

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

LED LCD TV

Model No.	Brand
50DU60+0, 50DU6+00 50H6607, 50H6D, 50H6D+ 50H6+0D, 50H6+0D1 50H60+0D, 50H60+0D1	Hisense

FCC ID : W9HLCDF0120

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

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Report No. : ACI-F17186
Date of Test : May 03-10, 2017
Date of Report : May 23, 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 May 03-10, 2017 is technically compliance with the FCC official limits also.

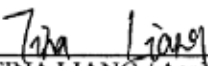
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

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.

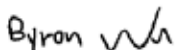
The test results for EUT's TV functions are contained in No.F17001A4, a Verification report.

Date of Test : May 03-10, 2017 Date of Report : May 23, 2017

Producer :


TINA LIANG / Assistant

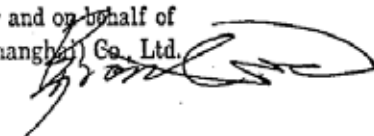
Review :


BYRON WU / Deputy Assistant Manager



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

Signatory :


Authorized Signature(s) 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	:	50DU60+0, 50DU6+00, 50H6607, 50H6D, 50H6D+50H6+0D, 50H6+0D1, 50H60+0D, 50H60+0D1
Note#1	:	The above models are all the same except for model number.50H6D model is tested and recorded in the report.
Note#2	:	“+”represents any of the Arabic numeral.
Brand	:	Hisense
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.
LCD Panel	:	Manufacturer : Hisense M/N : HD500K3U54
Tuner	:	Manufacturer : SILICON LABS M/N : Si2151-A10
WIFI Modular	:	FCC ID: 2AJVQ-ZDGFMT7612U
Max Resolution	:	3840*2160@60Hz
HDMI Cable*4 (Lab provide)	:	Shielded, Detachable, 1.80m
Power Cord	:	Unshielded, Detachable, 1.80m, 2C
LAN Cable	:	Unshielded, Detachable, 1.50m

USB Cable*3 : Shielded, Detachable, 1.00m
(Lab provide)

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 ANT Port : Connected with ATSC SG / TV SG
- (2) One USB 1 Port : Connected with Hard-Disk
- (3) One USB 2 Port : Connected with Hard-Disk
- (4) One Service Port : Do not open to the customers
- (5) One AUDIO OUT Port : Connected with Earphone#1
- (6) One HDMI 1/MHL Port : Connected with Mobile phone
- (7) One HDMI2 Port : Connected with PC
- (8) One USB 3 Port : Connected with Hard-Disk

Back Port:

- (9) One COMPONENT IN/AV IN Port : Connected with DVD PLAYER
- (10) One LAN IN Port : Connected with PC
- (11) One Digital Audio Out Port : Connected with Audio Converter to Earphone#2
- (12) One HDMI3 Port : Connected with PC
- (13) One HDMI4 Port : Connected with DVD PLAYER

2.2 Peripherals

2.2.1 PC

Manufacturer : HP
Model Number : Pro3340
Serial Number : 6CR2512VFD
Power Cord : Unshielded, Detachable, 1.8m
Certificate : FCC DoC; CE/EMC; VCCI; C-Tick;

2.2.2 Keyboard

Manufacturer : Microsoft
Model Number : RT2300
Serial Number : 7668200662248
Data Cable : Shielded, undetachable, 1.8m
Certificate : CE/EMC, FCC DoC, VCCI, MIC,
C-Tick, BSMI

2.2.3 Mouse

Manufacturer : Microsoft
Model Number : RT2300
Serial Number : 6965712071551
Data Cable : Shielded, Undetachable, 1.8m.
Certificate : CE/EMC, FCC DoC, VCCI, MIC,
C-Tick, BSMI

2.2.4 Modem

Manufacturer : TP-LINK
Model Number : TM-EC5658V
Serial Number : 07123301053
Data Cable : Shielded, Detachable, 1.8m
Certificate : CCC

2.2.5 Earphone*2

Manufacturer : EDIFIER
Model Number : H210

2.2.6 TV Signal Generator

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

2.2.7 ATSC Signal Generator

Manufacturer : SENCORE
Model Number : ATSC997
Serial Number : 6790071

2.2.8 DVD PLAYER

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

2.2.9 Hard Disk#1

Manufacturer : Tetasys
Model Number : F12
Serial Number : A010022-486006
Data Cable : Shielded, Undetachable, 1.8m.
Certificate : CE, FCC DoC

2.2.10 Hard Disk #2

Manufacturer : Tetasys
Model Number : F12
Serial Number : A010022-4860010X
Data Cable : Shielded, Undetachable, 1.8m.
Certificate : CE, FCC DoC

2.2.11 Hard Disk #3

Manufacturer : Tetasys
Model Number : F12
Serial Number : A010022-4A60007
Data Cable : Shielded, Undetachable, 1.8m.
Certificate : CE, FCC DoC

2.2.12 Earphone*2

Manufacturer : Edifier
Model Number : H210

2.3 Description of Test Facility

Site Description (No.3 3m Chamber) : Sept. 17, 1998 file on
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

