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

### LED LCD TV

### Model No.:

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

FCC ID: W9HLCDF0139

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-F17237 Date of Test: Jun 29, 2017 Date of Report: Jul 07, 2017

# TABLE OF CONTENTS

		Page
1	SUMMARY OF STANDARDS AND RESULTS	4
	1.1 Description of Standards and Results	4
2	2 GENERAL INFORMATION	5
	2.1 Description of Equipment Under Test	5
	2.2 Peripherals	
	2.3 Description of Test Facility	
	2.4 Measurement Uncertainty	9
3	3 CONDUCTED EMISSION TEST	
	3.1 Test Equipment	10
	3.2 Block Diagram of Test Setup	
	3.3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107	
	3.4 Test Configuration	11
	3.5 Operating Condition of EUT	
	3.6 Test Procedures	
	3.7 Test Results	
4	4 RADIATED EMISSION TEST	26
	4.1 Test Equipment	26
	4.2 Block Diagram of Test Setup	26
	4.3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a	a)]28
	4.4 Test Configuration	
	4.5 Operating Condition of EUT	
	4.6 Test Procedures	
	4.7 Test Results	29
5	5 DEVIATION TO TEST SPECIFICATIONS	43
6	5 DEBUG DESCRIPTION	44

# 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 Sec2.1) which was tested in 3m anechoic chamber Jun 29, 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.F17238, a Verification report.

Date of Test:	Jun 29, 2017	Date of Report : _	Jul 07, 2017
Producer:	TINA LIANG/Assistant	-	
Review:	Byron VA  BYRON WU / Deputy Assistant Man	ager	
For Audix Technology (Sh	and on bohalf of angher) Go. Ltd.		

Authorized Signature(s) BYRON KWO / Assistant General Manager

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 4 of 44

# 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>	Standard	Limits	Results					
EMISSION								
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B AND ANSI C63.4-2014	15.107(a) Class B Minimum pass 10.74dB at						
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B AND ANSI C63.4-2014	15.109(a)	Pass sing margin is 06.482MHz					

### **2 GENERAL INFORMATION**

2.1 Description of Equipment Under Test

Description : LED LCD TV

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

Model No : 55DU60+0, 55DU6+00, 55H6607, 55H6D, 55H6D+

55H6+0D, 55H6+0D1, 55H60+0D, 55H60+0D1

Note #1 : The above models are all the same except for model

number. 55H6D model is tested and recorded in

the report.

Note #2 : "+"represents any of the Arabic numeral.

Note #3 : The tuner port comply with the 15.111 requirement.

Brand : Hisense

RF module FCC ID: 2AJVQ-ZDGFMT7612U

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, China, 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 : HD550K3U52

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

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 6 of 44

LAN Cable : Unshielded, Detachable, 1.50m

USB Cable\*3 : Shielded, Detachable, 1.00m

(Lab provide)

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 USB 1 Port

: Connected with Hard-Disk

(3) One USB 2 Port

: Connected with Hard-Disk

(4) One Service Port

: Do not open to the customers

(5) One AUDIO OUT Port

: Connected with Earphone#1

(6) One HDMI 1/MHL Port

: Connected with Mobile phone

(7) One HDMI2 Port

: Connected with PC

(8) One USB 3 Port

: Connected with Hard-Disk

Back Port:

(9) One COMPONENT IN/AV IN Port

: Connected with DVD PLAYER

(10) One LAN IN Port

: Connected with PC

(11) One Digital Audio Out Port

: Connected with Audio Converter to

Earphone#2

(12) One HDMI3 Port

: Connected with PC

(13) One HDMI4 Port

: Connected with DVD PLAYER

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 7 of 44

### 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, undetachable, 1.8m 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, Undetachable, 1.8m.
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, 1.8m

Certificate : CCC

### 2.2.5 Earphone\*2

Manufacturer : EDIFIER Model Number : H210

### 2.2.6 TV Signal Generator

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

### 2.2.7 ATSC Signal Generator

Manufacturer : SENCORE Model Number : ATSC997 Serial Number : 6790071 Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 8 of 44

#### 2.2.8 DVD PLAYER

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

Certificate : CCC

#### 2.2.9 Hard Disk#1

Manufacturer : Tetasys Model Number : F12

Serial Number: A010022-486006

Data Cable : Shielded, Undetachable, 1.8m.

Certificate : CE, FCC DoC

### 2.2.10 Hard Disk #2

Manufacturer : Tetasys Model Number : F12

Serial Number: A010022-4860010X

Data Cable : Shielded, Undetachable, 1.8m.

Certificate : CE, FCC DoC

### 2.2.11 Hard Disk #3

Manufacturer : Tetasys Model Number : F12

Serial Number: A010022-4A60007

Data Cable : Shielded, Undetachable, 1.8m.

