

TEST REPORT FOR CERTIFICATION
On Behalf for
Philips Electronics Industries (Taiwan) Ltd.
Flat Panel Color Monitor
Model No.: (1)170S5 (2)170B5
FCC ID. : A3KM129
Brand : PHILIPS

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-G921348
Report Number : TTEMC-F92249
Date of Test : Dec. 29, 2003
Date of Report : Dec. 31, 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	:	Flat Panel Color Monitor
FCC ID.	:	A3KM129
		(A) MODEL NO. : (1)170S5 (2)170B5
		(B) SERIAL NO. : (1) TY0304759(2) TY0304758
		(C) BRAND : PHILIPS
		(D) POWER SUPPLY : AC 100V-240V~ , 60-50Hz, 1.2-0.6A
		(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 : Dec. 29, 2003

Prepared by : Cherry Wang 9 Mar. 2004
(Cherry Wang/Assistant Manager)

Test Engineer : Allen Wang Mar. 22, 2004
(Allen Wang/Deputy Manager)

Approve & Authorized Signer : Leon Liu Mar. 22 2004
(Leon Liu/General Assistant Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Flat Panel Color Monitor
FCC ID	:	A3KM129
Model Number	:	(1)170S5 (2)170B5
		Above two models are identical, except for model difference. The model (1)170S5 is representative selected reported in this test report.
Serial Number	:	(1) TY0304759(2) TY0304758
Brand	:	PHILIPS
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, PROC
Manufacturer #4	:	Philips Monitors Manufacturing Hungary Free Trade Zone Limited Liability Company (PMM LLC) H-9700 Szombathely, Puskas tivadar u. 10., HUNGARY
Scanning Frequency	:	Horizontal : 30kHz-80kHz Vertical : 56Hz-75Hz
LCD Panel	:	LG. Philips, M/N: LM170E01
Inverter Board	:	(1) LC (Lien Chang), Type No. AI-0068X (2) Ambit, Type No. T50P050.xx

Data Cable (D-Sub)	:	Shielded, Detachable, 1.8m Bonded two ferrite cores
Date of Receipt of Sample	:	Dec. 29, 2003
Date of Test	:	Dec. 29, 2003

1.2. Tested Supporting System Details

1.2.1. PERSONAL COMPUTER

Model Number	:	HP VECTRA XE320
Serial Number	:	SG21101987
FCC ID	:	By DoC
BSMI ID	:	3912A318
Manufacturer	:	First International Computer (Brand: HP)
VGA Card	:	ASUS, M/N VGA-V7100/2V1D S/N 1BCKY12261, FCC by DoC
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.2. KEYBOARD

Model Number	:	SK-2502C
Serial Number	:	M020236402
FCC ID	:	By DoC
BSMI ID	:	3872F107
Manufacturer	:	Silitek (Brand: HP)
Data Cable	:	Non-Shielded, Undetachable, 1.8m

1.2.3. DOT MATRIX PRINTER

Model Number	:	KX-P2135
Serial Number	:	8DMCNC02144
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	:	980034395
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. PS2 MOUSE

Model Number	:	M-S48a
Serial Number	:	LZE20501538
FCC ID	:	JNZ201213
BSMI ID	:	4882A001
Manufacturer	:	Logitech (Brand: HP)
Data Cable	:	Non-Shielded, Undetachable, 1.8m

1.2.6. SPEAKER

Model Number	:	J-008
Serial Number	:	97-C-009783-T
Manufacturer	:	(J-S) JAZZ HIPSTER
Data Cable	:	Non-Shielded, Undetachable, 1m

1.2.7. WALKMAN

Model Number	:	Q-P35LT-K
Serial Number	:	HA08473
Manufacturer	:	Panasonic
Data Cable	:	Non-Shielded, Detachable, 1.8m

1.2.8. MICROPHONE

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

1.2.9. USB2.0 MICRO VAULT (USB STORAGE MEDIA) #1

Model Number	:	USM64U2
Serial Number	:	N/A
FCC ID	:	By DoC
BSMI ID	:	D33021
Manufacturer	:	SONY
Data Cable	:	Shielded, Detachable, 1.2m

1.2.10. USB2.0 MICRO VAULT (USB STORAGE MEDIA) #2

Model Number	:	USM64U2
Serial Number	:	N/A
FCC ID	:	By DoC
BSMI ID	:	D33021
Manufacturer	:	SONY
Data Cable	:	Shielded, Detachable, 1.2m

1.2.11. AC Power Cord

Power Cord	:	Non-Shielded, Detachable, 1.8m (3Pin)
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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 Hsiang,
 Taipei County 24443, Taiwan, R.O.C.

Test Facility & Location : **No. 3 Shielded Room & 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

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

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

1.4. Measurement Uncertainty

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

Remark : Uncertainty = $k u_c(y)$

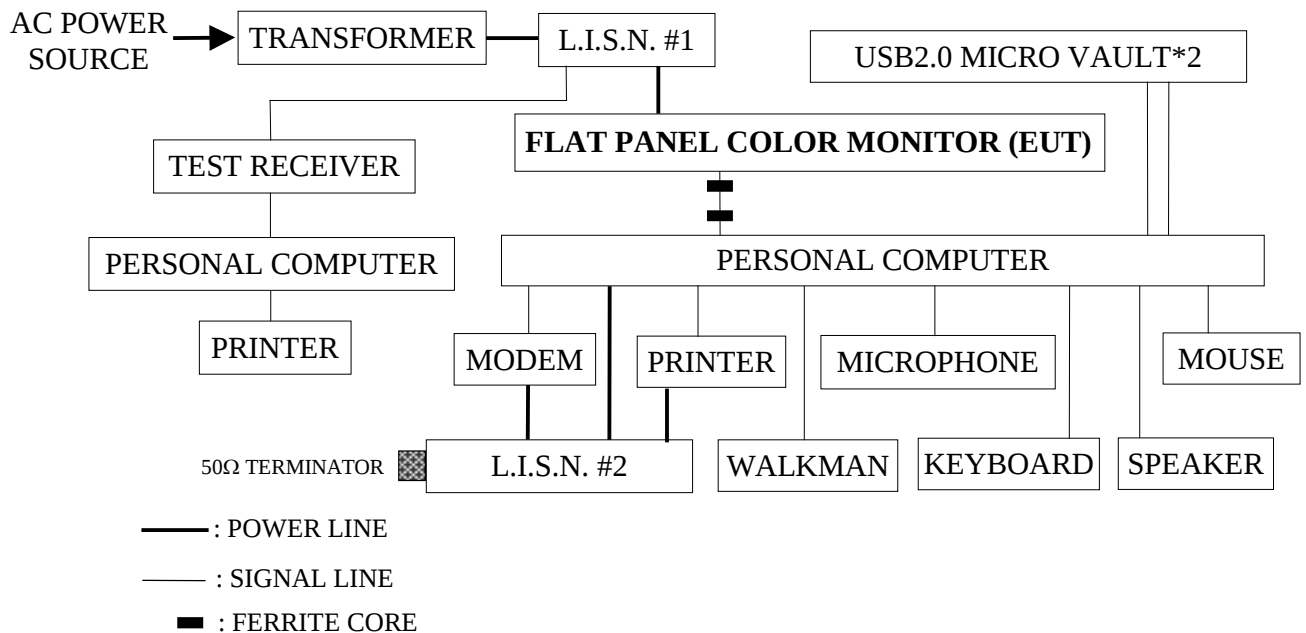
2. CONDUCTED EMISSION MEASUREMENT

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.	Personal Computer	TOKIN	586PC	N/A	N/A	N/A
2.	Test Receiver	R & S	ESCS 30	825442/020	Aug. 09, 03'	Aug. 08, 04'
3.	L.I.S.N. #1	Kyoritsu	KNW-407	8-1370-10	Jun. 05, 03'	Jun. 04, 04'
4.	L.I.S.N. #2	Kyoritsu	KNW-407	8-1370-9	Jun. 05, 03'	Jun. 04, 04'
5.	Printer	HP	C2164A	SG58N1321Y	N/A	N/A

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. Flat Panel Color Monitor (EUT)

Model Number	:	170S5
Serial No.	:	(1)TY0304759 (2)TY0304758
Brand	:	PHILIPS
FCC ID.	:	A3KM129
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
Scanning Frequency	:	Horizontal : 30kHz-80kHz Vertical : 56Hz-75Hz
LCD Panel	:	LG. Philips, M/N: LM170E01
Inverter Board	:	(1) LC (Lien Chang), Type No. AI-0068X (2) Ambit, Type No. T50P050.xx
Data Cable (D-Sub)	:	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. Personal Computer read data from disk.
- 2.5.4. Personal Computer running the self-test program "IBM V1.8" by windows and sent "H" character to monitor (EUT) through VGA card, the screen displayed and filled with "H" pattern by EUT's resolution via D-Sub input.
- 2.5.5. Repeat the above procedures from 2.5.3 to 2.5.4.
- 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 should be manipulated according to FCC ANSI C63.4-2001 during conducted measurement.

