

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

LED LCD TV

Model No.:  
65H8C, 65H8C+, 65H8707, 65H8D, 65H8D+, 65H8+0D, 65H8+0D1,  
65H8+0D2, 65H80+0D, 65H80+0D1, 65H80+0D2

Brand: Hisense

FCC ID : W9HLCDF0110

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

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Report No. : ACI-F17094  
Date of Test : Feb 10-22, 2017  
Date of Report : Mar 02, 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 OCTOBER 2015  
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 Sec2.1) which was tested in 3m anechoic chamber Feb 10-22, 2017 is technically compliance with the FCC official limits also.

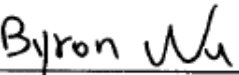
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.


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.F17095, a Verification report.***

Date of Test : Feb 10-22, 2017                      Date of Report : Mar 02, 2017

Producer :   
                   ALAN HE / 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:

<b>Description of Test Item</b>	<b>Standard</b>	<b>Limits</b>	<b>Results</b>
<b>EMISSION</b>			
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2015 AND ANSI C63.4-2014	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2015 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	:	<input checked="" type="checkbox"/> Production <input type="checkbox"/> Pre-product <input type="checkbox"/> Pro-type
Model No	:	65H8C, 65H8C+, 65H8707, 65H8D, 65H8D+, 65H8+0D, 65H8+0D1, 65H8+0D2, 65H80+0D, 65H80+0D1, 65H80+0D2
Note #1	:	The above models are all the same except for model number. 65H8C model is tested and recorded in the report.
Note #2	:	“+”represents any of the Arabic numeral.
Brand	:	Hisense
RF module FCC ID	:	PPQ-WCBN4511R
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 : HE650K5U51-L1
Tuner	:	Manufacturer : SILICON LABS M/N : Si2151-A10
Max Resolution	:	3840*2160@60Hz
HDMI Cable*4 (Lab provide)	:	Shielded, Detachable, 1.80m
Power Cord	:	Unshielded, Detachable, 1.80m, 2C

USB Cable*3 (Lab provide)	:	Shielded, Detachable, 1.00m
LAN Cable	:	Shielded, 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
- (3) One USB2 Port : Connected with Hard-Disk
- (4) One Service Port : Do not open to customer
- (5) One AUDIO OUT Port : Connected with Earphone
- (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

## Bottom Port:

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

## 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 : Tetasy  
 Model Number : F12  
 Serial Number : A010022-486006  
 Data Cable : Shielded, Undetachable, 1.8m.  
 Certificate : CE, FCC DoC

## 2.2.10 Smart Mobile Phone

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

## 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

## 2.3 Description of Test Facility

Site Description : Sept. 17, 1998 file on  
 (No.3 3m Chamber) 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 = 5.1 dB



