

TEST REPORT FOR CERTIFICATION
Class II Permissive Change
On Behalf for
Philips Electronics Industries (Taiwan) Ltd.
Display Color Monitor
Model No.: M783p
FCC ID. : A3KM119
Brand : Dell Inc.

Prepared for : Philips Electronics Industries (Taiwan) Ltd.
5, Tze Chiang 1 Road, Chungli Industrial Park
Chungli, Taoyuan, Taiwan, R.O.C.

Prepared By : Audix Corporation
Technical Division EMC Department
No. 53-11, Tin-Fu Tsun, Lin-Kou,
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TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	3
1. GENERAL INFORMATION.....	4
1.1.Description of Device (EUT).....	4
1.2.Tested Supporting System Details.....	5
1.3.Description of Test Facility	7
1.4.Measurement Uncertainty.....	7
2. CONDUCTED EMISSION MEASUREMENT	8
2.1.Test Equipment.....	8
2.2.Block Diagram of Test Setup	8
2.3.Conducted Emission Limit (§15.107(a), Class B).....	8
2.4.EUT's Configuration during Compliance Measurement	9
2.5.Operating Condition of EUT	9
2.6.Test Procedure	10
2.7.Test Results.....	10
3. RADIATED EMISSION MEASUREMENT.....	23
3.1.Test Equipment.....	23
3.2.Block Diagram of Test Setup	23
3.3.Radiation Limit (§15.109/CISPR 22, Class B).....	24
3.4.EUT's Configuration during Compliance Measurement	24
3.5.Operating Condition of EUT	24
3.6.Test Procedure	25
3.7.Radiated Emission Measurement Results.....	26
4. DEVIATION TO TEST SPECIFICATIONS	38
5. PHOTOGRAPHS.....	39
5.1.Photos of Conducted Emission Measurement	39
5.2.Photos of Radiated Measurement at Open Field Test Site (30-1000MHz)	41
5.3.Photos of Radiated Measurement at Open Field Test Site (1-2GHz).....	45

TEST REPORT CERTIFICATION (Class II Permissive Change)

Applicant	:	Philips Electronics Industries (Taiwan) Ltd.
Manufacturer	:	Philips Electronics Industries (Taiwan) Ltd.
Factory #1	:	Skyway (Dong Guan) Monitor Factory
Factory #2	:	Philips Consumer Electronics Co., of Suzhou Ltd.
Factory #3	:	Philips Monitors Manufacturing Hungary
EUT Description	:	Display Color Monitor
FCC ID.	:	A3KM119
		(A) MODEL NO. : M783p
		(B) SERIAL NO. : (1)TY0304128 (2)TY0304130
		(C) BRAND : Dell Inc.
		(D) POWER SUPPLY : AC 100-240V~, 60-50Hz
		(Test Voltage: AC 120V/60Hz)

Measurement Procedure Used:

FCC 47 CFR, Part 15, Subpart B / Dec. 2003 and CISPR 22 / 1997
ANSI C63.4 / 2001

The device described above was tested by Audix Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the CISPR 22 Class B radiated emission limit below 1GHz against the 15.109(g) of FCC Part 15 and 15.109(a) of FCC Part 15 limit above 1GHz, and compared to the conducted emission limit of 15.107(a) of FCC Part 15.

The measurement results are contained in this test report and Audix Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Corporation.

Date of Test : Apr. 07 ~ 08, 2004

Prepared by: Tina Huang Apr. 14, 2004
(Tina Huang/Clerk)

Test Engineer : Allen Wang Apr. 20, 2004
(Allen Wang/Deputy Manager)

Approve & Authorized Signer : Leon Liu Apr. 20 2004
(Leon Liu/General Assistant Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Display Color Monitor (The front cover & base of monitor have two kinds of color, one is gray other is black)
Model Number	:	M783p
Serial Number	:	(1)TY0304128 (2)TY0304130
Brand	:	Dell Inc.
Applicant	:	Philips Electronics Industries (Taiwan) Ltd. 5, Tze Chiang 1 Road, Chungli Industrial Park Chungli, Taoyuan, Taiwan, R.O.C.
Manufacturer	:	Philips Electronics Industries (Taiwan) Ltd. 5, Tze Chiang 1 Road, Chungli Industrial Park P.O. Box 123, Chungli, Taoyuan, Taiwan, R.O.C
Factory #1	:	Skyway (Dong Guan) Monitor Factory Industrial Zone, Da Ling Shan Town, Dong Guan City, Guang Dong, China
Factory #2	:	Philips Consumer Electronics Co., of Suzhou Ltd. No. 161, Zhujiang Road, New District, Suzhou 215011, China
Factory #3	:	Philips Monitors Manufacturing Hungary Free Trade Zone Limited Liability Company (PMM LLC) H-9700 Szombathely, Puskas tivadar u. 10., Hungary
CRT	:	(1) LG. Philips, M/N M41QEE903X04 (2) SAMSUNG (SDI) M/N M41QCJ761X172
Scanning Frequency	:	Horizontal: 30-86kHz Vertical: 50-160Hz
Max. Resolution	:	1280×1024

Data Cable (D-Sub)	:	Shielded, Undetachable, 1.8m Bonded two ferrite cores
Power Cord	:	Non-Shielded, Detachable, 1.8m (3 Pin)
Date of Receipt of Sample	:	Apr. 07, 2004
Date of Test	:	Apr. 07 ~ 12, 2004

Remark:

This EUT is an upgrade version of original FCC ID A3KM119. The differences are as follow:

- (1) new cabinet style.
- (2) to add new base style.
- (3) the component of main board was modified.

1.2. Tested Supporting System Details

1.2.1. PERSONAL COMPUTER

Model Number	:	GX240
Serial Number	:	7NRN618
FCC ID	:	By DoC
BSMI ID	:	3902E524
Manufacturer	:	DELL
VGA Card	:	Nvidia GF FX5200
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.2. KEYBOARD

Model Number	:	SK-8100
Serial Number	:	CN-09C487-38844-193-7480
FCC ID	:	By DoC
BSMI ID	:	3912A105
Manufacturer	:	DELL
Data Cable	:	Non-Shielded, Undetachable, 2.0m

1.2.3. DOT MATRIX PRINTER

Model Number	:	KX-P2135
Serial Number	:	8DMCN02139
FCC ID	:	ACJ5Z6KX-P2135
BSMI ID	:	3872A371
Manufacturer	:	Matsushita (Brand: Panasonic)
Data Cable	:	Shielded, Detachable, 1.5m
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.4. MODEM

Model Number	:	DM-1414
Serial Number	:	980034392
FCC ID	:	IFAXDM1414
Manufacturer	:	Accex
Data Cable	:	Shielded, Detachable, 1.2m
Power Adapter	:	Amigo, M/N AM-91000A
		Non-Shielded, Undetachable, 1.8m

1.2.5. PS2 MOUSE

Model Number	:	M-S69
Serial Number	:	LZA31578847
FCC ID	:	JNZ211443
BSMI ID	:	3892D101
Manufacturer	:	DELL
Data Cable	:	Non-Shielded, Undetachable, 1.8m

1.2.6. MICROPHONE

Model Number	:	HD-303
Serial Number	:	N/A
Manufacturer	:	Multimedia Microphone System
Data Cable	:	Non-Shielded, Undetachable, 2.2m

1.2.7. SPEAKER

Model Number	:	J-008
Serial Number	:	J80549157
Manufacturer	:	(J-S) JAZZ HIPSTER
Data Cable	:	Non-Shielded, Undetachable, 1m

1.2.8. WALKMAN

Model Number	:	RQ-P35LT-K
Serial Number	:	HA08562
Manufacturer	:	Panasonic
Data Cable	:	Non-Shielded, Detachable, 1.8m

1.2.9. MICRO VAULT (USB2.0 STORAGE MEDIA)

Model Number	:	USM64U2
Serial Number	:	N/A
FCC ID	:	by DoC
BSMI ID	:	D33021
Manufacturer	:	SONY
Data Cable	:	Shielded, Detachable, 1.0m

1.3. Description of Test Facility

Name of Firm : **Audix Corporation**
 Technical Division EMC Department
 No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.

Test Facility & Location : **No. 4 Shielded Room**
 (C4/R4/R6) No. 67-4, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.

