

FCC/MB/LLW

JAN 22 1999

FCC ID: A3KM082

Exhibit 5

Test Data of Original

FCC TEST REPORT

FCC ID : A3KM082
REPORT NO.: EMI98-043
TEST DATE : MAY/30/1998
TEST ENGI.: C.C.Wu

TEST PERFORMED BY
PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.
CONSUMER ELECTRONICS DIVISION (PEI-CED)
EMI-LAB
P.O.BOX 123
CHUNGLI, TAOYUAN, TAIWAN, R.O.C.
TEL: 886-3-4549862 FAX: 886-3-4549887

MANUFACTURER : PEI-CED

TESTED SYSTEM:

1. EUT : 151AX LCD COLOR MONITOR S/N.: --
FCC ID. : A3KM082
2. COMPUTER: IBM Aptiva 2176-T33 S/N.: 90-A58TZ
FCC ID. : AN02161V
3. PRINTER : HP 2225C S/N.: 3145S02419
FCC ID. : DSI6XU2225
4. MODEM : HAYES 07-00038 S/N.: A29900153966
FCC ID. : BFJ9D907-00038
5. MOUSE : IBM M-S34 S/N.: 23-146196
FCC ID. : DZL211029
6. KEYBOARD: IBM KB-9826 S/N.: K071940
FCC ID. : E8HKB-5323
7. VIDEO CARD : WINNER 3000L S/N.: 023004001190
FCC ID. : KJ6W3000L
8. CD_ROMD : SONY CDU31A S/N.: --
FCC ID. : K6ACDU31A2

NOTE: TEST WAS PERFORMED IN ACCORDANCE WITH FCC MEASUREMENT PROCEDURE
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''

MONITOR WAS CONNECTED TO FLOOR MOUNTED AC OUTLET.
60.0Kz MODE(1024X768/75Hz) WAS TESTED.
FLY-IN I/O CABLE WITH FOUR FERRITE CORES(TWO INSIDE) WAS USED
UNSHIELDED MAINS CORD WAS USED DURING TEST.
EXTRA EARPHONE AND MICPHONE WERE USED DURING TEST.
EXTRA 4 USB CABLES WERE CONNECTED TO DUMMY LOAD WAS USED.

THE TEST EQUIPMENT PLEASE REFER TO EQUIPMENT LIST AS ATTACHED.

DEVIATION: NONE

RADIATED RF LEVEL - PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
| 115.59 | 33.16 | 31.96 | 43.5 |
| 136 | 33.66 | 33.56 | 43.5 |

FCC ID : A3KM082
-- #043 CONT. --

| | | | |
|--------|--------|---------|------|
| 141.79 | 32.32 | 33.12 | 43.5 |
| 156.4 | 33.2 | 30.8 | 43.5 |
| 163.2 | 27.79 | 29.09 | 43.5 |
| 170 | 28.9 | 30.7 | 43.5 |
| 183.6 | 32.36 | 30.16 | 43.5 |
| 231.2 | 36.05 | 35.55 | 46 |
| 238 | 37.4 | 37.5 | 46 |
| 244.8 | 36.1 | 36.7 | 46 |
| 251.6 | 37.9 | 36.3 | 46 |
| 258.4 | 38 | 36.7 | 46 |
| 265.2 | 37.4 | 37.8 | 46 |
| 271.98 | 38.38 | 36.68 | 46 |
| 278.78 | 37.66 | AMBIENT | 46 |
| 285.58 | 39.8 | AMBIENT | 46 |
| 292.39 | 37.94 | 36.94 | 46 |
| 299.3 | 36.48 | 38.98 | 46 |
| 306 | 31.424 | 30.024 | 46 |
| 312.78 | 32.752 | 31.852 | 46 |
| 319.58 | 35.18 | 35.58 | 46 |
| 326.41 | 36.224 | 35.624 | 46 |
| 330.82 | 34.944 | 37.944 | 46 |
| 333.18 | 31.592 | 30.992 | 46 |
| 338.7 | 34.136 | 36.536 | 46 |
| 340 | 36.36 | 38.56 | 46 |
| 346.8 | 36.028 | 36.328 | 46 |
| 353.6 | 37.9 | 39.3 | 46 |
| 354.45 | 35.6 | 37.8 | 46 |
| 360.4 | 36.3 | 34.4 | 46 |
| 367.19 | 34 | 33 | 46 |
| 370.2 | 35.3 | 33.5 | 46 |
| 374 | 38.1 | 37.1 | 46 |
| 378.09 | 37.208 | 34.208 | 46 |
| 380.8 | 33.816 | 34.116 | 46 |
| 385.96 | 33.196 | 32.896 | 46 |
| 387.6 | 36.468 | 36.668 | 46 |
| 394.39 | 38.284 | 38.284 | 46 |
| 401.19 | 34.112 | 33.412 | 46 |
| 408 | 37.496 | 38.496 | 46 |
| 414.78 | 33.78 | 32.88 | 46 |
| 421.59 | 36.364 | 35.664 | 46 |
| 442 | 35.408 | 36.008 | 46 |
| 455.6 | 36.344 | 35.544 | 46 |
| 462.4 | 37.688 | 38.588 | 46 |
| 476 | 38.832 | 39.632 | 46 |
| 535.62 | 34.844 | 35.444 | 46 |
| 551.37 | 37.424 | 36.024 | 46 |
| 567.11 | 35.808 | 36.108 | 46 |

ABOVE READINGS ARE PEAK READINGS WITH CABLE AND ANTENNA FACTORS INCLUDED.
SPECTRUM ANALYZER SETTINGS:

RBW : 100KHz

VBW : 100KHz

FCC ID : A3KM082

-- #043 CONT. --

QUASI-PEAK READINGS ARE TAKEN WITH ROHDE & SCHWARZ EMI TEST RECEIVER
20 - 1000MHz ESVG 30 :

RADIATED RF LEVEL - QUASI-PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
| 71.61 | 25.66 | 36.86 | 40 |
| 122.39 | 35.46 | 33.26 | 43.5 |
| 129.19 | 33.37 | 33.17 | 43.5 |
| 133.92 | 30.64 | 34.54 | 43.5 |
| 142.8 | 35.03 | 33.13 | 43.5 |
| 149.6 | 35 | 32.3 | 43.5 |
| 197.2 | 31.97 | 30.27 | 43.5 |
| 210.8 | 33.48 | 30.38 | 43.5 |
| 217.6 | 35.14 | 30.44 | 46 |
| 224.4 | 37.98 | 33.48 | 46 |
| 428.4 | 37.872 | 39.572 | 46 |
| 472.6 | 39.552 | 38.152 | 46 |
| 590.75 | 39.692 | 36.292 | 46 |
| 598.38 | 40.676 | 40.176 | 46 |
| 630.13 | 39.6 | 39.8 | 46 |

THE SPECTRUM WAS SCANNED FROM 30 TO 1000 MHz AND THE SIGNIFICANT EMISSIONS
ARE RECORDED.

TEST DISTANCE BETWEEN DEVICE UNDER TEST AND RECEIVING ANTENNA WAS 3-METER.

SAMPLE CALCULATION :

FINAL VALUE (dBuv/m) = ANTENNA FACTOR (dB) + CABLE (dB) + READING (dBuv/m)

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN
APPROVAL OF THE LABORATORY

THIS REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT
BY NULAP OR ANY AGENCY OF THE U.S. GOVERNMENT

THE TEST RESULT WAS PASS FCC CLASS B LIMIT.

CHECKED BY:

K.J. Hsu

K.J.HSU, NULAP SIGNATORY

TESTED BY:

