FCC TEST REPORT

Report No. : EMI00-031
Tested Date: July/29/00

Test Performed By
Philips Electronics Industries (Taiwan) Ltd.
Business Electronics
EMC Lab.
No. 5, Tze Chiang 1 Road,
Chungli, Taoyuan, Taiwan, R.O.C.
Tel.: + 886-3-454-9862 Fax.: +886-3-454-9887

Manufacturer : Philips Business Electronics

Tested System:

1. EUT : 180P1 color LCD monitor s/n: TY0004031
   FCC ID : A3KM099
2. Computer : Acer AP6100 s/n: 8138A01502
   FCC ID : FCC Logo
3. Keyboard : HP E0633-WLUS2 s/n: 65368112
   FCC ID : FCC Logo
4. Mouse : IBM M-S34 s/n: 457249
   FCC ID : DZL211029
5. Modem : USRoboties 268 s/n: 002680559278575
   FCC ID : CJE-0318
6. Printer : HP2225C s/n: 3123S97227
   FCC ID : DSI6XU2225
7. Video Card : ATI FURY PRO s/n: 024035
   FCC ID : FCC Logo

Note: Test was performed in according with FCC measurement procedure ANSI C63.4-1992 "AMERICAN NATIONAL STANDARD FOR MEASUREMENT OF RADIO-NOISE EMISSION FROM LOW-VOLTAGE ELECTRONIC EQUIPMENT IN THE RANGE OF 9KHz TO 40GHz"

Monitor was connected to floor mounted AC outlet.
80.0KHz mode (1280x1024/75Hz) was tested.
DVI I/F cable with two ferrite cores was used.
Non-shield power cord was used during test.
Extra headphone and Mic were used.
Audio-out cable with one ferrite cord was used.
Mic-in cable with one ferrite cord was used.
Extra USB keyboard, mouse and dummy laod were connected to USB Hub.
The test equipment used for testing please refer to the list as attached.

Deviation: None

Radiated RF Level – Peak Value

Frequency (MHz)	Horizontal (dBuv/m)	Vertical (dBuv/m)	FCC/B Limit (dBuv/m)
42.02	27.38	30.78	40.0
61.74	25.76	28.16	40.0
85.5	26.8	28.5	40.0

112.14	30.52	35.52	43.5
123.43	27.79	29.49	43.5
135.27	31.45	34.05	43.5
148.1	28.18	29.28	43.5
152.0	32.6	32.8	43.5
197.47	30.97	30.97	43.5
236.27	33.5	35.2	46.0
246.85	34.28	34.68	46.0
270.03	35.6	36.0	46.0
296.22	36.12	36.62	46.0
308.56	34.33	32.23	46.0
320.65	38.48	35.48	46.0
337.54	32.91	32.01	46.0
345.59	34.60	37.90	46.0
394.95	33.22	36.62	46.0
428.0	34.47	37.57	46.0
438.8	37.83	39.23	46.0
472.56	36.25	35.35	46.0
493.71	34.80	37.50	46.0
506.29	39.44	39.74	46.0
543.08	35.77	37.77	46.0
573.81	36.67	37.17	46.0
585.07	37.22	36.42	46.0
802.29	39.83	39.63	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 – Quasi-Peak Value

Frequency (MHz)	Horizontal (dBuv/m)	Vertical (dBuv/m)	FCC/B Limit (dBuv/m)
168.77	36.87	39.97	43.5
303.78	38.41	35.51	46.0
371.3	35.0	38.8	46.0
600.07	37.8	35.4	46.0
607.58	36.95	37.05	46.0
615.08	35.58	36.58	46.0
641.32	39.74	37.94	46.0
641.82	38.98	39.08	46.0
691.2	37.68	37.88	46.0
708.85	41.26	41.46	46.0
740.59	39.1	40.3	46.0
776.35	40.21	41.31	46.0
789.94	37.44	37.54	46.0
839.31	44.22	43.92	46.0
843.85	41.0	39.9	46.0
863.23	39.91	40.81	46.0
864.0	43.73	43.93	46.0
864.76	40.16	40.93	46.0
877.61	38.61	38.61	46.0
890.98	39.06	38.36	46.0

