EXHIBIT 4

Test Report

Test Report TTEMC-F99070

APPLICATION FOR CERTIFICATION
On Behalf of
Top Victory Electronics (Taiwan) Co., Ltd.
15" LCD Monitor

Model No. : TF1560E

FCC ID. : ARSTF1560E

Prepared for : Top Victory Electronics (Taiwan) Co., Ltd.
6F, 168, Lien Chen Road, Chung-Ho,
Taipei Hsien, Taiwan, R.O.C.

Prepared By : Taiwan Tokin EMC Eng. Corp.
No. 53-11, Tin-Fu Tsun, Lin-Kou,
Taipei Hsien, Taiwan, R.O.C

Tel: (02) 2609-9301, (02) 2609-2133

File Number	:	ATM-G99202
Report Number	:	TTEMC-F99070
Date of Test	:	May 03 ~ 25, 1999
Date of Report	:	Jun. 02, 1999

TABLE OF CONTENTS

T0K99-F007

TEST REPORT CERTIFICATION

Applicant	:	Top Victory Electronics (Taiwan) Co., Ltd.
Manufacturer	:	Top Victory Electronics (Fujian) Co., Ltd.
FCC ID	:	ARSTF1560E
EUT Description	:	15" LCD Monitor
		(A) MODEL NO. : TF1560E
		(B) SERIAL NO. : N/A
		(C) POWER SUPPLY : AC 120V / 60Hz

Measurement Procedure Used:

FCC RULES AND CISPR 22 (DOCKET NO. 92-152, SEP. 1993) AND
FCC / ANSI C63.4-1992

The device described above was tested by TAIWAN TOKIN EMC ENG. CORP. to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the CISPR 22 Class B limits both radiated and conducted emissions.

The measurement results are contained in this test report and TAIWAN TOKIN EMC ENG. CORP. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant 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 Taiwan Tokin EMC Eng. corp.

Date of Test : May 03 ~ 25, 1999

Prepared by : Monica Chang Jun. 4. 1999
(MONICA CHANG)

Test Engineer : Allen Wang 6/5.'99
(ALLEN WANG)

Approve & Authorized Signer : Jackie 6/5'99
(JACKIE DENG)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	15" LCD Monitor
Model Number	:	TF1560E
FCC ID	:	ARSTF1560E
Applicant	:	Top Victory Electronics (Taiwan) Co., Ltd. 6F, 168, Lien Chen Road, Chung-Ho, Taipei Hsien, Taiwan, R.O.C.
Manufacturer	:	Top Victory Electronics (Fujian) Co., Ltd. Yuan Hong Road, Shang-Zhen, Hong-Lu, Fuqing City, Fujian, China.
LCD Panel #1	:	LG, M/N LM151X2 S/N 1518CP2603660
LCD Panel #2	:	Samsung, M/N LT150X1-051 S/N 2MB4Q812.3
Data Cable	:	Shielded, Undetachable, 1.5m Bonded a ferrite core
Power Cord	:	Non-Shielded, Detachable, 1.8m
Date of Receipt of Sample	:	May 03, 1999
Date of Test	:	May 03 ~ 25, 1999

1.2. Tested Supporting System Details

§ For EUT w/ LG LCD Panel § (LM15/X2)

1.2.1. PERSONAL COMPUTER

Model Number	:	D5250A
Serial Number	:	US72455810
FCC ID	:	By FCC DoC
Manufacturer	:	Hewlett Packard
CD-ROM	:	Goldstar, M/N CRD-8240B S/N 7054007048 FCC ID BEJCRD-8240B
VGA Card	:	Metabyte FCC ID 127MM-VS03A
Sound Card	:	Digitan Systems, M/N DSAC-300 S/N F/D O 625938
Lan Card	:	Digitan Systems, M/N DS560-450 S/N F/D O 630443
Telephone Line	:	Non-Shielded, Detachable, 2.1m
Power Cord	:	Non-Shielded, Undetachable, 1.8m

1.2.2. KEYBOARD

Model Number	:	SK-2501
Serial Number	:	M970441461
FCC ID	:	GYUR38SK
Manufacturer	:	Hewlett Packard
Data Cable	:	Shielded, Undetachable, 1.8m Bonded a ferrite core

1.2.3. PRINTER

Model Number	:	2225C+
Serial Number	:	3123S97227
FCC ID	:	DSI6XU2225
Manufacturer	:	Hewlett Packard
Power Adapter	:	Kani, Model AD-09
	:	Non-Shielded, Detachable, 2.0m
Data Cable	:	Shielded, Detachable, 1.2m

1.2.4. MODEM

Model Number	:	DM-1414
Serial Number	:	980034387
FCC ID	:	IFAXDM1414
Manufacturer	:	Accex
Data Cable	:	Shielded, Detachable, 1.2m
Power Adapter	:	Amigo, Model AM-91000A Non-Shielded, Undetachable, 1.8m

1.2.5. USB MOUSE #1

Model Number	:	M-UB48
Serial Number	:	LZB81900219
FCC ID	:	DZL211137
Manufacturer	:	Logitech
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.6. USB MOUSE #2

Model Number	:	M-UB48
Serial Number	:	LZB81900227
FCC ID	:	DZL211137
Manufacturer	:	Logitech
Data Cable	:	Shielded, Undetachable, 1.8m

1.2.7. MOUSE

Model Number	:	M-S34
Serial Number	:	LZA65242531
FCC ID	:	DZL211029
Manufacturer	:	Hewlett Packard
Data Cable	:	Shielded, Undetachable, 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. SPEAKER

Model Number	:	J-008
Serial Number	:	97-C-009783-T
Manufacturer	:	(J-S) JAZZ HIPSTER
Data Cable	:	Non-Shielded, Detachable, 1.1m

1.2.10. WALKMAN

Model Number	:	WM-18
Serial Number	:	N/A
Manufacturer	:	Dragon
Data Cable	:	Non-Shielded, Detachable, 1.8m

1.2.11. EARPHONE #1

Manufacturer	:	Panasonic
Data Cable	:	Non-Shielded, Undetachable, 1.1m

1.2.12. EARPHONE #2

Model Number	:	N/A
Serial Number	:	N/A
Manufacturer	:	Cathay Pacific
Data Cable	:	Non-Shielded, Undetachable, 1.3m

1.2.13. TELEPHONE

Model Number	:	RS-802M
Serial Number	:	N/A
Manufacturer	:	Ju Tong
Data Cable	:	Non-Shielded, Detachable, 0.5m

1.2.14. GAME PAD

Model Number	:	S-2300
Serial Number	:	N/A
Manufacturer	:	Super Cobra
Data Cable	:	Non-Shielded, Undetachable, 1.35m

§ For EUT w/ Samsung LCD Panel § (LT150X1-051)

1.2.15. PERSONAL COMPUTER

Mother Board	:	ASUS, M/N P5A FCC ID. By DoC
CPU	:	AMD K6-2 266MHz
Case	:	Enlight, M/N EN7105C
S.P.S.	:	SPI, M/N FSP250-61GT S/N W13562644
Floppy Driver 3.5"	:	Mitsumi, M/N D353M3
Hard Disk Driver	:	Seagate, M/N ST34321A S/N VTH85652
VGA Card	:	ELSA, M/N Gloria-Synergy FCC ID KJGP2EASY
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.16. KEYBOARD

Model Number	:	5121
Serial Number	:	J83300819
FCC ID	:	E5XKBM104M10UC
Manufacturer	:	Behavior Tech Computer Corp.
Data Cable	:	Shielded, Undetachable, 1.0m

1.2.17. PRINTER

Model Number	:	2225C+
Serial Number	:	3007S68643
FCC ID	:	DSI6XU2225
Manufacturer	:	Hewlett Packard
Power Adapter	:	Hewlett Packard, M/N 82241A Non-Shielded, Undetachable, 2.0m
Data Cable	:	Shielded, Detachable, 1.2m

1.2.18. MODEM #1

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

1.2.19. MODEM #2

Model Number	:	DM-1414
Serial Number	:	980034391
FCC ID	:	IFAXDM1414
Manufacturer	:	Accex
Data Cable	:	Shielded, Detachable, 1.2m
Power Adapter	:	Amigo, Model AM-91000A Non-Shielded, Undetachable, 1.8m

1.2.20. MOUSE

Model Number	:	M-S35
Serial Number	:	LZA82103138
FCC ID	:	DZL211029
Manufacturer	:	Logitech
Data Cable	:	Non-Shielded, Undetachable, 1.8m

1.2.21. USB GAMEPAD #1

Model Number	:	INT-002
Serial Number	:	N/A
FCC ID	:	CWTEAK032
Manufacturer	:	Alps
Data Cable	:	Shielded, Undetachable, 2.3m Bonded a ferrite core

1.2.22. USB GAMEPAD #2

Model Number	:	INT-003
Serial Number	:	N/A
FCC ID	:	CWTEAK032
Manufacturer	:	Alps
Data Cable	:	Shielded, Undetachable, 2.3m Bonded a ferrite core

1.3. Description of Test Facility

Site Description (No. 3 Open Site)	:	Mar. 11, 1997 File on Federal Communication Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, U.S.A.
Site Description (No. 1 Open Site)	:	Oct. 21, 1996 Re-file on Federal Communication Commission FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, U.S.A.
Name of Firm	:	Taiwan Tokin EMC Eng. Corp.
Site Location	:	No. 53-11, Tin-Fu Tsun, Lin-Kou, Taipei Hsien, Taiwan, R.O.C
NVLAP Lab Code	:	200077-0

