

APPLICATION FOR CERTIFICATION
(FCC CFR47 PART 15 DIGITAL DEVICE)

On Behalf of

LG Electronics USA

42" Plasma Monitor

Model : MU-42PZ15

FCC ID : BEJMU42PZ15

Brand: LG

Prepared for : LG Electronics USA
6133 N River Rd., Suite 1100,
Rosemont IL US.

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, 2609-2133
Fax: (02) 2609-9303

File Number : ATM-G91204
Report Number : TTEMC-F91030
Date of Test : Mar. 01 ~ 07, 2002
Date of Report : Mar. 14, 2002

TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	3
1.GENERAL INFORMATION	4
1.1. Description of Device (EUT)	4
1.2. Tested Supporting System Details	5
1.3. Description of Test Facility	7
1.4. Measurement Uncertainty	7
2.POWERLINE CONDUCTED TEST	8
2.1. Test Equipment	8
2.2. Block Diagram of Test Setup	8
2.3. Powerline Conducted Emission Limit (CISPR 22, Class B)	8
2.4. EUT's Configuration during Compliance Measurement	9
2.5. Operating Condition of EUT	9
2.6. Test Procedure	10
2.7. Line Conducted RF Voltage Measurement Results	10
3.RADIATED EMISSION TEST	23
3.1. Test Equipment	23
3.2. Block Diagram of Test Setup	23
3.3. Radiation Limit (CISPR 22, Class B)	24
3.4. EUT's Configuration during Compliance Measurement	24
3.5. Operating Condition of EUT	24
3.6. Test Procedure	25
3.7. Radiated Emission Noise Measurement Results	26
4.MODIFICATIONS TO EUT	29
5.DEVIATION TO TEST SPECIFICATIONS.....	30
6.PHOTOGRAPHS.....	31
6.1. Photos of Powerline Conducted Measurement	31
6.2. Photos of Radiated Measurement at Open Field Test Site	33
6.3. Photos of Radiated Measurement at Anechoic Chamber	35
APPENDIX (Radiated Test Data at Anechoic Chamber)	38

TEST REPORT CERTIFICATION

Applicant : LG Electronics USA
 Manufacturer : LG Electronics Inc.
 FCC ID : BEJMU42PZ15
 EUT Description : 42" Plasma Monitor
 (A) MODEL NO. : MU-42PZ15
 (B) SERIAL NO. : N/A
 (C) BRAND : LG
 (D) 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
 (FCC CFR 47, Part 15 Subpart B/2001 and CISPR 22/1997 +A1/2000)

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 and above 1000MHz compared to the FCC Part 15 Subject B radiated limit.

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 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 Taiwan Tokin EMC Eng. Corp.

(NOTE: These results are deemed satisfactory evidence of compliance with ICES-003 of the Canadian Interference-Causing Equipment Regulations.)

Date of Test : Mar. 01 ~ 07, 2002

Prepared By: Monica Chang Mar. 21, 2002
 (Monica Chang/Officer)

Test Engineer : Allen Wang Mar. 23, 2002
 (Allen Wang/Deputy Manager)

Approve & Authorized Signer : Jackie Deng 23'02
 (Jackie Deng/Assistant General Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	42" Plasma Monitor
Model Number	:	MU-42PZ15
FCC ID	:	BEJMU42PZ15
Brand	:	LG
Applicant	:	LG Electronics USA 6133 N River Rd., Suite 1100, Rosemont IL US.
Manufacturer	:	LG Electronics Inc. (Kumi TV Plant.) Kumi TV Plant. 642, Jinpyung-dong, Kumi-City, Kyoungsang Buk-do, 730-360, Korea
Scanning Frequency	:	Horizontal: 31kHz-69kHz Vertical: 56Hz-120Hz
Maximum Resolution	:	1024x768
Display Panel Module	:	LG, M/N PDP42WVSN3
Remote Control	:	LG, 6710V00067K
D-Sub Cable (to PC)	:	Shielded, Detachable, 7.2m Bonded two ferrite cores
A/V Cable (Optional) (Optional, to TV Pattern Generator)	:	Non-Shielded, Detachable, 3m
Speaker w/Stand (L, R) (Optional)	:	Speaker: LG, AP-42SA10 Wires: Non-Shielded, Undetachable, 4.8m Bonded a ferrite core
Power Cord (AC IN)	:	Non-Shielded, Detachable, 2.7m
Date of Receipt of Sample	:	Feb. 27, 2002
Date of Test	:	Mar. 01 ~ 07, 2002

1.2. Tested Supporting System Details

1.2.1. PERSONAL COMPUTER (TO EUT)

Mother Board	:	ASUS, M/N P5A, FCC by DoC
CPU	:	AMD K6-2 266MHz
Case	:	Enlight, M/N EN7105C
S.P.S.	:	SPI, M/N FSP250-61GT, S/N W13562612
Floppy Driver 3.5"	:	Mitsumi, M/N D353M3
Hard Disk Driver	:	Seagate, M/N ST34321A, S/N VTH97300
VGA Card	:	Dataexpert, M/N CP765V2, S/N E700492315 FCC ID LUT-CP765
Sound Card	:	Dataexpert, M/N MED6617 S/N E800016158, FCC By DoC
RS232C Cable (to EUT)	:	Non-Shielded, Detachable, 1.8m
Audio Cable (to EUT)	:	Non-Shielded, Detachable, 1.8m
Power Cord	:	Non-Shielded, Detachable, 1.8m

1.2.2. KEYBOARD

Model Number	:	5121
Serial Number	:	J83300806
FCC ID	:	E5XKBM104M10UC
Manufacturer	:	Behavior Tech Computer Corp.
Data Cable	:	Shielded, Undetachable, 1.0m

1.2.3. 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

1.2.4. 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. MOUSE

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

1.2.6. USB MOUSE #1

Model Number : M-UB48
 Serial Number : LZB81900216
 FCC ID : DZL211137
 Manufacturer : Logitech
 Data Cable : Shielded, Undetachable, 1.8m

1.2.7. USB MOUSE #2

Model Number : M-UB48
 Serial Number : LZB81900209
 FCC ID : DZL211137
 Manufacturer : Logitech
 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-009780-T
 Manufacturer : (J-S) JAZZ HIPSTER
 Data Cable : Non-Shielded, Undetachable, 1m

1.2.10. WALKMAN

Model Number : RQ-P35LT-K
 Serial Number : HA08489
 Manufacturer : Panasonic
 Data Cable : Non-Shielded, Detachable, 1.8m

1.2.11. GAME PAD

Model Number : JI-1073
 Serial Number : N/A
 Manufacturer : Super Cobra
 Data Cable : Non-Shielded, Undetachable, 1.3m

1.2.12. DVD PLAYER (TO EUT)

Model Number : DV-S6D
 Serial Number : UCYD007728TA
 Manufacturer : Pioneer
 Data Cable (Component) : Non-Shielded, Detachable, 1.8m
 Power Cord : Non-Shielded, Detachable, 2m

1.2.13. COLOR TV PATTERN GENERATOR (TO EUT)

Model Number : PM 5415TX+Y/C
 Serial Number : LO732610
 Manufacturer : Fluke
 Cal. Date : Apr. 17, 2001
 Data Cable (S-Video) : Shielded, Detachable, 1.8m
 Power Cord : Non-Shielded, Detachable, 1.8m

1.3. Description of Test Facility

Site Description (R5) : Jan. 29, 2001 File on
 Federal Communication Commission
 FCC Engineering Laboratory
 7435 Oakland Mills Road
 Columbia, MD 21046, U.S.A.
 Registration Number: 90992

Site Description (Anechoic Chamber) : May 16, 2000 Re-file on
 Federal Communication Commission
 FCC Engineering Laboratory
 7435 Oakland Mills Road
 Columbia, MD 21046, U.S.A.
 Registration Number: 90993

Name of Firm : Taiwan Tokin EMC Eng. Corp.

Site Location #1 : No. 53-11, Tin-Fu Tsun, Lin-Kou,
 Taipei Hsien, Taiwan, R.O.C.

Site Location #2 : No. 67-4, Tin-Fu Tsun, Lin-Kou,
 Taipei Hsien, Taiwan, R.O.C.

