



# Test Report

Product Name : Notebook PC  
Model No. : U47A,Q400A, R404A, U47V,R404V,  
U47XXXX, Q400XXXX,R404XXXX

Applicant : ASUSTeK COMPUTER INC.

Address : NO.150,Li-Te Rd.,Peitou,Taipei,Taiwan,R.O.C

Date of Receipt : Mar. 02, 2012  
Test Date : Mar. 02, 2012 ~ Mar. 25, 2012  
Issued Date : Mar. 27, 2012  
Report No. : 123S006E-IT-CE-P01V01  
Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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# Test Report Certification

Issued Date : Mar. 27, 2012  
 Report No. : 123S006E-IT-CE-P01V01



Product Name : Notebook PC  
 Applicant : ASUSTeK COMPUTER INC.  
 Address : NO.150,Li-Te Rd.,Peitou,Taipei,Taiwan,R.O.C  
 Manufacturer : 1. PEGATRON CORP TAOYUAN MFG  
 2. PROTEK (SHANGHAI) LTD  
 3.FUXIANG PRECISION INDUSTRIAL(KUNSHAN) CO LTD  
 4. TECH-COM(SHANGHAI) COMPUTER CO. LTD  
 Address : 1. 5, SHING YEH ST., KWEI SHAN HSIANG, TAOYUAN 333,  
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 CHINA  
 4.68 SANZHUANG RD, SONGJIANG EXPORT PROCESSING  
 ZONE,SHANGHAI 201613, CHINA  
 Model No. : U47A,Q400A, R404A, U47V,R404V, U47XXXX,  
 Q400XXXX,R404XXXX  
 Brand Name : ASUS  
 EUT Voltage : AC 230 V / 50 Hz  
 Applicable Standard : EN 55022:2010  
 AS/NZS CISPR 22:2009  
 EN 61000-3-2:2006+A1:2009+A2:2009  
 EN 61000-3-3:2008  
 EN 55024:2010  
 Test Result : Complied  
 Performed Location : Suzhou EMC Laboratory  
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## Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

<b>Taiwan R.O.C.</b>	<b>:</b>	<b>BSMI, NCC, TAF</b>
<b>Germany</b>	<b>:</b>	<b>TUV Rheinland</b>
<b>Norway</b>	<b>:</b>	<b>Nemko, DNV</b>
<b>USA</b>	<b>:</b>	<b>FCC, NVLAP</b>
<b>Japan</b>	<b>:</b>	<b>VCCI</b>

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>  
The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :  
<http://www.quietek.com/>  
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## 1. General Information

### 1.1. EUT Description

Product Name	Notebook PC
Model No.	U47A,Q400A, R404A, U47V,R404V, U47XXXX, Q400XXXX,R404XXXX
Brand Name	ASUS

Note: The EUT is including eight models for different marketing requirement.

#### Keypart

Device	Vendor	Model Name	Description
Motherboard	ASUS	U47VC MAIN BOARD	
CPU	Intel	INT I3-3110M 2.4G/3M QC4V BGA	CPU AV8063801032800 920268 QS
		INT I5-3210M 2.5G/3M QC4T BGA	CPU AV8063801032502 920266 QS
		INT I5-3320M 2.6G/3M QC4R BGA	CPU AV8063801031900 920264 QS
		INT I5-3360M 2.8G/3M QC4P BGA	CPU AV8063801031102 920262 QS
		INT I7-3520M 2.9G/4M QC4M BGA	CPU AV8063801028803 920260 QS
LCD (ID)	IVO	P140NWR1 R0	
	IVO	P140NWR1 R1	
DIMM	SAMSUNG	M471B5773DH0-CK0	DDR3 1600 SO-D 2GB 204P
	ASINT	SSZ302G08-GGNED	DDRIII 1600 SO-DIM 2GB 204P
	HYNIX	HMT351S6CFR8C-PB	DDR3 1600 SO-DIM 4GB 204P
	ELPIDA	EBJ40UG8BBU0-GN-F	DDR3 1600 SO-DIM 4GB 204P
	SAMSUNG	M471B5273DH0-CK0	DDR3 1600 SO-D 4GB 204P
	HYNIX	HMT325S6CFR8C-PB	DDR3 1600 SO-DIM 2GB 204P
HDD	WD	WD3200BPVT-80JJ5T0	SATA ML320S-AF2 320G 5400R 2.5
	SEAGATE	ST320LT020	SATA SAPTA15 320G 5400R 2.5'
	SEAGATE	ST9500325AS	SATA WYATT 500G 5400R 2.5'
	HITACHI	HTS545050A7E380	SATA JAGUAR-B7 500G 5400R 2.5'
	HGST	HTS547575A9E384	SATA JET-B 750G 5400R 2.5'
	SEAGATE	ST9750423AS	SATA DESARU 750G 5400R 2.5'
	WD	WD10JPVT-80A1YT0	SATA ML500M 1TB 5400R 2.5'
	SEAGATE	ST1000LM024	SATA M8 1TB 5400R 2.5'
	SEAGATE	ST9500423AS	SATA DESARU 500G 7200R 2.5'
	WD	5000BPKT-80PK4T0	SATA MX375M 500G 7200R 2.5'
	SEAGATE	ST9750420AS	SATA DESARU 750G 7200R 2.5'
	WD	7500BPKT-80PK4T0	SATA MX375M 750G 7200R 2.5'

ODD	PANASONIC	UJ8B2	DVD S-MULTI DL 8X/6X/8X6X/5X
	HLDS	GU60N	DVD S-MULTI DL 8X/6X/8X6X/5X
WIFI Only	Atheros	AR5B125(AW-NE186H)	802.11B/G/N 1*1 WLAN HMC
	INTEL	105BNHMW	CENTRINO WIRELESS-N 105
WIFI+BT	Atheros	AR5B225(AW-NB097H)	802.11B/G/N WLAN+BT4.0+HS R0
Combo	INTEL	2230BNHMW	CENTRINO WIRELESS-N 2230
Battery	Simplo Technology Co Ltd (ASUS)	A32-U47	10.8Vdc,5200mAh/56Wh
	Simplo Technology Co Ltd (ASUS)	A32-U47	11.25Vdc,5900mA /66Wh
Camera	Azurewave	AM-VS053	CAMERA 0.3M FIX 3.3V D MIC CL
	CHICONY	CKFB1D321003870LH	CAMERA HD FIX 3.3V D MIC CL
TP	ELAN	SA4611-1000	TOUCHPAD FOR K45
Keyboard	ASUS	0KN0-MF1US13	KEYBOARD 302MM BL WOF(US)
	ASUS	0KN0-MF2UK13	
Adapter	DELTA	ADP-90CD CB	POWER ADAPTER 90W19V (2PIN)
	DELTA	ADP-90CD DB	POWER ADAPTER 90W 19V (3PIN)
	ENERTRONIX	EXA0904YH	POWER ADAPTER 90W19V 3PIN(BLK)



**1.2. Mode of Operation**

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Pre Test Mode	
Emission	Mode 1: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 3: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 5: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 8: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 9: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 12: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)
Final Test Mode	
Emission	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)
Immunity	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)

Item	Mode 1	Mode 2
Motherboard	ASUS U47VC MAIN BOARD	ASUS U47VC MAIN BOARD
CPU	INT I7-3520M 2.9G/4M QC4M BGA	INT I5-3360M 2.8G/3M QC4P BGA
Memory	HYNIX/HMT351S6CFR8C-PB	SAMSUNG/M471B5273DH0-CK0
HDD	SEAGATE/ST1000LM024	WD/WD3200BPVT-80JJ5T0
ODD	PANASONIC/UJ8B2	PANASONIC/UJ8B2
WIFI Only	N/A	N/A
WIFI+BT Combo	Atheros/AR5B225	Atheros/AR5B225
LCD	IVO/P140NWR1 R0	IVO/P140NWR1 R1
Camera	Azurewave/AM-VS053	CHICONY/CKFB1D321003870LH
Touch Pad	ELAN/SA461I-1000	ELAN/SA461I-1000
KeyBoard	0KN0-MF1US13	0KN0-MF2UK13
HDMI to VGA Connector	Yes	No
Battery	SIMPLO TECHNOLOGY CO LTD (ASUS)/A32-U47,11.25V	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47,11.25V
Adapter	DELTA/ADP-90CD CB	DELTA/ADP-90CD CB

Item	Mode 3	Mode 4
Motherboard	ASUS U47VC MAIN BOARD	ASUS U47VC MAIN BOARD
CPU	INT I5-3320M 2.6G/3M QC4R BGA	INT I5-3210M 2.5G/3M QC4T BGA
Memory	HYNIX/HMT325S6CFR8C-PB	SAMSUNG/M471B5773DH0-CK0
HDD	SEAGATE/ST320LT020	HGST/HTS547575A9E384
ODD	PANASONIC/UJ8B2	HLDS/GU60N
WIFI Only	N/A	AZWAVE/AW-NE186H 2ANT.
WIFI+BT Combo	Atheros/AR5B225	N/A
LCD	IVO/P140NWR1 R0	IVO/P140NWR1 R1
Camera	Azurewave/AM-VS053	CHICONY/CKFB1D321003870LH
Touch Pad	ELAN/SA461I-1000	ELAN/SA461I-1000
KeyBoard	0KN0-MF1US13	0KN0-MF2UK13
HDMI to VGA Connector	Yes	No
Battery	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47, 11.25V	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47, 10.8V
Adapter	ENERTRONIX/EXA0904YH	ENERTRONIX/EXA0904YH

Item	Mode 5	Mode 6
Motherboard	ASUS U47VC MAIN BOARD	ASUS U47VC MAIN BOARD
CPU	INT I3-3110M 2.4G/3M QC4V BGA	INT I3-3110M 2.4G/3M QC4V BGA
Memory	SAMSUNG/M471B5773DH0-CK0	SAMSUNG/M471B5773DH0-CK0
HDD	SEAGATE/ST9500325AS	HITACHI/HTS545050A7E380
ODD	HLDS/GU60N	HLDS/GU60N
WIFI Only	Atheros/AR5B125	Atheros/AR5B125
WIFI+BT Combo	N/A	N/A
LCD	IVO/P140NWR1 R0	IVO/P140NWR1 R1
Camera	Azurewave/AM-VS053	CHICONY/CKFB1D321003870LH
Touch Pad	ELAN/SA461I-1000	ELAN/SA461I-1000
KeyBoard	0KN0-MF1US13	0KN0-MF2UK13
HDMI to VGA Connector	Yes	No
Battery	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47/3S2P,10.8V	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47,10.8V
Adapter	DELTA/ADP-90CD DB	DELTA/ADP-90CD DB

Item	Mode 7	Mode 8
Motherboard	ASUS U47VC MAIN BOARD	ASUS U47VC MAIN BOARD
CPU	INT I3-3110M 2.4G/3M QC4V BGA	INT I3-3110M 2.4G/3M QC4V BGA
Memory	ELPIDA/EBJ40UG8BBU0-GN-F	ELPIDA/EBJ40UG8BBU0-GN-F
HDD	SEAGATE/ST9750423AS	WD/WD10JPVT-80A1YT0
ODD	HLDS/GU60N	HLDS/GU60N
WIFI Only	N/A	N/A
WIFI+BT Combo	INTEL/2230BNHMW	INTEL/2230BNHMW
LCD	IVO/P140NWR1 R0	IVO/P140NWR1 R1
Camera	Azurewave/AM-VS053	CHICONY/CKFB1D321003870LH
Touch Pad	ELAN/SA461I-1000	ELAN/SA461I-1000
KeyBoard	0KN0-MF1US13	0KN0-MF2UK13
HDMI to VGA Connector	Yes	No
Battery	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47, 11.25V	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47, 11.25V
Adapter	DELTA/ADP-90CD DB	DELTA/ADP-90CD DB

Item	Mode 9	Mode 10
Motherboard	ASUS U47VC MAIN BOARD	ASUS U47VC MAIN BOARD
CPU	INT I3-3110M 2.4G/3M QC4V BGA	INT I3-3110M 2.4G/3M QC4V BGA
Memory	ELPIDA/EBJ40UG8BBU0-GN-F	ASINT/SSZ302G08-GGNED
HDD	SEAGATE/ST9500423AS	WD/5000BPKT-80PK4T0
ODD	HLDS/GU60N	HLDS/GU60N
WIFI Only	N/A	INTEL/105BN.HMWG 917353
WIFI+BT Combo	INTEL/2230BNHMW	N/A
LCD	IVO/P140NWR1 R0	IVO/P140NWR1 R1
Camera	Azurewave/AM-VS053	CHICONY/CKFB1D321003870LH
Touch Pad	ELAN/SA461I-1000	ELAN/SA461I-1000
KeyBoard	0KN0-MF1US13	0KN0-MF2UK13
HDMI to VGA Connector	Yes	No
Battery	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47, 11.25V	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47, 10.8V
Adapter	DELTA/ADP-90CD DB	DELTA/ADP-90CD DB

Item	Mode 11	Mode 12
Motherboard	ASUS U47VC MAIN BOARD	ASUS U47VC MAIN BOARD
CPU	INT I3-3110M 2.4G/3M QC4V BGA	INT I3-3110M 2.4G/3M QC4V BGA
Memory	ASINT/SSZ302G08-GGNED	ASINT/SSZ302G08-GGNED
HDD	SEAGATE/ST9750420AS	WD/7500BPKT-80PK4T0
ODD	HLDS/GU60N	HLDS/GU60N
WIFI Only	INTEL/105BNHMW	INTEL/105BNHMW
WIFI+BT Combo	N/A	N/A
LCD	IVO/P140NWR1 R0	IVO/P140NWR1 R1
Camera	Azurewave/AM-VS053	CHICONY/CKFB1D321003870LH
Touch Pad	ELAN/SA461I-1000	ELAN/SA461I-1000
KeyBoard	0KN0-MF1US13	0KN0-MF2UK13
HDMI to VGA Connector	Yes	No
Battery	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47,10.8V	SIMPLO TECHNOLOGY CO LTD (ASUS)/ A32-U47,10.8V
Adapter	DELTA/ADP-90CD DB	DELTA/ADP-90CD DB

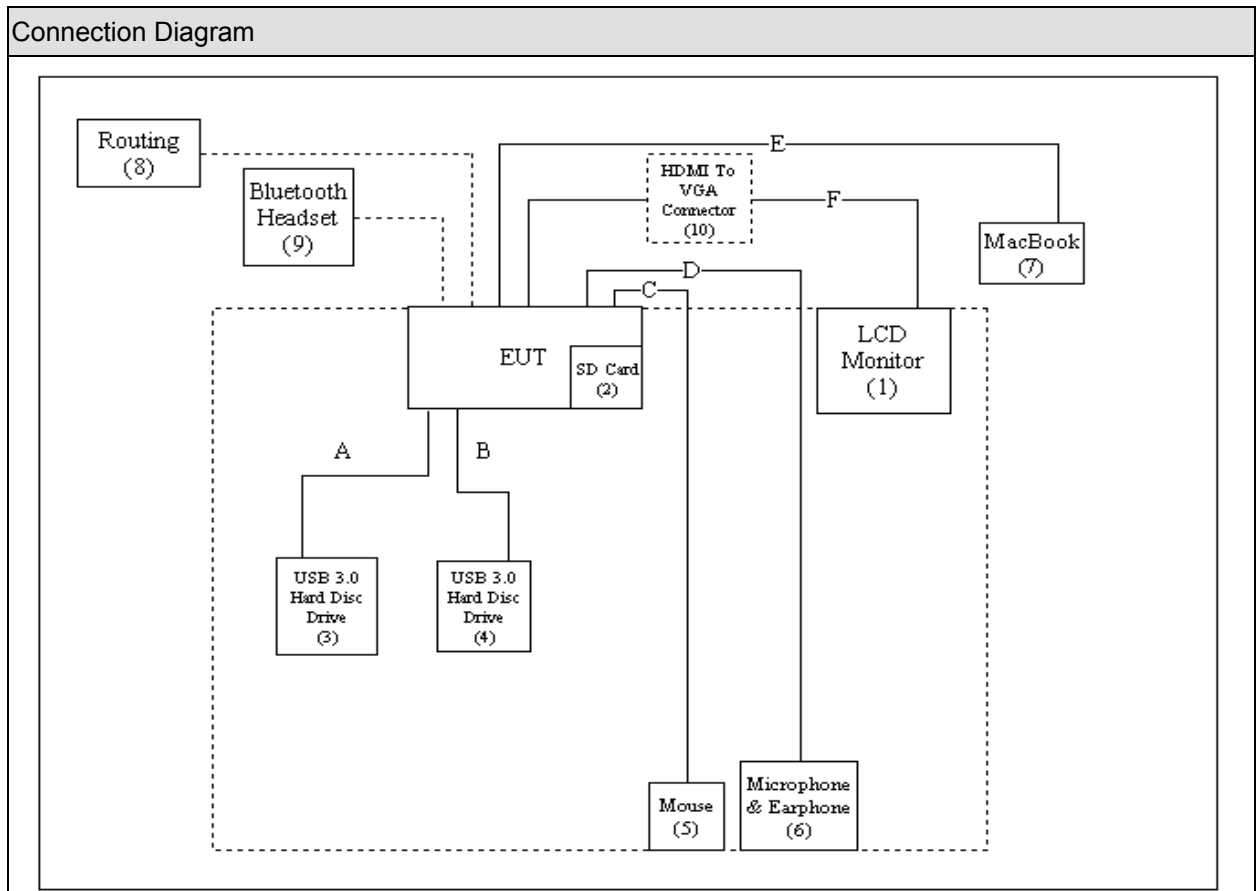
## 1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	LCD Monitor	DELL	U2410f	CN-OJ257M-72872-99E-1K JL	Non-Shielded, 1.8m
2	SD Card	SanDisk	2GB	OPWG 5000	Power by EUT
3	USB 3.0 Hard Disc Drive	Datage	Pleades 2500	15476991123653	Power by EUT
4	USB 3.0 Hard Disc Drive	Datage	Pleades 2500	15476991123646	Power by EUT
5	Mouse	ASUS	Foxlink 15890-1035-00A0	N/A	Power by EUT
6	Microphone & Earphone	SALAR	V81	N/A	Power by EUT
7	MacBook	Apple	MB061CH	W8732B4TZ5V	Power by Adapter
8	Routing	D-Link	DIR-605	PK11496006143	Non-Shielded, 1.8m
9	Bluetooth Headset	SUCD	STB-0068	N/A	Power by Battery
10	HDMI To VGA Connector	N/A	KS50008	N/A	Power by EUT



1.4. Configuration of Tested System



Signal Cable Type		Signal cable Description
A	USB 3.0 Cable	Shielded, 0.5m
B	USB 3.0 Cable	Shielded, 0.5m
C	USB 2.0 Cable	Shielded, 1.5m
D	Microphone & Earphone Cable	Non-Shielded, 1.8m
E	LAN Cable	Non-Shielded, >10m
F	HDMI Cable or VGA Cable	Shielded, 1.5m or Shielded, 1.5m, with two ferrite core bonded

**1.5. EUT Exercise Software**

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	Open the Camera and play music using Media Player program.
4	Play DVD disk with Media player.
5	Execute the HDD running program using "WINTHRAX.exe" software.
6	EUT will send and receive data through LAN using "Ping" function.
7	EUT communicates with another Notebook PC by WLAN; communicates with Bluetooth Earphone by Bluetooth.
8	Run Burn In Test program using Burn In Test" (Ver.6.0) software and send "H" pattern to the monitor.

## 2. Technical Test

### 2.1. Summary of Test Result

- No deviations from the test standards  
 Deviations from the test standards as below description:

Emission			
Performed Test Item	Normative References	Test Performed	Deviation
Conducted disturbance at mains terminals and telecommunication ports	EN 55022:2010 AS/NZS CISPR 22:2009	Yes	No
Radiated disturbance	EN 55022:2010 AS/NZS CISPR 22:2009	Yes	No
Harmonic current emissions	EN 61000-3-2:2006+A1:2009+A2:2009	Yes	No
Voltage fluctuations and flicker	EN 61000-3-3:2008	Yes	No

Immunity			
Performed Test Item	Normative References	Test Performed	Deviation
Electrostatic discharge	IEC 61000-4-2:2008	Yes	No
Radio-frequency electromagnetic field	IEC 61000-4-3:2010	Yes	No
Electrical fast transients	IEC 61000-4-4:2011	Yes	No
Surges	IEC 61000-4-5:2005	Yes	No
Radio-frequency continuous conducted	IEC 61000-4-6:2008	Yes	No
Power frequency magnetic field	IEC 61000-4-8:2009	Yes	No
Voltage dips and interruptions	IEC 61000-4-11:2004	Yes	No

## 2.2. List of Test Equipment

Conducted disturbance at mains terminals and telecommunication ports / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100906	2013.01.13
Two-Line V-Network	R&S	ENV216	101043	2012.04.29
Two-Line V-Network	R&S	ENV216	101044	2012.09.07
Impedance Stabilization Network	Teseq GmbH	ISN T800	30306	2013.02.24
Impedance Stabilization Network	Teseq GmbH	ISN T8-Cat6	29680	2013.02.24
Current Probe	R&S	EZ-17	100255	2012.04.18
50ohm Termination	SHX	TF2	07081401	2012.09.22
50ohm Termination	SHX	TF2	07081402	2012.09.22
50ohm Termination	SHX	TF2	07081403	2012.09.22
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2013.03.02
Coaxial Cable	Suhner	RG 223	TR1-C1	2013.03.02
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2013.01.10

Radiated disturbance / AC1

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100175	2012.09.22
EMI Test Receiver	R&S	ESCI	100726	2012.04.23
Spectrum Analyzer	Agilent	N9010A	MY48030494	2012.04.23
Preamplifier	Quietek	AP-025C	CHM-0602008	2012.04.12
Preamplifier	Quietek	AP-025C	CHM-0503006	2012.04.12
Bilog Antenna	Schaffner	CBL6112B	2931	2012.10.18
Bilog Antenna	Schaffner	CBL6112B	2933	2012.10.18
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2012.06.11
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC1-L	2013.03.02
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC1-R	2013.03.02
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC1-C	2013.03.02
Temperature/Humidity Meter	zhicheng	ZC1-2	AC1-TH	2013.01.10

Radiated disturbance / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100573	2012.04.23
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2012.10.18
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2013.03.02
Temperature/Humidity Meter	zhicheng	ZC1-2	AC2-TH	2013.01.10

Radiated disturbance / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
EMI Test Receiver	R&S	ESCI	100176	2012.09.22
Bilog Antenna	Teseq GmbH	CBL6112D	27613	2012.10.18
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC3-C	2013.03.02
Temperature/Humidity Meter	zhicheng	ZC1-2	AC3-TH	2013.01.10

Radiated disturbance / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2012.04.23
Preamplifier	Miteq	NSP1800-25	1364185	2012.05.05
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2012.06.11
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2012.05.05
Temperature/Humidity Meter	zhicheng	ZC1-2	AC5-TH	2013.01.10

Harmonic current emissions / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Power Analyzer	California	PACS-1	72419	2012.11.09
AC Power Source	California	5001iX-208	56741	2012.11.09
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2013.01.10

Voltage fluctuation and flicker / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Power Analyzer	California	PACS-1	72419	2012.11.09
AC Power Source	California	5001iX-208	56741	2012.11.09
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2013.01.10

Electrostatic discharge / TR3

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
ESD Simulator	EM TEST	Dito	V0616101367	2012.05.18
Barometer	Fengyun	DYM3	0506048	2012.09.30
Temperature/Humidity Meter	zhicheng	ZC1-2	TR3-TH	2013.01.10

Radio-frequency electromagnetic field / AC4

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Signal Generator	R&S	SML03	102324	2012.09.22
Power Meter	Boonton	4231A	144502	2012.09.22
Power Sensor	Boonton	51011-EMC	33859	2012.09.22
Power Meter	Agilent	E4416A	GB41293844	2012.09.22
Power Sensor	Agilent	E9304A	MY41497198	2012.09.22
RF Switch	MF	SW1072	RFSW980005	N/A
Power Amplifier	Schaffner	CBA9413B	43526	NA
Power Amplifier	Schaffner	CBA9428	43516	NA
Directional Coupler	Schaffner	CHA 9652B	0121	N/A
Directional Coupler	A&R	DC7144A	312249	N/A
E-Field Probe Type 8.3	Narda	2244/90.21	AZ-0030	2012.06.11
EMR-20C Radiation Meter	Narda	BN 2244/70	AW-0074	2012.06.11
Bilog Antenna	Schaffner	CBL6141A	4278	N/A
Horn Antenna	A&R	AT4002A	312312	N/A
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC4-TH	2013.01.10

Electrical fast transients / TR2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Immunity Test System	Teseq GmbH	NSG 3060	087	2012.08.06
Automatic Steptransformer	Teseq GmbH	INA6502-CIB	167	2012.12.06
CDN	Teseq GmbH	CDN 3061	087	2012.08.06
CDN	Teseq GmbH	CDN 8014	32791	2013.02.24
Burst / EFT pulse verification kit	Teseq GmbH	CAS3025	32093	2012.09.15
Temperature/Humidity Meter	zhicheng	ZC1-2	TR2-TH	2013.01.10

Surges / TR2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Immunity Test System	Teseq GmbH	NSG 3060	087	2012.08.06
Automatic Steptransformer	Teseq GmbH	INA6502-CIB	167	2012.12.06
CDN	Teseq GmbH	CDN 3061	087	2012.08.06
CDN	Teseq GmbH	CDN 118	37349	2013.02.24
Signal Line Coupling Network	Teseq GmbH	CDN 117	31806	2013.02.24
Telecom Surge Module	Teseq GmbH	TSM3751	0078	2012.04.19
Temperature/Humidity Meter	zhicheng	ZC1-2	TR2-TH	2013.01.10

Radio-frequency continuous conducted / TR2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
RF-Generator	Schaffner	NSG2070	1120	2012.09.22
Attenuator	Schaffner	INA2070-1	2120	2012.09.22
Coupling / Decoupling Network	Schaffner	CDN M016	21249	2012.09.22
Coupling / Decoupling Network	Teseq GmbH	CDN M016	24484	2012.09.01
Coupling / Decoupling Network	Schaffner	CDN T400	19083	2012.09.22
Coupling / Decoupling Network	Teseq GmbH	CDN T400	22461	2012.09.01
Coupling / Decoupling Network	Teseq GmbH	CDN T800	26167	2013.01.13
Temperature/Humidity Meter	zhicheng	ZC1-2	TR2-TH	2013.01.10

Power-frequency magnetic field / TR2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Immunity Test System	Teseq GmbH	NSG 3060	087	2012.08.06
Automatic Steptransformer	Teseq GmbH	INA6502-CIB	167	2012.12.06
CDN	Teseq GmbH	CDN 3061	087	2012.08.06
Magnetic field Coil	Teseq GmbH	INA 702	224	2012.10.31
Magnetic Field Generator	Teseq GmbH	MFO 6502	134	2012.06.06
Temperature/Humidity Meter	zhicheng	ZC1-2	TR2-TH	2013.01.10

Voltage dips and interruptions / TR2

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Immunity Test System	Teseq GmbH	NSG 3060	087	2012.08.06
Automatic Steptransformer	Teseq GmbH	INA6502-CIB	167	2012.12.06
CDN	Teseq GmbH	CDN 3061	087	2012.08.06
Temperature/Humidity Meter	zhicheng	ZC1-2	TR2-TH	2013.01.10

**2.3. Measurement Uncertainty**

Conducted disturbance at mains terminals and telecommunication ports / TR1
The maximum measurement uncertainty is evaluated as: 9kHz~30MHz: ±3.35dB
Radiated disturbance / AC1
The maximum measurement uncertainty is evaluated as: 30MHz~1GHz: ±4.24dB Above 1GHz: ±5.11dB
Radiated disturbance / AC2
The maximum measurement uncertainty is evaluated as: 30MHz~1GHz: ±4.04dB
Radiated disturbance / AC3
The maximum measurement uncertainty is evaluated as: 30MHz~1GHz: ±4.23dB
Radiated disturbance / AC5
The maximum measurement uncertainty is evaluated as: 30MHz~1GHz: ±4.20dB Above 1GHz: ±5.58dB
Harmonic current emissions / TR1
The maximum measurement uncertainty is evaluated as ±0.2%.
Voltage fluctuation and flicker / TR1
The maximum measurement uncertainty is evaluated as $d_c$ and $d_{max}$ : ±0.095%, $P_{st}$ and $P_{it}$ : ±4%, $d_{(t)}$ : ±1.5%.
Electrostatic discharge / TR3
The maximum measurement uncertainty is evaluated as Voltage: ±1.63%, Time: ±2.76%.
Radio-frequency electromagnetic field / AC4
The maximum measurement uncertainty is evaluated as ±2.72dB.
Electrical fast transients / TR2
The maximum measurement uncertainty is evaluated as Voltage: ±1.63%, Frequency: ±2.8 x 10 <sup>-10</sup> , Time: ±2.76%.
Surges / TR2
The maximum measurement uncertainty is evaluated as Voltage: ±1.63%, Time: ±2.76%.
Radio-frequency continuous conducted / TR2
The maximum measurement uncertainty is evaluated as ±3.72dB.
Power-frequency magnetic field / TR2
The maximum measurement uncertainty is evaluated as ± 2.0%.
Voltage dips and interruptions / TR2
The maximum measurement uncertainty is evaluated as Voltage: ±1.63%, Time: ±2.76%.

## **2.4. Performance Criteria**

### **Performance Criterion A**

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

### **Performance Criterion B**

After the test, the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the EUT is used as intended. The performance level may be replaced by a permissible loss of performance.

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

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

### **Performance Criterion C**

During and after testing, a temporary loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls or cycling of the power to the EUT by the user in accordance with the manufacturer's instructions.

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

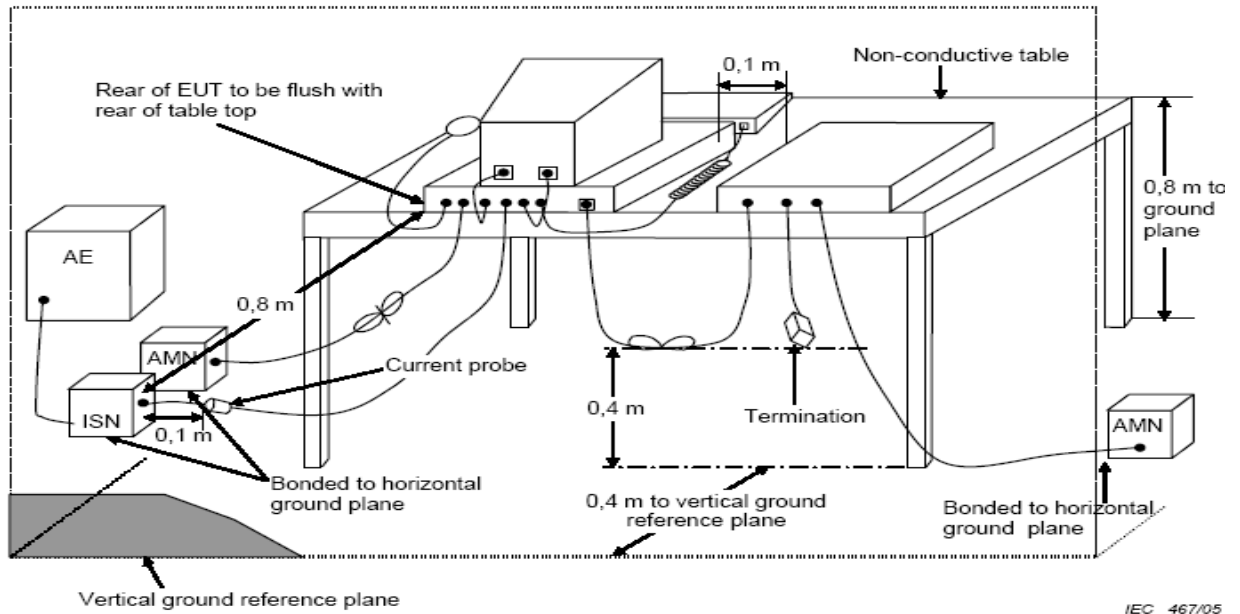


### 3. Conducted disturbance at mains terminals and telecommunication ports

#### 3.1. Test Specification

According to EMC Standard: EN 55022 and AS/NZS CISPR 22 Class B

#### 3.2. Test Setup



#### 3.3. Limit

Limits of mains terminal disturbance voltage

Limits for conducted disturbance at the mains ports of class A ITE		
Frequency range MHz	Limits dB(μV)	
	Quasi-peak	Average
0.15 to 0.50	79	66
0.50 to 30	73	60

NOTE: The lower limit shall apply at the transition frequency.

Limits for conducted disturbance at the mains ports of class B ITE		
Frequency range MHz	Limits dB(μV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

NOTE 1: The lower limit shall apply at the transition frequencies.  
 NOTE 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports

Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0.15MHz to 30 MHz for class A equipment				
Frequency range MHz	Voltage Limits dB(μV)		Current limits dB(μA)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.50	97 to 87	84 to 74	53 to 43	40 to 30
0.50 to 30	87	74	43	30

NOTE 1: The limits decrease linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.  
 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 150Ω to the telecommunication port under test (conversion factor is  $20 \log_{10} 150 / I = 44\text{dB}$ ).

Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0.15MHz to 30 MHz for class B equipment				
Frequency range MHz	Voltage Limits dB(μV)		Current limits dB(μA)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.50	84 to 74	74 to 64	40 to 30	30 to 20
0.50 to 30	74	64	30	20

NOTE 1: The limits decrease linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.  
 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 150Ω to the telecommunication port under test (conversion factor is  $20 \log_{10} 150 / I = 44\text{dB}$ ).

### 3.4. Test Procedure

#### **For Main Ports:**

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a  $50\Omega / 50\mu\text{H}$  or  $50\Omega / 50\mu\text{H} + 5\Omega$  coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a  $50\Omega / 50\mu\text{H}$  or  $50\Omega / 50\mu\text{H} + 5\Omega$  coupling impedance with  $50\Omega$  termination.

Both sides of A.C. line are checked for maximum conducted interference.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

#### **For Telecommunication Ports:**

The mains voltage shall be supplied to the EUT via the LISN when the measurement of telecommunication port is performed. The common mode disturbances at the telecommunication port shall be connected to the ISN, which is  $150\Omega$  impedance.

Both alternative cables are tested related to the LCL requested.

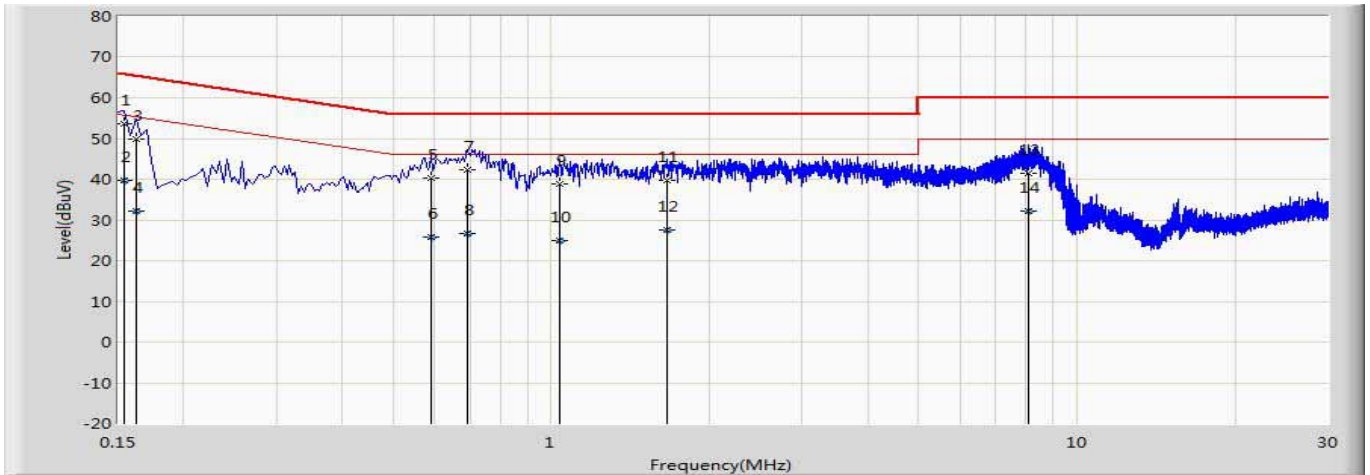
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

### 3.5. Deviation from Test Standard

No deviation.

### 3.6. Test Result

Engineer: White	
Site: TR1	Time: 2012/03/11 - 23:41
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

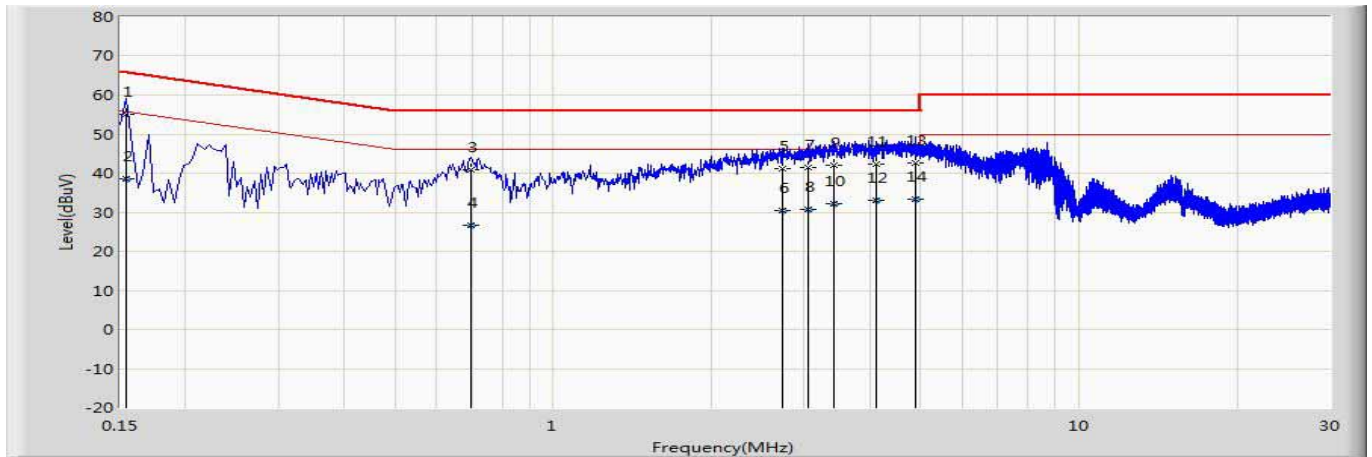


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.154	53.655	43.800	-12.126	65.781	9.795	0.060	0.000	QP
2		0.154	39.803	29.948	-15.979	55.781	9.795	0.060	0.000	AV
3		0.162	49.971	40.118	-15.390	65.361	9.793	0.060	0.000	QP
4		0.162	32.125	22.272	-23.236	55.361	9.793	0.060	0.000	AV
5		0.590	40.222	30.344	-15.778	56.000	9.808	0.070	0.000	QP
6		0.590	25.919	16.041	-20.081	46.000	9.808	0.070	0.000	AV
7		0.694	42.304	32.462	-13.696	56.000	9.772	0.070	0.000	QP
8		0.694	26.560	16.718	-19.440	46.000	9.772	0.070	0.000	AV
9		1.038	38.902	29.093	-17.098	56.000	9.729	0.080	0.000	QP
10		1.038	25.040	15.232	-20.960	46.000	9.729	0.080	0.000	AV
11		1.658	39.739	29.945	-16.261	56.000	9.704	0.090	0.000	QP
12		1.658	27.527	17.733	-18.473	46.000	9.704	0.090	0.000	AV
13		8.078	41.574	31.624	-18.426	60.000	9.730	0.220	0.000	QP
14		8.078	32.051	22.101	-17.949	50.000	9.730	0.220	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/11 - 23:45
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

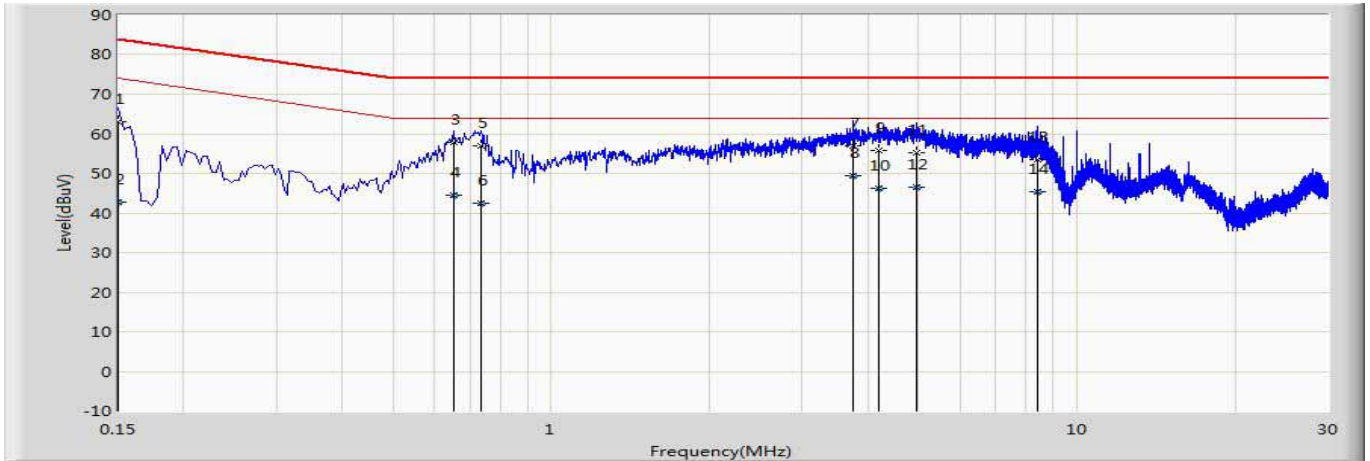


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.154	55.103	45.111	-10.679	65.781	9.931	0.060	0.000	QP
2		0.154	38.519	28.528	-17.262	55.781	9.931	0.060	0.000	AV
3		0.698	40.920	31.039	-15.080	56.000	9.812	0.070	0.000	QP
4		0.698	26.654	16.773	-19.346	46.000	9.812	0.070	0.000	AV
5		2.730	41.170	31.188	-14.830	56.000	9.872	0.110	0.000	QP
6		2.730	30.406	20.425	-15.594	46.000	9.872	0.110	0.000	AV
7		3.050	41.505	31.503	-14.495	56.000	9.881	0.120	0.000	QP
8		3.050	30.749	20.748	-15.251	46.000	9.881	0.120	0.000	AV
9		3.418	42.125	32.102	-13.875	56.000	9.893	0.130	0.000	QP
10		3.418	32.175	22.152	-13.825	46.000	9.893	0.130	0.000	AV
11		4.110	42.352	32.298	-13.648	56.000	9.914	0.140	0.000	QP
12		4.110	33.005	22.952	-12.995	46.000	9.914	0.140	0.000	AV
13		4.874	42.593	32.497	-13.407	56.000	9.936	0.160	0.000	QP
14		4.874	33.299	23.203	-12.701	46.000	9.936	0.160	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 00:01
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-10Mbps	

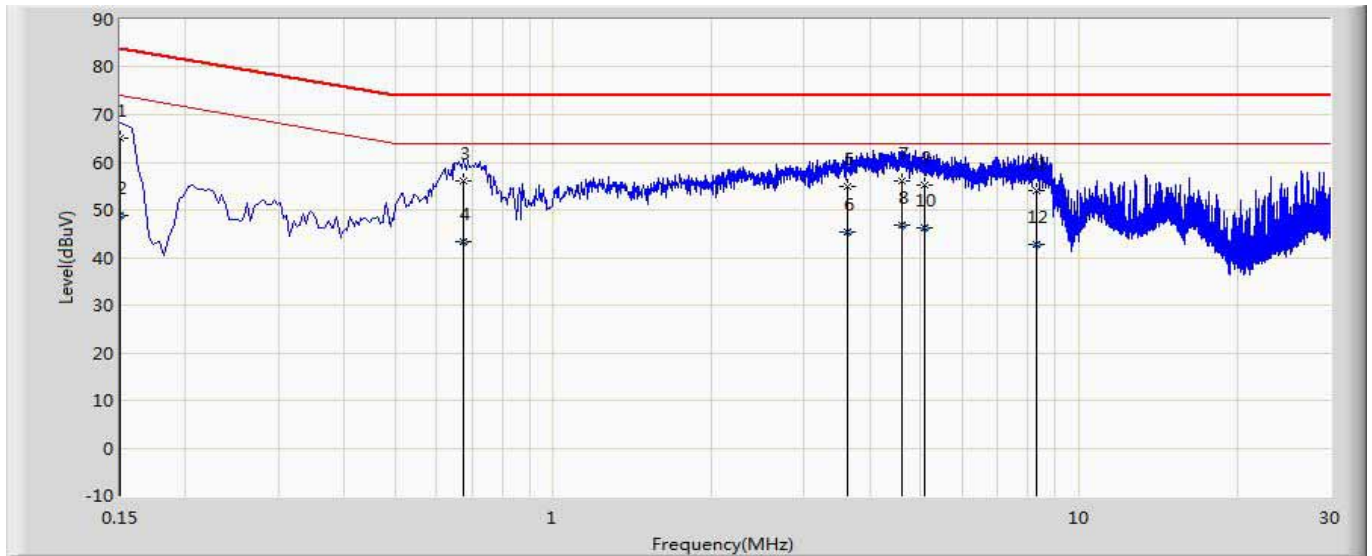


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	63.144	52.964	-20.856	84.000	10.120	0.060	0.000	QP
2		0.150	42.630	32.450	-31.370	74.000	10.120	0.060	0.000	AV
3		0.654	57.770	47.838	-16.230	74.000	9.863	0.070	0.000	QP
4		0.654	44.553	34.620	-19.447	64.000	9.863	0.070	0.000	AV
5		0.734	56.842	46.950	-17.158	74.000	9.822	0.070	0.000	QP
6		0.734	42.536	32.645	-21.464	64.000	9.822	0.070	0.000	AV
7		3.750	56.850	47.184	-17.150	74.000	9.529	0.136	0.000	QP
8	*	3.750	49.279	39.613	-14.721	64.000	9.529	0.136	0.000	AV
9		4.194	55.809	46.145	-18.191	74.000	9.525	0.140	0.000	QP
10		4.194	46.350	36.686	-17.650	64.000	9.525	0.140	0.000	AV
11		4.966	55.300	45.624	-18.700	74.000	9.516	0.160	0.000	QP
12		4.966	46.387	36.711	-17.613	64.000	9.516	0.160	0.000	AV
13		8.426	53.474	43.768	-20.526	74.000	9.476	0.230	0.000	QP
14		8.426	45.417	35.711	-18.583	64.000	9.476	0.230	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/11 - 23:53
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-100Mbps	

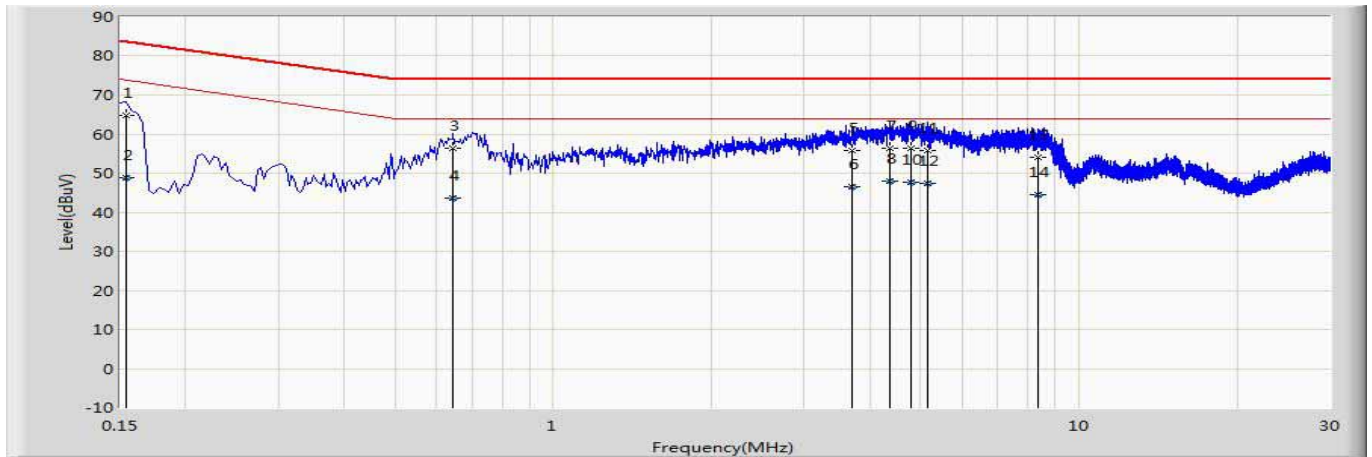


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	64.966	54.786	-19.034	84.000	10.120	0.060	0.000	QP
2		0.150	48.955	38.775	-25.045	74.000	10.120	0.060	0.000	AV
3		0.674	55.987	46.064	-18.013	74.000	9.852	0.070	0.000	QP
4		0.674	43.413	33.491	-20.587	64.000	9.852	0.070	0.000	AV
5		3.630	55.017	45.356	-18.983	74.000	9.531	0.130	0.000	QP
6		3.630	45.222	35.561	-18.778	64.000	9.531	0.130	0.000	AV
7		4.590	56.157	46.487	-17.843	74.000	9.520	0.150	0.000	QP
8	*	4.590	46.933	37.263	-17.067	64.000	9.520	0.150	0.000	AV
9		5.086	55.289	45.615	-18.711	74.000	9.514	0.160	0.000	QP
10		5.086	46.091	36.417	-17.909	64.000	9.514	0.160	0.000	AV
11		8.278	54.039	44.331	-19.961	74.000	9.478	0.230	0.000	QP
12		8.278	42.666	32.959	-21.334	64.000	9.478	0.230	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/11 - 23:49
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-1Gbps	



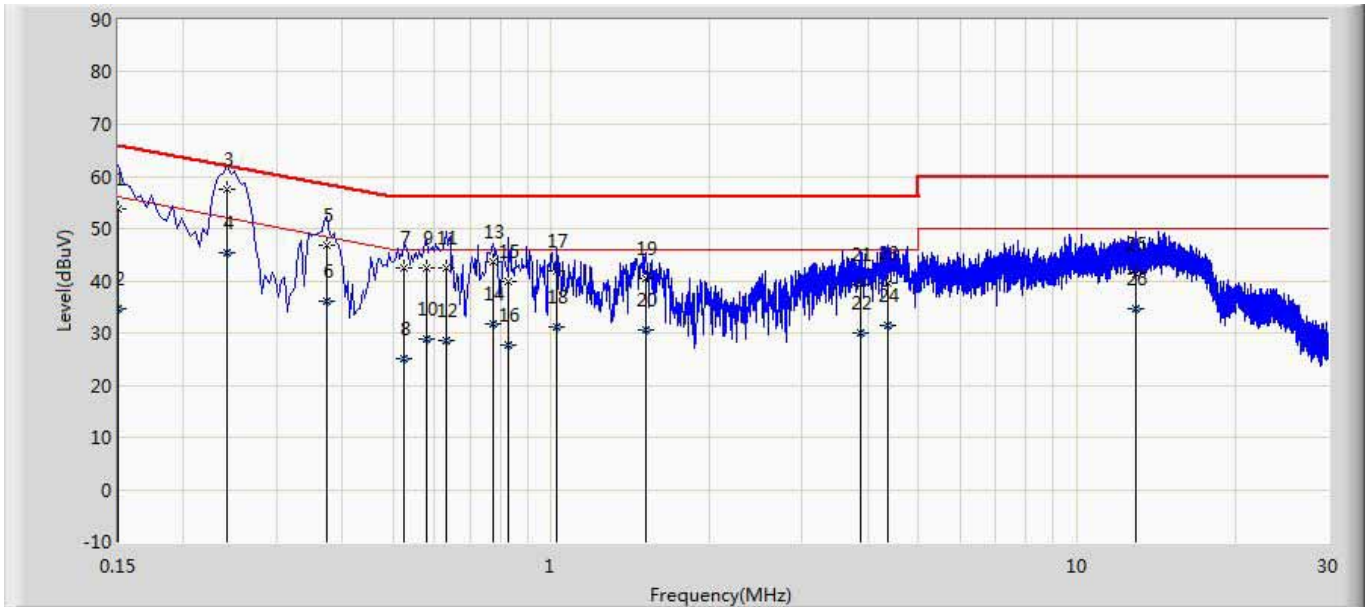
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.154	64.705	54.527	-19.076	83.781	10.118	0.060	0.000	QP
2		0.154	48.925	38.747	-24.857	73.781	10.118	0.060	0.000	AV
3		0.646	56.237	46.300	-17.763	74.000	9.867	0.070	0.000	QP
4		0.646	43.562	33.625	-20.438	64.000	9.867	0.070	0.000	AV
5		3.694	55.828	46.168	-18.172	74.000	9.530	0.130	0.000	QP
6		3.694	46.633	36.973	-17.367	64.000	9.530	0.130	0.000	AV
7		4.366	56.431	46.759	-17.569	74.000	9.522	0.150	0.000	QP
8	*	4.366	48.016	38.344	-15.984	64.000	9.522	0.150	0.000	AV
9		4.790	56.392	46.714	-17.608	74.000	9.518	0.160	0.000	QP
10		4.790	47.760	38.083	-16.240	64.000	9.518	0.160	0.000	AV
11		5.166	55.706	46.033	-18.294	74.000	9.513	0.160	0.000	QP
12		5.166	47.294	37.621	-16.706	64.000	9.513	0.160	0.000	AV
13		8.374	54.025	44.319	-19.975	74.000	9.476	0.230	0.000	QP
14		8.374	44.615	34.908	-19.385	64.000	9.476	0.230	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).