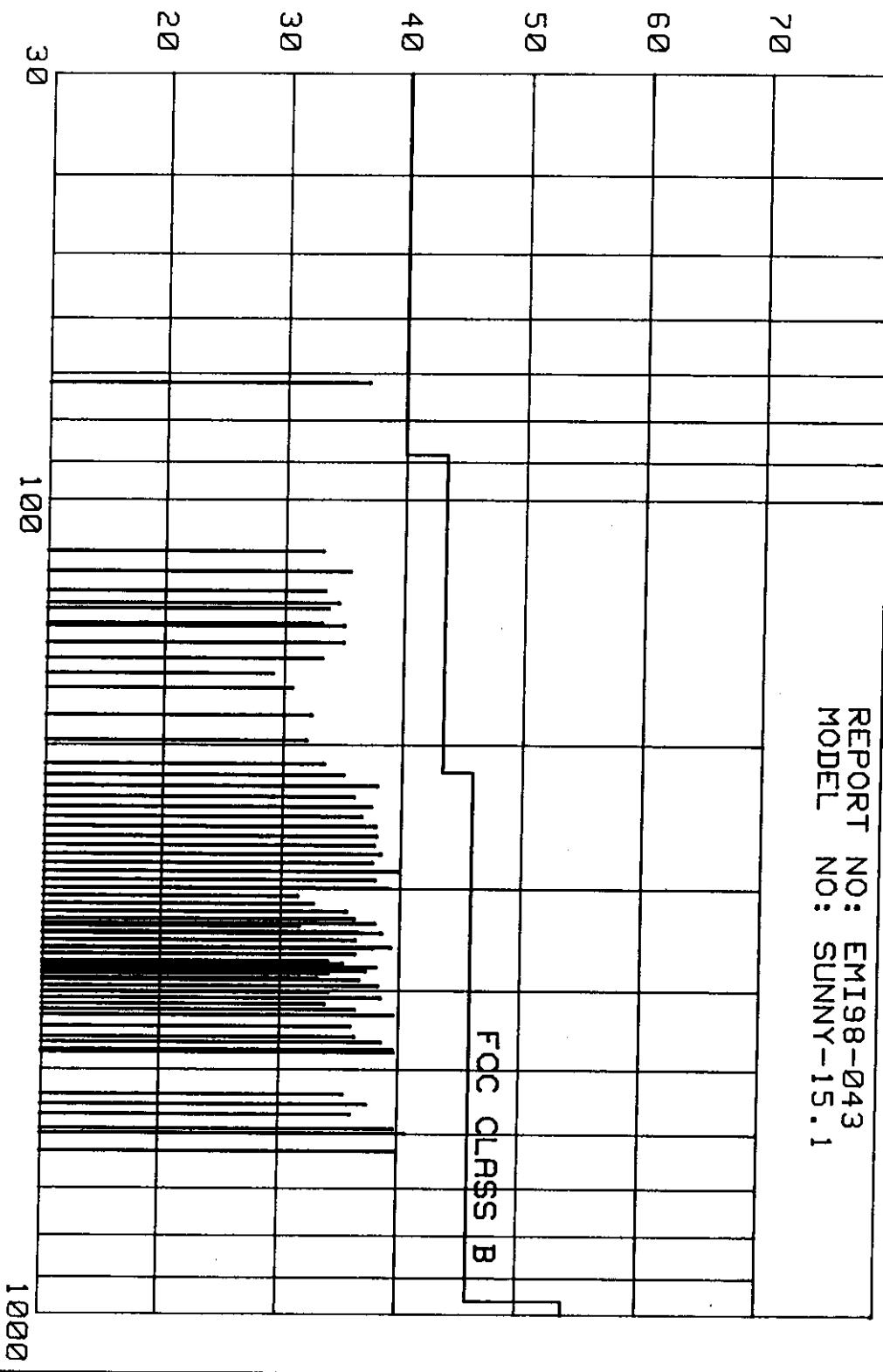
C.C.Wu

C.C.Wu

RFI EMISSION LEVEL dB_{UV}/m

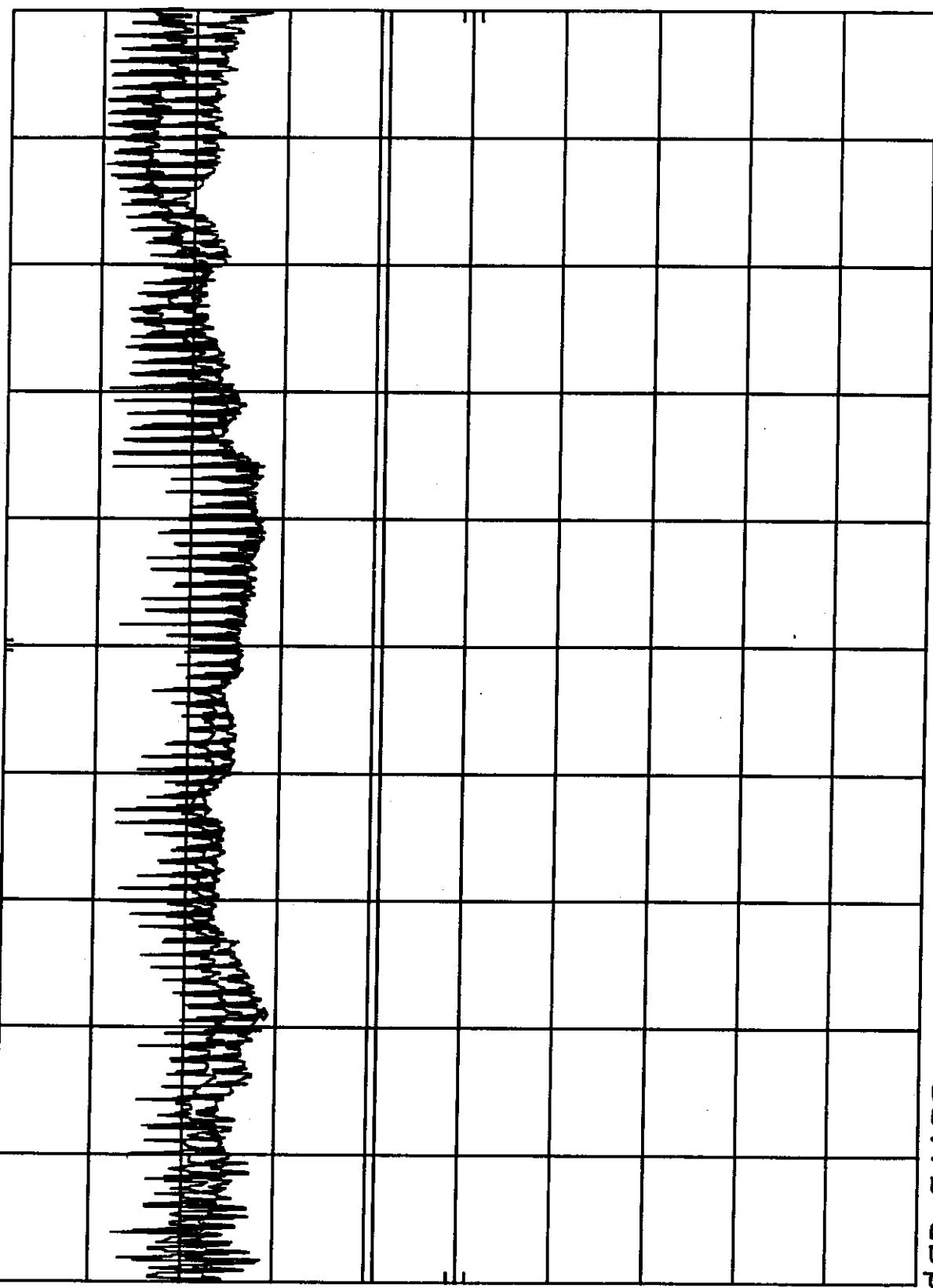
MAY/30/1998

REPORT NO: EMI98-043
MODEL NO: SUNNY-15.1



АЗКМ082 RUN 1024X768/75Hz 60kHz MODE 110V
REF 107.0 dB μ V ATTEN 10 dB
10 dB/
MKA 23.76 MHz 35.70 dB μ V

DL
48.0
dB μ V

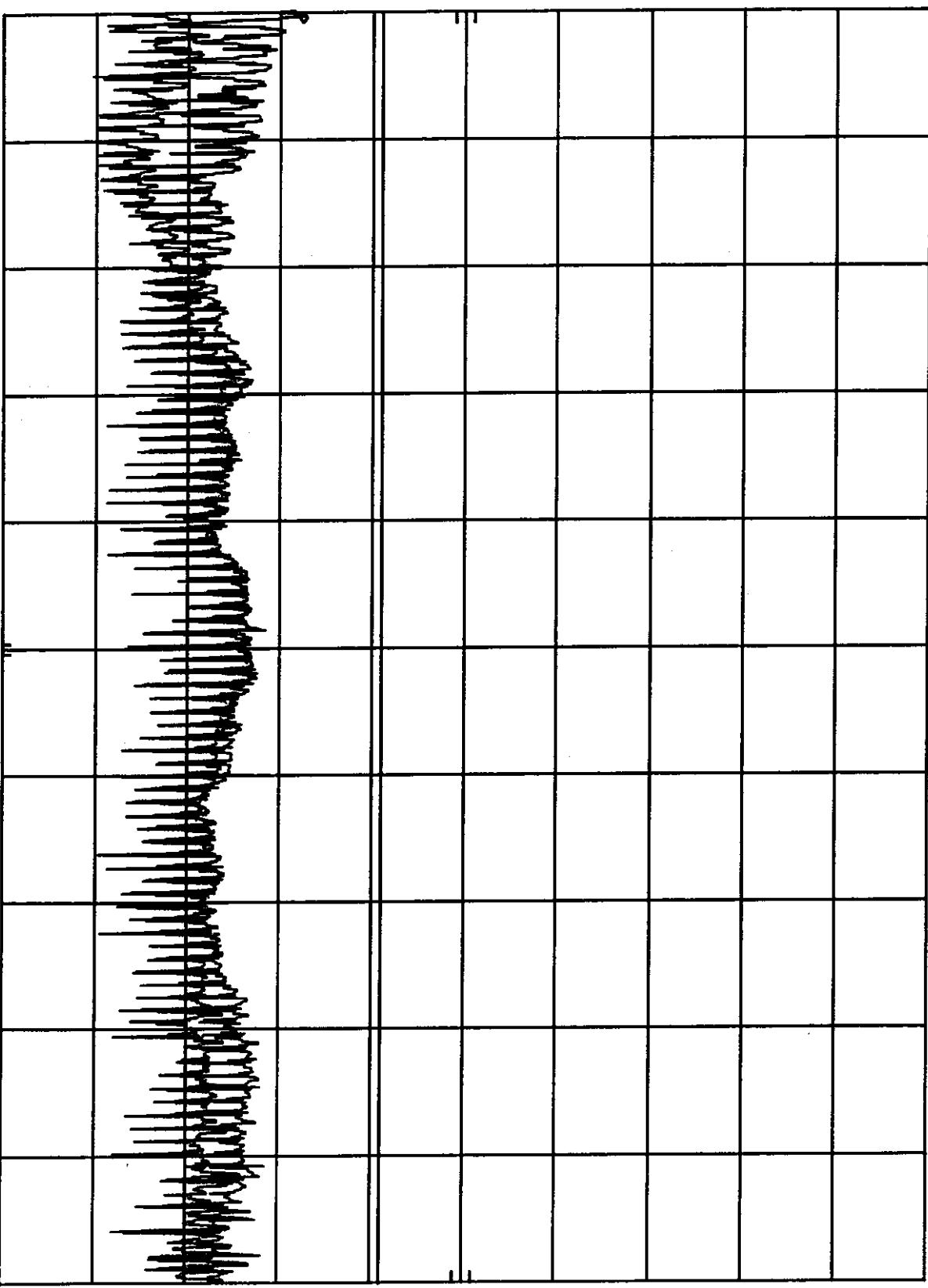


START 450 kHz
RES BW 10 kHz
VBW 10 kHz

STOP 30.00 MHz
SWP 750 msec

A3KM082 RUN 1024X768/75Hz 60kHz MODE AC220V
REF 107.0 dB μ V ATTEN 10 dB
10 dB/ μ V