Tokyo-Foot

2. POWERLINE CONDUCTED TEST

2.1. Test Equipment

The following test equipments are used during the power line conducted tests :

2.1.1. For EUT w/ LG LCD Panel (No. 3 Shielded Room)

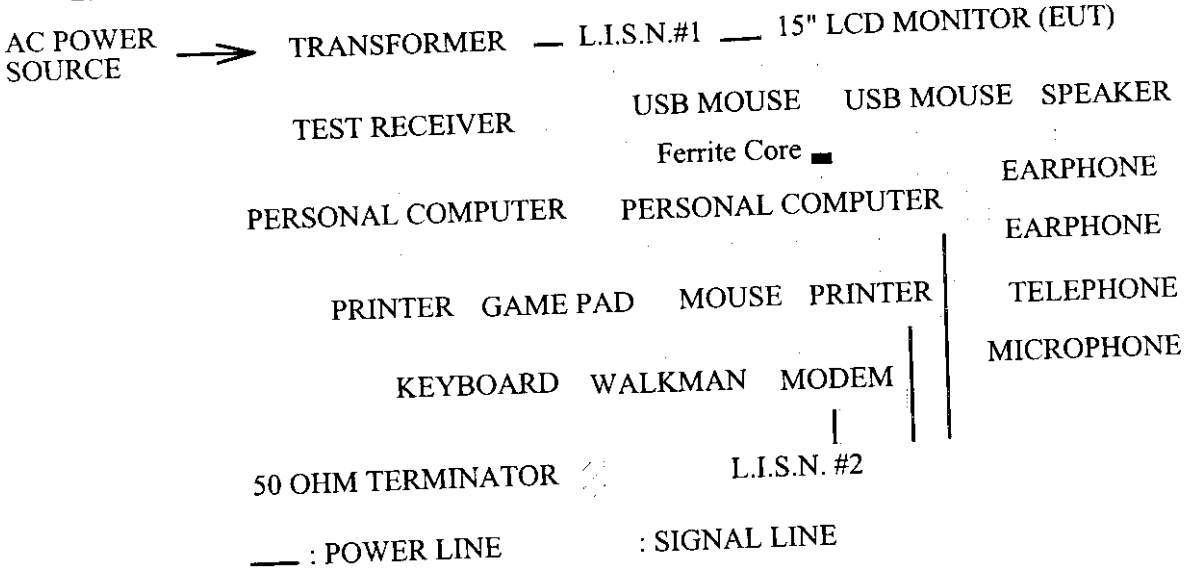
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde&Schwarz	ESHS 10	844591/015	Jan.30, 99'	1 Year
2.	L.I.S.N. # 1	Kyoritsu	KNW-407	8-1370-9	Jun.03, 98'	1 Year
3.	L.I.S.N. # 2	Kyoritsu	KNW-407	8-1370-10	Jun.03, 98'	1 Year

2.1.2. For EUT w/ Samsung LCD Panel (No. 2 Shielded Room)

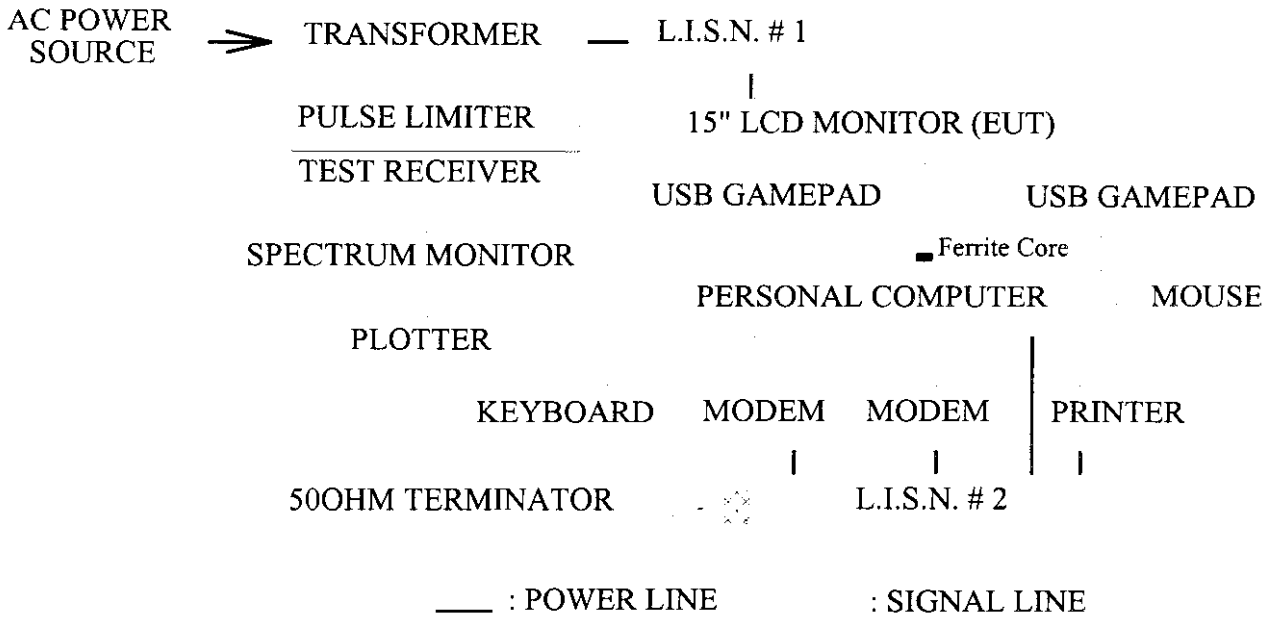
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESH3	886047/035	Jun.24, 98'	1 Year
2.	L.I.S.N. # 1	Kyoritsu	KNW-407	8-881-13	Apr.21, 99'	1 Year
3.	L.I.S.N. # 2	Kyoritsu	KNW-407	8-855-9	Apr.21, 99'	1 Year

2.2. Block Diagram of Test Setup

2.2.1. For EUT w/ LG LCD Panel



2.2.2 For EUT w/ Samsung LCD Panel



2.3. Powerline Conduction Limit (CISPR 22, Class B)

FREQUENCY	MAXIMUN RF LINE VOLTAGE	
	Quasi-Peak Level	Average Level
150KHz ~ 500KHz	66 ~ 56 dB	56 ~ 46 dB
500KHz ~ 5MHz	56 dB	46 dB
5MHz ~ 30MHz	60 dB	50dB

REMARKS : RF LINE VOLTAGE (dBuV) = 20 log RF LINE VOLTAGE (uV)

2.4. EUT's Configuration during Compliance Measurement

The following equipments 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. 15" LCD Monitor (EUT)

Model Number	:	TF1560E
FCC ID	:	ARSTF1560E
Manufacturer	:	Top Victory Electronics (Fujian) Co., Ltd.
LCD Panel #1	:	LG, M/N LM151X2 S/N 1518CP2603660
LCD Panel #2	:	Samsung, M/N LT150X1-051 S/N 2MB4Q812.3
Data Cable	:	Shielded, Undetachable, 1.5m Bonded a ferrite core
Power Cord	:	Non-Shielded, Detachable, 1.8m

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 equipments.

2.5.3. Personal computer read data from disk.

2.5.4. Personal computer sent "H" character to LCD monitor (EUT) through VGA card and the screen displayed and filled with "H" patter by EUT's resolution 1024*768, 800*600 and 640*480.

2.5.5. Personal computer read data from floppy disk 、 modem and then wrote the data into floppy disk 、 modem.

2.5.6. The other peripheral devices were drove and operated in turn during all testing.

2.6. Test Procedure

The EUT 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 of equipments and all of the interface cables were changed according to FCC ANSI C63.4-1992 on conducted measurement.

The bandwidth of the R&S Test Receiver ESHS 10 was set at 10KHz. (For EUT w/ LG LCD Panel Measurement)

The bandwidth of the R&S Test Receiver ESH3 was set at 10KHz. (For EUT w/ Samsung LCD Panel Measurement)

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

2.7. Line Conducted RF Voltage Measurement Results

PASSED. Please refer to the following pages.

