



EMC UPDATE TEST REPORT

For

LCD Monitor

Applicant : Compal Electronics Inc.
Trade Name : Compal; **acer
Model Number : CM870
Part Number : CM570; **CM670; **AM670; **AL722
Serial Number : N/A
Date : May 10, 2002
Date of test : May 9 ~ 10, 2002
Revision : 01
Reference Standard: ANSI C63.4: 1992 (FCC Class B (DoC))

Description of Rev. 01:

1. Applicant adds one trade name for marketing purpose only.
(Please refer to have ** mark items on this report)
2. Applicant adds three part name on this report as per customer requested.
(Please refer to have ** mark items on this report)
3. Applicant adds two Panel to re-test.
(Please refer to have ** mark items on this report)
4. Other information please refers to the Rev.00 and this (Rev.01) test report.

Approved by Authorized Signatory:

A handwritten signature in black ink that reads 'Kurt Chen'.

Kurt Chen / Q.A. Manager



PRODUCT INFORMATION

Housing Type: Plastic

EUT Power Rating: DCV from Power Adapter

AC power during Test: 120VAC/60Hz to Power Adapter

Power Adapter Manufacturer: LI SHIN

Power Adapter Model Number: LSE9901B1260

Power Adapter Power Rating: I/P: 100-240VAC, 50/60Hz, 1.5A
O/P: 12VDC, 5A

AC Power Cord Type: Unshielded, 1.8m (Detachable) to Power Adapter

DC Power Cable Type: Unshielded, 1.8m (Non-detachable) at Power Adapter with a core

OSC/Clock Frequencies: 11.0592MHz/14.318MHz

17.4" LCD Panel Manufacturer: Fujitsu **Model:** FLC445XC8V
** AU L170E3-1-M170EN04
** HYUNDAI HT17E11

VGA Cable Type: Shielded, 1.8m with two cores (Detachable)

I/O Port of EUT:

I/O Port Type	Q'TY	Tested with
1. Video Port	1	1
2. Line in Port	1	1
3. Earphone Port	1	1



SUPPORT EQUIPMENT

No.	Equipment	Model #	Serial #	FCC ID	Trade Name	Data Cable	Power Cord
1.	PC	Presario 5180	1L8ABX422174	FCC DoC	Compaq	Audio Cable: Unshielded, 1.8m	Unshielded, 1.8m
2.	Modem	2400	94-364-176-277	DK467GSM24	Computer Peripherals	Shielded, 1.8m	Unshielded, 1.8m
3.	Printer	2225C	3050S82775	DSI6XU2225	HP	Shielded, 1.8m	Unshielded, 1.8m
4.	PS/2 Keyboard	SK-2800C	B1C790BCPJCN6L	GYUR79SK	Compaq	Shielded, 1.8m	N/A
5.	PS/2 Mouse	M-CAA43	LZA11750827	FCC DoC	Logitech	Shielded, 1.8m	N/A
6.	Earphone	GT-2004V	A5-1	N/A	GITON	Shielded, 1.8m	N/A

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

BLOCK DIAGRAM OF TEST SETUP

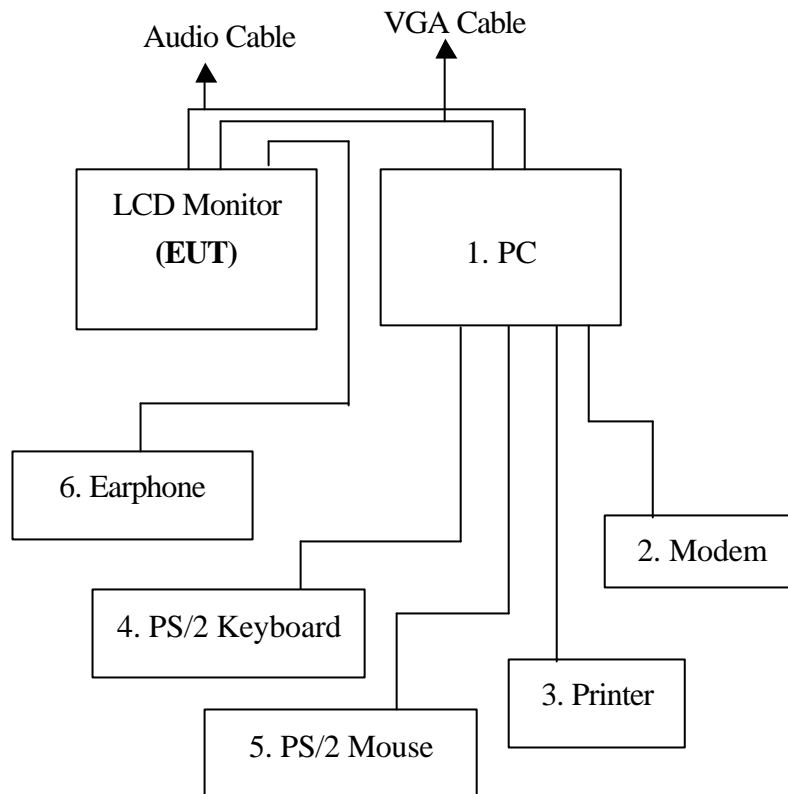
System Diagram of Connections between EUT and Simulators