DL
48.0
dB μ V



START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec

FCC TEST REPORT

FCC ID : A3KM082
REPORT NO.: EMI98-043A
TEST DATE : JUN/01/1998
TEST ENGI.: C.C.Wu

TEST PERFORMED BY
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FCC ID. : AN02161V
3. PRINTER : HP 2225C S/N.: 3145S02419
FCC ID. : DSI6XU2225
4. MODEM : HAYES 07-00038 S/N.: A29900153966
FCC ID. : BFJ9D907-00038
5. MOUSE : IBM M-S34 S/N.: 23-146196
FCC ID. : DZL211029
6. KEYBOARD: IBM KB-9826 S/N.: K071940
FCC ID. : E8HKB-5323
7. VIDEO CARD : WINNER 3000L S/N.: 023004001190
FCC ID. : KJ6W3000L
8. CD_ROMD : SONY CDU31A S/N.: --
FCC ID. : KGACDU31A2

NOTE: TEST WAS PERFORMED IN ACCORDANCE WITH FCC MEASUREMENT PROCEDURE
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"

MONITOR WAS CONNECTED TO FLOOR MOUNTED AC OUTLET.

48.3Kz MODE(1024X768/60Hz) WAS TESTED.

FLY-IN I/O CABLE WITH FOUR FERRITE CORES(TWO INSIDE) WAS USED
UNSHIELDED MAINS CORD WAS USED DURING TEST.

EXTRA EARPHONE AND MICPHONE WERE USED DURING TEST.

EXTRA 4 USB CABLES WERE CONNECTED TO DUMMY LOAD WAS USED.

THE TEST EQUIPMENT PLEASE REFER TO EQUIPMENT LIST AS ATTACHED.

DEVIATION: NONE

RADIATED RF LEVEL - PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
|--------------------|------------------------|----------------------|-------------------------------|

| | | | |
|-------|-------|-------|------|
| 110.2 | 29.3 | 33.5 | 43.5 |
| 121.2 | 72.26 | 71.76 | 47.5 |

FCC ID : A3KM082
-- #043A CONT. --

| | | | |
|--------|--------|---------|------|
| 156.72 | 31.45 | 30.25 | 43.5 |
| 170 | 29.6 | 30.9 | 43.5 |
| 197.35 | 33.87 | AMBIENT | 43.5 |
| 231.34 | 36.25 | 35.65 | 46 |
| 237.96 | 37.7 | 36.9 | 46 |
| 265.29 | 36.7 | 37.7 | 46 |
| 271.96 | 39.08 | 36.98 | 46 |
| 292.67 | 38.66 | 36.66 | 46 |
| 303.85 | 31.616 | 36.816 | 46 |
| 310.15 | 33.24 | 36.74 | 46 |
| 319.24 | 32.076 | 36.376 | 46 |
| 325.91 | 33.524 | 29.324 | 46 |
| 335.35 | 34.84 | 38.74 | 46 |
| 339.87 | 35.66 | 39.96 | 46 |
| 346.56 | 35.028 | 37.728 | 46 |
| 353.26 | 37.1 | 30.5 | 46 |
| 360.72 | 37.9 | 36.7 | 46 |
| 367.29 | 32.9 | 35 | 46 |
| 373.85 | 36.2 | 38.3 | 46 |
| 408 | 37.396 | 28.696 | 46 |
| 421.26 | 34.252 | 36.852 | 46 |
| 428.71 | 36.196 | 38.796 | 46 |
| 441.99 | 34.108 | 38.508 | 46 |
| 455.14 | 34.42 | 39.02 | 46 |
| 462.56 | 30.412 | 36.212 | 46 |
| 476.01 | 35.652 | 37.032 | 46 |

ABOVE READINGS ARE PEAK READINGS WITH CABLE AND ANTENNA FACTORS INCLUDED.
SPECTRUM ANALYZER SETTINGS:

RBW : 100KHz

VBW : 100KHz

QUASI-PEAK READINGS ARE TAKEN WITH ROHDE & SCHWARZ EMI TEST RECEIVER
20 - 1000MHz ESVG 30 :

RADIATED RF LEVEL - QUASI-PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
| 71.33 | 26.18 | 37.28 | 40 |
| 115.28 | 33.1 | 30.6 | 43.5 |
| 116.5 | 32.52 | 36.32 | 43.5 |
| 122.72 | 33.89 | 35.29 | 43.5 |
| 135.95 | 28.56 | 31.96 | 43.5 |
| 149.27 | 33.69 | 33.49 | 43.5 |
| 183.26 | 32.07 | 27.67 | 43.5 |
| 210.63 | 33.28 | 31.28 | 43.5 |
| 218.07 | 32.44 | 32.04 | 46 |
| 223.85 | 34.08 | AMBIENT | 46 |
| 224.71 | AMBIENT | 38.4 | 46 |
| 251.27 | 38.05 | 33.35 | 46 |
| 258.72 | 41.25 | 35.75 | 46 |
| 340 | 32.86 | 37.86 | 46 |
| 387.27 | 33.532 | 38.532 | 46 |
| 394.72 | 36.62 | 39.12 | 46 |
| 580.95 | 34.272 | 38.672 | 46 |

FCC ID : A3KM082

-- #043A CONT. --

THE SPECTRUM WAS SCANNED FROM 30 TO 1000 MHz AND THE SIGNIFICANT EMISSIONS
ARE RECORDED.

TEST DISTANCE BETWEEN DEVICE UNDER TEST AND RECEIVING ANTENNA WAS 3-METER.

SAMPLE CALCULATION :

FINAL VALUE (dB_{uv/m}) = ANTENNA FACTOR (dB) + CABLE (dB) + READING (dB_{uv/m})

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THIS REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT
BY NULAP OR ANY AGENCY OF THE U.S. GOVERNMENT

THE TEST RESULT WAS PASS FCC CLASS B LIMIT.

CHECKED BY:

K. J. Hs

K.J.HSU, NULAP SIGNATORY

TESTED BY:

