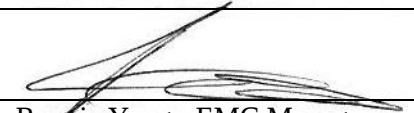




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Philips Electronics Industries (Taiwan) Ltd - EMC Lab. 5, Tze Chiang 1 Road, Chungli Industrial Park, Chungli, Taoyuan, Taiwan Tel.: +886-3-454-9862 Fax.: +886-3-454-9887 E-mail: ronnie.yang@philips.com	FCC Test Report	Report No.: TYR87-2012 Date : 24 June, 2002 Page : Page 1 of 34
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. : A3KM076 Model Name : E772p Serial Number : TY0205276 Description : 17" XGA color monitor, Max. resolution 1280x1024/60Hz		
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 : 19 Jun. 2002 Date of performance of test : 21 Jun., 2002 to 22 Jun., 2002		
 C.C. Wu - EMC Test Engineer  Ronnie Yang - EMC Manager NVLAP Signatory		

Philips Electronics Industries (Taiwan) Ltd

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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, 17" color monitor :

Model No. : E772p
FCC ID : A3KM076
Brand : DELL

The color monitor automatically scans horizontal frequencies between 30KHz and 70KHz , 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 1280x1024 pixels.

The monitor has 8 factory-preset modes as indicated in the following table:

#	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	1280x1024	64.0	60.0	+	+

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	08/15/2001	08/15/2002
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	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	05/29/2002	05/29/2003
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

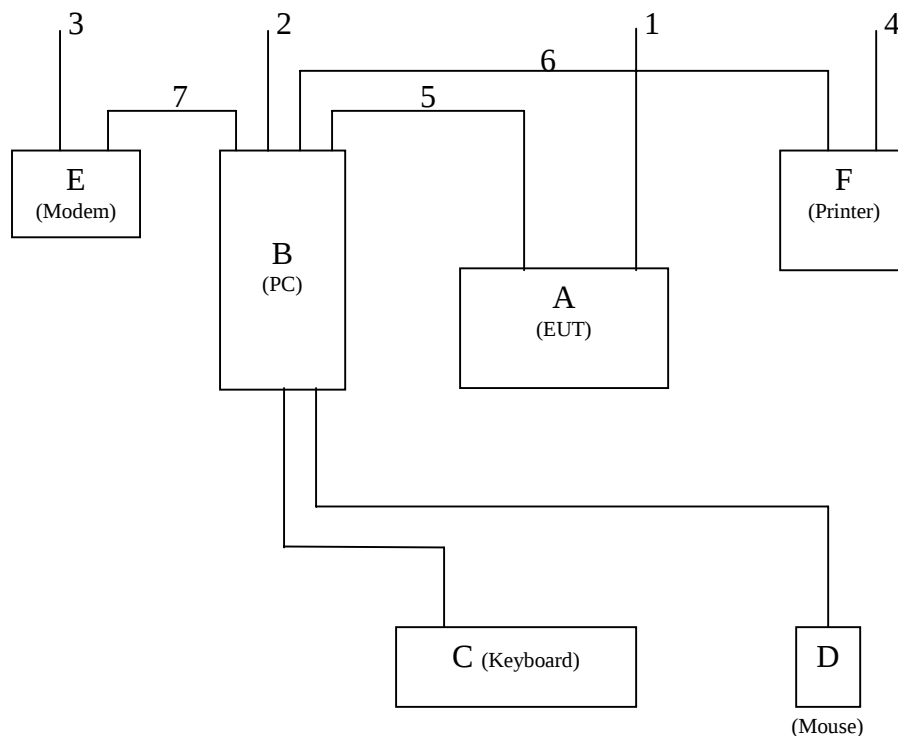
The system was configured for testing in a typical fashion (as a customer would normally use it) according to ANSI C63.4-1992, please see the photographs for detail. For system measurement, the EUT “E772p” were connected to:

	Description	Brand/ Model No.	Serial No.	FCC ID	Remark
A	Monitor	DELL E772p	TY0205276	A3KM076	EUT
B	PC	DELL DHM	GV8P21X	FCC logo	
C	Keyboard	DELL SK-8100	CN-09C487-38844-193-7480	FCC logo	
D	Mouse	Logitech M-S34	LNA14011260	DZL211029	
E	Modem	USRobotics 268	2680559278575	CJE-0318	
F	Printer	HP 2225C	3145S02419	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	EMI02-027-C	1280x1024	64KHz/60Hz	D-sub
		1024x768	68.7KHz/85Hz	D-sub
Radiated	EMI02-027-R	1280x1024	64KHz/60Hz	D-sub
		1024x768	68.7KHz/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" 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

: 21 Jun., 2002 to 22 Jun., 2002

Test Engineer

: C.C.Wu

For detail measurement results see next pages.

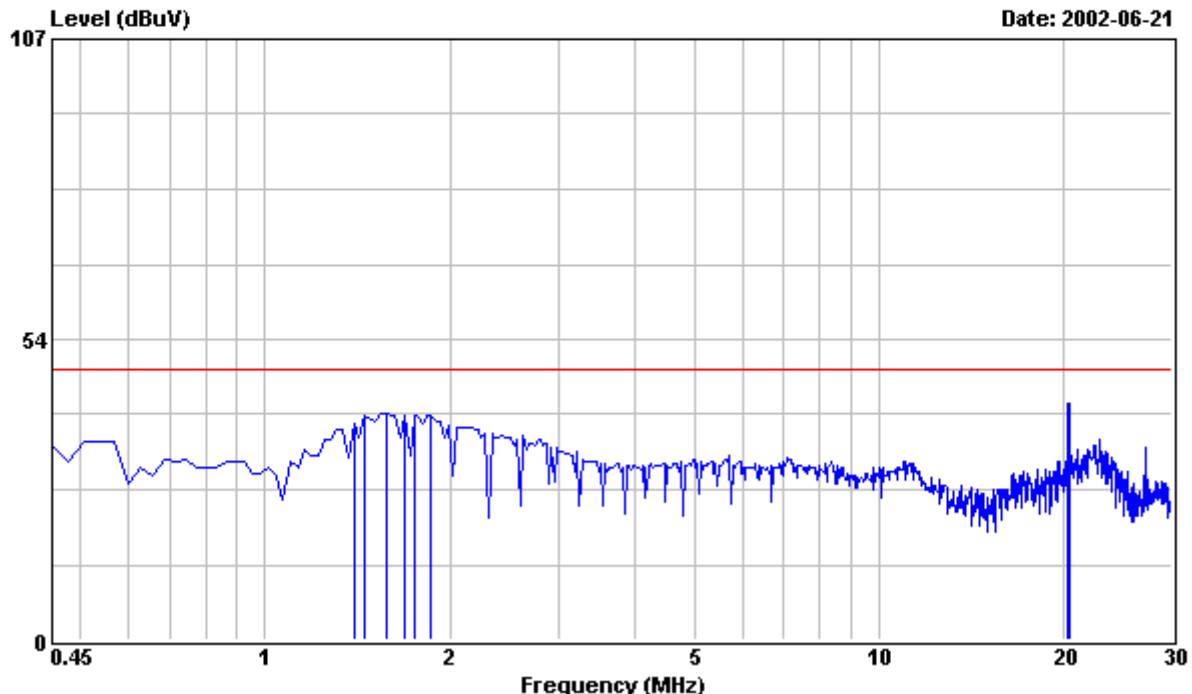


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Data#: 1

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L1 LINE
EUT : DELL E772p Serial No:TY0205276
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1024x768/85Hz 68.7KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ LINE
1.396	38.20	48.00	0.40	38.60	-9.40	
1.455	39.60	48.00	0.40	40.00	-8.00	
1.573	40.00	48.00	0.40	40.40	-7.60	
1.691	39.40	48.00	0.40	39.80	-8.20	
1.750	39.50	48.00	0.40	39.90	-8.10	
1.868	39.60	48.00	0.40	40.00	-8.00	
20.367	41.40	48.00	0.81	42.21	-5.79	
20.426	41.10	48.00	0.81	41.91	-6.09	

