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

LED LCD TV

Model No.	Brand
55H8C,55H8C+	
55H8D,55H8D+	
55H8+0D,55H8+0D1,55H8+0D2	Hisense
55H80+0D,55H80+0D1,55H80+0D2	
55H8107	

FCC ID: W9HLCDF0109

Prepared For: Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy & Technology

Development Zone, Qingdao, China

Prepared By: Audix Technology (Shanghai) Co., Ltd.

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Report No. : ACI-F17087 Date of Test : Feb 08- 10, 2017 Date of Report : Feb 24, 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.	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 Feb 08- 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.F17086, a Verification report.

Date of Test:	Feb 08- 10, 20177	Date of Report :	Feb 24, 2017
Producer:	HUIMIN JAN / Assistant	_	
Review:	Byron W. Assistant Manager	_	
For and	on behalf of		
Signatory:	how so	•	

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:

Description of Test Item	Standard	Limits	Results
	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 : 55H8C,55H8C+,55H8D,55H8D+,55H8107,

55H8+0D,55H8+0D1,55H8+0D2, 55H80+0D,55H80+0D1,55H80+0D2

Brand : Hisense

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

number. The 55H8C 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 : HD550DU-B52

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

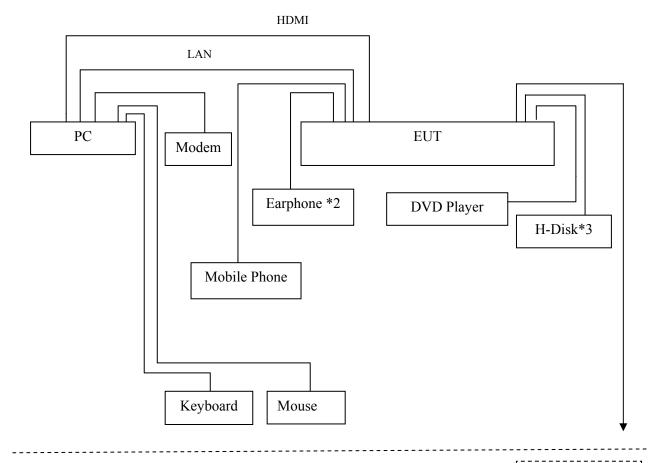
The following test equipments are used during the conducted emission test in a shielded room:

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

Outside the Test Room

3.2.1 EUT & Peripherals

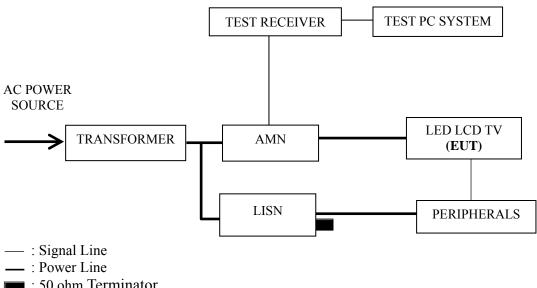


ATSC SG

or

TV 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 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
HDMI1 3840*2160@60Hz & 1kHz Playing
HDMI2 3840*2160@60Hz & 1kHz Playing
HDMI3 3840*2160@60Hz & 1kHz Playing
HDMI4 3840*2160@60Hz & 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
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
HDMI1 3840*2160@60Hz & 1kHz Playing	P13
HDMI2 3840*2160@60Hz & 1kHz Playing	P14
HDMI3 3840*2160@60Hz & 1kHz Playing	P15
HDMI4 3840*2160@60Hz & 1kHz Playing	P16
HDMI1 1920*1080@60Hz & 1kHz Playing	P17
HDMI1 1280*1024@60Hz & 1kHz playing	P18
HDMI1 640*480@60Hz & 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 USB Play test mode. The worst emission is detected at 0.150MHz (Quasi-Peak Value) with corrected signal level of 57.69 dB (μ V) (limit is 66.00 dB (μ V)), when the Line of the EUT is connected to AMN.

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI1 3840*2160@60Hz Date of Test : Feb 08 20

& 1kHz Playing Feb 08, 2017

	<u> </u>) f .		г · ·			
Test	Frequency	Meter	Factor	Emission Level	Limits	Margin	D 1
Line	(MHz)	Reading	(dB)		dB(μV)	(dB)	Remark
	, ,	$dB(\mu V)$	` ′	$dB(\mu V)$			
	0.150	45.30	10.59	55.89	66.00	10.11	
	0.348	33.09	10.46	43.55	59.00	15.45	
	0.535	33.90	10.40	44.30	56.00	11.70	QP
	1.418	31.61	10.40	42.01	56.00	13.99	Q1
	1.993	33.90	10.41	44.31	56.00	11.69	
Line	17.410	18.70	10.58	29.28	60.00	30.72	
Line	0.150	29.60	10.59	40.19	56.00	15.81	
	0.348	16.09	10.46	26.55	49.00	22.45	AV
	0.535	18.70	10.40	29.10	46.00	16.90	
	1.418	15.31	10.40	25.71	46.00	20.29	
	1.993	21.00	10.41	31.41	46.00	14.59	
	17.410	14.10	10.58	24.68	50.00	25.32	
	0.150	44.40	10.58	54.98	66.00	11.02	
	0.348	32.79	10.45	43.24	59.00	15.76	
	0.529	34.00	10.39	44.39	56.00	11.61	OD
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	2.286	32.20	10.44	42.64	56.00	13.36	
NI41	23.400	11.00	10.80	21.80	60.00	38.20	
Neutral	0.150	28.50	10.58	39.08	56.00	16.92	
	0.348	18.19	10.45	28.64	49.00	20.36	
	0.529	19.50	10.39	29.89	46.00	16.11	AX 7
	0.890	18.30	10.40	28.70	46.00	17.30	AV
	2.286	22.30	10.44	32.74	46.00	13.26	
	23.400	5.50	10.80	16.30	50.00	33.70	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI2 3840*2160@60Hz

