

Application for FCC Certificate  
On Behalf of  
Hisense Electric Co., Ltd.

LED LCD TV

Model No.	Brand
LC-50N7000U LC-50N7000C	Sharp

FCC ID : W9HLCDF0065

Prepared For : Hisense Electric Co., Ltd.  
No.218 Qianwangang Road, Economy & Technology  
Development Zone, Qingdao, China

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Report No. : ACI-F16006  
Date of Test : Dec11-29, 2015  
Date of Report : Jan 08, 2016

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## TEST REPORT FOR FCC CERTIFICATE

Applicant : Hisense Electric Co., Ltd.  
 Manufacturer : Hisense Electric Co., Ltd.  
 Factory #1 : Hisense Electric Co., Ltd.  
 Factory #2 : Tatung Mexico S.A. de C.V.  
 Factory #3 : HISENSE ELECTRONICA MEXICO, S.A. DE C.V.  
 EUT Description : LED LCD TV

Model No.	Brand	Power Supply
LC-50N7000U LC-50N7000C	Sharp	120V/60Hz

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2014  
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: Refer to Sec2.1) which was tested in 3m anechoic chamber Dec 11-29, 2015 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.

***The test results for EUT's TV functions are contained in No.F16007, a Verification report.***

Date of Test : Dec 11-29, 2015 Date of Report : Jan 08, 2016

Producer : Huimin Yan  
HUIMIN YAN / Assistant

Review : Sammy Chen  
SAMMY CHEN / Manager

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

Signatory : Sammy Chen for  
Authorized Signature EMC BYRON KWOK / Assistant General 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
<b>EMISSION</b>			
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2014 AND ANSI C63.4-2003	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2014 AND ANSI C63.4-2003	15.109(a) Class B	Pass

## 2 GENERAL INFORMATION

### 2.1 Description of Equipment Under Test

Description	:	LED LCD TV
Type of EUT	:	<input checked="" type="checkbox"/> Production <input type="checkbox"/> Pre-product <input type="checkbox"/> Pro-type
Model No	:	LC-50N7000U, LC-50N7000C
Note	:	The above models are all the same except for model number.LC-50N7000U model is tested and recorded in the report.
Brand	:	Sharp
Applicant	:	Hisense Electric Co., Ltd. No.218 Qianwangang Road, Economy & Technology Development Zone, Qingdao, China
Manufacturer	:	Same as Applicant
Factory #1	:	Same as Applicant
Factory #2	:	Tatung Mexico S.A. de C.V. Miguel Catalán 420, Parque Industrial Rio Bravo, Cd. Juarez, Chih., CP 32557
Factory #3	:	HISENSE ELECTRONICA MEXICO,S.A. DE C.V. Blvd. Sharp #3510 Parque Industrial Rosarito, C.P. 22710 Playas de Rosarito, B.C.
LCD Panel	:	Manufacturer : Hisense M/N : HE500IU-B51
Tuner	:	Manufacturer : XuGuang Tech. Co. Ltd. M/N : HFT-96S/W11FJ2H
Max Resolution	:	3840*2160@60Hz
HDMI Cable*4 (Lab provide)	:	Shielded, Detachable, 1.50m
Power Cord	:	Unshielded, Detachable, 1.80m
LAN Cable	:	Shielded, Detachable, 1.50m
USB Cable*3 (Lab provide)	:	Shielded, Detachable, 1.00m, with one core
MHL to HDMI Adaptor: with RCP (Lab provide)	:	Manufacture: CE-Link M/N: 3002

**Remark:**

The EUT is a LED LCD TV which input/output ports as follows:

## Side Port:

- (1) One HDMI2 Port : Connected with PC
- (2) One HDMI1/MHL Port : Connected with Mobile Phone
- (3) One USB#1 Port : Connected with H-Disk#1
- (4) One USB#2 Port : Connected with H-Disk#2
- (5) One USB#3 Port : Connected with H-Disk#3
- (6) One ANT Port : Connected with ATSC SG
- (7) One Digital Audio Out Port : Connected with Earphone

## Back Port:

- (8) One COMPONENT IN/AV IN Port : Connected with DVD PLAYER#1
- (9) One HDMI3 Port : Connected with DVD PLAYER #1
- (10) One HDMI4 Port : Connected with DVD PLAYER #2
- (11) One LAN Port : Connected with PC
- (12) One Digital Audio Out Port : Connected with DVD PLAYER#1

## 2.2 Peripherals

### 2.2.1 PC

Manufacturer : HP  
 Model Number : dx7400MT  
 Serial Number : CNG8130K89  
 Power Cord : Shielded, Detachable, 1.8m  
 Certificate : FCC DoC; CE/EMC; VCCI; C-Tick;

### 2.2.2 Keyboard

Manufacturer : Microsoft  
 Model Number : RT2300  
 Serial Number : 7668200662248  
 Data Cable : Shielded, Detachable, 1.5m  
 Certificate : CE/EMC, FCC DoC, VCCI, MIC, C-Tick, BSMI

## 2.2.3 Mouse

Manufacturer : Microsoft  
Model Number : RT2300  
Serial Number : 6965712071551  
Data Cable : Shielded, Detachable, 1.5m.  
Certificate : CE/EMC, FCC DoC, VCCI, MIC,  
C-Tick, BSMI

## 2.2.4 Modem

Manufacturer : TP-LINK  
Model Number : TM-EC5658V  
Serial Number : 07123301053  
Data Cable : Shielded, Detachable, 1.5m  
Certificate : CCC

## 2.2.5 Earphone

Manufacturer : audio-technica  
Model Number : ATH-CKL200

## 2.2.6 DVD PLAYER #1

Manufacturer : PHILIPS  
Model Number : DVP3986K/93  
Serial Number : KX1A0902120108  
Certificate : CCC

## 2.2.7 DVD PLAYER #2

Manufacturer : PHILIPS  
Model Number : DVP3986K/93  
Serial Number : KX1A0902120082  
Certificate : CCC

## 2.2.8 Hard Disk #1

Manufacturer : Tetasy  
Model Number : F12  
Serial Number : A010022-4860010X  
Data Cable : Shielded, Detachable, 1.5m.  
Certificate : CE, FCC DoC

## 2.2.9 Hard Disk #2

Manufacturer : Tetasy  
Model Number : F12  
Serial Number : A010022-4860007  
Data Cable : Shielded, Detachable, 1.5m.  
Certificate : CE, FCC DoC

### 2.2.10 Hard Disk #3

Manufacturer : Tetasys  
Model Number : F12  
Serial Number : A010022-40F0005  
Data Cable : Shielded, Detachable, 1.5m.  
Certificate : CE, FCC DoC

### 2.2.11 ATSC Signal Generator

Manufacturer : SENCORE  
Model Number : ATSC997  
Serial Number : 6790071

### 2.2.12 TV Signal Generator

Manufacturer : FLUKE  
Model Number : 54200M01  
Serial Number : 814008

### 2.2.13 Smart Mobile Phone

Manufacturer : SAMSUNG  
Model Number : GT-I9100G  
Serial Number : 6935152011519  
Certificate : CE/EMC

