

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

LED LCD TV

Model No.	Brand
55DU60+0, 55DU6+00, 55H6607 55H6D, 55H6D+, 55H6+0D, 55H6+0D1 55H60+0D, 55H60+0D1	Hisense

FCC ID : W9HLCDF0117

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

Prepared By : Audix Technology (Shanghai) Co., Ltd.  
3F and 4F, 34Bldg 680 Guiping Rd,  
Caohejing Hi-Tech Park,  
Shanghai 200233, China

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

Report No. : ACI-F17176  
Date of Test : Apr 08-21, 2017  
Date of Report : May 08, 2017

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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. : Refer to Sec.2.1  
Brand : Hisense  
Power Supply : 120V/60Hz

Test Procedure Used:

***FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B  
AND ANSI C63.4-2014***

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 Sec.2.1) which was tested in 3m anechoic chamber Apr 08-21, 2017 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

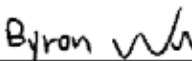
***The test results for EUT's TV functions are contained in No.F17059A4, a Verification report.***


Date of Test : Apr 08-21, 2017 Date of Report : May 08, 2017

Producer :

  
TINA LIANG / Assistant

Review :

  
BYRON WU / Deputy Assistant Manager

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

Signatory :  
Authorized Signature(s) BYRON KWO / 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 AND ANSI C63.4-2014	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B AND ANSI C63.4-2014	15.109(a) Class B	Pass

## 2 GENERAL INFORMATION

### 2.1 Description of Equipment Under Test

Description : LED LCD TV

Type of EUT : ☒ Production ☐ Pre-product ☐ Pro-type

Model No.	Brand
55DU60+0, 55DU6+00, 55H6607 55H6D, 55H6D+, 55H6+0D, 55H6+0D1 55H60+0D, 55H60+0D1	Hisense

Note #1 : “+” represents any of the Arabic numeral.

Note #2 : The tuner port comply with the 15.111 requirement.

Note #3 : The above models are all the same except for model number. 55H6D model is tested and recorded in the report.

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. Hisense #3510 Parque Industrial  
Rosarito, C.P. 22710 Playas de Rosarito, B.C.

LCD Panel : Manufacturer : Hisense  
M/N : HD550K3U51

Tuner : Manufacturer : SILICON LABS  
M/N : Si2151-A10

WIFI Modular : FCC ID: 2AJVQ-ZDGFMT7612U

Max Resolution : 3840\*2160@60Hz

HDMI Cable\*4 : Shielded, Detachable, 1.80m  
(Lab provide)

Power Cord : Unshielded, Detachable, 1.80m, 2C

USB Cable*3 (Lab provide)	:	Shielded, Detachable, 1.00m
LAN Cable	:	Unshielded, Detachable, 1.50m
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 ANT Port : Connected with ATSC SG/TV SG
- (2) One USB1 Port : Connected with Hard-Disk #1
- (3) One USB2 Port : Connected with Hard-Disk #2
- (4) One Service Port : Do not open to customer
- (5) One AUDIO OUT Port : Connected with Earphone #1
- (6) One HDMI1/MHL Port : Connected with Smart Mobile Phone
- (7) One HDMI2 Port : Connected with PC
- (8) One USB3 Port : Connected with Hard-Disk #3

## Back Port:

- (9) One COMPONENT IN/AV IN Port : Connected with DVD Player
- (10) One LAN Port : Connected with PC
- (11) One DIGITAL AUDIO OUT Port : Connected with Audio Converter to Earphone#2
- (12) One HDMI3 Port : Connect with PC
- (13) One HDMI4 Port : Connect with DVD Player

## 2.2 Peripherals

### 2.2.1 PC

Manufacturer	:	HP
Model Number	:	Pro3340
Serial Number	:	6CR2512VFD
Power Cord	:	Unshielded, 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 \*2

Manufacturer : EDIFIER  
Model Number : H210

#### 2.2.6 DVD Player

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

#### 2.2.7 Hard Disk #1

Manufacturer : Tetasys  
Model Number : F12  
Serial Number : A010022-4860010X  
Data Cable : Shielded, Undetachable, 1.8m.  
Certificate : CE, FCC DoC

#### 2.2.8 Hard Disk #2

Manufacturer : Tetasys  
Model Number : F12  
Serial Number : A010022-4A60007  
Data Cable : Shielded, Undetachable, 1.8m.  
Certificate : CE, FCC DoC

#### 2.2.9 Hard Disk #3

Manufacturer : Tetasys  
Model Number : F12  
Serial Number : A010022-4860006  
Data Cable : Shielded, Undetachable, 1.8m.  
Certificate : CE, FCC DoC

#### 2.2.10 ATSC Signal Generator

Manufacturer : SENCORE  
Model Number : ATSC997  
Serial Number : 6790071

#### 2.2.11 TV Signal Generator

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



## 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 = 4.3dB(Horizontal)  
U = 4.6dB (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):  
U = 4.3dB (Horizontal)  
U = 5.5dB (Vertical)

