Application for FCC Certificate On Behalf of S3 Graphics, Co., Ltd.

Chrome 530 Graphic Card

Model No.: S3G002

Serial No.: A083600010996

FCC ID: WN9S3G002

Prepared For: S3 Graphics, Co., Ltd.

1025 Mission Court, Fremont, CA 94539, USA

Prepared By: Audix Technology (Shanghai) Co., Ltd.

3F 34Bldg 680 Guiping Rd, Caohejing Hi-Tech Park, Shanghai 200233, China

Tel: +86-21-64955500 Fax: +86-21-64955491

Report No.: ACI-F08067

Date of Test: Nov 10 – 15, 2008 Date of Report: Nov 19, 2008

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TEST REPORT FOR FCC CERTIFICATE

Applicant : S3 Graphics, Co., Ltd.

Manufacturer : Excelsior Electronics Limited

EUT Description : Chrome 530 Graphic Card

(A) Model No. : S3G002

(B) Serial No. : A083600010996

(C) Power Supply : 120V/60Hz

Test Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B 2007.10 AND ANSI C63.4-2003

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B (Class B) limits both radiated and conducted emissions.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report shows that the EUT (M/N: S3G002; S/N: A083600010996) which was tested in 3m anechoic chamber on Nov 10-15, 2008 is technically compliance with the FCC official limits also.

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

This report contains data that are not covered by the NVLAP accreditation.

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

Date of Test: Nov 10 – 15, 2008 Date of Report: Nov 19, 2008

Producer: KATHY WANG! Assistant

KAIHY WANG # Assistant

Review: Dio YANG/ Supervisor

For and on behalf of Audix Technology (Shanghai) Co., Ltd.

Signatory: United Signature ENAMMY CHEN / Assistant Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

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

Description of Test Item	Standard	Limits	Results
	EMISSION		
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B 2007.10 AND ANSI C63.4-2003	15.109(a) Class B	Pass

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description : Chrome 530 Graphic Card

Type of EUT : \square Production \square Pre-product \square Pro-type

Model No. : S3G002

Serial No. : A083600010996

Max Resolution : Windows Modes : 1600*1200

Refresh Max 100

HDMI Compatible Modes : 1920*1080p Device Specific Modes : 2048*1536

Refresh Max 75

Rated Power : 30W

Rated Voltage : 12V/3.3V

Rated Current : 2A

Work Freq. : 625MHz/900MHz

Output Freq. Range : 25MHz-333MHz

Applicant : S3 Graphics, Co., Ltd.

1025 Mission Court, Fremont, CA 94539, USA

Manufacturer : Excelsior Electronics Limited

Sam Tun Management Zone, Houjie, Dongguan,

Guangdong, P.R.China

Remark:

The EUT is a Chrome 530 Graphic Card which input/output ports as follows:

(1) One HDMI Port

: Connected with LCD Monitor

(2) One DVI Port

: Connected with CRT Monitor through DVI to D-Sub

converter

2.2 Peripherals

2.2.1 PC

Manufacturer: HP

Model Number: dx6120MT Serial Number: CNG53004J2

Power Cord : Unshielded, Detachable, 1.80m

Certificate : VCCI, FCC DoC, CE, CCC (A000111)

MIC (E-A011-04-2659B)

2.2.2 Printer

Manufacturer : HP Model Number : C3990A Serial Number : JPZX020487

Data Cable : Shielded, Detachable, 1.5m Certificate : GS, CE/EMC, C-Tick, FCC DoC

2.2.3 Keyboard

Manufacturer : Microsoft Model Number : RT2300

Serial Number: 7668200662248

Data Cable : Shielded, Undetachable, 1.8m Certificate : CE/EMC, FCC DoC, VCCI, MIC,

C-Tick, BSMI

2.2.4 Mouse

Manufacturer : Microsoft Model Number : RT2300

Serial Number: 6965712071551

Data Cable : Shielded, Undetachable, 1.80m.
Certificate : FCC DoC, VCCI, CE/EMC, MIC, GS

2.2.5 Modem

Manufacturer : TP-LINK
Model Number : TM-EC5658V
Serial Number : 07123301053

Data Cable : Shielded, Detachable, 1.80m Certificate : CE/EMC, FCC DoC, CCC

2.2.6 Monitor #1 (CRT Monitor)

Manufacturer : ViewSonic
Model Number : VS10284
Serial Number : P9K052800024

Data Cable : Shielded, Detachable, 1.80m
Power Cord : Shielded, Detachable, 1.80m
Certificate : FCC DoC, CE/EMC, BSMI, CCC

2.2.7 Monitor #2 (LCD Monitor)

Manufacturer : BENQ Model Number : FP241W

Serial Number: ET61700278CL0

Data Cable : Shielded, Detachable, 1.80m Certificate : CCC, FCC DoC, CE/EMC, VCCI,

BSMI ID: R43002

2.3 Description of Test Facility

Site Description : Sept. 17, 1998 file on (Semi-Anechoic Chamber) : July 26, 2006 Renewed

Federal Communications Commission

FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3F 34Bldg 680 Guiping Rd,

Caohejing Hi-Tech Park, Shanghai 200233, China

NVLAP Lab Code : 200371-0

2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty: U = 1.26 dBRadiated Emission Expanded Uncertainty : U = 3.02 dB

3 CONDUCTED EMISSION TEST

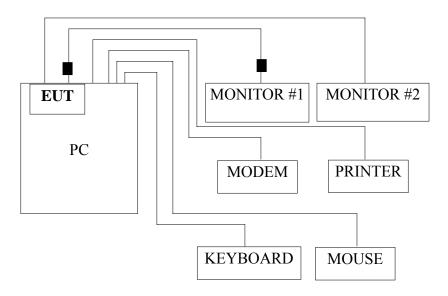
3.1 Test Equipment

The following test equipments are used during the conducted emission test in a shielded room:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESHS10	830223/007	Apr 02, 2008	Apr 02, 2009
2.	Artificial Mains Network (AMN)	R&S	ESH2-Z5	843890/011	Apr 02, 2008	Apr 02, 2009
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Apr 02, 2008	Apr 02, 2009
4.	50 Ω Coaxial Switch	Anritsu	MP59B	6200426389	Sep 19, 2008	Mar 19, 2009
5.	50Ω Terminator	Anritsu	BNC	001	Apr 02, 2008	Apr 02, 2009
6.	Software	Audix	E3	SET00200 9804M592		

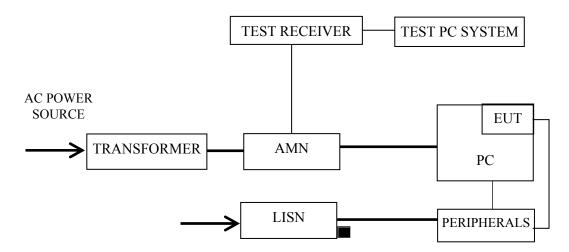
3.2 Block Diagram of Test Setup

3.2.1 EUT & Peripherals



: Ferrite core

3.2.2 Conducted Disturbance Test Setup



: Signal Line: Power Line

: 50 ohm Terminator

3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)]

Frequency Range	Limits c	lB (μV)
(MHz)	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 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 0.15 MHz~0.50 MHz

3.4 Test Configuration

The EUT (listed in Sec.2.1) and the peripherals (listed in Sec 2.2) were installed as shown on Sec.3.2 to meet FCC requirement and operating in a manner that tends to maximize its emission level in a normal application.