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

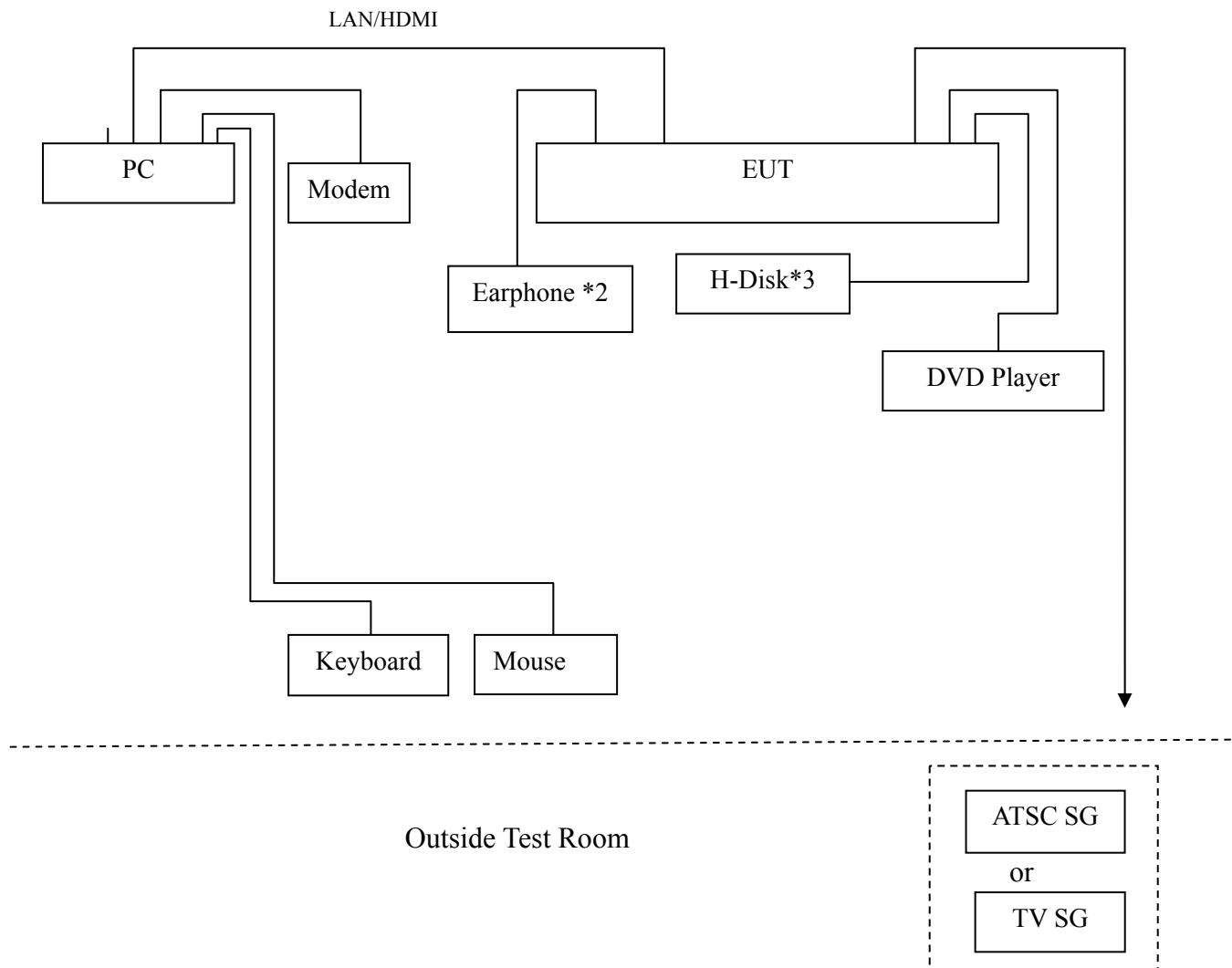
3.1 Test Equipment

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

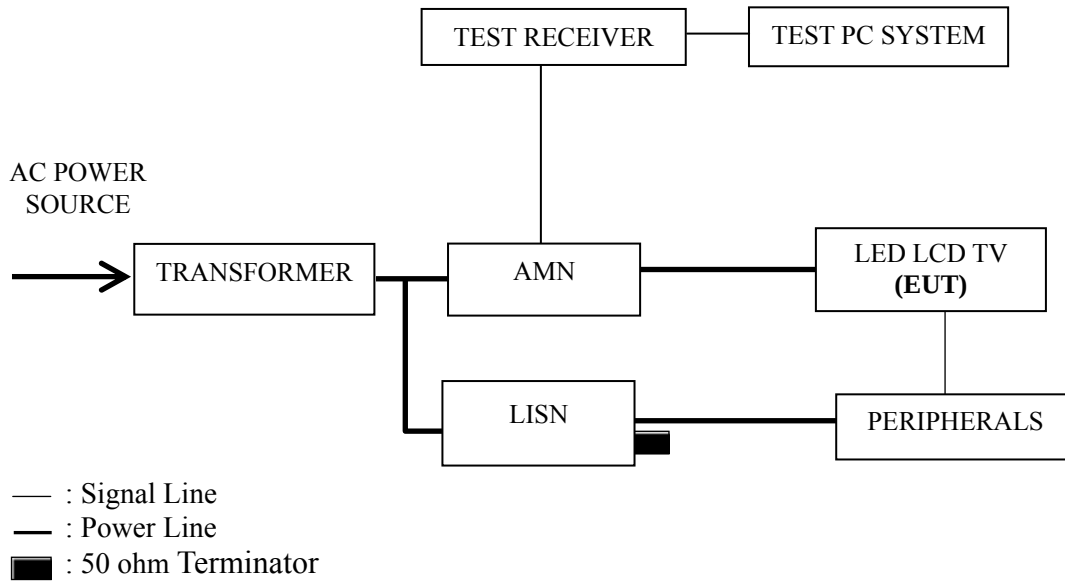
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2017	Apr 26, 2018
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 17, 2017	Mar 16, 2018
4.	50Ω Terminator	Anritsu	BNC	001	Mar 17, 2017	Mar 16, 2018
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 (μV)	
	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 Hard Disk.