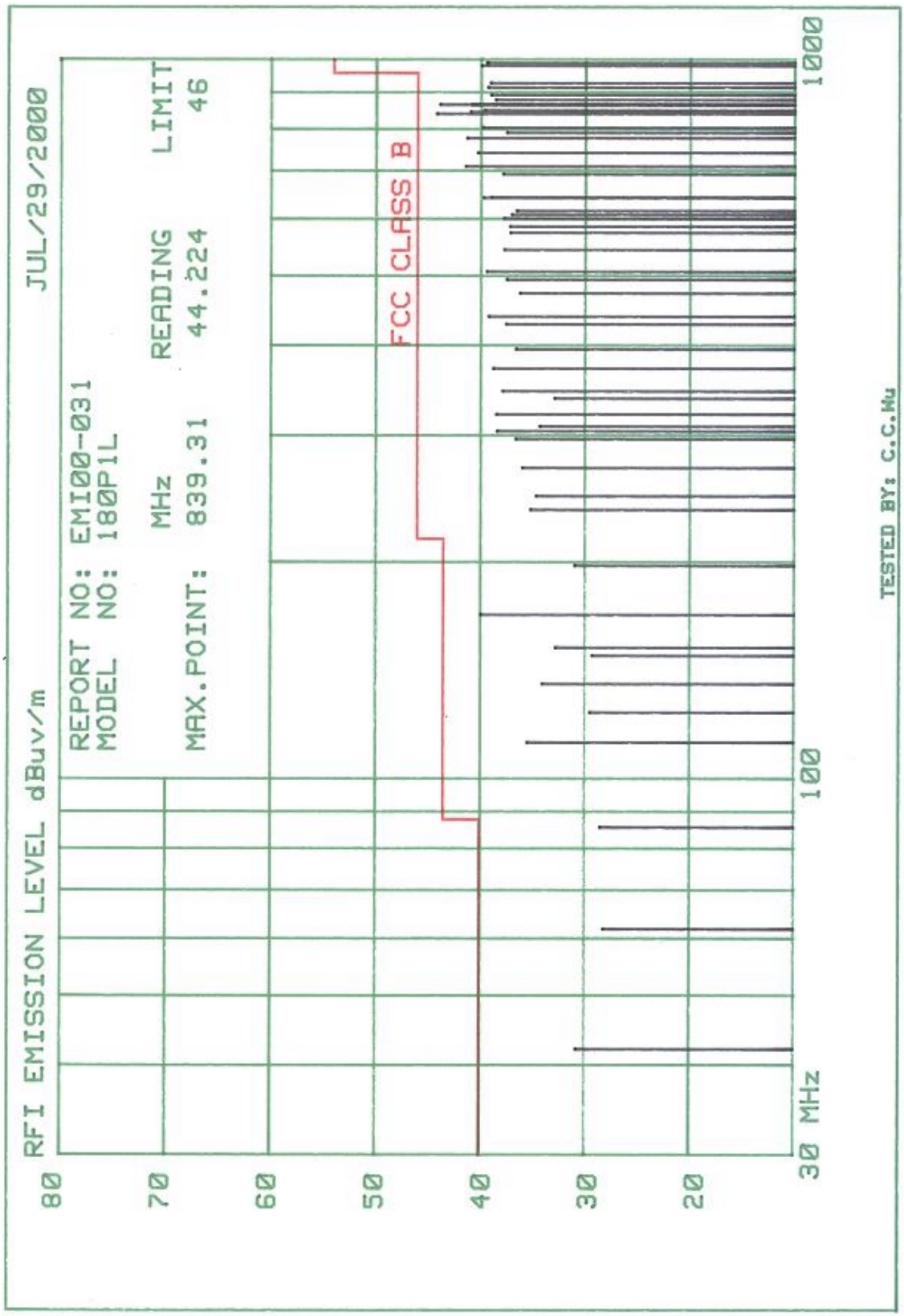
FCC ID: A3KM099

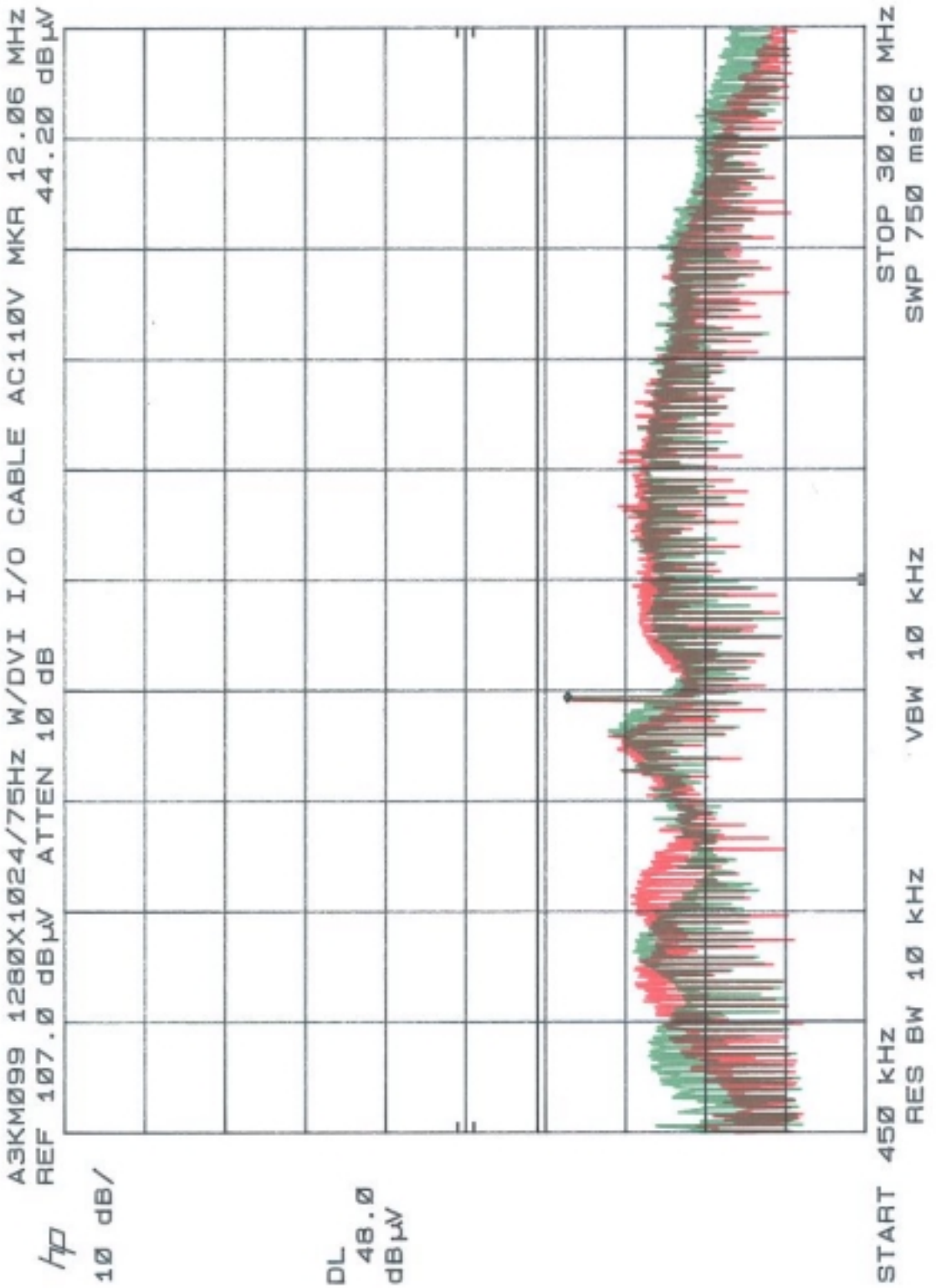
863.23	39.91	40.81	46.0
864.0	43.73	43.93	46.0
864.76	40.16	40.93	46.0
877.61	38.61	38.61	46.0
890.98	39.06	38.36	46.0
913.36	39.35	38.85	46.0
925.69	38.6	39.11	46.0
978.86	38.68	39.98	54.0
987.42	38.94	39.44	54.0

