| | | |
|---|---|---|
| Philips Electronics Industries<br>(Taiwan) Ltd - EMC Lab.<br>5, Tze Chiang 1 Road,<br>Chungli Industrial Park,<br>Chungli, Taoyuan, Taiwan<br>Tel.: +886-3-454-9862<br>Fax.: +886-3-454-9887<br>E-mail: ronnie.yang@philips.com | # FCC Test Report | Report No.: TYR87-2042<br>Date : 11 March, 2003<br>Page : Page 1 of 32 |

Customer : Philips Electronics Industries

Name : Mr. S.T. Huang – EE LCD
Address : 5, Tze Chiang 1 Road,
Zip/City : Chungli Industrial Park,
Country : Chungli, Taiwan, R.O.C.

Equipment Under Test (including peripherals) :

FCC ID. : A3KM114
Model Name : 6739-60N
Serial Number : TY0302101
Description : 19” XGA color monitor, Max. resolution 1600x1200/75Hz

EMC Standards : FCC Part 15 of October 01,1999 Class B
ANSI C63.4-1992

Result : PASSED the limits/test-levels in the standards.

Note : The results in this report apply only to the sample(s) and mode(s) tested. It is the manufacturer’s responsibility to assume the continued EMC compliance of production models.

Date of receipt of EUT : 21 Feb. 2003

Date of performance of test : 22 Feb., 2003 to 24 Feb., 2003

C.C. Wu - EMC Test Engineer

Ronnie Yang - EMC Manager
NVLAP Signatory

# Table of contents

# 1. Summary of test results

| Test | Standard | Result | Note |
|---|---|---|---|
| Emission, ANSI C63.4-1992 | | | |
| Conducted emission | FCC Part 15 | **Passed** | |
| Radiated emission | FCC Part 15 | **Passed** | |

Remark:

The test sample fully complies with the requirements set forth in : FCC Part 15 Class B.

## 2. General Information of EUT

The EUT, 19" color monitor :

Model No. : 6739-60N
FCC ID : A3KM114
Brand : IBM

The color monitor automatically scans horizontal frequencies between 30KHz and 96KHz , and vertical frequencies between 50Hz and 160Hz. This color monitor displays sharp and brilliant images of text and graphics with a maximum resolution up to 1600x1200 pixels.

The monitor has 10 factory-preset modes as indicated in the following table:

| Item | Resolution | Hor (kHz) | Ver (Hz) | H-pol | V-pol |
|---|---|---|---|---|---|
| 1 | 720x400 | 31.469 | 70.087 | - | + |
| 2 | 640 x 480 | 31.469 | 59.940 | - | - |
| 3 | 640 x 480 | 43.269 | 85.008 | - | - |
| 4 | 800 x 600 | 46.875 | 75.000 | + | + |
| 5 | 800 x 600 | 53.674 | 85.061 | + | + |
| 6 | 1024 x 768 | 60.023 | 75.029 | + | + |
| 7 | 1024 x 768 | 68.677 | 84.997 | + | + |
| 8 | 1280 x 1024 | 79.976 | 75.024 | + | + |
| 9 | 1280 x 1024 | 91.146 | 85.024 | + | + |
| 10 | 1600 x 1200 | 93.750 | 75.000 | + | + |

## 3. Test Equipment

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

- For Conducted Emissions Test:

| Test Equipment | Model No. | Serial No. | Last Calibrate | Next Calibrate |
|---|---|---|---|---|
| Spectrum | HP8568B | 2928A04640 | 06/27/2002 | 06/27/2003 |
| EMI Receiver | R & S ESVS30 | 841977/006 | 06/13/2002 | 06/13/2003 |
| LISN | EMCO 3825/2 | 9311-2153 | 06/13/2002 | 06/13/2003 |
| LISN | EMCO 3825/2 | 9311-2154 | 06/13/2002 | 06/13/2003 |
| RF Cable | 8-meter | N/A | 05/29-2002 | 05/29/2003 |

- For Radiated Emissions Test:

| Test Equipment | Model No. | Serial No. | Last Calibrate | Next Calibrate |
|---|---|---|---|---|
| Spectrum | HP8568B | 2928A04640 | 06/27/2002 | 06/27/2003 |
| RF Preselector | HP85685A | 2620A00338 | 06/27/2002 | 06/27/2003 |
| QP Adapter | HP85650A | 2811A01324 | 06/27/2002 | 06/27/2003 |
| EMI Receiver | R & S ESVS30 | 841977/006 | 06/13/2002 | 06/13/2003 |
| Biconical Antenna | EMCO 3110B | 3222 | 06/04/2002 | 06/04/2003 |
| Biconical Antenna | EMCO 3110B | 3224 | 06/04/2002 | 06/04/2003 |
| Log-Periodic Antenna | EMCO 3146A | 1424 | 06/04/2002 | 06/04/2003 |
| Log-Periodic Antenna | EMCO 3146A | 1425 | 06/04/2002 | 06/04/2003 |
| Turn Table | EMCO 1060 | 1068 | 05/27/2002 | 05/27/2003 |
| Antenna Tower | EMCO 1050 | 1113 | 05/27/2002 | 05/27/2003 |
| RF Cable | M17/75-RG214-NE | N/A | 05/27/2002 | 05/27/2003 |

## 4. Test Configuration of EUT and Peripherals

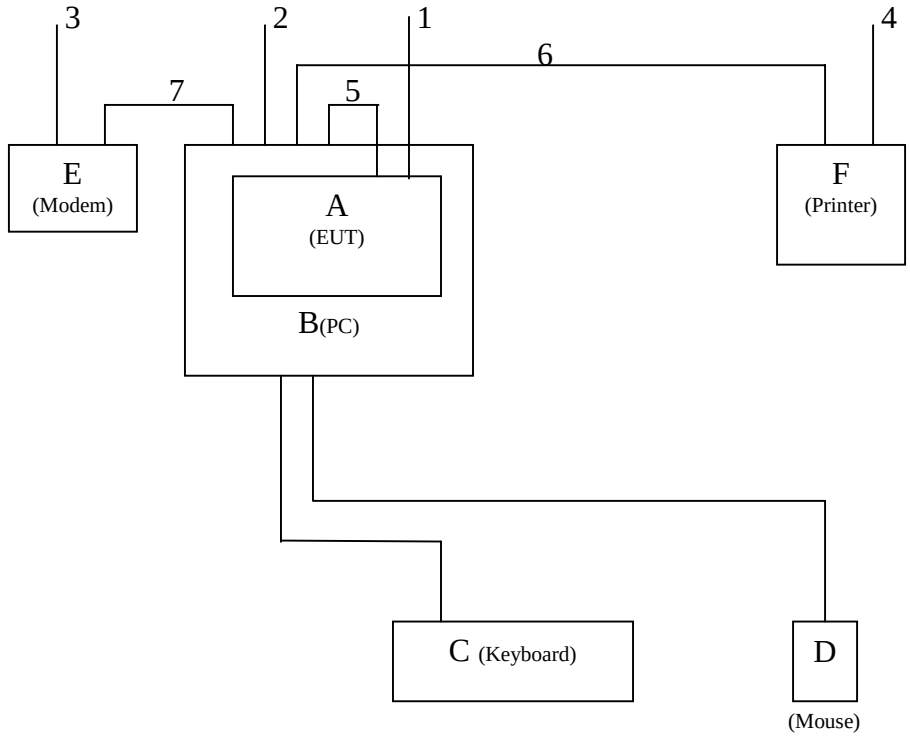
The system was configured for testing in a typical fashion ( as a customer would normally use it ) according to ANSI C63.4-1992, please see the photographs for detail. For system measurement, the EUT "6739-60N" were connected to:

| | Description | Brand/ Model No. | Serial No. | FCC ID | Remark |
|---|---|---|---|---|---|
| A | Monitor | IBM 6739-60N | TY0302101 | A3KM114 | EUT |
| B | PC | IBM 8305/52V | 99BLVWC | FCC Logo | |
| C | Keyboard | SK-8820 | 03923795 | FCC Logo | |
| D | Mouse | MU29J | 23-102280 | FCC Logo | |
| E | Modem | Hayes 231AA | A22231081770 | BFJ9D9308US | |
| F | Printer | HP 2225C | 2934S55406 | DSI6XU2225 | |

## Connected Cables

| No. | Description | Manufacturer | Length | Shielded | Remark |
|---|---|---|---|---|---|
| 1 | Power Cord | Long Shine | 1.8 meters | No | for EUT |
| 2 | Power Cord | Acer | 1.8 meters | No | for PC |
| 3 | Power Cord | Aceex | 2.0 meters | No | for Modem |
| 4 | Power Cord | HP | 1.8 meters | No | for Printer |
| 5 | Video Cable | Long Shine | 1.5 meters | Yes | |
| 6 | Printer Cable | HP | 1.8 meters | Yes | |
| 7 | Modem Cable | Aceex | 1.5 meters | Yes | |

## System Block Diagram of Test Configuration



## 5. Test Procedure

Test was performed by:

PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.
CONSUMER ELECTRONICS DIVISION
- EMC LAB

5, Tze Chiang 1 Road, Chungli Industrial Park
P.O. Box 123, Chungli, Taoyuan, Taiwan
Tel : 886-3-4549862 Fax : 886-3-4549887
Internet: ronnie.yang@philips.com

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"

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 2 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.
D-sub I/F cable with two ferrite cores was used.

Tested and reported modes as following:

| Test Item | File No. | Resolution | Frequencies | I/F Cable |
|---|---|---|---|---|
| Conducted | EMI03-009-C | 1600x1200 | 93.8KHz/75Hz | D-sub |
| | | 1280x1024 | 91.1KHz/85Hz | D-sub |
| Radiated | EMI03-009-R | 1600x1200 | 93.8KHz/75Hz | D-sub |
| | | 1280x1024 | 91.1KHz/85Hz | D-sub |

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. A pattern of scrolling H’s should be displayed on the monitor.