NVLAP Lab Code : 200077-0

DAR- Registration No. : DAT-P-092/99-00e

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
Radiation Test (Distance: 3m)	30MHz~300MHz	+4.26dB / -4.22dB
	300MHz~1000MHz	+5.28dB / -4.0dB

Remark : Uncertainty = $K\mu(y)$

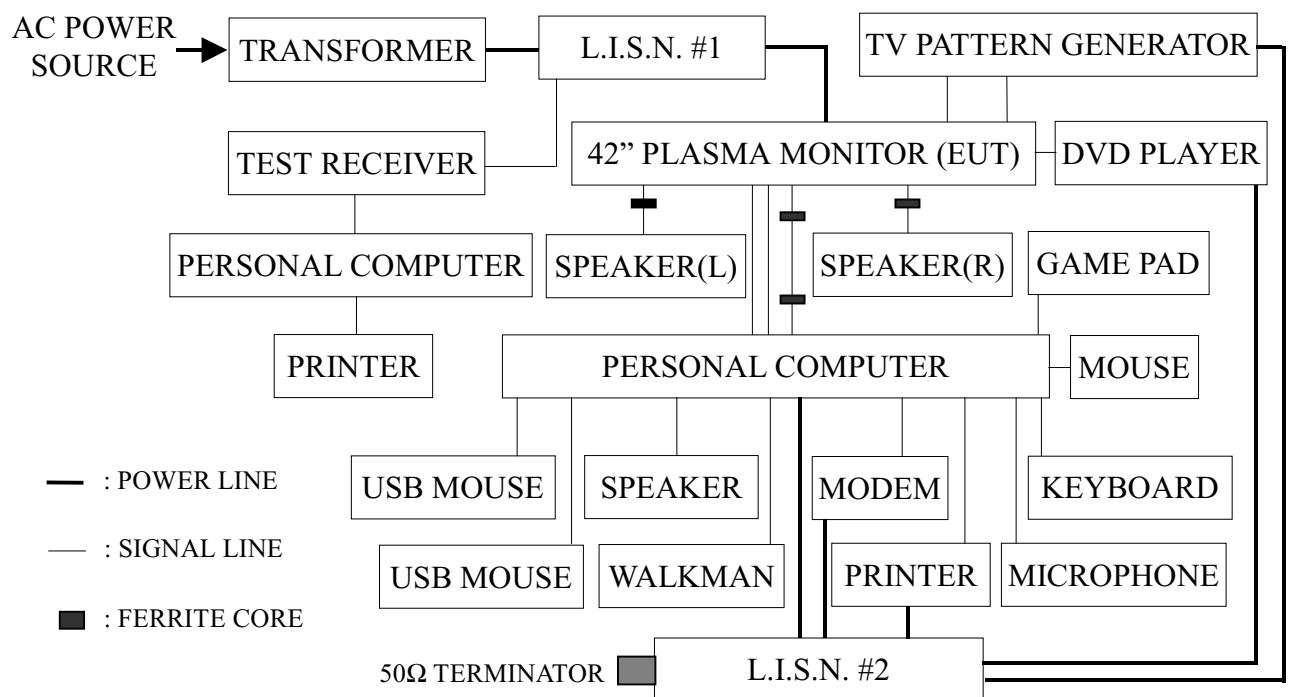
2. POWERLINE CONDUCTED TEST

2.1. Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS 30	825442/020	Jun. 29, 01'	1 Year
2.	L.I.S.N. #1	Kyoritsu	KNW-407	8-1370-10	May 28, 01'	1 Year
3.	L.I.S.N. #2	Kyoritsu	KNW-407	8-1370-9	May 28, 01'	1 Year

2.2. Block Diagram of Test Setup



2.3. Powerline Conducted Emission Limit (CISPR 22, Class B)

Frequency	Maximum 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	50 dB

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. 42" Plasma Monitor (EUT)

Model Number	:	MU-42PZ15
Serial Number	:	N/A
Brand	:	LG
FCC ID	:	BEJMU42PZ15
Manufacturer	:	LG Electronics Inc.
Scanning Frequency	:	Horizontal : 31kHz-69kHz Vertical: 56Hz-120Hz
Maximum Resolution	:	1024x768
Display Panel Module	:	LG, M/N PDP42WVSN3
Remote Control	:	LG, 6710V00067K
D-Sub Cable (to PC)	:	Shielded, Detachable, 7.2m Bonded two ferrite cores
A/V Cable (Optional)	:	Non-Shielded, Detachable, 3m
Speaker w/Stand (L, R) (Optional)	:	Speaker: LG, AP-42SA10 Wires: Non-Shielded, Undetachable, 4.8m Bonded a ferrite core
Power Cord (AC IN)	:	Non-Shielded, Detachable, 2.7m

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 run the EMI self-test program "Hwin", and sent "H" character to 42" Plasma Monitor (EUT), then the screen of 42" Plasma Monitor (EUT) displayed "H" pattern by EUT's resolution via D-Sub signal input.
- 2.5.5. Color TV Pattern Generator sent "Color Bar" to 42" Plasma Monitor (EUT), then the screen of 42" Plasma Monitor (EUT) displayed "Color Bar" via A/V or S-Video signal input.
- 2.5.6. DVD Player played a DVD-Disk and sent the image & sound to 42" Plasma Monitor (EUT) via Component input.
- 2.5.7. The other peripheral devices were driven and operated in turn during all testing.
- 2.5.8. Repeat the above procedures from 2.5.3 to 2.5.6.

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 equipment 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 ESCS 30 was set at 9KHz.

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

2.7. Line Conducted RF Voltage Measurement Results

PASSED. Please refer to the following pages.

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

EUT with the following test modes were done on conducted measurement, and all the test results are attached in the next pages.

(Test Date: Mar. 04, 2002 Temperature: 23°C Humidity: 73 %)

No.	Input Port	Display of EUT	Reference Data #
1.	D-Sub	“H” Pattern, 640*480/85Hz, 43kHz	# 70 (71, 72) ; # 67 (68, 69).
2.	D-Sub	“H” Pattern, 800*600/85Hz, 53kHz	# 73 (74, 75) ; # 76 (77, 78).
3.	D-Sub	“H” Pattern, 1024*768/85Hz, 69kHz	# 82 (83, 84) ; # 79 (80, 81).
4.	A/V	“Color Bar” Image	# 94 (95, 96) ; # 91 (92, 93).
5.	S-Video	“Color Bar” Image	# 85 (86, 87) ; # 88 (89, 90).
6.	Component	“DVD-Disk” Image	# 97 (98, 99) ; # 100 (101, 102).

TOKIN

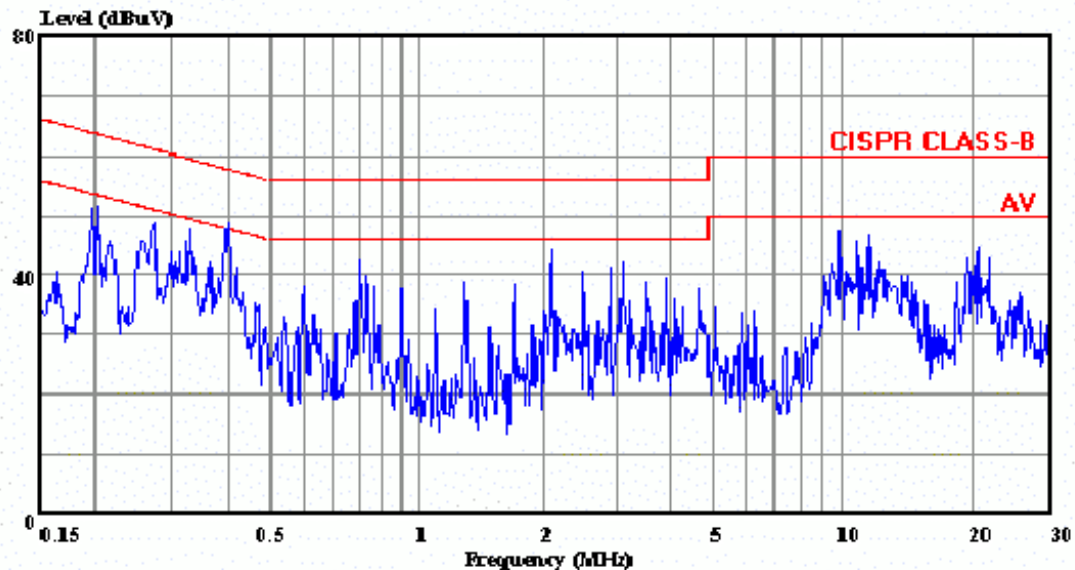
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:tttemc@tttemc.com.tw

Data#: 70

File#: LG-9.emi

Date: 2002-03-04 Time: 21:55:45



Site : No.3 Shielded room
Condition: CISPR CLASS-B KNW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 640*480/85Hz;43KHz