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

Tested by : C.C.Wu

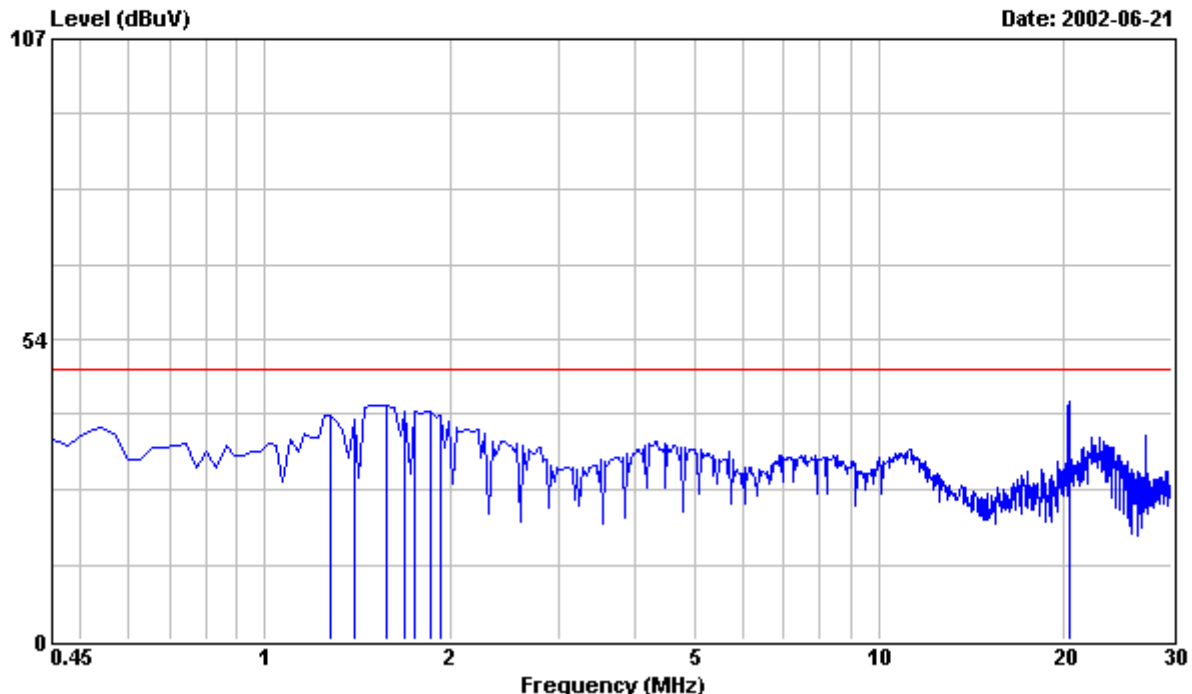


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Data#: 2

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L2 NEUTRAL
EUT : DELL E772p Serial No:TY0205276
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1024x768/85Hz 68.7KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ NEUTRAL
1.277	39.40	48.00	0.40	39.80	-8.20	
1.396	38.90	48.00	0.40	39.30	-8.70	
1.573	41.50	48.00	0.40	41.90	-6.10	
1.691	40.10	48.00	0.40	40.50	-7.50	
1.750	40.40	48.00	0.40	40.80	-7.20	
1.868	40.10	48.00	0.40	40.50	-7.50	
1.928	39.60	48.00	0.40	40.00	-8.00	
20.426	41.50	48.00	0.91	42.41	-5.59	

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

Tested by : C.C.Wu

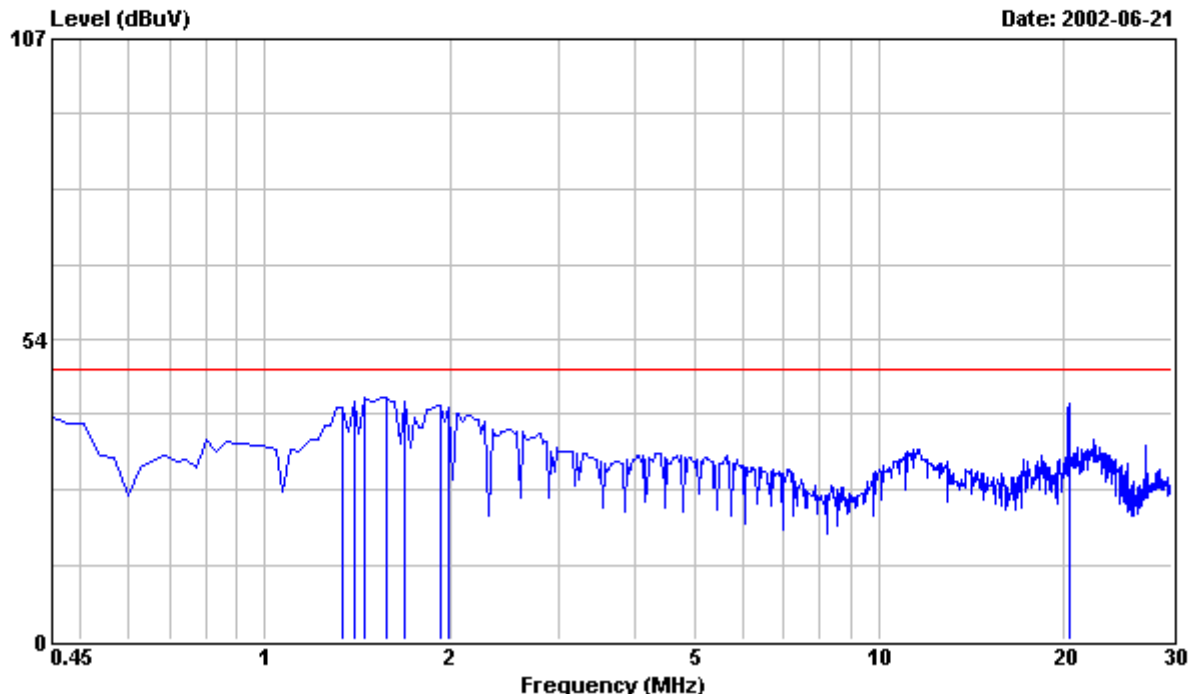


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Data#: 3

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L1 LINE
EUT : DELL E772p Serial No:TY0205276
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1024x768/85Hz 68.7KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ LINE
1.337	41.10	48.00	0.40	41.50	-6.50	
1.396	42.00	48.00	0.40	42.40	-5.60	
1.455	42.70	48.00	0.40	43.10	-4.90	
1.573	42.90	48.00	0.40	43.30	-4.70	
1.691	42.00	48.00	0.40	42.40	-5.60	
1.928	41.30	48.00	0.40	41.70	-6.30	
1.987	40.90	48.00	0.40	41.30	-6.70	
20.426	41.30	48.00	0.81	42.11	-5.89	