& 1kHz Playing

Date of Test: Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.50	10.59	55.09	66.00	10.91	
	0.355	32.40	10.45	42.85	58.85	16.00	
	0.529	34.20	10.40	44.60	56.00	11.40	OD
	0.882	33.80	10.40	44.20	56.00	11.80	QP
	1.952	31.70	10.43	42.13	56.00	13.87	
Line	16.385	25.20	10.67	35.87	60.00	24.13	
Line	0.150	28.20	10.59	38.79	56.00	17.21	
	0.355	16.70	10.45	27.15	48.85	21.70	AV
	0.529	19.90	10.40	30.30	46.00	15.70	
	0.882	18.20	10.40	28.60	46.00	17.40	
	1.952	20.20	10.43	30.63	46.00	15.37	
	16.385	21.40	10.67	32.07	50.00	17.93	
	0.150	43.90	10.58	54.48	66.00	11.52	
	0.327	32.70	10.45	43.15	59.52	16.37	
	0.517	33.70	10.39	44.09	56.00	11.91	OD
	0.885	34.00	10.40	44.40	56.00	11.60	QP
	2.237	31.60	10.44	42.04	56.00	13.96	
Neutral	16.547	23.20	10.67	33.87	60.00	26.13	
Neutrai	0.150	28.20	10.58	38.78	56.00	17.22	
	0.327	13.10	10.45	23.55	49.52	25.97	
	0.517	19.60	10.39	29.99	46.00	16.01	AV
	0.885	18.50	10.40	28.90	46.00	17.10	
	2.237	21.40	10.44	31.84	46.00	14.16	
	16.547	18.40	10.67	29.07	50.00	20.93	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI3 3840*2160@60Hz

& 1kHz Playing

Date of Test: Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.50	10.59	55.09	66.00	10.91	
	0.337	32.10	10.46	42.56	59.27	16.71	OD
	0.525	34.20	10.40	44.60	56.00	11.40	
	0.890	34.10	10.40	44.50	56.00	11.50	QP
	2.255	32.00	10.42	42.42	56.00	13.58	
Line	16.647	23.70	10.57	34.27	60.00	25.73	
Line	0.150	28.20	10.59	38.79	56.00	17.21	
	0.337	11.90	10.46	22.36	49.27	26.91	
	0.525	20.00	10.40	30.40	46.00	15.60	AV
	0.890	18.50	10.40	28.90	46.00	17.10	
	2.255	22.40	10.42	32.82	46.00	13.18	
	16.647	19.10	10.57	29.67	50.00	20.33	
	0.150	44.10	10.58	54.68	66.00	11.32	OD
	0.336	32.40	10.45	42.85	59.31	16.46	
	0.531	33.90	10.39	44.29	56.00	11.71	
	0.875	34.00	10.40	44.40	56.00	11.60	QP
	1.754	32.09	10.43	42.52	56.00	13.48	
Neutral	16.478	23.40	10.67	34.07	60.00	25.93	
Neuman	0.150	28.40	10.58	38.98	56.00	17.02	
	0.336	12.20	10.45	22.65	49.31	26.66	
	0.531	19.50	10.39	29.89	46.00	16.11	AV
	0.875	18.40	10.40	28.80	46.00	17.20	
	1.754	22.29	10.43	32.72	46.00	13.28	
	16.478	18.40	10.67	29.07	50.00	20.93	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI4 3840*2160@60Hz

& 1kHz Playing

Date of Test: Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.60	10.59	55.19	66.00	10.81	
	0.339	32.39	10.46	42.85	59.23	16.38	
	0.529	34.40	10.40	44.80	56.00	11.20	QP
	0.875	34.10	10.40	44.50	56.00	11.50	QP
	2.457	30.40	10.42	40.82	56.00	15.18	
Line	16.343	23.39	10.57	33.96	60.00	26.04	1
Line	0.150	28.50	10.59	39.09	56.00	16.91	
	0.339	15.39	10.46	25.85	49.23	23.38	AV
	0.529	20.10	10.40	30.50	46.00	15.50	
	0.875	18.40	10.40	28.80	46.00	17.20	
	2.457	22.20	10.42	32.62	46.00	13.38	
	16.343	18.69	10.57	29.26	50.00	20.74	
	0.150	44.20	10.58	54.78	66.00	11.22	
	0.337	32.40	10.45	42.85	59.27	16.42	
	0.529	34.20	10.39	44.59	56.00	11.41	OD
	0.888	33.90	10.40	44.30	56.00	11.70	QP
	1.861	30.70	10.43	41.13	56.00	14.87	
Neutral	16.378	23.50	10.67	34.17	60.00	25.83	
Neutrai	0.150	28.40	10.58	38.98	56.00	17.02	
	0.337	12.20	10.45	22.65	49.27	26.62	
	0.529	19.70	10.39	30.09	46.00	15.91	AV
	0.888	18.10	10.40	28.50	46.00	17.50	
F	1.861	18.40	10.43	28.83	46.00	17.17	
	16.378	18.50	10.67	29.17	50.00	20.83	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI1 1920*1080@60Hz