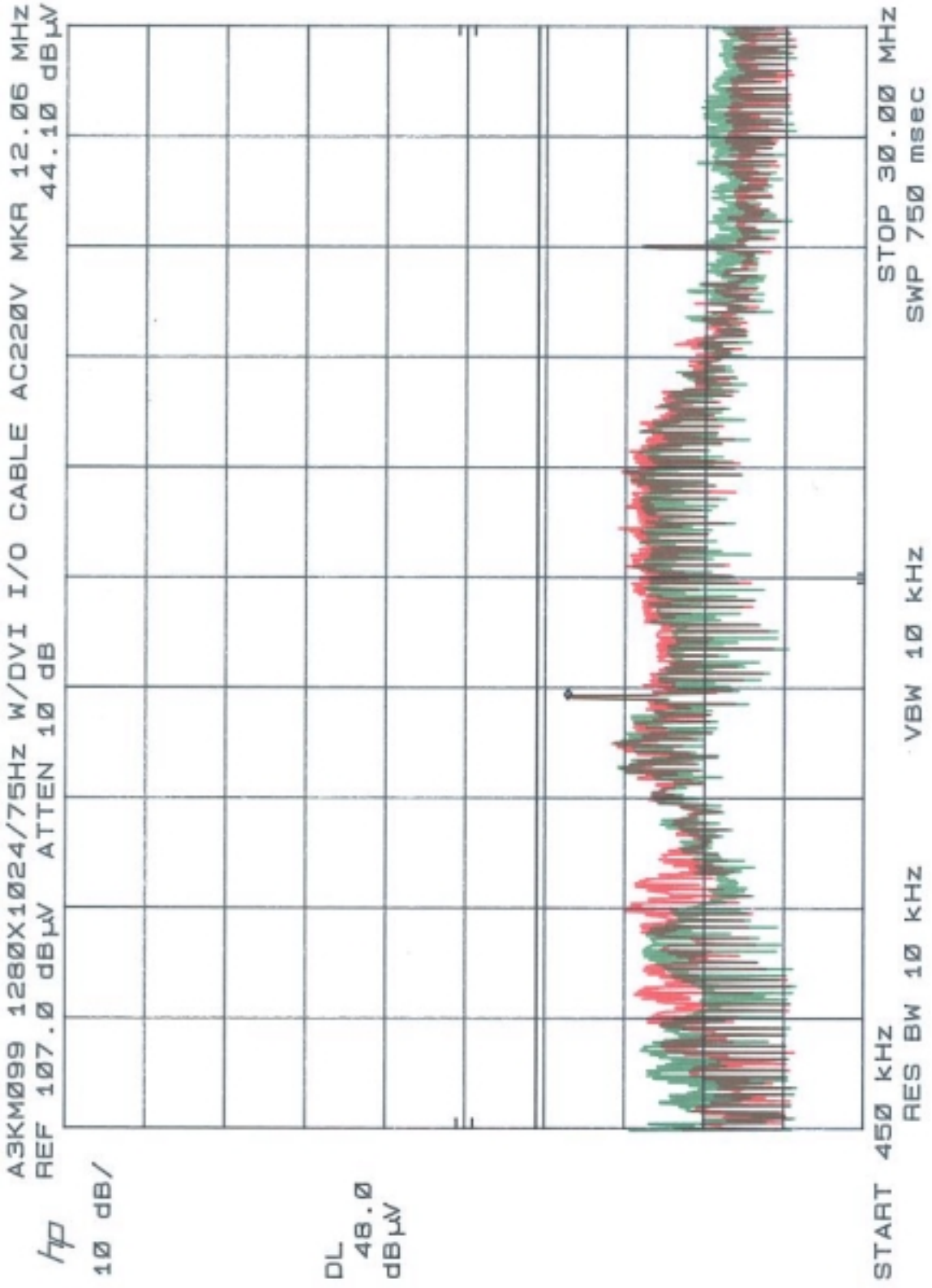
The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.
Sample of calculation:
Final value (dBuv/m) = Antenna Factor (dB) + Cable Loss (dB) + Reading value (dBuv/m)

Tested by: C.C.Wu

Checked by: K.J.Hsu – EMC Engineer
NVLAP Signatory


RFI EMISSION LEVEL dBuv/m
JUL/29/2000
REPORT NO: EMI00-031
MODEL NO: 180P1L
MHz READING LIMIT
MAX.POINT: 839.31 44.224 46
FCC CLASS B
80
70
60
50
40
30
20
30 MHz
100
1000
TESTED BY: C.C.Hu


A3KM099 1280X1024/75Hz W/DVI I/O CABLE AC110V MKR 12.06 MHz
44.20 dBµV
REF 107.0 dBµV ATTEN 10 dB
10 dB/
DL
48.0
dBµV
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.000 MHz
SWP 750 msec


A3KM099 1280X1024/75Hz W/DVI I/O CABLE AC220V MKR 12.06 MHz
REF 107.0 dBµV ATTEN 10 dB 44.10 dBµV
10 dB/
DL
48.0
dBµV
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec

FCC TEST REPORT

Report No. : EMI00-031A
Tested Date: July/31/00

Test Performed By
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Tel.: + 886-3-454-9862 Fax.: +886-3-454-9887

Manufacturer : Philips Business Electronics

Tested System:

1. EUT : 180P1 color LCD monitor s/n: TY0004031
   FCC ID : A3KM099
2. Computer : Acer AP6100 s/n: 8138A01502
   FCC ID : FCC Logo
3. Keyboard : HP E0633-WLUS2 s/n: 65368112
   FCC ID : FCC Logo
4. Mouse : IBM M-S34 s/n: 457249
   FCC ID : DZL211029
5. Modem : USRoboties 268 s/n: 002680559278575
   FCC ID : CJE-0318
6. Printer : HP2225C s/n: 3123S97227
   FCC ID : DSI6XU2225
7. Video Card : ATI FURY PRO s/n: 024035
   FCC ID : FCC Logo

Note: Test was performed in according with FCC measurement procedure ANSI C63.4-1992 "AMERICAN NATIONAL STANDARD FOR MEASUREMENT OF RADIO-NOISE EMISSION FROM LOW-VOLTAGE ELECTRONIC EQUIPMENT IN THE RANGE OF 9KHz TO 40GHz"

Monitor was connected to floor mounted AC outlet.
80.0KHz mode (1280x1024/75Hz) was tested.
D-sub I/F cable with two ferrite cores was used.
Non-shield power cord was used during test.
Extra headphone and Mic were used.
Audio-out cable with one ferrite cord was used.
Mic-in cable with one ferrite cord was used.
Extra USB keyboard, mouse and dummy laod were connected to USB Hub.
The test equipment used for testing please refer to the list as attached.