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.
- 3.5.2 Turn on the power of all equipments and the EUT.
- 3.5.3 Set the contrast & brightness of EUT to maximum.
- 3.5.4 PC system ran the self-test program "EMC Test" by windows XP and sent "H" characters to monitors through EUT, the monitors' screen displayed and filled with "H" pattern by it's resolution. (Via DVI and HDMI output).
- 3.5.5 Repeat above procedure from 3.5.3 to 3.5.4 for difference test mode.
- 3.5.6 The other peripheral devices were driven and operated during the test.
- 3.5.7 The test modes are as follows:

Test Mode
DVI + HDMI 640*480@60Hz
DVI + HDMI 1600*1200@60Hz
DVI + HDMI 1680*1050@60Hz
DVI + HDMI 1920*1200@60Hz
DVI + HDMI 2048*1536@75Hz

3.6 Test Procedures

The PC was connected to the power mains through an Artificial Mains Network (AMN). The EUT was installed in PC. The other peripheral devices power cord was connected to the power mains through a line impedance stabilization network (L.I.S.N). This provided a 50 ohm coupling impedance for the measuring equipment.

Both sides of AC line (Line & Neutral) were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed or manipulated according to ANSI C63.4:2003 during conducted emission test.

The bandwidth of R&S Test Receiver ESHS10 was set at 10 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test modes were done on conducted disturbance test and all the test results are listed in Sec. 3.7.

3.7 Test Results

< PASS >

The frequency and amplitude of the highest conducted emission relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

Test Mode	Data Page
DVI + HDMI 640*480@60Hz	P12 – P13
DVI + HDMI 1600*1200@60Hz	P14 – P15
DVI + HDMI 1680*1050@60Hz	P16 – P17
DVI + HDMI 1920*1200@60Hz	P18 – P19
DVI + HDMI 2048*1536@75Hz	P20 – P21

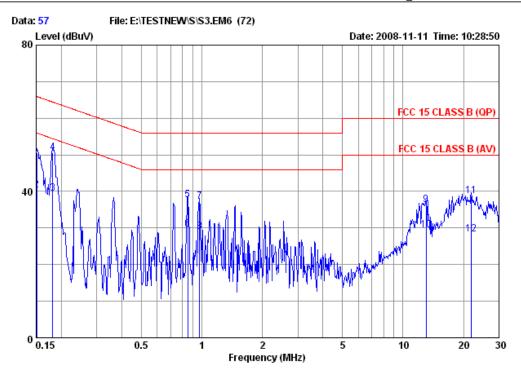
NOTE 1 - Factor = Cable Loss + AMN Factor.

NOTE 2 – Emission Level = Meter Reading + Factor.

NOTE 3 – "QP" means "Quasi-Peak" values, "AV" means "Average" values.

NOTE 4 – The worst case is for DVI + HDMI 2048*1536@60Hz test mode. The worst emission is detected at 0.152 MHz (Average Value) with corrected signal level of 47.12 dB (μ V) (limit is 55.87 dB (μ V)), when the Line of the PC is connected to AMN.





 Site no
 : Conduction
 Data no
 :57

 AMN
 : ESH3-Z5-08.04.02
 AMN Phase
 :LINE

 Limit
 : FCC 15 CLASS B (QP)

Env/Ins : 25'C 55%RH / ESHS10 Engineer : Yong

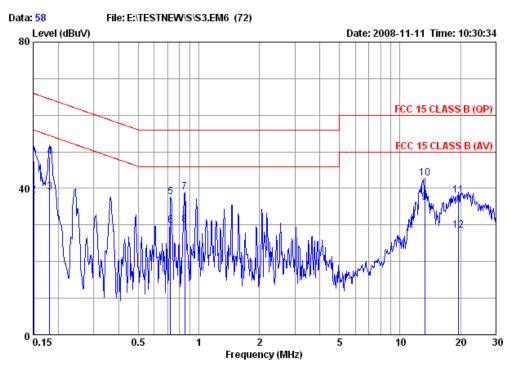
EUT : Chrome 530 Graphic Card

M/N : \$33002 \$/N : \$083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 640*480@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.151	0.16	0.07	50.44	50.67	65.96	15.29	QP
2	0.151	0.16	0.07	40.12	40.35	55.96	15.61	Average
3	0.182	0.13	0.08	39.26	39.47	54.42	14.95	Average
4	0.182	0.13	0.08	50.40	50.61	64.42	13.81	QP
5	0.853	0.14	0.11	37.41	37.66	56.00	18.34	QP
6	0.853	0.14	0.11	29.44	29.69	46.00	16.31	Average
7	0.974	0.15	0.11	36.93	37.19	56.00	18.81	QP
8	0.974	0.15	0.11	28.79	29.05	46.00	16.95	Average
9	13.057	0.31	0.36	35.75	36.42	60.00	23.58	QP
10	13.057	0.31	0.36	28.79	29.46	50.00	20.54	Average
11	21.830	0.47	0.32	37.95	38.74	60.00	21.26	QP
12	21.830	0.47	0.32	27.45	28.24	50.00	21.76	Average





 Site no
 : Conduction
 Data no
 :58

 AMN
 : ESH3-Z5-08.04.02
 AMN Phase
 :NEUTRAL

 Limit
 : FCC 15 CLASS B (QP)

Env/Ins : 25'C 55%RH / ESHS10 Engineer : Yong

EUT : Chrome 530 Graphic Card

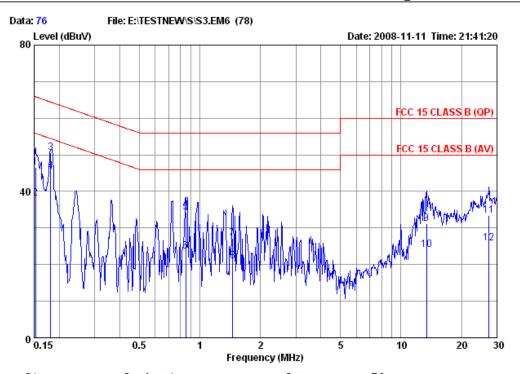
M/N : 33G002 S/N : A083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 640*480@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.151	0.12	0.07	47.30	47.49	65.96	18.47	QP
2	0.151	0.12	0.07	37.98	38.17	55.96	17.79	Average
3	0.182	0.12	0.08	38.79	38.99	54.42	15.43	Average
4	0.182	0.12	0.08	48.46	48.66	64.42	15.76	QP
5	0.724	0.12	0.11	37.42	37.65	56.00	18.35	QP
6	0.724	0.12	0.11	29.56	29.79	46.00	16.21	Average
7	0.853	0.12	0.11	38.72	38.95	56.00	17.05	QP
8	0.853	0.12	0.11	29.86	30.09	46.00	15.91	Average
9	13.267	0.22	0.36	35.46	36.04	50.00	13.96	Average
10	13.267	0.22	0.36	42.10	42.68	60.00	17.32	QP
11	19.532	0.24	0.31	37.53	38.08	60.00	21.92	QP
12	19.532	0.24	0.31	27.89	28.44	50.00	21.56	Average

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading





 Site no
 : Conduction
 Data no
 :76

 AMN
 : ESH3-Z5-08.04.02
 AMN Phase
 :LINE

 Limit
 : FCC 15 CLASS B (QP)