Certificate : CE, FCC DoC

#### 2.2.12 Mobile Phone

Manufacturer : SUMSUNG Model Number : GT-I9100G Serial Number : 69351520011519

Certificate : CE/EMC

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 9 of 44

# 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 = 5.5 dB (Vertical)

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

U = 5.1 dB

# 3 CONDUCTED EMISSION TEST

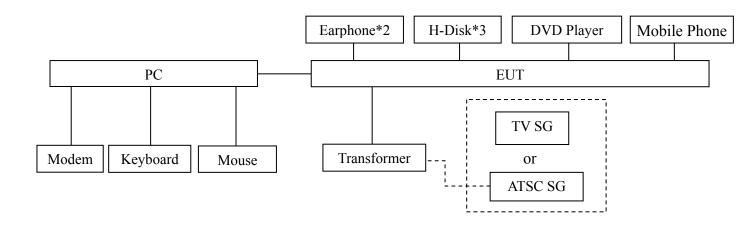
# 3.1 Test Equipment

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

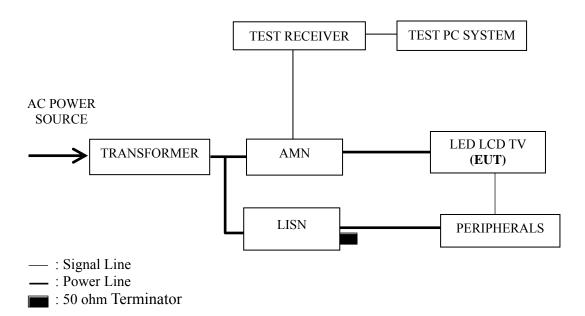
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.				
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2017	Apr 26, 2018				
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2017	Jun 24, 2018				
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 17, 2017	Mar 16, 2018				
4.	50Ω Terminator	Anritsu	BNC	001	Mar 20, 2017	Sep 19, 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	Limits Db (µV)				
(MHz)	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  $0.15~\text{MHz}{\sim}0.50~\text{MHz}$ 

# 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 WIFI mode, set the EUT play digital media through WIFI.
- 3.5.9 In MHL mode, set the EUT play digital media from mobile phone.
- 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
HDMI2 3840*2160@60Hz & 1kHz playing
HDMI3 3840*2160@30Hz & 1kHz playing
HDMI4 3840*2160@30Hz & 1kHz playing
HDMI1 1920*1080@60Hz & 1kHz playing
HDMI1 1280*1024@60Hz & 1kHz playing
HDMI1 640*480@60Hz & 1kHz playing
HDMI1080P
USB Play
LAN Play
WIFI
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 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@30Hz & 1kHz playing	P16
HDMI4 3840*2160@30Hz & 1kHz playing	P17
HDMI1 1920*1080@60Hz & 1kHz playing	P18
HDMI1 1280*1024@60Hz & 1kHz playing	P19
HDMI1 640*480@60Hz & 1kHz playing	P20
HDMI1080P	P21
USB Play	P22
LAN Play	P23
WIFI	P24
MHL	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.

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test :

3840\*2160@60Hz & Jun 29, 2017 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	39.97	10.60	50.57	65.98	15.41	
	0.389	26.12	10.41	36.53	58.08	21.55	
	0.862	26.28	10.39	36.67	56.00	19.33	ΟD
	1.433	22.23	10.40	32.63	56.00	23.37	QP
	5.993	25.05	10.48	35.53	60.00	24.47	
Line	20.377	21.57	10.41	31.98	60.00	28.02	
Line	0.150	23.10	10.60	33.70	55.98	22.28	
	0.389	16.30	10.41	26.71	48.08	21.37	AV
	0.862	11.20	10.39	21.59	46.00	24.41	
	1.433	8.30	10.40	18.70	46.00	27.30	
	5.993	13.20	10.48	23.68	50.00	26.32	
	20.377	16.20	10.41	26.61	50.00	23.39	
	0.150	35.60	10.52	46.12	65.98	19.86	
	0.398	31.96	10.40	42.36	57.90	15.54	QP
	0.665	29.33	10.39	39.72	56.00	16.28	
	2.474	27.46	10.43	37.89	56.00	18.11	
	6.557	24.60	10.49	35.09	60.00	24.91	
Neutral	21.600	21.66	10.47	32.13	60.00	27.87	
Neuman	0.150	18.50	10.52	29.02	55.98	26.96	
	0.398	25.60	10.40	36.00	47.90	11.90	
	0.665	18.80	10.39	29.19	46.00	16.81	AV
	2.474	11.80	10.43	22.23	46.00	23.77	
	6.557	14.10	10.49	24.59	50.00	25.41	
	21.600	16.20	10.47	26.67	50.00	23.33	

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI2 Date of Test :

3840\*2160@60Hz & Jun 29, 2017

1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.152	38.94	10.60	49.54	65.91	16.37	
	0.393	25.62	10.41	36.03	57.99	21.96	
	1.197	26.20	10.40	36.60	56.00	19.40	ΩD
	3.840	22.41	10.45	32.86	56.00	23.14	QP
	6.488	25.03	10.48	35.51	60.00	24.49	
Line	20.814	22.85	10.41	33.26	60.00	26.74	
Line	0.152	23.94	10.60	34.54	55.91	21.37	
	0.393	15.62	10.41	26.03	47.99	21.96	AV
	1.197	12.20	10.40	22.60	46.00	23.40	
	3.840	9.41	10.45	19.86	46.00	26.14	
	6.488	14.03	10.48	24.51	50.00	25.49	
	20.814	16.85	10.41	27.26	50.00	22.74	
	0.152	36.20	10.52	46.72	65.91	19.19	
	0.406	29.40	10.40	39.80	57.73	17.93	QP
	0.672	28.79	10.39	39.18	56.00	16.82	
	3.107	27.23	10.44	37.67	56.00	18.33	
	6.878	22.84	10.50	33.34	60.00	26.66	
Neutral	22.063	21.04	10.47	31.51	60.00	28.49	
Neutrai	0.152	17.20	10.52	27.72	55.91	28.19	
	0.406	24.40	10.40	34.80	47.73	12.93	
	0.672	17.79	10.39	28.18	46.00	17.82	AV
	3.107	21.23	10.44	31.67	46.00	14.33	
	6.878	12.84	10.50	23.34	50.00	26.66	
	22.063	15.04	10.47	25.51	50.00	24.49	

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI3 Date of Test :

