EMC TEST REPORT					
Project No.		LBE081805 Revision No. NONE			NONE
		ame of organization	Samsung Electro	onics	s Co., Ltd.
Applicant		Address	416 Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, 443-742 Korea		
	I	Date of application	2008.05.30		
		Kind of product	LCD Monitor		LCD Monitor
		Model No.	MG32PS		
EUT		Model No.	Variant Model No. NONE		NONE
Equipment Under Test		New / Alternative / Permissive change information	* New		
	Manufacturer		Samsung Electronics Co., Ltd. 416 Maetan 3-Dong,Yeongtong-Gu,Suwon-Si, Gyeonggi-Do, 443-742 Korea		
			EN55022:1998+A1:2000+A2:2003		000+A2:2003
Applied Sta	and	larde	EN55024:1998+	A1:2	001+A2:2003
		iai 43	EN61000-3-2:20	00+4	42:2005
			EN61000-3-3:1995+A1:2001+A2:2005		
Issue date		2008.07.31			
Test result Complied					

Test result : Complied

The equipment under test has found to be compliant with the applied standards. (Refer to the attached test result for more detail.)

Tested by : Hyun Jeong Jang

Reviewed by : No Cheon Park

N. C. Park

This report is the test result about the sphere accredited by KOLAS which signed the Mutual Recognition Arrangement of International Laboratory Accreditation Cooperation.

The test results in this report only apply to the tested sample. This report must not be reproduced, except in full, without written permission from SEC EMC Laboratory.



416 Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, 443-742 Korea Tel: 82 31 277 7752, Fax: 82 31 277 7753





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1. Summary of test results

1.1 Emission

The EUT has been tested according to the following specifications:

Applied	Test type	Applied standard	Result	Remarks
	Conducted Disturbance (Mains Port)	EN55022:1998+A1:200	Complied	Meets Class B Limit Minimum margin is 3.4 dB at 0.539 MHz
	Radiated Disturbance	0+A2:2003	Complied	Meets Class B Limit Minimum margin is 6.0 dB at 633.412 MHz
	Harmonics current	EN61000-3-2:2000 +A2:2005	Complied	
	Voltage fluctuation & Flicker	EN61000-3-3:1995+A1: 2001+A2:2005	Complied	

1.2 Immunity

Immunity test applied the normative documents of EN55024:1998+A1:2001+A2:2003. The EUT has been tested according to the following specifications:

Applied	Test type	Applied standard	Performance Criterion		
Applied			Result	Specification	
\boxtimes	Electrostatic discharge	EN61000-4-2:1995	А⊠ В⊡ С□	В	
	Radiated, radio-frequency, electromagnetic field	EN61000-4-3:1995	А⊠В□С□	Α	
\boxtimes	Electrical fast transient/burst	EN61000-4-4:1995	1995 A⊠ B□ C□ B		
\square	Surge EN61000-4-5:1995		А⊠ В⊡ С⊡	В	
\boxtimes	Radio-frequency conducted	EN61000-4-6:1996	А⊠ В⊡ С⊡	Α	
			A⊠ B⊡ C⊡		
\boxtimes	Voltage dips, short interruptions and voltage variations	EN61000-4-11:1994	1994 AX B C C: 30 % 2	B : > 95 % 0.5 Reduction C : 30 % 25 Reduction C : > 95 % 250 Reduction	
	Variations		A□ B⊠ C□		
	Power-frequency magnetic field	EN61000-4-8:1993	А∏ В∏ С∏	Α	





2. General Information

2.1 Test facility

The SEC EMC Laboratory is located on Samsung Electronics Co., Ltd. at 416 Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, South Korea.

All testing are performed in Semi-anechoic chambers conforming to the site attenuation Characteristics defined by ANSI C63.4, CISPR 22, 16-1 and 16-2. and Shielded rooms.

The SEC EMC Laboratory is operated as testing laboratory in accordance with the requirements of ISO/IEC 17025:2005.

	Laboratory Qualifications Remarks				
THE MERITARY ACCRETING	KOLAS(Korea Laboratory Accreditation Scheme)	Accredited : 124			
MIC	Radio Research Laboratory	Accredited : KR0004			
F©	FCC(Federal Communications Commission)	Accredited : KR0004			
ÇAJVN	National Voluntary Laboratory Accreditation Program	Lab Code: 200623-0			
N	Norges Elektriske Materiellkontroll	Accredited : ELA 195			
I ∕€I	VCCI (Voluntary Control Council for Interference by Information Technology Equipment)	C-2421,R-2224			
CQC	China Quality Certification Center	5-053, 5-054			
TÜV	TUV Rhineland	H9354285			
P	GOST(GOSTSTANDART)	ROSTEST			
	Elektrotechnicky Zkusebni Ustav	Reg. No.: 001			
Industry Canada	IC(Industry Canada)	Assigned Code: 5871			

2.2 Accreditation and listing





3. Test Setup configuration

3.1 Test Peripherals

The cables used for these peripherals are either permanently attached by the peripheral manufacturer or coupled with an assigned cable as defined below.

The following is a listing of the EUT and peripherals utilized during the performance of EMC test:

Description	Model No.	Serial No.	Manufacturer	Note
LCD Monitor	MG32PS	-	Samsung	EUT
PC	DM-V65	156X96BP600169L	Samsung	-
USB Keyboard	SEM-DT35	40037574	Samsung	-
USB Mouse	M-SBF69	HCA53112273	Samsung	-
USB Mouse	MS201U	69G0536	Samsung	-
USB Mouse	MS201U	69G0513	Samsung	-
USB Mouse	MS201U	69G1500	Samsung	-

3.2 EUT operating mode

To achieve compliance applied standard specification, the following mode(s) were made during compliance testing:

Operating Mode 1	PC Video In(Analog)	
Operating Mode 2	DVI Input(Digital)	
Operating Mode 3	DVI to HDMI Connected	
Operating Mode 4	Magic Network	

3.3 Details of Sampling

Customer selected, single unit.





LCD Monitor MG32PS



3.4 Used cable description

The EUT is configured, installed, arranged and operated in a manner consistent with typical applications. Interface cables/loads/devices are connected to at least one of each type of interface port of the EUT, and where practical, each cable shall be terminated in a device typical of actual usage. The type(s) of interconnecting cables to be used and the interface port (of the EUT) to which these were connected;

No	Connect Cable	Length [m]	Ferrite core [Y/N]	Remark
1	Power	1.8	N	For EUT
2	Power	1.8	N	For PC
3	Power	1.8	N	For Printer
4	PC Video In(Analog)	1.5	N	-
5	DVI Input(Digital)	1.5	N	-
6	DVI to HDMI	1.5	Y	-
7	USB Keyboard	1.5	N	-
8	USB Mouse	1.5	N	-
9	USB Mouse	1.0	Y	-
10	USB Mouse	1.0	Y	-
11	USB Mouse	1.0	Y	-
12	PC Audio In	1.5	Y	-
13	LAN	2.0	Y	-
14	A/V Out	1.0	N	-
15	Audio In	1.0	N	-
16	RS232C IN	1.5	Y	-
17	RS232C OUT	1.5	Y	-
18	USB Printer	1.0	Ν	

3.5 EUT Description

The following features describe EUT represented by this report:

Items	Description
Optimum Resoultion	1 360 x 768 @ 60Hz
Maximum Resolution	1 360 x 768 @ 60Hz
Horizontal Frequency(kHz)	30 ~ 70KHz
Vertical Frequency(Hz)	50 ~ 85Hz



LCD Monitor MG32PS



3.6 Description of the EUT exercising method

The EUT exercise program used during EMI and Immunity (EMS) testing was the SEC EMC Laboratory standardized test program for MS Windows. The program repetitively sends a screen of H - Character to the display.

Connect video output of computer on EUT's PC IN(D-sub)port and scrolled H – character continuously on EUT's screen.

Also, when EUT has loudspeaker, it was regenerative through EUT's audio input reproducing "digital white noise" by MS Windows Media player in computer.

3.7 Performance Criteria

Performance criterion A

The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Performance criterion B

After the test, the equipment shall continue to operate as intended without operator intervention.

No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance.

During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test.

If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Performance criterion C

Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.





3.8 Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus: (According to CISPR 16-4 and UKAS Lab 34.)

3.8.1 Emission

Test	Measurement uncertainty (C.L. 95 %, k = 2)	
Conducted disturbance	± 2.8 dB	
Radiated Disturbance	Horizontal	± 4.82 dB
	Vertical	± 5.42 dB





4. Results of individual test

4.1 Conducted disturbance

Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration. The EUT measured in accordance with the methods described in Clause 9.

Limits for conducted disturbance at the mains ports of class A ITE

Frequency range Limits	Limits dB(μV)		
MHz	Quasi-peak	Average		
0,15 to 0,50	79	66		
0,50 to 30	73	60		
NOTE The lower limit shall apply at the transition frequency				

Limits for conducted disturbance at the mains ports of class B ITE

Frequency range Limits	Limits dB(µV)			
MHz	Quasi-peak	Average		
0,15 to 0,50	66 to 56	56 to 46		
0,50 to 5	56	46		
5 to 30	60	50		
 NOTE 1 The lower limit shall apply at the transition frequency NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz. 				

4.1.1 Test instrumentation

Test instrumentation used in the Conducted disturbance test was as follows:

			Serial or Calibi		ration	
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	Date	Interval (Month)	
Test Software	EMC 32	R&S	Ver. 4.40.0	N/A	N/A	
Measuring receiver	ESCI	R&S	100368	2008-06-11	12	
Artificial mains network	ENV216	R&S	100116	2007-09-13	12	



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4.1.2 Photograph of the test Configuration

(Front)



(Rear)





LCD Monitor MG32PS



4.1.3 Test results

Operating condition	PC Video In(Analog)_Ping test						
Test date	2008-07	7-31	Test er	ngineer	Hyun Jeo	ng Jang	
Climate condition	Ambient temperature24.1 °CRelative humidity40 %Atmospheric pressure						
Test place			Shielde	d Room #1			
Note	* Result = Leve (LISN Insertion * Margin = Lim	* QP : Quasi-peak, AV: Average * Result = Level(QP or AV) + Corr. (LISN Insertion loss + Cable loss – Amplifier Gain) * Margin = Limit - Level					
ardware Setup: '	Voltage wit	h ENV 2	2-Line-LIS	6N - [EM	II conducted]	
Frequency Range: Receiver:	150k⊦ ESCI	lz - 30MHz					
Transducer:		-	er-2-Line-LISN	ENV216			
Subrange E	dB μ λ	IF B	andwidth	Meas. Time	e Receiver		
Subrange E 50kHz - 30MHz C	Detectors QuasiPeak; Avera	IF B age 9kH		Meas. Time 15s	e Receiver ESCI 3		
ubrange E 50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH					
ubrange E 50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH					
Subrange E 50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH	Z		ESCI 3		
Subrange E 50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH		15s	ESCI 3		
Subrange E 50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH		15s	ESCI 3		
Subrange 50kHz - 30MHz N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH		15s	ESCI 3		
Subrange E 50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH e-LISN		15s	ESCI 3		
50kHz - 30MHz C N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH e-LISN		15s	ESCI 3		
Subrange 50kHz - 30MHz N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH e-LISN		15s	ESCI 3		
Subrange 50kHz - 30MHz N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH e-LISN		15s	ESCI 3		
ubrange 50kHz - 30MHz N55022_B with	Detectors QuasiPeak; Avera	IF B age 9kH e-LISN		15s	ESCI 3		







Final Measurement Detector 1

Frequency (MHz)	Quasi Peak (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.191 500	45.9	L1	9.6	18.1	64.0
0.213 500	42.4	N	9.6	20.7	63.1
0.304 500	46.2	N	9.6	13.9	60.1
0.361 500	43.3	N	9.6	15.4	58.7
0.427 500	44.7	N	9.6	12.6	57.3
0.510 500	50.3	N	9.6	5.7	56.0
0.541 500	52.1	N	9.6	3.9	56.0
0.611 500	42.9	L1	9.6	13.1	56.0
0.818 500	35.9	L1	9.7	20.1	56.0
0.941 500	34.9	L1	9.7	21.1	56.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.320 500	30.5	N	9.6	19.1	49.7
0.429 500	27.3	N	9.6	19.9	47.3
0.510 500	41.2	N	9.6	4.8	46.0
0.576 500	41.6	N	9.6	4.4	46.0
0.822 500	26.9	L1	9.7	19.1	46.0
1.174 500	26.7	L1	9.7	19.3	46.0
1.409 500	25.7	L1	9.7	20.3	46.0
1.645 500	25.2	N	9.7	20.8	46.0
2.116 500	25.0	L1	9.7	21.0	46.0
3.179 500	23.1	L1	9.8	22.9	46.0



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Operating condition	DVI Input(Digital)_Ping test					
Test date	2008-07	'- 31	Test en	gineer	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24 .1 ℃	Relative humidity	40 %	Atmospheric pressure	100.7 kPa
Test place			Shielded	I Room #1		
Note	* QP : Quasi-p * Result = Leve (LISN Insertic * Margin = Lim	el(QP or AV on loss + Ca		olifier Gain)		

Hardware Setup: Voltage with ENV 2-Line-LISN - [EMI conducted]

Subrange 1 Frequency Range: Receiver: Transducer:

150kHz - 30MHz ESCI 3 ENV216 / Receiver-2-Line-LISN ENV216

Scan Setup: EN55022_B_ENV 2-Line-LISN fin [EMI conducted]

Hardware Setup: Level Unit: Voltage with ENV 2-Line-LISN dB μ V

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
150kHz - 30MHz	QuasiPeak; Average	9kHz	15s	ESCI 3

EN55022_B with ENV 2-Line-LISN









Final Measurement Detector 1

Frequency (MHz)	Quasi Peak (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.172 500	45.9	L1	9.6	18.9	64.8
0.199 500	43.6	N	9.6	20.0	63.6
0.303 500	43.9	N	9.6	16.3	60.1
0.368 500	43.2	N	9.6	15.3	58.5
0.419 500	45.2	N	9.6	12.3	57.5
0.509 500	51.4	N	9.6	4.6	56.0
0.537 500	51.7	N	9.6	4.3	56.0
0.616 500	42.9	L1	9.6	13.1	56.0
0.812 500	37.0	L1	9.7	19.0	56.0
0.966 500	33.9	L1	9.7	22.1	56.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.321 500	31.1	N	9.6	18.5	49.7
0.429 500	27.5	N	9.6	19.7	47.3
0.508 500	41.7	L1	9.6	4.3	46.0
0.579 500	40.4	N	9.6	5.6	46.0
0.642 500	21.7	L1	9.7	24.3	46.0
0.814 500	23.7	L1	9.7	22.3	46.0
1.158 500	23.8	L1	9.7	22.2	46.0
1.389 500	22.1	L1	9.7	23.9	46.0
1.623 500	20.8	L1	9.7	25.2	46.0
17.080 500	27.9	N	10.1	22.1	50.0



LCD Monitor MG32PS



Operating condition	HDMI to DVI connected _ Ping test					
Test date	2008-07	' -31	Test enç	gineer	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24 .1 ℃	Relative humidity	40 %	Atmospheric pressure	100.7 kPa
Test place			Shielded	I Room #1		
Note	* QP : Quasi-p * Result = Leve (LISN Insertic * Margin = Lim	el(QP or AV on loss + Ca		olifier Gain)		

Hardware Setup: Voltage with ENV 2-Line-LISN - [EMI conducted]

Subrange 1 Frequency Range: Receiver: Transducer:

150kHz - 30MHz ESCI 3 ENV216 / Receiver-2-Line-LISN ENV216

Scan Setup: EN55022_B_ENV 2-Line-LISN fin [EMI conducted]

Hardware Setup: Level Unit: Voltage with ENV 2-Line-LISN dB μ V

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
150kHz - 30MHz	QuasiPeak; Average	9kHz	15s	ESCI 3

