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# Technical Compliance Statement

No. ACS-E14294

The following products have been tested by us with the listed standards and found in compliance with the council EMC directive 2004/108/EC. It is demonstrative for the compliance with this EMC Directive.

**Submitter** : TPV Display Technology (China) Co., Ltd  
No. 106 Jinghai 3 Rd., BDA, Beijing City 100176 P.R. China

**Product** : LCD Monitor

Brand Name	Model No.
AOC	236LM00014; M2470SWD; 236LM000**; *2470*****

### Test Standards :

EN 55022: 2010+AC:2011 (Class B) AS/NZS CISPR 22: 2009+A1:2010	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	
EN61000-3-2:2006+A1:2009+A2:2009	Electromagnetic compatibility(EMC) Part 3 :Limits Section 2 : Limits for harmonic current emissions (equipment input current $\leq$ 16A per phase)	
EN 61000-3-3:2013	Electromagnetic compatibility(EMC) Part 3 :Limits Section 3 : Limits of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current $\leq$ 16A	
EN 55024: 2010	Information technology equipment-Immunity characteristics limits and methods of measurement	
	IEC 61000-4-2: 2008	Electrostatic discharge
	IEC 61000-4-3: 2010	RF Field Strength susceptibility
	IEC 61000-4-4: 2012	Electrical Fast transients
	IEC 61000-4-5: 2005	Surge
	IEC 61000-4-6: 2013	Conducted Susceptibility
	IEC 61000-4-8: 2009	Magnetic field immunity
	IEC 61000-4-11: 2004	Dips / Voltage Interruption Variation



Audix Technology (Shenzhen) Co., Ltd.  
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Signature: David Jin

David Jin  
Manager

Date : Jun.26, 2014



The statement is based on a single evaluation of one sample of above mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

## EMC TEST REPORT

for

TPV Display Technology (China) Co., Ltd

LCD Monitor

Brand Name	Model No.
AOC	236LM00014; M2470SWD; 236LM000**; *2470*****

Prepared for : TPV Display Technology (China) Co., Ltd  
No. 106 Jinghai 3 Rd., BDA, Beijing City 100176 P.R.  
China

Prepared By : Audix Technology (Shenzhen) Co., Ltd.  
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Report Number : ACS-E14294  
Date of Test : Jun.16 ~ 19, 2014  
Date of Report : Jun.26, 2014

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## TEST REPORT VERIFICATION

Applicant : TPV Display Technology (China) Co., Ltd

EUT Description : LCD Monitor

(A) Model No. & Brand Name	Brand Name	Model No.
	AOC	236LM00014; M2470SWD; 236LM000**; *2470*****

(B) Power Supply : AC 100V-240V, 50/60Hz

(C) Test Voltage : AC 230V/50Hz

**Measurement Standard Used:**

AS/NZS CISPR 22: 2009+A1:2010, EN 55022: 2010+AC: 2011 (Class B)  
 EN 61000-3-2: 2006+A1:2009+A2:2009, EN 61000-3-3:2013  
 EN 55024: 2010  
 (IEC 61000-4-2:2008, IEC 61000-4-3: 2010, IEC 61000-4-4:2012,  
 IEC 61000-4-5: 2005, IEC 61000-4-6:2013, IEC 61000-4-8:2009, IEC 61000-4-11:2004)

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the EN 55022, EN 61000-3-2, EN 61000-3-3 and EN 55024 requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test : Jun.16 ~ 19, 2014 Report of date: Jun.26, 2014

Prepared by : April Tseng Reviewed by : Jack Zhong  
 April Tseng / Assistant Jack Zhong / Assistant Manager

信華科技(深圳)有限公司  
 Audix Technology (Shenzhen) Co., Ltd.  
 EMC 部門報告專用章

Stamp only for EMC Dept. Report

Signature: David Jin 6.26

Approved & Authorized Signer : David Jin  
 David Jin / Manager

## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

<b>EMISSION</b>				
<b>Description of Test Item</b>	<b>Standard</b>	<b>Results</b>	<b>Remark</b>	
Conducted disturbance at mains terminals	EN 55022:2010+AC:2011	PASS	Meets Class B Minimum passing margin is 9.24dB at 0.206MHz	
Conducted disturbance at telecommunication port	EN 55022:2010+AC:2011	N/A	N/A	
Radiated disturbance (30-1000MHz)	EN 55022:2010+AC:2011	PASS	Meets Class B Minimum passing margin is 4.07dB at 212.360MHz	
Radiated disturbance (1-6GHz)	EN 55022:2010+AC:2011	PASS	Meets Class B Minimum passing margin is 6.56dB at 1791.357MHz	
Harmonic current emissions	EN 61000-3-2:2006+A1:2009+A2:2009	PASS	Meets the Class D requirement	
Voltage fluctuations & flicker	EN 61000-3-3:2013	PASS	Meets the requirement	
<b>IMMUNITY (EN 55024:2010)</b>				
<b>Description of Test Item</b>	<b>Basic Standard</b>	<b>Results</b>	<b>Performance Criteria</b>	<b>Observation Criteria</b>
Electrostatic discharge (ESD)	IEC 61000-4-2:2008	PASS	B	A & B
Radio-frequency, Continuous radiated disturbance	IEC 61000-4-3: 2010	PASS	A	A
Electrical fast transient (EFT)	IEC 61000-4-4: 2012	PASS	B	A & B
Surge (Input a.c. power port)	IEC 61000-4-5:2005	PASS	B	A & B
Surge(Telecommunication port)		N/A	N/A	N/A
Radio-frequency, Continuous conducted disturbance	IEC 61000-4-6:2013	PASS	A	A
Power frequency magnetic field	IEC 61000-4-8:2009	PASS	A	A
Voltage dips, >95% reduction	IEC 61000-4-11:2004	PASS	B	A
Voltage dips, 30% reduction		PASS	C	A
Voltage interruptions		PASS	C	B
N/A is an abbreviation for Not Applicable.				

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

Description : LCD Monitor

Model Number & Brand Name :

Brand Name	Model No.
AOC	236LM00014; M2470SWD; 236LM000**; *2470*****

The “\*” could be any alphanumeric character including blank for marketing differentiation.

Test Model : 236LM00014

Applicant : TPV Display Technology (China) Co., Ltd  
No. 106 Jinghai 3 Rd., BDA, Beijing City 100176 P.R. China

Max Resolution : 1920\*1080@60Hz

Max Work Frequency : 165MHz

Power Cord : Unshielded, Detachable, 1.8m/1.5m/1.2m(3 pins)

DVI Cable : Shielded, Detachable, 1.8m/1.5m/1.2m (Bonded two ferrite cores)

VGA Cable : Shielded, Detachable, 1.8m/1.5m/1.2m (Bonded two ferrite cores)

Audio Cable : Shielded, Detachable, 1.8m/1.5m/1.2m

Date of Test : Jun.16 ~ 19, 2014

Date of Receipt : Jun.14, 2014

Sample Type : Prototype production

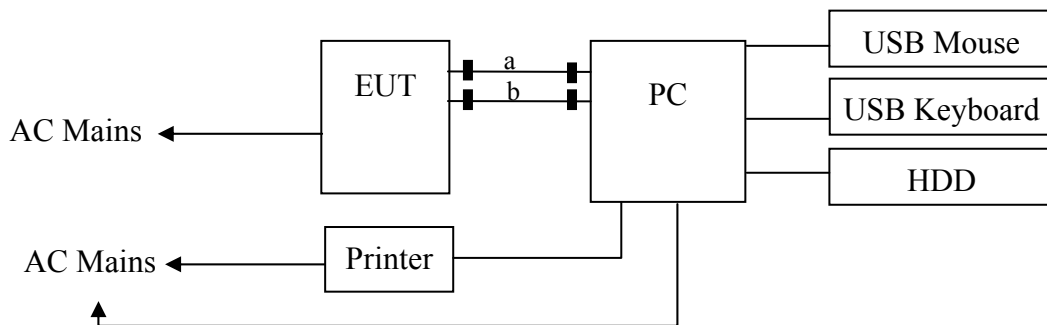


### 2.2. Tested Supporting System Details

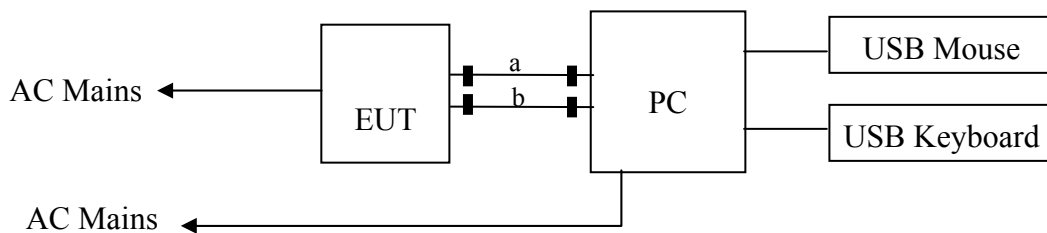
No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Personal Computer	Test PC S	DELL	Vostro 470	2SP05W1	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID:R33002
		Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)				
2.	USB Keyboard	ACS-EMC- K03R	DELL	SK-8115	CN-ODJ313-7161 6-711-04WJ	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: T3A002
		Power Cord: shielded, Undetachable, 2.0m				
3.	USB Mouse	ACS-EMC-M03R	DELL	M056UO	512023253	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R41108
		Power Cord: shielded, Undetachable, 1.8m				
4.	Printer	ACS-EMC-PT04	HP	C9079A	N/A	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R33001
		USB Cable: Shielded, Detachable, 1.8m Power Cord: Unshielded, Detachable, 1.8m Power Adapter: HP, M/N: 0957-2119, BSMI ID: R33030 DC Cable: Unshielded, Detachable, 1.5m				
5.	HDD	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-53900 18	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: 4912A022
		USB Cable: shielded, Detachable, 1.0m				

### 2.3. Block Diagram of connection between EUT and simulators

#### For EMI Tests



#### For EMS Tests



a : VGA Cable  
 b : DVI Cable  
 ■ : Core

(EUT: LCD Monitor)

## 2.4. Test Facility

### Site Description

- Name of Firm : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China
- 3m Anechoic Chamber : Certificated by FCC, USA  
Registration Number: 90454  
Valid Date: Feb.22, 2015
- 3m & 10m Anechoic Chamber : Certificated by FCC, USA  
Registration Number: 794232  
Valid Date: Oct.31, 2015
- EMC Lab. : Certificated by DAkkS, Germany  
Registration No: D-PL-12151-01-00  
Valid Date: Dec.15, 2016
- Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2015

## 2.5. Measurement Uncertainty

(95% confidence levels, k=2)

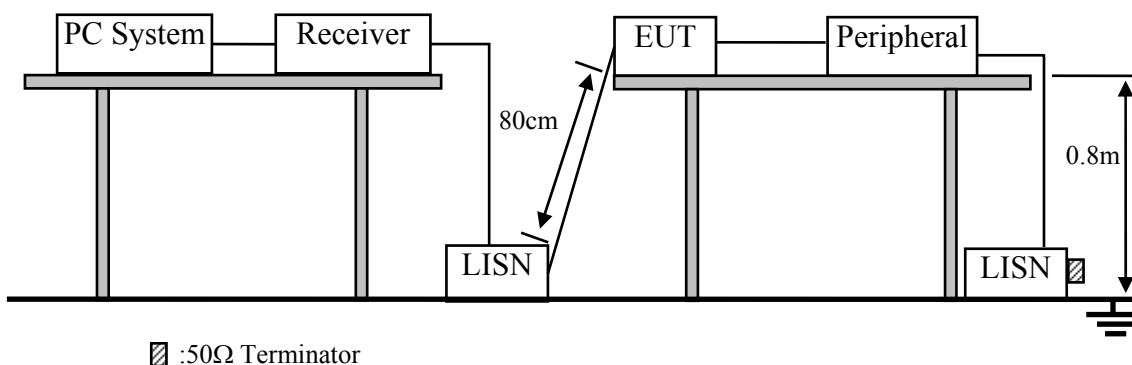
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 2 Conduction	3.08dB
Uncertainty for Radiation Emission test in 10m chamber (Distance: 10m)	3.45dB (30~200MHz, Polarize: H)
	3.47dB (30~200MHz, Polarize: V)
	3.62dB (200M~1GHz, Polarize: H)
	3.52dB (200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in 10m chamber (1GHz-18GHz)	4.89dB (Distance: 3m)
	4.66dB (Distance: 3m)
Uncertainty for Flicker test	5.18%
Uncertainty for Harmonic test	9.4%
Uncertainty for C/S Test	1.36dB (Using CDN test)
	3.20dB (Using EM clamp test)
Uncertainty for R/S Test	1.73dB (80MHz~200MHz)
	1.76dB(200MHz~1000MHz)
Uncertainty for test site temperature and humidity	0.6°C
	3%
Pressure	1kPa

### 3. CONDUCTED DISTURBANCE AT MAINS TERMINALS TEST

#### 3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100843	Nov.08, 13	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ENV4200	100041	Apr. 28,14	1 Year
3.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1628-5	Apr. 28,14	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	Apr. 28,14	1 Year
5.	Terminator	Hubersuhner	50Ω	No. 2	Apr. 28,14	1 Year
6.	RF Cable	Fujikura	3D-2W	No.2	Apr. 28,14	1 Year
7.	Coaxial Switch	Anritsu	MP59B	6201397223	May. 16,14	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100340	Apr. 28,14	1 Year

#### 3.2. Block Diagram of Test Setup



#### 3.3. Test Standard

EN55022: 2010+AC: 2011, Class B

#### 3.4. Power Line Conducted Emission at Mains Terminals Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

#### 3.5. EUT Configuration on Test

The following equipments are installed on Conducted Emission Test to meet EN 55022 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

##### 3.5.1. LCD Monitor (EUT)

Model Number : 236LM00014

Serial Number : N/A

3.5.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2.

### 3.6. Operating Condition of EUT

- 3.6.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.6.2. Turned on the power of all equipment.
- 3.6.3. PC system ran the Self-test program “H-win” by windows XP and sent “H” Character to LCD Monitor (EUT) through DVI / VGA card, the Screen of EUT displayed and filled with “H” pattern.
- 3.6.4. The other peripheral devices were driven and operated in turn during all testing.

### 3.7. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. #1). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to EN 55022 Class B on conducted Disturbance test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test results are reported and test results for Conducted Disturbance Test on Section 3.8.

### 3.8. Conducted Disturbance at Mains Terminals Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test modes were tested and selected (No.3~6) to read Q.P values and Average values, all the test results are listed in next pages.

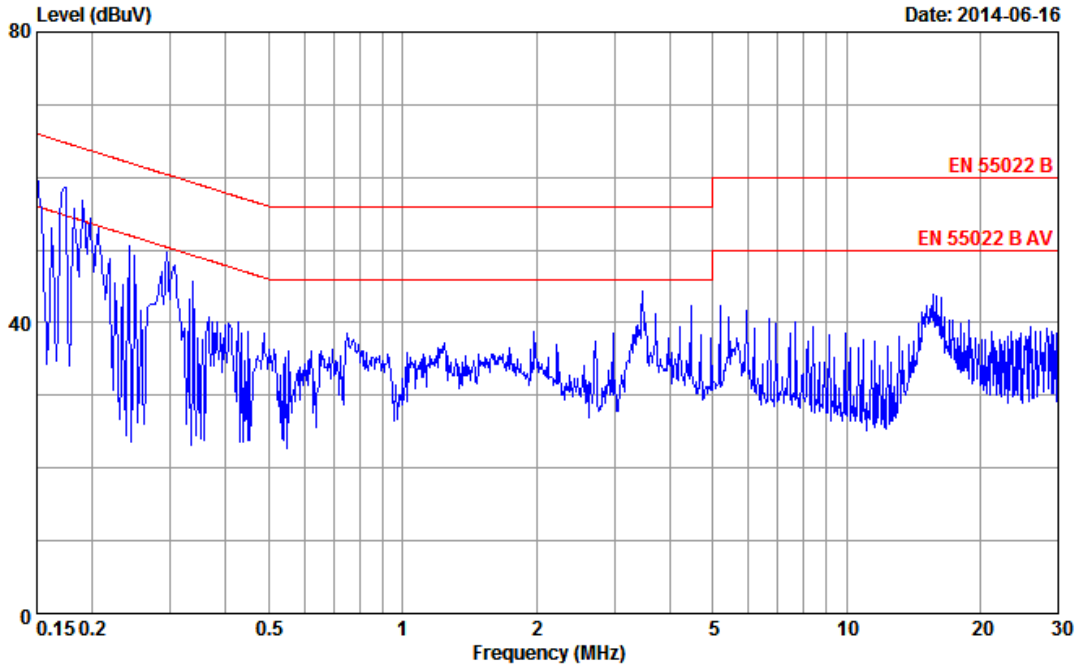
EUT: LCD Monitor Model No. : 236LM00014' Test Date: Jun.16, 2014

Temperature: 20.8°C Humidity: 44.9% Pressure: 101.6kPa

No.	Cable Length	Input Port	Resolution & Frequency	Reference Test Data No.	
				Line	Neutral
1.	1.8m	DVI	640*480/60Hz	#14	#13
2.			1280*1024/75Hz	#16	#15
<b>3.✘</b>			<b>1920*1080/60Hz</b>	<b>#18</b>	<b>#17</b>
4.		VGA	1920*1080/60Hz	#24	#23
5.	1.5m	DVI	1920*1080/60Hz	#20	#19
6.	1.2m	DVI	1920*1080/60Hz	#22	#21

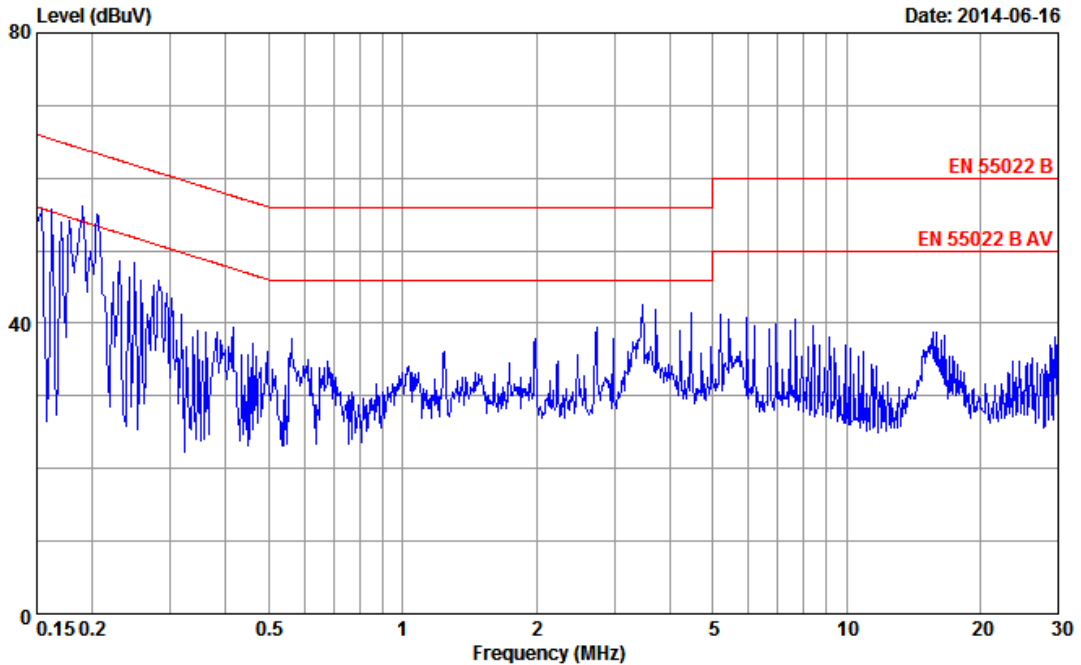
(✘ Worst test mode)

Data: 14 File: D:\2014 Report DATA CE\TTPVACS14Q1104.EM6 (28) Date: 2014-06-16



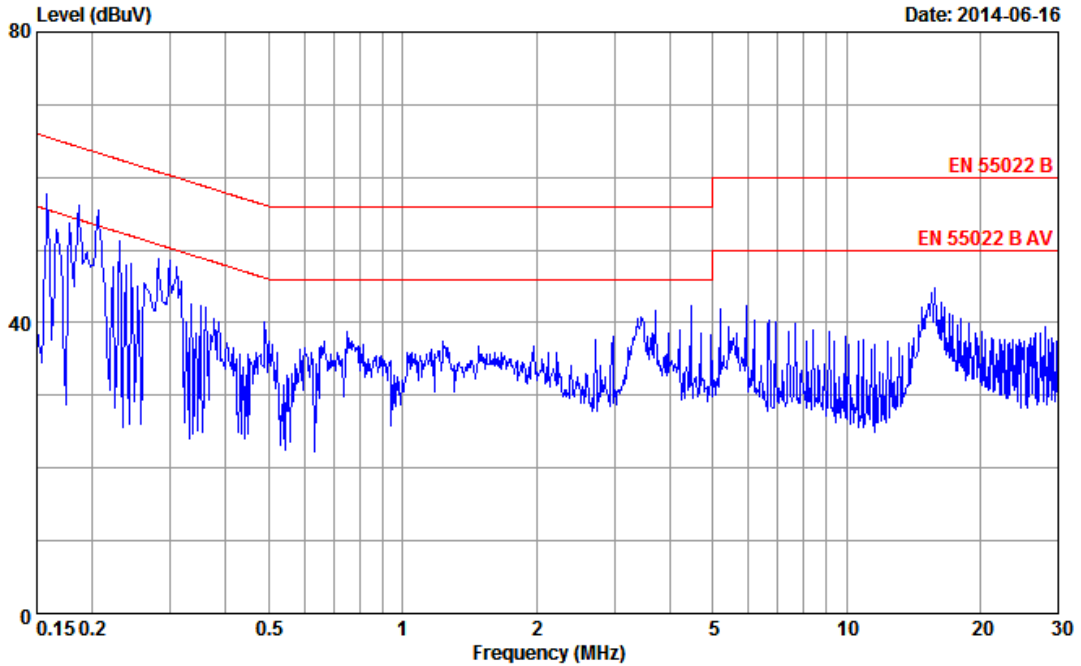
Site no	:2# Conduction	Data No	:14
Dis./Lisn	:14 ENV4200 L1	LISN phase	:LINE
Limit	:EN 55022 B	Pre	:101.6KPa
Env./Ins.	:20.8°C/44.9%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running"H"Pattern		
	DVI:640*480@60Hz		
	Line:1.8m		

Data: 13 File: D:\2014 Report DATA CE\TTPVACS14Q1104.EM6 (28) Date: 2014-06-16



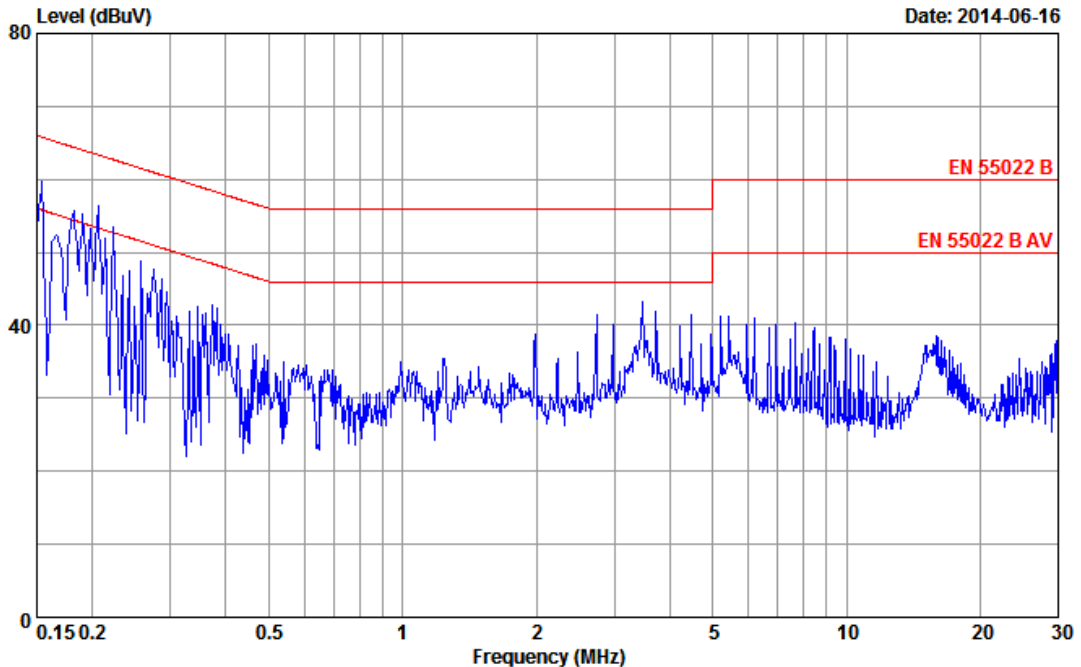
Site no	:2# Conduction	Data No	:13
Dis./Lisn	:14 ENV4200 N	LISN phase	:NEUTRAL
Limit	:EN 55022 B	Pre	:101.6KPa
Env./Ins.	:20.8°C/44.9%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running"H"Pattern		
	DVI:640*480@60Hz		
	Line:1.8m		