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

Tested by : C.C.Wu

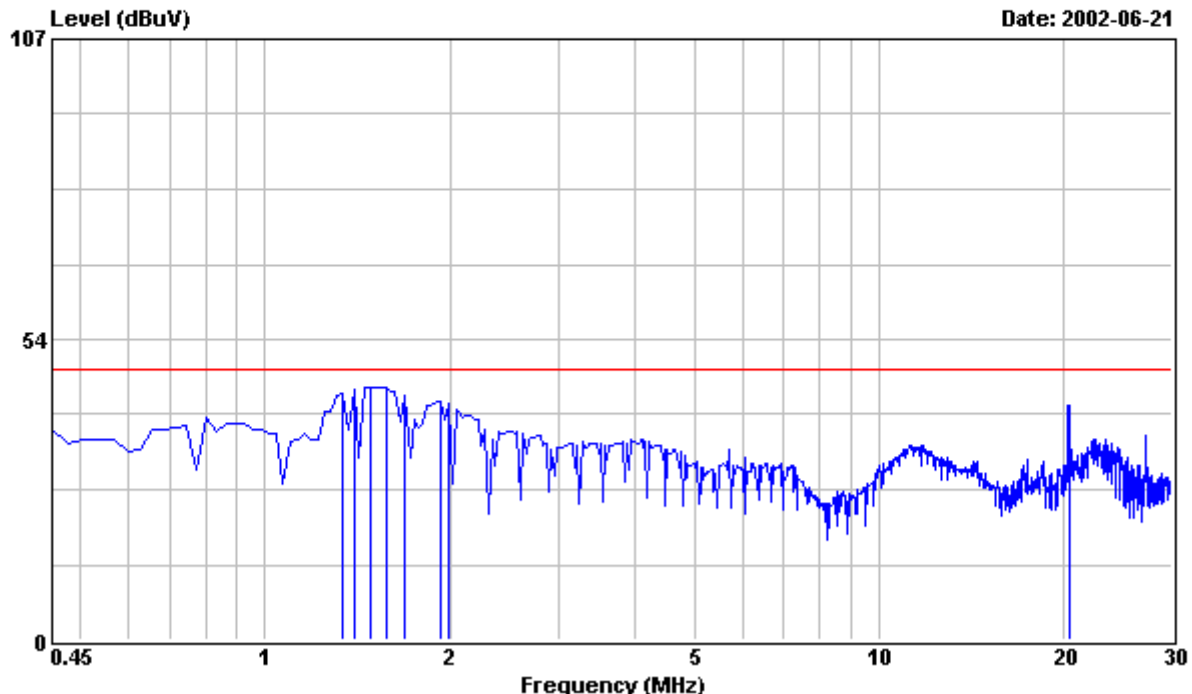


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Data#: 4

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L2 NEUTRAL
EUT : DELL E772p Serial No:TY0205276
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1024x768/85Hz 68.7KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ NEUTRAL
1.337	43.30	48.00	0.40	43.70	-4.30	
1.396	44.20	48.00	0.40	44.60	-3.40	
1.484	44.70	48.00	0.40	45.10	-2.90	
1.573	44.60	48.00	0.40	45.00	-3.00	
1.691	43.00	48.00	0.40	43.40	-4.60	
1.928	42.10	48.00	0.40	42.50	-5.50	
1.987	41.60	48.00	0.40	42.00	-6.00	
20.426	40.70	48.00	0.91	41.61	-6.39	

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

Tested by : C.C.Wu

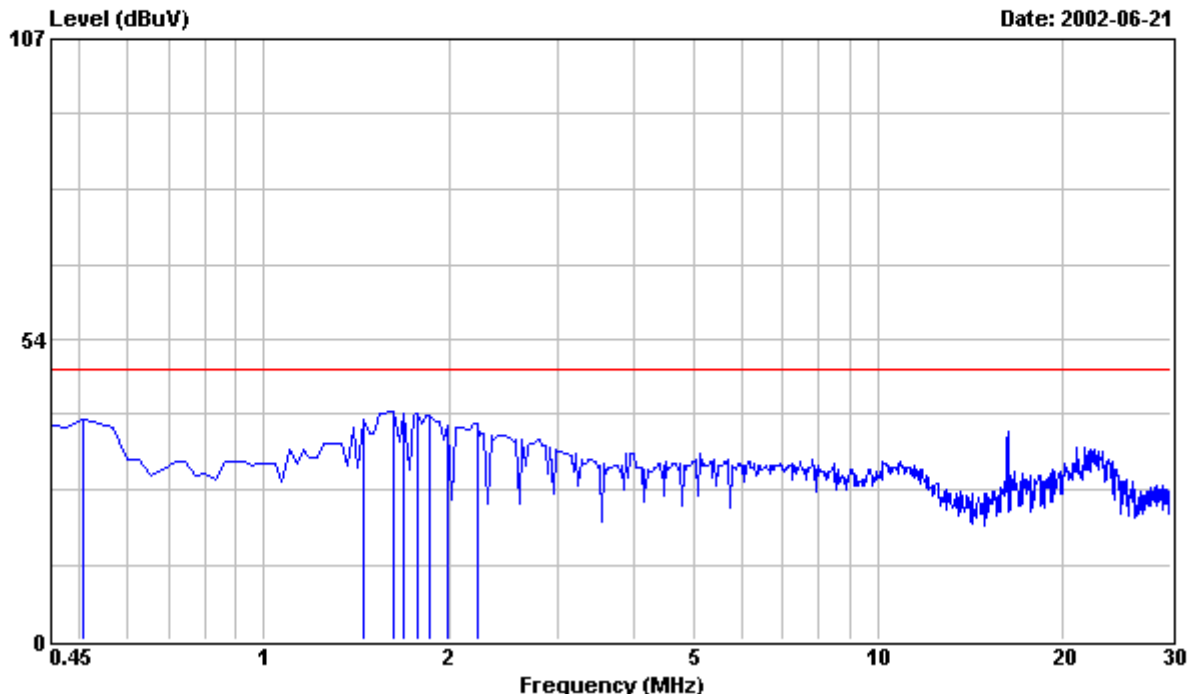


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Data#: 5

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L1 LINE
EUT : DELL E772p Serial No:TY0205276
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1280x1024/60Hz 64KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ LINE
0.509	39.10	48.00	0.23	39.33	-8.67	
1.455	38.90	48.00	0.40	39.30	-8.70	
1.632	40.20	48.00	0.40	40.60	-7.40	
1.691	40.00	48.00	0.40	40.40	-7.60	
1.780	39.80	48.00	0.40	40.20	-7.80	
1.868	39.60	48.00	0.40	40.00	-8.00	
1.987	37.90	48.00	0.40	38.30	-9.70	
2.223	38.10	48.00	0.40	38.50	-9.50	

