

TEST REPORT

Report number : Z071C-10282A1

Issue date : July 19, 2011

The device, as described herewith, was tested pursuant to applicable test procedure and complies with the requirements of;

EN 55022EN 61000-3-2EN 61000-3-3EN 55024

The test results are traceable to the international or national standards.

Applicant	: NEC Display Solutions, Ltd.
Equipment under test (EUT)	: LCD Projector
Model number	: NP-P350W *Tested NP-M300XS *Tested NP-M260XS *Tested NP-M260WS (With modified panel) *Tested NP-P350X, NP-P420X, NP-M350XS, NP-M260WS, NP-M300WS, NP-M420XV, NP-M420X

Date of test : September 28, 29, October 1, 4, 6 - 8, 12 - 15, 18, 20 - 22, 25, 2010,
June 27, 29, 30, July 4, 2011

Test place : ZACTA Technology Corporation Yonezawa Testing Center
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Test results : Complied

Remarks : This report replaces test report No.Z071C-10282.

The results in this report are applicable only to the equipment tested.

This report shall not be re-produced except in full without the written approval of ZACTA Technology Corporation.

This test report must not be used by client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

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NVLAP LAB CODE 200306-0

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1. Summary of Test

1.1 Purpose of test

It is the original test in order to verify conformance to standards listed in section 1.2.

The purpose of the test is additional test due to the modification of the panel of NP-M260WS.

Measurements in all test modes were performed by NP-P350W which is the highest performance model.

Regarding the NP-M260WS (With modified panel), as a result of technical judgment, the Radiated emission, EN 61000-4-2 and EN 61000-4-3 results in the COMPUTER 1 UXGA 60Hz mode were reported.

Regarding the NP-M300XS, as a result of technical judgment, the test results in the worst mode (COMPUTER 1 UXGA 60Hz mode) and USB VIEWER (still image) mode were reported.

Regarding the NP-M260XS, as a result of technical judgment, the test result in the worst mode (COMPUTER 1 UXGA 60Hz mode) was reported.

The worst mode was selected for each model by performing preliminary test.

Regarding the EN 61000-4-5 and EN 61000-4-11, only the COMPUTER 1 UXGA 60Hz was reported for each model in this test report.

Moreover, the purpose of this report is update of standard.

NP-P350W, NP-M300XS and NP-M260XS were tested in accordance with EN 61000-3-3:1995 + Amendment 1:2001 + Amendment 2:2005 originally.

The revised content of the latest standard does not affect NP-P350W, NP-M300XS and NP-M260XS.

Therefore, the NP-P350W, NP-M300XS and NP-M260XS are deemed to comply with the latest standard without re-testing.

1.2 Standards

EN 55022:2006 + Amendment 1:2007

EN 61000-3-2:2006

EN 61000-3-3: 2008

EN 55024:1998 + Amendment 1:2001 + Amendment 2:2003

1.2.1 Test Methods

EN 61000-4-2:1995 + Amendment 1:1998 + Amendment 2:2001

EN 61000-4-3:2006

EN 61000-4-4:2004

EN 61000-4-5:2006

EN 61000-4-6:2007

EN 61000-4-8:1993 + Amendment 1:2001

EN 61000-4-11:2004

1.2.2 Deviation from standards

Test methods listed in section 1.2.1 were used instead of those referenced in EN55024.

1.3 List of applied test to the EUT

Test item	Classification of EUT	Test	Result	Note
Conducted emission at mains port	Class B	Applied	PASS	-
Conducted emission at telecommunication port	Class B	Applied	PASS	-
Radiated emission (Below 1GHz)	Class B	Applied	PASS	-
Radiated emission (Above 1GHz)	Class B	Applied	PASS	-

Note: None.

Test item	Classification of EUT	Test	Result	Note
Harmonic current emissions	Class D	Applied	PASS	-

Note: None.

Test item	Test	Result	Note
Voltage changes, voltage fluctuations and flicker measurement	Applied	PASS	-

Note: None.

Port	Test item	Performance criterion	Test	Result	Note
Enclosure	Electrostatic discharge immunity	B	Applied	PASS	-
	Radio-frequency electromagnetic field immunity	A	Applied	PASS	-
	Power frequency magnetic field immunity	A	Applied	PASS	-
AC power	Electrical fast transient/burst immunity	B	Applied	PASS	-
	Surges immunity	B	Applied	PASS	-
	Conducted disturbances, inducted by radio-frequency fields immunity	A	Applied	PASS	-
	Voltage dips immunity	B and C	Applied	PASS	-
	Short interruptions immunity	C	Applied	PASS	-
DC power	Electrical fast transient/burst immunity	B	Not applied	Not applied	1
	Surges immunity	B	Not applied	Not applied	1
	Conducted disturbances, inducted by radio-frequency fields immunity	A	Not applied	Not applied	1
Signal ports and telecommunication ports	Electrical fast transient/burst immunity	B	Applied	PASS	-
	Surges immunity	B	Applied	PASS	-
	Conducted disturbances, inducted by radio-frequency fields immunity	A	Applied	PASS	-

Note 1: Test is not applied because the EUT has no relevant ports.

1.3.1 Test set up

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1.4 Performance Criteria

Performance criterion	Operating condition
A	EUT shall operate with no abnormal operation such as power ON/OFF or mode change. About the noise generated on the screen, the beat noise is permissible. Any other noise such as shortage of displayed screen is permissible if it is extent to which the screen can be recognized. The screen must be displayed by 60% or more as the range which can be recognized.
B	EUT shall be self-recovered to the normal operation after removing the disturbance.
C	Failures which are not self-recovered after removal of the external disturbance, but which can be recovered to normal operation by reset or reboot are permissible.

1.5 Monitoring of EUT

In order to evaluate the performance of equipment during the test, it is confirmed visually whether the EUT operates as intended.

1.6 Test Plan

All the tests in this test report are performed according to Test plan number: Z071Z-10092 and Z071Z-11038.

1.6.1 Deviation from the Test Plan

None.

1.7 Modification to the EUT by laboratory

None.

2. Equipment Under Test

2.1 General Description of equipment

The EUT is LCD Projector.

2.2 EUT information

Applicant	: NEC Display Solutions, Ltd. 686-1, Nishioi, Oi-machi, Ashigarakami-gun, Kanagawa 258-8533 Japan Phone: +81-465-85-2384 Fax: +81-465-85-2393
Equipment under test	: LCD Projector
Trade name	: NEC
Model number	: NP-P350W *Tested NP-M300XS *Tested NP-M260XS *Tested NP-M260WS (With modified panel) *Tested NP-P350X, NP-P420X, NP-M350XS, NP-M260WS, NP-M300WS, NP-M420XV, NP-M420X
Serial number	: 0740110JE2, 0740108JE2 0740027JE2, 0740023JE2 0740015JE2, 0740018JE2 1640001FP
EUT condition	: Semi Production
Max. frequency	: 2220MHz
Power ratings	: AC100-240V 50/60Hz 3.9-1.7A (NP-P350W, NP-P420X, NP-M350XS, NP-M300WS, NP-M420XV, NP-M420X) AC100-240V 50/60Hz 3.5-1.5A (NP-P350X) AC100-240V 50/60Hz 3.4-1.5A (NP-M300XS, NP-M260WS) AC100-240V 50/60Hz 2.8-1.2A (NP-M260XS)
Size	: 39 (W)×28 (D)×115(H) mm (NP-P350W, NP-P420X, NP-P350X, NP-M420XV, NP-M420X) 39 (W)×30 (D)×14 (H) mm (NP-M300XS, NP-M260XS, NP-M350XS, NP-M260WS, NP-M300WS)

2.3 Variation of the family model(s)

NP-P350W *Tested

NP-M300XS *Tested

NP-M260XS *Tested

NP-M260WS (With modified panel) *Tested

NP-P350X, NP-P420X, NP-M350XS, NP-M260WS, NP-M300WS, NP-M420XV, NP-M420X

Model No.	LCD Panel	Resolution	wattage of lamps	Lens cover SW	MM board	AUDIO IN/OUT	Brightness	CLK (LCD)	AC input rating	
NP-P350W	Sony	WXGA	AC260W	Yes	Yes	Yes	3500lm	83MHz	AC100-240V 3.9-1.7A	*Tested
NP-M300XS	Sony	XGA	AC230W	No	No	Yes	3000lm	68MHz	AC100-240V 3.4-1.5A	*Tested
NP-M260XS	Epson	XGA	AC180W	No	No	Yes	2600lm	65MHz	AC100-240V 2.8-1.2A	*Tested
NP-P350X	Sony	XGA	AC230W	Yes	Yes	Yes	3500lm	68MHz	AC100-240V 3.5-1.5A	
NP-P420X	Sony	XGA	AC260W	Yes	Yes	Yes	4200lm	68MHz	AC100-240V 3.9-1.7A	
NP-M350XS	Sony	XGA	AC260W	No	No	Yes	3500lm	68MHz	AC100-240V 3.9-1.7A	
NP-M260WS	Sony	WXGA	AC230W	No	No	Yes	2600lm	83MHz	AC100-240V 3.4-1.5A	
NP-M300WS	Sony	WXGA	AC260W	No	No	Yes	3000lm	83MHz	AC100-240V 3.9-1.7A	
NP-M420XV	Sony	XGA	AC260W	Yes	No	No	4200lm	68MHz	AC100-240V 3.9-1.7A	
NP-M420X	Sony	XGA	AC260W	Yes	No	Yes	4200lm	68MHz	AC100-240V 3.9-1.7A	
NP-M260WS (With modified panel)	Epson	WXGA	AC230W	No	No	Yes	2600lm	85MHz	AC100-240V 3.4-1.5A	*Tested

Measurements in all test modes were performed by NP-P350W which is the highest performance model.

2.4 Operating mode

NP-P350W

【COMPUTER 1 UXGA 60Hz, COMPUTER 2 WXGA 60Hz, HDMI 1080P 60Hz mode】

- i) “H” characters data are sent to Projector from nPC
- ii) Projected “H” characters data
- iii) i) and ii) is repeated

【USB Display (moving image) mode】

- i) Moving image data are sent to Projector from PC
- ii) Projected moving image data
- iii) i) and ii) is repeated

【USB VIEWER (moving image) mode】

- i) Moving image data are sent to Projector from USB Memory
- ii) Projected moving image data
- iii) i) and ii) is repeated

【VIDEO, S-VIDEO^{*1} mode】

- i) Color bar data are sent to Projector from Video Cassette Recorder/DVD Player
- ii) Projected Color bar data
- iii) i) and ii) is repeated

*1: Used it for EN61000-4-4 and EN61000-4-6

NP-M300XS

【COMPUTER 1 UXGA 60Hz mode】

- i) “H” characters data are sent to Projector from nPC
- ii) Projected “H” characters data
- iii) i) and ii) is repeated

【USB VIEWER (still image) mode】

- i) “H” characters data and image are sent to Projector from USB Memory
- ii) Projected “H” characters data and image
- iii) i) and ii) is repeated

NP-M260XS

【COMPUTER 1 UXGA 60Hz mode】

- i) “H” characters data are sent to Projector from nPC
- ii) Projected “H” characters data
- iii) i) and ii) is repeated

NP-M260WS (With modified panel)

【COMPUTER 1 UXGA 60Hz mode】

- i) “H” characters data are sent to Projector from PC
- ii) Projected “H” characters data
- iii) i) and ii) is repeated

3. Configuration of equipment

3.1 Equipment(s) used [NP-P350W, NP-M300XS, NP-M260XS]

No.	Equipment	Company	Model No.	Serial No.	Comment
1	LCD Projector	NEC	NP-P350W	0740110JE2	*1
				0740108JE2	*2
			NP-M300XS	0740027JE2	*1
				0740023JE2	*2
			NP-M260XS	0740015JE2	*1
				0740018JE2	*2
2	Remote Controller	NEC	RD-448E	N/A	Accessory
3	Personal Computer	HP	dx6120MT	JPA6030BSL	*1
		HP	xw4400	JPA7190B2L	*2
4	Keyboard	DELL	054EXM	TH-054EXM-37171-19A-1537	*1
		DELL	SK-8110	CN-07N247-38844-293-0337	*2
5	PS/2 Mouse	DELL	M-SAW34	LNA20517343	*1
		HP	M-S69	N/A	*2
6	Printer	HP	C4555A	US6BC212N	*1
7	Personal Computer	DELL	MCM	9WMZ31S	*1
8	Keyboard	DELL	SK-8000	N/A	*1
9	PS/2 Mouse	Logitech	M-S34	LNA10500394	*1
10	Display	DELL	2001FP	CN-0C0649-46633-495-09CL	*1
		MITSUBISHI	AP627	7X211774CJ	*2
11	AC adapter for Display	DELL	ADP-90FB	CN-0R0423-48661-48P-5POS	*1
12	USB Memory	Transcend	N/A	556355 0764	*1
		BUFFALO	RUF-C1U2	B8032403735	*3
		SanDisk	CRUZER MICRO	N/A	*4
13	USB Wireless LAN Unit	NEC	NP02LM	001D6A0831A5	*1
				001D6A0881A9	*2
14	Video Cassette Recorder	Panasonic	NV-SV1	VM0233470	*1
		TOSHIBA	A-S100	14179636	*2
15	DVD Player	SONY	DVP-NS575P	2019560	*2

*1: Used it for EN 55022

*2: Used it for EN 55024 and EN 61000-3-2/3-3

*3: Used it for EN 55024 (except Electrostatic discharge immunity) and EN 61000-3-2/3-3

*4: Used it for Electrostatic discharge immunity

3.2 Cable(s) used [NP-P350W, NP-M300XS, NP-M260XS]

No.	Cable	Length[m]	Shield	Connector	Comment
a	AC power cord for EUT	1.8 *3	No	Plastic	Accessory
		3.0 *4			
b	RGB cable	1.9	Yes	Metal	Accessory
c	HDMI cable	5.0	Yes	Metal	*1
		3.0	Yes	Metal	*2
d	Serial cable	1.5	Yes	Metal	*1
		1.5	Yes	Metal	*2
e	LAN cable	3.0	No	Plastic	*1
		2.9	No	Plastic	*2
f	Audio cable	1.5	No	Metal	*1
		1.6	No	Metal	*2
g	Audio cable	1.5	No	Metal	*1
		2.0	No	Metal	*2
h	USB cable	1.8	Yes	Metal	*1
		1.7	Yes	Metal	*2
i	AC power cord for PC	1.9	No	Plastic	*1
		3.0	No	Plastic	*2
j	Keyboard cable	1.8	No	Metal	*1
		2.1	No	Metal	*2
k	Mouse cable	1.9	No	Metal	*1
		1.8	No	Metal	*2
l	Parallel cable	2.1	Yes	Metal	*1
m	AC power cord for Printer	2.6	No	Plastic	*1
n	RGB cable	2.2	Yes	Metal	*1
		1.9	Yes	Metal	*2
o	AC power cord for PC	1.9	No	Plastic	*1
p	Keyboard cable	1.8	No	Metal	*1
q	Mouse cable	1.8	No	Metal	*1
r	RGB cable	2.0	Yes	Metal	*1
		1.8	Yes	Metal	*2
s	DC cable for Display AC adapter	1.8	No	Plastic	*1
t	AC power cord for Display AC adapter	1.7	No	Plastic	*1
	AC power cord for Display	1.7	No	Plastic	*2
u	S-VIDEO cable	1.4	Yes	Metal	*1
		3.0	Yes	Metal	*2
v	Audio/Video cable	1.1	No	Metal	*1
		1.6	No	Metal	*2
w	Audio cable	1.0	No	Metal	*1
		3.0	No	Metal	*2
x	AC power cord for Video Cassette Recorder	1.8	No	Plastic	*1
		1.8	No	Plastic	*2
y	AC power cord for DVD Player	1.6	No	Plastic	*2

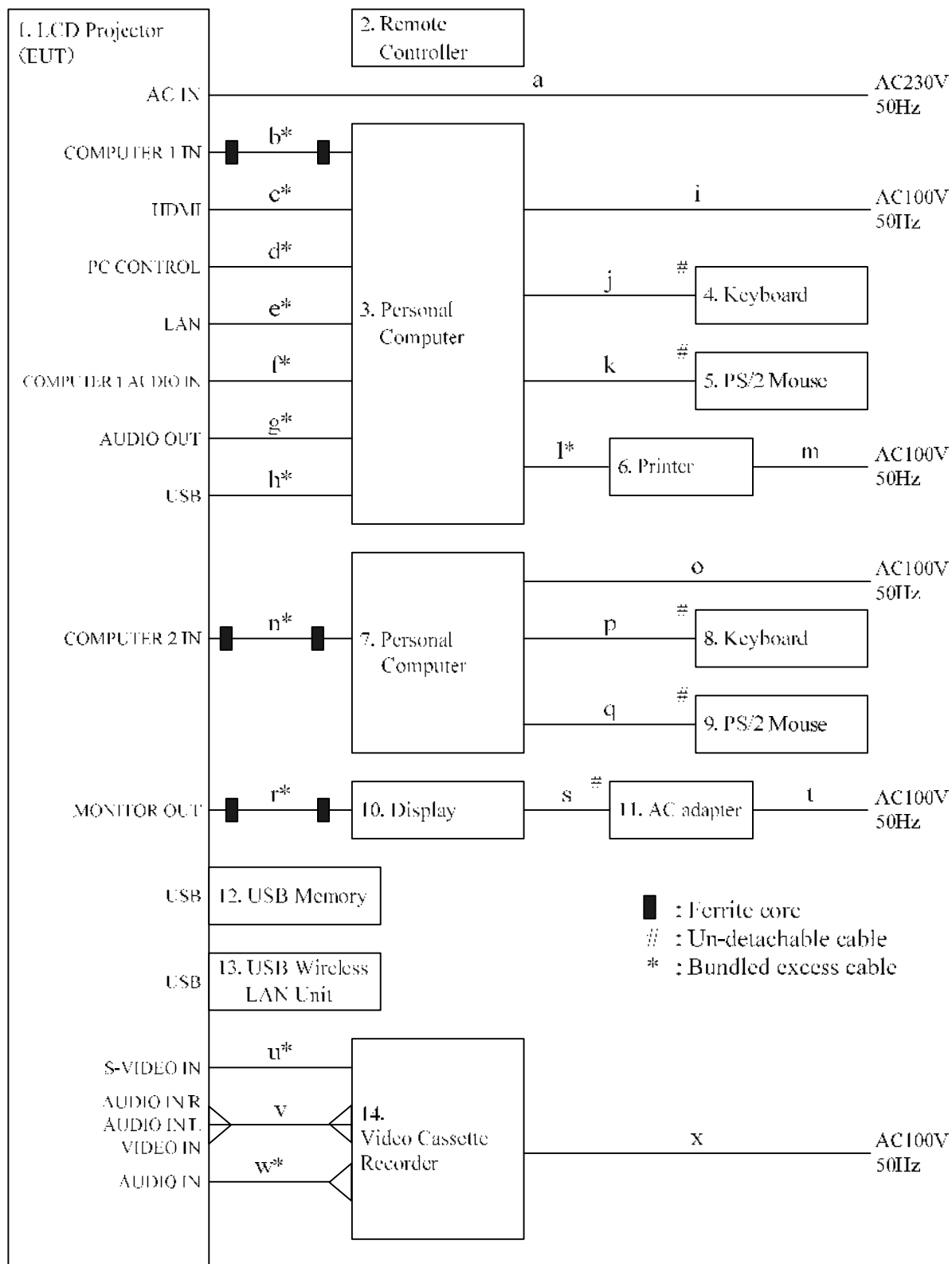
*1: Used it for EN 55022

*2: Used it for EN 55024 and EN 61000-3-2/3-3

*3: Used it for NP-P350W

*4: Used it for NP-M300XS and NP-M260XS

3.3 System configuration [NP-P350W, NP-M300XS, NP-M260XS: EN 55022: except COMPUTER 2 WXGA 60Hz]



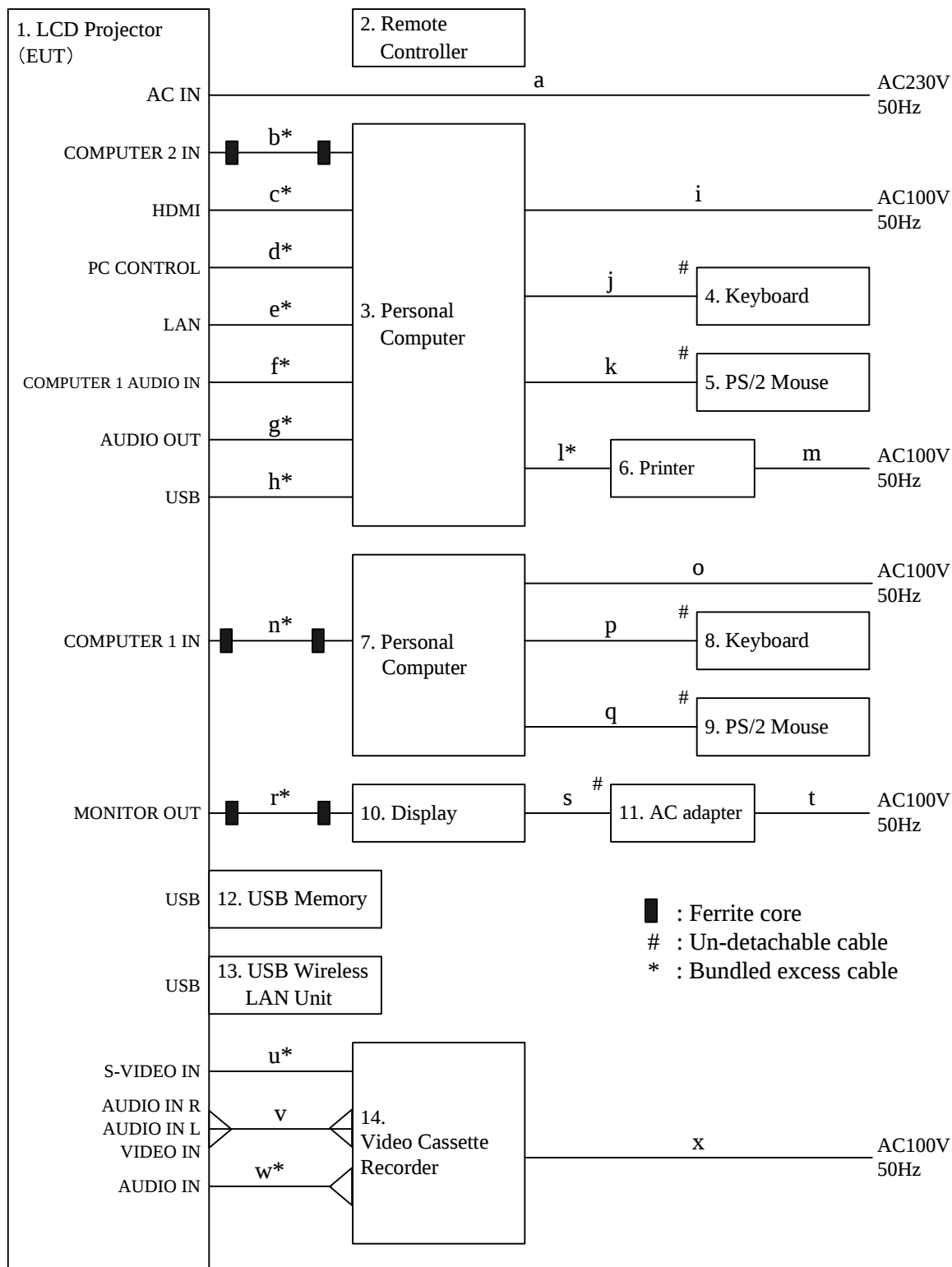
Note1: Numbers assigned to equipment or cables on this diagram correspond to the list in “3.1 Equipment(s) used” and “3.2 Cable(s) used”.

Note2: Two ferrite cores of RGB cable (No.b) are accessory of EUT.

Note3: Two ferrite cores of RGB cable (No.n) are not accessory of EUT.

Note4: Two ferrite cores of RGB cable (No.r) are accessory of Display (No.10).

3.4 System configuration [NP-P350W: EN 55022: COMPUTER 2 WXGA 60Hz]



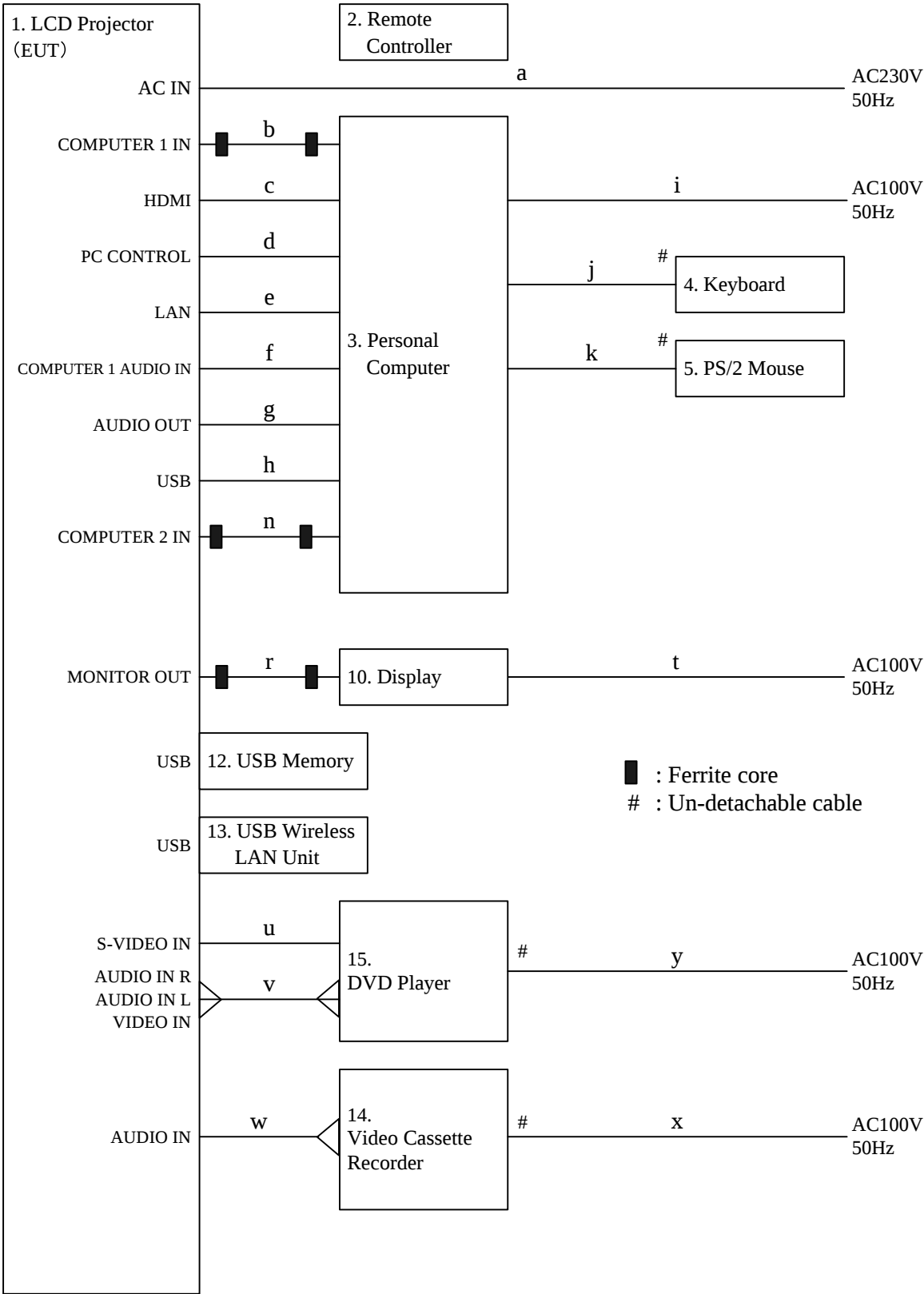
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Note2: Two ferrite cores of RGB cable (No.b) are accessory of EUT.

Note3: Two ferrite cores of RGB cable (No.n) are not accessory of EUT.

Note4: Two ferrite cores of RGB cable (No.r) are accessory of Display (No.10).

3.5 System configuration [NP-P350W, NP-M300XS, NP-M260XS: EN 55024, EN 61000-3-2/3-3: except COMPUTER 2 WXGA 60Hz]



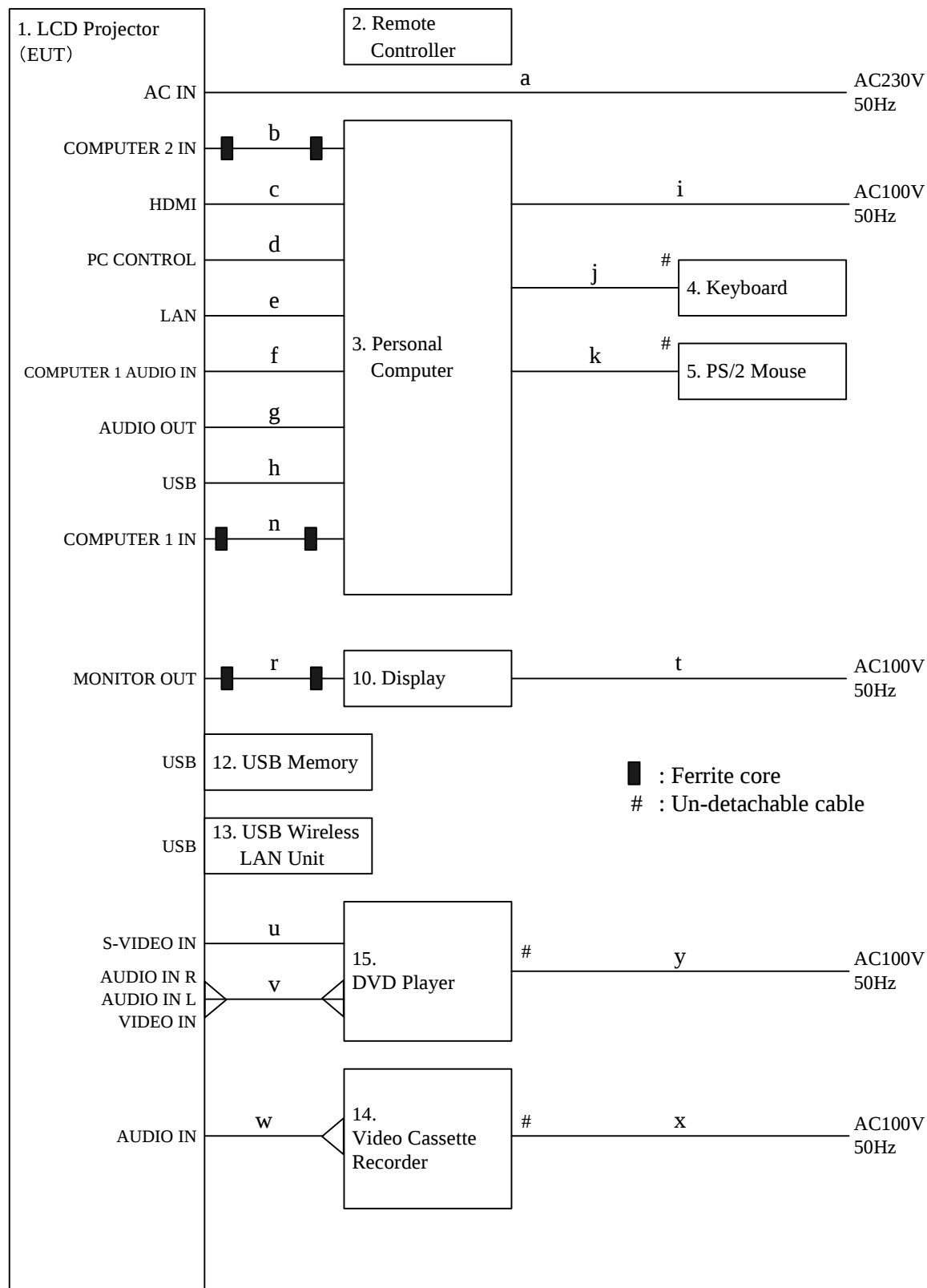
Note1: Numbers assigned to equipment or cables on this diagram correspond to the list in “3.1 Equipment(s) used” and “3.2 Cable(s) used”.

Note2: Two ferrite cores of RGB cable (No.b) are accessory of EUT.

Note3: Two ferrite cores of RGB cable (No.n) are not accessory of EUT.

Note4: Two ferrite cores of RGB cable (No.r) are accessory of Display (No.10).

3.6 System configuration [NP-P350W: EN 55024, EN 61000-3-2/3-3: COMPUTER 2 WXGA 60Hz]



Note1: Numbers assigned to equipment or cables on this diagram correspond to the list in "3.1 Equipment(s) used" and "3.2 Cable(s) used".

Note2: Two ferrite cores of RGB cable (No.b) are accessory of EUT.

Note3: Two ferrite cores of RGB cable (No.n) are not accessory of EUT.

Note4: Two ferrite cores of RGB cable (No.r) are accessory of Display (No.10).

3.7 Equipment(s) used [NP-M260WS: With modified panel]

No.	Equipment	Company	Model No.	Serial No.	Comment
1	LCD Projector	NEC	NP-M260WS	1640001FP	EUT
2	Remote Controller	NEC	RD-448E	N/A	Accessory
3	Personal Computer	HP	dx6120MT	JPA6030BSL	-
4	Keyboard	DELL	SK-8110	N/A	-
5	PS/2 Mouse	Logitech	M-S34	LNA13032232	-
6	Printer	HP	C4555A	US6BC212N	*1
7	Personal Computer	DELL	MCM	9WMZ31S	-
8	Keyboard	DELL	054EXM	TH-054EXM-3717 1-19A-1537	-
9	PS/2 Mouse	Logitech	M-S34	LNA10500394	-
10	Display	DELL	2001FP	CN-0C0649-46633 -495-09CL	-
11	AC adapter for Display	DELL	ADP-90FB	CN-0R0423-48661 -48P-5POS	-
12	USB Memory	Transcend	2GB	N/A	-
13	USB Wireless LAN Unit	NEC	NP02LM	001D6A691902	Accessory
14	Video Cassette Recorder	Panasonic	NV-VP51S	LV5GB001522	-

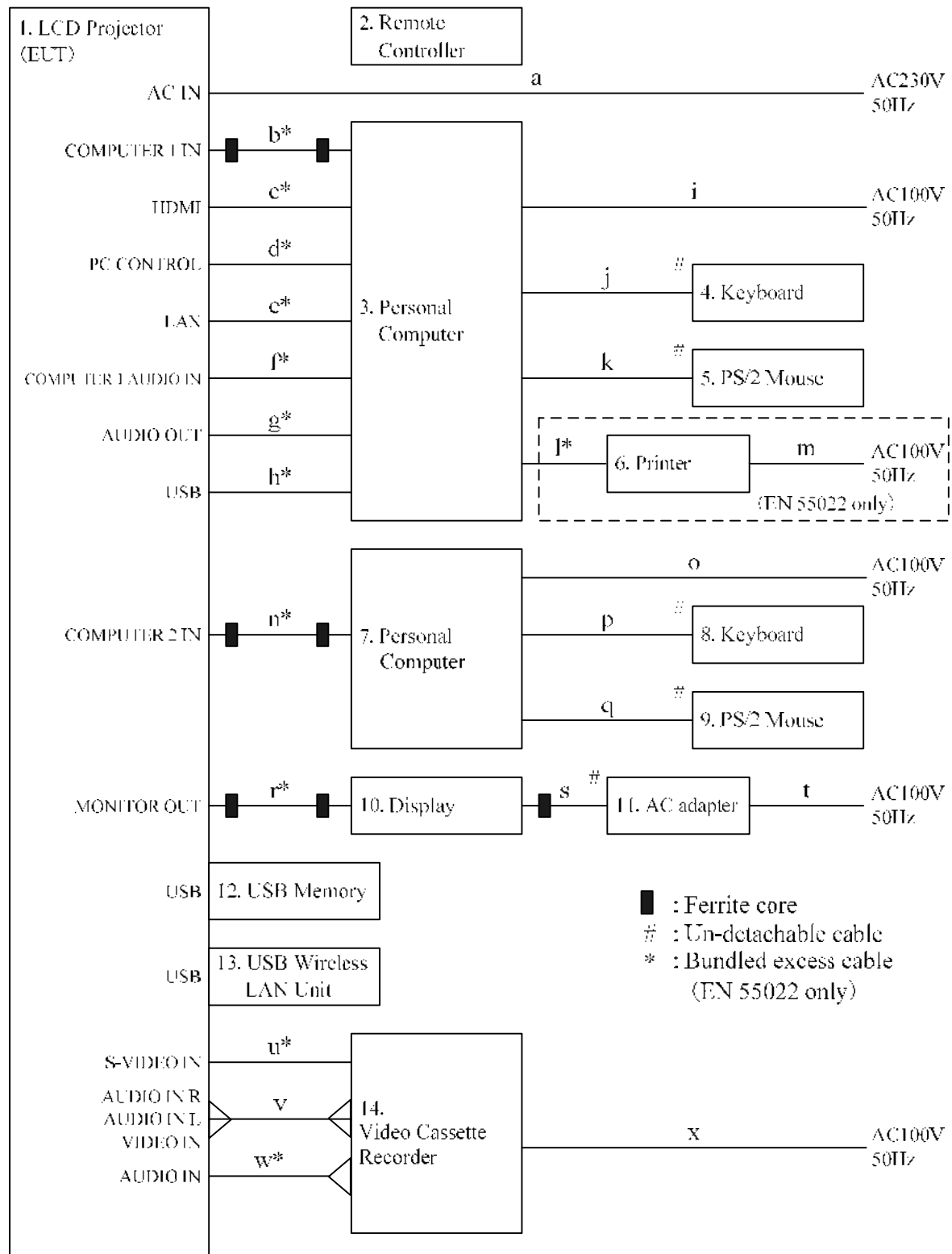
*1: Used it for EN 55022

3.8 Cable(s) used [NP-M260WS: With modified panel]

No.	Cable	Length[m]	Shield	Connector	Comment
a	AC power cord for EUT	3.0	No	Plastic	Accessory
b	RGB cable	1.8	Yes	Metal	Accessory
c	HDMI cable	5.0	Yes	Metal	-
d	Serial cable	1.5	Yes	Metal	-
e	LAN cable	3.0	No	Plastic	-
f	Audio cable	1.5	No	Metal	-
g	Audio cable	1.5	No	Metal	-
h	USB cable	2.1	Yes	Metal	-
i	AC power cord for PC	1.9	No	Plastic	-
j	Keyboard cable	2.1	No	Metal	-
k	Mouse cable	1.8	No	Metal	-
l	Parallel cable	2.1	Yes	Metal	*1
m	AC power cord for Printer	2.7	No	Plastic	*1
n	RGB cable	2.2	Yes	Metal	-
o	AC power cord for PC	1.8	No	Plastic	-
p	Keyboard cable	1.8	No	Metal	-
q	Mouse cable	1.8	No	Metal	-
r	RGB cable	1.8	Yes	Metal	-
s	DC cable for Display AC adapter	1.8	No	Plastic	-
t	AC power cord for Display AC adapter	1.7	No	Plastic	-
u	S-VIDEO cable	1.4	Yes	Metal	-
v	Audio/Video cable	1.1	No	Metal	-
w	Audio cable	1.0	No	Metal	-
x	AC power cord for Video Cassette Recorder	2.0	No	Plastic	-

*1: Used it for EN 55022

3.9 System configuration [NP-M260WS: With modified panel]



Note1: Numbers assigned to equipment or cables on this diagram correspond to the list in "3.7 Equipment(s) used" and "3.8 Cable(s) used".