Engineer: White	
Site: TR1	Time: 2012/03/12 - 01:00
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	



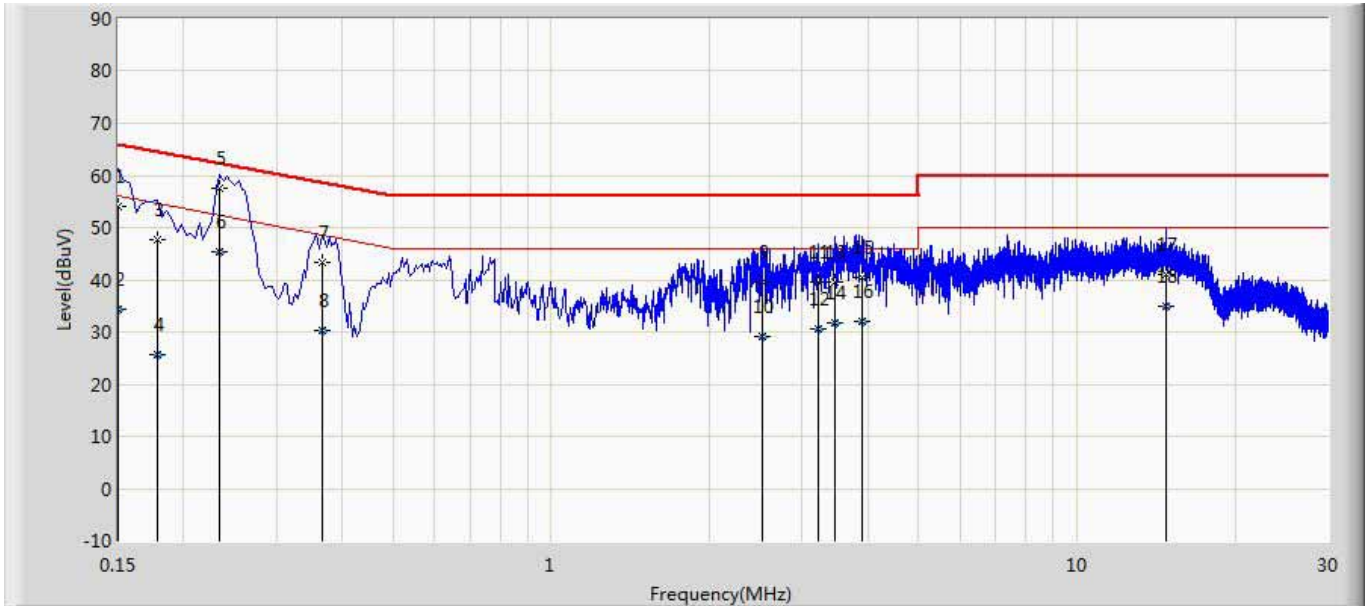
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	53.701	43.843	-12.299	66.000	9.798	0.060	0.000	QP
2		0.150	34.661	24.803	-21.339	56.000	9.798	0.060	0.000	AV
3	*	0.242	57.456	47.590	-4.571	62.027	9.806	0.060	0.000	QP
4		0.242	45.407	35.541	-6.620	52.027	9.806	0.060	0.000	AV
5		0.374	46.738	36.854	-11.674	58.412	9.824	0.060	0.000	QP
6		0.374	36.083	26.199	-12.329	48.412	9.824	0.060	0.000	AV
7		0.526	42.506	32.605	-13.494	56.000	9.831	0.070	0.000	QP
8		0.526	25.107	15.207	-20.893	46.000	9.831	0.070	0.000	AV
9		0.578	42.321	32.439	-13.679	56.000	9.812	0.070	0.000	QP
10		0.578	28.696	18.814	-17.304	46.000	9.812	0.070	0.000	AV
11		0.630	42.574	32.710	-13.426	56.000	9.794	0.070	0.000	QP
12		0.630	28.570	18.705	-17.430	46.000	9.794	0.070	0.000	AV
13		0.774	43.538	33.708	-12.462	56.000	9.760	0.070	0.000	QP
14		0.774	31.614	21.784	-14.386	46.000	9.760	0.070	0.000	AV
15		0.830	39.765	29.942	-16.235	56.000	9.753	0.070	0.000	QP
16		0.830	27.540	17.717	-18.460	46.000	9.753	0.070	0.000	AV
17		1.026	41.970	32.161	-14.030	56.000	9.729	0.080	0.000	QP

18		1.026	31.246	21.437	-14.754	46.000	9.729	0.080	0.000	AV
19		1.518	40.402	30.602	-15.598	56.000	9.709	0.090	0.000	QP
20		1.518	30.467	20.668	-15.533	46.000	9.709	0.090	0.000	AV
21		3.882	39.381	29.545	-16.619	56.000	9.696	0.140	0.000	QP
22		3.882	30.042	20.206	-15.958	46.000	9.696	0.140	0.000	AV
23		4.362	39.590	29.742	-16.410	56.000	9.698	0.150	0.000	QP
24		4.362	31.461	21.613	-14.539	46.000	9.698	0.150	0.000	AV
25		12.926	41.177	31.088	-18.823	60.000	9.759	0.330	0.000	QP
26		12.926	34.678	24.589	-15.322	50.000	9.759	0.330	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 01:04
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	



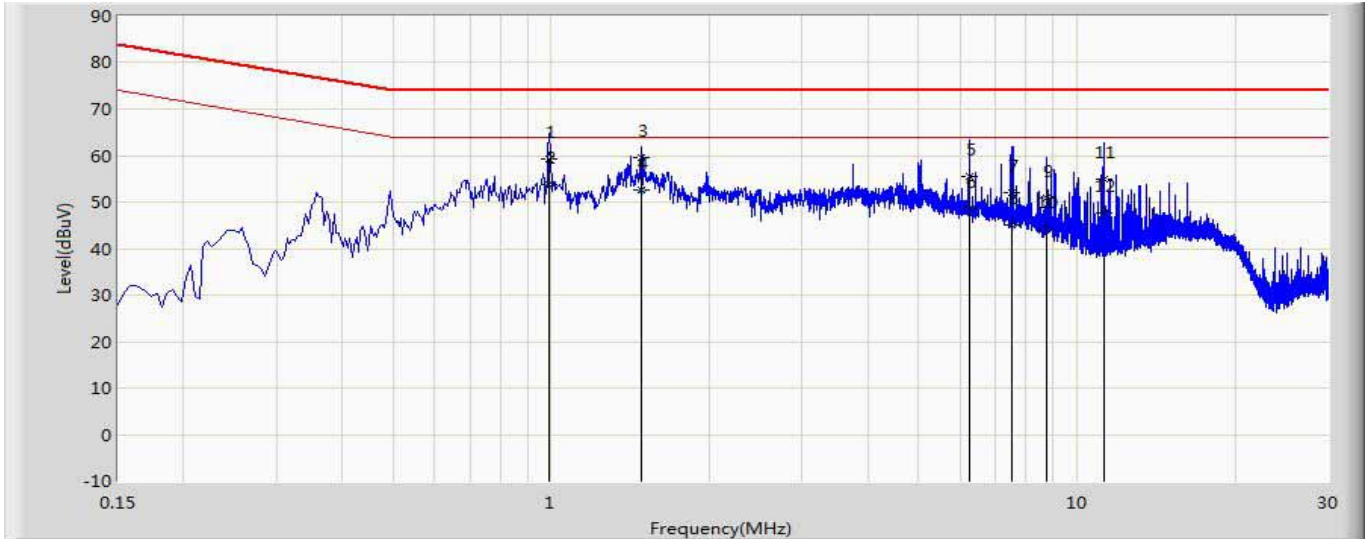
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	54.158	44.173	-11.842	66.000	9.925	0.060	0.000	QP
2		0.150	34.332	24.347	-21.668	56.000	9.925	0.060	0.000	AV
3		0.178	47.680	37.727	-16.898	64.578	9.893	0.060	0.000	QP
4		0.178	25.703	15.750	-28.875	54.578	9.893	0.060	0.000	AV
5	*	0.234	57.506	47.590	-4.800	62.307	9.857	0.060	0.000	QP
6		0.234	45.359	35.443	-6.947	52.307	9.857	0.060	0.000	AV
7		0.366	43.446	33.463	-15.145	58.591	9.923	0.060	0.000	QP
8		0.366	30.145	20.162	-18.446	48.591	9.923	0.060	0.000	AV
9		2.526	39.684	29.708	-16.316	56.000	9.866	0.110	0.000	QP
10		2.526	29.074	19.098	-16.926	46.000	9.866	0.110	0.000	AV
11		3.226	39.583	29.576	-16.417	56.000	9.887	0.120	0.000	QP
12		3.226	30.561	20.554	-15.439	46.000	9.887	0.120	0.000	AV
13		3.462	39.705	29.681	-16.295	56.000	9.894	0.130	0.000	QP
14		3.462	31.773	21.749	-14.227	46.000	9.894	0.130	0.000	AV
15		3.910	40.300	30.253	-15.700	56.000	9.907	0.140	0.000	QP
16		3.910	31.991	21.944	-14.009	46.000	9.907	0.140	0.000	AV

17		14.814	41.006	30.822	-18.994	60.000	9.822	0.363	0.000	QP
18		14.814	34.792	24.607	-15.208	50.000	9.822	0.363	0.000	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 00:49
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-10Mbps	

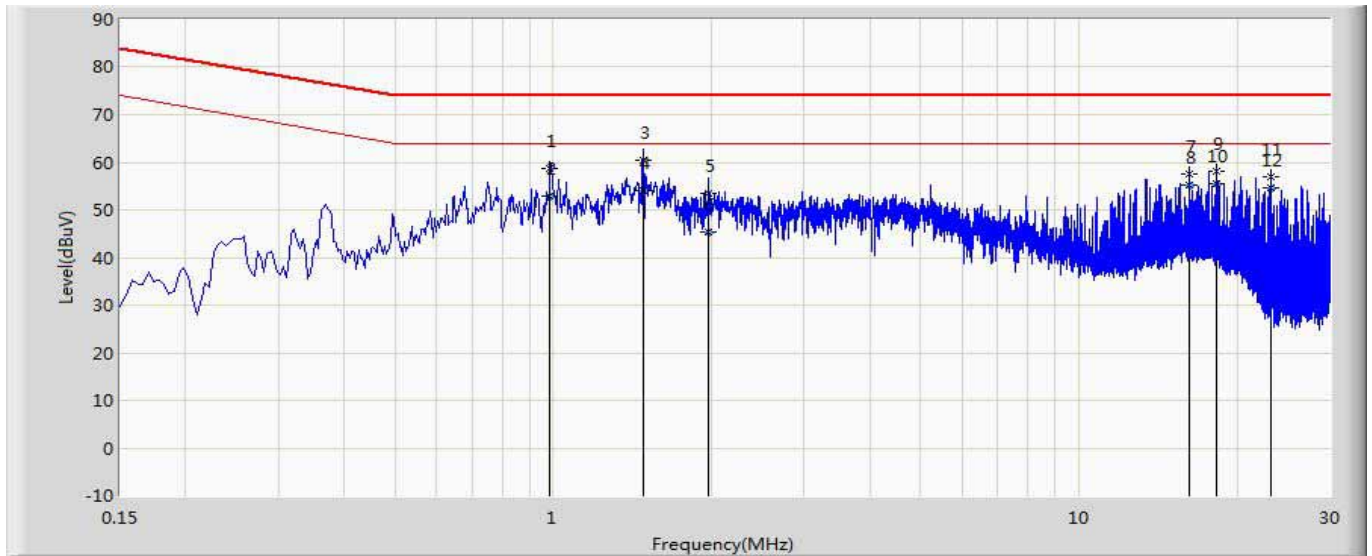


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.990	59.237	49.466	-14.763	74.000	9.691	0.080	0.000	QP
2	*	0.990	53.832	44.061	-10.168	64.000	9.691	0.080	0.000	AV
3		1.482	59.434	49.788	-14.566	74.000	9.555	0.090	0.000	QP
4		1.482	52.581	42.936	-11.419	64.000	9.555	0.090	0.000	AV
5		6.250	55.455	45.764	-18.545	74.000	9.501	0.190	0.000	QP
6		6.250	48.573	38.882	-15.427	64.000	9.501	0.190	0.000	AV
7		7.494	52.077	42.380	-21.923	74.000	9.487	0.210	0.000	QP
8		7.494	45.185	35.488	-18.815	64.000	9.487	0.210	0.000	AV
9		8.754	50.774	41.062	-23.226	74.000	9.472	0.240	0.000	QP
10		8.754	44.270	34.558	-19.730	64.000	9.472	0.240	0.000	AV
11		11.250	54.790	45.029	-19.210	74.000	9.471	0.290	0.000	QP
12		11.250	47.665	37.904	-16.335	64.000	9.471	0.290	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 00:43
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-100Mbps	

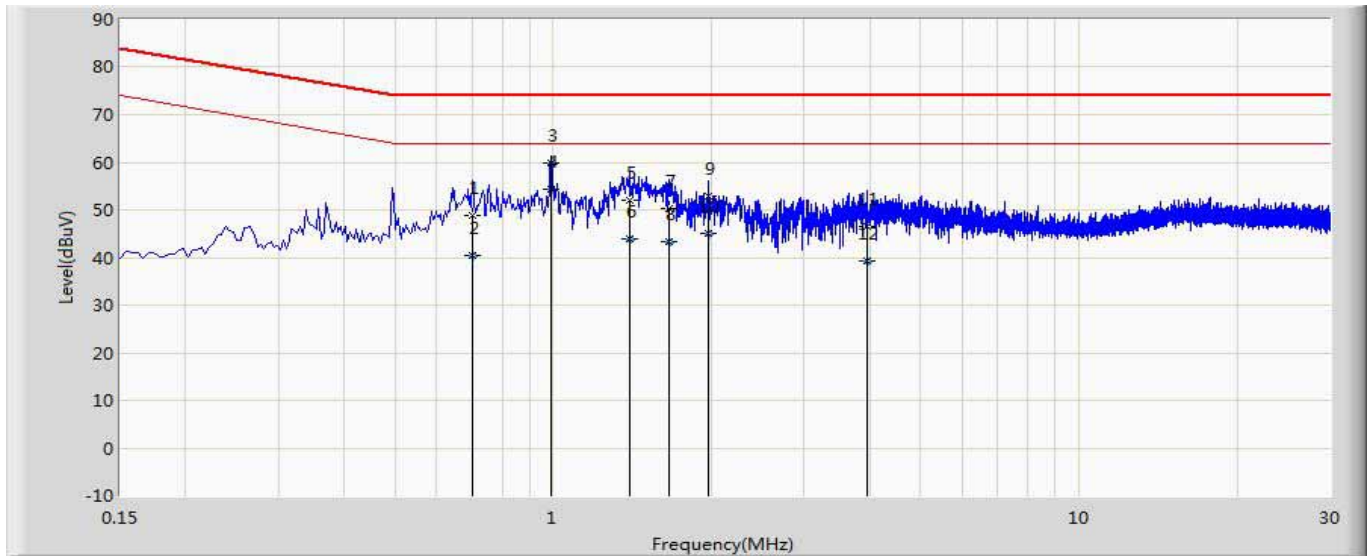


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.986	58.581	48.808	-15.419	74.000	9.693	0.080	0.000	QP
2		0.986	53.030	43.257	-10.970	64.000	9.693	0.080	0.000	AV
3		1.482	60.530	50.885	-13.470	74.000	9.555	0.090	0.000	QP
4		1.482	54.005	44.360	-9.995	64.000	9.555	0.090	0.000	AV
5		1.978	53.366	43.716	-20.634	74.000	9.550	0.100	0.000	QP
6		1.978	45.308	35.658	-18.692	64.000	9.550	0.100	0.000	AV
7		16.226	57.631	47.721	-16.369	74.000	9.520	0.390	0.000	QP
8		16.226	55.293	45.383	-8.707	64.000	9.520	0.390	0.000	AV
9		18.242	58.066	48.086	-15.934	74.000	9.540	0.440	0.000	QP
10	*	18.242	55.580	45.600	-8.420	64.000	9.540	0.440	0.000	AV
11		23.126	57.000	46.824	-17.000	74.000	9.636	0.540	0.000	QP
12		23.126	54.517	44.342	-9.483	64.000	9.636	0.540	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 00:46
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-1Gbps	

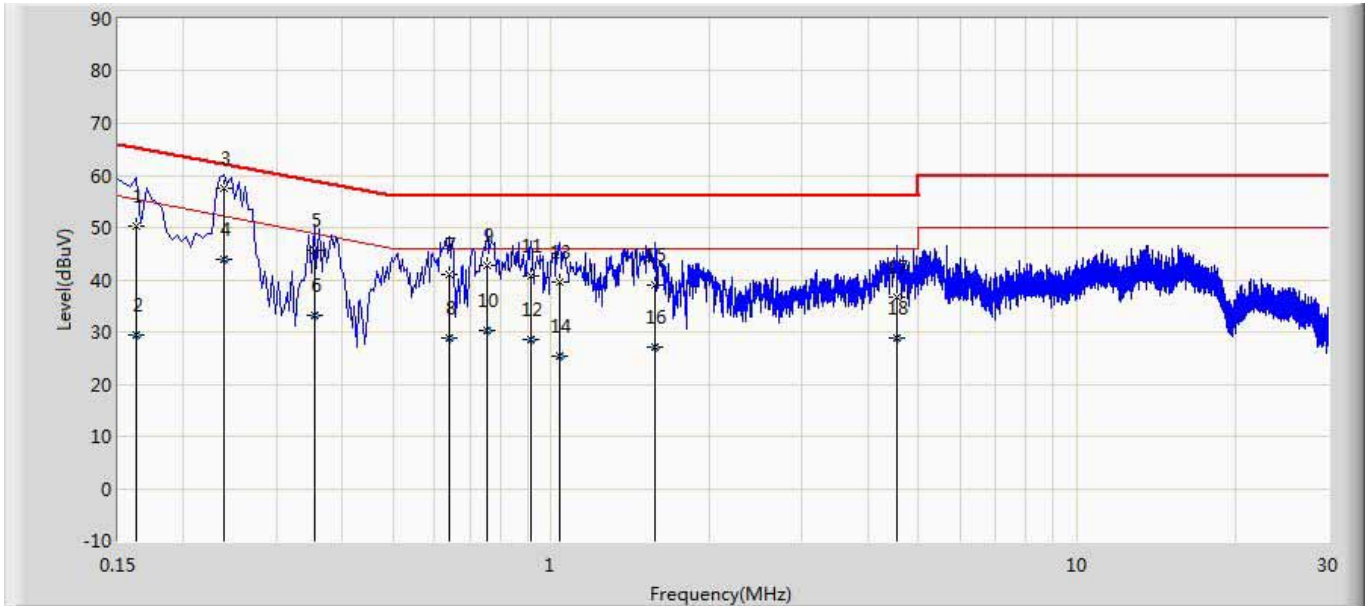


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.702	48.770	38.862	-25.230	74.000	9.838	0.070	0.000	QP
2		0.702	40.296	30.389	-23.704	64.000	9.838	0.070	0.000	AV
3		0.990	59.897	50.126	-14.103	74.000	9.691	0.080	0.000	QP
4	*	0.990	54.268	44.497	-9.732	64.000	9.691	0.080	0.000	AV
5		1.398	52.144	42.497	-21.856	74.000	9.556	0.090	0.000	QP
6		1.398	44.013	34.367	-19.987	64.000	9.556	0.090	0.000	AV
7		1.658	50.329	40.685	-23.671	74.000	9.553	0.090	0.000	QP
8		1.658	43.340	33.697	-20.660	64.000	9.553	0.090	0.000	AV
9		1.978	52.969	43.319	-21.031	74.000	9.550	0.100	0.000	QP
10		1.978	45.210	35.561	-18.790	64.000	9.550	0.100	0.000	AV
11		3.954	46.535	36.868	-27.465	74.000	9.527	0.140	0.000	QP
12		3.954	39.260	29.593	-24.740	64.000	9.527	0.140	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 01:24
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.162	50.251	40.399	-15.110	65.361	9.793	0.060	0.000	QP
2		0.162	29.421	19.568	-25.940	55.361	9.793	0.060	0.000	AV
3	*	0.238	57.471	47.606	-4.695	62.166	9.806	0.060	0.000	QP
4		0.238	43.880	34.015	-8.285	52.166	9.806	0.060	0.000	AV
5		0.354	45.641	35.760	-13.227	58.868	9.821	0.060	0.000	QP
6		0.354	33.323	23.442	-15.545	48.868	9.821	0.060	0.000	AV
7		0.638	40.899	31.038	-15.101	56.000	9.791	0.070	0.000	QP
8		0.638	28.874	19.013	-17.126	46.000	9.791	0.070	0.000	AV
9		0.754	42.689	32.856	-13.311	56.000	9.763	0.070	0.000	QP
10		0.754	30.278	20.446	-15.722	46.000	9.763	0.070	0.000	AV
11		0.914	40.738	30.917	-15.262	56.000	9.741	0.080	0.000	QP
12		0.914	28.649	18.828	-17.351	46.000	9.741	0.080	0.000	AV
13		1.038	39.434	29.625	-16.566	56.000	9.729	0.080	0.000	QP
14		1.038	25.464	15.655	-20.536	46.000	9.729	0.080	0.000	AV
15		1.578	38.957	29.161	-17.043	56.000	9.707	0.090	0.000	QP
16		1.578	27.240	17.443	-18.760	46.000	9.707	0.090	0.000	AV

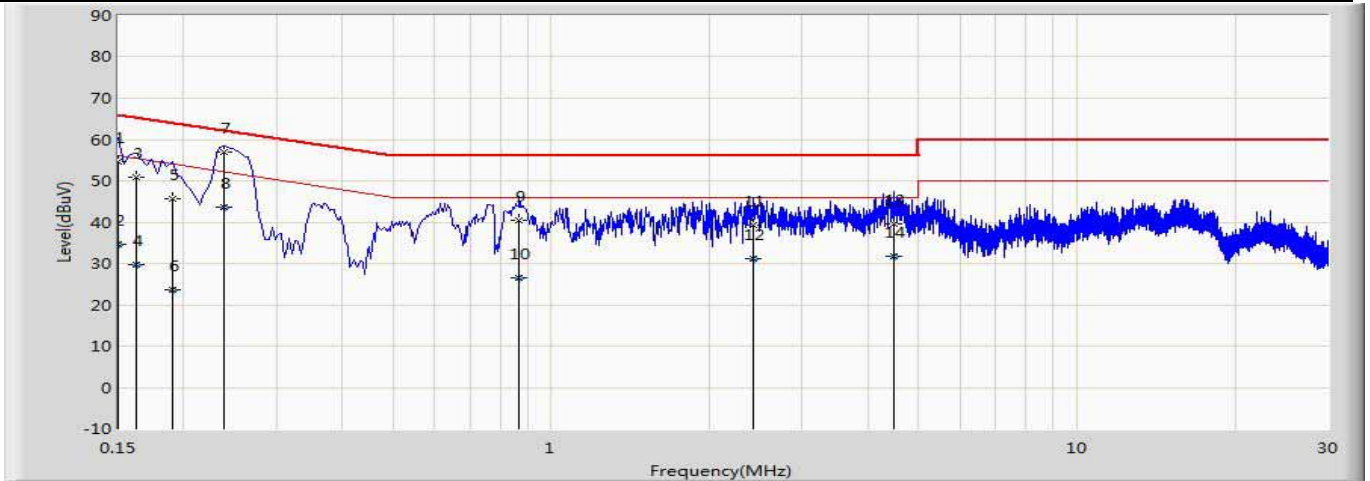


17		4.558	36.628	26.780	-19.372	56.000	9.699	0.150	0.000	QP
18		4.558	28.793	18.944	-17.207	46.000	9.699	0.150	0.000	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 01:27
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

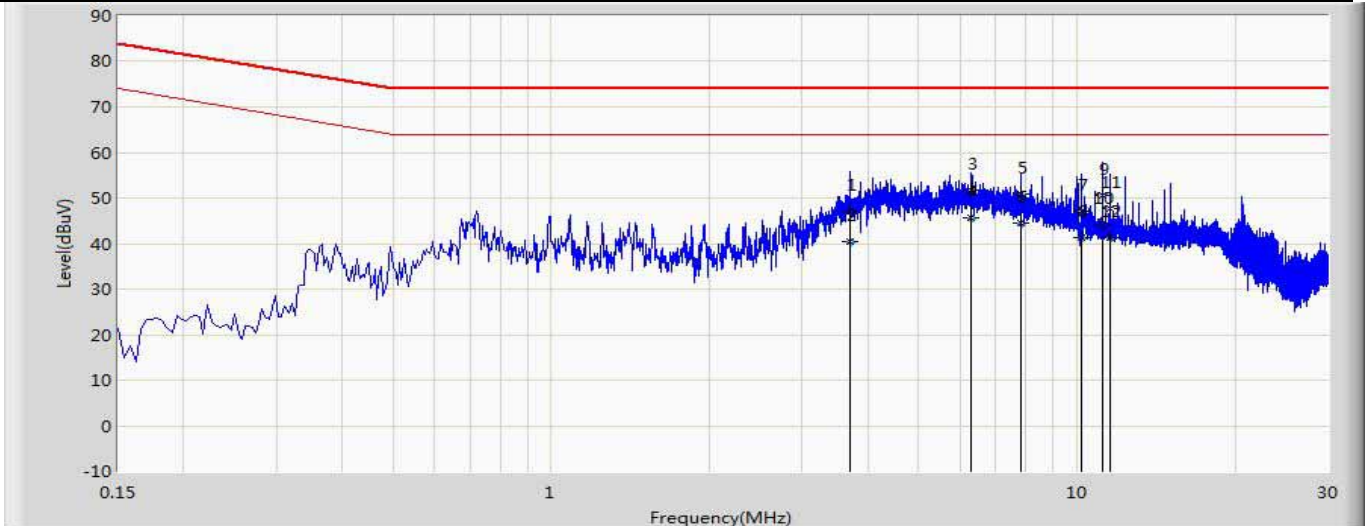


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	54.731	44.746	-11.269	66.000	9.925	0.060	0.000	QP
2		0.150	34.720	24.735	-21.280	56.000	9.925	0.060	0.000	AV
3		0.162	50.852	40.860	-14.509	65.361	9.932	0.060	0.000	QP
4		0.162	29.645	19.653	-25.716	55.361	9.932	0.060	0.000	AV
5		0.190	45.758	35.832	-18.278	64.037	9.866	0.060	0.000	QP
6		0.190	23.634	13.708	-30.402	54.037	9.866	0.060	0.000	AV
7	*	0.238	56.854	46.936	-5.311	62.166	9.859	0.060	0.000	QP
8		0.238	43.554	33.635	-8.612	52.166	9.859	0.060	0.000	AV
9		0.870	40.478	30.513	-15.522	56.000	9.895	0.071	0.000	QP
10		0.870	26.638	16.672	-19.362	46.000	9.895	0.071	0.000	AV
11		2.426	39.329	29.357	-16.671	56.000	9.863	0.110	0.000	QP
12		2.426	31.047	21.075	-14.953	46.000	9.863	0.110	0.000	AV
13		4.486	39.460	29.386	-16.540	56.000	9.924	0.150	0.000	QP
14		4.486	31.819	21.745	-14.181	46.000	9.924	0.150	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 01:56
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-10Mbps	

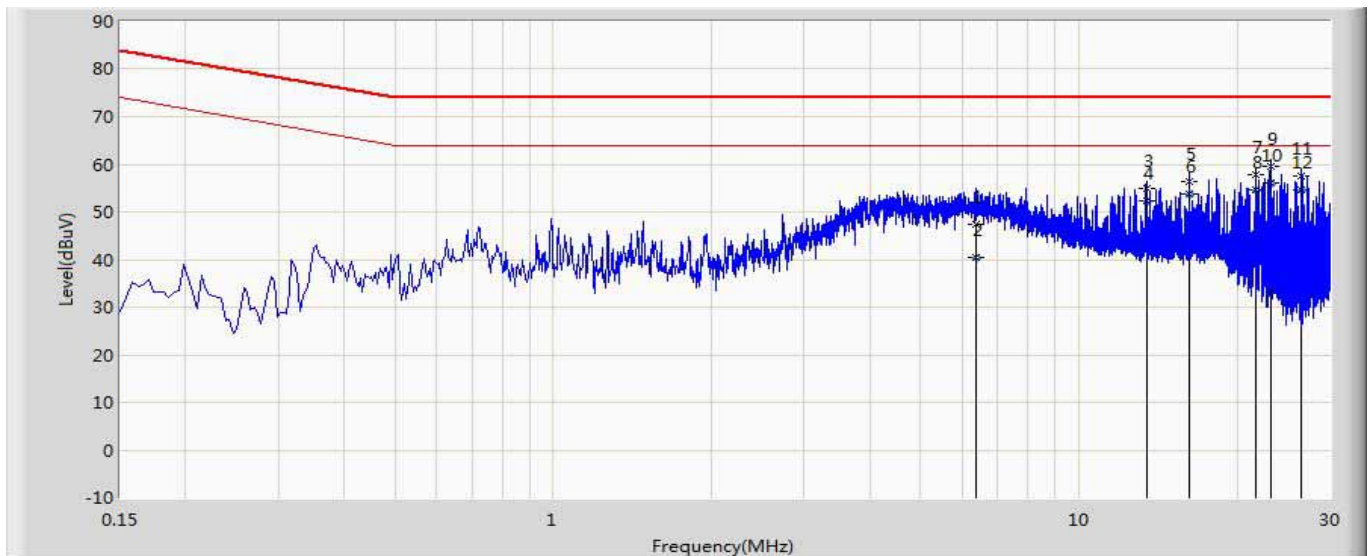


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		3.698	47.145	37.485	-26.855	74.000	9.530	0.130	0.000	QP
2		3.698	40.292	30.632	-23.708	64.000	9.530	0.130	0.000	AV
3		6.306	51.775	42.085	-22.225	74.000	9.500	0.190	0.000	QP
4	*	6.306	45.604	35.914	-18.396	64.000	9.500	0.190	0.000	AV
5		7.826	50.758	41.055	-23.242	74.000	9.483	0.220	0.000	QP
6		7.826	44.631	34.928	-19.369	64.000	9.483	0.220	0.000	AV
7		10.166	47.080	37.350	-26.920	74.000	9.460	0.270	0.000	QP
8		10.166	41.375	31.645	-22.625	64.000	9.460	0.270	0.000	AV
9		11.194	50.509	40.749	-23.491	74.000	9.470	0.290	0.000	QP
10		11.194	44.076	34.316	-19.924	64.000	9.470	0.290	0.000	AV
11		11.574	47.624	37.850	-26.376	74.000	9.474	0.300	0.000	QP
12		11.574	41.401	31.627	-22.599	64.000	9.474	0.300	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 01:59
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-100Mbps	

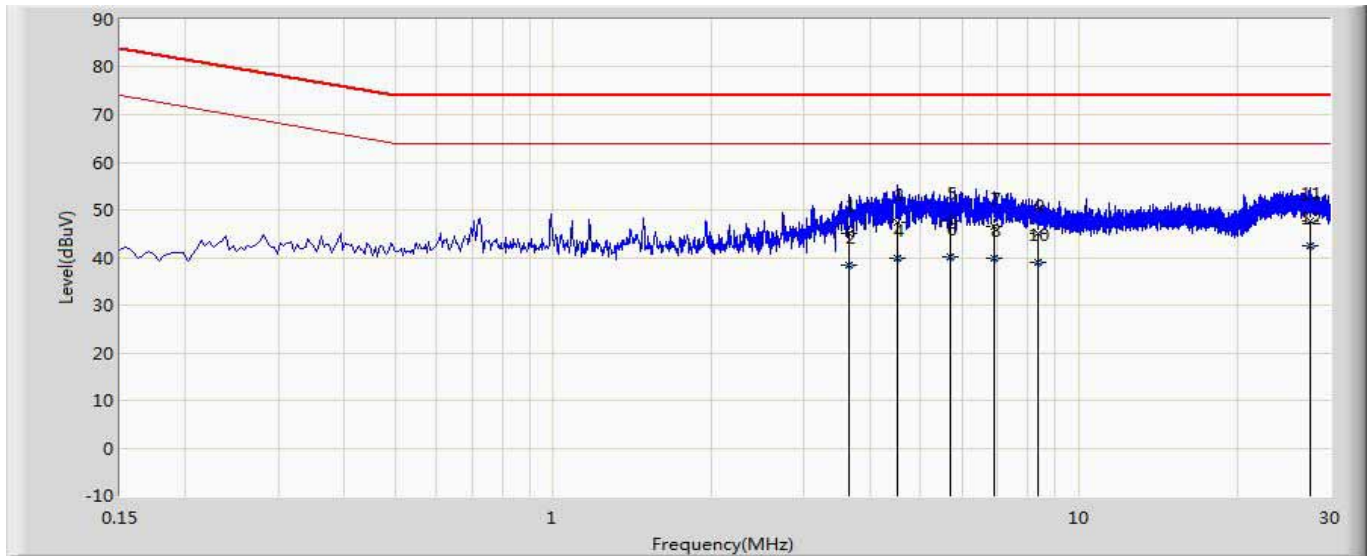


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		6.366	47.414	37.725	-26.586	74.000	9.500	0.190	0.000	QP
2		6.366	40.547	30.857	-23.453	64.000	9.500	0.190	0.000	AV
3		13.418	54.784	44.952	-19.216	74.000	9.492	0.340	0.000	QP
4		13.418	52.433	42.601	-11.567	64.000	9.492	0.340	0.000	AV
5		16.226	56.233	46.323	-17.767	74.000	9.520	0.390	0.000	QP
6		16.226	53.849	43.939	-10.151	64.000	9.520	0.390	0.000	AV
7		21.662	57.919	47.810	-16.081	74.000	9.600	0.510	0.000	QP
8		21.662	54.518	44.408	-9.482	64.000	9.600	0.510	0.000	AV
9		23.130	59.438	49.262	-14.562	74.000	9.636	0.540	0.000	QP
10	*	23.130	56.032	45.856	-7.968	64.000	9.636	0.540	0.000	AV
11		26.486	57.639	47.310	-16.361	74.000	9.719	0.610	0.000	QP
12		26.486	54.610	44.280	-9.390	64.000	9.719	0.610	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 02:01
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-1Gbps	

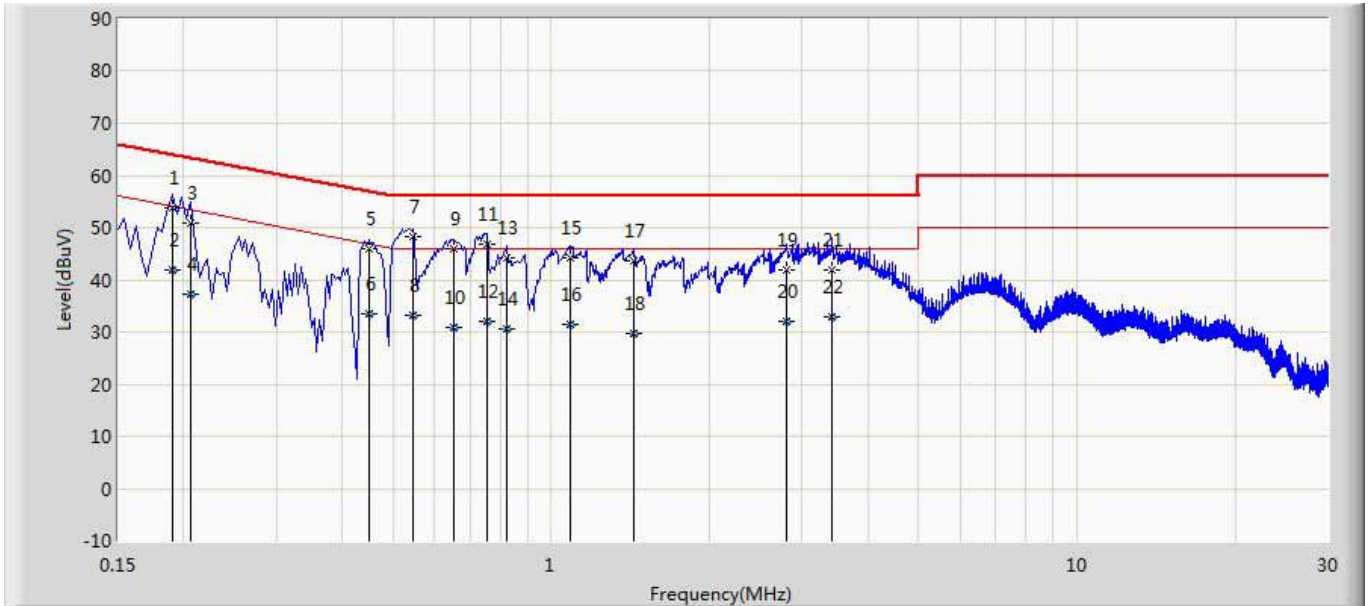


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		3.650	45.086	35.425	-28.914	74.000	9.531	0.130	0.000	QP
2		3.650	38.264	28.604	-25.736	64.000	9.531	0.130	0.000	AV
3		4.506	47.476	37.805	-26.524	74.000	9.521	0.150	0.000	QP
4		4.506	39.842	30.171	-24.158	64.000	9.521	0.150	0.000	AV
5		5.702	47.650	37.963	-26.350	74.000	9.507	0.180	0.000	QP
6		5.702	40.067	30.380	-23.933	64.000	9.507	0.180	0.000	AV
7		6.890	46.443	36.750	-27.557	74.000	9.493	0.200	0.000	QP
8		6.890	39.741	30.048	-24.259	64.000	9.493	0.200	0.000	AV
9		8.330	44.946	35.239	-29.054	74.000	9.477	0.230	0.000	QP
10		8.330	38.861	29.154	-25.139	64.000	9.477	0.230	0.000	AV
11		27.450	47.747	37.374	-26.253	74.000	9.744	0.630	0.000	QP
12	*	27.450	42.351	31.978	-21.649	64.000	9.744	0.630	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:07
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	



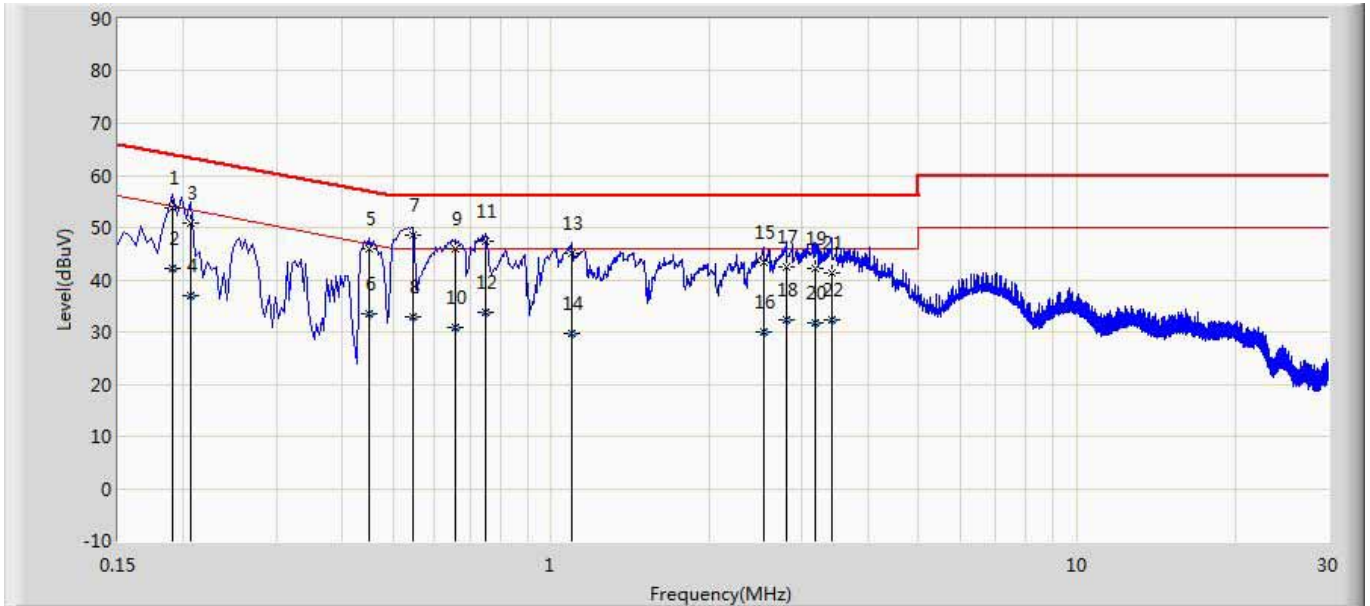
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.190	53.751	43.893	-10.286	64.037	9.798	0.060	0.000	QP
2		0.190	41.981	32.122	-12.056	54.037	9.798	0.060	0.000	AV
3		0.206	50.980	41.119	-12.385	63.365	9.801	0.060	0.000	QP
4		0.206	37.284	27.423	-16.081	53.365	9.801	0.060	0.000	AV
5		0.450	45.977	36.073	-10.898	56.875	9.834	0.070	0.000	QP
6		0.450	33.354	23.450	-13.521	46.875	9.834	0.070	0.000	AV
7	*	0.546	48.373	38.479	-7.627	56.000	9.824	0.070	0.000	QP
8		0.546	33.294	23.400	-12.706	46.000	9.824	0.070	0.000	AV
9		0.654	45.810	35.954	-10.190	56.000	9.786	0.070	0.000	QP
10		0.654	30.833	20.977	-15.167	46.000	9.786	0.070	0.000	AV
11		0.754	46.825	36.992	-9.175	56.000	9.763	0.070	0.000	QP
12		0.754	31.917	22.085	-14.083	46.000	9.763	0.070	0.000	AV
13		0.822	44.210	34.386	-11.790	56.000	9.754	0.070	0.000	QP
14		0.822	30.441	20.618	-15.559	46.000	9.754	0.070	0.000	AV
15		1.090	44.206	34.400	-11.794	56.000	9.726	0.080	0.000	QP
16		1.090	31.554	21.748	-14.446	46.000	9.726	0.080	0.000	AV

17		1.438	43.586	33.784	-12.414	56.000	9.712	0.090	0.000	QP
18		1.438	29.736	19.934	-16.264	46.000	9.712	0.090	0.000	AV
19		2.810	41.794	31.981	-14.206	56.000	9.693	0.120	0.000	QP
20		2.810	32.000	22.187	-14.000	46.000	9.693	0.120	0.000	AV
21		3.426	41.745	31.920	-14.255	56.000	9.695	0.130	0.000	QP
22		3.426	32.968	23.143	-13.032	46.000	9.695	0.130	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:10
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.190	53.759	43.833	-10.278	64.037	9.866	0.060	0.000	QP
2		0.190	42.169	32.243	-11.868	54.037	9.866	0.060	0.000	AV
3		0.206	50.787	40.870	-12.578	63.365	9.857	0.060	0.000	QP
4		0.206	36.880	26.964	-16.485	53.365	9.857	0.060	0.000	AV
5		0.450	46.026	35.991	-10.849	56.875	9.965	0.070	0.000	QP
6		0.450	33.440	23.406	-13.435	46.875	9.965	0.070	0.000	AV
7	*	0.546	48.465	38.446	-7.535	56.000	9.949	0.070	0.000	QP
8		0.546	32.771	22.752	-13.229	46.000	9.949	0.070	0.000	AV
9		0.658	45.824	35.906	-10.176	56.000	9.848	0.070	0.000	QP
10		0.658	31.001	21.083	-14.999	46.000	9.848	0.070	0.000	AV
11		0.750	47.350	37.445	-8.650	56.000	9.835	0.070	0.000	QP
12		0.750	33.799	23.894	-12.201	46.000	9.835	0.070	0.000	AV
13		1.094	45.161	35.132	-10.839	56.000	9.949	0.080	0.000	QP
14		1.094	29.842	19.812	-16.158	46.000	9.949	0.080	0.000	AV
15		2.530	43.284	33.308	-12.716	56.000	9.866	0.110	0.000	QP
16		2.530	29.889	19.913	-16.111	46.000	9.866	0.110	0.000	AV

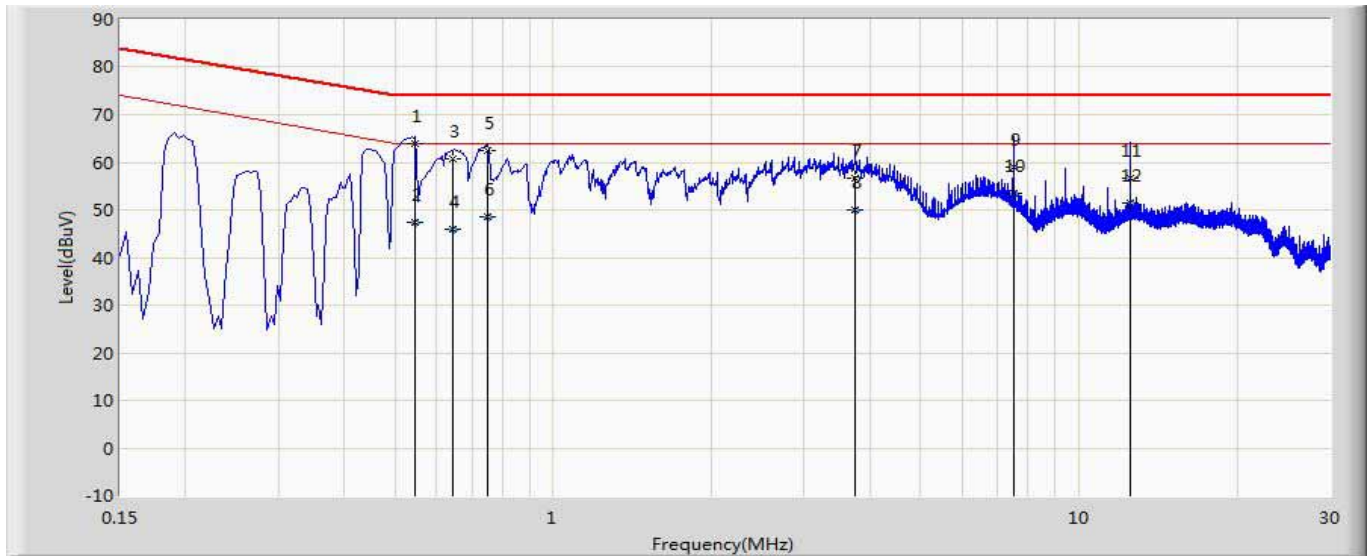


17		2.806	42.558	32.564	-13.442	56.000	9.874	0.120	0.000	QP
18		2.806	32.294	22.300	-13.706	46.000	9.874	0.120	0.000	AV
19		3.178	42.069	32.064	-13.931	56.000	9.886	0.120	0.000	QP
20		3.178	31.643	21.637	-14.357	46.000	9.886	0.120	0.000	AV
21		3.422	41.351	31.328	-14.649	56.000	9.893	0.130	0.000	QP
22		3.422	32.426	22.403	-13.574	46.000	9.893	0.130	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:13
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) LAN-10Mbps	

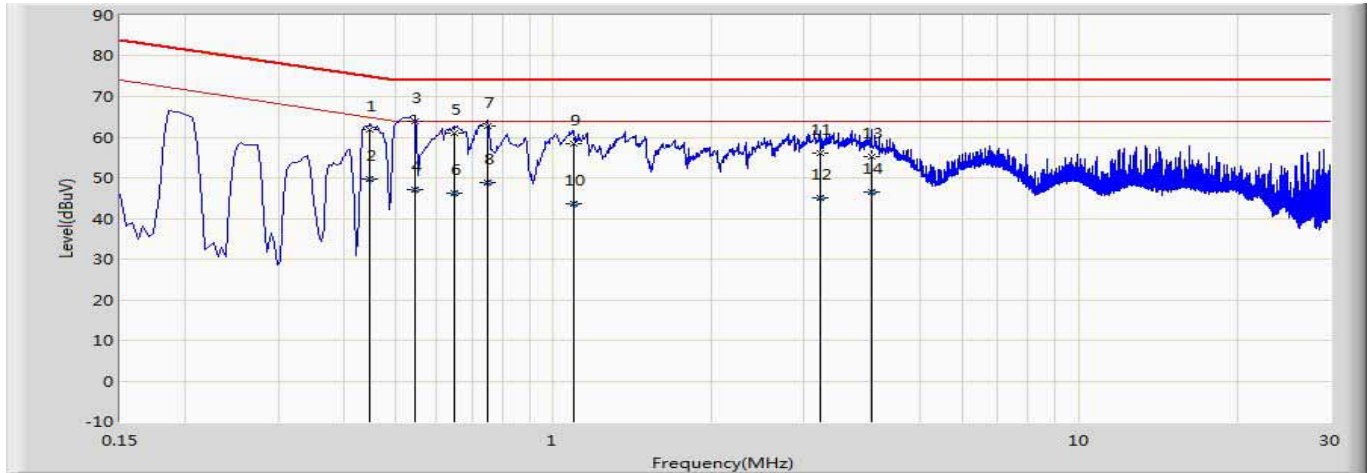


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1	*	0.546	63.791	53.804	-10.209	74.000	9.918	0.070	0.000	QP
2		0.546	47.509	37.521	-16.491	64.000	9.918	0.070	0.000	AV
3		0.642	60.825	50.886	-13.175	74.000	9.869	0.070	0.000	QP
4		0.642	45.853	35.914	-18.147	64.000	9.869	0.070	0.000	AV
5		0.750	62.595	52.711	-11.405	74.000	9.813	0.070	0.000	QP
6		0.750	48.609	38.725	-15.391	64.000	9.813	0.070	0.000	AV
7		3.750	56.635	46.970	-17.365	74.000	9.529	0.136	0.000	QP
8		3.750	50.014	40.349	-13.986	64.000	9.529	0.136	0.000	AV
9		7.502	59.026	49.330	-14.974	74.000	9.487	0.210	0.000	QP
10		7.502	53.618	43.921	-10.382	64.000	9.487	0.210	0.000	AV
11		12.502	56.800	46.997	-17.200	74.000	9.483	0.320	0.000	QP
12		12.502	51.530	41.727	-12.470	64.000	9.483	0.320	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:16
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) LAN-100Mbps	

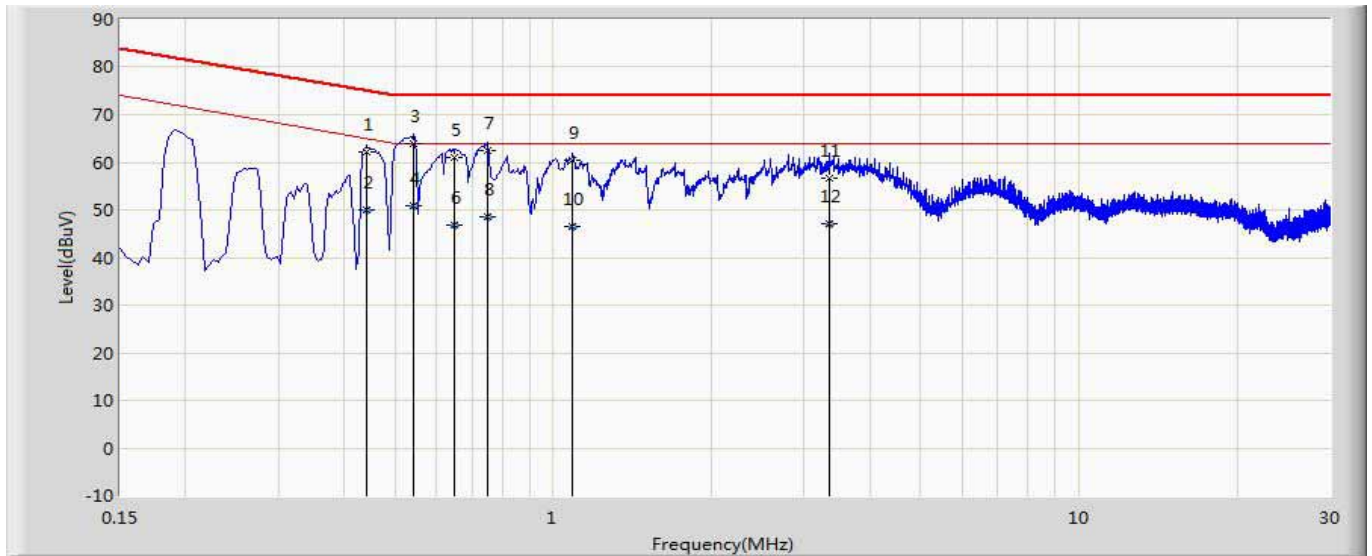


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.446	62.023	51.985	-12.926	74.949	9.968	0.070	0.000	QP
2		0.446	49.712	39.674	-15.237	64.949	9.968	0.070	0.000	AV
3	*	0.546	63.818	53.831	-10.182	74.000	9.918	0.070	0.000	QP
4		0.546	47.099	37.111	-16.901	64.000	9.918	0.070	0.000	AV
5		0.650	60.927	50.992	-13.073	74.000	9.865	0.070	0.000	QP
6		0.650	46.275	36.340	-17.725	64.000	9.865	0.070	0.000	AV
7		0.750	62.661	52.777	-11.339	74.000	9.813	0.070	0.000	QP
8		0.750	48.848	38.965	-15.152	64.000	9.813	0.070	0.000	AV
9		1.094	58.442	48.725	-15.558	74.000	9.638	0.080	0.000	QP
10		1.094	43.722	34.005	-20.278	64.000	9.638	0.080	0.000	AV
11		3.210	56.111	46.455	-17.889	74.000	9.535	0.120	0.000	QP
12		3.210	45.180	35.525	-18.820	64.000	9.535	0.120	0.000	AV
13		4.030	55.146	45.480	-18.854	74.000	9.526	0.140	0.000	QP
14		4.030	46.555	36.889	-17.445	64.000	9.526	0.140	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:18
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) LAN-1Gbps	

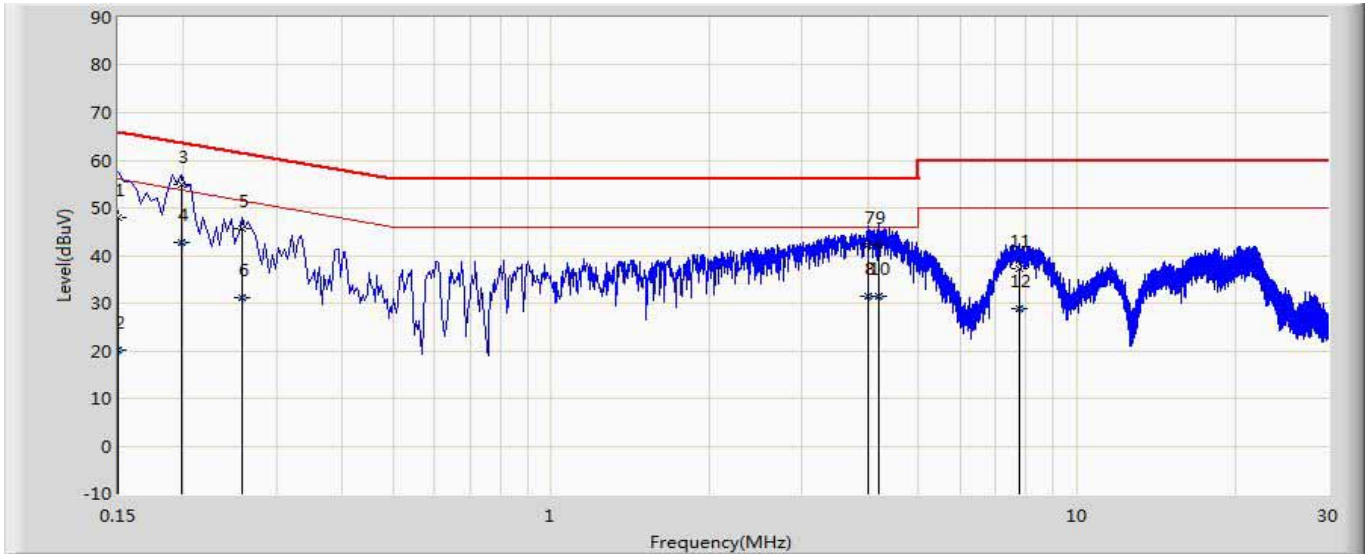


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.442	62.134	52.093	-12.891	75.024	9.970	0.070	0.000	QP
2		0.442	49.953	39.913	-15.071	65.024	9.970	0.070	0.000	AV
3	*	0.542	63.921	53.932	-10.079	74.000	9.920	0.070	0.000	QP
4		0.542	50.865	40.875	-13.135	64.000	9.920	0.070	0.000	AV
5		0.650	60.950	51.015	-13.050	74.000	9.865	0.070	0.000	QP
6		0.650	46.724	36.789	-17.276	64.000	9.865	0.070	0.000	AV
7		0.750	62.547	52.664	-11.453	74.000	9.813	0.070	0.000	QP
8		0.750	48.423	38.539	-15.577	64.000	9.813	0.070	0.000	AV
9		1.090	60.433	50.714	-13.567	74.000	9.640	0.080	0.000	QP
10		1.090	46.378	36.658	-17.622	64.000	9.640	0.080	0.000	AV
11		3.342	56.632	46.968	-17.368	74.000	9.534	0.130	0.000	QP
12		3.342	47.052	37.388	-16.948	64.000	9.534	0.130	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:30
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

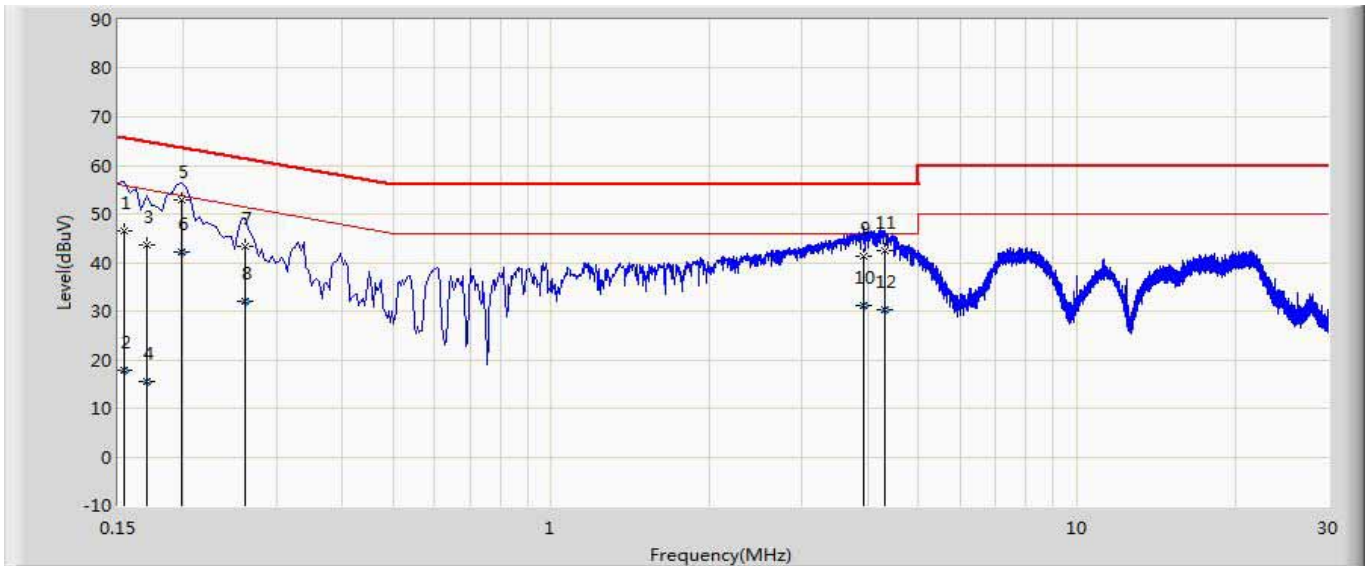


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	47.980	38.123	-18.020	66.000	9.798	0.060	0.000	QP
2		0.150	20.136	10.278	-35.864	56.000	9.798	0.060	0.000	AV
3	*	0.198	54.894	45.034	-8.800	63.694	9.800	0.060	0.000	QP
4		0.198	42.711	32.851	-10.984	53.694	9.800	0.060	0.000	AV
5		0.258	45.611	35.743	-15.885	61.496	9.808	0.060	0.000	QP
6		0.258	31.241	21.372	-20.255	51.496	9.808	0.060	0.000	AV
7		3.994	42.219	32.382	-13.781	56.000	9.697	0.140	0.000	QP
8		3.994	31.330	21.493	-14.670	46.000	9.697	0.140	0.000	AV
9		4.202	42.314	32.477	-13.686	56.000	9.697	0.140	0.000	QP
10		4.202	31.423	21.586	-14.577	46.000	9.697	0.140	0.000	AV
11		7.778	37.232	27.282	-22.768	60.000	9.730	0.220	0.000	QP
12		7.778	28.756	18.806	-21.244	50.000	9.730	0.220	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:32
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

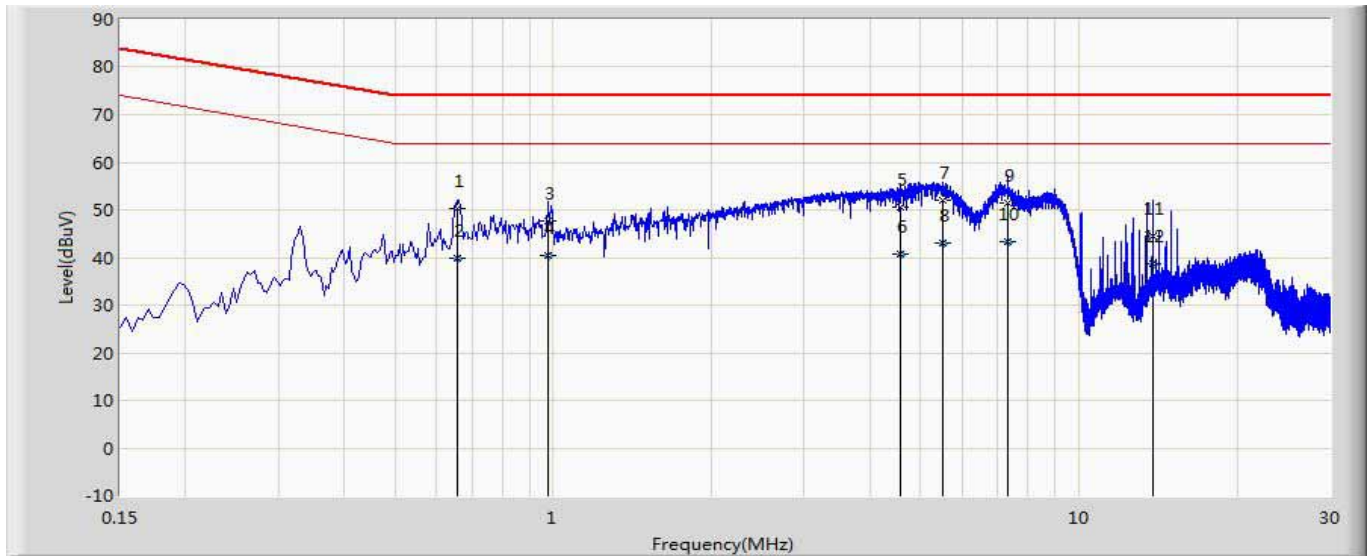


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.154	46.604	36.613	-19.177	65.781	9.931	0.060	0.000	QP
2		0.154	17.925	7.933	-37.857	55.781	9.931	0.060	0.000	AV
3		0.170	43.647	33.674	-21.314	64.960	9.912	0.060	0.000	QP
4		0.170	15.649	5.677	-39.311	54.960	9.912	0.060	0.000	AV
5	*	0.198	52.990	43.069	-10.704	63.694	9.862	0.060	0.000	QP
6		0.198	42.154	32.233	-11.540	53.694	9.862	0.060	0.000	AV
7		0.262	43.427	33.497	-17.940	61.368	9.871	0.060	0.000	QP
8		0.262	32.076	22.146	-19.291	51.368	9.871	0.060	0.000	AV
9		3.930	41.425	31.377	-14.575	56.000	9.908	0.140	0.000	QP
10		3.930	31.029	20.981	-14.971	46.000	9.908	0.140	0.000	AV
11		4.298	42.392	32.323	-13.608	56.000	9.919	0.150	0.000	QP
12		4.298	30.431	20.362	-15.569	46.000	9.919	0.150	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:27
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-10Mbps	

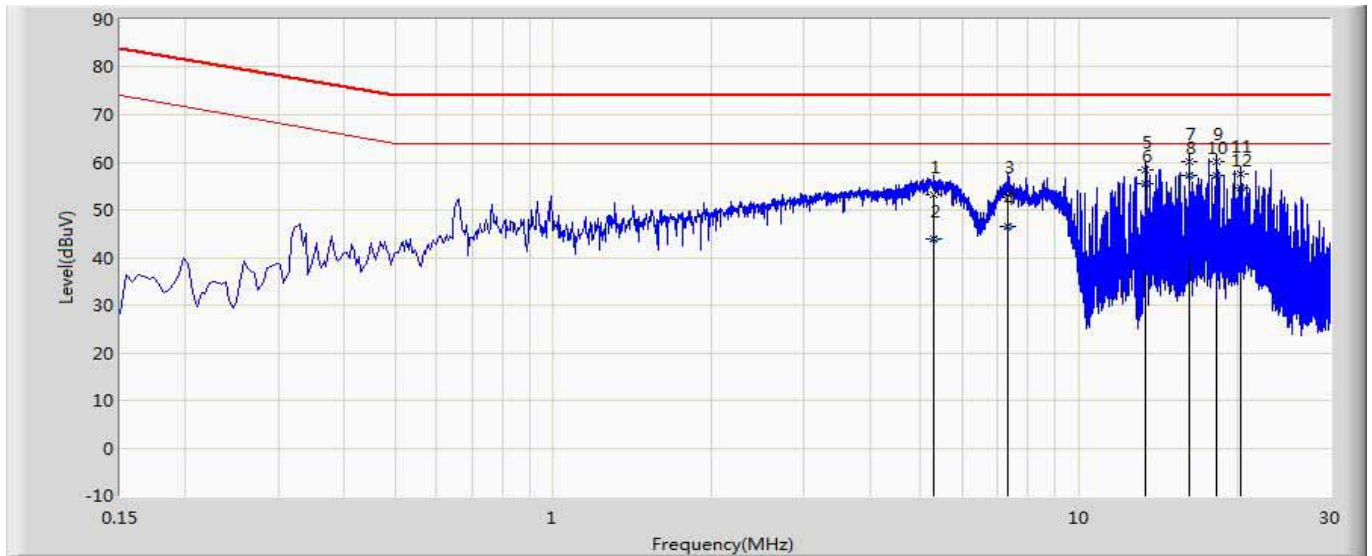


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.658	50.246	40.315	-23.754	74.000	9.861	0.070	0.000	QP
2		0.658	39.885	29.954	-24.115	64.000	9.861	0.070	0.000	AV
3		0.978	47.686	37.909	-26.314	74.000	9.697	0.080	0.000	QP
4		0.978	40.426	30.649	-23.574	64.000	9.697	0.080	0.000	AV
5		4.586	50.483	40.813	-23.517	74.000	9.520	0.150	0.000	QP
6		4.586	40.838	31.168	-23.162	64.000	9.520	0.150	0.000	AV
7		5.490	52.125	42.445	-21.875	74.000	9.510	0.170	0.000	QP
8		5.490	43.186	33.506	-20.814	64.000	9.510	0.170	0.000	AV
9		7.334	51.428	41.730	-22.572	74.000	9.488	0.210	0.000	QP
10	*	7.334	43.410	33.712	-20.590	64.000	9.488	0.210	0.000	AV
11		13.806	44.593	34.757	-29.407	74.000	9.496	0.340	0.000	QP
12		13.806	38.599	28.763	-25.401	64.000	9.496	0.340	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:24
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-100Mbps	



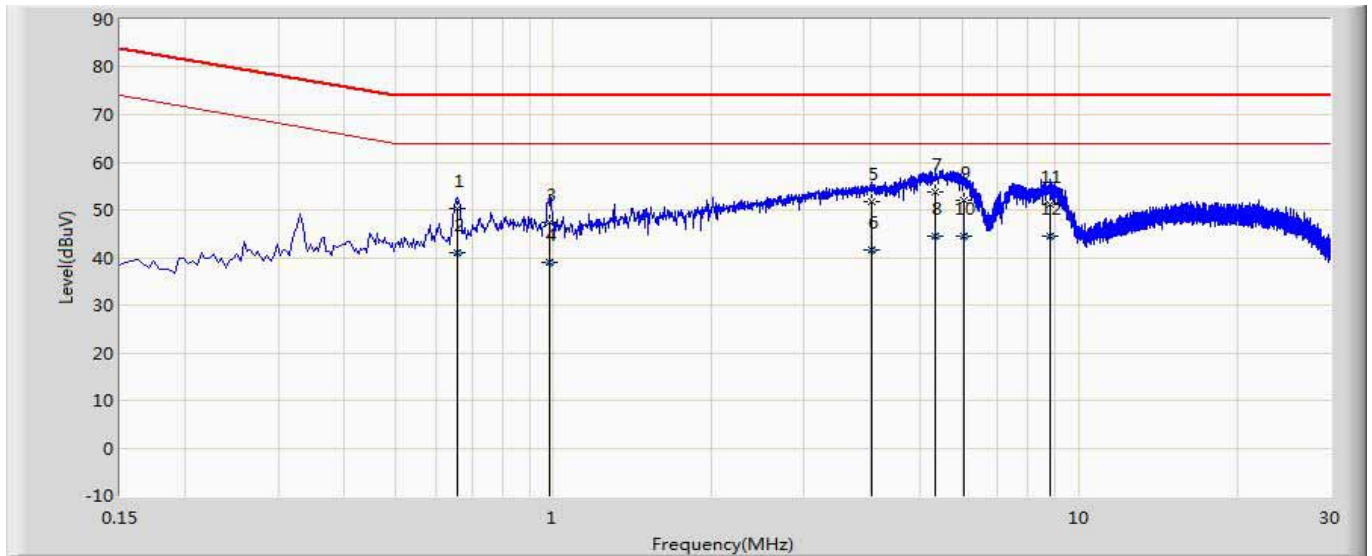
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		5.302	53.203	43.521	-20.797	74.000	9.512	0.170	0.000	QP
2		5.302	43.959	34.277	-20.041	64.000	9.512	0.170	0.000	AV
3		7.314	53.203	43.504	-20.797	74.000	9.489	0.210	0.000	QP
4		7.314	46.549	36.850	-17.451	64.000	9.489	0.210	0.000	AV
5		13.358	58.314	48.492	-15.686	74.000	9.491	0.330	0.000	QP
6		13.358	55.448	45.626	-8.552	64.000	9.491	0.330	0.000	AV
7		16.226	60.122	50.212	-13.878	74.000	9.520	0.390	0.000	QP
8	*	16.226	57.312	47.402	-6.688	64.000	9.520	0.390	0.000	AV
9		18.242	60.046	50.066	-13.954	74.000	9.540	0.440	0.000	QP
10		18.242	57.256	47.276	-6.744	64.000	9.540	0.440	0.000	AV
11		20.258	57.429	47.384	-16.571	74.000	9.565	0.480	0.000	QP
12		20.258	54.680	44.635	-9.320	64.000	9.565	0.480	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).



Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:21
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz) LAN-1Gbps	

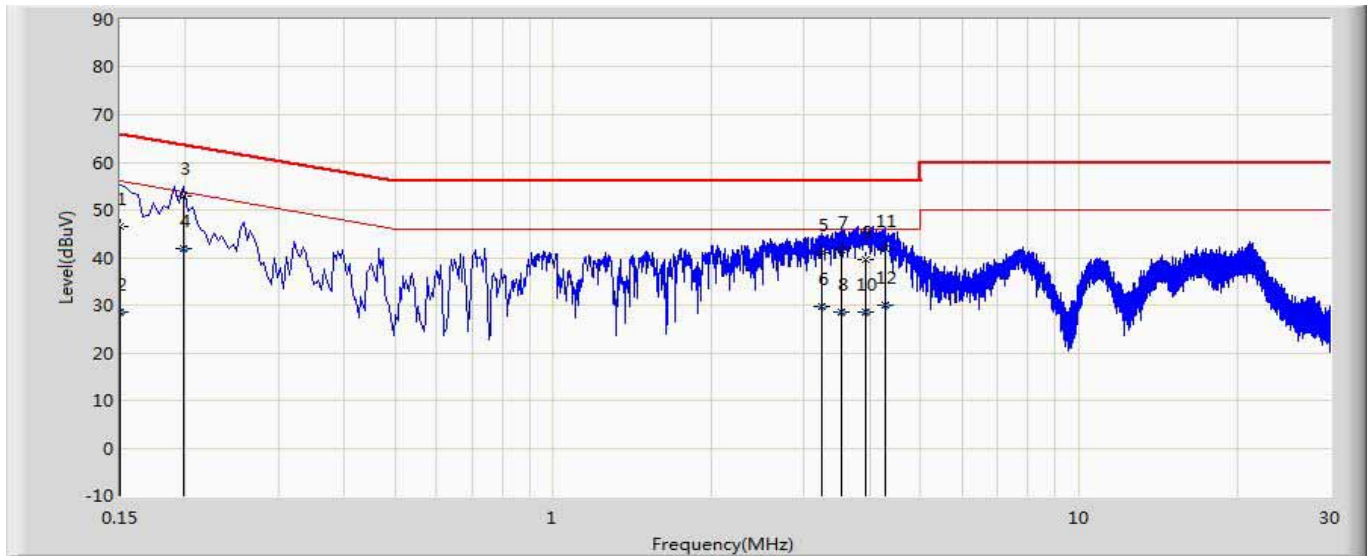


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.658	50.290	40.359	-23.710	74.000	9.861	0.070	0.000	QP
2		0.658	40.894	30.964	-23.106	64.000	9.861	0.070	0.000	AV
3		0.986	47.331	37.558	-26.669	74.000	9.693	0.080	0.000	QP
4		0.986	39.080	29.307	-24.920	64.000	9.693	0.080	0.000	AV
5		4.034	51.690	42.024	-22.310	74.000	9.526	0.140	0.000	QP
6		4.034	41.569	31.903	-22.431	64.000	9.526	0.140	0.000	AV
7		5.314	53.772	44.090	-20.228	74.000	9.512	0.170	0.000	QP
8	*	5.314	44.637	34.955	-19.363	64.000	9.512	0.170	0.000	AV
9		6.042	51.893	42.210	-22.107	74.000	9.503	0.180	0.000	QP
10		6.042	44.405	34.722	-19.595	64.000	9.503	0.180	0.000	AV
11		8.810	51.089	41.377	-22.911	74.000	9.472	0.240	0.000	QP
12		8.810	44.382	34.670	-19.618	64.000	9.472	0.240	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:49
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

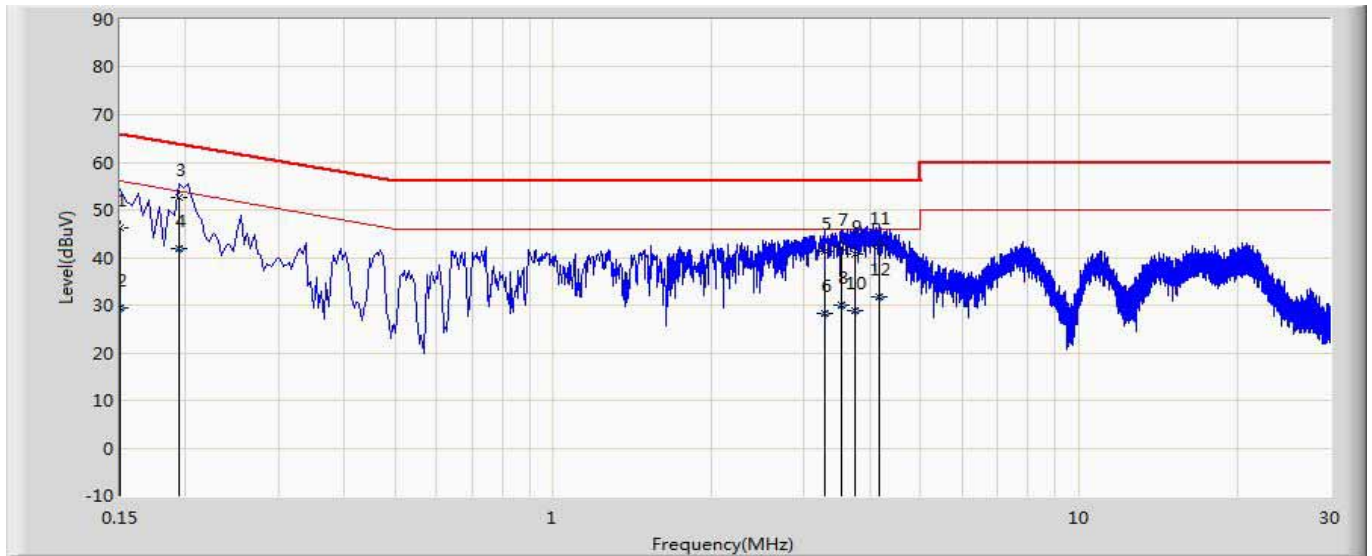


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	46.411	36.553	-19.589	66.000	9.798	0.060	0.000	QP
2		0.150	28.491	18.634	-27.509	56.000	9.798	0.060	0.000	AV
3	*	0.198	52.859	42.999	-10.835	63.694	9.800	0.060	0.000	QP
4		0.198	41.992	32.132	-11.702	53.694	9.800	0.060	0.000	AV
5		3.250	41.085	31.271	-14.915	56.000	9.694	0.120	0.000	QP
6		3.250	29.608	19.794	-16.392	46.000	9.694	0.120	0.000	AV
7		3.538	41.696	31.871	-14.304	56.000	9.695	0.130	0.000	QP
8		3.538	28.688	18.863	-17.312	46.000	9.695	0.130	0.000	AV
9		3.938	39.649	29.813	-16.351	56.000	9.696	0.140	0.000	QP
10		3.938	28.651	18.815	-17.349	46.000	9.696	0.140	0.000	AV
11		4.290	41.933	32.085	-14.067	56.000	9.698	0.150	0.000	QP
12		4.290	30.070	20.222	-15.930	46.000	9.698	0.150	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:52
Limit: EN55022_CE_Mains_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Neutral
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

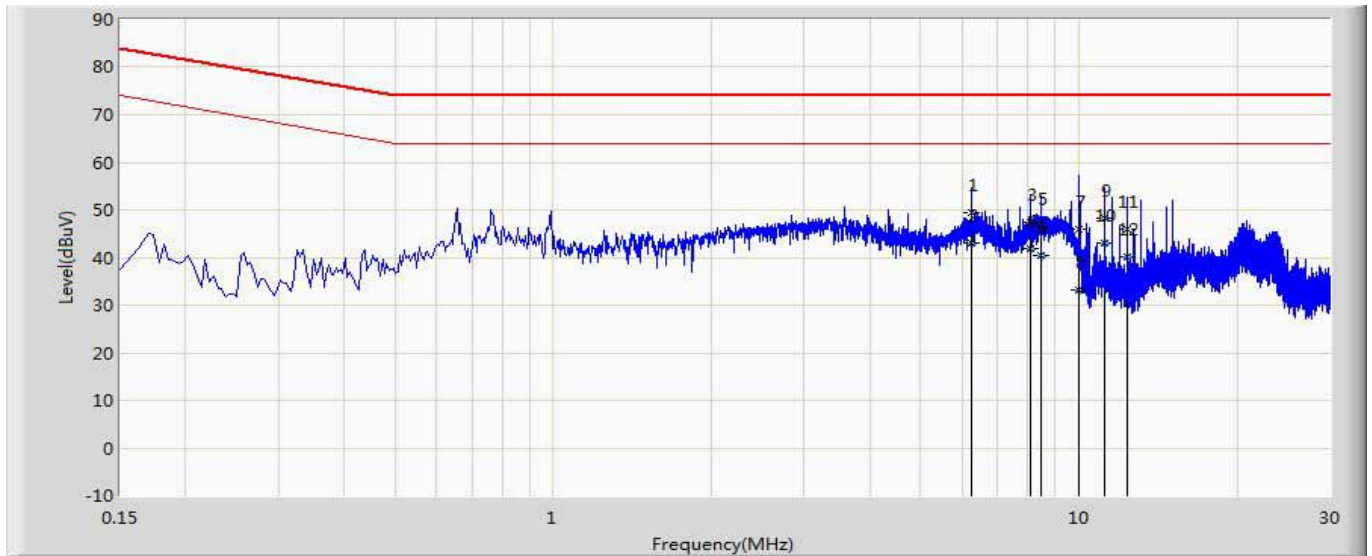


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.150	46.187	36.201	-19.813	66.000	9.925	0.060	0.000	QP
2		0.150	29.442	19.457	-26.558	56.000	9.925	0.060	0.000	AV
3	*	0.194	52.588	42.664	-11.276	63.864	9.864	0.060	0.000	QP
4		0.194	41.792	31.868	-12.071	53.864	9.864	0.060	0.000	AV
5		3.290	41.282	31.263	-14.718	56.000	9.888	0.130	0.000	QP
6		3.290	28.210	18.192	-17.790	46.000	9.888	0.130	0.000	AV
7		3.530	42.070	32.044	-13.930	56.000	9.896	0.130	0.000	QP
8		3.530	30.115	20.089	-15.885	46.000	9.896	0.130	0.000	AV
9		3.742	40.686	30.650	-15.314	56.000	9.902	0.133	0.000	QP
10		3.742	28.706	18.670	-17.294	46.000	9.902	0.133	0.000	AV
11		4.174	42.514	32.459	-13.486	56.000	9.915	0.140	0.000	QP
12		4.174	31.800	21.745	-14.200	46.000	9.915	0.140	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:54
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) LAN-10Mbps	

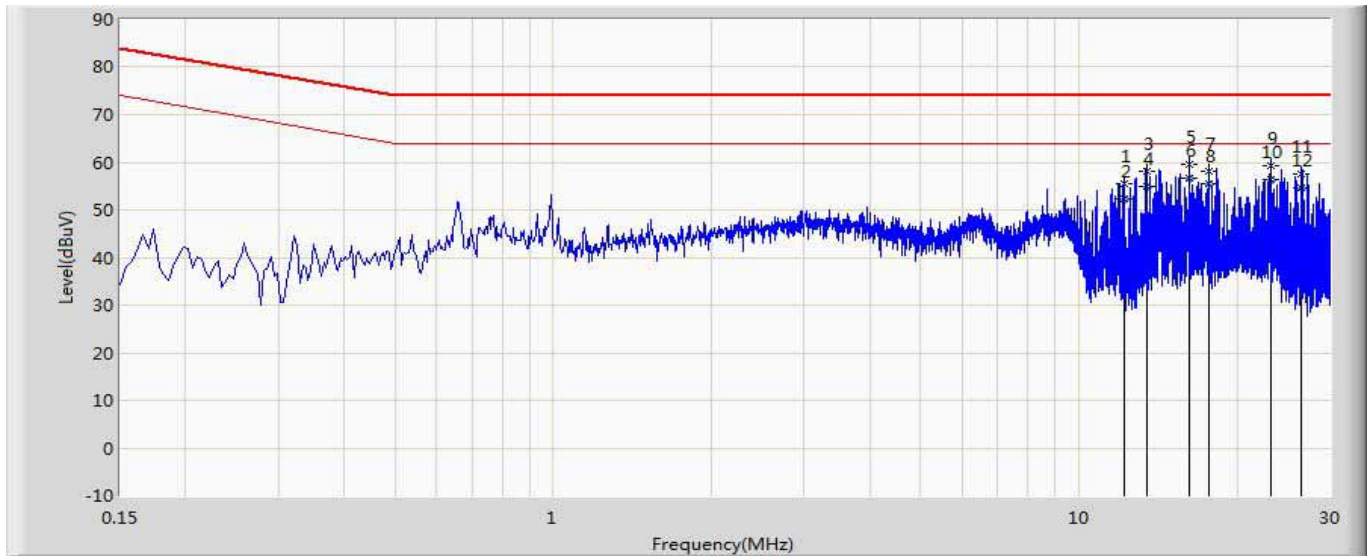


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		6.250	49.364	39.673	-24.636	74.000	9.501	0.190	0.000	QP
2	*	6.250	43.135	33.444	-20.865	64.000	9.501	0.190	0.000	AV
3		8.098	47.272	37.570	-26.728	74.000	9.480	0.223	0.000	QP
4		8.098	41.917	32.215	-22.083	64.000	9.480	0.223	0.000	AV
5		8.478	46.502	36.797	-27.498	74.000	9.475	0.230	0.000	QP
6		8.478	40.536	30.831	-23.464	64.000	9.475	0.230	0.000	AV
7		10.010	46.020	36.299	-27.980	74.000	9.458	0.263	0.000	QP
8		10.010	33.316	23.594	-30.684	64.000	9.458	0.263	0.000	AV
9		11.194	48.208	38.448	-25.792	74.000	9.470	0.290	0.000	QP
10		11.194	43.017	33.257	-20.983	64.000	9.470	0.290	0.000	AV
11		12.338	45.885	36.094	-28.115	74.000	9.481	0.310	0.000	QP
12		12.338	40.056	30.264	-23.944	64.000	9.481	0.310	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:57
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) LAN-100Mbps	

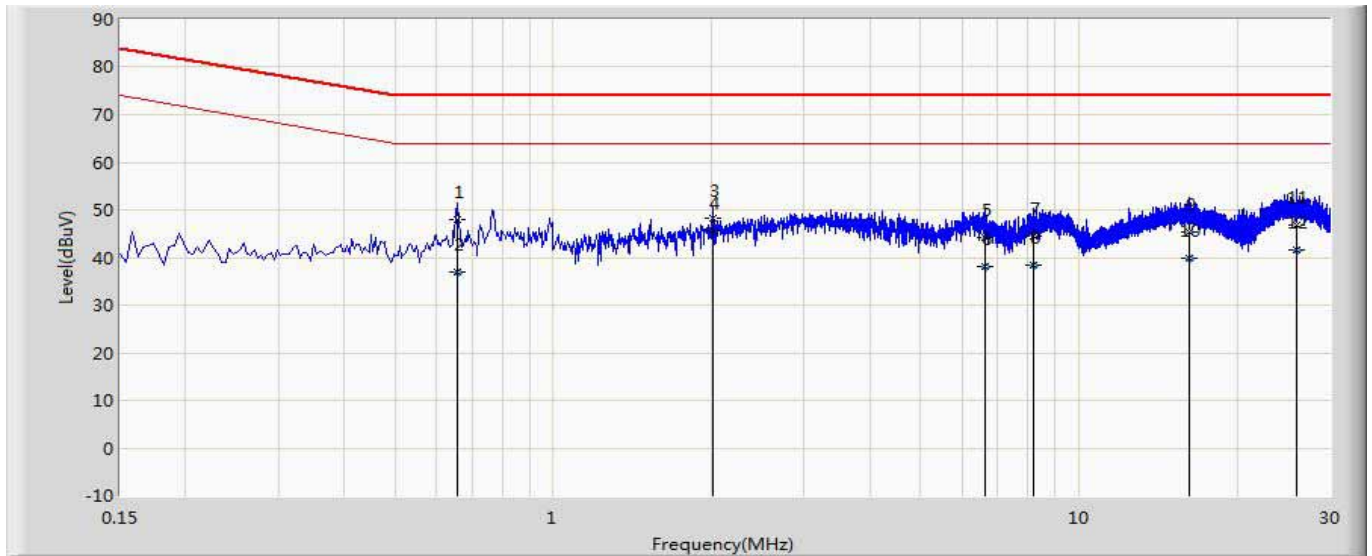


No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		12.198	55.442	45.652	-18.558	74.000	9.480	0.310	0.000	QP
2		12.198	52.438	42.648	-11.562	64.000	9.480	0.310	0.000	AV
3		13.418	58.025	48.193	-15.975	74.000	9.492	0.340	0.000	QP
4		13.418	54.997	45.165	-9.003	64.000	9.492	0.340	0.000	AV
5		16.226	59.577	49.667	-14.423	74.000	9.520	0.390	0.000	QP
6	*	16.226	56.720	46.810	-7.280	64.000	9.520	0.390	0.000	AV
7		17.694	58.114	48.159	-15.886	74.000	9.535	0.420	0.000	QP
8		17.694	55.502	45.547	-8.498	64.000	9.535	0.420	0.000	AV
9		23.130	59.376	49.200	-14.624	74.000	9.636	0.540	0.000	QP
10		23.130	56.311	46.135	-7.689	64.000	9.636	0.540	0.000	AV
11		26.486	57.582	47.253	-16.418	74.000	9.719	0.610	0.000	QP
12		26.486	54.670	44.341	-9.330	64.000	9.719	0.610	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: White	
Site: TR1	Time: 2012/03/12 - 04:59
Limit: EN55022_CE_ISN(Voltage)_ClassB	Margin: 0
Probe: TESEQ-ISN-T800-Cat 5_30306	Polarity:
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz) LAN-1Gbps	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.658	48.061	38.130	-25.939	74.000	9.861	0.070	0.000	QP
2		0.658	36.925	26.994	-27.075	64.000	9.861	0.070	0.000	AV
3		2.014	48.256	38.607	-25.744	74.000	9.549	0.100	0.000	QP
4	*	2.014	45.540	35.891	-18.460	64.000	9.549	0.100	0.000	AV
5		6.614	44.272	34.585	-29.728	74.000	9.497	0.190	0.000	QP
6		6.614	38.178	28.491	-25.822	64.000	9.497	0.190	0.000	AV
7		8.174	44.384	34.675	-29.616	74.000	9.479	0.230	0.000	QP
8		8.174	38.341	28.632	-25.659	64.000	9.479	0.230	0.000	AV
9		16.162	45.336	35.426	-28.664	74.000	9.519	0.390	0.000	QP
10		16.162	39.970	30.060	-24.030	64.000	9.519	0.390	0.000	AV
11		25.882	46.882	36.588	-27.118	74.000	9.704	0.590	0.000	QP
12		25.882	41.639	31.345	-22.361	64.000	9.704	0.590	0.000	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

### 3.7. Test Photograph

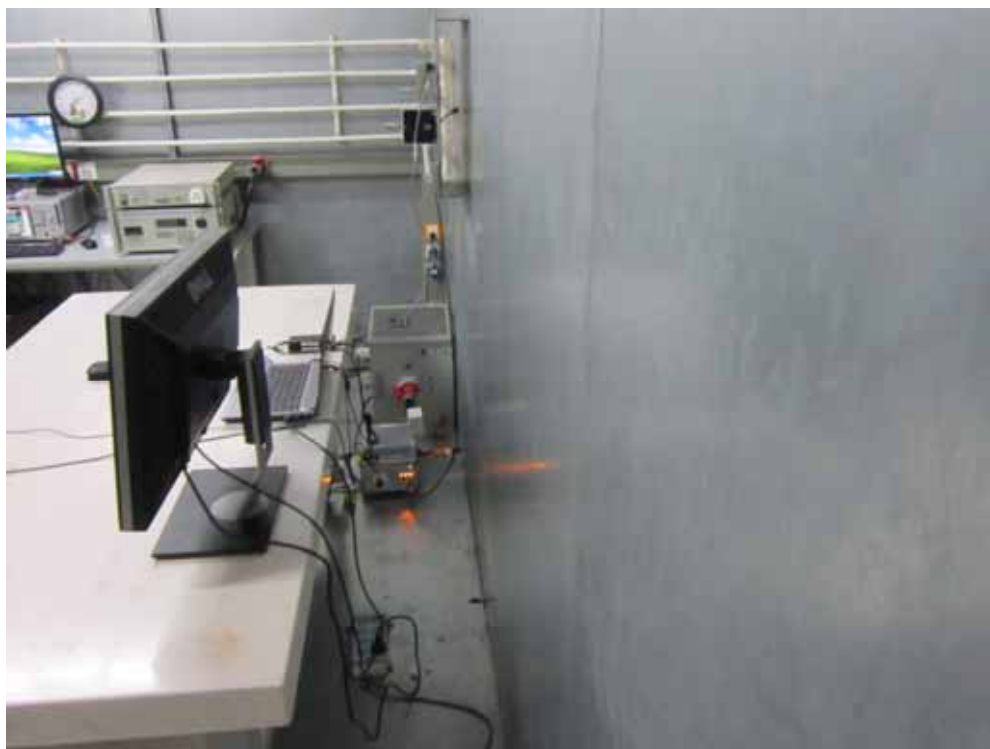
Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at mains terminals Test Setup



Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at mains terminals Test Setup



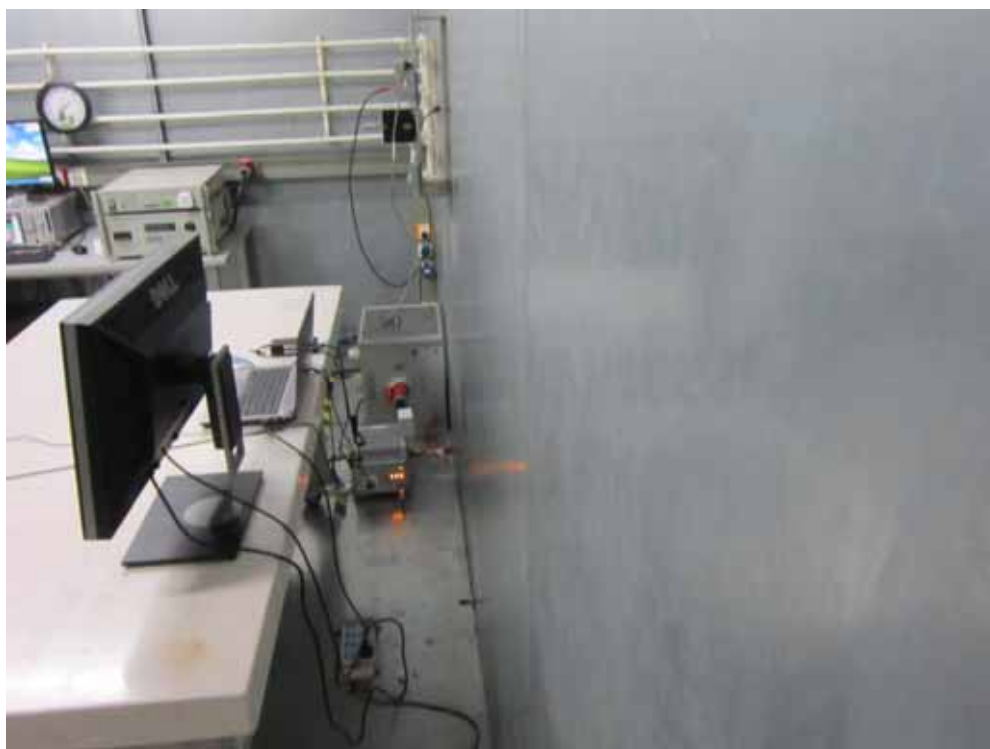
Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at telecommunication ports Test Setup (LAN)



Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at telecommunication ports Test Setup (LAN)





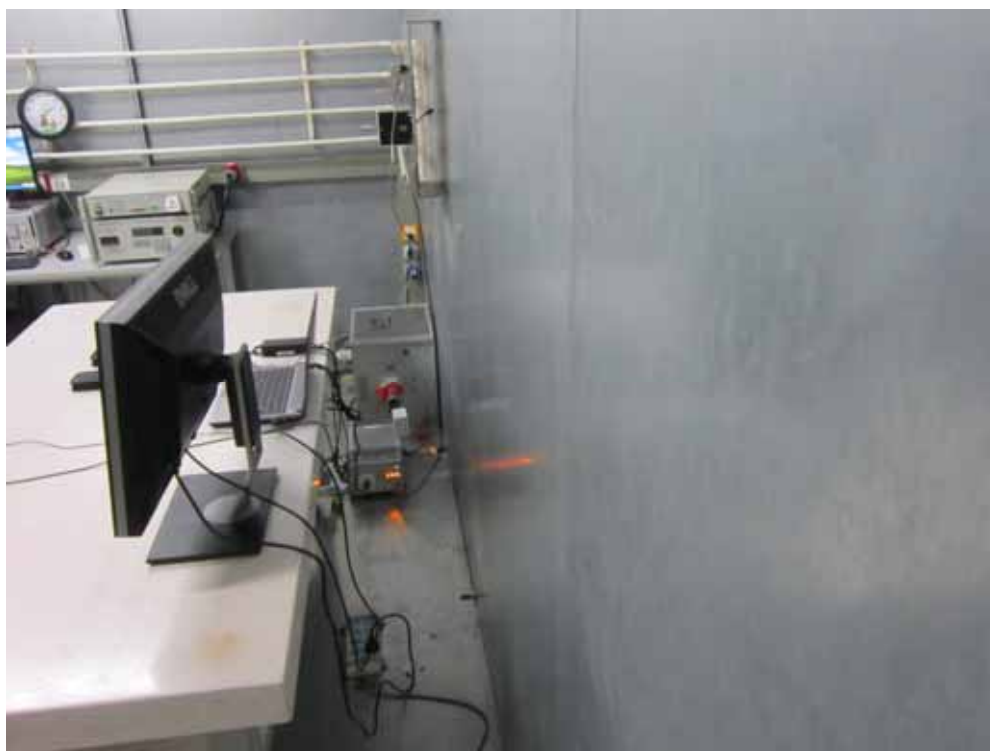
Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at mains terminals Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at mains terminals Test Setup



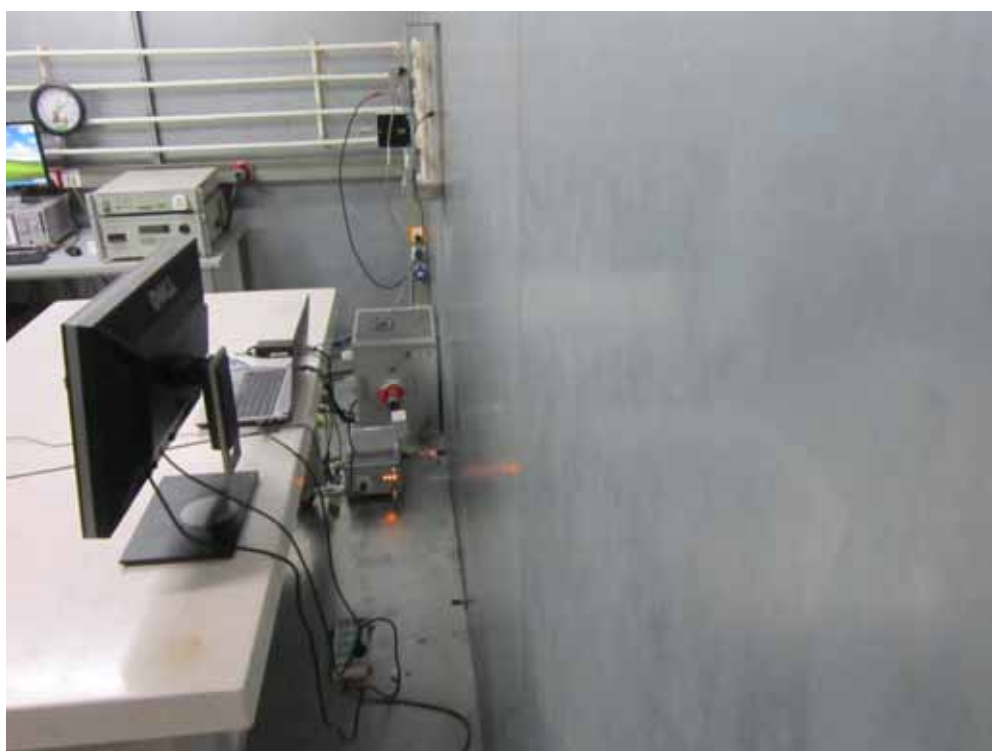
Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at telecommunication ports Test Setup (LAN)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at telecommunication ports Test Setup (LAN)



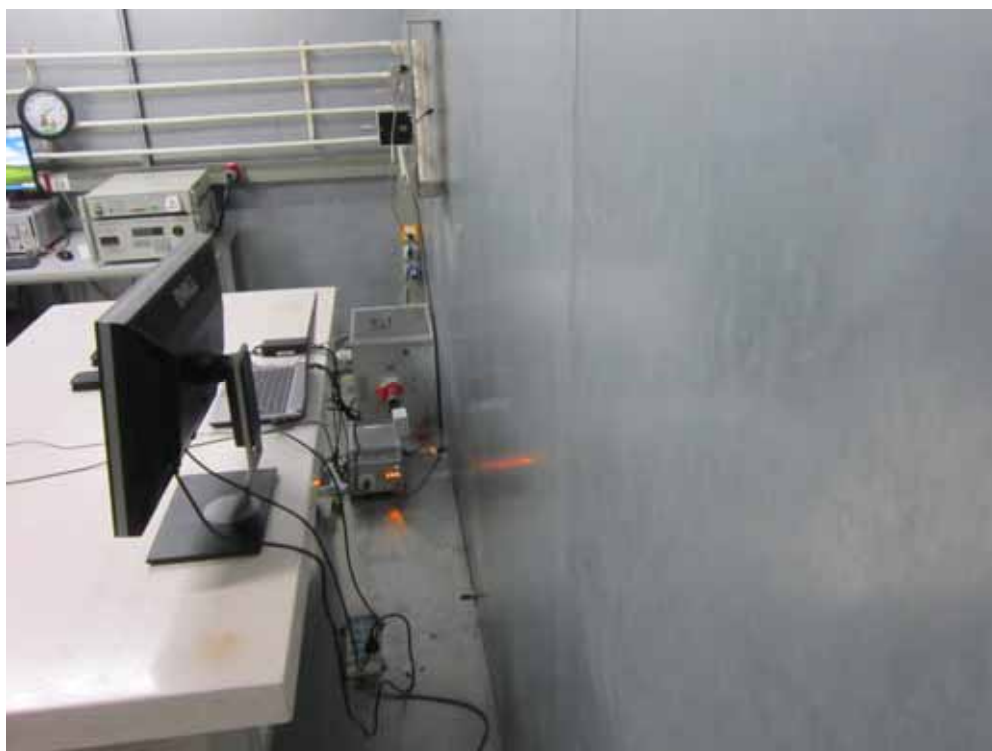
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at mains terminals Test Setup



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at mains terminals Test Setup



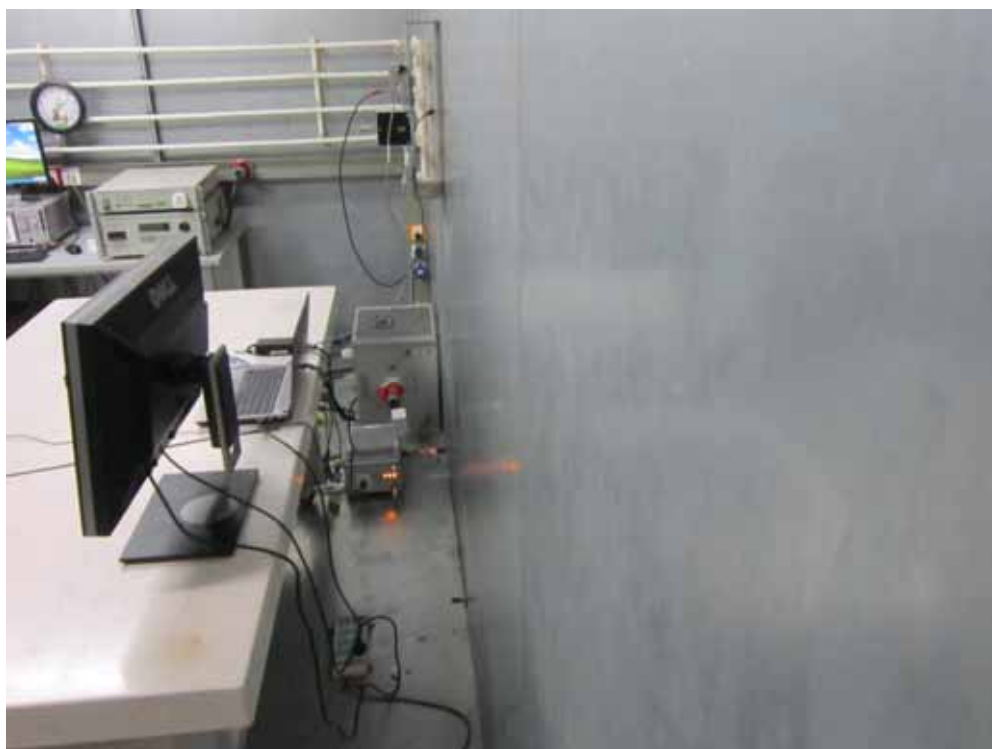
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at telecommunication ports Test Setup (LAN)



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at telecommunication ports Test Setup (LAN)



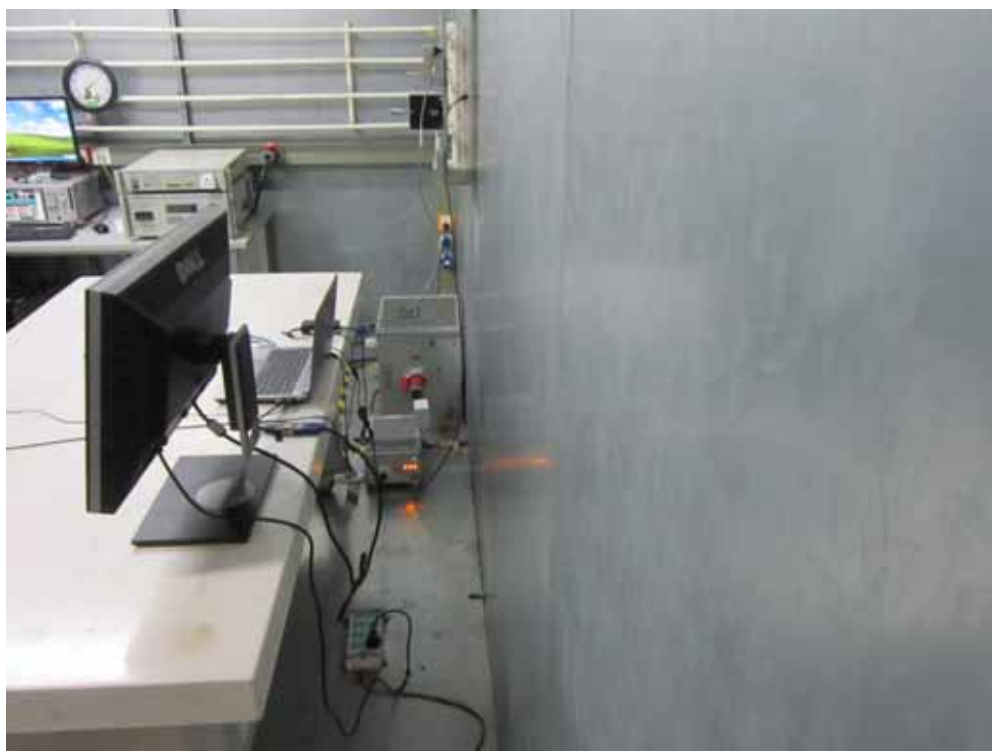
Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Conducted disturbance at mains terminals Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Side View of Conducted disturbance at mains terminals Test Setup



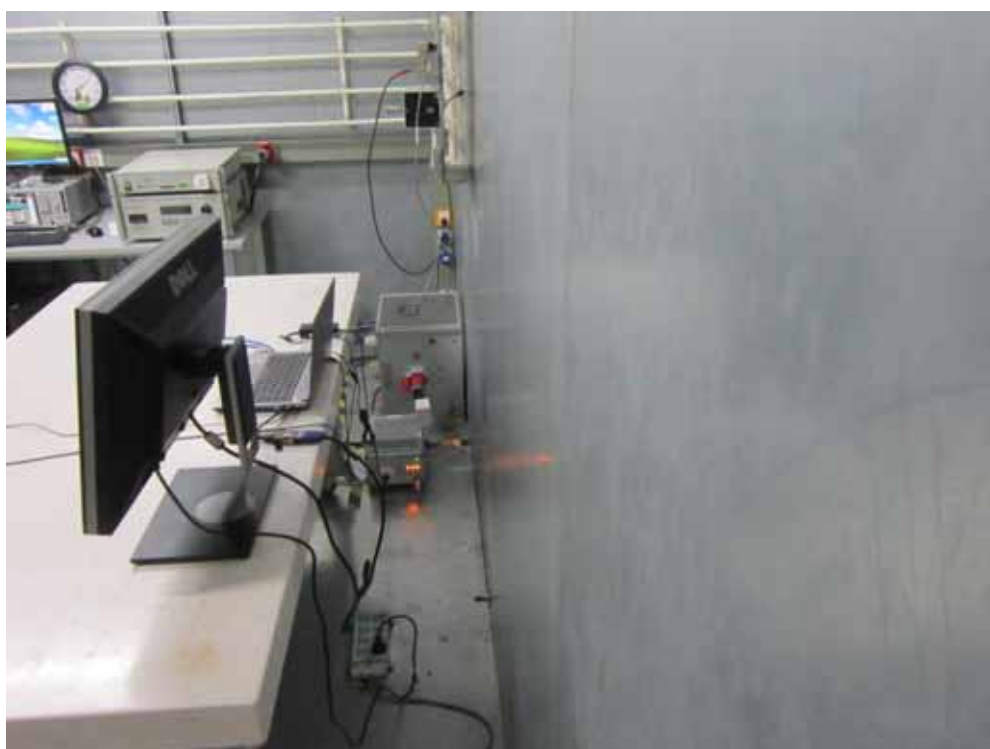
Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Conducted disturbance at telecommunication ports Test Setup (LAN)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Side View of Conducted disturbance at telecommunication ports Test Setup (LAN)



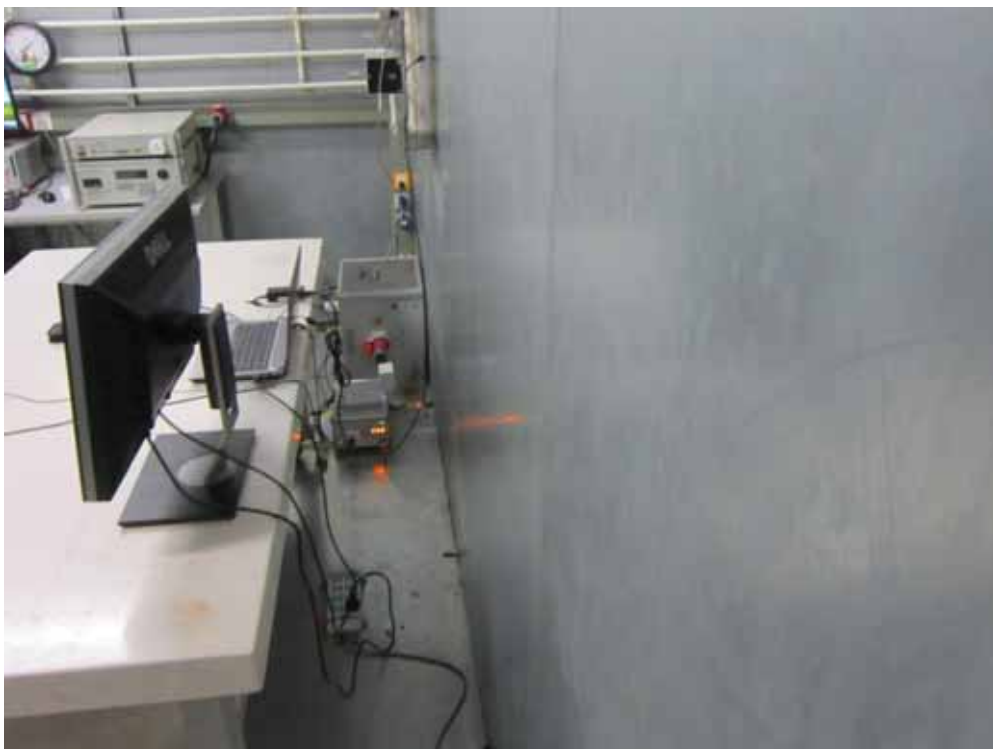
Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at mains terminals Test Setup



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at mains terminals Test Setup



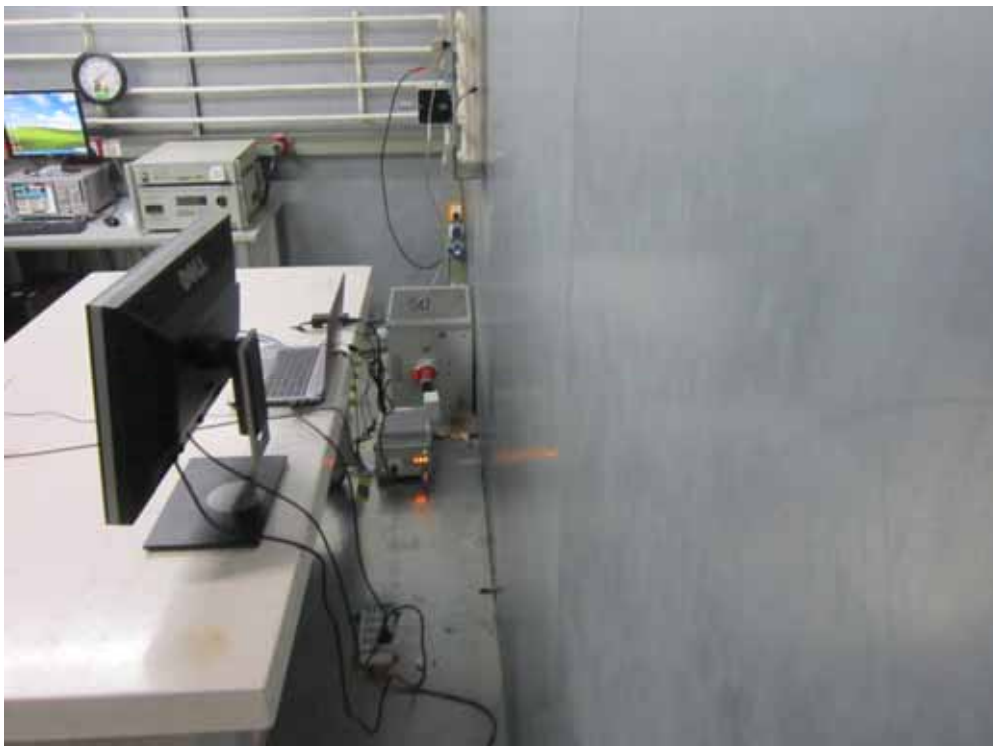
Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Conducted disturbance at telecommunication ports Test Setup (LAN)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Side View of Conducted disturbance at telecommunication ports Test Setup (LAN)





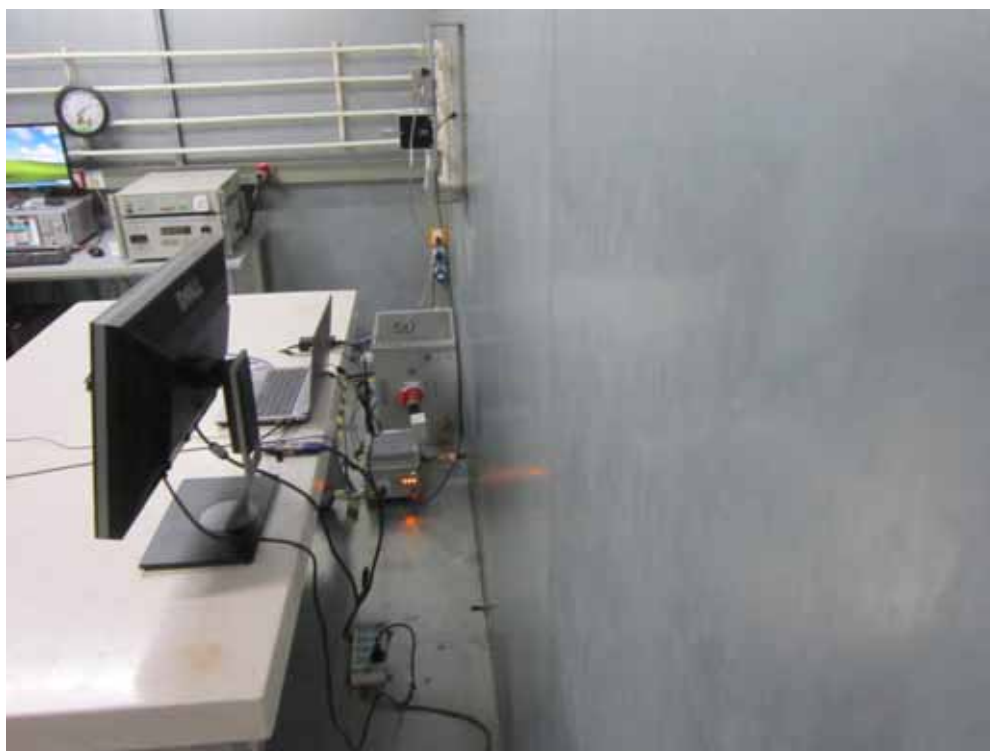
Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Conducted disturbance at mains terminals Test Setup



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Side View of Conducted disturbance at mains terminals Test Setup



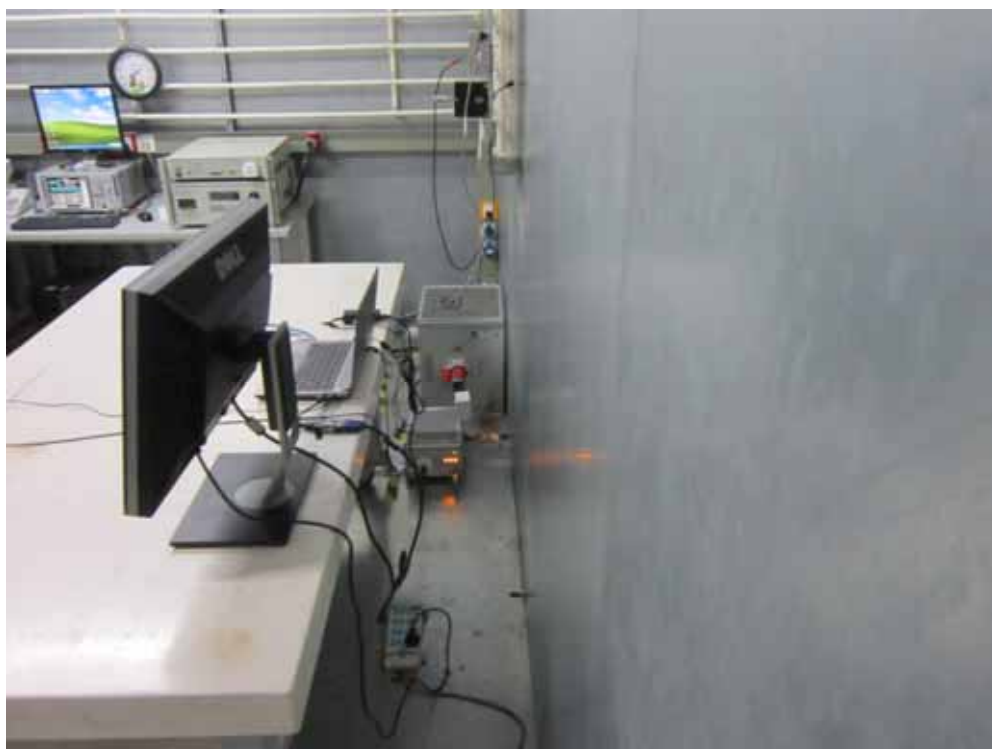
Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Conducted disturbance at telecommunication ports Test Setup (LAN)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Side View of Conducted disturbance at telecommunication ports Test Setup (LAN)



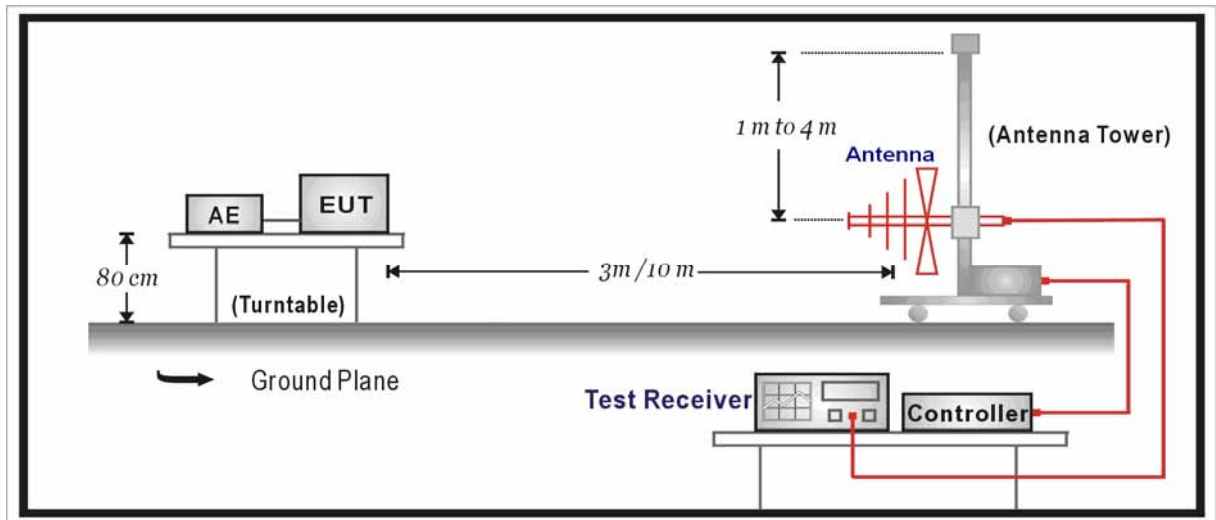
#### 4. Radiated disturbance

##### 4.1. Test Specification

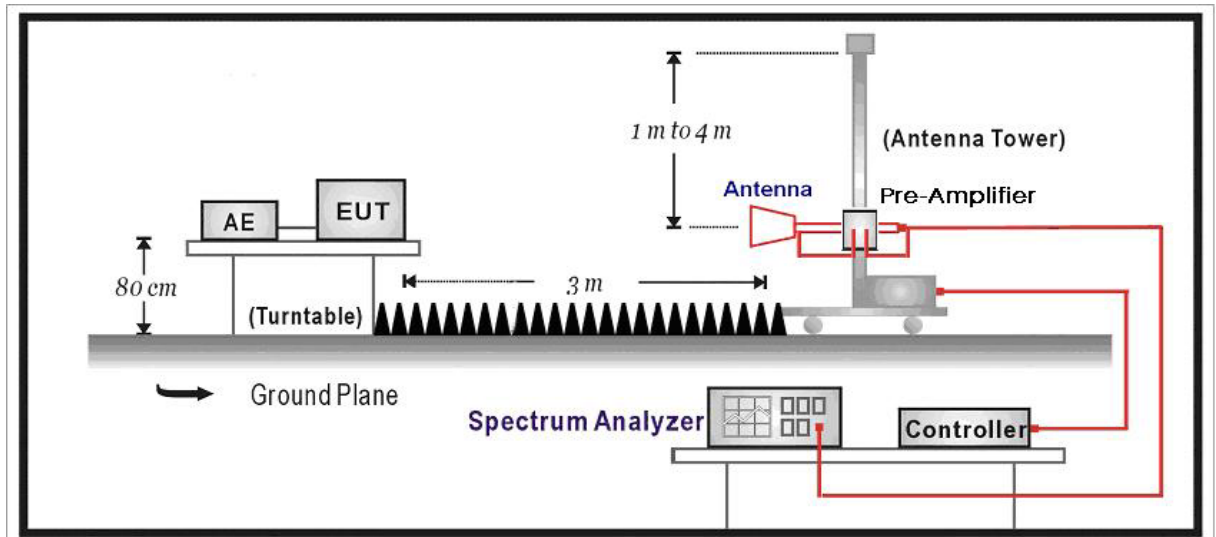
According to EMC Standard: EN 55022 and AS/NZS CISPR 22 Class B

##### 4.2. Test Setup

###### Below 1GHz Test Setup



###### Above 1GHz Test Setup



**4.3. Limit**

**Limits below 1GHz**

Limits for radiated disturbance of class A ITE at a measuring distance of 10m	
Frequency range MHz	Quasi-peak limits dB(μV/m)
30 to 230	40
230 to 1000	47

NOTE 1: The lower limit shall apply at the transition frequency.  
NOTE 2: Additional provisions may be required for cases where interference occurs.

Limits for radiated disturbance of class B ITE at a measuring distance of 10m	
Frequency range MHz	Quasi-peak limits dB(μV/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.

**Limits above 1GHz**

Limits for radiated disturbance of class A ITE at a measuring distance of 3m		
Frequency range GHz	Average limit dB(μV/m)	Peak-peak dB(μV/m)
1 to 3	56	76
3 to 6	60	80

NOTE: The lower limit applies at transition frequency.

Limits for radiated disturbance of class B ITE at a measuring distance of 3m		
Frequency range GHz	Average limit dB(μV/m)	Peak-peak dB(μV/m)
1 to 3	50	70
3 to 6	54	74

NOTE: The lower limit applies at transition frequency.

#### 4.4. Test Procedure

The EUT and its simulators are placed on a turntable which is 0.8 meter above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 10 meters for below 1GHz and 3 meters for above 1GHz.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be changed during radiated measurement.

The bandwidth below 1GHz setting on the receiver is 120kHz and above 1GHz is 1MHz.

##### **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.

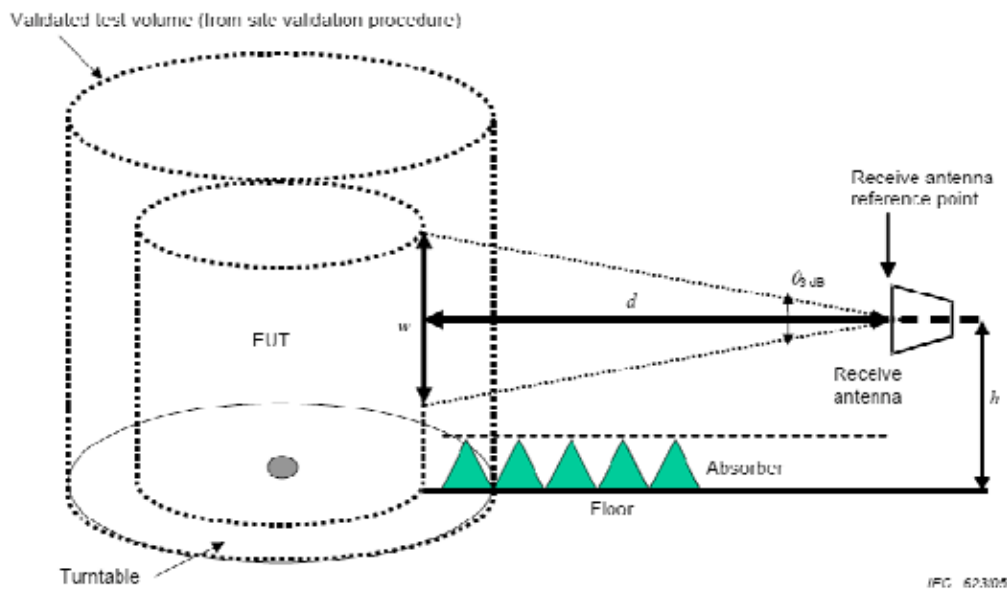
If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz.

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.

The radiated field measurement method above 1 GHz is based on measurement of the maximum electric field emitted from the EUT as shown below



**Measurement method above 1 GHz, receive antenna in vertical polarization**

● **Definitions referring to Figure**

**Validated test volume:** The volume validated during the site validation procedure (see 8.3.3 of CISPR 16-1-4:2010). Typically, this is the largest diameter EUT that can be used in the test facility.

**EUT:** The smallest diameter cylinder that will fully encompass all portions of the actual EUT, including cable racks and a minimum length of 30 cm of cables. The EUT that is located within this cylinder must be capable of rotating about its centre (typically by a remotely controlled turntable). The EUT must be located within the validated test volume. A maximum of 30 cm of  $\omega$  (see definition of  $\omega$  below) may be below the height of absorbers on the floor only when the EUT is floor standing and cannot be raised above the height of the absorbers (see 7.3.3).

**3 dB:** The minimum 3 dB beamwidth of the receive antenna at each frequency of interest.  $\theta_{3\text{ dB}}$  is the minimum of both the E-plane and H-plane values at each frequency. 3dB may be obtained from manufacturer provided data for the receive antenna.

**d:** The measurement distance (in meters). This is measured as the horizontal distance between the periphery of the EUT and the reference point of the receive antenna.

