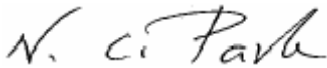


EMC Test Report

According to FCC Part 15 Subpart B

Project No.	LBE042363
Equipment under Test	
Address	416 Maetan3-Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea, 443-742
Product Name	LCD TV Monitor
Model Name	RE23UO
Manufacturer	SAMSUNG
Brand Name	SAMSUNG
Variant Model	See Page 3
Date of Test	December 23, 2004
Issued Date	December 24, 2004

	Name/Position	Signature
Tested by	Kyung Chul, Min Test Engineer	
Reviewed by	No Cheon, Park Manager of EMC Lab.	
Authorized by	Kyu Baek, Chung Chief of EMC Lab.	

1. This test reports does not constitute an endorsement by NIST/NVLAP or U.S Government.
2. This test report is to certify that the tested device properly complies with the requirements of FCC Rules and Regulations Part 15 Subpart B Unintentional Radiators.

All tests necessary to show compliance to the requirements were and these results met the specifications requirement.

This laboratory is registered by the NIST/NVLAP, U.S.A.

The test reported herein have been performed in accordance
with its terms of registration.



NVLAP LAB CODE 200623-0

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1. General Information

1.1 Basic Information related Product

Applicant	Samsung Electronics Co. Ltd,
Model name	RE23UO
Applicant Address	Samsung Electronics Co. Ltd; 416 Maetan3- Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea, 443-742
Contact Person	Kyung Chul, Min
Kind of product	LCD TV Monitor
Valiant list	None
Manufacturer	Samsung Electronics Co.Ltd;
New / Alternative / Permissive change Information	This report is original report #

1.2 Detail Information related Product

Specification

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
IBM	640 X 480	31.469	59.940	25.175	- / -
	720 X 400	31.469	70.087	28.322	- / +
VESA	640 X 480	37.861	72.809	31.500	- / -
	640 X 480	37.500	75.000	31.500	- / -
	800 X 600	37.879	60.317	40.000	+ / +
	800 X 600	48.077	72.188	50.000	+ / +
	800 X 600	46.875	75.000	49.500	+ / +
	1024 X 768	48.364	60.000	65.000	- / -
	1024 X 768	56.476	70.069	75.000	- / -
	1024 X 768	60.023	75.029	78.750	+ / +
	1360 X 768	47.712	60.015	85.800	+ / +

* The interlace mode is not supported.

* The set might operate abnormally if a non-standard video format is selected.

* DVI dose not support PC function.

1.3 Operating Mode and Condition

The system was configured for testing in typical fashion use. Cable were attached to each of the available I/O Ports. The mode of operation utilized for testing was selected to best simulate typical EUT use.

- PC Analog In
- TV Receiving

: This operating mode was covered by another report

1.4 Equipment Modifications

No equipment modifications were required.

