



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.: TYR87-2035 Date : 16 December, 2002 Page : Page 1 of 32
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. : A3KM079 Model Name : 105E11 Serial Number : CX000147875146 Description : 15" XGA color monitor, Max. resolution 1024x768/60Hz		
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 : 02 Dec. 2002 Date of performance of test : 04 Dec., 2002 to 09 Dec., 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, 15" color monitor :

Model No. : 105E11
 FCC ID : A3KM079
 Brand : PHILIPS

The color monitor automatically scans horizontal frequencies between 30KHz and 54KHz , and vertical frequencies between 50Hz and 120Hz. This color monitor displays sharp and brilliant images of text and graphics with a maximum resolution up to 1024x768 pixels.

The monitor has 6 factory-preset modes as indicated in the following table:

Resolution	H. freq.	V. freq.	H / V
720 x 400	31.5 KHz	70Hz (VGA)	- / +
640 x 480	31.47 KHz	60Hz (VGA)	- / -
640 x 480	37.5 KHz	75Hz (VESA)	- / -
800 x 600	46.9 KHz	75Hz (VESA)	+ / +
800 x 600	53.674KHz	85Hz (VESA)	+ / +
1024 x 768	48.3 KHz	60Hz (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	06/27/2002	06/27/2003
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	2928A04640	06/27/2002	06/27/2003
RF Preselector	HP85685A	2620A00338	06/27/2002	06/27/2003
QP Adapter	HP85650A	2811A01324	06/27/2002	06/27/2003
EMI Receiver	R & S ESVS30	841977/006	06/13/2002	06/13/2003
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

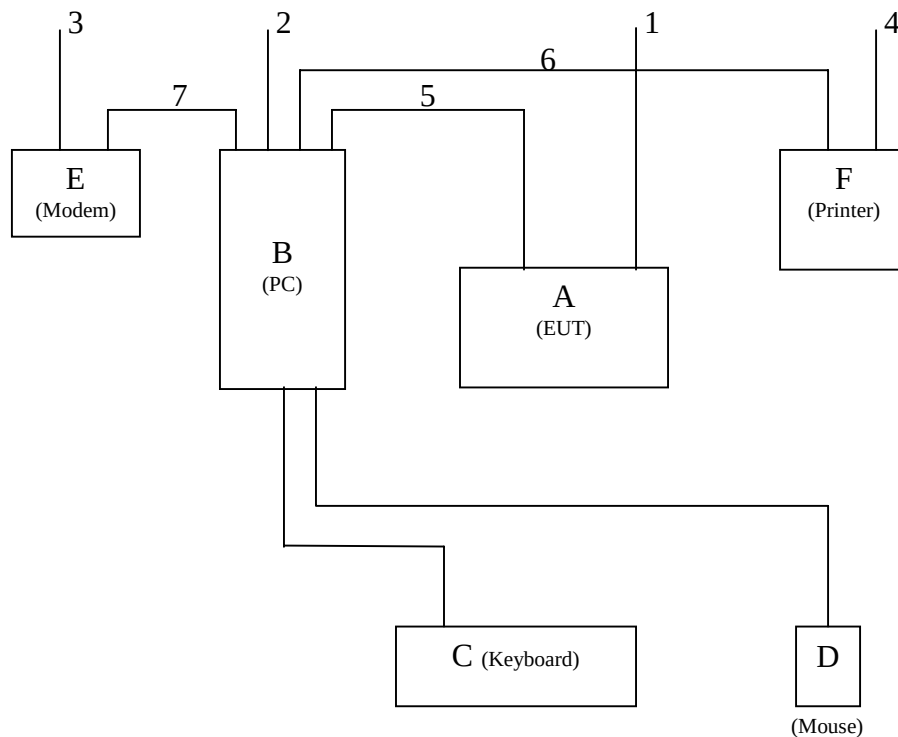
The system was configured for testing in a typical fashion (as a customer would normally use it) according to ANSI C63.4-1992, please see the photographs for detail. For system measurement, the EUT "105E11" were connected to:

	Description	Brand/ Model No.	Serial No.	FCC ID	Remark
A	Monitor	PHILIPS 105E11	CX000147875146	A3KM079	EUT
B	PC	IBM Aptiva V66M	11S8138A	FCC logo	
C	Keyboard	IBM KB-7993	0017954	FCC Logo	
D	Mouse	IBM 12J3619	23-034616	DZL211120	
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
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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 one ferrite cores was used.

Tested and reported modes as following:

Test Item	File No.	Resolution	Frequencies	I/F Cable
Conducted	EMI02-065-C	800x600	53.7KHz/85Hz	D-sub
		1024x768	48.3KHz/60Hz	D-sub
Radiated	EMI02-065-R	800x600	53.7KHz/85Hz	D-sub
		1024x768	48.3KHz/60Hz	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 Dec., 2002 to 09 Dec., 2002	
Test Engineer	: C.C.Wu	
For detail measurement results see next pages.		