3840\*2160@60Hz & Jun 29, 2017 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.151	39.09	10.60	49.69	65.96	16.27	
	0.292	27.59	10.45	38.04	60.46	22.42	
	0.943	24.60	10.39	34.99	56.00	21.01	ΩD
	3.293	22.71	10.44	33.15	56.00	22.85	QP
	6.698	24.02	10.48	34.50	60.00	25.50	
Time	20.594	22.14	10.40	32.54	60.00	27.46	
Line	0.151	22.09	10.60	32.69	55.96	23.27	
	0.292	17.59	10.45	28.04	50.46	22.42	AV
	0.943	10.60	10.39	20.99	46.00	25.01	
	3.293	9.71	10.44	20.15	46.00	25.85	
	6.698	13.02	10.48	23.50	50.00	26.50	
	20.594	17.14	10.40	27.54	50.00	22.46	
	0.152	36.23	10.52	46.75	65.91	19.16	
	0.406	30.98	10.40	41.38	57.73	16.35	QP
	0.672	29.67	10.39	40.06	56.00	15.94	
	2.261	26.03	10.43	36.46	56.00	19.54	
	6.805	23.73	10.50	34.23	60.00	25.77	
Neutral	21.830	20.59	10.47	31.06	60.00	28.94	
Neutrai	0.152	18.23	10.52	28.75	55.91	27.16	
	0.406	24.98	10.40	35.38	47.73	12.35	
	0.672	19.67	10.39	30.06	46.00	15.94	AV
	2.261	11.03	10.43	21.46	46.00	24.54	
	6.805	14.73	10.50	25.23	50.00	24.77	
	21.830	16.59	10.47	27.06	50.00	22.94	

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI4 Date of Test :

3840\*2160@60Hz & Jun 29, 2017 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.151	38.82	10.60	49.42	65.96	16.54	
	0.393	25.73	10.41	36.14	57.99	21.85	
	0.943	25.79	10.39	36.18	56.00	19.82	ΩD
	2.334	22.86	10.42	33.28	56.00	22.72	QP
	6.285	23.12	10.48	33.60	60.00	26.40	
Lina	19.950	20.88	10.41	31.29	60.00	28.71	
Line	0.151	23.82	10.60	34.42	55.96	21.54	
	0.393	17.73	10.41	28.14	47.99	19.85	AV
	0.943	12.79	10.39	23.18	46.00	22.82	
	2.334	8.86	10.42	19.28	46.00	26.72	
	6.285	14.12	10.48	24.60	50.00	25.40	
	19.950	14.88	10.41	25.29	50.00	24.71	
	0.151	34.03	10.52	44.55	65.96	21.41	
	0.402	29.14	10.40	39.54	57.81	18.27	QP
	0.672	28.59	10.39	38.98	56.00	17.02	
	2.285	26.10	10.43	36.53	56.00	19.47	
	6.805	22.89	10.50	33.39	60.00	26.61	
Nautral	21.830	22.99	10.47	33.46	60.00	26.54	
Neutral	0.151	18.03	10.52	28.55	55.96	27.41	
	0.402	23.14	10.40	33.54	47.81	14.27	
	0.672	19.59	10.39	29.98	46.00	16.02	AV
	2.285	12.10	10.43	22.53	46.00	23.47	
	6.805	12.89	10.50	23.39	50.00	26.61	
	21.830	16.99	10.47	27.46	50.00	22.54	

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test :

1920\*1080@60Hz & Jun 29, 2017 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.151	41.86	10.60	52.46	65.97	13.51	
	0.402	26.82	10.41	37.23	57.81	20.58	
	0.672	27.24	10.38	37.62	56.00	18.38	ΩD
	1.184	22.50	10.39	32.89	56.00	23.11	QP
	6.121	24.57	10.48	35.05	60.00	24.95	
Lina	20.814	22.04	10.41	32.45	60.00	27.55	
Line	0.151	24.70	10.60	35.30	55.97	20.67	
	0.402	15.82	10.41	26.23	47.81	21.58	
	0.672	12.24	10.38	22.62	46.00	23.38	AV
	1.184	8.50	10.39	18.89	46.00	27.11	
	6.121	12.57	10.48	23.05	50.00	26.95	
	20.814	15.04	10.41	25.45	50.00	24.55	
	0.151	38.55	10.52	49.07	65.97	16.90	
	0.406	30.46	10.40	40.86	57.73	16.87	
	0.679	29.69	10.39	40.08	56.00	15.92	ΩD
	2.839	27.39	10.44	37.83	56.00	18.17	QP
	6.805	23.98	10.50	34.48	60.00	25.52	
Nautral	22.063	22.68	10.47	33.15	60.00	26.85	
Neutral	0.151	20.40	10.52	30.92	55.97	25.05	
	0.406	23.46	10.40	33.86	47.73	13.87	AV
	0.679	19.69	10.39	30.08	46.00	15.92	
	2.839	12.39	10.44	22.83	46.00	23.17	
	6.805	13.98	10.50	24.48	50.00	25.52	
	22.063	17.68	10.47	28.15	50.00	21.85	

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test :

1280\*1024@60Hz & Jun 29, 2017 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	41.95	10.60	52.55	65.98	13.43	
	0.398	26.41	10.41	36.82	57.90	21.08	
	0.953	27.60	10.39	37.99	56.00	18.01	OD
	1.480	23.24	10.40	33.64	56.00	22.36	QP
	5.535	25.99	10.47	36.46	60.00	23.54	
Line	21.830	21.11	10.40	31.51	60.00	28.49	
Line	0.150	24.20	10.60	34.80	55.98	21.18	
	0.398	17.41	10.41	27.82	47.90	20.08	
	0.953	11.60	10.39	21.99	46.00	24.01	AV
	1.480	9.24	10.40	19.64	46.00	26.36	
	5.535	13.99	10.47	24.46	50.00	25.54	
	21.830	15.11	10.40	25.51	50.00	24.49	
	0.150	38.46	10.52	48.98	65.98	17.00	
	0.398	31.04	10.40	41.44	57.90	16.46	
	0.672	28.69	10.39	39.08	56.00	16.92	ΩD
	2.500	26.50	10.43	36.93	56.00	19.07	QP
	6.627	24.46	10.49	34.95	60.00	25.05	
Noutral	21.600	20.64	10.47	31.11	60.00	28.89	
Neutral	0.150	20.80	10.52	31.32	55.98	24.66	
	0.398	25.04	10.40	35.44	47.90	12.46	AV
	0.672	18.69	10.39	29.08	46.00	16.92	
	2.500	11.50	10.43	21.93	46.00	24.07	
	6.627	14.46	10.49	24.95	50.00	25.05	
	21.600	15.64	10.47	26.11	50.00	23.89	

