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

## LED LCD TV

Model No.	Brand
55H9D,55H9D+	
55H9D Plus,55H9D+ Plus	
55H9050,55H9907	Higgman
55H9+0D Plus,55H9+0D1 Plus	Hisense
55H9+0D2 Plus ,55H90+0D Plus,	
55H90+0D1 Plus,55H90+0D2 Plus	

FCC ID: W9HLCDF0105

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-F17075

Date of Test : Jan 15-Feb 10, 2017

Date of Report: Feb 20, 2017

# TABLE OF CONTENTS

		Page
1 S	UMMARY OF STANDARDS AND RESULTS	4
1.	1 Description of Standards and Results	4
	ENERAL INFORMATION	
2.	1 Description of Equipment Under Test	5
2.		
2.	1	
2.	4 Measurement Uncertainty	8
3 C	ONDUCTED EMISSION TEST	9
3.	1 Test Equipment	9
3.		
3.	3 Conducted Emission Limit [FCC Part 15 Subpart B 15.107(a)]	10
3.		
3.	5 Operating Condition of EUT	11
3.	6 Test Procedures	11
3.	7 Test Results	12
4 R	ADIATED EMISSION TEST	22
4.	1 Test Equipment	22
4.	2 Block Diagram of Test Setup	22
4.	3 Radiated Emission Limit [FCC Part 15 Subpart B 15.109(a)]	24
4.	4 Test Configuration	24
4.		
4.	6 Test Procedures	24
4.	7 Test Results	25
5 D	EBUG DESCRIPTION	37
6 D	EVIATION TO TEST SPECIFICATIONS	38

## TEST REPORT FOR FCC CERTIFICATE

Applicant : Hisense Electric Co., Ltd.

Manufacturer : Hisense Electric Co., Ltd.

Factory #1 : Hisense Electric Co., Ltd.

Factory #2 : Tatung Mexico S.A. de C.V.

Factory #3 : HISENSE ELECTRONICA MEXICO, S.A. DE C.V.

EUT Description : LED LCD TV

Model No.	Brand	Power Supply
Refer to Sec.2.1	Hisense	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 Jan 15-Feb 10, 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.F17074, a Verification report.

Jan 15-Feb 10, 2017	Date of Report :	Feb 20, 2017
Huiminjan	_	
HUI MIN YAN / Assistant		
Byron Nu	_	
BYRON WU / Deputy Assistant Manager	•	
	HUI MIN YAN / Assistant Byron W	HUI MIN YAN / Assistant  Byron WM  BYRON WU / Deputy Assistant Manager  on behalf of

Signatory:

Authorized Signature EMC 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>	cription of Test Item Standard			
	EMISSION			
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 :  $\square$  Production  $\square$  Pre-product  $\square$  Pro-type

Model No : 55H9D, 55H9D+,55H9D Plus,55H9050, 55H9907

55H9D+ Plus,55H9+0D Plus, 55H9+0D1 Plus 55H9+0D2 Plus, 55H90+0D Plus, 55H90+0D1 Plus

55H90+0D2 Plus

Brand : Hisense

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

number. The 55H9D was tested and reported in

the report.

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

Applicant : Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy &

Technology Development Zone, Qingdao, China

Manufacturer : Same as Applicant

Factory #1 : Same as Applicant

Factory #2 : Tatung Mexico S.A. de C.V.

Miguel Catalán 420, Parque Industrial Rio Bravo,

Cd. Juarez, Chih., CP 32557

Factory #3 : HISENSE ELECTRONICA MEXICO, S.A. DE C.V.

Blvd. Sharp #3510 Parque Industrial

Rosarito, C.P. 22710 Playas de Rosarito, B.C.

Max Resolution : 3840\*2160@60Hz

LCD Panel : Manufacturer : Hisense

M/N : HE550IU-B32

Tuner : Manufacturer : SILICON LABS

M/N : Si2151-A10

HDMI Cable\*4

(Lab provide)

Shielded, Detachable, 1.80m

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

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

(Lab provide)

LAN Cable : Unshielded, Detachable, 1.50m

MHL to HDMI Adaptor: Manufacture: CE-Link

with RCP (Lab provide) M/N: 3002

#### **Remark:**

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

Side Port:

(1) One USB3 Port

: Connected with Hard-Disk

(2) One HDMI2 Port

: Connected with PC

(3) One HDMI1/MHL Port

: Connected with Smart Mobile Phone

(4) One Audio out Port

: Connected with Earphone

(5) One Service Port

: This port does not open to customer

(6) One USB1 Port

: Connected with Hard-Disk

(7) One USB2 Port

: Connected with Hard-Disk

(8) One ANT/CABLE IN Port

: Connected with ATSC SG / TV SG

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

(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 : CE/EMC, FCC DoC, VCCI, UL, CCC

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, 1.8m

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 : A010022-486006

Data Cable : Shielded, Undetachable, 1.8m.

Certificate : CE, FCC DoC

## 2.2.9 Hard Disk #3

Manufacturer : Tetasys Model Number : F12

Serial Number : A010022-4A60007

Data Cable : Shielded, Detachable, 1.5m.