Note2: Two ferrite cores of RGB cable (No.b) are accessory of EUT.

Note3: Two ferrite cores of RGB cable (No.n) are not accessory of EUT.

Note4: Two ferrite cores of RGB cable (No.r) are accessory of Display (No.10).

Note5: One ferrite core of DC cable (No.s) is an accessory of AC adapter (No.11).

4. Conducted emission at mains port test information

4.1 Measurement procedure

Test was applied by following conditions.

Test method:	EN 55022
Frequency range:	0.15MHz to 30MHz
Test place:	Open area test site
EUT was placed on:	Wooden table / 2.3m(W) × 1.0m(D) × 0.8m(H)
Vertical Metal Reference Plane:	2.4 m(W) × 2.7m (H) 0.4m away from EUT
Horizontal Metal Reference Plane:	40.0m x 7.8m

Test receiver setting

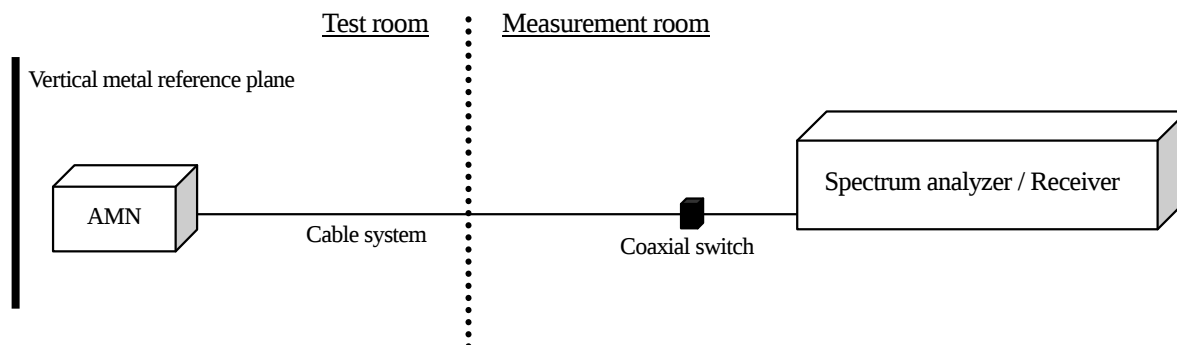
- Detector: Quasi-peak, Average
- Bandwidth: 9 kHz

EUT and peripherals are connected to 50Ω/50μH Artificial Mains Network (AMN) which are connected to reference ground plane, and are placed 80cm away from EUT. Excess of AC power cable is bundled in center.

AMN for peripheral is terminated in 50Ω.

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Maximum emission configuration is determined by manipulating the EUT, peripherals, interconnecting cables. Sufficient time for EUT, peripherals and test equipment is provided in order for them to warm up to their normal operating condition. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits.

- Test configuration



4.2 Calculation method

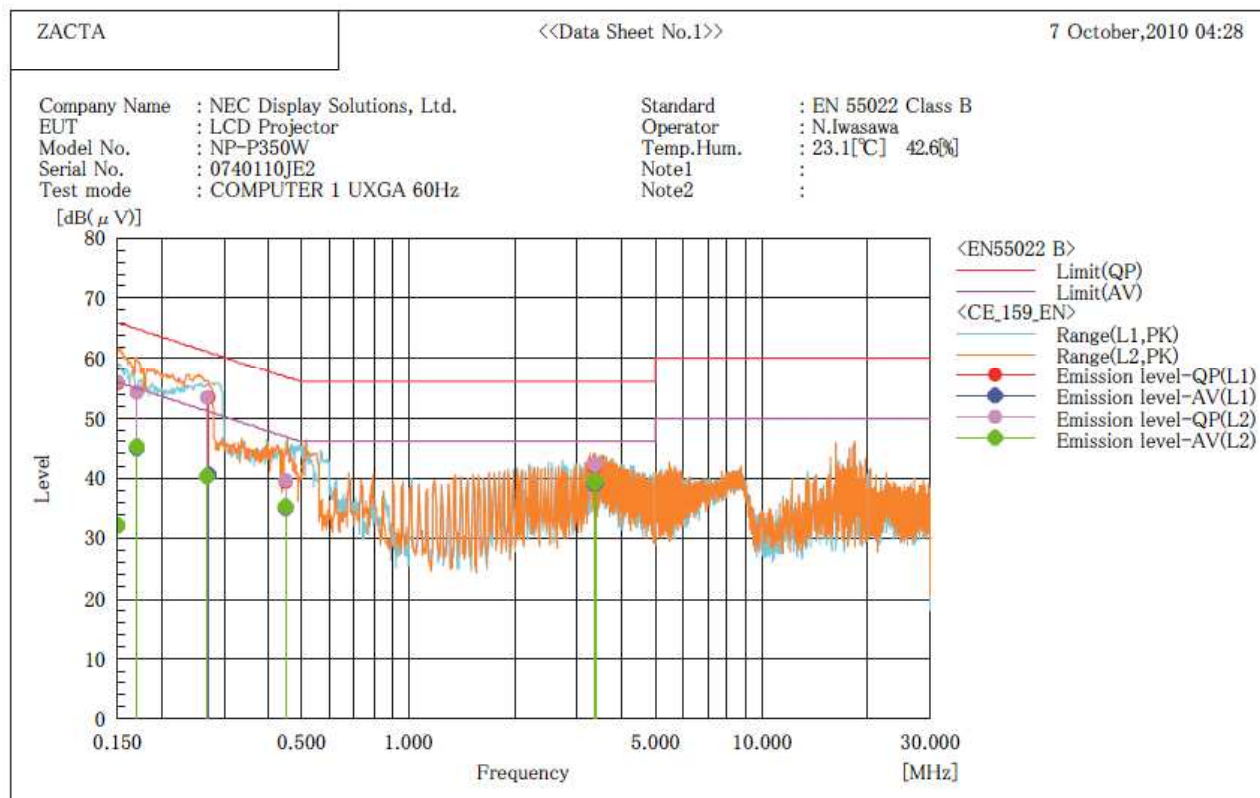
Emission level = Reading + (AMN. factor + Cable system loss)

Margin = Limit - Emission level

4.3 Test data

[NP-P350W]

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

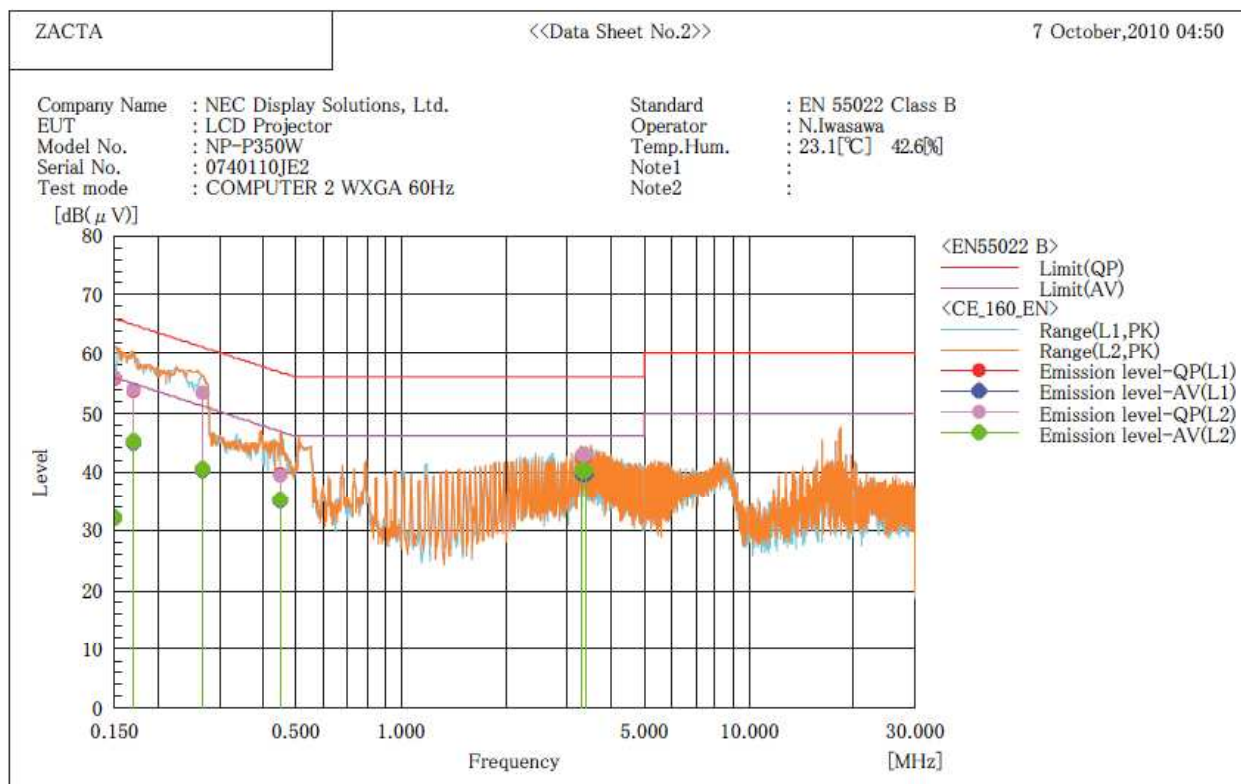
--- L1 Phase ---

No.	Frequency	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin
	[MHz]	QP	AV		QP	AV	QP	AV	QP	AV
		[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.9	21.1	11.0	55.9	32.1	66.0	56.0	10.1	23.9
2	0.170	43.4	34.2	10.8	54.2	45.0	65.0	55.0	10.8	10.0
3	0.272	43.1	30.4	10.3	53.4	40.7	61.1	51.1	7.7	10.4
4	0.451	29.8	25.2	9.7	39.5	34.9	56.9	46.9	17.4	12.0
5	3.331	32.3	29.3	9.8	42.1	39.1	56.0	46.0	13.9	6.9
6	3.388	32.2	29.2	9.8	42.0	39.0	56.0	46.0	14.0	7.0

--- L2 Phase ---

No.	Frequency	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin
	[MHz]	QP	AV		QP	AV	QP	AV	QP	AV
		[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	45.0	21.2	11.0	56.0	32.2	66.0	56.0	10.0	23.8
2	0.170	43.3	34.5	10.9	54.2	45.4	65.0	55.0	10.8	9.6
3	0.270	43.0	30.0	10.3	53.3	40.3	61.1	51.1	7.8	10.8
4	0.451	29.9	25.5	9.7	39.6	35.2	56.9	46.9	17.3	11.7
5	3.332	32.6	29.7	9.8	42.4	39.5	56.0	46.0	13.6	6.5
6	3.388	32.5	29.6	9.8	42.3	39.4	56.0	46.0	13.7	6.6

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

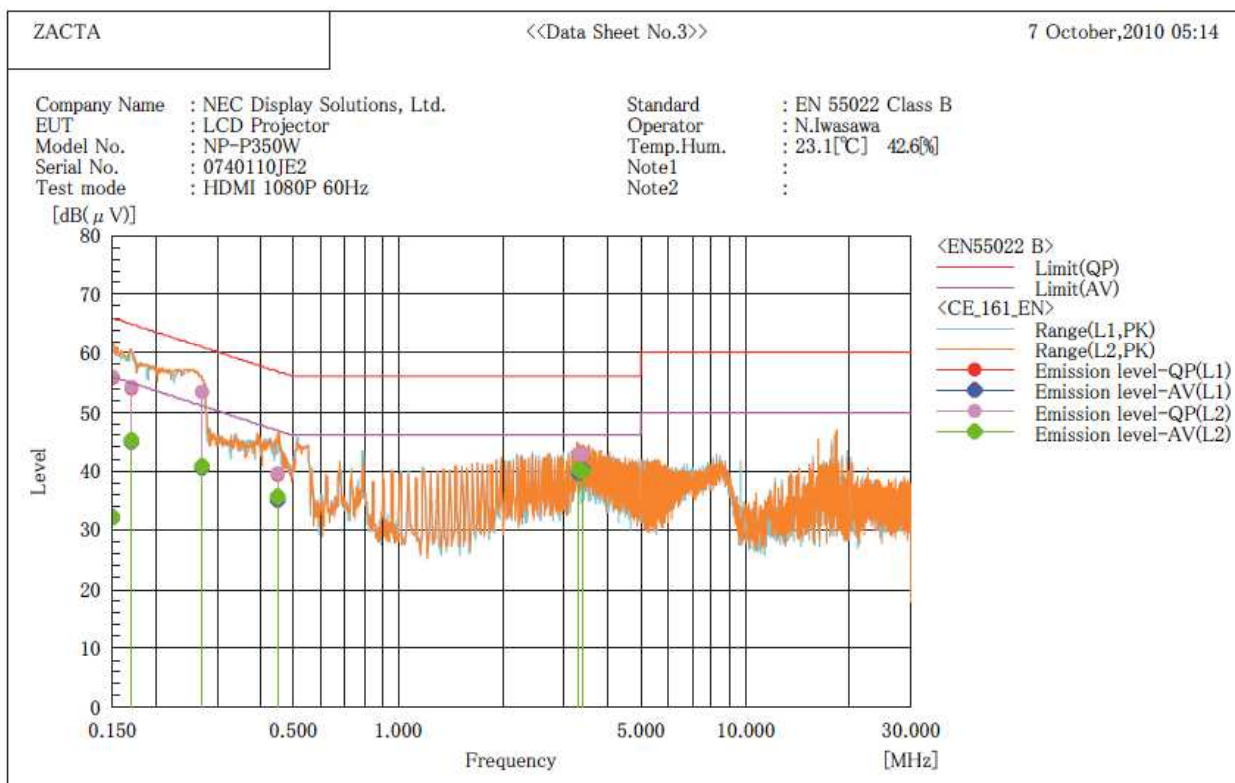
--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.8	21.1	11.0	55.8	32.1	66.0	56.0	10.2	23.9
2	0.170	43.0	34.1	10.8	53.8	44.9	65.0	55.0	11.2	10.1
3	0.269	43.0	30.0	10.3	53.3	40.3	61.1	51.1	7.8	10.8
4	0.451	29.9	25.2	9.7	39.6	34.9	56.9	46.9	17.3	12.0
5	3.329	32.7	30.0	9.8	42.5	39.8	56.0	46.0	13.5	6.2
6	3.386	32.7	29.9	9.8	42.5	39.7	56.0	46.0	13.5	6.3

--- L2 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	45.0	21.2	11.0	56.0	32.2	66.0	56.0	10.0	23.8
2	0.170	43.2	34.5	10.9	54.1	45.4	65.0	55.0	10.9	9.6
3	0.270	43.0	30.4	10.3	53.3	40.7	61.1	51.1	7.8	10.4
4	0.451	29.8	25.7	9.7	39.5	35.4	56.9	46.9	17.4	11.5
5	3.329	33.0	30.4	9.8	42.8	40.2	56.0	46.0	13.2	5.8
6	3.384	33.1	30.4	9.8	42.9	40.2	56.0	46.0	13.1	5.8

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>

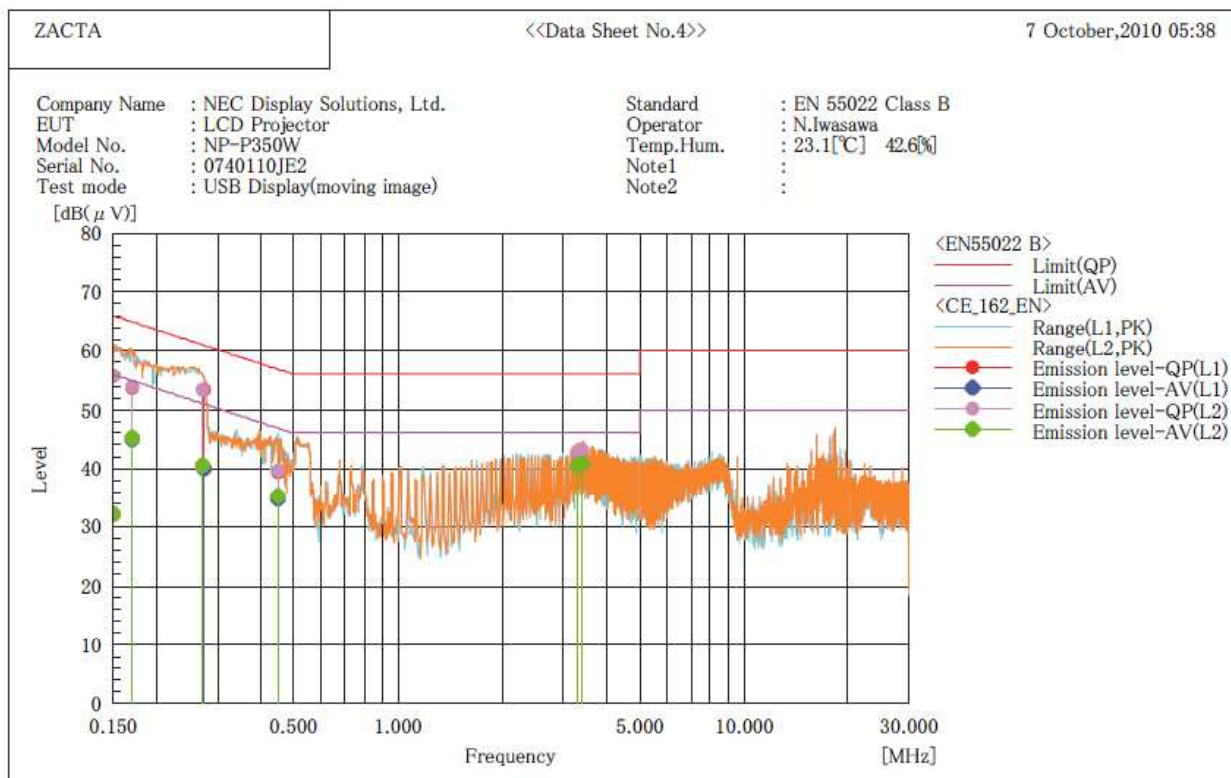


Final Result

--- L1 Phase ---										
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.9	21.1	11.0	55.9	32.1	66.0	56.0	10.1	23.9
2	0.170	43.1	34.1	10.8	53.9	44.9	65.0	55.0	11.1	10.1
3	0.272	43.1	30.3	10.3	53.4	40.6	61.1	51.1	7.7	10.5
4	0.451	29.7	25.2	9.7	39.4	34.9	56.9	46.9	17.5	12.0
5	3.328	33.0	29.9	9.8	42.8	39.7	56.0	46.0	13.2	6.3
6	3.384	33.1	30.4	9.8	42.9	40.2	56.0	46.0	13.1	5.8

--- L2 Phase ---										
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	45.0	21.1	11.0	56.0	32.1	66.0	56.0	10.0	23.9
2	0.170	43.3	34.5	10.9	54.2	45.4	65.0	55.0	10.8	9.6
3	0.271	43.0	30.5	10.3	53.3	40.8	61.1	51.1	7.8	10.3
4	0.451	30.1	25.8	9.7	39.8	35.5	56.9	46.9	17.1	11.4
5	3.328	33.2	30.5	9.8	43.0	40.3	56.0	46.0	13.0	5.7
6	3.385	33.2	30.3	9.8	43.0	40.1	56.0	46.0	13.0	5.9

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

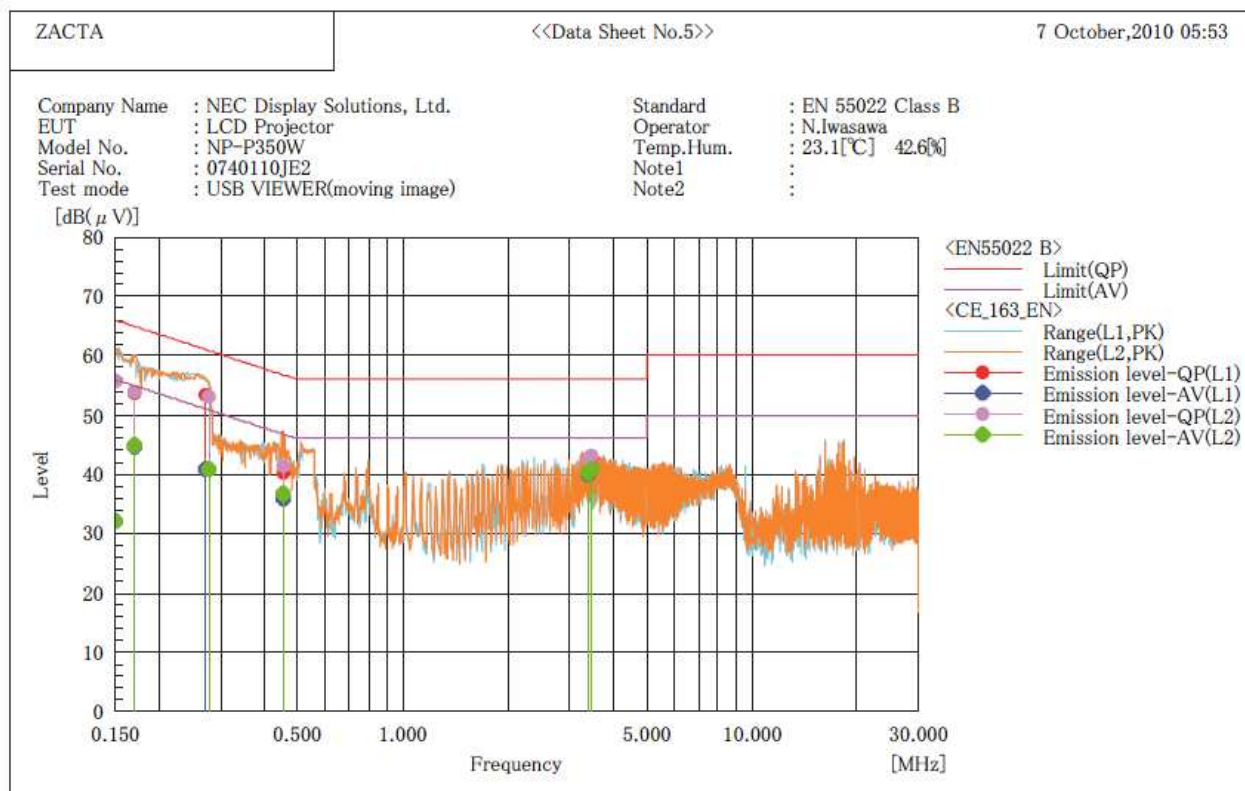
--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.8	21.1	11.0	55.8	32.1	66.0	56.0	10.2	23.9
2	0.170	42.9	34.1	10.8	53.7	44.9	65.0	55.0	11.3	10.1
3	0.275	43.1	29.6	10.3	53.4	39.9	61.0	51.0	7.6	11.1
4	0.451	29.6	24.9	9.7	39.3	34.6	56.9	46.9	17.6	12.3
5	3.328	33.0	30.8	9.8	42.8	40.6	56.0	46.0	13.2	5.4
6	3.384	33.3	31.1	9.8	43.1	40.9	56.0	46.0	12.9	5.1

--- L2 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.9	21.1	11.0	55.9	32.1	66.0	56.0	10.1	23.9
2	0.170	43.1	34.5	10.9	54.0	45.4	65.0	55.0	11.0	9.6
3	0.272	43.0	30.4	10.3	53.3	40.7	61.1	51.1	7.8	10.4
4	0.451	30.1	25.5	9.7	39.8	35.2	56.9	46.9	17.1	11.7
5	3.329	33.2	30.9	9.8	43.0	40.7	56.0	46.0	13.0	5.3
6	3.384	33.5	31.2	9.8	43.3	41.0	56.0	46.0	12.7	5.0

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>

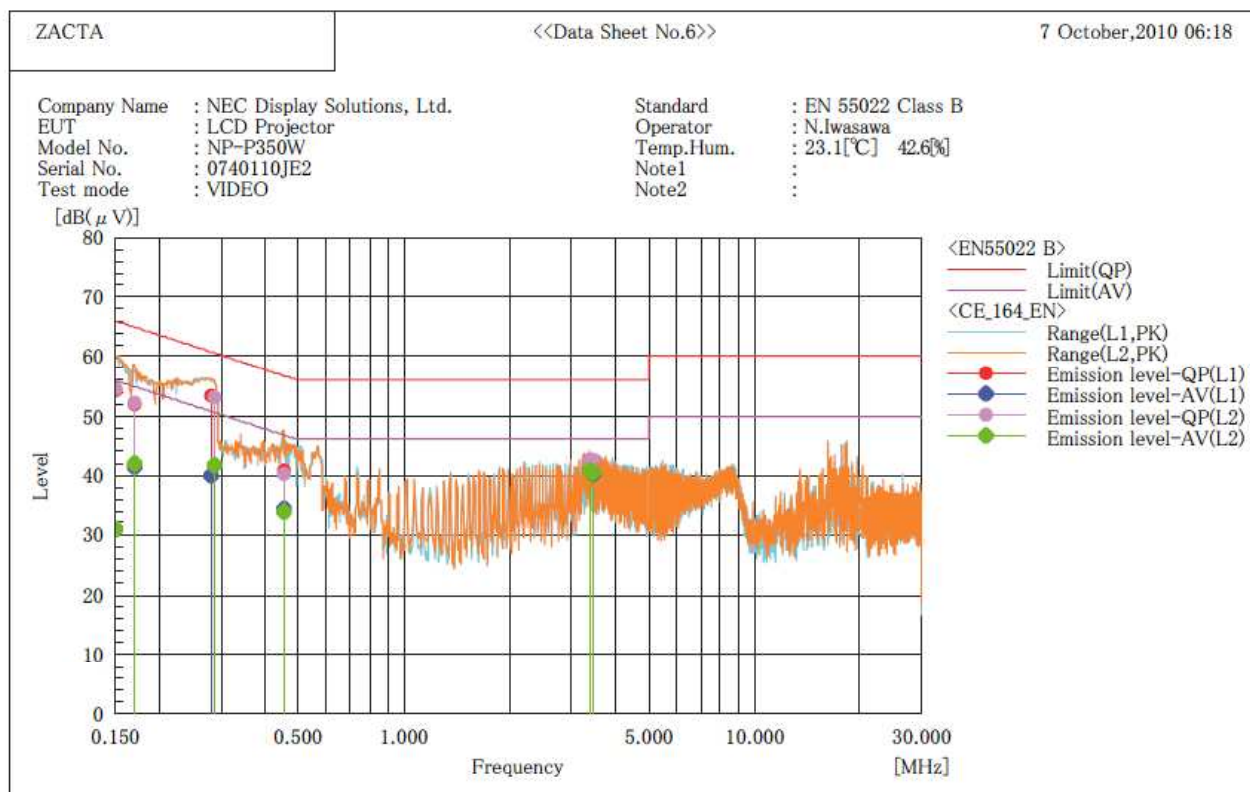


Final Result

--- L1 Phase ---										
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.8	21.0	11.0	55.8	32.0	66.0	56.0	10.2	24.0
2	0.170	42.9	33.9	10.8	53.7	44.7	65.0	55.0	11.3	10.3
3	0.273	43.0	30.5	10.3	53.3	40.8	61.0	51.0	7.7	10.2
4	0.452	30.6	26.1	9.7	40.3	35.8	56.8	46.8	16.5	11.0
5	3.390	32.7	30.3	9.8	42.5	40.1	56.0	46.0	13.5	5.9
6	3.447	33.0	31.0	9.8	42.8	40.8	56.0	46.0	13.2	5.2

--- L2 Phase ---										
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	44.9	21.1	11.0	55.9	32.1	66.0	56.0	10.1	23.9
2	0.170	43.0	34.2	10.9	53.9	45.1	65.0	55.0	11.1	9.9
3	0.277	42.9	30.5	10.3	53.2	40.8	60.9	50.9	7.7	10.1
4	0.452	31.7	27.1	9.7	41.4	36.8	56.8	46.8	15.4	10.0
5	3.390	32.9	30.4	9.8	42.7	40.2	56.0	46.0	13.3	5.8
6	3.447	33.3	31.1	9.8	43.1	40.9	56.0	46.0	12.9	5.1

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

--- L1 Phase ---

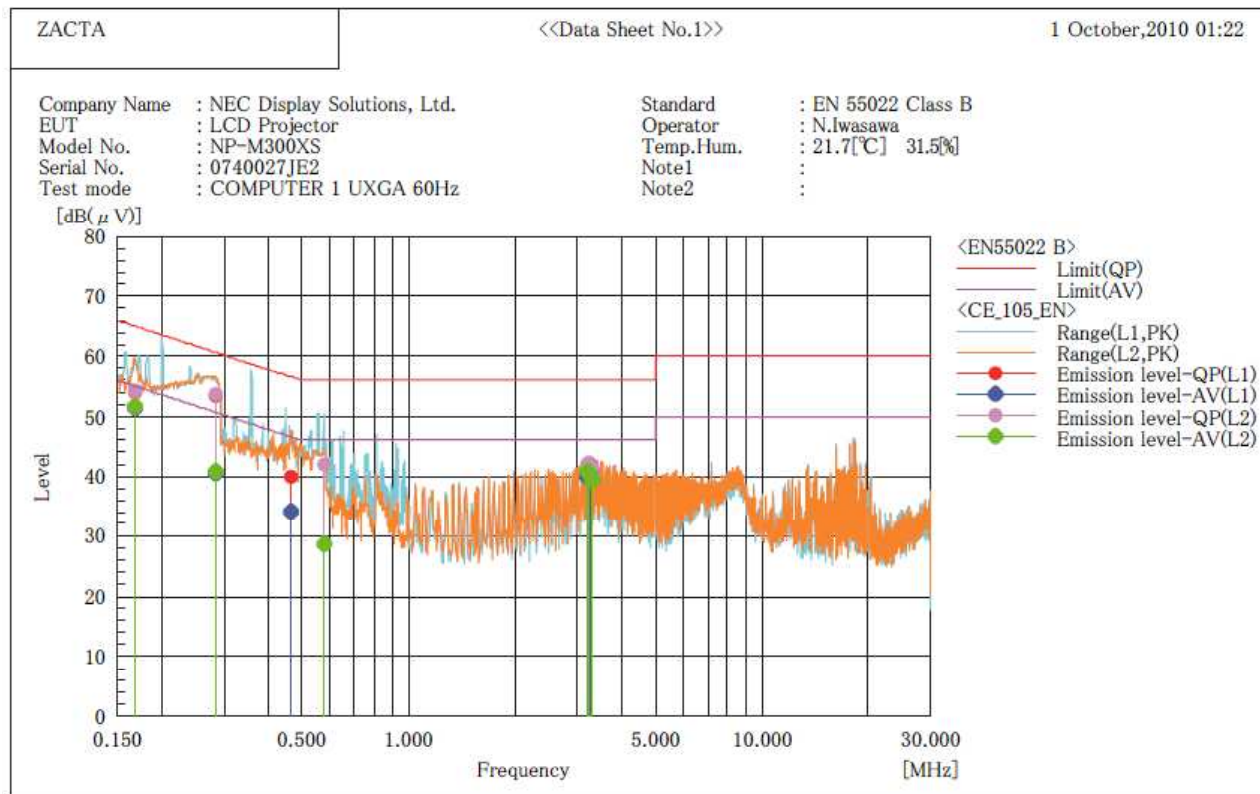
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	43.4	19.9	11.0	54.4	30.9	66.0	56.0	11.6	25.1
2	0.170	41.3	30.8	10.8	52.1	41.6	65.0	55.0	12.9	13.4
3	0.281	43.0	29.8	10.3	53.3	40.1	60.8	50.8	7.5	10.7
4	0.453	31.2	24.8	9.7	40.9	34.5	56.8	46.8	15.9	12.3
5	3.393	32.7	31.0	9.8	42.5	40.8	56.0	46.0	13.5	5.2
6	3.450	32.6	30.6	9.8	42.4	40.4	56.0	46.0	13.6	5.6

--- L2 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.150	43.5	20.0	11.0	54.5	31.0	66.0	56.0	11.5	25.0
2	0.170	41.5	31.1	10.9	52.4	42.0	65.0	55.0	12.6	13.0
3	0.286	43.0	31.6	10.2	53.2	41.8	60.6	50.6	7.4	8.8
4	0.455	30.5	24.3	9.7	40.2	34.0	56.8	46.8	16.6	12.8
5	3.393	32.9	31.2	9.8	42.7	41.0	56.0	46.0	13.3	5.0
6	3.450	32.9	30.8	9.8	42.7	40.6	56.0	46.0	13.3	5.4

[NP-M300XS]

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

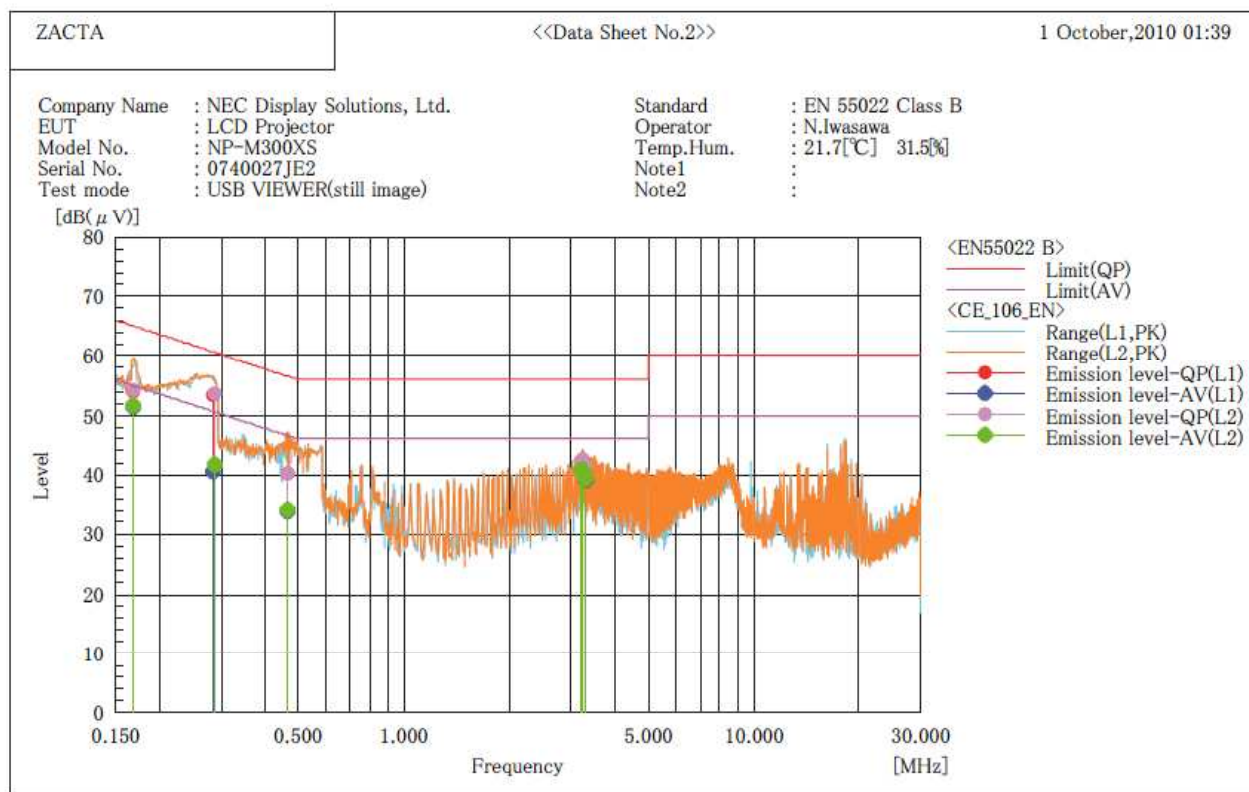
--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.168	43.1	40.6	10.9	54.0	51.5	65.1	55.1	11.1	3.6
2	0.283	43.2	30.5	10.2	53.4	40.7	60.7	50.7	7.3	10.0
3	0.466	30.3	24.4	9.7	40.0	34.1	56.6	46.6	16.6	12.5
4	3.202	31.7	30.3	9.8	41.5	40.1	56.0	46.0	14.5	5.9
5	3.262	32.1	31.2	9.8	41.9	41.0	56.0	46.0	14.1	5.0
6	3.318	31.3	29.7	9.8	41.1	39.5	56.0	46.0	14.9	6.5