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

Tested by : C.C.Wu

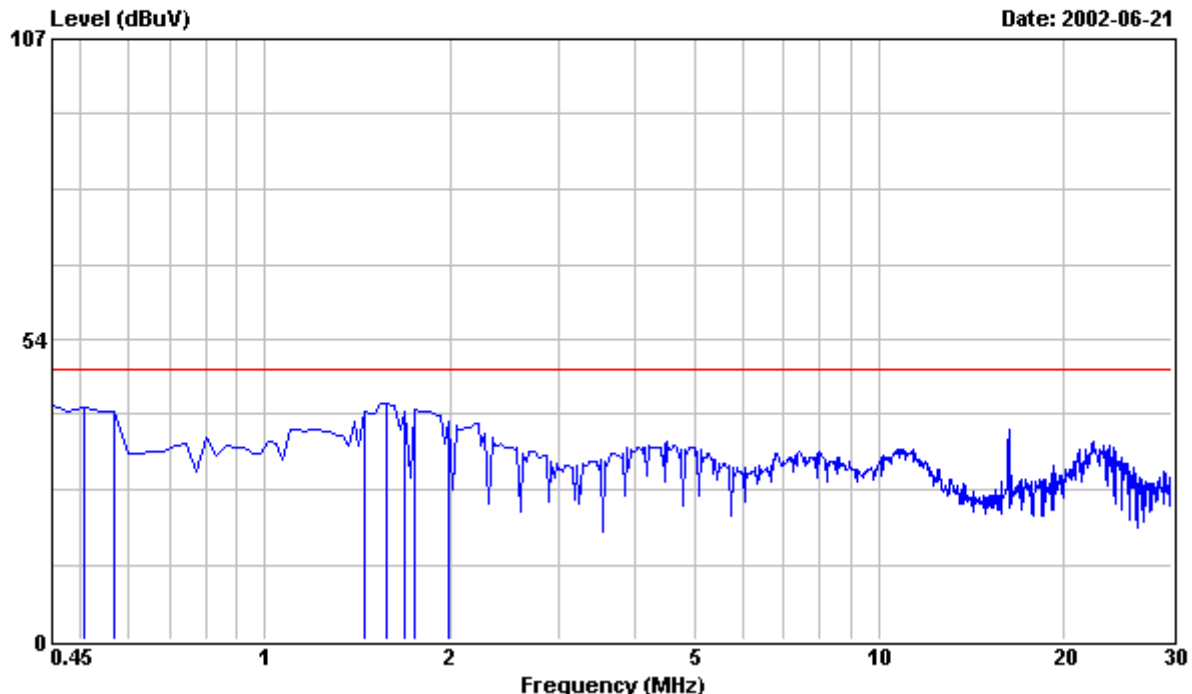


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Data#: 6

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L2 NEUTRAL
EUT : DELL E772p Serial No:TY0205276
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1280x1024/60Hz 64KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ NEUTRAL
0.450	41.50	48.00	0.20	41.70	-6.30	
0.509	41.00	48.00	0.23	41.23	-6.77	
0.568	40.50	48.00	0.26	40.76	-7.24	
1.455	40.20	48.00	0.40	40.60	-7.40	
1.573	41.80	48.00	0.40	42.20	-5.80	
1.691	40.10	48.00	0.40	40.50	-7.50	
1.750	40.50	48.00	0.40	40.90	-7.10	
1.987	38.40	48.00	0.40	38.80	-9.20	

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

Tested by : C.C.Wu

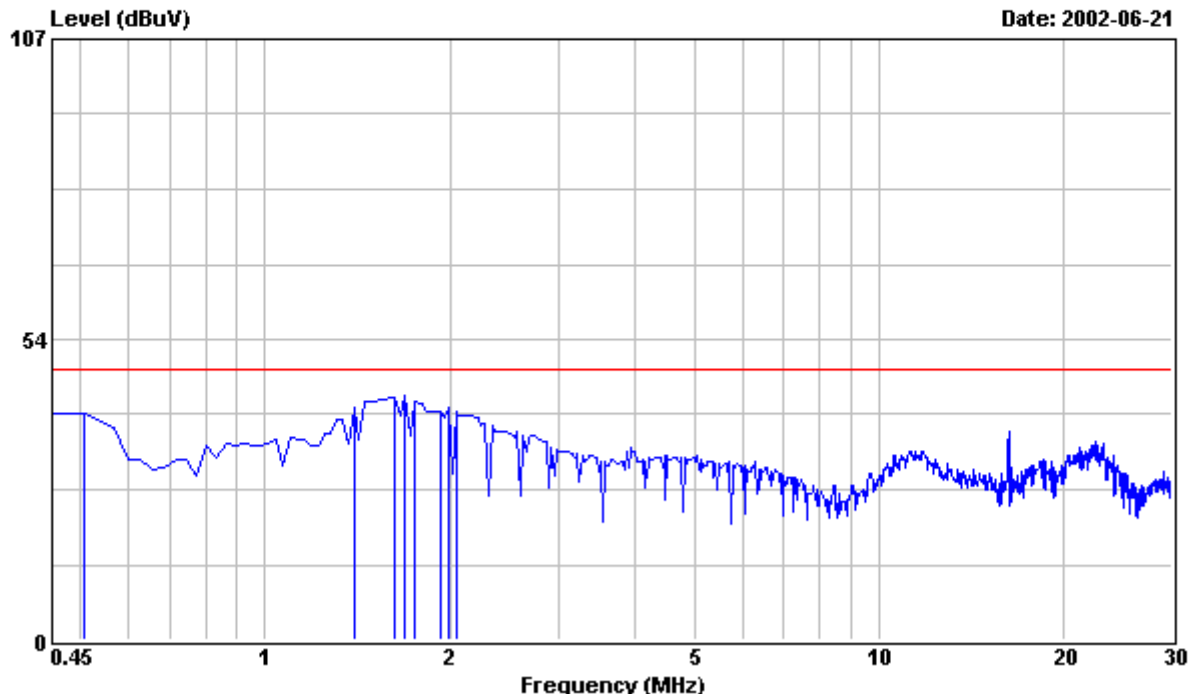


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Data#: 7

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L1 LINE
EUT : DELL E772p Serial No:TY0205276
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1280x1024/60Hz 64KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit * LINE dBuV
0.509	40.20	48.00	0.23	40.43	-7.57
1.396	41.10	48.00	0.40	41.50	-6.50
1.632	42.70	48.00	0.40	43.10	-4.90
1.691	43.10	48.00	0.40	43.50	-4.50
1.750	42.10	48.00	0.40	42.50	-5.50
1.928	40.40	48.00	0.40	40.80	-7.20
1.987	40.80	48.00	0.40	41.20	-6.80
2.046	40.10	48.00	0.40	40.50	-7.50