The bandwidth of the R&S Test Receiver ESCS30 was set at 9kHz.

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

2.7. Test Results

PASSED. Please refer to the following pages.

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

The EUT with flowing testing modes and with AC 120V/60Hz supplying voltage were performed during conducted testing and all the test results are listed in next section.

EUT : Flat Panel Color Monitor Model No.: 170S5

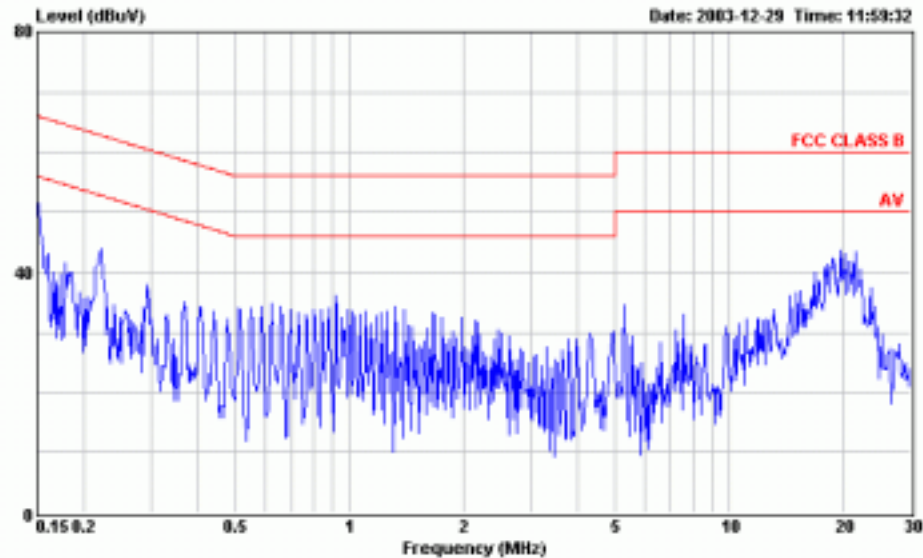
(Test Date: Dec. 29, 2003 Temperature: 18 °C Humidity: 49 %)

Mode.	Model No./Serial No.	Inverter Board	Frequency Resolution	Reference Data #
1.	170S5 (TY0304759)	LC	640*480/60Hz, 31kHz	# 52 (53, 54); #49 (50, 51)
2.			1024*768/75Hz, 60kHz	# 43 (44, 45); # 46 (47, 48)
3.			1280*1024/75Hz, 80kHz	# 40 (41, 42); # 37 (38, 39)
4.	170S5 (TY0304758)	Ambit	640*480/60Hz, 31kHz	# 19 (20, 21); #22 (23, 24)
5.			1024*768/75Hz, 60kHz	# 28 (29, 30); # 25 (26, 27)
6.			1280*1024/75Hz, 80kHz	# 31 (32, 33); #34 (35, 36)



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Data#: 52 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) NEUTRAL
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 640*480/60Hz ; 31KHz
 : S/N:TY0304759 (LPL + LC)

Data#: 53 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 12:00:18

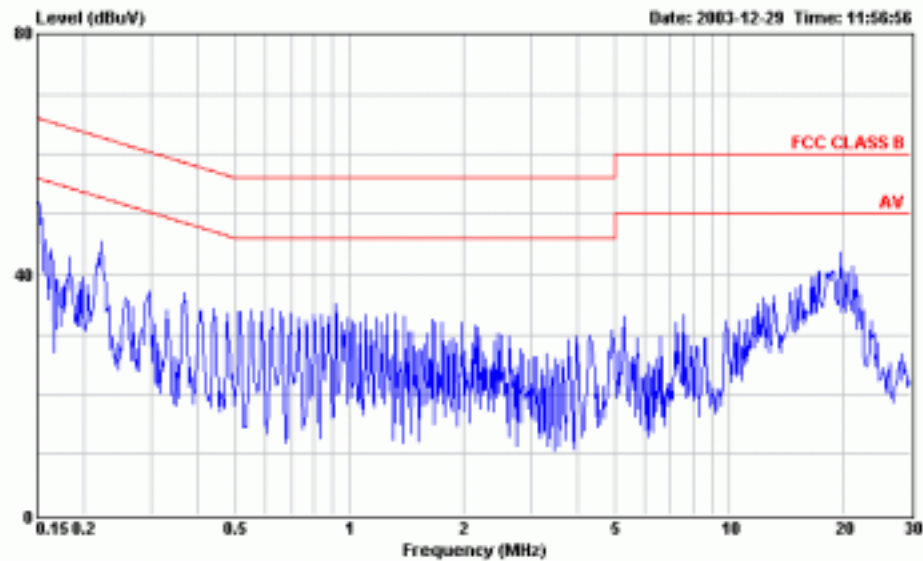
Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) NEUTRAL
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 640*480/60Hz ; 31KHz
 : S/N:TY0304759 (LPL + LC)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	49.66	-16.31	65.97	49.16	0.30	0.20	QP
2	0.220	43.06	-19.76	62.82	42.67	0.19	0.20	QP
3	0.292	36.01	-24.46	60.47	35.66	0.15	0.20	QP
4	0.918	36.81	-19.19	56.00	36.51	0.10	0.20	QP
5	17.543	38.25	-21.75	60.00	37.25	0.30	0.70	QP
6	19.525	42.65	-17.35	60.00	41.65	0.30	0.70	QP

Data#: 54 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	39.48	-16.49	55.97	38.98	0.30	0.20	Average
2	0.220	35.67	-17.15	52.82	35.28	0.19	0.20	Average
3	0.292	32.82	-17.65	50.47	32.47	0.15	0.20	Average
4	0.918	32.69	-13.31	46.00	32.39	0.10	0.20	Average
5	17.543	31.86	-18.14	50.00	30.86	0.30	0.70	Average
6	19.525	34.44	-15.56	50.00	33.44	0.30	0.70	Average

Data#: 49 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor E/N:17055
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 640*480/60Hz ; 31KHz
 : S/N:TY03D4759 (LPL + LC)

Data#: 50 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:58:21

Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor E/N:17055
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 640*480/60Hz ; 31KHz
 : S/N:TY03D4759 (LPL + LC)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	49.97	-15.96	65.93	49.57	0.20	0.20	QP
2	0.219	43.84	-19.03	62.87	43.54	0.10	0.20	QP
3	0.293	36.50	-23.94	60.44	36.20	0.10	0.20	QP
4	0.916	34.78	-21.22	56.00	34.48	0.10	0.20	QP
5	17.541	39.53	-20.47	60.00	38.58	0.25	0.70	QP
6	19.523	40.68	-19.32	60.00	39.69	0.29	0.70	QP

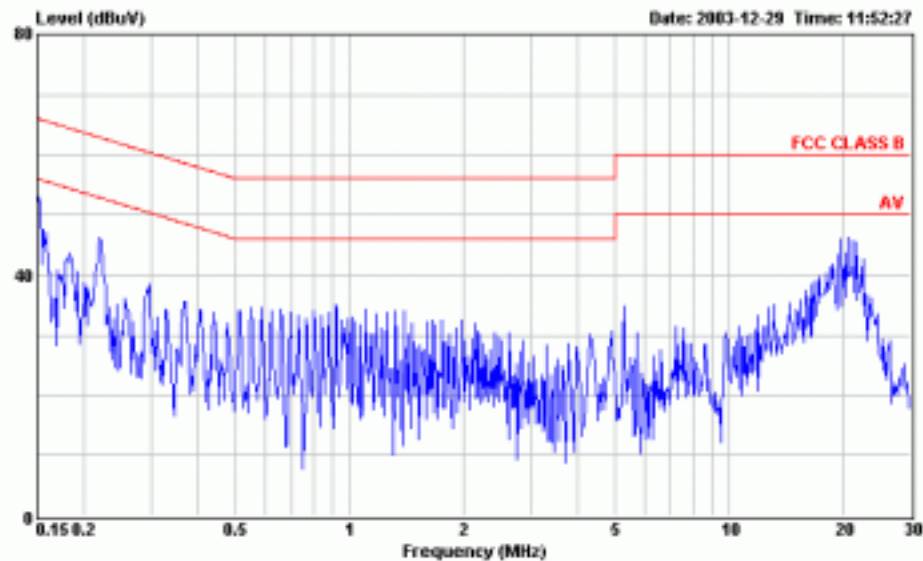
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	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	40.72	-15.21	55.93	40.32	0.20	0.20	Average
2	0.219	35.72	-17.15	52.87	35.42	0.10	0.20	Average
3	0.293	33.30	-17.14	50.44	33.00	0.10	0.20	Average
4	0.916	30.34	-15.66	46.00	30.04	0.10	0.20	Average
5	17.541	31.67	-18.33	50.00	30.72	0.25	0.70	Average
6	19.523	32.40	-17.60	50.00	31.41	0.29	0.70	Average