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

#### 2.2.12 Smart Mobile Phone

Manufacturer : SAMSUNG Model Number : GT-I9100G Serial Number : 6935152011519

Certificate : CE/EMC

#### 2.2.13 Router

Manufacturer : TP-LINK
Model Number : TL-WR800N
Serial Number : 13806805316

## 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 = 4.6dB(Horizontal)

U = 4.3 dB (Vertical)

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

U = 4.5 dB (Horizontal)

U = 5.4dB (Vertical)

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

U = 5.1 dB

## 3 CONDUCTED EMISSION TEST

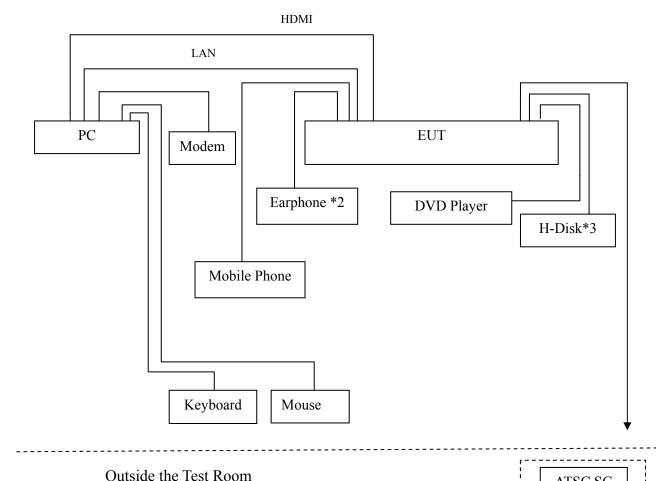
## 3.1 Test Equipment

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	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 20, 2016	Mar 19, 2017
4.	50Ω Terminator	Anritsu	BNC	001	Mar 20, 2016	Mar 19, 2017
5.	Software	Audix	e3	6.111206		

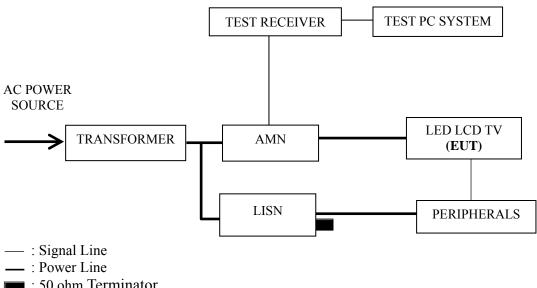
# 3.2 Block Diagram of Test Setup

## 3.2.1 EUT & Peripherals



ATSC SG

## 3.2.2 Conducted Disturbance Test Setup



: 50 ohm Terminator

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

Frequency Range	Limits o	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 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 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
HDMI 3840*2160@60Hz & 1kHz Playing
HDMI 1920*1080@60Hz & 1kHz Playing
HDMI 1280*1024@60Hz & 1kHz playing
HDMI 640*480@60Hz & 1kHz playing
HDMI1080P
USB Play
LAN Play
MHL
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 C63.4:2014 during conducted emission test.

The bandwidth of R&S Test Receiver ESCI was set at 9 kHz.

The frequency range from 150 kHz to 30 MHz was checked.

The test modes were done on conducted disturbance test and all the test results are listed in Sec. 3.7.

## 3.7 Test Results

#### < PASS >

The frequency and amplitude of the highest conducted emission relative to the limit is reported. All emissions not reported below are too low against the prescribed limits.

Test Mode	Data Page
HDMI 3840*2160@60Hz & 1kHz Playing	P13
HDMI 1920*1080@60Hz & 1kHz Playing	P14
HDMI 1280*1024@60Hz & 1kHz playing	P15
HDMI 640*480@60Hz & 1kHz playing	P16
HDMI1080P	P17
USB Play	P18
LAN Play	P19
MHL	P20
Wifi	P21

NOTE 1 - Factor = Cable Loss + AMN Factor.

NOTE 2 – Emission Level = Meter Reading + Factor.

NOTE 3 – "QP" means "Quasi-Peak" values, "AV" means "Average" values.

NOTE 4 – The worst case is for Wifi test mode. The worst emission is detected at 0.150MHz (Quasi-Peak Value) with corrected signal level of 63.18 dB ( $\mu$ V) (limit is 66.00 dB ( $\mu$ V)), when the Neutral of the EUT is connected to AMN.

Model No. : 55H9D Humidity : 48%RH

Test Mode : HDMI 3840\*2160@60Hz Date of Test : Jan 15, 2017

& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.157	47.10	10.58	57.68	65.60	7.92	
	0.320	32.99	10.47	43.46	59.71	16.25	
	0.767	31.00	10.40	41.40	56.00	14.60	ΩD
	2.500	29.60	10.42	40.02	56.00	15.98	QP
	4.721	28.20	10.45	38.65	56.00	17.35	
Line	15.552	20.11	10.55	30.66	60.00	29.34	
Line	0.157	36.50	10.58	47.08	55.60	8.52	
	0.320	26.89	10.47	37.36	49.71	12.35	
	0.767	22.60	10.40	33.00	46.00	13.00	AV
	2.500	22.90	10.42	33.32	46.00	12.68	
	4.721	21.60	10.45	32.05	46.00	13.95	
	15.552	16.01	10.55	26.56	50.00	23.44	
	0.150	50.90	10.58	61.48	66.00	4.52	
	0.320	32.29	10.46	42.75	59.71	16.96	
	0.767	30.40	10.39	40.79	56.00	15.21	ΩD
	1.418	29.30	10.42	39.72	56.00	16.28	QP
	2.500	29.31	10.44	39.75	56.00	16.25	
Neutral	5.774	25.80	10.51	36.31	60.00	23.69	
Neutrai	0.150	37.60	10.58	48.18	56.00	7.82	
	0.320	26.09	10.46	36.55	49.71	13.16	
	0.767	23.20	10.39	33.59	46.00	12.41	AV
	1.418	21.70	10.42	32.12	46.00	13.88	AV
	2.500	22.31	10.44	32.75	46.00	13.25	
	5.774	19.40	10.51	29.91	50.00	20.09	

Model No. : 55H9D Humidity : 48%RH

Test Mode : HDMI 1920\*1080@60Hz Date of Test : Jan 15, 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	50.20	10.59	60.79	65.91	5.12	
	0.317	32.59	10.47	43.06	59.80	16.74	
	0.759	30.20	10.40	40.60	56.00	15.40	OD
	1.403	29.79	10.41	40.20	56.00	15.80	QP
	2.707	29.19	10.43	39.62	56.00	16.38	
Line	5.333	25.60	10.45	36.05	60.00	23.95	
Line	0.152	37.30	10.59	47.89	55.91	8.02	
	0.317	25.29	10.47	35.76	49.80	14.04	
	0.759	23.90	10.40	34.30	46.00	11.70	AV
	1.403	21.99	10.41	32.40	46.00	13.60	
	2.707	22.29	10.43	32.72	46.00	13.28	
	5.333	16.00	10.45	26.45	50.00	23.55	
	0.152	50.60	10.58	61.18	65.91	4.73	
	0.320	31.69	10.46	42.15	59.71	17.56	
	0.767	29.70	10.39	40.09	56.00	15.91	OD
	1.568	26.30	10.42	36.72	56.00	19.28	QP
	2.707	29.09	10.46	39.55	56.00	16.45	
Neutral	5.333	25.41	10.50	35.91	60.00	24.09	
Neutrai	0.152	37.00	10.58	47.58	55.91	8.33	
	0.320	25.29	10.46	35.75	49.71	13.96	
	0.767	23.30	10.39	33.69	46.00	12.31	A 3.7
	1.568	17.20	10.42	27.62	46.00	18.38	AV
	2.707	22.69	10.46	33.15	46.00	12.85	
	5.333	16.31	10.50	26.81	50.00	23.19	

Model No. : 55H9D Humidity : 48%RH

Test Mode : HDMI 1280\*1024@60Hz Date of Test : Jan 15, 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	51.10	10.59	61.69	66.00	4.31	
	0.322	32.49	10.47	42.96	59.66	16.70	
	0.767	30.00	10.40	40.40	56.00	15.60	OD
	1.403	29.19	10.41	39.60	56.00	16.40	QP
	2.581	29.50	10.42	39.92	56.00	16.08	
Time	5.774	26.20	10.46	36.66	60.00	23.34	
Line	0.150	38.10	10.59	48.69	56.00	7.31	
	0.322	24.99	10.47	35.46	49.66	14.20	
	0.767	23.60	10.40	34.00	46.00	12.00	A T 7
	1.403	20.99	10.41	31.40	46.00	14.60	AV
	2.581	24.30	10.42	34.72	46.00	11.28	
	5.774	19.10	10.46	29.56	50.00	20.44	
	0.153	50.01	10.57	60.58	65.82	5.24	
	0.325	32.99	10.46	43.45	59.57	16.12	
	0.546	29.50	10.39	39.89	56.00	16.11	OD
	0.974	30.60	10.40	41.00	56.00	15.00	QP
	2.527	30.10	10.45	40.55	56.00	15.45	
NI asstral	5.774	25.80	10.51	36.31	60.00	23.69	
Neutral	0.153	36.41	10.57	46.98	55.82	8.84	
	0.325	26.79	10.46	37.25	49.57	12.32	
	0.546	24.90	10.39	35.29	46.00	10.71	AX 7
	0.974	22.30	10.40	32.70	46.00	13.30	AV
	2.527	23.90	10.45	34.35	46.00	11.65	
	5.774	18.80	10.51	29.31	50.00	20.69	

Model No. : 55H9D Humidity : 48%RH

Test Mode : HDMI 640\*480@60Hz & Date of Test : Jan 15, 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	51.40	10.59	61.99	66.00	4.01	
	0.329	33.90	10.46	44.36	59.49	15.13	
	0.775	30.50	10.40	40.90	56.00	15.10	OD
	1.433	30.61	10.40	41.01	56.00	14.99	QP
Line	2.527	28.80	10.42	39.22	56.00	16.78	
	4.454	27.80	10.44	38.24	56.00	17.76	
	0.150	38.50	10.59	49.09	56.00	6.91	
	0.329	27.80	10.46	38.26	49.49	11.23	
	0.775	18.20	10.40	28.60	46.00	17.40	AV
	1.433	21.91	10.40	32.31	46.00	13.69	
	2.527	20.30	10.42	30.72	46.00	15.28	
	4.454	20.00	10.44	30.44	46.00	15.56	
	0.150 51.50		10.58	62.08	66.00	3.92	
	0.329	32.80	10.45	43.25	59.49	16.24	
	0.775	28.30	10.39	38.69	56.00	17.31	ΩD
	2.044	26.70	10.43	37.13	56.00	18.87	QP
	4.622	26.29	10.50	36.79	56.00	19.21	
Neutral	5.535	24.70	10.51	35.21	60.00	24.79	
Neutrai	0.150	38.40	10.58	48.98	56.00	7.02	
	0.329	27.20	10.45	37.65	49.49	11.84	
	0.775	17.40	10.39	27.79	46.00	18.21	AV
	2.044	19.00	10.43	29.43	46.00	16.57	AV
	4.622	19.69	10.50	30.19	46.00	15.81	
	5.535	16.70	10.51	27.21	50.00	22.79	