Deviation: None

Radiated RF Level – Peak Value

Frequency (MHz)	Horizontal (dBuv/m)	Vertical (dBuv/m)	FCC/B Limit (dBuv/m)
42.02	25.78	30.58	40.0
61.74	25.86	26.96	40.0
85.5	27.4	27.3	40.0
112.14	32.92	36.12	43.5

123.43	29.69	30.29	43.5
135.27	33.35	35.45	43.5
152.0	32.6	34.1	43.5
197.47	29.97	30.77	43.5
236.27	35.9	37.4	46.0
246.85	34.58	34.28	46.0
270.03	35.8	37.2	46.0
296.22	36.02	35.52	46.0
303.78	31.11	33.61	46.0
308.56	29.33	34.53	46.0
320.91	29.58	31.28	46.0
337.54	31.41	34.81	46.0
345.59	31.3	39.9	46.0
355.49	31.6	35.0	46.0
369.52	30.5	37.7	46.0
371.3	33.9	39.0	46.0
391.2	32.32	36.72	46.0
394.95	32.32	36.72	46.0
428.18	32.37	37.07	46.0
468.02	32.43	34.83	46.0
472.56	34.25	36.95	46.0
506.3	39.34	39.54	46.0
540.06	35.46	38.86	46.0
573.81	34.47	36.97	46.0
607.57	38.35	39.55	46.0
708.85	39.56	39.86	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 – Quasi-Peak Value

Frequency (MHz)	Horizontal (dBuv/m)	Vertical (dBuv/m)	FCC/B Limit (dBuv/m)
168.77	32.77	38.07	43.5
370.27	32.8	42.4	46.0
384.07	32.82	38.22	46.0
444.34	34.55	40.05	46.0
480.09	41.26	37.86	46.0
493.71	34.7	39.9	46.0
616.38	34.81	38.61	46.0
617.14	42.14	43.64	46.0
617.9	34.67	38.37	46.0
641.32	38.34	40.64	46.0
641.82	37.68	36.78	46.0
740.56	36.3	36.9	46.0
776.35	37.01	38.81	46.0
810.11	39.56	39.86	46.0
839.31	37.32	37.62	46.0
863.23	40.91	40.71	46.0
864.0	43.83	43.63	46.0
864.76	41.06	40.86	46.0