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI1 640\*480@60Hz Date of Test : Jun 29, 2017

& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.151	41.75	10.60	52.35	65.97	13.62	
	0.389	26.98	10.41	37.39	58.08	20.69	
	0.943	25.26	10.39	35.65	56.00	20.35	OD
	1.716	22.07	10.41	32.48	56.00	23.52	QP
	6.186	24.87	10.48	35.35	60.00	24.65	
Line	22.655	19.35	10.41	29.76	60.00	30.24	
Line	0.151	23.90	10.60	34.50	55.97	21.47	
	0.389	16.98	10.41	27.39	48.08	20.69	AV
	0.943	12.26	10.39	22.65	46.00	23.35	
	1.716	11.07	10.41	21.48	46.00	24.52	
	6.186	13.87	10.48	24.35	50.00	25.65	
	22.655	14.35	10.41	24.76	50.00	25.24	
	0.152	38.01	10.52	48.53	65.91	17.38	
	0.406	30.31	10.40	40.71	57.73	17.02	
	0.679	30.14	10.39	40.53	56.00	15.47	OD
	2.581	26.48	10.43	36.91	56.00	19.09	QP
	6.805	23.64	10.50	34.14	60.00	25.86	
Nautral	22.063	21.79	10.47	32.26	60.00	27.74	
Neutral	0.152	18.70	10.52	29.22	55.91	26.69	
	0.406	22.31	10.40	32.71	47.73	15.02	
	0.679	18.14	10.39	28.53	46.00	17.47	AV
	2.581	11.48	10.43	21.91	46.00	24.09	
	6.805	14.64	10.50	25.14	50.00	24.86	
	22.063	15.79	10.47	26.26	50.00	23.74	

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 21 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : HDMI 1080P Date of Test : Jun 29, 2017

Test Line	Frequency (MHz)	Meter Reading dB(µV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	41.78	10.60	52.38	65.98	13.60	
	0.406	27.70	10.41	38.11	57.73	19.62	
	0.679	26.32	10.38	36.70	56.00	19.30	QP
	1.480	22.13	10.40	32.53	56.00	23.47	QP
	6.285	24.60	10.48	35.08	60.00	24.92	
Line	21.600	20.28	10.41	30.69	60.00	29.31	
Line	0.150	24.10	10.60	34.70	55.98	21.28	
	0.406	17.70	10.41	28.11	47.73	19.62	
	0.679	10.32	10.38	20.70	46.00	25.30	
	1.480	9.13	10.40	19.53	46.00	26.47	
	6.285	12.60	10.48	23.08	50.00	26.92	
	21.600	16.28	10.41	26.69	50.00	23.31	
	0.152	37.89	10.52	48.41	65.91	17.50	
	0.406	30.28	10.40	40.68	57.73	17.05	
	0.665	30.91	10.39	41.30	56.00	14.70	OD
	2.581	28.29	10.43	38.72	56.00	17.28	QP
	6.769	22.84	10.50	33.34	60.00	26.66	
N ovetma 1	21.830	21.10	10.47	31.57	60.00	28.43	
Neutral	0.152	18.80	10.52	29.32	55.91	26.59	
	0.406	23.28	10.40	33.68	47.73	14.05	AV
	0.665	18.91	10.39	29.30	46.00	16.70	
	2.581	12.29	10.43	22.72	46.00	23.28	
	6.769	13.84	10.50	24.34	50.00	25.66	
	21.830	16.10	10.47	26.57	50.00	23.43	

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 22 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : USB Play Date of Test : Jun 29, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits $dB(\mu V)$	Margin (dB)	Remark
	0.150	42.00	10.60	52.60	65.99	13.39	
	0.408	26.82	10.41	37.23	57.68	20.45	
	0.679	25.00	10.38	35.38	56.00	20.62	OD
	1.480	23.91	10.40	34.31	56.00	21.69	QP
	6.056	24.15	10.48	34.63	60.00	25.37	
Line	21.830	20.75	10.40	31.15	60.00	28.85	
Line	0.150	24.40	10.60	35.00	55.99	20.99	
	0.408	16.82	10.41	27.23	47.68	20.45	AV
	0.679	11.00	10.38	21.38	46.00	24.62	
	1.480	11.91	10.40	22.31	46.00	23.69	
	6.056	13.15	10.48	23.63	50.00	26.37	
	21.830	15.75	10.40	26.15	50.00	23.85	
	0.166	34.76	10.51	45.27	65.16	19.89	
	0.406	30.40	10.40	40.80	57.73	16.93	
	0.661	28.75	10.39	39.14	56.00	16.86	OD
	2.285	27.09	10.43	37.52	56.00	18.48	QP
	6.878	24.44	10.50	34.94	60.00	25.06	
NI 4 1	22.655	20.70	10.47	31.17	60.00	28.83	
Neutral	0.166	18.60	10.51	29.11	55.16	26.05	
	0.406	26.40	10.40	36.80	47.73	10.93	AV
	0.661	19.75	10.39	30.14	46.00	15.86	
	2.285	12.09	10.43	22.52	46.00	23.48	
	6.878	14.44	10.50	24.94	50.00	25.06	
	22.655	14.70	10.47	25.17	50.00	24.83	