Data: 16 File: D:\2014 Report DATA CE\TTPVACS14Q1104.EM6 (28) Date: 2014-06-16

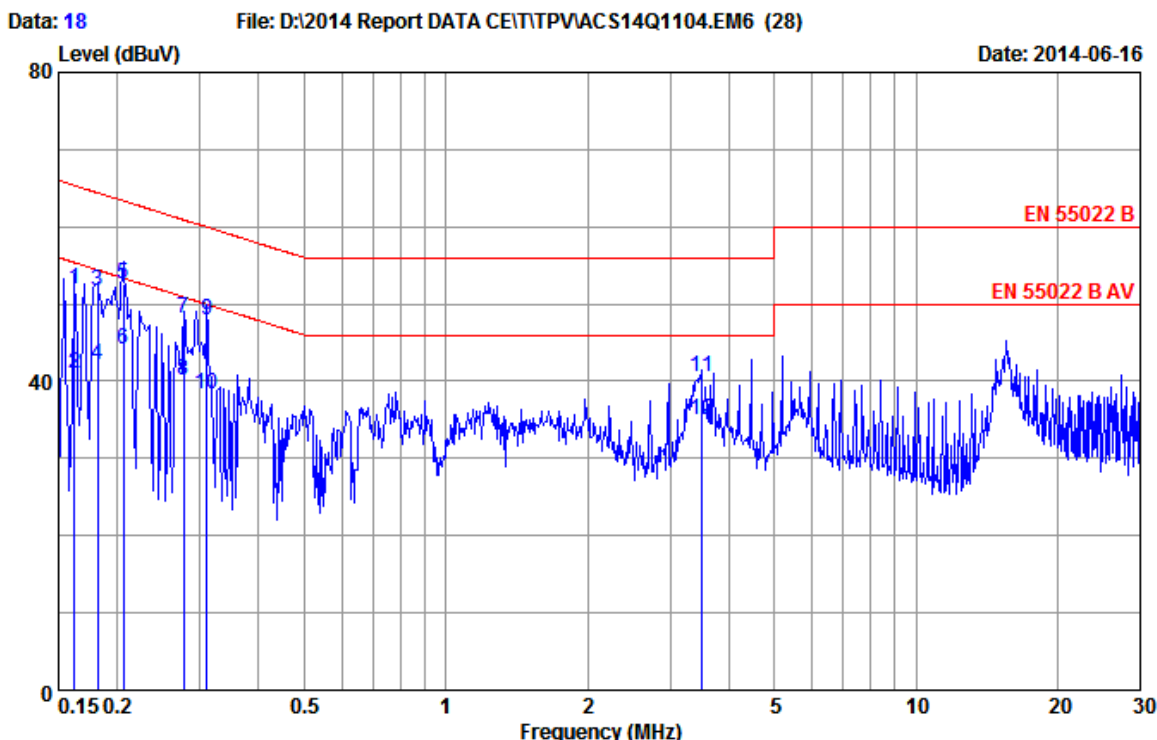


Site no	:2# Conduction	Data No	:16
Dis./Lisn	:14 ENV4200 L1	LISN phase	:LINE
Limit	:EN 55022 B	Pre	:101.6KPa
Env./Ins.	:20.8°C/44.9%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running"H"Pattern		
	DVI:1280*1024@75Hz		
	Line:1.8m		

Data: 15 File: D:\2014 Report DATA CE\TTPVACS14Q1104.EM6 (28) Date: 2014-06-16



Site no	:2# Conduction	Data No	:15
Dis./Lisn	:14 ENV4200 N	LISN phase	:NEUTRAL
Limit	:EN 55022 B	Pre	:101.6KPa
Env./Ins.	:20.8°C/44.9%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running"H"Pattern		
	DVI:1280*1024@75Hz		
	Line:1.8m		



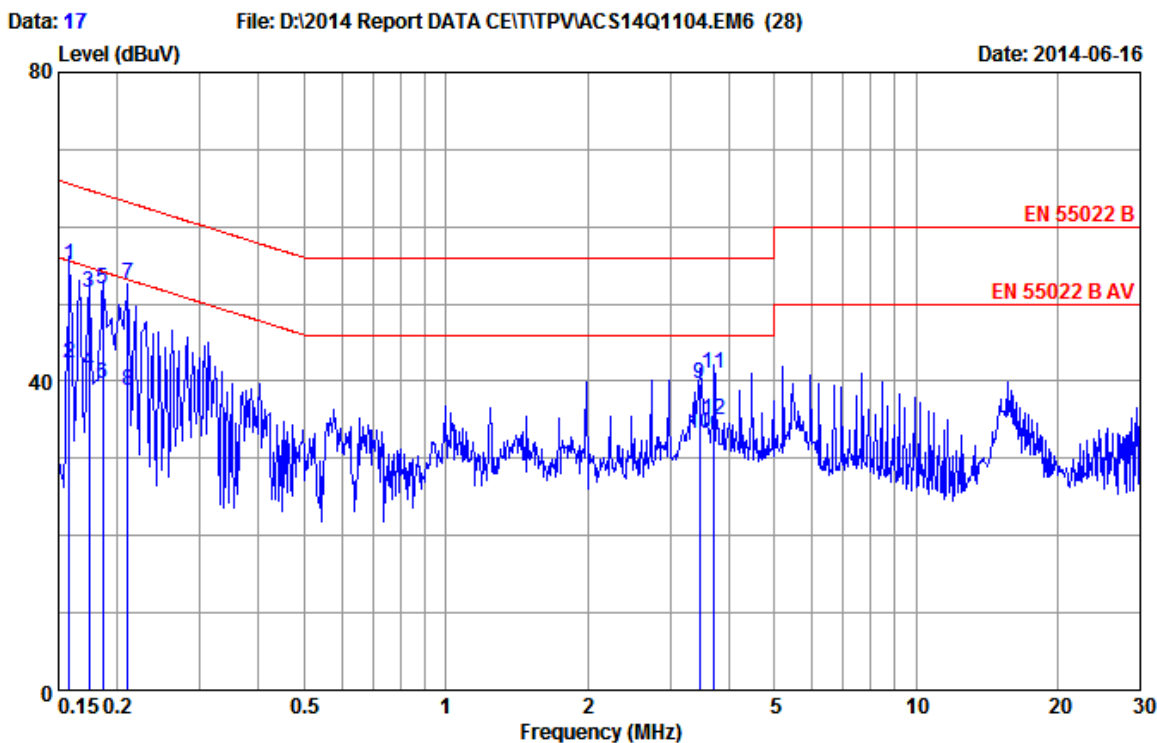
```

Site no      :2# Conduction           Data No     :18
Dis./Lisn   :14 ENV4200 L1          LISN phase:LINE
Limit       :EN 55022 B              Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%           Engineer   :Bery_Guo
EUT         :LCD Monitor             M/N:236LM00014
Power Rating:AC 230V/50Hz
Test Mode   :Running"H"Pattern
              DVI:1920*1080@60Hz
              Line:1.8m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	9.90	9.90	32.07	51.87	65.34	13.47	QP
2	0.162	9.90	9.90	21.10	40.90	55.34	14.44	Average
3	0.182	9.93	9.90	31.93	51.76	64.42	12.66	QP
4	0.182	9.93	9.90	22.30	42.13	54.42	12.29	Average
5	0.206	9.95	9.90	32.74	52.59	63.36	10.77	QP
6	0.206	10.07	9.90	24.15	44.12	53.36	9.24	Average
7	0.277	9.89	9.89	28.32	48.10	60.90	12.80	QP
8	0.277	9.89	9.89	20.33	40.11	50.90	10.79	Average
9	0.310	9.87	9.89	28.09	47.85	59.97	12.12	QP
10	0.310	9.87	9.89	18.50	38.26	49.97	11.71	Average
11	3.491	9.76	9.92	20.83	40.51	56.00	15.49	QP
12	3.491	9.76	9.92	15.20	34.88	46.00	11.12	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



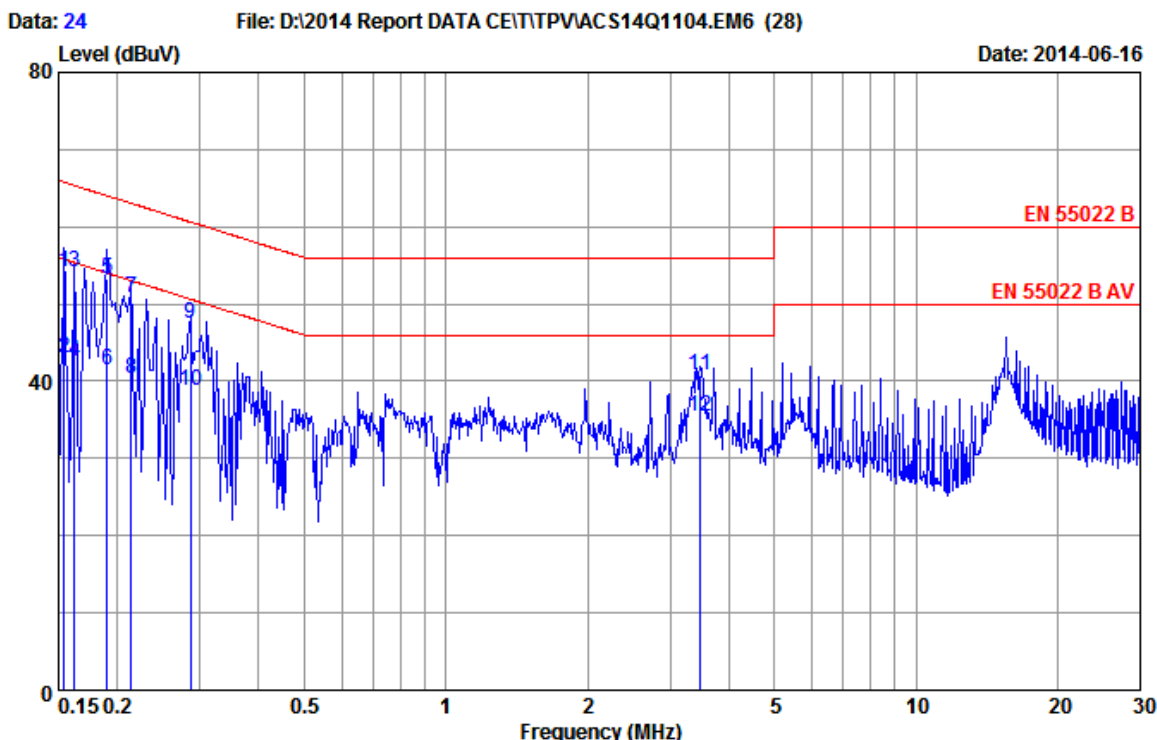


```

Site no      :2# Conduction           Data No     :17
Dis./Lisn   :14 ENV4200 N           LISN phase:NEUTRAL
Limit       :EN 55022 B             Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%          Engineer   :Bery_Guo
EUT         :LCD Monitor            M/N:236LM00014
Power Rating :AC 230V/50Hz
Test Mode   :Running"H"Pattern
              DVI:1920*1080@60Hz
              Line:1.8m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	9.92	9.90	35.32	55.14	65.56	10.42	QP
2	0.158	9.92	9.90	22.59	42.41	55.56	13.15	Average
3	0.174	9.91	9.90	31.58	51.39	64.77	13.38	QP
4	0.174	9.91	9.90	21.50	41.31	54.77	13.46	Average
5	0.186	9.90	9.90	32.19	51.99	64.20	12.21	QP
6	0.186	9.90	9.90	19.80	39.60	54.20	14.60	Average
7	0.211	9.90	9.90	32.72	52.52	63.18	10.66	QP
8	0.211	9.90	9.90	18.89	38.69	53.18	14.49	Average
9	3.472	9.75	9.92	19.96	39.63	56.00	16.37	QP
10	3.472	9.75	9.92	13.50	33.17	46.00	12.83	Average
11	3.720	9.75	9.92	21.38	41.05	56.00	14.95	QP
12	3.720	9.75	9.92	15.21	34.88	46.00	11.12	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

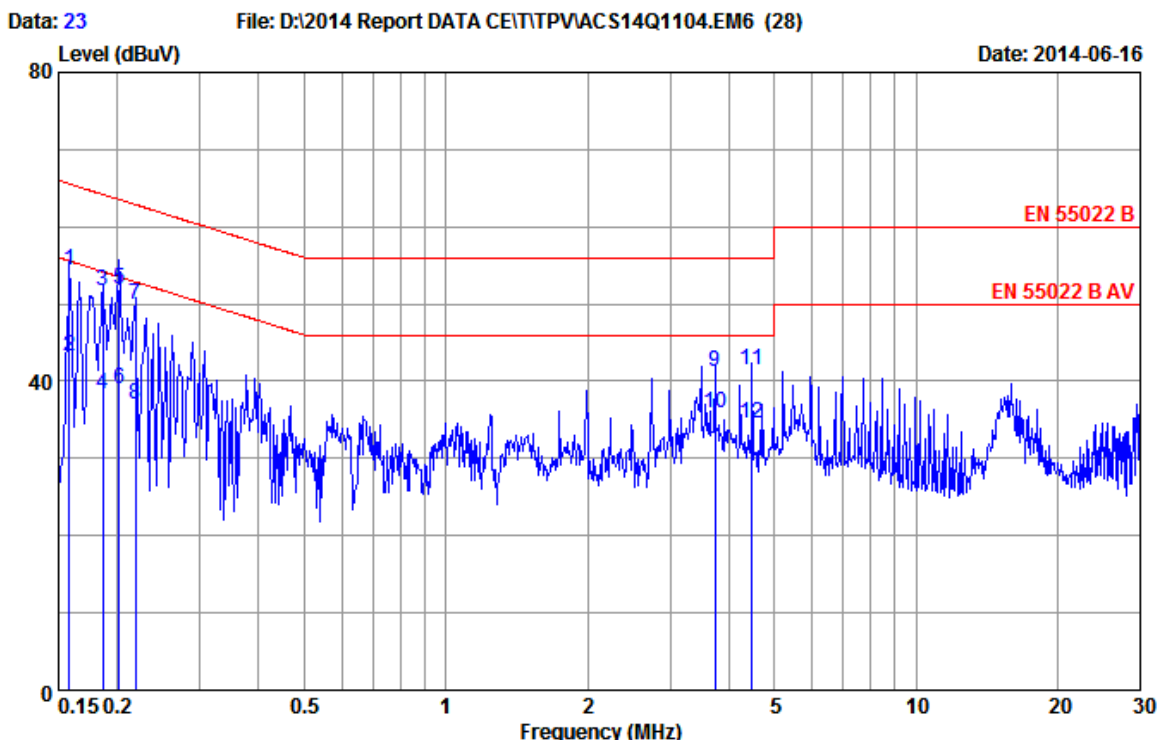


```

Site no      :2# Conduction           Data No     :24
Dis./Lisn   :14 ENV4200 L1          LISN phase:LINE
Limit       :EN 55022 B              Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%           Engineer   :Bery_Guo
EUT         :LCD Monitor             M/N:236LM00014
Power Rating:AC 230V/50Hz
Test Mode   :Running"H"Pattern
              VGA:1920*1080@60Hz
              Line:1.8m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.154	9.89	9.90	34.43	54.22	65.78	11.56	QP
2	0.154	9.89	9.90	23.19	42.98	55.78	12.80	Average
3	0.162	9.90	9.90	34.27	54.07	65.34	11.27	QP
4	0.162	9.90	9.90	22.80	42.60	55.34	12.74	Average
5	0.190	9.95	9.90	33.30	53.15	64.02	10.87	QP
6	0.190	9.95	9.90	21.49	41.34	54.02	12.68	Average
7	0.214	9.95	9.90	30.99	50.84	63.05	12.21	QP
8	0.214	9.95	9.90	20.59	40.44	53.05	12.61	Average
9	0.286	9.89	9.89	27.74	47.52	60.63	13.11	QP
10	0.286	9.89	9.89	19.10	38.88	50.63	11.75	Average
11	3.472	9.76	9.92	21.12	40.80	56.00	15.20	QP
12	3.472	9.76	9.92	15.80	35.48	46.00	10.52	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

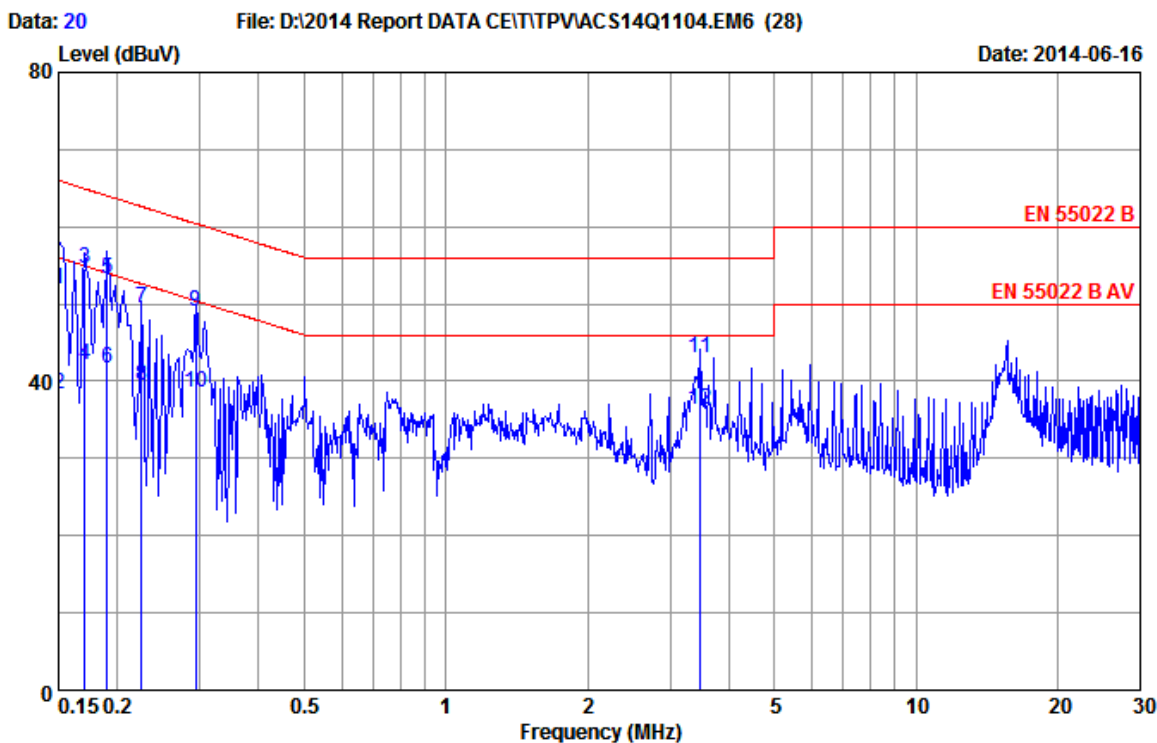


```

Site no      :2# Conduction           Data No     :23
Dis./Lisn   :14 ENV4200 N           LISN phase:NEUTRAL
Limit       :EN 55022 B             Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%          Engineer   :Bery_Guo
EUT         :LCD Monitor            M/N:236LM00014
Power Rating:AC 230V/50Hz
Test Mode   :Running"H"Pattern
              VGA:1920*1080@60Hz
              Line:1.8m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	9.92	9.90	34.65	54.47	65.56	11.09	QP
2	0.158	9.92	9.90	23.49	43.31	55.56	12.25	Average
3	0.186	9.90	9.90	31.85	51.65	64.20	12.55	QP
4	0.186	9.90	9.90	18.60	38.40	54.20	15.80	Average
5	0.202	9.90	9.90	32.20	52.00	63.53	11.53	QP
6	0.202	9.90	9.90	19.30	39.10	53.53	14.43	Average
7	0.219	9.90	9.90	30.11	49.91	62.88	12.97	QP
8	0.219	9.90	9.90	17.19	36.99	52.88	15.89	Average
9	3.740	9.75	9.92	21.50	41.17	56.00	14.83	QP
10	3.740	9.75	9.92	16.21	35.88	46.00	10.12	Average
11	4.478	9.76	9.93	21.66	41.35	56.00	14.65	QP
12	4.478	9.76	9.93	14.79	34.48	46.00	11.52	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

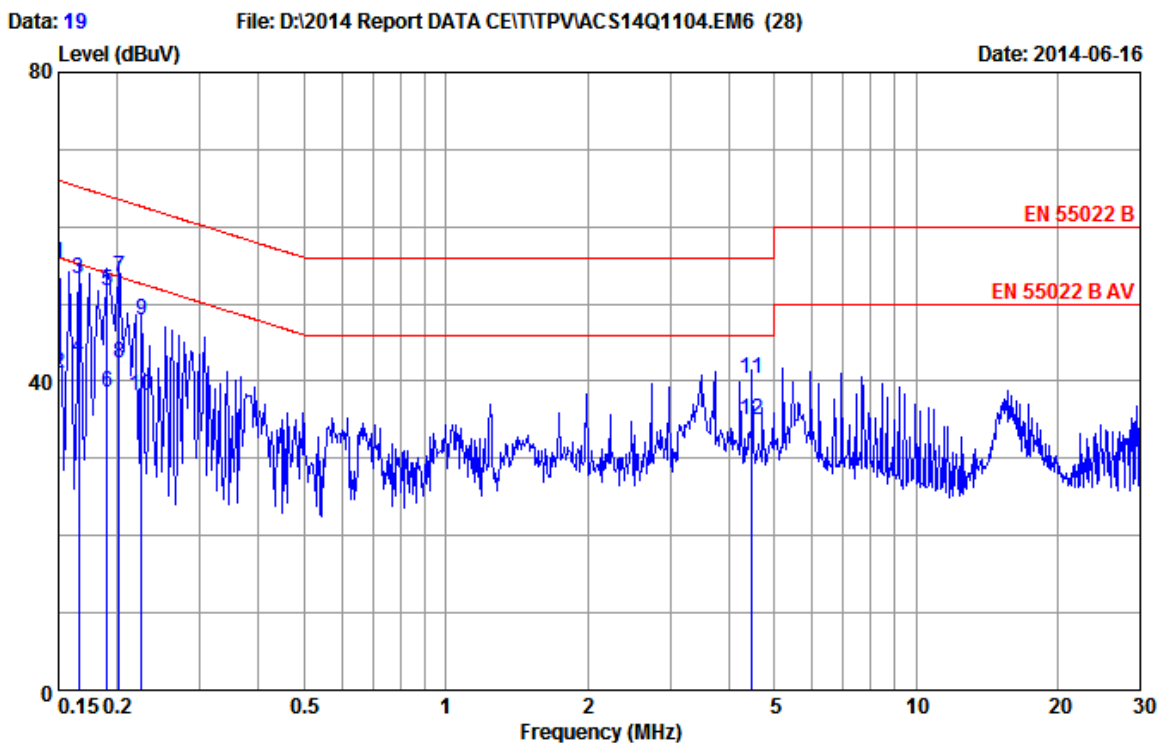


```

Site no      :2# Conduction           Data No     :20
Dis./Lisn   :14 ENV4200 L1          LISN phase:LINE
Limit       :EN 55022 B              Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%           Engineer   :Bery_Guo
EUT         :LCD Monitor             M/N:236LM00014
Power Rating :AC 230V/50Hz
Test Mode   :Running"H"Pattern
              DVI:1920*1080@60Hz
              Line:1.5m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	9.88	9.90	32.20	51.98	66.00	14.02	QP
2	0.150	9.88	9.90	18.60	38.38	56.00	17.62	Average
3	0.170	9.92	9.90	34.76	54.58	64.94	10.36	QP
4	0.170	9.92	9.90	22.19	42.01	54.94	12.93	Average
5	0.190	9.95	9.90	33.49	53.34	64.04	10.70	QP
6	0.190	9.95	9.90	21.79	41.64	54.04	12.40	Average
7	0.226	9.94	9.89	29.56	49.39	62.61	13.22	QP
8	0.226	9.94	9.89	19.60	39.43	52.61	13.18	Average
9	0.294	9.88	9.89	29.24	49.01	60.41	11.40	QP
10	0.294	9.88	9.89	18.80	38.57	50.41	11.84	Average
11	3.472	9.76	9.92	23.42	43.10	56.00	12.90	QP
12	3.472	9.76	9.92	16.60	36.28	46.00	9.72	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

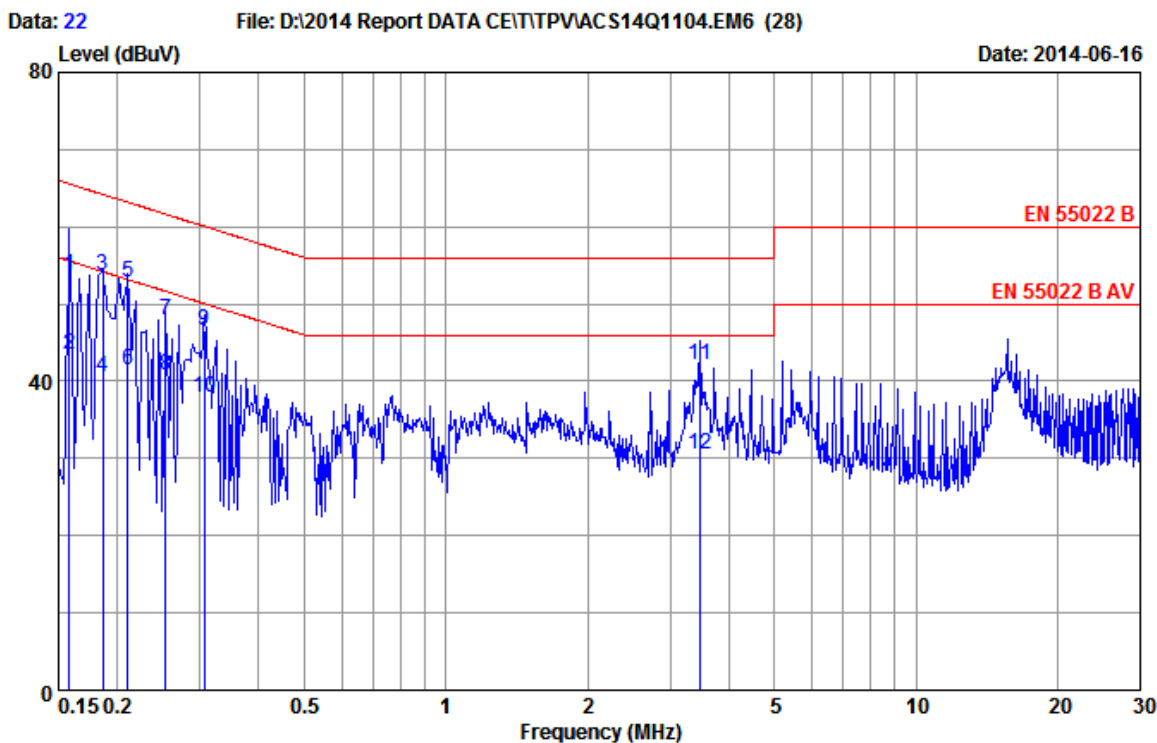


