The test was performed in accordance with ANSI C63.4-1992, "AMERICAN NATIONAL STANDARD FOR MEASUREMENT OF RADIO-NOISE EMISSION FROM LOW-VOLTAGE ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE RANGE OF 9KHz TO 40GHz"

Test equipment used for line Conducted and Radiated emissions as following. All equipment were calibrated according to ANSI C63.4-1992 and ISO-9000 requirement unless otherwise specified.

| Test Equipment | Model No. | Serial No. | Calibrated Date |
|---|---|---|---|
| Spectrum | HP8568B | 2848A17338 | 7/22/1999 |
| RF Preselector | HP85685A | 2620A00138 | 7/22/1999 |
| QP Adapter | HP85650A | 2811A01326 | 7/22/1999 |
| EMI Receiver | HP85460A | 3441A00199 | 10/28/1999 |
| RFI Filter Section | HP85460A | 3330A00177 | 10/28/1999 |
| EMI Receiver | R & S ESVS30 | 8419977/066 | 10/06/1999 |
| Biconical Antenna | EMCO 3110B | 3222 | 12/16/1999 |
| Biconical Antenna | EMCO 3110B | 3224 | 12/16/1999 |
| Log-Periodic Antenna | EMCO 3146A | 1424 | 12/20/1999 |
| Log-Periodic Antenna | EMCO 3146A | 1425 | 12/20/1999 |
| LISN | EMCO 3825/2 | 9311-2153 | 10/01/1999 |
| LISN | EMCO 3825/2 | 9311-2154 | 10/01/1999 |
| Turn Table | EMCO 1060 | 1068 | 11/18/1999 |
| Antenna Tower | EMCO 1050 | 1113 | 11/18/1999 |
| RF Cable | M17/75-RG214-NE | N/A | 11/18/1999 |
| Computer | HP9000/300 | 2614A78610 | N/A |
| Printer | HP2225A | 2728S02586 | N/A |
| Plotter | HP7440A | 2539A40856 | N/A |

Traceability to R.O.C. and international standards is assured by using calibrated all equipment.

For system measurement, the EUT "201P10" was connected to:

| Item | Model No. | Serial No. | FCC ID |
|---|---|---|---|
| 1. Computer | Acer AP6100 | A0283000007M | FCC Logo |
| 2. Keyboard | KB-7993 | 0051312 | FCC Logo |
| 3. Mouse | M-S34 | LZA73005463 | DZL211029 |
| 4. Printer | HP 2225C | 3123S97227 | DSI6XU2225 |
| 5. Modem | USRobotics 268 | 0002680559278575 | CJE-0318 |
| 6. Vide Card | Matrox G400 | 91127000373 | FCC Logo |
| 7. CD-ROM | Sony CDU31A | -- | FCC Logo |

The system was configured for testing in a typical fashion ( as a customer would normally use it ) according to ANSI C63.4-1992, please see the photographs for detail.

Both conducted and radiated testing were performed according to the procedure in ANSI C63.4-1992. Conducted testing was performed in screen room and radiated testing was

performed in open site at an antenna to EUT distance of 3-meter on horizontal and vertical polarization.

First, pre-scan all modes in screen room then select 3 higher modes (worst case) were tested and reported.

The line conductive interference was tested with 110VAC and 220VAC receptively.
Unshielded power cord was used during test.
Extra USB cable was connected to PC during test.

Tested and reported modes as following:

| Report No. | Resolution | Frequencies | I/F Cable |
|---|---|---|---|
| EMI00-002 | 1600 x 1200 | 120.0KHz/95Hz | D-sub |
| EMI00-002A | 2048 x 1536 | 95.8KHz/60Hz | D-sub |
| EMI00-003A | 2048 x 1536 | 95.8KHz/60Hz | B.N.C. |

## 3. Test Program and Test Results

Set up the EUT and all peripherals as chapter 6 of ANSI C63.4-1992 for AC power line conducted emissions testing and radiated emissions testing.

Turn on the power of EUT and all peripherals, select an appropriate displaying mode using the "setup" software. Then run an EMI test program "HTEST.EMI" as a basic software to execute the EUT operating under test.

Step 1 : Run the "HTEST.EMI" on personal computer then sends "H" character to monitor continuously until full screen.
Step 2 : Personal computer sends a complete line of continuously repeating "H" to HP 2225C printer.
Step 3 : Personal computer sends a file of "H" pattern to floppy disk then read a file of "H" pattern from floppy disk.
Step 4 : Personal computer sends a file of "H" pattern to hard disk then read a file of "H" pattern from hard disk.
Step 5 : Personal computer sends a file of "H" patter to USRobotics 268 modem.
Step 6 : Return to step 1

All data in this report are "PEAK" value within 15dB margin unless otherwise noted.

The radiated (open site) data has included antenna and cable factors, sample calculation:

Final Value (dBμv/m) = Reading (dBuv) + Antenna Factor (dB) + Cable Loss (dB)

The measured data of radiated RF interference at open site and line conducted interference as attached.

FCC ID: A3KM093

Uncertainty Statement: The system uncertainties listed below are based on the instrument absolute specifications, and do not include uncertainties of the equipment under test.

Uncertainty for Radiated Emissions Test at 3 meters Test Site

| Source of Measurement Uncertainty | Uncertainty/dB |
|---|---|
| Antenna factor calibration | +/- 2.0 |
| Cable loss calibration | +/- 0.5 |
| Receiver Specification | +/- 1.0 |
| Antenna position var. | +/- 2.0 |
| Measurement distance var. | +/- 0.5 |
| Site Imperfections | +/- 2.0 |
| Mismatch | +/- 1.1 |
| System repeatability | +/- 0.5 |

Uncertainty for Line Conducted Emissions Test in Screen Room

| Source of Measurement Uncertainty | Uncertainty/dB |
|---|---|
| LISN Specification | +/- 2.0 |
| Cable loss calibration | +/- 0.5 |
| Receiver Specification | +/- 1.0 |
| Pulse Limiter Spec. | +/- 0.3 |
| Measurement distance var. | +/- 0.5 |
| Site Imperfections | +/- 2.0 |
| System repeatability | +/- 0.5 |

**The subject device is in compliance with the limits for a class B digital device, pursuant to part 15, subpart B of the FCC rules.**

Ronnie Yang - Manager, Safety/Dev. PEI-CED
NVLAP Signatory