1.5 Test Configuration

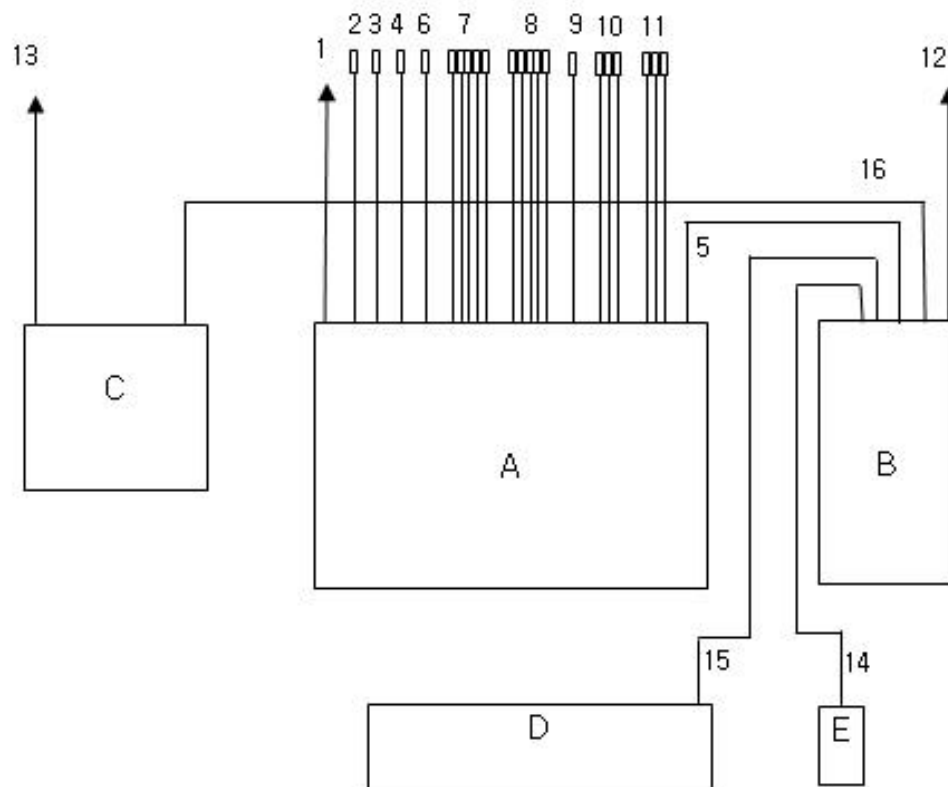
Used EUT and Peripherals

Seq	Device	Model Name	Serial #	Maker	Note
A	LCD TV Monitor	RE23UO	-	SAMSUNG	EUT
B	Personal Computer	M6050	812092FRC01952	SAMSUNG	
C	Printer	ML-1740	BABX820386E	SAMSUNG	
D	PS/2 Keyboard	5900	K03119305	SAMSUNG	
E	PS/2 Mouse	M-S48a	LZA95254368	SAMSUNG	

Used Cable Description

	Connect Cable	Length [m]	Shielded [Y/N]	Remark
1	Power	1.8	No	to the Mains
2	ANT In	1.5	Yes	Termination
3	HDMI	1.5	Yes	-
4	DVI Audio In	1.5	No	Termination
5	PC In	1.5	Yes	PC
6	PC Audio In	1.5	No	Termination
7	Component In 1	1.5	No	Termination
8	Component In 2	1.5	No	Termination
9	S-Video In	1.5	No	Termination
10	AV In	1.5	No	Termination
11	AV Out	1.5	No	Termination
12	Power(For PC)	1.8	No	To the Mains
13	Power(For Printer)	1.8	No	To the Mains
14	PS/2 Cable	1.2	No	To the PC
15	PS/2 Cable	1.2	No	To the PC
16	Parallel Cable	1.5	Yes	To the PC

Block Diagram



1.6 Applied Standards

List

Product or Generic Standards	Basic Standards
FCC Part15 Subpart B	ANSI C63.4 : 2003

1.7 Test Facility

General Information

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR 22, 16-1, 16-2.

This EMC Testing Lab. is accredited by Korea Laboratory Accreditation Scheme(KOLAS) which signed the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the above test item(s) and test method(s).

This Lab. is operated as testing laboratory in accordance with the requirements of ISO/IEC 17025:1998.

Accreditation and Listing



Uncertainty

(According to NAMAS Pub.NIS81)

Test Item	Expanded Uncertainty
Radiated Disturbance	5.09
Disturbance voltage at the mains terminals	1.64

2. Summary of Test Results

Result : PASS

The equipment under test(EUT) has been found to comply with the applied standards.

Test Name		Applied Standard	Result
Electromagnetic Emission Test			
3.1	Conducted Emission	FCC Part15 Subpart B	Complied
3.2	Radiated Emission	FCC Part15 Subpart B	Complied

3. Description of Individual Tests

3.1 Conducted Emission

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	December 23, 2004
	Climate Condition	Ambient Temperature : 23 Relative Humidity : 37%
	Test Place	Shield Room #5

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
Spectrum Analyzer	E7405A	Agilent	MY42000052	2005-08-26	12
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
Field strength meter	ESS	R&S	844661/005	2005-01-05	12
L.I.S.N	ESH3-Z5	R&S	100261	2005-07-23	12
L.I.S.N	ESH3-Z5	R&S	100262	2005-02-11	12

EUT Test Setup

The EUT was set up as per normal use on a wooden table 0.4m from a vertical ground reference plane, at least 0.8m from other conduction surfaces and 0.8m from the LISN.
See photo..