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.

# 6. Measurement Uncertainty

The system uncertainty 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 ver. | +/-2.0 |
| Measurement distance ver. | +/-0.5 |
| Site imperfections | +/-2.0 |
| Mismatch | +/-1.1 |
| System repeatability | +/-0.5 |

Uncertainty for Conducted Emissions Test at 3 meters Test Site.

| 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 ver. | +/-0.5 |
| Site imperfections | +/-2.0 |
| System repeatability | +/-0.5 |

## 7. Conducted Emissions Test

# Conducted Emissions

## FCC Part 15

### Operating conditions EUT:

EUT powered on with scrolling “H” pattern.

Limits:

| Frequency range (MHz) | Class A (dBuv) QP | Class B (dBuv) QP |
|---|---|---|
| 0.45 – 1.705 | 60.0 | 48.0 |
| 1.705 – 30.0 | 69.5 | 48.0 |

Test Result :

### Passed FCC Class B Limits

Option:

The following option may be employed if the conducted emissions exceed the limits, as appropriate, when measured using instrumentation employing a quasi-peak detector function: If the level of the emission measured using the quasi-peak instrumentation is 6dB, or, more higher than the level of the same emission measured with instrumentation having an average detector and a 9KHz minimum bandwidth, that emission is considered broadband and the level obtained with the quasi-peak detector may be reduced by 13dB for comparison to the limits.

Remark:

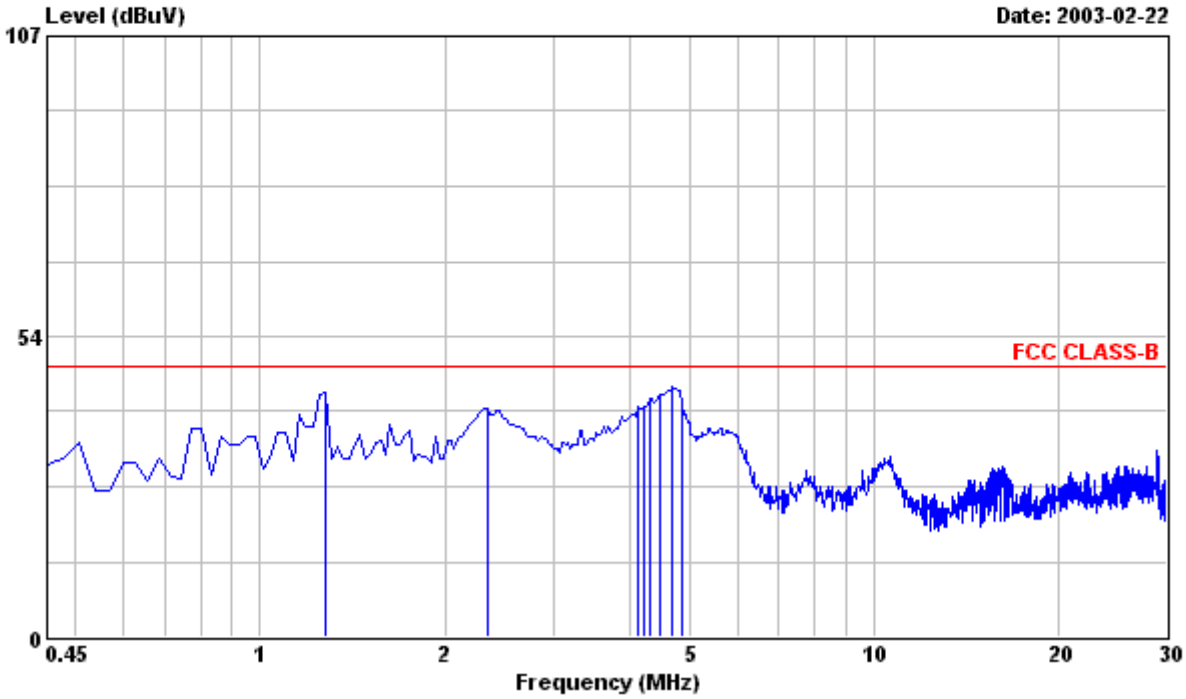
| | |
|---|---|
| Date of Test | : 22 Feb., 2003 to 24 Feb., 2003 |
| Test Engineer | : C.C.Wu |

For detail measurement results see next pages.

PHILIPS

Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 1 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP Reading | Limit LINE | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.277 | 43.10 | --- | 48.00 | 0.40 | 43.50 | -4.50 | Peak |
| 2.341 | 40.40 | --- | 48.00 | 0.40 | 40.80 | -7.20 | Peak |
| 4.114 | 40.50 | --- | 48.00 | 0.39 | 40.89 | -7.11 | Peak |
| 4.232 | 40.61 | --- | 48.00 | 0.37 | 40.98 | -7.02 | Peak |
| 4.321 | 42.11 | --- | 48.00 | 0.36 | 42.47 | -5.53 | Peak |
| 4.498 | 42.80 | --- | 48.00 | 0.35 | 43.15 | -4.85 | Peak |
| 4.705 | 44.30 | --- | 48.00 | 0.33 | 44.63 | -3.37 | Peak |
| 4.883 | 41.40 | --- | 48.00 | 0.31 | 41.71 | -6.29 | Peak |

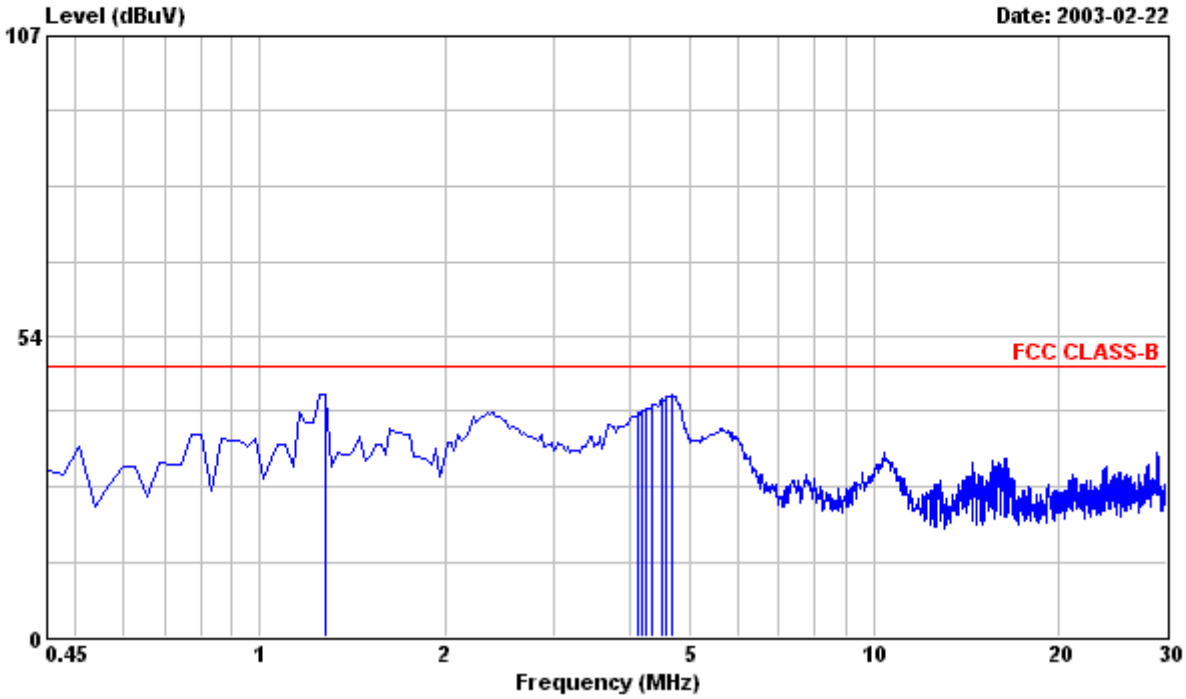
Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS

Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 2 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP Reading | Limit | Factor | Emission Lavel NEUTRAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.277 | 42.80 | --- | 48.00 | 0.40 | 43.20 | -4.80 | Peak |
| 4.114 | 39.70 | --- | 48.00 | 0.39 | 40.09 | -7.91 | Peak |
| 4.203 | 39.90 | --- | 48.00 | 0.38 | 40.28 | -7.72 | Peak |
| 4.262 | 40.20 | --- | 48.00 | 0.37 | 40.57 | -7.43 | Peak |
| 4.351 | 40.90 | --- | 48.00 | 0.36 | 41.26 | -6.74 | Peak |
| 4.528 | 42.01 | --- | 48.00 | 0.34 | 42.35 | -5.65 | Peak |
| 4.587 | 42.50 | --- | 48.00 | 0.34 | 42.84 | -5.16 | Peak |
| 4.705 | 43.00 | --- | 48.00 | 0.33 | 43.33 | -4.67 | Peak |