The following test modes were done on conducted measurement and all the test results are listed in following pages :

2.7.1 For EUT w/ LG LCD Panel

EUT : 15" LCD Monitor M/N : TF1560E

Test Date : May 05, 1999 Temperature : 21 ℃ Humidity : 70%

	Test Mode	Reference Data #
1	38KHz / 640*480, 72Hz	# 444 (445, 446) # 447 (448, 449)
2	48KHz / 800*600, 75Hz	# 453 (454, 455) # 450 (451, 452)
3	60KHz / 1024*768, 75Hz	# 456 (457, 458) # 459 (460, 461)

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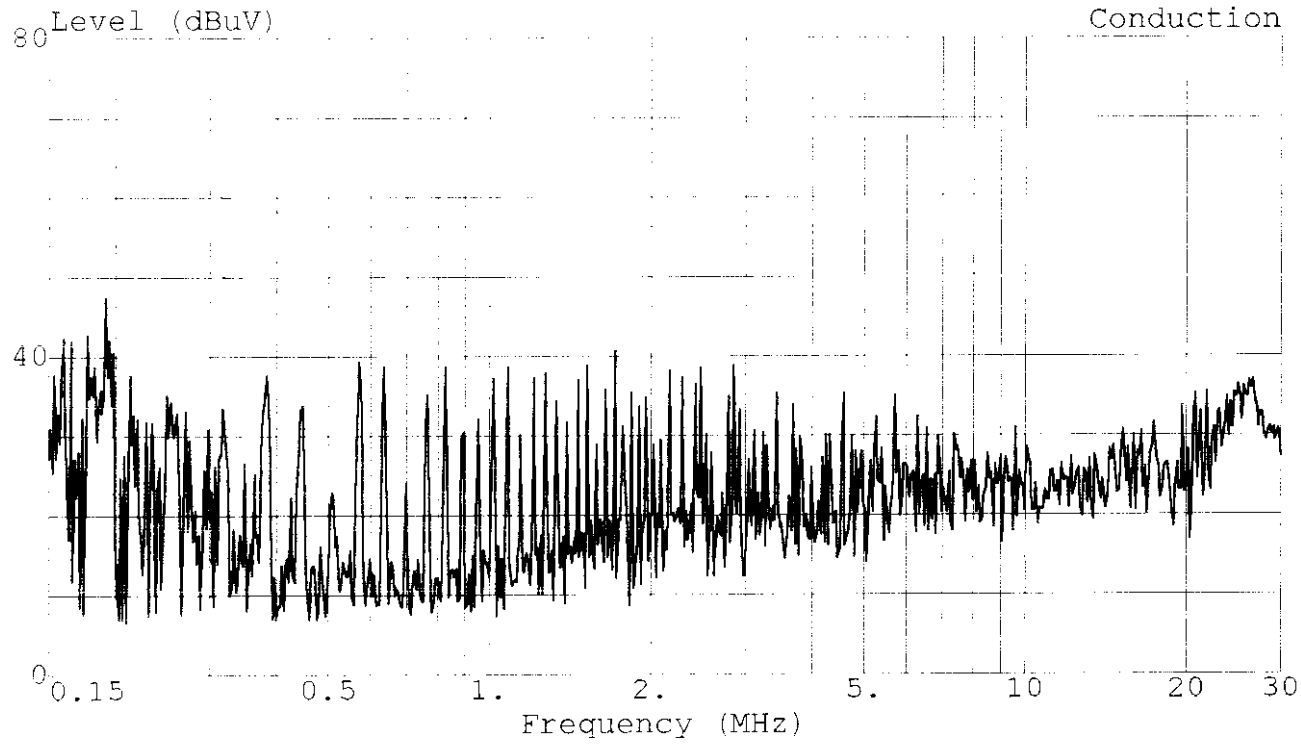
TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 444 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 13:22:24



Trace: Ref Trace:
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 640*480/72Hz;38KHz

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TAIWAN TOKIN EMC ENG. CORP.

Test Site: #53-11 Tingfu Tsun, Linkou, Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 445 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 13:26:56
Conduction
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 640*480/72Hz;38KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.192	45.39	-18.57	63.96	45.16	0.20	0.03	0.00	QP
2	0.383	37.67	-20.55	58.21	37.48	0.15	0.04	0.00	QP
3	0.831	38.09	-17.91	56.00	37.94	0.10	0.05	0.00	QP
4	1.723	37.46	-18.54	56.00	37.31	0.10	0.05	0.00	QP
5	4.599	28.54	-27.46	56.00	28.39	0.10	0.05	0.00	QP
6	20.807	32.83	-27.17	60.00	32.35	0.28	0.20	0.00	QP

Data#: 446 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 13:31:01
Conduction
Limit: CISPR-B (AV) Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 640*480/72Hz;38KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.192	36.18	-17.78	53.96	35.95	0.20	0.03	0.00	Average
2	0.383	34.42	-13.80	48.21	34.23	0.15	0.04	0.00	Average
3	0.831	35.61	-10.39	46.00	35.46	0.10	0.05	0.00	Average
4	1.723	21.72	-24.28	46.00	21.57	0.10	0.05	0.00	Average
5	4.599	16.01	-29.99	46.00	15.86	0.10	0.05	0.00	Average
6	20.807	24.64	-25.36	50.00	24.16	0.28	0.20	0.00	Average

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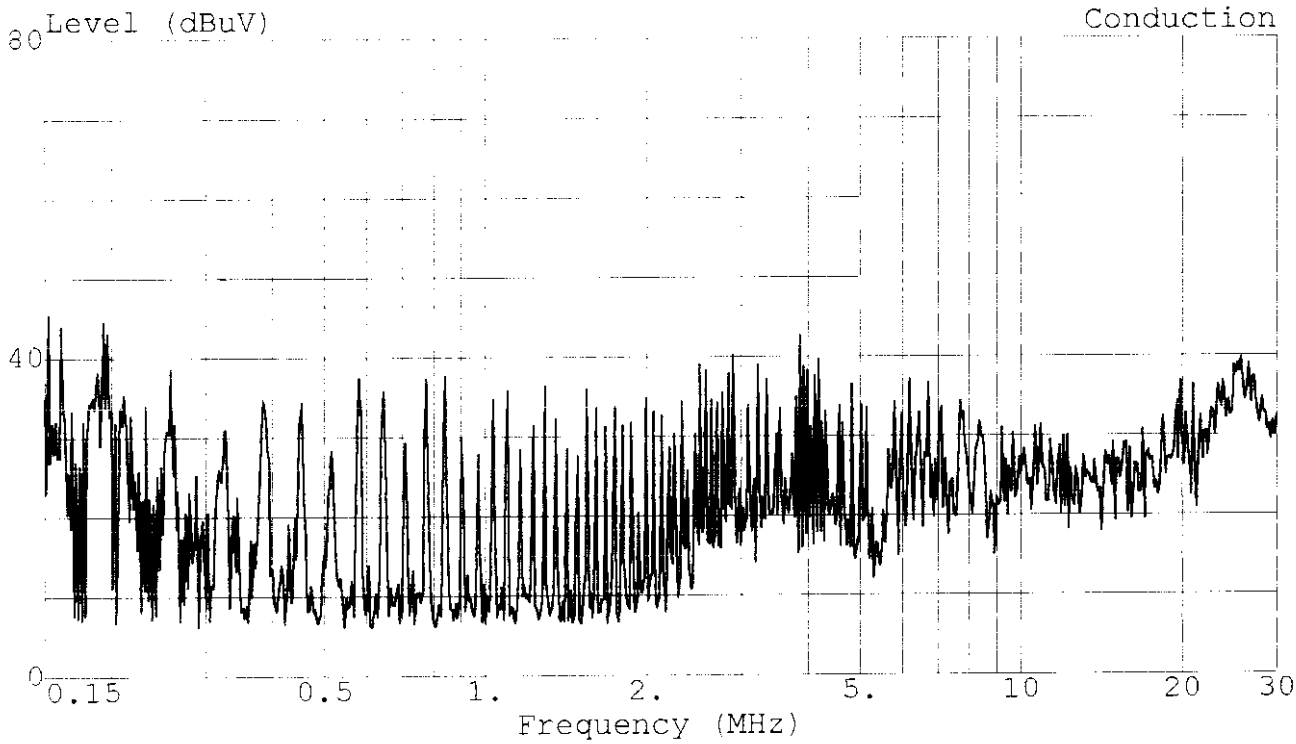
Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

TAIWAN TOKIN EMC ENG. CORP.

Data#: 447 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 13:38:21



Trace: Ref Trace:
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EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 640*480/72Hz;38KHz

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TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 448 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 13:41:08
Conduction
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 640*480/72Hz;38KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.193	43.94	-19.96	63.91	43.71	0.20	0.03	0.00	QP
2	0.383	32.12	-26.10	58.21	31.93	0.15	0.04	0.00	QP
3	0.839	36.62	-19.38	56.00	36.47	0.10	0.05	0.00	QP
4	2.519	36.64	-19.36	56.00	36.49	0.10	0.05	0.00	QP
5	3.875	36.34	-19.66	56.00	36.19	0.10	0.05	0.00	QP
6	19.863	27.69	-32.31	60.00	27.24	0.25	0.20	0.00	QP

Data#: 449 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 13:42:14
Conduction
Limit: CISPR-B (AV) Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 640*480/72Hz;38KHz