3.5.7 In LAN Play mode, set the EUT play digital media through LAN port.

3.5.8 In MHL mode, set the EUT play digital media from mobile phone.

3.5.1 In WIFI mode, set the EUT play digital media through WIFI.

3.5.2 The other peripherals devices were driven and operated during the test.

3.5.3 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
MHL
LAN Play
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
MHL	P23
LAN Play	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 HDMI 3840*2160@60Hz & 1kHz Playing test mode. The worst emission is detected at 0.385MHz (Average Value) with corrected signal level of 40.28 dB (μV) (limit is 48.17 dB (μV)), when the Line of the EUT is connected to AMN.

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : May 03, 2017
 3840*2160@60Hz &
 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	40.31	10.58	50.89	65.82	14.93	QP
	0.385	36.84	10.44	47.28	58.17	10.89	
	0.535	33.03	10.40	43.43	56.00	12.57	
	0.844	30.79	10.40	41.19	56.00	14.81	
	1.602	26.49	10.40	36.89	56.00	19.11	
	7.100	20.94	10.47	31.41	60.00	28.59	
	0.153	31.31	10.58	41.89	55.82	13.93	AV
	0.385	29.84	10.44	40.28	48.17	7.89	
	0.535	21.03	10.40	31.43	46.00	14.57	
	0.844	18.79	10.40	29.19	46.00	16.81	
	1.602	12.49	10.40	22.89	46.00	23.11	
	7.100	13.94	10.47	24.41	50.00	25.59	
Neutral	0.161	38.60	10.56	49.16	65.43	16.27	QP
	0.406	34.19	10.42	44.61	57.73	13.12	
	0.743	25.47	10.39	35.86	56.00	20.14	
	1.374	27.51	10.41	37.92	56.00	18.08	
	2.237	25.35	10.44	35.79	56.00	20.21	
	6.805	18.68	10.53	29.21	60.00	30.79	
	0.161	23.60	10.56	34.16	55.43	21.27	AV
	0.406	25.19	10.42	35.61	47.73	12.12	
	0.743	15.47	10.39	25.86	46.00	20.14	
	1.374	13.51	10.41	23.92	46.00	22.08	
	2.237	10.35	10.44	20.79	46.00	25.21	
	6.805	11.68	10.53	22.21	50.00	27.79	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI2 Date of Test : May 03, 2017
 3840*2160@60Hz &
 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	39.44	10.59	50.03	65.91	15.88	QP
	0.385	36.94	10.44	47.38	58.17	10.79	
	0.535	33.11	10.40	43.51	56.00	12.49	
	0.853	31.91	10.40	42.31	56.00	13.69	
	1.141	28.90	10.40	39.30	56.00	16.70	
	6.878	21.36	10.47	31.83	60.00	28.17	
	0.152	29.44	10.59	40.03	55.91	15.88	AV
	0.385	28.94	10.44	39.38	48.17	8.79	
	0.535	20.11	10.40	30.51	46.00	15.49	
	0.853	19.91	10.40	30.31	46.00	15.69	
	1.141	12.90	10.40	23.30	46.00	22.70	
	6.878	18.36	10.47	28.83	50.00	21.17	
Neutral	0.152	37.84	10.58	48.42	65.91	17.49	QP
	0.381	30.47	10.43	40.90	58.25	17.35	
	0.535	32.10	10.39	42.49	56.00	13.51	
	0.839	31.17	10.40	41.57	56.00	14.43	
	1.160	30.16	10.40	40.56	56.00	15.44	
	7.100	19.31	10.53	29.84	60.00	30.16	
	0.152	26.84	10.58	37.42	55.91	18.49	AV
	0.381	20.47	10.43	30.90	48.25	17.35	
	0.535	22.10	10.39	32.49	46.00	13.51	
	0.839	16.17	10.40	26.57	46.00	19.43	
	1.160	17.16	10.40	27.56	46.00	18.44	
	7.100	12.31	10.53	22.84	50.00	27.16	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI3 Date of Test : May 03, 2017
3840*2160@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	39.49	10.59	50.08	65.91	15.83	QP
	0.385	36.99	10.44	47.43	58.17	10.74	
	0.535	33.06	10.40	43.46	56.00	12.54	
	0.844	30.67	10.40	41.07	56.00	14.93	
	1.781	27.58	10.41	37.99	56.00	18.01	
	7.100	20.06	10.47	30.53	60.00	29.47	
	0.152	28.49	10.59	39.08	55.91	16.83	AV
	0.385	28.99	10.44	39.43	48.17	8.74	
	0.535	20.06	10.40	30.46	46.00	15.54	
	0.844	17.67	10.40	28.07	46.00	17.93	
	1.781	13.58	10.41	23.99	46.00	22.01	
	7.100	13.06	10.47	23.53	50.00	26.47	
Neutral	0.153	41.81	10.57	52.38	65.82	13.44	QP
	0.381	34.46	10.43	44.89	58.25	13.36	
	0.535	31.76	10.39	42.15	56.00	13.85	
	0.844	30.32	10.40	40.72	56.00	15.28	
	1.160	29.78	10.40	40.18	56.00	15.82	
	7.100	19.73	10.53	30.26	60.00	29.74	
	0.153	30.81	10.57	41.38	55.82	14.44	AV
	0.381	24.46	10.43	34.89	48.25	13.36	
	0.535	20.76	10.39	31.15	46.00	14.85	
	0.844	18.32	10.40	28.72	46.00	17.28	
	1.160	17.78	10.40	28.18	46.00	17.82	
	7.100	11.73	10.53	22.26	50.00	27.74	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI4 Date of Test : May 03, 2017
 3840*2160@60Hz &
 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.64	10.58	50.22	65.82	15.60	QP
	0.389	36.98	10.44	47.42	58.08	10.66	