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Data#: 43 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) NEUTRAL
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1024*768/75Hz ; 60KHz
: S/N:TY0304759 (LPL + LC)

Data#: 44 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:53:15

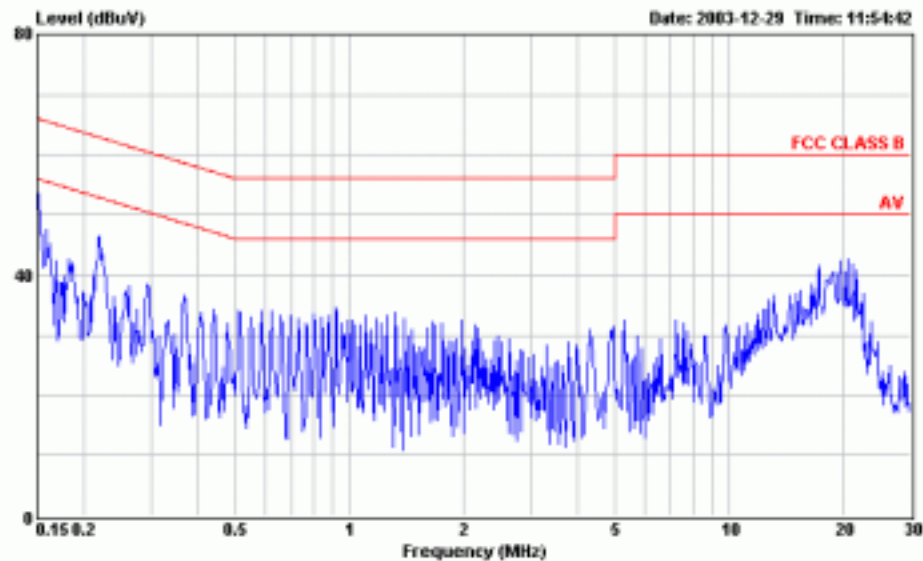
Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) NEUTRAL
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1024*768/75Hz ; 60KHz
: S/N:TY0304759 (LPL + LC)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	51.50	-14.46	65.96	51.00	0.30	0.20	QP
2	0.220	45.03	-17.79	62.82	44.64	0.19	0.20	QP
3	0.293	38.04	-22.39	60.43	37.69	0.15	0.20	QP
4	0.917	35.26	-20.74	56.00	34.96	0.10	0.20	QP
5	17.543	40.08	-19.92	60.00	39.08	0.30	0.70	QP
6	19.520	42.45	-17.55	60.00	41.45	0.30	0.70	QP

Data#: 45 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	41.08	-14.88	55.96	40.58	0.30	0.20	Average
2	0.220	36.84	-15.98	52.82	36.45	0.19	0.20	Average
3	0.293	34.42	-16.01	50.43	34.07	0.15	0.20	Average
4	0.917	29.94	-16.06	46.00	29.64	0.10	0.20	Average
5	17.543	35.76	-14.24	50.00	34.76	0.30	0.70	Average
6	19.520	35.69	-14.31	50.00	34.69	0.30	0.70	Average

Data#: 46 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1024*768/75Hz ; 60KHz
 : S/N:TY0304759 (LPL + LC)

Data#: 47 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:55:25

Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1024*768/75Hz ; 60KHz
 : S/N:TY0304759 (LPL + LC)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	51.66	-14.30	65.96	51.26	0.20	0.20	QP
2	0.219	44.56	-18.31	62.87	44.26	0.10	0.20	QP
3	0.292	36.34	-24.14	60.48	36.04	0.10	0.20	QP
4	0.917	35.24	-20.76	56.00	34.94	0.10	0.20	QP
5	17.540	39.81	-20.19	60.00	38.86	0.25	0.70	QP
6	19.523	41.92	-18.08	60.00	40.93	0.29	0.70	QP

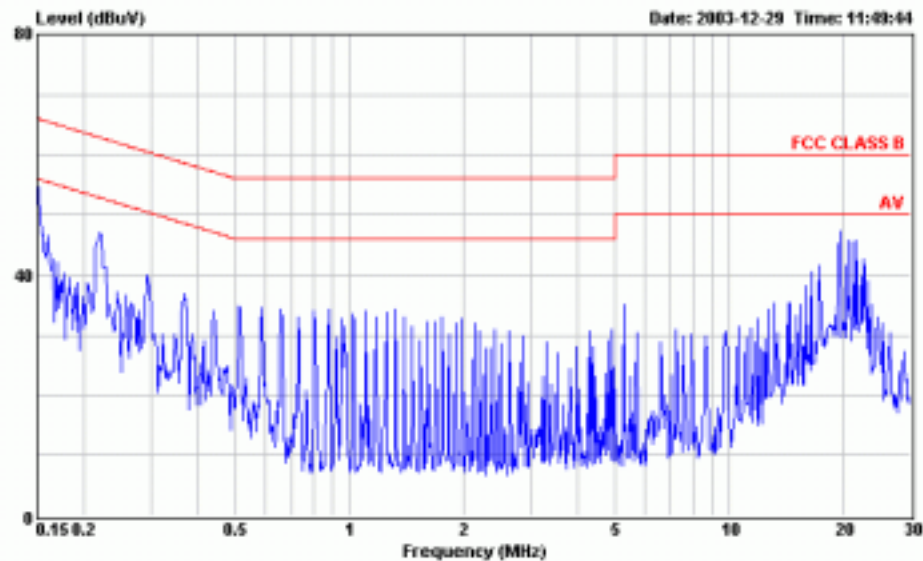
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	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	42.24	-13.72	55.96	41.84	0.20	0.20	Average
2	0.219	36.39	-16.48	52.87	36.09	0.10	0.20	Average
3	0.292	32.88	-17.60	50.48	32.58	0.10	0.20	Average
4	0.917	30.41	-15.59	46.00	30.11	0.10	0.20	Average
5	17.540	33.28	-16.72	50.00	32.33	0.25	0.70	Average
6	19.523	35.57	-14.43	50.00	34.58	0.29	0.70	Average



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Web:www.ttemc.com.tw

Data#: 40 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) NEUTRAL
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1280*1024/75Hz ; 80KHz
: S/N:TY0304759 (LPL + LC)

Data#: 41 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:50:54

Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) NEUTRAL
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1280*1024/75Hz ; 80KHz
: S/N:TY0304759 (LPL + LC)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	52.00	-13.95	65.95	51.50	0.30	0.20	QP
2	0.216	41.80	-21.17	62.97	41.41	0.19	0.20	QP
3	0.294	38.59	-21.81	60.40	38.25	0.14	0.20	QP
4	0.881	33.77	-22.23	56.00	33.47	0.10	0.20	QP
5	17.540	40.85	-19.15	60.00	39.85	0.30	0.70	QP
6	19.519	43.74	-16.26	60.00	42.74	0.30	0.70	QP

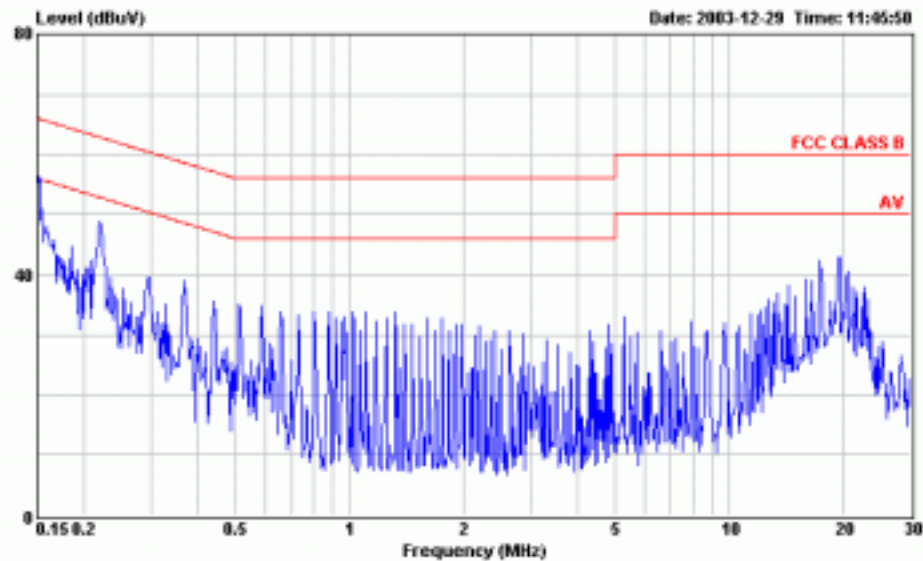
Data#: 42 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	41.54	-14.41	55.95	41.04	0.30	0.20	Average
2	0.216	33.47	-19.50	52.97	33.08	0.19	0.20	Average
3	0.294	35.08	-15.32	50.40	34.74	0.14	0.20	Average
4	0.881	33.16	-12.84	46.00	32.86	0.10	0.20	Average
5	17.540	36.88	-13.12	50.00	35.88	0.30	0.70	Average
6	19.519	37.65	-12.35	50.00	36.65	0.30	0.70	Average