**$\omega$ :** The dimension of the line tangent to the EUT formed by  $\theta_{3\text{ dB}}$  at the measurement distance d. Equation (10) shall be used to calculate  $\omega$  for each actual antenna and measurement distance used. The values of  $\omega$  shall be included in the test report. This calculation may be based on the manufacturer-provided receive-antenna beamwidth specifications :

$$\omega = 2 \times d \times \tan (0,5 \times \theta_{3\text{ dB}})$$

Broad-Band Horn Antenna ( M/N : BBHA9120D ) test dimension of  $\omega$

Frequency GHz	3 dB (min) °	$\omega_m$
1	95	6.55
2	55	3.12
3	38	2.07
4	32	1.72
5	50	2.80
6	55	3.12
7	51	2.86
8	49	2.73
9	45	2.49
10	46	2.55
11	47	2.61
12	45	2.49
13	46	2.55
14	48	2.67
15	16	0.84
16	14	0.74
17	43	2.36
18	13	0.16

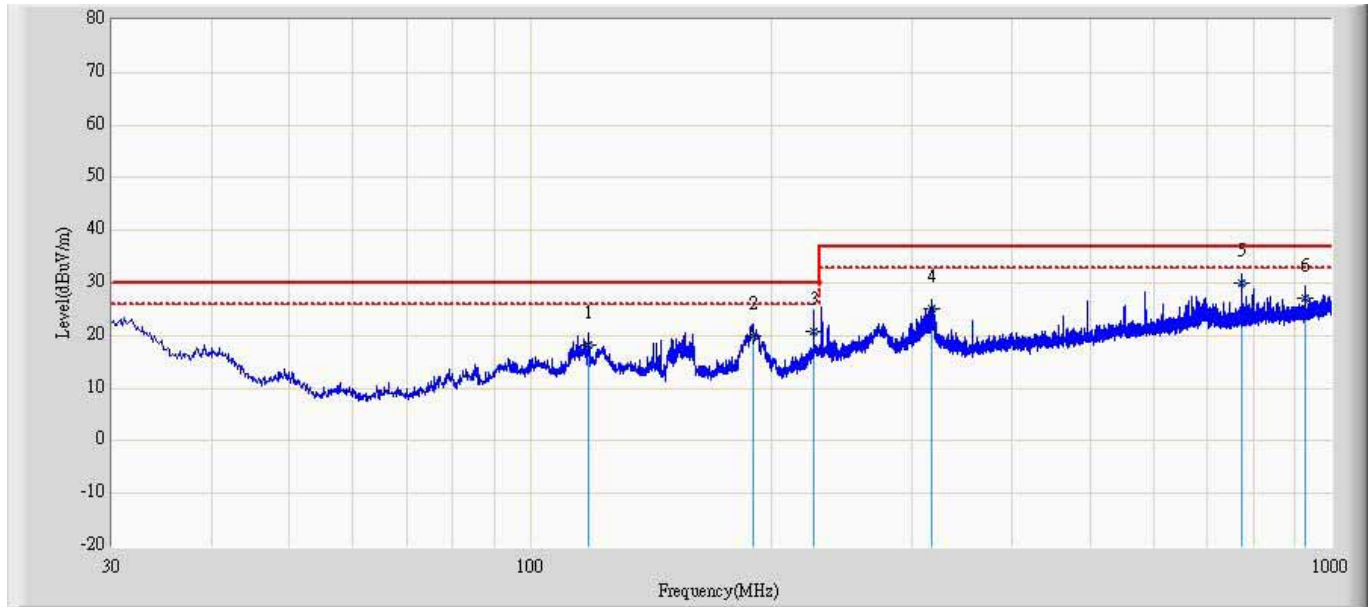
Note : The antenna's moving up and down is determined by  $\omega$  value for above 1GHz, to ensure that the acceptable range of the testing antenna can cover the whole range of EUT.

#### 4.5. Deviation from Test Standard

No deviation.

4.6. Test Result

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:23
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2931(30-1000MHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	



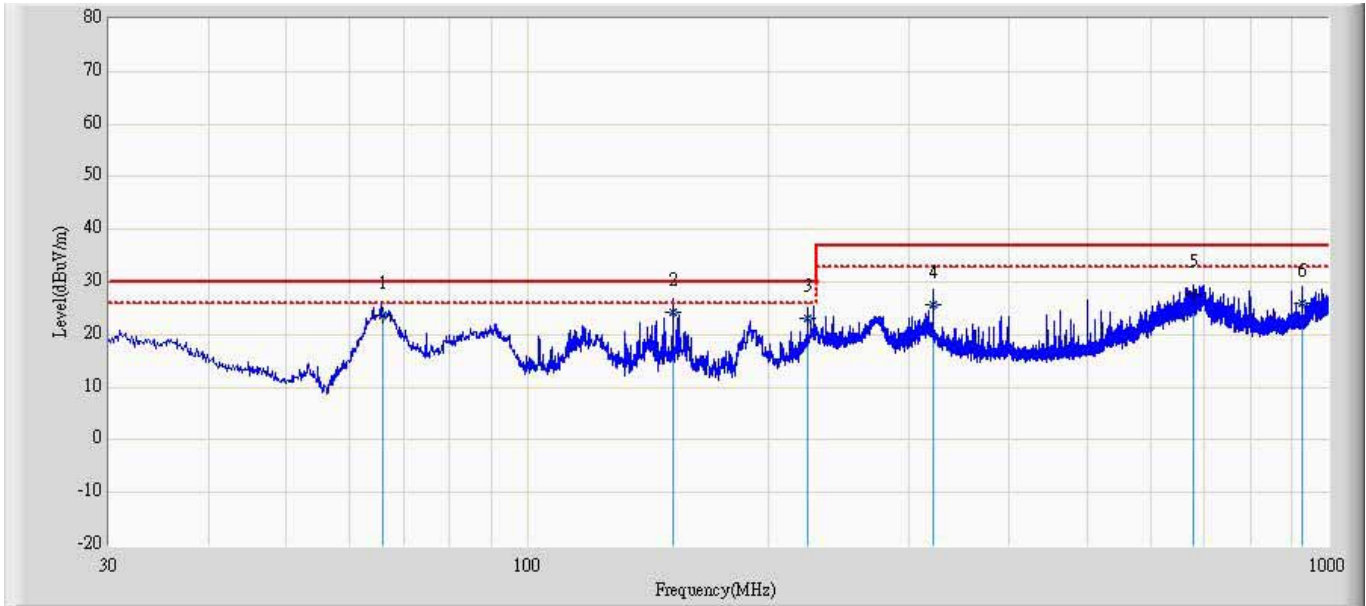
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		118.010	18.344	28.641	-11.656	30.000	10.194	1.610	22.100	100	0	QP
2		189.916	19.929	30.962	-10.071	30.000	8.971	2.030	22.034	200	8	QP
3		225.916	20.770	30.616	-9.230	30.000	9.888	2.220	21.954	400	360	QP
4		316.916	24.995	30.660	-12.005	37.000	13.473	2.648	21.786	400	97	QP
5	*	772.516	29.867	26.910	-7.133	37.000	19.698	4.125	20.866	200	99	QP
6		927.165	27.185	22.616	-9.815	37.000	20.790	4.561	20.782	100	96	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).



Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:25
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

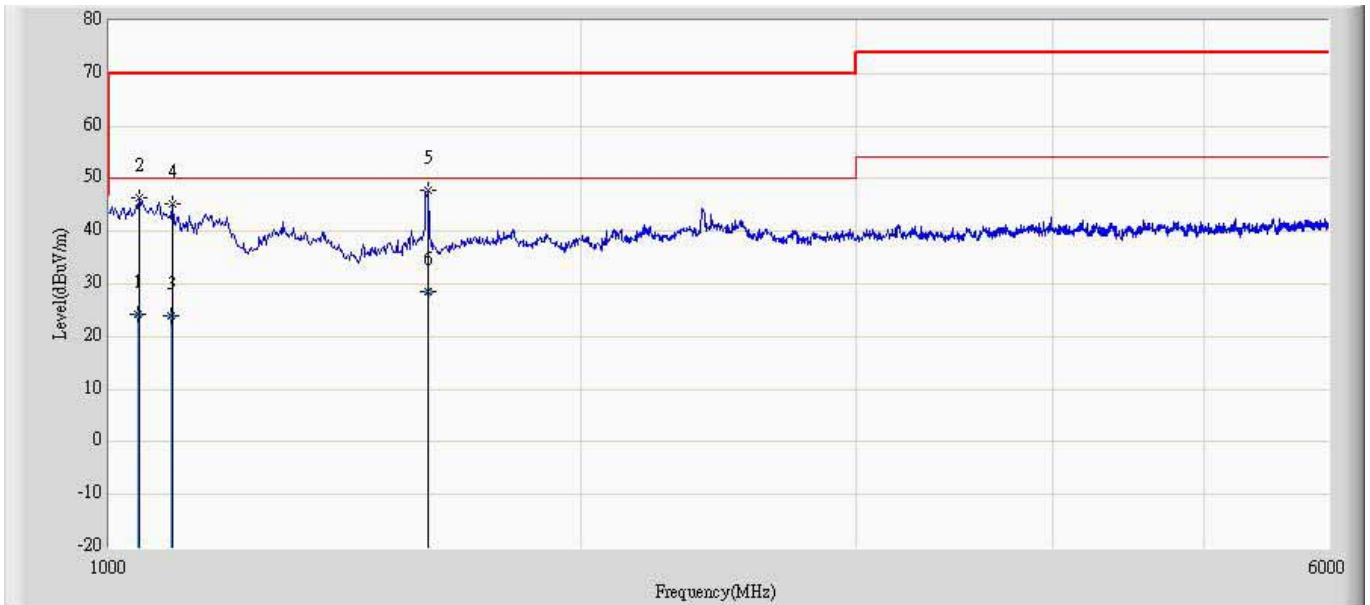


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		65.816	23.688	40.110	-6.312	30.000	5.275	1.388	23.085	100	360	QP
2	*	151.915	24.216	35.660	-5.784	30.000	9.566	2.070	23.079	300	66	QP
3		224.001	23.212	33.910	-6.788	30.000	9.732	2.510	22.940	100	5	QP
4		320.811	25.764	32.160	-11.236	37.000	13.562	3.000	22.958	200	89	QP
5		678.365	27.573	26.911	-9.427	37.000	18.878	4.378	22.595	200	9	QP
6		927.162	26.104	22.616	-10.896	37.000	20.717	5.139	22.368	400	6	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/11 - 23:33
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

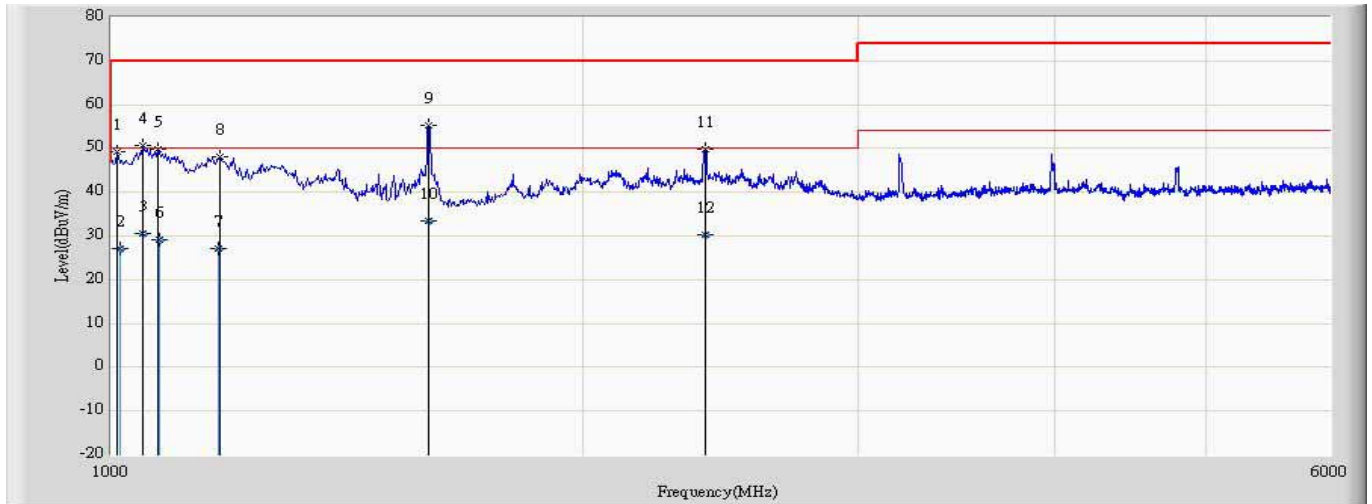


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1043.690	24.350	41.260	-25.650	50.000	27.978	2.396	47.283	100	206	AV
2			1045.000	46.352	63.264	-23.648	70.000	27.974	2.396	47.283	100	206	PK
3			1095.480	23.869	40.960	-26.131	50.000	27.832	2.362	47.286	120	346	AV
4			1097.500	45.092	62.183	-24.908	70.000	27.827	2.365	47.282	120	346	PK
5			1600.000	47.931	63.060	-22.069	70.000	29.020	2.908	47.056	100	63	PK
6		*	1600.020	28.547	43.675	-21.453	50.000	29.020	2.908	47.056	100	63	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/11 - 23:35
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

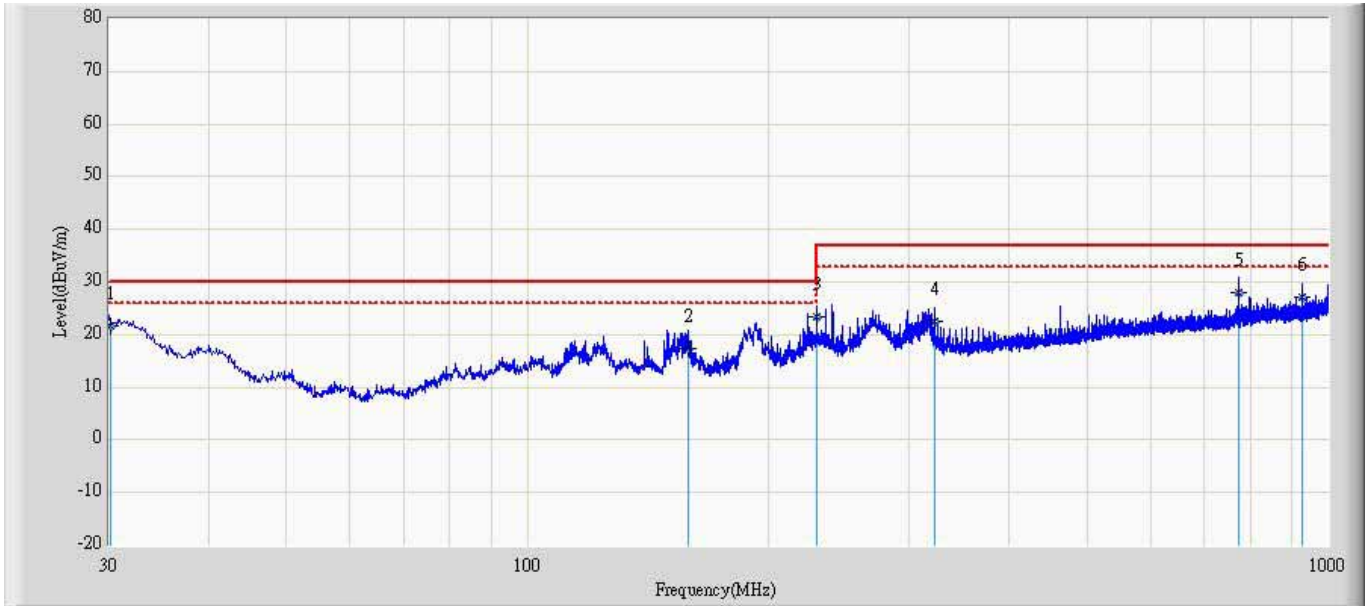


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1010.000	49.224	65.833	-20.776	70.000	28.392	2.294	47.295	100	52	PK
2			1012.360	27.048	43.652	-22.952	50.000	28.390	2.293	47.286	100	52	AV
3			1046.960	30.440	46.962	-19.560	50.000	28.362	2.398	47.282	100	95	AV
4			1047.500	50.564	67.086	-19.436	70.000	28.362	2.398	47.282	100	95	PK
5			1072.500	49.783	66.384	-20.217	70.000	28.342	2.343	47.286	100	286	PK
6			1072.924	29.054	45.656	-20.946	50.000	28.342	2.343	47.287	100	286	AV
7			1170.690	27.075	43.652	-22.925	50.000	28.263	2.452	47.292	163	360	AV
8			1172.500	48.027	64.603	-21.973	70.000	28.262	2.456	47.294	163	360	PK
9		*	1595.000	55.224	71.291	-14.776	70.000	28.088	2.890	47.045	100	183	PK
10			1596.360	33.581	49.632	-16.419	50.000	28.102	2.895	47.048	100	183	AV
11			2395.000	49.800	61.337	-20.200	70.000	31.722	3.676	46.935	100	213	PK
12			2396.521	30.421	41.963	-19.579	50.000	31.727	3.670	46.938	100	213	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:00
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2931(30-1000MHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

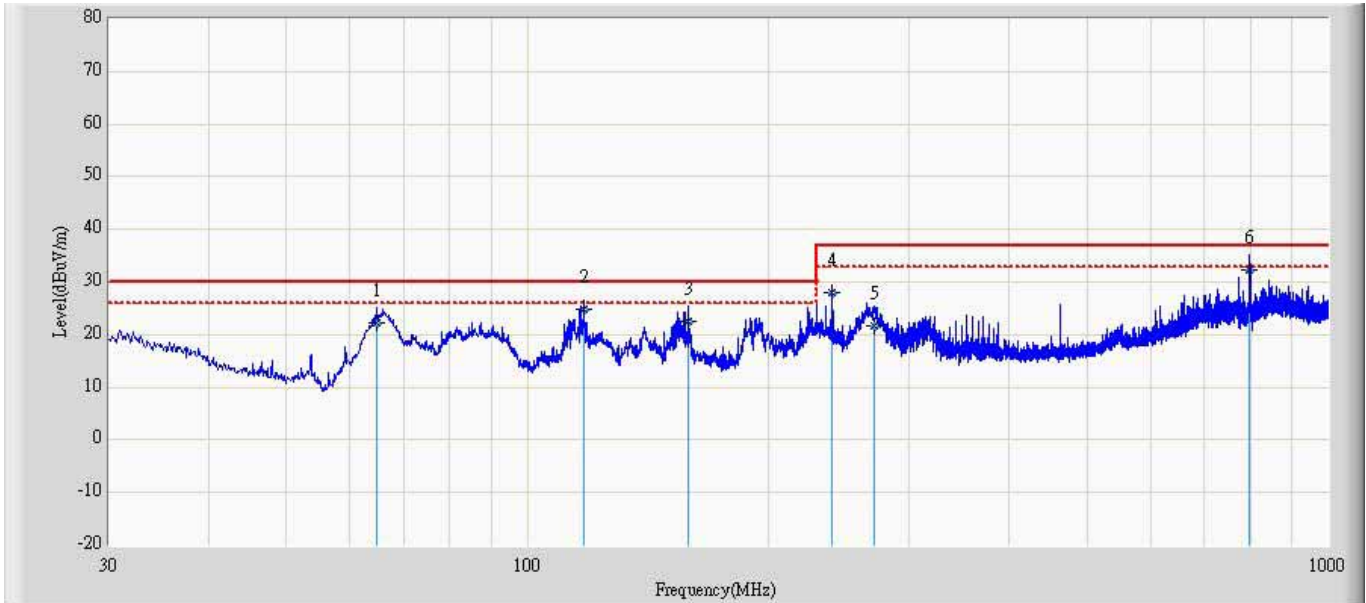


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.110	21.792	25.164	-8.208	30.000	17.839	0.812	22.024	400	360	QP
2		158.916	17.487	28.165	-12.513	30.000	9.499	1.869	22.046	100	336	QP
3	*	229.916	23.533	33.156	-6.467	30.000	10.056	2.258	21.937	200	164	QP
4		322.619	22.531	28.064	-14.469	37.000	13.633	2.657	21.822	200	58	QP
5		772.511	28.120	25.164	-8.880	37.000	19.698	4.125	20.866	100	9	QP
6		927.123	27.179	22.616	-9.821	37.000	20.790	4.561	20.788	100	89	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:00
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

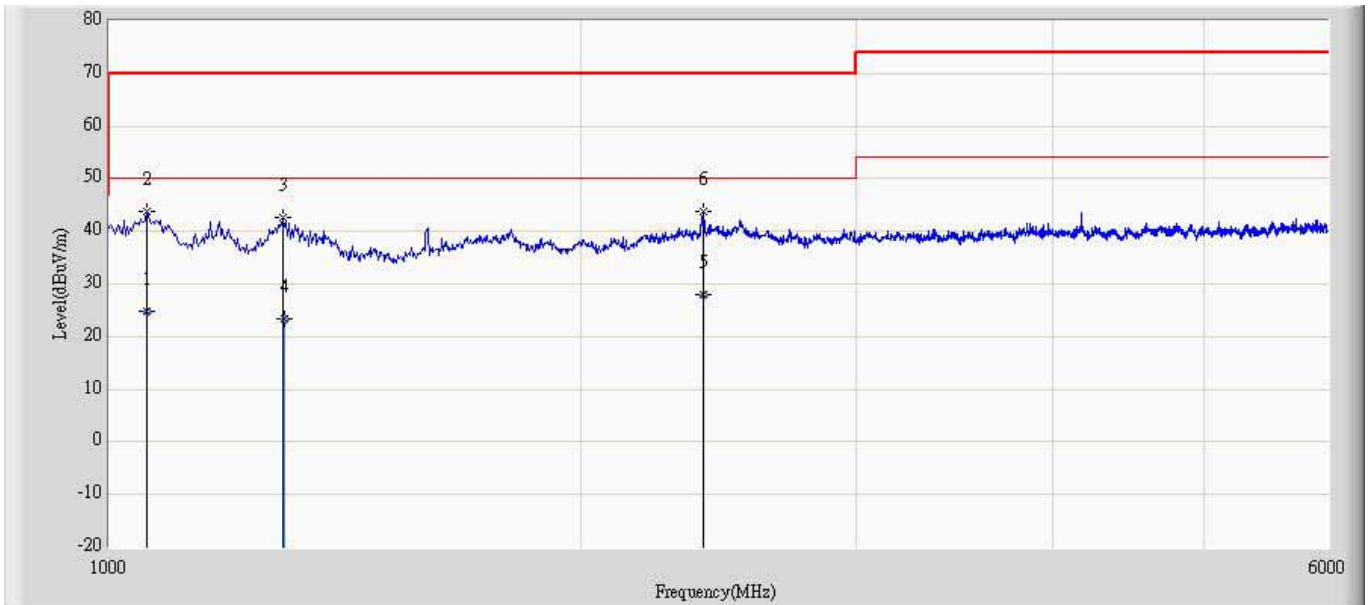


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		64.916	22.128	38.660	-7.872	30.000	5.248	1.360	23.140	200	97	QP
2		117.720	24.777	35.916	-5.223	30.000	10.181	1.840	23.160	100	94	QP
3		158.912	22.603	34.156	-7.397	30.000	9.440	2.118	23.111	200	9	QP
4		240.001	28.120	38.110	-8.880	37.000	10.420	2.605	23.015	100	5	QP
5		270.619	21.695	30.162	-15.305	37.000	11.737	2.789	22.993	200	96	QP
6	*	796.517	32.299	30.012	-4.701	37.000	20.058	4.758	22.529	100	8	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/12 - 00:20
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

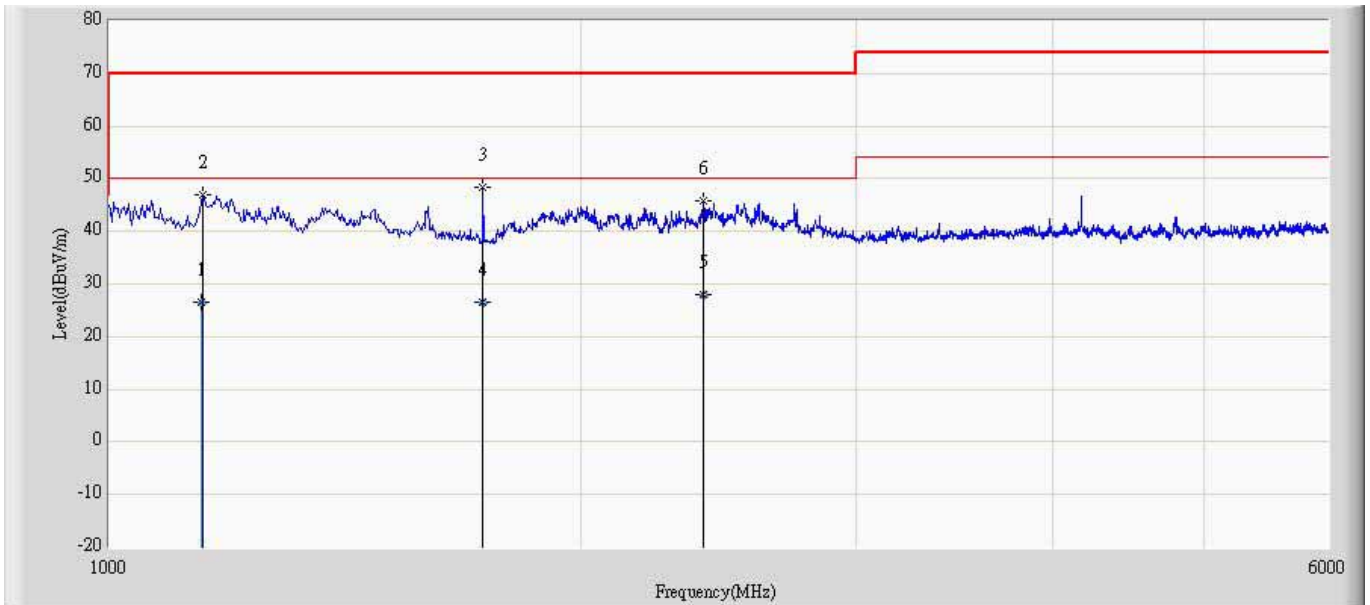


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1056.956	24.935	41.896	-25.065	50.000	27.941	2.379	47.280	100	153	AV
2			1057.500	43.725	60.689	-26.275	70.000	27.939	2.377	47.280	100	153	PK
3			1292.500	42.619	59.886	-27.381	70.000	27.383	2.594	47.244	100	58	PK
4			1293.390	23.297	40.560	-26.703	50.000	27.382	2.598	47.244	100	58	AV
5		*	2396.456	28.064	38.920	-21.936	50.000	32.413	3.670	46.938	100	123	AV
6			2397.500	43.715	54.569	-26.285	70.000	32.421	3.666	46.941	100	123	PK

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/12 - 00:23
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

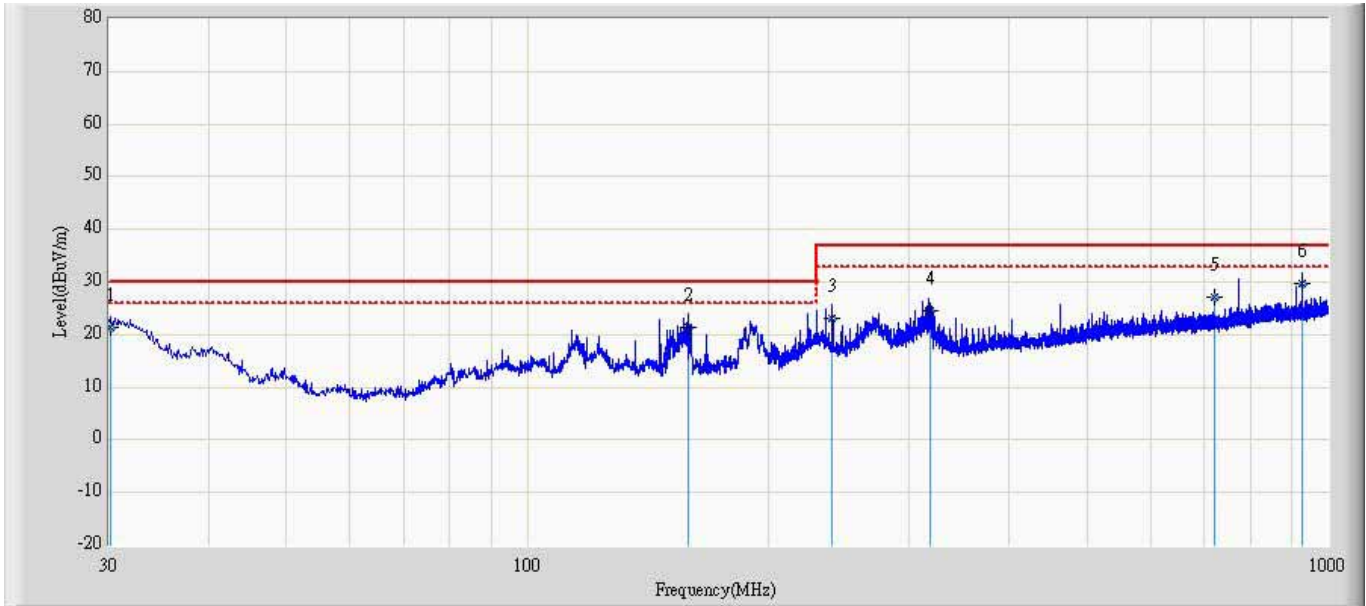


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1145.596	26.448	42.986	-23.552	50.000	28.284	2.454	47.276	100	20	AV
2			1147.500	46.896	63.426	-23.104	70.000	28.282	2.461	47.273	100	20	PK
3		*	1732.500	48.510	62.975	-21.490	70.000	29.518	3.068	47.050	100	209	PK
4			1733.200	26.607	41.066	-23.393	50.000	29.525	3.067	47.051	100	209	AV
5			2395.523	27.921	39.460	-22.079	50.000	31.724	3.674	46.936	100	46	AV
6			2397.500	45.907	57.451	-24.093	70.000	31.731	3.666	46.941	100	46	PK

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:15
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2931(30-1000MHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	



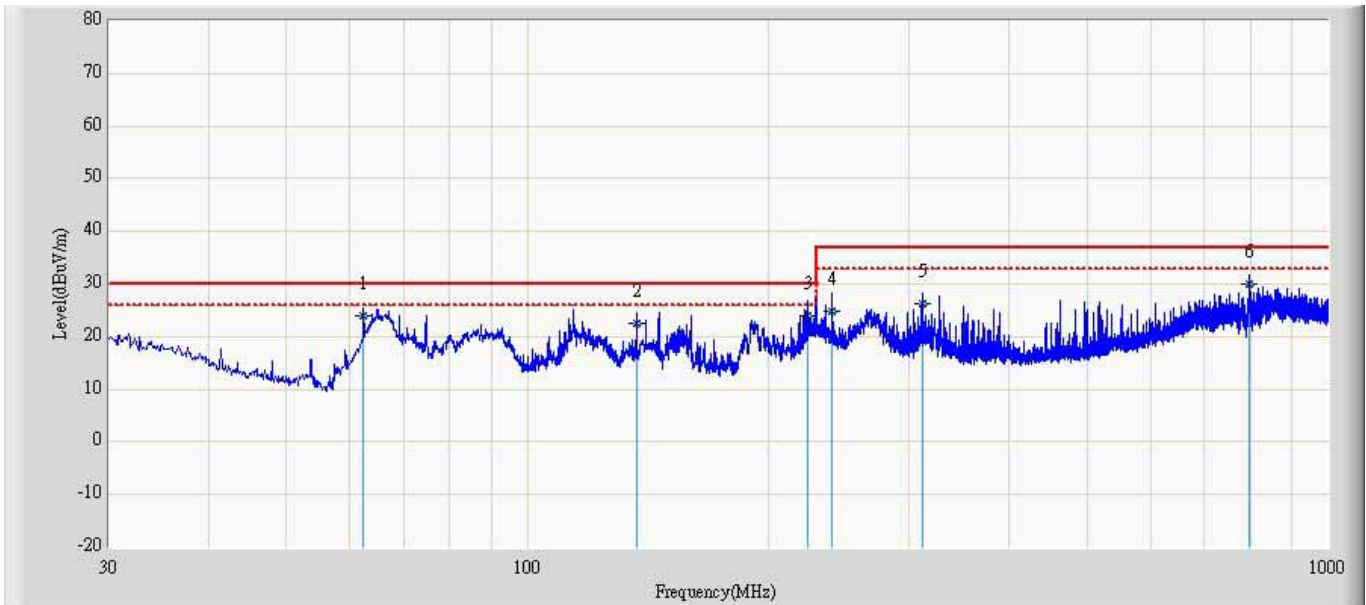
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.151	21.270	24.661	-8.730	30.000	17.817	0.813	22.021	200	9	QP
2		158.916	21.486	32.164	-8.514	30.000	9.499	1.869	22.046	200	8	QP
3		240.001	23.013	32.169	-13.987	37.000	10.480	2.280	21.916	200	98	QP
4		317.911	24.483	30.161	-12.517	37.000	13.502	2.634	21.814	300	66	QP
5		722.517	27.159	24.811	-9.841	37.000	19.147	3.990	20.790	100	144	QP
6	*	927.159	29.704	25.136	-7.296	37.000	20.790	4.561	20.783	100	147	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).



Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:15
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

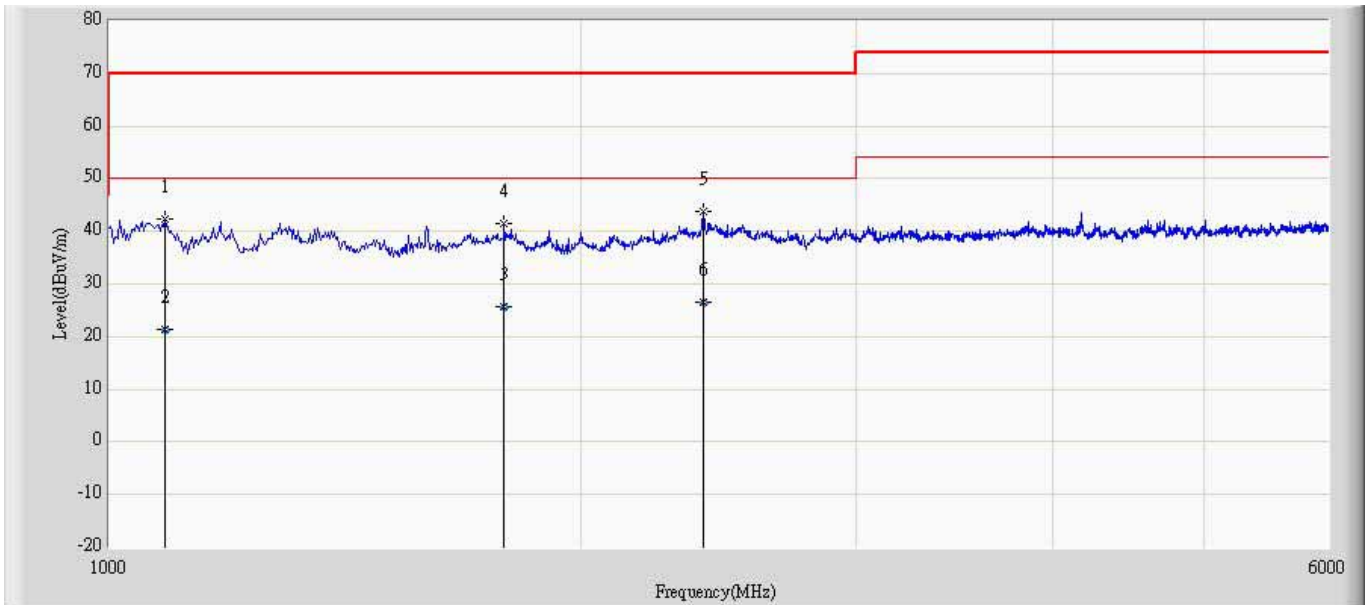


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		62.316	23.989	40.616	-6.011	30.000	5.169	1.336	23.133	100	116	QP
2		137.101	22.635	33.916	-7.365	30.000	9.832	1.980	23.093	400	199	QP
3	*	224.317	24.108	34.815	-5.892	30.000	9.746	2.517	22.969	200	17	QP
4		240.016	24.911	34.900	-12.089	37.000	10.420	2.605	23.014	200	95	QP
5		312.191	26.389	33.100	-10.611	37.000	13.329	2.978	23.018	200	8	QP
6		797.632	29.867	27.562	-7.133	37.000	20.071	4.750	22.516	200	91	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/12 - 00:31
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

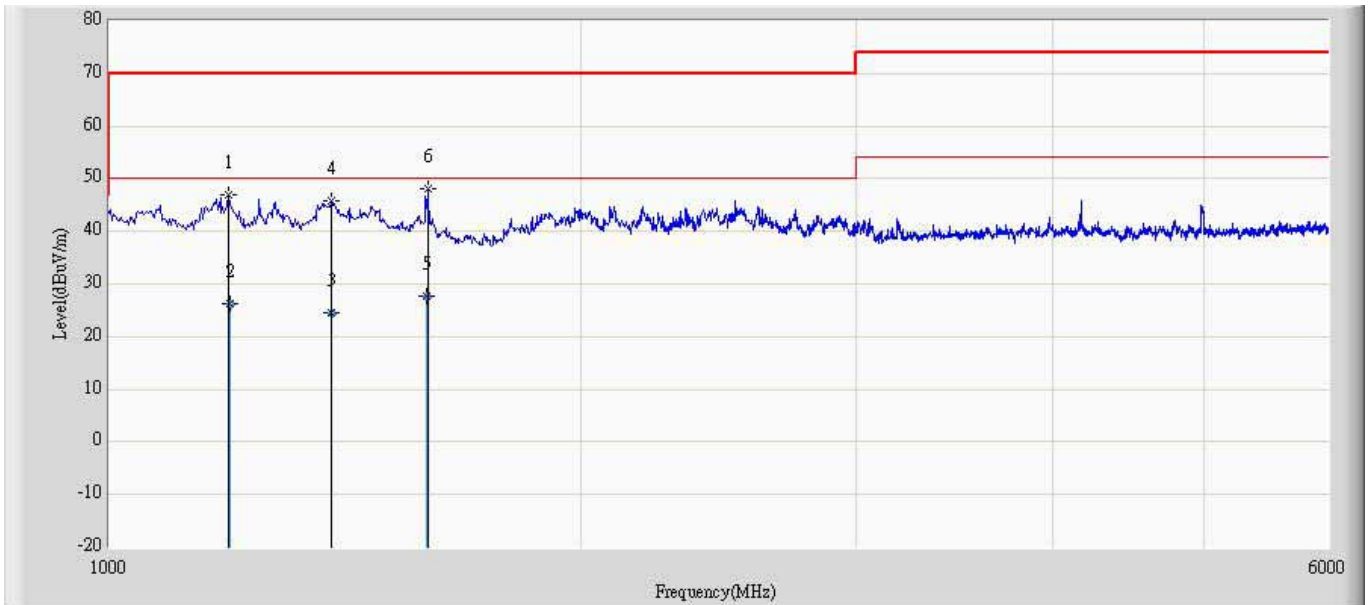


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1085.000	42.303	59.394	-27.697	70.000	27.862	2.350	47.303	100	206	PK
2			1086.566	21.398	38.489	-28.602	50.000	27.858	2.352	47.300	100	206	AV
3			1785.565	25.779	38.489	-24.221	50.000	31.358	3.008	47.077	100	53	AV
4			1787.500	41.625	54.340	-28.375	70.000	31.345	3.013	47.073	100	53	PK
5			2395.000	43.655	54.512	-26.345	70.000	32.402	3.676	46.935	100	193	PK
6		*	2396.486	26.607	37.463	-23.393	50.000	32.413	3.670	46.938	100	193	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/12 - 00:33
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

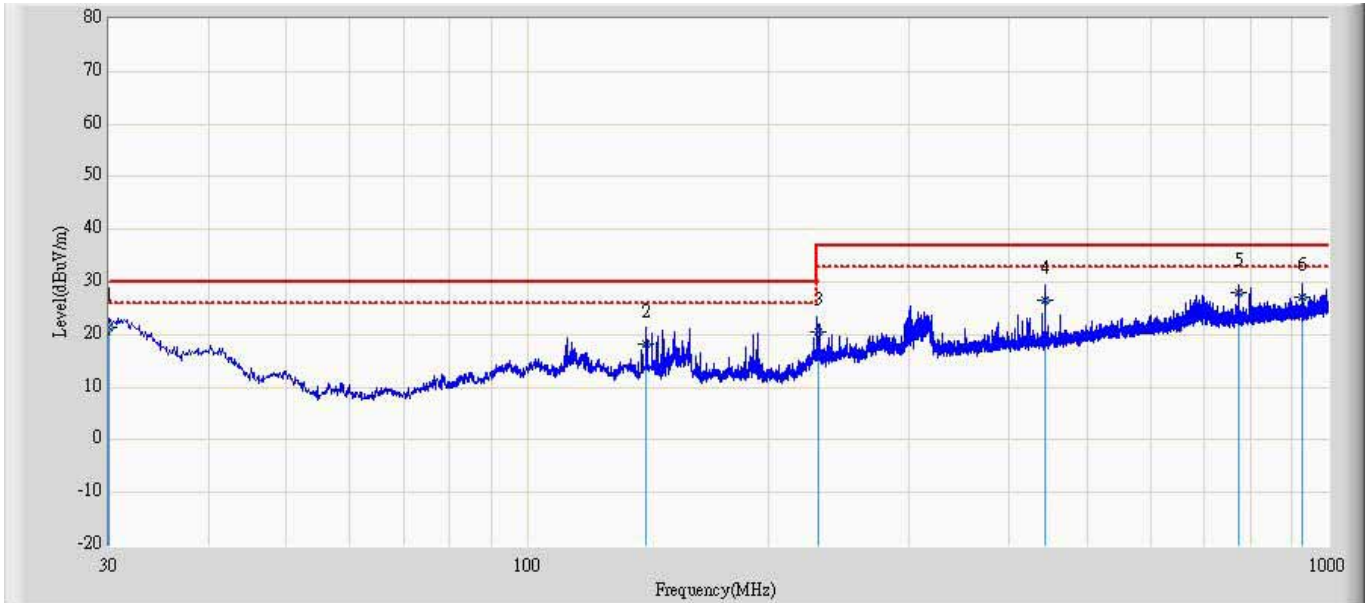


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1192.500	46.932	63.486	-23.068	70.000	28.246	2.500	47.300	100	109	PK
2			1193.489	26.344	42.895	-23.656	50.000	28.245	2.501	47.298	100	109	AV
3			1385.665	24.555	41.416	-25.445	50.000	27.603	2.732	47.196	100	105	AV
4			1387.500	45.943	62.822	-24.057	70.000	27.595	2.724	47.199	100	105	PK
5			1595.566	27.762	43.822	-22.238	50.000	28.094	2.892	47.046	100	309	AV
6		*	1597.500	47.985	64.023	-22.015	70.000	28.114	2.899	47.050	100	309	PK

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:39
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2931(30-1000MHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

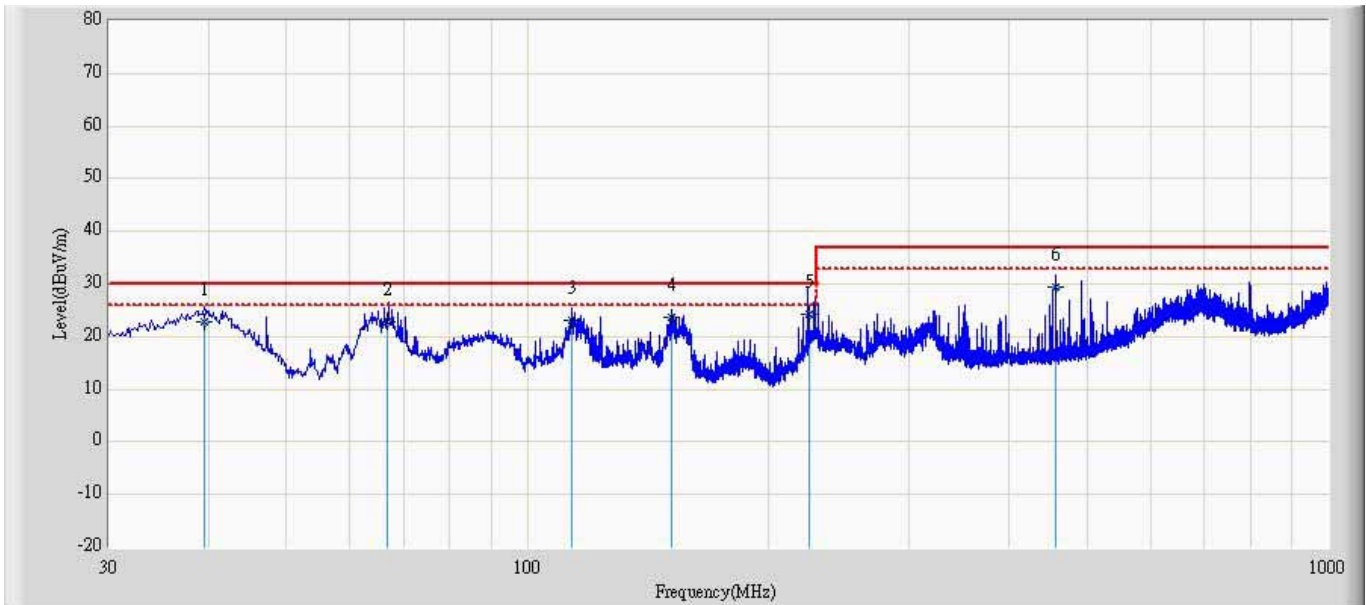


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	30.001	21.294	24.615	-8.706	30.000	17.899	0.810	22.031	100	151	QP
2		140.816	18.225	28.616	-11.775	30.000	9.806	1.765	21.962	100	3	QP
3		230.365	20.556	30.165	-16.444	37.000	10.075	2.249	21.933	200	5	QP
4		443.916	26.562	28.616	-10.438	37.000	16.459	3.120	21.632	400	6	QP
5		772.516	28.080	25.123	-8.920	37.000	19.698	4.125	20.866	200	9	QP
6		927.012	27.113	22.566	-9.887	37.000	20.789	4.562	20.805	100	4	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 02:40
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

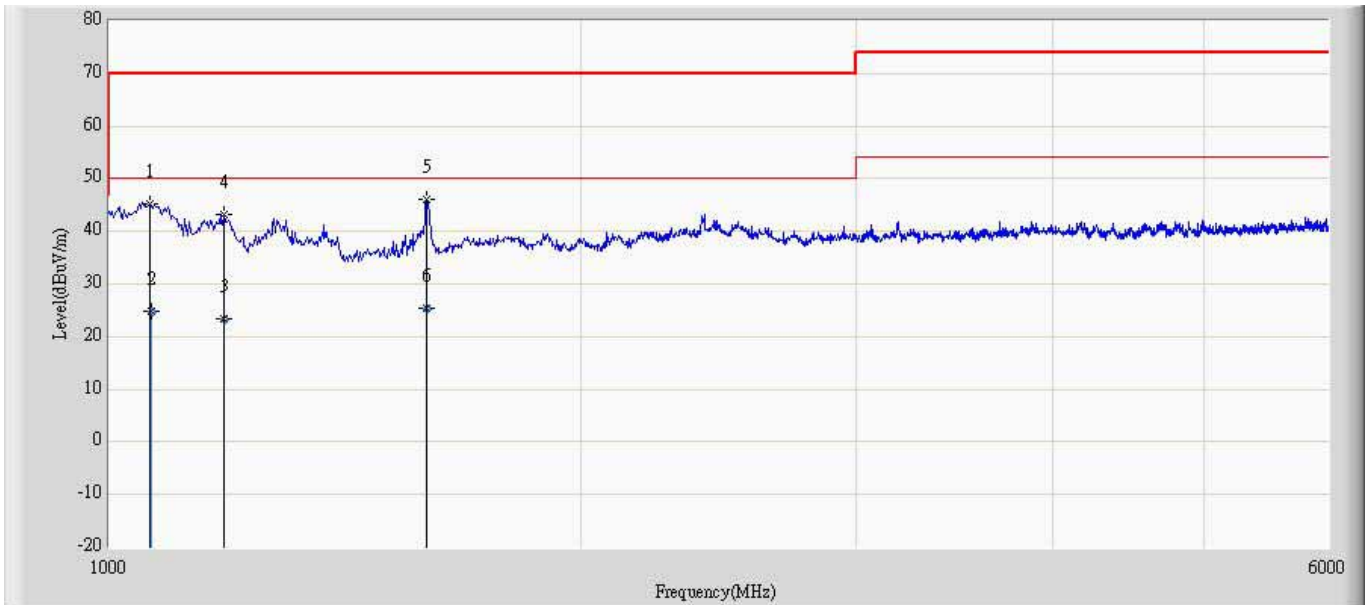


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		39.519	22.924	32.165	-7.076	30.000	12.765	1.076	23.082	100	360	QP
2		66.817	22.762	39.166	-7.238	30.000	5.305	1.390	23.099	400	186	QP
3		113.516	23.077	34.156	-6.923	30.000	10.256	1.801	23.136	200	173	QP
4		151.365	23.672	35.123	-6.328	30.000	9.576	2.070	23.096	200	178	QP
5	*	224.511	24.304	35.017	-5.696	30.000	9.754	2.521	22.987	100	115	QP
6		457.516	29.470	32.156	-7.530	37.000	16.563	3.595	22.844	200	15	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/11 - 23:40
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

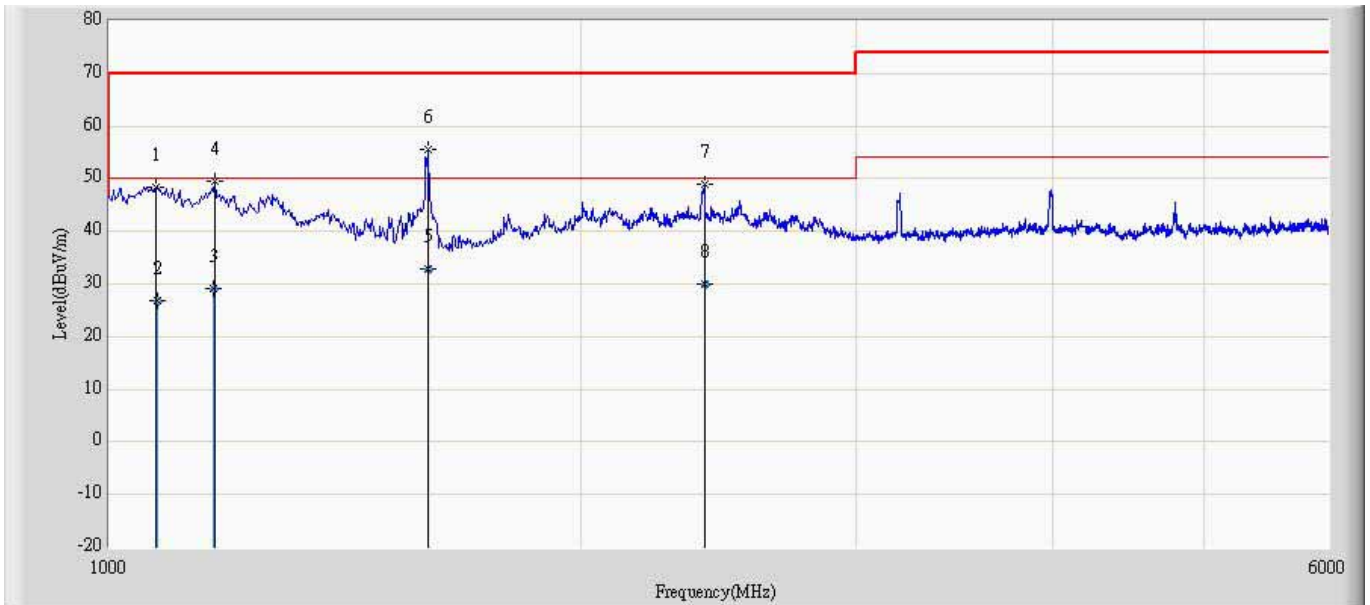


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1062.500	45.088	62.084	-24.912	70.000	27.925	2.359	47.280	100	45	PK
2			1063.557	24.854	41.856	-25.146	50.000	27.922	2.356	47.280	100	45	AV
3			1183.363	23.418	40.656	-26.582	50.000	27.586	2.481	47.306	100	62	AV
4			1185.000	43.246	60.487	-26.754	70.000	27.582	2.485	47.308	100	62	PK
5		*	1595.000	46.235	61.456	-23.765	70.000	28.934	2.890	47.045	100	78	PK
6			1596.636	25.432	40.623	-24.568	50.000	28.962	2.896	47.048	100	78	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/11 - 23:42
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

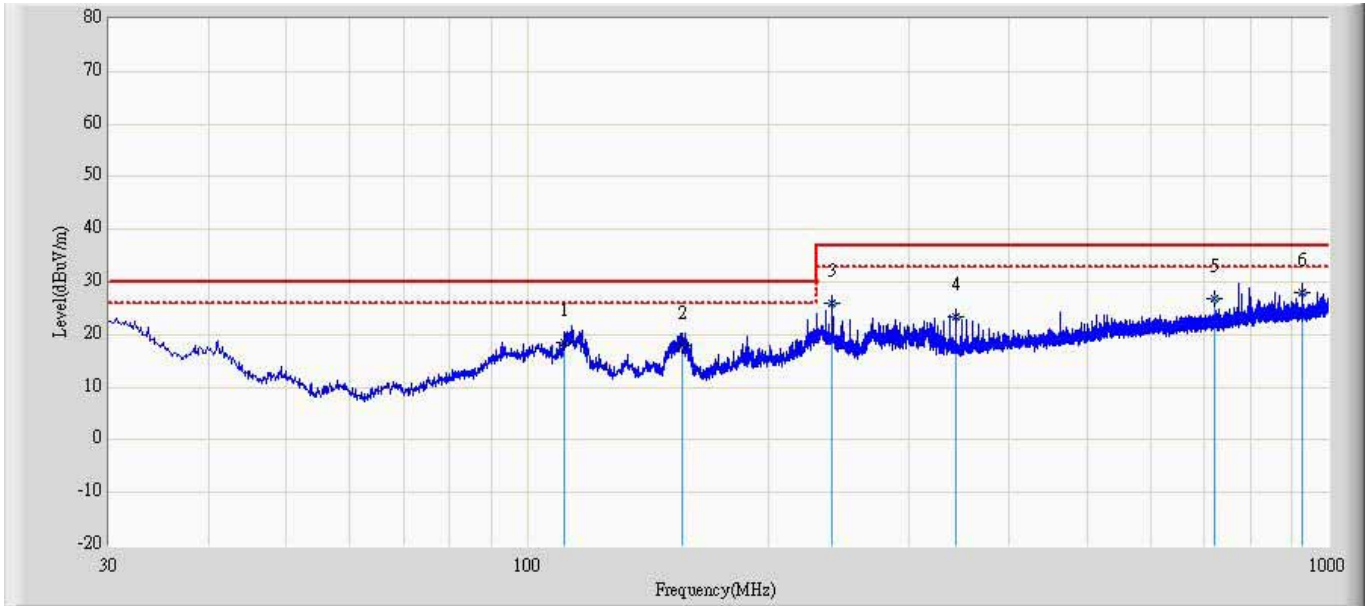


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1072.500	48.268	64.869	-21.732	70.000	28.342	2.343	47.286	100	175	PK
2			1073.457	26.960	43.563	-23.040	50.000	28.342	2.343	47.288	100	175	AV
3			1165.965	29.001	45.562	-20.999	50.000	28.267	2.457	47.285	100	48	AV
4			1167.500	49.442	66.009	-20.558	70.000	28.266	2.454	47.287	100	48	PK
5			1596.856	32.851	48.896	-17.149	50.000	28.107	2.897	47.049	100	156	AV
6		*	1597.500	55.517	71.555	-14.483	70.000	28.114	2.899	47.050	100	156	PK
7			2400.000	48.891	60.442	-21.109	70.000	31.740	3.655	46.946	100	29	PK
8			2400.420	30.078	41.630	-19.922	50.000	31.741	3.654	46.947	100	29	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 01:44
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2931(30-1000MHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	



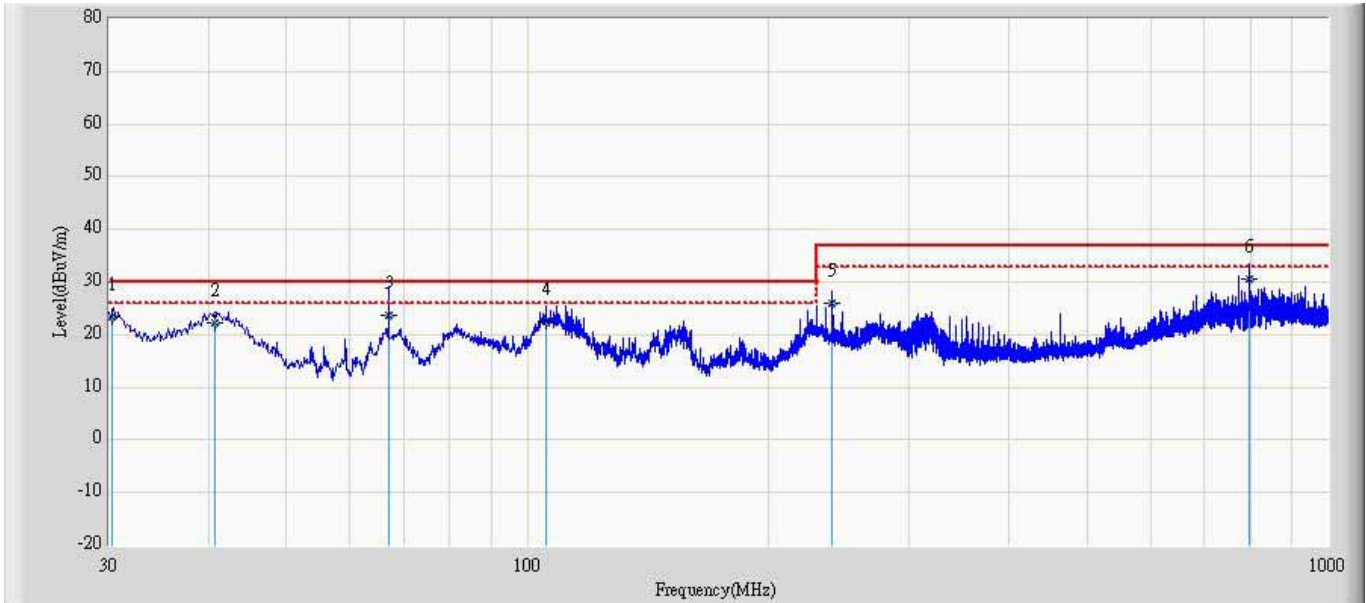
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		111.116	18.429	28.616	-11.571	30.000	10.311	1.566	22.064	200	69	QP
2		155.817	17.971	28.616	-12.029	30.000	9.551	1.827	22.023	200	135	QP
3		240.001	26.019	35.175	-10.981	37.000	10.480	2.280	21.916	100	39	QP
4		342.916	23.376	28.134	-13.624	37.000	14.202	2.746	21.706	100	11	QP
5		722.516	26.964	24.616	-10.036	37.000	19.147	3.990	20.790	100	124	QP
6	*	927.001	28.012	23.466	-8.988	37.000	20.789	4.563	20.806	200	212	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).



Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 01:44
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

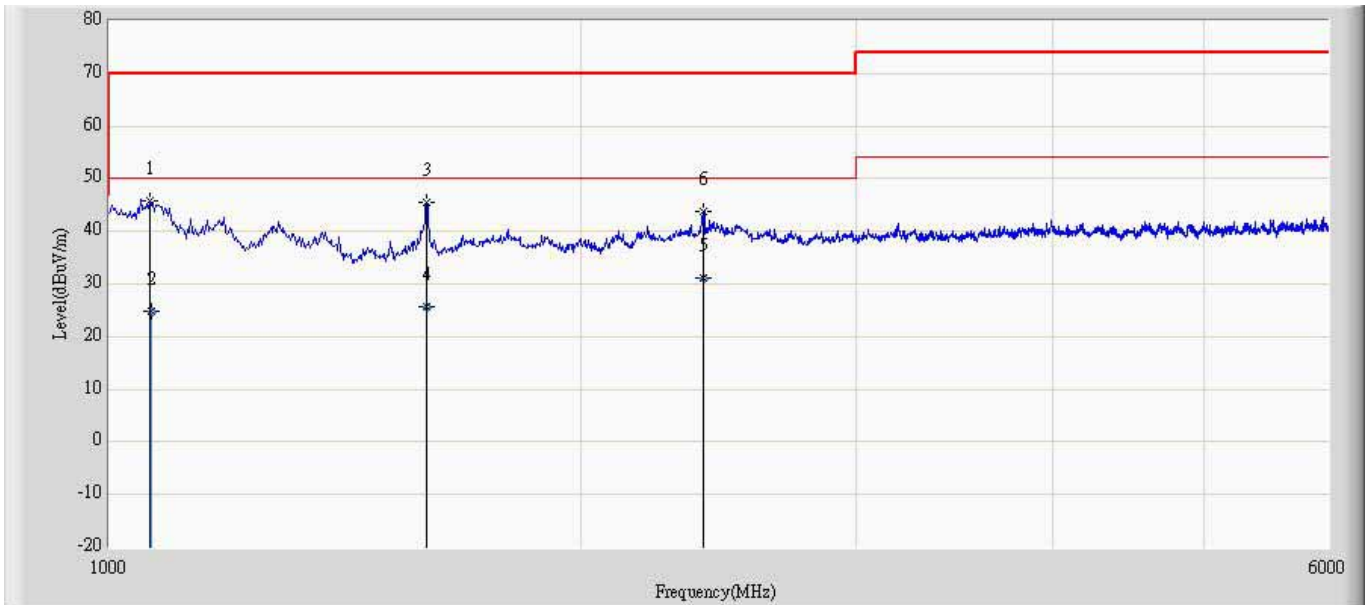


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.312	23.459	27.691	-6.541	30.000	17.828	0.940	23.000	100	5	QP
2		40.746	22.362	32.161	-7.638	30.000	12.135	1.092	23.025	100	91	QP
3	*	67.162	23.633	40.012	-6.367	30.000	5.315	1.393	23.088	100	360	QP
4		105.516	22.619	33.610	-7.381	30.000	10.401	1.729	23.120	100	9	QP
5		240.001	25.902	35.892	-11.098	37.000	10.420	2.605	23.015	400	36	QP
6		798.317	30.435	28.162	-6.565	37.000	20.080	4.750	22.557	100	5	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/11 - 23:45
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

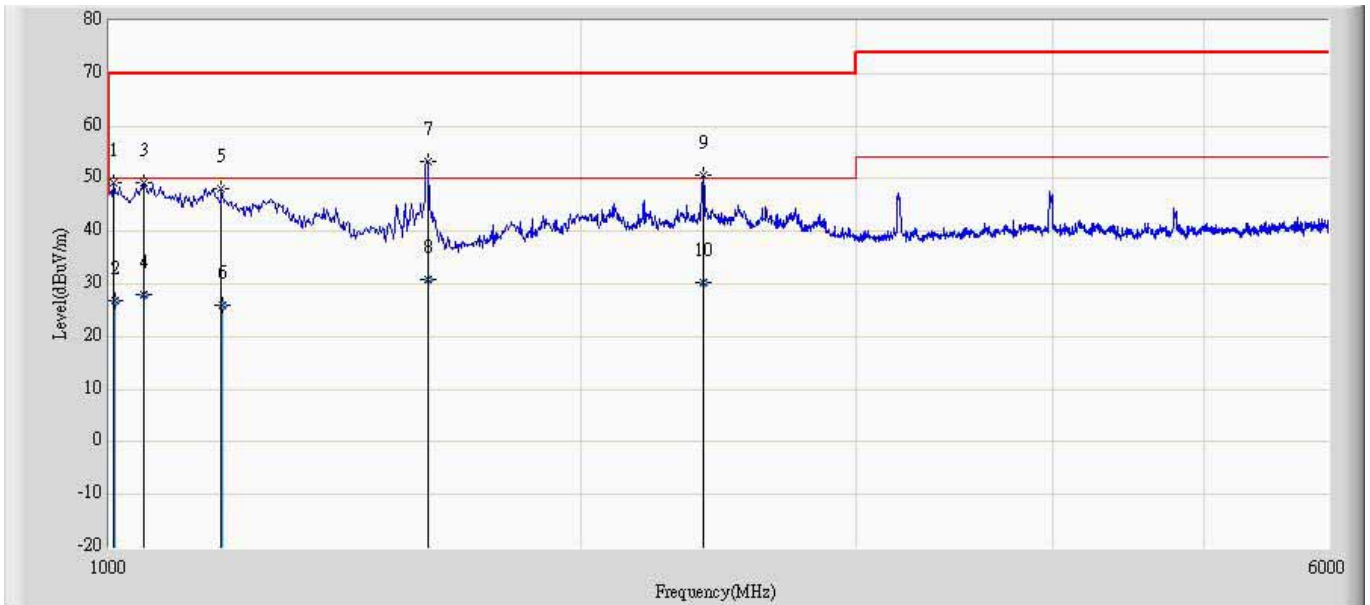


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1062.500	45.694	62.690	-24.306	70.000	27.925	2.359	47.280	100	78	PK
2			1063.749	24.892	41.895	-25.108	50.000	27.922	2.355	47.280	100	78	AV
3			1595.000	45.402	60.623	-24.598	70.000	28.934	2.890	47.045	120	360	PK
4			1596.456	25.702	40.896	-24.298	50.000	28.959	2.895	47.048	120	360	AV
5		*	2396.897	31.268	42.123	-18.732	50.000	32.416	3.668	46.939	100	156	AV
6			2397.500	43.702	54.556	-26.298	70.000	32.421	3.666	46.941	100	156	PK

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/11 - 23:47
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)	

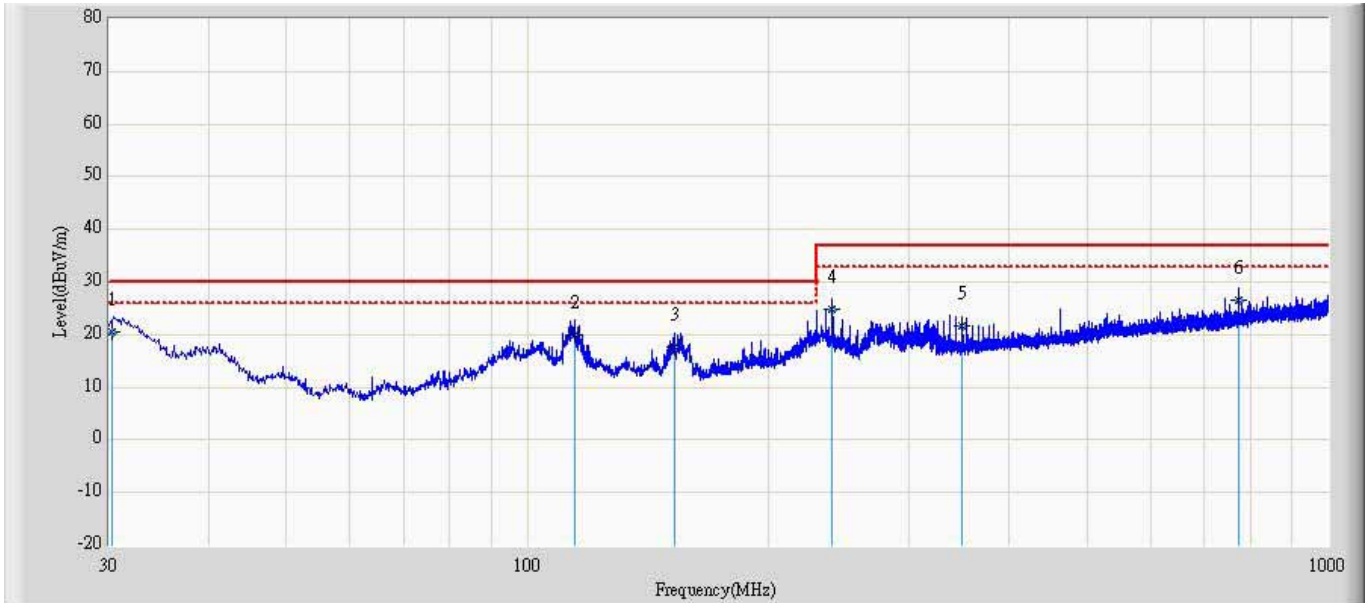


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1007.500	49.249	65.864	-20.751	70.000	28.394	2.296	47.305	100	56	PK
2			1008.565	26.956	43.569	-23.044	50.000	28.393	2.295	47.301	100	56	AV
3			1052.500	49.369	65.897	-20.631	70.000	28.358	2.395	47.280	100	52	PK
4			1053.486	27.924	44.456	-22.076	50.000	28.357	2.391	47.280	100	52	AV
5			1180.000	48.168	64.741	-21.832	70.000	28.256	2.474	47.302	100	48	PK
6			1181.560	25.984	42.556	-24.016	50.000	28.254	2.477	47.304	100	48	AV
7		*	1600.000	53.374	69.382	-16.626	70.000	28.140	2.908	47.056	100	78	PK
8			1600.160	30.884	46.890	-19.116	50.000	28.142	2.908	47.056	100	78	AV
9			2395.000	50.578	62.115	-19.422	70.000	31.722	3.676	46.935	100	189	PK
10			2396.889	30.180	41.723	-19.820	50.000	31.729	3.668	46.939	100	189	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 01:52
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2931(30-1000MHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

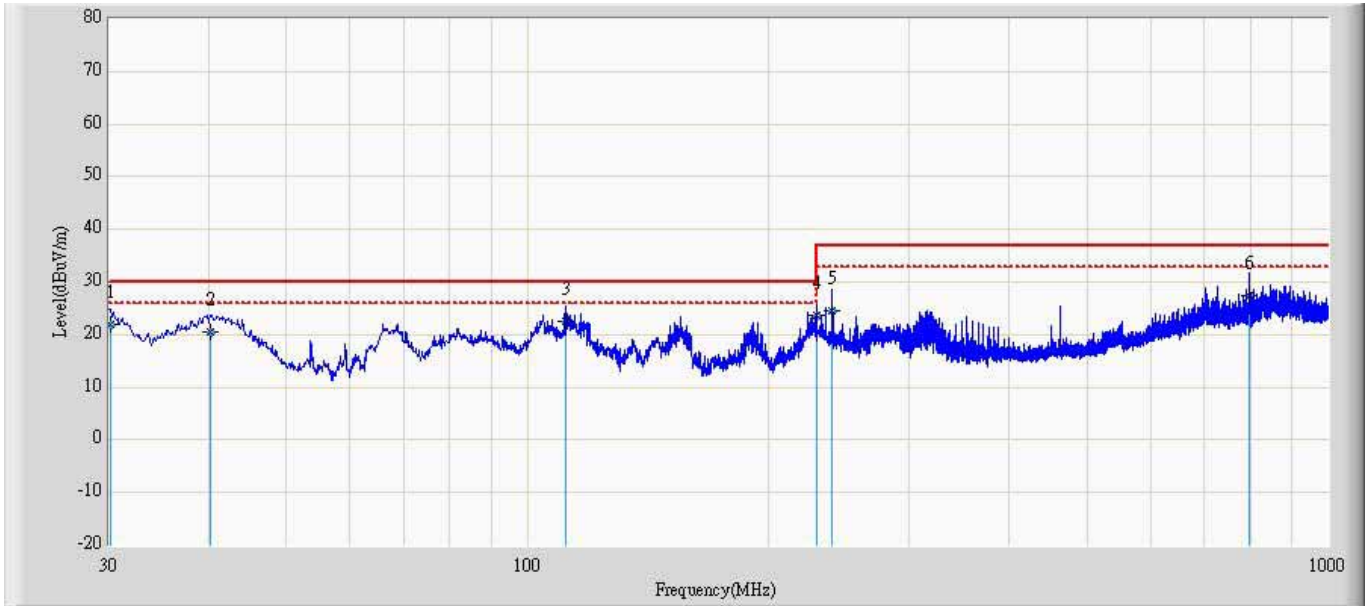


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	30.232	20.582	24.011	-9.418	30.000	17.772	0.815	22.016	100	136	QP
2		114.513	19.950	30.130	-10.050	30.000	10.253	1.590	22.023	200	91	QP
3		152.512	17.575	28.166	-12.425	30.000	9.607	1.820	22.019	300	6	QP
4		240.020	24.806	33.961	-12.194	37.000	10.481	2.280	21.916	100	24	QP
5		348.519	21.540	26.165	-15.460	37.000	14.358	2.777	21.761	200	15	QP
6		772.516	26.618	23.661	-10.382	37.000	19.698	4.125	20.866	400	114	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC1	Time: 2012/03/12 - 01:52
Limit: EN55022_RE(10m)_ClassB	Margin: 4
Probe: CBL6112B_2933(30-1000MHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

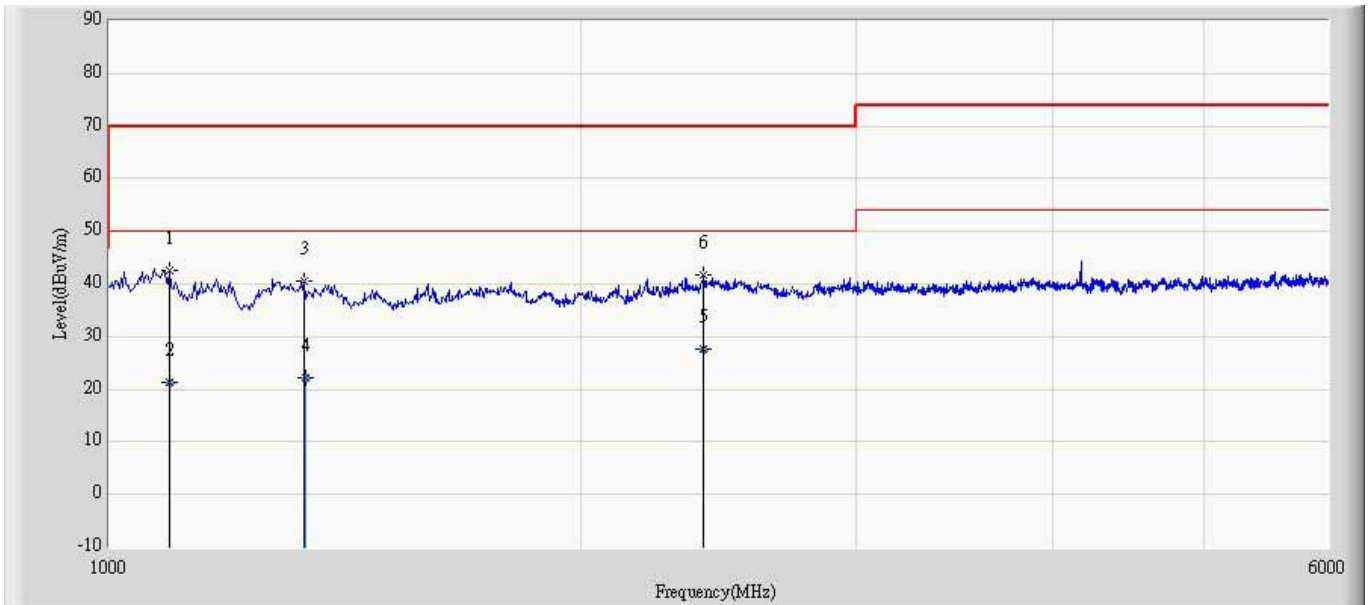


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		30.162	21.976	26.130	-8.024	30.000	17.911	0.935	23.000	200	88	QP
2		40.165	20.628	30.166	-9.372	30.000	12.429	1.085	23.051	100	274	QP
3		111.820	22.562	33.616	-7.438	30.000	10.287	1.784	23.125	100	28	QP
4	*	229.916	23.623	34.163	-6.377	30.000	9.986	2.548	23.074	100	255	QP
5		240.001	24.626	34.616	-12.374	37.000	10.420	2.605	23.015	300	6	QP
6		796.911	27.474	25.166	-9.526	37.000	20.063	4.754	22.509	100	55	QP

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/12 - 00:35
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Horizontal
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	

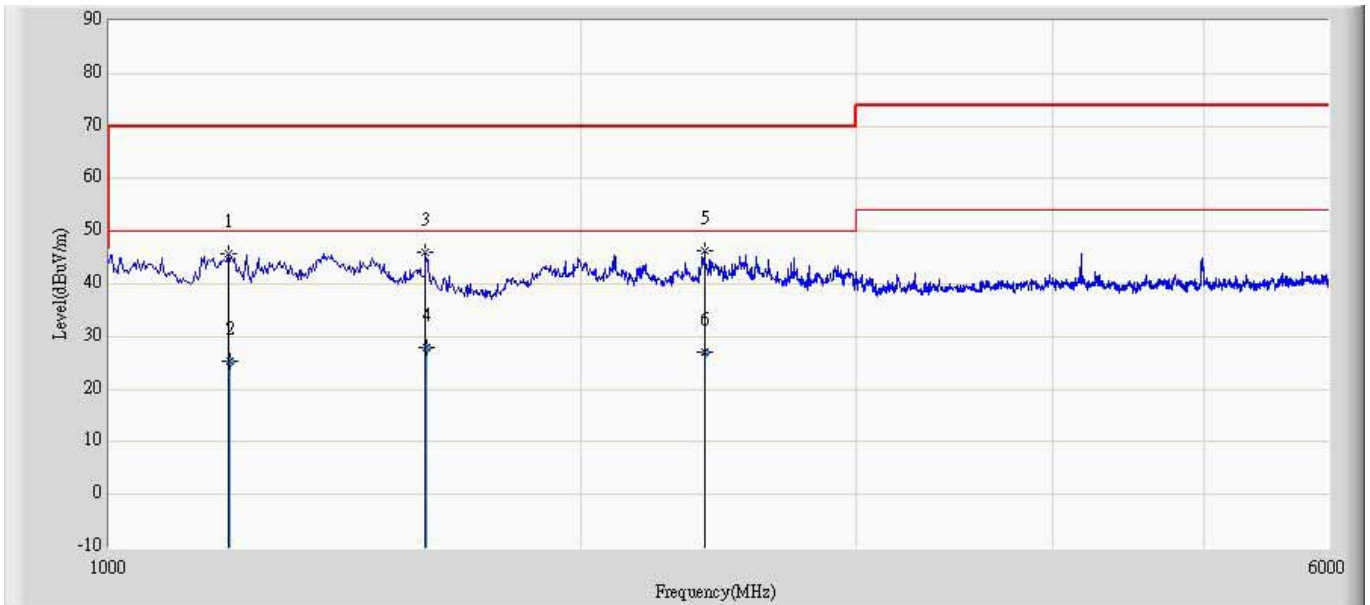


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1092.500	42.645	59.736	-27.355	70.000	27.841	2.359	47.291	100	249	PK
2			1093.479	21.349	38.440	-28.651	50.000	27.838	2.360	47.289	100	249	AV
3			1332.500	40.573	57.796	-29.427	70.000	27.367	2.674	47.263	100	46	PK
4			1335.956	22.245	39.458	-27.755	50.000	27.366	2.686	47.265	100	46	AV
5		*	2396.465	27.709	38.565	-22.291	50.000	32.413	3.670	46.938	100	193	AV
6			2397.500	41.610	52.464	-28.390	70.000	32.421	3.666	46.941	100	193	PK

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Engineer: Nikissa	
Site: AC5	Time: 2012/03/12 - 00:38
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: BBHA9120D_499(1-18GHz)	Polarity: Vertical
EUT: Notebook PC	Power: AC 230V/50Hz
Note: Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1			1192.500	45.783	62.337	-24.217	70.000	28.246	2.500	47.300	100	52	PK
2			1193.589	25.234	41.785	-24.766	50.000	28.245	2.502	47.298	100	52	AV
3			1592.500	45.993	62.097	-24.007	70.000	28.062	2.881	47.047	100	18	PK
4		*	1593.465	27.862	43.952	-22.138	50.000	28.072	2.885	47.046	100	18	AV
5			2400.000	46.255	57.806	-23.745	70.000	31.740	3.655	46.946	100	52	PK
6			2400.330	26.928	38.480	-23.072	50.000	31.741	3.654	46.947	100	52	AV

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

#### 4.7. Test Photograph

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Below 1GHz)



Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

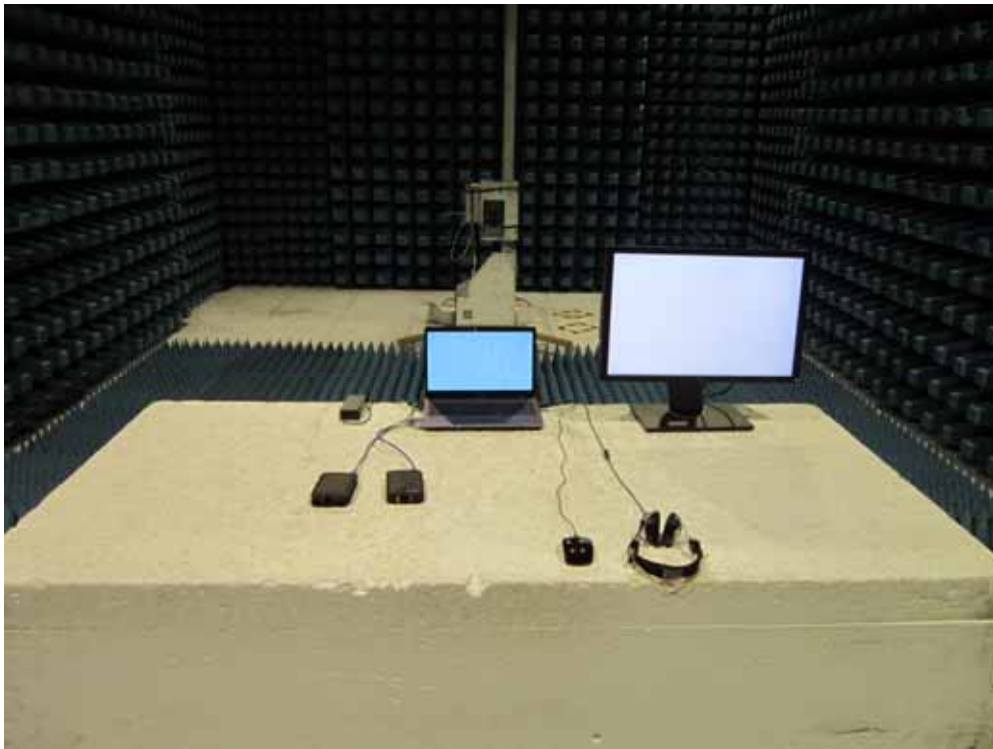
Description: Rear View of Radiated disturbance Test Setup (Below 1GHz)





Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Below 1GHz)



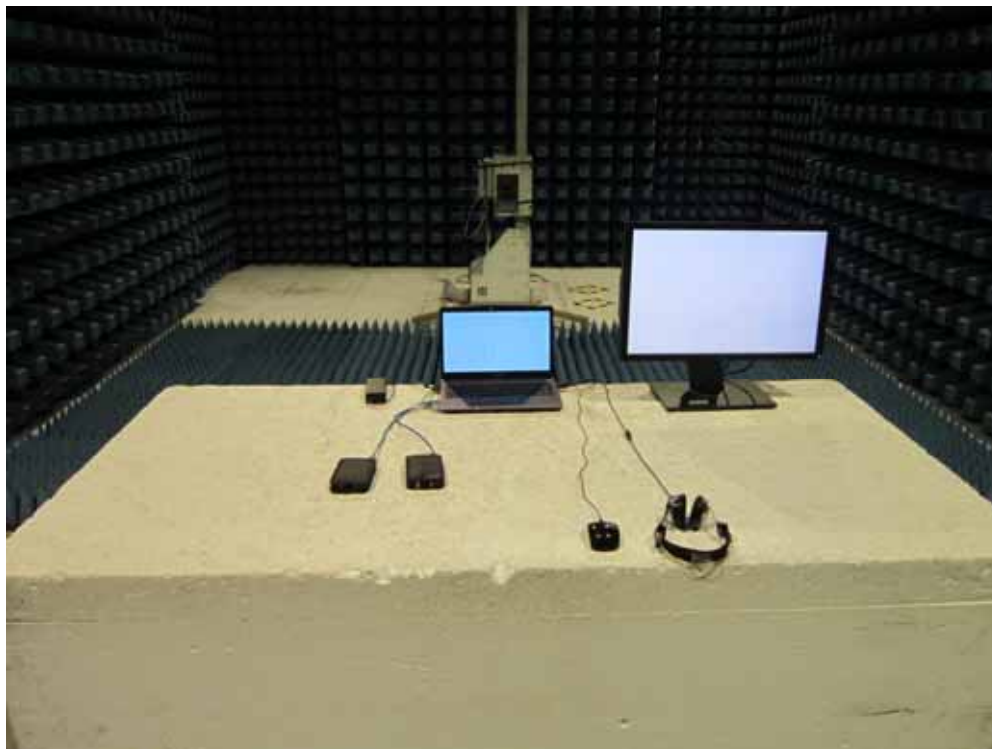
Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Below 1GHz)



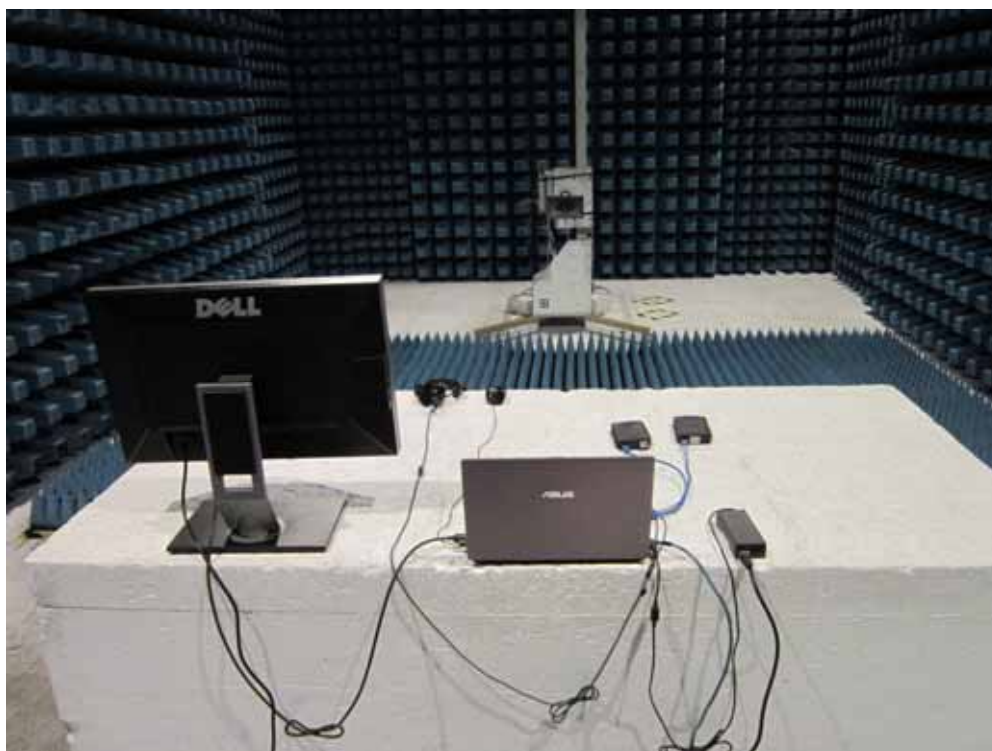
Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Below 1GHz)



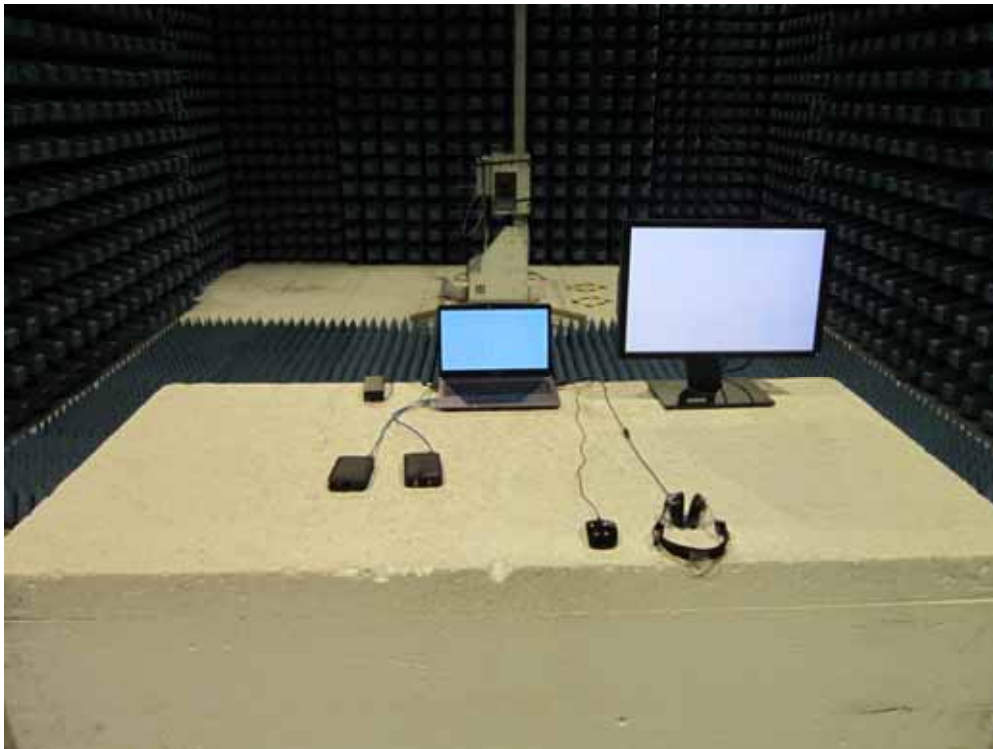
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Below 1GHz)



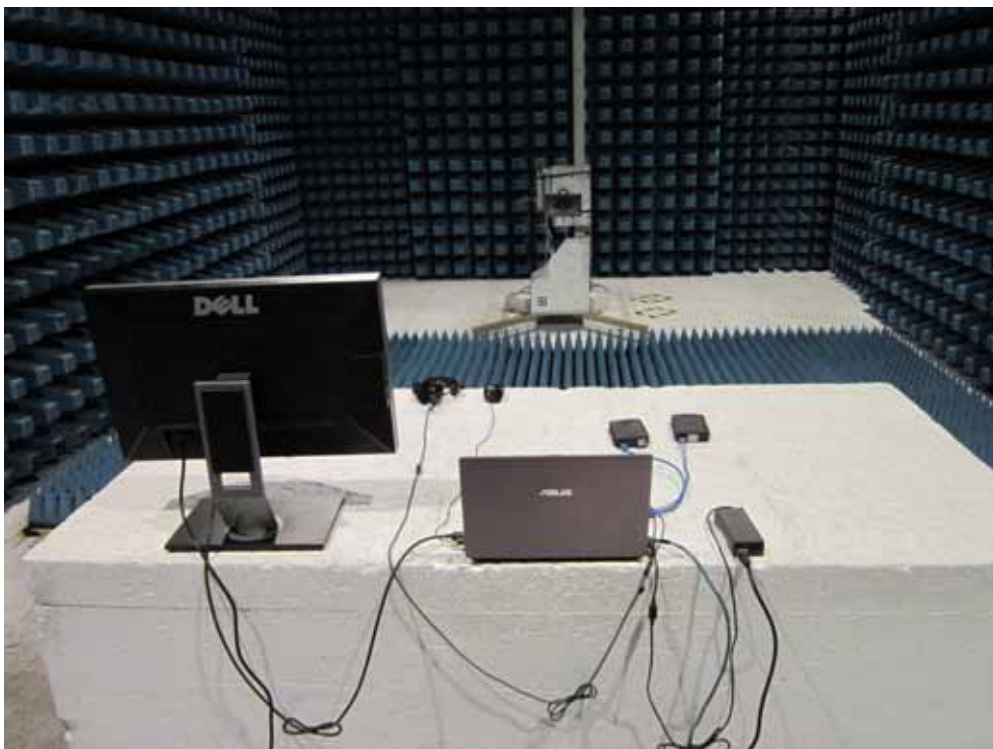
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Above 1GHz)



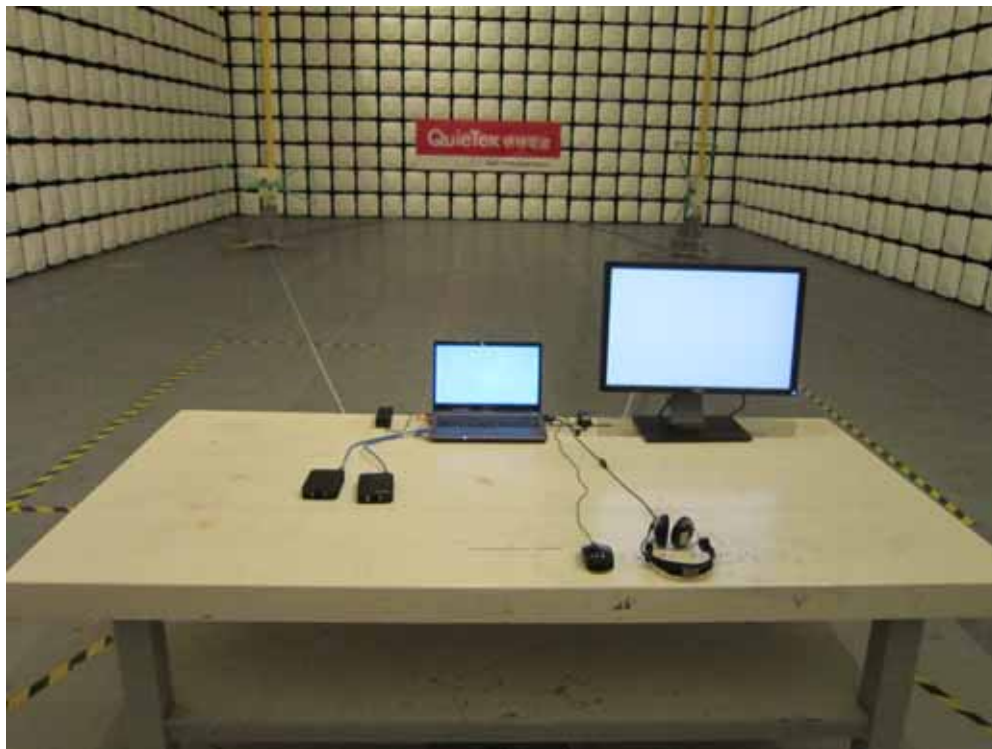
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Below 1GHz)



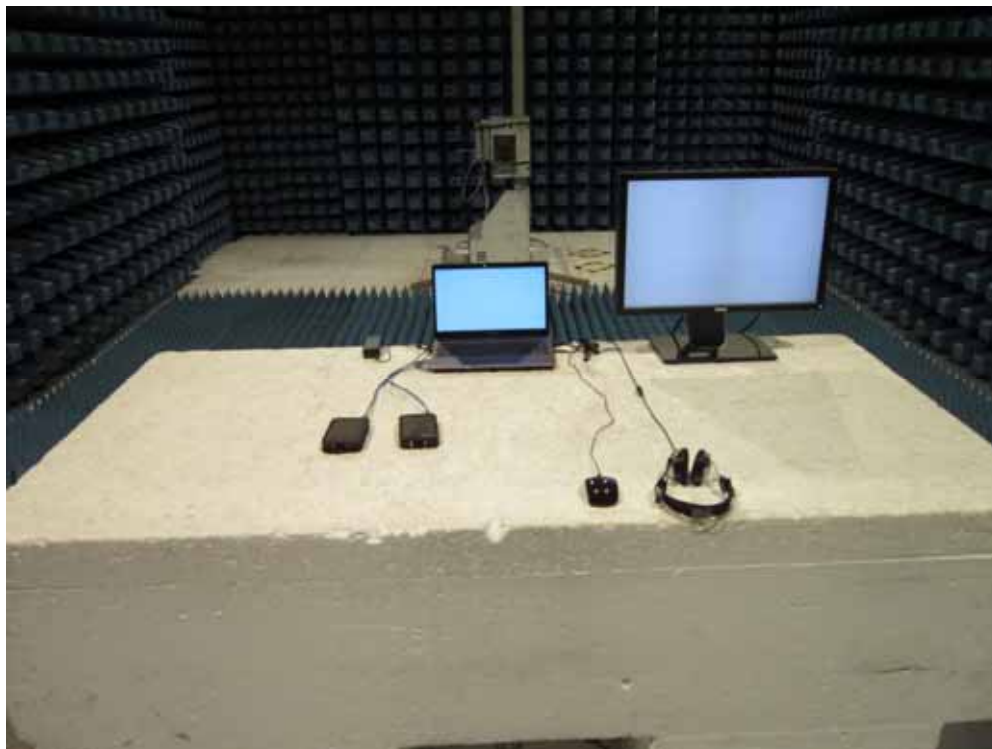
Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Below 1GHz)



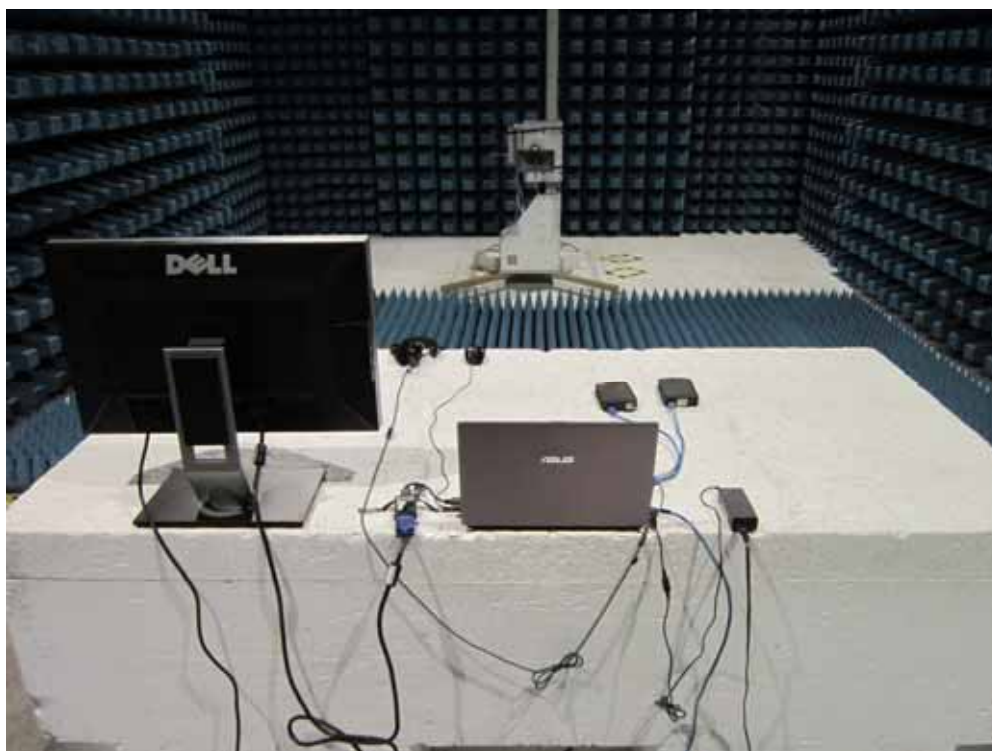
Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Below 1GHz)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

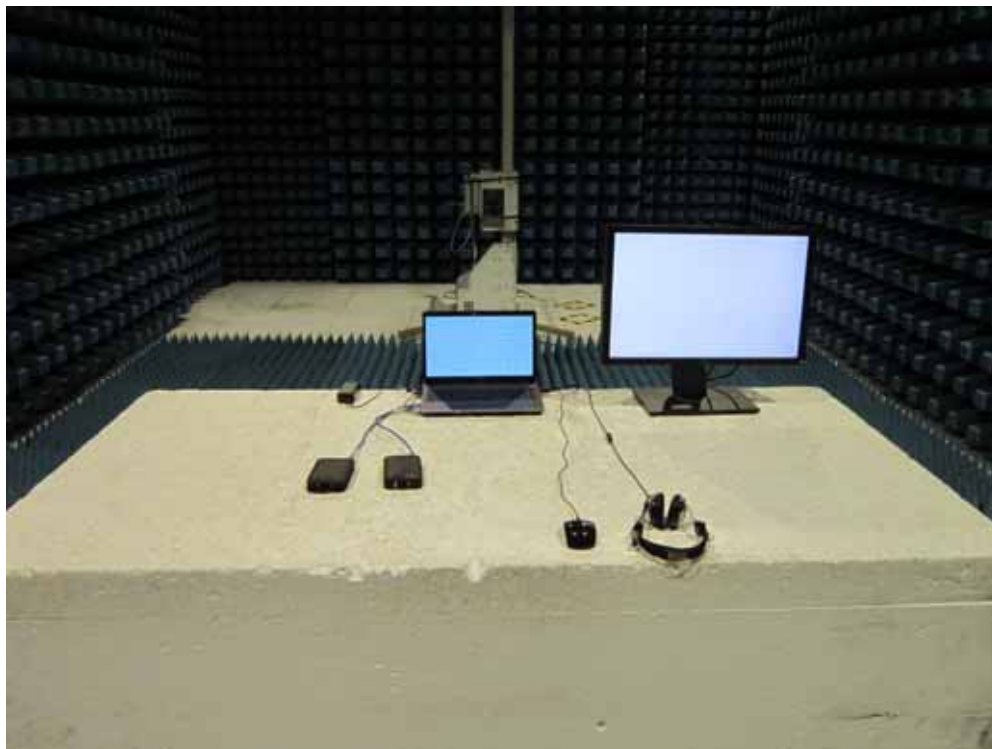
Description: Rear View of Radiated disturbance Test Setup (Below 1GHz)





Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Below 1GHz)



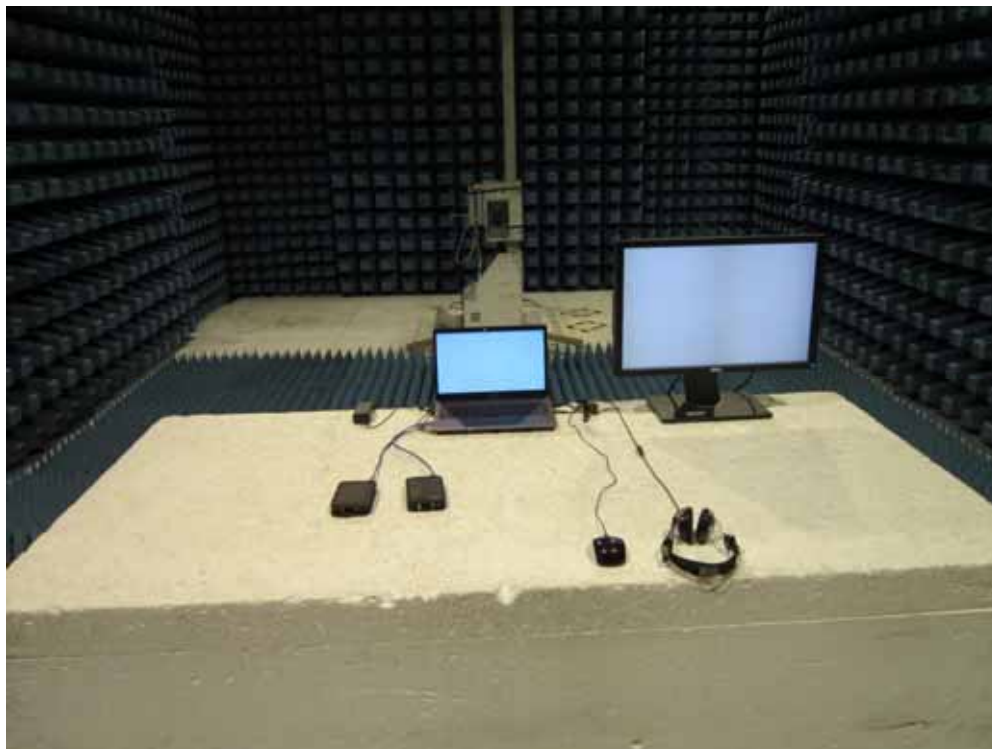
Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Below 1GHz)



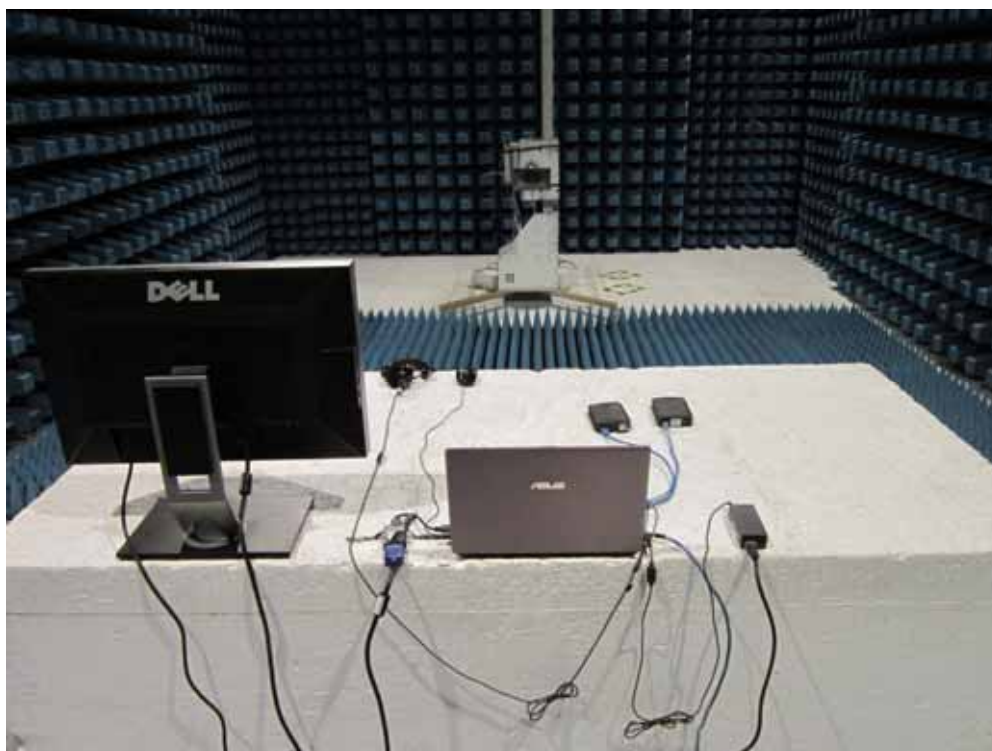
Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Front View of Radiated disturbance Test Setup (Above 1GHz)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Rear View of Radiated disturbance Test Setup (Above 1GHz)

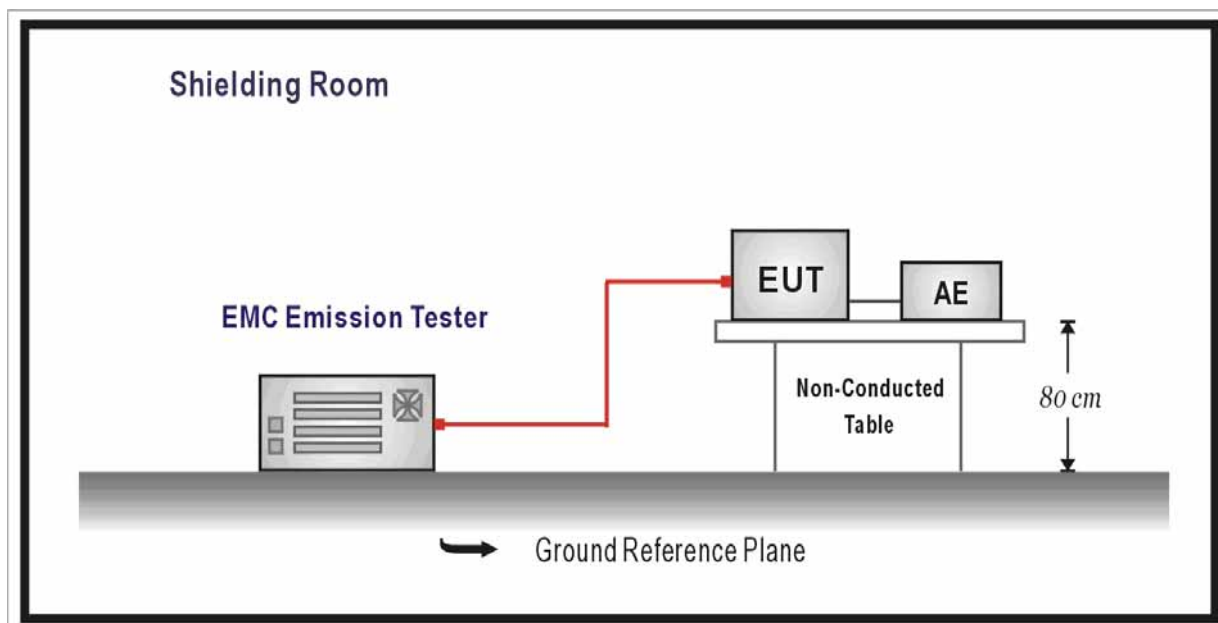


## 5. Harmonic current emissions

### 5.1. Test Specification

According to EMC Standard: EN 61000-3-2

### 5.2. Test Setup



### 5.3. Limit

(a) Limits of Class A Harmonics Currents

Harmonics Order $n$	Maximum Permissible harmonic current A	Harmonics Order $n$	Maximum Permissible harmonic current A
Odd harmonics		Even harmonics	
3	2.30	2	1.08
5	1.14	4	0.43
7	0.77	6	0.30
9	0.40	$8 \leq n \leq 40$	$0.23 * 8/n$
11	0.33		
13	0.21		
$15 \leq n \leq 39$	$0.15 * 15/n$		

(b) Limits of Class B Harmonics Currents

For Class B equipment, the harmonic of the input current shall not exceed the maximum permissible values given in table that is the limit of Class A multiplied by a factor of 1.5.

(c) Limits of Class C Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current Expressed as a percentage of the input current at the fundamental frequency %
2	2
3	$30 \cdot \lambda^*$
5	10
7	7
9	5
$11 \leq n \leq 39$ (odd harmonics only)	3
* $\lambda$ is the circuit power factor	

(d) Limits of Class D Harmonics Currents

Harmonics Order n	Maximum Permissible harmonic current per watt mA/W	Maximum Permissible harmonic current A
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
$11 \leq n \leq 39$ (odd harmonics only)	$3.85/n$	See limit of Class A

**5.4. Test Procedure**

The EUT is supplied in series with power analyzer from a power source having the same normal voltage and frequency as the rated supply voltage and the equipment under test. And the rated voltage at the supply voltage of EUT of 0.98 times and 1.02 times shall be performed.

**5.5. Deviation from Test Standard**

No deviation.

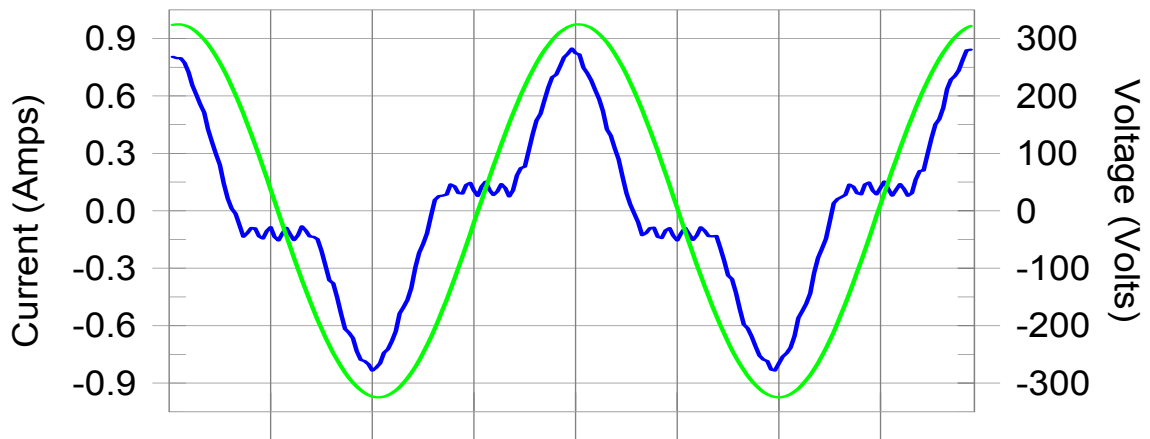
**5.6. Test Result**

Test Site	TR1	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	Andy
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

**Test Result: Pass**

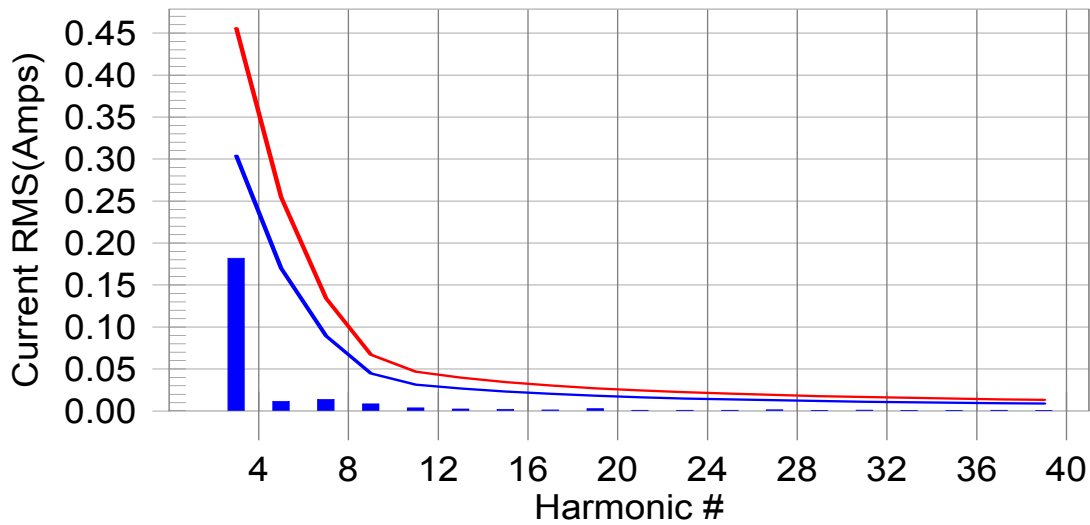
**Source qualification: Normal**

Current & voltage waveforms



Harmonics and Class D limit line

European Limits



Test result: Pass

**Test Result: Pass**                      **Source qualification: Normal**  
**THC(A): 0.18**                      **I-THD(%): 45.52**                      **POHC(A): 0.002**                      **POHC Limit(A): 0.038**  
**Highest parameter values during test:**

<b>V_RMS (Volts):</b> 229.88	<b>Frequency(Hz):</b> 50.00
<b>I_Peak (Amps):</b> 0.921	<b>I_RMS (Amps):</b> 0.441
<b>I_Fund (Amps):</b> 0.400	<b>Crest Factor:</b> 2.100
<b>Power (Watts):</b> 89.4	<b>Power Factor:</b> 0.884

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.000						
3	0.179	0.304	58.7	0.182	0.456	39.91	Pass
4	0.000						
5	0.011	0.170	6.3	0.012	0.255	4.58	Pass
6	0.000						
7	0.013	0.089	14.7	0.014	0.134	10.39	Pass
8	0.000						
9	0.008	0.045	18.5	0.009	0.067	12.83	Pass
10	0.000						
11	0.003	0.031	11.1	0.004	0.047	8.02	Pass
12	0.000						
13	0.002	0.027	8.1	0.002	0.040	6.20	Pass
14	0.000						
15	0.001	0.023	5.7	0.002	0.034	5.76	Pass
16	0.000						
17	0.001	0.021	4.1	0.001	0.030	4.27	Pass
18	0.000						
19	0.003	0.018	13.8	0.003	0.027	10.43	Pass
20	0.000						
21	0.001	0.016	3.2	0.001	0.025	3.90	Pass
22	0.000						
23	0.001	0.015	4.5	0.001	0.022	3.96	Pass
24	0.000						
25	0.001	0.014	5.7	0.001	0.021	4.59	Pass
26	0.000						
27	0.001	0.013	10.5	0.002	0.019	7.85	Pass
28	0.000						
29	0.001	0.012	4.7	0.001	0.018	3.72	Pass
30	0.000						
31	0.001	0.011	8.3	0.001	0.017	6.47	Pass
32	0.000						
33	0.001	0.010	5.7	0.001	0.016	4.91	Pass
34	0.000						
35	0.001	0.010	5.7	0.001	0.015	4.48	Pass
36	0.000						
37	0.001	0.009	8.0	0.001	0.014	6.84	Pass
38	0.000						
39	0.000	0.009	3.8	0.001	0.013	4.26	Pass
40	0.000						

- Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.
- According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

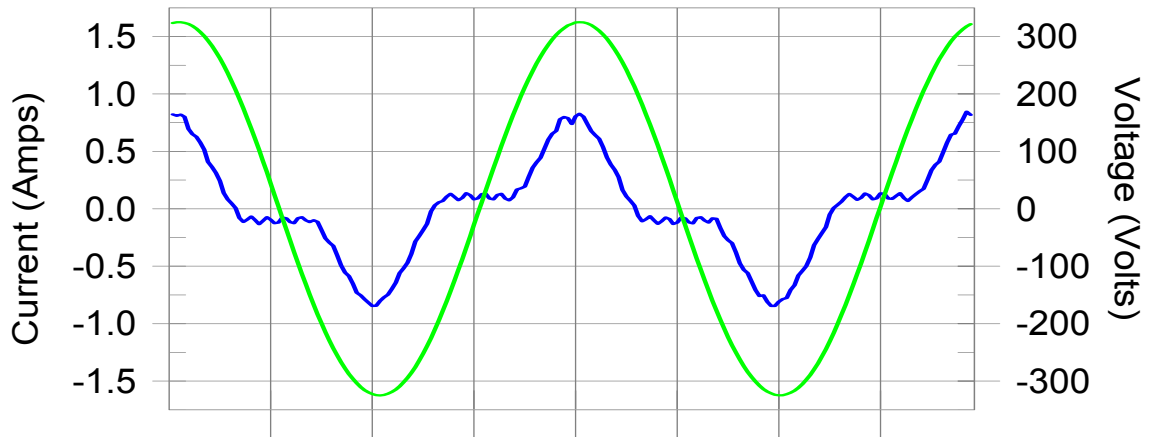


Test Site	TR1	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	Andy
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Test Result: Pass

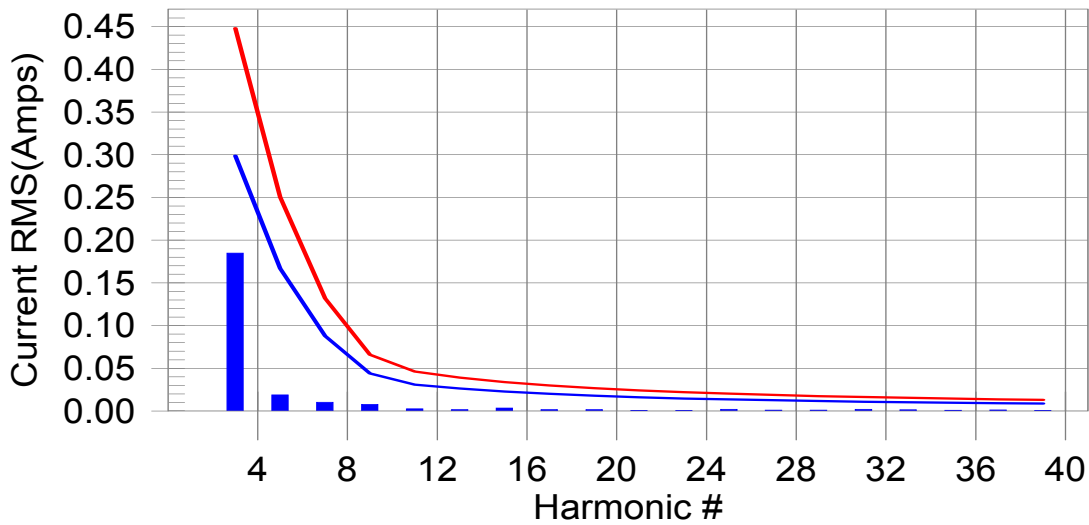
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class D limit line

European Limits



Test result: Pass

**Test Result: Pass**                      **Source qualification: Normal**  
**THC(A): 0.18**                      **I-THD(%): 47.34**                      **POHC(A): 0.003**                      **POHC Limit(A): 0.038**  
**Highest parameter values during test:**

<b>V_RMS (Volts):</b> 229.89	<b>Frequency(Hz):</b> 50.00
<b>I_Peak (Amps):</b> 0.994	<b>I_RMS (Amps):</b> 0.435
<b>I_Fund (Amps):</b> 0.392	<b>Crest Factor:</b> 2.306
<b>Power (Watts):</b> 87.9	<b>Power Factor:</b> 0.881