EUT : LED LCD TV Temperature : 22°C

Test Mode : HDMI1080P Date of Test : Jan 15, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark	
	0.150	50.90	10.59	61.49	66.00	4.51		
	0.325	33.69	10.47	44.16	59.57	15.41		
	0.494	33.10	10.40	43.50	56.10	12.60	OD	
	0.974	31.40	10.40	41.80	56.00	14.20	QP	
	1.878	27.70	10.41	38.11	56.00	17.89		
Time	4.501	28.61	10.44	39.05	56.00	16.95		
Line	0.150	38.10	10.59	48.69	56.00	7.31		
	0.325	26.99	10.47	37.46	49.57	12.11	AV	
	0.494	20.80	10.40	31.20	46.10	14.90		
	0.974	23.00	10.40	33.40	46.00	12.60		
	1.878	16.70	10.41	27.11	46.00	18.89		
	4.501	20.51	10.44	30.95	46.00	15.05		
	0.150	51.80	10.58	62.38	66.00	3.62		
	0.329	33.20	10.45	43.65	59.49	15.84		
	0.775	28.80	10.39	39.19	56.00	16.81	QP	
	1.433	30.80	10.42	41.22	56.00	14.78	Qr	
	4.501	28.40	10.49	38.89	56.00	17.11		
Neutral	5.993	25.00	10.52	35.52	60.00	24.48		
Neutrai	0.150	38.30	10.58	48.88	56.00	7.12		
	0.329	27.60	10.45	38.05	49.49	11.44		
	0.775	17.80	10.39	28.19	46.00	17.81	AV	
	1.433	21.90	10.42	32.32	46.00	13.68	AV	
	4.501	20.50	10.49	30.99	46.00	15.01		
	5.993	15.60	10.52	26.12	50.00	23.88		

Test Mode : USB Play Date of Test : Jan 15, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark			
	0.150	51.40	10.59	61.99	66.00	4.01				
	0.329	33.90	10.46	44.36	59.49	15.13				
	0.759	30.90	10.40	41.30	56.00	14.70	OD			
Line	1.433	30.81	10.40	41.21	56.00	14.79	QP			
	4.501	28.51	10.44	38.95	56.00	17.05				
	5.993	25.20	10.46	35.66	60.00	24.34				
	0.150	38.60	10.59	49.19	56.00	6.81				
	0.329	27.90	10.46	38.36	49.49	11.13				
	0.759	23.10	10.40	33.50	46.00	12.50	AV			
	1.433	22.61	10.40	33.01	46.00	12.99				
	4.501	20.51	10.44	30.95	46.00	15.05				
	5.993	15.80	10.46	26.26	50.00	23.74				
	0.150	51.80	10.58	62.38	66.00	3.62				
	0.329	33.10	10.45	43.55	59.49	15.94				
	0.494	31.20	10.39	41.59	56.10	14.51	OD			
	0.974	30.70	10.40	41.10	56.00	14.90	QP			
	2.088	29.50	10.43	39.93	56.00	16.07				
NI asstma1	4.224	28.40	10.49	38.89	56.00	17.11				
Neutral	0.150	38.20	10.58	48.78	56.00	7.22				
	0.329	27.90	10.45	38.35	49.49	11.14				
	0.494	19.10	10.39	29.49	46.10	16.61	A X 7			
	0.974	21.90	10.40	32.30	46.00	13.70	AV			
-  -	2.088	21.00	10.43	31.43	46.00	14.57				
	4.224	20.10	10.49	30.59	46.00	15.41				

