



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.: TYR87-2057 Date : 04 November, 2003 Page : Page 1 of 33
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. : A3KM124 Model Name : 107P50 Serial Number : TY0304521 Description : 17" SXGA color monitor, Max. resolution 1600x1200/75Hz		
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 : 28 Oct. 2003 Date of performance of test : 29 Oct., 2003 to 31 Oct., 2003		
 C.C. Wu - EMC Test Engineer  Ronnie Yang - EMC Manager		

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. : 107P50
 FCC ID : A3KM124
 Brand : PHILIPS

The color monitor automatically scans horizontal frequencies between 30KHz and 97KHz , 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 1600x1200 pixels.

The monitor has 12 factory-preset modes as indicated in the following table:

	Resolution modes	H. freq.	V. freq.	H.	V.
1.	720 x 400	31.5 Khz	70Hz (VGA)	-	+
2.	640 x 480	31.5 Khz	60 Hz (VGA)	-	-
3.	800 x 600	35.2 Khz	56 Hz (Mac- II)	+	+
4.	640 x 350	37.9 Khz	85 Hz (VESA)	+	-
5.	640 x 480	43.3 Khz	85 Hz (VGA)	-	-
6.	800 x 600	46.9 Khz	75 HZ(VESA)	+	+
7.	800 x 600	53.7 Khz	85 HZ(VESA)	+	+
8.	1024 x 768	60.0 Khz	75 HZ(VESA)	+	+
9.	1024 x 768	68.7 Khz	85 HZ(VESA)	+	+
10.	1280 x 1024	80.0 Khz	75 Hz (VESA)	+	+
11.	1280 x 1024	91.2 Khz	85 Hz (VESA)	+	+
12.	1600 x 1200	93.8 KHz	75Hz (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	2928A04640	02/27/2003	02/27/2004
EMI Receiver	R & S ESVS30	841977/006	02/27/2003	02/27/2004
LISN	EMCO 3825/2	9311-2153	06/16/2003	06/16/2004
LISN	EMCO 3825/2	9311-2154	06/16/2003	06/16/2004
RF Cable	8-meter	N/A	08/21/2003	08/21/2004

- For Radiated Emissions Test:

Test Equipment	Model No.	Serial No.	Last Calibrate	Next Calibrate
Spectrum	HP8568B	2928A04640	09/23/2003	09/23/2004
RF Preselector	HP85685A	2620A00338	09/23/2003	09/23/2004
QP Adapter	HP85650A	2811A01324	09/23/2003	09/23/2004
EMI Receiver	R & S ESVS30	841977/006	02/27/2003	02/27/2004
Biconical Antenna	EMCO 3110B	3224	08/21/2003	08/21/2004
Log-Periodic Antenna	EMCO 3146A	1425	08/21/2003	08/21/2004
Turn Table	EMCO 1060	1068	08/21/2003	08/21/2004
Antenna Tower	EMCO 1050	1113	08/21/2003	08/21/2004
RF Cable	M17/75-RG214-NE	N/A	08/21/2003	08/21/2004

4. Test Configuration of EUT and Peripherals

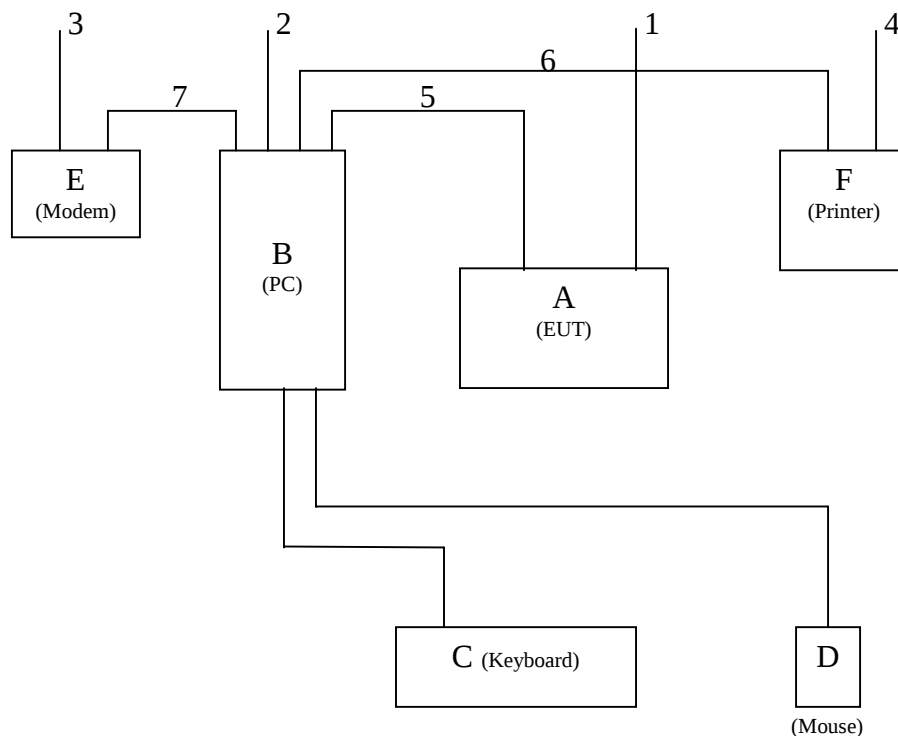
The system was configured for testing in a typical fashion (as a customer would normally use it) according to ANSI C63.4-1992, please see the photographs for detail. For system measurement, the EUT “107P50” were connected to:

	Description	Brand/ Model No.	Serial No.	FCC ID	Remark
A	Monitor	PHILIPS 107P50	TY0304521	A3KM124	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	Hayes 231AA	A22231081770	BFJ9D9308US	
F	Printer	HP 2225C	2934S55406	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
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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	EMI03-039-C	1600x1200	93.8KHz/75Hz	D-sub
		1280x1024	91.1KHz/85Hz	D-sub
Radiated	EMI03-039-R	1600x1200	93.8KHz/75Hz	D-sub
		1280x1024	91.1KHz/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

