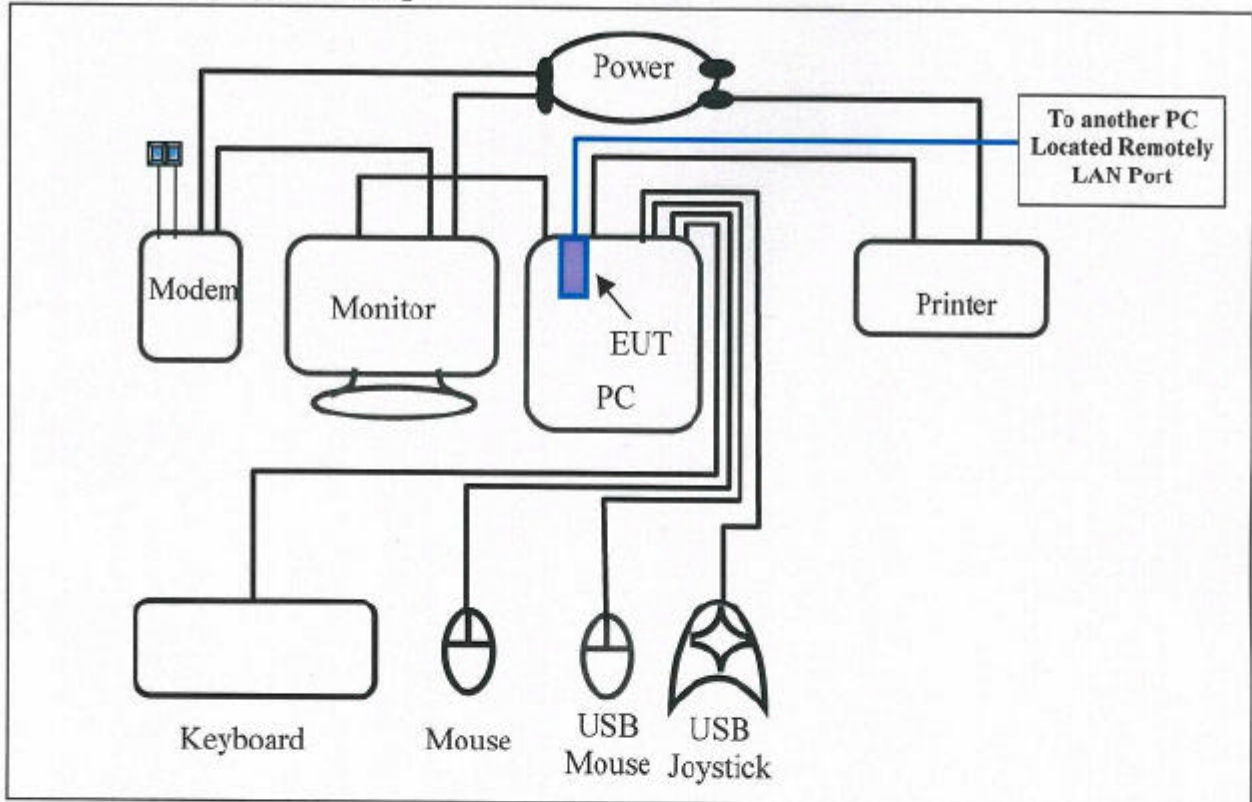
Pretest was found that the emission of operating mode is worse than standby mode. So, The final test is made at the operating mode.

During the measurement, there are three modes tested: " 10 x 10Mbps ", "100 x 100Mbps" and " 1000 x 1000Mbps " mode. The pretest was found out the testing mode: "1000 x 1000Mbps " was the worst case. We only recorded the worst case in this report.

During testing, the EUT was operated at "transmitting" and "receiving" mode simultaneously.

The test placement as the photographs showed is the worst case emission placed. (If the emission is close to the ambient, the resolution BW and view resolution will be reduced and the data will be recorded by detection of maximum hold peak mode.)

The testing configuration of test setup is showing in the next page.

Configuration of test setup**Connections:****PC :**

- *Serial Port --- via a 110cm shielded RS-232 cable to the serial port of Modem.
 - *Monitor Port --- a monitor with 1.5m length data cable.
 - *Keyboard Port --- a keyboard with 1.60m length data cable.
 - *Mouse Port --- a mouse with 1.60m length data cable.
 - *USB port 1 --- a USB Mouse with 1.8m long of data cable.
 - *USB port 2 --- a USB Joystick with 1.8m long of data cable.
 - *Printer port --- a printer with 1.80m length data cable.
- (Each port on PC is connected with suitable device)

EUT:

- *LAN port --- connect with a 3m length RJ-45 data cable to the LAN port of another PC located remotely

List of support equipment

PC : **HP Brio 85xx 6/350**
Model No. : D6928A
Serial No. : SG91801443
FCC ID : Doc Approved
Power type : 100 ~ 230VAC / 50 ~ 60Hz, 5A, Switching
Power cord : Non-shielded, 2.33m long, Plastic, No ferrite core

Monitor : **HP pavilion mx70**
Model No. : P1283A
Serial No. : TWTBQ00397
FCC ID : DOC Approved
Power type : 100 ~ 127V V 3.0A 50/ 60 Hz 1.5A
Power cord : Shielded, 1.83m long, No ferrite core
Data cable : Shielded, 1.46m (1.80m) long, with two ferrite cores (no ferrite core)

Keyboard : **HP**
Model No. : 5219
Serial No. : BN31206351
FCC ID : E5XKB5209
Power type : By PC
Data cable : Shielded, 1.60m long

Mouse : **HP**
Model No. : MO42KOA
Serial No. : 0306044011
FCC ID : DOC Approved
Power type : By PC
Power cord : Non-shielded, 1.88m long, No ferrite core

USB Mouse : **Logitech Wheel Mouse**
Model No. : M-BJ-58
Serial No. : LN20901985
FCC ID : Doc Approved
Power type : By PC
Power cord : Non-shielded, 1.88m long, No ferrite core

Printer : **HP**
Model No. : C2642A
Serial No. : SG69A196GV
FCC ID : B94C2642X
Power type : 220VAC, 50Hz
Power cord : Non-shielded, 2m long, no ferrite core
Data cable : Shielded, 1.84m long, no ferrite core (1.7m)

USB Joystick : **Rockfire**
Model No. : QF-337uv
Serial No. : 10600545
FCC ID : CE Approval
Power type : Powered by PC
Power cable : Shielded, 1.8m long, No ferrite bead data cable

Modem : **ACEEX**
Model No. : DM-1414V
FCC ID : IFAXDM1414
Power type : 120VAC, 60Hz/ 9VAC, 1A
Power cord : Non-shielded, 1.9m long, no ferrite cord
Data cable : RS232, Shielded, 1.2m long, no ferrite core
RJ11C x 2, 7' long non-shielded, no ferrite core

MIC. & Earphone : **KOKA**
Model No. : N/A
Power type : Dynamic
Data cable : Non-shielded, 3m

Walkman : **Aiwa**
Model No. : HS-TA176
Data cable : 1.2m long, non-shielded cable.
Power type : Powered by two AA size batteries

Chapter 2 Conducted Emission Test

Test condition and setup:

(1) Mains:

All the equipment is placed and setup according to the EN 55022. The EUT is assembled on a wooden table that is 80 cm high, is placed 40 cm from the back-wall that is a vertical conducting plane. One LISN is for EUT, the other LISN is for support equipment. They are all placed on the conductive ground. The EUT's LISN connect a line switch box for selecting L1 or L2, then connect to a preamplifier and spectrum for pretest.

