





PHILIPS

<p>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</p>	<h2>FCC Test Report</h2>	<p>Report No.: TYR87-2050</p> <p>Date : 08 July, 2003</p> <p>Page : Page 1 of 32</p>
<p>Customer : Philips Electronics Industries</p> <p>Name : Mr. S.T. Huang – EE LCD</p> <p>Address : 5, Tze Chiang 1 Road,</p> <p>Zip/City : Chungli Industrial Park,</p> <p>Country : Chungli, Taiwan, R.O.C.</p>		
<p>Equipment Under Test (including peripherals) :</p> <p>FCC ID. : A3KM118</p> <p>Model Name : C17-2</p> <p>Serial Number : TY0304321</p> <p>Description : 17" SXGA LCD color monitor, Max. resolution 1280x1024/75Hz</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 : 03 Jul. 2003</p> <p>Date of performance of test : 04 Jul., 2003 to 06 Jul., 2003</p>		
<div style="display: flex; justify-content: space-around;"><div style="text-align: center;"> C.C. Wu - EMC Test Engineer</div><div style="text-align: center;"> Ronnie Yang - EMC Manager</div></div>		

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. : C17-2
FCC ID : A3KM118
Brand : Fujitsu Siemens

The color monitor automatically scans horizontal frequencies between 30KHz and 82KHz , 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 1280x1024 pixels.

The monitor has 9 factory-preset modes as indicated in the following table:

#	Resolution	H-Frequency	Pixel rate	V-Frequency
1	720X400	31.5KHz	28.322	70Hz
2	640X480	31.5KHz	25.175	60Hz
3	640X480	37.5KHz	31.501	75Hz
4	800X600	37.9KHz	40	60Hz
5	800X600	46.9KHz	49.498	75Hz
6	1024X768	48.4KHz	65	60Hz
7	1024X768	60.0KHz	78.75	75Hz
8	1280X1024	64.0KHz	108	60Hz
9	1280X1024	80.0KHz	135	75Hz

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	09/15-2002	09/15/2003

- For Radiated Emissions Test:

Test Equipment	Model No.	Serial No.	Last Calibrate	Next Calibrate
Spectrum	HP8568B	2928A04640	09/02/2002	09/02/2003
RF Preselector	HP85685A	2620A00338	09/02/2002	09/02/2003
QP Adapter	HP85650A	2811A01324	09/02/2002	09/02/2003
EMI Receiver	R & S ESVS30	841977/006	02/27/2003	02/27/2004
Biconical Antenna	EMCO 3110B	3224	09/19/2002	09/19/2003
Log-Periodic Antenna	EMCO 3146A	1425	09/19/2002	09/19/2003
Turn Table	EMCO 1060	1068	09/15/2002	09/15/2003
Antenna Tower	EMCO 1050	1113	09/15/2002	09/15/2003
RF Cable	M17/75-RG214-NE	N/A	09/15/2002	09/15/2003

4. Test Configuration of EUT and Peripherals

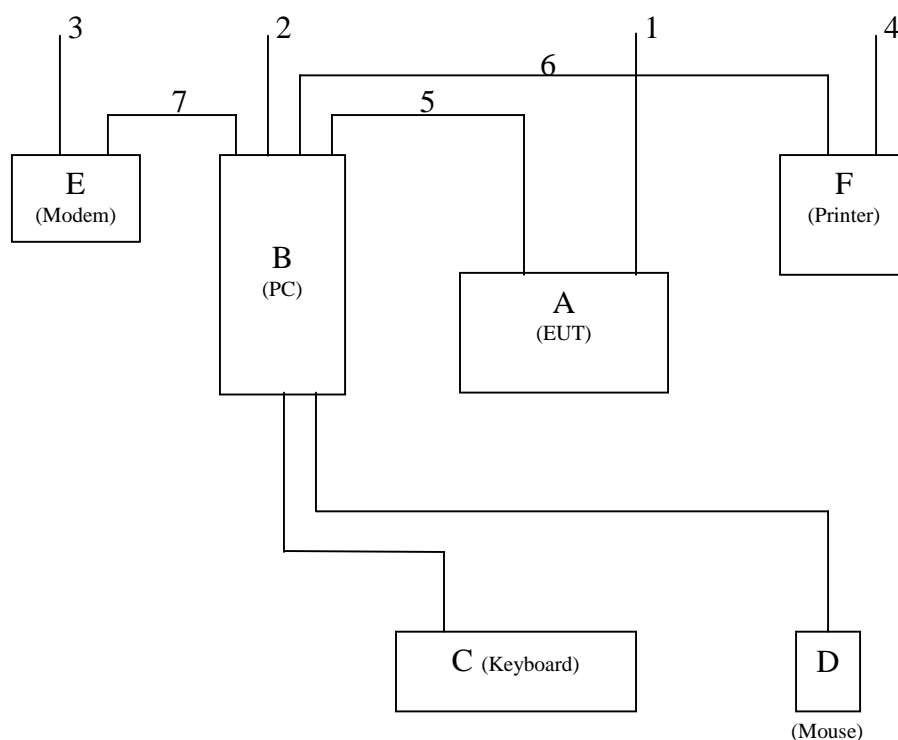
The system was configured for testing in a typical fashion (as a customer would normally use it) according to ANSI C63.4-1992, please see the photographs for detail. For system measurement, the EUT “C17-2” were connected to:

	Description	Brand/ Model No.	Serial No.	FCC ID	Remark
A	Monitor	Fujitsu Siemens C17-2	TY0304321	A3KM118	EUT
B	PC	Fujitsu Siemens MT8-D1387	YBSX459065	FCC logo	
C	Keyboard	Fujitsu Siemens S26381-K240-V110	YBKBO21111264507	HSS011A5TK240	
D	Mouse	Fujitsu Siemens M-S69	HCA23608284	JNZ211443	
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

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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	EMI03-029-C	1280x1024	80KHz/75Hz	D-sub
		1024x768	60KHz/75Hz	D-sub
Radiated	EMI03-029-R	1280x1024	80KHz/75Hz	D-sub
		1024x768	60KHz/75Hz	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

: 04 Jul., 2003 to 06 Jul., 2003

Test Engineer

: C.C.Wu

For detail measurement results see next pages.