--- L2 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c. f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]
1	0.169	43.3	40.8	10.9	54.2	51.7	65.0	55.0	10.8	3.3
2	0.283	43.4	30.6	10.3	53.7	40.9	60.7	50.7	7.0	9.8
3	0.575	32.4	18.9	9.7	42.1	28.6	56.0	46.0	13.9	17.4
4	3.196	32.3	31.0	9.8	42.1	40.8	56.0	46.0	13.9	5.2
5	3.254	32.5	30.9	9.8	42.3	40.7	56.0	46.0	13.7	5.3
6	3.312	31.7	29.5	9.8	41.5	39.3	56.0	46.0	14.5	6.7

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

--- L1 Phase ---

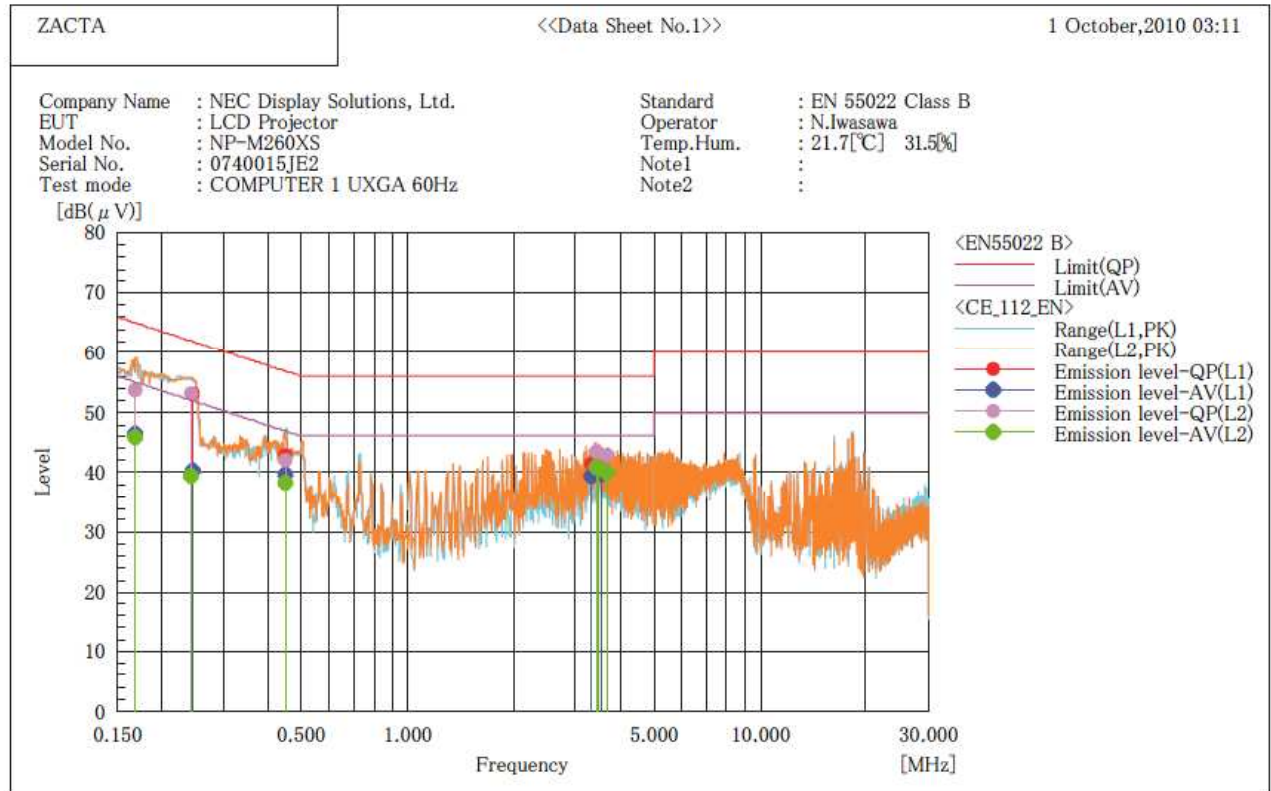
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.169	43.0	40.5	10.9	53.9	51.4	65.0	55.0	11.1	3.6
2	0.283	43.2	30.3	10.2	53.4	40.5	60.7	50.7	7.3	10.2
3	0.463	30.5	24.2	9.7	40.2	33.9	56.6	46.6	16.4	12.7
4	3.195	32.6	31.1	9.8	42.4	40.9	56.0	46.0	13.6	5.1
5	3.253	32.7	31.2	9.8	42.5	41.0	56.0	46.0	13.5	5.0
6	3.311	31.4	29.3	9.8	41.2	39.1	56.0	46.0	14.8	6.9

--- L2 Phase ---

No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.169	43.3	40.7	10.9	54.2	51.6	65.0	55.0	10.8	3.4
2	0.286	43.4	31.5	10.2	53.6	41.7	60.6	50.6	7.0	8.9
3	0.464	30.7	24.5	9.7	40.4	34.2	56.6	46.6	16.2	12.4
4	3.195	32.6	31.2	9.8	42.4	41.0	56.0	46.0	13.6	5.0
5	3.253	32.7	31.2	9.8	42.5	41.0	56.0	46.0	13.5	5.0
6	3.311	31.7	29.5	9.8	41.5	39.3	56.0	46.0	14.5	6.7

[NP-M260XS]

***** CONDUCTED EMISSION at MAINS PORT *****
 << Test site 3 >>



Final Result

--- L1 Phase ---										
No.	Frequency	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin
	[MHz]	QP	AV		QP	AV	QP	AV	QP	AV
		[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.169	42.9	35.5	10.9	53.8	46.4	65.0	55.0	11.2	8.6
2	0.245	42.6	29.8	10.4	53.0	40.2	61.9	51.9	8.9	11.7
3	0.450	33.1	30.0	9.7	42.8	39.7	56.9	46.9	14.1	7.2
4	3.318	31.7	29.6	9.8	41.5	39.4	56.0	46.0	14.5	6.6
5	3.486	32.6	30.6	9.8	42.4	40.4	56.0	46.0	13.6	5.6
6	3.542	32.0	29.8	9.8	41.8	39.6	56.0	46.0	14.2	6.4

--- L2 Phase ---										
No.	Frequency	Reading	Reading	c. f	Result	Result	Limit	Limit	Margin	Margin
	[MHz]	QP	AV		QP	AV	QP	AV	QP	AV
		[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	0.168	42.8	35.0	10.9	53.7	45.9	65.1	55.1	11.4	9.2
2	0.242	42.7	28.8	10.5	53.2	39.3	62.0	52.0	8.8	12.7
3	0.450	32.3	28.6	9.7	42.0	38.3	56.9	46.9	14.9	8.6
4	3.427	33.7	31.2	9.8	43.5	41.0	56.0	46.0	12.5	5.0
5	3.483	33.4	31.1	9.8	43.2	40.9	56.0	46.0	12.8	5.1
6	3.652	33.2	30.1	9.8	43.0	39.9	56.0	46.0	13.0	6.1

5. Conducted emission at telecommunication port test information

5.1 Measurement procedure

Test was applied by following conditions.

Test method:	EN 55022
Frequency range:	0.15MHz to 30MHz
Test place:	Open area test site
EUT was placed on:	Wooden table / 2.3m(W) × 1.0m(D) × 0.8m(H)
Vertical Metal Reference Plane:	2.4m (W) × 2.7 m(H) 0.4m away from EUT
Horizontal Metal Reference Plane:	40.0m x 7.8m

Test receiver setting

- Detector: Quasi-peak, Average
- Bandwidth: 9 kHz

EUT is connected to Impedance Stabilization Network (ISN) with characteristics;

Common mode termination impedance: $150\Omega \pm 20\Omega$,

☐ Category 6

$$LCL (dB) = 75 - 10 \log_{10} [1 + (f/5)^2] \text{ dB}$$

($\pm 3\text{dB}$ for $f < 2\text{MHz}$, $-3\text{dB}/+6\text{dB}$ for f between 2MHz and 30MHz)

☒ Category 5

$$LCL (dB) = 65 - 10 \log_{10} [1 + (f/5)^2] \text{ dB}$$

($\pm 3\text{dB}$ for $f < 2\text{MHz}$, $-3\text{dB}/+4.5\text{dB}$ for f between 2MHz and 30MHz)

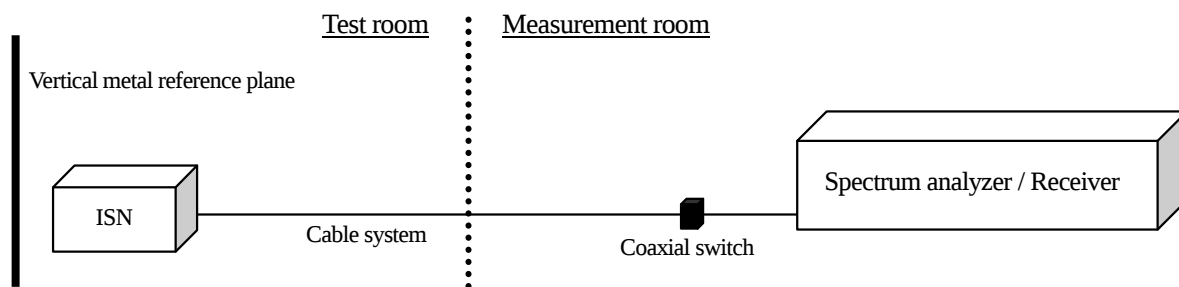
☐ Category 3

$$LCL (dB) = 55 - 10 \log_{10} [1 + (f/5)^2] \text{ dB } (\pm 3\text{dB})$$

EUT and peripherals are connected to 50Ω/50μH Artificial Mains Network (AMN) which are connected to reference ground plane, and is placed 80cm away from EUT. AMN for peripheral is terminated in 50Ω. Excess of AC power cable is bundled in center.

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Maximum emission configuration is determined by manipulating the EUT, peripherals, interconnecting cables. Then, emission measurements are performed with test receiver in above setting to each phase of the mains port. Sufficient time for EUT, peripherals and test equipment is provided in order for them to warm up to their normal operating condition. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits.

-Test configuration



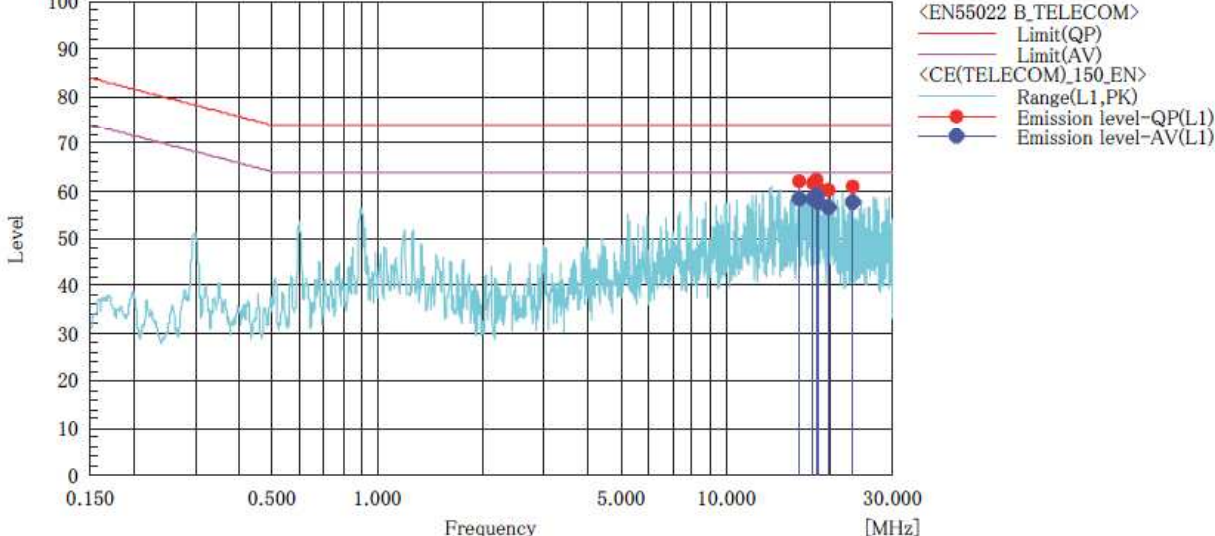
5.2 Calculation method

Emission level = Reading + (ISN factor + Cable system loss)

Margin = Limit - Emission level

[NP-P350W]

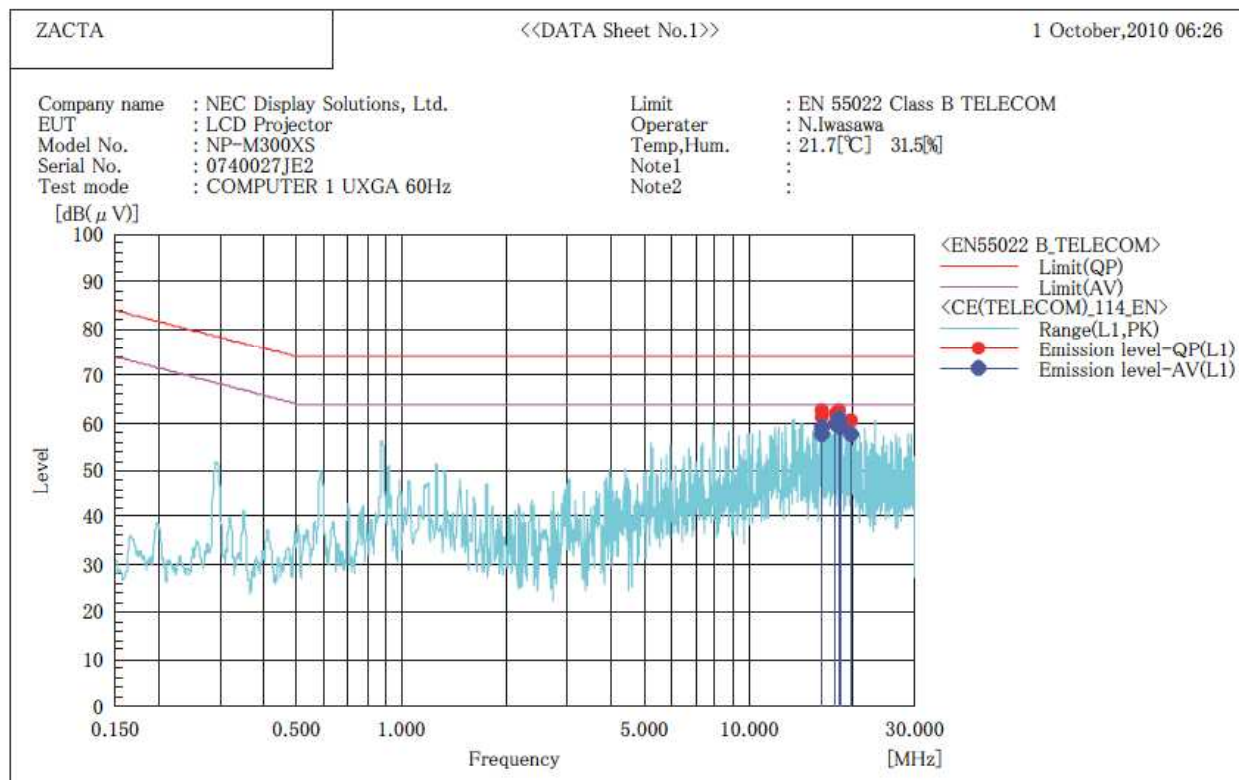
« Test site 3 »



Final Result

L1 Phase										
No.	Frequency	Reading QP	Reading AV	c. f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]
1	16.229	52.0	48.3	10.1	62.1	58.4	74.0	64.0	11.9	5.6
2	17.694	51.3	48.1	10.2	61.5	58.3	74.0	64.0	12.5	5.7
3	18.243	52.1	49.0	10.2	62.3	59.2	74.0	64.0	11.7	4.8
4	18.304	50.4	47.3	10.2	60.6	57.5	74.0	64.0	13.4	6.5
5	19.709	50.0	46.5	10.2	60.2	56.7	74.0	64.0	13.8	7.3
6	23.129	50.5	47.2	10.3	60.8	57.5	74.0	64.0	13.2	6.5

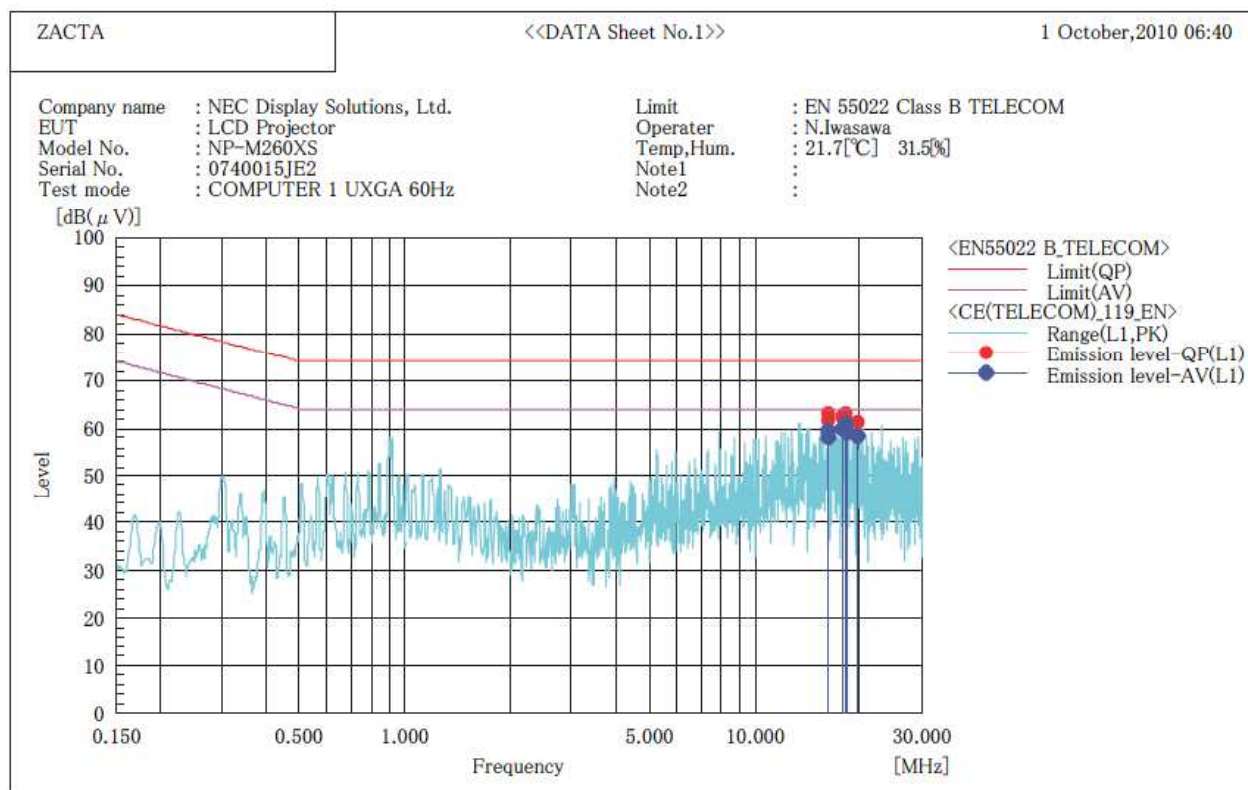
***** CONDUCTED EMISSION at TELECOMMUNICATION PORT *****
 < Test site 3 >



--- L1 Phase ---

No.	LI Phase Frequency	Reading QP [dB (μ V)]	Reading AV [dB (μ V)]	c. f [dB]	Result QP [dB (μ V)]	Result AV [dB (μ V)]	Limit QP [dB (μ V)]	Limit AV [dB (μ V)]	Margin QP [dB]	Margin AV [dB]
1	16.166	51.2	47.5	10.1	61.3	57.6	74.0	64.0	12.7	6.4
2	16.227	52.6	49.0	10.1	62.7	59.1	74.0	64.0	11.3	4.9
3	17.692	51.7	49.5	10.2	61.9	59.7	74.0	64.0	12.1	4.3
4	18.241	52.6	50.7	10.2	62.8	60.9	74.0	64.0	11.2	3.1
5	18.303	50.9	48.8	10.2	61.1	59.0	74.0	64.0	12.9	5.0
6	19.707	50.5	47.5	10.2	60.7	57.7	74.0	64.0	13.3	6.3

***** CONDUCTED EMISSION at TELECOMMUNICATION PORT *****
 << Test site 3 >>



— L1 Phase —

L1 Phase		Reading		c. f	Result		Limit		Margin	
No.	Frequency	QP	AV		QP	AV	QP	AV	QP	AV
	[MHz]	[dB(μ V)]	[dB(μ V)]	[dB]	[dB(μ V)]	[dB(μ V)]	[dB(μ V)]	[dB(μ V)]	[dB]	[dB]
1	16.165	51.5	48.0	10.1	61.6	58.1	74.0	64.0	12.4	5.9
2	16.227	52.9	49.4	10.1	63.0	59.5	74.0	64.0	11.0	4.5
3	17.692	52.1	49.8	10.2	62.3	60.0	74.0	64.0	11.7	4.0
4	18.241	53.0	50.7	10.2	63.2	60.9	74.0	64.0	10.8	3.1
5	18.302	51.0	48.8	10.2	61.2	59.0	74.0	64.0	12.8	5.0
6	19.707	51.0	48.1	10.2	61.2	58.3	74.0	64.0	12.8	5.7

6. Radiated emission test information (Below 1GHz)

6.1 Measurement procedure

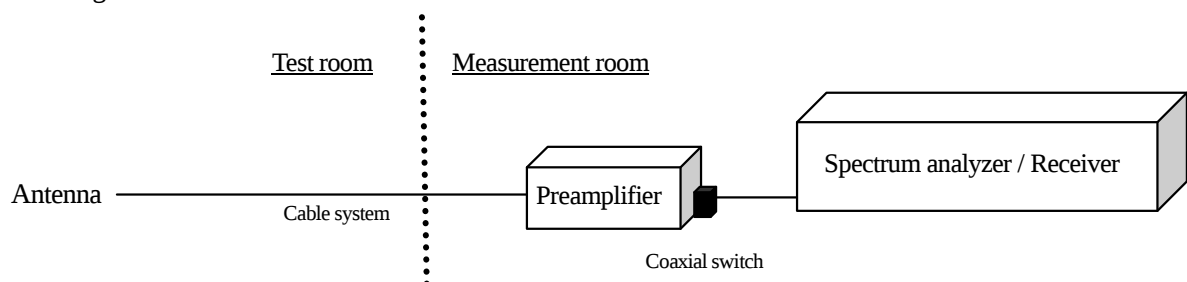
Test was applied by following conditions.

Test method:	EN 55022
Frequency range:	30MHz to 1000MHz
Test place:	Open area test site
EUT was placed on:	Wooden table / 2.3m(W) × 1.0m(D) × 0.8m(H)
Antenna distance:	10m

Test receiver setting	
- Detector:	Quasi-peak
- Bandwidth:	120kHz

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Then, emission measurements are performed with test receiver in above setting. In order to find the maximum emissions, antenna is adjusted between 1m to 4m in height and varied its polarization (horizontal and vertical), and EUT azimuth is also varied by rotating turntable 0 to 360 degrees. Sufficient time for EUT, peripherals and test equipment is provided in order for them to warm up to their normal operating condition.

- Test configuration



6.2 Calculation method

$$\text{Emission level} = \text{Reading} + (\text{Ant. factor} + \text{Cable system loss} - \text{Amp. Gain})$$

$$\text{Margin} = \text{Limit} - \text{Emission level}$$

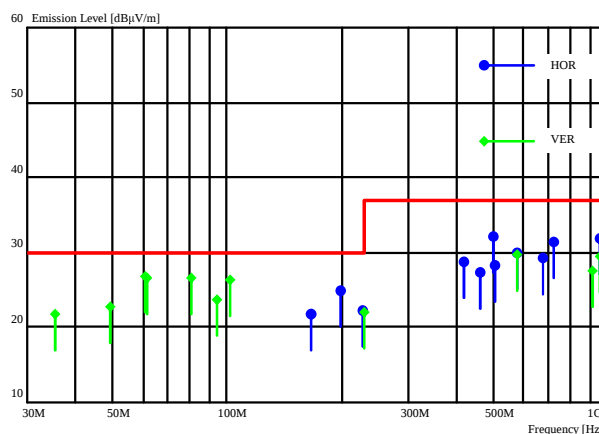
6.3 Test data

[NP-P350W]

***** RADIATED EMISSION *****

Sheet number : 1

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/10/1
 Test site : 3
 Temperature [°C] : 22.7
 Humidity [%] : 29.3
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-P350W
 Serial number : 0740110JE2
 Test mode : COMPUTER 1 UXGA 60Hz
 Comment :



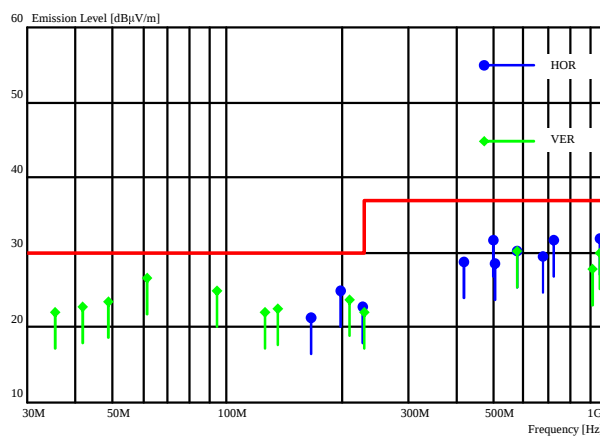
Antenna Pol.	Height	Table Radian	Reading Frequency	Level	Factor	Emission Level	Limit	Margin	Comment
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	80	35.28	31.9	-10.2	21.7	30.0	8.3	
VER	1.0	115	49.13	37.7	-15.0	22.7	30.0	7.3	
VER	1.0	80	60.75	45.0	-18.1	26.9	30.0	3.1	*
VER	1.0	80	61.74	44.9	-18.2	26.7	30.0	3.3	
VER	1.5	150	81.00	45.6	-19.0	26.6	30.0	3.4	
VER	1.0	150	94.01	40.6	-16.8	23.8	30.0	6.2	
VER	1.0	180	101.25	41.8	-15.4	26.4	30.0	3.6	
HOR	4.0	30	165.68	31.2	-9.5	21.7	30.0	8.3	
HOR	4.0	325	199.51	33.2	-8.4	24.8	30.0	5.2	
HOR	4.0	45	227.53	30.2	-7.9	22.3	30.0	7.7	
VER	1.0	15	229.10	29.8	-7.9	21.9	30.0	8.1	
HOR	2.0	100	420.84	36.1	-7.4	28.7	37.0	8.3	
HOR	1.8	215	465.52	33.2	-5.9	27.3	37.0	9.7	
HOR	1.6	35	500.00	37.3	-5.3	32.0	37.0	5.0	
HOR	1.7	195	505.06	33.5	-5.3	28.2	37.0	8.8	
HOR	1.4	30	577.93	33.8	-3.8	30.0	37.0	7.0	
VER	2.6	105	578.72	33.4	-3.8	29.6	37.0	7.4	
HOR	1.2	195	672.98	31.4	-2.1	29.3	37.0	7.7	
HOR	1.3	180	720.00	32.8	-1.3	31.5	37.0	5.5	
VER	3.0	15	911.86	25.9	1.7	27.6	37.0	9.4	
HOR	1.0	105	960.00	29.0	2.9	31.9	37.0	5.1	
VER	1.6	30	960.00	26.6	2.9	29.5	37.0	7.5	
HOR	1.0	20	1000.00	28.8	4.2	33.0	37.0	4.0	
VER	1.6	15	1000.00	28.0	4.2	32.2	37.0	4.8	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

***** RADIATED EMISSION *****

Sheet number : 2

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/10/1
 Test site : 3
 Temperature [°C] : 22.7
 Humidity [%] : 29.3
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-P350W
 Serial number : 0740110JE2
 Test mode : COMPUTER 2 WXGA 60Hz
 Comment :



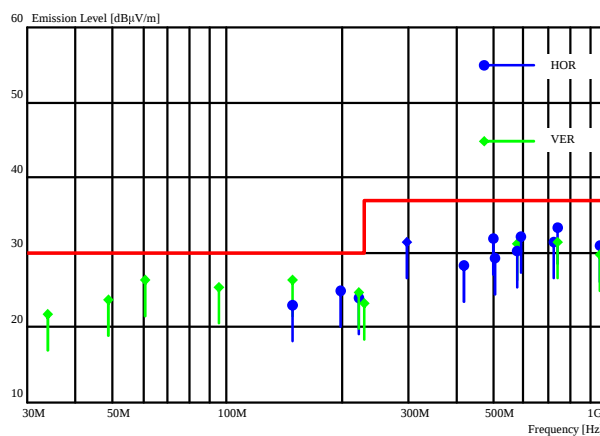
Antenna		Table	Reading		Factor	Emission	Limit	Margin	Comment
Pol.	Height	Radian	Frequency	Level		Level			
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	105	35.51	32.1	-10.2	21.9	30.0	8.1	
VER	1.0	250	41.72	35.0	-12.3	22.7	30.0	7.3	
VER	1.0	115	49.00	38.4	-15.0	23.4	30.0	6.6	
VER	1.0	80	61.59	44.9	-18.2	26.7	30.0	3.3	*
VER	1.0	135	94.01	41.7	-16.8	24.9	30.0	5.1	
VER	1.0	105	125.18	33.9	-11.9	22.0	30.0	8.0	
VER	1.0	125	135.63	33.6	-11.2	22.4	30.0	7.6	
HOR	4.0	45	165.68	30.7	-9.5	21.2	30.0	8.8	
HOR	4.0	20	199.50	33.4	-8.4	25.0	30.0	5.0	
VER	1.0	150	210.34	31.8	-8.1	23.7	30.0	6.3	
HOR	4.0	40	227.51	30.7	-7.9	22.8	30.0	7.2	
VER	1.0	15	229.10	29.8	-7.9	21.9	30.0	8.1	
HOR	2.1	115	420.85	36.1	-7.4	28.7	37.0	8.3	
HOR	1.6	45	500.00	37.0	-5.3	31.7	37.0	5.3	
HOR	1.8	220	505.06	33.7	-5.3	28.4	37.0	8.6	
HOR	1.6	30	577.93	34.0	-3.8	30.2	37.0	6.8	
VER	2.6	115	578.77	33.9	-3.8	30.1	37.0	6.9	
HOR	1.3	200	672.98	31.5	-2.1	29.4	37.0	7.6	
HOR	1.3	185	720.00	32.9	-1.3	31.6	37.0	5.4	
VER	3.1	25	911.86	26.0	1.7	27.7	37.0	9.3	
HOR	1.0	105	960.00	28.9	2.9	31.8	37.0	5.2	
VER	1.7	40	960.00	27.0	2.9	29.9	37.0	7.1	
HOR	1.0	25	1000.00	29.0	4.2	33.2	37.0	3.8	
VER	1.5	10	1000.00	28.1	4.2	32.3	37.0	4.7	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

***** RADIATED EMISSION *****

Sheet number : 3

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/10/4
 Test site : 3
 Temperature [°C] : 21.3
 Humidity [%] : 49.1
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-P350W
 Serial number : 0740110JE2
 Test mode : HDMI 1080P 60Hz
 Comment :



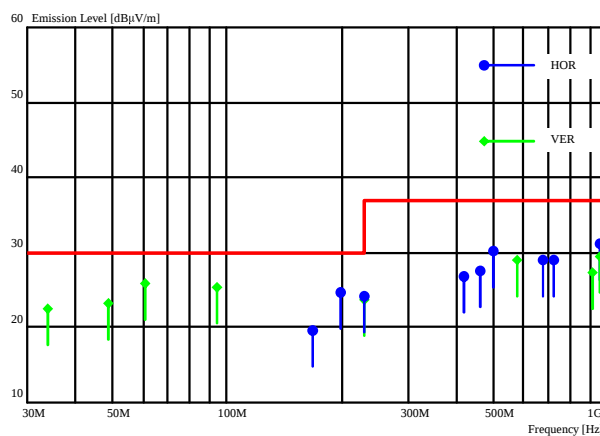
Antenna Pol.	Height	Table Radian	Reading Frequency	Level	Factor	Emission Level	Limit	Margin	Comment
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	65	33.63	31.2	-9.5	21.7	30.0	8.3	
VER	1.0	95	49.05	38.8	-15.0	23.8	30.0	6.2	
VER	1.0	90	60.82	44.5	-18.1	26.4	30.0	3.6	*
VER	1.5	150	95.27	41.9	-16.6	25.3	30.0	4.7	
VER	1.0	120	148.50	36.6	-10.3	26.3	30.0	3.7	
HOR	4.0	100	148.51	33.4	-10.3	23.1	30.0	6.9	
HOR	4.0	20	199.51	33.4	-8.4	25.0	30.0	5.0	
HOR	4.0	35	222.75	31.9	-7.9	24.0	30.0	6.0	
VER	1.0	200	222.75	32.5	-7.9	24.6	30.0	5.4	
VER	1.0	350	229.10	31.1	-7.9	23.2	30.0	6.8	
HOR	2.6	285	297.01	35.8	-4.5	31.3	37.0	5.7	
HOR	2.0	95	420.93	35.6	-7.4	28.2	37.0	8.8	
HOR	1.6	150	500.00	37.2	-5.3	31.9	37.0	5.1	
HOR	1.8	175	505.06	34.6	-5.3	29.3	37.0	7.7	
VER	2.4	100	577.78	35.0	-3.8	31.2	37.0	5.8	
HOR	2.2	80	577.93	34.0	-3.8	30.2	37.0	6.8	
HOR	1.5	30	594.00	35.5	-3.5	32.0	37.0	5.0	
HOR	1.5	175	720.00	32.7	-1.3	31.4	37.0	5.6	
HOR	1.4	130	742.50	34.4	-1.1	33.3	37.0	3.7	
VER	2.3	140	742.50	32.5	-1.1	31.4	37.0	5.6	
HOR	1.0	120	960.00	28.0	2.9	30.9	37.0	6.1	
VER	1.0	85	960.00	26.9	2.9	29.8	37.0	7.2	
HOR	1.0	120	1000.00	28.8	4.2	33.0	37.0	4.0	
VER	1.8	0	1000.00	27.0	4.2	31.2	37.0	5.8	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

***** RADIATED EMISSION *****

Sheet number : 4

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/10/4
 Test site : 3
 Temperature [°C] : 21.3
 Humidity [%] : 49.1
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-P350W
 Serial number : 0740110JE2
 Test mode : USB Display(moving image)
 Comment :



