

EMI TESTING REPORT

EUT : VGA COLOR MONITOR

MODEL: MD-1737

FCCID: HG7MD-1737

PREPARED FOR:

Lonton Corporation

Fl 6, No. 113-1, Tunghsing St.

Taipei

Taiwan, R.O.C.

PREPARED BY:

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LABORATORY INC.

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TABLE OF CONTENTS

|                                                                           |       |
|---------------------------------------------------------------------------|-------|
| 1. TEST REPORT CERTIFICATION.....                                         | 4     |
| 2. TEST STATEMENT                                                         |       |
| 2.1 TEST STATEMENT.....                                                   | 5     |
| 2.2 DEPARTURE FROM DOCUMENT POLICIES,<br>PROCEDURE OR SPECIFICATIONS..... | 6     |
| 3. EUT MODIFICATIONS.....                                                 | 7     |
| 4. MODIFICATION LETTER.....                                               | 8     |
| 5. CONDUCTED POWER LINE TEST                                              |       |
| 5.1 TEST EQUIPMENT.....                                                   | 9     |
| 5.2 TEST PROCEDURE.....                                                   | 10-11 |
| 5.3 EUT OPERATING CONDITION.....                                          | 12    |
| 5.4 TEST PROCEDURE.....                                                   | 13    |
| 5.5 TEST SETUP.....                                                       | 14    |
| 5.6 RADIATED EMISSION LIMIT.....                                          | 15    |
| 5.7 CONDUCTED POWER LINE TEST RESULT.....                                 | 16-18 |
| 6. RADIATED EMISSION TEST                                                 |       |
| 6.1 TEST EQUIPMENT.....                                                   | 19    |
| 6.2 CONFIGURATION OF THE EUT.....                                         | 20    |
| 6.3 EUT OPERATING CONDITION.....                                          | 20    |
| 6.4 TEST PROCEDURE.....                                                   | 20    |
| 6.5 TEST SETUP.....                                                       | 21-22 |
| 6.6 RADIATED EMISSION LIMIT.....                                          | 23    |
| 6.7 RADIATED EMISSION TEST RESULT.....                                    | 24-26 |
| 7. PHOTOS OF TESTING.....                                                 | 27-42 |

1. TEST REPORT CERTIFICATION

APPLICANT : Lonton Corporation

ADDRESS : Fl 6, No. 113-1, Tunghsing Street,  
: Taipei, Taiwan, R.O.C.

EUT DESCRIPTION : VGA COLOR MONITOR

(A) POWER SUPPLY : 115/230V

(B) MODEL : MD-1737

(C) FCCID : HG7MD-1737

FINAL TEST DATE : 12/05/1996

MEASUREMENT PROCEDURE USED :

PART 15 SUB PART B OF FCC RULES AND

REGULATIONS ( 47 CFR PART 15 )

FCC / ANSI C63.4 - 1992

WE HEREBY SHOW THAT:

THE MEASUREMENTS SHOWN IN THE ATTACHMENT WERE  
MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED,  
AND THE ENERGY EMITTED BY THE EQUIPMENT WAS  
FOUND TO BE WITHIN THE LIMITS APPLICABLE.

TESTING ENGINEER : Taylor auth. DATE 12/5/96

SUPERVISOR : [Signature] DATE 12/05/96

APPROVED BY : [Signature] DATE May 12, 98

## 2. TEST STATEMENT

### 2.1 TEST STATEMENT

TO whom it may concern,

This letter is to explain the test condition of this project.  
The EUT be tested as the following status.

CPU: 486DX4/100

CPU Clock Signal: 33 MHz

RESOLUTION:    640 X    480 (NI)  
                  1024 X    768 (NI)  
                  1280 X 1024 (NI)

The data shown in this report reflects the worst-case data for each condition as listed above.

Please disregard any other conditions that shown in this user manual.

2. TEST STATEMENT

2.2 DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS

DID HAVE  
ANY DEPARTURE FROM DOCUMENT POLICIES  
& PROCEDURES OR FROM SPECIFICATIONS.

YES \_\_\_\_\_ ,    NO N/A .

IF YES, THE DESCRIPTION AS BELOW.

2.3 TEST STATEMENT

1. THE CERTIFICATE OR REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY.
2. THE REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

### 3. EUT MODIFICATIONS

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING:

- 1). ADDED A GROUND WIRE FROM R002 OF MAIN BOARD TO CRT GROUND WIRE.
- 2). ADDED THREE FERRITE BEAD (imp: 120ohm AT 100MHz) AT LC701-LC703 AND THREE 100pF BYPASS CAP.
- 3). ADDED FIVE BEAD (imp: 120ohm AT 100MHz) AND FIVE 100pF BYPASS CAP. AT PIN2, 4, 6, 9, 10 OF P702.
- 4). CHANGED J715, J745, J747 FROM JUMPER TO FERRITE BEAD (imp: 50uH AT 100MHz).
- 5). ADDED FOUR 220pF CAP. ON C020, C022, C010 AND PINE1 OF P104.
- 6). ADDED A 0.01uF BYPASS CAP. AT PINE 15 OF T001.
- 7). ADDED TWO GROUND WIRES FROM VIDEO COVER TO CHASSIS GROUND.
- 8). ADDED A FERRITE CORE THREE TURNS ON EARTH GROUND.