Env/Ins : 25'C 55%RH / ESHS10 Engineer : Yong

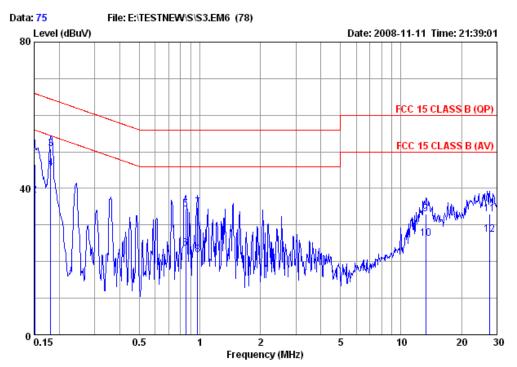
EUT : Chrome 530 Graphic Card

M/N : \$33002 S/N : \$083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 1600*1200@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.152	0.15	0.07	46.43	46.65	65.87	19.22	QP
2	0.152	0.15	0.07	37.88	38.10	55.87	17.77	Average
3	0.182	0.13	0.08	50.29	50.50	64.42	13.92	QP
4	0.182	0.13	0.08	45.30	45.51	54.42	8.91	Average
5	0.853	0.14	0.11	34.15	34.40	56.00	21.60	QP
6	0.853	0.14	0.11	23.34	23.59	46.00	22.41	Average
7	1.449	0.15	0.14	26.88	27.17	56.00	28.83	QP
8	1.458	0.15	0.14	20.75	21.04	46.00	24.96	Average
9	13.408	0.32	0.36	30.52	31.20	60.00	28.80	QP
10	13.408	0.32	0.36	23.35	24.03	50.00	25.97	Average
11	27.416	0.69	0.33	32.29	33.31	60.00	26.69	QP
12	27.416	0.69	0.33	24.73	25.75	50.00	24.25	Average





 Site no
 : Conduction
 Data no
 :75

 AMN
 : ESH3-Z5-08.04.02
 AMN Phase :NEUTRAL

 Limit
 : FCC 15 CLASS B (QP)

Env/Ins : 25°C 55%RH / ESHS10 Engineer : Yong

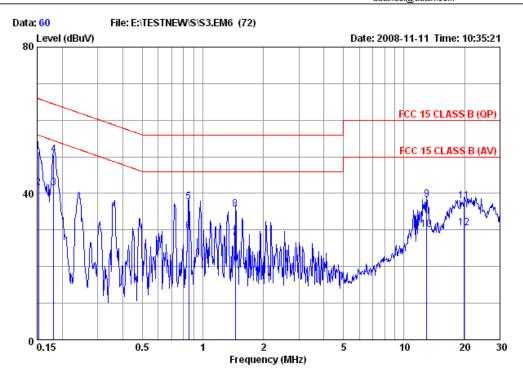
EUT : Chrome 530 Graphic Card

M/N : \$33002 S/N : \$083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 1600*1200@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.151	0.12	0.07	46.35	46.54	65.96	19.42	QP
2	0.151	0.12	0.07	37.84	38.03	55.96	17.93	Average
3	0.182	0.12	0.08	50.68	50.88	64.42	13.54	QP
4	0.182	0.12	0.08	45.22	45.42	54.42	9.00	Average
5	0.853	0.12	0.11	34.16	34.39	56.00	21.61	QP
6	0.853	0.12	0.11	23.41	23.64	46.00	22.36	Average
7	0.974	0.12	0.11	34.47	34.70	56.00	21.30	QP
8	0.974	0.12	0.11	21.70	21.93	46.00	24.07	Average
9	13.267	0.22	0.36	32.38	32.96	60.00	27.04	QP
10	13.267	0.22	0.36	25.61	26.19	50.00	23.81	Average
11	27.708	0.39	0.33	32.31	33.03	60.00	26.97	QP
12	27.708	0.39	0.33	26.63	27.35	50.00	22.65	Average





 Site no
 : Conduction
 Data no
 : 60

 AMN
 : ESH3-Z5-08.04.02
 AMN Phase
 :LINE

 Limit
 : FCC 15 CLASS B (QP)

Env/Ins : 25'C 55%RH / ESHS10 Engineer : Yong

EUT : Chrome 530 Graphic Card

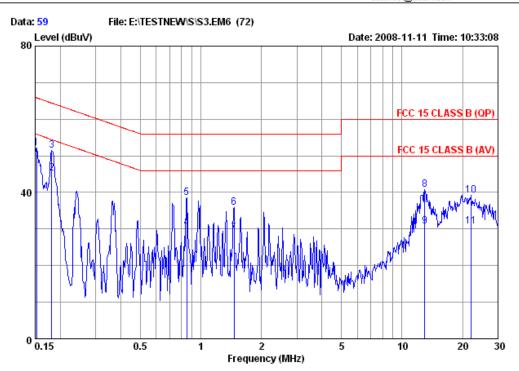
M/N : \$35002 S/N : A083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 1680*1050@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.152	0.15	0.07	51.23	51.45	65.87	14.42	QP
2	0.152	0.15	0.07	41.12	41.34	55.87	14.53	Average
3	0.182	0.13	0.08	41.25	41.46	54.42	12.96	Average
4	0.182	0.13	0.08	50.36	50.57	64.42	13.85	QP
5	0.853	0.14	0.11	37.39	37.64	56.00	18.36	QP
6	0.853	0.14	0.11	29.44	29.69	46.00	16.31	Average
- 7	1.449	0.15	0.14	27.56	27.85	46.00	18.15	Average
8	1.449	0.15	0.14	35.38	35.67	56.00	20.33	QP
9	12.988	0.31	0.36	37.63	38.30	60.00	21.70	QP
10	12.988	0.31	0.36	29.45	30.12	50.00	19.88	Average
11	19.950	0.41	0.31	37.18	37.90	60.00	22.10	QP
12	19.950	0.41	0.31	29.87	30.59	50.00	19.41	Average

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading





 Site no
 : Conduction
 Data no
 :59

 AMN
 : ESH3-Z5-08.04.02
 AMN Phase :NEUTRAL

 Limit
 : FCC 15 CLASS B (QP)

Env/Ins : 25'C 55%RH / ESHS10 Engineer : Yong

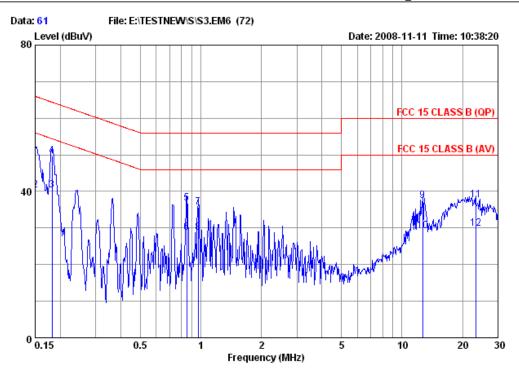
EUT : Chrome 530 Graphic Card

M/N : 33G002 S/N : A083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 1680*1050@60Hz

	Freq	AMN. Factor	Cable Loss	Reading	Emission Level	Limits	Margin	Remark
	MHz	(dB) 	(dB) 	(dBuV)	(dBuV)	(dBuV)	(dB) 	
1	0.152	0.12	0.07	51.90	52.09	65.87	13.78	QP
2	0.182	0.12	0.08	45.12	45.32	54.42	9.10	Average
3	0.182	0.12	0.08	51.20	51.40	64.42	13.02	QP
4	0.853	0.12	0.11	30.12	30.35	46.00	15.65	Average
5	0.853	0.12	0.11	38.34	38.57	56.00	17.43	QP
6	1.464	0.12	0.14	35.56	35.82	56.00	20.18	QP
7	1.464	0.12	0.14	28.79	29.05	46.00	16.95	Average
8	12.988	0.22	0.36	40.16	40.74	60.00	19.26	QP
9	12.988	0.22	0.36	30.21	30.79	50.00	19.21	Average
10	21.946	0.29	0.32	38.59	39.20	60.00	20.80	QP
11	21.946	0.29	0.32	30.12	30.73	50.00	19.27	Average





