

TEST REPORT FOR CERTIFICATION
Philips Electronics Industries (Taiwan) Ltd.
Display Color Monitor
Model No. : P1230
FCC ID. : A3KM107

Brand : DELL

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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File Number : EM-G921300
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Date of Test : Dec. 15 ~ 26, 2003
Date of Report : Dec. 29, 2003

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TEST REPORT CERTIFICATION

Applicant	:	Philips Electronics Industries (Taiwan) Ltd.
Manufacturer #1	:	Philips Electronics Industries (Taiwan) Ltd.
Manufacturer #2	:	Skyway (Dong Guan) Monitor Factory
Manufacturer #3	:	Philips Consumer Electronics Co., of Suzhou Ltd.
Manufacturer #4	:	Philips Monitors Manufacturing Hungary
EUT Description	:	Display Color Monitor
FCC ID.	:	A3KM107
(A) MODEL NO. : P1230		
(B) SERIAL NO. : N/A		
(C) BRAND : DELL		
(D) POWER SUPPLY : AC 100-240V~, 60-50Hz		
(Test Voltage: AC 120V/60Hz)		

Measurement Standards Used:
FCC Part 15B/ Mar. 2003 and CISPR 22/1997
ANSI C63.4-1992

The device described as above was tested by Audix Corporation to determine the maximum emission level emanating from the device. The measurement results are contained in this test report and Audix Corporation is assumed full responsibility for the accuracy and completeness of these measurements. The report shows that the EUT is technically compliance with the provisions of Sections 15.107(a) and 15.109(a)(g) of Part 15 of the FCC Rules.

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

Date of Test : Dec. 15 ~ 26, 2003

Prepared by: Monica Chang Dec. 29, 2003
(Monica Chang/Assistant)

Test Engineer : Allen Wang Dec. 29, 2003
(Allen Wang/Deputy Manager)

Approved & Authorized Signer : Leon Liu Dec 30 2003
(Leon Liu/Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Display Color Monitor
Model Number	:	P1230
Brand	:	DELL
Applicant	:	Philips Electronics Industries (Taiwan) Ltd. 5, Tze Chiang 1 Road, Chungli Industrial Park Chungli, Taoyuan, Taiwan, R.O.C.
Manufacturer #1	:	Philips Electronics Industries (Taiwan) Ltd. 5, Tze Chiang 1 Road, Chungli Industrial Park P.O. Box 123, Chungli, Taoyuan, Taiwan, R.O.C
Manufacturer #2	:	Skyway (Dong Guan) Monitor Factory Industrial Zone, Da Ling Shan Town, Dong Guan City, Guang Dong, China
Manufacturer #3	:	Philips Consumer Electronics Co., of Suzhou Ltd. No. 161, Zhujiang Road, New District, Suzhou 215011, China
Manufacturer #4	:	Philips Monitors Manufacturing Hungary Free Trade Zone Limited Liability Company (PMM LLC) H-9700 Szombathely, Puskas tivadar u. 10., HUNGARY
CRT	:	Mitsubishi, M/N M51LVT42X71 A S/N 3K700432 A
Scanning Frequency	:	Horizontal: 30kHz-130kHz Vertical: 50Hz-160Hz
Max. Resolution	:	2048*1536
D-Sub Cable #1	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
D-Sub Cable #2	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
Date of Receipt of Sample	:	Dec. 13, 2003
Date of Test	:	Dec. 15 ~ 26, 2003

1.2. Tested Supporting System Details

1.2.1. PC SYSTEM

Model Name	:	DHM
Serial Number	:	7NRN618
FCC ID	:	By DoC
BSMI ID	:	3902E524
Manufacturer	:	DELL
VGA Card	:	NVIDIA, M/N FX5200
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.2. KEYBOARD

Model Number	:	SK-8110
Serial Number	:	N/A
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	:	980034400
FCC ID	:	IFAXDM1414
Manufacturer	:	Aceex
Data Cable	:	Shielded, Detachable, 1.2m
Power Adapter	:	Amigo, Model AM-91000A
		Non-Shielded, Undetachable, 1.8m

1.2.5. MOUSE

Model Number	:	IntelliMouse 1.3A PS/2 Compatible
Serial Number	:	N/A
FCC ID	:	FCC By DoC
BSMI ID	:	3892A378
Manufacturer	:	DELL
Data Cable	:	Non-Shielded, Undetachable, 1.8m

1.2.6. USB STORAGE MEDIA

Model Number	:	USM64UZ
Serial Number	:	N/A
BSMI ID	:	D33021
FCC ID	:	FCC By DoC
Manufacturer	:	SONY
USB Cable	:	Shielded, Detachable, 1.5m

1.2.7. MICROPHONE

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

1.2.8. SPEAKER

Model Number	:	J-008
Serial Number	:	J80547833
Manufacturer	:	(J-S) JAZZ HIPSTER
Data Cable	:	Non-Shielded, Undetachable, 1m

1.2.9. WALKMAN

Model Number	:	RQ-P35LT-K
Serial Number	:	HA08697
Manufacturer	:	Panasonic
Data Cable	:	Non-Shielded, Detachable, 1.8m

1.2.10. POWER CORD	:	Non-Shielded, Detachable, 1.8m
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1.3. Description of Test Facility

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

Test Site : **No. 4 Shielded Room**
 No. 67-4, Tin-Fu Tsun, Lin-Kou,
 Taipei County, Taiwan, R.O.C.

No. 3 Open Test Site
 Federal Communication Commission
 Registration Number: 90996
 Filing on February 10, 2003
 No. 67-4, Tin-Fu Tsun, Lin-Kou,
 Taipei County, Taiwan, R.O.C.

Semi-Anechoic Chamber
 Federal Communication Commission
 Registration Number: 90993
 Filing on May 16, 2003
 No. 53-11, Tin-Fu Tsun, Lin-Kou,
 Taipei County, Taiwan, R.O.C.

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

DAR-Registration No. : DAT-P-145/03-00

1.4. Measurement Uncertainty

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

Remark Uncertainty = $k_{u_c}(y)$

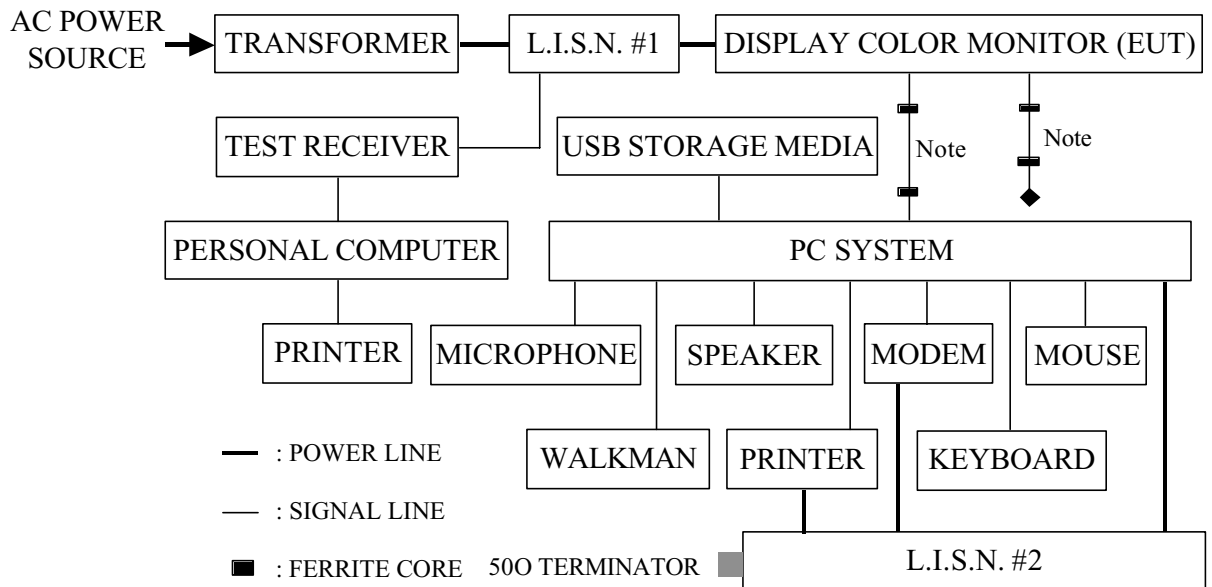
2. CONDUCTED EMISSION TEST

2.1. Test Equipment

The following test equipment was used during the conducted emission tests

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESHS10	844591/015	Mar. 05, 03'	Mar. 04, 04'
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



Note: D-Sub Cable #1 or #2. (D-Sub 1 and 2 input can't be used at the same time.)

2.3. Conducted Emission Limit (§15.107)

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

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 was 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	:	P1230
Serial No.	:	N/A
Brand	:	DELL
Manufacturer	:	Philips Electronics Industries (Taiwan) Ltd.
CRT	:	Mitsubishi, M/N M51LVT42X71 A S/N 3K700432 A
Scanning Frequency	:	Horizontal: 30kHz-130kHz Vertical: 50Hz-160Hz
Max. Resolution	:	2048*1536
Data Cable (D-Sub) #1	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
Data Cable (D-Sub) #1	:	Shielded, Detachable, 1.8m Bonded two ferrite cores

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. The PC system running the self-test program "H-V1.8" sent character "H" to the Display Color Monitor (EUT) through VGA card and the screen displayed and filled with pattern "H" by EUT's resolution via the D-Sub 1 or D-Sub 2 input.

2.5.4. 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). The peripheral devices power cord connected to the power mains through another 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 of equipment and all of the interface cables were changed according to FCC ANSI C63.4-1992 during conducted measurement.

The bandwidth of the R&S Test Receiver ESHS10 was set at 10kHz.

The frequency range from 150kHz to 30MHz was checked.

2.7. Conducted Emission Measurement Results

PASSED. Please refer to the following pages.

