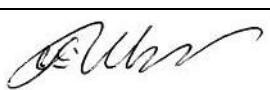
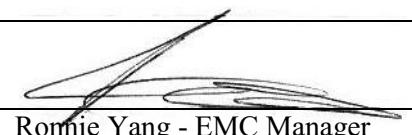




PHILIPS

| | | |
|--|------------------------|---|
| Philips Electronics Industries (Taiwan) Ltd - EMC Lab. 5, Tze Chiang 1 Road, Chungli Industrial Park, Chungli, Taoyuan, Taiwan Tel.: +886-3-454-9862 Fax.: +886-3-454-9887 E-mail: ronnie.yang@philips.com | FCC Test Report | Report No.: TYR87-01101 Date : 18 February, 2002 Page : 1 of 40 |
| <p>Customer : Philips Electronics Industries</p> <p>Name : Mr. S.T. Huang – EE LCD Address : 5, Tze Chiang 1 Road, Zip/City : Chungli Industrial Park, Country : Chungli, Taiwan, R.O.C.</p> | | |
| <p>Equipment Under Test (including peripherals) :</p> <p>FCC ID. : A3KM108 Model Name : 150P3, 150B3 Serial Number : TY0105680, TY0105700 Description : 15" XGA TFT LCD monitor, Max. resolution 1024x768/75Hz</p> | | |
| <p>EMC Standards : FCC Part 15 of October 01,1999 Class B ANSI C63.4-1992</p> <p>Result : PASSED the limits/test-levels in the standards.</p> <p>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.</p> | | |
| <p>Date of receipt of EUT : 05 Dec. 2001</p> <p>Date of performance of test : 10 Dec., 2001 to 25 Dec., 2001</p> | | |
|  C.C. Wu - EMC Test Engineer | | |
|  Ronnie Yang - EMC Manager NVLAP Signatory | | |

Philips Electronics Industries (Taiwan) Ltd

This report shall not be reproduced except in full, without written approval of the testing laboratory

Table of contents

| | |
|---|----|
| 1. Summary of test results..... | 3 |
| 2. General information of EUT..... | 4 |
| 3. Test equipment..... | 5 |
| 4. Test configuration of EUT and peripherals..... | 6 |
| 5. Test procedure..... | 7 |
| 6. Measurement uncertainty..... | 8 |
| 7. Conducted emissions test..... | 9 |
| 8. Radiated emissions test..... | 16 |
| 9. Photographs of test set-up..... | 23 |
| 10. References..... | 27 |

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, 15" LCD color monitor :

Model No. : 150P3, 150B3
 FCC ID : A3KM108
 Brand : Philips

The color monitor automatically scans horizontal frequencies between 30KHz and 61KHz , and vertical frequencies between 56Hz and 76Hz. 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:

| Mode | Resolution | H. freq. / V. freq | Standard |
|------|------------|--------------------|-----------|
| 1. | 640 x 350 | 31.469Khz/70.087Hz | VGA |
| 2. | 720 x 400 | 31.469Khz/70.087Hz | VGA |
| 3. | 640 x 480 | 31.469Khz/59.940Hz | VGA |
| 4. | 640 x 480 | 35.000Khz/66.667Hz | Macintosh |
| 5. | 640 x 480 | 37.861Khz/72.809Hz | VESA |
| 6. | 640 x 480 | 37.500Khz/75.000Hz | VESA |
| 7. | 800 x 600 | 35.156Khz/56.250Hz | VESA |
| 8. | 800 x 600 | 37.879Khz/60.317Hz | VESA |
| 9. | 800 x 600 | 48.077Khz/72.188Hz | VESA |
| 10. | 800 x 600 | 46.875Khz/75.000Hz | VESA |
| 11. | 832 x 624 | 49.700Khz/75.000Hz | Macintosh |
| 12. | 1024 x 768 | 48.363Khz/60.004Hz | VESA |
| 13. | 1024 x 768 | 56.476Khz/70.069Hz | VESA |
| 14. | 1024 x 768 | 60.023Khz/75.029Hz | VESA |

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 | 2415A00346 | 05/16/2001 | 05/16/2002 |
| EMI Receiver | R & S ESCS30 | 830245/026 | 06/09/2001 | 06/08/2002 |
| LISN | EMCO 3825/2 | 9311-2153 | 12/04/2001 | 06/04/2002 |
| LISN | EMCO 3825/2 | 9311-2154 | 12/04/2001 | 06/04/2002 |
| RF Cable | 8-meter | N/A | 05/28/2001 | 05/28/2002 |

- For Radiated Emissions Test:

| Test Equipment | Model No. | Serial No. | Last Calibrate | Next Calibrate |
|----------------------|-----------------|------------|----------------|----------------|
| Spectrum | HP8568B | 2415A00346 | 08/15/2001 | 08/15/2002 |
| RF Preselector | HP85685A | 2901A00946 | 08/15/2001 | 08/15/2002 |
| QP Adapter | HP85650A | 2043A00366 | 08/15/2001 | 08/15/2002 |
| EMI Receiver | HP85460A | 3441A00199 | 09/11/2001 | 09/11/2002 |
| RFI Filter Section | HP85460A | 3330A00177 | 09/11/2001 | 09/11/2002 |
| EMI Receiver | R & S ESVS30 | 841977/006 | 05/28/2001 | 05/28/2002 |
| Biconical Antenna | EMCO 3110B | 3222 | 04/27/2001 | 04/27/2002 |
| Biconical Antenna | EMCO 3110B | 3224 | 04/27/2001 | 04/27/2002 |
| Log-Periodic Antenna | EMCO 3146A | 1424 | 04/27/2001 | 04/27/2002 |
| Log-Periodic Antenna | EMCO 3146A | 1425 | 04/27/2001 | 04/27/2002 |
| Turn Table | EMCO 1060 | 1068 | 05/26/2001 | 05/26/2002 |
| Antenna Tower | EMCO 1050 | 1113 | 05/26/2001 | 05/26/2002 |
| RF Cable | M17/75-RG214-NE | N/A | 05/26/2001 | 05/26/2002 |

4. Test Configuration of EUT and Peripherals

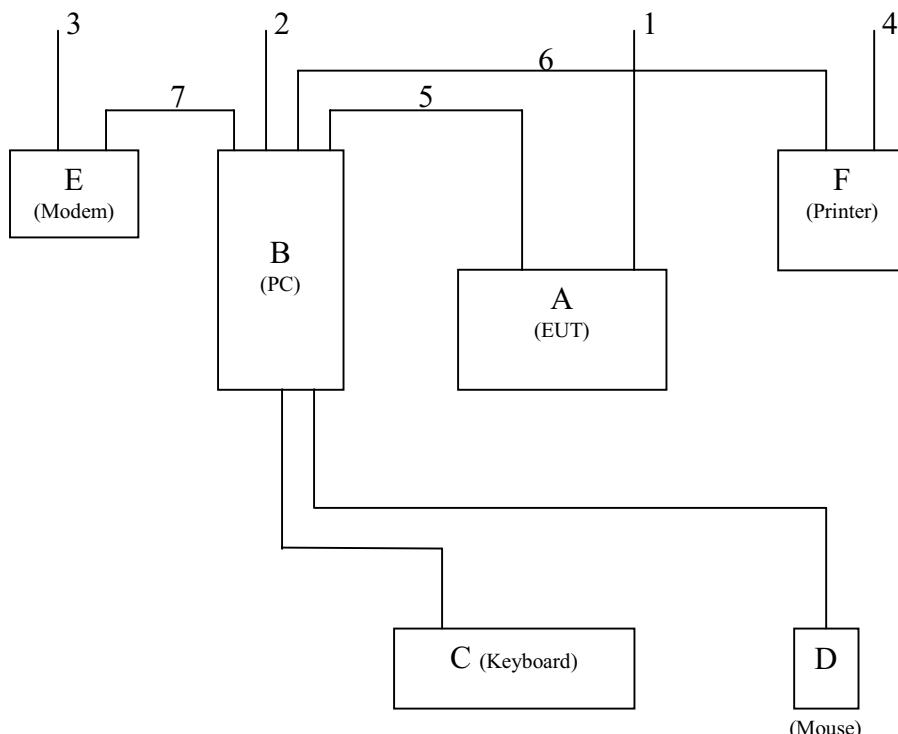
The system was configured for testing in a typical fashion (as a customer would normally use it) according to ANSI C63.4-1992, please see the photographs for detail. For system measurement, the EUT “150P3, 150B3” were connected to:

| | Description | Brand/ Model No. | Serial No. | FCC ID | Remark |
|---|-----------------|------------------------|------------------------|--------------------|--------|
| A | 15" LCD monitor | Philips 150P3 150B3 | TY0105680 TY0105700 | A3KM108 A3KM108 | EUT |
| B | PC | Compaq ENC P866 | 5K15FXHZ2013 | FCC logo | |
| C | Keyboard | Compaq KB-9963 | B26950GGALP13Q | FCC Logo | |
| D | Mouse | Compaq M-S48a | | JNZ201213 | |
| E | Modem | USRobotics 268 | 2680559278575 | CJE-0318 | |
| F | Printer | HP 2225C | 3123S97227 | 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 | Accex | 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 | Accex | 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 **5 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.
DVI I/F cable with two ferrite cores was used.
Extra microphone and earphone were used during test.