Site no : Conduction Data no :61
AMN : ESH3-Z5-08.04.02 AMN Phase :LINE

Limit : FCC 15 CLASS B (QP)
Env/Ins : 25'C 55%RH / ESHS10 Engineer

EUT : Chrome 530 Graphic Card

M/N : 33G002 S/N : A083600010996 Power Rating : 120V/60Hz

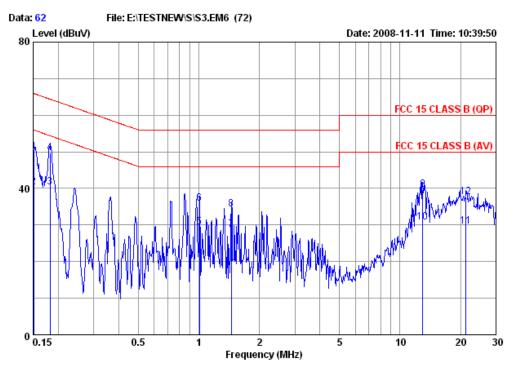
Test Mode : DVI+HDMI 1920*1200@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	0.16	0.07	50.12	50.35	66.00	15.65	QP
2	0.150	0.16	0.07	40.15	40.38	56.00	15.62	Average
3	0.182	0.13	0.08	40.15	40.36	54.37	14.01	Average
4	0.182	0.13	0.08	49.48	49.69	64.37	14.68	QP
5	0.853	0.14	0.11	36.45	36.70	56.00	19.30	QP
6	0.853	0.14	0.11	28.48	28.73	46.00	17.27	Average
7	0.968	0.15	0.11	35.34	35.60	56.00	20.40	QP
8	0.968	0.15	0.11	28.49	28.75	46.00	17.25	Average
9	12.649	0.30	0.37	36.80	37.47	60.00	22.53	QP
10	12.649	0.30	0.37	28.48	29.15	50.00	20.85	Average
11	23.263	0.51	0.33	36.89	37.73	60.00	22.27	QP
12	23.263	0.51	0.33	29.12	29.96	50.00	20.04	Average

Remarks: 1.Emission Level= AMN Factor + Cable Loss + Reading

:Yong





Env/Ins : 25'C 55%RH / ESHS10 Engineer : Yong

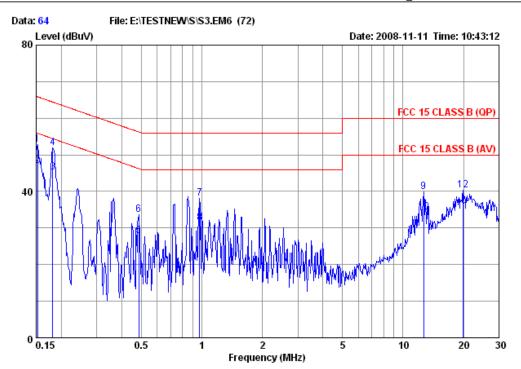
EUT : Chrome 530 Graphic Card

M/N : \$35002 S/N : \$083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 1920*1200@60Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.151	0.12	0.07	50.29	50.48	65.96	15.48	QP
2	0.151	0.12	0.07	40.15	40.34	55.96	15.62	Average
3	0.182	0.12	0.08	40.12	40.32	54.37	14.05	Average
4	0.182	0.12	0.08	49.42	49.62	64.37	14.75	QP
5	1.005	0.12	0.11	29.14	29.37	46.00	16.63	Average
6	1.005	0.12	0.11	35.69	35.92	56.00	20.08	QP
7	1.449	0.12	0.14	28.45	28.71	46.00	17.29	Average
8	1.449	0.12	0.14	34.04	34.30	56.00	21.70	QP
9	12.988	0.22	0.36	39.07	39.65	60.00	20.35	QP
10	12.988	0.22	0.36	30.12	30.70	50.00	19.30	Average
11	21.260	0.27	0.32	29.15	29.74	50.00	20.26	Average
12	21.260	0.27	0.32	36.96	37.55	60.00	22.45	QP





Site no : Conduction Data no :64
AMN : ESH3-Z5-08.04.02 AMN Phase :LINE

Limit : FCC 15 CLASS B (QP)
Env/Ins : 25'C 55%RH / ESHS10

EUT : Chrome 530 Graphic Card

M/N : 33G002 S/N : A083600010996 Power Rating : 12OV/60Hz

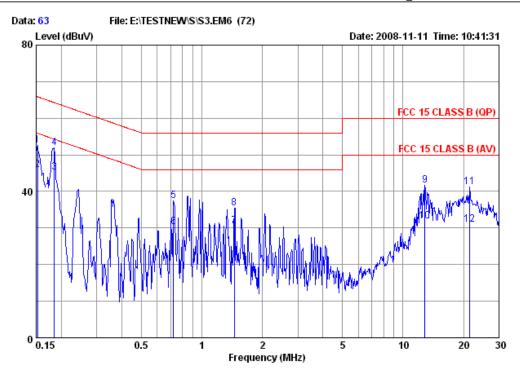
Test Mode : DVI+HDMI 2048*1536@75Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.152	0.15	0.07	52.57	52.79	65.87	13.08	QP
2	0.152	0.15	0.07	46.90	47.12	55.87	8.75	Average
3	0.182	0.13	0.08	45.10	45.31	54.42	9.11	Average
4	0.182	0.13	0.08	51.62	51.83	64.42	12.59	QP
5	0.486	0.12	0.10	27.70	27.92	46.23	18.31	Average
6	0.486	0.12	0.10	33.48	33.70	56.23	22.53	QP
7	0.974	0.15	0.11	37.89	38.15	56.00	17.85	QP
8	0.974	0.15	0.11	31.20	31.46	46.00	14.54	Average
9	12.649	0.30	0.37	39.30	39.97	60.00	20.03	QP
10	12.649	0.30	0.37	33.59	34.26	50.00	15.74	Average
11	19.845	0.41	0.31	33.90	34.62	50.00	15.38	Average
12	19.845	0.41	0.31	39.58	40.30	60.00	19.70	QP

Engineer

:Yong





Env/Ins : 25'C 55%RH / ESHS10 Engineer

EUT : Chrome 530 Graphic Card

M/N : 33G002 S/N : A083600010996 Power Rating : 120V/60Hz

Test Mode : DVI+HDMI 2048*1536@75Hz

	Freq MHz	AMN. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.152	0.12	0.07	52.31	52.50	65.87	13.37	QP
2	0.152	0.12	0.07	45.78	45.97	55.87	9.90	Average
3	0.184	0.12	0.08	45.12	45.32	54.28	8.96	Average
4	0.184	0.12	0.08	51.72	51.92	64.28	12.36	QP
5	0.724	0.12	0.11	37.24	37.47	56.00	18.53	QP
6	0.724	0.12	0.11	30.12	30.35	46.00	15.65	Average
7	1.449	0.12	0.14	30.21	30.47	46.00	15.53	Average
8	1.449	0.12	0.14	35.15	35.41	56.00	20.59	QP
9	12.852	0.22	0.37	41.12	41.71	60.00	18.29	QP
10	12.852	0.22	0.37	31.24	31.83	50.00	18.17	Average
11	21.486	0.28	0.32	40.54	41.14	60.00	18.86	QP
12	21.486	0.28	0.32	30.45	31.05	50.00	18.95	Average

:Yong

4 RADIATED EMISSION TEST

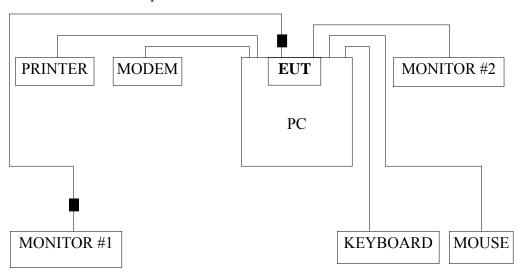
4.1 Test Equipment

The following test equipments are used during the radiated emission test in a semi-anechoic chamber:

Item	Туре	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESVS10	844594/001	Mar 07, 2008	Mar 07, 2009
2.	Preamplifier	Agilent	8447D	2944A10548	Sep 19, 2008	Mar 19, 2009
3.	Preamplifier	HP	8449B	3008A00864	May 19, 2008	May 19, 2009
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2009
5.	Horn Antenna	EMCO	3115	9607-4878	Apr 24, 2008	Apr 24, 2009
6.	Spectrum	Agilent	E7405A	MY45106600	May 19, 2008	May 19, 2009
7.	Software	Audix	Е3	SET00200 9912M295-2		

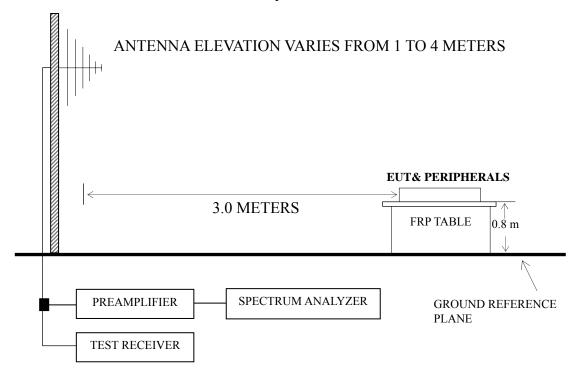
4.2 Block Diagram of Test Setup

4.2.1 EUT and Peripherals



■: Ferrite core

4.2.2 Radiated emission test setup



: 50 ohm Coaxial Switch

4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)]

Frequency	Distance	Field strength limits				
(MHz)	(m)	(µV/m)	dB (μV/m)			
30 ~ 88	3	100	40.0			
88 ~ 216	3	150	43.5			
216 ~ 960	3	200	46.0			
Above 960	3	500	54.0			

- NOTE 1 Emission Level dB (μ V/m) = 20 log Emission Level (μ V/m)
- NOTE 2 The tighter limit applies at the band edges.
- NOTE 3 Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- NOTE 4 The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz.
- NOTE 5 Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT

4.4 Test Configuration

The configuration of the EUT and peripherals are same as those used in conducted emission test.

Please refer to Sec.3.4.

4.5 Operating Condition of EUT

Same as conducted emission test which is listed in Sec.3.5, except for the test setup replaced by Sec.4.2.

4.6 Test Procedures

The EUT and peripherals were placed on a FRP turntable that is 0.8 meter above ground. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated Bilog Antenna or Horn Antenna) was used as receiving antenna. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.4:2003 requirements during radiated emission test.

The bandwidth of Test Receiver R&S ESVS10 was set at 120 kHz below 1GHz and The Spectrum Agilent E7405A was set at 1MHz above 1GHz.

The frequency range from 30 MHz to 1000MHz was checked for all test modes.

The frequency range from 1 GHz to 5 GHz was checked for all test modes.

The test modes were done on radiated disturbance test and all the test results are listed in Sec.4.7.

4.7 Test Results

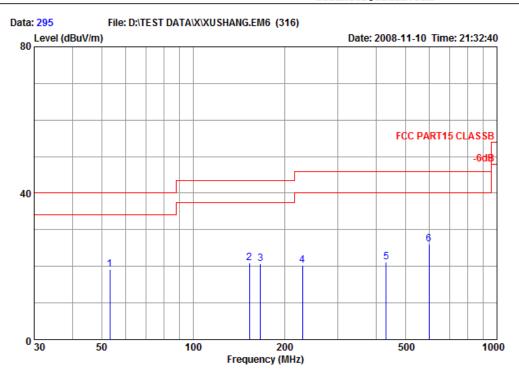
<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

Test Mode	Data Page
DVI + HDMI 640*480@60Hz	P26 – P29
DVI + HDMI 1600*1200@60Hz	P30 – P33
DVI + HDMI 1680*1050@60Hz	P34 – P37
DVI + HDMI 1920*1200@60Hz	P38 – P41
DVI + HDMI 2048*1536@75Hz	P42 – P45

- NOTE 1 Emission Level = Antenna Factor + Cable Loss + Meter Reading.(< 1GHz)
- NOTE 2 Emission Level = Antenna Factor + Cable Loss Preamp Factor + Meter Reading.(> 1GHz)
- NOTE 3 The emission levels that are 20dB below the official limit are not reported.
- NOTE $4 0^{\circ}$ was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.
- NOTE 5 All reading are Quasi-Peak values below or equal to 1GHz and Peak values above 1GHz. For measurements above 1 GHz, the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.
- NOTE 6 The worst case is for DVI + HDMI 2048*1536@60Hz test mode. The worst emission at horizontal polarization was detected at 597.450 MHz with corrected signal level of 30.45 dB (μ V/m) (limit is 46.00 dB (μ V/m)), when the antenna was 1.10 m height and the turntable was at 120°. The worst emission at vertical polarization was detected at 37.760 MHz with corrected signal level of 33.12 dB (μ V/m) (limit is 40.00 dB (μ V/m)), when the antenna was 1.00 m height and the turntable was at 70°.





Site no : Audix ACI (3m Chamber) Data no. : 295

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : HORIZONTAL

Env. / Ins.: 22'C 60%RH ESVS10 Engineer : Leo EUT : Chrome 530 Graphic Card

M/N : S3G002

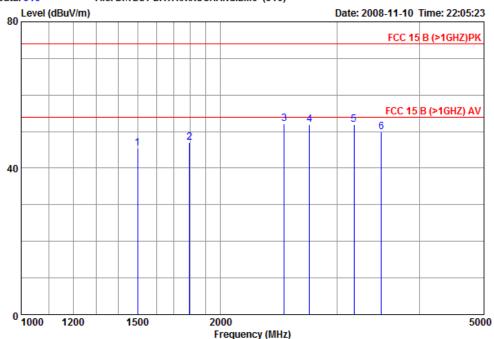
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 640*480@60Hz

	Freq.		Cable Loss	Reading	Emission Level	Limits	Margin
_	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)
1	53.280	8.14	0.79	10.21	19.14	40.00	20.86
2	153.190	11.04	0.93	8.98	20.95	43.50	22.55
3	166.770	10.31	0.98	9.44	20.73	43.50	22.77
4	228.850	12.07	1.20	6.94	20.21	46.00	25.79
5	432.550	16.95	2.16	2.13	21.24	46.00	24.76
6	597.450	19.17	2.58	4.23	25.98	46.00	20.02







Site no : Audix ACI (3m Chamber) Data no. : 310

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : HORIZONTAL

Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

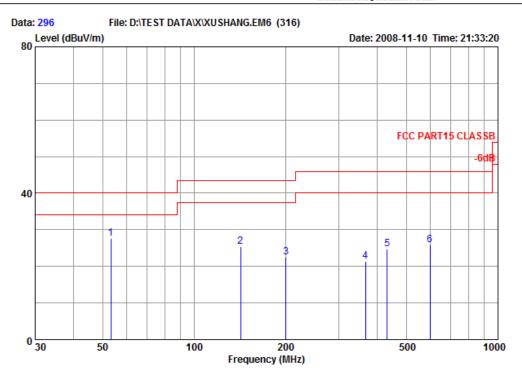
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 640*480@60Hz

Freq.	Antenna Factor (dB/m)	Preamp Factor (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/n	_
1 1500.000	26.14	36.53	8.43	47.32	45.36	74.00	28.64
2 1796.000	27.06	36.01	9.32	46.61	46.98	74.00	27.02
3 2496.000	29.17	35.21	11.54	46.58	52.08	74.00	21.92
4 2724.000	29.82	35.01	11.67	45.33	51.81	74.00	22.19
5 3180.000	30.92	34.56	11.91	43.71	51.98	74.00	22.02
6 3500.000	31.61	34.16	12.06	40.30	49.81	74.00	24.19