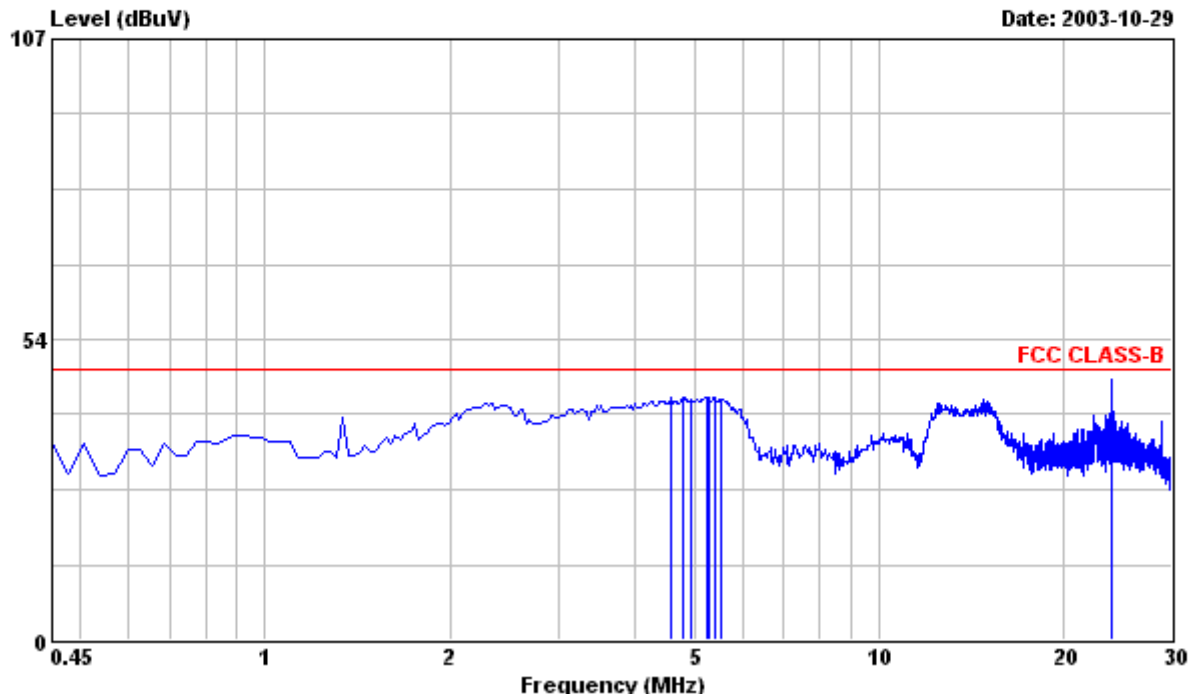


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Data#: 1

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 18 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
4.587	42.80	---	48.00	0.34	43.14	-4.86	Peak
4.794	43.00	---	48.00	0.32	43.32	-4.68	Peak
4.942	42.61	---	48.00	0.30	42.91	-5.09	Peak
5.237	42.70	---	48.00	0.33	43.03	-4.97	Peak
5.296	42.90	---	48.00	0.33	43.23	-4.77	Peak
5.414	42.80	---	48.00	0.34	43.14	-4.86	Peak
5.533	42.60	---	48.00	0.35	42.95	-5.05	Peak
24.031	45.50	---	48.00	0.88	46.38	-1.62	Peak

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

Tested by : C C.Wu

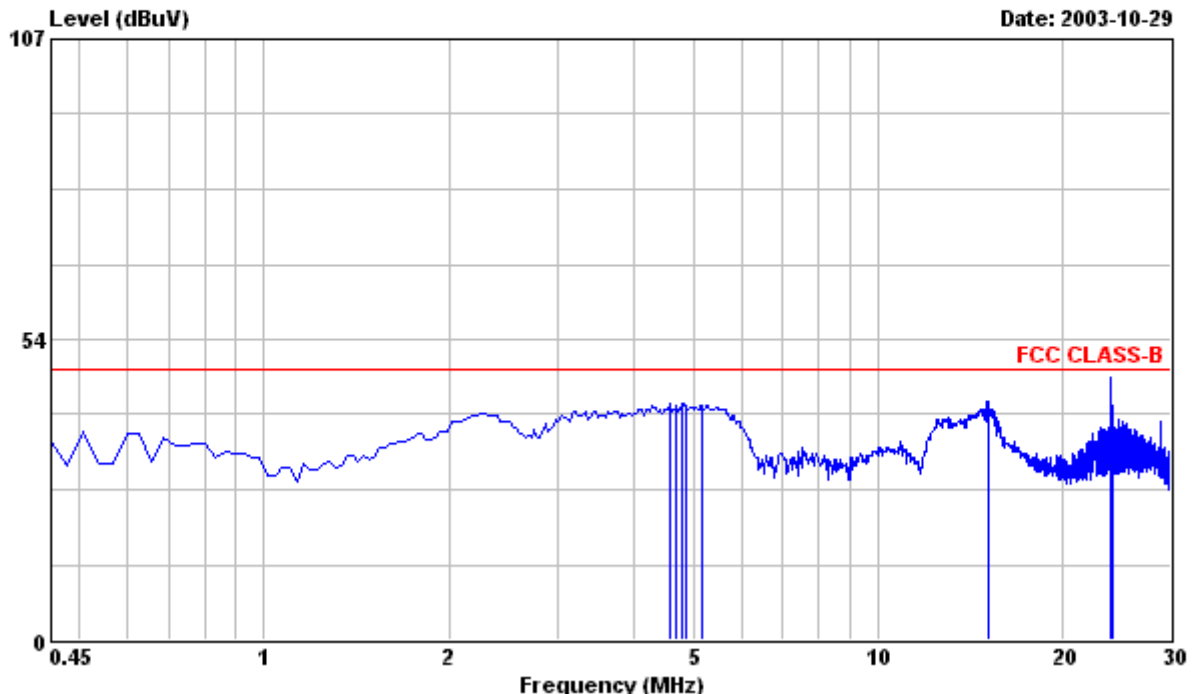


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Data#: 2

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 18 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							
4.587	41.80	---	48.00	0.34	42.14	-5.86	Peak
4.705	41.50	---	48.00	0.33	41.83	-6.17	Peak
4.794	41.90	---	48.00	0.32	42.22	-5.78	Peak
4.883	41.40	---	48.00	0.31	41.71	-6.29	Peak
5.178	41.40	---	48.00	0.32	41.72	-6.28	Peak
15.107	41.60	---	48.00	0.71	42.31	-5.69	Peak
24.031	45.60	---	48.00	0.98	46.58	-1.42	Peak
24.149	40.80	---	48.00	0.98	41.78	-6.22	Peak