### 3 CONDUCTED EMISSION TEST

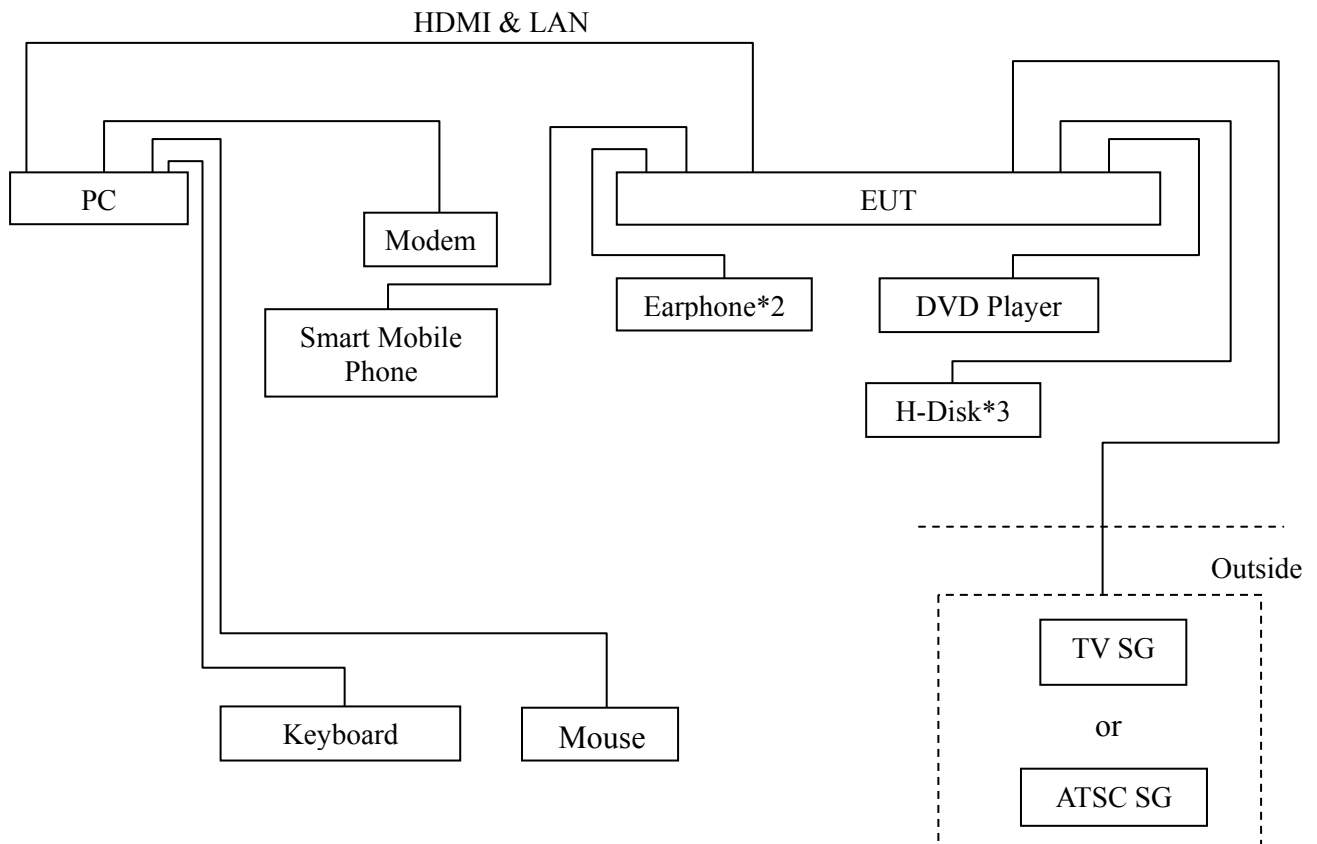
#### 3.1 Test Equipment

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

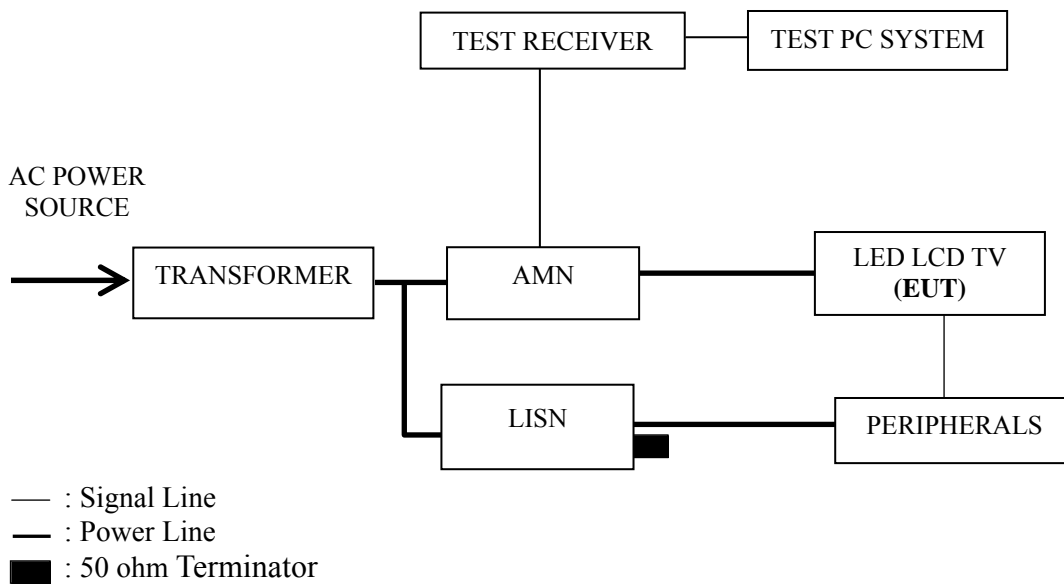
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2016	Apr 26, 2017
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Mar 20, 2016	Mar 19, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	May 15, 2016	May 14, 2017
4.	50Ω Terminator	Anritsu	BNC	001	Sep 18, 2016	Mar 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 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 In WIFI mode, set the EUT play digital media through WIFI.
- 3.5.10 The other peripherals devices were driven and operated during the test.
- 3.5.11 The test modes are as follows:

Test Mode
HDMI1 3840*2160@60Hz & 1kHz playing
HDMI1 1920*1080@60Hz & 1kHz playing
HDMI1 1280*1024@60Hz & 1kHz playing
HDMI1 640*480@60Hz & 1kHz playing
HDMI2 3840*2160@60Hz & 1kHz playing
HDMI3 3840*2160@30Hz & 1kHz playing
HDMI4 3840*2160@30Hz & 1kHz playing
HDMI1080P
USB Play
LAN Play
MHL
WIFI

### 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	P13
HDMI1 1920*1080@60Hz & 1kHz playing	P14
HDMI1 1280*1024@60Hz & 1kHz playing	P15
HDMI1 640*480@60Hz & 1kHz playing	P16
HDMI2 3840*2160@60Hz & 1kHz playing	P17
HDMI3 3840*2160@30Hz & 1kHz playing	P18
HDMI4 3840*2160@30Hz & 1kHz playing	P19
HDMI1080P	P20
USB Play	P21
LAN Play	P22
MHL	P23
WIFI	P24

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 HDMI2 3840\*2160@60Hz & 1kHz playing test mode. The worst emission is detected at 0.410 MHz (Average Value) with corrected signal level of 34.52dB ( $\mu$ V) (limit is 47.64 dB ( $\mu$ V)), when the Neutral of the EUT is connected to AMN.

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Feb 10, 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	0.176	34.60	10.56	45.16	64.68	19.52	QP
	0.262	30.20	10.49	40.69	61.38	20.69	
	0.634	18.80	10.40	29.20	56.00	26.80	
	1.662	14.61	10.40	25.01	56.00	30.99	
	4.874	15.60	10.45	26.05	56.00	29.95	
	6.488	24.60	10.47	35.07	60.00	24.93	
	AV	0.176	21.50	10.56	32.06	54.68	22.62
		0.262	17.40	10.49	27.89	51.38	23.49
		0.634	9.50	10.40	19.90	46.00	26.10
		1.662	6.81	10.40	17.21	46.00	28.79
		4.874	2.80	10.45	13.25	46.00	32.75
		6.488	8.50	10.47	18.97	50.00	31.03
Neutral	<b>0.176</b>	<b>35.00</b>	<b>10.55</b>	<b>45.55</b>	<b>64.68</b>	<b>19.13</b>	QP
	0.259	31.40	10.48	41.88	61.47	19.59	
	0.641	22.20	10.39	32.59	56.00	23.41	
	1.991	15.80	10.43	26.23	56.00	29.77	
	6.488	23.49	10.53	34.02	60.00	25.98	
	20.170	15.30	10.72	26.02	60.00	33.98	
	AV	0.176	22.20	10.55	32.75	54.68	21.93
		0.259	18.80	10.48	29.28	51.47	22.19
		0.641	12.90	10.39	23.29	46.00	22.71
		1.991	0.40	10.43	10.83	46.00	35.17
		6.488	7.79	10.53	18.32	50.00	31.68
		20.170	8.60	10.72	19.32	50.00	30.68