C.C.Wu

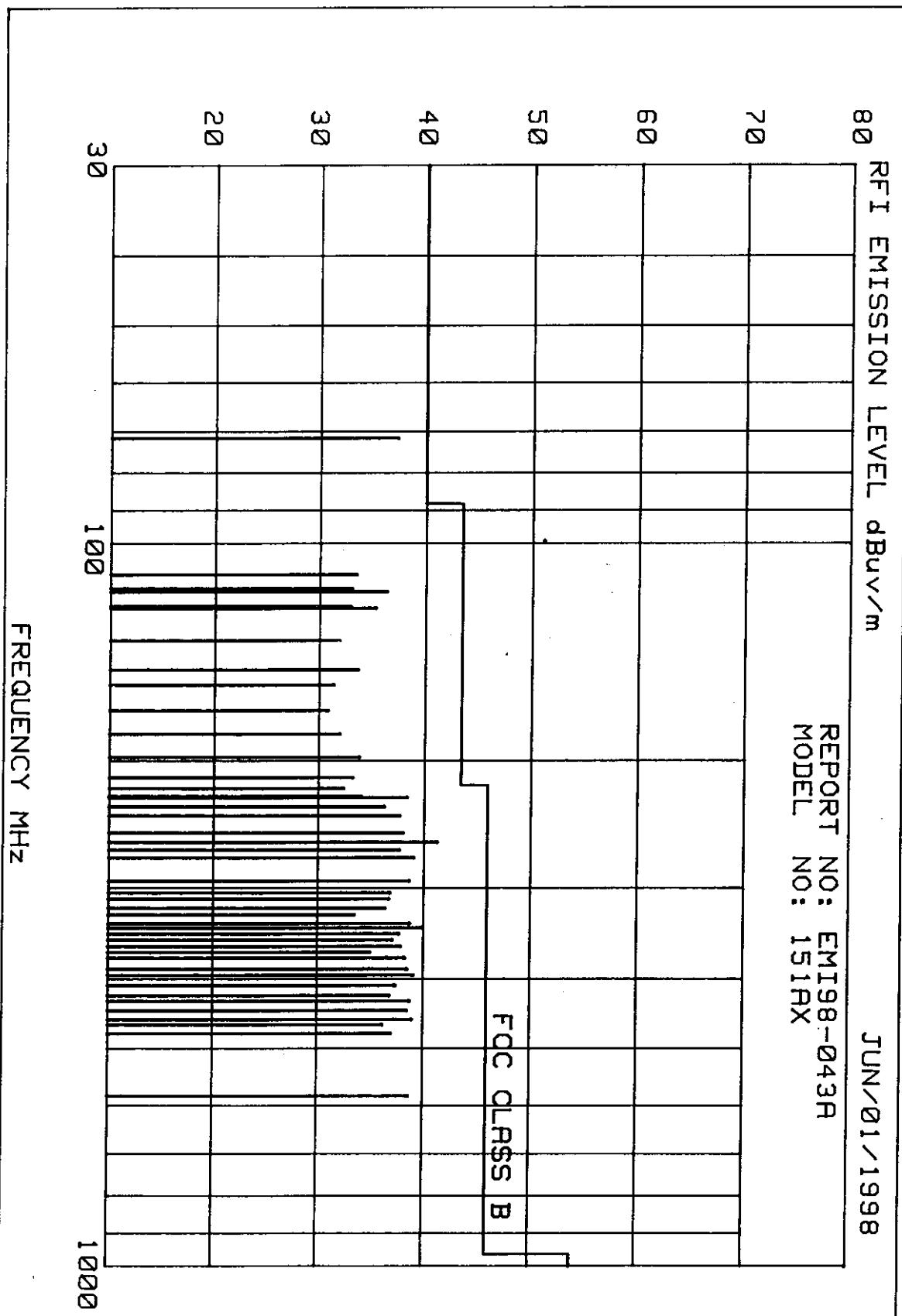
C.C.Wu

-- 3 --

RFI EMISSION LEVEL dB_{uv}/m

JUN/01/1998

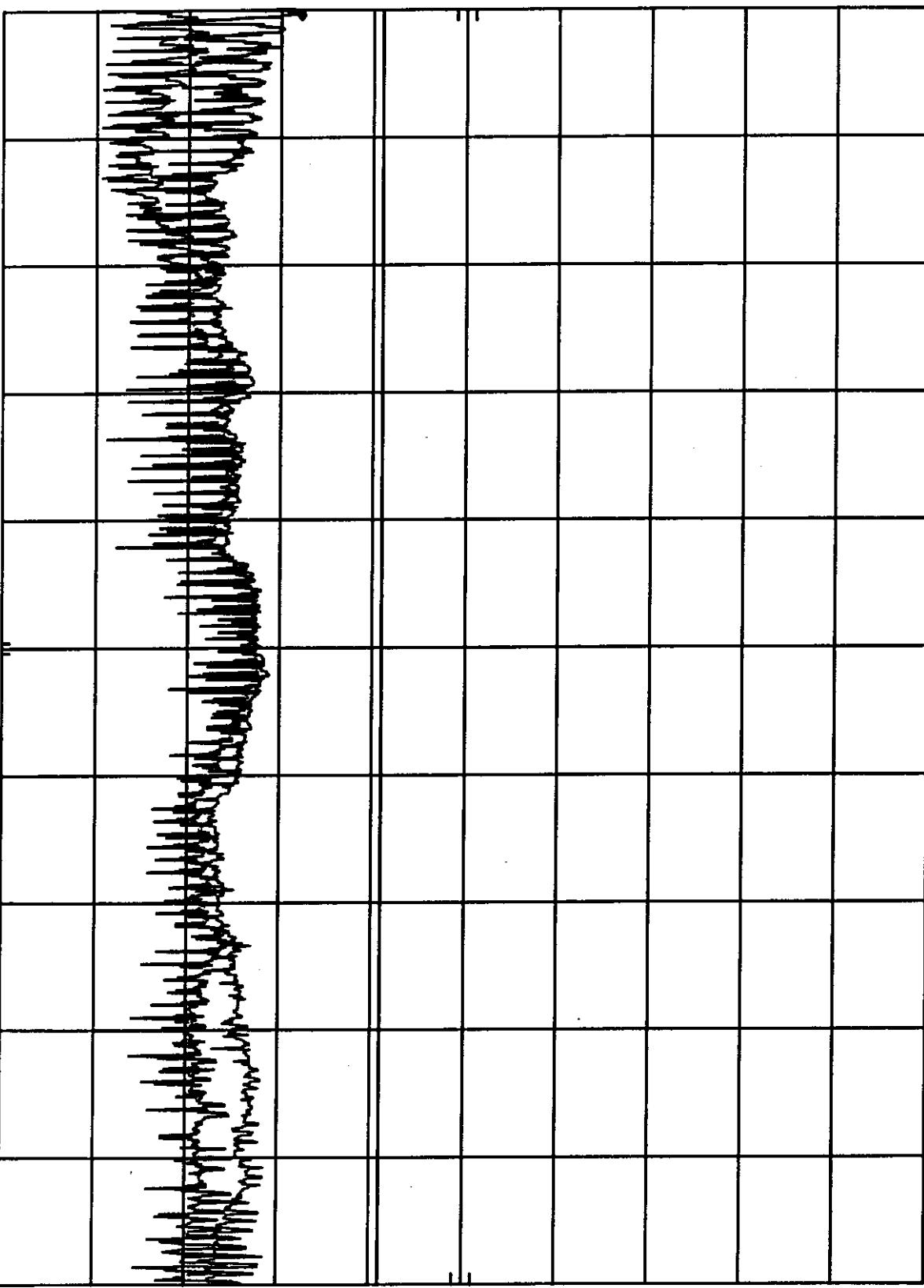
REPORT NO: EMI98-043A
MODEL NO: 151AX



АЭКМ082 RUN 1024X768/60Hz 48.ЭКHz MODE AC220V MKA 510 kHz
REF 107.0 dB μ V ATTEN 10 dB 39.20 dB μ V

10 dB/

DL
48.0
dB μ V



START 450 kHz
RES BW 10 kHz

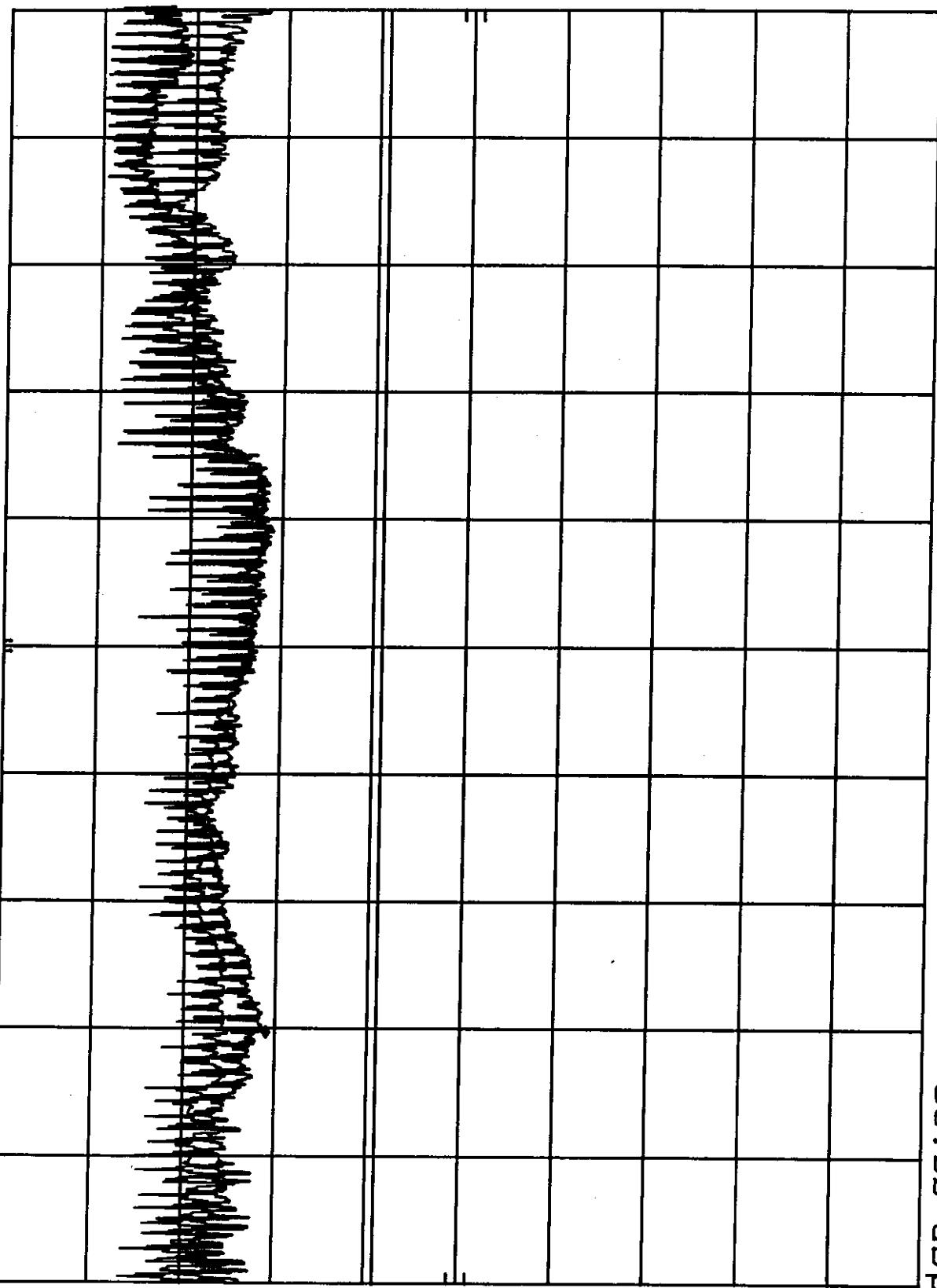
VBW 10 kHz

STOP 30.00 MHz
SWP 750 msec

АЗКМ082 RUN 1024X768/60Hz 48.3kHz MODE AC110V MKR 24.15 MHz
REF 107.0 dB μ V ATTEN 10 dB
36.00 dB μ V

10 dB/

DL
48.0
dB μ V



0

START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec

FCC/MELLON

JAN 22 1999

FCC ID: A3KM082

Exhibit 6

**Statement of Data Measured
and
Test Data of Modified**

STATEMENT OF DATA MEASURED

1. General Information of EUT

The EUT, 15.1" LCD color monitor :

Model No. : 15L5082Q
 FCC ID : A3KM082
 Brand : PHILIPS

The LCD monitor automatically scans horizontal frequencies between 30KHz and 61KHz, and vertical frequencies between 50Hz and 75Hz. This color monitor displays sharp and brilliant images of text and graphics with a maximum resolution up to 1024X768 pixels. .