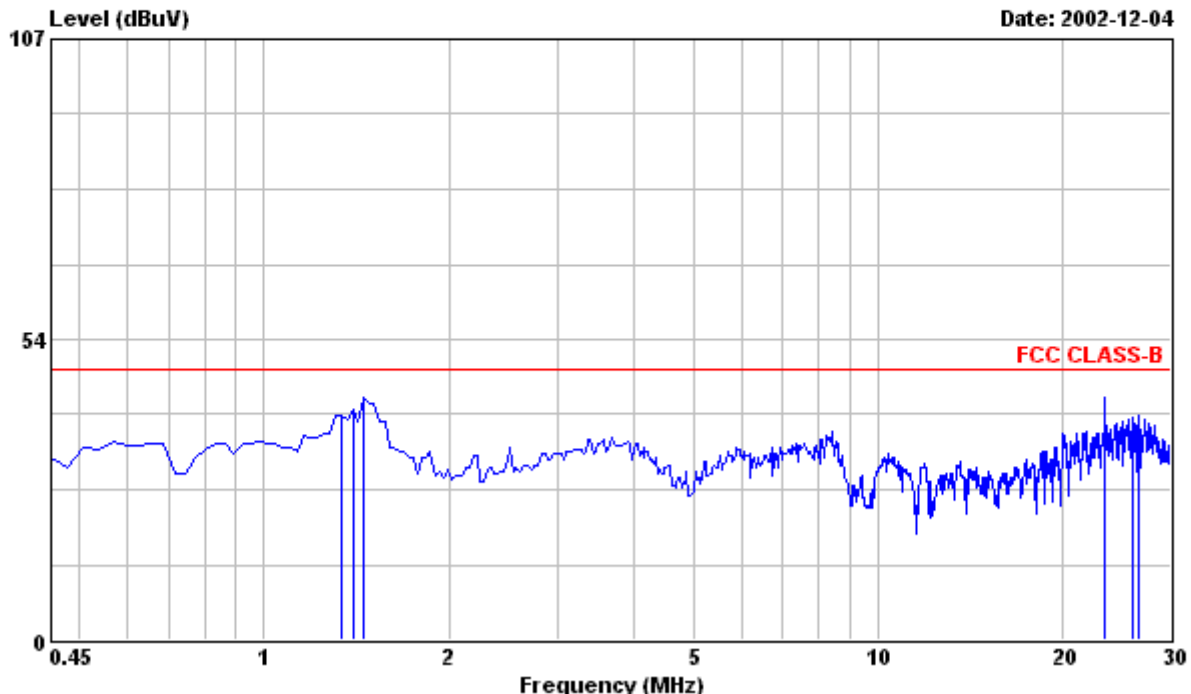


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Data#: 1

File#: C:\Program Files\es\EMIO2-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 800x600/85Hz 53.7KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
1.337	39.50	---	48.00	0.40	39.90	-8.10	Peak
1.396	40.50	---	48.00	0.40	40.90	-7.10	Peak
1.455	42.90	---	48.00	0.40	43.30	-4.70	Peak
23.440	42.20	---	48.00	0.87	43.07	-4.93	Peak
23.499	42.00	---	48.00	0.87	42.87	-5.13	Peak
25.952	38.70	---	48.00	0.88	39.58	-8.42	Peak
26.543	38.80	---	48.00	0.87	39.67	-8.33	Peak
26.602	39.10	---	48.00	0.87	39.97	-8.03	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

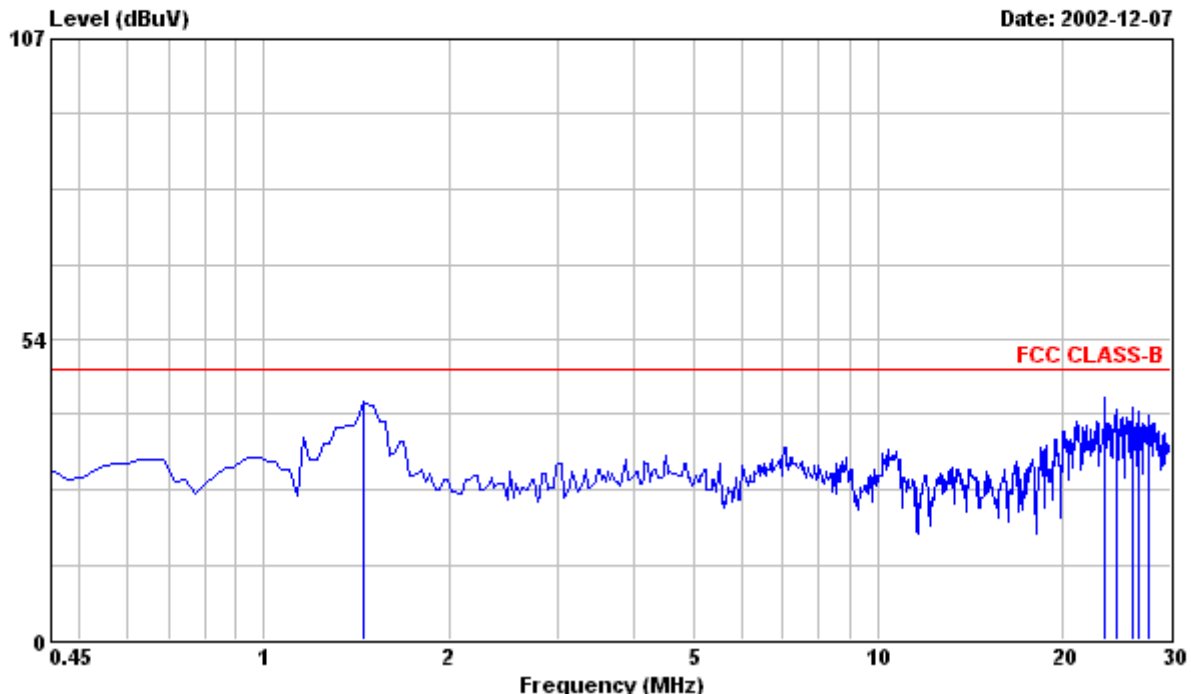


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Data#: 2

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 800x600/85Hz 53.7KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

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

1.455	41.90	---	48.00	0.40	42.30	-5.70	Peak
23.440	41.30	---	48.00	0.97	42.27	-5.73	Peak
23.499	42.10	---	48.00	0.97	43.07	-4.93	Peak
24.445	39.90	---	48.00	0.99	40.89	-7.11	Peak
26.011	40.30	---	48.00	0.98	41.28	-6.72	Peak
26.543	38.90	---	48.00	0.97	39.87	-8.13	Peak
26.602	39.70	---	48.00	0.97	40.67	-7.33	Peak
27.636	39.09	---	48.00	0.95	40.04	-7.96	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