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.000						
3	0.182	0.299	60.9	0.185	0.448	41.26	Pass
4	0.000						
5	0.018	0.167	10.9	0.019	0.250	7.52	Pass
6	0.000						
7	0.010	0.088	11.2	0.010	0.132	7.82	Pass
8	0.000						
9	0.008	0.044	17.1	0.008	0.066	11.80	Pass
10	0.000						
11	0.002	0.031	7.4	0.002	0.046	5.34	Pass
12	0.000						
13	0.002	0.026	6.0	0.002	0.039	4.44	Pass
14	0.000						
15	0.003	0.023	13.9	0.003	0.034	10.06	Pass
16	0.000						
17	0.001	0.020	6.9	0.002	0.030	5.35	Pass
18	0.000						
19	0.001	0.018	7.3	0.002	0.027	5.95	Pass
20	0.000						
21	0.001	0.016	3.2	0.001	0.024	3.04	Pass
22	0.000						
23	0.000	0.015	1.6	0.000	0.022	1.99	Pass
24	0.000						
25	0.002	0.014	12.7	0.002	0.020	9.56	Pass
26	0.000						
27	0.001	0.013	6.6	0.001	0.019	5.48	Pass
28	0.000						
29	0.001	0.012	7.0	0.001	0.017	5.58	Pass
30	0.000						
31	0.002	0.011	16.5	0.002	0.016	12.00	Pass
32	0.000						
33	0.001	0.010	13.1	0.001	0.015	9.30	Pass
34	0.000						
35	0.001	0.010	7.8	0.001	0.015	5.79	Pass
36	0.000						
37	0.001	0.009	11.4	0.001	0.014	9.03	Pass
38	0.000						
39	0.000	0.009	3.9	0.001	0.013	4.53	Pass
40	0.000						

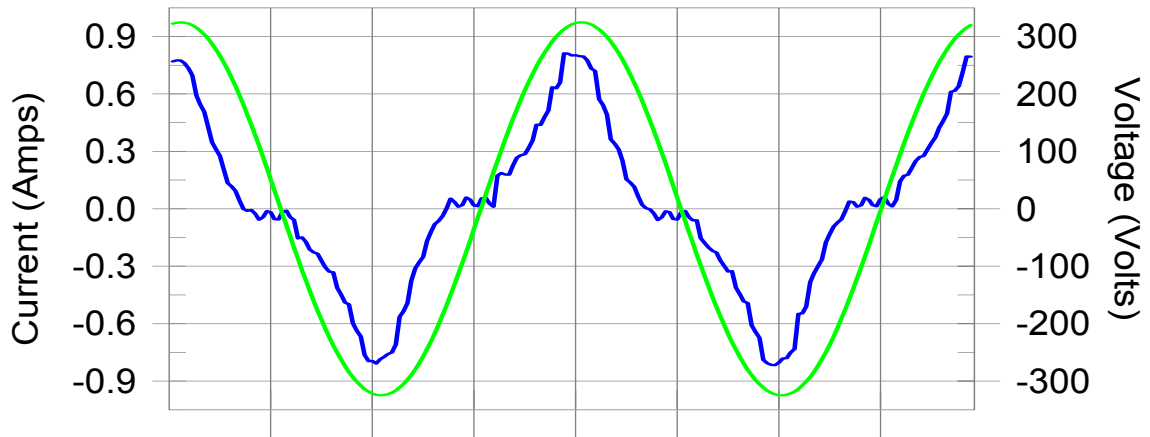
- Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.
- According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

Test Site	TR1	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	Andy
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

**Test Result: Pass**

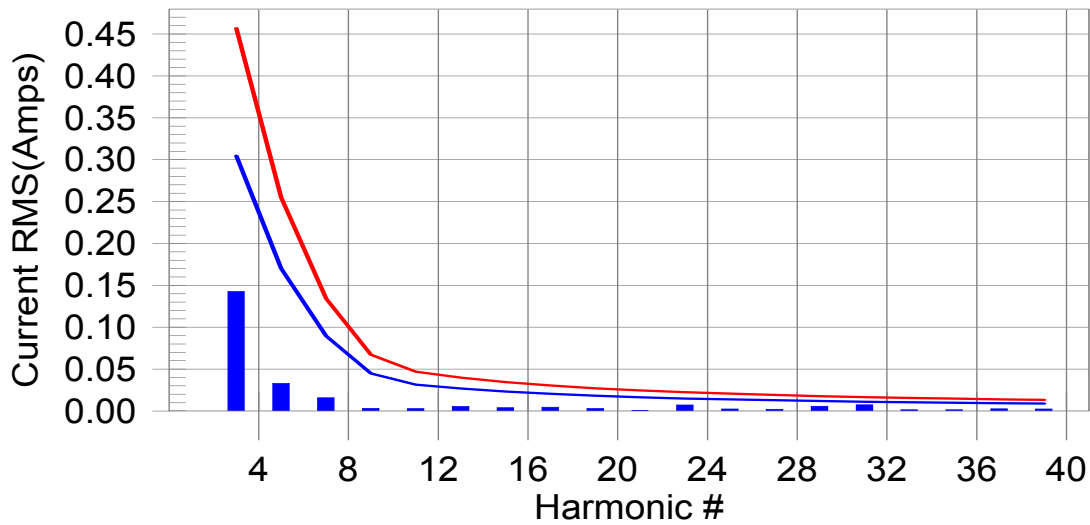
**Source qualification: Normal**

**Current & voltage waveforms**



**Harmonics and Class D limit line**

**European Limits**



**Test result: Pass**

Test Result: Pass                      Source qualification: Normal  
 THC(A): 0.15                      I-THD(%): 37.13                      POHC(A): 0.012                      POHC Limit(A): 0.039  
 Highest parameter values during test:

V_RMS (Volts):	229.88	Frequency(Hz):	50.00
I_Peak (Amps):	0.827	I_RMS (Amps):	0.423
I_Fund (Amps):	0.396	Crest Factor:	1.983
Power (Watts):	89.6	Power Factor:	0.921

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.000						
3	0.140	0.305	45.9	0.143	0.457	31.21	Pass
4	0.000						
5	0.032	0.170	19.0	0.033	0.255	12.97	Pass
6	0.000						
7	0.015	0.090	17.2	0.016	0.134	11.88	Pass
8	0.000						
9	0.003	0.045	6.6	0.003	0.067	4.83	Pass
10	0.000						
11	0.003	0.031	8.3	0.003	0.047	6.15	Pass
12	0.000						
13	0.005	0.027	19.6	0.006	0.040	13.86	Pass
14	0.000						
15	0.004	0.023	15.8	0.004	0.035	11.17	Pass
16	0.000						
17	0.004	0.021	21.8	0.005	0.030	15.22	Pass
18	0.000						
19	0.003	0.018	16.3	0.003	0.027	11.21	Pass
20	0.000						
21	0.001	0.016	3.3	0.001	0.025	2.58	Pass
22	0.000						
23	0.007	0.015	47.0	0.007	0.022	31.94	Pass
24	0.000						
25	0.002	0.014	15.2	0.002	0.021	11.56	Pass
26	0.000						
27	0.002	0.013	14.4	0.002	0.019	10.45	Pass
28	0.000						
29	0.005	0.012	45.2	0.006	0.018	31.92	Pass
30	0.000						
31	0.007	0.011	64.5	0.007	0.017	43.93	Pass
32	0.000						
33	0.001	0.010	11.8	0.001	0.016	9.23	Pass
34	0.000						
35	0.001	0.010	11.8	0.001	0.015	9.58	Pass
36	0.000						
37	0.002	0.009	25.6	0.003	0.014	18.64	Pass
38	0.000						
39	0.002	0.009	25.8	0.002	0.013	18.66	Pass
40	0.000						

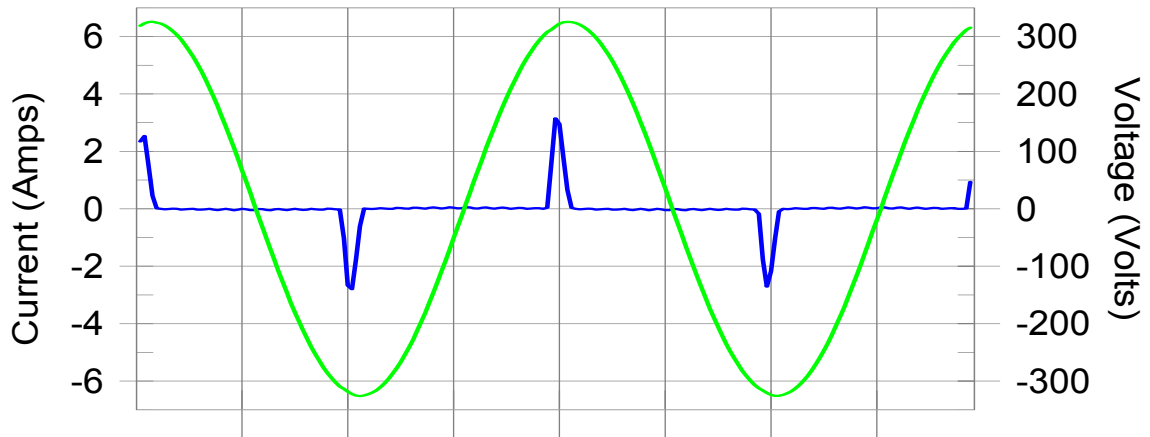
- Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.
- According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

Test Site	TR1	Date of Test	2012.03.19
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

**Test Result: N/L**

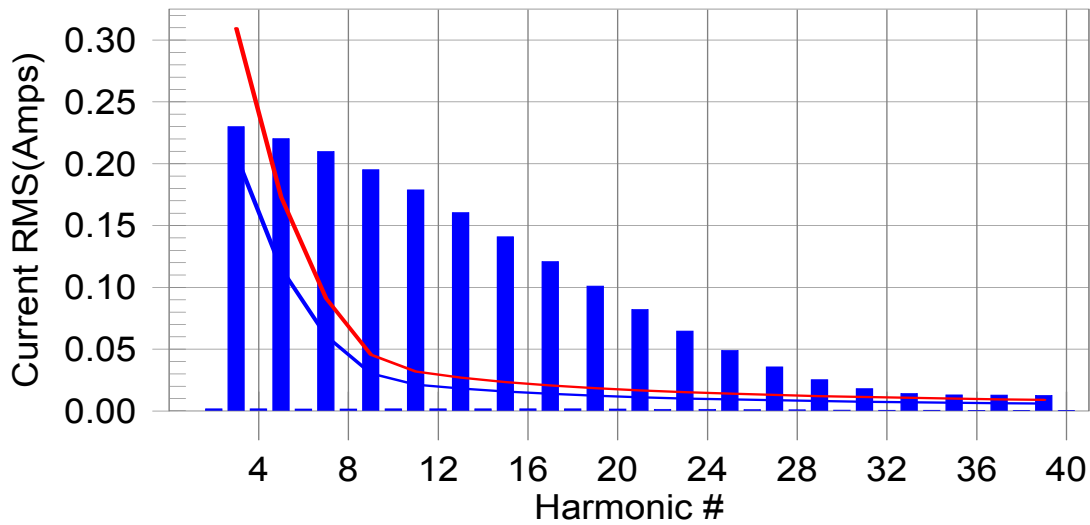
**Source qualification: Normal**

**Current & voltage waveforms**



**Harmonics and Class D limit line**

**European Limits**



**Test result: N/L**

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):	229.91	Frequency(Hz):	50.00
I_Peak (Amps):	3.275	I_RMS (Amps):	0.662
I_Fund (Amps):	0.258	Crest Factor:	5.462
Power (Watts):	60.7	Power Factor:	0.399

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002						
3	0.234	0.206	0.0	0.230	0.310	0.00	N/L
4	0.002						
5	0.225	0.115	0.0	0.220	0.173	0.00	N/L
6	0.002						
7	0.213	0.061	0.0	0.210	0.091	0.00	N/L
8	0.002						
9	0.198	0.030	0.0	0.195	0.046	0.00	N/L
10	0.002						
11	0.181	0.021	0.0	0.179	0.032	0.00	N/L
12	0.002						
13	0.161	0.018	0.0	0.160	0.027	0.00	N/L
14	0.002						
15	0.141	0.016	0.0	0.141	0.023	0.00	N/L
16	0.002						
17	0.120	0.014	0.0	0.121	0.021	0.00	N/L
18	0.002						
19	0.100	0.012	0.0	0.101	0.018	0.00	N/L
20	0.002						
21	0.080	0.011	0.0	0.082	0.017	0.00	N/L
22	0.001						
23	0.063	0.010	0.0	0.065	0.015	0.00	N/L
24	0.001						
25	0.047	0.009	0.0	0.049	0.014	0.00	N/L
26	0.001						
27	0.034	0.009	0.0	0.036	0.013	0.00	N/L
28	0.001						
29	0.025	0.008	0.0	0.025	0.012	0.00	N/L
30	0.001						
31	0.018	0.008	0.0	0.018	0.011	0.00	N/L
32	0.001						
33	0.015	0.007	0.0	0.014	0.011	0.00	N/L
34	0.001						
35	0.014	0.007	0.0	0.013	0.010	0.00	N/L
36	0.000						
37	0.013	0.006	0.0	0.013	0.009	0.00	N/L
38	0.000						
39	0.013	0.006	0.0	0.013	0.009	0.00	N/L
40	0.000						

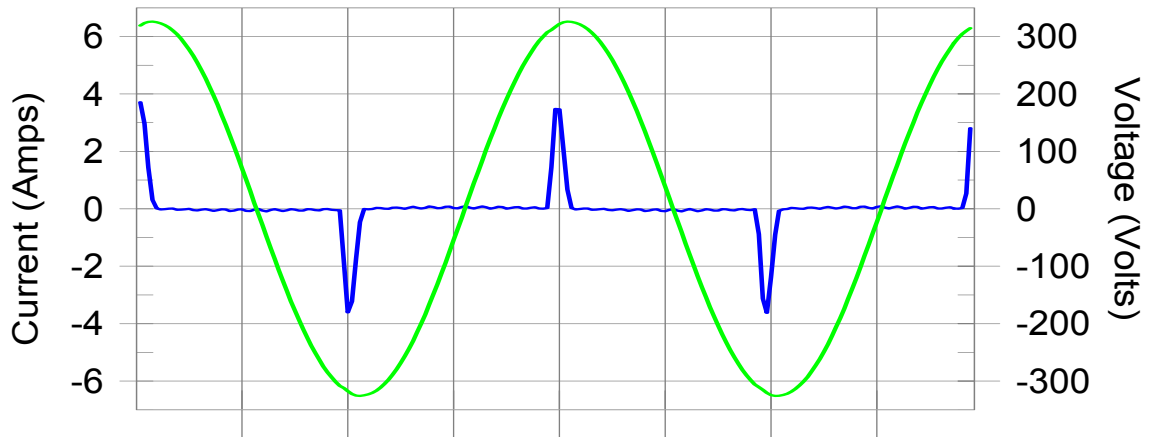
- Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.
- According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

Test Site	TR1	Date of Test	2012.03.19
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Test Result: N/L

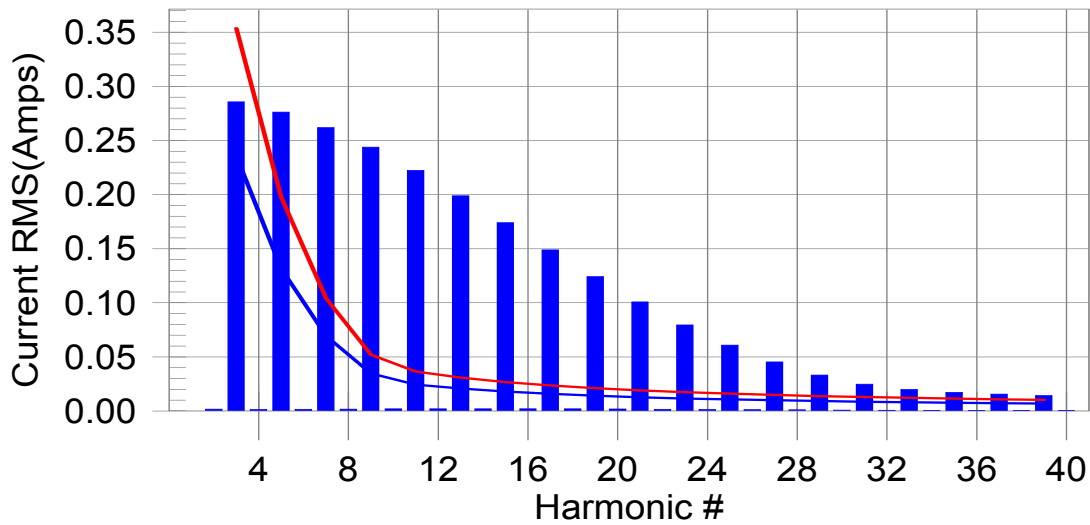
Source qualification: Normal

**Current & voltage waveforms**



**Harmonics and Class D limit line**

**European Limits**



**Test result: N/L**

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):	229.92	Frequency(Hz):	50.00
I_Peak (Amps):	3.753	I_RMS (Amps):	0.771
I_Fund (Amps):	0.307	Crest Factor:	5.216
Power (Watts):	69.4	Power Factor:	0.396

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002						
3	0.286	0.236	0.0	0.286	0.354	0.00	N/L
4	0.001						
5	0.275	0.132	0.0	0.276	0.198	0.00	N/L
6	0.002						
7	0.260	0.069	0.0	0.262	0.104	0.00	N/L
8	0.002						
9	0.242	0.035	0.0	0.244	0.052	0.00	N/L
10	0.002						
11	0.220	0.024	0.0	0.222	0.036	0.00	N/L
12	0.002						
13	0.196	0.021	0.0	0.199	0.031	0.00	N/L
14	0.002						
15	0.171	0.018	0.0	0.174	0.027	0.00	N/L
16	0.002						
17	0.145	0.016	0.0	0.149	0.024	0.00	N/L
18	0.002						
19	0.120	0.014	0.0	0.124	0.021	0.00	N/L
20	0.002						
21	0.097	0.013	0.0	0.101	0.019	0.00	N/L
22	0.002						
23	0.076	0.012	0.0	0.080	0.017	0.00	N/L
24	0.001						
25	0.058	0.011	0.0	0.061	0.016	0.00	N/L
26	0.001						
27	0.043	0.010	0.0	0.045	0.015	0.00	N/L
28	0.001						
29	0.032	0.009	0.0	0.033	0.014	0.00	N/L
30	0.001						
31	0.025	0.009	0.0	0.025	0.013	0.00	N/L
32	0.001						
33	0.020	0.008	0.0	0.020	0.012	0.00	N/L
34	0.001						
35	0.018	0.008	0.0	0.017	0.011	0.00	N/L
36	0.000						
37	0.016	0.007	0.0	0.016	0.011	0.00	N/L
38	0.000						
39	0.014	0.007	0.0	0.014	0.010	0.00	N/L
40	0.000						

- Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.
- According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

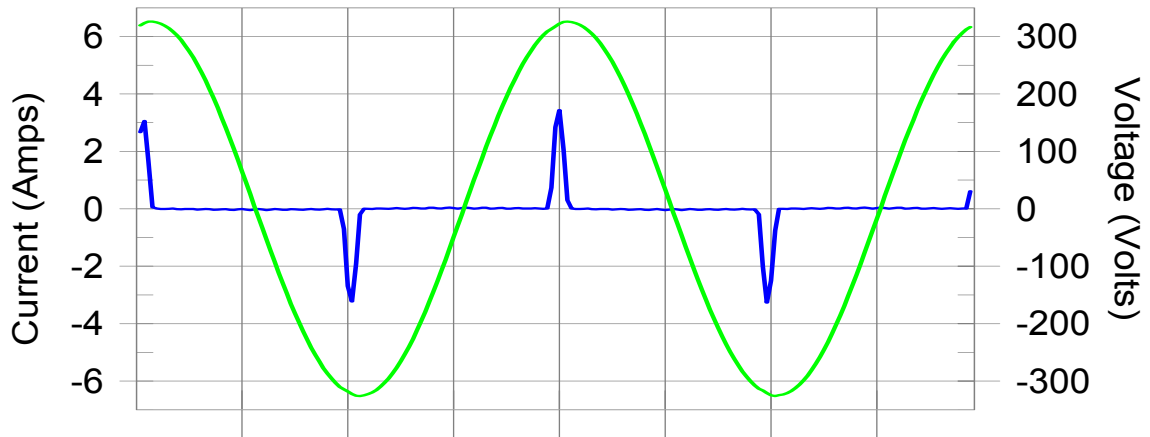


Test Site	TR1	Date of Test	2012.03.19
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

**Test Result: N/L**

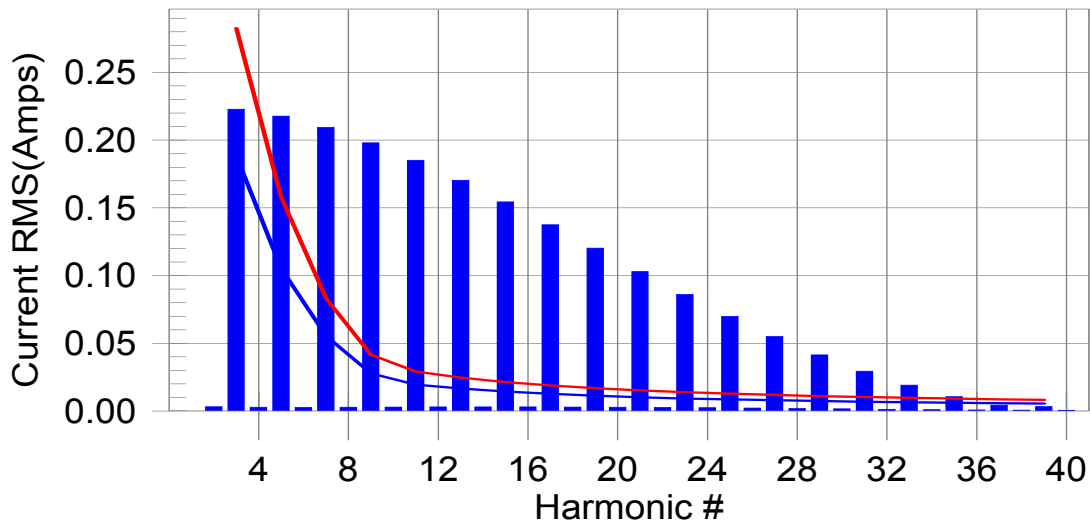
**Source qualification: Normal**

**Current & voltage waveforms**



**Harmonics and Class D limit line**

**European Limits**



**Test result: N/L**

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):	229.92	Frequency(Hz):	50.00
I_Peak (Amps):	3.507	I_RMS (Amps):	0.657
I_Fund (Amps):	0.239	Crest Factor:	5.768
Power (Watts):	55.4	Power Factor:	0.368

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.003						
3	0.226	0.188	0.0	0.223	0.283	0.00	N/L
4	0.003						
5	0.220	0.105	0.0	0.218	0.158	0.00	N/L
6	0.003						
7	0.211	0.055	0.0	0.209	0.083	0.00	N/L
8	0.003						
9	0.200	0.028	0.0	0.198	0.042	0.00	N/L
10	0.003						
11	0.187	0.019	0.0	0.185	0.029	0.00	N/L
12	0.003						
13	0.172	0.017	0.0	0.170	0.025	0.00	N/L
14	0.003						
15	0.156	0.014	0.0	0.154	0.021	0.00	N/L
16	0.003						
17	0.138	0.013	0.0	0.138	0.019	0.00	N/L
18	0.003						
19	0.121	0.011	0.0	0.120	0.017	0.00	N/L
20	0.003						
21	0.103	0.010	0.0	0.103	0.015	0.00	N/L
22	0.003						
23	0.086	0.009	0.0	0.086	0.014	0.00	N/L
24	0.002						
25	0.070	0.009	0.0	0.070	0.013	0.00	N/L
26	0.002						
27	0.055	0.008	0.0	0.055	0.012	0.00	N/L
28	0.002						
29	0.041	0.007	0.0	0.041	0.011	0.00	N/L
30	0.002						
31	0.029	0.007	0.0	0.029	0.010	0.00	N/L
32	0.001						
33	0.019	0.006	0.0	0.019	0.010	0.00	N/L
34	0.001						
35	0.010	0.006	0.0	0.011	0.009	0.00	N/L
36	0.001						
37	0.004	0.006	0.0	0.004	0.009	0.00	N/L
38	0.001						
39	0.004	0.005	0.0	0.003	0.008	0.00	N/L
40	0.001						

- Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.
- According to EN61000-3-2 paragraph 7 the note 1 and 2 are valid for all applications having an active input power >75W. Others the result should be pass.

**5.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Harmonic current emissions Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Harmonic current emissions Test Setup



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Harmonic current emissions Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Harmonic current emissions Test Setup



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Harmonic current emissions Test Setup



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Harmonic current emissions Test Setup

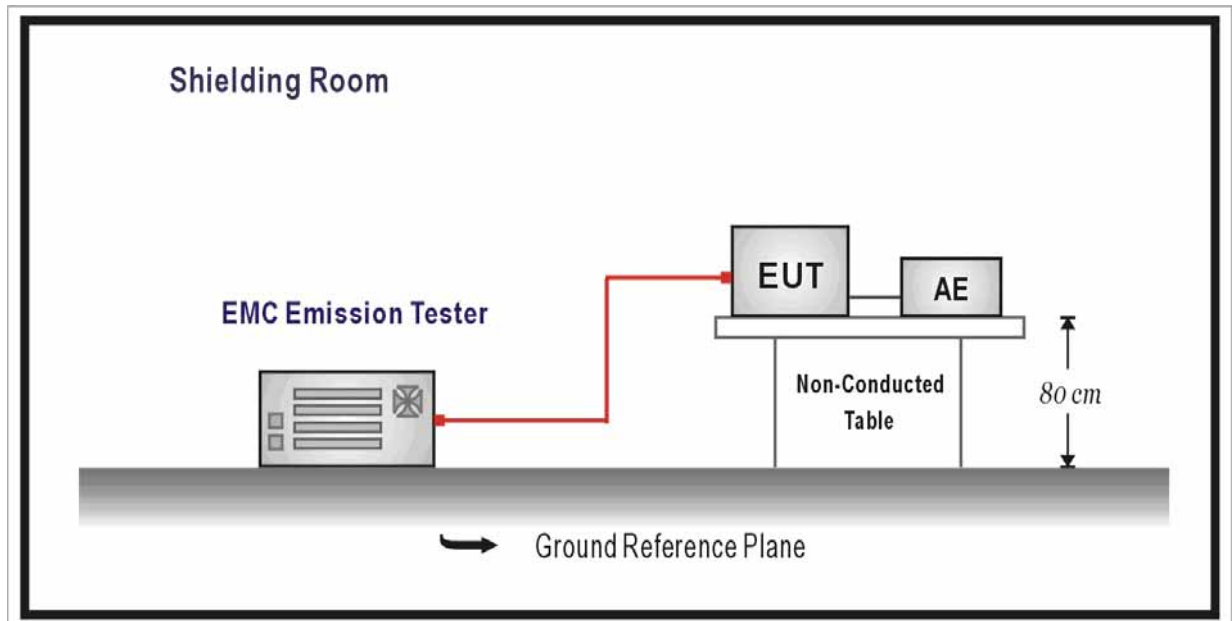


## 6. Voltage fluctuations and flicker

### 6.1. Test Specification

According to EMC Standard: EN 61000-3-3

### 6.2. Test Setup



### 6.3. Limit

The following limits apply:

- the value of  $P_{st}$  shall not be greater than 1.0;
- the value of  $P_{lt}$  shall not be greater than 0.65;
- the value of  $d(t)$  during a voltage change shall not exceed 3.3% for more than 500ms;
- the relative steady-state voltage change,  $d_c$ , shall not exceed 3.3%;
- the maximum relative voltage change,  $d_{max}$ , shall not exceed;
  - a) 4% without additional conditions;
  - b) 6% for equipment which is:
    - switched manually, or
    - switched automatically more frequently than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds), or manual restart, after a power supply interruption.

NOTE: The cycling frequency will be further limited by the  $P_{st}$  and  $P_{lt}$  limit.

For example: a  $d_{max}$  of 6% producing a rectangular voltage change characteristic twice per hour will give a  $P_{lt}$  of about 0.65.

c) 7% for equipment which is:

- attended whilst in use (for example: hair dryers, vacuum cleaners, kitchen equipment such as mixers, garden equipment such as lawn mowers, portable tools such as electric drills), or
- switched on automatically, or is intended to be switched on manually, no more than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds) or manual restart, after a power supply interruption.

$P_{st}$  and  $P_{lt}$  requirements shall not be applied to voltage changes caused by manual switching.

#### **6.4. Test Procedure**

The EUT is supplied in series with power analyzer from a power source having the same normal voltage and frequency as the rated supply voltage and the equipment under test. And the rated voltage at the supply voltage of EUT of 0.98 times and 1.02 times shall be performed.

#### **6.5. Deviation from Test Standard**

No deviation.

## 6.6. Test Result

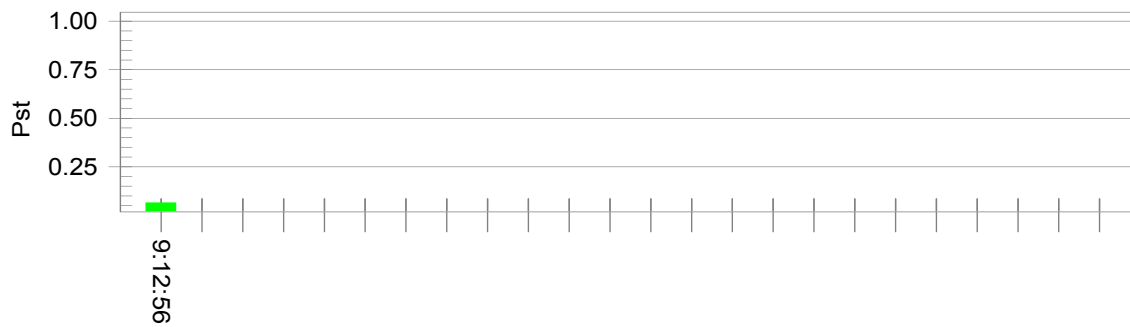
Test Site	TR1	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	Andy
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

**Test Result: Pass**

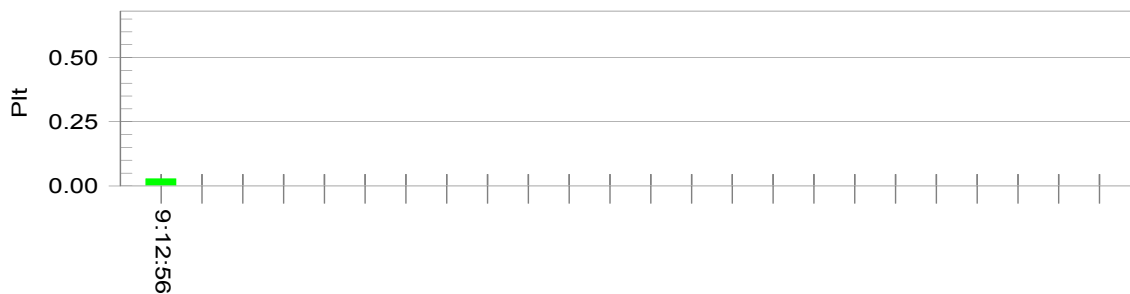
**Status: Test Completed**

### 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):	229.69			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	0.0	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



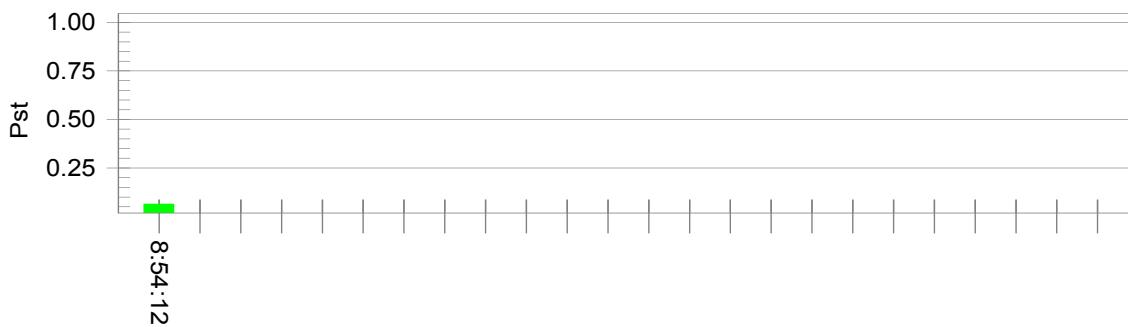
Test Site	TR1	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	Andy
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

**Test Result: Pass**

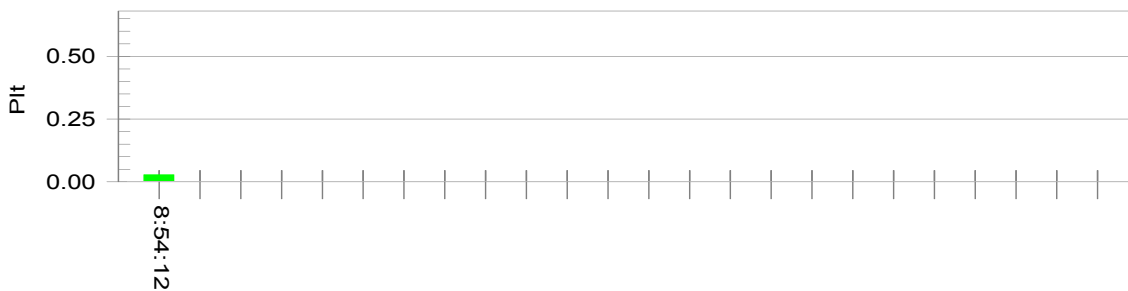
**Status: Test Completed**

**Pst and limit line**

**European Limits**



**Plt and limit line**



**Parameter values recorded during the test:**

Vrms at the end of test (Volt):	229.68			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	0.0	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

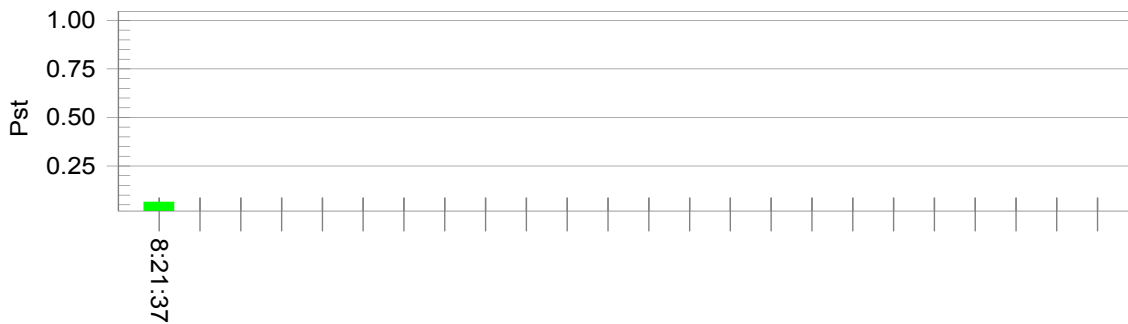
Test Site	TR1	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	Andy
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

**Test Result: Pass**

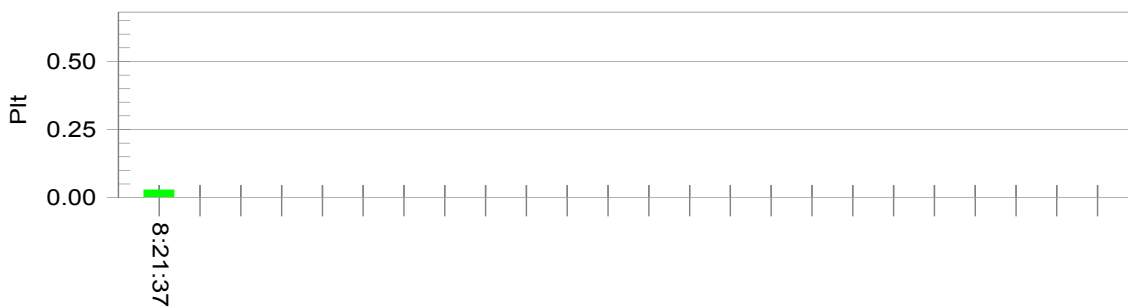
**Status: Test Completed**

**Pst and limit line**

**European Limits**



**Plt and limit line**



**Parameter values recorded during the test:**

Vrms at the end of test (Volt):	229.61		
Highest dt (%):	0.00	Test limit (%):	3.30 Pass
Time(mS) > dt:	0.0	Test limit (mS):	0.0 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

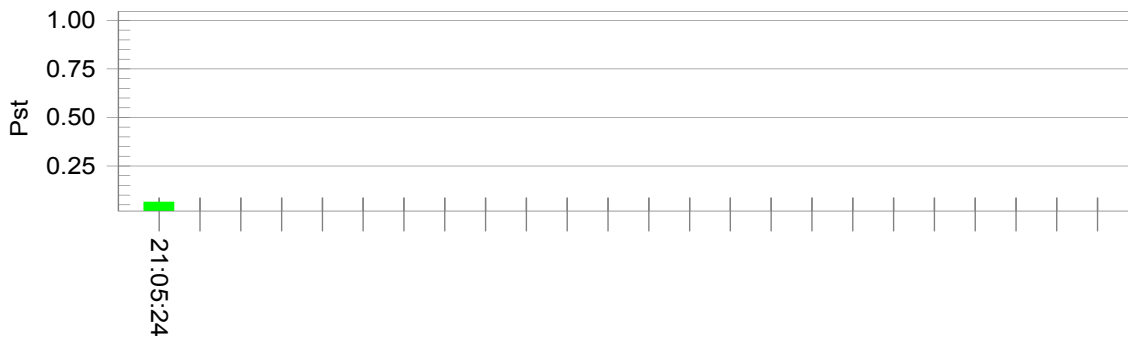
Test Site	TR1	Date of Test	2012.03.19
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

**Test Result: Pass**

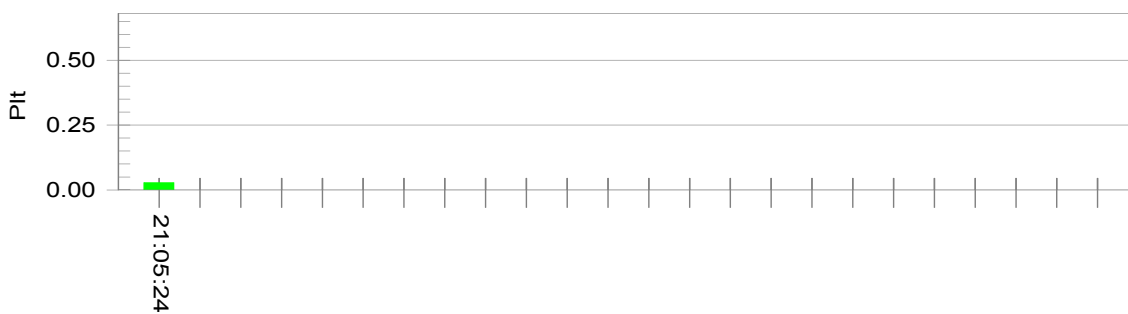
**Status: Test Completed**

**Pst and limit line**

**European Limits**



**Plt and limit line**



**Parameter values recorded during the test:**

Vrms at the end of test (Volt):	229.72		
Highest dt (%):	-0.17	Test limit (%):	3.30 Pass
Time(mS) > dt:	0.0	Test limit (mS):	0.0 Pass
Highest dc (%):	0.00	Test limit (%):	3.30 Pass
Highest dmax (%):	-0.12	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

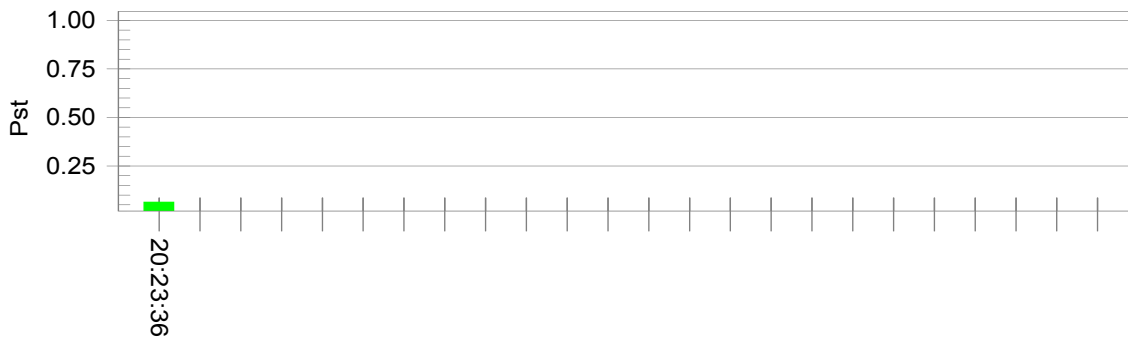
Test Site	TR1	Date of Test	2012.03.19
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

**Test Result: Pass**

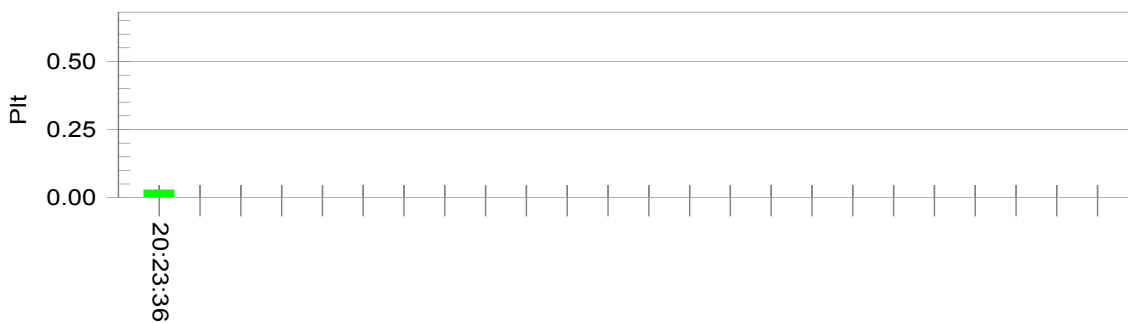
**Status: Test Completed**

**Pst and limit line**

**European Limits**



**Plt and limit line**



**Parameter values recorded during the test:**

Vrms at the end of test (Volt):	229.72	Test limit (%):	3.30	Pass
Highest dt (%):	-0.15	Test limit (mS):	0.0	Pass
Time(mS) > dt:	0.0	Test limit (%):	3.30	Pass
Highest dc (%):	0.00	Test limit (%):	4.00	Pass
Highest dmax (%):	0.10	Test limit:	1.000	Pass
Highest Pst (10 min. period):	0.064	Test limit:	0.650	Pass
Highest Plt (2 hr. period):	0.028			

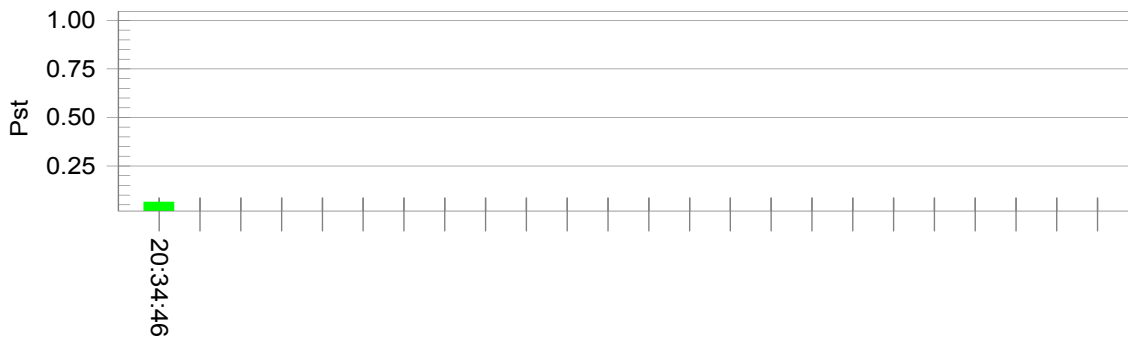
Test Site	TR1	Date of Test	2012.03.19
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	25°C	Humidity	48%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

**Test Result: Pass**

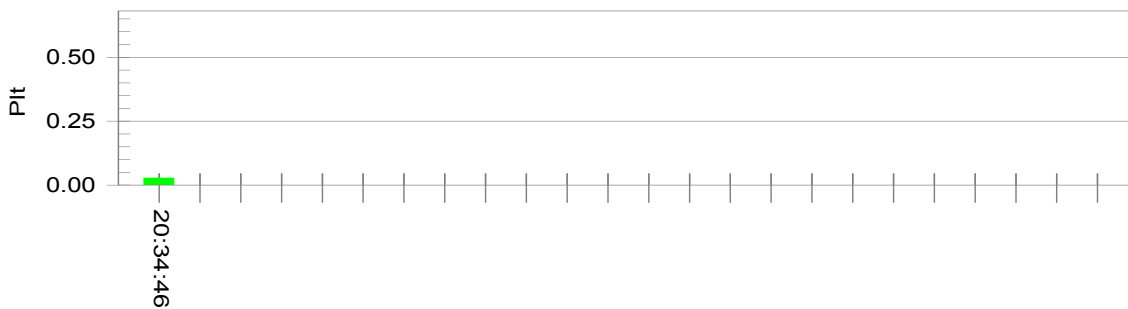
**Status: Test Completed**

**Pst and limit line**

**European Limits**



**Plt and limit line**



**Parameter values recorded during the test:**

Vrms at the end of test (Volt):	229.71		
Highest dt (%):	-0.18	Test limit (%):	3.30 Pass
Time(mS) > dt:	0.0	Test limit (mS):	0.0 Pass
Highest dc (%):	0.00	Test limit (%):	3.30 Pass
Highest dmax (%):	0.10	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

**6.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage fluctuations and flicker Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage fluctuations and flicker Test Setup



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage fluctuations and flicker Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Voltage fluctuations and flicker Test Setup



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage fluctuations and flicker Test Setup



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Voltage fluctuations and flicker Test Setup



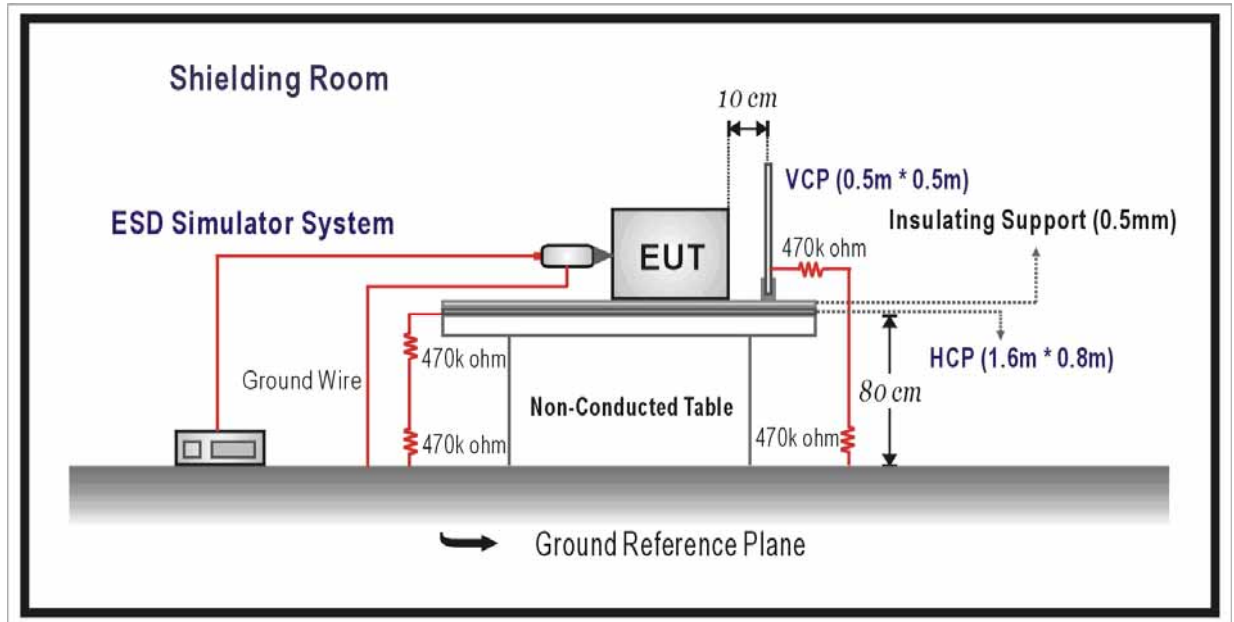


## 7. Electrostatic discharge

### 7.1. Test Specification

According to EMC Standard: IEC 61000-4-2

### 7.2. Test Setup



### 7.3. Limit

Environmental phenomenon	Test specification	Units	Performance criterion
Enclosure port			
Electrostatic discharge	±4 (Contact discharge)	kV (Charge voltage)	B
	±8 (Air discharge)	kV (Charge voltage)	

## 7.4. Test Procedure

### **Direct application of discharges to the EUT:**

Contact discharge was applied only to conductive surfaces of the EUT.

Air discharges were applied only to non-conductive surfaces of the EUT.

During the test, it was performed with single discharges. For the single discharge time between successive single discharges will be keep longer 1 second. It was at least twenty-five single discharges with positive and negative at the same selected point.

The selected point, which was performed with electrostatic discharge, was marked on the red label of the EUT.

### **Indirect application of discharges to the EUT:**

#### Vertical Coupling Plane (VCP):

The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least twenty-five single discharges with positive and negative at the same selected point.

#### Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge. It was at least twenty-five single discharges with positive and negative at the same selected point.

## 7.5. Deviation from Test Standard

No deviation.

**7.6. Test Result**

Test Site	TR3	Date of Test	2012.03.20
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	24°C	Humidity	44%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Air Discharge								
Test Location	Test Level						Observation	Result
	+2kV	-2kV	+4kV	-4kV	+8kV	-8kV		
2	A	A	A	A	A	A	Note	Pass
3	A	A	A	A	A	A	Note	Pass
4	A	A	A	A	A	A	Note	Pass
5	A	A	A	A	A	A	Note	Pass
6	A	A	A	A	A	A	Note	Pass
7	A	A	A	A	A	A	Note	Pass
8	A	A	A	A	A	A	Note	Pass
9	A	A	A	A	A	A	Note	Pass
11	A	A	A	A	A	A	Note	Pass
12	A	A	A	A	A	A	Note	Pass
13	A	A	A	A	A	A	Note	Pass
14	A	A	A	A	A	A	Note	Pass
15	A	A	A	A	A	A	Note	Pass
16	A	A	A	A	A	A	Note	Pass
17	A	A	A	A	A	A	Note	Pass
18	A	A	A	A	A	A	Note	Pass
19	A	A	A	A	A	A	Note	Pass
20	A	A	A	A	A	A	Note	Pass
21	A	A	A	A	A	A	Note	Pass
22	A	A	A	A	A	A	Note	Pass
23	A	A	A	A	A	A	Note	Pass
24	A	A	A	A	A	A	Note	Pass
25	A	A	A	A	A	A	Note	Pass
26	A	A	A	A	A	A	Note	Pass
27	A	A	A	A	A	A	Note	Pass
28	A	A	A	A	A	A	Note	Pass
29	A	A	A	A	A	A	Note	Pass

30	A	A	A	A	A	A	Note	Pass
31	A	A	A	A	A	A	Note	Pass
32	A	A	A	A	A	A	Note	Pass
33	A	A	A	A	A	A	Note	Pass
34	A	A	A	A	A	A	Note	Pass
35	A	A	A	A	A	A	Note	Pass
36	A	A	A	A	A	A	Note	Pass
37	A	A	A	A	A	A	Note	Pass
38	A	A	A	A	A	A	Note	Pass
39	A	A	A	A	A	A	Note	Pass
40	A	A	A	A	A	A	Note	Pass
41	A	A	A	A	A	A	Note	Pass
42	A	A	A	A	A	A	Note	Pass
43	A	A	A	A	A	A	Note	Pass
44	A	A	A	A	A	A	Note	Pass
45	A	A	A	A	A	A	Note	Pass
46	A	A	A	A	A	A	Note	Pass
47	A	A	A	A	A	A	Note	Pass
48	A	A	A	A	A	A	Note	Pass
49	A	A	A	A	A	A	Note	Pass
50	A	A	A	A	A	A	Note	Pass
51	A	A	A	A	A	A	Note	Pass
52	A	A	A	A	A	A	Note	Pass
53	A	A	A	A	A	A	Note	Pass
54	A	A	A	A	A	A	Note	Pass
55	A	A	A	A	A	A	Note	Pass
56	A	A	A	A	A	A	Note	Pass
57	A	A	A	A	A	A	Note	Pass
58	A	A	A	A	A	A	Note	Pass
59	A	A	A	A	A	A	Note	Pass
60	A	A	A	A	A	A	Note	Pass
61	A	A	A	A	A	A	Note	Pass
62	A	A	A	A	A	A	Note	Pass
63	A	A	A	A	A	A	Note	Pass
64	A	A	A	A	A	A	Note	Pass
65	A	A	A	A	A	A	Note	Pass

66	A	A	A	A	A	A	Note	Pass
67	A	A	A	A	A	A	Note	Pass
68	A	A	A	A	A	A	Note	Pass
69	A	A	A	A	A	A	Note	Pass
70	A	A	A	A	A	A	Note	Pass
71	A	A	A	A	A	A	Note	Pass
72	A	A	A	A	A	A	Note	Pass
73	A	A	A	A	A	A	Note	Pass
74	A	A	A	A	A	A	Note	Pass
75	A	A	A	A	A	A	Note	Pass
76	A	A	A	A	A	A	Note	Pass

Contact Discharge				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
1	A	A	Note	Pass
10	A	A	Note	Pass

Horizontal Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

Vertical Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

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

Test Site	TR3	Date of Test	2012.03.20
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	24°C	Humidity	44%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Air Discharge								
Test Location	Test Level						Observation	Result
	+2kV	-2kV	+4kV	-4kV	+8kV	-8kV		
2	A	A	A	A	A	A	Note	Pass
3	A	A	A	A	A	A	Note	Pass
4	A	A	A	A	A	A	Note	Pass
5	A	A	A	A	A	A	Note	Pass
6	A	A	A	A	A	A	Note	Pass
7	A	A	A	A	A	A	Note	Pass
8	A	A	A	A	A	A	Note	Pass
9	A	A	A	A	A	A	Note	Pass
11	A	A	A	A	A	A	Note	Pass
12	A	A	A	A	A	A	Note	Pass
13	A	A	A	A	A	A	Note	Pass
14	A	A	A	A	A	A	Note	Pass
15	A	A	A	A	A	A	Note	Pass
16	A	A	A	A	A	A	Note	Pass
17	A	A	A	A	A	A	Note	Pass
18	A	A	A	A	A	A	Note	Pass
19	A	A	A	A	A	A	Note	Pass
20	A	A	A	A	A	A	Note	Pass
21	A	A	A	A	A	A	Note	Pass
22	A	A	A	A	A	A	Note	Pass
23	A	A	A	A	A	A	Note	Pass
24	A	A	A	A	A	A	Note	Pass
25	A	A	A	A	A	A	Note	Pass
26	A	A	A	A	A	A	Note	Pass
27	A	A	A	A	A	A	Note	Pass
28	A	A	A	A	A	A	Note	Pass
29	A	A	A	A	A	A	Note	Pass

30	A	A	A	A	A	A	Note	Pass
31	A	A	A	A	A	A	Note	Pass
32	A	A	A	A	A	A	Note	Pass
33	A	A	A	A	A	A	Note	Pass
34	A	A	A	A	A	A	Note	Pass
35	A	A	A	A	A	A	Note	Pass
36	A	A	A	A	A	A	Note	Pass
37	A	A	A	A	A	A	Note	Pass
38	A	A	A	A	A	A	Note	Pass
39	A	A	A	A	A	A	Note	Pass
40	A	A	A	A	A	A	Note	Pass
41	A	A	A	A	A	A	Note	Pass
42	A	A	A	A	A	A	Note	Pass
43	A	A	A	A	A	A	Note	Pass
44	A	A	A	A	A	A	Note	Pass
45	A	A	A	A	A	A	Note	Pass
46	A	A	A	A	A	A	Note	Pass
47	A	A	A	A	A	A	Note	Pass
48	A	A	A	A	A	A	Note	Pass
49	A	A	A	A	A	A	Note	Pass
50	A	A	A	A	A	A	Note	Pass
51	A	A	A	A	A	A	Note	Pass
52	A	A	A	A	A	A	Note	Pass
53	A	A	A	A	A	A	Note	Pass
54	A	A	A	A	A	A	Note	Pass
55	A	A	A	A	A	A	Note	Pass
56	A	A	A	A	A	A	Note	Pass
57	A	A	A	A	A	A	Note	Pass
58	A	A	A	A	A	A	Note	Pass
59	A	A	A	A	A	A	Note	Pass
60	A	A	A	A	A	A	Note	Pass
61	A	A	A	A	A	A	Note	Pass
62	A	A	A	A	A	A	Note	Pass
63	A	A	A	A	A	A	Note	Pass
64	A	A	A	A	A	A	Note	Pass
65	A	A	A	A	A	A	Note	Pass

66	A	A	A	A	A	A	Note	Pass
67	A	A	A	A	A	A	Note	Pass
68	A	A	A	A	A	A	Note	Pass
69	A	A	A	A	A	A	Note	Pass
70	A	A	A	A	A	A	Note	Pass
71	A	A	A	A	A	A	Note	Pass
72	A	A	A	A	A	A	Note	Pass
73	A	A	A	A	A	A	Note	Pass
74	A	A	A	A	A	A	Note	Pass
75	A	A	A	A	A	A	Note	Pass
76	A	A	A	A	A	A	Note	Pass

Contact Discharge				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
1	A	A	Note	Pass
10	A	A	Note	Pass

Horizontal Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

Vertical Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

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



Test Site	TR3	Date of Test	2012.03.20
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	24°C	Humidity	44%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Air Discharge								
Test Location	Test Level						Observation	Result
	+2kV	-2kV	+4kV	-4kV	+8kV	-8kV		
2	A	A	A	A	A	A	Note	Pass
3	A	A	A	A	A	A	Note	Pass
4	A	A	A	A	A	A	Note	Pass
5	A	A	A	A	A	A	Note	Pass
6	A	A	A	A	A	A	Note	Pass
7	A	A	A	A	A	A	Note	Pass
8	A	A	A	A	A	A	Note	Pass
9	A	A	A	A	A	A	Note	Pass
11	A	A	A	A	A	A	Note	Pass
12	A	A	A	A	A	A	Note	Pass
13	A	A	A	A	A	A	Note	Pass
14	A	A	A	A	A	A	Note	Pass
15	A	A	A	A	A	A	Note	Pass
16	A	A	A	A	A	A	Note	Pass
17	A	A	A	A	A	A	Note	Pass
18	A	A	A	A	A	A	Note	Pass
19	A	A	A	A	A	A	Note	Pass
20	A	A	A	A	A	A	Note	Pass
21	A	A	A	A	A	A	Note	Pass
22	A	A	A	A	A	A	Note	Pass
23	A	A	A	A	A	A	Note	Pass
24	A	A	A	A	A	A	Note	Pass
25	A	A	A	A	A	A	Note	Pass
26	A	A	A	A	A	A	Note	Pass
27	A	A	A	A	A	A	Note	Pass
28	A	A	A	A	A	A	Note	Pass
29	A	A	A	A	A	A	Note	Pass

30	A	A	A	A	A	A	Note	Pass
31	A	A	A	A	A	A	Note	Pass
32	A	A	A	A	A	A	Note	Pass
33	A	A	A	A	A	A	Note	Pass
34	A	A	A	A	A	A	Note	Pass
35	A	A	A	A	A	A	Note	Pass
36	A	A	A	A	A	A	Note	Pass
37	A	A	A	A	A	A	Note	Pass
38	A	A	A	A	A	A	Note	Pass
39	A	A	A	A	A	A	Note	Pass
40	A	A	A	A	A	A	Note	Pass
41	A	A	A	A	A	A	Note	Pass
42	A	A	A	A	A	A	Note	Pass
43	A	A	A	A	A	A	Note	Pass
44	A	A	A	A	A	A	Note	Pass
45	A	A	A	A	A	A	Note	Pass
46	A	A	A	A	A	A	Note	Pass
47	A	A	A	A	A	A	Note	Pass
48	A	A	A	A	A	A	Note	Pass
49	A	A	A	A	A	A	Note	Pass
50	A	A	A	A	A	A	Note	Pass
51	A	A	A	A	A	A	Note	Pass
52	A	A	A	A	A	A	Note	Pass
53	A	A	A	A	A	A	Note	Pass
54	A	A	A	A	A	A	Note	Pass
55	A	A	A	A	A	A	Note	Pass
56	A	A	A	A	A	A	Note	Pass
57	A	A	A	A	A	A	Note	Pass
58	A	A	A	A	A	A	Note	Pass
59	A	A	A	A	A	A	Note	Pass
60	A	A	A	A	A	A	Note	Pass
61	A	A	A	A	A	A	Note	Pass
62	A	A	A	A	A	A	Note	Pass
63	A	A	A	A	A	A	Note	Pass
64	A	A	A	A	A	A	Note	Pass
65	A	A	A	A	A	A	Note	Pass

