



EMC TEST REPORT

Authorized under Declaration of Conformity

According to

EN 55022 : 2010 (Class B)	EN 55024 : 2010
EN 61000-3-2 : 2006+A1:2009+A2:2009	IEC 61000-4-2 : 2008
EN 61000-3-3 : 2008	IEC 61000-4-3 : 2006+A1:2007+A2:2010
CISPR 22 : 2008	IEC 61000-4-4 : 2012
AS/NZS CISPR 22 : 2009	IEC 61000-4-5 : 2005
	IEC 61000-4-6 : 2008
	IEC 61000-4-8 : 2009
	IEC 61000-4-11 : 2004

Applicant : TPV Electronics (FuJian) Co., Ltd
Address : Shangzheng, Yuanhong Road, Fuqing City,
Fujian Province, P.R.China
Equipment : LCD Monitor
Model No. : 240LM00010, G2460PQU**

- The test result refers exclusively to the test presented test model / sample.
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CERTIFICATE OF COMPLIANCE

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EN 61000-3-3 : 2008	IEC 61000-4-3 : 2006+A1:2007+A2:2010
CISPR 22 : 2008	IEC 61000-4-4 : 2012
AS/NZS CISPR 22 : 2009	IEC 61000-4-5 : 2005
	IEC 61000-4-6 : 2008
	IEC 61000-4-8 : 2009
	IEC 61000-4-11 : 2004

Applicant : TPV Electronics (FuJian) Co., Ltd
Address : Shangzheng, Yuanhong Road, Fuqing City, Fujian Province, P.R.China
Equipment : LCD Monitor
Model No. : 240LM00010, G2460PQU**

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **EUROPEAN COUNCIL DIRECTIVE 2004/108/EC.**

The test was carried out on Oct 30, 2013 at **CerpPASS Technology(Suzhou) Corp.**

Signature

Miro Chueh/ Technical director



1. Summary of Test Procedure and Test Results

Original:

Test Item	Normative References	Test Result	Remarks
Conducted Emission	EN 55022:2010	PASS	Meets Class B Limit Minimum passing margin(AV) is -9.22 dB at 0.5700 MHz
Radiated Emission	EN 55022:2010	PASS	Meets Class B Limit Minimum passing margin(QP) is -4.63 dB at 188.1100 MHz
Harmonics	EN 61000-3-2 : 2006 +A2:2009	PASS	Meets the requirements.
Voltage Fluctuations	EN 61000-3-3: 2008	PASS	Meets the requirements.
Electrostatic Discharge Immunity Test (ESD)	IEC 61000-4-2 :2008	PASS	Meets the requirements of performance criterion B
Radio Frequency electromagnetic field immunity test (RS)	IEC 61000-4-3 : 2010	PASS	Meets the requirements of performance criterion A
Electrical Fast Transient/ Burst Immunity Test (EFT)	IEC 61000-4-4 : 2012	PASS	Meets the requirements of performance criterion B
Surge Immunity Test	IEC 61000-4-5 : 2005	PASS	Meets the requirements of performance criterion B
Conduction Disturbances induced by Radio-Frequency Fields	IEC 61000-4-6 : 2008	PASS	Meets the requirements of performance criterion A
Power Frequency Magnetic Field Immunity Test	IEC 61000-4-8 : 2009	PASS	Meets the requirements of performance criterion A
Voltage Dips and Voltage Interruptions Immunity Test	IEC 61000-4-11 : 2004	PASS	Meets the requirements: Voltage Dips: 1) >95% reduction – Performance Criterion B 2) 30% reduction – Performance Criterion C Voltage Interruptions: 1) >95% reduction – Performance Criterion C



First edition:

Test Item	Normative References	Test Result	Remarks
Conducted Emission	EN 55022:2010	PASS	Meets Class B Limit Minimum passing margin(AV) is -9.22 dB at 0.5700 MHz
Radiated Emission	EN 55022:2010	PASS	Meets Class B Limit Minimum passing margin(QP) is -4.22 dB at 187.1399 MHz
Harmonics	EN 61000-3-2 : 2006 +A2:2009	PASS	Meets the requirements.
Voltage Fluctuations	EN 61000-3-3: 2008	PASS	Meets the requirements.
Electrostatic Discharge Immunity Test (ESD)	IEC 61000-4-2 :2008	PASS	Meets the requirements of performance criterion B
Radio Frequency electromagnetic field immunity test (RS)	IEC 61000-4-3 : 2010	PASS	Meets the requirements of performance criterion A
Electrical Fast Transient/ Burst Immunity Test (EFT)	IEC 61000-4-4 : 2012	PASS	Meets the requirements of performance criterion B
Surge Immunity Test	IEC 61000-4-5 : 2005	PASS	Meets the requirements of performance criterion B
Conduction Disturbances induced by Radio-Frequency Fields	IEC 61000-4-6 : 2008	PASS	Meets the requirements of performance criterion A
Power Frequency Magnetic Field Immunity Test	IEC 61000-4-8 : 2009	PASS	Meets the requirements of performance criterion A
Voltage Dips and Voltage Interruptions Immunity Test	IEC 61000-4-11 : 2004	PASS	Meets the requirements: Voltage Dips: 3) >95% reduction – Performance Criterion B 4) 30% reduction – Performance Criterion C Voltage Interruptions: 2) >95% reduction – Performance Criterion C



Second edition:

Test Item	Normative References	Test Result	Remarks
Conducted Emission	EN 55022:2010	PASS	Meets Class B Limit Minimum passing margin(AV) is -9.49dB at 16.7060 MHz
Radiated Emission	EN 55022:2010	PASS	Meets Class B Limit Minimum passing margin(QP) is -4.02 dB at 180.3499 MHz
Harmonics	EN 61000-3-2 : 2006 +A2:2009	PASS	Meets the requirements.
Voltage Fluctuations	EN 61000-3-3: 2008	PASS	Meets the requirements.
Electrostatic Discharge Immunity Test (ESD)	IEC 61000-4-2 :2008	PASS	Meets the requirements of performance criterion B
Radio Frequency electromagnetic field immunity test (RS)	IEC 61000-4-3 : 2010	PASS	Meets the requirements of performance criterion A
Electrical Fast Transient/ Burst Immunity Test (EFT)	IEC 61000-4-4 : 2012	PASS	Meets the requirements of performance criterion B
Surge Immunity Test	IEC 61000-4-5 : 2005	PASS	Meets the requirements of performance criterion B
Conduction Disturbances induced by Radio-Frequency Fields	IEC 61000-4-6 : 2008	PASS	Meets the requirements of performance criterion A
Power Frequency Magnetic Field Immunity Test	IEC 61000-4-8 : 2009	PASS	Meets the requirements of performance criterion A
Voltage Dips and Voltage Interruptions Immunity Test	IEC 61000-4-11 : 2004	PASS	Meets the requirements: Voltage Dips: 5) >95% reduction – Performance Criterion B 6) 30% reduction – Performance Criterion C Voltage Interruptions: 3) >95% reduction – Performance Criterion C



2. Immunity Testing Performance Criteria Definition

- A. Normal performance within limits specified by the manufacture, requestor or purchaser;
- B. Temporary loss of function or degradation of performance which ceases after the disturbance ceases, and from which the equipment under test recovers its normal performance, without operator intervention;
- C. Temporary loss of function or degradation of performance, the correction of which requires operation intervention;
- D. Loss of function or degradation of performance which is not recoverable, owing to damage to hardware or software, or loss of data.



3. Test Configuration of Equipment under Test

3.1. Feature of Equipment under Test

LCD Monitor	Model No:	240LM00010, G2460PQU** (The “*” could be any alphanumeric character including blank for marketing differentiation.)
Power Cable	Non-shielding, 1.2m&1.5m&1.8m	

3.2. Test Mode and Test Manner

Original:

Test Manner

- a During testing, the interface cables and equipment positions were varied according to Europe Standard.
- b Running "H" pattern.
- c During the test, connect the PC, USB keyboard, USB Mouse, Earphone, iPod and EUT, make the EUT at the test mode.
- d Adjust the EUT, then test.

The pre-test modes

Original:

Test Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal

Test Mode 2: Full system (VGA mode 1280*1024@75Hz) for Horizontal

Test Mode 3: Full system (VGA mode 640*480@60Hz) for Horizontal

Test Mode 4: Full system (VGA mode 1920*1080@60Hz) for Vertical

Test Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal

Test Mode 6: Full system (DVI mode 1280*1024@75Hz) for Horizontal

Test Mode 7: Full system (DVI mode 640*480@60Hz) for Horizontal

Test Mode 8: Full system (DVI mode 1920*1080@60Hz) for Vertical

Test Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal

Test Mode 10: Full system (HDMI mode 1280*1024@75Hz) for Horizontal

Test Mode 11: Full system (HDMI mode 640*480@60Hz) for Horizontal

Test Mode 12: Full system (HDMI mode 1920*1080@60Hz) for Vertical

Test Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal

Test Mode 14: Full system (Display mode 1280*1024@75Hz) for Horizontal

Test Mode 15: Full system (Display mode 640*480@60Hz) for Horizontal

Test Mode 16: Full system (Display mode 1920*1080@60Hz) for Vertical

Test Mode 17: DVD Mode



The worse case was selected as the final test mode and record in the report

Test Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal

Test Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal

Test Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal

Test Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal

First edition:

Test Manner

- a During testing, the interface cables and equipment positions were varied according to Europe Standard.
- b Running "H" pattern.
- c During the test, connect the PC, USB keyboard, USB Mouse, Earphone, iPod and EUT, make the EUT at the test mode.
- d Adjust the EUT, then test.

The pre-test modes

Test Mode 1: Full system (DVI mode 1920*1080@120Hz) for Horizontal

Test Mode 2: Full system (DVI mode 1920*1080@120Hz) for Vertical

Test Mode 3: Full system (DVI mode 1920*1080@144Hz) for Horizontal

Test Mode 4: Full system (DVI mode 1920*1080@144Hz) for Vertical

The worse case was selected as the final test mode and record in the report

Test Mode 1: Full system (DVI mode 1920*1080@120Hz) for Horizontal

Second edition:

Test Manner

During testing, the interface cables and equipment positions were varied according to Europe Standard.

Running "H" pattern.

During the test, connect the PC, USB keyboard, USB Mouse, Earphone, iPod and EUT, make the EUT at the test mode.

Adjust the EUT, then test.

The pre-test modes

Test Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal

Test Mode 2: Full system (VGA mode 1280*1024@75Hz) for Horizontal

Test Mode 3: Full system (VGA mode 640*480@60Hz) for Horizontal

Test Mode 4: Full system (VGA mode 1920*1080@60Hz) for Vertical

Test Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal

Test Mode 6: Full system (DVI mode 1280*1024@75Hz) for Horizontal



- Test Mode 7: Full system (DVI mode 640*480@60Hz) for Horizontal
- Test Mode 8: Full system (DVI mode 1920*1080@60Hz) for Vertical
- Test Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal
- Test Mode 10: Full system (HDMI mode 1280*1024@75Hz) for Horizontal
- Test Mode 11: Full system (HDMI mode 640*480@60Hz) for Horizontal
- Test Mode 12: Full system (HDMI mode 1920*1080@60Hz) for Vertical
- Test Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal
- Test Mode 14: Full system (Display mode 1920*1080@120Hz) for Horizontal
- Test Mode 15: Full system (Display mode 1920*1080@144Hz) for Horizontal
- Test Mode 16: Full system (Display mode 1280*1024@75Hz) for Horizontal
- Test Mode 17: Full system (Display mode 640*480@60Hz) for Horizontal
- Test Mode 18: Full system (Display mode 1920*1080@100Hz) for Vertical
- Test Mode 19: DVD Mode

The worse case was selected as the final test mode and record in the report

- Test Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal
- Test Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal
- Test Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal
- Test Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal



3.3. Description of Support Unit

No.	Device	Manufacturer	Model No.	Description
1	PC	Dell	DCMF	N/A
2	USB Keyboard	DELL	SK-8115	N/A
3	USB Mouse	DELL	G0K02XYK	N/A
4	Earphone	Apple	N/A	N/A
5	iPod	Apple	MA477TA/A	N/A
6	iPod	Apple	MA477TA/A	N/A
7	iPod	Apple	MA477TA/A	N/A
8	iPod	Apple	MA477TA/A	N/A

No.	Cable	Quantity	Description
A	VGA Cable	1	Shielded, 1.5m&1.8m&1.2m, with two ferrites core bonded
B	HDMI Cable	1	Shielded, 1.5m&1.8m&1.2m
C	DVI Cable	1	Shielded, 1.5m&1.8m&1.2m, with two ferrites core bonded
D	Display Cable	1	Shielded, 1.5m&1.8m&1.2m
E	Audio Out Cable	1	Shielded, 1.2m
F	Audio In Cable	1	Shielded, 1.5m&1.8m&1.2m
G	USB Cable	1	Shielded, 1.8m, with one ferrite core bonded
H	USB Cable	1	Shielded, 1.2m
I	USB Cable	4	Shielded, 1.0m
J	USB Cable	1	Shielded, 1.8m



3.4. General Information of Test

Test Site:	Cerpass Technology (Suzhou) Co.,Ltd
Test Site Location :	No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China
NVLAP LAB Code :	200814-0
FCC Registration Number :	916572, 331395
IC Registration Number :	7290A-1, 7290A-2
VCCI Registration Number :	T-1945 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test below 1GHz G-227 for Radiated emission test above 1GHz
Frequency Range Investigated :	Conducted Emission Test: from 150kHz to 30 MHz Radiated Emission Test: from 30 MHz to 1,000 MHz Radiated Emission Test: from 1GHz to 6GHz
Test Distance :	The test distance of radiated emission below 1GHz from antenna to EUT is 10 M. The test distance of radiated emission above 1GHz from antenna to EUT is 3 M.

LABORATORY ACCREDITATION



3.5. Measurement Uncertainty

Conducted Emission		
The measurement uncertainty is evaluated as ± 2.71 dB.		
Radiated Emission		
(30MHz -1000MHz)	Horizontal	The measurement uncertainty is evaluated as ± 3.59 dB.
	Vertical	The measurement uncertainty is evaluated as ± 3.89 dB
(1GHz-6GHz)	Horizontal	The measurement uncertainty is evaluated as ± 2.31 dB.
	Vertical	The measurement uncertainty is evaluated as ± 2.15 dB.



4. Test of Conducted Emission

4.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 kHz and return leads of the EUT according to the methods defined in European Standard EN 55022. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in standard. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position producing maximum conducted emissions.

Table 1 Class B Line Conducted Emission Limits:

Frequency range (MHz)	Limits (dB μ V)	
	Quasi Peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5. to 30.	60	50

Note 1: The lower limits shall apply at the transition frequencies.
 Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to .50MHz.

Table 2 - Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0.15 MHz to 30 MHz for class B equipment.

Frequency range (MHz)	Voltage limits dB(μ V)		Current limits dB(μ A)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.5	84 to 74	74 to 64	40 to 30	30 to 20
0.5 to 30	74	64	30	20

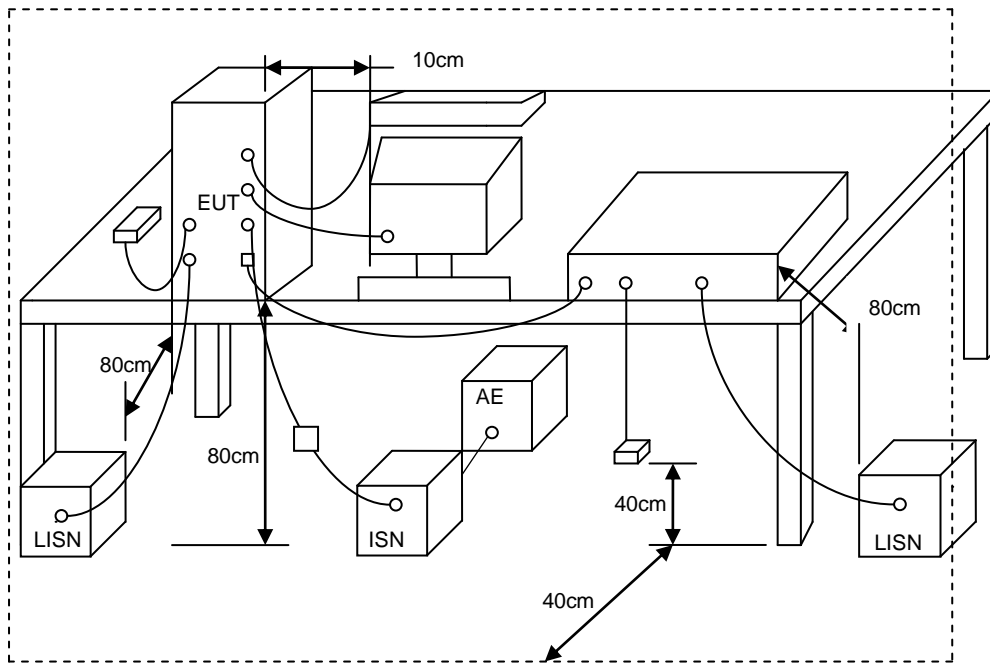
Note 1: The limits decrease linearly with the logarithm of the frequency in the range 0.15 to 0.5 MHz.
 Note 2: The current and voltage disturbance limits are derived for use with an impedance stabilization network (ISN) which presents a common mode (asymmetric mode) impedance of 150 Ω to the telecommunication under test (conversion factor is $20 \log_{10} 150/1 = 44\text{dB}$).



4.2. Test Procedures

- a. The EUT was placed on a desk 0.8 meters height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meters from any other grounded conducting surface.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connecting to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The CISPR states that a 50 ohm, 50 micro-Henry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

4.3. Typical Test Setup





4.4. Measurement equipment

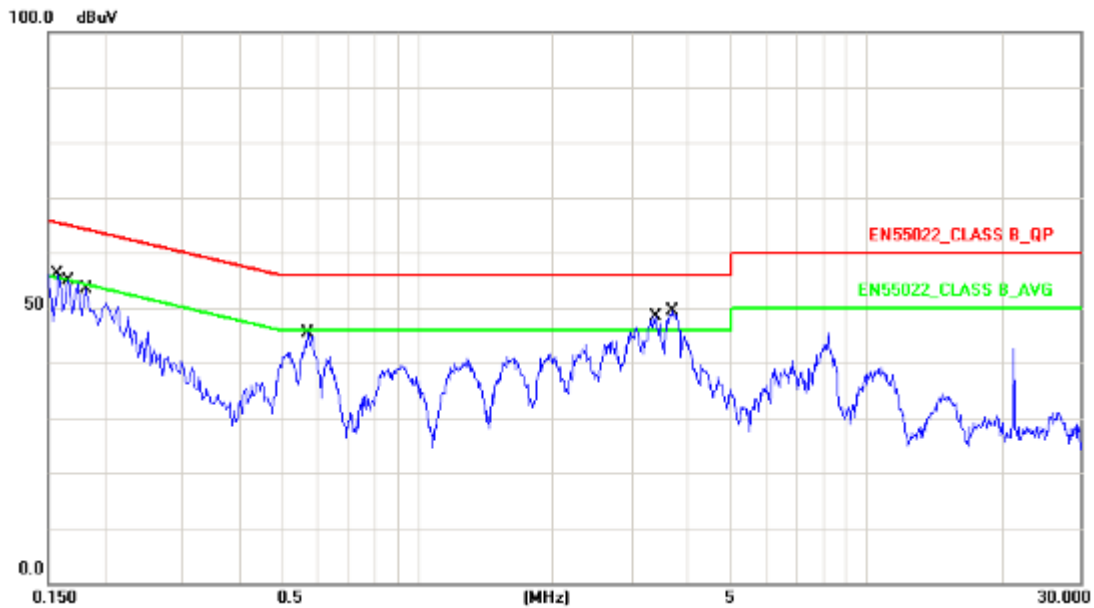
Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
Test Receiver	R&S	ESCI	100565	2012.11.05	2013.11.04
AMN	R&S	ESH2-Z5	100182	2013.09.11	2014.09.10
Two-Line V-Network	R&S	ENV216	100325	2013.03.10	2014.03.09
ISN	FCC	FCC-TLISN-T2-02	20379	2012.12.08	2013.12.07
ISN	FCC	FCC-TLISN-T4-02	20380	2012.12.08	2013.12.07
ISN	FCC	FCC-TLISN-T8-02	20381	2012.12.08	2013.12.07
ISN	TESEQ	ISN ST08	30175	2013.09.11	2014.09.10
Current Probe	R&S	EZ-17	100303	2013.03.10	2014.03.09
Passive Voltage Probe	R&S	ESH2-Z3	100026	2013.03.10	2014.03.09
Pulse Limiter	R&S	ESH3-Z2	100529	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2013.03.10	2014.03.09



4.5. Test Data and Result

Original:

Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22 °C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

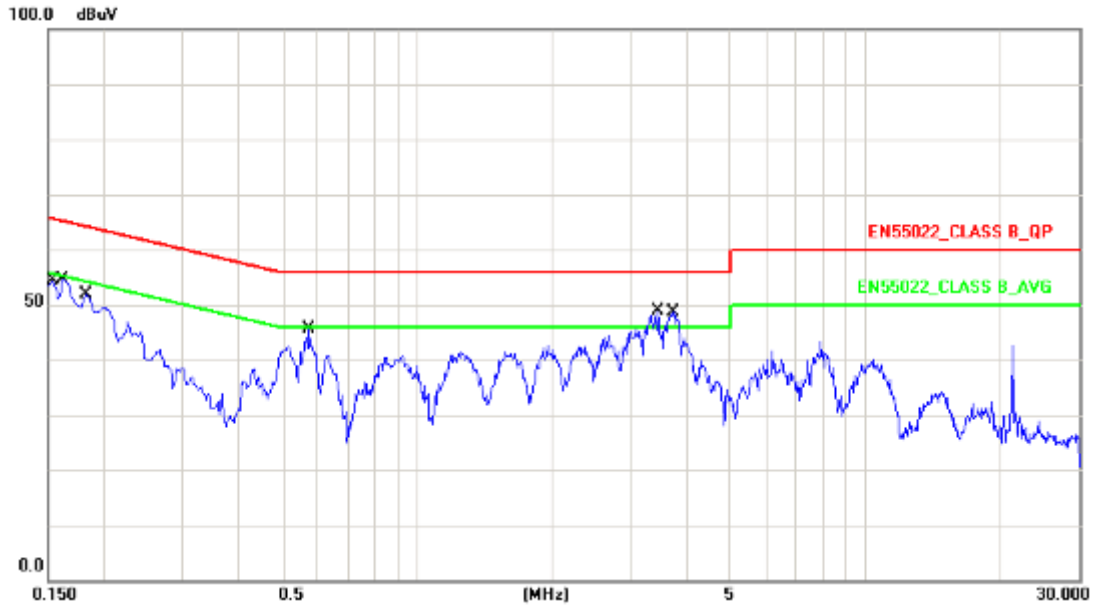


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1580	9.87	41.56	51.43	65.57	-14.14	QP
2	0.1580	9.87	28.99	38.86	55.57	-16.71	AVG
3	0.1660	9.87	39.73	49.60	65.16	-15.56	QP
4	0.1660	9.87	28.60	38.47	55.16	-16.69	AVG
5	0.1820	9.87	38.37	48.24	64.39	-16.15	QP
6	0.1820	9.87	24.54	34.41	54.39	-19.98	AVG
7	0.5700	9.85	31.04	40.89	56.00	-15.11	QP
8	0.5700	9.85	25.66	35.51	46.00	-10.49	AVG
9	3.3900	9.71	33.09	42.80	56.00	-13.20	QP
10	3.3900	9.71	23.76	33.47	46.00	-12.53	AVG
11	3.6820	9.70	34.09	43.79	56.00	-12.21	QP
12	3.6820	9.70	23.43	33.13	46.00	-12.87	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

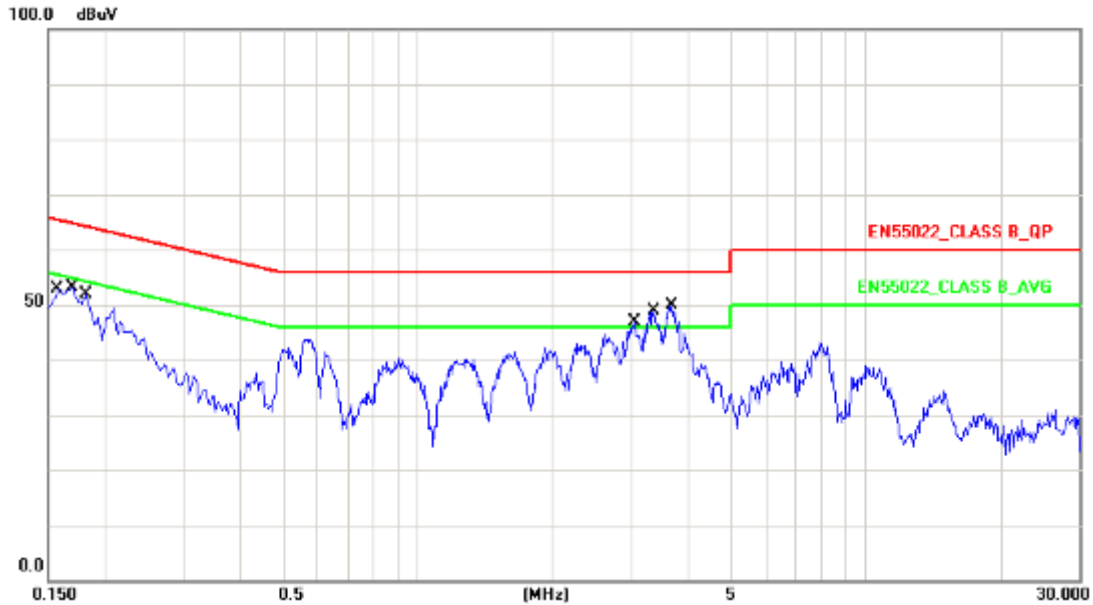


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1540	9.50	39.87	49.37	65.78	-16.41	QP
2	0.1540	9.50	27.24	36.74	55.78	-19.04	AVG
3	0.1620	9.50	40.36	49.86	65.36	-15.50	QP
4	0.1620	9.50	28.75	38.25	55.36	-17.11	AVG
5	0.1820	9.50	36.92	46.42	64.39	-17.97	QP
6	0.1820	9.50	24.20	33.70	54.39	-20.69	AVG
7	0.5740	9.50	31.72	41.22	56.00	-14.78	QP
8	0.5740	9.50	26.54	36.04	46.00	-9.96	AVG
9	3.4460	9.57	32.06	41.63	56.00	-14.37	QP
10	3.4460	9.57	23.23	32.80	46.00	-13.20	AVG
11	3.7340	9.58	34.19	43.77	56.00	-12.23	QP
12	3.7340	9.58	24.24	33.82	46.00	-12.18	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

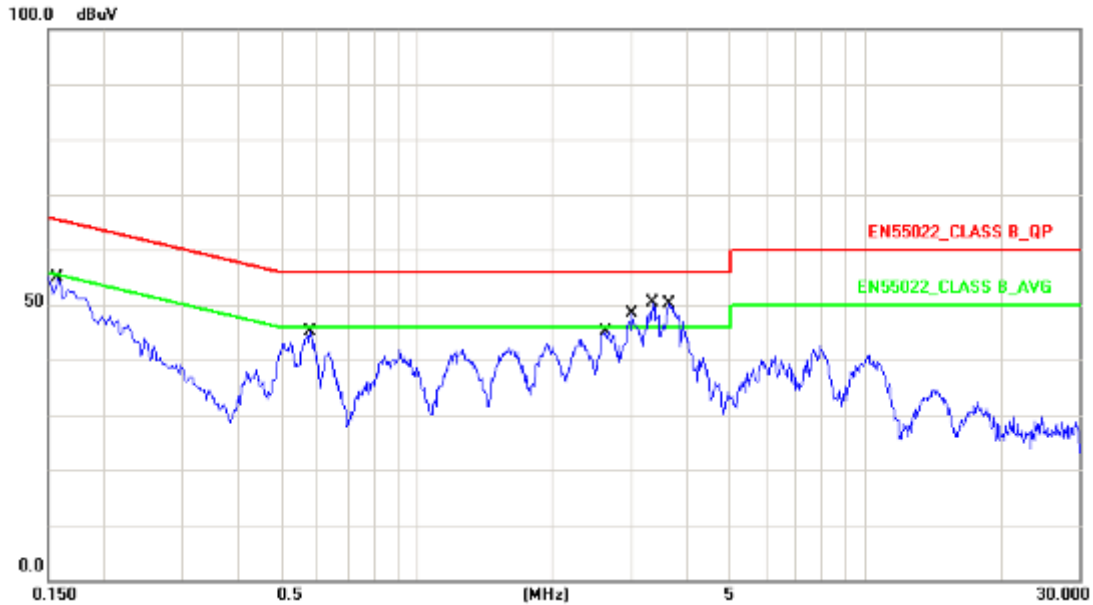


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1580	9.87	40.29	50.16	65.57	-15.41	QP
2	0.1580	9.87	28.54	38.41	55.57	-17.16	AVG
3	0.1677	9.87	37.85	47.72	65.07	-17.35	QP
4	0.1677	9.87	27.74	37.61	55.07	-17.46	AVG
5	0.1820	9.87	37.09	46.96	64.39	-17.43	QP
6	0.1820	9.87	23.83	33.70	54.39	-20.69	AVG
7	3.0700	9.71	30.83	40.54	56.00	-15.46	QP
8	3.0700	9.71	23.15	32.86	46.00	-13.14	AVG
9	3.3780	9.71	33.32	43.03	56.00	-12.97	QP
10	3.3780	9.71	24.20	33.91	46.00	-12.09	AVG
11	3.6860	9.70	34.25	43.95	56.00	-12.05	QP
12	3.6860	9.70	23.83	33.53	46.00	-12.47	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

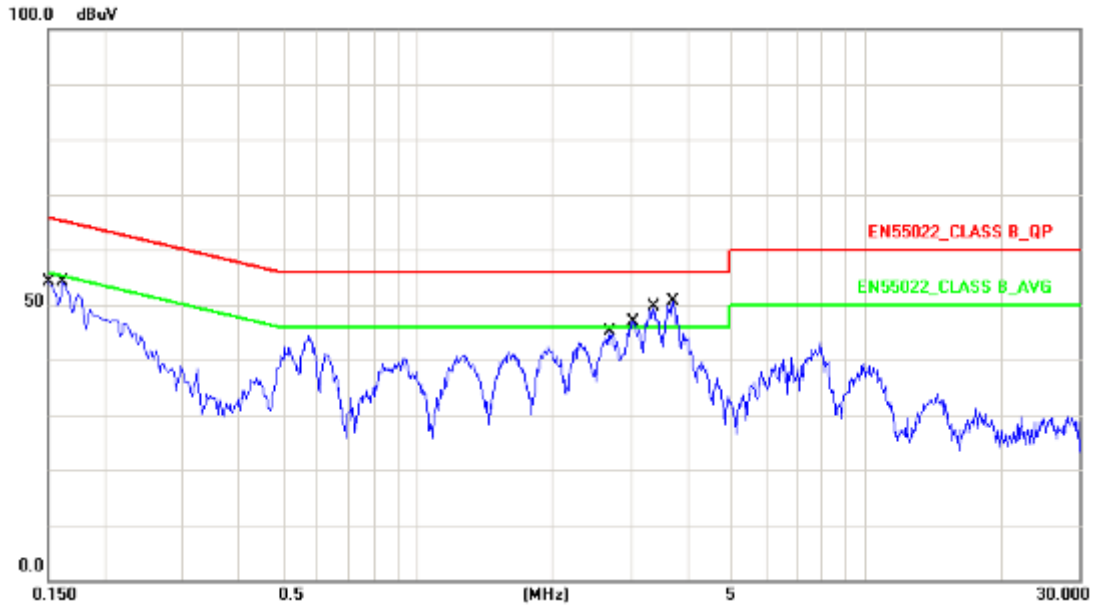


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1580	9.50	39.87	49.37	65.57	-16.20	QP
2	0.1580	9.50	28.52	38.02	55.57	-17.55	AVG
3	0.5780	9.50	31.47	40.97	56.00	-15.03	QP
4	0.5780	9.50	26.57	36.07	46.00	-9.93	AVG
5	2.6340	9.54	30.05	39.59	56.00	-16.41	QP
6	2.6340	9.54	23.49	33.03	46.00	-12.97	AVG
7	3.0140	9.55	31.78	41.33	56.00	-14.67	QP
8	3.0140	9.55	24.26	33.81	46.00	-12.19	AVG
9	3.3460	9.56	33.57	43.13	56.00	-12.87	QP
10	3.3460	9.56	24.68	34.24	46.00	-11.76	AVG
11	3.6540	9.58	34.11	43.69	56.00	-12.31	QP
12	3.6540	9.58	23.78	33.36	46.00	-12.64	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

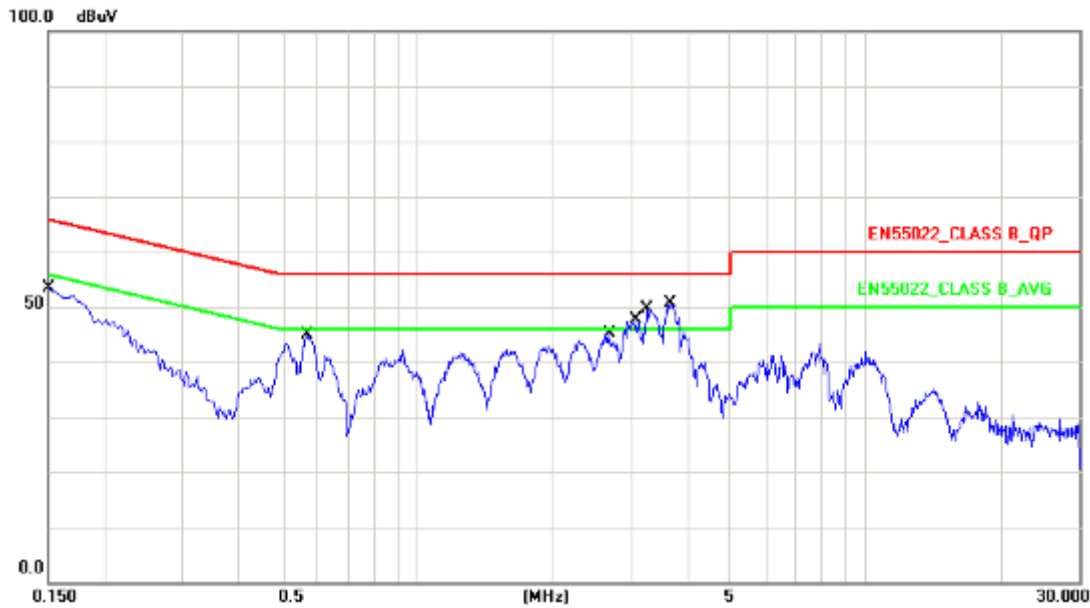


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	9.87	38.31	48.18	66.00	-17.82	QP
2	0.1500	9.87	23.78	33.65	56.00	-22.35	AVG
3	0.1620	9.87	39.05	48.92	65.36	-16.44	QP
4	0.1620	9.87	29.02	38.89	55.36	-16.47	AVG
5	2.7020	9.71	29.76	39.47	56.00	-16.53	QP
6	2.7020	9.71	23.25	32.96	46.00	-13.04	AVG
7	3.0340	9.71	31.66	41.37	56.00	-14.63	QP
8	3.0340	9.71	23.63	33.34	46.00	-12.66	AVG
9	3.3740	9.71	33.59	43.30	56.00	-12.70	QP
10	3.3740	9.71	24.40	34.11	46.00	-11.89	AVG
11	3.7260	9.70	34.30	44.00	56.00	-12.00	QP
12	3.7260	9.70	24.36	34.06	46.00	-11.94	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