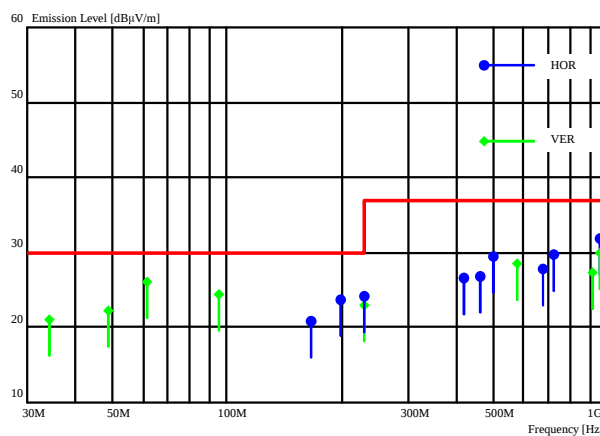
Antenna		Table	Reading		Factor	Emission	Limit	Margin	Comment
Pol.	Height	Radian	Frequency	Level		Level			
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	85	33.81	31.9	-9.5	22.4	30.0	7.6	
VER	1.0	100	48.72	38.0	-14.7	23.3	30.0	6.7	
VER	1.0	100	61.32	44.0	-18.2	25.8	30.0	4.2	*
VER	1.2	135	94.41	42.2	-16.8	25.4	30.0	4.6	
HOR	4.0	35	167.74	29.1	-9.5	19.6	30.0	10.4	
HOR	4.0	5	199.49	33.0	-8.4	24.6	30.0	5.4	
VER	1.0	310	229.10	31.7	-7.9	23.8	30.0	6.2	
HOR	4.0	50	229.12	32.0	-7.9	24.1	30.0	5.9	
HOR	1.9	100	420.86	34.3	-7.4	26.9	37.0	10.1	
HOR	1.8	315	465.50	33.4	-5.9	27.5	37.0	9.5	
HOR	1.9	140	500.00	35.4	-5.3	30.1	37.0	6.9	
VER	2.4	95	577.79	32.7	-3.8	28.9	37.0	8.1	
HOR	1.6	140	672.98	31.1	-2.1	29.0	37.0	8.0	
HOR	1.3	180	720.00	30.3	-1.3	29.0	37.0	8.0	
VER	3.0	30	911.86	25.5	1.7	27.2	37.0	9.8	
HOR	1.0	120	960.00	28.2	2.9	31.1	37.0	5.9	
VER	1.0	85	960.00	26.5	2.9	29.4	37.0	7.6	
HOR	1.0	160	1000.00	28.4	4.2	32.6	37.0	4.4	
VER	1.6	10	1000.00	27.0	4.2	31.2	37.0	5.8	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

***** RADIATED EMISSION *****

Sheet number : 5

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/10/4
 Test site : 3
 Temperature [°C] : 21.3
 Humidity [%] : 49.1
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-P350W
 Serial number : 0740110JE2
 Test mode : USB VIEWER(moving image)
 Comment :



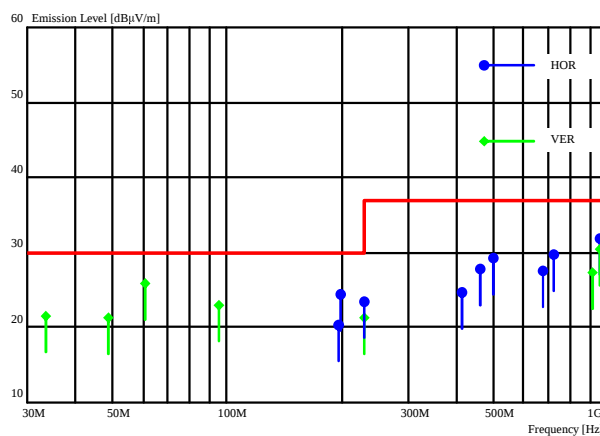
Antenna		Table	Reading		Factor	Emission	Limit	Margin	Comment
Pol.	Height	Radian	Frequency	Level		Level			
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	70	34.11	30.9	-9.8	21.1	30.0	8.9	
VER	1.0	100	49.04	37.3	-15.0	22.3	30.0	7.7	
VER	1.0	90	61.70	44.2	-18.2	26.0	30.0	4.0	*
VER	1.2	150	95.01	41.0	-16.6	24.4	30.0	5.6	
HOR	3.5	35	166.09	30.3	-9.5	20.8	30.0	9.2	
HOR	4.0	45	199.50	32.0	-8.4	23.6	30.0	6.4	
VER	1.0	185	229.10	31.0	-7.9	23.1	30.0	6.9	
HOR	4.0	50	229.11	32.0	-7.9	24.1	30.0	5.9	
HOR	1.9	90	420.86	34.1	-7.4	26.7	37.0	10.3	
HOR	1.8	325	465.50	32.8	-5.9	26.9	37.0	10.1	
HOR	1.7	145	500.00	34.7	-5.3	29.4	37.0	7.6	
VER	2.5	95	577.91	32.4	-3.8	28.6	37.0	8.4	
HOR	1.5	140	672.97	29.9	-2.1	27.8	37.0	9.2	
HOR	1.5	185	720.00	31.1	-1.3	29.8	37.0	7.2	
VER	3.0	30	911.86	25.5	1.7	27.2	37.0	9.8	
HOR	1.0	125	960.00	28.9	2.9	31.8	37.0	5.2	
VER	1.0	95	960.00	27.0	2.9	29.9	37.0	7.1	
HOR	1.0	160	1000.00	28.6	4.2	32.8	37.0	4.2	
VER	1.5	10	1000.00	27.2	4.2	31.4	37.0	5.6	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

***** RADIATED EMISSION *****

Sheet number : 6

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/10/4
 Test site : 3
 Temperature [°C] : 21.3
 Humidity [%] : 49.1
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-P350W
 Serial number : 0740110JE2
 Test mode : VIDEO
 Comment :



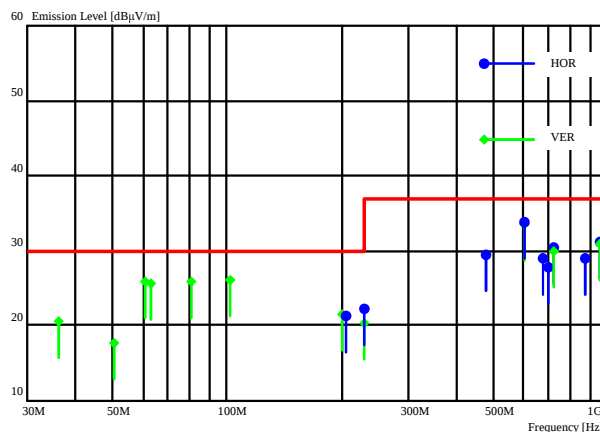
Antenna		Table	Reading		Factor	Emission	Limit	Margin	Comment
Pol.	Height	Radian	Frequency	Level		Level			
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	55	33.53	31.1	-9.5	21.6	30.0	8.4	
VER	1.0	105	48.84	35.9	-14.7	21.2	30.0	8.8	
VER	1.0	105	60.80	43.9	-18.1	25.8	30.0	4.2	*
VER	1.2	145	95.31	39.7	-16.6	23.1	30.0	6.9	
HOR	4.0	15	197.21	28.8	-8.4	20.4	30.0	9.6	
HOR	4.0	15	199.50	32.8	-8.4	24.4	30.0	5.6	
VER	1.0	180	229.09	29.2	-7.9	21.3	30.0	8.7	
HOR	4.0	45	229.10	31.3	-7.9	23.4	30.0	6.6	
HOR	1.9	95	412.79	32.0	-7.4	24.6	37.0	12.4	
HOR	1.9	340	465.50	33.7	-5.9	27.8	37.0	9.2	
HOR	1.6	145	500.00	34.5	-5.3	29.2	37.0	7.8	
HOR	1.5	135	672.97	29.6	-2.1	27.5	37.0	9.5	
HOR	1.5	185	720.00	31.1	-1.3	29.8	37.0	7.2	
VER	2.9	30	911.86	25.5	1.7	27.2	37.0	9.8	
HOR	1.0	125	960.00	28.9	2.9	31.8	37.0	5.2	
VER	1.0	95	960.00	27.6	2.9	30.5	37.0	6.5	
HOR	1.0	150	1000.00	28.5	4.2	32.7	37.0	4.3	
VER	1.4	10	1000.00	27.3	4.2	31.5	37.0	5.5	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

[NP-M300XS]******* RADIATED EMISSION *******

Sheet number : 1

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/9/29
 Test site : 3
 Temperature [°C] : 21.9
 Humidity [%] : 31.8
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-M300XS
 Serial number : 0740027JE2
 Test mode : COMPUTER 1 UXGA 60Hz
 Comment :



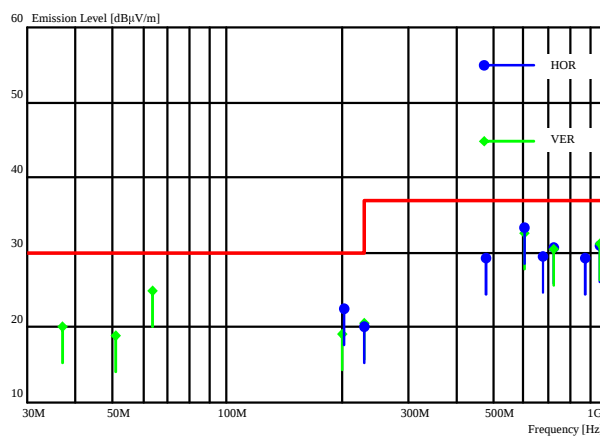
Antenna Pol.	Height	Table Radian	Reading Frequency	Level	Factor	Emission Level	Limit	Margin	Comment
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	340	36.29	31.1	-10.5	20.6	30.0	9.4	
VER	1.0	105	50.40	33.0	-15.4	17.6	30.0	12.4	
VER	1.0	120	60.76	44.0	-18.1	25.9	30.0	4.1	
VER	1.0	115	62.88	44.0	-18.4	25.6	30.0	4.4	
VER	1.9	175	81.00	44.8	-19.0	25.8	30.0	4.2	
VER	1.0	135	101.25	41.6	-15.4	26.2	30.0	3.8	
VER	1.0	10	199.97	30.0	-8.4	21.6	30.0	8.4	
HOR	4.0	155	206.30	29.7	-8.3	21.4	30.0	8.6	
VER	1.0	325	229.09	28.3	-7.9	20.4	30.0	9.6	
HOR	4.0	50	229.11	30.2	-7.9	22.3	30.0	7.7	
HOR	1.8	155	480.00	35.1	-5.7	29.4	37.0	7.6	
VER	2.8	25	607.08	36.8	-3.3	33.5	37.0	3.5	
HOR	1.6	345	607.90	37.0	-3.3	33.7	37.0	3.3	*
HOR	1.8	120	672.97	31.0	-2.1	28.9	37.0	8.1	
HOR	1.4	85	701.60	29.2	-1.5	27.7	37.0	9.3	
HOR	1.6	190	720.00	31.8	-1.3	30.5	37.0	6.5	
VER	3.0	15	720.00	31.2	-1.3	29.9	37.0	7.1	
HOR	1.4	150	874.86	27.8	1.3	29.1	37.0	7.9	
HOR	1.0	130	960.00	28.3	2.9	31.2	37.0	5.8	
VER	1.3	95	960.00	28.0	2.9	30.9	37.0	6.1	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

***** RADIATED EMISSION *****

Sheet number : 2

Standard : EN 55022
Class : B
Distance [m] : 10
Date of test : 2010/9/29
Test site : 3
Temperature [°C] : 21.9
Humidity [%] : 31.8
Operator : N.Iwasawa
Company name : NEC Display Solutions, Ltd.
EUT : LCD Projector
Model number : NP-M300XS
Serial number : 0740027JE2
Test mode : USB VIEWER(still image)
Comment :



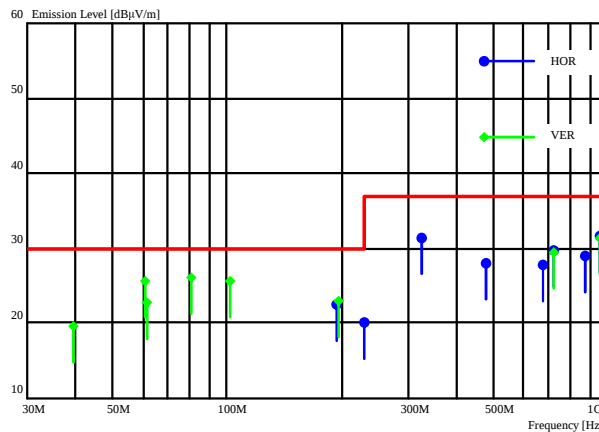
Antenna		Table	Reading		Factor	Emission	Limit	Margin	Comment
Pol.	Height	Radian	Frequency	Level		Level			
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	245	36.90	30.7	-10.5	20.2	30.0	9.8	
VER	1.0	110	51.11	34.8	-15.8	19.0	30.0	11.0	
VER	1.0	100	63.83	43.4	-18.5	24.9	30.0	5.1	
VER	1.0	350	199.97	27.6	-8.4	19.2	30.0	10.8	
HOR	4.0	35	202.50	30.7	-8.3	22.4	30.0	7.6	
VER	1.0	50	229.10	28.5	-7.9	20.6	30.0	9.4	
HOR	4.0	75	229.11	28.1	-7.9	20.2	30.0	9.8	
HOR	1.8	145	480.00	35.0	-5.7	29.3	37.0	7.7	
VER	3.0	15	607.16	35.8	-3.3	32.5	37.0	4.5	
HOR	1.4	195	607.99	36.5	-3.3	33.2	37.0	3.8	*
HOR	1.8	145	672.98	31.5	-2.1	29.4	37.0	7.6	
HOR	1.4	195	720.00	32.0	-1.3	30.7	37.0	6.3	
VER	2.4	35	720.00	31.8	-1.3	30.5	37.0	6.5	
HOR	1.2	130	874.86	28.0	1.3	29.3	37.0	7.7	
HOR	1.0	125	960.00	28.0	2.9	30.9	37.0	6.1	
VER	1.5	90	960.00	28.3	2.9	31.2	37.0	5.8	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

[NP-M260XS]******* RADIATED EMISSION *******

Sheet number : 1

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2010/9/28
 Test site : 3
 Temperature [°C] : 22.4
 Humidity [%] : 49.6
 Operator : N.Iwasawa
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-M260XS
 Serial number : 0740015JE2
 Test mode : COMPUTER 1 UXGA 60Hz
 Comment :



Antenna Pol.	Height	Table Radian	Reading Frequency	Reading Level	Factor	Emission Level	Limit	Margin	Comment
HOR/VER	[m]	[Deg.]	[MHz]	[dBμV]	[dB/m]	[dBμV/m]	[dBμV/m]	[dB]	
VER	1.0	250	39.57	31.0	-11.5	19.5	30.0	10.5	
VER	1.0	110	60.76	43.8	-18.1	25.7	30.0	4.3	
VER	1.0	65	61.83	41.0	-18.2	22.8	30.0	7.2	
VER	1.6	155	81.00	45.1	-19.0	26.1	30.0	3.9	*
VER	1.0	145	101.25	41.0	-15.4	25.6	30.0	4.4	
HOR	4.0	55	194.01	31.0	-8.5	22.5	30.0	7.5	
VER	1.0	0	197.52	31.4	-8.4	23.0	30.0	7.0	
HOR	4.0	285	229.11	28.0	-7.9	20.1	30.0	9.9	
HOR	2.4	100	323.25	41.3	-9.8	31.5	37.0	5.5	
HOR	1.7	155	480.00	33.8	-5.7	28.1	37.0	8.9	
HOR	1.3	100	672.97	30.0	-2.1	27.9	37.0	9.1	
HOR	1.5	215	720.00	31.0	-1.3	29.7	37.0	7.3	
VER	2.6	35	720.00	30.9	-1.3	29.6	37.0	7.4	
HOR	1.4	155	874.86	27.6	1.3	28.9	37.0	8.1	
HOR	1.0	115	960.00	28.7	2.9	31.6	37.0	5.4	
VER	1.4	95	960.00	28.4	2.9	31.3	37.0	5.7	

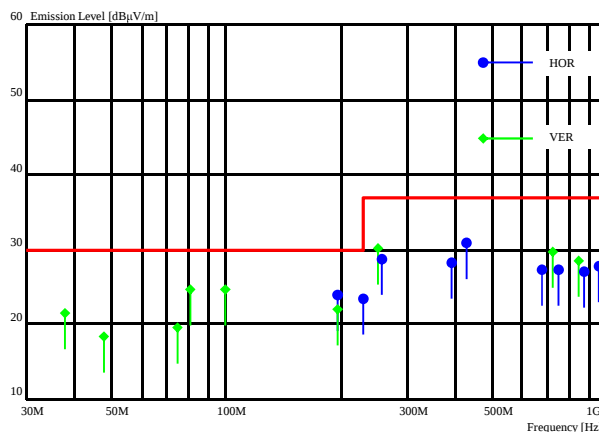
* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F3#043

[NP-M260WS: With modified panel]

***** RADIATED EMISSION *****

Sheet number : 1

Standard : EN 55022
 Class : B
 Distance [m] : 10
 Date of test : 2011/6/27
 Test site : 2
 Temperature [°C] : 21.5
 Humidity [%] : 70.0
 Operator : M.Takeda
 Company name : NEC Display Solutions, Ltd.
 EUT : LCD Projector
 Model number : NP-M260WS
 Serial number : 1640001FP
 Test mode : COMPUTER 1 UXGA 60Hz
 Comment :



Antenna Pol.	Height [m]	Table Radian [Deg.]	Reading Frequency [MHz]	Reading Level [dBμV]	Factor [dB/m]	Emission Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Comment
HOR/VER									
VER	1.0	275	37.96	32.0	-10.5	21.5	30.0	8.5	
VER	1.0	95	47.50	32.4	-14.0	18.4	30.0	11.6	
VER	1.5	140	74.16	38.6	-18.9	19.7	30.0	10.3	
VER	1.8	145	81.00	43.3	-18.7	24.6	30.0	5.4	
VER	1.0	100	99.80	40.2	-15.5	24.7	30.0	5.3	*
HOR	4.0	55	196.60	31.7	-7.8	23.9	30.0	6.1	
VER	1.0	185	196.61	29.7	-7.8	21.9	30.0	8.1	
HOR	3.6	235	229.10	30.7	-7.3	23.4	30.0	6.6	
VER	1.0	200	250.00	36.9	-6.8	30.1	37.0	6.9	
HOR	3.6	30	256.95	35.3	-6.6	28.7	37.0	8.3	
HOR	2.3	350	390.18	34.6	-6.3	28.3	37.0	8.7	
HOR	2.4	20	427.33	37.7	-6.9	30.8	37.0	6.2	
HOR	1.4	45	674.80	31.8	-4.5	27.3	37.0	9.7	
VER	2.5	15	720.00	33.0	-3.4	29.6	37.0	7.4	
HOR	1.3	215	750.00	29.7	-2.5	27.2	37.0	9.8	
VER	2.2	25	843.99	30.8	-2.2	28.6	37.0	8.4	
HOR	1.4	235	875.00	28.2	-1.1	27.1	37.0	9.9	
HOR	1.2	105	960.00	27.6	0.3	27.9	37.0	9.1	

* : The worst emission. Factor : Antenna Factor + Attenuator + Cable Loss - Amp Gain Ver.2.81 F2#044

7. Radiated emission test information (Above 1GHz)

7.1 Measurement procedure

Test was applied by following conditions.

Test method:	EN 55022
Frequency range:	1000MHz to 6000MHz
Test place:	10m Semi-anechoic chamber
EUT was placed on	Styrene foam table/ 2.0m(W) × 1.0m(D) × 0.8m(H)
Antenna distance:	Refer to Note in datasheet for measurements
Test receiver setting	
- Detector:	Peak, Average
- Bandwidth:	1MHz
w : The dimension of the line tangent to EUT formed by θ_{3dB} at the measurement distance d	$w = 2 \times d \times \tan(0.5 \times \theta_{3dB})$ $w = 1.83$ $\theta_{3dB} = 34^\circ$

Test setups and operation conditions of the EUT are performed the same as those used below 1GHz.

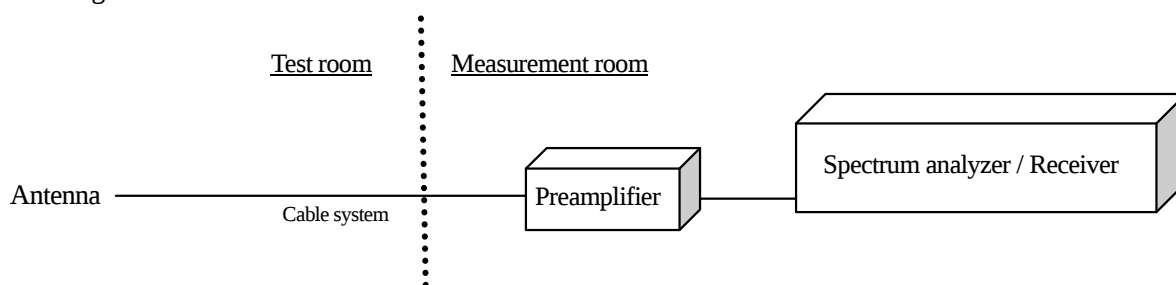
Distance from antenna to EUT is adjusted by test volume. Measurement data in actual measurement distance is adjusted to the value in 3m distance. Refer to 7.2 Calculation method.

EUT operating mode is selected to emit the maximum noise. Overall frequency range is investigated with spectrum analyzer using peak detector. Then, emission measurements are performed with test receiver in above setting.

Absorbers with 0.3m height are placed on a ground plane between EUT and antenna. Refer to Configuration photographs for location of absorbers.

In order to find the maximum emissions, antenna is adjusted by the height (scan or fixed) calculated from the relation between size and "w" of EUT and varied its polarization (horizontal and vertical) for measurements above 1GHz. Refer to Note in datasheet for height of antenna for measurements above 1GHz, and EUT azimuth is also varied by rotating turntable 0 to 360 degrees. Sufficient time for EUT, peripherals and test equipment is provided in order for them to warm up to their normal operating condition.

- Test configuration



7.2 Calculation method

$$\text{Emission level} = \text{Reading} + \text{Conversion factor to distance} + (\text{Ant. factor} + \text{Cable system loss} - \text{Amp. Gain})$$

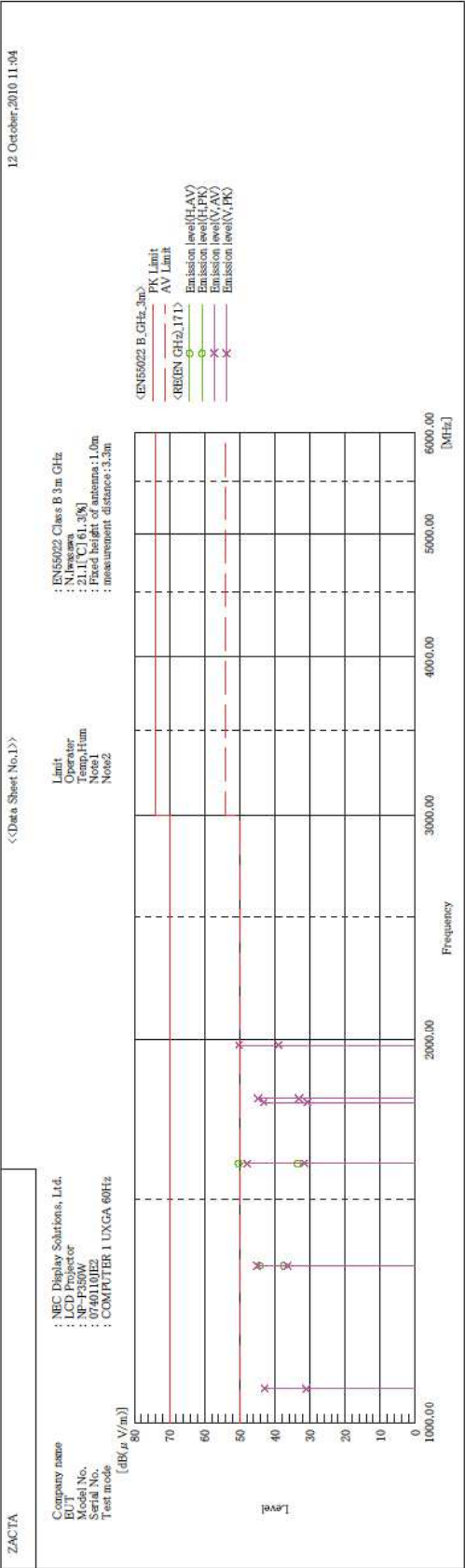
$$\text{Margin} = \text{Limit} - \text{Emission level}$$

$$\begin{aligned} \text{Conversion factor to distance [dB(}\mu\text{V)/m]} &= 20 \log (\text{Measurement distance [m]} / 3\text{m}) \\ &= 20 \log (3.3 / 3) \\ &= 0.8 \end{aligned}$$

7.3 Test data

[NP-P350W]

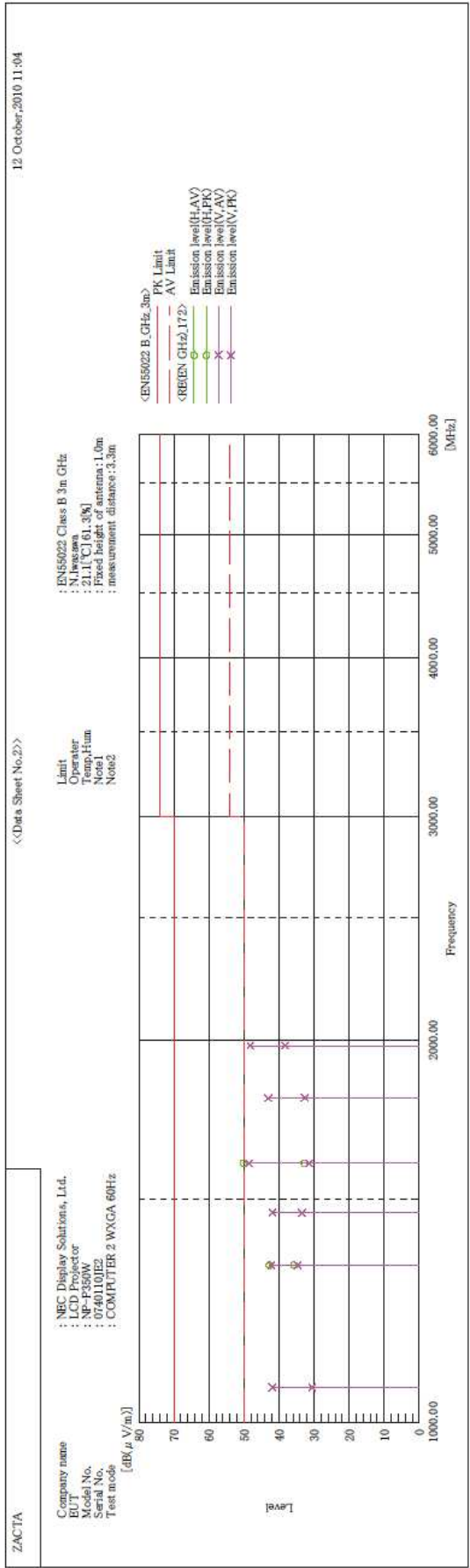
***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1063.800	V	40.7	52.5	-9.6	31.1	42.9	70.0	18.9	27.1	100.0	13.0
2	1063.800	V	40.7	52.5	-9.6	31.1	42.9	70.0	18.9	27.1	100.0	13.0
3	1329.771	V	44.3	52.9	-7.8	36.5	45.1	70.0	13.5	24.9	100.0	37.0
4	1329.771	V	44.3	52.9	-7.8	36.5	45.1	70.0	13.5	24.9	100.0	37.0
5	1329.823	H	45.3	52.1	-7.8	37.5	44.3	70.0	12.5	25.7	100.0	152.0
6	1329.823	H	45.3	52.1	-7.8	37.5	44.3	70.0	12.5	25.7	100.0	152.0
7	1599.257	V	38.0	54.3	-6.4	31.6	47.9	70.0	18.4	22.1	100.0	0.0
8	1599.257	V	38.0	54.3	-6.4	31.6	47.9	70.0	18.4	22.1	100.0	0.0
9	1599.369	H	39.9	56.7	-6.4	33.5	50.3	70.0	16.5	19.7	100.0	286.0
10	1599.369	H	39.9	56.7	-6.4	33.5	50.3	70.0	16.5	19.7	100.0	286.0
11	1787.200	V	35.4	47.8	-4.6	30.8	43.2	70.0	19.2	26.8	100.0	209.0
12	1787.200	V	35.4	47.8	-4.6	30.8	43.2	70.0	19.2	26.8	100.0	209.0
13	1799.886	V	37.8	49.4	-4.6	33.2	44.8	70.0	16.8	25.2	100.0	214.0
14	1799.886	V	37.8	49.4	-4.6	33.2	44.8	70.0	16.8	25.2	100.0	214.0
15	1979.980	V	42.2	53.5	-3.3	38.9	50.2	70.0	11.1	19.8	100.0	133.0
16	1979.980	V	42.2	53.5	-3.3	38.9	50.2	70.0	11.1	19.8	100.0	133.0

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1064.100	V	40.1	51.6	-9.6	30.5	42.0	70.0	19.5	28.0	100.0	3.0
2	1064.100	V	40.1	51.6	-9.6	30.5	42.0	50.0	19.5	28.0	100.0	3.0
3	1329.864	H	43.5	50.5	-7.8	35.7	42.7	70.0	14.3	27.3	100.0	158.0
4	1329.864	H	43.5	50.5	-7.8	35.7	42.7	50.0	14.3	27.3	100.0	158.0
5	1329.879	V	42.4	50.0	-7.8	34.6	42.2	70.0	15.4	27.8	100.0	100.0
6	1329.879	V	42.4	50.0	-7.8	34.6	42.2	50.0	15.4	27.8	100.0	100.0
7	1462.964	V	40.8	49.2	-7.3	33.5	41.9	70.0	16.5	28.1	100.0	58.0
8	1462.964	V	40.8	49.2	-7.3	33.5	41.9	50.0	16.5	28.1	100.0	58.0
9	1599.240	H	39.2	56.6	-6.4	32.8	50.2	70.0	17.2	19.8	100.0	319.0
10	1599.240	H	39.2	56.6	-6.4	32.8	50.2	50.0	17.2	19.8	100.0	319.0
11	1599.392	V	37.8	55.0	-6.4	31.4	48.6	70.0	18.6	21.4	100.0	0.0
12	1599.392	V	37.8	55.0	-6.4	31.4	48.6	50.0	18.6	21.4	100.0	0.0
13	1799.782	V	37.3	47.7	-4.6	32.7	43.1	70.0	17.3	26.9	100.0	210.0
14	1799.782	V	37.3	47.7	-4.6	32.7	43.1	50.0	17.3	26.9	100.0	210.0
15	1979.857	V	41.5	51.4	-3.3	38.2	48.1	70.0	11.8	21.9	100.0	154.0
16	1979.857	V	41.5	51.4	-3.3	38.2	48.1	50.0	11.8	21.9	100.0	154.0

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1063.829	V	42.0	53.0	-9.6	32.4	43.4	70.0	17.6	26.6	100.0	0.0
2	1063.829	V	42.0	53.0	-9.6	32.4	43.4	50.0	17.6	26.6	100.0	0.0
3	1124.914	V	44.9	53.0	-9.3	35.6	43.7	70.0	14.4	26.3	100.0	37.0
4	1124.914	V	44.9	53.0	-9.3	35.6	43.7	50.0	14.4	26.3	100.0	37.0
5	1329.812	H	44.7	52.0	-7.8	36.9	44.2	70.0	13.1	25.8	100.0	165.0
6	1329.812	H	44.7	52.0	-7.8	36.9	44.2	50.0	13.1	25.8	100.0	165.0
7	1329.836	V	41.3	52.4	-7.8	34.0	44.6	70.0	16.0	25.4	100.0	0.0
8	1329.836	V	41.3	52.4	-7.8	34.0	44.6	50.0	16.0	25.4	100.0	0.0
9	1462.907	V	39.0	47.6	-7.3	31.7	40.3	70.0	18.3	29.7	100.0	138.0
10	1462.907	V	39.0	47.6	-7.3	31.7	40.3	50.0	18.3	29.7	100.0	138.0
11	1599.371	H	39.3	55.8	-6.4	32.9	49.4	70.0	17.1	20.6	100.0	319.0
12	1599.371	H	39.3	55.8	-6.4	32.9	49.4	50.0	17.1	20.6	100.0	319.0
13	1599.400	V	37.7	54.3	-6.4	31.3	47.9	70.0	18.7	22.1	100.0	310.0
14	1599.400	V	37.7	54.3	-6.4	31.3	47.9	50.0	18.7	22.1	100.0	310.0
15	1979.957	V	42.1	51.7	-3.3	38.8	48.4	70.0	11.2	21.6	100.0	186.0
16	1979.957	V	42.1	51.7	-3.3	38.8	48.4	50.0	11.2	21.6	100.0	186.0

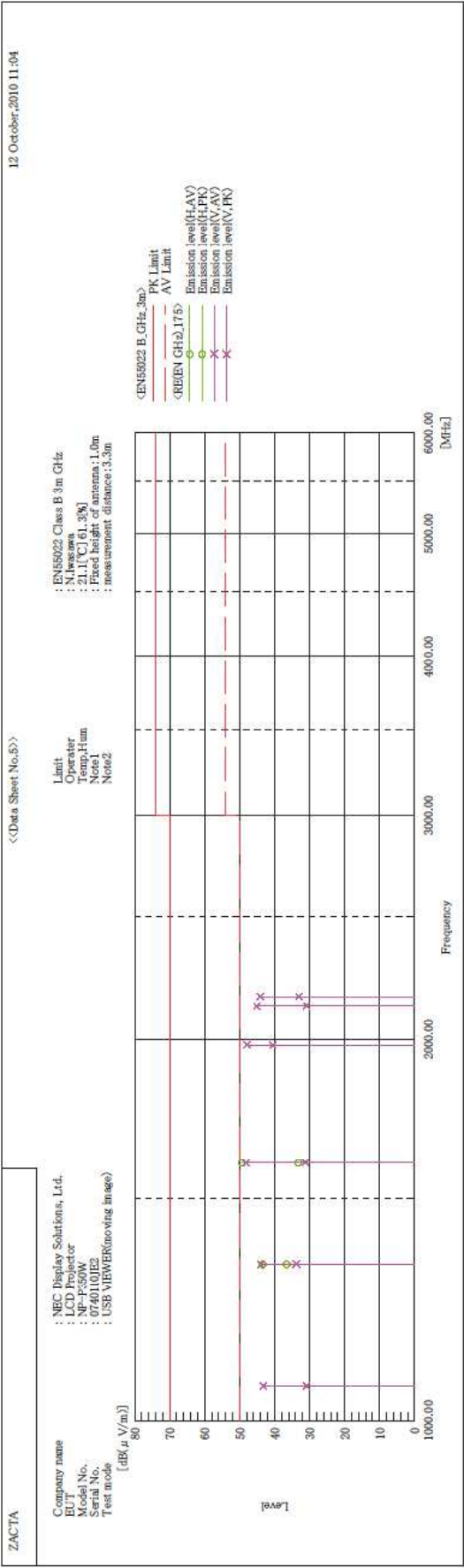
***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1064.114	V	43.8	53.8	-9.6	34.2	44.2	70.0	15.8	25.8	100.0	354.0
2	1064.114	V	43.8	53.8	-9.6	34.2	44.2	50.0	15.8	25.8	100.0	354.0
3	1188.043	V	45.0	55.3	-9.0	36.0	46.3	70.0	14.0	23.7	100.0	0.0
4	1188.043	V	45.0	55.3	-9.0	36.0	46.3	50.0	14.0	23.7	100.0	0.0
5	1329.697	V	40.8	52.5	-7.8	33.0	44.7	70.0	17.0	25.3	100.0	28.0
6	1329.697	V	40.8	52.5	-7.8	33.0	44.7	50.0	17.0	25.3	100.0	28.0
7	1329.879	H	44.2	50.9	-7.8	36.4	43.1	70.0	13.6	26.9	100.0	157.0
8	1329.879	H	44.2	50.9	-7.8	36.4	43.1	50.0	13.6	26.9	100.0	157.0
9	1462.957	V	39.8	48.3	-7.3	32.5	41.0	70.0	17.5	29.0	100.0	134.0
10	1462.957	V	39.8	48.3	-7.3	32.5	41.0	50.0	17.5	29.0	100.0	134.0
11	1599.117	V	38.4	56.6	-6.4	32.0	50.2	70.0	18.0	19.8	100.0	312.0
12	1599.117	V	38.4	56.6	-6.4	32.0	50.2	50.0	18.0	19.8	100.0	312.0
13	1599.241	H	41.2	59.8	-6.4	34.8	53.4	70.0	15.2	16.6	100.0	322.0
14	1599.241	H	41.2	59.8	-6.4	34.8	53.4	50.0	15.2	16.6	100.0	322.0
15	1979.880	V	44.3	50.4	-3.3	41.0	47.1	70.0	9.0	22.9	100.0	154.0
16	1979.880	V	44.3	50.4	-3.3	41.0	47.1	50.0	9.0	22.9	100.0	154.0