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

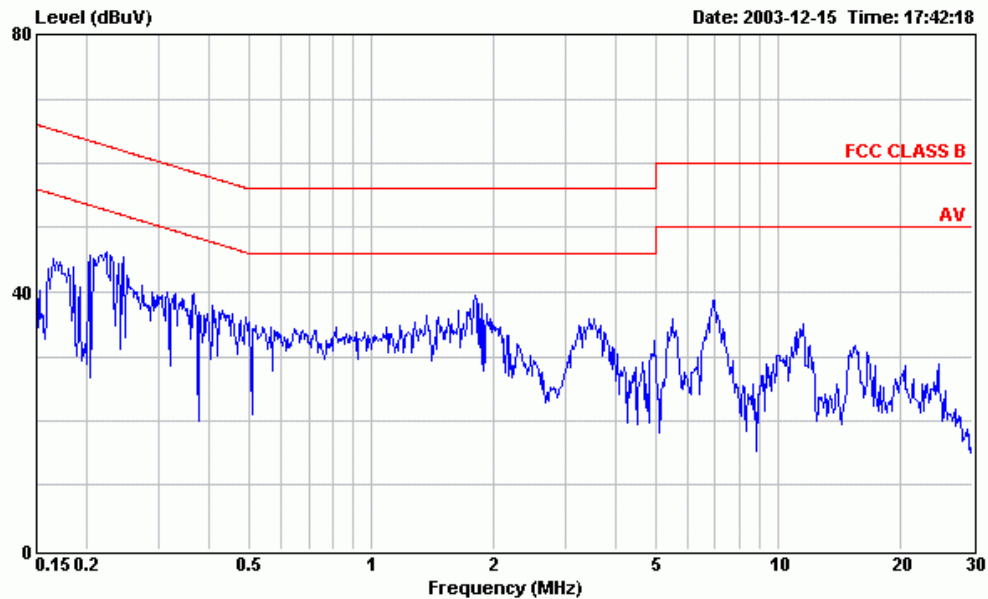
The EUT was tested with the following test modes during conducted emission measurement and all the test results are attached in next pages.

EUT: Display Color Monitor Model No.: P1230

(Test Date: Dec. 15, 2003 Temperature: 18 Humidity: 56%)

Mode	Input	Resolution/ Frequency	Reference Data #
1.	D-Sub 1	640*480/60Hz, 31.5kHz	# 100 (101, 102); # 97 (98, 99)
2.		1024*768/75Hz, 60kHz	# 91 (92, 93)); # 94 (95, 96)
3.		1600*1200/85Hz, 106.5kHz	# 88 (89, 90); # 85 (86, 87)
4.		1920*1400/85Hz, 128.5kHz	# 79 (80, 81); # 82 (83, 84)
5.		2048*1536/75Hz, 120kHz	# 76 (77, 78); # 73 (74, 75)
6.	D-Sub 2	2048*1536/75Hz, 120kHz	# 103 (104, 105); # 106 (107, 108)

Data#: 100 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 640*480 / 60Hz;31.5KHz(D-SUB 1)

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Date: 2003-12-15 Time: 17:42:23

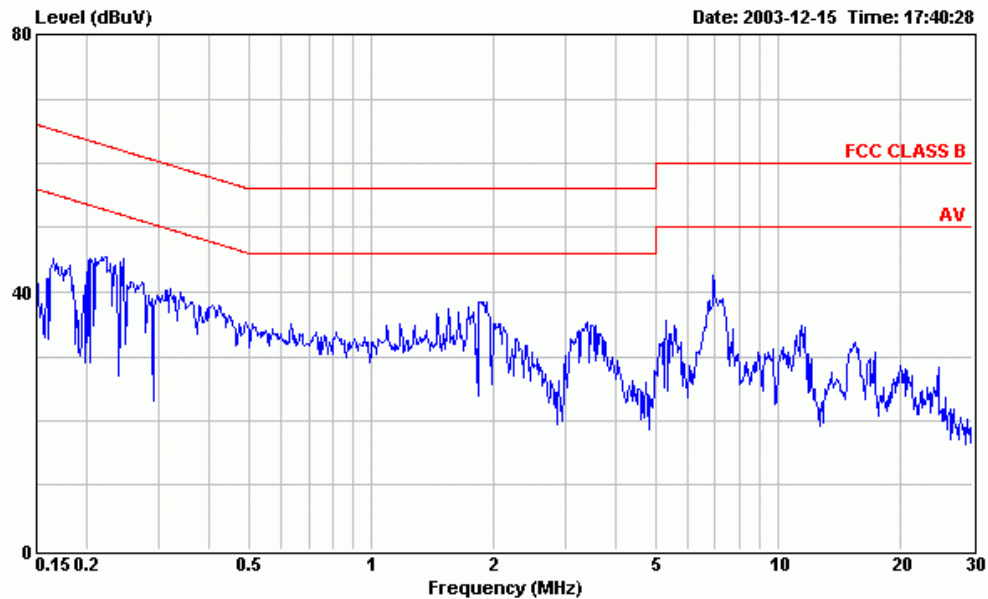
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 640*480 / 60Hz;31.5KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.53	-22.45	65.98	43.20	0.30	0.03	QP
2	0.223	44.55	-18.14	62.69	44.32	0.18	0.05	QP
3	0.490	33.74	-22.42	56.16	33.60	0.10	0.04	QP
4	1.900	34.29	-21.71	56.00	34.11	0.10	0.08	QP
5	3.487	31.71	-24.29	56.00	31.51	0.10	0.10	QP
6	6.998	33.43	-26.57	60.00	33.19	0.16	0.08	QP

Data#: 102 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	29.91	-26.07	55.98	29.58	0.30	0.03	Average
2	0.223	27.45	-25.24	52.69	27.22	0.18	0.05	Average
3	0.490	19.66	-26.50	46.16	19.52	0.10	0.04	Average
4	1.900	20.17	-25.83	46.00	19.99	0.10	0.08	Average
5	3.487	23.20	-22.80	46.00	23.00	0.10	0.10	Average
6	6.998	23.67	-26.33	50.00	23.43	0.16	0.08	Average

Data#: 97 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 640*480 / 60Hz;31.5KHz(D-SUB 1)

Data#: 98 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:40:53

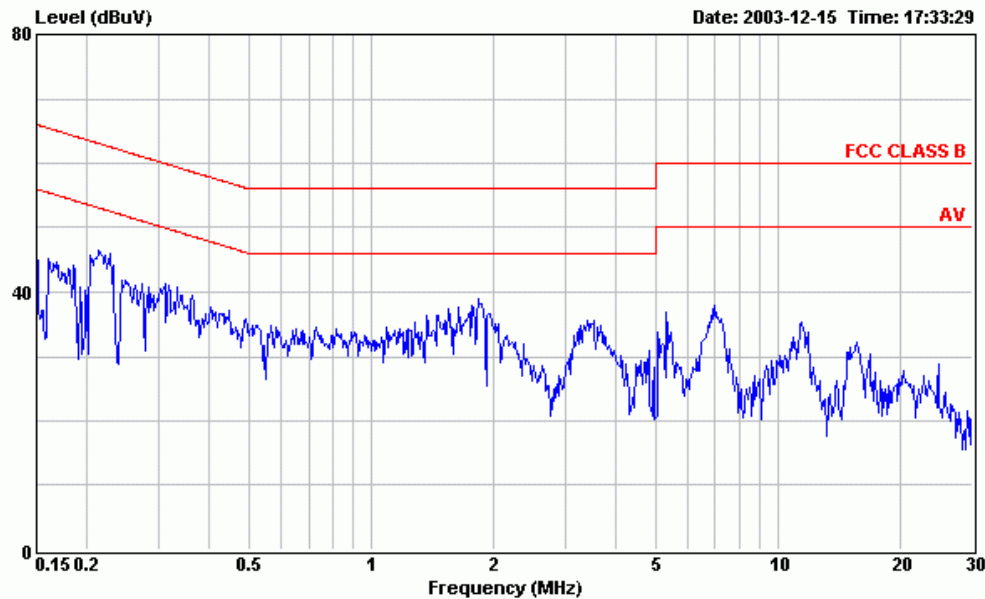
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 640*480 / 60Hz;31.5KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	44.29	-21.69	65.98	43.96	0.30	0.03	QP
2	0.225	44.37	-18.25	62.62	44.14	0.18	0.05	QP
3	0.488	33.64	-22.57	56.21	33.50	0.10	0.04	QP
4	1.897	34.81	-21.19	56.00	34.63	0.10	0.08	QP
5	3.488	31.29	-24.71	56.00	31.09	0.10	0.10	QP
6	6.999	36.68	-23.32	60.00	36.44	0.16	0.08	QP

Data#: 99 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	29.03	-26.95	55.98	28.70	0.30	0.03	Average
2	0.225	25.44	-27.18	52.62	25.21	0.18	0.05	Average
3	0.488	20.01	-26.20	46.21	19.87	0.10	0.04	Average
4	1.897	19.71	-26.29	46.00	19.53	0.10	0.08	Average
5	3.488	21.15	-24.85	46.00	20.95	0.10	0.10	Average
6	6.999	24.46	-25.54	50.00	24.22	0.16	0.08	Average

Data#: 91 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1024*768 / 75Hz;60KHz(D-SUB 1)