Model No. : 55H9D Humidity : 48%RH

Test Mode : LAN Play Date of Test : Jan 15, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark	
	0.150	51.40	10.59	61.99	66.00	4.01		
	0.325	33.69	10.47	44.16	59.57	15.41		
	0.494	33.20	10.40	43.60	56.10	12.50		
	0.974	31.00	10.40	41.40	56.00	14.60	QP	
Line	2.309	28.90	10.42	39.32	56.00	16.68		
	4.454	28.10	10.44	38.54	56.00	17.46		
Line	0.150	38.50	10.59	49.09	56.00	6.91		
	0.325	26.69	10.47	37.16	49.57	12.41		
	0.494	20.70	10.40	31.10	46.10	15.00	A X 7	
	0.974	22.00	10.40	32.40	46.00	13.60	AV	
	2.309	18.80	10.42	29.22	46.00	16.78		
	4.454	20.30	10.44	30.74	46.00	15.26	<u> </u>	
	0.150	51.80	10.58	62.38	66.00	3.62		
	0.322	30.69	10.46	41.15	59.66	18.51		
	0.775	29.80	10.39	40.19	56.00	15.81	OD	
	1.628	30.10	10.42	40.52	56.00	15.48	QP	
	2.962	27.80	10.46	38.26	56.00	17.74		
NI asstral	4.672	27.79	10.50	38.29	56.00	17.71		
Neutral	0.150	38.20	10.58	48.78	56.00	7.22		
	0.322	22.29	10.46	32.75	49.66	16.91		
	0.775	19.70	10.39	30.09	46.00	15.91	AX 7	
	1.628	21.80	10.42	32.22	46.00	13.78	AV	
	2.962	17.00	10.46	27.46	46.00	18.54		
	4.672	19.99	10.50	30.49	46.00	15.51		

Model No. : 55H9D Humidity : 48%RH

Test Mode : \_\_\_\_ MHL Date of Test : \_\_\_ Jan 15, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark			
	0.150	51.40	10.59	61.99	66.00	4.01				
	0.329	33.90	10.46	44.36	59.49	15.13				
	0.494	33.10	10.40	43.50	56.10	12.60	OD			
	0.974	31.10	10.40	41.50	56.00	14.50	QP			
Line	2.088	29.20	10.41	39.61	56.00	16.39				
	4.454	27.80	10.44	38.24	56.00	17.76				
Line	0.150	38.60	10.59	49.19	56.00	6.81				
	0.329	27.90	10.46	38.36	49.49	11.13				
	0.494	20.70	10.40	31.10	46.10	15.00	A X 7			
	0.974	22.70	10.40	33.10	46.00	12.90	AV			
	2.088	21.20	10.41	31.61	46.00	14.39				
	4.454	20.00	10.44	30.44	46.00	15.56				
	0.150	51.80	10.58	62.38	66.00	3.62				
	0.329	33.20	10.45	43.65	59.49	15.84				
	0.494	31.30	10.39	41.69	56.10	14.41	OD			
	0.974	31.10	10.40	41.50	56.00	14.50	QP			
	2.044	26.30	10.43	36.73	56.00	19.27				
NI41	5.112	26.30	10.50	36.80	60.00	23.20				
Neutral	0.150	38.30	10.58	48.88	56.00	7.12				
	0.329	27.60	10.45	38.05	49.49	11.44				
	0.494	19.10	10.39	29.49	46.10	16.61	A T 7			
	0.974	22.60	10.40	33.00	46.00	13.00	AV			
	2.044	16.60	10.43	27.03	46.00	18.97				
	5.112	17.00	10.50	27.50	50.00	22.50				

Model No. : 55H9D Humidity : 48%RH

Test Mode : Wifi Date of Test : Jan 15, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	52.60	10.59	63.19	66.00	2.81	
	0.489	32.60	10.40	43.00	56.19	13.19	
	0.767	32.10	10.40	42.50	56.00	13.50	OD
	1.418	31.21	10.40	41.61	56.00	14.39	QP
Line	3.328	28.90	10.43	39.33	56.00	16.67	
	5.333	27.70	10.45	38.15	60.00	21.85	
Line	0.150	39.50	10.59	50.09	56.00	5.91	
	0.489	21.00	10.40	31.40	46.19	14.79	AV
	0.767	23.60	10.40	34.00	46.00	12.00	
	1.418	22.81	10.40	33.21	46.00	12.79	AV
	3.328	19.80	10.43	30.23	46.00	15.77	
	5.333	18.80	10.45	29.25	50.00	20.75	
	0.150	52.60	10.58	63.18	66.00	2.82	
	0.329	35.20	10.45	45.65	59.49	13.84	
	0.963	32.10	10.40	42.50	56.00	13.50	OD
	1.418	33.10	10.42	43.52	56.00	12.48	QP
	4.622	29.09	10.50	39.59	56.00	16.41	
Neutral	6.056	27.50	10.52	38.02	60.00	21.98	
Neutrai	0.150	38.90	10.58	49.48	56.00	6.52	
	0.329	24.10	10.45	34.55	49.49	14.94	
	0.963	22.30	10.40	32.70	46.00	13.30	AX7
	1.418	22.70	10.42	33.12	46.00	12.88	AV
	4.622	23.09	10.50	33.59	46.00	12.41	
	6.056	18.40	10.52	28.92	50.00	21.08	

## 4 RADIATED EMISSION TEST

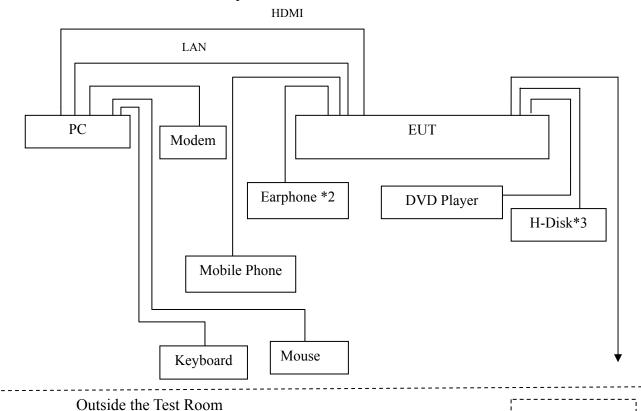
## 4.1 Test Equipment

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

Item	Туре	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.	Software	Audix	e3	6.2007-9-10		

## 4.2 Block Diagram of Test Setup

## 4.2.1 EUT & Peripherals



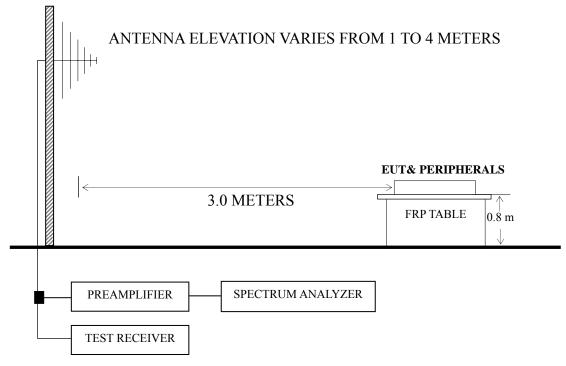
ATSC SG

TV SG

or

## 4.2.2 Radiated emission test setup

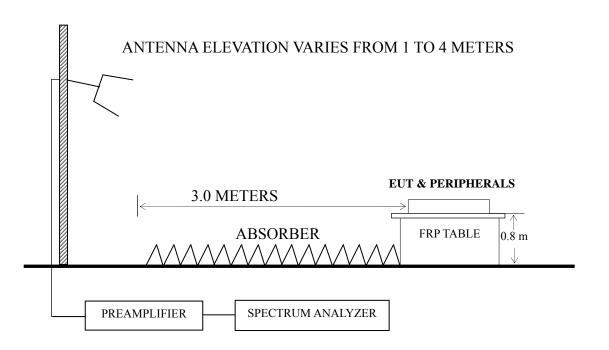
## 4.2.2.1 Below 1GHz



: 50 ohm Coaxial Switch

4.2.2.2 Above 1GHz

## **BORE-SIGHT ANTENNA TOWER**



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

Frequency	Distance	Field strength 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 and The Spectrum AgilentE7405A was set at 1MHz above 1GHz.

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.

Frequency	Test Mode	Data Page
	HDMI1 3840*2160@60Hz & 1kHz Playing	P26-P27
	HDMI3 3840*2160@30Hz & 1kHz Playing	P28
	HDMI1 1920*1080@60Hz & 1kHz Playing	P29
	HDMI1 1280*1024@60Hz & 1kHz playing	P30
Below 1GHz	HDMI1 640*480@60Hz & 1kHz playing	P31
	HDMI1080P	P32
	USB Play	P33
	LAN Play	P34
	MHL	P35
	Wifi	P36
Above 1GHz	HDMI1 3840*2160@60Hz & 1kHz Playing	P26-P27

- NOTE 1 Emission Level = Antenna Factor + Cable Loss + 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.
- 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 of42.70dB ( $\mu$ V/m) (limit is 46.00 dB ( $\mu$ V/m)), when the antenna was 2.0 m height and the turntable was at 145°. The worst emission at vertical polarization was detected at 890.728 MHz with corrected signal level of 42.82dB ( $\mu$ V/m) (limit is 46.00 dB ( $\mu$ V/m)), when the antenna was 1.5 m height and the turntable was at 300°.

LED LCD TV Temperature:  $22^{\circ}\!\mathbb{C}$ **EUT** 

Humidity Model No. 55H9D 60%RH

HDMI1 3840\*2160@60Hz Date of Test: Feb 06, 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	26.52	8.75	0.88	0.00	36.15	40.00	3.85		
	238.310	22.70	11.98	1.60	0.00	36.28	46.00	9.72		
	297.224	18.43	13.60	1.75	0.00	33.78	46.00	12.22	OD	
	620.710	17.24	18.80	2.56	0.00	38.60	46.00	7.40	QP	
	860.035	18.33	20.70	3.00	0.00	42.03	46.00	3.97		
Horizontal	890.728	18.53	21.10	3.07	0.00	42.70	46.00	3.30		
Horizontai	1317.757	56.22	24.92	3.82	35.98	48.98	74.00	25.02		
	1771.048	55.15	26.70	4.41	35.43	50.83	74.00	23.17	PK	
	2655.171	54.71	29.10	5.48	35.20	54.09	74.00	19.91		
	1317.757	35.49	24.92	3.82	35.98	28.25	54.00	25.75		
	1771.048	33.20	26.70	4.41	35.43	28.88	54.00	25.12	AV	
	2655.171	31.77	29.10	5.48	35.20	31.15	54.00	22.85		