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Web:www.ttemc.com.tw

Data#: 37 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) LINE
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1280*1024/75Hz ; 80KHz
: S/N:TY0304759 (LPL + LC)

Data#: 30 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:47:43

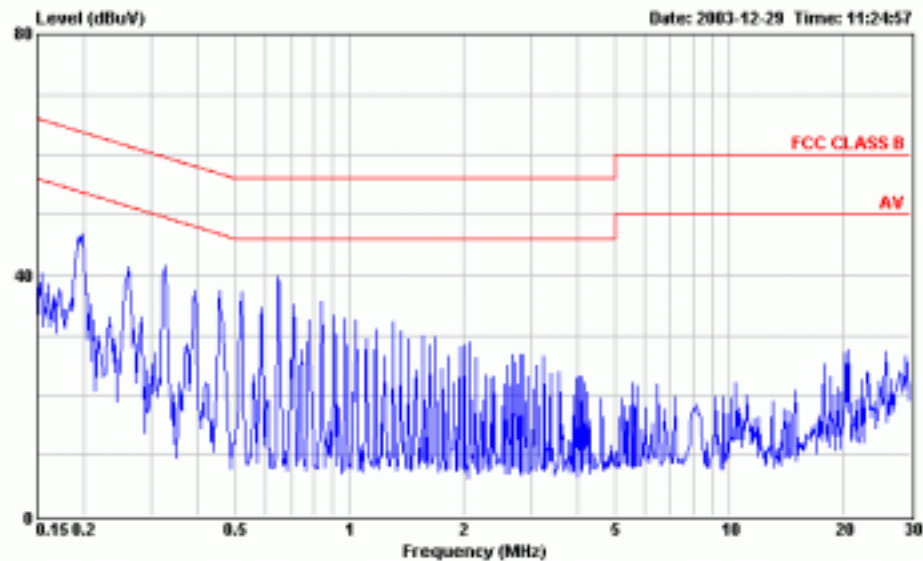
Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) LINE
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1280*1024/75Hz ; 80KHz
: S/N:TY0304759 (LPL + LC)

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	53.67	-12.28	65.95	53.27	0.20	0.20	QP
2	0.219	46.95	-15.92	62.87	46.65	0.10	0.20	QP
3	0.292	38.75	-21.71	60.46	38.45	0.10	0.20	QP
4	0.880	33.05	-22.95	56.00	32.75	0.10	0.20	QP
5	17.539	40.03	-19.97	60.00	39.08	0.25	0.70	QP
6	19.520	42.64	-17.36	60.00	41.65	0.29	0.70	QP

Data#: 39 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	43.89	-12.06	55.95	43.49	0.20	0.20	Average
2	0.219	38.53	-14.34	52.87	38.23	0.10	0.20	Average
3	0.292	34.68	-15.78	50.46	34.38	0.10	0.20	Average
4	0.880	32.80	-13.20	46.00	32.50	0.10	0.20	Average
5	17.539	38.38	-11.62	50.00	37.43	0.25	0.70	Average
6	19.520	39.16	-10.84	50.00	38.17	0.29	0.70	Average

Data#: 19 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) NEUTRAL
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 640*480/60Hz ; 31KHz
 : S/N:TY0304758 (LPL + Ambit)

Data#: 20 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:27:28

Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) NEUTRAL
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 640*480/60Hz ; 31KHz
 : S/N:TY0304758 (LPL + Ambit)

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.195	45.93	-17.88	63.81	45.52	0.21	0.20	QP
2	0.260	40.27	-21.15	61.42	39.91	0.16	0.20	QP
3	0.326	40.17	-19.38	59.55	39.84	0.13	0.20	QP
4	0.518	36.03	-19.97	56.00	35.73	0.10	0.20	QP
5	0.650	38.52	-17.48	56.00	38.22	0.10	0.20	QP
6	20.601	25.58	-34.42	60.00	24.57	0.31	0.70	QP

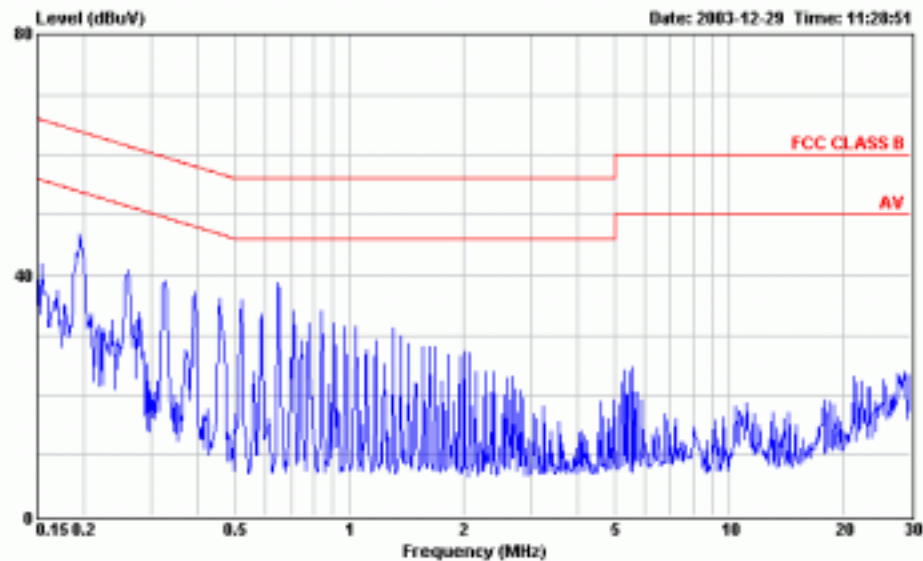
Data#: 21 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.195	41.92	-11.89	53.81	41.51	0.21	0.20	Average
2	0.260	39.31	-12.11	51.42	38.95	0.16	0.20	Average
3	0.326	38.34	-11.21	49.55	38.01	0.13	0.20	Average
4	0.518	35.52	-10.48	46.00	35.22	0.10	0.20	Average
5	0.650	35.76	-10.24	46.00	35.46	0.10	0.20	Average
6	20.601	20.21	-29.79	50.00	19.20	0.31	0.70	Average



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Data#: 22 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) LINE
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 640*480/60Hz ; 31KHz
: S/N:TY0304758 (LPL + Ambient)

Data#: 23 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:30:41

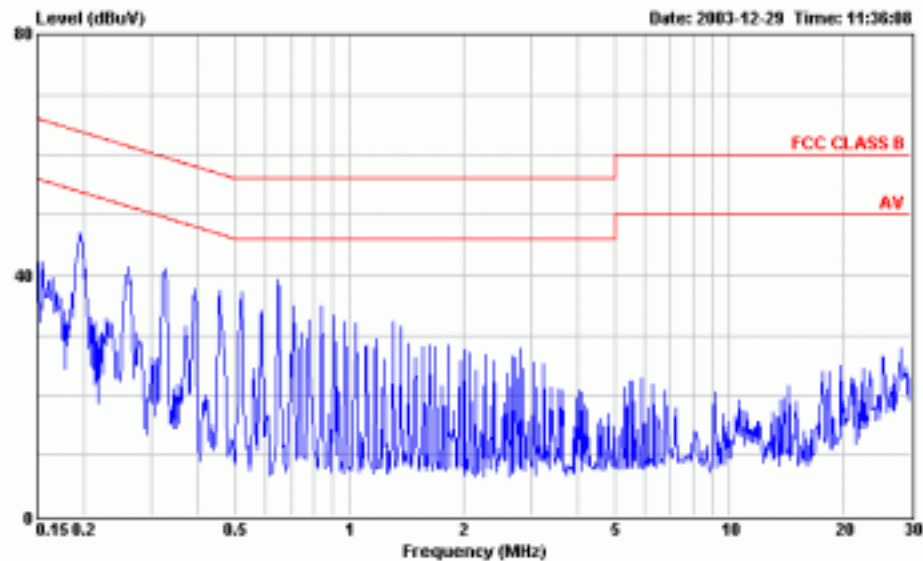
Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) LINE
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 640*480/60Hz ; 31KHz
: S/N:TY0304758 (LPL + Ambient)

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.193	44.45	-19.47	63.92	44.14	0.11	0.20	QP
2	0.259	39.40	-22.06	61.46	39.10	0.10	0.20	QP
3	0.325	38.67	-20.91	59.58	38.37	0.10	0.20	QP
4	0.520	35.06	-20.94	56.00	34.76	0.10	0.20	QP
5	0.650	37.64	-18.36	56.00	37.34	0.10	0.20	QP
6	21.305	21.68	-38.32	60.00	20.65	0.33	0.70	QP