## 2.3 Description of Test Facility

Site Description (No.3 3m Chamber) : Sept. 17, 1998 file on  
Jan.15, 2015 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

FCC registration Number : 91789

NVLAP Lab Code : 200371-0



## 2.4 Measurement Uncertainty

Conducted Emission Expanded Uncertainty : U = 3.4db

Radiated Emission Expanded Uncertainty (30-200MHz):

U = 4.6db (Horizontal)

U = 4.3db (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):

U = 4.5db (Horizontal)

U = 5.4db (Vertical)

Radiated Emission Expanded Uncertainty (1GHz-6GHz):

U = 5.1db

### 3 CONDUCTED EMISSION TEST

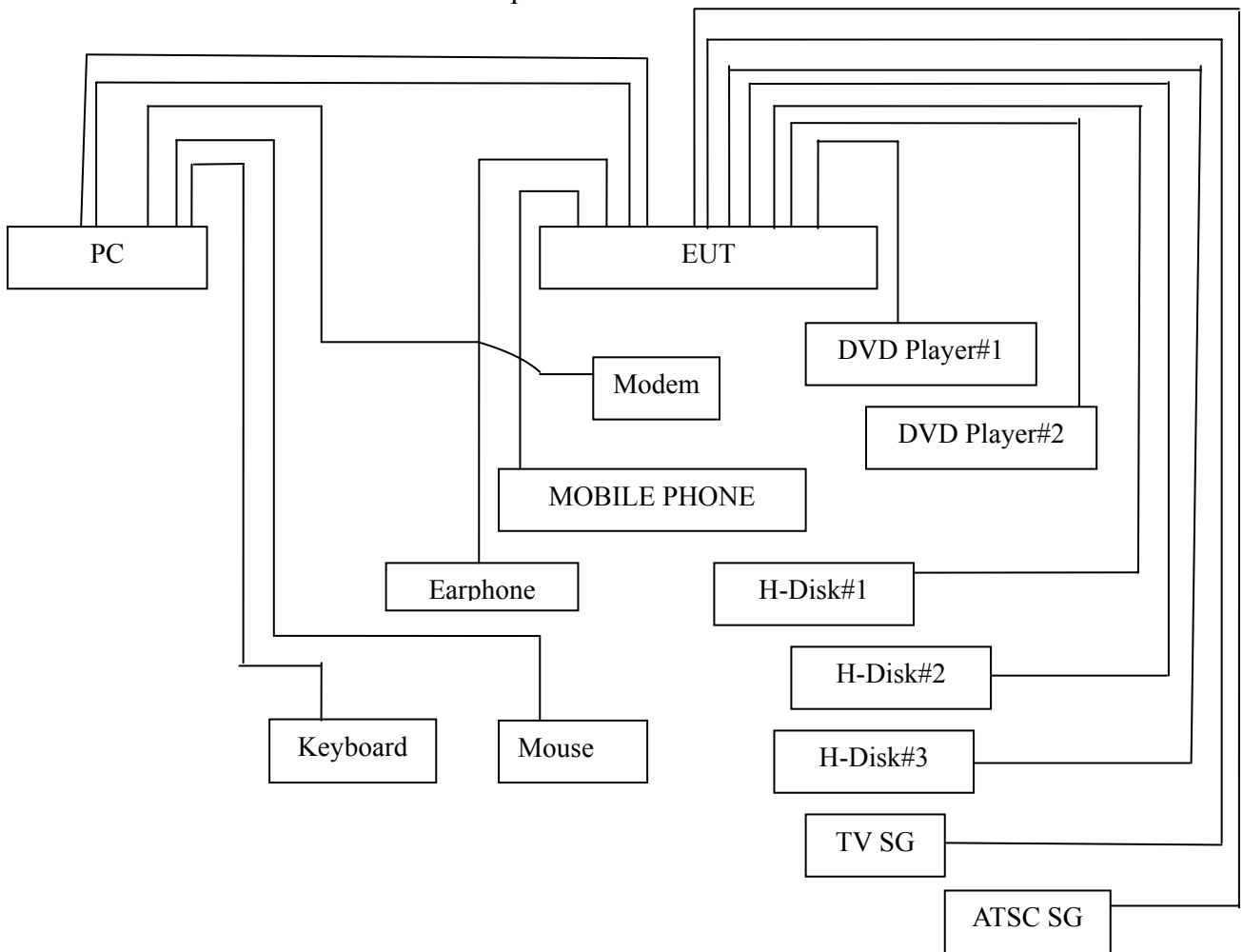
#### 3.1 Test Equipment

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

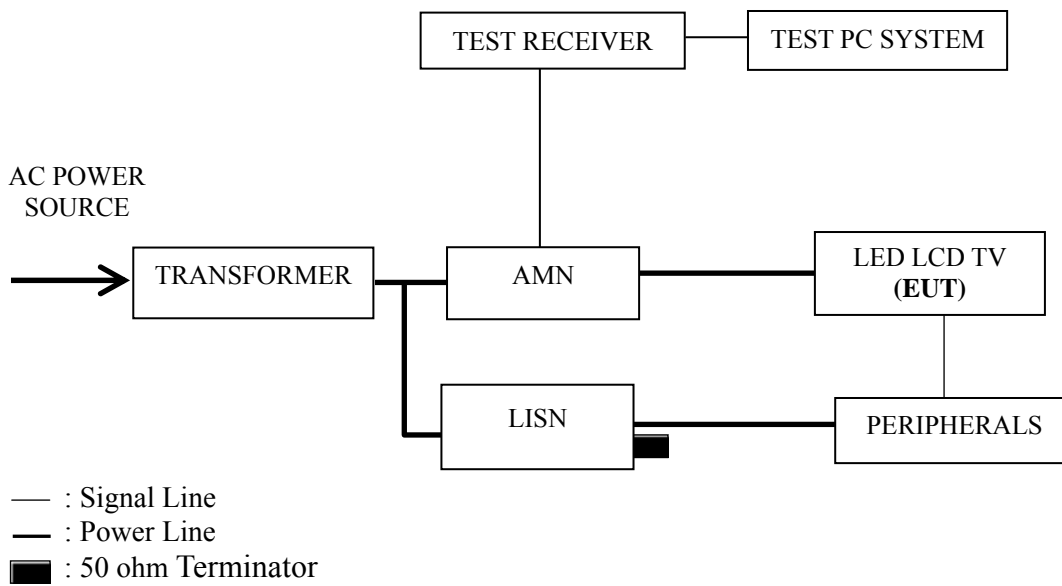
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Jul 03, 2015	Jul 02, 2016
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 27, 2015	Jun 26, 2016
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-5	Mar 20, 2015	Mar 19, 2016
4.	50Ω Terminator	Anritsu	BNC	001	Mar 20, 2015	Mar 19, 2016
5.	Software	Audix	E3	6.111206	--	--