```

Site no      :2# Conduction           Data No     :19
Dis./Lisn   :14 ENV4200 N           LISN phase:NEUTRAL
Limit        :EN 55022 B            Pre         :101.6KPa
Env./Ins.   :20.8*C/44.9%          Engineer    :Bery_Guo
EUT          :LCD Monitor           M/N:236LM00014
Power Rating :AC 230V/50Hz
Test Mode    :Running"H"Pattern
              DVI:1920*1080@60Hz
              Line:1.5m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	9.92	9.90	35.35	55.17	66.00	10.83	QP
2	0.150	9.92	9.90	21.10	40.92	56.00	15.08	Average
3	0.166	9.91	9.90	33.39	53.20	65.16	11.96	QP
4	0.166	9.91	9.90	23.20	43.01	55.16	12.15	Average
5	0.190	9.90	9.90	31.80	51.60	64.02	12.42	QP
6	0.190	9.90	9.90	18.80	38.60	54.02	15.42	Average
7	0.202	9.90	9.90	33.60	53.40	63.54	10.14	QP
8	0.202	9.90	9.90	22.50	42.30	53.54	11.24	Average
9	0.226	9.90	9.89	28.05	47.84	62.61	14.77	QP
10	0.226	9.90	9.89	18.30	38.09	52.61	14.52	Average
11	4.478	9.76	9.93	20.73	40.42	56.00	15.58	QP
12	4.478	9.76	9.93	15.19	34.88	46.00	11.12	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

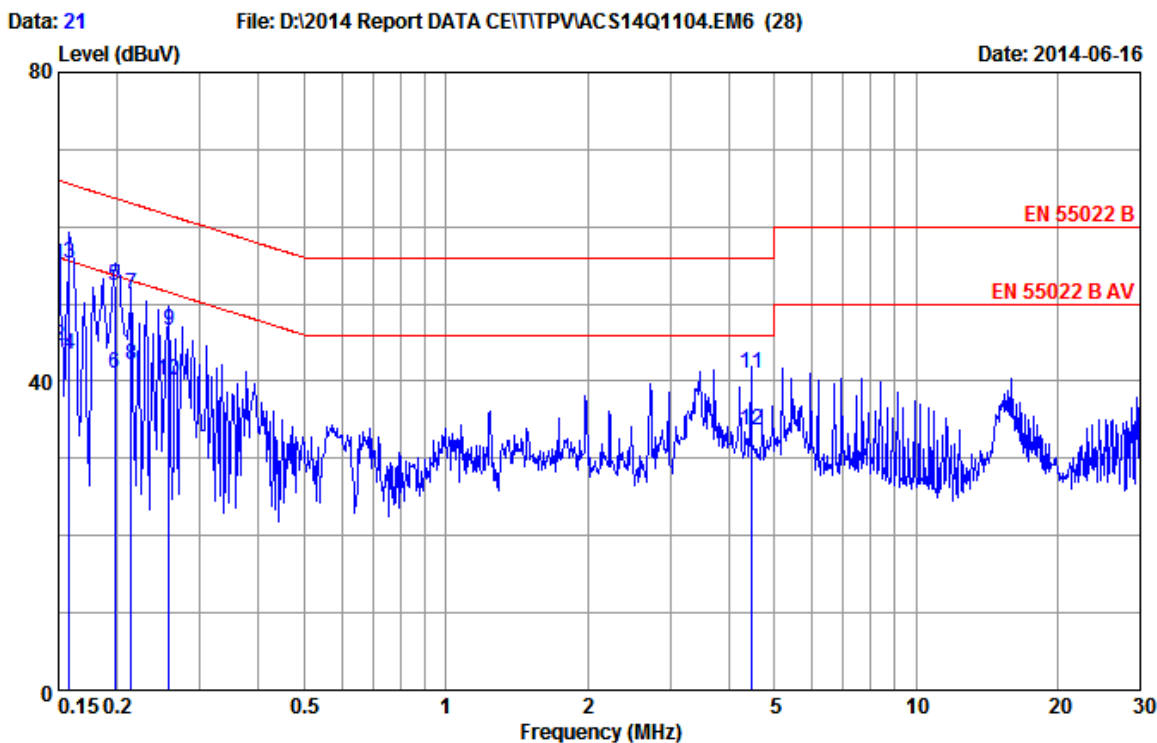


```

Site no      :2# Conduction           Data No     :22
Dis./Lisn   :14 ENV4200 L1          LISN phase:LINE
Limit       :EN 55022 B              Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%           Engineer   :Bery_Guo
EUT         :LCD Monitor             M/N:236LM00014
Power Rating:AC 230V/50Hz
Test Mode   :Running"H"Pattern
              DVI:1920*1080@60Hz
              Line:1.2m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	10.06	9.90	33.69	53.65	65.56	11.91	QP
2	0.158	10.06	9.90	23.39	43.35	55.56	12.21	Average
3	0.186	10.08	9.90	33.64	53.62	64.20	10.58	QP
4	0.186	10.08	9.90	20.47	40.45	54.20	13.75	Average
5	0.211	10.07	9.90	32.94	52.91	63.18	10.27	QP
6	0.211	10.07	9.90	21.53	41.50	53.18	11.68	Average
7	0.253	10.03	9.89	28.02	47.94	61.64	13.70	QP
8	0.253	10.03	9.89	20.80	40.72	51.64	10.92	Average
9	0.307	9.99	9.89	26.68	46.56	60.06	13.50	QP
10	0.307	9.99	9.89	18.11	37.99	50.06	12.07	Average
11	3.472	9.97	9.92	22.25	42.14	56.00	13.86	QP
12	3.472	9.97	9.92	10.57	30.46	46.00	15.54	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



```

Site no      :2# Conduction           Data No     :21
Dis./Lisn   :14 ENV4200 N           LISN phase:NEUTRAL
Limit       :EN 55022 B             Pre        :101.6KPa
Env./Ins.   :20.8*C/44.9%          Engineer   :Bery_Guo
EUT         :LCD Monitor            M/N:236LM00014
Power Rating:AC 230V/50Hz
Test Mode   :Running"H"Pattern
            DVI:1920*1080@60Hz
            Line:1.2m
    