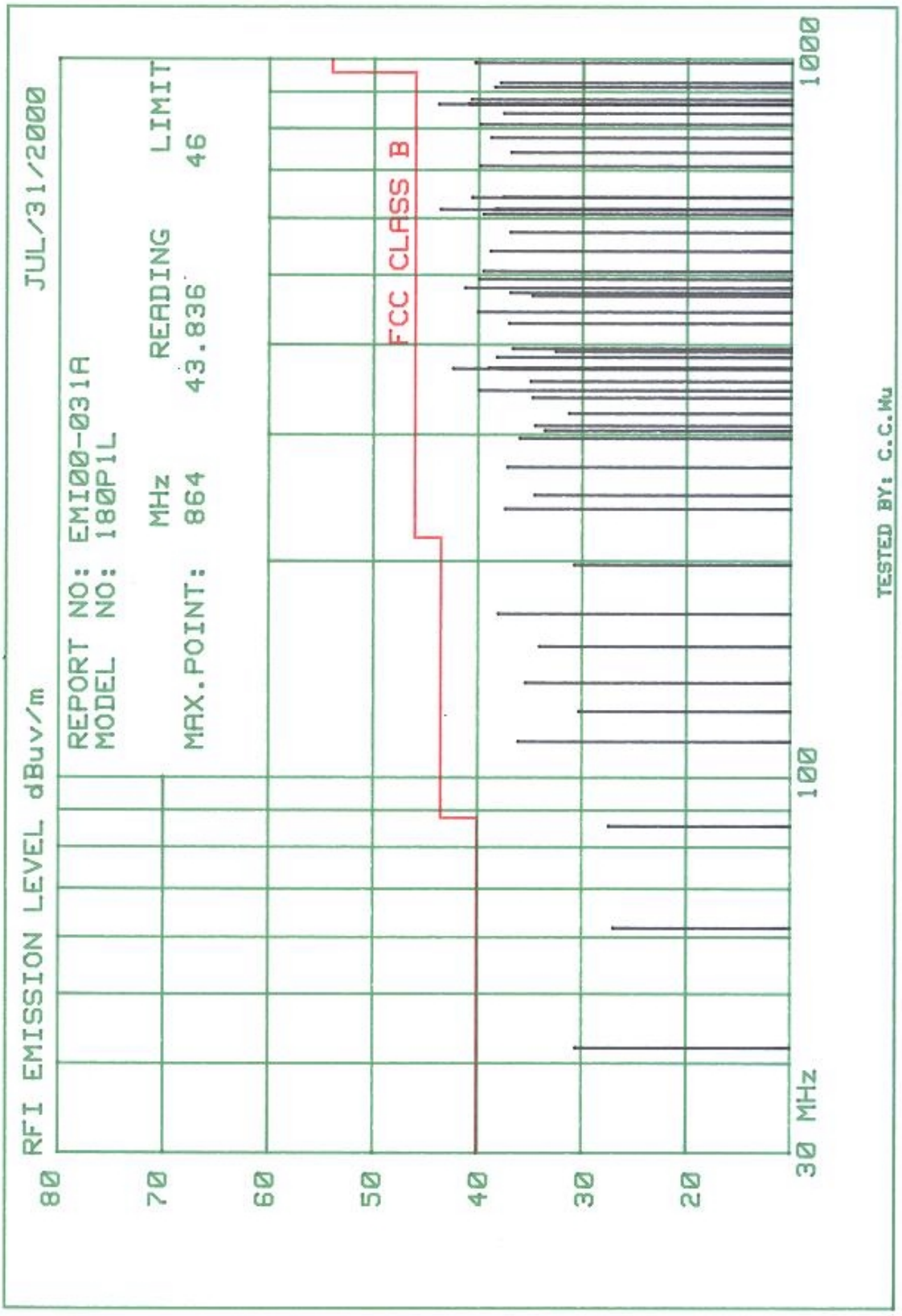
FCC ID: A3KM099

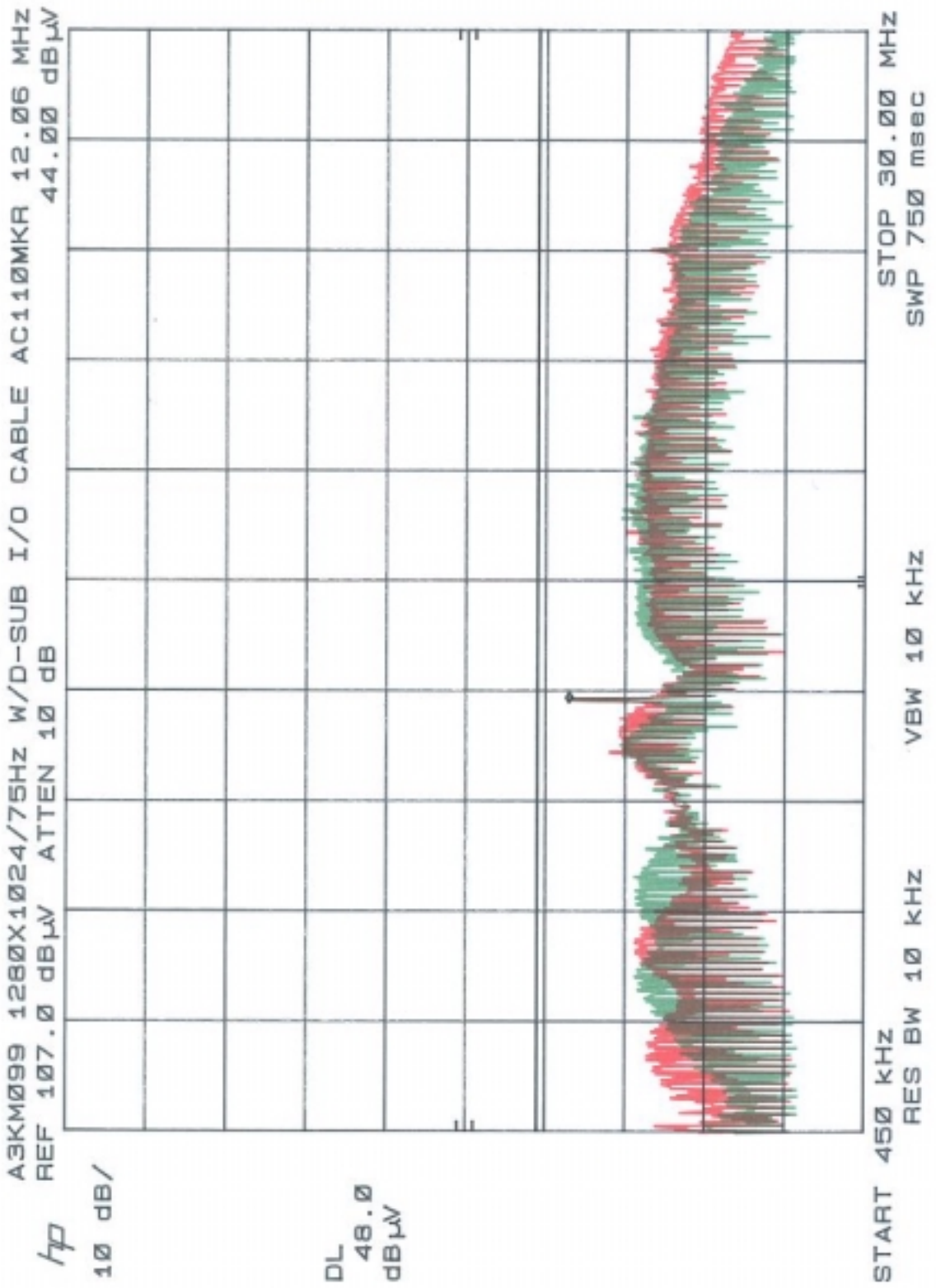
810.11	39.56	39.86	46.0
839.31	37.32	37.62	46.0
863.23	40.91	40.71	46.0
864.0	43.83	43.63	46.0
864.76	41.06	40.86	46.0
877.61	40.11	40.71	46.0
913.36	38.25	38.45	46.0
925.69	37.61	37.91	54.0
987.42	38.94	40.34	54.0

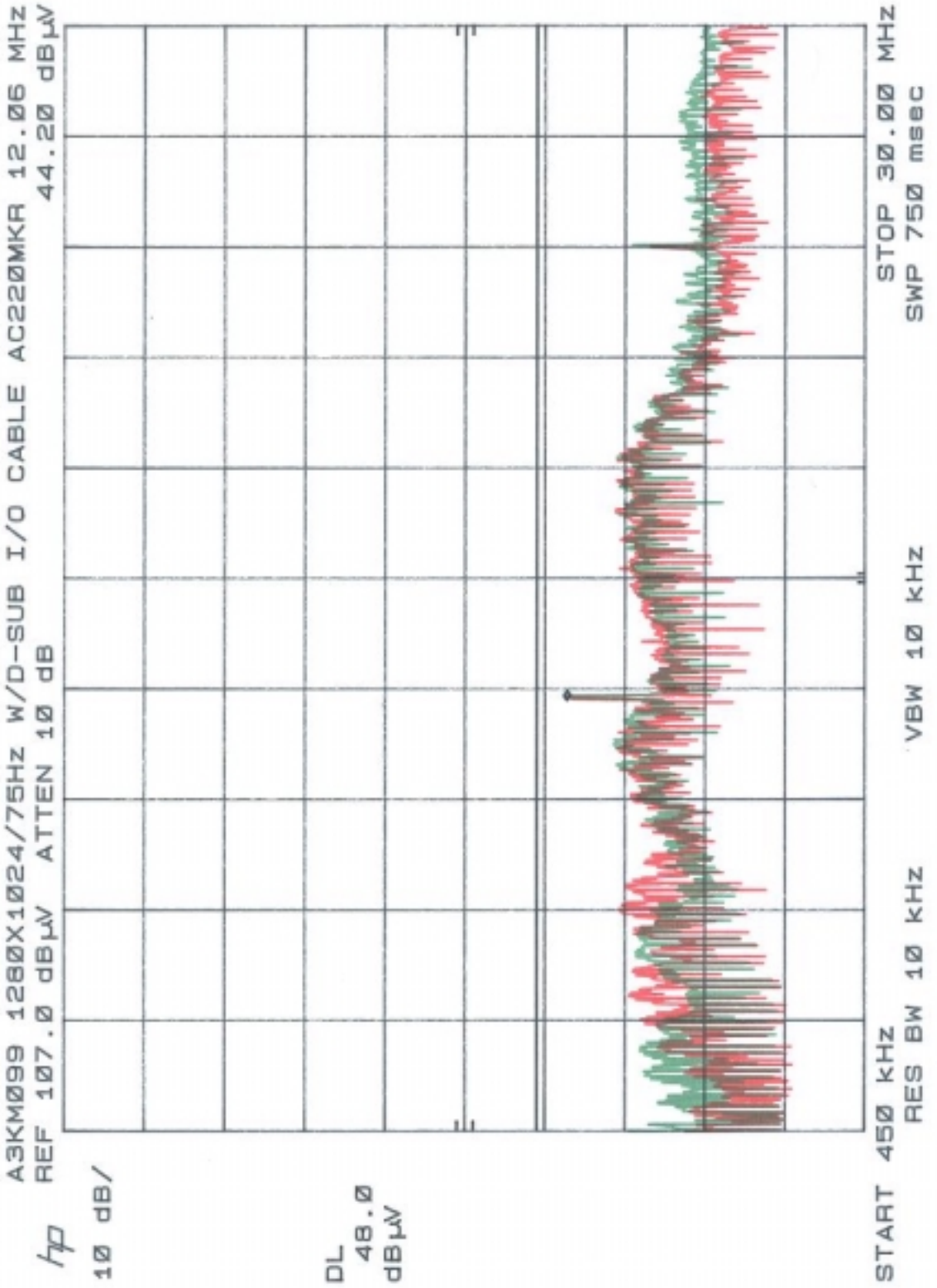
The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.
Sample of calculation:
Final value (dBuv/m) = Antenna Factor (dB) + Cable Loss (dB) + Reading value (dBuv/m)