The monitor has 14 factory-preset modes as indicated in the following table:

| | Resolution | H-Frequency | V-Frequency | Remark |
|-----|------------|-------------|-------------|----------------|
| M01 | 640 X 350 | 31.5KHz | 70Hz | Non-interlaced |
| M02 | 720 X 400 | 31.5KHz | 70Hz | Non-interlaced |
| M03 | 640 X 480 | 31.5KHZ | 60Hz | Non-interlaced |
| M04 | 640 X 480 | 35.0KHz | 67Hz | Non-interlaced |
| M05 | 640 X 480 | 37.9KHz | 73Hz | Non-interlaced |
| M06 | 640 X 480 | 37.5KHz | 75Hz | Non-interlaced |
| M07 | 800 X 600 | 35.2KHz | 56Hz | Non-interlaced |
| M08 | 800 X 600 | 37.9KHz | 60Hz | Non-interlaced |
| M09 | 800 X 600 | 48.1KHz | 72Hz | Non-interlaced |
| M10 | 800 X 600 | 46.9KHz | 75Hz | Non-interlaced |
| M11 | 832 X 624 | 49.7KHz | 75Hz | Non-interlaced |
| M12 | 1024 X 768 | 48.3KHz | 60Hz | Non-interlaced |
| M13 | 1024 X 768 | 56.5KHz | 70Hz | Non-interlaced |
| M14 | 1024 X 768 | 60.0KHz | 75Hz | Non-interlaced |

2. Test Equipment and Procedure

Test was performed by:

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

5, Tze Chiang 1 Road, Chungli Industrial Park
 P.O. Box 123, Chungli, Taoyuan, Taiwan
 R. O. C.

Tel : 886-3-4549862 Fax : 886-3-4549887
 Internet: ronnie.yang@tw.ccmail.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"

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 | 2403A06961 | 7/21/1998 |
| RF Preselector | HP85685A | 2901A00964 | 7/21/1998 |
| QP Adapter | HP85650A | 2043A00366 | 7/21/1998 |
| EMI Receiver | HP85460A | 3441A00199 | 8/27/1998 |
| RFI Filter Section | HP85460A | 3330A00177 | 8/27/1998 |
| EMI Receiver | R & S ESVS30 | 8419977/066 | 8/21/1998 |
| Biconical Antenna | EMCO 3110B | 2863 | 3/10/1998 |
| Biconical Antenna | EMCO 3110B | 2864 | 3/10/1998 |
| Log-Periodic Antenna | EMCO 3146A | 1377 | 3/10/1998 |
| Log-Periodic Antenna | EMCO 3146A | 1378 | 3/10/1998 |
| LISN | EMCO 3825/2 | 9311-2153 | 3/23/1998 |
| LISN | EMCO 3825/2 | 9311-2154 | 3/23/1998 |
| Turn Table | EMCO 1060 | 1068 | 4/16/1998 |
| Antenna Tower | EMCO 1050 | 1113 | 4/16/1998 |
| RF Cable | M17/75-RG214-NE | N/A | 4/16/1998 |
| 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 "15L5082Q" was connected to:

| Item | Model No. | Serial No. | FCC ID |
|--------------|-----------------|------------------|---------------|
| 1. Computer | HP D5052N | FR80627957 | B94VECTRAV6MT |
| 2. Keyboard | HP C4735-60101 | J7319E0092 | FCC Logo |
| 3. Mouse | IBM M-S34 | 23-146196 | DZL211029 |
| 4. Printer | HP 2225C | 3123S97227 | DSI6XU2225 |
| 5. Modem | USRobotics 268 | 0002680559278575 | CJE-0318 |
| 6. Vide Card | METABYTE GIA-3D | 10105 | I27MM-VS03A |
| 7. CD-ROM | Sony CDU31A | -- | KGACDU31A2 |

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 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.

Tested and reported modes as following:

| Report No. | Resolution | Frequencies |
|------------|------------|--------------|
| EMC99-001 | 1024 X 768 | 60.0KHz/75Hz |
| EMC99-001A | 1024 X 768 | 48.3KHz/60Hz |

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" pattern 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 (dB μ v/m) = Reading (dB μ v) + Antenna Factor (dB) + Cable Loss (dB)

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

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



FCC TEST REPORT

FCC ID : A3KM082
REPORT NO.: EMI98-001
TEST DATE : JAN/01/1999
TEST ENGI.: C.C.Wu

TEST PERFORMED BY
PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.
CONSUMER ELECTRONICS DIVISION (PEI-CED)
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P.O.BOX 123
CHUNGLI, TAOYUAN, TAIWAN, R.O.C.
TEL: 886-3-4549862 FAX: 886-3-4549887

MANUFACTURER : PHILIPS

TESTED SYSTEM:

1. EUT : 15L5082Q LCD COLOR MONITOR S/N.: TY9802207
FCC ID. : A3KM082
2. COMPUTER: HP D5052N S/N.: FR80627957
FCC ID. : B94VECTRAV6MT
3. PRINTER : HP 2225C S/N.: 3145S02419
FCC ID. : DSI6XU2225
4. MODEM : USRobotics 268 S/N.: 0002680559278575
FCC ID. : CJE-0318
5. MOUSE : IBM M-S34 S/N.: 23-146196
FCC ID. : DZL211029
6. KEYBOARD: HP C4735-60101 S/N.: J7319E0092
FCC ID. : FCC LOGO
7. VIDEO CARD : METABYTE GIA-3D S/N.: 10105
FCC ID. : I27MM-VS03A
8. CD_ROMD : SONY CDU31A S/N.: --
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MONITOR WAS CONNECTED TO FLOOR MOUNTED AC OUTLET.
48.3Kz MODE(1024X768/60Hz) WAS TESTED.
FLY-IN I/O CABLE WITH TWO FERRITE CORES(ONE INSIDE) WAS USED
UNSHIELDED MAINS CORD WAS USED DURING TEST.
EXTRA EARPHONE AND MICPHONE WERE USED DURING TEST.
EXTRA 4 USB CABLES WERE CONNECTED TO DUMMY LOAD WAS USED.

THE TEST EQUIPMENT PLEASE REFER TO EQUIPMENT LIST AS ATTACHED.

DEVIATION: NONE

RADIATED RF LEVEL - PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
|--------------------|------------------------|----------------------|-------------------------------|

| | | | |
|-------|-------|-------|----|
| 47.55 | 26.82 | 31.92 | 40 |
|-------|-------|-------|----|

FCC ID : A3KM082
 -- #001 CONT. --

| | | | |
|--------|--------|---------|------|
| 122.44 | 29.26 | 30.76 | 43.5 |
| 129.22 | 39.27 | 31.77 | 43.5 |
| 149.56 | 31.2 | 29.4 | 43.5 |
| 156.43 | 30.7 | 28.8 | 43.5 |
| 163.2 | 30.69 | 32.19 | 43.5 |
| 183.56 | 32.46 | 31.06 | 43.5 |
| 197.2 | 32.37 | 31.17 | 43.5 |
| 210.78 | 33.28 | 32.28 | 43.5 |
| 231.22 | 34.45 | 32.65 | 46 |
| 244.78 | 36 | 34 | 46 |
| 251.54 | 34.5 | 34.3 | 46 |
| 258.42 | 38.9 | 36.8 | 46 |
| 265.22 | 37.7 | 34.7 | 46 |
| 292.42 | 38.34 | 35.74 | 46 |
| 299.22 | 37.28 | 35.38 | 46 |
| 306 | 38.024 | 33.224 | 46 |
| 312.8 | 36.452 | 37.352 | 46 |
| 319.58 | 32.58 | 32.08 | 46 |
| 326.42 | 32.124 | 32.824 | 46 |
| 333.2 | 31.392 | 31.392 | 46 |
| 353.56 | 31.3 | 32 | 46 |
| 360.89 | 31.8 | 35 | 46 |
| 374 | 34.6 | 39.8 | 46 |
| 380.78 | 32.116 | AMBIENT | 46 |
| 387.57 | 31.668 | 32.568 | 46 |
| 394.43 | 32.784 | 34.384 | 46 |
| 408 | 33.596 | 33.696 | 46 |
| 421.04 | 38.252 | 38.352 | 46 |
| 442 | 35.908 | 37.408 | 46 |
| 462.44 | 33.388 | 34.888 | 46 |
| 476 | 35.532 | 36.732 | 46 |
| 498.58 | 34.268 | 34.968 | 46 |
| 516.79 | 34.236 | 33.636 | 46 |
| 530.43 | 34.22 | 34.02 | 46 |
| 544 | 39.676 | 38.976 | 46 |
| 578 | 38.236 | 38.936 | 46 |
| 598.43 | 35.576 | 35.376 | 46 |
| 666.43 | 39.388 | 38.588 | 46 |
| 686.79 | 39.588 | 38.688 | 46 |

ABOVE READINGS ARE PEAK READINGS WITH CABLE AND ANTENNA FACTORS INCLUDED.
 SPECTRUM ANALYZER SETTINGS:

RBW : 100KHz

VBW : 100KHz

QUASI-PEAK READINGS ARE TAKEN WITH ROHDE & SCHWARZ EMI TEST RECEIVER
 20 - 1000MHz ESVS 30 :