4. MODIFICATION LETTER

THIS SECTION CONTAINS THE FOLLOWING DOCUMENTS:

A. LETTER OF MODIFICATIONS

N/A

隆騰電子股份有限公司

LONTON CORP.

L. 6, NO. 113-1, TUNGHSING STREET, TAIPEI, TAIWAN, R.O.C.

TEL: 886-2-767-2201

FAX: 886-2-767-2661

Federal Communications Commission  
Authorization and Evaluation Division  
7435 Oakland Mills Road  
Columbia, MD 21046

Dear Sir/Madam:

This is to serve as proper notice that our company  
agrees to make all modifications to FCC ID: HG7MD-1737 as listed in  
section 3.0 of the test report submitted by Spectrum  
Research and Testing Laboratory, Inc.

Respectfully,



Name : JOHNSON YANG

Title : MONITOR PRODUCTS DIVISION MANAGER

Effective Dates: From Jan. 1, 1998 To Jan. 1, 1999

5. CONDUCTED POWER LINE TEST

5.1 TEST EQUIPMENT

THE FOLLOWING TEST EQUIPMENT WAS USED DURING THE  
CONDUCTED POWER LINE TEST :

| EQUIPMENT/<br>FACILITIES | SPECIFICAT<br>-IONS            | MANUFACTURER         | MODEL#/<br>SERIAL#             | DATE OF CAL.<br>& CAL.CENTER | DUE<br>DATE |
|--------------------------|--------------------------------|----------------------|--------------------------------|------------------------------|-------------|
| SPECTRUM<br>ANALZER      | 9 KHz TO<br>1 GHz              | HP                   | 8590L/<br>3624A01317           | JULY, 1996<br>HP             | 1Y          |
| EMI TEST<br>RECEIVER     | 9 KHz TO<br>30 MHz             | ROHDE &<br>SCHWARZ   | ESHS30/<br>893517/013          | SEP, 1996<br>ERSO            | 1Y          |
| LISN                     | 50 uH, 50<br>ohm               | SOLAR<br>ELECTRONICS | 9252-50-<br>R24-BNC/<br>951315 | AUGUST, 1996<br>ETC          | 1Y          |
| LISN                     | 50 uH, 50<br>ohm               | SOLAR<br>ELECTRONICS | 9252-50-<br>R24-BNC/<br>951318 | AUGUST, 1996<br>ETC          | 1Y          |
| SIGNAL<br>GENERATOR      | 9 KHz TO<br>1080 MHz           | ROHDE &<br>SCHWARZ   | SMY01/<br>841104/019           | APRIL, 1996<br>R&S           | 1Y          |
| POWER<br>CONVERTER       | 0 TO 300<br>VAC 47 -<br>500 Hz | AFC                  | AFC-1KW/<br>850510             | APRIL, 1996<br>SRT           | 1Y          |

## 5.2 CONFIGURATION OF THE EUT

THE EUT WAS CONFIGURED ACCORDING TO ANSI C63.4 - 1992.  
ALL INTERFACE PORTS WERE CONNECTED TO THE APPROPRIATE  
PERIPHERALS.    ALL PERIPHERALS AND CABLES ARE LISTED  
BELOW.

### -EUT

| DEVICE           | MANUFACTURER         | MODEL # | FCCID      |
|------------------|----------------------|---------|------------|
| COLOR<br>MONITOR | DTK COMPUTER<br>INC. | MD-1737 | HG7MD-1737 |

### -REMARK

### -INTERNAL DEVICES

|               |                     |                |              |
|---------------|---------------------|----------------|--------------|
| <u>DEVICE</u> | <u>MANUFACTURER</u> | <u>MODEL #</u> | <u>FCCID</u> |
|---------------|---------------------|----------------|--------------|

-PERIPHERALS

| DEVICE   | MANUFAC-TURER | MODEL# / SERIAL# | FCCID          | CABLE               |
|----------|---------------|------------------|----------------|---------------------|
| PRINTER  | HP            | 2225C+           | DSI6XU2225     | POWER-UNS<br>DATA-S |
| MODEM    | SMARTEAM      | 103/212A         | EF56A5103/212A | POWER-UNS<br>DATA-S |
| MODEM    | SMARTEAM      | 103/212A         | EF56A5103/212A | POWER-UNS<br>DATA-S |
| KEYBOARD | EPSON         | N860-4871-T001   | C9SKB4870      | DATA-S              |
| MOUSE    | LOGITECH      | M-S34-6MD        | DZL210472      | DATA-UNS            |
| PC       | HP            | VE4/66           | HCJVECTRAVE4   | POWER-UNS           |
|          |               |                  |                |                     |

-REMARK

- (1). CABLE - UNS : UNSHIELDED CABLE  
S : SHIELDED CABLE
- (2). CABLES - ALL 1m OR GREATER IN LENGTH-  
BUNDLED ACCORDING TO ANSI C63.4 - 1992.