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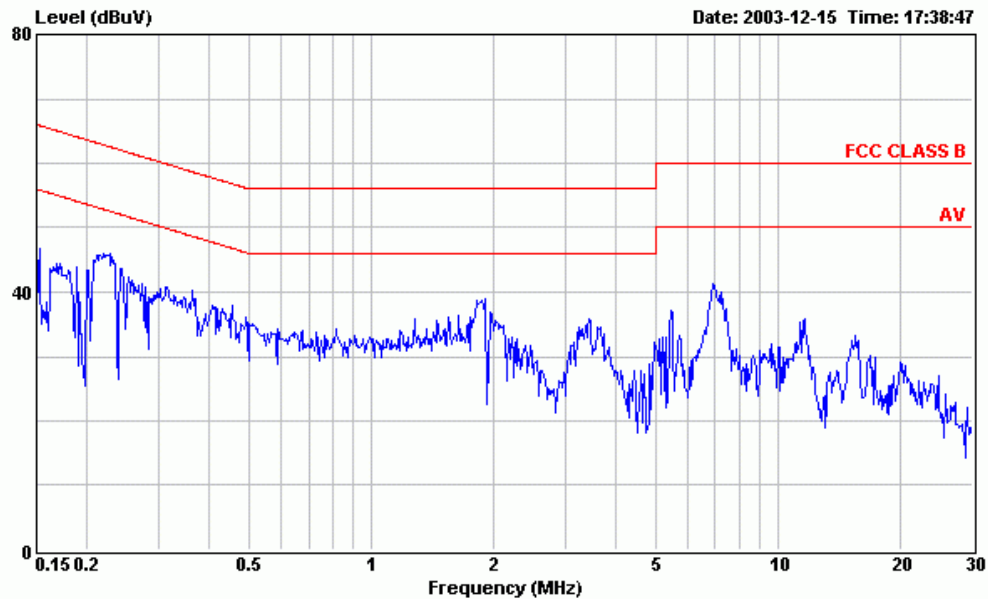
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1024*768 / 75Hz;60KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.93	-22.05	65.98	43.60	0.30	0.03	QP
2	0.226	44.49	-18.09	62.58	44.26	0.18	0.05	QP
3	0.491	33.68	-22.46	56.14	33.54	0.10	0.04	QP
4	1.898	34.25	-21.75	56.00	34.07	0.10	0.08	QP
5	3.492	31.43	-24.57	56.00	31.23	0.10	0.10	QP
6	6.992	33.61	-26.39	60.00	33.37	0.16	0.08	QP

Data#: 93 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	30.68	-25.30	55.98	30.35	0.30	0.03	Average
2	0.226	25.52	-27.06	52.58	25.29	0.18	0.05	Average
3	0.491	19.04	-27.10	46.14	18.90	0.10	0.04	Average
4	1.898	19.28	-26.72	46.00	19.10	0.10	0.08	Average
5	3.492	21.60	-24.40	46.00	21.40	0.10	0.10	Average
6	6.992	23.24	-26.76	50.00	23.00	0.16	0.08	Average

Data#: 94 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1024*768 / 75Hz;60KHz(D-SUB 1)

Data#: 95 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:39:08

Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1024*768 / 75Hz;60KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	42.50	-23.48	65.98	42.50	0.00	0.00	QP
2	0.221	44.36	-18.41	62.77	44.36	0.00	0.00	QP
3	0.489	33.66	-22.53	56.19	33.66	0.00	0.00	QP
4	1.894	35.04	-20.96	56.00	35.04	0.00	0.00	QP
5	3.492	31.23	-24.77	56.00	31.23	0.00	0.00	QP
6	6.997	36.86	-23.14	60.00	36.86	0.00	0.00	QP

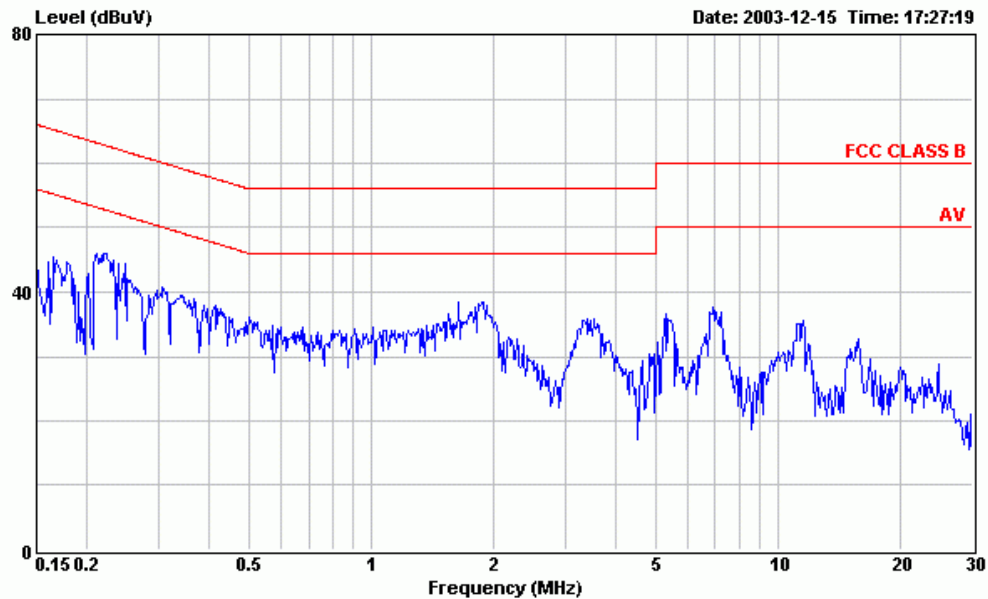
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	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	30.98	-25.00	55.98	30.65	0.30	0.03	Average
2	0.221	28.65	-24.12	52.77	28.41	0.19	0.05	Average
3	0.489	19.21	-26.98	46.19	19.07	0.10	0.04	Average
4	1.894	19.94	-26.06	46.00	19.76	0.10	0.08	Average
5	3.492	21.27	-24.73	46.00	21.07	0.10	0.10	Average
6	6.997	25.70	-24.30	50.00	25.46	0.16	0.08	Average



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Web:www.ttemc.com.tw

Data#: 88 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
EUT : Display color monitor M/N:P1230
POWER : 120Vac / 60Hz(18°C / 56%)
MEMO : 1600*1200 / 85Hz;106.5KHz(D-SUB 1)

Data#: 89 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:27:59

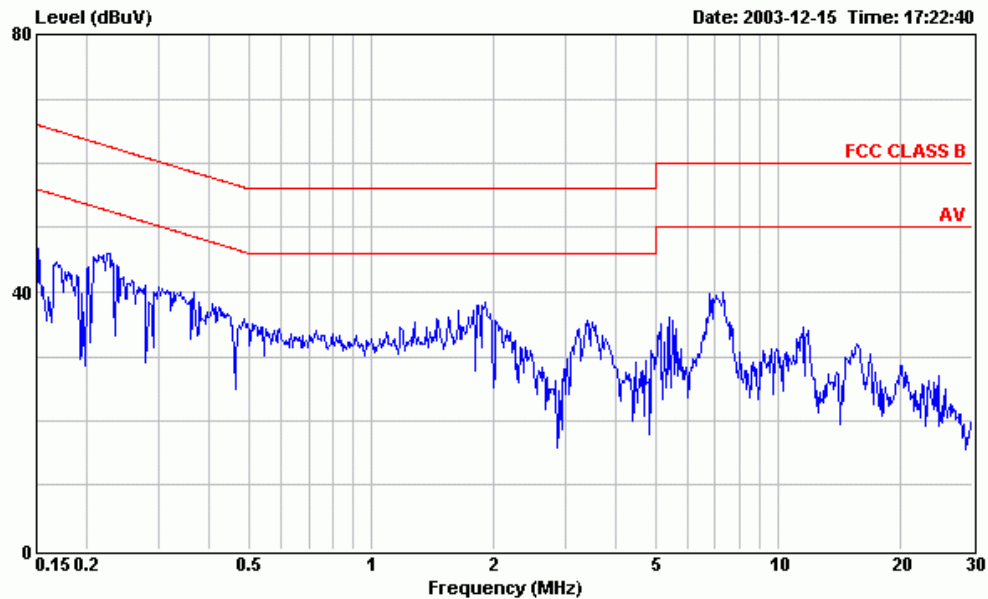
Site : No.4 Shielded room
Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
EUT : Display color monitor M/N:P1230
POWER : 120Vac / 60Hz(18°C / 56%)
MEMO : 1600*1200 / 85Hz;106.5KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.45	-22.53	65.98	43.12	0.30	0.03	QP
2	0.225	44.53	-18.09	62.62	44.30	0.18	0.05	QP
3	0.493	33.74	-22.38	56.12	33.60	0.10	0.04	QP
4	1.897	34.21	-21.79	56.00	34.03	0.10	0.08	QP
5	3.497	31.59	-24.41	56.00	31.39	0.10	0.10	QP
6	6.989	33.37	-26.63	60.00	33.13	0.16	0.08	QP

Data#: 90 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	31.85	-24.13	55.98	31.52	0.30	0.03	Average
2	0.225	28.68	-23.94	52.62	28.45	0.18	0.05	Average
3	0.493	18.83	-27.29	46.12	18.69	0.10	0.04	Average
4	1.897	18.56	-27.44	46.00	18.38	0.10	0.08	Average
5	3.497	20.24	-25.76	46.00	20.04	0.10	0.10	Average
6	6.989	22.29	-27.71	50.00	22.05	0.16	0.08	Average

Data#: 85 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1600*1200 / 85Hz;106.5KHz(D-SUB 1)

Data#: 86 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:23:11

Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1600*1200 / 85Hz;106.5KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.30	-22.68	65.98	42.97	0.30	0.03	QP
2	0.223	44.33	-18.39	62.72	44.10	0.18	0.05	QP
3	0.491	33.56	-22.58	56.14	33.42	0.10	0.04	QP
4	1.898	34.77	-21.23	56.00	34.59	0.10	0.08	QP
5	3.503	30.99	-25.01	56.00	30.79	0.10	0.10	QP
6	6.995	36.56	-23.44	60.00	36.32	0.16	0.08	QP