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1063.861	V	40.5	52.8	-9.6	30.9	43.2	70.0	19.1	26.8	100.0	0.0
2	1063.861	V	40.5	52.8	-9.6	30.9	43.2	50.0	19.1	26.8	100.0	0.0
3	1329.871	V	41.6	51.8	-7.8	33.8	44.0	70.0	16.2	26.0	100.0	0.0
4	1329.871	V	41.6	51.8	-7.8	33.8	44.0	50.0	16.2	26.0	100.0	0.0
5	1329.921	H	44.3	51.2	-7.8	36.5	43.4	70.0	13.5	26.6	100.0	166.0
6	1329.921	H	44.3	51.2	-7.8	36.5	43.4	50.0	13.5	26.6	100.0	166.0
7	1599.357	V	37.7	54.7	-6.4	31.3	48.3	70.0	18.7	21.7	100.0	0.0
8	1599.357	V	37.7	54.7	-6.4	31.3	48.3	50.0	18.7	21.7	100.0	0.0
9	1599.400	H	39.6	55.7	-6.4	33.2	49.3	70.0	16.8	20.7	100.0	287.0
10	1599.400	H	39.6	55.7	-6.4	33.2	49.3	50.0	16.8	20.7	100.0	287.0
11	1979.936	V	43.8	51.3	-3.3	40.5	48.0	70.0	9.5	22.0	100.0	156.0
12	1979.936	V	43.8	51.3	-3.3	40.5	48.0	50.0	9.5	22.0	100.0	156.0
13	2123.492	V	33.7	47.8	-2.8	30.9	45.0	70.0	19.1	25.0	100.0	0.0
14	2123.492	V	33.7	47.8	-2.8	30.9	45.0	50.0	19.1	25.0	100.0	0.0
15	2159.900	V	35.9	47.1	-2.9	33.0	44.2	70.0	17.0	25.8	100.0	137.0
16	2159.900	V	35.9	47.1	-2.9	33.0	44.2	50.0	17.0	25.8	100.0	137.0

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]

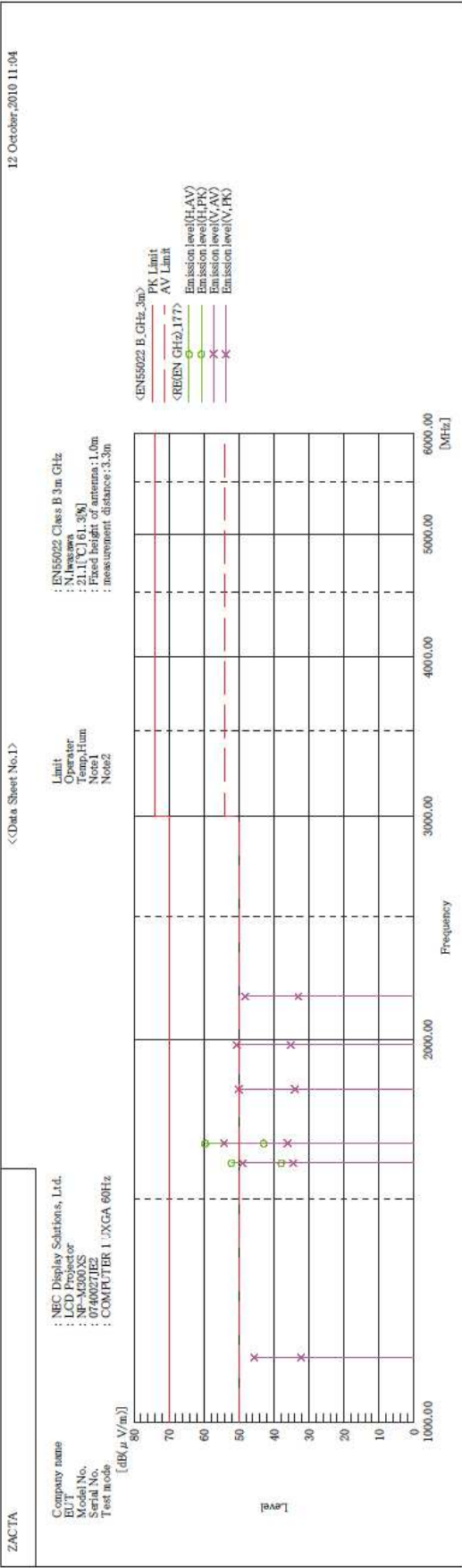


Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1063.871	V	41.1	52.5	-9.6	31.5	42.9	70.0	18.5	27.1	100.0	1.0
2	1063.871	V	41.1	52.5	-9.6	31.5	42.9	70.0	18.5	27.1	100.0	1.0
3	1329.900	V	41.3	50.0	-7.8	33.5	42.2	70.0	16.5	27.8	100.0	151.0
4	1329.900	V	41.3	50.0	-7.8	33.5	42.2	70.0	16.5	27.8	100.0	151.0
5	1329.950	H	43.7	50.8	-7.8	35.9	43.0	70.0	14.1	27.0	100.0	159.0
6	1329.950	H	43.7	50.8	-7.8	35.9	43.0	70.0	14.1	27.0	100.0	159.0
7	1379.900	V	45.6	51.5	-7.6	38.0	43.9	70.0	12.0	26.1	100.0	24.0
8	1379.900	V	45.6	51.5	-7.6	38.0	43.9	70.0	12.0	26.1	100.0	24.0
9	1599.200	H	40.7	57.4	-6.4	34.3	51.0	70.0	15.7	19.0	100.0	320.0
10	1599.200	H	40.7	57.4	-6.4	34.3	51.0	70.0	15.7	19.0	100.0	320.0
11	1599.357	V	37.7	54.0	-6.4	31.3	47.6	70.0	18.7	22.4	100.0	0.0
12	1599.357	V	37.7	54.0	-6.4	31.3	47.6	70.0	18.7	22.4	100.0	0.0
13	1931.986	V	41.3	48.0	-3.6	37.7	44.4	70.0	12.3	25.6	100.0	156.0
14	1931.986	V	41.3	48.0	-3.6	37.7	44.4	70.0	12.3	25.6	100.0	156.0
15	1979.900	V	43.3	52.7	-3.3	40.0	49.4	70.0	10.0	20.6	100.0	155.0
16	1979.900	V	43.3	52.7	-3.3	40.0	49.4	70.0	10.0	20.6	100.0	155.0

[NP-M300XS]

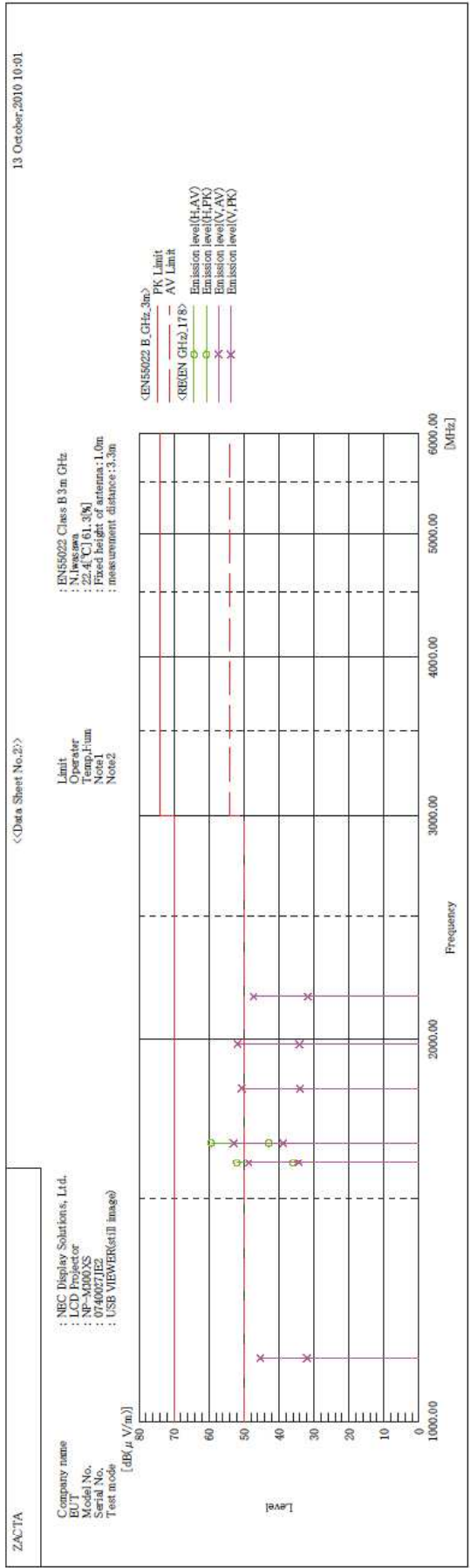
***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c. f. [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1124.523	V	41.5	55.0	-9.3	32.2	45.7	70.0	17.8	24.3	100.0	0.0
2	1124.523	V	41.5	55.0	-9.3	32.2	45.7	70.0	17.8	24.3	100.0	0.0
3	1599.200	V	40.8	55.3	-6.4	34.4	48.9	70.0	15.6	21.1	100.0	0.0
4	1599.200	V	40.8	55.3	-6.4	34.4	48.9	70.0	15.6	21.1	100.0	0.0
5	1599.314	H	44.3	58.5	-6.4	37.9	52.1	70.0	12.1	17.9	100.0	320.0
6	1599.314	H	44.3	58.5	-6.4	37.9	52.1	70.0	12.1	17.9	100.0	320.0
7	1657.114	H	49.3	65.9	-6.3	43.0	59.6	70.0	7.0	10.4	100.0	320.0
8	1657.114	H	49.3	65.9	-6.3	43.0	59.6	70.0	7.0	10.4	100.0	320.0
9	1657.400	V	42.5	60.6	-6.3	36.2	54.3	70.0	13.8	15.7	100.0	0.0
10	1657.400	V	42.5	60.6	-6.3	36.2	54.3	70.0	13.8	15.7	100.0	0.0
11	1828.929	V	38.5	54.4	-4.4	34.1	50.0	70.0	15.9	20.0	100.0	339.0
12	1828.929	V	38.5	54.4	-4.4	34.1	50.0	70.0	15.9	20.0	100.0	339.0
13	1980.200	V	38.5	54.0	-3.3	35.2	50.7	70.0	14.8	19.3	100.0	151.0
14	1980.200	V	38.5	54.0	-3.3	35.2	50.7	70.0	14.8	19.3	100.0	151.0
15	2161.018	V	35.9	51.1	-2.9	33.0	48.2	70.0	17.0	21.8	100.0	131.0
16	2161.018	V	35.9	51.1	-2.9	33.0	48.2	70.0	17.0	21.8	100.0	131.0

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]

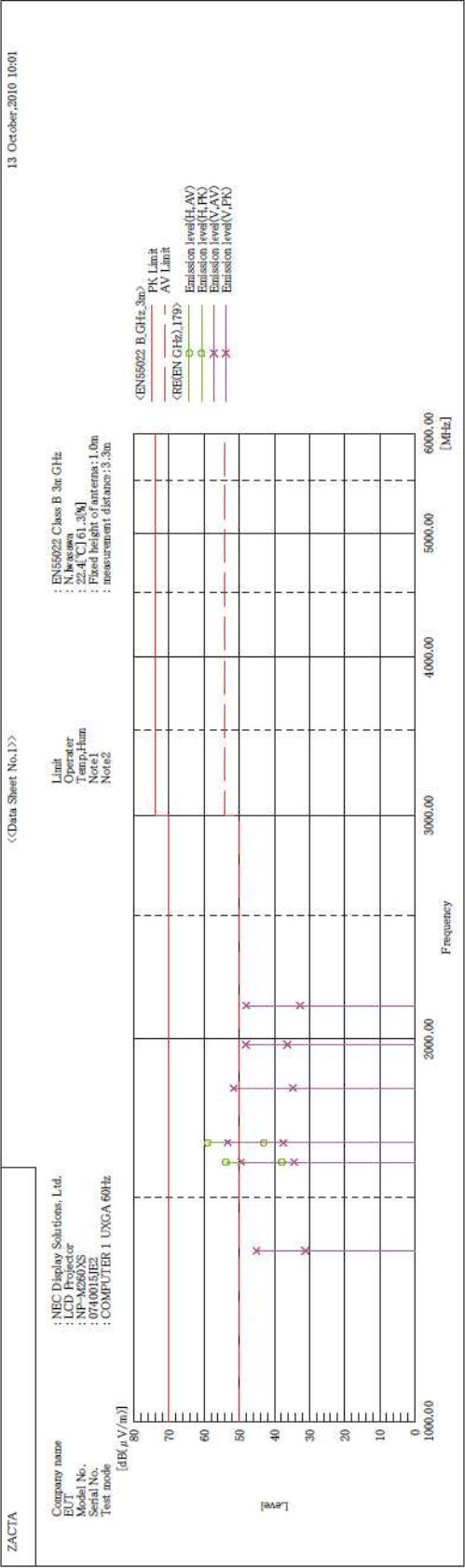


Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1121.728	V	41.4	54.7	-9.4	32.0	45.3	70.0	18.0	24.7	100.0	0.0
2	1121.728	V	41.4	54.7	-9.4	32.0	45.3	70.0	18.0	24.7	100.0	0.0
3	1599.096	V	40.7	55.1	-6.4	34.3	48.7	70.0	15.7	21.3	100.0	0.0
4	1599.096	V	40.7	55.1	-6.4	34.3	48.7	70.0	15.7	21.3	100.0	0.0
5	1599.486	H	42.4	58.4	-6.4	36.0	52.0	70.0	14.0	18.0	100.0	308.0
6	1599.486	H	42.4	58.4	-6.4	36.0	52.0	70.0	14.0	18.0	100.0	308.0
7	1657.971	V	45.1	59.3	-6.3	38.8	53.0	70.0	11.2	17.0	100.0	0.0
8	1657.971	V	45.1	59.3	-6.3	38.8	53.0	70.0	11.2	17.0	100.0	0.0
9	1658.381	H	49.2	65.6	-6.3	42.9	59.3	70.0	7.1	10.7	100.0	320.0
10	1658.381	H	49.2	65.6	-6.3	42.9	59.3	70.0	7.1	10.7	100.0	320.0
11	1828.942	V	38.4	55.1	-4.4	34.0	50.7	70.0	16.0	19.3	100.0	337.0
12	1828.942	V	38.4	55.1	-4.4	34.0	50.7	70.0	16.0	19.3	100.0	337.0
13	1981.423	V	37.5	55.2	-3.3	34.2	51.9	70.0	15.8	18.1	100.0	181.0
14	1981.423	V	37.5	55.2	-3.3	34.2	51.9	70.0	15.8	18.1	100.0	181.0
15	2161.588	V	34.5	50.2	-2.9	31.7	47.3	70.0	18.3	22.7	100.0	132.0
16	2161.588	V	34.5	50.2	-2.9	31.7	47.3	70.0	18.3	22.7	100.0	132.0

[NP-M260XS]

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]

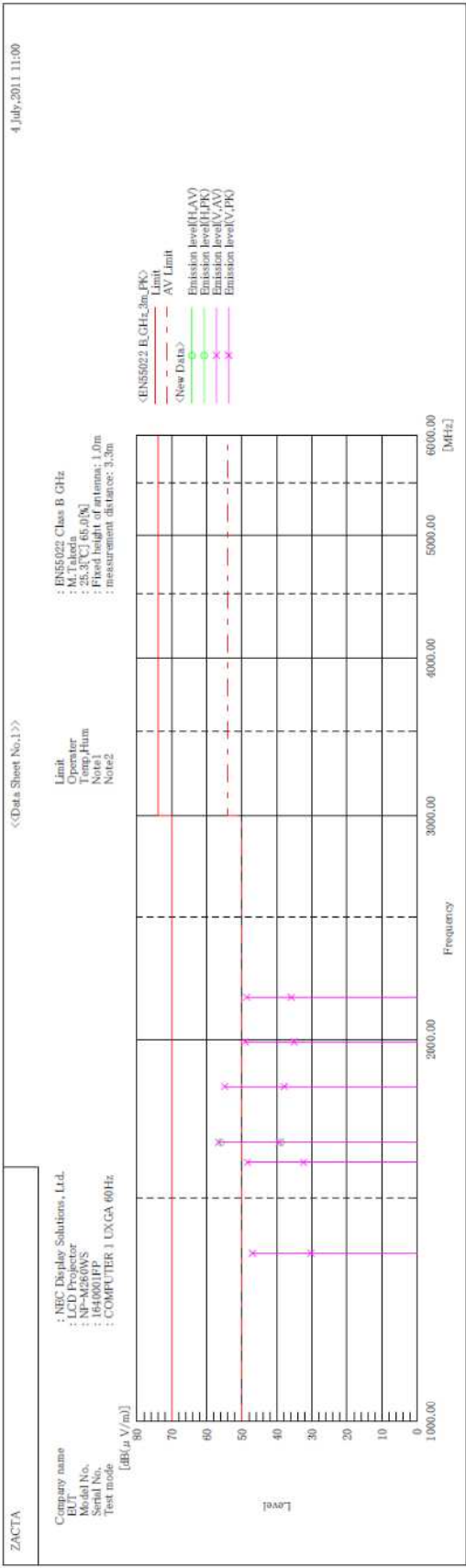


Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1361.429	V	38.9	52.7	-7.6	31.3	45.1	70.0	18.7	24.9	100.0	354.0
2	1361.429	V	38.9	52.7	-7.6	31.3	45.1	70.0	18.7	24.9	100.0	354.0
3	1599.357	V	40.7	55.9	-6.4	34.3	49.5	70.0	15.7	20.5	100.0	306.0
4	1599.357	V	40.7	55.9	-6.4	34.3	49.5	70.0	15.7	20.5	100.0	306.0
5	1599.471	H	44.2	60.2	-6.4	37.8	53.8	70.0	12.2	16.2	100.0	321.0
6	1599.471	H	44.2	60.2	-6.4	37.8	53.8	70.0	12.2	16.2	100.0	321.0
7	1656.686	V	43.8	59.7	-6.4	37.4	53.3	70.0	12.6	16.7	100.0	5.0
8	1656.686	V	43.8	59.7	-6.4	37.4	53.3	70.0	12.6	16.7	100.0	5.0
9	1656.729	H	49.4	65.4	-6.4	43.0	59.0	70.0	7.0	11.0	100.0	320.0
10	1656.729	H	49.4	65.4	-6.4	43.0	59.0	70.0	7.0	11.0	100.0	320.0
11	1829.071	V	39.1	56.0	-4.4	34.7	51.6	70.0	15.3	18.4	100.0	334.0
12	1829.071	V	39.1	56.0	-4.4	34.7	51.6	70.0	15.3	18.4	100.0	334.0
13	1979.954	V	39.7	51.4	-3.3	36.4	48.1	70.0	13.6	21.9	100.0	152.0
14	1979.954	V	39.7	51.4	-3.3	36.4	48.1	70.0	13.6	21.9	100.0	152.0
15	2123.503	V	35.6	50.9	-2.8	32.8	48.1	70.0	17.2	21.9	100.0	5.0
16	2123.503	V	35.6	50.9	-2.8	32.8	48.1	70.0	17.2	21.9	100.0	5.0

[NP-M260WS: With modified panel]

***** RADIATED EMISSION *****
[10m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [°]
1	1357.000	V	34.6	51.3	-4.3	30.3	47.0	70.0	19.7	23.0	100.0	8.0
2	1357.000	V	34.6	51.3	-4.3	30.3	47.0	70.0	19.7	23.0	100.0	8.0
3	1599.383	V	35.6	51.6	-3.2	32.4	48.4	70.0	17.6	21.6	100.0	339.0
4	1599.383	V	35.6	51.6	-3.2	32.4	48.4	70.0	17.6	21.6	100.0	339.0
5	1658.446	H	41.7	58.9	-2.9	38.8	56.0	70.0	11.2	14.0	100.0	12.0
6	1658.446	H	41.7	58.9	-2.9	38.8	56.0	70.0	11.2	14.0	100.0	12.0
7	1658.533	V	42.2	59.6	-2.9	39.3	56.7	70.0	10.7	13.3	100.0	353.0
8	1658.533	V	42.2	59.6	-2.9	39.3	56.7	70.0	10.7	13.3	100.0	353.0
9	1834.867	V	39.0	56.0	-1.1	37.9	54.9	70.0	12.1	15.1	100.0	335.0
10	1834.867	V	39.0	56.0	-1.1	37.9	54.9	70.0	12.1	15.1	100.0	335.0
11	1992.323	V	35.4	49.4	-0.3	35.1	49.1	70.0	14.9	20.9	100.0	151.0
12	1992.323	V	35.4	49.4	-0.3	35.1	49.1	70.0	14.9	20.9	100.0	151.0
13	2159.988	V	35.7	48.4	0.2	35.9	48.6	70.0	21.4	21.4	100.0	210.0
14	2159.988	V	35.7	48.4	0.2	35.9	48.6	70.0	21.4	21.4	100.0	210.0

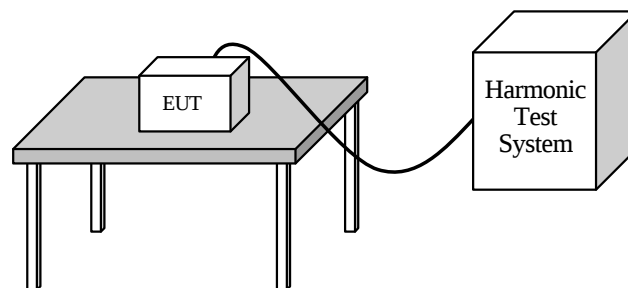
8. Harmonic current emissions

8.1 Applied test condition

Test was applied by following conditions.

Items	Description
Test method	EN 61000-3-2
Repeatability	5 %
POHC Limit	150%
Classification of equipment	D

8.2 Sample test set up



8.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.	Type of Test	EN61000-3-2(2006)	
		*IEC61000-3-2:Ed3.0(2005)	
Operating Mode	COMPUTER 1 UXGA 60Hz	EN61000-4-7(2002)	
Date of Test	2010/10/13 13:39:19	*IEC61000-4-7(2002)	
Climatic Condition		Class D	
Memo	Classification	Power Analyzer	
	Supply Source	KHA1000 Ver1.50	
	Reference Impedance	230V 50Hz	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.96 V	THC	0.5380 A
Current	1.5898 A	POHC/Limit	0.0141 A / 0.1457 A *3
Power	339.24 W	Nominal	230 V / 50 Hz
Power Factor	0.9279	Fundamental Current	1.4959 A
Apparent Power	365.6 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.4947	1.4959	N/A
2	----	----	0.0148	0.0155	N/A
3	1.1534	1.7301	0.5329	0.5332	Pass
4	----	----	0.0073	0.0075	N/A
5	0.6446	0.9668	0.0322	0.0323	Pass
6	----	----	0.0056	0.0057	N/A
7	0.3392	0.5089	0.0057	0.0059	Pass
8	----	----	0.0042	0.0043	N/A
9	0.1696	0.2544	0.0502	0.0504	Pass
10	----	----	0.0025	0.0028	N/A
11	0.1187	0.1781	0.0103	0.0104	Pass
12	----	----	0.0014	0.0017	N/A
13	0.1005	0.1507	0.0284	0.0285	Pass
14	----	----	0.0008	0.0008	N/A
15	0.0871	0.1306	0.0063	0.0064	Pass
16	----	----	0.0008	0.0010	N/A
17	0.0768	0.1152	0.0061	0.0062	Pass
18	----	----	0.0010	0.0011	N/A
19	0.0687	0.1031	0.0033	0.0034	Pass
20	----	----	0.0013	0.0015	N/A
21	0.0933	0.0933	0.0040	0.0042	Pass
22	----	----	0.0013	0.0014	N/A
23	0.0852	0.0852	0.0091	0.0092	Pass
24	----	----	0.0011	0.0012	N/A
25	0.0784	0.0784	0.0043	0.0045	Pass
26	----	----	0.0014	0.0016	N/A
27	0.0726	0.0726	0.0028	0.0029	Pass
28	----	----	0.0009	0.0011	N/A
29	0.0676	0.0676	0.0039	0.0040	Pass
30	----	----	0.0007	0.0008	N/A
31	0.0632	0.0632	0.0048	0.0049	Pass
32	----	----	0.0007	0.0008	N/A
33	0.0594	0.0594	0.0039	0.0041	Pass
34	----	----	0.0011	0.0012	N/A
35	0.0560	0.0560	0.0022	0.0023	Pass
36	----	----	0.0010	0.0011	N/A
37	0.0529	0.0529	0.0028	0.0030	Pass
38	----	----	0.0011	0.0012	N/A
39	0.0502	0.0502	0.0024	0.0025	Pass
40	----	----	0.0010	0.0011	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

Operating mode : COMPUTER 2 WXGA 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic conditions : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type		Type of Test	EN61000-3-2(2006)
Serial No.			*IEC61000-3-2:Ed3.0(2005)
Operating Mode	COMPUTER 2 WXGA 60Hz		EN61000-4-7(2002)
Date of Test	2010/10/13 14:11:23		*IEC61000-4-7(2002)
Climatic Condition		Classification	Class D
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.92 V	THC	0.5372 A
Current	1.5923 A	POHC/Limit	0.0140 A / 0.1461 A *3
Power	339.91 W	Nominal	230 V / 50 Hz
Power Factor	0.9285	Fundamental Current	1.4989 A
Apparent Power	366.1 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.4977	1.4989	N/A
2	----	----	0.0151	0.0157	N/A
3	1.1557	1.7335	0.5320	0.5324	Pass
4	----	----	0.0075	0.0076	N/A
5	0.6458	0.9687	0.0318	0.0319	Pass
6	----	----	0.0058	0.0059	N/A
7	0.3399	0.5099	0.0060	0.0062	Pass
8	----	----	0.0043	0.0044	N/A
9	0.1700	0.2549	0.0505	0.0509	Pass
10	----	----	0.0026	0.0027	N/A
11	0.1190	0.1785	0.0103	0.0104	Pass
12	----	----	0.0015	0.0016	N/A
13	0.1007	0.1510	0.0281	0.0282	Pass
14	----	----	0.0008	0.0009	N/A
15	0.0872	0.1309	0.0065	0.0066	Pass
16	----	----	0.0008	0.0010	N/A
17	0.0770	0.1155	0.0061	0.0062	Pass
18	----	----	0.0010	0.0011	N/A
19	0.0689	0.1033	0.0032	0.0034	Pass
20	----	----	0.0013	0.0014	N/A
21	0.0935	0.0935	0.0039	0.0040	Pass
22	----	----	0.0013	0.0014	N/A
23	0.0853	0.0853	0.0092	0.0093	Pass
24	----	----	0.0011	0.0012	N/A
25	0.0785	0.0785	0.0043	0.0045	Pass
26	----	----	0.0015	0.0016	N/A
27	0.0727	0.0727	0.0026	0.0028	Pass
28	----	----	0.0010	0.0011	N/A
29	0.0677	0.0677	0.0038	0.0039	Pass
30	----	----	0.0008	0.0009	N/A
31	0.0633	0.0633	0.0047	0.0049	Pass
32	----	----	0.0007	0.0009	N/A
33	0.0595	0.0595	0.0038	0.0039	Pass
34	----	----	0.0011	0.0012	N/A
35	0.0561	0.0561	0.0023	0.0024	Pass
36	----	----	0.0010	0.0011	N/A
37	0.0531	0.0531	0.0027	0.0031	Pass
38	----	----	0.0012	0.0013	N/A
39	0.0503	0.0503	0.0023	0.0024	Pass
40	----	----	0.0010	0.0011	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

Operating mode : HDMI 1080P 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type		Type of Test	EN61000-3-2(2006)
Serial No.			*IEC61000-3-2:Ed3.0(2005)
Operating Mode	HDMI 1080P 60Hz		EN61000-4-7(2002)
Date of Test	2010/10/13 13:44:13		*IEC61000-4-7(2002)
Climatic Condition		Classification	Class D
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.96 V	THC	0.5385 A
Current	1.5916 A	POHC/Limit	0.0141 A / 0.1459 A *3
Power	339.66 W	Nominal	230 V / 50 Hz
Power Factor	0.9280	Fundamental Current	1.4977 A
Apparent Power	366.0 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.4960	1.4977	N/A
2	----	----	0.0151	0.0158	N/A
3	1.1548	1.7323	0.5335	0.5337	Pass
4	----	----	0.0074	0.0075	N/A
5	0.6454	0.9680	0.0321	0.0322	Pass
6	----	----	0.0057	0.0058	N/A
7	0.3397	0.5095	0.0055	0.0056	Pass
8	----	----	0.0042	0.0043	N/A
9	0.1698	0.2547	0.0502	0.0504	Pass
10	----	----	0.0025	0.0026	N/A
11	0.1189	0.1783	0.0103	0.0104	Pass
12	----	----	0.0015	0.0016	N/A
13	0.1006	0.1509	0.0284	0.0285	Pass
14	----	----	0.0008	0.0008	N/A
15	0.0872	0.1308	0.0063	0.0064	Pass
16	----	----	0.0009	0.0010	N/A
17	0.0769	0.1154	0.0061	0.0062	Pass
18	----	----	0.0010	0.0011	N/A
19	0.0688	0.1032	0.0033	0.0035	Pass
20	----	----	0.0013	0.0014	N/A
21	0.0934	0.0934	0.0040	0.0041	Pass
22	----	----	0.0013	0.0014	N/A
23	0.0853	0.0853	0.0091	0.0092	Pass
24	----	----	0.0011	0.0012	N/A
25	0.0785	0.0785	0.0044	0.0046	Pass
26	----	----	0.0014	0.0016	N/A
27	0.0726	0.0726	0.0028	0.0029	Pass
28	----	----	0.0010	0.0011	N/A
29	0.0676	0.0676	0.0039	0.0040	Pass
30	----	----	0.0008	0.0010	N/A
31	0.0633	0.0633	0.0048	0.0049	Pass
32	----	----	0.0007	0.0007	N/A
33	0.0594	0.0594	0.0039	0.0040	Pass
34	----	----	0.0011	0.0012	N/A
35	0.0560	0.0560	0.0022	0.0023	Pass
36	----	----	0.0010	0.0011	N/A
37	0.0530	0.0530	0.0028	0.0029	Pass
38	----	----	0.0011	0.0012	N/A
39	0.0503	0.0503	0.0024	0.0025	Pass
40	----	----	0.0010	0.0010	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

[Repeatability]

Ref/Meas	File	Curr Range	Worst [%]	Judge
Ref	HDMI_HM_1080p60Hz_EN_001.hr	5A	---	---
	HDMI_HM_1080p60Hz_EN_002.hr	5A	0.0	Pass
Meas	HDMI_HM_1080p60Hz_EN_003.hr	5A	-0.1	Pass

Order	Ref [A rms]	Meas [A rms]	Per [%]	Judge
1	1.4960	1.4960	0.0	Pass
2	0.0151	0.0151	---	---
3	0.5335	0.5330	-0.1	Pass
4	0.0074	0.0074	---	---
5	0.0321	0.0321	---	---
6	0.0057	0.0057	---	---
7	0.0055	0.0057	---	---
8	0.0042	0.0042	---	---
9	0.0502	0.0503	---	---
10	0.0025	0.0025	---	---
11	0.0103	0.0103	---	---
12	0.0015	0.0015	---	---
13	0.0284	0.0283	---	---
14	0.0008	0.0008	---	---
15	0.0063	0.0063	---	---
16	0.0009	0.0009	---	---
17	0.0061	0.0061	---	---
18	0.0010	0.0010	---	---
19	0.0033	0.0033	---	---
20	0.0013	0.0013	---	---
21	0.0040	0.0040	---	---
22	0.0013	0.0013	---	---
23	0.0091	0.0091	---	---
24	0.0011	0.0011	---	---
25	0.0044	0.0043	---	---
26	0.0014	0.0014	---	---
27	0.0028	0.0027	---	---
28	0.0010	0.0010	---	---
29	0.0039	0.0039	---	---
30	0.0008	0.0008	---	---
31	0.0048	0.0047	---	---
32	0.0007	0.0007	---	---
33	0.0039	0.0039	---	---
34	0.0011	0.0011	---	---
35	0.0022	0.0022	---	---
36	0.0010	0.0010	---	---
37	0.0028	0.0028	---	---
38	0.0011	0.0011	---	---
39	0.0024	0.0024	---	---
40	0.0010	0.0010	---	---

Meas : Comprison file to be close-up.