Tested by: C.C.Wu

Checked by: K.J.Hsu – EMC Engineer
NVLAP Signatory


RFI EMISSION LEVEL dBuv/m
JUL/31/2000
REPORT NO: EMI00-031A
MODEL NO: 180P1L
MHz READING LIMIT
MAX.POINT: 864 43.836 46
FCC CLASS B
80
70
60
50
40
30
20
30 MHz
100
1000
TESTED BY: C.C.Wu


A3KM099 1280X1024/75Hz W/D-SUB I/O CABLE AC110MKR 12.06 MHz
44.00 dBµV
REF 107.0 dBµV ATTEN 10 dB
10 dB/
DL
48.0
dBµV
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec


A3KM099 1280X1024/75Hz W/D-SUB I/O CABLE AC220MKR 12.06 MHz
44.20 dBµV
REF 107.0 dBµV ATTEN 10 dB
10 dB/
DL
48.0
dBµV
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec

FCC TEST REPORT

Report No. : EMI00-031B
Tested Date: Aug./01/00

Test Performed By
Philips Electronics Industries (Taiwan) Ltd.
Business Electronics
EMC Lab.
No. 5, Tze Chiang 1 Road,
Chungli, Taoyuan, Taiwan, R.O.C.
Tel.: + 886-3-454-9862 Fax.: +886-3-454-9887

Manufacturer : Philips Business Electronics

Tested System:

1. EUT : 180P1 color LCD monitor s/n: TY0004031
   FCC ID : A3KM099
2. Computer : Acer AP6100 s/n: 8138A01502
   FCC ID : FCC Logo
3. Keyboard : HP E0633-WLUS2 s/n: 65368112
   FCC ID : FCC Logo
4. Mouse : IBM M-S34 s/n: 457249
   FCC ID : DZL211029
5. Modem : USRoboties 268 s/n: 002680559278575
   FCC ID : CJE-0318
6. Printer : HP2225C s/n: 3123S97227
   FCC ID : DSI6XU2225
7. Video Card : ATI FURY PRO s/n: 024035
   FCC ID : FCC Logo

Note: Test was performed in according with FCC measurement procedure ANSI C63.4-1992 "AMERICAN NATIONAL STANDARD FOR MEASUREMENT OF RADIO-NOISE EMISSION FROM LOW-VOLTAGE ELECTRONIC EQUIPMENT IN THE RANGE OF 9KHz TO 40GHz"

Monitor was connected to floor mounted AC outlet.
64.0KHz mode (1280x1024/60Hz) was tested.
DVI I/F cable with two ferrite cores was used.
Non-shield power cord was used during test.
Extra headphone and Mic were used.
Audio-out cable with one ferrite cord was used.
Mic-in cable with one ferrite cord was used.
Extra USB keyboard, mouse and dummy laod were connected to USB Hub.
The test equipment used for testing please refer to the list as attached.

Deviation: None

Radiated RF Level – Peak Value

Frequency (MHz)	Horizontal (dBuv/m)	Vertical (dBuv/m)	FCC/B Limit (dBuv/m)
42.02	26.48	28.68	40.0
61.85	26.86	25.56	40.0
84.71	33.55	29.65	40.0
112.14	31.82	35.02	43.5
120.04	31.6	34.7	43.5

FCC ID: A3KM099

123.43	31.09	29.29	43.5
135.01	32.55	35.55	43.5
189.02	35.11	35.51	43.5
210.16	35.64	31.54	43.5
218.19	35.64	31.54	46.0
228.16	33.06	32.16	46.0
240.04	35.1	34.0	46.0
297.05	37.24	36.84	46.0
330.2	33.82	31.62	46.0
336.07	36.06	34.66	46.0
351.05	35.9	34.7	46.0
392.07	35.21	34.31	46.0
543.06	37.57	37.37	46.0