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

Tested by : C.C.Wu

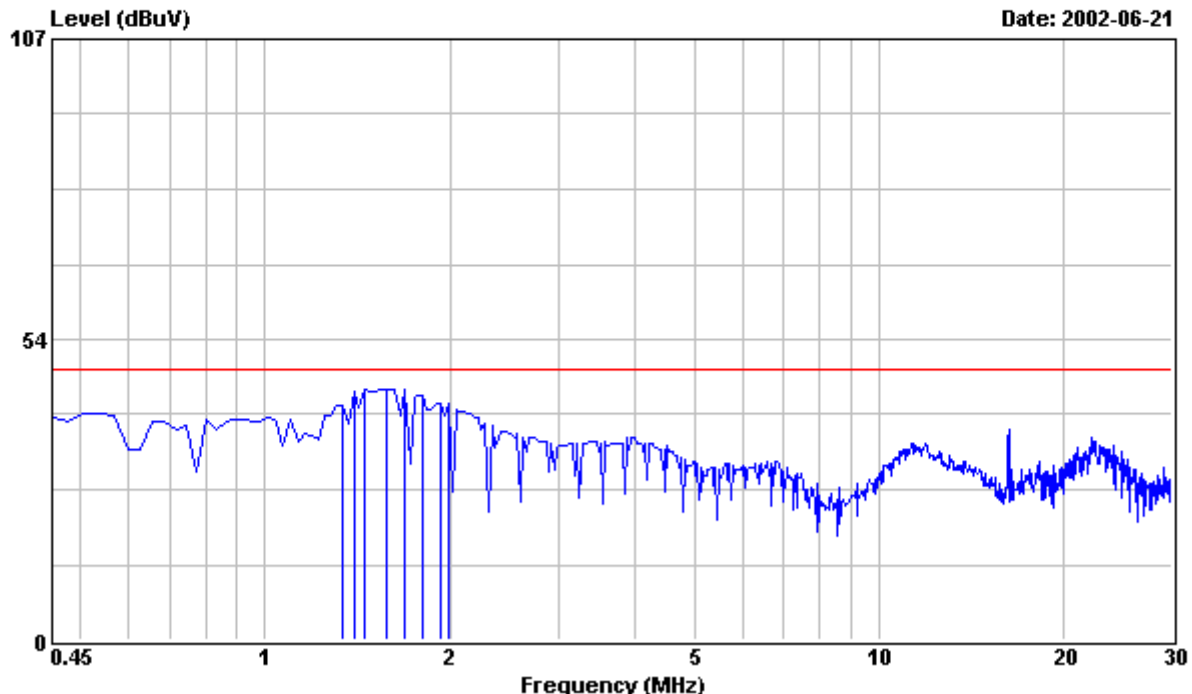


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Data#: 8

File#: C:\Program Files\em3\EMI02-027-C.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B EMCO 3825/2_L2 NEUTRAL
EUT : DELL E772p Serial No:TY0205276
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1280x1024/60Hz 64KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency MHz	Peak Reading dBuV	Limit dBuV	Factor dB	Emission Level dBuV	Over Limit dBuV	※ NEUTRAL
1.337	41.30	48.00	0.40	41.70	-6.30	
1.396	43.90	48.00	0.40	44.30	-3.70	
1.455	44.10	48.00	0.40	44.50	-3.50	
1.573	44.30	48.00	0.40	44.70	-3.30	
1.691	44.10	48.00	0.40	44.50	-3.50	
1.809	43.10	48.00	0.40	43.50	-4.50	
1.928	41.80	48.00	0.40	42.20	-5.80	
1.987	41.60	48.00	0.40	42.00	-6.00	

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

Tested by : C.C.Wu

Radiated Emissions FCC Part 15																				
Operating conditions EUT: EUT powered on with scrolling “H” pattern.																				
Limits: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Frequency range (MHz)</th> <th style="width: 33%;">Class A at 10m (dBuv) QP</th> <th style="width: 33%;">Class B at 3m (dBuv) QP</th> </tr> </thead> <tbody> <tr> <td>30.0 – 88.0</td> <td>39.0</td> <td>40.0 Quasi-Peak</td> </tr> <tr> <td>88.0 – 216.0</td> <td>43.5</td> <td>43.5 Quasi-Peak</td> </tr> <tr> <td>216.0 – 960.0</td> <td>46.5</td> <td>46.0 Quasi-Peak</td> </tr> <tr> <td>960.0 – 1000.0</td> <td>49.5</td> <td>54.0 Quasi-Peak</td> </tr> <tr> <td>Above 1000.0</td> <td>49.5</td> <td>54.0 Average</td> </tr> </tbody> </table>			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
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 Test Engineer	: 21 Jun., 2002 to 22 Jun., 2002 : C.C.Wu																			
For detail measurement results see next pages.																				

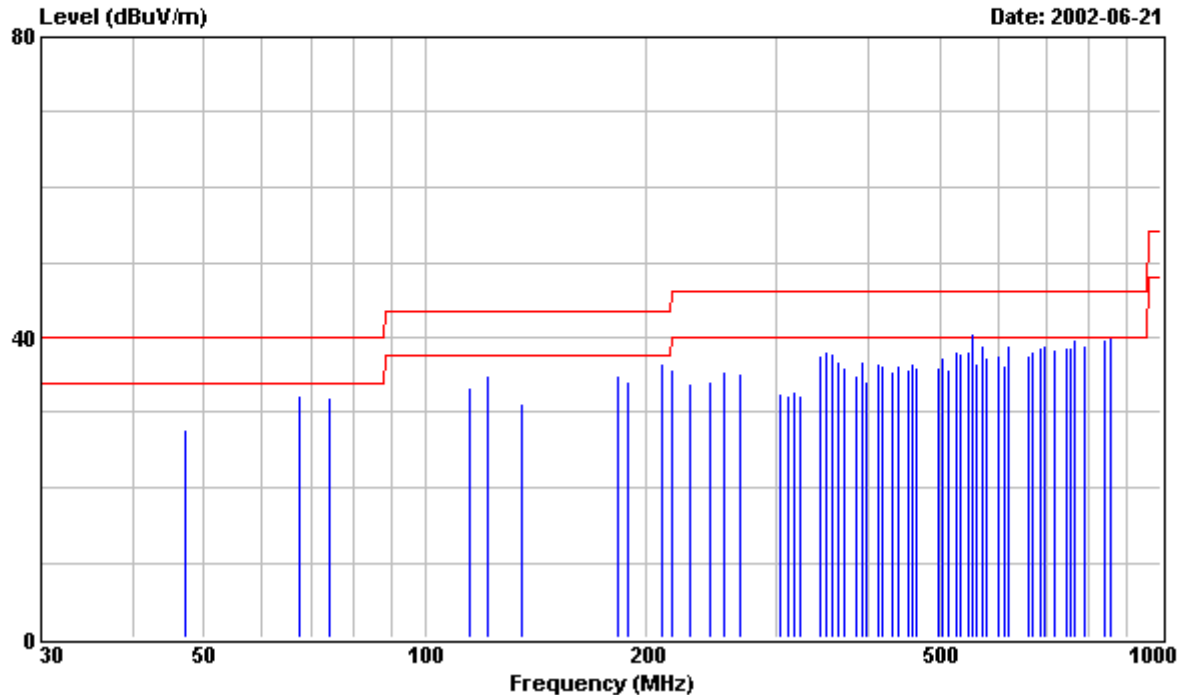


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Data#: 1

File#: C:\Program Files\es\EMI02-027-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : DELL E772p Serial No:TY0205276
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1024x768/85Hz 68.7KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
MHz	dBuV	dBuV	dBuV/m	dB/m	HORIZONTAL dBuV/m	dBuV/m
47.260	16.50	---	40.00	11.17	27.67	-12.33
67.510	22.19	---	40.00	9.98	32.17	-7.83
74.250	21.80	---	40.00	10.17	31.97	-8.03
114.770	21.10	---	43.50	12.15	33.25	-10.25
121.510	22.40	---	43.50	12.42	34.82	-8.68
135.030	18.29	---	43.50	12.89	31.18	-12.32
182.260	20.30	---	43.50	14.65	34.95	-8.55
189.000	18.90	---	43.50	15.29	34.19	-9.31
209.270	19.50	---	43.50	17.15	36.65	-6.85
216.000	17.90	---	43.50	17.74	35.64	-7.86
229.500	14.90	---	46.00	18.86	33.76	-12.24
243.060	14.19	---	46.00	19.98	34.17	-11.83