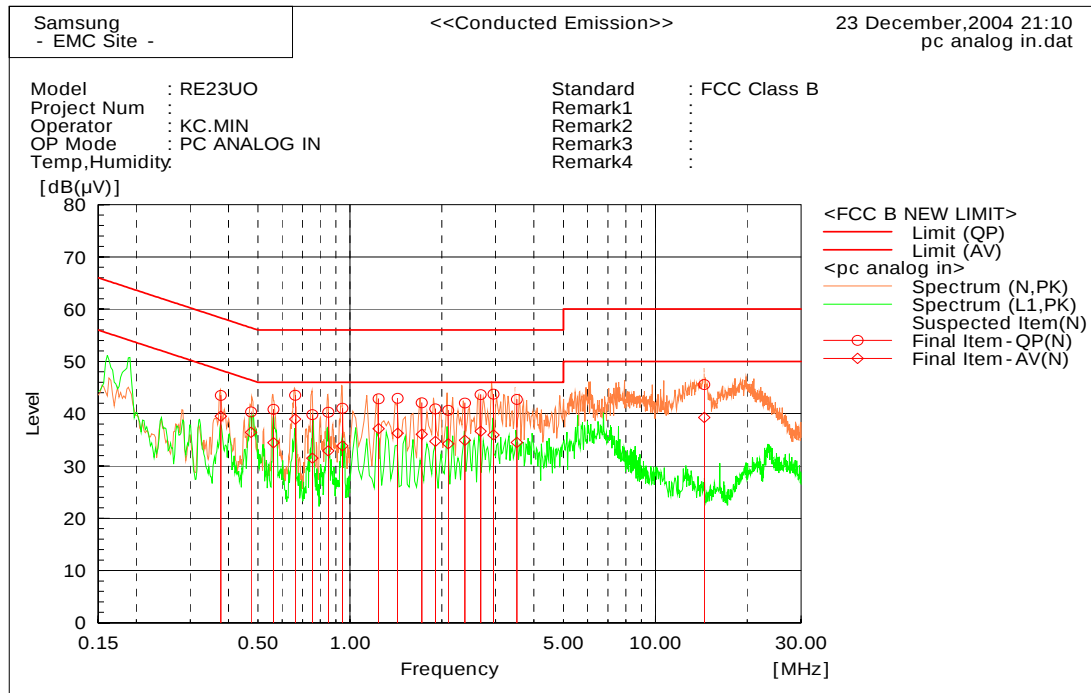
Test Result

Measurement Results	Pass The measured emissions of the EUT have found to be below the specified limits.
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Test Data

■ Operating Mode : PC Analog In

[Graph and Data]