	0.535	33.11	10.40	43.51	56.00	12.49	
	0.839	30.55	10.40	40.95	56.00	15.05	
	1.449	27.61	10.40	38.01	56.00	17.99	
	6.698	16.58	10.47	27.05	60.00	32.95	
	0.153	30.64	10.58	41.22	55.82	14.60	AV
	0.389	27.98	10.44	38.42	48.08	9.66	
	0.535	20.11	10.40	30.51	46.00	15.49	
	0.839	16.55	10.40	26.95	46.00	19.05	
	1.449	11.61	10.40	22.01	46.00	23.99	
	6.698	9.58	10.47	20.05	50.00	29.95	
Neutral	0.152	40.66	10.58	51.24	65.91	14.67	QP
	0.385	34.45	10.43	44.88	58.17	13.29	
	0.529	30.39	10.39	40.78	56.00	15.22	
	0.839	30.34	10.40	40.74	56.00	15.26	
	1.160	29.60	10.40	40.00	56.00	16.00	
	6.878	21.76	10.53	32.29	60.00	27.71	
	0.152	30.66	10.58	41.24	55.91	14.67	AV
	0.385	23.45	10.43	33.88	48.17	14.29	
	0.529	18.39	10.39	28.78	46.00	17.22	
	0.839	17.34	10.40	27.74	46.00	18.26	
	1.160	16.60	10.40	27.00	46.00	19.00	
	6.878	18.76	10.53	29.29	50.00	20.71	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : May 03, 2017
 1920*1080@60Hz &
 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.20	10.58	49.78	65.82	16.04	QP
	0.385	36.00	10.44	46.44	58.17	11.73	
	0.535	33.85	10.40	44.25	56.00	11.75	
	0.844	30.42	10.40	40.82	56.00	15.18	
	1.781	27.53	10.41	37.94	56.00	18.06	
	6.878	21.73	10.47	32.20	60.00	27.80	
	0.153	30.20	10.58	40.78	55.82	15.04	AV
	0.385	27.00	10.44	37.44	48.17	10.73	
	0.535	20.85	10.40	31.25	46.00	14.75	
	0.844	18.42	10.40	28.82	46.00	17.18	
	1.781	11.53	10.41	21.94	46.00	24.06	
	6.878	18.73	10.47	29.20	50.00	20.80	
Neutral	0.161	37.65	10.56	48.21	65.43	17.22	QP
	0.406	32.05	10.42	42.47	57.73	15.26	
	0.743	28.72	10.39	39.11	56.00	16.89	
	0.974	24.05	10.40	34.45	56.00	21.55	
	1.374	27.17	10.41	37.58	56.00	18.42	
	7.025	18.02	10.53	28.55	60.00	31.45	
	0.161	24.65	10.56	35.21	55.43	20.22	AV
	0.406	20.05	10.42	30.47	47.73	17.26	
	0.743	20.72	10.39	31.11	46.00	14.89	
	0.974	13.05	10.40	23.45	46.00	22.55	
	1.374	13.17	10.41	23.58	46.00	22.42	
	7.025	10.02	10.53	20.55	50.00	29.45	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : May 03, 2017
1280*1024@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.15	10.58	49.73	65.82	16.09	QP
	0.385	36.94	10.44	47.38	58.17	10.79	
	0.535	33.12	10.40	43.52	56.00	12.48	
	0.853	31.55	10.40	41.95	56.00	14.05	
	1.160	30.96	10.40	41.36	56.00	14.64	
	6.878	21.45	10.47	31.92	60.00	28.08	
	0.153	30.15	10.58	40.73	55.82	15.09	AV
	0.385	28.94	10.44	39.38	48.17	8.79	
	0.535	20.12	10.40	30.52	46.00	15.48	
	0.853	19.55	10.40	29.95	46.00	16.05	
	1.160	16.96	10.40	27.36	46.00	18.64	
	6.878	18.45	10.47	28.92	50.00	21.08	
Neutral	0.152	40.68	10.58	51.26	65.91	14.65	QP
	0.385	34.33	10.43	44.76	58.17	13.41	
	0.541	32.52	10.39	42.91	56.00	13.09	
	0.839	31.01	10.40	41.41	56.00	14.59	
	1.160	30.33	10.40	40.73	56.00	15.27	
	6.878	21.41	10.53	31.94	60.00	28.06	
	0.152	30.68	10.58	41.26	55.91	14.65	AV
	0.385	26.33	10.43	36.76	48.17	11.41	
	0.541	21.52	10.39	31.91	46.00	14.09	
	0.839	16.01	10.40	26.41	46.00	19.59	
	1.160	17.33	10.40	27.73	46.00	18.27	
	6.878	18.41	10.53	28.94	50.00	21.06	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI1 640*480@60Hz Date of Test : May 03, 2017
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.25	10.58	49.83	65.82	15.99	QP
	0.385	36.93	10.44	47.37	58.17	10.80	
	0.535	33.00	10.40	43.40	56.00	12.60	
	0.844	30.99	10.40	41.39	56.00	14.61	
	1.374	27.59	10.41	38.00	56.00	18.00	
	7.025	17.48	10.47	27.95	60.00	32.05	
	0.153	30.25	10.58	40.83	55.82	14.99	AV
	0.385	28.93	10.44	39.37	48.17	8.80	
	0.535	22.00	10.40	32.40	46.00	13.60	
	0.844	17.99	10.40	28.39	46.00	17.61	
	1.374	12.59	10.41	23.00	46.00	23.00	
	7.025	10.48	10.47	20.95	50.00	29.05	
Neutral	0.152	40.91	10.58	51.49	65.91	14.42	QP
	0.381	35.45	10.43	45.88	58.25	12.37	
	0.535	33.60	10.39	43.99	56.00	12.01	
	0.862	30.95	10.40	41.35	56.00	14.65	
	1.153	29.29	10.40	39.69	56.00	16.31	
	6.878	21.20	10.53	31.73	60.00	28.27	
	0.152	30.91	10.58	41.49	55.91	14.42	AV
	0.381	24.45	10.43	34.88	48.25	13.37	
	0.535	21.60	10.39	31.99	46.00	14.01	
	0.862	15.95	10.40	26.35	46.00	19.65	
	1.153	16.29	10.40	26.69	46.00	19.31	
	6.878	18.20	10.53	28.73	50.00	21.27	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : HDMI1080P Date of Test : May 03, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.18	10.58	49.76	65.82	16.06	QP