Tested and reported modes as following:

| File No. | Resolution | Frequencies | I/F Cable | Figure | |
|------------|------------|--------------|-----------|--------------|-----------|
| | | | | Conducted | Radiated |
| EMI01-050 | 1024x768 | 60.0KHz/75Hz | D-sub | Figure 1, 2 | Figure 11 |
| EMI01-050A | 1024x768 | 60.0KHz/75Hz | DVI | Figure 3, 4 | Figure 12 |
| EMI01-050B | 1024x768 | 48.3KHz/60Hz | D-sub | Figure 5, 6 | Figure 13 |
| EMI01-052 | 1024x768 | 60.0KHz/75Hz | D-sub | Figure 7, 8 | Figure 14 |
| EMI01-052A | 1024x768 | 48.3KHz/60Hz | D-sub | Figure 9, 10 | Figure 15 |

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" 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.

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 : 10 Dec., 2001 to 25 Dec., 2001

Test Engineer : C.C.Wu

For detail measurement results see next pages.

Figure 1

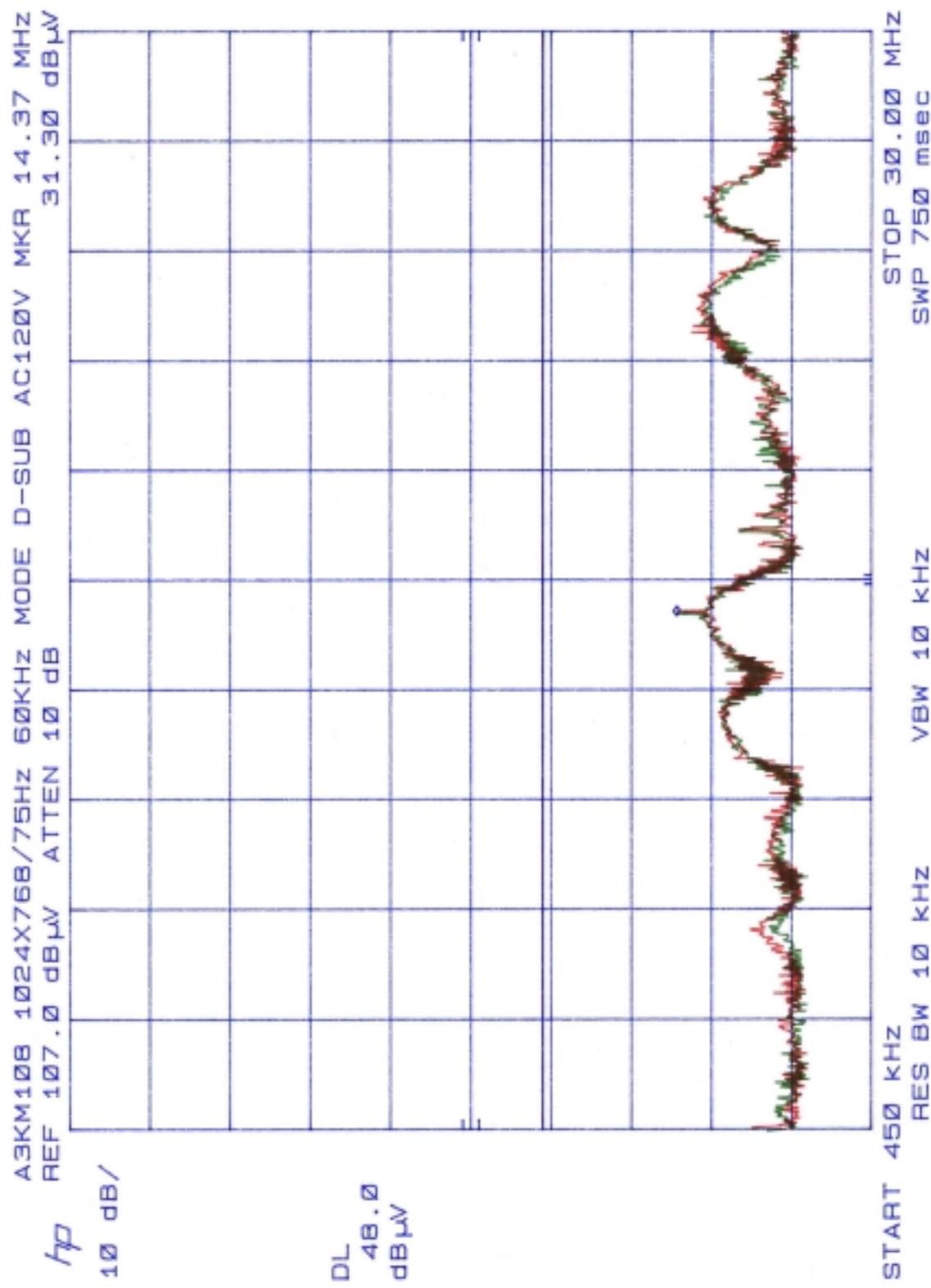


Figure 2

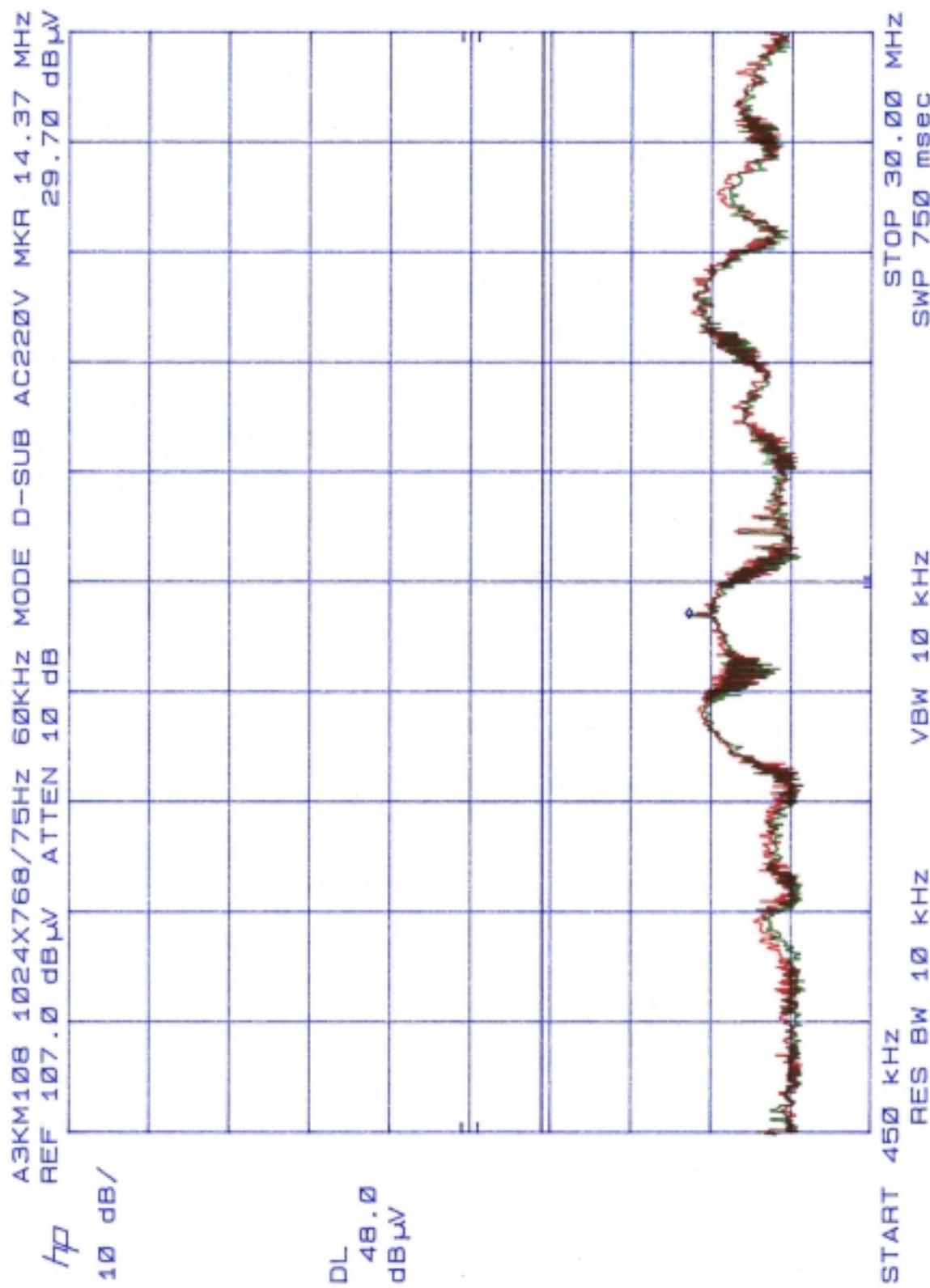


Figure 3

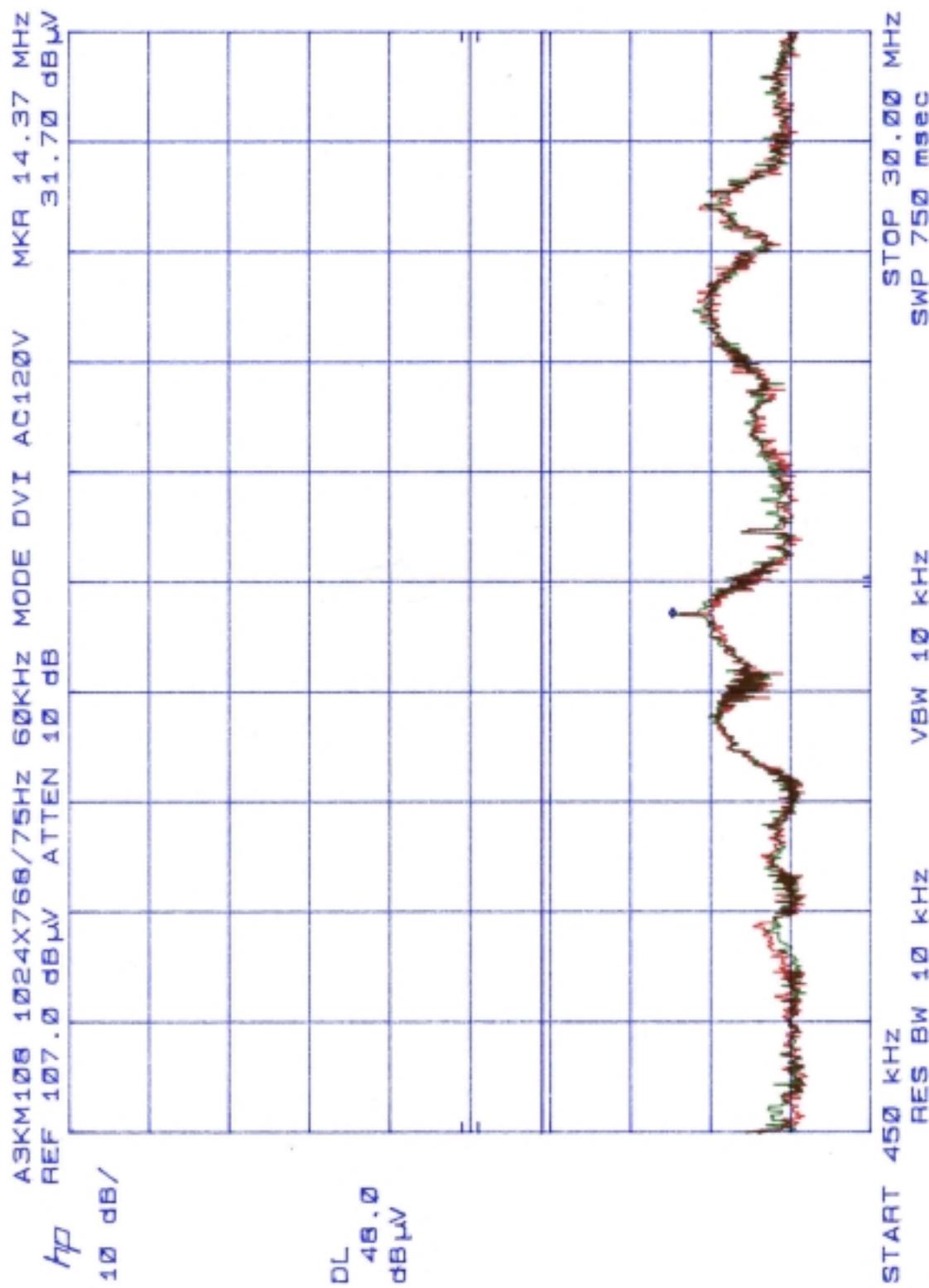


Figure 4