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Feb 10, 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	0.178	36.49	10.56	47.05	64.59	17.54	QP
	0.389	27.70	10.44	38.14	58.08	19.94	
	0.672	21.70	10.40	32.10	56.00	23.90	
	2.201	16.09	10.42	26.51	56.00	29.49	
	4.772	8.70	10.45	19.15	56.00	36.85	
	6.285	24.10	10.46	34.56	60.00	25.44	
	0.178	23.79	10.56	34.35	54.59	20.24	AV
	<b>0.389</b>	<b>20.50</b>	<b>10.44</b>	<b>30.94</b>	<b>48.08</b>	<b>17.14</b>	
	0.672	13.40	10.40	23.80	46.00	22.20	
	2.201	4.79	10.42	15.21	46.00	30.79	
	4.772	1.90	10.45	12.35	46.00	33.65	
	6.285	9.10	10.46	19.56	50.00	30.44	
Neutral	0.178	36.29	10.55	46.84	64.59	17.75	QP
	0.262	31.80	10.48	42.28	61.38	19.10	
	0.641	20.10	10.39	30.49	56.00	25.51	
	1.680	14.80	10.42	25.22	56.00	30.78	
	4.772	15.70	10.50	26.20	56.00	29.80	
	6.488	23.09	10.53	33.62	60.00	26.38	
	0.178	26.79	10.55	37.34	54.59	17.25	AV
	0.262	19.80	10.48	30.28	51.38	21.10	
	0.641	9.80	10.39	20.19	46.00	25.81	
	1.680	2.50	10.42	12.92	46.00	33.08	
	4.772	3.80	10.50	14.30	46.00	31.70	
	6.488	8.09	10.53	18.62	50.00	31.38	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Feb 10, 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	0.182	36.80	10.55	47.35	64.42	17.07	QP
	0.398	27.50	10.43	37.93	57.90	19.97	
	0.672	21.40	10.40	31.80	56.00	24.20	
	1.698	15.40	10.41	25.81	56.00	30.19	
	4.773	8.10	10.45	18.55	56.00	37.45	
	6.056	23.70	10.46	34.16	60.00	25.84	
	0.182	25.60	10.55	36.15	54.42	18.27	AV
	0.398	20.20	10.43	30.63	47.90	17.27	
	0.672	13.30	10.40	23.70	46.00	22.30	
	1.698	4.20	10.41	14.61	46.00	31.39	
	4.773	0.60	10.45	11.05	46.00	34.95	
	6.056	8.00	10.46	18.46	50.00	31.54	
Neutral	<b>0.178</b>	<b>37.69</b>	<b>10.55</b>	<b>48.24</b>	<b>64.59</b>	<b>16.35</b>	QP
	0.393	27.79	10.43	38.22	57.99	19.77	
	0.672	21.30	10.39	31.69	56.00	24.31	
	1.744	15.89	10.43	26.32	56.00	29.68	
	6.056	22.80	10.52	33.32	60.00	26.68	
	8.916	18.30	10.56	28.86	60.00	31.14	
	0.178	24.49	10.55	35.04	54.59	19.55	AV
	0.393	20.89	10.43	31.32	47.99	16.67	
	0.672	12.80	10.39	23.19	46.00	22.81	
	1.744	1.89	10.43	12.32	46.00	33.68	
	6.056	7.40	10.52	17.92	50.00	32.08	
	8.916	3.60	10.56	14.16	50.00	35.84	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI1 640\*480@60Hz Date of Test : Feb 10, 2017  
& 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	0.180	37.79	10.56	48.35	64.50	16.15	QP
	0.402	28.30	10.43	38.73	57.81	19.08	
	0.654	21.50	10.40	31.90	56.00	24.10	
	1.734	15.30	10.41	25.71	56.00	30.29	
	6.121	25.00	10.46	35.46	60.00	24.54	
	9.107	20.90	10.48	31.38	60.00	28.62	
	AV	0.180	25.99	10.56	36.55	54.50	17.95
		0.402	21.30	10.43	31.73	47.81	16.08
		0.654	12.50	10.40	22.90	46.00	23.10
		1.734	2.90	10.41	13.31	46.00	32.69
		6.121	12.70	10.46	23.16	50.00	26.84
		9.107	9.60	10.48	20.08	50.00	29.92
Neutral	<b>0.180</b>	<b>37.89</b>	<b>10.55</b>	<b>48.44</b>	<b>64.50</b>	<b>16.06</b>	QP
	0.402	28.10	10.42	38.52	57.81	19.29	
	0.672	21.30	10.39	31.69	56.00	24.31	
	2.033	17.00	10.43	27.43	56.00	28.57	
	6.352	23.99	10.53	34.52	60.00	25.48	
	8.916	18.40	10.56	28.96	60.00	31.04	
	AV	0.180	26.19	10.55	36.74	54.50	17.76
		0.402	21.00	10.42	31.42	47.81	16.39
		0.672	12.30	10.39	22.69	46.00	23.31
		2.033	2.90	10.43	13.33	46.00	32.67
		6.352	7.59	10.53	18.12	50.00	31.88
		8.916	3.50	10.56	14.06	50.00	35.94

TEST ENGINEER: BYRON WU



EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI2 Date of Test : Feb 10, 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	0.176	39.90	10.56	50.46	64.65	14.19	QP
	0.399	31.40	10.43	41.83	57.88	16.05	
	0.688	23.00	10.40	33.40	56.00	22.60	
	1.789	18.30	10.41	28.71	56.00	27.29	
	6.250	24.40	10.46	34.86	60.00	25.14	
	8.905	18.40	10.48	28.88	60.00	31.12	
	AV	0.176	26.10	10.56	36.66	54.65	17.99
		0.399	23.40	10.43	33.83	47.88	14.05
		0.688	15.00	10.40	25.40	46.00	20.60
		1.789	4.10	10.41	14.51	46.00	31.49
		6.250	8.70	10.46	19.16	50.00	30.84
		8.905	5.40	10.48	15.88	50.00	34.12
Neutral	0.179	40.09	10.55	50.64	64.54	13.90	QP
	0.410	31.00	10.42	41.42	57.64	16.22	
	0.675	22.20	10.39	32.59	56.00	23.41	
	1.800	18.10	10.43	28.53	56.00	27.47	
	6.341	22.39	10.53	32.92	60.00	27.08	
	8.902	18.20	10.56	28.76	60.00	31.24	
	AV	0.179	28.79	10.55	39.34	54.54	15.20
		<b>0.410</b>	<b>24.10</b>	<b>10.42</b>	<b>34.52</b>	<b>47.64</b>	<b>13.12</b>
		0.675	13.10	10.39	23.49	46.00	22.51
		1.800	3.40	10.43	13.83	46.00	32.17
		6.341	6.39	10.53	16.92	50.00	33.08
		8.902	4.90	10.56	15.46	50.00	34.54