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

Tested by : C C.Wu

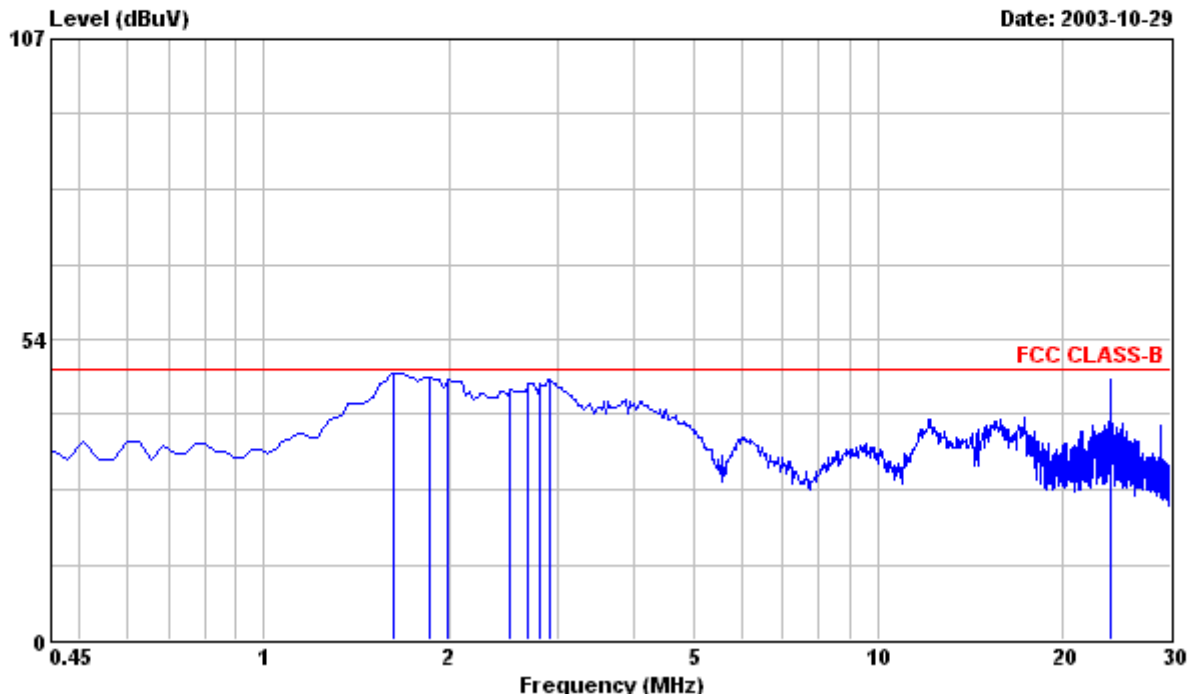


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Data#: 3

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 18 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
1.632	47.00	---	48.00	0.40	47.40	-0.60	Peak
1.632	---	43.46	48.00	0.40	43.86	-4.14	QP
1.868	46.50	---	48.00	0.40	46.90	-1.10	Peak
1.987	45.80	---	48.00	0.40	46.20	-1.80	Peak
2.519	44.10	---	48.00	0.40	44.50	-3.50	Peak
2.696	45.30	---	48.00	0.40	45.70	-2.30	Peak
2.814	45.20	---	48.00	0.40	45.60	-2.40	Peak
2.932	46.00	---	48.00	0.40	46.40	-1.60	Peak
24.031	45.60	---	48.00	0.88	46.48	-1.52	Peak

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

Tested by : C C.Wu

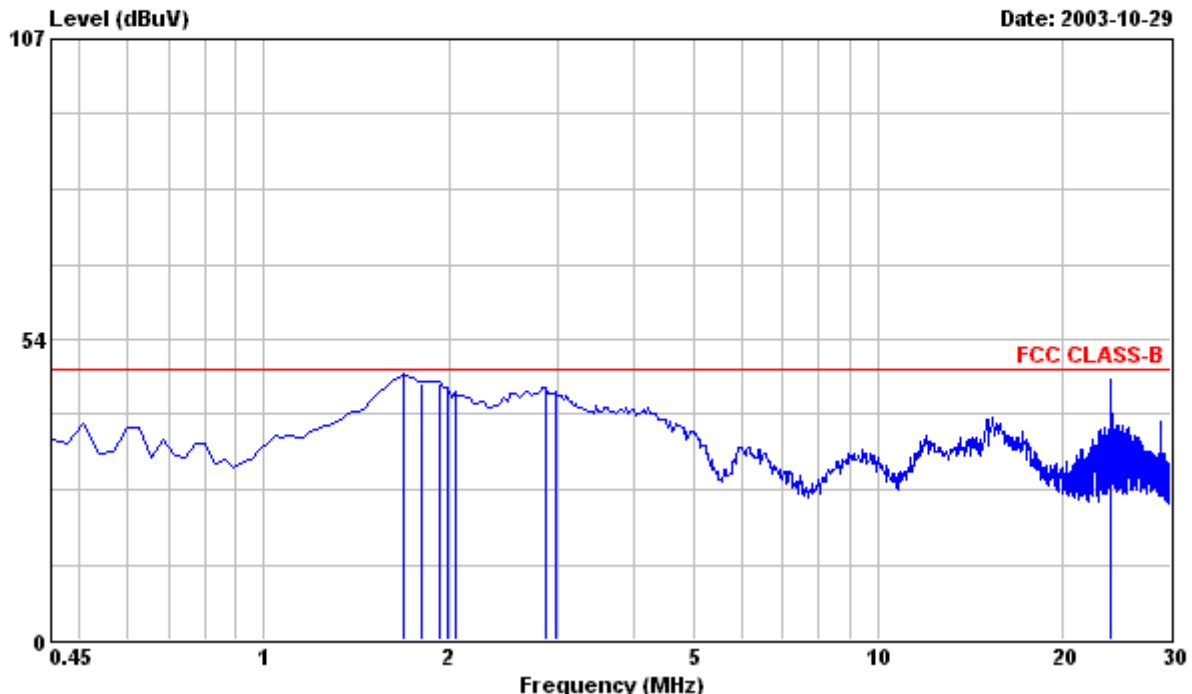


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Data#: 4

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 18 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							
1.691	---	43.42	48.00	0.40	43.82	-4.18	QP
1.691	47.00	---	48.00	0.40	47.40	-0.60	Peak
1.809	45.70	---	48.00	0.40	46.10	-1.90	Peak
1.928	45.60	---	48.00	0.40	46.00	-2.00	Peak
1.987	44.60	---	48.00	0.40	45.00	-3.00	Peak
2.046	43.90	---	48.00	0.40	44.30	-3.70	Peak
2.873	44.50	---	48.00	0.40	44.90	-3.10	Peak
2.991	43.90	---	48.00	0.40	44.30	-3.70	Peak
24.031	45.30	---	48.00	0.98	46.28	-1.72	Peak

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

Tested by : C C.Wu

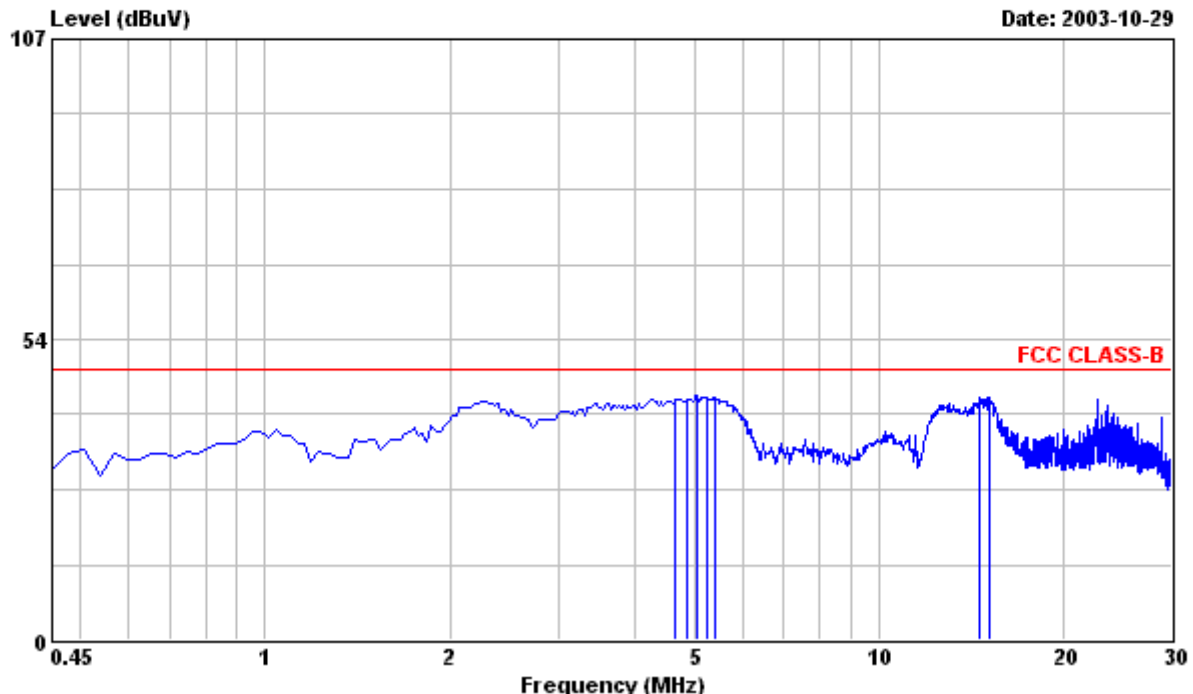


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Data#: 5

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
4.646	42.60	---	48.00	0.33	42.93	-5.07	Peak
4.853	42.60	---	48.00	0.31	42.91	-5.09	Peak
5.060	43.10	---	48.00	0.31	43.41	-4.59	Peak
5.237	42.79	---	48.00	0.33	43.12	-4.88	Peak
5.414	42.80	---	48.00	0.34	43.14	-4.86	Peak
14.634	42.50	---	48.00	0.69	43.19	-4.81	Peak
15.107	42.50	---	48.00	0.70	43.20	-4.80	Peak
15.166	42.30	---	48.00	0.70	43.00	-5.00	Peak