Data#: 71

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 21:56:38

Site : No.3 Shielded room
Condition: CISPR CLASS-B KNW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 640*480/85Hz;43KHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV							
1	0.200	49.50	-14.11	63.61	49.10	0.20	0.20	0.00	QP
2	0.328	45.65	-13.86	59.51	45.25	0.20	0.20	0.00	QP
3	0.400	47.21	-10.65	57.86	46.81	0.20	0.20	0.00	QP
4	0.834	39.73	-16.27	56.00	39.13	0.40	0.20	0.00	QP
5	2.200	41.94	-14.06	56.00	41.14	0.40	0.40	0.00	QP
6	9.937	49.93	-10.07	60.00	48.83	0.50	0.60	0.00	QP

Data#: 72

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV							
1	0.200	39.18	-14.43	53.61	38.78	0.20	0.20	0.00	Average
2	0.328	33.60	-15.91	49.51	33.20	0.20	0.20	0.00	Average
3	0.400	36.19	-11.67	47.86	35.79	0.20	0.20	0.00	Average
4	0.834	27.42	-18.58	46.00	26.82	0.40	0.20	0.00	Average
5	2.200	28.76	-17.24	46.00	27.96	0.40	0.40	0.00	Average
6	9.937	40.85	-9.15	50.00	39.75	0.50	0.60	0.00	Average

TOKIN

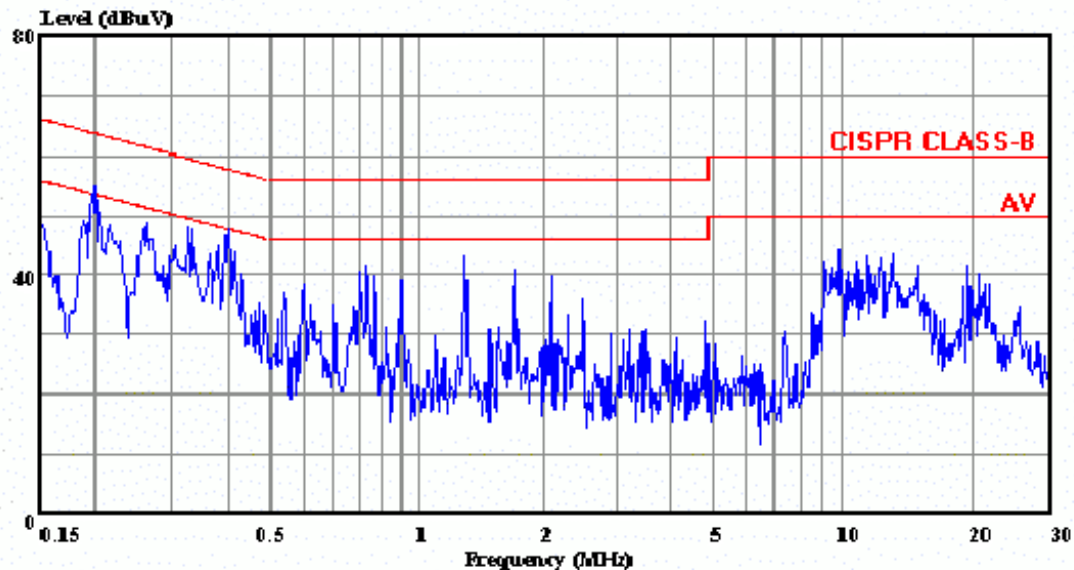
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 67

File#: LG-9.emi

Date: 2002-03-04 Time: 21:51:13



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 640*480/85Hz;43KHz

Data#: 68

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 21:52:25

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 640*480/85Hz;43KHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.201	52.65	-10.91	63.56	52.25	0.20	0.20	0.00	QP
2	0.326	46.05	-13.49	59.54	45.65	0.20	0.20	0.00	QP
3	0.399	46.36	-11.51	57.87	45.96	0.20	0.20	0.00	QP
4	0.833	40.25	-15.75	56.00	39.65	0.40	0.20	0.00	QP
5	1.400	44.39	-11.61	56.00	43.59	0.40	0.40	0.00	QP
6	9.937	48.11	-11.89	60.00	47.01	0.50	0.60	0.00	QP

Data#: 69

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.201	42.56	-11.00	53.56	42.16	0.20	0.20	0.00	Average
2	0.326	33.66	-15.88	49.54	33.26	0.20	0.20	0.00	Average
3	0.399	35.55	-12.32	47.87	35.15	0.20	0.20	0.00	Average
4	0.833	27.72	-18.28	46.00	27.12	0.40	0.20	0.00	Average
5	1.400	32.38	-13.62	46.00	31.58	0.40	0.40	0.00	Average
6	9.937	39.45	-10.55	50.00	38.35	0.50	0.60	0.00	Average



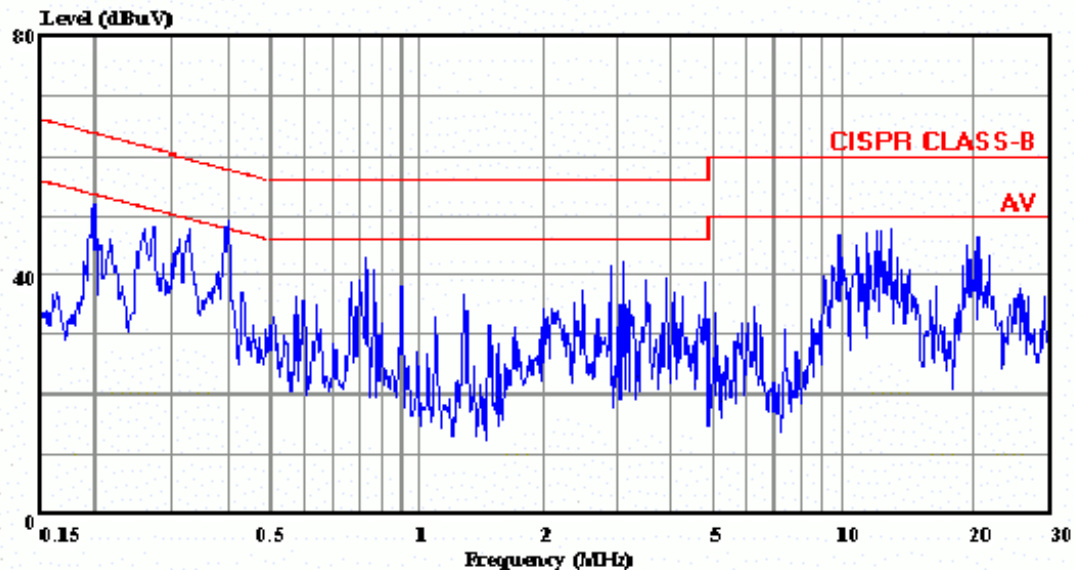
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 73

File#: LG-9.emi

Date: 2002-03-04 Time: 21:58:52



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 800*600/85Hz;53KHz

Data#: 74

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:00:13

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 800*600/85Hz;53KHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.201	49.20	-14.36	63.56	48.80	0.20	0.20	0.00	QP
2	0.326	46.86	-12.68	59.54	46.46	0.20	0.20	0.00	QP
3	0.401	47.35	-10.48	57.83	46.75	0.40	0.20	0.00	QP
4	0.833	41.35	-14.65	56.00	40.75	0.40	0.20	0.00	QP
5	3.201	41.94	-14.06	56.00	41.14	0.40	0.40	0.00	QP
6	12.111	48.97	-11.03	60.00	47.47	0.80	0.70	0.00	QP

Data#: 75

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.201	39.09	-14.47	53.56	38.69	0.20	0.20	0.00	Average
2	0.326	36.39	-13.15	49.54	35.99	0.20	0.20	0.00	Average
3	0.401	36.69	-11.14	47.83	36.09	0.40	0.20	0.00	Average
4	0.833	28.99	-17.01	46.00	28.39	0.40	0.20	0.00	Average
5	3.201	31.43	-14.57	46.00	30.63	0.40	0.40	0.00	Average
6	12.111	34.04	-15.96	50.00	32.54	0.80	0.70	0.00	Average