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI3 Date of Test : Feb 10, 2017  
3840\*2160@30Hz &  
1kHz playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	39.79	10.56	50.35	64.49	14.14	QP
	0.402	32.10	10.43	42.53	57.82	15.29	
	0.666	21.20	10.40	31.60	56.00	24.40	
	1.509	17.01	10.40	27.41	56.00	28.59	
	6.249	24.20	10.46	34.66	60.00	25.34	
	8.905	18.50	10.48	28.98	60.00	31.02	
	0.180	28.09	10.56	38.65	54.49	15.84	AV
	<b>0.402</b>	<b>24.10</b>	<b>10.43</b>	<b>34.53</b>	<b>47.82</b>	<b>13.29</b>	
	0.666	12.50	10.40	22.90	46.00	23.10	
	1.509	5.51	10.40	15.91	46.00	30.09	
	6.249	8.30	10.46	18.76	50.00	31.24	
	8.905	5.60	10.48	16.08	50.00	33.92	
Neutral	0.177	40.20	10.55	50.75	64.63	13.88	QP
	0.410	31.10	10.42	41.52	57.64	16.12	
	0.680	22.20	10.39	32.59	56.00	23.41	
	1.800	18.10	10.43	28.53	56.00	27.47	
	6.248	24.00	10.52	34.52	60.00	25.48	
	8.920	18.10	10.56	28.66	60.00	31.34	
	0.177	27.70	10.55	38.25	54.63	16.38	AV
	0.410	23.90	10.42	34.32	47.64	13.32	
	0.680	13.00	10.39	23.39	46.00	22.61	
	1.800	3.30	10.43	13.73	46.00	32.27	
	6.248	8.60	10.52	19.12	50.00	30.88	
	8.920	4.80	10.56	15.36	50.00	34.64	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI4 Date of Test : Feb 10, 2017  
3840\*2160@30Hz &  
1kHz playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.176	39.10	10.56	49.66	64.68	15.02	QP
	0.402	29.80	10.43	40.23	57.81	17.58	
	0.679	21.10	10.40	31.50	56.00	24.50	
	1.744	17.10	10.41	27.51	56.00	28.49	
	6.186	24.40	10.46	34.86	60.00	25.14	
	9.107	19.20	10.48	29.68	60.00	30.32	
	0.176	24.80	10.56	35.36	54.68	19.32	AV
	<b>0.402</b>	<b>23.00</b>	<b>10.43</b>	<b>33.43</b>	<b>47.81</b>	<b>14.38</b>	
	0.679	11.30	10.40	21.70	46.00	24.30	
	1.744	3.90	10.41	14.31	46.00	31.69	
	6.186	7.70	10.46	18.16	50.00	31.84	
	9.107	9.80	10.48	20.28	50.00	29.72	
Neutral	0.178	39.59	10.55	50.14	64.59	14.45	QP
	0.395	30.19	10.43	40.62	57.95	17.33	
	0.680	22.00	10.39	32.39	56.00	23.61	
	2.025	17.40	10.43	27.83	56.00	28.17	
	6.476	25.89	10.53	36.42	60.00	23.58	
	9.157	18.50	10.56	29.06	60.00	30.94	
	0.178	27.09	10.55	37.64	54.59	16.95	AV
	0.395	22.09	10.43	32.52	47.95	15.43	
	0.680	14.00	10.39	24.39	46.00	21.61	
	2.025	1.40	10.43	11.83	46.00	34.17	
	6.476	13.39	10.53	23.92	50.00	26.08	
	9.157	9.50	10.56	20.06	50.00	29.94	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : HDMI 1080P Date of Test : Feb 10, 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	0.176	37.50	10.56	48.06	64.68	16.62	QP
	0.398	28.60	10.43	39.03	57.90	18.87	
	0.679	21.50	10.40	31.90	56.00	24.10	
	1.762	17.00	10.41	27.41	56.00	28.59	
	6.121	24.10	10.46	34.56	60.00	25.44	
	8.822	20.80	10.48	31.28	60.00	28.72	
	AV	0.176	23.60	10.56	34.16	54.68	20.52
		0.398	21.70	10.43	32.13	47.90	15.77
		0.679	13.60	10.40	24.00	46.00	22.00
		1.762	4.30	10.41	14.71	46.00	31.29
		6.121	12.50	10.46	22.96	50.00	27.04
		8.822	8.90	10.48	19.38	50.00	30.62
Neutral	0.176	38.30	10.55	48.85	64.68	15.83	QP
	0.406	29.00	10.42	39.42	57.73	18.31	
	0.665	21.20	10.39	31.59	56.00	24.41	
	2.044	17.30	10.43	27.73	56.00	28.27	
	6.420	24.69	10.53	35.22	60.00	24.78	
	9.011	18.40	10.56	28.96	60.00	31.04	
	AV	0.176	24.20	10.55	34.75	54.68	19.93
		<b>0.406</b>	<b>21.90</b>	<b>10.42</b>	<b>32.32</b>	<b>47.73</b>	<b>15.41</b>
		0.665	12.30	10.39	22.69	46.00	23.31
		2.044	2.60	10.43	13.03	46.00	32.97
		6.420	12.49	10.53	23.02	50.00	26.98
		9.011	4.70	10.56	15.26	50.00	34.74

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C  
 Model No. : 65H8C Humidity : 48%RH  
 Test Mode : USB Play Date of Test : Feb 10, 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>0.178</b>	<b>39.39</b>	<b>10.56</b>	<b>49.95</b>	<b>64.59</b>	<b>14.64</b>	QP
	0.398	30.10	10.43	40.53	57.90	17.37	
	0.679	21.30	10.40	31.70	56.00	24.30	
	1.734	17.00	10.41	27.41	56.00	28.59	
	6.420	23.20	10.47	33.67	60.00	26.33	
	20.810	14.51	10.62	25.13	60.00	34.87	
	0.178	26.69	10.56	37.25	54.59	17.34	AV
	0.398	22.40	10.43	32.83	47.90	15.07	
	0.679	12.00	10.40	22.40	46.00	23.60	
	1.734	4.30	10.41	14.71	46.00	31.29	
	6.420	12.30	10.47	22.77	50.00	27.23	
	20.810	7.91	10.62	18.53	50.00	31.47	
Neutral	0.176	38.30	10.55	48.85	64.68	15.83	QP
	0.408	29.40	10.42	39.82	57.68	17.86	
	0.686	22.20	10.39	32.59	56.00	23.41	
	1.716	16.19	10.43	26.62	56.00	29.38	
	4.772	14.70	10.50	25.20	56.00	30.80	
	6.420	24.19	10.53	34.72	60.00	25.28	
	0.176	24.30	10.55	34.85	54.68	19.83	AV
	0.408	22.40	10.42	32.82	47.68	14.86	
	0.686	13.30	10.39	23.69	46.00	22.31	
	1.716	3.79	10.43	14.22	46.00	31.78	
	4.772	2.70	10.50	13.20	46.00	32.80	
	6.420	12.29	10.53	22.82	50.00	27.18	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : LAN Play Date of Test : Feb 10, 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	0.176	39.10	10.56	49.66	64.68	15.02	QP	
	0.402	29.80	10.43	40.23	57.81	17.58		
	0.679	21.10	10.40	31.50	56.00	24.50		
	1.744	17.10	10.41	27.51	56.00	28.49		
	6.186	24.40	10.46	34.86	60.00	25.14		
	9.107	19.20	10.48	29.68	60.00	30.32		
	0.176	24.80	10.56	35.36	54.68	19.32	AV	
	0.402	23.00	10.43	33.43	47.81	14.38		
	0.679	11.30	10.40	21.70	46.00	24.30		
	1.744	3.90	10.41	14.31	46.00	31.69		
	6.186	7.70	10.46	18.16	50.00	31.84		
	9.107	9.80	10.48	20.28	50.00	29.72		
	Neutral	<b>0.178</b>	<b>39.69</b>	<b>10.55</b>	<b>50.24</b>	<b>64.59</b>	<b>14.35</b>	QP
		0.398	30.50	10.42	40.92	57.90	16.98	
0.686		22.10	10.39	32.49	56.00	23.51		
2.044		17.50	10.43	27.93	56.00	28.07		
6.488		26.09	10.53	36.62	60.00	23.38		
9.107		18.60	10.56	29.16	60.00	30.84		
0.178		27.39	10.55	37.94	54.59	16.65	AV	
0.398		22.20	10.42	32.62	47.90	15.28		
0.686		14.10	10.39	24.49	46.00	21.51		
2.044		1.30	10.43	11.73	46.00	34.27		
6.488		13.49	10.53	24.02	50.00	25.98		
9.107		8.63	10.56	19.19	50.00	30.81		

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 48%RH

Test Mode : MHL Date of Test : Feb 10, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark	
Line	0.182	39.40	10.55	49.95	64.42	14.47	QP	
	0.406	30.00	10.43	40.43	57.73	17.30		
	0.679	21.20	10.40	31.60	56.00	24.40		
	1.762	16.60	10.41	27.01	56.00	28.99		
	6.186	23.90	10.46	34.36	60.00	25.64		
	9.107	18.60	10.48	29.08	60.00	30.92		
	0.182	28.10	10.55	38.65	54.42	15.77	AV	
	<b>0.406</b>	<b>23.20</b>	<b>10.43</b>	<b>33.63</b>	<b>47.73</b>	<b>14.10</b>		
	0.679	12.00	10.40	22.40	46.00	23.60		
	1.762	3.60	10.41	14.01	46.00	31.99		
	6.186	7.50	10.46	17.96	50.00	32.04		
	9.107	8.90	10.48	19.38	50.00	30.62		
	Neutral	0.178	39.79	10.55	50.34	64.59	14.25	QP
		0.413	31.10	10.42	41.52	57.59	16.07	
0.686		22.10	10.39	32.49	56.00	23.51		
1.519		16.90	10.42	27.32	56.00	28.68		
6.488		25.89	10.53	36.42	60.00	23.58		
9.107		18.40	10.56	28.96	60.00	31.04		
0.178		27.19	10.55	37.74	54.59	16.85	AV	
0.413		23.80	10.42	34.22	47.59	13.37		
0.686		14.10	10.39	24.49	46.00	21.51		
1.519		6.90	10.42	17.32	46.00	28.68		
6.488		12.99	10.53	23.52	50.00	26.48		
9.107		8.50	10.56	19.06	50.00	30.94		