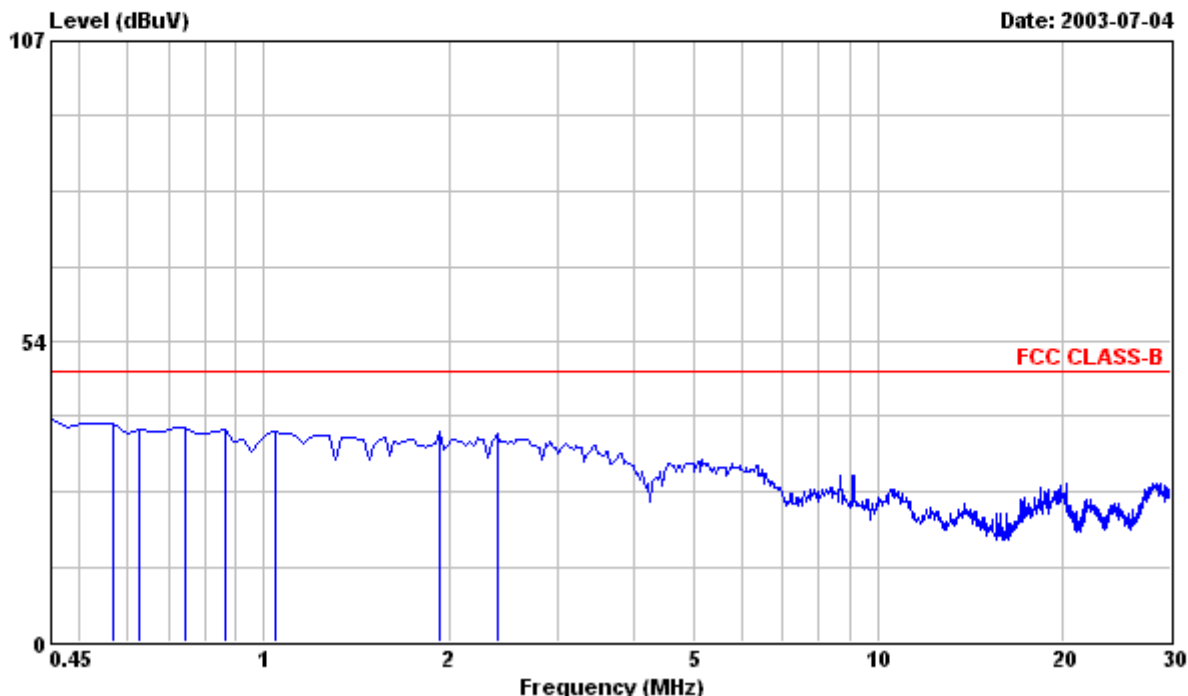


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Data#: 1

File#: C:\Program Files\em3\EMI03-029-C(FCS C17-2).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : FSC C17-2 Serial No:TY0304321
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1280x1024/75Hz 80KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
0.450	39.40	---	48.00	0.20	39.60	-8.40	Peak
0.568	38.70	---	48.00	0.26	38.96	-9.04	Peak
0.627	37.60	---	48.00	0.28	37.88	-10.12	Peak
0.746	37.80	---	48.00	0.33	38.13	-9.87	Peak
0.864	37.60	---	48.00	0.36	37.96	-10.04	Peak
1.041	36.90	---	48.00	0.40	37.30	-10.70	Peak
1.928	36.90	---	48.00	0.40	37.30	-10.70	Peak
2.400	36.70	---	48.00	0.40	37.10	-10.90	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

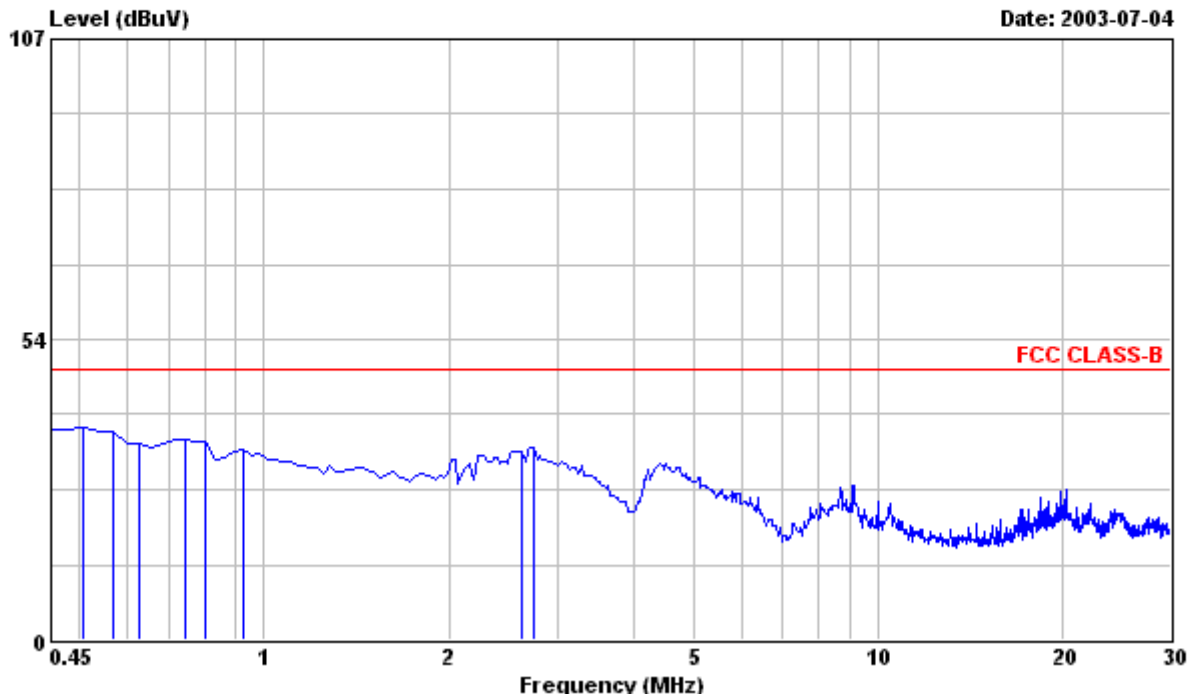


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Data#: 2

File#: C:\Program Files\em3\EMI03-029-C(FCS C17-2).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1280x1024/75Hz 80KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							

0.509	37.40	---	48.00	0.23	37.63	-10.37	Peak
0.568	36.80	---	48.00	0.26	37.06	-10.94	Peak
0.627	34.70	---	48.00	0.28	34.98	-13.02	Peak
0.746	35.40	---	48.00	0.33	35.73	-12.27	Peak
0.805	34.90	---	48.00	0.35	35.25	-12.75	Peak
0.923	33.50	---	48.00	0.38	33.88	-14.12	Peak
2.637	33.30	---	48.00	0.40	33.70	-14.30	Peak
2.755	33.70	---	48.00	0.40	34.10	-13.90	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

