

FCC TEST REPORT

Report No. : EMI00-032
 Tested Date: Aug./04/00

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 | : | Dell M991 color monitor s/n: TY0005192 |
| | : | FCC ID : A3KM101 |
| 2. Computer | : | Dell MMS s/n: EY1CQ |
| | : | FCC ID : FCC Logo |
| 3. Keyboard | : | SK-1000REW s/n: 12710-86G3040 |
| | : | FCC ID : GYUR57SK |
| 4. Mouse | : | Logitech M-S35 s/n: LZA48813179 |
| | : | 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 3DRAGE s/n: 12674 |
| | : | 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.
 93.7KHz mode (1600x1200/75Hz) was tested.
 D-sub I/F cable with four ferrite cores was used (two inside).
 Non-shield power cord was used during test.
 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)
35.19	27.1	30.9	40.0
43.97	32.26	31.06	40.0

52.78	30.43	33.03	40.0
61.57	26.36	30.96	40.0
70.37	27.9	30.1	40.0
79.16	ambient	27.82	40.0
114.37	33.24	32.14	43.5
123.18	36.49	34.39	43.5
132.02	35.12	33.32	43.5
149.58	35.8	30.0	43.5
158.37	33.9	30.6	43.5
184.74	30.15	29.45	43.5
211.16	33.48	31.58	43.5
228.76	34.58	33.28	46.0
255.12	35.55	36.65	46.0
263.94	34.36	34.66	46.0
272.74	37.02	36.42	46.0
325.55	35.22	34.92	46.0
334.35	36.51	34.81	46.0
351.95	32.8	33.3	46.0
378.32	33.3	32.8	46.0
387.12	32.43	33.63	46.0
448.74	36.37	35.37	46.0
457.52	36.89	36.89	46.0
466.32	36.58	ambient	46.0
475.14	36.4	36.6	46.0
483.92	36.58	36.38	46.0
492.74	37.97	37.67	46.0
507.1	37.35	38.05	46.0
519.12	37.25	37.65	46.0
527.92	38.11	38.91	46.0
536.72	36.74	38.04	46.0
545.53	35.38	37.08	46.0
554.32	38.49	38.69	46.0
563.12	37.61	38.51	46.0
571.92	36.72	38.42	46.0
580.7	37.07	39.47	46.0
589.5	36.18	36.88	46.0
598.3	36.77	38.57	46.0
633.5	37.46	38.56	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 (dB _{UV} /m)	Vertical (dB _{UV} /m)	FCC/B Limit (dB _{UV} /m)
202.36	36.7	30.8	43.5
299.16	37.48	38.28	46.0

307.95	37.43	39.23	46.0
501.52	39.11	38.71	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:

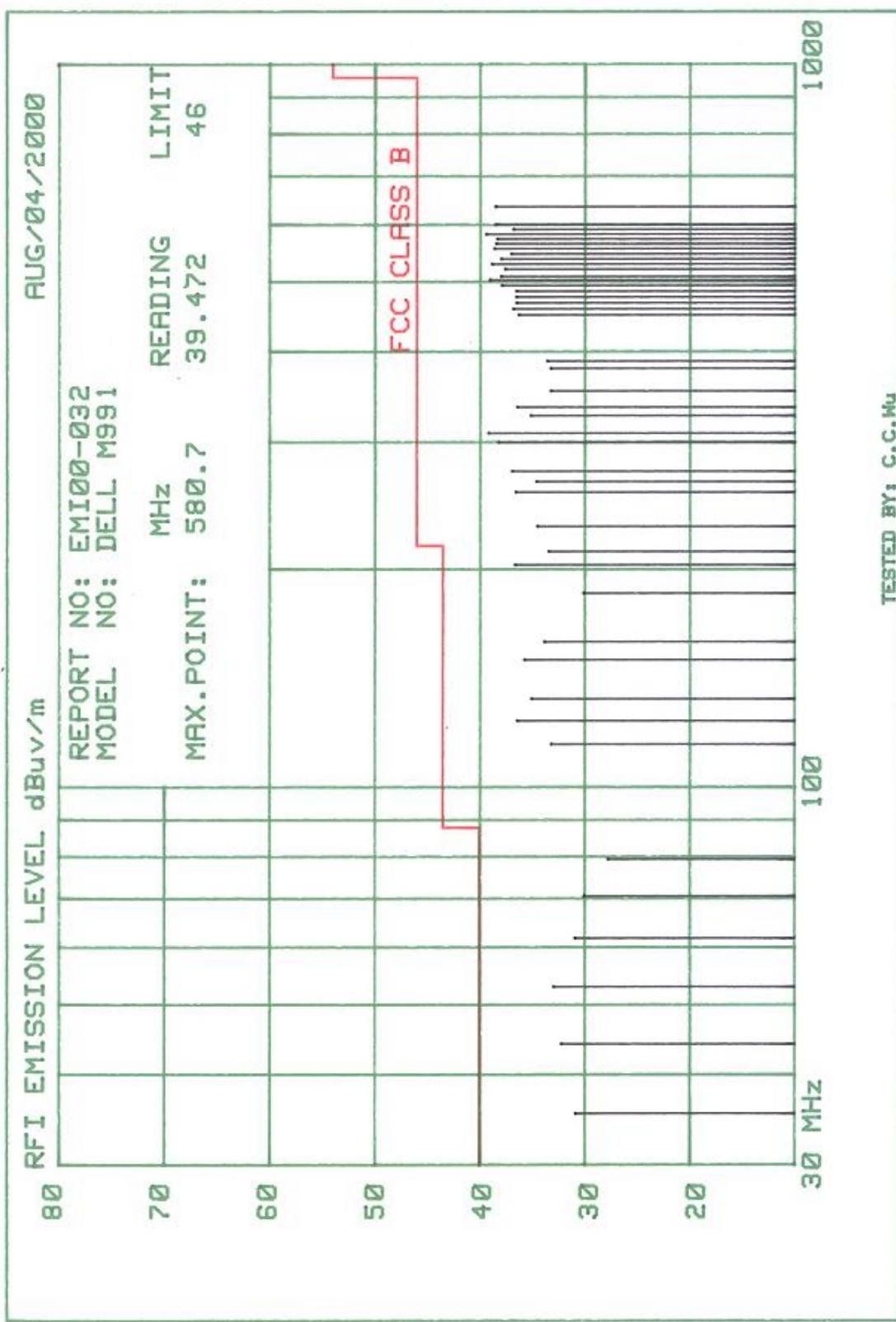
$$\text{Final value (dBuv/m)} = \text{Antenna Factor (dB)} + \text{Cable Loss (dB)} + \text{Reading value (dBuv/m)}$$