#### 3.2 Block Diagram of Test Setup

##### 3.2.1 EUT & Peripherals



### 3.2.2 Conducted Disturbance Test Setup



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

Frequency Range (MHz)	Limits Db ( $\mu$ V)	
	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 EUT through graphic card, the EUT’s screen displayed and filled with “H” pattern by its resolution (Via HDMI Input).
- 3.5.5 PC system sent the 1kHz audio signal to EUT through audio port, the EUT speak out 1kHz audio signal.
- 3.5.6 In USB Play mode, set the EUT play digital media from H-Disk.
- 3.5.7 In LAN Play mode, set the EUT play digital media through LAN port.
- 3.5.8 In MHL mode, set the EUT play digital media from mobile phone.
- 3.5.9 The other peripherals devices were driven and operated during the test.
- 3.5.10 The test modes are as follows:

Test Mode
HDMI 3840*2160@60Hz & 1kHz playing
HDMI 1920*1080@60Hz & 1kHz playing
HDMI 1280*1024@60Hz & 1kHz playing
HDMI 640*480@60Hz & 1kHz playing
HDMI1080P
USB Play
LAN Play
MHL

### 3.6 Test Procedures

The EUT and peripherals were connected to the power mains through an Artificial Mains Network (AMN). 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 ESCI was set at 9 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
HDMI 3840*2160@60Hz & 1kHz playing	P16
HDMI 1920*1080@60Hz & 1kHz playing	P17
HDMI 1280*1024@60Hz & 1kHz playing	P18
HDMI 640*480@60Hz & 1kHz playing	P19
HDMI1080P	P20
USB Play	P21
LAN Play	P20
MHL	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 HDMI 1920\*1080@60Hz & 1kHz playing test mode.  
The worst emission is detected at 0.362 MHz (QP Value) with corrected signal level of 20.82dB (μV) (limit is 48.69 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : HDMI 3840\*2160@60Hz Date of Test : Dec 11, 2015  
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark	
Line	0.160	49.80	10.57	60.37	65.47	5.10	QP	
	0.374	28.10	10.43	38.53	58.41	19.88		
	0.562	25.60	10.38	35.98	56.00	20.02		
	1.192	25.50	10.39	35.89	56.00	20.11		
	<b>2.825</b>	<b>21.10</b>	<b>10.44</b>	<b>31.54</b>	<b>56.00</b>	<b>24.46</b>		
	6.062	26.36	10.47	36.83	60.00	23.17	AV	
	0.160	35.50	10.57	46.07	55.47	9.40		
	0.374	15.20	10.43	25.63	48.41	-22.78		
	0.562	15.20	10.38	25.58	46.00	20.42		
	1.192	16.60	10.39	26.99	46.00	19.01		
	<b>2.825</b>	<b>12.30</b>	<b>10.44</b>	<b>22.74</b>	<b>46.00</b>	<b>23.26</b>		
	6.062	20.50	10.47	30.97	50.00	19.03		
Neutral	0.161	48.90	10.57	59.47	65.43	5.96	QP	
	0.384	29.90	10.41	40.31	58.20	17.89		
	0.555	27.61	10.36	37.97	56.00	18.03		
	1.128	26.71	10.37	37.08	56.00	18.92		
	2.464	25.20	10.42	35.62	56.00	20.38		
		<b>6.447</b>	<b>26.89</b>	<b>10.51</b>	<b>37.40</b>	<b>60.00</b>	<b>22.60</b>	AV
	0.161	35.20	10.57	45.77	55.43	9.66		
		<b>0.384</b>	<b>18.10</b>	<b>10.41</b>	<b>28.51</b>	<b>48.20</b>	<b>19.69</b>	
	0.555	17.51	10.36	27.87	46.00	18.13		
	1.128	16.61	10.37	26.98	46.00	19.02		
	2.464	16.10	10.42	26.52	46.00	19.48		
	6.447	21.69	10.51	32.20	50.00	17.80		

TEST ENGINEER: WENCY YANG

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : HDMI 1920\*1080@60Hz Date of Test : Dec 11, 2015  
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.151	53.29	10.59	63.88	65.97	2.09	QP
	0.348	27.49	10.45	37.94	59.00	21.06	
	0.612	28.20	10.38	38.58	56.00	17.42	
	1.159	26.41	10.38	36.79	56.00	19.21	
	1.806	26.60	10.41	37.01	56.00	18.99	
	<b>6.408</b>	<b>26.20</b>	<b>10.47</b>	<b>36.67</b>	<b>60.00</b>	<b>23.33</b>	
	0.151	40.09	10.59	50.68	55.97	5.29	AV
	<b>0.348</b>	<b>13.59</b>	<b>10.45</b>	<b>24.04</b>	<b>49.00</b>	<b>24.96</b>	
	0.612	17.10	10.38	27.48	46.00	18.52	
	1.159	14.21	10.38	24.59	46.00	21.41	
	1.806	17.50	10.41	27.91	46.00	18.09	
	6.408	21.70	10.47	32.17	50.00	17.83	
Neutral	0.151	52.39	10.59	62.98	65.97	2.99	QP
	0.362	27.30	10.42	37.72	58.69	20.97	
	0.623	27.10	10.36	37.46	56.00	18.54	
	1.064	24.70	10.37	35.07	56.00	20.93	
	1.804	25.59	10.41	36.00	56.00	20.00	
	<b>5.995</b>	<b>28.40</b>	<b>10.49</b>	<b>38.89</b>	<b>60.00</b>	<b>21.11</b>	
	0.151	39.49	10.59	50.08	55.97	5.89	AV
	<b>0.362</b>	<b>10.40</b>	<b>10.42</b>	<b>20.82</b>	<b>48.69</b>	<b>27.87</b>	
	0.623	15.40	10.36	25.76	46.00	20.24	
	1.064	13.10	10.37	23.47	46.00	22.53	
	1.804	16.49	10.41	26.90	46.00	19.10	
	5.995	24.20	10.49	34.69	50.00	15.31	