Data#: 24 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.193	40.02	-13.90	53.92	39.71	0.11	0.20	Average
2	0.259	38.07	-13.39	51.46	37.77	0.10	0.20	Average
3	0.325	37.70	-11.88	49.58	37.40	0.10	0.20	Average
4	0.520	35.16	-10.84	46.00	34.86	0.10	0.20	Average
5	0.650	34.89	-11.11	46.00	34.59	0.10	0.20	Average
6	21.305	19.80	-30.20	50.00	18.77	0.33	0.70	Average

Data#: 28 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) NEUTRAL
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1024*768/75Hz ; 60KHz
 : S/N:TY0304758 (LPL + Ambit)

Data#: 29 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:37:05

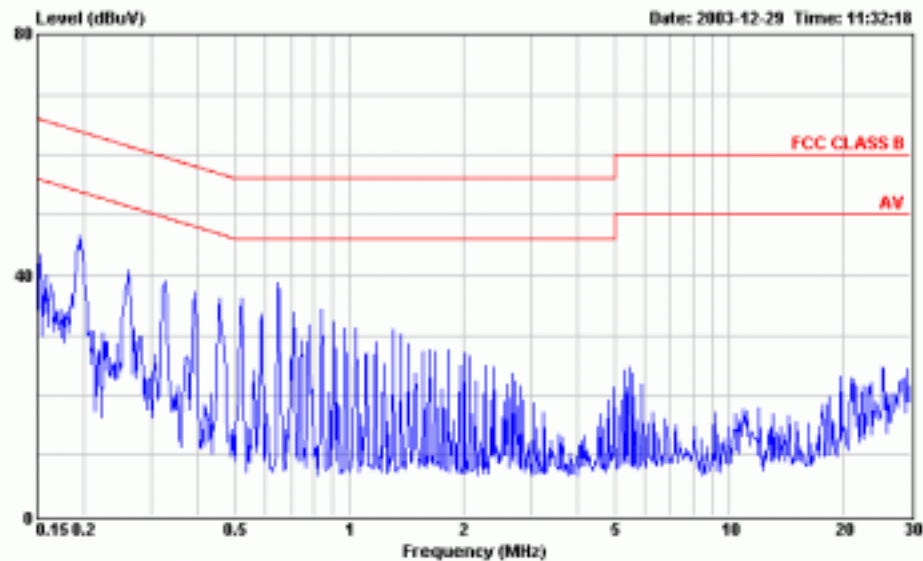
Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) NEUTRAL
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1024*768/75Hz ; 60KHz
 : S/N:TY0304758 (LPL + Ambit)

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.193	44.61	-19.31	63.92	44.20	0.21	0.20	QP
2	0.262	39.18	-22.20	61.38	38.82	0.16	0.20	QP
3	0.323	38.84	-20.80	59.64	38.51	0.13	0.20	QP
4	0.518	36.23	-19.77	56.00	35.93	0.10	0.20	QP
5	0.650	38.18	-17.82	56.00	37.88	0.10	0.20	QP
6	21.300	20.16	-39.84	60.00	19.13	0.33	0.70	QP

Data#: 30 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.193	40.75	-13.17	53.92	40.34	0.21	0.20	Average
2	0.262	38.20	-13.18	51.38	37.84	0.16	0.20	Average
3	0.323	37.56	-12.08	49.64	37.23	0.13	0.20	Average
4	0.518	35.67	-10.33	46.00	35.37	0.10	0.20	Average
5	0.651	35.33	-10.67	46.00	35.03	0.10	0.20	Average
6	21.300	16.78	-33.22	50.00	15.75	0.33	0.70	Average

Data#: 25 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1024*768/75Hz ; 60KHz
 : S/N:TY0304758 (LPL + Ambient)

Data#: 26 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:34:49

Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor M/N:17085
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1024*768/75Hz ; 60KHz
 : S/N:TY0304758 (LPL + Ambient)

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.193	44.41	-19.51	63.92	44.10	0.11	0.20	QP
2	0.258	38.56	-22.94	61.50	38.26	0.10	0.20	QP
3	0.325	38.67	-20.91	59.58	38.37	0.10	0.20	QP
4	0.519	35.20	-20.80	56.00	34.90	0.10	0.20	QP
5	0.651	37.80	-18.20	56.00	37.50	0.10	0.20	QP
6	21.300	21.45	-38.55	60.00	20.42	0.33	0.70	QP

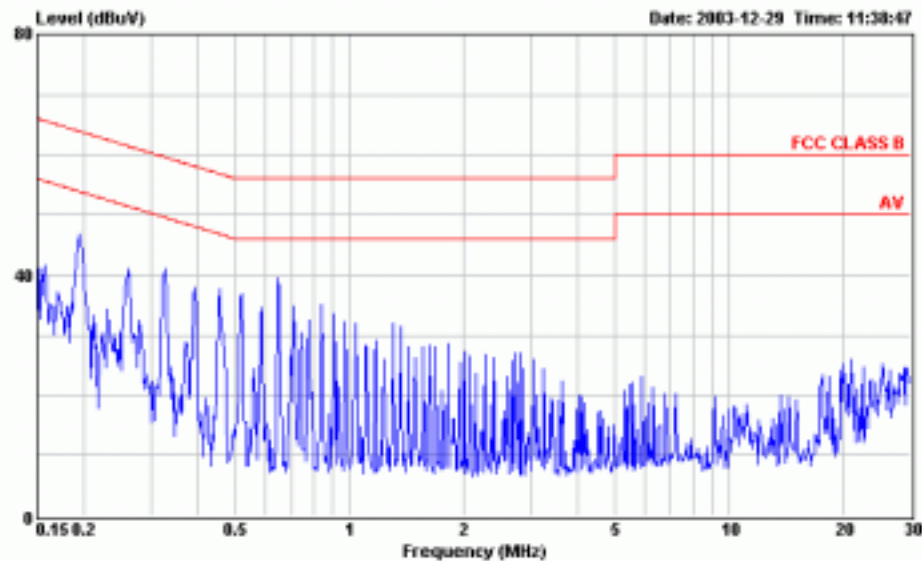
Data#: 27 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.193	40.02	-13.90	53.92	39.71	0.11	0.20	Average
2	0.258	37.31	-14.19	51.50	37.01	0.10	0.20	Average
3	0.325	37.70	-11.88	49.58	37.40	0.10	0.20	Average
4	0.519	35.15	-10.85	46.00	34.85	0.10	0.20	Average
5	0.651	35.82	-10.18	46.00	35.52	0.10	0.20	Average
6	21.300	19.26	-30.74	50.00	18.23	0.33	0.70	Average



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Data#: 31 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) NEUTRAL
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1280*1024/75Hz ; 80KHz
: S/N:TY0304758 (LPL + Ambient)

Data#: 32 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:40:23

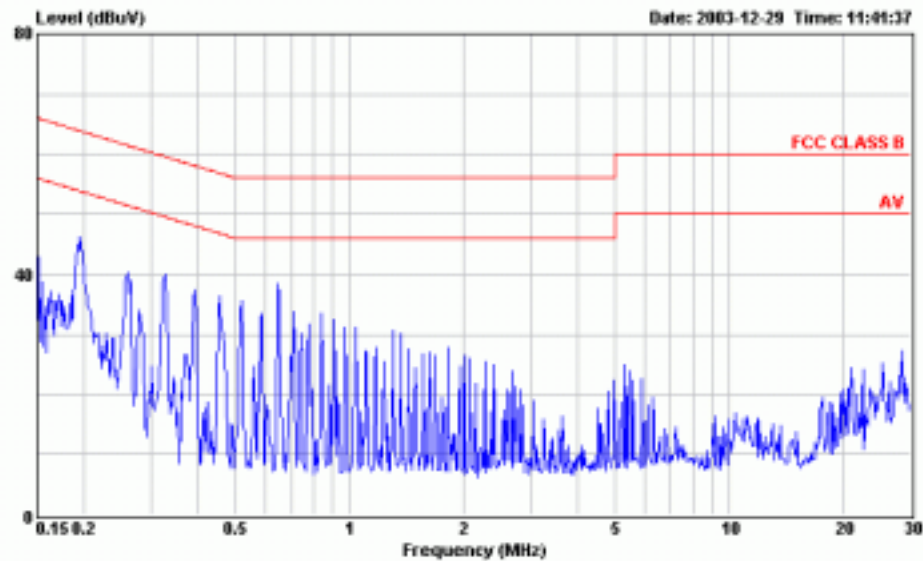
Site : No.3 Shielded room
Condition : FCC CLASS B KNU-407(030618) NEUTRAL
EUT : Flat Panel Color Monitor M/N:17085
Power : 120Vac / 60Hz (18°C/49%)
Memo : 1280*1024/75Hz ; 80KHz
: S/N:TY0304758 (LPL + Ambient)

