

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

LED LCD TV

Model No.	Brand
55H9D,55H9D+	Hisense
55H9+0D,55H9+0D1,55H9+0D2	
55H90+0D,55H90+0D1,55H90+0D2	
55H9707	

FCC ID : W9HLCDF0114

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

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Report No. : ACI-F17108
Date of Test : Feb 26- Mar 08, 2017
Date of Report : Mar 17, 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 26- Mar 08, 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.F17107, a Verification report.

Date of Test : Feb 26- Mar 08, 2017 Date of Report : Mar 17, 2017

Producer : Hui Min Yan
HUI MIN YAN / Assistant

Review : Byron WU
BYRON WU / Deputy Assistant Manager

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

Signatory : Byron Kwo
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	:	<input checked="" type="checkbox"/> Production <input type="checkbox"/> Pre-product <input type="checkbox"/> Pro-type
Model No	:	55H9D,55H9D+,55H9707, 55H9+0D,55H9+0D1,55H9+0D2, 55H90+0D,55H90+0D1,55H90+0D2
Brand	:	Hisense
Note#1	:	The above models are all the same except for the model number. The 55H9707 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 : HE550M7U52-TA
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

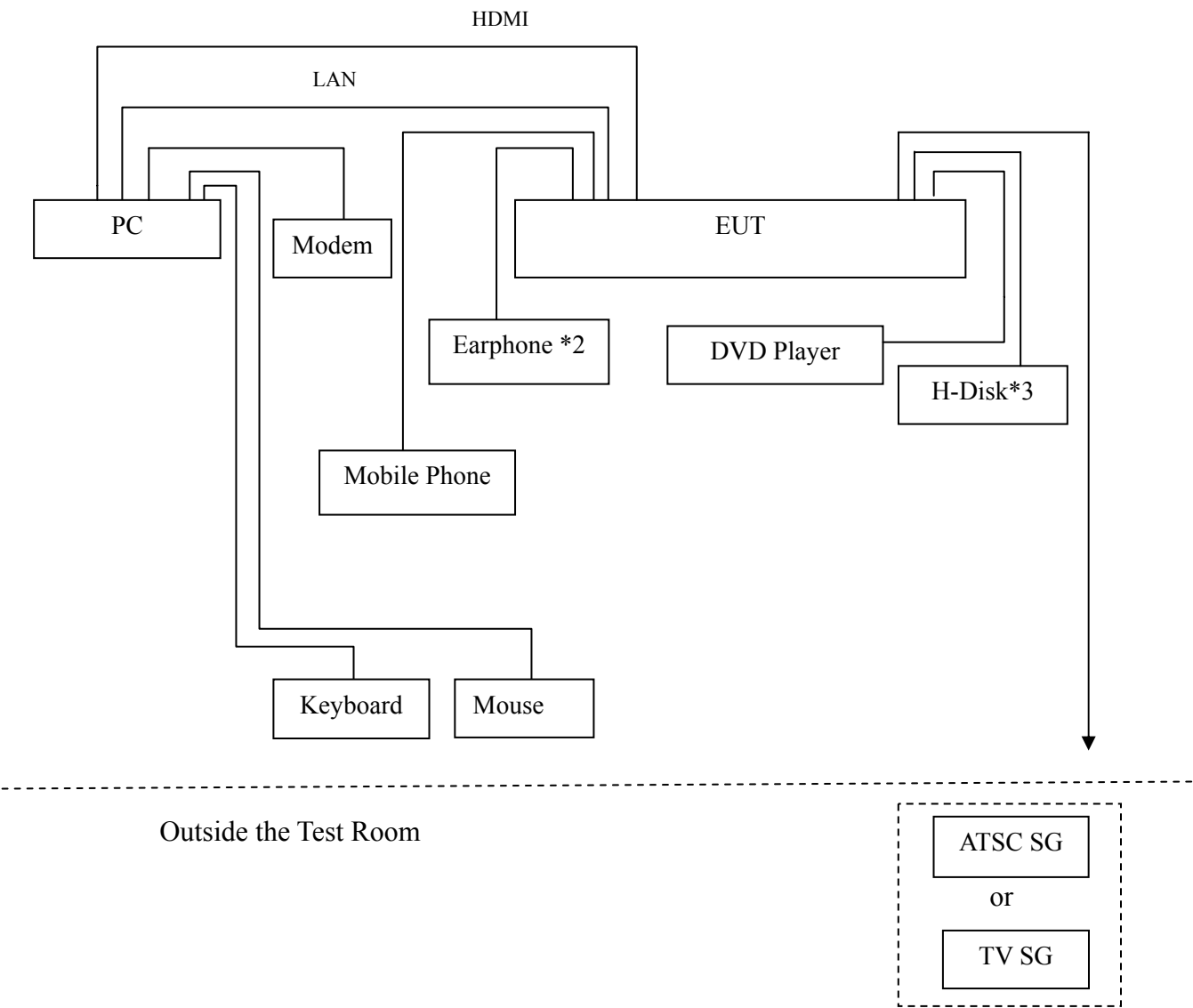
3.1 Test Equipment

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

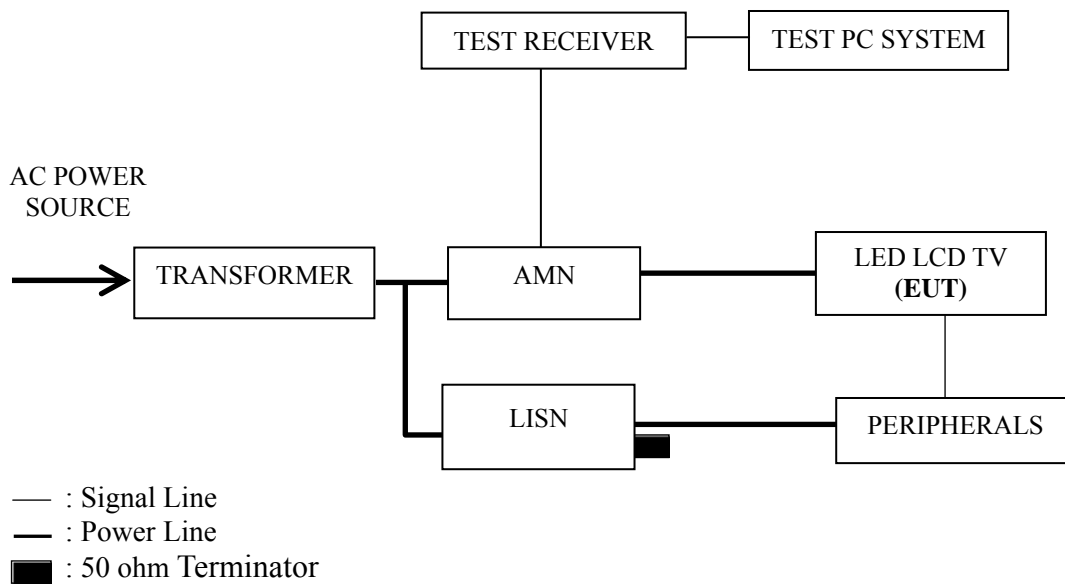
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2016	Apr 26, 2017
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 20, 2016	Mar 19, 2017
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@30Hz & 1kHz Playing
HDMI4 3840*2160@30Hz & 1kHz Playing
HDMI1 1920*1080@60Hz & 1kHz Playing
HDMI1 1280*1024@60Hz & 1kHz playing
HDMI1 640*480@60Hz & 1kHz playing
HDMI1080P
USB Play
LAN Play
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@30Hz & 1kHz Playing	P16
HDMI4 3840*2160@30Hz & 1kHz Playing	P17
HDMI1 1920*1080@60Hz & 1kHz Playing	P18
HDMI1 1280*1024@60Hz & 1kHz playing	P19
HDMI1 640*480@60Hz & 1kHz playing	P20
HDMI1080P	P21
USB Play	P22
LAN Play	P23
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 MHL test mode. The worst emission is detected at 0.150MHz (Quasi-Peak Value) with corrected signal level of 10.58 dB (μV) (limit is 66.00 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI1 3840*2160@60Hz Date of Test : Feb 26, 2017
& 1kHz Playing

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

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI2 3840*2160@60Hz & 1kHz Playing Date of Test : Feb 26, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.155	46.85	57.43	10.58	65.74	8.31	QP
	0.325	31.32	41.79	10.47	59.57	17.78	
	0.546	31.10	41.50	10.40	56.00	14.50	
	0.775	28.24	38.64	10.40	56.00	17.36	
	1.403	26.34	36.75	10.41	56.00	19.25	
	2.736	23.87	34.30	10.43	56.00	21.70	