TOKIN

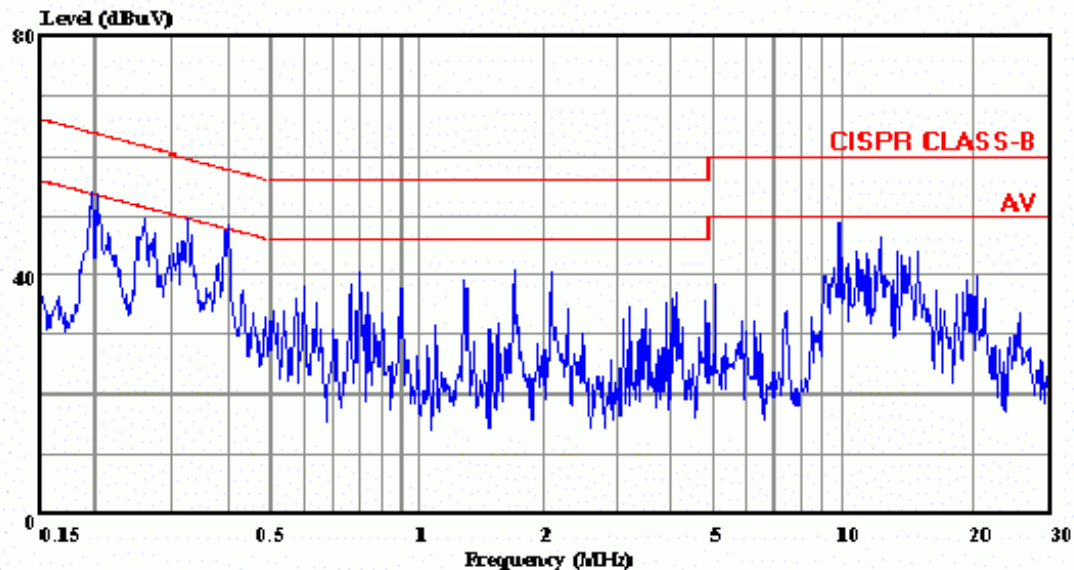
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 76

File#: LG-9.emi

Date: 2002-03-04 Time: 22:02:32



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 800*600/85Hz;53KHz

Data#: 77

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:03:25

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 800*600/85Hz;53KHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.200	52.83	-10.78	63.61	52.43	0.20	0.20	0.00	QP
2	0.325	47.00	-12.58	59.58	46.60	0.20	0.20	0.00	QP
3	0.400	46.69	-11.17	57.86	46.29	0.20	0.20	0.00	QP
4	0.834	41.47	-14.53	56.00	40.87	0.40	0.20	0.00	QP
5	1.800	41.05	-14.95	56.00	40.25	0.40	0.40	0.00	QP
6	10.000	48.11	-11.89	60.00	47.01	0.50	0.60	0.00	QP

Data#: 78

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.200	42.58	-11.03	53.61	42.18	0.20	0.20	0.00	Average
2	0.325	36.65	-12.93	49.58	36.25	0.20	0.20	0.00	Average
3	0.400	36.01	-11.85	47.86	35.61	0.20	0.20	0.00	Average
4	0.834	29.19	-16.81	46.00	28.59	0.40	0.20	0.00	Average
5	1.800	29.52	-16.48	46.00	28.72	0.40	0.40	0.00	Average
6	10.000	37.17	-12.83	50.00	36.07	0.50	0.60	0.00	Average



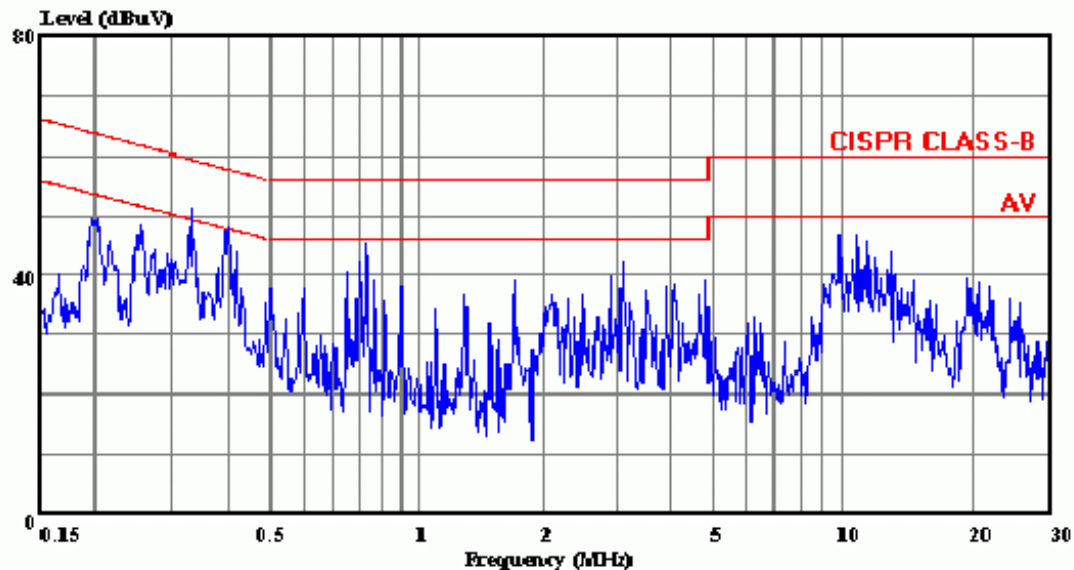
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 82

File#: LG-9.emi

Date: 2002-03-04 Time: 22:09:56



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 1024*768/85Hz;69KHz

Data#: 83

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:13:32

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 1024*768/85Hz;69KHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.199	48.85	-14.81	63.66	48.45	0.20	0.20	0.00	QP
2	0.334	50.20	-9.15	59.35	49.80	0.20	0.20	0.00	QP
3	0.400	47.31	-10.55	57.86	46.71	0.40	0.20	0.00	QP
4	0.834	43.32	-12.68	56.00	42.72	0.40	0.20	0.00	QP
5	3.200	41.94	-14.06	56.00	41.14	0.40	0.40	0.00	QP
6	10.000	47.25	-12.75	60.00	46.15	0.50	0.60	0.00	QP

Data#: 84

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.199	38.56	-15.10	53.66	38.16	0.20	0.20	0.00	Average
2	0.334	35.84	-13.51	49.35	35.44	0.20	0.20	0.00	Average
3	0.400	36.27	-11.59	47.86	35.67	0.40	0.20	0.00	Average
4	0.834	30.13	-15.87	46.00	29.53	0.40	0.20	0.00	Average
5	3.200	30.50	-15.50	46.00	29.70	0.40	0.40	0.00	Average
6	10.000	37.38	-12.62	50.00	36.28	0.50	0.60	0.00	Average



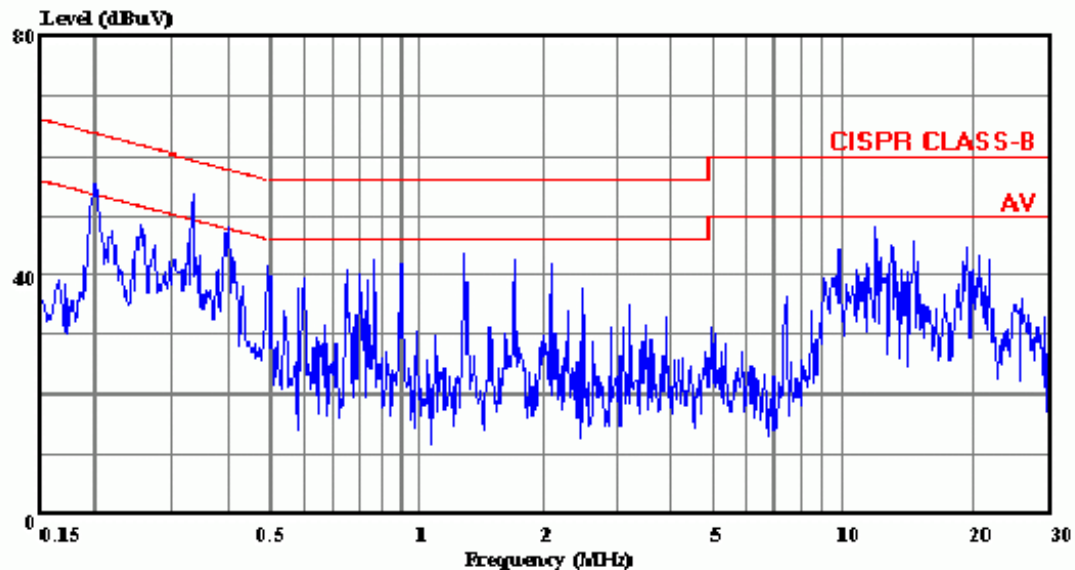
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 79

File#: LG-9.emi

Date: 2002-03-04 Time: 22:05:49



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 1024*768/85Hz;69KHz

Data#: 80

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:06:42

Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : 1024*768/85Hz;69KHz

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.200	53.12	-10.49	63.61	52.72	0.20	0.20	0.00	QP
2	0.333	49.96	-9.42	59.38	49.56	0.20	0.20	0.00	QP
3	0.400	46.85	-11.01	57.86	46.25	0.40	0.20	0.00	QP
4	0.869	40.43	-15.57	56.00	39.83	0.40	0.20	0.00	QP
5	1.799	43.21	-12.79	56.00	42.41	0.40	0.40	0.00	QP
6	12.110	48.40	-11.60	60.00	46.90	0.80	0.70	0.00	QP