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

Tested by : C C.Wu

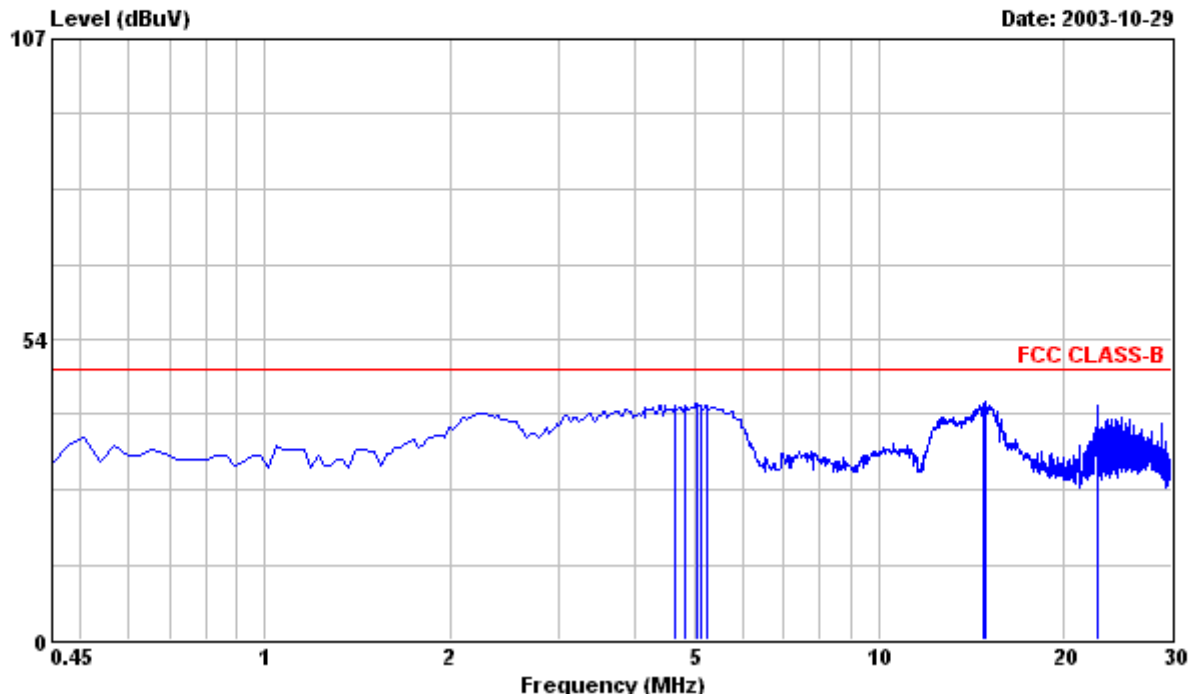


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Data#: 6

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							
4.646	41.40	---	48.00	0.33	41.73	-6.27	Peak
4.823	41.50	---	48.00	0.32	41.82	-6.18	Peak
5.060	41.70	---	48.00	0.31	42.01	-5.99	Peak
5.119	41.50	---	48.00	0.31	41.81	-6.19	Peak
5.237	41.40	---	48.00	0.33	41.73	-6.27	Peak
14.811	41.30	---	48.00	0.70	42.00	-6.00	Peak
14.930	41.60	---	48.00	0.70	42.30	-5.70	Peak
22.672	40.80	---	48.00	0.96	41.76	-6.24	Peak

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

Tested by : C C.Wu

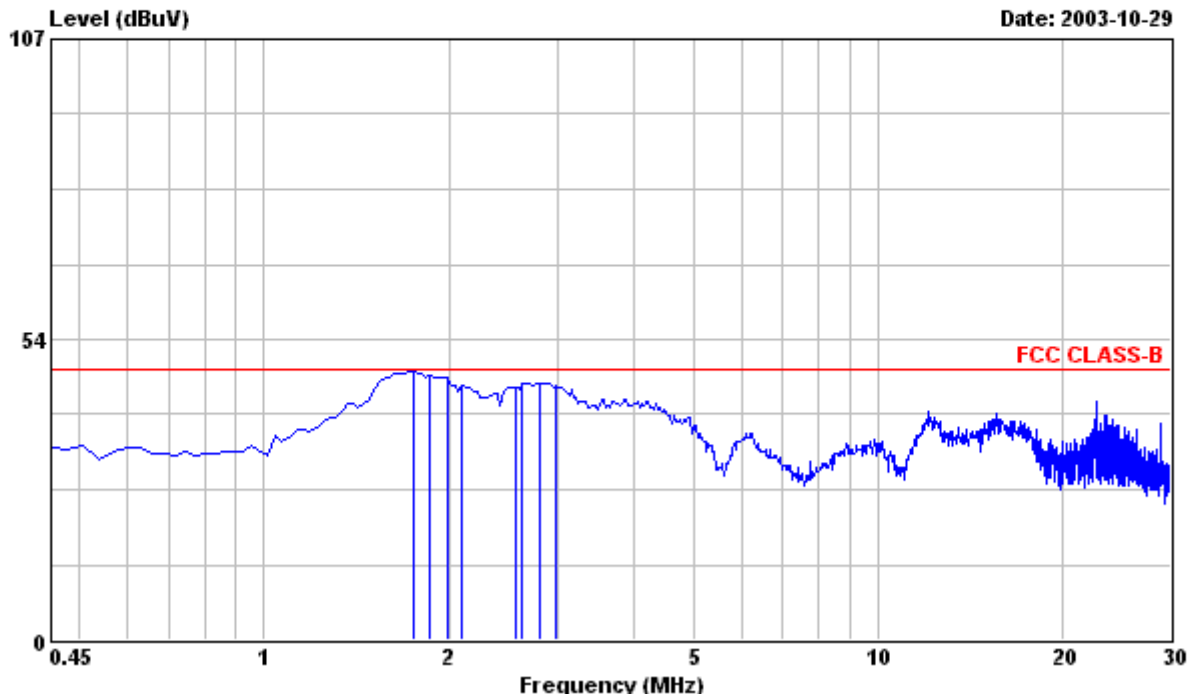


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Data#: 7

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
1.750	---	43.94	48.00	0.40	44.34	-3.66	QP
1.750	47.40	---	48.00	0.40	47.80	-0.20	Peak
1.868	46.60	---	48.00	0.40	47.00	-1.00	Peak
1.987	46.50	---	48.00	0.40	46.90	-1.10	Peak
2.105	45.00	---	48.00	0.40	45.40	-2.60	Peak
2.578	44.70	---	48.00	0.40	45.10	-2.90	Peak
2.637	45.30	---	48.00	0.40	45.70	-2.30	Peak
2.814	45.40	---	48.00	0.40	45.80	-2.20	Peak
2.991	44.90	---	48.00	0.40	45.30	-2.70	Peak