EUT: LCD Monitor

Trade Name: Compal

Model Number: CM870

AC Power Cord: Unshielded, 1.8m to Power Adapter





TEST EQUIPMENT LIST (EMISSION)

Instrumentation: The following list contains equipment used at C & C Laboratory, Co., Ltd. for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2-1988 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 9kHz to 1.0GHz or above.

Equipment used during the tests:

Open Area Test Site: #1

Open Area Test Site # 1					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Q.P Adaptor	HP	85650A	2811A01399	06/19/2001	06/18/2002
RF Pre-selector	HP	85685A	2947A01064	06/19/2001	06/18/2002
Spectrum Analyzer	HP	8568B	3001A05004	06/19/2001	06/18/2002
S.P.A Display	HP	85662A	3014A18846	06/19/2001	06/18/2002
Precision Dipole	SCHWAZBECK	VHAP	998/999	05/17/2001	05/16/2002
Precision Dipole	SCHWAZBECK	UHAP	981/982	05/17/2001	05/16/2002
Bilog Antenna	CHASE	CBL6112A	2309	02/09/2002	02/08/2003
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2604	N.C.R	N.C.R
Controller	EMCO	2090	N/A	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M54367	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	11/03/2001	11/02/2002
Spectrum Analyzer	ADVANTEST	R3261A	21720279	08/16/2001	08/15/2002

Conducted Emission Test Site: #3

Conducted Emission Test Site # 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EMI Test Receiver	R&S	ESCS30	847793/012	12/19/2001	12/18/2002
LISN	R&S	ESH2-Z5	843285/010	12/10/2001	12/09/2002
LISN	EMCO	3825/2	9003-1628	07/16/2001	07/15/2002

The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.



EUT Configuration during measurement:

1) Pre-scan mode are list as below:

Mode(s): (Customer defined)

- 1. 1280 × 1024 Resolution (75Hz) + AU LCD Panel**
- 2. 1024 × 768 Resolution (75Hz) + AU LCD Panel**
- 3. 800 × 600 Resolution (75Hz) + AU LCD Panel**
- 4. 1280 × 1024 Resolution (75Hz) + HYUNDAI LCD Panel**

2) After pre-scan, found mode 1 producing the highest emission level, used this mode for all final test.



SUMMARY DATA (LINE CONDUCTED TEST)

Model Number: CM870

Location: Site # 3

Tested by: Tommy Lin

Test Mode: Mode 1

Test Results: Passed

Temperature: 25?

Humidity: 55? RH

(The chart below shows the highest readings taken from the final data)

FREQ MHz	Q.P. RAW dBuV	AVG RAW dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.170	41.90	---	65.00	55.00	-23.1	---	L1
2.253	23.30	---	56.00	46.00	-32.7	---	L1
3.665	32.80	---	56.00	46.00	-23.2	---	L1
3.982	33.90	---	56.00	46.00	-22.1	---	L1
12.501	25.60	---	60.00	50.00	-34.4	---	L1
23.568	26.30	---	60.00	50.00	-33.7	---	L1
0.169	41.50	---	65.01	55.01	-23.5	---	L2
2.262	25.60	---	56.00	46.00	-30.4	---	L2
3.582	35.40	---	56.00	46.00	-20.6	---	L2
3.979	34.20	---	56.00	46.00	-21.8	---	L2
12.550	30.70	---	60.00	50.00	-29.3	---	L2
14.323	29.50	---	60.00	50.00	-30.5	---	L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

****NOTE: “---” denotes the emission level complied with the Average limit, with at least 2dB margin, so no further recheck.**



SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: CM870

Location: Site # 1

Tested by: Tommy Lin

Polar: Vertical – 10m

Test Mode: Mode 1

Detector Function: Quasi-Peak

Test Results: Passed

Temperature: 28?