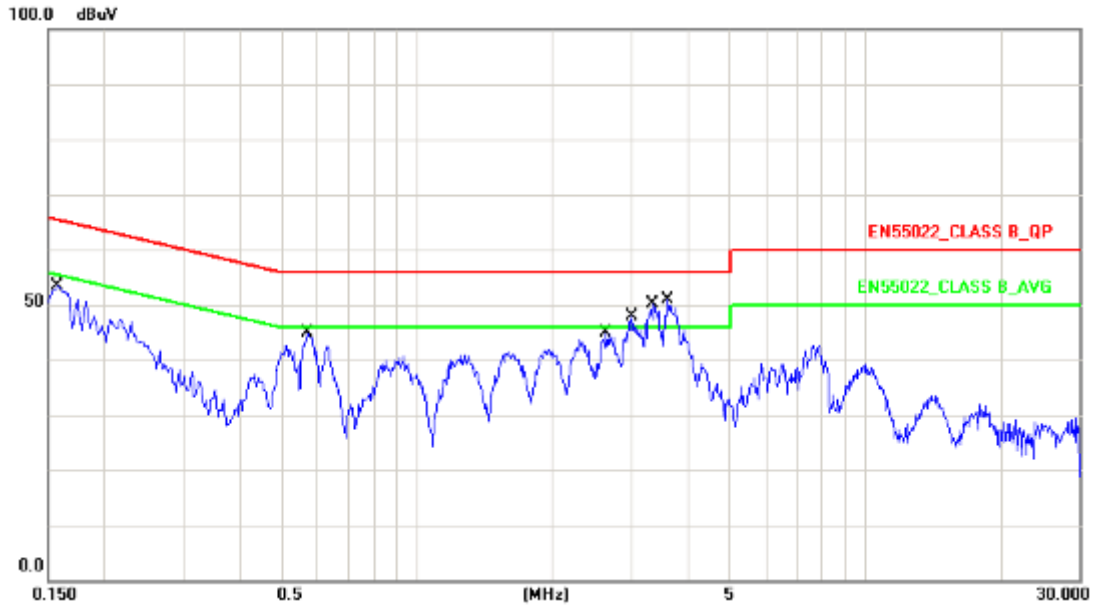


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	9.50	37.20	46.70	66.00	-19.30	QP
2	0.1500	9.50	23.11	32.61	56.00	-23.39	AVG
3	0.5700	9.50	31.86	41.36	56.00	-14.64	QP
4	0.5700	9.50	27.23	36.73	46.00	-9.27	AVG
5	2.6860	9.54	30.60	40.14	56.00	-15.86	QP
6	2.6860	9.54	24.24	33.78	46.00	-12.22	AVG
7	3.0740	9.55	31.27	40.82	56.00	-15.18	QP
8	3.0740	9.55	23.85	33.40	46.00	-12.60	AVG
9	3.2620	9.56	31.67	41.23	56.00	-14.77	QP
10	3.2620	9.56	22.42	31.98	46.00	-14.02	AVG
11	3.6740	9.58	34.74	44.32	56.00	-11.68	QP
12	3.6740	9.58	24.72	34.30	46.00	-11.70	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17

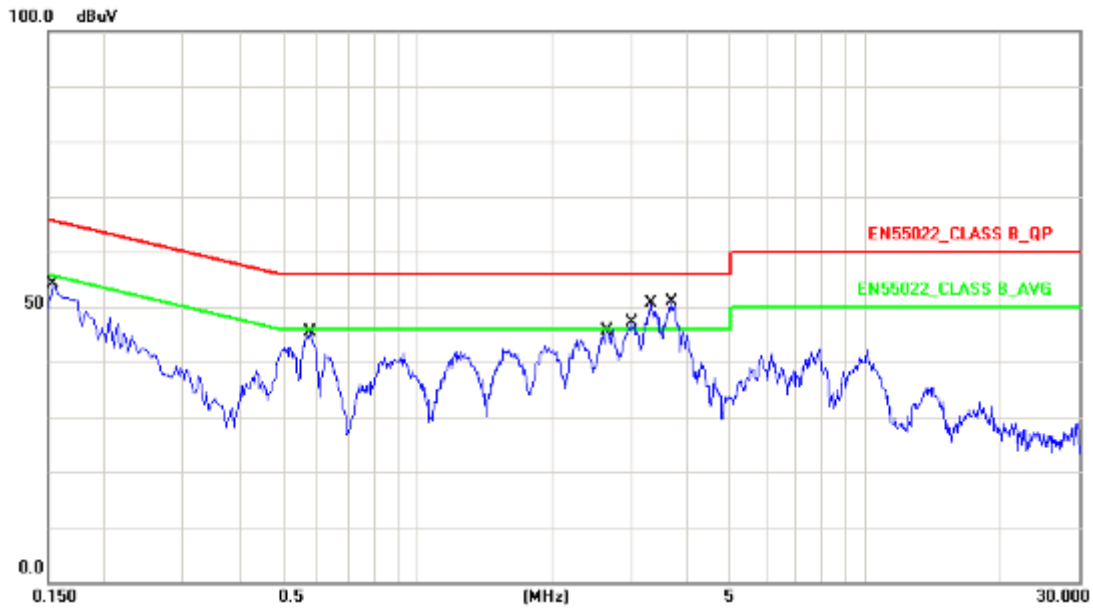


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1580	9.87	38.38	48.25	65.57	-17.32	QP
2	0.1580	9.87	27.65	37.52	55.57	-18.05	AVG
3	0.5700	9.85	31.50	41.35	56.00	-14.65	QP
4	0.5700	9.85	26.93	36.78	46.00	-9.22	AVG
5	2.6420	9.71	29.51	39.22	56.00	-16.78	QP
6	2.6420	9.71	22.97	32.68	46.00	-13.32	AVG
7	3.0100	9.71	31.50	41.21	56.00	-14.79	QP
8	3.0100	9.71	23.57	33.28	46.00	-12.72	AVG
9	3.3580	9.71	33.43	43.14	56.00	-12.86	QP
10	3.3580	9.71	24.43	34.14	46.00	-11.86	AVG
11	3.6340	9.70	33.27	42.97	56.00	-13.03	QP
12	3.6340	9.70	22.85	32.55	46.00	-13.45	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2012/12/17



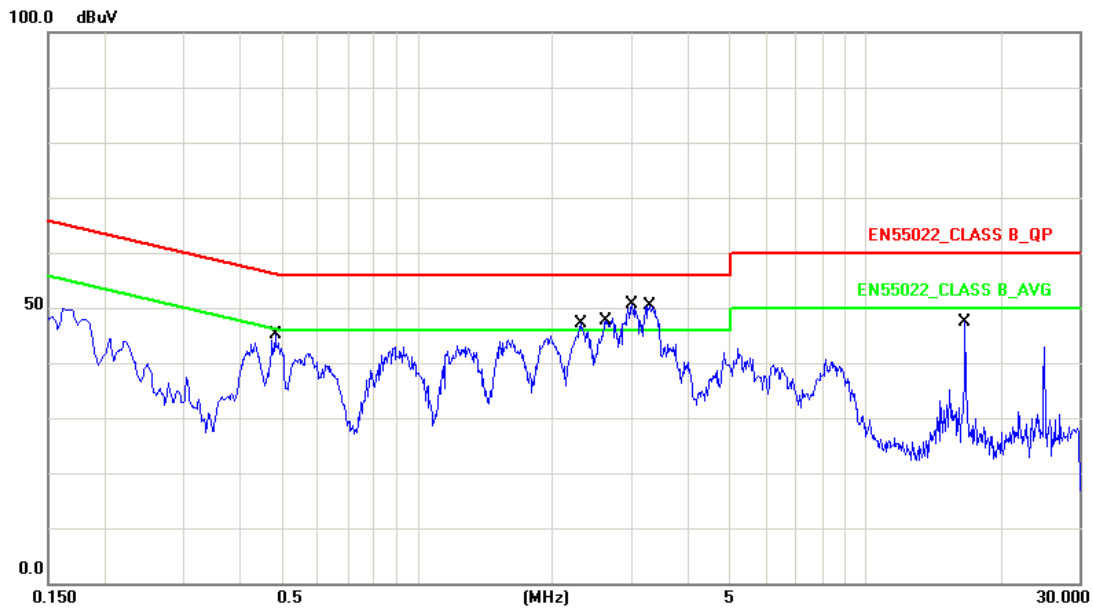
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1540	9.50	37.74	47.24	65.78	-18.54	QP
2	0.1540	9.50	25.24	34.74	55.78	-21.04	AVG
3	0.5780	9.50	31.81	41.31	56.00	-14.69	QP
4	0.5780	9.50	27.27	36.77	46.00	-9.23	AVG
5	2.6540	9.54	30.53	40.07	56.00	-15.93	QP
6	2.6540	9.54	24.38	33.92	46.00	-12.08	AVG
7	3.0220	9.55	32.05	41.60	56.00	-14.40	QP
8	3.0220	9.55	24.56	34.11	46.00	-11.89	AVG
9	3.3180	9.56	33.58	43.14	56.00	-12.86	QP
10	3.3180	9.56	24.75	34.31	46.00	-11.69	AVG
11	3.7020	9.58	34.86	44.44	56.00	-11.56	QP
12	3.7020	9.58	24.91	34.49	46.00	-11.51	AVG

Note: Measurement Level = Reading Level + Correct Factor



Second edition:

Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

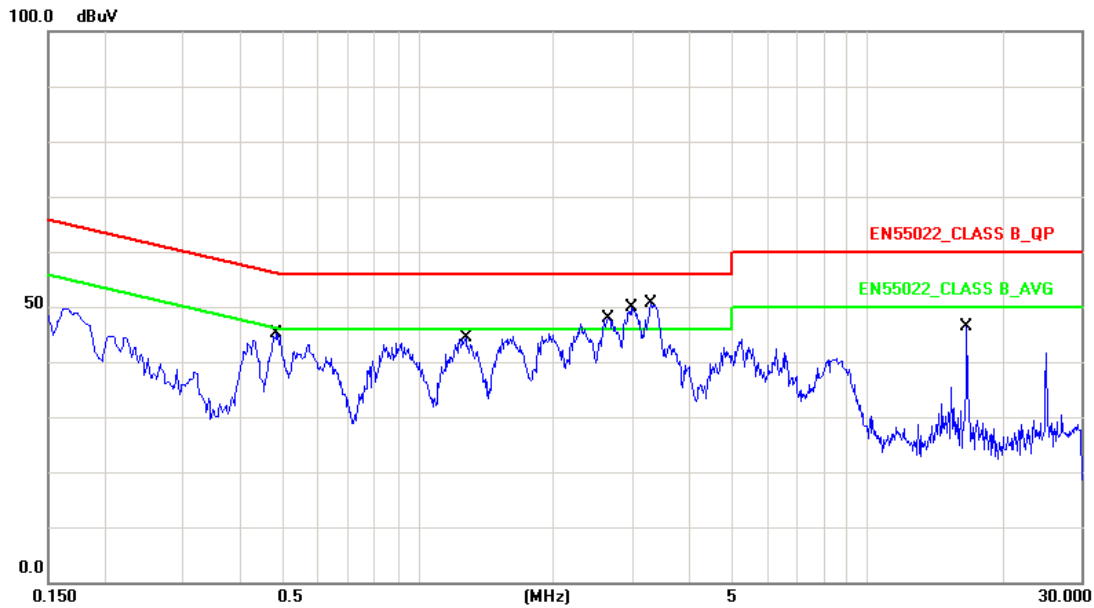


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4820	10.16	31.42	41.58	56.30	-14.72	QP
2	0.4820	10.16	25.11	35.27	46.30	-11.03	AVG
3	2.3220	10.18	31.10	41.28	56.00	-14.72	QP
4	2.3220	10.18	25.38	35.56	46.00	-10.44	AVG
5	2.6260	10.18	31.89	42.07	56.00	-13.93	QP
6	2.6260	10.18	25.01	35.19	46.00	-10.81	AVG
7	3.0100	10.19	34.13	44.32	56.00	-11.68	QP
8	3.0100	10.19	26.00	36.19	46.00	-9.81	AVG
9	3.3020	10.19	34.29	44.48	56.00	-11.52	QP
10	3.3020	10.19	24.26	34.45	46.00	-11.55	AVG
11	16.7060	10.46	36.76	47.22	60.00	-12.78	QP
12	16.7060	10.46	30.05	40.51	50.00	-9.49	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22 °C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

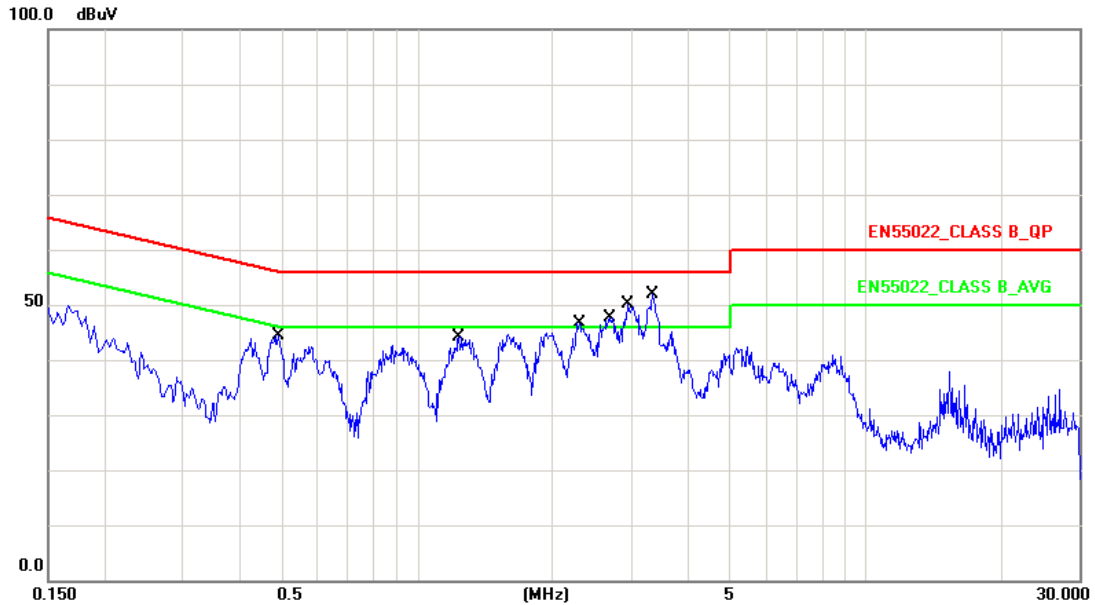


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4860	10.15	31.62	41.77	56.24	-14.47	QP
2	0.4860	10.15	26.06	36.21	46.24	-10.03	AVG
3	1.2820	10.18	29.21	39.39	56.00	-16.61	QP
4	1.2820	10.18	24.46	34.64	46.00	-11.36	AVG
5	2.6580	10.19	32.61	42.80	56.00	-13.20	QP
6	2.6580	10.19	26.04	36.23	46.00	-9.77	AVG
7	2.9860	10.20	34.07	44.27	56.00	-11.73	QP
8	2.9860	10.20	25.93	36.13	46.00	-9.87	AVG
9	3.2940	10.21	33.80	44.01	56.00	-11.99	QP
10	3.2940	10.21	24.70	34.91	46.00	-11.09	AVG
11	16.7060	10.49	36.70	47.19	60.00	-12.81	QP
12	16.7060	10.49	29.97	40.46	50.00	-9.54	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

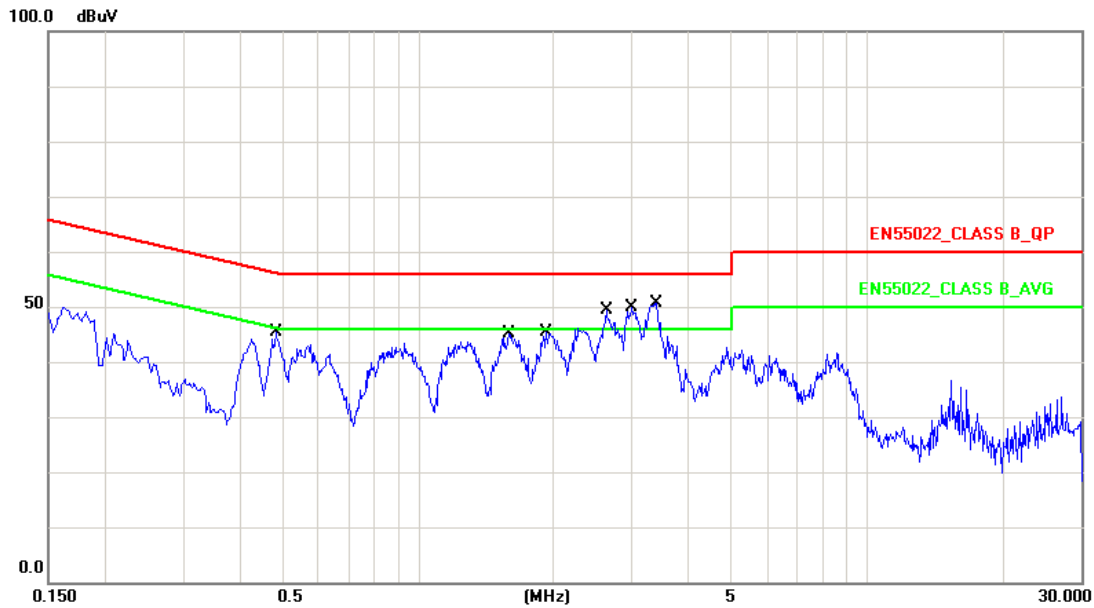


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4900	10.16	30.29	40.45	56.17	-15.72	QP
2	0.4900	10.16	25.79	35.95	46.17	-10.22	AVG
3	1.2420	10.16	28.54	38.70	56.00	-17.30	QP
4	1.2420	10.16	23.74	33.90	46.00	-12.10	AVG
5	2.3020	10.17	30.77	40.94	56.00	-15.06	QP
6	2.3020	10.17	25.00	35.17	46.00	-10.83	AVG
7	2.6660	10.18	32.32	42.50	56.00	-13.50	QP
8	2.6660	10.18	25.82	36.00	46.00	-10.00	AVG
9	2.9580	10.19	33.12	43.31	56.00	-12.69	QP
10	2.9580	10.19	24.78	34.97	46.00	-11.03	AVG
11	3.3460	10.19	34.51	44.70	56.00	-11.30	QP
12	3.3460	10.19	24.80	34.99	46.00	-11.01	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22 °C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

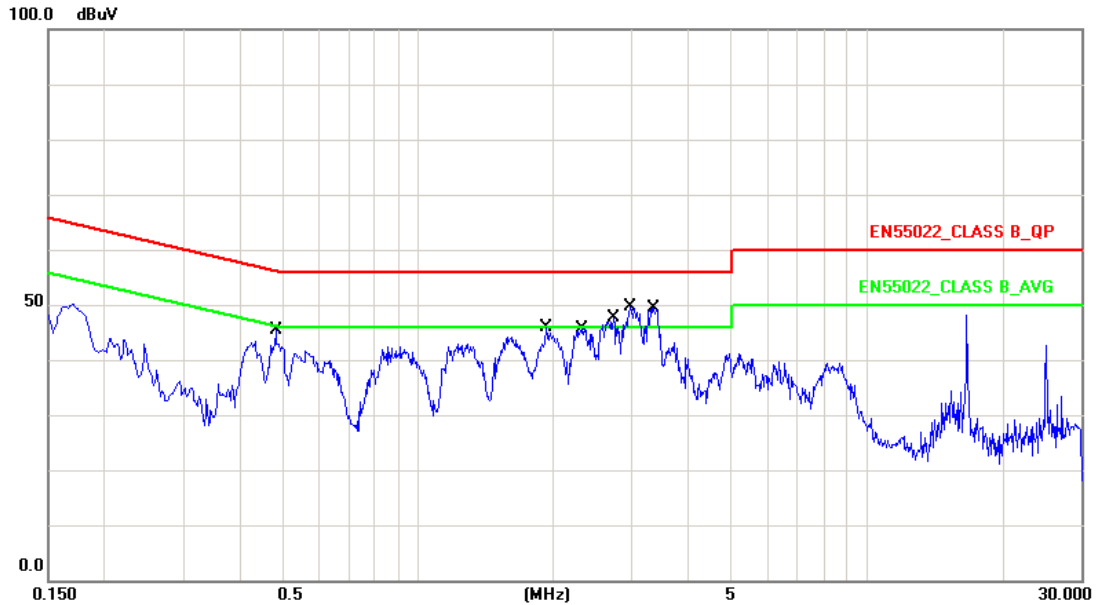


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4820	10.15	31.90	42.05	56.30	-14.25	QP
2	0.4820	10.15	25.66	35.81	46.30	-10.49	AVG
3	1.5940	10.18	29.98	40.16	56.00	-15.84	QP
4	1.5940	10.18	24.89	35.07	46.00	-10.93	AVG
5	1.9380	10.18	30.36	40.54	56.00	-15.46	QP
6	1.9380	10.18	24.91	35.09	46.00	-10.91	AVG
7	2.6340	10.19	32.09	42.28	56.00	-13.72	QP
8	2.6340	10.19	25.55	35.74	46.00	-10.26	AVG
9	3.0059	10.20	33.94	44.14	56.00	-11.86	QP
10	3.0059	10.20	26.18	36.38	46.00	-9.62	AVG
11	3.4060	10.21	32.61	42.82	56.00	-13.18	QP
12	3.4060	10.21	23.13	33.34	46.00	-12.66	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22 °C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

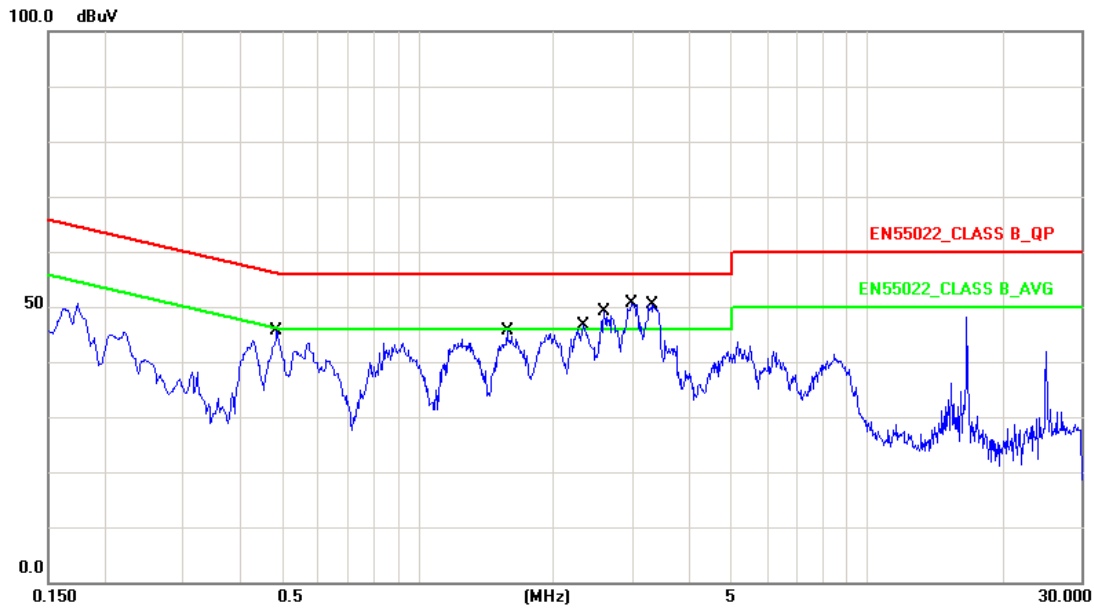


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4820	10.16	31.49	41.65	56.30	-14.65	QP
2	0.4820	10.16	25.39	35.55	46.30	-10.75	AVG
3	1.9380	10.17	29.72	39.89	56.00	-16.11	QP
4	1.9380	10.17	24.35	34.52	46.00	-11.48	AVG
5	2.3220	10.18	30.92	41.10	56.00	-14.90	QP
6	2.3220	10.18	25.26	35.44	46.00	-10.56	AVG
7	2.7220	10.18	31.93	42.11	56.00	-13.89	QP
8	2.7220	10.18	25.47	35.65	46.00	-10.35	AVG
9	2.9620	10.19	33.21	43.40	56.00	-12.60	QP
10	2.9620	10.19	25.04	35.23	46.00	-10.77	AVG
11	3.3460	10.19	34.17	44.36	56.00	-11.64	QP
12	3.3460	10.19	24.77	34.96	46.00	-11.04	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

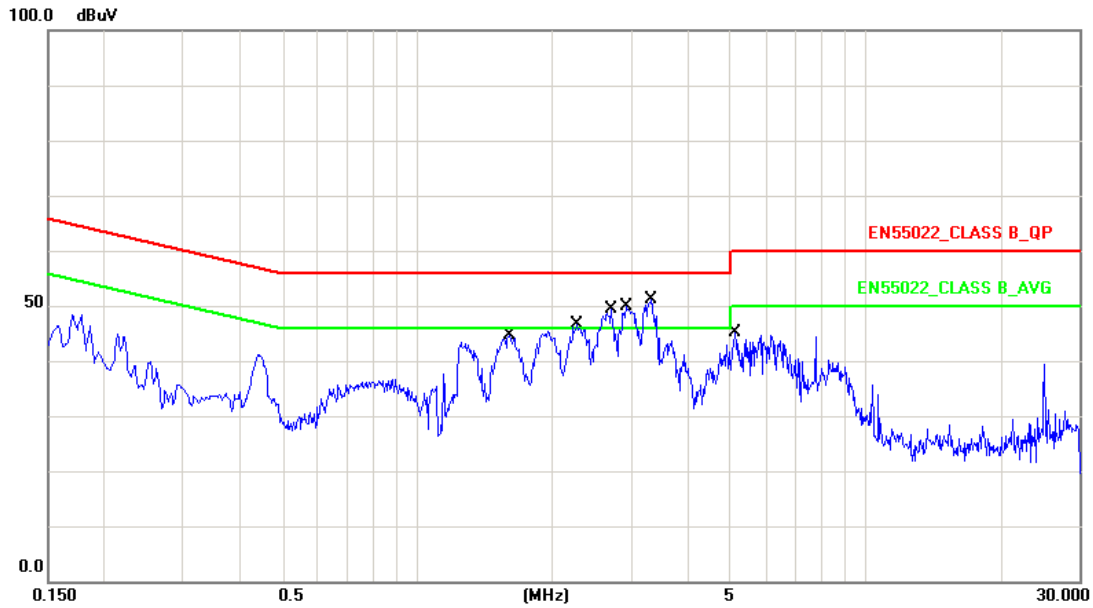


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4860	10.15	31.44	41.59	56.24	-14.65	QP
2	0.4860	10.15	26.40	36.55	46.24	-9.69	AVG
3	1.5820	10.18	30.20	40.38	56.00	-15.62	QP
4	1.5820	10.18	24.74	34.92	46.00	-11.08	AVG
5	2.3380	10.19	31.20	41.39	56.00	-14.61	QP
6	2.3380	10.19	25.68	35.87	46.00	-10.13	AVG
7	2.6060	10.19	31.41	41.60	56.00	-14.40	QP
8	2.6060	10.19	24.74	34.93	46.00	-11.07	AVG
9	2.9860	10.20	33.66	43.86	56.00	-12.14	QP
10	2.9860	10.20	25.82	36.02	46.00	-9.98	AVG
11	3.3220	10.21	34.08	44.29	56.00	-11.71	QP
12	3.3220	10.21	24.95	35.16	46.00	-10.84	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	LINE
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30

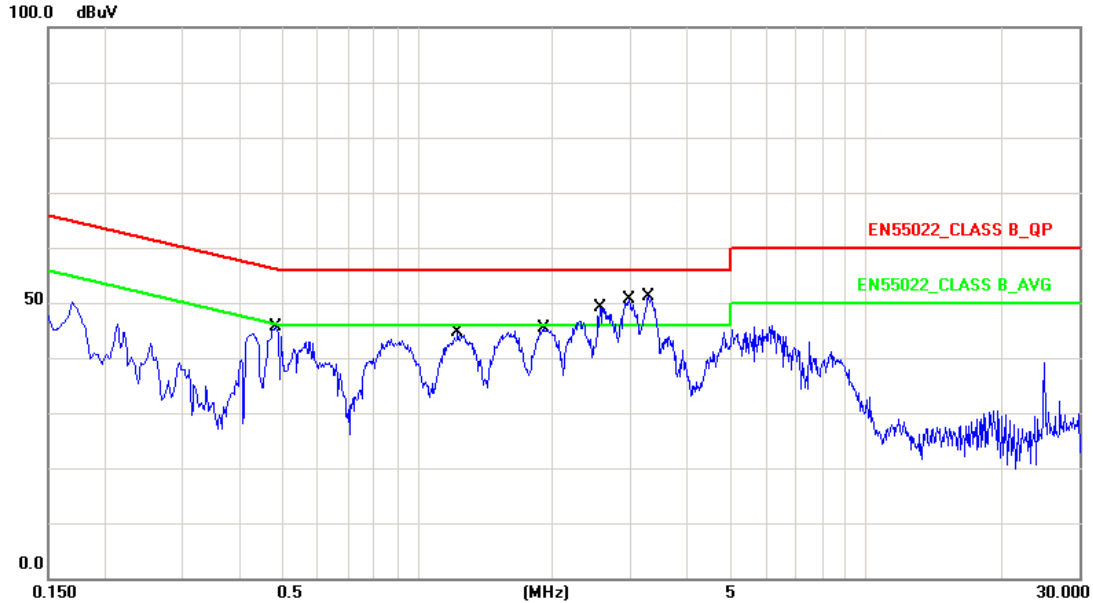


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	1.6060	10.17	31.32	41.49	56.00	-14.51	QP
2	1.6060	10.17	22.33	32.50	46.00	-13.50	AVG
3	2.2740	10.17	32.41	42.58	56.00	-13.42	QP
4	2.2740	10.17	23.99	34.16	46.00	-11.84	AVG
5	2.7100	10.18	32.66	42.84	56.00	-13.16	QP
6	2.7100	10.18	24.04	34.22	46.00	-11.78	AVG
7	2.9180	10.19	33.92	44.11	56.00	-11.89	QP
8	2.9180	10.19	23.67	33.86	46.00	-12.14	AVG
9	3.3300	10.19	35.64	45.83	56.00	-10.17	QP
10	3.3300	10.19	24.67	34.86	46.00	-11.14	AVG
11	5.1340	10.24	28.79	39.03	60.00	-20.97	QP
12	5.1340	10.24	23.10	33.34	50.00	-16.66	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Phase :	NEUTRAL
Equipment :	LCD Monitor	Model No :	240LM00010
Temperature :	22°C	Humidity :	50%
Pressure(mbar) :	1002	Date:	2013/10/30



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4820	10.15	33.46	43.61	56.30	-12.69	QP
2	0.4820	10.15	20.28	30.43	46.30	-15.87	AVG
3	1.2340	10.18	31.70	41.88	56.00	-14.12	QP
4	1.2340	10.18	22.82	33.00	46.00	-13.00	AVG
5	1.9220	10.18	31.97	42.15	56.00	-13.85	QP
6	1.9220	10.18	23.38	33.56	46.00	-12.44	AVG
7	2.5620	10.19	31.92	42.11	56.00	-13.89	QP
8	2.5620	10.19	22.97	33.16	46.00	-12.84	AVG
9	2.9660	10.20	35.25	45.45	56.00	-10.55	QP
10	2.9660	10.20	25.47	35.67	46.00	-10.33	AVG
11	3.2860	10.21	35.25	45.46	56.00	-10.54	QP
12	3.2860	10.21	24.33	34.54	46.00	-11.46	AVG

Note: Measurement Level = Reading Level + Correct Factor

Test engineer: Seben



4.6. Test Photographs

Front View



Rear View





Second edition

Front View



Rear View





5. Test of Radiated Emission

5.1. Test Limit

The EUT shall meet the limits of below Table when measured at the measuring distance R in accordance with the methods described in European Standard EN 55022. If the reading on the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the highest reading shall be recorded, with the exception of any brief isolated high reading, which shall be ignored.

Table – Limits for radiated disturbance of class B ITE at a measuring distance of 10 m

Frequency range MHz	Quasi-peak limits dB(μ V/m)
30 to 230	30
230 to 1000	37
NOTE 1 The lower limit shall apply at the transition frequency. NOTE 2 Additional provisions may be required for cases where interference occurs.	

The EUT shall meet the limits of below Table when measured in accordance with the method described in European Standard EN 55022 and the conditional testing procedure described below.

Table – Limits for radiated disturbance of class B ITE at a measuring distance of 3 m

Frequency range GHz	Average limit dB(μ V/m)	Peak limits dB(μ V/m)
1 to 3	50	70
3 to 6	54	74
NOTE The lower limit applies at the transition frequency.		

• Conditional testing procedure:

The highest internal source of an EUT is defined as the highest frequency generated or used within the EUT or on which the EUT operates or tunes.

If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz.

If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz.

If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz.

If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.



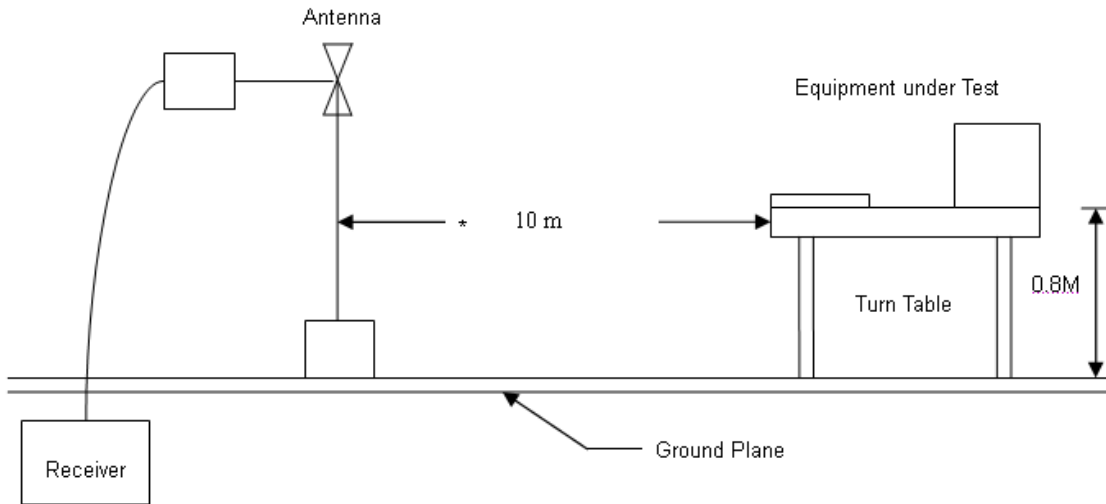
5.2. Test Procedures

- a. The EUT was placed on a relatable table top 0.8 meter above ground.
- b. The EUT was set 10 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.