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

Tested by : C C.Wu

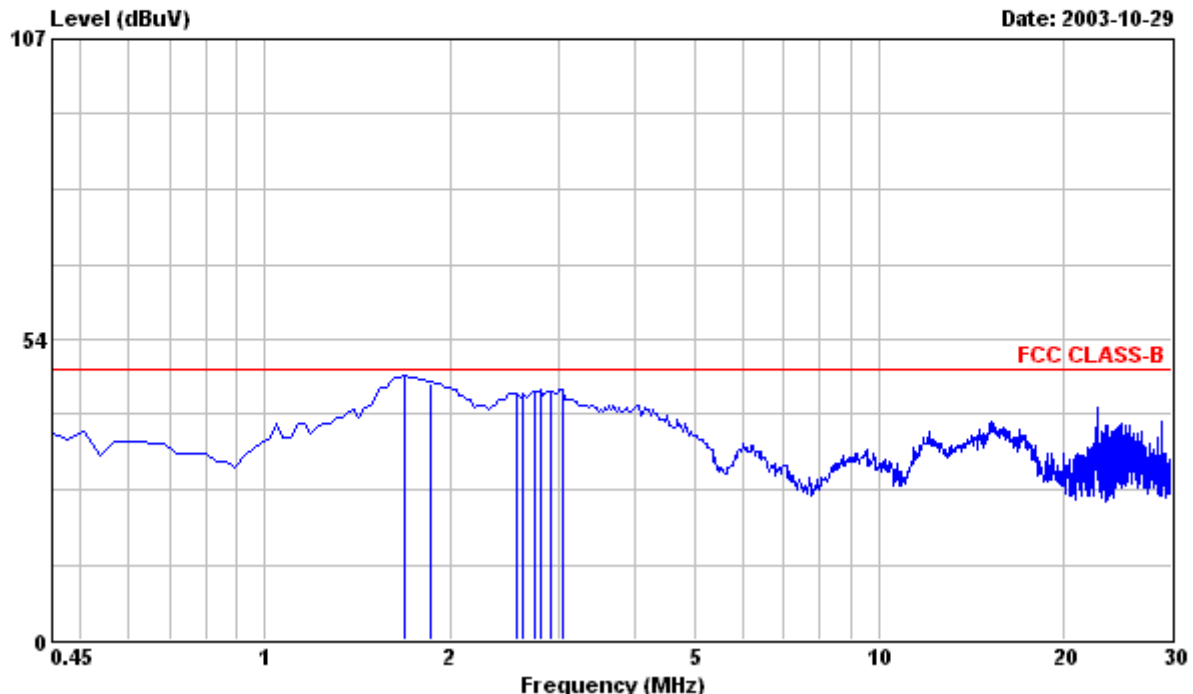


PHILIPS

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Data#: 8

File#: C:\Program Files\em3\EMI03-039-C(107P50).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							
1.691	---	43.18	48.00	0.40	43.58	-4.42	QP
1.691	46.80	---	48.00	0.40	47.20	-0.80	Peak
1.868	45.70	---	48.00	0.40	46.10	-1.90	Peak
2.578	43.60	---	48.00	0.40	44.00	-4.00	Peak
2.637	43.30	---	48.00	0.40	43.70	-4.30	Peak
2.755	44.00	---	48.00	0.40	44.40	-3.60	Peak
2.814	44.30	---	48.00	0.40	44.70	-3.30	Peak
2.932	43.90	---	48.00	0.40	44.30	-3.70	Peak
3.050	44.30	---	48.00	0.40	44.70	-3.30	Peak

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

Tested by : C C.Wu

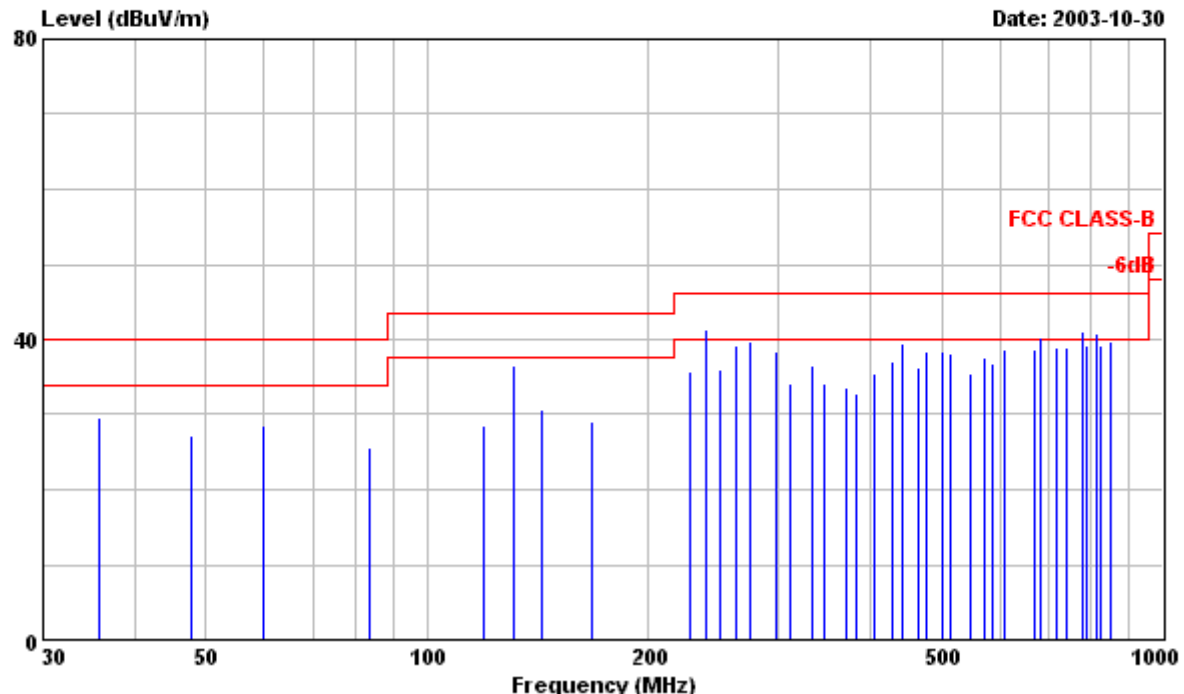


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Data#: 1

File#: C:\Program Files\em3\EMI03-039-R(107P50).emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 18 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency Peak Reading QP reading Limit Factor Emission Level Over Limit Remark
HORIZONTAL

MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
35.820	16.30	---	40.00	13.24	29.54	-10.46	Peak
47.760	16.10	---	40.00	11.10	27.20	-12.80	Peak
59.700	18.70	---	40.00	9.93	28.63	-11.37	Peak
83.580	15.40	---	40.00	10.58	25.98	-14.02	Peak
119.400	16.20	---	43.50	12.36	28.56	-14.94	Peak
131.360	23.70	---	43.50	12.74	36.44	-7.06	Peak
143.300	17.40	---	43.50	13.18	30.58	-12.92	Peak
167.170	15.30	---	43.50	13.90	29.20	-14.30	Peak
226.840	17.10	---	46.00	18.66	35.76	-10.24	Peak