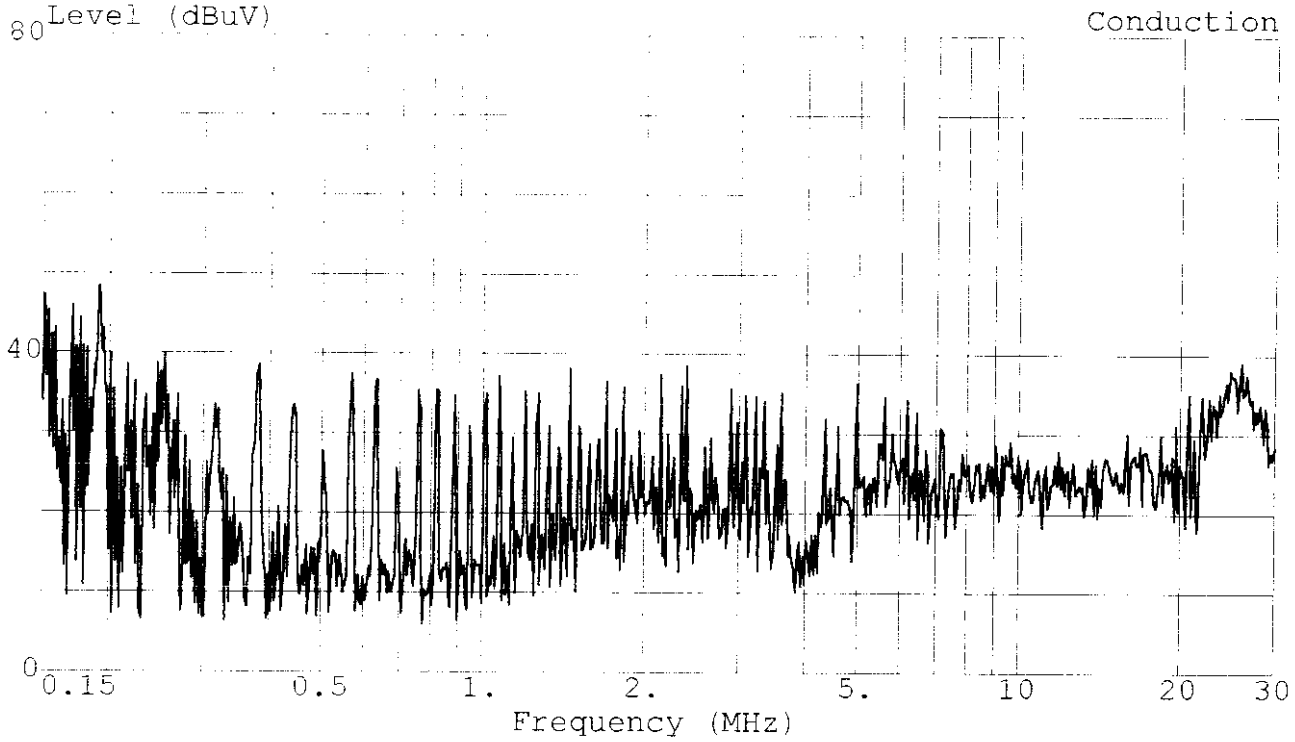
Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.193	34.63	-19.27	53.91	34.40	0.20	0.03	0.00	Average
2	0.383	26.93	-21.29	48.21	26.74	0.15	0.04	0.00	Average
3	0.839	35.46	-10.54	46.00	35.31	0.10	0.05	0.00	Average
4	2.519	31.37	-14.63	46.00	31.22	0.10	0.05	0.00	Average
5	3.875	20.26	-25.74	46.00	20.11	0.10	0.05	0.00	Average
6	19.863	19.83	-30.17	50.00	19.38	0.25	0.20	0.00	Average

TAIWAN TOKIN EMC ENG. CORP.

Test Site: #53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 453 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:07:33



Trace: Ref Trace:
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 800*600/75Hz;48KHz

TOKIN

TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 454 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:10:22
Conduction
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 800*600/75Hz;48KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.191	46.67	-17.32	63.99	46.44	0.20	0.03	0.00	QP
2	0.381	37.47	-20.79	58.26	37.28	0.15	0.04	0.00	QP
3	0.826	37.89	-18.11	56.00	37.74	0.10	0.05	0.00	QP
4	2.409	35.22	-20.78	56.00	35.07	0.10	0.05	0.00	QP
5	5.010	24.12	-35.88	60.00	23.97	0.10	0.05	0.00	QP
6	26.024	34.23	-25.77	60.00	33.57	0.46	0.20	0.00	QP

Data#: 455 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:11:06
Conduction
Limit: CISPR-B (AV) Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 800*600/75Hz;48KHz

Page: 1

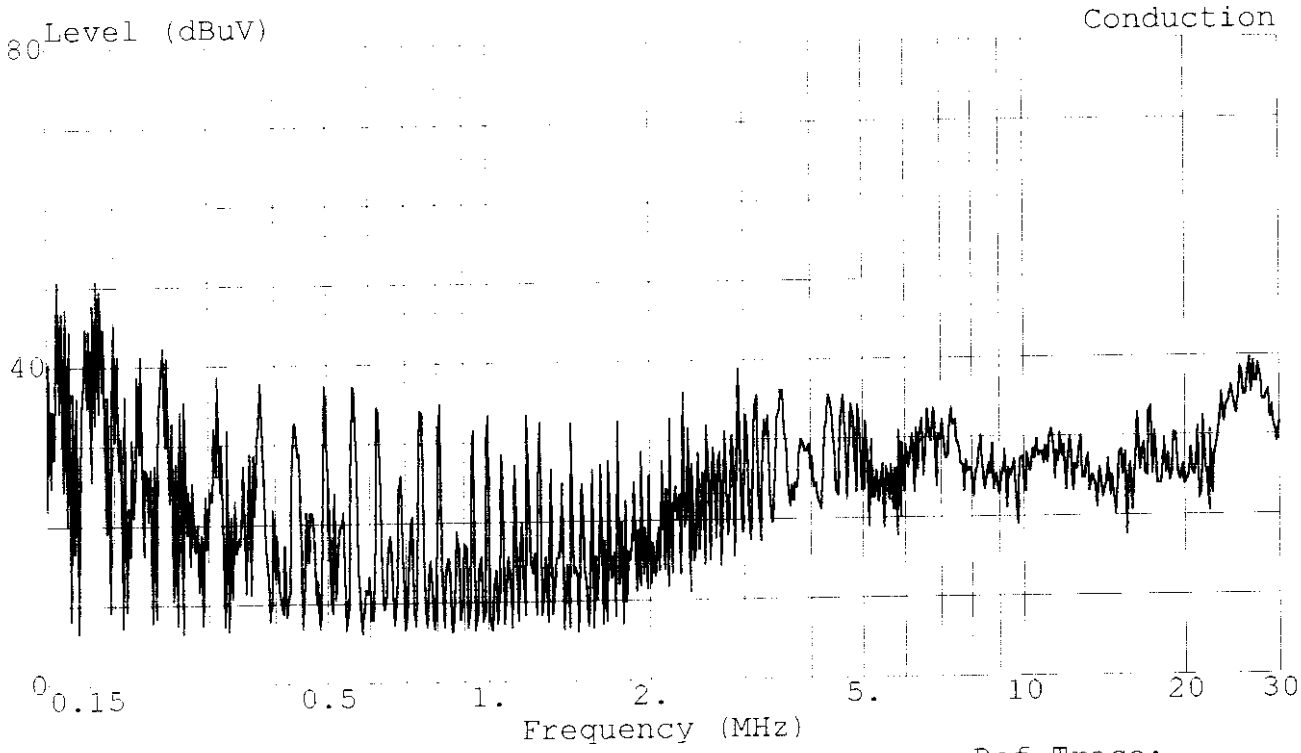
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.191	37.24	-16.75	53.99	37.01	0.20	0.03	0.00	Average
2	0.381	33.62	-14.64	48.26	33.43	0.15	0.04	0.00	Average
3 !	0.826	36.66	-9.34	46.00	36.51	0.10	0.05	0.00	Average
4	2.409	26.54	-19.46	46.00	26.39	0.10	0.05	0.00	Average
5	5.010	8.67	-41.33	50.00	8.52	0.10	0.05	0.00	Average
6	26.024	29.20	-20.80	50.00	28.54	0.46	0.20	0.00	Average

TOKIN

TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 450 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 16:59:59



Trace: Ref Trace:
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 800*600/75Hz;48KHz

TOKIN

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

TAIWAN TOKIN EMC ENG. CORP.

Data#: 451 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:02:29
Conduction
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 800*600/75Hz;48KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.185	46.72	-17.54	64.26	46.48	0.21	0.03	0.00	QP
2	0.312	35.75	-24.17	59.92	35.56	0.15	0.04	0.00	QP
3	0.624	32.41	-23.59	56.00	32.26	0.10	0.05	0.00	QP
4	1.753	27.81	-28.19	56.00	27.66	0.10	0.05	0.00	QP
5	7.330	30.95	-29.05	60.00	30.79	0.11	0.05	0.00	QP
6	26.245	36.28	-23.72	60.00	35.62	0.46	0.20	0.00	QP

Data#: 452 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:03:10
Conduction
Limit: CISPR-B (AV) Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 800*600/75Hz;48KHz