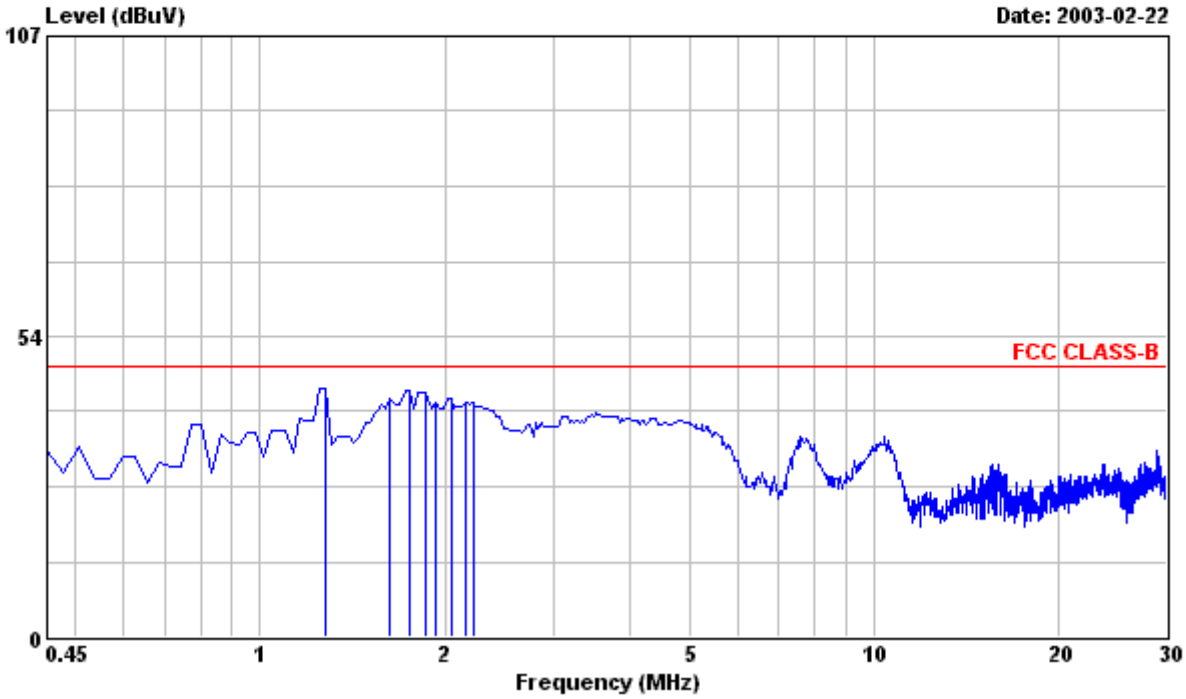
Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS

Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 3 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : IBM 6739-60N Serial No:TY0302101
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP Reading | Limit LINE | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.277 | 44.00 | --- | 48.00 | 0.40 | 44.40 | -3.60 | Peak |
| 1.632 | 42.10 | --- | 48.00 | 0.40 | 42.50 | -5.50 | Peak |
| 1.750 | 43.30 | --- | 48.00 | 0.40 | 43.70 | -4.30 | Peak |
| 1.868 | 43.10 | --- | 48.00 | 0.40 | 43.50 | -4.50 | Peak |
| 1.928 | 41.40 | --- | 48.00 | 0.40 | 41.80 | -6.20 | Peak |
| 2.046 | 42.00 | --- | 48.00 | 0.40 | 42.40 | -5.60 | Peak |
| 2.164 | 41.20 | --- | 48.00 | 0.40 | 41.60 | -6.40 | Peak |
| 2.223 | 41.20 | --- | 48.00 | 0.40 | 41.60 | -6.40 | Peak |

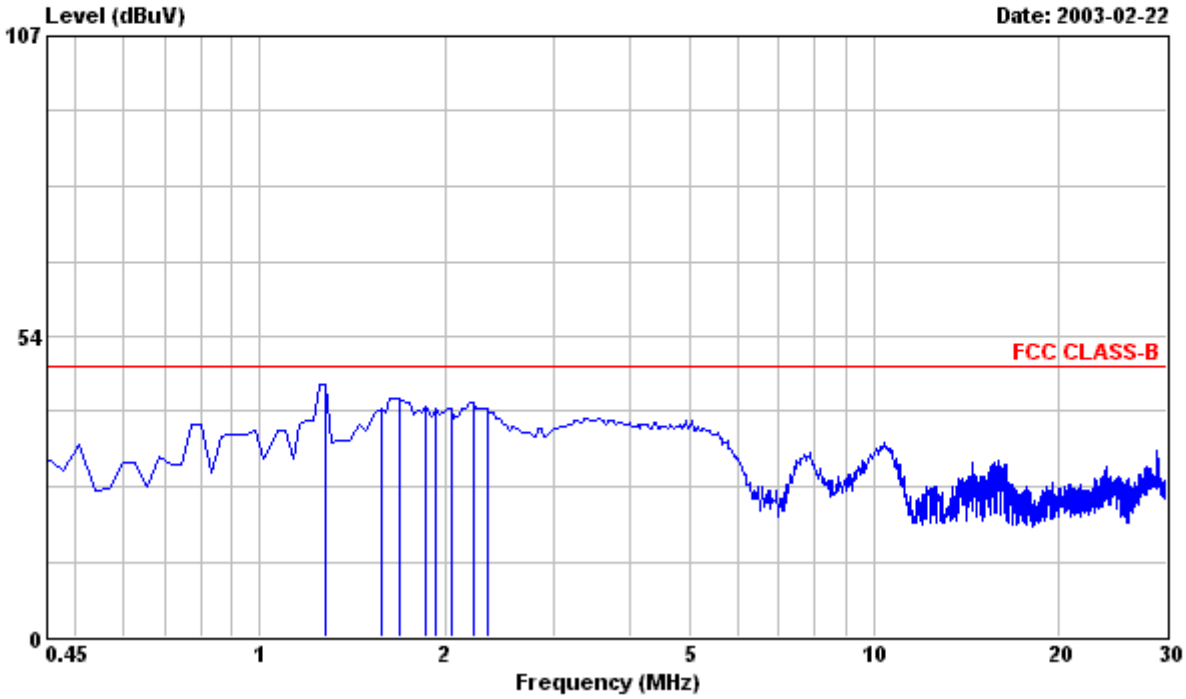
Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS

Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 4 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

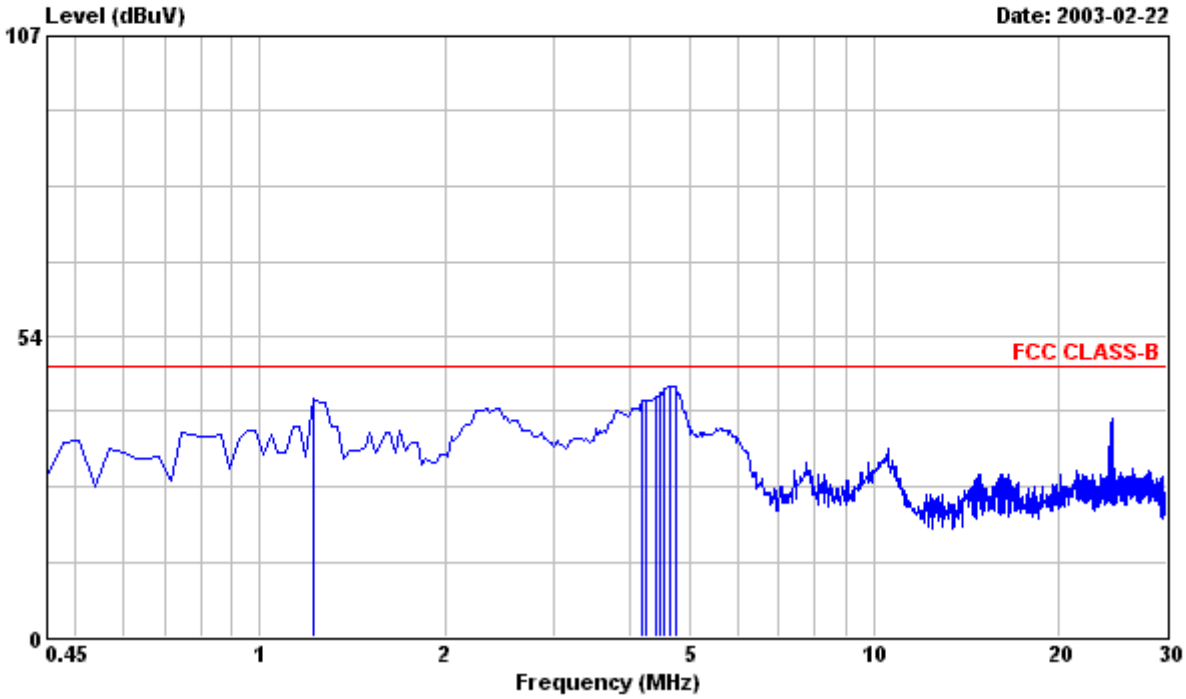
| Frequency | Peak Reading | QP Reading | Limit | Factor | Emission Lavel NEUTRAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.277 | 44.50 | --- | 48.00 | 0.40 | 44.90 | -3.10 | Peak |
| 1.573 | 40.30 | --- | 48.00 | 0.40 | 40.70 | -7.30 | Peak |
| 1.691 | 42.10 | --- | 48.00 | 0.40 | 42.50 | -5.50 | Peak |
| 1.868 | 40.60 | --- | 48.00 | 0.40 | 41.00 | -7.00 | Peak |
| 1.928 | 40.10 | --- | 48.00 | 0.40 | 40.50 | -7.50 | Peak |
| 2.046 | 40.40 | --- | 48.00 | 0.40 | 40.80 | -7.20 | Peak |
| 2.223 | 41.50 | --- | 48.00 | 0.40 | 41.90 | -6.10 | Peak |
| 2.341 | 40.40 | --- | 48.00 | 0.40 | 40.80 | -7.20 | Peak |

Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS
Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 5 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 14 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP Reading | Limit LINE | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.218 | 42.00 | --- | 48.00 | 0.40 | 42.40 | -5.60 | Peak |
| 4.203 | 41.60 | --- | 48.00 | 0.38 | 41.98 | -6.02 | Peak |
| 4.262 | 41.80 | --- | 48.00 | 0.37 | 42.17 | -5.83 | Peak |
| 4.410 | 42.30 | --- | 48.00 | 0.36 | 42.66 | -5.34 | Peak |
| 4.469 | 43.10 | --- | 48.00 | 0.35 | 43.45 | -4.55 | Peak |
| 4.557 | 43.80 | --- | 48.00 | 0.34 | 44.14 | -3.86 | Peak |
| 4.646 | 44.30 | --- | 48.00 | 0.33 | 44.63 | -3.37 | Peak |
| 4.764 | 44.40 | --- | 48.00 | 0.32 | 44.72 | -3.28 | Peak |

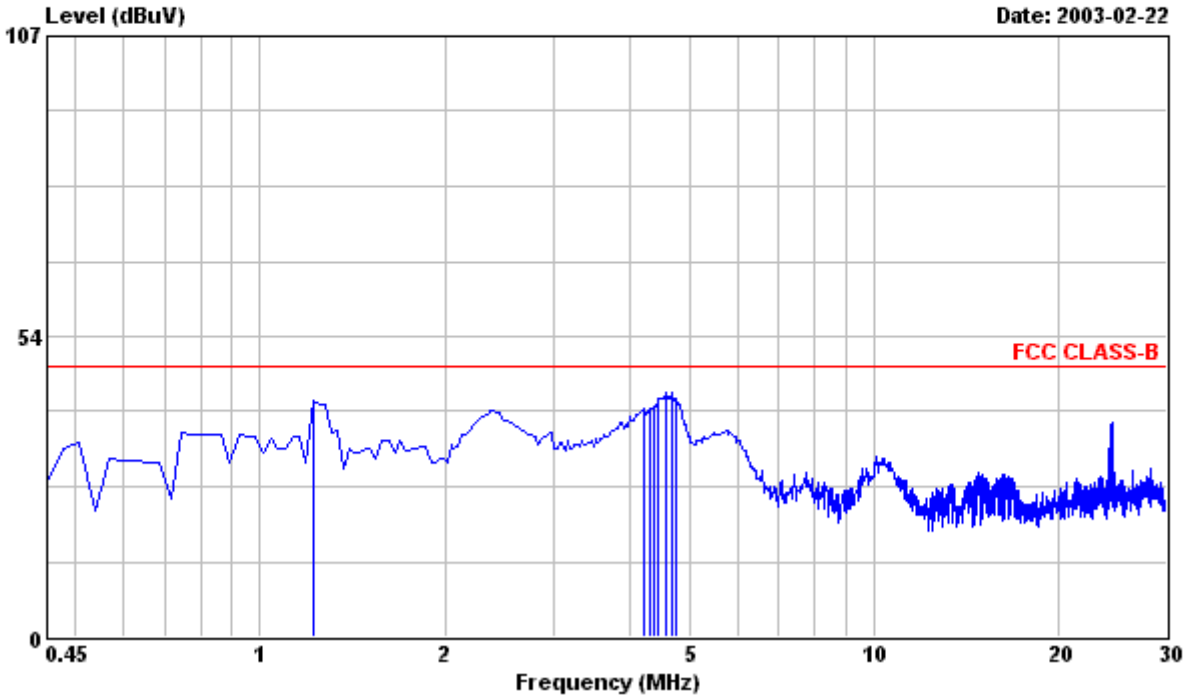
Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS

Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 6 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 14 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP Reading | Limit | Factor | Emission Lavel NEUTRAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.218 | 41.70 | --- | 48.00 | 0.40 | 42.10 | -5.90 | Peak |
| 4.232 | 40.41 | --- | 48.00 | 0.37 | 40.78 | -7.22 | Peak |
| 4.321 | 40.31 | --- | 48.00 | 0.36 | 40.67 | -7.33 | Peak |
| 4.380 | 40.80 | --- | 48.00 | 0.36 | 41.16 | -6.84 | Peak |
| 4.439 | 42.10 | --- | 48.00 | 0.35 | 42.45 | -5.55 | Peak |
| 4.587 | 43.30 | --- | 48.00 | 0.34 | 43.64 | -4.36 | Peak |
| 4.676 | 43.20 | --- | 48.00 | 0.33 | 43.53 | -4.47 | Peak |
| 4.764 | 42.00 | --- | 48.00 | 0.32 | 42.32 | -5.68 | Peak |

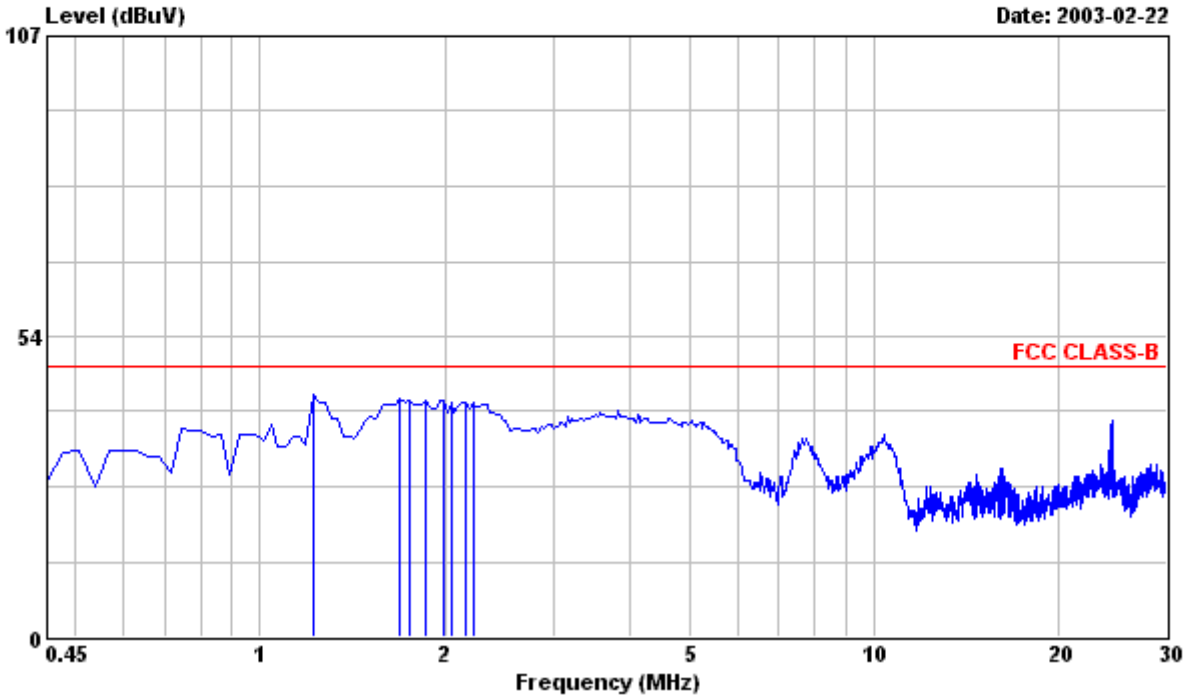
Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS

Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 7 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : IBM 6739-60N Serial No:TY0302101
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 14 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

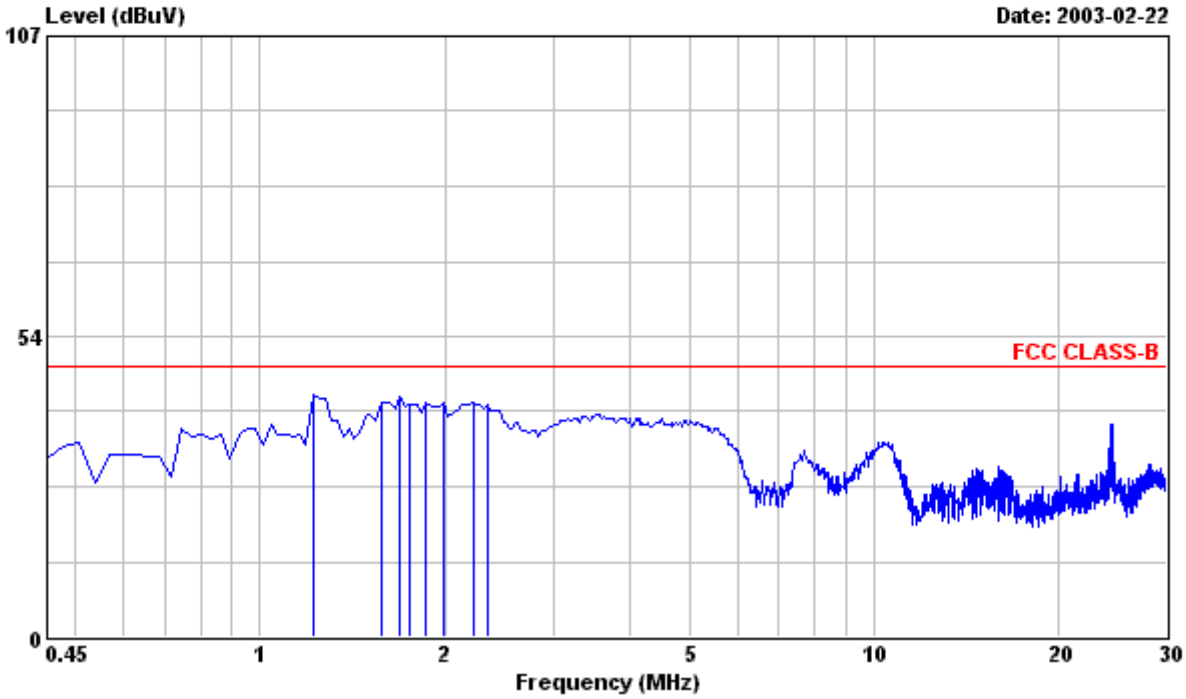
| Frequency | Peak Reading | QP Reading | Limit Line | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.218 | 42.70 | --- | 48.00 | 0.40 | 43.10 | -4.90 | Peak |
| 1.691 | 42.10 | --- | 48.00 | 0.40 | 42.50 | -5.50 | Peak |
| 1.750 | 41.60 | --- | 48.00 | 0.40 | 42.00 | -6.00 | Peak |
| 1.868 | 41.60 | --- | 48.00 | 0.40 | 42.00 | -6.00 | Peak |
| 1.987 | 41.60 | --- | 48.00 | 0.40 | 42.00 | -6.00 | Peak |
| 2.046 | 41.30 | --- | 48.00 | 0.40 | 41.70 | -6.30 | Peak |
| 2.164 | 41.20 | --- | 48.00 | 0.40 | 41.60 | -6.40 | Peak |
| 2.223 | 41.40 | --- | 48.00 | 0.40 | 41.80 | -6.20 | Peak |

Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

PHILIPS
Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 8 File#: C:\Program Files\e3\EMI03-009-C(IBM 6739-60N).emi




Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 14 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP Reading | Limit | Factor | Emission Lavel NEUTRAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| 1.218 | 42.80 | --- | 48.00 | 0.40 | 43.20 | -4.80 | Peak |
| 1.573 | 41.50 | --- | 48.00 | 0.40 | 41.90 | -6.10 | Peak |
| 1.691 | 42.40 | --- | 48.00 | 0.40 | 42.80 | -5.20 | Peak |
| 1.750 | 41.00 | --- | 48.00 | 0.40 | 41.40 | -6.60 | Peak |
| 1.868 | 41.20 | --- | 48.00 | 0.40 | 41.60 | -6.40 | Peak |
| 1.987 | 41.50 | --- | 48.00 | 0.40 | 41.90 | -6.10 | Peak |
| 2.223 | 41.30 | --- | 48.00 | 0.40 | 41.70 | -6.30 | Peak |
| 2.341 | 40.80 | --- | 48.00 | 0.40 | 41.20 | -6.80 | Peak |

Remarks: 1. All Readings are Peak & Quasi-Peak Values.
2. Emission Lavel (dBuV) = Factor (dB) + Meter Reading (dBuV)
3. Factor (dB/m) = LISN Loss (dB) + Cable Loss (dB)

Tested by : C.C.Wu

## 8. .Radiated Emission Test

# Radiated Emissions

## FCC Part 15

Operating conditions EUT:

EUT powered on with scrolling “H” pattern.

Limits:

| Frequency range (MHz) | Class A at 10m (dBuv) QP | Class B at 3m (dBuv) QP |
|---|---|---|
| 30.0 – 88.0 | 39.0 | 40.0 |
| 88.0 – 216.0 | 43.5 | 43.5 |
| 216.0 – 960.0 | 46.5 | 46.0 |
| 960.0 – 1000.0 | 49.5 | 54.0 |
| Above 1000.0 | 49.5 | 54.0 Average |

Test Result :

Passed FCC Class B Limits

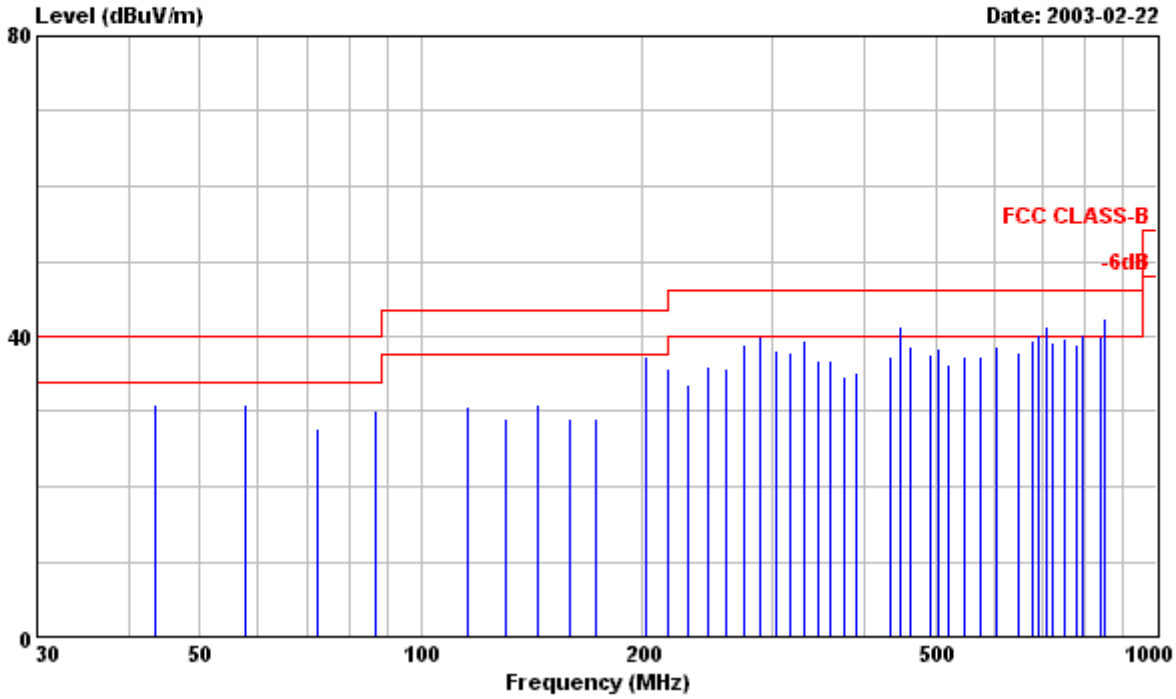
Remark:

| | |
|---|---|
| Date of Test | : 22 Feb., 2003 to 24 Feb., 2003 |
| Test Engineer | : C.C.Wu |

For detail measurement results see next pages.

PHILIPS
Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 1 File#: C:\Program Files\e3\EMI03-009-R.emi




Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP reading | Limit | Factor | Emission Lavel HORIZONTAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| MHz | dBuV | dBuV | dBuV/m | dB/m | dBuV/m | dBuV/m | |
| 43.320 | 19.20 | --- | 40.00 | 11.69 | 30.89 | -9.11 | Peak |
| 57.730 | 20.90 | --- | 40.00 | 10.09 | 30.99 | -9.01 | Peak |
| 72.170 | 17.60 | --- | 40.00 | 10.08 | 27.68 | -12.32 | Peak |
| 86.590 | 19.30 | --- | 40.00 | 10.73 | 30.03 | -9.97 | Peak |
| 115.460 | 18.50 | --- | 43.50 | 12.17 | 30.67 | -12.83 | Peak |
| 129.900 | 16.30 | --- | 43.50 | 12.69 | 28.99 | -14.51 | Peak |
| 144.350 | 17.70 | --- | 43.50 | 13.22 | 30.92 | -12.58 | Peak |
| 158.750 | 15.40 | --- | 43.50 | 13.66 | 29.06 | -14.44 | Peak |
| 173.200 | 15.00 | --- | 43.50 | 14.05 | 29.05 | -14.45 | Peak |
| 202.060 | 20.90 | --- | 43.50 | 16.50 | 37.40 | -6.10 | Peak |
| 216.470 | 18.00 | --- | 46.00 | 17.81 | 35.81 | -10.19 | Peak |
| 230.910 | 14.70 | --- | 46.00 | 18.99 | 33.69 | -12.31 | Peak |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

PHILIPS
Philips Electronics Industries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