No. 4 Open Test Site
 No. 67-4, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.
 Feb. 10, 2003 Re-File on
 Federal Communication Commission
 Registration Number: 90991

No. 6 Open Test Site
 No. 67-4, Tin-Fu Tsun, Lin-Kou Hsiang,
 Taipei County 24443, Taiwan, R.O.C.
 June. 11, 2003 File on
 Federal Communication Commission
 Registration Number: 98448

NVLAP Lab. Code : 200077-0
 (NVLAP is a NATA accredited body under Mutual Recognition Agreement)

DAR-Registration No. : DAT-P-145/03-01

1.4. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty (dB)
Conduction Test	150kHz~30MHz	±2.66dB
Radiation Test (Distance: 3m)	30MHz~300MHz	+4.26dB / -4.22dB
	300MHz~1000MHz	+5.28dB / -4.0dB
Radiation Test (Distance: 10m)	30MHz~300MHz	+4.5dB / -4.5dB
	300MHz~1000MHz	+3.88dB / -3.84dB

Remark : Uncertainty = $k_{uc}(y)$

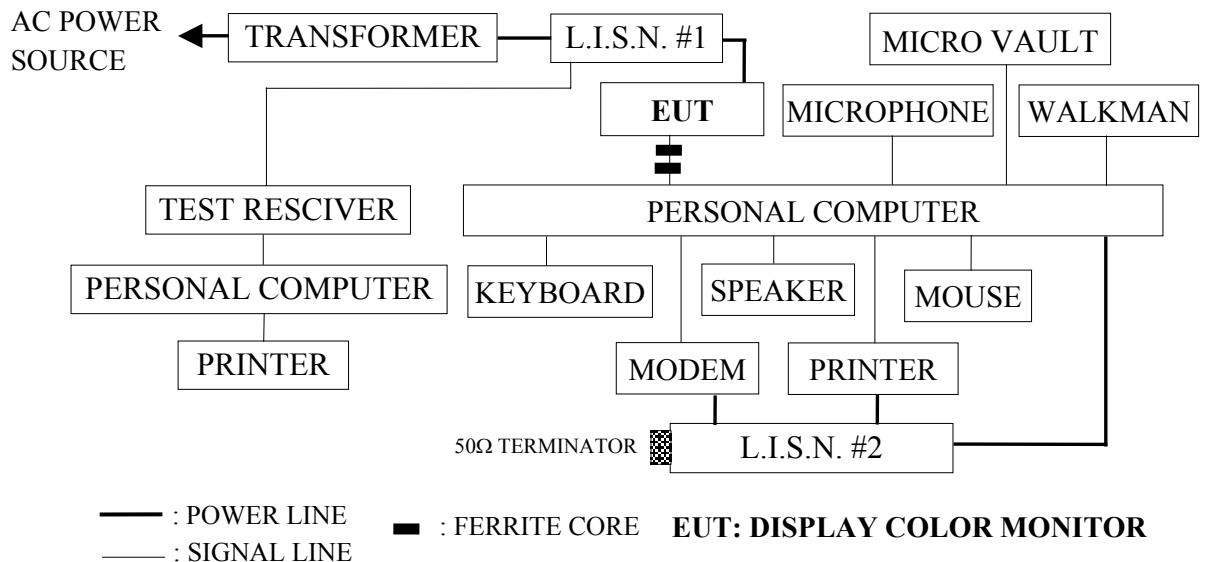
2. CONDUCTED EMISSION MEASUREMENT

2.1. Test Equipment

The following test equipment was used during the conducted emission measurement :

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESHS10	844591/015	Mar. 04, 04'	Mar. 03, 05'
2.	L.I.S.N. #1	Kyoritsu	KNW-407	8-1430-5	Nov. 20, 03'	Nov. 19, 04'
3.	L.I.S.N. #2	Kyoritsu	KNW-407	8-1430-6	Nov. 20, 03'	Nov. 19, 04'

2.2. Block Diagram of Test Setup



2.3. Conducted Emission Limit (§15.107(a), Class B)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dB μ V	56 ~ 46 dB μ V
500kHz ~ 5MHz	56 dB μ V	46 dB μ V
5MHz ~ 30MHz	60 dB μ V	50 dB μ V

Remark1.: If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.

2.: The lower limit applies at the band edges.

2.4. EUT's Configuration during Compliance Measurement

The following equipment were installed on RF LINE VOLTAGE measurement to meet the Commission requirement and operating in a manner which tended to maximize its emission characteristics in a normal application.

2.4.1. Display Color Monitor (EUT)

Model Number	:	M783p (The front cover & base of monitor have two kinds of color, one is gray other is black)
Serial Number	:	(1)TY0304128 (2)TY0304130
Brand	:	Dell Inc.
Factory	:	Skyway (Dong Guan) Monitor Factory
CRT	:	(1) LG. Philips, M/N M41QEE903X04 (2) SAMSUNG(SDI), M/N M41QCJ761X172
Scanning Frequency	:	Horizontal: 30-86kHz Vertical: 50-160Hz
Max. Resolution	:	1280×1024
Data Cable (D-Sub)	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
Power Cord	:	Non-Shielded, Detachable, 1.8m (3 Pin)

2.4.2. Supporting System : As In Section 1.2.

2.5. Operating Condition of EUT

- 2.5.1. Setup the EUT and simulator as shown on 2.2.
- 2.5.2. Turned on the power of all equipment.
- 2.5.3. Personal Computer read data from disk.
- 2.5.4. Personal Computer running the self-test program "Dell Pattern" by windows and sent "H" character to monitor (EUT) through VGA card, the screen displayed and filled with "H" pattern by EUT's resolution.
- 2.5.5. Personal Computer played a music file and sent sound to speaker of EUT.
- 2.5.6. The other peripheral devices were driven and operated in turn during all testing.

2.6. Test Procedure

The EUT was put on table which was above the ground by 80cm and its power cord was connected to the power mains through a line impedance stabilization network (L.I.S.N. #1) and the other peripheral devices power cord were connected to the power mains through a line impedance stabilization network (L.I.S.N. #2) This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions simulators of the interface cables were manipulated according to FCC ANSI C63.4-2001 during conducted measurement.

The bandwidth of the R&S Test Receiver ESHS 10 was set at 10kHz.

The frequency range from 150kHz to 30MHz was checked using a peak detector.

The all reading of measurement were with the Quasi-Peak detector and Average detector. (Remark: If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

2.7. Test Results

PASSED. Please refer to the following pages.

(All the emissions not reported are below too low against the prescribed limits.)

EUT with following test modes and with AC 120V/60Hz supplying voltage were performed during conducted testing and all the test results are attached in next pages.

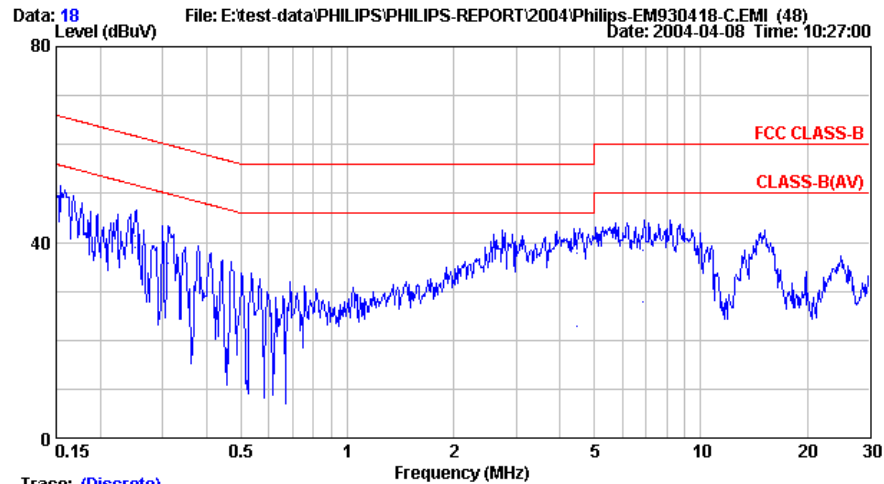
EUT: Display Color Monitor Model No.: M783p

(Test Date: Apr. 08, 2004 Temperature: 19°C Humidity: 59%)

Mode	Serial Number	Panel	Resolution/ Frequency	Reference Test Data #
1.	TY0304128 (Gray)	LG. Philips M/N M41QEE903X04	640×480/60Hz, 31kHz	# 18 ; # 17
2.			1024×768/85Hz, 69kHz	# 15 ; # 16
3.			1280×1024/75Hz, 80kHz	# 14 ; # 13
4.	TY0304130 (Black)	SAMSUNG (SDI) M/N M41QCJ761X172	640×480/60Hz, 31kHz	# 31 ; # 32
5.			1024×768/85Hz, 69kHz	# 34 ; # 33
6.			1280×1024/75Hz, 80kHz	# 35 ; # 36



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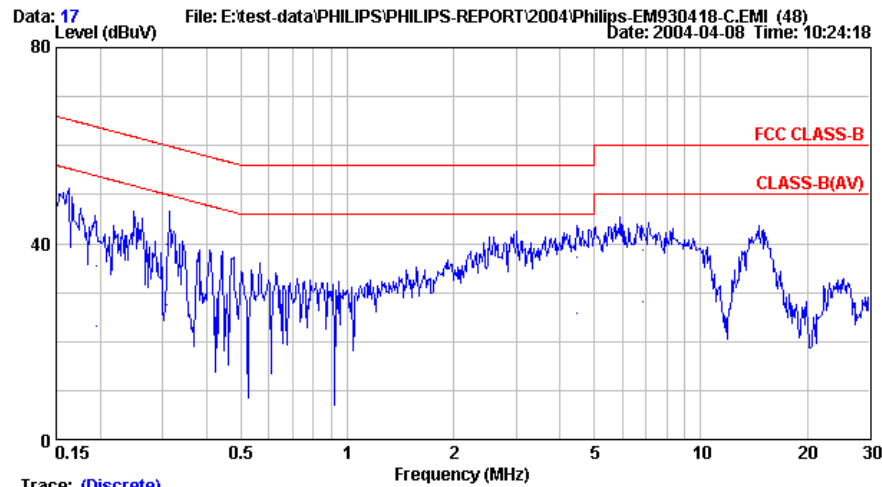