	0.385	36.92	10.44	47.36	58.17	10.81	
	0.529	30.23	10.40	40.63	56.00	15.37	
	0.844	31.91	10.40	42.31	56.00	13.69	
	1.153	29.82	10.40	40.22	56.00	15.78	
	7.100	19.80	10.47	30.27	60.00	29.73	
	0.153	30.18	10.58	40.76	55.82	15.06	AV
	0.385	28.92	10.44	39.36	48.17	8.81	
	0.529	15.23	10.40	25.63	46.00	20.37	
	0.844	17.91	10.40	28.31	46.00	17.69	
	1.153	15.82	10.40	26.22	46.00	19.78	
	7.100	12.80	10.47	23.27	50.00	26.73	
Neutral	0.153	41.74	10.57	52.31	65.82	13.51	QP
	0.381	35.38	10.43	45.81	58.25	12.44	
	0.535	33.42	10.39	43.81	56.00	12.19	
	0.839	31.27	10.40	41.67	56.00	14.33	
	1.296	28.02	10.41	38.43	56.00	17.57	
	6.878	21.99	10.53	32.52	60.00	27.48	
	0.153	31.74	10.57	42.31	55.82	13.51	AV
	0.381	24.38	10.43	34.81	48.25	13.44	
	0.535	22.42	10.39	32.81	46.00	13.19	
	0.839	17.27	10.40	27.67	46.00	18.33	
	1.296	12.02	10.41	22.43	46.00	23.57	
	6.878	18.99	10.53	29.52	50.00	20.48	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : USB Play Date of Test : May 03, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	39.44	10.59	50.03	65.91	15.88	QP
	0.385	36.90	10.44	47.34	58.17	10.83	
	0.535	33.13	10.40	43.53	56.00	12.47	
	0.844	30.28	10.40	40.68	56.00	15.32	
	1.153	29.06	10.40	39.46	56.00	16.54	
	6.878	21.60	10.47	32.07	60.00	27.93	
	0.152	28.44	10.59	39.03	55.91	16.88	AV
	0.385	28.90	10.44	39.34	48.17	8.83	
	0.535	20.13	10.40	30.53	46.00	15.47	
	0.844	17.28	10.40	27.68	46.00	18.32	
	1.153	16.06	10.40	26.46	46.00	19.54	
	6.878	18.60	10.47	29.07	50.00	20.93	
Neutral	0.153	41.82	10.57	52.39	65.82	13.43	QP
	0.385	35.35	10.43	45.78	58.17	12.39	
	0.541	33.55	10.39	43.94	56.00	12.06	
	0.839	31.16	10.40	41.56	56.00	14.44	
	1.160	30.70	10.40	41.10	56.00	14.90	
	6.878	21.32	10.53	31.85	60.00	28.15	
	0.153	31.82	10.57	42.39	55.82	13.43	AV
	0.385	27.35	10.43	37.78	48.17	10.39	
	0.541	23.55	10.39	33.94	46.00	12.06	
	0.839	16.16	10.40	26.56	46.00	19.44	
	1.160	17.70	10.40	28.10	46.00	17.90	
	6.878	18.32	10.53	28.85	50.00	21.15	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : MHL Date of Test : May 03, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.152	39.29	10.59	49.88	65.91	16.03	QP
	0.385	36.97	10.44	47.41	58.17	10.76	
	0.535	33.81	10.40	44.21	56.00	11.79	
	0.839	30.53	10.40	40.93	56.00	15.07	
	1.160	29.71	10.40	40.11	56.00	15.89	
	6.878	21.39	10.47	31.86	60.00	28.14	
	0.152	28.29	10.59	38.88	55.91	17.03	AV
	0.385	28.97	10.44	39.41	48.17	47.06	
	0.535	20.81	10.40	31.21	46.00	14.79	
	0.839	15.53	10.40	25.93	46.00	20.07	
	1.160	17.71	10.40	28.11	46.00	17.89	
	6.878	18.39	10.47	28.86	50.00	21.14	
Neutral	0.153	40.86	10.57	51.43	65.82	14.39	QP
	0.381	35.34	10.43	45.77	58.25	12.48	
	0.535	32.94	10.39	43.33	56.00	12.67	
	0.844	31.67	10.40	42.07	56.00	13.93	
	1.153	29.69	10.40	40.09	56.00	15.91	
	6.878	21.71	10.53	32.24	60.00	27.76	
	0.153	31.86	10.57	42.43	55.82	13.39	AV
	0.381	24.34	10.43	34.77	48.25	13.48	
	0.535	21.94	10.39	32.33	46.00	13.67	
	0.844	19.67	10.40	30.07	46.00	15.93	
	1.153	17.69	10.40	28.09	46.00	17.91	
	6.878	18.71	10.53	29.24	50.00	20.76	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : LAN Play Date of Test : May 03, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.47	10.58	50.05	65.82	15.77	QP
	0.385	36.93	10.44	47.37	58.17	10.80	
	0.529	30.80	10.40	41.20	56.00	14.80	
	0.844	31.32	10.40	41.72	56.00	14.28	
	1.781	27.54	10.41	37.95	56.00	18.05	
	6.878	22.29	10.47	32.76	60.00	27.24	
	0.153	30.47	10.58	41.05	55.82	14.77	AV
	0.385	28.93	10.44	39.37	48.17	8.80	
	0.529	15.80	10.40	26.20	46.00	19.80	
	0.844	18.32	10.40	28.72	46.00	17.28	
	1.781	12.54	10.41	22.95	46.00	23.05	
	6.878	18.29	10.47	28.76	50.00	21.24	
Neutral	0.153	41.73	10.57	52.30	65.82	13.52	QP
	0.385	35.38	10.43	45.81	58.17	12.36	
	0.535	33.55	10.39	43.94	56.00	12.06	
	0.862	30.24	10.40	40.64	56.00	15.36	
	1.153	29.11	10.40	39.51	56.00	16.49	
	6.878	21.64	10.53	32.17	60.00	27.83	
	0.153	31.73	10.57	42.30	55.82	13.52	AV
	0.385	27.38	10.43	37.81	48.17	10.36	
	0.535	22.55	10.39	32.94	46.00	13.06	
	0.862	17.24	10.40	27.64	46.00	18.36	
	1.153	16.11	10.40	26.51	46.00	19.49	
	6.878	18.64	10.53	29.17	50.00	20.83	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 48%RH