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.195	45.63	-18.18	63.81	45.22	0.21	0.20	QP
2	0.260	40.07	-21.35	61.42	39.71	0.16	0.20	QP
3	0.324	39.93	-19.68	59.61	39.60	0.13	0.20	QP
4	0.518	36.23	-19.77	56.00	35.93	0.10	0.20	QP
5	0.650	38.18	-17.82	56.00	37.88	0.10	0.20	QP
6	21.099	22.48	-37.52	60.00	21.46	0.32	0.70	QP

Data#: 33 File#: C:\Philips-G921348-C.EMI

	Freq	Level	Over Limit	Limit	Read	Probe	Cable	
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	Remark
1	0.195	41.81	-12.00	53.81	41.40	0.21	0.20	Average
2	0.260	39.24	-12.18	51.42	38.88	0.16	0.20	Average
3	0.324	38.45	-11.16	49.61	38.12	0.13	0.20	Average
4	0.518	35.67	-10.33	46.00	35.37	0.10	0.20	Average
5	0.650	35.62	-10.38	46.00	35.32	0.10	0.20	Average
6	21.099	20.95	-29.05	50.00	19.93	0.32	0.70	Average

Data#: 34 File#: C:\Philips-G921348-C.EMI



Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor E/N:17055
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1280*1024/75Hz ; 80KHz
 : S/N:TY0304758 (LPL + Ambit)

Data#: 35 File#: C:\Philips-G921348-C.EMI

Date: 2003-12-29 Time: 11:43:05

Site : No.3 Shielded room
 Condition : FCC CLASS B KNU-407(030618) LINE
 EUT : Flat Panel Color Monitor E/N:17055
 Power : 120Vac / 60Hz (18°C/49%)
 Memo : 1280*1024/75Hz ; 80KHz
 : S/N:TY0304758 (LPL + Ambit)

	Over	Limit	Read	Probe	Cable	
Freq	Level	Limit	Line	Level	Factor	Loss
MHz	dBuV	dB	dBuV	dBuV	dB	dB
1	0.195	45.29	-18.52	63.81	44.98	0.11
2	0.258	39.04	-22.44	61.48	38.74	0.10
3	0.324	38.23	-21.38	59.61	37.93	0.10
4	0.519	35.20	-20.80	56.00	34.90	0.10
5	0.650	37.51	-18.49	56.00	37.21	0.10
6	21.097	22.58	-37.42	60.00	21.56	0.32

Data#: 36 File#: C:\Philips-G921348-C.EMI

	Over	Limit	Read	Probe	Cable	
Freq	Level	Limit	Line	Level	Factor	Loss
MHz	dBuV	dB	dBuV	dBuV	dB	dB
1	0.195	41.02	-12.79	53.81	40.71	0.11
2	0.258	37.84	-13.64	51.48	37.54	0.10
3	0.324	37.38	-12.23	49.61	37.08	0.10
4	0.519	35.17	-10.83	46.00	34.87	0.10
5	0.650	34.82	-11.18	46.00	34.52	0.10
6	21.097	20.57	-29.43	50.00	19.55	0.32

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. 4 Open Field Test Site)

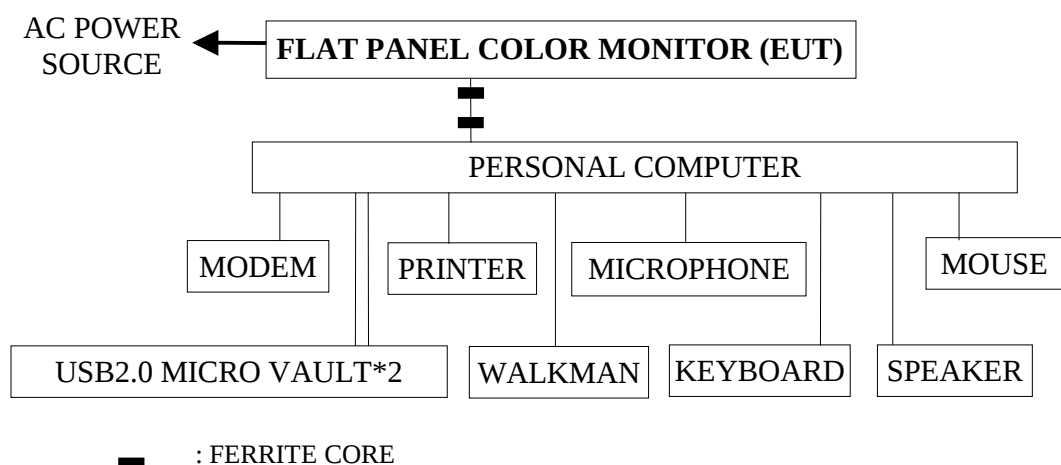
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8590L	3624A01446	N/A	N/A
2.	Test Receiver	R & S	ESVS10	845165/018	May 16, 03'	May 15, 04'
3.	Computer	TOKIN	586PC	N/A	N/A	N/A
4.	Printer	NEC	P2000	553295372	N/A	N/A
5.	Amplifier	HP	8447D	2727A05737	N/A	N/A
6.	Biconical Antenna	Chase	VBA6106A	1263	Nov.24, 03'	Nov 23, 04'
7.	Log Periodic Antenna	Chase	UPA6109	1020	Nov.24, 03'	Nov 23, 04'

3.1.2. For 1GHz~2GHz Frequency (At No. 4 Open Field Test Site)

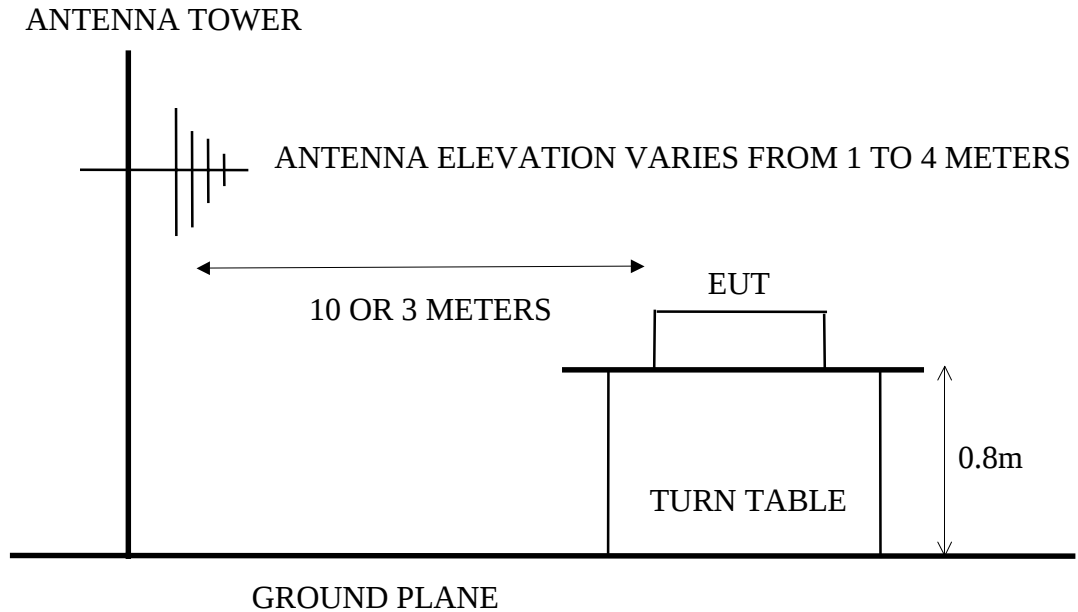
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Spectrum Analyzer	HP	8590L	3624A01446	N/A	N/A
2.	Amplifier	HP	8449B	3008A00529	Jan. 07, 03'	Jan. 06, 04'
3.	Horn Antenna	EMCO	3115	9112-3775	Apr. 21, 03'	Apr. 20, 04'

3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators



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 8590L was set at 1MHz. (For 1GHz-2GHz)

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

For 30-1000MHz frequency range, EUT (Flat Panel Color Monitor, M/N 170S5) with test voltage of AC 120V/60Hz and with the following test modes were performed during radiated testing, all the test results are listed in section 3.7.1.

(worst test mode)

Mode.	Model No./Serial No.	Inverter Board	Frequency Resolution
1.	170S5 (TY0304759)	LC	640*480/60Hz, 31kHz
2.			1024*768/75Hz, 60kHz
3.			1280*1024/75Hz, 80kHz
4.	170S5 (TY0304758)	Ambit	640*480/60Hz, 31kHz
5.			1024*768/75Hz, 60kHz ()
6.			1280*1024/75Hz, 80kHz

For 1-2GHz frequency range, the **test mode 2 & mode 5** were selected and measured within No. 4 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.