EN55022_B with ENV 2-Line-LISN









Final Measurement Detector 1

Frequency (MHz)	Quasi Peak (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.191 500	45.8	L1	9.6	18.1	64.0
0.306 500	45.6	N	9.6	14.4	60.1
0.352 500	43.3	N	9.6	15.6	58.9
0.433 500	44.5	N	9.6	12.7	57.2
0.512 500	50.1	N	9.6	5.9	56.0
0.549 500	52.7	N	9.6	3.3	56.0
0.617 500	41.1	L1	9.6	14.9	56.0
0.752 500	36.3	L1	9.7	19.7	56.0
0.943 500	34.9	L1	9.7	21.1	56.0
1.176 500	35.3	L1	9.7	20.7	56.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.320 500	30.9	N	9.6	18.8	49.7
0.431 500	27.6	N	9.6	19.6	47.2
0.510 500	41.1	N	9.6	4.9	46.0
0.576 500	41.9	N	9.6	4.1	46.0
0.824 500	27.4	L1	9.7	18.6	46.0
1.178 500	26.8	L1	9.7	19.2	46.0
1.414 500	26.4	L1	9.7	19.6	46.0
1.649 500	26.5	L1	9.7	19.5	46.0
2.119 500	25.6	L1	9.7	20.4	46.0
2.120 500	25.4	N	9.7	20.6	46.0



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Operating condition	Magic Network _ Ping test					
Test date	2008-07	2008-07-31Test engineerHyun Jeong Jang				
Climate condition	Ambient temperature					
Test place			Shielded	Room #1		
Note	* QP : Quasi-p * Result = Leve (LISN Insertic * Margin = Lim	el(QP or AV on loss + Ca		lifier Gain)		

Hardware Setup: Voltage with ENV 2-Line-LISN - [EMI conducted]

Subrange 1 Frequency Range: Receiver: Transducer:

150kHz - 30MHz ESCI 3 ENV216 / Receiver-2-Line-LISN ENV216

Scan Setup: EN55022_B_ENV 2-Line-LISN fin [EMI conducted]

Hardware Setup: Level Unit:	Voltage wit dB μ V	h ENV 2-Line-LISN	-	-	
Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver	
150kHz - 30MHz	QuasiPeak; Average	9kHz	15s	ESCI 3	

EN55022_B with ENV 2-Line-LISN



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LCD Monitor MG32PS

Final Measurement Detector 1

Frequency (MHz)	Quasi Peak (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.350 500	43.0	N	9.6	16.0	59.0
0.434 500	45.6	N	9.6	11.6	57.2
0.511 500	50.3	N	9.6	5.7	56.0
0.539 500	52.6	N	9.6	3.4	56.0
0.614 500	41.2	L1	9.6	14.8	56.0
2.739 500	34.5	L1	9.7	21.5	56.0
3.412 500	39.1	L1	9.8	16.9	56.0
4.182 500	43.3	L1	9.8	12.7	56.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.320 500	30.9	N	9.6	18.8	49.7
0.509 500	41.1	N	9.6	4.9	46.0
0.577 500	41.3	N	9.6	4.7	46.0
2.951 500	30.0	N	9.7	16.0	46.0
3.188 500	32.2	N	9.7	13.8	46.0
4.183 500	33.7	N	9.8	12.3	46.0
4.304 500	29.3	N	9.8	16.7	46.0
5.311 500	32.6	L1	9.8	17.4	50.0



LCD Monitor MG32PS



Operating condition	LAN TEST _ 100M Full Duplex					
Test date	2008-07-31 Test engineer		Hyun Jeong Jang			
Climate condition	Ambient temperature	24 .1 ℃	Relative humidity	40 %	Atmospheric pressure	100.7 kPa
Test place			Shielded	I Room #1		
Note	* Result = Leve (LISN Insertio	* QP : Quasi-peak, AV: Average * Result = Level(QP or AV) + Corr. (LISN Insertion loss + Cable loss – Amplifier Gain) * Margin = Limit - Level				

Hardware Setup: ISN T400A Cat5 - [EMI conducted]

Subrange 1 Frequency Range: Receiver: Transducer:

150kHz - 30MHz ESCI 3 ISN T400A Cat5 / Receiver-2-Line-LISN ENV216

Scan Setup: EN55022_B_T400A Cat5 ISN fin [EMI conducted]

Hardware Setup: Level Unit:	ISN T400A dB μ V	Cat5	-	-	
Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver	
150kHz - 30MHz	QuasiPeak; Average	9kHz	5s	ESCI 3	

EN55022_B with T400A Cat5(100M) ISN



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Final Measurement Detector 1

Frequency	Quasi Peak	Corr.	Margin	Limit
(MHz)	(dB	(dB)	(dB)	(dB
13.359 500	60.6	9.5	13.4	74.0
13.419 500	60.8	9.5	13.2	74.0
13.480 500	59.9	9.5	14.1	74.0
16.167 500	60.1	9.6	13.9	74.0
16.228 500	61.3	9.6	12.7	74.0
18.244 500	59.1	9.6	14.9	74.0
23.129 500	61.4	9.6	12.6	74.0
29.236 500	59.9	9.7	14.1	74.0

Final Measurement Detector 2

Frequency (MHz)	Average (dB μ V)	Corr. (dB)	Margin (dB)	Limit (dB µ V)
13.358 500	56.9	9.5	7.1	64.0
13.420 500	56.9	9.5	7.1	64.0
13.480 500	56.3	9.5	7.7	64.0
16.229 500	57.3	9.6	6.7	64.0
23.067 500	55.3	9.6	8.7	64.0
23.129 500	59.3	9.6	4.7	64.0
28.686 500	56.1	9.7	7.9	64.0
29.236 500	56.1	9.7	7.9	64.0





4.2 Radiated disturbance

Of those disturbances above (L - 20dB), where L is the limit level in logarithmic units, record at least the disturbance levels and the frequencies of the six highest disturbances.

The following data lists the significant emission frequencies, measured levels, correction factors (for antenna and cables), orientation of table, polarization and height of antenna, the corrected reading, the limit, and the amount of margin. All measurements were taken utilizing quasi-peak detection unless stated otherwise. Measurements were performed at an antenna to EUT distance of 10 meters and elevated between 1 and 4 meters. Both vertical and horizontal antenna polarizations were measured.

Limits for radiated disturbance of ITE at a measuring distance of 10 m

Frequency range Limits MHz		Quasi-peak Limits dB dB(μV/m)				
		Class A	Class B			
30 to 230		40	30			
	230 to 1000	47	37			
NOTE 1 T	NOTE 1 The lower limit shall apply at the transition frequency					
NOTE 2 A	dditional provisions may be required for cas	es where interference o	ccurs.			

4.2.1 Test instrumentation

Test instrumentation used in the Radiated disturbance was as follows:

				Calibration	
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	Date	Interval (Month)
EMI Test Receiver	ESIB-26	R&S	832692/002	2008-03-18	12
EMI Test Receiver	ESIB-26	R&S	100290	2008-03-27	12
Ant. Mast	MA4000	inn-co	-	N/A	N/A
Ant. Mast	MA4000	inn-co	-	N/A	N/A
Mast Controller	CO2000	inn-co	-	N/A	N/A
Amplifier	310N	SONOMA	251674	2008-03-13	12
Amplifier	310N	SONOMA	186465	2008-04-09	12
RF selector	NS4900	inn-co	-	N/A	N/A
RF selector	NS4900	inn-co	-	N/A	N/A
Bi-log Antenna	CBL6112D	SCHAFFNER	22248	2007-10-18	24
Bi-log Antenna	CBL6112D	SCHAFFNER	22603	2007-04-02	24



LCD Monitor MG32PS



4.2.2 Photograph of the test Configuration

(Front)



<image>



LCD Monitor MG32PS



4.2.3 Test results

Operating condition	PC Video In(Analog) _ Ping test						
Test date	2008-07-30	Test engineer	ng Jang				
Climate condition	Ambient temperature	23.4 ℃	Relat	tive humidity	<mark>42</mark> %		
	Atmospheric pressure	101.0 kPa					
Test place	1	0m Semi-Anechoic C	hamber	#2			
Note	* Receiving antenna mode * Test distance : 10 m (RF * Result = Reading + c.f (A * Margin = Limit – Result	Semi Anechoic Chan	nber)	Amp Gain)			



-23/65-



LCD Monitor MG32PS



Operating condition	DVI Input(Digital) _ Ping test						
Test date	2008-07-30	Test engineer	Hyun Jeon	eong Jang			
Climate condition	Ambient temperature	23.4 ℃	Relative humidity	<mark>42</mark> %			
	Atmospheric pressure	101.0 kPa					
Test place	1()m Semi-Anechoic C	hamber #2				
Note	* Receiving antenna mode * Test distance : 10 m (RF * Result = Reading + c.f (A * Margin = Limit – Result	Semi Anechoic Chan	nber)				





LCD Monitor MG32PS



Operating condition	HDMI to DVI connected _ Ping test						
Test date	2008-07-30	Test engineer Hyun Jeong					
Climate condition	Ambient temperature	23.4 ℃	Relat	tive humidity	<mark>42</mark> %		
	Atmospheric pressure	101.0 kPa					
Test place	10	m Semi-Anechoic C	hamber	· #2			
Note	* Test distance : 10 m (RF S	Receiving antenna mode : Horizontal, Vertical est distance : 10 m (RF Semi Anechoic Chamber) Result = Reading + c.f (Antenna factor + Cable loss- Amp Gain)					





LCD Monitor MG32PS



Operating condition		Magic Network _ Ping test					
Test date	2008-07-30	Test engineer	Hyun Jeon	g Jang			
	Ambient temperature	23.4 ℃	Relative humidity	<mark>42</mark> %			
Climate condition	Atmospheric pressure	101.0 kPa					
Test place	10	m Semi-Anechoic C	hamber #2				
Note	* Receiving antenna mode * Test distance : 10 m (RF S * Result = Reading + c.f (Ar * Margin = Limit – Result	Semi Anechoic Cham	nber)				







4.3 Harmonics current

The EUT operated to produce the maximum harmonic components under normal operating conditions for each successive harmonic component in turn.

The power consumption, steady state harmonic currents were measured in the tested operating mode(s). The EUT measured in accordance with the test conditions described in Annex C (C.10).

Harmonic order	Maximum permissible harmonic current per watt	Maximum permissible harmonic current
n	mA/W	Α
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
13 ≤ n ≤ 39	3.85/n	See Table 1
(odd harmonics only)		

4.3.1 Test instrumentation

Test instrumentation used in the Harmonics current test was as follows:

			Serial or	Calibra	ation
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	Date	Interval (Month)
Power Analyzer	PM6000	Voltech	100006700167	2007-10-12	12
IEC Network	555	ZIMMER	IB10/9466	N/A	N/A
Test Software	IEC1000-3	Voltech	Ver 3.13.08	N/A	N/A



LCD Monitor MG32PS



4.3.2 Photograph of the test Configuration





LCD Monitor MG32PS



4.3.3 Test results

Operating cond	dition		PC Video In(Analo	og) _ Ping te	st	
Test date		2008-08-04	Test engir	neer	Hyun Jeon	ig Jang
		Ambient temperature	24.2 ℃	Relat	ive humidity	<mark>40</mark> %
Climate condit	ion	Atmospheric pressure	100.5 kPa			
Test place			Shielded R	oom #3		
Product:	MONI	TOR		2008 Aug 02 5	5:07pm	
Serial no:	None			Page 1 of 1		
Description: Test Date:		Aug 02 4:06pm				
Result Name:	HAR_			4 7:0000		
Type of Test: Limits:	Class	000:2006 Harmonics inc. interha D	rmonics to EN61000	-4-7:2002		
Power Analyzer:	Volteo Channel	ch PM6000 SN: 10000670016 (s):	7 Firmware version:	v1.20.06RC3		
		90015500508, 25 Adjusted Date: 22 JUL 200			JUL 2007.	
		90015500543, 25 Adjusted Date: 5 AUG 2007 one Adjusted Date:None 6. SN:None Ad		ate:None		
	Shunt(s)		-			
		91024300502, 4 Adjusted Date: 14 JUL 2007.			L 2007.	
		91024300504, 4 Adjusted Date: 14 JUL 2007. one Adjusted Date:None 6. SN:None Adj	-	le.none		
AC Source:		/ Manual Source				
Harmonic Results		Notes:				
Against Chosen L	imits:	Voltage Crest Factor outside pe	ermitted limits			
PASS						
Test Parameter De	etails		User Entered		Measured	
Operating Frequen	cy:		50		49.9840	
Operating Voltage: Specified Power:			230 192.0000		230.2034 189.7964	
Fundamental Curre	ent:		0.0000		0.8555	
Power Factor:			0.0000		0.9606	
Average Input Curr	ent:				0.8582	
Maximum POHC:					0.0060	
POHC Limit:					0.0826	
Maximum THC:			75		0.0701	
Minimum Power: Class Multiplier:			75 1.0000			
Test Duration:			00:02:30			