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C  
 Model No. : 65H8C Humidity : 48%RH  
 Test Mode : WIFI Date of Test : Feb 10, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.182	39.40	10.55	49.95	64.42	14.47	QP
	0.406	30.00	10.43	40.43	57.73	17.30	
	0.679	21.20	10.40	31.60	56.00	24.40	
	1.762	16.60	10.41	27.01	56.00	28.99	
	6.186	23.90	10.46	34.36	60.00	25.64	
	9.107	18.60	10.48	29.08	60.00	30.92	
	AV	0.182	28.10	10.55	38.65	54.42	15.77
		0.406	23.20	10.43	33.63	47.73	14.10
		0.679	12.00	10.40	22.40	46.00	23.60
		1.762	3.60	10.41	14.01	46.00	31.99
		6.186	7.50	10.46	17.96	50.00	32.04
		9.107	8.90	10.48	19.38	50.00	30.62
Neutral	0.177	39.90	10.55	50.45	64.63	14.18	QP
	0.411	31.00	10.42	41.42	57.62	16.20	
	0.680	22.00	10.39	32.39	56.00	23.61	
	1.519	16.90	10.42	27.32	56.00	28.68	
	6.488	25.89	10.53	36.42	60.00	23.58	
	9.087	18.30	10.56	28.86	60.00	31.14	
	AV	0.177	27.30	10.55	37.85	54.63	16.78
		<b>0.411</b>	<b>23.70</b>	<b>10.42</b>	<b>34.12</b>	<b>47.62</b>	<b>13.50</b>
		0.680	14.00	10.39	24.39	46.00	21.61
		1.519	6.90	10.42	17.32	46.00	28.68
		6.488	12.99	10.53	23.52	50.00	26.48
		9.087	8.30	10.56	18.86	50.00	31.14

TEST ENGINEER: BYRON WU



## 4 RADIATED EMISSION TEST

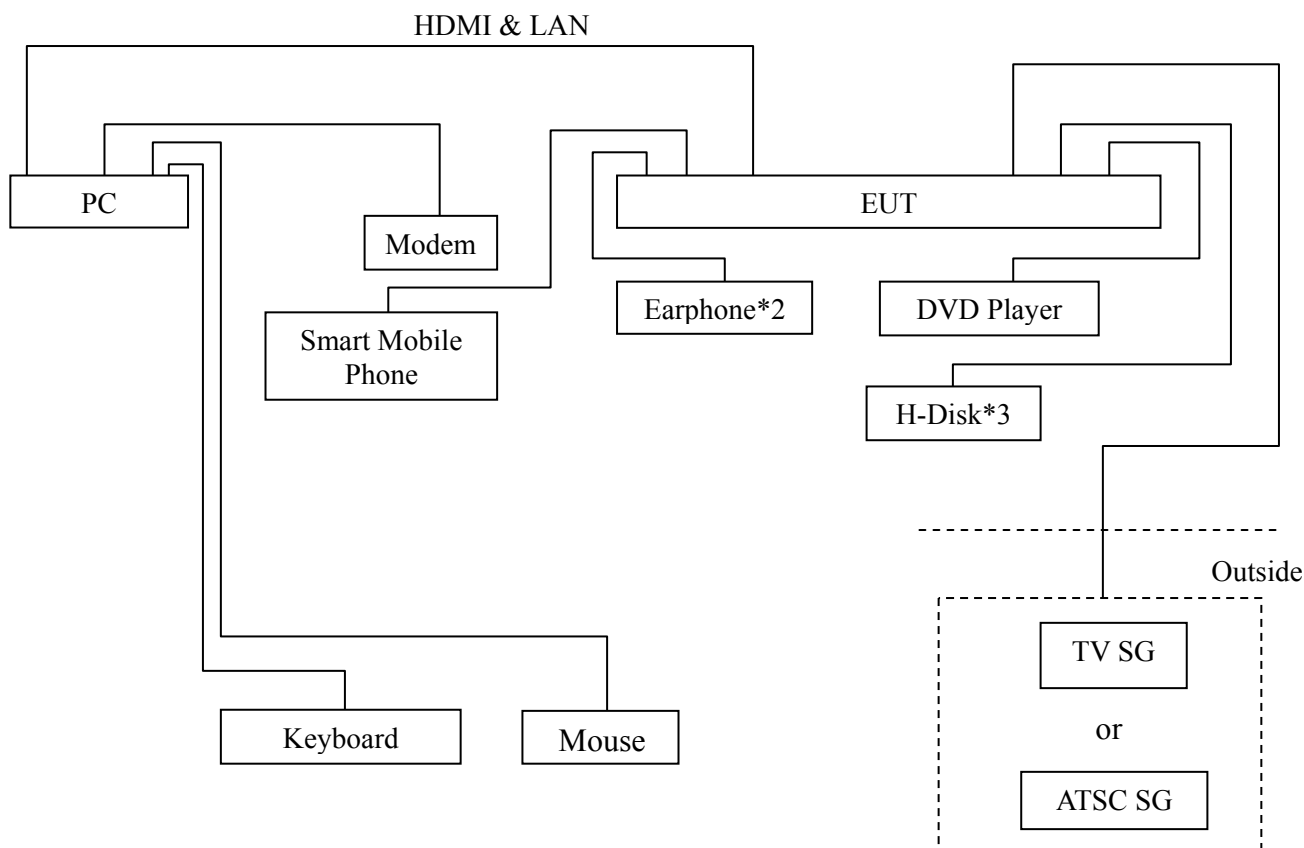
### 4.1 Test Equipment

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	May 07, 2016	May 06, 2017
2.	Preamplifier	Agilent	8447D	2944A06664	Apr 27, 2016	Apr 26, 2017
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2016	Mar 19, 2017
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 15, 2016	May 14, 2017
5.	Horn Antenna	EMCO	3115	9607-4878	Jun 03, 2016	Jun 02, 2017
6.	Spectrum	Agilent	E7405A	MY45106600	Apr 26, 2016	Apr 25, 2017
7.	Spectrum	HP	8591EM	3628A00908	May 07, 2016	May 06, 2017
8.	Software	Audix	e3	6.2007-9-10	--	--