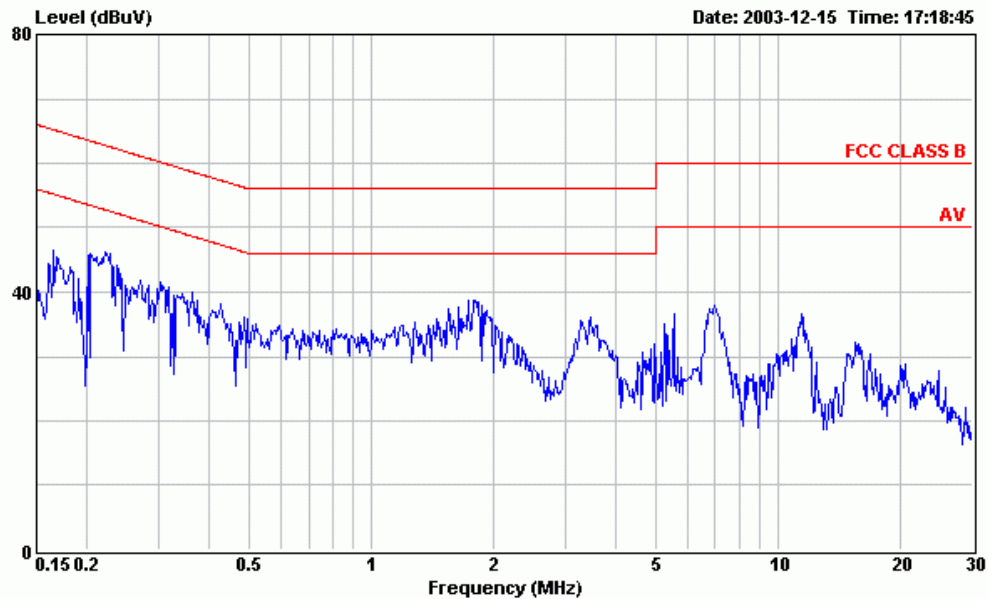
Data#: 87 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	30.91	-25.07	55.98	30.58	0.30	0.03	Average
2	0.223	27.77	-24.95	52.72	27.54	0.18	0.05	Average
3	0.491	19.81	-26.33	46.14	19.67	0.10	0.04	Average
4	1.898	20.33	-25.67	46.00	20.15	0.10	0.08	Average
5	3.503	20.94	-25.06	46.00	20.74	0.10	0.10	Average
6	6.995	26.46	-23.54	50.00	26.22	0.16	0.08	Average



EMC Laboratory
No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei
County, Taiwan R.O.C. Post Code:24443
Tel:+886-2-26092133 Fax:+886-2-26099303
Email:ttemc@ttemc.com.tw
Web:www.ttemc.com.tw

Data#: 79 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
EUT : Display color monitor M/N:P1230
POWER : 120Vac / 60Hz(18°C / 56%)
MEMO : 1920*1440 / 85Hz;128.5KHz(D-SUB 1)

Data#: 80 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:18:55

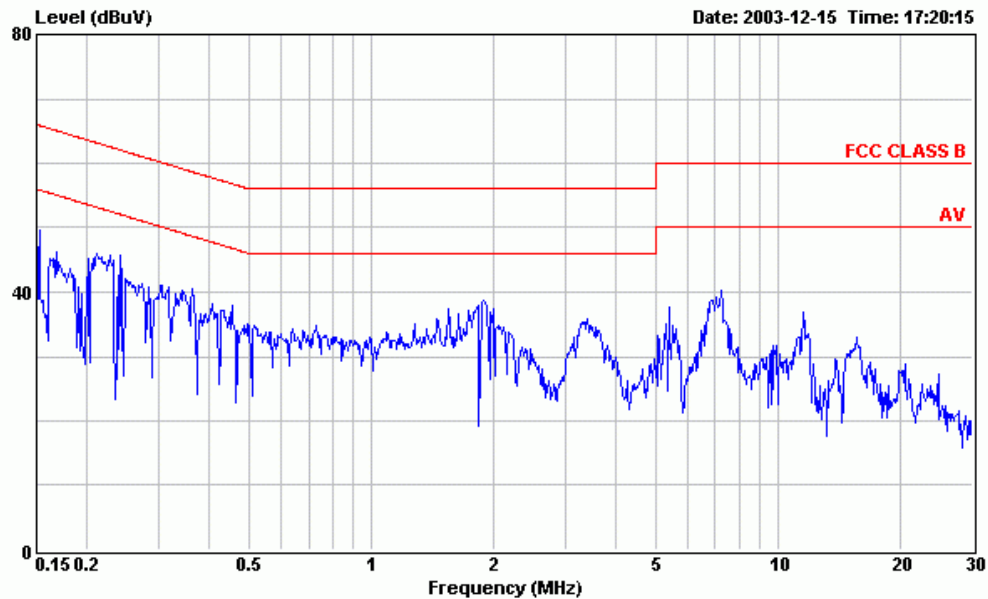
Site : No.4 Shielded room
Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
EUT : Display color monitor M/N:P1230
POWER : 120Vac / 60Hz(18°C / 56%)
MEMO : 1920*1440 / 85Hz;128.5KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.41	-22.57	65.98	43.08	0.30	0.03	QP
2	0.228	44.23	-18.30	62.53	44.00	0.18	0.05	QP
3	0.489	33.64	-22.55	56.19	33.50	0.10	0.04	QP
4	1.889	34.45	-21.55	56.00	34.27	0.10	0.08	QP
5	3.500	31.81	-24.19	56.00	31.61	0.10	0.10	QP
6	6.996	33.59	-26.41	60.00	33.35	0.16	0.08	QP

Data#: 81 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	30.70	-25.28	55.98	30.37	0.30	0.03	Average
2	0.228	26.00	-26.53	52.53	25.77	0.18	0.05	Average
3	0.489	20.14	-26.05	46.19	20.00	0.10	0.04	Average
4	1.889	19.19	-26.81	46.00	19.01	0.10	0.08	Average
5	3.500	21.97	-24.03	46.00	21.77	0.10	0.10	Average
6	6.996	22.39	-27.61	50.00	22.15	0.16	0.08	Average

Data#: 82 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1920*1440 / 85Hz;128.5KHz(D-SUB 1)

Data#: 83 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:21:03

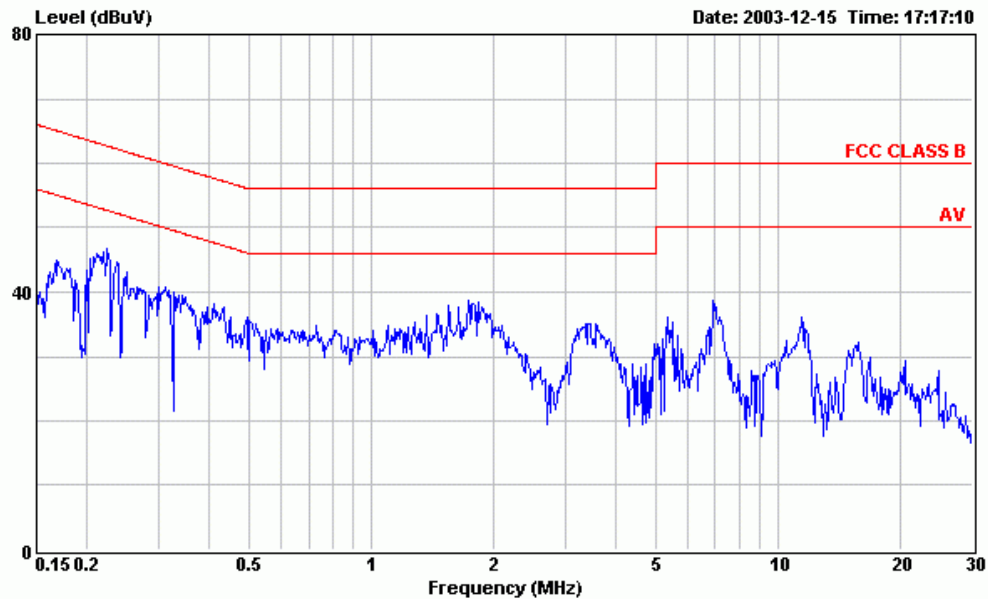
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 1920*1440 / 85Hz;128.5KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	42.92	-23.06	65.98	42.59	0.30	0.03	QP
2	0.223	44.33	-18.39	62.72	44.10	0.18	0.05	QP
3	0.488	33.50	-22.71	56.21	33.36	0.10	0.04	QP
4	1.891	34.75	-21.25	56.00	34.57	0.10	0.08	QP
5	3.509	31.14	-24.86	56.00	30.94	0.10	0.10	QP
6	6.992	36.76	-23.24	60.00	36.52	0.16	0.08	QP

Data#: 84 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	31.38	-24.60	55.98	31.05	0.30	0.03	Average
2	0.223	28.26	-24.46	52.72	28.03	0.18	0.05	Average
3	0.488	19.78	-26.43	46.21	19.64	0.10	0.04	Average
4	1.891	19.23	-26.77	46.00	19.05	0.10	0.08	Average
5	3.509	20.46	-25.54	46.00	20.26	0.10	0.10	Average
6	6.992	25.87	-24.13	50.00	25.63	0.16	0.08	Average

Data#: 76 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 1)

Data#: 77 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:17:15

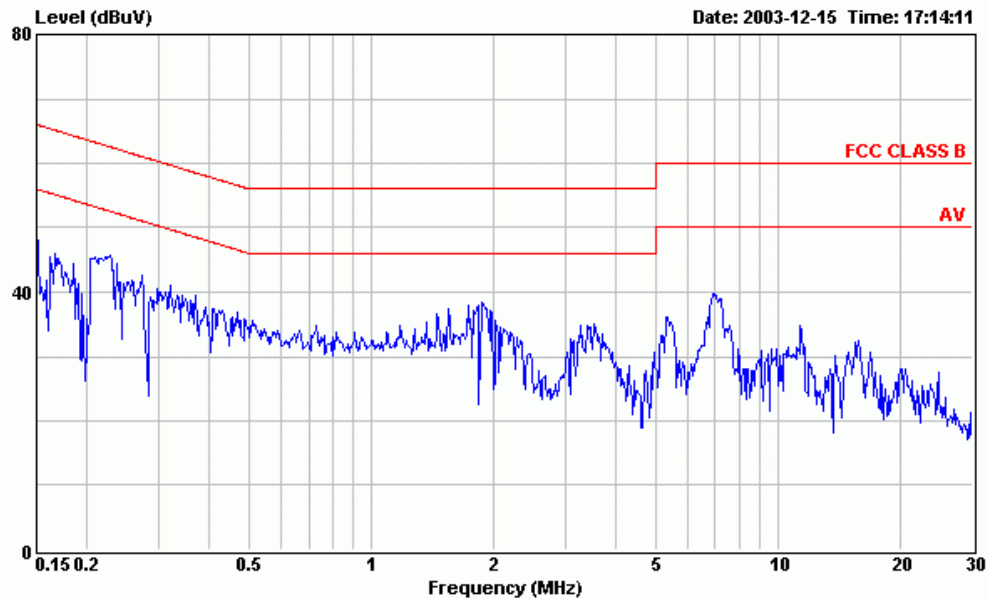
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.06	-22.92	65.98	42.73	0.30	0.03	QP
2	0.225	44.95	-17.68	62.63	44.72	0.18	0.05	QP
3	0.489	33.72	-22.47	56.19	33.58	0.10	0.04	QP
4	1.887	34.39	-21.61	56.00	34.21	0.10	0.08	QP
5	3.509	31.56	-24.44	56.00	31.36	0.10	0.10	QP
6	7.000	33.67	-26.33	60.00	33.43	0.16	0.08	QP