Page: 1

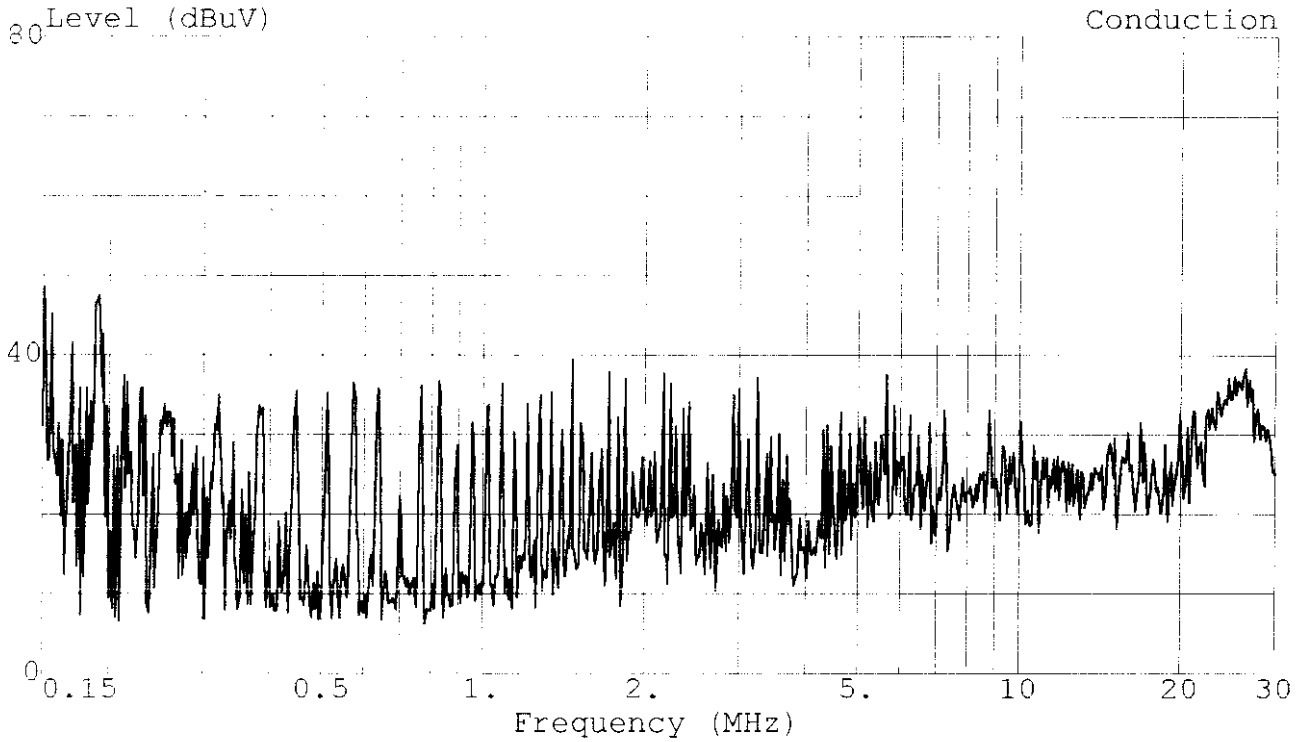
	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.185	35.80	-18.46	54.26	35.56	0.21	0.03	0.00	Average
2	0.312	28.79	-21.13	49.92	28.60	0.15	0.04	0.00	Average
3	0.624	29.76	-16.24	46.00	29.61	0.10	0.05	0.00	Average
4	1.753	16.60	-29.40	46.00	16.45	0.10	0.05	0.00	Average
5	7.330	27.99	-22.01	50.00	27.83	0.11	0.05	0.00	Average
6	26.245	31.17	-18.83	50.00	30.51	0.46	0.20	0.00	Average

TOKIN

TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 456 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:17:32



Trace: Ref Trace:
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 1024*768/75Hz;60KHz

TOKIN

TAIWAN TOKIN EMC ENG. CORP.

Test Site: #53-11 Tingfu Tsun, Linkou, Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 457 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:20:28
Conduction
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 1024*768/75Hz;60KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.192	45.21	-18.72	63.94	44.98	0.20	0.03	0.00	QP
2	0.447	33.87	-23.06	56.93	33.71	0.12	0.04	0.00	QP
3	0.829	34.41	-21.59	56.00	34.26	0.10	0.05	0.00	QP
4	1.471	38.25	-17.75	56.00	38.10	0.10	0.05	0.00	QP
5	3.260	28.11	-27.89	56.00	27.96	0.10	0.05	0.00	QP
6	5.694	26.70	-33.30	60.00	26.55	0.10	0.05	0.00	QP

Data#: 458 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:21:11
Conduction
Limit: CISPR-B (AV) Probe: LISN(FCC)8-1370-10 NEUTRAL
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 1024*768/75Hz;60KHz

Page: 1

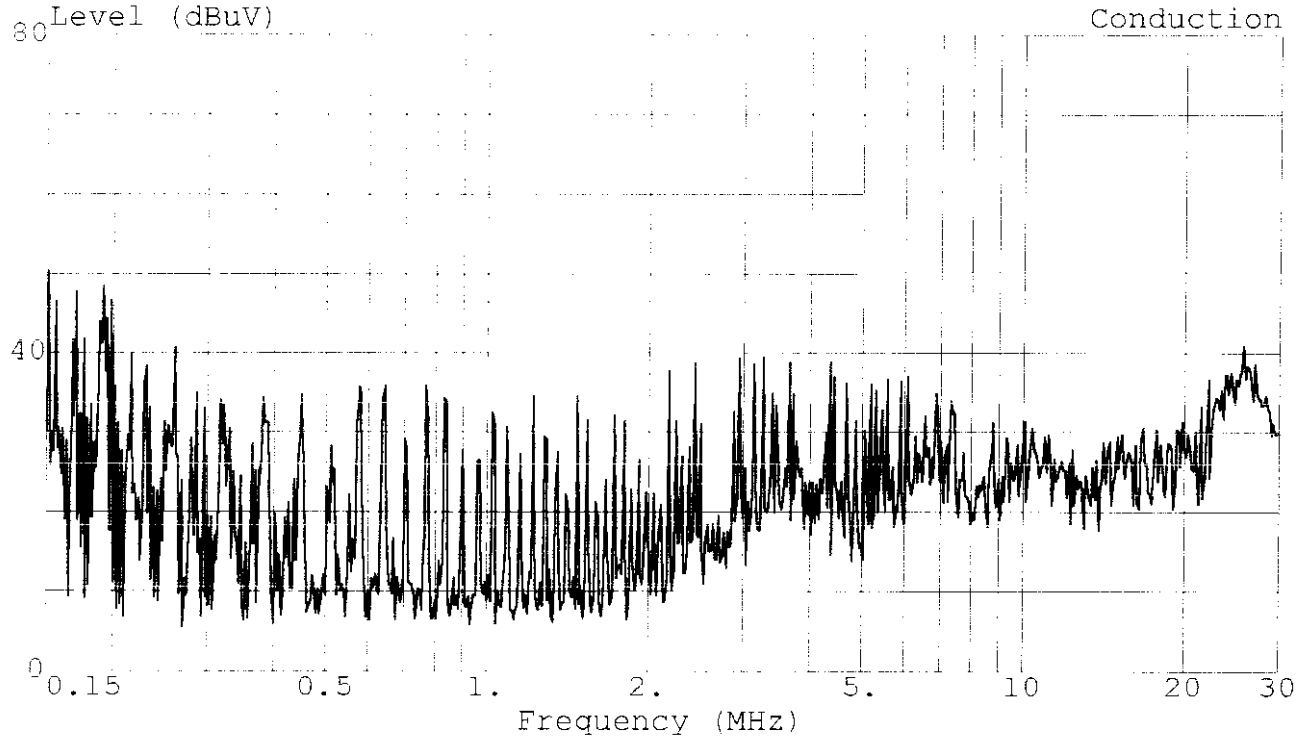
		Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
		MHz	dB	dB	dB	dB	dB	dB	dB	
1		0.192	36.47	-17.46	53.94	36.24	0.20	0.03	0.00	Average
2		0.447	33.05	-13.88	46.93	32.89	0.12	0.04	0.00	Average
3		0.829	33.01	-12.99	46.00	32.86	0.10	0.05	0.00	Average
4	!	1.471	36.28	-9.72	46.00	36.13	0.10	0.05	0.00	Average
5		3.260	12.10	-33.90	46.00	11.95	0.10	0.05	0.00	Average
6		5.694	12.10	-37.90	50.00	11.95	0.10	0.05	0.00	Average

TOKIN

TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 459 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:23:06



Trace: Ref Trace:
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 1024*768/75Hz;60KHz

TOKIN

TAIWAN TOKIN EMC ENG. CORP.

Test Site:
#53-11 Tingfu Tsun, Linkou,
Taipei, Taiwan R.O.C.
Tel:02-26092133 Fax:02-26099303

Data#: 460 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:26:00
Conduction
Limit: CISPR CLASS-B Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 1024*768/75Hz;60KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.194	44.62	-19.24	63.86	44.39	0.20	0.03	0.00	QP
2	0.449	33.28	-23.61	56.89	33.12	0.12	0.04	0.00	QP
3	1.220	31.30	-24.70	56.00	31.15	0.10	0.05	0.00	QP
4	2.444	36.85	-19.15	56.00	36.70	0.10	0.05	0.00	QP
5	8.812	20.36	-39.64	60.00	20.18	0.13	0.05	0.00	QP
6	25.785	37.49	-22.51	60.00	36.83	0.46	0.20	0.00	QP

Data#: 461 File#: TOP-VICT.EMI Date: 1999-05-05 Time: 17:26:42
Conduction
Limit: CISPR-B (AV) Probe: LISN(FCC)8-1370-10 LINE
EUT : 15" LCD MONITOR. M/N:TF1560E
Power: 120Vac/60Hz
Memo : 1024*768/75Hz;60KHz

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	0.194	34.42	-19.44	53.86	34.19	0.20	0.03	0.00	Average
2	0.449	31.12	-15.77	46.89	30.96	0.12	0.04	0.00	Average
3	1.220	28.36	-17.64	46.00	28.21	0.10	0.05	0.00	Average
4	2.444	32.37	-13.63	46.00	32.22	0.10	0.05	0.00	Average
5	8.812	13.68	-36.32	50.00	13.50	0.13	0.05	0.00	Average
6	25.785	31.05	-18.95	50.00	30.39	0.46	0.20	0.00	Average