Test Mode : Wifi Date of Test : May 03, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	39.24	10.58	49.82	65.82	16.00	QP
	0.385	36.11	10.44	46.55	58.17	11.62	
	0.529	30.23	10.40	40.63	56.00	15.37	
	0.844	31.88	10.40	42.28	56.00	13.72	
	1.160	29.40	10.40	39.80	56.00	16.20	
	7.100	20.24	10.47	30.71	60.00	29.29	
	0.153	30.24	10.58	40.82	55.82	15.00	AV
	0.385	28.11	10.44	38.55	48.17	9.62	
	0.529	15.23	10.40	25.63	46.00	20.37	
	0.844	18.88	10.40	29.28	46.00	16.72	
	1.160	15.40	10.40	25.80	46.00	20.20	
	7.100	12.24	10.47	22.71	50.00	27.29	
Neutral	0.155	40.77	10.57	51.34	65.74	14.40	QP
	0.385	35.41	10.43	45.84	58.17	12.33	
	0.535	32.64	10.39	43.03	56.00	12.97	
	0.839	31.32	10.40	41.72	56.00	14.28	
	1.160	29.30	10.40	39.70	56.00	16.30	
	7.100	19.93	10.53	30.46	60.00	29.54	
	0.155	31.77	10.57	42.34	55.74	13.40	AV
	0.385	27.41	10.43	37.84	48.17	10.33	
	0.535	21.64	10.39	32.03	46.00	13.97	
	0.839	17.32	10.40	27.72	46.00	18.28	
	1.160	16.30	10.40	26.70	46.00	19.30	
	7.100	12.93	10.53	23.46	50.00	26.54	

4 RADIATED EMISSION TEST

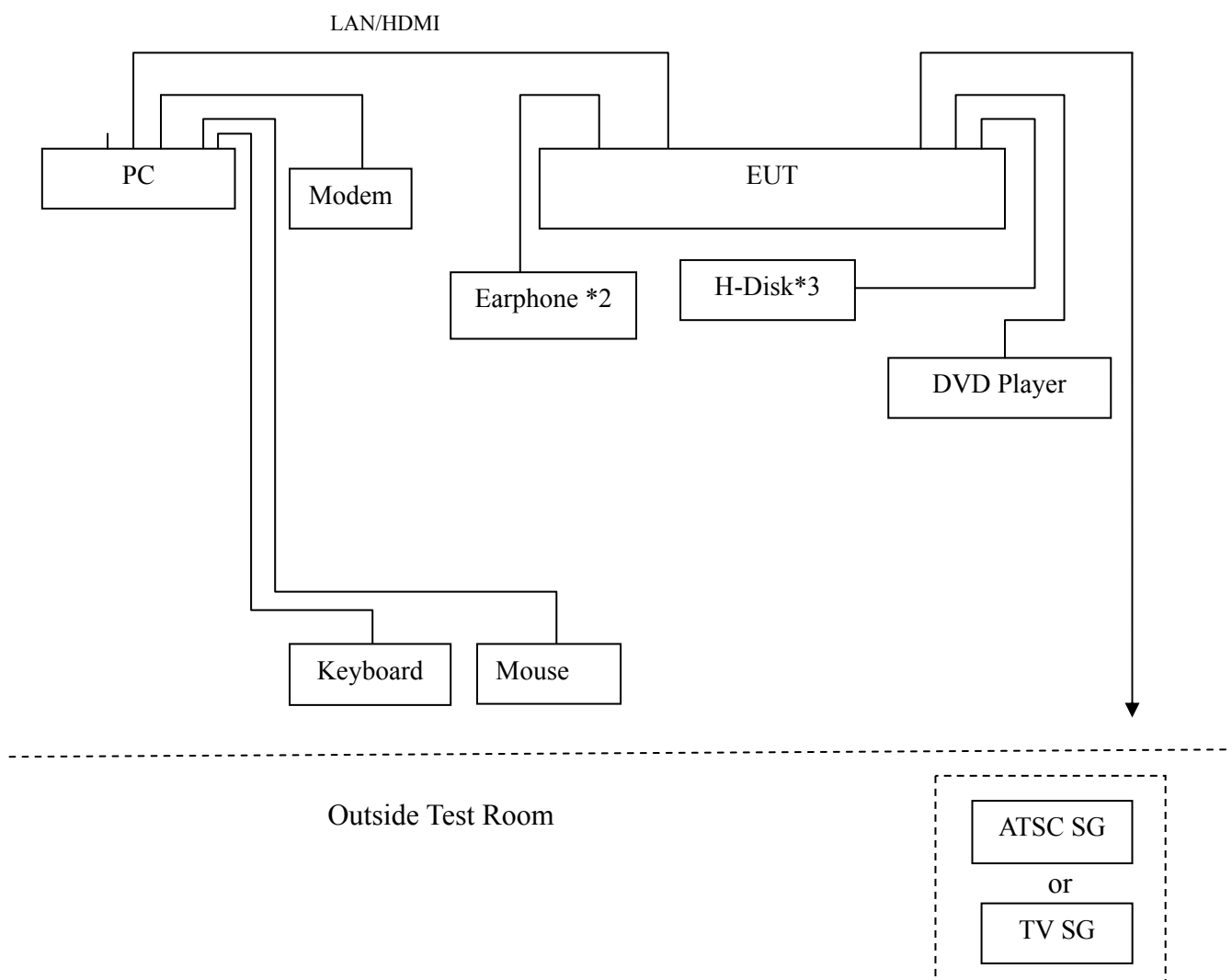
4.1 Test Equipment

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

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101303	May 07, 2017	May 06, 2018
2.	Preamplifier	Agilent	8447D	2944A06664	Mar 18, 2017	Sep 17, 2017
3.	Preamplifier	HP	8449B	3008A00864	Mar 17, 2017	Mar 16, 2018
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Mar 25, 2017	Mar 24, 2018
5.	Horn Antenna	EMCO	3115	9607-4878	May 31, 2016	May 30, 2017
6.	Spectrum	Agilent	E7405A	MY45106600	Jan 06, 2017	Jan 05, 2018
7.	Software	Audix	e3	6.2007-9-10	--	--