& 1kHz Playing

Date of Test: Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.90	10.59	55.49	66.00	10.51	
	0.343	32.89	10.46	43.35	59.13	15.78	
	0.535	34.40	10.40	44.80	56.00	11.20	OP
	0.890	34.20	10.40	44.60	56.00	11.40	QP
	2.261	32.40	10.42	42.82	56.00	13.18	
Line	17.568	20.60	10.58	31.18	60.00	28.82	
Line	0.150	28.70	10.59	39.29	56.00	16.71	
	0.343	15.59	10.46	26.05	49.13	23.08	AV
	0.535	19.50	10.40	29.90	46.00	16.10	
	0.890	19.70	10.40	30.10	46.00	15.90	
	2.261	22.70	10.42	33.12	46.00	12.88	
	17.568	15.70	10.58	26.28	50.00	23.72	
	0.150	44.30	10.58	54.88	66.00	11.12	
	0.347	32.89	10.45	43.34	59.04	15.70	
	0.529	34.00	10.39	44.39	56.00	11.61	ΟD
	0.890	34.10	10.40	44.50	56.00	11.50	QP
	2.237	31.70	10.44	42.14	56.00	13.86	
Neutral	23.400	11.10	10.80	21.90	60.00	38.10	
Neutrai	0.150	28.50	10.58	39.08	56.00	16.92	
	0.347	16.79	10.45	27.24	49.04	21.80	
	0.529	19.60	10.39	29.99	46.00	16.01	AV
	0.890	18.30	10.40	28.70	46.00	17.30	
	2.237	21.20	10.44	31.64	46.00	14.36	
	23.400	5.70	10.80	16.50	50.00	33.50	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI1 1280*1024@60Hz Date of Test : Feb 08, 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	44.90	10.59	55.49	66.00	10.51	
	0.343	32.99	10.46	43.45	59.13	15.68	
	0.524	33.60	10.40	44.00	56.00	12.00	OD
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	2.261	32.20	10.42	42.62	56.00	13.38	
Line	5.713	15.30	10.46	25.76	60.00	34.24	
Line	0.150	28.80	10.59	39.39	56.00	16.61	
	0.343	15.79	10.46	26.25	49.13	22.88	AV
	0.524	18.00	10.40	28.40	46.00	17.60	
	0.890	18.50	10.40	28.90	46.00	17.10	
	2.261	22.30	10.42	32.72	46.00	13.28	
	5.713	11.40	10.46	21.86	50.00	28.14	
	0.150	44.40	10.58	54.98	66.00	11.02	
	0.339	32.99	10.45	43.44	59.22	15.78	
	0.535	34.20	10.39	44.59	56.00	11.41	OD
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	2.261	32.30	10.44	42.74	56.00	13.26	
Neutral	17.568	20.49	10.69	31.18	60.00	28.82	
Neutrai	0.150	28.40	10.58	38.98	56.00	17.02	
	0.339	14.39	10.45	24.84	49.22	24.38	
	0.535	19.80	10.39	30.19	46.00	15.81	AV
	0.890	18.40	10.40	28.80	46.00	17.20	
	2.261	22.20	10.44	32.64	46.00	13.36	
	17.568	15.59	10.69	26.28	50.00	23.72	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI1 640*480@60Hz Date of Test : Feb 08, 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	44.80	10.59	55.39	66.00	10.61	
	0.336	32.80	10.46	43.26	59.31	16.05	
	0.529	34.00	10.40	44.40	56.00	11.60	OD
	0.890	34.20	10.40	44.60	56.00	11.40	QP
	2.262	32.00	10.42	42.42	56.00	13.58	
Line	17.568	20.80	10.58	31.38	60.00	28.62	1
Line	0.150	28.70	10.59	39.29	56.00	16.71	
	0.336	13.50	10.46	23.96	49.31	25.35	
	0.529	19.60	10.40	30.00	46.00	16.00	AV
	0.890	18.50	10.40	28.90	46.00	17.10	AV
	2.262	22.50	10.42	32.92	46.00	13.08	
	17.568	15.60	10.58	26.18	50.00	23.82	
	0.150	44.30	10.58	54.88	66.00	11.12	
	0.336	33.00	10.45	43.45	59.31	15.86	
	0.524	33.60	10.39	43.99	56.00	12.01	ΩD
	0.890	33.90	10.40	44.30	56.00	11.70	QP
	1.781	33.59	10.43	44.02	56.00	11.98	
Neutral	17.568	20.69	10.69	31.38	60.00	28.62	
Neutrai	0.150	28.50	10.58	39.08	56.00	16.92	
	0.336	15.70	10.45	26.15	49.31	23.16	
	0.524	18.00	10.39	28.39	46.00	17.61	A 3.7
	0.890	18.70	10.40	29.10	46.00	16.90	AV
	1.781	21.49	10.43	31.92	46.00	14.08	
	17.568	15.29	10.69	25.98	50.00	24.02	