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



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Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
					HORIZONTAL	
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m
255.060	14.70	---	46.00	20.76	35.46	-10.54
267.060	13.70	---	46.00	21.43	35.13	-10.87
303.750	16.10	---	46.00	16.55	32.65	-13.35
310.500	15.60	---	46.00	16.69	32.29	-13.71
317.250	16.00	---	46.00	16.85	32.85	-13.15
324.020	15.30	---	46.00	16.99	32.29	-13.71
344.270	20.10	---	46.00	17.39	37.49	-8.51
351.020	20.70	---	46.00	17.51	38.21	-7.79
357.760	20.10	---	46.00	17.65	37.75	-8.25
364.510	19.10	---	46.00	17.77	36.87	-9.13
371.260	18.20	---	46.00	17.88	36.08	-9.92
384.760	16.70	---	46.00	18.14	34.84	-11.16
391.510	18.60	---	46.00	18.26	36.86	-9.14
398.260	16.00	---	46.00	18.35	34.35	-11.65
411.760	17.90	---	46.00	18.57	36.47	-9.53
418.510	17.50	---	46.00	18.67	36.17	-9.83
432.010	16.60	---	46.00	18.85	35.45	-10.55
438.760	17.40	---	46.00	18.94	36.34	-9.66
452.260	16.70	---	46.00	19.12	35.82	-10.18
459.010	17.30	---	46.00	19.20	36.50	-9.50
465.760	16.70	---	46.00	19.29	35.99	-10.01
499.510	16.30	---	46.00	19.70	36.00	-10.00
506.250	17.60	---	46.00	19.82	37.42	-8.58
513.000	15.90	---	46.00	19.93	35.83	-10.17
526.500	17.90	---	46.00	20.13	38.03	-7.97
533.250	17.60	---	46.00	20.25	37.85	-8.15
546.750	17.80	---	46.00	20.45	38.25	-7.75
553.510	19.90	---	46.00	20.54	40.44	-5.56
553.510	---	17.59	46.00	20.54	38.13	-7.87
560.260	15.80	---	46.00	20.65	36.45	-9.55
573.760	18.20	---	46.00	20.85	39.05	-6.95
580.500	16.50	---	46.00	20.94	37.44	-8.56
600.750	16.40	---	46.00	21.25	37.65	-8.35
614.250	14.80	---	46.00	21.57	36.37	-9.63
621.000	17.10	---	46.00	21.72	38.82	-7.18
661.500	14.90	---	46.00	22.66	37.56	-8.44
668.250	15.20	---	46.00	22.82	38.02	-7.98
688.500	15.40	---	46.00	23.29	38.69	-7.31
695.250	15.50	---	46.00	23.40	38.90	-7.10
715.500	14.70	---	46.00	23.74	38.44	-7.56
742.500	14.50	---	46.00	24.08	38.58	-7.42
756.000	14.30	---	46.00	24.25	38.55	-7.45
762.750	15.50	---	46.00	24.36	39.86	-6.14
789.750	14.20	---	46.00	24.70	38.90	-7.10
837.000	14.30	---	46.00	25.37	39.67	-6.33
857.250	14.20	---	46.00	25.68	39.88	-6.12

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

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Tested by : C C.Wu

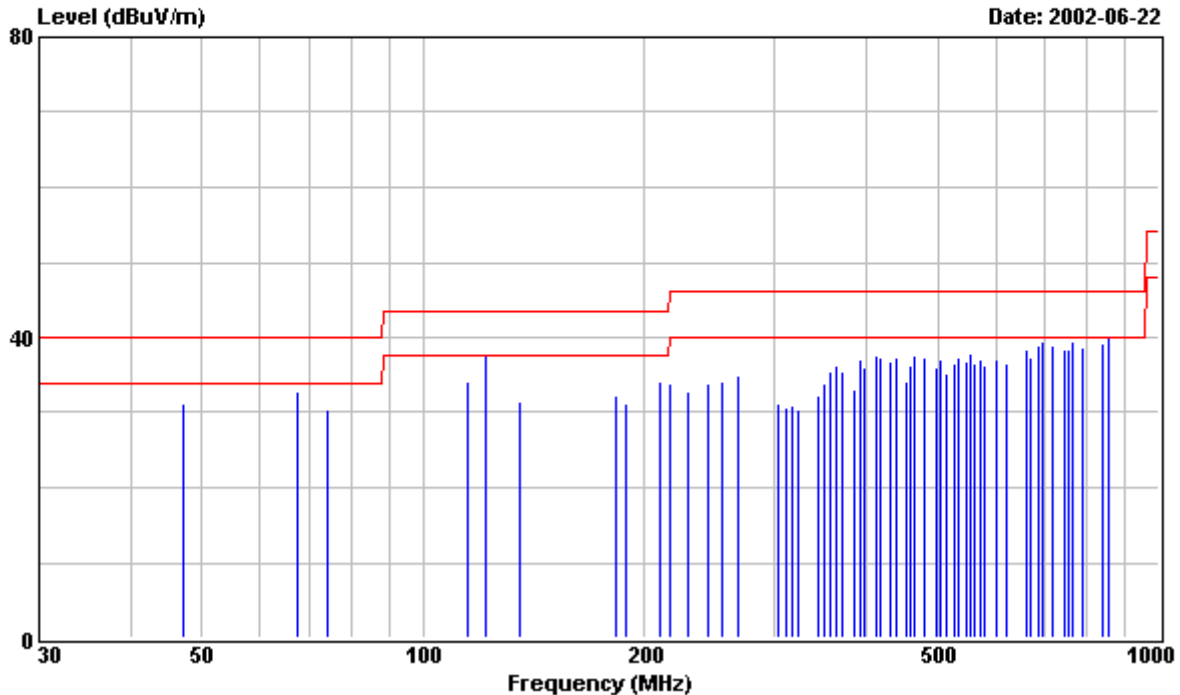


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Data#: 2

File#: C:\Program Files\em3\EMI02-027-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : DELL E772p Serial No:TY0205276
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1024x768/85Hz 68.7KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
MHz	dBuV	dBuV	dBuV/m	dB/m	VERTICAL dBuV/m	dBuV/m
47.260	20.00	---	40.00	11.17	31.17	-8.83
67.510	22.90	---	40.00	9.98	32.88	-7.12
74.250	20.30	---	40.00	10.17	30.47	-9.53
114.770	22.30	---	43.50	12.15	34.45	-9.05
121.510	25.20	---	43.50	12.42	37.62	-5.88
121.510	---	23.60	43.50	12.42	36.02	-7.48
135.030	18.70	---	43.50	12.89	31.59	-11.91
182.260	17.60	---	43.50	14.65	32.25	-11.25
189.000	16.00	---	43.50	15.29	31.29	-12.21
209.270	16.90	---	43.50	17.15	34.05	-9.45
216.000	16.00	---	43.50	17.74	33.74	-9.76
229.500	14.00	---	46.00	18.86	32.86	-13.14