Data#: 78 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	31.11	-24.87	55.98	30.78	0.30	0.03	Average
2	0.225	25.03	-27.60	52.63	24.80	0.18	0.05	Average
3	0.489	19.01	-27.18	46.19	18.87	0.10	0.04	Average
4	1.887	19.40	-26.60	46.00	19.22	0.10	0.08	Average
5	3.509	21.23	-24.77	46.00	21.03	0.10	0.10	Average
6	7.000	23.64	-26.36	50.00	23.40	0.16	0.08	Average

Data#: 73 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 1)

Data#: 74 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:16:03

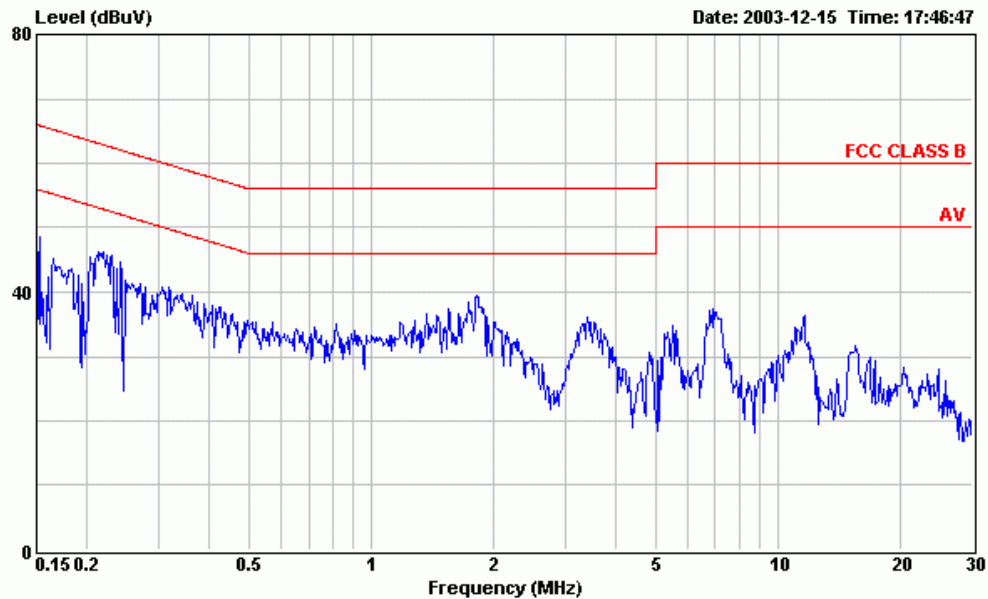
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 1)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	42.72	-23.26	65.98	42.39	0.30	0.03	QP
2	0.226	45.27	-17.31	62.58	45.04	0.18	0.05	QP
3	0.488	33.68	-22.53	56.21	33.54	0.10	0.04	QP
4	1.891	34.85	-21.15	56.00	34.67	0.10	0.08	QP
5	3.519	30.95	-25.05	56.00	30.75	0.10	0.10	QP
6	6.997	36.82	-23.18	60.00	36.58	0.16	0.08	QP

Data#: 75 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	31.15	-24.83	55.98	30.82	0.30	0.03	Average
2	0.226	25.74	-26.84	52.58	25.51	0.18	0.05	Average
3	0.488	18.78	-27.43	46.21	18.64	0.10	0.04	Average
4	1.891	19.50	-26.50	46.00	19.32	0.10	0.08	Average
5	3.519	21.15	-24.85	46.00	20.95	0.10	0.10	Average
6	6.997	25.50	-24.50	50.00	25.26	0.16	0.08	Average

Data#: 103 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 2)

Data#: 104 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:46:52

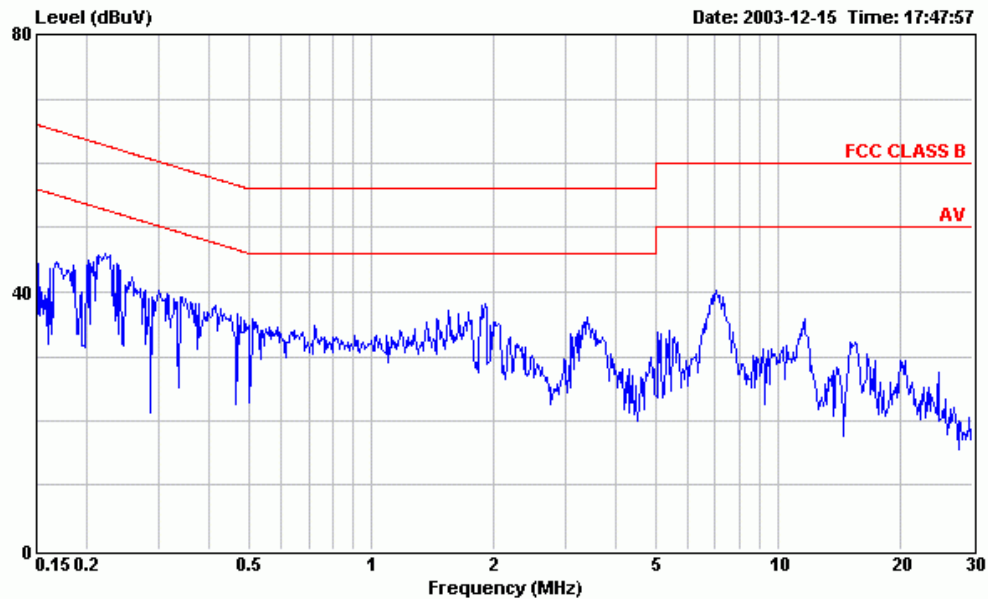
Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) NEUTRAL
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 2)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	43.89	-22.09	65.98	43.56	0.30	0.03	QP
2	0.226	44.41	-18.19	62.60	44.18	0.18	0.05	QP
3	0.492	33.48	-22.66	56.14	33.34	0.10	0.04	QP
4	1.891	34.71	-21.29	56.00	34.53	0.10	0.08	QP
5	3.482	31.85	-24.15	56.00	31.65	0.10	0.10	QP
6	7.005	33.31	-26.69	60.00	33.07	0.16	0.08	QP

Data#: 105 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	30.13	-25.85	55.98	29.80	0.30	0.03	Average
2	0.226	26.51	-26.09	52.60	26.28	0.18	0.05	Average
3	0.492	19.01	-27.13	46.14	18.87	0.10	0.04	Average
4	1.891	19.37	-26.63	46.00	19.19	0.10	0.08	Average
5	3.482	22.80	-23.20	46.00	22.60	0.10	0.10	Average
6	7.005	23.06	-26.94	50.00	22.82	0.16	0.08	Average

Data#: 106 File#: D:\Philips-G921300.EMI



Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 2)

Data#: 107 File#: D:\Philips-G921300.EMI

Date: 2003-12-15 Time: 17:48:13

Site : No.4 Shielded room
 Condition : FCC CLASS B KNW-407(S/R4-031127) LINE
 EUT : Display color monitor M/N:P1230
 POWER : 120Vac / 60Hz(18°C / 56%)
 MEMO : 2048*1536 / 75Hz;120KHz(D-SUB 2)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	42.58	-23.40	65.98	42.25	0.30	0.03	QP
2	0.226	44.35	-18.25	62.60	44.12	0.18	0.05	QP
3	0.493	33.56	-22.56	56.12	33.42	0.10	0.04	QP
4	1.895	35.16	-20.84	56.00	34.98	0.10	0.08	QP
5	3.485	31.49	-24.51	56.00	31.29	0.10	0.10	QP
6	7.007	36.64	-23.36	60.00	36.40	0.16	0.08	QP

Data#: 108 File#: D:\Philips-G921300.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	28.24	-27.74	55.98	27.91	0.30	0.03	Average
2	0.226	26.51	-26.09	52.60	26.28	0.18	0.05	Average
3	0.493	20.98	-25.14	46.12	20.84	0.10	0.04	Average
4	1.895	19.01	-26.99	46.00	18.83	0.10	0.08	Average
5	3.485	20.51	-25.49	46.00	20.31	0.10	0.10	Average
6	7.007	25.74	-24.26	50.00	25.50	0.16	0.08	Average

3. RADIATED EMISSION TEST

3.1. Test Equipment

The following test equipment was used during the radiated emission tests

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

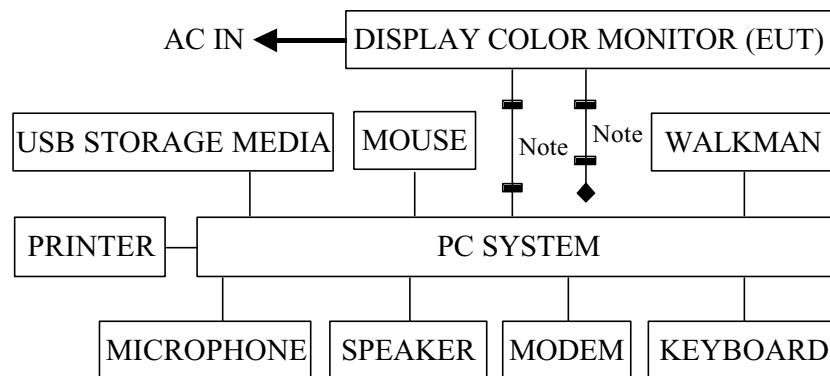
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESVS10	845165/002	Feb. 11, 03'	Feb. 10, 04'
2.	Biconical Antenna	Chase	VBA6106A	1231	Mar. 19, 03'	Mar. 18, 04'
3.	Log Periodic Antenna	Chase	UPA6109	1027	Mar. 19, 03'	Mar. 18, 04'