Data#: 81

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.200	42.81	-10.80	53.61	42.41	0.20	0.20	0.00	Average
2	0.333	36.22	-13.16	49.38	35.82	0.20	0.20	0.00	Average
3	0.400	36.20	-11.66	47.86	35.60	0.40	0.20	0.00	Average
4	0.869	25.96	-20.04	46.00	25.36	0.40	0.20	0.00	Average
5	1.799	30.32	-15.68	46.00	29.52	0.40	0.40	0.00	Average
6	12.110	31.44	-18.56	50.00	29.94	0.80	0.70	0.00	Average

TOKIN

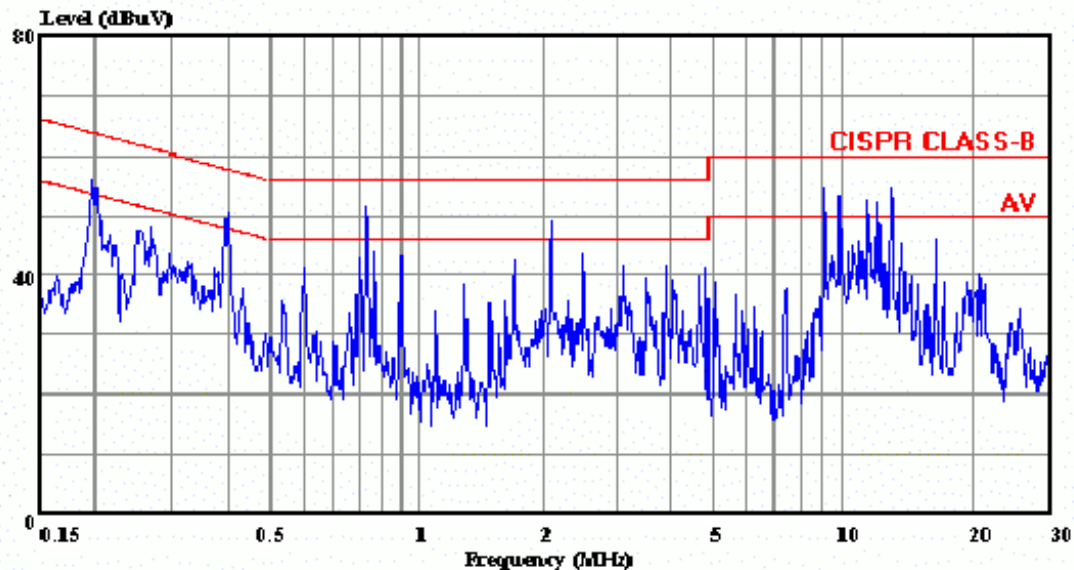
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 94

File#: LG-9.emi

Date: 2002-03-04 Time: 22:31:01



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : AV IN

Data#: 95

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:31:56

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : AV IN

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1 !	0.200	54.59	-9.02	63.61	54.19	0.20	0.20	0.00	QP
2	0.253	44.96	-16.71	61.67	44.56	0.20	0.20	0.00	QP
3 !	0.400	48.44	-9.42	57.86	47.84	0.40	0.20	0.00	QP
4 !	0.833	49.85	-6.15	56.00	49.25	0.40	0.20	0.00	QP
5 !	2.200	46.01	-9.99	56.00	45.21	0.40	0.40	0.00	QP
6 !	10.061	56.55	-3.45	60.00	55.05	0.80	0.70	0.00	QP

Data#: 96

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.200	36.67	-16.94	53.61	36.27	0.20	0.20	0.00	Average
2 !	0.253	44.47	-7.20	51.67	44.07	0.20	0.20	0.00	Average
3	0.400	31.12	-16.74	47.86	30.52	0.40	0.20	0.00	Average
4 !	0.833	36.09	-9.91	46.00	35.49	0.40	0.20	0.00	Average
5	2.200	27.73	-18.27	46.00	26.93	0.40	0.40	0.00	Average
6 !	10.061	42.28	-7.72	50.00	40.78	0.80	0.70	0.00	Average

TOKIN

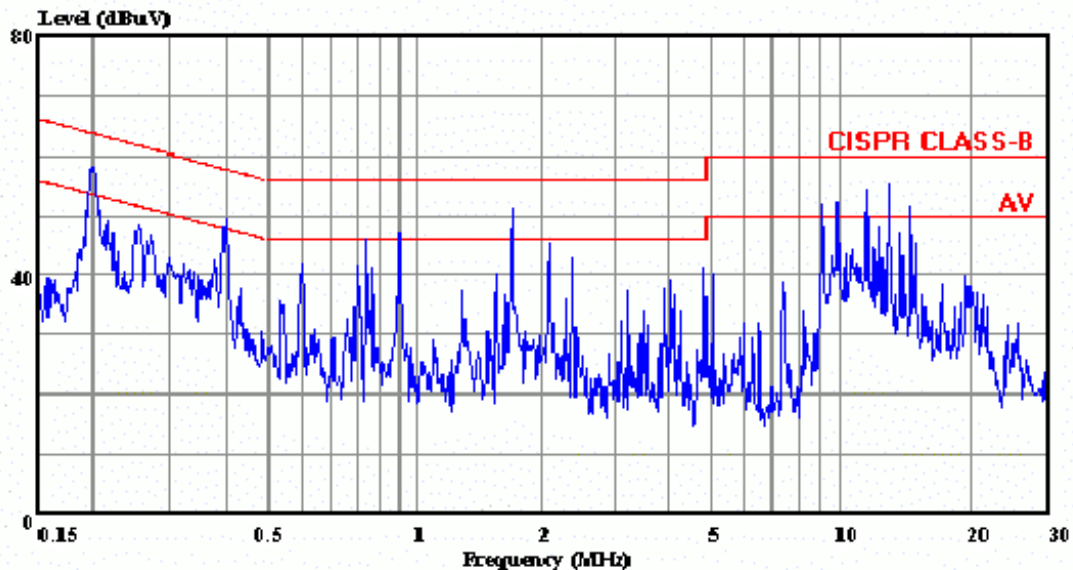
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 91

File#: LG-9.emi

Date: 2002-03-04 Time: 22:27:11



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : AV IN

Data#: 92

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:28:09

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : AV IN

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1 !	0.199	55.90	-7.76	63.66	55.50	0.20	0.20	0.00	QP
2	0.254	45.32	-16.31	61.63	44.92	0.20	0.20	0.00	QP
3	0.400	47.77	-10.09	57.86	47.17	0.40	0.20	0.00	QP
4	1.000	44.91	-11.09	56.00	44.11	0.40	0.40	0.00	QP
5 !	1.800	50.74	-5.26	56.00	49.94	0.40	0.40	0.00	QP
6 !	10.063	55.06	-4.94	60.00	53.56	0.80	0.70	0.00	QP

Data#: 93

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.199	42.15	-11.51	53.66	41.75	0.20	0.20	0.00	Average
2 !	0.254	44.50	-7.13	51.63	44.10	0.20	0.20	0.00	Average
3	0.400	34.44	-13.42	47.86	33.84	0.40	0.20	0.00	Average
4	1.000	29.95	-16.05	46.00	29.15	0.40	0.40	0.00	Average
5	1.800	35.12	-10.88	46.00	34.32	0.40	0.40	0.00	Average
6 !	10.063	41.59	-8.41	50.00	40.09	0.80	0.70	0.00	Average

TOKIN

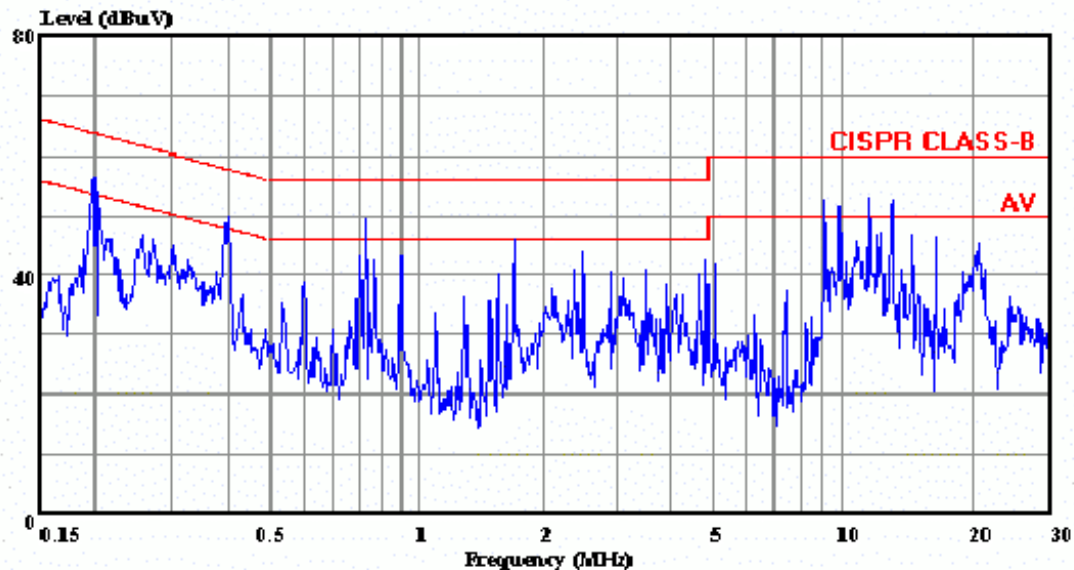
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 85