```

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	10.11	9.90	35.11	55.12	66.00	10.88	QP
2	0.150	10.11	9.90	24.57	44.58	56.00	11.42	Average
3	0.158	10.10	9.90	35.17	55.17	65.56	10.39	QP
4	0.158	10.10	9.90	23.36	43.36	55.56	12.20	Average
5	0.198	10.05	9.90	32.33	52.28	63.71	11.43	QP
6	0.198	10.05	9.90	20.98	40.93	53.71	12.78	Average
7	0.214	10.04	9.90	31.28	51.22	63.05	11.83	QP
8	0.214	10.04	9.90	22.28	42.22	53.05	10.83	Average
9	0.258	10.02	9.89	26.71	46.62	61.51	14.89	QP
10	0.258	10.02	9.89	20.21	40.12	51.51	11.39	Average
11	4.454	10.06	9.93	21.00	40.99	56.00	15.01	QP
12	4.454	10.06	9.93	13.67	33.66	46.00	12.34	Average

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2.If the average limit is met when using a quasi-peak detector.  
 the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.

## 4. RADIATED DISTURBANCE MEASUREMENT

### 4.1. Test Equipments

#### 4.1.1. For frequency range 30MHz~1000MHz (In 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber	AUDIX	N/A	N/A	Nov.25,13	1 Year
2.	EMC Analyzer	Agilent	E7405A	MY42000131	Oct.31, 13	1 Year
3.	EMC Analyzer	Agilent	E7405A	MY45116588	Oct.31, 13	1 Year
4.	Test Receiver	Rohde & Schwarz	ESCI	100842	Apr. 28,14	1 Year
5.	Amplifier	Agilent	8447D	2944A10684	Apr. 28,14	1Year
6.	Amplifier	Agilent	8447D	2944A11140	Apr. 28,14	1 Year
7.	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-493	Apr. 08,14	1 Year
8.	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-429	Dec.03, 13	1 Year
9.	RF Cable	MIYAZAKI	CFD400-NL	10m Chamber No.1	Apr. 28,14	1 Year
10.	RF Cable	MIYAZAKI	CFD400-NL	10m Chamber No.2	Apr. 28,14	1 Year
11.	Coaxial Switch	Anritsu	MP59B	6201397220	May. 16,14	1 Year
12.	Coaxial Switch	Anritsu	MP59B	6201397221	May. 16,14	1 Year
13.	Coaxial Switch	Anritsu	MP59B	6201397222	May. 16,14	1 Year

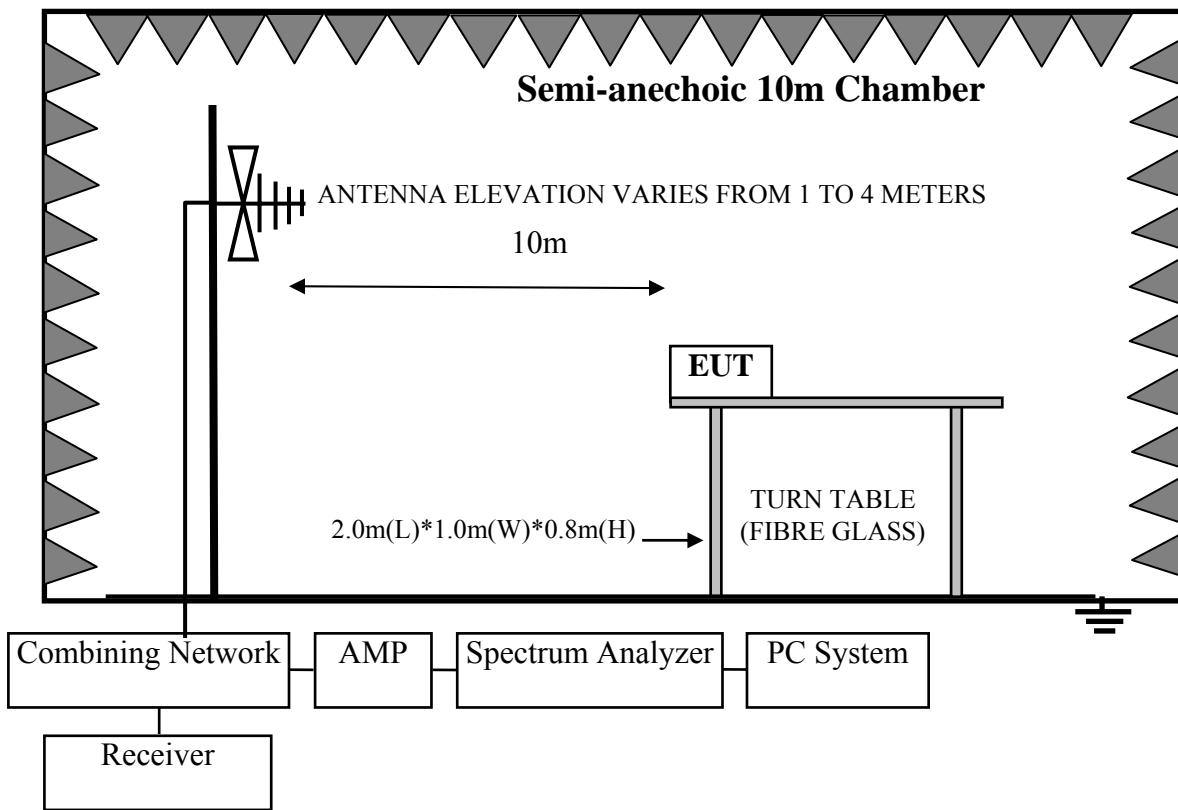
#### 4.1.2. For frequency range 1GHz~6GHz (In 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMC Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Aug.27, 13	1 Year
3.	Amplifier	Agilent	8449B	3008A00863	Apr. 28,14	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	Apr. 28,14	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX106	28616/2	Apr. 28,14	1 Year
6.	10m Chamber	AUDIX	N/A	N/A	Mar.31, 14	1 Year

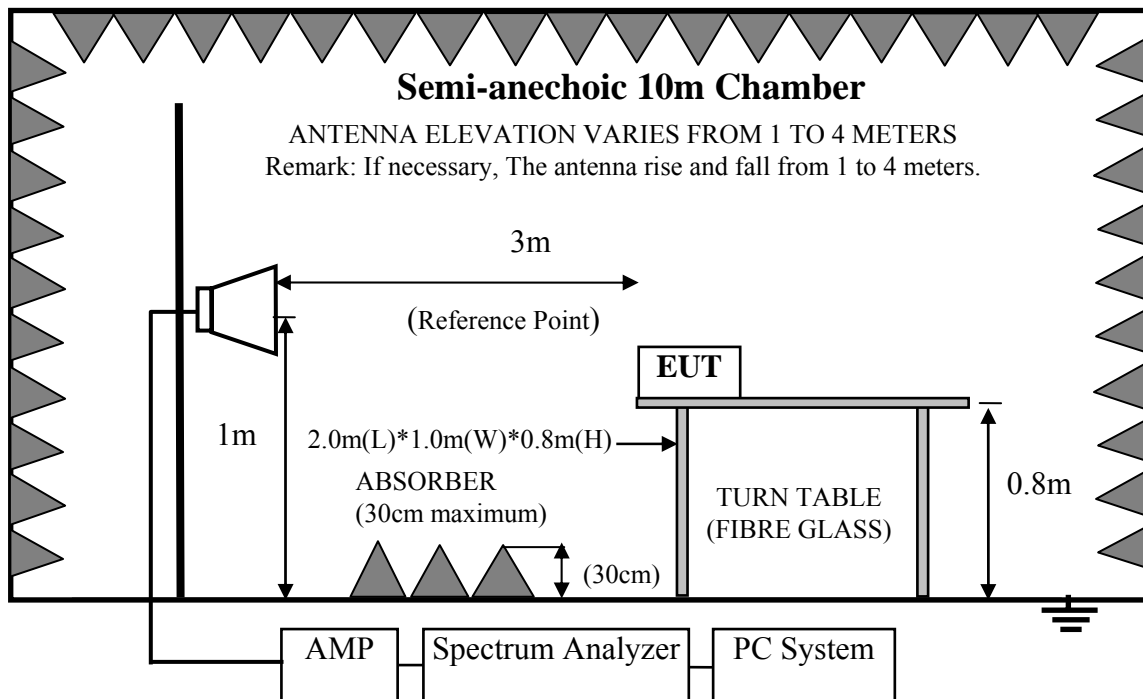


## 4.2. Block Diagram of Test Setup

### 4.2.1. In 10m Anechoic Chamber Test Setup Diagram for 30MHz~1000MHz



### 4.2.2. In 10m Anechoic Chamber Test Setup Diagram for 1-6GHz



### 4.3. Test Standard

EN55022: 2010+AC: 2011, Class B

### 4.4. Radiated Emission Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB $\mu$ V/m)
30 ~ 230	10	30
230 ~ 1000	10	37
1000~3000	3	70(Peak) 50(Average)
3000~6000	3	74(Peak) 54(Average)

- Note:
- (1) Emission level = Antenna Factor + Cable Loss + Reading  
Emission level = Antenna Factor - Amp Factor + Cable Loss + Reading (above 1000MHz)
  - (2) The lower limit shall apply at the transition frequencies.
  - (3) Distance refers to the distance in meters between the test instrument antenna and the closed point of any part of the E.U.T..

### 4.5. EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

### 4.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 4.2.

### 4.7. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m & 10m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all the interface cables were changed according to EN 55022 Class B on Radiated Disturbance test.

The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCI) is 120 kHz.

The resolution bandwidth of the EMC Analyzer N9030A was set at 1MHz. (For above 1GHz)

The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values.

The frequency range from 1GHz to 6GHz was checked and all final readings of measurement were with Peak and Average detector, measurement distance was 3m at semi-anechoic chamber. The portion of the test volume that was obstructed by absorber placed on the floor (30cm maximum).

Finally, selected operating situations at Anechoic Chamber measurement, all the test results are listed in section 4.8.

#### 4.8. Radiated Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

**EUT: LCD Monitor Model No. : 236LM00014**

##### For frequency range 30MHz~1GHz

The EUT with the following test modes were tested and selected (No.3 ~ 6) to read Q.P values, all the test results are listed in next pages.

Test Date: Jun.18, 2014 Temperature: 24.8°C

Humidity: 41.5% Pressure: 101.6kPa

No.	Cable Length	Input Port	Resolution & Frequency	Reference Test Data No.	
				Horizontal	Vertical
1.	1.8m	DVI	640*480/60Hz	#2	#1
2.			1280*1024/75Hz	#4	#3
<b>3.※</b>			<b>1920*1080/60Hz</b>	<b>#6</b>	<b>#5</b>
4.		VGA	1920*1080/60Hz	#12	#11
5.	1.5m	DVI	1920*1080/60Hz	#8	#7
6.	1.2m	DVI	1920*1080/60Hz	#10	#9

(※ Worst test mode)

##### For frequency range 1GHz~6GHz

The EUT with below test mode were measured within Anechoic Chamber and the test results listed in next pages

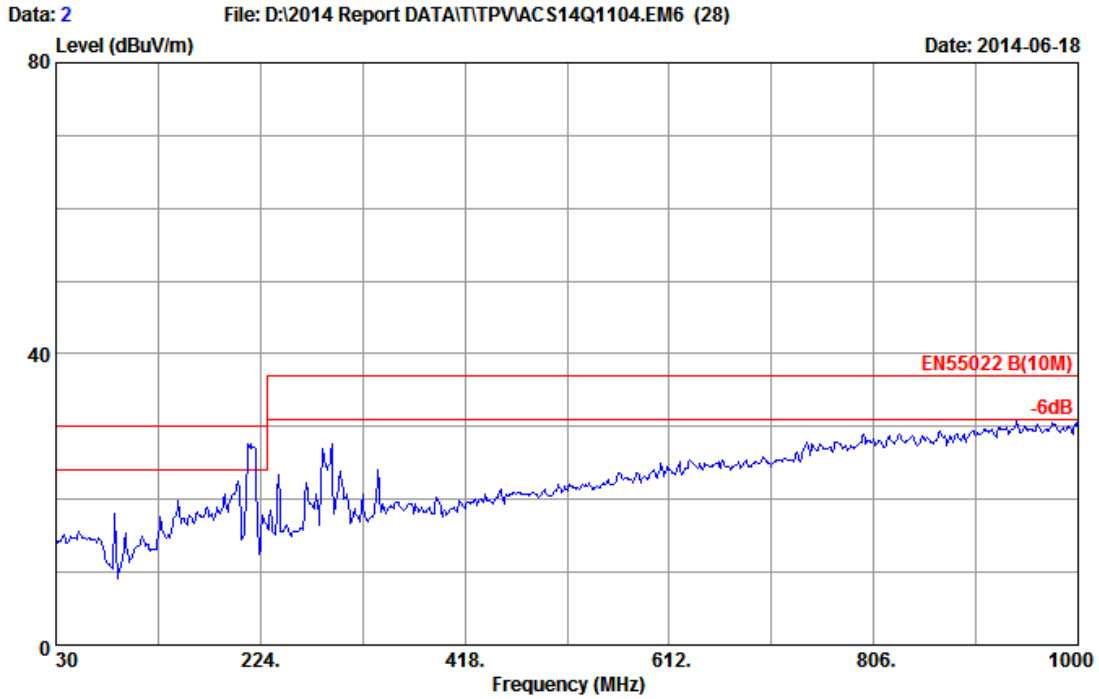
Test Date: Jun.17, 2014 Temperature: 26.0°C

Humidity: 41.5% Pressure: 101.7kPa

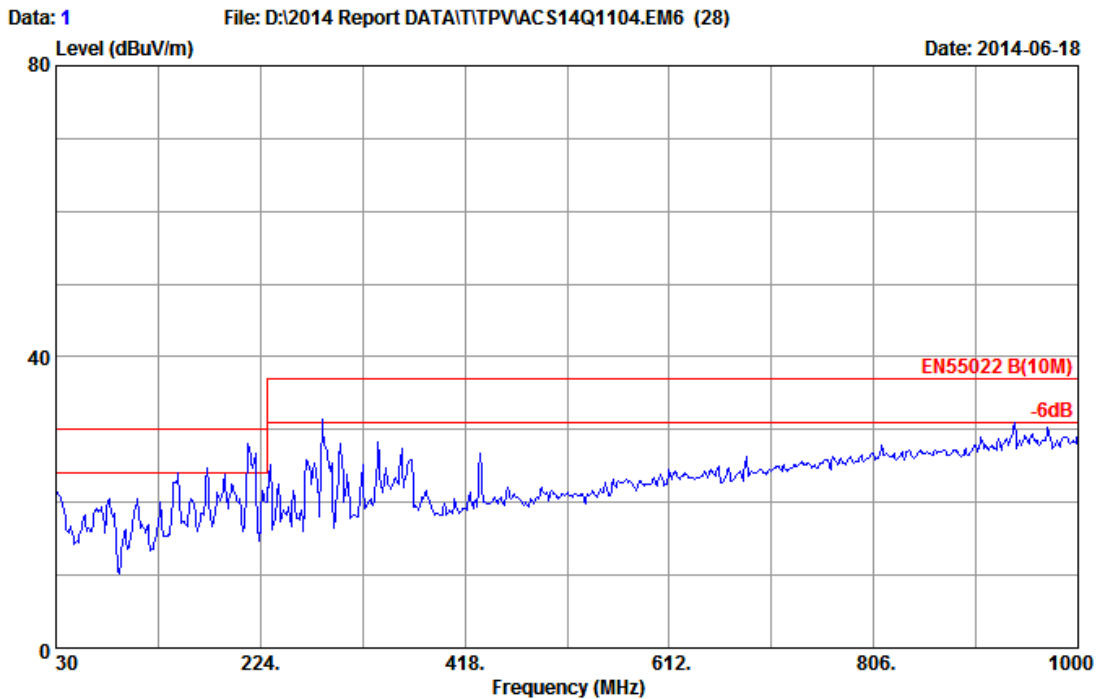
The EUT was pre-tested under following test modes, and test mode 1~3 was the worst cases for final test.

No.	Input Port	Resolution & Frequency	Reference Test Data No.	
			Horizontal	Vertical
1.	VGA	1280*1024/75Hz	#1	#2
<b>2. ※</b>		<b>1920*1080/60Hz</b>	<b>#3</b>	<b>#4</b>
3.	DVI	1920*1080/60Hz	#5	#6

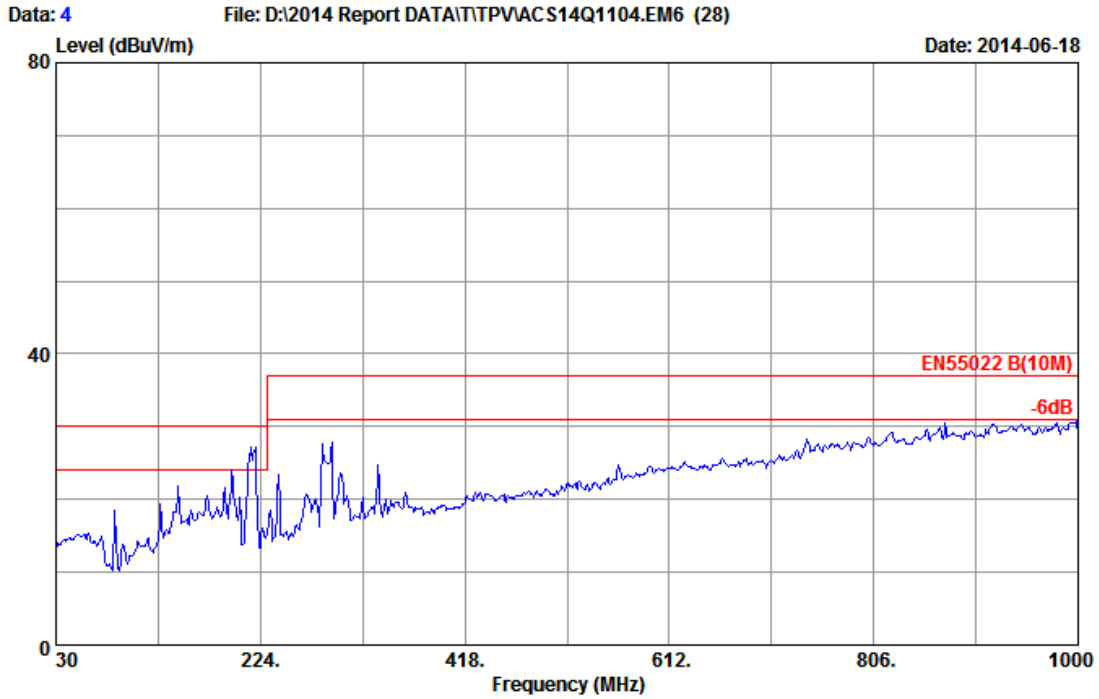
(※ Worst test mode)



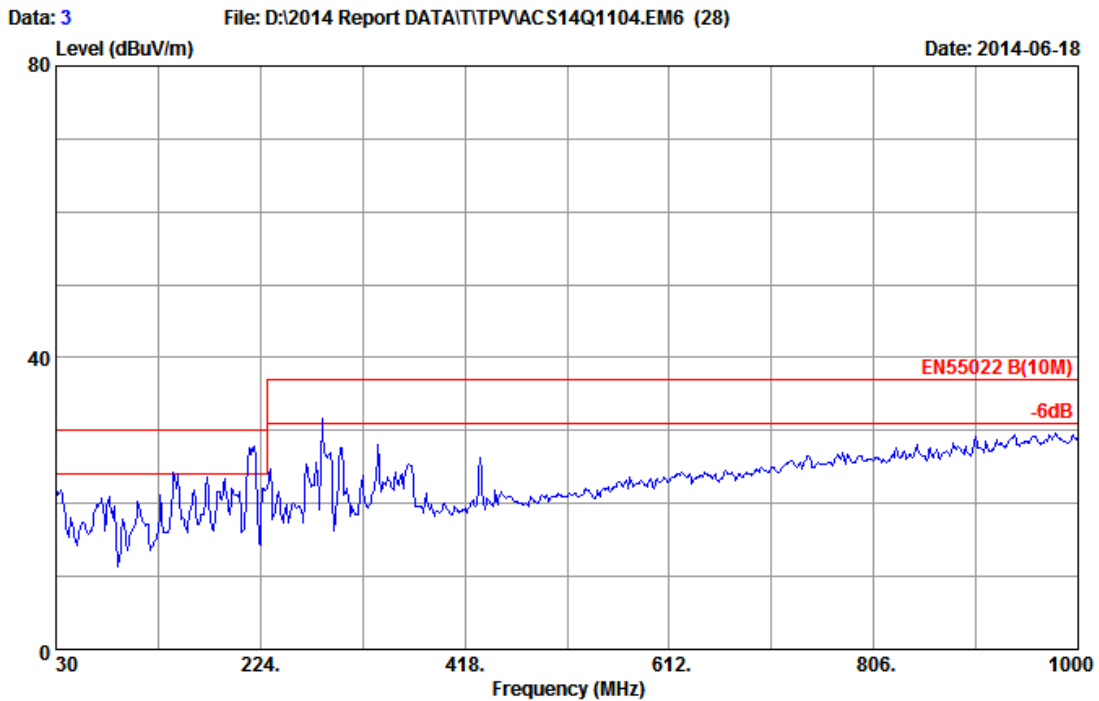
Site no	:10m Chamber	Data No	:2
Dis./Ant.	:10m 2013 9168-429	Ant.pol	:HORIZONTAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8°C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	DVI:640*480@60Hz		
	Line:1.8m		



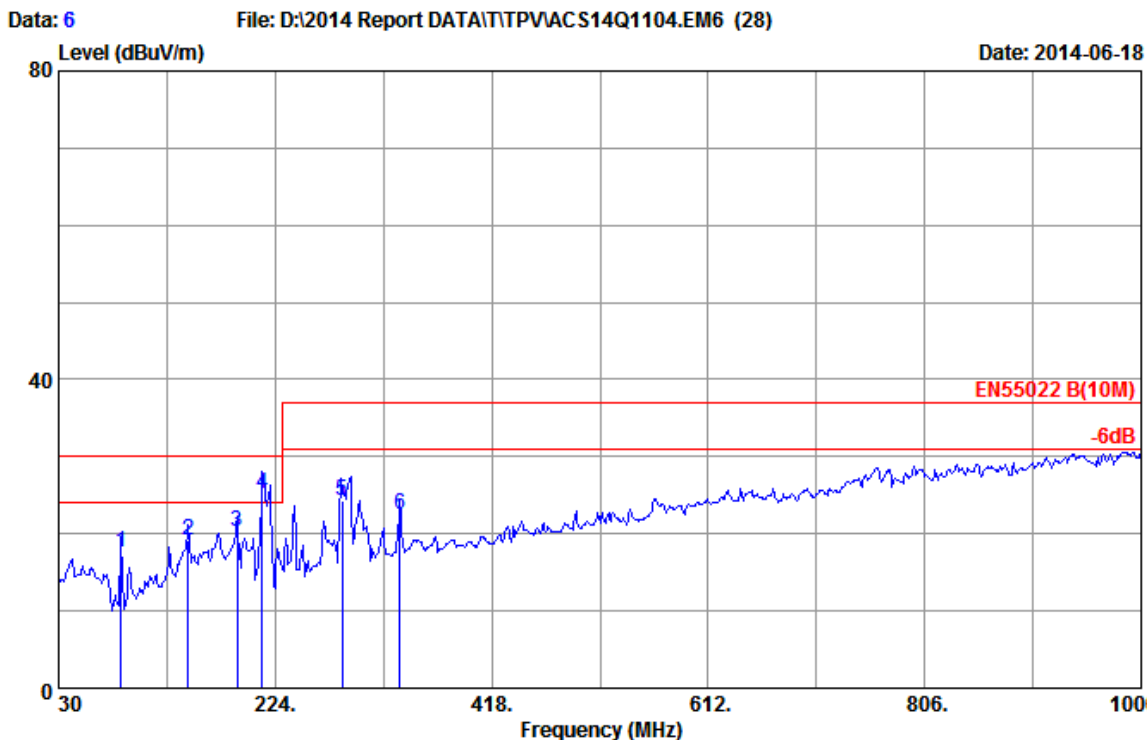
Site no	:10m Chamber	Data No	:1
Dis./Ant.	:10m 2014 9168-493	Ant.pol	:VERTICAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8°C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	DVI:640*480@60Hz		
	Line:1.8m		



Site no	:10m Chamber	Data No	:4
Dis./Ant.	:10m 2013 9168-429	Ant.pol	:HORIZONTAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8°C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	DVI:1280*1024@75Hz		
	Line:1.8m		



Site no	:10m Chamber	Data No	:3
Dis./Ant.	:10m 2014 9168-493	Ant.pol	:VERTICAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8°C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	DVI:1280*1024@75Hz		
	Line:1.8m		

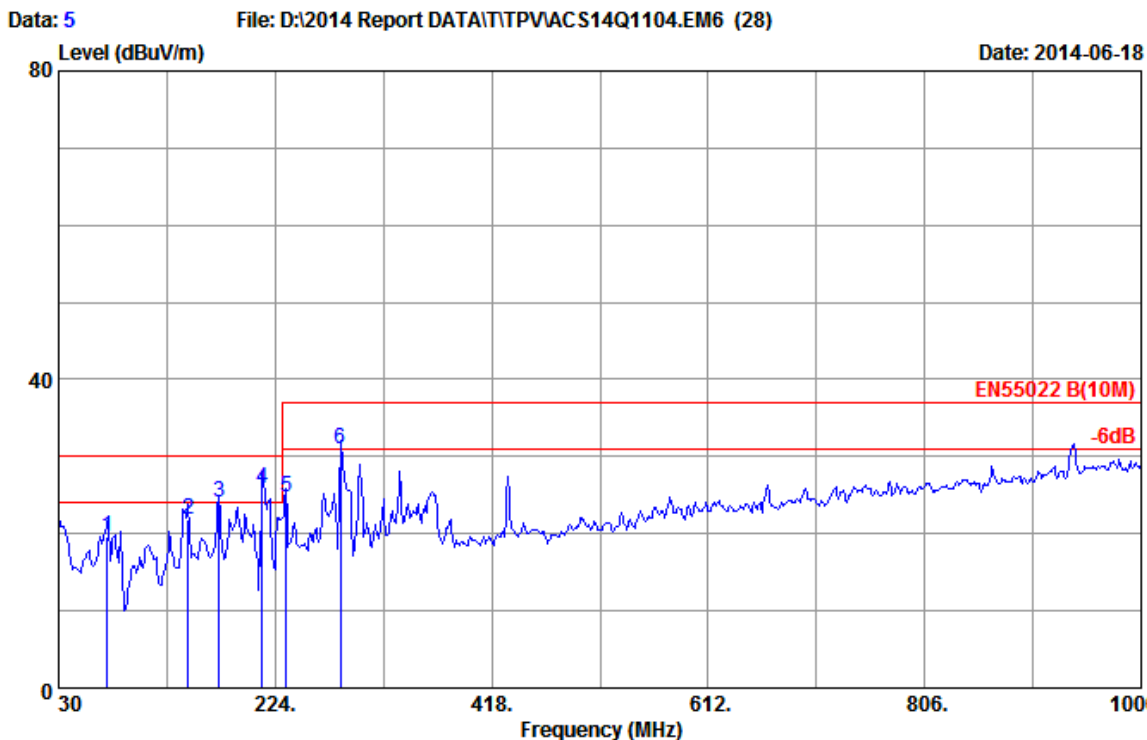


Site no	:10m Chamber	Data No	:6
Dis./Ant.	:10m 2013 9168-429	Ant.pol	:HORIZONTAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8°C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	DVI:1920*1080@60Hz		
	Line:1.8m		

No	Freq (MHz)	ANT		Cable Loss (dB)	Reading (dBuV)	Emission			Remark
		Factor (dB/m)				Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	86.260	8.48		1.25	7.78	17.51	30.00	12.49	QP
2	146.400	13.48		1.54	4.08	19.10	30.00	10.90	QP
3	190.050	10.69		1.68	7.96	20.33	30.00	9.67	QP
4	212.360	9.75		1.74	13.67	25.16	30.00	4.84	QP
5	284.140	13.28		1.89	9.14	24.31	37.00	12.69	QP
6	335.550	14.39		2.03	6.01	22.43	37.00	14.57	QP

Remarks:

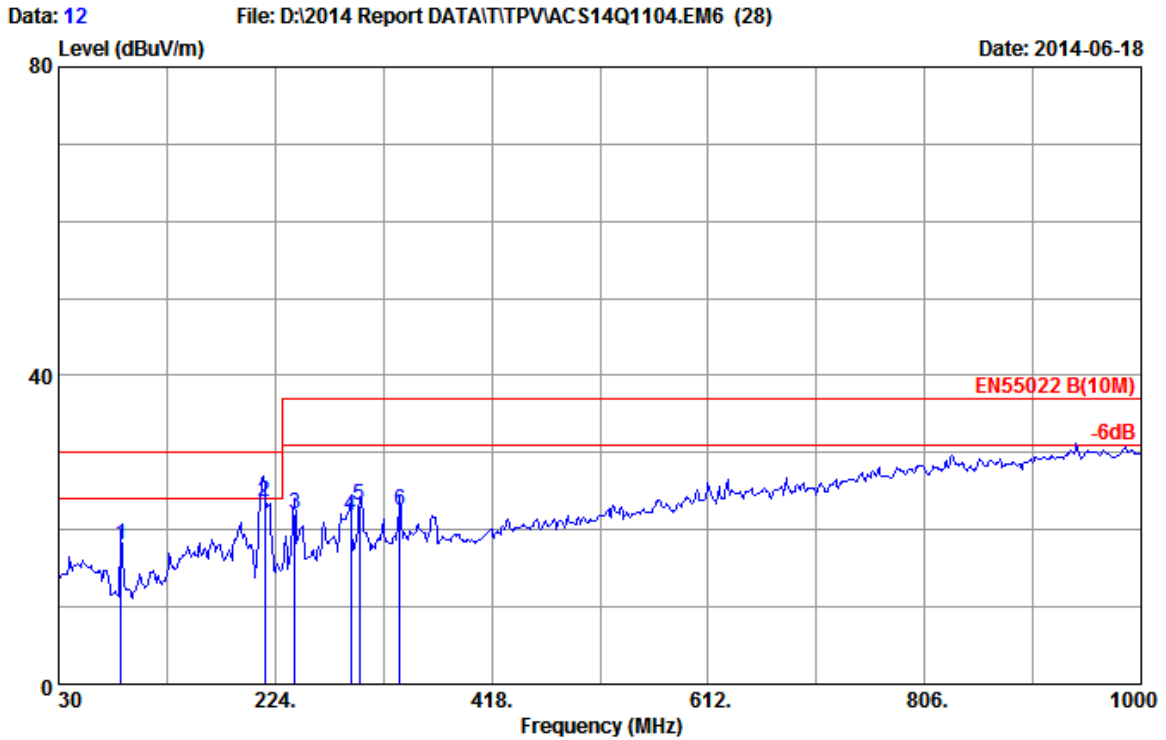
- 1.Emission Level=Antenna Factor+Cable Loss+Reading.
- 2.The emission Levels that are 20dB below the official limit are not reported
3. The worst emission was detected at 212.360 MHz with corrected signal level of 25.16 dBuV/m (Limit is 30.00dBuV/m) when the antenna was at horizontal polarization and at 2.0m high and the turn table was at 224°.
4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.



Site no :10m Chamber Data No :5  