Test Mode : LAN Play Date of Test : Jun 29, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	41.93	10.60	52.53	65.99	13.46	
	0.398	27.69	10.41	38.10	57.90	19.80	
	0.953	26.51	10.39	36.90	56.00	19.10	QP
	1.480	21.26	10.40	31.66	56.00	24.34	Qr
	5.419	24.70	10.47	35.17	60.00	24.83	
Line	21.600	20.06	10.41	30.47	60.00	29.53	
Line	0.150	24.50	10.60	35.10	55.99	20.89	
	0.398	17.69	10.41	28.10	47.90	19.80	AV
	0.953	11.51	10.39	21.90	46.00	24.10	
	1.480	9.26	10.40	19.66	46.00	26.34	
	5.419	12.70	10.47	23.17	50.00	26.83	
	21.600	15.06	10.41	25.47	50.00	24.53	
	0.152	38.16	10.52	48.68	65.91	17.23	
	0.402	31.46	10.40	41.86	57.81	15.95	
	0.672	29.12	10.39	39.51	56.00	16.49	ΟD
	2.261	28.00	10.43	38.43	56.00	17.57	QP
	6.488	25.13	10.49	35.62	60.00	24.38	
NI41	21.600	20.64	10.47	31.11	60.00	28.89	
Neutral	0.152	18.90	10.52	29.42	55.91	26.49	
	0.402	25.46	10.40	35.86	47.81	11.95	
	0.672	19.12	10.39	29.51	46.00	16.49	AV
	2.261	12.00	10.43	22.43	46.00	23.57	
	6.488	15.13	10.49	25.62	50.00	24.38	
	21.600	15.64	10.47	26.11	50.00	23.89	

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 24 of 44

EUT : LED LCD TV Temperature : 22

Test Mode : WIFI Date of Test : Jun 29, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.152	41.35	10.60	51.95	65.91	13.96	
	0.402	26.09	10.41	36.50	57.81	21.31	
	0.923	27.16	10.39	37.55	56.00	18.45	QP
	1.480	21.72	10.40	32.12	56.00	23.88	Qr
	6.056	24.24	10.48	34.72	60.00	25.28	
Line	20.162	20.03	10.41	30.44	60.00	29.56	
Line	0.152	22.40	10.60	33.00	55.91	22.91	
	0.402	16.09	10.41	26.50	47.81	21.31	AV
	0.923	13.16	10.39	23.55	46.00	22.45	
	1.480	8.72	10.40	19.12	46.00	26.88	
	6.056	12.24	10.48	22.72	50.00	27.28	
	20.162	16.03	10.41	26.44	50.00	23.56	
	0.151	38.74	10.52	49.26	65.97	16.71	
	0.406	29.54	10.40	39.94	57.73	17.79	
	0.686	30.41	10.39	40.80	56.00	15.20	ΩD
	2.309	26.12	10.43	36.55	56.00	19.45	QP
	6.557	24.19	10.49	34.68	60.00	25.32	
NI asstmal	22.535	20.05	10.47	30.52	60.00	29.48	
Neutral	0.151	20.90	10.52	31.42	55.97	24.55	
	0.406	24.54	10.40	34.94	47.73	12.79	
	0.686	18.41	10.39	28.80	46.00	17.20	AV
	2.309	10.12	10.43	20.55	46.00	25.45	
	6.557	15.19	10.49	25.68	50.00	24.32	
	22.535	15.05	10.47	25.52	50.00	24.48	

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 25 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 48%RH

Test Mode : MHL Date of Test : Jun 29, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	41.86	10.60	52.46	65.98	13.52	
	0.398	25.85	10.41	36.26	57.90	21.64	
	0.953	27.87	10.39	38.26	56.00	17.74	QP
	1.480	22.29	10.40	32.69	56.00	23.31	Qr
	5.993	24.33	10.48	34.81	60.00	25.19	
Line	22.298	20.96	10.40	31.36	60.00	28.64	
Line	0.150	24.50	10.60	35.10	55.98	20.88	
	0.398	17.85	10.41	28.26	47.90	19.64	AV
	0.953	12.87	10.39	23.26	46.00	22.74	
	1.480	10.29	10.40	20.69	46.00	25.31	
	5.993	14.33	10.48	24.81	50.00	25.19	
	22.298	16.96	10.40	27.36	50.00	22.64	
	0.152	38.15	10.52	48.67	65.91	17.24	
	0.408	30.54	10.40	40.94	57.68	16.74	
	0.672	28.66	10.39	39.05	56.00	16.95	OD
	2.581	26.77	10.43	37.20	56.00	18.80	QP
	6.627	23.65	10.49	34.14	60.00	25.86	
NI41	19.950	21.39	10.48	31.87	60.00	28.13	
Neutral	0.152	18.70	10.52	29.22	55.91	26.69	
	0.408	26.54	10.40	36.94	47.68	10.74	
	0.672	19.66	10.39	30.05	46.00	15.95	
	2.581	12.77	10.43	23.20	46.00	22.80	
	6.627	15.65	10.49	26.14	50.00	23.86	
	19.950	16.39	10.48	26.87	50.00	23.13	

# **4 RADIATED EMISSION TEST**

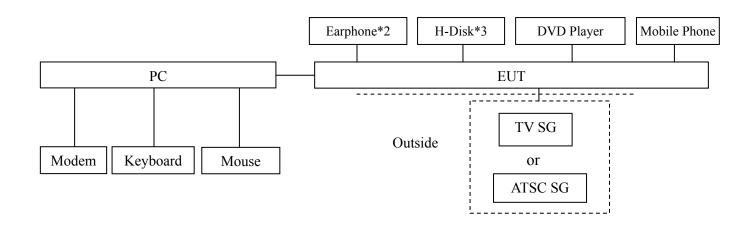
# 4.1 Test Equipment

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, 2017	May 06, 2018
2.	Preamplifier	Agilent	8447D	2944A06664	Apr 27, 2017	Apr 26, 2018
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2017	Mar 19, 2018
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Mar 25, 2017	Mar 24, 2018
5.	Horn Antenna	EMCO	3115	9607-4878	May 31, 2017	May 30, 2018
6.	Spectrum	Agilent	E7405A	MY45106600	Apr 26, 2017	Apr 25, 2018
7.	Software	Audix	e3	6.2007-9-10		