The spectrum measured from 150KHz to 30MHz. Conducted emission levels are detected at max. peak mode. But if the max. peak mode failed or over average limit, it will be measured by QP and average detection mode using the Receiver.

While testing, there is the worst-emission plot printed at peak detection mode, and there are more than 6 highest emissions relative to limit recorded. The plot is kept as the original data, not included in test report.

(2) Telecommunication ports:

The EUT is placed as mains disturbance test. The communication line connected to the ISN and then the measuring receiver connected to the ISN to measured the level of voltage disturbance.

List of test Instrument :

| Instrument Name | Model No. | Brand | Serial No. | Calibration Date | |
|--------------------|---------------|---------------|-----------------|------------------|-----------|
| | | | | Last time | Next time |
| Receiver | SCR3102 | SCHAFFNER | 012 | 04/22/03 | 04/21/04 |
| LISN (EUT) | 3825/2 | EMCO | 9411-2284 | 07/21/03 | 07/20/04 |
| LISN (Support E.) | 3825/2 | EMCO | 9210-2007 | 09/03/03 | 09/02/04 |
| Preamplifier | CB-001 | TRC | 98-02 | 05/29/03 | 05/28/04 |
| Line switch box | CB-01 | TRC | 98-04 | 05/29/03 | 05/28/04 |
| 1dB Attenuator | CAT-1 | mini-circuits | ----- | 05/29/03 | 05/28/04 |
| FTB-1-6 Attenuator | 15542 | mini-circuits | 9620 03 | 05/29/03 | 05/28/04 |
| 20dB Attenuator | CAT-20 | mini-circuits | 9620 13 | 05/29/03 | 05/28/04 |
| 3dB Attenuator | CAT-3 | mini-circuits | 9620 14 | 05/29/03 | 05/28/04 |
| Coixal Cable | BNC3200B-0058 | Jyebao | CL-05 | 05/29/03 | 05/28/04 |
| Coixal Cable | BNC31VB-0316 | Jyebao | IF-01ca0069-036 | 05/29/03 | 05/28/04 |
| 50ohm terminator | 370BNM | NARDA | PWR5W | 07/21/03 | 07/20/04 |
| 50ohm terminator | 370BNM | NARDA | PWR5W | 07/21/03 | 07/20/04 |
| 50ohm terminator | 370BNM | NARDA | PWR5W | 09/03/03 | 09/02/04 |
| 50ohm terminator | 370BNM | NARDA | PWR5W | 09/03/03 | 09/02/04 |

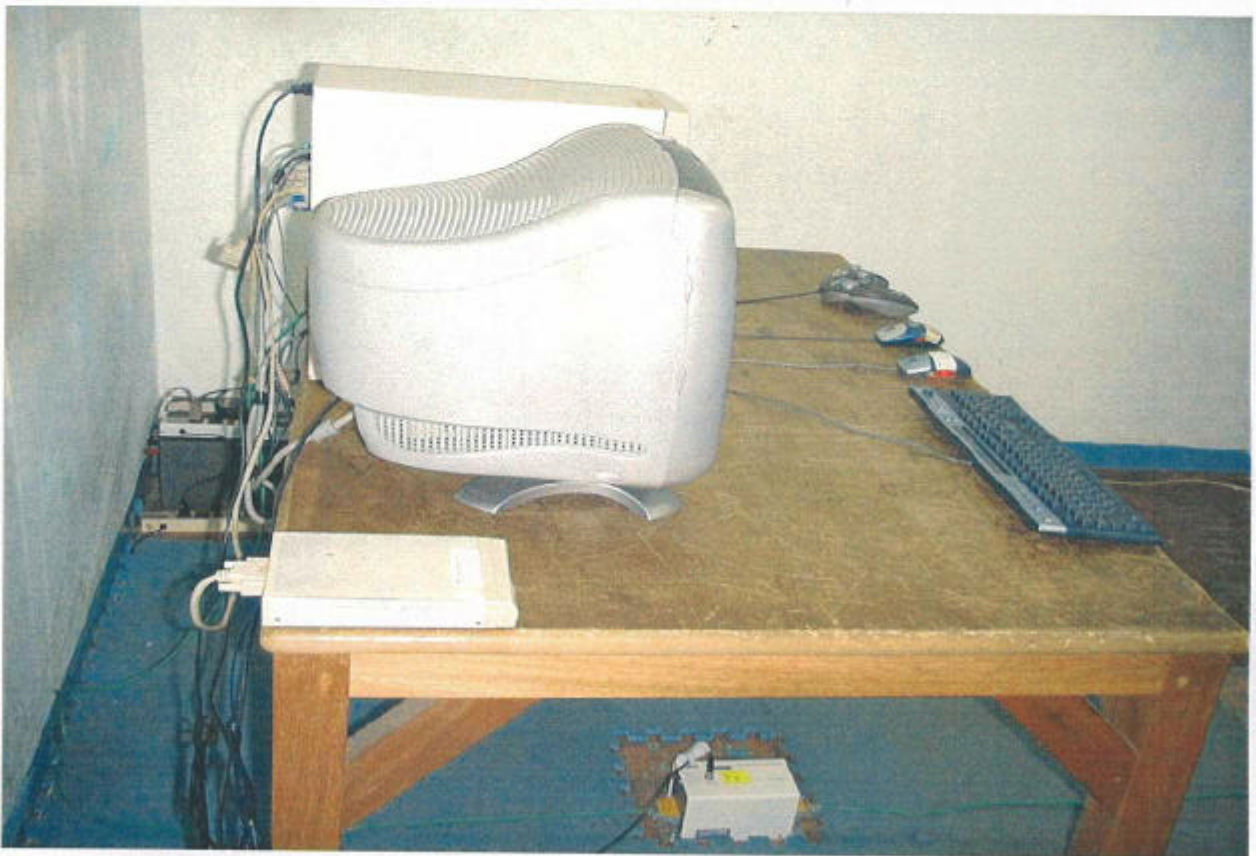
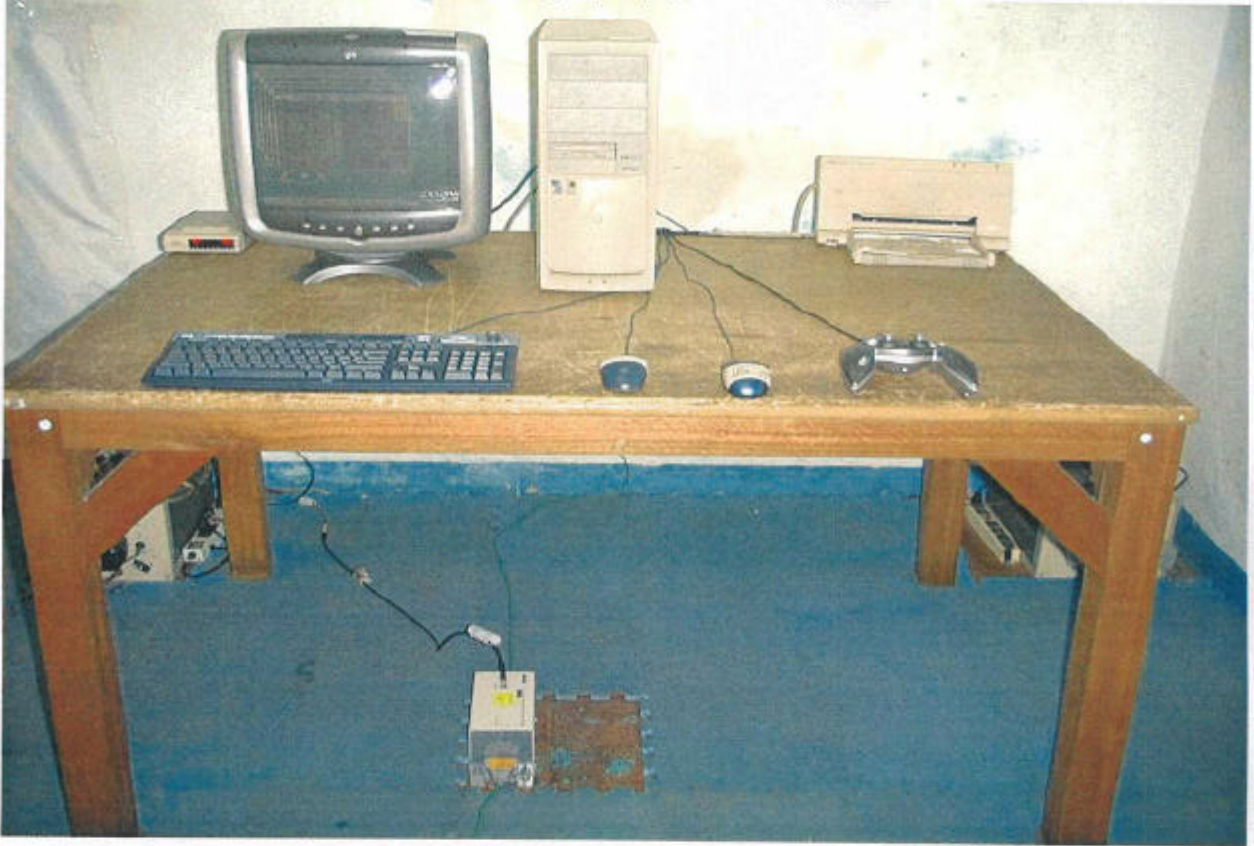
The level of confidence of 95% , the uncertainty of measurement of conducted emission is +3.1/-4.84 dB .