TEST ENGINEER: WENCY YANG

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : HDMI 1280\*1024@60Hz Date of Test : Dec 11, 2015  
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.164	49.50	10.57	60.07	65.24	5.17	QP
	0.387	28.50	10.43	38.93	58.13	19.20	
	0.586	30.40	10.38	40.78	56.00	15.22	
	1.307	26.10	10.39	36.49	56.00	19.51	
	2.814	23.50	10.44	33.94	56.00	22.06	
	<b>5.887</b>	<b>26.70</b>	<b>10.47</b>	<b>37.17</b>	<b>60.00</b>	<b>22.83</b>	
	0.164	36.10	10.57	46.67	55.24	8.57	AV
	0.387	18.10	10.43	28.53	48.13	19.60	
	0.586	19.80	10.38	30.18	46.00	15.82	
	<b>1.307</b>	<b>14.00</b>	<b>10.39</b>	<b>24.39</b>	<b>46.00</b>	<b>21.61</b>	
2.814	13.40	10.44	23.84	46.00	22.16		
5.887	20.30	10.47	30.77	50.00	19.23		
Neutral	0.166	47.10	10.56	57.66	65.17	7.51	QP
	0.387	29.20	10.41	39.61	58.13	18.52	
	0.585	31.30	10.36	41.66	56.00	14.34	
	1.173	27.41	10.37	37.78	56.00	18.22	
	2.695	26.60	10.43	37.03	56.00	18.97	
	<b>6.140</b>	<b>25.30</b>	<b>10.50</b>	<b>35.80</b>	<b>60.00</b>	<b>24.20</b>	
	0.166	32.30	10.56	42.86	55.17	12.31	AV
	0.387	20.10	10.41	30.51	48.13	17.62	
	0.585	20.50	10.36	30.86	46.00	15.14	
	1.173	17.11	10.37	27.48	46.00	18.52	
2.695	16.20	10.43	26.63	46.00	19.37		
<b>6.140</b>	<b>19.20</b>	<b>10.50</b>	<b>29.70</b>	<b>50.00</b>	<b>20.30</b>		

TEST ENGINEER: WENCY YANG



EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : HDMI 640\*480@60Hz & 1kHz Playing Date of Test : Dec 11, 2015

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.164	49.50	10.57	60.07	65.28	5.21	QP
	0.378	28.20	10.43	38.63	58.32	19.69	
	0.582	30.10	10.38	40.48	56.00	15.52	
	1.234	27.20	10.39	37.59	56.00	18.41	
	2.664	24.29	10.44	34.73	56.00	21.27	
	<b>5.896</b>	<b>27.50</b>	<b>10.47</b>	<b>37.97</b>	<b>60.00</b>	<b>22.03</b>	
	0.164	35.40	10.57	45.97	55.28	9.31	AV
	<b>0.378</b>	<b>14.60</b>	<b>10.43</b>	<b>25.03</b>	<b>48.32</b>	<b>23.29</b>	
	0.582	20.00	10.38	30.38	46.00	15.62	
	1.234	16.70	10.39	27.09	46.00	18.91	
	2.664	15.79	10.44	26.23	46.00	19.77	
	5.896	22.10	10.47	32.57	50.00	17.43	
Neutral	0.164	48.10	10.56	58.66	65.27	6.61	QP
	0.389	30.80	10.41	41.21	58.08	16.87	
	0.583	28.20	10.36	38.56	56.00	17.44	
	1.172	27.21	10.37	37.58	56.00	18.42	
	1.950	25.20	10.41	35.61	56.00	20.39	
	<b>5.232</b>	<b>25.51</b>	<b>10.47</b>	<b>35.98</b>	<b>60.00</b>	<b>24.02</b>	
	0.164	34.30	10.56	44.86	55.27	10.41	AV
	0.389	19.40	10.41	29.81	48.08	18.27	
	0.583	16.00	10.36	26.36	46.00	19.64	
	1.172	16.81	10.37	27.18	46.00	18.82	
	<b>1.950</b>	<b>15.60</b>	<b>10.41</b>	<b>26.01</b>	<b>46.00</b>	<b>19.99</b>	
	5.232	19.71	10.47	30.18	50.00	19.82	

TEST ENGINEER: WENCY YANG

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : HDMI 1080P Date of Test : Dec 07, 2015

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.151	52.49	10.59	63.08	65.96	2.88	QP
	0.351	27.50	10.44	37.94	58.95	21.01	
	0.618	27.80	10.38	38.18	56.00	17.82	
	1.057	25.50	10.38	35.88	56.00	20.12	
	2.537	24.50	10.43	34.93	56.00	21.07	
	<b>6.129</b>	<b>28.10</b>	<b>10.47</b>	<b>38.57</b>	<b>60.00</b>	<b>21.43</b>	
	0.151	40.09	10.59	50.68	55.96	5.28	AV
	<b>0.351</b>	<b>13.20</b>	<b>10.44</b>	<b>23.64</b>	<b>48.95</b>	<b>25.31</b>	
	0.618	15.90	10.38	26.28	46.00	19.72	
	1.057	13.10	10.38	23.48	46.00	22.52	
	2.537	16.60	10.43	27.03	46.00	18.97	
	6.129	23.40	10.47	33.87	50.00	16.13	
Neutral	0.164	48.10	10.56	58.66	65.27	6.61	QP
	0.383	28.90	10.41	39.31	58.22	18.91	
	0.584	28.50	10.36	38.86	56.00	17.14	
	1.164	27.21	10.37	37.58	56.00	18.42	
	2.622	24.11	10.42	34.53	56.00	21.47	
	<b>5.855</b>	<b>27.70</b>	<b>10.49</b>	<b>38.19</b>	<b>60.00</b>	<b>21.81</b>	
	0.164	34.30	10.56	44.86	55.27	10.41	AV
	0.383	18.20	10.41	28.61	48.22	19.61	
	0.584	16.30	10.36	26.66	46.00	19.34	
	1.164	16.31	10.37	26.68	46.00	19.32	
	<b>2.622</b>	<b>15.81</b>	<b>10.42</b>	<b>26.23</b>	<b>46.00</b>	<b>19.77</b>	
	5.855	21.30	10.49	31.79	50.00	18.21	

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : USB Play Date of Test : Dec 11, 2015

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.165	49.30	10.57	59.87	65.23	5.36	QP
	0.385	27.90	10.43	38.33	58.17	19.84	
	0.584	28.60	10.38	38.98	56.00	17.02	
	1.167	27.51	10.38	37.89	56.00	18.11	
	1.980	27.10	10.41	37.51	56.00	18.49	
	<b>5.709</b>	<b>26.70</b>	<b>10.47</b>	<b>37.17</b>	<b>60.00</b>	<b>22.83</b>	
	0.165	36.40	10.57	46.97	55.23	8.26	AV
	<b>0.385</b>	<b>17.40</b>	<b>10.43</b>	<b>27.83</b>	<b>48.17</b>	<b>20.34</b>	
	0.584	16.50	10.38	26.88	46.00	19.12	
	1.167	16.61	10.38	26.99	46.00	19.01	
	1.980	17.00	10.41	27.41	46.00	18.59	
5.709	19.90	10.47	30.37	50.00	19.63		
Neutral	0.163	48.80	10.56	59.36	65.29	5.93	QP
	0.391	30.89	10.41	41.30	58.05	16.75	
	0.586	31.20	10.36	41.56	56.00	14.44	
	1.154	27.21	10.37	37.58	56.00	18.42	
	2.816	25.10	10.43	35.53	56.00	20.47	
	<b>5.805</b>	<b>24.70</b>	<b>10.49</b>	<b>35.19</b>	<b>60.00</b>	<b>24.81</b>	
	0.163	36.30	10.56	46.86	55.29	8.43	AV
	0.391	19.39	10.41	29.80	48.05	18.25	
	0.586	20.60	10.36	30.96	46.00	15.04	
	1.154	15.81	10.37	26.18	46.00	19.82	
	2.816	14.40	10.43	24.83	46.00	21.17	
<b>5.805</b>	<b>18.20</b>	<b>10.49</b>	<b>28.69</b>	<b>50.00</b>	<b>21.31</b>		