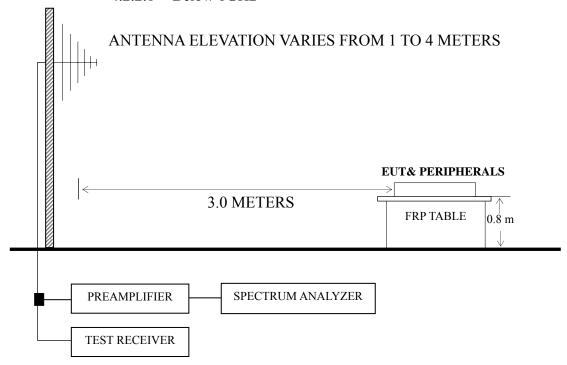
# 4.2 Block Diagram of Test Setup

# 4.2.1 EUT & Peripherals



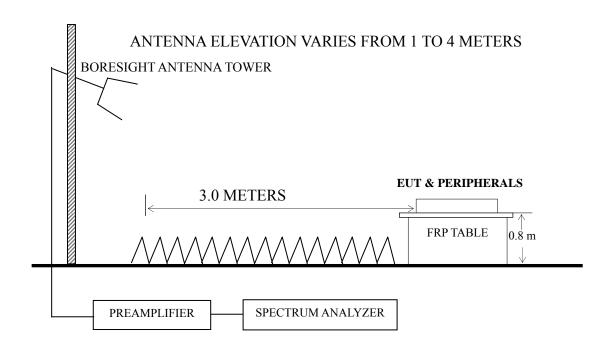
### 4.2.2 Radiated emission test setup

### 4.2.2.1 Below 1GHz



: 50 ohm Coaxial Switch

4.2.2.2 Above 1GHz



Frequency	Distance	Field stren	ngth limits
(MHz)	(m)	(µV/m)	dB (μV/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 ( $\mu$ V/m) = 20 log Emission Level ( $\mu$ 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.

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 29 of 44

### 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-P31
HDMI2 3840*2160@60Hz & 1kHz playing	P32
HDMI3 3840*2160@30Hz & 1kHz playing	P33
HDMI4 3840*2160@30Hz & 1kHz playing	P34
HDMI1 1920*1080@60Hz & 1kHz playing	P35
HDMI1 1280*1024@60Hz & 1kHz playing	P36
HDMI1 640*480@60Hz & 1kHz playing	P37
HDMI1080P	P38
USB Play	P39
LAN Play	P40
WIFI	P41
MHL	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  $3-0^{\circ}$  was the table front facing the antenna. Degree is calculated from  $0^{\circ}$  clockwise facing the antenna.

.

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 30 of 44

> LED LCD TV Temperature: **EUT** 22

Humidity 60%RH Model No. 55H6D

Date of Test: HDMI1 3840\*2160@60Hz Jun 29, 2017 Test Mode

& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (µV/m)	Limits dB ( $\mu V/m$ )	Margin (dB)	Remark
	78.965	21.65	9.15	0.86		31.66	40.00	8.34	
	207.123	24.55	10.14	1.51		36.20	43.50	7.30	
	227.691	26.52	11.22	1.58		39.32	46.00	6.68	QP
	447.982	14.51	17.57	2.17		34.25	46.00	11.75	Qr
	691.987	11.79	20.30	2.67		34.76	46.00	11.24	
Horizontal	906.482	17.58	21.10	3.05		41.73	46.00	4.27	
Tiorizontai	1428.407	47.88	25.35	3.79	35.83	41.19	74.00	32.81	
	1771.048	55.43	26.70	4.13	35.43	50.83	74.00	23.17	PK
	2679.065	50.44	29.20	5.25	35.20	49.69	74.00	24.31	
	1428.407	32.10	25.35	3.79	35.83	25.41	54.00	28.59	
	1771.048	40.88	26.70	4.13	35.43	36.28	54.00	17.72	AV
	2679.065	36.46	29.20	5.25	35.20	35.71	54.00	18.29	

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 31 of 44

> Temperature: EUT LED LCD TV 22

> Humidity Model No. 60%RH 55H6D

> Date of Test: HDMI1 3840\*2160@60Hz Test Mode Jun 29, 2017

& 1kHz Playing

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
	30.962	16.35	18.21	0.56		35.12	40.00	4.88	
	70.090	26.89	7.70	0.82		35.41	40.00	4.59	
	138.874	18.07	12.39	1.23		31.69	43.50	11.81	ΩD
	238.310	23.26	11.88	1.61		36.75	46.00	9.25	QP
	446.414	13.59	17.53	2.17		33.29	46.00	12.71	
Vertical	890.728	15.33	21.00	3.03		39.36	46.00	6.64	
Vertical	1475.227	54.03	25.52	3.86	35.77	47.64	74.00	26.36	
	1777.406	45.68	26.72	4.13	35.42	41.11	74.00	32.89	PK
	2742.200	44.93	29.47	5.32	35.20	44.52	74.00	29.48	
	1475.227	39.79	25.52	3.86	35.77	33.40	54.00	20.60	
	1777.406	30.73	26.72	4.13	35.42	26.16	54.00	27.84	AV
	2742.200	30.99	29.47	5.32	35.20	30.58	54.00	23.42	

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 32 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI2 3840\*2160@60Hz Date of Test : Jun 29, 2017

