



# EMC

## TEST REPORT

REPORT NO. : F88122501MODEL NO. : TC 3000 Series, T8000 SeriesDATE OF TEST : Dec. 29, 1999PREPARED FOR: VXL INSTRUMENTS LIMITED CO.ADDRESS : 168, 7TH MAIN, 1ST BLOCK, KORAMANGALA,  
BANGALORE 560034, INDIAPREPARED BY: ADVANCE DATA TECHNOLOGY CORPORATION

Accredited Laboratory

11F, NO.1, SEC.4, NAN-KING EAST RD.,  
TAIPEI, TAIWAN, R.O.C.

This test report consists of 15 pages in total. It may be duplicated completely for legal use with the allowance of the applicant. It shall not be reproduced except in full, without the written approval of our laboratory. It should not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. government. The test result in the report only applies to the tested sample.



## **TABLE OF CONTENTS**

|                                                                  |    |
|------------------------------------------------------------------|----|
| 1. CERTIFICATION.....                                            | 3  |
| 2. GENERAL INFORMATION .....                                     | 4  |
| 2.1    GENERAL DESCRIPTION OF EUT.....                           | 4  |
| 2.2    DESCRIPTION OF SUPPORT UNITS.....                         | 5  |
| 2.3    TEST METHODOLOGY AND CONFIGURATION .....                  | 5  |
| 3. TEST INSTRUMENTS .....                                        | 6  |
| 3.1    TEST INSTRUMENTS (EMISSION).....                          | 6  |
| 3.2    LIMITS OF CONDUCTED AND RADIATED EMISSION.....            | 7  |
| 4. TEST RESULTS (EMISSION).....                                  | 8  |
| 4.1    RADIO DISTURBANCE .....                                   | 8  |
| 4.2    EUT OPERATING CONDITION .....                             | 8  |
| 4.3    TEST DATA OF CONDUCTED EMISSION .....                     | 9  |
| 4.4    TEST DATA OF RADIATED EMISSION.....                       | 11 |
| 5. PHOTOGRAPHS OF THE TEST CONFIGURATION WITH MINIMUM MARGIN.... | 13 |
| 6. APPENDIX - INFORMATION OF THE TESTING LABORATORY .....        | 15 |

**1. CERTIFICATION**

Issue Date: Jan. 3, 1999

Product : THINCLIENT  
Trade Name : VXL, ESPRIT  
Model No. : TC 3000 Series, T8000 Series  
Applicant : VXL INSTRUMENTS LIMITED  
Standard : FCC Part 15, Subpart B, Class B  
ANSI C63.4-1992  
CISPR 22: 1993+A1: 1995+A2: 1996, Class B

We hereby certify that one sample of the designation has been tested in our facility on Dec. 29, 1999. The test record, data evaluation and Equipment Under Test (EUT) configurations represent herein are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

The test results show that the EUT as described in this report is in compliance with the Class B limits of conducted and radiated emission of applicable standards.

TESTED BY : Jone Lin , DATE: 1/3/2000  
( Jone Lin )

CHECKED BY : Yemmy Soong , DATE: 1/3/2000  
( Yemmy Soong )

APPROVED BY : Mike Su , DATE: 1/3/2000  
( Mike Su )

**ADVANCE DATA TECHNOLOGY CORPORATION****NVLAP<sup>®</sup>**

Accredited Laboratory



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

|                   |   |                              |
|-------------------|---|------------------------------|
| Product           | : | THINCLIENT                   |
| Model No.         | : | TC 3000 Series, T8000 Series |
| Power Supply Type | : | Switching                    |
| Power Cord        | : | Nonshielded (1.8m)           |

Note: The EUT is a client for the Citrix Winframe Server & Windows-NT. It works on ICA3 protocol. TC 3000 Series consists of the following :

- 1) Power Supply
- 2) Media-GX Logic Card
- 3) Disk On Chip (Flash Disk)

The EUT has two model names, which are identical to each other in all aspects except for their brand and model names:

- Model: TC 3000 Series, brand: VXL
- Model: T8000 Series, brand: ESPRIT

From the above models, Model: TC 3000 Series was selected as the representative for the test, and its data is recorded in this report.

For more detailed features description, please refer to Manufacturer's Specification or User's Manual.



