



# FCC 47 CFR PART 15 SUBPART B TEST REPORT

for

**47" LCD TV, LCD Monitor, LED LCD TV**

**Model: 47LV4400; 47LV4400XXX**

**(The " X " may be any alphanumeric character or blank.)**

**FCC ID: MDZ47LV4400UA**

Test Report Number:

T110628112-D

Issued for

**Amtran Technology Co., Ltd.**

**17F., No. 268, Liancheng Rd., Jhonghe District New Taipei City 23553, Taiwan, R.O.C.**

Issued By:

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**Revision History**

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 18, 2011	Initial Issue	All	Sabrina Wang



**TABLE OF CONTENTS**

**1 TEST RESULT CERTIFICATION.....4**

**2 EUT DESCRIPTION.....5**

**3 TEST METHODOLOGY.....6**

3.1. DECISION OF FINAL TEST MODE .....6

3.2. EUT SYSTEM OPERATION .....6

**4 SETUP OF EQUIPMENT UNDER TEST.....7**

4.1. DESCRIPTION OF SUPPORT UNITS .....7

4.2. CONFIGURATION OF SYSTEM UNDER TEST .....8

**5 FACILITIES AND ACCREDITATIONS .....9**

5.1. FACILITIES .....9

5.2. ACCREDITATIONS.....9

5.3. MEASUREMENT UNCERTAINTY .....10

**6 CONDUCTED EMISSION MEASUREMENT .....11**

6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT .....11

6.2. TEST INSTRUMENTS .....11

6.3. TEST PROCEDURES.....12

6.4. TEST SETUP .....13

6.5. DATA SAMPLE: .....13

6.6. TEST RESULTS.....14

**7 RADIATED EMISSION MEASUREMENT .....16**

7.1. LIMITS OF RADIATED EMISSION MEASUREMENT .....16

7.2. TEST INSTRUMENTS .....17

7.3. TEST PROCEDURES.....18

7.4. TEST SETUP .....19

7.5. DATA SAMPLE: .....20

7.6. TEST RESULTS.....21

**8 PHOTOGRAPHS OF THE TEST CONFIGURATION .....23**

**APPENDIX 1: PHOTOGRAPHS OF EUT.....26**



# 1 TEST RESULT CERTIFICATION

<b>Product:</b>	47" LCD TV, LCD Monitor, LED LCD TV
<b>Model:</b>	47LV4400; 47LV4400XXX (The " X " may be any alphanumeric character or blank.)
<b>Brand:</b>	LG
<b>Applicant:</b>	<b>Amtran Technology Co., Ltd.</b> 17F., No. 268, Liancheng Rd., Jhonghe District New Taipei City 23553, Taiwan, R.O.C.
<b>Manufacturer:</b>	<b>1. Amtran Electronic Co., Ltd.</b> No. 225, Jinfeng Road, Suzhou New District, Suzhou, Jiangsu PRC. <b>2. SuZhou Raken Technology Co., Ltd.</b> No. 278, Mayun Rd., Su Zhou New District, Jiangsu, China <b>3. SuZhou Raken Technology Co., Ltd. Jinfeng Branch</b> No. 225, Jinfeng Road, Suzhou New District, Suzhou, Jiangsu PRC
<b>Tested:</b>	July 8 ~ 11, 2011
<b>Test Voltage:</b>	120VAC, 60Hz

EMISSION			
Standard	Item	Result	Remarks
FCC 47 CFR Part 15 Subpart B ICES-003 Issue 4 (2004) ANSI C63.4-2003	Conducted (Main Port)	PASS	Meet Class B limit
	Radiated	PASS	Meet Class B limit

Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.  
2. The information of measurement uncertainty is available upon the customer's request.

Deviation from Applicable Standard
None

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:

Ethan Huang  
Section Manager

Reviewed by:

Stan Lin  
Supervisor



## 2 EUT DESCRIPTION

<b>Product</b>	47" LCD TV, LCD Monitor, LED LCD TV		
<b>Model</b>	47LV4400; 47LV4400XXX (The " X " may be any alphanumeric character or blank.)		
<b>Brand Name</b>	LG		
<b>Applicant</b>	Amtran Technology Co., Ltd.		
<b>Serial Number</b>	T110624109		
<b>Received Date</b>	June 24, 2011		
<b>EUT Power Rating</b>	100-240VAC, 50/60Hz		
<b>AC Power Cord Type</b>	Unshielded, 1.8m (Detachable) to Power Adaptor		
<b>LCD Panel Manufacturer</b>	LG Display or Suzhou Raken	<b>Model</b>	LC470EUG
<b>R/C IPB Manufacturer</b>	Delta	<b>Model</b>	DPS-139BP XX (X = A-Z ,or a-z or 0-9 or blank)

### I/O Port

I/O PORT TYPES	Q'TY	TESTED WITH
1. D-SUB Port	1	1
2. HDMI Port	3	4
3. USB Port	1	2
4. Component Port (Y/Pb/Pr/R/L)	1 Set	1 Set
5. Audio In Port	1	1
6. Audio out Port (PC)	1	1
7. Optical Port	1	1
8. Antenna Port	1	1

### Note:

1. The means of "X" (The " X " may be any alphanumeric character or blank.) on model number are identical, just for marketing purpose only.
2. All the model numbers (list on this report) are identical just for marketing purpose only.
3. The EUT include one Remote Control for sale only.
4. Client consigns only one model sample (Model number: 47LV4400) to test. Therefore testing Lab. just guarantees the units, which have been tested.



### 3 TEST METHODOLOGY

#### 3.1. DECISION OF FINAL TEST MODE

1. The following test mode(s) were scanned during the preliminary test:

Mode	D-SUB	R/C IPB	Panel
1	1920 x 1080 / 60Hz	Delta DPS-139BP XX	LG Display or Suzhou Raken LC470EUG
2	1280 x 1024 / 60Hz		
3	800 x 600 / 60Hz		

2. After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test Mode		
Emission	Conducted Emission	<b>Mode 1</b>
	Radiated Emission	<b>Mode 1</b>

Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

#### 3.2. EUT SYSTEM OPERATION

1	EMI test program was loaded and executed in "Windows XP" mode.
2	Operates the Wireless LAN function of EUT.
3	Data was sent to EUT filling the screen with upper case of "H" patterns.
4	Test program sequentially exercised all related I/O's of Host PC and sent "H" patterns to all applicable output ports of Host PC.
5	Repeat 2 to 4.

*Note: Test program is self-repeating throughout the test.*



## 4 SETUP OF EQUIPMENT UNDER TEST

### 4.1. DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

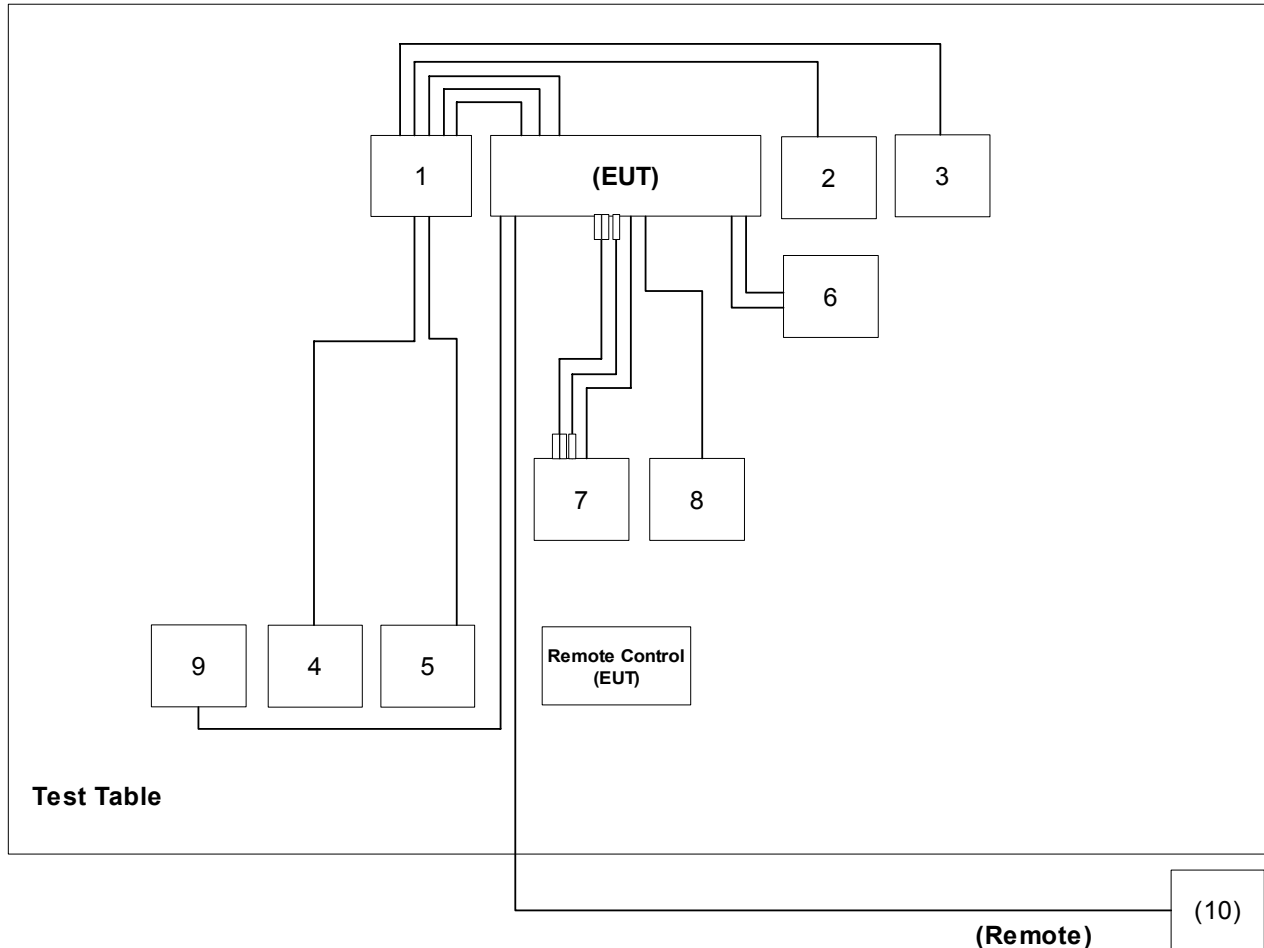
No.	Equipment	Model No.	Serial No.	FCC ID	Trade Name	Data Cable	Power Cord
1	PC	PRO 2000	SGH008RRNL	FCC DoC	HP	D-SUB Cable: Shielded, 1.8m with two cores Audio Cable: Unshielded, 1.8m	Unshielded, 1.8m
2	Modem	DM-1414	304012265	IFAXDM1414	ACEEX	Shielded, 1.8m	Unshielded, 1.8m
3	Printer	STYLUS C60	DR3K041511	FCC DoC	EPSON	Shielded, 1.8m	Unshielded, 1.8m
4	PS/2 Keyboard	Y-SJ17	SY520U00643	FCC DoC	Logitech	Unshielded, 1.8m	N/A
5	PS/2 Mouse	M-SBF69	HCA45009696	FCC DoC	Logitech	Unshielded, 1.8m	N/A
6	5.1 Digital Amplifier	Z-5400	S-0180B	FCC DoC	Logitech	Optical Cable: Unshielded, 1.0m Audio Cable: Unshielded, 1.8m	Unshielded, 1.8m
7	DVD Player	DVP-NS975V	2030939	FCC DoC	SONY	HDMI Cable: Unshielded, 1.8m Audio Cable: Unshielded, 1.8m x 2 Component Cable: Unshielded, 1.8m x 3	Unshielded, 1.8m
8	DVD Player	BDP-S360	1005989	FCC DoC	SONY	HDMI Cable: Unshielded, 1.8m	Unshielded, 1.8m
9	Traveling Disk	LuxMini 720	N/A	FCC DoC	SILICON POWER	Shielded, 1.0m	N/A
10	Digital TV S.G. (Remote)	DSG300A	CA06204385	FCC DoC	DiTV	Coaxial Cable: Unshielded, 10m	Unshielded, 1.8m
	Analogy TV S.G. (Remote)	PT5820	DM735003	FCC DoC	PHILIPS	Coaxial Cable: Unshielded, 10m	Unshielded, 1.8m

**Note:** Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



### 4.2. CONFIGURATION OF SYSTEM UNDER TEST

1	PC	2	Modem	3	Printer
4	PS/2 Keyboard	5	PS/2 Mouse	6	5.1 Digital Amplifier
7	DVD Player	8	DVD Player	9	Traveling Disk
10	Digital TV S.G. or Analogy TV S.G	11	---	12	---







## **5 FACILITIES AND ACCREDITATIONS**

### **5.1. FACILITIES**

All measurement facilities used to collect the measurement data are located at No.81-1, Lane 210, Bade 2nd Rd., Lujhu Township, Taoyuan County 33841, Taiwan, R.O.C.

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4, CISPR 16-1-5 and CISPR 16-2-3.

### **5.2. ACCREDITATIONS**

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

<b>Taiwan</b>	TAF
<b>USA</b>	A2LA

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

<b>Canada</b>	Industry Canada
<b>Germany</b>	TUV Rheinland
<b>Japan</b>	VCCI
<b>Taiwan</b>	BSMI
<b>USA</b>	FCC

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.ccsrf.com>



### 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	± 2.0518
Radiated emissions	30~200MHz	± 3.8906
	200~1000MHz	± 3.8688
	1~8GHz	± 1.7947
	8~18GHz	± 1.9019
	18~26GHz	± 2.1599
	26~40GHz	± 2.6612

*This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.*

*Consistent with industry standard (e.g. CISPR 22: 2006, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.*

*The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than  $U_{CISPR}$  which is 3.6dB and 5.2dB respectively. CCS values (called  $U_{Lab}$  in CISPR 16-4-2) is less than  $U_{CISPR}$  as shown in the table above. Therefore, MU need not be considered for compliance.*



## 6 CONDUCTED EMISSION MEASUREMENT

### 6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

**NOTE:**

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 6.2. TEST INSTRUMENTS

Conducted Emission Room # 4				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCI	100782	06/13/2012
LISN	R&S	ENV216	100066	03/31/2012
LISN	R&S	ENV 4200	830326/016	05/09/2012
ISN	FCC	FCC-TLISN-T4-02	20396	06/23/2012
ISN	TESEQ	ISN ST08	27907	11/23/2011
Current Probe	FCC	F-35	506	07/05/2012
ISN	FCC	FCC-TLISN-T2-PLC	20491	11/29/2011
Test S/W	EZ-EMC			

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
 2. N.C.R = No Calibration Request.



### **6.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

#### **Procedure of Preliminary Test**

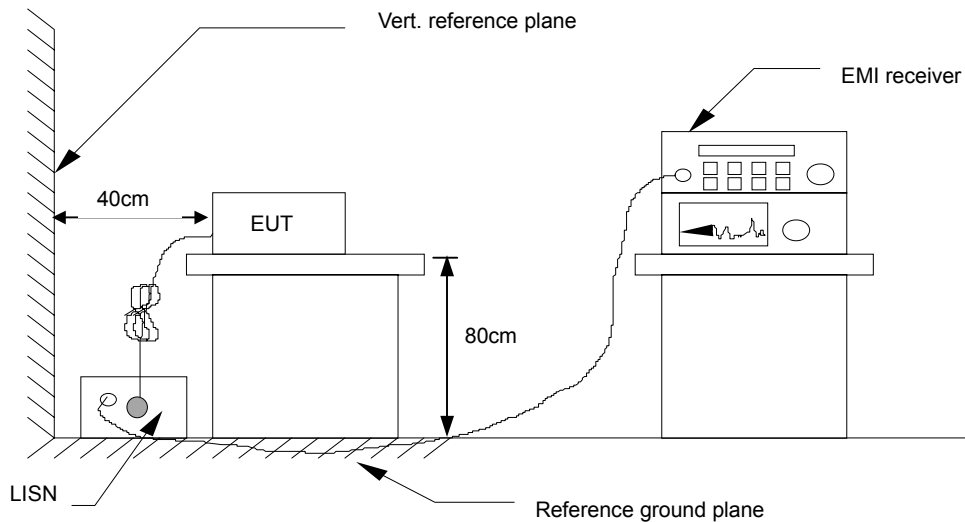
- The EUT and support equipment, if needed, were set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT installed by AC 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- All support equipment power by from a second LISN.
- The test program of the EUT was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

#### **Procedure of Final Test**

- EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- The test data of the worst-case condition(s) was recorded.



### 6.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

### 6.5. DATA SAMPLE:

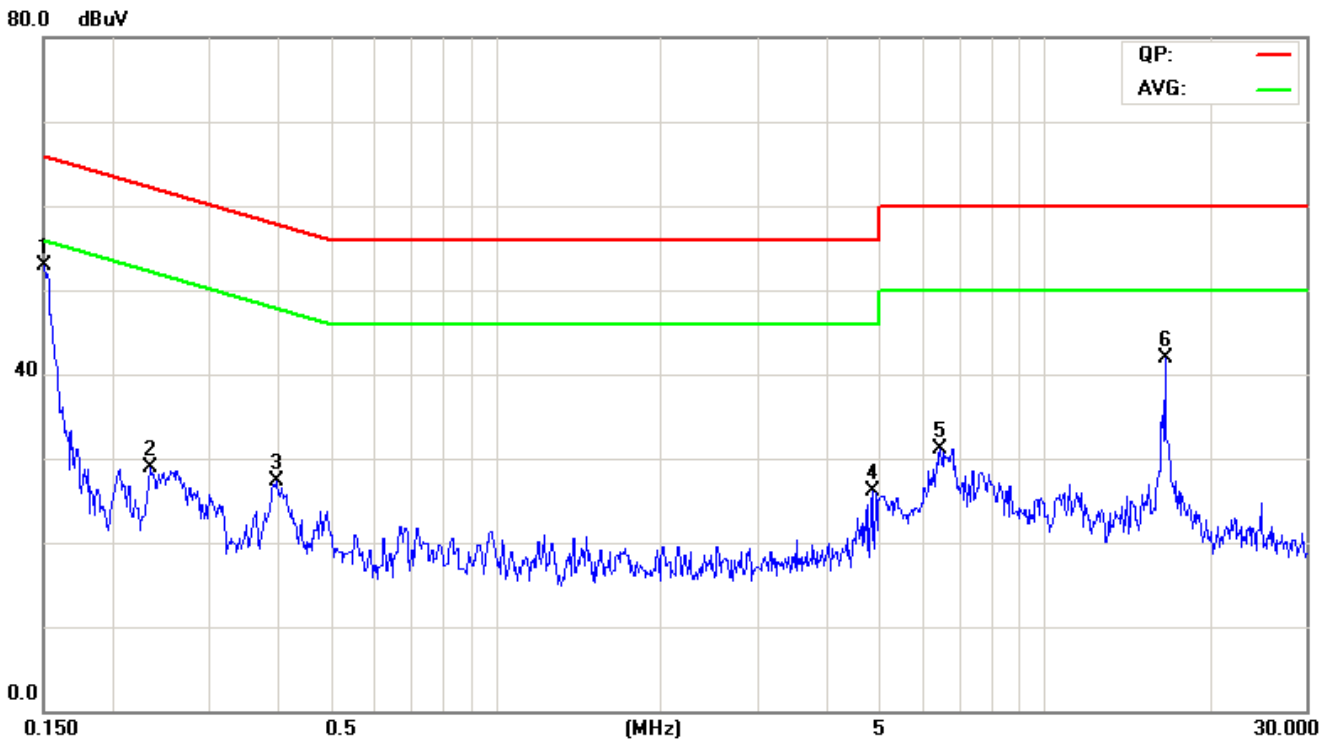
Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
x.xx	43.95	33.00	10.00	53.95	43.00	56.00	46.00	-2.05	-3.00	Pass

Frequency (MHz) = Emission frequency in MHz  
 Reading (dBuV) = Uncorrected Analyzer/Receiver reading + Insertion loss of LISN, if it > 0.5 dB  
 Correction Factor (dB) = LISN Factor + Cable Loss  
 Result (dBuV) = Raw reading converted to dBuV and CF added  
 Limit (dBuV) = Limit stated in standard  
 Margin (dB) = Result (dBuV) – Limit (dBuV)



### 6.6. TEST RESULTS

<b>Model No.</b>	47LV4400	<b>6dB Bandwidth</b>	9 kHz
<b>Environmental Conditions</b>	25°C, 57% RH	<b>Test Mode</b>	Mode 1
<b>Tested by</b>	Tony Tsai	<b>Line</b>	L1

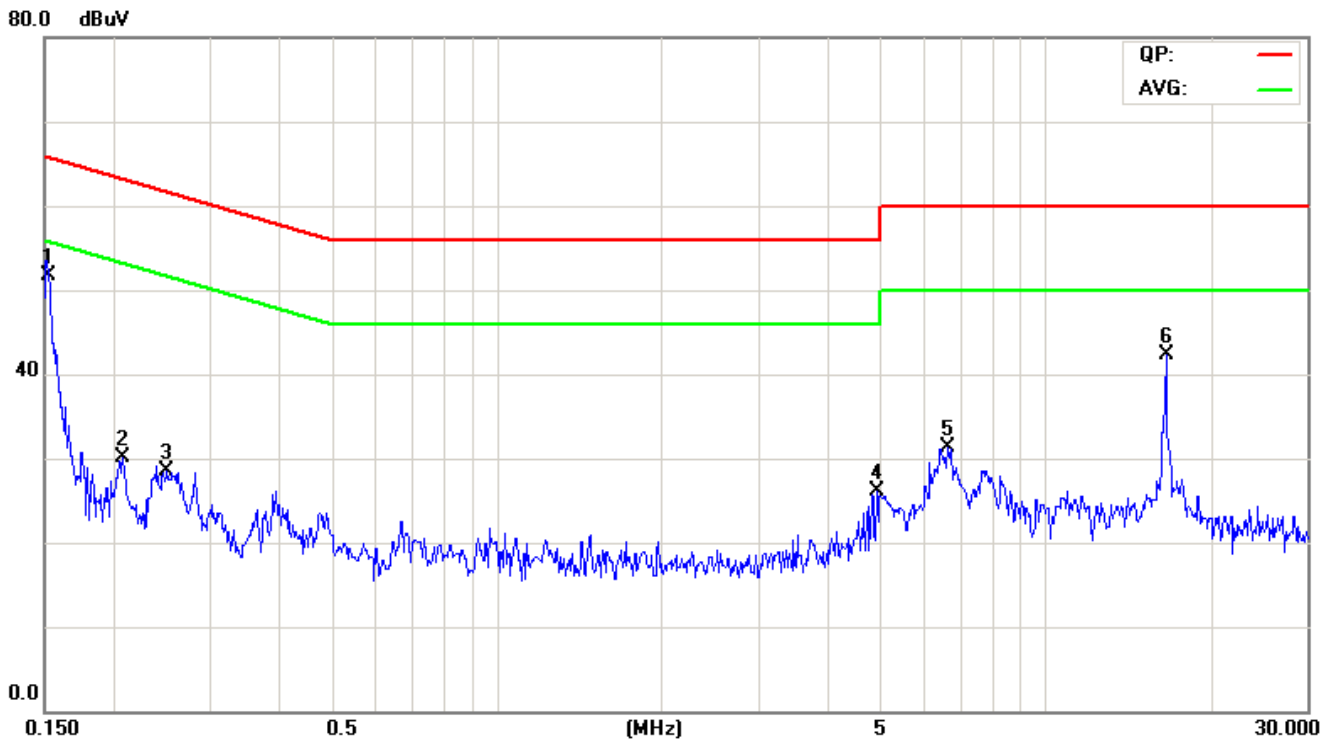


NO.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark (Pass/Fail)
1	0.1519	15.57	9.92	9.65	25.22	19.57	65.90	55.90	-40.68	-36.33	Pass
2	0.2361	14.49	5.51	9.65	24.14	15.16	62.23	52.23	-38.09	-37.07	Pass
3	0.3936	14.52	6.71	9.65	24.17	16.36	57.99	47.99	-33.82	-31.63	Pass
4	4.9128	14.44	10.41	9.78	24.22	20.19	56.00	46.00	-31.78	-25.81	Pass
5	6.4371	15.56	8.66	9.80	25.36	18.46	60.00	50.00	-34.64	-31.54	Pass
6*	16.5382	30.80	19.38	10.30	41.10	29.68	60.00	50.00	-18.90	-20.32	Pass

**REMARKS:** L1 = Line One (Live Line)



<b>Model No.</b>	47LV4400	<b>6dB Bandwidth</b>	9 kHz
<b>Environmental Conditions</b>	25°C, 57% RH	<b>Test Mode</b>	Mode 1
<b>Tested by</b>	Tony Tsai	<b>Line</b>	L2



NO.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark (Pass/Fail)
1	0.1538	10.15	6.50	9.66	19.81	16.16	65.79	55.79	-45.98	-39.63	Pass
2	0.2072	15.95	12.37	9.66	25.61	22.03	63.32	53.32	-37.71	-31.29	Pass
3	0.2513	11.02	3.75	9.66	20.68	13.41	61.71	51.71	-41.03	-38.30	Pass
4	4.9117	14.75	10.50	9.80	24.55	20.30	56.00	46.00	-31.45	-25.70	Pass
5	6.6193	16.71	11.10	9.84	26.55	20.94	60.00	50.00	-33.45	-29.06	Pass
6*	16.5381	31.09	19.58	10.40	41.49	29.98	60.00	50.00	-18.51	-20.02	Pass

**REMARKS:** L2 = Line Two (Neutral Line)



## 7 RADIATED EMISSION MEASUREMENT

### 7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

#### For 10 Limits

FREQUENCY (MHz)	dBuV/m (At 10m)	
	Class A	Class B
30 ~ 230	40	30
230 ~ 1000	47	37

**NOTE:** (1) The lower limit shall apply at the transition frequencies.  
 (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).

#### For 3 Limits

Frequency (MHZ)	Distance (m)	Maximum Field Strength Limit (dBuV/m/Q.P.)
30 - 88	3	40
88 - 216	3	43.5
216 – 960	3	46
Above 960	3	54

Frequency (MHZ)	Class A (dBuV/m) (At 3m)		Class B (dBuV/m) (At 3m)	
	Average	Peak	Average	Peak
Above 1000	60	80	54	74

**NOTE:** (1) The lower limit shall apply at the transition frequencies.  
 (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or in which the device operated or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower





**7.2. TEST INSTRUMENTS**

<b>Open Area Test Site # 5</b>				
<b>Name of Equipment</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial Number</b>	<b>Calibration Due</b>
Spectrum Analyzer	ADVANTEST	R3132	91700456	N.C.R
EMI Test Receiver	R&S	ESVS10	846285/016	06/27/2012
Bilog Antenna	TESEQ	CBL 6112D	23190	10/06/2011
Pre-Amplifier	WIRELESS	FPA-6592G	060010	09/04/2011
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
RF Switch	ANRITSU	MP59B	10877	N.C.R
Test S/W	LabVIEW 6.1 (CCS OATS EMI SW V2.7)			

<b>3 Meter Chamber</b>				
<b>Name of Equipment</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial Number</b>	<b>Calibration Due</b>
Spectrum Analyzer	Agilent	E4446A	MY48250064	12/29/2011
Pre-Amplifier	HP	8449B	3008A00965	04/17/2012
Pre-Amplifier	MITEQ	AMF-6F-260400-40-8P	985646	05/23/2012
Horn Antenna	EMCO	3115	9602-4659	05/09/2012
Horn Antenna	EMCO	3116	00026370	10/12/2011
Low Loss Cable	Huber+Suhner	104PEA	24815/4PEA	08/13/2011
Low Loss Cable	Huber+Suhner	104PEA	30956/4PEA	04/17/2012
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
Bore-Sight Antenna Tower	CCS	CCS-BORESIGHT	001	N.C.R
Test S/W	CCS-3A1RE			

**NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
 2. N.C.R = No Calibration Request.



### **7.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

#### **Procedure of Preliminary Test**

- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical usage as per ANSI C63.4.
- The EUT received AC 120VAC/60Hz power source from the outlet socket under the turntable. All support equipment power received from another socket under the turntable.
- The antenna was placed at 3 or 10 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.
- The Analyzer / Receiver quickly scanned from 30MHz to 40GHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters (For Below 1GHz) or 1 meter (For Above 1GHz) above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test:
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

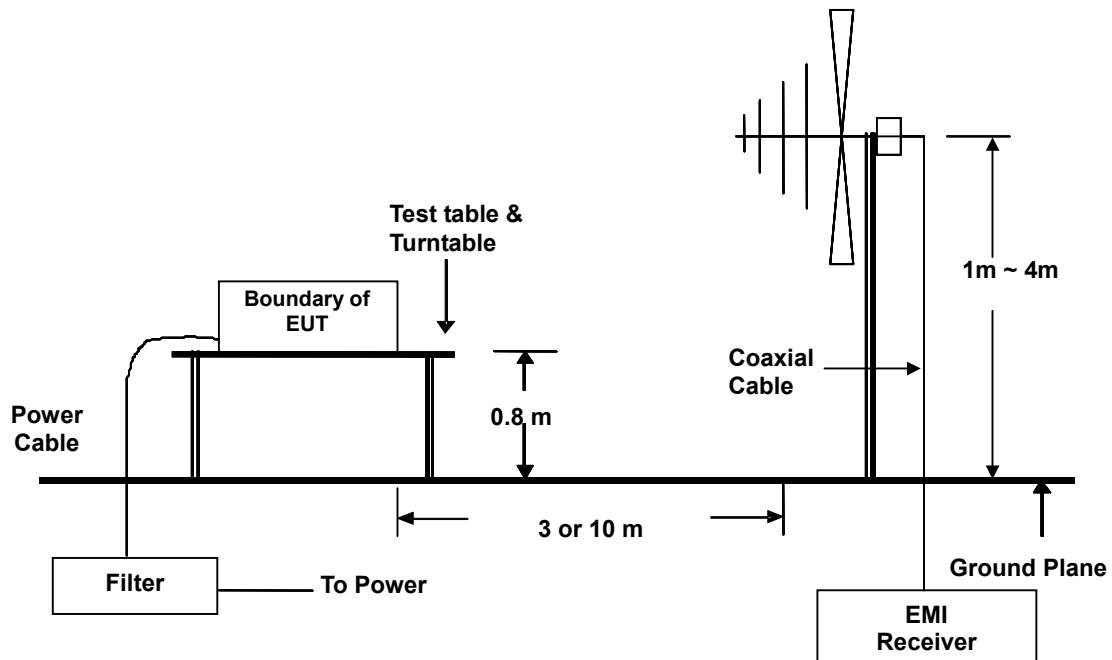
#### **Procedure of Final Test**

- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 or 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recording at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P. (For Below 1GHz) or Peak/Average (For Above 1GHz) reading is presented.
- The test data of the worst-case condition(s) was recorded.

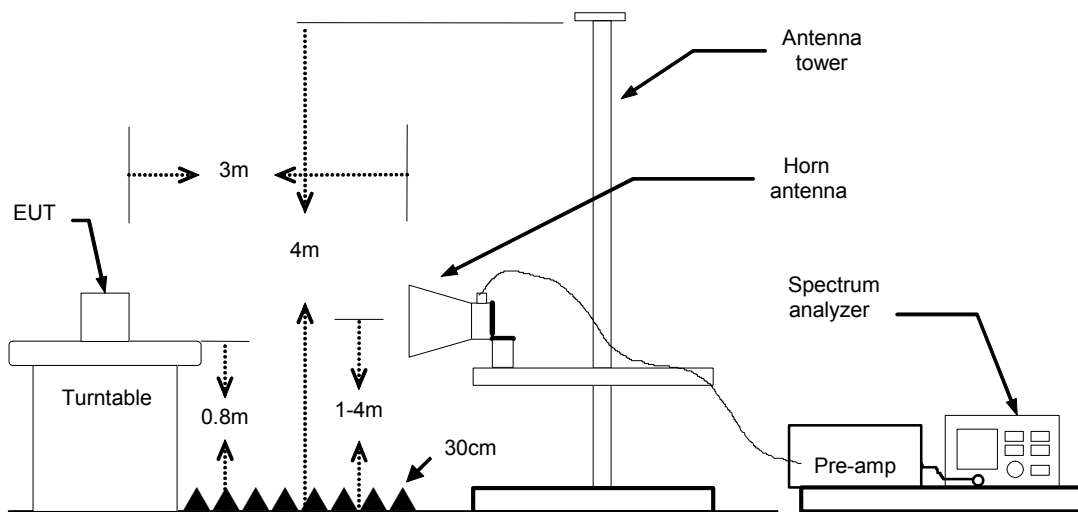


### 7.4. TEST SETUP

Below 1GHz



Above 1GHz



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.



7.5. DATA SAMPLE:

Below 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
xx.xx	16.49	9.86	26.35	30.00	-3.65	116.00	101.00	QP

Above 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
xx.xx	60.80	-14.59	46.21	74.00	-27.79	200	351	peak
xx.xx	52.05	-13.17	38.88	54.00	-15.12	200	135	AVG

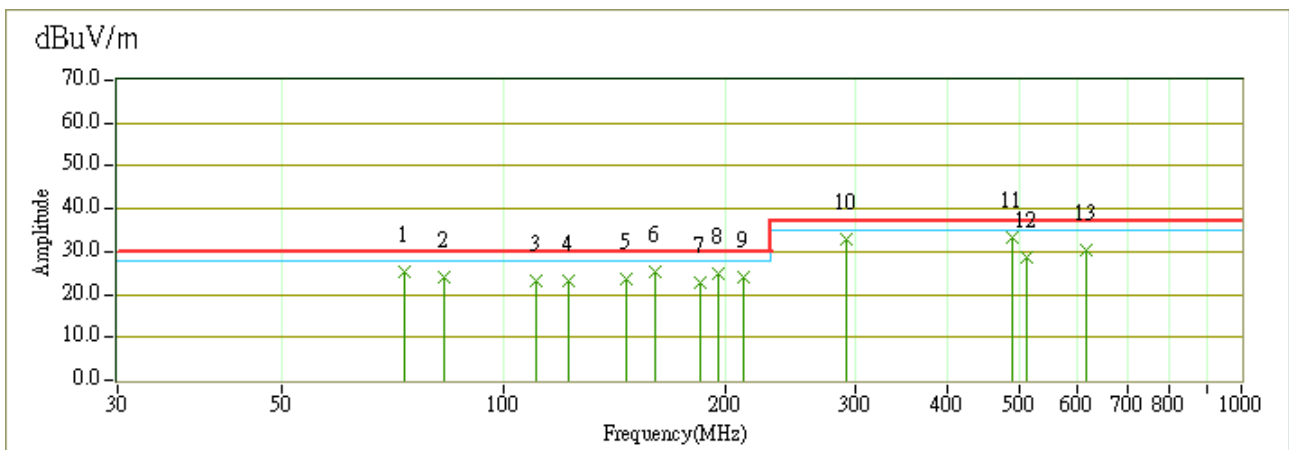
- Frequency (MHz) = Emission frequency in MHz
- Reading (dBuV) = Uncorrected Analyzer / Receiver reading
- Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain
- Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)
- Limit (dBuV/m) = Limit stated in standard
- Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)
- Q.P. = Quasi-Peak



## 7.6. TEST RESULTS

### Below 1GHz

<b>Model No.</b>	47LV4400	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	26°C, 60% RH	<b>6dB Bandwidth</b>	120 kHz
<b>Antenna Pole</b>	Vertical	<b>Antenna Distance</b>	10m
<b>Detector Function:</b>	Quasi-peak.	<b>Tested by</b>	Tony Tsai

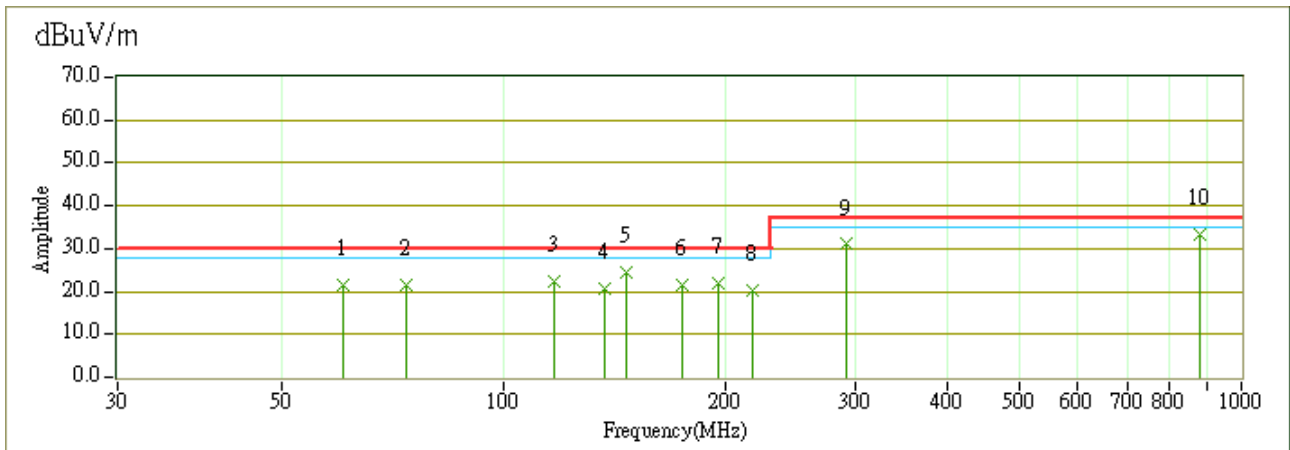


No.	Frequency (MHz)	Reading (dBuV)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	73.21	46.23	-20.95	25.28	30.00	-4.72	360.00	100.10	QP
2	83.14	43.30	-19.27	24.03	30.00	-5.97	360.00	100.10	QP
3	110.87	38.80	-15.66	23.14	30.00	-6.86	246.90	100.10	QP
4	122.31	38.49	-15.26	23.24	30.00	-6.76	148.80	100.10	QP
5	146.94	40.23	-16.45	23.79	30.00	-6.21	99.00	100.10	QP
6	160.60	42.50	-17.33	25.18	30.00	-4.82	108.70	100.10	QP
7	185.18	40.31	-17.62	22.69	30.00	-7.31	280.40	100.10	QP
8	195.21	42.02	-17.20	24.82	30.00	-5.18	131.30	100.10	QP
9	211.82	41.11	-16.94	24.18	30.00	-5.82	217.20	100.10	QP
10	292.23	45.23	-12.41	32.82	37.00	-4.18	360.00	100.10	QP
11	488.41	39.53	-6.26	33.27	37.00	-3.73	360.00	304.80	QP
12	512.90	34.00	-5.40	28.60	37.00	-8.40	0.10	210.90	QP
13	615.19	33.35	-2.87	30.49	37.00	-6.51	0.10	147.40	QP

**REMARKS:** The other emission levels were very low against the limit.



<b>Model No.</b>	47LV4400	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	26°C, 60% RH	<b>6dB Bandwidth</b>	120 kHz
<b>Antenna Pole</b>	Horizontal	<b>Antenna Distance</b>	10m
<b>Detector Function:</b>	Quasi-peak.	<b>Tested by</b>	Tony Tsai



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	60.58	42.95	-21.28	21.67	30.00	-8.33	34.70	400.00	QP
2	73.64	42.21	-20.89	21.32	30.00	-8.68	178.50	400.00	QP
3	117.29	37.84	-15.31	22.54	30.00	-7.46	285.60	400.00	QP
4	137.14	36.74	-15.87	20.87	30.00	-9.13	0.10	400.00	QP
5	146.78	40.72	-16.44	24.28	30.00	-5.72	360.00	400.00	QP
6	174.88	39.25	-17.70	21.55	30.00	-8.45	168.50	400.00	QP
7	195.52	39.00	-17.19	21.81	30.00	-8.19	151.60	400.00	QP
8	218.12	36.97	-16.90	20.07	30.00	-9.93	360.00	400.00	QP
9	292.30	43.41	-12.41	31.00	37.00	-6.00	196.10	400.00	QP
10	880.40	31.90	1.37	33.27	37.00	-3.73	0.10	100.10	QP

**REMARKS:** The other emission levels were very low against the limit.





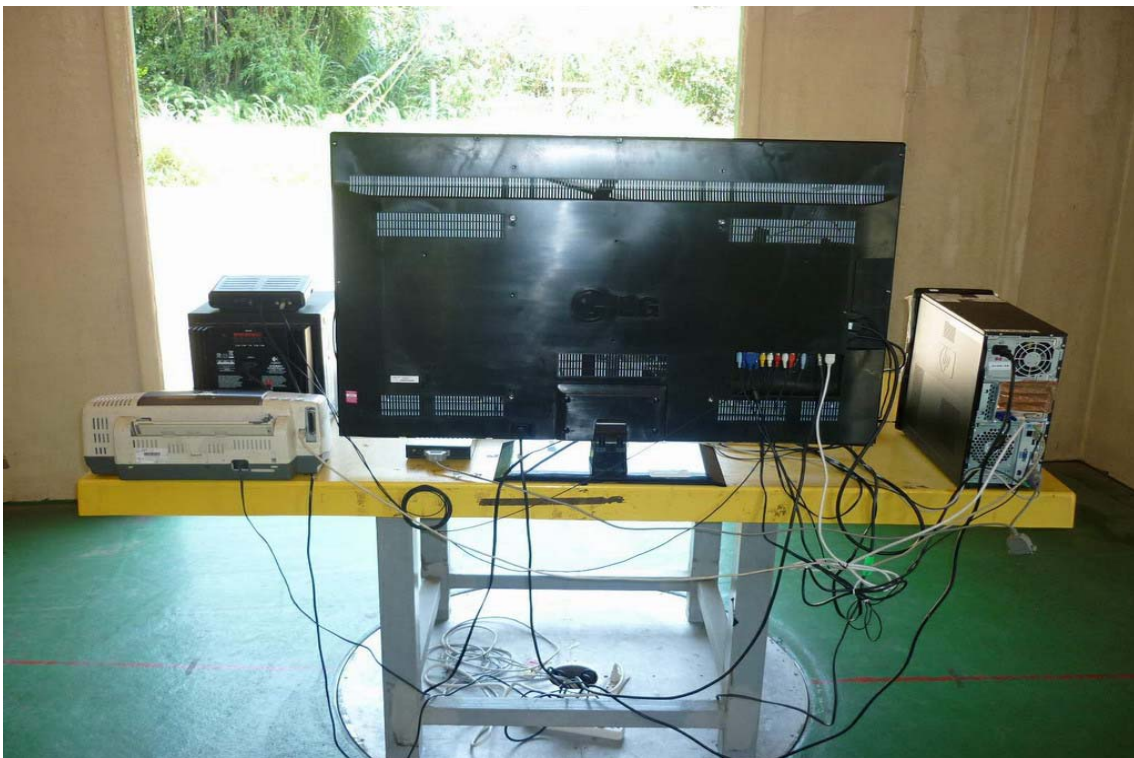
## 8 PHOTOGRAPHS OF THE TEST CONFIGURATION

### CONDUCTED EMISSION TEST





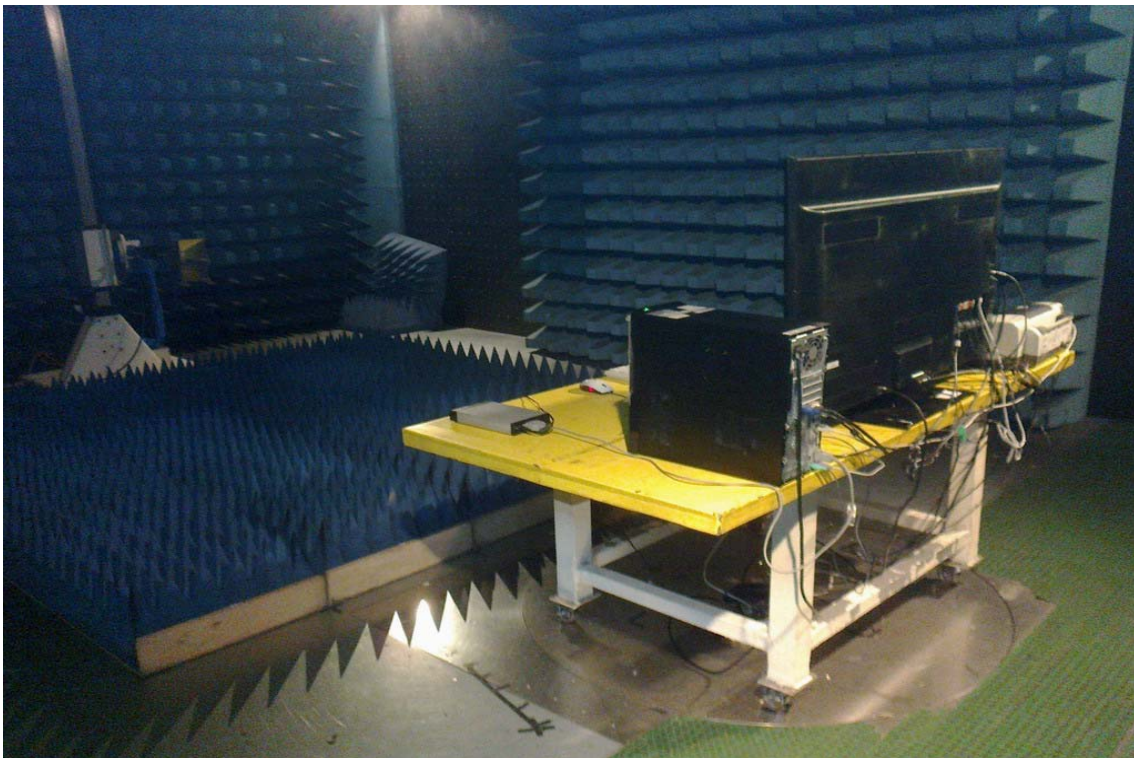
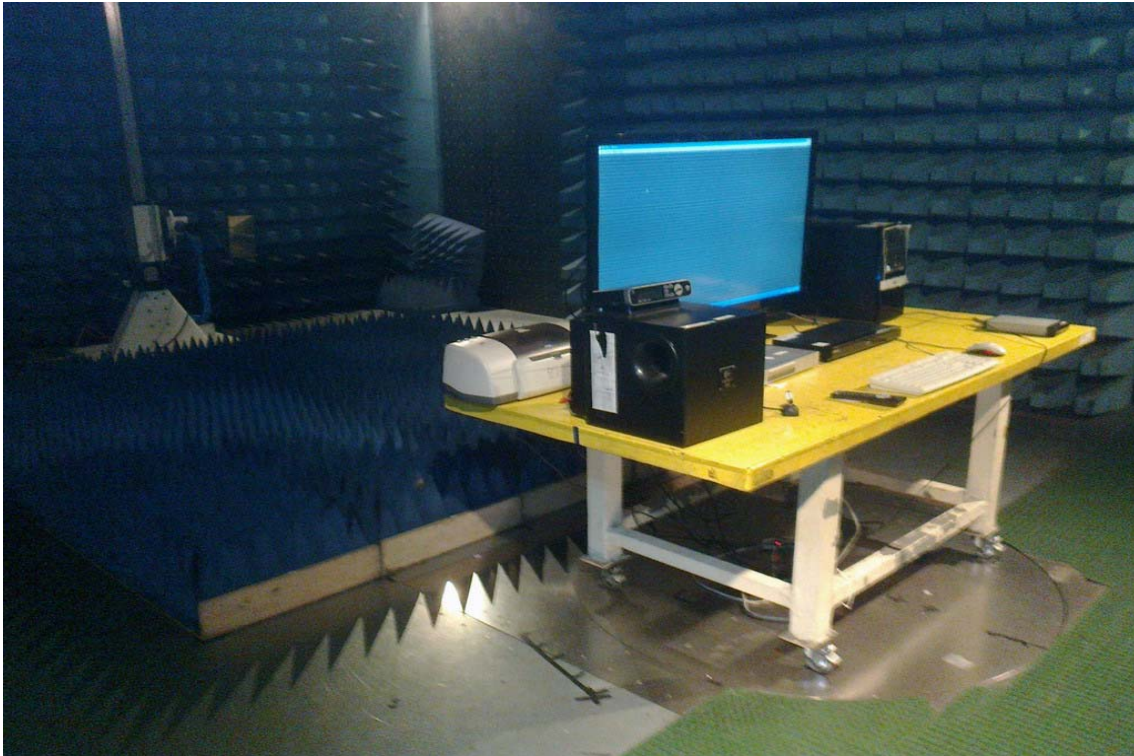
**RADIATED EMISSION TEST  
Below 1GHz**







**Above 1GHz**





**APPENDIX 1: PHOTOGRAPHS OF EUT**

**Refer to T110628112 External Photographs.**