File#: LG-9.emi

Date: 2002-03-04 Time: 22:15:57



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : S IN

Data#: 86

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:20:51

Site : No.3 Shielded room
Condition : CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : S IN

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark
	MHz	dBuV		dBuV	dBuV				
1 !	0.200	54.53	-9.08	63.61	54.13	0.20	0.20	0.00	QP
2	0.254	43.95	-17.68	61.63	43.55	0.20	0.20	0.00	QP
3 !	0.400	48.42	-9.44	57.86	47.82	0.40	0.20	0.00	QP
4 !	0.834	49.26	-6.74	56.00	48.66	0.40	0.20	0.00	QP
5 !	1.800	46.70	-9.30	56.00	45.90	0.40	0.40	0.00	QP
6 !	10.000	52.70	-7.30	60.00	51.60	0.50	0.60	0.00	QP

Data#: 87

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamplifier Factor	Remark
	MHz	dBuV		dBuV	dBuV				
1	0.200	40.28	-13.33	53.61	39.88	0.20	0.20	0.00	Average
2 !	0.254	43.24	-8.39	51.63	42.84	0.20	0.20	0.00	Average
3	0.400	34.71	-13.15	47.86	34.11	0.40	0.20	0.00	Average
4	0.834	35.58	-10.42	46.00	34.98	0.40	0.20	0.00	Average
5	1.800	30.82	-15.18	46.00	30.02	0.40	0.40	0.00	Average
6 !	10.000	40.15	-9.85	50.00	39.05	0.50	0.60	0.00	Average

TOKIN

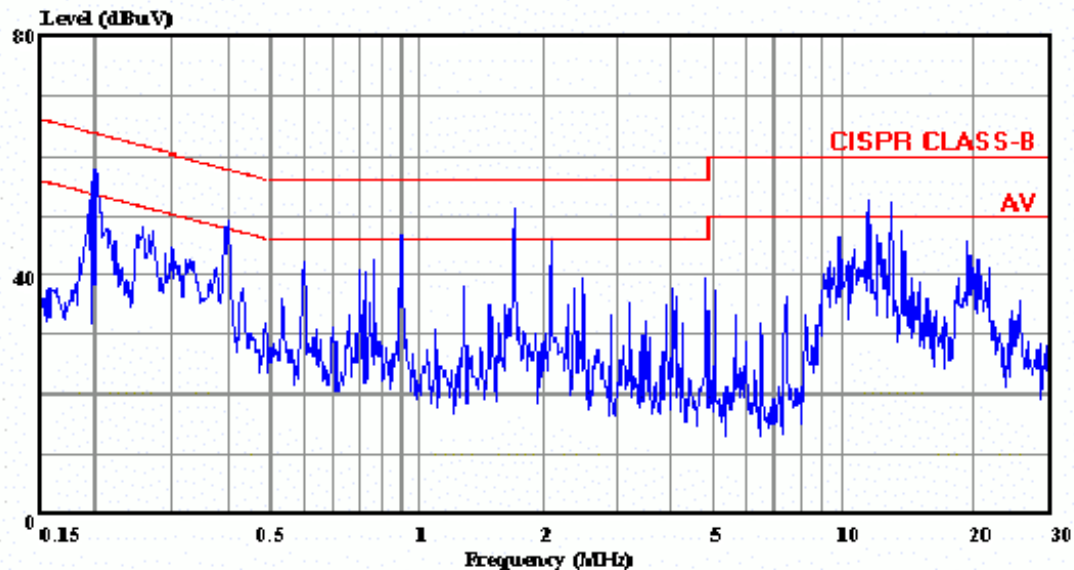
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 88

File#: LG-9.emi

Date: 2002-03-04 Time: 22:23:56



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : S IN

Data#: 89

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:24:51

Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : S IN

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preampl Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1 !	0.200	55.90	-7.71	63.61	55.50	0.20	0.20	0.00	QP
2	0.255	44.90	-16.69	61.59	44.50	0.20	0.20	0.00	QP
3	0.400	47.21	-10.65	57.86	46.61	0.40	0.20	0.00	QP
4	1.000	44.39	-11.61	56.00	43.59	0.40	0.40	0.00	QP
5 !	1.800	50.14	-5.86	56.00	49.34	0.40	0.40	0.00	QP
6 !	10.000	51.14	-8.86	60.00	50.04	0.50	0.60	0.00	QP

Data#: 90

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preampl Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.200	39.41	-14.20	53.61	39.01	0.20	0.20	0.00	Average
2 !	0.255	44.34	-7.25	51.59	43.94	0.20	0.20	0.00	Average
3	0.400	31.46	-16.40	47.86	30.86	0.40	0.20	0.00	Average
4	1.000	26.52	-19.48	46.00	25.72	0.40	0.40	0.00	Average
5	1.800	31.73	-14.27	46.00	30.93	0.40	0.40	0.00	Average
6	10.000	38.11	-11.89	50.00	37.01	0.50	0.60	0.00	Average

TOKIN

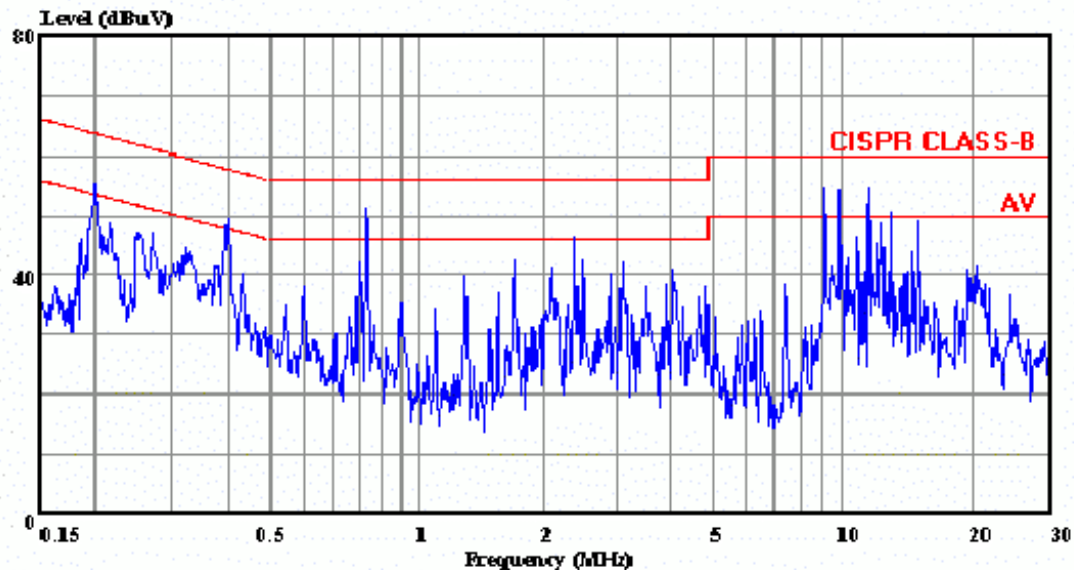
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 97

File#: LG-9.emi

Date: 2002-03-04 Time: 22:36:53



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : DVD

Data#: 98

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:37:50

Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 NEUTRAL
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : DVD

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.201	49.50	-14.06	63.56	49.10	0.20	0.20	0.00	QP
2	0.254	45.04	-16.59	61.63	44.64	0.20	0.20	0.00	QP
3	0.401	47.45	-10.38	57.83	46.85	0.40	0.20	0.00	QP
4	0.834	46.99	-9.01	56.00	46.39	0.40	0.20	0.00	QP
5	2.500	41.04	-14.96	56.00	40.24	0.40	0.40	0.00	QP
6	10.064	58.08	-1.92	60.00	56.58	0.80	0.70	0.00	QP

Data#: 99

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.201	41.20	-12.36	53.56	40.80	0.20	0.20	0.00	Average
2	0.254	44.60	-7.03	51.63	44.20	0.20	0.20	0.00	Average
3	0.401	39.09	-8.74	47.83	38.49	0.40	0.20	0.00	Average
4	0.834	27.69	-18.31	46.00	27.09	0.40	0.20	0.00	Average
5	2.500	26.17	-19.83	46.00	25.37	0.40	0.40	0.00	Average
6	10.064	43.47	-6.53	50.00	41.97	0.80	0.70	0.00	Average