Radiated Emission Expanded Uncertainty (1GHz-6GHz):  
U = 5.1dB

### 3 CONDUCTED EMISSION TEST

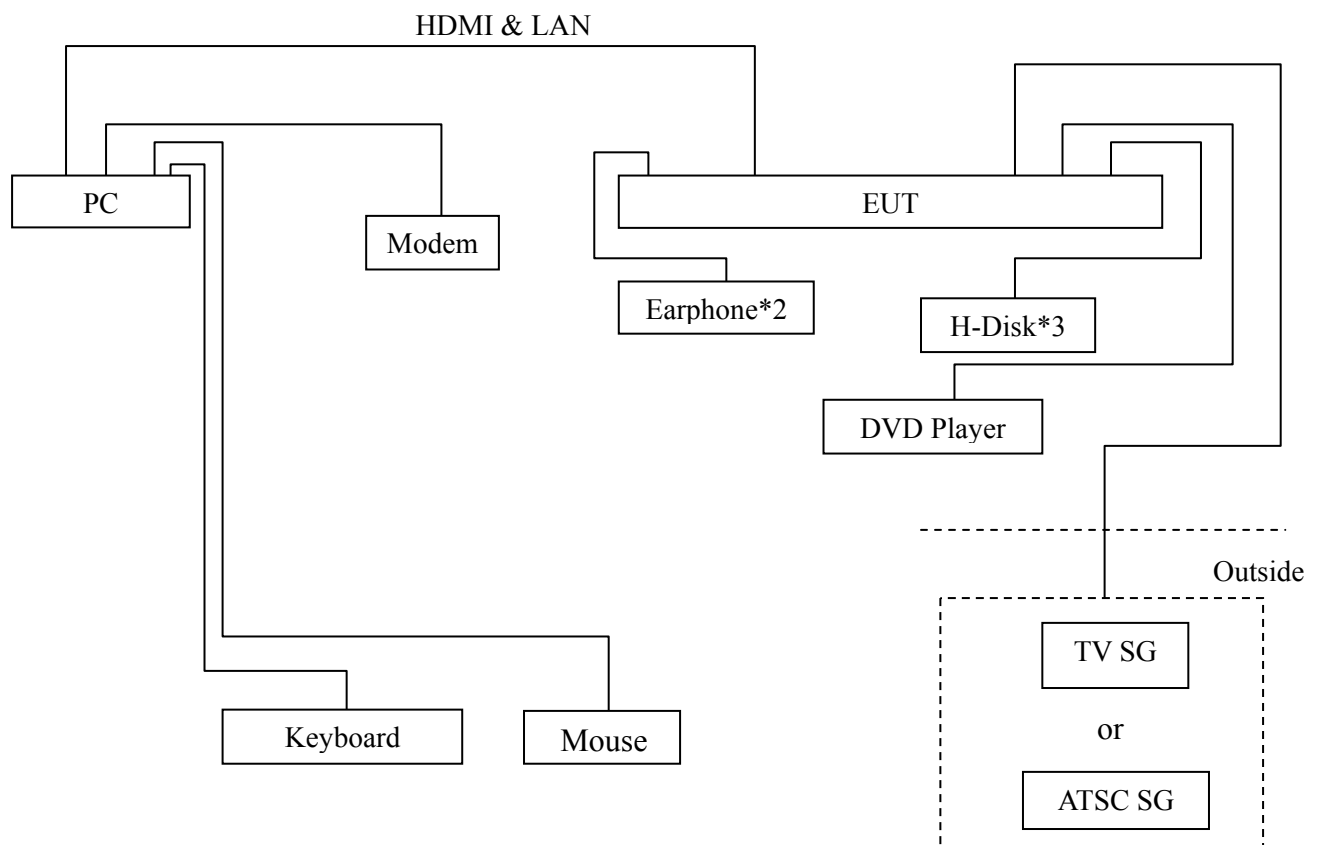
#### 3.1 Test Equipment

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

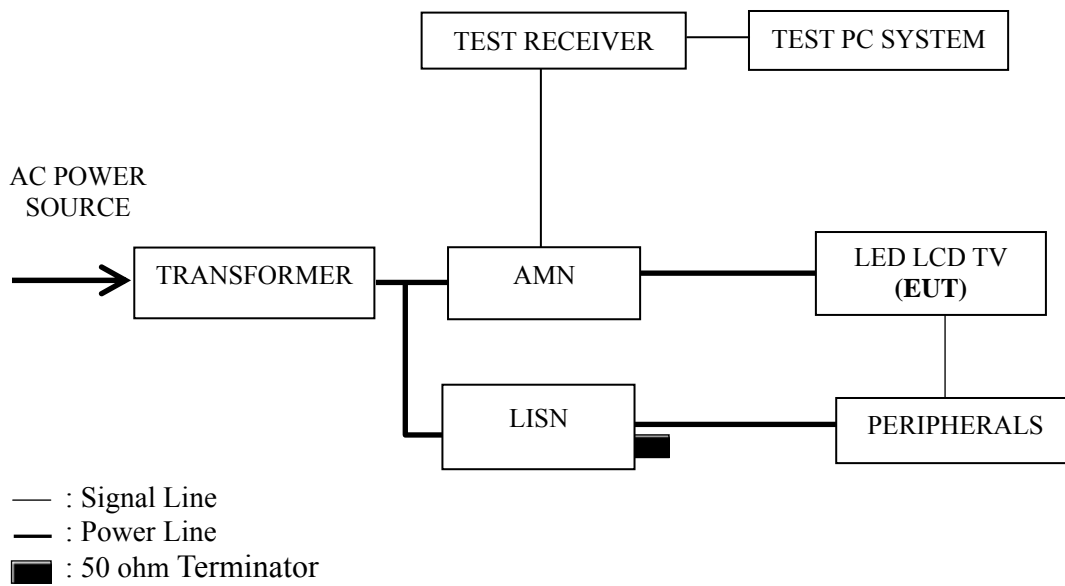
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2017	Apr 26, 2018
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 17, 2017	Mar 16, 2018
4.	50Ω Terminator	Anritsu	BNC	001	Mar 18, 2017	Sep 17, 2017
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 The other peripherals devices were driven and operated during the test.

### 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 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
HDMI1 3840*2160@60Hz & 1kHz Playing	P14
HDMI2 3840*2160@60Hz & 1kHz Playing	P15
HDMI3 3840*2160@60Hz & 1kHz Playing	P16
HDMI4 3840*2160@60Hz & 1kHz Playing	P17
HDMI1 1920*1080@60Hz & 1kHz Playing	P18
HDMI1 1280*1024@60Hz & 1kHz Playing	P19
HDMI1 640*480@60Hz & 1kHz Playing	P20
HDMI 1080P	P21
USB Play	P22
LAN Play	P23
MHL	P24
Wifi	P25

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 USB Play mode. The worst emission is detected at 0.156 MHz (Average Value) with corrected signal level of 51.34dB (μV) (limit is 65.65 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Apr 08, 2017  
3840\*2160@60Hz &  
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.153</b>	<b>40.14</b>	<b>10.58</b>	<b>50.72</b>	<b>65.82</b>	<b>15.10</b>	QP
	0.356	30.36	10.45	40.81	58.83	18.02	
	0.627	25.21	10.39	35.60	56.00	20.40	
	0.890	26.29	10.40	36.69	56.00	19.31	
	1.388	23.21	10.41	33.62	56.00	22.38	
	16.486	23.24	10.57	33.81	60.00	26.19	
	0.153	28.14	10.58	38.72	55.82	17.10	AV
	0.356	18.36	10.45	28.81	48.83	20.02	
	0.627	13.21	10.39	23.60	46.00	22.40	
	0.890	12.29	10.40	22.69	46.00	23.31	
	1.388	11.21	10.41	21.62	46.00	24.38	
	16.486	19.24	10.57	29.81	50.00	20.19	
Neutral	0.159	34.74	10.57	45.31	65.52	20.21	QP
	0.381	31.29	10.43	41.72	58.25	16.53	
	<b>0.641</b>	<b>30.49</b>	<b>10.39</b>	<b>40.88</b>	<b>56.00</b>	<b>15.12</b>	
	0.871	23.60	10.40	34.00	56.00	22.00	
	3.881	18.57	10.48	29.05	56.00	26.95	
	16.486	24.41	10.67	35.08	60.00	24.92	
	0.159	23.74	10.57	34.31	55.52	21.21	AV
	0.381	17.29	10.43	27.72	48.25	20.53	
	0.641	16.49	10.39	26.88	46.00	19.12	
	0.871	14.60	10.40	25.00	46.00	21.00	
	3.881	11.57	10.48	22.05	46.00	23.95	