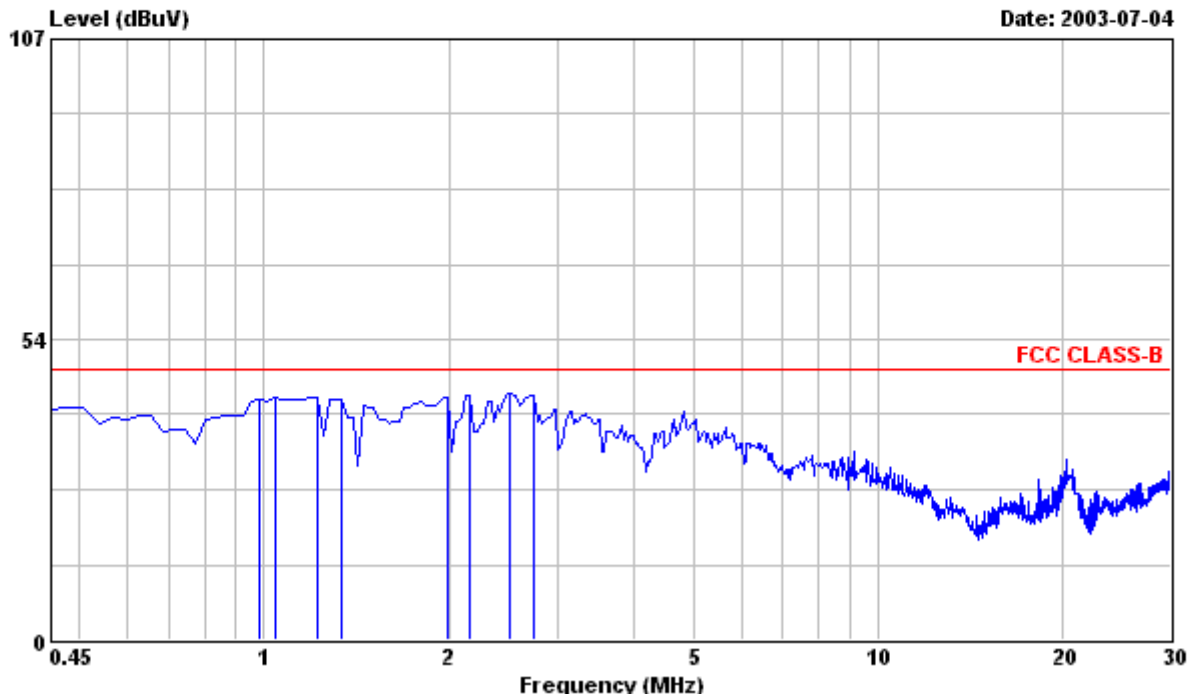


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Data#: 3

File#: C:\Program Files\em3\EMI03-029-C(FCS C17-2).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : FSC C17-2 Serial No:TY0304321
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1280x1024/75Hz 80KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
-----------	--------------	------------	-------	--------	----------------	------------	--------

0.982	42.30	---	48.00	0.40	42.70	-5.30	Peak
1.041	42.70	---	48.00	0.40	43.10	-4.90	Peak
1.218	42.60	---	48.00	0.40	43.00	-5.00	Peak
1.337	42.40	---	48.00	0.40	42.80	-5.20	Peak
1.987	42.90	---	48.00	0.40	43.30	-4.70	Peak
2.164	43.10	---	48.00	0.40	43.50	-4.50	Peak
2.519	43.30	---	48.00	0.40	43.70	-4.30	Peak
2.755	43.10	---	48.00	0.40	43.50	-4.50	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

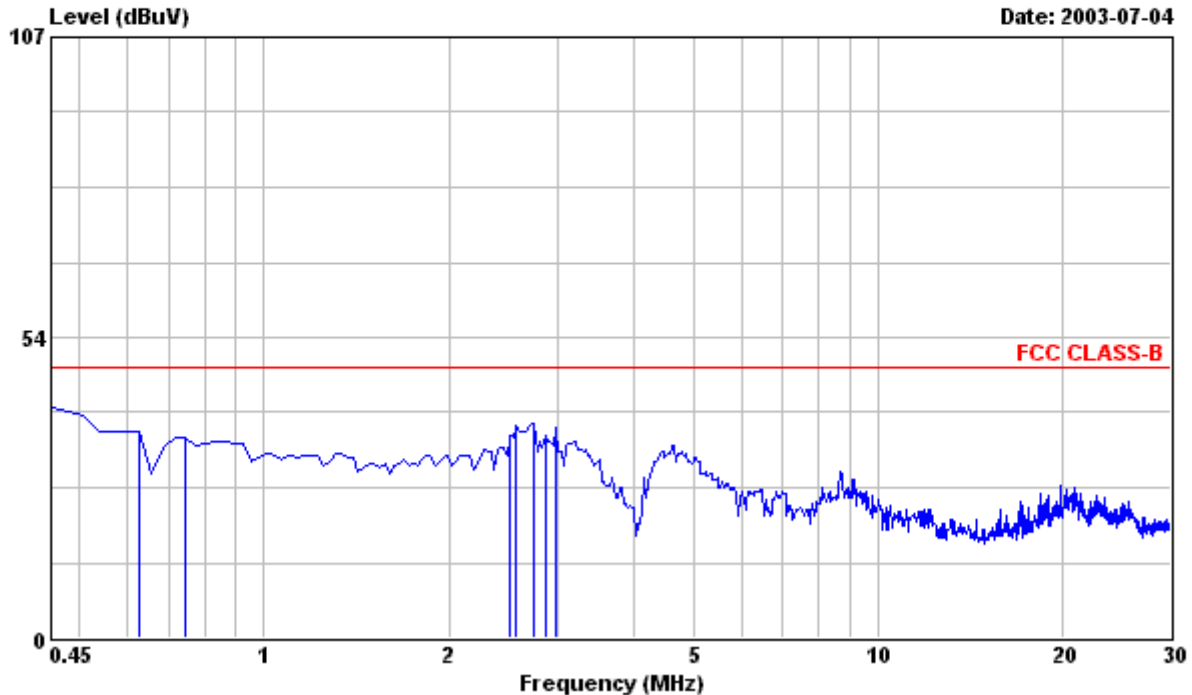


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Data#: 4

File#: C:\Program Files\em3\EMI03-029-C(FCS C17-2).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1280x1024/75Hz 80KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							

0.450	40.70	---	48.00	0.20	40.90	-7.10	Peak
0.627	36.40	---	48.00	0.28	36.68	-11.32	Peak
0.746	35.50	---	48.00	0.33	35.83	-12.17	Peak
2.519	35.50	---	48.00	0.40	35.90	-12.10	Peak
2.578	37.40	---	48.00	0.40	37.80	-10.20	Peak
2.755	37.70	---	48.00	0.40	38.10	-9.90	Peak
2.873	35.50	---	48.00	0.40	35.90	-12.10	Peak
2.991	37.20	---	48.00	0.40	37.60	-10.40	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