66	A	A	A	A	A	A	Note	Pass
67	A	A	A	A	A	A	Note	Pass
68	A	A	A	A	A	A	Note	Pass
69	A	A	A	A	A	A	Note	Pass
70	A	A	A	A	A	A	Note	Pass
71	A	A	A	A	A	A	Note	Pass
72	A	A	A	A	A	A	Note	Pass
73	A	A	A	A	A	A	Note	Pass
74	A	A	A	A	A	A	Note	Pass
75	A	A	A	A	A	A	Note	Pass
76	A	A	A	A	A	A	Note	Pass

Contact Discharge				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
1	A	A	Note	Pass
10	A	A	Note	Pass

Horizontal Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

Vertical Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

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

Test Site	TR3	Date of Test	2012.03.20
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	24°C	Humidity	44%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Air Discharge								
Test Location	Test Level						Observation	Result
	+2kV	-2kV	+4kV	-4kV	+8kV	-8kV		
2	A	A	A	A	A	A	Note	Pass
3	A	A	A	A	A	A	Note	Pass
4	A	A	A	A	A	A	Note	Pass
5	A	A	A	A	A	A	Note	Pass
6	A	A	A	A	A	A	Note	Pass
7	A	A	A	A	A	A	Note	Pass
8	A	A	A	A	A	A	Note	Pass
9	A	A	A	A	A	A	Note	Pass
11	A	A	A	A	A	A	Note	Pass
12	A	A	A	A	A	A	Note	Pass
13	A	A	A	A	A	A	Note	Pass
14	A	A	A	A	A	A	Note	Pass
15	A	A	A	A	A	A	Note	Pass
16	A	A	A	A	A	A	Note	Pass
17	A	A	A	A	A	A	Note	Pass
18	A	A	A	A	A	A	Note	Pass
19	A	A	A	A	A	A	Note	Pass
20	A	A	A	A	A	A	Note	Pass
21	A	A	A	A	A	A	Note	Pass
22	A	A	A	A	A	A	Note	Pass
23	A	A	A	A	A	A	Note	Pass
24	A	A	A	A	A	A	Note	Pass
25	A	A	A	A	A	A	Note	Pass
26	A	A	A	A	A	A	Note	Pass
27	A	A	A	A	A	A	Note	Pass
28	A	A	A	A	A	A	Note	Pass
29	A	A	A	A	A	A	Note	Pass

30	A	A	A	A	A	A	Note	Pass
31	A	A	A	A	A	A	Note	Pass
32	A	A	A	A	A	A	Note	Pass
33	A	A	A	A	A	A	Note	Pass
34	A	A	A	A	A	A	Note	Pass
35	A	A	A	A	A	A	Note	Pass
36	A	A	A	A	A	A	Note	Pass
37	A	A	A	A	A	A	Note	Pass
38	A	A	A	A	A	A	Note	Pass
39	A	A	A	A	A	A	Note	Pass
40	A	A	A	A	A	A	Note	Pass
41	A	A	A	A	A	A	Note	Pass
42	A	A	A	A	A	A	Note	Pass
43	A	A	A	A	A	A	Note	Pass
44	A	A	A	A	A	A	Note	Pass
45	A	A	A	A	A	A	Note	Pass
46	A	A	A	A	A	A	Note	Pass
47	A	A	A	A	A	A	Note	Pass
48	A	A	A	A	A	A	Note	Pass
49	A	A	A	A	A	A	Note	Pass
50	A	A	A	A	A	A	Note	Pass
51	A	A	A	A	A	A	Note	Pass
52	A	A	A	A	A	A	Note	Pass
53	A	A	A	A	A	A	Note	Pass
54	A	A	A	A	A	A	Note	Pass
55	A	A	A	A	A	A	Note	Pass
56	A	A	A	A	A	A	Note	Pass
57	A	A	A	A	A	A	Note	Pass
58	A	A	A	A	A	A	Note	Pass
59	A	A	A	A	A	A	Note	Pass
60	A	A	A	A	A	A	Note	Pass
61	A	A	A	A	A	A	Note	Pass
62	A	A	A	A	A	A	Note	Pass
63	A	A	A	A	A	A	Note	Pass
64	A	A	A	A	A	A	Note	Pass
65	A	A	A	A	A	A	Note	Pass
66	A	A	A	A	A	A	Note	Pass
67	A	A	A	A	A	A	Note	Pass

68	A	A	A	A	A	A	Note	Pass
69	A	A	A	A	A	A	Note	Pass
70	A	A	A	A	A	A	Note	Pass
71	A	A	A	A	A	A	Note	Pass
72	A	A	A	A	A	A	Note	Pass
73	A	A	A	A	A	A	Note	Pass
74	A	A	A	A	A	A	Note	Pass
75	A	A	A	A	A	A	Note	Pass
76	A	A	A	A	A	A	Note	Pass
77	A	A	A	A	A	A	Note	Pass
78	A	A	A	A	A	A	Note	Pass
79	A	A	A	A	A	A	Note	Pass

Contact Discharge				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
1	A	A	Note	Pass
10	A	A	Note	Pass

Horizontal Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

Vertical Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

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

Test Site	TR3	Date of Test	2012.03.20
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	24°C	Humidity	44%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Air Discharge								
Test Location	Test Level						Observation	Result
	+2kV	-2kV	+4kV	-4kV	+8kV	-8kV		
2	A	A	A	A	A	A	Note	Pass
3	A	A	A	A	A	A	Note	Pass
4	A	A	A	A	A	A	Note	Pass
5	A	A	A	A	A	A	Note	Pass
6	A	A	A	A	A	A	Note	Pass
7	A	A	A	A	A	A	Note	Pass
8	A	A	A	A	A	A	Note	Pass
9	A	A	A	A	A	A	Note	Pass
11	A	A	A	A	A	A	Note	Pass
12	A	A	A	A	A	A	Note	Pass
13	A	A	A	A	A	A	Note	Pass
14	A	A	A	A	A	A	Note	Pass
15	A	A	A	A	A	A	Note	Pass
16	A	A	A	A	A	A	Note	Pass
17	A	A	A	A	A	A	Note	Pass
18	A	A	A	A	A	A	Note	Pass
19	A	A	A	A	A	A	Note	Pass
20	A	A	A	A	A	A	Note	Pass
21	A	A	A	A	A	A	Note	Pass
22	A	A	A	A	A	A	Note	Pass
23	A	A	A	A	A	A	Note	Pass
24	A	A	A	A	A	A	Note	Pass
25	A	A	A	A	A	A	Note	Pass
26	A	A	A	A	A	A	Note	Pass
27	A	A	A	A	A	A	Note	Pass
28	A	A	A	A	A	A	Note	Pass
29	A	A	A	A	A	A	Note	Pass

30	A	A	A	A	A	A	Note	Pass
31	A	A	A	A	A	A	Note	Pass
32	A	A	A	A	A	A	Note	Pass
33	A	A	A	A	A	A	Note	Pass
34	A	A	A	A	A	A	Note	Pass
35	A	A	A	A	A	A	Note	Pass
36	A	A	A	A	A	A	Note	Pass
37	A	A	A	A	A	A	Note	Pass
38	A	A	A	A	A	A	Note	Pass
39	A	A	A	A	A	A	Note	Pass
40	A	A	A	A	A	A	Note	Pass
41	A	A	A	A	A	A	Note	Pass
42	A	A	A	A	A	A	Note	Pass
43	A	A	A	A	A	A	Note	Pass
44	A	A	A	A	A	A	Note	Pass
45	A	A	A	A	A	A	Note	Pass
46	A	A	A	A	A	A	Note	Pass
47	A	A	A	A	A	A	Note	Pass
48	A	A	A	A	A	A	Note	Pass
49	A	A	A	A	A	A	Note	Pass
50	A	A	A	A	A	A	Note	Pass
51	A	A	A	A	A	A	Note	Pass
52	A	A	A	A	A	A	Note	Pass
53	A	A	A	A	A	A	Note	Pass
54	A	A	A	A	A	A	Note	Pass
55	A	A	A	A	A	A	Note	Pass
56	A	A	A	A	A	A	Note	Pass
57	A	A	A	A	A	A	Note	Pass
58	A	A	A	A	A	A	Note	Pass
59	A	A	A	A	A	A	Note	Pass
60	A	A	A	A	A	A	Note	Pass
61	A	A	A	A	A	A	Note	Pass
62	A	A	A	A	A	A	Note	Pass
63	A	A	A	A	A	A	Note	Pass
64	A	A	A	A	A	A	Note	Pass
65	A	A	A	A	A	A	Note	Pass
66	A	A	A	A	A	A	Note	Pass
67	A	A	A	A	A	A	Note	Pass



68	A	A	A	A	A	A	Note	Pass
69	A	A	A	A	A	A	Note	Pass
70	A	A	A	A	A	A	Note	Pass
71	A	A	A	A	A	A	Note	Pass
72	A	A	A	A	A	A	Note	Pass
73	A	A	A	A	A	A	Note	Pass
74	A	A	A	A	A	A	Note	Pass
75	A	A	A	A	A	A	Note	Pass
76	A	A	A	A	A	A	Note	Pass

Contact Discharge				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
1	A	A	Note	Pass
10	A	A	Note	Pass

Horizontal Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

Vertical Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

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

Test Site	TR3	Date of Test	2012.03.20
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	24°C	Humidity	44%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Air Discharge								
Test Location	Test Level						Observation	Result
	+2kV	-2kV	+4kV	-4kV	+8kV	-8kV		
2	A	A	A	A	A	A	Note	Pass
3	A	A	A	A	A	A	Note	Pass
4	A	A	A	A	A	A	Note	Pass
5	A	A	A	A	A	A	Note	Pass
6	A	A	A	A	A	A	Note	Pass
7	A	A	A	A	A	A	Note	Pass
8	A	A	A	A	A	A	Note	Pass
9	A	A	A	A	A	A	Note	Pass
11	A	A	A	A	A	A	Note	Pass
12	A	A	A	A	A	A	Note	Pass
13	A	A	A	A	A	A	Note	Pass
14	A	A	A	A	A	A	Note	Pass
15	A	A	A	A	A	A	Note	Pass
16	A	A	A	A	A	A	Note	Pass
17	A	A	A	A	A	A	Note	Pass
18	A	A	A	A	A	A	Note	Pass
19	A	A	A	A	A	A	Note	Pass
20	A	A	A	A	A	A	Note	Pass
21	A	A	A	A	A	A	Note	Pass
22	A	A	A	A	A	A	Note	Pass
23	A	A	A	A	A	A	Note	Pass
24	A	A	A	A	A	A	Note	Pass
25	A	A	A	A	A	A	Note	Pass
26	A	A	A	A	A	A	Note	Pass
27	A	A	A	A	A	A	Note	Pass
28	A	A	A	A	A	A	Note	Pass
29	A	A	A	A	A	A	Note	Pass

30	A	A	A	A	A	A	Note	Pass
31	A	A	A	A	A	A	Note	Pass
32	A	A	A	A	A	A	Note	Pass
33	A	A	A	A	A	A	Note	Pass
34	A	A	A	A	A	A	Note	Pass
35	A	A	A	A	A	A	Note	Pass
36	A	A	A	A	A	A	Note	Pass
37	A	A	A	A	A	A	Note	Pass
38	A	A	A	A	A	A	Note	Pass
39	A	A	A	A	A	A	Note	Pass
40	A	A	A	A	A	A	Note	Pass
41	A	A	A	A	A	A	Note	Pass
42	A	A	A	A	A	A	Note	Pass
43	A	A	A	A	A	A	Note	Pass
44	A	A	A	A	A	A	Note	Pass
45	A	A	A	A	A	A	Note	Pass
46	A	A	A	A	A	A	Note	Pass
47	A	A	A	A	A	A	Note	Pass
48	A	A	A	A	A	A	Note	Pass
49	A	A	A	A	A	A	Note	Pass
50	A	A	A	A	A	A	Note	Pass
51	A	A	A	A	A	A	Note	Pass
52	A	A	A	A	A	A	Note	Pass
53	A	A	A	A	A	A	Note	Pass
54	A	A	A	A	A	A	Note	Pass
55	A	A	A	A	A	A	Note	Pass
56	A	A	A	A	A	A	Note	Pass
57	A	A	A	A	A	A	Note	Pass
58	A	A	A	A	A	A	Note	Pass
59	A	A	A	A	A	A	Note	Pass
60	A	A	A	A	A	A	Note	Pass
61	A	A	A	A	A	A	Note	Pass
62	A	A	A	A	A	A	Note	Pass
63	A	A	A	A	A	A	Note	Pass
64	A	A	A	A	A	A	Note	Pass
65	A	A	A	A	A	A	Note	Pass
66	A	A	A	A	A	A	Note	Pass
67	A	A	A	A	A	A	Note	Pass

68	A	A	A	A	A	A	Note	Pass
69	A	A	A	A	A	A	Note	Pass
70	A	A	A	A	A	A	Note	Pass
71	A	A	A	A	A	A	Note	Pass
72	A	A	A	A	A	A	Note	Pass
73	A	A	A	A	A	A	Note	Pass
74	A	A	A	A	A	A	Note	Pass
75	A	A	A	A	A	A	Note	Pass
76	A	A	A	A	A	A	Note	Pass
77	A	A	A	A	A	A	Note	Pass
78	A	A	A	A	A	A	Note	Pass
79	A	A	A	A	A	A	Note	Pass

Contact Discharge				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
1	A	A	Note	Pass
10	A	A	Note	Pass

Horizontal Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

Vertical Coupling				
Test Location	Test Level		Observation	Result
	+4kV	-4kV		
Front	A	A	Note	Pass
Rear	A	A	Note	Pass
Left	A	A	Note	Pass
Right	A	A	Note	Pass

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

**7.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrostatic discharge Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrostatic discharge Test Setup



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrostatic discharge Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Electrostatic discharge Test Setup



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrostatic discharge Test Setup

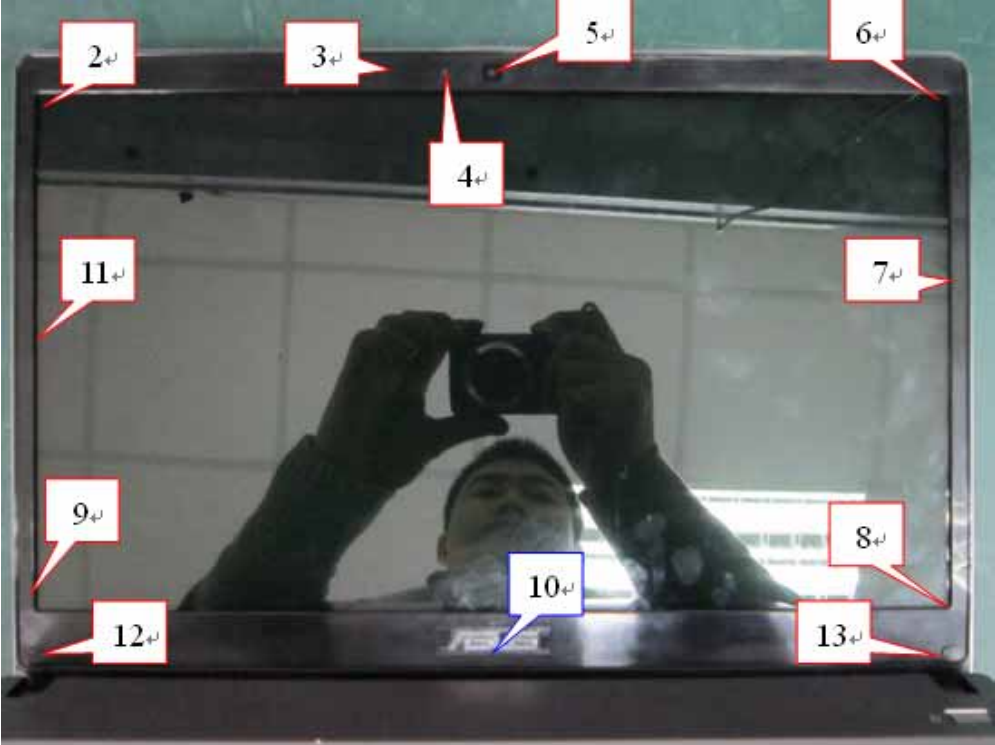


Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

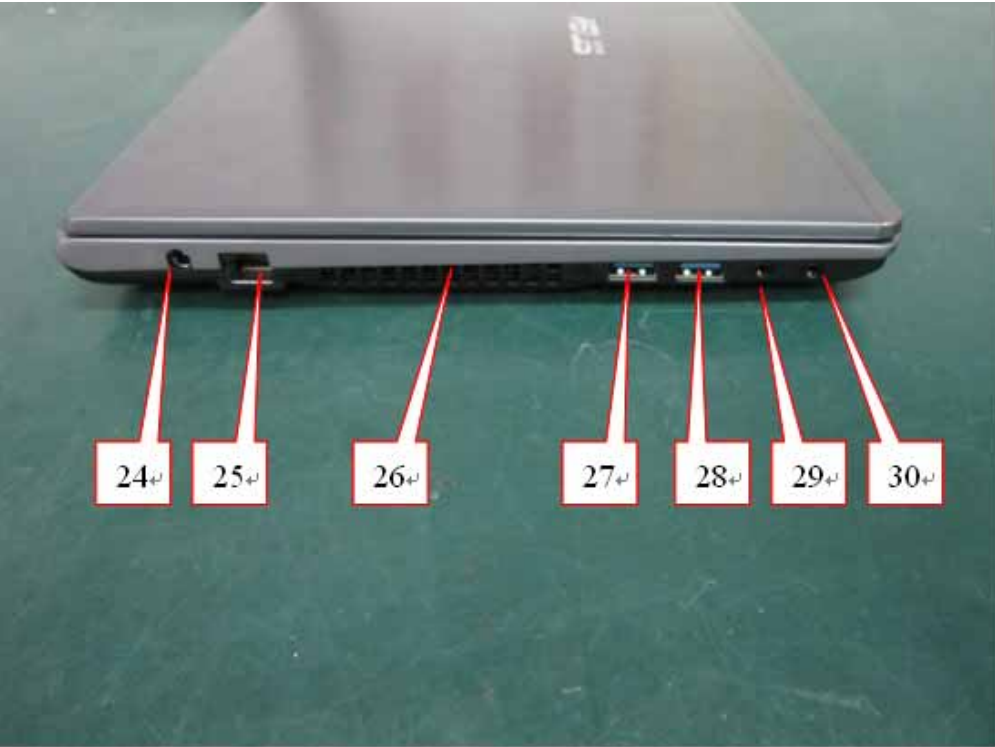
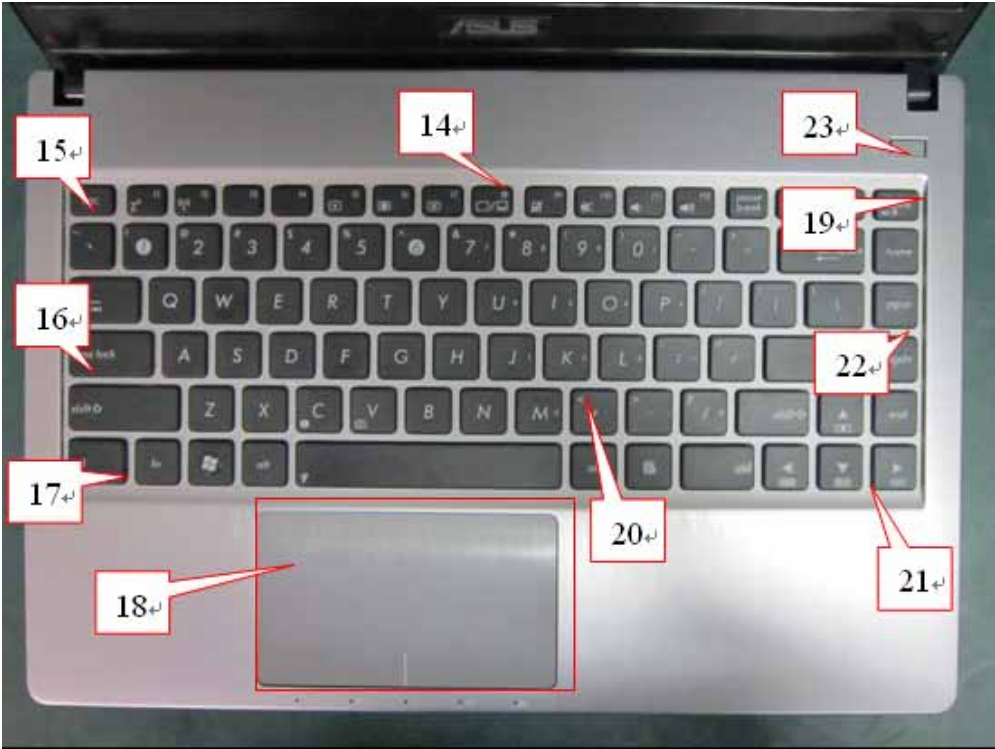
Description: Electrostatic discharge Test Setup

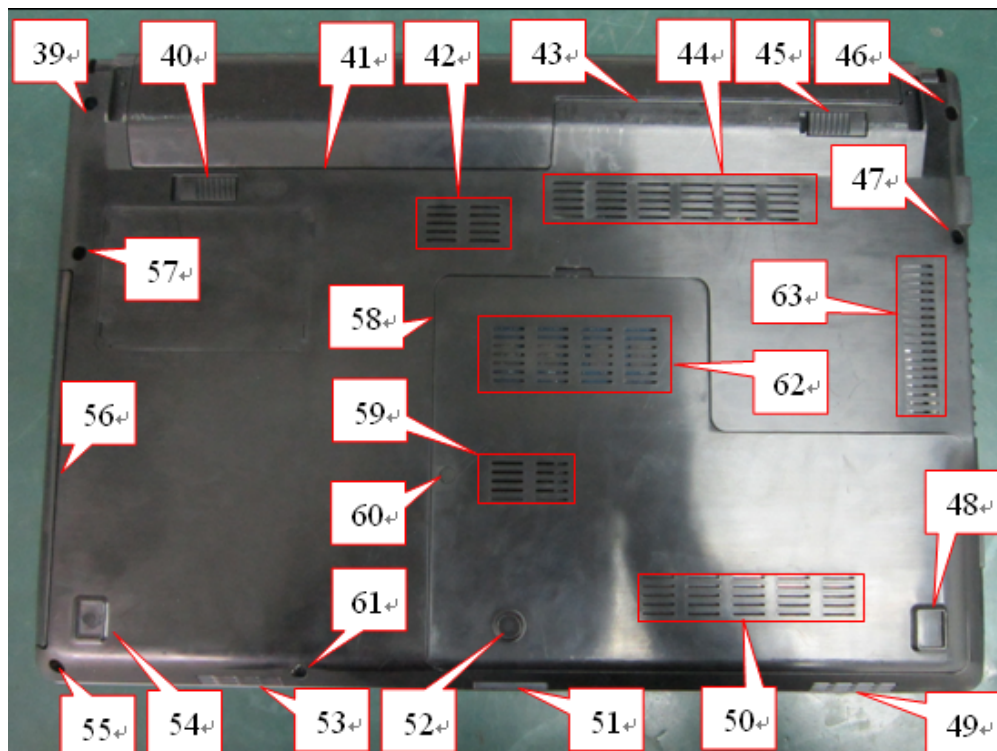
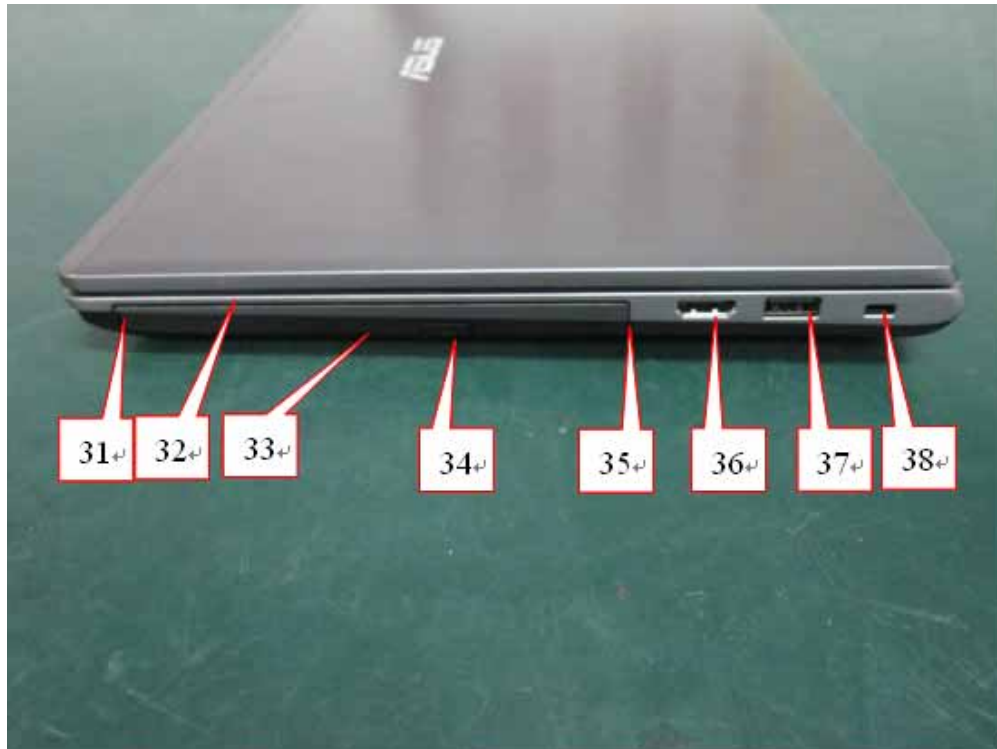


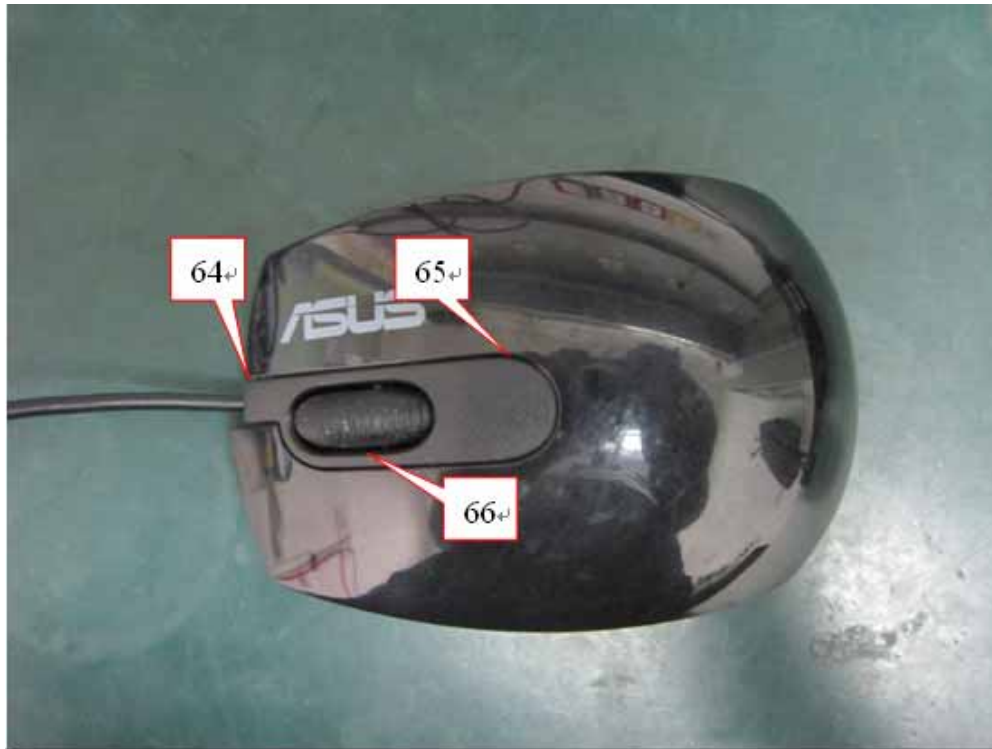
Electrostatic discharge Test Location  
(Mode 2,4,6,10)

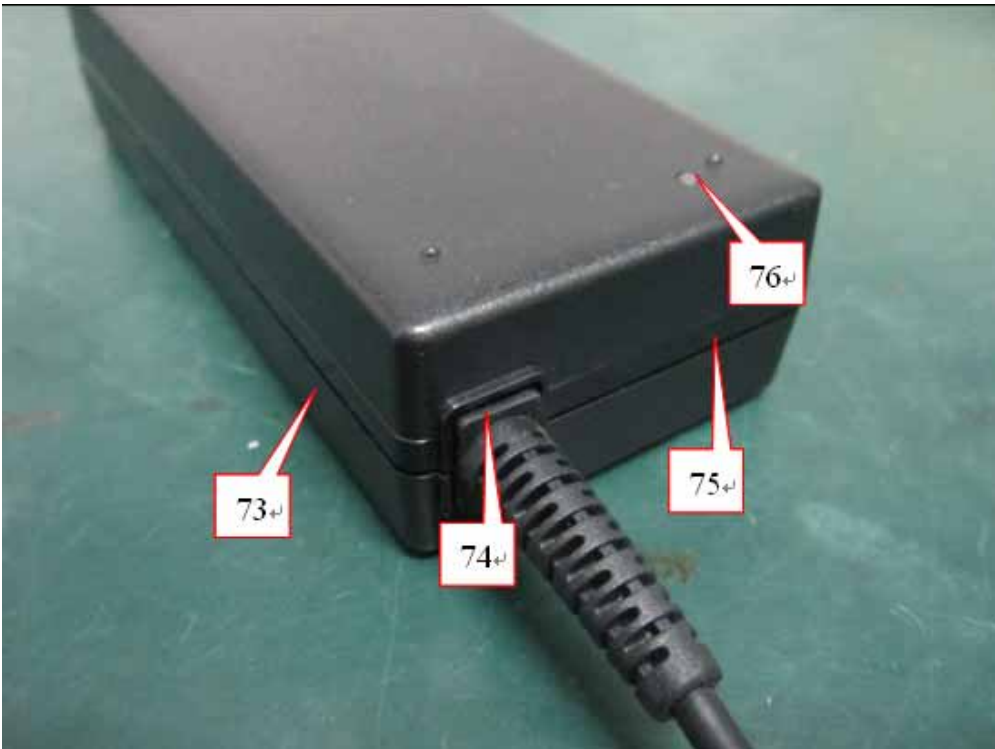
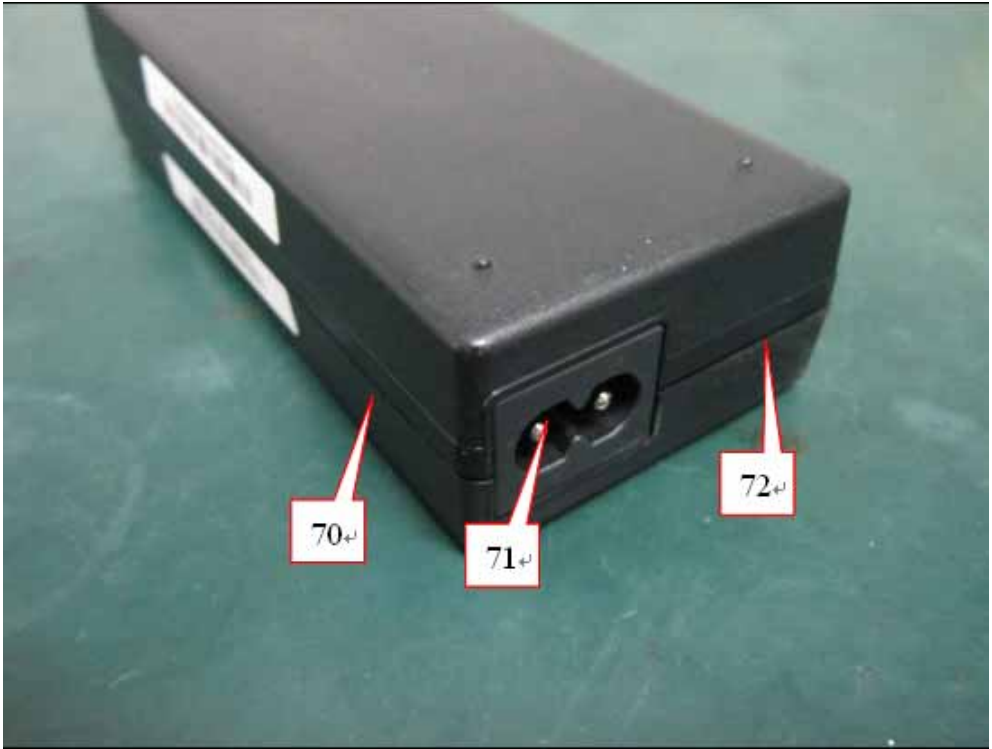




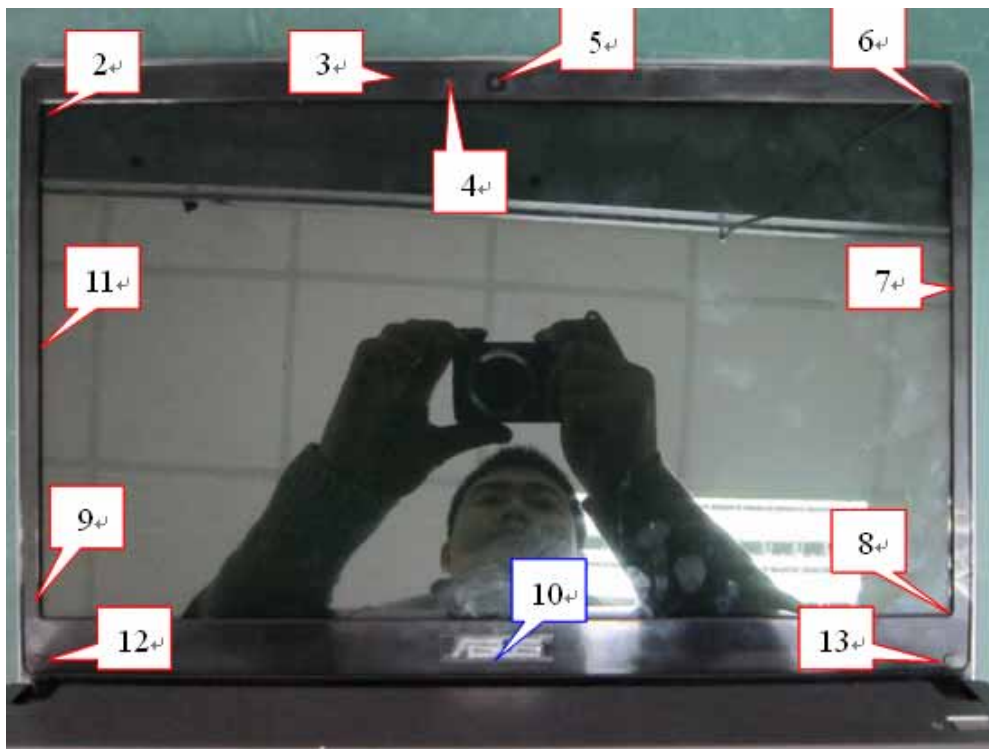
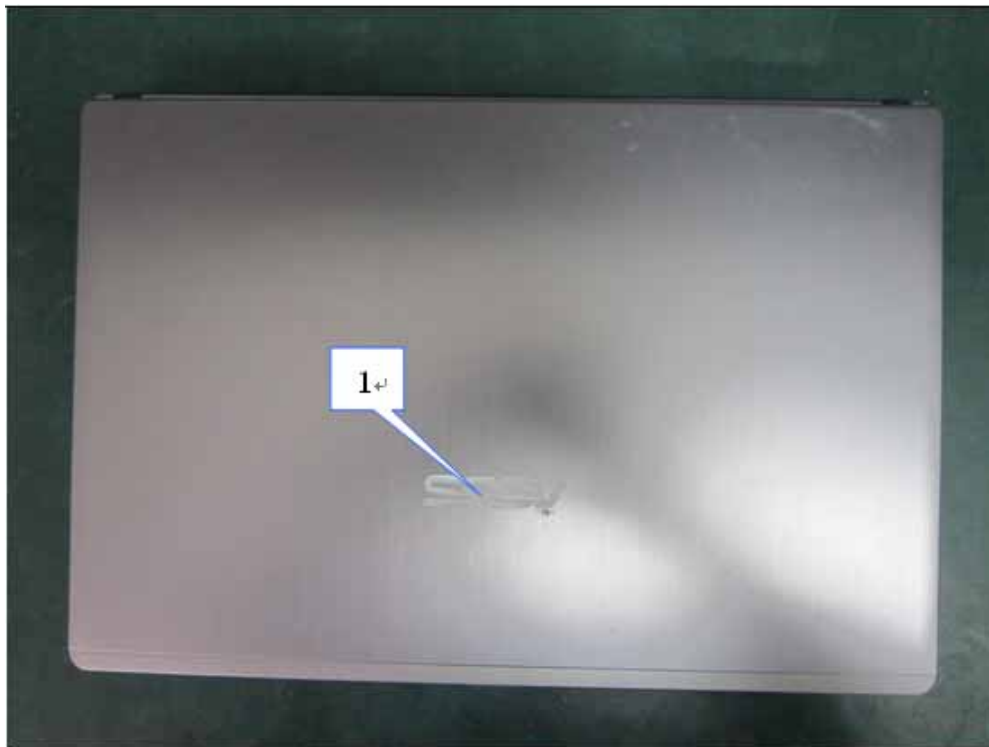


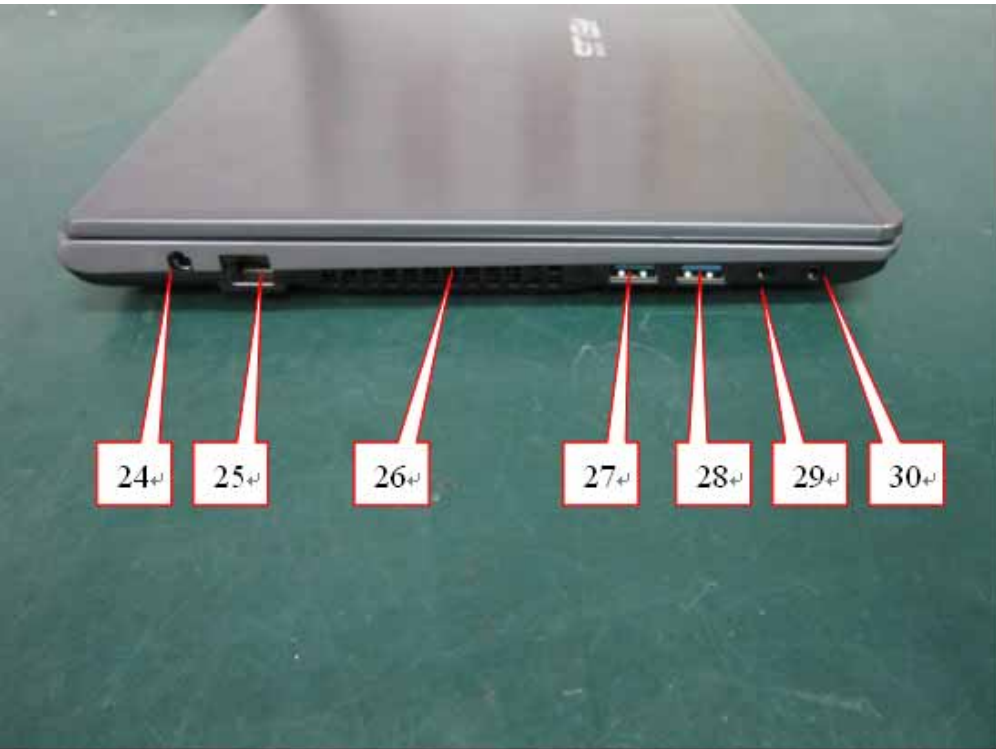
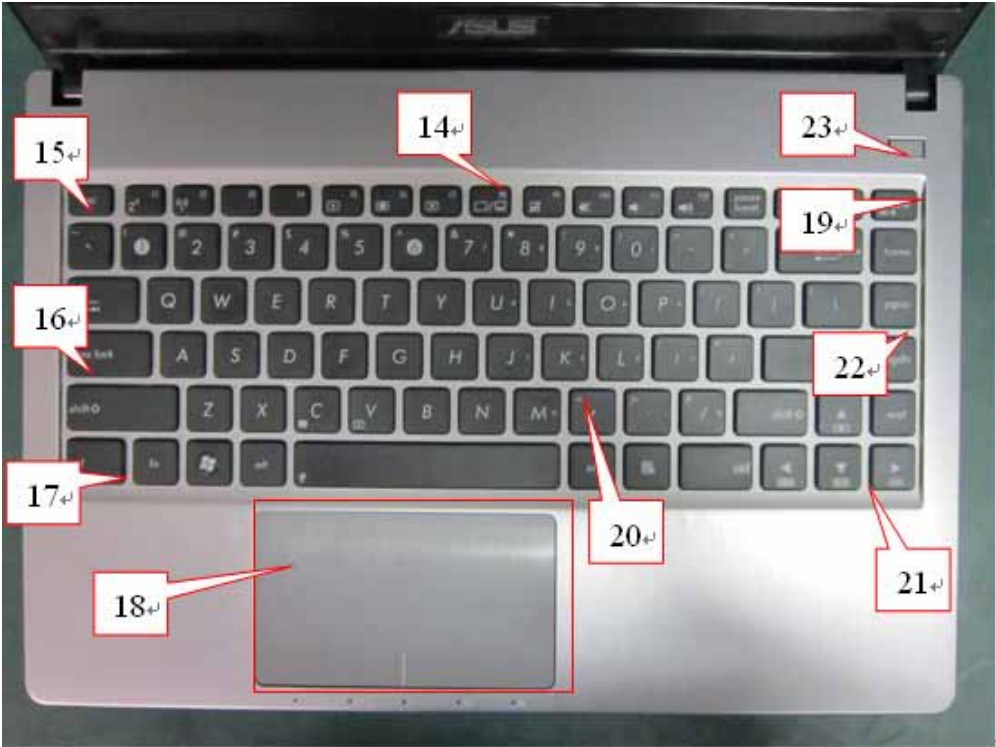


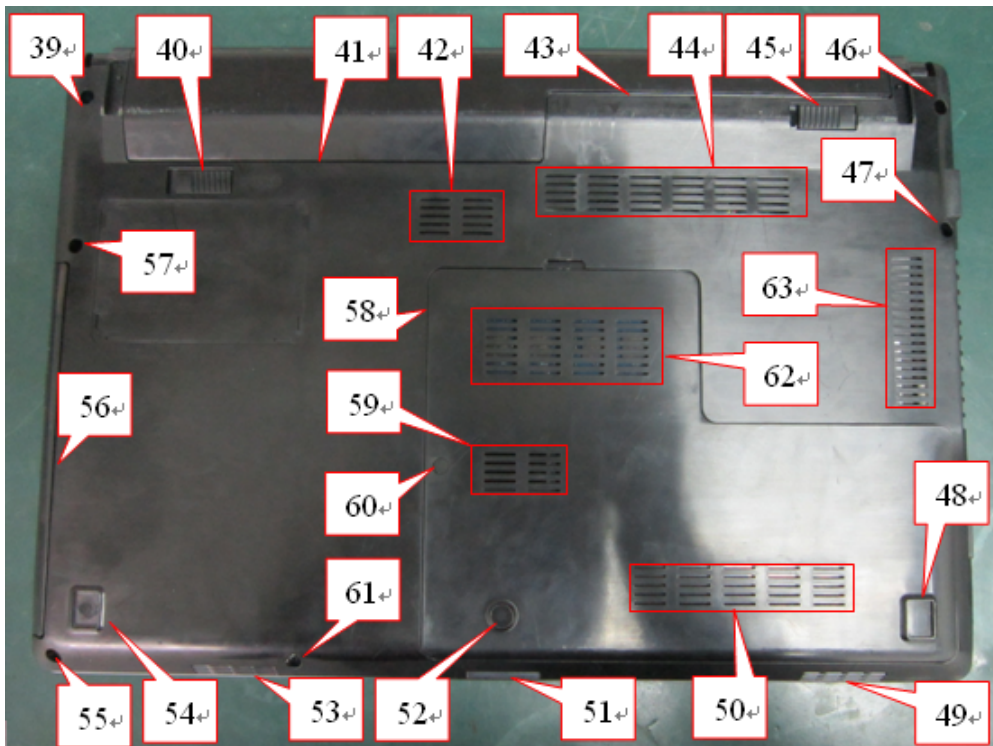
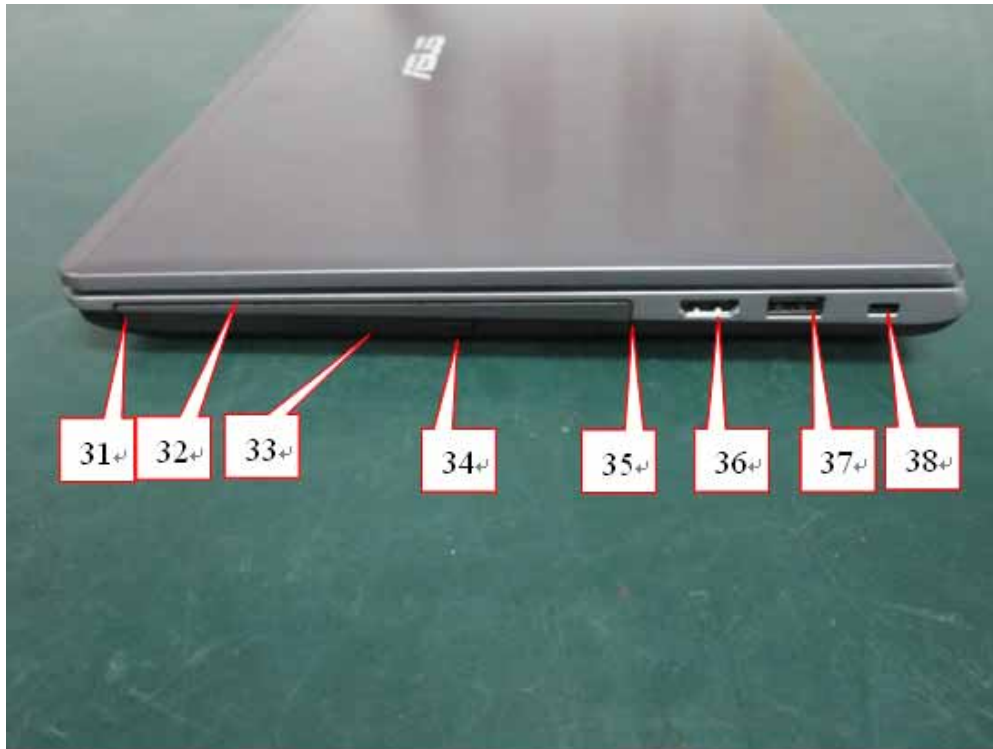




Electrostatic discharge Test Location  
(Mode 7,11)

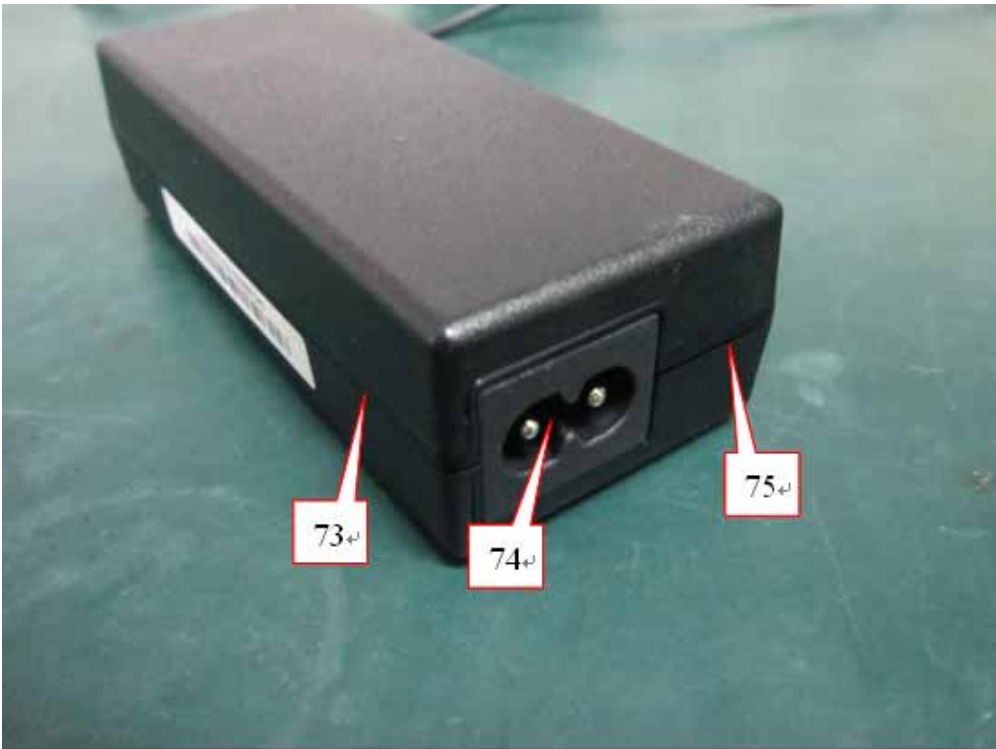


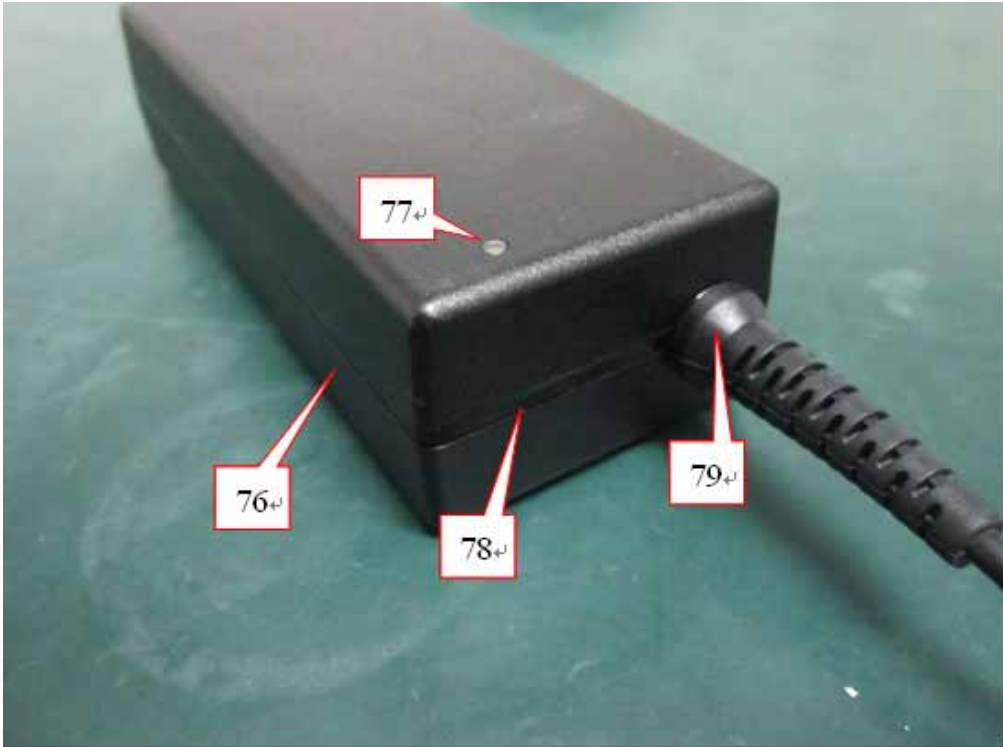










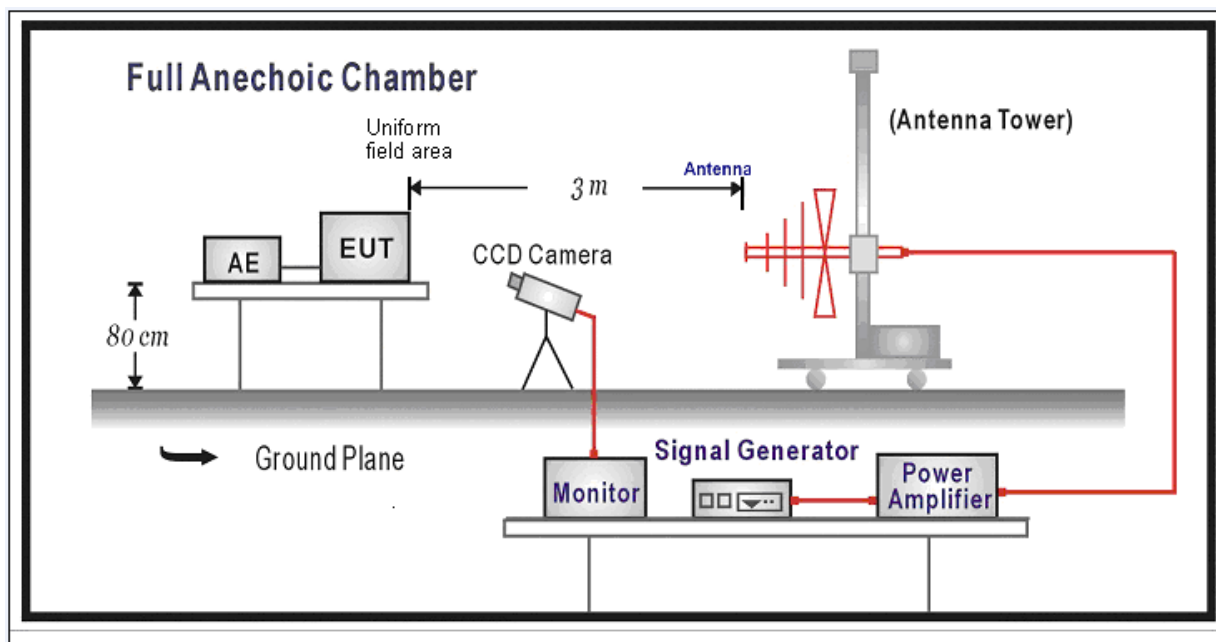


**8. Radio-frequency electromagnetic field**

**8.1. Test Specification**

According to EMC Standard: IEC 61000-4-3

**8.2. Test Setup**



**8.3. Limit**

Environmental phenomenon	Test specification	Units	Performance criterion
Enclosure port			
Radio-frequency electromagnetic field	80 - 1000	MHz	A
	3	V/m (unmodulated, r.m.s)	
	80	% AM (1kHz)	
NOTE: The frequency range is scanned as specified. However, when specified in Annex A, an additional comprehensive functional test shall be carried out at a limited number of frequencies. The selected frequencies are: 80, 120, 160, 230, 434, 460, 600, 863 and 900MHz (± 1%).			

**8.4. Test Procedure**

The EUT and load, which are placed on a table that is 0.8 meter above ground, are placed with one coincident with the calibration plane such that the distance from antenna to the EUT was 3 meters.

Both horizontal and vertical polarization of the antenna and four sides of the EUT are set on measurement.

In order to judge the EUT performance, a CCD camera is used to monitor EUT screen.

All the scanning conditions are as follows:

	Condition of Test	Remarks
1.	Field Strength	3V/m
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	80 - 1000MHz
4.	Dwell Time	3 Seconds
5.	Frequency Step Size $\Delta f$	1%

**8.5. Deviation from Test Standard**

No deviation.