TEST ENGINEER: WENCY YANG

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : LAN Play Date of Test : Dec 11, 2015

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.165	49.09	10.57	59.66	65.20	5.54	QP
	0.584	28.80	10.38	39.18	56.00	16.82	
	1.154	27.21	10.38	37.59	56.00	18.41	
	4.305	24.90	10.47	35.37	56.00	20.63	
	5.897	27.40	10.47	37.87	60.00	22.13	
	<b>20.230</b>	<b>23.70</b>	<b>10.60</b>	<b>34.30</b>	<b>60.00</b>	<b>25.70</b>	
	0.165	36.49	10.57	47.06	55.20	8.14	AV
	0.584	16.40	10.38	26.78	46.00	19.22	
	1.154	16.11	10.38	26.49	46.00	19.51	
	4.305	16.30	10.47	26.77	46.00	19.23	
	5.897	21.80	10.47	32.27	50.00	17.73	
	<b>20.230</b>	<b>18.10</b>	<b>10.60</b>	<b>28.70</b>	<b>50.00</b>	<b>21.30</b>	
Neutral	0.165	47.60	10.56	58.16	65.23	7.07	QP
	0.540	29.70	10.37	40.07	56.00	15.93	
	1.161	27.31	10.37	37.68	56.00	18.32	
	2.724	24.80	10.43	35.23	56.00	20.77	
	5.834	25.70	10.49	36.19	60.00	23.81	
	<b>20.030</b>	<b>24.20</b>	<b>10.70</b>	<b>34.90</b>	<b>60.00</b>	<b>25.10</b>	
	0.165	33.00	10.56	43.56	55.23	11.67	AV
	0.540	19.30	10.37	29.67	46.00	16.33	
	1.161	16.41	10.37	26.78	46.00	19.22	
	2.724	15.90	10.43	26.33	46.00	19.67	
	5.834	19.30	10.49	29.79	50.00	20.21	
	<b>20.030</b>	<b>18.40</b>	<b>10.70</b>	<b>29.10</b>	<b>50.00</b>	<b>20.90</b>	

TEST ENGINEER: WENCY YANG

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 48%RH

Test Mode : MHL Date of Test : Dec 11, 2015

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	0.162	48.10	10.57	58.67	65.38	6.71	QP
	0.389	28.90	10.43	39.33	58.08	18.75	
	0.586	30.60	10.38	40.98	56.00	15.02	
	1.164	28.11	10.38	38.49	56.00	17.51	
	2.467	24.11	10.42	34.53	56.00	21.47	
	<b>5.881</b>	<b>26.80</b>	<b>10.47</b>	<b>37.27</b>	<b>60.00</b>	<b>22.73</b>	
	0.162	32.70	10.57	43.27	55.38	12.11	AV
	<b>0.389</b>	<b>17.80</b>	<b>10.43</b>	<b>28.23</b>	<b>48.08</b>	<b>19.85</b>	
	0.586	20.30	10.38	30.68	46.00	15.32	
	1.164	17.91	10.38	28.29	46.00	17.71	
	2.467	16.21	10.42	26.63	46.00	19.37	
	5.881	20.2	10.47	30.67	50	19.33	
Neutral	0.151	52.19	10.59	62.78	65.95	3.17	QP
	0.357	29.90	10.42	40.32	58.79	18.47	
	0.544	30.41	10.36	40.77	56.00	15.23	
	1.071	26.80	10.37	37.17	56.00	18.83	
	2.663	25.30	10.43	35.73	56.00	20.27	
	<b>5.829</b>	<b>25.80</b>	<b>10.49</b>	<b>36.29</b>	<b>60.00</b>	<b>23.71</b>	
	0.151	39.89	10.59	50.48	55.95	5.47	AV
	0.357	18.20	10.42	28.62	48.79	20.17	
	0.544	19.21	10.36	29.57	46.00	16.43	
	1.071	15.90	10.37	26.27	46.00	19.73	
	2.663	16.40	10.43	26.83	46.00	19.17	
	<b>5.829</b>	<b>19.10</b>	<b>10.49</b>	<b>29.59</b>	<b>50.00</b>	<b>20.41</b>	

## 4 RADIATED EMISSION TEST

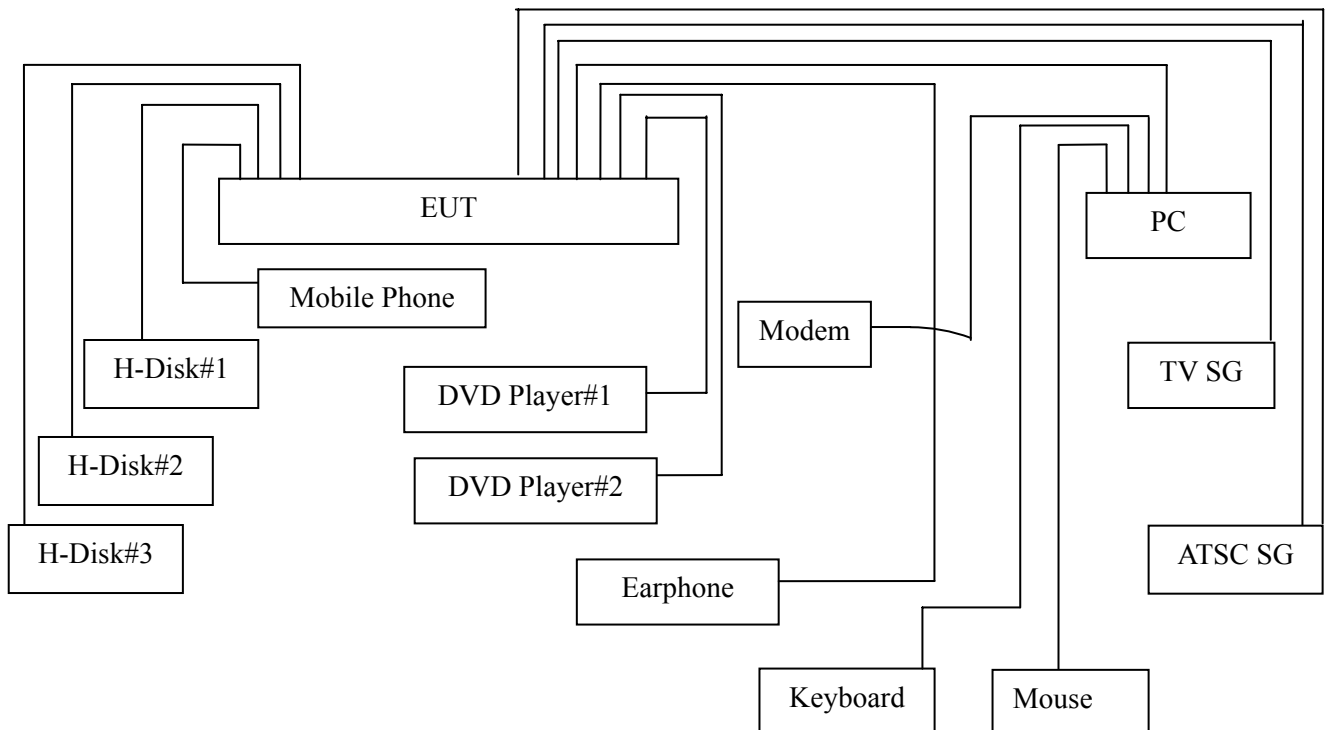
### 4.1 Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101303	May 07, 2015	May 06, 2016
2.	Preamplifier	Agilent	8447D	2944A06664	Apr 27, 2015	Apr 26, 2016
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2015	Sep 19, 2016
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 15, 2015	May 14, 2016
5.	Horn Antenna	EMCO	3115	9607-4878	Jun 03, 2015	Jun 02, 2016
6.	Spectrum	Agilent	N9010A	MY52221182	Jun 12, 2015	Jun 11, 2016
7.	Spectrum	HP	8591EM	3628A00908	May 07, 2015	May 06, 2016
8.	Software	Audix	E3	6.2007-9-10	--	--