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 296

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Leo

EUT : Chrome 530 Graphic Card

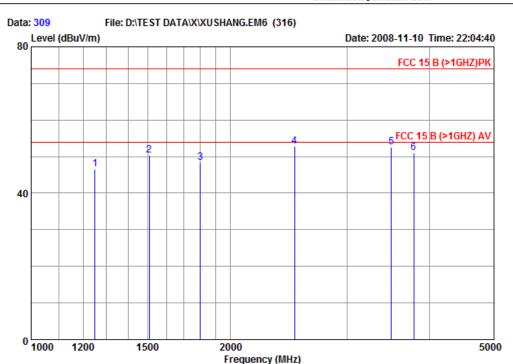
M/N : S3G002

S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 640*480@60Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	53.280	8.14	0.79	18.78	27.71	40.00	12.29
2	142.520	11.91	0.91	12.59	25.41	43.50	18.09
3	200.720	10.74	1.08	10.59	22.41	43.50	21.09
4	366.590	15.77	1.89	3.78	21.44	46.00	24.56
5	432.550	16.95	2.16	5.58	24.69	46.00	21.31
6	597.450	19.17	2.58	4.15	25.90	46.00	20.10





Site no : Audix ACI (3m Chamber) Data no. : 309

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

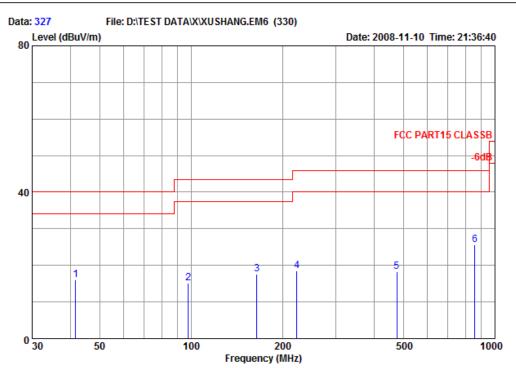
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 640*480@60Hz

	Freq.	Antenna Factor (dB/m)	Preamp Factor (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin
2 3 4 5	1248.000 1508.000 1800.000 2500.000 3500.000 3784.000	25.22 26.17 27.06 29.19 31.61 32.18		7.33 8.43 9.32 11.54 12.06	51.11 52.32 48.06 47.18 43.09 40.52	46.60 50.41 48.44 52.71 52.60 51.07	74.00 74.00 74.00 74.00 74.00 74.00	27.40 23.59 25.56 21.29 21.40 22.93

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 327

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : HORIZONTAL

Env. / Ins.: 22'C 60%RH ESVS10 Engineer : Leo EUT : Chrome 530 Graphic Card

M/N : S3G002

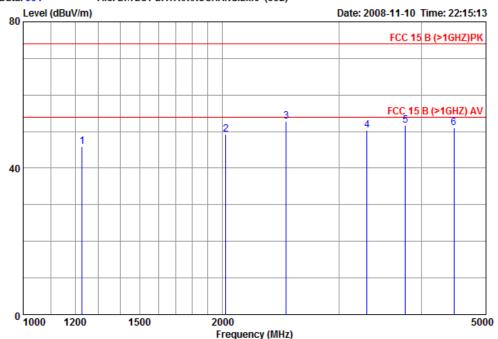
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1600*1200@60Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	41.640	13.02	0.70	2.39	16.11	40.00	23.89
2	97.900	11.11	0.85	3.27	15.23	43.50	28.27
3	164.830	10.35	0.97	6.34	17.66	43.50	25.84
4	223.030	11.80	1.17	5.49	18.46	46.00	27.54
5	475.230	17.60	2.30	-1.58	18.32	46.00	27.68
6	859.350	21.31	3.44	0.85	25.60	46.00	20.40







Site no : Audix ACI (3m Chamber) Data no. : 331

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : HORIZONTAL

Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

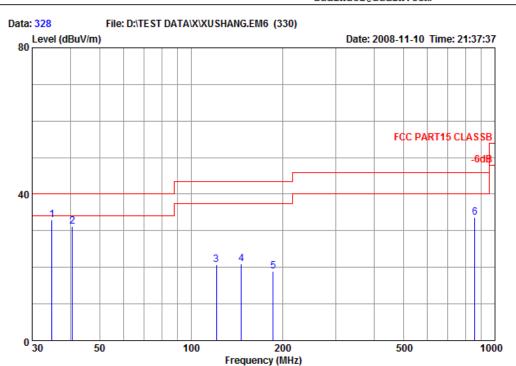
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1600*1200@60Hz

		Antenna Factor	Factor	Loss	_	Emission Level		Margin
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/n	ı) (dB)
1	1228.000	25.14	37.10	7.24	50.64	45.92	74.00	28.08
2	2024.000	27.68	35.67	9.98	47.29	49.28	74.00	24.72
3	2496.000	29.17	35.21	11.54	47.30	52.80	74.00	21.20
4	3304.000	31.19	34.40	11.96	41.70	50.45	74.00	23.55
5	3780.000	32.18	33.84	12.19	41.28	51.81	74.00	22.19
6	4472.000	32.99	34.20	12.40	39.92	51.11	74.00	22.89

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 328

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Leo

EUT : Chrome 530 Graphic Card

M/N : S3G002

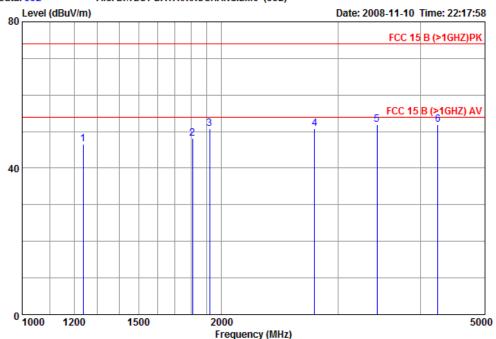
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1600*1200@60Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)		,
-							
1	34.850	16.97	0.62	15.39	32.98	40.00	7.02
2	40.670	13.62	0.69	16.81	31.12	40.00	8.88
3	121.180	12.95	0.88	6.89	20.72	43.50	22.78
4	146.400	11.61	0.92	8.45	20.98	43.50	22.52
5	186.170	10.14	1.04	7.72	18.90	43.50	24.60
6	859.350	21.31	3.44	8.96	33.71	46.00	12.29







Site no : Audix ACI (3m Chamber) Data no. : 332

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

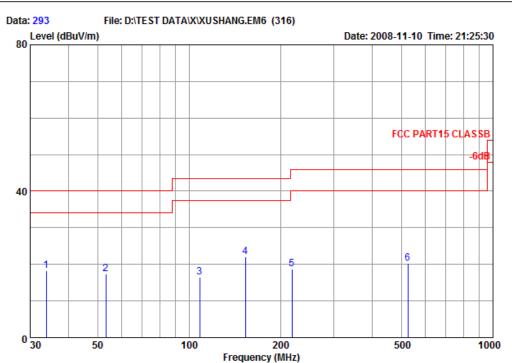
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1600*1200@60Hz

	Freq.	Antenna Factor (dB/m)	Preamp Factor (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin
1 123	6.000	25.16	37.09	7.24	51.27	46.58	74.00	27.42
2 180	8.000	27.09	35.99	9.40	47.74	48.24	74.00	25.76
3 192	0.000	27.40	35.81	9.73	49.45	50.77	74.00	23.23
4 276	4.000	29.92	34.99	11.69	44.28	50.90	74.00	23.10
5 343	6.000	31.49	34.24	12.04	42.73	52.02	74.00	21.98
6 424	4.000	32.81	33.92	12.34	40.60	51.83	74.00	22.17