Model No. : 55H8C Humidity : 48%RH

Test Mode : HDMI11080P Date of Test : Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.80	10.59	55.39	66.00	10.61	
	0.332	32.60	10.46	43.06	59.40	16.34	
Line	0.529	34.10	10.40	44.50	56.00	11.50	OD
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	2.261	32.30	10.42	42.72	56.00	13.28	
	8.637	11.70	10.48	22.18	60.00	37.82	1
	0.150	28.70	10.59	39.29	56.00	16.71	AV
	0.332	14.90	10.46	25.36	49.40	24.04	
	0.529	20.20	10.40	30.60	46.00	15.40	
	0.890	18.80	10.40	29.20	46.00	16.80	
	2.261	22.60	10.42	33.02	46.00	12.98	
	8.637	6.50	10.48	16.98	50.00	33.02	
	0.150	44.40	10.58	54.98	66.00	11.02	
	0.332	33.10	10.45	43.55	59.40	15.85	
	0.529	34.10	10.39	44.49	56.00	11.51	OD
	0.890	34.10	10.40	44.50	56.00	11.50	QP
	2.237	31.80	10.44	42.24	56.00	13.76	
NI asstmal	17.568	20.59	10.69	31.28	60.00	28.72	
Neutral	0.150	28.60	10.58	39.18	56.00	16.82	
	0.332	13.10	10.45	23.55	49.40	25.85	
	0.529	19.70	10.39	30.09	46.00	15.91	AV
	0.890	18.50	10.40	28.90	46.00	17.10	
	2.237	21.60	10.44	32.04	46.00	13.96	
	17.568	15.39	10.69	26.08	50.00	23.92	

Model No. : 55H8C Humidity : 48%RH

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

		Meter		Emission			
Test	Frequency	Reading	Factor	Level	Limits	Margin	Remark
Line	(MHz)	dB(μV)	(dB)	dB(μV)	$dB(\mu V)$	(dB)	Remark
	0.150	47.10	10.59	57.69	66.00	8.31	
	0.343	32.99	10.46	43.45	59.13	15.68	
	0.524	33.60	10.40	44.00	56.00	12.00	$\bigcap_{\mathbf{D}}$
	0.890	34.20	10.40	44.60	56.00	11.40	QP
	2.422	30.80	10.42	41.22	56.00	14.78	
Line	17.568	20.90	10.58	31.48	60.00	28.52	
Line	0.150	30.10	10.59	40.69	56.00	15.31	AV
	0.343	15.69	10.46	26.15	49.13	22.98	
	0.524	18.10	10.40	28.50	46.00	17.50	
	0.890	18.60	10.40	29.00	46.00	17.00	
	2.422	22.50	10.42	32.92	46.00	13.08	
	17.568	15.60	10.58	26.18	50.00	23.82	
	0.150	44.30	10.58	54.88	66.00	11.12	
	0.339	32.99	10.45	43.44	59.22	15.78	
	0.524	33.70	10.39	44.09	56.00	11.91	ΩD
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	2.448	31.51	10.44	41.95	56.00	14.05	
Neutral	17.568	20.69	10.69	31.38	60.00	28.62	
Neutrai	0.150	28.30	10.58	38.88	56.00	17.12	
	0.339	14.39	10.45	24.84	49.22	24.38	
	0.524	18.60	10.39	28.99	46.00	17.01	AV
	0.890	18.50	10.40	28.90	46.00	17.10	
	2.448	22.21	10.44	32.65	46.00	13.35	
	17.568	15.39	10.69	26.08	50.00	23.92	

Model No. : 55H8C Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.80	10.59	55.39	66.00	10.61	
	0.339	32.89	10.46	43.35	59.22	15.87	
	0.529	34.10	10.40	44.50	56.00	11.50	OD
	0.890	34.10	10.40	44.50	56.00	11.50	QP
	2.261	32.40	10.42	42.82	56.00	13.18	
Lina	17.568	21.00	10.58	31.58	60.00	28.42	_
Line	0.150	28.60	10.59	39.19	56.00	16.81	
	0.339	14.49	10.46	24.95	49.22	24.27	AV
	0.529	19.80	10.40	30.20	46.00	15.80	
	0.890	18.70	10.40	29.10	46.00	16.90	
	2.261	22.70	10.42	33.12	46.00	12.88	
	17.568	15.60	10.58	26.18	50.00	23.82	
	0.150	44.30	10.58	54.88	66.00	11.12	
	0.343	32.99	10.45	43.44	59.13	15.69	
	0.535	34.40	10.39	44.79	56.00	11.21	OD
	1.065	31.80	10.40	42.20	56.00	13.80	QP
	2.133	32.30	10.43	42.73	56.00	13.27	
Neutral	24.790	10.20	10.83	21.03	60.00	38.97	
Neutrai	0.150	28.40	10.58	38.98	56.00	17.02	
	0.343	15.69	10.45	26.14	49.13	22.99	
	0.535	19.90	10.39	30.29	46.00	15.71	AV
	1.065	18.54	10.40	28.94	46.00	17.06	
	2.133	22.60	10.43	33.03	46.00	12.97	
	24.790	6.50	10.83	17.33	50.00	32.67	