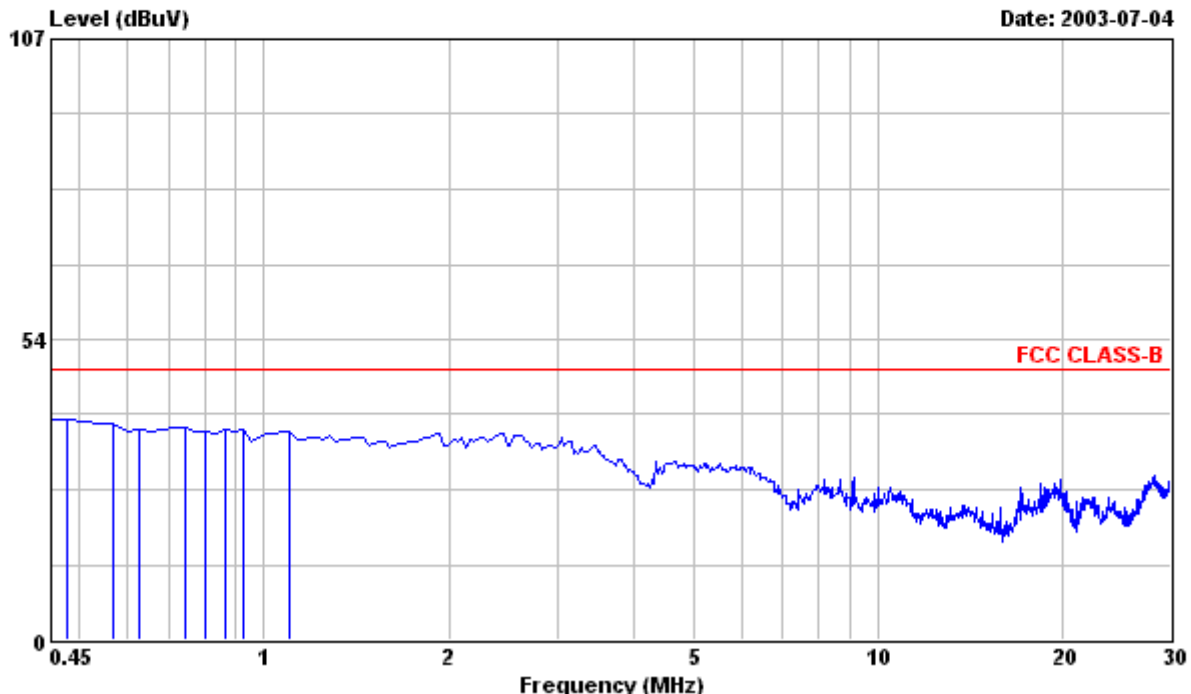


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Data#: 5

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Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : FSC C17-2 Serial No:TY0304321
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1024x768/75Hz 60KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
-----------	--------------	------------	-------	--------	----------------	------------	--------

0.480	39.10	---	48.00	0.22	39.32	-8.68	Peak
0.568	38.10	---	48.00	0.26	38.36	-9.64	Peak
0.627	37.00	---	48.00	0.28	37.28	-10.72	Peak
0.746	37.50	---	48.00	0.33	37.83	-10.17	Peak
0.805	36.90	---	48.00	0.35	37.25	-10.75	Peak
0.864	37.20	---	48.00	0.36	37.56	-10.44	Peak
0.923	36.90	---	48.00	0.38	37.28	-10.72	Peak
1.100	36.60	---	48.00	0.40	37.00	-11.00	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

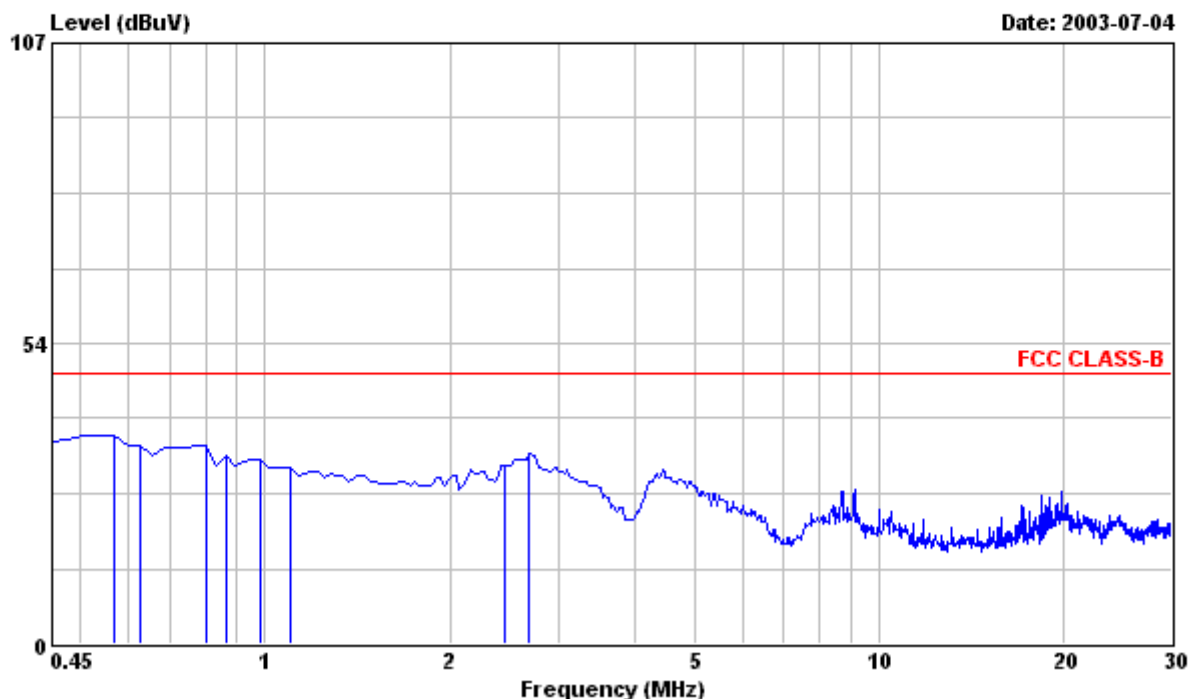


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: PATTERN.
: 3. 1024x768/75Hz 60KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							

0.568	36.80	---	48.00	0.26	37.06	-10.94	Peak
0.627	34.90	---	48.00	0.28	35.18	-12.82	Peak
0.805	34.90	---	48.00	0.35	35.25	-12.75	Peak
0.864	33.10	---	48.00	0.36	33.46	-14.54	Peak
0.982	32.30	---	48.00	0.40	32.70	-15.30	Peak
1.100	31.00	---	48.00	0.40	31.40	-16.60	Peak
2.459	31.50	---	48.00	0.40	31.90	-16.10	Peak
2.696	33.40	---	48.00	0.40	33.80	-14.20	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