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 293

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : HORIZONTAL

Env. / Ins.: 22'C 60%RH ESVS10 Engineer : Leo EUT : Chrome 530 Graphic Card

M/N : S3G002

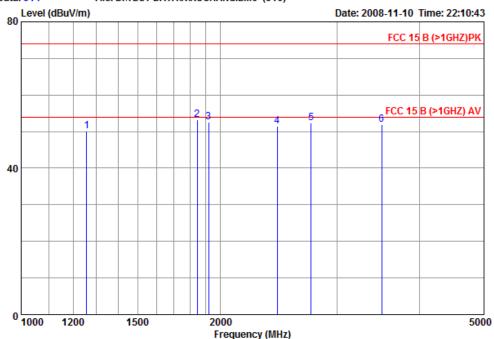
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1680*1050@60Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	33.880	17.44	0.61	0.18	18.23	40.00	21.77
2	53.280	8.14	0.79	8.43	17.36	40.00	22.64
3	108.570	12.17	0.86	3.55	16.58	43.50	26.92
4	153.190	11.04	0.93	10.06	22.03	43.50	21.47
5	218.180	11.52	1.15	6.12	18.79	46.00	27.21
6	524.700	18.21	2.43	-0.37	20.27	46.00	25.73







Site no : Audix ACI (3m Chamber) Data no. : 314

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : HORIZONTAL

Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

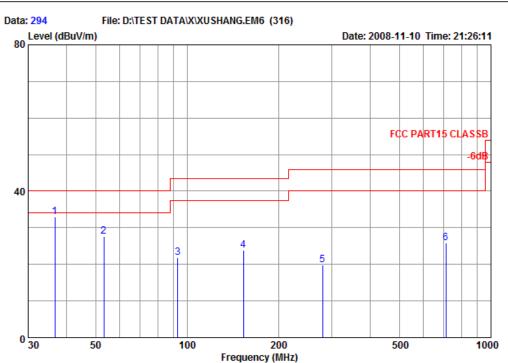
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1680*1050@60Hz

	Freq.	Antenna Factor	Preamp Factor	Loss	_	Emission Level		Margin
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/n	ı) (dB)
1	1256.000	25.25	37.04	7.33	54.59	50.13	74.00	23.87
2	1844.000	27.19	35.93	9.48	52.45	53.19	74.00	20.81
3	1920.000	27.40	35.81	9.73	51.28	52.60	74.00	21.40
4	2436.000	29.01	35.26	11.33	46.46	51.54	74.00	22.46
5	2740.000	29.86	35.01	11.67	45.77	52.29	74.00	21.71
6	3504.000	31.63	34.15	12.06	42.44	51.98	74.00	22.02

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 294

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Leo

EUT : Chrome 530 Graphic Card

M/N : S3G002

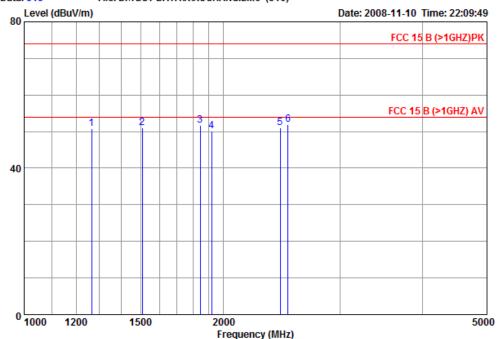
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1680*1050@60Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	36.790	15.80	0.65	16.52	32.97	40.00	7.03
2	53.280	8.14	0.79	18.64	27.57	40.00	12.43
3	93.050	10.09	0.85	10.90	21.84	43.50	21.66
4	153.190	11.04	0.93	11.83	23.80	43.50	19.70
5	279.290	13.52	1.42	4.87	19.81	46.00	26.19
6	710.940	19.82	3.09	2.92	25.83	46.00	20.17







Site no : Audix ACI (3m Chamber) Data no. : 313

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

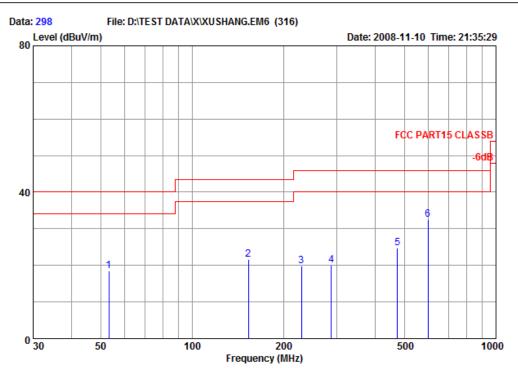
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1680*1050@60Hz

	Freq.	Antenna Factor (dB/m)	Preamp Factor (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin
2 3 4 5	1264.000 1508.000 1844.000 1920.000 2436.000 2504.000	25.28 26.17 27.19 27.40 29.01 29.22	37.02 36.51 35.93 35.81 35.26 35.20	7.41 8.43 9.48 9.73 11.33 11.54	55.15 52.90 50.96 48.78 46.04 46.32	50.82 50.99 51.70 50.10 51.12 51.88	74.00 74.00 74.00 74.00 74.00 74.00	23.18 23.01 22.30 23.90 22.88 22.12

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 298

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : HORIZONTAL

Env. / Ins.: 22'C 60%RH ESVS10 Engineer : Leo EUT : Chrome 530 Graphic Card

M/N : S3G002

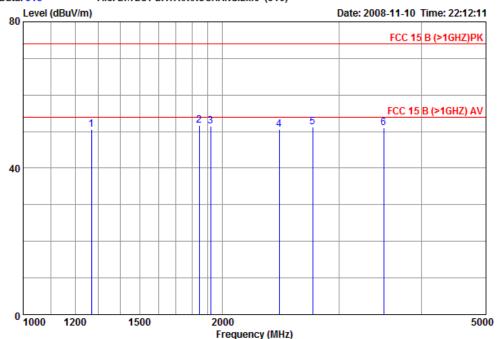
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1920*1200@60Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	53.280	8.14	0.79	9.61	18.54	40.00	21.46
2	153.190	11.04	0.93	9.66	21.63	43.50	21.87
3	228.850	12.07	1.20	6.56	19.83	46.00	26.17
4	287.050	13.68	1.48	4.87	20.03	46.00	25.97
5	474.260	17.57	2.30	4.80	24.67	46.00	21.33
6	598.420	19.20	2.59	10.85	32.64	46.00	13.36







Site no : Audix ACI (3m Chamber) Data no. : 315

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : HORIZONTAL

Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

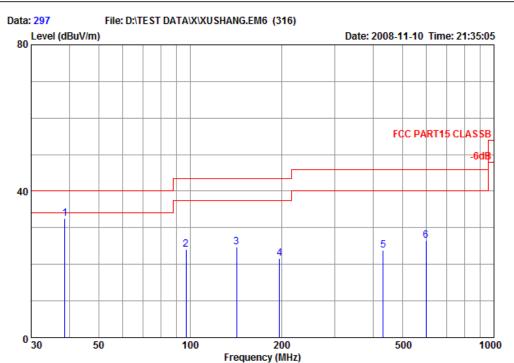
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1920*1200@60Hz

	Freq.	Antenna Factor	Preamp Factor		Reading	Emission Level	Limits	Margin
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	ı) (dB)
1	1268.000	25.30	37.02	7.41	54.95	50.64	74.00	23.36
2	1844.000	27.19	35.93	9.48	51.02	51.76	74.00	22.24
3	1920.000	27.40	35.81	9.73	50.26	51.58	74.00	22.42
4	2436.000	29.01	35.26	11.33	45.52	50.60	74.00	23.40
5	2736.000	29.84	35.01	11.67	44.73	51.23	74.00	22.77
6	3504.000	31.63	34.15	12.06	41.55	51.09	74.00	22.91