LCD Monitor MG32PS



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Prod													Aug 02	5.07p	DITI
Seria			None	•								Page	IOTI		
	ription:														
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				uating ⊓a ch PM6								20.0680	`?		
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				09001550050	8, 25 Adju	isted Da	ite: 22 JUL	2007.	2. SN: 09	00155005	21,25 Ad	justed Date:	23 JUL 20	07.	
			3. SN: (09001550054	3, 25 Adju	isted Da	ite: 5 AUG	\$ 2007.	4. SN:Nor	ne Adjus	ted Date:N	lone			
			5. SN:N	lone Adjust	ed Date:N	one 6	. SN:None	Adjust	ed Date:N	one					
			Shunt(s	5):											
			1. SN: (09102430050	2, 4 Adjus	ted Date	e: 14 JUL :	2007. 2	2. SN: 091	02430050	3, 4 Adjust	ted Date: 14	JUL 2007.		
			3. SN: (09102430050	4,4 Adjus	ted Dat	e: 14 JUL	2007. 4	4. SN:Non	e Adjuste	ed Date:No	ne			
			5. SN:N	lone Adjust	ed Date:N	one 6	. SN:None	e Adjuste	ed Date:No	ne					
AC S	Source:		Main	s / Manua	al Sourc	e									
Over	all Res	ult:	Notes	s:											
		-	Volta	ge Crest	Factor	outsid	e perm	itted lir	mits						
	PAS	S													
Class	s		Class	s D											
	-	lier	Class 1	s D											
	s s Multip	lier		s D				1							
Class	s Multip		1		Max	<12	Pass	Harm	Limit 1	Limit 2	Average	<11<12	Max	دا ۲	Page
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Class	s Multip		1 Average			<l2< td=""><td></td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>-</td><td><l1 <l2<="" td=""><td></td><td><l2< td=""><td></td></l2<></td></l1></td></l2<>		Harm	Limit 1	Limit 2	-	<l1 <l2<="" td=""><td></td><td><l2< td=""><td></td></l2<></td></l1>		<l2< td=""><td></td></l2<>	
Class	Limit 1	Limit 2	1 Average Reading		Reading	<l2< td=""><td>FAIL</td><td></td><td></td><td></td><td>Reading</td><td><د1 <12</td><td>Reading</td><td><l2< td=""><td>FAIL</td></l2<></td></l2<>	FAIL				Reading	<د1 <12	Reading	<l2< td=""><td>FAIL</td></l2<>	FAIL
Class Harm	Limit 1	Limit 2 None	1 Average Reading 1.139mA		Reading	<l2< td=""><td>FAIL N/A</td><td>Harm 3 5</td><td>652.8mA</td><td>Limit 2 979.2mA 547.2mA</td><td>Reading</td><td><l1 <l2<="" td=""><td>Reading 52.75mA</td><td><∟2</td><td></td></l1></td></l2<>	FAIL N/A	Harm 3 5	652.8mA	Limit 2 979.2mA 547.2mA	Reading	<l1 <l2<="" td=""><td>Reading 52.75mA</td><td><∟2</td><td></td></l1>	Reading 52.75mA	<∟2	
Class	Limit 1	Limit 2	1 Average Reading		Reading	<l2< td=""><td>FAIL</td><td>3</td><td></td><td>979.2mA</td><td>Reading</td><td><l1 <l2<="" td=""><td>Reading</td><td><l2< td=""><td>FAIL Pass Pass</td></l2<></td></l1></td></l2<>	FAIL	3		979.2mA	Reading	<l1 <l2<="" td=""><td>Reading</td><td><l2< td=""><td>FAIL Pass Pass</td></l2<></td></l1>	Reading	<l2< td=""><td>FAIL Pass Pass</td></l2<>	FAIL Pass Pass
Class Harm 2 4	S Multip	Limit 2 None None	Average Reading 1.139mA 0.482mA		Reading 1.217mA 0.520mA	<l2< td=""><td>FAIL N/A N/A</td><td>3</td><td>652.8mA 364.8mA</td><td>979.2mA 547.2mA</td><td>Reading 52.60mA 27.75mA</td><td><1 <2 </td><td>Reading 52.75mA 27.80mA</td><td><l2< td=""><td>FAIL Pass</td></l2<></td></l2<>	FAIL N/A N/A	3	652.8mA 364.8mA	979.2mA 547.2mA	Reading 52.60mA 27.75mA	<1 <2 	Reading 52.75mA 27.80mA	<l2< td=""><td>FAIL Pass</td></l2<>	FAIL Pass
Class Harm 2 4 6	S Multip	Limit 2 None None None	1 Average Reading 1.139mA 0.482mA 0.462mA		Reading 1.217mA 0.520mA 0.512mA	<l2< td=""><td>FAIL N/A N/A N/A</td><td>3 5 7</td><td>652.8mA 364.8mA 192.0mA</td><td>979.2mA 547.2mA 288.0mA</td><td>Reading 52.60mA 27.75mA 25.82mA</td><td><l1 <l2<="" td=""><td>Reading 52.75mA 27.80mA 25.91mA</td><td><l2< td=""><td>FAIL Pass Pass Pass</td></l2<></td></l1></td></l2<>	FAIL N/A N/A N/A	3 5 7	652.8mA 364.8mA 192.0mA	979.2mA 547.2mA 288.0mA	Reading 52.60mA 27.75mA 25.82mA	<l1 <l2<="" td=""><td>Reading 52.75mA 27.80mA 25.91mA</td><td><l2< td=""><td>FAIL Pass Pass Pass</td></l2<></td></l1>	Reading 52.75mA 27.80mA 25.91mA	<l2< td=""><td>FAIL Pass Pass Pass</td></l2<>	FAIL Pass Pass Pass
Class Harm 2 4 6 8	S Multip	Limit 2 None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.276mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA	<l2< td=""><td>FAIL N/A N/A N/A</td><td>3 5 7 9</td><td>652.8mA 364.8mA 192.0mA 96.00mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA</td><td>Reading 52.60mA 27.75mA 25.82mA 18.49mA</td><td><11 <12 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td><td>Reading 52.75mA 27.80mA 25.91mA 18.58mA</td><td><l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<></td></l2<>	FAIL N/A N/A N/A	3 5 7 9	652.8mA 364.8mA 192.0mA 96.00mA	979.2mA 547.2mA 288.0mA 144.0mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA	<11 <12 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Reading 52.75mA 27.80mA 25.91mA 18.58mA	<l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<>	FAIL Pass Pass Pass Pass
Class Harm 2 4 6 8 10	S Multip	Limit 2 None None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.276mA 0.425mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.454mA	<l2< td=""><td>FAIL N/A N/A N/A N/A</td><td>3 5 7 9 11</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA</td><td>Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA</td><td><1 <1 2 </td><td>Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA</td><td><l2 <="" td=""> ✓ ✓ ✓ ✓ ✓ ✓ ✓</l2></td><td>FAIL Pass Pass Pass Pass Pass</td></l2<>	FAIL N/A N/A N/A N/A	3 5 7 9 11	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA	<1 <1 2 	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA	<l2 <="" td=""> ✓ ✓ ✓ ✓ ✓ ✓ ✓</l2>	FAIL Pass Pass Pass Pass Pass
Class Harm 2 4 6 8 10 12	Limit 1 Limit 1 None None None None None None	Limit 2 None None None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.462mA 0.425mA 0.299mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.454mA 0.327mA	<.2	FAIL N/A N/A N/A N/A N/A	3 5 7 9 11 13	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA	<l1 <l2<="" td=""><td>Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA</td><td><l2 <="" td=""> ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</l2></td><td>FAIL Pass Pass Pass Pass Pass Pass</td></l1>	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA	<l2 <="" td=""> ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</l2>	FAIL Pass Pass Pass Pass Pass Pass
Class Harm 2 4 6 8 10 12 14	S Multip	Limit 2 None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.462mA 0.276mA 0.425mA 0.299mA 0.349mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.454mA 0.327mA 0.375mA	<.2	FAIL N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA	<l1 <l2<="" td=""><td>Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA 5.162mA</td><td> ✓ ✓<</td><td>FAIL Pass Pass Pass Pass Pass Pass N/A</td></l1>	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA 5.162mA	 ✓ ✓<	FAIL Pass Pass Pass Pass Pass Pass N/A
Class Harm 2 4 6 8 10 12 14 16	None None None None None None None None	Limit 2 None None None None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.276mA 0.425mA 0.299mA 0.349mA 0.223mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.424mA 0.327mA 0.375mA 0.248mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA 4.970mA	<l1 <l2<="" p=""> V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V V</l1>	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA 5.162mA 5.008mA		FAIL Pass Pass Pass Pass Pass N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18	None None None None None None None None	Limit 2 None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.276mA 0.225mA 0.349mA 0.223mA 0.254mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.424mA 0.327mA 0.375mA 0.248mA 0.248mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA	 <1 <12 ✓ <	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA 5.162mA 5.008mA 3.876mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.276mA 0.329mA 0.349mA 0.223mA 0.254mA 0.310mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.427mA 0.327mA 0.327mA 0.248mA 0.248mA 0.281mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA 2.041mA	 <1 <12 ✓ <	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 5.162mA 5.008mA 3.876mA 2.084mA		FAIL Pass Pass Pass Pass Pass N/A N/A
Class Harm 2 4 6 8 8 10 12 14 16 18 20 22	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.276mA 0.425mA 0.223mA 0.223mA 0.349mA 0.223mA 0.310mA 0.250mA		Reading 1.217mA 0.520mA 0.427mA 0.427mA 0.327mA 0.327mA 0.248mA 0.281mA 0.281mA 0.340mA 0.279mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21 23	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA 2.041mA 0.657mA	 <1 <12 ✓ <	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 8.372mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.462mA 0.276mA 0.425mA 0.223mA 0.223mA 0.254mA 0.310mA 0.550mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.454mA 0.327mA 0.375mA 0.248mA 0.281mA 0.340mA 0.279mA 0.537mA	<12	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25	652.8mA 364.8mA 192.0mA 66.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA	Reading 52.60mA 27.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA 2.041mA 0.657mA 0.936mA	 <1 <12 ✓ <	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA 0.975mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.462mA 0.276mA 0.425mA 0.230mA 0.254mA 0.250mA 0.250mA 0.501mA 0.207mA		Reading 1.217mA 0.520mA 0.512mA 0.427mA 0.427mA 0.327mA 0.327mA 0.248mA 0.248mA 0.248mA 0.249mA 0.249mA 0.340mA	<12	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA	Reading 52.60mA 52.75mA 25.82mA 18.49mA 13.02mA 5.103mA 4.970mA 3.834mA 2.041mA 0.657mA 0.936mA 0.907mA	 <1 <12 ✓ <	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 5.162mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA 0.975mA 0.946mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.462mA 0.276mA 0.425mA 0.223mA 0.250mA 0.501mA 0.501mA 0.207mA 0.300mA		Reading 1.217mA 0.520mA 0.427mA 0.451mA 0.454mA 0.327mA 0.327mA 0.248mA 0.281mA 0.281mA 0.279mA 0.537mA 0.226mA 0.213mA	<12	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA	Reading 52.60mA 52.75mA 25.82mA 18.49mA 13.02mA 5.103mA 4.970mA 3.834mA 2.041mA 0.936mA 0.936mA 1.723mA	<1	Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 5.162mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA 0.975mA 0.946mA 1.753mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A
Class Larm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.462mA 0.276mA 0.425mA 0.299mA 0.349mA 0.223mA 0.254mA 0.310mA 0.501mA 0.207mA 0.185mA 0.190mA		Reading 1.217mA 0.520mA 0.427mA 0.454mA 0.327mA 0.327mA 0.248mA 0.281mA 0.281mA 0.281mA 0.279mA 0.537mA 0.226mA 0.2213mA 0.207mA	<12	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA	Reading 52.60mA 52.75mA 25.82mA 18.49mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA 2.041mA 0.936mA 0.936mA 1.723mA 2.667mA		Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA 0.975mA 0.975mA 1.753mA 2.710mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A
Class Larm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 300 32	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.425mA 0.276mA 0.299mA 0.349mA 0.223mA 0.254mA 0.310mA 0.250mA 0.501mA 0.207mA 0.185mA 0.190mA 0.207mA 0.190mA 0.214mA		Reading 1.217mA 0.520mA 0.427mA 0.454mA 0.327mA 0.327mA 0.248mA 0.281mA 0.281mA 0.279mA 0.537mA 0.226mA 0.2213mA 0.207mA 0.241mA	<12	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 22.40mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA 33.59mA	Reading 52.60mA 52.75mA 25.82mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA 2.041mA 0.936mA 0.930mA 1.723mA 2.667mA 2.758mA		Reading 52.75mA 27.80mA 25.91mA 13.06mA 8.372mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA 0.687mA 0.975mA 1.755mA 2.710mA 2.710mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.139mA 0.482mA 0.482mA 0.276mA 0.225mA 0.349mA 0.299mA 0.349mA 0.293mA 0.349mA 0.254mA 0.250mA 0.501mA 0.207mA 0.185mA 0.190mA 0.214mA 0.237mA		Reading 1.217mA 0.520mA 0.427mA 0.451mA 0.454mA 0.327mA 0.327mA 0.248mA 0.281mA 0.281mA 0.279mA 0.279mA 0.279mA 0.226mA 0.213mA 0.2213mA 0.207mA 0.207mA	<12	FAIL N/A N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33 35	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA 22.40mA 21.12mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA 33.59mA 31.68mA	Reading 52.60mA 27.75mA 25.82mA 13.02mA 8.336mA 5.103mA 4.970mA 3.834mA 2.041mA 0.657mA 0.936mA 1.723mA 2.667mA 2.75mA		Reading 52.75mA 27.80mA 25.91mA 18.58mA 13.06mA 5.162mA 5.008mA 3.876mA 2.084mA 0.687mA 0.975mA 0.946mA 1.753mA 2.710mA 2.788mA 2.5084mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A

<L1 : Reading is below limit 1.

<L2 : Reading is below limit 2.

N/A : Harmonic current below 0.6% of rated current or 5mA, whichever is greater, are disregarded.

-30/65-



LCD Monitor MG32PS



Operating condition		DVI Input (Digital)								
Test date	2008-08-04	2008-08-04 Test engineer Hyun Jeong Ja								
Climate condition	Ambient temperature	24.2 ℃	Rela	tive humidity	<mark>40</mark> %					
Climate condition	Atmospheric pressure	100.5 kPa								
Test place		Shielded Roon	n #3							

Product: Serial no: Description:	MONITOR None	2008 Aug 02 6:07pm Page 1 of 1
Test Date: Result Name:	2008 Aug 02 4:20pm HAR_DVI	
Type of Test: Limits:	EN61000:2006 Harmonics inc. interharmonics to Class D	EN61000-4-7:2002
Power Analyzer:	Voltech PM6000 SN: 100006700167 Firmwar	e version: v1.20.06RC3
	1. SN: 090015500508, 25 Adjusted Date: 22 JUL 2007. 2. SN: 090	
	3. SN: 090015500543, 25 Adjusted Date: 5 AUG 2007. 4. SN:Non 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:No	•
	Shunt(s):	
	1. SN: 091024300502, 4 Adjusted Date: 14 JUL 2007. 2. SN: 0910 3. SN: 091024300504, 4 Adjusted Date: 14 JUL 2007. 4. SN:None	-
	5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:Nor	•
AC Source:	Mains / Manual Source	
PASS		
Test Parameter De		ntered Measured
Operating Frequenc Operating Voltage:	y: 50 230	49.9840 230.2049
Specified Power:	192.00	
Fundamental Currer Power Factor:	nt: 0.0000 0.0000	
Average Input Curre		0.8578
Maximum POHC:		0.0059
POHC Limit: Maximum THC:		0.0826 0.0701
Minimum Power:	75	
Class Multiplier: Test Duration:	1.0000 00:02:	
	00.02.	