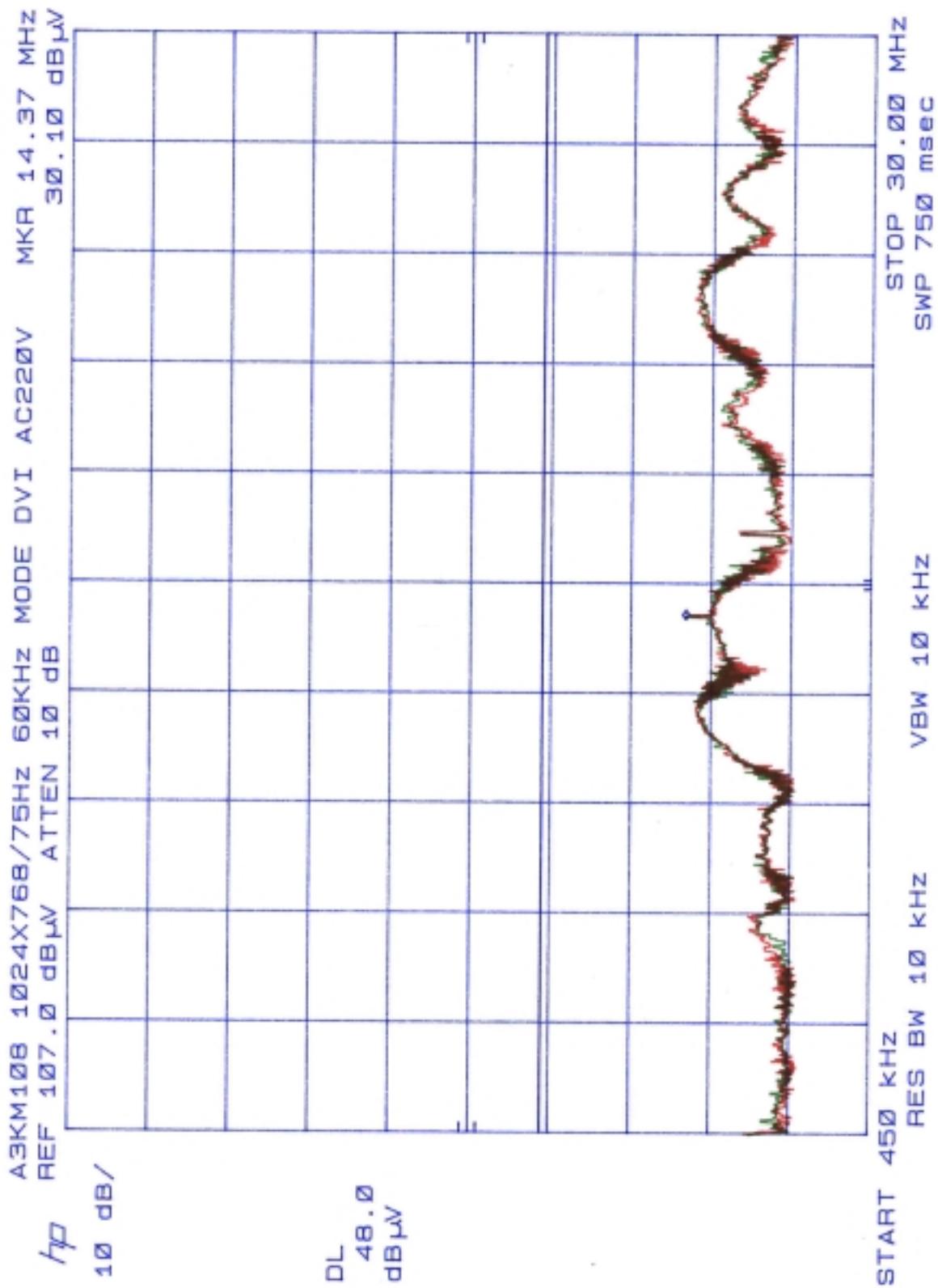


Figure 5

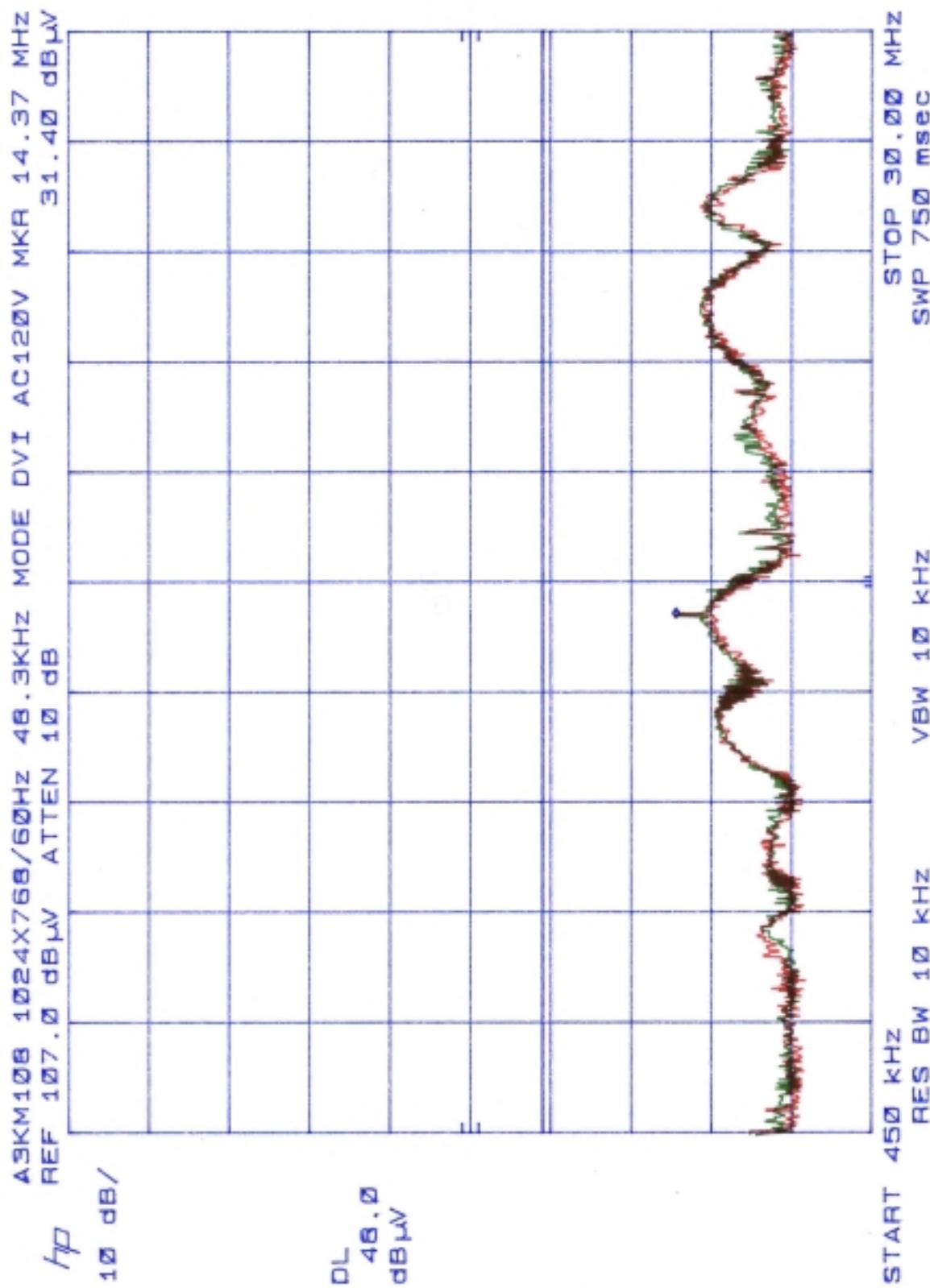


Figure 6

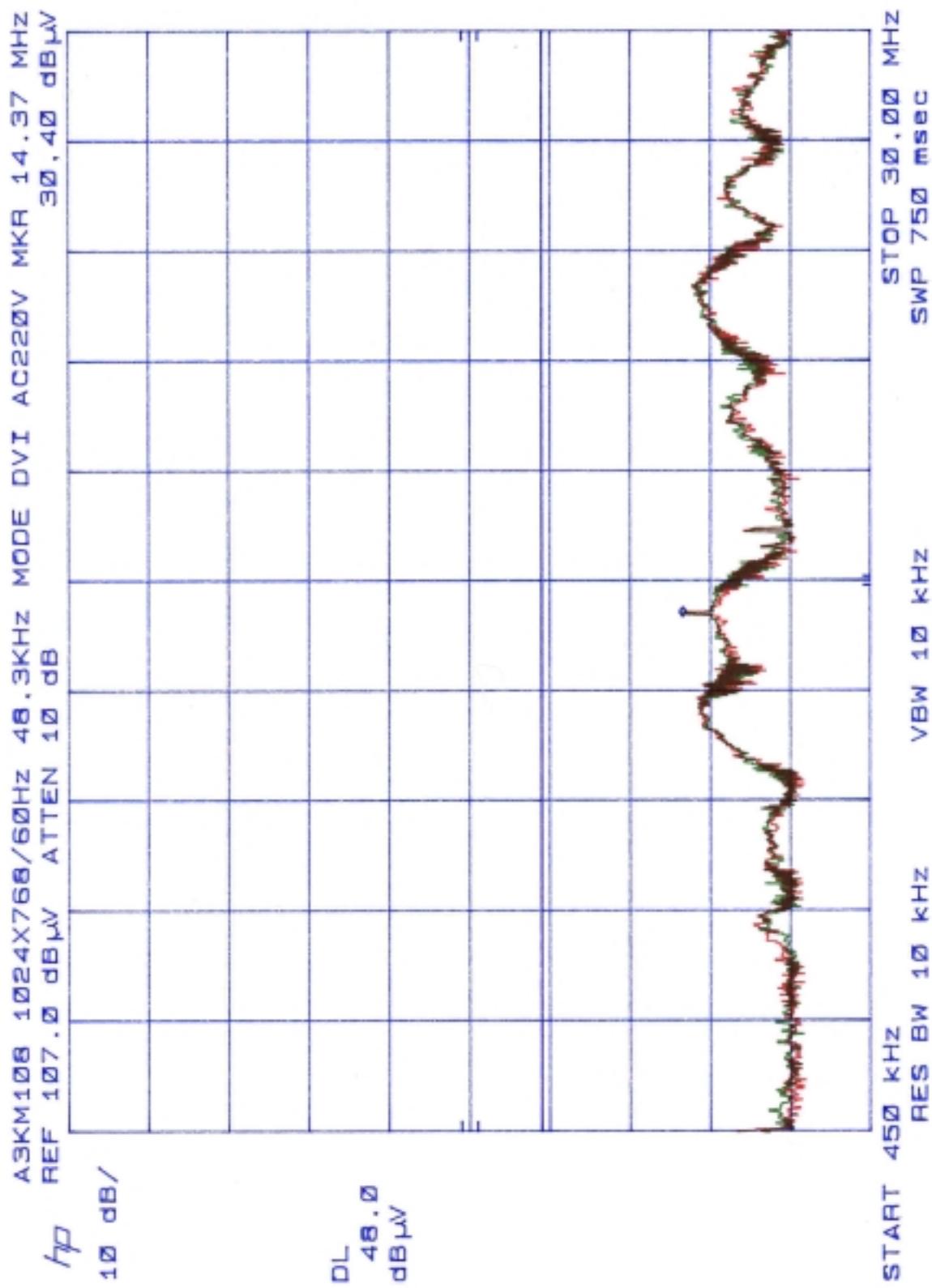


Figure 7

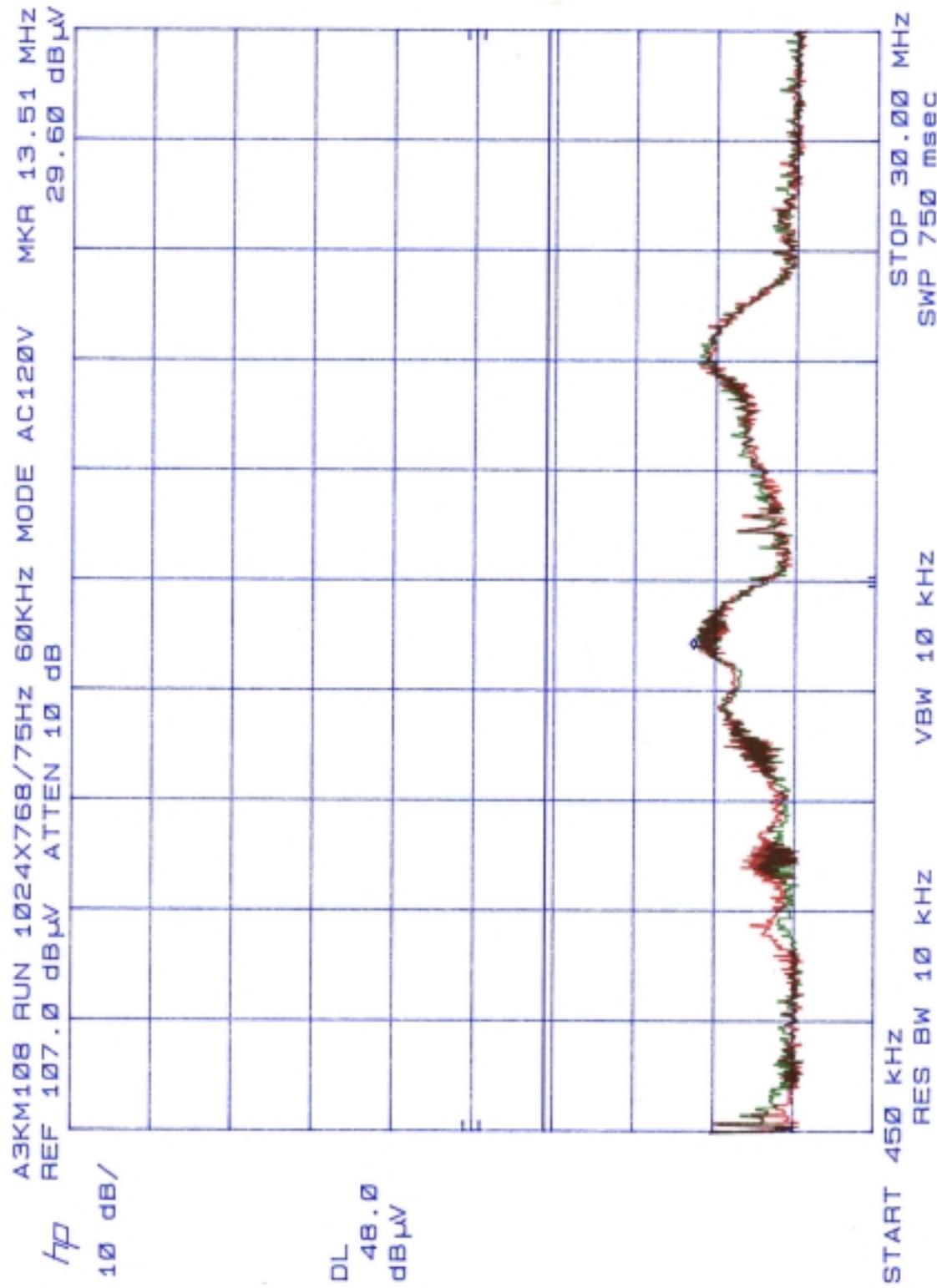


Figure 8

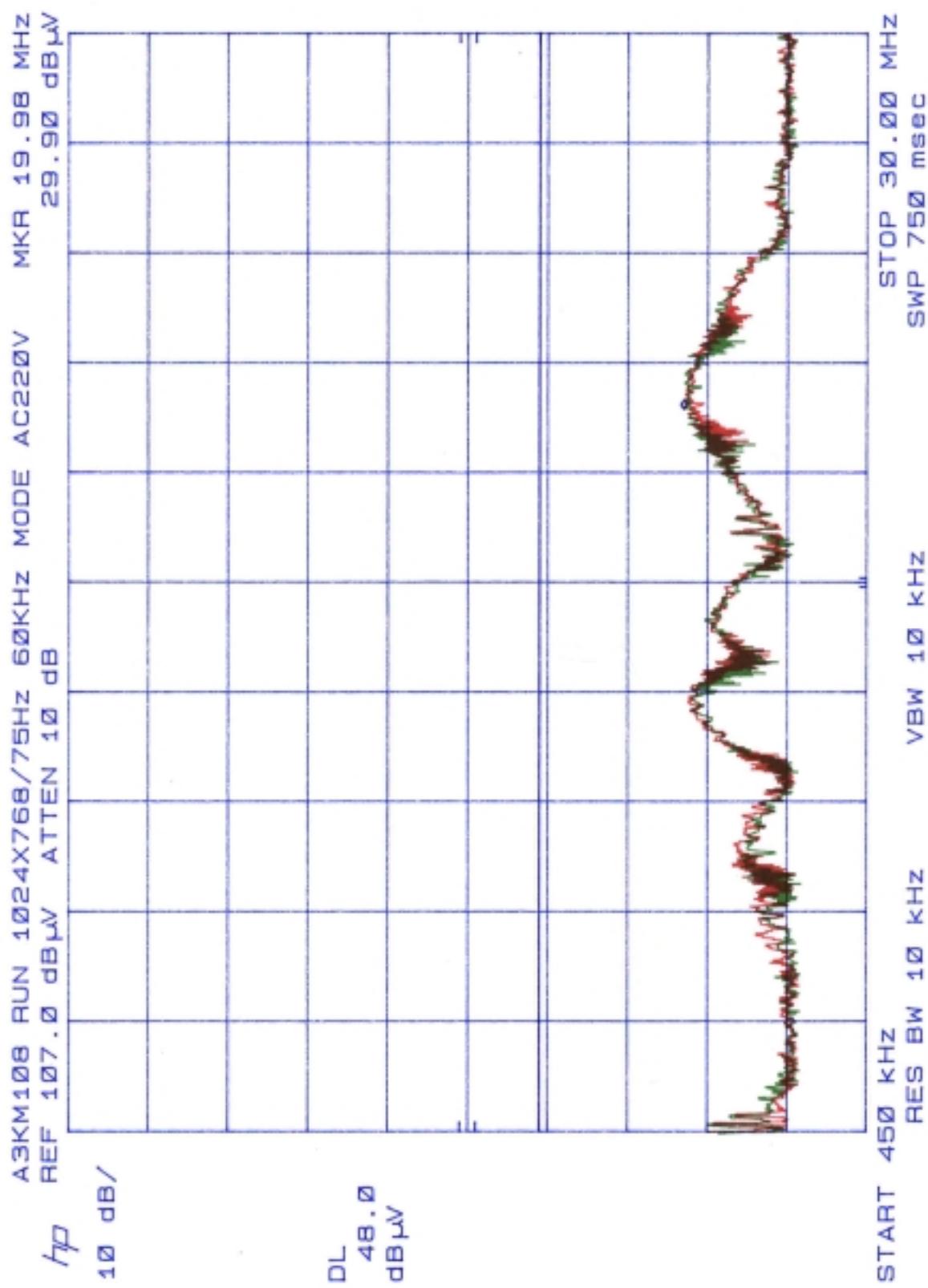


Figure 9

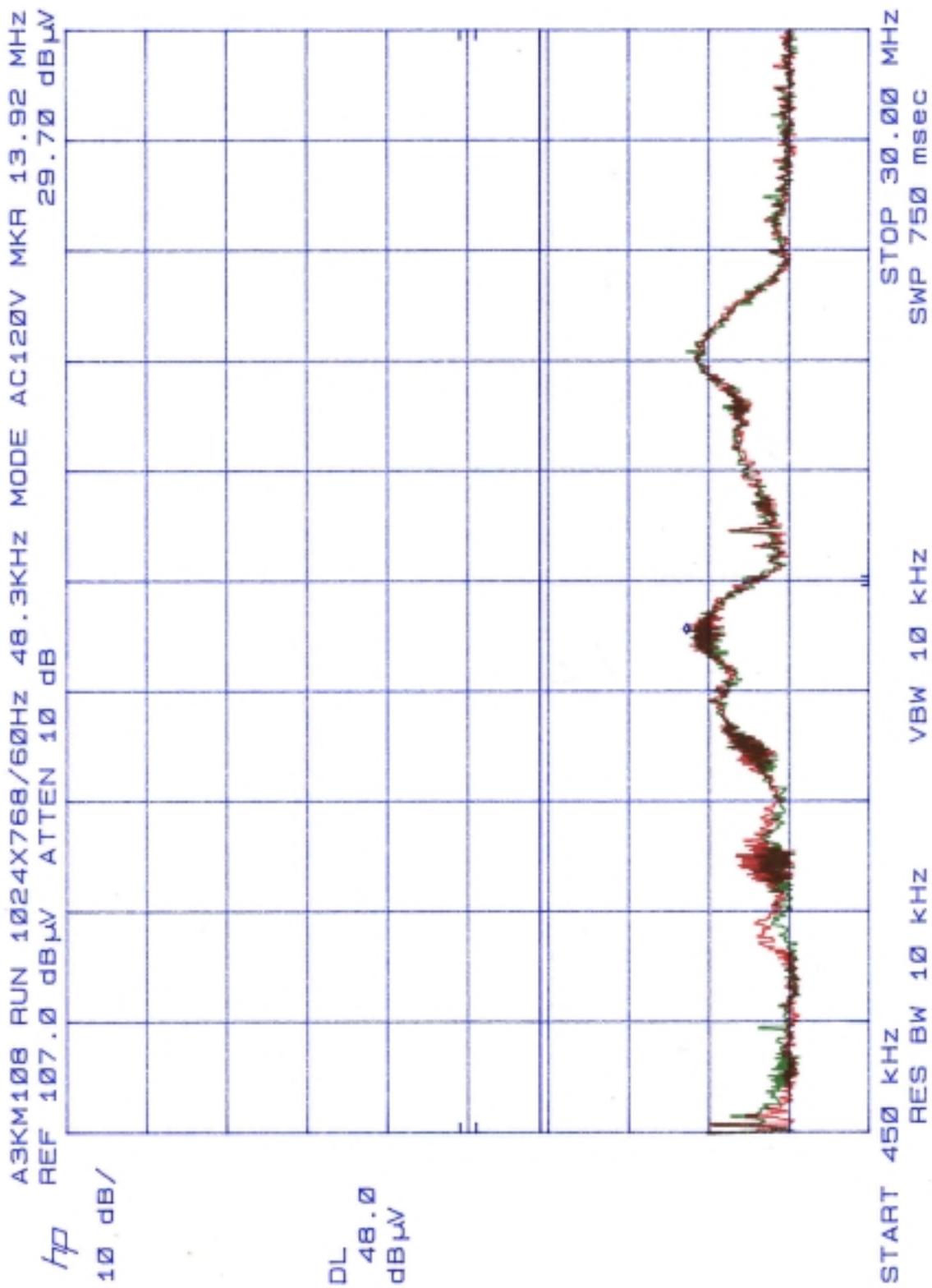
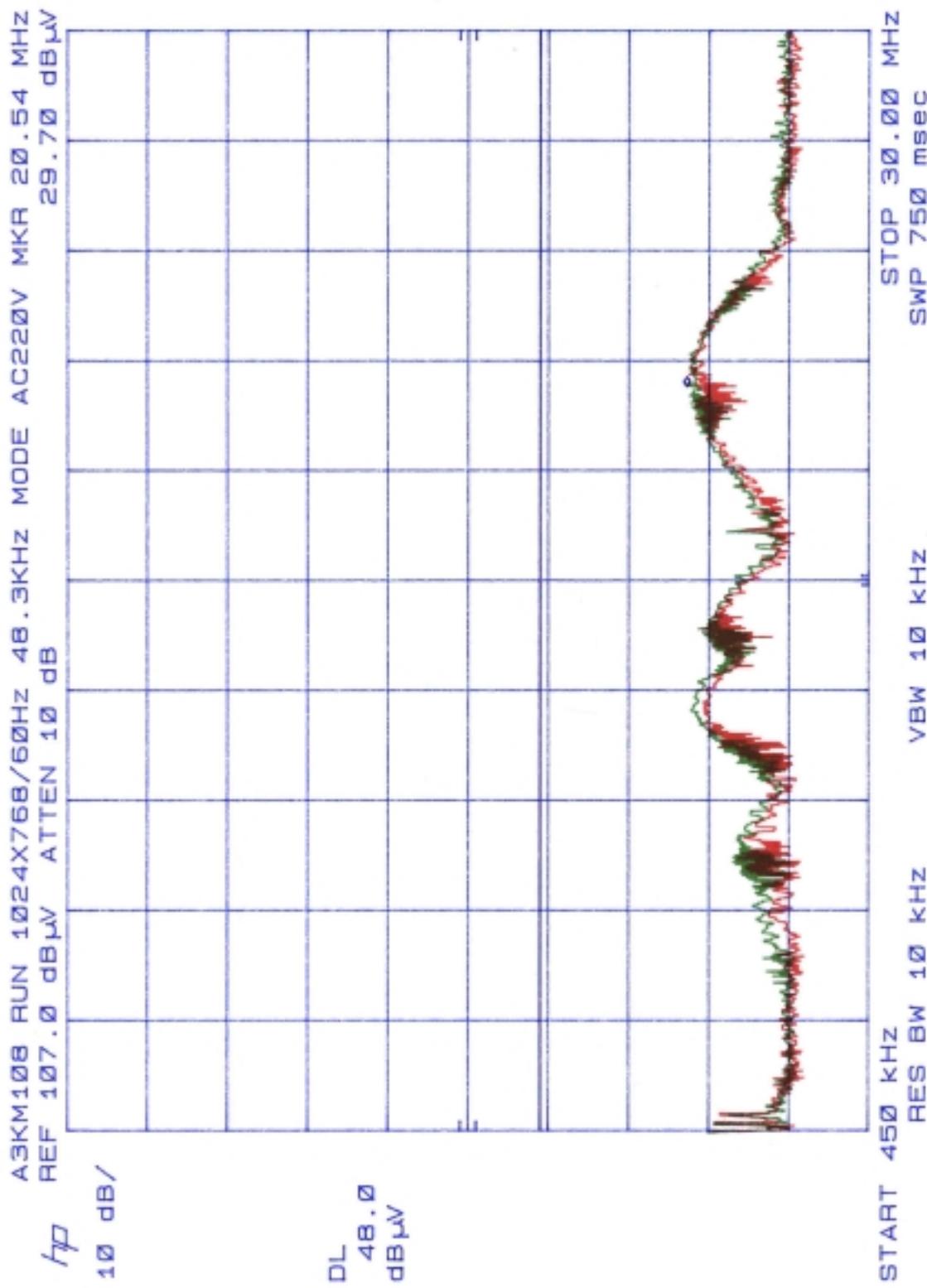