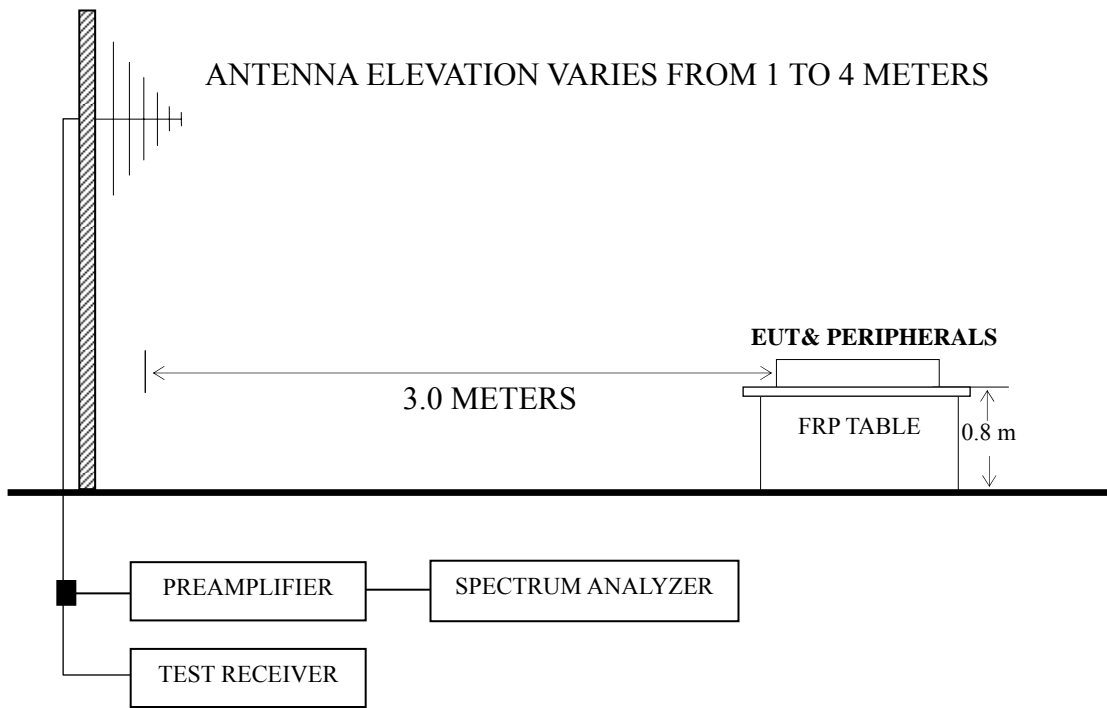
### 4.2 Block Diagram of Test Setup

#### 4.2.1 EUT & Peripherals

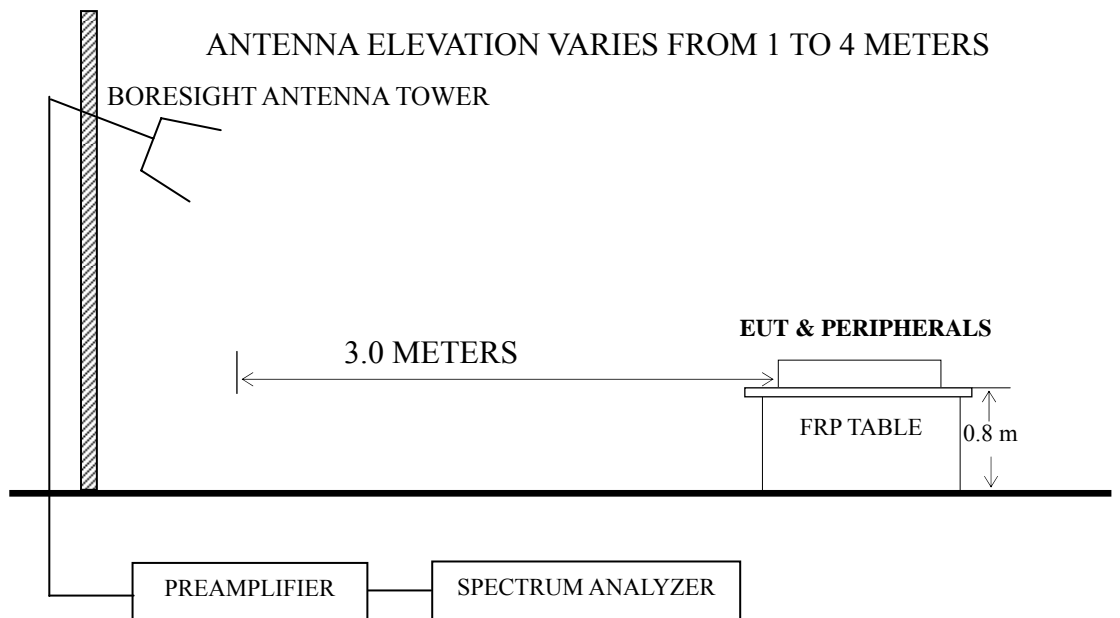


### 4.2.2 Radiated emission test setup

#### 4.2.2.1 Below 1GHz



#### 4.2.2.2 Above 1GHz



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

Frequency (MHz)	Distance (m)	Field strength limits	
		( $\mu\text{V/m}$ )	dB ( $\mu\text{V/m}$ )
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 ( $\mu\text{V/m}$ ) = 20 log Emission Level ( $\mu\text{V/m}$ )  
 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.  
 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) 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 I.F. bandwidth of Test Receiver R&S ESCI was set at 120 kHz.