Humidity: 69? RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dBuV)	Emiss. Level (dBuV/m)	Limits	Margin (dB)
33.06	8.3	18.9	27.2	30.0	-2.8
47.67	11.5	12.6	24.1	30.0	-5.9
135.25	14.0	12.2	26.2	30.0	-3.8
210.88	13.7	10.6	24.3	30.0	-5.7
629.27	10.9	23.0	33.9	37.0	-3.1
840.06	5.0	28.5	33.5	37.0	-3.5



SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: CM870

Location: Site # 1

Tested by: Tommy Lin

Polar: Horizontal – 10m

Test Mode: Mode 1

Detector Function: Quasi-Peak

Test Results: Passed

Temperature: 28?

Humidity: 69? RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dBuV)	Emiss. Level (dBuV/m)	Limits	Margin (dB)
139.72	12.8	12.3	25.1	30.0	-4.9
210.27	12.5	10.6	23.1	30.0	-6.9
280.12	14.9	16.1	31.0	37.0	-6.0
349.52	15.2	17.7	32.9	37.0	-4.1
629.63	10.5	23.0	33.5	37.0	-3.5
768.20	8.3	26.2	34.5	37.0	-2.5



APPENDIX 1

PHOTOGRAPHS OF TEST SETUP

LINE CONDUCTED EMISSION TEST
Front View



Back View



RADIATED EMISSION TEST
Front View



Back View





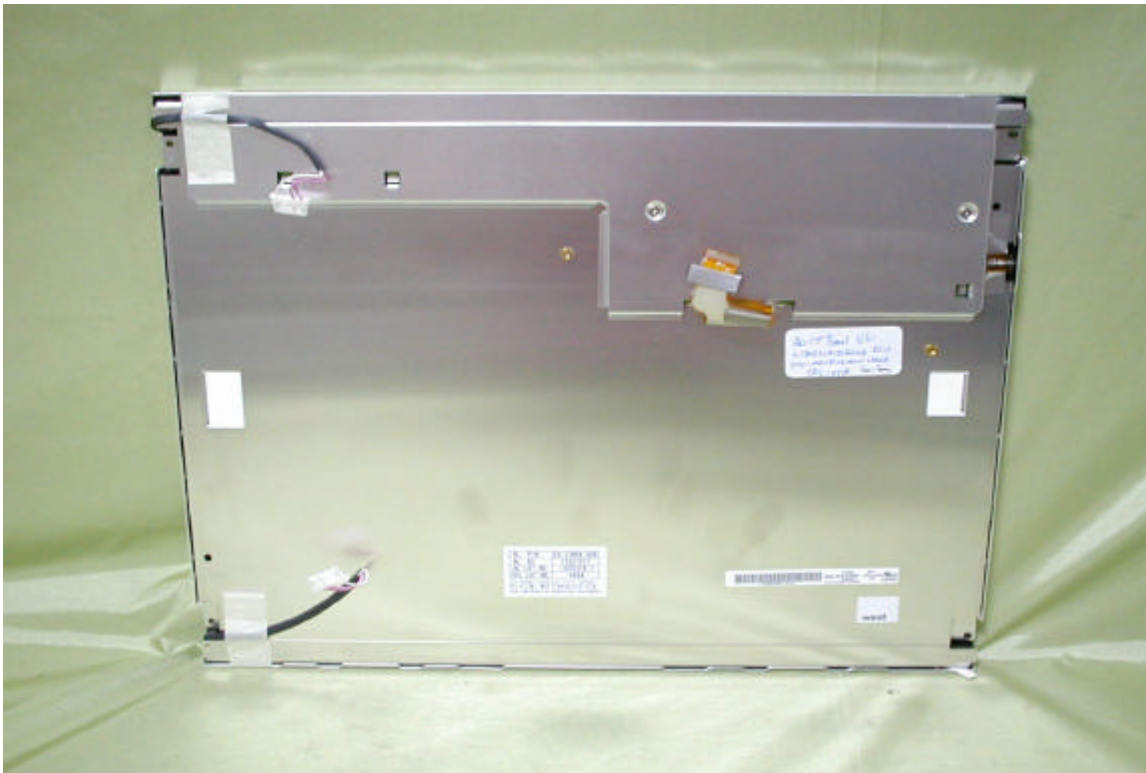
APPENDIX 2

PHOTOGRAPHS OF EUT

Front View of AU



Back View of AU



Front View of HYUNDAI



Back View of HYUNDAI