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	Remark
HORIZONTAL							
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
! 238.770	21.70	---	46.00	19.65	41.35	-4.65	Peak
238.770	---	20.28	46.00	19.65	39.93	-6.07	QP
250.710	15.50	---	46.00	20.50	36.00	-10.00	Peak
262.650	18.10	---	46.00	21.23	39.33	-6.67	Peak
274.590	17.90	---	46.00	21.85	39.75	-6.25	Peak
298.470	15.20	---	46.00	23.10	38.30	-7.70	Peak
310.410	17.60	---	46.00	16.69	34.29	-11.71	Peak
334.290	19.20	---	46.00	17.20	36.40	-9.60	Peak
346.230	16.60	---	46.00	17.44	34.04	-11.96	Peak
370.110	15.80	---	46.00	17.88	33.68	-12.32	Peak
382.050	14.60	---	46.00	18.10	32.70	-13.30	Peak
405.920	17.00	---	46.00	18.48	35.48	-10.52	Peak
429.790	18.20	---	46.00	18.81	37.01	-8.99	Peak
441.720	20.40	---	46.00	18.98	39.38	-6.62	Peak
465.580	17.10	---	46.00	19.29	36.39	-9.61	Peak
477.540	18.90	---	46.00	19.43	38.33	-7.67	Peak
501.420	18.60	---	46.00	19.73	38.33	-7.67	Peak
513.360	18.30	---	46.00	19.93	38.23	-7.77	Peak
549.180	14.90	---	46.00	20.48	35.38	-10.62	Peak
573.060	16.70	---	46.00	20.83	37.53	-8.47	Peak
585.000	15.90	---	46.00	21.00	36.90	-9.10	Peak
608.880	17.10	---	46.00	21.46	38.56	-7.44	Peak
668.570	15.90	---	46.00	22.82	38.72	-7.28	Peak
! 680.510	17.30	---	46.00	23.08	40.38	-5.62	Peak
716.330	15.20	---	46.00	23.74	38.94	-7.06	Peak
740.210	14.80	---	46.00	24.05	38.85	-7.15	Peak
776.030	---	13.87	46.00	24.53	38.40	-7.60	QP
! 776.030	16.60	---	46.00	24.53	41.13	-4.87	Peak
787.960	14.50	---	46.00	24.66	39.16	-6.84	Peak
! 811.840	15.80	---	46.00	25.02	40.82	-5.18	Peak
811.840	---						

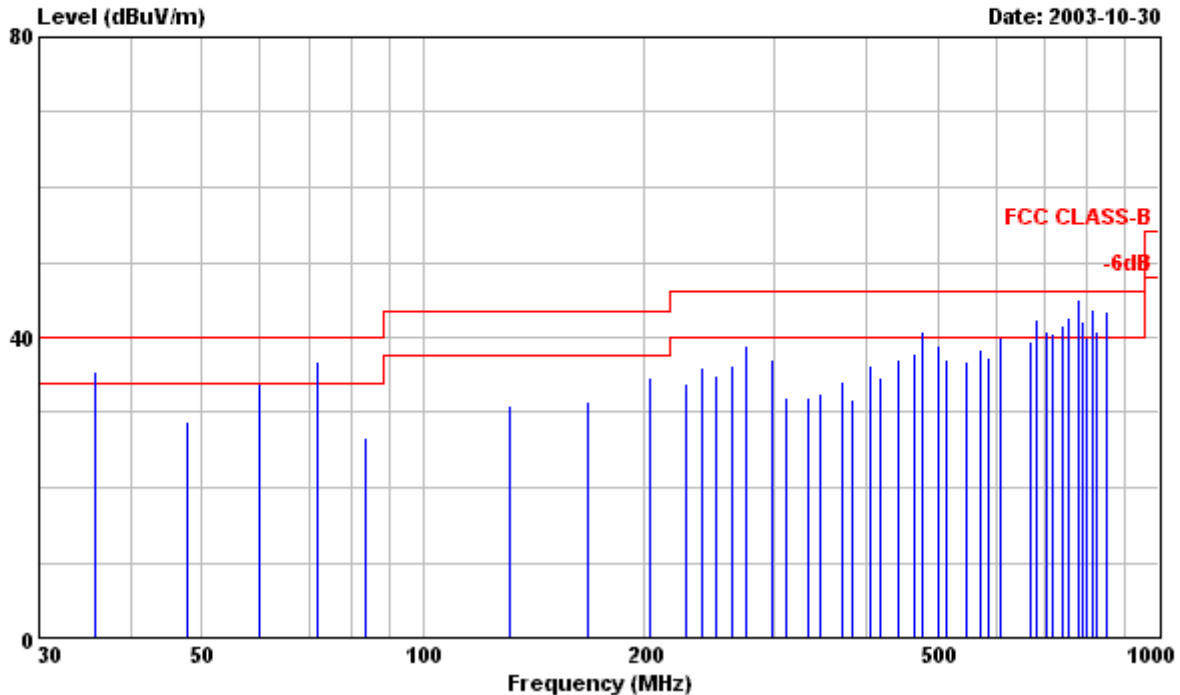


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Data#: 2

File#: C:\Program Files\em3\EMI03-039-R(107P50).emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 18 ARIAL "H" PATTERN.
: 3. 1600x1200/75Hz 93.8KHz MODE WITH
: COMPAQ ENC/P866/20E/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak	Reading	QP reading	Limit	Factor	Emission Level	Over Limit	Remark
MHz		dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
! 35.820	---	20.84	40.00	13.24	34.08	-5.92	QP	
! 35.820	22.10	---	40.00	13.24	35.34	-4.66	Peak	
47.760	17.60	---	40.00	11.10	28.70	-11.30	Peak	
59.700	23.90	---	40.00	9.93	33.83	-6.17	Peak	
! 71.640	---	25.32	40.00	10.06	35.38	-4.62	QP	
! 71.640	26.70	---	40.00	10.06	36.76	-3.24	Peak	
83.580	16.20	---	40.00	10.58	26.78	-13.22	Peak	
131.360	18.31	---	43.50	12.74	31.05	-12.45	Peak	
167.170	17.50	---	43.50	13.90	31.40	-12.10	Peak	