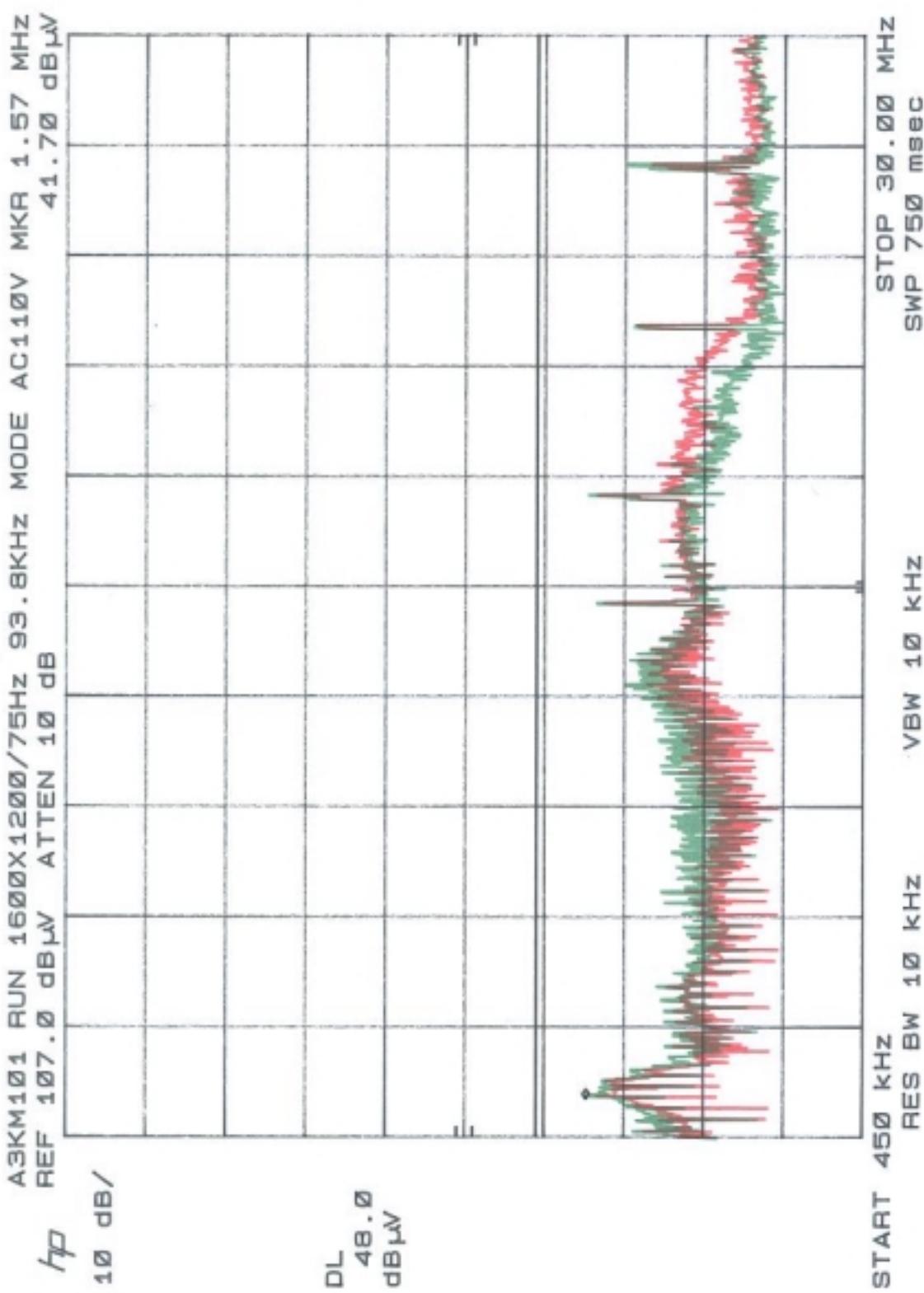
Tested by:

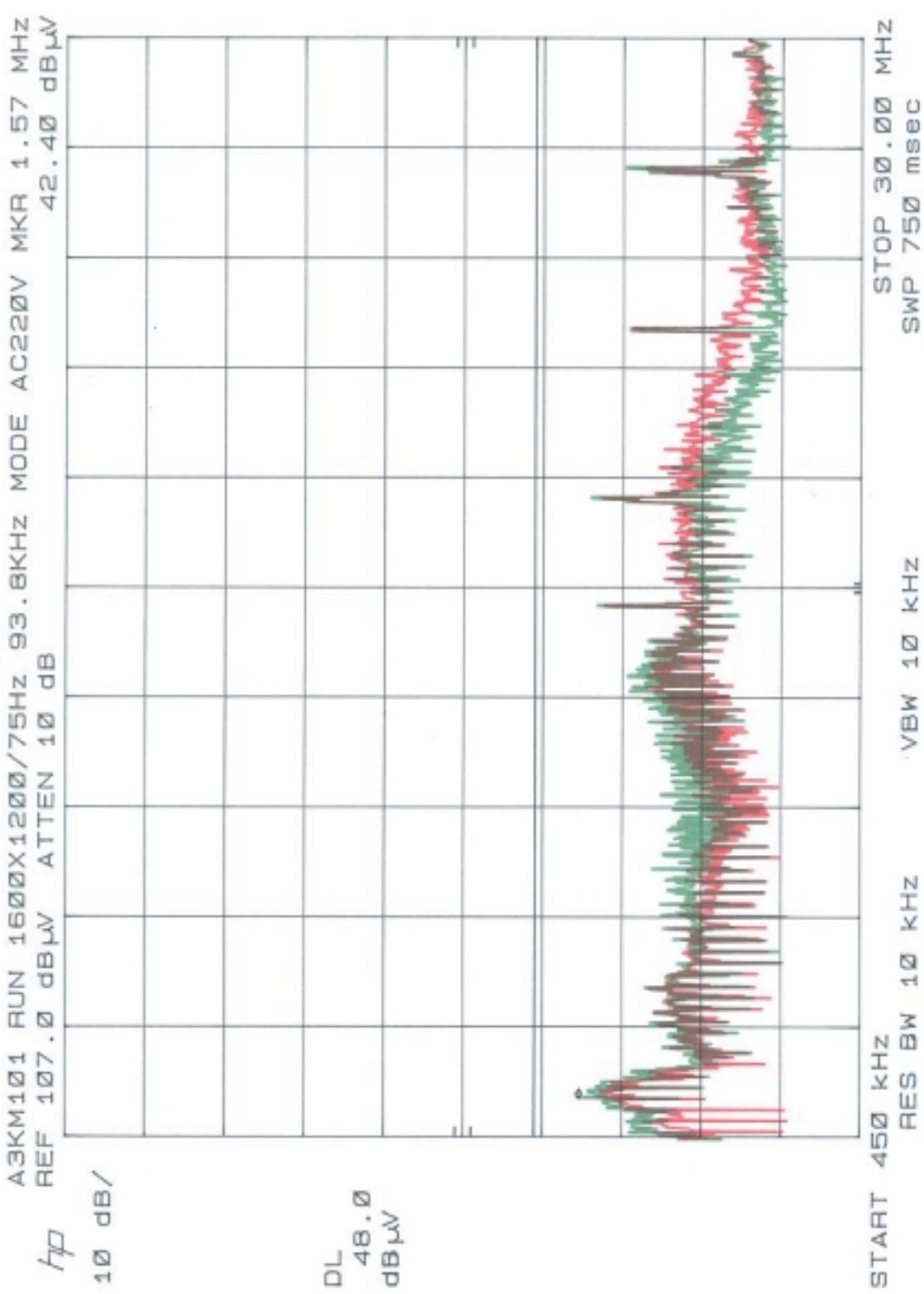
Checked by:

C.C.Wu

K.J.Hsu – EMC Engineer
NVLAP Signatory







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 OF 9KHz TO 40GHz"

Monitor was connected to floor mounted AC outlet.
 91.1KHz mode (1280x1024/85Hz) was tested.
 D-sub I/F cable with four ferrite cores was used (two inside).
 Non-shield power cord was used during test.
 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)
31.42	28.36	32.76	40.0
47.12	29.28	31.58	40.0

62.82	26.99	30.09	40.0
70.68	27.08	29.78	40.0
86.39	33.7	32.5	40.0
117.82	29.88	31.18	43.5
125.65	34.78	35.18	43.5
133.52	35.14	32.24	43.5
149.23	29.49	ambient	43.5
157.07	34.15	29.15	43.5
164.91	32.15	28.85	43.5
180.63	33.29	30.89	43.5
204.21	33.3	31.2	43.5
212.07	34.26	32.76	43.5
235.63	34.3	33.9	46.0
259.19	36.85	36.65	46.0
267.05	37.48	37.18	46.0
282.76	39.35	36.95	46.0
298.47	36.16	36.16	46.0
306.3	32.12	32.92	46.0
314.16	39.75	38.55	46.0
322.02	30.48	29.98	46.0
330.07	32.42	31.82	46.0
337.72	30.71	31.71	46.0
345.59	32.2	32.8	46.0
354.05	32.6	32.1	46.0
361.31	32.78	32.5	46.0
369.19	34.2	34.9	46.0
377.02	30.77	31.67	46.0
384.87	32.26	32.76	46.0
392.73	32.94	33.14	46.0
416.29	36.79	33.79	46.0
471.29	36.2	35.6	46.0
479.14	35.62	34.72	46.0
486.96	36.48	35.78	46.0
502.65	39.02	38.52	46.0
518.37	34.94	34.54	46.0
541.97	35.36	35.06	46.0
549.82	36.6	36.8	46.0
557.67	36.09	36.59	46.0
565.53	35.28	35.88	46.0
573.37	37.45	37.75	46.0
581.22	36.67	36.68	46.0
604.79	36.16	36.76	46.0
628.35	37.32	38.42	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 (dB _B /m)	Vertical (dB _B /m)	FCC/B Limit (dB _B /m)
55.0	30.35	34.45	40.0
290.62	38.12	36.92	46.0
494.82	38.54	37.04	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:

$$\text{Final value (dB}_B\text{/m)} = \text{Antenna Factor (dB)} + \text{Cable Loss (dB)} + \text{Reading value (dB}_B\text{/m)}$$

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Checked by:

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