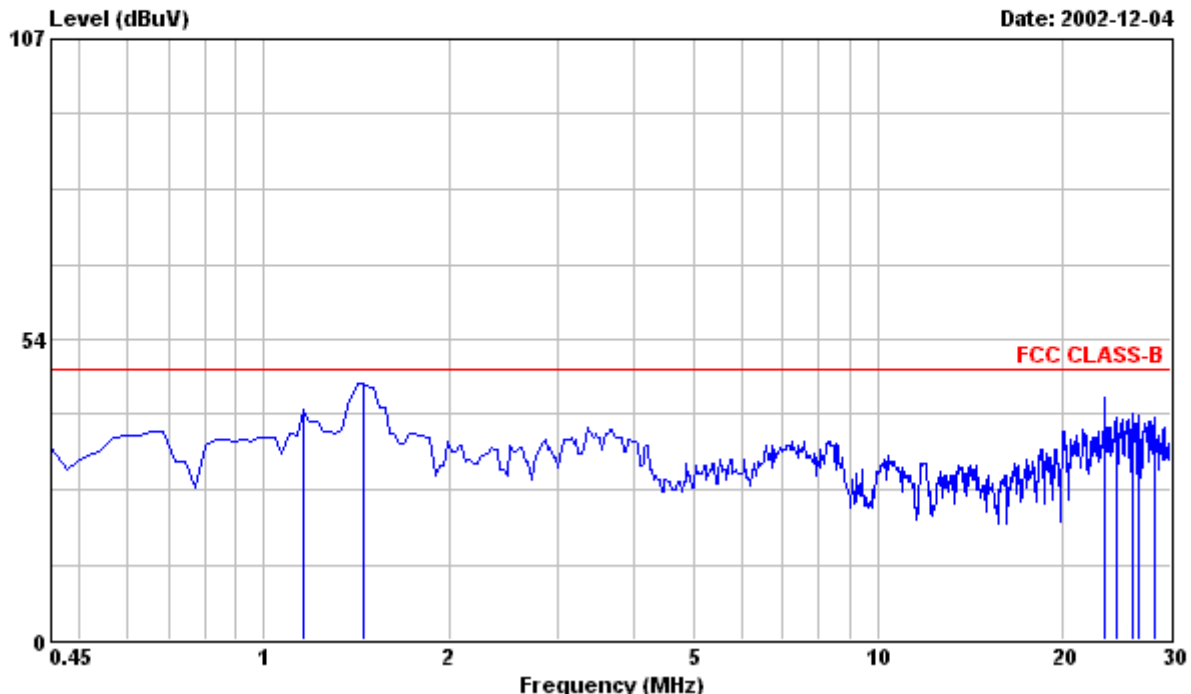


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Data#: 3

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 800x600/85Hz 53.7KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
1.159	40.50	---	48.00	0.40	40.90	-7.10	Peak
1.455	45.20	---	48.00	0.40	45.60	-2.40	Peak
23.440	42.30	---	48.00	0.87	43.17	-4.83	Peak
23.499	41.40	---	48.00	0.87	42.27	-5.73	Peak
24.445	38.60	---	48.00	0.89	39.49	-8.51	Peak
25.952	39.50	---	48.00	0.88	40.38	-7.62	Peak
26.543	39.20	---	48.00	0.87	40.07	-7.93	Peak
28.168	38.70	---	48.00	0.83	39.53	-8.47	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

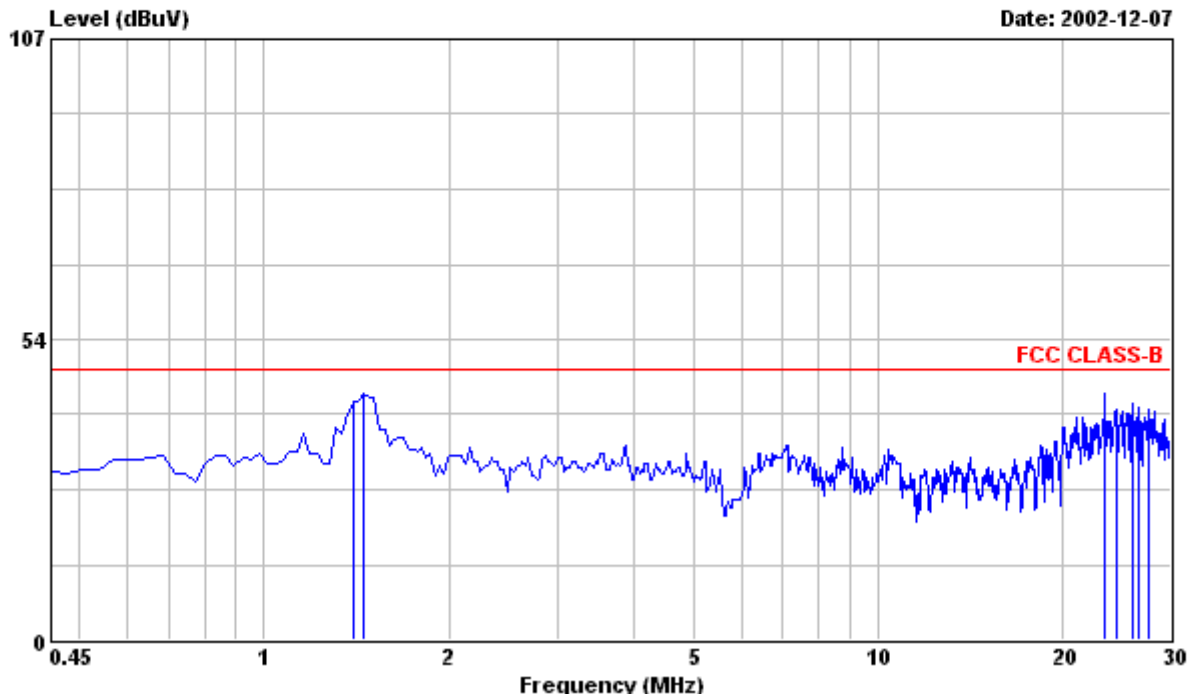


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Data#: 4

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 800x600/85Hz 53.7KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

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

1.396	42.20	---	48.00	0.40	42.60	-5.40	Peak
1.455	43.50	---	48.00	0.40	43.90	-4.10	Peak
23.440	42.60	---	48.00	0.97	43.57	-4.43	Peak
23.499	43.00	---	48.00	0.97	43.97	-4.03	Peak
24.445	40.20	---	48.00	0.99	41.19	-6.81	Peak
25.952	41.10	---	48.00	0.98	42.08	-5.92	Peak
26.602	40.40	---	48.00	0.97	41.37	-6.63	Peak
27.577	40.00	---	48.00	0.95	40.95	-7.05	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