Operating mode : USB Display (moving image)
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.		Type of Test	EN61000-3-2(2006) *IEC61000-3-2:Ed3.0(2005)
Operating Mode	USB Display(moving image)		EN61000-4-7(2002) *IEC61000-4-7(2002)
Date of Test	2010/10/13 14:31:39		
Climatic Condition		Classification	Class D
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.96 V	THC	0.5377 A
Current	1.5857 A	POHC/Limit	0.0142 A / 0.1453 A *3
Power	338.28 W	Nominal	230 V / 50 Hz
Power Factor	0.9277	Fundamental Current	1.4916 A
Apparent Power	364.7 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.4901	1.4916	N/A
2	----	----	0.0144	0.0152	N/A
3	1.1502	1.7252	0.5325	0.5329	Pass
4	----	----	0.0071	0.0072	N/A
5	0.6427	0.9641	0.0325	0.0326	Pass
6	----	----	0.0055	0.0056	N/A
7	0.3383	0.5074	0.0056	0.0057	Pass
8	----	----	0.0041	0.0042	N/A
9	0.1691	0.2537	0.0500	0.0502	Pass
10	----	----	0.0024	0.0025	N/A
11	0.1184	0.1776	0.0105	0.0106	Pass
12	----	----	0.0014	0.0015	N/A
13	0.1002	0.1503	0.0285	0.0286	Pass
14	----	----	0.0008	0.0009	N/A
15	0.0868	0.1302	0.0060	0.0062	Pass
16	----	----	0.0008	0.0009	N/A
17	0.0766	0.1149	0.0062	0.0063	Pass
18	----	----	0.0010	0.0011	N/A
19	0.0685	0.1028	0.0034	0.0035	Pass
20	----	----	0.0013	0.0015	N/A
21	0.0930	0.0930	0.0041	0.0042	Pass
22	----	----	0.0013	0.0014	N/A
23	0.0849	0.0849	0.0091	0.0092	Pass
24	----	----	0.0011	0.0012	N/A
25	0.0781	0.0781	0.0043	0.0044	Pass
26	----	----	0.0014	0.0015	N/A
27	0.0724	0.0724	0.0029	0.0030	Pass
28	----	----	0.0009	0.0010	N/A
29	0.0674	0.0674	0.0039	0.0040	Pass
30	----	----	0.0007	0.0008	N/A
31	0.0630	0.0630	0.0049	0.0050	Pass
32	----	----	0.0007	0.0007	N/A
33	0.0592	0.0592	0.0038	0.0040	Pass
34	----	----	0.0011	0.0012	N/A
35	0.0558	0.0558	0.0021	0.0024	Pass
36	----	----	0.0010	0.0011	N/A
37	0.0528	0.0528	0.0029	0.0030	Pass
38	----	----	0.0011	0.0012	N/A
39	0.0501	0.0501	0.0025	0.0026	Pass
40	----	----	0.0009	0.0010	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

Operating mode : USB VIEWER (moving image)
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.	Type of Test	EN61000-3-2(2006)	
		*IEC61000-3-2:Ed3.0(2005)	
Operating Mode	USB VIEWER(moving image)	EN61000-4-7(2002)	
Date of Test	2010/10/13 14:42:00	*IEC61000-4-7(2002)	
Climatic Condition		Class D	
Memo		KHA1000 Ver1.50	
	Power Analyzer	230V 50Hz	
	Supply Source		
	Reference Impedance		

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.96 V	THC	0.5356 A
Current	1.5781 A	POHC/Limit	0.0143 A / 0.1447 A *3
Power	336.62 W	Nominal	230 V / 50 Hz
Power Factor	0.9276	Fundamental Current	1.4844 A
Apparent Power	362.9 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.4833	1.4844	N/A
2	----	----	0.0128	0.0139	N/A
3	1.1445	1.7168	0.5304	0.5307	Pass
4	----	----	0.0065	0.0067	N/A
5	0.6396	0.9594	0.0329	0.0331	Pass
6	----	----	0.0052	0.0053	N/A
7	0.3366	0.5049	0.0061	0.0064	Pass
8	----	----	0.0039	0.0040	N/A
9	0.1683	0.2525	0.0498	0.0500	Pass
10	----	----	0.0023	0.0024	N/A
11	0.1178	0.1767	0.0108	0.0109	Pass
12	----	----	0.0013	0.0014	N/A
13	0.0997	0.1495	0.0286	0.0288	Pass
14	----	----	0.0007	0.0008	N/A
15	0.0864	0.1296	0.0058	0.0059	Pass
16	----	----	0.0008	0.0009	N/A
17	0.0762	0.1144	0.0063	0.0064	Pass
18	----	----	0.0010	0.0011	N/A
19	0.0682	0.1023	0.0034	0.0035	Pass
20	----	----	0.0013	0.0014	N/A
21	0.0926	0.0926	0.0042	0.0043	Pass
22	----	----	0.0013	0.0014	N/A
23	0.0845	0.0845	0.0090	0.0091	Pass
24	----	----	0.0011	0.0011	N/A
25	0.0778	0.0778	0.0044	0.0046	Pass
26	----	----	0.0013	0.0014	N/A
27	0.0720	0.0720	0.0030	0.0032	Pass
28	----	----	0.0009	0.0010	N/A
29	0.0670	0.0670	0.0039	0.0040	Pass
30	----	----	0.0007	0.0007	N/A
31	0.0627	0.0627	0.0050	0.0051	Pass
32	----	----	0.0007	0.0008	N/A
33	0.0589	0.0589	0.0039	0.0041	Pass
34	----	----	0.0011	0.0012	N/A
35	0.0555	0.0555	0.0020	0.0021	Pass
36	----	----	0.0009	0.0010	N/A
37	0.0525	0.0525	0.0029	0.0031	Pass
38	----	----	0.0010	0.0011	N/A
39	0.0498	0.0498	0.0027	0.0027	Pass
40	----	----	0.0009	0.0010	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

Operating mode : VIDEO
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type	Type of Test	EN61000-3-2(2006)	
Serial No.		*IEC61000-3-2:Ed3.0(2005)	
Operating Mode	VIDEO	EN61000-4-7(2002)	
Date of Test	2010/10/13 13:53:48	*IEC61000-4-7(2002)	
Climatic Condition	Memo	Class D	
		Power Analyzer	
		KHA1000 Ver1.50	
		Supply Source	
		230V 50Hz	
		Reference Impedance	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.94 V	THC	0.5369 A
Current	1.5871 A	POHC/Limit	0.0141 A / 0.1455 A *3
Power	338.67 W	Nominal	230 V / 50 Hz
Power Factor	0.9280	Fundamental Current	1.4934 A
Apparent Power	365.0 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	-----	-----	1.4926	1.4934	N/A
2	-----	-----	0.0146	0.0152	N/A
3	1.1515	1.7272	0.5318	0.5321	Pass
4	-----	-----	0.0072	0.0074	N/A
5	0.6435	0.9652	0.0323	0.0324	Pass
6	-----	-----	0.0056	0.0057	N/A
7	0.3387	0.5080	0.0059	0.0061	Pass
8	-----	-----	0.0041	0.0043	N/A
9	0.1693	0.2540	0.0503	0.0505	Pass
10	-----	-----	0.0025	0.0026	N/A
11	0.1185	0.1778	0.0104	0.0105	Pass
12	-----	-----	0.0014	0.0015	N/A
13	0.1003	0.1504	0.0283	0.0286	Pass
14	-----	-----	0.0008	0.0008	N/A
15	0.0869	0.1304	0.0062	0.0063	Pass
16	-----	-----	0.0008	0.0010	N/A
17	0.0767	0.1150	0.0062	0.0063	Pass
18	-----	-----	0.0010	0.0012	N/A
19	0.0686	0.1029	0.0033	0.0035	Pass
20	-----	-----	0.0013	0.0014	N/A
21	0.0931	0.0931	0.0040	0.0041	Pass
22	-----	-----	0.0013	0.0015	N/A
23	0.0850	0.0850	0.0091	0.0092	Pass
24	-----	-----	0.0011	0.0013	N/A
25	0.0782	0.0782	0.0043	0.0045	Pass
26	-----	-----	0.0014	0.0015	N/A
27	0.0724	0.0724	0.0027	0.0029	Pass
28	-----	-----	0.0010	0.0011	N/A
29	0.0674	0.0674	0.0038	0.0039	Pass
30	-----	-----	0.0008	0.0008	N/A
31	0.0631	0.0631	0.0048	0.0049	Pass
32	-----	-----	0.0007	0.0007	N/A
33	0.0593	0.0593	0.0038	0.0040	Pass
34	-----	-----	0.0011	0.0012	N/A
35	0.0559	0.0559	0.0022	0.0024	Pass
36	-----	-----	0.0010	0.0011	N/A
37	0.0529	0.0529	0.0027	0.0028	Pass
38	-----	-----	0.0011	0.0012	N/A
39	0.0501	0.0501	0.0024	0.0025	Pass
40	-----	-----	0.0010	0.0011	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M300XS		
Type			
Serial No.		Type of Test	EN61000-3-2(2006) *IEC61000-3-2:Ed3.0(2005)
Operating Mode	COMPUTER 1 UXGA 60Hz		EN61000-4-7(2002) *IEC61000-4-7(2002)
Date of Test	2010/10/13 20:05:23		
Climatic Condition		Classification	Class D
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	229.98 V	THC	0.5024 A
Current	1.4225 A	POHC/Limit	0.0148 A / 0.1290 A *3
Power	300.55 W	Nominal	230 V / 50 Hz
Power Factor	0.9187	Fundamental Current	1.3307 A
Apparent Power	327.2 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.3287	1.3307	N/A
2	----	----	0.0058	0.0065	N/A
3	1.0219	1.5328	0.4971	0.4977	Pass
4	----	----	0.0023	0.0026	N/A
5	0.5710	0.8566	0.0368	0.0371	Pass
6	----	----	0.0019	0.0020	N/A
7	0.3005	0.4508	0.0045	0.0046	Pass
8	----	----	0.0018	0.0019	N/A
9	0.1503	0.2254	0.0449	0.0451	Pass
10	----	----	0.0014	0.0016	N/A
11	0.1052	0.1578	0.0157	0.0159	Pass
12	----	----	0.0013	0.0014	N/A
13	0.0890	0.1335	0.0281	0.0287	Pass
14	----	----	0.0012	0.0013	N/A
15	0.0771	0.1157	0.0018	0.0020	Pass
16	----	----	0.0012	0.0013	N/A
17	0.0681	0.1021	0.0053	0.0055	Pass
18	----	----	0.0012	0.0014	N/A
19	0.0609	0.0914	0.0041	0.0043	Pass
20	----	----	0.0013	0.0014	N/A
21	0.0827	0.0827	0.0085	0.0086	Pass
22	----	----	0.0013	0.0014	N/A
23	0.0755	0.0755	0.0060	0.0062	Pass
24	----	----	0.0012	0.0014	N/A
25	0.0694	0.0694	0.0037	0.0041	Pass
26	----	----	0.0012	0.0014	N/A
27	0.0643	0.0643	0.0039	0.0043	Pass
28	----	----	0.0012	0.0013	N/A
29	0.0599	0.0599	0.0037	0.0039	Pass
30	----	----	0.0012	0.0014	N/A
31	0.0560	0.0560	0.0042	0.0046	Pass
32	----	----	0.0012	0.0014	N/A
33	0.0526	0.0526	0.0038	0.0040	Pass
34	----	----	0.0013	0.0015	N/A
35	0.0496	0.0496	0.0029	0.0031	Pass
36	----	----	0.0013	0.0015	N/A
37	0.0469	0.0469	0.0031	0.0033	Pass
38	----	----	0.0012	0.0014	N/A
39	0.0445	0.0445	0.0034	0.0039	Pass
40	----	----	0.0012	0.0014	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

[Repeatability]

Ref/Meas	File	Curr Range	Worst [%]	Judge
Ref	COM1_HM_UXGA60Hz_EN_001.hr	5A	----	----
	COM1_HM_UXGA60Hz_EN_002.hr	5A	-0.1	Pass
Meas	COM1_HM_UXGA60Hz_EN_003.hr	5A	-0.2	Pass

Order	Ref [A rms]	Meas [A rms]	Per [%]	Judge
1	1.3287	1.3276	-0.1	Pass
2	0.0058	0.0059	----	----
3	0.4971	0.4962	-0.2	Pass
4	0.0023	0.0023	----	----
5	0.0368	0.0369	----	----
6	0.0019	0.0019	----	----
7	0.0045	0.0047	----	----
8	0.0018	0.0017	----	----
9	0.0449	0.0449	----	----
10	0.0014	0.0014	----	----
11	0.0157	0.0156	----	----
12	0.0013	0.0013	----	----
13	0.0281	0.0281	----	----
14	0.0012	0.0012	----	----
15	0.0018	0.0018	----	----
16	0.0012	0.0012	----	----
17	0.0053	0.0053	----	----
18	0.0012	0.0012	----	----
19	0.0041	0.0040	----	----
20	0.0013	0.0012	----	----
21	0.0085	0.0084	----	----
22	0.0013	0.0012	----	----
23	0.0060	0.0060	----	----
24	0.0012	0.0012	----	----
25	0.0037	0.0036	----	----
26	0.0012	0.0012	----	----
27	0.0039	0.0039	----	----
28	0.0012	0.0012	----	----
29	0.0037	0.0038	----	----
30	0.0012	0.0012	----	----
31	0.0042	0.0041	----	----
32	0.0012	0.0012	----	----
33	0.0038	0.0038	----	----
34	0.0013	0.0012	----	----
35	0.0029	0.0029	----	----
36	0.0013	0.0012	----	----
37	0.0031	0.0031	----	----
38	0.0012	0.0013	----	----
39	0.0034	0.0034	----	----
40	0.0012	0.0013	----	----

Meas : Comprison file to be close-up.

Operating mode : USB VIEWER (still image)
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M300XS		
Type			
Serial No.	Type of Test	EN61000-3-2(2006)	
		*IEC61000-3-2:Ed3.0(2005)	
Operating Mode	USB VIEWER(still image)	EN61000-4-7(2002)	
Date of Test	2010/10/13 20:23:31	*IEC61000-4-7(2002)	
Climatic Condition		Class D	
Memo		KHA1000 Ver1.50	
	Classification	Power Analyzer	
	Supply Source	230V 50Hz	
	Reference Impedance		

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	230.00 V	THC	0.5019 A
Current	1.4209 A	POHC/Limit	0.0146 A / 0.1290 A *3
Power	300.22 W	Nominal	230 V / 50 Hz
Power Factor	0.9187	Fundamental Current	1.3291 A
Apparent Power	326.8 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	-----	-----	1.3272	1.3291	N/A
2	-----	-----	0.0061	0.0069	N/A
3	1.0208	1.5311	0.4966	0.4972	Pass
4	-----	-----	0.0024	0.0026	N/A
5	0.5704	0.8556	0.0370	0.0373	Pass
6	-----	-----	0.0019	0.0021	N/A
7	0.3002	0.4503	0.0045	0.0047	Pass
8	-----	-----	0.0017	0.0019	N/A
9	0.1501	0.2252	0.0449	0.0452	Pass
10	-----	-----	0.0014	0.0015	N/A
11	0.1051	0.1576	0.0156	0.0159	Pass
12	-----	-----	0.0013	0.0015	N/A
13	0.0889	0.1334	0.0281	0.0283	Pass
14	-----	-----	0.0013	0.0015	N/A
15	0.0771	0.1156	0.0018	0.0020	Pass
16	-----	-----	0.0012	0.0014	N/A
17	0.0680	0.1020	0.0052	0.0055	Pass
18	-----	-----	0.0012	0.0013	N/A
19	0.0608	0.0913	0.0040	0.0043	Pass
20	-----	-----	0.0012	0.0014	N/A
21	0.0826	0.0826	0.0083	0.0085	Pass
22	-----	-----	0.0012	0.0014	N/A
23	0.0754	0.0754	0.0060	0.0062	Pass
24	-----	-----	0.0012	0.0013	N/A
25	0.0694	0.0694	0.0036	0.0038	Pass
26	-----	-----	0.0012	0.0014	N/A
27	0.0642	0.0642	0.0039	0.0043	Pass
28	-----	-----	0.0012	0.0014	N/A
29	0.0598	0.0598	0.0038	0.0040	Pass
30	-----	-----	0.0012	0.0014	N/A
31	0.0559	0.0559	0.0041	0.0043	Pass
32	-----	-----	0.0012	0.0014	N/A
33	0.0525	0.0525	0.0038	0.0040	Pass
34	-----	-----	0.0012	0.0014	N/A
35	0.0495	0.0495	0.0029	0.0031	Pass
36	-----	-----	0.0012	0.0014	N/A
37	0.0469	0.0469	0.0031	0.0034	Pass
38	-----	-----	0.0012	0.0014	N/A
39	0.0445	0.0445	0.0034	0.0036	Pass
40	-----	-----	0.0013	0.0015	N/A

N/A : Not Apply

*3. When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 23.8°C 50.5% 985 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Harmonics Current Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M260XS		
Type			
Serial No.		Type of Test	EN61000-3-2(2006)
			*IEC61000-3-2:Ed3.0(2005)
Operating Mode	COMPUTER 1 UXGA 60Hz		EN61000-4-7(2002)
Date of Test	2010/10/13 20:47:15		*IEC61000-4-7(2002)
Climatic Condition		Classification	Class D
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Current Harmonics

Final Test Result	Pass	Tobs	Short cyclic
Voltage	230.00 V	THC	0.3490 A
Current	1.1564 A	POHC/Limit	0.0132 A / 0.1056 A *3
Power	246.28 W	Nominal	230 V / 50 Hz
Power Factor	0.9260	Fundamental Current	1.1025 A
Apparent Power	266.0 VA	Measuring Period	150 s
		Margin	100 %

Order	Limit1(A rms)	Limit2(A rms)	Ave(A rms)	Max(A rms)	Judge
1	----	----	1.1008	1.1025	N/A
2	----	----	0.0126	0.0139	N/A
3	0.8374	1.2560	0.3351	0.3360	Pass
4	----	----	0.0036	0.0040	N/A
5	0.4679	0.7019	0.0365	0.0369	Pass
6	----	----	0.0008	0.0009	N/A
7	0.2463	0.3694	0.0759	0.0761	Pass
8	----	----	0.0011	0.0013	N/A
9	0.1231	0.1847	0.0266	0.0268	Pass
10	----	----	0.0013	0.0015	N/A
11	0.0862	0.1293	0.0170	0.0171	Pass
12	----	----	0.0010	0.0011	N/A
13	0.0729	0.1094	0.0103	0.0105	Pass
14	----	----	0.0007	0.0008	N/A
15	0.0632	0.0948	0.0169	0.0170	Pass
16	----	----	0.0008	0.0009	N/A
17	0.0558	0.0837	0.0075	0.0076	Pass
18	----	----	0.0008	0.0009	N/A
19	0.0499	0.0749	0.0029	0.0033	Pass
20	----	----	0.0008	0.0009	N/A
21	0.0677	0.0677	0.0038	0.0040	Pass
22	----	----	0.0007	0.0009	N/A
23	0.0618	0.0618	0.0065	0.0068	Pass
24	----	----	0.0008	0.0009	N/A
25	0.0569	0.0569	0.0060	0.0061	Pass
26	----	----	0.0008	0.0008	N/A
27	0.0527	0.0527	0.0037	0.0041	Pass
28	----	----	0.0008	0.0009	N/A
29	0.0490	0.0490	0.0031	0.0034	Pass
30	----	----	0.0008	0.0009	N/A
31	0.0459	0.0459	0.0041	0.0043	Pass
32	----	----	0.0007	0.0008	N/A
33	0.0431	0.0431	0.0041	0.0042	Pass
34	----	----	0.0007	0.0008	N/A
35	0.0406	0.0406	0.0030	0.0031	Pass
36	----	----	0.0007	0.0008	N/A
37	0.0384	0.0384	0.0027	0.0028	Pass
38	----	----	0.0008	0.0009	N/A
39	0.0365	0.0365	0.0025	0.0027	Pass
40	----	----	0.0009	0.0010	N/A

N/A : Not Apply

*3 When the POHC value does not exceed the POHC Limit, 150% of the Limit1 value is applied to each Limit1 value.

[Repeatability]

Ref/Meas	File	Curr Range	Worst [%]	Judge
Ref	COM1_HM_UXGA60Hz_EN_001.hr	5A	----	----
Meas	COM1_HM_UXGA60Hz_EN_002.hr	5A	-0.4	Pass
	COM1_HM_UXGA60Hz_EN_003.hr	5A	-0.3	Pass

Order	Ref [A rms]	Meas [A rms]	Per [%]	Judge
1	1.1008	1.1004	0.0	Pass
2	0.0126	0.0124	----	----
3	0.3351	0.3338	-0.4	Pass
4	0.0036	0.0036	----	----
5	0.0365	0.0363	----	----
6	0.0008	0.0008	----	----
7	0.0759	0.0762	----	----
8	0.0011	0.0011	----	----
9	0.0266	0.0266	----	----
10	0.0013	0.0013	----	----
11	0.0170	0.0169	----	----
12	0.0010	0.0010	----	----
13	0.0103	0.0103	----	----
14	0.0007	0.0007	----	----
15	0.0169	0.0170	----	----
16	0.0008	0.0007	----	----
17	0.0075	0.0074	----	----
18	0.0008	0.0008	----	----
19	0.0029	0.0028	----	----
20	0.0008	0.0008	----	----
21	0.0038	0.0038	----	----
22	0.0007	0.0007	----	----
23	0.0065	0.0065	----	----
24	0.0008	0.0008	----	----
25	0.0060	0.0059	----	----
26	0.0008	0.0008	----	----
27	0.0037	0.0037	----	----
28	0.0008	0.0008	----	----
29	0.0031	0.0031	----	----
30	0.0008	0.0008	----	----
31	0.0041	0.0041	----	----
32	0.0007	0.0007	----	----
33	0.0041	0.0040	----	----
34	0.0007	0.0007	----	----
35	0.0030	0.0030	----	----
36	0.0007	0.0007	----	----
37	0.0027	0.0027	----	----
38	0.0008	0.0008	----	----
39	0.0025	0.0025	----	----
40	0.0009	0.0009	----	----

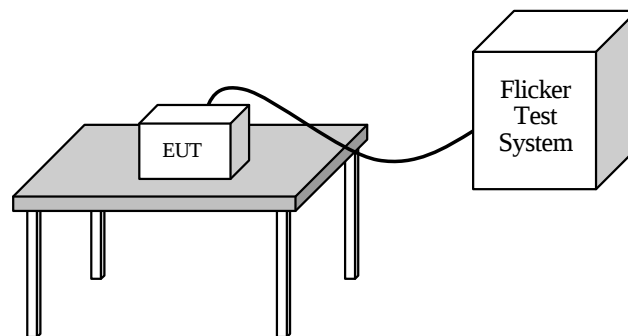
Meas : Comprison file to be close-up.

9. Voltage Change, voltage fluctuation and flicker

9.1 Applied test condition

Items	Description
Test method	EN 61000-3-3
Observation period	10 min. 1 min. x 24 times (Switched manually)

9.2 Sample test set up



9.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 13, 2010
Test Place : Shielded room No.1
Climatic condition : 24.0°C 51.2% 986 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.	Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)	
Operating Mode	COMPUTER 1 UXGA 60Hz	EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)	
Date of Test	2010/10/13 15:57:07		
Climatic Condition			
Memo	Power Analyzer	KHA1000 Ver1.50	
	Supply Source	230V 50Hz	
	Reference Impedance		

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
Nominal Voltage 230 V
Nominal Frequency 50 Hz
Plt Test Duration 600 s
Flicker Margin 100 %
d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.035	0.004	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Voltage Change Caused by Manual Switching Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.		Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)
Operating Mode	COMPUTER 1 UXGA 60Hz		EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)
Date of Test	2010/10/13 17:36:37		
Climatic Condition			
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 1440 s

d Measurement Margin 100 %

Segment	dmax(%)	dc(%)	d(t)>3.3%(ms)
Seg. 1	0.813	0.048	0
Seg. 2	0.717	0.009	0
Seg. 3	1.187	0.057	0
Seg. 4	1.113	0.009	0
Seg. 5	1.070	0.043	0
Seg. 6	1.052	0.009	0
Seg. 7	0.661	0.013	0
Seg. 8	0.657	0.013	0
Seg. 9	0.930	0.013	0
Seg.10	1.052	0.009	0
Seg.11	0.713	0.009	0
Seg.12	0.783	0.013	0
Seg.13	0.617	0.013	0
Seg.14	0.717	0.013	0
Seg.15	0.700	0.013	0
Seg.16	0.604	0.013	0
Seg.17	0.983	0.013	0
Seg.18	0.604	0.013	0
Seg.19	1.000	0.013	0
Seg.20	1.022	0.013	0
Seg.21	0.996	0.013	0
Seg.22	0.435	0.017	0
Seg.23	0.970	0.013	0
Seg.24	0.757	0.009	0

Total	dmax(%)	dc(%)	d(t)>3.3%(ms)
Limit	6.000	3.300	500
Average	0.842		
Maximum	1.187	0.057	0

This test data meets EN 61000-3-3:2008.

Operating mode : COMPUTER 2 WXGA 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.	Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)	
Operating Mode	COMPUTER 2 WXGA 60Hz	EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)	
Date of Test	2010/10/13 15:46:03		
Climatic Condition			
Memo	Power Analyzer	KHA1000 Ver1.50	
	Supply Source	230V 50Hz	
	Reference Impedance		

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 600 s
 Flicker Margin 100 %
 d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.035	0.004	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Operating mode : HDMI 1080P 60Hz
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.	Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)	
Operating Mode	HDMI 1080P 60Hz	EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)	
Date of Test	2010/10/13 15:34:53		
Climatic Condition			
Memo	Power Analyzer	KHA1000 Ver1.50	
	Supply Source	230V 50Hz	
	Reference Impedance		

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 600 s
 Flicker Margin 100 %
 d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.030	0.004	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Operating mode : USB Display (moving image)
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.	Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)	
Operating Mode	USB Display(moving image)	EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)	
Date of Test	2010/10/13 16:11:11		
Climatic Condition			
Memo	Power Analyzer	KHA1000 Ver1.50	
	Supply Source	230V 50Hz	
	Reference Impedance		

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 600 s
 Flicker Margin 100 %
 d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.035	0.004	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Operating mode : USB VIEWER (moving image)
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type		Type of Test	EN61000-3-3(1995)/A2(2005)
Serial No.			*IEC61000-3-3:Ed1.2(2005)
Operating Mode	USB VIEWER(moving image)		EN61000-4-15(1998)/A1(2003)
Date of Test	2010/10/13 15:07:25		*IEC61000-4-15:Ed1.1(2003)
Climatic Condition		Power Analyzer	KHA1000 Ver1.50
Memo		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 PIt Test Duration 600 s
 Flicker Margin 100 %
 d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.035	0.004	0	Pass

PIt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Operating mode : VIDEO
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-P350W		
Type			
Serial No.		Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)
Operating Mode	VIDEO		EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)
Date of Test	2010/10/13 15:23:34		
Climatic Condition			
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 600 s
 Flicker Margin 100 %
 d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.030	0.004	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 13, 2010
Test Place : Shielded room No.1
Climate condition : 24.0°C 51.2% 986 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M300XS		
Type			
Serial No.		Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)
Operating Mode	COMPUTER 1 UXGA 60Hz		EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)
Date of Test	2010/10/13 18:05:27		
Climatic Condition			
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result	Pass
Nominal Voltage	230 V
Nominal Frequency	50 Hz
Pft Test Duration	600 s
Flicker Margin	100 %
d Measurement Margin	100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.035	0.004	0	Pass

Pft	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Voltage Change Caused by Manual Switching Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M300XS		
Type			
Serial No.		Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)
Operating Mode	COMPUTER 1 UXGA 60Hz		EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)
Date of Test	2010/10/13 19:45:10		
Climatic Condition			
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 PIt Test Duration 1440 s

d Measurement Margin 100 %

Segment	dmax(%)	dc(%)	d(t)>3.3%(ms)
Seg. 1	0.874	0.004	0
Seg. 2	0.552	0.013	0
Seg. 3	0.852	0.013	0
Seg. 4	0.539	0.013	0
Seg. 5	0.552	0.009	0
Seg. 6	0.413	0.009	0
Seg. 7	0.643	0.009	0
Seg. 8	0.635	0.009	0
Seg. 9	0.635	0.004	0
Seg.10	0.548	0.013	0
Seg.11	0.930	0.013	0
Seg.12	0.735	0.004	0
Seg.13	0.643	0.009	0
Seg.14	0.917	0.009	0
Seg.15	0.613	0.009	0
Seg.16	0.965	0.009	0
Seg.17	0.452	0.009	0
Seg.18	0.643	0.013	0
Seg.19	1.065	0.009	0
Seg.20	0.778	0.013	0
Seg.21	0.409	0.009	0
Seg.22	0.474	0.013	0
Seg.23	0.652	0.009	0
Seg.24	1.096	0.009	0

Total	dmax(%)	dc(%)	d(t)>3.3%(ms)
Limit	6.000	3.300	500
Average	0.687		
Maximum	1.096	0.013	0

This test data meets EN 61000-3-3:2008.

Operating mode : USB VIEWER (still image)
 Date of test : October 13, 2010
 Test Place : Shielded room No.1
 Climatic condition : 24.0°C 51.2% 986 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M300XS		
Type			
Serial No.		Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)
Operating Mode	USB VIEWER(still image)		EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)
Date of Test	2010/10/13 18:17:36		
Climatic Condition			
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 600 s
 Flicker Margin 100 %
 d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.006	0.030	0.004	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 13, 2010
Test Place : Shielded room No.1
Climatic condition : 23.8°C 50.5% 985 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage Fluctuation and Flicker Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M260XS		
Type			
Serial No.	Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)	
Operating Mode	COMPUTER 1 UXGA 60Hz	EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)	
Date of Test	2010/10/13 21:12:48		
Climatic Condition			
Memo	Power Analyzer	KHA1000 Ver1.50	
	Supply Source	230V 50Hz	
	Reference Impedance		

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
Nominal Voltage 230 V
Nominal Frequency 50 Hz
Plt Test Duration 600 s
Flicker Margin 100 %
d Measurement Margin 100 %

Segment	Pst	dmax(%)	dc(%)	d(t)>3.3%(ms)	Judge
Limit	1.000	4.000	3.300	500	
Seg. 1	0.007	0.035	0.000	0	Pass

Plt	Value	Judge
Limit	0.650	
Measurement	0.003	Pass

This test data meets EN 61000-3-3:2008.

Voltage Change Caused by Manual Switching Test Report

Company	NEC Display Solutions, Ltd.		
Model Name	NP-M260XS		
Type			
Serial No.		Type of Test	EN61000-3-3(1995)/A2(2005) *IEC61000-3-3:Ed1.2(2005)
Operating Mode	COMPUTER 1 UXGA 60Hz		EN61000-4-15(1998)/A1(2003) *IEC61000-4-15:Ed1.1(2003)
Date of Test	2010/10/13 22:15:20		
Climatic Condition			
Memo		Power Analyzer	KHA1000 Ver1.50
		Supply Source	230V 50Hz
		Reference Impedance	

Test Data of Voltage Fluctuation and Flicker

Final Test Result **Pass**
 Nominal Voltage 230 V
 Nominal Frequency 50 Hz
 Plt Test Duration 1440 s

d Measurement Margin 100 %

Segment	dmax(%)	dc(%)	d(t)>3.3%(ms)
Seg. 1	0.670	0.009	0
Seg. 2	0.396	0.009	0
Seg. 3	0.426	0.013	0
Seg. 4	0.417	0.009	0
Seg. 5	0.443	0.009	0
Seg. 6	0.487	0.009	0
Seg. 7	0.552	0.009	0
Seg. 8	0.374	0.009	0
Seg. 9	0.591	0.009	0
Seg.10	0.713	0.004	0
Seg.11	0.465	0.013	0
Seg.12	0.535	0.009	0
Seg.13	0.557	0.009	0
Seg.14	0.448	0.009	0
Seg.15	0.491	0.013	0
Seg.16	0.417	0.013	0
Seg.17	0.387	0.013	0
Seg.18	0.565	0.009	0
Seg.19	0.439	0.013	0
Seg.20	0.374	0.009	0
Seg.21	0.443	0.013	0
Seg.22	0.443	0.013	0
Seg.23	0.348	0.009	0
Seg.24	0.387	0.013	0

Total	dmax(%)	dc(%)	d(t)>3.3%(ms)
Limit	6.000	3.300	500
Average	0.469		
Maximum	0.713	0.013	0

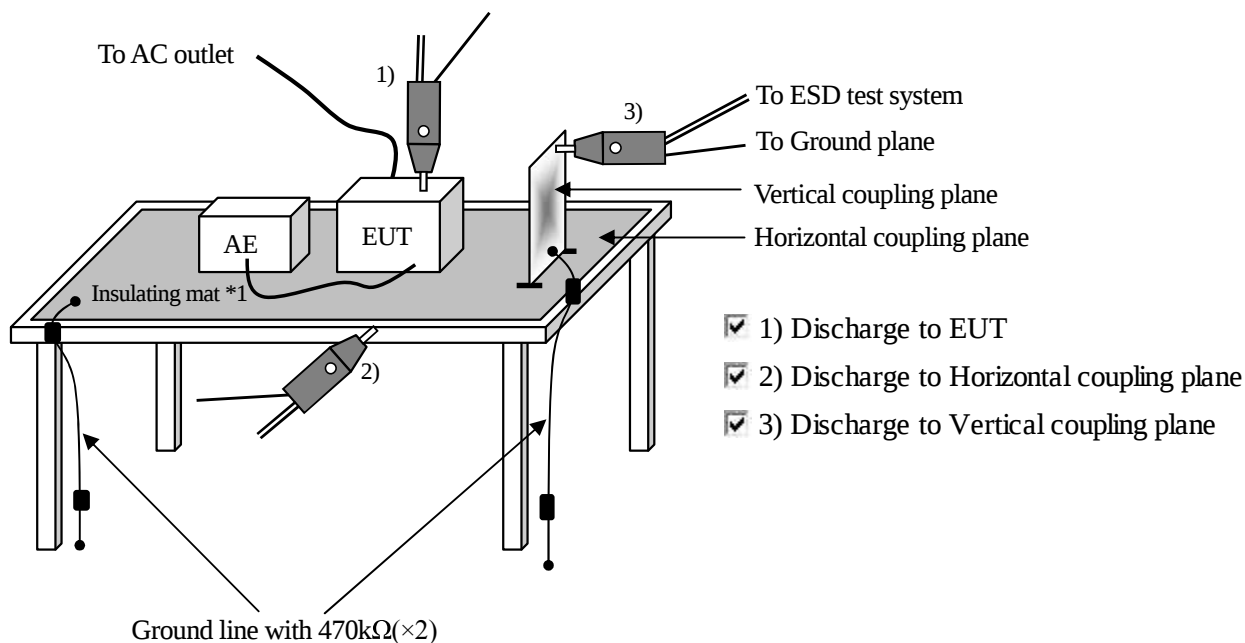
This test data meets EN 61000-3-3:2008.

10. Electrostatic discharge immunity

10.1 Applied test condition

Items	Description
Test method	EN 61000-4-2
Performance criterion	B
Test level	Contact discharge : $\pm 2\text{kV}$, $\pm 4\text{kV}$ Air discharge : $\pm 2\text{ kV}$, $\pm 4\text{ kV}$, $\pm 8\text{kV}$
Number of discharge	Contact discharge : 25 discharges Air discharge : 10 single discharges
Time interval	1 sec.
Table size	Work table / $2.0\text{m(W)} \times 1.0\text{m(D)} \times 0.8\text{m(H)}$
Horizontal coupling plane size	$1.6\text{ m} \times 0.8\text{m}$
Vertical coupling plane size	$0.5\text{m} \times 0.5\text{m}$

10.2 Sample test set up



*1: Used it for EUT Installation / Table-top only

10.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate conditions : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C1 - C2	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.
EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

Operating mode : COMPUTER 2 WXGA 60Hz
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate condition : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C1 - C2	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.
EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

Operating mode : HDMI 1080P 60Hz
 Date of test : October 25, 2010
 Test Place : Shielded room No.1
 Climate condition : 24.9°C 52.6% 988 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C1 - C2	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.

EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

Operating mode : USB Display (moving image)
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate condition : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C1 - C2	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.
EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

Operating mode : USB VIEWER (moving image)
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate conditions : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C1 - C2	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.

EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

Operating mode : VIDEO
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate condition : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C1 - C2	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.

EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate condition : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C3 - C5	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.
EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

Operating mode : USB VIEWER (still image)
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate conditions : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C3 - C5	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.

EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 25, 2010
Test Place : Shielded room No.1
Climate condition : 24.9°C 52.6% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
C3 - C5	A	A	B*	B*	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote controller only)	A	A	A	A	PASS

B*: LAN communication was stopped momentarily when applying disturbance.
EUT was self-recoverable to normal operation after the test.

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

[NP-M260WS: With modified panel]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : June 30, 2011
Test Place : Shielded room No.1
Climate condition : 25.4°C 58.9% 993 Pa
Test engineer : Yoshiyuki Takahashi

Note: As a result of test performed based on Test plan, EUT passed the test.

Contact discharge to conductive part

Discharge Point (Refer to discharge locations)	Result of performance criterion				Test result
	Test voltage 2kV		Test voltage 4kV		
	+	-	+	-	
Contact discharge (○)	A	A	A	A	PASS
Horizontal Coupling Plane (Indirect) Center of the Front edge	A	A	A	A	PASS
Vertical Coupling Plane (Indirect) Front, Right, Back, Left side (Remote Controller Only)	A	A	A	A	PASS

Air discharge to insulating surface

Discharge Point (Refer to discharge locations)	Result of performance criterion						Test result
	Test voltage 2kV		Test voltage 4kV		Test voltage 8kV		
	+	-	+	-	+	-	
Air discharge (□)	A	A	A	A	A	A	PASS

10.4 Discharge locations

[NP-P350W, NP-M300XS, NP-M260XS]

Discharge point, ○: Contact discharge, □: Air discharge
Number: Point where degradation of performance appeared.