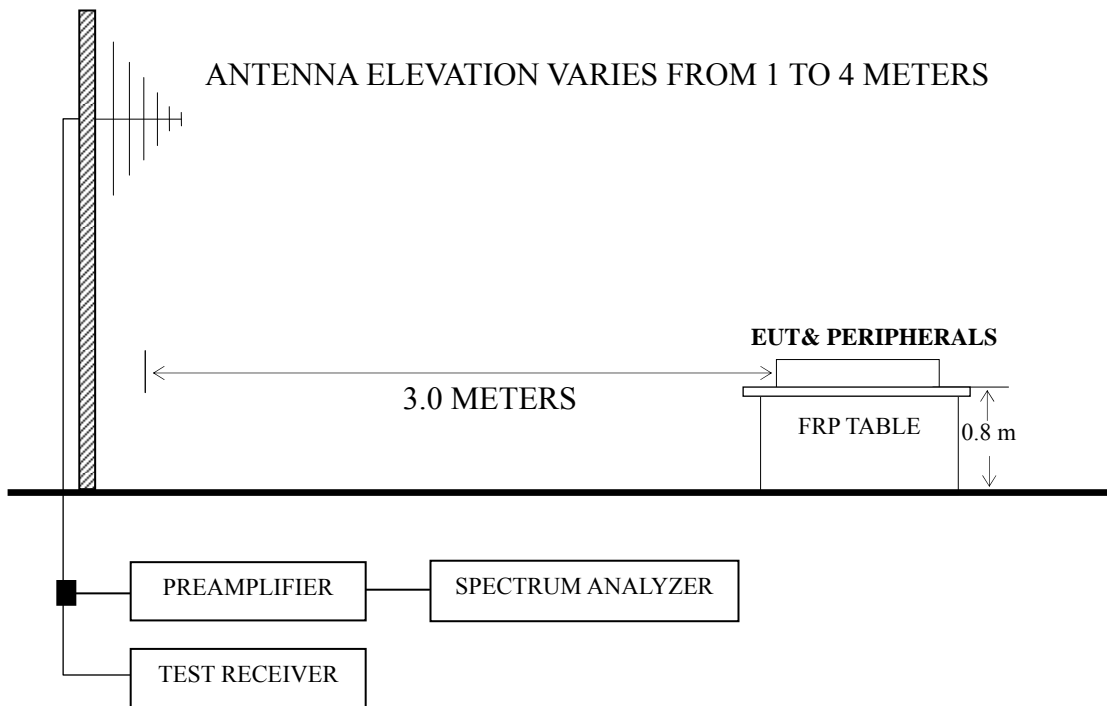
### 4.2 Block Diagram of Test Setup

#### 4.2.1 EUT & Peripherals

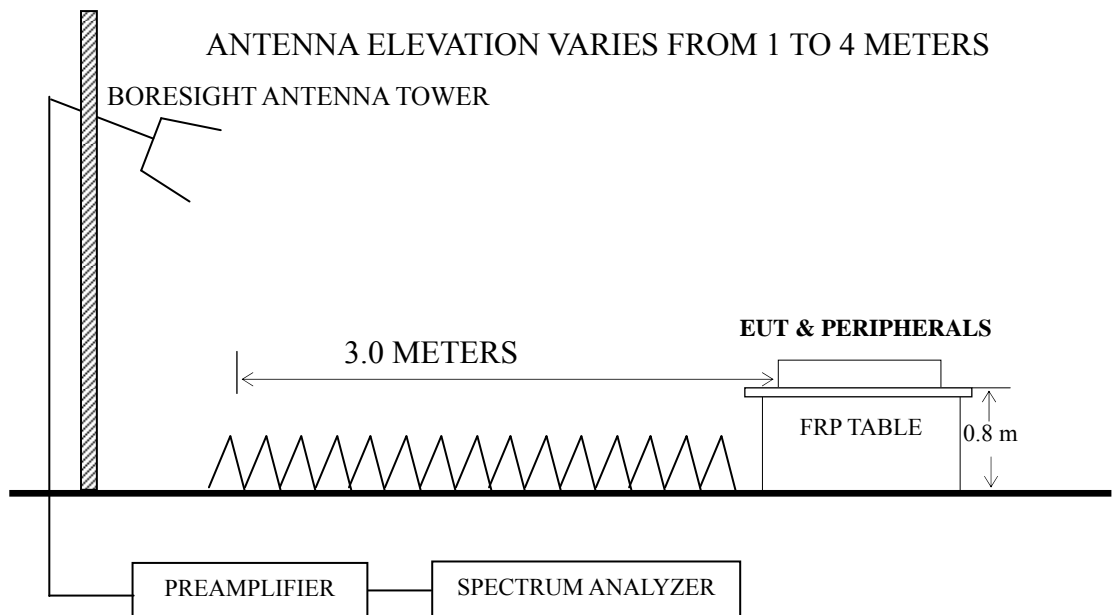


### 4.2.2 Radiated emission test setup

#### 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 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	P29-P30
HDMI1 1920*1080@60Hz & 1kHz playing	P31
HDMI1 1280*1024@60Hz & 1kHz playing	P32
HDMI1 640*480@60Hz & 1kHz playing	P33
HDMI2 3840*2160@60Hz & 1kHz playing	P34
HDMI3 3840*2160@30Hz & 1kHz playing	P35
HDMI4 3840*2160@30Hz & 1kHz playing	P36
HDMI1080P	P37
USB Play	P38
LAN Play	P39
MHL	P40
WIFI	P41

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 HDMI1 3840\*2160@60Hz & 1kHz playing test mode. The worst emission at horizontal polarization was detected at 890.728 MHz with corrected signal level of 42.96 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 2.10 m height and the turntable was at 300°. The worst emission at vertical polarization was detected at 890.728 MHz with corrected signal level of 42.71 dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.60 m height and the turntable was at 260°.

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI1 3840\*2160@60Hz & 1kHz Playing Date of Test : Feb 22, 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	22.49	10.20	0.93	--	33.62	40.00	6.38	QP
	153.200	23.81	11.73	1.29	--	36.83	43.50	6.67	
	234.991	28.48	11.80	1.59	--	41.87	46.00	4.13	
	475.499	19.64	17.16	2.22	--	39.02	46.00	6.98	
	742.259	17.67	19.57	2.79	--	40.03	46.00	5.97	
	<b>890.728</b>	<b>18.79</b>	<b>21.10</b>	<b>3.07</b>	--	<b>42.96</b>	<b>46.00</b>	<b>3.04</b>	
	1885.669	53.97	27.10	4.56	35.31	50.32	74.00	23.68	PK
	2640.937	52.49	29.03	5.48	35.20	51.80	74.00	22.20	
	3103.070	48.78	30.73	5.97	35.08	50.40	74.00	23.60	
	1885.669	32.19	27.10	4.56	35.31	28.54	54.00	25.46	AV
	2640.937	30.89	29.03	5.48	35.20	30.20	54.00	23.80	
3103.070	28.78	30.73	5.97	35.08	30.40	54.00	23.60		

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI1 3840\*2160@60Hz & 1kHz Playing Date of Test : Feb 22, 2017