Figure 10



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 Quasi-Peak |
| 88.0 – 216.0 | 43.5 | 43.5 Quasi-Peak |
| 216.0 – 960.0 | 46.5 | 46.0 Quasi-Peak |
| 960.0 – 1000.0 | 49.5 | 54.0 Quasi-Peak |
| Above 1000.0 | 49.5 | 54.0 Average |

Test Result :

Passed FCC Class B Limits

Remark:

Date of Test : 10 Dec., 2001 to 25 Dec., 2001

Test Engineer : C.C.Wu

For detail measurement results see next pages.

Radiated RF Level – Peak Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 66.0 | 30.48 | 32.48 | 40.0 |
| 132.01 | 29.52 | 31.22 | 43.5 |
| 165.0 | 29.15 | 28.95 | 43.5 |
| 198.01 | 34.38 | 30.78 | 43.5 |
| 231.0 | 34.65 | 37.05 | 46.0 |
| 264.01 | 35.46 | 35.16 | 46.0 |
| 297.01 | 36.04 | 36.64 | 46.0 |
| 330.01 | 30.52 | 31.42 | 46.0 |
| 363.01 | 33.2 | 33.1 | 46.0 |
| 394.37 | 32.68 | 34.78 | 46.0 |
| 396.01 | 31.85 | 32.45 | 46.0 |
| 429.0 | 31.49 | 34.29 | 46.0 |
| 495.0 | 33.14 | 33.84 | 46.0 |
| 528.0 | 33.31 | 34.61 | 46.0 |
| 561.0 | 34.26 | 35.16 | 46.0 |
| 594.0 | 34.32 | 34.62 | 46.0 |
| 627.0 | 35.88 | 36.18 | 46.0 |
| 990.0 | 42.9 | 42.6 | 54.0 |

Spectrum Analyzer Setting:

RBW: 100KHz

VBW: 100KHz

Quasi-peak Values were taken with Rohde & Schwarz ESVS 30 EMI test receiver.

Radiated RF Level – QP Value

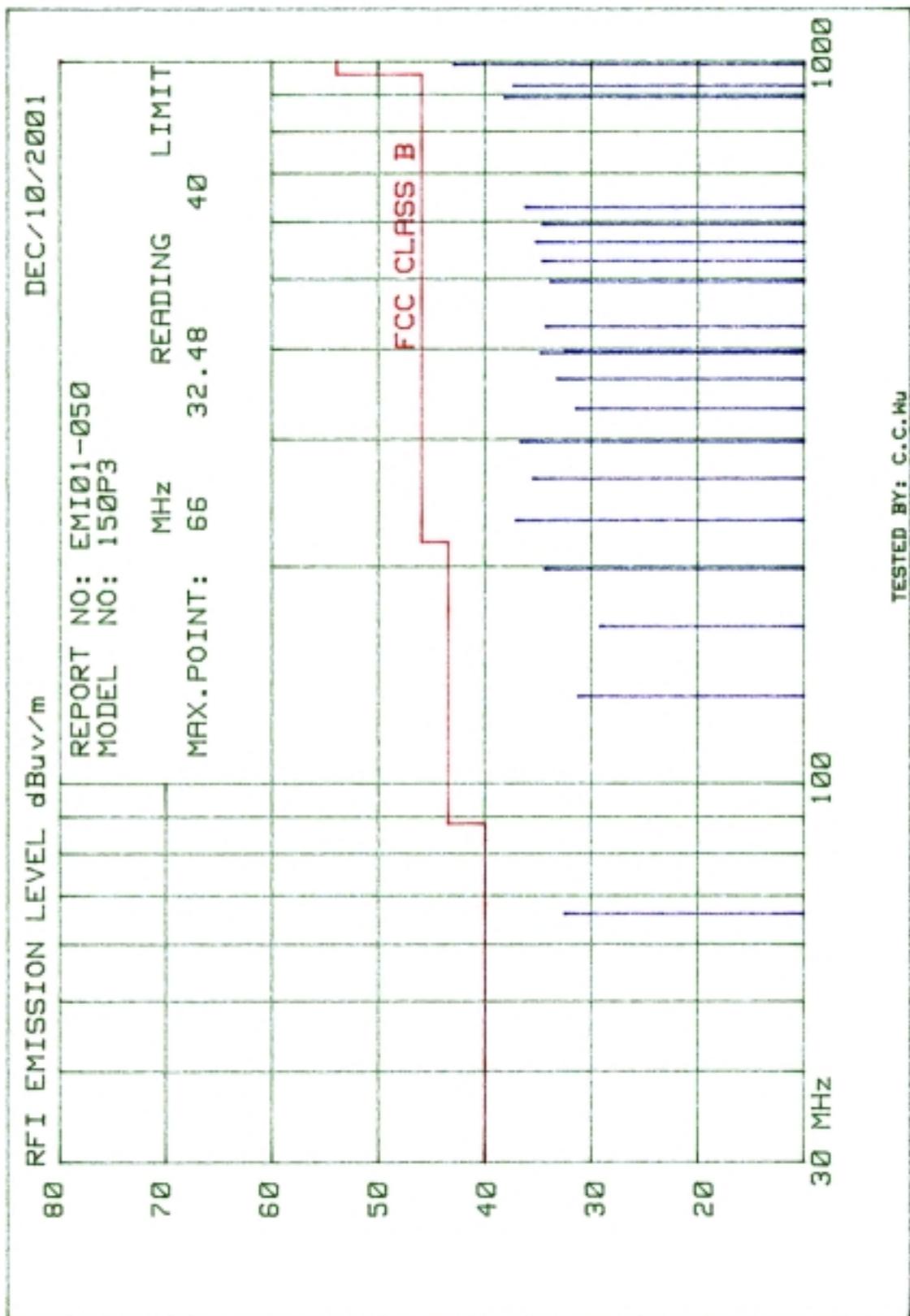
| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 891.0 | 36.76 | 38.16 | 46.0 |
| 924.0 | 36.19 | 37.29 | 46.0 |

The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.