Test Result : Pass (Appendix A)

Conducted Test Placement: (Photographs)(Power Line)



Conducted Test Placement: (Photographs)(Data Line)



Chapter 3 Radiated emission test

Test condition and setup :

Pretest: Prior to the final test (OATS test), the EUT is placed in a shielded enclosure, and scan from 30MHz to 1GHz. This is done to ensure the radiation is exactly emitted from the EUT.

Final test : Final radiation measurements is made on a **10 – meter**, open-field test site. The EUT is placed on a nonconductive table, which is 0.8m height, the top surface is 1.0 x 1.5 meter. The placement is according to EN 55022.

The M. E. whole range Antenna is used to measure frequency from 30 MHz to 1GHz. The final test is used the Receiver.

Measure more than six top marked frequencies generated form pretest by computer step by step at each frequency. The EUT is rotated 360 degrees, and antenna is raised and lowered from 1 to 4 meters to find the maximum emission levels. The antenna is used with both horizontal and vertical polarization.

Appropriated preamplifier that is made by TRC is used for improving sensitivity and precaution is taken to avoid overloading. The spectrum analyzer's 6dB bandwidth is set to 120 K Hz, and the EUT is measured at quasi-peak mode.

If the emission is close to the frequency band of ambient, the tester will recheck the data and the corrected data will be written in the test data sheet. If the emission is just within the ambient, the data from shielded room will be taken as the final data.

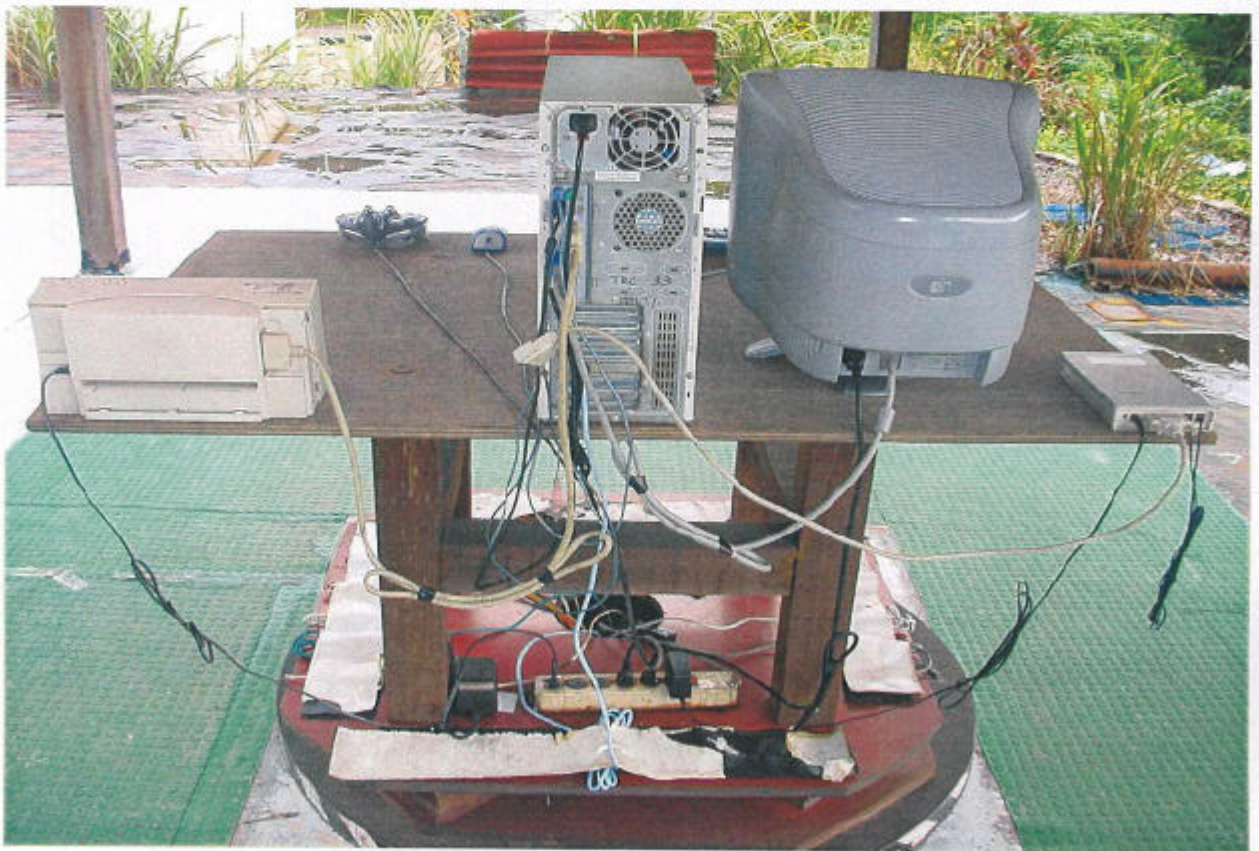
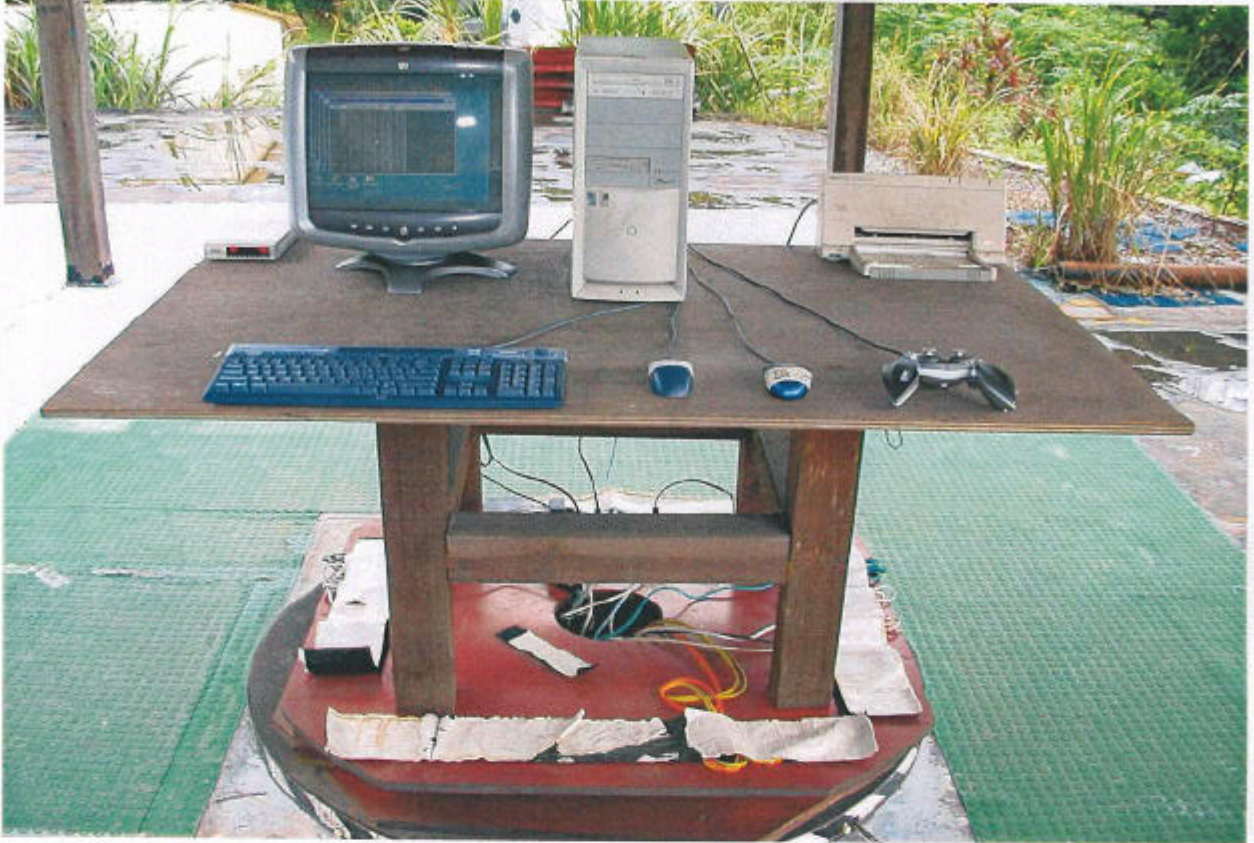
List of test Instrument :

