

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

LED LCD TV

Model No.	Brand
65H9D,65H9D+	Hisense
65H9+0D,65H9+0D1,65H9+0D2	
65H90+0D,65H90+0D1,65H90+0D2	
65H9707	

FCC ID : W9HLCDF0111

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-F17102
Date of Test : Feb 20- Mar 01, 2017
Date of Report : Mar 09, 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
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 20- Mar 01, 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.

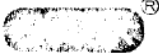
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

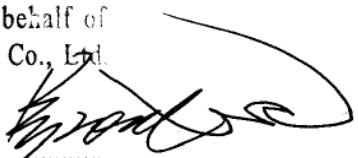
The test results for EUT's TV functions are contained in No.F17101, a Verification report.

Date of Test : Feb 20- Mar 01, 2017 Date of Report : Mar 09, 2017

Producer : Huimin Yan
HUI MIN YAN / Assistant

Review : Byron Wu
BYRON WU / Deputy Assistant Manager

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

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:

Description of Test Item	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	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B AND ANSI C63.4-2014	15.109(a) Class B	Pass

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description	:	LED LCD TV
Type of EUT	:	☒ Production ☐ Pre-product ☐ Pro-type
Model No	:	65H9D,65H9D+,65H9707, 65H9+0D,65H9+0D1,65H9+0D2, 65H90+0D,65H90+0D1,65H90+0D2
Brand	:	Hisense
Note#1	:	The above models are all the same except for the model number. The 65H9707 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 : HE650M7U51-T1
Tuner	:	Manufacturer : SILICON LABS M/N : Si2151-A10
WIFI Modular	:	FCC ID: PPQ-WCBN4511R
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 = 4.3dB (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):
U = 4.5dB (Horizontal)
U = 5.4dB (Vertical)

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

3 CONDUCTED EMISSION TEST

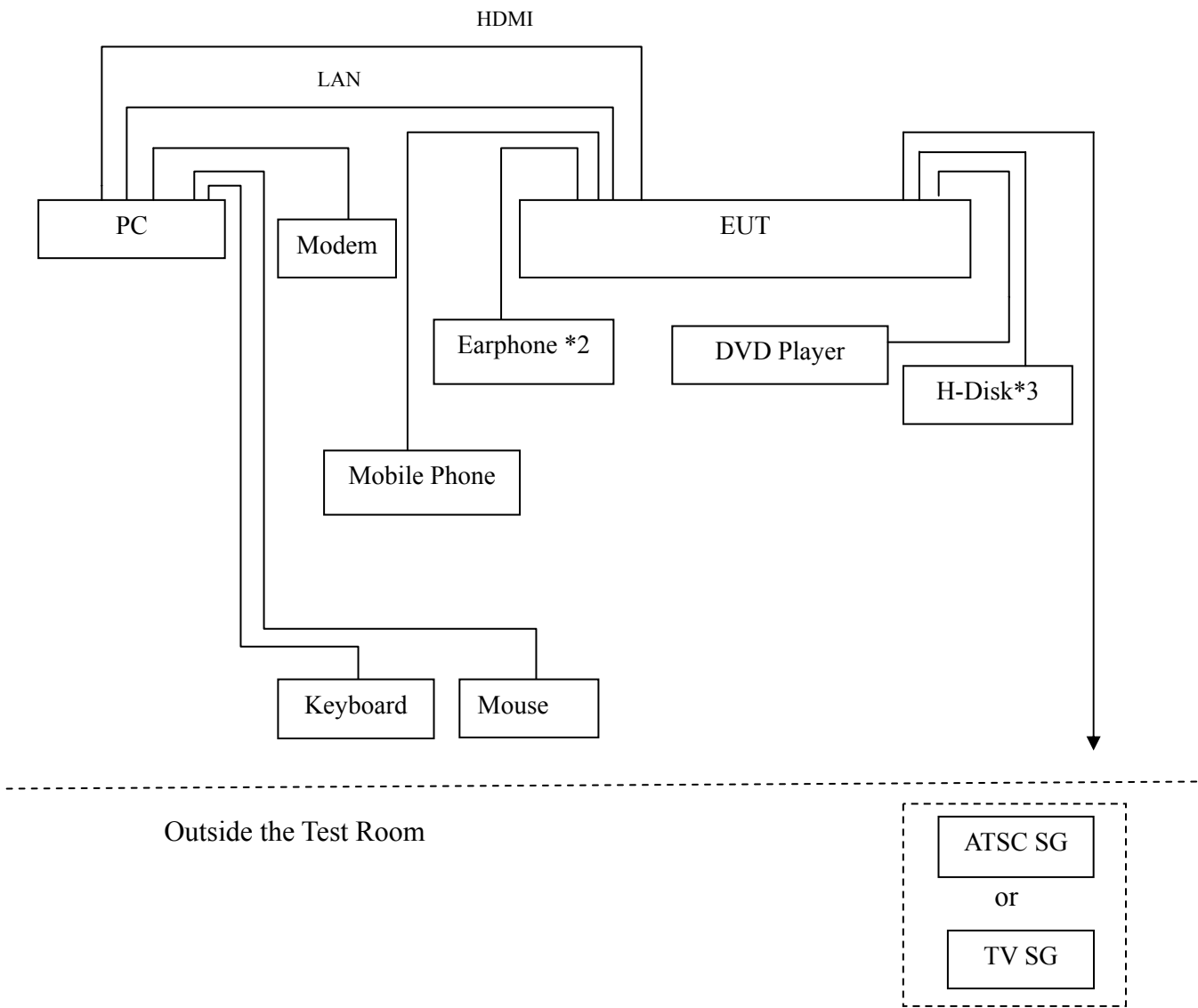
3.1 Test Equipment

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

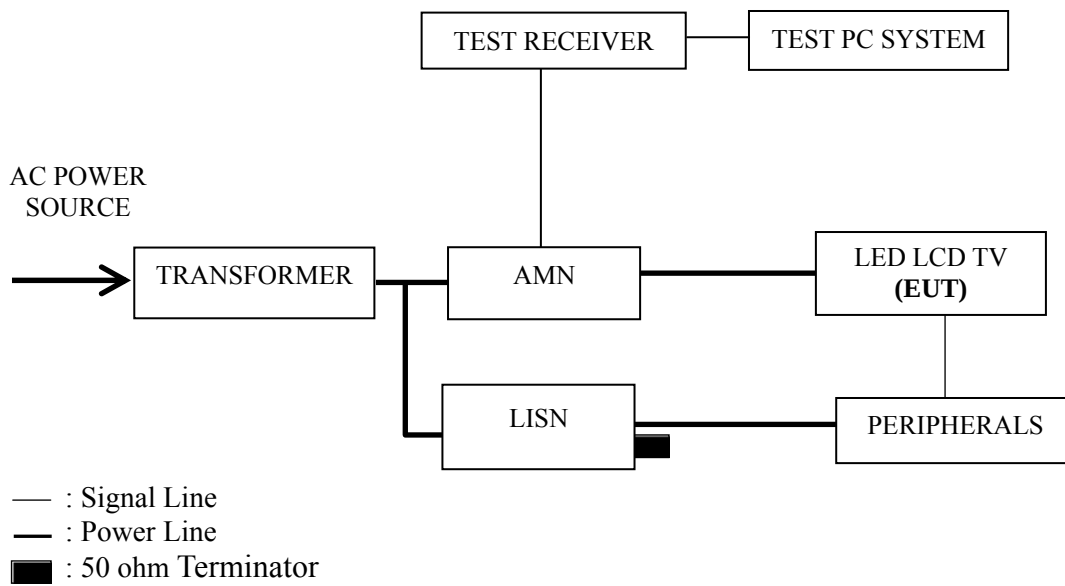
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2016	Apr 26, 2017
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 20, 2016	Mar 19, 2017
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