& 1kHz playing

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	78.689	23.53	9.15	0.86	33.54	40.00	6.46
	121.976	21.08	13.08	1.14	35.30	43.50	8.20
Horizontal	205.675	25.63	9.90	1.51	37.04	43.50	6.46
Пописний	238.310	26.18	11.88	1.61	39.67	46.00	6.33
	564.639	13.58	18.80	2.43	34.81	46.00	11.19
	890.728	17.22	21.00	3.03	41.25	46.00	4.75
	31.955	16.39	17.70	0.57	34.66	40.00	5.34
	52.025	25.07	7.70	0.73	33.50	40.00	6.50
Vertical	72.084	25.53	8.01	0.83	34.37	40.00	5.63
	238.310	23.41	11.88	1.61	36.90	46.00	9.10
	297.224	18.33	13.90	1.76	33.99	46.00	12.01
	890.728	16.75	21.00	3.03	40.78	46.00	5.22

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 33 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI3 3840\*2160@60Hz Date of Test : Jun 29, 2017

& 1kHz playing

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (μV/m)	Limits dB (µV/m)	Margin (dB)
	74.919	24.03	8.40	0.84	33.27	40.00	6.73
	116.950	18.12	13.08	1.11	32.31	43.50	11.19
Horizontal	207.850	25.41	10.26	1.52	37.19	43.50	6.31
Horizontal	235.816	25.40	11.76	1.60	38.76	46.00	7.24
	449.556	13.44	17.60	2.19	33.23	46.00	12.77
	906.482	16.87	21.10	3.05	41.02	46.00	4.98
	31.843	16.44	17.77	0.57	34.78	40.00	5.22
	52.025	25.97	7.70	0.73	34.40	40.00	5.60
Vertical	77.865	25.02	8.96	0.85	34.83	40.00	5.17
	215.268	24.64	11.00	1.54	37.18	43.50	6.32
	446.414	13.84	17.53	2.17	33.54	46.00	12.46
	890.728	15.34	21.00	3.03	39.37	46.00	6.63

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 34 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI4 3840\*2160@60Hz Date of Test : Jun 29, 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)
	82.071	22.76	9.79	0.87	33.42	40.00	6.58
	205.675	25.82	9.90	1.51	37.23	43.50	6.27
Horizontal	235.816	26.15	11.76	1.60	39.51	46.00	6.49
Попідопіаї	446.414	14.36	17.53	2.17	34.06	46.00	11.94
	558.730	13.63	18.70	2.43	34.76	46.00	11.24
	890.728	17.23	21.00	3.03	41.26	46.00	4.74
	30.962	16.17	18.21	0.56	34.94	40.00	5.06
	50.942	25.48	8.03	0.73	34.24	40.00	5.76
Vertical	71.080	25.42	7.83	0.83	34.08	40.00	5.92
vertical	219.845	24.73	10.80	1.55	37.08	46.00	8.92
	517.248	12.25	18.50	2.33	33.08	46.00	12.92
	890.728	14.18	21.00	3.03	38.21	46.00	7.79

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 35 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI1 1920\*1080@60Hz Date of Test : Jun 29, 2017

Meter Antenna Cable Emission Limits Margin Frequency Polarization Reading Factor Loss Level dB dB (dB) (MHz)  $dB(\mu V)$ (dB)  $(\mu V/m)$ (dB/m)  $(\mu V/m)$ 83.816 22.39 10.11 0.89 33.39 40.00 6.61 116.132 18.27 13.04 1.10 32.41 43.50 11.09 207.123 24.05 10.14 1.51 35.70 43.50 7.80 Horizontal 238.310 25.35 11.88 1.61 38.84 46.00 7.16 17.57 447.982 12.32 2.17 32.06 46.00 13.94 893.857 15.55 20.97 3.03 39.55 46.00 6.45 16.34 18.21 0.56 35.11 40.00 4.89 30.962 39.994 18.08 13.04 0.65 31.77 40.00 8.23 75.977 25.38 8.59 0.84 34.81 40.00 5.19 Vertical 159.784 20.65 32.58 43.50 10.92 10.61 1.32 13.05 238.310 19.46 11.88 1.61 32.95 46.00 719.200 8.55 20.48 2.73 31.76 46.00 14.24

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 36 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI1 1280\*1024@60Hz Date of Test : Jun 29, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB ( $\mu V/m$ )	Margin (dB)
	77.865	23.15	8.96	0.85	32.96	40.00	7.04
	118.186	16.91	13.12	1.12	31.15	43.50	12.35
Horizontal	205.675	26.60	9.90	1.51	38.01	43.50	5.49
Пописний	238.310	26.31	11.88	1.61	39.80	46.00	6.20
	446.414	13.41	17.53	2.17	33.11	46.00	12.89
	896.997	15.82	20.93	3.03	39.78	46.00	6.22
	30.962	15.34	18.21	0.56	34.11	40.00	5.89
	50.942	26.43	8.03	0.73	35.19	40.00	4.81
Vertical	73.103	26.60	8.14	0.83	35.57	40.00	4.43
verticai	238.310	24.17	11.88	1.61	37.66	46.00	8.34
	513.633	10.68	18.50	2.33	31.51	46.00	14.49
	900.147	10.61	20.90	3.05	34.56	46.00	11.44

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 37 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI1 640\*480@60Hz & Date of Test : Jun 29, 2017

Antenna | Cable | Emission | Limits Meter Margin Frequency Reading Factor Loss Level dB Polarization dB (MHz) (dB) dB (μV) (dB/m)(dB)  $(\mu V/m)$   $(\mu V/m)$ 23.64 80.081 9.40 0.86 33.90 40.00 6.10 116.950 18.27 13.08 1.11 32.46 43.50 11.04 207.850 25.74 10.26 1.52 37.52 43.50 5.98 Horizontal 238.310 25.93 11.88 1.61 39.42 46.00 6.58 14.72 17.53 446.414 2.17 34.42 46.00 11.58 900.147 17.71 20.90 3.05 41.66 46.00 4.34 33.59 30.962 14.82 18.21 0.56 40.00 6.41 40.00 25.20 8.03 0.73 50.942 33.96 6.04 75.977 25.16 8.59 0.84 34.59 40.00 5.41