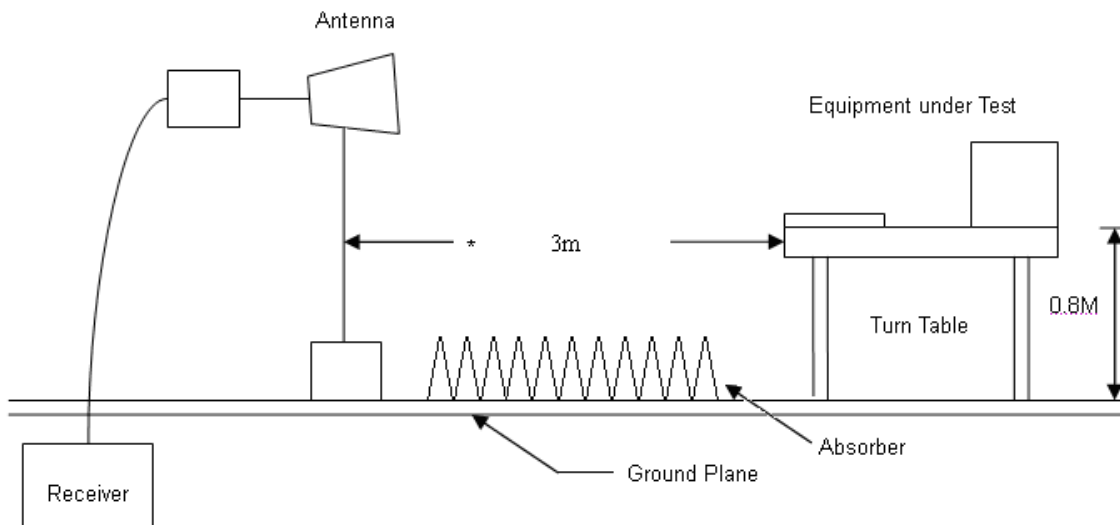


5.3. Typical test Setup

Below 1GHz Test Setup



Above 1GHz Test Setup





5.4. Measurement equipment

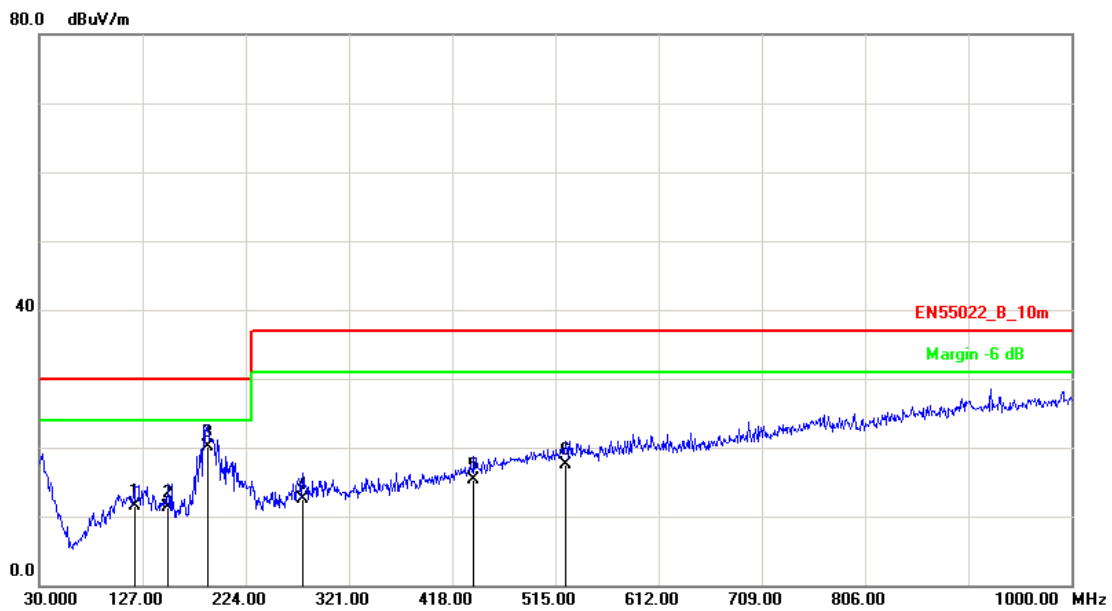
Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
EMI Test Receiver	R&S	ESCI	101183	2013.03.10	2014.03.09
Preamplifier	Agilent	87405B	My39500554	2013.03.10	2014.03.09
Preamplifier	Agilent	8449B	3008A02342	2013.03.10	2014.03.09
Ultra Broadband Antenna	R&S	HL562	100363	2013.05.03	2014.05.02
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-618	2013.05.03	2014.05.02
Spectrum Analyzer	R&S	FSP40	100324	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-001	2013.03.10	2014.03.09



5.5. Test Result and Data (30MHz ~ 1000MHz)

Original:

Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

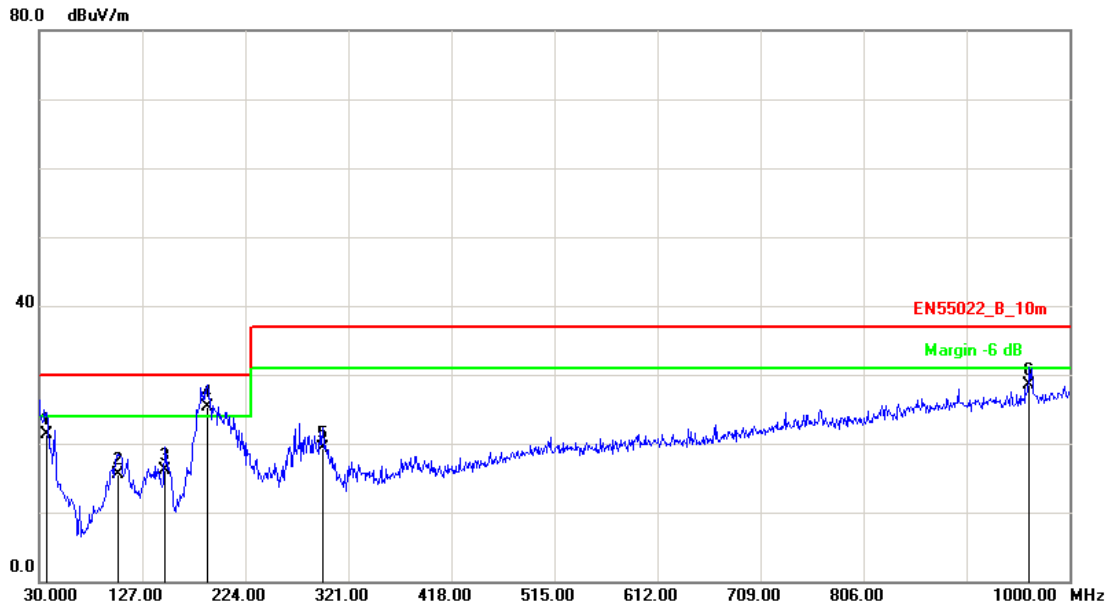


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	120.2099	-14.89	26.42	11.53	30.00	-18.47	QP	400	237
2	151.2500	-15.24	26.58	11.34	30.00	-18.66	QP	400	221
3	188.1100	-15.49	35.55	20.06	30.00	-9.94	QP	400	133
4	277.3500	-11.91	24.38	12.47	37.00	-24.53	QP	400	41
5	438.3700	-6.96	22.30	15.34	37.00	-21.66	QP	129	360
6	524.7000	-4.92	22.44	17.52	37.00	-19.48	QP	100	200

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

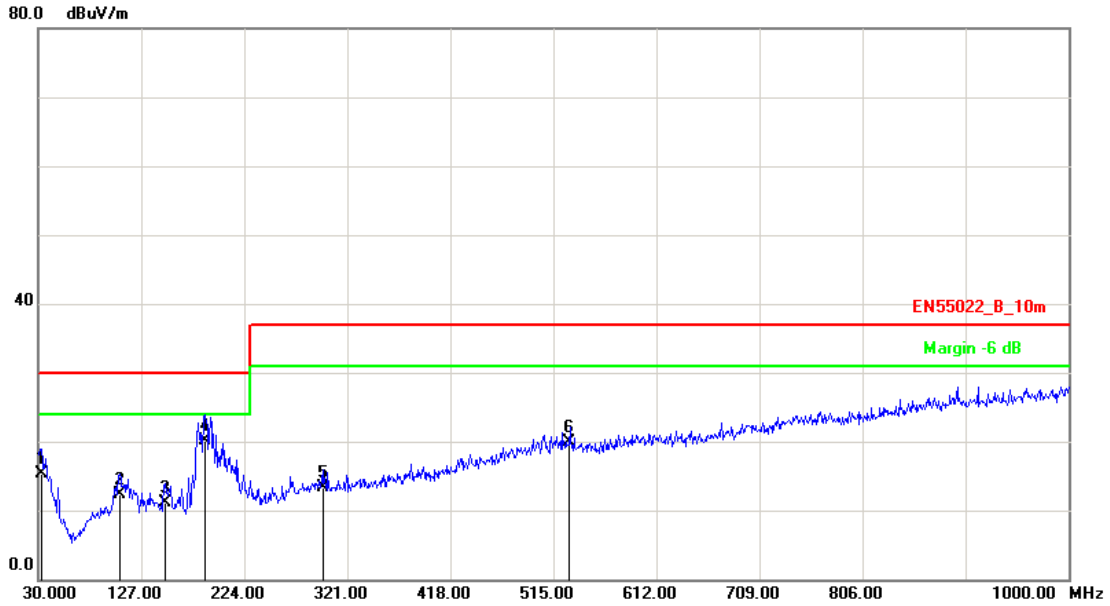


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	36.7900	-8.80	30.06	21.26	30.00	-8.74	QP	100	360
2	104.6900	-14.71	30.24	15.53	30.00	-14.47	QP	100	360
3	148.3400	-15.21	31.35	16.14	30.00	-13.86	QP	100	343
4	188.1100	-15.49	40.86	25.37	30.00	-4.63	QP	100	117
5	296.7500	-11.25	30.57	19.32	37.00	-17.68	QP	100	160
6	962.1700	2.03	26.40	28.43	37.00	-8.57	QP	400	175

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

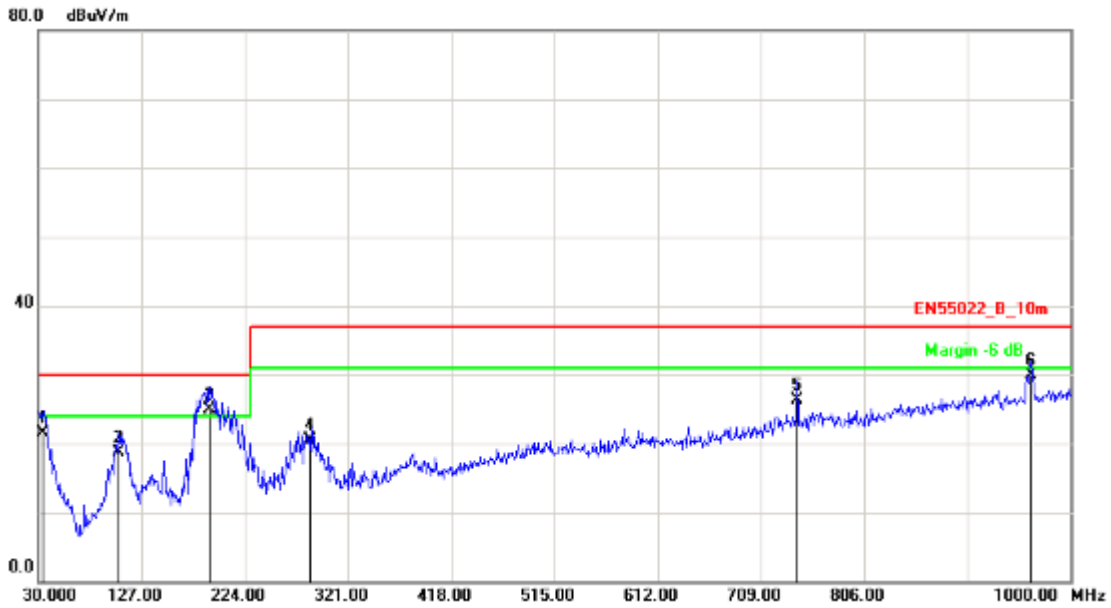


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	32.9099	-6.95	22.21	15.26	30.00	-14.74	QP	400	360
2	106.6299	-14.74	27.08	12.34	30.00	-17.66	QP	400	327
3	149.3100	-15.22	26.31	11.09	30.00	-18.91	QP	399	360
4	187.1399	-15.48	35.62	20.14	30.00	-9.86	QP	400	186
5	297.7200	-11.22	24.48	13.26	37.00	-23.74	QP	400	116
6	530.5198	-4.93	24.78	19.85	37.00	-17.15	QP	100	143

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

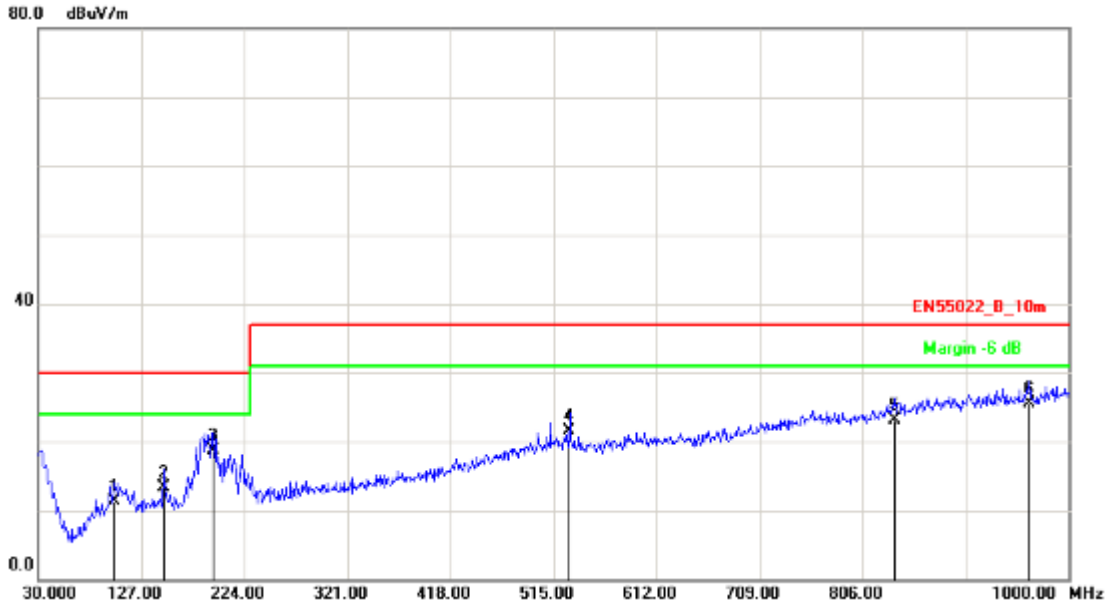


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	34.8500	-7.87	29.40	21.53	30.00	-8.47	QP	100	68
2	105.6600	-14.72	33.34	18.62	30.00	-11.38	QP	111	360
3	191.0200	-15.51	40.45	24.94	30.00	-5.06	QP	100	139
4	286.0799	-11.61	32.02	20.41	37.00	-16.59	QP	100	190
5	742.9500	-1.07	27.41	26.34	37.00	-10.66	QP	251	360
6	963.1400	2.05	27.77	29.82	37.00	-7.18	QP	400	204

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

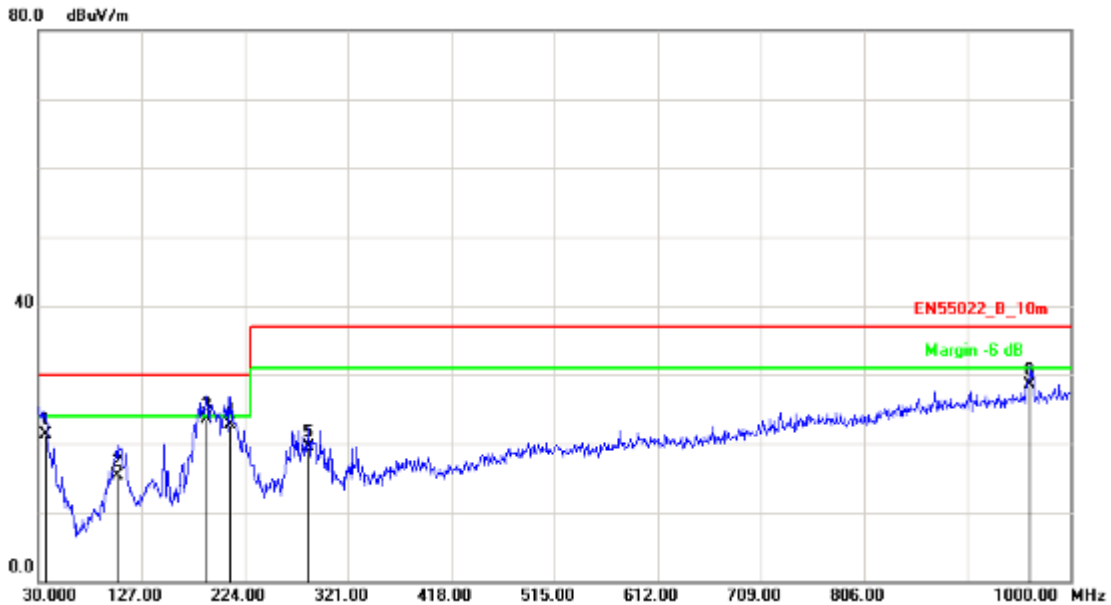


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	101.7800	-14.68	25.94	11.26	30.00	-18.74	QP	333	360
2	148.3400	-15.21	28.45	13.24	30.00	-16.76	QP	400	308
3	194.9000	-15.54	34.27	18.73	30.00	-11.27	QP	400	130
4	530.5198	-4.93	26.49	21.56	37.00	-15.44	QP	100	226
5	836.0700	0.24	22.81	23.05	37.00	-13.95	QP	100	102
6	963.1399	2.05	23.37	25.42	37.00	-11.58	QP	100	250

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

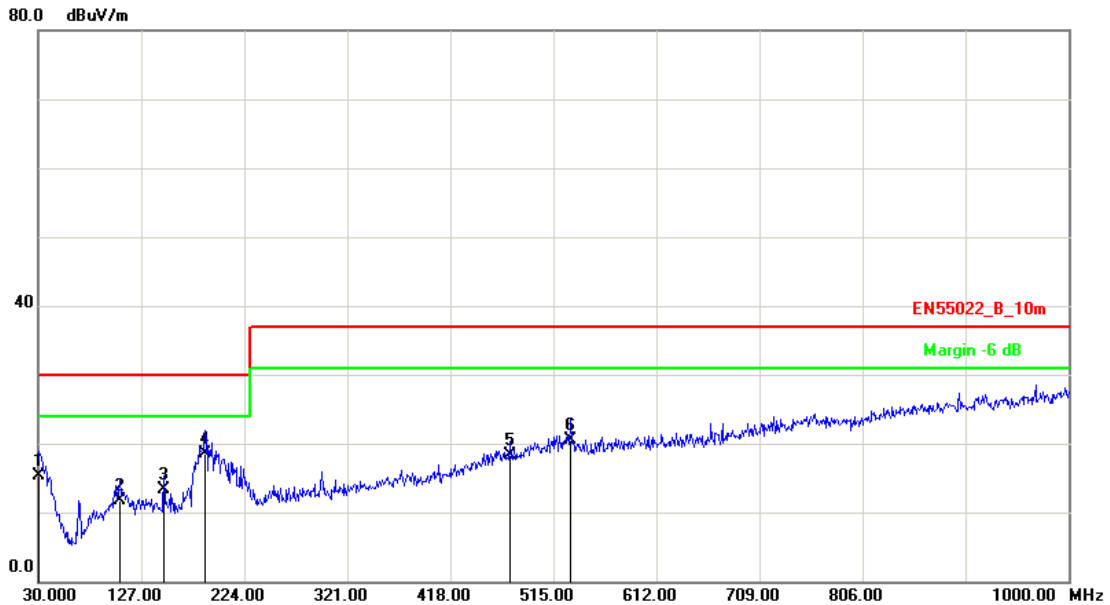


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	36.7900	-8.80	30.06	21.26	30.00	-8.74	QP	100	327
2	103.7200	-14.70	30.08	15.38	30.00	-14.62	QP	100	222
3	188.1100	-15.49	38.94	23.45	30.00	-6.55	QP	100	295
4	210.4200	-15.00	37.73	22.73	30.00	-7.27	QP	100	303
5	284.1400	-11.68	31.21	19.53	37.00	-17.47	QP	100	176
6	962.1700	2.03	26.45	28.48	37.00	-8.52	QP	400	213

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

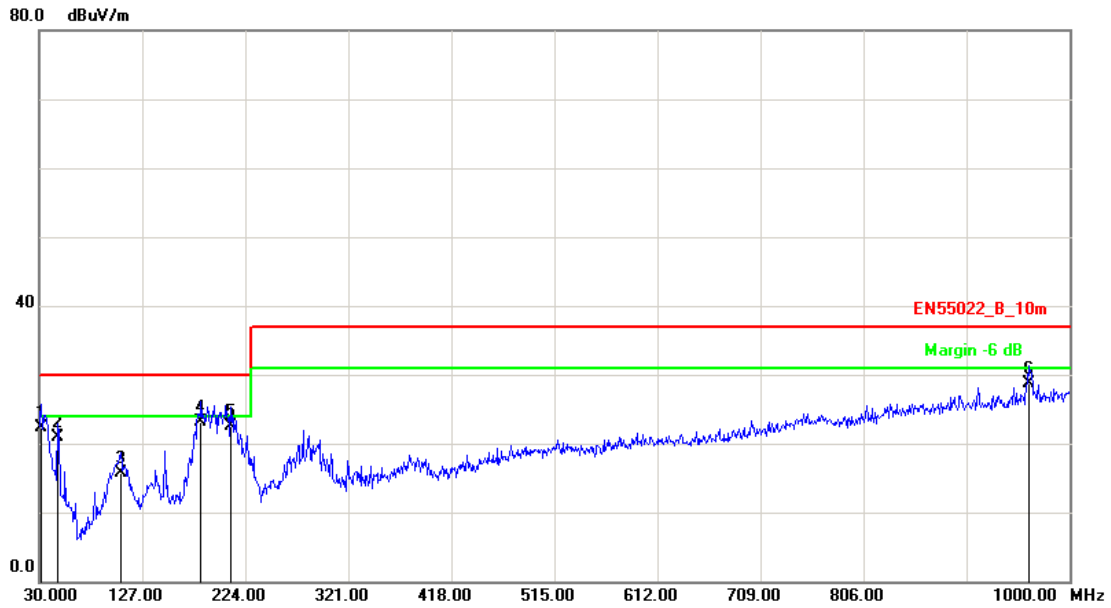


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	30.0000	-5.56	20.88	15.32	30.00	-14.68	QP	239	360
2	106.6299	-14.74	26.52	11.78	30.00	-18.22	QP	400	358
3	148.3400	-15.21	28.46	13.25	30.00	-16.75	QP	400	305
4	187.1399	-15.48	33.97	18.49	30.00	-11.51	QP	400	139
5	474.2599	-5.69	24.01	18.32	37.00	-18.68	QP	100	0
6	531.4900	-4.93	25.37	20.44	37.00	-16.56	QP	100	175

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17



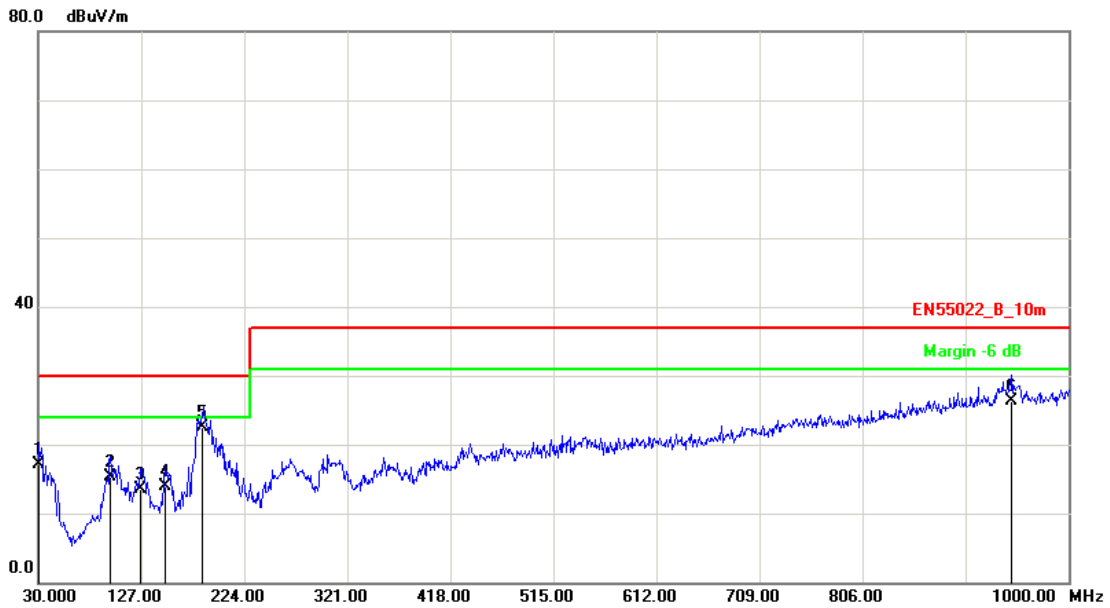
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	31.9400	-6.49	28.83	22.34	30.00	-7.66	QP	100	360
2	47.4600	-14.51	35.33	20.82	30.00	-9.18	QP	338	360
3	106.6300	-14.74	30.37	15.63	30.00	-14.37	QP	100	203
4	182.2899	-15.45	38.59	23.14	30.00	-6.86	QP	100	3
5	210.4200	-15.00	37.56	22.56	30.00	-7.44	QP	100	308
6	961.2000	2.01	26.74	28.75	37.00	-8.25	QP	400	193

Note: Measurement Level = Reading Level + Correct Factor



First edition:

Test Mode :	Mode 1: Full system (DVI mode 1920*1080@120Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2013/05/02

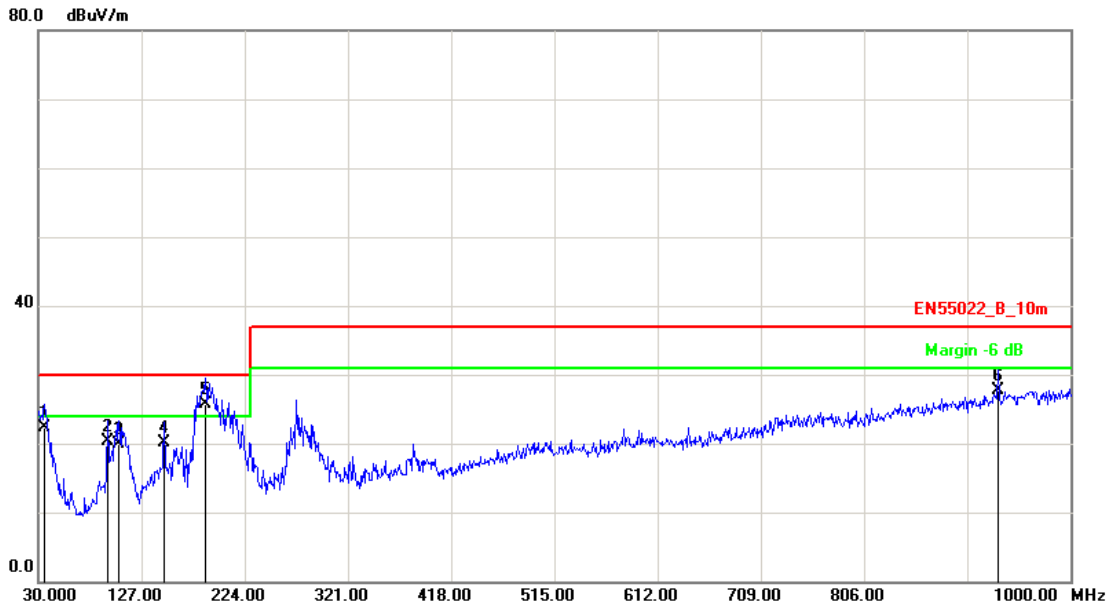


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	30.0000	-5.56	22.67	17.11	30.00	-12.89	QP	400	12
2	97.9000	-14.73	29.96	15.23	30.00	-14.77	QP	300	0
3	126.0300	-14.96	28.50	13.54	30.00	-16.46	QP	300	135
4	149.3100	-15.22	29.12	13.90	30.00	-16.10	QP	200	227
5	185.1999	-15.47	37.95	22.48	30.00	-7.52	QP	200	169
6	946.6499	1.77	24.53	26.30	37.00	-10.70	QP	400	43

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (DVI mode 1920*1080@120Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2013/05/02



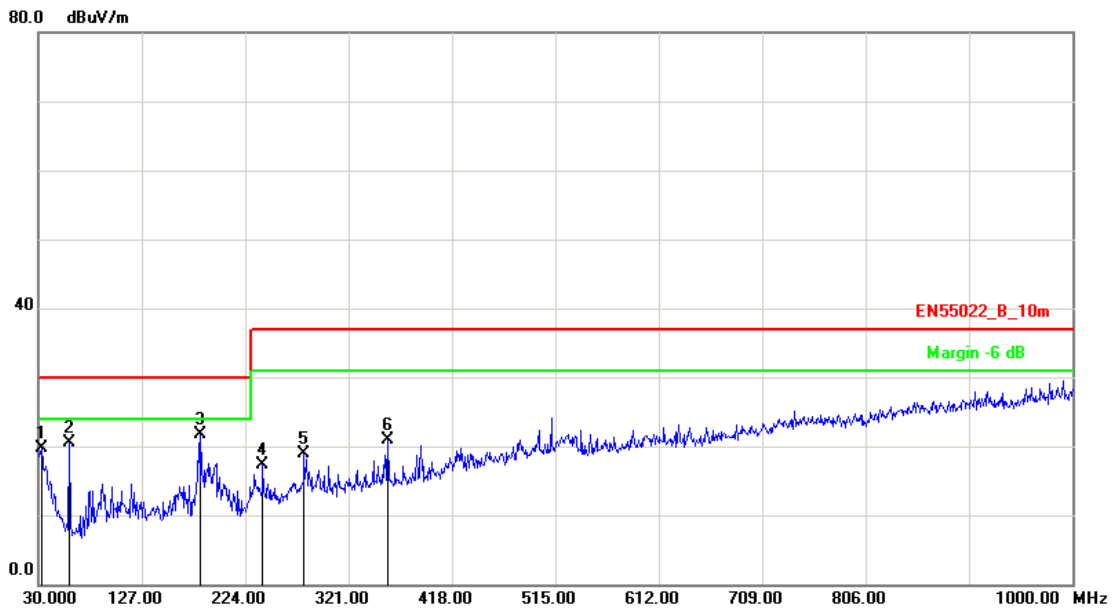
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	35.8200	-8.34	30.65	22.31	30.00	-7.69	QP	100	25
2	94.9899	-14.83	35.10	20.27	30.00	-9.73	QP	200	360
3	105.6598	-14.72	34.71	19.99	30.00	-10.01	QP	100	17
4	148.3400	-15.21	35.24	20.03	30.00	-9.97	QP	100	112
5	187.1399	-15.48	41.26	25.78	30.00	-4.22	QP	200	208
6	932.1000	1.69	25.97	27.66	37.00	-9.34	QP	100	323

Note: Measurement Level = Reading Level + Correct Factor



Second edition:

Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

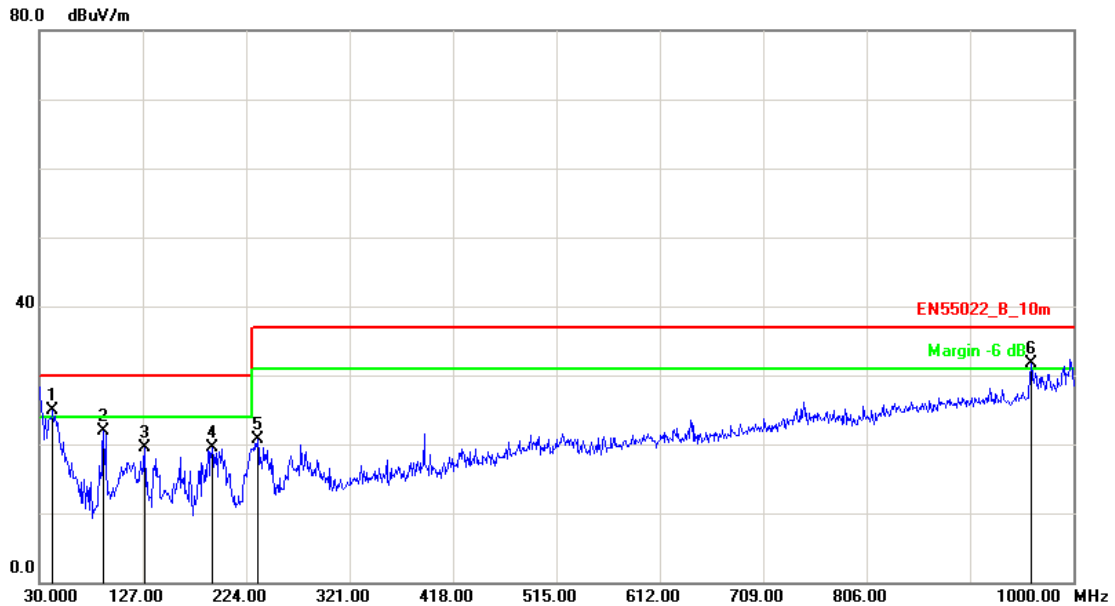


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	32.9099	-6.95	26.74	19.79	30.00	-10.21	QP	200	264
2	59.1000	-19.42	40.00	20.58	30.00	-9.42	QP	200	320
3	182.2899	-15.45	37.14	21.69	30.00	-8.31	QP	200	191
4	240.4900	-13.35	30.71	17.36	37.00	-19.64	QP	200	83
5	279.2900	-11.84	30.68	18.84	37.00	-18.16	QP	200	328
6	357.8599	-9.54	30.54	21.00	37.00	-16.00	QP	200	35

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

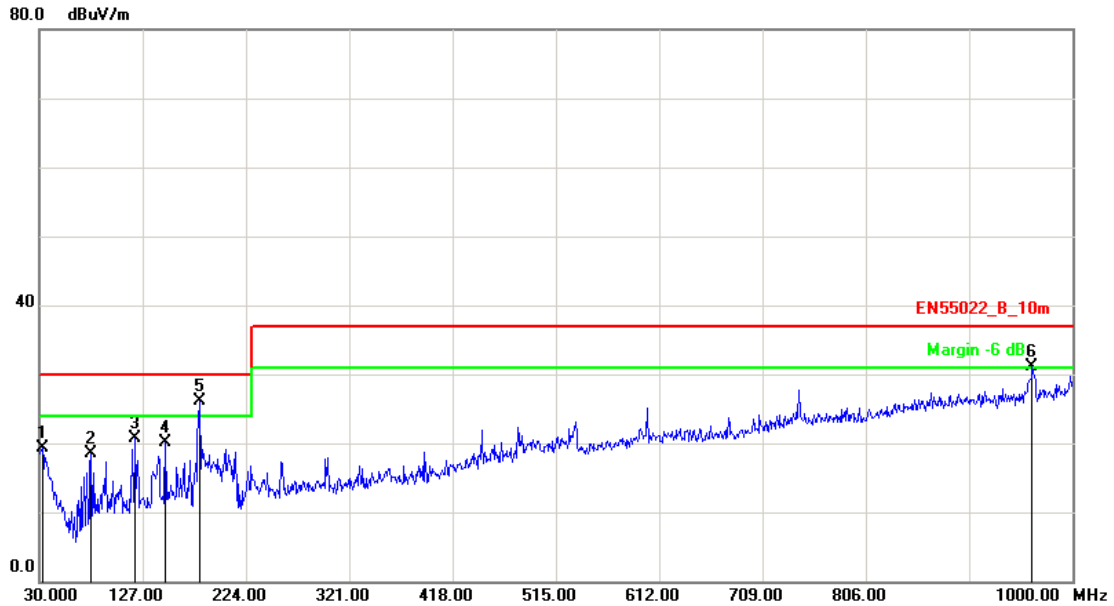


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	42.6100	-11.79	36.63	24.84	30.00	-5.16	QP	100	149
2	90.1400	-14.99	36.88	21.89	30.00	-8.11	QP	200	102
3	128.9400	-14.99	34.50	19.51	30.00	-10.49	QP	100	257
4	191.9900	-15.52	35.07	19.55	30.00	-10.45	QP	100	284
5	234.6700	-13.67	34.31	20.64	37.00	-16.36	QP	100	20
6	960.2300	1.99	29.75	31.74	37.00	-5.26	QP	118	360

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

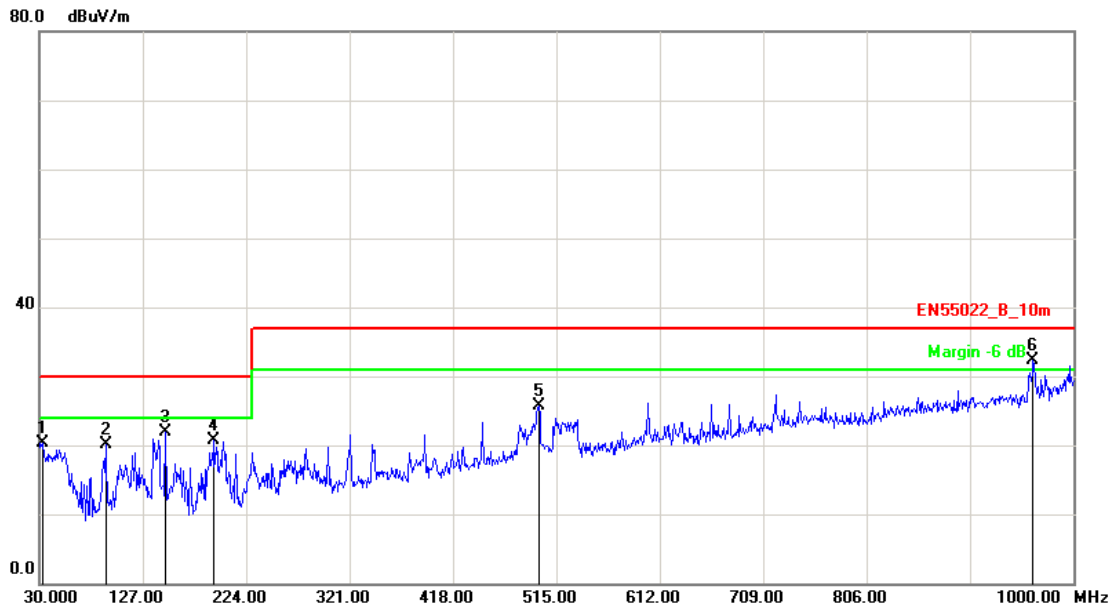


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	32.9099	-6.95	26.19	19.24	30.00	-10.76	QP	100	83
2	78.5000	-15.86	34.29	18.43	30.00	-11.57	QP	400	356
3	120.2099	-14.89	35.62	20.73	30.00	-9.27	QP	400	280
4	148.3400	-15.21	35.37	20.16	30.00	-9.84	QP	400	337
5	180.3499	-15.44	41.42	25.98	30.00	-4.02	QP	400	178
6	962.1699	2.03	29.07	31.10	37.00	-5.90	QP	100	12