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

The frequency range from 1 GHz to 6 GHz was checked for the maximum resolution test mode.

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
HDMI 3840*2160@60Hz & 1kHz playing	P28-P29
HDMI 1920*1080@60Hz & 1kHz playing	P30
HDMI 1280*1024@60Hz & 1kHz playing	P31
HDMI 640*480@60Hz & 1kHz playing	P32
HDMI1080P	P33
USB Play	P34
LAN Play	P35
MHL	P36

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading. (< 1GHz);

Emission Level = Antenna Factor + Cable Loss – Preamp Factor + Meter Reading. (> 1GHz)

NOTE 2 – All readings are Quasi-Peak values below or equal to 1GHz, Peak and Average values above 1GHz.

NOTE 3 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 4 – The worst case is for HDMI 3840\*2160@60Hz & 1 kHz playing test mode. The worst emission at horizontal polarization was detected at 4230.695 MHz with corrected signal level of 55.25 dB (μV/m) (limit is 74.00 dB (μV/m)), when the antenna was 1.90 m height and the turntable was at 245°. The worst emission at vertical polarization was detected at 1187.688 MHz with corrected signal level of 37.09 dB (μV/m) (limit is 54.00 dB (μV/m)), when the antenna was 1.90m height and the turntable was at 150°.

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : HDMI 3840\*2160@60Hz & 1kHz Playing Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	<b>129.910</b>	<b>22.23</b>	<b>12.80</b>	<b>1.52</b>	--	<b>36.55</b>	<b>43.50</b>	<b>-6.95</b>	QP
	241.460	26.49	12.00	2.13	--	40.62	46.00	-5.38	
	310.330	26.86	14.10	2.60	--	43.56	46.00	-2.44	
	484.930	23.30	17.56	2.91	--	43.77	46.00	-2.23	
	730.340	16.08	20.10	3.59	--	39.77	46.00	-6.23	
	891.000	18.30	21.30	4.46	--	44.06	46.00	-1.94	
	1485.838	66.02	3.86	25.56	35.7	59.74	74	-14.26	PK
	1485.838	46.1	3.86	25.56	35.7	39.82	54	-14.18	
	<b>1933.569</b>	<b>60.11</b>	<b>4.35</b>	<b>27.27</b>	<b>35.17</b>	<b>56.56</b>	<b>74</b>	<b>-17.44</b>	
	1933.569	40.22	4.35	27.27	35.17	36.67	54	-17.33	
	2538.859	60.87	4.96	28.57	35.16	59.24	74	-14.76	
	2538.859	40.2	4.96	28.57	35.16	38.57	54	-15.43	
	2961.827	63.24	5.76	30.37	35.2	64.17	74	-9.83	AV
	2961.827	42.52	5.76	30.37	35.2	43.45	54	-10.55	
	3375.707	59.75	6.1	31.27	34.83	62.29	74	-11.71	
	3375.707	36.21	6.1	31.27	34.83	38.75	54	-15.25	
	<b>4230.695</b>	<b>49.96</b>	<b>6.31</b>	<b>33.18</b>	<b>34.2</b>	<b>55.25</b>	<b>74</b>	<b>-18.75</b>	
	4230.695	32.2	6.31	33.18	34.2	37.49	54	-16.51	

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : HDMI 3840\*2160@60Hz & 1kHz Playing Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)	Remark
Vertical	<b>68.800</b>	<b>25.78</b>	<b>7.12</b>	<b>0.92</b>	--	<b>33.82</b>	<b>40.00</b>	<b>-6.18</b>	QP
	132.820	23.82	12.69	1.54	--	38.05	43.50	-5.45	
	309.360	23.16	14.10	2.60	--	39.86	46.00	-6.14	
	672.140	20.83	19.60	3.16	--	43.59	46.00	-2.41	
	719.670	21.21	19.90	3.57	--	44.68	46.00	-1.32	
	844.800	18.65	20.73	4.07	--	43.45	46.00	-2.55	
	1187.688	65.36	3.52	24.4	36.16	57.12	74	-16.88	PK
	<b>1187.688</b>	<b>45.33</b>	<b>3.52</b>	<b>24.4</b>	<b>36.16</b>	<b>37.09</b>	<b>54</b>	<b>-16.91</b>	
	1774.224	67.28	4.13	26.7	35.34	62.77	74	-11.23	
	1774.224	45.95	4.13	26.7	35.34	41.44	54	-12.56	
	2534.314	66.37	4.96	28.57	35.16	64.74	74	-9.26	
	2534.314	44.54	4.96	28.57	35.16	42.91	54	-11.09	
	2972.46	65.67	5.76	30.4	35.2	66.63	74	-7.37	AV
	2972.46	43.88	5.76	30.4	35.2	44.84	54	-9.16	
	4253.498	50.68	6.43	33.22	34.19	56.14	74	-17.86	
	<b>4253.498</b>	<b>32.3</b>	<b>6.43</b>	<b>33.22</b>	<b>34.19</b>	<b>37.76</b>	<b>54</b>	<b>-16.24</b>	
5893.452	50	8.31	35.06	34.08	59.29	74	-14.71		
5893.452	30.21	8.31	35.06	34.08	39.5	54	-14.5		

TEST ENGINEER: MARK LI

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : HDMI 1920\*1080@60Hz Date of Test : Dec 29, 2015  
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	<b>132.820</b>	<b>22.12</b>	<b>12.69</b>	<b>1.54</b>	<b>36.35</b>	<b>43.50</b>	<b>-7.15</b>
	237.580	26.96	11.64	2.11	40.71	46.00	-5.29
	306.450	23.88	13.99	2.60	40.47	46.00	-5.53
	481.050	22.05	17.52	2.90	42.47	46.00	-3.53
	725.490	18.27	20.03	3.59	41.89	46.00	-4.11
	847.710	16.86	20.70	4.07	41.63	46.00	-4.37
Vertical	132.820	23.41	12.69	1.54	37.64	43.50	-5.86
	310.330	24.96	14.10	2.60	41.66	46.00	-4.34
	<b>607.150</b>	<b>17.30</b>	<b>19.10</b>	<b>2.26</b>	<b>38.66</b>	<b>46.00</b>	<b>-7.34</b>
	667.290	18.10	19.60	3.16	40.86	46.00	-5.14
	719.670	19.53	19.90	3.57	43.00	46.00	-3.00
	847.710	15.26	20.70	4.07	40.03	46.00	-5.97