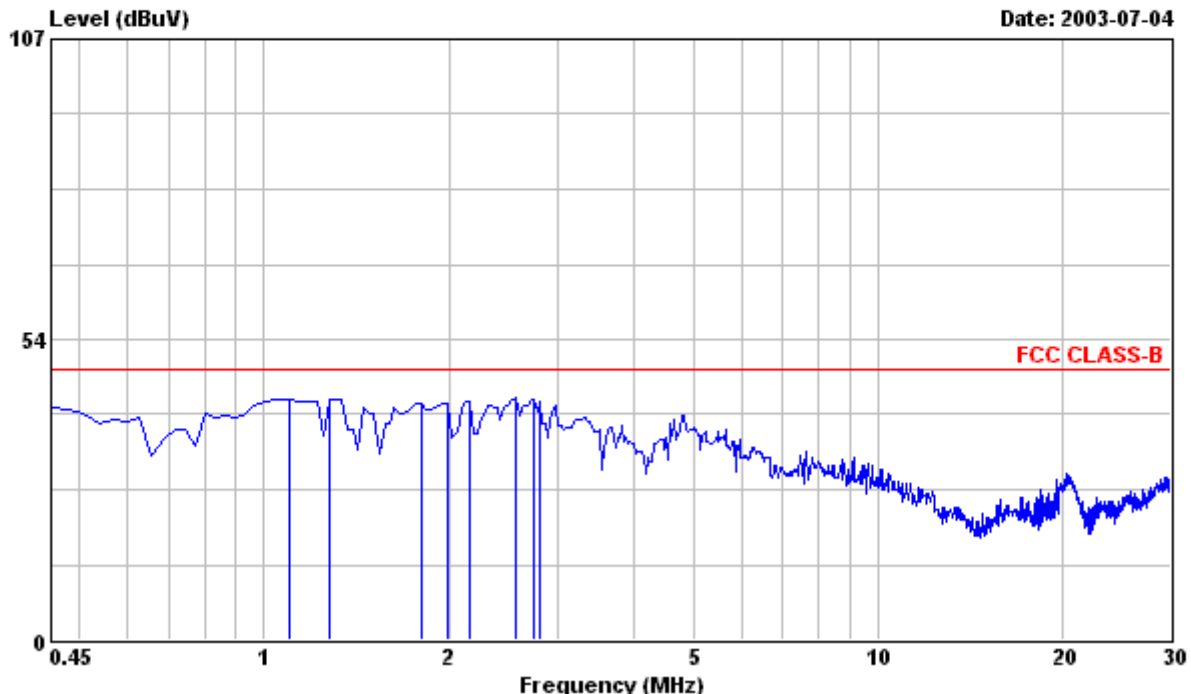


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Data#: 7

File#: C:\Program Files\em3\EMI03-029-C(FCS C17-2).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : FSC C17-2 Serial No:TY0304321
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1024x768/75Hz 60KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
1.100	42.40	---	48.00	0.40	42.80	-5.20	Peak
1.277	42.40	---	48.00	0.40	42.80	-5.20	Peak
1.809	41.70	---	48.00	0.40	42.10	-5.90	Peak
1.987	41.80	---	48.00	0.40	42.20	-5.80	Peak
2.164	42.20	---	48.00	0.40	42.60	-5.40	Peak
2.578	42.60	---	48.00	0.40	43.00	-5.00	Peak
2.755	42.40	---	48.00	0.40	42.80	-5.20	Peak
2.814	42.20	---	48.00	0.40	42.60	-5.40	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

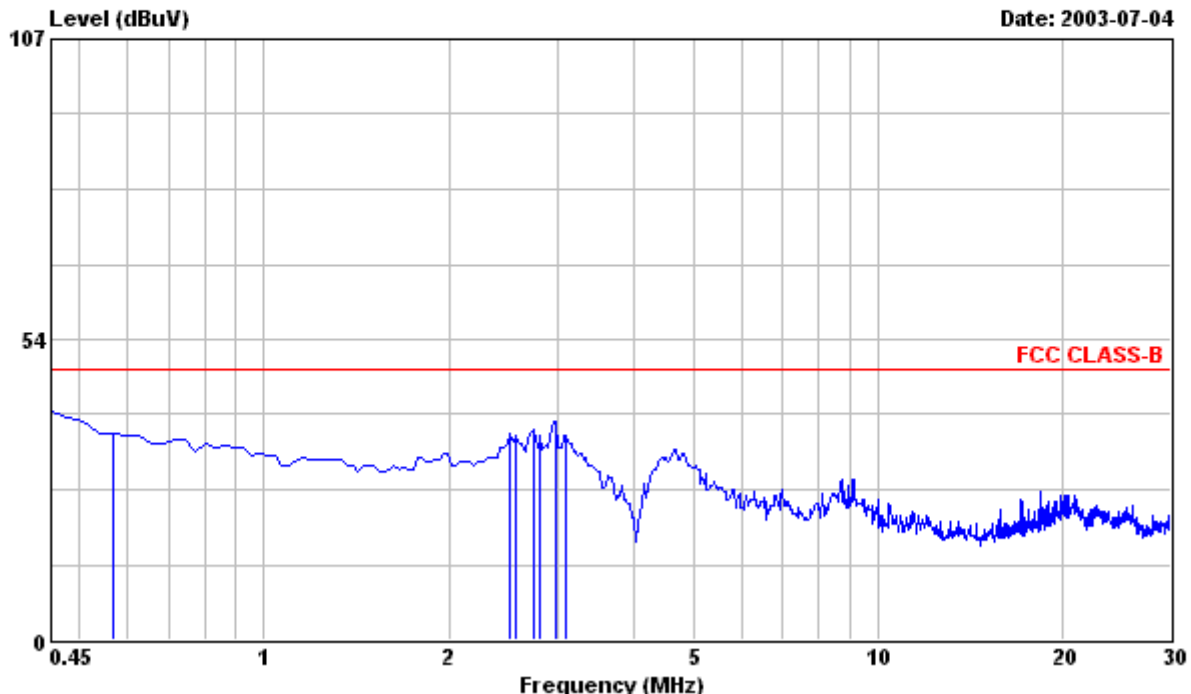


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Data#: 8

File#: C:\Program Files\em3\EMI03-029-C(FCS C17-2).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1024x768/75Hz 60KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
NEUTRAL							

0.450	40.40	---	48.00	0.20	40.60	-7.40	Peak
0.568	36.40	---	48.00	0.26	36.66	-11.34	Peak
2.519	36.20	---	48.00	0.40	36.60	-11.40	Peak
2.578	36.00	---	48.00	0.40	36.40	-11.60	Peak
2.755	37.00	---	48.00	0.40	37.40	-10.60	Peak
2.814	36.10	---	48.00	0.40	36.50	-11.50	Peak
2.991	38.40	---	48.00	0.40	38.80	-9.20	Peak
3.110	36.10	---	48.00	0.40	36.50	-11.50	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