Trace: (Discrete)
Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 NEUTRAL
Env. / Ins. : (19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :640*480/60Hz ; 31KHz
:S/N:TY0304128

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	47.67	-18.31	65.98	47.29	0.30	0.08	QP
2	0.150	25.87	-30.11	55.98	25.49	0.30	0.08	AVERAGE
3	0.250	41.40	-20.34	61.74	41.16	0.17	0.08	QP
4	0.250	38.97	-12.77	51.74	38.73	0.17	0.08	AVERAGE
5	0.311	41.35	-18.58	59.93	41.15	0.14	0.07	QP
6	0.311	35.66	-14.27	49.93	35.46	0.14	0.07	AVERAGE
7	0.439	35.75	-21.33	57.08	35.55	0.10	0.10	QP
8	0.439	34.86	-12.22	47.08	34.66	0.10	0.10	AVERAGE
9	4.456	37.80	-18.20	56.00	37.53	0.11	0.16	QP
10	4.456	22.80	-23.20	46.00	22.53	0.11	0.16	AVERAGE
11	6.835	38.26	-21.74	60.00	37.94	0.16	0.16	QP
12	6.835	27.85	-22.15	50.00	27.53	0.16	0.16	AVERAGE



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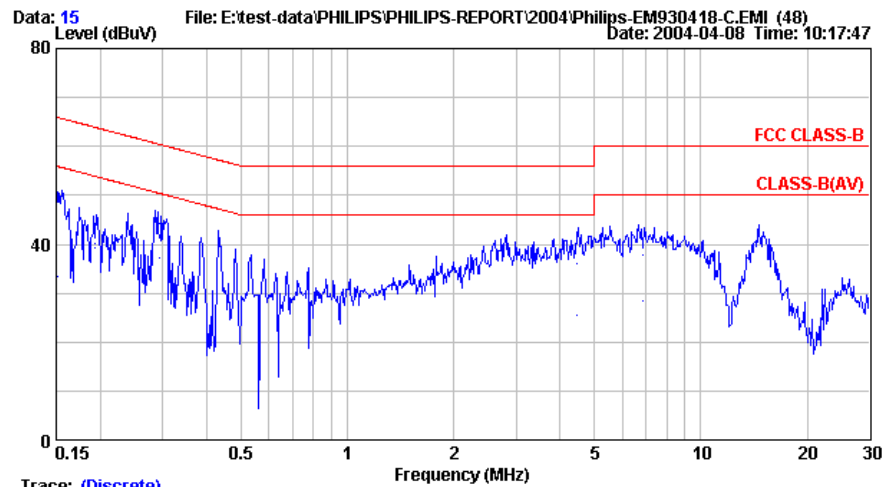


Trace: (Discrete)
Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 LINE
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :640*480/60Hz ; 31KHz
:S/N:TY0304128

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	47.89	-18.09	65.98	47.51	0.30	0.08	QP
2	0.150	24.98	-31.00	55.98	24.60	0.30	0.08	AVERAGE
3	0.195	35.52	-28.29	63.80	35.21	0.21	0.10	QP
4	0.195	23.07	-30.74	53.80	22.76	0.21	0.10	AVERAGE
5	0.309	39.80	-20.20	60.00	39.60	0.14	0.06	QP
6	0.309	27.45	-22.55	50.00	27.25	0.14	0.06	AVERAGE
7	0.440	36.54	-20.52	57.06	36.34	0.10	0.10	QP
8	0.440	35.75	-11.31	47.06	35.55	0.10	0.10	AVERAGE
9	4.460	37.17	-18.83	56.00	36.91	0.10	0.16	QP
10	4.460	25.90	-20.10	46.00	25.64	0.10	0.16	AVERAGE
11	6.836	38.60	-21.40	60.00	38.34	0.10	0.16	QP
12	6.836	28.10	-21.90	50.00	27.84	0.10	0.16	AVERAGE



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Trace: (Discrete)

Site :No.4 Shielded room

Condition :FCC CLASS-B KNW-407 NEUTRAL

Env. / Ins. :(19°C/59%)/ESHS10

Engineer :ALEX HUANG

Eut :Display Color Monitor M/N:M783p

Power Rating:120Vac/60Hz

emo :1024*768/85Hz ; 69KHz

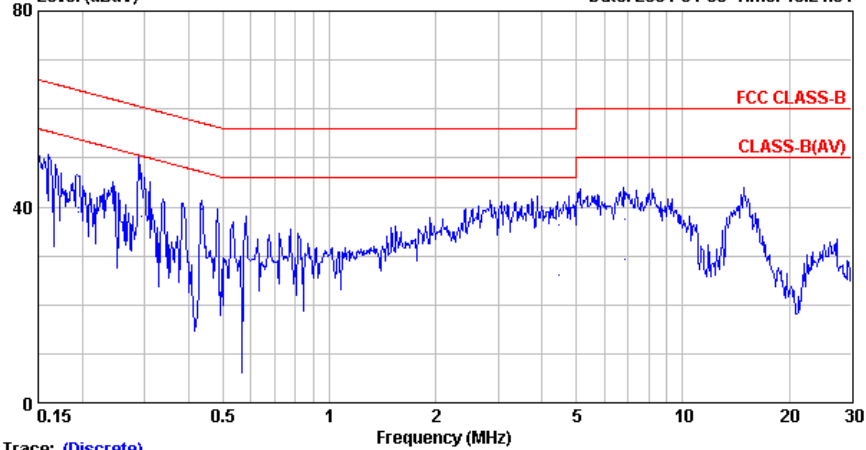
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	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	49.23	-16.73	65.96	48.85	0.30	0.08	QP
2	0.151	33.55	-22.41	55.96	33.17	0.30	0.08	AVERAGE
3	0.193	40.28	-23.61	63.89	39.97	0.21	0.10	QP
4	0.193	39.15	-14.74	53.89	38.84	0.21	0.10	AVERAGE
5	0.294	44.36	-16.06	60.42	44.15	0.14	0.06	QP
6	0.294	37.31	-13.11	50.42	37.10	0.14	0.06	AVERAGE
7	0.435	40.69	-16.46	57.15	40.49	0.10	0.10	QP
8 @	0.435	39.48	-7.67	47.15	39.28	0.10	0.10	AVERAGE
9	4.438	36.00	-20.00	56.00	35.73	0.11	0.16	QP
10	4.438	25.48	-20.52	46.00	25.21	0.11	0.16	AVERAGE
11	6.849	37.82	-22.18	60.00	37.50	0.16	0.16	QP
12	6.849	28.37	-21.63	50.00	28.05	0.16	0.16	AVERAGE



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Level (dBuV) Date: 2004-04-08 Time: 10:21:31



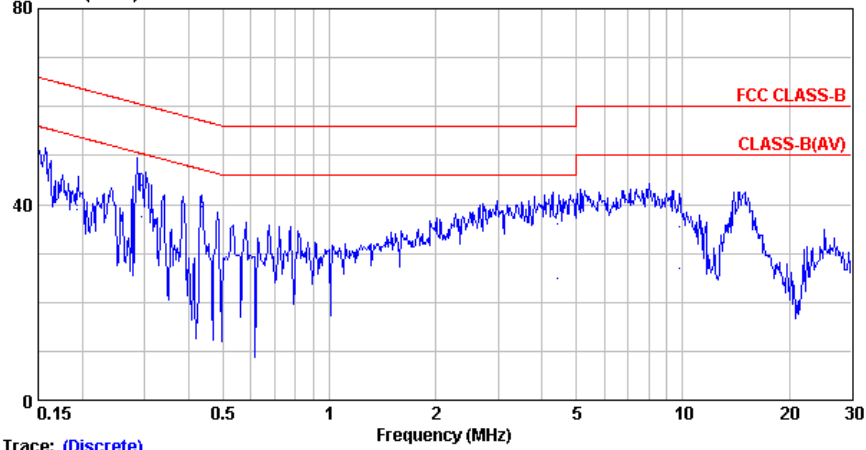
Trace: (Discrete)
Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 LINE
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :1024*768/85Hz ; 69KHz
:S/N:TY0304128

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	49.05	-16.92	65.97	48.67	0.30	0.08	QP
2	0.151	35.58	-20.39	55.97	35.20	0.30	0.08	AVERAGE
3	0.194	39.88	-23.98	63.86	39.57	0.21	0.10	QP
4	0.194	38.87	-14.99	53.86	38.56	0.21	0.10	AVERAGE
5	0.294	44.00	-16.42	60.42	43.79	0.14	0.06	QP
6	0.294	38.00	-12.42	50.42	37.79	0.14	0.06	AVERAGE
7	0.435	40.39	-16.77	57.16	40.19	0.10	0.10	QP
8 @	0.435	39.54	-7.62	47.16	39.34	0.10	0.10	AVERAGE
9	4.447	36.40	-19.60	56.00	36.14	0.10	0.16	QP
10	4.447	26.16	-19.84	46.00	25.90	0.10	0.16	AVERAGE
11	6.848	37.52	-22.48	60.00	37.26	0.10	0.16	QP
12	6.848	29.40	-20.60	50.00	29.14	0.10	0.16	AVERAGE