| Instrument Name | Model No. | Brand | Serial No. | Calibration Date | |
|--|--------------|-----------|------------|------------------|-----------|
| | | | | Last time | Next time |
| Receiver | SCR3102 | SCHAFFNER | 012 | 04/22/03 | 04/21/04 |
| Control Box | TWR95-4 | TRC | C9001-2 | N/A | N/A |
| Antenna | CBL6141A | SCHAFFNER | 4206 | 05/27/03 | 05/26/04 |
| Open test side (Antenna, Amplify, cable calibrated together) | | | | 05/29/03 | 05/28/04 |
| Pre-amplifier | TRC-CB-2 | TRC | CB-002 | 05/29/03 | 05/28/04 |
| Coixal Cable(20meter) | RG-214/U | Jyebao | CL-002 | 05/29/03 | 05/28/04 |
| Coixal Cable(50cm) | BNC31VB-0316 | Jyebao | CL-002 | 05/29/03 | 05/28/04 |
| Coixal Cable(20cm) | BNC31VB-0318 | Jyebao | CL-007 | 05/29/03 | 05/28/04 |
| Coixal Cable(55cm) | BNC31VB-0316 | Jyebao | CL-006 | 05/29/03 | 05/28/04 |
| Coixal Cable(55cm) | BNC31VB-0316 | Jyebao | CL-005 | 05/29/03 | 05/28/04 |

The level of confidence of 95%, the uncertainty of measurement of radiated emission is +2.85/-2.77 dB.

Test Result : Pass (Appendix B)

Radiated Test Placement: (Photographs)



Chapter 4 Radio Frequency Immunity Test (RS)

Test information:

Test setup: Anechoic Chamber

Test Frequency: 80 ~ 1000 MHz
 27 ~ 500 MHz Without Modulation

Modulation: FM %
 80% AM Modulation with 1KHz
 900 KHz ± 5 KHz with PM 200 Hz and 100% depth

Step size: ≤ 1% step size

Sweep time: 2.5 Second

Field strength: 1V/m 3V/m 10V/m

Test mode: Ref. Test method of Chapter 1

Test instruments:

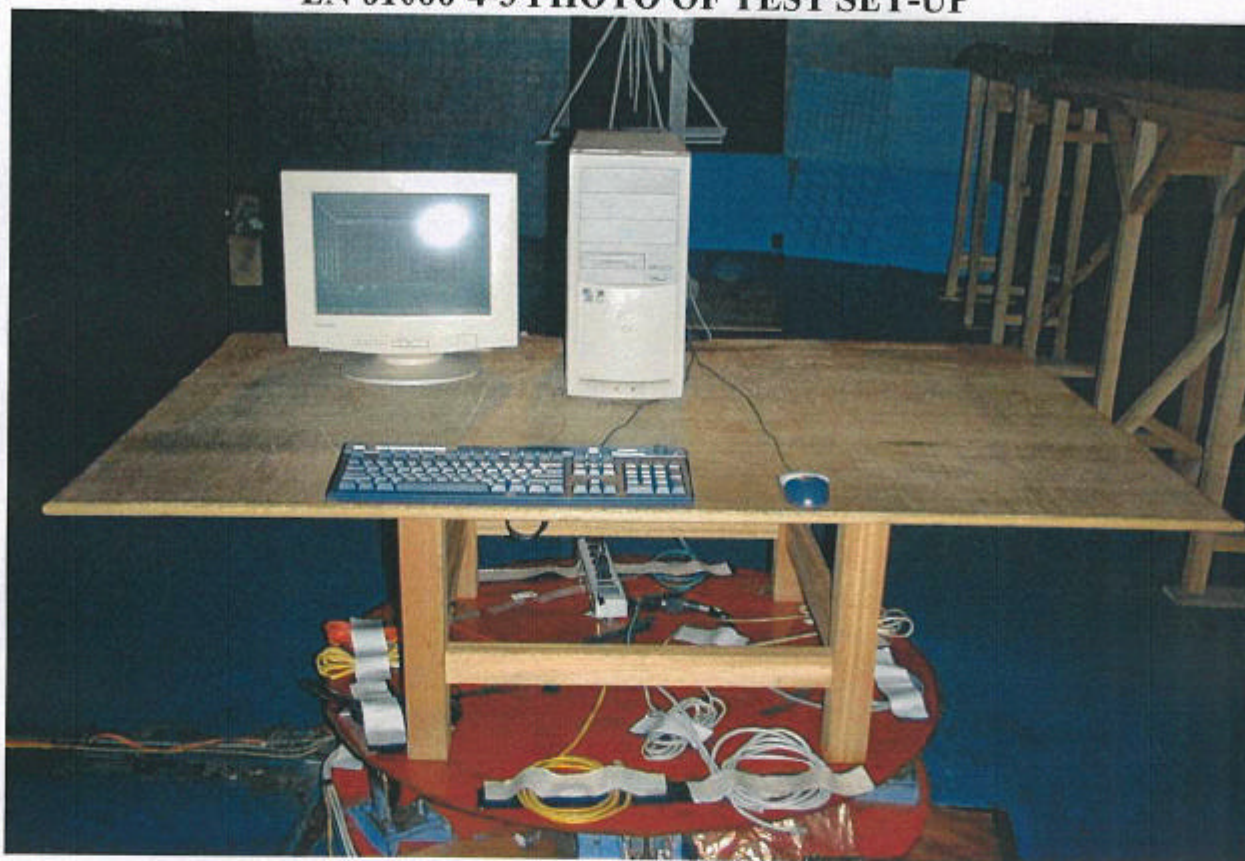
| Name | Model Number | Serial Number | Selected |
|-------------------|--------------|---------------|----------|
| Shielding Room | AC5-001 | N / A | X |
| DC Power Supply | GPR-3520H | 7090069 | X |
| Signal Generator | 900 | 287104 | X |
| Amplifier | AC5-002 | N / A | X |
| Power Meter | 1219-D-007 | 157 | X |
| Spectrum Analyzer | 8594EM | 3710A00198 | X |
| Preamplifier | AC3-002 | N / A | X |