TOKIN

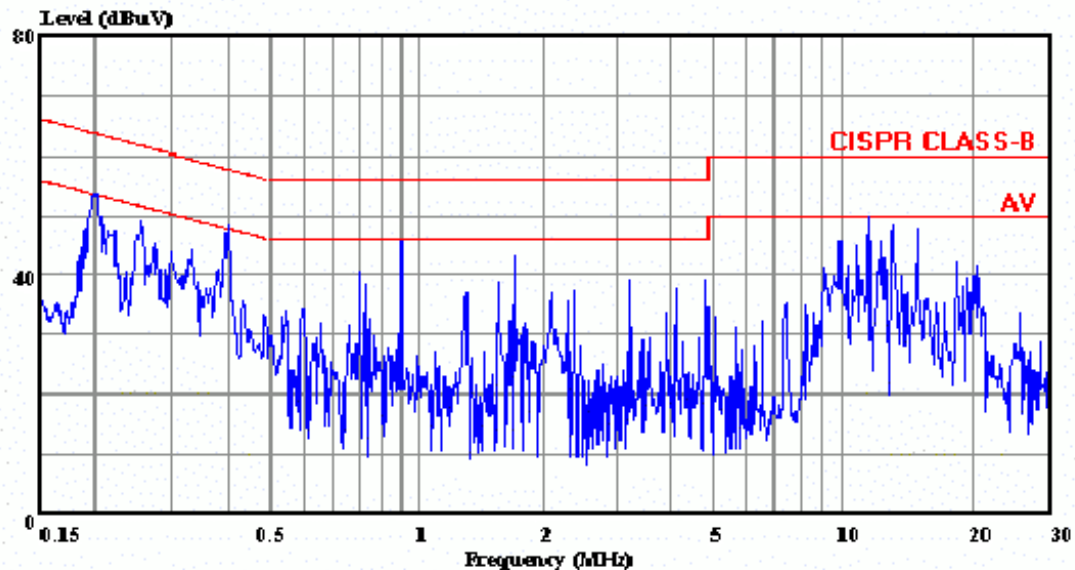
TAIWAN TOKIN EMC ENG. CORP.
台灣東金科技股份有限公司

No.53-11, Tin-fu Tsun, Lin-kou Hsiang,
Taipei Country, Taiwan, R.O.C.
Tel:02-26092133 Fax:02-26099303
Email:ttemc@ttemc.com.tw

Data#: 100

File#: LG-9.emi

Date: 2002-03-04 Time: 22:42:20



Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : DVD

Data#: 101

File#: D:\LG-9.emi

Date: 2002-03-04 Time: 22:43:13

Site : No.3 Shielded room
Condition: CISPR CLASS-B KMW-407 LINE
EUT : 42" PLASMA MONITOR M/N:MU-42PZ15
Power : 120Vac/60Hz
Memo : DVD

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV		dBuV	dBuV				
1	0.200	52.09	-11.52	63.61	51.69	0.20	0.20	0.00	QP
2	0.253	45.38	-16.29	61.67	44.98	0.20	0.20	0.00	QP
3	0.401	46.56	-11.27	57.83	45.96	0.40	0.20	0.00	QP
4	1.000	38.12	-17.88	56.00	37.32	0.40	0.40	0.00	QP
5	1.799	43.51	-12.49	56.00	42.71	0.40	0.40	0.00	QP
6	10.063	58.71	-1.29	60.00	57.21	0.80	0.70	0.00	QP

Data#: 102

File#: D:\LG-9.emi

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV		dBuV	dBuV				
1	0.200	45.33	-8.28	53.61	44.93	0.20	0.20	0.00	Average
2	0.253	44.58	-7.09	51.67	44.18	0.20	0.20	0.00	Average
3	0.401	38.73	-9.10	47.83	38.13	0.40	0.20	0.00	Average
4	1.000	31.01	-14.99	46.00	30.21	0.40	0.40	0.00	Average
5	1.799	34.06	-11.94	46.00	33.26	0.40	0.40	0.00	Average
6	10.063	40.04	-9.96	50.00	38.54	0.80	0.70	0.00	Average

3. RADIATED EMISSION TEST

3.1. Test Equipment

The following test equipment are used during the radiated emission tests :

3.1.1. For 30MHz~1000MHz Frequency (at Anechoic Chamber)

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	HP	8593EM	3826A00248	Sep. 04, 01'	1 Year
2.	Pre-Amplifier	HP	8447D	2944A06305	Mar. 07, 01'	1 Year
3.	Broadband Antenna	Schwarzbeck	BBA 9106	A3L	Jan. 08, 02'	1 Year
4.	Broadband Antenna	Schwarzbeck	UHALP9108-A	0139	Jan. 08, 02'	1 Year

3.1.2. For 1GHz~2GHz frequency (at Anechoic Chamber)

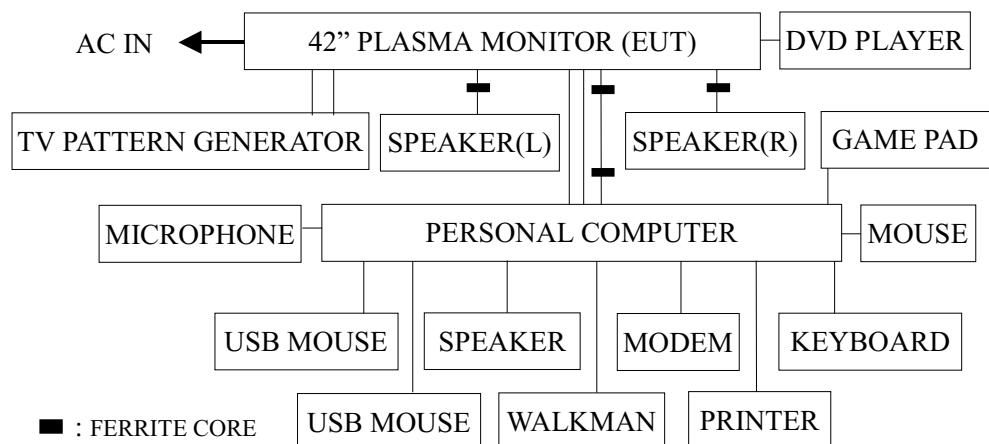
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	HP	8593EM	3826A00248	Sep. 04, 01'	1 Year
2.	Amplifier	HP	8449B	3008A00529	Jan. 05, 02'	1 Year
3.	Horn Antenna	EMCO	3115	9112-3775	Apr. 17, 01'	1 Year

3.1.3. For 30MHz~1000MHz Frequency (at No. 5 Open Test Site)

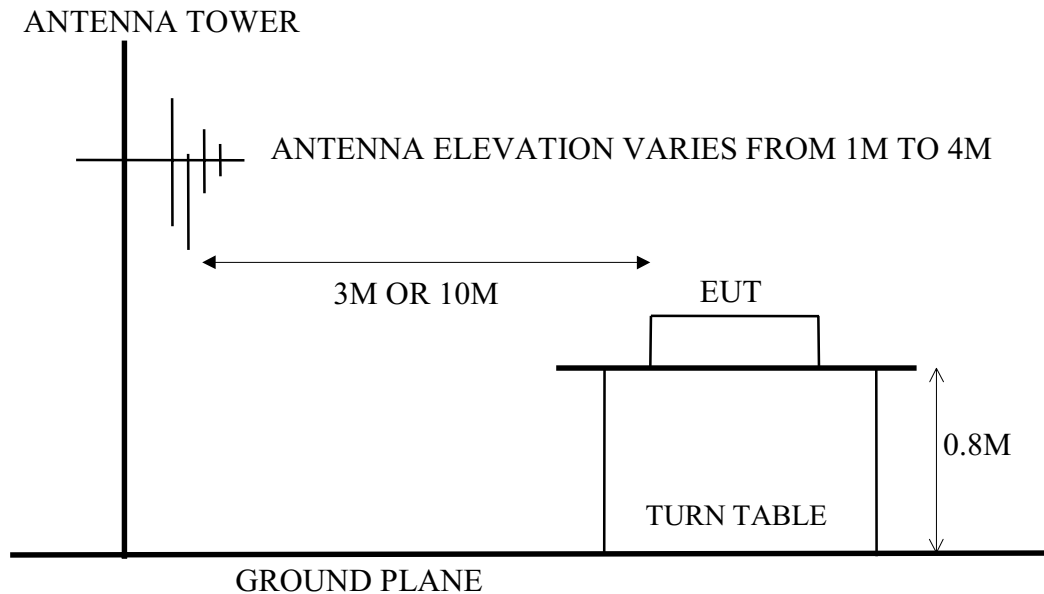
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	HP	8595E	3829A03778	Aug. 17, 01'	1 Year
2.	Test Receiver	R&S	ESVS10	849231/017	Dec. 20, 01'	1 Year
3.	Biconical Antenna	Chase	VBA6106A	1227	Nov. 27, 01'	1 Year
4.	Log Periodic Antenna	Chase	UPA6109	1061	Nov. 27, 01'	1 Year

3.2. Block Diagram of Test Setup

3.2.1. Block Diagram of connection between EUT and simulators



3.2.2. Anechoic Chamber (3M) & Open Field Test Site (10M) Setup Diagram



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 (dB μ V/m)
30 ~ 230	10 (3)	30 (40)
230 ~ 1000	10 (3)	37 (47)
1000 ~ 2000	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 (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 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 3 or 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.