3.1.2. For frequency above 1GHz (Semi-Anechoic Chamber)

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8593EM	3826A00248	Sep. 24, 03'	Sep. 23, 04'
2.	Amplifier	HP	8449B	3008A00529	Jan. 07, 03'	Jan. 06, 04'
3.	Horn Antenna	EMCO	3115	9112-3775	Apr. 21, 03'	Apr. 20, 04'

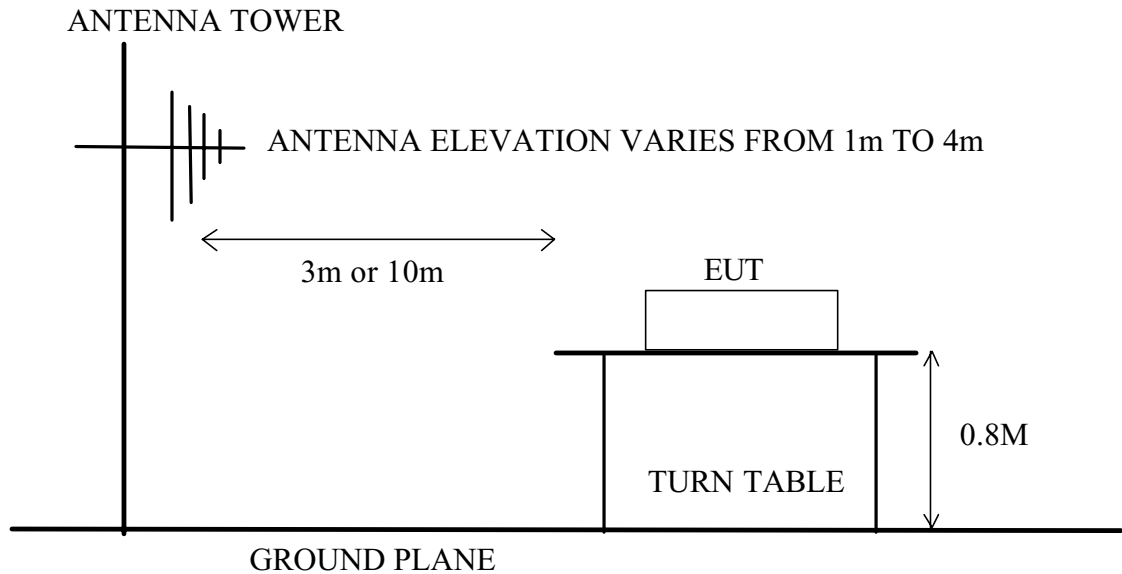
3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators



Note: Data Cable (D-Sub) #1 or #2. (D-Sub 1 and 2 input can't be used at the same time.) ■ : FERRITE CORE

3.2.2. Semi-Anechoic Chamber (3m) & Open Field Test Site (10m) Setup Diagram



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 (dB μ V/m)
30 ~ 230	10	30
230 ~ 1000	10	37
Above 1000	3	74.0 (Peak)

- 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. Therefor, a FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.109 (a, g).

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 meters (or 3 meters at semi-anechoic chamber) 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 ANSI C63.4-1992 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 above 1GHz)

The frequency range from 30MHz to 1000MHz was checked.

For frequency range 30MHz~1000MHz, The EUT was tested with the following test modes at No. 3 Open Field Test Site and all the test results are listed in section 3.7.1.

Mode	Input	Resolution/ Frequency
1.	D-Sub 1	640*480/60Hz, 31.5kHz
2.		1024*768/75Hz, 60kHz
※ 3.		1600*1200/85Hz, 106.5kHz
4.		1920*1400/85Hz, 128.5kHz
5.		2048*1536/75Hz, 120kHz
6.	D-Sub 2	1600*1200/85Hz, 106.5kHz

For frequency range above 1GHz, the test mode **[Mode 3]** was selected in above 1GHz test and measured within Semi-Anechoic Chamber 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.

Date of Test Dec. 16, 2003 Temperature 22EUT Display Color Monitor Humidity 46Test Mode D-Sub 1 Input, 640*480/60Hz, 31kHz

Frequency MHz	Antenna	Cable	Meter Reading	Emission Level		Margin
	Factor dB/m	Loss dB	Horizontal dBμ V	Horizontal dBμ V/m	Limits dBμ V/m	
47.007	16.16	1.20	4.37	21.73	30.00	8.27
67.154	12.01	1.60	4.70	18.31	30.00	11.69
134.307	19.79	2.20	0.26	22.25	30.00	7.75
174.600	20.83	2.60	-1.89	21.54	30.00	8.46
201.462	20.64	2.80	-1.82	21.62	30.00	8.38
241.754	22.08	3.20	-0.50	24.78	37.00	12.22
268.616	23.18	3.20	1.02	27.40	37.00	9.60
315.623	13.91	3.63	5.38	22.92	37.00	14.08
376.062	15.48	4.00	0.11	19.59	37.00	17.41
429.785	16.60	4.40	-0.06	20.94	37.00	16.06
523.801	18.74	5.00	-0.77	22.97	37.00	14.03
631.247	20.24	5.60	-1.11	24.73	37.00	12.27
731.978	21.09	6.00	-0.03	27.06	37.00	9.94

Frequency MHz	Antenna	Cable	Meter Reading	Emission Level		Margin dB
	Factor dB/m	Loss dB	Vertical dBμV	Vertical dBμV/m	Limits dBμV/m	
43.150	18.27	1.20	7.11	26.58	30.00	3.42
67.154	13.26	1.60	3.26	18.12	30.00	11.88
71.830	12.48	1.60	3.30	17.38	30.00	12.62
134.307	19.20	2.20	2.47	23.87	30.00	6.13
174.600	20.32	2.60	-1.95	20.97	30.00	9.03
208.177	22.03	3.00	-2.02	23.01	30.00	6.99
255.185	22.33	3.20	-1.17	24.36	37.00	12.64
349.200	15.48	3.87	6.21	25.56	37.00	11.44
396.208	17.12	4.20	-0.88	20.44	37.00	16.56
476.793	18.15	4.80	0.63	23.58	37.00	13.42
584.239	20.46	5.20	-1.08	24.58	37.00	12.42
658.109	20.86	5.60	-1.15	25.31	37.00	11.69
718.547	21.11	6.00	0.02	27.13	37.00	9.87

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

Date of Test	Dec. 16, 2003	Temperature	22
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EUT	Display Color Monitor	Humidity	46
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Test Mode	D-Sub 1 Input, 1024*768/75Hz, 60kHz		
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Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
66.578	11.97	1.60	8.76	22.33	30.00	7.67
119.509	18.75	2.20	-2.29	18.66	30.00	11.34
139.347	19.70	2.40	-0.26	21.84	30.00	8.16
199.109	20.75	2.80	-0.65	22.90	30.00	7.10
219.008	21.48	3.00	-1.48	23.00	30.00	7.00
278.708	23.53	3.40	0.67	27.60	37.00	9.40
345.041	14.90	3.80	5.29	23.99	37.00	13.01
398.108	16.47	4.20	0.27	20.94	37.00	16.06
457.807	16.78	4.80	-0.13	21.45	37.00	15.55
530.774	18.90	5.00	-0.90	23.00	37.00	14.00
563.940	20.03	5.20	-0.35	24.88	37.00	12.12
663.440	20.58	5.80	-1.24	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
43.118	18.27	1.20	6.49	25.96	30.00	4.04
70.414	12.48	1.60	8.70	22.78	30.00	7.22
126.049	18.97	2.20	1.84	23.01	30.00	6.99
139.339	18.97	2.40	4.27	25.64	30.00	4.36
159.214	19.79	2.40	-1.77	20.42	30.00	9.58
172.481	20.09	2.50	-1.92	20.67	30.00	9.33
199.014	21.77	2.80	-0.32	24.25	30.00	5.75
265.347	22.41	3.40	-1.03	24.78	37.00	12.22
338.408	14.91	3.83	6.32	25.06	37.00	11.94
371.574	15.69	4.00	2.09	21.78	37.00	15.22
404.741	16.81	4.20	1.27	22.28	37.00	14.72
457.807	17.62	4.80	0.77	23.19	37.00	13.81
524.140	19.19	5.00	0.20	24.39	37.00	12.61
563.940	20.16	5.20	0.55	25.91	37.00	11.09
683.339	21.47	5.80	-0.28	26.99	37.00	10.01

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

Date of Test	Dec. 16, 2003	Temperature	22
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EUT	Display Color Monitor	Humidity	46
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Test Mode	D-Sub 1 Input, 1600*1200/85Hz, 106.5kHz
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	Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level		Margin dB
					Horizontal dBμV/m	Limits dBμV/m	
*	65.569	12.07	1.60	10.00	23.67	30.00	6.33
	114.756	18.42	2.10	-1.05	19.47	30.00	10.53
	147.549	19.90	2.40	-1.21	21.09	30.00	8.91
	163.958	20.59	2.60	1.10	24.29	30.00	5.71
	213.137	21.07	2.80	-0.78	23.09	30.00	6.91
	229.508	21.72	3.00	-0.71	24.01	30.00	5.99
	251.371	22.51	3.20	-1.38	24.33	37.00	12.67
	322.424	14.39	3.60	7.30	25.29	37.00	11.71
	382.545	15.87	4.10	1.05	21.02	37.00	15.98
	437.201	16.74	4.40	-0.07	21.07	37.00	15.93
	491.857	17.95	4.80	-0.33	22.42	37.00	14.58
	535.582	19.04	5.00	-0.85	23.19	37.00	13.81
	623.032	20.07	5.60	-1.09	24.58	37.00	12.42
	672.222	20.89	5.80	-1.29	25.40	37.00	11.60