### 5.3 EUT OPERATING CONDITION

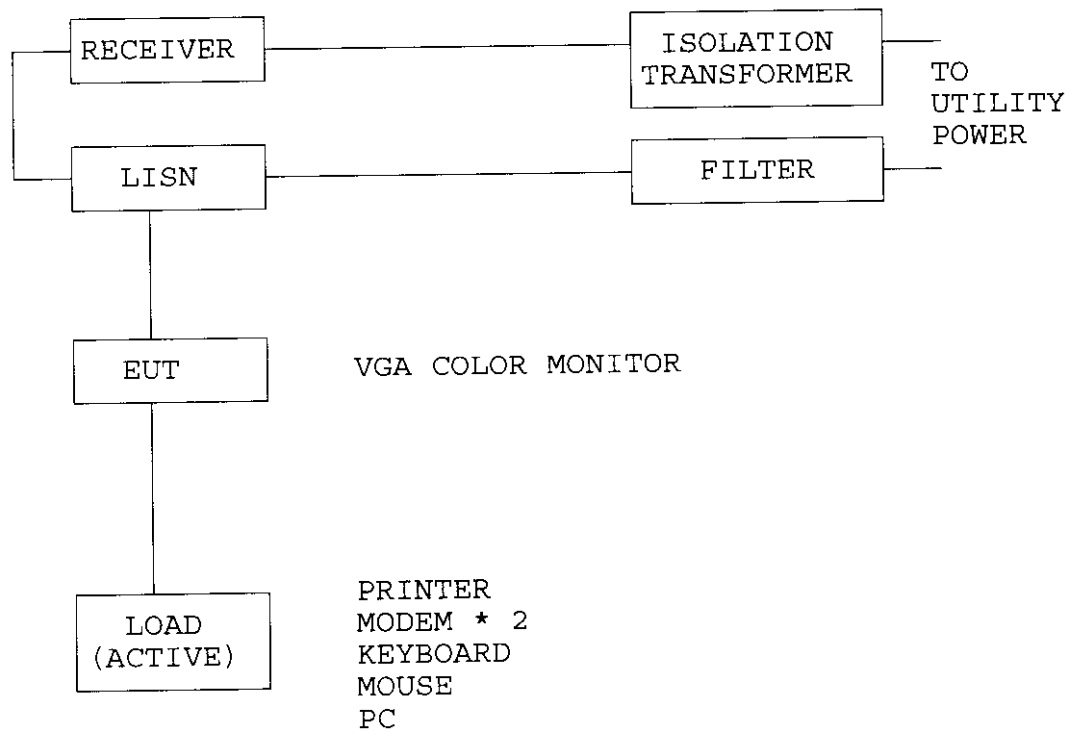
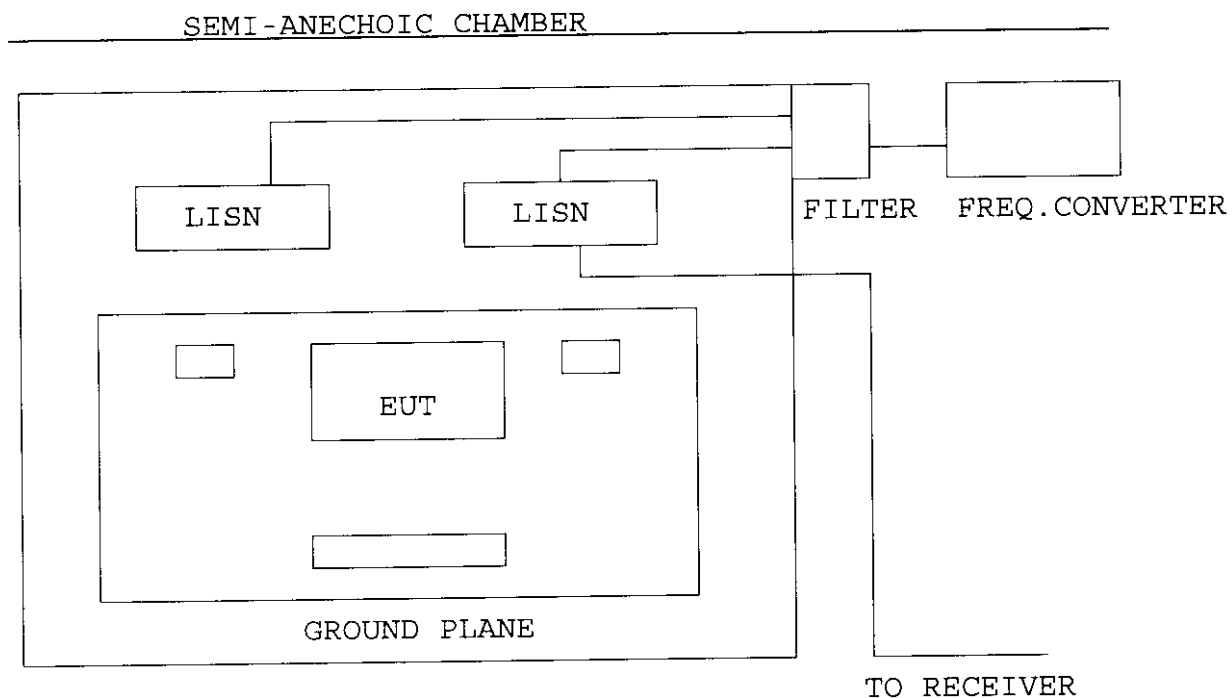
OPERATING CONDITION IS ACCORDING TO ANSI C63.4 - 1992.