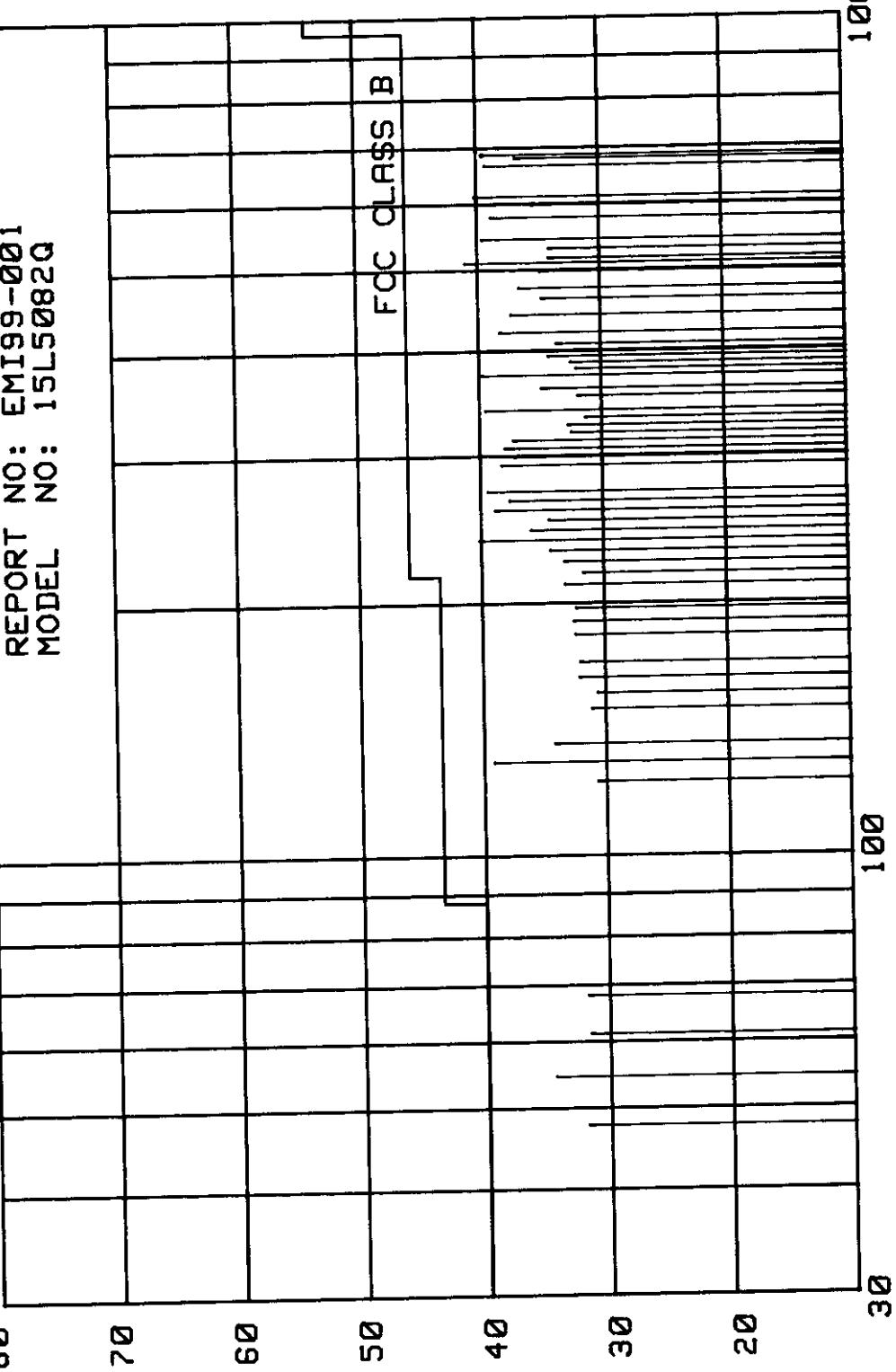
RADIATED RF LEVEL - QUASI-PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
| 54.42 | 28.34 | 34.54 | 40 |
| 67.98 | 27.94 | 31.84 | 40 |
| 136 | 31.26 | 34.26 | 43.5 |
| 170 | 32.1 | 31.9 | 43.5 |
| 190.43 | 32.6 | 29.6 | 43.5 |

JAN/01/1999

REPORT NO: EMI99-001
MODEL NO: 15L50820

RFI EMISSION LEVEL dBuv/m



FREQUENCY MHz

1000
100
30

MKR 570 kHz
36.40 dB μ V

A3KM082 RUN 1024X768/75Hz 60kHz MODE AC110V
REF 107.0 dB μ V ATTEN 10 dB

μ V

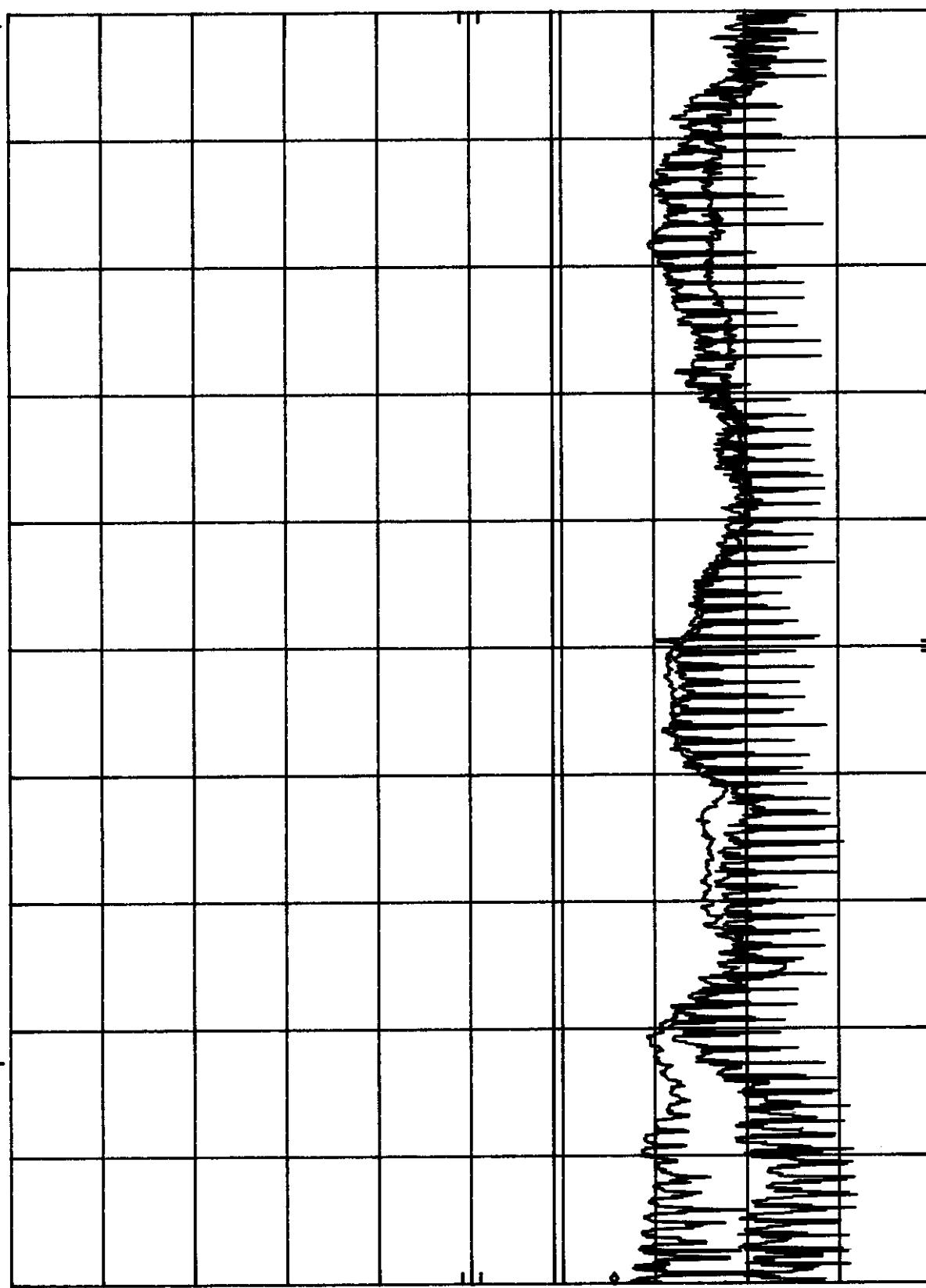
10 dB/

DL 48.0
dB μ V

STOP 30.00 MHz
SWP 750 msec

START 450 kHz
RES BW 10 kHz VBW 10 kHz

A3KM082 RUN 1024X768/75Hz 60kHz MODE AC220V
REF 107.0 dB μ V ATTEN 10 dB
10 dB/
hP



DL
48.0
dB μ V

START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec

FCC TEST REPORT

FCC ID : A3KM082
REPORT NO.: EMI99-001A
TEST DATE : JAN/02/1999
TEST ENGI.: C.C.Wu

TEST PERFORMED BY
PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.
CONSUMER ELECTRONICS DIVISION (PEI-CED)
EMI-LAB
P.O.BOX 123
CHUNGLI, TAOYUAN, TAIWAN, R.O.C.
TEL: 886-3-4549862 FAX: 886-3-4549887

MANUFACTURER : PHILIPS

TESTED SYSTEM:

1. EUT : 15L5082Q LCD COLOR MONITOR S/N.: TY9802207
FCC ID. : A3KM082
2. COMPUTER: HP D5052N S/N.: FR80627957
FCC ID. : B94VECTRAV6MT
3. PRINTER : HP 2225C S/N.: 3145S02419
FCC ID. : DSI6XU2225
4. MODEM : USRobotics 268 S/N.: 0002680559278575
FCC ID. : CJE-0318
5. MOUSE : IBM M-534 S/N.: 23-146196
FCC ID. : DZL211029
6. KEYBOARD: HP C4735-60101 S/N.: J7319E0092
FCC ID. : FCC LOGO
7. VIDEO CARD : METABYTE GIA-3D S/N.: 10105
FCC ID. : I27MM-VS03A
8. CD_ROMD : SONY CDU31A S/N.: --
FCC ID. : KGACDU31A2

NOTE: TEST WAS PERFORMED IN ACCORDANCE WITH FCC MEASUREMENT PROCEDURE
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"

MONITOR WAS CONNECTED TO FLOOR MOUNTED AC OUTLET.
48.3Kz MODE(1024X768/60Hz) WAS TESTED.
FLY-IN I/O CABLE WITH TWO FERRITE CORES(ONE INSIDE) WAS USED
UNSHIELDED MAINS CORD WAS USED DURING TEST.
EXTRA EARPHONE AND MICPHONE WERE USED DURING TEST.
EXTRA 4 USB CABLES WERE CONNECTED TO DUMMY LOAD WAS USED.