Comment:

Performance Criteria A B C

Test Result : Pass

EN 61000-4-3 PHOTO OF TEST SET-UP



Chapter 5 Electric Fast Transient/Burst Requirements Test

Test information:

Test setup: According to EN 61000-4-4

Test Voltage: DC Power line () 0.5 KV, 5 KH
 AC Power line (X) 1 KV, 5 KHz
 Signal & Control line (X) 0.5 KV, 5 KHz
 () 1 KV, 5 KHz

Polarity: (X) Positive (X) Negative

Test Duration: () 1 minute (X) 3 minutes

Connected lines: () Power line shielded
 (X) Power line non-shielded
 (X) Signal & Control line non-shielded
 () Signal & Control line shielded

Test mode: Ref. Test method of Chapter 1.

Test instruments:

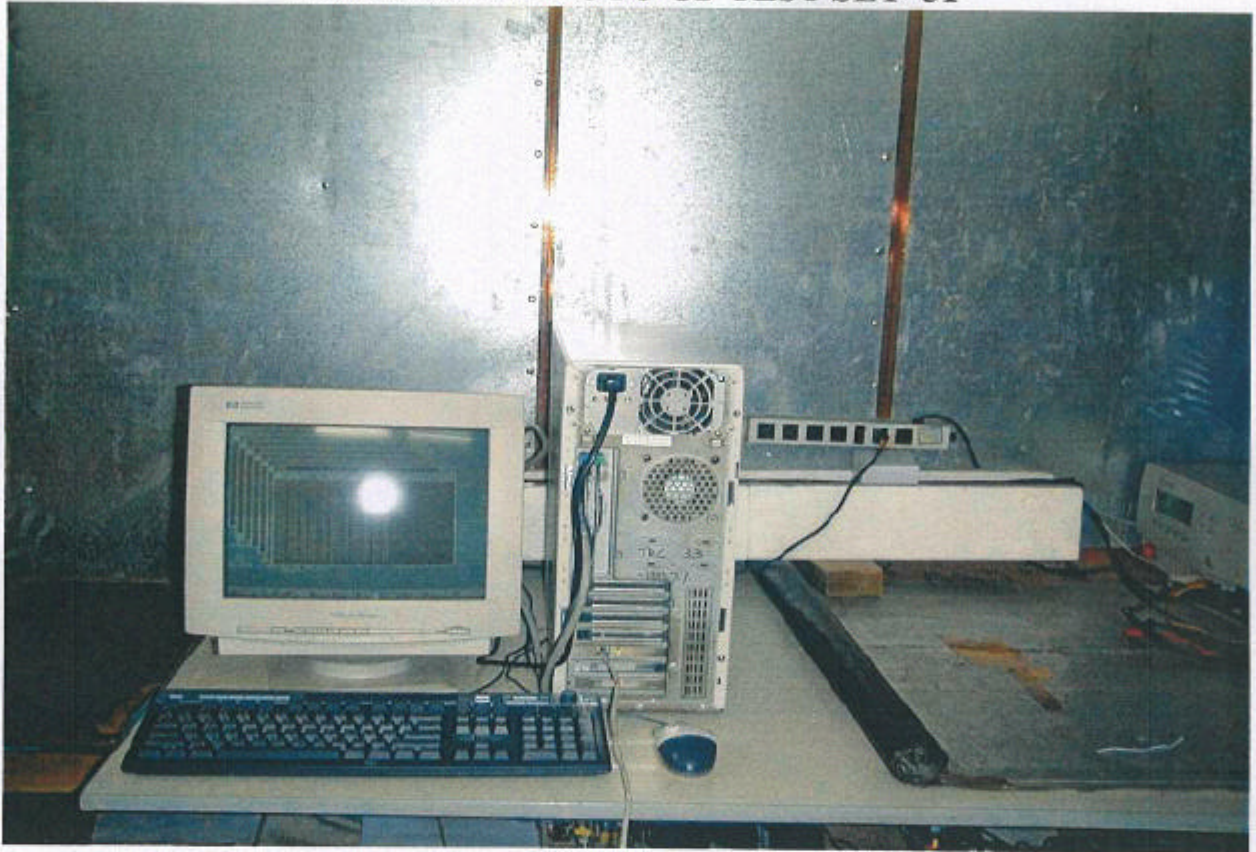
| Name | Model Number | Serial Number | Selected |
|--------------------------|------------------------|---------------|----------|
| BEST EMC Test Instrument | BEST EMC V2.3 (-8, -9) | 199918-006SC | X |
| Induction Coil | INA 701 BEST | 199922-001SC | X |
| | | | |

Comment:

Performance Criteria () A (X) B () C

Test Result : Pass

EN 61000-4-4 PHOTO OF TEST SET-UP



Chapter 6 Electrostatic Discharges Immunity Test

Test information:

Test setup: Shielded Room

Test Voltage: 4KV contact discharge
 8KV air discharge

Indirect Discharges: HCP
 VCP

Polarity: positive negative

Test mode: Ref. Test method of Chapter 1

Test points: Each Port of EUT

Test instruments:

| Name | Model Number | Serial Number | Selected |
|--|--------------|---------------|----------|
| NoiseKen Electrostatic Discharge Simulator | ESS-100L(A) | 2100C03605 | X |
| NoiseKen Electrostatic Discharge Gun | TC-815P | 2100C03566 | X |
| | | | |

Comment:

Performance Criteria A B C

Test Result : Pass

EN 61000-4-2 PHOTO OF TEST SET-UP



Chapter 7 Surge Immunity Test

Test information:

Test setup: According to EN 61000-4-5

Test Voltage: DC Power line () 0.5 KV
 AC Power line (X) 2 KV
 Control line () 0.5 KV
 Signal () 2 KV

Time : (X) 1.2/50µs (8/20µs)

Polarity: (X) Positive (X) Negative

Connected lines: () Power line shielded (X) Power line non-shielded
 () Signal & Control line non-shielded () Signal & Control line shielded

Test mode: Ref. Test method of Chapter 1.