**8.6. Test Result**

Test Site	AC4	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Polarity	Position	Field Strength (V/m)	Test Result Criterion	Observation	Result
80-1000	Horizontal	Front	3	A	Note	Pass
80-1000	Vertical	Front	3	A	Note	Pass
80-1000	Horizontal	Rear	3	A	Note	Pass
80-1000	Vertical	Rear	3	A	Note	Pass
80-1000	Horizontal	Left	3	A	Note	Pass
80-1000	Vertical	Left	3	A	Note	Pass
80-1000	Horizontal	Right	3	A	Note	Pass
80-1000	Vertical	Right	3	A	Note	Pass

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

Test Site	AC4	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Polarity	Position	Field Strength (V/m)	Test Result Criterion	Observation	Result
80-1000	Horizontal	Front	3	A	Note	Pass
80-1000	Vertical	Front	3	A	Note	Pass
80-1000	Horizontal	Rear	3	A	Note	Pass
80-1000	Vertical	Rear	3	A	Note	Pass
80-1000	Horizontal	Left	3	A	Note	Pass
80-1000	Vertical	Left	3	A	Note	Pass
80-1000	Horizontal	Right	3	A	Note	Pass
80-1000	Vertical	Right	3	A	Note	Pass

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

Test Site	AC4	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Polarity	Position	Field Strength (V/m)	Test Result Criterion	Observation	Result
80-1000	Horizontal	Front	3	A	Note	Pass
80-1000	Vertical	Front	3	A	Note	Pass
80-1000	Horizontal	Rear	3	A	Note	Pass
80-1000	Vertical	Rear	3	A	Note	Pass
80-1000	Horizontal	Left	3	A	Note	Pass
80-1000	Vertical	Left	3	A	Note	Pass
80-1000	Horizontal	Right	3	A	Note	Pass
80-1000	Vertical	Right	3	A	Note	Pass

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

Test Site	AC4	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Frequency (MHz)	Polarity	Position	Field Strength (V/m)	Test Result Criterion	Observation	Result
80-1000	Horizontal	Front	3	A	Note	Pass
80-1000	Vertical	Front	3	A	Note	Pass
80-1000	Horizontal	Rear	3	A	Note	Pass
80-1000	Vertical	Rear	3	A	Note	Pass
80-1000	Horizontal	Left	3	A	Note	Pass
80-1000	Vertical	Left	3	A	Note	Pass
80-1000	Horizontal	Right	3	A	Note	Pass
80-1000	Vertical	Right	3	A	Note	Pass

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



Test Site	AC4	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Polarity	Position	Field Strength (V/m)	Test Result Criterion	Observation	Result
80-1000	Horizontal	Front	3	A	Note	Pass
80-1000	Vertical	Front	3	A	Note	Pass
80-1000	Horizontal	Rear	3	A	Note	Pass
80-1000	Vertical	Rear	3	A	Note	Pass
80-1000	Horizontal	Left	3	A	Note	Pass
80-1000	Vertical	Left	3	A	Note	Pass
80-1000	Horizontal	Right	3	A	Note	Pass
80-1000	Vertical	Right	3	A	Note	Pass

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

Test Site	AC4	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

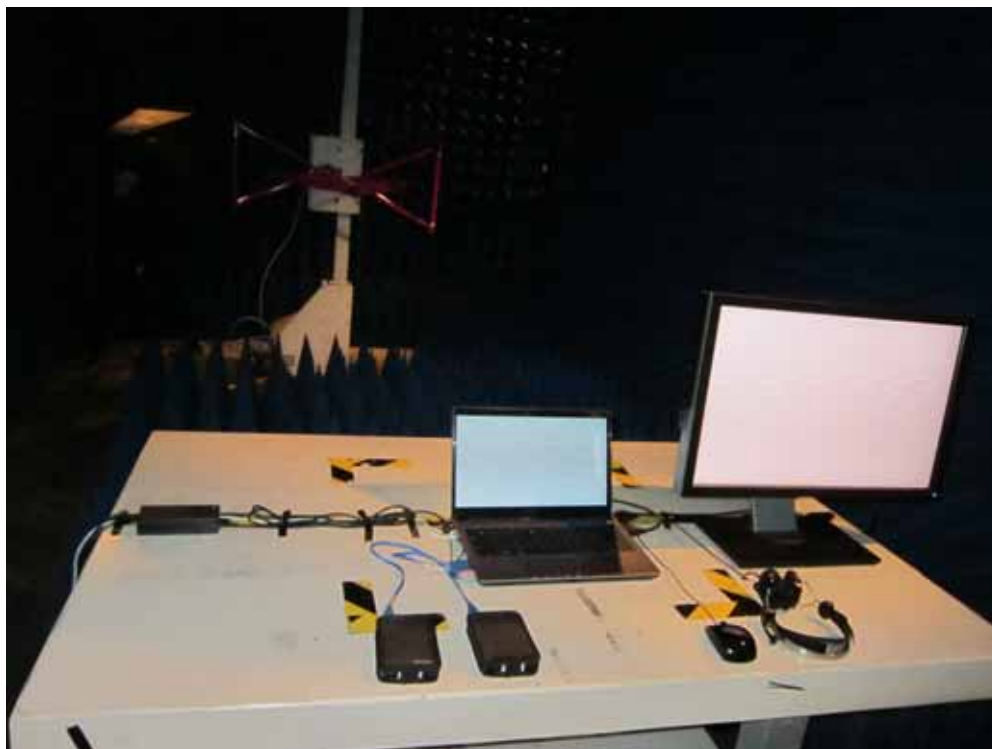
Frequency (MHz)	Polarity	Position	Field Strength (V/m)	Test Result Criterion	Observation	Result
80-1000	Horizontal	Front	3	A	Note	Pass
80-1000	Vertical	Front	3	A	Note	Pass
80-1000	Horizontal	Rear	3	A	Note	Pass
80-1000	Vertical	Rear	3	A	Note	Pass
80-1000	Horizontal	Left	3	A	Note	Pass
80-1000	Vertical	Left	3	A	Note	Pass
80-1000	Horizontal	Right	3	A	Note	Pass
80-1000	Vertical	Right	3	A	Note	Pass

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

**8.7. Test Photograph**

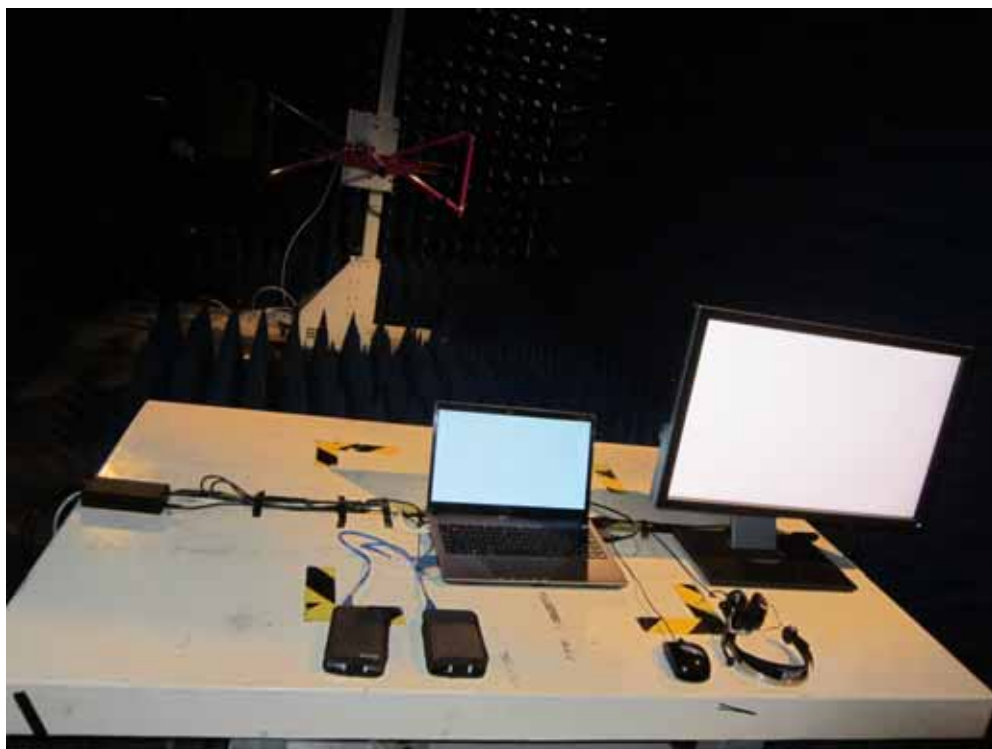
Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency electromagnetic field Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency electromagnetic field Test Setup



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency electromagnetic field Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Radio-frequency electromagnetic field Test Setup



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency electromagnetic field Test Setup



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Radio-frequency electromagnetic field Test Setup

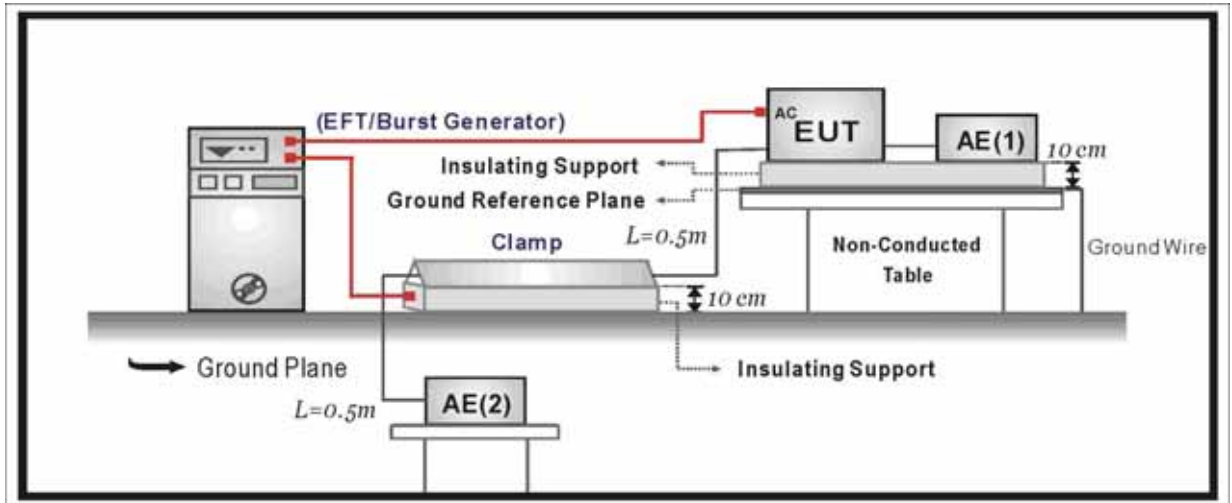


9. Electrical fast transients

9.1. Test Specification

According to EMC Standard: IEC 61000-4-4

9.2. Test Setup



9.3. Limit

Environmental phenomenon	Test specification	Units	Performance criterion
Input a.c. power ports			
Electrical fast transients	±1.0	kV (peak)	B
	5/50	Tr/Th (ns)	
	5	Repetition frequency (kHz)	
Input d.c. power ports			
Electrical fast transients	±0.5	kV (peak)	B
	5/50	Tr/Th (ns)	
	5	Repetition frequency (kHz)	
Signal ports and telecommunication ports (See Note)			
Electrical fast transients	±0.5	kV (peak)	B
	5/50	Tr/Th (ns)	
	5	Repetition frequency (kHz)	

NOTE :

1. Applicable only to cables which according to the manufacturer's specification supports communication on cable lengths greater than 3m.
2. Test applied to all lines simultaneously to earth (ground)
3. For xDSL equipment, the repetition frequency for EFT testing shall be 100 kHz (See EN 55024:2010 Annex H).

#### 9.4. Test Procedure

The EUT is placed on a table that is 0.8 meter height. A ground reference plane is placed on the table, and uses a 0.1m insulation between the EUT and ground reference plane.

The minimum area of the ground reference plane is 1m\*1m, and 0.65mm thick min, and projected beyond the EUT by at least 0.1m on all sides.

**For input a.c. and d.c. power ports:**

The EUT is connected to the power mains through a coupling device that directly couples the EFT/B interference signal.

Each of the line conductors is impressed with burst noise for 1 minute.

The length of the power lines between the coupling device and the EUT is 0.5m.

**For signal and telecommunication ports:**

The EFT interference signal is through a coupling clamp device couples to the signal of the EUT with burst noise for 1 minute.

The length of the signal lines between the coupling device and the EUT is 0.5m.

#### 9.5. Deviation from Test Standard

No deviation.

## 9.6. Test Result

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
L	+	1	60	Direct	A	Note	Pass
L	-	1	60	Direct	A	Note	Pass
N	+	1	60	Direct	A	Note	Pass
N	-	1	60	Direct	A	Note	Pass
L+N	+	1	60	Direct	A	Note	Pass
L+N	-	1	60	Direct	A	Note	Pass
Signal ports and telecommunication ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
LAN	+	0.5	60	Clamp	A	Note	Pass
LAN	-	0.5	60	Clamp	A	Note	Pass

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



Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
L	+	1	60	Direct	A	Note	Pass
L	-	1	60	Direct	A	Note	Pass
N	+	1	60	Direct	A	Note	Pass
N	-	1	60	Direct	A	Note	Pass
PE	+	1	60	Direct	A	Note	Pass
PE	-	1	60	Direct	A	Note	Pass
L+N+PE	+	1	60	Direct	A	Note	Pass
L+N+PE	-	1	60	Direct	A	Note	Pass
Signal ports and telecommunication ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
LAN	+	0.5	60	Clamp	A	Note	Pass
LAN	-	0.5	60	Clamp	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
L	+	1	60	Direct	A	Note	Pass
L	-	1	60	Direct	A	Note	Pass
N	+	1	60	Direct	A	Note	Pass
N	-	1	60	Direct	A	Note	Pass
PE	+	1	60	Direct	A	Note	Pass
PE	-	1	60	Direct	A	Note	Pass
L+N+PE	+	1	60	Direct	A	Note	Pass
L+N+PE	-	1	60	Direct	A	Note	Pass
Signal ports and telecommunication ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
LAN	+	0.5	60	Clamp	A	Note	Pass
LAN	-	0.5	60	Clamp	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
L	+	1	60	Direct	A	Note	Pass
L	-	1	60	Direct	A	Note	Pass
N	+	1	60	Direct	A	Note	Pass
N	-	1	60	Direct	A	Note	Pass
L+N	+	1	60	Direct	A	Note	Pass
L+N	-	1	60	Direct	A	Note	Pass
Signal ports and telecommunication ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
LAN	+	0.5	60	Clamp	A	Note	Pass
LAN	-	0.5	60	Clamp	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
L	+	1	60	Direct	A	Note	Pass
L	-	1	60	Direct	A	Note	Pass
N	+	1	60	Direct	A	Note	Pass
N	-	1	60	Direct	A	Note	Pass
PE	+	1	60	Direct	A	Note	Pass
PE	-	1	60	Direct	A	Note	Pass
L+N+PE	+	1	60	Direct	A	Note	Pass
L+N+PE	-	1	60	Direct	A	Note	Pass
Signal ports and telecommunication ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
LAN	+	0.5	60	Clamp	A	Note	Pass
LAN	-	0.5	60	Clamp	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Input a.c. power ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
L	+	1	60	Direct	A	Note	Pass
L	-	1	60	Direct	A	Note	Pass
N	+	1	60	Direct	A	Note	Pass
N	-	1	60	Direct	A	Note	Pass
PE	+	1	60	Direct	A	Note	Pass
PE	-	1	60	Direct	A	Note	Pass
L+N+PE	+	1	60	Direct	A	Note	Pass
L+N+PE	-	1	60	Direct	A	Note	Pass
Signal ports and telecommunication ports (Tr/Th: 5/50ns, Repetition Frequency: 5kHz)							
Inject Line	Polarity	Test Level (kV)	Test Duration (second)	Inject Method	Test Result Criterion	Observation	Result
LAN	+	0.5	60	Clamp	A	Note	Pass
LAN	-	0.5	60	Clamp	A	Note	Pass

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

**9.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (Input a.c. power ports)



Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (LAN)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (Input a.c. power ports)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (LAN)



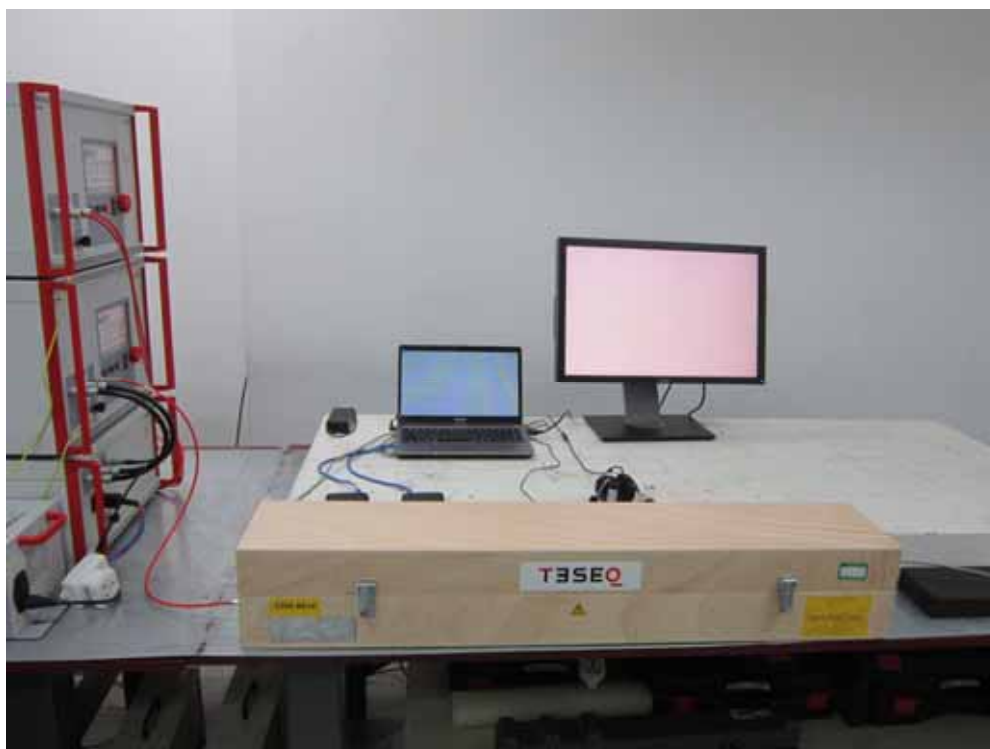
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (Input a.c. power ports)



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (LAN)





Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (Input a.c. power ports)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (LAN)



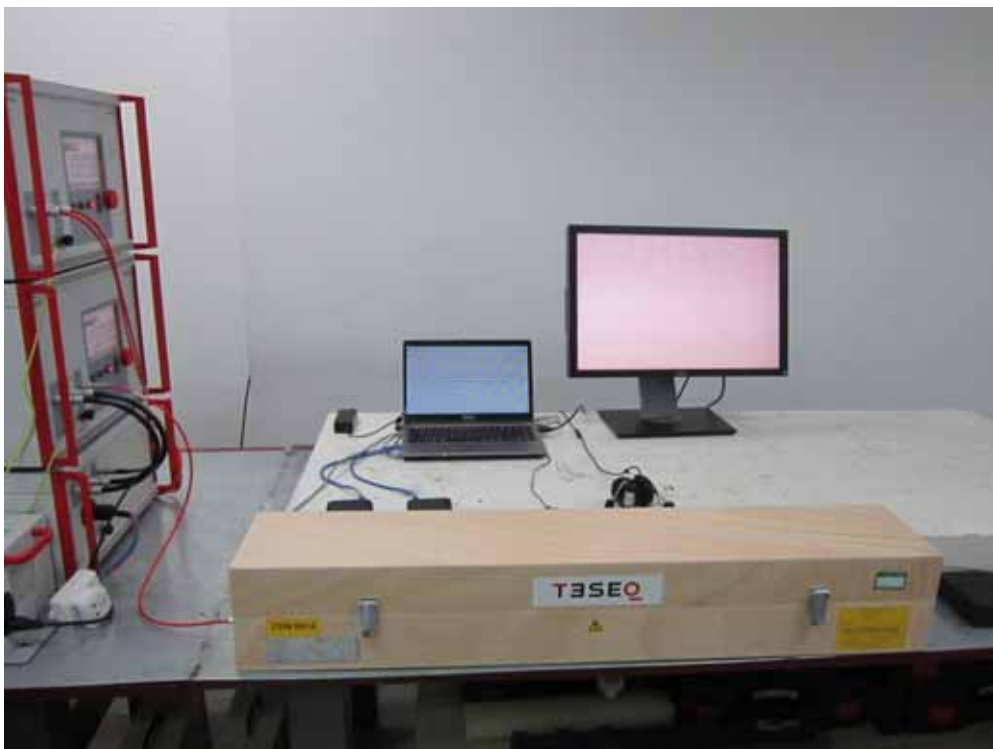
Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (Input a.c. power ports)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (LAN)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (Input a.c. power ports)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Electrical fast transients Test Setup (LAN)

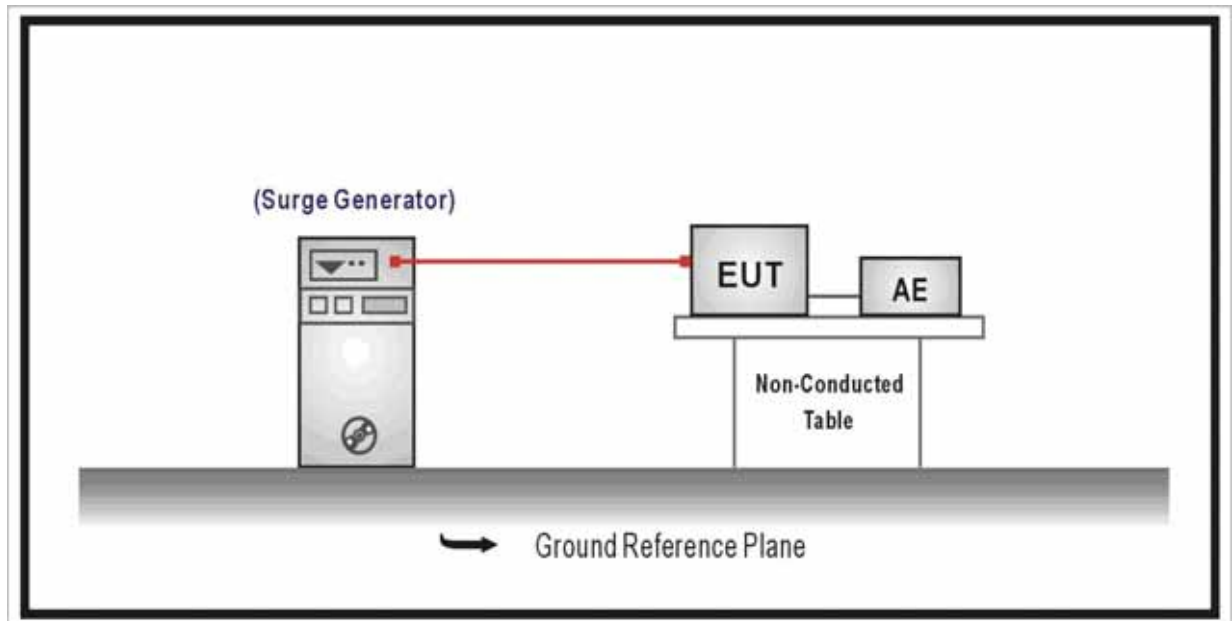


## 10. Surges

### 10.1. Test Specification

According to EMC Standard: IEC 61000-4-5

### 10.2. Test Setup



10.3. Limit

Environmental phenomenon	Test specification	Units	Performance criterion
Input a.c. power ports (See Note 1)			
Surges	1.2/50 (8/20)	Tr/Th (us)	B
	1 line to line	kV (peak)	
	2 line to earth (ground)	kV (peak)	
Input d.c. power ports (See Note 2)			
Surges	1.2/50 (8/20)	Tr/Th (us)	B
	0.5	kV (peak)	
Signal ports and telecommunication ports (See Note 2, 3, 4 and 5)			
Surges Line to Ground	10/700	Tr/Th (us)	C
	1	kV (peak)	
	10/700	Tr/Th (us)	C
4	kV (peak)		
<p>NOTE 1: When the manufacturer specifies protection measures and it is impractical to simulate these measures during the tests, then the applied test levels shall be reduced to 0.5kV and 1kV.</p> <p>NOTE 2: Applicable only to ports which according to the manufacturer's specification may connect directly to outdoor cables.</p> <p>NOTE 3: For ports where primary protection is intended, surges are applied at voltages up to 4 kV with the primary protectors fitted. Otherwise the 1 kV test level is applied without primary protection in place.</p> <p>NOTE 4: Test applied to all lines simultaneously to earth (ground).</p> <p>NOTE 5: Where the coupling network for the 10/700 <math>\mu</math>s waveform affects the functioning of high speed data ports, the test shall be carried out using a 1,2/50 (8/20) <math>\mu</math>s waveform and appropriate coupling network.</p>			

#### 10.4. Test Procedure

The EUT is placed on a table that is 0.8 meter above a metal ground plane measured 1m\*1m minimum and 0.65mm thick minimum and projected beyond the EUT by at least 0.1m on all sides. The length of power cord between the coupling device and the EUT shall be 2m or less.

**For input a.c. and d.c. power ports:**

The EUT is connected to the power mains through a coupling device that directly couples the surge interference signal.

The surge noise shall be applied synchronized to the voltage phase at 0<sup>o</sup>, 90<sup>o</sup>, 180<sup>o</sup>, 270<sup>o</sup> and the peak value of the a.c. voltage wave. (Positive and negative)

Each of Line to Earth and Line to Line is impressed with a sequence of five surge voltages with interval of 1 minute.

**For signal and telecommunication ports:**

The signal line of EUT is connected to coupling and decoupling network that directly couples the surge interference signal.

Only Line to ground is impressed with a sequence of five surge voltages with interval of 1 minute.

#### 10.5. Deviation from Test Standard

No deviation.

**10.6. Test Result**

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Inject Line	Polarity	Angle (degree)	Test Level (kV)	Test Interval (second)	Test Result Criterion	Observation	Result
L+N	+	0	1	60	A	Note	Pass
L+N	-	0	1	60	A	Note	Pass
L+N	+	90	1	60	A	Note	Pass
L+N	-	90	1	60	A	Note	Pass
L+N	+	180	1	60	A	Note	Pass
L+N	-	180	1	60	A	Note	Pass
L+N	+	270	1	60	A	Note	Pass
L+N	-	270	1	60	A	Note	Pass
L+PE	+	0	2	60	A	Note	Pass
L+PE	-	0	2	60	A	Note	Pass
L+PE	+	90	2	60	A	Note	Pass
L+PE	-	90	2	60	A	Note	Pass
L+PE	+	180	2	60	A	Note	Pass
L+PE	-	180	2	60	A	Note	Pass
L+PE	+	270	2	60	A	Note	Pass
L+PE	-	270	2	60	A	Note	Pass
N+PE	+	0	2	60	A	Note	Pass
N+PE	-	0	2	60	A	Note	Pass
N+PE	+	90	2	60	A	Note	Pass
N+PE	-	90	2	60	A	Note	Pass
N+PE	+	180	2	60	A	Note	Pass
N+PE	-	180	2	60	A	Note	Pass
N+PE	+	270	2	60	A	Note	Pass
N+PE	-	270	2	60	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Inject Line	Polarity	Angle (degree)	Test Level (kV)	Test Interval (second)	Test Result Criterion	Observation	Result
L+N	+	0	1	60	A	Note	Pass
L+N	-	0	1	60	A	Note	Pass
L+N	+	90	1	60	A	Note	Pass
L+N	-	90	1	60	A	Note	Pass
L+N	+	180	1	60	A	Note	Pass
L+N	-	180	1	60	A	Note	Pass
L+N	+	270	1	60	A	Note	Pass
L+N	-	270	1	60	A	Note	Pass
L+PE	+	0	2	60	A	Note	Pass
L+PE	-	0	2	60	A	Note	Pass
L+PE	+	90	2	60	A	Note	Pass
L+PE	-	90	2	60	A	Note	Pass
L+PE	+	180	2	60	A	Note	Pass
L+PE	-	180	2	60	A	Note	Pass
L+PE	+	270	2	60	A	Note	Pass
L+PE	-	270	2	60	A	Note	Pass
N+PE	+	0	2	60	A	Note	Pass
N+PE	-	0	2	60	A	Note	Pass
N+PE	+	90	2	60	A	Note	Pass
N+PE	-	90	2	60	A	Note	Pass
N+PE	+	180	2	60	A	Note	Pass
N+PE	-	180	2	60	A	Note	Pass
N+PE	+	270	2	60	A	Note	Pass
N+PE	-	270	2	60	A	Note	Pass

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



Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Inject Line	Polarity	Angle (degree)	Test Level (kV)	Test Interval (second)	Test Result Criterion	Observation	Result
L+N	+	0	1	60	A	Note	Pass
L+N	-	0	1	60	A	Note	Pass
L+N	+	90	1	60	A	Note	Pass
L+N	-	90	1	60	A	Note	Pass
L+N	+	180	1	60	A	Note	Pass
L+N	-	180	1	60	A	Note	Pass
L+N	+	270	1	60	A	Note	Pass
L+N	-	270	1	60	A	Note	Pass
L+PE	+	0	2	60	A	Note	Pass
L+PE	-	0	2	60	A	Note	Pass
L+PE	+	90	2	60	A	Note	Pass
L+PE	-	90	2	60	A	Note	Pass
L+PE	+	180	2	60	A	Note	Pass
L+PE	-	180	2	60	A	Note	Pass
L+PE	+	270	2	60	A	Note	Pass
L+PE	-	270	2	60	A	Note	Pass
N+PE	+	0	2	60	A	Note	Pass
N+PE	-	0	2	60	A	Note	Pass
N+PE	+	90	2	60	A	Note	Pass
N+PE	-	90	2	60	A	Note	Pass
N+PE	+	180	2	60	A	Note	Pass
N+PE	-	180	2	60	A	Note	Pass
N+PE	+	270	2	60	A	Note	Pass
N+PE	-	270	2	60	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Inject Line	Polarity	Angle (degree)	Test Level (kV)	Test Interval (second)	Test Result Criterion	Observation	Result
L+N	+	0	1	60	A	Note	Pass
L+N	-	0	1	60	A	Note	Pass
L+N	+	90	1	60	A	Note	Pass
L+N	-	90	1	60	A	Note	Pass
L+N	+	180	1	60	A	Note	Pass
L+N	-	180	1	60	A	Note	Pass
L+N	+	270	1	60	A	Note	Pass
L+N	-	270	1	60	A	Note	Pass
L+PE	+	0	2	60	A	Note	Pass
L+PE	-	0	2	60	A	Note	Pass
L+PE	+	90	2	60	A	Note	Pass
L+PE	-	90	2	60	A	Note	Pass
L+PE	+	180	2	60	A	Note	Pass
L+PE	-	180	2	60	A	Note	Pass
L+PE	+	270	2	60	A	Note	Pass
L+PE	-	270	2	60	A	Note	Pass
N+PE	+	0	2	60	A	Note	Pass
N+PE	-	0	2	60	A	Note	Pass
N+PE	+	90	2	60	A	Note	Pass
N+PE	-	90	2	60	A	Note	Pass
N+PE	+	180	2	60	A	Note	Pass
N+PE	-	180	2	60	A	Note	Pass
N+PE	+	270	2	60	A	Note	Pass
N+PE	-	270	2	60	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Inject Line	Polarity	Angle (degree)	Test Level (kV)	Test Interval (second)	Test Result Criterion	Observation	Result
L+N	+	0	1	60	A	Note	Pass
L+N	-	0	1	60	A	Note	Pass
L+N	+	90	1	60	A	Note	Pass
L+N	-	90	1	60	A	Note	Pass
L+N	+	180	1	60	A	Note	Pass
L+N	-	180	1	60	A	Note	Pass
L+N	+	270	1	60	A	Note	Pass
L+N	-	270	1	60	A	Note	Pass
L+PE	+	0	2	60	A	Note	Pass
L+PE	-	0	2	60	A	Note	Pass
L+PE	+	90	2	60	A	Note	Pass
L+PE	-	90	2	60	A	Note	Pass
L+PE	+	180	2	60	A	Note	Pass
L+PE	-	180	2	60	A	Note	Pass
L+PE	+	270	2	60	A	Note	Pass
L+PE	-	270	2	60	A	Note	Pass
N+PE	+	0	2	60	A	Note	Pass
N+PE	-	0	2	60	A	Note	Pass
N+PE	+	90	2	60	A	Note	Pass
N+PE	-	90	2	60	A	Note	Pass
N+PE	+	180	2	60	A	Note	Pass
N+PE	-	180	2	60	A	Note	Pass
N+PE	+	270	2	60	A	Note	Pass
N+PE	-	270	2	60	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	40%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Inject Line	Polarity	Angle (degree)	Test Level (kV)	Test Interval (second)	Test Result Criterion	Observation	Result
L+N	+	0	1	60	A	Note	Pass
L+N	-	0	1	60	A	Note	Pass
L+N	+	90	1	60	A	Note	Pass
L+N	-	90	1	60	A	Note	Pass
L+N	+	180	1	60	A	Note	Pass
L+N	-	180	1	60	A	Note	Pass
L+N	+	270	1	60	A	Note	Pass
L+N	-	270	1	60	A	Note	Pass
L+PE	+	0	2	60	A	Note	Pass
L+PE	-	0	2	60	A	Note	Pass
L+PE	+	90	2	60	A	Note	Pass
L+PE	-	90	2	60	A	Note	Pass
L+PE	+	180	2	60	A	Note	Pass
L+PE	-	180	2	60	A	Note	Pass
L+PE	+	270	2	60	A	Note	Pass
L+PE	-	270	2	60	A	Note	Pass
N+PE	+	0	2	60	A	Note	Pass
N+PE	-	0	2	60	A	Note	Pass
N+PE	+	90	2	60	A	Note	Pass
N+PE	-	90	2	60	A	Note	Pass
N+PE	+	180	2	60	A	Note	Pass
N+PE	-	180	2	60	A	Note	Pass
N+PE	+	270	2	60	A	Note	Pass
N+PE	-	270	2	60	A	Note	Pass

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

**10.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Surges Test Setup (Input a.c. power ports)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Surges Test Setup (Input a.c. power ports)



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Surges Test Setup (Input a.c. power ports)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Surges Test Setup (Input a.c. power ports)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Surges Test Setup (Input a.c. power ports)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Surges Test Setup (Input a.c. power ports)



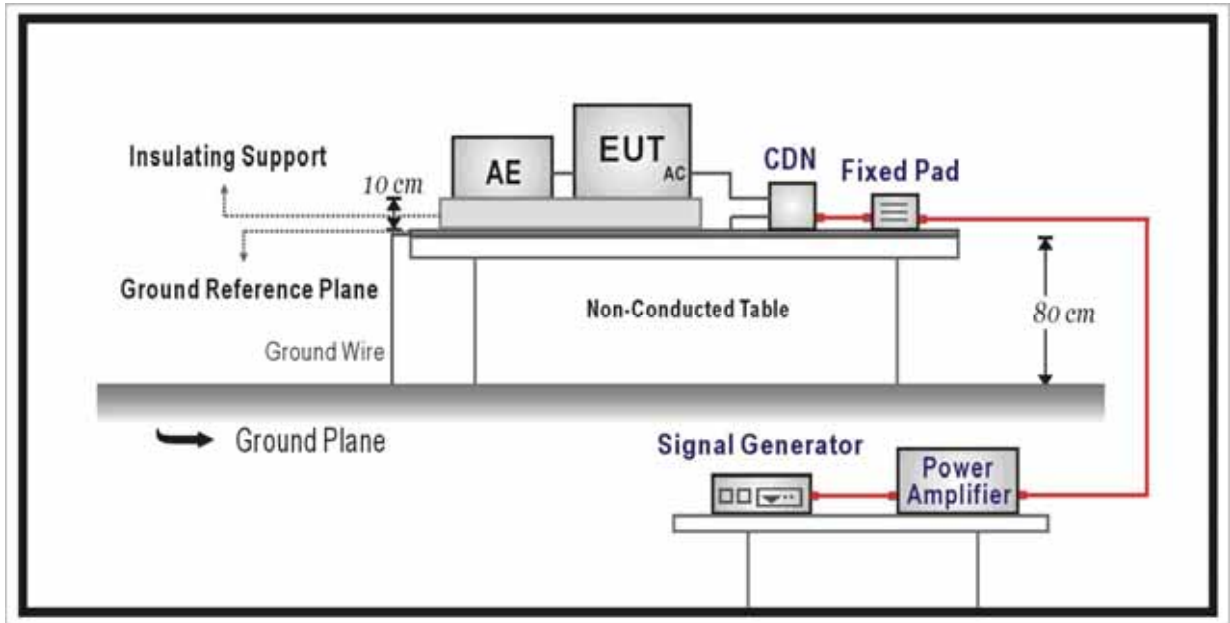
## 11. Radio-frequency continuous conducted

### 11.1. Test Specification

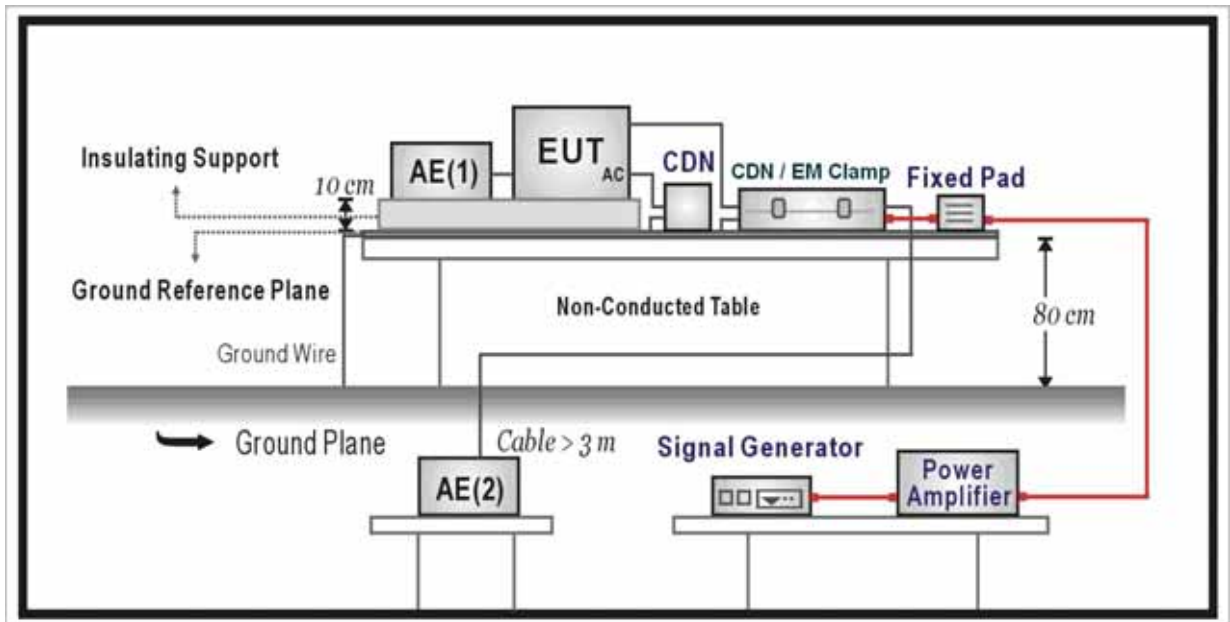
According to EMC Standard: IEC 61000-4-6

### 11.2. Test Setup

#### CDN Test Setup



#### EM Clamp Test Setup





11.3. Limit

Environmental phenomenon	Test specification	Units	Performance criterion
Input a.c. power ports (See Note 1)			
Radio-frequency	0.15 - 80	MHz	A
continuous	3	V (unmodulated, r.m.s)	
conducted	80	% AM (1kHz)	
Input d.c. power ports (See Note 1)			
Radio-frequency	0.15 - 80	MHz	A
continuous	3	V (unmodulated, r.m.s)	
conducted	80	% AM (1kHz)	
Signal ports and telecommunication ports (See Note 1 and 2)			
Radio-frequency	0.15 - 80	MHz	A
continuous	3	V (unmodulated, r.m.s)	
conducted	80	% AM (1kHz)	
NOTE 1: The frequency range is scanned as specified. However, when specified in Annex A, an additional comprehensive functional test shall be carried out at a limited number of frequencies. The selected frequencies for conducted test are: 0.2; 1; 7.1; 13.56; 21; 27.12 and 40.68MHz (± 1%).			
NOTE 2: Applicable only to cables which according to the manufacturer's specification supports communication on cable lengths greater than 3m.			

### 11.4. Test Procedure

The EUT is placed on a table that is 0.8 meter height, and a ground reference plane on the table, EUT is placed upon table and use a 0.1m insulation between the EUT and ground reference plane.

**For input a.c. and d.c. power ports:**

The EUT is connected to the power mains through a coupling and decoupling networks for power supply lines. And directly couples the disturbances signal into EUT.

Used CDN-M2 for two wires or CDN-M3 for three wires.

**For signal and telecommunication ports:**

The disturbance signal is through a coupling and decoupling networks (CDN) or EM-clamp device couples to the signal and telecommunication lines of the EUT.

	Condition of Test	Remarks
1.	Field Strength	3V
2.	Radiated Signal	AM 80% Modulated with 1kHz
3.	Scanning Frequency	0.15 - 80MHz
4.	Dwell Time	3 Seconds
5.	Frequency Step Size $\Delta f$	1%

### 11.5. Deviation from Test Standard

No deviation.

**11.6. Test Result**

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Inject Voltage (V)	Inject Ports	Inject Method	Test Result Criterion	Observation	Result
0.15-80	3	AC Mains	CDN	A	Note	Pass
0.15-80	3	LAN (10/100Mbps)	CDN T400-LAN	A	Note	Pass
0.15-80	3	LAN (1000Mbps)	CDN T800-LAN	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Inject Voltage (V)	Inject Ports	Inject Method	Test Result Criterion	Observation	Result
0.15-80	3	AC Mains	CDN	A	Note	Pass
0.15-80	3	LAN (10/100Mbps)	CDN T400-LAN	A	Note	Pass
0.15-80	3	LAN (1000Mbps)	CDN T800-LAN	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Inject Voltage (V)	Inject Ports	Inject Method	Test Result Criterion	Observation	Result
0.15-80	3	AC Mains	CDN	A	Note	Pass
0.15-80	3	LAN (10/100Mbps)	CDN T400-LAN	A	Note	Pass
0.15-80	3	LAN (1000Mbps)	CDN T800-LAN	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Frequency (MHz)	Inject Voltage (V)	Inject Ports	Inject Method	Test Result Criterion	Observation	Result
0.15-80	3	AC Mains	CDN	A	Note	Pass
0.15-80	3	LAN (10/100Mbps)	CDN T400-LAN	A	Note	Pass
0.15-80	3	LAN (1000Mbps)	CDN T800-LAN	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Frequency (MHz)	Inject Voltage (V)	Inject Ports	Inject Method	Test Result Criterion	Observation	Result
0.15-80	3	AC Mains	CDN	A	Note	Pass
0.15-80	3	LAN (10/100Mbps)	CDN T400-LAN	A	Note	Pass
0.15-80	3	LAN (1000Mbps)	CDN T800-LAN	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Frequency (MHz)	Inject Voltage (V)	Inject Ports	Inject Method	Test Result Criterion	Observation	Result
0.15-80	3	AC Mains	CDN	A	Note	Pass
0.15-80	3	LAN (10/100Mbps)	CDN T400-LAN	A	Note	Pass
0.15-80	3	LAN (1000Mbps)	CDN T800-LAN	A	Note	Pass

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



**11.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (Input a.c. power ports)



Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (LAN)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (Input a.c. power ports)



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (LAN)



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (Input a.c. power ports)



Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (LAN)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (Input a.c. power ports)



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (LAN)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (Input a.c. power ports)



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (LAN)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (Input a.c. power ports)



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Radio-frequency continuous conducted Test Setup (LAN)

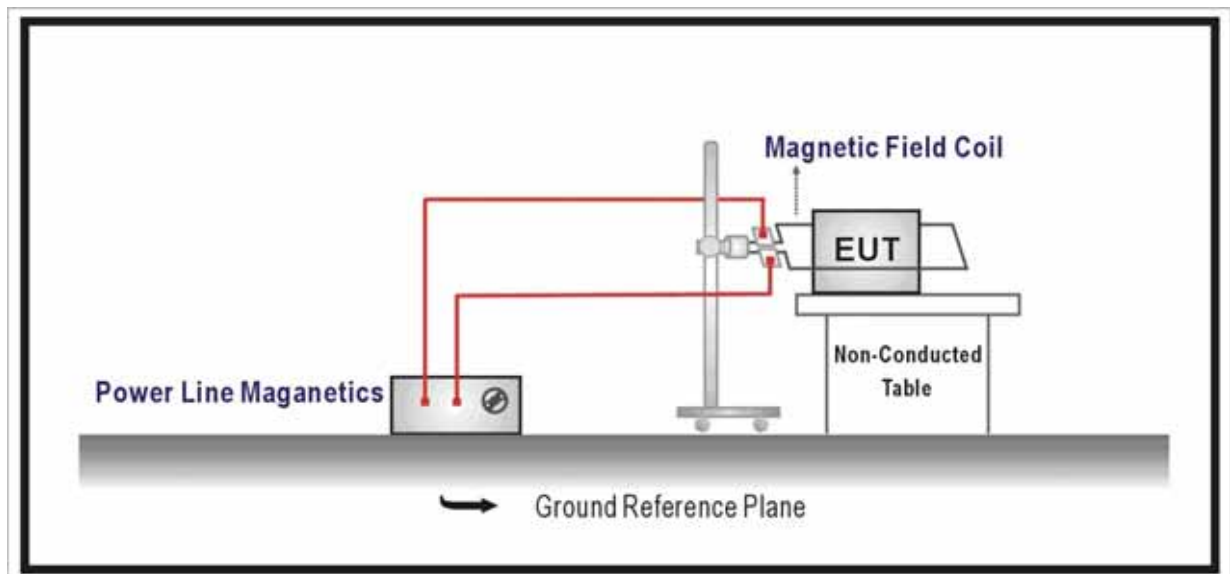


## 12. Power-frequency magnetic field

### 12.1. Test Specification

According to EMC Standard: IEC 61000-4-8

### 12.2. Test Setup



**12.3. Limit**

Environmental phenomenon	Test specification	Units	Performance criterion
Enclosure port			
Power-frequency magnetic field	50 1	Hz A/m (r.m.s)	A
NOTE: Applicable only to equipment containing devices susceptible to magnetic fields, such as CRT monitors, Hall elements, electrodynamic microphones, magnetic field sensors, etc.			

**12.4. Test Procedure**

The EUT is placed on a table which is 0.8 meter above a metal ground plane measured at least 1m\*1m minimum. The test magnetic field shall be placed at central of the induction coil. The test magnetic Field shall be applied 10 minutes by the immersion method to the EUT, and the induction coil shall be rotated by 90° in order to expose the EUT to the test field with different orientation (X, Y, Z Orientations).

**12.5. Deviation from Test Standard**

No deviation.



**12.6. Test Result**

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Test Coil Position	Frequency (Hz)	Magnetic Strength (A/m)	Test Result Criterion	Observation	Result
X Axis	50	1	A	Note	Pass
Y Axis	50	1	A	Note	Pass
Z Axis	50	1	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Test Coil Position	Frequency (Hz)	Magnetic Strength (A/m)	Test Result Criterion	Observation	Result
X Axis	50	1	A	Note	Pass
Y Axis	50	1	A	Note	Pass
Z Axis	50	1	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Test Coil Position	Frequency (Hz)	Magnetic Strength (A/m)	Test Result Criterion	Observation	Result
X Axis	50	1	A	Note	Pass
Y Axis	50	1	A	Note	Pass
Z Axis	50	1	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Test Coil Position	Frequency (Hz)	Magnetic Strength (A/m)	Test Result Criterion	Observation	Result
X Axis	50	1	A	Note	Pass
Y Axis	50	1	A	Note	Pass
Z Axis	50	1	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Test Coil Position	Frequency (Hz)	Magnetic Strength (A/m)	Test Result Criterion	Observation	Result
X Axis	50	1	A	Note	Pass
Y Axis	50	1	A	Note	Pass
Z Axis	50	1	A	Note	Pass

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

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 230V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

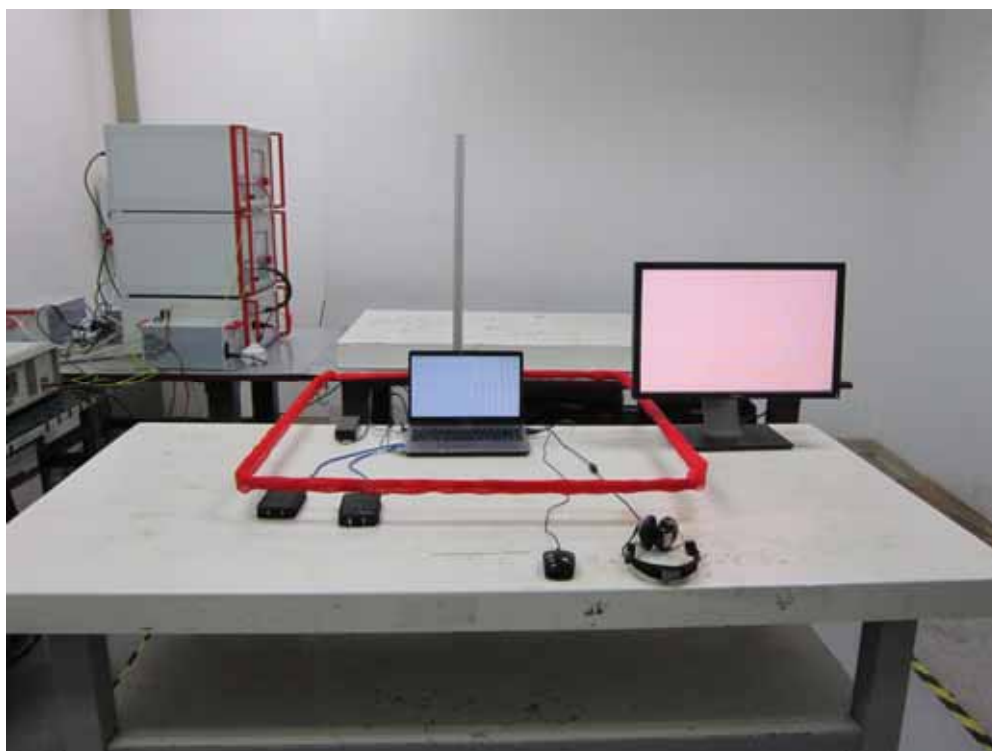
Test Coil Position	Frequency (Hz)	Magnetic Strength (A/m)	Test Result Criterion	Observation	Result
X Axis	50	1	A	Note	Pass
Y Axis	50	1	A	Note	Pass
Z Axis	50	1	A	Note	Pass

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

**12.7. Test Photograph**

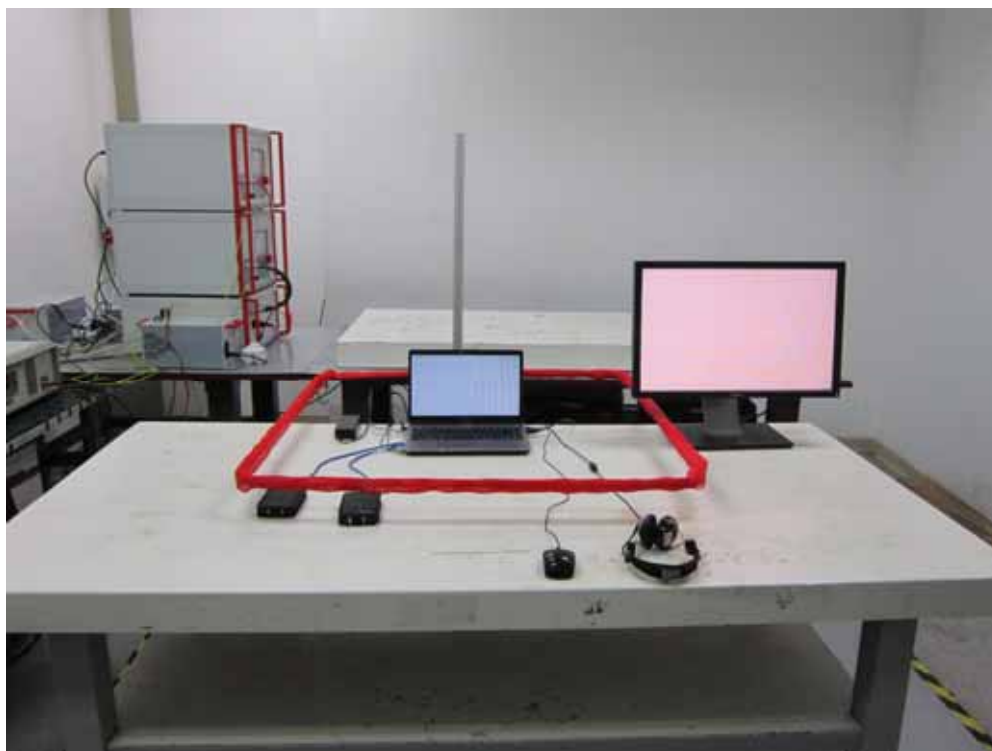
Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Power-frequency magnetic field Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Power-frequency magnetic field Test Setup



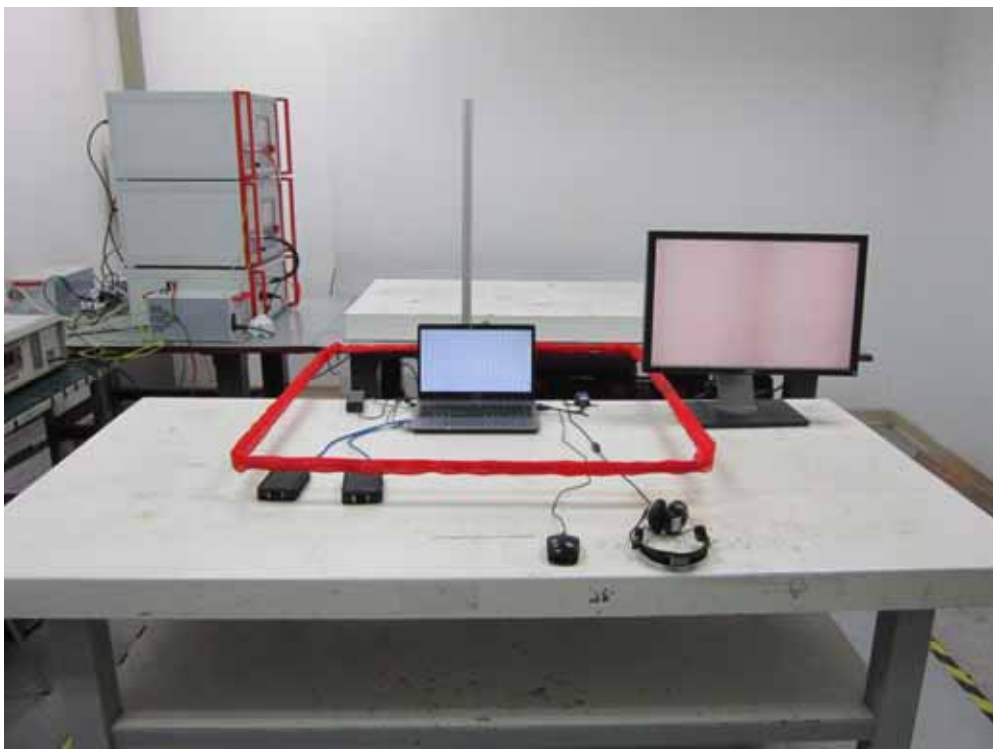
Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Power-frequency magnetic field Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

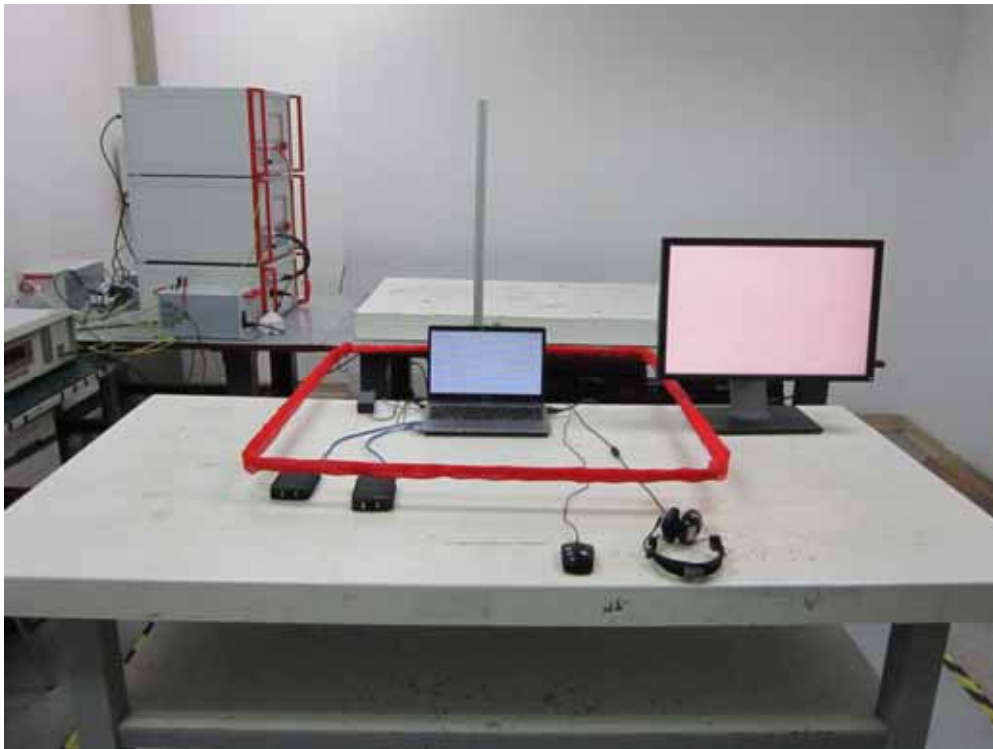
Description: Power-frequency magnetic field Test Setup





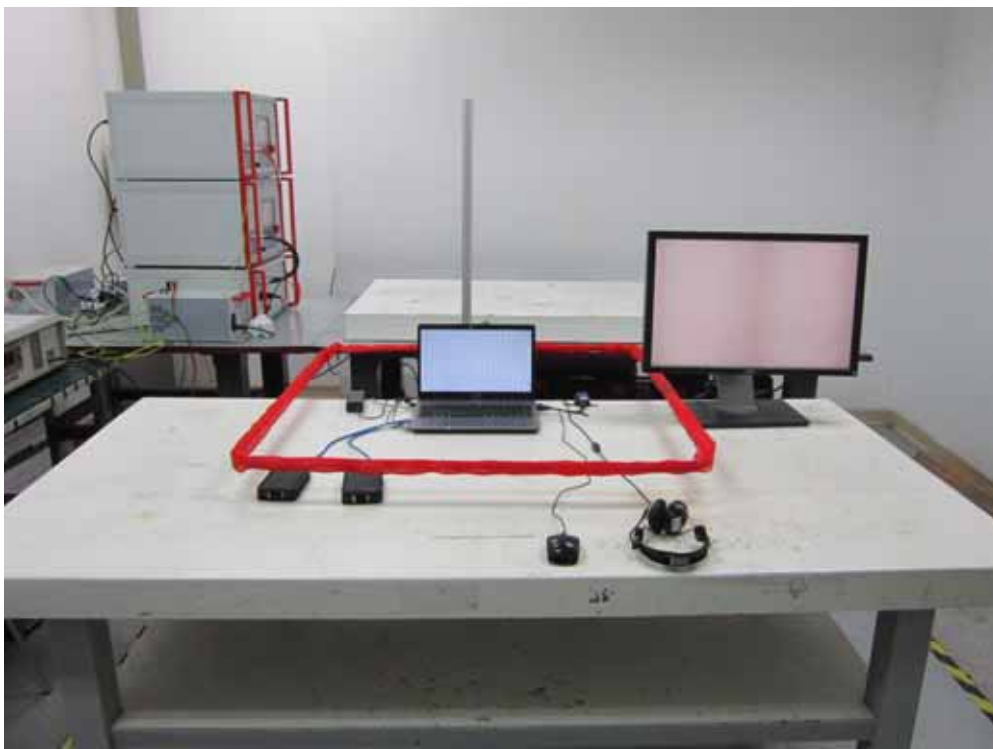
Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Power-frequency magnetic field Test Setup



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Power-frequency magnetic field Test Setup

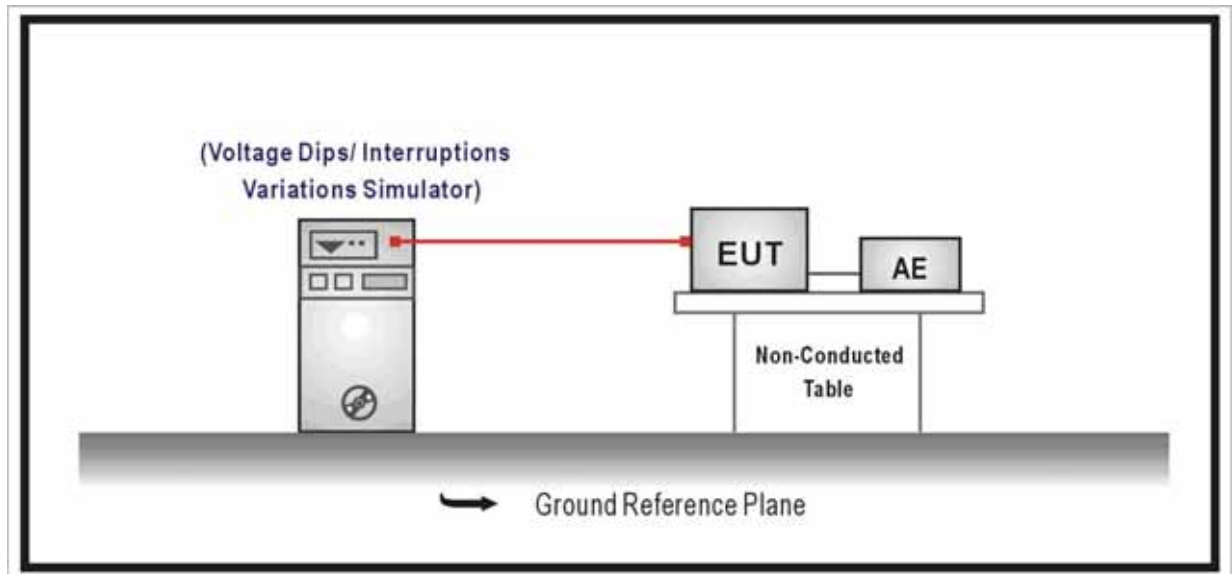


### 13. Voltage dips and interruptions

#### 13.1. Test Specification

According to EMC Standard: IEC 61000-4-11

#### 13.2. Test Setup



**13.3. Limit**

Environmental phenomenon	Test specification	Units	Performance criterion
Input a.c. power ports			
Voltage dips	>95	% reduction period	B
	0.5		
	30 25	% reduction periods	C
Voltage interruptions	>95	% reduction periods	C
	250		
NOTE: Changes to occur at 0 degree crossover point of the voltage waveform.			

**13.4. Test Procedure**

The EUT is placed on a table which is 0.8 meter above a metal ground plane measured 1m\*1m minimum, and 0.65mm thick minimum, and projected beyond the EUT by at least 0.1m on all sides. The power cord shall be used the shortest power cord as specified by the manufacturer.

For Voltage dips and interruptions test:

The selection of test voltage is based on the rated power range. If the operation range is large than 20% of lower power range, both end of specified voltage shall be tested. Otherwise, the typical voltage specification is selected as test voltage.

The EUT is connected to the power mains through a coupling device that directly couples to the voltage dips and interruption generator.

**13.5. Deviation from Test Standard**

No deviation.

**13.6. Test Result**

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 100V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	B	Note 2	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 240V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 2: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	A	Note 1	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 100V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	B	Note 2	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 240V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 4: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	A	Note 1	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 100V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	B	Note 2	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.



Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 240V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 6: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	A	Note 1	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 100V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	B	Note 2	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 240V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 7: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	A	Note 1	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 100V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	B	Note 2	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 240V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 10: LCD(1366*768@60Hz)+HDMI(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	A	Note 1	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 100V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	B	Note 2	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

Test Site	TR2	Date of Test	2012.03.14
EUT	Notebook PC	Test Voltage	AC 240V / 50Hz
Temperature	22°C	Humidity	42%RH
Barometric Pressure	101kPa	Test Engineer	White
Test Mode	Mode 11: LCD(1366*768@60Hz)+VGA(1366*768@60Hz)		

Voltage % Reduction	Test Duration (period)	Complied to Criteria	Observation	Result
>95(Dips)	0.5	A	Note 1	Pass
30(Dips)	25	A	Note 1	Pass
>95(Interruptions)	250	B	Note 2	Pass

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

NOET 2: The power consumption of EUT has changed from adapter to battery during the test, but self-recoverable after the test.

**13.7. Test Photograph**

Test Mode: Mode 2: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage dips and interruptions Test Setup



Test Mode: Mode 4: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage dips and interruptions Test Setup





Test Mode: Mode 6: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage dips and interruptions Test Setup



Test Mode: Mode 7: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Voltage dips and interruptions Test Setup



Test Mode: Mode 10: LCD(1366\*768@60Hz)+HDMI(1366\*768@60Hz)

Description: Voltage dips and interruptions Test Setup



Test Mode: Mode 11: LCD(1366\*768@60Hz)+VGA(1366\*768@60Hz)

Description: Voltage dips and interruptions Test Setup



14. Attachment

EUT Photograph

(1) EUT Photo



(2) EUT Photo



(3) EUT Photo



(4) EUT Photo



(5) EUT Photo



(6) EUT Photo



(7) EUT Photo



(8) EUT Photo



(9) EUT Photo



(10) EUT Photo



(11) EUT Photo



(12) EUT Photo





(13) EUT Photo



(14) EUT Photo