10.84

12.00

20.48

1.32

1.61

2.73

31.22

38.21

33.03

43.50

46.00

46.00

1kHz Playing

19.06

24.60

9.82

Vertical

158.112

239.987

719.200

TEST ENGINEER: LEON YUN

12.28

7.79

12.97

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 38 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : HDMI1080P Date of Test : Jun 29, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)		Margin (dB)
	64.433	22.24	6.78	0.80	29.82	40.00	10.18
	84.702	19.16	10.24	0.90	30.30	40.00	9.70
Horizontal	210.786	25.10	10.58	1.52	37.20	43.50	6.30
Horizontal	231.718	26.30	11.46	1.59	39.35	46.00	6.65
	526.397	13.23	18.50	2.36	34.09	46.00	11.91
	869.130	16.20	21.00	2.98	40.18	46.00	5.82
	30.531	12.83	18.51	0.55	31.89	40.00	8.11
	77.051	25.02	8.84	0.85	34.71	40.00	5.29
Vertical	207.123	25.45	10.14	1.51	37.10	43.50	6.40
	230.907	26.23	11.38	1.59	39.20	46.00	6.80
	519.065	14.71	18.50	2.34	35.55	46.00	10.45
	890.728	15.80	21.00	3.03	39.83	46.00	6.17

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 39 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : USB Play Date of Test : Jun 29, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	77.051	21.61	8.84	0.85	31.30	40.00	8.70
	211.527	23.48	10.67	1.53	35.68	43.50	7.82
Horizontal	229.293	27.31	11.26	1.58	40.15	46.00	5.85
Попідопіаї	451.135	13.86	17.60	2.19	33.65	46.00	12.35
	558.730	12.67	18.70	2.43	33.80	46.00	12.20
	863.056	14.39	21.00	2.98	38.37	46.00	7.63
	30.424	14.66	18.58	0.55	33.79	40.00	6.21
	74.919	25.06	8.40	0.84	34.30	40.00	5.70
Vertical	232.532	21.95	11.54	1.59	35.08	46.00	10.92
verticai	443.294	13.14	17.47	2.17	32.78	46.00	13.22
	618.537	10.64	19.70	2.55	32.89	46.00	13.11
	919.287	10.67	21.20	3.08	34.95	46.00	11.05

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 40 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : LAN Play Date of Test : Jun 29, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	80.081	22.12	9.40	0.86	32.38	40.00	7.62
	113.714	17.91	12.95	1.09	31.95	43.50	11.55
Horizontal	223.733	21.99	11.00	1.57	34.56	46.00	11.44
поптенца	526.397	10.25	18.50	2.36	31.11	46.00	14.89
	742.259	8.50	20.57	2.76	31.83	46.00	14.17
	884.503	8.66	21.05	3.01	32.72	46.00	13.28
	30.638	14.67	18.43	0.56	33.66	40.00	6.34
	50.409	23.50	8.17	0.72	32.39	40.00	7.61
Vertical	73.876	24.82	8.27	0.83	33.92	40.00	6.08
vertical	215.268	23.41	11.00	1.54	35.95	43.50	7.55
	508.258	10.80	18.48	2.31	31.59	46.00	14.41
	857.025	9.19	20.97	2.96	33.12	46.00	12.88

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 41 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : WIFI Date of Test : Jun 29, 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)
	81.212	21.86	9.59	0.87	32.32	40.00	7.68
	118.601	17.81	13.14	1.12	32.07	43.50	11.43
Horizontal	219.075	23.57	10.84	1.55	35.96	46.00	10.04
Поптенца	428.019	12.72	17.27	2.13	32.12	46.00	13.88
	584.790	11.54	19.40	2.48	33.42	46.00	12.58
	839.182	9.75	20.90	2.94	33.59	46.00	12.41
	30.211	13.26	18.65	0.55	32.46	40.00	7.54
	73.359	24.83	8.18	0.83	33.84	40.00	6.16
Vertical	211.527	22.27	10.67	1.53	34.47	43.50	9.03
verticai	463.970	13.46	17.74	2.22	33.42	46.00	12.58
	622.890	10.89	19.70	2.55	33.14	46.00	12.86
	854.025	10.42	20.93	2.96	34.31	46.00	11.69

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 42 of 44

EUT : LED LCD TV Temperature : 22

Model No. : 55H6D Humidity : 60%RH

Test Mode : MHL Date of Test : Jun 29, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	78.965	23.26	9.15	0.86	33.27	40.00	6.73
	117.773	18.15	13.12	1.11	32.38	43.50	11.12
Horizontal	218.309	24.82	10.84	1.55	37.21	46.00	8.79
поптенца	234.991	23.02	11.70	1.60	36.32	46.00	9.68
	568.613	13.07	18.90	2.45	34.42	46.00	11.58
	878.322	10.67	21.07	3.01	34.75	46.00	11.25
	31.731	15.06	17.85	0.57	33.48	40.00	6.52
	52.575	24.40	7.60	0.74	32.74	40.00	7.26
Vertical	77.593	23.73	8.90	0.85	33.48	40.00	6.52
verticai	181.283	20.58	9.97	1.42	31.97	43.50	11.53
	233.349	21.14	11.54	1.59	34.27	46.00	11.73
	511.835	12.36	18.50	2.33	33.19	46.00	12.81

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 43 of 44

# 5 DEVIATION TO TEST SPECIFICATIONS

None.

Audix Technology (Shanghai) Co., Ltd. Report No.: ACI-F17237

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0139 Page 44 of 44

### **6 DEBUG DESCRIPTION**

The following components are used during the countermeasure procedures:

Name	M/N	Manufacturer	Location
SM Contact	SMR-TSL-4-3.5-5R	Qingdao Joinset	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 testing, must be incorporated in each unit marked

TEST ENGINEER:

Audix Technology (Shanghai) Co., Ltd. Report No.: ACI-F17237

(BYRON WU)