1. EUT POWER ON.
2. "H" PATTERN SENT TO THE FOLLOWING PERIPHERALS:
  - PRINTER
  - MODEM \* 2
3. CPU : 486DX4/100  
CLOCK CHIP SIGNAL : 33MHz
4. RESOLUTION :    640 X    480 (NI)  
                  1024 X    768 (NI)  
                  1280 X 1024 (NI)

#### 5.4 TEST PROCEDURE

THE EUT WAS TESTED ACCORDING TO ANSI C63.4 - 1992. THE CONDUCTED TEST WAS PERFORMED IN AN ANECHOIC CHAMBER. THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. THE LISN USED WAS 50 ohm / 50 uHenry AS SPECIFIED BY SECTION 5.1 OF ANSI C63.4 - 1992. CABLES AND PERIPHERALS WERE MOVED TO FIND THE MAXIMUM EMISSION LEVELS FOR EACH FREQUENCY.

## 5.5 TEST SETUP



5.6 CONDUCTED POWER LINE EMISSION LIMIT

| FREQUENCY RANGE (MHz) | CLASS A | CLASS B |
|-----------------------|---------|---------|
| 0.045 - 1.705         | 1000 uV | 250 uV  |
| 1.705 - 30            | 3000 uV | 250 uV  |

NOTE : IN THE ABOVE TABLE, THE TIGHTER LIMIT  
APPLIES AT THE BAND EDGES.

# 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : 28 C

HUMIDITY : 78 %RH

| FREQUENCY (MHz) | LINE 1 (uv) | LINE 2 (uv) | LIMIT (uv) |
|-----------------|-------------|-------------|------------|
| 1.030           | 8.900       | 13.50       | 250        |
| 3.040           | 13.80       | 26.30       | 250        |
| 18.73           | 136.5       | 128.8       | 250        |
| 25.03           | 177.8       | 118.9       | 250        |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |

- REMARKS : (1). \* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY  
 (2). UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB  
 (3). TEST CONFIGURATION PLEASE SEE 4.2  
 (4). TEST EQUIPMENT PLEASE SEE 4.1  
 (5). ANY DEPARTURE FROM SPECIFICATION : N/A  
 (6). RESOLUTION: 640 X 480

SIGNED BY TESTING ENGINEER : Taylor mtr.

# 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : 28 C

HUMIDITY : 78 %RH

| FREQUENCY (MHz) | LINE 1 (uv) | LINE 2 (uv) | LIMIT (uv) |
|-----------------|-------------|-------------|------------|
| 1.780           | 26.30       | 31.60       | 250        |
| 6.592           | 53.10       | 188.4       | 250        |
| 16.26           | 127.4       | 144.5       | 250        |
| 24.05           | 158.5       | 141.3       | 250        |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |

- REMARKS : (1). \* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY  
 (2). UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB  
 (3). TEST CONFIGURATION PLEASE SEE 4.2  
 (4). TEST EQUIPMENT PLEASE SEE 4.1  
 (5). ANY DEPARTURE FROM SPECIFICATION : N/A  
 (6). RESOLUTION: 1024 X 768

SIGNED BY TESTING ENGINEER : \_\_\_\_\_

*Tyler Smith*

#### 4.7 CONDUCTED POWER LINE TEST RESULT

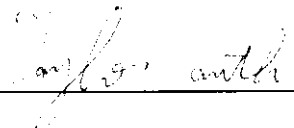
THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : 28 C

HUMIDITY : 78 %RH

| FREQUENCY (MHz) | LINE 1 (uv) | LINE 2 (uv) | LIMIT (uv) |
|-----------------|-------------|-------------|------------|
| 2.308           | 54.30       | 37.20       | 250        |
| 6.097           | 182.0       | 158.5       | 250        |
| 18.28           | 147.9       | 131.8       | 250        |
| 25.15           | 186.2       | 162.2       | 250        |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |
|                 |             |             |            |