3.2.2 Conducted Disturbance Test Setup



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

Frequency Range (MHz)	Limits dB (μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66~56	56~46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE 1 – The lower limit shall apply at the transition frequencies.
 NOTE 2 – The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz~0.50 MHz

3.4 Test Configuration

The EUT (listed in Sec.2.1) and the peripherals (listed in Sec 2.2) were installed as shown on Sec.3.2 to meet FCC requirement and operating in a manner that tends to maximize its emission level in a normal application.

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and peripherals as shown in Sec. 3.2.
- 3.5.2 Turn on the power of all equipments and the EUT.
- 3.5.3 Set the contrast & brightness of EUT to maximum.
- 3.5.4 PC system ran the self-test program “EMC Test” by windows XP and sent “H” characters to EUT through graphic card, the EUT’s screen displayed and filled with “H” pattern by its resolution (Via HDMI Input).
- 3.5.5 PC system sent the 1kHz audio signal to EUT through audio port, the EUT speak out 1kHz audio signal.
- 3.5.6 In USB Play mode, set the EUT play digital media from H-Disk.
- 3.5.7 In LAN Play mode, set the EUT play digital media through LAN port.
- 3.5.8 In 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	P14
HDMI2 3840*2160@60Hz & 1kHz Playing	P15
HDMI3 3840*2160@60Hz & 1kHz Playing	P16
HDMI4 3840*2160@60Hz & 1kHz Playing	P17
HDMI1 1920*1080@60Hz & 1kHz Playing	P18
HDMI1 1280*1024@60Hz & 1kHz playing	P19
HDMI1 640*480@60Hz & 1kHz playing	P20
HDMI1080P	P21
USB Play	P22
LAN Play	P23
MHL	P24
Wifi	P25

NOTE 1 – Factor = Cable Loss + AMN Factor.

NOTE 2 – Emission Level = Meter Reading + Factor.