Test instrument:

| Name | Model Number | Serial Number | Selected |
|-------------------------------|---|---------------------------|----------|
| BEST EMC Test Instrument | BEST EMC V2.3 (-8, -9) | 199918-006SC | X |
| Induction Coil | INA 701 BEST | 199922-001SC | X |
| KeyTek Pulsed-EMI Test System | E103, E501B, E502B, E503, E505A, E4552A | 0008260 ~0008264, 0008254 | |

Comment:

Performance Criteria: () A (X) B () C

Test Result : Pass

Report No.: C51CE264

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EN 61000-4-5 PHOTO OF TEST SET-UP



Chapter 8 Continuous Wave Voltage Immunity Test

Test information:

Test setup: According to EN 61000-4-6

Test Frequency: 0.15 ~ 80MHz

Modulation: FM %
 80% AM Modulation with 1KHz
 900 MHz \pm 5 MHz with PM 200 Hz and 50% duty cycle

Step size: \leq 1% step size

Field strength: 1V 3V 10V

Test mode: Ref. Test method of Chapter 1

Test instruments:

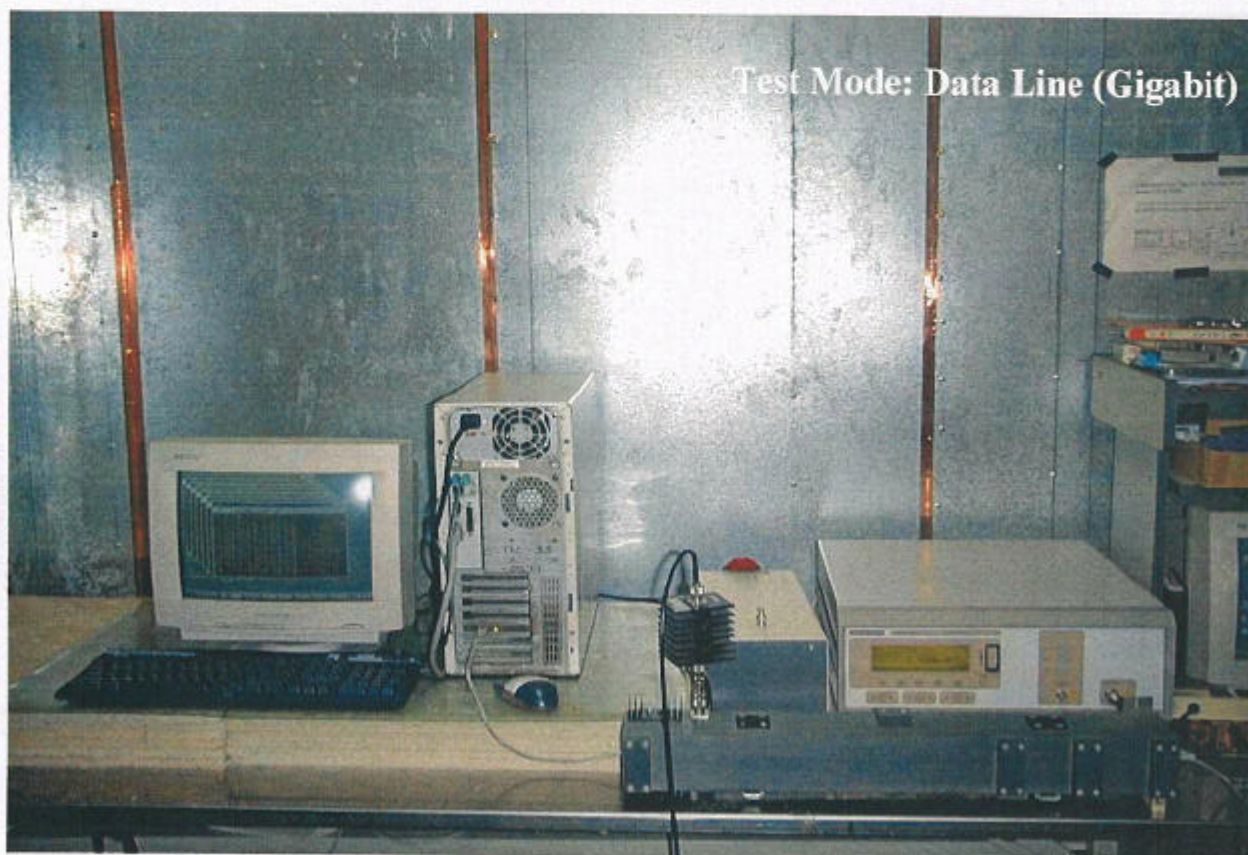
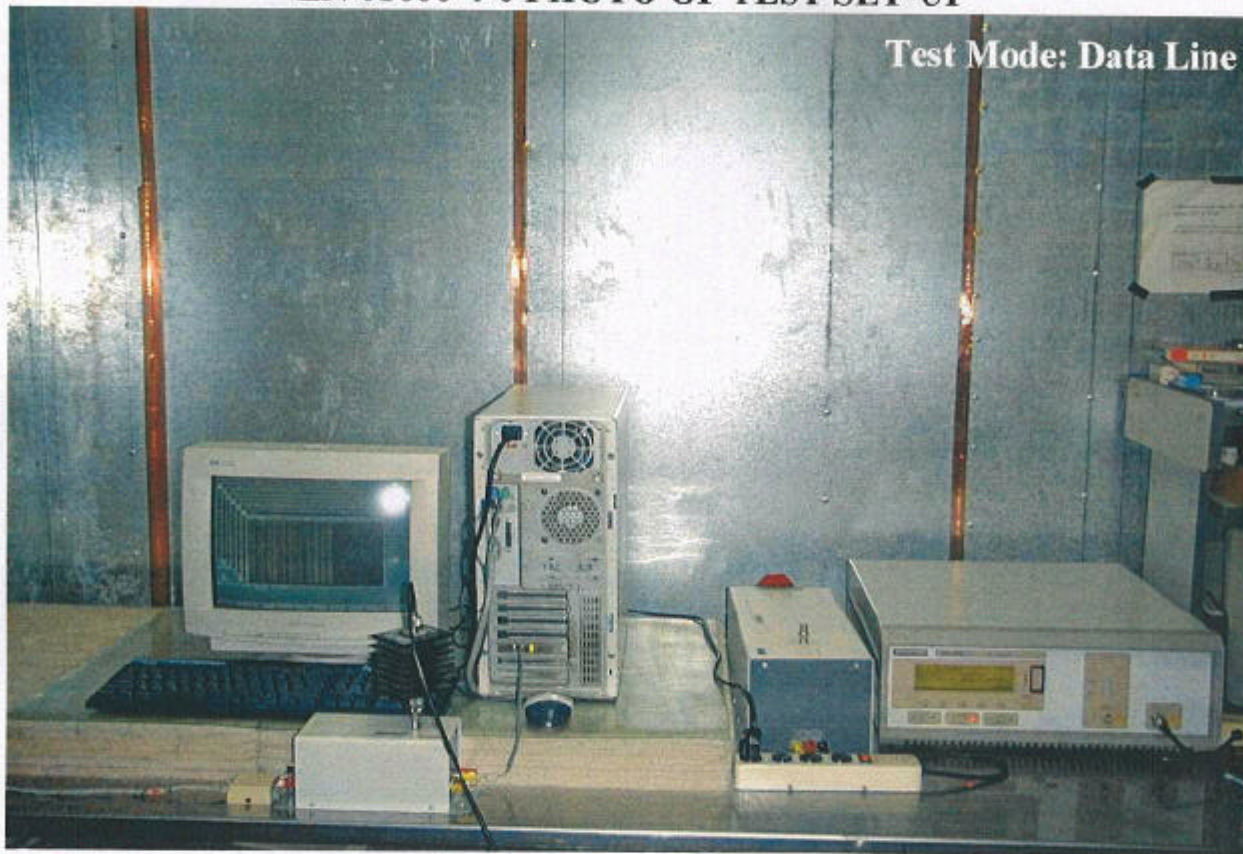
| Name | Model Number | Serial Number | Selected |
|---------------------------------------|--------------|---------------|----------|
| SCHAFFNER RF-SYNTHESIZER/AMPLIFIER | NSG 2070-1 | 1020 | X |
| SCHAFFNER CDN | M325 | 13773 | X |
| SCHAFFNER CDN | M216 | 15604 | |
| SCHAFFNER CDN | T004 | 15230 | X |
| SCHAFFNER CDN | S501 | 15167 | |
| SCHAFFNER FM-Koppelzange | KEMZ 801 | 14301 | |