Model No. : 55H9D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.80	10.59	55.39	66.00	10.61	
	0.346	32.99	10.46	43.45	59.05	15.60	
	0.535	34.50	10.40	44.90	56.00	11.10	$\bigcap_{\mathbf{D}}$
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	2.261	32.10	10.42	42.52	56.00	13.48	
Line	16.398	24.80	10.57	35.37	60.00	24.63	
Line	0.150	28.60	10.59	39.19	56.00	16.81	
	0.346	16.99	10.46	27.45	49.05	21.60	AV
	0.535	20.00	10.40	30.40	46.00	15.60	
	0.890	18.60	10.40	29.00	46.00	17.00	
	2.261	22.50	10.42	32.92	46.00	13.08	
	16.398	19.90	10.57	30.47	50.00	19.53	
	0.150	44.60	10.58	55.18	66.00	10.82	
	0.343	33.09	10.45	43.54	59.13	15.59	
	0.524	33.60	10.39	43.99	56.00	12.01	OD
	1.197	31.20	10.41	41.61	56.00	14.39	QP
	2.261	32.40	10.44	42.84	56.00	13.16	
Neutral	24.790	10.80	10.83	21.63	60.00	38.37	
Neutrai	0.150	28.30	10.58	38.88	56.00	17.12	
	0.343	15.59	10.45	26.04	49.13	23.09	
	0.524	17.50	10.39	27.89	46.00	18.11	AV
	1.197	15.20	10.41	25.61	46.00	20.39	
	2.261	22.60	10.44	33.04	46.00	12.96	
	24.790	6.50	10.83	17.33	50.00	32.67	

Model No. : 55H8C Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(µV)	Limits dB(µV)	Margin (dB)	Remark
	0.150	44.80	10.59	55.39	66.00	10.61	
	0.332	32.40	10.46	42.86	59.41	16.55	
	0.540	34.10	10.40	44.50	56.00	11.50	\bigcap D
	0.885	34.00	10.40	44.40	56.00	11.60	QP
	2.250	32.00	10.42	42.42	56.00	13.58	
Time	16.359	23.70	10.57	34.27	60.00	25.73	_
Line	0.150	28.10	10.59	38.69	56.00	17.31	
	0.332	12.10	10.46	22.56	49.41	26.85	AV
	0.540	20.00	10.40	30.40	46.00	15.60	
	0.885	18.40	10.40	28.80	46.00	17.20	
	2.250	22.50	10.42	32.92	46.00	13.08	
	16.359	19.10	10.57	29.67	50.00	20.33	
	0.150	44.30	10.58	54.88	66.00	11.12	
	0.332	32.80	10.45	43.25	59.40	16.15	
	0.529	34.00	10.39	44.39	56.00	11.61	OD
	0.890	34.00	10.40	44.40	56.00	11.60	QP
	1.762	32.29	10.43	42.72	56.00	13.28	
NI asstract	16.398	23.60	10.67	34.27	60.00	25.73	
Neutral	0.150	28.70	10.58	39.28	56.00	16.72	
	0.332	12.30	10.45	22.75	49.40	26.65	
	0.529	19.70	10.39	30.09	46.00	15.91	AX7
	0.890	18.60	10.40	29.00	46.00	17.00	AV
	1.762	22.39	10.43	32.82	46.00	13.18	
	16.398	18.50	10.67	29.17	50.00	20.83	

4 RADIATED EMISSION TEST

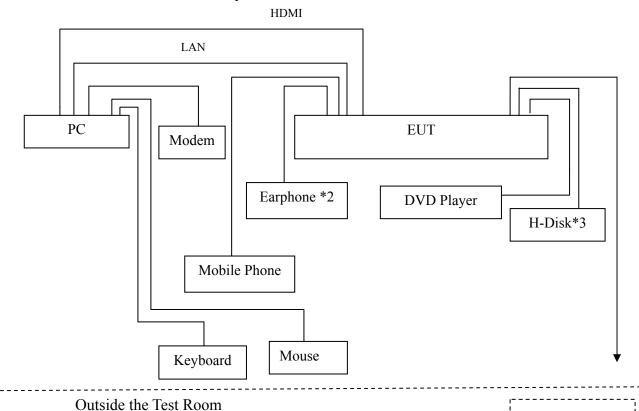
4.1 Test Equipment

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



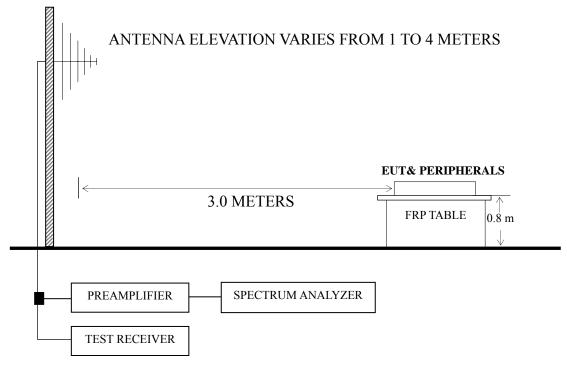
ATSC SG

TV SG

or

4.2.2 Radiated emission test setup

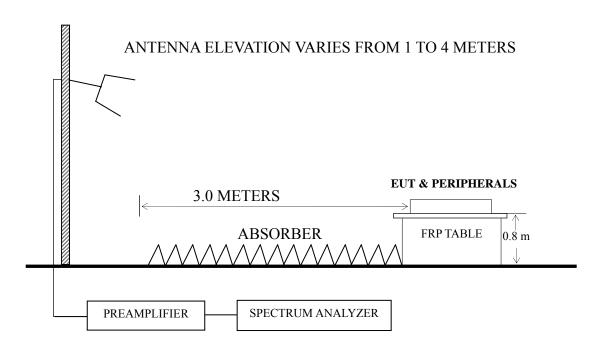
4.2.2.1 Below 1GHz



: 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 (μ V/m) = 20 log Emission Level (μ 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	P29-P30
	HDMI2 3840*2160@60Hz & 1kHz Playing	P31
	HDMI3 3840*2160@30Hz & 1kHz Playing	P32
	HDMI4 3840*2160@60Hz & 1kHz Playing	P33
	HDMI1 1920*1080@60Hz & 1kHz Playing	P34
Below 1GHz	HDMI1 1280*1024@60Hz & 1kHz playing	P35
Delow Toffz	HDMI1 640*480@60Hz & 1kHz playing	P36
	HDMI11080P	P37
	USB Play	P38
	LAN Play	P39
	MHL	P40
	Wifi	P41
Above 1GHz	HDMI1 3840*2160@60Hz & 1kHz Playing	P29-P30

- 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° 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 of42.98dB (μ V/m) (limit is 46.00 dB (μ V/m)), when the antenna was 2.0 m height and the turntable was at 130°. The worst emission at vertical polarization was detected at 75.977 MHz with corrected signal level of 36.84dB (μ V/m) (limit is 40.00 dB (μ V/m)), when the antenna was 1.4 m height and the turntable was at 0°.

Model No. : 55H8C Humidity : 60%RH

Test Mode : HDMI1 3840*2160@60Hz Date of Test : Feb 10, 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 ($\mu V/m$)	Margin (dB)	Remark
	75.977	27.56	8.41	0.87	0.00	36.84	40.00	3.16	
	109.029	23.60	12.14	1.06	0.00	36.80	43.50	6.70	
	144.842	25.06	12.60	1.26	0.00	38.92	43.50	4.58	ΩD
	297.224	22.25	13.60	1.75	0.00	37.60	46.00	8.40	QP
	684.745	20.19	19.45	2.69	0.00	42.33	46.00	3.67	
Horizontal	890.728	18.48	21.10	3.07	0.00	42.65	46.00	3.35	
Tiorizontai	1327.235	55.43	24.97	3.82	35.97	48.25	74.00	25.75	
	2617.383	51.11	28.93	5.44	35.20	50.28	74.00	23.72	PK
	3097.515	48.65	30.71	5.97	35.09	50.24	74.00	23.76	
	1327.235	33.29	24.97	3.82	35.97	26.11	54.00	27.89	
	2617.383	30.29	28.93	5.44	35.20	29.46	54.00	24.54	AV
	3097.515	28.36	30.71	5.97	35.09	29.95	54.00	24.05	

Model No. : 55H8C Humidity : 60%RH

Test Mode : HDMI1 3840*2160@60Hz Date of Test : Feb 10, 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
	63.983	27.87	6.84	0.80	0.00	35.51	40.00	4.49	
	75.977	27.21	8.41	0.87	0.00	36.49	40.00	3.51	
	144.842	24.10	12.60	1.26	0.00	37.96	43.50	5.54	QP
	297.224	19.54	13.60	1.75	0.00	34.89	46.00	11.11	Qr
	684.745	19.53	19.45	2.69	0.00	41.67	46.00	4.33	
Vertical	890.728	18.81	21.10	3.07	0.00	42.98	46.00	3.02	
Vertical	1322.488	65.49	24.95	3.82	35.98	58.28	74.00	15.72	
	2659.932	50.18	29.10	5.48	35.20	49.56	74.00	24.44	PK
	3108.635	50.90	30.73	5.97	35.08	52.52	74.00	21.48	
	1322.488	44.49	24.95	3.82	35.98	37.28	54.00	16.72	
	2659.932	30.74	29.10	5.48	35.20	30.12	54.00	23.88	AV
	3108.635	31.22	30.73	5.97	35.08	32.84	54.00	21.16	

 EUT
 :
 LED LCD TV
 Temperature :
 22°C

 Model No.
 :
 55H8C
 Humidity :
 60%RH

 Test Mode
 :
 HDMI2 3840*2160@30Hz & Date of Test : & Feb 10, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB ($\mu V/m$)	Margin (dB)
	75.182	26.86	8.34	0.86	36.06	40.00	3.94
	141.826	23.41	12.98	1.24	37.63	43.50	5.87
Horizontal	440.196	20.83	16.63	2.13	39.59	46.00	6.41
Попідопіаї	675.208	20.29	19.47	2.67	42.43	46.00	3.57
	851.035	18.26	20.57	3.00	41.83	46.00	4.17
	887.610	18.46	21.10	3.07	42.63	46.00	3.37
	73.876	26.74	8.13	0.86	35.73	40.00	4.27
	106.385	23.35	12.25	1.04	36.64	43.50	6.86
Vertical	146.374	24.39	12.48	1.26	38.13	43.50	5.37
	325.596	24.54	14.33	1.83	40.70	46.00	5.30
	658.836	20.27	19.20	2.63	42.10	46.00	3.90
	893.857	17.42	21.13	3.07	41.62	46.00	4.38

EUT : LED LCD TV Temperature : 22° C

Model No. : 55H8C Humidity : 60%RH

Test Mode : HDMI3 3840*2160@30Hz Date of Test : Feb 10, 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)
	64.887	26.33	6.90	0.80	34.03	40.00	5.97
	75.977	26.44	8.41	0.87	35.72	40.00	4.28
Horizontal	132.221	23.87	12.86	1.19	37.92	43.50	5.58
Попідопіаї	297.224	25.15	13.60	1.75	40.50	46.00	5.50
	684.745	20.31	19.45	2.69	42.45	46.00	3.55
	890.728	18.20	21.10	3.07	42.37	46.00	3.63
	73.103	27.60	7.96	0.85	36.41	40.00	3.59
	132.221	24.59	12.86	1.19	38.64	43.50	4.86
Vertical	164.908	25.38	11.10	1.35	37.83	43.50	5.67
	297.224	25.77	13.60	1.75	41.12	46.00	4.88
	776.878	19.14	20.03	2.85	42.02	46.00	3.98
	890.728	18.57	21.10	3.07	42.74	46.00	3.26