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

NOTE 4 – The worst case is for HDMI1080P test mode. The worst emission is detected at 0.329MHz (Quasi-Peak Value) with corrected signal level of 37.45 dB (μV) (limit is 49.49 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI1 3840*2160@60Hz & 1kHz Playing Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.00	10.59	46.59	66.00	19.41	QP
	0.206	36.40	10.53	46.93	63.36	16.43	
	0.535	25.40	10.40	35.80	56.00	20.20	
	0.943	20.40	10.40	30.80	56.00	25.20	
	2.285	18.40	10.42	28.82	56.00	27.18	
	25.321	17.90	10.76	28.66	60.00	31.34	
	0.150	14.50	10.59	25.09	56.00	30.91	AV
	0.206	23.30	10.53	33.83	53.36	19.53	
	0.535	18.20	10.40	28.60	46.00	17.40	
	0.943	7.50	10.40	17.90	46.00	28.10	
	2.285	9.20	10.42	19.62	46.00	26.38	
	25.321	10.80	10.76	21.56	50.00	28.44	
Neutral	0.150	36.00	10.58	46.58	66.00	19.42	QP
	0.208	35.10	10.51	45.61	63.27	17.66	
	0.546	28.20	10.39	38.59	56.00	17.41	
	0.880	22.20	10.40	32.60	56.00	23.40	
	2.285	18.20	10.44	28.64	56.00	27.36	
	5.653	16.70	10.51	27.21	60.00	32.79	
	0.150	14.90	10.58	25.48	56.00	30.52	AV
	0.208	22.80	10.51	33.31	53.27	19.96	
	0.546	23.40	10.39	33.79	46.00	12.21	
	0.880	9.60	10.40	20.00	46.00	26.00	
	2.285	10.30	10.44	20.74	46.00	25.26	
	5.653	10.40	10.51	20.91	50.00	29.09	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI2 3840*2160@60Hz Date of Test : Feb 20, 2017
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.206	33.47	10.53	44.00	63.36	19.36	QP
	0.535	26.07	10.40	36.47	56.00	19.53	
	0.759	24.32	10.40	34.72	56.00	21.28	
	0.943	25.37	10.40	35.77	56.00	20.23	
	1.628	18.26	10.40	28.66	56.00	27.34	
	25.321	21.16	10.76	31.92	60.00	28.08	
	0.206	24.47	10.53	35.00	53.36	18.36	AV
	0.535	17.07	10.40	27.47	46.00	18.53	
	0.759	17.32	10.40	27.72	46.00	18.28	
	0.943	13.37	10.40	23.77	46.00	22.23	
	1.628	6.26	10.40	16.66	46.00	29.34	
	25.321	13.16	10.76	23.92	50.00	26.08	
Neutral	0.208	33.29	10.51	43.80	63.27	19.47	QP
	0.546	27.83	10.39	38.22	56.00	17.78	
	0.880	25.64	10.40	36.04	56.00	19.96	
	1.628	18.42	10.42	28.84	56.00	27.16	
	2.285	19.73	10.44	30.17	56.00	25.83	
	5.653	18.59	10.51	29.10	60.00	30.90	
	0.208	25.29	10.51	35.80	53.27	17.47	AV
	0.546	16.83	10.39	27.22	46.00	18.78	
	0.880	14.64	10.40	25.04	46.00	20.96	
	1.628	11.42	10.42	21.84	46.00	24.16	
	2.285	6.73	10.44	17.17	46.00	28.83	
	5.653	10.59	10.51	21.10	50.00	28.90	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI3 3840*2160@60Hz & 1kHz Playing Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.204	31.34	10.53	41.87	63.45	21.58	QP
	0.546	23.73	10.40	34.13	56.00	21.87	
	0.767	24.05	10.40	34.45	56.00	21.55	
	0.953	20.55	10.40	30.95	56.00	25.05	
	1.628	16.21	10.40	26.61	56.00	29.39	
	24.529	17.07	10.74	27.81	60.00	32.19	
	0.204	23.34	10.53	33.87	53.45	19.58	AV
	0.546	13.73	10.40	24.13	46.00	21.87	
	0.767	15.05	10.40	25.45	46.00	20.55	
	0.953	11.55	10.40	21.95	46.00	24.05	
	1.628	9.21	10.40	19.61	46.00	26.39	
	24.529	9.07	10.74	19.81	50.00	30.19	
Neutral	0.211	32.26	10.51	42.77	63.18	20.41	QP
	0.546	24.08	10.39	34.47	56.00	21.53	
	0.751	22.94	10.39	33.33	56.00	22.67	
	0.890	22.66	10.40	33.06	56.00	22.94	
	2.474	17.29	10.44	27.73	56.00	28.27	
	17.849	14.41	10.69	25.10	60.00	34.90	
	0.211	21.26	10.51	31.77	53.18	21.41	AV
	0.546	18.08	10.39	28.47	46.00	17.53	
	0.751	15.94	10.39	26.33	46.00	19.67	
	0.890	12.66	10.40	23.06	46.00	22.94	
	2.474	5.29	10.44	15.73	46.00	30.27	
	17.849	2.41	10.69	13.10	50.00	36.90	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI4 3840*2160@60Hz & 1kHz Playing Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.206	31.23	10.53	41.76	63.36	21.60	QP
	0.546	20.27	10.40	30.67	56.00	25.33	
	0.984	19.20	10.40	29.60	56.00	26.40	
	1.628	15.16	10.40	25.56	56.00	30.44	
	2.261	14.17	10.42	24.59	56.00	31.41	
	25.864	18.47	10.80	29.27	60.00	30.73	
	0.206	21.23	10.53	31.76	53.36	21.60	AV
	0.546	10.27	10.40	20.67	46.00	25.33	
	0.984	10.20	10.40	20.60	46.00	25.40	
	1.628	9.16	10.40	19.56	46.00	26.44	
	2.261	9.17	10.42	19.59	46.00	26.41	
	25.864	11.47	10.80	22.27	50.00	27.73	
Neutral	0.204	32.16	10.52	42.68	63.45	20.77	QP
	0.552	26.68	10.39	37.07	56.00	18.93	
	0.890	22.50	10.40	32.90	56.00	23.10	
	1.628	15.58	10.42	26.00	56.00	30.00	
	5.058	15.84	10.50	26.34	60.00	33.66	
	23.140	13.50	10.79	24.29	60.00	35.71	
	0.204	20.16	10.52	30.68	53.45	22.77	AV
	0.552	16.68	10.39	27.07	46.00	18.93	
	0.890	12.50	10.40	22.90	46.00	23.10	
	1.628	9.58	10.42	20.00	46.00	26.00	
	5.058	7.84	10.50	18.34	50.00	31.66	
	23.140	1.50	10.79	12.29	50.00	37.71	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI1 1920*1080@60Hz & 1kHz Playing Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.70	10.59	47.29	66.00	18.71	QP
	0.322	25.89	10.47	36.36	59.66	23.30	
	0.546	26.50	10.40	36.90	56.00	19.10	
	0.953	21.40	10.40	31.80	56.00	24.20	
	3.025	17.60	10.43	28.03	56.00	27.97	
	24.529	18.20	10.74	28.94	60.00	31.06	
	0.150	15.90	10.59	26.49	56.00	29.51	AV
	0.322	18.89	10.47	29.36	49.66	20.30	
	0.546	21.60	10.40	32.00	46.00	14.00	
	0.953	8.10	10.40	18.50	46.00	27.50	
	3.025	7.40	10.43	17.83	46.00	28.17	
	24.529	10.80	10.74	21.54	50.00	28.46	
Neutral	0.150	36.20	10.58	46.78	66.00	19.22	QP
	0.332	27.50	10.45	37.95	59.40	21.45	
	0.546	28.00	10.39	38.39	56.00	17.61	
	0.890	23.60	10.40	34.00	56.00	22.00	
	2.474	17.91	10.44	28.35	56.00	27.65	
	5.594	16.00	10.51	26.51	60.00	33.49	
	0.150	15.30	10.58	25.88	56.00	30.12	AV
	0.332	21.60	10.45	32.05	49.40	17.35	
	0.546	23.30	10.39	33.69	46.00	12.31	
	0.890	10.20	10.40	20.60	46.00	25.40	
	2.474	9.31	10.44	19.75	46.00	26.25	
	5.594	9.80	10.51	20.31	50.00	29.69	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI1 1280*1024@60Hz Date of Test : Feb 20, 2017
& 1kHz playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.80	10.59	47.39	66.00	18.61	QP
	0.206	34.40	10.53	44.93	63.36	18.43	
	0.546	26.80	10.40	37.20	56.00	18.80	
	0.984	23.60	10.40	34.00	56.00	22.00	
	2.261	17.30	10.42	27.72	56.00	28.28	
	25.864	18.49	10.80	29.29	60.00	30.71	
	0.150	16.60	10.59	27.19	56.00	28.81	AV
	0.206	22.70	10.53	33.23	53.36	20.13	
	0.546	21.90	10.40	32.30	46.00	13.70	
	0.984	15.40	10.40	25.80	46.00	20.20	
	2.261	8.50	10.42	18.92	46.00	27.08	
	25.864	10.79	10.80	21.59	50.00	28.41	
Neutral	0.150	36.40	10.58	46.98	66.00	19.02	QP
	0.329	29.10	10.45	39.55	59.49	19.94	
	0.552	28.10	10.39	38.49	56.00	17.51	
	0.890	23.70	10.40	34.10	56.00	21.90	
	1.628	19.80	10.42	30.22	56.00	25.78	
	5.058	16.30	10.50	26.80	60.00	33.20	
	0.150	15.70	10.58	26.28	56.00	29.72	AV
	0.329	26.60	10.45	37.05	49.49	12.44	
	0.552	21.20	10.39	31.59	46.00	14.41	
	0.890	10.50	10.40	20.90	46.00	25.10	
	1.628	12.10	10.42	22.52	46.00	23.48	
	5.058	9.30	10.50	19.80	50.00	30.20	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI1 640*480@60Hz Date of Test : Feb 20, 2017
& 1kHz playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.90	10.59	47.49	66.00	18.51	QP
	0.206	34.50	10.53	45.03	63.36	18.33	
	0.546	26.80	10.40	37.20	56.00	18.80	
	0.953	22.20	10.40	32.60	56.00	23.40	
	2.500	15.10	10.42	25.52	56.00	30.48	
	22.063	17.80	10.67	28.47	60.00	31.53	
	0.150	16.30	10.59	26.89	56.00	29.11	AV
	0.206	22.80	10.53	33.33	53.36	20.03	
	0.546	21.80	10.40	32.20	46.00	13.80	
	0.953	10.20	10.40	20.60	46.00	25.40	
	2.500	6.50	10.42	16.92	46.00	29.08	
	22.063	9.80	10.67	20.47	50.00	29.53	
Neutral	0.150	36.50	10.58	47.08	66.00	18.92	QP
	0.204	34.90	10.52	45.42	63.45	18.03	
	0.541	28.20	10.39	38.59	56.00	17.41	
	0.890	23.70	10.40	34.10	56.00	21.90	
	2.962	17.80	10.46	28.26	56.00	27.74	
	5.594	15.90	10.51	26.41	60.00	33.59	
	0.150	16.00	10.58	26.58	56.00	29.42	AV
	0.204	22.50	10.52	33.02	53.45	20.43	
	0.541	22.20	10.39	32.59	46.00	13.41	
	0.890	10.40	10.40	20.80	46.00	25.20	
	2.962	9.50	10.46	19.96	46.00	26.04	
	5.594	9.60	10.51	20.11	50.00	29.89	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : HDMI11080P Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	37.00	10.59	47.59	66.00	18.41	QP
	0.325	27.29	10.47	37.76	59.57	21.81	
	0.552	26.30	10.40	36.70	56.00	19.30	
	0.943	22.40	10.40	32.80	56.00	23.20	
	2.261	15.90	10.42	26.32	56.00	29.68	
	26.841	17.81	10.84	28.65	60.00	31.35	
	0.150	16.30	10.59	26.89	56.00	29.11	AV
	0.325	21.49	10.47	31.96	49.57	17.61	
	0.552	21.20	10.40	31.60	46.00	14.40	
	0.943	9.30	10.40	19.70	46.00	26.30	
	2.261	6.30	10.42	16.72	46.00	29.28	
	26.841	9.71	10.84	20.55	50.00	29.45	
Neutral	0.150	36.20	10.58	46.78	66.00	19.22	QP
	0.329	29.30	10.45	39.75	59.49	19.74	
	0.546	27.90	10.39	38.29	56.00	17.71	
	0.923	22.50	10.40	32.90	56.00	23.10	
	2.237	18.40	10.44	28.84	56.00	27.16	
	17.849	11.60	10.69	22.29	60.00	37.71	
	0.150	15.10	10.58	25.68	56.00	30.32	AV
	0.329	27.00	10.45	37.45	49.49	12.04	
	0.546	23.20	10.39	33.59	46.00	12.41	
	0.923	10.50	10.40	20.90	46.00	25.10	
	2.237	9.20	10.44	19.64	46.00	26.36	
	17.849	6.20	10.69	16.89	50.00	33.11	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : USB Play Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.60	10.59	47.19	66.00	18.81	QP
	0.332	27.60	10.46	38.06	59.40	21.34	
	0.552	26.20	10.40	36.60	56.00	19.40	
	0.953	22.50	10.40	32.90	56.00	23.10	
	2.309	18.60	10.42	29.02	56.00	26.98	
	21.830	18.80	10.66	29.46	60.00	30.54	
	0.150	15.50	10.59	26.09	56.00	29.91	AV
	0.332	22.90	10.46	33.36	49.40	16.04	
	0.552	21.40	10.40	31.80	46.00	14.20	
	0.953	9.90	10.40	20.30	46.00	25.70	
	2.309	9.10	10.42	19.52	46.00	26.48	
	21.830	10.70	10.66	21.36	50.00	28.64	
Neutral	0.150	35.90	10.58	46.48	66.00	19.52	QP
	0.204	35.10	10.52	45.62	63.45	17.83	
	0.541	27.20	10.39	37.59	56.00	18.41	
	0.923	22.40	10.40	32.80	56.00	23.20	
	2.066	18.30	10.43	28.73	56.00	27.27	
	6.121	15.70	10.52	26.22	60.00	33.78	
	0.150	15.20	10.58	25.78	56.00	30.22	AV
	0.204	22.90	10.52	33.42	53.45	20.03	
	0.541	19.80	10.39	30.19	46.00	15.81	
	0.923	10.40	10.40	20.80	46.00	25.20	
	2.066	10.20	10.43	20.63	46.00	25.37	
	6.121	9.30	10.52	19.82	50.00	30.18	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : LAN Play Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.50	10.59	47.09	66.00	18.91	QP
	0.329	27.40	10.46	37.86	59.49	21.63	
	0.541	25.70	10.40	36.10	56.00	19.90	
	0.953	22.40	10.40	32.80	56.00	23.20	
	2.309	18.40	10.42	28.82	56.00	27.18	
	23.636	17.90	10.71	28.61	60.00	31.39	
	0.150	15.60	10.59	26.19	56.00	29.81	AV
	0.329	23.80	10.46	34.26	49.49	15.23	
	0.541	18.40	10.40	28.80	46.00	17.20	
	0.953	9.80	10.40	20.20	46.00	25.80	
	2.309	9.10	10.42	19.52	46.00	26.48	
	23.636	10.20	10.71	20.91	50.00	29.09	
Neutral	0.150	36.00	10.58	46.58	66.00	19.42	QP
	0.332	29.90	10.45	40.35	59.40	19.05	
	0.558	25.90	10.39	36.29	56.00	19.71	
	0.880	23.90	10.40	34.30	56.00	21.70	
	1.628	20.60	10.42	31.02	56.00	24.98	
	5.594	15.50	10.51	26.01	60.00	33.99	
	0.150	15.20	10.58	25.78	56.00	30.22	AV
	0.332	26.10	10.45	36.55	49.40	12.85	
	0.558	17.90	10.39	28.29	46.00	17.71	
	0.880	12.00	10.40	22.40	46.00	23.60	
	1.628	12.00	10.42	22.42	46.00	23.58	
	5.594	9.60	10.51	20.11	50.00	29.89	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : MHL Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	36.50	10.59	47.09	66.00	18.91	QP
	0.332	27.80	10.46	38.26	59.40	21.14	
	0.546	26.60	10.40	37.00	56.00	19.00	
	0.989	23.70	10.40	34.10	56.00	21.90	
	2.309	18.60	10.42	29.02	56.00	26.98	
	21.600	17.69	10.66	28.35	60.00	31.65	
	0.150	15.20	10.59	25.79	56.00	30.21	AV
	0.332	23.20	10.46	33.66	49.40	15.74	
	0.546	21.60	10.40	32.00	46.00	14.00	
	0.989	15.50	10.40	25.90	46.00	20.10	
	2.309	9.30	10.42	19.72	46.00	26.28	
	21.600	9.49	10.66	20.15	50.00	29.85	
Neutral	0.150	35.90	10.58	46.48	66.00	19.52	QP
	0.325	29.29	10.46	39.75	59.57	19.82	
	0.558	25.90	10.39	36.29	56.00	19.71	
	0.880	24.10	10.40	34.50	56.00	21.50	
	2.237	18.70	10.44	29.14	56.00	26.86	
	5.594	15.60	10.51	26.11	60.00	33.89	
	0.150	14.80	10.58	25.38	56.00	30.62	AV
	0.325	24.29	10.46	34.75	49.57	14.82	
	0.558	18.10	10.39	28.49	46.00	17.51	
	0.880	12.30	10.40	22.70	46.00	23.30	
	2.237	9.40	10.44	19.84	46.00	26.16	
	5.594	9.30	10.51	19.81	50.00	30.19	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 48%RH