2.7.2 For EUT w/ Samsung LCD Panel

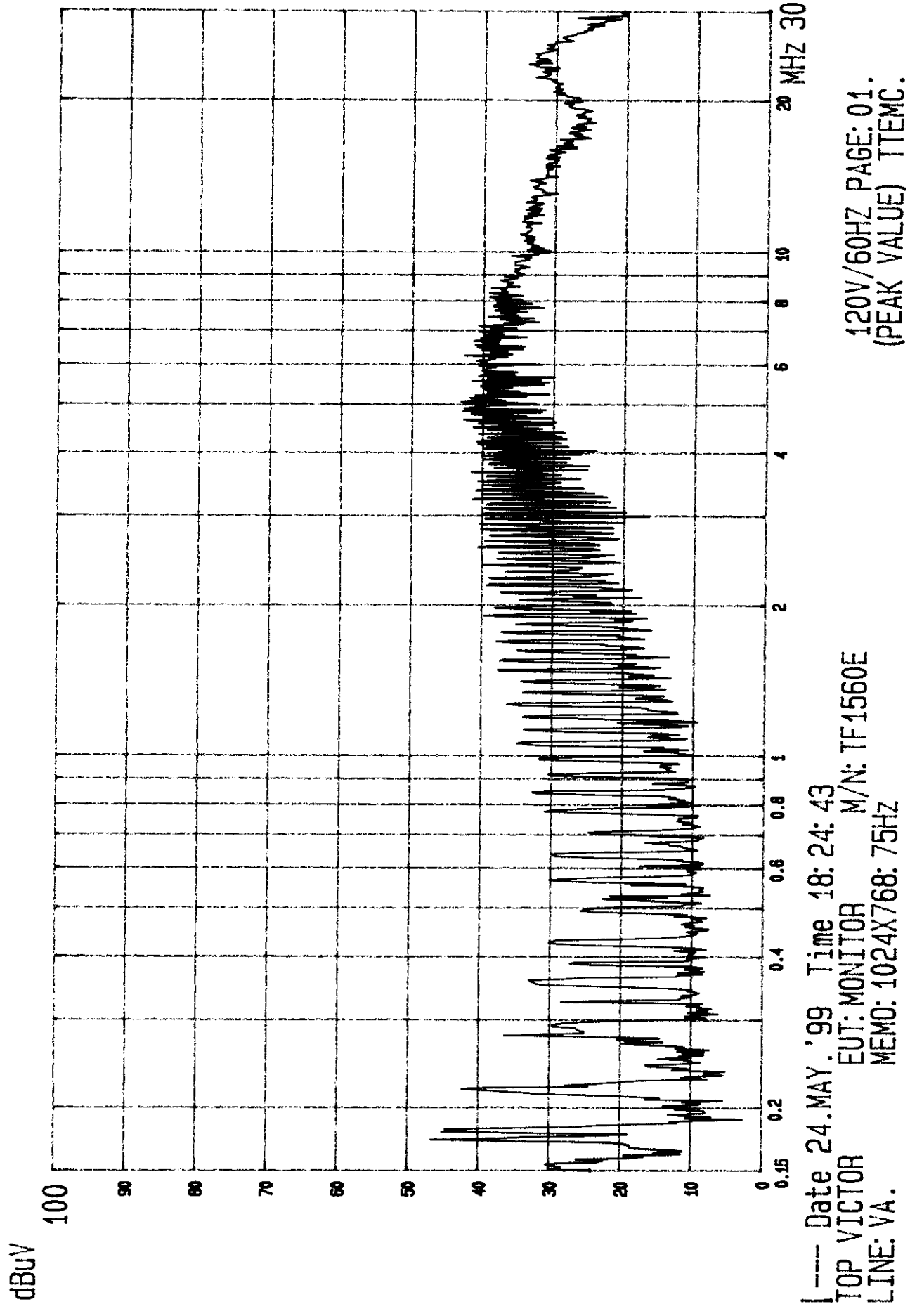
Date of Test : May 24, 1999 Temperature : 26 ℃

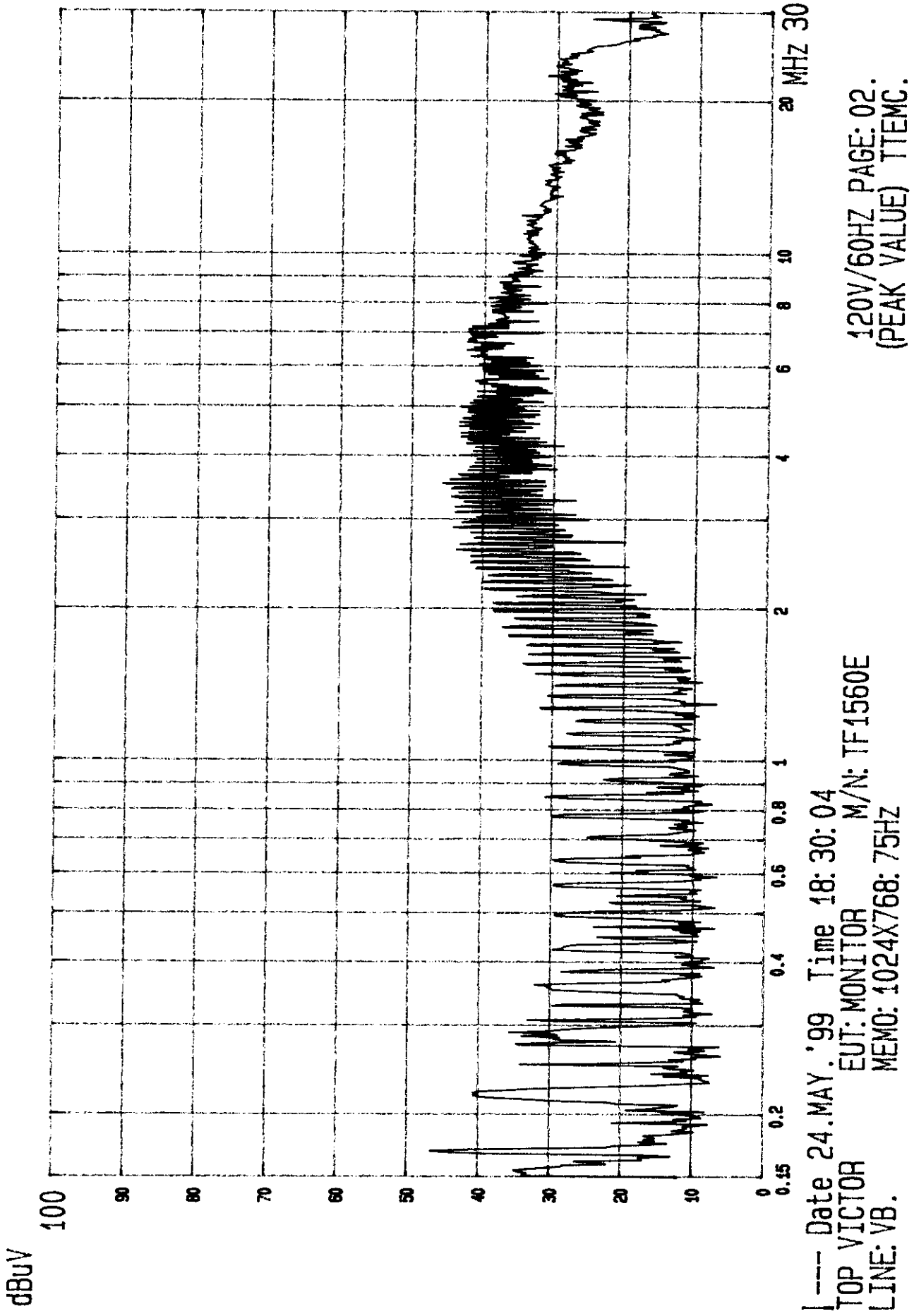
EUT & M/N : 15" LCD Monitor Humidity : 50 %

Test Mode : EUT w/ Samsung LCD Panel, 60KHz / 1024*768, 75Hz

Frequency	Factor	Measurement (dBuV)				Reading (dBuV)				Limits (dBuV)	
		Phase A Neutral		Phase B Line		Phase A Neutral		Phase B Line			
(MHz)	dB	Q.P.	Average	Q.P.	Average	Q.P.	Average	Q.P.	Average	Q.P.	Average
0.1517	0.5	*	*	43.2	15.0	*	*	43.7	15.5	65.9	55.9
0.1645	0.5	40.3	12.9	*	*	40.8	13.4	*	*	65.2	55.2
0.2108	0.5	40.9	30.9	*	*	41.4	31.4	*	*	63.2	53.2
0.2115	0.5	*	*	40.8	29.7	*	*	41.3	30.2	63.2	53.2
1.1985	0.5	*	*	27.4	24.3	*	*	27.9	24.8	56.0	46.0
1.9006	0.5	37.7	33.7	*	*	38.2	34.2	*	*	56.0	46.0
3.5266	0.5	*	*	43.7	37.8	*	*	44.2	38.3	56.0	46.0
4.6564	0.5	40.3	35.2	*	*	40.8	35.7	*	*	56.0	46.0
7.0947	0.8	*	*	32.0	25.2	*	*	32.8	26.0	60.0	50.0
8.4502	0.8	36.5	31.3	*	*	37.3	32.1	*	*	60.0	50.0
22.5012	1.1	*	*	26.0	19.9	*	*	27.1	21.0	60.0	50.0
23.5941	1.1	29.3	23.5	*	*	30.4	24.6	*	*	60.0	50.0

Remark : 1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss


dBuV
100
90
80
70
60
50
40
30
20
10
0
0.15
0.2
0.4
0.6
0.8
1
2
4
6
8
10
20 MHz 30
|--- Date 24.MAY.'99 Time 18:24:43
TOP VICTOR EUT:MONITOR M/N:TF1560E
LINE:VA. MEMO:1024X768:75Hz
120V/60HZ PAGE:01.
(PEAK VALUE) TTEMC.


dBuV
100
90
80
70
60
50
40
30
20
10
0
0.15
0.2
0.4
0.6
0.8
1
2
4
6
8
10
20 MHz 30
|--- Date 24.MAY.'99 Time 18:30:04
TOP VICTOR EUT:MONITOR M/N: TF1560E
LINE: VB. MEMO: 1024X768: 75HZ
120V/60HZ PAGE: 02.
(PEAK VALUE) TTEMC.