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



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Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
MHz	dBuV	dBuV	dBuV/m	dB/m	VERTICAL dBuV/m	dBuV/m
243.060	13.90	---	46.00	19.98	33.88	-12.12
255.060	13.70	---	46.00	20.76	34.46	-11.54
267.060	13.50	---	46.00	21.43	34.93	-11.07
303.750	14.60	---	46.00	16.55	31.15	-14.85
310.500	13.90	---	46.00	16.69	30.59	-15.41
317.250	14.10	---	46.00	16.85	30.95	-15.05
324.020	13.40	---	46.00	16.99	30.39	-15.61
344.270	14.90	---	46.00	17.39	32.29	-13.71
351.010	16.40	---	46.00	17.51	33.91	-12.09
357.760	17.80	---	46.00	17.65	35.45	-10.55
364.510	18.50	---	46.00	17.77	36.27	-9.73
371.260	17.60	---	46.00	17.88	35.48	-10.52
384.760	15.00	---	46.00	18.14	33.14	-12.86
391.510	18.90	---	46.00	18.26	37.16	-8.84
398.260	17.70	---	46.00	18.35	36.05	-9.95
411.760	19.10	---	46.00	18.57	37.67	-8.33
418.510	18.70	---	46.00	18.67	37.37	-8.63
432.010	18.00	---	46.00	18.85	36.85	-9.15
438.760	---	---	46.00	18.94	37.44	-8.56
452.260	15.30	---	46.00	19.12	34.42	-11.58
459.010	17.00	---	46.00	19.20	36.20	-9.80
465.760	18.40	---	46.00	19.29	37.69	-8.31
479.260	17.90	---	46.00	19.45	37.35	-8.65
499.510	16.40	---	46.00	19.70	36.10	-9.90
506.260	17.30	---	46.00	19.82	37.12	-8.88
513.000	15.30	---	46.00	19.93	35.23	-10.77
526.500	16.40	---	46.00	20.13	36.53	-9.47
533.250	17.20	---	46.00	20.25	37.45	-8.55
546.750	16.40	---	46.00	20.45	36.85	-9.15
553.510	17.20	---	46.00	20.54	37.74	-8.26
560.260	15.80	---	46.00	20.65	36.45	-9.55
573.760	16.10	---	46.00	20.85	36.95	-9.05
580.500	15.40	---	46.00	20.94	36.34	-9.66
600.750	15.80	---	46.00	21.25	37.05	-8.95
621.000	14.90	---	46.00	21.72	36.62	-9.38
661.500	15.80	---	46.00	22.66	38.46	-7.54
668.250	14.60	---	46.00	22.82	37.42	-8.58
688.500	15.70	---	46.00	23.29	38.99	-7.01
695.250	16.10	---	46.00	23.40	39.50	-6.50
715.500	15.10	---	46.00	23.74	38.84	-7.16
742.500	14.30	---	46.00	24.08	38.38	-7.62
756.000	14.20	---	46.00	24.25	38.45	-7.55
762.750	15.10	---	46.00	24.36	39.46	-6.54
789.750	14.00	---	46.00	24.70	38.70	-7.30
837.000	13.70	---	46.00	25.37	39.07	-6.93
857.250	14.20	---	46.00	25.68	39.88	-6.12

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

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2. Emission Level (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

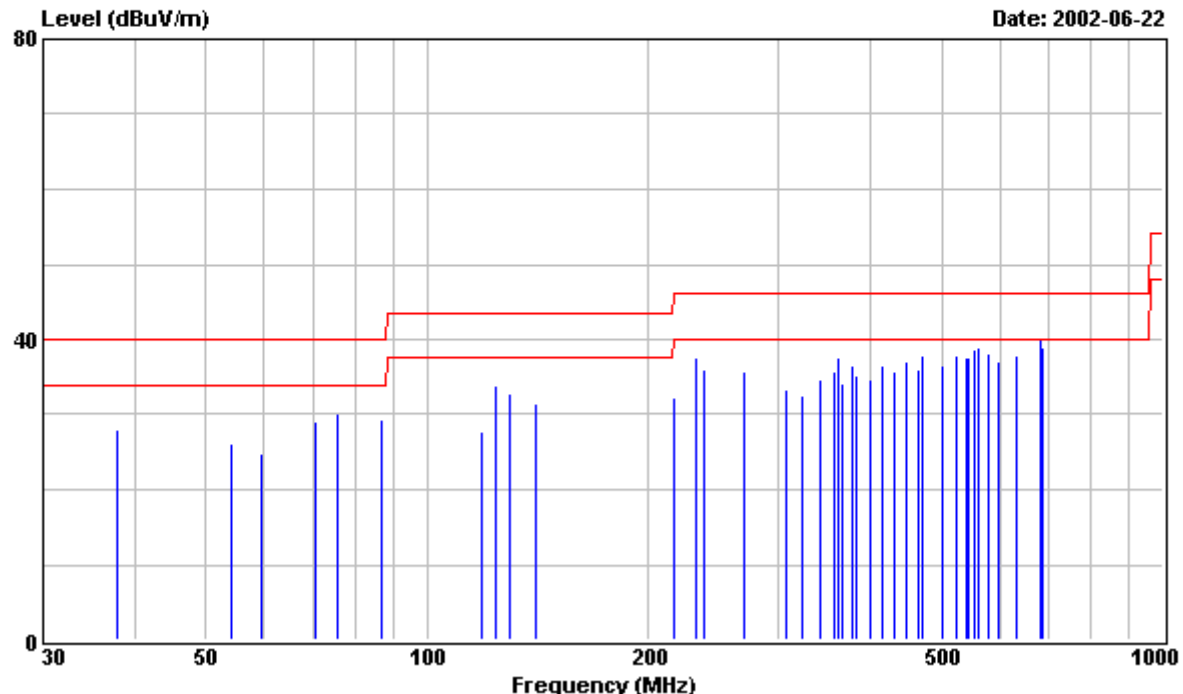


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Data#: 3

File#: C:\Program Files\em3\EMI02-027-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : DELL E772p Serial No:TY0205276
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1280x1024/60Hz 64KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
MHz	dBuV	dBuV	dBuV/m	dB/m	HORIZONTAL dBuV/m	dBuV/m
37.800	15.40	---	40.00	12.69	28.09	-11.91
54.000	15.80	---	40.00	10.42	26.22	-13.78
59.400	14.80	---	40.00	9.95	24.75	-15.25
70.200	19.10	---	40.00	10.00	29.10	-10.90
75.600	19.90	---	40.00	10.23	30.13	-9.87
86.400	18.70	---	40.00	10.73	29.43	-10.57
118.820	15.50	---	43.50	12.34	27.84	-15.66
124.210	21.50	---	43.50	12.48	33.98	-9.52
129.610	20.20	---	43.50	12.68	32.88	-10.62
140.400	18.30	---	43.50	13.08	31.38	-12.12
216.010	14.40	---	46.00	17.74	32.14	-13.86
232.200	18.50	---	46.00	19.12	37.62	-8.38