THE TEST EQUIPMENT PLEASE REFER TO EQUIPMENT LIST AS ATTACHED.

DEVIATION: NONE

RADIATED RF LEVEL - PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dBuv/m) | VERTICAL (dBuv/m) | FCC CLASS B LIMIT (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------------|
|--------------------|------------------------|----------------------|-------------------------------|

| | | | |
|-------|-------|-------|----|
| 47.68 | 26.52 | 29.92 | 40 |
| 61.14 | 31.23 | 32.33 | 40 |

FCC ID : A3KM082
-- #001A CONT. --

| | | | |
|--------|--------|---------|------|
| 72.18 | 32.46 | 31.16 | 40 |
| 115.65 | 27.26 | 30.46 | 43.5 |
| 122.32 | 29.16 | 29.76 | 43.5 |
| 129.16 | 30.57 | 31.37 | 43.5 |
| 156.32 | 31.6 | 29.1 | 43.5 |
| 163.15 | 29.49 | 31.19 | 43.5 |
| 183.67 | 32.16 | 31.06 | 43.5 |
| 197.15 | 32.97 | 31.07 | 43.5 |
| 210.83 | 33.28 | 32.28 | 43.5 |
| 231.14 | 35.65 | 33.05 | 46 |
| 244.84 | 35.7 | 33.5 | 46 |
| 251.68 | 35.3 | 34.1 | 46 |
| 258.32 | 39.4 | 36 | 46 |
| 265.15 | 38.4 | 35.3 | 46 |
| 278.83 | 36.66 | AMBIENT | 46 |
| 292.31 | 38.44 | 36.34 | 46 |
| 299.15 | 36.48 | 36.18 | 46 |
| 306 | 36.524 | 37.124 | 46 |
| 319.68 | 32.18 | 30.58 | 46 |
| 326.31 | 31.024 | 31.424 | 46 |
| 333.15 | 31.492 | 31.492 | 46 |
| 353.68 | 31.4 | 32.2 | 46 |
| 360.32 | 32.2 | 33 | 46 |
| 367.16 | 30.9 | 30.8 | 46 |
| 374 | 35.3 | 39.7 | 46 |
| 380.33 | 34.28 | 33.28 | 46 |
| 394.31 | 32.784 | 33.384 | 46 |
| 408 | 34.596 | 33.896 | 46 |
| 442 | 35.508 | 38.408 | 46 |
| 462.3 | 32.988 | 33.888 | 46 |
| 475.98 | 35.432 | 35.532 | 46 |
| 516.83 | 33.836 | 34.036 | 46 |
| 523.67 | 33.392 | 33.692 | 46 |
| 530.32 | 34.32 | 33.92 | 46 |
| 544 | 38.176 | 38.276 | 46 |
| 578 | 39.236 | 38.436 | 46 |
| 639.47 | 37.76 | 38.26 | 46 |
| 666.83 | 38.956 | 38.356 | 46 |
| 686.84 | 38.388 | 38.488 | 46 |

ABOVE READINGS ARE PEAK READINGS WITH CABLE AND ANTENNA FACTORS INCLUDED.
SPECTRUM ANALYZER SETTINGS:

RBW : 100KHz

VBW : 100KHz

QUASI-PEAK READINGS ARE TAKEN WITH ROHDE & SCHWARZ EMI TEST RECEIVER
20 - 1000MHz ESVG 30 :

RADIATED RF LEVEL - QUASI-PEAK VALUE

| FREQUENCY (MHz) | HORIZONTAL (dB _{uv} /m) | VERTICAL (dB _{uv} /m) | FCC CLASS B LIMIT (dB _{uv} /m) |
|--------------------|-------------------------------------|-----------------------------------|--|
| 54.3 | 27.24 | 34.34 | 40 |
| 68 | 28.94 | 32.14 | 40 |
| 136 | 32.96 | 35.26 | 43.5 |
| 170 | 31.8 | 32.7 | 43.5 |
| 190.3 | 33.7 | 30.4 | 43.5 |

FCC ID : A3KM082
-- #001A CONT. --

| | | | |
|--------|--------|--------|----|
| 217.67 | 31.54 | 30.24 | 46 |
| 224.3 | 33.08 | 30.68 | 46 |
| 238 | 40.3 | 37.2 | 46 |
| 272 | 39.28 | 35.38 | 46 |
| 393.52 | 42.984 | 40.484 | 46 |
| 442.72 | 36.732 | 37.932 | 46 |
| 510 | 40.08 | 41.18 | 46 |
| 612 | 39.784 | 38.284 | 46 |
| 680 | 36.42 | 36.92 | 46 |

THE SPECTRUM WAS SCANNED FROM 30 TO 1000 MHz AND THE SIGNIFICANT EMISSIONS
ARE RECORDED.

TEST DISTANCE BETWEEN DEVICE UNDER TEST AND RECEIVING ANTENNA WAS 3-METER.

SAMPLE CALCULATION :

FINAL VALUE (dB_{uv/m}) = ANTENNA FACTOR (dB) + CABLE (dB) + READING (dB_{uv/m})

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN
APPROVAL OF THE LABORATORY

THIS REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT
BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT

THE TEST RESULT WAS PASS FCC CLASS B LIMIT.

CHECKED BY:

K.J.Hs

K.J.HSU, NVLAP SIGNATORY

TESTED BY:

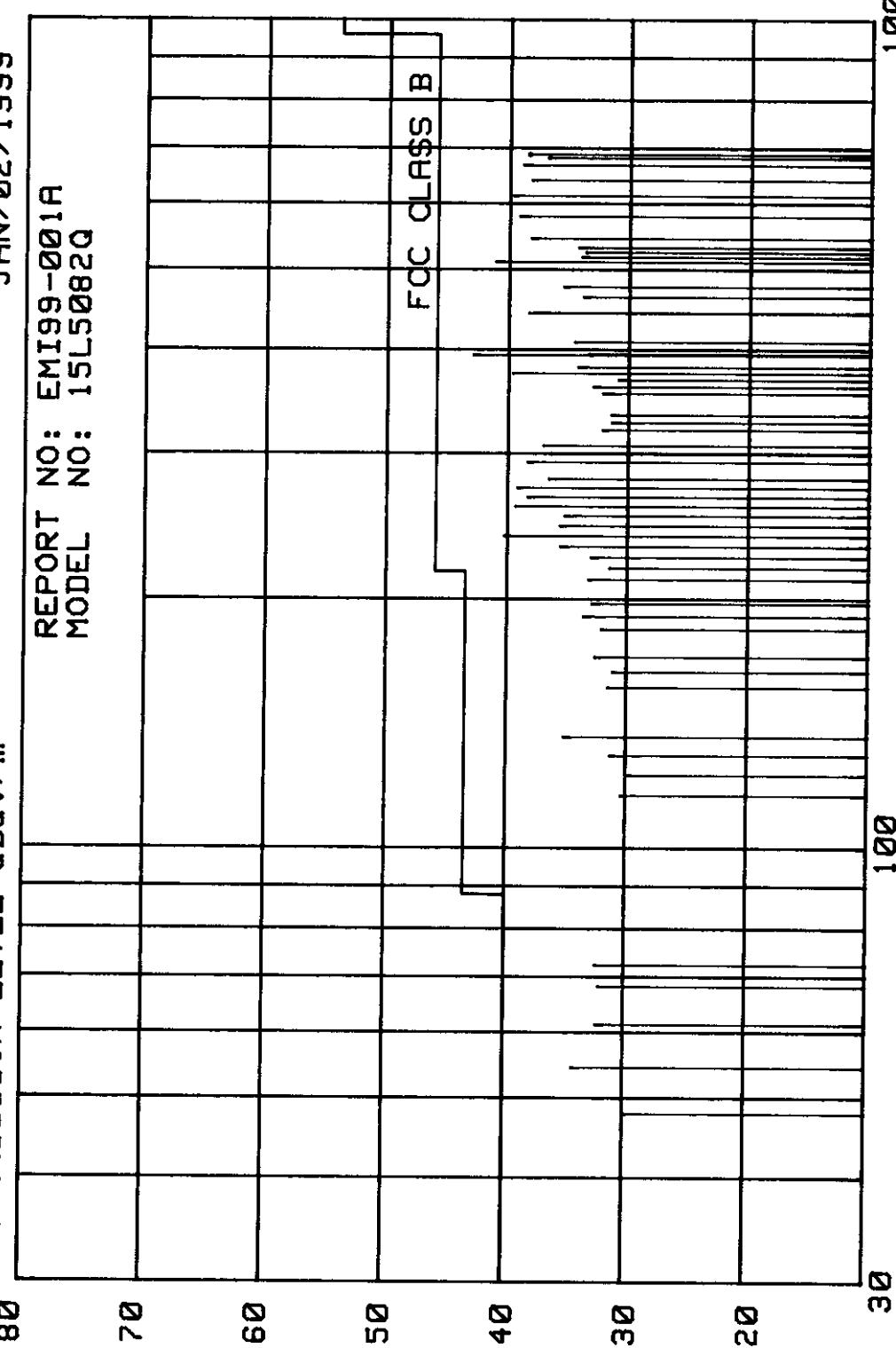
C.C.Wu

C.C.Wu

JAN/02/1999

REPORT NO: EMI99-001A
MODEL NO: 15L5082Q

RFI EMISSION LEVEL dB_{uv}/m



FREQUENCY MHz

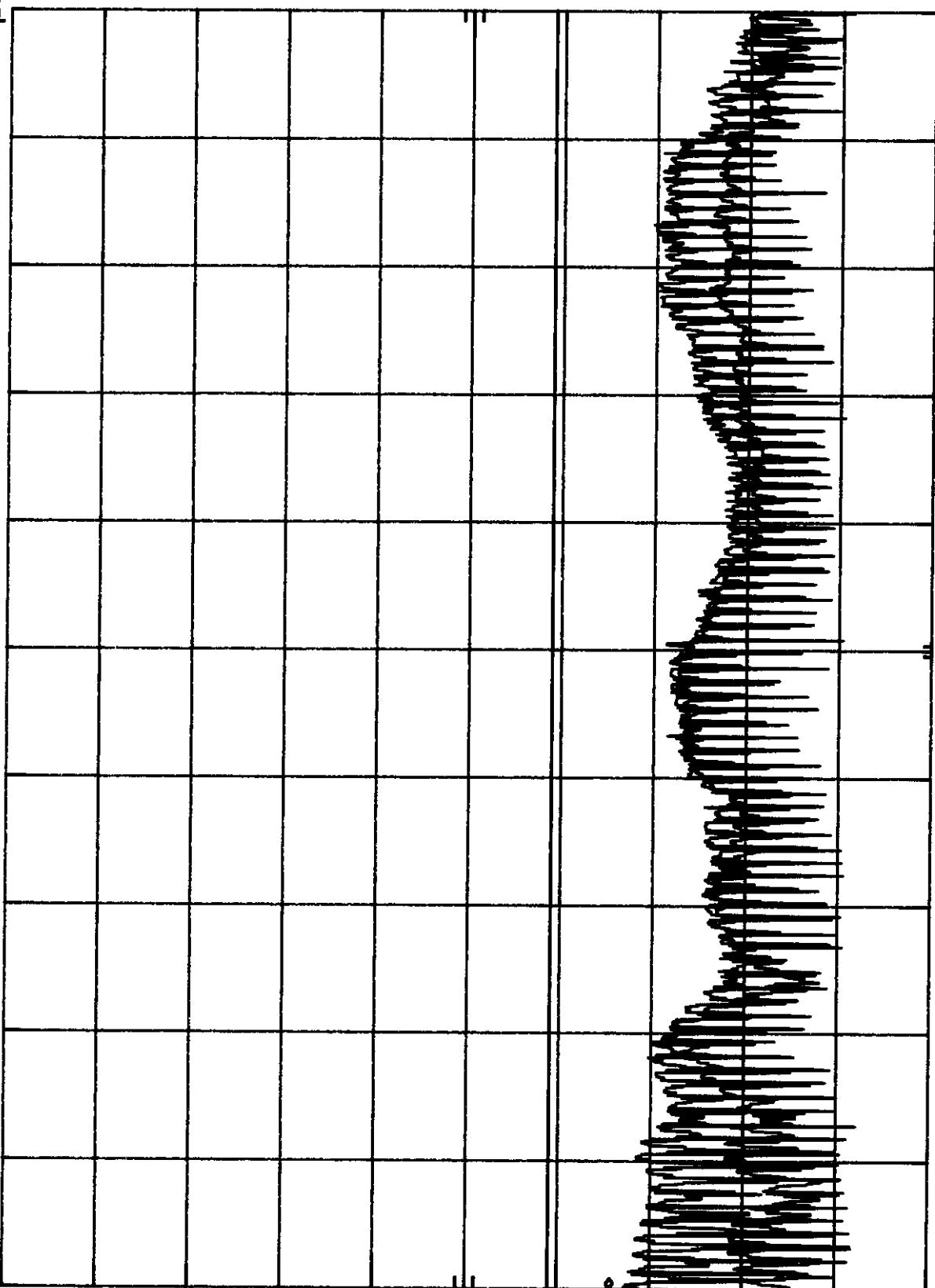
1000

100

10

A3KM082 RUN 1024X768/60Hz 48.3kHz MODE AC220V MKR 450 kHz
REF 107.0 dB μ V ATTEN 10 dB

10 dB/
Hz



START 450 kHz
RES BW 10 kHz
VBW 10 kHz
SWP 750 msec
STOP 30.00 MHz

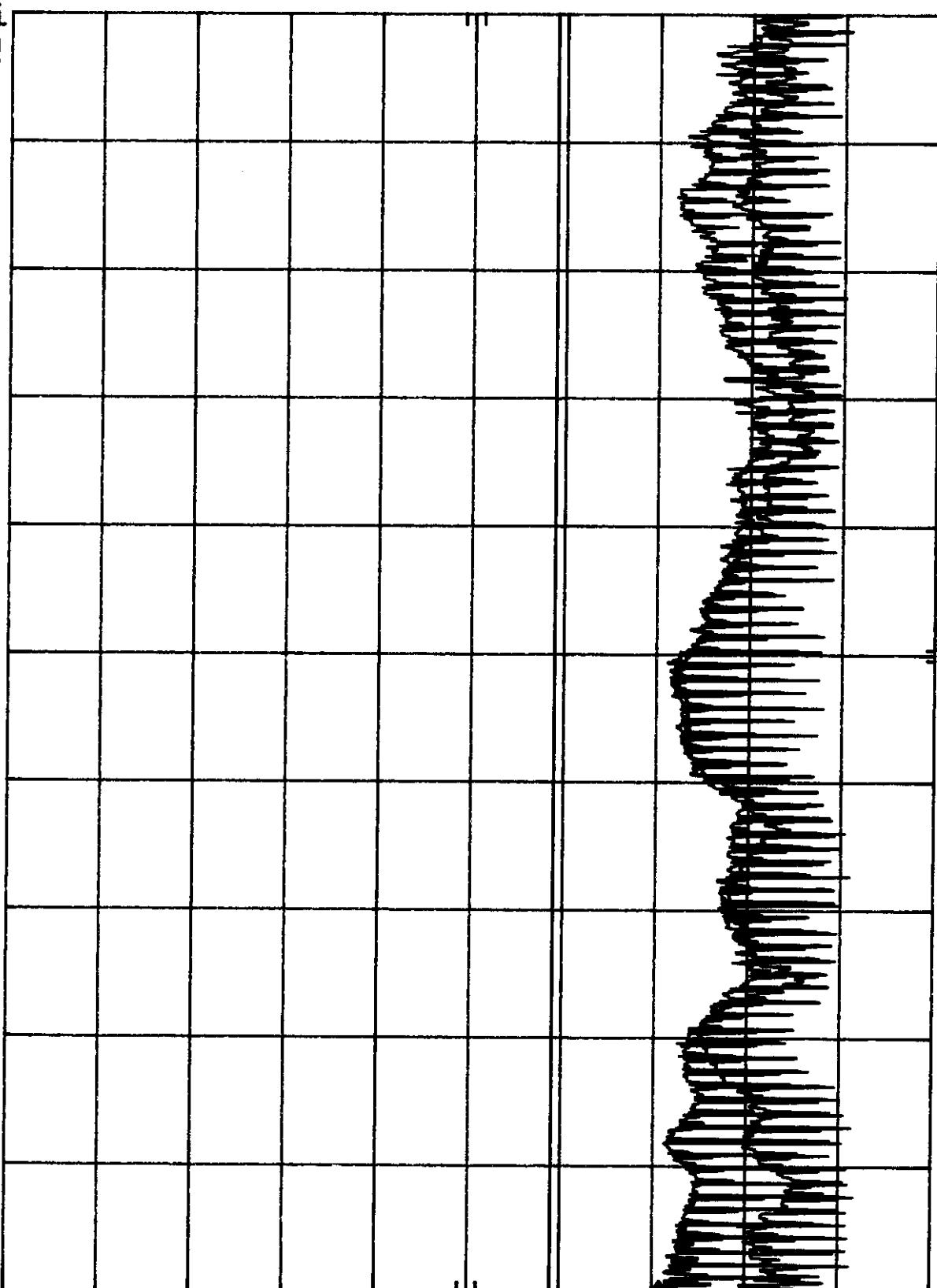
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
SWP 750 msec
STOP 30.00 MHz

A3KM082 RUN 1024X768/60Hz 48.0kHz MODE AC110V
REF 107.0 dB μ V ATTEN 10 dB

h μ

10 dB/

OL
48.0
dB μ V



START 450 kHz
RES BW 10 kHz VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec