

**FCC PART 15B**  
**MEASUREMENT AND TEST REPORT**  
**FOR**

**J&W TECHNOLOGY LTD.**

**Room1301, 13/F, Building B, Haisong Edifice, Tairan 9th Rd, Futian District,**  
**Shenzhen, China.**

**FCC ID: WMFJRS890ITX01**

<b>Report Concerns:</b> Original Report	<b>Equipment Type:</b> Mainboard
<b>Model:</b>	<u>JRS890ITX01</u>
<b>Report No.:</b>	<u>STR10098049I</u>
<b>Test Date:</b>	<u>2010-09-07 to 2010-09-30</u>
<b>Issue Date:</b>	<u>2010-10-01</u>
<b>Tested By:</b>	<u>Jason Chen / Engineer</u> <i>Jason chen</i>
<b>Reviewed By:</b>	<u>Lahm Peng / EMC Manager</u> <i>Lahm peng</i>
<b>Approved &amp; Authorized By:</b>	<u>Jandy so / PSQ Manager</u> <i>Jandyso</i>
<b>Prepared By:</b>	<b>SEM.Test Compliance Service Co., Ltd</b> 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C. (518101) Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by SEM.Test Compliance Service Co., Ltd.

**TABLE OF CONTENTS**

<b>1. GENERAL INFORMATION.....</b>	<b>3</b>
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	3
1.2 TEST STANDARDS.....	4
1.3 RELATED SUBMITTAL(S)/GRANT(S) .....	4
1.4 TEST METHODOLOGY .....	4
1.5 TEST FACILITY .....	4
1.6 EUT EXERCISE SOFTWARE .....	4
1.7 ACCESSORIES EQUIPMENT LIST AND DETAILS .....	5
1.8 EUT CABLE LIST AND DETAILS .....	5
<b>2. SUMMARY OF TEST RESULTS .....</b>	<b>6</b>
<b>3. §15.107 (A)- CONDUCTED EMISSION .....</b>	<b>7</b>
3.1 MEASUREMENT UNCERTAINTY .....	7
3.2 TEST EQUIPMENT LIST AND DETAILS .....	7
3.3 TEST PROCEDURE.....	7
3.4 BASIC TEST SETUP BLOCK DIAGRAM.....	7
3.5 ENVIRONMENTAL CONDITIONS .....	8
3.6 TEST RECEIVER SETUP .....	8
3.7 SUMMARY OF TEST RESULTS/PLOTS .....	8
3.8 CONDUCTED EMISSIONS TEST DATA.....	8
<b>4. §15.109(A)- RADIATED EMISSION .....</b>	<b>11</b>
4.1 MEASUREMENT UNCERTAINTY .....	11
4.2 TEST EQUIPMENT LIST AND DETAILS .....	11
4.3 TEST PROCEDURE.....	11
4.4 TEST RECEIVER SETUP .....	12
4.5 CORRECTED AMPLITUDE & MARGIN CALCULATION.....	12
4.6 ENVIRONMENTAL CONDITIONS .....	12
4.7 SUMMARY OF TEST RESULTS/PLOTS .....	12

## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment Under Test (EUT)

#### Client Information

Applicant: J&W TECHNOLOGY LTD.  
 Address of applicant: Room1301, 13/F, Building B, Haisong Edifice, Tairan 9th Rd, Futian District, Shenzhen, China.

Manufacturer 1: Kuan Da Electronics (Shenzhen) Company Limited  
 Address of manufacturer: Block A&B, Shixia Ganglian (Shajing) Industrial Park, Jinxiu Road, Shajing, Baoan District, Shenzhen, China.

Manufacturer 2: ZhongYing Electronics LTD  
 Address of manufacturer: NiuPu Industrial Park, HuangJiang Town, DongGuan City, GuangDong Province, China.

Manufacturer 3: SCD TECHNOLOGY CO., LTD.  
 Address of manufacturer: NO.1, The 2nd Street, Huihuang Industrial Zone, Xiekeng Villgae, Qingxi Town, Dongguang City, Guangdong Province, China.P.523600

#### General Description of E.U.T

Items	Description
EUT Description:	Mainboard
Trade Name:	J&W
Model No.:	JRS890ITX01
Rated Voltage:	/
Rated Current:	/
Packaging Size:	17 x17 x4 cm
For more information refer to the circuit diagram form and the user's manual.	

#### General Description fo EUT Tested

Items	Description
CPU Speed:	2.8GHz
Memory Size and Speed:	2GHz and DDR 866MHz
Highest frequency:	2.8GHz
Video pixel clock based on resolution tested for worst-case configuration	
VGA mode(1280X1024, 75Hz):	135MHz
DVI mode(1600X1200, 70Hz):	189MHz
HDMI mode(1600X1200, 75Hz):	202MHz
Brightness:	Max. Brightness
Contrast:	Max. Contrast

*The test data is gathered from a production sample, provided by the manufacturer.*

## 1.2 Test Standards

The following report is prepared on behalf of the J&W TECHNOLOGY LTD. in accordance with Part 2, Subpart J, and Part 15, Subparts A and B of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15.107, 15.109, and 15.32(a)(1)(i) rules.

**Maintenance of compliance** is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission/immunity, should be checked to ensure compliance has been maintained.

## 1.3 Related Submittal(s)/Grant(s)

No Related Submittal(s).

## 1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

The equipment under test (EUT) was configured to measure its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the Operating Instructions.

## 1.5 Test Facility

FCC – Registration No.: **994117**

SEM.Test Compliance Services Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 994117.

Industry Canada (IC) Registration No.: **7673A**

The 3m Semi-anechoic chamber of SEM.Test Compliance Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 7673A.

## 1.6 EUT Exercise Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the system components. The test software, provided by the customer, is started while the EUT is on to simulate the normal work. under the Windows XP terminal, the exercise software includes the following features:

- \* With a file read and write function for all hard drives or external USB disk,
- \* A exercise video function that fill the character “H” in the LCD display.
- \* Run all I/O port, for exaample the USB mouse, Keyboard, Earphone, Microphone, RJ45 ethernet port etc.

With LCD display unit and LCD display setup information (base on three kind of LCD display output, including VGA, HDMI and DVI output functions)

\* Set the contrast control to maximum

\* Set the brightness control to maximum or at raster extinction if raster extinction occurs at less than maximum brightness.

In addition, the computer playing the standard 1kHz audio signal, and plug in the microphone and headphone so that the microphone and audio port is running.

## 1.7 Accessories Equipment List and Details

Description	Manufacturer	Model	Serial Number
LCD Monitor 1	ACER	V203H	9243073242
LCD Monitor 2	BenQ	VP2212	QLD2900124032
Mouse	DELL	MOC5UQ	J0700J92
Keyboard	DELL	SK-8115	CNODJ331-71616-06A-01Q4
Earphone	PHILIPS	SHM1500	/
USB Disk	Lenovo	T180	/

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
VGA Cable	1.5m	Shielded	With Core
DVI Cable	1.5m	Shielded	With Core
HDMI Cable	1.5 m	Shielded	With Core
Mouse USB Cable	1.7 m	Unshielded	Without Core
Keyboard USB Cable	1.7 m	Shielded	With Core
Earphone Cable	1.5m	Unshielded	Without Core
Network Cable	/	Unshielded	Without Core
Power Cable	1.2	Unshielded	Without Core

## 1.8 EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/
/	/	/	/

2. SUMMARY OF TEST RESULTS

Description of Test	Result
§15.107 (a) Conducted Emission	Compliant
§15.109(a) Radiated Emission	Compliant

### 3. §15.107 (a)- CONDUCTED EMISSION

#### 3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is  $\pm 2.88$  dB.

#### 3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2010-08-12	2011-08-11
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2010-08-12	2011-08-11
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2010-08-12	2011-08-11

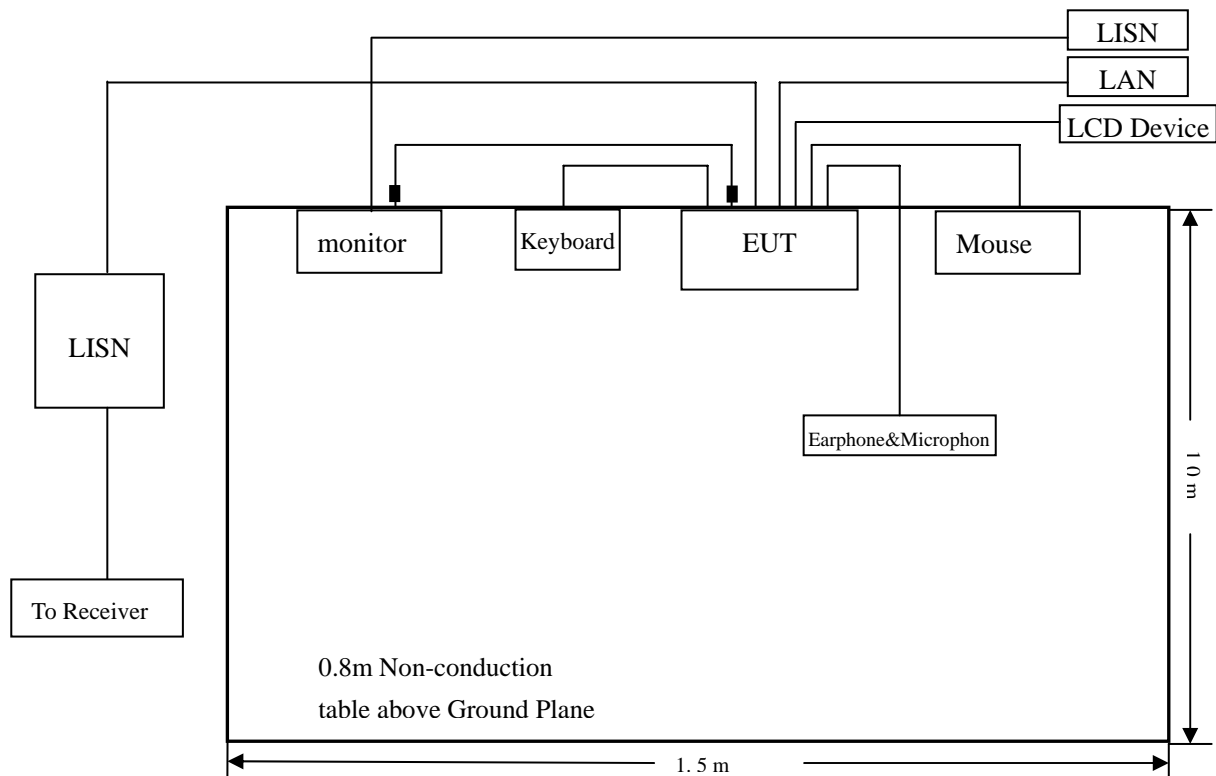
#### 3.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2009 measurement procedure. The specification used was with the FCC Part 15.107 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

#### 3.4 Basic Test Setup Block Diagram



### 3.5 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

### 3.6 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency ..... 150 kHz  
 Stop Frequency..... 30 MHz  
 Sweep Speed ..... Auto  
 IF Bandwidth..... 10 kHz  
 Quasi-Peak Adapter Bandwidth ..... 9 kHz  
 Quasi-Peak Adapter Mode ..... Normal

### 3.7 Summary of Test Results/Plots

According to the data in section 3.8, the EUT complied with the FCC Part 15B Conducted margin for a Class B device, with the *worst* margin reading of:

**-4.31 dBμV at 6.906 MHz in the Line mode, Ave detector, 0.15-30MHz**

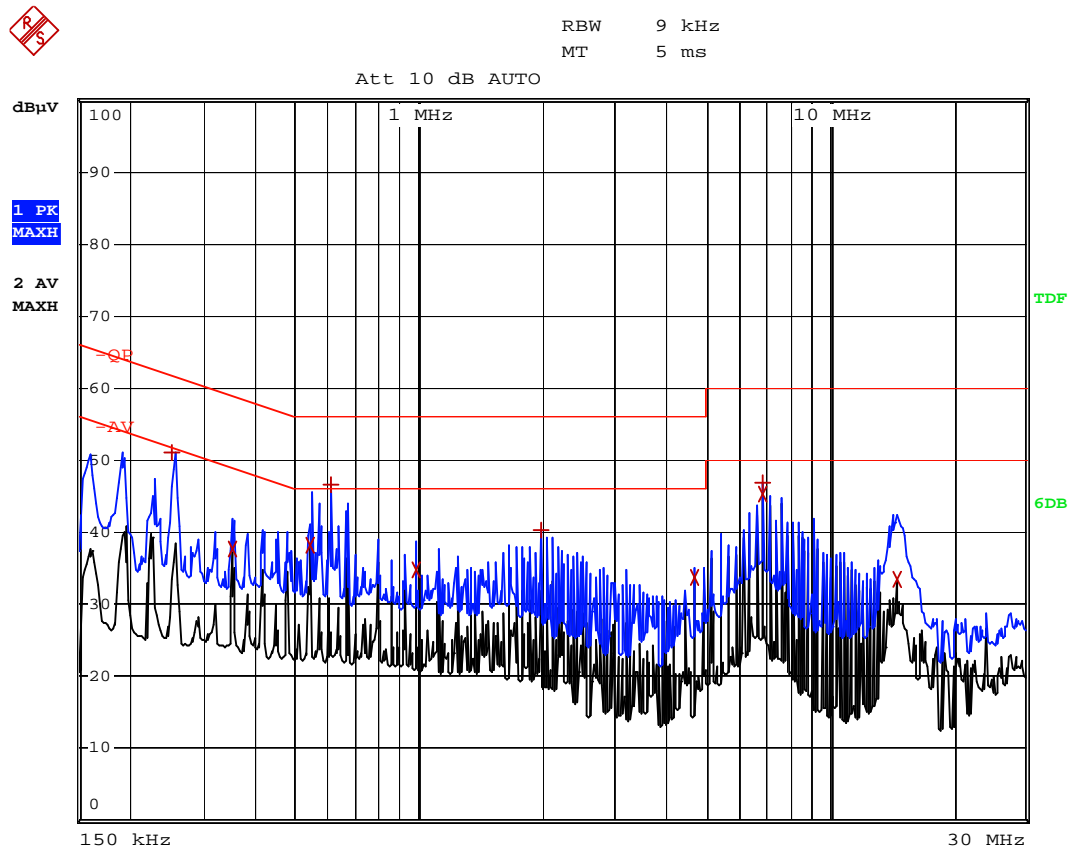
### 3.8 Conducted Emissions Test Data

LINE CONDUCTED EMISSIONS				FCC 15 CLASS B	
Frequency	Amplitude	Detector	Phase	Limit	Margin
MHz	dBμV	QP/Ave/Pk	Line/Neutral	dBμV	dB
6.906	45.68	Ave	Line	50.00	-4.31
9.906	45.37	Ave	Neutral	50.00	-4.62
0.542	38.10	Ave	Neutral	46.00	-7.89
0.542	37.23	Ave	Line	46.00	-8.76
0.610	46.61	Pk	Neutral	56.00	-9.38
0.254	51.25	Pk	Line	61.62	-10.37
0.254	51.01	Pk	Neutral	61.62	-10.61
0.538	45.06	Pk	Line	56.00	-10.93
0.986	34.72	Ave	Neutral	46.00	-11.27
0.350	37.60	Ave	Neutral	48.96	-11.36
0.986	34.36	Ave	Line	46.00	-11.63
0.190	41.74	Ave	Line	54.03	-12.29
4.686	33.65	Ave	Neutral	46.00	-12.34
6.906	47.20	Pk	Line	60.00	-12.79
4.686	33.01	Ave	Line	46.00	-12.98
6.906	46.82	Pk	Neutral	60.00	-13.17

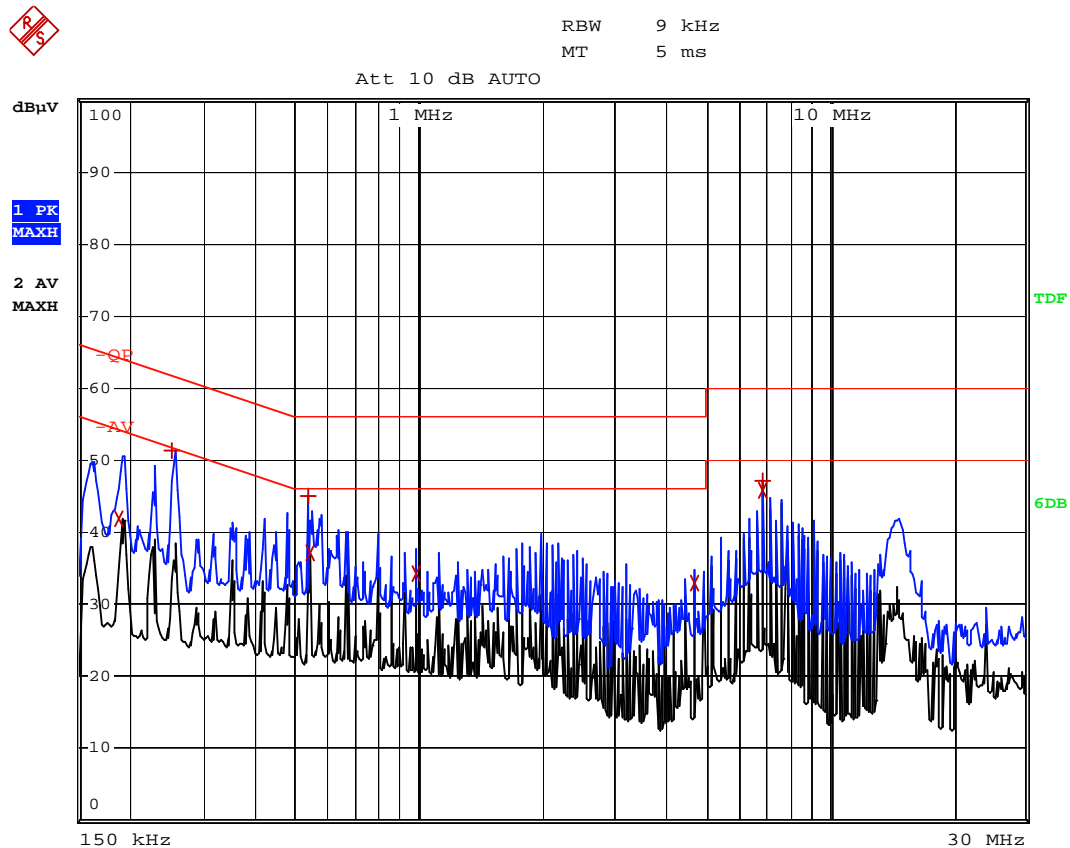


Plot of Conducted Emissions Test Data

Conducted Disturbance  
EUT: Mainboard  
M/N: JRS890ITX01  
Operating Condition: EMC test Software to Run and VGA Out Display  
Test Specification: N  
Comment: AC 120V/60Hz



Date: 13.SEP.2010 17:12:17

**Plot of Conducted Emissions Test Data***Conducted Disturbance**EUT: Mainboard**M/N: JRS890ITX01**Operating Condition: EMC test Software to Run and VGA Out Display**Test Specification: L**Comment: AC 120V/60Hz connect to PC, USB 5V*

Date: 13.SEP.2010 17:10:15

## 4. §15.109(a)- RADIATED EMISSION

### 4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is  $\pm 5.10$  dB.

### 4.2 Test Equipment List and Details

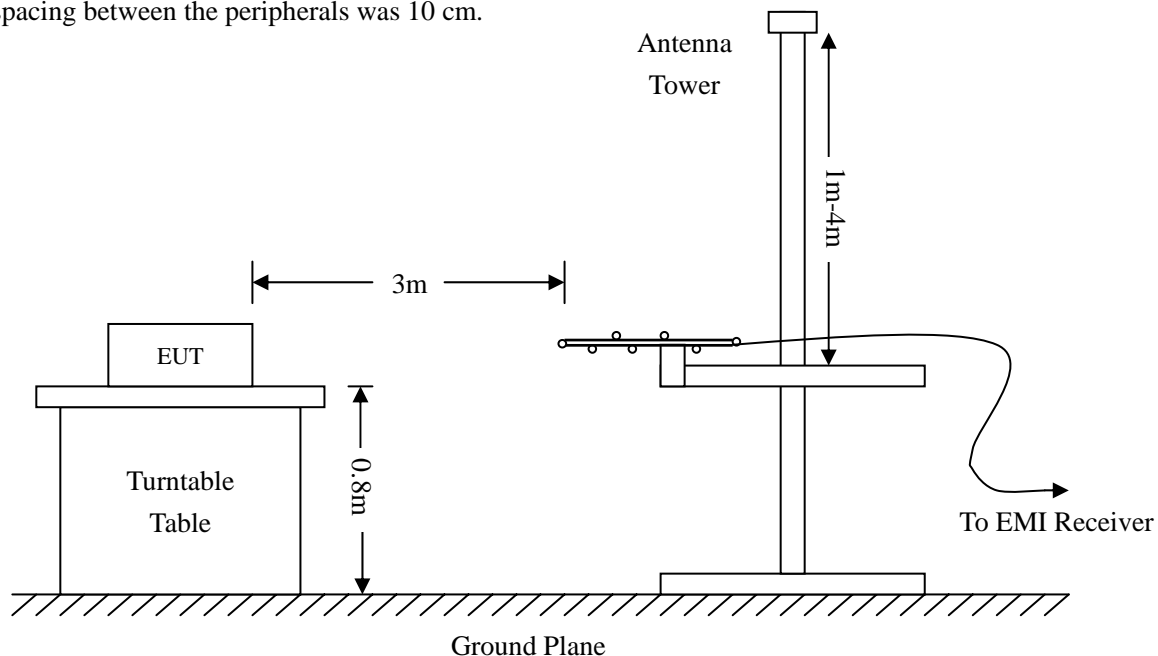
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2010-04-16	2011-04-15
EMI Test Receiver	R&S	ESVB	825471/005	2010-08-12	2011-08-11
Pre-amplifier	Agilent	8447F	3113A06717	2010-08-12	2011-08-11
Pre-amplifier	Compliance Direction	PAP-0118	24002	2010-08-12	2011-08-11
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2010-07-21	2011-07-20
Horn Antenna	ETS	3117	00086197	2010-07-21	2011-07-20

### 4.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.205 and FCC Part 15.109 Limit and FCC Part 15.32(a)(2).

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.



Note: The measuring antenna was raised from 1-4m and the turntable was rotated over 360 degrees to maximize spurious emissions. These interconnection cables position were manipulated to maximize emissions during testing. User controls were adjusted to maximize emissions, i.e. brightness and contrast for displays. All test modes were adjusted to maximize emissions.

#### 4.4 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Measurement From 30MHz to 1000MHz:

Sweep Speed ..... Auto  
 IF Bandwidth..... 100 kHz  
 Video Bandwidth..... 300 kHz

During the radiated emission test for above 1GHz, the test receiver was set with the following configurations:

For peak detector:

RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:

RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

#### 4.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} - \text{Corr. Factor}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15B Limit}$$

#### 4.6 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

#### 4.7 Summary of Test Results/Plots

According to the data, the EUT complied with the FCC part 15.109 and 15.32(a)(1)(i) rule, the radiated emission shall be allow not exceed the radiated emission limits specified in Section 15.109 of this part by more than 6 dB, and had the worst margin of:

**-1.90 dBμV at 804.6028 MHz in the, Horizontal polarization VGA OUT Display Mode 30 MHz to 14 GHz, 3Meters**

**4.53 dBμV at 804.6028MHz in the, Horizontal polarization HDMI OUT Display Mode 30 MHz to 14 GHz, 3Meters**

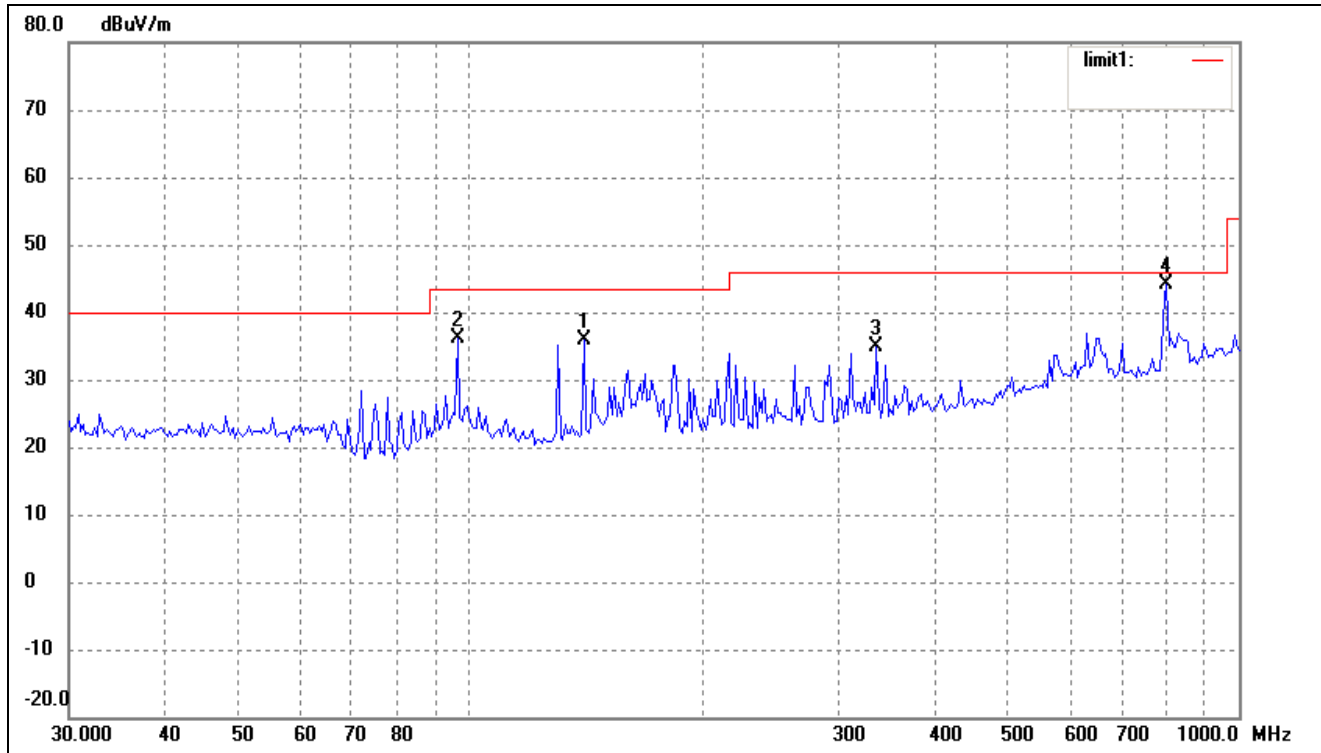
**5.06 dBμV at 574.6258MHz in the, Horizontal polarization DVI OUT Display Mode 30 MHz to 14 GHz, 3Meters**

**Plot of Radiation Emissions Test Data**

Operating Condition: EMC test Software to Run and VGA Out Display

Test Specification: Horizontal &amp; Vertical

Comment: AC 120V/60Hz

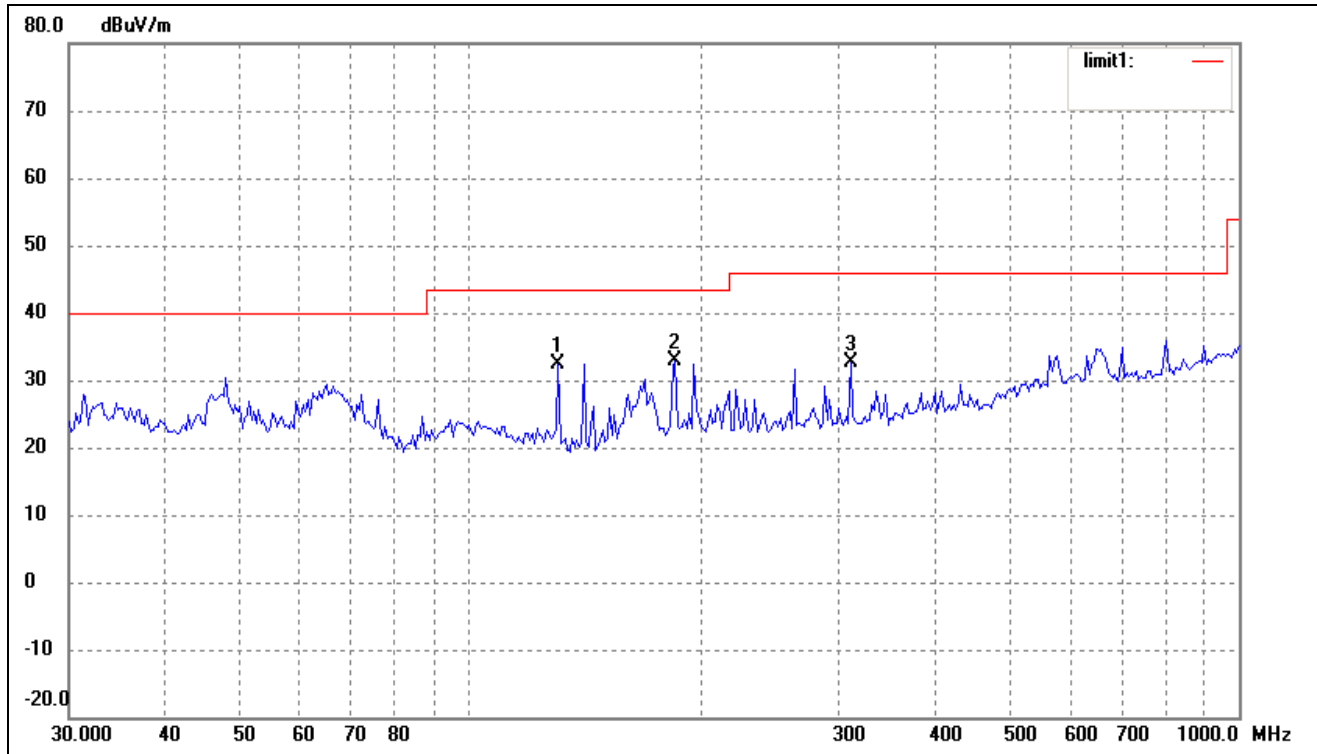
**Horizontal**

No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( ° )	Height (cm)	Remark
1	140.3421	32.55	3.22	35.77	43.50	-7.73	360	100	peak
2	96.0986	28.51	7.54	36.05	43.50	-7.45	0	200	peak
3	337.2155	25.74	9.18	34.92	46.00	-11.08	0	200	peak
4	804.6028	28.53	15.57	44.10	46.00	-1.90	229	117	QP

**Above 1GHz**

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( ° )	Height (cm)	Remark
1	1224.25	63.86	-7.68	56.18	74.00	-17.8	360	100	peak
	1224.25	50.92	-7.68	43.24	54.00	-10.8	360	100	Ave.
2	2135.06	61.96	-8.21	53.75	74.00	-20.3	360	100	peak
	2135.06	47.98	-8.21	39.77	54.00	-14.2	360	100	Ave
3	2789.22	61.67	-5.33	56.34	74.00	-17.7	360	100	peak
	2789.22	52.11	-5.33	46.78	54.00	-7.2	360	100	Ave.
4	5578.56	57.3	-2.52	54.78	74.00	-19.2	360	100	peak
	5578.56	47.84	-2.52	45.32	54.00	-8.7	360	100	Ave
5	8366.12	50.09	2.45	52.54	74.00	-21.5	360	100	peak
	8366.12	36.22	2.45	38.67	54.00	-15.3	360	100	Ave.

Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( ° )	Height (cm)	Remark
1	129.9226	28.47	3.86	32.33	43.50	-11.17	0	100	peak
2	184.4898	27.73	5.18	32.91	43.50	-10.59	360	100	peak
3	312.1794	23.95	8.76	32.71	46.00	-13.29	0	200	peak

Above 1GHz

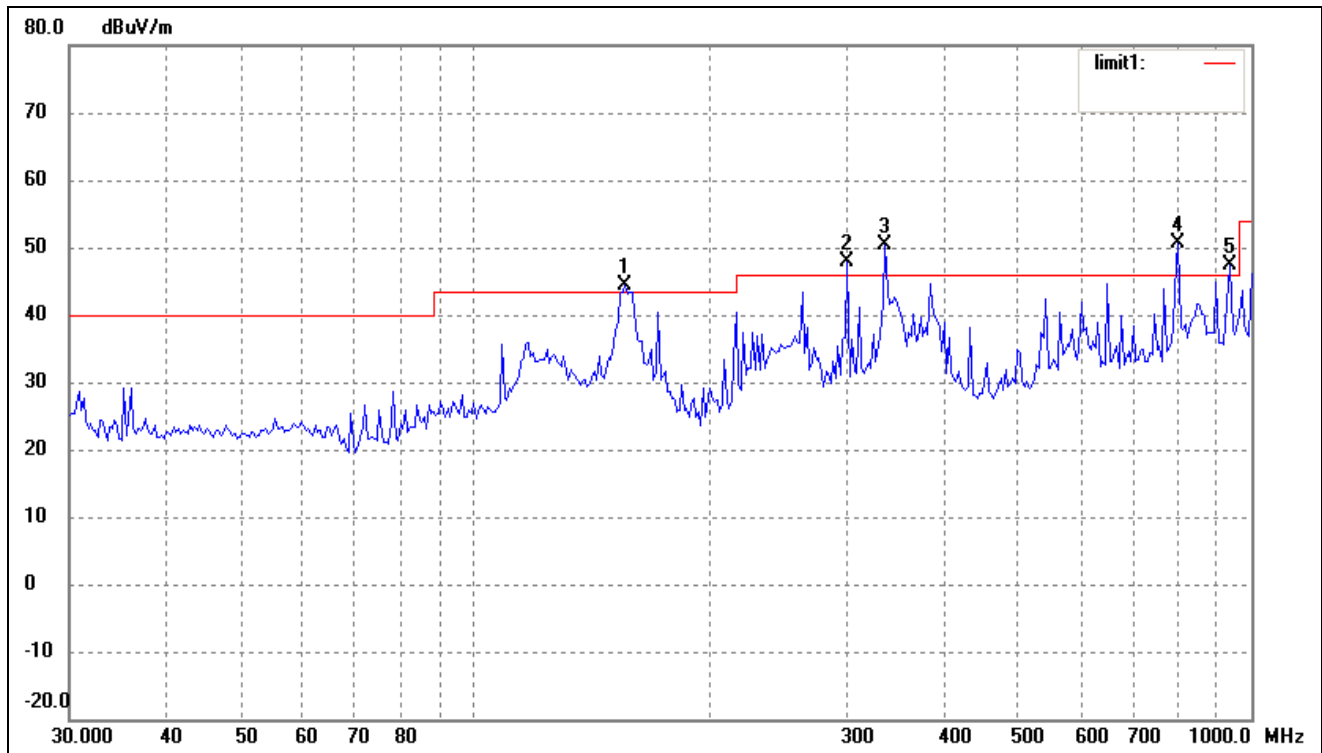
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( ° )	Height (cm)	Remark
1	1224.25	65.17	-7.68	57.49	74.00	-16.5	360	100	peak
	1224.25	49.56	-7.68	41.88	54.00	-12.1	360	100	Ave.
2	2135.06	64.15	-8.21	55.94	74.00	-18.1	360	100	peak
	2135.06	50.79	-8.21	42.58	54.00	-11.4	360	100	Ave
3	2789.22	61.78	-5.33	56.45	74.00	-17.6	360	100	peak
	2789.22	51.68	-5.33	46.35	54.00	-7.7	360	100	Ave.
4	5578.56	57.76	-2.52	55.24	74.00	-18.8	360	100	peak
	5578.56	47.74	-2.52	45.22	54.00	-8.8	360	100	Ave
5	8366.12	49.9	2.45	52.35	74.00	-21.7	360	100	peak
	8366.12	33.99	2.45	36.44	54.00	-17.6	360	100	Ave.

Operating Condition: EMC test Software to Run and HDMI Out Display

Test Specification: Horizontal & Vertical

Comment: AC 120V/60Hz

Horizontal

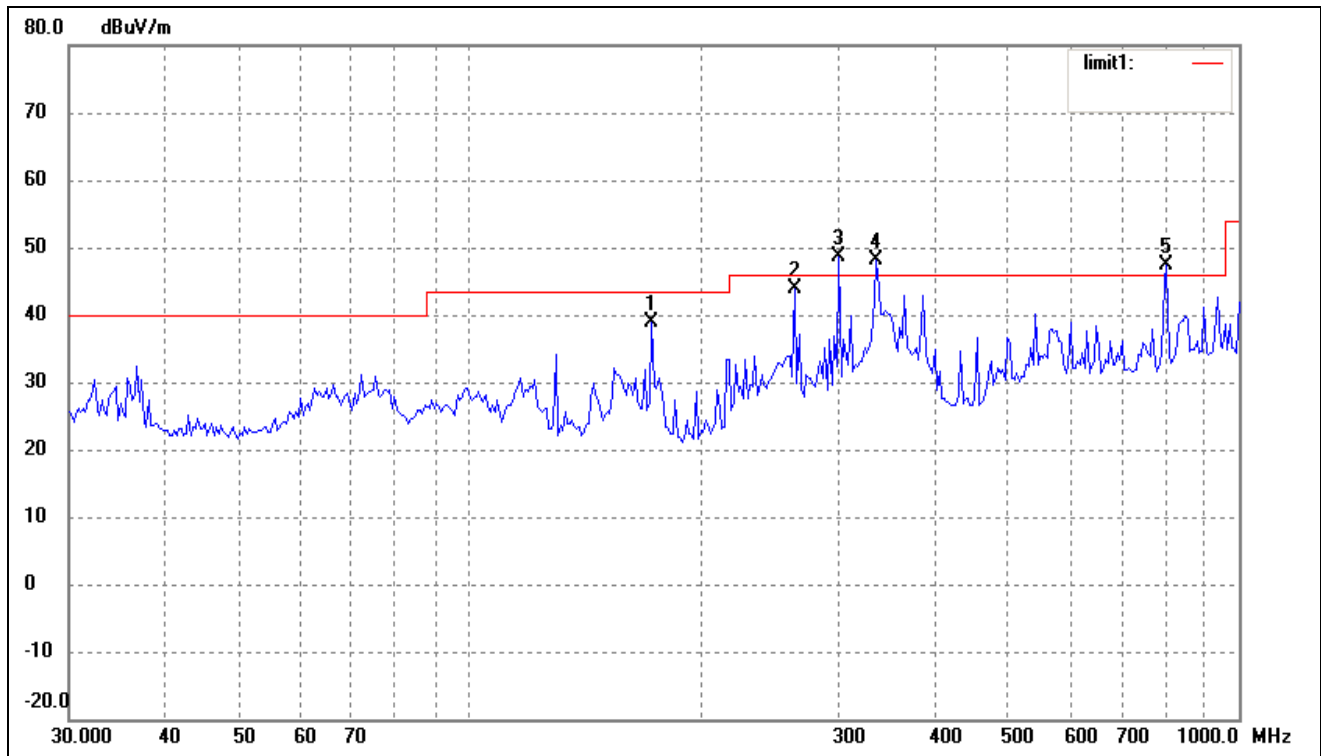


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( ° )	(cm)	
1	155.9101	40.85	3.56	44.41	43.50	0.91	360	100	peak *
2	301.4224	39.33	8.66	47.99	46.00	1.99	360	100	peak *
3	337.2155	41.20	9.18	50.38	46.00	4.38	360	100	peak *
4	804.6028	34.96	15.57	50.53	46.00	4.53	360	100	peak *
5	938.8326	29.86	17.42	47.28	46.00	1.28	360	100	peak *

Above 1G

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	( ° )	(cm)	
1	1224.25	62.02	-7.68	54.34	74.00	-19.7	360	100	peak
	1224.25	49.32	-7.68	41.64	54.00	-12.4	360	100	Ave.
3	2135.06	60.54	-8.21	52.33	74.00	-21.7	360	100	peak
	2135.06	47.49	-8.21	39.28	54.00	-14.7	360	100	Ave
3	2789.22	62.79	-5.33	57.46	74.00	-16.5	360	100	peak
	2789.22	51.46	-5.33	46.13	54.00	-7.9	360	100	Ave.
4	5578.56	57.77	-2.52	55.25	74.00	-18.8	360	100	peak
	5578.56	47.21	-2.52	44.69	54.00	-9.3	360	100	Ave
5	8366.12	50.1	2.45	52.55	74.00	-21.5	360	100	peak
	8366.12	35.33	2.45	37.78	54.00	-16.2	360	100	Ave.

Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	171.9946	34.77	4.20	38.97	43.50	-4.53	360	100	peak
2	263.8190	35.85	8.02	43.87	46.00	-2.13	360	100	peak
3	301.4224	40.01	8.66	48.67	46.00	2.67	360	100	peak *
4	337.2155	38.99	9.18	48.17	46.00	2.17	360	100	peak *
5	804.6028	31.69	15.57	47.26	46.00	1.26	360	100	peak *

Above 1G

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	1224.25	59.82	-7.68	52.14	74.00	-21.9	360	100	peak
	1224.25	48.23	-7.68	40.55	54.00	-13.5	360	100	Ave.
2	1516.42	55.6	-6.85	48.75	74.00	-25.3	360	100	peak
	1516.42	46.12	-6.85	39.27	54.00	-14.7	360	100	Ave.
3	2135.06	56.25	-8.21	48.04	74.00	-25.96	360	100	peak
	2135.06	43.28	-8.21	35.07	54.00	-18.93	360	100	Ave
3	2789.22	65.81	-5.33	60.48	74.00	-13.5	360	100	peak
	2789.22	54.86	-5.33	49.53	54.00	-4.5	360	100	Ave.
4	5578.56	60.3	-2.52	57.78	74.00	-16.2	360	100	peak
	5578.56	49.4	-2.52	46.88	54.00	-7.1	360	100	Ave
5	8366.12	49.9	2.45	52.35	74.00	-21.7	360	100	peak
	8366.12	35.12	2.45	37.57	54.00	-16.4	360	100	Ave.

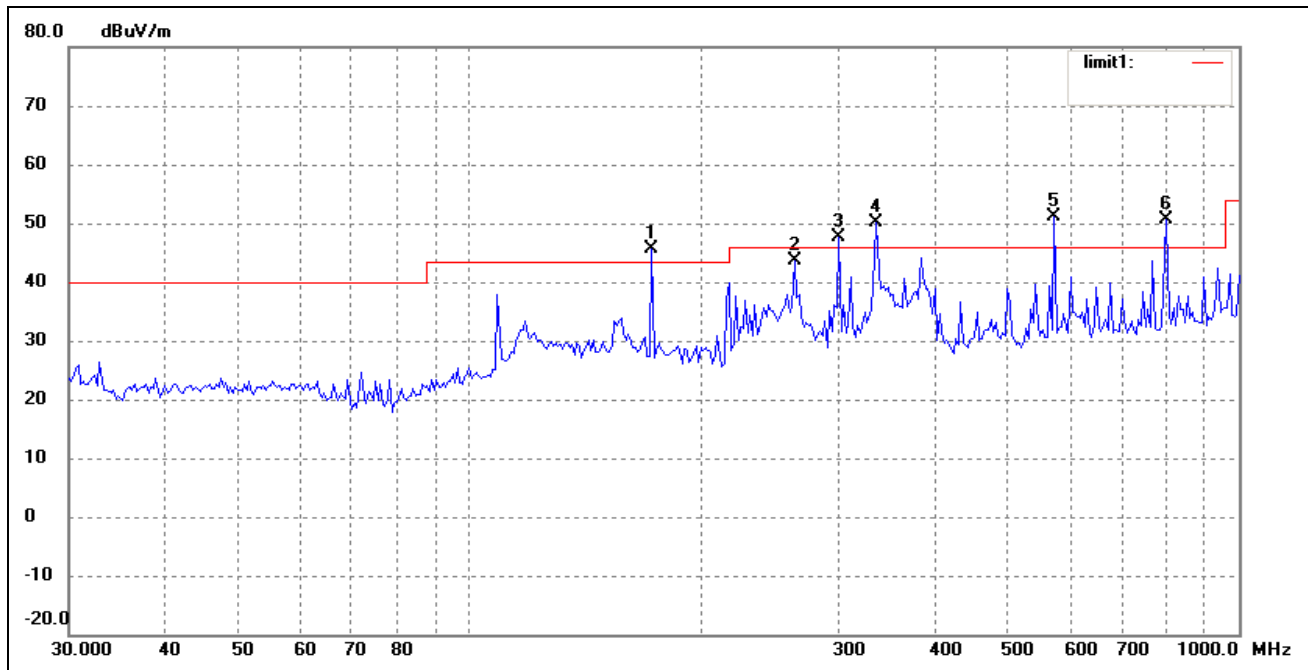


Operating Condition: EMC test Software to Run and DVI Out Display

Test Specification: Horizontal & Vertical

Comment: AC 120V/60Hz

Horizontal

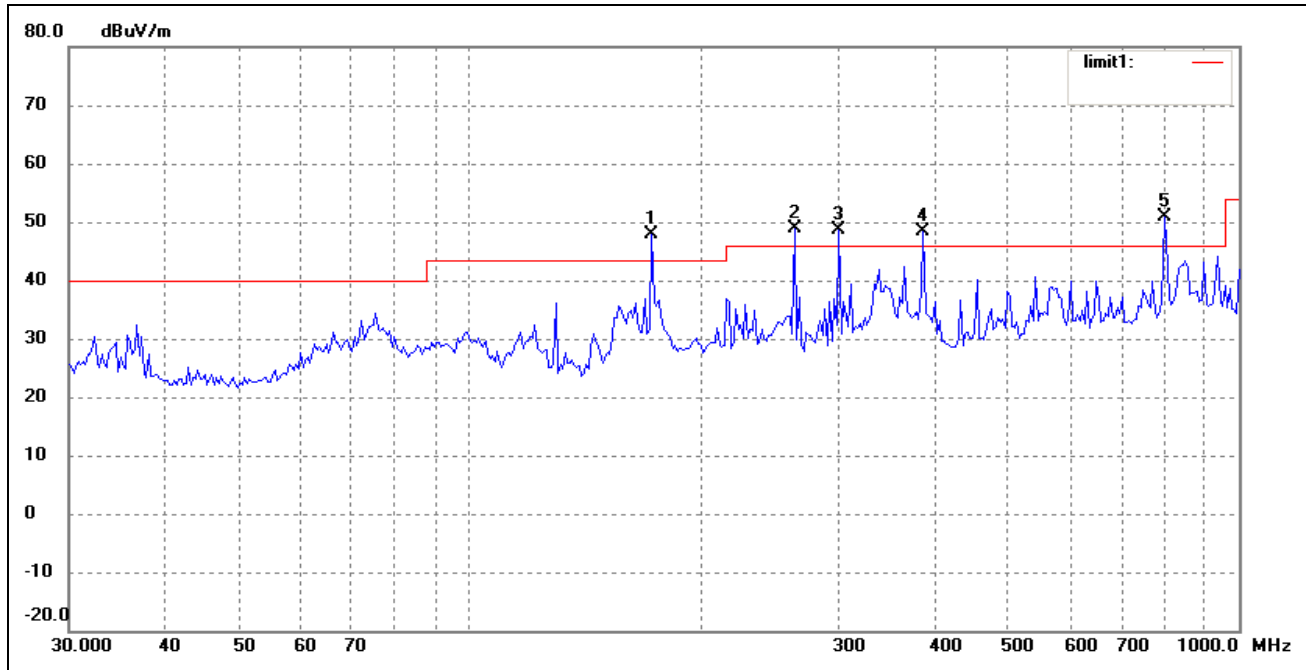


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	171.9944	41.50	4.20	45.70	43.50	2.20	360	100	peak
2	263.8190	35.66	8.02	43.68	46.00	-2.32	360	100	peak
3	301.4223	39.02	8.66	47.68	46.00	1.68	360	100	peak *
4	337.2155	41.04	9.18	50.22	46.00	4.22	360	100	peak *
5	574.6258	37.33	13.73	51.06	46.00	5.06	360	100	peak *
6	804.6028	35.04	15.57	50.61	46.00	4.61	360	100	peak *

Above 1G

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	1224.25	60.93	-7.68	53.25	74.00	-20.8	360	100	peak
	1224.25	49.02	-7.68	41.34	54.00	-12.7	360	100	Ave.
2	2135.06	59.38	-8.21	51.17	74.00	-22.8	360	100	peak
	2135.06	46.54	-8.21	38.33	54.00	-15.7	360	100	Ave
3	2789.22	63.67	-5.33	58.34	74.00	-15.7	360	100	peak
	2789.22	53.45	-5.33	48.12	54.00	-5.9	360	100	Ave.
4	5578.56	57.85	-2.52	55.33	74.00	-18.7	360	100	peak
	5578.56	47.89	-2.52	45.37	54.00	-8.6	360	100	Ave
5	8366.12	50.99	2.45	53.44	74.00	-20.6	360	100	peak
	8366.12	36.22	2.45	38.67	54.00	-15.3	360	100	Ave.

Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	171.9945	43.77	4.20	47.97	43.50	4.47	360	100	peak *
2	263.8190	40.85	8.02	48.87	46.00	2.87	360	100	peak *
3	301.4223	40.01	8.66	48.67	46.00	2.67	360	100	peak *
4	387.9920	38.36	9.99	48.35	46.00	2.35	360	100	peak *
5	798.9796	35.36	15.50	50.86	46.00	4.86	360	100	peak *

Above 1G

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	1516.42	54.3	-6.85	47.45	74.00	-26.6	360	100	peak
	1516.42	45.51	-6.85	38.66	54.00	-15.3	360	100	Ave.
2	2135.06	57.33	-8.21	49.12	74.00	-24.9	360	100	peak
	2135.06	44.47	-8.21	36.26	54.00	-17.7	360	100	Ave
3	2789.22	64.98	-5.33	59.65	74.00	-14.4	360	100	peak
	2789.22	53.55	-5.33	48.22	54.00	-5.8	360	100	Ave.
4	5578.56	58.86	-2.52	56.34	74.00	-17.7	360	100	peak
	5578.56	48.85	-2.52	46.33	54.00	-7.7	360	100	Ave
5	8366.12	50.67	2.45	53.12	74.00	-20.9	360	100	peak
	8366.12	36.44	2.45	38.89	54.00	-15.1	360	100	Ave.

\*:According to the 15.32(a)(1)(i) rule, the radiated emission shall be allow not exceed the radiated emission limits specified in Section 15.109 of this part by more than 6 dB.

Note: Emissions attenuated more than 20 dB below the permissible value are not reported. There is only the base noise in frequency 8GHz to 14GHz.

\*\*\*\*\* END OF REPORT \*\*\*\*\*