- Remarks
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. The worst emission was detected at 163.958MHz with corrected signal level of 24.29dBμV/m (limit was 30dBμV/m) when the antenna was at horizontal polarization and was at 4m high and the turn table was at 110°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test	Dec. 16, 2003	Temperature	22
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EUT	Display Color Monitor	Humidity	46
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Test Mode	D-Sub 1 Input, 1600*1200/85Hz, 106.5kHz
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	Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading		Emission Level	
				Vertical dBμV	Vertical dBμV/m	Limits dBμV/m	Margin dB
*	43.700	18.03	1.20	6.33	25.56	30.00	4.44
	49.186	16.33	1.23	5.97	23.53	30.00	6.47
	65.567	13.56	1.60	11.95	27.11	30.00	2.89
	114.754	19.00	2.10	1.34	22.44	30.00	7.56
	147.470	20.52	2.40	0.53	23.45	30.00	6.55
	163.939	19.90	2.60	-0.31	22.19	30.00	7.81
	213.141	21.49	2.80	-0.75	23.54	30.00	6.46
	229.510	20.24	3.00	-0.08	23.16	30.00	6.84
	256.855	22.74	3.20	-0.69	25.25	37.00	11.75
	349.752	15.57	3.83	7.21	26.61	37.00	10.39
	393.476	16.89	4.20	2.17	23.26	37.00	13.74
	431.736	17.04	4.40	-0.01	21.43	37.00	15.57
	475.460	18.16	4.80	-0.43	22.53	37.00	14.47
	568.376	20.00	5.30	-1.01	24.29	37.00	12.71
	655.825	20.65	5.60	-1.34	24.91	37.00	12.09

- Remarks
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. The worst emission was detected at 65.567MHz with corrected signal level of 27.11dBμV/m (limit was 30dBμV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 165°. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test	Dec. 16, 2003	Temperature	22
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EUT	Display Color Monitor	Humidity	46
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Test Mode	D-Sub 1 Input, 1920*1400/85Hz, 128.5kHz
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Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
60.789	12.24	1.40	8.84	22.48	30.00	7.52
121.439	18.73	2.20	-0.07	20.86	30.00	9.14
182.249	20.92	2.60	1.42	24.94	30.00	5.06
206.587	20.81	2.80	-1.86	21.75	30.00	8.25
243.037	22.06	3.20	-0.68	24.58	37.00	12.42
328.042	14.54	3.80	6.31	24.65	37.00	12.35
376.642	15.47	4.00	0.99	20.46	37.00	16.54
449.543	16.80	4.40	0.85	22.05	37.00	14.95
546.744	19.58	5.05	-0.10	24.53	37.00	12.47
668.245	20.71	5.80	0.56	27.07	37.00	9.93
704.695	21.43	5.80	-1.58	25.65	37.00	11.35

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
43.440	18.16	1.20	6.84	26.20	30.00	3.80
60.791	13.21	1.40	8.98	23.59	30.00	6.41
121.449	19.36	2.20	-1.01	20.55	30.00	9.45
133.633	19.17	2.20	0.37	21.74	30.00	8.26
182.255	21.23	2.60	-0.69	23.14	30.00	6.86
218.705	21.63	3.00	-1.85	22.78	30.00	7.22
255.155	22.33	3.20	-1.18	24.35	37.00	12.65
340.192	14.89	4.00	7.38	26.27	37.00	10.73
364.492	15.74	4.00	2.41	22.15	37.00	14.85
425.243	17.04	4.40	1.08	22.52	37.00	14.48
473.843	18.27	4.80	0.43	23.50	37.00	13.50
534.594	19.10	5.00	0.11	24.21	37.00	12.79
656.095	20.65	5.60	0.60	26.85	37.00	10.15

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

Date of Test	Dec. 16, 2003	Temperature	22
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EUT	Display Color Monitor	Humidity	46
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Test Mode	D-Sub 1 Input, 2048*1536/75Hz, 120kHz		
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Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
71.118	12.53	1.60	6.45	20.58	30.00	9.42
124.334	19.20	2.20	-0.36	21.04	30.00	8.96
159.811	20.56	2.40	1.13	24.09	30.00	5.91
177.598	20.64	2.60	1.00	24.24	30.00	5.76
213.227	21.07	2.80	-0.56	23.31	30.00	6.69
266.516	22.75	3.30	-1.02	25.03	37.00	11.97
337.573	14.61	3.80	6.47	24.88	37.00	12.12
390.884	16.13	4.20	1.09	21.42	37.00	15.58
461.914	17.32	4.80	-0.14	21.98	37.00	15.02
515.203	18.88	5.00	-0.81	23.07	37.00	13.93
621.780	20.18	5.60	-0.59	25.19	37.00	11.81
728.284	21.07	6.00	0.03	27.10	37.00	9.90

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
43.430	18.16	1.20	6.93	26.29	30.00	3.71
71.033	12.36	1.60	12.54	26.50	30.00	3.50
124.363	19.02	2.20	-1.88	19.34	30.00	10.66
142.082	19.58	2.40	2.00	23.98	30.00	6.02
159.824	19.81	2.40	3.42	25.63	30.00	4.37
177.626	20.47	2.60	-1.74	21.33	30.00	8.67
213.214	21.49	2.80	0.21	24.50	30.00	5.50
230.984	20.25	3.00	0.92	24.17	37.00	12.83
284.273	23.75	3.60	0.36	27.71	37.00	9.29
337.500	14.85	3.80	7.89	26.54	37.00	10.46
390.789	16.76	4.20	1.39	22.35	37.00	14.65
461.841	18.17	4.80	0.77	23.74	37.00	13.26
550.655	19.36	5.20	-0.41	24.15	37.00	12.85
657.233	20.66	5.60	-0.49	25.77	37.00	11.23
746.047	22.03	6.20	0.65	28.88	37.00	8.12

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

Date of Test	Dec. 16, 2003	Temperature	22
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EUT	Display Color Monitor	Humidity	46
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Test Mode	D-Sub 2 Input, 1600*1200/85Hz, 106.5kHz
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Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
65.603	12.07	1.60	6.39	20.06	30.00	9.94
131.172	19.50	2.20	-1.03	20.67	30.00	9.33
163.942	20.59	2.60	1.55	24.74	30.00	5.26
229.506	21.72	3.00	-0.42	24.30	30.00	5.70
262.308	22.88	3.40	-0.93	25.35	37.00	11.65
327.911	14.49	3.80	4.42	22.71	37.00	14.29
373.833	15.39	4.00	1.00	20.39	37.00	16.61
426.315	16.45	4.40	-0.05	20.80	37.00	16.20
472.237	17.82	4.80	-0.37	22.25	37.00	14.75
531.280	18.90	5.00	-0.89	23.01	37.00	13.99
629.684	20.33	5.60	-1.06	24.87	37.00	12.13
734.649	21.31	6.00	-0.15	27.16	37.00	9.84

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
43.000	18.31	1.20	6.45	25.96	30.00	4.04
65.565	13.49	1.60	12.01	27.10	30.00	2.90
131.130	18.63	2.20	3.56	24.39	30.00	5.61
163.960	19.90	2.60	1.42	23.92	30.00	6.08
229.507	20.24	3.00	0.33	23.57	30.00	6.43
262.309	22.61	3.40	-0.75	25.26	37.00	11.74
327.912	14.84	3.80	5.44	24.08	37.00	12.92
380.394	16.31	4.00	1.13	21.44	37.00	15.56
439.437	17.14	4.40	-0.10	21.44	37.00	15.56
472.238	18.50	4.80	-0.46	22.84	37.00	14.16
537.841	19.32	5.10	-0.86	23.56	37.00	13.44
623.125	20.08	5.60	-1.10	24.58	37.00	12.42
708.409	21.53	5.80	-1.47	25.86	37.00	11.14

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

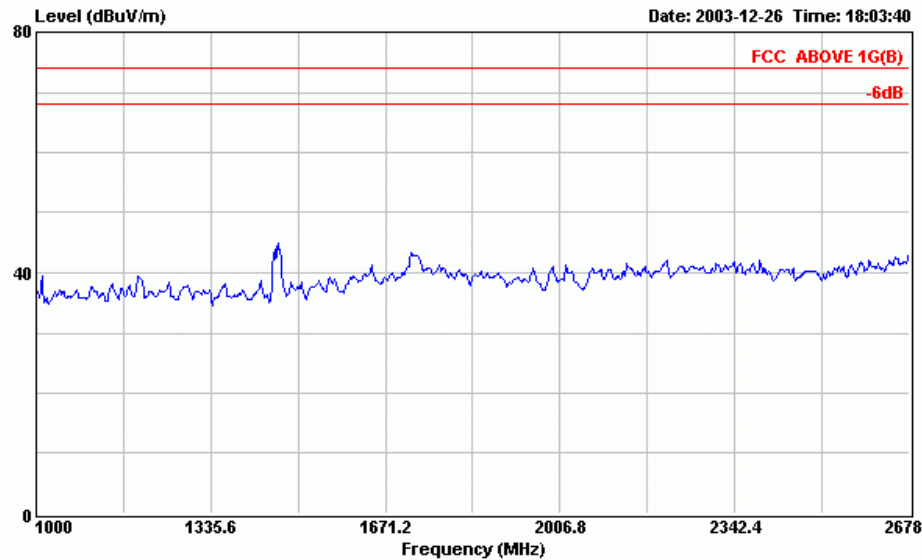
3.7.2. Above 1GHz frequency and 3 meters distance measurement.

Because of the emission level from EUT is too low to be measured, therefore, the reading values not reported. All the scanning waveform with peak detector are listed in the following pages.