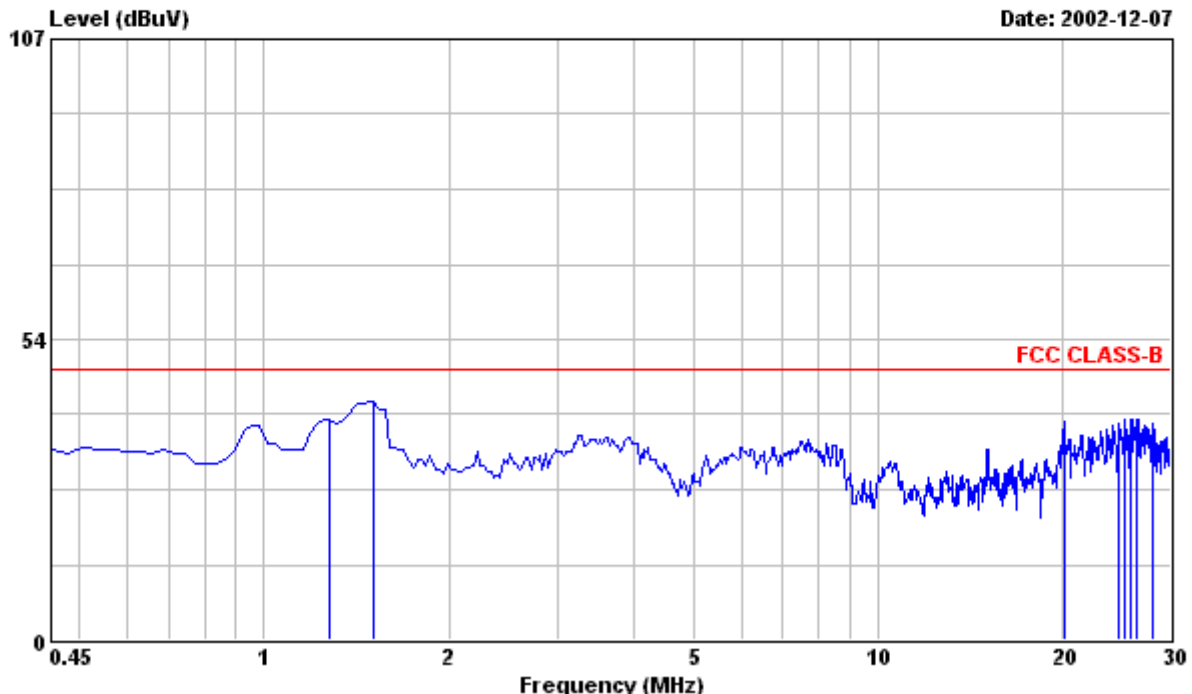


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Data#: 5

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 14 "H" PATTERN.
: 3. 1024x768/60Hz 48.3KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
1.277	38.70	---	48.00	0.40	39.10	-8.90	Peak
1.514	42.10	---	48.00	0.40	42.50	-5.50	Peak
20.130	38.20	---	48.00	0.80	39.00	-9.00	Peak
24.622	37.60	---	48.00	0.89	38.49	-9.51	Peak
25.272	38.19	---	48.00	0.90	39.09	-8.91	Peak
25.893	38.20	---	48.00	0.88	39.08	-8.92	Peak
26.484	38.20	---	48.00	0.87	39.07	-8.93	Peak
28.079	37.80	---	48.00	0.84	38.64	-9.36	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

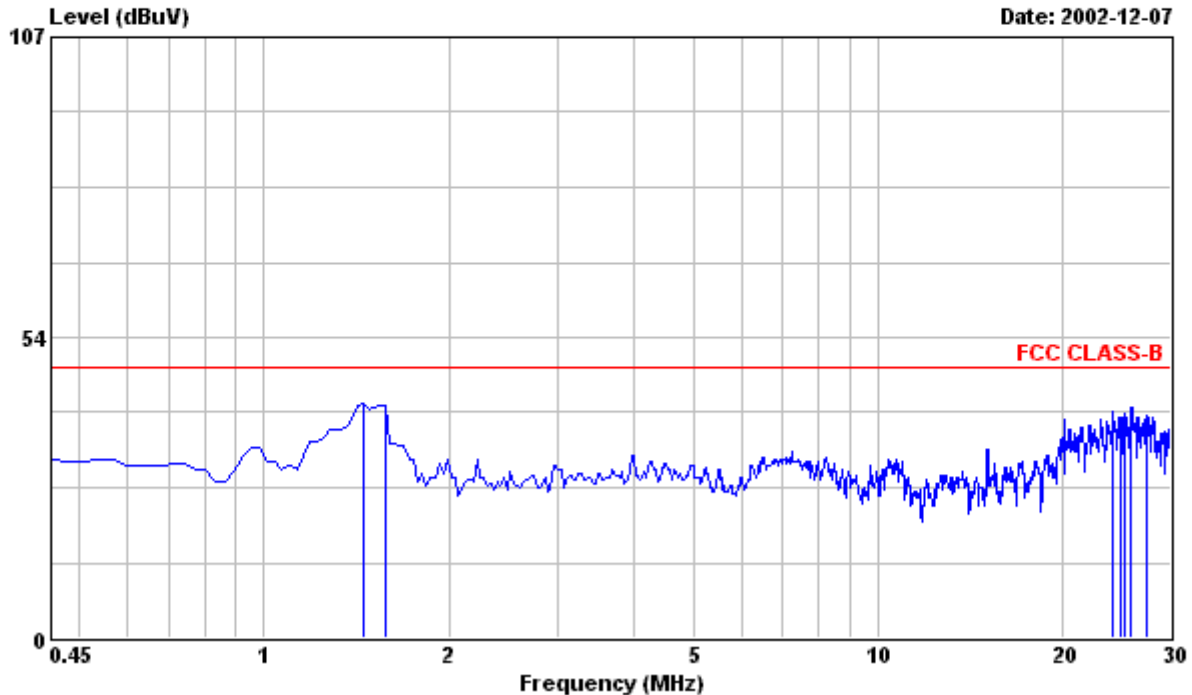


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Data#: 6

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 14 "H" PATTERN.
: 3. 1024x768/60Hz 48.3KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

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

1.455	41.50	---	48.00	0.40	41.90	-6.10	Peak
1.573	40.90	---	48.00	0.40	41.30	-6.70	Peak
24.149	39.30	---	48.00	0.98	40.28	-7.72	Peak
24.917	38.40	---	48.00	1.00	39.40	-8.60	Peak
25.213	38.50	---	48.00	1.00	39.50	-8.50	Peak
25.272	38.89	---	48.00	1.00	39.89	-8.11	Peak
25.893	40.20	---	48.00	0.98	41.18	-6.82	Peak
27.459	38.70	---	48.00	0.95	39.65	-8.35	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