Date of Test : Dec. 29, 2003 Temperature : 19

EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%

Test Mode : 640*480/60Hz, 31kHz, (Inverter: LC)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
115.854	18.19	1.10	0.35	19.64	30.00	10.36
152.991	20.00	1.35	-2.13	19.22	30.00	10.78
177.749	20.83	1.44	-2.99	19.28	30.00	10.72
214.885	21.12	1.50	-2.74	19.88	30.00	10.12
252.022	22.51	1.68	-0.40	23.79	37.00	13.21
276.780	23.16	1.73	-0.61	24.28	37.00	12.72
313.917	13.59	1.89	7.65	23.13	37.00	13.87
375.811	15.44	2.12	3.35	20.91	37.00	16.09
425.327	16.61	2.27	4.61	23.49	37.00	13.51
487.221	18.35	2.42	-0.58	20.19	37.00	16.81
573.873	20.41	2.62	0.39	23.42	37.00	13.58
611.010	20.30	2.77	-0.29	22.78	37.00	14.22

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
53.959	14.81	0.78	6.48	22.07	30.00	7.93
128.233	17.06	1.16	4.26	22.48	30.00	7.52
165.370	19.91	1.36	-0.12	21.15	30.00	8.85
202.506	21.46	1.60	-1.09	21.97	30.00	8.03
239.643	21.20	1.62	-1.59	21.23	37.00	15.77
276.780	23.12	1.73	-1.55	23.30	37.00	13.70
326.295	14.56	1.97	6.66	23.19	37.00	13.81
363.432	15.64	2.11	5.35	23.10	37.00	13.90
425.327	16.80	2.27	0.59	19.66	37.00	17.34
474.842	18.64	2.41	-1.61	19.44	37.00	17.56
536.737	19.11	2.51	4.23	25.85	37.00	11.15
573.873	20.19	2.62	-1.66	21.15	37.00	15.85

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

Date of Test : Dec. 29, 2003 Temperature : 19

EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%

Test Mode : 1024*768/75Hz, 60kHz, (Inverter: LC)

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
65.782	12.45	0.87	4.29	17.61	30.00	12.39
109.500	18.17	1.11	1.18	20.46	30.00	9.54
121.664	18.70	1.12	1.20	21.02	30.00	8.98
151.374	20.20	1.35	-3.02	18.53	30.00	11.47
166.357	20.07	1.36	-2.94	18.49	30.00	11.51
219.543	21.36	1.52	-3.43	19.45	30.00	10.55
257.898	22.69	1.71	0.13	24.53	37.00	12.47
326.522	14.59	1.97	3.09	19.65	37.00	17.35
386.304	16.30	2.13	8.89	27.32	37.00	9.68
404.112	16.39	2.20	4.25	22.84	37.00	14.16
468.893	18.03	2.41	-0.05	20.39	37.00	16.61
533.674	18.92	2.50	1.74	23.16	37.00	13.84
637.324	20.35	2.86	-0.29	22.92	37.00	14.08
728.017	20.57	3.12	1.37	25.06	37.00	11.94

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
70.892	11.94	0.89	6.78	19.61	30.00	10.39
109.517	16.55	1.11	2.01	19.67	30.00	10.33
112.795	16.91	1.10	1.75	19.76	30.00	10.24
121.699	16.80	1.12	1.76	19.68	30.00	10.32
146.712	20.86	1.35	2.30	24.51	30.00	5.49
166.985	20.11	1.37	-3.00	18.48	30.00	11.52
197.315	21.76	1.66	-2.59	20.83	30.00	9.17
218.274	22.60	1.52	0.14	24.26	30.00	5.74
260.637	22.75	1.71	0.96	25.42	37.00	11.58
325.628	14.56	1.97	2.20	18.73	37.00	18.27
390.409	16.38	2.15	7.11	25.64	37.00	11.36
406.962	16.63	2.21	2.18	21.02	37.00	15.98
458.787	18.12	2.38	0.43	20.93	37.00	16.07
549.481	19.05	2.54	0.81	22.40	37.00	14.60
627.218	19.57	2.83	0.94	23.34	37.00	13.66
743.824	21.91	3.16	-0.28	24.79	37.00	12.21

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

Date of Test : Dec. 29, 2003 Temperature : 19EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%Test Mode : 1280*1024/75Hz, 80kHz, (Inverter: LC)

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
109.533	18.17	1.11	1.96	21.24	30.00	8.76
121.673	18.70	1.12	0.39	20.21	30.00	9.79
164.704	20.09	1.36	-1.39	20.06	30.00	9.94
192.365	20.66	1.69	-2.53	19.82	30.00	10.18
225.960	21.57	1.55	-3.44	19.68	30.00	10.32
250.210	22.44	1.67	2.76	26.87	37.00	10.13
321.218	14.06	1.94	2.91	18.91	37.00	18.09
383.632	15.73	2.12	6.80	24.65	37.00	12.35
411.911	15.93	2.23	3.23	21.39	37.00	15.61
463.273	17.33	2.39	2.93	22.65	37.00	14.35
528.055	19.69	2.49	0.32	22.50	37.00	14.50
631.794	20.38	2.85	1.56	24.79	37.00	12.21

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
71.158	11.89	0.89	7.60	20.38	30.00	9.62
109.506	16.55	1.11	3.91	21.57	30.00	8.43
121.682	16.80	1.12	2.72	20.64	30.00	9.36
146.750	20.86	1.35	2.30	24.51	30.00	5.49
183.627	21.29	1.54	-2.04	20.79	30.00	9.21
228.535	20.35	1.56	0.21	22.12	30.00	7.88
331.780	15.04	2.01	2.93	19.98	37.00	17.02
383.427	16.05	2.12	8.15	26.32	37.00	10.68
409.835	16.38	2.22	1.17	19.77	37.00	17.23
461.660	18.21	2.39	1.01	21.61	37.00	15.39
539.397	19.09	2.51	1.57	23.17	37.00	13.83
656.003	20.49	2.91	1.06	24.46	37.00	12.54

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

Date of Test : Dec. 29, 2003 Temperature : 19

EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%

Test Mode : 640*480/60Hz, 31kHz, (Inverter: Ambit)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
111.657	18.19	1.11	1.26	20.56	30.00	9.44
148.794	20.31	1.35	-2.96	18.70	30.00	11.30
185.930	20.58	1.59	-2.95	19.22	30.00	10.78
210.688	20.95	1.51	-2.82	19.64	30.00	10.36
235.446	22.15	1.60	-2.59	21.16	37.00	15.84
284.961	23.63	1.74	-0.68	24.69	37.00	12.31
334.477	14.85	2.02	8.66	25.53	37.00	11.47
396.372	16.63	2.17	3.66	22.46	37.00	14.54
445.887	16.80	2.34	5.76	24.90	37.00	12.10
495.403	18.10	2.43	1.58	22.11	37.00	14.89
582.055	20.25	2.65	1.34	24.24	37.00	12.76
631.572	20.33	2.84	1.47	24.64	37.00	12.36

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
62.142	13.07	0.86	8.34	22.27	30.00	7.73
111.658	16.71	1.11	4.30	22.12	30.00	7.88
136.416	18.55	1.25	2.28	22.08	30.00	7.92
173.552	20.53	1.38	-0.04	21.87	30.00	8.13
210.689	21.76	1.51	-2.03	21.24	30.00	8.76
260.205	22.75	1.71	0.40	24.86	37.00	12.14
334.478	15.04	2.02	10.68	27.74	37.00	9.26
383.994	16.21	2.13	4.29	22.63	37.00	14.37
433.509	17.36	2.30	4.42	24.08	37.00	12.92
495.404	18.65	2.43	2.46	23.54	37.00	13.46
544.919	18.84	2.53	5.06	26.43	37.00	10.57
619.193	19.84	2.80	-2.00	20.64	37.00	16.36

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

Date of Test : Dec. 29, 2003 Temperature : 19EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%Test Mode : 1024*768/75Hz, 60kHz, (Inverter: Ambit)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading		Emission Level	
			Horizontal dB μ V	Horizontal dB μ V/m	Limits dB μ V/m	Margin dB
109.514	18.17	1.11	0.59	19.87	30.00	10.13
121.689	18.70	1.12	0.08	19.90	30.00	10.10
133.240	19.76	1.21	1.34	22.31	30.00	7.69
164.290	19.97	1.36	-0.87	20.46	30.00	9.54
192.508	20.66	1.71	-1.37	21.00	30.00	9.00
* 212.570	20.91	1.49	2.43	24.83	30.00	5.17
261.717	22.57	1.71	-0.03	24.25	37.00	12.75
375.123	15.44	2.12	6.11	23.67	37.00	13.33
392.371	16.75	2.16	7.84	26.75	37.00	10.25
416.750	16.08	2.25	4.75	23.08	37.00	13.92
552.580	19.87	2.55	1.27	23.69	37.00	13.31
629.836	20.33	2.84	1.11	24.28	37.00	12.72
744.311	22.13	3.16	1.94	27.23	37.00	9.77