Final Result

--- N Phase ---										
No.	Frequency	Reading OP	Reading AV	c. f	Result OP	Result AV	Limit OP	Limit AV	Margin OP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.37814	43.4	39.4	0.1	43.5	39.5	58.3	48.3	14.8	8.8
2	0.47457	40.2	36.3	0.1	40.3	36.4	56.4	46.4	16.1	10.0
3	0.56172	40.8	34.3	0.1	40.9	34.4	56.0	46.0	15.1	11.6
4	0.66208	43.3	38.7	0.2	43.5	38.9	56.0	46.0	12.5	7.1
5	0.75354	39.6	31.3	0.2	39.8	31.5	56.0	46.0	16.2	14.5
6	0.85004	40.1	32.7	0.2	40.3	32.9	56.0	46.0	15.7	13.1
7	0.94458	40.9	33.6	0.2	41.1	33.8	56.0	46.0	14.9	12.2
8	1.241	42.8	37.0	0.1	42.9	37.1	56.0	46.0	13.1	8.9
9	1.4336	42.8	36.2	0.1	42.9	36.3	56.0	46.0	13.1	9.7
10	1.7202	42.0	36.0	0.1	42.1	36.1	56.0	46.0	13.9	10.0
11	1.905	40.8	34.6	0.1	40.9	34.7	56.0	46.0	15.1	11.3
12	2.0969	40.5	34.1	0.1	40.6	34.2	56.0	46.0	15.4	11.8
13	2.3813	41.9	34.8	0.1	42.0	34.9	56.0	46.0	14.0	11.1
14	2.6805	43.6	36.5	0.1	43.7	36.6	56.0	46.0	12.4	9.4
15	2.9528	43.6	35.9	0.1	43.7	36.0	56.0	46.0	12.3	10.0
16	3.520	42.7	34.4	0.1	42.8	34.5	56.0	46.0	13.2	11.5
17	14.4645	44.9	38.6	0.7	45.6	39.3	60.0	50.0	14.4	10.7

3.2 Radiated Emission

Test Information		
	Test Engineer	Min Kyung Chul
	Test Date	December 23, 2004
	Climate Condition	Ambient Temperature : 23 Relative Humidity : 37%
	Test Place	10m Semi Anechoic chamber

Test Equipments

Equipment	Modal Name	Manufacturer	Serial No.	Calibration	
				Next Date	Interval
Biconilog Antenna	6112B	SCHAFFNER	2767	2005-05-22	12
TV Signal Generator	PM5418-TDSI	PHILIPS	LO612437	2005-09-23	12
Biconilog Antenna	6112B	SCHAFFNER	2766	2005-07-06	12
Spectrum Analyzer	E7405A	Agilent	US41110272	2005-06-30	12
Field strength meter	ESCS30	R&S	839809/002	2005-04-28	12
AMPLIFIER	8447D	Agilent	2944A10430	2005-07-20	12

EUT Test Setup

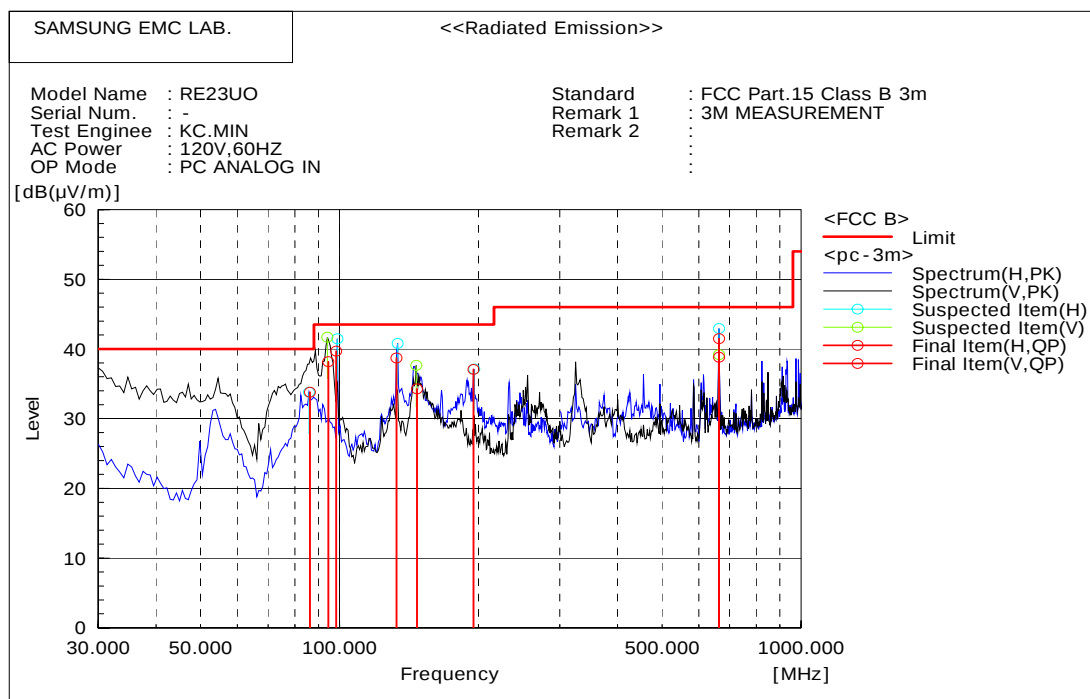
EUT set up in semi-anechoic chamber. EUT positioned at 3m from antenna in center of table.
All ports terminated into characteristic loads.