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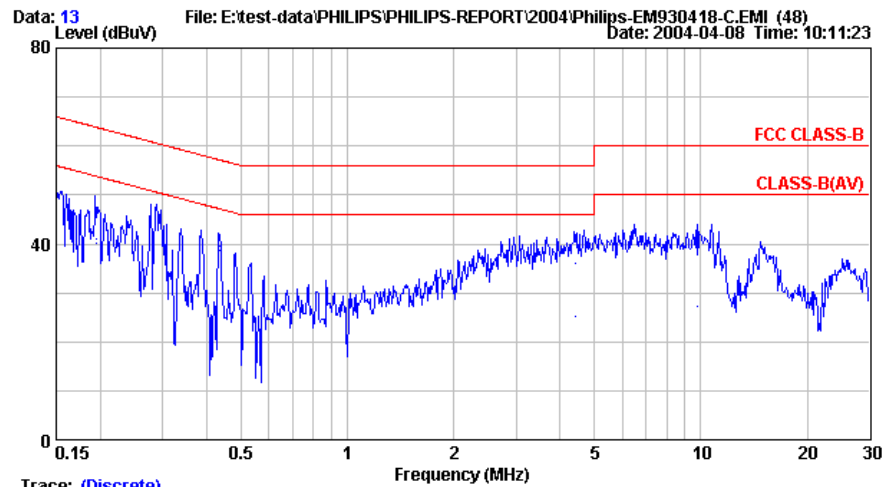


Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 NEUTRAL
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :1280*1024/75Hz ; 80KHz
:S/N:TY0304128

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	49.17	-16.81	65.98	48.79	0.30	0.08	QP
2	0.150	36.07	-19.91	55.98	35.69	0.30	0.08	AVERAGE
3	0.194	39.88	-23.99	63.87	39.57	0.21	0.10	QP
4	0.194	39.01	-14.86	53.87	38.70	0.21	0.10	AVERAGE
5	0.294	44.10	-16.32	60.42	43.89	0.14	0.06	QP
6	0.294	37.61	-12.81	50.42	37.40	0.14	0.06	AVERAGE
7	0.434	40.57	-16.60	57.17	40.37	0.10	0.10	QP
8 @	0.434	39.65	-7.52	47.17	39.45	0.10	0.10	AVERAGE
9	4.421	36.10	-19.90	56.00	35.83	0.11	0.16	QP
10	4.421	24.99	-21.01	46.00	24.72	0.11	0.16	AVERAGE
11	9.756	35.43	-24.57	60.00	35.08	0.20	0.16	QP
12	9.756	26.92	-23.08	50.00	26.57	0.20	0.16	AVERAGE



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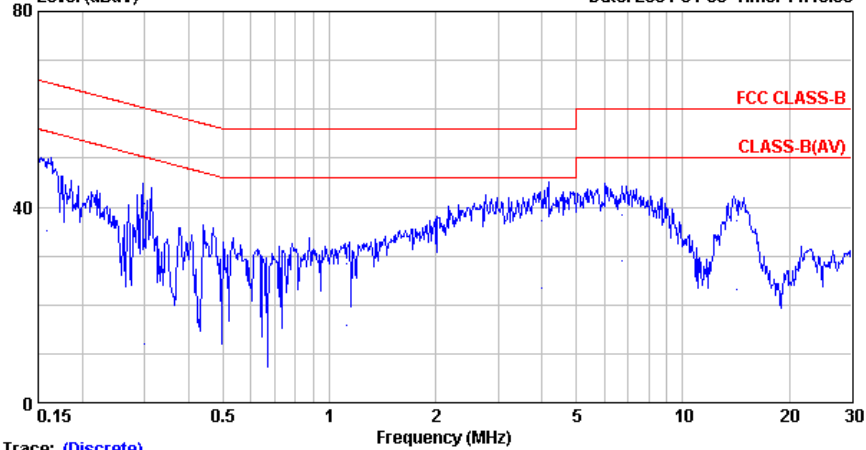
Trace: (Discrete)
Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 LINE
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :1280*1024/75Hz ; 80KHz
:S/N:TY0304128

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	49.65	-16.34	65.99	49.27	0.30	0.08	QP
2	0.150	36.35	-19.64	55.99	35.97	0.30	0.08	AVERAGE
3	0.194	41.01	-22.86	63.86	40.70	0.21	0.10	QP
4	0.194	40.26	-13.61	53.86	39.95	0.21	0.10	AVERAGE
5	0.290	46.67	-13.85	60.52	46.46	0.15	0.06	QP
6 @	0.290	42.75	-7.77	50.52	42.54	0.15	0.06	AVERAGE
7	0.436	39.61	-17.53	57.14	39.41	0.10	0.10	QP
8 @	0.436	38.82	-8.32	47.14	38.62	0.10	0.10	AVERAGE
9	4.424	35.93	-20.07	56.00	35.67	0.10	0.16	QP
10	4.424	25.28	-20.72	46.00	25.02	0.10	0.16	AVERAGE
11	9.768	37.87	-22.14	60.00	37.61	0.10	0.16	QP
12	9.768	27.32	-22.69	50.00	27.06	0.10	0.16	AVERAGE



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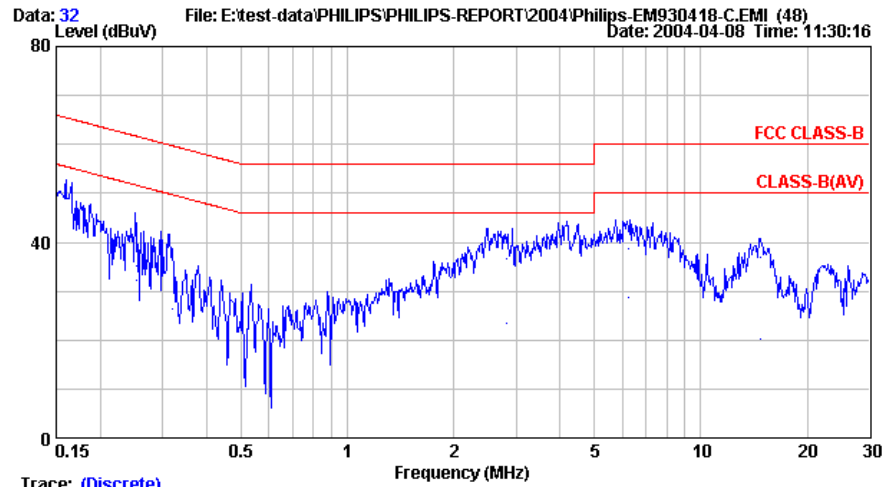


Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 NEUTRAL
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :640*480/60Hz 31KHz
:S/N:TY0304130

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.158	48.30	-17.27	65.56	47.93	0.28	0.08	QP
2	0.158	35.18	-20.39	55.56	34.81	0.28	0.08	AVERAGE
3	0.299	40.81	-19.47	60.28	40.61	0.14	0.06	QP
4	0.299	11.94	-38.34	50.28	11.74	0.14	0.06	AVERAGE
5	1.116	28.32	-27.68	56.00	28.12	0.10	0.10	QP
6	1.116	15.70	-30.30	46.00	15.50	0.10	0.10	AVERAGE
7	3.968	37.17	-18.83	56.00	36.89	0.10	0.18	QP
8	3.968	23.59	-22.41	46.00	23.31	0.10	0.18	AVERAGE
9	6.740	38.50	-21.50	60.00	38.18	0.16	0.16	QP
10	6.740	29.10	-20.90	50.00	28.78	0.16	0.16	AVERAGE
11	14.153	37.19	-22.81	60.00	36.78	0.20	0.21	QP
12	14.153	23.12	-26.88	50.00	22.71	0.20	0.21	AVERAGE



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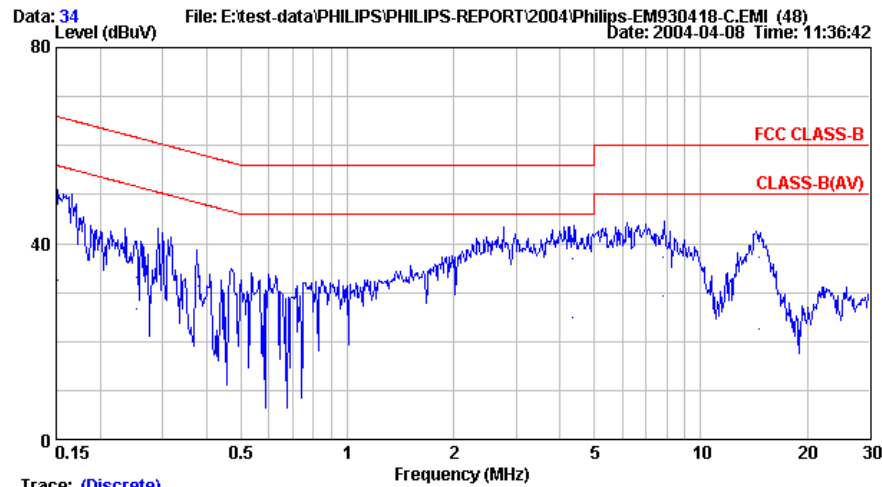


Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 LINE
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :640*480/60Hz 31KHz
:S/N:TY0304130