LCD Monitor MG32PS



Prod	uct:		MON	ITOR								2008 /	Aug 02	6:07p	om
Seria	al no:		None									Page	1 of 1		
Desc	ription:														
Resu	ılt Nam	e:	HAR_	DVI											
Volte	ch IEC	61000-	3 Winde	ows Softw	vare 1.	10.04	RC5			Tes	t Date:	2008	Aug 02	4:20p	m
Туре	of Tes	t:	Fluct	uating Ha	rmonics	s Test	- Wors	st Case	e Table	(2006)					
Powe	er Analy	yzer:			000 SN	1: 100	00670	0167 I	Firmwa	re vers	ion: v1	.20.06RC	3		
			Channe		0.05 Adia	inted Da	+ 22 II II	2007	2 ON: 00	00455005	24 25 44	functed Date:	22 11 20		
				09001550050								ljusted Date:	23 JUL 20	07.	
				lone Adjust							sted Date.i	Volle			
			Shunt(s		eu Date.int	one o.	. on none	- Aujusi	eu Dale.in	one					
					2.4 Adius	sted Date	e: 14 JUL	2007. 2	2. SN: 091	02430050)3. 4 Adius	ted Date: 14	JUL 2007		
				09102430050									0022007.		
				lone Adjust						-					
ACS	Source:			s / Manua											
	all Res	ult	Notes												
Over	all Res	uit.		s. ae Crest	Factor	histuc	e nerm	itted lir	nits						
	PAS	S	1 01100	go 0.000		outoru	o point								
							_								
Class	5		Class	5 D											
	s s Multip	olier	Class 1	s D											
	-	lier		5 D											
	-	lier Limit 2	1 Average	S D	Max	<l2< td=""><td>Pass</td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>Average</td><td><∟1 <∟2</td><td>Max</td><td><l2< td=""><td>Pass</td></l2<></td></l2<>	Pass	Harm	Limit 1	Limit 2	Average	<∟1 <∟2	Max	<l2< td=""><td>Pass</td></l2<>	Pass
Class	s Multip		1		Max Reading	<l2< td=""><td>Pass FAIL</td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>Average Reading</td><td><l1 <l2<="" td=""><td>Max Reading</td><td><l2< td=""><td>Pass FAIL</td></l2<></td></l1></td></l2<>	Pass FAIL	Harm	Limit 1	Limit 2	Average Reading	<l1 <l2<="" td=""><td>Max Reading</td><td><l2< td=""><td>Pass FAIL</td></l2<></td></l1>	Max Reading	<l2< td=""><td>Pass FAIL</td></l2<>	Pass FAIL
Class	s Multip		1 Average			<l2< td=""><td></td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>_</td><td><l1 <l2<="" td=""><td></td><td><l2< td=""><td></td></l2<></td></l1></td></l2<>		Harm	Limit 1	Limit 2	_	<l1 <l2<="" td=""><td></td><td><l2< td=""><td></td></l2<></td></l1>		<l2< td=""><td></td></l2<>	
Class	s Multip		1 Average			<l2< td=""><td></td><td>Harm 3</td><td>Limit 1 662.8mA</td><td>Limit 2 979.2mA</td><td>_</td><td><1 <2 ✓ ✓</td><td></td><td><∟2</td><td></td></l2<>		Harm 3	Limit 1 662.8mA	Limit 2 979.2mA	_	<1 <2 ✓ ✓		<∟2	
Class	S Multip	Limit 2	1 Average Reading		Reading	<l2< td=""><td>FAIL</td><td></td><td></td><td></td><td>Reading</td><td></td><td>Reading</td><td><12</td><td>FAIL</td></l2<>	FAIL				Reading		Reading	<12	FAIL
Class Harm	S Multip	Limit 2 None	1 Average Reading 1.072mA		Reading	<l2< td=""><td>FAIL N/A</td><td>3</td><td>652.8mA</td><td>979.2mA</td><td>Reading 52.69mA</td><td><l1 <l2<="" td=""><td>Reading 52.82mA</td><td><l2< td=""><td>FAIL Pass</td></l2<></td></l1></td></l2<>	FAIL N/A	3	652.8mA	979.2mA	Reading 52.69mA	<l1 <l2<="" td=""><td>Reading 52.82mA</td><td><l2< td=""><td>FAIL Pass</td></l2<></td></l1>	Reading 52.82mA	<l2< td=""><td>FAIL Pass</td></l2<>	FAIL Pass
Class Harm 2 4 8	S Multip	Limit 2 None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.295mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA	<l2< td=""><td>FAIL N/A N/A N/A</td><td>3</td><td>652.8mA 364.8mA 192.0mA 96.00mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA</td><td>Reading 52.69mA 27.82mA 25.83mA 18.53mA</td><td><.1 <.2 </td><td>Reading 52.82mA 27.88mA 25.92mA 18.64mA</td><td><l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<></td></l2<>	FAIL N/A N/A N/A	3	652.8mA 364.8mA 192.0mA 96.00mA	979.2mA 547.2mA 288.0mA 144.0mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA	<.1 <.2 	Reading 52.82mA 27.88mA 25.92mA 18.64mA	<l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<>	FAIL Pass Pass Pass Pass
Class Harm 2 4 8 10	S Multip	Limit 2 None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.295mA 0.450mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.508mA	<l2< td=""><td>FAIL N/A N/A N/A N/A</td><td>3 5 7 9 11</td><td>852.8mA 384.8mA 192.0mA 98.00mA 67.19mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA</td><td>Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA</td><td><.1 <.2 </td><td>Reading 52.82mA 27.88mA 25.92mA 18.64mA 13.02mA</td><td><22 <!--2<br--><!--2<br--><!--2<br--><!--2<br--><!--2<br--><!--2<br--><!--2</td--><td>FAIL Pass Pass Pass Pass Pass</td></td></l2<>	FAIL N/A N/A N/A N/A	3 5 7 9 11	852.8mA 384.8mA 192.0mA 98.00mA 67.19mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA	<.1 <.2 	Reading 52.82mA 27.88mA 25.92mA 18.64mA 13.02mA	<22 2<br 2<br 2<br 2<br 2<br 2<br 2</td <td>FAIL Pass Pass Pass Pass Pass</td>	FAIL Pass Pass Pass Pass Pass
Class Harm 2 4 6 8 10 12	S Multip	Limit 2 None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.439mA 0.456mA 0.367mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.508mA 0.405mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A</td><td>3 5 7 9 11 13</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 86.29mA</td><td>Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA</td><td><1 <2 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td><td>Reading 52.82mA 27.86mA 25.92mA 18.64mA 13.02mA 8.295mA</td><td><22 </td>VVVVVV</l2<>	FAIL N/A N/A N/A N/A N/A	3 5 7 9 11 13	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 86.29mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA	<1 <2 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Reading 52.82mA 27.86mA 25.92mA 18.64mA 13.02mA 8.295mA	<22	FAIL Pass Pass Pass Pass Pass Pass
Class Harm 2 4 8 10 12 14	S Multip	Limit 2 None None None None None	1 Average Reading 1.072mA 0.410mA 0.430mA 0.430mA 0.367mA 0.367mA 0.430mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.405mA 0.405mA 0.490mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA	<1 <2 </td <td>Reading 52.82mA 27.86mA 25.92mA 18.64mA 13.02mA 8.295mA 5.131mA</td> <td></td> <td>FAIL Pass Pass Pass Pass Pass Pass N/A</td>	Reading 52.82mA 27.86mA 25.92mA 18.64mA 13.02mA 8.295mA 5.131mA		FAIL Pass Pass Pass Pass Pass Pass N/A
Class Harm 2 4 6 8 10 12 14 18	Limit 1 None None None None None None None	Limit 2 None None None None None None	1.072mA 0.410mA 0.439mA 0.439mA 0.450mA 0.367mA 0.387mA 0.315mA		Reading 1.150mA 0.478mA 0.429mA 0.429mA 0.508mA 0.405mA 0.490mA 0.388mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17	852.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA	<1 <1 2 	Reading 52.82mA 27.86mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA		FAIL Pass Pass Pass Pass Pass Pass N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18	Limit 1 Limit 1 None None None None None None None None	Limit 2 None None None None None None None	1.072mA 0.410mA 0.430mA 0.430mA 0.460mA 0.460mA 0.430mA 0.430mA 0.307mA 0.430mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.508mA 0.405mA 0.400mA 0.388mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 66.22mA 58.35mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.867mA	<l1 <l2<="" td=""><td>Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA</td><td> <</td><td>FAIL Pass Pass Pass Pass Pass N/A N/A</td></l1>	Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA	 <	FAIL Pass Pass Pass Pass Pass N/A N/A
Class Harm 2 4 6 8 10 12 14 18 18 20	S Multip	Limit 2 None None None None None None None	1.072mA 0.410mA 0.439mA 0.439mA 0.439mA 0.458mA 0.387mA 0.387mA 0.315mA 0.259mA 0.298mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.405mA 0.405mA 0.490mA 0.388mA 0.286mA 0.329mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA	Reading 52.89mA 27.82mA 26.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA	<l1 <l2<="" p=""> ✓ ✓</l1>	Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 5.02mA 3.912mA 2.056mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A
Class Harm 2 4 8 10 12 14 16 18 20 22	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.430mA 0.468mA 0.367mA 0.438mA 0.315mA 0.259mA 0.259mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.429mA 0.405mA 0.490mA 0.368mA 0.286mA 0.329mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23</td><td>852.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.88mA 49.27mA 43.48mA 38.90mA 36.20mA 32.13mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA</td><td>Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.887mA 2.019mA 0.660mA</td><td><1 <12</td><td>Reading 52.82mA 27.86mA 26.92mA 18.64mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.056mA 0.699mA</td><td><12 × × × × × × × × × × ×</td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23	852.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.88mA 49.27mA 43.48mA 38.90mA 36.20mA 32.13mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.887mA 2.019mA 0.660mA	<1 <12	Reading 52.82mA 27.86mA 26.92mA 18.64mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.056mA 0.699mA	<12 × × × × × × × × × × ×	FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A
Class Harm 2 4 8 10 12 14 16 18 20 22 24	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.430mA 0.450mA 0.450mA 0.307mA 0.315mA 0.250mA 0.250mA 0.512mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.429mA 0.405mA 0.490mA 0.388mA 0.388mA 0.329mA 0.329mA 0.541mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25</td><td>852.8mA 364.8mA 192.0mA 67.19mA 56.80mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA 44.36mA</td><td>Reading 52.60mA 27.82mA 25.83mA 18.53mA 12.90mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA 0.080mA 0.940mA</td><td></td><td>Reading 52.82mA 27.86mA 26.92mA 18.64mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.056mA 0.899mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25	852.8mA 364.8mA 192.0mA 67.19mA 56.80mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA 44.36mA	Reading 52.60mA 27.82mA 25.83mA 18.53mA 12.90mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA 0.080mA 0.940mA		Reading 52.82mA 27.86mA 26.92mA 18.64mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.056mA 0.899mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.430mA 0.295mA 0.456mA 0.367mA 0.315mA 0.255mA 0.255mA 0.512mA 0.512mA 0.327mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.429mA 0.405mA 0.405mA 0.308mA 0.286mA 0.287mA 0.229mA 0.521mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25 27</td><td>862.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.00mA</td><td>Reading 52.00mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.980mA 3.867mA 2.019mA 0.060mA 0.940mA 0.915mA</td><td></td><td>Reading 52.82mA 27.86mA 25.92mA 18.64mA 13.02mA 8.296mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.988mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27	862.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.00mA	Reading 52.00mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.980mA 3.867mA 2.019mA 0.060mA 0.940mA 0.915mA		Reading 52.82mA 27.86mA 25.92mA 18.64mA 13.02mA 8.296mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.988mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 28 28 28	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.295mA 0.466mA 0.367mA 0.367mA 0.367mA 0.367mA 0.325mA 0.255mA 0.512mA 0.237mA 0.233mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.405mA 0.405mA 0.308mA 0.308mA 0.286mA 0.329mA 0.529mA 0.541mA 0.259mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25 27 29</td><td>862.8mA 364.8mA 192.0mA 96.00mA 87.19mA 56.80mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 86.22mA 58.36mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA</td><td>Reading 52.00mA 27.82mA 25.83mA 18.53mA 12.90mA 8.243mA 5.070mA 4.989mA 3.887mA 2.019mA 0.960mA 0.940mA 0.940mA 1.747mA</td><td></td><td>Reading 52.82mA 27.80mA 25.92mA 18.04mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.986mA 0.988mA 1.785mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29	862.8mA 364.8mA 192.0mA 96.00mA 87.19mA 56.80mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 86.22mA 58.36mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA	Reading 52.00mA 27.82mA 25.83mA 18.53mA 12.90mA 8.243mA 5.070mA 4.989mA 3.887mA 2.019mA 0.960mA 0.940mA 0.940mA 1.747mA		Reading 52.82mA 27.80mA 25.92mA 18.04mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.986mA 0.988mA 1.785mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.295mA 0.450mA 0.460mA 0.367mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.237mA 0.233mA 0.244mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.429mA 0.405mA 0.405mA 0.308mA 0.388mA 0.280mA 0.329mA 0.541mA 0.227mA 0.259mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25 27 29 31</td><td>852.8mA 384.8mA 192.0mA 96.00mA 87.19mA 56.88mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 86.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.00mA 38.23mA 36.76mA</td><td>Reading 52.09mA 27.82mA 25.83mA 18.53mA 12.99mA 3.243mA 5.070mA 4.989mA 3.807mA 2.019mA 0.940mA 0.940mA 1.747mA 2.864mA</td><td></td><td>Reading 52.82mA 27.80mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA 2.058mA 0.989mA 0.989mA 1.785mA 2.701mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31	852.8mA 384.8mA 192.0mA 96.00mA 87.19mA 56.88mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 86.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.00mA 38.23mA 36.76mA	Reading 52.09mA 27.82mA 25.83mA 18.53mA 12.99mA 3.243mA 5.070mA 4.989mA 3.807mA 2.019mA 0.940mA 0.940mA 1.747mA 2.864mA		Reading 52.82mA 27.80mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA 2.058mA 0.989mA 0.989mA 1.785mA 2.701mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.439mA 0.439mA 0.460mA 0.307mA 0.315mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.237mA 0.233mA 0.244mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.508mA 0.405mA 0.405mA 0.368mA 0.280mA 0.287mA 0.287mA 0.270mA 0.270mA 0.272mA 0.272mA	<.2	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33	852.8mA 384.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 36.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 38.23mA 35.76mA 33.59mA	Reading 52.89mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.987mA 2.019mA 0.860mA 0.940mA 0.915mA 1.747mA 2.864mA 2.738mA		Reading 52.82mA 27.86mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA 2.056mA 0.980mA 0.980mA 1.785mA 2.701mA 2.771mA		FAIL Pass Pass Pass Pass N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 22 24 26 28 30 32 34	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.439mA 0.439mA 0.460mA 0.307mA 0.307mA 0.315mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.2512mA 0.233mA 0.244mA 0.232mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.508mA 0.405mA 0.405mA 0.308mA 0.296mA 0.229mA 0.227mA 0.259mA 0.272mA 0.272mA	<.2	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35	852.8mA 384.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA 23.84mA 21.12mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA 33.59mA 31.08mA	Reading 52.89mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA 0.860mA 0.940mA 0.915mA 1.747mA 2.864mA 2.738mA 2.467mA		Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.989mA 0.989mA 1.785mA 2.701mA 2.701mA 2.502mA		FAIL Pass Pass Pass Pass NVA
Class Harm 2 4 6 8 10 12 14 18 20 22 24 26 22 24 26 28 30 32 34 36	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.439mA 0.439mA 0.430mA 0.307mA 0.315mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.237mA 0.233mA 0.244mA 0.241mA 0.232mA 0.241mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.405mA 0.405mA 0.405mA 0.298mA 0.298mA 0.297mA 0.297mA 0.259mA 0.272mA 0.272mA 0.272mA	<.2	FAIL N/A N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33 35 37	862.8mA 384.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 22.56mA 23.84mA 23.84mA 23.84mA 22.40mA 21.12mA 19.97mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 86.29mA 65.29mA 65.279mA 48.20mA 44.35mA 44.35mA 41.06mA 38.23mA 36.76mA 33.59mA 31.68mA 29.96mA	Reading 52.69mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA 0.940mA 0.940mA 0.915mA 1.747mA 2.664mA 2.738mA 2.487mA 1.819mA		Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 8.295mA 5.131mA 5.022mA 3.912mA 2.058mA 0.988mA 0.988mA 0.948mA 1.785mA 2.701mA 2.771mA 2.502mA 1.8502mA		FAIL Pass Pass Pass Pass NVA
Class Harm 2 4 8 8 10 12 14 18 20 22 24 28 28 30 32 34	S Multip	Limit 2 None None None None None None None None	1 Average Reading 1.072mA 0.410mA 0.439mA 0.439mA 0.439mA 0.460mA 0.307mA 0.307mA 0.315mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.259mA 0.2512mA 0.233mA 0.244mA 0.232mA		Reading 1.150mA 0.478mA 0.518mA 0.429mA 0.508mA 0.405mA 0.405mA 0.308mA 0.296mA 0.229mA 0.227mA 0.259mA 0.272mA 0.272mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35</td><td>852.8mA 384.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA 23.84mA 21.12mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA 33.59mA 31.08mA</td><td>Reading 52.89mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA 0.860mA 0.940mA 0.915mA 1.747mA 2.864mA 2.738mA 2.467mA</td><td> <1 <12 <</td><td>Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.989mA 0.989mA 1.785mA 2.701mA 2.701mA 2.502mA</td><td></td><td>FAIL Pass Pass Pass Pass NVA NVA NVA NVA NVA NVA NVA NVA NVA NVA</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35	852.8mA 384.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA 23.84mA 21.12mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 85.22mA 58.36mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA 33.59mA 31.08mA	Reading 52.89mA 27.82mA 25.83mA 18.53mA 12.99mA 8.243mA 5.070mA 4.989mA 3.867mA 2.019mA 0.860mA 0.940mA 0.915mA 1.747mA 2.864mA 2.738mA 2.467mA	 <1 <12 <	Reading 52.82mA 27.88mA 25.92mA 18.04mA 13.02mA 5.131mA 5.022mA 3.912mA 2.056mA 0.989mA 0.989mA 0.989mA 1.785mA 2.701mA 2.701mA 2.502mA		FAIL Pass Pass Pass Pass NVA

<L1 : Reading is below limit 1.

<L2 : Reading is below limit 2.

N/A : Harmonic current below 0.8% of rated current or 5mA, whichever is greater, are disregarded.