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

EUT with the following test modes were measured within Anechoic Chamber and all the scanning waveform were attached within APPENDIX, which include:

No.	Input Port	Display of EUT
※ 1.	D-Sub	“H” Pattern, 640*480/85Hz, 43kHz
2.	D-Sub	“H” Pattern, 800*600/85Hz, 53kHz
※ 3.	D-Sub	“H” Pattern, 1024*768/85Hz, 69kHz
4.	A/V	“Color Bar” Image
5.	S-Video	“Color Bar” Image
6.	Component	“DVD-Disk” Image

Finally, re-measured the two worst test mode [Mode 1] at No. 5 Open Field Test Site and all the test results are listed in section 3.7.1.

For 1GHz ~ 2GHz frequency range, the tesst mode [Mode 3] were selected in 1~2GHz test and the test results are listed in section 3.7.2.

3.7. Radiated Emission Noise Measurement Results

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

3.7.1. 30MHz to 1000MHz frequency and at 10 meters distance measurement.

Date of Test : Mar. 07, 2002 Temperature : 23°C
 EUT : 42" Plasma Monitor Humidity : 54%
 Test Mode : D-Sub, 640*480/85Hz, 43kHz ("H" Pattern)

	Frequency	Antenna	Cable	Meter Reading	Emission Level	Limits	Margin
	MHz	Factor dB/m	Loss dB	Horizontal dBμV	Horizontal dBμV/m		
*	40.013	20.08	1.26	-2.14	19.20	30.00	10.80
	67.975	12.55	1.69	3.91	18.15	30.00	11.85
	80.005	13.97	1.87	2.75	18.59	30.00	11.41
	108.000	18.44	2.20	2.55	23.19	30.00	6.81
	136.449	19.96	2.52	-1.83	20.65	30.00	9.35
	153.569	20.34	2.68	-2.20	20.82	30.00	9.18
	160.000	20.53	2.72	-1.39	21.86	30.00	8.14
	200.001	21.67	3.07	-2.75	21.99	30.00	8.01
	215.999	21.83	3.22	-1.62	23.43	30.00	6.57
	222.045	21.96	3.26	0.51	25.73	30.00	4.27
	239.164	22.53	3.39	-0.79	25.13	37.00	11.87
	270.030	23.76	3.60	-2.59	24.77	37.00	12.23
	338.556	14.74	4.15	7.77	26.66	37.00	10.34
	402.891	16.62	4.56	6.92	28.10	37.00	8.90
	419.519	16.45	4.63	4.20	25.28	37.00	11.72
	478.772	18.31	5.01	1.37	24.69	37.00	12.31
	559.385	20.58	5.45	0.78	26.81	37.00	10.19
	633.396	20.80	5.78	-1.57	25.01	37.00	11.99
	736.109	22.52	6.47	0.42	29.41	37.00	7.59
	821.703	23.83	7.04	-0.79	30.08	37.00	6.92
890.179	24.64	7.32	-1.16	30.80	37.00	6.20	
992.893	25.27	7.79	-1.16	31.90	37.00	5.10	

- Remark :
1. All reading are Quasi-Peak values.
 2. '*' The worst emission was detected at 222.045MHz with corrected signal level of 25.73dBμV/m (limit was 30dBμV/m) when the antenna was at horizontal polarization and was at 4m high and the turn table was at 45°.
 3. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
 4. Measurement at No. 5 open field test site.

Date of Test : Mar. 07, 2002 Temperature : 23°C

EUT : 42" Plasma Monitor Humidity : 54%

Test Mode : D-Sub, 640*480/85Hz, 43kHz ("H" Pattern)

	Frequency MHz	Antenna	Cable	Meter Reading	Emission Level	Limits dBμV/m	Margin dB
		Factor dB/m	Loss dB	Vertical dBμV	Vertical dBμV/m		
	30.550	23.86	1.08	-4.88	20.06	30.00	9.94
	59.924	14.37	1.57	3.89	19.83	30.00	10.17
	68.472	13.02	1.69	5.65	20.36	30.00	9.64
	136.947	20.24	2.52	-2.28	20.48	30.00	9.52
	147.453	20.12	2.63	-1.45	21.30	30.00	8.70
	160.003	21.70	2.72	-2.88	21.54	30.00	8.46
	171.195	22.06	2.84	-1.27	23.63	30.00	6.37
*	205.406	22.29	3.11	-1.35	24.05	30.00	5.95
	215.999	21.81	3.22	-1.69	23.34	30.00	6.66
	240.011	22.93	3.39	-1.04	25.28	37.00	11.72
	256.763	23.79	3.49	-1.21	26.07	37.00	10.93
	338.549	15.37	4.15	7.31	26.83	37.00	10.17
	361.122	15.67	4.27	3.90	23.84	37.00	13.16
	430.194	17.43	4.67	3.72	25.82	37.00	11.18
	527.330	19.20	5.25	1.18	25.63	37.00	11.37
	600.026	20.89	5.59	0.16	26.64	37.00	10.36
	685.214	22.36	6.07	-1.88	26.55	37.00	10.45
	736.109	22.65	6.47	0.39	29.51	37.00	7.49
	873.060	24.43	7.25	-1.04	30.64	37.00	6.36

- Remark :
1. All reading are Quasi-Peak values.
 2. "*" The worst emission was detected at 205.406MHz with corrected signal level of 24.05dBμV/m (limit was 30dBμV/m) when the antenna was at vertical polarization and was at 1m high and the turn table was at 140° .
 3. 0° is the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
 4. Measurement at No. 5 open field test site.

3.7.2. 1GHz to 2GHz frequency and at 3 meters distance measurement.

Date of Test : Mar. 04, 2002 Temperature : 25°C

EUT : 42" Plasma Monitor Humidity : 75%

Test Mode : D-Sub, 1024*768/85Hz, 69kHz ("H" Pattern)

Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Pre-Amp Factor dB	Meter Reading Horizontal dBμV	Emission Level (Peak) Horizontal dBμV/m	Limits dBμV/m	Margin dB
1000.000	25.20	4.18	40.74	48.20	36.84	74.00	37.16
1068.798	25.23	4.32	40.68	51.50	40.37	74.00	33.63
1335.600	25.34	4.95	40.47	56.61	46.43	74.00	27.57
1602.402	25.96	6.16	40.29	47.55	39.38	74.00	34.62
1870.882	27.25	6.52	40.14	44.04	37.67	74.00	36.33

Emission Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Pre-Amp Factor dB	Meter Reading Vertical dBμV	Emission Level (Peak) Vertical dBμV/m	Limits dBμV/m	Margin dB
1000.000	25.20	4.18	40.74	49.49	38.13	74.00	35.87
1068.798	25.23	4.32	40.68	54.02	42.89	74.00	31.11
1337.278	25.34	4.95	40.46	61.21	51.04	74.00	22.96
1602.402	25.96	6.16	40.29	48.48	40.31	74.00	33.69
1872.560	27.26	6.51	40.14	45.89	39.52	74.00	34.48

- Remark :
1. All reading are Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading – Pre-Amp Factor.
 3. Measurement at Anechoic Chamber.

4. MODIFICATIONS TO EUT

1. Added four conductive gaskets on the holder of connector.
2. Added conductive gaskets on the frame of back cover.
3. Added four ferrite cores on the flat cables.
4. Added a ferrite core on the control wire of main board.
5. Added conductive fabric tape on the bracket of AV and component jacks.
6. Added a ferrite core on the control wire of speaker board.
7. Added a conductive gasket on the cover of power supply.
8. Bonded a ferrite core on the speaker's cable.
9. Bonded two ferrite cores on the D-Sub cable.

5. DEVIATION TO TEST SPECIFICATIONS

【NONE】