Test Mode : Wifi Date of Test : Feb 20, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	32.10	10.59	42.69	66.00	23.31	QP
	0.202	35.80	10.53	46.33	63.54	17.21	
	0.558	26.60	10.40	37.00	56.00	19.00	
	1.000	24.40	10.40	34.80	56.00	21.20	
	2.736	16.29	10.43	26.72	56.00	29.28	
	21.600	19.59	10.66	30.25	60.00	29.75	
	0.150	12.20	10.59	22.79	56.00	33.21	AV
	0.202	25.70	10.53	36.23	53.54	17.31	
	0.558	20.40	10.40	30.80	46.00	15.20	
	1.000	16.40	10.40	26.80	46.00	19.20	
	2.736	8.19	10.43	18.62	46.00	27.38	
	21.600	10.79	10.66	21.45	50.00	28.55	
Neutral	0.150	31.60	10.58	42.18	66.00	23.82	QP
	0.199	36.40	10.52	46.92	63.67	16.75	
	0.558	28.20	10.39	38.59	56.00	17.41	
	0.871	24.40	10.40	34.80	56.00	21.20	
	2.088	19.20	10.43	29.63	56.00	26.37	
	5.333	17.21	10.50	27.71	60.00	32.29	
	0.150	11.60	10.58	22.18	56.00	33.82	AV
	0.199	26.20	10.52	36.72	53.67	16.95	
	0.558	22.00	10.39	32.39	46.00	13.61	
	0.871	12.80	10.40	23.20	46.00	22.80	
	2.088	10.40	10.43	20.83	46.00	25.17	
	5.333	10.11	10.50	20.61	50.00	29.39	

TEST ENGINEER: BYRON WU

4 RADIATED EMISSION TEST

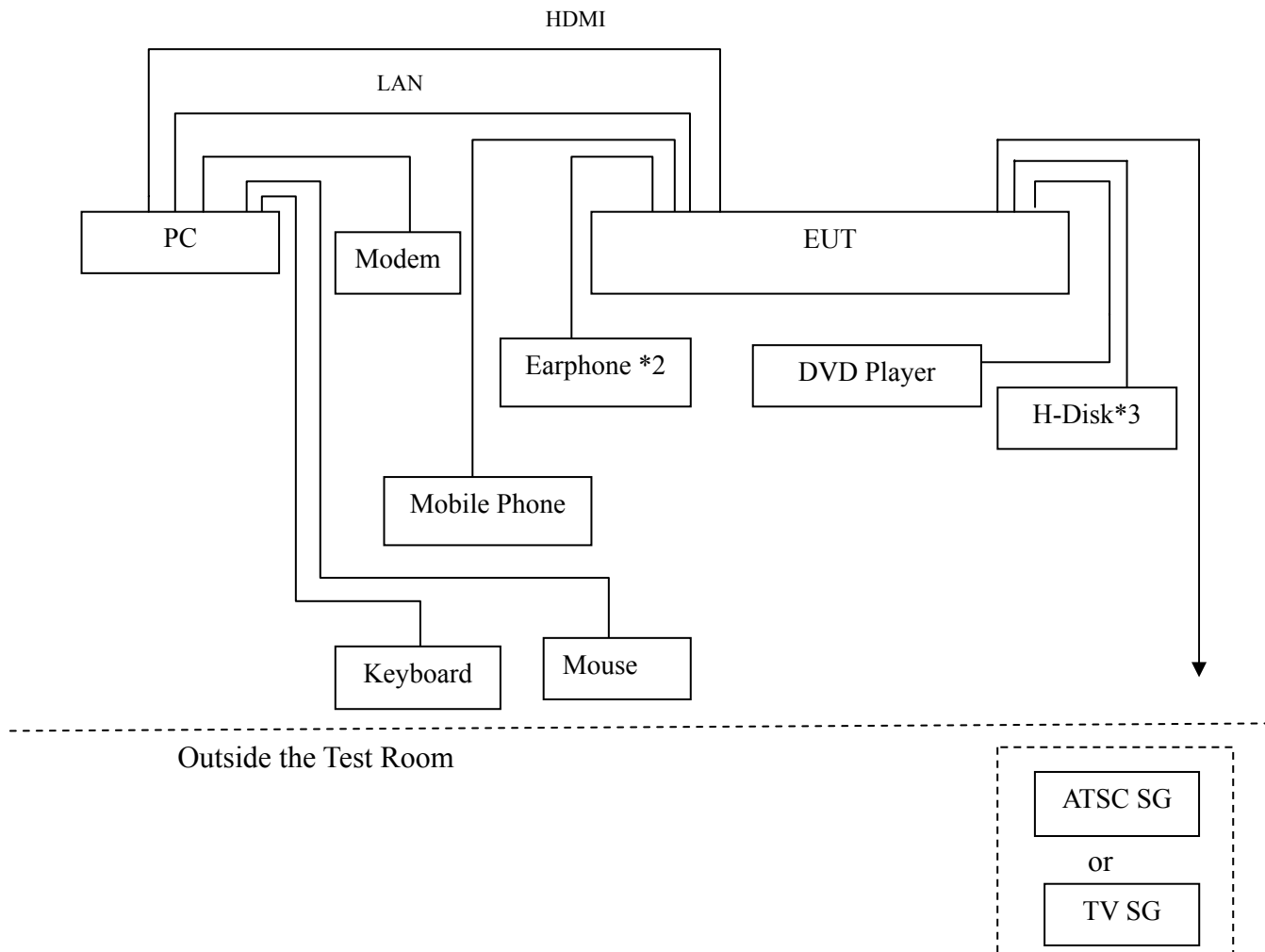
4.1 Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101303	May 07, 2016	May 06, 2017
2.	Preamplifier	Agilent	8447D	2944A06664	Apr 27, 2016	Apr 26, 2017
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2016	Mar 19, 2017
4.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 15, 2016	May 14, 2017
5.	Horn Antenna	EMCO	3115	9607-4878	Jun 03, 2016	Jun 02, 2017
6.	Spectrum	Agilent	E7405A	MY45106600	Apr 26, 2016	Apr 25, 2017
7.	Software	Audix	e3	6.2007-9-10	--	--

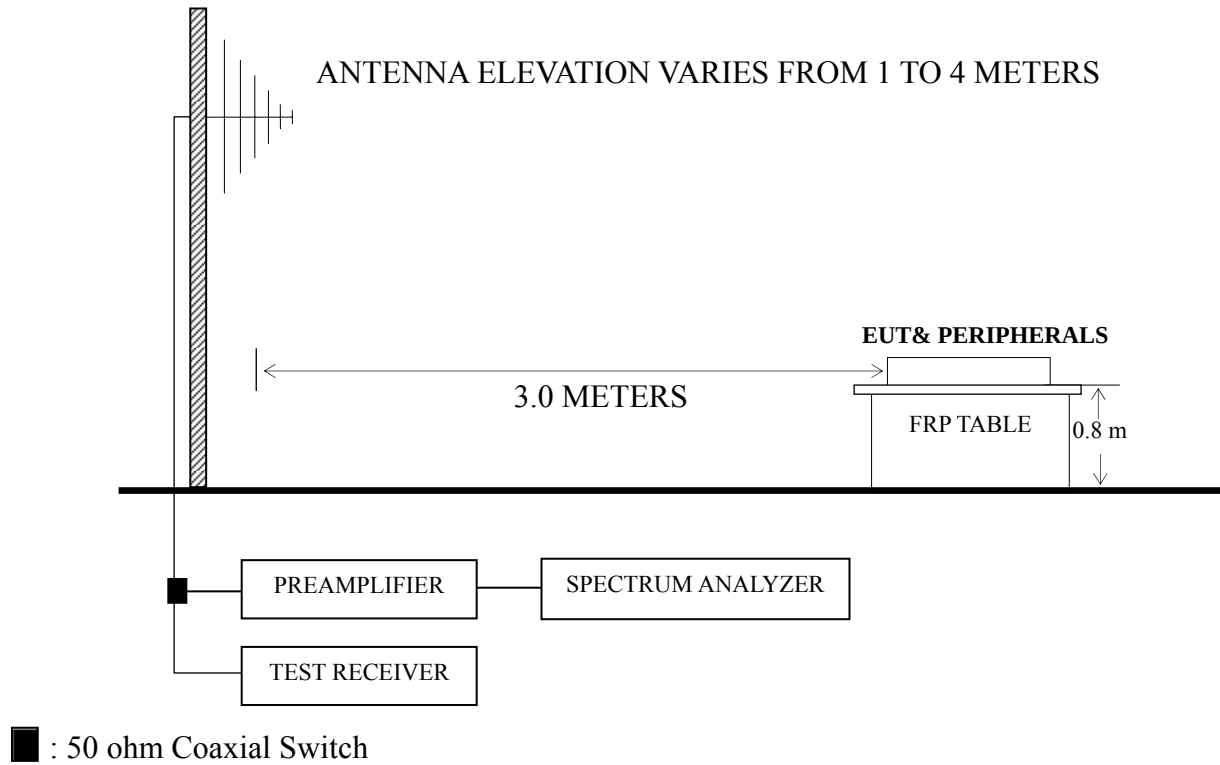
4.2 Block Diagram of Test Setup

4.2.1 EUT & Peripherals



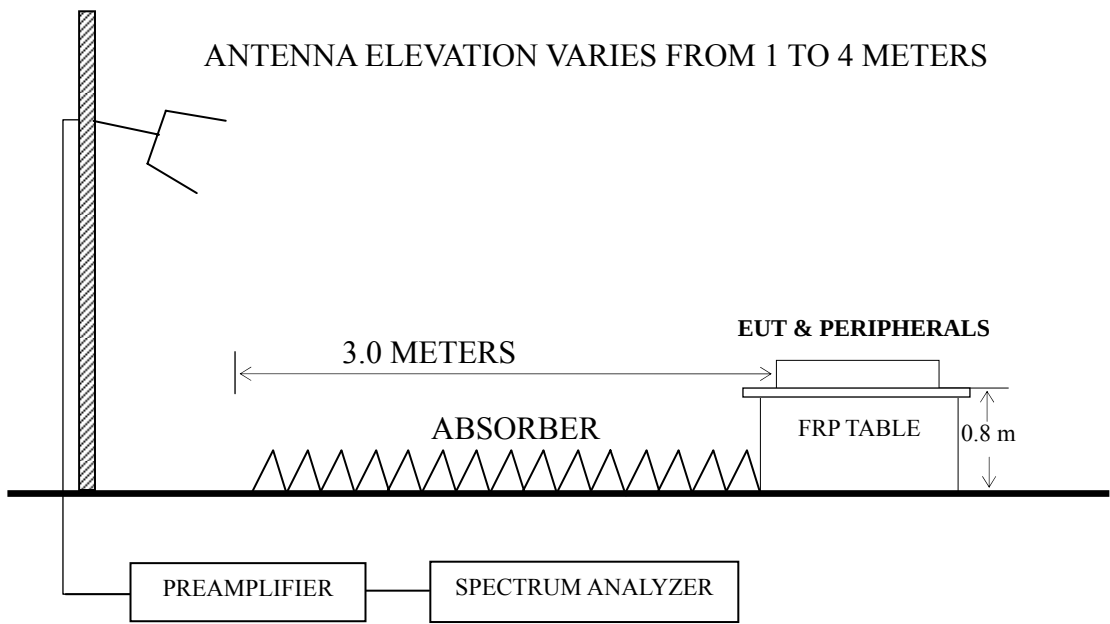
4.2.2 Radiated emission test setup

4.2.2.1 Below 1GHz



4.2.2.2 Above 1GHz

BORE-SIGHT ANTENNA TOWER



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

Frequency (MHz)	Distance (m)	Field strength limits	
		($\mu\text{V/m}$)	dB ($\mu\text{V/m}$)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
NOTE 1 - Emission Level dB ($\mu\text{V/m}$) = 20 log Emission Level ($\mu\text{V/m}$) NOTE 2 - The tighter limit applies at the band edges. NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system. NOTE 4 - The limits shown are based on Quasi-peak value detector. NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT.			

4.4 Test Configuration

The configuration of the EUT and peripherals are same as those used in conducted emission test.

Please refer to Sec.3.4.

4.5 Operating Condition of EUT

Same as conducted emission test which is listed in Sec.3.5, except for the test setup replaced by Sec.4.2.

4.6 Test Procedures

The EUT and peripherals were placed on a FRP turntable that is 0.8 meter above ground. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. Broadband antenna (Calibrated Bilog Antenna) was used as receiving antenna. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.4 requirements during radiated emission test.

The I.F. bandwidth of Test Receiver R&S ESCI was set at 120 kHz 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.