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	Remark
MHz	dBuV	dBuV	dBuV/m	dB/m	VERTICAL		
					dBuV/m	dBuV/m	
202.960	18.10	---	43.50	16.56	34.66	-8.84	Peak
226.840	15.30	---	46.00	18.66	33.96	-12.04	Peak
238.770	16.30	---	46.00	19.65	35.95	-10.05	Peak
250.710	14.40	---	46.00	20.50	34.90	-11.10	Peak
262.650	15.10	---	46.00	21.23	36.33	-9.67	Peak
274.590	17.00	---	46.00	21.85	38.85	-7.15	Peak
298.470	14.10	---	46.00	23.10	37.20	-8.80	Peak
310.410	15.30	---	46.00	16.69	31.99	-14.01	Peak
334.290	14.80	---	46.00	17.20	32.00	-14.00	Peak
346.230	15.10	---	46.00	17.44	32.54	-13.46	Peak
370.110	16.20	---	46.00	17.88	34.08	-11.92	Peak
382.050	13.70	---	46.00	18.10	31.80	-14.20	Peak
405.920	17.70	---	46.00	18.48	36.18	-9.82	Peak
417.850	16.10	---	46.00	18.65	34.75	-11.25	Peak
441.720	18.20	---	46.00	18.98	37.18	-8.82	Peak
465.580	18.60	---	46.00	19.29	37.89	-8.11	Peak
! 477.540	21.50	---	46.00	19.43	40.93	-5.07	Peak
477.540	---	20.18	46.00	19.43	39.61	-6.39	QP
501.420	19.30	---	46.00	19.73	39.03	-6.97	Peak
513.360	17.10	---	46.00	19.93	37.03	-8.97	Peak
549.180	16.30	---	46.00	20.48	36.78	-9.22	Peak
573.060	17.70	---	46.00	20.83	38.53	-7.47	Peak
585.000	16.30	---	46.00	21.00	37.30	-8.70	Peak
608.880	18.50	---	46.00	21.46	39.96	-6.04	Peak
668.570	16.70	---	46.00	22.82	39.52	-6.48	Peak
! 680.510	19.20	---	46.00	23.08	42.28	-3.72	Peak
680.510	---	16.35	46.00	23.08	39.43	-6.57	QP
704.380	---	14.48	46.00	23.57	38.05	-7.95	QP
! 704.380	17.30	---	46.00	23.57	40.87	-5.13	Peak
! 716.330	16.80	---	46.00	23.74	40.54	-5.46	Peak
716.330	---	13.20	46.00	23.74	36.94	-	



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Frequency	Peak Reading	QP reading	Limit	Factor	Emission Level	Over Limit	Remark
MHz	dBuV	dBuV	dBuV/m	dB/m	VERTICAL dBuV/m	dBuV/m	
! 847.650	17.90	---	46.00	25.55	43.45	-2.55	Peak
! 847.650	---	15.18	46.00	25.55	40.73	-5.27	QP

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

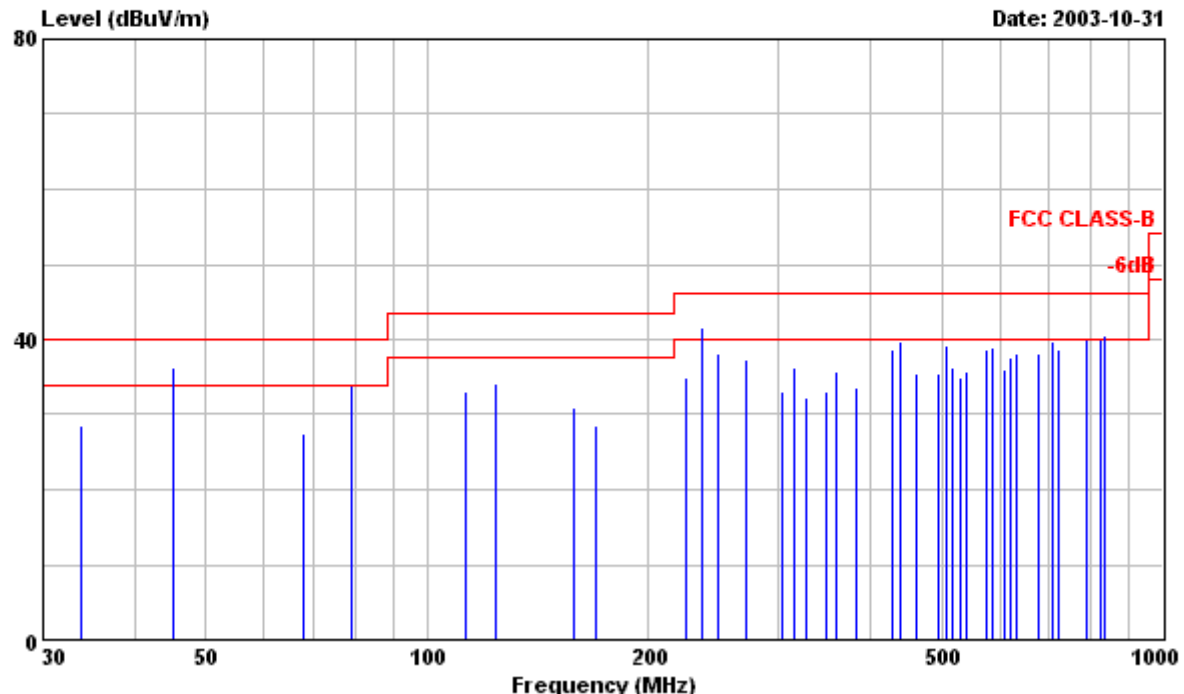


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Data#: 3

File#: C:\Program Files\em3\EMI03-039-R(107P50).emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH
: COMPAQ ENC/P866/2OE/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency Peak Reading QP reading Limit Factor Emission Level Over Limit Remark
HORIZONTAL

MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
33.790	14.70	---	40.00	13.80	28.50	-11.50	Peak
! 45.080	24.80	---	40.00	11.50	36.30	-3.70	Peak
! 45.080	---	23.20	40.00	11.50	34.70	-5.30	QP
67.600	17.40	---	40.00	9.98	27.38	-12.62	Peak
78.870	23.60	---	40.00	10.36	33.96	-6.04	Peak
112.680	20.90	---	43.50	12.04	32.94	-10.56	Peak
123.950	21.90	---	43.50	12.48	34.38	-9.12	Peak
157.740	17.30	---	43.50	13.63	30.93	-12.57	Peak
169.010	14.60	---	43.50	13.94	28.54	-14.96	Peak

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	Remark
HORIZONTAL							
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
225.360	16.40	---	46.00	18.53	34.93	-11.07	Peak
! 236.600	22.20	---	46.00	19.45	41.65	-4.35	Peak
236.600	---	20.32	46.00	19.45	39.77	-6.23	QP
247.870	17.80	---	46.00	20.30	38.10	-7.90	Peak
270.410	15.80	---	46.00	21.64	37.44	-8.56	Peak
304.200	16.60	---	46.00	16.57	33.17	-12.83	Peak
315.460	19.50	---	46.00	16.80	36.30	-9.70	Peak
326.730	15.20	---	46.00	17.04	32.24	-13.76	Peak
349.270	15.70	---	46.00	17.49	33.19	-12.81	Peak
360.540	18.00	---	46.00	17.70	35.70	-10.30	Peak
383.080	15.60	---	46.00	18.10	33.70	-12.30	Peak
428.120	19.80	---	46.00	18.79	38.59	-7.41	Peak
439.400	20.80	---	46.00	18.94	39.74	-6.26	Peak
461.940	16.10	---	46.00	19.25	35.35	-10.65	Peak
495.730	15.90	---	46.00	19.66	35.56	-10.44	Peak
506.980	19.30	---	46.00	19.82	39.12	-6.88	Peak
518.260	16.20	---	46.00	20.02	36.22	-9.78	Peak
529.530	14.70	---	46.00	20.19	34.89	-11.11	Peak
540.800	15.40	---	46.00	20.36	35.76	-10.24	Peak
574.610	17.70	---	46.00	20.85	38.55	-7.45	Peak
585.860	18.00	---	46.00	21.03	39.03	-6.97	Peak
608.400	14.60	---	46.00	21.41	36.01	-9.99	Peak
619.670	15.90	---	46.00	21.72	37.62	-8.38	Peak
630.930	16.10	---	46.00	21.98	38.08	-7.92	Peak
675.980	15.20	---	46.00	22.98	38.18	-7.82	Peak
709.790	16.00	---	46.00	23.64	39.64	-6.36	Peak
721.060	14.90	---	46.00	23.81	38.71	-7.29	Peak
788.650	15.30	---	46.00	24.66	39.96	-6.04	Peak
822.460	14.80	---	46.00	25.15	39.95	-6.05	Peak
833.720	---	12.13	46.00	25.33	37.46	-8.54	QP
! 833.720	15.						