8. .Radiated Emission Test

<h1 style="text-align: center;">Radiated Emissions</h1> <h2 style="text-align: center;">FCC Part 15</h2>																				
<p>Operating conditions EUT:</p> <p>EUT powered on with scrolling “H” pattern.</p>																				
<p>Limits:</p> <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</td> </tr> <tr> <td>88.0 – 216.0</td> <td>43.5</td> <td>43.5</td> </tr> <tr> <td>216.0 – 960.0</td> <td>46.5</td> <td>46.0</td> </tr> <tr> <td>960.0 – 1000.0</td> <td>49.5</td> <td>54.0</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	88.0 – 216.0	43.5	43.5	216.0 – 960.0	46.5	46.0	960.0 – 1000.0	49.5	54.0	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																		
88.0 – 216.0	43.5	43.5																		
216.0 – 960.0	46.5	46.0																		
960.0 – 1000.0	49.5	54.0																		
Above 1000.0	49.5	54.0 Average																		
<p>Test Result :</p> <p style="text-align: center;">Passed FCC Class B Limits</p>																				
<p>Remark:</p>																				
<p>Date of Test</p> <p>Test Engineer</p>	<p>: 04 Jul., 2003 to 06 Jul., 2003</p> <p>: C.C.Wu</p>																			
<p>For detail measurement results see next pages.</p>																				

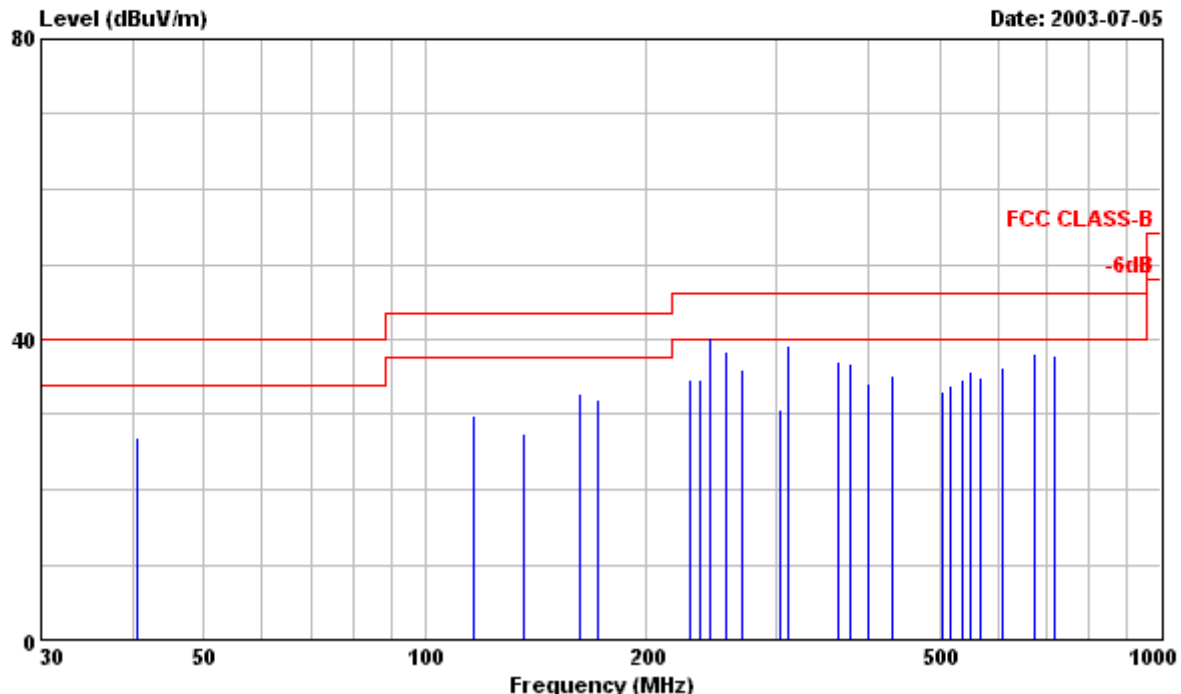


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Data#: 1

File#: C:\Program Files\em3\EMI03-029-R.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1280x1024/75Hz 80KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE 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	
40.520	14.80	---	40.00	12.03	26.83	-13.17	Peak
116.180	17.70	---	43.50	12.21	29.91	-13.59	Peak
136.060	14.60	---	43.50	12.92	27.52	-15.98	Peak
162.040	19.09	---	43.50	13.76	32.85	-10.65	Peak
171.860	17.90	---	43.50	14.02	31.92	-11.58	Peak
229.540	15.90	---	46.00	18.86	34.76	-11.24	Peak
236.300	15.30	---	46.00	19.45	34.75	-11.25	Peak
243.040	---	18.63	46.00	19.98	38.61	-7.39	QP
! 243.040	20.30	---	46.00	19.98	40.28	-5.72	Peak
256.560	17.60	---	46.00	20.86	38.46	-7.54	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	
270.050	14.30	---	46.00	21.64	35.94	-10.06	Peak
304.330	14.20	---	46.00	16.57	30.77	-15.23	Peak
310.560	22.40	---	46.00	16.71	39.11	-6.89	Peak
364.590	19.30	---	46.00	17.77	37.07	-8.93	Peak
378.070	18.80	---	46.00	18.02	36.82	-9.18	Peak
400.950	15.80	---	46.00	18.40	34.20	-11.80	Peak
432.090	16.40	---	46.00	18.85	35.25	-10.75	Peak
504.840	13.20	---	46.00	19.79	32.99	-13.01	Peak
519.160	13.90	---	46.00	20.02	33.92	-12.08	Peak
537.050	14.40	---	46.00	20.31	34.71	-11.29	Peak
551.380	15.20	---	46.00	20.51	35.71	-10.29	Peak
567.120	14.30	---	46.00	20.74	35.04	-10.96	Peak
607.760	14.80	---	46.00	21.41	36.21	-9.79	Peak
675.130	15.10	---	46.00	22.98	38.08	-7.92	Peak
715.640	14.00	---	46.00	23.74	37.74	-8.26	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)