Spectrum Analyzer Setting:
RBW: 100KHz
VBW: 100KHz

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

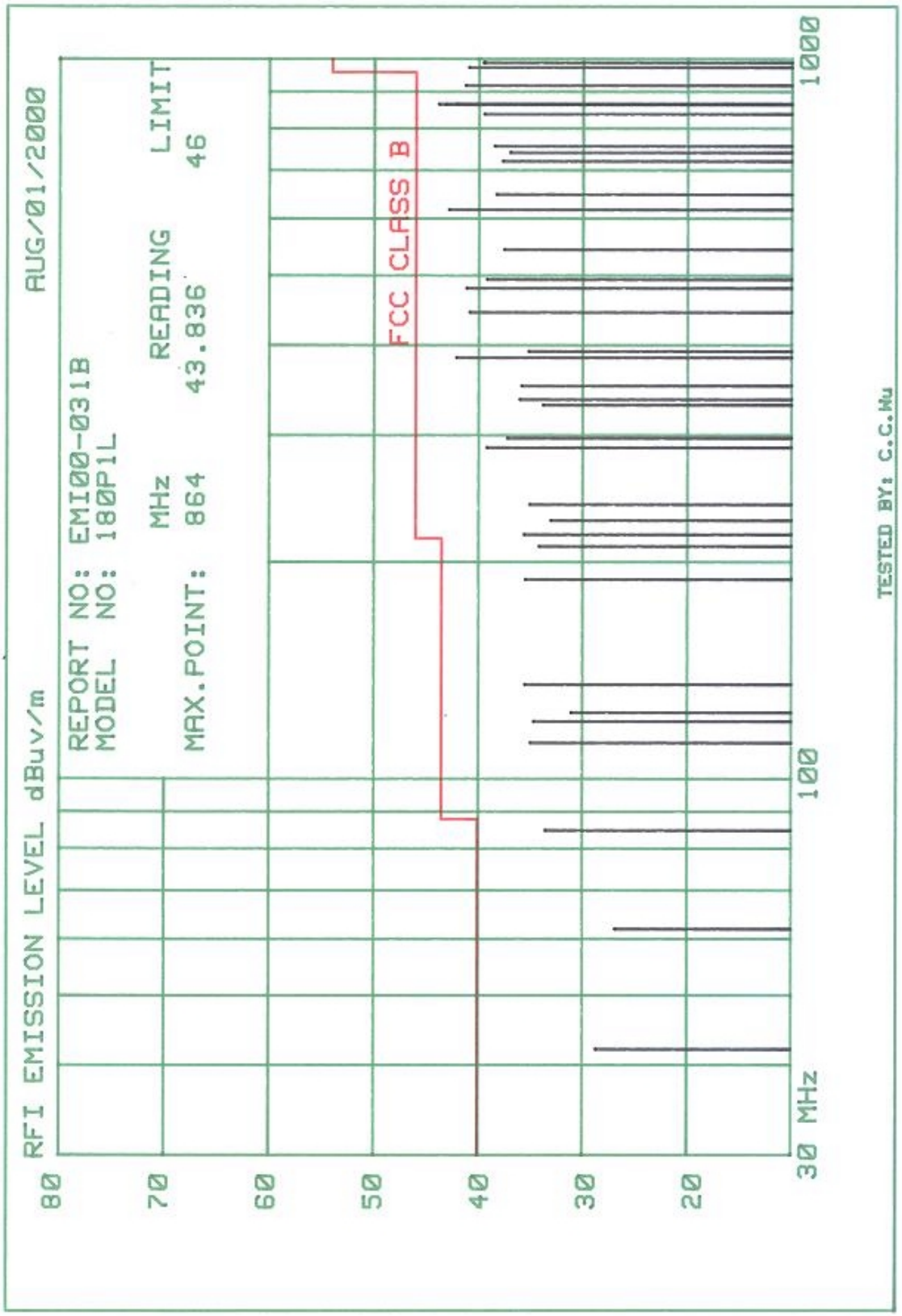
Radiated RF Level – Quasi-Peak Value

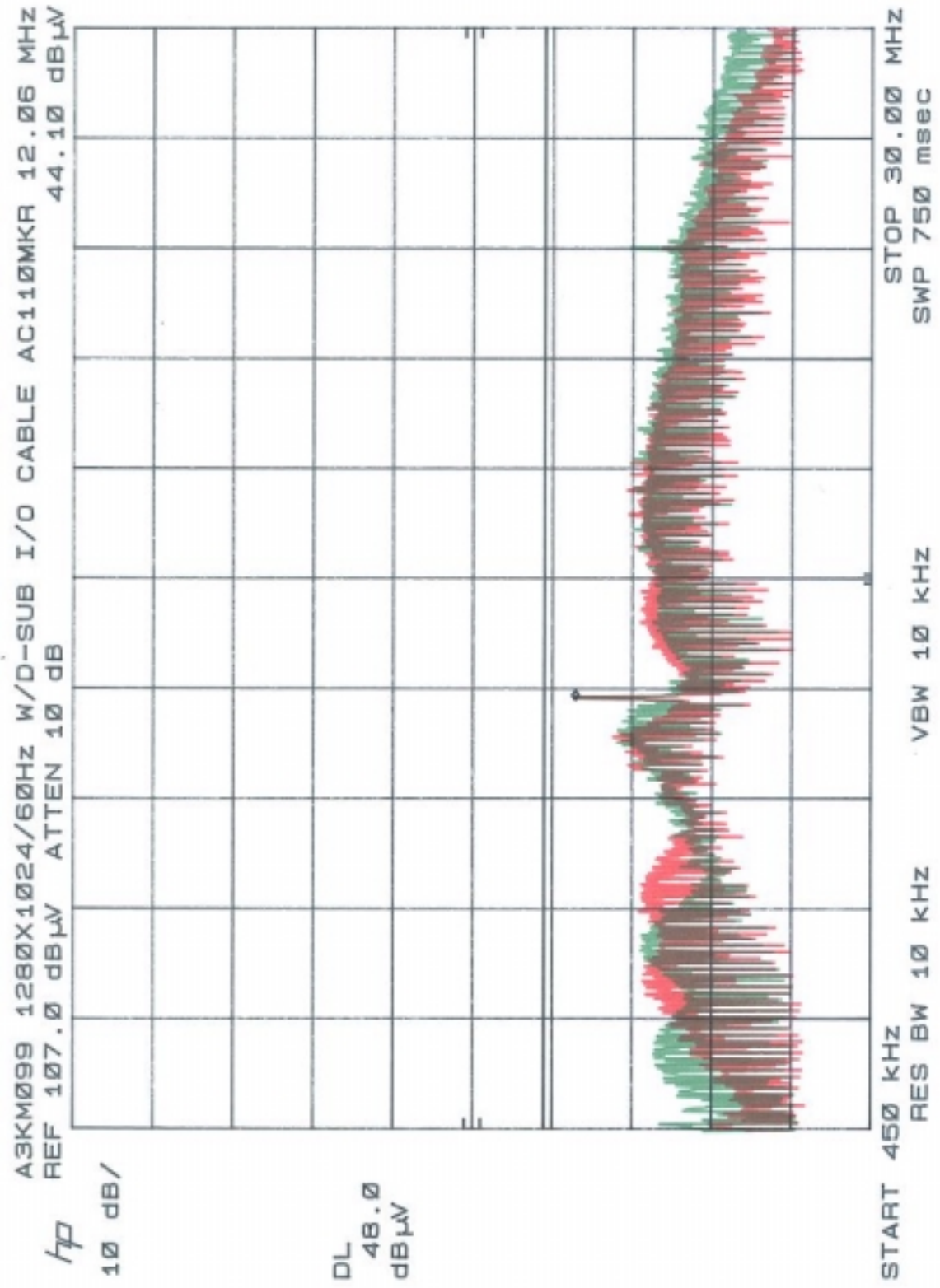
Frequency (MHz)	Horizontal (dBuv/m)	Vertical (dBuv/m)	FCC/B Limit (dBuv/m)
288.07	39.2	38.1	46.0
384.07	41.62	42.12	46.0
444.34	34.75	40.85	46.0
480.09	41.16	37.86	46.0
493.71	34.30	39.20	46.0
617.14	41.34	42.84	46.0
648.08	35.82	38.32	46.0
720.15	37.72	37.52	46.0
740.56	36.9	37.0	46.0
756.1	37.19	38.49	46.0
837.1	37.49	39.49	46.0
863.23	40.5	41.51	46.0
864.0	43.43	43.83	46.0
864.11	43.23	42.83	46.0
864.76	40.86	42.16	46.0
918.12	41.27	39.87	46.0
972.12	38.95	40.95	54.0
987.42	38.54	39.54	54