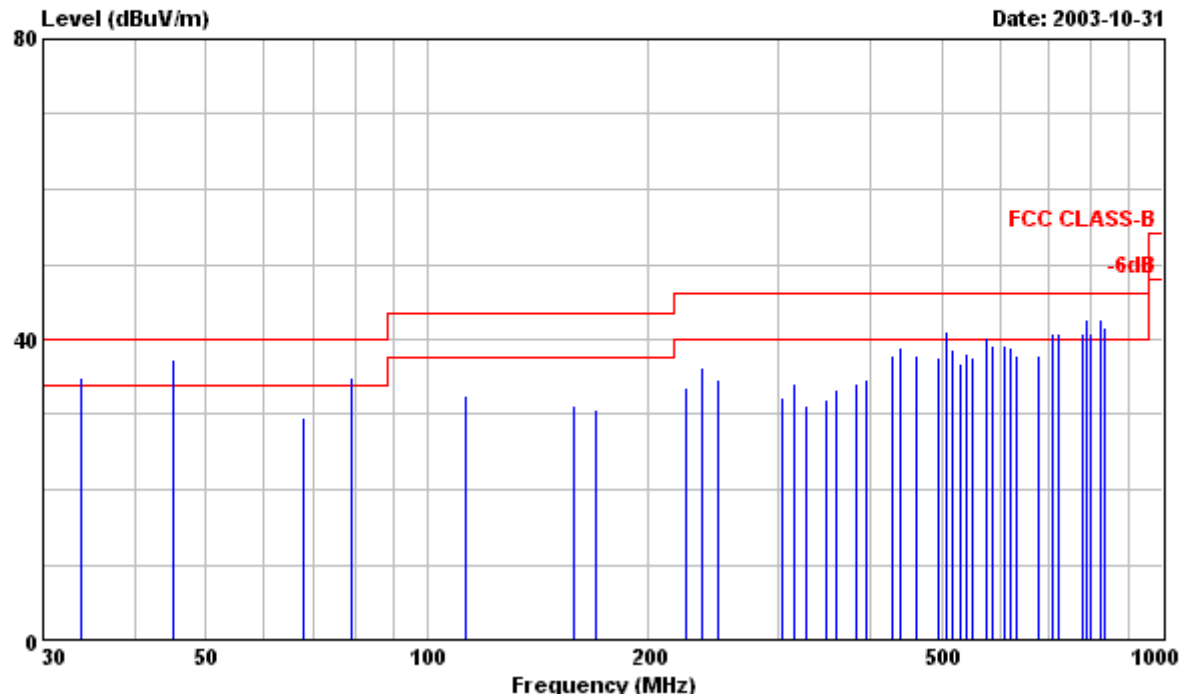


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Data#: 4

File#: C:\Program Files\em3\EMI03-039-R(107P50).emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : PHILIPS 107P50 Serial No:TY0304521
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL CPT TUBE,RUN IBM V1.8
: FONT 16 ARIAL "H" PATTERN.
: 3. 1280x1024/85Hz 91.1KHz MODE WITH
: COMPAQ ENC/P866/2OE/8/128A TAI PC
: ATI RADEON VE DDR VIDEO CARD
: WAS TESTED.

Frequency	Peak	Reading	QP reading	Limit	Factor	Emission Level	Over Limit	Remark
MHz		dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
33.790	---	19.82	40.00	13.80	33.62	-6.38	QP	
! 33.790	21.00	---	40.00	13.80	34.80	-5.20	Peak	
! 45.080	25.80	---	40.00	11.50	37.30	-2.70	Peak	
! 45.080	---	24.30	40.00	11.50	35.80	-4.20	QP	
67.600	19.50	---	40.00	9.98	29.48	-10.52	Peak	
! 78.870	24.60	---	40.00	10.36	34.96	-5.04	Peak	
78.870	---	23.00	40.00	10.36	33.36	-6.64	QP	
112.680	20.60	---	43.50	12.04	32.64	-10.86	Peak	
157.740	17.60	---	43.50	13.63	31.23	-12.27	Peak	

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	Remark
MHz	dBuV	dBuV	dBuV/m	dB/m	VERTICAL dBuV/m	dBuV/m	
169.010	16.60	---	43.50	13.94	30.54	-12.96	Peak
225.360	15.00	---	46.00	18.53	33.53	-12.47	Peak
236.600	16.90	---	46.00	19.45	36.35	-9.65	Peak
247.870	14.40	---	46.00	20.30	34.70	-11.30	Peak
304.200	15.80	---	46.00	16.57	32.37	-13.63	Peak
315.460	17.20	---	46.00	16.80	34.00	-12.00	Peak
326.730	14.20	---	46.00	17.04	31.24	-14.76	Peak
349.270	14.50	---	46.00	17.49	31.99	-14.01	Peak
360.540	15.70	---	46.00	17.70	33.40	-12.60	Peak
383.060	16.10	---	46.00	18.10	34.20	-11.80	Peak
394.330	16.30	---	46.00	18.31	34.61	-11.39	Peak
428.120	19.20	---	46.00	18.79	37.99	-8.01	Peak
439.400	20.10	---	46.00	18.94	39.04	-6.96	Peak
461.940	18.70	---	46.00	19.25	37.95	-8.05	Peak
495.730	18.00	---	46.00	19.66	37.66	-8.34	Peak
506.980	---	19.40	46.00	19.82	39.22	-6.78	QP
! 506.980	21.20	---	46.00	19.82	41.02	-4.98	Peak
518.260	18.60	---	46.00	20.02	38.62	-7.38	Peak
529.530	16.60	---	46.00	20.19	36.79	-9.21	Peak
540.800	17.90	---	46.00	20.36	38.26	-7.74	Peak
552.060	17.10	---	46.00	20.54	37.64	-8.36	Peak
! 574.610	19.50	---	46.00	20.85	40.35	-5.65	Peak
574.610	---	16.76	46.00	20.85	37.61	-8.39	QP
585.860	18.30	---	46.00	21.03	39.33	-6.67	Peak
608.400	17.70	---	46.00	21.41	39.11	-6.89	Peak
619.670	17.30	---	46.00	21.72	39.02	-6.98	Peak
630.930	15.80	---	46.00	21.98	37.78	-8.22	Peak
675.980	14.90	---	46.00	22.98	37.88	-8.12	Peak
709.790	---	13.81	46.00	23.64	37.45	-8.55	QP
! 709.790	17.10	---	46.00	23.64	40.74	-5.26	Peak
721.060	---	13.98	46.00	23.81	37.79	-8.21	QP
! 721.060	16.90	---	46.00	23.8			