Test Mode	Data Page
HDMI1 3840*2160@60Hz & 1kHz Playing	P30
HDMI2 3840*2160@60Hz & 1kHz Playing	P31-P32
HDMI3 3840*2160@30Hz & 1kHz Playing	P33
HDMI4 3840*2160@60Hz & 1kHz Playing	P34
HDMI2 1920*1080@60Hz & 1kHz Playing	P35
HDMI2 1280*1024@60Hz & 1kHz playing	P36
HDMI2 640*480@60Hz & 1kHz playing	P37
HDMI11080P	P38
USB Play	P39
LAN Play	P40
MHL	P41
Wifi	P42

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° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 4 – The worst case is for HDMI2 3840*2160@60Hz & 1kHz Playing test mode. The worst emission at horizontal polarization was detected at 455.906 MHz with corrected signal level of 42.70dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 2.3 m height and the turntable was at 320°. The worst emission at vertical polarization was detected at 40.00 MHz with corrected signal level of 36.48dB (μV/m) (limit is 40.00 dB (μV/m)), when the antenna was 1.4 m height and the turntable was at 150°.

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI1 3840*2160@30Hz Date of Test : Mar 01, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	76.781	25.53	8.52	0.87	34.92	40.00	5.08
	157.007	20.65	11.43	1.31	33.39	43.50	10.11
	293.084	18.68	13.58	1.74	34.00	46.00	12.00
	414.722	23.35	16.24	2.07	41.66	46.00	4.34
	446.414	22.82	16.73	2.15	41.70	46.00	4.30
	903.309	15.81	21.25	3.09	40.15	46.00	5.85
Vertical	30.531	15.32	18.05	0.56	33.93	40.00	6.07
	53.693	27.07	7.83	0.73	35.63	40.00	4.37
	78.689	25.96	8.75	0.88	35.59	40.00	4.41
	443.294	20.63	16.67	2.15	39.45	46.00	6.55
	586.844	21.72	18.15	2.48	42.35	46.00	3.65
	726.805	19.78	19.37	2.77	41.92	46.00	4.08

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI2 3840*2160@60Hz & 1kHz Playing Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	73.876	26.98	8.13	0.86	0.00	35.97	40.00	4.03	QP
	297.224	22.90	13.60	1.75	0.00	38.25	46.00	7.75	
	407.515	23.09	16.23	2.06	0.00	41.38	46.00	4.62	
	435.590	23.72	16.52	2.13	0.00	42.37	46.00	3.63	
	455.906	23.67	16.86	2.17	0.00	42.70	46.00	3.30	
	909.667	17.01	21.30	3.09	0.00	41.40	46.00	4.60	
	1313.043	56.35	24.91	3.82	35.99	49.09	74.00	24.91	PK
	2640.937	55.00	29.03	5.48	35.20	54.31	74.00	19.69	
	3091.970	48.52	30.71	5.97	35.10	50.10	74.00	23.90	
	1313.043	36.92	24.91	3.82	35.99	29.66	54.00	24.34	AV
	2640.937	33.03	29.03	5.48	35.20	32.34	54.00	21.66	
	3091.970	27.11	30.71	5.97	35.10	28.69	54.00	25.31	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI2 3840*2160@60Hz & 1kHz Playing Date of Test : Mar 01, 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
Vertical	30.962	15.23	17.71	0.57	0.00	33.51	40.00	6.49	QP
	55.027	27.49	7.62	0.74	0.00	35.85	40.00	4.15	
	75.940	27.20	8.41	0.87	0.00	36.48	40.00	3.52	
	454.310	23.02	16.84	2.16	0.00	42.02	46.00	3.98	
	580.703	19.72	18.25	2.46	0.00	40.43	46.00	5.57	
	890.728	16.38	21.10	3.07	0.00	40.55	46.00	5.45	PK
	1343.987	62.71	25.03	3.85	35.95	55.64	74.00	18.36	
	2367.504	50.72	28.18	5.14	35.20	48.84	74.00	25.16	
	4778.879	41.01	33.88	7.69	33.96	48.62	74.00	25.38	AV
	1343.987	41.28	25.03	3.85	35.95	34.21	54.00	19.79	
	2367.504	30.93	28.18	5.14	35.20	29.05	54.00	24.95	
	4778.879	22.64	33.88	7.69	33.96	30.25	54.00	23.75	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI3 3840*2160@30Hz Date of Test : Mar 01, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	76.244	25.34	8.45	0.87	34.66	40.00	5.34
	156.458	22.81	11.45	1.31	35.57	43.50	7.93
	411.824	23.64	16.22	2.07	41.93	46.00	4.07
	441.743	23.30	16.63	2.13	42.06	46.00	3.94
	584.790	21.05	18.20	2.48	41.73	46.00	4.27
	903.309	17.94	21.25	3.09	42.28	46.00	3.72
Vertical	54.835	27.64	7.62	0.74	36.00	40.00	4.00
	73.876	26.29	8.13	0.86	35.28	40.00	4.72
	446.414	22.90	16.73	2.15	41.78	46.00	4.22
	578.670	21.35	18.30	2.46	42.11	46.00	3.89
	734.491	17.21	19.47	2.79	39.47	46.00	6.53
	881.407	17.23	21.00	3.05	41.28	46.00	4.72

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI4 3840*2160@30Hz Date of Test : Mar 01, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	74.919	25.38	8.30	0.86	34.54	40.00	5.46
	152.130	21.04	11.80	1.29	34.13	43.50	9.37
	414.722	23.07	16.24	2.07	41.38	46.00	4.62
	457.507	22.95	16.88	2.17	42.00	46.00	4.00
	590.974	18.42	18.17	2.50	39.09	46.00	6.91
	912.862	16.74	21.37	3.09	41.20	46.00	4.80
Vertical	33.917	15.18	16.35	0.60	32.13	40.00	7.87
	54.071	26.93	7.80	0.73	35.46	40.00	4.54
	75.977	25.58	8.41	0.87	34.86	40.00	5.14
	457.507	22.41	16.88	2.17	41.46	46.00	4.54
	590.974	21.51	18.17	2.50	42.18	46.00	3.82
	726.805	16.21	19.37	2.77	38.35	46.00	7.65

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI2 1920*1080@60Hz Date of Test : Mar 01, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	73.617	26.73	8.07	0.86	35.66	40.00	4.34
	158.112	21.28	11.38	1.32	33.98	43.50	9.52
	238.310	20.68	11.98	1.60	34.26	46.00	11.74
	435.590	22.49	16.52	2.13	41.14	46.00	4.86
	454.310	22.34	16.84	2.16	41.34	46.00	4.66
	912.862	15.04	21.37	3.09	39.50	46.00	6.50
Vertical	54.071	26.78	7.80	0.73	35.31	40.00	4.69
	75.700	25.89	8.38	0.87	35.14	40.00	4.86
	153.200	22.46	11.73	1.29	35.48	43.50	8.02
	455.906	22.77	16.86	2.17	41.80	46.00	4.20
	584.790	20.32	18.20	2.48	41.00	46.00	5.00
	909.667	15.05	21.30	3.09	39.44	46.00	6.56