LCD Monitor MG32PS



Operating condition		HDMI to DVI connected								
Test date	2008-08-04	2008-08-04 Test engineer Hyun Jeong Jang								
Climate condition	Ambient temperature	24.2 ℃	Rela	tive humidity	40 %					
Climate condition	Atmospheric pressure	100.5 kPa								
Test place		Shielded Roon	า #3							

Serial no:	MONITOR None	2008 / Page	Aug 02 5:07pm 1 of 1
Description: Test Date: Result Name:	2008 Aug 02 4:12pm HAR_HDMI		
Type of Test: Limits:	EN61000:2006 Harmonics inc. in Class D	terharmonics to EN61000-4-7:2	002
Power Analyzer:	Voltech PM6000 SN: 1000067 Channel(s):	00167 Firmware version: v1.20	0.06RC3
	1. SN: 090015500508, 25 Adjusted Date: 22 J 3. SN: 090015500543, 25 Adjusted Date: 5 AU	-	
	5. SN:None Adjusted Date:None 6. SN:Non		c
	Shunt(s): 1. SN: 091024300502, 4 Adjusted Date: 14 JU	L 2007. 2. SN: 091024300503, 4 Adjusted	Date: 14 JUL 2007.
	3. SN: 091024300504, 4 Adjusted Date: 14 JU 5. SN:None Adjusted Date:None 6. SN:Non	-	
AC Source:	Mains / Manual Source		
PASS			
Test Parameter Det		User Entered	Measured
Operating Frequenc		50	49.9840
Operating Frequenc Operating Voltage:		50 230	49.9840 230.2049
Operating Frequenc	y:	50	49.9840
Operating Frequenc Operating Voltage: Specified Power:	y:	50 230 192.0000	49.9840 230.2049 189.7326
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Currer	y: t:	50 230 192.0000 0.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Currer Maximum POHC:	y: t:	50 230 192.0000 0.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Curre Maximum POHC: POHC Limit:	y: t:	50 230 192.0000 0.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059 0.0826
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Curre Maximum POHC: POHC Limit: Maximum THC:	y: t:	50 230 192.0000 0.0000 0.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Curre Maximum POHC: POHC Limit:	y: t:	50 230 192.0000 0.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059 0.0826
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Curre Maximum POHC: POHC Limit: Maximum THC: Minimum Power:	y: t:	50 230 192.0000 0.0000 0.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059 0.0826
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Curre Maximum POHC: POHC Limit: Maximum THC: Minimum Power: Class Multiplier:	y: t:	50 230 192.0000 0.0000 0.0000 75 1.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059 0.0826
Operating Frequenc Operating Voltage: Specified Power: Fundamental Currer Power Factor: Average Input Curre Maximum POHC: POHC Limit: Maximum THC: Minimum Power: Class Multiplier:	y: t:	50 230 192.0000 0.0000 0.0000 75 1.0000	49.9840 230.2049 189.7326 0.8552 0.9605 0.8578 0.0059 0.0826



LCD Monitor MG32PS



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Class	Limit 1	Limit 2	1 Average Reading		Reading	<l2< td=""><td>FAIL</td><td></td><td></td><td></td><td>Reading</td><td></td><td>Reading</td><td><l2< td=""><td>FAIL</td></l2<></td></l2<>	FAIL				Reading		Reading	<l2< td=""><td>FAIL</td></l2<>	FAIL
Class	s Multip		1 Average			<l2< td=""><td></td><td>Harm 3 5</td><td>652.8mA</td><td>979.2mA</td><td></td><td><1 <12</td><td>Reading</td><td><∟2</td><td>FAIL</td></l2<>		Harm 3 5	652.8mA	979.2mA		<1 <12	Reading	<∟2	FAIL
Class Harm	Limit 1	Limit 2 None None	Average Reading 0.723mA 0.493mA		Reading 0.797mA 0.558mA	<l2< td=""><td>FAIL N/A N/A</td><td>3</td><td></td><td>979.2mA 547.2mA</td><td>Reading 52.68mA 27.80mA</td><td></td><td>Reading 52.82mA 27.84mA</td><td><l2< td=""><td>FAIL Pass Pass</td></l2<></td></l2<>	FAIL N/A N/A	3		979.2mA 547.2mA	Reading 52.68mA 27.80mA		Reading 52.82mA 27.84mA	<l2< td=""><td>FAIL Pass Pass</td></l2<>	FAIL Pass Pass
Class Harm 2 4	Limit 1	Limit 2 None	1 Average Reading 0.723mA		Reading	<l2< td=""><td>FAIL N/A</td><td>3</td><td>652.8mA 364.8mA</td><td>979.2mA</td><td>Reading 52.68mA</td><td></td><td>Reading</td><td><l2< td=""><td>FAIL Pass Pass Pass</td></l2<></td></l2<>	FAIL N/A	3	652.8mA 364.8mA	979.2mA	Reading 52.68mA		Reading	<l2< td=""><td>FAIL Pass Pass Pass</td></l2<>	FAIL Pass Pass Pass
Class Harm 2 4 6	Limit 1 None None None	Limit 2 None None None	1 Average Reading 0.723mA 0.493mA 0.459mA		Reading 0.797mA 0.558mA 0.492mA	<l2< td=""><td>FAIL N/A N/A N/A</td><td>3 5 7</td><td>652.8mA 364.8mA 192.0mA</td><td>979.2mA 547.2mA 288.0mA</td><td>Reading 52.68mA 27.80mA 25.80mA</td><td></td><td>Reading 52.82mA 27.84mA 25.90mA</td><td><l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<></td></l2<>	FAIL N/A N/A N/A	3 5 7	652.8mA 364.8mA 192.0mA	979.2mA 547.2mA 288.0mA	Reading 52.68mA 27.80mA 25.80mA		Reading 52.82mA 27.84mA 25.90mA	<l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<>	FAIL Pass Pass Pass Pass
Class Harm 2 4 6 8 10	Limit 1 Limit 1 None None None None	Limit 2 None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA		Reading 0.797mA 0.558mA 0.492mA 0.467mA 0.523mA	<l2< td=""><td>FAIL N/A N/A N/A</td><td>3 5 7 9</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA</td><td>Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA</td><td></td><td>Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA</td><td><l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<></td></l2<>	FAIL N/A N/A N/A	3 5 7 9	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA	<l2< td=""><td>FAIL Pass Pass Pass Pass</td></l2<>	FAIL Pass Pass Pass Pass
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Class Harm 2 4 6 8 10 12 14 16 18	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.352mA 0.249mA 0.249mA 0.231mA 0.249mA 0.231mA		Reading 0.797mA 0.558mA 0.492mA 0.467mA 0.523mA 0.367mA 0.381mA 0.285mA 0.285mA 0.261mA	٩٢	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 5.133mA 5.133mA 5.031mA 3.890mA 2.051mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.352mA 0.249mA 0.249mA		Reading 0.797mA 0.558mA 0.492mA 0.523mA 0.367mA 0.381mA 0.285mA 0.285mA 0.261mA 0.312mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21 23	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.658mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 8.331mA 5.133mA 5.031mA 3.890mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.352mA 0.249mA 0.231mA 0.249mA 0.245mA 0.242mA		Reading 0.797mA 0.558mA 0.492mA 0.467mA 0.523mA 0.367mA 0.381mA 0.285mA 0.285mA 0.261mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 5.133mA 5.133mA 5.133mA 5.031mA 2.051mA 2.051mA 0.698mA 0.988mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A
Harm 2 4 6 8 10 12 14 16 18 20 22 24 24 26	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.249mA 0.231mA 0.249mA 0.231mA 0.249mA 0.205mA		Reading 0.797mA 0.558mA 0.492mA 0.523mA 0.367mA 0.381mA 0.285mA 0.261mA 0.312mA 0.312mA 0.536mA 0.536mA 0.225mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21 23 25 27	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 41.06mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.958mA 0.946mA 0.912mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 5.133mA 5.133mA 5.133mA 5.133mA 2.051mA 0.698mA 0.938mA 0.937mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A
Harm A A A A A A A A A A A A A A A A A A A	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.249mA 0.231mA 0.249mA 0.231mA 0.285mA 0.293mA 0.205mA 0.205mA 0.205mA 0.205mA 0.186mA		Reading 0.797mA 0.558mA 0.492mA 0.467mA 0.523mA 0.367mA 0.381mA 0.285mA 0.285mA 0.212mA 0.536mA 0.536mA 0.225mA 0.206mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.958mA 0.946mA 0.912mA 1.731mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 5.133mA 5.133mA 5.133mA 5.133mA 2.051mA 2.051mA 0.698mA 0.988mA 0.937mA 1.766mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 300	S Multip	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.249mA 0.231mA 0.249mA 0.249mA 0.249mA 0.205mA 0.240mA 0.504mA 0.504mA 0.186mA 0.212mA		Reading 0.797mA 0.558mA 0.492mA 0.467mA 0.523mA 0.323mA 0.285mA 0.285mA 0.261mA 0.212mA 0.312mA 0.272mA 0.536mA 0.225mA 0.225mA	<d2< td=""><td>FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 111 13 15 17 19 21 23 25 27 29 31</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA</td><td>Reading 52.68mA 27.80mA 25.80mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.946mA 0.912mA 1.731mA 2.662mA</td><td></td><td>Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 13.05mA 5.133mA 5.133mA 5.031mA 3.890mA 2.051mA 0.698mA 0.988mA 0.988mA 1.766mA 2.700mA</td><td>✓ ✓ ✓ ✓ ✓</td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A</td></d2<>	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA	Reading 52.68mA 27.80mA 25.80mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.946mA 0.912mA 1.731mA 2.662mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 13.05mA 5.133mA 5.133mA 5.031mA 3.890mA 2.051mA 0.698mA 0.988mA 0.988mA 1.766mA 2.700mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 300 32	S Multip	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.249mA 0.231mA 0.249mA 0.249mA 0.249mA 0.205mA 0.504mA 0.504mA 0.242mA 0.504mA 0.205mA 0.242mA 0.504mA 0.205mA 0.212mA 0.230mA		Reading 0.797mA 0.558mA 0.492mA 0.523mA 0.523mA 0.367mA 0.381mA 0.285mA 0.212mA 0.225mA 0.225mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA 33.59mA	Reading 52.68mA 27.80mA 25.80mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.946mA 0.912mA 1.731mA 2.662mA 2.750mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 5.133mA 5.133mA 5.031mA 5.031mA 2.051mA 0.988mA 0.988mA 0.988mA 2.053mA 2.750mA 2.770mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A
Harm 4 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 32 34	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.493mA 0.313mA 0.459mA 0.313mA 0.332mA 0.3459mA 0.332mA 0.324mA 0.249mA 0.249mA 0.504mA 0.504mA 0.205mA 0.186mA 0.212mA 0.230mA 0.230mA		Reading 0.797mA 0.558mA 0.492mA 0.523mA 0.523mA 0.367mA 0.381mA 0.285mA 0.212mA 0.225mA 0.225mA 0.232mA 0.232mA 0.225mA	 <td>FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33 35</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 22.548mA 23.84mA 23.84mA 22.40mA 21.12mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA 33.59mA 31.68mA</td><td>Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.958mA 0.946mA 0.912mA 1.731mA 2.662mA 2.750mA 2.477mA</td><td></td><td>Reading 52.82mA 27.84mA 25.90mA 13.05mA 13.05mA 13.05mA 5.133mA 5.031mA 3.890mA 2.051mA 0.698mA 0.938mA 1.766mA 2.778mA 2.778mA 2.510mA</td><td>✓ ✓ ✓ ✓ ✓</td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A</td>	FAIL N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33 35	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 22.548mA 23.84mA 23.84mA 22.40mA 21.12mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 35.76mA 33.59mA 31.68mA	Reading 52.68mA 27.80mA 25.80mA 18.50mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.958mA 0.946mA 0.912mA 1.731mA 2.662mA 2.750mA 2.477mA		Reading 52.82mA 27.84mA 25.90mA 13.05mA 13.05mA 13.05mA 5.133mA 5.031mA 3.890mA 2.051mA 0.698mA 0.938mA 1.766mA 2.778mA 2.778mA 2.510mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 300 32	S Multip	Limit 2 None None None None None None None None	1 Average Reading 0.723mA 0.493mA 0.459mA 0.313mA 0.484mA 0.332mA 0.249mA 0.231mA 0.249mA 0.249mA 0.249mA 0.205mA 0.504mA 0.504mA 0.242mA 0.504mA 0.205mA 0.242mA 0.504mA 0.205mA 0.212mA 0.230mA		Reading 0.797mA 0.558mA 0.492mA 0.523mA 0.523mA 0.367mA 0.381mA 0.285mA 0.212mA 0.225mA 0.225mA		FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA 33.59mA	Reading 52.68mA 27.80mA 25.80mA 13.01mA 8.294mA 5.068mA 4.969mA 3.851mA 2.020mA 0.946mA 0.912mA 1.731mA 2.662mA 2.750mA		Reading 52.82mA 27.84mA 25.90mA 18.60mA 13.05mA 5.133mA 5.133mA 5.031mA 5.031mA 2.051mA 0.988mA 0.988mA 0.988mA 2.053mA 2.750mA 2.770mA	✓ ✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A

<L1 : Reading is below limit 1.

<L2 : Reading is below limit 2.

N/A : Harmonic current below 0.6% of rated current or 5mA, whichever is greater, are disregarded.



LCD Monitor MG32PS



Operating condition		Magic Network _ Ping test								
Test date	2008-08-04	2008-08-04 Test engineer Hyun Jeong Jang								
Climate condition	Ambient temperature	24.2 ℃	Rela	tive humidity	40 %					
Climate condition	Atmospheric pressure	100.5 kPa								
Test place		Shielded Roon	า #3							

Product: Serial no:	MONITOR None	2008 Aug 02 5:07pm Page 1 of 1								
Description: Test Date: Result Name:	2008 Aug 02 3:56pm HAR_MAGICN									
Type of Test: Limits:	EN61000:2006 Harmonics inc. interharmonics to EN6 Class D	61000-4-7:2002								
Power Analyzer:	Voltech PM6000 SN: 100006700167 Firmware ve Channel(s):	rsion: v1.20.06RC3								
	1. SN: 090015500508, 25 Adjusted Date: 22 JUL 2007. 2. SN: 090015500521, 25 Adjusted Date: 23 JUL 2007.									
	3. SN: 090015500543, 25 Adjusted Date: 5 AUG 2007. 4. SN:None Adjusted Date:None									
	5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:None									
	Shunt(s): 1. SN: 091024300502, 4 Adjusted Date: 14 JUL 2007. 2. SN: 091024300503, 4 Adjusted Date: 14 JUL 2007. 3. SN: 091024300504, 4 Adjusted Date: 14 JUL 2007. 4. SN:None Adjusted Date:None 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:None									
AC Source:	Mains / Manual Source									
Test Parameter Det										
Operating Frequenc	y: 50 230	49.9840								
Operating Voltage: Specified Power:	192.0000	230.1991 189.8328								
Fundamental Currer		0.8556								
Power Factor:	0.0000	0.9606								
Average Input Curre	nt:	0.8582								
Maximum POHC:		0.0061								
POHC Limit: Maximum THC:		0.0826 0.0708								
Minimum Power:	75	0.0708								
Class Multiplier:	1.0000									
Test Duration:	00:02:30									