## 2.2 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories are used to form representative test configuration during the tests.

| No. | Product           | Brand          | Model No. | FCC ID           | I/O Cable                                                                            |
|-----|-------------------|----------------|-----------|------------------|--------------------------------------------------------------------------------------|
| 1   | MONITOR           | HITACHI        | CM814U    | FCC Doc Approved | Shielded Signal (1.5m)<br>Nonshielded Power (1.8m)                                   |
| 2   | LCD MONITOR       | MAG            | LT530F    | FCC Doc Approved | Nonshielded Power AC (1.8m)<br>Nonshielded Power DC (1.5m)<br>Shielded Signal (1.2m) |
| 3   | KEYBOARD          | IBM            | 52619700  | 0260267          | Shielded Signal (1.4m)                                                               |
| 4   | USB KEYBOARD      | BTC            | 7932      | E5XKBUCP10410    | Shielded Signal (1.4m)                                                               |
| 5   | MODEM<br>X2       | ACEEX          | 1414      | IFAXDM1414       | Shielded Signal (1.2m)<br>Nonshielded Power (1.2m)                                   |
| 6   | MOUSE             | LOGITECH       | M-S34     | DZL211029        | Shielded Signal (1.5m)                                                               |
| 7   | USB MOUSE         | DEXIN          | A2U800A   | NIYA2P800A       | Shielded Signal (1.5m)                                                               |
| 8   | PRINTER           | HP             | 2225C+    | DSI6XU2225       | Shielded Signal (1.2m)<br>Nonshielded Power (1.2m)                                   |
| 9   | MICROPHONE        | CAROL          | MUD-329   | NA               | Nonshielded Signal (3.0m)                                                            |
| 10  | SPEAKER           | AUDIO-TECNHICA | AT-SP25   | NA               | Nonshielded Power DC (2.2m)<br>Nonshielded Signal (1.0m)                             |
| 11  | TELEVISION        | SONY           | PVM-1351Q | VERIFICATION     | Nonshielded Power (1.0m)                                                             |
| 12  | PERSONAL COMPUTER | IBM            | 6560-T7T  | AN06260F         | Nonshielded Power (1.8m)                                                             |
| 13  | MONITOR           | ADI            | SM-5514A  | BR8SM-5514AC     | Shielded Signal (1.2m)<br>Nonshielded Power (1.8m)                                   |
| 14  | KEYBOARD          | FORWARD        | FDA-104GA | F4ZDA-104G       | Shielded Signal (1.4m)                                                               |
| 15  | MOUSE             | DEXIN          | A2P800A   | NIYA2P800A       | Shielded Signal (1.4m)                                                               |
| 16  | LAN CARD          | INTEL          | S82555    | EJMNPDSD035      | NA                                                                                   |

Note: 1. The EUT acted as SERVER PC and communicated with support units 13-16 which acted as WORKSTATION and partners of communication system via a UTP cable (10m).

## 2.3 TEST METHODOLOGY AND CONFIGURATION

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4:1992. Radiated testing was performed at an antenna to EUT distance of 3/10 m on an open area test site.

Please refer to the photos of test configuration in item 5.



### 3. TEST INSTRUMENTS

#### 3.1 TEST INSTRUMENTS (EMISSION)

##### CONDUCTED EMISSION MEASUREMENT

| Description & Manufacturer               | Model No. | Serial No. | Calibrated Until |
|------------------------------------------|-----------|------------|------------------|
| ROHDE & SCHWARZ Test Receiver            | ESHS30    | 828765/002 | Aug. 2, 2000     |
| ROHDE & SCHWARZ Artificial Mains Network | ESH2-Z5   | 828075/003 | July 21, 2000    |
| EMCO-L.I.S.N.                            | 3825/2    | 90031627   | July 21, 2000    |
| Shielded Room                            | Site 5    | ADT-C05    | NA               |

Note: 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months.

And the calibrations are traceable to NML/ROC and NIST/USA.