- REMARKS : (1) . \* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY  
 (2) . UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB  
 (3) . TEST CONFIGURATION PLEASE SEE 4.2  
 (4) . TEST EQUIPMENT PLEASE SEE 4.1  
 (5) . ANY DEPARTURE FROM SPECIFICATION : N/A  
 (6) . RESOLUTION: 1280 X 1024

SIGNED BY TESTING ENGINEER : 

## 6. RADIATED EMISSION TEST

## 6.1 TEST EQUIPMENT

THE FOLLOWING TEST EQUIPMENT WAS USED DURING THE  
RADIATED EMISSION TEST :

| EQUIPMENT /<br>FACILITIES | SPECIFICAT<br>-IONS    | MANUFACTUR<br>-ER  | MODEL#/<br>SERIAL#     | DATE OF CAL.<br>& CAL. CENTER | DUE<br>DATE |
|---------------------------|------------------------|--------------------|------------------------|-------------------------------|-------------|
| RECEIVER                  | 20 MHz TO<br>1000 MHz  | R & S              | ESVS 30/<br>841977/003 | JAN, 1996<br>R&S              | 1Y          |
| SPECTRUM<br>ANALYZER      | 100 Hz TO<br>1500 MHz  | HP                 | 8568B/<br>3019A05294   | JULY, 1996<br>HP              | 1Y          |
| SPECTRUM<br>ANALYZER      | 9 KHz TO<br>22 GHz     | HP                 | 8593B/<br>3322A00670   | OCT, 1996<br>AEL              | 1Y          |
| SPECTRUM<br>ANALYZER      | 100 Hz TO<br>1000 MHz  | IFR                | A-7550/<br>2684/1248   | JULY, 1996<br>AEL             | 1Y          |
| SIGNAL<br>GENERATOR       | 9 KHz TO<br>1080 MHz   | ROHDE &<br>SCHWARZ | SMY01/<br>841104/019   | APRIL, 1996<br>R&S            | 1Y          |
| DIPOLE<br>ANTENNA         | 28 MHz TO<br>1000 MHz  | EMCO               | 3121C/<br>9505-1137    | AUGUST, 1996<br>EMCO          | 1Y          |
| DIPOLE<br>ANTENNA         | 28 MHz TO<br>1000 MHz  | EMCO               | 3121C/<br>9611-1239    | NOV, 1996<br>EMCO             | 1Y          |
| BI-LOG<br>ANTENNA         | 26 MHz TO<br>2000 MHz  | EMCO               | 3142/<br>96081-1073    | AUGUST, 1996<br>EMCO          | 1Y          |
| BI-LOG<br>ANTENNA         | 26 MHz TO<br>1100 MHz  | EMCO               | 3143/<br>9001-1443     | SEP, 1996<br>EMCO             | 1Y          |
| PRE-AMPLIFIER             | 0.1 MHz TO<br>1300 MHz | HP                 | 8447D/<br>2944A08402   | MARCH, 1996<br>ERSO           | 1Y          |
| PRE-AMPLIFIER             | 0.1 MHz TO<br>1300 MHz | HP                 | 8447D/<br>2944A06412   | NOV, 1996<br>HP               | 1Y          |
| HORN ANTENNA              | 1 GHz TO<br>18 GHz     | EMCO               | 3115/<br>9012-3619     | MAY, 1996<br>EMCO             | 1Y          |

## 6.2 CONFIGURATION OF THE EUT

SAME AS SECTION 5.4 OF THIS REPORT.

## 6.3 EUT OPERATING CONDITION

SAME AS SECTION 5.3 OF THIS REPORT.