Sample of calculation:

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

Figure 11



Radiated RF Level – Peak Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 132.0 | 30.52 | 34.62 | 43.5 |
| 165.01 | 28.75 | 29.05 | 43.5 |
| 198.0 | 35.08 | 31.08 | 43.5 |
| 231.0 | 33.65 | 34.75 | 46.0 |
| 264.0 | 35.26 | 35.66 | 46.0 |
| 297.0 | 37.94 | 37.24 | 46.0 |
| 315.5 | 31.26 | 31.76 | 46.0 |
| 328.56 | 30.39 | 29.19 | 46.0 |
| 330.0 | 30.62 | 32.62 | 46.0 |
| 363.01 | 33.6 | 34.2 | 46.0 |
| 394.37 | 38.48 | 38.58 | 46.0 |
| 396.01 | 31.95 | 31.45 | 46.0 |
| 429.0 | 31.69 | 33.39 | 46.0 |
| 473.25 | 36.15 | 37.15 | 46.0 |
| 528.0 | 33.01 | 33.81 | 46.0 |
| 561.0 | 34.36 | 34.56 | 46.0 |
| 627.0 | 36.18 | 35.38 | 46.0 |
| 693.0 | 39.03 | 38.83 | 46.0 |
| 990.0 | 43.3 | 43.2 | 54.0 |

Spectrum Analyzer Setting:

RBW: 100KHz

VBW: 100KHz

Quasi-peak Values were taken with Rohde & Schwarz ESVS 30 EMI test receiver.

Radiated RF Level – QP Value

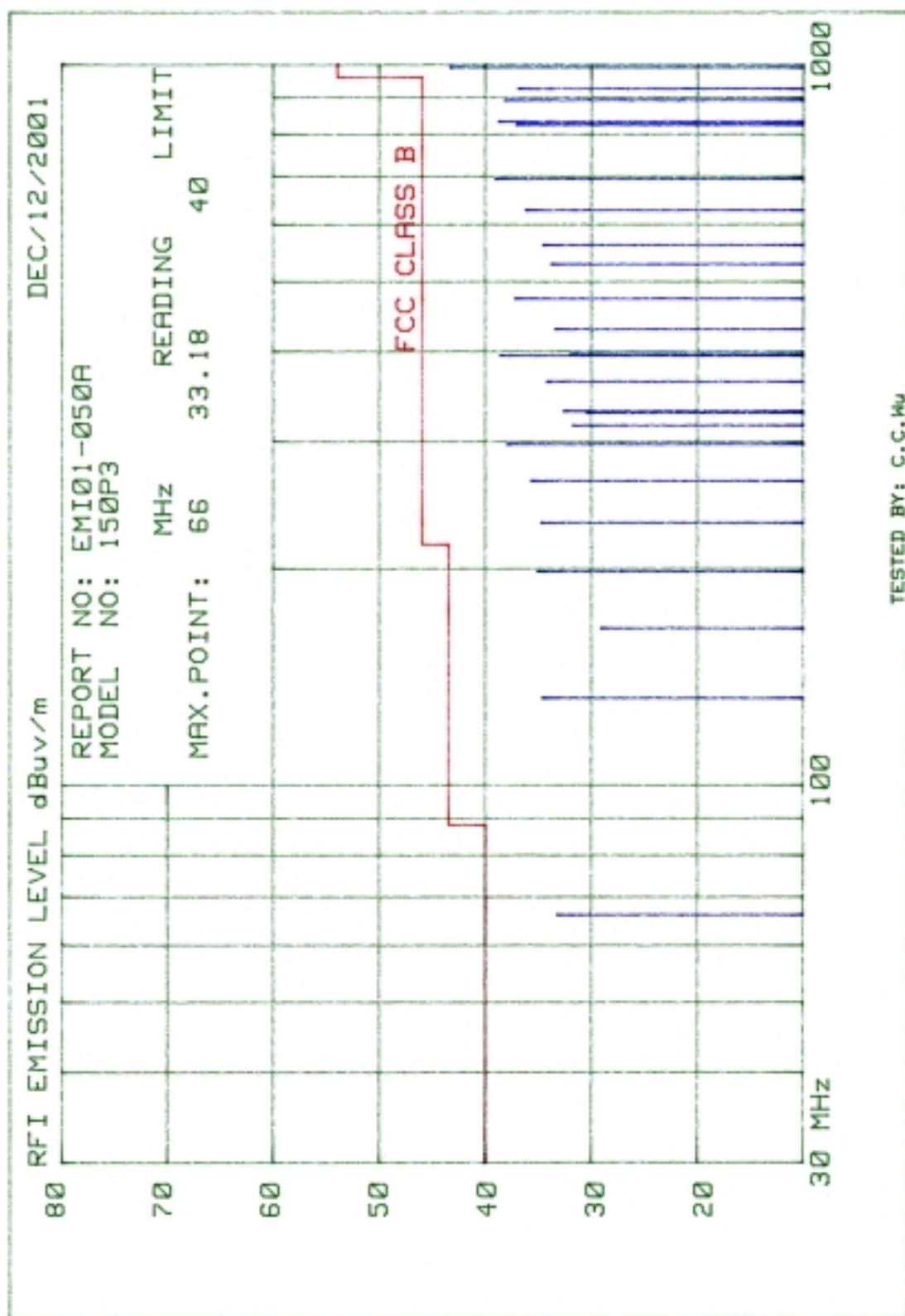
| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 66.0 | 29.88 | 33.18 | 40.0 |
| 823.8 | 37.08 | 35.98 | 46.0 |
| 824.8 | 37.0 | 35.9 | 46.0 |
| 832.55 | 38.72 | 37.32 | 46.0 |
| 891.0 | 36.56 | 38.16 | 46.0 |
| 924.0 | 36.29 | 36.89 | 46.0 |

The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.

Sample of calculation:

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

Figure 12



Radiated RF Level – Peak Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 33.01 | 29.38 | 30.88 | 40.0 |
| 132.0 | 31.82 | 33.52 | 43.5 |
| 165.0 | 30.25 | 28.85 | 43.5 |
| 198.0 | 34.28 | 31.88 | 43.5 |
| 231.0 | 34.35 | 34.55 | 46.0 |
| 264.0 | 35.46 | 35.36 | 46.0 |
| 297.0 | 37.84 | 37.44 | 46.0 |
| 328.56 | 30.99 | 29.49 | 46.0 |
| 330.0 | 30.62 | 32.52 | 46.0 |
| 390.21 | 31.34 | 31.84 | 46.0 |
| 396.0 | 30.85 | 31.75 | 46.0 |
| 495.0 | 33.44 | 34.14 | 46.0 |
| 561.0 | 33.46 | 34.56 | 46.0 |
| 627.0 | 35.48 | 35.88 | 46.0 |

Spectrum Analyzer Setting:

RBW: 100KHz

VBW: 100KHz

Quasi-peak Values were taken with Rohde & Schwarz ESVS 30 EMI test receiver.

Radiated RF Level – QP Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 66.01 | 30.88 | 33.28 | 40.0 |
| 650.34 | 40.7 | 38.1 | 46.0 |
| 845.44 | 43.52 | 40.82 | 46.0 |
| 874.38 | 38.97 | 38.57 | 46.0 |
| 881.59 | 40.02 | 39.22 | 46.0 |
| 910.49 | 43.54 | 42.64 | 46.0 |
| 975.52 | 44.42 | 42.22 | 46.0 |

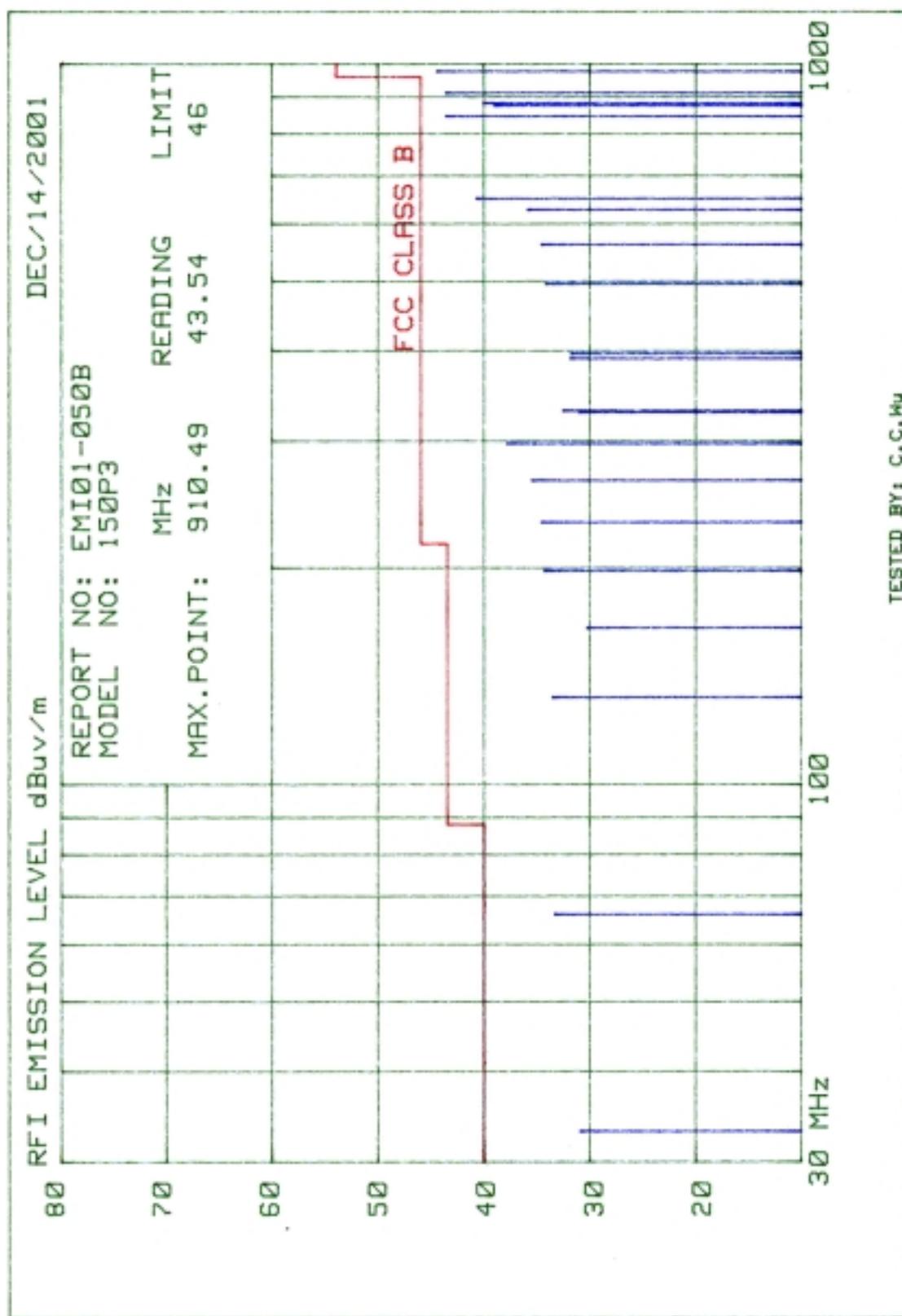
The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.