	0.155	33.85	44.43	10.58	55.74	11.31	AV
	0.325	24.32	34.79	10.47	49.57	14.78	
	0.546	23.10	33.50	10.40	46.00	12.50	
	0.775	21.24	31.64	10.40	46.00	14.36	
	1.403	19.34	29.75	10.41	46.00	16.25	
	2.736	14.87	25.30	10.43	46.00	20.70	
Neutral	0.154	47.19	57.76	10.57	65.78	8.02	QP
	0.325	28.56	39.02	10.46	59.57	20.55	
	0.546	25.92	36.31	10.39	56.00	19.69	
	0.759	24.44	34.83	10.39	56.00	21.17	
	2.088	28.32	38.75	10.43	56.00	17.25	
	4.269	26.57	37.06	10.49	56.00	18.94	
	0.154	32.19	42.76	10.57	55.78	13.02	AV
	0.325	16.56	27.02	10.46	49.57	22.55	
	0.546	17.92	28.31	10.39	46.00	17.69	
	0.759	16.44	26.83	10.39	46.00	19.17	
	2.088	11.32	21.75	10.43	46.00	24.25	
	4.269	15.57	26.06	10.49	46.00	19.94	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI3 3840*2160@30Hz & 1kHz Playing Date of Test : Feb 26, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	45.38	55.97	10.59	65.91	9.94	QP
	0.489	30.51	40.91	10.40	56.19	15.28	
	0.775	25.46	35.86	10.40	56.00	20.14	
	1.433	25.44	35.84	10.40	56.00	20.16	
	1.878	27.50	37.91	10.41	56.00	18.09	
	4.224	23.34	33.78	10.44	56.00	22.22	
	0.152	34.38	44.97	10.59	55.91	10.94	AV
	0.489	19.51	29.91	10.40	46.19	16.28	
	0.775	18.46	28.86	10.40	46.00	17.14	
	1.433	17.44	27.84	10.40	46.00	18.16	
	1.878	16.50	26.91	10.41	46.00	19.09	
	4.224	15.34	25.78	10.44	46.00	20.22	
Neutral	0.153	46.03	56.60	10.57	65.82	9.22	QP
	0.489	28.50	38.89	10.39	56.19	17.30	
	0.775	26.92	37.31	10.39	56.00	18.69	
	1.433	26.78	37.20	10.42	56.00	18.80	
	2.088	25.95	36.38	10.43	56.00	19.62	
	4.224	24.84	35.33	10.49	56.00	20.67	
	0.153	37.03	47.60	10.57	55.82	8.22	AV
	0.489	19.50	29.89	10.39	46.19	16.30	
	0.775	16.92	27.31	10.39	46.00	18.69	
	1.433	16.78	27.20	10.42	46.00	18.80	
	2.088	16.95	27.38	10.43	46.00	18.62	
	4.224	17.84	28.33	10.49	46.00	17.67	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI4 3840*2160@30Hz & 1kHz Playing Date of Test : Feb 26, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	45.75	56.33	10.58	65.82	9.49	QP
	0.325	27.32	37.79	10.47	59.57	21.78	
	0.546	30.59	40.99	10.40	56.00	15.01	
	0.775	28.65	39.05	10.40	56.00	16.95	
	1.296	27.14	37.55	10.41	56.00	18.45	
	4.269	25.76	36.20	10.44	56.00	19.80	
	0.153	34.75	45.33	10.58	55.82	10.49	AV
	0.325	21.32	31.79	10.47	49.57	17.78	
	0.546	21.59	31.99	10.40	46.00	14.01	
	0.775	21.65	32.05	10.40	46.00	13.95	
	1.296	17.14	27.55	10.41	46.00	18.45	
	4.269	12.76	23.20	10.44	46.00	22.80	
Neutral	0.154	47.16	57.73	10.57	65.78	8.05	QP
	0.325	23.35	33.81	10.46	59.57	25.76	
	0.546	29.81	40.20	10.39	56.00	15.80	
	0.775	27.37	37.76	10.39	56.00	18.24	
	1.433	28.65	39.07	10.42	56.00	16.93	
	4.224	29.47	39.96	10.49	56.00	16.04	
	0.154	34.16	44.73	10.57	55.78	11.05	AV
	0.325	19.35	29.81	10.46	49.57	19.76	
	0.546	16.81	27.20	10.39	46.00	18.80	
	0.775	23.37	33.76	10.39	46.00	12.24	
	1.433	19.65	30.07	10.42	46.00	15.93	
	4.224	15.47	25.96	10.49	46.00	20.04	

TEST ENGINEER: BYRON WU

EUT	:	<u>LED LCD TV</u>	Temperature :	<u>22°C</u>
Model No.	:	<u>55H9707</u>	Humidity :	<u>48%RH</u>
Test Mode	:	HDMI1 1920*1080@60Hz & 1kHz Playing	Date of Test :	Feb 26, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	50.20	60.79	10.59	65.91	5.12	QP
	0.317	32.59	43.06	10.47	59.80	16.74	
	0.759	30.20	40.60	10.40	56.00	15.40	
	1.403	29.79	40.20	10.41	56.00	15.80	
	2.707	29.19	39.62	10.43	56.00	16.38	
	5.333	25.60	36.05	10.45	60.00	23.95	
	AV	0.152	37.30	47.89	10.59	55.91	8.02
		0.317	25.29	35.76	10.47	49.80	14.04
		0.759	23.90	34.30	10.40	46.00	11.70
		1.403	21.99	32.40	10.41	46.00	13.60
		2.707	22.29	32.72	10.43	46.00	13.28
		5.333	16.00	26.45	10.45	50.00	23.55
Neutral	0.152	50.60	61.18	10.58	65.91	4.73	QP
	0.320	31.69	42.15	10.46	59.71	17.56	
	0.767	29.70	40.09	10.39	56.00	15.91	
	1.568	26.30	36.72	10.42	56.00	19.28	
	2.707	29.09	39.55	10.46	56.00	16.45	
	5.333	25.41	35.91	10.50	60.00	24.09	
	AV	0.152	37.00	47.58	10.58	55.91	8.33
		0.320	25.29	35.75	10.46	49.71	13.96
		0.767	23.30	33.69	10.39	46.00	12.31
		1.568	17.20	27.62	10.42	46.00	18.38
		2.707	22.69	33.15	10.46	46.00	12.85
		5.333	16.31	26.81	10.50	50.00	23.19

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI1 1280*1024@60Hz Date of Test : Feb 26, 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	51.10	61.69	10.59	66.00	4.31	QP
	0.322	32.49	42.96	10.47	59.66	16.70	
	0.767	30.00	40.40	10.40	56.00	15.60	
	1.403	29.19	39.60	10.41	56.00	16.40	
	2.581	29.50	39.92	10.42	56.00	16.08	
	5.774	26.20	36.66	10.46	60.00	23.34	
	0.150	38.10	48.69	10.59	56.00	7.31	AV
	0.322	24.99	35.46	10.47	49.66	14.20	
	0.767	23.60	34.00	10.40	46.00	12.00	
	1.403	20.99	31.40	10.41	46.00	14.60	
	2.581	24.30	34.72	10.42	46.00	11.28	
	5.774	19.10	29.56	10.46	50.00	20.44	
Neutral	0.153	50.01	60.58	10.57	65.82	5.24	QP
	0.325	32.99	43.45	10.46	59.57	16.12	
	0.546	29.50	39.89	10.39	56.00	16.11	
	0.974	30.60	41.00	10.40	56.00	15.00	
	2.527	30.10	40.55	10.45	56.00	15.45	
	5.774	25.80	36.31	10.51	60.00	23.69	
	0.153	36.41	46.98	10.57	55.82	8.84	AV
	0.325	26.79	37.25	10.46	49.57	12.32	
	0.546	24.90	35.29	10.39	46.00	10.71	
	0.974	22.30	32.70	10.40	46.00	13.30	
	2.527	23.90	34.35	10.45	46.00	11.65	
	5.774	18.80	29.31	10.51	50.00	20.69	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI1 640*480@60Hz & 1kHz playing Date of Test : Feb 26, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	51.40	61.99	10.59	66.00	4.01	QP
	0.329	33.90	44.36	10.46	59.49	15.13	
	0.775	30.50	40.90	10.40	56.00	15.10	
	1.433	30.61	41.01	10.40	56.00	14.99	
	2.527	28.80	39.22	10.42	56.00	16.78	
	4.454	27.80	38.24	10.44	56.00	17.76	
	0.150	38.50	49.09	10.59	56.00	6.91	AV
	0.329	27.80	38.26	10.46	49.49	11.23	
	0.775	18.20	28.60	10.40	46.00	17.40	
	1.433	21.91	32.31	10.40	46.00	13.69	
	2.527	20.30	30.72	10.42	46.00	15.28	
	4.454	20.00	30.44	10.44	46.00	15.56	
Neutral	0.150	51.50	62.08	10.58	66.00	3.92	QP
	0.329	32.80	43.25	10.45	59.49	16.24	
	0.775	28.30	38.69	10.39	56.00	17.31	
	2.044	26.70	37.13	10.43	56.00	18.87	
	4.622	26.29	36.79	10.50	56.00	19.21	
	5.535	24.70	35.21	10.51	60.00	24.79	
	0.150	38.40	48.98	10.58	56.00	7.02	AV
	0.329	27.20	37.65	10.45	49.49	11.84	
	0.775	17.40	27.79	10.39	46.00	18.21	
	2.044	19.00	29.43	10.43	46.00	16.57	
	4.622	19.69	30.19	10.50	46.00	15.81	
	5.535	16.70	27.21	10.51	50.00	22.79	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : HDMI1080P Date of Test : Feb 26, 2017

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

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : USB Play Date of Test : Feb 26, 2017

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

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : LAN Play Date of Test : Feb 26, 2017

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

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : MHL Date of Test : Feb 26, 2017

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

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 48%RH

Test Mode : Wifi Date of Test : Feb 26, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.150	51.60	62.19	10.59	66.00	3.81	QP
	0.489	32.60	43.00	10.40	56.19	13.19	
	0.767	32.10	42.50	10.40	56.00	13.50	
	1.418	31.21	41.61	10.40	56.00	14.39	
	3.328	28.90	39.33	10.43	56.00	16.67	
	5.333	27.70	38.15	10.45	60.00	21.85	
	0.150	39.50	50.09	10.59	56.00	5.91	AV
	0.489	21.00	31.40	10.40	46.19	14.79	
	0.767	23.60	34.00	10.40	46.00	12.00	
	1.418	22.81	33.21	10.40	46.00	12.79	
	3.328	19.80	30.23	10.43	46.00	15.77	
	5.333	18.80	29.25	10.45	50.00	20.75	
Neutral	0.150	51.60	62.18	10.58	66.00	3.82	QP
	0.329	35.20	45.65	10.45	59.49	13.84	
	0.963	32.10	42.50	10.40	56.00	13.50	
	1.418	33.10	43.52	10.42	56.00	12.48	
	4.622	29.09	39.59	10.50	56.00	16.41	
	6.056	27.50	38.02	10.52	60.00	21.98	
	0.150	38.90	49.48	10.58	56.00	6.52	AV
	0.329	24.10	34.55	10.45	49.49	14.94	
	0.963	22.30	32.70	10.40	46.00	13.30	
	1.418	22.70	33.12	10.42	46.00	12.88	
	4.622	23.09	33.59	10.50	46.00	12.41	
	6.056	18.40	28.92	10.52	50.00	21.08	

TEST ENGINEER: BYRON WU

4 RADIATED EMISSION TEST

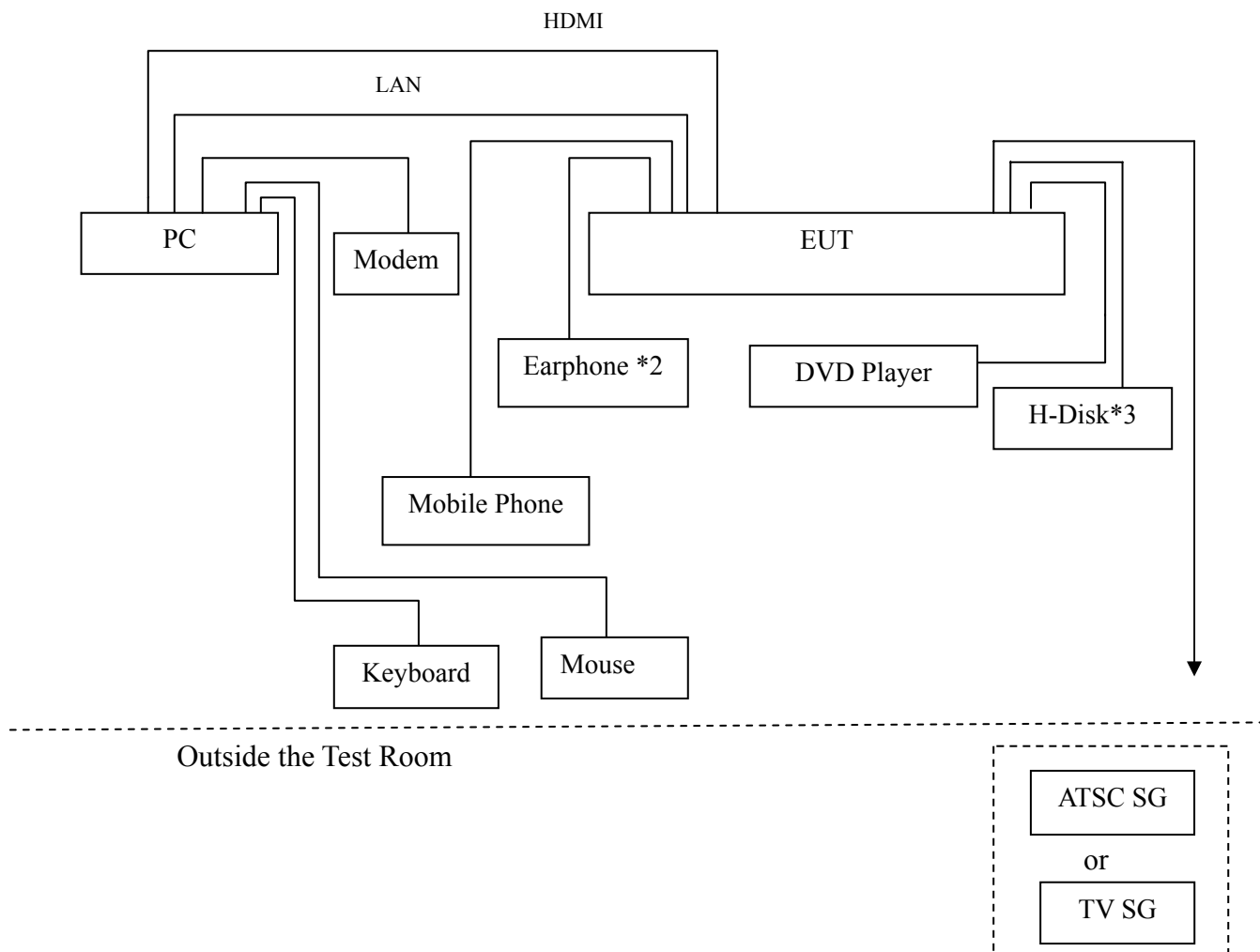
4.1 Test Equipment

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	--	--

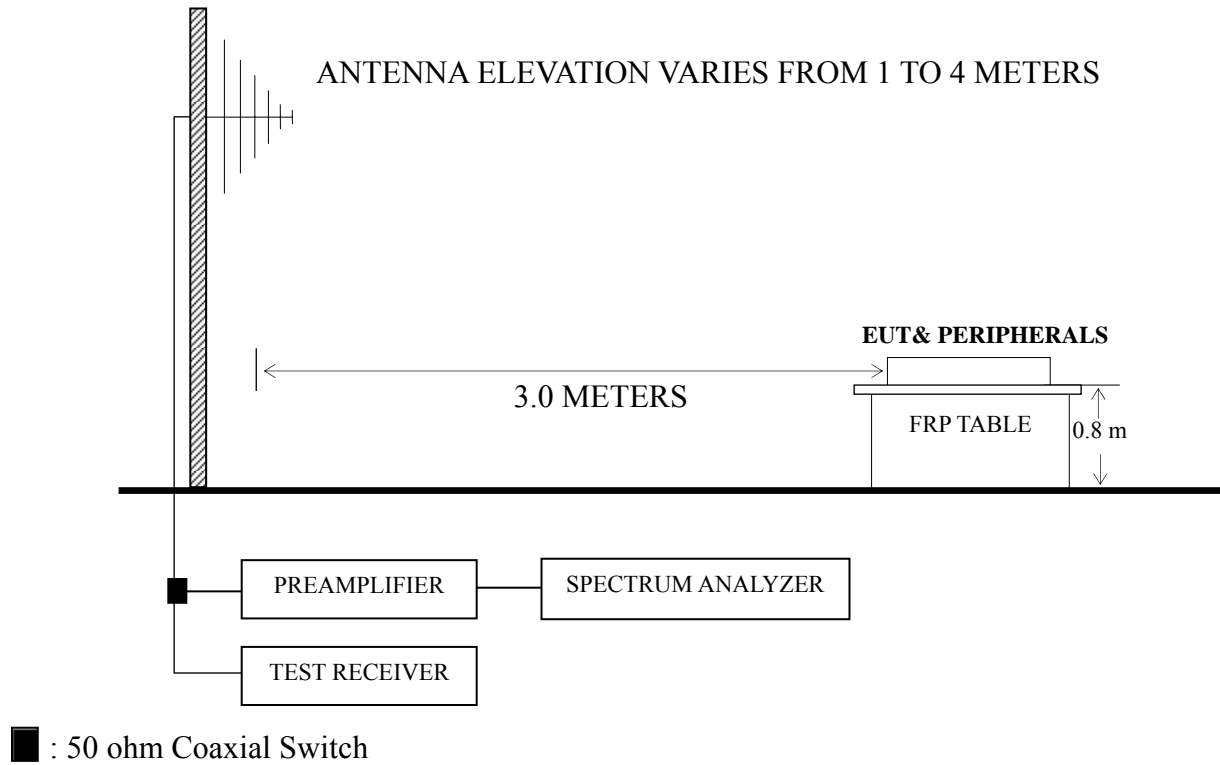
4.2 Block Diagram of Test Setup

4.2.1 EUT & Peripherals



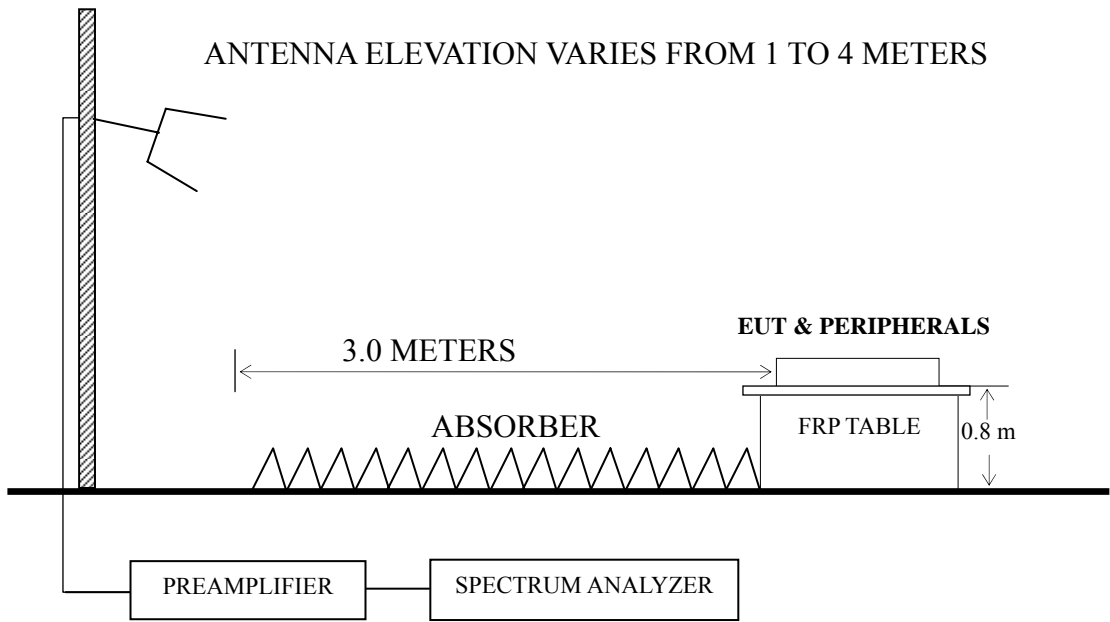
4.2.2 Radiated emission test setup

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
HDMI3 3840*2160@30Hz & 1kHz Playing	P32
HDMI4 3840*2160@30Hz & 1kHz Playing	P33-P34
HDMI4 1920*1080@60Hz & 1kHz Playing	P35
HDMI4 1280*1024@60Hz & 1kHz playing	P36
HDMI4 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 HDMI4 3840*2160@60Hz & 1kHz Playing test mode. The worst emission at horizontal polarization was detected at 796.183 MHz with corrected signal level of 42.56dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 2.0 m height and the turntable was at 140°. The worst emission at vertical polarization was detected at 860.035 MHz with corrected signal level of 42.96dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.6 m height and the turntable was at 60°.

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI1 3840*2160@30Hz Date of Test : Mar 08, 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	26.64	8.13	0.86	35.63	40.00	4.37
	161.474	19.48	11.24	1.33	32.05	43.50	11.45
	245.090	20.13	12.40	1.62	34.15	46.00	11.85
	468.876	12.92	17.10	2.20	32.22	46.00	13.78
	590.974	15.08	18.17	2.50	35.75	46.00	10.25
	903.309	12.82	21.25	3.09	37.16	46.00	8.84
Vertical	32.067	17.00	17.05	0.58	34.63	40.00	5.37
	80.362	26.46	8.99	0.89	36.34	40.00	3.66
	238.310	21.32	11.98	1.60	34.90	46.00	11.10
	478.846	13.87	17.20	2.22	33.29	46.00	12.71
	588.905	14.32	18.10	2.48	34.90	46.00	11.10
	890.728	17.64	21.10	3.07	41.81	46.00	4.19

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI2 3840*2160@30Hz & 1kHz Playing Date of Test : Mar 08, 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	26.42	8.30	0.86	35.58	40.00	4.42
	233.349	27.36	11.68	1.58	40.62	46.00	5.38
	297.224	23.78	13.60	1.75	39.13	46.00	6.87
	597.223	15.76	18.33	2.50	36.59	46.00	9.41
	796.183	16.41	20.37	2.89	39.67	46.00	6.33
	875.247	18.50	20.93	3.05	42.48	46.00	3.52
Vertical	32.979	17.48	16.67	0.59	34.74	40.00	5.26
	77.051	25.91	8.56	0.87	35.34	40.00	4.66
	233.349	22.54	11.68	1.58	35.80	46.00	10.20
	297.224	22.53	13.60	1.75	37.88	46.00	8.12
	801.786	15.24	20.40	2.91	38.55	46.00	7.45
	869.130	17.97	20.90	3.03	41.90	46.00	4.10

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI3 3840*2160@30Hz Date of Test : Mar 08, 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	25.88	8.52	0.87	35.27	40.00	4.73
	157.007	19.02	11.43	1.31	31.76	43.50	11.74
	234.991	22.91	11.80	1.59	36.30	46.00	9.70
	294.114	17.19	13.60	1.74	32.53	46.00	13.47
	452.720	13.65	16.82	2.16	32.63	46.00	13.37
	912.862	15.80	21.37	3.09	40.26	46.00	5.74
Vertical	30.745	15.80	17.88	0.57	34.25	40.00	5.75
	70.584	28.17	7.51	0.84	36.52	40.00	3.48
	152.664	18.40	11.80	1.29	31.49	43.50	12.01
	238.310	19.79	11.98	1.60	33.37	46.00	12.63
	482.216	14.40	17.22	2.23	33.85	46.00	12.15
	893.857	15.42	21.13	3.07	39.62	46.00	6.38

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI4 3840*2160@30Hz & 1kHz Playing Date of Test : Mar 08, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	73.876	27.20	8.13	0.86	0.00	36.19	40.00	3.81	QP
	159.225	19.83	11.35	1.32	0.00	32.50	43.50	11.00	
	231.718	24.88	11.62	1.58	0.00	38.08	46.00	7.92	
	465.599	15.71	17.02	2.19	0.00	34.92	46.00	11.08	
	796.183	19.30	20.37	2.89	0.00	42.56	46.00	3.44	
	854.960	18.11	20.63	3.00	0.00	41.74	46.00	4.26	PK
	1462.070	51.36	25.47	4.02	35.79	45.06	74.00	28.94	
	2617.383	51.11	28.93	5.44	35.20	50.28	74.00	23.72	
	4424.514	41.49	33.50	7.31	34.06	48.24	74.00	25.76	
	1462.070	33.53	25.47	4.02	35.79	27.23	54.00	26.77	AV
	2617.383	34.73	28.93	5.44	35.20	33.90	54.00	20.10	
	4424.514	25.64	33.50	7.31	34.06	32.39	54.00	21.61	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI4 3840*2160@30Hz & 1kHz Playing Date of Test : Mar 08, 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	33.095	18.32	16.67	0.59	0.00	35.58	40.00	4.42	QP
	75.370	26.89	8.34	0.87	0.00	36.10	40.00	3.90	
	144.842	17.24	12.60	1.26	0.00	31.10	43.50	12.40	
	233.349	20.23	11.68	1.58	0.00	33.49	46.00	12.51	
	470.523	16.71	17.10	2.20	0.00	36.01	46.00	9.99	
	860.035	19.26	20.70	3.00	0.00	42.96	46.00	3.04	
	1353.654	61.55	25.08	3.88	35.94	54.57	74.00	19.43	PK
	2598.691	45.77	28.83	5.44	35.20	44.84	74.00	29.16	
	3097.515	48.32	30.71	5.97	35.09	49.91	74.00	24.09	
	1353.654	44.77	25.08	3.88	35.94	37.79	54.00	16.21	AV
	2598.691	28.53	28.83	5.44	35.20	27.60	54.00	26.40	
	3097.515	30.82	30.71	5.97	35.09	32.41	54.00	21.59	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI4 1920*1080@60Hz Date of Test : Mar 08, 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	74.135	23.58	8.13	0.86	32.57	40.00	7.43
	164.908	19.40	11.10	1.35	31.85	43.50	11.65
	233.349	26.04	11.68	1.58	39.30	46.00	6.70
	357.929	16.35	15.31	1.93	33.59	46.00	12.41
	804.603	18.38	20.37	2.91	41.66	46.00	4.34
	860.035	17.90	20.70	3.00	41.60	46.00	4.40
Vertical	33.211	17.35	16.62	0.59	34.56	40.00	5.44
	78.689	25.92	8.75	0.88	35.55	40.00	4.45
	233.349	19.11	11.68	1.58	32.37	46.00	13.63
	485.609	15.67	17.26	2.23	35.16	46.00	10.84
	796.183	14.29	20.37	2.89	37.55	46.00	8.45
	878.322	17.92	20.97	3.05	41.94	46.00	4.06

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI4 1280*1024@60Hz Date of Test : Mar 08, 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	25.76	8.13	0.86	34.75	40.00	5.25
	231.718	24.42	11.62	1.58	37.62	46.00	8.38
	283.979	22.31	13.42	1.72	37.45	46.00	8.55
	499.425	18.70	17.50	2.26	38.46	46.00	7.54
	804.603	18.60	20.37	2.91	41.88	46.00	4.12
	878.322	17.50	20.97	3.05	41.52	46.00	4.48
Vertical	32.979	18.63	16.67	0.59	35.89	40.00	4.11
	77.051	27.03	8.56	0.87	36.46	40.00	3.54
	233.349	19.67	11.68	1.58	32.93	46.00	13.07
	497.677	14.84	17.46	2.26	34.56	46.00	11.44
	798.980	13.95	20.40	2.89	37.24	46.00	8.76
	878.322	17.91	20.97	3.05	41.93	46.00	4.07

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI4 640*480@60Hz & 1kHz Playing Date of Test : Mar 08, 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	73.876	26.43	8.13	0.86	35.42	40.00	4.58
	230.907	22.27	11.56	1.58	35.41	46.00	10.59
	286.982	19.58	13.45	1.73	34.76	46.00	11.24
	449.556	14.42	16.80	2.16	33.38	46.00	12.62
	804.603	15.60	20.37	2.91	38.88	46.00	7.12
	881.407	17.32	21.00	3.05	41.37	46.00	4.63
Vertical	33.328	17.12	16.57	0.59	34.28	40.00	5.72
	76.060	26.30	8.45	0.87	35.62	40.00	4.38
	233.349	19.59	11.68	1.58	32.85	46.00	13.15
	286.982	20.31	13.45	1.73	35.49	46.00	10.51
	804.603	13.54	20.37	2.91	36.82	46.00	9.18
	875.247	17.58	20.93	3.05	41.56	46.00	4.44