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	31.955	13.32	17.10	0.58	--	31.00	40.00	9.00	QP	
	152.130	19.58	11.80	1.29	--	32.67	43.50	10.83		
	234.991	23.21	11.80	1.59	--	36.60	46.00	9.40		
	290.017	24.28	13.50	1.73	--	39.51	46.00	6.49		
	590.974	21.67	18.17	2.50	--	42.34	46.00	3.66		
	<b>890.728</b>	<b>18.54</b>	<b>21.10</b>	<b>3.07</b>	--	<b>42.71</b>	<b>46.00</b>	<b>3.29</b>	PK	
	1761.553	57.49	26.66	4.41	35.44	53.12	74.00	20.88		
	2659.932	54.31	29.10	5.48	35.20	53.69	74.00	20.31		
	3097.515	48.10	30.71	5.97	35.09	49.69	74.00	24.31		
	1761.553	38.66	26.66	4.41	35.44	34.29	54.00	19.71		AV
	2659.932	33.33	29.10	5.48	35.20	32.71	54.00	21.29		
3097.515	29.74	30.71	5.97	35.09	31.33	54.00	22.67			

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI1 1920\*1080@60Hz Date of Test : Feb 22, 2017  
& 1kHz Playing

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	73.103	25.10	7.96	0.85	33.91	40.00	6.09
	148.963	23.79	12.16	1.28	37.23	43.50	6.27
	234.991	27.06	11.80	1.59	40.45	46.00	5.55
	435.590	21.19	16.52	2.13	39.84	46.00	6.16
	593.050	19.03	18.25	2.50	39.78	46.00	6.22
	<b>742.259</b>	<b>19.22</b>	<b>19.57</b>	<b>2.79</b>	<b>41.58</b>	<b>46.00</b>	<b>4.42</b>
Vertical	152.130	23.22	11.80	1.29	36.31	43.50	7.19
	235.816	23.68	11.86	1.59	37.13	46.00	8.87
	302.481	21.48	13.68	1.76	36.92	46.00	9.08
	435.590	19.53	16.52	2.13	38.18	46.00	7.82
	<b>742.259</b>	<b>18.62</b>	<b>19.57</b>	<b>2.79</b>	<b>40.98</b>	<b>46.00</b>	<b>5.02</b>
	890.728	15.80	21.10	3.07	39.97	46.00	6.03

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI1 1280\*1024@60Hz Date of Test : Feb 22, 2017  
& 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	74.919	24.26	8.30	0.86	33.42	40.00	6.58
	84.110	22.37	9.84	0.91	33.12	40.00	6.88
	152.130	23.44	11.80	1.29	36.53	43.50	6.97
	<b>235.816</b>	<b>26.75</b>	<b>11.86</b>	<b>1.59</b>	<b>40.20</b>	<b>46.00</b>	<b>5.80</b>
	435.590	20.78	16.52	2.13	39.43	46.00	6.57
	890.728	14.81	21.10	3.07	38.98	46.00	7.02
Vertical	31.955	14.59	17.10	0.58	32.27	40.00	7.73
	145.861	23.29	12.48	1.26	37.03	43.50	6.47
	291.036	23.03	13.52	1.74	38.29	46.00	7.71
	435.590	19.49	16.52	2.13	38.14	46.00	7.86
	<b>590.974</b>	<b>19.13</b>	<b>18.17</b>	<b>2.50</b>	<b>39.80</b>	<b>46.00</b>	<b>6.20</b>
	726.805	16.16	19.37	2.77	38.30	46.00	7.70

TEST ENGINEER: CAESAR WU



EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI1 640\*480@60Hz & 1kHz Playing Date of Test : Feb 22, 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	73.103	24.15	7.96	0.85	32.96	40.00	7.04
	<b>152.130</b>	<b>24.69</b>	<b>11.80</b>	<b>1.29</b>	<b>37.78</b>	<b>43.50</b>	<b>5.72</b>
	235.816	26.29	11.86	1.59	39.74	46.00	6.26
	435.590	19.53	16.52	2.13	38.18	46.00	7.82
	590.974	14.38	18.17	2.50	35.05	46.00	10.95
Vertical	893.857	14.27	21.13	3.07	38.47	46.00	7.53
	32.979	14.24	16.67	0.59	31.50	40.00	8.50
	145.861	23.00	12.48	1.26	36.74	43.50	6.76
	235.816	22.10	11.86	1.59	35.55	46.00	10.45
	435.590	20.26	16.52	2.13	38.91	46.00	7.09
	607.787	17.49	18.55	2.52	38.56	46.00	7.44
	<b>726.805</b>	<b>17.50</b>	<b>19.37</b>	<b>2.77</b>	<b>39.64</b>	<b>46.00</b>	<b>6.36</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI2 3840\*2160@60Hz Date of Test : Feb 22, 2017  
& 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	75.446	23.97	8.38	0.87	33.22	40.00	6.78
	89.276	21.07	10.70	0.94	32.71	43.50	10.79
	293.084	25.10	13.58	1.74	40.42	46.00	5.58
	416.179	17.22	16.26	2.07	35.55	46.00	10.45
	586.844	16.54	18.15	2.48	37.17	46.00	8.83
	<b>896.997</b>	<b>17.73</b>	<b>21.17</b>	<b>3.07</b>	<b>41.97</b>	<b>46.00</b>	<b>4.03</b>
Vertical	32.293	14.41	16.94	0.58	31.93	40.00	8.07
	146.374	20.47	12.48	1.26	34.21	43.50	9.29
	294.114	21.86	13.60	1.74	37.20	46.00	8.80
	397.633	16.87	16.23	2.03	35.13	46.00	10.87
	584.790	20.21	18.20	2.48	40.89	46.00	5.11
	<b>737.071</b>	<b>19.98</b>	<b>19.53</b>	<b>2.79</b>	<b>42.30</b>	<b>46.00</b>	<b>3.70</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI3 3840\*2160@30Hz Date of Test : Feb 22, 2017  
& 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	73.876	24.57	8.13	0.86	33.56	40.00	6.44
	153.200	22.68	11.73	1.29	35.70	43.50	7.80
	235.816	26.82	11.86	1.59	40.27	46.00	5.73
	612.064	18.78	18.65	2.54	39.97	46.00	6.03
	776.878	17.05	20.03	2.85	39.93	46.00	6.07
	<b>890.678</b>	<b>17.79</b>	<b>21.10</b>	<b>3.07</b>	<b>41.96</b>	<b>46.00</b>	<b>4.04</b>
Vertical	33.211	14.12	16.62	0.59	31.33	40.00	8.67
	152.130	20.95	11.80	1.29	34.04	43.50	9.46
	291.036	24.83	13.52	1.74	40.09	46.00	5.91
	406.088	19.69	16.25	2.06	38.00	46.00	8.00
	<b>590.974</b>	<b>21.26</b>	<b>18.17</b>	<b>2.50</b>	<b>41.93</b>	<b>46.00</b>	<b>4.07</b>
	890.728	17.60	21.10	3.07	41.77	46.00	4.23

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI4 3840\*2160@30Hz & 1kHz playing Date of Test : Feb 22, 2017