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

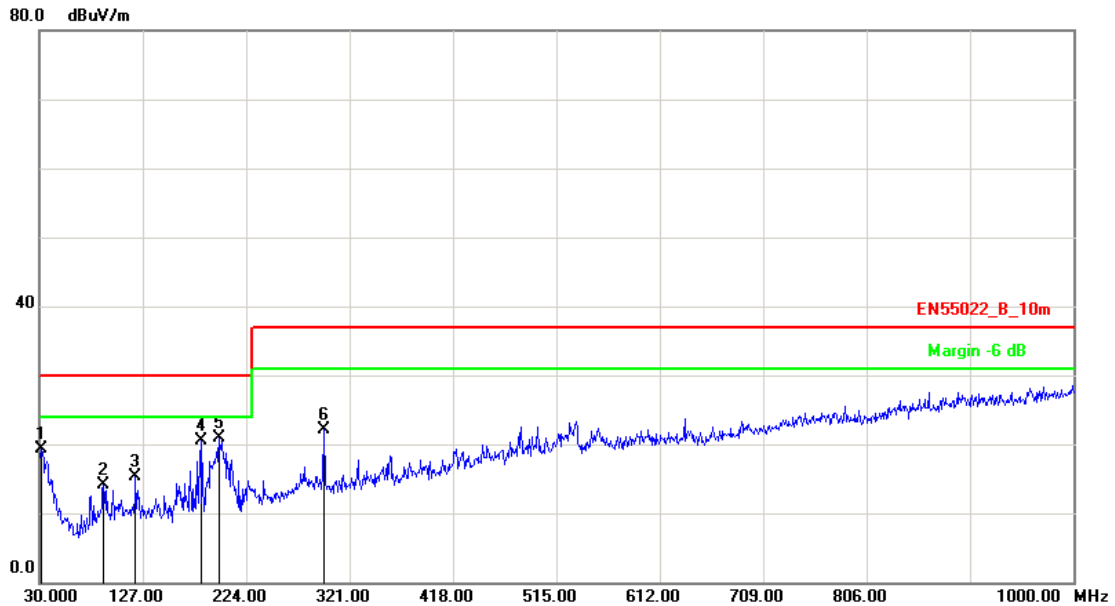


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	32.9100	-6.95	27.18	20.23	30.00	-9.77	QP	100	294
2	92.0800	-14.92	34.95	20.03	30.00	-9.97	QP	400	143
3	148.3400	-15.21	37.19	21.98	30.00	-8.02	QP	100	104
4	193.9299	-15.53	36.20	20.67	30.00	-9.33	QP	100	236
5	498.5100	-4.94	30.57	25.63	37.00	-11.37	QP	100	4
6	962.1700	2.03	30.31	32.34	37.00	-4.66	QP	249	360

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

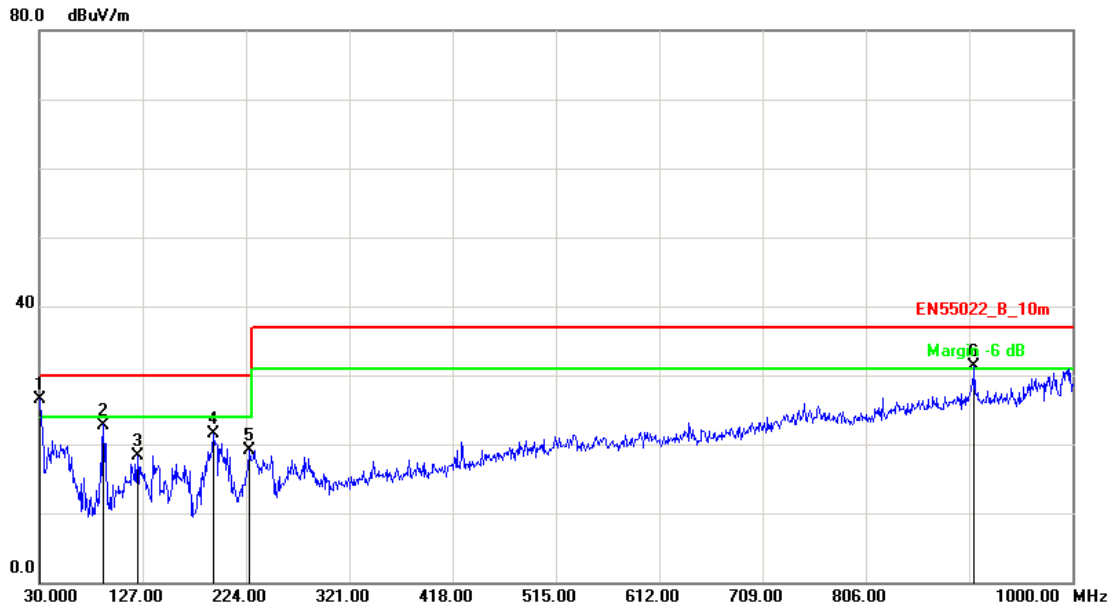


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	31.9400	-6.49	25.83	19.34	30.00	-10.66	QP	200	4
2	90.1400	-14.99	29.16	14.17	30.00	-15.83	QP	200	326
3	120.2099	-14.89	30.28	15.39	30.00	-14.61	QP	200	73
4	182.2899	-15.45	35.92	20.47	30.00	-9.53	QP	200	295
5	198.7800	-15.56	36.50	20.94	30.00	-9.06	QP	200	23
6	296.7500	-11.25	33.35	22.10	37.00	-14.90	QP	200	19

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

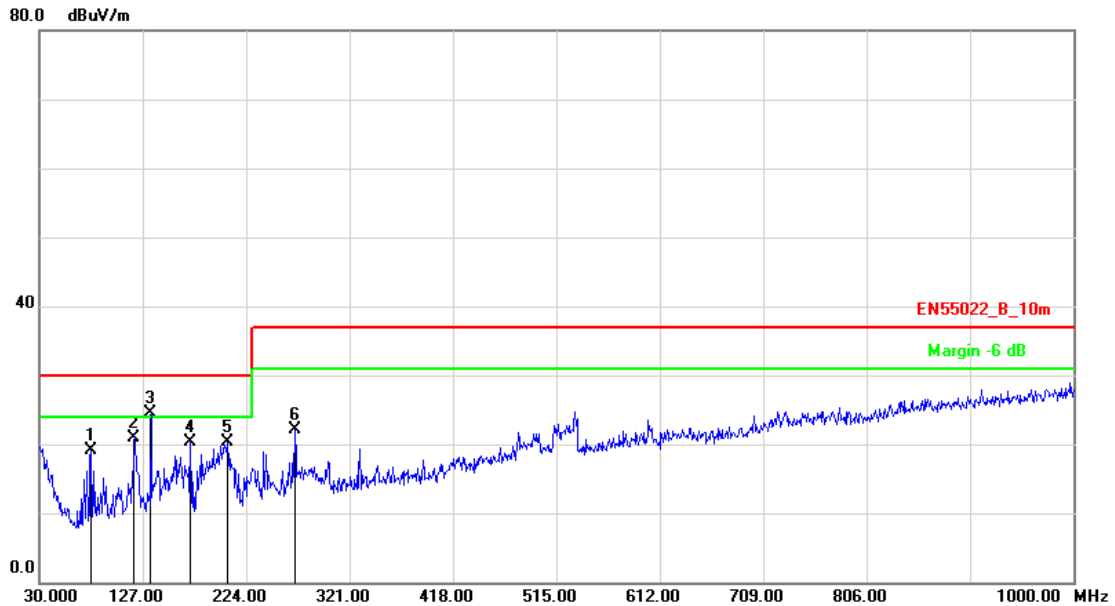


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	30.0000	-5.56	31.53	25.97	30.00	-4.03	QP	100	277
2	90.1400	-14.99	37.79	22.80	30.00	-7.20	QP	200	85
3	122.1500	-14.91	33.25	18.34	30.00	-11.66	QP	100	300
4	193.9299	-15.53	37.12	21.59	30.00	-8.41	QP	100	316
5	226.9100	-14.10	33.16	19.06	30.00	-10.94	QP	200	150
6	907.8500	1.55	29.67	31.22	37.00	-5.78	QP	154	360

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

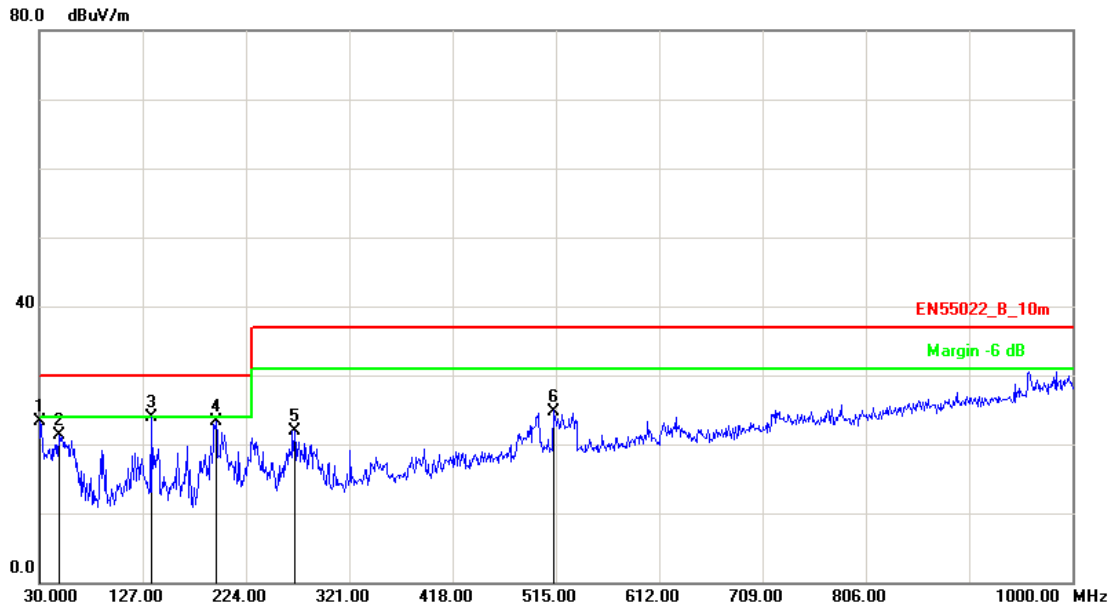


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	78.5000	-15.86	34.91	19.05	30.00	-10.95	QP	400	344
2	119.2399	-14.88	35.81	20.93	30.00	-9.07	QP	400	265
3	134.7599	-15.06	39.61	24.55	30.00	-5.45	QP	400	134
4	171.6200	-15.38	35.61	20.23	30.00	-9.77	QP	400	201
5	206.5399	-15.21	35.46	20.25	30.00	-9.75	QP	400	360
6	269.5899	-12.17	34.27	22.10	37.00	-14.90	QP	400	90

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	30.9700	-6.02	29.39	23.37	30.00	-6.63	QP	100	264
2	48.4300	-15.05	36.35	21.30	30.00	-8.70	QP	100	332
3	134.7600	-15.06	38.90	23.84	30.00	-6.16	QP	100	43
4	195.8700	-15.54	38.82	23.28	30.00	-6.72	QP	100	227
5	269.5900	-12.17	34.02	21.85	37.00	-15.15	QP	145	360
6	513.0600	-4.91	29.71	24.80	37.00	-12.20	QP	343	360

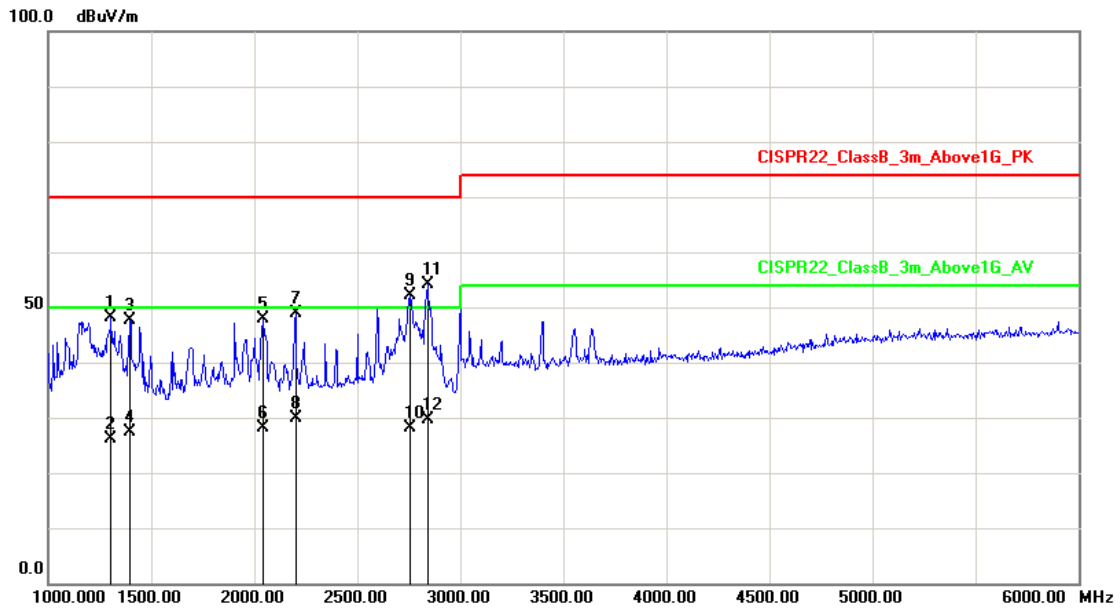
Note: Measurement Level = Reading Level + Correct Factor



5.6. Test Result and Data (1000MHz ~ 6000MHz)

Original:

Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

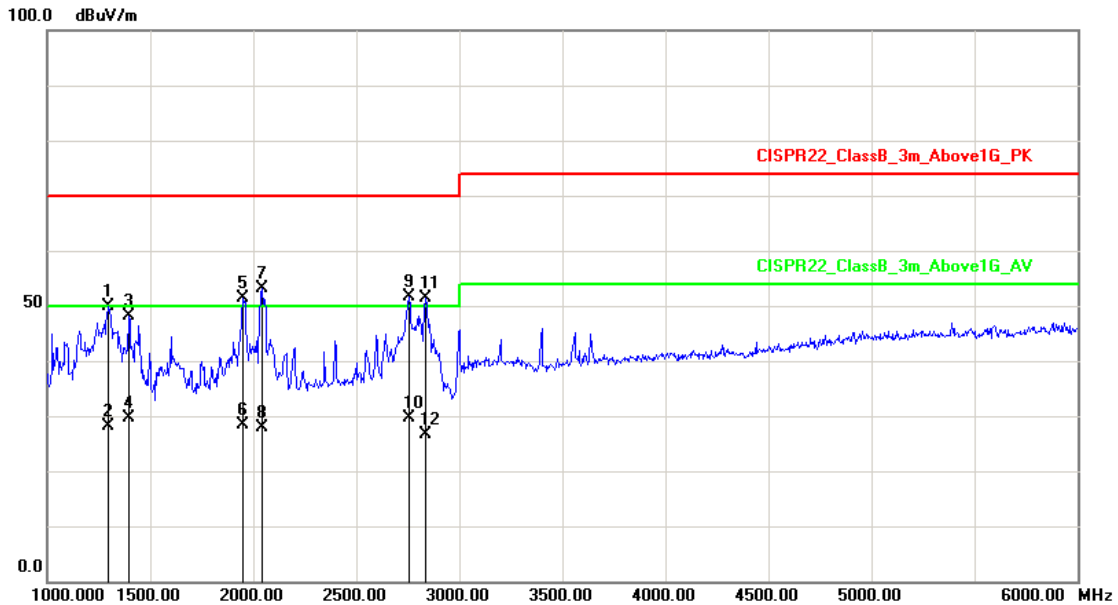


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1305.000	-15.24	63.32	48.08	70.00	-21.92	peak	200	323
2	1305.000	-15.24	41.37	26.13	50.00	-23.87	AVG	200	323
3	1395.000	-14.53	62.22	47.69	70.00	-22.31	peak	100	304
4	1395.000	-14.53	41.79	27.26	50.00	-22.74	AVG	100	305
5	2045.000	-10.98	58.85	47.87	70.00	-22.13	peak	100	355
6	2045.000	-10.98	39.15	28.17	50.00	-21.83	AVG	100	355
7	2200.000	-10.16	58.99	48.83	70.00	-21.17	peak	200	20
8	2200.000	-10.16	39.92	29.76	50.00	-20.24	AVG	200	20
9	2755.000	-7.64	59.86	52.22	70.00	-17.78	peak	200	0
10	2755.000	-7.64	35.80	28.16	50.00	-21.84	AVG	200	2
11	2840.000	-7.34	61.37	54.03	70.00	-15.97	peak	200	310
12	2840.000	-7.34	36.96	29.62	50.00	-20.38	AVG	200	310

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

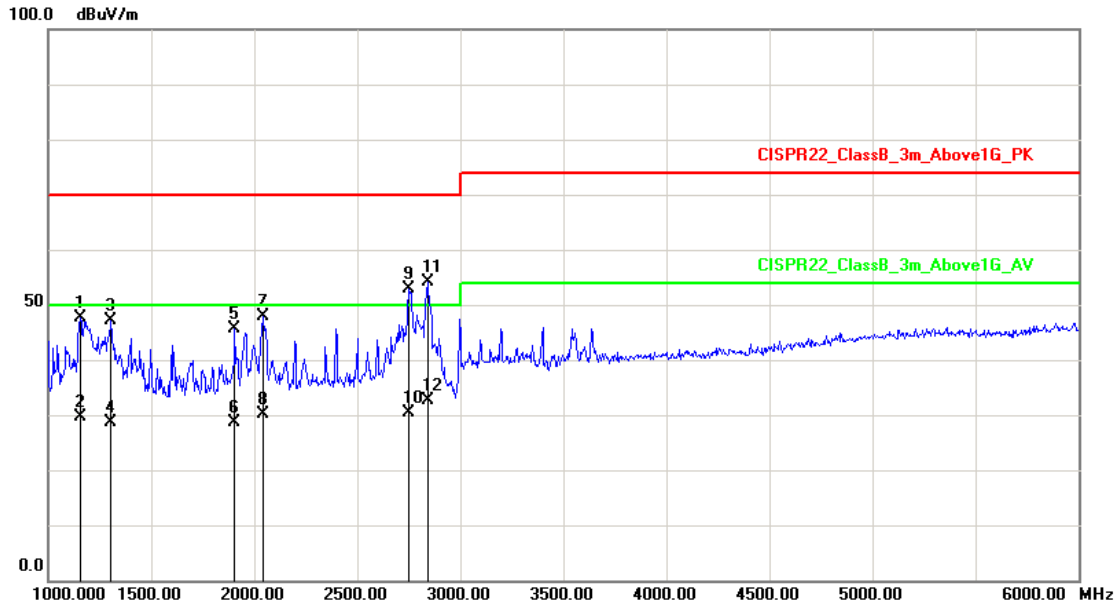


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1295.000	-15.31	65.12	49.81	70.00	-20.19	peak	178	0
2	1295.000	-15.31	43.46	28.15	50.00	-21.85	AVG	178	0
3	1395.000	-14.53	62.67	48.14	70.00	-21.86	peak	200	326
4	1395.000	-14.53	44.24	29.71	50.00	-20.29	AVG	200	326
5	1950.000	-11.59	62.88	51.29	70.00	-18.71	peak	100	333
6	1950.000	-11.59	39.90	28.31	50.00	-21.69	AVG	100	333
7	2040.000	-11.01	64.10	53.09	70.00	-16.91	peak	100	351
8	2040.000	-11.01	38.87	27.86	50.00	-22.14	AVG	100	351
9	2755.000	-7.64	59.15	51.51	70.00	-18.49	peak	100	151
10	2755.000	-7.64	37.31	29.67	50.00	-20.33	AVG	100	151
11	2835.000	-7.35	58.83	51.48	70.00	-18.52	peak	100	164
12	2835.000	-7.35	33.86	26.51	50.00	-23.49	AVG	100	164

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

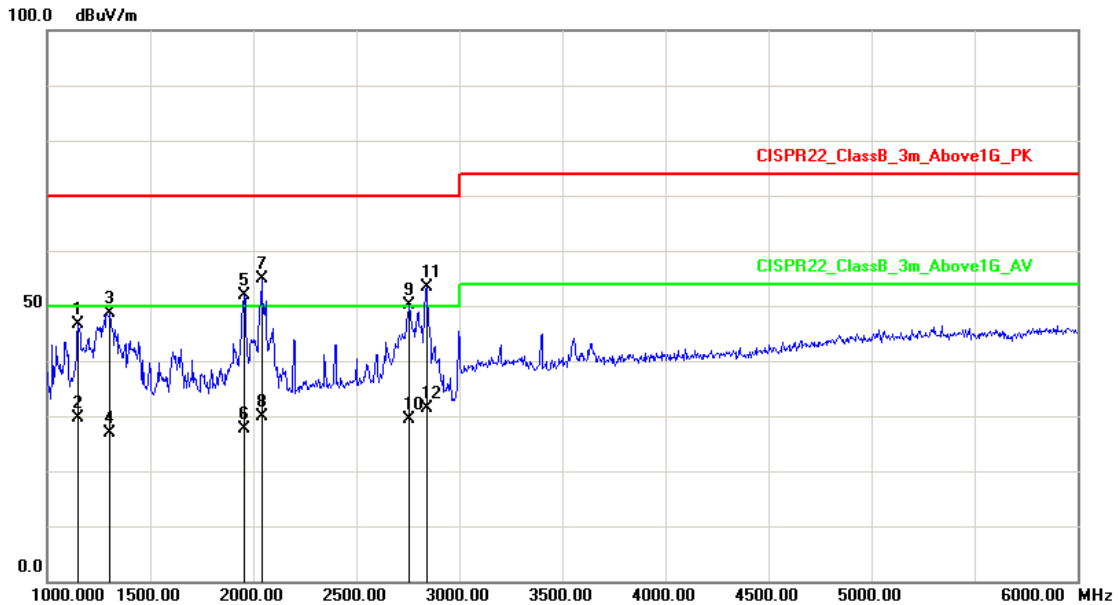


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1155.000	-16.25	63.83	47.58	70.00	-22.42	peak	106	0
2	1155.000	-16.25	45.92	29.67	50.00	-20.33	AVG	106	0
3	1305.000	-15.24	62.43	47.19	70.00	-22.81	peak	200	312
4	1305.000	-15.24	43.81	28.57	50.00	-21.43	AVG	200	312
5	1905.000	-11.93	57.52	45.59	70.00	-24.41	peak	100	21
6	1905.000	-11.93	40.60	28.67	50.00	-21.33	AVG	100	21
7	2040.000	-11.01	58.82	47.81	70.00	-22.19	peak	100	356
8	2040.000	-11.01	41.14	30.13	50.00	-19.87	AVG	100	356
9	2750.000	-7.66	60.53	52.87	70.00	-17.13	peak	200	258
10	2750.000	-7.66	37.95	30.29	50.00	-19.71	AVG	200	258
11	2840.000	-7.34	61.40	54.06	70.00	-15.94	peak	100	138
12	2840.000	-7.34	39.99	32.65	50.00	-17.35	AVG	100	138

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

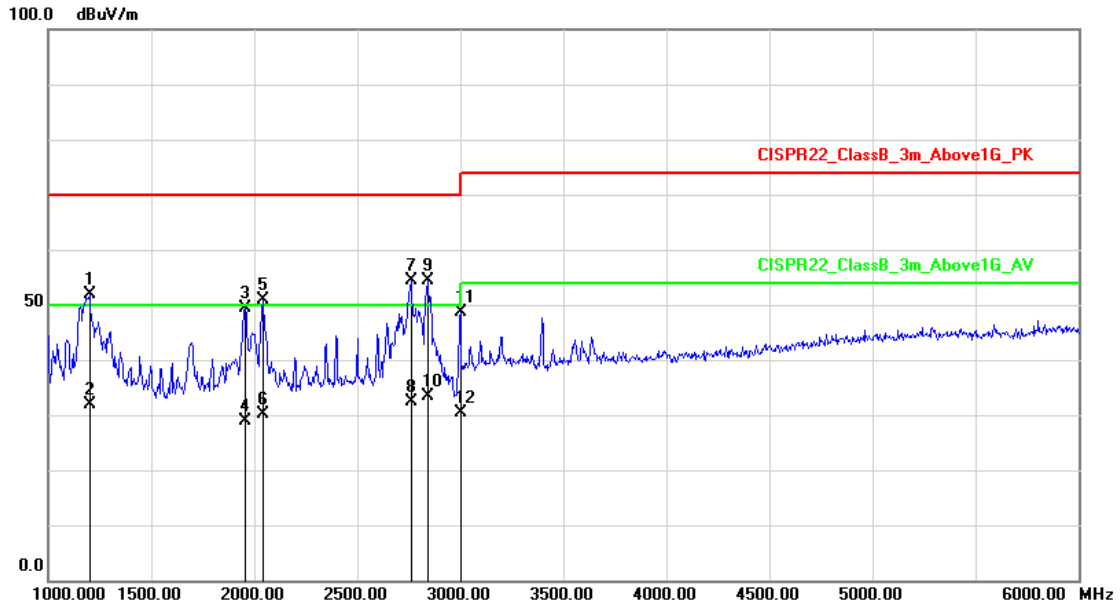


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1150.000	-16.27	62.99	46.72	70.00	-23.28	peak	100	0
2	1150.000	-16.27	45.80	29.53	50.00	-20.47	AVG	100	0
3	1305.000	-15.24	63.92	48.68	70.00	-21.32	peak	200	314
4	1305.000	-15.24	42.11	26.87	50.00	-23.13	AVG	200	314
5	1955.000	-11.56	63.35	51.79	70.00	-18.21	peak	100	349
6	1955.000	-11.56	39.18	27.62	50.00	-22.38	AVG	100	349
7	2040.000	-11.01	65.86	54.85	70.00	-15.15	peak	100	25
8	2040.000	-11.01	40.87	29.86	50.00	-20.14	AVG	100	25
9	2755.000	-7.64	57.70	50.06	70.00	-19.94	peak	100	20
10	2755.000	-7.64	36.90	29.26	50.00	-20.74	AVG	100	20
11	2840.000	-7.34	60.62	53.28	70.00	-16.72	peak	200	197
12	2840.000	-7.34	38.70	31.36	50.00	-18.64	AVG	200	197

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

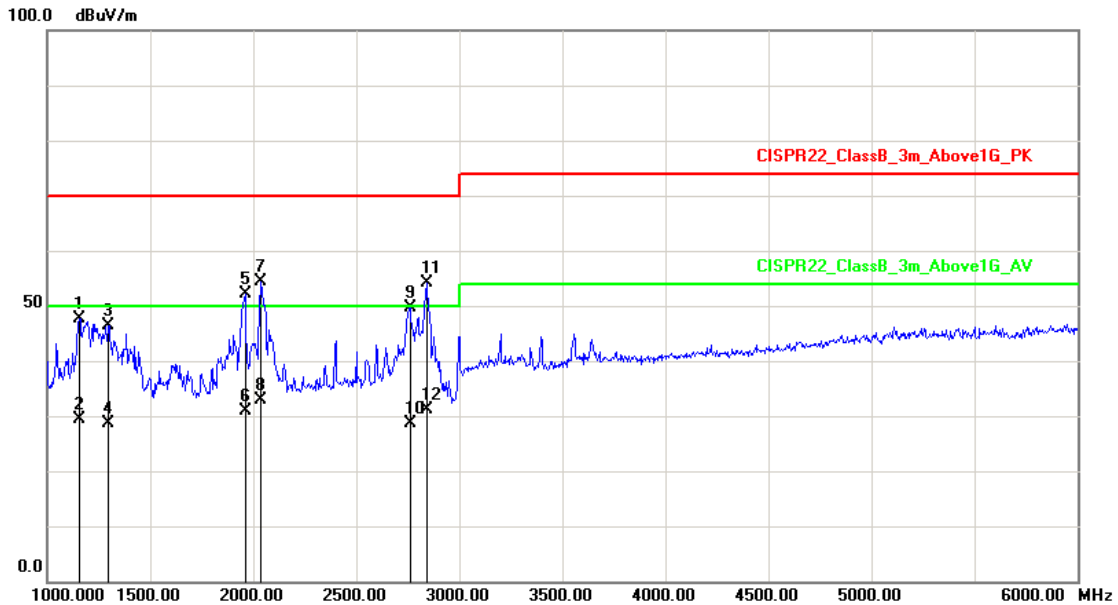


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1200.000	-16.06	68.04	51.98	70.00	-18.02	peak	100	331
2	1200.000	-16.06	47.91	31.85	50.00	-18.15	AVG	100	331
3	1955.000	-11.56	60.98	49.42	70.00	-20.58	peak	200	321
4	1955.000	-11.56	40.51	28.95	50.00	-21.05	AVG	200	321
5	2040.000	-11.01	61.95	50.94	70.00	-19.06	peak	100	307
6	2040.000	-11.01	41.16	30.15	50.00	-19.85	AVG	100	307
7	2760.000	-7.62	61.91	54.29	70.00	-15.71	peak	200	310
8	2760.000	-7.62	40.09	32.47	50.00	-17.53	AVG	200	310
9	2840.000	-7.34	61.79	54.45	70.00	-15.55	peak	100	323
10	2840.000	-7.34	40.60	33.26	50.00	-16.74	AVG	100	323
11	3000.000	-6.76	55.38	48.62	70.00	-21.38	peak	200	102
12	3000.000	-6.76	37.02	30.26	50.00	-19.74	AVG	200	102

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

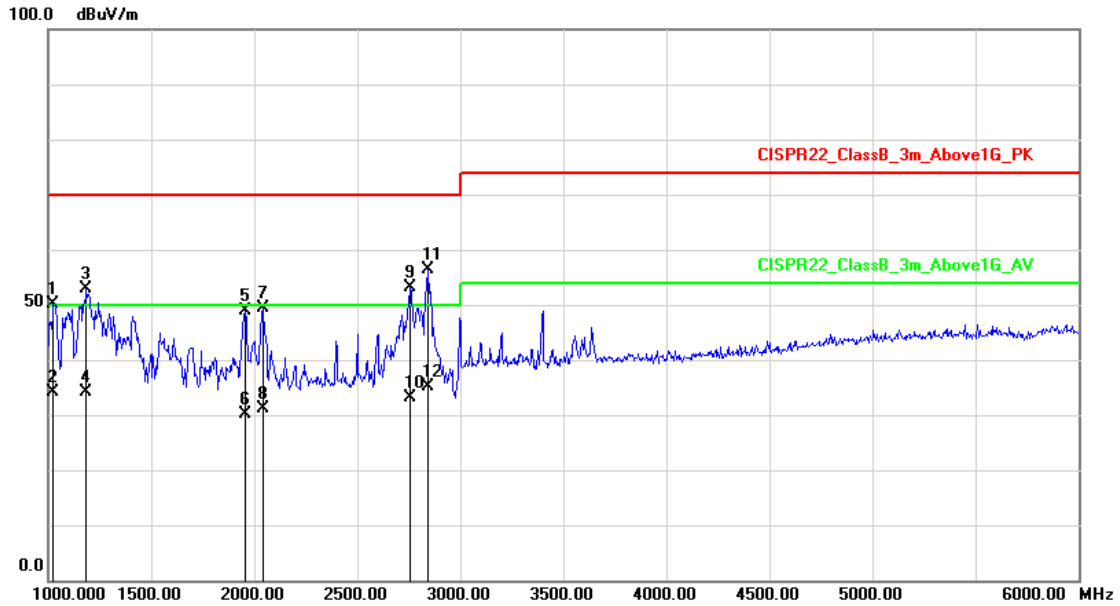


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1155.000	-16.25	63.95	47.70	70.00	-22.30	peak	125	360
2	1155.000	-16.25	45.70	29.45	50.00	-20.55	AVG	125	360
3	1295.000	-15.31	61.78	46.47	70.00	-23.53	peak	156	360
4	1295.000	-15.31	43.98	28.67	50.00	-21.33	AVG	153	360
5	1960.000	-11.52	63.67	52.15	70.00	-17.85	peak	100	346
6	1960.000	-11.52	42.50	30.98	50.00	-19.02	AVG	100	346
7	2035.000	-11.03	65.42	54.39	70.00	-15.61	peak	200	357
8	2035.000	-11.03	44.01	32.98	50.00	-17.02	AVG	200	357
9	2760.000	-7.62	57.36	49.74	70.00	-20.26	peak	100	264
10	2760.000	-7.62	36.23	28.61	50.00	-21.39	AVG	100	264
11	2840.000	-7.34	61.42	54.08	70.00	-15.92	peak	100	178
12	2840.000	-7.34	38.40	31.06	50.00	-18.94	AVG	100	178

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17

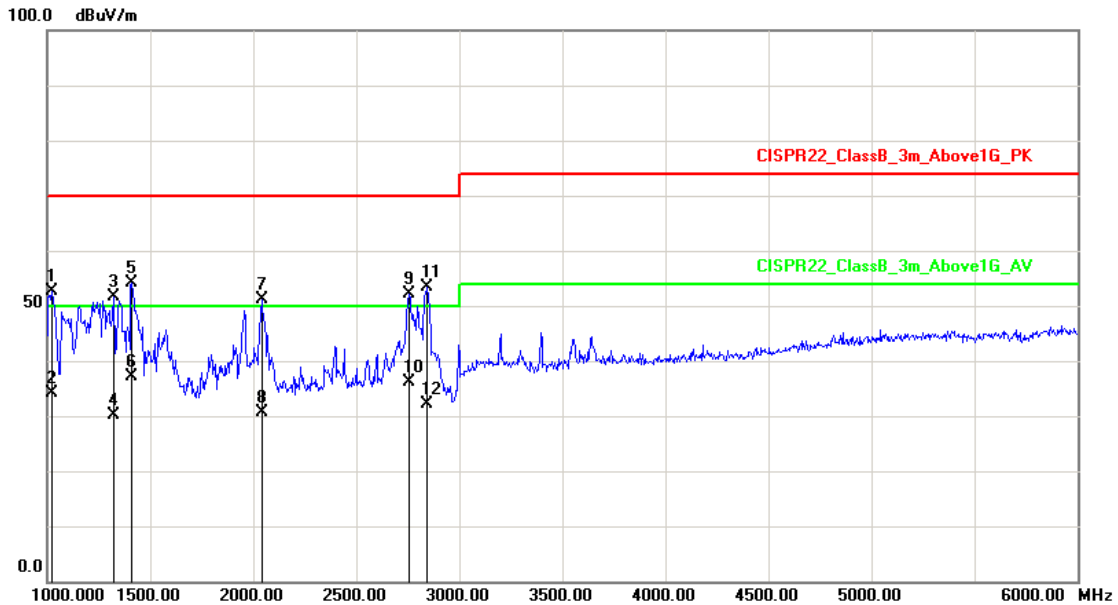


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1025.000	-16.79	67.02	50.23	70.00	-19.77	peak	108	0
2	1025.000	-16.79	51.04	34.25	50.00	-15.75	AVG	108	0
3	1185.000	-16.12	69.08	52.96	70.00	-17.04	peak	100	12
4	1185.000	-16.12	50.34	34.22	50.00	-15.78	AVG	100	12
5	1955.000	-11.56	60.41	48.85	70.00	-21.15	peak	200	39
6	1955.000	-11.56	41.68	30.12	50.00	-19.88	AVG	200	39
7	2045.000	-10.98	60.43	49.45	70.00	-20.55	peak	200	302
8	2045.000	-10.98	42.23	31.25	50.00	-18.75	AVG	200	302
9	2755.000	-7.64	60.72	53.08	70.00	-16.92	peak	200	308
10	2755.000	-7.64	40.89	33.25	50.00	-16.75	AVG	200	308
11	2840.000	-7.34	63.75	56.41	70.00	-13.59	peak	100	298
12	2840.000	-7.34	42.59	35.25	50.00	-14.75	AVG	100	298