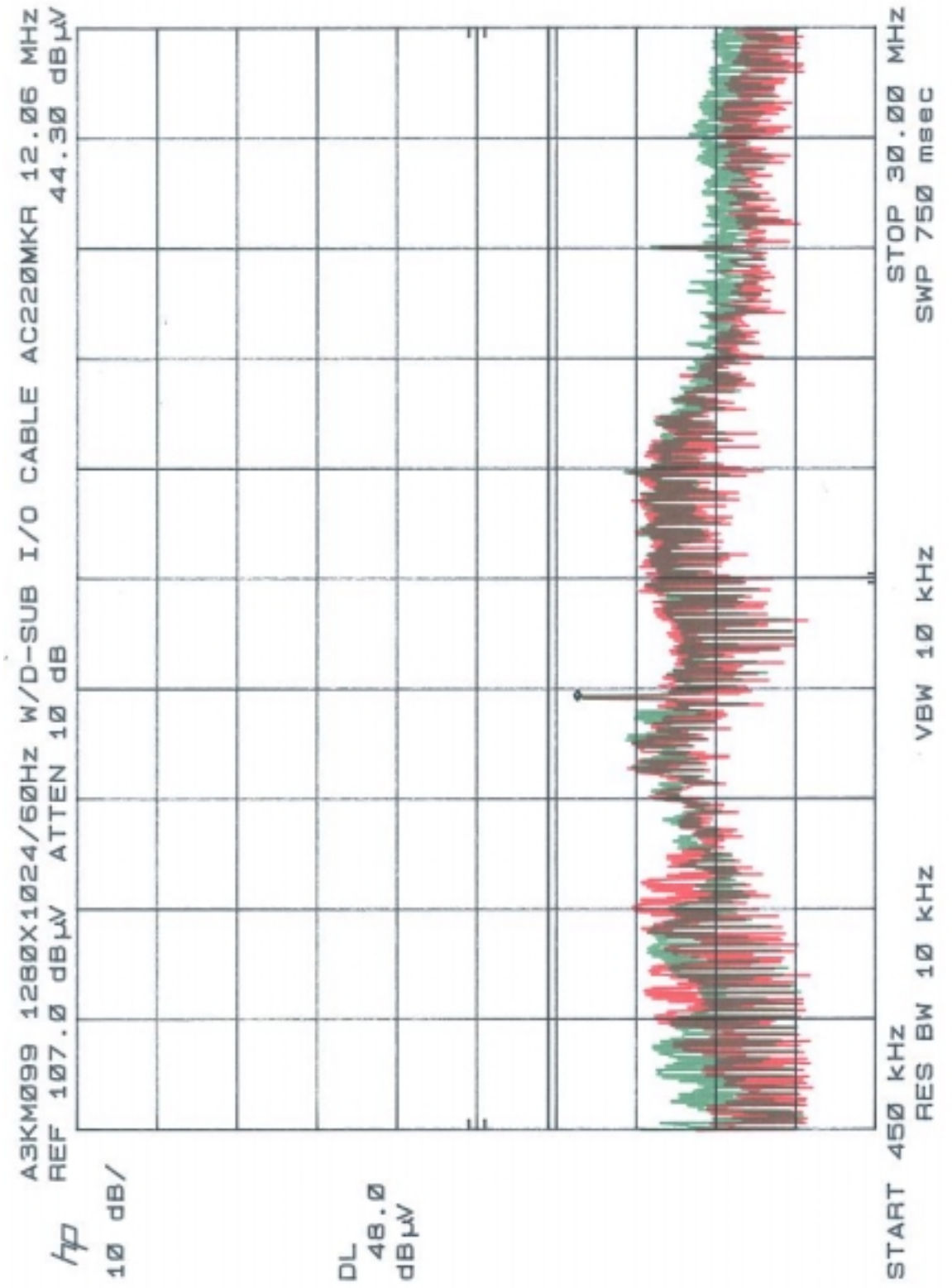
The spectrum was scanned from 30MHz to 1000MHz and the significant emissions were recorded.
Test distance between device under test and receiving antenna was 3-meter.
Sample of calculation:
Final value (dBuv/m) = Antenna Factor (dB) + Cable Loss (dB) + Reading value (dBuv/m)

Tested by: C.C.Wu

Checked by: K.J.Hsu – EMC Engineer
NVLAP Signatory


RFI EMISSION LEVEL dBuv/m
AUG/01/2000
REPORT NO: EMI00-031B
MODEL NO: 180P1L
MHz READING LIMIT
MAX.POINT: 864 43.836 46
FCC CLASS B
80
70
60
50
40
30
20
30 MHz
100
1000
TESTED BY: C.C.Wu


A3KM099 1280X1024/60Hz W/D-SUB I/O CABLE AC110MKR 12.06 MHz
44.10 dBµV
REF 107.0 dBµV ATTEN 10 dB
10 dB/
DL
48.0
dBµV
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec


A3KM099 1280X1024/60Hz W/D-SUB I/O CABLE AC220MKR 12.06 MHz
44.30 dBµV
REF 107.0 dBµV ATTEN 10 dB
10 dB/
DL
48.0
dBµV
START 450 kHz
RES BW 10 kHz
VBW 10 kHz
STOP 30.00 MHz
SWP 750 msec