## 6.4 TEST PROCEDURE

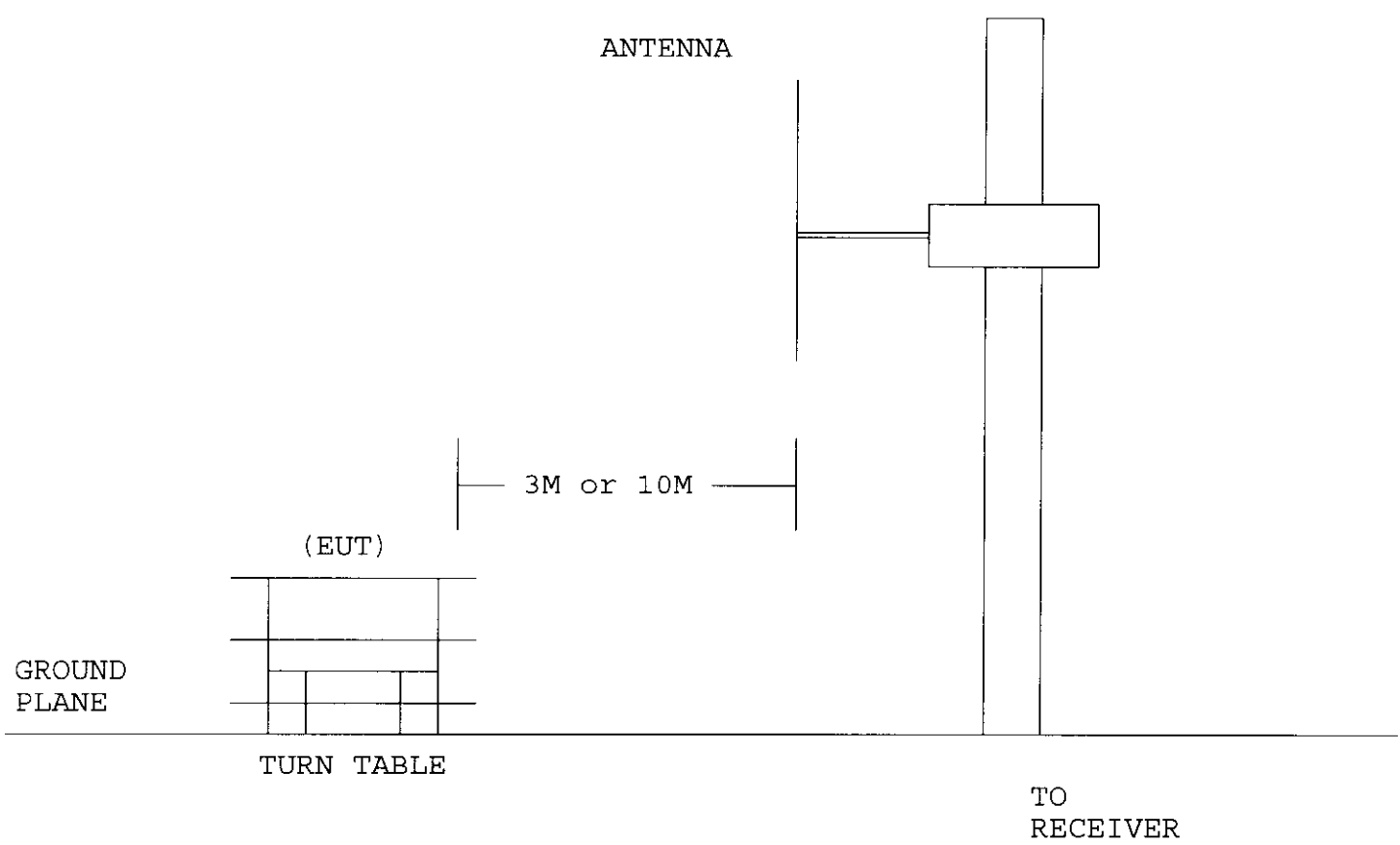
THE EUT WAS TESTED ACCORDING TO ANSI C63.4 - 1992. THE RADIATED TEST WAS PERFORMED AT SRT LAB'S OPEN SITE. THIS SITE IS ON FILE WITH THE FCC LABORATORY DIVISION, REFERENCE 31040/SIT.

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. MEASUREMENTS WERE MADE AT THREE METERS WITH AN ADJUSTABLE DIPOLE ANTENNA. PERIPHERALS, CABLES, EUT ORIENTATION, AND ANTENNA HEIGHT WERE VARIED TO FIND THE MAXIMUM EMISSION FOR EACH FREQUENCY.