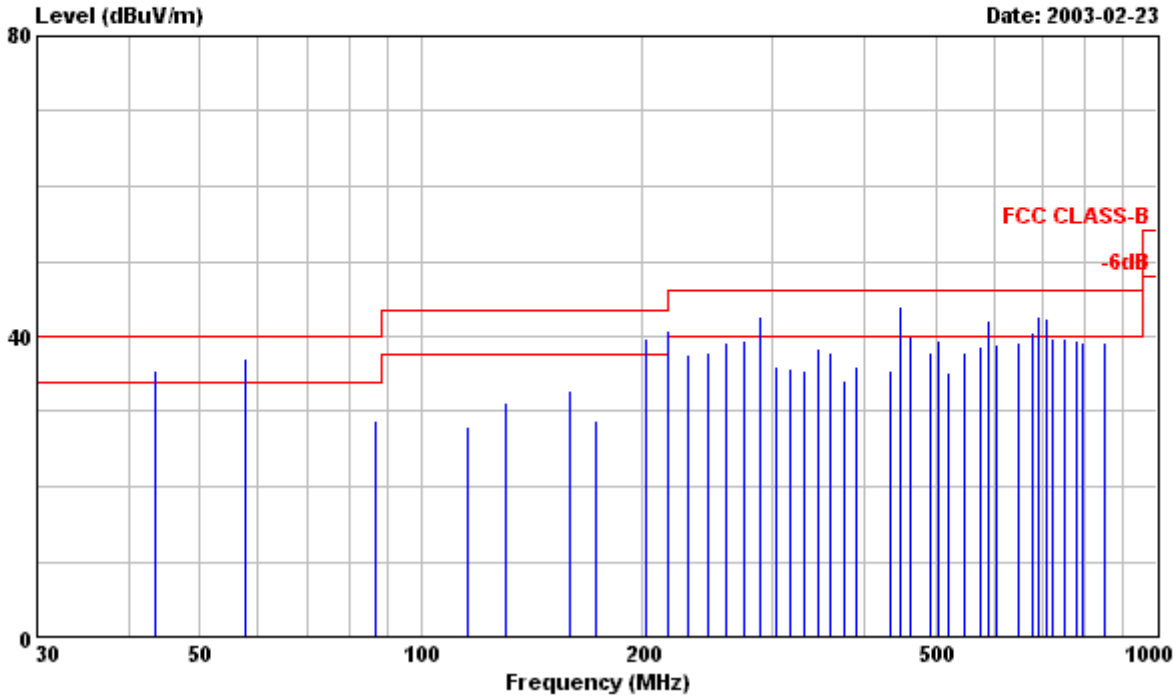
| | Frequency MHz | Peak Reading dBuV | QP reading dBuV | Limit dBuV/m | Factor dB/m | Emission Lavel HORIZONTAL dBuV/m | Over Limit dBuV/m | Remark |
|---|---|---|---|---|---|---|---|---|
| | 245.350 | 15.80 | --- | 46.00 | 20.11 | 35.91 | -10.09 | Peak |
| | 259.780 | 14.70 | --- | 46.00 | 21.07 | 35.77 | -10.23 | Peak |
| | 274.190 | 17.00 | --- | 46.00 | 21.85 | 38.85 | -7.15 | Peak |
| | 288.660 | 17.30 | --- | 46.00 | 22.63 | 39.93 | -6.07 | Peak |
| | 303.080 | 21.50 | --- | 46.00 | 16.55 | 38.05 | -7.95 | Peak |
| | 317.500 | 21.00 | --- | 46.00 | 16.85 | 37.85 | -8.15 | Peak |
| | 331.940 | 22.30 | --- | 46.00 | 17.16 | 39.46 | -6.54 | Peak |
| | 346.390 | 19.40 | --- | 46.00 | 17.44 | 36.84 | -9.16 | Peak |
| | 360.800 | 19.20 | --- | 46.00 | 17.70 | 36.90 | -9.10 | Peak |
| | 375.240 | 16.80 | --- | 46.00 | 17.95 | 34.75 | -11.25 | Peak |
| | 389.670 | 17.10 | --- | 46.00 | 18.21 | 35.31 | -10.69 | Peak |
| | 432.970 | 18.60 | --- | 46.00 | 18.85 | 37.45 | -8.55 | Peak |
| ! | 447.400 | 22.40 | --- | 46.00 | 19.06 | 41.46 | -4.54 | Peak |
| | 447.400 | --- | 20.56 | 46.00 | 19.06 | 39.62 | -6.38 | QP |
| | 461.830 | 19.40 | --- | 46.00 | 19.25 | 38.65 | -7.35 | Peak |
| | 490.710 | 18.10 | --- | 46.00 | 19.60 | 37.70 | -8.30 | Peak |
| | 505.120 | 18.60 | --- | 46.00 | 19.79 | 38.39 | -7.61 | Peak |
| | 519.540 | 16.30 | --- | 46.00 | 20.02 | 36.32 | -9.68 | Peak |
| | 548.420 | 16.90 | --- | 46.00 | 20.48 | 37.38 | -8.62 | Peak |
| | 577.290 | 16.50 | --- | 46.00 | 20.88 | 37.38 | -8.62 | Peak |
| | 606.150 | 17.30 | --- | 46.00 | 21.36 | 38.66 | -7.34 | Peak |
| | 649.440 | 15.50 | --- | 46.00 | 22.40 | 37.90 | -8.10 | Peak |
| | 678.310 | 16.40 | --- | 46.00 | 23.03 | 39.43 | -6.57 | Peak |
| ! | 692.760 | 16.90 | --- | 46.00 | 23.34 | 40.24 | -5.76 | Peak |
| | 692.760 | --- | 13.85 | 46.00 | 23.34 | 37.19 | -8.81 | QP |
| | 707.170 | --- | 13.78 | 46.00 | 23.60 | 37.38 | -8.62 | QP |
| ! | 707.170 | 17.70 | --- | 46.00 | 23.60 | 41.30 | -4.70 | Peak |
| | 721.600 | 15.30 | --- | 46.00 | 23.81 | 39.11 | -6.89 | Peak |
| | 750.480 | 15.60 | --- | 46.00 | 24.18 | 39.78 | -6.22 | Peak |
| | 779.340 | 14.40 | --- | 46.00 | 24.56 | 38.96 | -7.04 | Peak |
| ! | 793.770 | 15.50 | --- | 46.00 | 24.73 | 40.23 | -5.77 | Peak |
| | 793.770 | --- | 12.06 | 46.00 | 24.73 | 36.79 | -9.21 | QP |
| | 837.070 | 14.50 | --- | 46.00 | 25.37 | 39.87 | -6.13 | Peak |
| ! | 851.500 | 16.80 | --- | 46.00 | 25.59 | 42.39 | -3.61 | Peak |
| | 851.500 | --- | 13.38 | 46.00 | 25.59 | 38.97 | -7.03 | QP |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

Tested by : C C.Wu

PHILIPS
Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 2 File#: C:\Program Files\e3\EMI03-009-R.emi




Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP reading | Limit | Factor | Emission Lavel VERTICAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| MHz | dBuV | dBuV | dBuV/m | dB/m | dBuV/m | dBuV/m | |
| ! 43.320 | 23.70 | --- | 40.00 | 11.69 | 35.39 | -4.61 | Peak |
| ! 43.320 | --- | 22.40 | 40.00 | 11.69 | 34.09 | -5.91 | QP |
| ! 57.730 | 27.00 | --- | 40.00 | 10.09 | 37.09 | -2.91 | Peak |
| ! 57.730 | --- | 25.30 | 40.00 | 10.09 | 35.39 | -4.61 | QP |
| 86.590 | 18.00 | --- | 40.00 | 10.73 | 28.73 | -11.27 | Peak |
| 115.460 | 15.90 | --- | 43.50 | 12.17 | 28.07 | -15.43 | Peak |
| 129.900 | 18.60 | --- | 43.50 | 12.69 | 31.29 | -12.21 | Peak |
| 158.750 | 19.10 | --- | 43.50 | 13.66 | 32.76 | -10.74 | Peak |
| 173.200 | 14.80 | --- | 43.50 | 14.05 | 28.85 | -14.65 | Peak |
| ! 202.060 | 23.20 | --- | 43.50 | 16.50 | 39.70 | -3.80 | Peak |
| ! 202.060 | --- | 21.70 | 43.50 | 16.50 | 38.20 | -5.30 | QP |
| ! 216.470 | 23.10 | --- | 46.00 | 17.81 | 40.91 | -5.09 | Peak |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

PHILIPS
Philips Electronics Industries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