LCD Monitor MG32PS



- TOO!	uct:		MON	ITOR								200	02 Aud	5:07r	om	
Seria			MONITOR None								2008 Aug 02 5:07pm Page 1 of 1					
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				09001550054												
			5. SN:N	lone Adjust	ed Date:No	one 6	. SN:None	Adjust	ed Date:N	one						
			Shunt(s	s):												
			1. SN: (09102430050	2, 4 Adjus	ted Dat	e: 14 JUL	2007. 2	2. SN: 091	02430050	3, 4 Adjus	ted Date:	: 14 JUL 2007	-		
			3. SN: (09102430050	4,4 Adjus	ted Dat	e: 14 JUL	2007. 4	1. SN:Non	e Adjuste	ed Date:No	one				
			5. SN:N	lone Adjust	ed Date:No	one 6	. SN:None	Adjuste	d Date:No	one						
AC S	ource:		Main	s / Manua	l Sourc	e										
Over	all Res	ult:	Notes	s:												
				ge Crest	Factor	outsid	e perm	itted lir	nits							
	PAS	S		-			•									
Class	6		Class	s D												
	s Multip	lier	Class 1	s D												
		lier		s D												
Class	s Multip		1		Mari				Limit 4	Limit 2			12 Mari	-12	Peer	
		lier Limit 2	1 Average	s D <l1 <l2<="" td=""><td>Max Reading</td><td><l2< td=""><td>Pass</td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>Average Reading</td><td><l1 <l<="" td=""><td></td><td><l2< td=""><td>Pass</td></l2<></td></l1></td></l2<></td></l1>	Max Reading	<l2< td=""><td>Pass</td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>Average Reading</td><td><l1 <l<="" td=""><td></td><td><l2< td=""><td>Pass</td></l2<></td></l1></td></l2<>	Pass	Harm	Limit 1	Limit 2	Average Reading	<l1 <l<="" td=""><td></td><td><l2< td=""><td>Pass</td></l2<></td></l1>		<l2< td=""><td>Pass</td></l2<>	Pass	
Class	s Multip		1		Max Reading	<l2< td=""><td>Pass FAIL</td><td>Harm</td><td>Limit 1</td><td>Limit 2</td><td>Average Reading</td><td><l1 <l<="" td=""><td>L2 Max Reading</td><td><l2< td=""><td></td></l2<></td></l1></td></l2<>	Pass FAIL	Harm	Limit 1	Limit 2	Average Reading	<l1 <l<="" td=""><td>L2 Max Reading</td><td><l2< td=""><td></td></l2<></td></l1>	L2 Max Reading	<l2< td=""><td></td></l2<>		
Class	Limit 1	Limit 2	1 Average Reading		Reading	<l2< td=""><td>FAIL</td><td></td><td></td><td></td><td>Reading</td><td><l1 <l<="" td=""><td>Reading</td><td></td><td>FAIL</td></l1></td></l2<>	FAIL				Reading	<l1 <l<="" td=""><td>Reading</td><td></td><td>FAIL</td></l1>	Reading		FAIL	
Class Harm	Limit 1	Limit 2 None	Average Reading		Reading 1.199mA	<۲2	FAIL N/A	3	652.8mA	979.2mA	Reading	≪1 ≪	Reading		FAIL Pass	
Class Harm 2 4	Limit 1 None None	Limit 2 None None	Average Reading 1.117mA 0.458mA		Reading 1.199mA 0.510mA	<l2< td=""><td>FAIL N/A N/A</td><td>3</td><td>652.8mA 364.8mA</td><td>979.2mA 547.2mA</td><td>Reading 52.57mA 27.73mA</td><td><1 < ✓ ✓</td><td>Reading 52.91mA 28.11mA</td><td>✓ ✓</td><td>FAIL Pass Pass</td></l2<>	FAIL N/A N/A	3	652.8mA 364.8mA	979.2mA 547.2mA	Reading 52.57mA 27.73mA	<1 < ✓ ✓	Reading 52.91mA 28.11mA	✓ ✓	FAIL Pass Pass	
Class Harm 2 4 6	Limit 1 None None None	Limit 2 None None None	1 Average Reading 1.117mA 0.458mA 0.430mA		Reading 1.199mA 0.510mA 0.495mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7</td><td>652.8mA 364.8mA 192.0mA</td><td>979.2mA 547.2mA 288.0mA</td><td>Reading 52.57mA 27.73mA 25.83mA</td><td><1 < ✓ , ✓ , ✓ ,</td><td>Reading 52.91mA 28.11mA 26.31mA</td><td>✓ ✓ ✓</td><td>FAIL Pass Pass Pass</td></l2<>	FAIL N/A N/A	3 5 7	652.8mA 364.8mA 192.0mA	979.2mA 547.2mA 288.0mA	Reading 52.57mA 27.73mA 25.83mA	<1 < ✓ , ✓ , ✓ ,	Reading 52.91mA 28.11mA 26.31mA	✓ ✓ ✓	FAIL Pass Pass Pass	
Class Harm 2 4 6 8	Limit 1	Limit 2 None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA	<l2< td=""><td>FAIL N/A N/A N/A</td><td>3 5 7 9</td><td>652.8mA 364.8mA 192.0mA 96.00mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA</td><td>√ ×√ ×√ ×√ ×</td><td>Reading 52.91mA 28.11mA 26.31mA 18.93mA</td><td>✓ ✓ ✓ ✓</td><td>FAIL Pass Pass Pass Pass</td></l2<>	FAIL N/A N/A N/A	3 5 7 9	652.8mA 364.8mA 192.0mA 96.00mA	979.2mA 547.2mA 288.0mA 144.0mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA	√ ×√ ×√ ×√ ×	Reading 52.91mA 28.11mA 26.31mA 18.93mA	✓ ✓ ✓ ✓	FAIL Pass Pass Pass Pass	
Class Harm 2 4 6 8 10	Limit 1 None None None None	Limit 2 None None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA 0.467mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA	<l2< td=""><td>FAIL N/A N/A N/A N/A</td><td>3 5 7 9 11</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA</td><td> ✓ ✓ ✓</td><td>Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass</td></l2<>	FAIL N/A N/A N/A N/A	3 5 7 9 11	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA	 ✓ ✓ ✓	Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA		FAIL Pass Pass Pass Pass Pass	
Class Harm 2 4 6 8 10 12	Limit 1 Limit 1 None None None None	Limit 2 None None None None	1.117mA 0.458mA 0.430mA 0.274mA 0.349mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A</td><td>3 5 7 9 11 13</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA</td><td><1 </td><td>Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA 8.708mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass Pass</td></l2<>	FAIL N/A N/A N/A N/A N/A	3 5 7 9 11 13	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA	<1	Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA 8.708mA		FAIL Pass Pass Pass Pass Pass Pass	
Class Harm 2 4 6 8 10 12 14	None None None None None None None None	Limit 2 None None None None None None	1.117mA 0.458mA 0.430mA 0.274mA 0.349mA 0.369mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.398mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 11 13 15</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA</td><td></td><td>Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA 8.708mA 5.432mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass Pass N/A</td></l2<>	FAIL N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA		Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA 8.708mA 5.432mA		FAIL Pass Pass Pass Pass Pass Pass N/A	
Class Harm 2 4 6 8 10 12 14 16	None None None None None None None None	Limit 2 None None None None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA 0.467mA 0.349mA 0.369mA 0.248mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.398mA 0.276mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA		Reading 52.91mA 28.11mA 26.31mA 26.31mA 18.93mA 13.38mA 8.708mA 5.432mA 5.236mA		FAIL Pass Pass Pass Pass Pass Pass N/A	
Class Harm 2 4 6 8 10 12 14 16 18	None None None None None None None None	Limit 2 None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.430mA 0.274mA 0.349mA 0.349mA 0.369mA 0.248mA 0.290mA		Reading 1.199mA 0.510mA 0.495mA 0.495mA 0.439mA 0.517mA 0.383mA 0.398mA 0.276mA 0.325mA	<د2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA		Reading 52.91mA 28.11mA 26.31mA 18.93mA 13.38mA 8.708mA 5.236mA 5.236mA 4.029mA		FAIL Pass Pass Pass Pass Pass N/A N/A	
Class Harm 2 4 6 8 10 12 14 16 18 20	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA 0.369mA 0.369mA 0.248mA 0.290mA 0.310mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.383mA 0.325mA 0.325mA 0.325mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA		Reading 52.91mA 28.11mA 26.31mA 26.31mA 18.93mA 13.38mA 5.432mA 5.432mA 4.029mA 2.239mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A	
Class Harm 2 4 6 8 8 10 12 14 16 18 20 22	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA 0.467mA 0.369mA 0.248mA 0.248mA 0.310mA 0.310mA 0.234mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.383mA 0.383mA 0.398mA 0.398mA 0.276mA 0.325mA 0.325mA	<12	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21 23	652.8mA 364.8mA 192.0mA 66.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.652mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 13.38mA 5.432mA 5.236mA 4.029mA 2.239mA 0.813mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A	
Harm 2 4 6 8 10 12 14 16 18 20 22 24	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.274mA 0.467mA 0.349mA 0.290mA 0.310mA 0.234mA 0.290mA 0.310mA 0.501mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.383mA 0.276mA 0.325mA 0.341mA 0.532mA	<.2	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25	652.8mA 364.8mA 192.0mA 67.19mA 67.19mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.652mA 0.933mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 3.38mA 5.432mA 5.236mA 4.029mA 2.239mA 0.813mA 1.058mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A	
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA 0.467mA 0.369mA 0.248mA 0.248mA 0.310mA 0.310mA 0.234mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.383mA 0.383mA 0.398mA 0.398mA 0.276mA 0.325mA 0.325mA	<.2	FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	3 5 7 9 11 13 15 17 19 21 23	652.8mA 364.8mA 192.0mA 66.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.652mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 13.38mA 5.432mA 5.236mA 4.029mA 2.239mA 0.813mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A	
Harm 2 4 6 8 10 12 14 16 18 20 22 24	None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.274mA 0.467mA 0.349mA 0.290mA 0.310mA 0.234mA 0.290mA 0.310mA 0.501mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.383mA 0.276mA 0.325mA 0.341mA 0.532mA	<.2	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25	652.8mA 364.8mA 192.0mA 67.19mA 67.19mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 73.91mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.652mA 0.933mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 3.38mA 5.432mA 5.236mA 4.029mA 2.239mA 0.813mA 1.058mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A	
Class Harm 2 4 6 8 10 12 14 16 18 20 22 24 26	Limit 1 Limit 1 None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.430mA 0.274mA 0.349mA 0.369mA 0.248mA 0.290mA 0.310mA 0.234mA 0.501mA 0.216mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.398mA 0.398mA 0.276mA 0.325mA 0.325mA 0.321mA 0.532mA	<.2	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27	652.8mA 364.8mA 192.0mA 67.19mA 67.19mA 49.27mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.852mA 0.933mA 0.933mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 13.38mA 3.38mA 5.432mA 5.236mA 4.029mA 2.239mA 0.813mA 0.813mA 0.991mA		FAIL Pass Pass Pass Pass N/A N/A N/A N/A N/A	
Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28	Limit 1 Limit 1 None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.430mA 0.274mA 0.349mA 0.369mA 0.248mA 0.300mA 0.290mA 0.310mA 0.234mA 0.501mA 0.216mA 0.202mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.276mA 0.325mA 0.325mA 0.261mA 0.532mA 0.235mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25 27 29</td><td>652.8mA 364.8mA 192.0mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.652mA 0.933mA 0.933mA 0.909mA 1.722mA</td><td></td><td>Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 1.058mA 1.791mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29	652.8mA 364.8mA 192.0mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.652mA 0.933mA 0.933mA 0.909mA 1.722mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 1.058mA 1.791mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A	
Harm 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30	Limit 1 Limit 1 None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.430mA 0.274mA 0.467mA 0.349mA 0.369mA 0.290mA 0.310mA 0.234mA 0.501mA 0.216mA 0.224mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.398mA 0.276mA 0.325mA 0.325mA 0.235mA 0.235mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 11 13 15 17 19 21 23 25 27 29 31</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 38.23mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.933mA 0.933mA 1.722mA 1.722mA</td><td></td><td>Reading 52.91mA 28.11mA 28.31mA 26.31mA 13.38mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 0.991mA 2.730mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 11 13 15 17 19 21 23 25 27 29 31	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 44.35mA 38.23mA 38.23mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.933mA 0.933mA 1.722mA 1.722mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 13.38mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 0.991mA 2.730mA		FAIL Pass Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A	
Harm	Limit 1 Limit 1 None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.430mA 0.274mA 0.430mA 0.349mA 0.349mA 0.349mA 0.349mA 0.349mA 0.349mA 0.310mA 0.216mA 0.202mA 0.224mA 0.202mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.398mA 0.276mA 0.325mA 0.235mA 0.235mA 0.235mA 0.235mA 0.235mA	<l2< td=""><td>FAIL N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA 22.40mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA 33.59mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.952mA 0.933mA 0.909mA 1.722mA 2.673mA 2.673mA</td><td></td><td>Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 1.791mA 2.730mA 2.795mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 25.48mA 23.84mA 23.84mA 22.40mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.22mA 58.35mA 52.79mA 48.20mA 44.35mA 41.06mA 38.23mA 35.76mA 33.59mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 8.380mA 5.131mA 4.967mA 3.822mA 2.057mA 0.952mA 0.933mA 0.909mA 1.722mA 2.673mA 2.673mA		Reading 52.91mA 28.11mA 28.31mA 26.31mA 18.93mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 1.791mA 2.730mA 2.795mA		FAIL Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A	
Harm 2 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34	Limit 1 Limit 1 None None None None None None None None	Limit 2 None None None None None None None None	1 Average Reading 1.117mA 0.458mA 0.458mA 0.430mA 0.274mA 0.430mA 0.349mA 0.349mA 0.349mA 0.349mA 0.369mA 0.290mA 0.310mA 0.203tmA 0.201mA 0.202mA 0.202mA 0.202mA 0.224mA 0.225mA 0.253mA		Reading 1.199mA 0.510mA 0.495mA 0.439mA 0.517mA 0.383mA 0.398mA 0.276mA 0.325mA 0.225mA 0.235mA 0.235mA 0.235mA 0.235mA	<l2< td=""><td>FAIL N/A N/A</td><td>3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33 35</td><td>652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 23.84mA 23.84mA 22.40mA 21.12mA</td><td>979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.29mA 65.27mA 48.20mA 48.20mA 44.35mA 44.35mA 38.23mA 38.23mA 33.59mA 31.68mA</td><td>Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 5.131mA 4.967mA 3.822mA 2.057mA 0.952mA 0.933mA 0.909mA 1.722mA 2.673mA 2.673mA 2.673mA</td><td></td><td>Reading 52.91mA 28.11mA 28.11mA 26.31mA 18.93mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 2.795mA 2.795mA 2.510mA</td><td></td><td>FAIL Pass Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A N/A</td></l2<>	FAIL N/A N/A	3 5 7 9 111 13 15 17 19 21 23 25 27 29 31 33 35	652.8mA 364.8mA 192.0mA 96.00mA 67.19mA 56.86mA 49.27mA 43.48mA 38.90mA 35.20mA 32.13mA 29.56mA 27.37mA 23.84mA 23.84mA 22.40mA 21.12mA	979.2mA 547.2mA 288.0mA 144.0mA 100.7mA 85.29mA 65.29mA 65.27mA 48.20mA 48.20mA 44.35mA 44.35mA 38.23mA 38.23mA 33.59mA 31.68mA	Reading 52.57mA 27.73mA 25.83mA 18.47mA 13.03mA 5.131mA 4.967mA 3.822mA 2.057mA 0.952mA 0.933mA 0.909mA 1.722mA 2.673mA 2.673mA 2.673mA		Reading 52.91mA 28.11mA 28.11mA 26.31mA 18.93mA 13.38mA 5.432mA 5.236mA 2.239mA 2.239mA 0.813mA 0.991mA 2.795mA 2.795mA 2.510mA		FAIL Pass Pass Pass Pass Pass Pass N/A N/A N/A N/A N/A N/A N/A N/A N/A	

<L1 : Reading is below limit 1.

<L2 : Reading is below limit 2.

N/A : Harmonic current below 0.6% of rated current or 5mA, whichever is greater, are disregarded.




4.4 Voltage fluctuation & Flicker

The EUT operated to produce the most unfavorable sequence of voltage changes under normal operating conditions.

During the flicker measurement, the measure time shall include that part of whole operation cycle in which the EUT produce the most unfavorable sequence of voltage changes.

Limits of voltage fluctuations and flicker at the supply terminals

short-term flicker indicator, Pst	the relative steady-state voltage change, dc	the value of <i>d(t)</i> during a voltage change, d(t) >3.3 %	the maximum relative voltage change, dmax
1.0	3.3 %	500 ms	4 %

4.4.1 Test instrumentation

Test instrumentation used in the Voltage fluctuation & Flicker test was as follows:

			Serial or	Calibr	ation
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	Date	Interval (Month)
Power Analyzer	PM6000	Voltech	100006700167	2007-10-12	12
IEC Network	555	ZIMMER	IB10/9466	N/A	N/A
Test Software	IEC1000-3	Voltech	Ver 3.13.08	N/A	N/A

4.4.2 Photograph of the test Configuration

Is Same the Harmonic current test photograph.