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2012/12/17



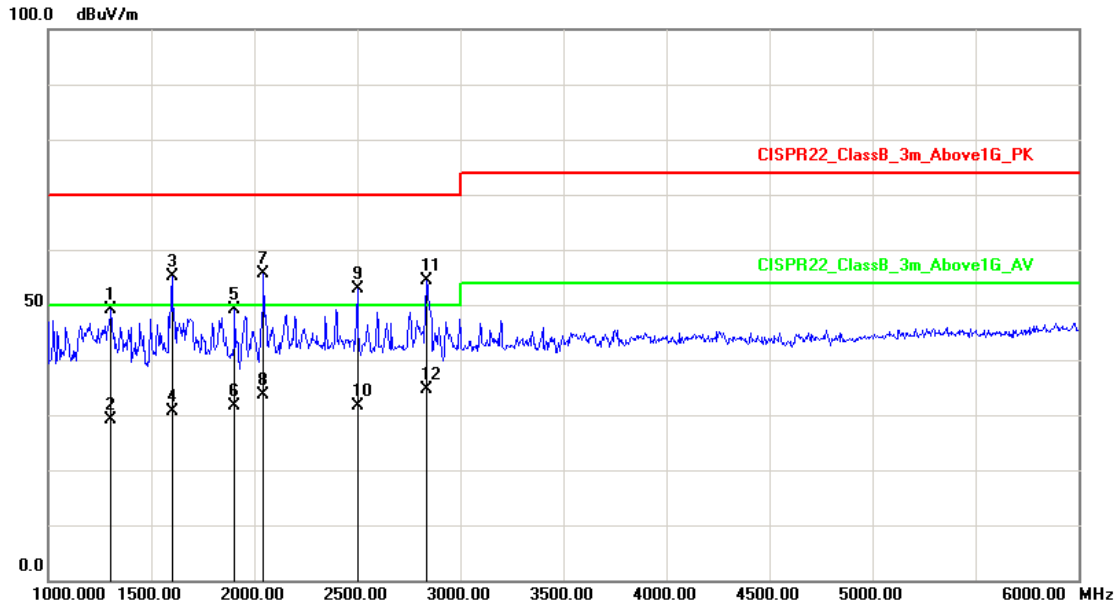
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1020.000	-16.81	69.51	52.70	70.00	-17.30	peak	100	302
2	1020.000	-16.81	51.06	34.25	50.00	-15.75	AVG	100	302
3	1320.000	-15.12	66.73	51.61	70.00	-18.39	peak	100	25
4	1320.000	-15.12	45.34	30.22	50.00	-19.78	AVG	100	25
5	1410.000	-14.46	68.61	54.15	70.00	-15.85	peak	200	32
6	1410.000	-14.46	51.58	37.12	50.00	-12.88	AVG	200	32
7	2040.000	-11.01	62.02	51.01	70.00	-18.99	peak	100	53
8	2040.000	-11.01	41.53	30.52	50.00	-19.48	AVG	100	53
9	2755.000	-7.64	59.85	52.21	70.00	-17.79	peak	200	308
10	2755.000	-7.64	43.89	36.25	50.00	-13.75	AVG	200	308
11	2845.000	-7.32	60.75	53.43	70.00	-16.57	peak	100	310
12	2845.000	-7.32	39.48	32.16	50.00	-17.84	AVG	100	310

Note: Measurement Level = Reading Level + Correct Factor



First edition:

Test Mode :	Mode 1: Full system (DVI mode 1920*1080@120Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2013/05/02

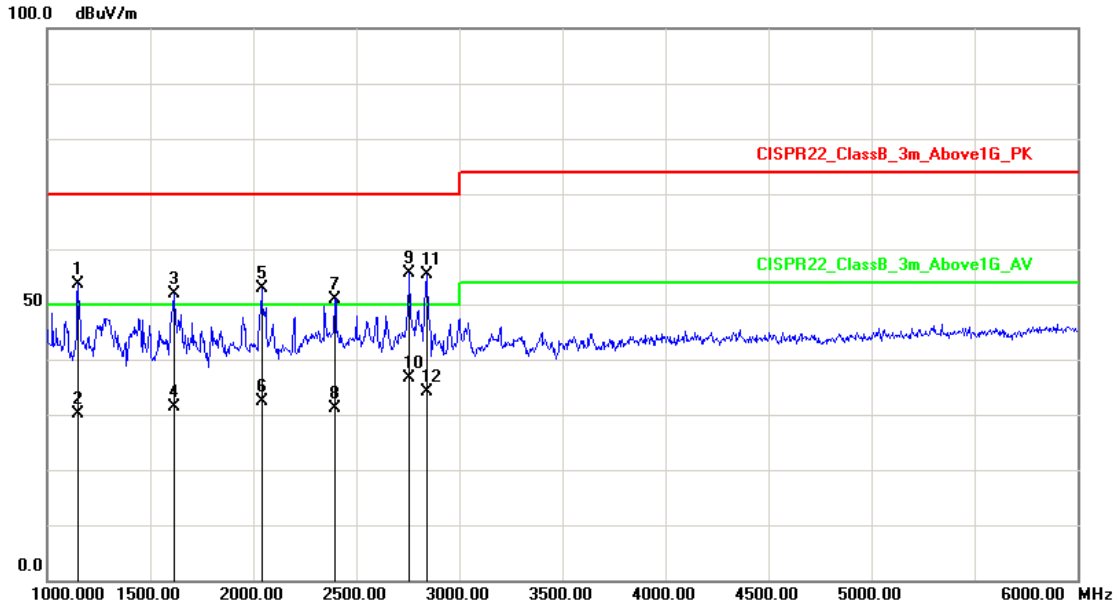


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1305.000	-15.24	64.43	49.19	70.00	-20.81	peak	100	13
2	1305.000	-15.24	44.40	29.16	50.00	-20.84	AVG	100	13
3	1600.000	-13.86	68.87	55.01	70.00	-14.99	peak	100	0
4	1600.000	-13.86	44.42	30.56	50.00	-19.44	AVG	100	0
5	1905.000	-11.93	61.02	49.09	70.00	-20.91	peak	100	159
6	1905.000	-11.93	43.50	31.57	50.00	-18.43	AVG	100	159
7	2045.000	-10.98	66.68	55.70	70.00	-14.30	peak	100	241
8	2045.000	-10.98	44.60	33.62	50.00	-16.38	AVG	100	241
9	2500.000	-8.56	61.48	52.92	70.00	-17.08	peak	100	360
10	2500.000	-8.56	40.16	31.60	50.00	-18.40	AVG	100	360
11	2835.000	-7.35	61.64	54.29	70.00	-15.71	peak	100	97
12	2835.000	-7.35	41.89	34.54	50.00	-15.46	AVG	100	97

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (DVI mode 1920*1080@120Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	52%
Pressure(mbar) :	1002	Date :	2013/05/02



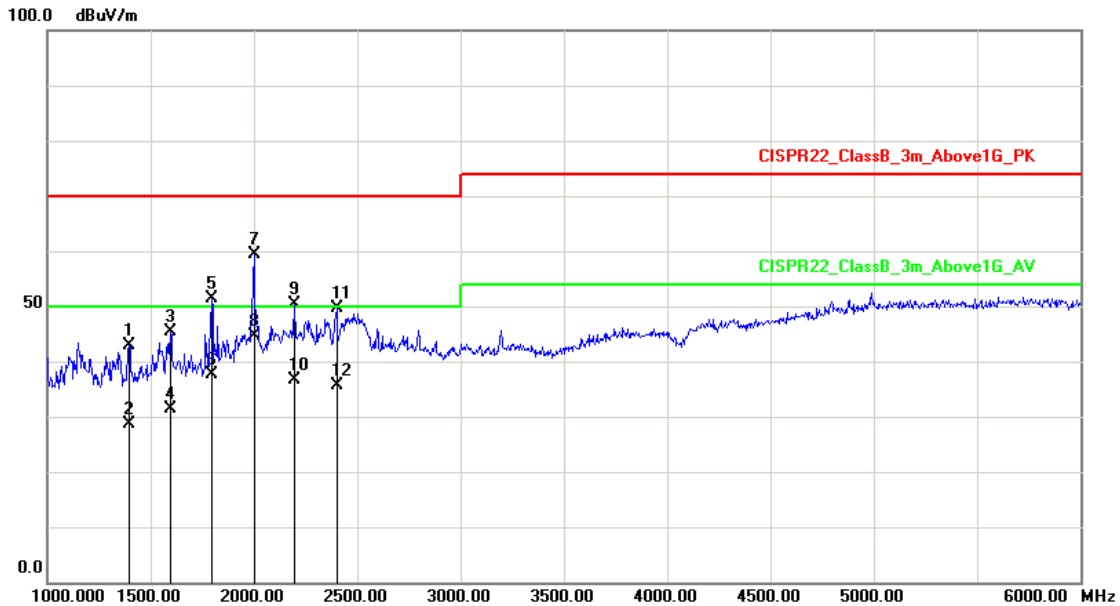
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1150.000	-16.27	69.99	53.72	70.00	-16.28	peak	100	131
2	1150.000	-16.27	46.42	30.15	50.00	-19.85	AVG	100	131
3	1615.000	-13.77	65.53	51.76	70.00	-18.24	peak	100	26
4	1615.000	-13.77	45.25	31.48	50.00	-18.52	AVG	100	26
5	2040.000	-11.01	63.86	52.85	70.00	-17.15	peak	100	319
6	2040.000	-11.01	43.28	32.27	50.00	-17.73	AVG	100	319
7	2395.000	-9.12	60.09	50.97	70.00	-19.03	peak	100	87
8	2395.000	-9.12	40.27	31.15	50.00	-18.85	AVG	100	87
9	2755.000	-7.64	63.20	55.56	70.00	-14.44	peak	100	214
10	2755.000	-7.64	44.35	36.71	50.00	-13.29	AVG	100	214
11	2845.000	-7.32	62.69	55.37	70.00	-14.63	peak	100	5
12	2845.000	-7.32	41.40	34.08	50.00	-15.92	AVG	100	5

Note: Measurement Level = Reading Level + Correct Factor



Second edition:

Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

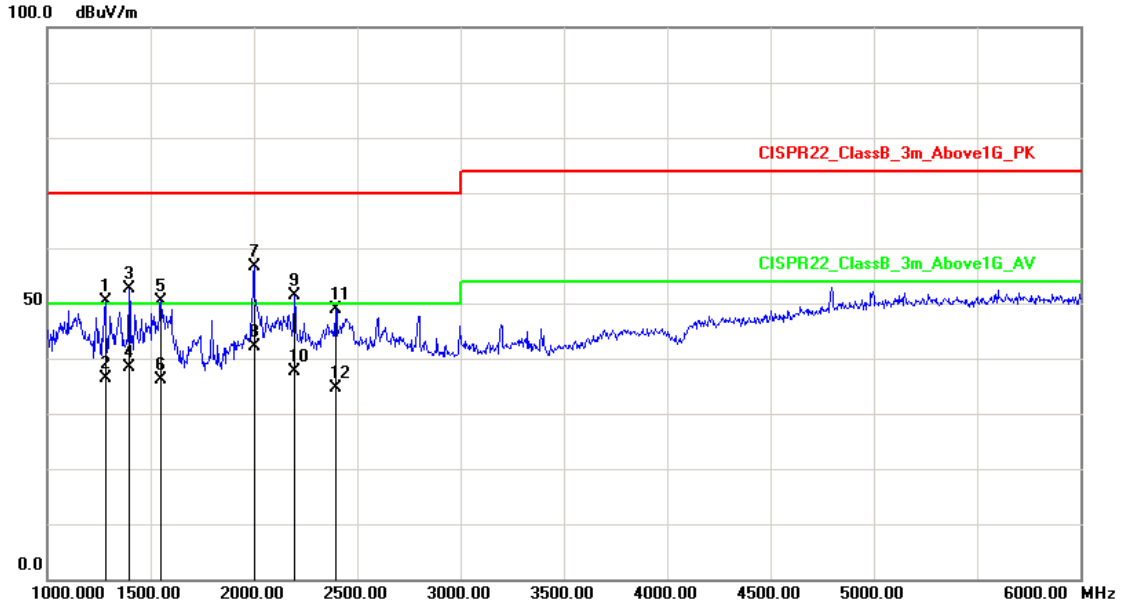


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1395.000	-11.39	54.27	42.88	70.00	-27.12	peak	200	68
2	1395.000	-11.39	40.02	28.63	50.00	-21.37	AVG	200	68
3	1595.000	-10.07	55.46	45.39	70.00	-24.61	peak	200	235
4	1595.000	-10.07	41.36	31.29	50.00	-18.71	AVG	200	235
5	1795.000	-11.01	62.43	51.42	70.00	-18.58	peak	100	268
6	1795.000	-11.01	48.62	37.61	50.00	-12.39	AVG	100	268
7	2000.000	-6.13	65.51	59.38	70.00	-10.62	peak	100	181
8	2000.000	-6.13	50.72	44.59	50.00	-5.41	AVG	100	181
9	2195.000	-5.19	55.57	50.38	70.00	-19.62	peak	100	36
10	2195.000	-5.19	41.77	36.58	50.00	-13.42	AVG	100	36
11	2400.000	-4.19	53.75	49.56	70.00	-20.44	peak	100	347
12	2400.000	-4.19	39.88	35.69	50.00	-14.31	AVG	100	347

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

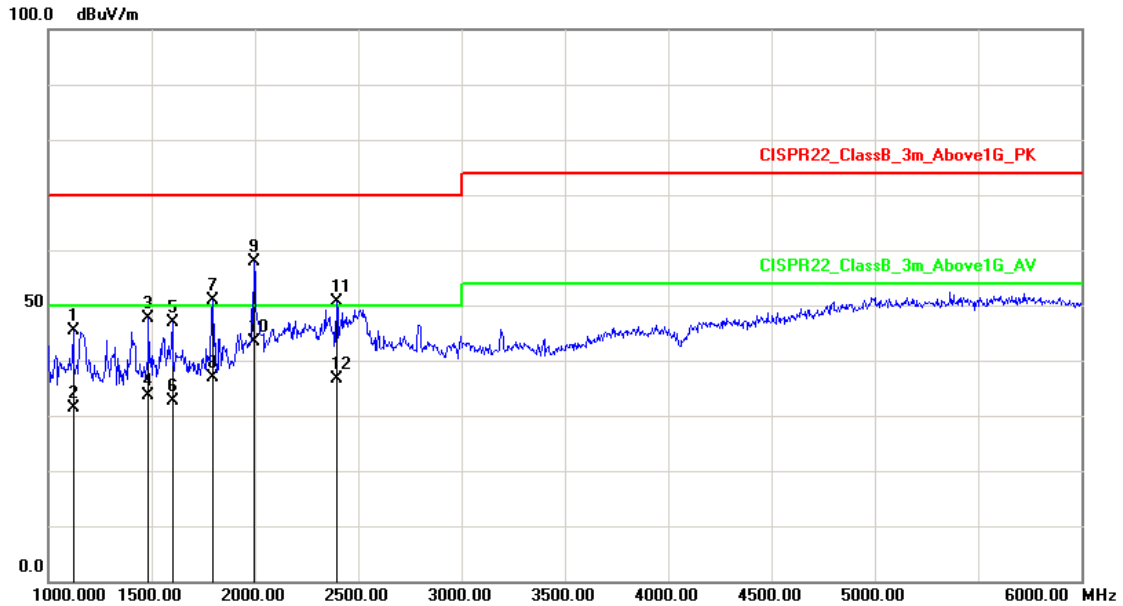


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1280.000	-12.38	62.85	50.47	70.00	-19.53	peak	100	360
2	1280.000	-12.38	48.70	36.32	50.00	-13.68	AVG	100	360
3	1395.000	-11.39	64.01	52.62	70.00	-17.38	peak	200	207
4	1395.000	-11.39	49.65	38.26	50.00	-11.74	AVG	200	207
5	1550.000	-10.37	60.72	50.35	70.00	-19.65	peak	200	4
6	1550.000	-10.37	46.61	36.24	50.00	-13.76	AVG	200	4
7	2000.000	-6.13	62.87	56.74	70.00	-13.26	peak	100	201
8	2000.000	-6.13	48.31	42.18	50.00	-7.82	AVG	100	201
9	2195.000	-5.19	56.62	51.43	70.00	-18.57	peak	100	146
10	2195.000	-5.19	42.81	37.62	50.00	-12.38	AVG	100	146
11	2395.000	-4.22	53.10	48.88	70.00	-21.12	peak	100	146
12	2395.000	-4.22	38.77	34.55	50.00	-15.45	AVG	100	146

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

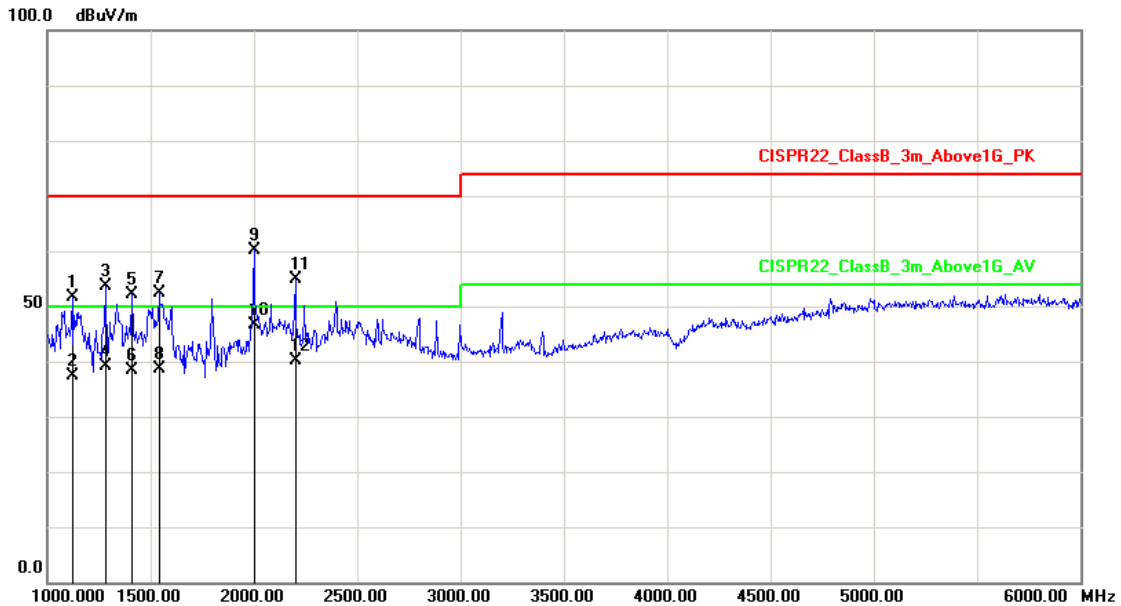


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1120.000	-13.54	58.96	45.42	70.00	-24.58	peak	100	9
2	1120.000	-13.54	44.80	31.26	50.00	-18.74	AVG	100	9
3	1485.000	-10.79	58.34	47.55	70.00	-22.45	peak	100	28
4	1485.000	-10.79	44.43	33.64	50.00	-16.36	AVG	100	28
5	1600.000	-10.04	56.81	46.77	70.00	-23.23	peak	200	132
6	1600.000	-10.04	42.73	32.69	50.00	-17.31	AVG	200	132
7	1795.000	-11.01	61.85	50.84	70.00	-19.16	peak	100	170
8	1795.000	-11.01	47.99	36.98	50.00	-13.02	AVG	100	170
9	1995.000	-6.25	64.11	57.86	70.00	-12.14	peak	100	193
10	1995.000	-6.25	49.51	43.26	50.00	-6.74	AVG	100	193
11	2395.000	-4.22	54.85	50.63	70.00	-19.37	peak	100	327
12	2395.000	-4.22	40.76	36.54	50.00	-13.46	AVG	100	327

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

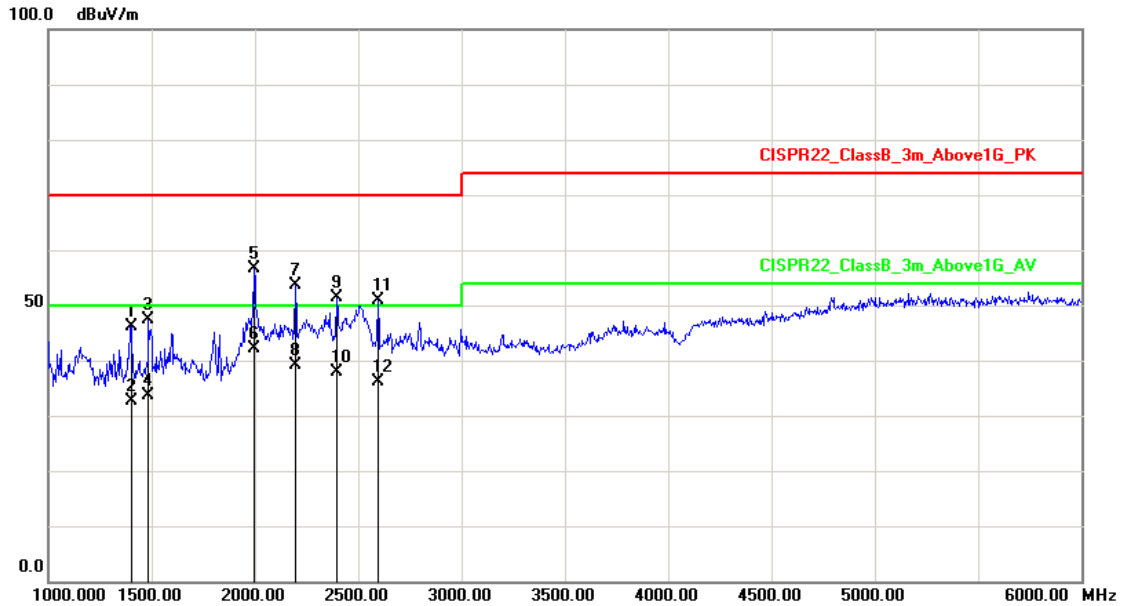


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	1120.000	-13.54	65.19	51.65	70.00	-18.35	peak	116	360	
2	1120.000	-13.54	50.80	37.26	50.00	-12.74	AVG	116	360	
3	1280.000	-12.38	66.12	53.74	70.00	-16.26	peak	100	359	
4	1280.000	-12.38	51.47	39.09	50.00	-10.91	AVG	100	359	
5	1410.000	-11.28	63.32	52.04	70.00	-17.96	peak	100	215	
6	1410.000	-11.28	49.54	38.26	50.00	-11.74	AVG	100	215	
7	1540.000	-10.43	62.72	52.29	70.00	-17.71	peak	200	0	
8	1540.000	-10.43	49.09	38.66	50.00	-11.34	AVG	200	0	
9	2000.000	-6.13	66.26	60.13	70.00	-9.87	peak	100	186	
10	2000.000	-6.13	50.65	44.52	50.00	-5.48	AVG	100	186	
11	2200.000	-5.16	60.10	54.94	70.00	-15.06	peak	100	224	
12	2200.000	-5.16	45.28	40.12	50.00	-9.88	AVG	100	224	

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

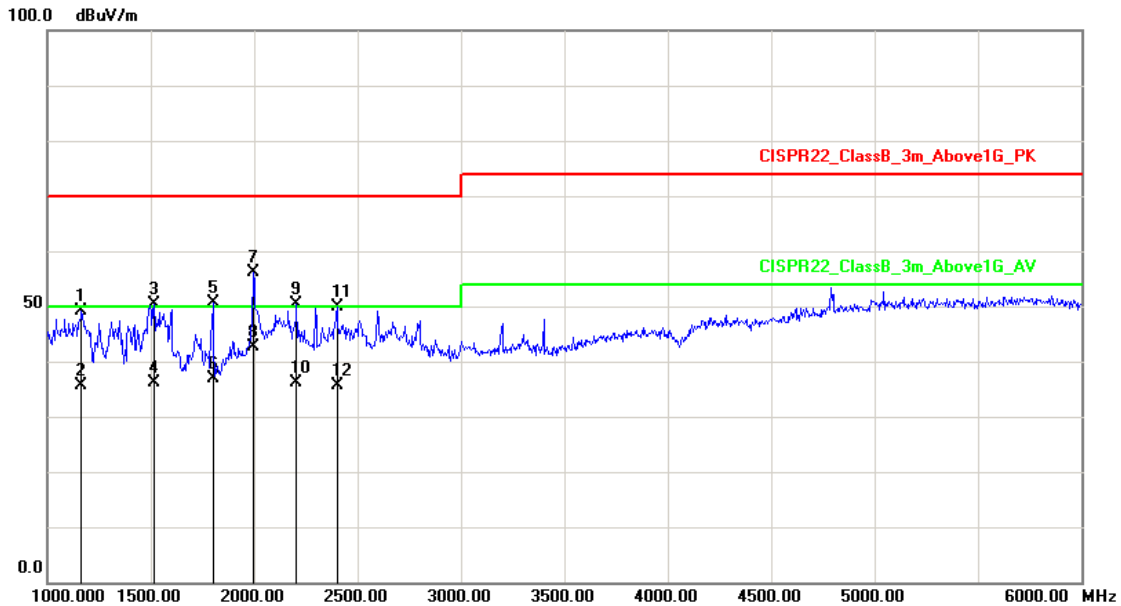


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1400.000	-11.35	57.54	46.19	70.00	-23.81	peak	200	49
2	1400.000	-11.35	43.97	32.62	50.00	-17.38	AVG	200	49
3	1485.000	-10.79	58.15	47.36	70.00	-22.64	peak	100	320
4	1485.000	-10.79	44.46	33.67	50.00	-16.33	AVG	100	320
5	1995.000	-6.25	62.78	56.53	70.00	-13.47	peak	100	302
6	1995.000	-6.25	48.43	42.18	50.00	-7.82	AVG	100	302
7	2195.000	-5.19	58.82	53.63	70.00	-16.37	peak	100	162
8	2195.000	-5.19	44.25	39.06	50.00	-10.94	AVG	100	162
9	2395.000	-4.22	55.66	51.44	70.00	-18.56	peak	100	306
10	2395.000	-4.22	42.02	37.80	50.00	-12.20	AVG	100	306
11	2595.000	-3.58	54.48	50.90	70.00	-19.10	peak	100	302
12	2595.000	-3.58	39.62	36.04	50.00	-13.96	AVG	100	302

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

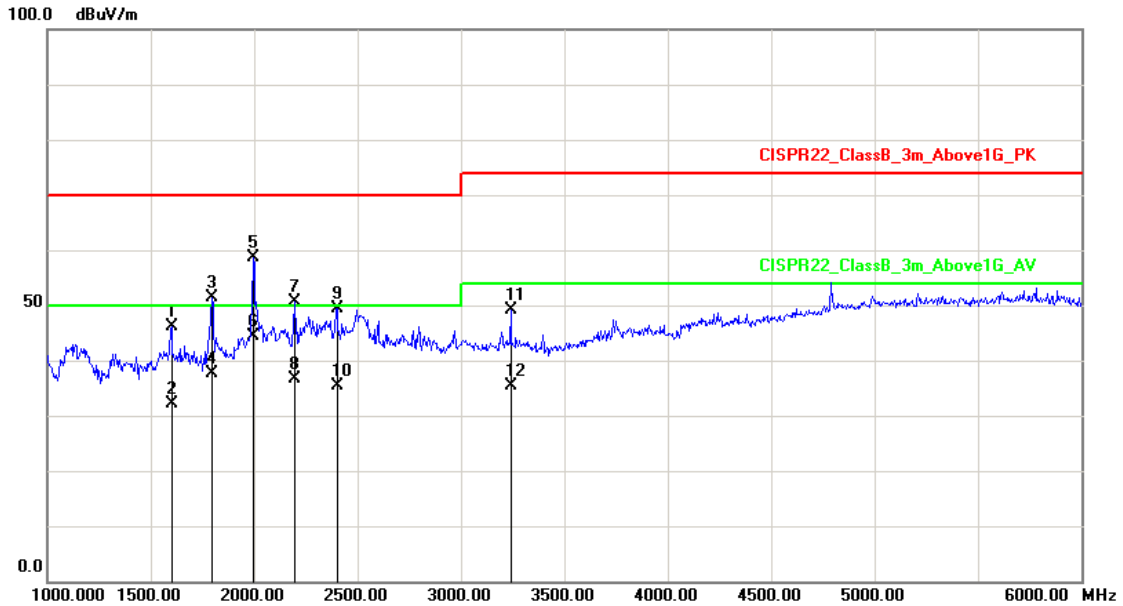


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	1165.000	-13.27	62.38	49.11	70.00	-20.89	peak	200	17	
2	1165.000	-13.27	48.89	35.62	50.00	-14.38	AVG	200	17	
3	1515.000	-10.60	60.93	50.33	70.00	-19.67	peak	200	0	
4	1515.000	-10.60	46.81	36.21	50.00	-13.79	AVG	200	0	
5	1800.000	-11.03	61.72	50.69	70.00	-19.31	peak	100	207	
6	1800.000	-11.03	48.01	36.98	50.00	-13.02	AVG	100	207	
7	1995.000	-6.25	62.34	56.09	70.00	-13.91	peak	100	211	
8	1995.000	-6.25	48.89	42.64	50.00	-7.36	AVG	100	211	
9	2205.000	-5.14	55.63	50.49	70.00	-19.51	peak	100	198	
10	2205.000	-5.14	41.24	36.10	50.00	-13.90	AVG	100	198	
11	2400.000	-4.19	54.17	49.98	70.00	-20.02	peak	200	175	
12	2400.000	-4.19	39.74	35.55	50.00	-14.45	AVG	200	175	

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Horizontal
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30

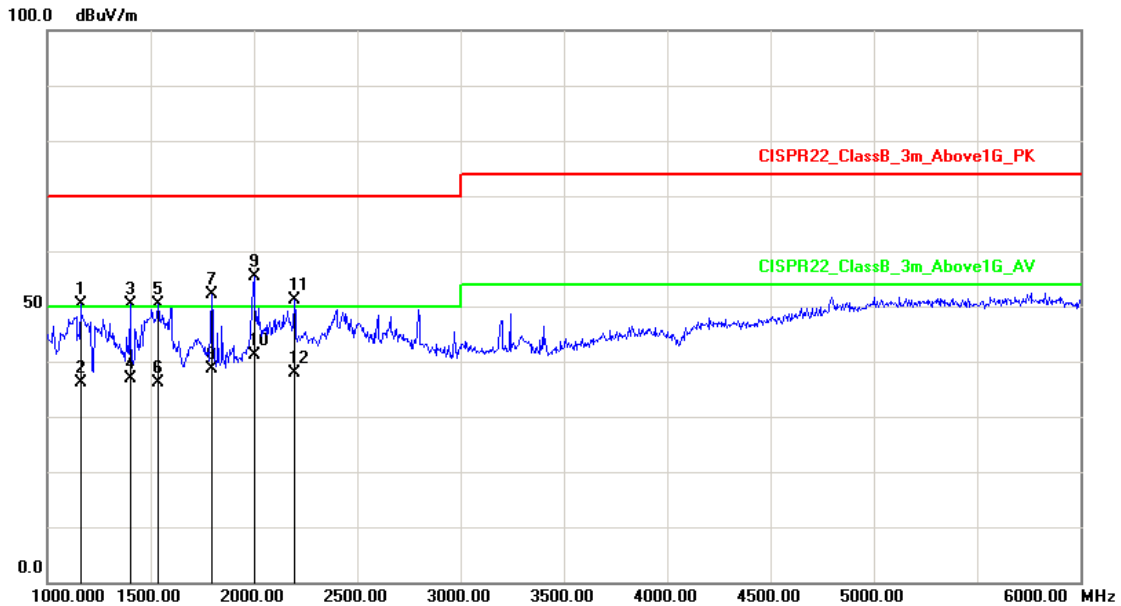


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1600.000	-10.04	56.28	46.24	70.00	-23.76	peak	200	130
2	1600.000	-10.04	42.10	32.06	50.00	-17.94	AVG	200	130
3	1795.000	-11.01	62.28	51.27	70.00	-18.73	peak	100	244
4	1795.000	-11.01	48.63	37.62	50.00	-12.38	AVG	100	244
5	1995.000	-6.25	64.88	58.63	70.00	-11.37	peak	100	189
6	1995.000	-6.25	50.51	44.26	50.00	-5.74	AVG	100	189
7	2195.000	-5.19	55.71	50.52	70.00	-19.48	peak	100	332
8	2195.000	-5.19	41.78	36.59	50.00	-13.41	AVG	100	332
9	2400.000	-4.19	53.65	49.46	70.00	-20.54	peak	200	199
10	2400.000	-4.19	39.52	35.33	50.00	-14.67	AVG	200	199
11	3240.000	-3.22	52.34	49.12	74.00	-24.88	peak	100	24
12	3240.000	-3.22	38.69	35.47	54.00	-18.53	AVG	100	24

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal		
AC Power :	AC 230V/50Hz	Ant. Polarization:	Vertical
Equipment :	LCD Monitor	Model No :	240LM00010
Temp :	23°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2013/10/30



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	1160.000	-13.30	63.64	50.34	70.00	-19.66	peak	118	360
2	1160.000	-13.30	49.55	36.25	50.00	-13.75	AVG	118	360
3	1400.000	-11.35	61.68	50.33	70.00	-19.67	peak	100	255
4	1400.000	-11.35	48.22	36.87	50.00	-13.13	AVG	100	255
5	1535.000	-10.47	60.86	50.39	70.00	-19.61	peak	200	5
6	1535.000	-10.47	46.53	36.06	50.00	-13.94	AVG	200	5
7	1795.000	-11.01	63.02	52.01	70.00	-17.99	peak	100	13
8	1795.000	-11.01	49.70	38.69	50.00	-11.31	AVG	100	13
9	2000.000	-6.13	61.60	55.47	70.00	-14.53	peak	100	203
10	2000.000	-6.13	47.22	41.09	50.00	-8.91	AVG	100	203
11	2195.000	-5.19	56.23	51.04	70.00	-18.96	peak	100	110
12	2195.000	-5.19	43.07	37.88	50.00	-12.12	AVG	100	110

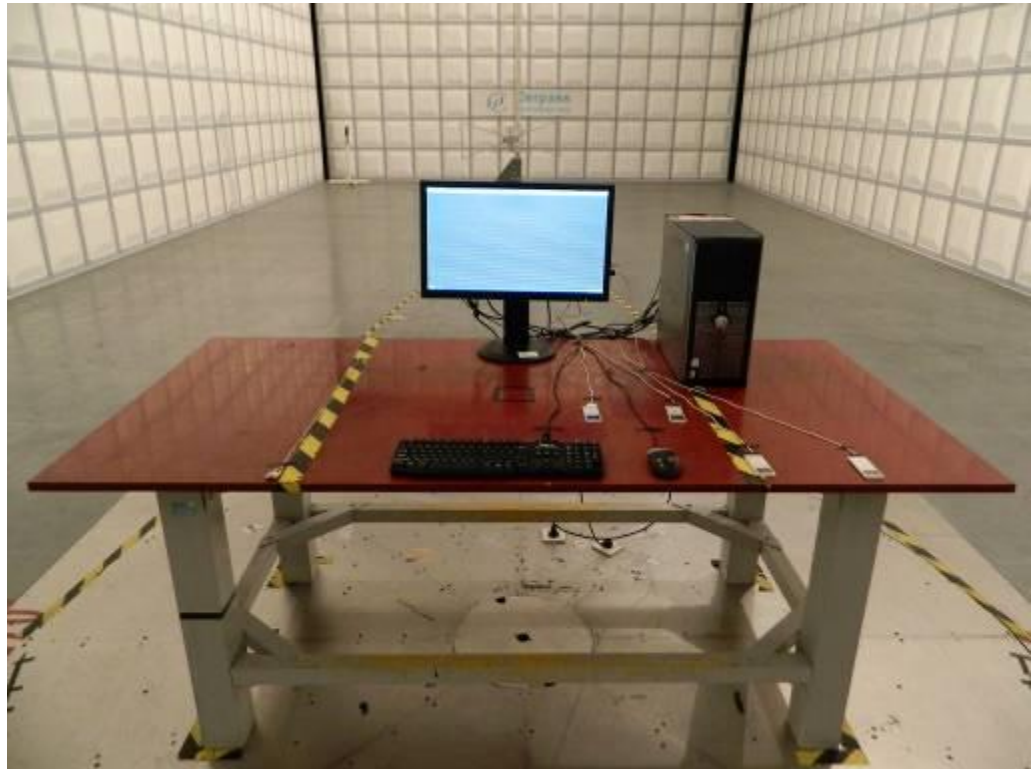
Note: Measurement Level = Reading Level + Correct Factor