[NP-P350W]

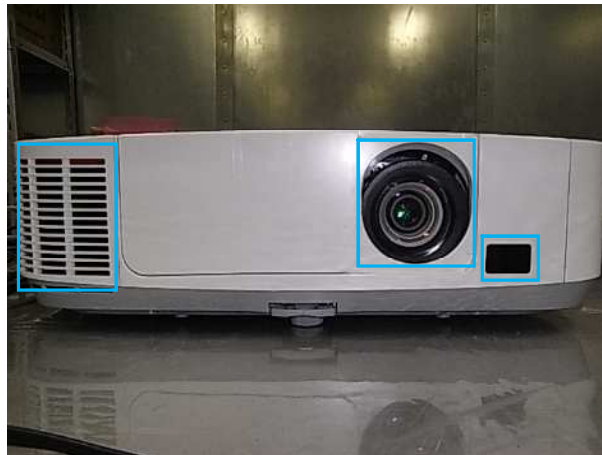


Figure1



Figure2

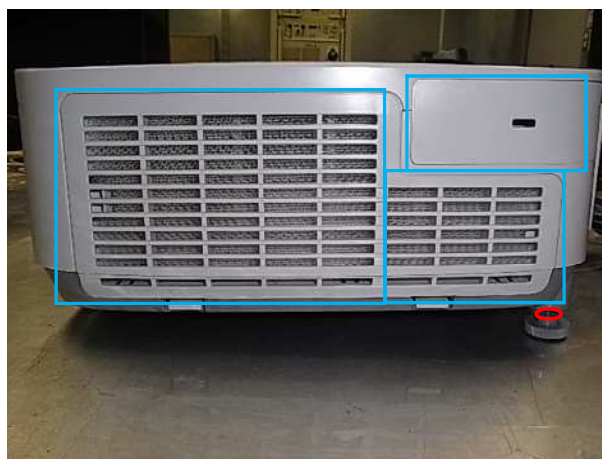


Figure3

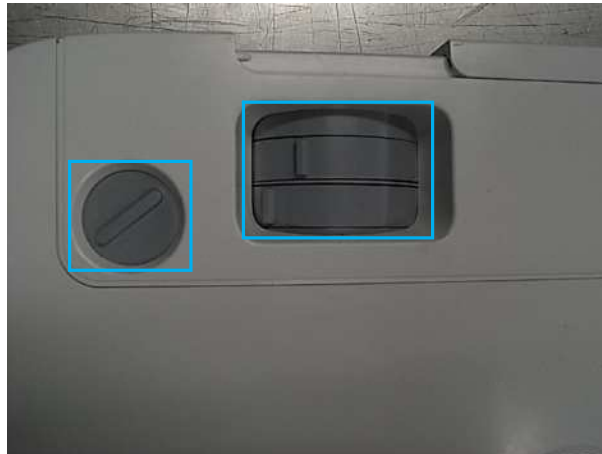


Figure4

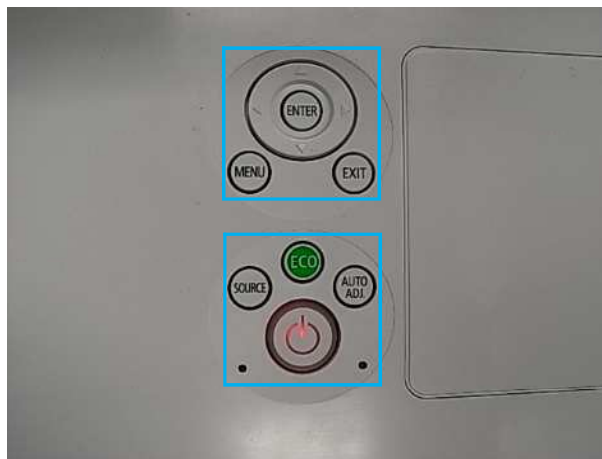


Figure5



Figure6

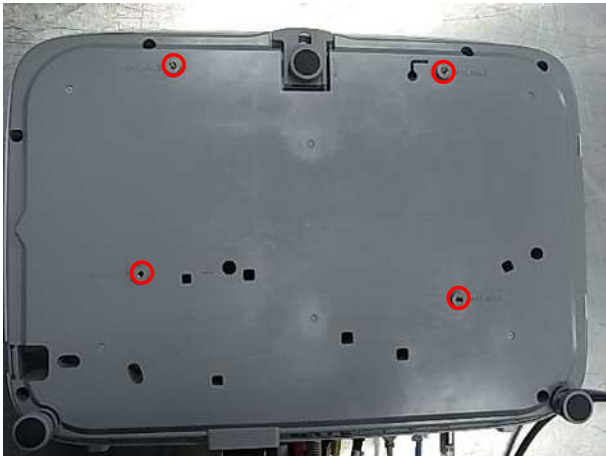


Figure7

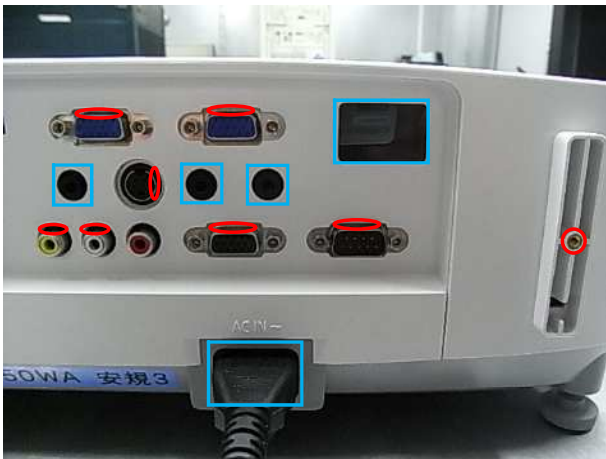


Figure8

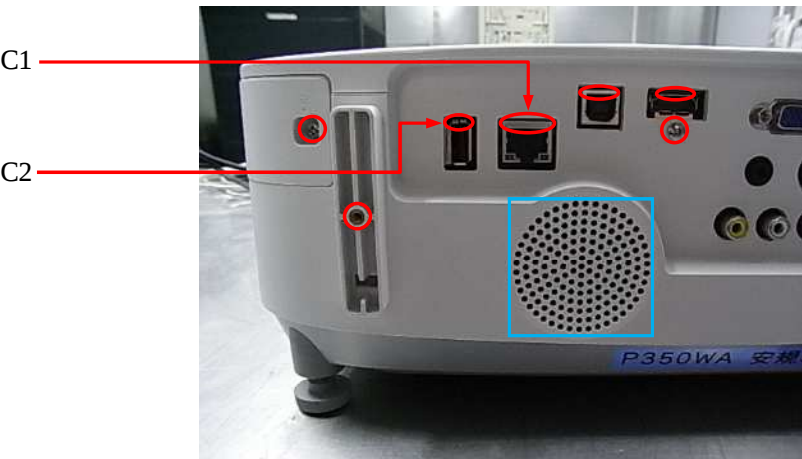


Figure9



Figure10



Figure11



Figure12

(COMPUTER 1 UXGA 60Hz, HDMI 1080P 60Hz, USB Display (moving image) , USB VIEWER (moving image) , VIDEO)

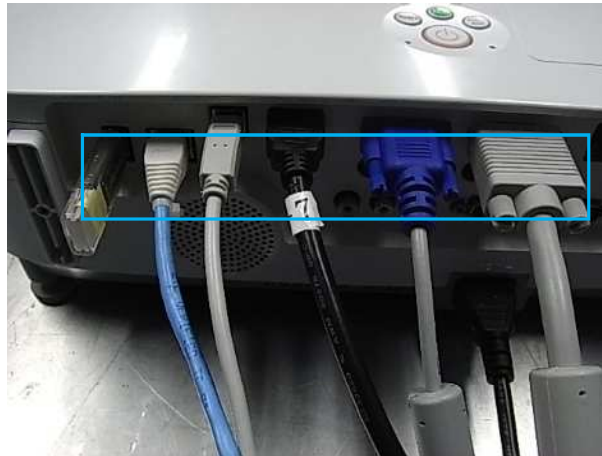


Figure13
(COMPUTER 2 WXGA 60Hz)



Figure14



Figure15

[NP-M300XS, NP-M260XS]



Figure16



Figure17

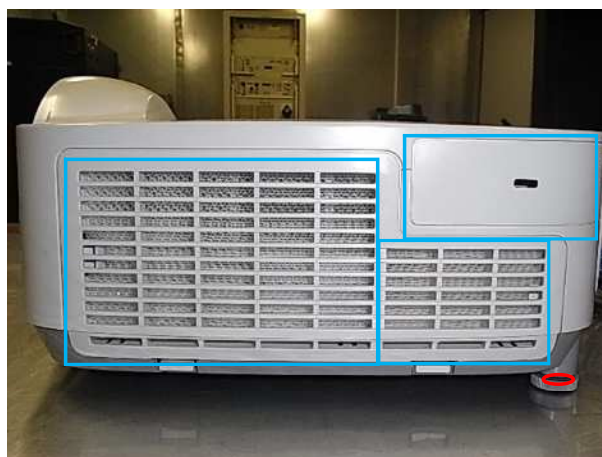


Figure18



Figure19

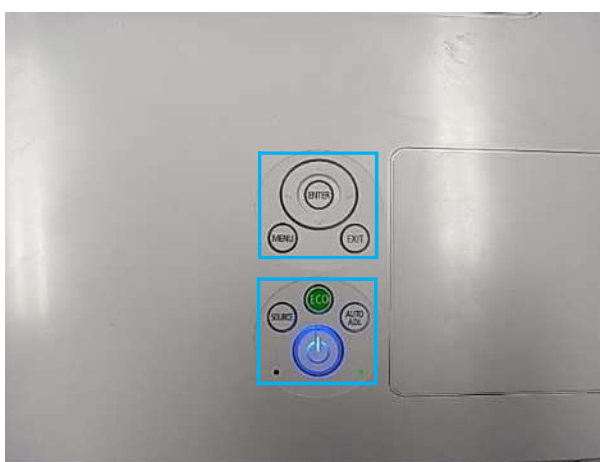


Figure20



Figure21



Figure22

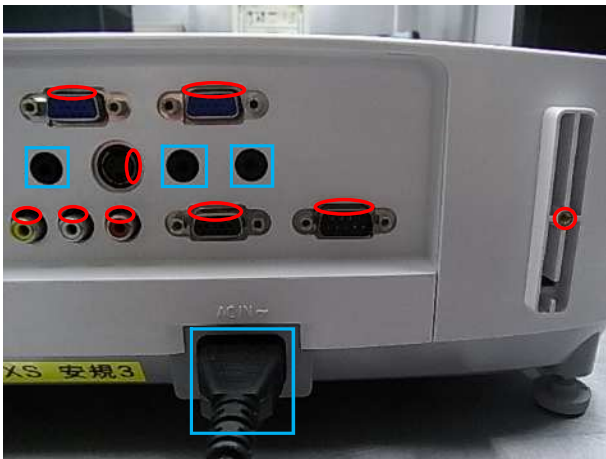


Figure23

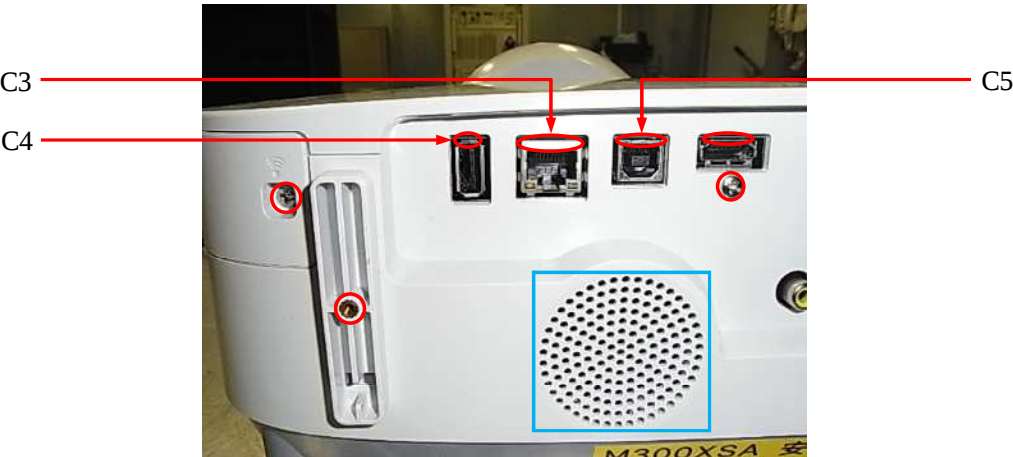


Figure24

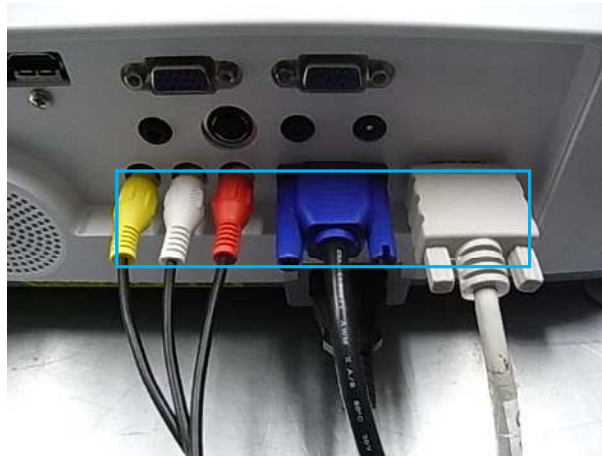


Figure25



Figure26



Figure27



Figure28



Figure29

[NP-M260WS: With modified panel]

Discharge point, ○ : Contact discharge, □ : Air discharge
Number: Point where degradation of performance appeared.



Figure1



Figure2

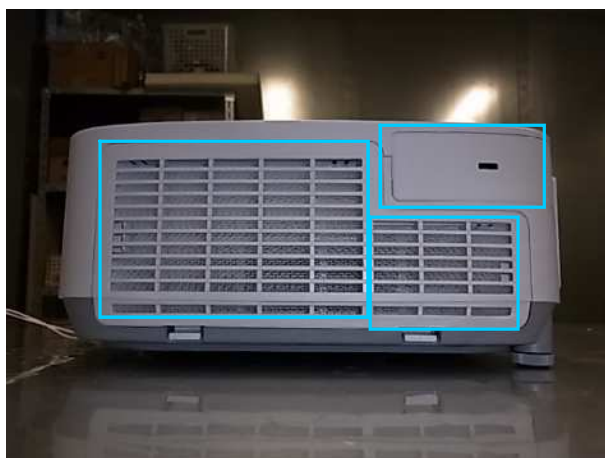


Figure3



Figure4

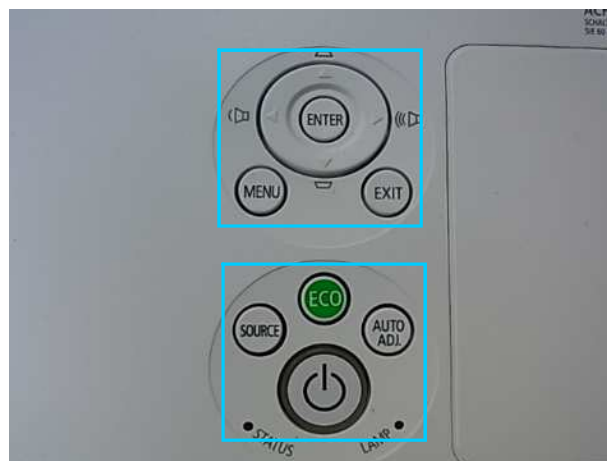


Figure5

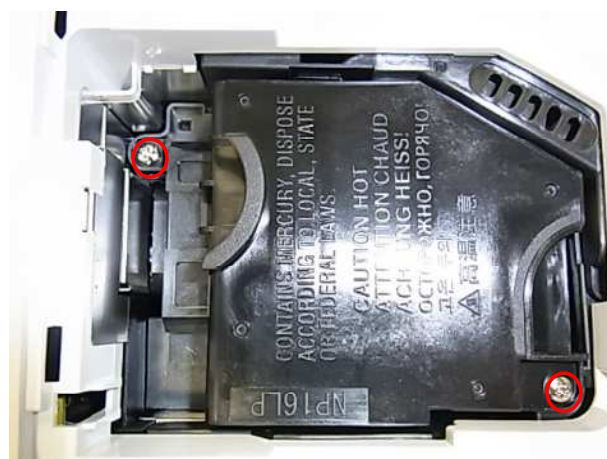


Figure6

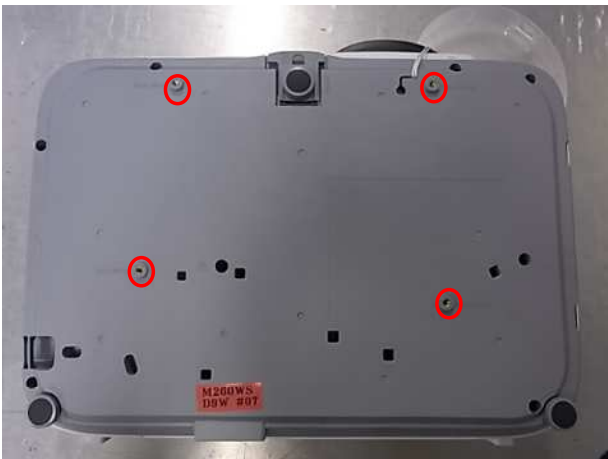


Figure7

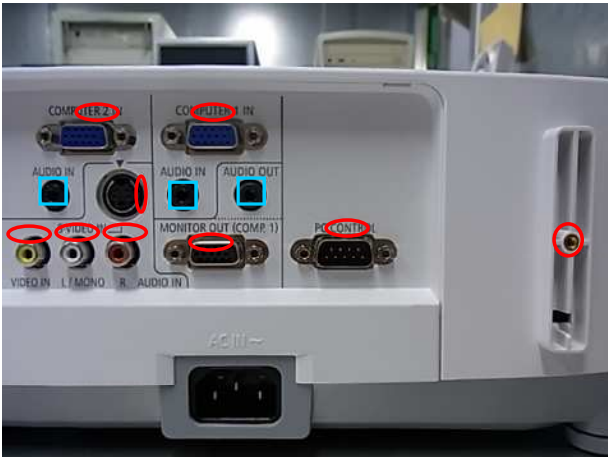


Figure8

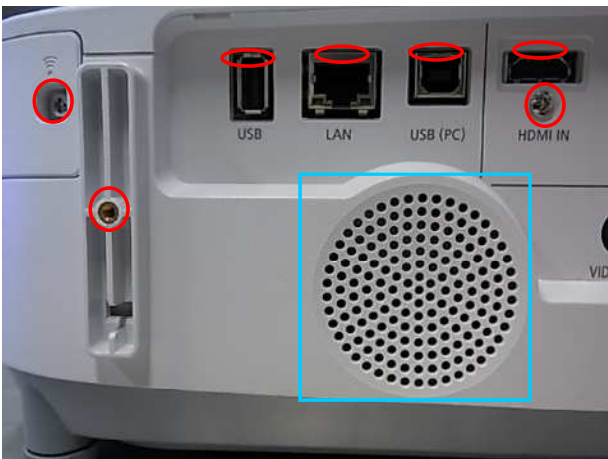


Figure9



Figure10



Figure11

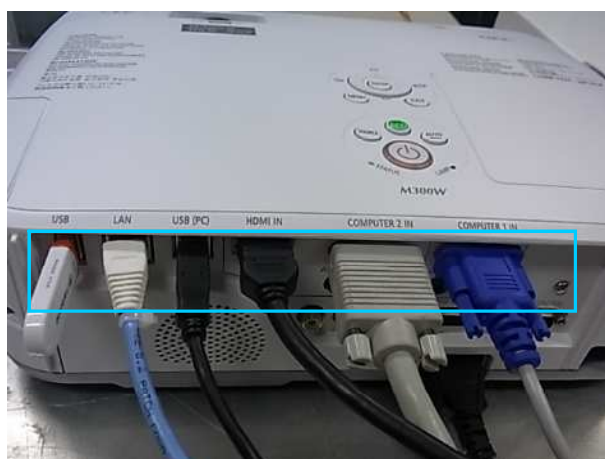


Figure12



Figure13



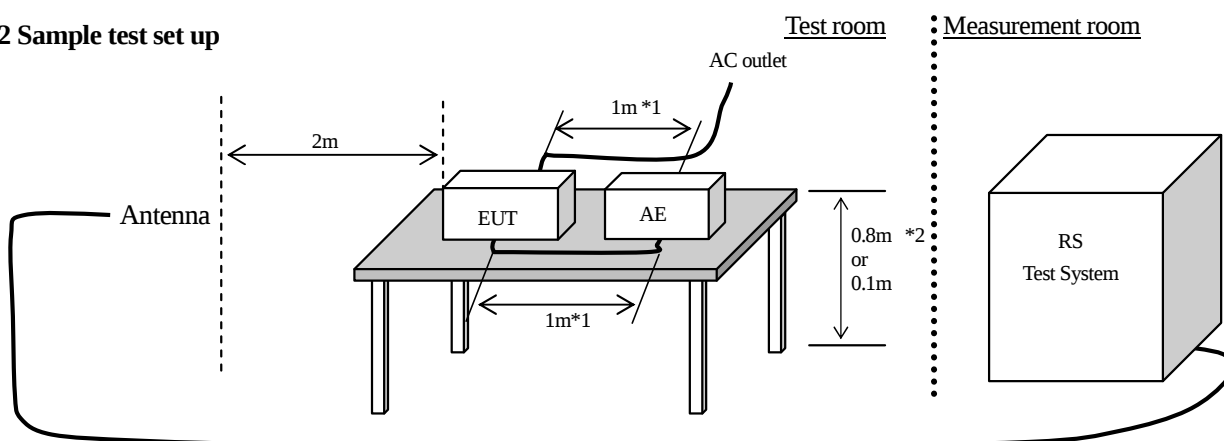
Figure14

11. Radio-frequency electromagnetic field immunity

11.1 Applied test condition

Items	Description
Test method	EN 61000-4-3
Performance criterion	A
Test level	3V/m
Frequency range	80MHz to 1000MHz
Frequency step	1%
Dwell time	2.9 sec.
Modulation	AM 80% 1kHz
EUT direction	Front, Right, Back, Left
Antenna polarity	Horizontal and Vertical
Test distance	2m
Antenna height	1.75m
Antenna type	Logbicon antenna

11.2 Sample test set up



*1 : Wiring is left exposed to the electromagnetic field for a distance of 1m from the EUT.

Wire is arranged parallel to the uniform area of the field.

*2: EUT Installation / Table-top: 0.8m

EUT Installation / Floor-Standing: 0.1m

11.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 7, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.7°C 49.9% 986 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

Operating mode : COMPUTER 2 WXGA 60Hz
Date of test : October 7, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.7°C 49.9% 986 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

Operating mode : HDMI 1080P 60Hz
Date of test : October 7, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.7°C 49.9% 986 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

Operating mode : USB Display (moving image)
Date of test : October 8, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.2°C 45.4% 985 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

Operating mode : USB VIEWER (moving image)
Date of test : October 8, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.2°C 45.4% 985 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

Operating mode : VIDEO
Date of test : October 8, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.2°C 45.4% 985 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A*	PASS
		Vertical	A*	PASS
Right (90°)	3	Horizontal	A*	PASS
		Vertical	A*	PASS
Back (180°)	3	Horizontal	A*	PASS
		Vertical	A*	PASS
Left (270°)	3	Horizontal	A*	PASS
		Vertical	A*	PASS

A*: Displayed image waved within the manufacturer's allowable range when applied disturbance.
EUT is self-recoverable to normal operation after removal of the disturbance.

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 12, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.7°C 48.9% 986 hPa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

Operating mode : USB VIEWER (still image)
Date of test : October 12, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.7°C 48.9% 986 hPa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 12, 2010
Test Place : Small anechoic chamber
Climate conditions : 22.7°C 48.9% 986 hPa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

[NP-M260WS: With modified panel]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : June 29, 2011
Test Place : Small anechoic chamber
Climate conditions : 29.6°C 58.1% 984 Pa
Test engineer : Yoshiyuki Takahashi

Note: As a result of test performed based on Test plan, EUT passed the test.

EUT direction	Test level (V/m)	Antenna polarity	Result of performance criterion	Test result
Front (0°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Right (90°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Back (180°)	3	Horizontal	A	PASS
		Vertical	A	PASS
Left (270°)	3	Horizontal	A	PASS
		Vertical	A	PASS

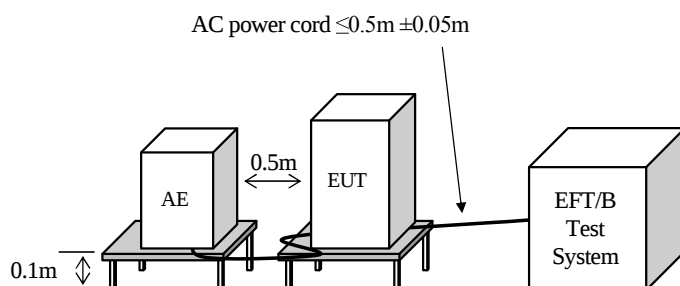
12. Electrical fast transient/burst immunity

12.1 Applied test condition

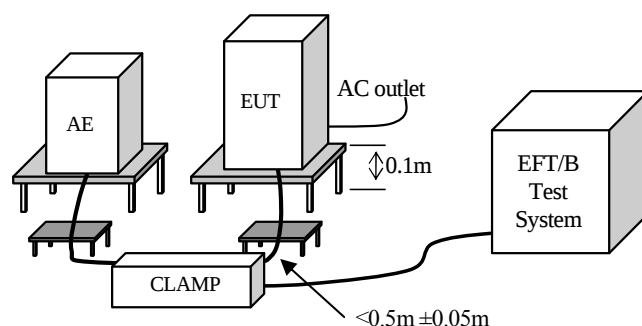
Items	Description
Test method	EN 61000-4-4
Performance criterion	B
Test level	☒ AC power port : $\pm 1.0\text{K V}$
	☒ Signal port : $\pm 0.5\text{K V}$
	☐ DC power port : $\pm 0.5\text{K V}$
Spec. of wave form	
Rise time of one pulse	5ns
Impulse duration	50ns
Repetition frequency	5kHz
Burst duration	15ms
Burst period	300ms
Duration	60 sec.

12.2 Sample test set up

AC power port



Signal port



12.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 hPa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS
Signal port COMPUTER 1	Clamp	0.5	+	A	PASS
			-	A	PASS
Signal port MONITOR OUT	Clamp	0.5	+	A	PASS
			-	A	PASS
Signal port PC CONTROL	Clamp	0.5	+	A	PASS
			-	A	PASS
Signal port AUDIO1 IN	Clamp	0.5	+	A	PASS
			-	A	PASS
Signal port AUDIO OUT	Clamp	0.5	+	A	PASS
			-	A	PASS
Signal port LAN	Clamp	0.5	+	A	PASS
			-	B*	PASS

B*: LAN communication was sometimes stopped when applying disturbance.

EUT was self-recoverable to normal operation after the test.

Operating mode : COMPUTER 2 WXGA 60Hz
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS
Signal port COMPUTER 2	Clamp	0.5	+	A	PASS
			-	A	PASS
Signal port AUDIO2 IN	Clamp	0.5	+	A	PASS
			-	A	PASS

Operating mode : HDMI 1080P 60Hz
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS
Signal port HDMI	Clamp	0.5	+	A	PASS
			-	A	PASS

Operating mode : USB Display (moving image)
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS
Signal port USB	Clamp	0.5	+	A	PASS
			-	A	PASS

Operating mode : USB VIEWER (moving image)
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS

Operating mode : VIDEO
 Date of test : October 18, 2010
 Test Place : Shielded room No.1
 Climatic conditions : 24.7°C 50.1% 988 hPa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS
Signal port VIDEO+AUDIO L+AUDIO R	Clamp	0.5	+	B*	PASS
			-	B*	PASS

B*: Displayed image flickered when applying disturbance. EUT was self-recoverable to normal operation after the test.

Operating mode : S-VIDEO
 Date of test : October 18, 2010
 Test Place : Shielded room No.1
 Climatic conditions : 24.7°C 50.1% 988 hPa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
Signal port S-VIDEO	Clamp	0.5	+	B*	PASS
			-	B*	PASS

B*: Displayed image flickered when applying disturbance. EUT was self-recoverable to normal operation after the test.

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 hPa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS
Signal port LAN	Clamp	0.5	+	B*	PASS
			-	B*	PASS

B*: LAN communication was stopped momentarily when applying disturbance.
EUT was self-recoverable to normal operation after the test.

Operating mode : USB VIEWER (still image)
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate conditions : 24.7°C 50.1% 988 hPa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 18, 2010
Test Place : Shielded room No.1
Climate condition : 24.7°C 50.1% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Injection method	Test voltage (kV)	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Neutral	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Ground	CDN	1.0	+	A	PASS
			-	A	PASS
AC power port Line + Neutral + Ground	CDN	1.0	+	A	PASS
			-	A	PASS

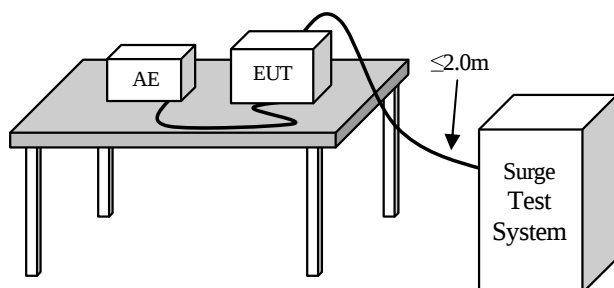
13. Surges immunity

13.1 Applied test condition

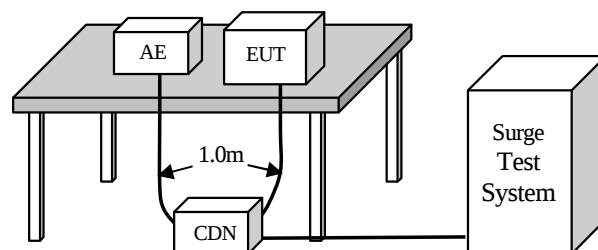
Items	Description
Test method	EN 61000-4-5
Performance criterion	B
Test level	☒ AC power port : Line - Line: $\pm 1.0\text{kV}$: Line - Ground: $\pm 2.0\text{ kV}$
	☒ Signal port : Line - Ground: $\pm 1.0\text{ kV}$
	☐ DC port : Line - Ground: $\pm 0.5\text{ kV}$
Spec. of wave form	1.2 μs / 50 μs
Open-circuit voltage	
Front time/ Time to half value	8 μs / 20 μs
Short-circuit current	
Front time/ Time to half value	
Phase angle	AC power port : 0°, 90°, 180°, 270°
	Signal port : -
	DC power port : Asynchronous
Number of test	5 times
Repetition rate	1min.

13.2 Sample test set up

AC power port



Signal port



13.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.6°C 52.7% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Test voltage (kV)	Phase angle	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line - Neutral	1	0	+	A	PASS
			-	A	PASS
	1	90	+	A	PASS
			-	A	PASS
	1	180	+	A	PASS
			-	A	PASS
	1	270	+	A	PASS
			-	A	PASS
	2	0	+	A	PASS
			-	A	PASS
AC power port Line - Ground	2	90	+	A	PASS
			-	A	PASS
	2	180	+	A	PASS
			-	A	PASS
	2	270	+	A	PASS
			-	A	PASS
AC power port Neutral - Ground	2	0	+	A	PASS
			-	A	PASS
	2	90	+	A	PASS
			-	A	PASS
	2	180	+	A	PASS
			-	A	PASS
	2	270	+	A	PASS
			-	A	PASS
Signal port LAN	1	-	+	A	PASS
			-	A	PASS

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 15, 2010
Test Place : Shielded room No.1
Climate conditions : 21.9°C 47.8% 984 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Test voltage (kV)	Phase angle	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line - Neutral	1	0	+	A	PASS
			-	A	PASS
	1	90	+	A	PASS
			-	A	PASS
	1	180	+	A	PASS
			-	A	PASS
	1	270	+	A	PASS
			-	A	PASS
AC power port Line - Ground	2	0	+	A	PASS
			-	A	PASS
	2	90	+	A	PASS
			-	A	PASS
	2	180	+	A	PASS
			-	A	PASS
	2	270	+	A	PASS
			-	A	PASS
AC power port Neutral - Ground	2	0	+	A	PASS
			-	A	PASS
	2	90	+	A	PASS
			-	A	PASS
	2	180	+	A	PASS
			-	A	PASS
	2	270	+	A	PASS
			-	A	PASS
Signal port LAN	1	-	+	A	PASS
			-	A	PASS

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 15, 2010
Test Place : Shielded room No.1
Climate conditions : 23.1°C 52.3% 986 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Coupling	Test voltage (kV)	Phase angle	Polarity (+/-)	Result of performance criterion	Test result
AC power port Line - Neutral	1	0	+	A	PASS
			-	A	PASS
	1	90	+	A	PASS
			-	A	PASS
	1	180	+	A	PASS
			-	A	PASS
	1	270	+	A	PASS
			-	A	PASS
	2	0	+	A	PASS
			-	A	PASS
AC power port Line - Ground	2	90	+	A	PASS
			-	A	PASS
	2	180	+	A	PASS
			-	A	PASS
	2	270	+	A	PASS
			-	A	PASS
AC power port Neutral - Ground	2	0	+	A	PASS
			-	A	PASS
	2	90	+	A	PASS
			-	A	PASS
	2	180	+	A	PASS
			-	A	PASS
	2	270	+	A	PASS
			-	A	PASS
Signal port LAN	1	-	+	A	PASS
			-	A	PASS

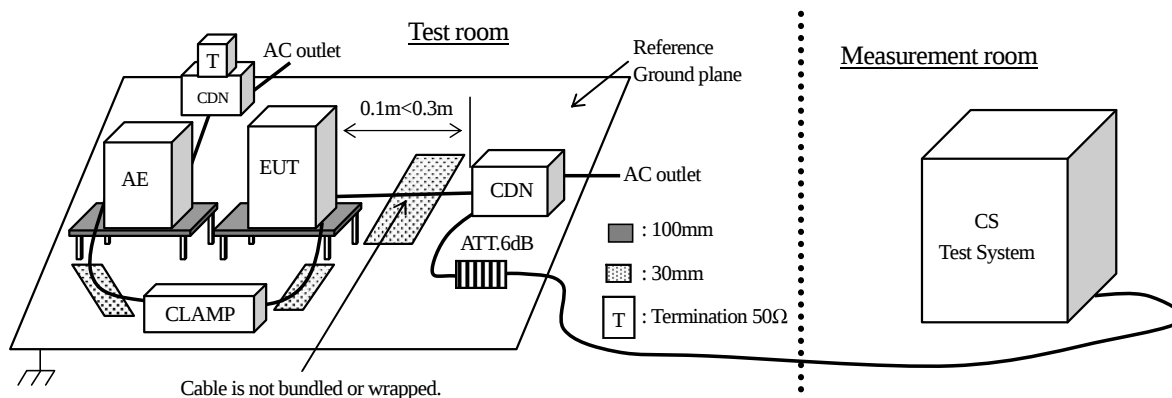
14. Conducted disturbances, induced by radio-frequency fields immunity

14.1 Applied test condition

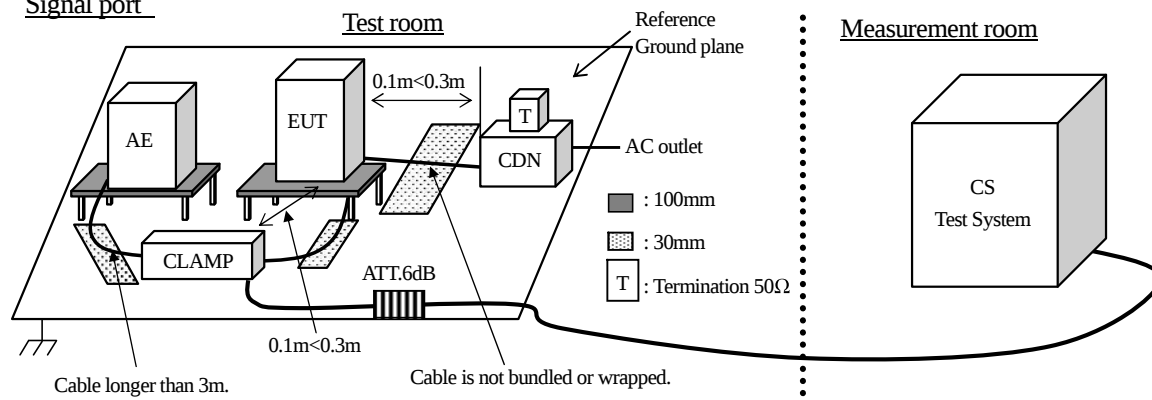
Items	Requirement
Test method	EN 61000-4-6
Performance criterion	A
Test level	☒ AC power port : 3V
	☒ Signal port : 3V
	☐ DC power port : 3V
Frequency range	0.15MHz to 80MHz
Frequency step	1%
Dwell time	2.9 sec.
Modulation	AM 80% 1kHz
Coupling & decoupling device	CDN-M3 (AC power port) : For EUT(Internal cable length of CDN : 200mm) CDN-M3 (AC power port) : For Peripheral EM clamp (Signal port)

14.2 Sample test set up

AC power port



Signal port



14.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
 Date of test : October 20, 2010
 : October 21, 2010
 : October 22, 2010
 Test Place : Small anechoic chamber
 Climate conditions : 24.3°C 51.4% 988 Pa
 : 24.0°C 50.8% 988 Pa
 : 24.4°C 51.1% 988 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS
Signal port COMPUTER1	3	EM clamp	A	PASS
Signal port MONITOR OUT	3	EM clamp	A	PASS
Signal port PC CONTROL	3	EM clamp	A	PASS
Signal port AUDIO 1 IN	3	EM clamp	A	PASS
Signal port AUDIO OUT	3	EM clamp	A	PASS
Signal port LAN	3	EM clamp	A	PASS

Operating mode : COMPUTER 2 WXGA 60Hz
 Date of test : October 21, 2010
 : October 22, 2010
 Test Place : Small anechoic chamber
 Climate conditions : 24.0°C 50.8% 987 Pa
 : 24.4°C 51.1% 988 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS
Signal port COMPUTER2	3	EM clamp	A*	PASS
Signal port AUDIO 2 IN	3	EM clamp	A	PASS

A*: Displayed image waved within the manufacturer's allowable range when applying disturbance.
 EUT is self-recoverable to normal operation after removal of the disturbance.

Operating mode : HDMI 1080P 60Hz
Date of test : October 21, 2010
October 22, 2010
Test Place : Small anechoic chamber
Climate conditions : 24.0°C 50.8% 987 Pa
24.4°C 51.1% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS
Signal port HDMI	3	EM clamp	A	PASS

Operating mode : USB Display (moving image)
Date of test : October 21, 2010
October 22, 2010
Test Place : Small anechoic chamber
Climate conditions : 24.0°C 50.8% 987 Pa
24.4°C 51.1% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS
Signal port USB	3	EM clamp	A	PASS

Operating mode : USB VIEWER (moving image)
Date of test : October 21, 2010
Test Place : Small anechoic chamber
Climate conditions : 24.0°C 50.8% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS

Operating mode : VIDEO
 Date of test : October 21, 2010
 : October 22, 2010
 Test Place : Small anechoic chamber
 Climate conditions : 24.0°C 50.8% 987 Pa
 : 24.4°C 51.1% 989 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS
Signal port VIDEO+AUDIO L+AUDIO R	3	EM clamp	A*	PASS

A*: Displayed image waved within the manufacturer's allowable range when applying disturbance.
 EUT is self-recoverable to normal operation after removal of the disturbance.

Operating mode : S-VIDEO
 Date of test : October 22, 2010
 Test Place : Small anechoic chamber
 Climate conditions : 24.4°C 51.1% 989 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
Signal port S-VIDEO	3	EM clamp	A*	PASS

A*: Displayed image waved within the manufacturer's allowable range when applying disturbance.
 EUT is self-recoverable to normal operation after removal of the disturbance.