Tested by : C C.Wu

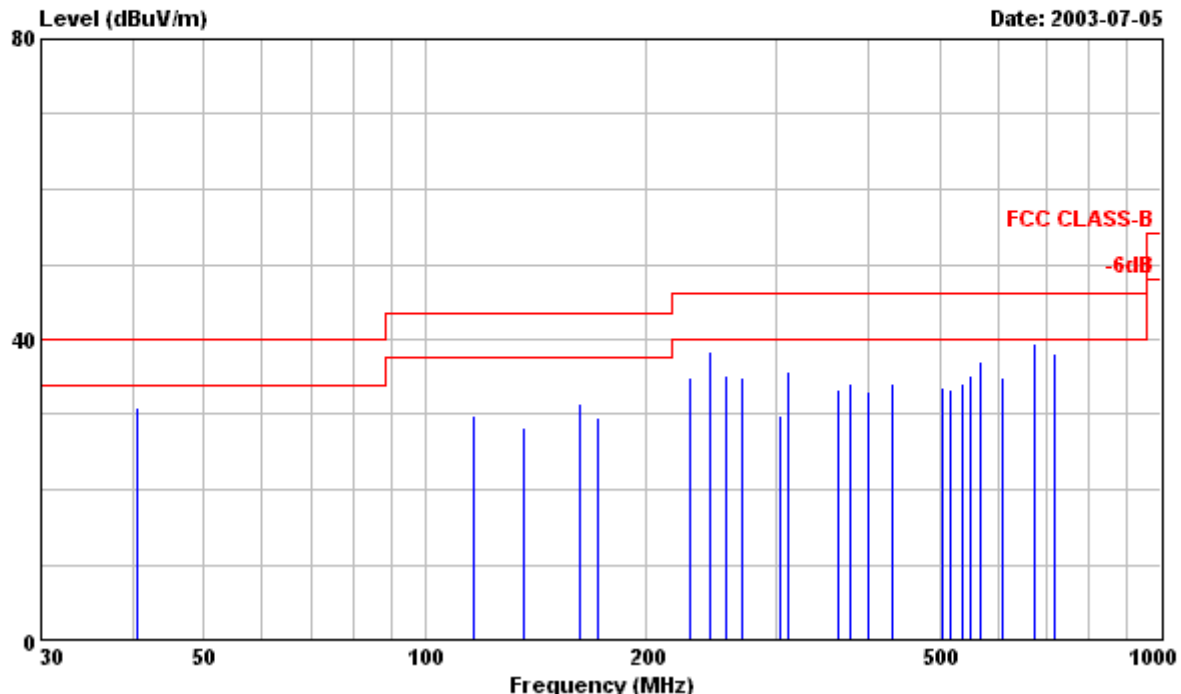


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Data#: 2

File#: C:\Program Files\em3\EMI03-029-R.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1280x1024/75Hz 80KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

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

MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
40.520	19.00	---	40.00	12.03	31.03	-8.97	Peak
116.180	17.70	---	43.50	12.21	29.91	-13.59	Peak
136.060	15.30	---	43.50	12.92	28.22	-15.28	Peak
162.040	17.59	---	43.50	13.76	31.35	-12.15	Peak
171.860	15.70	---	43.50	14.02	29.72	-13.78	Peak
229.540	16.10	---	46.00	18.86	34.96	-11.04	Peak
243.040	18.40	---	46.00	19.98	38.38	-7.62	Peak
256.560	14.40	---	46.00	20.86	35.26	-10.74	Peak
270.050	13.20	---	46.00	21.64	34.84	-11.16	Peak
304.330	13.30	---	46.00	16.57	29.87	-16.13	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
					VERTICAL		
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
310.560	19.10	---	46.00	16.71	35.81	-10.19	Peak
364.590	15.60	---	46.00	17.77	33.37	-12.63	Peak
378.070	16.30	---	46.00	18.02	34.32	-11.68	Peak
400.950	14.60	---	46.00	18.40	33.00	-13.00	Peak
432.090	15.40	---	46.00	18.85	34.25	-11.75	Peak
504.840	13.80	---	46.00	19.79	33.59	-12.41	Peak
519.160	13.30	---	46.00	20.02	33.32	-12.68	Peak
537.050	14.20	---	46.00	20.31	34.51	-11.49	Peak
551.380	14.70	---	46.00	20.51	35.21	-10.79	Peak
567.120	16.20	---	46.00	20.74	36.94	-9.06	Peak
607.760	13.60	---	46.00	21.41	35.01	-10.99	Peak
675.130	16.60	---	46.00	22.98	39.58	-6.42	Peak
715.640	14.30	---	46.00	23.74	38.04	-7.96	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)