Model No. : 55H9D Humidity : 60%RH

Test Mode : HDMI1 3840\*2160@60Hz Date of Test : Feb 06, 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	
	32.067	18.57	17.05	0.58	0.00	36.20	40.00	3.80		
	60.918	27.90	6.66	0.78	0.00	35.34	40.00	4.66		
	77.865	27.08	8.64	0.88	0.00	36.60	40.00	3.40	QP	
	239.987	26.89	12.10	1.60	0.00	40.59	46.00	5.41		
	620.710	16.67	18.80	2.56	0.00	38.03	46.00	7.97		
Vertical	890.728	18.65	21.10	3.07	0.00	42.82	46.00	3.18		
Vertical	1320.120	64.72	24.94	3.82	35.98	57.50	74.00	16.50		
	1771.048	59.46	26.70	4.41	35.43	55.14	74.00	18.86	PK	
	2640.937	50.12	29.03	5.48	35.20	49.43	74.00	24.57		
	1320.120	42.77	24.94	3.82	35.98	35.55	54.00	18.45		
	1771.048	36.54	26.70	4.41	35.43	32.22	54.00	21.78	AV	
	2640.937	28.02	29.03	5.48	35.20	27.33	54.00	26.67		

Model No. : 55H9D Humidity : 60%RH

Test Mode : HDMI3 3840\*2160@30Hz Date of Test : Feb 06, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	68.151	25.12	7.21	0.83	33.16	40.00	6.84
	73.103	27.11	7.96	0.85	35.92	40.00	4.08
Horizontal	150.538	22.53	12.03	1.28	35.84	43.50	7.66
Попідопіаї	574.626	17.69	18.25	2.46	38.40	46.00	7.60
	616.372	21.00	18.75	2.54	42.29	46.00	3.71
	881.407	18.09	21.00	3.05	42.14	46.00	3.86
	31.071	16.15	17.71	0.57	34.43	40.00	5.57
	46.016	23.01	9.60	0.68	33.29	40.00	6.71
Vertical	78.413	24.18	8.71	0.88	33.77	40.00	6.23
vertical	157.007	24.23	11.43	1.31	36.97	43.50	6.53
	605.659	21.35	18.55	2.52	42.42	46.00	3.58
	782.345	18.62	20.17	2.87	41.66	46.00	4.34

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9D Humidity : 60%RH

Test Mode : HDMI1 1920\*1080@60Hz Date of Test : Feb 06, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB ( $\mu V/m$ )	Margin (dB)
	64.659	25.06	6.88	0.80	32.74	40.00	7.26
	72.338	27.37	7.85	0.85	36.07	40.00	3.93
Horizontal	156.458	24.24	11.45	1.31	37.00	43.50	6.50
Пописний	590.974	20.02	18.17	2.50	40.69	46.00	5.31
	629.477	19.23	19.10	2.58	40.91	46.00	5.09
	798.980	18.59	20.40	2.89	41.88	46.00	4.12
	32.520	15.96	16.89	0.58	33.43	40.00	6.57
	53.505	25.99	7.87	0.73	34.59	40.00	5.41
Vertical	155.364	19.16	11.48	1.30	31.94	43.50	11.56
	483.910	20.38	17.24	2.23	39.85	46.00	6.15
	658.836	18.89	19.20	2.63	40.72	46.00	5.28
	782.345	18.62	20.17	2.87	41.66	46.00	4.34

Model No. : 55H9D Humidity : 60%RH

Test Mode : HDMI1 1280\*1024@60Hz Date of Test : Feb 06, 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)
	63.759	26.80	6.84	0.80	34.44	40.00	5.56
	77.865	24.89	8.64	0.88	34.41	40.00	5.59
Horizontal	153.200	23.73	11.73	1.29	36.75	43.50	6.75
Horizontai	603.539	18.38	18.50	2.52	39.40	46.00	6.60
	804.603	16.49	20.37	2.91	39.77	46.00	6.23
	884.503	15.51	21.05	3.05	39.61	46.00	6.39
	32.864	17.66	16.73	0.58	34.97	40.00	5.03
	80.081	24.77	8.90	0.89	34.56	40.00	5.44
Vertical	155.364	24.37	11.48	1.30	37.15	43.50	6.35
	478.846	19.49	17.20	2.22	38.91	46.00	7.09
	550.948	19.97	17.90	2.40	40.27	46.00	5.73
	771.449	16.25	19.90	2.85	39.00	46.00	7.00

EUT : LED LCD TV Temperature :  $22^{\circ}$ C

Model No. : 55H9D Humidity :  $60^{\circ}$ RH

Test Mode : HDMI1 640\*480@60Hz & Date of Test : Feb 06, 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)
	64.433	27.27	6.87	0.80	34.94	40.00	5.06
	74.396	25.47	8.19	0.86	34.52	40.00	5.48
Horizontal	156.458	23.80	11.45	1.31	36.56	43.50	6.94
Попідопіаї	219.845	26.78	11.00	1.54	39.32	46.00	6.68
	580.703	19.50	18.25	2.46	40.21	46.00	5.79
	881.407	17.01	21.00	3.05	41.06	46.00	4.94
	32.520	16.91	16.89	0.58	34.38	40.00	5.62
	55.415	26.86	7.53	0.74	35.13	40.00	4.87
Vertical	73.617	24.71	8.07	0.86	33.64	40.00	6.36
	480.528	20.67	17.20	2.22	40.09	46.00	5.91
	668.142	18.33	19.35	2.65	40.33	46.00	5.67
	763.376	19.28	19.77	2.83	41.88	46.00	4.12