Test engineer: Seben

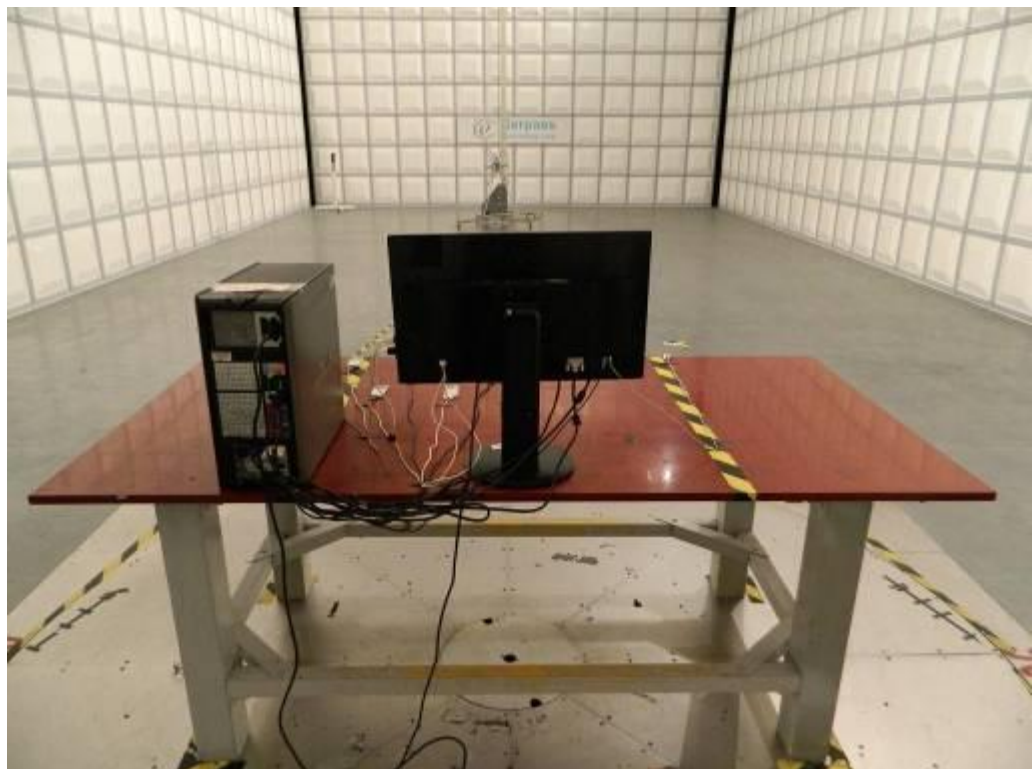


5.7. Test Photographs (30MHz ~ 1000MHz)

Front View



Rear View



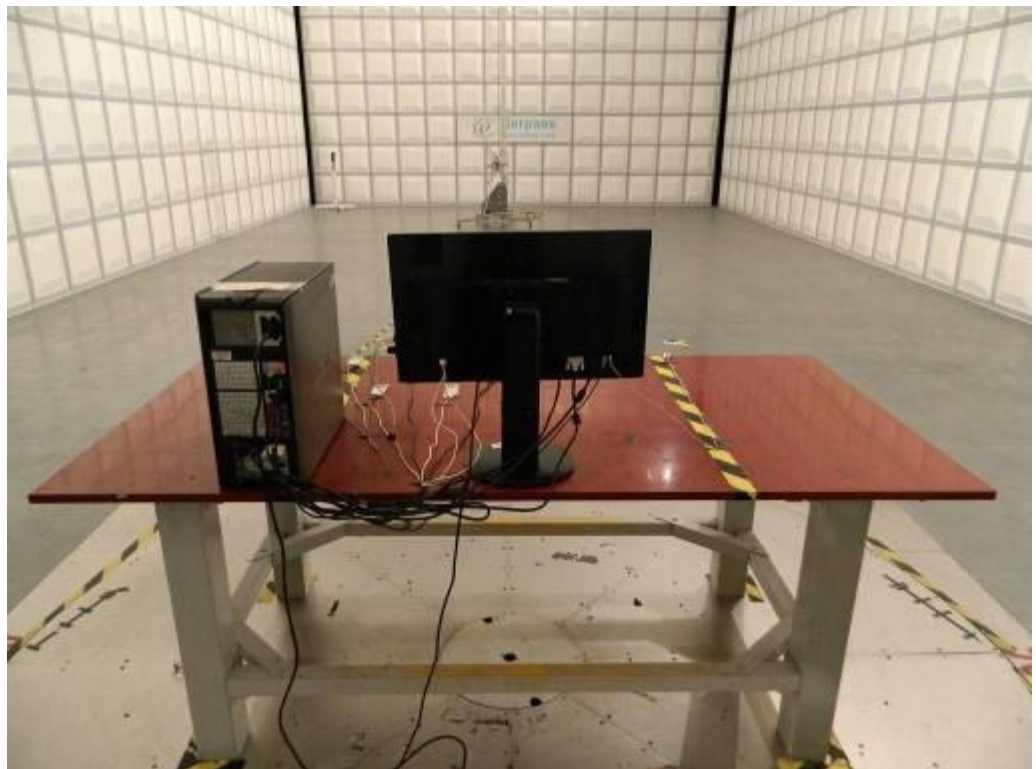


Second edition

Front View



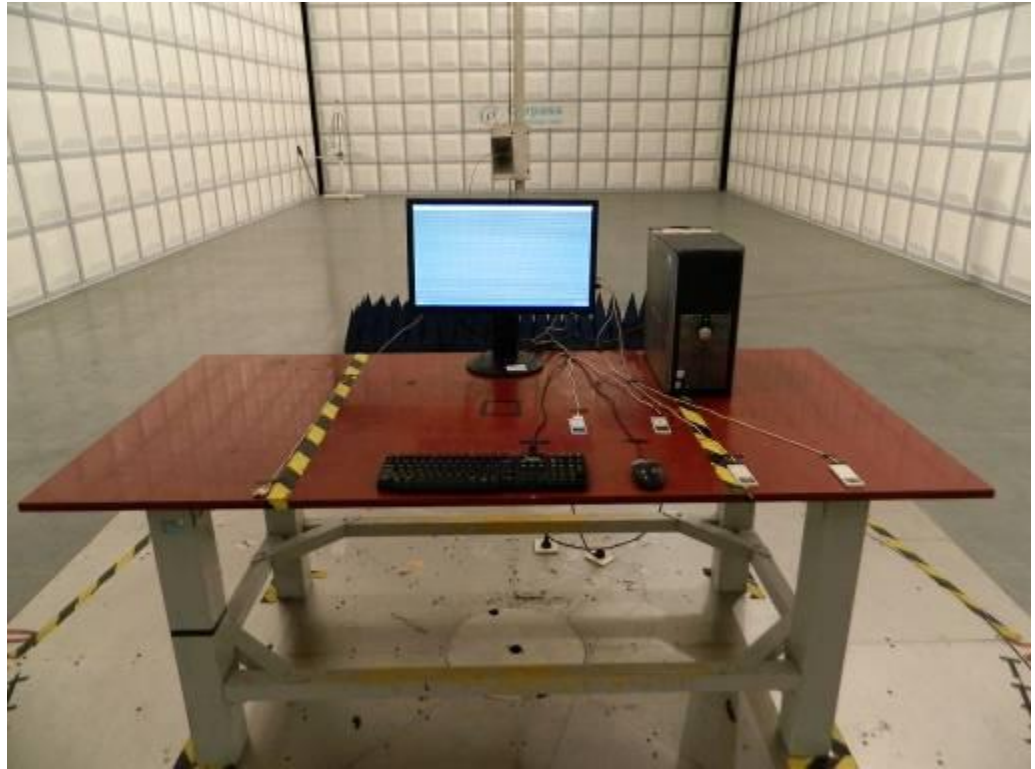
Rear View



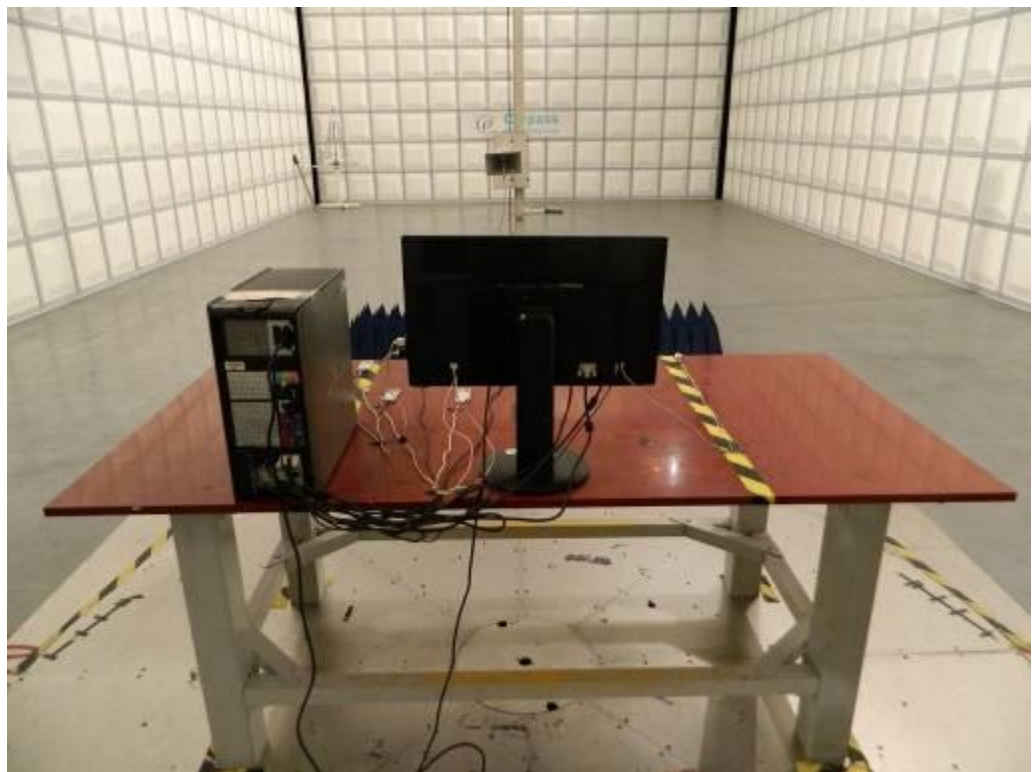


5.8. Test Photographs (1000MHz ~ 6000MHz)

Front View



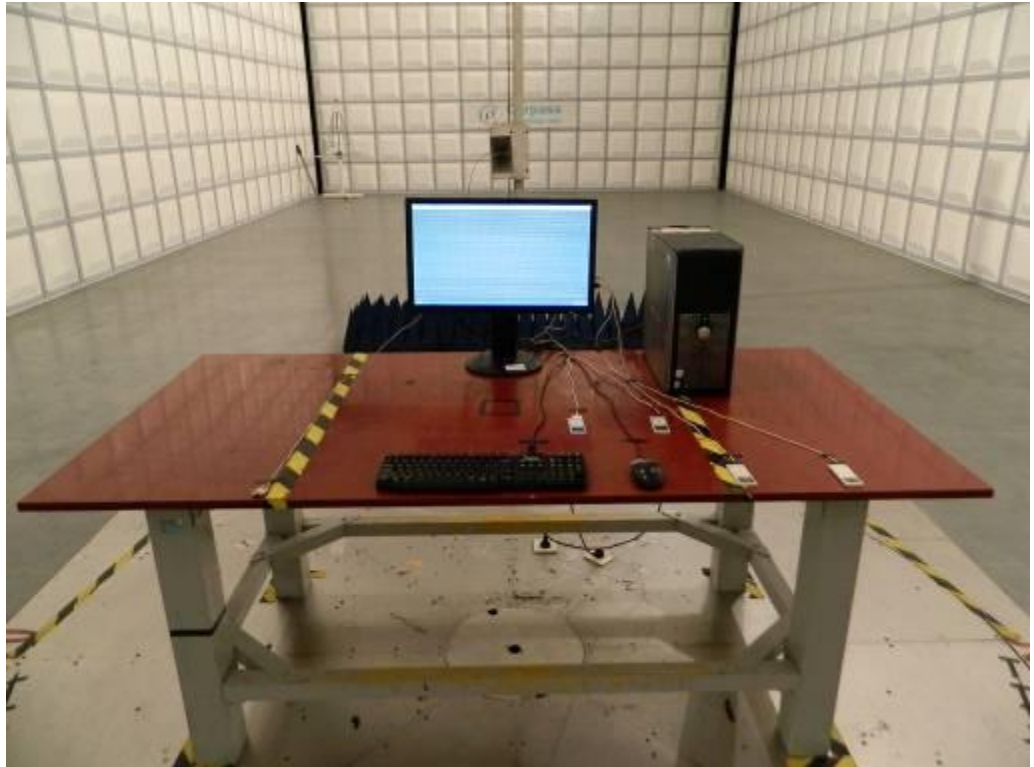
Rear View



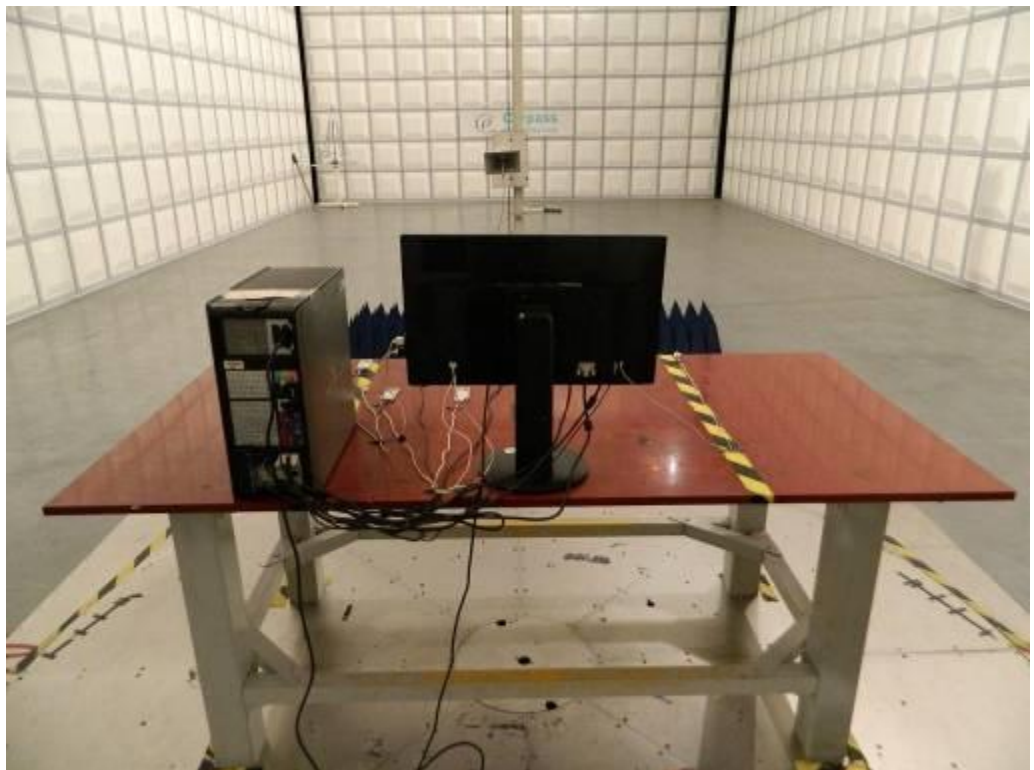


Second edition

Front View



Rear View





6. Harmonics Test

6.1. Limits Of Harmonics Current Measurement

Limits for Class A equipment		Limits for Class D equipment		
Harmonics Order n	Max. Permissible harmonics current A	Harmonics Order n	Max. Permissible harmonics current per watt mA/W	Max. Permissible harmonics current A
Odd harmonics		Odd Harmonics only		
3	2.30	3	3.4	2.30
5	1.14	5	1.9	1.14
7	0.77	7	1.0	0.77
9	0.40	9	0.5	0.40
11	0.33	11	0.35	0.33
13	0.21	13	0.30	0.21
15<=n<=39	0.15 × 15/n	15<=n<=39	3.85/n	0.15 x15/n
Even harmonics				
2	1.08			
4	0.43			
6	0.30			
8<=n<=40	0.23 × 8/n			

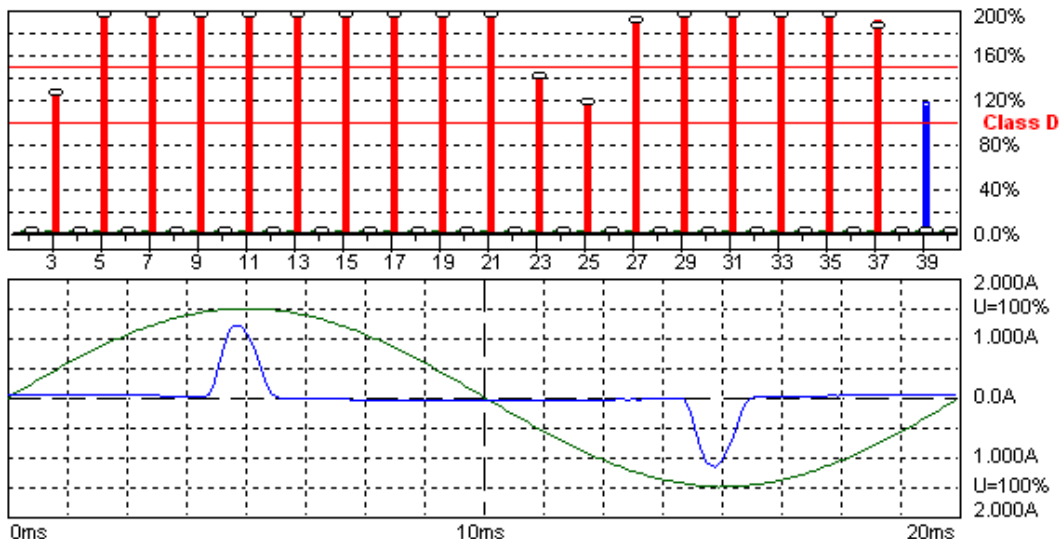
6.2. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
EMC Emission Tester	EMCPARTNER	Harmonics-1000	159	2013.03.10	2014.03.09
Temperature/Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2013.03.10	2014.03.09



6.3. Test Result and Data

Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Test Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2012-12-17 16:59:50

Urms = 230.7 V P = 31.02 W THC = 0.272 A Range: 2 A
 Irms = 0.299 A pf = 0.450 Pmax = 31.05 W V-nom: 230 V
 TestTime: 15 min (100%)

HAR-1000 EMC-Parber

Full Bar : Actual Values
 Empty Bar : Maximum Values
 Blue : Current , Green : Voltage , Red : Failed

Urms = 230.7V Freq = 50.000 Range: 2 A
 Irms = 0.299A Ipk = 1.228A cf = 4.108
 P = 31.02W S = 68.94VA pf = 0.450
 THDi = 88.8 % THDu = 0.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 31.049W
 Test completed, Result: N/L

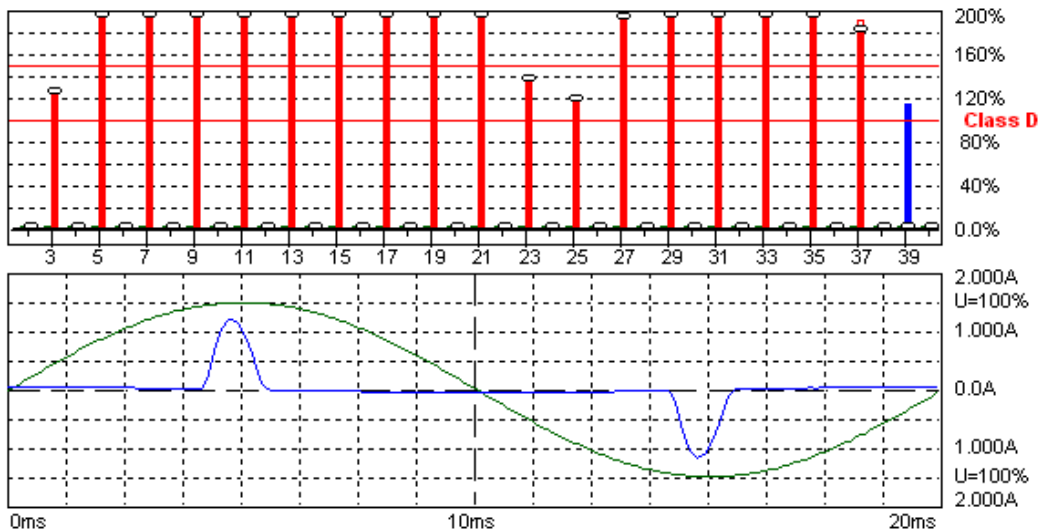


Order	Freq. [Hz]	Irms [A]	Irms%L [%]	I _{max} [A]	I _{max} %L [%]	Limit [A]	Status
1	50	0.1407		0.1410			
2	100	0.0040		0.0040			
3	150	0.1300	123.15	0.1305	123.61	0.00	N/L
4	200	0.0035		0.0038			
5	250	0.1235	209.41	0.1238	209.82	0.00	N/L
6	300	0.0035		0.0037			
7	350	0.1136	366.03	0.1138	366.42	0.00	N/L
8	400	0.0033		0.0034			
9	450	0.1011	651.06	0.1012	651.85	0.00	N/L
10	500	0.0024		0.0026			
11	550	0.0862	793.05	0.0863	794.17	0.00	N/L
12	600	0.0017		0.0021			
13	650	0.0708	769.97	0.0709	771.29	0.00	N/L
14	700	0.0013		0.0016			
15	750	0.0554	695.42	0.0555	696.95	0.00	N/L
16	800	0.0009		0.0012			
17	850	0.0404	574.62	0.0405	576.35	0.00	N/L
18	900	0.0005		0.0009			
19	950	0.0271	430.73	0.0272	432.67	0.00	N/L
20	1000	0.0007		0.0009			
21	1050	0.0156	274.49	0.0157	276.64	0.00	N/L
22	1100	0.0009		0.0010			
23	1150	0.0073	140.92	0.0074	143.27	0.00	N/L
24	1200	0.0010		0.0011			
25	1250	0.0055	114.88	0.0056	117.44	0.00	N/L
26	1300	0.0009		0.0010			
27	1350	0.0083	187.49	0.0084	190.25	0.00	N/L
28	1400	0.0009		0.0010			
29	1450	0.0104	251.72	0.0106	257.64	0.00	N/L
30	1500	0.0007		0.0009			
31	1550	0.0110	284.91	0.0111	288.07	0.00	N/L
32	1600	0.0006		0.0006			
33	1650	0.0100	276.33	0.0101	279.70	0.00	N/L
34	1700	0.0005		0.0006			
35	1750	0.0083	243.04	0.0084	246.61	0.00	N/L
36	1800	0.0005		0.0006			
37	1850	0.0060	185.14	0.0060	185.14	0.00	N/L
38	1900	0.0006		0.0007			
39	1950	0.0034	111.51	0.0035	115.50	0.00	N/L
40	2000	0.0007		0.0007			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Test Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2012-12-17 16:43:56

Urms = 230.7 V	P = 30.97 W	THC = 0.272 A	Range: 2 A
Irms = 0.299 A	pf = 0.449	Pmax = 31.00 W	V-nom: 230 V
			TestTime: 15 min (100%)

HAR-1000 EMC-Parber

Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.7V Freq = 49.974 Range: 2 A
 Irms = 0.299A Ipk = 1.224A cf = 4.095
 P = 30.97W S = 68.94VA pf = 0.449
 THDi = 88.9 % THDu = 0.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 30.996W
 Test completed, Result: N/L

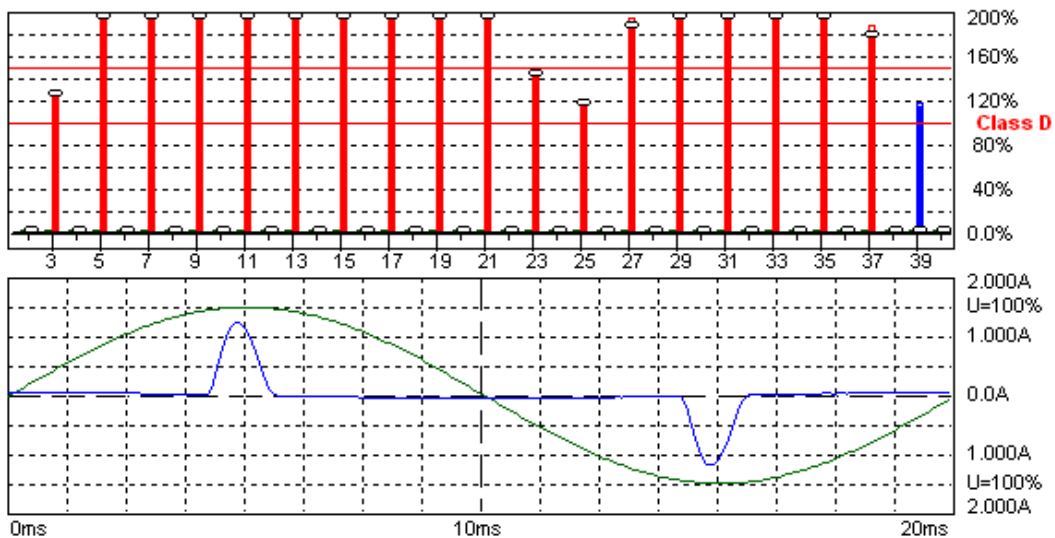


Order	Freq. [Hz]	Irms [A]	Irms%L [%]	I _{max} [A]	I _{max} %L [%]	Limit [A]	Status
1	50	0.1405		0.1407			
2	100	0.0040		0.0040			
3	150	0.1302	123.59	0.1306	123.94	0.00	N/L
4	200	0.0037		0.0038			
5	250	0.1235	209.76	0.1239	210.39	0.00	N/L
6	300	0.0037		0.0038			
7	350	0.1136	366.65	0.1138	367.05	0.00	N/L
8	400	0.0034		0.0034			
9	450	0.1010	651.39	0.1011	652.18	0.00	N/L
10	500	0.0024		0.0026			
11	550	0.0862	794.40	0.0862	794.40	0.00	N/L
12	600	0.0018		0.0021			
13	650	0.0707	769.96	0.0707	769.96	0.00	N/L
14	700	0.0013		0.0016			
15	750	0.0552	693.54	0.0553	695.08	0.00	N/L
16	800	0.0009		0.0012			
17	850	0.0402	572.12	0.0403	573.86	0.00	N/L
18	900	0.0006		0.0009			
19	950	0.0269	427.58	0.0270	429.53	0.00	N/L
20	1000	0.0009		0.0010			
21	1050	0.0155	272.81	0.0156	274.96	0.00	N/L
22	1100	0.0010		0.0010			
23	1150	0.0072	138.81	0.0073	141.16	0.00	N/L
24	1200	0.0010		0.0011			
25	1250	0.0056	117.64	0.0057	120.19	0.00	N/L
26	1300	0.0009		0.0010			
27	1350	0.0084	190.57	0.0085	193.33	0.00	N/L
28	1400	0.0009		0.0010			
29	1450	0.0105	255.12	0.0106	258.08	0.00	N/L
30	1500	0.0007		0.0009			
31	1550	0.0110	285.40	0.0111	288.57	0.00	N/L
32	1600	0.0006		0.0007			
33	1650	0.0100	276.80	0.0100	276.80	0.00	N/L
34	1700	0.0005		0.0006			
35	1750	0.0083	243.46	0.0083	243.46	0.00	N/L
36	1800	0.0005		0.0006			
37	1850	0.0059	181.67	0.0060	185.46	0.00	N/L
38	1900	0.0007		0.0009			
39	1950	0.0034	111.70	0.0034	111.70	0.00	N/L
40	2000	0.0007		0.0007			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Test Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2012-12-17 17:41:44

Urms = 230.7 V P = 31.22 W THC = 0.275 A Range: 2 A
 Irms = 0.302 A pf = 0.448 Pmax = 31.36 W V-nom: 230 V
 TestTime: 15 min (100%)

HAR-1000 EMC-Parber

Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.7V Freq = 50.000 Range: 2 A
 Irms = 0.302A Ipk = 1.239A cf = 4.107
 P = 31.22W S = 69.61VA pf = 0.448
 THDi = 88.9 % THDu = 0.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 31.365W
 Test completed, Result: N/L

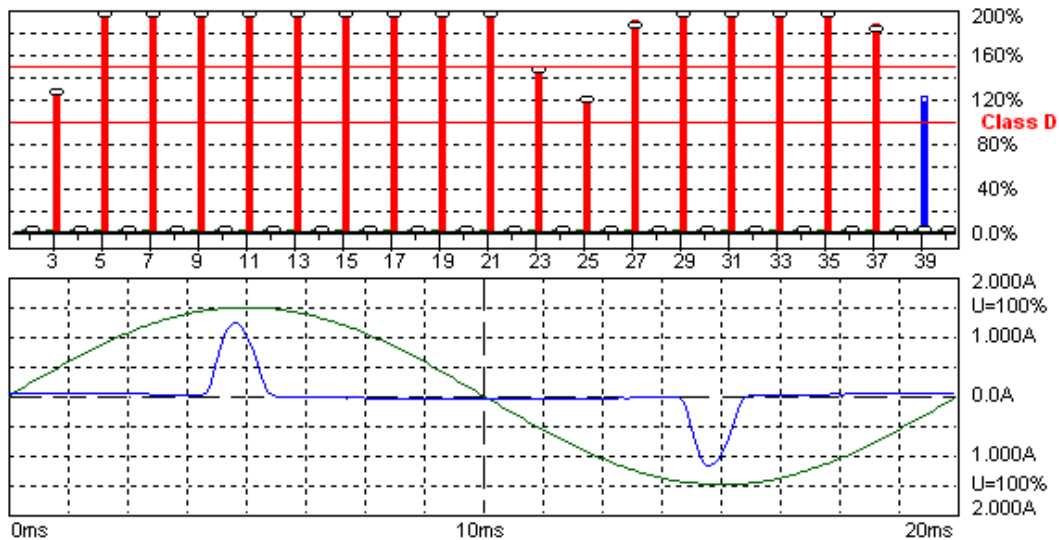


Order	Freq. [Hz]	Irms [A]	Irms%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.1417		0.1422			
2	100	0.0039		0.0040			
3	150	0.1317	123.51	0.1318	123.63	0.00	N/L
4	200	0.0037		0.0038			
5	250	0.1250	209.75	0.1251	209.96	0.00	N/L
6	300	0.0037		0.0038			
7	350	0.1150	366.62	0.1150	366.62	0.00	N/L
8	400	0.0033		0.0035			
9	450	0.1021	650.73	0.1022	651.51	0.00	N/L
10	500	0.0023		0.0027			
11	550	0.0872	793.95	0.0873	795.07	0.00	N/L
12	600	0.0018		0.0022			
13	650	0.0715	770.10	0.0718	772.73	0.00	N/L
14	700	0.0012		0.0018			
15	750	0.0559	694.48	0.0562	697.52	0.00	N/L
16	800	0.0009		0.0013			
17	850	0.0408	573.98	0.0410	577.42	0.00	N/L
18	900	0.0006		0.0010			
19	950	0.0273	430.24	0.0276	434.08	0.00	N/L
20	1000	0.0009		0.0010			
21	1050	0.0157	273.85	0.0160	278.10	0.00	N/L
22	1100	0.0009		0.0010			
23	1150	0.0073	139.50	0.0076	144.15	0.00	N/L
24	1200	0.0010		0.0011			
25	1250	0.0055	113.73	0.0057	118.78	0.00	N/L
26	1300	0.0010		0.0010			
27	1350	0.0083	185.60	0.0087	193.79	0.00	N/L
28	1400	0.0009		0.0010			
29	1450	0.0104	249.18	0.0107	257.98	0.00	N/L
30	1500	0.0009		0.0010			
31	1550	0.0110	282.04	0.0112	288.31	0.00	N/L
32	1600	0.0006		0.0007			
33	1650	0.0099	270.21	0.0103	280.22	0.00	N/L
34	1700	0.0005		0.0007			
35	1750	0.0082	237.05	0.0085	247.67	0.00	N/L
36	1800	0.0005		0.0006			
37	1850	0.0057	175.79	0.0061	187.01	0.00	N/L
38	1900	0.0007		0.0009			
39	1950	0.0034	110.39	0.0035	114.33	0.00	N/L
40	2000	0.0006		0.0007			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Test Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012



Harmonic Emission - IEC 61000-3-2, EN 61000-3-2, (EN60555-2)

2012-12-17 17:58:23

Urms = 230.7 V P = 31.27 W THc = 0.275 A Range: 2 A
 Irms = 0.302 A pf = 0.449 Pmax = 31.28 W V-nom: 230 V
 TestTime: 15 min (100%)

HAR-1000 EMC-Partner

Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.7V Freq = 50.039 Range: 2 A
 Irms = 0.302A Ipk = 1.243A cf = 4.120
 P = 31.27W S = 69.61VA pf = 0.449
 THDi = 88.9 % THDu = 0.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 31.282W
 Test completed, Result: N/L



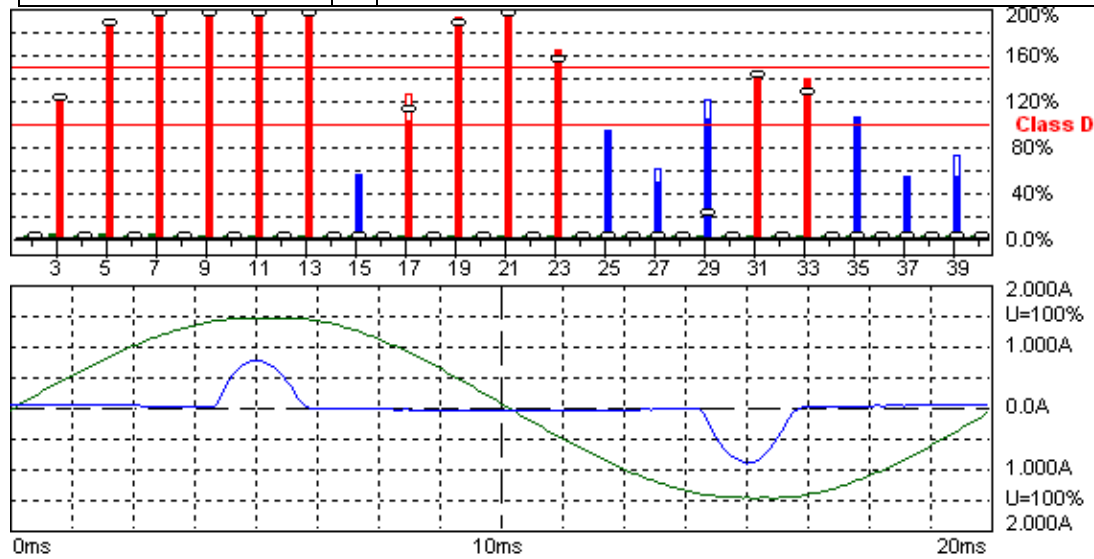
Order	Freq. [Hz]	Irms [A]	Irms%L [%]	I _{max} [A]	I _{max} %L [%]	Limit [A]	Status
1	50	0.1416		0.1420			
2	100	0.0040		0.0040			
3	150	0.1316	123.72	0.1318	123.95	0.00	N/L
4	200	0.0038		0.0038			
5	250	0.1250	210.31	0.1252	210.72	0.00	N/L
6	300	0.0038		0.0038			
7	350	0.1150	367.59	0.1151	367.98	0.00	N/L
8	400	0.0034		0.0035			
9	450	0.1021	652.45	0.1023	654.01	0.00	N/L
10	500	0.0024		0.0026			
11	550	0.0872	796.05	0.0874	798.28	0.00	N/L
12	600	0.0018		0.0021			
13	650	0.0717	773.45	0.0719	776.08	0.00	N/L
14	700	0.0013		0.0016			
15	750	0.0562	699.36	0.0563	700.88	0.00	N/L
16	800	0.0009		0.0012			
17	850	0.0410	578.95	0.0411	580.67	0.00	N/L
18	900	0.0006		0.0009			
19	950	0.0276	435.22	0.0277	437.15	0.00	N/L
20	1000	0.0009		0.0010			
21	1050	0.0160	278.83	0.0162	283.09	0.00	N/L
22	1100	0.0010		0.0010			
23	1150	0.0076	144.53	0.0077	146.87	0.00	N/L
24	1200	0.0010		0.0011			
25	1250	0.0056	116.56	0.0057	119.09	0.00	N/L
26	1300	0.0010		0.0010			
27	1350	0.0084	188.83	0.0085	191.56	0.00	N/L
28	1400	0.0009		0.0010			
29	1450	0.0106	255.72	0.0107	258.66	0.00	N/L
30	1500	0.0009		0.0009			
31	1550	0.0111	285.93	0.0112	289.07	0.00	N/L
32	1600	0.0006		0.0007			
33	1650	0.0103	280.96	0.0103	280.96	0.00	N/L
34	1700	0.0005		0.0006			
35	1750	0.0085	248.32	0.0087	251.87	0.00	N/L
36	1800	0.0005		0.0006			
37	1850	0.0060	183.76	0.0061	187.51	0.00	N/L
38	1900	0.0007		0.0009			
39	1950	0.0035	114.63	0.0037	118.59	0.00	N/L
40	2000	0.0007		0.0007			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Second edition:

Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 29, 2013



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2013-10-29 9:47:07 harmonic.hsu

Urms = 230.3 V	P = 32.98 W	THC = 0.222 A	Range: 2 A
Irms = 0.265 A	pf = 0.541	Pmax = 33.47 W	V-nom: 230 V
			TestTime: 15 min (100%)

HAR-1000 EMC-Parier

Full Bar : Actual Values
 Empty Bar : Maximum Values
 Blue : Current , Green : Voltage , Red : Failed

Urms = 230.3V Freq = 50.000 Range: 2 A
 Irms = 0.265A Ipk = 0.913A cf = 3.450
 P = 32.98W S = 60.95VA pf = 0.541
 THDi = 83.1 % THDu = 1.10 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 33.466W