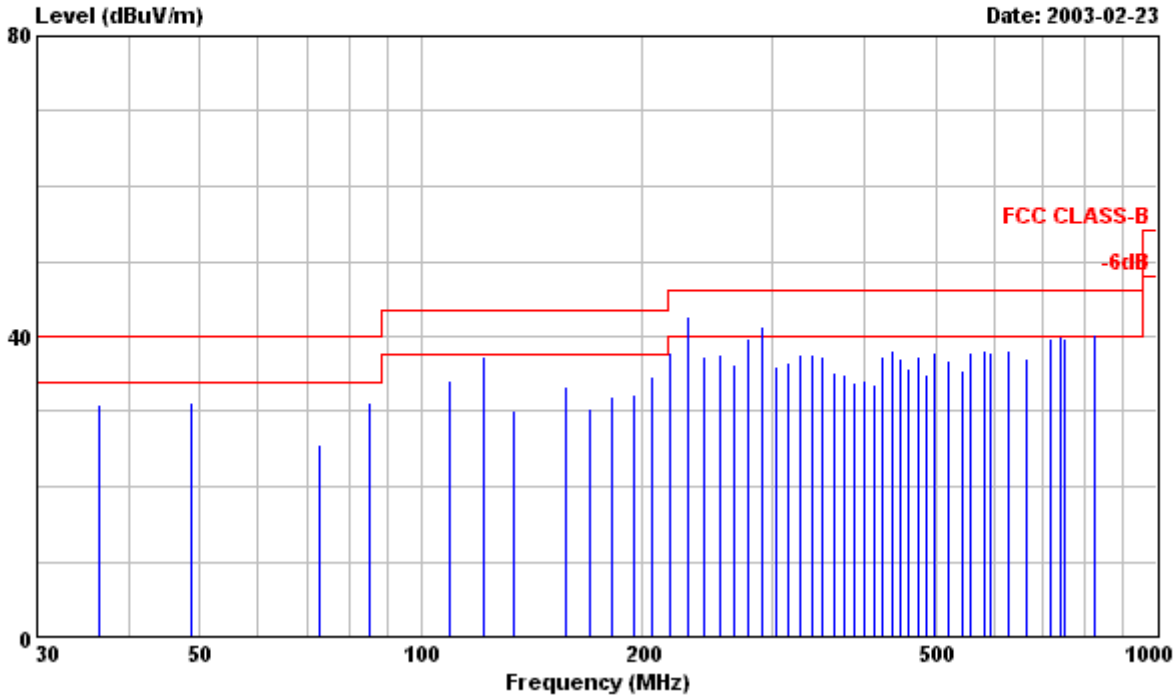
| | Frequency | Peak Reading | QP reading | Limit | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|
| | | | | | | VERTICAL | | |
| | MHz | dBuV | dBuV | dBuV/m | dB/m | dBuV/m | dBuV/m | |
| | 216.470 | --- | 21.50 | 46.00 | 17.81 | 39.31 | -6.69 | QP |
| | 230.910 | 18.50 | --- | 46.00 | 18.99 | 37.49 | -8.51 | Peak |
| | 245.350 | 17.70 | --- | 46.00 | 20.11 | 37.81 | -8.19 | Peak |
| | 259.780 | 18.10 | --- | 46.00 | 21.07 | 39.17 | -6.83 | Peak |
| | 274.220 | 17.60 | --- | 46.00 | 21.85 | 39.45 | -6.55 | Peak |
| ! | 288.660 | 20.30 | --- | 46.00 | 22.63 | 42.93 | -3.07 | Peak |
| ! | 288.660 | --- | 18.80 | 46.00 | 22.63 | 41.43 | -4.57 | QP |
| | 303.080 | 19.40 | --- | 46.00 | 16.55 | 35.95 | -10.05 | Peak |
| | 317.500 | 18.90 | --- | 46.00 | 16.85 | 35.75 | -10.25 | Peak |
| | 331.940 | 18.20 | --- | 46.00 | 17.16 | 35.36 | -10.64 | Peak |
| | 346.390 | 20.90 | --- | 46.00 | 17.44 | 38.34 | -7.66 | Peak |
| | 360.800 | 20.10 | --- | 46.00 | 17.70 | 37.80 | -8.20 | Peak |
| | 375.240 | 16.10 | --- | 46.00 | 17.95 | 34.05 | -11.95 | Peak |
| | 389.670 | 17.80 | --- | 46.00 | 18.21 | 36.01 | -9.99 | Peak |
| | 432.970 | 16.70 | --- | 46.00 | 18.85 | 35.55 | -10.45 | Peak |
| ! | 447.400 | 24.90 | --- | 46.00 | 19.06 | 43.96 | -2.04 | Peak |
| ! | 447.400 | --- | 23.74 | 46.00 | 19.06 | 42.80 | -3.20 | QP |
| | 461.830 | 20.70 | --- | 46.00 | 19.25 | 39.95 | -6.05 | Peak |
| | 490.710 | 18.30 | --- | 46.00 | 19.60 | 37.90 | -8.10 | Peak |
| | 505.120 | 19.60 | --- | 46.00 | 19.79 | 39.39 | -6.61 | Peak |
| | 519.540 | 15.10 | --- | 46.00 | 20.02 | 35.12 | -10.88 | Peak |
| | 548.420 | 17.30 | --- | 46.00 | 20.48 | 37.78 | -8.22 | Peak |
| | 577.290 | 17.70 | --- | 46.00 | 20.88 | 38.58 | -7.42 | Peak |
| ! | 591.730 | 21.10 | --- | 46.00 | 21.08 | 42.18 | -3.82 | Peak |
| ! | 591.730 | --- | 19.10 | 46.00 | 21.08 | 40.18 | -5.82 | QP |
| | 606.150 | 17.50 | --- | 46.00 | 21.36 | 38.86 | -7.14 | Peak |
| | 649.440 | 16.80 | --- | 46.00 | 22.40 | 39.20 | -6.80 | Peak |
| ! | 678.310 | 17.60 | --- | 46.00 | 23.03 | 40.63 | -5.37 | Peak |
| ! | 692.760 | 19.60 | --- | 46.00 | 23.34 | 42.94 | -3.06 | Peak |
| ! | 692.760 | --- | 16.81 | 46.00 | 23.34 | 40.15 | -5.85 | QP |
| ! | 707.170 | 18.80 | --- | 46.00 | 23.60 | 42.40 | -3.60 | Peak |
| | 707.170 | --- | 15.86 | 46.00 | 23.60 | 39.46 | -6.54 | QP |
| | 721.600 | 15.90 | --- | 46.00 | 23.81 | 39.71 | -6.29 | Peak |
| | 750.480 | 15.60 | --- | 46.00 | 24.18 | 39.78 | -6.22 | Peak |
| | 779.340 | 14.90 | --- | 46.00 | 24.56 | 39.46 | -6.54 | Peak |
| | 793.770 | 14.40 | --- | 46.00 | 24.73 | 39.13 | -6.87 | Peak |
| | 851.500 | 13.50 | --- | 46.00 | 25.59 | 39.09 | -6.91 | Peak |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

Tested by : C C.Wu

PHILIPS
Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 3 File#: C:\Program Files\e3\EMI03-009-R.emi




Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 14 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency MHz | Peak Reading dBuV | QP reading dBuV | Limit dBuV/m | Factor dB/m | Emission Lavel HORIZONTAL dBuV/m | Over Limit dBuV/m | Remark |
|---|---|---|---|---|---|---|---|
| 36.380 | 17.80 | --- | 40.00 | 13.09 | 30.89 | -9.11 | Peak |
| 48.490 | 20.30 | --- | 40.00 | 11.01 | 31.31 | -8.69 | Peak |
| 72.720 | 15.80 | --- | 40.00 | 10.12 | 25.92 | -14.08 | Peak |
| 84.840 | 20.50 | --- | 40.00 | 10.64 | 31.14 | -8.86 | Peak |
| 109.060 | 22.60 | --- | 43.50 | 11.87 | 34.47 | -9.03 | Peak |
| 121.180 | 24.80 | --- | 43.50 | 12.41 | 37.21 | -6.29 | Peak |
| 133.300 | 17.20 | --- | 43.50 | 12.82 | 30.02 | -13.48 | Peak |
| 157.550 | 19.80 | --- | 43.50 | 13.63 | 33.43 | -10.07 | Peak |
| 169.660 | 16.40 | --- | 43.50 | 13.96 | 30.36 | -13.14 | Peak |
| 181.790 | 17.30 | --- | 43.50 | 14.59 | 31.89 | -11.61 | Peak |
| 193.920 | 16.60 | --- | 43.50 | 15.73 | 32.33 | -11.17 | Peak |
| 206.020 | 17.90 | --- | 43.50 | 16.82 | 34.72 | -8.78 | Peak |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

PHILIPS
Philips Electronics Industries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

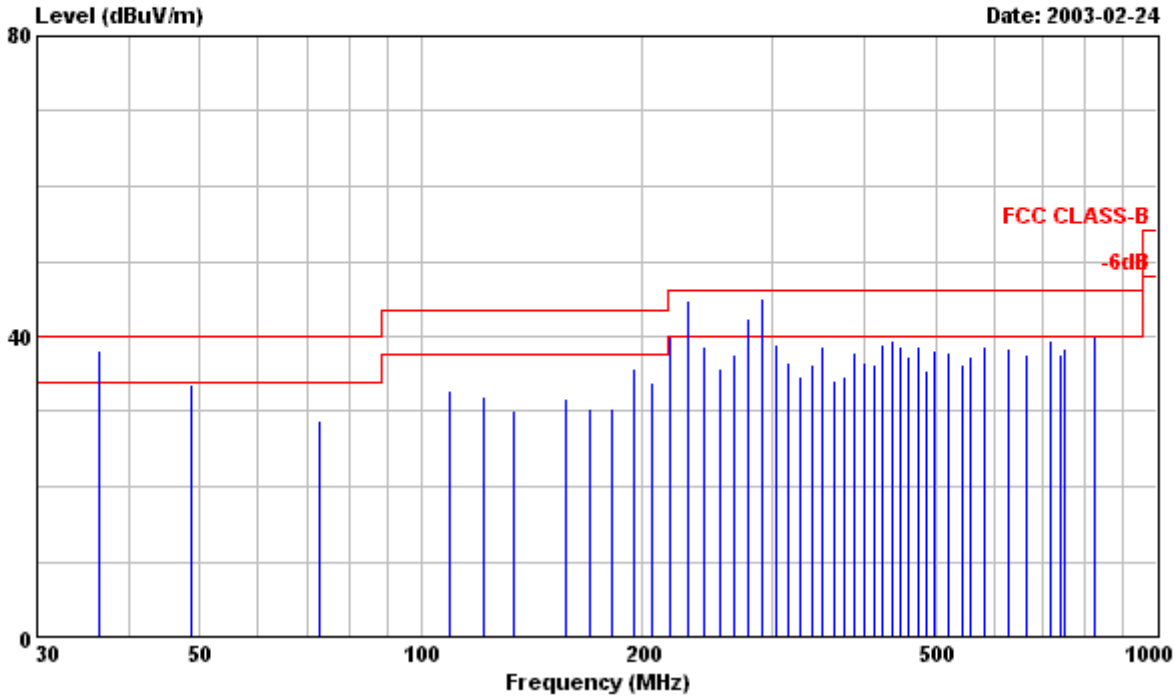
| | Frequency | Peak Reading | QP reading | Limit | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|
| | | | | | | HORIZONTAL | | |
| | MHz | dBuV | dBuV | dBuV/m | dB/m | dBuV/m | dBuV/m | |
| | 218.140 | 19.80 | --- | 46.00 | 17.94 | 37.74 | -8.26 | Peak |
| ! | 230.250 | --- | 22.31 | 46.00 | 18.92 | 41.23 | -4.77 | QP |
| ! | 230.250 | 24.00 | --- | 46.00 | 18.92 | 42.92 | -3.08 | Peak |
| | 242.350 | 17.30 | --- | 46.00 | 19.91 | 37.21 | -8.79 | Peak |
| | 254.480 | 16.90 | --- | 46.00 | 20.76 | 37.66 | -8.34 | Peak |
| | 266.610 | 14.90 | --- | 46.00 | 21.43 | 36.33 | -9.67 | Peak |
| | 278.730 | 17.60 | --- | 46.00 | 22.11 | 39.71 | -6.29 | Peak |
| ! | 290.830 | 18.60 | --- | 46.00 | 22.73 | 41.33 | -4.67 | Peak |
| | 302.960 | 19.50 | --- | 46.00 | 16.52 | 36.02 | -9.98 | Peak |
| | 315.080 | 19.70 | --- | 46.00 | 16.80 | 36.50 | -9.50 | Peak |
| | 327.200 | 20.50 | --- | 46.00 | 17.04 | 37.54 | -8.46 | Peak |
| | 339.330 | 20.30 | --- | 46.00 | 17.30 | 37.60 | -8.40 | Peak |
| | 351.460 | 19.90 | --- | 46.00 | 17.53 | 37.43 | -8.57 | Peak |
| | 363.570 | 17.40 | --- | 46.00 | 17.74 | 35.14 | -10.86 | Peak |
| | 375.690 | 17.00 | --- | 46.00 | 17.98 | 34.98 | -11.02 | Peak |
| | 387.800 | 15.60 | --- | 46.00 | 18.19 | 33.79 | -12.21 | Peak |
| | 399.930 | 15.90 | --- | 46.00 | 18.40 | 34.30 | -11.70 | Peak |
| | 412.030 | 15.00 | --- | 46.00 | 18.57 | 33.57 | -12.43 | Peak |
| | 424.130 | 18.60 | --- | 46.00 | 18.73 | 37.33 | -8.67 | Peak |
| | 436.260 | 19.30 | --- | 46.00 | 18.90 | 38.20 | -7.80 | Peak |
| | 448.380 | 17.90 | --- | 46.00 | 19.06 | 36.96 | -9.04 | Peak |
| | 460.490 | 16.60 | --- | 46.00 | 19.23 | 35.83 | -10.17 | Peak |
| | 472.610 | 17.90 | --- | 46.00 | 19.37 | 37.27 | -8.73 | Peak |
| | 484.740 | 15.50 | --- | 46.00 | 19.51 | 35.01 | -10.99 | Peak |
| | 496.870 | 18.20 | --- | 46.00 | 19.68 | 37.88 | -8.12 | Peak |
| | 521.120 | 16.80 | --- | 46.00 | 20.05 | 36.85 | -9.15 | Peak |
| | 545.320 | 15.00 | --- | 46.00 | 20.42 | 35.42 | -10.58 | Peak |
| | 557.450 | 17.20 | --- | 46.00 | 20.59 | 37.79 | -8.21 | Peak |
| | 581.680 | 17.30 | --- | 46.00 | 20.94 | 38.24 | -7.76 | Peak |
| | 593.810 | 16.70 | --- | 46.00 | 21.11 | 37.81 | -8.19 | Peak |
| | 630.160 | 16.10 | --- | 46.00 | 21.93 | 38.03 | -7.97 | Peak |
| | 666.530 | 14.30 | --- | 46.00 | 22.77 | 37.07 | -8.93 | Peak |
| | 714.980 | 16.10 | --- | 46.00 | 23.71 | 39.81 | -6.19 | Peak |
| | 739.210 | 15.90 | --- | 46.00 | 24.05 | 39.95 | -6.05 | Peak |
| | 751.340 | 15.50 | --- | 46.00 | 24.18 | 39.68 | -6.32 | Peak |
| ! | 824.060 | 15.20 | --- | 46.00 | 25.20 | 40.40 | -5.60 | Peak |
| | 824.060 | --- | 12.66 | 46.00 | 25.20 | 37.86 | -8.14 | QP |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