##### RADIATED EMISSION MEASUREMENT

| Description & Manufacturer         | Model No.            | Serial No.               | Calibrated Until |
|------------------------------------|----------------------|--------------------------|------------------|
| HP Spectrum Analyzer               | 8590L                | 3544A01176               | April 22, 2000   |
| HP Preamplifier                    | 8447D                | 2944A08485               | May 1, 2000      |
| HP Preamplifier                    | 8347A                | 3307A01088               | Aug. 30, 2000    |
| ROHDE & SCHWARZ TEST RECEIVER      | ESMI                 | 839013/007<br>839379/002 | Aug. 30, 2000    |
| SCHWARZBECK Tunable Dipole Antenna | VHA 9103<br>UHA 9105 | E101051<br>E101055       | Nov. 23, 2000    |
| CHASE BILOG Antenna                | CBL6112A             | 2221                     | Aug. 4, 2000     |
| EMCO Turn Table                    | 1060                 | 1115                     | NA               |
| SHOSHIN Tower                      | AP-4701              | A6Y005                   | NA               |
| Open Field Test Site               | Site 5               | ADT-R05                  | July 30, 2000    |

Note: 1. The measurement uncertainty is less than +/- 3dB, which is calculated as per NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months.

And the calibrations are traceable to NML/ROC and NIST/USA.



## 3.2 LIMITS OF CONDUCTED AND RADIATED EMISSION

### LIMIT OF RADIATED EMISSION OF CISPR 22

| FREQUENCY<br>(MHz) | Class A (at 10m) * | Class B (at 10m) * |
|--------------------|--------------------|--------------------|
|                    | dBuV/m             | dBuV/m             |
| 30 - 230           | 40                 | 30                 |
| 230 - 1000         | 47                 | 37                 |

\* Detector Function: Quasi-Peak

### LIMIT OF RADIATED EMISSION OF FCC PART 15, SUBPART B FOR FREQUENCY ABOVE 1000 MHz

| FREQUENCY<br>(MHz) | Class A (dBuV/m) (at 3m) |         | Class B (dBuV/m) (at 3m) |         |
|--------------------|--------------------------|---------|--------------------------|---------|
|                    | Peak                     | Average | Peak                     | Average |
| Above 1000         | 80.0                     | 60.0    | 74.0                     | 54.0    |

- Note: (1) The lower limit shall apply at the transition frequencies.  
 (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).  
 (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### LIMIT OF CONDUCTED EMISSION OF CISPR 22

| FREQUENCY<br>(MHz) | Class A (dBuV) |         | Class B (dBuV) |         |
|--------------------|----------------|---------|----------------|---------|
|                    | Quasi-peak     | Average | Quasi-peak     | Average |
| 0.15 - 0.5         | 79             | 66      | 66 - 56        | 56 - 46 |
| 0.50 - 5.0         | 73             | 60      | 56             | 46      |
| 5.0 - 30.0         | 73             | 60      | 60             | 50      |

- Note: (1) The lower limit shall apply at the transition frequencies.  
 (2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz  
 (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.



## 4. TEST RESULTS (EMISSION)

### 4.1 RADIO DISTURBANCE

Frequency Range : 0.15 - 30 MHz (Conducted Emission)  
 30 - 2000 MHz (Radiated Emission)  
 Input Voltage : 120 Vac, 60 Hz  
 Temperature : 24 degree C  
 Humidity : 60 %  
 Atmospheric Pressure : 1005 mbar

| TEST RESULT | Remarks                                                                                                                                    |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PASS</b> | Minimum passing margin of conducted emission: -20.0 dB at 17.486 MHz<br>Minimum passing margin of radiated emission: -2.1 dB at 167.06 MHz |

### 4.2 EUT OPERATING CONDITION

1. Turn on the power of all equipment.
2. EUT runs a test program to enable all functions.
3. EUT reads and writes messages from HDD.
4. EUT sends and receives messages from WORKSTATION via a UTP cable.
5. EUT sends "H" messages to LCD monitor, external monitor and television.  
Then, LCD monitor, external monitor and television display "H" patterns on their screens simultaneously.
6. EUT sends "H" messages to modems.
7. EUT sends "H" messages to printer, and then printer prints them on paper.
8. EUT sends audio messages to the external speaker.
9. Repeat steps 3-9.