	16.486	19.41	10.67	30.08	50.00	19.92	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI2 Date of Test : Apr 08, 2017  
3840\*2160@60Hz &  
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.156</b>	<b>37.80</b>	<b>10.58</b>	<b>48.38</b>	<b>65.65</b>	<b>17.27</b>	QP
	0.332	24.86	10.46	35.32	59.40	24.08	
	0.641	25.80	10.40	36.20	56.00	19.80	
	0.899	25.65	10.40	36.05	56.00	19.95	
	3.276	23.09	10.43	33.52	56.00	22.48	
	16.398	24.95	10.57	35.52	60.00	24.48	
	0.156	26.80	10.58	37.38	55.65	18.27	AV
	0.332	18.86	10.46	29.32	49.40	20.08	
	0.641	17.80	10.40	28.20	46.00	17.80	
	0.899	13.65	10.40	24.05	46.00	21.95	
	3.276	9.09	10.43	19.52	46.00	26.48	
	16.398	18.95	10.57	29.52	50.00	20.48	
Neutral	0.156	33.56	10.57	44.13	65.65	21.52	QP
	0.381	29.98	10.43	40.41	58.25	17.84	
	<b>0.634</b>	<b>27.91</b>	<b>10.39</b>	<b>38.30</b>	<b>56.00</b>	<b>17.70</b>	
	0.890	23.09	10.40	33.49	56.00	22.51	
	3.107	17.68	10.46	28.14	56.00	27.86	
	16.398	24.22	10.67	34.89	60.00	25.11	
	0.156	22.56	10.57	33.13	55.65	22.52	AV
	0.381	16.98	10.43	27.41	48.25	20.84	
	0.634	10.91	10.39	21.30	46.00	24.70	
	0.890	12.09	10.40	22.49	46.00	23.51	
	3.107	11.68	10.46	22.14	46.00	23.86	
	16.398	18.22	10.67	28.89	50.00	21.11	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI3 Date of Test : Apr 08, 2017  
3840\*2160@60Hz &  
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.157</b>	<b>37.99</b>	<b>10.58</b>	<b>48.57</b>	<b>65.60</b>	<b>17.03</b>	QP
	0.332	23.12	10.46	33.58	59.40	25.82	
	0.627	24.16	10.39	34.55	56.00	21.45	
	1.141	19.44	10.40	29.84	56.00	26.16	
	2.993	24.20	10.43	34.63	56.00	21.37	
	16.486	23.45	10.57	34.02	60.00	25.98	
	0.157	26.99	10.58	37.57	55.60	18.03	AV
	0.332	10.12	10.46	20.58	49.40	28.82	
	0.627	11.16	10.39	21.55	46.00	24.45	
	1.141	9.44	10.40	19.84	46.00	26.16	
	2.993	11.20	10.43	21.63	46.00	24.37	
	16.486	18.45	10.57	29.02	50.00	20.98	
Neutral	0.156	32.92	10.57	43.49	65.65	22.16	QP
	<b>0.385</b>	<b>30.68</b>	<b>10.43</b>	<b>41.11</b>	<b>58.17</b>	<b>17.06</b>	
	0.627	22.92	10.38	33.30	56.00	22.70	
	0.880	21.12	10.40	31.52	56.00	24.48	
	3.472	24.60	10.47	35.07	56.00	20.93	
	16.839	23.74	10.67	34.41	60.00	25.59	
	0.156	22.92	10.57	33.49	55.65	22.16	AV
	0.385	17.68	10.43	28.11	48.17	20.06	
	0.627	13.92	10.38	24.30	46.00	21.70	
	0.880	10.12	10.40	20.52	46.00	25.48	
	3.472	12.60	10.47	23.07	46.00	22.93	
	16.839	17.74	10.67	28.41	50.00	21.59	