Tested by : C C.Wu

PHILIPS
Philips Electronics Inductries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

Data#: 4 File#: C:\Program Files\e3\EMI03-009-R.emi




Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : IBM 6739-60N Serial No:TY0302101
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL SDI TUBE,RUN IBM V1.8
: FONT 14 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH IBM
: 8305-52V PC,VIDEO CARD ONBOARD WAS
: TESTED.

| Frequency | Peak Reading | QP reading | Limit | Factor | Emission Lavel VERTICAL | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| MHz | dBuV | dBuV | dBuV/m | dB/m | dBuV/m | dBuV/m | |
| ! 36.380 | --- | 23.80 | 40.00 | 13.09 | 36.89 | -3.11 | QP |
| ! 36.380 | 25.00 | --- | 40.00 | 13.09 | 38.09 | -1.91 | Peak |
| 48.490 | 22.60 | --- | 40.00 | 11.01 | 33.61 | -6.39 | Peak |
| 72.720 | 18.60 | --- | 40.00 | 10.12 | 28.72 | -11.28 | Peak |
| 109.060 | 21.00 | --- | 43.50 | 11.87 | 32.87 | -10.63 | Peak |
| 121.180 | 19.60 | --- | 43.50 | 12.41 | 32.01 | -11.49 | Peak |
| 133.300 | 17.40 | --- | 43.50 | 12.82 | 30.22 | -13.28 | Peak |
| 157.550 | 18.00 | --- | 43.50 | 13.63 | 31.63 | -11.87 | Peak |
| 169.660 | 16.40 | --- | 43.50 | 13.96 | 30.36 | -13.14 | Peak |
| 181.790 | 15.70 | --- | 43.50 | 14.59 | 30.29 | -13.21 | Peak |
| 193.920 | 19.90 | --- | 43.50 | 15.73 | 35.63 | -7.87 | Peak |
| 206.020 | 17.10 | --- | 43.50 | 16.82 | 33.92 | -9.58 | Peak |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

PHILIPS

Philips Electronics Industries (Taiwan)., Ltd.
No.5, Tze Chiang 1 Road, Chungli Inductrial Park,
Chungli, Taiwan, R.O.C.
Tel:+886-3-4549862 Fax:+886-3-4549887

| Frequency | Peak Reading | QP reading | Limit | Factor | Emission Lavel | Over Limit | Remark |
|---|---|---|---|---|---|---|---|
| | | | | | VERTICAL | | |
| MHz | dBuV | dBuV | dBuV/m | dB/m | dBuV/m | dBuV/m | |
| ! 218.140 | 22.10 | --- | 46.00 | 17.94 | 40.04 | -5.96 | Peak |
| 218.140 | --- | 20.30 | 46.00 | 17.94 | 38.24 | -7.76 | QP |
| ! 230.250 | --- | 24.42 | 46.00 | 18.92 | 43.34 | -2.66 | QP |
| ! 230.250 | 26.01 | --- | 46.00 | 18.92 | 44.93 | -1.07 | Peak |
| 242.350 | 18.70 | --- | 46.00 | 19.91 | 38.61 | -7.39 | Peak |
| 254.480 | 15.10 | --- | 46.00 | 20.76 | 35.86 | -10.14 | Peak |
| 266.610 | 16.20 | --- | 46.00 | 21.43 | 37.63 | -8.37 | Peak |
| ! 278.730 | 20.20 | --- | 46.00 | 22.11 | 42.31 | -3.69 | Peak |
| ! 278.730 | --- | 18.50 | 46.00 | 22.11 | 40.61 | -5.39 | QP |
| ! 290.830 | 22.30 | --- | 46.00 | 22.73 | 45.03 | -0.97 | Peak |
| ! 290.830 | --- | 20.70 | 46.00 | 22.73 | 43.43 | -2.57 | QP |
| 302.960 | 22.50 | --- | 46.00 | 16.52 | 39.02 | -6.98 | Peak |
| 315.080 | 19.80 | --- | 46.00 | 16.80 | 36.60 | -9.40 | Peak |
| 327.200 | 17.50 | --- | 46.00 | 17.04 | 34.54 | -11.46 | Peak |
| 339.330 | 19.10 | --- | 46.00 | 17.30 | 36.40 | -9.60 | Peak |
| 351.460 | 21.10 | --- | 46.00 | 17.53 | 38.63 | -7.37 | Peak |
| 363.570 | 16.70 | --- | 46.00 | 17.74 | 34.44 | -11.56 | Peak |
| 375.690 | 16.70 | --- | 46.00 | 17.98 | 34.68 | -11.32 | Peak |
| 387.800 | 19.60 | --- | 46.00 | 18.19 | 37.79 | -8.21 | Peak |
| 399.930 | 18.20 | --- | 46.00 | 18.40 | 36.60 | -9.40 | Peak |
| 412.030 | 17.70 | --- | 46.00 | 18.57 | 36.27 | -9.73 | Peak |
| 424.130 | 20.30 | --- | 46.00 | 18.73 | 39.03 | -6.97 | Peak |
| 436.260 | 20.60 | --- | 46.00 | 18.90 | 39.50 | -6.50 | Peak |
| 448.380 | 19.70 | --- | 46.00 | 19.06 | 38.76 | -7.24 | Peak |
| 460.490 | 18.10 | --- | 46.00 | 19.23 | 37.33 | -8.67 | Peak |
| 472.610 | 19.30 | --- | 46.00 | 19.37 | 38.67 | -7.33 | Peak |
| 484.740 | 15.90 | --- | 46.00 | 19.51 | 35.41 | -10.59 | Peak |
| 496.870 | 18.40 | --- | 46.00 | 19.68 | 38.08 | -7.92 | Peak |
| 521.120 | 17.70 | --- | 46.00 | 20.05 | 37.75 | -8.25 | Peak |
| 545.320 | 15.90 | --- | 46.00 | 20.42 | 36.32 | -9.68 | Peak |
| 557.450 | 16.70 | --- | 46.00 | 20.59 | 37.29 | -8.71 | Peak |
| 581.680 | 17.60 | --- | 46.00 | 20.94 | 38.54 | -7.46 | Peak |
| 630.160 | 16.40 | --- | 46.00 | 21.93 | 38.33 | -7.67 | Peak |
| 666.530 | 14.70 | --- | 46.00 | 22.77 | 37.47 | -8.53 | Peak |
| 714.980 | 15.80 | --- | 46.00 | 23.71 | 39.51 | -6.49 | Peak |
| 739.210 | 13.60 | --- | 46.00 | 24.05 | 37.65 | -8.35 | Peak |
| 751.340 | 14.20 | --- | 46.00 | 24.18 | 38.38 | -7.62 | Peak |
| 824.060 | 14.70 | --- | 46.00 | 25.20 | 39.90 | -6.10 | Peak |

Remarks: 1. All Readings are Peak & Quasi-peak values.
2. Emission Lavel (dBuV/m) = Factor (dB/m) + Meter Reading (dBuV/m)
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

Tested by : C C.Wu