### 4.3 TEST DATA OF CONDUCTED EMISSION

EUT: **THINCLIENT**MODEL: **TC 3000 Series**6 dB Bandwidth: 10 kHzPHASE: LINE (L)

| Freq.  | Corr.  | Reading Value |     | Emission Level |     | Limit     |      | Margin |     |
|--------|--------|---------------|-----|----------------|-----|-----------|------|--------|-----|
| [MHz]  | Factor | [dB (uV)]     |     | [dB (uV)]      |     | [dB (uV)] |      | (dB)   |     |
|        | (dB)   | Q.P.          | AV. | Q.P.           | AV. | Q.P.      | AV.  | Q.P.   | AV. |
| 0.165  | 0.2    | 41.5          | -   | 41.7           | -   | 65.2      | 55.2 | -23.5  | -   |
| 0.252  | 0.2    | 28.4          | -   | 28.6           | -   | 61.7      | 51.7 | -33.1  | -   |
| 0.744  | 0.3    | 30.7          | -   | 31.0           | -   | 56.0      | 46.0 | -25.0  | -   |
| 1.908  | 0.3    | 29.8          | -   | 30.1           | -   | 56.0      | 46.0 | -25.9  | -   |
| 6.179  | 0.8    | 35.1          | -   | 35.9           | -   | 60.0      | 50.0 | -24.1  | -   |
| 17.486 | 1.3    | 38.7          | -   | 40.0           | -   | 60.0      | 50.0 | -20.0  | -   |

- Remarks:
1. "\*": Undetectable
  2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  3. "-": The Quasi-peak emission level also meets average limit and measurement with the average detector is unnecessary.
  4. The emission levels of other frequencies were very low against the limit.
  5. Margin value = Emission level - Limit value
  6. Emission Level = Correction Factor + Reading Value.



## TEST DATA OF CONDUCTED EMISSION

EUT: THINCLIENTMODEL: TC 3000 Series6 dB Bandwidth: 10 kHzPHASE: NEUTRAL (N)

| Freq.  | Corr.  | Reading Value |     | Emission Level |     | Limit     |      | Margin |     |
|--------|--------|---------------|-----|----------------|-----|-----------|------|--------|-----|
| [MHz]  | Factor | [dB (uV)]     |     | [dB (uV)]      |     | [dB (uV)] |      | (dB)   |     |
|        | (dB)   | Q.P.          | AV. | Q.P.           | AV. | Q.P.      | AV.  | Q.P.   | AV. |
| 0.165  | 0.2    | 39.5          | -   | 39.7           | -   | 65.2      | 55.2 | -25.5  | -   |
| 0.252  | 0.2    | 34.2          | -   | 34.4           | -   | 61.7      | 51.7 | -27.3  | -   |
| 0.744  | 0.3    | 28.4          | -   | 28.7           | -   | 56.0      | 46.0 | -27.3  | -   |
| 1.908  | 0.3    | 29.6          | -   | 29.9           | -   | 56.0      | 46.0 | -26.1  | -   |
| 6.179  | 0.7    | 35.9          | -   | 36.6           | -   | 60.0      | 50.0 | -23.4  | -   |
| 17.486 | 1.1    | 37.8          | -   | 38.9           | -   | 60.0      | 50.0 | -21.1  | -   |

Remarks:

1. "\*": Undetectable
2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
3. "-": The Quasi-peak emission level also meets average limit and measurement with the average detector is unnecessary.
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



#### 4.4 TEST DATA OF RADIATED EMISSION

EUT: THINCLIENTMODEL: TC 3000 SeriesANT. POLARITY: Horizontal
 DETECTOR FUNCTION AND BANDWIDTH: Quasi peak, 120 kHz (30-1000 MHz)  
Peak, 1 MHz (1000 MHz-2000 MHz)
FREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 MFREQUENCY RANGE: 1000-2000 MHzMEASURED DISTANCE: 3 M

| Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (cm) | Table Angle (Degree) |
|-----------------|------------------------|----------------------|-------------------------|----------------|-------------|---------------------|----------------------|
| 72.00           | 7.0                    | 15.2                 | 22.2                    | 30.0           | -7.8        | 400                 | 7                    |
| 112.45          | 12.4                   | 9.3                  | 21.7                    | 30.0           | -8.3        | 400                 | 111                  |
| 126.77          | 12.8                   | 9.8                  | 22.6                    | 30.0           | -7.4        | 400                 | 198                  |
| 129.17          | 12.8                   | 9.8                  | 22.6                    | 30.0           | -7.4        | 400                 | 174                  |
| 143.49          | 12.5                   | 12.9                 | 25.4                    | 30.0           | -4.6        | 400                 | 219                  |
| 167.07          | 11.3                   | 14.3                 | 25.6                    | 30.0           | -4.4        | 400                 | 312                  |
| 174.58          | 11.0                   | 14.3                 | 25.3                    | 30.0           | -4.7        | 400                 | 359                  |
| 181.77          | 10.7                   | 13.1                 | 23.8                    | 30.0           | -6.2        | 400                 | 258                  |
| 191.32          | 10.4                   | 14.8                 | 25.2                    | 30.0           | -4.8        | 400                 | 0                    |
| 198.49          | 10.2                   | 15.1                 | 25.3                    | 30.0           | -4.7        | 400                 | 339                  |
| 224.81          | 11.9                   | 13.4                 | 25.3                    | 30.0           | -4.7        | 400                 | 10                   |
| 229.61          | 12.2                   | 13.3                 | 25.5                    | 30.0           | -4.5        | 400                 | 266                  |
| 233.88          | 12.6                   | 19.1                 | 31.7                    | 37.0           | -5.3        | 400                 | 200                  |
| 440.07          | 18.5                   | 13.1                 | 31.6                    | 37.0           | -5.4        | 254                 | 157                  |
| 444.86          | 18.6                   | 15.0                 | 33.6                    | 37.0           | -3.4        | 196                 | 326                  |
| 468.78          | 19.1                   | 13.4                 | 32.5                    | 37.0           | -4.5        | 205                 | 135                  |
| 478.34          | 19.3                   | 12.9                 | 32.2                    | 37.0           | -4.8        | 184                 | 358                  |
| 557.25          | 20.9                   | 9.9                  | 30.8                    | 37.0           | -6.2        | 120                 | 358                  |
| 1001.04         | 27.2                   | 21.1                 | 48.3                    | 74.0           | -25.7       | 99                  | 244                  |
| 1195.75         | 28.5                   | 25.0                 | 53.5                    | 74.0           | -20.5       | 205                 | 294                  |

- REMARKS:
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
  2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level - Limit value



## TEST DATA OF RADIATED EMISSION

EUT: THINCLIENTMODEL: TC 3000 SeriesANT. POLARITY: Vertical
 DETECTOR FUNCTION AND BANDWIDTH: Quasi peak, 120 kHz (30-1000 MHz)  
Peak, 1 MHz (1000 MHz-2000 MHz)
FREQUENCY RANGE: 30-1000 MHzMEASURED DISTANCE: 10 MFREQUENCY RANGE: 1000-2000 MHzMEASURED DISTANCE: 3 M

| Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (cm) | Table Angle (Degree) |
|-----------------|------------------------|----------------------|-------------------------|----------------|-------------|---------------------|----------------------|
| 47.85           | 9.2                    | 17.1                 | 26.3                    | 30.0           | -3.7        | 100                 | 23                   |
| 78.91           | 8.7                    | 17.8                 | 26.5                    | 30.0           | -3.5        | 173                 | 356                  |
| 108.80          | 12.2                   | 11.4                 | 23.6                    | 30.0           | -6.4        | 100                 | 296                  |
| 129.15          | 12.8                   | 10.7                 | 23.5                    | 30.0           | -6.5        | 100                 | 2                    |
| 133.93          | 12.7                   | 9.4                  | 22.1                    | 30.0           | -7.9        | 100                 | 91                   |
| 143.51          | 12.5                   | 14.6                 | 27.1                    | 30.0           | -2.9        | 100                 | 5                    |
| 153.07          | 12.0                   | 12.8                 | 24.8                    | 30.0           | -5.2        | 100                 | 5                    |
| 157.86          | 11.8                   | 12.4                 | 24.2                    | 30.0           | -5.8        | 100                 | 181                  |
| 167.06          | 11.3                   | 16.6                 | 27.9                    | 30.0           | -2.1        | 100                 | 58                   |
| 184.17          | 10.6                   | 12.9                 | 23.5                    | 30.0           | -6.5        | 100                 | 357                  |
| 191.35          | 10.4                   | 15.8                 | 26.2                    | 30.0           | -3.8        | 100                 | 357                  |
| 198.53          | 10.2                   | 14.4                 | 24.6                    | 30.0           | -5.4        | 100                 | 3                    |
| 229.70          | 12.3                   | 13.4                 | 25.7                    | 30.0           | -4.3        | 100                 | 1                    |
| 287.01          | 14.8                   | 15.5                 | 30.3                    | 37.0           | -6.7        | 100                 | 351                  |
| 437.66          | 18.5                   | 11.7                 | 30.2                    | 37.0           | -6.8        | 319                 | 8                    |
| 468.78          | 19.1                   | 10.7                 | 29.8                    | 37.0           | -7.2        | 264                 | 9                    |
| 509.41          | 20.0                   | 10.4                 | 30.4                    | 37.0           | -6.6        | 294                 | 5                    |
| 1004.51         | 27.2                   | 20.8                 | 48.0                    | 74.0           | -26.0       | 180                 | 367                  |
| 1030.00         | 27.4                   | 25.9                 | 53.3                    | 74.0           | -20.7       | 99                  | 349                  |
| 1195.74         | 28.5                   | 25.3                 | 53.8                    | 74.0           | -20.2       | 191                 | 64                   |