Test distance between device under test and receiving antenna was 3-meter.

Sample of calculation:

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

Figure 13



Radiated RF Level – Peak Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 51.87 | 29.92 | 26.62 | 40.0 |
| 61.3 | 30.13 | 29.23 | 40.0 |
| 66.01 | 28.58 | 31.28 | 40.0 |
| 70.73 | 26.38 | 28.48 | 40.0 |
| 127.27 | 27.61 | 26.71 | 43.5 |
| 132.0 | 32.82 | 27.92 | 43.5 |
| 136.7 | 28.47 | 27.37 | 43.5 |
| 165.0 | 28.85 | 28.55 | 43.5 |
| 198.01 | 34.48 | 32.08 | 43.5 |
| 231.0 | 33.95 | 33.45 | 46.0 |
| 264.0 | 34.86 | 33.86 | 46.0 |
| 297.0 | 38.24 | 38.34 | 46.0 |
| 330.0 | 29.82 | 30.52 | 46.0 |
| 363.0 | 32.1 | 34.3 | 46.0 |
| 386.59 | 34.23 | 32.83 | 46.0 |
| 396.01 | 31.35 | 31.15 | 46.0 |
| 429.0 | 31.59 | 33.39 | 46.0 |
| 495.0 | 33.64 | 33.84 | 46.0 |
| 528.0 | 33.81 | 34.61 | 46.0 |
| 561.0 | 33.86 | 34.36 | 46.0 |
| 594.0 | 34.62 | 33.62 | 46.0 |
| 627.0 | 35.28 | 35.68 | 46.0 |
| 989.97 | 43.1 | 45.2 | 54.0 |

Spectrum Analyzer Setting:

RBW: 100KHz

VBW: 100KHz

Quasi-peak Values were taken with Rohde & Schwarz ESVS 30 EMI test receiver.

Radiated RF Level – QP Value

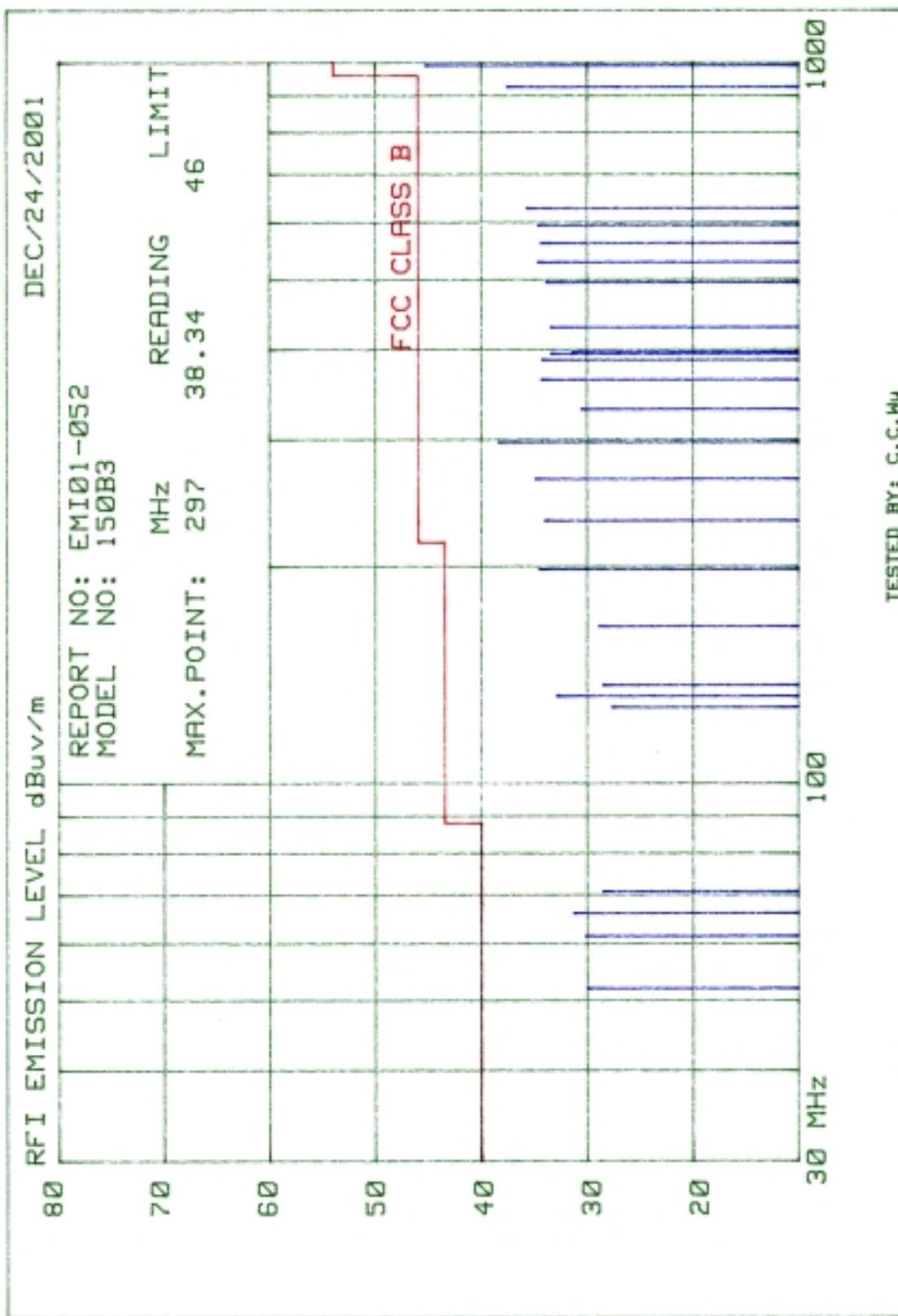
| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 923.97 | 36.89 | 37.49 | 46.0 |

The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.

Sample of calculation:

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

Figure 14



Radiated RF Level – Peak Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 51.87 | 25.52 | 27.72 | 40.0 |
| 66.01 | 27.18 | 31.38 | 40.0 |
| 70.73 | 24.58 | 26.88 | 40.0 |
| 132.0 | 32.62 | 26.52 | 43.5 |
| 136.7 | 26.57 | 27.17 | 43.5 |
| 164.97 | 28.45 | 28.15 | 43.5 |
| 198.01 | 33.58 | 31.48 | 43.5 |
| 231.0 | 34.95 | 34.35 | 46.0 |
| 264.0 | 35.56 | 36.16 | 46.0 |
| 297.0 | 36.64 | 37.74 | 46.0 |
| 325.18 | 30.3 | 30.7 | 46.0 |
| 330.0 | 30.22 | 31.62 | 46.0 |
| 363.0 | 31.6 | 34.4 | 46.0 |
| 390.2 | 31.94 | 32.64 | 46.0 |
| 396.0 | 31.85 | 32.75 | 46.0 |
| 429.0 | 31.79 | 33.89 | 46.0 |
| 495.0 | 33.24 | 33.94 | 46.0 |
| 528.0 | 33.31 | 34.11 | 46.0 |
| 561.0 | 34.06 | 34.56 | 46.0 |
| 594.0 | 35.72 | 34.72 | 46.0 |
| 627.0 | 35.38 | 35.38 | 46.0 |
| 989.97 | 43.4 | 45.5 | 54.0 |

Spectrum Analyzer Setting:

RBW: 100KHz

VBW: 100KHz

Quasi-peak Values were taken with Rohde & Schwarz ESVS 30 EMI test receiver.

Radiated RF Level – QP Value

| Frequency (MHz) | Horizontal (dBuv/m) | Vertical (dBuv/m) | FCC/B Limit (dBuv/m) |
|--------------------|------------------------|----------------------|-------------------------|
| 923.97 | 37.09 | 37.49 | 46.0 |

The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.

Sample of calculation:

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

Figure 15