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
 Date of test : October 20, 2010
 : October 22, 2010
 Test Place : Small anechoic chamber
 Climate conditions : 24.3°C 51.4% 988 Pa
 : 24.4°C 51.1% 988 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS
Signal port LAN	3	EM clamp	A	PASS

Operating mode : USB VIEWER (still image)
 Date of test : October 20, 2010
 Test Place : Small anechoic chamber
 Climate conditions : 24.3°C 51.4% 988 Pa
 Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 20, 2010
Test Place : Small anechoic chamber
Climate conditions : 24.3°C 51.4% 988 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

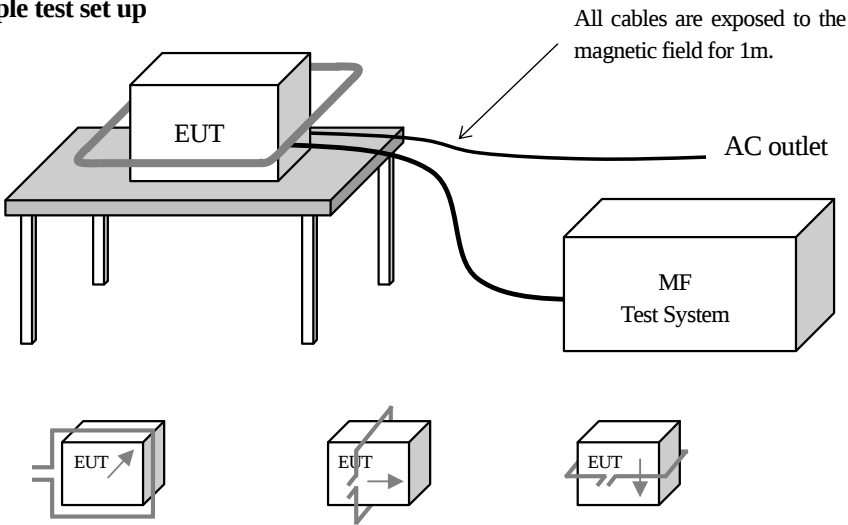
Test port	Test level (V)	Injection method	Result of performance criterion	Test result
AC power port	3	CDN-M3	A	PASS

15. Power-frequency magnetic field immunity

15.1 Applied test condition

Items	Description
Test method	EN 61000-4-8
Performance criterion	A
Test level	1 A/m
Power frequency	50 Hz
Test duration	1min.
Induction coil	1m × 1m Square coil

15.2 Sample test set up



15.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

Operating mode : COMPUTER 2 WXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

Operating mode : HDMI 1080P 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

Operating mode : USB Display (moving image)
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

Operating mode : USB VIEWER (moving image)
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

Operating mode : VIDEO
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

Operating mode : USB VIEWER (still image)
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.3°C 52.2% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

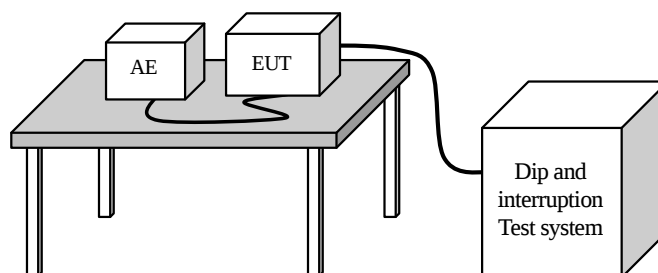
Test axis	Test level (A/m)	Result of performance criterion	Test result
X axis	1	A	PASS
Y axis	1	A	PASS
Z axis	1	A	PASS

16. Voltage dips, short interruption and voltage variations immunity

16.1 Applied test condition

Items	Description	
	Voltage dips	Voltage interruptions
Test method	EN 61000-4-11	EN 61000-4-11
Performance criterion	B / >95% Reduction, 0.5 cycle C / 30% Reduction, 25 cycle	C / >95% Reduction, 250 cycle
Nominal voltage	AC 100V 50Hz AC 240V 50Hz	AC 100V 50Hz AC 240V 50Hz
Test level	>95% Reduction, 0.5 cycle 30% Reduction, 25 cycle	>95% Reduction, 250 cycle
Repeat time	3 times (Interval time of 10 sec.)	3 times (Interval time of 10 sec.)
Phase angle	0°, 180°(180° for 0.5 cycle only)	0°

16.2 Sample test set up



16.3 Test data

[NP-P350W]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.5°C 52.6% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage dips

Nominal voltage (V)	Reduction (%)	Output voltage (V)	Cycle	Phase angle	Result of performance criterion	Test result
100	>9.5	0	0.5	0°	A	PASS
	>9.5	0	0.5	180°	A	PASS
	30	70	25	0°	A	PASS
240	>9.5	0	0.5	0°	A	PASS
	>9.5	0	0.5	180°	A	PASS
	30	168	25	0°	A	PASS

Voltage interruptions

Nominal voltage (V)	Reduction (%)	Output voltage (V)	Cycle	Phase angle	Result of performance criterion	Test result
100	>95	0	250	0°	C*	PASS
240	>95	0	250	0°	C*	PASS

C*: Power of the EUT was turned off. EUT was recoverable to normal operation by re-setting up the EUT and PC after voltage was recovered.

[NP-M300XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.5°C 52.6% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage dips

Nominal voltage (V)	Reduction (%)	Output voltage (V)	Cycle	Phase angle	Result of performance criterion	Test result
100	>9.5	0	0.5	0°	A	PASS
	>9.5	0	0.5	180°	A	PASS
	30	70	25	0°	A	PASS
240	>9.5	0	0.5	0°	A	PASS
	>9.5	0	0.5	180°	A	PASS
	30	168	25	0°	A	PASS

Voltage interruptions

Nominal voltage (V)	Reduction (%)	Output voltage (V)	Cycle	Phase angle	Result of performance criterion	Test result
100	>95	0	250	0°	C*	PASS
240	>95	0	250	0°	C*	PASS

C*: Power of the EUT was turned off. EUT was recoverable to normal operation by re-setting up the EUT and PC after voltage was recovered.

[NP-M260XS]

Operating mode : COMPUTER 1 UXGA 60Hz
Date of test : October 14, 2010
Test Place : Shielded room No.1
Climate conditions : 23.5°C 52.6% 987 Pa
Test engineer : Satoshi Hosoya

Note: As a result of test performed based on Test plan, EUT passed the test.

Voltage dips

Nominal voltage (V)	Reduction (%)	Output voltage (V)	Cycle	Phase angle	Result of performance criterion	Test result
100	>9.5	0	0.5	0°	A	PASS
	>9.5	0	0.5	180°	A	PASS
	30	70	25	0°	A	PASS
240	>9.5	0	0.5	0°	A	PASS
	>9.5	0	0.5	180°	A	PASS
	30	168	25	0°	A	PASS

Voltage interruptions

Nominal voltage (V)	Reduction (%)	Output voltage (V)	Cycle	Phase angle	Result of performance criterion	Test result
100	>95	0	250	0°	C*	PASS
240	>95	0	250	0°	C*	PASS

C*: Power of the EUT was turned off. EUT was recoverable to normal operation by re-setting up the EUT and PC after voltage was recovered.

17. Uncertainty of measurement

Expanded uncertainties stated are calculated with a coverage Factor k=2.

Please note that these results are not taken into account when determining compliance or non-compliance with test result.

Test item	Measurement uncertainty
Conducted emission at mains port	±3.0dB
Conducted emission at telecom port	+2.5dB, -3.1dB
Radiated emission (30MHz - 1000MHz)	±4.5dB
Radiated emission (1GHz - 26GHz)	±3.9dB
Harmonic current emission	±2.8%
Voltage change, voltage fluctuation and flicker	±2.8%
Electrostatic discharge immunity	±2.8%
Radio-frequency electromagnetic field immunity (below 1000MHz)	±3.1dB
Radio-frequency electromagnetic field immunity (above 1000MHz)	±3.2dB
Electrical fast transient burst immunity	±2.7%
Surges immunity	±2.7%
Conducted disturbances, induced by radio-frequency fields immunity	±2.7dB
Power frequency magnetic field immunity	±2.8%
Voltage dips, short interruptions and voltage variations immunity	±2.3%

18. Laboratory description

1. Location: ZACTA Technology Corporation Yonezawa Testing Center

4149-7 Hachimanpara 5-chome Yonezawa-shi Yamagata 992-1128 Japan

Phone: +81-238-28-2880 Fax: +81-238-28-2888

2. Facility filing information:

1) NVLAP accreditation: NVLAP Lab. code: 200306-0

2) VLAC accreditation: Lab. code: VLAC-013

Site name	Radiated emission	Conducted emission for mains port	Conducted emission for telecom port	Radiated emission (CMAD)	Expiry Date
10m Semi-anechoic chamber	VLAC-013			VLAC-013	Jul. 3, 2013
3m Semi-anechoic chamber				-	
Shielded room No.1	-	VLAC-013		-	

3) FCC filing:

Site name	Registration Number	Expiry Date
Site 2, Site3	91065	November 19, 2011
3m Semi-anechoic chamber 10m Semi-anechoic chamber Shielded room No.1	540072	February 16, 2013

4) Industry Canada Oats site filing:

Site name	Sites on file: Oats 3m/10m	Expiry Date
Site 2	4224A-2	February 16, 2012
Site 3	4224A-3	February 16, 2012
3m Semi-anechoic chamber	4224A-4	February 16, 2012
10m Semi-anechoic chamber	4224A-5	February 16, 2012

5) VCCI site filing:

Site name	Radiated emission	Conducted emission for mains port	Expiry Date	Conducted emission for telecom port	Expiry Date
Site 2	R-137	C-133	Nov. 16, 2011	T-1477	Oct. 8, 2011
Site 3	R-138	C-134	Nov. 16, 2011	T-1478	Oct. 8, 2011

6) Intertek authorization:

Authorized as an EMC test laboratory.

7) TUV Rheinland authorization:

Authorized as an EMC test laboratory.

8) BUREAU VERITAS certification:

Certified as an EMC test laboratory

Appendix A: Test equipment

[NP-P350W, NP-M300XS, NP-M260XS]

Conducted emission at mains port

Conducted emission at telecommunication port

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
EMI Receiver	ROHDE&SCHWARZ	ESCI	100764	Jun. 2011	Jun. 14, 2010
Highpass filter	ROHDE&SCHWARZ	EZ-25	100007	Jan. 2011	Jan. 7, 2010
Impedance Stabilization Network	Fischer custom communications inc.	FCC-TLISN-T4-02	20384	May. 2011	May. 21, 2009
Artificial mains network for EUT	Kyoritsu Electrical Works, Ltd.	KNW-242C	8-1094-5	Mar. 2011	Mar. 12, 2010
Artificial mains network for peripheral	Kyoritsu Electrical Works, Ltd.	KNW-407	8-693-20	Mar. 2011	Mar. 12, 2010
Coaxial cable	FUJIKURA	8D-2W/15m	OATS#3C	May. 2011	May. 28, 2010
Coaxial cable	FUJIKURA	5D-2W/1m	OATS#3RC-001	May. 2011	May. 28, 2010
Coaxial cable	FUJIKURA	5D-2W/1m	OATS#3RC-002	May. 2011	May. 28, 2010
Coaxial switch	ANRITSU	MP59B	6200611581	May. 2011	May. 25, 2010
LCL adapter	Fischer custom communications inc.	T4ALCL-1	20384.03	May. 2011	May. 21, 2009
50Ω terminator	HRS	UG-88/U	N/A (S065)	Mar. 2011	Mar. 5, 2010
50Ω terminator	HRS	UG-88/U	N/A (S066)	Mar. 2011	Mar. 5, 2010
PC	IBM	6892-44J	97-43012	N/A	N/A
Software	TOYO Corporation	EP5/CE-AJ	0611193/V3.3	N/A	N/A

Radiated emission (Below 1GHz)

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	Agilent Technologies	8568B	2732A03847	Sep. 2011	Sep. 21, 2010
		85662A	3026A19352		
Test receiver	ROHDE&SCHWARZ	ESVS10	849231/010	Jan. 2011	Jan. 19, 2010
Biconical antenna	Schwarzbeck	VHA9103/BBA9106	2322	Jun. 2011	Jun. 12, 2010
Log periodic antenna	Schwarzbeck	UHALP9108A	0398	Jun. 2011	Jun. 12, 2010
Attenuator	TDC	TAT-43B-03	N/A (S204)	Jun. 2011	Jun. 12, 2010
Attenuator	TDC	TAT-43B-03	N/A (S206)	Jun. 2011	Jun. 12, 2010
Coaxial cable	FUJIKURA	8D-SFA/15m	OATS#3R-001	May. 2011	May. 28, 2010
Coaxial cable	FUJIKURA	8D-SFA/15m	OATS#3R-002	May. 2011	May. 28, 2010
Coaxial cable	FUJIKURA	8D-2W/8m	OATS#3R-003	May. 2011	May. 28, 2010
Coaxial cable	FUJIKURA	5D-2W/1m	OATS#3RC-001	May. 2011	May. 28, 2010
Coaxial cable	FUJIKURA	5D-2W/1m	OATS#3RC-002	May. 2011	May. 28, 2010
Preamplifier	ANRITSU	MH648A	M96157	May. 2011	May. 28, 2010
Coaxial switch	ANRITSU	MP59B	6200611581	May. 2011	May. 25, 2010
Normalized Site Attenuation	ZACTA Technology Corp.	N/A	OATS#3	Jul. 2011	Jul. 3, 2010
PC	IBM	6892-44J	97-43012	N/A	N/A
Software	ZACTA	EMI Data Sheet	Ver.2.81	N/A	N/A

Radiated emission (Above 1GHz)

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	ADVANTEST	R3271A	65050042	Jul. 2011	Jul. 23, 2010
Preamplifier	Agilent Technologies	8449B	3008A01008	Dec. 2010	Dec. 11, 2009
Double ridged guide antenna	EMCO	3115	4328	Dec. 2010	Dec. 10, 2008
Microwave cable	SUHNER	SUCOFLEX104/9m	322082/4	Sep. 2011	Sep. 14, 2010
Microwave cable	SUHNER	SUCOFLEX104/1m	322085/4	Sep. 2011	Sep. 14, 2010
Microwave cable	SUHNER	SUCOFLEX104/1.5m	317222/4	Sep. 2011	Sep. 14, 2010
Microwave cable	SUHNER	SUCOFLEX106/12m	41624/6	Sep. 2011	Sep. 14, 2010
10m Semi an-echoic Chamber	TOKIN	N/A	N/A (9001-SVSWR)	Apr. 2011	Apr. 4, 2010
PC	DELL	DIMENSION E521	85465BX	N/A	N/A
Software	TOYO Corporation	EP5/RE-AJ	0611193/V3.4	N/A	N/A
Absorber	RIKEN	PFP30	N/A	N/A	N/A

Harmonic current emissions/Voltage Change, voltage fluctuation and flicker

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
Power Analyzer	KIKUSUI	KHA1000	MC004192	May. 2011	May. 24, 2010
Software	KIKUSUI	SD005-KHA	Ver 3.31	N/A	N/A
Reference impedance network	NF ELECTRONIC INSTRUMENTS	SEN35239	809289	Aug. 2011	Aug. 3, 2010
Signal-phase master	NF ELECTRONIC INSTRUMENTS	4420	300116	Aug. 2011	Aug. 3, 2010
Booster	NF ELECTRONIC INSTRUMENTS	4421	349301	Aug. 2011	Aug. 3, 2010
Booster	NF ELECTRONIC INSTRUMENTS	4421	192041	Aug. 2011	Aug. 3, 2010
Booster	NF ELECTRONIC INSTRUMENTS	4421	307873	Aug. 2011	Aug. 3, 2010
Booster	NF ELECTRONIC INSTRUMENTS	4421	337969	Aug. 2011	Aug. 3, 2010
Booster	NF ELECTRONIC INSTRUMENTS	4421	337975	Aug. 2011	Aug. 3, 2010

Electrostatic discharge immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
ESD simulator	NoiseKen	ESS-2002	ESS0493502	Jun. 2011	Jun. 22, 2010
Horizontal coupling plane	Zacta	N/A	N/A	N/A	N/A
Vertical coupling plane	Matsushita Techno Trading	N/A	N/A	N/A	N/A

Radio-frequency electromagnetic field immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
Signal generator	ROHDE&SCHWARZ	SMB100A	100341	Sep. 2011	Sep. 17, 2010
Logbicon Super Broadband test Antenna	Schwarzbeck	VULB9167	5011	Jan. 2011	Jan. 15, 2010
Millivolt meter	ROHDE&SCHWARZ	URV5	841771/030	May. 2011	May. 21, 2010
Power sensor	ROHDE&SCHWARZ	NRV-Z5	100140	May. 2011	May. 21, 2010
Power sensor	ROHDE&SCHWARZ	NRV-Z5	100149	May. 2011	May. 21, 2010
High power directional coupler	WERLATONE	C6021	13004	Oct. 2011	Oct. 5, 2010
Electric field monitor	Amplifier Research	FM7004	0327186	Jan. 2011	Jan. 5, 2010
Lasar Probe Interface	Amplifier Research	FL7000	0326201	Jan. 2011	Jan. 5, 2010
Electric field probe	Amplifier Research	FL7006	0326694	Jan. 2011	Jan. 5, 2010
RF power amplifier	Amplifier Research	150W1000	320348	Jul. 2011	Jul. 27, 2010
Small anechoic Chamber	TOKIN	N/A	N/A (9003)	Feb. 2011	Feb. 3, 2010
Software	TSJ	TEPTO-RS/ANT	Ver.4.8.139	N/A	N/A

Electrical fast transient/burst immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
Ultra compact simulator	EM TEST	UCS500M4	V0550100978	Jun. 2011	Jun. 15, 2010
Capacitive coupling clamp	EM TEST	HFK	N/A (0652)	N/A	N/A

Surges immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
TRANSIENT TEST SYSTEM	EMC-PARTNER	TRA2000IN4	871	Apr. 2011	Apr. 6, 2010
CDN	EMC-PARTNER	CDN-UTP	043	Apr. 2011	Apr. 7, 2010

Conducted disturbances, induced by radio-frequency fields immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
Signal generator	Agilent Technologies	8648D	3836U00338	Oct. 2011	Oct. 5, 2010
Millivolt meter	ROHDE&SCHWARZ	URV5	841771/030	May. 2011	May. 21, 2010
Power sensor	ROHDE&SCHWARZ	NRV-Z5	100140	May. 2011	May. 21, 2010
Power sensor	ROHDE&SCHWARZ	NRV-Z5	100149	May. 2011	May. 21, 2010
High power directional coupler	WERLATONE	C6021	13004	Oct. 2011	Oct. 5, 2010
RF power amplifier	Amplifier Research	250A250A	312909	Jul. 2011	Jul. 27, 2010
Attenuator	Weinschel	45-6-33	MW936	Jul. 2011	Jul. 2, 2010
CDN-M3	Kyoritsu Electrical Works, Ltd.	KSI-8003	8-1230-7	Mar. 2011	Mar. 5, 2010
CDN-M3	Kyoritsu Electrical Works, Ltd.	KSI-8003	8-1230-8	Mar. 2011	Mar. 5, 2010
EM clamp	Kyoritsu Electrical Works, Ltd.	KT-30	8-1199-5	Jul. 2011	Jul. 2, 2010
Decoupling clamp	Kyoritsu Electrical Works, Ltd.	KT-20	8-1201-5	Jul. 2011	Jul. 2, 2010
Decoupling clamp	Kyoritsu Electrical Works, Ltd.	KT-20	8-689-4	Jul. 2011	Jul. 2, 2010
50Ω terminator	TDC	TDL-21A	N/A (S019)	Mar. 2011	Mar. 5, 2010
50Ω terminator	TDC	TDL-21A	N/A (S020)	Mar. 2011	Mar. 5, 2010
Artificial hand	ZACTA	N/A	N/A	N/A	N/A
Software	TSJ	TEPTO-S6V32	Ver.3.0.0006	N/A	N/A

Power-frequency magnetic field immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
Magnetic field coil	EM TEST	MS100	N/A (1495)	N/A	N/A
Current transformer	EM TEST	MC2630	0905-08	N/A	N/A
EMF Probe and Level Tester	Narda S.T.S	ELT-400	H-0005	Aug. 2011	Aug. 25, 2009
AC power supply	NF ELECTRONIC INSTRUMENTS	EPO2000S	445936	N/A	N/A

Voltage dips, short interruption and voltage variations immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
4-quadrant amplifier	Spitzenberger + Spies	E5000/PAS	A175201/00796	Dec. 2010	Dec. 3, 2009
inrush current source	Spitzenberger + Spies	PAS5000/19-5	A175608/00696	Dec. 2010	Dec. 3, 2009
Power amplifier	Spitzenberger + Spies	UT1000/MFS	A175603/00636	N/A	N/A
Power supply	Spitzenberger + Spies	NT5000	A175602/00696	N/A	N/A
Software	Spitzenberger+Spies	EMC basic system EN61000-4-11	Ver.2.9a	N/A	N/A

[NP-M260WS: With modified panel]**Radiated emission (Below 1GHz)**

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	Agilent Technologies	8568B	2634A03228	Oct. 2011	Oct. 26, 2010
		85662A	2648A14093		
EMI Receiver	ROHDE&SCHWARZ	ESCI	100451	Jun. 2012	Jun. 3, 2011
Biconical antenna	Schwarzbeck	VHA9103/BBA9106	1563	Jun. 2012	Jun. 12, 2011
Log periodic antenna	Schwarzbeck	UHALP9108A	0728	Jun. 2012	Jun. 12, 2011
Attenuator	TDC	TAT-43B-03	N/A (S199)	Dec. 2011	Dec. 10, 2010
Attenuator	TME	CFA-01NPJ-3	N/A (S271)	Jun. 2012	Jun. 12, 2011
Coaxial cable	FUJIKURA	8D-SFA/15m	OATS#2R-001	May. 2012	May. 27, 2011
Coaxial cable	FUJIKURA	8D-SFA/15m	OATS#2R-002	May. 2012	May. 27, 2011
Coaxial cable	FUJIKURA	8D-2W/8m	OATS#2R-003	May. 2012	May. 27, 2011
Coaxial cable	FUJIKURA	5D-2W/1m	OATS#2RC-001	May. 2012	May. 27, 2011
Coaxial cable	FUJIKURA	5D-2W/1m	OATS#2RC-002	May. 2012	May. 27, 2011
Preamplifier	ANRITSU	MH648A	M96257	May. 2012	May. 27, 2011
Coaxial switch	ANRITSU	MP59B	6200611580	May. 2012	May. 25, 2011
Normalized Site Attenuation	ZACTA Technology Corp.	N/A	OATS#2	Jul. 2011	Jul. 4, 2010
PC	IBM	6892-44J	97-42089	N/A	N/A
Software	ZACTA	EMI Data Sheet	Ver.2.81	N/A	N/A

Radiated emission (Above 1GHz)

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
Spectrum analyzer	Agilent Technologies	E4447A	MY46180188	Feb. 2012	Feb. 23, 2011
Preamplifier	Agilent Technologies	8449B	3008A01008	Dec. 2011	Dec. 10, 2010
Double ridged guide antenna	EMCO	3115	4328	Dec. 2011	Dec. 16, 2010
Attenuator	AEROFLEX	40A-03	081217-20	Feb. 2012	Feb. 23, 2011
Microwave cable	SUHNER	SUCOFLEX104/9m	322082/4	Sep. 2011	Sep. 14, 2010
Microwave cable	SUHNER	SUCOFLEX104/1m	322085/4	Sep. 2011	Sep. 14, 2010
Microwave cable	SUHNER	SUCOFLEX104/1.5m	317222/4	Sep. 2011	Sep. 14, 2010
Microwave cable	SUHNER	SUCOFLEX106/12m	41624/6	Sep. 2011	Sep. 14, 2010
10m Semi an-echoic Chamber	TOKIN	N/A	N/A (9001-SVSWR)	Apr. 2012	Apr. 4, 2011
PC	DELL	DIMENSION E521	85465BX	N/A	N/A
Software	TOYO Corporation	EP5/RE-AJ	0611193/V3.4	N/A	N/A
Absorber	RIKEN	PFP30	N/A	N/A	N/A

Electrostatic discharge immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. date
ESD simulator	NoiseKen	ESS-2002	ESS0493502	Jun. 2012	Jun. 23, 2011
Horizontal coupling plane	Zacta	N/A	N/A	N/A	N/A
Vertical coupling plane	Matsushita Techno Trading	N/A	N/A	N/A	N/A

Radio-frequency electromagnetic field immunity

Equipment	Company	Model No.	Serial No.	Cal. due	Cal. Date
Signal generator	ROHDE&SCHWARZ	SMB100A	100341	Sep. 2011	Sep. 17, 2010
Logbicon Super Broadband test Antenna	Schwarzbeck	VULB9167	5011	Jan. 2012	Jan. 14, 2011
Millivolt meter	ROHDE&SCHWARZ	URV5	841771/030	May. 2012	May. 23, 2011
Power sensor	ROHDE&SCHWARZ	NRV-Z5	100140	May. 2012	May. 23, 2011
Power sensor	ROHDE&SCHWARZ	NRV-Z5	100149	May. 2012	May. 23, 2011
High power directional coupler	WERLATONE	C6021	13004	Oct. 2011	Oct. 5, 2010
Electric field probe	Amplifier Research	FL7006	0326694	Dec. 2011	Dec. 24, 2010
Lasar Probe Interface	Amplifier Research	FL7000	0326201	Dec. 2011	Dec. 24, 2010
RF power amplifier	Amplifier Research	150W1000	320348	Jul. 2011	Jul. 27, 2010
Small anechoic Chamber	TOKIN	N/A	N/A (9003)	Feb. 2012	Feb. 3, 2011
Software	TSJ	TEPTO-RS/ANT	Ver.4.8.139	N/A	N/A
Electric field monitor	Amplifier Research	FM7004	0327186	Dec. 2011	Dec. 24, 2010

Appendix B: Configuration photographs

[NP-P350W, NP-M300XS, NP-M260XS]

Conducted emission at mains port [NP-P350W: except COMPUTER 2 WXGA 60Hz]



The photographs show maximized emission configuration.

Conducted emission at telecommunication port [NP-P350W]



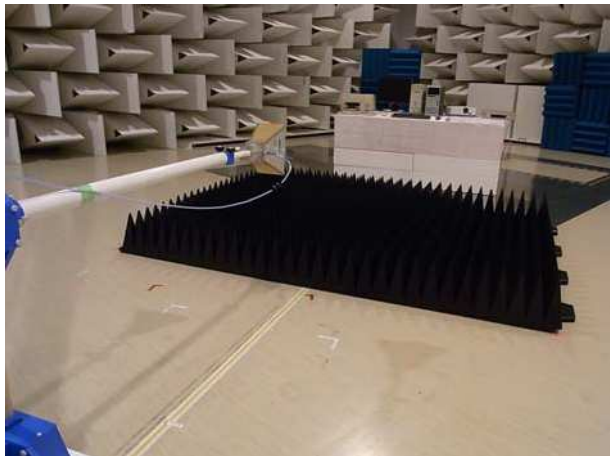
The photographs show maximized emission configuration.

Radiated emission [NP-P350W: below 1GHz: except COMPUTER 2 WXGA 60Hz]



The photographs show maximized emission configuration.

Radiated emission [NP-P350W: above 1GHz: except COMPUTER 2 WXGA 60Hz]



The photographs show maximized emission configuration.

Conducted emission at mains port [NP-P350W: COMPUTER 2 WXGA 60Hz]



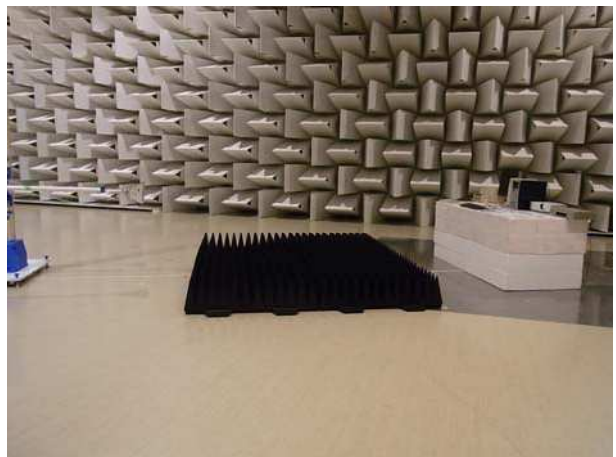
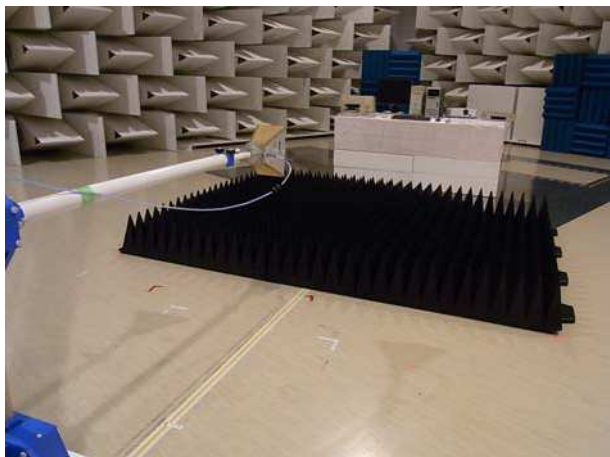
The photographs show maximized emission configuration.

Radiated emission [NP-P350W: below 1GHz: COMPUTER 2 WXGA 60Hz]



The photographs show maximized emission configuration.

Radiated emission [NP-P350W: above 1GHz: COMPUTER 2 WXGA 60Hz]



The photographs show maximized emission configuration.

Conducted emission at mains port [NP-M300XS, NP-M260XS]



The photographs show maximized emission configuration.

Conducted emission at telecommunication port [NP-M300XS, NP-M260XS]



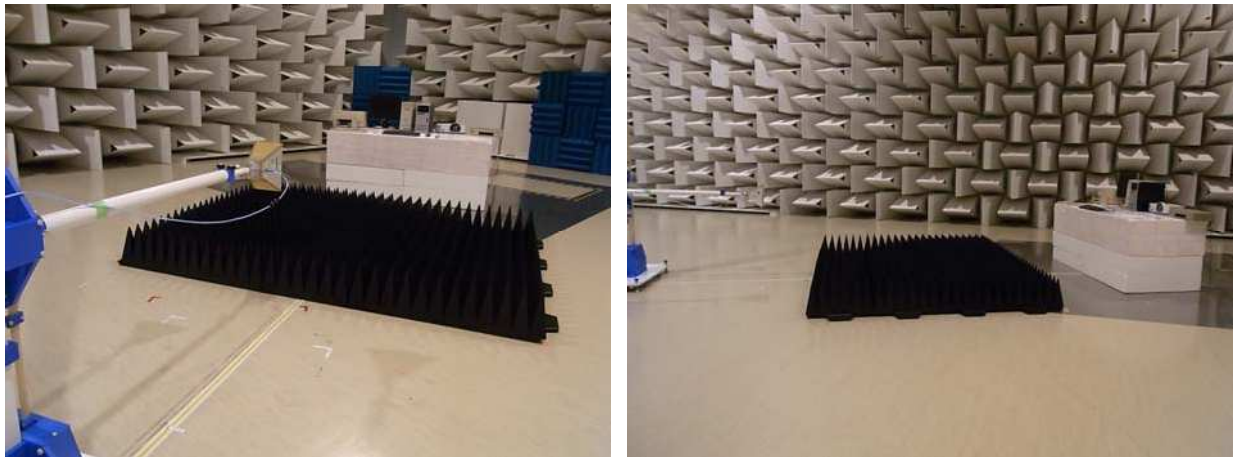
The photographs show maximized emission configuration.

Radiated emission [NP-M300XS, NP-M260XS: below 1GHz]



The photographs show maximized emission configuration.

Radiated emission [NP-M300XS, NP-M260XS: above 1GHz]



The photographs show maximized emission configuration.

Harmonic current emissions

Voltage change, Voltage fluctuation and flicker

[NP-P350W]



[NP-M300XS, NP-M260XS]



Electrostatic discharge immunity

[NP-P350W]

Contact discharge



Air discharge



[NP-M300XS, NP-M260XS]

Contact discharge



Air discharge



Radio-frequency electromagnetic field immunity

[NP-P350W]

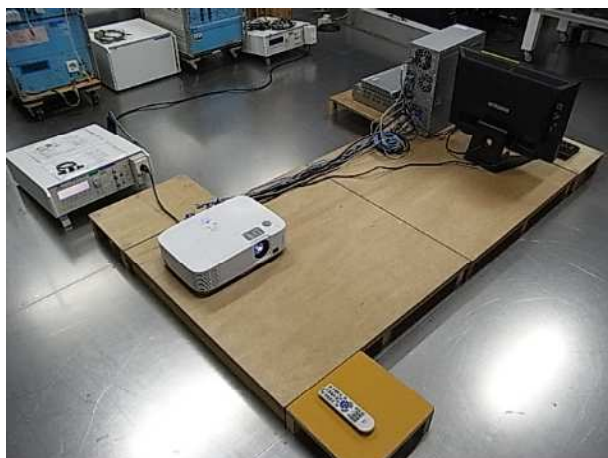


[NP-M300XS, NP-M260XS]



Electrical fast transient/burst immunity (AC power port)

[NP-P350W]

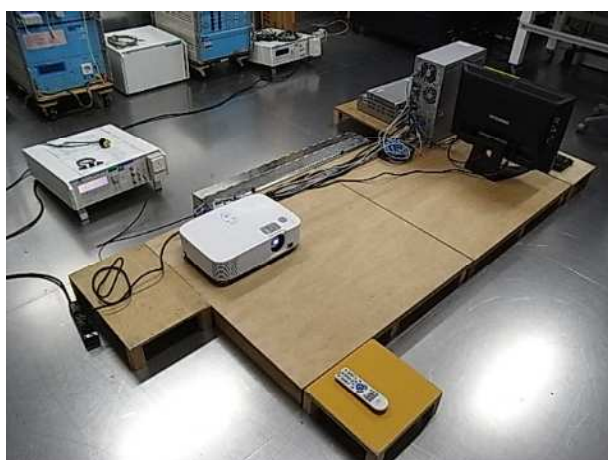


[NP-M300XS, NP-M260XS]

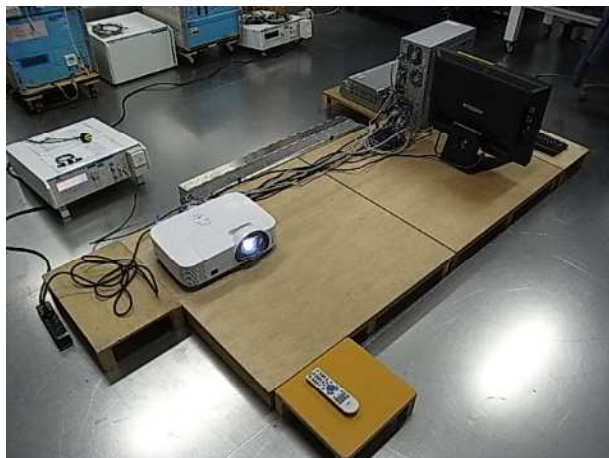


Electrical fast transient/burst immunity (Signal port)

[NP-P350W]



[NP-M300XS]



Surge immunity (AC power port)

[NP-P350W]



[NP-M300XS, NP-M260XS]

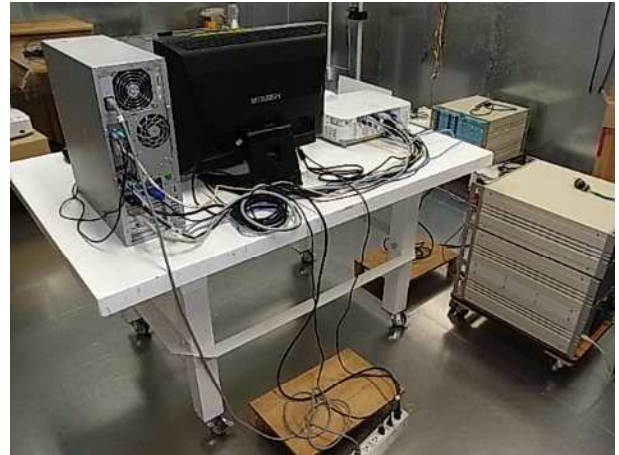


Surge immunity (Signal port)

[NP-P350W]



[NP-M300XS, NP-M260XS]



Conducted disturbances, induced by radio-frequency fields immunity (AC power port)

[NP-P350W]



[NP-M300XS, NP-M260XS]



Conducted disturbances, induced by radio-frequency fields immunity (Signal port)

[NP-P350W]



[NP-M300XS]



Power-frequency magnetic field immunity

[NP-P350W]



[NP-M300XS, NP-M260XS]



Voltage dips, short interruption and voltage variations immunity

[NP-P350W]



[NP-M300XS, NP-M260XS]



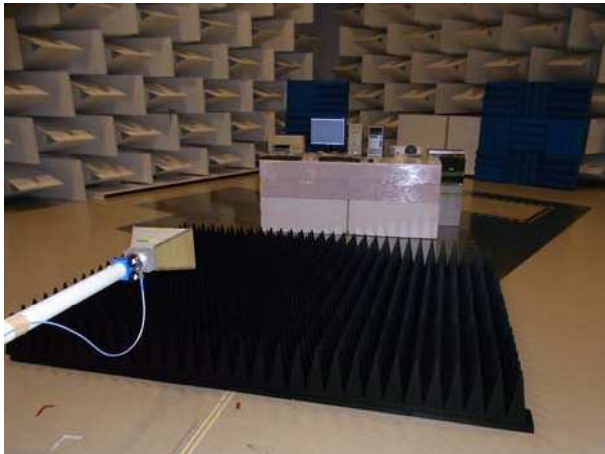
[NP-M260WS: With modified panel]

Radiated emission(below 1GHz)



The photographs show maximized emission configuration.

Radiated emission (above 1GHz)



The photographs show maximized emission configuration.

Electrostatic discharge immunity

Contact discharge



Air discharge



Radio-frequency electromagnetic field immunity