3. RADIATED EMISSION TEST

3.1. Test Equipment

The following test equipments were used during the radiated emission tests :

3.1.1 For EUT w/ LG LCD Panel (No. 3 Open Site)

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde&Schwarz	ESVS10	845165/002	Dec.12, 98'	1 Year
2.	Pre-Amplifier	HP	8449B	3008A00529	Jan.27,99'	1 Year
3.	Broadband Antenna	Chase	VBA6106A	1231	Dec.30, 98'	1 Year
4.	Broadband Antenna	Chase	UPA6109	1027	Dec.30, 98'	1 Year

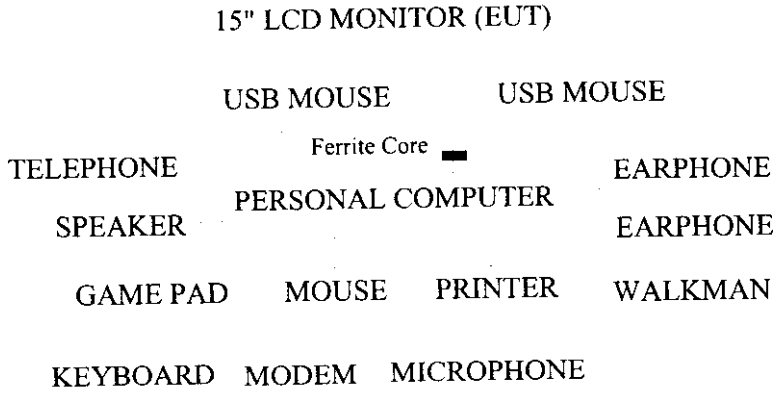
3.1.2. For EUT w/ Samsung LCD Panel (No. 1 Open Site)

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde&Schwarz	ESVP	893202/001	May 13, 99'	1 Year
2.	Broadband Antenna	Schwarzbeck	BBA9106	A1L	Feb.02, 99'	1 Year
3.	Broadband Antenna	Chase	UPA6109	1039	Feb.02, 99'	1 Year

3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators

3.2.1. For EUT w/ LG LCD Panel



3.2.1. For EUT w/ Samsung LCD Panel

15" LCD MONITOR (EUT)

USB GAMEPAD USB GAMEPAD

Ferrite Core

MODEM PERSONAL COMPUTER MODEM

KEYBOARD MOUSE PRINTER

3.2.2. Open Field Test Site Setup Diagram

ANTENNA TOWER

ANTENNA ELEVATION VARIES FROM 1METER TO 4 METERS

10 METERS

EUT

0.8
METER

TURN TABLE

GROUND PLANE

3.3. Radiation Limit (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 (dBuV/m)
30 ~ 230	10	30
230 ~ 1000	10	37

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 device or system.

3.4. EUT's Configuration during Compliance Measurement

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

3.5. Operating Condition of EUT

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

3.6. Test Procedure

The EUT and its simulators were placed on a turn table which is 0.8 meter above ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT is set 10 meters away from the receiving antenna which was mounted on a antenna tower. The antenna moved 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 EUT w/ LG LCD Panel Measurement)

The bandwidth of the R&S Test Receiver ESVP was set at 120KHz. (For EUT w/ Samsung LCD Panel Measurement)

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

The following test modes were done on radiated measurement and all the test results are listed in section 3.8.

EUT w/ LG LCD Panel (Measurement at No. 3 Open Site)

(1) 38KHz/640*480, 72Hz
(2) 48KHz/800*600, 75Hz
(3) 60KHz/1024*768, 75Hz

EUT w/ Samsung LCD Panel (Measurement at No. 1 Open Site)

(1) 60KHz/1024*768, 75Hz

3.7. Test Results

PASSED. Please refer to the following pages.

3.8. Radiated Emission Measurement Results

The frequency spectrum from 30 MHz to 1000MHz is investigated. All the emissions not report below are too low against the CISPR 22 Class B limit.

Date of Test : May 03, 1999 Temperature : 21 ℃

EUT : 15" LCD Monitor Humidity : 72 %

Test Mode : EUT w/ LG LCD Panel, 38KHz / 640*480, 72Hz

	Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBuV	Emission Level Horizontal dBuV/m	Limits dBuV/m	Margin dB
	48.165	15.66	1.20	-3.42	13.44	30.00	16.56
	70.151	12.32	1.60	2.82	16.74	30.00	13.26
	83.255	14.30	1.60	5.74	21.64	30.00	8.36
	113.423	18.53	2.20	-1.42	19.31	30.00	10.69
	127.027	19.29	2.20	0.46	21.95	30.00	8.05
	140.302	19.58	2.40	-0.02	21.96	30.00	8.04
	161.878	20.62	2.40	1.28	24.30	30.00	5.70
*	**209.952**	**20.89**	**3.00**	**3.20**	**27.09**	**30.00**	**2.91**
	244.870	22.06	3.40	1.67	27.13	37.00	9.87
	279.988	23.70	3.40	0.44	27.54	37.00	9.46
	315.276	13.83	3.70	5.75	23.28	37.00	13.72
	350.280	15.06	3.80	14.37	33.23	37.00	3.77
	385.323	15.85	4.10	5.31	25.26	37.00	11.74
	420.353	16.36	4.40	11.92	32.68	37.00	4.32
	490.238	17.74	4.80	6.64	29.18	37.00	7.82

Remark :
1. All readings are Quasi-Peak values.
2. The worst emission was detected at 209.952MHz with corrected signal level of 27.09dBuV/m (limit was 30dBuV/m) when the antenna was at horizontal polarization and was at 4m high and the turn table was at 220°.
3. 0° was the table front facing the antenna, Degree is calculated from 0° clockwise facing the antenna.
4. Measurement at No. 3 open field site

Date of Test : May 03, 1999 Temperature : 21 ℃

EUT : 15" LCD Monitor Humidity : 72 %

Test Mode : EUT w/ LG LCD Panel, 38KHz / 640*480, 72Hz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBuV	Emission Level Vertical dBuV/m	Limits dBuV/m	Margin dB
48.117	16.50	1.20	0.89	18.59	30.00	11.41
70.118	12.48	1.60	3.15	17.23	30.00	12.77
83.245	14.46	1.60	5.23	21.29	30.00	8.71
113.538	18.51	2.20	1.89	22.60	30.00	7.40
140.258	19.05	2.40	2.66	24.11	30.00	5.89
174.554	20.32	2.60	1.78	24.70	30.00	5.30
210.100	21.95	3.00	2.61	27.56	30.00	2.44
280.224	23.70	3.40	1.14	28.24	37.00	8.76
315.285	14.02	3.70	6.48	24.20	37.00	12.80
350.329	15.61	3.80	11.79	31.20	37.00	5.80
385.321	16.50	4.10	4.54	25.14	37.00	11.86
420.377	16.70	4.40	6.21	27.31	37.00	9.69
490.387	18.30	4.80	4.29	27.39	37.00	9.61
560.287	20.14	5.00	0.73	25.87	37.00	11.13

Remark : 1. All readings are Quasi-Peak values.
2. Measurement at No. 3 open field site

Date of Test : May 03, 1999 Temperature : 21 ℃

EUT : 15" LCD Monitor Humidity : 72 %

Test Mode : EUT w/ LG LCD Panel, 48KHz / 800*600, 75Hz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBuV	Emission Level Horizontal dBuV/m	Limits dBuV/m	Margin dB
49.015	15.16	1.20	-3.25	13.11	30.00	16.89
70.141	12.32	1.60	2.21	16.13	30.00	13.87
80.108	13.70	1.80	3.25	18.75	30.00	11.25
85.524	14.58	1.60	2.19	18.37	30.00	11.63
111.818	18.36	2.00	-2.76	17.60	30.00	12.40
139.620	19.68	2.40	-0.61	21.47	30.00	8.53
174.600	20.66	2.60	1.63	24.89	30.00	5.11
209.948	20.89	3.00	2.41	26.30	30.00	3.70
280.135	23.70	3.40	1.12	28.22	37.00	8.78
315.276	13.83	3.70	8.03	25.56	37.00	11.44
350.254	15.06	3.80	14.97	33.83	37.00	3.17
385.234	15.85	4.10	6.11	26.06	37.00	10.94
420.442	16.36	4.40	13.00	33.76	37.00	3.24
490.285	17.74	4.80	7.66	30.20	37.00	6.80
560.308	20.31	5.00	3.53	28.84	37.00	8.16

Remark : 1. All readings are Quasi-Peak values.
2. Measurement at No. 3 open field site