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	49.11	-16.87	65.98	48.73	0.30	0.08	QP
2	0.150	30.36	-25.62	55.98	29.98	0.30	0.08	AVERAGE
3	0.254	35.19	-26.43	61.62	34.95	0.17	0.08	QP
4	0.254	32.09	-19.53	51.62	31.85	0.17	0.08	AVERAGE
5	0.320	36.29	-23.41	59.70	36.09	0.13	0.07	QP
6	0.320	26.26	-23.44	49.70	26.06	0.13	0.07	AVERAGE
7	2.813	36.66	-19.34	56.00	36.48	0.10	0.08	QP
8	2.813	23.44	-22.56	46.00	23.26	0.10	0.08	AVERAGE
9	6.226	38.61	-21.39	60.00	38.35	0.10	0.16	QP
10	6.226	28.85	-21.15	50.00	28.59	0.10	0.16	AVERAGE
11	14.680	36.78	-23.22	60.00	36.37	0.19	0.22	QP
12	14.680	20.20	-29.80	50.00	19.79	0.19	0.22	AVERAGE



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Trace: (Discrete)

Site :No.4 Shielded room

Condition :FCC CLASS-B KNW-407 NEUTRAL

Env. / Ins. :(19°C/59%)/ESHS10

Engineer :ALEX HUANG

Eut :Display Color Monitor M/N:M783p

Power Rating:120Vac/60Hz

emo :1024*768/85Hz 69KHz

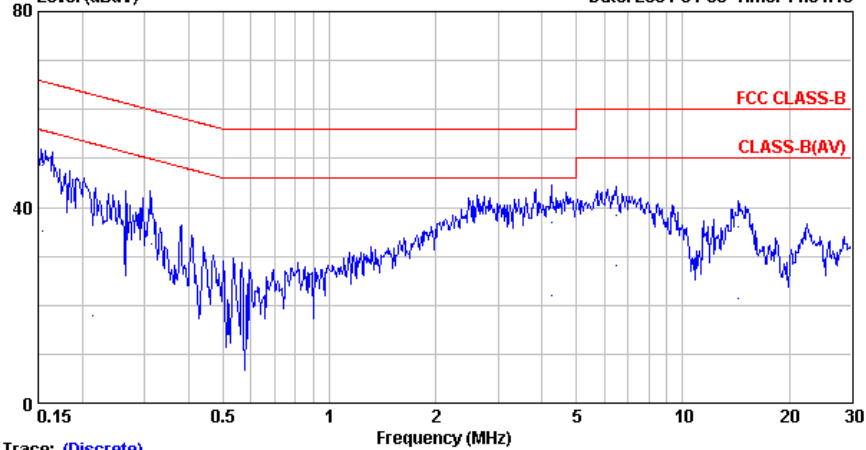
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	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	48.81	-17.13	65.94	48.43	0.30	0.08	QP
2	0.151	32.63	-23.31	55.94	32.25	0.30	0.08	AVERAGE
3	0.254	33.10	-28.52	61.62	32.86	0.16	0.08	QP
4	0.254	26.80	-24.82	51.62	26.56	0.16	0.08	AVERAGE
5	0.378	34.97	-23.36	58.33	34.77	0.11	0.09	QP
6	0.378	31.21	-17.12	48.33	31.01	0.11	0.09	AVERAGE
7	4.316	37.03	-18.97	56.00	36.76	0.11	0.17	QP
8	4.316	25.02	-20.98	46.00	24.75	0.11	0.17	AVERAGE
9	7.779	37.27	-22.73	60.00	36.98	0.17	0.11	QP
10	7.779	29.22	-20.78	50.00	28.93	0.17	0.11	AVERAGE
11	14.626	37.36	-22.64	60.00	36.94	0.20	0.22	QP
12	14.626	22.51	-27.49	50.00	22.09	0.20	0.22	AVERAGE



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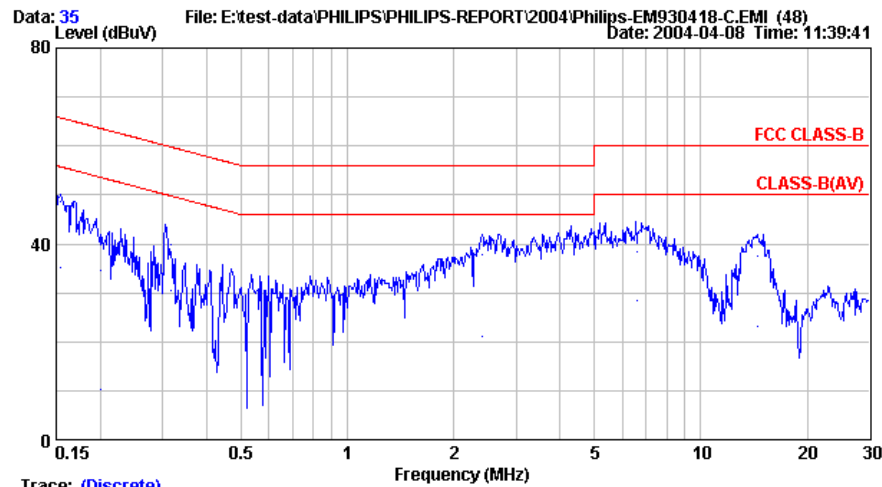


Trace: (Discrete)
Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 LINE
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :1024*768/85Hz 69KHz
:S/N:TY0304130

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.154	48.66	-17.13	65.79	48.29	0.29	0.08	QP
2	0.154	35.11	-20.68	55.79	34.74	0.29	0.08	AVERAGE
3	0.214	36.27	-26.79	63.06	35.99	0.19	0.09	QP
4	0.214	18.01	-35.05	53.06	17.73	0.19	0.09	AVERAGE
5	0.314	39.24	-20.62	59.87	39.04	0.14	0.07	QP
6	0.314	32.61	-17.25	49.87	32.41	0.14	0.07	AVERAGE
7	4.256	37.03	-18.97	56.00	36.76	0.10	0.17	QP
8	4.256	21.97	-24.03	46.00	21.70	0.10	0.17	AVERAGE
9	6.496	38.43	-21.57	60.00	38.17	0.10	0.16	QP
10	6.496	28.16	-21.84	50.00	27.90	0.10	0.16	AVERAGE
11	14.384	36.00	-24.00	60.00	35.60	0.19	0.21	QP
12	14.384	21.39	-28.61	50.00	20.99	0.19	0.21	AVERAGE



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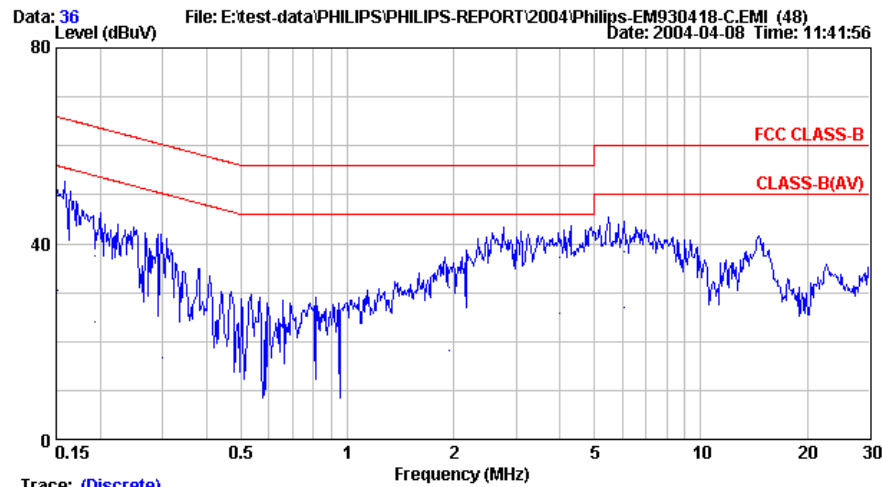


Trace: (Discrete)
Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 NEUTRAL
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :1280*1024/75Hz 80KHz
:S/N:TY0304130

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.155	48.60	-17.13	65.73	48.23	0.29	0.08	QP
2	0.155	35.17	-20.56	55.73	34.80	0.29	0.08	AVERAGE
3	0.200	34.53	-29.08	63.61	34.23	0.20	0.10	QP
4	0.200	10.14	-43.47	53.61	9.84	0.20	0.10	AVERAGE
5	0.316	39.86	-19.96	59.82	39.66	0.13	0.07	QP
6	0.316	30.54	-19.28	49.82	30.34	0.13	0.07	AVERAGE
7	2.411	37.94	-18.06	56.00	37.75	0.10	0.09	QP
8	2.411	21.23	-24.77	46.00	21.04	0.10	0.09	AVERAGE
9	6.574	38.31	-21.69	60.00	38.00	0.15	0.16	QP
10	6.574	28.35	-21.65	50.00	28.04	0.15	0.16	AVERAGE
11	14.526	37.65	-22.35	60.00	37.24	0.20	0.21	QP
12	14.526	23.28	-26.72	50.00	22.87	0.20	0.21	AVERAGE



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Site :No.4 Shielded room
Condition :FCC CLASS-B KNW-407 LINE
Env. / Ins. :(19°C/59%)/ESHS10
Engineer :ALEX HUANG
Eut :Display Color Monitor M/N:M783p
Power Rating:120Vac/60Hz
emo :1280*1024/75Hz 80KHz
:S/N:TY0304130