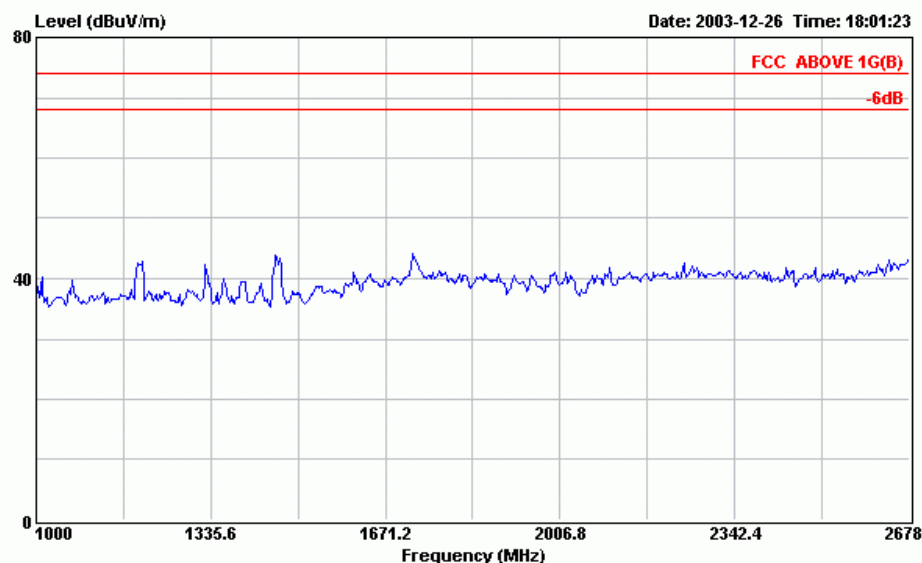
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Web:www.ttemc.com.tw

Data#: 2 File#: C:\PHILIPS-G921300.EMI



Site : Anechoic Chamber
Condition : FCC ABOVE 1G(B) 3m 3115 HORIZONTAL
ENVIRONMENT : 19°C/50%
EUT : Display Color Monitor M/N:P1230
POWER : 120Vac/60Hz
MEMO : 1600*1200/85Hz 106.5KHz D-SUB 1

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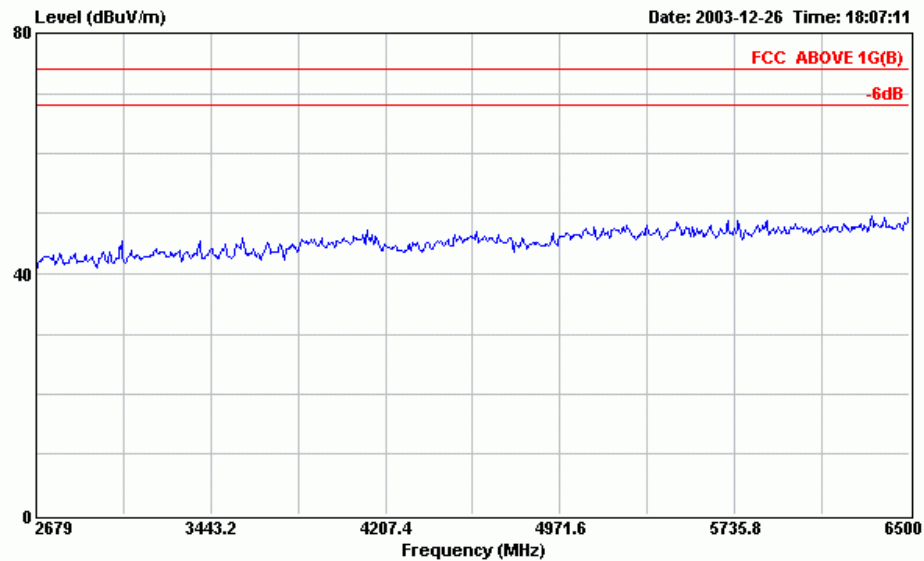


Site : Anechoic Chamber
Condition : FCC ABOVE 1G(B) 3m 3115 VERTICAL
ENVIRONMENT : 19°C/50%
EUT : Display Color Monitor M/N:P1230
POWER : 120Vac/60Hz
MEMO : 1600*1200/85Hz 106.5KHz D-SUB 1



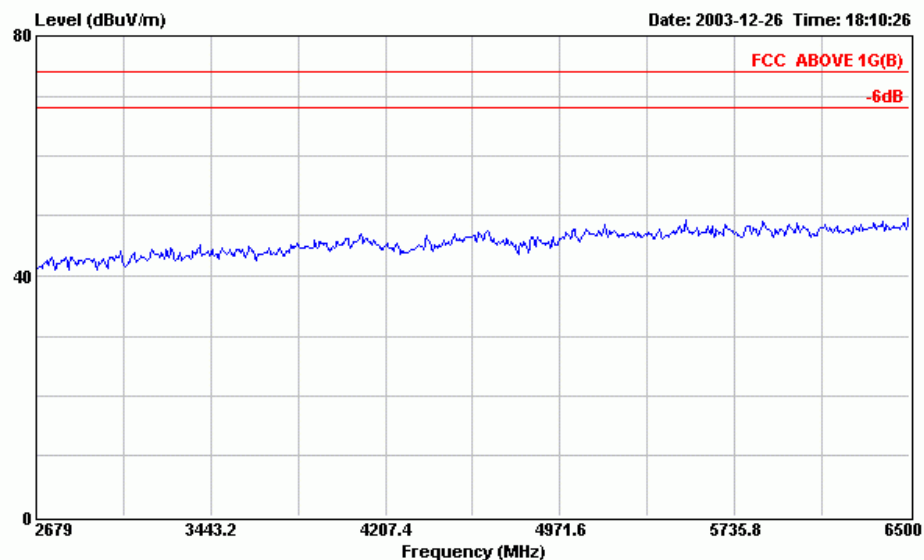
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Data#: 3 File#: C:\PHILIPS-G921300.EMI



Site : Anechoic Chamber
Condition : FCC ABOVE 1G(B) 3m 3115 HORIZONTAL
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POWER : 120Vac/60Hz
MEMO : 1600*1200/85Hz 106.5KHz D-SUB 1

Data#: 4 File#: C:\PHILIPS-G921300.EMI

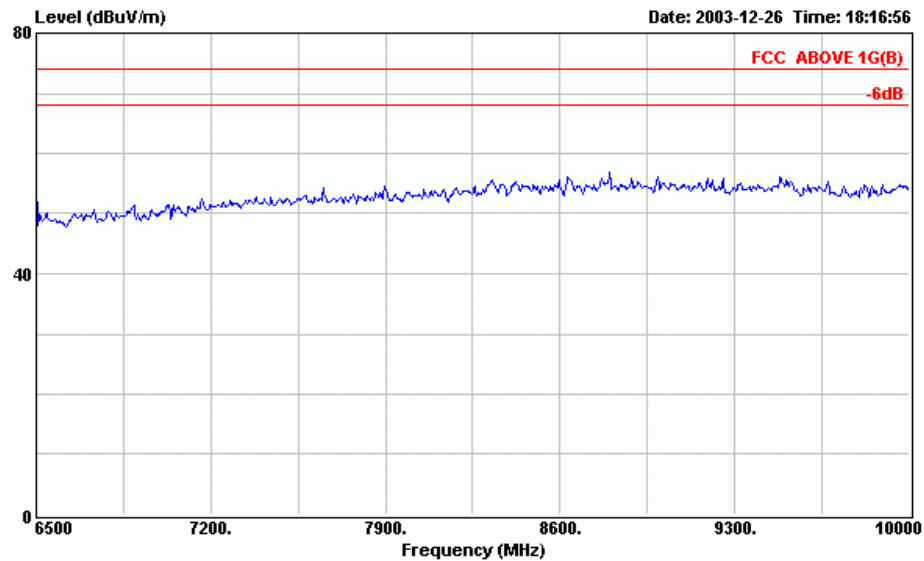


Site : Anechoic Chamber
Condition : FCC ABOVE 1G(B) 3m 3115 VERTICAL
ENVIRONMENT : 19°C/50%
EUT : Display Color Monitor M/N:P1230
POWER : 120Vac/60Hz
MEMO : 1600*1200/85Hz 106.5KHz D-SUB 1



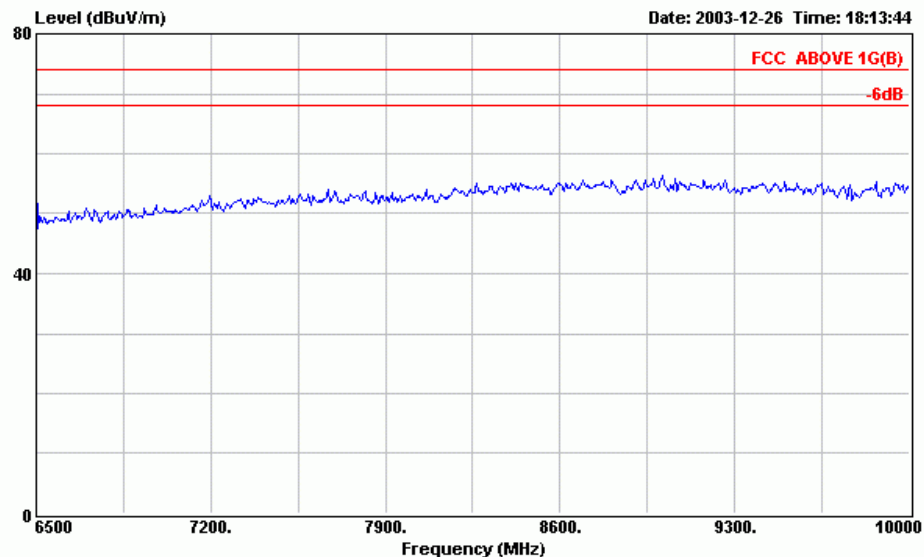
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Web:www.ttemc.com.tw

Data#: 6 File#: C:\PHILIPS-G921300.EMI



Site : Anechoic Chamber
Condition : FCC ABOVE 1G(B) 3m 3115 HORIZONTAL
ENVIRONMENT : 19°C/50%
EUT : Display Color Monitor M/N:P1230
POWER : 120Vac/60Hz
MEMO : 1600*1200/85Hz 106.5KHz D-SUB 1

Data#: 5 File#: C:\PHILIPS-G921300.EMI



Site : Anechoic Chamber
Condition : FCC ABOVE 1G(B) 3m 3115 VERTICAL
ENVIRONMENT : 19°C/50%
EUT : Display Color Monitor M/N:P1230
POWER : 120Vac/60Hz
MEMO : 1600*1200/85Hz 106.5KHz D-SUB 1

4. DEVIATION TO TEST SPECIFICATIONS

[NONE]