Test completed, Result: N/L

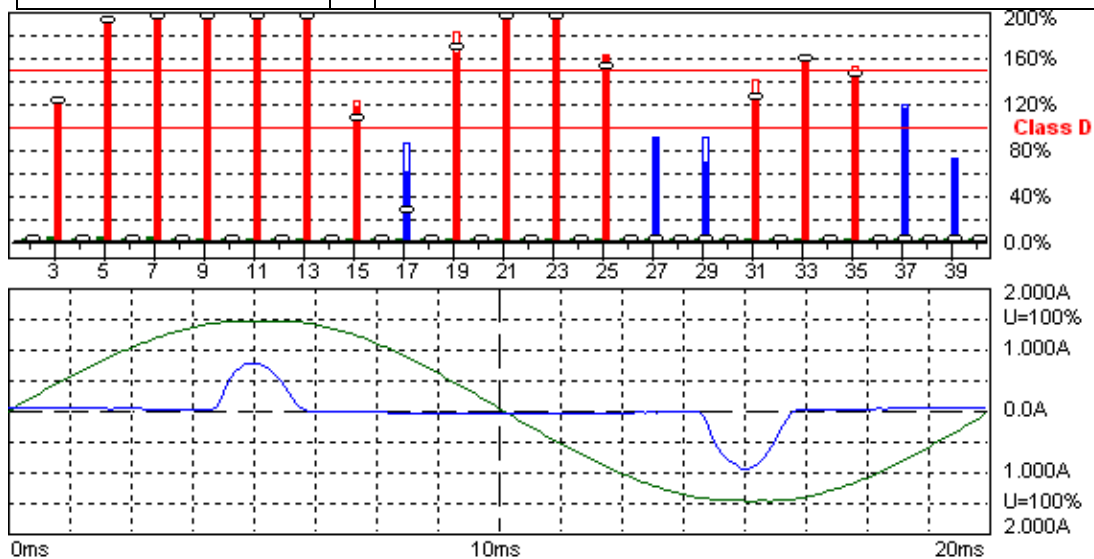


Order	Freq. [Hz]	Irms [A]	Irms%L [%]	I _{max} [A]	I _{max} %L [%]	Limit [A]	Status
1	50	0.1490		0.1511			
2	100	0.0138		0.0138			
3	150	0.1357	119.30	0.1379	121.23	0.00	N/L
4	200	0.0117		0.0117			
5	250	0.1182	185.84	0.1187	186.60	0.00	N/L
6	300	0.0090		0.0095			
7	350	0.0952	284.51	0.0953	284.88	0.00	N/L
8	400	0.0061		0.0063			
9	450	0.0687	410.72	0.0688	411.45	0.00	N/L
10	500	0.0037		0.0037			
11	550	0.0430	366.85	0.0430	366.85	0.00	N/L
12	600	0.0011		0.0012			
13	650	0.0211	213.08	0.0210	211.85	0.00	N/L
14	700	0.0012		0.0013			
15	750	0.0046	54.004	0.0046	54.004	0.00	N/L
16	800	0.0020		0.0021			
17	850	0.0076	99.859	0.0094	124.02	0.00	N/L
18	900	0.0024		0.0026			
19	950	0.0125	183.61	0.0131	192.61	0.00	N/L
20	1000	0.0024		0.0026			
21	1050	0.0125	202.94	0.0125	202.94	0.00	N/L
22	1100	0.0023		0.0024			
23	1150	0.0092	163.43	0.0092	163.43	0.00	N/L
24	1200	0.0022		0.0023			
25	1250	0.0046	90.006	0.0048	92.375	0.00	N/L
26	1300	0.0022		0.0022			
27	1350	0.0022	46.045	0.0028	58.836	0.00	N/L
28	1400	0.0021		0.0022			
29	1450	0.0045	101.66	0.0052	118.14	0.00	N/L
30	1500	0.0018		0.0020			
31	1550	0.0057	138.04	0.0060	143.92	0.00	N/L
32	1600	0.0015		0.0016			
33	1650	0.0054	137.57	0.0054	137.57	0.00	N/L
34	1700	0.0015		0.0018			
35	1750	0.0038	102.80	0.0038	102.80	0.00	N/L
36	1800	0.0016		0.0018			
37	1850	0.0018	52.583	0.0018	52.583	0.00	N/L
38	1900	0.0016		0.0017			
39	1950	0.0017	51.730	0.0023	70.205	0.00	N/L
40	2000	0.0015		0.0016			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 30, 2013



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2013-10-30 14:30:57

Urms = 230.3 V P = 32.49 W THC = 0.227 A Range: 2 A
 Irms = 0.267 A pf = 0.529 Pmax = 32.88 W V-nom: 230 V
 TestTime: 15 min (100%)

HAR-1000 EMC-Partner

Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.3V Freq = 49.987 Range: 2 A
 Irms = 0.267A Ipk = 0.949A cf = 3.560
 P = 32.49W S = 61.40VA pf = 0.529
 THDi = 84.0 % THDu = 1.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 32.878W

Test completed, Result: N/L

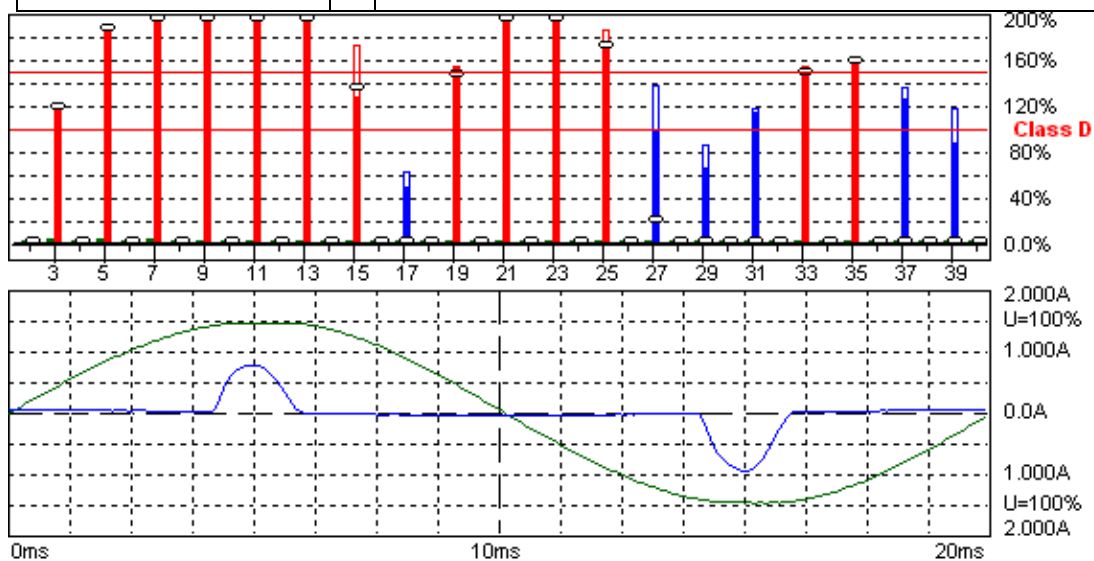


Order	Freq. [Hz]	Irms [A]	Irms%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.1472		0.1488			
2	100	0.0153		0.0155			
3	150	0.1344	120.23	0.1370	122.52	0.00	N/L
4	200	0.0137		0.0139			
5	250	0.1183	189.35	0.1198	191.70	0.00	N/L
6	300	0.0111		0.0114			
7	350	0.0978	297.40	0.0985	299.62	0.00	N/L
8	400	0.0076		0.0077			
9	450	0.0739	449.25	0.0742	451.48	0.00	N/L
10	500	0.0046		0.0048			
11	550	0.0494	429.62	0.0499	433.87	0.00	N/L
12	600	0.0018		0.0018			
13	650	0.0276	283.33	0.0280	287.09	0.00	N/L
14	700	0.0009		0.0011			
15	750	0.0098	115.72	0.0101	120.06	0.00	N/L
16	800	0.0022		0.0023			
17	850	0.0044	59.019	0.0062	83.610	0.00	N/L
18	900	0.0029		0.0031			
19	950	0.0109	163.07	0.0121	181.40	0.00	N/L
20	1000	0.0031		0.0031			
21	1050	0.0132	218.72	0.0133	220.74	0.00	N/L
22	1100	0.0029		0.0031			
23	1150	0.0116	210.71	0.0117	212.93	0.00	N/L
24	1200	0.0027		0.0027			
25	1250	0.0079	156.71	0.0081	159.12	0.00	N/L
26	1300	0.0023		0.0026			
27	1350	0.0040	85.925	0.0042	88.529	0.00	N/L
28	1400	0.0026		0.0026			
29	1450	0.0029	67.120	0.0039	89.493	0.00	N/L
30	1500	0.0023		0.0023			
31	1550	0.0050	122.57	0.0056	137.52	0.00	N/L
32	1600	0.0020		0.0021			
33	1650	0.0060	155.94	0.0061	159.12	0.00	N/L
34	1700	0.0020		0.0021			
35	1750	0.0054	148.51	0.0055	151.89	0.00	N/L
36	1800	0.0020		0.0021			
37	1850	0.0039	114.18	0.0040	117.75	0.00	N/L
38	1900	0.0020		0.0021			
39	1950	0.0023	71.459	0.0023	71.459	0.00	N/L
40	2000	0.0020		0.0021			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 30 , 2013



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2013-10-30 15:58:17

Urms = 230.3 V P = 32.20 W THC = 0.227 A Range: 2 A
 Irms = 0.267 A pf = 0.524 Pmax = 33.45 W V-nom: 230 V
 TestTime: 15 min (100%)

HAR-1000 EMC-Partner

Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.3V Freq = 50.000 Range: 2 A
 Irms = 0.267A Ipk = 0.954A cf = 3.579
 P = 32.20W S = 61.40VA pf = 0.524
 THDi = 84.2 % THDu = 1.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 33.449W

Test completed, Result: N/L

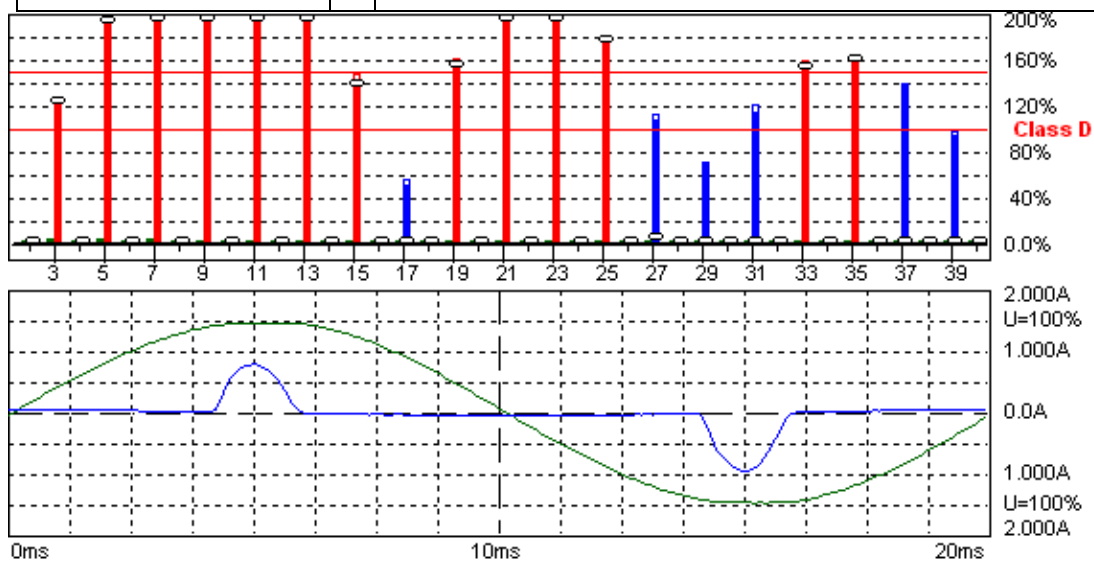


Order	Freq. [Hz]	Irms [A]	Irms%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.1460		0.1462			
2	100	0.0161		0.0165			
3	150	0.1337	117.53	0.1338	117.64	0.00	N/L
4	200	0.0144		0.0148			
5	250	0.1179	185.54	0.1184	186.31	0.00	N/L
6	300	0.0120		0.0122			
7	350	0.0978	292.32	0.0988	295.24	0.00	N/L
8	400	0.0083		0.0087			
9	450	0.0742	443.77	0.0756	451.80	0.00	N/L
10	500	0.0051		0.0055			
11	550	0.0504	430.63	0.0519	443.14	0.00	N/L
12	600	0.0018		0.0022			
13	650	0.0287	289.58	0.0304	306.83	0.00	N/L
14	700	0.0007		0.0011			
15	750	0.0107	125.12	0.0145	169.20	0.00	N/L
16	800	0.0023		0.0023			
17	850	0.0035	46.731	0.0045	59.623	0.00	N/L
18	900	0.0032		0.0032			
19	950	0.0103	151.28	0.0104	153.09	0.00	N/L
20	1000	0.0032		0.0034			
21	1050	0.0129	211.00	0.0131	212.99	0.00	N/L
22	1100	0.0031		0.0032			
23	1150	0.0120	213.66	0.0122	218.02	0.00	N/L
24	1200	0.0027		0.0029			
25	1250	0.0087	168.25	0.0094	182.47	0.00	N/L
26	1300	0.0024		0.0027			
27	1350	0.0046	97.254	0.0065	135.64	0.00	N/L
28	1400	0.0026		0.0027			
29	1450	0.0028	63.225	0.0037	82.467	0.00	N/L
30	1500	0.0024		0.0024			
31	1550	0.0046	111.66	0.0048	114.60	0.00	N/L
32	1600	0.0021		0.0023			
33	1650	0.0059	150.15	0.0060	153.28	0.00	N/L
34	1700	0.0021		0.0023			
35	1750	0.0057	155.93	0.0059	159.25	0.00	N/L
36	1800	0.0021		0.0022			
37	1850	0.0044	126.26	0.0048	136.78	0.00	N/L
38	1900	0.0020		0.0022			
39	1950	0.0028	85.026	0.0038	114.60	0.00	N/L
40	2000	0.0020		0.0022			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.



Basic Standard	:	EN 61000-3-2
Final Test Result	:	PASS
Test Mode	:	Mode 13: Full system (Display mode 1920*1080@100Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 30, 2013



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2013-10-30 15:28:06

Urms = 230.3 V P = 32.20 W THC = 0.228 A Range: 2 A
 Irms = 0.268 A pf = 0.523 Pmax = 32.25 W V-nom: 230 V
 TestTime: 15 min (100%)

HAR-1000 EMC-Partner

Full Bar : Actual Values

Empty Bar : Maximum Values

Blue : Current , Green : Voltage , Red : Failed

Urms = 230.3V Freq = 50.013 Range: 2 A
 Irms = 0.268A Ipk = 0.961A cf = 3.591
 P = 32.20W S = 61.62VA pf = 0.523
 THDi = 84.2 % THDu = 1.20 % Class D
 Test - Time : 15min (100 %)
 Limit Reference: Pmax = 32.248W

Test completed, Result: N/L



Order	Freq. [Hz]	Irms [A]	Irms%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.1461		0.1462			
2	100	0.0159		0.0162			
3	150	0.1337	121.91	0.1338	122.02	0.00	N/L
4	200	0.0142		0.0145			
5	250	0.1182	192.85	0.1184	193.25	0.00	N/L
6	300	0.0117		0.0121			
7	350	0.0981	304.34	0.0986	305.85	0.00	N/L
8	400	0.0083		0.0084			
9	450	0.0747	463.32	0.0753	467.11	0.00	N/L
10	500	0.0051		0.0054			
11	550	0.0509	450.99	0.0518	458.56	0.00	N/L
12	600	0.0021		0.0021			
13	650	0.0293	306.76	0.0302	315.70	0.00	N/L
14	700	0.0007		0.0009			
15	750	0.0114	137.16	0.0121	146.00	0.00	N/L
16	800	0.0021		0.0023			
17	850	0.0035	48.472	0.0039	53.486	0.00	N/L
18	900	0.0031		0.0032			
19	950	0.0101	155.05	0.0105	160.65	0.00	N/L
20	1000	0.0032		0.0033			
21	1050	0.0129	218.86	0.0131	220.92	0.00	N/L
22	1100	0.0031		0.0032			
23	1150	0.0121	223.87	0.0121	223.87	0.00	N/L
24	1200	0.0027		0.0028			
25	1250	0.0088	176.98	0.0089	179.43	0.00	N/L
26	1300	0.0024		0.0027			
27	1350	0.0049	106.19	0.0051	111.49	0.00	N/L
28	1400	0.0026		0.0027			
29	1450	0.0029	68.430	0.0029	68.430	0.00	N/L
30	1500	0.0023		0.0026			
31	1550	0.0045	112.77	0.0048	118.87	0.00	N/L
32	1600	0.0021		0.0023			
33	1650	0.0059	155.74	0.0060	158.98	0.00	N/L
34	1700	0.0021		0.0022			
35	1750	0.0057	161.74	0.0057	161.74	0.00	N/L
36	1800	0.0021		0.0022			
37	1850	0.0045	134.60	0.0045	134.60	0.00	N/L
38	1900	0.0020		0.0022			
39	1950	0.0029	92.027	0.0031	95.862	0.00	N/L
40	2000	0.0020		0.0022			

The power of EUT is less than 75W after the testing. According the standard, the equipment with a rated power of 75W or less, other than lighting equipment, limits are not specified in this standard. So the test data needn't list.

Test engineer: *Seben*



6.4. Test Photographs



Second edition





7. Voltage Fluctuations Test

7.1. Test Procedure

The equipment shall be tested under the conditions of **Clause 5**.

The total impedance of the test circuit, excluding the appliance under test, but including the internal impedance of the supply source, shall be equal to the reference impedance. The stability and tolerance of the reference impedance shall be adequate to ensure that the overall accuracy of $\pm 8\%$ is achieved during the whole assessment procedure.

7.2. Measurement equipment

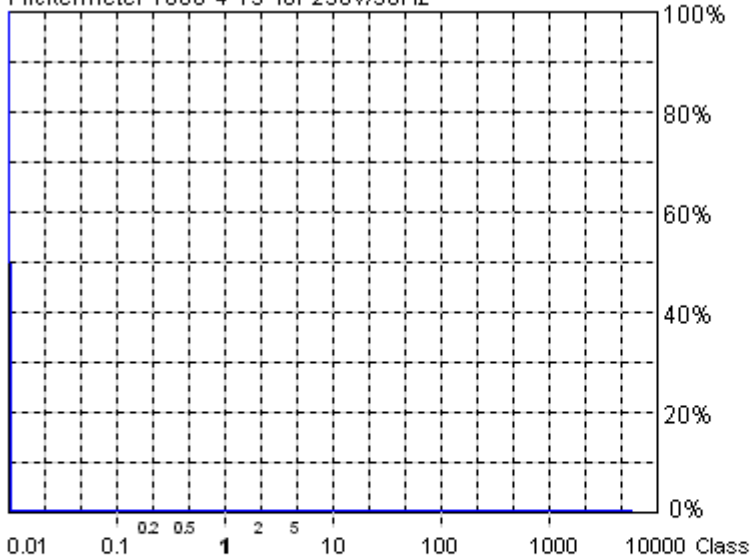
Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
EMC Emission Tester	EMCPARTNER	Harmonics-1000	159	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2013.03.10	2014.03.09



7.3. Test Result and Data

Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Test Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.00
Short-term Flicker (Pst): 0.07
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.07
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.01%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

Urms = 230.7 V P = 30.92 W
 Irms = 0.288 A pf = 0.465

2012-12-17 16:12:43

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Partner

- Full Bar : Actual Values
- Empty Bar : Maximum Values
- Circles : Average Values
- Blue : Current , Green : Voltage , Red : Failed



Urms = 230.7V Freq = 49.987 Range: 2 A
Irms = 0.288A Ipk = 1.153A cf = 4.003
P = 30.92W S = 66.46VA pf = 0.465

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

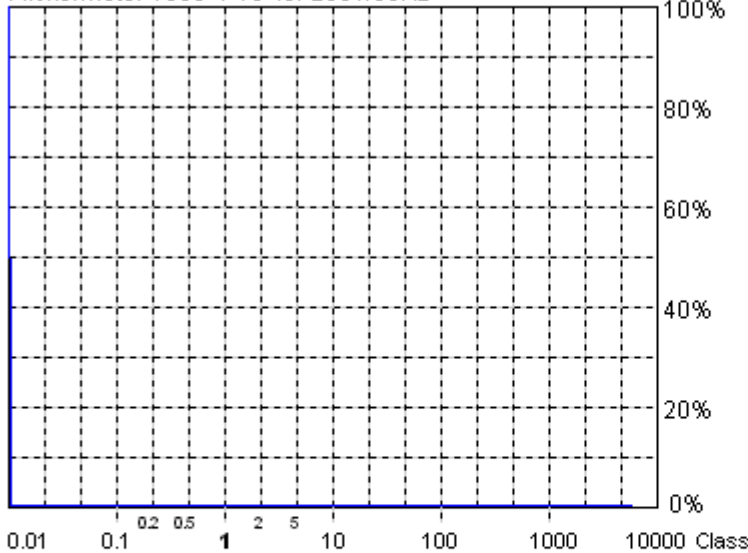
Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED



Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Test Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	51 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.00
Short-term Flicker (Pst): 0.07
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.07
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.00%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

2012-12-17 17:12:30

Urms = 230.7 V P = 31.02 W
 Irms = 0.290 A pf = 0.464

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Partner

- Full Bar : Actual Values
- Empty Bar : Maximum Values
- Circles : Average Values
- Blue : Current , Green : Voltage , Red : Failed



Urms = 230.7V Freq = 50.013 Range: 2 A
Irms = 0.290A Ipk = 1.158A cf = 3.993
P = 31.02W S = 66.91VA pf = 0.464

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

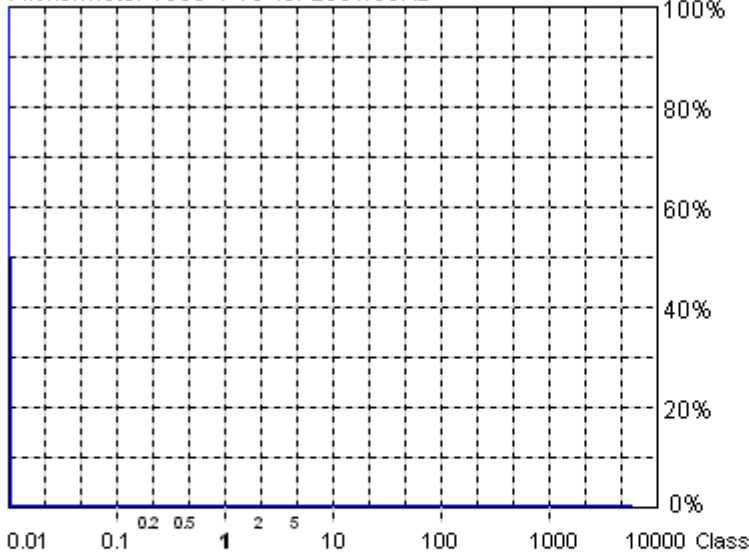
Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED



Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Test Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 12, 2012

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.00
Short-term Flicker (Pst): 0.07
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.07
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.01%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

2012-12-17 17:25:41

Urms = 230.7 V P = 31.32 W
 Irms = 0.292 A pf = 0.465

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Parber

- Full Bar : Actual Values
- Empty Bar : Maximum Values
- Circles : Average Values
- Blue : Current , Green : Voltage , Red : Failed



Urms = 230.7V Freq = 50.013 Range: 2 A
Irms = 0.292A Ipk = 1.173A cf = 4.017
P = 31.32W S = 67.36VA pf = 0.465

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

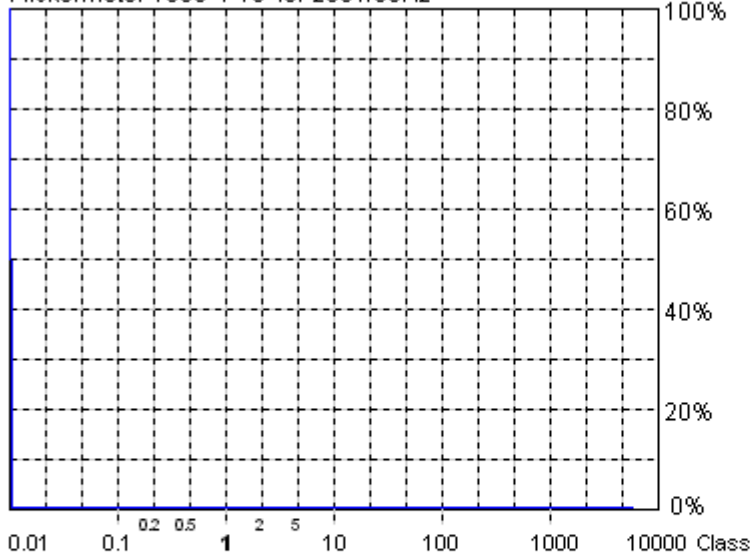
Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED



Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Test Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Dec 17, 2012

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.00
Short-term Flicker (Pst): 0.07
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.07
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.01%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

2012-12-17 18:09:47

Urms = 230.7 V P = 31.22 W
 Irms = 0.292 A pf = 0.463

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Parber

Full Bar : Actual Values
 Empty Bar : Maximum Values
 Circles : Average Values
 Blue : Current , Green : Voltage , Red : Failed

Urms = 230.7V Freq = 49.987 Range: 2 A



Irms = 0.292A Ipk = 1.169A cf = 4.003
P = 31.22W S = 67.36VA pf = 0.463

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

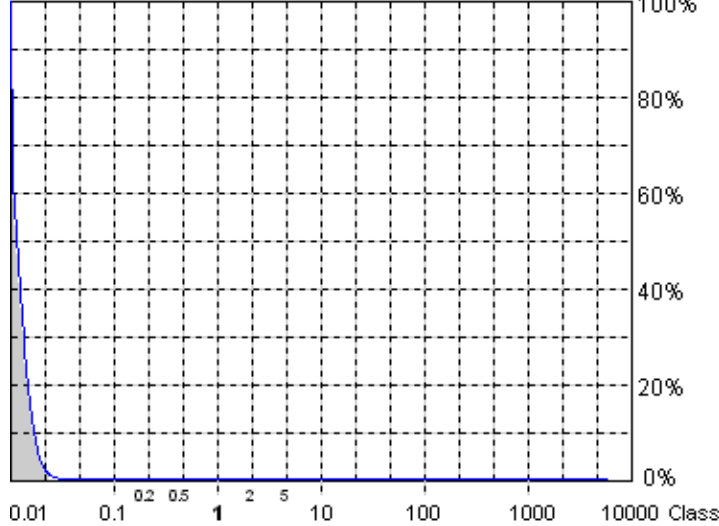
Test completed, Result: PASSED



Second edition:

Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Mode 1: Full system (VGA mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 29, 2013

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.01
Short-term Flicker (Pst): 0.09
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.09
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.12%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

Urms = 230.3 V P = 32.89 W
 Irms = 0.264 A pf = 0.542

2013-10-29 10:07:37

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Parber

- Full Bar : Actual Values
- Empty Bar : Maximum Values
- Circles : Average Values
- Blue : Current , Green : Voltage , Red : Failed



Urms = 230.3V Freq = 50.000 Range: 2 A
Irms = 0.264A Ipk = 0.910A cf = 3.452
P = 32.89W S = 60.72VA pf = 0.542

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : No LIN

Limits : Plt : 0.65 Pst : 1.00

dmax : 4.00 % dc : 3.30 %

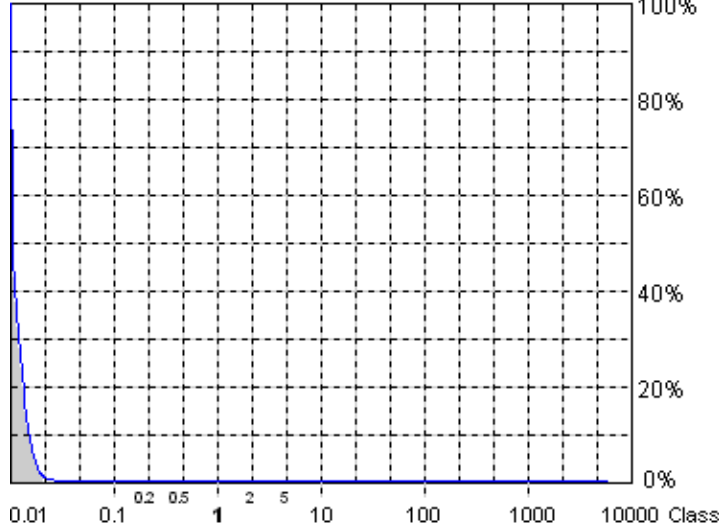
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED



Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Mode 5: Full system (DVI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	51 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 30, 2013

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.02
Short-term Flicker (Pst): 0.09
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.09
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.13%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

Urms = 230.3 V P = 32.40 W
 Irms = 0.268 A pf = 0.526

2013-10-30 14:43:42

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Parber

Full Bar : Actual Values

Empty Bar : Maximum Values

Circles : Average Values

Blue : Current , Green : Voltage , Red : Failed



Urms = 230.3V Freq = 50.000 Range: 2 A
Irms = 0.268A Ipk = 0.961A cf = 3.591
P = 32.40W S = 61.62VA pf = 0.526
Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : No LIN

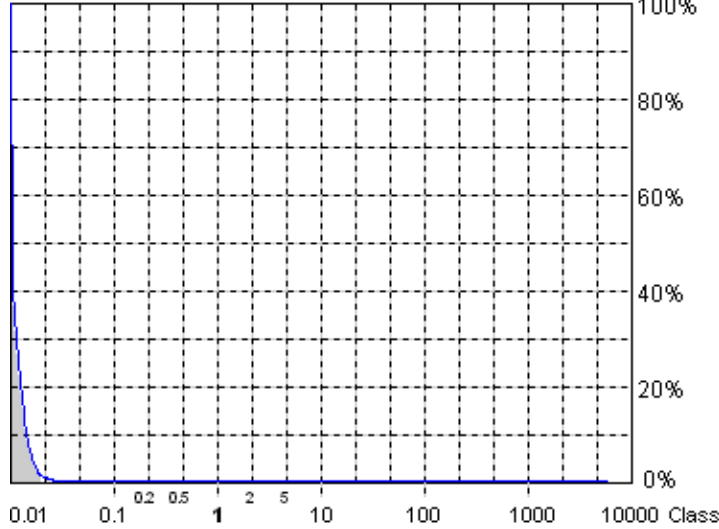
Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED



Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Mode 9: Full system (HDMI mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 30, 2013

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.01
Short-term Flicker (Pst): 0.09
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.09
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.12%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

Urms = 230.3 V P = 32.25 W
 Irms = 0.268 A pf = 0.523

2013-10-30 15:11:45

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Parier

- Full Bar : Actual Values
- Empty Bar : Maximum Values
- Circles : Average Values
- Blue : Current , Green : Voltage , Red : Failed



Urms = 230.3V Freq = 50.013 Range: 2 A
Irms = 0.268A Ipk = 0.957A cf = 3.577
P = 32.25W S = 61.62VA pf = 0.523

Test - Time : 1 x 10min = 10min (100 %)

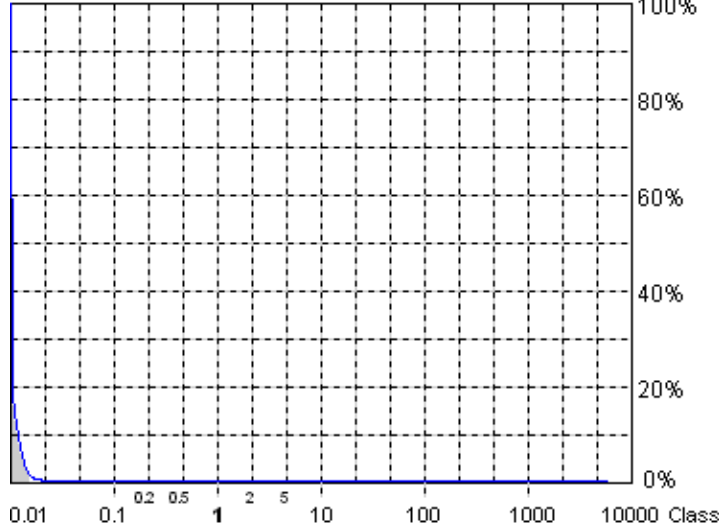
LIN (Line Impedance Network) : No LIN
Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED



Basic Standard	:	EN 61000-3-3
Final Test Result	:	PASS
Test Mode	:	Mode 13: Full system (Display mode 1920*1080@60Hz) for Horizontal
Model No.	:	240LM00010
Temperature	:	21°C
Humidity	:	50 %
Atmospheric Pressure	:	100 kPa
Test Date	:	Oct 30, 2013

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.01
Short-term Flicker (Pst): 0.08
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.08
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.10%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

Urms = 230.3 V P = 32.20 W
 Irms = 0.268 A pf = 0.523

2013-10-30 15:42:22

Range: 2 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

HAR-1000 EMC-Parber

- Full Bar : Actual Values
- Empty Bar : Maximum Values
- Circles : Average Values
- Blue : Current , Green : Voltage , Red : Failed



Urms = 230.3V Freq = 50.000 Range: 2 A
Irms = 0.268A Ipk = 0.961A cf = 3.591
P = 32.20W S = 61.62VA pf = 0.523

Test - Time : 1 x 10min = 10min (100 %)
LIN (Line Impedance Network) : No LIN
Limits : Plt : 0.65 Pst : 1.00
dmax : 4.00 % dc : 3.30 %
dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED

Test engineer: _____



7.4. Test Photographs



Second edition





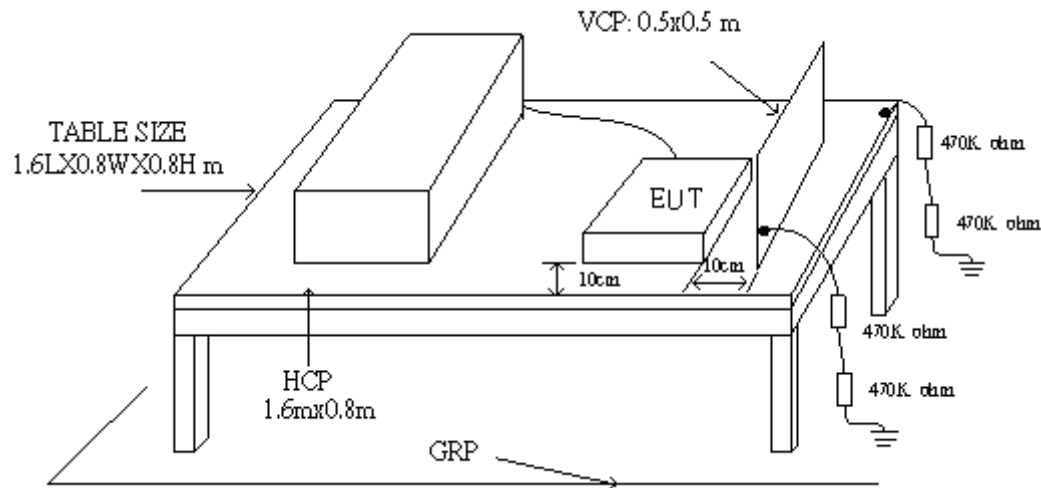
8. Electrostatic Discharge Immunity Test

8.1. Test Procedure

- a. In the case of air discharge testing the climatic conditions shall be within the following ranges:
 - ambient temperature: 15°C to 35°C;
 - relative humidity : 30% to 60%;
 - atmospheric pressure : 86 KPa (860 hPa) to 106 KPa (1060 hPa).
- b. Test programs and software shall be chosen so as to exercise all normal modes of operation of the EUT. The use of special exercising software is encouraged, but permitted only where it can be shown that the EUT is being comprehensively exercised.
- c. The test voltage shall be increased from the minimum to the selected test severity level, in order to determine any threshold of failure. The final severity level should not exceed the product specification value in order to avoid damage to the equipment.
- d. The test shall be performed with both air discharge and contact discharge. On reselected points at least 10 single discharges (in the most sensitive polarity) shall be applied on air discharge. On reselected points at least 25 single discharges (in the most sensitive polarity) shall be applied on contact discharge.
- e. For the time interval between successive single discharges an initial value of one second is recommended. Longer intervals may be necessary to determine whether a system failure has occurred.
- f. In the case of contact discharges, the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.
- g. In the case of painted surface covering a conducting substrate, the following procedure shall be adopted :
 - ◇ If the coating is not declared to be an insulating coating by the equipment manufacturer, then the pointed tip of the generator shall penetrate the coating so as to make contact with the conducting substrate.
 - ◇ Coating declared as insulating by the manufacturer shall only be submitted to the air discharge.
 - ◇ The contact discharge test shall not be applied to such surfaces.
- h. In the case of air discharges, the round discharge tip of the discharge electrode shall be approached as fast as possible (without causing mechanical damage) to touch the EUT . After each discharge, the ESD generator (discharge electrode) shall be removed from the EUT. The generator is then retriggered for a new single discharge. This procedure shall be repeated until the discharges are completed. In the case of an air discharge test, the discharge switch, which is used for contact discharge, shall be closed.