Date of Test : May 03, 1999 Temperature : 21 ℃

EUT : 15" LCD Monitor Humidity : 72 %

Test Mode : EUT w/ LG LCD Panel, 48KHz / 800*600, 75Hz

	Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBuV	Emission Level Vertical dBuV/m	Limits dBuV/m	Margin dB
	41.939	18.29	1.20	-0.69	18.80	30.00	11.20
	69.983	12.48	1.60	5.98	20.06	30.00	9.94
	80.410	13.77	1.80	6.80	22.37	30.00	7.63
	111.205	17.66	2.00	0.63	20.29	30.00	9.71
	140.032	19.05	2.40	1.27	22.72	30.00	7.28
	175.038	20.22	2.60	1.40	24.22	30.00	5.78
*	**210.114**	**21.95**	**3.00**	**2.81**	**27.76**	**30.00**	**2.24**
	280.101	23.70	3.40	3.27	30.37	37.00	6.63
	315.244	14.02	3.70	5.36	23.08	37.00	13.92
	350.262	15.61	3.80	13.59	33.00	37.00	4.00
	385.248	16.50	4.10	5.00	25.60	37.00	11.40
	420.329	16.70	4.40	7.12	28.22	37.00	8.78
	490.237	18.24	4.80	0.46	23.50	37.00	13.50
	560.298	20.14	5.00	0.22	25.36	37.00	11.64

Remark : 1. All readings are Quasi-Peak values.
2. The worst emission was detected at 210.114MHz with corrected signal level of 27.76dBuV/m (limit was 30.0dBuV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 130°.
3. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
4. Measurement at No. 3 open field site

Date of Test : May 03, 1999 Temperature : 21 ℃

EUT : 15" LCD Monitor Humidity : 72 %

Test Mode : EUT w/ LG LCD Panel, 60KHz / 1024*768, 75Hz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBuV	Emission Level Horizontal dBuV/m	Limits dBuV/m	Margin dB
41.984	17.43	1.20	-3.23	15.40	30.00	14.60
70.026	12.32	1.60	1.26	15.18	30.00	14.82
84.028	14.31	1.70	6.85	22.86	30.00	7.14
118.803	18.64	2.00	-0.71	19.93	30.00	10.07
125.791	19.27	2.20	2.00	23.47	30.00	6.53
161.061	20.49	2.40	1.58	24.47	30.00	5.53
175.014	20.76	2.60	2.74	26.10	30.00	3.90
210.136	20.89	3.00	1.83	25.72	30.00	4.28
231.050	21.77	3.00	-1.73	23.04	37.00	13.96
245.085	22.09	3.10	-1.44	23.75	37.00	13.25
280.032	23.70	3.40	1.61	28.71	37.00	8.29
315.295	13.83	3.70	8.27	25.80	37.00	11.20
350.162	15.06	3.80	12.83	31.69	37.00	5.31
385.165	15.85	4.10	7.23	27.18	37.00	9.82
420.199	16.41	4.40	11.62	32.43	37.00	4.57
490.223	17.74	4.80	8.73	31.27	37.00	5.73
560.282	20.31	5.00	3.98	29.29	37.00	7.71

Remark : 1. All readings are Quasi-Peak values.
2. Measurement at No. 3 open field site

Date of Test : May 03, 1999 Temperature : 21 ℃

EUT : 15" LCD Monitor Humidity : 72 %

Test Mode : EUT w/ LG LCD Panel, 60KHz / 1024*768, 75Hz

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBuV	Emission Level Vertical dBuV/m	Limits dBuV/m	Margin dB
42.185	18.47	1.20	2.57	22.24	30.00	7.76
49.135	16.10	1.20	4.97	22.27	30.00	7.73
56.111	14.15	1.60	5.18	20.93	30.00	9.07
70.007	12.48	1.60	4.42	18.50	30.00	11.50
84.072	14.83	1.70	10.99	27.52	30.00	2.48
119.024	19.22	2.20	-0.77	20.65	30.00	9.35
126.199	18.87	2.20	3.29	24.36	30.00	5.64
140.018	19.05	2.40	1.04	22.49	30.00	7.51
161.113	19.83	2.40	3.24	25.47	30.00	4.53
174.632	20.32	2.60	0.97	23.89	30.00	6.11
210.016	21.95	3.00	1.21	26.16	30.00	3.84
280.189	23.70	3.40	1.75	28.85	37.00	8.15
315.314	14.02	3.70	6.32	24.04	37.00	12.96
350.174	15.61	3.80	10.44	29.85	37.00	7.15
385.192	16.50	4.10	7.39	27.99	37.00	9.01
490.246	18.24	4.80	5.45	28.49	37.00	8.51
525.224	19.36	5.00	-0.54	23.82	37.00	13.18

Remark : 1. All readings are Quasi-Peak values.
2. Measurement at No. 3 open field site

Date of Test : May 25, 1999 Temperature : 26.8 ℃

EUT : 15" LCD Monitor Humidity : 52 %

Test Mode : EUT w/ Samsung LCD Panel, 60KHz / 1024*768, 75Hz

	Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBuV	Emission Level Horizontal dBuV/m	Limits dBuV/m	Margin dB
	66.882	12.34	2.01	8.70	23.05	30.00	6.95
	82.322	13.49	2.16	2.11	17.76	30.00	12.24
	118.343	18.84	2.42	2.40	23.66	30.00	6.34
	144.006	20.56	2.70	-3.19	20.07	30.00	9.93
	179.986	21.31	3.19	-3.10	21.40	30.00	8.60
	195.418	21.89	3.35	-3.80	21.44	30.00	8.56
	216.014	22.47	3.53	-2.80	23.20	30.00	6.80
	236.596	22.93	3.68	1.60	28.21	37.00	8.79
	262.297	23.68	3.99	-4.00	23.67	37.00	13.33
	324.009	13.97	4.47	-0.30	18.14	37.00	18.86
	360.003	14.77	4.60	1.80	21.17	37.00	15.83
	396.017	15.36	4.78	5.20	25.34	37.00	11.66
	432.025	16.05	4.95	0.10	21.10	37.00	15.90
*	**473.200**	**16.97**	**5.47**	**11.80**	**34.24**	**37.00**	**2.76**
	504.036	17.29	5.38	-1.50	21.17	37.00	15.83

Remark :
1. All readings are Quasi-Peak values.
2. The worst emission was detected at 473.200MHz with corrected signal level of 34.24dBuV/m (limit was 37dBuV/m) when the antenna was at horizontal polarization and was at 4m high and the turn table was at 300°.
3. 0° was the table front facing the antenna, Degree is calculated from 0° clockwise facing the antenna.
4. Measurement at No. 1 open field site

Date of Test : May 25, 1999 Temperature : 26.8 ℃

EUT : 15" LCD Monitor Humidity : 52 %

Test Mode : EUT w/ Samsung LCD Panel, 60KHz / 1024*768, 75Hz

	Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBuV	Emission Level Vertical dBuV/m	Limits dBuV/m	Margin dB
	66.875	13.72	2.01	9.09	24.82	30.00	5.18
	82.317	13.44	2.16	7.51	23.11	30.00	6.89
	118.338	17.54	2.42	1.80	21.76	30.00	8.24
	143.980	19.98	2.70	-0.90	21.78	30.00	8.22
	179.991	22.67	3.19	-3.10	22.76	30.00	7.24
	195.435	21.63	3.35	-3.71	21.27	30.00	8.73
	216.012	22.93	3.53	-3.00	23.46	30.00	6.54
	236.591	23.32	3.68	1.10	28.10	37.00	8.90
	257.151	22.98	3.92	-3.01	23.89	37.00	13.11
	324.018	13.03	4.47	0.60	18.10	37.00	18.90
	360.017	14.98	4.60	2.00	21.58	37.00	15.42
	396.015	15.68	4.78	3.10	23.56	37.00	13.44
	432.018	16.40	4.95	-0.20	21.15	37.00	15.85
*	**473.228**	**17.02**	**5.47**	**11.80**	**34.29**	**37.00**	**2.71**
	504.034	17.47	5.38	-1.00	21.85	37.00	15.15

Remark :
1. All readings are Quasi-Peak values.
2. The worst emission was detected at 473.228MHz with corrected signal level of 34.29dBuV/m (limit was 37dBuV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 315°.
3. 0° was the table front facing the antenna, Degree is calculated from 0° clockwise facing the antenna.
4. Measurement at No. 3 open field site

4. MODIFICATIONS TO EUT

§ For LG LCD Panel §

1. Added a ferrite core with 2 turns on the wire which was from main board to control panel.
2. Added a ferrite core on the wire which was from main board to inverter board.
3. Added a ferrite core on the wire which was from main board to panel.
4. Added a ferrite core on the cable which was from main board to S.P.S.
5. Added two ferrite cores on the signal cable.
6. Main board with metal shielding.
7. Inverter board with metal shielding.

§ For Samsung LCD Panel §

8. Added a ferrite core with 2 turns on the wire which was from main board to control panel.
9. Added a ferrite core on the wire which was from main board to inverter board.
10. Added a ferrite core on the wire which was from main board to DC adapter.
11. Added a ferrite core on the cable which was from main board to S.P.S.
12. Added two ferrite cores on the signal cable.
13. Main board with metal shielding.
14. Inverter board with metal shielding.

5. DEVIATION TO TEST SPECIFICATIONS

【 NONE 】