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



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Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
					HORIZONTAL	
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m
237.610	16.60	---	46.00	19.52	36.12	-9.88
270.060	14.00	---	46.00	21.64	35.64	-10.36
307.800	16.70	---	46.00	16.64	33.34	-12.66
324.010	15.50	---	46.00	16.99	32.49	-13.51
341.080	17.40	---	46.00	17.32	34.72	-11.28
356.400	18.10	---	46.00	17.63	35.73	-10.27
361.810	19.80	---	46.00	17.72	37.52	-8.48
367.210	16.50	---	46.00	17.81	34.31	-11.69
378.010	18.40	---	46.00	18.02	36.42	-9.58
383.400	17.10	---	46.00	18.12	35.22	-10.78
399.620	16.20	---	46.00	18.38	34.58	-11.42
415.810	17.90	---	46.00	18.63	36.53	-9.47
432.010	16.80	---	46.00	18.85	35.65	-10.35
448.200	17.90	---	46.00	19.06	36.96	-9.04
464.410	16.60	---	46.00	19.27	35.87	-10.13
469.810	18.40	---	46.00	19.35	37.75	-8.25
502.200	16.80	---	46.00	19.76	36.56	-9.44
523.810	17.80	---	46.00	20.10	37.90	-8.10
540.000	17.40	---	46.00	20.33	37.73	-8.27
545.410	17.10	---	46.00	20.42	37.52	-8.48
556.200	18.00	---	46.00	20.59	38.59	-7.41
561.600	18.20	---	46.00	20.65	38.85	-7.15
577.810	17.30	---	46.00	20.91	38.21	-7.79
599.400	16.00	---	46.00	21.20	37.20	-8.80
631.800	15.90	---	46.00	21.98	37.88	-8.12
681.350	16.80	---	46.00	23.13	39.93	-6.07
685.810	15.80	---	46.00	23.19	38.99	-7.01

Remarks: 1. All Readings are Peak & Quasi-peak values.

2. Emission Level (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

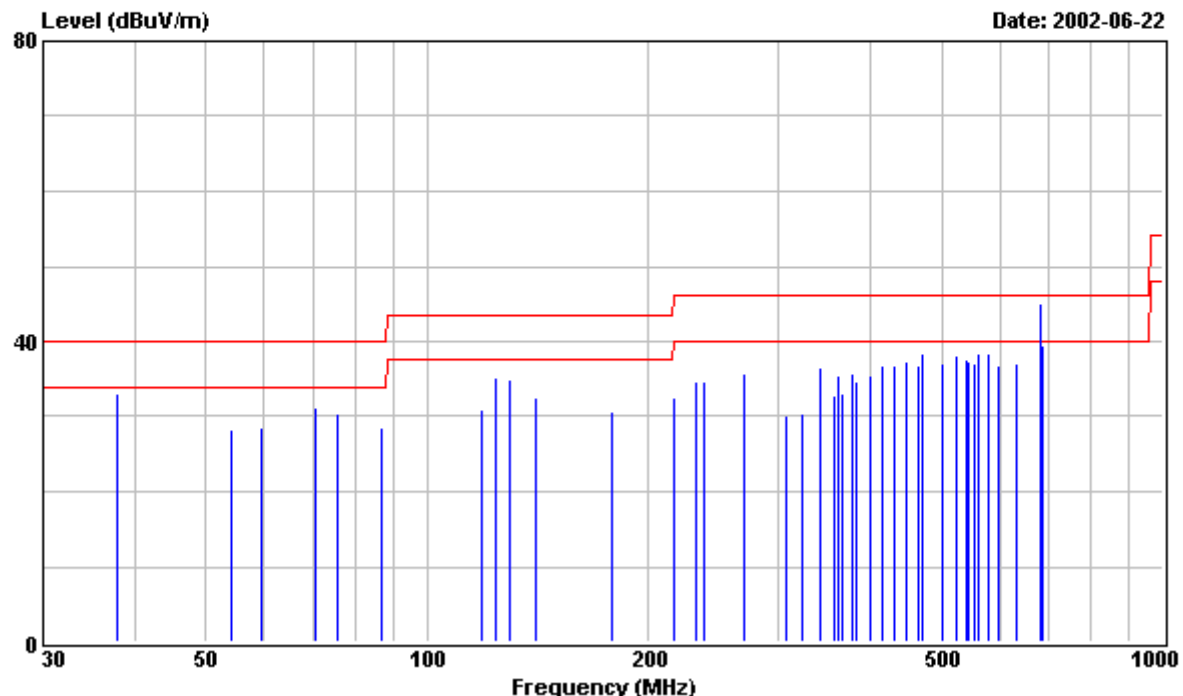


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Data#: 4

File#: C:\Program Files\em3\EMI02-027-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : DELL E772p Serial No:TY0205276
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL LG PHILIPS TUBE,RUN DELL
: "H" PATTERN.
: 3. 1280x1024/60Hz 64KHz MODE WITH
: DELL DHM PC,NVIDIA QUADRO 4
: VIDEO CARD WAS TESTED.

Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
MHz	dBuV	dBuV	dBuV/m	dB/m	VERTICAL dBuV/m	dBuV/m
37.800	20.30	---	40.00	12.69	32.99	-7.01
54.000	17.80	---	40.00	10.42	28.22	-11.78
59.400	18.50	---	40.00	9.95	28.45	-11.55
70.200	21.10	---	40.00	10.00	31.10	-8.90
75.600	20.20	---	40.00	10.23	30.43	-9.57
86.400	17.80	---	40.00	10.73	28.53	-11.47
118.820	18.70	---	43.50	12.34	31.04	-12.46
124.210	22.80	---	43.50	12.48	35.28	-8.22
129.610	22.29	---	43.50	12.68	34.97	-8.53
140.400	19.40	---	43.50	13.08	32.48	-11.02
178.200	16.50	---	43.50	14.29	30.79	-12.71
216.010	14.80	---	46.00	17.74	32.54	-13.46

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



PHILIPS

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Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit
					VERTICAL	
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m
232.200	15.60	---	46.00	19.12	34.72	-11.28
237.610	15.10	---	46.00	19.52	34.62	-11.38
270.060	14.00	---	46.00	21.64	35.64	-10.36
307.800	13.50	---	46.00	16.64	30.14	-15.86
324.010	13.40	---	46.00	16.99	30.39	-15.61
341.080	19.20	---	46.00	17.32	36.52	-9.48
356.400	15.30	---	46.00	17.63	32.93	-13.07
361.810	17.70	---	46.00	17.72	35.42	-10.58
367.210	15.30	---	46.00	17.81	33.11	-12.89
378.010	17.60	---	46.00	18.02	35.62	-10.38
383.400	16.60	---	46.00	18.12	34.72	-11.28
399.620	17.10	---	46.00	18.38	35.48	-10.52
415.810	18.30	---	46.00	18.63	36.93	-9.07
432.010	17.90	---	46.00	18.85	36.75	-9.25
448.200	18.20	---	46.00	19.06	37.26	-8.74
464.410	17.60	---	46.00	19.27	36.87	-9.13
469.810	19.00	---	46.00	19.35	38.35	-7.65
502.200	17.30	---	46.00	19.76	37.06	-8.94
523.810	18.10	---	46.00	20.10	38.20	-7.80
540.000	17.20	---	46.00	20.33	37.53	-8.47
545.410	17.00	---	46.00	20.42	37.42	-8.58
556.200	16.60	---	46.00	20.59	37.19	-8.81
561.600	17.80	---	46.00	20.65	38.45	-7.55
577.810	17.40	---	46.00	20.91	38.31	-7.69
599.400	15.60	---	46.00	21.20	36.80	-9.20
631.800	15.10	---	46.00	21.98	37.08	-8.92
683.210	21.90	---	46.00	23.13	45.03	-0.97
683.210	---	19.30	46.00	23.13	42.43	-3.57
685.810	16.20	---	46.00	23.19	39.39	-6.61

Remarks: 1. All Readings are Peak & Quasi-peak values.

2. Emission Level (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