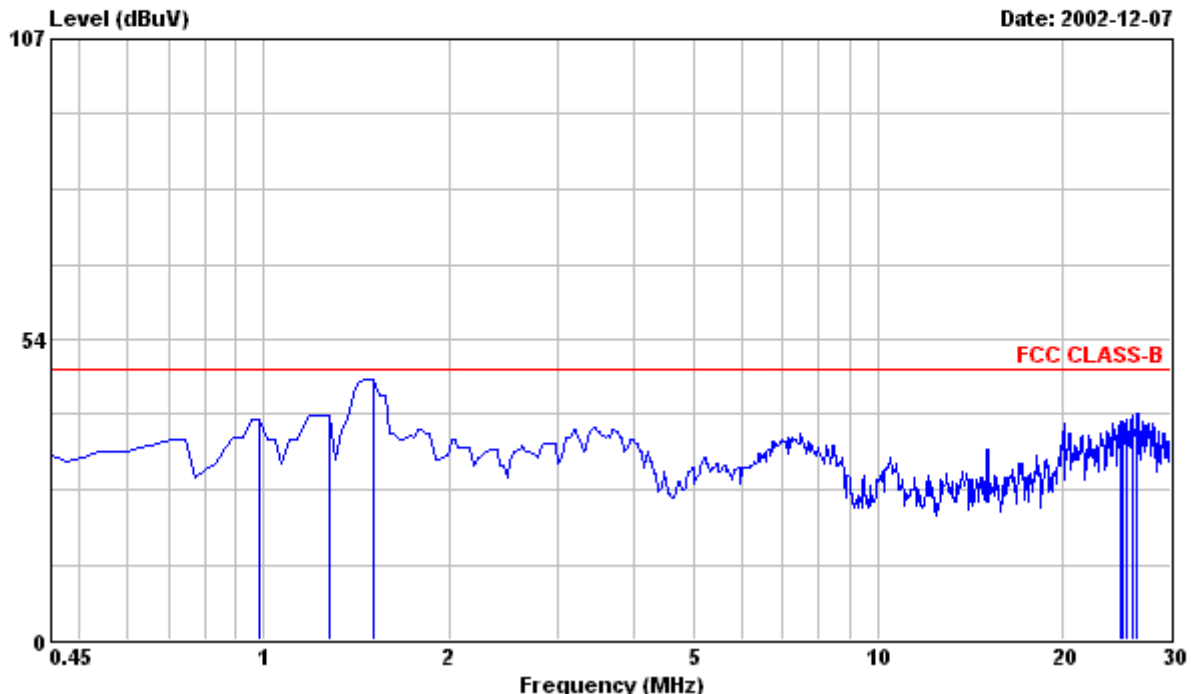


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Data#: 7

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L1 LINE
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 14 "H" PATTERN.
: 3. 1024x768/60Hz 48.3KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

Frequency	Peak Reading	QP Reading	Limit	Factor	Emission Level	Over Limit	Remark
LINE							
0.982	38.90	---	48.00	0.40	39.30	-8.70	Peak
1.277	39.70	---	48.00	0.40	40.10	-7.90	Peak
1.514	46.00	---	48.00	0.40	46.40	-1.60	Peak
24.917	38.00	---	48.00	0.90	38.90	-9.10	Peak
24.977	37.90	---	48.00	0.90	38.80	-9.20	Peak
25.508	38.30	---	48.00	0.89	39.19	-8.81	Peak
25.922	39.20	---	48.00	0.88	40.08	-7.92	Peak
26.484	39.30	---	48.00	0.87	40.17	-7.83	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

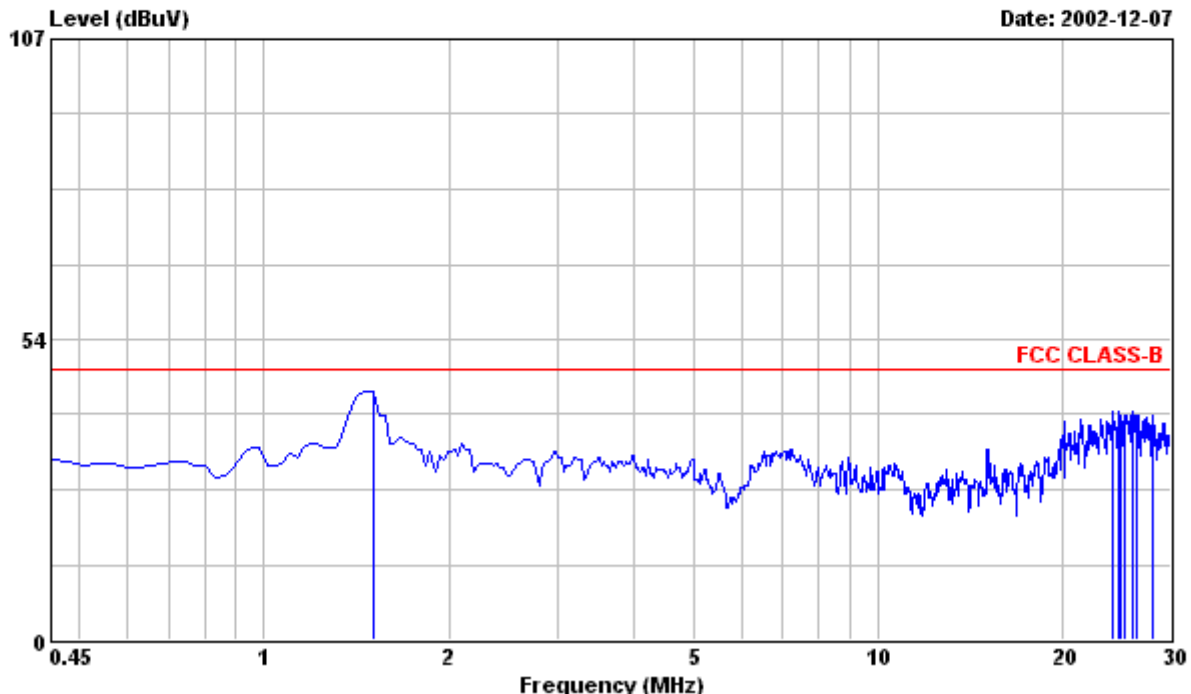


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Data#: 8

File#: C:\Program Files\es\EMI02-065-C(Philips 105E11).emi



Site : PHILIPS EMI Shielding Room
Condition : FCC CLASS-B FCC_LCI_L2 NEUTRAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 220VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 14 "H" PATTERN.
: 3. 1024x768/60Hz 48.3KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X VIDEO CARD
: WAS TESTED.

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

1.514	44.00	---	48.00	0.40	44.40	-3.60	Peak
24.149	39.50	---	48.00	0.98	40.48	-7.52	Peak
24.681	39.50	---	48.00	0.99	40.49	-7.51	Peak
24.888	39.00	---	48.00	1.00	40.00	-8.00	Peak
25.272	38.79	---	48.00	1.00	39.79	-8.21	Peak
25.922	39.60	---	48.00	0.98	40.58	-7.42	Peak
26.484	39.10	---	48.00	0.97	40.07	-7.93	Peak
27.991	38.90	---	48.00	0.94	39.84	-8.16	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

Radiated Emissions FCC Part 15		
Operating conditions EUT: EUT powered on with scrolling "H" pattern.		
Limits:		
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
Test Result : Passed FCC Class B Limits		
Remark: 		
Date of Test Test Engineer	: 04 Dec., 2002 to 09 Dec., 2002 : C.C.Wu	
For detail measurement results see next pages.		