EUT : LED LCD TV Temperature : 22° C

Model No. : 55H8C Humidity : 60° RH

Test Mode : HDMI4 3840*2160@30Hz Date of Test : Feb 10, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (µV/m)	Limits dB ($\mu V/m$)	Margin (dB)
	73.876	26.03	8.13	0.86	35.02	40.00	4.98
	146.374	24.57	12.48	1.26	38.31	43.50	5.19
Horizontal	198.588	24.94	10.03	1.47	36.44	43.50	7.06
Попідопіаї	337.216	21.16	14.71	1.87	37.74	46.00	8.26
	672.845	19.76	19.47	2.65	41.88	46.00	4.12
	896.997	17.99	21.17	3.07	42.23	46.00	3.77
	65.114	26.68	6.93	0.81	34.42	40.00	5.58
	74.396	26.84	8.19	0.86	35.89	40.00	4.11
Vertical	145.351	25.25	12.54	1.26	39.05	43.50	4.45
vertical	327.887	21.75	14.39	1.85	37.99	46.00	8.01
	679.960	19.60	19.60	2.67	41.87	46.00	4.13
	893.857	18.23	21.13	3.07	42.43	46.00	3.57

EUT : LED LCD TV Temperature : 22℃

Model No. : 55H8C Humidity : 60%RH

Test Mode : HDMI1 1920*1080@60Hz Date of Test : Feb 10, 2017

Polarization	Frequency (MHz)	Meter Reading dB (µV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB ($\mu V/m$)	Margin (dB)
	63.092	26.96	6.79	0.79	34.54	40.00	5.46
	75.977	26.83	8.41	0.87	36.11	40.00	3.89
Horizontal	145.351	24.09	12.54	1.26	37.89	43.50	5.61
попиона	432.546	18.99	16.44	2.12	37.55	46.00	8.45
	682.348	19.05	19.52	2.67	41.24	46.00	4.76
	893.857	16.61	21.13	3.07	40.81	46.00	5.19
	66.034	27.39	7.01	0.81	35.21	40.00	4.79
	75.977	26.79	8.41	0.87	36.07	40.00	3.93
Vertical	144.842	25.33	12.60	1.26	39.19	43.50	4.31
	684.745	18.07	19.45	2.69	40.21	46.00	5.79
	742.259	19.84	19.57	2.79	42.20	46.00	3.80
	890.728	17.14	21.10	3.07	41.31	46.00	4.69

EUT : LED LCD TV Temperature : 22° C

Model No. : 55H8C Humidity : 60%RH

Test Mode : HDMI1 1280*1024@60Hz Date of Test : Feb 10, 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)
	75.977	26.02	8.41	0.87	35.30	40.00	4.70
	144.842	24.07	12.60	1.26	37.93	43.50	5.57
Horizontal	324.456	22.29	14.27	1.83	38.39	46.00	7.61
попиона	539.478	20.71	17.60	2.36	40.67	46.00	5.33
	684.745	19.30	19.45	2.69	41.44	46.00	4.56
	896.997	15.54	21.17	3.07	39.78	46.00	6.22
	64.887	27.67	6.90	0.80	35.37	40.00	4.63
	73.359	27.14	8.02	0.86	36.02	40.00	3.98
Vertical -	145.861	23.38	12.48	1.26	37.12	43.50	6.38
	324.456	22.35	14.27	1.83	38.45	46.00	7.55
	539.478	18.58	17.60	2.36	38.54	46.00	7.46
	682.348	17.55	19.52	2.67	39.74	46.00	6.26

EUT : LED LCD TV Temperature : 22° C

Model No. : 55H8C Humidity : 60° RH

Test Mode : HDMI1 640*480@60Hz & Date of Test : Feb 10, 2017

1kHz Playing

	Frequency	Meter	Antenna	Cable	Emission	Limits	Margin
Polarization	(MHz)	Reading	Factor	Loss	Level dB	dB	_
	(МПZ)	dB (µV)	(dB/m)	(dB)	$(\mu V/m)$	$(\mu V/m)$	(dB)
	64.887	25.74	6.90	0.80	33.44	40.00	6.56
	73.103	26.79	7.96	0.85	35.60	40.00	4.40
Harizantal	109.029	23.39	12.14	1.06	36.59	43.50	6.91
Horizontal	145.861	23.20	12.48	1.26	36.94	43.50	6.56
	684.745	19.66	19.45	2.69	41.80	46.00	4.20
	890.728	16.64	21.10	3.07	40.81	46.00	5.19
	66.967	25.43	7.09	0.82	33.34	40.00	6.66
	75.977	26.67	8.41	0.87	35.95	40.00	4.05
Vertical -	106.013	23.09	12.25	1.04	36.38	43.50	7.12
	144.842	24.42	12.60	1.26	38.28	43.50	5.22
	326.740	18.47	14.39	1.85	34.71	46.00	11.29
	684.745	18.63	19.45	2.69	40.77	46.00	5.23