8.2. Test Setup for Tests Performed in Laboratory



The test setup consists of the test generator, EUT and auxiliary instrumentation necessary to perform DIRECT and INDIRECT application of discharges to the EUT as applicable, in the follow manner :

- a. Contact Discharge to the conductive surfaces and to coupling plane;
- b. Air Discharge at insulating surfaces.

The preferred test method is that of type tests performed in laboratories and the only accepted method of demonstrating conformance with this standard. The EUT was arranged as closely as possible to arrangement in final installed conditions.

A ground reference plane was provided on the floor of the test site. It was a metallic sheet (copper or aluminum) of 0.25 mm, minimum thickness; other metallic may be used but they shall have at least 0.65 mm thickness. In the Exclusive Certification Corp., we provided 1 mm thickness stainless steel ground reference plane. The minimum size of the ground reference plane is 2.5 m x 2.5 m, the exact size depending on the dimensions of the EUT. It was connected to the protective grounding system.

The EUT was arranged and connected according to its functional requirements. A distance of 1m minimum was provided between the EUT and the wall of the lab. and any other metallic structure. In cases where this length exceeds the length necessary to apply the discharges to the selected points, the excess length shall, where possible, be placed non-inductively off the ground reference plane and shall not come closer than 0.2m to other conductive parts in the test setup.

Where the EUT is installed on a metal table, the table was connected to the reference plane via a cable with a 470k ohm resistor located at each end, to prevent a build-up of charge. The test setup



was consist a wooden table, 0.8m high, standing on the ground reference plane. A HCP, 1.6 m x 0.8 m, was placed on the table. The EUT and cables was isolated from the HCP by an insulating support 0.5 mm thick. The VCP size, 0.5 m x 0.5 m.

8.3. Test Severity Levels

Contact Discharge		Air Discharge	
Level	Test Voltage (kV) of Contact discharge	Level	Test Voltage (kV) of Air Discharge
1	±2	1	±2
2	±4	2	±4
3	±6	3	±8
4	±8	4	±15
X	Specified	X	Specified

Remark: "X" is an open level.

8.4. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
ESD Simulator	EM Test	ditto	V0714102399	2013.03.26	2014.03.25
ESD Simulator	EMC PARTNER	ESD3000	292	2013.02.01	2014.01.31
Tonometer	shanghaifengyun	DYM3	3251	2013.03.22	2014.03.21
Dehumidifier	ZEDO	ZD-220LB	CEP-TH-01	N/A	N/A
Humidifier	YADU	YZ-DS251C	CEP-TH-02	N/A	N/A
Temperature/ Humidity Meter	feiyun	N/A	102	2013.03.10	2014.03.09



8.5. Test Result and Data

Basic Standard : IEC 61000-4-2
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : B
 Test Voltage : ±2 / ±4 / ±8 kV for air discharge,
 : ±2 / ±4 kV for contact discharge
 Temperature : 20°C
 Relative Humidity : 50 %
 Atmospheric Pressure : 100 kPa
 Test Date : Dec 19, 2012

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

	Contact Discharge								Air Discharge							
	25 times / each								10 times / each							
Voltage	2 kV		4 kV		6 kV		8 kV		2 kV		4 kV		8 kV		10 kV	
Point\Polarity	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
HCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
VCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
Screw	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
Case	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Light	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Panel	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
VGA Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
DVI Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
HDMI Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Display Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Audio Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
USB Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---



Second edition:

Basic Standard : IEC 61000-4-2
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : B
 Test Voltage : ±2 / ±4 / ±8 kV for air discharge,
 : ±2 / ±4 kV for contact discharge
 Temperature : 20°C
 Relative Humidity : 50 %
 Atmospheric Pressure : 100 kPa
 Test Date : Oct 29, 2013

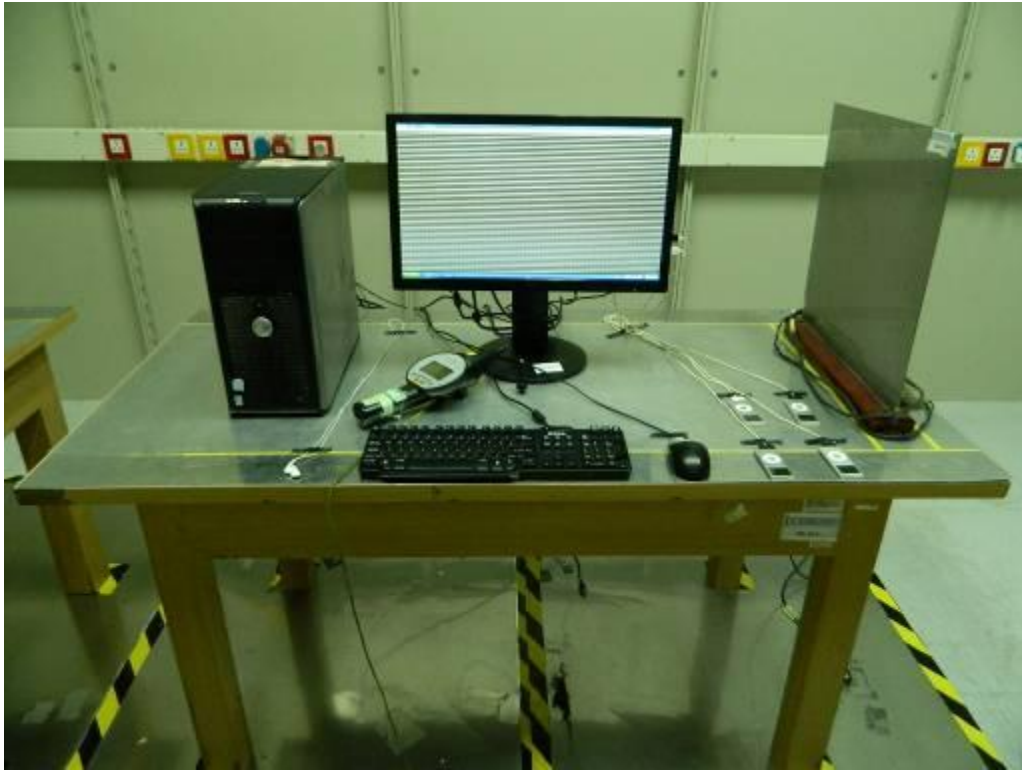
Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

	Contact Discharge								Air Discharge							
	25 times / each								10 times / each							
Voltage	2 kV		4 kV		6 kV		8 kV		2 kV		4 kV		8 kV		10 kV	
Point\Polarity	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-
HCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
VCP	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
Screw	A	A	A	A	---	---	---	---	---	---	---	---	---	---	---	---
Case	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Light	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Panel	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
VGA Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
DVI Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
HDMI Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Display Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
Audio Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---
USB Port	---	---	---	---	---	---	---	---	A	A	A	A	A	A	---	---

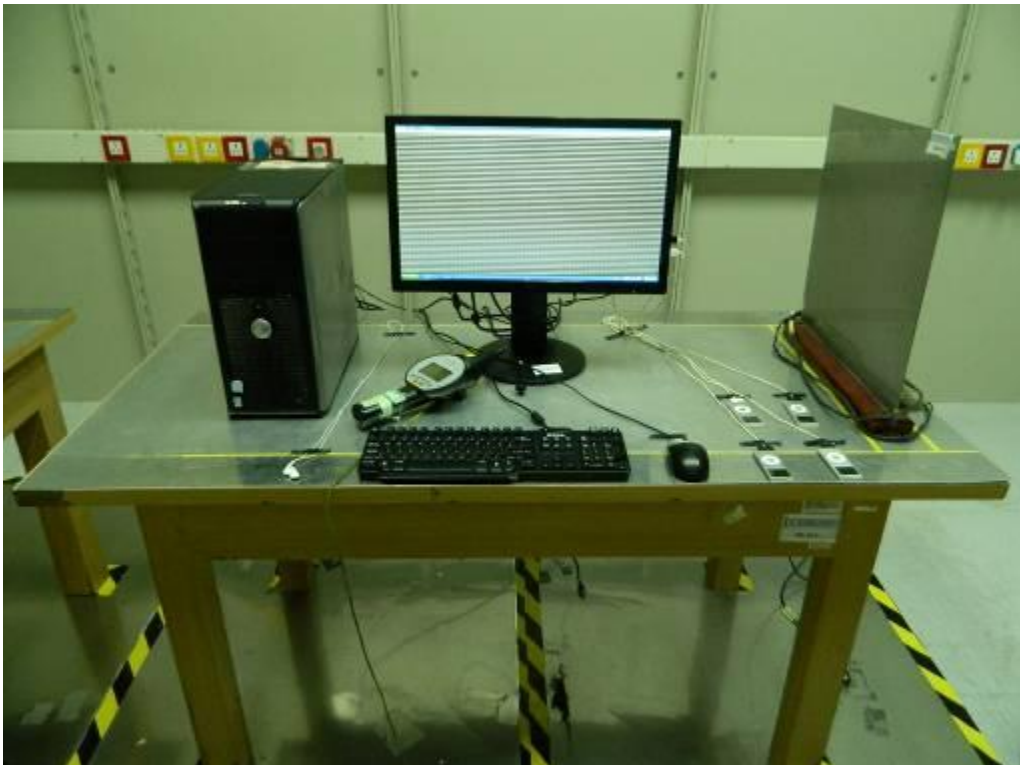
Test engineer: Seben



8.6. Test Photographs



Second edition





9. Radio Frequency electromagnetic field immunity test

9.1. Test Procedure

- a. The equipment to be tested is placed in the center of the enclosure on a wooden table. The equipment is then connected to power and signal leads according to pertinent installation instructions.
- b. The antenna which is enabling the complete frequency range of 80-1000 MHz is placed 3m away from the equipment. The required field strength is determined by placing the field strength meter(s) on top of or directly alongside the equipment under test and monitoring the field strength meter via a remote field strength indicator outside the enclosure while adjusting the continuous-wave to the applicable antennae.
- c. The test is normally performed with the antenna facing the most sensitive side of the EUT. The polarization of the field generated by the bucolical antenna necessitates testing each position twice, once with the antenna positioned vertically and again with the antenna positioned horizontally. The circular polarization of the field from the log-spiral antenna makes a change of position of the antenna unnecessary.
- d. At each of the above conditions, the frequency range is swept 80-1000 MHz, pausing to adjust the R.F. signal level or to switch oscillators and antenna. The rate of sweep is in the order of 1.5×10^{-3} decades/s. The sensitive frequencies or frequencies of dominant interest may be discretely analyzed.



9.2. Test Severity Levels

Frequency Band	
Level	Test field strength (V/m)
1	1
2	3
3	10
X	Specified
Remark: "X" is an open class.	

9.3. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
Signal Generator	R&S	SML03	103287	2013.03.10	2014.03.09
Power Sensor	R&S	NR P-Z91	100383	2013.03.10	2014.03.09
Power Sensor	R&S	NRP-Z91	100384	2013.03.10	2014.03.09
Power Meter	R&S	NRP	101206	2013.03.10	2014.03.09
Power Amplifier	BONN	BLWA0830-16 0/100/40D	076659	2013.03.10	2014.03.09
Istropic Electric Field Probe	EST.LINDGRE N	HI-6105	137445	2013.09.25	2014.09.24
EMS Antenna	R&S	HL046E	100028	N/A	N/A
Temperature/ Humidity Meter	feiyang	N/A	101	2013.03.10	2014.03.09



9.4. Test Result and Data

Basic Standard : IEC 61000-4-3
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : A
 Frequency Range : 80~1000 MHz
 Temperature : 22°C
 Relative Humidity : 52 %
 Atmospheric Pressure : 100 kPa
 Test Date : Dec 19, 2012

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Modulation : AM 80% , 1KHz sine wave , Dwell time: 3.0 S				
Frequency Step Size : 1 % of preceding frequency value				
Frequency (MHz)	Antenna Polarization	face	Field strength (V/m)	Result
80~1000	Vertical	Front	3 V/m	A
80~1000	Vertical	Rear	3 V/m	A
80~1000	Vertical	Left	3 V/m	A
80~1000	Vertical	Right	3 V/m	A
80~1000	Horizontal	Front	3 V/m	A
80~1000	Horizontal	Rear	3 V/m	A
80~1000	Horizontal	Left	3 V/m	A
80~1000	Horizontal	Right	3 V/m	A



Second edition:

Basic Standard : IEC 61000-4-3
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : A
 Frequency Range : 80~1000 MHz
 Temperature : 22°C
 Relative Humidity : 52 %
 Atmospheric Pressure : 100 kPa
 Test Date : Oct 29, 2013

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Modulation : AM 80% , 1KHz sine wave , Dwell time: 3.0 S				
Frequency Step Size : 1 % of preceding frequency value				
Frequency (MHz)	Antenna Polarization	face	Field strength (V/m)	Result
80~1000	Vertical	Front	3 V/m	A
80~1000	Vertical	Rear	3 V/m	A
80~1000	Vertical	Left	3 V/m	A
80~1000	Vertical	Right	3 V/m	A
80~1000	Horizontal	Front	3 V/m	A
80~1000	Horizontal	Rear	3 V/m	A
80~1000	Horizontal	Left	3 V/m	A
80~1000	Horizontal	Right	3 V/m	A

Test engineer: Seben



9.5. Test Photographs



Second edition





10. Electrical Fast Transient/ Burst Immunity Test

10.1. Test Procedure

- a. In order to minimize the effect of environmental parameters on test results, the climatic conditions when test is carrying out shall comply with the following requirements:
 - ✧ ambient temperature: 15°C to 35°C;
 - ✧ relative humidity : 45% to 75%;
 - ✧ Atmospheric pressure: 86 Kpa (860 hPa) to 106 Kpa (1060 hPa).
- b. In order to minimize the effect of environmental parameters on test results, the electromagnetic environment of the laboratory shall not influence the test results.
- c. The variety and diversity of equipment and systems to be tested make it difficult to establish general criteria for the evaluation of the effects of fast transients/bursts on equipment and systems.
- d. Test on Power Line:
 - ✧ The EFT/B-generator was located on the GRP.. The length from the EFT/B-generator to the EUT is not exceeding 1 m.
 - ✧ The EFT/B-generator provides the ability to apply the test voltage in a non-symmetrical condition to the power supply input terminals of the EUT.
- e. Test on Communication Lines
 - ✧ The coupling clamp is composed of a clamp unit for housing the cable (length more than 3 m), and was placed on the GRP.
 - ✧ The coupling clamp provides the ability of coupling the fast transient/bursts to the cable under test.
- f. The test results may be classified on the basic of the operating conditions and the functional specification of the equipment under test, according to the following performance criteria :
 - ✧ Normal performance within the specification limits.
 - ✧ Temporary degradation or loss of function or performance which is self-recoverable.
 - ✧ Temporary degradation or loss of function or performance which requires operator intervention or system reset.
 - ✧ Degradation or loss of function which is not recoverable due to damage of equipment (components).



10.2. Test Severity Levels

The following test severity levels are recommended for the fast transient/burst test :

Open circuit output test voltage $\pm 10\%$		
Level	On Power Supply	On I/O signal, data and control line
1	0.5 kV	0.25 kV
2	1.0 kV	0.50 kV
3	2.0 kV	1.00 kV
4	4.0 kV	2.00 kV
X	Specified	Specified

Remark : “ X ” is an open level. The level is subject to negotiation between the user and the manufacturer or is specified by the manufacturer.

10.3. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
TRANSIENT	EMCPARTNER	TRA2000IN6	901	2013.03.10	2014.03.09
CDN	EMCPARTNER	CDN200-06-32	121	2013.03.10	2014.03.09
Coupling clamp	EMCPARTNER	CN-EFT1000	547	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-005	2013.03.10	2014.03.09



10.4. Test Result and Data

Basic Standard : IEC 61000-4-4
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : B
 Test Voltage : On Power Supply -- ±1.0 kV
 : On I/O signal, data and control line -- ±0.5 kV
 Temperature : 21 °C
 Relative Humidity : 51 %
 Atmospheric Pressure : 100 kPa
 Test Date : Dec 19, 2012

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Pulse : 5/50 ns		Repetition Rate: <u>5 kHz</u> above 2.0 kV			
Burst : 15m/300ms		<u>5 kHz</u> below and equal 2.0 kV			
Test time : 1 min/each condition					
Voltage/ Mode/ Polarity/ Result/ Phase		<u>0.5 kV</u>		<u>1.0 kV</u>	
		+	-	+	-
Power Line	L	---	---	A	A
	N	---	---	A	A
	L-N	---	---	A	A
	PE	---	---	A	A
	L-PE	---	---	A	A
	N-PE	---	---	A	A
	L-N-PE	---	---	A	A




Second edition:

Basic Standard : IEC 61000-4-4
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : B
 Test Voltage : On Power Supply -- ±1.0 kV
 : On I/O signal, data and control line -- ±0.5 kV
 Temperature : 21°C
 Relative Humidity : 51 %
 Atmospheric Pressure : 100 kPa
 Test Date : Oct 29, 2013

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Pulse : 5/50 ns		Repetition Rate: <u>5 kHz</u> above 2.0 kV			
Burst : 15m/300ms		<u>5 kHz</u> below and equal 2.0 kV			
Test time : 1 min/each condition					
Voltage/ Mode/ Polarity/ Result/ Phase		<u>0.5 kV</u>		<u>1.0 kV</u>	
		+	-	+	-
Power Line	L	---	---	A	A
	N	---	---	A	A
	L-N	---	---	A	A
	PE	---	---	A	A
	L-PE	---	---	A	A
	N-PE	---	---	A	A
	L-N-PE	---	---	A	A

Test engineer: 



10.5. Test Photographs



Second edition





11. Surge Immunity Test

11.1. Test Procedure

a. Climatic conditions

The climatic conditions shall comply with the following requirements :

- ✧ ambient temperature : 15 °C to 35 °C
- ✧ relative humidity : 10 % to 75 %
- ✧ atmospheric pressure : 86 kPa to 106 kPa (860 hPa to 1060 hPa)

b. Electromagnetic conditions

the electromagnetic environment of the laboratory shall not influence the test results.

c. The test shall be performed according the test plan that shall specify the test set-up with

- ✧ generator and other equipment utilized;
- ✧ test level (voltage/current);
- ✧ generator source impedance;
- ✧ internal or external generator trigger;
- ✧ number of tests : at least five positive and five negative at the selected points;
- ✧ repetition rate : maximum 1/min.
- ✧ inputs and outputs to be tested;
- ✧ representative operating conditions of the EUT;
- ✧ sequence of application of the surge to the circuit;
- ✧ phase angle in the case of AC. power supply;
- ✧ actual installation conditions, for example :

AC : neutral earthed,

DC : (+) or (-) earthed to simulated the actual earthing conditions.

- d. If not otherwise specified the surges have to be applied synchronized to the voltage phase at the zero-crossing and the peak value of the AC. voltage wave (positive and negative).
- e. The surges have to be applied line to line and line(s) and earth. When testing line to earth, the test voltage has to be applied successively between each of the lines and earth, if there is no other specification.
- f. The test procedure shall also consider the non-linear current-voltage characteristics of the equipment under test. Therefore the test voltage has to be increased by steps up to the test level specified in the product standard or test plan.
- g. All lower levels including the selected test level shall be satisfied. For testing the secondary protection, the output voltage of the generator shall be increased up to the worst-case voltage breakdown level (let-through level) of the primary protection.
- h. If the actual operating signal sources are not available, that may be simulated. Under no circumstances may the test level exceed the product specification. The test shall be carried out according to a test plan.
- i. To find all critical points of the duty cycle of the equipment, a sufficient number of positive and negative test pulses shall be applied. For acceptance test previously unstressed equipment shall be used to the protection devices shall be replaced.

**11.2. Test Severity Level**

Level	Open-circuit test voltage, $\pm 10\%$, kV
1	0.5
2	1.0
3	2.0
4	4.0
X	Specified

NOTE: "X" is an open class. This level can be specified in the product specification.

11.3. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
TRANSIENT	EMCPARTNER	TRA2000IN6	901	2013.03.10	2014.03.09
CDN	EMCPARTNER	CDN-UTP8	021	2013.03.10	2014.03.09
CDN	EMCPARTNER	CDN200-06-32	121	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-005	2013.03.10	2014.03.09



11.4. Test Result and Data

Basic Standard : IEC 61000-4-5
Final Test Result : PASS
Model No. : 240LM00010
Pass performance criteria : B
Test Voltage : Input AC Power Port -- ±0.5/1.0 kV for Line to Line
±0.5/1.0/2.0 kV for Line to Ground
Temperature : 21 °C
Relative Humidity : 51 %
Atmospheric Pressure : 100 kPa
Test Date : Dec 19, 2012

Power Port

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Waveform : 1.2/50µs(8/20µs) Repetition rate : 60 sec Time : 20 time/each condition						
/Phase Voltage / Mode / Polarity / Result			0°	90°	180°	270°
<u>0.5/1.0 kV</u>	L-N	+	A	A	A	A
		-	A	A	A	A
<u>0.5/1.0/2.0kV</u>	L-PE	+	A	A	A	A
		-	A	A	A	A
	N-PE	+	A	A	A	A
		-	A	A	A	A




Second edition:

- Basic Standard : IEC 61000-4-5
- Final Test Result : PASS
- Model No. : 240LM00010
- Pass performance criteria : B
- Test Voltage : Input AC Power Port -- ±0.5/1.0 kV for Line to Line
±0.5/1.0/2.0 kV for Line to Ground
- Temperature : 21°C
- Relative Humidity : 51 %
- Atmospheric Pressure : 100 kPa
- Test Date : Oct 29, 2013

Power Port

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Waveform : 1.2/50µs(8/20µs) Repetition rate : 60 sec Time : 20 time/each condition						
/Phase Voltage / Mode / Polarity / Result			0°	90°	180°	270°
<u>0.5/1.0 kV</u>	L-N	+	A	A	A	A
		-	A	A	A	A
<u>0.5/1.0/2.0kV</u>	L-PE	+	A	A	A	A
		-	A	A	A	A
	N-PE	+	A	A	A	A
		-	A	A	A	A

Test engineer 



11.5. Test Photographs



Second edition





12. Conduction Disturbances induced by Radio-Frequency Fields

12.1. Test Procedure

- a. The EUT shall be operated within its intended climatic conditions. The temperature and relative humidity should be recorded.
- b. This test method test can be performed without using a sell shielded enclosure. This is because the disturbance levels applied and the geometry of the setups are not likely to radiated a high amount of energy, especially at the lower frequencies. If under certain circumstances the radiated energy is too high, a shielded enclosure has to be used.
- c. The test shall be performed with the test generator connected to each of the coupling and decoupling devices in turn while the other non-excited RF-input ports of the coupling devices are terminated by a 50 ohm load resistor.
- d. The frequency range is swept from 150 KHz to 80 MHz, using the signal levels established during the setting process, and with the disturbance signal 80% amplitude modulated with a 1KHz sign wave, pausing to adjust the RF-signal level or to switch coupling devices as necessary. The rate of sweep shall no exceed 1.5×10^{-3} decades/s. Where the frequency is swept incrementally, the step size shall no exceed 1% of the start and thereafter 1% of the preceding frequency value.
- e. The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies e.g. clock frequency (ies) and harmonics or frequencies of dominant interest shall be analyzed separately.
- f. An alternative test procedure may be adopted, wherein the frequency range is swept incrementally, with a step size not exceeding 4% of the start ad thereafter 4% of the preceding frequency value. The test level should be at least twice the value of the specified test level.
- g. In cases of dispute, the test procedure using a step size not exceeding 1% of the start and thereafter 1% of preceding frequency value shall take precedence.
- h. Attempts should be made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility.
- i. The use of special exercising programs is recommended.
- j. Testing shall be performed according to a Test Plan, which shall be included in the test report.
- k. It may be necessary to carry out some investigatory testing in order to establish some aspects of the test plan.



12.2. Test Severity Levels

Level	Voltage Level (EMF),
1	1 V
2	3 V
3	10 V
x	Specified
NOTE - x is an open class. This level can be specified in the product specification.	

12.3. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
Conducted immunity test system	FRANKONIA	CIT-10/75	102D1294	2013.03.10	2014.03.09
EM Injection clamp	FCC	F-203I-23MM	536	2013.03.10	2014.03.09
CDN	FRANKONIA	CDN-T2	A3010029	2013.03.10	2014.03.09
CDN	FRANKONIA	CDN-T4	A3015017	2013.03.10	2014.03.09
CDN	FRANKONIA	CDN-T8	A3022010	2013.03.10	2014.03.09
CDN	FRANKONIA	CDN-M2	A3002037	2013.03.10	2014.03.09
CDN	FRANKONIA	CDN-M2+M3	A3011102	2013.03.10	2014.03.09
CDN	FCC	CDN-M5/32	A3013024	2013.03.10	2014.03.09
6 dB Attenuator	FRANKONIA	N/A	N/A	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-005	2013.03.10	2014.03.09



12.4. Test Result and Data

Basic Standard : IEC 61000-4-6
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : A
 Coupling mode : CDN-(M2+M3) for AC power ports
 : CDN-T4 for signal ports
 : EM-Clamp for signal ports
 Temperature : 21 °C
 Relative Humidity : 51 %
 Atmospheric Pressure : 100 kPa
 Test Date : Dec 19, 2012

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Frequency : 0.15~80MHz, Modulation : AM 80%,1KHz sine wave, Dwell time: 2.9s			
Frequency Step Size : 1 % of preceding frequency value			
Frequency	Test mode	Voltage(V)	Result
0.15 ~ 80MHz	Power(M3)	3	A



Second edition:

Basic Standard : IEC 61000-4-6
Final Test Result : PASS
Model No. : 240LM00010
Pass performance criteria : A
Coupling mode : CDN-(M2+M3) for AC power ports
 : CDN-T4 for signal ports
 : EM-Clamp for signal ports
Temperature : 21 °C
Relative Humidity : 51 %
Atmospheric Pressure : 100 kPa
Test Date : Oct 29, 2013

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Frequency : 0.15~80MHz, Modulation : AM 80%,1KHz sine wave, Dwell time: 2.9s			
Frequency Step Size : 1 % of preceding frequency value			
Frequency	Test mode	Voltage(V)	Result
0.15 ~ 80MHz	Power(M3)	3	A

Test engineer: Seben



12.5. Test Photographs



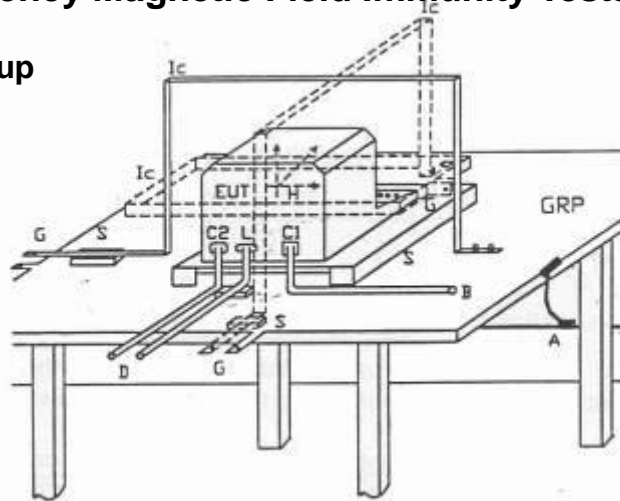
Second edition





13. Power Frequency Magnetic Field Immunity Tests

13.1. Test Setup



GPR	: Ground plane	C1	: Power supply circuit
A	: Safety earth	C2	: Signal circuit
S	: Insulating support	L	: Communication line
EUT	: Equipment under test	B	: To power supply source
Lc	: Induction coil	D	: To signal source, simulator
E	: Earth terminal	G	: To the test generator

13.2. Test Severity Levels

Level	Magnetic field strength A/m
1	1
2	3
3	10
4	30
5	100
X ¹⁾	special

NOTE 1 "X" is an open level. This level can be given in the product specification.

13.3. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
TRANSIENT	EMCPARTNER	TRA2000IN6	901	2013.03.10	2014.03.09
H-Filed-Loop	EMCPARTNER	MF1000-1	144	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-005	2013.03.10	2014.03.09



13.4. Test Result and Data

Basic Standard : IEC 61000-4-8
Final Test Result : PASS
Model No. : 240LM00010
Pass performance criteria : A
Temperature : 21 °C
Relative Humidity : 51 %
Atmospheric Pressure : 100 kPa
Test Date : Dec 19, 2012

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Power Frequency Magnetic Field : <u>50</u> Hz, <u>1</u> A/m		
Coil Orientation	Testing duration	Results
X-axis	1.0 Min	A
Y-axis	1.0 Min	A
Z-axis	1.0 Min	A



Second edition:

Basic Standard : IEC 61000-4-8
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance criteria : A
 Temperature : 21 °C
 Relative Humidity : 51 %
 Atmospheric Pressure : 100 kPa
 Test Date : Oct 29, 2013

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13

Power Frequency Magnetic Field : 50 Hz, 1 A/m		
Coil Orientation	Testing duration	Results
X-axis	1.0 Min	A
Y-axis	1.0 Min	A
Z-axis	1.0 Min	A

Test engineer: _____



13.5. Test Photographs



Second edition





14. Voltage Dips and Voltage Interruptions Immunity Test Setup

14.1. Test Conditions

1. Source voltage and frequency : 230V / 50Hz, Single phase.
2. Test of interval : 10 sec.
3. Level and duration : Sequence of 3 dips/interrupts.
4. Voltage rise (and fall) time : 1 ~ 5 μ s.
5. Test severity :

Voltage dips and Interrupt reduction (%)	Test Duration (period)
>95%	250
30%	25
>95%	0.5

14.2. Measurement equipment

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
TRANSIENT	EMCPARTNER	TRA2000IN6	901	2013.03.10	2014.03.09
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-005	2013.03.10	2014.03.09



14.3. Test Result and Data

Basic Standard : IEC 61000-4-11
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance Criteria : C for voltage interruption, B for voltage dips
 Temperature : 21 °C
 Relative Humidity : 51 %
 Atmospheric Pressure : 100 kPa
 Test Date : Dec 19, 2012

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13										
Voltage(UT): AC 230 V 50 Hz Interval(s) : 10s Times : 3										
Test mod	Test level UT %	Durations (period / ms)	Phase / Result							
			0	45	90	135	180	225	270	315
Voltage interruptions	>95%	250	C	C	C	C	C	C	C	C
Voltage dips	30%	25	A	A	A	A	A	A	A	A
	>95%	0.5	A	A	A	A	A	A	A	A



Second edition:

Basic Standard : IEC 61000-4-11
 Final Test Result : PASS
 Model No. : 240LM00010
 Pass performance Criteria : C for voltage interruption, B for voltage dips
 Temperature : 21 °C
 Relative Humidity : 51 %
 Atmospheric Pressure : 100 kPa
 Test Date : Oct 29, 2013

Test Mode: Mode 1&Mode 5&Mode 9&Mode 13										
Voltage(UT): AC 230 V 50 Hz Interval(s) : 10s Times : 3										
Test mod	Test level UT %	Durations (period / ms)	Phase / Result							
			0	45	90	135	180	225	270	315
Voltage interruptions	>95%	250	C	C	C	C	C	C	C	C
Voltage dips	30%	25	A	A	A	A	A	A	A	A
	>95%	0.5	A	A	A	A	A	A	A	A

Test engineer: Seben



14.4. Test Photographs



Second edition





15. Photographs of EUT

1) EUT Photo



2) EUT Photo





3) EUT Photo



4) EUT Photo

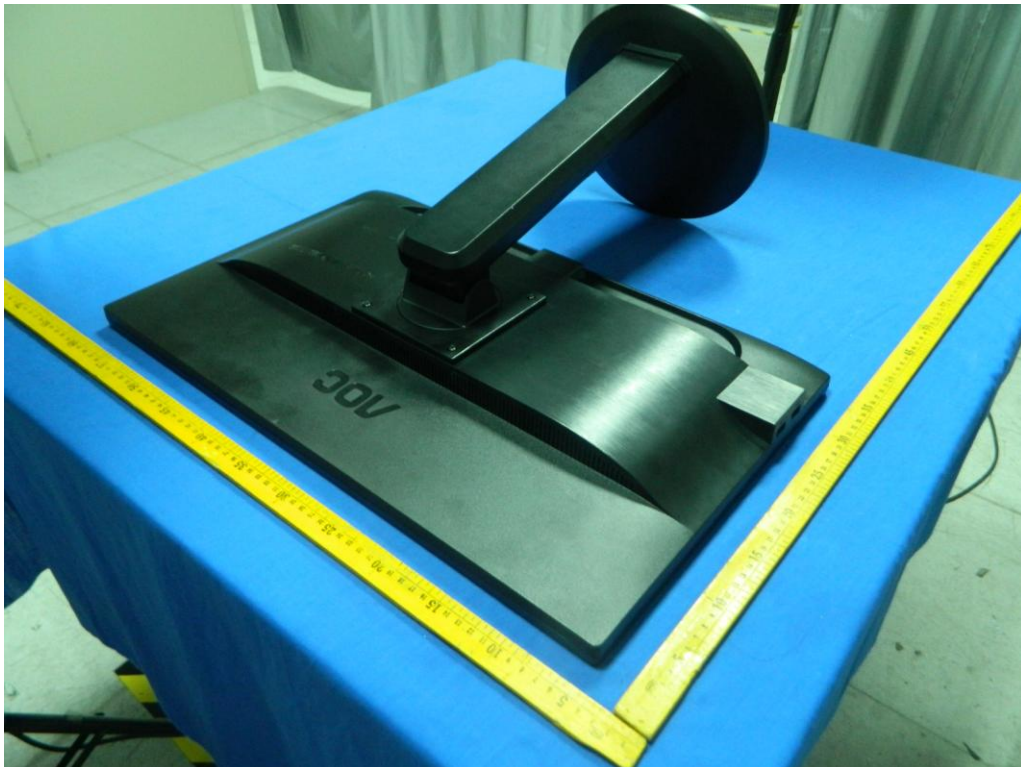




5) EUT Photo

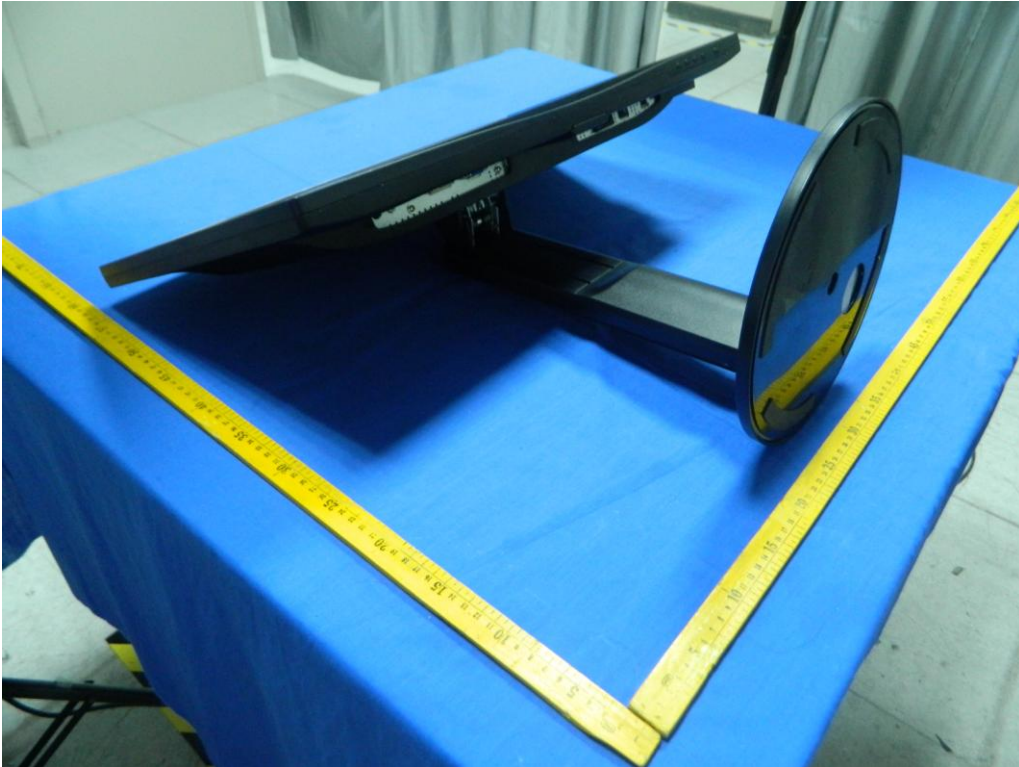


6) EUT Photo(second edition)





7) EUT Photo (second edition)



8) EUT Photo (second edition)





9) EUT Photo (second edition)