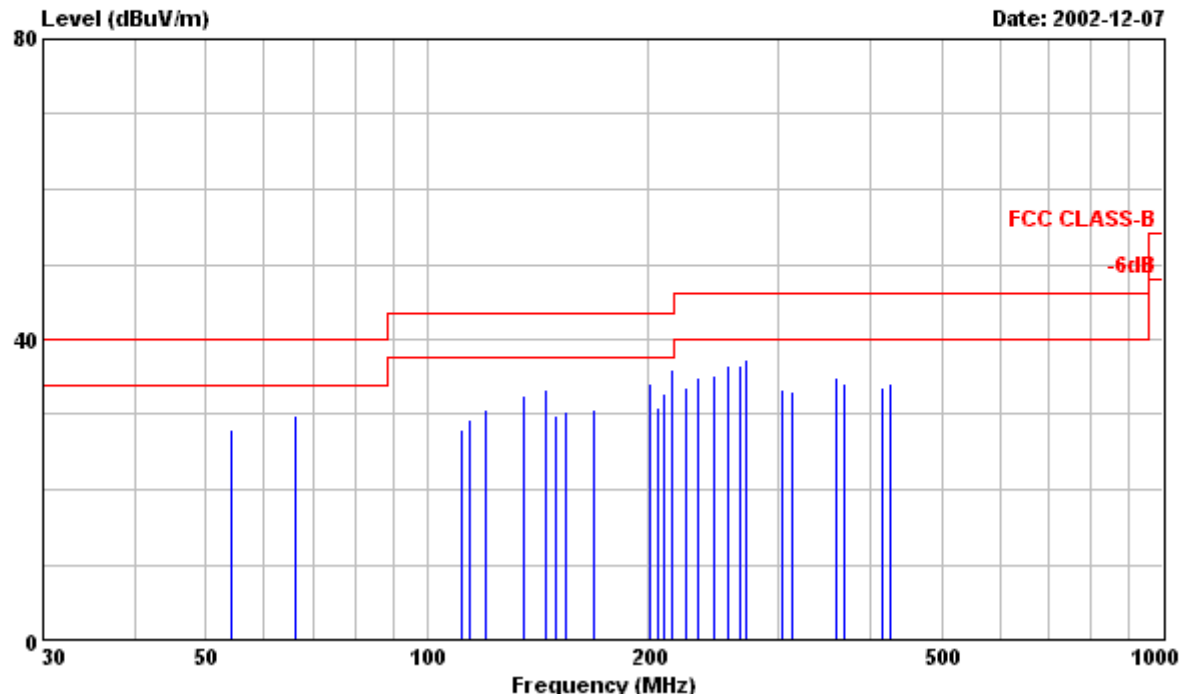


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Data#: 1

File#: C:\Program Files\em3\EMI02-065-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 800x600/85Hz 53.7KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X 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	
54.000	17.60	---	40.00	10.42	28.02	-11.98	Peak
66.020	19.80	---	40.00	9.96	29.76	-10.24	Peak
111.030	16.00	---	43.50	11.97	27.97	-15.53	Peak
114.040	17.20	---	43.50	12.12	29.32	-14.18	Peak
120.040	18.30	---	43.50	12.38	30.68	-12.82	Peak
135.560	19.70	---	43.50	12.90	32.60	-10.90	Peak
144.890	20.00	---	43.50	13.24	33.24	-10.26	Peak
149.560	16.40	---	43.50	13.39	29.79	-13.71	Peak
154.240	16.90	---	43.50	13.54	30.44	-13.06	Peak
168.050	16.70	---	43.50	13.91	30.61	-12.89	Peak
200.980	17.70	---	43.50	16.37	34.07	-9.43	Peak
205.670	14.10	---	43.50	16.82	30.92	-12.58	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	
210.340	15.50	---	43.50	17.22	32.72	-10.78	Peak
215.000	18.40	---	43.50	17.68	36.08	-7.42	Peak
224.350	15.10	---	46.00	18.47	33.57	-12.43	Peak
233.690	15.80	---	46.00	19.19	34.99	-11.01	Peak
246.070	15.10	---	46.00	20.17	35.27	-10.73	Peak
257.060	15.60	---	46.00	20.92	36.52	-9.48	Peak
266.430	15.20	---	46.00	21.43	36.63	-9.37	Peak
271.100	15.70	---	46.00	21.69	37.39	-8.61	Peak
303.810	16.70	---	46.00	16.55	33.25	-12.75	Peak
313.150	16.40	---	46.00	16.76	33.16	-12.84	Peak
359.890	17.20	---	46.00	17.70	34.90	-11.10	Peak
369.240	16.50	---	46.00	17.86	34.36	-11.64	Peak
416.000	15.10	---	46.00	18.63	33.73	-12.27	Peak
425.320	15.60	---	46.00	18.75	34.35	-11.65	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