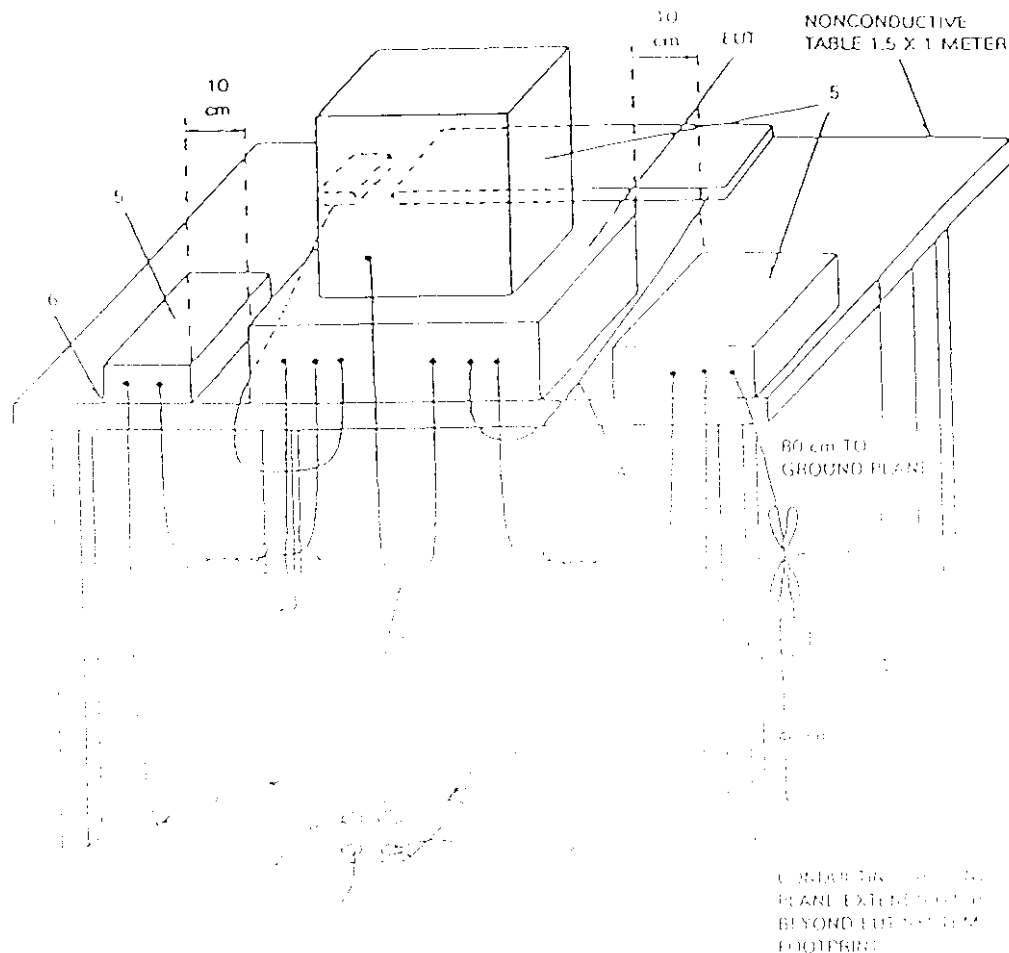
THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED. THE MEASUREMENTS UNDER 1 GHz WITH RESOLUTION BANDWIDTH OF 120 KHz ARE QUASI-PEAK READING MADE AT THREE METERS USING AN ADJUSTABLE DIPOLE ANTENNA. PERIPHERALS, CABLES, EUT ORIENTATION, AND ANTENNA HEIGHT WERE VARIED TO FIND THE MAXIMUM EMISSION FOR EACH FREQUENCY.

THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF THREE METERS WITH A HORN ANTENNA.

6.5 RADIATED TEST SETUP



## 6.5 RADIATED TEST SETUP



U.S. Census Bureau

3. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 to 40 cm long, hanging approximately in the middle between ground plane and table.
4. I/O cables that are connected to a peripheral shall be bundled in center. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1 m.
5. If EISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground plane with the receptacle flush with the ground plane.
6. Cables of hand-operated devices, such as keyboards, mouses, etc., have to be placed as close as possible to the controller.
7. Non EUT components of EUT system being tested.
8. The rear of all components of the system under test shall be located flush with the rear of the table.
9. No vertical conducting wall used.
10. Power cords drape to the floor and are routed over to receptacle.

## 6.6 RADIATED EMISSION LIMIT

ALL EMISSION FROM A DIGITAL DEVICE, INCLUDING ANY NETWORK OF CONDUCTORS AND APPARATUS CONNECTED THERETO, SHALL NOT EXCEED THE LEVEL OF FIELD STRENGTH SPECIFIED BELOW :

## CLASS B

| FREQUENCY<br>(MHz) | DISTANCE<br>(m) | FIELD STRENGTH<br>(uV/m) |
|--------------------|-----------------|--------------------------|
| 30 - 88            | 3               | 100                      |
| 88 - 216           | 3               | 150                      |
| 216 - 960          | 3               | 200                      |
| ABOVE 960          | 3               | 500                      |

## CLASS B ( OPEN CASE )

| FREQUENCY<br>(MHz) | DISTANCE<br>(m) | FIELD STRENGTH<br>(uV/m) |
|--------------------|-----------------|--------------------------|
| 30 - 88            | 3               | 199.5                    |
| 88 - 216           | 3               | 298.5                    |
| 216 - 960          | 3               | 398.1                    |

## CLASS A

| FREQUENCY<br>(MHz) | DISTANCE<br>(m) | FIELD STRENGTH<br>(uV/m) |
|--------------------|-----------------|--------------------------|
| 30 - 88            | 3               | 316.3                    |
| 88 - 216           | 3               | 473.2                    |
| 216 - 960          | 3               | 613.0                    |
| ABOVE 960          | 3               | 1000.0                   |

- NOTE : 1. IN THE EMISSION TABLES ABOVE, THE TIGHTER LIMIT APPLIES AT THE BAND EDGES.
2. DISTANCE REFERS TO THE DISTANCE BETWEEN MEASURING INSTRUMENT, ANTENNA, AND THE CLOSEST POINT OF ANY PART OF THE DEVICE OR SYSTEM.