 Dis./Ant. :10m 2014 9168-493 Ant.pol :VERTICAL  
 Limit :EN55022 B(10M) Pre :101.6kPa  
 Env./Ins. :24.8\*C/41.5% Engineer :ANDY  
 EUT :LCD Monitor M/N:236LM00014  
 Power Rating :AC 230V/50Hz  
 Test Mode :Running "H" Pattern  
 DVI:1920\*1080@60Hz  
 Line:1.8m

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	73.650	10.97	0.97	7.71	19.65	30.00	10.35	QP
2	146.400	13.50	1.32	6.97	21.79	30.00	8.21	QP
3	173.560	12.44	1.43	10.19	24.06	30.00	5.94	QP
4	212.360	9.98	1.55	14.40	25.93	30.00	4.07	QP
5	233.700	11.04	1.61	12.12	24.77	37.00	12.23	QP
6	282.200	13.11	1.73	16.23	31.07	37.00	5.93	QP

Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported  
 3.The worst emission was detected at 212.360MHz with corrected signal level of 25.93 dBuV/m (Limit is 30.00dBuV/m) when the antenna was at vertical polarization and at 1.0m high and the turn table was at 48°.  
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

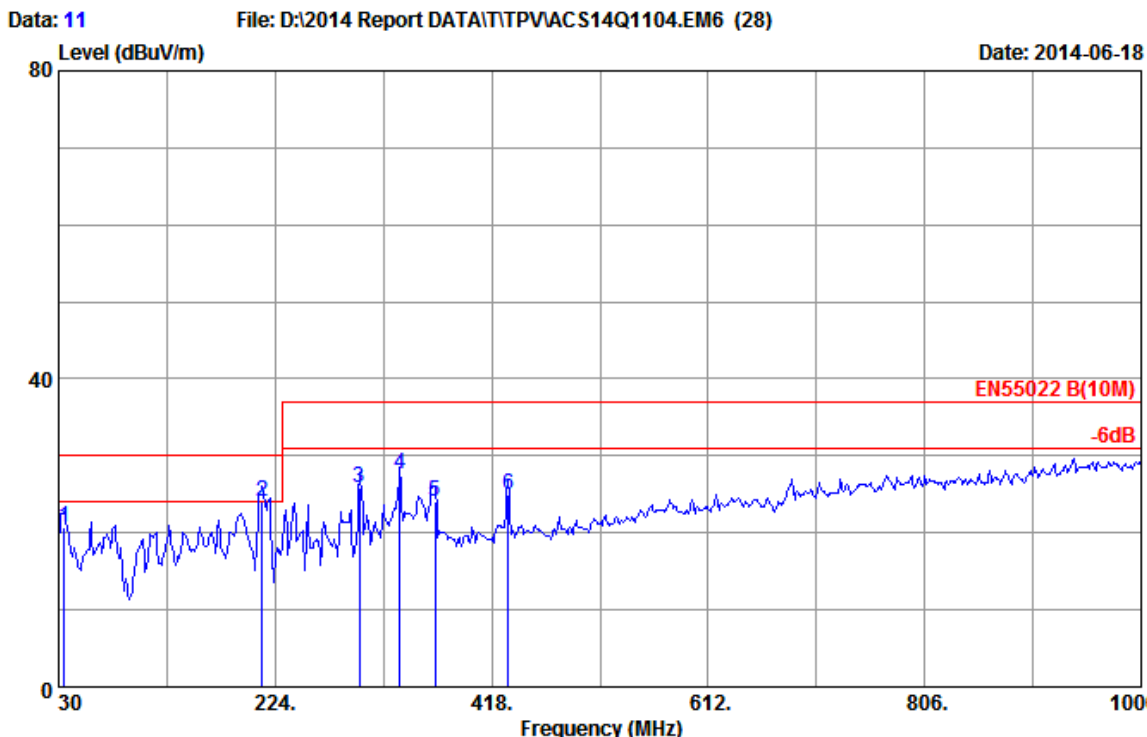


Site no	:10m Chamber	Data No	:12
Dis./Ant.	:10m 2013 9168-429	Ant.pol	:HORIZONTAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8°C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	VGA:1920*1080@60Hz		
	Line:1.8m		

No	Freq (MHz)	ANT		Cable		Emission			Remark
		Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)		
1	86.260	8.48	1.25	8.31	18.04	30.00	11.96	QP	
2	214.300	9.79	1.74	12.06	23.59	30.00	6.41	QP	
3	241.460	11.69	1.81	8.46	21.96	37.00	15.04	QP	
4	291.900	13.40	1.91	6.56	21.87	37.00	15.13	QP	
5	299.660	13.49	1.92	7.79	23.20	37.00	13.80	QP	
6	335.550	14.39	2.03	5.98	22.40	37.00	14.60	QP	

Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported

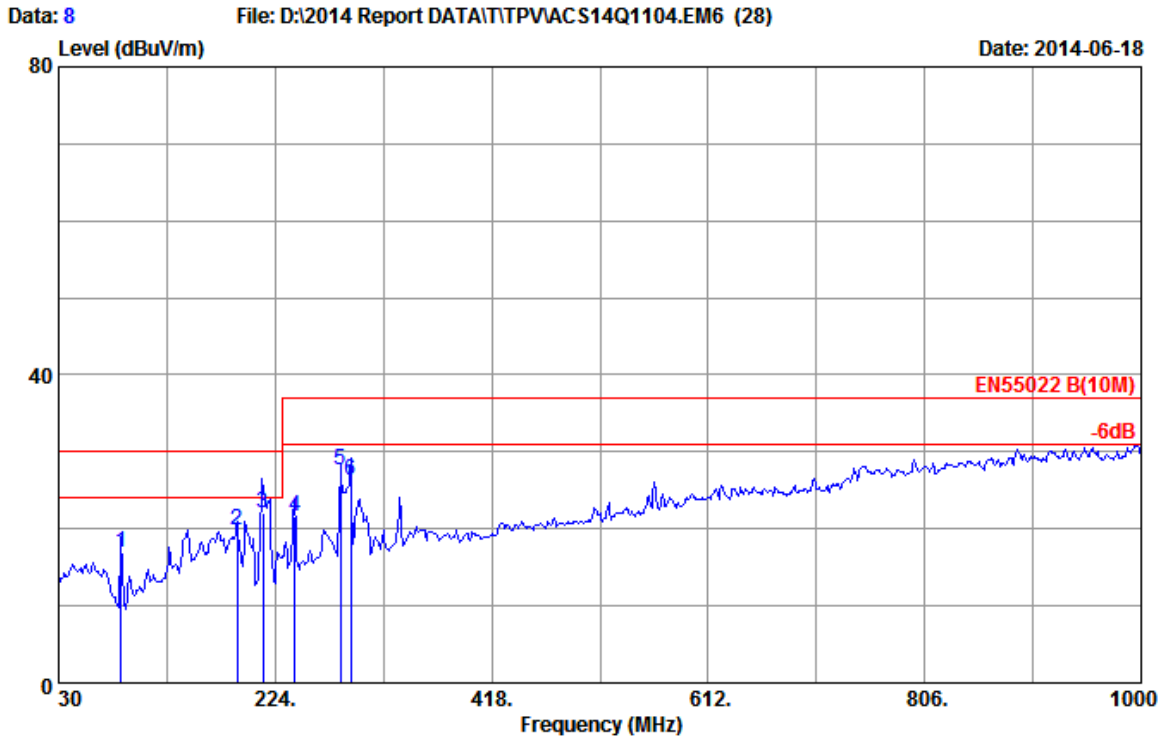




Site no :10m Chamber Data No :11  
 Dis./Ant. :10m 2014 9168-493 Ant.pol :VERTICAL  
 Limit :EN55022 B(10M) Pre :101.6kPa  
 Env./Ins. :24.8\*C/41.5% Engineer :ANDY  
 EUT :LCD Monitor M/N:236LM00014  
 Power Rating :AC 230V/50Hz  
 Test Mode :Running "H" Pattern  
 VGA:1920\*1080@60Hz  
 Line:1.8m

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.850	12.32	0.73	7.68	20.73	30.00	9.27	QP
2	212.360	9.98	1.55	12.48	24.01	30.00	5.99	QP
3	299.660	13.40	1.77	10.76	25.93	37.00	11.07	QP
4	335.550	14.21	1.91	11.42	27.54	37.00	9.46	QP
5	367.560	15.00	2.03	7.12	24.15	37.00	12.85	QP
6	432.550	16.65	2.24	6.04	24.93	37.00	12.07	QP

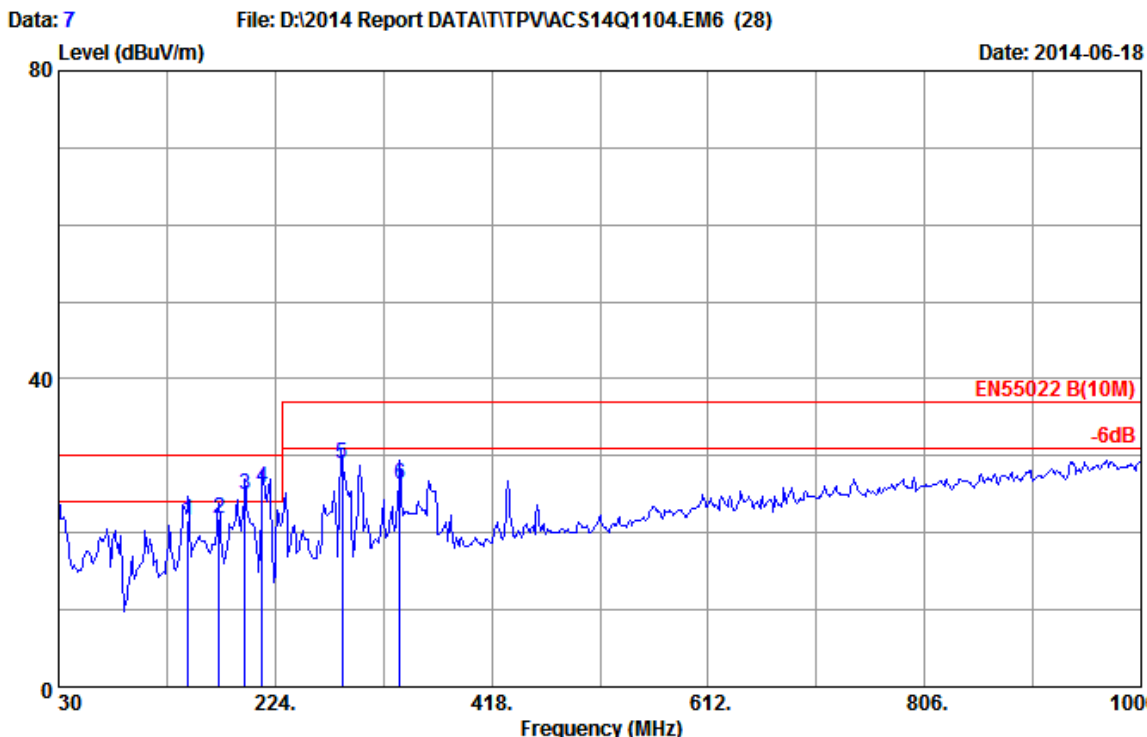
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported



Site no :10m Chamber Data No :8  
 Dis./Ant. :10m 2013 9168-429 Ant.pol :HORIZONTAL  
 Limit :EN55022 B(10M) Pre :101.6kPa  
 Env./Ins. :24.8\*C/41.5% Engineer :ANDY  
 EUT :LCD Monitor M/N:236LM00014  
 Power Rating :AC 230V/50Hz  
 Test Mode :Running "H" Pattern  
 DVI:1920\*1080@60Hz  
 Line:1.5m

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	86.260	8.48	1.25	7.23	16.96	30.00	13.04	QP
2	190.050	10.69	1.68	7.55	19.92	30.00	10.08	QP
3	213.330	9.77	1.74	10.65	22.16	30.00	7.84	QP
4	241.460	11.69	1.81	8.12	21.62	37.00	15.38	QP
5	282.200	13.24	1.89	12.41	27.54	37.00	9.46	QP
6	291.900	13.40	1.91	10.94	26.25	37.00	10.75	QP

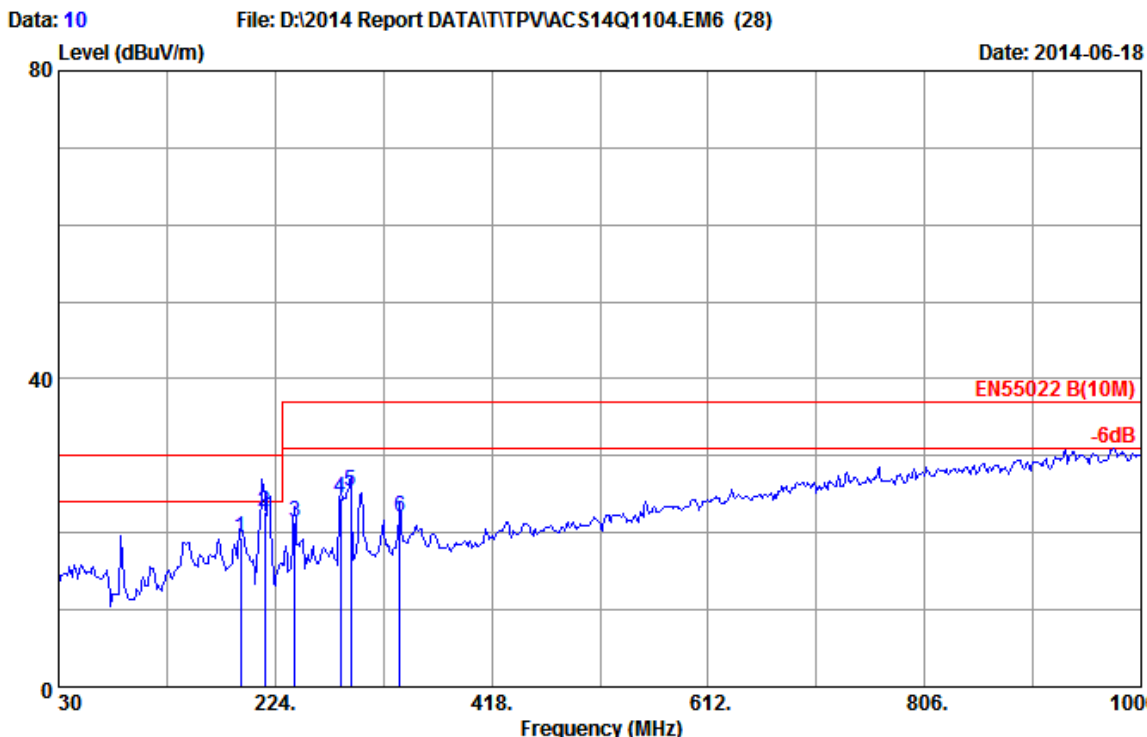
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported



Site no :10m Chamber Data No :7  
 Dis./Ant. :10m 2014 9168-493 Ant.pol :VERTICAL  
 Limit :EN55022 B(10M) Pre :101.6kPa  
 Env./Ins. :24.8\*C/41.5% Engineer :ANDY  
 EUT :LCD Monitor M/N:236LM00014  
 Power Rating :AC 230V/50Hz  
 Test Mode :Running "H" Pattern  
 DVI:1920\*1080@60Hz  
 Line:1.5m

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	146.400	13.50	1.32	6.83	21.65	30.00	8.35	QP
2	173.560	12.44	1.43	7.90	21.77	30.00	8.23	QP
3	196.840	10.40	1.51	13.06	24.97	30.00	5.03	QP
4	212.360	9.98	1.55	14.24	25.77	30.00	4.23	QP
5	284.140	13.20	1.74	14.08	29.02	37.00	7.98	QP
6	335.550	14.21	1.91	10.23	26.35	37.00	10.65	QP

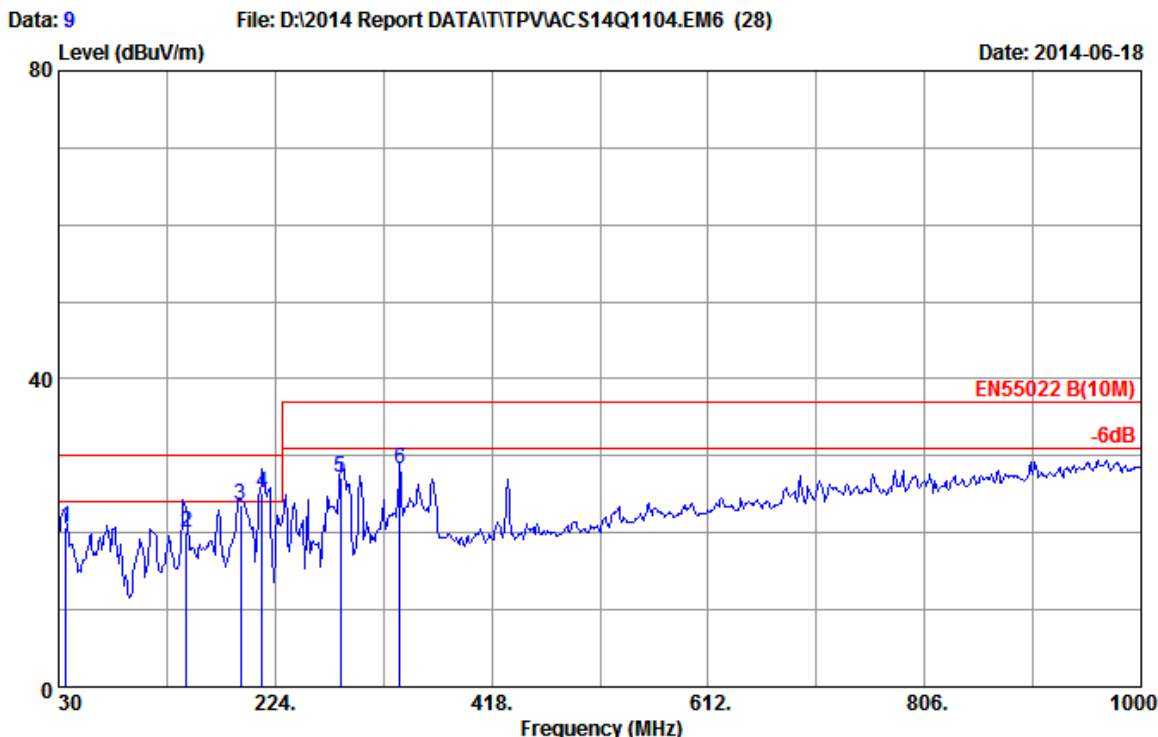
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported



Site no :10m Chamber Data No :10  
 Dis./Ant. :10m 2013 9168-429 Ant.pol :HORIZONTAL  
 Limit :EN55022 B(10M) Pre :101.6kPa  
 Env./Ins. :24.8\*C/41.5% Engineer :ANDY  
 EUT :LCD Monitor M/N:236LM00014  
 Power Rating :AC 230V/50Hz  
 Test Mode :Running "H" Pattern  
 DVI:1920\*1080@60Hz  
 Line:1.2m

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.960	10.45	1.69	7.26	19.40	30.00	10.60	QP
2	214.300	9.79	1.74	11.16	22.69	30.00	7.31	QP
3	241.460	11.69	1.81	7.96	21.46	37.00	15.54	QP
4	282.200	13.24	1.89	9.32	24.45	37.00	12.55	QP
5	291.900	13.40	1.91	10.04	25.35	37.00	11.65	QP
6	335.550	14.39	2.03	5.68	22.10	37.00	14.90	QP

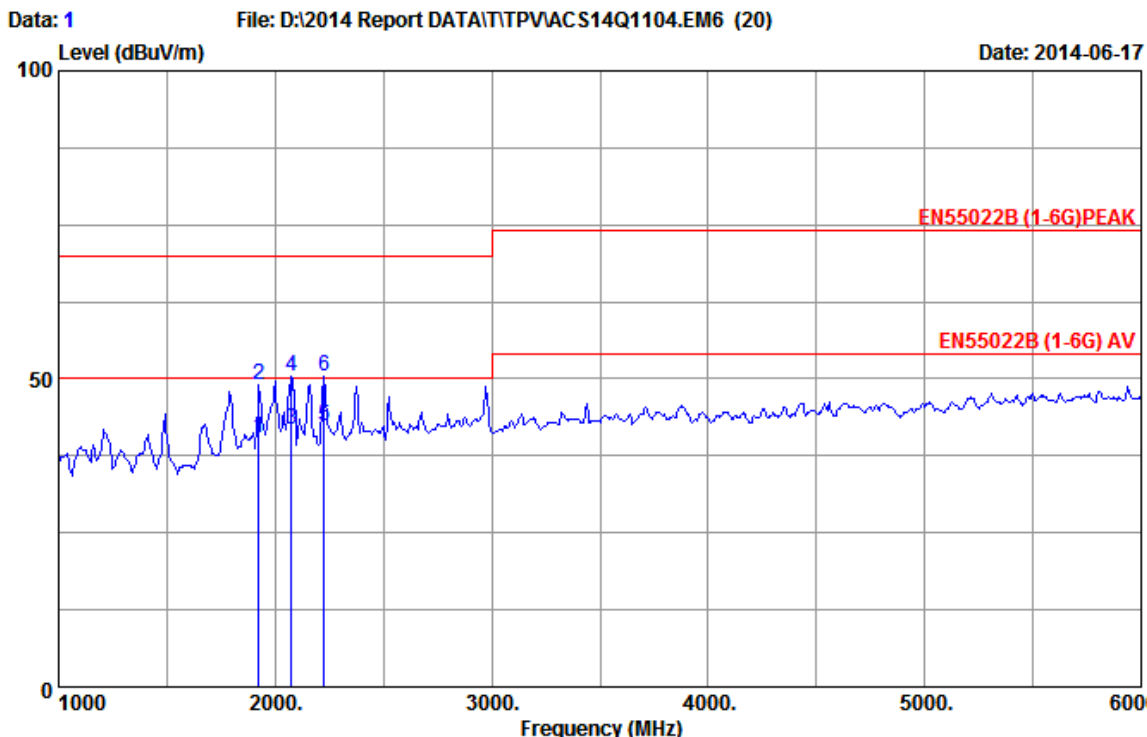
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported



Site no	:10m Chamber	Data No	:9
Dis./Ant.	:10m 2014 9168-493	Ant.pol	:VERTICAL
Limit	:EN55022 B(10M)	Pre	:101.6kPa
Env./Ins.	:24.8*C/41.5%	Engineer	:ANDY
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	:DVI:1920*1080@60Hz		
	:Line:1.2m		

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	36.790	12.72	0.74	7.22	20.68	30.00	9.32	QP
2	144.460	13.35	1.31	5.49	20.15	30.00	9.85	QP
3	192.960	10.60	1.49	11.50	23.59	30.00	6.41	QP
4	212.360	9.98	1.55	13.76	25.29	30.00	4.71	QP
5	282.200	13.11	1.73	12.43	27.27	37.00	9.73	QP
6	335.550	14.21	1.91	12.17	28.29	37.00	8.71	QP

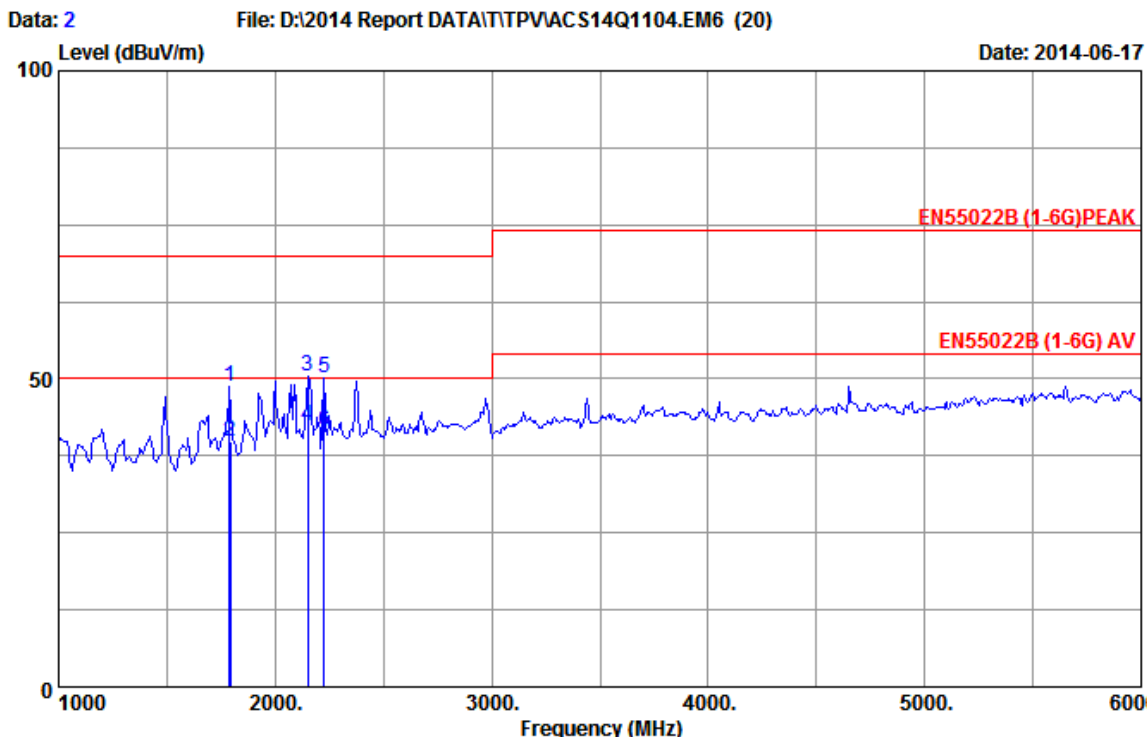
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading.  
 2.The emission Levels that are 20dB below the official limit are not reported



Site no	:10m Chamber	Data No	:1
Dis./Ant.	:3m 2013 3115 (4877)	Ant.pol	:HORIZONTAL
Limit	:EN55022B (1-6G) PEAK	Pre	:101.7kPa
Env./Ins.	:26.0°C/41.5%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	DVI:1280*1024@75Hz		
	Line:1.8m		

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	1924.187	26.02	3.24	35.01	46.22	40.47	50.00	9.53	Average
2	1925.326	26.03	3.25	35.01	54.75	49.02	70.00	20.98	Peak
3	2074.217	26.31	3.41	34.95	47.13	41.90	50.00	8.10	Average
4	2075.236	26.31	3.41	34.95	55.78	50.55	70.00	19.45	Peak
5	2224.365	26.73	3.43	34.90	47.13	42.39	50.00	7.61	Average
6	2225.649	26.73	3.43	34.90	55.08	50.34	70.00	19.66	Peak

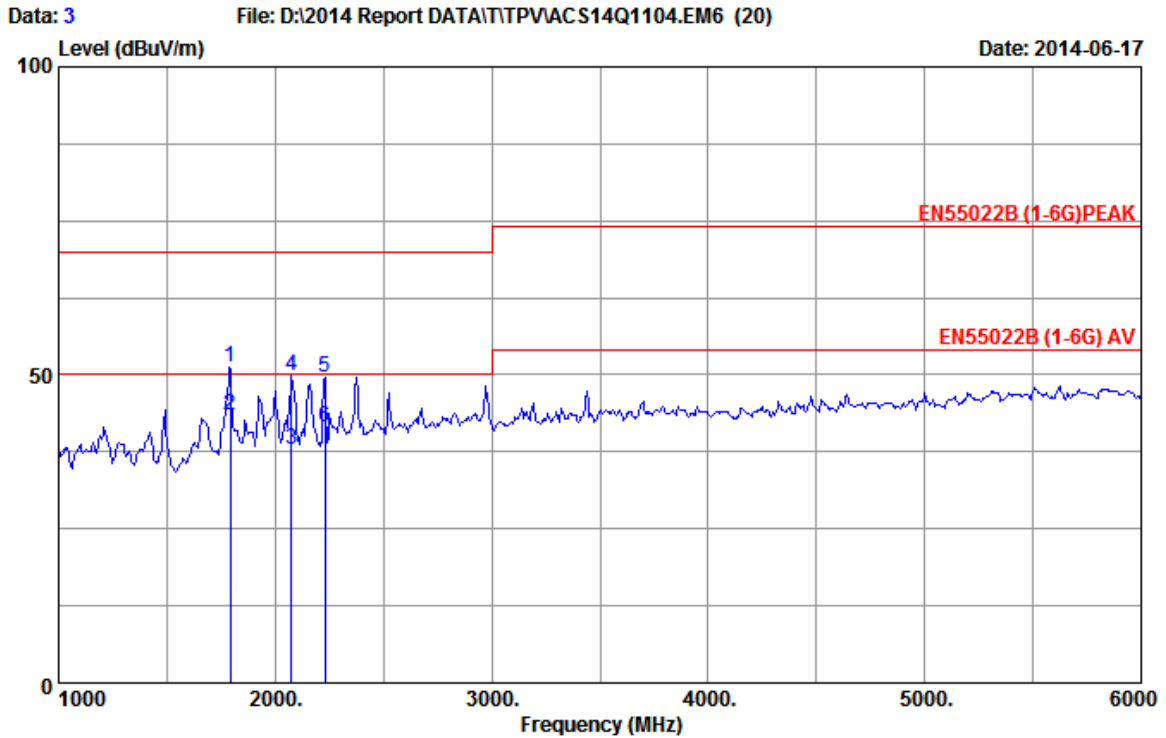
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading-Amp factor.  
 2.The emission Levels that are 20db below the official limit are not reported



Site no :10m Chamber Data No :2  
 Dis./Ant. :3m 2013 3115 (4877) Ant.pol :VERTICAL  
 Limit :EN55022B (1-6G) PEAK Pre :101.7kPa  
 Env./Ins. :26.0\*C/41.5% Engineer :Bery\_Guo  
 EUT :LCD Monitor M/N:236LM00014  
 Power Rating :AC 230V/50Hz  
 Test Mode :Running "H" Pattern  
 DVI:1280\*1024@75Hz  
 Line:1.8m

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1790.325	25.89	2.95	35.08	54.92	48.68	70.00	21.32	Peak
2	1791.982	25.89	2.95	35.08	46.12	39.88	50.00	10.12	Average
3	2150.784	26.52	3.42	34.92	55.36	50.38	70.00	19.62	Peak
4	2151.452	26.52	3.42	34.92	47.20	42.22	50.00	7.78	Average
5	2225.365	26.73	3.43	34.90	54.86	50.12	70.00	19.88	Peak
6	2226.963	26.74	3.43	34.90	46.28	41.55	50.00	8.45	Average

Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading-Amp factor.  
 2.The emission Levels that are 20db below the official limit are not reported



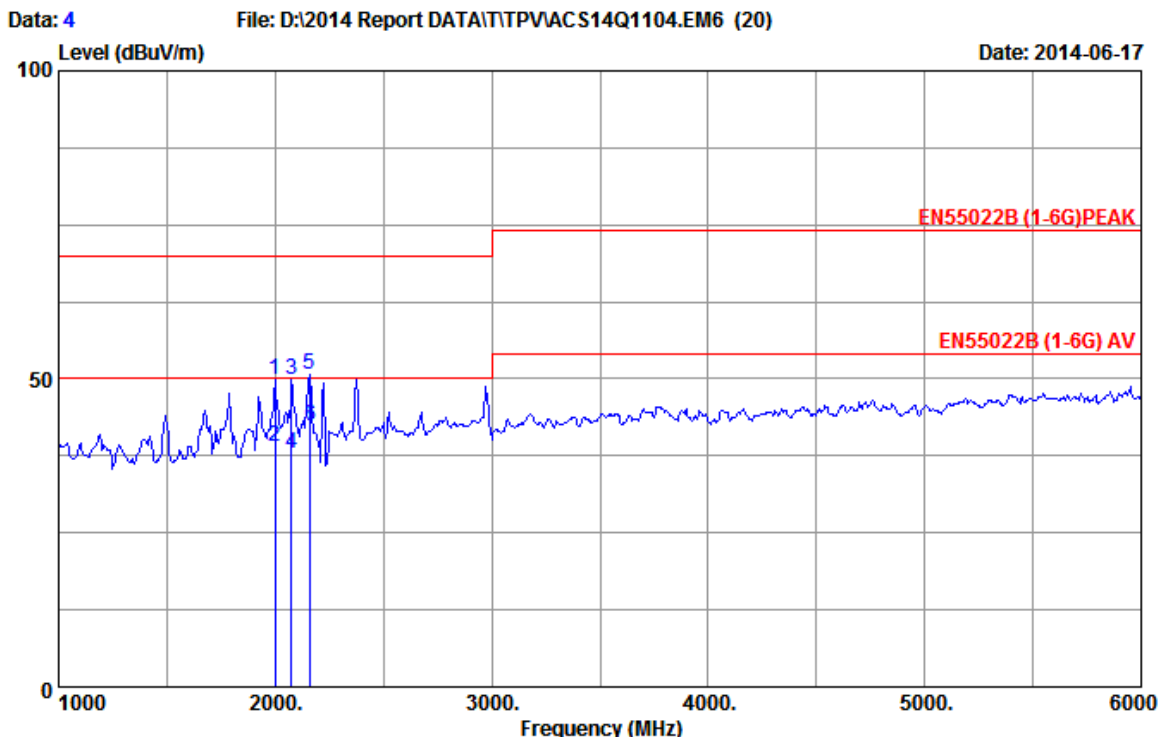
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Site no      :10m Chamber           Data No     :3
Dis./Ant.   :3m 2013 3115 (4877)   Ant.pol    :HORIZONTAL
Limit       :EN55022B (1-6G) PEAK  Pre       :101.7kPa
Env./Ins.   :26.0*C/41.5%         Engineer   :Bery_Guo
EUT         :LCD Monitor M/N:236LM00014
Power Rating :AC 230V/50Hz
Test Mode   :Running "H" Pattern
             DVI:1920*1080@60Hz
             Line:1.8m
    
```