TEST ENGINEER: BYRON WU



EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI4 Date of Test : Apr 08, 2017  
 3840\*2160@60Hz &  
 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.153</b>	<b>39.36</b>	<b>10.58</b>	<b>49.94</b>	<b>65.82</b>	<b>15.88</b>	QP
	0.647	29.54	10.40	39.94	56.00	16.06	
	0.880	25.71	10.40	36.11	56.00	19.89	
	1.403	25.29	10.41	35.70	56.00	20.30	
	3.207	23.76	10.43	34.19	56.00	21.81	
	16.226	23.00	10.57	33.57	60.00	26.43	
	0.153	27.36	10.58	37.94	55.82	17.88	AV
	0.647	17.54	10.40	27.94	46.00	18.06	
	0.880	14.71	10.40	25.11	46.00	20.89	
	1.403	12.29	10.41	22.70	46.00	23.30	
	3.207	10.76	10.43	21.19	46.00	24.81	
	16.226	18.00	10.57	28.57	50.00	21.43	
Neutral	0.168	32.33	10.55	42.88	65.08	22.20	QP
	0.385	30.26	10.43	40.69	58.17	17.48	
	<b>0.641</b>	<b>29.61</b>	<b>10.39</b>	<b>40.00</b>	<b>56.00</b>	<b>17.00</b>	
	0.880	20.88	10.40	31.28	56.00	24.72	
	3.173	16.57	10.47	27.04	56.00	28.96	
	16.398	23.36	10.67	34.03	60.00	25.97	
	0.168	20.33	10.55	30.88	55.08	24.20	AV
	0.385	19.26	10.43	29.69	48.17	18.48	
	0.641	15.61	10.39	26.00	46.00	20.00	
	0.880	12.88	10.40	23.28	46.00	22.72	
	3.173	8.57	10.47	19.04	46.00	26.96	
	16.398	17.36	10.67	28.03	50.00	21.97	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Apr 08, 2017  
 1920\*1080@60Hz &  
 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.155</b>	<b>39.50</b>	<b>10.58</b>	<b>50.08</b>	<b>65.74</b>	<b>15.66</b>	QP
	0.346	29.67	10.46	40.13	59.05	18.92	
	0.627	26.71	10.39	37.10	56.00	18.90	
	0.880	27.62	10.40	38.02	56.00	17.98	
	1.403	23.02	10.41	33.43	56.00	22.57	
	16.226	22.49	10.57	33.06	60.00	26.94	
	0.155	28.50	10.58	39.08	55.74	16.66	AV
	0.346	20.67	10.46	31.13	49.05	17.92	
	0.627	14.71	10.39	25.10	46.00	20.90	
	0.880	13.62	10.40	24.02	46.00	21.98	
	1.403	11.02	10.41	21.43	46.00	24.57	
	16.226	19.49	10.57	30.06	50.00	19.94	
Neutral	0.155	33.29	10.57	43.86	65.74	21.88	QP
	0.385	29.32	10.43	39.75	58.17	18.42	
	<b>0.641</b>	<b>29.33</b>	<b>10.39</b>	<b>39.72</b>	<b>56.00</b>	<b>16.28</b>	
	0.880	24.84	10.40	35.24	56.00	20.76	
	3.207	22.26	10.47	32.73	56.00	23.27	
	16.398	24.52	10.67	35.19	60.00	24.81	
	0.155	22.29	10.57	32.86	55.74	22.88	AV
	0.385	18.32	10.43	28.75	48.17	19.42	
	0.641	16.33	10.39	26.72	46.00	19.28	
	0.880	13.84	10.40	24.24	46.00	21.76	
	3.207	12.26	10.47	22.73	46.00	23.27	
	16.398	18.52	10.67	29.19	50.00	20.81	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Apr 08, 2017  
1280\*1024@60Hz &  
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.153</b>	<b>40.07</b>	<b>10.58</b>	<b>50.65</b>	<b>65.82</b>	<b>15.17</b>	QP
	0.356	30.20	10.45	40.65	58.83	18.18	
	0.641	25.41	10.40	35.81	56.00	20.19	
	0.899	26.99	10.40	37.39	56.00	18.61	
	2.594	23.52	10.42	33.94	56.00	22.06	
	16.398	23.73	10.57	34.30	60.00	25.70	
	0.153	27.07	10.58	37.65	55.82	18.17	AV
	0.356	19.20	10.45	29.65	48.83	19.18	
	0.641	14.41	10.40	24.81	46.00	21.19	
	0.899	14.99	10.40	25.39	46.00	20.61	
	2.594	11.52	10.42	21.94	46.00	24.06	
	16.398	19.73	10.57	30.30	50.00	19.70	
Neutral	0.155	35.42	10.57	45.99	65.74	19.75	QP
	0.385	31.30	10.43	41.73	58.17	16.44	
	<b>0.627</b>	<b>30.10</b>	<b>10.38</b>	<b>40.48</b>	<b>56.00</b>	<b>15.52</b>	
	0.899	23.80	10.40	34.20	56.00	21.80	
	3.207	18.36	10.47	28.83	56.00	27.17	
	16.398	24.27	10.67	34.94	60.00	25.06	
	0.155	23.42	10.57	33.99	55.74	21.75	AV
	0.385	17.30	10.43	27.73	48.17	20.44	
	0.627	16.10	10.38	26.48	46.00	19.52	
	0.899	14.80	10.40	25.20	46.00	20.80	
	3.207	12.36	10.47	22.83	46.00	23.17	
	16.398	19.27	10.67	29.94	50.00	20.06	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 640\*480@60Hz Date of Test : Apr 08, 2017  
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	<b>0.155</b>	<b>40.50</b>	<b>10.58</b>	<b>51.08</b>	<b>65.74</b>	<b>14.66</b>	QP
	0.641	30.57	10.40	40.97	56.00	15.03	
	1.160	25.42	10.40	35.82	56.00	20.18	
	1.839	26.85	10.41	37.26	56.00	18.74	
	2.900	23.81	10.43	34.24	56.00	21.76	
	16.661	23.85	10.57	34.42	60.00	25.58	
	0.155	29.50	10.58	40.08	55.74	15.66	AV
	0.641	19.57	10.40	29.97	46.00	16.03	
	1.160	13.42	10.40	23.82	46.00	22.18	
	1.839	12.85	10.41	23.26	46.00	22.74	
	2.900	12.81	10.43	23.24	46.00	22.76	
	16.661	18.85	10.57	29.42	50.00	20.58	
Neutral	0.155	33.44	10.57	44.01	65.74	21.73	QP
	0.381	31.04	10.43	41.47	58.25	16.78	
	<b>0.641</b>	<b>29.25</b>	<b>10.39</b>	<b>39.64</b>	<b>56.00</b>	<b>16.36</b>	
	0.890	23.01	10.40	33.41	56.00	22.59	
	3.472	19.80	10.47	30.27	56.00	25.73	
	16.226	24.55	10.67	35.22	60.00	24.78	
	0.155	23.44	10.57	34.01	55.74	21.73	AV
	0.381	18.04	10.43	28.47	48.25	19.78	
	0.641	17.25	10.39	27.64	46.00	18.36	
	0.890	16.01	10.40	26.41	46.00	19.59	
	3.472	11.80	10.47	22.27	46.00	23.73	
	16.226	19.55	10.67	30.22	50.00	19.78	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI 1080P Date of Test : Apr 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	<b>0.157</b>	<b>40.44</b>	<b>10.58</b>	<b>51.02</b>	<b>65.60</b>	<b>14.58</b>	QP
	0.356	29.26	10.45	39.71	58.83	19.12	
	0.641	25.54	10.40	35.94	56.00	20.06	
	0.880	26.47	10.40	36.87	56.00	19.13	
	2.178	23.03	10.41	33.44	56.00	22.56	
	16.398	23.26	10.57	33.83	60.00	26.17	
	0.157	28.44	10.58	39.02	55.60	16.58	AV
	0.356	18.26	10.45	28.71	48.83	20.12	
	0.641	13.54	10.40	23.94	46.00	22.06	
	0.880	12.47	10.40	22.87	46.00	23.13	
	2.178	10.03	10.41	20.44	46.00	25.56	
	16.398	19.26	10.57	29.83	50.00	20.17	
Neutral	0.155	33.15	10.57	43.72	65.74	22.02	QP
	0.385	30.56	10.43	40.99	58.17	17.18	
	<b>0.641</b>	<b>30.91</b>	<b>10.39</b>	<b>41.30</b>	<b>56.00</b>	<b>14.70</b>	
	0.899	23.05	10.40	33.45	56.00	22.55	
	3.901	18.60	10.48	29.08	56.00	26.92	
	16.398	24.81	10.67	35.48	60.00	24.52	
	0.155	24.15	10.57	34.72	55.74	21.02	AV
	0.385	18.56	10.43	28.99	48.17	19.18	
	0.641	17.91	10.39	28.30	46.00	17.70	
	0.899	15.05	10.40	25.45	46.00	20.55	
	3.901	9.60	10.48	20.08	46.00	25.92	
	16.398	18.81	10.67	29.48	50.00	20.52	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : USB Play Date of Test : Apr 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	<b>0.156</b>	<b>40.76</b>	<b>10.58</b>	<b>51.34</b>	<b>65.65</b>	<b>14.31</b>	QP
	0.356	29.30	10.45	39.75	58.83	19.08	
	0.634	25.97	10.40	36.37	56.00	19.63	
	0.880	26.20	10.40	36.60	56.00	19.40	
	2.178	23.82	10.41	34.23	56.00	21.77	
	16.226	23.93	10.57	34.50	60.00	25.50	
	0.156	28.76	10.58	39.34	55.65	16.31	AV
	0.356	18.30	10.45	28.75	48.83	20.08	
	0.634	13.97	10.40	24.37	46.00	21.63	
	0.880	13.20	10.40	23.60	46.00	22.40	
	2.178	11.82	10.41	22.23	46.00	23.77	
	16.226	19.93	10.57	30.50	50.00	19.50	
Neutral	0.156	33.71	10.57	44.28	65.65	21.37	QP
	0.385	30.94	10.43	41.37	58.17	16.80	
	<b>0.634</b>	<b>29.87</b>	<b>10.39</b>	<b>40.26</b>	<b>56.00</b>	<b>15.74</b>	
	0.880	23.41	10.40	33.81	56.00	22.19	
	3.943	20.08	10.48	30.56	56.00	25.44	
	16.661	24.35	10.67	35.02	60.00	24.98	
	0.156	22.71	10.57	33.28	55.65	22.37	AV
	0.385	17.94	10.43	28.37	48.17	19.80	
	0.634	16.87	10.39	27.26	46.00	18.74	
	0.880	15.41	10.40	25.81	46.00	20.19	
	3.943	9.08	10.48	19.56	46.00	26.44	
	16.661	18.35	10.67	29.02	50.00	20.98	

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : LAN Play Date of Test : Apr 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	<b>0.155</b>	<b>40.60</b>	<b>10.58</b>	<b>51.18</b>	<b>65.74</b>	<b>14.56</b>	QP
	0.352	30.32	10.45	40.77	58.91	18.14	
	0.647	25.26	10.40	35.66	56.00	20.34	
	1.160	26.38	10.40	36.78	56.00	19.22	
	2.900	23.43	10.43	33.86	56.00	22.14	
	16.226	23.98	10.57	34.55	60.00	25.45	
	0.155	28.60	10.58	39.18	55.74	16.56	AV
	0.352	18.32	10.45	28.77	48.91	20.14	
	0.647	16.26	10.40	26.66	46.00	19.34	
	1.160	12.38	10.40	22.78	46.00	23.22	
	2.900	11.43	10.43	21.86	46.00	24.14	
	16.226	19.98	10.57	30.55	50.00	19.45	
Neutral	0.159	34.84	10.57	45.41	65.52	20.11	QP
	0.381	31.95	10.43	42.38	58.25	15.87	
	<b>0.634</b>	<b>30.92</b>	<b>10.39</b>	<b>41.31</b>	<b>56.00</b>	<b>14.69</b>	
	0.880	23.62	10.40	34.02	56.00	21.98	
	3.207	18.23	10.47	28.70	56.00	27.30	
	17.018	24.15	10.67	34.82	60.00	25.18	
	0.159	23.84	10.57	34.41	55.52	21.11	AV
	0.381	17.95	10.43	28.38	48.25	19.87	
	0.634	16.92	10.39	27.31	46.00	18.69	
	0.880	14.62	10.40	25.02	46.00	20.98	
	3.207	11.23	10.47	21.70	46.00	24.30	
	17.018	18.15	10.67	28.82	50.00	21.18	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : MHL Date of Test : Apr 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	<b>0.153</b>	<b>39.87</b>	<b>10.58</b>	<b>50.45</b>	<b>65.82</b>	<b>15.37</b>	QP
	0.352	30.73	10.45	41.18	58.91	17.73	
	0.654	25.79	10.40	36.19	56.00	19.81	
	0.890	26.51	10.40	36.91	56.00	19.09	
	2.594	21.78	10.42	32.20	56.00	23.80	
	16.226	24.43	10.57	35.00	60.00	25.00	
	0.153	27.87	10.58	38.45	55.82	17.37	AV
	0.352	18.73	10.45	29.18	48.91	19.73	
	0.654	13.79	10.40	24.19	46.00	21.81	
	0.890	13.51	10.40	23.91	46.00	22.09	
	2.594	10.78	10.42	21.20	46.00	24.80	
	16.226	18.43	10.57	29.00	50.00	21.00	
Neutral	0.155	33.99	10.57	44.56	65.74	21.18	QP
	<b>0.385</b>	<b>30.75</b>	<b>10.43</b>	<b>41.18</b>	<b>58.17</b>	<b>16.99</b>	
	0.634	28.50	10.39	38.89	56.00	17.11	
	0.890	24.43	10.40	34.83	56.00	21.17	
	2.962	19.74	10.46	30.20	56.00	25.80	
	16.839	24.45	10.67	35.12	60.00	24.88	
	0.155	24.99	10.57	35.56	55.74	20.18	AV
	0.385	17.75	10.43	28.18	48.17	19.99	
	0.634	15.50	10.39	25.89	46.00	20.11	
	0.890	13.43	10.40	23.83	46.00	22.17	
	2.962	11.74	10.46	22.20	46.00	23.80	
	16.839	19.45	10.67	30.12	50.00	19.88	

TEST ENGINEER: BYRON WU



EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : Wifi Date of Test : Apr 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB( $\mu$ V)	Factor (dB)	Emission Level dB( $\mu$ V)	Limits dB( $\mu$ V)	Margin (dB)	Remark
Line	<b>0.159</b>	<b>40.25</b>	<b>10.58</b>	<b>50.83</b>	<b>65.52</b>	<b>14.69</b>	QP
	0.346	30.27	10.46	40.73	59.05	18.32	
	0.647	25.68	10.40	36.08	56.00	19.92	
	0.880	26.96	10.40	37.36	56.00	18.64	
	3.207	24.37	10.43	34.80	56.00	21.20	
	16.055	23.98	10.56	34.54	60.00	25.46	
	0.159	28.25	10.58	38.83	55.52	16.69	AV
	0.346	18.27	10.46	28.73	49.05	20.32	
	0.647	13.68	10.40	24.08	46.00	21.92	
	0.880	13.96	10.40	24.36	46.00	21.64	
	3.207	11.37	10.43	21.80	46.00	24.20	
	16.055	19.98	10.56	30.54	50.00	19.46	
Neutral	0.156	33.44	10.57	44.01	65.65	21.64	QP
	0.381	30.09	10.43	40.52	58.25	17.73	
	<b>0.647</b>	<b>30.72</b>	<b>10.39</b>	<b>41.11</b>	<b>56.00</b>	<b>14.89</b>	
	0.880	24.82	10.40	35.22	56.00	20.78	
	2.993	19.54	10.46	30.00	56.00	26.00	
	16.226	24.74	10.67	35.41	60.00	24.59	
	0.156	22.44	10.57	33.01	55.65	22.64	AV
	0.381	17.09	10.43	27.52	48.25	20.73	
	0.647	16.72	10.39	27.11	46.00	18.89	
	0.880	13.82	10.40	24.22	46.00	21.78	
	2.993	11.54	10.46	22.00	46.00	24.00	
	16.226	19.74	10.67	30.41	50.00	19.59	

TEST ENGINEER: BYRON WU

## 4 RADIATED EMISSION TEST

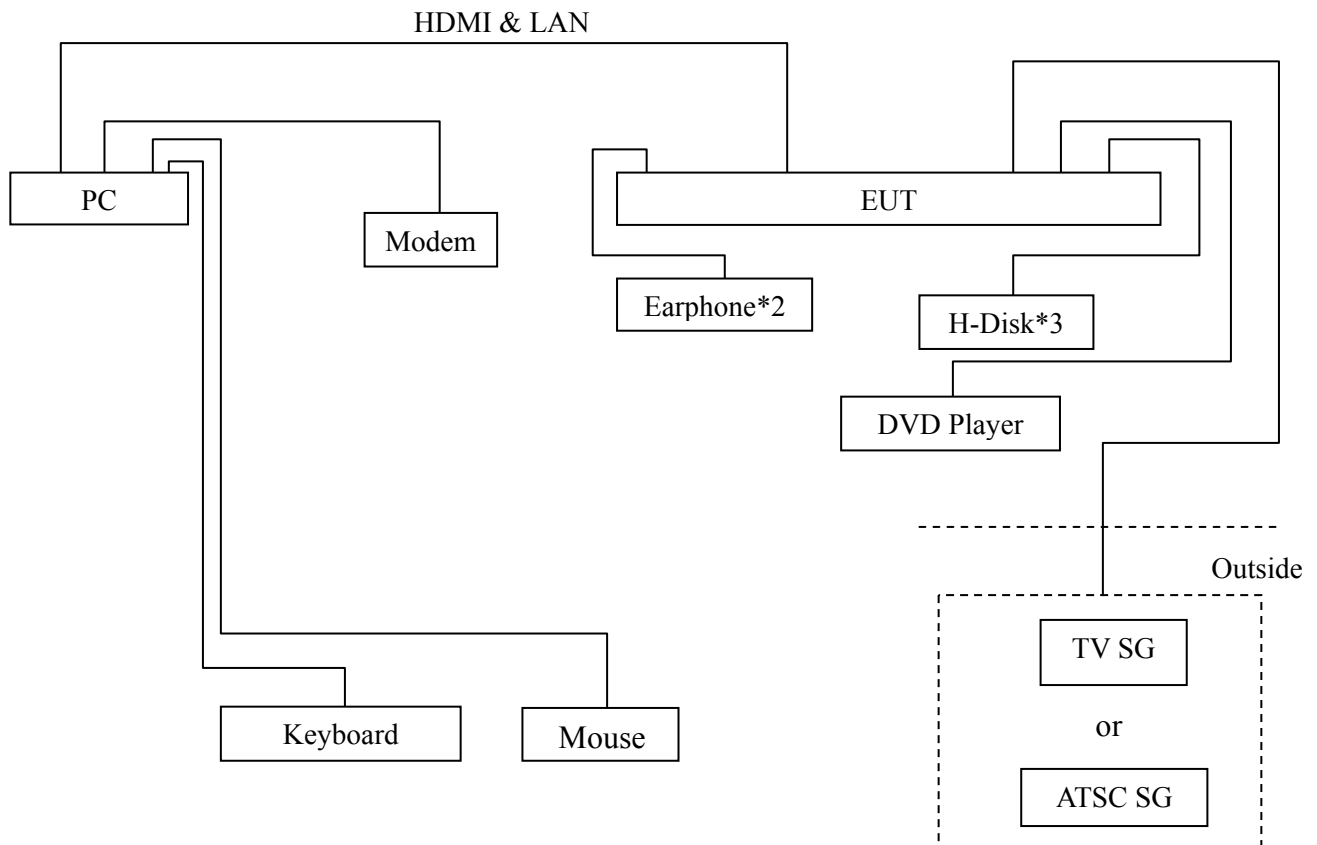
### 4.1 Test Equipment

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	Apr 27, 2017	Apr 26, 2018
2.	Preamplifier	Agilent	8447D	2944A06664	Jun 25, 2016	Jun 24, 2017
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2017	Mar 19, 2018
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	Mar 20, 2017	Mar 19, 2018
5.	Horn Antenna	EMCO	3115	9607-4878	Apr 27, 2017	Apr 26, 2018
6.	Spectrum	Agilent	E7405A	MY45106600	Jun 25, 2016	Jun 24, 2017
7.	Software	Audix	e3	6.2007-9-10	--	--

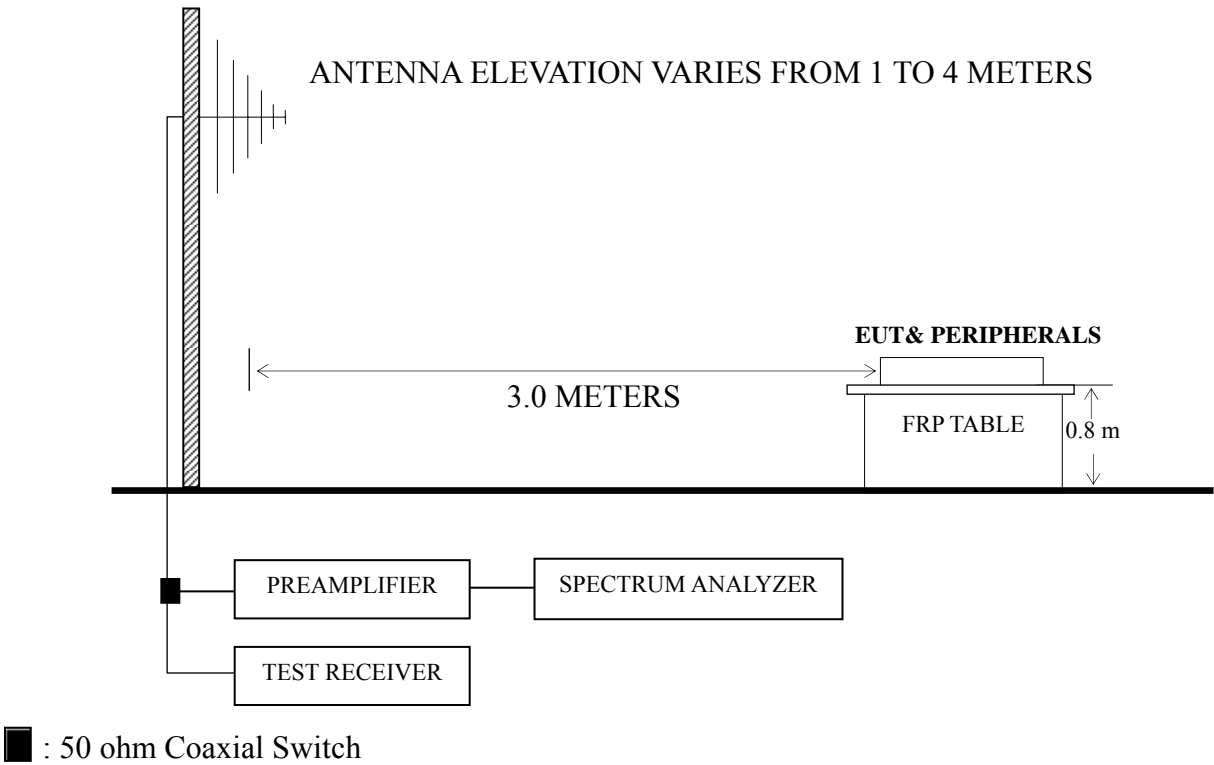
### 4.2 Block Diagram of Test Setup

#### 4.2.1 EUT & Peripherals

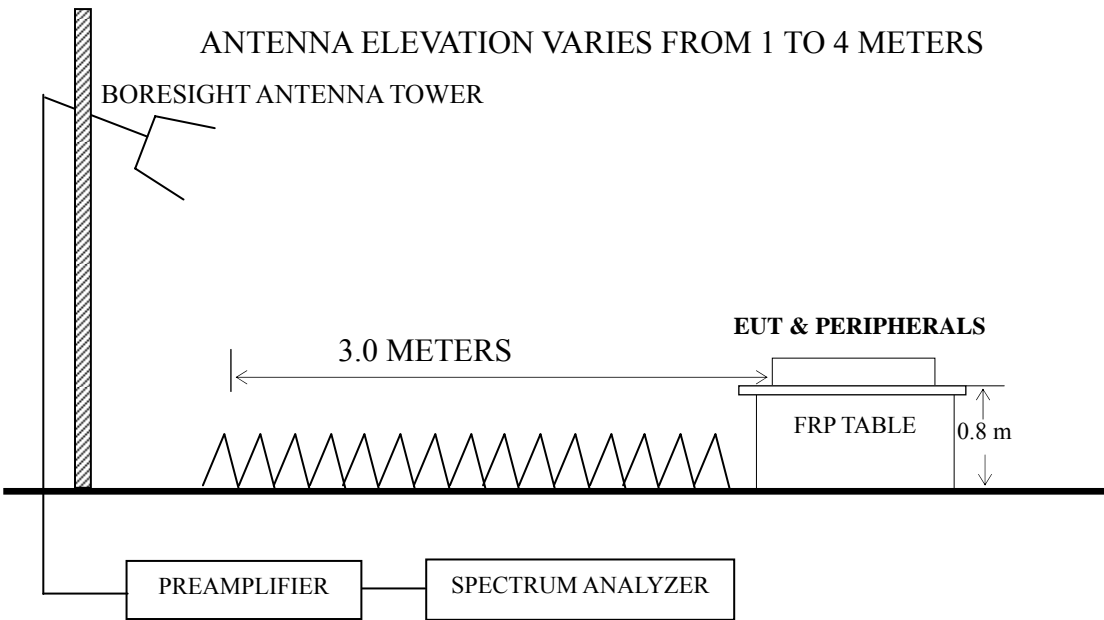


4.2.2 Radiated emission test setup

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 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
HDMI1 3840*2160@60Hz & 1kHz Playing	P30
HDMI2 3840*2160@60Hz & 1kHz Playing	P31-P32
HDMI3 3840*2160@60Hz & 1kHz Playing	P33
HDMI4 3840*2160@60Hz & 1kHz Playing	P34
HDMI2 1920*1080@60Hz & 1kHz Playing	P35
HDMI2 1280*1024@60Hz & 1kHz Playing	P36
HDMI2 640*480@60Hz & 1kHz Playing	P37
HDMI 1080P	P38
USB Play	P39
LAN Play	P40
MHL	P41
Wifi	P42

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 HDMI2 3840\*2160@60Hz & 1kHz Playing mode. The worst emission at horizontal polarization was detected at 890.728 MHz with corrected signal level of 42.60dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 2.40 m height and the turntable was at 255°. The worst emission at vertical polarization was detected at 721.726MHz with corrected signal level of 42.86dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.9 m height and the turntable was at 75°.

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI1 3840\*2160@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	67.913	23.58	7.17	0.82	31.57	40.00	8.43
	132.221	24.29	12.47	1.19	37.95	43.50	5.55
	216.783	26.76	10.72	1.53	39.01	46.00	6.99
	235.816	27.83	11.92	1.59	41.34	46.00	4.66
	<b>593.050</b>	<b>20.87</b>	<b>18.75</b>	<b>2.50</b>	<b>42.12</b>	<b>46.00</b>	<b>3.88</b>
	890.728	17.57	21.30	3.07	41.94	46.00	4.06
Vertical	30.962	15.57	17.91	0.57	34.05	40.00	5.95
	66.034	26.85	6.93	0.81	34.59	40.00	5.41
	164.908	24.75	11.20	1.35	37.30	43.50	6.20
	241.676	27.69	12.24	1.61	41.54	46.00	4.46
	<b>593.050</b>	<b>21.17</b>	<b>18.75</b>	<b>2.50</b>	<b>42.42</b>	<b>46.00</b>	<b>3.58</b>
	890.728	17.79	21.30	3.07	42.16	46.00	3.84

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI2 3840\*2160@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

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	85.898	21.12	10.27	0.93	--	32.32	40.00	7.68	QP
	170.195	23.38	10.70	1.37	--	35.45	43.50	8.05	
	245.090	26.02	12.60	1.62	--	40.24	46.00	5.76	
	330.195	23.91	14.40	1.85	--	40.16	46.00	5.84	
	721.726	19.88	19.50	2.75	--	42.13	46.00	3.87	
	<b>890.728</b>	<b>18.23</b>	<b>21.30</b>	<b>3.07</b>	<b>--</b>	<b>42.60</b>	<b>46.00</b>	<b>3.40</b>	
	1464.692	52.29	25.48	4.02	35.79	46.00	74.00	28.00	PK
	2251.658	45.42	27.98	5.02	35.20	43.22	74.00	30.78	
	3280.305	41.73	31.08	6.18	34.89	44.10	74.00	29.90	
	1464.692	35.67	25.48	4.02	35.79	29.38	54.00	24.62	AV
	2251.658	28.62	27.98	5.02	35.20	26.42	54.00	27.58	
	3280.305	27.67	31.08	6.18	34.89	30.04	54.00	23.96	

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI2 3840\*2160@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	31.955	16.13	17.30	0.58	--	34.01	40.00	5.99	QP
	63.983	27.54	6.76	0.80	--	35.10	40.00	4.90	
	235.816	25.55	11.92	1.59	--	39.06	46.00	6.94	
	593.050	19.94	18.75	2.50	--	41.19	46.00	4.81	
	<b>721.726</b>	<b>20.61</b>	<b>19.50</b>	<b>2.75</b>	--	<b>42.86</b>	<b>46.00</b>	<b>3.14</b>	
	890.728	17.69	21.30	3.07	--	42.06	46.00	3.94	PK
	1164.509	50.12	24.30	3.55	36.22	41.75	74.00	32.25	
	1496.525	47.11	25.59	4.08	35.75	41.03	74.00	32.97	
	2525.249	43.90	28.50	5.35	35.20	42.55	74.00	31.45	AV
	1164.509	33.19	24.30	3.55	36.22	24.82	54.00	29.18	
	1496.525	30.89	25.59	4.08	35.75	24.81	54.00	29.19	
	2525.249	28.72	28.50	5.35	35.20	27.37	54.00	26.63	

TEST ENGINEER: CAESAR WU



EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI3 3840\*2160@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	77.051	25.27	8.56	0.87	34.70	40.00	5.30
	99.878	24.41	12.34	1.00	37.75	43.50	5.75
	297.224	24.36	13.60	1.75	39.71	46.00	6.29
	446.414	20.45	16.73	2.15	39.33	46.00	6.67
	719.200	19.80	19.27	2.75	41.82	46.00	4.18
	<b>896.997</b>	<b>18.54</b>	<b>21.17</b>	<b>3.07</b>	<b>42.78</b>	<b>46.00</b>	<b>3.22</b>
Vertical	30.962	15.32	17.71	0.57	33.60	40.00	6.40
	73.876	25.96	8.13	0.86	34.95	40.00	5.05
	185.138	25.51	10.20	1.43	37.14	43.50	6.36
	473.835	21.04	17.14	2.20	40.38	46.00	5.62
	<b>719.200</b>	<b>20.63</b>	<b>19.27</b>	<b>2.75</b>	<b>42.65</b>	<b>46.00</b>	<b>3.35</b>
	890.728	17.85	21.10	3.07	42.02	46.00	3.98

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI4 3840\*2160@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	77.051	24.70	8.56	0.87	34.13	40.00	5.87
	183.201	24.81	10.23	1.42	36.46	43.50	7.04
	297.224	24.67	13.60	1.75	40.02	46.00	5.98
	449.556	22.07	16.80	2.16	41.03	46.00	4.97
	721.726	19.74	19.30	2.75	41.79	46.00	4.21
	<b>890.728</b>	<b>18.13</b>	<b>21.10</b>	<b>3.07</b>	<b>42.30</b>	<b>46.00</b>	<b>3.70</b>
Vertical	32.979	16.20	16.67	0.59	33.46	40.00	6.54
	73.876	25.28	8.13	0.86	34.27	40.00	5.73
	219.845	27.74	11.00	1.54	40.28	46.00	5.72
	297.224	23.91	13.60	1.75	39.26	46.00	6.74
	475.499	21.93	17.16	2.22	41.31	46.00	4.69
	<b>890.728</b>	<b>17.86</b>	<b>21.10</b>	<b>3.07</b>	<b>42.03</b>	<b>46.00</b>	<b>3.97</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI2 1920\*1080@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	148.963	25.19	11.88	1.28	38.35	43.50	5.15
	234.991	25.89	11.90	1.59	39.38	46.00	6.62
	444.851	20.35	16.70	2.15	39.20	46.00	6.80
	593.050	20.11	18.75	2.50	41.36	46.00	4.64
	742.259	18.57	19.73	2.79	41.09	46.00	4.91
	<b>896.997</b>	<b>17.41</b>	<b>21.17</b>	<b>3.07</b>	<b>41.65</b>	<b>46.00</b>	<b>4.35</b>
Vertical	61.995	27.34	6.68	0.79	34.81	40.00	5.19
	148.963	25.02	11.88	1.28	38.18	43.50	5.32
	235.816	25.96	11.92	1.59	39.47	46.00	6.53
	593.050	19.55	18.75	2.50	40.80	46.00	5.20
	742.259	18.76	19.73	2.79	41.28	46.00	4.72
	<b>890.728</b>	<b>17.47</b>	<b>21.30</b>	<b>3.07</b>	<b>41.84</b>	<b>46.00</b>	<b>4.16</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI2 1280\*1024@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	85.898	21.39	10.27	0.93	32.59	40.00	7.41
	234.991	27.36	11.90	1.59	40.85	46.00	5.15
	324.456	25.00	14.29	1.83	41.12	46.00	4.88
	539.478	20.08	18.10	2.36	40.54	46.00	5.46
	<b>647.386</b>	<b>19.55</b>	<b>19.63</b>	<b>2.61</b>	<b>41.79</b>	<b>46.00</b>	<b>4.21</b>
	893.857	17.11	21.23	3.07	41.41	46.00	4.59
Vertical	63.092	27.20	6.73	0.79	34.72	40.00	5.28
	107.888	23.84	12.45	1.05	37.34	43.50	6.16
	235.816	26.58	11.92	1.59	40.09	46.00	5.91
	324.456	24.75	14.29	1.83	40.87	46.00	5.13
	<b>539.478</b>	<b>21.12</b>	<b>18.10</b>	<b>2.36</b>	<b>41.58</b>	<b>46.00</b>	<b>4.42</b>
	647.386	18.12	19.63	2.61	40.36	46.00	5.64

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI2 640\*480@60Hz & 1kHz Playing Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	84.999	21.63	10.20	0.92	32.75	40.00	7.25
	159.784	24.95	11.35	1.32	37.62	43.50	5.88
	<b>235.816</b>	<b>27.53</b>	<b>11.92</b>	<b>1.59</b>	<b>41.04</b>	<b>46.00</b>	<b>4.96</b>
	447.982	17.08	16.83	2.15	36.06	46.00	9.94
	640.611	14.48	19.70	2.59	36.77	46.00	9.23
	890.728	16.57	21.30	3.07	40.94	46.00	5.06
Vertical	<b>63.092</b>	<b>27.10</b>	<b>6.73</b>	<b>0.79</b>	<b>34.62</b>	<b>40.00</b>	<b>5.38</b>
	159.784	24.15	11.35	1.32	36.82	43.50	6.68
	235.816	25.78	11.92	1.59	39.29	46.00	6.71
	454.310	17.05	16.90	2.16	36.11	46.00	9.89
	640.611	16.06	19.70	2.59	38.35	46.00	7.65
	919.287	12.58	21.70	3.12	37.40	46.00	8.60

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : USB Play Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	83.522	22.14	9.89	0.91	32.94	40.00	7.06
	133.151	21.98	12.40	1.20	35.58	43.50	7.92
	216.024	25.34	10.66	1.53	37.53	46.00	8.47
	<b>241.676</b>	<b>27.12</b>	<b>12.24</b>	<b>1.61</b>	<b>40.97</b>	<b>46.00</b>	<b>5.03</b>
	463.970	18.55	17.02	2.19	37.76	46.00	8.24
	866.088	14.79	20.70	3.03	38.52	46.00	7.48
Vertical	30.317	14.02	18.34	0.56	32.92	40.00	7.08
	<b>57.796</b>	<b>27.35</b>	<b>6.84</b>	<b>0.76</b>	<b>34.95</b>	<b>40.00</b>	<b>5.05</b>
	158.668	22.19	11.40	1.32	34.91	43.50	8.59
	238.310	26.93	11.96	1.60	40.49	46.00	5.51
	463.970	19.59	17.02	2.19	38.80	46.00	7.20
	903.309	13.54	21.10	3.09	37.73	46.00	8.27

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : USB Play Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	83.522	22.14	9.89	0.91	32.94	40.00	7.06
	133.151	21.98	12.40	1.20	35.58	43.50	7.92
	216.024	25.34	10.66	1.53	37.53	46.00	8.47
	<b>241.676</b>	<b>27.12</b>	<b>12.24</b>	<b>1.61</b>	<b>40.97</b>	<b>46.00</b>	<b>5.03</b>
	463.970	18.55	17.02	2.19	37.76	46.00	8.24
	866.088	14.79	20.70	3.03	38.52	46.00	7.48
Vertical	30.317	14.02	18.34	0.56	32.92	40.00	7.08
	<b>57.796</b>	<b>27.35</b>	<b>6.84</b>	<b>0.76</b>	<b>34.95</b>	<b>40.00</b>	<b>5.05</b>
	158.668	22.19	11.40	1.32	34.91	43.50	8.59
	238.310	26.93	11.96	1.60	40.49	46.00	5.51
	463.970	19.59	17.02	2.19	38.80	46.00	7.20
	903.309	13.54	21.10	3.09	37.73	46.00	8.27

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : LAN Play Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	81.212	22.27	9.34	0.90	32.51	40.00	7.49
	137.420	22.23	12.66	1.22	36.11	43.50	7.39
	245.951	25.96	12.62	1.62	40.20	46.00	5.80
	381.249	19.09	16.10	1.99	37.18	46.00	8.82
	452.720	20.03	16.90	2.16	39.09	46.00	6.91
	<b>890.728</b>	<b>16.12</b>	<b>21.30</b>	<b>3.07</b>	<b>40.49</b>	<b>46.00</b>	<b>5.51</b>
Vertical	31.731	15.37	17.47	0.58	33.42	40.00	6.58
	<b>65.343</b>	<b>26.63</b>	<b>6.83</b>	<b>0.81</b>	<b>34.27</b>	<b>40.00</b>	<b>5.73</b>
	238.310	25.45	11.96	1.60	39.01	46.00	6.99
	459.114	18.72	16.90	2.17	37.79	46.00	8.21
	663.473	16.71	19.30	2.65	38.66	46.00	7.34
	887.610	13.62	21.30	3.07	37.99	46.00	8.01

TEST ENGINEER: CAESAR WU



EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : MHL Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	78.965	23.07	8.93	0.88	32.88	40.00	7.12
	141.330	21.77	12.93	1.24	35.94	43.50	7.56
	239.987	26.42	12.00	1.60	40.02	46.00	5.98
	454.310	19.63	16.90	2.16	38.69	46.00	7.31
	682.348	15.78	19.50	2.67	37.95	46.00	8.05
	<b>890.728</b>	<b>16.13</b>	<b>21.30</b>	<b>3.07</b>	<b>40.50</b>	<b>46.00</b>	<b>5.50</b>
Vertical	32.067	15.32	17.22	0.58	33.12	40.00	6.88
	<b>66.266</b>	<b>26.91</b>	<b>6.97</b>	<b>0.82</b>	<b>34.70</b>	<b>40.00</b>	<b>5.30</b>
	232.532	25.46	11.82	1.58	38.86	46.00	7.14
	259.234	20.96	13.50	1.66	36.12	46.00	9.88
	459.114	20.14	16.90	2.17	39.21	46.00	6.79
	965.542	12.99	21.93	3.18	38.10	54.00	15.90

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : Wifi Date of Test : Apr 21, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	81.212	23.07	9.34	0.90	33.31	40.00	6.69
	184.490	24.46	10.30	1.42	36.18	43.50	7.32
	250.301	24.38	12.70	1.63	38.71	46.00	7.29
	444.851	20.39	16.70	2.15	39.24	46.00	6.76
	771.449	13.71	20.00	2.85	36.56	46.00	9.44
	<b>922.516</b>	<b>14.62</b>	<b>21.57</b>	<b>3.12</b>	<b>39.31</b>	<b>46.00</b>	<b>6.69</b>
Vertical	30.531	13.86	18.25	0.56	32.67	40.00	7.33
	<b>58.819</b>	<b>27.45</b>	<b>6.72</b>	<b>0.76</b>	<b>34.93</b>	<b>40.00</b>	<b>5.07</b>
	165.487	22.76	11.13	1.35	35.24	43.50	8.26
	242.525	25.02	12.36	1.61	38.99	46.00	7.01
	463.970	17.04	17.02	2.19	36.25	46.00	9.75
	881.407	15.01	21.00	3.05	39.06	46.00	6.94

TEST ENGINEER: CAESAR WU

## **5 DEVIATION TO TEST SPECIFICATIONS**

None.


## 6 DEBUG DESCRIPTION

The following components are used during the countermeasure procedures:

Name	M/N	Manufacturer	Location
SMcontact	SMR-TSL-4-3.5-5R	Qingdao Joinset Co., Ltd	See Internal Photos Figure 20

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:

  
(BYRON WU)