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	82.938	22.51	9.59	0.90	33.00	40.00	7.00
	152.130	23.22	11.80	1.29	36.31	43.50	7.19
	294.114	18.80	13.60	1.74	34.14	46.00	11.86
	556.774	17.04	18.05	2.40	37.49	46.00	8.51
	737.071	16.03	19.53	2.79	38.35	46.00	7.65
	<b>893.857</b>	<b>17.75</b>	<b>21.13</b>	<b>3.07</b>	<b>41.95</b>	<b>46.00</b>	<b>4.05</b>
Vertical	30.853	13.75	17.79	0.57	32.11	40.00	7.89
	84.999	21.31	10.10	0.92	32.33	40.00	7.67
	154.279	21.03	11.57	1.30	33.90	43.50	9.60
	291.036	23.88	13.52	1.74	39.14	46.00	6.86
	584.790	19.38	18.20	2.48	40.06	46.00	5.94
	<b>893.857</b>	<b>17.29</b>	<b>21.13</b>	<b>3.07</b>	<b>41.49</b>	<b>46.00</b>	<b>4.51</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : HDMI1080P Date of Test : Feb 22, 2017

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	76.781	22.69	8.52	0.87	32.08	40.00	7.92
	151.067	22.21	11.95	1.29	35.45	43.50	8.05
	237.476	23.77	11.98	1.60	37.35	46.00	8.65
	296.184	18.25	13.60	1.75	33.60	46.00	12.40
	533.832	19.34	17.75	2.36	39.45	46.00	6.55
	<b>896.997</b>	<b>17.33</b>	<b>21.17</b>	<b>3.07</b>	<b>41.57</b>	<b>46.00</b>	<b>4.43</b>
Vertical	31.620	13.33	17.27	0.58	31.18	40.00	8.82
	150.011	17.76	12.10	1.28	31.14	43.50	12.36
	293.084	19.45	13.58	1.74	34.77	46.00	11.23
	443.294	18.23	16.67	2.15	37.05	46.00	8.95
	605.659	19.54	18.55	2.52	40.61	46.00	5.39
	<b>726.805</b>	<b>19.33</b>	<b>19.37</b>	<b>2.77</b>	<b>41.47</b>	<b>46.00</b>	<b>4.53</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : USB Play Date of Test : Feb 22, 2017

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>76.781</b>	<b>22.99</b>	<b>8.52</b>	<b>0.87</b>	<b>32.38</b>	<b>40.00</b>	<b>7.62</b>
	147.404	18.09	12.35	1.27	31.71	43.50	11.79
	297.224	18.08	13.60	1.75	33.43	46.00	12.57
	443.294	14.38	16.67	2.15	33.20	46.00	12.80
	719.200	11.24	19.27	2.75	33.26	46.00	12.74
	893.857	13.93	21.13	3.07	38.13	46.00	7.87
Vertical	<b>31.510</b>	<b>12.81</b>	<b>17.36</b>	<b>0.57</b>	<b>30.74</b>	<b>40.00</b>	<b>9.26</b>
	147.921	18.55	12.29	1.27	32.11	43.50	11.39
	295.147	20.39	13.60	1.75	35.74	46.00	10.26
	443.294	16.78	16.67	2.15	35.60	46.00	10.40
	599.321	15.61	18.40	2.50	36.51	46.00	9.49
	739.661	11.98	19.60	2.79	34.37	46.00	11.63

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : LAN Play Date of Test : Feb 22, 2017

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>74.396</b>	<b>24.50</b>	<b>8.19</b>	<b>0.86</b>	<b>33.55</b>	<b>40.00</b>	<b>6.45</b>
	149.486	19.11	12.16	1.28	32.55	43.50	10.95
	294.114	18.46	13.60	1.74	33.80	46.00	12.20
	447.982	15.53	16.77	2.15	34.45	46.00	11.55
	597.223	12.65	18.33	2.50	33.48	46.00	12.52
	903.309	11.86	21.25	3.09	36.20	46.00	9.80
Vertical	32.179	14.02	16.99	0.58	31.59	40.00	8.41
	79.521	21.79	8.82	0.88	31.49	40.00	8.51
	149.486	19.54	12.16	1.28	32.98	43.50	10.52
	301.422	20.76	13.64	1.76	36.16	46.00	9.84
	434.065	15.17	16.48	2.12	33.77	46.00	12.23
	<b>593.050</b>	<b>16.97</b>	<b>18.25</b>	<b>2.50</b>	<b>37.72</b>	<b>46.00</b>	<b>8.28</b>

TEST ENGINEER: CAESAR WU

EUT : LED LCD TV Temperature : 22°C  
 Model No. : 65H8C Humidity : 60%RH  
 Test Mode : MHL Date of Test : Feb 22, 2017

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	83.816	22.07	9.84	0.91	32.82	40.00	7.18
	151.597	22.27	11.88	1.29	35.44	43.50	8.06
	296.184	17.63	13.60	1.75	32.98	46.00	13.02
	410.383	17.16	16.20	2.06	35.42	46.00	10.58
	562.662	15.61	18.12	2.42	36.15	46.00	9.85
	<b>729.358</b>	<b>17.57</b>	<b>19.40</b>	<b>2.77</b>	<b>39.74</b>	<b>46.00</b>	<b>6.26</b>
Vertical	31.289	14.42	17.53	0.57	32.52	40.00	7.48
	79.800	21.73	8.86	0.89	31.48	40.00	8.52
	149.486	19.77	12.16	1.28	33.21	43.50	10.29
	295.147	20.98	13.60	1.75	36.33	46.00	9.67
	396.242	17.68	16.23	2.03	35.94	46.00	10.06
	<b>605.659</b>	<b>17.83</b>	<b>18.55</b>	<b>2.52</b>	<b>38.90</b>	<b>46.00</b>	<b>7.10</b>

TEST ENGINEER: CAESAR WU



EUT : LED LCD TV Temperature : 22°C

Model No. : 65H8C Humidity : 60%RH

Test Mode : WIFI Date of Test : Feb 22, 2017

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	74.657	23.48	8.24	0.86	32.58	40.00	7.42
	91.816	20.73	11.07	0.96	32.76	43.50	10.74
	150.538	20.37	12.03	1.28	33.68	43.50	9.82
	293.084	19.97	13.58	1.74	35.29	46.00	10.71
	549.020	14.31	17.84	2.38	34.53	46.00	11.47
	<b>906.482</b>	<b>14.71</b>	<b>21.30</b>	<b>3.09</b>	<b>39.10</b>	<b>46.00</b>	<b>6.90</b>
Vertical	<b>31.399</b>	<b>14.78</b>	<b>17.45</b>	<b>0.57</b>	<b>32.80</b>	<b>40.00</b>	<b>7.20</b>
	146.888	20.16	12.41	1.27	33.84	43.50	9.66
	294.114	19.50	13.60	1.74	34.84	46.00	11.16
	441.743	16.68	16.63	2.13	35.44	46.00	10.56
	590.974	16.17	18.17	2.50	36.84	46.00	9.16
	729.358	15.66	19.40	2.77	37.83	46.00	8.17

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)**