No	Freq (MHz)	ANT			AMP		Emission			Remark
		Factor (dB/m)	Cable Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)		
1	1790.987	25.89	2.95	35.08	57.37	51.13	70.00	18.87	Peak	
2	1791.357	25.89	2.95	35.08	49.68	43.44	50.00	6.56	Average	
3	2074.321	26.31	3.41	34.95	42.98	37.75	50.00	12.25	Average	
4	2075.714	26.31	3.41	34.95	55.06	49.83	70.00	20.17	Peak	
5	2230.639	26.75	3.43	34.90	54.41	49.69	70.00	20.31	Peak	
6	2231.528	26.75	3.43	34.90	46.22	41.50	50.00	8.50	Average	

Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading-Amp factor.  
 2.The emission Levels that are 20db below the official limit are not reported



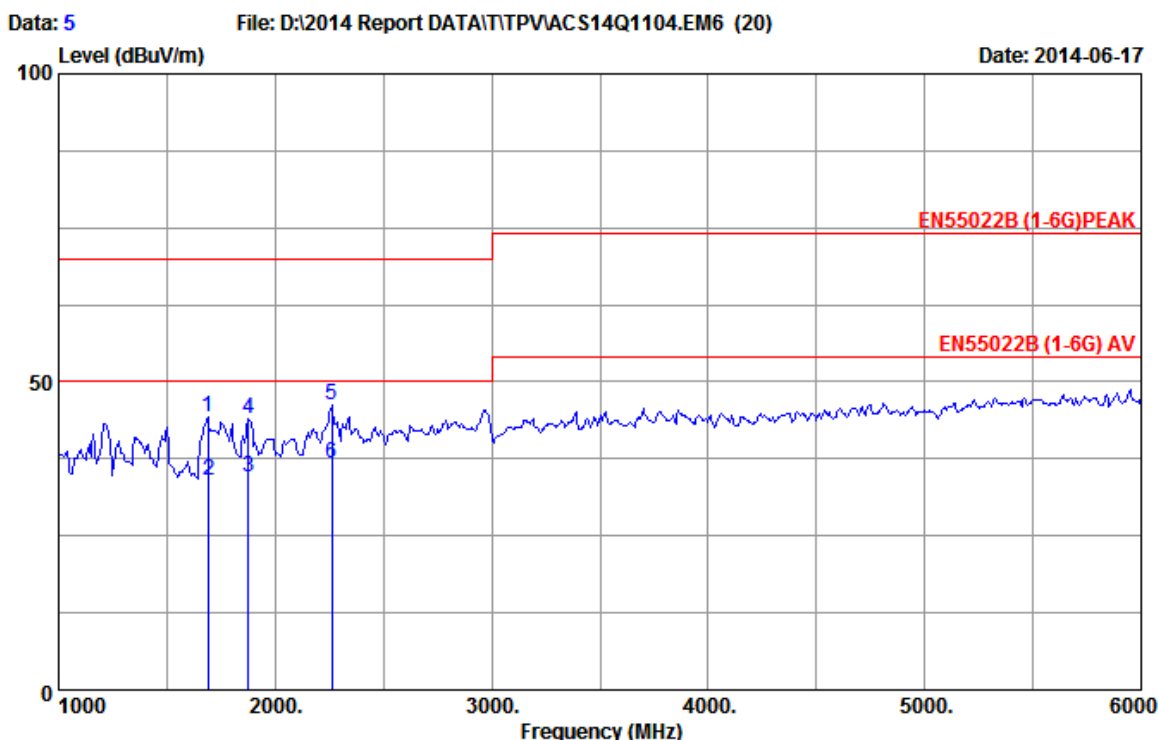


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Site no       :10m Chamber           Data No      :4
Dis./Ant.    :3m 2013 3115 (4877)   Ant.pol     :VERTICAL
Limit        :EN55022B (1-6G) PEAK  Pre         :101.7kPa
Env./Ins.    :26.0*C/41.5%          Engineer    :Bery_Guo
EUT          :LCD Monitor M/N:236LM00014
Power Rating :AC 230V/50Hz
Test Mode    :Running "H" Pattern
              DVI:1920*1080@60Hz
              Line:1.8m
    