REMARKS:

1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value

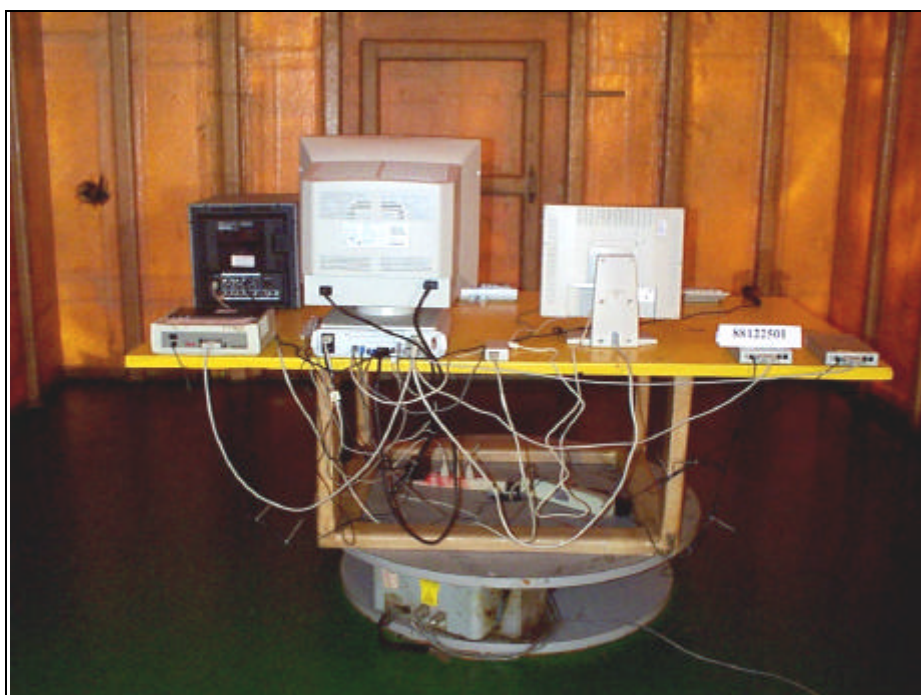


## 5. PHOTOGRAPHS OF THE TEST CONFIGURATION WITH MINIMUM MARGIN

### CONDUCTED EMISSION TEST



## **RADIATED EMISSION TEST**





## 6. APPENDIX - INFORMATION OF THE TESTING LABORATORY

### Information of the testing laboratory

We, ADT Corp., are founded in 1988, to provide our best service in EMC and Safety consultation. Our laboratory is accredited by the following approval agencies according to ISO/IEC Guide 25 or EN 45001:

|               |                                      |
|---------------|--------------------------------------|
| ● USA         | FCC, UL, NVLAP                       |
| ● Germany     | TUV Rheinland<br>TUV Product Service |
| ● Japan       | VCCI                                 |
| ● New Zealand | RFS                                  |
| ● Norway      | NEMKO, DNV                           |
| ● U.K.        | INCHCAPE                             |
| ● R.O.C.      | BSMI                                 |

Enclosed please find some certificates of our laboratory obtained from approval agencies. If you have any comments, please feel free to contact us with the following:

**Lin Kou EMC Lab.:**

Tel: 886-2-26032180

Fax: 886-2-26022943

**Hsin Chu EMC Lab:**

Tel: 886-35-935343

Fax: 886-35-935342

**Lin Kou Safety Lab.:**

Tel: 886-2-26093195

Fax: 886-2-26093184

**Design Center:**

Tel: 886-2-26093195

Fax: 886-2-26093184

E-mail: [service@mail.adt.com.tw](mailto:service@mail.adt.com.tw)<http://www.adt.com.tw>