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.152	49.83	-16.09	65.91	49.45	0.30	0.08	QP
2	0.152	30.61	-25.31	55.91	30.23	0.30	0.08	AVERAGE
3	0.193	37.55	-26.34	63.89	37.24	0.21	0.10	QP
4	0.193	24.10	-29.79	53.89	23.79	0.21	0.10	AVERAGE
5	0.301	39.72	-20.50	60.22	39.52	0.14	0.06	QP
6	0.301	16.64	-33.58	50.22	16.44	0.14	0.06	AVERAGE
7	1.944	31.19	-24.81	56.00	30.99	0.10	0.10	QP
8	1.944	18.27	-27.73	46.00	18.07	0.10	0.10	AVERAGE
9	3.998	37.07	-18.93	56.00	36.79	0.10	0.18	QP
10	3.998	25.82	-20.18	46.00	25.54	0.10	0.18	AVERAGE
11	6.098	38.44	-21.56	60.00	38.18	0.10	0.16	QP
12	6.098	27.05	-22.95	50.00	26.79	0.10	0.16	AVERAGE

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

The following test equipment was used during the radiated emission measurement :

3.1.1. For 30MHz~1000MHz Frequency (At No. 3 Open Field Test Site)

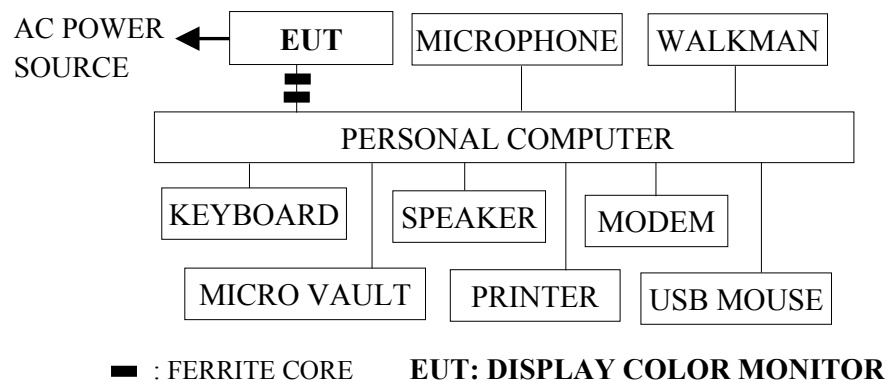
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESVS10	845165/018	May 16, 03'	May 15, 04'
2.	Biconical Antenna	Chase	VBA6106A	1263	Nov. 24, 03'	Nov. 23, 04'
3.	Log Periodic Antenna	Chase	UPA6109	1020	Nov. 24, 03'	Nov. 23, 04'

3.1.2. For 1GHz~2GHz Frequency (At No. 6 Open Field Test Site)

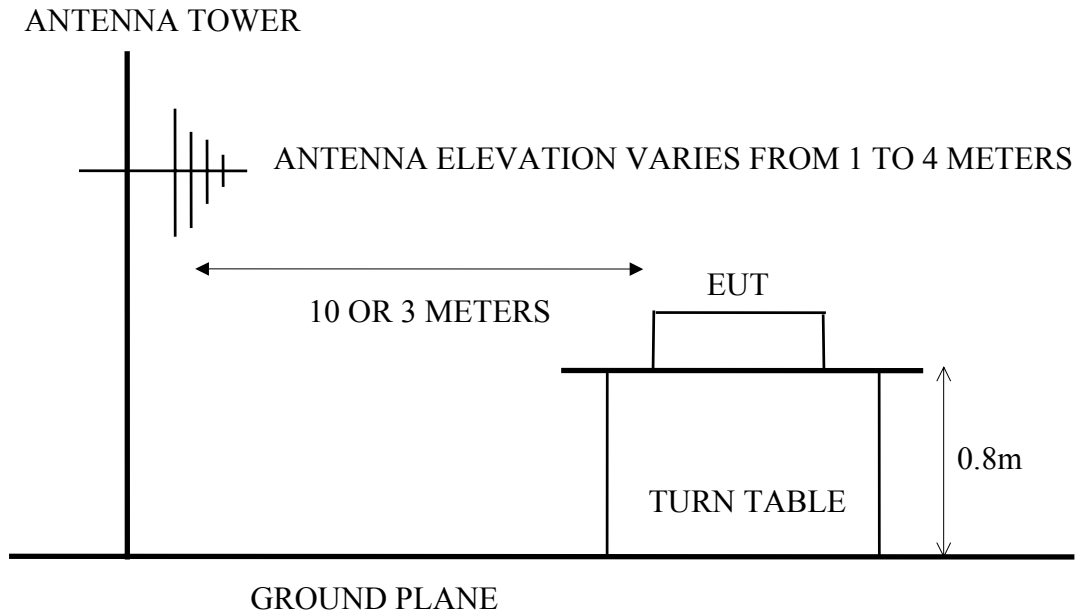
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00272	Jun. 06, 03'	Jun. 05, 04'
2.	Amplifier	HP	8449B	3008A01284	Jul. 02, 03'	Jul. 01, 04'
3.	Horn Antenna	EMCO	3115	9609-4927	Jul. 04, 03'	Jul. 03, 04'

3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Open Field Test Site (10m & 3m) Setup Diagram (10m for 30-1000MHz; 3m for 1GHz-2GHz)



3.3. Radiation Limit (§15.109/CISPR 22, Class B)

All emanations from a class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dBμV/m)
30 ~ 230	10	30
230 ~ 1000	10	37
Above 1GHz	3	74.0 (Peak)
Above 1GHz	3	54.0 (Average)

- Note :
- (1) The tighter limit applies at the edge between two frequency bands.
 - (2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the E.U.T.
 - (3) There is no over 1GHz limits in CISPR 22 standard. Therefore, a FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.109 (a), (g).
 - (4) The 3m limit apply relation: $L2 = L1(d1/d2)$

3.4. EUT's Configuration during Compliance Measurement

The configuration of EUT and its supporting system were same as those used in conducted measurement. Please refer to section 2.4.

3.5. Operating Condition of EUT

Same as conducted measurement which is listed in 2.5., except the test set up replaced by section 3.2.

3.6. Test Procedure

The EUT was placed on a turn table which was 0.8 meter above ground. The turn table rotate 360 degrees to determine the position of the maximum emission level. EUT was set 10 (or 3 meters) away from the receiving antenna which were mounted on a antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated biconical and log periodical antenna) and dipole antenna were used as receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to CISPR 22 and ANSI C63.4-2001 on radiated measurement.

The bandwidth of the R&S Test Receiver ESVS10 was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth of the HP Spectrum Analyzer 8593EM was set at 1MHz. (For 1GHz-2GHz)

The frequency range from 30MHz to 2GHz was checked.

For 30-1000MHz frequency range, EUT (Display Color Monitor) with test voltage of AC 120V/60Hz and with the following test modes were performed during radiated testing at No. 4 open test site, all the test results are listed in section 3.7.1.

(※worst test mode)

	Mode	Serial Number	Panel	Resolution/ Frequency
※	1.	TY0304128 (Gray)	LG. Philips M/N M41QEE903X04	640×480/60Hz, 31kHz
	2.			1024×768/85Hz, 69kHz
	3.			1280×1024/75Hz, 80kHz
※	4.	TY0304130 (Black)	SAMSUNG (SDI) M/N M41QCJ761X172	640×480/60Hz, 31kHz
	5.			1024×768/85Hz, 69kHz
	6.			1280×1024/75Hz, 80kHz

For 1-2GHz frequency range, the **test mode 3 & mode 6** were selected and measured within No. 6 open test site and the test results are listed in section 3.7.2.

3.7. Radiated Emission Measurement Results

PASSED. Please refer to the following pages.

All emissions not reported below are too low against the prescribed limits.

3.7.1. 30MHz to 1000MHz frequency and 10 meters distance measurement.
(At No. 3 open test site)

Date of Test : Apr. 07, 2004 Temperature : 26°C

EUT : Display Color Monitor Humidity : 69%

Test Mode : S/N TY0304128 w/LG Philips CRT, 640×480/60Hz, 31kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
41.356	18.45	0.68	0.07	19.20	30.00	10.80
78.264	13.45	0.93	7.58	21.95	30.00	8.05
110.496	18.17	1.11	-0.76	18.52	30.00	11.48
146.167	20.25	1.35	0.76	22.37	30.00	7.63
171.364	20.57	1.37	-0.14	21.80	30.00	8.20
244.857	22.29	1.64	0.71	24.64	37.00	12.36
281.237	23.29	1.74	1.72	26.75	37.00	10.25
330.071	14.71	2.00	8.50	25.21	37.00	11.79
378.903	15.37	2.12	11.60	29.09	37.00	7.91
427.736	16.59	2.28	9.10	27.97	37.00	9.03
537.610	18.88	2.52	5.20	26.59	37.00	10.41
647.485	20.39	2.89	2.20	25.48	37.00	11.52
769.567	22.48	3.22	-1.70	24.00	37.00	13.00

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
41.313	19.24	0.68	1.50	21.42	30.00	8.58
78.025	13.54	0.93	9.10	23.57	30.00	6.43
110.194	16.55	1.11	2.90	20.56	30.00	9.44
146.650	20.86	1.35	2.60	24.81	30.00	5.19
171.235	20.11	1.37	1.60	23.08	30.00	6.92
244.485	21.55	1.64	2.60	25.80	37.00	11.20
281.109	24.03	1.74	2.20	27.96	37.00	9.04
330.186	14.88	2.00	10.70	27.57	37.00	9.43
378.364	15.91	2.12	8.46	26.49	37.00	10.51
427.656	16.74	2.28	8.95	27.98	37.00	9.02
537.346	19.09	2.52	4.56	26.16	37.00	10.84
647.456	19.98	2.89	2.40	25.27	37.00	11.73
769.782	22.52	3.22	-1.28	24.47	37.00	12.54