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8C Humidity : 60%RH

Test Mode : HDMI11080P Date of Test : Feb 10, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
	64.208	25.79	6.85	0.80	33.44	40.00	6.56
	75.182	25.78	8.34	0.86	34.98	40.00	5.02
Horizontal	142.824	23.57	12.82	1.25	37.64	43.50	5.86
Horizontai	434.065	19.40	16.48	2.12	38.00	46.00	8.00
	670.489	19.75	19.40	2.65	41.80	46.00	4.20
	887.610	15.87	21.10	3.07	40.04	46.00	5.96
	68.151	26.84	7.21	0.83	34.88	40.00	5.12
	74.135	26.87	8.13	0.86	35.86	40.00	4.14
Vertical	147.921	23.44	12.29	1.27	37.00	43.50	6.50
	329.039	22.31	14.44	1.85	38.60	46.00	7.40
	440.196	18.41	16.63	2.13	37.17	46.00	8.83
	679.960	18.81	19.60	2.67	41.08	46.00	4.92

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8C Humidity : 60%RH

Test Mode : USB Play Date of Test : Feb 10, 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)
	73.359	26.05	8.02	0.86	34.93	40.00	5.07
	105.272	21.44	12.28	1.04	34.76	43.50	8.74
Horizontal	150.538	22.89	12.03	1.28	36.20	43.50	7.30
поптенца	294.114	18.71	13.60	1.74	34.05	46.00	11.95
	386.634	15.62	16.00	2.00	33.62	46.00	12.38
	839.182	12.55	20.20	2.98	35.73	46.00	10.27
	66.967	25.66	7.09	0.82	33.57	40.00	6.43
	74.657	25.34	8.24	0.86	34.44	40.00	5.56
Vertical	146.374	23.08	12.48	1.26	36.82	43.50	6.68
	329.039	20.09	14.44	1.85	36.38	46.00	9.62
	682.348	16.52	19.52	2.67	38.71	46.00	7.29
	893.857	13.15	21.13	3.07	37.35	46.00	8.65

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8C Humidity : 60%RH

Test Mode : LAN Play Date of Test : Feb 10, 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)
	74.919	25.64	8.30	0.86	34.80	40.00	5.20
	108.267	21.45	12.15	1.06	34.66	43.50	8.84
Horizontal	144.842	24.34	12.60	1.26	38.20	43.50	5.30
Поптенца	434.065	17.57	16.48	2.12	36.17	46.00	9.83
	663.473	18.14	19.25	2.65	40.04	46.00	5.96
	890.728	15.27	21.10	3.07	39.44	46.00	6.56
	66.499	25.85	7.07	0.82	33.74	40.00	6.26
	75.446	24.97	8.38	0.87	34.22	40.00	5.78
Vertical	147.404	23.64	12.35	1.27	37.26	43.50	6.24
	331.355	20.26	14.54	1.86	36.66	46.00	9.34
	679.960	16.95	19.60	2.67	39.22	46.00	6.78
	893.857	12.78	21.13	3.07	36.98	46.00	9.02

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8C Humidity : 60%RH

Test Mode : MHL Date of Test : Feb 10, 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)
	75.446	25.42	8.38	0.87	34.67	40.00	5.33
	106.013	21.95	12.25	1.04	35.24	43.50	8.26
Horizontal	141.330	20.95	13.05	1.24	35.24	43.50	8.26
поптенца	239.147	22.24	12.04	1.60	35.88	46.00	10.12
	560.693	16.07	18.10	2.42	36.59	46.00	9.41
	845.088	14.19	20.40	2.98	37.57	46.00	8.43
	65.343	26.18	6.93	0.81	33.92	40.00	6.08
	75.182	26.09	8.34	0.86	35.29	40.00	4.71
Vertical	97.115	23.31	11.97	0.99	36.27	43.50	7.23
	148.963	24.26	12.16	1.28	37.70	43.50	5.80
	330.195	20.39	14.50	1.85	36.74	46.00	9.26
	672.845	16.76	19.47	2.65	38.88	46.00	7.12

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EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8C Humidity : 60%RH

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)		Emission Level dB (µV/m)	Limits dB (µV/m)	Margin (dB)
Horizontal	74.657	25.99	8.24	0.86	35.09	40.00	4.91
	104.903	21.45	12.30	1.03	34.78	43.50	8.72
	143.326	22.62	12.82	1.25	36.69	43.50	6.81
	438.655	14.27	16.60	2.13	33.00	46.00	13.00
	677.580	18.01	19.53	2.67	40.21	46.00	5.79
	884.503	11.07	21.05	3.05	35.17	46.00	10.83
Vertical	66.499	26.85	7.07	0.82	34.74	40.00	5.26
	73.617	26.92	8.07	0.86	35.85	40.00	4.15
	97.115	22.13	11.97	0.99	35.09	43.50	8.41
	147.404	24.64	12.35	1.27	38.26	43.50	5.24
	438.655	14.92	16.60	2.13	33.65	46.00	12.35
	665.804	14.84	19.30	2.65	36.79	46.00	9.21

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5 DEBUG DESCRIPTION

The following components are used during the countermeasure procedures:

Name	M/N	Manufacturer	Location
Aluminum foil	14.3*24.0	Hengrui	See Appendix Figure20
SMcontact	SMR-TSL-4-3.5-5R	Qingdao Joinset Co., Ltd	See Appendix Figure 21

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)

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6 DEVIATION TO TEST SPECIFICATIONS

None