Comment:

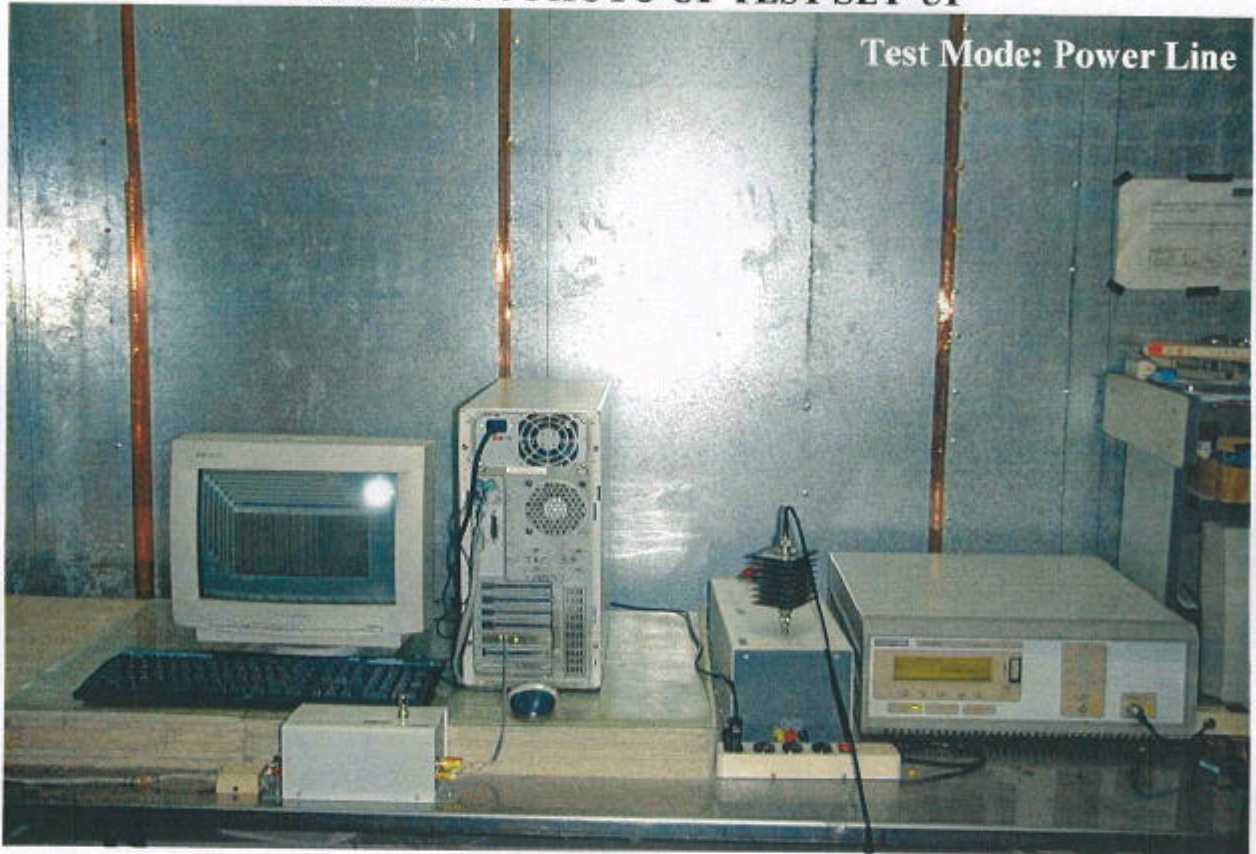
Performance Criteria: A B C

Test Result : Pass

EN 61000-4-6 PHOTO OF TEST SET-UP



EN 61000-4-6 PHOTO OF TEST SET-UP



Chapter 9 Power Frequency Magnetic Field Immunity Test

Test information:

Test setup: According to EN 61000-4-8

Test method : Continuous Short duration

Magnetic Field Strength: 1A/m

Frequency: 50Hz

polarization: X polarization Y polarization Z polarization

Test mode: Ref. Test method of Chapter 1

Test Duration: 30 seconds 1~3 seconds

Connected lines: Power line shielded Power line non-shielded
 Signal & Control line non-shielded Signal & Control line shielded

**** Power Frequency Magnetic Field in the horizontal and vertical polarity.****

Test instruments:

| Name | Model Number | Serial Number | Selected |
|--------------------------|------------------------|---------------|----------|
| BEST EMC Test Instrument | BEST EMC V2.3 (-8, -9) | 199918-006SC | X |
| Induction Coil | INA 701 BEST | 199922-001SC | X |
| | | | |

Comment:

Performance Criteria: A B C

Test Result : Pass

EN 61000-4-8 PHOTO OF TEST SET-UP



EN 61000-4-11 PHOTO OF TEST SET-UP



Chapter 11 Harmonics Test

Test information:

Test setup: According to EN 61000-3-2

Test Item: Quasi – stationary & Fluctuating Current Harmonics Test

Test mode: Ref. Test method of Chapter 1

Test instrument:

| Name | Model Number | Serial Number | Selected |
|------------------------------|--------------|---------------|----------|
| Harmonic/Flicker Test System | HP 6842A | 3531A-00102 | X |
| | | | |
| | | | |

| Test Equipment Settings: | Quasi-stationary Current Harmonics Test | Fluctuating Current Harmonics Test |
|---------------------------|---|------------------------------------|
| Line Voltage | 230VAC | 230VAC |
| Line Frequency | 50Hz | 50Hz |
| Device Class | D | D |
| Test Limit Overrides | None | None |
| | | |
| Total Number of Failures: | None | None |
| | | |
| Total Number of Errors: | None | None |

Test Result: PASS

Chapter 12 Voltage Fluctuation and Flicker Test

Test information:

Test setup: According to EN 61000-3-3

Test mode: Ref. Test method of Chapter 1

Test instrument:

| Name | Model Number | Serial Number | Selected |
|------------------------------|--------------|---------------|----------|
| Harmonic/Flicker Test System | HP 6842A | 3531A-00102 | X |
| | | | |
| | | | |

| | |
|---------------------------|---------------------------|
| Test Equipment Settings: | |
| Line Voltage | 230VAC |
| Line Frequency | 50Hz |
| Test Limit Overrides | None |
| | |
| Total Number of Failures: | Pst: (0), Plt: (0) |
| | Dc: (0), Dmax (0), Dt (0) |
| | |
| Total Number of Errors: | None |

Test Result: PASS

Appendix A

Conducted Emission Test Result: (Test Mode: Power Line 1000 x 1000Mbps)