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

| FREQ.<br>(MHz) | CABLE<br>LOSS<br>(dB) | ANT.<br>FACTOR<br>(dB) | READING (dBuV) |      | EMISSION (uV) |      | LMTS<br>(uV) |
|----------------|-----------------------|------------------------|----------------|------|---------------|------|--------------|
|                |                       |                        | HORIZ          | VERT | HORIZ         | VERT |              |
| 34.90          | 0.8                   | 11.6                   | *              | 23.4 | *             | 61.7 | 100          |
| 54.30          | 0.9                   | 6.30                   | *              | 14.1 | *             | 11.6 | 100          |
| 78.50          | 1.1                   | 8.20                   | 9.90           | 10.8 | 9.10          | 10.1 | 100          |
| 253.1          | 2.0                   | 12.3                   | 14.0           | 12.0 | 26.0          | 20.7 | 200          |
| 296.8          | 2.2                   | 14.4                   | 12.3           | 11.8 | 27.9          | 26.3 | 200          |
| 745.4          | 3.4                   | 20.9                   | 15.1           | 15.2 | 93.3          | 94.4 | 200          |
|                |                       |                        |                |      |               |      |              |

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION

$$20 \text{ LOG (EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$$

(4). TEST CONFIGURATION PLEASE SEE 5.2

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4$  dB

(7). ANY DEPARTURE FROM SPECIFICATION : N/A

(8). RESOLUTION: 640 X 480

SIGNED BY TESTING ENGINEER : \_\_\_\_\_

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

| FREQ.<br>(MHz) | CABLE<br>LOSS<br>(dB) | ANT.<br>FACTOR<br>(dB) | READING (dBuV) |      | EMISSION (uV) |      | LMTS<br>(uV) |
|----------------|-----------------------|------------------------|----------------|------|---------------|------|--------------|
|                |                       |                        | HORIZ          | VERT | HORIZ         | VERT |              |
| 32.40          | 0.7                   | 11.2                   | *              | 12.0 | *             | 15.7 | 100          |
| 83.30          | 1.1                   | 8.30                   | 13.5           | 10.5 | 14.0          | 9.90 | 100          |
| 100.3          | 1.2                   | 7.40                   | 13.6           | 16.8 | 12.9          | 18.6 | 150          |
| 146.4          | 1.4                   | 10.2                   | *              | 14.2 | *             | 19.5 | 150          |
| 168.2          | 1.6                   | 9.00                   | 13.5           | 15.5 | 16.0          | 19.5 | 150          |
| 282.2          | 2.2                   | 14.4                   | 13.7           | 12.8 | 32.7          | 29.5 | 200          |
| 706.6          | 3.4                   | 20.3                   | *              | 14.4 | *             | 80.4 | 200          |

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION  
 $20 \text{ LOG (EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$

(4). TEST CONFIGURATION PLEASE SEE 5.2

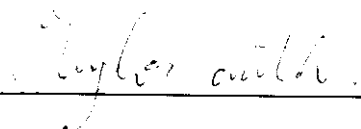
(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $<+/-4\text{dB}$

(7). ANY DEPARTURE FROM SPECIFICATION : N/A

(8). RESOLUTION: 1024 X 768

SIGNED BY TESTING ENGINEER :



## 5.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS FROM 30 MHz TO 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. ALL READINGS ARE ABOVE 1 GHz, PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 1 MHz. MEASUREMENTS WERE MADE AT 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

| FREQ.<br>(MHz) | CABLE<br>LOSS<br>(dB) | ANT.<br>FACTOR<br>(dB) | READING (dBuV) |      | EMISSION (uV) |       | LMTS<br>(uV) |
|----------------|-----------------------|------------------------|----------------|------|---------------|-------|--------------|
|                |                       |                        | HORIZ          | VERT | HORIZ         | VERT  |              |
| 38.60          | 0.1                   | 9.80                   | 24.0           | 24.0 | 49.50         | 49.50 | 100          |
| 52.30          | 0.3                   | 6.60                   | *              | 25.4 | *             | 41.20 | 100          |
| 82.20          | 0.7                   | 8.40                   | 23.9           | 24.4 | 44.70         | 47.30 | 100          |
| 114.5          | 0.8                   | 7.00                   | 24.8           | 23.1 | 42.70         | 35.10 | 150          |
| 141.4          | 0.7                   | 10.3                   | 29.6           | 22.0 | 107.2         | 44.70 | 150          |
| 168.3          | 0.8                   | 8.90                   | 29.0           | *    | 86.10         | *     | 150          |
| 259.8          | 1.0                   | 13.1                   | *              | 22.0 | *             | 63.80 | 200          |
| 278.4          | 1.2                   | 13.1                   | *              | 29.2 | *             | 149.6 | 200          |

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION

$$20 \text{ LOG (EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$$

(4). TEST CONFIGURATION PLEASE SEE 5.2

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4\text{dB}$ (7). ANY DEPARTURE FROM SPECIFICATION : N/A

(8). RESOLUTION: 1280 X 10204

SIGNED BY TESTING ENGINEER : \_\_\_\_\_