LCD Monitor MG32PS



4.4.3 Test results

Operating condition		PC Video In(Analog) _ Ping test			
Test date	2008-08-04	Test enginee	r	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24.2 ℃	Relative humidity		40 %
Climate condition	Atmospheric pressure	100.5 kPa			
Test place		Shielded Roon	n #3		

MONITOR			2008 1.1 20 10:17-
			2008 Jul 29 10:47am
None			Page 1 of 1
FLI_ANALOG			
Windows Software 1.1	0.04RC5	Test Date:	2008 Jul 29 9:33am
Flickermeter Test - Tab	le		
Voltech PM6000 SN: Channel(s):	100006700167 Firmware	e Version: v1.2	20.06RC3
1. SN: 090015500508, 25 Adjust	ed Date: 22 JUL 2007. 2. SN: 090	015500521, 25 Adju	sted Date: 23 JUL 2007.
3. SN: 090015500543, 25 Adjust	ed Date: 5 AUG 2007. 4. SN:None	e Adjusted Date:No	ne
5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:No	ne	
Shunt(s):			
1. SN: 091024300502, 4 Adjuste	d Date: 14 JUL 2007. 2. SN: 0910	24300503, 4 Adjuste	d Date: 14 JUL 2007.
3. SN: 091024300504, 4 Adjuste	d Date: 14 JUL 2007. 4. SN:None	Adjusted Date:None	9
5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:Non	ie	
Mains / Manual Source			
Notes:			
Measurement method -	Voltage		
Pst	dc (%)	dmax (%)	d(t) > 3.3%(ms)
		· · ·	500
0.118	0.002	0.403	0
	Flickermeter Test - Tab Voltech PM6000 SN: Channel(s): 1. SN: 090015500508, 25 Adjust 3. SN: 090015500543, 25 Adjust 5. SN:None Adjusted Date:Non Shunt(s): 1. SN: 091024300502, 4 Adjuste 3. SN: 091024300504, 4 Adjuste 3. SN: 091024300504, 4 Adjuste 5. SN:None Adjusted Date:Non Mains / Manual Source Notes: Measurement method - Pst 1.000 1.0000	None FLI_ANALOG Windows Software 1.10.04RC5 Flickermeter Test - Table Voltech PM6000 SN: 100006700167 Firmware Channel(s): 1. SN: 090015500508, 25 Adjusted Date: 22 JUL 2007. 2. SN: 090 3. SN: 090015500543, 25 Adjusted Date: 5 AUG 2007. 4. SN:None 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:No Shurt(s): 1. SN: 091024300502, 4 Adjusted Date: 14 JUL 2007. 2. SN: 0910 3. SN: 091024300504, 4 Adjusted Date: 14 JUL 2007. 4. SN:None 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:Nor Mains / Manual Source Notes: Measurement method - Voltage Pst dc (%) 1.000 3.300	None FLI_ANALOG Windows Software 1.10.04RC5 Test Date: Flickermeter Test - Table Voltech PM6000 SN: 100006700167 Firmware Version: v1.2 Channel(s): 1. SN: 090015500508, 25 Adjusted Date: 22 JUL 2007. 2. SN: 090015500521, 25 Adjuret 3. SN: 090015500543, 25 Adjusted Date: 5 AUG 2007. 4. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None Shunt(s): 1. SN: 091024300502, 4 Adjusted Date: 14 JUL 2007. 2. SN: 091024300503, 4 Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None Adjusted Date: None 6. SN:None Adjusted Date: None 5. SN:None 6.



LCD Monitor MG32PS



Operating condition		DVI Input (Digital)	Ping te	st	
Test date	2008-08-04	Test enginee	r	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24.2 ℃	Relative humidity		40 %
Climate condition	Atmospheric pressure	100.5 kPa			·
Test place		Shielded Roon	n #3		

Product:	MONITOR			2008 Jul 29 10:47am
	None			Page 1 of 1
Description:	none			Fage For F
	FLI_DIGITAL			
	Windows Software 1.1		Test Date:	2008 Jul 29 9:56am
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Flickermeter Test - Tab			
,	Voltech PM6000 SN: Channel(s):	100006700167 Firmw	are Version: v1.2	0.06RC3
	1. SN: 090015500508, 25 Adjust	ted Date: 22 JUL 2007. 2. SN: (090015500521, 25 Adjus	ted Date: 23 JUL 2007.
	3. SN: 090015500543, 25 Adjust	ted Date: 5 AUG 2007. 4. SN:N	lone Adjusted Date:Nor	ne
	5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:	None	
	Shunt(s):			
	1. SN: 091024300502, 4 Adjuste	ed Date: 14 JUL 2007. 2. SN: 09	91024300503, 4 Adjusted	Date: 14 JUL 2007.
	3. SN: 091024300504, 4 Adjuste	ed Date: 14 JUL 2007. 4. SN:No	one Adjusted Date:None	
	5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:	None	
AC Source:	Mains / Manual Source			
Overall Result:	Notes:			
	Measurement method -	- Voltage		
PASS				
·	Pst	dc (%)	dmax (%)	d(t) > 3.3%(ms)
Limit	1.000	3.300	4.000	500
Reading 1	0.161	0.002	0.412	0



LCD Monitor MG32PS



Operating condition	н	OMI to DVI connecte	d _ Ping	ı test	
Test date	2008-08-04	Test enginee	r	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24.2 ℃	Relative humidity		40 %
Climate condition	Atmospheric pressure	100.5 kPa			
Test place		Shielded Roor	n #3		

Product:	MONITOR			2008 Jul 29 10:47am
Serial no:	None			Page 1 of 1
Description:				
Result Name:	FLI_HDMI			
Voltech IEC61000-3	Windows Software 1.1	0.04RC5	Test Date:	2008 Jul 29 9:14am
Type of Test:	Flickermeter Test - Tab	le		
Power Analyzer:	Voltech PM6000 SN: Channel(s):	100006700167 Firmware	e Version: v1.2	20.06RC3
	1. SN: 090015500508, 25 Adjus	ted Date: 22 JUL 2007. 2. SN: 0900	015500521, 25 Adju	sted Date: 23 JUL 2007.
	3. SN: 090015500543, 25 Adjus	ted Date: 5 AUG 2007. 4. SN:None	Adjusted Date:No	ne
	5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:Non	ie	
	Shunt(s):			
	1. SN: 091024300502, 4 Adjuste	d Date: 14 JUL 2007. 2. SN: 09102	24300503, 4 Adjusteo	d Date: 14 JUL 2007.
	3. SN: 091024300504, 4 Adjuste	d Date: 14 JUL 2007. 4. SN:None	Adjusted Date:None	9
	5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:None	е	
AC Source:	Mains / Manual Source			
Overall Result:	Notes:			
	Measurement method -	· Voltage		
PASS				
	Pst	dc (%)	dmax (%)	d(t) > 3.3%(ms)
Limit	1.000	3.300	4.000	500
Reading 1	0.153	0.006	0.368	0



LCD Monitor MG32PS



Operating condition		Magic Network _ F	Ping test	:	
Test date	2008-08-04	Test enginee	r	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24.2 ℃	Relative humidity 4		40 %
Climate condition	Atmospheric pressure	100.5 kPa			
Test place		Shielded Roor	n #3		

Product:	MONITOR			2008 Jul 29 10:47am
	MONITOR			
Serial no:	None			Page 1 of 1
Description:				
Result Name:	FLI_MAGICN			
Voltech IEC61000-3	3 Windows Software 1.1	0.04RC5	Test Date:	2008 Jul 29 10:23am
Type of Test:	Flickermeter Test - Tab	le		
Power Analyzer:	Voltech PM6000 SN: Channel(s):	100006700167 Firmware	e Version: v1.2	20.06RC3
	1. SN: 090015500508, 25 Adjust	ted Date: 22 JUL 2007. 2. SN: 0900)15500521, 25 Adju	sted Date: 23 JUL 2007.
	3. SN: 090015500543, 25 Adjus	ted Date: 5 AUG 2007. 4. SN:None	Adjusted Date:No	ne
	5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:Non	e	
	Shunt(s):			
	1. SN: 091024300502, 4 Adjuste	d Date: 14 JUL 2007. 2. SN: 09102	24300503, 4 Adjuste	d Date: 14 JUL 2007.
	3. SN: 091024300504, 4 Adjuste	d Date: 14 JUL 2007. 4. SN:None	Adjusted Date:None	e
	5. SN:None Adjusted Date:Non	e 6. SN:None Adjusted Date:None	e	
AC Source:	Mains / Manual Source			
Overall Result:	Notes:			
	Measurement method -	· Voltage		
PASS				
			1 (01)	
	Pst	dc (%)	dmax (%)	d(t) > 3.3%(ms)
Limit	1.000	3.300	4.000	500
Reading 1	0.152	0.002	0.406	0



LCD Monitor MG32PS



Operating condition		Manual Switch	ning		
Test date	2008-08-04	Test enginee	r	Hyun Jeo	ng Jang
Climate condition	Ambient temperature	24.2 ℃	Relative humidity		40 %
Climate condition	Atmospheric pressure	100.5 kPa			
Test place		Shielded Roor	n #3		

Product:	MONITOR				2008 Aug 04 6:42	2pm
Serial no:	None				Page 1 of 1	
Description:				L. L.		
Result Name:	MANUAL SV					
		ftware 1.10.04RC5		Test Date:	2008 Aug 04 5:12	2pm
Type of Test:		ching - Table				
Power Analyzer:		6000 SN: 10000670	0167 Firmware	Version: v1.2	0.06RC3	
	Channel(s):	508, 25 Adjusted Date: 22 JU	1 2007 2 SN: 0900	15500521 25 Adjue	ad Date: 23 II II 2007	
		543, 25 Adjusted Date: 5 AUG				
		usted Date:None 6. SN:None		-		
	Shunt(s):					
		502, 4 Adjusted Date: 14 JUL	2007. 2. SN: 09102	4300503, 4 Adjusted	Date: 14 JUL 2007.	
		504, 4 Adjusted Date: 14 JUL				
	5. SN:None Adju	usted Date:None 6. SN:None	e Adjusted Date:Non	•		
AC Source:	Mains / Man	ual Source				
Overall Result:	Notes:					
		nt method - Voltage				
PASS		-				
Average dmax	1.386					
-						
-	4					
-		dt > dc	dmax	dmax pas	s / fail includ	ed
dmax limit	4	dt > dc	dmax 1.681	dmax pas		ed
dmax limit Result	4 dc				3 🗸	ed
dmax limit Result 1	4 dc 0.104	0.000	1.681	Pase		ed
dmax limit Result 1 2	4 dc 0.104 0.107	0.000	1.681 1.210	Pass		ed
dmax limit Result 1 2 3	4 dc 0.104 0.107 0.099	0.000 0.000 0.000	1.681 1.210 1.555	Pass Pass Pass		ed
dmax limit Result 1 2 3 4	4 dc 0.104 0.099 0.098	0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619	Pass Pass Pass Pass Pass	$\begin{array}{c c} 3 & \checkmark \\ 5 & \checkmark \\ 5 & \checkmark \\ \end{array}$	
dmax limit Result 1 2 3 4 5	4 dc 0.104 0.107 0.099 0.098 0.099	0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735	Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098	0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11	4 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12	4 dc 0.104 0.099 0.099 0.099 0.102 0.098 0.102 0.098 0.105 0.104 0.104 0.104	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13	4 dc 0.104 0.099 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.104	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14	4 dc 0.104 0.107 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	4 dc 0.104 0.107 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.105 0.104	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	4 dc 0.104 0.107 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.105 0.104 0.107 0.099 0.098 0.099 0.098 0.098 0.098 0.098 0.098 0.098 0.098 0.098 0.098 0.009 0.004 0.004 0.004 0.104 0.104 0.104 0.105 0.104 0.104 0.105 0.104 0.104 0.105 0.104 0.105 0.104 0.104 0.104 0.104 0.105 0.104 0.104 0.104 0.105 0.105 0.104 0.104 0.104 0.105 0.105 0.104 0.104 0.104 0.105 0.105 0.104 0.105 0.105 0.104 0.105 0.105 0.104 0.105 0.105 0.105 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.105 0.104 0.105 0.	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.460	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.104 0.105 0.104 0.105 0.104	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.480 1.480 1.473	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.105 0.102 0.102 0.102 0.102 0.101	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.480 1.480 1.480	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.104 0.105 0.104 0.105 0.102 0.101 0.102	0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.480 1.485 1.540 0.716	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.104 0.105 0.102 0.101 0.102 0.101	0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.460 1.173 1.540 0.716 2.283	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.102 0.101 0.102 0.101 0.105	0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.460 1.173 1.540 0.716 2.283 1.277	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit Result 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	4 dc 0.104 0.107 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.105 0.102 0.102 0.101 0.102 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.105 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.104 0.104 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.104 0.105 0.102 0.105 0.104 0.105 0.102 0.105 0.104 0.104 0.105 0.102 0.102 0.102 0.102 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.102 0.101 0.105 0.101 0.102 0.101 0.105 0.101 0.102 0.101 0.105 0.101 0.105 0.101 0.102 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.105 0.101 0.101 0.105 0.101 0.	0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.460 1.173 1.540 0.716 2.283 1.277 1.685	Pass Pass Pass Pass Pass Pass Pass Pass		
dmax limit	4 dc 0.104 0.099 0.099 0.098 0.099 0.102 0.098 0.105 0.104 0.104 0.104 0.104 0.104 0.104 0.104 0.104 0.105 0.102 0.101 0.102 0.101 0.105	0.000 0.000	1.681 1.210 1.555 1.619 0.735 1.709 2.116 0.612 0.670 1.820 0.902 2.538 1.808 1.485 1.860 1.460 1.173 1.540 0.716 2.283 1.277	Pass Pass Pass Pass Pass Pass Pass Pass		

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4.5 Electrostatic discharge

Contact discharges to the conductive surfaces and coupling planes:

The EUT shall be exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points. One of the test points are subjected to at least 50 indirect discharges to the center of the front edge of the horizontal coupling plane.

The remaining three test points are each receive at least 50 direct contact discharges.

If no direct contact test points are available, then at least 200 indirect discharges be applied in the indirect mode. Test is performed at a maximum repetition rate of one discharge per second.

Air discharges at slots and apertures and insulating surfaces:

On those parts of the EUT where it is not possible to perform contact discharge testing, the equipment should be investigated to identify user accessible points where breakdown may occur. Such points are tested using the air discharge method. This investigation should be restricted to those area normally handled by the user.

A minimum of 10 single air discharges shall be applied to the selected test point for each such area. The EUT was tested with all I/O ports exercised. Test results are listed below. The basic test procedure was in accordance with IEC 61000-4-2.

Performance criteria

Application of discharge	Test specification (kV)	Performance criteria
Contact discharge	4	В
Air Discharge	8	В

4.5.1 Test instrumentation

Test instrumentation used in the Electrostatic discharge test was as follows:

			Serial or	Calibra	ition
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	Date	ration Interval (Month) 12
ESD Gun	NSG435	SCHAFFNER	001506	2008-03-27	12
Vertical Plane	VCP-1	Thermo Keytek	-	-	-



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4.5.2 Photograph of the test Configuration







4.5.3 Test results

Operating condition	PC Video In(Analog)					
Test date	2008-08-04Test engineerHyun Jeong, Jang					
Climate condition	Ambient temperature	24.0 ℃	Relative humidity 50		<mark>56</mark> %	
	Atmospheric pressure	100.5 kPa				
Test place	Shielded Room #3					

Test Method	No	Applied Point	Discharge Method	Test Level(KV)	Observation [Note No.]	Performance Result
Indirect		HCP	Contact	±2🛛 ±4🖂 ±8	Note 1⊠ 2□	A⊠ B⊡ C⊡
Indirect -		VCP	Contact	±2🛛 ±4🖂 ±8	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
	1	LCD Panel	Air	±2⊠ ±4⊠ ±8⊠	Note 1⊠ 2⊡	A⊠ B⊡ C□
	2	Switch	Air	±2⊠ ±4⊠ ±8⊠	Note 1 2	
	3	AC In	Air	±2🛛 ±4🖂 ±8🖂	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
	4	RS232C In/Out	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
	5	PC Audio In	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
Direct	6	HDMI	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
Direct	7	PC Video In	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
	8	DVI Input	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	A⊠ B⊡ C⊡
	9	A/V Out	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	
	10	Audio In	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	
	11	LAN	Contact	±2⊠ ±4⊠ ±8□	Note 1 2	
	12	USB Port	Contact	±2⊠ ±4⊠ ±8□	Note 1⊠ 2⊡	A⊠ B⊡ C□

NOTE

There was no change compared with initial operation during the test.
 While the electrostatic discharge tests, malfunction appeared in normal operate,

but self-recoverable after the test.



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4.5.4 Tested points



∎ Rear 1



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Rear 2







4.6 Radiated, radio-frequency, electromagnetic field

The test was performed with the EUT exposed to both vertically and horizontally polarized fields. on each of the four sides.

The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond. The basic test procedure was in accordance with IEC 61000-4-3.

Performance criteria

Test range [MHz]	Test specification	Performance criteria	Remarks		
80 ~ 1000 3 V/m(unmodulated, r.r 80 % AM(1 kHz)		Α	The test level specified is prior to modulation See *)		
*) The frequency range is scanned as specified. However, when specified in Annex A, EN55024, an additional comprehensive functional test shall be carried out at a limited number of frequencies. The selected frequencies are: 80, 120, 160, 230, 434, 460, 600, 863 and 900 MHz (±1 %).					

4.6.1 Test conditions

Test condition in the Radiated, radio-frequency, and electromagnetic field test was as follows:

1. Representative operating conditions of EUT		PC Video In(Analog) _ Ping test		
	⊠ Table-top	☐ a combination of the two		
2. Type of the EUT	☐ Floor-standing	a height above the ground plane;		
	g	🗌 🗋 0.1 m 🔄 0.8 m		
3. Type of test facility		3m Fully anechoic chamber		
4. Position of the radiating a	ntennas	a distance of 3 meters from the EUT		
5. Type of antennas		Log-periodic		
6. Frequency sweep rate		1.5 x 10-3 decades/s		
7. Dwell time and frequency steps		Dwell time : 3 s, Step size : 1 %		
8. Applied test level		3 V/m		





4.6.2 Test instrumentation

Test instrumentation used in the Radiated, radio-frequency, and electromagnetic field test was as follows:

			Serial or Calibration		ation
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	date	Interval
Mast Controller	CO2000	INNCO	-	N/A	-
Sinal Generator	SML03	R&S	102191	2007-09-07	12
Milivolt Meter	URV5	R&S	100243	2008-04-07	12
10V Insertion Unit	URV5-Z2	R&S	100240	2008-04-07	12
10V Insertion Unit	URV5-Z2	R&S	100241	2008-04-07	12
Amplifier	250W1000A	AR	312241	N/A	N/A
Amplifier	60SIG3	AR	311853	N/A	N/A
Antenna	AT1080	AR	310700	N/A	N/A
Antenna Mast	TP1000A	AR	311200	N/A	N/A
Relay Switching Unit	TS-RSP	AR	-	N/A	N/A

4.6.2 Photograph of the test Configuration





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4.6.3 Test results

Test date	2008-08-05	Test engineer		Hyun Jeong Jang	
Climate condition	Ambient temperature	21.0 ℃	Relative humidity 42 %		<mark>42</mark> %
	Atmospheric pressure	100.5 kPa			

Frequency [MHz]	Table Azimuth [degree]	Polarity	Observation	Performance Result
	0	Horizontal		A 🛛 B 🗌
	0	Vertical		А 🛛 В 🗌
	00	Horizontal	-	А 🛛 В 🗌
80 ~ 1 000	90	Vertical	See Note	A 🛛 B 🗌
80 ~ 1 000	180	Horizontal	See Note	А 🛛 В 🗌
	100	Vertical		А 🖂 В 🗌
	070	Horizontal		А 🛛 В 🗌
	270	270	Vertical	

NOTE: There was no change compared with initial operation during the test.





4.7 Electrical fast transient/burst

Test on power supply ports and on protective earth terminals

Stationary, floor-mounted equipment

The test voltage applied between a reference ground plane and each of the power supply terminals, a.c. or d.c., and on the terminal for the protective or function earth on the cabinet of the EUT.

The EFT/B-generator shall be located on the reference plane.

The length of the "hot wire" from the coaxial output of the EFT/B-generator to the terminals on the EUT is not exceeding 1 m. This connection was unshielded but well insulated.

All other connections of the EUT are in accordance with its functional requirements.

Non-stationary mounted EUT, connected to the mains supply by flexible cord and plugs

The test voltage is applied between each of the power supply conductors and the protective earth at the power supply outlet to which the EUT is to be connected.

Test on I/O and communication ports

As far as possible, the capacitive coupling clamp is used for coupling the test voltage into the lines. However, if the clamp cannot be used due to mechanical problems (size, cable routing) in the cabling, it may be replaced by a tape or a conductive foil enveloping the lines under test. The capacitance of this coupling arrangement with foil or tape is equivalent to that of the standard coupling clamp.

In other cases, it is useful to couple the EFT/B-generator to the terminals of the lines via discrete 100 pF capacitors instead of the distributed capacitance of the clamp or of the foil or tape arrangement.

All tests carried out in shielded room.

The EUT was tested with all I/O ports exercised. Test results are listed below.

Performance criteria

Applied conditions	Test specification	Performance criteria
Open-circuit output test voltage		
a.c. power ports	1 kV(Peak)	
signal and telecommunication ports	0.5 kV(Peak)	
d.c. power ports	0.5 kV(Peak)	В
Wave shape of the pulse	5/50 Tr/Th ns	
Repetition Frequency	5 kHz	



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4.7.1 Test conditions

Test condition in the Electrical fast transient/burst immunity test was as follows:

1. Representative operating conditions of the EUT		PC Video In(Analog) _ Ping test		
2. the Type of the EUT	Stationary, floor-r	nounted equipment		
	🛛 Non-stationary m	ounted EUT		
3. the type of test facility		Shielded Room #2		
4. Test level		🗌 0.5 kV 🛛 🖾 1 kV		
5. Polarity of the test voltage		🛛 Positive 🖾 Negative		
6. Duration of the test		18 min		
7. EUT's ports to be tested	a.c. power port	s Live Solution Neutral		
	Others ports	 I/O ports Communication ports d.c. power ports 		

4.7.2 Test instrumentation

Test instrumentation used in the Electrical fast transient/burst test was as follows:

			Serial or	tion	
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	Date	Interval (Month)
EFT/Burst Generator	NSG 2025	SCHAFFNER	19873	2007-09-06	12
CDN	CDN 8015	SCHAFFNER	19073	N/A	N/A



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4.7.3 Photograph of the test Configuration





4.7.4 Test results

Test date	2008-08-04	Test engineer		Hyun Jeong Jang	
Climate condition	Ambient temperature	25.0 ℃	Relative humidity		<mark>48</mark> %
	Atmospheric pressure	100.7 kPa			

Test Point		Polarity	Test Level (kV)	Tr/Th [ns]	Observation [Note No.]	Performance Result
	Live	+/-	1	5/50ns, 5kHz	Note 1 2	A 🖂 B 🗌
	Neutral	+/-	1	5/50ns, 5kHz	Note 1 2	А 🖂 В 🗌
	PE (Ground)	+/-	1	5/50ns, 5kHz	Note 1 2	А 🖂 В 🗌
a.c. power	Live + PE	+/-	1	5/50ns, 5kHz	Note 1 2	А 🖂 В 🗌
ports	Neutral + PE	+/-	1	5/50ns, 5kHz	Note 1⊠ 2⊡	А 🛛 В 🗌
	Live + Neutral	+/-	1	5/50ns, 5kHz	Note 1 2	А 🖂 В 🗌
	Live + Neutral + PE	+/-	1	5/50ns, 5kHz	Note 1⊠ 2□	A 🛛 B 🗌
I	AN Ports	+/-	0.5	5/50ns, 5kHz	Note 1 2	А 🗌 В 🗌

NOTE

There was no change compared with initial operation during the test.
 The transmission of data was stopped during the test, but self-recoverable after the test.





4.8 Surge

The basic test procedure was in accordance with IEC 61000-4-5.

Performance criteria

Applied conditions	Test specification	Performance criteria
Combination wave a.c. power ports	Line to Line 1 kV(Peak) ①	
	Line to earth 2 kV(Peak) ①	
signal and telecommunication ports	Line to ground 1 kV(Peak) ②	В
d.c. power ports	0.5 kV(Peak) ③	
Waveform parameter		
Open-circuit voltage	1.2/50 Tr/Th μs	
Short-circuit current	8/20 Tr/Th μs	

① Applicable only to ports which according to the manufacturer's specification may connect directly to outdoor cables. Where normal functioning cannot be achieved because of the impact of the CDN on the EUT, no test shall be required.

2 When the manufacturer specifies protection measures and it is impractical to simulate these measures during the tests, then the applied test levels shall be reduced to 0,5 kV and 1 kV.

③ Applicable only to ports which according to the manufacturer's specification may connect directly to outdoor cables.

4.8.1 Test instrumentation

Test instrumentation used in the Surge test was as follows:

			Serial or	Calibration	
Test instrumentation	Model name Manufacture		Firmware (No./Ver.)	Date	Interval (Month)
Surge Tester	PSURGE 8000	HAEFELY	152602	2008-01-30	12
Surge Impulse Module	PIM 100	HAEFELY	152288	2008-01-23	12
Coupling Decoupling Network	PCD 120	HAEFELY	148918	2008-01-23	12
Coupling Decoupling Network	FP-SURGE 100M	HAEFELY	152636	2008-01-23	12
Impulse Module	PIM 120	HAEFELY	150663	2008-01-30	12



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4.8.2 Test conditions

Test condition in the Surge immunity test was as follows:					
1. Representative operating conditions of the EUT			PC Video In(Analog) _ Ping test		
	🛛 EUT power su				
	unshielded as	ymmetrically oper	erated interconnection lines		
2. Type of unshielded symmetrically operated interconnection / telecommunication					
	Shielded lines				
	potential difference	rences			
3. the type of t	test facility		Shielded Room #3		
4. Test level			🗌 0.5 kV 🛛 1 kV 🖾 2 kV		
5. Polarity of t	he surge		⊠ Positive ⊠ Negative		
6. Number of t	est(at selected point	ts)	40		
7. Repetition r	ate		60 sec		
8. EUT's ports to be tested		a.c. power ports	S Live + Neutral		
		others ports	 I/O ports Communication ports d.c. power ports 		



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4.8.3 Photograph of the test Configuration





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4.8.4 Test results

Test date	2008-08-02	Test engineer		Hyun Jeong Jang	
Climate condition	Ambient temperature	24.0 ℃	Relative humidity 56		<mark>56</mark> %
	Atmospheric pressure	100.1 kPa			

Test Point		Polarity	Test Level (kV)	Phase wave Shape [µs]	Observation [Note No.]	Performance Result	
	Live + PE		+/-	2	1.2/50(8/20)	Note 1 2	A 🛛 B 🗌
a.c. power ports	Neutral + PE		+/-	2	1.2/50(8/20)	Note 1⊠ 2⊡	А 🖂 В 🗌
•	Live +	· Neutral	+/-	1	1.2/50(8/20)	Note 1 2	А 🖂 В 🗌
I/O Ports			+/-	1	1.2/50(8/20)	Note 1 2	A 🗌 B 🗌
LAN Ports	rts Li		+/-	1	1.2/50(8/20)	Note 1 2	A 🗌 B 🗌
Modem Ports d.c. power ports		Earth	+/-	1	1.2/50(8/20)	Note 1 2	A 🗌 B 🗌
			+/-	0.5	1.2/50(8/20)	Note 1 2	A 🗌 B 🗌

NOTE

1. There was no change compared with initial operation during the test.

2. The transmission of data was stopped during the test, but self-recoverable after the test.





4.9 Conducted disturbances, induced by radio-frequency fields

The test was performed with the test generator connected to each of the coupling and decoupling devices in turn, while the other non-excited RF input ports of the coupling devices are terminated by a 50-ohm load resistor.

Attempts should be made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility. Test results are listed below. The basic test procedure was in accordance with IEC 61000-4-6.

Performance criteria

Т	est range [MHz]	Test specification	Performance criteria	Remarks			
C).15 ~ 80	3 V(unmodulated, r.m.s) 80 % AM(1 kHz)	A	See 1), 2)			
1)	 The frequency range is scanned as specified. However, when specified in Annex A, an additional comprehensive functional test shall be carried out at a limited number of frequencies. The selected frequencies for conducted tests are: 0,2; 1; 7,1; 13,56; 21; 27,12 and 40,68 MHz (±1 %). 						
2)	 Applicable only to cables which according to the manufacturer's specification supports communication on cable lengths greater than 3m. 						

4.9.1 Test conditions

Test condition in the Radiated, radio-frequency, and electromagnetic field test was as follows:

1. Representative operating co	nditions of EUT	PC Video In(Analog) _ Ping test		
2. Type of EUT' unit	⊠ Single □	Multiple		
3. Type of test facility used		Shielded Room #2		
4. Frequency range of applicat	ion the test	0.15 ~ 80 MHz		
5. Frequency sweep rate		1.5 x 10-3 decades/s		
6. Dwell time and frequency steps		Dwell time : 3 s, Step size : 1 %		
7. Applied test level		3 V		





4.9.2 Test instrumentation

Test instrumentation used in the Conducted disturbances, induced by radio-frequency fields test was as follows:

			Serial or	Calibration	
Test instrumentation	Model name	Manufacturer	Firmware (No./Ver.)	date	Interval (Month)
RF - Generator	NSG2070	Schaffner	1118	2008-06-16	12
Attenuator	INA2070-1	Schaffner	2118	2008-03-06	12
Test Software	Win 2070	Schaffner	V01.05	N/A	N/A
Coupling Decoupling Network	CDN M016	Schaffner	21246	2008-04-21	12

4.9.4 Photograph of the test Configuration







4.9.5 Test results

Test date	2008-08-02	Test engineer		Hyun Jeong Jang	
Climate condition	Ambient temperature	23.7 ℃	Relative humidity		<mark>51</mark> %
	Atmospheric pressure	100.3 kPa			

Frequency (MHz)	Field Strength (Vr.m.s.)	Injection Method	Inject Points Observation (Cable length) [Note No.]		Performance Result
	3	CDN-M3	AC power line(1.8m)	Note 1 2	A 🖂 B 🗌
	3	CDN-T4	LAN (10m)	Note 1 2	A 🗌 B 🗌
0.15 ~ 80	3	CDN-T2	Telephone (10m)	Note 1 2	A 🗌 B 🗌
0.15 ~ 00	3	CLAMP	DC (1.8m)	Note 1 2	A 🗌 B 🗌
	3	CLAMP	Printer (2m)	Note 1 2	A 🗌 B 🗌
	3	CLAMP	VGA (1.8m)	Note 1 2	A 🗌 B 🗌

NOTE

1. There was no change compared with initial operation during the test.

2. The transmission of data from modem port stopped during the test, but self-recoverable after the test. This permissive loss of performance is specified by the manufacturer, and this phenomenon will be put as a clear statement in the User's Manual to avoid misunderstanding.





4.10 Voltage dips, short interruptions and voltage variations

The EUT is tested for each selected combination of test levels and duration with a sequence of tree dips/interruptions with intervals of 10 s minimum (between each test event). Each representative mode of operation shall be tested. Abrupt changes in supply voltage shall occur at zero crossings of the voltage waveform. The basic test procedure was in accordance with IEC 61000-4-11.

Performance criteria

Environmental phenomenon	Test specification	Units	Performance criteria	Remarks	
Voltage dips	>95 0,5		В		
	30 25	% reduction periods	С	See NOTE	
Voltage interruptions	>95 250		С		
[NOTE] Changes to occur at 0 degree crossover point of the voltage waveform.					

4.10.1 Test instrumentation

Test instrumentation used in the Voltage dips, short interruptions and voltage variations test was as follows:

Test	Model name	Manufacturer	Serial or	Calibration	
instrumentation			Firmware (No./Ver.)	date	Interval (Month)
Voltage Dip & Interruption	□ PFS 503	EM TEST	PFS503/63A -0513100236	2007-06-16	12
	PLINE 1610	HAEFELY	083690-21	2008-05-13	12



LCD Monitor MG32PS



4.10.2 Photograph of the test Configuration







4.10.3 Test results

Operating condition	PC Video In(Analog) _ Ping test				
Test date	2008-08-02	Test engineer Hyun Jeong Ja		g Jang	
Climate condition	Ambient temperature	25.0 ℃	Relative humidity		<mark>48</mark> %
	Atmospheric pressure	100.7kPa			

Test Voltage	Period	Number of Applications	Angle [Degrees]	Observation [Note No.]	Performance Result
>95 % UT	0.5	10	0, 180	Note 1⊠ 2⊡	A 🖂 B 🗌 C 🗌
30 % UT	25	10	0	Note 1 2	A 🖂 B 🗌 C 🗌
>95 % UT	250	10	0	Note 1 □ 2⊠	A 🗌 B 🖂 C 🗌

NOTE

1. There was no change compared with initial operation during the test.

2. While The Voltage Dip & Interruption tests, malfunction appeared in normal operate, but self-recoverable after the test.





Appendix – EUT photography

Front View



Rear View



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