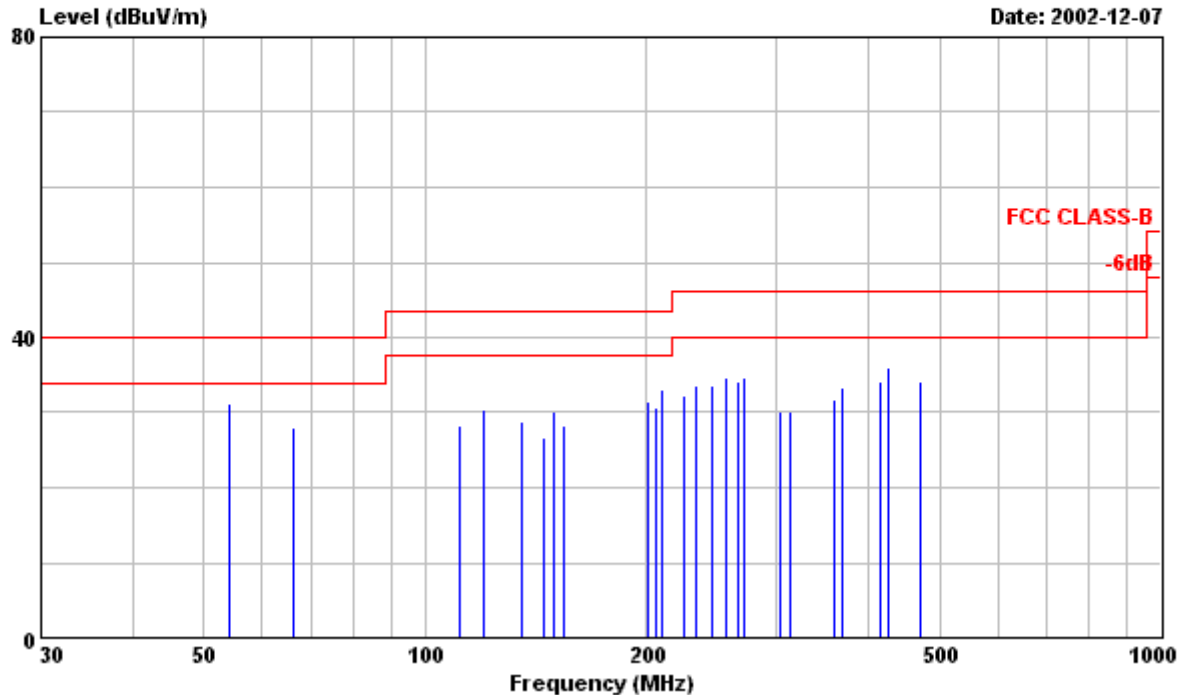


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Data#: 2

File#: C:\Program Files\es\EMI02-065-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 800x600/85Hz 53.7KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X 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	
54.000		20.70	---	40.00	10.42	31.12	-8.88	Peak
66.000		18.00	---	40.00	9.96	27.96	-12.04	Peak
111.030		16.20	---	43.50	11.97	28.17	-15.33	Peak
120.040		17.90	---	43.50	12.38	30.28	-13.22	Peak
135.560		15.80	---	43.50	12.90	28.70	-14.80	Peak
144.890		13.50	---	43.50	13.24	26.74	-16.76	Peak
149.560		16.70	---	43.50	13.39	30.09	-13.41	Peak
154.240		14.70	---	43.50	13.54	28.24	-15.26	Peak
200.980		15.20	---	43.50	16.37	31.57	-11.93	Peak
205.670		13.90	---	43.50	16.82	30.72	-12.78	Peak
210.340		15.90	---	43.50	17.22	33.12	-10.38	Peak
224.350		13.90	---	46.00	18.47	32.37	-13.63	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	
233.690	14.40	---	46.00	19.19	33.59	-12.41	Peak
246.070	13.40	---	46.00	20.17	33.57	-12.43	Peak
257.060	13.70	---	46.00	20.92	34.62	-11.38	Peak
266.430	13.00	---	46.00	21.43	34.43	-11.57	Peak
271.100	13.10	---	46.00	21.69	34.79	-11.21	Peak
303.810	13.70	---	46.00	16.55	30.25	-15.75	Peak
313.150	13.30	---	46.00	16.76	30.06	-15.94	Peak
359.890	14.10	---	46.00	17.70	31.80	-14.20	Peak
369.240	15.50	---	46.00	17.86	33.36	-12.64	Peak
416.000	15.90	---	46.00	18.63	34.53	-11.47	Peak
425.320	17.30	---	46.00	18.75	36.05	-9.95	Peak
472.070	14.80	---	46.00	19.37	34.17	-11.83	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

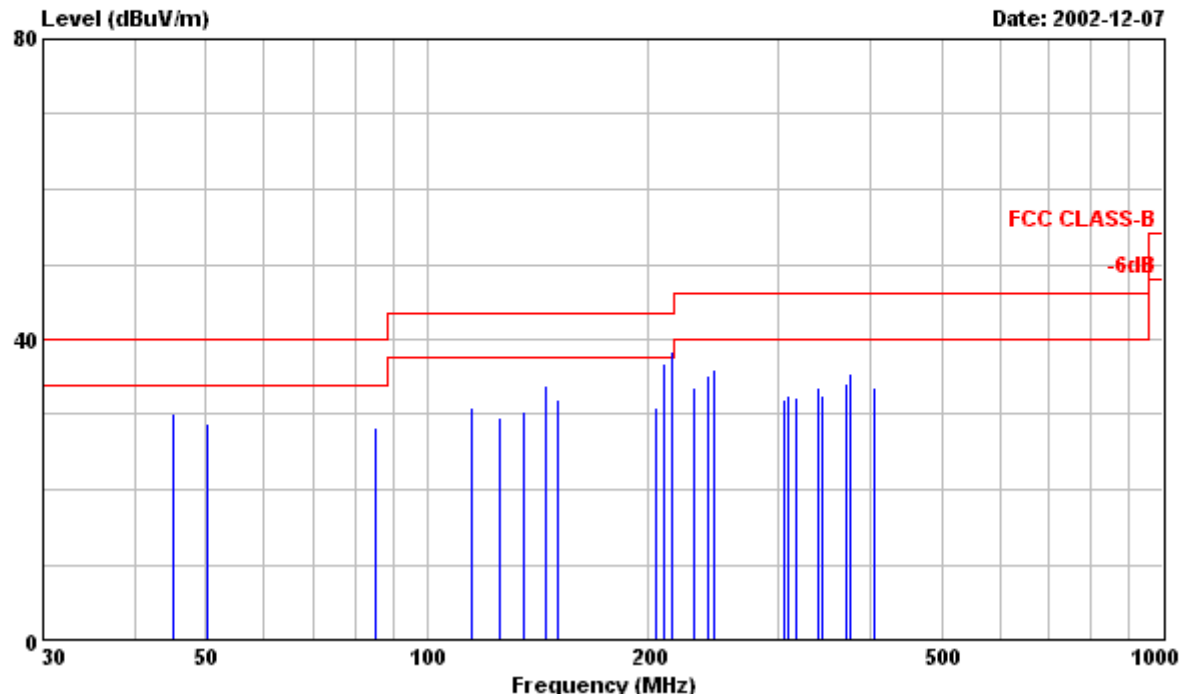


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Data#: 3

File#: C:\Program Files\em3\EMI02-065-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR HORIZONTAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 1024x768/60Hz 48.3KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X 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	
45.040	18.70	---	40.00	11.50	30.20	-9.80	Peak
50.030	18.00	---	40.00	10.80	28.80	-11.20	Peak
85.050	17.60	---	40.00	10.66	28.26	-11.74	Peak
115.080	18.90	---	43.50	12.15	31.05	-12.45	Peak
125.090	17.10	---	43.50	12.50	29.60	-13.90	Peak
135.040	17.50	---	43.50	12.89	30.39	-13.11	Peak
145.100	20.70	---	43.50	13.25	33.95	-9.55	Peak
150.090	18.50	---	43.50	13.41	31.91	-11.59	Peak
205.010	14.20	---	43.50	16.76	30.96	-12.54	Peak
210.120	19.50	---	43.50	17.22	36.72	-6.78	Peak
! 215.130	20.60	---	43.50	17.68	38.28	-5.22	Peak
215.130	---	18.78	43.50	17.68	36.46	-7.04	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)