Testing room : Temperature : 22 °C Humidity : 62 % RH

Line 1

| Frequency (KHz) | READING AMPLITUDE | | | LIMIT | | Margin (dB) |
|--------------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------|
| | Peak (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | |
| 189.00 | 45.17 | ***.*** | ***.*** | 64.89 | 54.89 | -9.71 |
| 212.00 | 46.79 | ***.*** | ***.*** | 64.23 | 54.23 | -7.44 |
| 530.00 | 28.92 | ***.*** | ***.*** | 56.00 | 46.00 | -17.08 |
| 783.00 | 37.34 | ***.*** | ***.*** | 56.00 | 46.00 | -8.66 |
| 1170.00 | 30.35 | ***.*** | ***.*** | 56.00 | 46.00 | -15.65 |
| 1593.00 | 29.84 | ***.*** | ***.*** | 56.00 | 46.00 | -16.16 |
| 1702.00 | 30.60 | ***.*** | ***.*** | 56.00 | 46.00 | -15.40 |
| 2970.00 | 30.48 | ***.*** | ***.*** | 56.00 | 46.00 | -15.52 |
| 19110.00 | 33.75 | ***.*** | ***.*** | 60.00 | 50.00 | -16.25 |
| 19620.00 | 33.82 | ***.*** | ***.*** | 60.00 | 50.00 | -16.18 |

Line 2

| Frequency (KHz) | READING AMPLITUDE | | | LIMIT | | Margin (dB) |
|--------------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------|
| | Peak (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | |
| 597.00 | 33.27 | ***.*** | ***.*** | 56.00 | 46.00 | -12.73 |
| 637.00 | 33.39 | ***.*** | ***.*** | 56.00 | 46.00 | -12.61 |
| 783.00 | 43.54 | ***.*** | ***.*** | 56.00 | 46.00 | -2.46 |
| 1170.00 | 35.49 | ***.*** | ***.*** | 56.00 | 46.00 | -10.51 |
| 1593.00 | 35.96 | ***.*** | ***.*** | 56.00 | 46.00 | -10.04 |
| 1702.00 | 36.91 | ***.*** | ***.*** | 56.00 | 46.00 | -9.09 |
| 1803.00 | 34.90 | ***.*** | ***.*** | 56.00 | 46.00 | -11.10 |
| 2970.00 | 34.35 | ***.*** | ***.*** | 56.00 | 46.00 | -11.65 |
| 4240.00 | 33.80 | ***.*** | ***.*** | 56.00 | 46.00 | -12.20 |
| 4350.00 | 32.99 | ***.*** | ***.*** | 56.00 | 46.00 | -13.01 |

*The reading amplitudes are all under limit.

Conducted Emission Test Result: (Test Data Line 100 x 100 Mbps)

Testing room : Temperature : 21 °C Humidity : 62 % RH

Line 1

| Frequency (KHz) | READING AMPLITUDE | | | LIMIT | | Margin (dB) |
|--------------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------|
| | Peak (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | |
| 12190.00 | 54.53 | ***.*** | ***.*** | 74.00 | 64.00 | -9.47 |
| 12890.00 | 54.12 | ***.*** | ***.*** | 74.00 | 64.00 | -9.88 |
| 13360.00 | 55.60 | ***.*** | ***.*** | 74.00 | 64.00 | -8.40 |
| 16150.00 | 55.03 | ***.*** | ***.*** | 74.00 | 64.00 | -8.97 |
| 23050.00 | 56.11 | ***.*** | ***.*** | 74.00 | 64.00 | -7.89 |
| 24300.00 | 54.10 | ***.*** | ***.*** | 74.00 | 64.00 | -9.90 |
| 25700.00 | 54.67 | ***.*** | ***.*** | 74.00 | 64.00 | -9.33 |
| 26570.00 | 56.63 | ***.*** | ***.*** | 74.00 | 64.00 | -7.37 |
| 27090.00 | 55.22 | ***.*** | ***.*** | 74.00 | 64.00 | -8.78 |
| 28770.00 | 55.00 | ***.*** | ***.*** | 74.00 | 64.00 | -9.00 |

Line 2

| Frequency (KHz) | READING AMPLITUDE | | | LIMIT | | Margin (dB) |
|--------------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------|
| | Peak (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | Quasi-Peak (dBμV) | Average (dBμV) | |
| 11850.00 | 54.28 | ***.*** | ***.*** | 74.00 | 64.00 | -9.72 |
| 12800.00 | 54.35 | ***.*** | ***.*** | 74.00 | 64.00 | -9.65 |
| 13450.00 | 54.84 | ***.*** | ***.*** | 74.00 | 64.00 | -9.16 |
| 18210.00 | 56.51 | ***.*** | ***.*** | 74.00 | 64.00 | -7.49 |
| 23050.00 | 55.18 | ***.*** | ***.*** | 74.00 | 64.00 | -8.82 |
| 24300.00 | 55.46 | ***.*** | ***.*** | 74.00 | 64.00 | -8.54 |
| 25700.00 | 54.78 | ***.*** | ***.*** | 74.00 | 64.00 | -9.22 |
| 26570.00 | 56.61 | ***.*** | ***.*** | 74.00 | 64.00 | -7.39 |
| 27090.00 | 56.17 | ***.*** | ***.*** | 74.00 | 64.00 | -7.83 |
| 29180.00 | 54.43 | ***.*** | ***.*** | 74.00 | 64.00 | -9.57 |

*The reading amplitudes are all under limit.

Appendix B

Radiated Emission Test Result: (Test mode: 1000 x 1000 Mbps)

Test Conditions:

Testing site : Temperature : 28° C Humidity : 70 % RH

| Frequency | Reading Amplitude | Ant. Height | Table | Correction Factors | Corrected Amplitude | Class B Limit | Margin |
|-----------|-------------------|-------------|--------|--------------------|---------------------|---------------|--------|
| MHz | dBμV/m | m | degree | dB | dBμV/m | dBμV/m | dB |

(Horizontal)

| | | | | | | | |
|----------|-------|------|-----|-------|-------|-------|-------|
| 37.8825 | 20.18 | 2.49 | 310 | 0.67 | 20.85 | 30.00 | -9.15 |
| 249.9995 | 30.07 | 2.49 | 338 | -1.80 | 28.27 | 37.00 | -8.73 |
| 374.9978 | 29.39 | 2.49 | 20 | 3.15 | 32.54 | 37.00 | -4.46 |
| 499.9955 | 27.63 | 2.49 | 65 | 6.80 | 34.43 | 37.00 | -2.57 |
| 749.9996 | 17.02 | 3.98 | 41 | 14.30 | 31.32 | 37.00 | -5.68 |
| *** | | | | | | | |

(Vertical)

| | | | | | | | |
|----------|-------|------|-----|-------|-------|-------|-------|
| 37.8825 | 24.04 | 1.00 | 353 | 0.67 | 24.71 | 30.00 | -5.29 |
| 125.0025 | 30.16 | 1.00 | 68 | -4.70 | 25.46 | 30.00 | -4.54 |
| 250.0090 | 31.63 | 2.51 | 272 | -1.80 | 29.83 | 37.00 | -7.17 |
| 375.0135 | 27.01 | 3.99 | 177 | 3.15 | 30.16 | 37.00 | -6.84 |
| 500.0170 | 27.43 | 1.00 | 119 | 6.80 | 34.23 | 37.00 | -2.77 |
| *** | | | | | | | |

Note:

1. Margin = Amplitude - limit, *if margin is minus means under limit.*
2. Corrected Amplitude = Reading Amplitude + Correction Factors
3. Correction factor = Antenna factor + (Cable Loss - Amplitude gain)
 (For example : 30MHz correction factor = 15.5 + (-15.26) = 0.24 dB/m)

Appendix C
Photographs of EUT