```

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2000.963	26.10	3.40	34.97	55.31	49.84	70.00	20.16	Peak
2	2001.265	26.10	3.40	34.97	44.38	38.91	50.00	11.09	Average
3	2075.569	26.31	3.41	34.95	55.06	49.83	70.00	20.17	Peak
4	2076.875	26.32	3.41	34.94	43.22	38.01	50.00	11.99	Average
5	2160.326	26.55	3.42	34.92	55.53	50.58	70.00	19.42	Peak
6	2161.417	26.55	3.42	34.92	47.30	42.35	50.00	7.65	Average

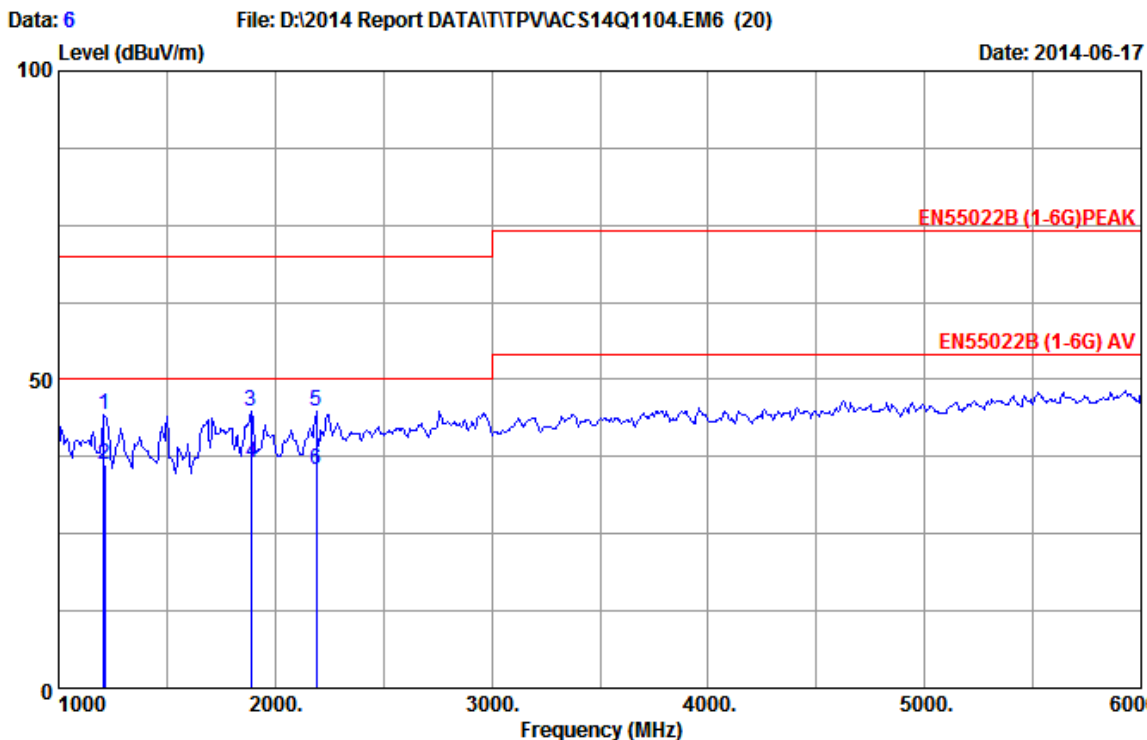
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading-Amp factor.  
 2.The emission Levels that are 20db below the official limit are not reported



Site no	:10m Chamber	Data No	:5
Dis./Ant.	:3m 2013 3115 (4877)	Ant.pol	:HORIZONTAL
Limit	:EN55022B (1-6G) PEAK	Pre	:101.7kPa
Env./Ins.	:26.0°C/41.5%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	VGA:1920*1080@60Hz		
	Line:1.8m		

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1690.568	25.79	2.72	35.14	50.87	44.24	70.00	25.76	Peak
2	1691.659	25.79	2.72	35.14	40.67	34.04	50.00	15.96	Average
3	1874.968	25.97	3.14	35.04	40.58	34.65	50.00	15.35	Average
4	1875.874	25.98	3.14	35.03	49.91	44.00	70.00	26.00	Peak
5	2260.325	26.83	3.44	34.89	50.76	46.14	70.00	23.86	Peak
6	2261.415	26.83	3.44	34.89	41.28	36.66	50.00	13.34	Average

Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading-Amp factor.  
 2.The emission Levels that are 20db below the official limit are not reported



Site no	:10m Chamber	Data No	:6
Dis./Ant.	:3m 2013 3115 (4877)	Ant.pol	:VERTICAL
Limit	:EN55022B (1-6G) PEAK	Pre	:101.7kPa
Env./Ins.	:26.0°C/41.5%	Engineer	:Bery_Guo
EUT	:LCD Monitor M/N:236LM00014		
Power Rating	:AC 230V/50Hz		
Test Mode	:Running "H" Pattern		
	VGA:1920*1080@60Hz		
	Line:1.8m		

No	Freq (MHz)	ANT Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	1210.214	24.32	1.93	35.66	53.58	44.17	70.00	25.83	Peak
2	1211.452	24.33	1.93	35.66	45.67	36.27	50.00	13.73	Average
3	1890.284	25.99	3.17	35.03	50.61	44.74	70.00	25.26	Peak
4	1891.968	25.99	3.17	35.03	42.28	36.41	50.00	13.59	Average
5	2190.325	26.63	3.43	34.91	49.78	44.93	70.00	25.07	Peak
6	2191.847	26.64	3.43	34.91	40.19	35.35	50.00	14.65	Average

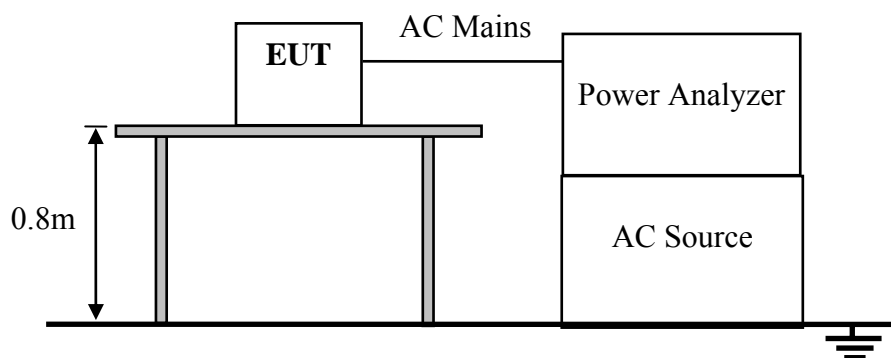
Remarks: 1.Emission Level=Antenna Factor+Cable Loss+Reading-Amp factor.  
 2.The emission Levels that are 20db below the official limit are not reported

## 5. HARMONIC CURRENT TEST

### 5.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	AC Source	California Instruments	5001ix	58481	Oct.31, 13	1 Year
2.	Power Analyzer	California Instruments	PACS-1	72627	Oct.31, 13	1 Year

### 5.2. Block Diagram of Test Setup



### 5.3. Test Standard

EN61000-3-2: 2006+A1: 2009+A2:2009; Class D

### 5.4. Limits of Harmonic Current

Limits for Class D Equipment		
Harmonic order (n)	Maximum permissible harmonic current per watt (mA/W)	Maximum permissible harmonic current (A)
3	3.4	0.23
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
13	0.30	0.21
15 ≤ n ≤ 39 (odd harmonic only)	3.85/n	0.15 × 15/n

Remark: if the EUT Power level is below 75 Watts and therefore has no defined limits.

### 5.5. EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

### 5.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 5.2.

### 5.7. Test Procedure

The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the maximum harmonic components under normal operating conditions for each successive harmonic component in turn. The correspondent test program of test instrument to measure the current harmonics emanated from EUT is chosen. The measure time shall be not less than the necessary for the EUT to be exercised.

## 5.8. Test Results

**PASS.**

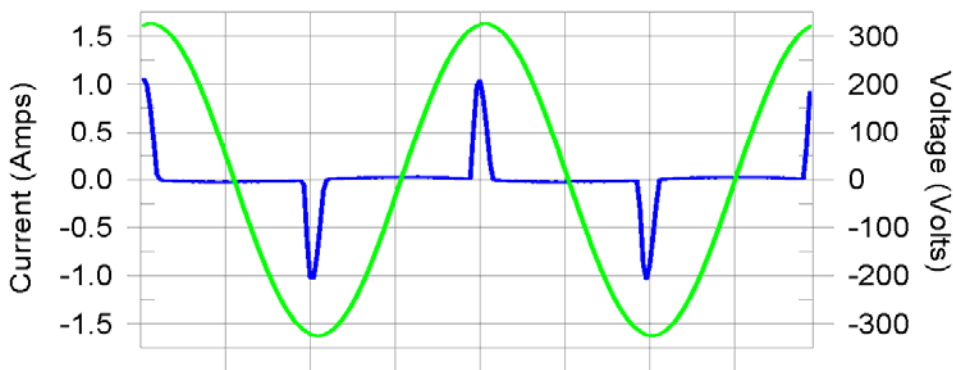
The EUT was tested and all the test results are listed in next pages.

Harmonics – Class-D per Ed. 3.2 (2009)(Run time)

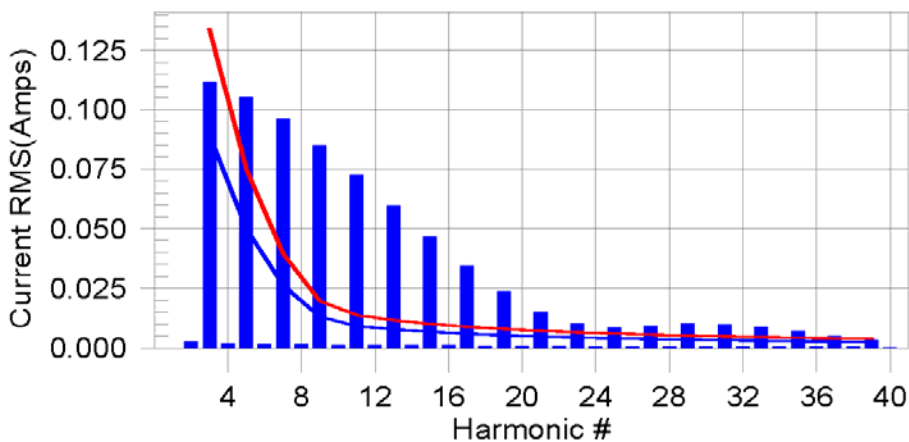
EUT: LCD Monitor M/N:236LM00014 Tested by: SUN  
 Test category: Class-D per Ed. 3.2 (2009) (European limits) Test Margin: 100  
 Test date: 2014-6-16 Start time: 21:48:43 End time: 21:51:35  
 Test duration (min): 2.5 Data file name: H-000124.cts\_data  
 Comment: Running "H" Pattern  
 Customer: TPV

Test Result: N/L Source qualification: Normal

Current & voltage waveforms



Harmonics and Class D limit line      European Limits



Test result: N/L Worst harmonic was #21 with 0.00% of the limit.

Current Test Result Summary (Run time)

EUT: LCD Monitor M/N:236LM00014 Tested by: SUN  
 Test category: Class-D per Ed. 3.2 (2009) (European limits) Test Margin: 100  
 Test date: 2014-6-16 Start time: 21:48:43 End time: 21:51:35  
 Test duration (min): 2.5 Data file name: H-000124.cts\_data  
 Comment: Running "H"Pattern  
 Customer: TPV

Test Result: N/L Source qualification: Normal  
 THC(A): 0.00 I-THD(%): 0.00 POHC(A): 0.000 POHC Limit(A): 0.000

Highest parameter values during test:

V\_RMS (Volts): 230.06 Frequency(Hz): 50.00  
 I\_Peak (Amps): 1.096 I\_RMS (Amps): 0.259  
 I\_Fund (Amps): 0.118 Crest Factor: 8.558  
 Power (Watts): 26.3 Power Factor: 0.443

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.003						
3	0.106	0.089	0.0	0.112	0.134	0.00	N/L
4	0.002						
5	0.100	0.050	0.0	0.105	0.075	0.00	N/L
6	0.002						
7	0.092	0.026	0.0	0.096	0.039	0.00	N/L
8	0.001						
9	0.081	0.013	0.0	0.085	0.020	0.00	N/L
10	0.001						
11	0.070	0.009	0.0	0.073	0.014	0.00	N/L
12	0.001						
13	0.057	0.008	0.0	0.060	0.012	0.00	N/L
14	0.001						
15	0.045	0.007	0.0	0.047	0.010	0.00	N/L
16	0.001						
17	0.033	0.006	0.0	0.034	0.009	0.00	N/L
18	0.001						
19	0.023	0.005	0.0	0.024	0.008	0.00	N/L
20	0.001						
21	0.014	0.005	0.0	0.015	0.007	0.00	N/L
22	0.001						
23	0.009	0.004	0.0	0.010	0.007	0.00	N/L
24	0.001						
25	0.008	0.004	0.0	0.008	0.006	0.00	N/L
26	0.001						
27	0.009	0.004	0.0	0.009	0.006	0.00	N/L
28	0.001						
29	0.010	0.003	0.0	0.010	0.005	0.00	N/L
30	0.000						
31	0.010	0.003	0.0	0.010	0.005	0.00	N/L
32	0.000						
33	0.009	0.003	0.0	0.009	0.005	0.00	N/L
34	0.000						
35	0.007	0.003	0.0	0.007	0.004	0.00	N/L
36	0.000						
37	0.005	0.003	0.0	0.005	0.004	0.00	N/L
38	0.000						
39	0.003	0.003	0.0	0.003	0.004	0.00	N/L
40	0.000						

Note: The EUT power level is below 75.0 Watts and therefore has no defined limits

Voltage Source Verification Data (Run time)

EUT: LCD Monitor M/N:236LM00014 Tested by: SUN  
 Test category: Class-D per Ed. 3.2 (2009) (European limits) Test Margin: 100  
 Test date: 2014-6-16 Start time: 21:48:43 End time: 21:51:35  
 Test duration (min): 2.5 Data file name: H-000124.cts\_data  
 Comment: Running "H"Pattern  
 Customer: TPV

Test Result: N/L Source qualification: Normal

Highest parameter values during test:

Voltage (Vrms): 230.06	Frequency(Hz): 50.00
I_Peak (Amps): 1.096	I_RMS (Amps): 0.259
I_Fund (Amps): 0.118	Crest Factor: 8.558
Power (Watts): 26.3	Power Factor: 0.443

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.074	0.460	16.16	OK
3	0.461	2.070	22.26	OK
4	0.052	0.460	11.35	OK
5	0.048	0.920	5.18	OK
6	0.031	0.460	6.69	OK
7	0.043	0.690	6.28	OK
8	0.009	0.460	2.03	OK
9	0.048	0.460	10.42	OK
10	0.013	0.460	2.90	OK
11	0.041	0.230	17.88	OK
12	0.011	0.230	4.71	OK
13	0.043	0.230	18.61	OK
14	0.005	0.230	1.97	OK
15	0.032	0.230	14.07	OK
16	0.009	0.230	3.91	OK
17	0.028	0.230	12.08	OK
18	0.010	0.230	4.26	OK
19	0.025	0.230	10.86	OK
20	0.007	0.230	3.00	OK
21	0.020	0.230	8.55	OK
22	0.004	0.230	1.70	OK
23	0.012	0.230	5.32	OK
24	0.004	0.230	1.76	OK
25	0.011	0.230	4.74	OK
26	0.002	0.230	1.01	OK
27	0.016	0.230	6.76	OK
28	0.002	0.230	0.93	OK
29	0.010	0.230	4.44	OK
30	0.002	0.230	1.01	OK
31	0.014	0.230	6.10	OK
32	0.002	0.230	1.04	OK
33	0.013	0.230	5.72	OK
34	0.002	0.230	1.05	OK
35	0.011	0.230	4.90	OK
36	0.002	0.230	0.95	OK
37	0.009	0.230	3.73	OK
38	0.002	0.230	0.89	OK
39	0.007	0.230	3.02	OK
40	0.003	0.230	1.25	OK



## 6. VOLTAGE FLUCTUATIONS & FLICKER TEST

### 6.1. Test Equipment

Same as Section 5.1.

### 6.2. Block Diagram of Test Setup

Same as Section 5.2.

### 6.3. Test Standard

EN61000-3-3:2013

### 6.4. Limits of Voltage Fluctuation and Flick

Test Item	Limit	Note
$P_{st}$	1.0	$P_{st}$ means Short-term flicker indicator
$P_{lt}$	0.65	$P_{lt}$ means long-term flicker indicator
$T_{dt}$	500ms	$T_{dt}$ means maximum time that dt exceeds 3.3%
$d_{max}(\%)$	4%	$d_{max}$ means maximum relative voltage change.
$d_c(\%)$	3.3%	$d_c$ means relative steady-state voltage change.

### 6.5. EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

### 6.6. Operating Condition of EUT

Same as Section 5.6.

### 6.7. Test Procedure

The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the most unfavorable sequence of voltage changes under normal conditions. During the flick measurement, the measure time shall include that part of whole operation changes. The observation period for short-term flicker indicator is 10 minutes and the observation period for long-term flicker indicator is 2 hours.

### 6.8. Test Results

**PASS.**

Please refer to the following page.

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

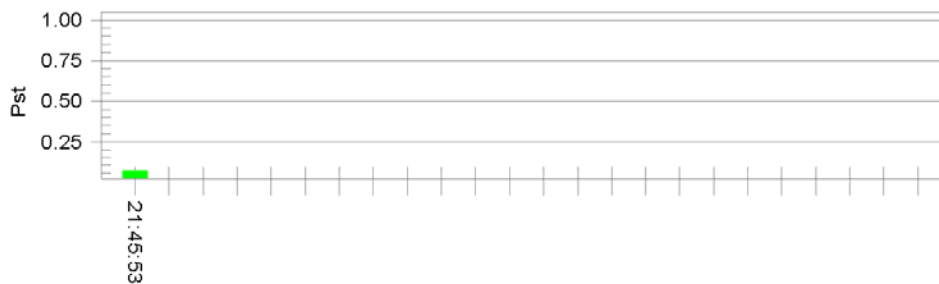
EUT: LCD Monitor M/N:236LM00014 Tested by: SUN  
 Test category: All parameters (European limits) Test Margin: 100  
 Test date: 2014-6-16 Start time: 21:35:33 End time: 21:45:54  
 Test duration (min): 10 Data file name: F-000123.cts\_data  
 Comment: Running "H" Pattern  
 Customer: TPV

Test Result: Pass

Status: Test Completed

Pst<sub>i</sub> and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.94		
Highest dt (%):	0.00	Test limit (%):	3.30 Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0 Pass
Highest dc (%):	0.00	Test limit (%):	3.30 Pass
Highest dmax (%):	0.00	Test limit (%):	4.00 Pass
Highest Pst (10 min. period):	0.064	Test limit:	1.000 Pass
Highest Plt (2 hr. period):	0.028	Test limit:	0.650 Pass

## 7. IMMUNITY PERFORMANCE CRITERIA

### Performance Level

The test results shall be classified in terms of the loss of function or degradation of performance of the equipment under test, relative to a performance level by its manufacturer or the requestor of the test, or the agreed between the manufacturer and the purchaser of the product.

Definition related to the performance level:

1. Based on the used product standard
2. Based on the declaration of the manufacturer, requestor or purchaser

#### ***Performance criterion A***

When seen from the normal viewing distance, the EUT shall operate with no change beyond the manufacturer's specification, in flicker, colour, focus and jitter (except for the power frequency magnetic field test).

#### ***Power frequency magnetic field test***

For CRT monitors, the following also applies:

The jitter shall be measured using a measuring microscope as specified in 6.6.14 of ISO 9241-3.

The jitter (in mm) shall not exceed the value  $\frac{(\text{character height in mm} + 0,3) \times 2,5}{33,3}$  when the monitor is immersed in a continuous magnetic field of 1A/m (r.m.s.) at one of the power frequencies of 50Hz.

Alternatively, a field of 50A/m may be applied, and a transparent graduated mask used to assess the jitter. In that case, the jitter shall not exceed 50 times the value in the above formula.

NOTE-This test level is used to simplify the measurement of jitter. Lesser values of the test level may be used if non-linearity is experienced, due to, for example, saturation of screening material.

The EUT shall be tested in two positions, both perpendicular to the magnetic field.

#### ***Performance criterion B***

Screen disturbances during the application of the test are permissible.

#### ***Performance criterion C***

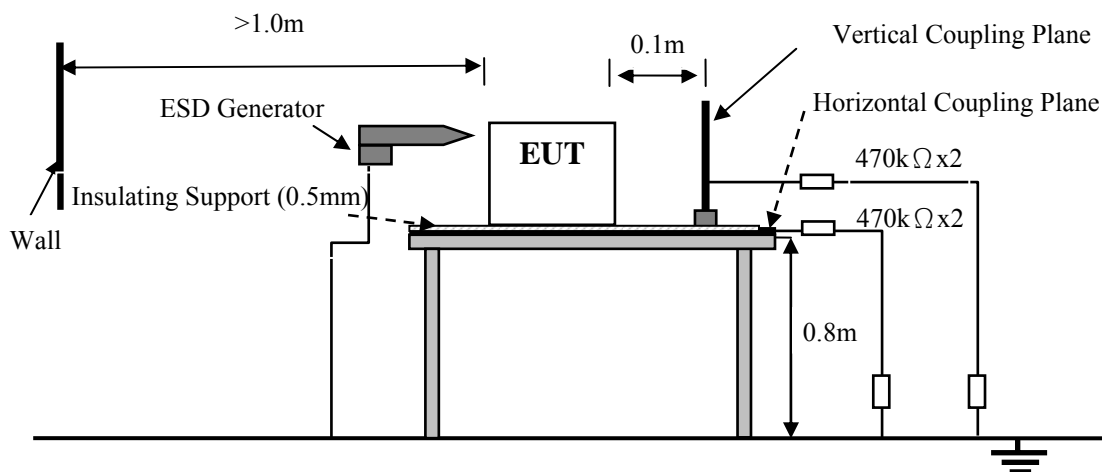
Failures which are not self-recovered after removal of the external disturbance, but which can be recovered to normal operation by reset or reboot are permissible.

## 8. ELECTROSTATIC DISCHARGE IMMUNITY TEST

### 8.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	ESD Tester	EM Test	Dito	P1349126669	Jun. 05,14	1 Year

### 8.2. Block Diagram of Test Setup



### 8.3. Test Standard

EN 55024: 2010 (IEC 61000-4-2: 2008)

(Severity Level 1 & 2 & 3 for Air Discharge at 2 kV & 4 kV & 8kV,  
Severity Level 1 & 2 for Contact Discharge at 2 kV & 4kV)

### 8.4. Severity Levels and Performance Criterion

Severity Level	Test Voltage Contact Discharge (kV)	Test Voltage Air Discharge (kV)	Performance criterion
1.	2	2	B
2.	4	4	
3.	6	8	
4.	8	15	
X	Special	Special	

### 8.5. EUT Configuration

The configurations of EUT are listed in Section 3.5.

### 8.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 8.2.

## 8.7. Test Procedure

### 8.7.1. Air Discharge:

The test was applied on non-conductive surfaces of EUT. The round discharge tip of the discharge electrode was approached as fast as possible to touch the EUT. After each discharge, the discharge electrode was removed from the EUT. The generator was re-triggered for a new single discharge and repeated 20 times for each pre-selected test point. This procedure was repeated until all the air discharge completed

### 8.7.2. Contact Discharge:

All the procedure was same as Section 8.7.1. except that the generator was re-triggered for a new single discharge and repeated 50 times for each pre-selected test point. The tip of the discharge electrode was touching the EUT before the discharge switch was operated.

### 8.7.3. Indirect discharge for horizontal coupling plane:

At least 20 single discharges were applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

### 8.7.4. Indirect discharge for vertical coupling plane:

At least 20 single discharges were applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, was placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges were applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

## 8.8. Test Results

### **PASS.**

The EUT was tested and all the test results are listed in next page.

## Electrostatic Discharge Test Results

Audix Technology (Shenzhen) Co., Ltd.

Applicant : TPV Display Technology (China) Co., Ltd	Test Date : Jun.19, 2014
EUT : LCD Monitor	Temperature : 24.2±0.6°C
M/N : 236LM00014	Humidity : 39±3%
Test Voltage : AC 230V/50Hz	Test Mode : Same as section 3.6
Test Engineer : Sun	Pressure : 100.6±1kPa
Required Performance : B	Actual Performance : A & B

Air Discharge: ±2kV ±4kV ±8kV # For Air Discharge each Point Positive 10 times and negative 10 times discharge.

Contact Discharge: ±2kV ±4kV # For Contact Discharge each point positive 25 times and negative 25 times discharge

For the time interval between successive single discharges an initial value of one second.

Discharge Voltage (kV)	Type of discharge	Dischargeable Points	Performance		Result (Pass/Fail)
			Required	Observation	
±2	Contact	2,5,7	B	A	Pass
±4	Contact	2,5,7	B	B	Pass
±2	Air	1,2,3,4,6,8	B	A	Pass
±4	Air	1,2,3,4,6,8	B	A	Pass
±8	Air	1,2,3,4,6,8	B	B	Pass
±2	HCP-Bottom	Edge of the HCP	B	A	Pass
±2	VCP-Front	Center of the VCP	B	A	Pass
±2	VCP-Left	Center of the VCP	B	A	Pass
±2	VCP-Back	Center of the VCP	B	A	Pass
±2	VCP-Right	Center of the VCP	B	A	Pass
±4	HCP-Bottom	Edge of the HCP	B	A	Pass
±4	VCP-Front	Center of the VCP	B	A	Pass
±4	VCP-Left	Center of the VCP	B	A	Pass
±4	VCP-Back	Center of the VCP	B	A	Pass
±4	VCP-Right	Center of the VCP	B	A	Pass

### Discharge Points Description

<u>1</u>	Slots	<u>6</u>	AC In Port
<u>2</u>	VGA Port/DVI Port	<u>7</u>	Screws
<u>3</u>	Screen	<u>8</u>	Keylock
<u>4</u>	Button	<u>9</u>	
<u>5</u>	Metal	<u>10</u>	

Remark: After discharge to the ungrounded part of EUT, it needs the bleeder resistor to remove the charge prior to next ESD pulse.  
The Class "B" Means the monitor will twinkle during test, but it will recovery by itself after test.

Discharge was considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

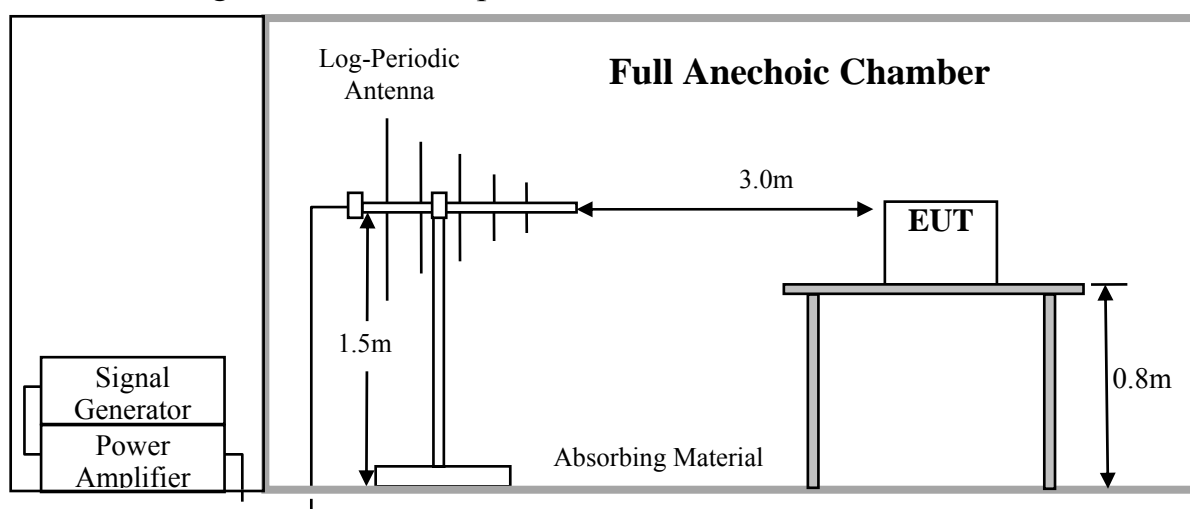
## 9. RF FIELD STRENGTH SUSCEPTIBILITY TEST

### 9.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	2#Chamber	AUDIX	N/A	N/A	Apr. 28,14	1Year
2.	Signal Generator	Agilent	N5181A	MY49061013	Oct.31, 13	1Year
3.	Amplifier	A&R	100W/1000M1	17028	NCR	NCR
4.	Power Meter	Anritsu	ML2487A	6K00002472	Apr. 28,14	1Year
5.	Power Sensor	Anritsu	MA2491A	032516	Apr. 28,14	1Year
6.	Log-periodic Antenna	A&R	AT1080	16512	NCR	NCR

Note: NCR: No calibration required(calibrated with system)