Tested by : C C.Wu

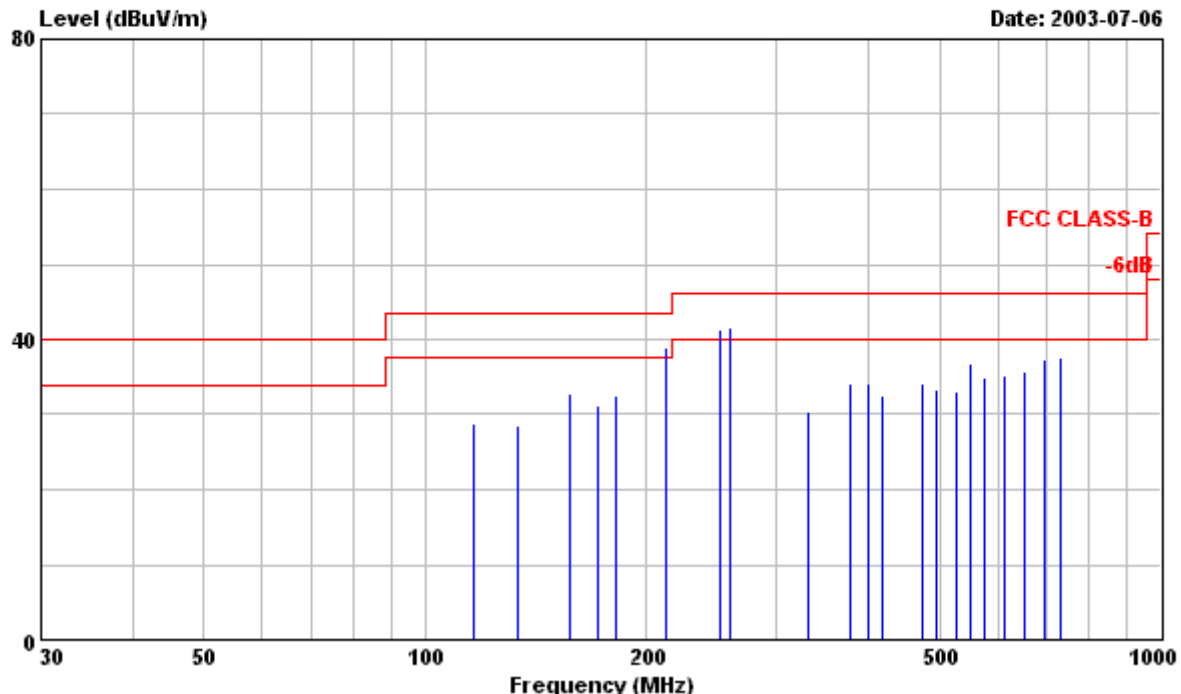


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Data#: 3

File#: C:\Program Files\em3\EMI03-029-R.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1024x768/75Hz 60KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE 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	
116.320	16.70	---	43.50	12.21	28.91	-14.59	Peak
133.910	15.60	---	43.50	12.85	28.45	-15.05	Peak
157.540	19.20	---	43.50	13.63	32.83	-10.67	Peak
171.858	17.10	---	43.50	14.02	31.12	-12.38	Peak
181.180	17.90	---	43.50	14.53	32.43	-11.07	Peak
! 212.650	21.50	---	43.50	17.48	38.98	-4.52	Peak
212.650	---	19.91	43.50	17.48	37.39	-6.11	QP
! 252.050	20.80	---	46.00	20.60	41.40	-4.60	Peak
252.050	---	19.24	46.00	20.60	39.84	-6.16	QP
! 259.940	20.40	---	46.00	21.07	41.47	-4.53	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	
259.940	---	18.60	46.00	21.07	39.67	-6.33	QP
330.810	13.30	---	46.00	17.13	30.43	-15.57	Peak
378.070	16.40	---	46.00	18.02	34.42	-11.58	Peak
401.000	16.00	---	46.00	18.40	34.40	-11.60	Peak
417.460	13.90	---	46.00	18.65	32.55	-13.45	Peak
472.590	14.70	---	46.00	19.37	34.07	-11.93	Peak
496.220	13.80	---	46.00	19.66	33.46	-12.54	Peak
527.730	13.00	---	46.00	20.16	33.16	-12.84	Peak
551.370	16.20	---	46.00	20.51	36.71	-9.29	Peak
574.980	14.10	---	46.00	20.85	34.95	-11.05	Peak
614.380	13.70	---	46.00	21.57	35.27	-10.73	Peak
653.740	13.30	---	46.00	22.51	35.81	-10.19	Peak
693.120	13.90	---	46.00	23.34	37.24	-8.76	Peak
732.520	13.60	---	46.00	23.94	37.54	-8.46	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)

Tested by : C C.Wu

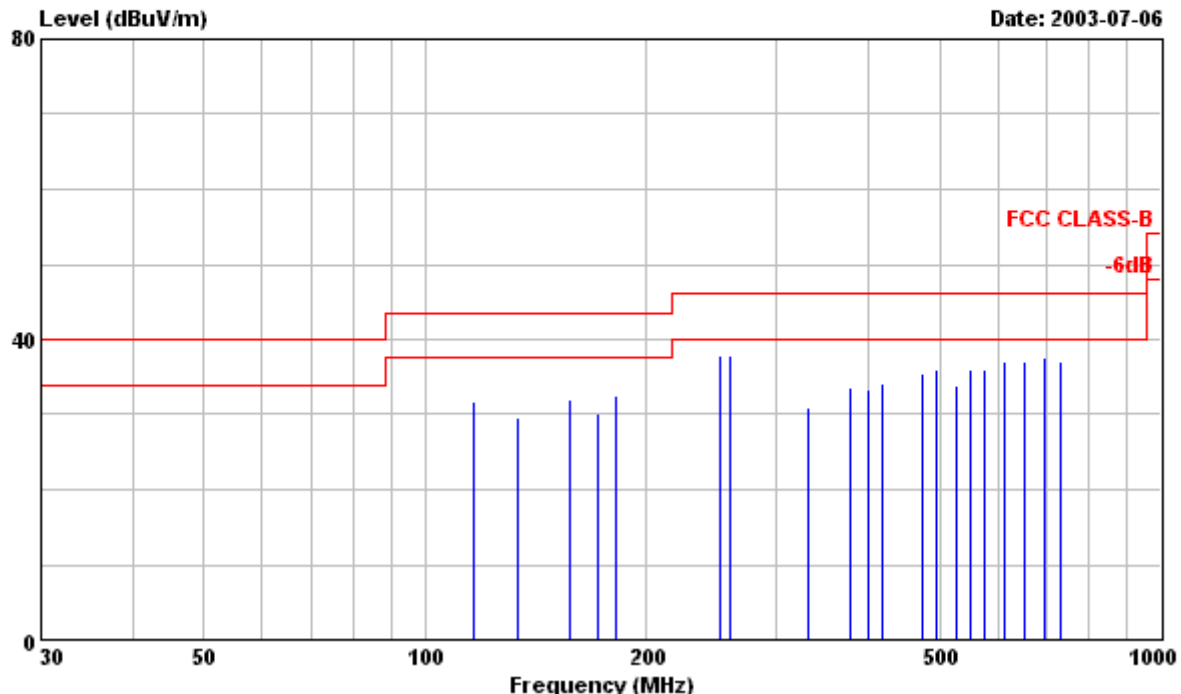


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Data#: 4

File#: C:\Program Files\em3\EMI03-029-R.emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : FSC C17-2 Serial No:TY0304321
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. 2ND MODEL QDI PANEL,RUN FSC "H"
: PATTERN.
: 3. 1024x768/75Hz 60KHz MODE WITH FSC
: MT8-D1387 PC,VIDEO CARD ONBOARD,
: AUDIO WITH HEADPHONE WAS TESTED.

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

MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
116.320	19.60	---	43.50	12.21	31.81	-11.69	Peak
133.910	16.80	---	43.50	12.85	29.65	-13.85	Peak
157.540	18.40	---	43.50	13.63	32.03	-11.47	Peak
171.858	16.20	---	43.50	14.02	30.22	-13.28	Peak
181.180	17.90	---	43.50	14.53	32.43	-11.07	Peak
252.050	17.30	---	46.00	20.60	37.90	-8.10	Peak
259.940	16.70	---	46.00	21.07	37.77	-8.23	Peak
330.810	13.80	---	46.00	17.13	30.93	-15.07	Peak
378.070	15.60	---	46.00	18.02	33.62	-12.38	Peak
401.000	14.80	---	46.00	18.40	33.20	-12.80	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
					VERTICAL		
MHz	dBuV	dBuV	dBuV/m	dB/m	dBuV/m	dBuV/m	
417.460	15.40	---	46.00	18.65	34.05	-11.95	Peak
472.590	16.10	---	46.00	19.37	35.47	-10.53	Peak
496.220	16.40	---	46.00	19.66	36.06	-9.94	Peak
527.730	13.70	---	46.00	20.16	33.86	-12.14	Peak
551.370	15.60	---	46.00	20.51	36.11	-9.89	Peak
574.980	15.10	---	46.00	20.85	35.95	-10.05	Peak
614.380	15.40	---	46.00	21.57	36.97	-9.03	Peak
653.740	14.60	---	46.00	22.51	37.11	-8.89	Peak
693.120	14.20	---	46.00	23.34	37.54	-8.46	Peak
732.520	13.20	---	46.00	23.94	37.14	-8.86	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)

Tested by : C C.Wu