- Remarks : 1. All readings are Quasi-Peak values.
2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 07, 2004 Temperature : 26°CEUT : Display Color Monitor Humidity : 69%Test Mode : S/N TY0304128 w/LG Philips CRT, 1024x768/85Hz, 69kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dB μ V	Emission Level Horizontal dB μ V/m	Limits dB μ V/m	Margin dB
64.394	12.18	0.87	5.70	18.75	30.00	11.25
84.618	15.35	0.98	6.40	22.73	30.00	7.27
114.953	18.20	1.10	6.20	25.51	30.00	4.49
145.288	20.18	1.35	2.60	24.13	30.00	5.87
161.981	20.02	1.36	3.60	24.98	30.00	5.02
175.585	20.93	1.40	2.10	24.42	30.00	5.58
* 215.997	21.24	1.51	2.90	25.64	30.00	4.36
236.255	22.19	1.60	4.50	28.30	37.00	8.70
266.590	22.86	1.72	5.60	30.18	37.00	6.82
355.520	14.62	2.11	9.30	26.03	37.00	10.97
374.920	15.56	2.12	7.60	25.27	37.00	11.73
433.112	16.85	2.30	8.60	27.75	37.00	9.25
478.380	18.48	2.42	6.50	27.39	37.00	9.61
536.570	18.86	2.51	5.20	26.56	37.00	10.44
633.576	19.95	2.85	2.60	25.40	37.00	11.60
730.561	20.91	3.13	1.20	25.24	37.00	11.76

- Remarks :
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. The worst emission was detected at 215.997MHz with corrected signal level of 25.64dB μ V/m (limit was 30dB μ V/m) when the antenna was at horizontal polarization and was at 4m high and the turn table was at 320°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test : Apr. 07, 2004 Temperature : 26°CEUT : Display Color Monitor Humidity : 69%Test Mode : S/N TY0304128 w/LG Philips CRT, 1024x768/85Hz, 69kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
67.514	12.33	0.87	11.30	24.50	30.00	5.50
74.000	19.24	0.67	3.20	23.12	30.00	6.88
82.952	14.01	0.96	9.70	24.67	30.00	5.33
115.853	16.84	1.10	4.20	22.14	30.00	7.86
* 146.401	20.86	1.35	3.60	25.81	30.00	4.19
182.395	21.26	1.53	0.80	23.59	30.00	6.41
222.842	21.15	1.54	0.10	22.79	30.00	7.21
263.288	23.13	1.72	3.20	28.05	37.00	8.95
325.154	14.45	1.96	6.80	23.21	37.00	13.79
351.019	15.34	2.10	9.60	27.04	37.00	9.96
435.081	17.20	2.31	7.30	26.81	37.00	10.19
551.275	19.63	2.55	6.20	28.37	37.00	8.63
629.070	19.71	2.84	2.10	24.65	37.00	12.35
758.396	22.39	3.20	1.60	27.19	37.00	9.81

- Remarks :
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. The worst emission was detected at 146.401MHz with corrected signal level of 25.81dBμV/m (limit was 30dBμV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 45°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test : Apr. 07, 2004 Temperature : 26°C

EUT : Display Color Monitor Humidity : 69%

Test Mode : S/N TY0304128 w/LG Philips CRT, 1280x1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
47.625	18.12	0.69	3.53	22.33	30.00	7.67
71.465	12.18	0.87	6.67	19.71	30.00	10.29
79.433	13.76	0.94	6.20	20.90	30.00	9.10
87.333	15.49	0.99	8.30	24.79	30.00	5.21
111.172	18.17	1.11	-1.13	18.14	30.00	11.86
153.501	20.00	1.35	3.17	24.52	30.00	5.48
158.839	20.01	1.35	3.22	24.58	30.00	5.42
182.659	20.69	1.53	1.07	23.29	30.00	6.71
230.299	21.81	1.58	3.81	27.20	37.00	9.80
277.939	23.24	1.73	4.20	29.16	37.00	7.84
320.790	14.06	1.93	11.60	27.60	37.00	9.40
357.022	14.65	2.11	9.20	25.95	37.00	11.05
381.177	15.45	2.12	10.20	27.77	37.00	9.23
441.565	16.70	2.33	6.80	25.83	37.00	11.17
550.262	19.87	2.55	4.10	26.52	37.00	10.48
658.960	21.18	2.92	3.60	27.70	37.00	9.30
731.425	20.91	3.13	1.10	25.14	37.00	11.86

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
39.711	19.75	0.66	-0.80	19.61	30.00	10.39
60.013	13.21	0.85	11.70	25.76	30.00	4.24
63.531	13.04	0.86	10.00	23.90	30.00	6.10
81.757	13.93	0.96	10.20	25.09	30.00	4.91
111.171	16.54	1.11	4.00	21.64	30.00	8.36
134.991	18.14	1.23	2.10	21.48	30.00	8.52
153.845	21.04	1.35	1.50	23.89	30.00	6.11
170.721	20.11	1.37	3.20	24.68	30.00	5.32
206.451	21.34	1.56	0.20	23.09	30.00	6.91
242.181	21.20	1.63	3.20	26.03	37.00	10.97
289.824	24.68	1.77	4.20	30.65	37.00	6.35
321.124	14.16	1.94	9.60	25.70	37.00	11.30
357.360	15.61	2.11	10.30	28.01	37.00	8.99
441.899	17.12	2.33	8.20	27.65	37.00	9.35
550.596	19.63	2.55	5.10	27.27	37.00	9.73
683.449	21.54	2.99	2.30	26.83	37.00	10.17
743.836	21.80	3.16	2.60	27.56	37.00	9.44

- Remarks : 1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 07, 2004 Temperature : 26°CEUT : Display Color Monitor Humidity : 69%Test Mode : S/N TY0304130 w/SAMSUNG (SDI) CRT, 640x480/60Hz, 31kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dB μ V	Emission Level Horizontal dB μ V/m	Limits dB μ V/m	Margin dB
41.368	18.45	0.68	2.80	21.93	30.00	8.07
78.268	13.45	0.93	6.20	20.58	30.00	9.42
110.496	18.17	1.11	3.60	22.88	30.00	7.12
146.177	20.18	1.35	2.10	23.63	30.00	6.37
171.368	20.57	1.37	3.20	25.14	30.00	4.86
244.857	22.29	1.64	3.50	27.43	37.00	9.57
281.238	23.29	1.74	4.50	29.53	37.00	7.47
331.177	14.76	2.01	9.80	26.57	37.00	10.43
378.986	15.37	2.12	7.90	25.39	37.00	11.61
427.735	16.59	2.28	6.90	25.77	37.00	11.23
537.652	18.88	2.52	4.10	25.49	37.00	11.51
647.856	20.39	2.89	1.10	24.38	37.00	12.62
769.561	22.48	3.22	-0.40	25.30	37.00	11.70

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dB μ V	Emission Level Vertical dB μ V/m	Limits dB μ V/m	Margin dB
41.312	19.24	0.68	3.60	23.52	30.00	6.48
78.026	13.54	0.93	8.20	22.67	30.00	7.33
110.196	16.55	1.11	2.30	19.96	30.00	10.04
146.651	20.86	1.35	2.60	24.81	30.00	5.19
171.235	20.11	1.37	1.80	23.28	30.00	6.72
244.457	21.55	1.64	0.60	23.80	37.00	13.20
281.111	24.03	1.74	3.70	29.46	37.00	7.54
330.188	14.88	2.00	8.60	25.47	37.00	11.53
378.346	15.91	2.12	7.80	25.83	37.00	11.17
428.634	16.84	2.29	7.60	26.73	37.00	10.27
536.989	19.09	2.52	3.60	25.20	37.00	11.80
647.465	19.98	2.89	4.80	27.68	37.00	9.32
769.826	22.52	3.22	2.10	27.84	37.00	9.16

- Remarks : 1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 07, 2004 Temperature : 26°CEUT : Display Color Monitor Humidity : 69%Test Mode : S/N TY0304130 w/SAMSUNG (SDI) CRT, 1024x768/85Hz, 69kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
53.590	13.80	0.78	8.40	22.98	30.00	7.02
83.445	15.07	0.97	6.40	22.43	30.00	7.57
115.279	18.20	1.10	-0.80	18.51	30.00	11.49
143.493	19.92	1.35	-1.20	20.07	30.00	9.93
157.250	19.91	1.35	4.52	25.79	30.00	4.22
206.356	20.80	1.56	-0.30	22.05	30.00	7.95
269.721	23.38	1.72	2.30	27.40	37.00	9.60
303.734	13.84	1.84	13.90	29.58	37.00	7.42
323.995	14.17	1.95	7.90	24.02	37.00	12.98
357.788	14.70	2.11	8.60	25.41	37.00	11.59
438.833	16.73	2.32	7.60	26.65	37.00	10.35
540.139	19.16	2.52	5.20	26.89	37.00	10.11
621.184	20.22	2.81	2.40	25.43	37.00	11.57
722.490	20.15	3.10	1.20	24.45	37.00	12.55
823.796	22.92	3.34	0.20	26.46	37.00	10.54