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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	
230.140	14.80	---	46.00	18.92	33.72	-12.28	Peak
240.150	15.50	---	46.00	19.71	35.21	-10.79	Peak
245.140	15.90	---	46.00	20.11	36.01	-9.99	Peak
306.070	15.40	---	46.00	16.59	31.99	-14.01	Peak
310.180	15.90	---	46.00	16.69	32.59	-13.41	Peak
318.080	15.30	---	46.00	16.85	32.15	-13.85	Peak
340.200	16.40	---	46.00	17.32	33.72	-12.28	Peak
345.210	15.20	---	46.00	17.41	32.61	-13.39	Peak
370.210	16.60	---	46.00	17.88	34.48	-11.52	Peak
375.220	17.50	---	46.00	17.95	35.45	-10.55	Peak
405.220	15.10	---	46.00	18.46	33.56	-12.44	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

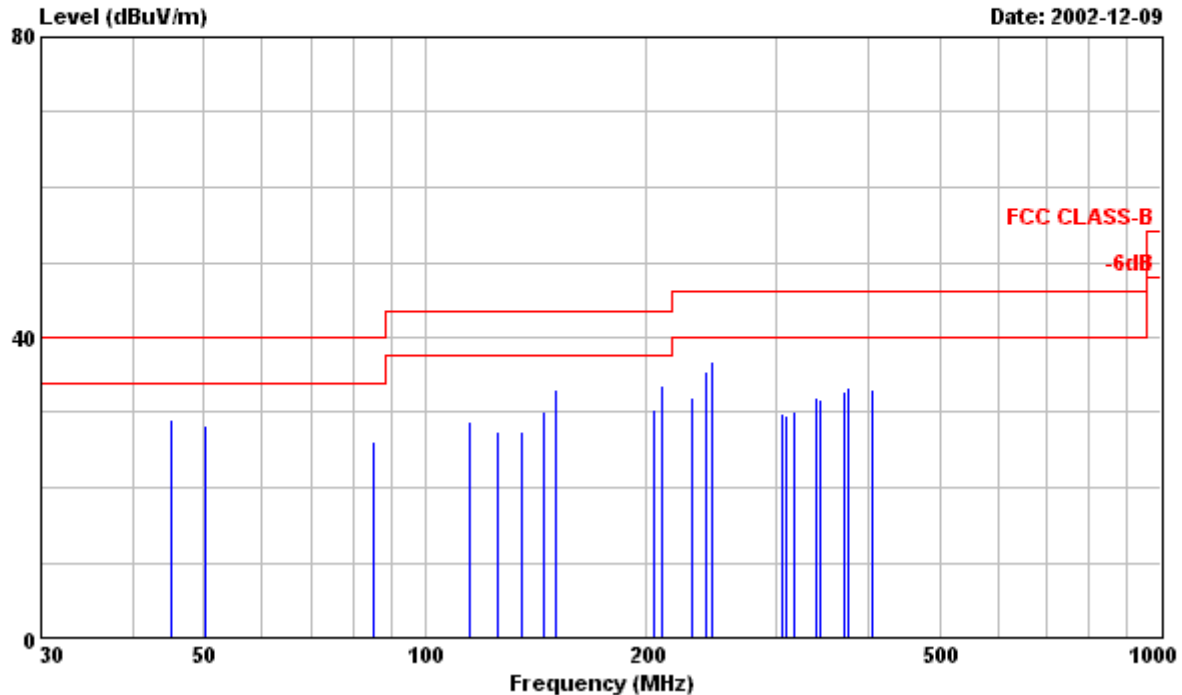


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Data#: 4

File#: C:\Program Files\em3\EMI02-065-R.emi



Site : PHILIPS EMI 3M open site
Condition : FCC CLASS-B 3m FCC-3M-FACTOR VERTICAL
EUT : PHILIPS 105E11 Serial No: CX000147875146
Power : 120-240VAC
Memo : 1. EMI EVALUATION FOR FCC SAMPLE.
: 2. PAC SAMPLE CPT LOW POWER CRT, RUN
: IBM V1.8 FONT 12 "H" PATTERN.
: 3. 1024x768/60Hz 48.3KHz MODE WITH IBM
: V66M PC, S3 Trio 3D/2X 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	
45.040		17.70	---	40.00	11.50	29.20	-10.80	Peak
50.030		17.40	---	40.00	10.80	28.20	-11.80	Peak
85.050		15.40	---	40.00	10.66	26.06	-13.94	Peak
115.080		16.60	---	43.50	12.15	28.75	-14.75	Peak
125.090		15.00	---	43.50	12.50	27.50	-16.00	Peak
135.040		14.70	---	43.50	12.89	27.59	-15.91	Peak
145.100		17.00	---	43.50	13.25	30.25	-13.25	Peak
150.070		19.60	---	43.50	13.41	33.01	-10.49	Peak
205.010		13.70	---	43.50	16.76	30.46	-13.04	Peak
210.120		16.30	---	43.50	17.22	33.52	-9.98	Peak
230.140		13.20	---	46.00	18.92	32.12	-13.88	Peak
240.150		15.70	---	46.00	19.71	35.41	-10.59	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	
245.140	16.80	---	46.00	20.11	36.91	-9.09	Peak
306.070	13.30	---	46.00	16.59	29.89	-16.11	Peak
310.180	13.00	---	46.00	16.69	29.69	-16.31	Peak
318.080	13.20	---	46.00	16.85	30.05	-15.95	Peak
340.200	14.60	---	46.00	17.32	31.92	-14.08	Peak
345.210	14.20	---	46.00	17.41	31.61	-14.39	Peak
370.210	14.80	---	46.00	17.88	32.68	-13.32	Peak
375.220	15.30	---	46.00	17.95	33.25	-12.75	Peak
405.220	14.70	---	46.00	18.46	33.16	-12.84	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