- Remark :
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. “*” The worst emission was detected at 212.570MHz with corrected signal level of 24.83dB 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 170°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test : Dec. 29, 2003 Temperature : 19EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%Test Mode : 1024*768/75Hz, 60kHz, (Inverter: Ambit)

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
51.101	14.85	0.75	3.91	19.51	30.00	10.49
70.678	11.99	0.88	10.07	22.94	30.00	7.06
85.940	14.58	0.98	1.91	17.47	30.00	12.53
110.430	16.54	1.11	6.53	24.18	30.00	5.82
128.895	17.06	1.16	6.27	24.49	30.00	5.51
133.240	17.94	1.21	4.56	23.71	30.00	6.29
155.375	21.02	1.35	0.07	22.44	30.00	7.56
192.018	22.08	1.69	-0.14	23.63	30.00	6.37
* 213.790	22.18	1.50	3.23	26.91	30.00	3.09
258.378	22.70	1.71	1.36	25.77	37.00	11.23
345.513	14.54	2.09	7.32	23.95	37.00	13.05
386.383	16.52	2.13	9.36	28.01	37.00	8.99
408.775	16.41	2.21	3.21	21.83	37.00	15.17
537.497	19.11	2.51	1.05	22.67	37.00	14.33
638.268	19.83	2.86	0.77	23.46	37.00	13.54
739.040	21.20	3.14	2.32	26.66	37.00	10.34

- Remark :
1. All readings are Quasi-Peak values.
 2. Emission Level= Antenna Factor + Cable Loss + Meter Reading.
 3. “*” The worst emission was detected at 213.790MHz with corrected signal level of 26.91dB μ V/m (limit was 30dB μ V/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 35°.
 4. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Date of Test : Dec. 29, 2003 Temperature : 19EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%Test Mode : 1280*1024/75Hz, 80kHz, (Inverter: Ambit)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Limits dBμV/m	Margin dB
83.433	15.14	0.97	2.60	18.71	30.00	11.29
133.340	19.76	1.21	0.43	21.40	30.00	8.60
163.290	19.85	1.36	0.78	21.99	30.00	8.01
219.030	21.35	1.52	0.88	23.75	30.00	6.25
223.980	21.43	1.54	1.01	23.98	30.00	6.02
268.953	23.12	1.72	0.81	25.65	37.00	11.35
369.206	15.23	2.11	4.98	22.32	37.00	14.68
394.432	16.63	2.16	8.20	26.99	37.00	10.01
470.272	18.03	2.41	1.12	21.56	37.00	15.44
537.453	18.82	2.51	1.46	22.79	37.00	14.21
671.815	20.68	2.96	3.27	26.91	37.00	10.09
806.205	22.28	3.30	3.59	29.17	37.00	7.83
940.567	25.07	3.43	2.00	30.50	37.00	6.50

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Limits dBμV/m	Margin dB
50.765	14.89	0.74	2.94	18.57	30.00	11.43
83.313	14.06	0.97	7.52	22.55	30.00	7.45
109.518	16.55	1.11	8.38	26.04	30.00	3.96
133.510	17.94	1.21	3.02	22.17	30.00	7.83
226.320	21.28	1.56	0.82	23.66	30.00	6.34
246.614	21.64	1.65	1.67	24.96	37.00	12.04
268.726	23.11	1.72	5.24	30.07	37.00	6.93
387.592	16.34	2.14	9.35	27.83	37.00	9.17
403.092	16.56	2.19	3.02	21.77	37.00	15.23
537.453	19.11	2.51	1.63	23.25	37.00	13.75
671.815	20.67	2.96	2.41	26.04	37.00	10.96
806.177	22.41	3.30	4.21	29.92	37.00	7.08

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

3.7.2. 1GHz-2GHz frequency and 3 meters distance measurement.

Date of Test : Dec. 29, 2003 Temperature : 19EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%Test Mode : 1024*768/75Hz, 60kHz, (Inverter: LC)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dB μ V	Emission Level Horizontal dB μ V/m	(Peak) Limits dB μ V/m	Margin dB
1025.000	23.99	2.00	21.38	47.37	74.00	26.63
1082.000	24.18	2.01	18.80	44.99	74.00	29.01
1175.000	24.46	2.02	16.70	43.18	74.00	30.82
1260.000	24.70	2.04	18.50	45.24	74.00	28.76
1336.000	24.90	2.04	14.44	41.38	74.00	32.62
1573.000	25.66	2.07	15.35	43.08	74.00	30.92

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dB μ V	Emission Level Vertical dB μ V/m	(Peak) Limits dB μ V/m	Margin dB
1025.000	23.99	2.00	15.76	41.75	74.00	32.25
1083.000	24.18	2.01	18.21	44.40	74.00	29.60
1172.000	24.45	2.02	17.57	44.04	74.00	29.96
1260.000	24.70	2.04	18.99	45.73	74.00	28.27
1358.000	24.96	2.05	15.92	42.93	74.00	31.07
1530.000	25.46	2.07	14.69	42.22	74.00	31.78

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

Date of Test : Dec. 29, 2003 Temperature : 19

EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%

Test Mode : 1024*768/75Hz, 60kHz, (Inverter: LC)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level (Average) Horizontal dBμV/m	Limits dBμV/m	Margin dB
1025.000	23.99	2.00	7.07	33.06	54.00	20.94
1082.000	24.18	2.01	1.45	27.64	54.00	26.36
1175.000	24.46	2.02	0.54	27.02	54.00	26.98
1260.000	24.70	2.04	1.70	28.44	54.00	25.56
1336.000	24.90	2.04	-2.33	24.61	54.00	29.39
1573.000	25.66	2.07	3.99	31.72	54.00	22.28

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level (Average) Vertical dBμV/m	Limits dBμV/m	Margin dB
1025.000	23.99	2.00	4.70	30.69	54.00	23.31
1083.000	24.18	2.01	4.36	30.55	54.00	23.45
1172.000	24.45	2.02	5.96	32.43	54.00	21.57
1260.000	24.70	2.04	1.71	28.45	54.00	25.55
1358.000	24.96	2.05	2.44	29.45	54.00	24.55
1530.000	25.46	2.07	1.56	29.09	54.00	24.91

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

Date of Test : Dec. 29, 2003 Temperature : 19

EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%

Test Mode : 1024*768/75Hz, 60kHz, (Inverter: Ambit)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dB μ V	Emission Level Horizontal dB μ V/m	(Peak) Limits dB μ V/m	Margin dB
1107.000	24.25	2.02	14.22	40.49	74.00	33.51
1206.000	24.55	2.03	17.79	44.37	74.00	29.63
1263.000	24.71	2.04	17.36	44.11	74.00	29.89
1352.000	24.95	2.05	16.02	43.22	74.00	30.78
1640.000	25.96	2.08	15.50	43.54	74.00	30.46
1735.000	26.37	2.08	12.11	40.56	74.00	33.44

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dB μ V	Emission Level Vertical dB μ V/m	(Peak) Limits dB μ V/m	Margin dB
1063.000	24.11	2.01	15.81	41.93	74.00	32.07
1106.000	24.25	2.02	14.18	40.45	74.00	33.55
1263.000	24.71	2.04	15.69	42.44	74.00	31.56
1386.000	25.03	2.05	14.48	41.56	74.00	32.44
1574.000	25.66	2.07	11.38	39.11	74.00	34.89
1640.000	25.96	2.08	9.02	37.06	74.00	36.94

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

Date of Test : Dec. 29, 2003 Temperature : 19

EUT & M/N : Flat Panel Color Monitor, M/N 170S5 Humidity : 54%

Test Mode : 1024*768/75Hz, 60kHz, (Inverter: Ambit)

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dB μ V	Emission Level Horizontal dB μ V/m	(Average) Limits dB μ V/m	Margin dB
1107.000	24.25	2.02	4.87	31.14	54.00	22.86
1206.000	24.55	2.03	4.19	30.77	54.00	23.23
1263.000	24.71	2.04	2.24	28.99	54.00	25.01
1352.000	24.95	2.05	1.35	28.35	54.00	25.65
1640.000	25.96	2.08	1.87	29.91	54.00	24.09
1735.000	26.37	2.08	1.15	29.60	54.00	24.40

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dB μ V	Emission Level Vertical dB μ V/m	(Average) Limits dB μ V/m	Margin dB
1063.000	24.11	2.01	3.11	29.23	54.00	24.77
1106.000	24.25	2.02	4.18	30.45	54.00	23.55
1263.000	24.71	2.04	5.11	31.86	54.00	22.14
1386.000	25.03	2.05	-1.49	25.59	54.00	28.41
1574.000	25.66	2.07	2.03	29.76	54.00	24.24
1640.000	25.96	2.08	-0.34	27.70	54.00	26.30

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

4. DEVIATION TO TEST SPECIFICATIONS

[NONE]