Test Result

Measurement Results	Pass The measured emissions of the EUT have found to be below the specified limits.
----------------------------	---

Test Data (Other Frequency)

■ Operating Mode : PC Analog In



Final Result

No.	Frequency [MHz]	(P)	S.C	Reading QP [dB(μV)]	c.f [dB(1/m)]	Result QP [dB(μV/m)]	Limit [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
1	86.241	H	S	50.6	-16.8	33.8	40.0	6.2	188.0	122.0
2	94.510	V	S	53.3	-15.1	38.2	43.5	5.3	128.0	236.0
3	98.303	H	S	54.0	-14.3	39.7	43.5	3.8	291.0	57.0
4	132.830	H	S	51.8	-13.1	38.7	43.5	4.8	211.0	60.0
5	147.113	V	S	47.9	-13.6	34.3	43.5	9.2	102.0	42.0
6	194.984	H	S	51.2	-14.1	37.1	43.5	6.4	108.0	167.0
7	663.970	H	S	41.5	0.0	41.5	46.0	4.5	146.0	139.0
8	663.970	V	S	38.8	0.0	38.8	46.0	7.2	104.0	155.0

4. Appendix A

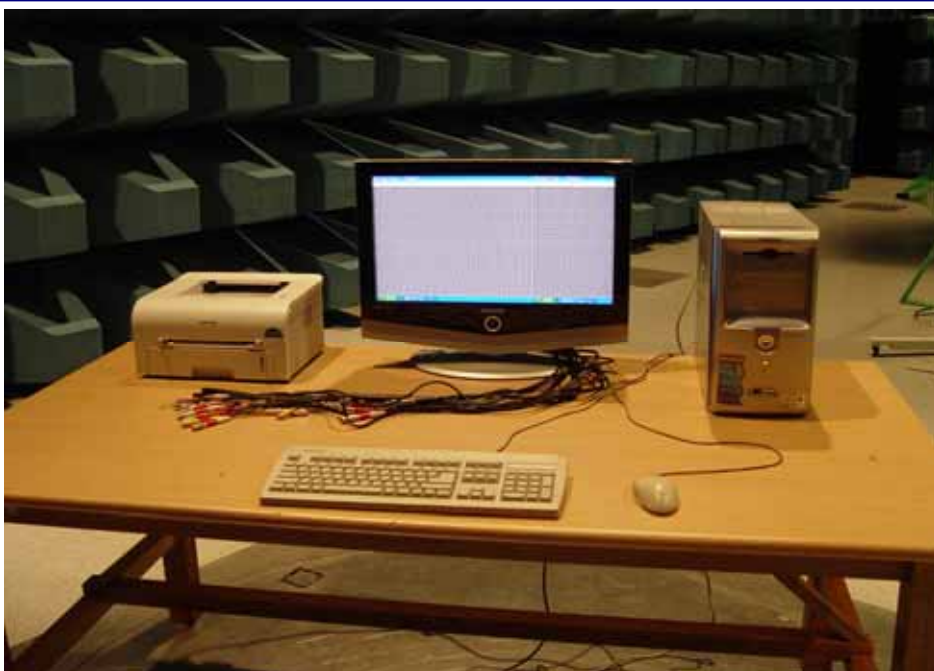
4.1 Test Photography



Picture 1. Conducted Emission (Front)



Picture 2. Conducted Emission (Side)



Picture 3. Radiated Emission (Front)



Picture 4. Radiated Emission (Rear)

4.2 EUT Photography



Picture 5. EUT (Front)



Picture 6. EUT (Rear)