### 9.2. Block Diagram of Test Setup



### 9.3. Test Standard

EN 55024: 2010 (IEC 61000-4-3: 2010)  
(Severity Level: 2 at 3V / m)

### 9.4. Test Severity Level and Performance Criterion

Severity Level	Test Field Strength V/m	Performance Criteria
1.	1	A
2.	3	
3.	10	
X.	Special	

### 9.5. EUT Configuration

The configurations of EUT are listed in Section 3.5.

### 9.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 9.2.

### 9.7. Test Procedure

Testing was performed in a Fully anechoic chamber as recommended by IEC 61000-4-3. The EUT was placed on an 80 cm high non-conductive table located in the area of field uniformity. The radiating antenna was placed 3m in front of the EUT and Support system, and dwell time of the radiated interference was controlled by an automated, computer-controlled system. The signal source was stepped through the applicable frequency range at a rate no faster than 1% of the fundamental. The signal was amplitude modulated 80% over the frequency range 80 MHz to 1GHz at a level of 3 V/m. The dwell time was set at 3 s. Field presence was monitored during testing via a field probe placed in close proximity to the EUT. Throughout testing, the EUT was closely monitored for signs of susceptibility. The test was performed with the antennae oriented in both a horizontal and vertical polarization.

All the scanning conditions are as follows:

Test conditions	
Frequency	80MHz-1GHz
Frequency increments step	1% of momentary used
Test level	3V/m (unmodulated)
Dwell time	3s
Test signal	80% amplitude modulated by 1kHz sinusoidal audio signal

### 9.8. Test Results

**PASS.**

The EUT was tested and all the test results are listed in next page.



## RF Field Strength Susceptibility Test Results

Audix Technology (Shenzhen) Co., Ltd.

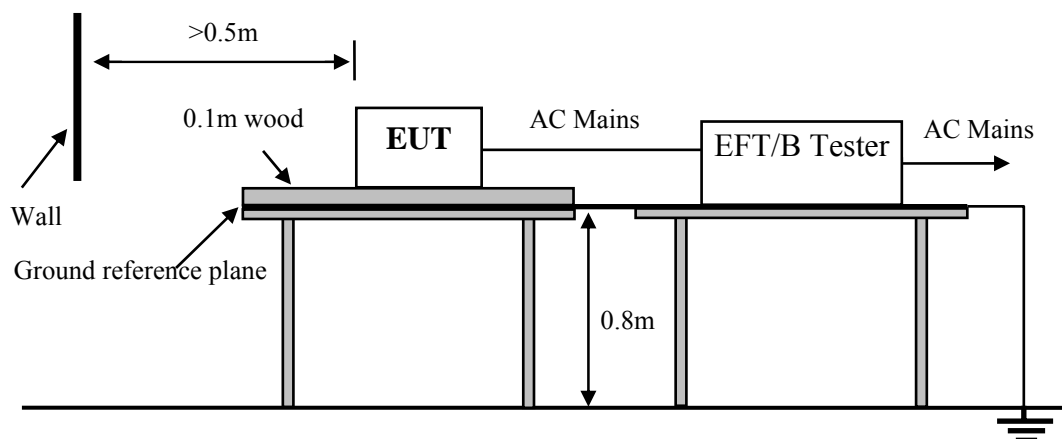
Applicant : TPV Display Technology (China) Co., Ltd	Test Date : Jun.16, 2014																																				
EUT : LCD Monitor	Temperature : 24±0.6°C																																				
M/N : 236LM00014	Humidity : 52±3%																																				
Test Voltage : AC 230V/50Hz	Pressure : 101.5±1kPa																																				
Test Engineer : Donjon	Test Mode : Same as section 3.6																																				
Required Performance : A	Actual Performance : A																																				
Modulation: <input checked="" type="checkbox"/> AM <input type="checkbox"/> Pulse <input type="checkbox"/> none      1 kHz      80%																																					
Frequency Rang :80 MHz -1000MHz																																					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th colspan="2" style="width: 35%;">Horizontal</th> <th colspan="2" style="width: 35%;">Vertical</th> <th style="width: 15%;">Result</th> </tr> <tr> <th></th> <th style="width: 15%;">Required</th> <th style="width: 20%;">Observation</th> <th style="width: 15%;">Required</th> <th style="width: 20%;">Observation</th> <th style="width: 15%;">(Pass / Fail)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Front</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">Right</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">Rear</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">Left</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A</td> <td style="text-align: center;">Pass</td> </tr> </tbody> </table>		Horizontal		Vertical		Result		Required	Observation	Required	Observation	(Pass / Fail)	Front	A	A	A	A	Pass	Right	A	A	A	A	Pass	Rear	A	A	A	A	Pass	Left	A	A	A	A	Pass
	Horizontal		Vertical		Result																																
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Right	A	A	A	A	Pass																																
Rear	A	A	A	A	Pass																																
Left	A	A	A	A	Pass																																
Remark:																																					

## 10. ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST

### 10.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Burst Tester	TESEQ	NSG3025	28017	Apr. 28,14	1 Year
2.	CDN	TESEQ	CDN8014	29638	Apr. 28,14	1 Year

### 10.2. Block Diagram of Test Setup



### 10.3. Test Standard

EN 55024: 2010 (IEC 61000-4-4:2012)  
(Severity Level 1 at 0.5kV Level 2 at 1kV)

### 10.4. Severity Levels and Performance Criterion

Open Circuit Output Test Voltage $\pm 10\%$			
Severity Level	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines	Performance criterion
1.	0.5 kV	0.25 kV	B
2.	1 kV	0.5 kV	
3.	2 kV	1 kV	
4.	4 kV	2 kV	
X	Special	Special	

### 10.5. EUT Configuration

The configurations of EUT are listed in Section 3.5.

### 10.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 10.2.

## 10.7. Test Procedure

The EUT and its simulators were placed on the ground reference plane and were insulated from it by a wood support  $0.1\text{m} \pm 0.01\text{m}$  thick. The ground reference plane was  $1\text{m} \times 1\text{m}$  metallic sheet with 0.65mm minimum thickness. This reference ground plane was project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane was more than 0.5m. All cables to the EUT was placed on the wood support, cables not subject to EFT/B was routed as far as possible from the cable under test to minimize the coupling between the cables.

### 10.7.1. For input and AC power ports:

The EUT was connected to the power mains by using a coupling device that couples the EFT interference signal to AC power lines. Both positive transients and negative transients of test voltage were applied during compliance test and the duration of the test can't less than 1min.

### 10.7.2. For signal lines and control lines ports:

Ports which are intended to be connected to telecommunication networks (e.g. public switched telecommunication networks, integrated services digital networks, local area networks and similar networks.)

### 10.7.3. For DC input and DC output power ports:

It's unnecessary to test.

## 10.8. Test Results

**PASS.**

The EUT was tested and all the test results are listed in next page.

## Electrical Fast Transient/Burst Test Results

Audix Technology (Shenzhen) Co., Ltd.

Applicant : TPV Display Technology (China) Co., Ltd <hr/> EUT : LCD Monitor <hr/> M/N : 236LM00014 <hr/> Test Voltage : AC 230V/50Hz <hr/> Test Engineer : Sun <hr/> Required Performance : B	Test Date : Jun.19, 2014 <hr/> Temperature : 24.2±0.6°C <hr/> Humidity : 39±3% <hr/> Test Mode : Same as section 3.6 <hr/> Pressure : 100.6±1kPa <hr/> Actual Performance : A & B
--	--

Repetition Frequency : 5 kHz      Burst Duration : 15ms      Burst Period: 300ms

Inject Time(s): 120s      Inject Method: Direct  
 Inject Line:  AC Mains     DC Supply     Signal

Line	Test Voltage	Performance			Result (Pass/Fail)
		Required	Observation(+)	Observation(-)	
L	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
N	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
PE	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
L N	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
L PE	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
N PE	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
L N PE	0.5kV	B	A	A	Pass
	1kV	B	B	B	Pass
Signal Line					

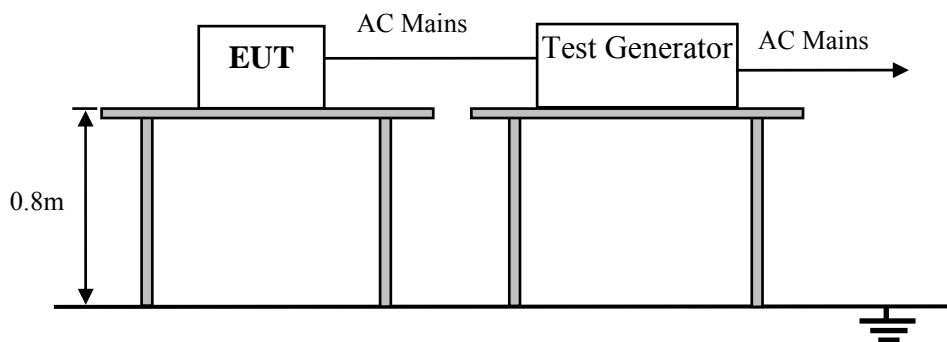
Remark: The Class "B" Means the monitor will twinkle during test, but it will recovery by itself after test.

## 11. SURGE TEST

### 11.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Transient Test System	EMC PARTNER	TRANSIENT 2000	TRA2006 F-S-T-D-R -1500	Oct.31, 13	1 Year
2	CDN	EMC PARTNER	CDN-UTP8	CDN-UTP8-1508	Oct.31, 13	1 Year
3	CDN	EMC PARTNER	CDN2000-06-25	CDN2000-06-25 0111	Oct.31, 13	1 Year

### 11.2. Block Diagram of Test Setup



### 11.3. Test Standard

EN 55024: 2010 (IEC 61000-4-5: 2005)

(Severity Level: Line to Line was Level 1 at 0.5kV & Level 2 at 1kV

Line to Ground was Level 1 at 0.5kV & Level 2 at 1kV & Level 3 at 2kV)

### 11.4. Severity Levels and Performance Criterion

Severity Level	Open-Circuit Test Voltage kV	Performance criterion
1	0.5	B
2	1.0	
3	2.0	
4	4.0	
*	Special	

### 11.5. EUT Configuration

The configurations of EUT are listed in Section 3.5.

### 11.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 11.2

### 11.7. Test Procedure

- 1) Set up the EUT and test generator as shown on Section 11.2.
- 2) For line-to-line coupling mode, provide a 1kV 1.2/50us voltage surge (at open-circuit condition) and 8/20us current surge to EUT selected points, and for active line / neutral lines to ground are same except test level is 2kV.
- 3) At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are applied during test.
- 4) Different phase angles are done individually.
- 5) Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

### 11.8. Test Results

**PASS.**

The EUT was tested and all the test results are listed in next page.



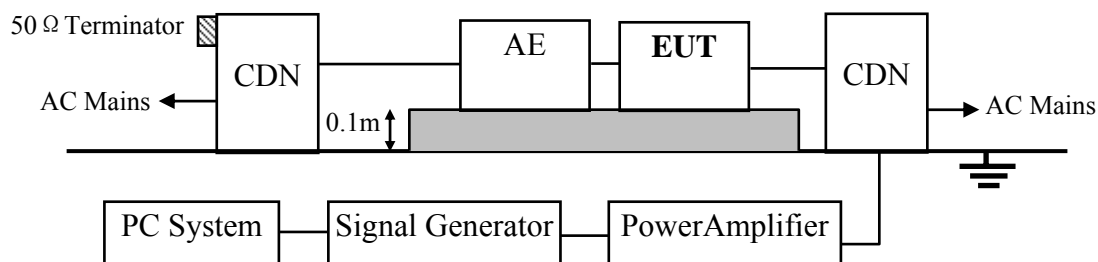
## 12. INJECTED CURRENTS SUSCEPTIBILITY TEST

### 12.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Generator	Agilent	N5181A	MY49061013	Oct.31, 13	1 Year
2.	Amplifier	AR	25A250A	19152	NCR	NCR
3.	Amplifier	AR	100A250	19368	NCR	NCR
4.	Power meter	HP	436A	2016A07891	Apr. 28,14	1Year
5.	Power sensor	Agilent	8482B	MY41090514	Nov.23, 13	1Year
6.	CDN	FCC	FCC-801-M2-25	47	Apr. 28,14	1 Year
7.	CDN	FCC	FCC-801-M3-25	107	Apr. 28,14	1 Year
8.	CDN	FCC	FCC-801-M2-25	07035	Apr. 28,14	1 Year
9.	CDN	FCC	FCC-801-M3-25	07045	Apr. 28,14	1 Year
10.	PC	N/A	N/A	N/A	N/A	N/A
11.	Attenuator	Weinschel	40-6-34	LJ092	Apr. 28,14	1 Year
12.	EM Injection Clamp	FCC	F-203I-23mm	403	Apr. 28,14	1 Year
13.	RF Cable	MICABLE	A04-07-07-2M	09111340	NCR	NCR
14.	RF Cable	STORM	MFR-57500	90-195-2MTR	NCR	NCR

Note: NCR: No calibration required(calibrated with system)

### 12.2. Block Diagram of Test Setup



### 12.3. Test Standard

EN55024: 2010 (IEC61000-4-6: 2013)

(Severity Level 2 at 3V (r.m.s.) and frequency is from 0.15MHz to 80MHz)

### 12.4. Severity Levels and Performance Criterion

Severity Level	Voltage Level (e.m.f.) V	Performance criterion
1	1	A
2	3	
3	10	
X	Special	

### 12.5. EUT Configuration

The configurations of EUT are listed in Section 3.5.



### 12.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 12.2.

### 12.7. Test Procedure

- 1) Set up the EUT, CDN and test generators as shown on Section 12.2.
- 2) Let the EUT work in test mode and test it.
- 3) The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 10 and 30 mm (where possible).
- 4) The disturbance signal described below is injected to EUT through CDN.
- 5) The EUT operates within its operational mode(s) under intended climatic conditions after power on.
- 6) The frequency range is swept from 0.150MHz to 80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1kHz sine wave.
- 7) The rate of sweep shall not exceed  $1.5 \times 10^{-3}$  decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.
- 8) Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

### 12.8. Test Results

**PASS.**

The EUT was tested and all the test results are listed in next page.

## Injected Currents Susceptibility Test Results

Audix Technology (Shenzhen)Co.,Ltd.

Applicant : TPV Display Technology (China) Co., Ltd <hr/> EUT : LCD Monitor <hr/> M/N : 236LM00014 <hr/> Power Supply : AC 230V/50Hz <hr/> Test Engineer : Donjon <hr/> Required Performance : A	Test Date : Jun.16, 2014 <hr/> Temperature : 24±0.6°C <hr/> Humidity : 52±3% <hr/> Test Mode : Same as section 3.6 <hr/> Pressure : 101.5±1kPa <hr/> Actual Performance : A
---	--

Frequency Range (MHz)	Injected Position	Voltage Level (e.m.f.)	Required	Observation	Result
					(Pass / Fail)
0.15 ~ 20	AC Mains	3V	A	A	PASS
20 ~ 80	AC Mains	3V	A	A	PASS

Modulation Signal:1kHz 80% AM

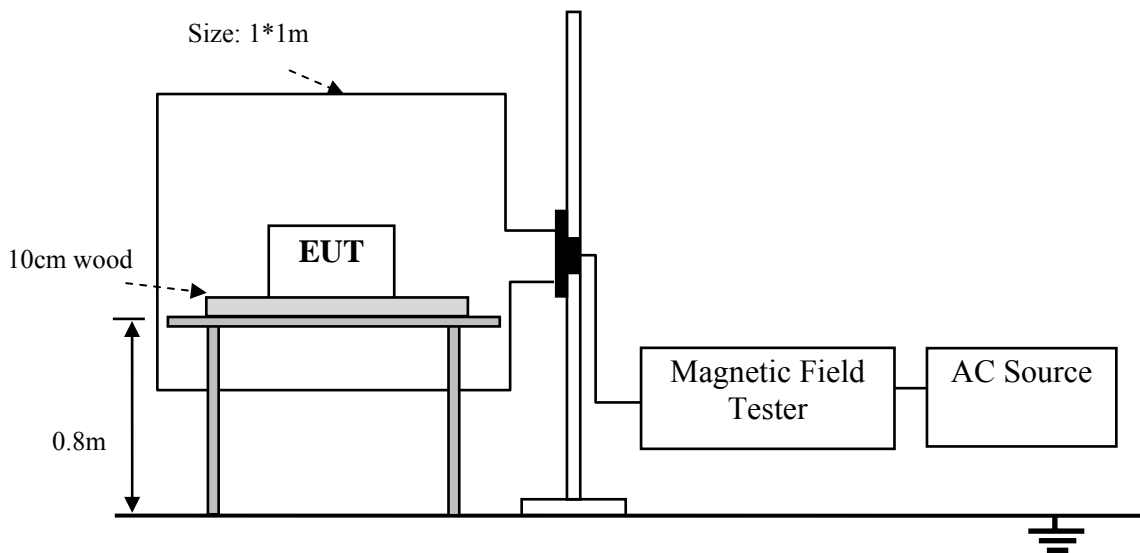
Remark:

### 13. MAGNETIC FIELD IMMUNITY TEST

#### 13.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Magnetic Field Tester	HEAFELY	MAG100.1	083858-10	Apr. 28,14	1 Year

#### 13.2. Block Diagram of Test Setup



#### 13.3. Test Standard

EN 55024: 2010 (IEC 61000-4-8: 2009)  
(Severity Level 1 at 1A/m)

#### 13.4. Severity Levels and Performance Criterion

Severity Level	Magnetic Field Strength A/m	Performance criterion
1.	1	A
2.	3	
3.	10	
4.	30	
5.	100	
X.	Special	

#### 13.5. EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

#### 13.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 13.2.

#### 13.7. Test Procedure

The EUT was subjected to the test magnetic field by using the induction coil of standard dimensions (1m\*1m) and shown in Section 13.2. The induction coil was then rotated by 90° in order to expose the EUT to the test field with different orientations.

#### 13.8. Test Results

**PASS.**

The EUT was tested and all the test results are listed in next page.

## Magnetic Field Immunity Test Results

Audix Technology (Shenzhen) Co., Ltd.

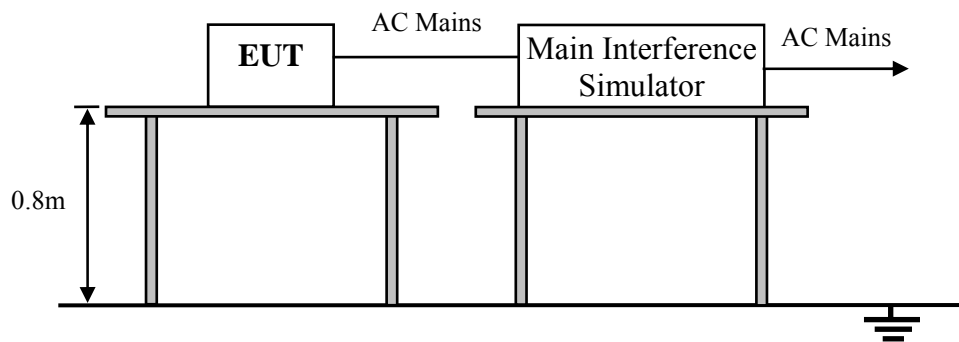
Applicant : TPV Display Technology (China) Co., Ltd <hr/> EUT : LCD Monitor <hr/> M/N : 236LM00014 <hr/> Test Voltage : AC 230V/50Hz <hr/> Test Engineer : Donjon <hr/> Required Performance : A	Test Date : Jun.16, 2014 <hr/> Temperature : 24±0.6°C <hr/> Humidity : 52±3% <hr/> Test Mode : Same as section 3.6 <hr/> Pressure : 101.5±1kPa <hr/> Actual Performance : A				
Test Level	Testing Duration	Coil Orientation	Required	Observation	Result (Pass/Fail)
1A/m	5 min / coil	X	A	A	PASS
1A/m	5 min / coil	Y	A	A	PASS
1A/m	5 min / coil	Z	A	A	PASS
Remark:					

## 14. VOLTAGE DIPS AND INTERRUPTIONS TEST

### 14.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Main Interference Simulator	HAEFELY	PLINE 1610	083690-05	Apr. 28,14	1 Year

### 14.2. Block Diagram of Test Setup



### 14.3. Test Standard

EN 55024: 2010 (IEC 61000-4-11: 2004)

### 14.4. Severity Levels and Performance Criterion

Test Level %U <sub>T</sub>	Voltage dip and short interruptions %U <sub>T</sub>	Duration (in period)	Performance Criterion
0	100	250	C
0	100	0.5	B
70	30	25	C

### 14.5. EUT Configuration

The configurations of EUT are listed in Section 3.5.

### 14.6. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 14.2.

### 14.7. Test Procedure

- 1) The EUT and test generator were setup as shown on Section 14.2.
- 2) The interruption is introduced at selected phase angles with specified duration.
- 3) Record any degradation of performance.

### 14.8. Test Results

**PASS.**

The EUT was tested and all the test results are listed in next page.

## Voltage Dips And Interruptions Test Results

Audix Technology (Shenzhen) Co., Ltd.

Applicant : TPV Display Technology (China) Co., Ltd <hr/> EUT : LCD Monitor <hr/> M/N : 236LM00014 <hr/> Power Supply : AC 100V/50Hz ; AC 230V/50Hz <hr/> Test Engineer : Donjon <hr/> Required Performance : B & C	Test Date : Jun.16, 2014 <hr/> Temperature : 24±0.6°C <hr/> Humidity : 52±3% <hr/> Test Mode : Same as section 3.6 <hr/> Pressure : 101.5±1kPa <hr/> Actual Performance : A & B
--	--

Test Level % U <sub>T</sub>	Voltage Dips & Short Interruptions % U <sub>T</sub>	Duration (in period)	Phase Angle	Required	Observation	Result
						(Pass / Fail)
0	100	0.5P	0° -360°	B	A	PASS
70	30	25P	0° -360°	C	A	PASS
0	100	250P	0° -360°	C	B	PASS

Note 1: U<sub>T</sub> is the rated voltage for the equipment.

Note 2: The frequency of the test voltage shall be within ±2% of the rated frequency, the output voltage shall be within ±5% of the rated voltage.

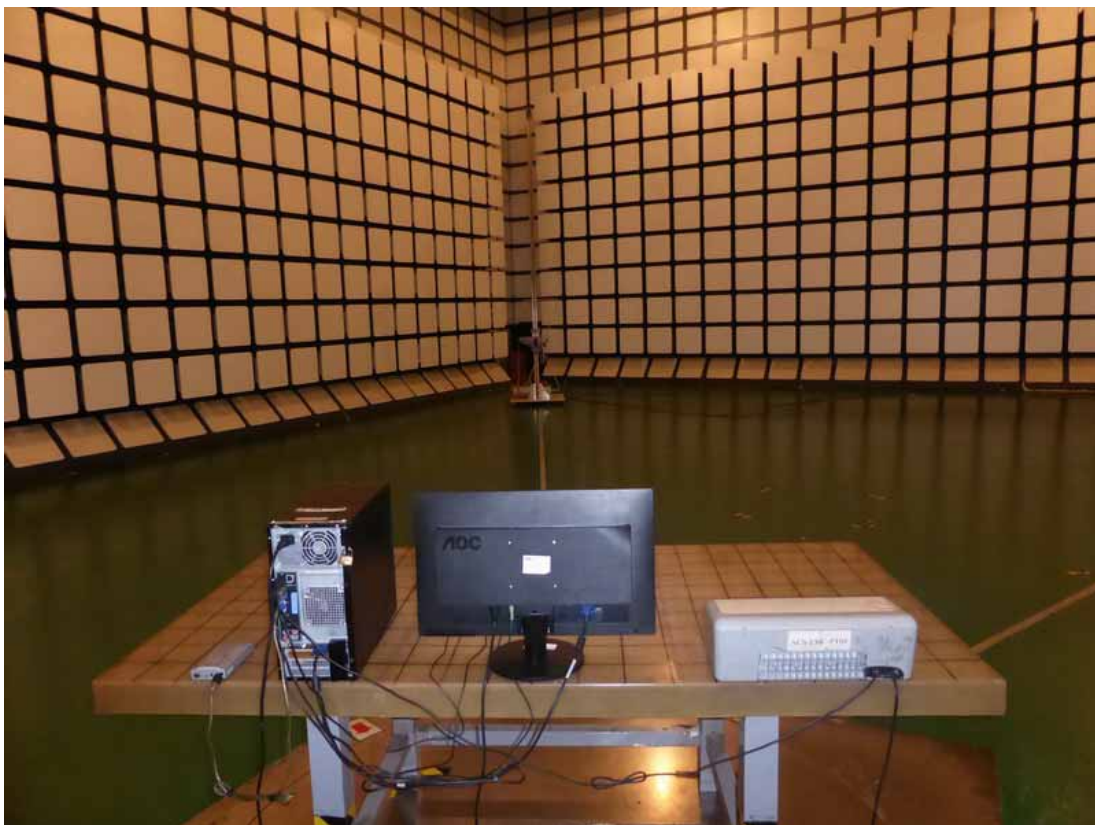
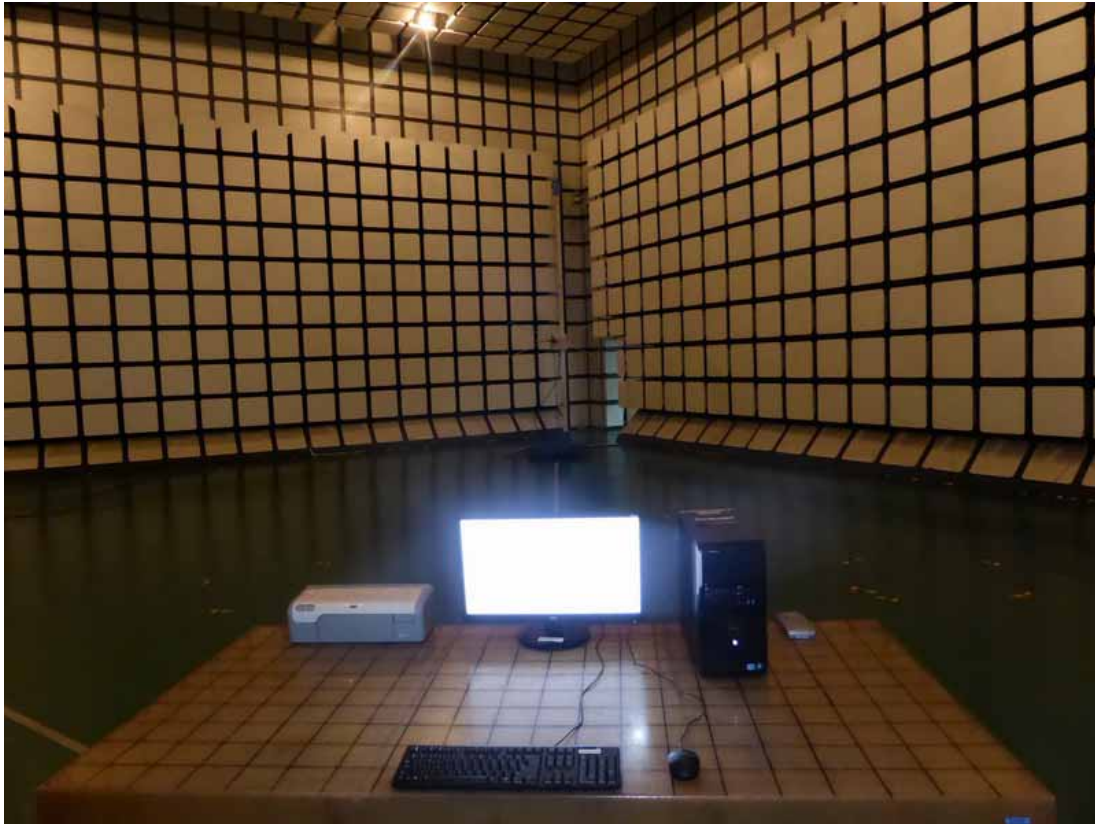
Remark: The Class “B” means the screen of the monitor was a little of flicker, but after finishing the test, it can recovery by self.

## 15. PHOTOGRAPHS

### 15.1. Photos of Power Line Conducted Emission Test

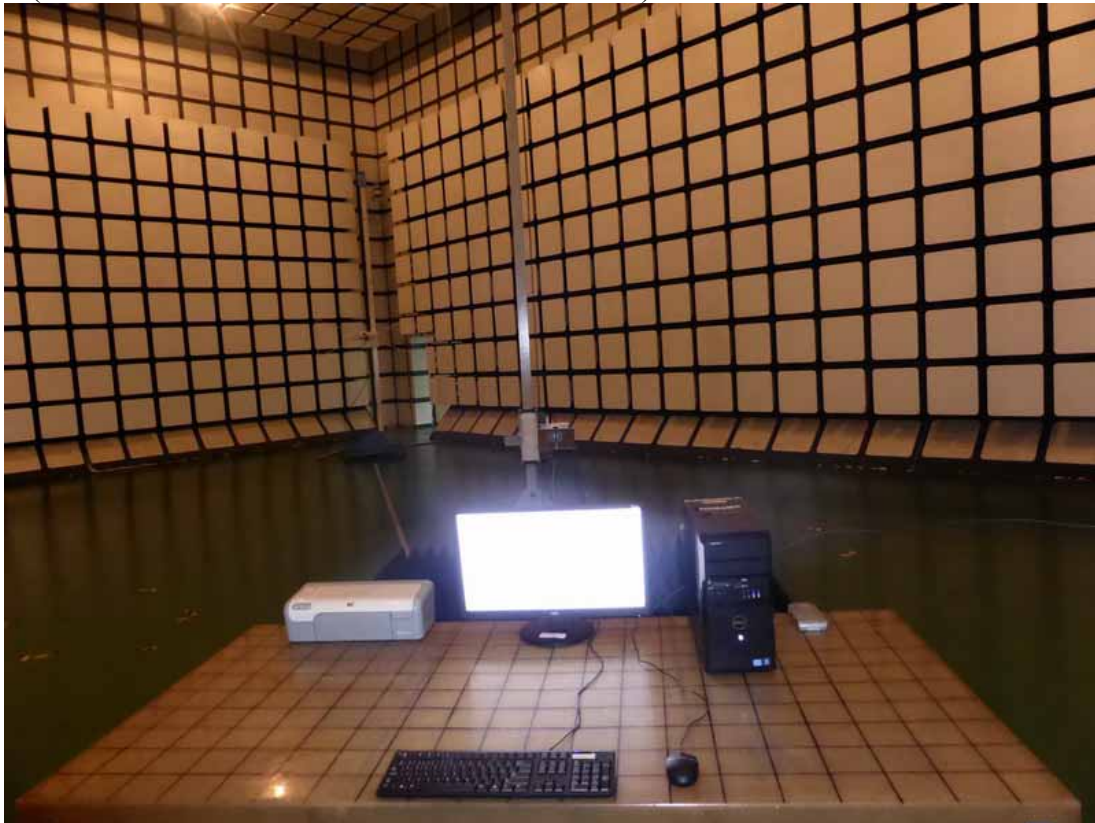


15.2. Photos of Radiated Emission Test (In Anechoic Chamber)





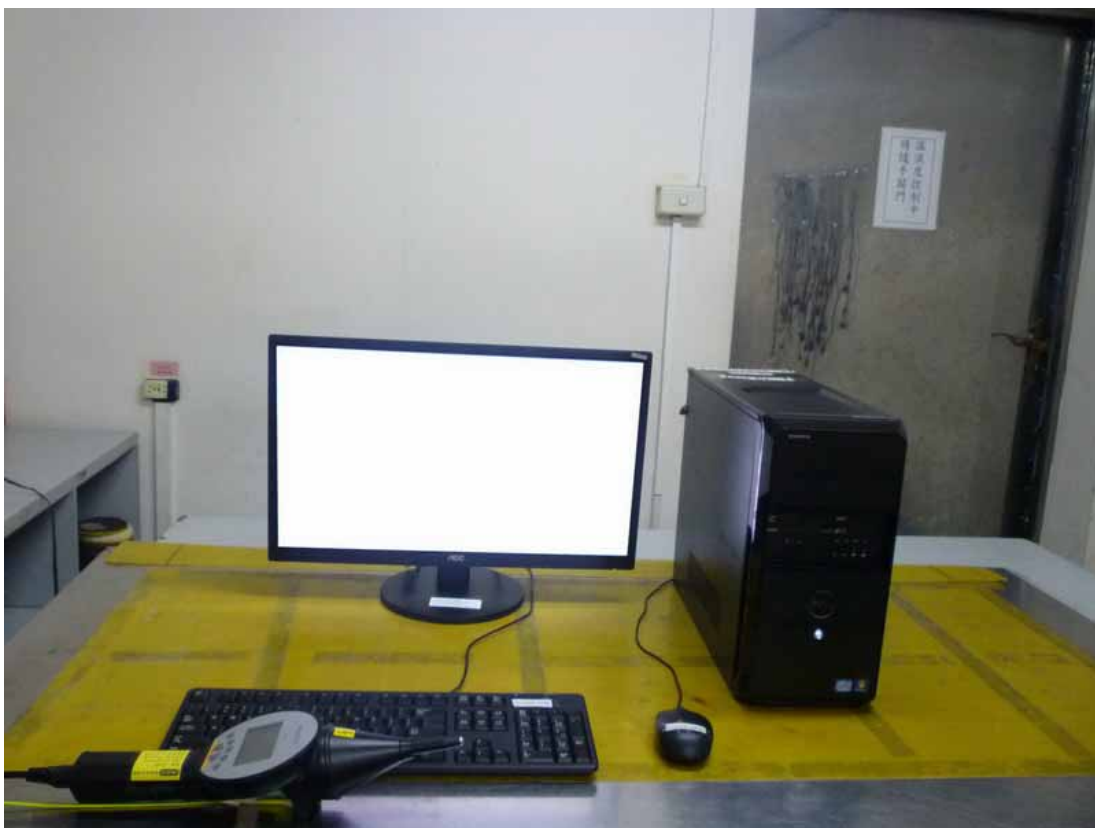
(At Anechoic 10m Chamber Test 1GHz –6GHz)



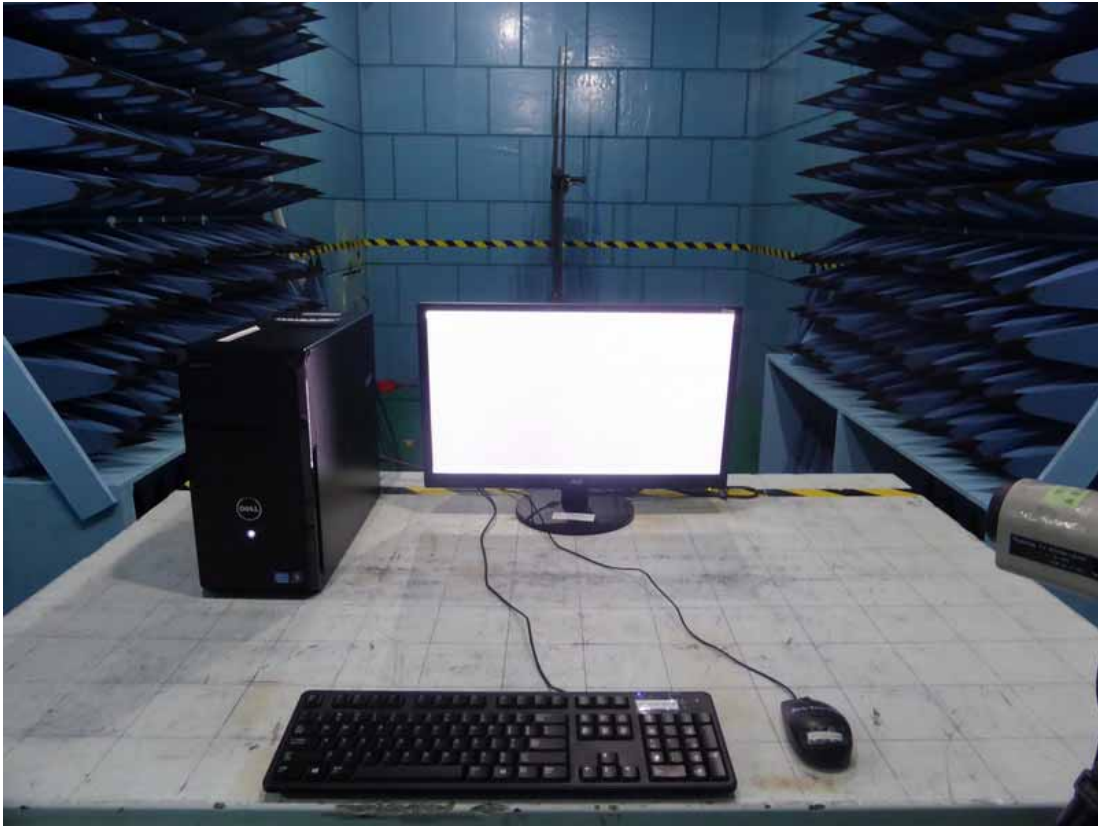
### 15.3. Photo of Harmonic / Flicker Test



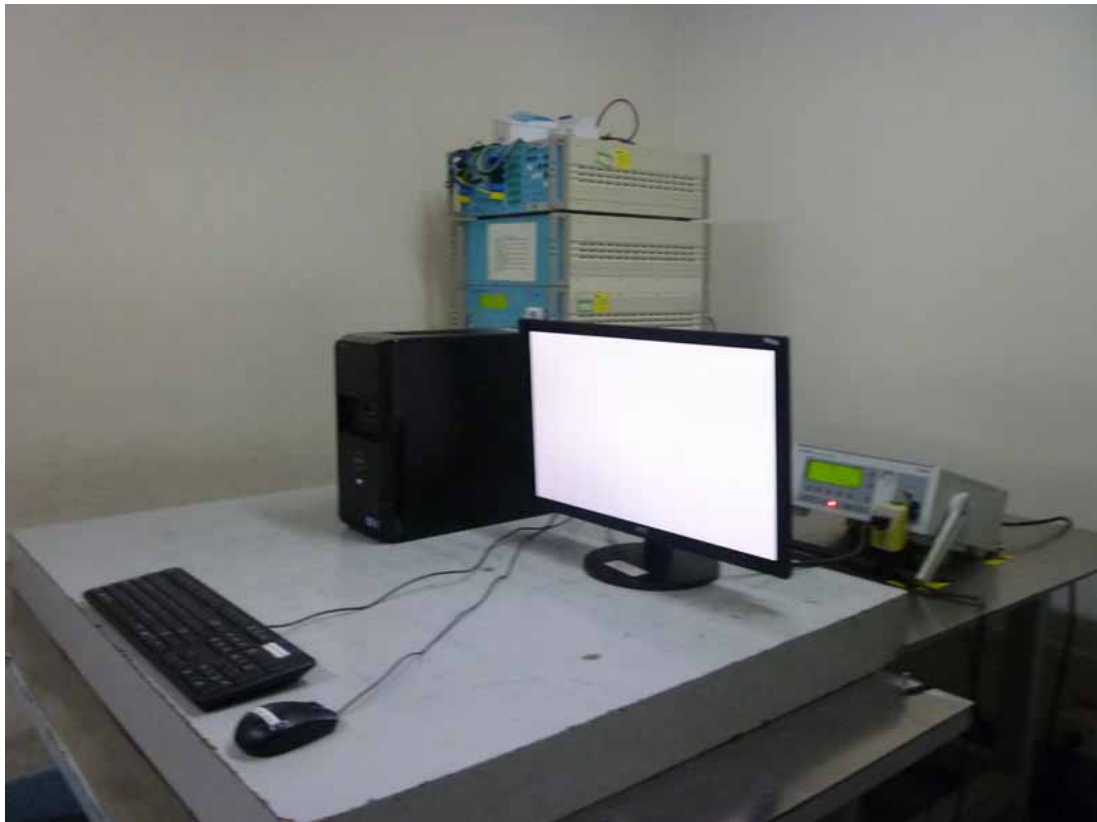
15.4. Photos of Electrostatic Discharge Immunity Test



15.5. Photo of RF Strength Susceptibility Test



15.6. Photo of Electrical Fast Transient/Burst Immunity Test



15.7. Photo of Surge Test



15.8. Photo of Injected Currents Susceptibility Test



15.9. Photo of Magnetic Field Test



15.10. Photo of Voltage Dips and interruptions test