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0105 Page 32 of 38

 EUT
 :
 LED LCD TV
 Temperature :
 22°C

 Model No.
 :
 55H9D
 Humidity :
 60%RH

Test Mode : HDMI1080P Date of Test : Feb 06, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	60.918	23.25	6.66	0.78	30.69	40.00	9.31
	72.592	24.73	7.85	0.85	33.43	40.00	6.57
Horizontal	158.112	19.17	11.38	1.32	31.87	43.50	11.63
Попідопіаї	549.020	20.37	17.84	2.38	40.59	46.00	5.41
	590.974	18.71	18.17	2.50	39.38	46.00	6.62
	884.503	15.23	21.05	3.05	39.33	46.00	6.67
	34.517	17.24	16.02	0.60	33.86	40.00	6.14
	56.991	25.70	7.25	0.75	33.70	40.00	6.30
Vertical	75.977	25.15	8.41	0.87	34.43	40.00	5.57
	157.007	23.75	11.43	1.31	36.49	43.50	7.01
	478.846	20.89	17.20	2.22	40.31	46.00	5.69
	755.387	17.74	19.60	2.81	40.15	46.00	5.85

EUT : LED LCD TV Temperature :  $22^{\circ}$ C

Model No. : 55H9D Humidity : 60%RH

Test Mode : USB Play Date of Test : Feb 06, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	43.506	22.11	10.95	0.66	33.72	40.00	6.28
	74.657	26.74	8.24	0.86	35.84	40.00	4.16
Horizontal	129.015	21.11	12.77	1.18	35.06	43.50	8.44
попідопіаї	146.888	22.23	12.41	1.27	35.91	43.50	7.59
	180.649	24.05	10.30	1.41	35.76	43.50	7.74
	807.429	15.52	20.33	2.91	38.76	46.00	7.24
	36.001	18.77	15.10	0.61	34.48	40.00	5.52
	56.593	27.18	7.32	0.75	35.25	40.00	4.75
Vantical	77.321	25.23	8.56	0.87	34.66	40.00	5.34
Vertical	199.986	22.92	10.10	1.48	34.50	43.50	9.00
	497.677	17.10	17.46	2.26	36.82	46.00	9.18
	869.130	13.68	20.90	3.03	37.61	46.00	8.39

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9D Humidity : 60%RH

Test Mode : LAN Play Date of Test : Feb 06, 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)
	74.135	26.09	8.13	0.86	35.08	40.00	4.92
	146.888	21.11	12.41	1.27	34.79	43.50	8.71
Harizantal	210.786	22.93	10.65	1.51	35.09	43.50	8.41
Horizontal	390.723	19.67	16.10	2.02	37.79	46.00	8.21
	566.622	17.54	18.18	2.44	38.16	46.00	7.84
	744.866	16.01	19.53	2.79	38.33	46.00	7.67
	33.445	17.97	16.51	0.59	35.07	40.00	4.93
	57.191	26.91	7.21	0.76	34.88	40.00	5.12
Vertical	94.098	23.20	11.47	0.97	35.64	43.50	7.86
	282.985	24.11	13.45	1.72	39.28	46.00	6.72
	640.611	15.65	19.20	2.59	37.44	46.00	8.56
	875.247	13.63	20.93	3.05	37.61	46.00	8.39

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9D Humidity : 60%RH

Test Mode : MHL Date of Test : Feb 06, 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)
	65.573	24.79	6.96	0.81	32.56	40.00	7.44
	80.927	22.33	9.07	0.89	32.29	40.00	7.71
Horizontal	117.360	21.69	12.25	1.11	35.05	43.50	8.45
Horizoniai	170.195	22.65	10.90	1.37	34.92	43.50	8.58
	520.888	19.75	17.56	2.32	39.63	46.00	6.37
	796.183	16.46	20.37	2.89	39.72	46.00	6.28
	35.749	17.15	15.19	0.61	32.95	40.00	7.05
	72.084	25.17	7.79	0.85	33.81	40.00	6.19
Vertical	112.524	21.63	12.26	1.08	34.97	43.50	8.53
	267.546	21.98	13.20	1.68	36.86	46.00	9.14
	423.540	17.00	16.33	2.10	35.43	46.00	10.57
	640.611	17.36	19.20	2.59	39.15	46.00	6.85

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9D Humidity : 60%RH

Test Mode : Wifi Date of Test : Feb 06, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	72.592	26.53	7.85	0.85	35.23	40.00	4.77
	80.362	26.54	8.99	0.89	36.42	40.00	3.58
Horizontal	240.830	24.11	12.16	1.61	37.88	46.00	8.12
Horizontai	607.787	16.73	18.55	2.52	37.80	46.00	8.20
	854.025	18.00	20.57	3.00	41.57	46.00	4.43
	893.857	17.28	21.13	3.07	41.48	46.00	4.52
	31.071	17.95	17.71	0.57	36.23	40.00	3.77
	74.135	27.02	8.13	0.86	36.01	40.00	3.99
Vertical	244.232	23.26	12.34	1.62	37.22	46.00	8.78
	499.425	16.47	17.50	2.26	36.23	46.00	9.77
	616.372	19.37	18.75	2.54	40.66	46.00	5.34
	896.997	16.74	21.17	3.07	40.98	46.00	5.02

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0105 Page 37 of 38

## 5 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 Appendix Figure 21,22

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)

Hisense Electric Co., Ltd. FCC ID: W9HLCDF0105 Page 38 of 38

# 6 DEVIATION TO TEST SPECIFICATIONS

None