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 297

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Leo

EUT : Chrome 530 Graphic Card

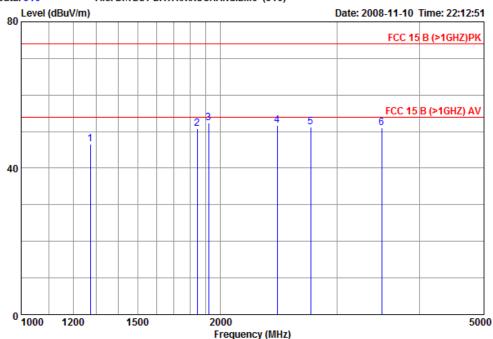
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1920*1200@60Hz

_	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1 2 3	38.730	14.62	0.67	17.24	32.53	40.00	7.47
	96.930	10.87	0.85	12.24	23.96	43.50	19.54
	142.520	11.91	0.91	12.01	24.83	43.50	18.67
4	196.840	10.57	1.07	9.92	21.56	43.50	21.94
	432.550	16.95	2.16	4.68	23.79	46.00	22.21
	597.450	19.17	2.58	4.85	26.60	46.00	19.40







Site no : Audix ACI (3m Chamber) Data no. : 316

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

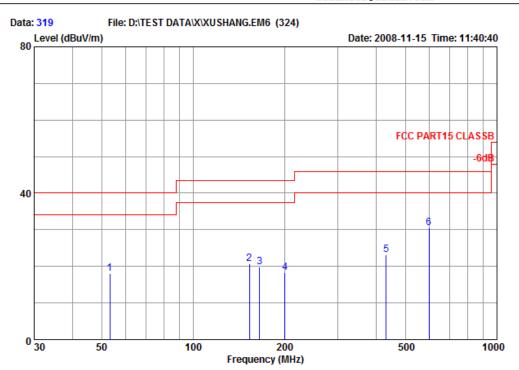
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 1920*1200@60Hz

		Antenna Factor	Factor	Loss	_	Emission Level		Margin
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	i) (dB)
1	1272.000	25.31	37.01	7.41	50.85	46.56	74.00	27.44
2	1844.000	27.19	35.93	9.48	50.04	50.78	74.00	23.22
3	1920.000	27.40	35.81	9.73	51.13	52.45	74.00	21.55
4	2436.000	29.01	35.26	11.33	46.52	51.60	74.00	22.40
5	2736.000	29.84	35.01	11.67	44.73	51.23	74.00	22.77
6	3504.000	31.63	34.15	12.06	41.55	51.09	74.00	22.91

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 319

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : HORIZONTAL

Env. / Ins.: 22'C 60%RH ESVS10 Engineer : Leo EUT : Chrome 530 Graphic Card

M/N : S3G002

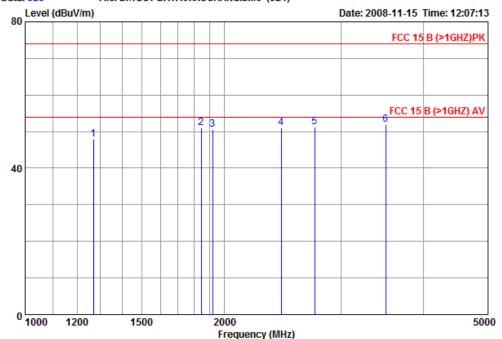
S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 2048*1536@75Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	53.280	8.14	0.79	9.21	18.14	40.00	21.86
2	153.190	11.04	0.93	8.84	20.81	43.50	22.69
3	165.800	10.33	0.97	8.49	19.79	43.50	23.71
4	200.720	10.74	1.08	6.48	18.30	43.50	25.20
5	431.580	16.95	2.16	4.09	23.20	46.00	22.80
6	597.450	19.17	2.58	8.70	30.45	46.00	15.55







Site no : Audix ACI (3m Chamber) Data no. : 323

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : HORIZONTAL

Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

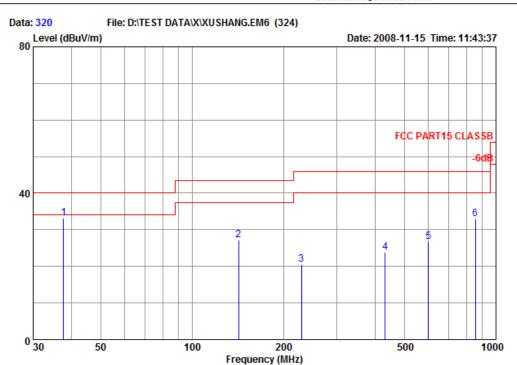
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 2048*1536@75Hz

	Freq.	Antenna Factor (dB/m)	Preamp Factor (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin
_								
1	1268.000	25.30	37.02	7.41	52.12	47.81	74.00	26.19
2	1844.000	27.19	35.93	9.48	50.21	50.95	74.00	23.05
3	1920.000	27.40	35.81	9.73	49.27	50.59	74.00	23.41
4	2436.000	29.01	35.26	11.33	46.00	51.08	74.00	22.92
5	2736.000	29.84	35.01	11.67	44.66	51.16	74.00	22.84
6	3504.000	31.63	34.15	12.06	42.37	51.91	74.00	22.09

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp Factor + Reading.





Site no : Audix ACI (3m Chamber) Data no. : 320

Dis. / Ant. : 3m /CBL 6112D-2008.05.14

Limit : FCC PART15 CLASSB Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Leo

EUT : Chrome 530 Graphic Card

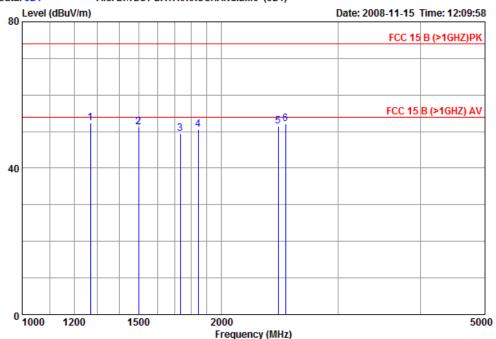
M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 2048*1536@75Hz

	Freq.	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	-
1	37.760	15.20	0.66	17.26	33.12	40.00	6.88
2	142.520	11.91	0.91	14.42	27.24	43.50	16.26
3	228.850	12.07	1.20	7.25	20.52	46.00	25.48
4	432.550	16.95	2.16	4.84	23.95	46.00	22.05
5	600.360	19.20	2.59	4.93	26.72	46.00	19.28
6	856.440	21.28	3.44	8.16	32.88	46.00	13.12







Site no : Audix ACI (3m Chamber) Data no. : 324

Dis. / Ant. : 3m /EMCO3115

Limit : FCC 15 B (>1GHZ)PK Ant. pol. : VERTICAL Env. / Ins. : 22'C 60%RH/ E7405A Engineer : Leo

EUT : Chrome 530 Graphic Card

M/N : S3G002 S/N : A083600010996 Power Rating: 120V/60Hz

Test Mode : DVI+HDMI 2048*1536@75Hz

	Freq.	Antenna Factor	Preamp Factor	Loss	_	Emission Level		Margin
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	1268.000	25.30	37.02	7.41	56.71	52.40	74.00	21.60
2	1500.000	26.14	36.53	8.43	53.19	51.23	74.00	22.77
3	1732.000	26.87	36.12	9.15	49.47	49.37	74.00	24.63
4	1844.000	27.19	35.93	9.48	49.84	50.58	74.00	23.42
5	2436.000	29.01	35.26	11.33	46.40	51.48	74.00	22.52
6	2500.000	29.19	35.20	11.54	46.59	52.12	74.00	21.88

Remarks: 1.Emission Level= Antenna Factor + Cable Loss - Preamp

Factor + Reading.

5 DEVIATION TO TEST SPECIFICATIONS

None.