TEST ENGINEER: MARK LI

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : HDMI 1280\*1024@60Hz Date of Test : Dec 29, 2015  
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	<b>131.850</b>	<b>23.14</b>	<b>12.71</b>	<b>1.53</b>	<b>37.38</b>	<b>43.50</b>	<b>-6.12</b>
	237.580	27.22	11.64	2.11	40.97	46.00	-5.03
	310.200	25.50	14.10	2.60	42.20	46.00	-3.80
	482.990	22.50	17.54	2.91	42.95	46.00	-3.05
	722.580	18.23	19.97	3.57	41.77	46.00	-4.23
	853.530	17.23	20.73	4.17	42.13	46.00	-3.87
Vertical	<b>30.970</b>	<b>14.24</b>	<b>18.15</b>	<b>0.64</b>	<b>33.03</b>	<b>40.00</b>	<b>-6.97</b>
	76.560	25.43	8.78	1.04	35.25	40.00	-4.75
	129.910	22.74	12.80	1.52	37.06	43.50	-6.44
	304.510	25.00	13.95	2.60	41.55	46.00	-4.45
	667.290	18.57	19.60	3.16	41.33	46.00	-4.67
	722.580	17.88	19.97	3.57	41.42	46.00	-4.58

TEST ENGINEER: MARK LI

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : HDMI 640\*480@60Hz & 1kHz Playing Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	<b>139.610</b>	<b>23.03</b>	<b>12.51</b>	<b>1.57</b>	<b>37.11</b>	<b>43.50</b>	<b>-6.39</b>
	237.580	26.01	11.64	2.11	39.76	46.00	-6.24
	312.270	24.08	14.20	2.61	40.89	46.00	-5.11
	481.050	20.91	17.52	2.90	41.33	46.00	-4.67
	728.400	18.45	20.03	3.59	42.07	46.00	-3.93
	844.800	16.65	20.73	4.07	41.45	46.00	-4.55
Vertical	76.560	24.39	8.78	1.04	34.21	40.00	-5.79
	127.000	23.78	12.97	1.51	38.26	43.50	-5.24
	<b>223.030</b>	<b>22.02</b>	<b>10.70</b>	<b>2.05</b>	<b>34.77</b>	<b>46.00</b>	<b>-11.23</b>
	313.240	24.37	14.25	2.61	41.23	46.00	-4.77
	667.290	18.72	19.60	3.16	41.48	46.00	-4.52
	717.730	17.98	19.88	3.57	41.43	46.00	-4.57

TEST ENGINEER: MARK LI

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : HDMI1080P Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	134.760	22.54	12.60	1.55	36.69	43.50	-6.81
	<b>223.030</b>	<b>25.87</b>	<b>10.70</b>	<b>2.05</b>	<b>38.62</b>	<b>46.00</b>	<b>-7.38</b>
	482.990	20.86	17.54	2.91	41.31	46.00	-4.69
	722.580	17.91	19.97	3.57	41.45	46.00	-4.55
	850.620	16.45	20.70	4.17	41.32	46.00	-4.68
	960.000	14.40	22.20	4.75	41.35	46.00	-4.65
Vertical	77.530	24.29	8.95	1.05	34.29	40.00	-5.71
	133.790	24.16	12.64	1.54	38.34	43.50	-5.16
	<b>220.120</b>	<b>25.10</b>	<b>10.55</b>	<b>2.04</b>	<b>37.69</b>	<b>46.00</b>	<b>-8.31</b>
	306.450	25.46	13.99	2.60	42.05	46.00	-3.95
	669.230	19.73	19.60	3.16	42.49	46.00	-3.51
	725.490	19.77	20.03	3.59	43.39	46.00	-2.61

TEST ENGINEER: MARK LI

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : USB Play Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	130.880	21.63	12.76	1.53	35.92	43.50	-7.58
	<b>239.520</b>	<b>20.97</b>	<b>11.80</b>	<b>2.11</b>	<b>34.88</b>	<b>46.00</b>	<b>-11.12</b>
	566.410	17.41	18.45	2.47	38.33	46.00	-7.67
	728.400	16.08	20.03	3.59	39.70	46.00	-6.30
	847.710	15.50	20.70	4.07	40.27	46.00	-5.73
	891.000	15.80	21.30	4.46	41.56	46.00	-4.44
Vertical	133.790	24.52	12.64	1.54	38.70	43.50	-4.80
	208.480	26.79	9.96	2.01	38.76	43.50	-4.74
	<b>605.210</b>	<b>15.61</b>	<b>19.10</b>	<b>2.26</b>	<b>36.97</b>	<b>46.00</b>	<b>-9.03</b>
	722.580	13.71	19.97	3.57	37.25	46.00	-8.75
	847.710	15.13	20.70	4.07	39.90	46.00	-6.10
	891.000	15.80	21.30	4.46	41.56	46.00	-4.44

TEST ENGINEER: MARK LI



EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : LAN Play Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	<b>136.700</b>	<b>20.93</b>	<b>12.57</b>	<b>1.56</b>	<b>35.06</b>	<b>43.50</b>	<b>-8.44</b>
	242.430	27.27	12.10	2.13	41.50	46.00	-4.50
	297.000	25.10	13.70	2.56	41.36	46.00	-4.64
	482.990	21.02	17.54	2.91	41.47	46.00	-4.53
	667.290	16.45	19.60	3.16	39.21	46.00	-6.79
	893.300	15.95	21.30	4.46	41.71	46.00	-4.29
Vertical	76.560	24.51	8.78	1.04	34.33	40.00	-5.67
	297.000	25.20	13.70	2.56	41.46	46.00	-4.54
	<b>484.930</b>	<b>17.60</b>	<b>17.56</b>	<b>2.91</b>	<b>38.07</b>	<b>46.00</b>	<b>-7.93</b>
	596.480	18.80	18.98	2.31	40.09	46.00	-5.91
	669.230	19.08	19.60	3.16	41.84	46.00	-4.16
	728.400	17.88	20.03	3.59	41.50	46.00	-4.50

TEST ENGINEER: MARK LI

EUT : LED LCD TV Temperature : 22

Model No. : LC-50N7000U Humidity : 60%RH

Test Mode : MHL Date of Test : Dec 29, 2015

Polarization	Frequency (MHz)	Meter Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)
Horizontal	<b>238.550</b>	<b>23.70</b>	<b>11.72</b>	<b>2.11</b>	<b>37.53</b>	<b>46.00</b>	<b>-8.47</b>
	299.660	24.91	13.80	2.59	41.30	46.00	-4.70
	566.410	16.43	18.45	2.47	37.35	46.00	-8.65
	719.670	15.87	19.90	3.57	39.34	46.00	-6.66
	850.000	15.20	20.70	4.17	40.07	46.00	-5.93
	891.000	14.30	21.30	4.46	40.06	46.00	-5.94
Vertical	30.970	15.01	18.15	0.64	33.80	40.00	-6.20
	127.000	23.68	12.97	1.51	38.16	43.50	-5.34
	206.540	27.07	9.84	1.99	38.90	43.50	-4.60
	<b>602.300</b>	<b>18.07</b>	<b>19.10</b>	<b>2.26</b>	<b>39.43</b>	<b>46.00</b>	<b>-6.57</b>
	891.000	16.00	21.30	4.46	41.76	46.00	-4.24
	959.260	13.83	22.20	4.75	40.78	46.00	-5.22

TEST ENGINEER: MARK LI

## **5 DEVIATION TO TEST SPECIFICATIONS**

None.