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
55.703	14.49	0.80	7.60	22.89	30.00	7.11
65.915	12.29	0.87	9.10	22.27	30.00	7.73
83.850	14.01	0.97	10.40	25.38	30.00	4.62
115.288	16.86	1.10	5.40	23.36	30.00	6.64
143.183	20.27	1.34	4.30	25.91	30.00	4.09
206.301	21.34	1.56	0.70	23.59	30.00	6.41
269.720	23.00	1.72	2.60	27.32	37.00	9.68
303.734	13.81	1.84	13.60	29.24	37.00	7.76
344.254	14.78	2.09	8.20	25.07	37.00	11.93
384.777	16.21	2.13	9.20	27.54	37.00	9.46
445.560	17.31	2.34	9.20	28.85	37.00	8.15
587.389	19.96	2.68	3.90	26.54	37.00	10.46
688.695	21.20	3.00	1.20	25.40	37.00	11.60
790.008	22.23	3.26	1.20	26.69	37.00	10.31

- Remarks : 1. All readings are Quasi-Peak values.
2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 07, 2004 Temperature : 26°CEUT : Display Color Monitor Humidity : 69%Test Mode : S/N TY0304130 w/SAMSUNG (SDI) CRT, 1280×1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
56.308	12.46	0.81	4.80	18.07	30.00	11.93
72.023	12.49	0.89	7.60	20.98	30.00	9.02
83.018	15.07	0.96	2.20	18.23	30.00	11.77
111.392	18.17	1.11	2.40	21.67	30.00	8.33
142.931	19.92	1.34	2.80	24.06	30.00	5.94
* 157.388	19.91	1.35	5.00	26.26	30.00	3.74
208.825	20.80	1.52	0.30	22.63	30.00	7.37
254.131	22.65	1.69	6.20	30.55	37.00	6.45
270.008	23.38	1.72	7.00	32.10	37.00	4.90
325.593	14.59	1.96	8.30	24.85	37.00	12.15
341.466	14.73	2.07	9.10	25.90	37.00	11.10
381.176	15.45	2.12	7.00	24.57	37.00	12.43
452.922	16.75	2.37	8.20	27.32	37.00	9.68
548.454	19.36	2.54	6.50	28.40	37.00	8.60
691.752	22.06	3.01	1.60	26.67	37.00	10.33
771.362	22.63	3.23	2.40	28.27	37.00	8.73

- Remarks :
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. The worst emission was detected at 157.388MHz with corrected signal level of 26.26dBμV/m (limit was 30dBμV/m) when the antenna was at horizontal polarization and was at 4m high and the turn table was at 340°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test : Apr. 07, 2004 Temperature : 26°CEUT : Display Color Monitor Humidity : 69%Test Mode : S/N TY0304130 w/SAMSUNG (SDI) CRT, 1280×1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
56.312	14.08	0.81	5.70	20.60	30.00	9.40
72.018	11.84	0.89	7.00	19.73	30.00	10.27
83.020	14.01	0.96	10.60	25.57	30.00	4.43
111.385	16.54	1.11	1.40	19.04	30.00	10.96
142.931	20.27	1.34	3.20	24.81	30.00	5.19
* 156.031	21.02	1.35	3.90	26.27	30.00	3.73
208.852	21.37	1.52	0.80	23.70	30.00	6.30
277.968	23.23	1.73	1.20	26.16	37.00	10.84
293.800	24.32	1.79	0.60	26.71	37.00	10.29
317.636	14.28	1.91	8.90	25.09	37.00	11.91
381.076	15.73	2.12	8.60	26.45	37.00	10.55
476.610	18.99	2.41	7.60	29.00	37.00	8.00
556.226	19.67	2.56	6.10	28.33	37.00	8.67
651.756	20.57	2.90	3.20	26.67	37.00	10.33
715.440	20.75	3.08	4.20	28.03	37.00	8.97
858.730	24.48	3.37	-1.80	26.05	37.00	10.95

- Remarks :
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. The worst emission was detected at 156.031MHz with corrected signal level of 26.27dBμV/m (limit was 30dBμV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 30°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

3.7.2. 1GHz-2GHz frequency and 3 meters distance measurement.
(At No. 6 open test site)

Date of Test : Apr. 08, 2004 Temperature : 16°C

EUT : Display Color Monitor Humidity : 77%

Test Mode : S/N TY0304128 w/LG Philips CRT, 1280×1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	(Peak) Limits dBμV/m	Margin dB
1106.00	24.25	2.75	11.47	38.47	74.00	35.53
1235.00	24.63	2.63	10.08	37.35	74.00	36.65
1516.00	25.38	3.93	7.39	36.70	74.00	37.30
1638.00	25.95	3.85	6.94	36.74	74.00	37.26
1729.00	26.33	4.02	6.57	36.91	74.00	37.09
1806.00	26.67	4.62	6.62	37.90	74.00	36.10

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	(Peak) Limits dBμV/m	Margin dB
1106.00	24.25	2.75	8.18	35.18	74.00	38.82
1235.00	24.63	2.63	9.89	37.16	74.00	36.84
1516.00	25.38	3.93	7.55	36.86	74.00	37.14
1638.00	25.95	3.85	5.80	35.60	74.00	38.40
1729.00	26.33	4.02	6.56	36.90	74.00	37.10
1806.00	26.67	4.62	6.03	37.31	74.00	36.69

- Remark :
1. All readings are Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 08, 2004 Temperature : 16°C

EUT : Display Color Monitor Humidity : 77%

Test Mode : S/N TY0304128 w/LG Philips CRT, 1280×1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	(Average) Limits dBμV/m	Margin dB
1106.00	24.25	2.75	3.63	30.63	54.00	23.37
1235.00	24.63	2.63	1.98	29.25	54.00	24.75
1516.00	25.38	3.93	-0.91	28.40	54.00	25.60
1638.00	25.95	3.85	-1.60	28.20	54.00	25.80
1729.00	26.33	4.02	0.96	31.30	54.00	22.70
1806.00	26.67	4.62	0.01	31.29	54.00	22.71

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	(Average) Limits dBμV/m	Margin dB
1106.00	24.25	2.75	3.19	30.19	54.00	23.81
1235.00	24.63	2.63	2.38	29.65	54.00	24.35
1516.00	25.38	3.93	1.12	30.43	54.00	23.57
1638.00	25.95	3.85	0.19	29.99	54.00	24.01
1729.00	26.33	4.02	0.36	30.70	54.00	23.30
1806.00	26.67	4.62	0.48	31.76	54.00	22.24

- Remark :
1. All readings are Average values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 08, 2004 Temperature : 16°C

EUT : Display Color Monitor Humidity : 77%

Test Mode : S/N TY0304130 w/SAMSUNG (SDI) CRT, 1280×1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	(Peak) Limits dBμV/m	Margin dB
1129.00	24.32	2.63	10.90	37.84	74.00	36.16
1236.00	24.63	2.63	9.98	37.25	74.00	36.75
1396.00	25.05	3.16	7.84	36.04	74.00	37.96
1409.00	25.09	3.22	9.03	37.34	74.00	36.66
1638.00	25.95	3.85	7.49	37.29	74.00	36.71
1718.00	26.29	4.05	7.24	37.58	74.00	36.42

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	(Peak) Limits dBμV/m	Margin dB
1128.00	24.32	2.63	10.27	37.22	74.00	36.79
1235.00	24.63	2.63	7.03	34.30	74.00	39.70
1396.00	25.05	3.16	7.96	36.16	74.00	37.84
1409.00	25.09	3.22	10.09	38.40	74.00	35.60
1638.00	25.95	3.85	8.49	38.29	74.00	35.71
1718.00	26.29	4.05	6.84	37.18	74.00	36.82

- Remark :
1. All readings are Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading.

Date of Test : Apr. 08, 2004 Temperature : 16°C

EUT : Display Color Monitor Humidity : 77%

Test Mode : S/N TY0304130 w/SAMSUNG (SDI) CRT, 1280×1024/75Hz, 80kHz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	(Average) Limits dBμV/m	Margin dB
1129.00	24.32	2.63	4.22	31.16	54.00	22.84
1236.00	24.63	2.63	3.24	30.51	54.00	23.49
1396.00	25.05	3.16	2.50	30.70	54.00	23.30
1409.00	25.09	3.22	1.02	29.33	54.00	24.67
1638.00	25.95	3.85	1.19	30.99	54.00	23.01
1718.00	26.29	4.05	-0.80	29.54	54.00	24.46

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	(Average) Limits dBμV/m	Margin dB
1128.00	24.32	2.63	3.21	30.16	54.00	23.85
1235.00	24.63	2.63	4.25	31.52	54.00	22.48
1396.00	25.05	3.16	0.30	28.50	54.00	25.50
1409.00	25.09	3.22	1.98	30.29	54.00	23.71
1638.00	25.95	3.85	-1.22	28.58	54.00	25.42
1718.00	26.29	4.05	0.78	31.12	54.00	22.88

- Remark :
1. All readings are Average values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading.

4. DEVIATION TO TEST SPECIFICATIONS

[NONE]