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : HDMI 1080P Date of Test : Mar 08, 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	75.182	23.02	8.34	0.86	32.22	40.00	7.78
	234.168	22.53	11.74	1.59	35.86	46.00	10.14
	293.084	17.10	13.58	1.74	32.42	46.00	13.58
	449.556	13.81	16.80	2.16	32.77	46.00	13.23
	796.183	17.62	20.37	2.89	40.88	46.00	5.12
	884.503	17.20	21.05	3.05	41.30	46.00	4.70
Vertical	31.399	16.61	17.45	0.57	34.63	40.00	5.37
	51.301	24.14	8.27	0.71	33.12	40.00	6.88
	74.396	26.94	8.19	0.86	35.99	40.00	4.01
	159.225	20.07	11.35	1.32	32.74	43.50	10.76
	497.677	14.61	17.46	2.26	34.33	46.00	11.67
	863.056	14.63	20.77	3.03	38.43	46.00	7.57

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : USB Play Date of Test : Mar 08, 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	32.179	16.72	16.99	0.58	34.29	40.00	5.71
	80.644	25.25	8.99	0.89	35.13	40.00	4.87
	231.718	20.69	11.62	1.58	33.89	46.00	12.11
	473.835	14.97	17.14	2.20	34.31	46.00	11.69
	810.265	12.04	20.30	2.91	35.25	46.00	10.75
	887.610	14.81	21.10	3.07	38.98	46.00	7.02
Vertical	73.103	26.24	7.96	0.85	35.05	40.00	4.95
	234.168	20.73	11.74	1.59	34.06	46.00	11.94
	472.176	13.25	17.12	2.20	32.57	46.00	13.43
	593.050	12.39	18.25	2.50	33.14	46.00	12.86
	796.183	17.45	20.37	2.89	40.71	46.00	5.29
	866.088	17.59	20.83	3.03	41.45	46.00	4.55

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : LAN Play Date of Test : Mar 08, 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	77.321	26.83	8.56	0.87	36.26	40.00	3.74
	142.324	20.24	12.90	1.24	34.38	43.50	9.12
	175.652	20.87	10.56	1.39	32.82	43.50	10.68
	478.846	14.66	17.20	2.22	34.08	46.00	11.92
	654.232	10.99	19.25	2.63	32.87	46.00	13.13
	909.667	13.00	21.30	3.09	37.39	46.00	8.61
Vertical	32.406	17.53	16.94	0.58	35.05	40.00	4.95
	73.617	27.67	8.07	0.86	36.60	40.00	3.40
	147.404	18.61	12.35	1.27	32.23	43.50	11.27
	234.168	20.27	11.74	1.59	33.60	46.00	12.40
	495.934	14.72	17.42	2.25	34.39	46.00	11.61
	863.056	14.70	20.77	3.03	38.50	46.00	7.50

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : MHL Date of Test : Mar 08, 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	76.781	24.61	8.52	0.87	34.00	40.00	6.00
	157.559	20.26	11.40	1.31	32.97	43.50	10.53
	237.476	22.71	11.98	1.60	36.29	46.00	9.71
	483.910	14.65	17.24	2.23	34.12	46.00	11.88
	724.261	12.07	19.33	2.77	34.17	46.00	11.83
	887.610	16.64	21.10	3.07	40.81	46.00	5.19
Vertical	31.289	16.68	17.53	0.57	34.78	40.00	5.22
	72.847	27.05	7.91	0.85	35.81	40.00	4.19
	157.559	19.61	11.40	1.31	32.32	43.50	11.18
	234.991	19.55	11.80	1.59	32.94	46.00	13.06
	487.315	12.68	17.28	2.23	32.19	46.00	13.81
	869.130	15.15	20.90	3.03	39.08	46.00	6.92

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H9707 Humidity : 60%RH

Test Mode : Wifi Date of Test : Mar 08, 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	31.955	16.16	17.10	0.58	33.84	40.00	6.16
	75.446	26.47	8.38	0.87	35.72	40.00	4.28
	152.130	18.06	11.80	1.29	31.15	43.50	12.35
	234.168	19.27	11.74	1.59	32.60	46.00	13.40
	502.940	12.53	17.52	2.26	32.31	46.00	13.69
	860.035	13.54	20.70	3.00	37.24	46.00	8.76
Vertical	79.800	25.63	8.86	0.89	35.38	40.00	4.62
	168.414	18.85	10.96	1.36	31.17	43.50	12.33
	239.987	21.82	12.10	1.60	35.52	46.00	10.48
	468.876	14.03	17.10	2.20	33.33	46.00	12.67
	590.974	13.54	18.17	2.50	34.21	46.00	11.79
	872.183	16.58	20.90	3.03	40.51	46.00	5.49

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 20

Note: We had required the applicant and manufacturer that all electrical and mechanical devices employed for spurious radiation suppression, including any modifications made during certification testing, must be incorporated in each unit marked

TEST ENGINEER:



(BYRON WU)

6 DEVIATION TO TEST SPECIFICATIONS

None