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI2 1280*1024@60Hz Date of Test : Mar 01, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	73.876	27.15	8.13	0.86	36.14	40.00	3.86
	152.130	20.09	11.80	1.29	33.18	43.50	10.32
	414.722	23.09	16.24	2.07	41.40	46.00	4.60
	455.906	23.48	16.86	2.17	42.51	46.00	3.49
	506.479	22.35	17.56	2.28	42.19	46.00	3.81
	912.862	17.03	21.37	3.09	41.49	46.00	4.51
Vertical	30.962	14.49	17.71	0.57	32.77	40.00	7.23
	54.071	27.14	7.80	0.73	35.67	40.00	4.33
	76.950	26.63	8.52	0.87	36.02	40.00	3.98
	455.906	22.39	16.86	2.17	41.42	46.00	4.58
	558.730	21.57	18.05	2.42	42.04	46.00	3.96
	726.805	18.70	19.37	2.77	40.84	46.00	5.16

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI2 640*480@60Hz & 1kHz Playing Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	74.919	26.69	8.30	0.86	35.85	40.00	4.15
	238.310	23.06	11.98	1.60	36.64	46.00	9.36
	406.088	22.56	16.25	2.06	40.87	46.00	5.13
	455.906	22.71	16.86	2.17	41.74	46.00	4.26
	506.479	21.88	17.56	2.28	41.72	46.00	4.28
	912.862	17.41	21.37	3.09	41.87	46.00	4.13
Vertical	30.638	15.96	17.97	0.57	34.50	40.00	5.50
	55.027	27.34	7.62	0.74	35.70	40.00	4.30
	78.965	26.37	8.75	0.88	36.00	40.00	4.00
	454.310	22.87	16.84	2.16	41.87	46.00	4.13
	506.479	20.91	17.56	2.28	40.75	46.00	5.25
	912.862	14.13	21.37	3.09	38.59	46.00	7.41

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : HDMI 1080P Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	76.244	25.91	8.45	0.87	35.23	40.00	4.77
	154.821	21.40	11.50	1.30	34.20	43.50	9.30
	237.476	21.32	11.98	1.60	34.90	46.00	11.10
	447.982	21.27	16.77	2.15	40.19	46.00	5.81
	508.258	20.70	17.58	2.28	40.56	46.00	5.44
	893.857	14.60	21.13	3.07	38.80	46.00	7.20
Vertical	31.731	14.08	17.27	0.58	31.93	40.00	8.07
	76.781	26.78	8.52	0.87	36.17	40.00	3.83
	152.130	20.15	11.80	1.29	33.24	43.50	10.26
	447.982	21.50	16.77	2.15	40.42	46.00	5.58
	599.321	20.05	18.40	2.50	40.95	46.00	5.05
	734.491	15.47	19.47	2.79	37.73	46.00	8.27

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : USB Play Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	74.657	26.35	8.24	0.86	35.45	40.00	4.55
	151.067	19.73	11.95	1.29	32.97	43.50	10.53
	408.946	20.83	16.22	2.06	39.11	46.00	6.89
	446.414	22.10	16.73	2.15	40.98	46.00	5.02
	499.425	17.92	17.50	2.26	37.68	46.00	8.32
	896.997	15.78	21.17	3.07	40.02	46.00	5.98
Vertical	30.745	14.30	17.88	0.57	32.75	40.00	7.25
	52.945	25.63	7.97	0.72	34.32	40.00	5.68
	72.338	26.38	7.85	0.85	35.08	40.00	4.92
	443.294	19.74	16.67	2.15	38.56	46.00	7.44
	501.179	17.16	17.50	2.26	36.92	46.00	9.08
	588.905	19.14	18.10	2.48	39.72	46.00	6.28

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : LAN Play Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	72.084	26.50	7.79	0.85	35.14	40.00	4.86
	157.007	19.74	11.43	1.31	32.48	43.50	11.02
	407.515	22.26	16.23	2.06	40.55	46.00	5.45
	443.294	21.11	16.67	2.15	39.93	46.00	6.07
	478.846	18.53	17.20	2.22	37.95	46.00	8.05
	906.482	15.69	21.30	3.09	40.08	46.00	5.92
Vertical	31.399	15.47	17.45	0.57	33.49	40.00	6.51
	54.071	27.08	7.80	0.73	35.61	40.00	4.39
	76.781	26.31	8.52	0.87	35.70	40.00	4.30
	452.720	21.73	16.82	2.16	40.71	46.00	5.29
	547.098	17.62	17.78	2.38	37.78	46.00	8.22
	815.968	15.08	20.30	2.94	38.32	46.00	7.68

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : MHL Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	76.244	26.54	8.45	0.87	35.86	40.00	4.14
	147.404	17.38	12.35	1.27	31.00	43.50	12.50
	416.179	21.75	16.26	2.07	40.08	46.00	5.92
	444.851	21.06	16.70	2.15	39.91	46.00	6.09
	502.940	18.13	17.52	2.26	37.91	46.00	8.09
Vertical	903.309	14.78	21.25	3.09	39.12	46.00	6.88
	30.745	14.30	17.88	0.57	32.75	40.00	7.25
	56.197	27.22	7.40	0.75	35.37	40.00	4.63
	74.396	26.65	8.19	0.86	35.70	40.00	4.30
	451.135	20.49	16.80	2.16	39.45	46.00	6.55
	588.905	19.14	18.10	2.48	39.72	46.00	6.28
	739.661	15.21	19.60	2.79	37.60	46.00	8.40

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 65H9707 Humidity : 60%RH

Test Mode : Wifi Date of Test : Mar 01, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	73.103	26.50	7.96	0.85	35.31	40.00	4.69
	159.225	21.07	11.35	1.32	33.74	43.50	9.76
	239.987	20.02	12.10	1.60	33.72	46.00	12.28
	451.135	21.88	16.80	2.16	40.84	46.00	5.16
	504.706	20.22	17.54	2.28	40.04	46.00	5.96
	890.728	14.46	21.10	3.07	38.63	46.00	7.37
Vertical	31.510	15.15	17.36	0.57	33.08	40.00	6.92
	59.859	27.52	6.66	0.77	34.95	40.00	5.05
	77.051	26.21	8.56	0.87	35.64	40.00	4.36
	504.706	18.63	17.54	2.28	38.45	46.00	7.55
	588.905	17.10	18.10	2.48	37.68	46.00	8.32
	925.756	14.20	21.43	3.12	38.75	46.00	7.25

TEST ENGINEER: BYRON WU

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 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)

6 DEVIATION TO TEST SPECIFICATIONS

None