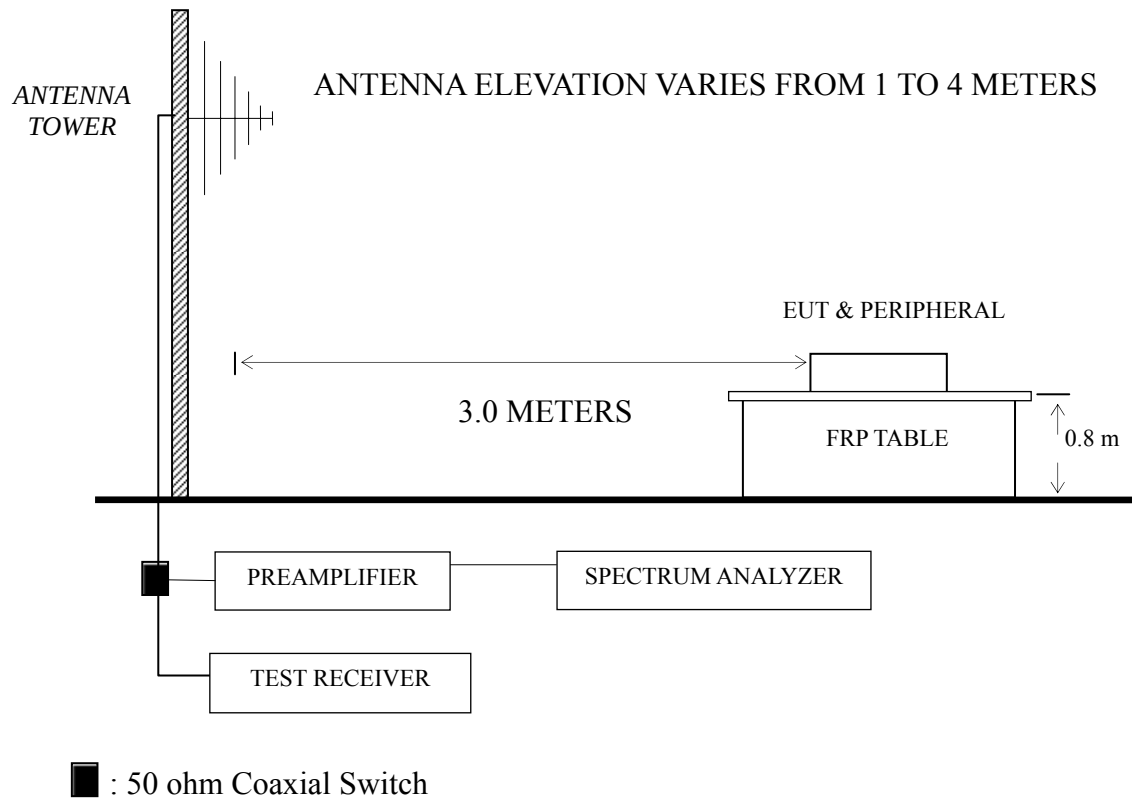
4.2 Block Diagram of Test Setup

4.2.1 EUT & Peripherals



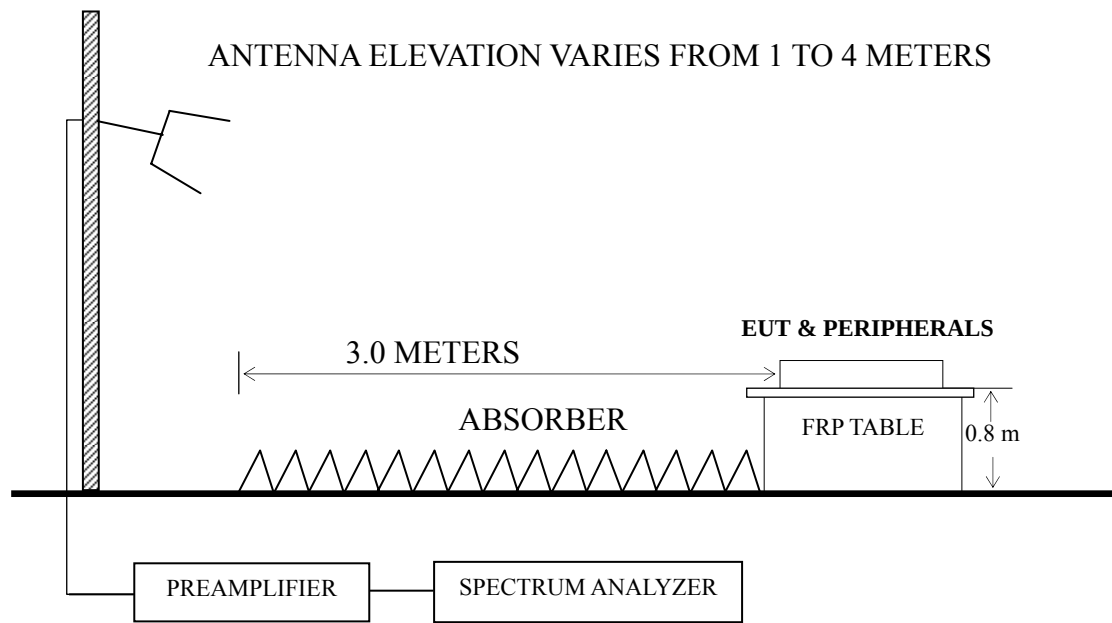
4.2.2 Test Setup

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 C63.4:2014 requirements during radiated emission test.

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

The frequency range from 30 MHz to 1000MHz was checked for all test modes.

The frequency range from 1 GHz to 6 GHz was checked for the maximum resolution test mode.

The test modes were done on radiated disturbance test and all the test results are listed in Sec.4.7.

4.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

Test Mode	Data Page
HDMI1 3840*2160@60Hz & 1kHz playing	P30 – P31
HDMI2 3840*2160@60Hz & 1kHz playing	P32
HDMI3 3840*2160@60Hz & 1kHz playing	P33
HDMI4 3840*2160@60Hz & 1kHz playing	P34
HDMI1 1920*1080@60Hz & 1kHz playing	P35
HDMI1 1280*1024@60Hz & 1kHz playing	P36
HDMI1 640*480@60Hz & 1kHz playing	P37
HDMI1080P	P38
MHL	P39
USB Play	P40
LAN Play	P41
Wifi	P42

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading.
($< 1\text{GHz}$);

Emission Level = Antenna Factor + Cable Loss – Preamp Factor
+ Meter Reading. ($> 1\text{GHz}$)

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 HDMI1 3840*2160@60Hz & 1kHz playing test
mode. The worst emission at horizontal polarization was detected
at 891.170 MHz with corrected signal level of 42.36 dB ($\mu\text{V/m}$)
(limit is 46.00 dB ($\mu\text{V/m}$)), when the antenna was 1.9 m height
and the turntable was at 225° . The worst emission at vertical
polarization was detected at 460.727MHz with corrected signal
level of 40.65dB ($\mu\text{V/m}$) (limit is 46.00 dB ($\mu\text{V/m}$)), when the
antenna was 1.0m height and the turntable was at 60° .

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI1 3840*2160@60Hz & 1kHz Playing Date of Test : May 10, 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	82.071	21.77	9.57	0.90	--	32.24	40.00	7.76	QP
	164.908	23.15	11.20	1.35	--	35.70	43.50	7.80	
	233.349	23.38	11.82	1.58	--	36.78	46.00	9.22	
	304.610	23.99	13.80	1.77	--	39.56	46.00	6.44	
	470.523	20.27	17.20	2.20	--	39.67	46.00	6.33	
	891.170	18.06	21.23	3.07	--	42.36	46.00	3.64	
	1733.375	47.94	26.55	4.38	35.47	43.40	74.00	30.60	PK
	2156.885	46.10	27.80	4.89	35.20	43.59	74.00	30.41	
	3980.656	39.68	32.74	6.87	34.21	45.08	74.00	28.92	
	1733.375	30.73	26.55	4.38	35.47	26.19	54.00	27.81	AV
	2156.885	31.21	27.80	4.89	35.20	28.70	54.00	25.30	
	3980.656	29.24	32.74	6.87	34.21	34.64	54.00	19.36	

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI1 3840*2160@60Hz & 1kHz Playing Date of Test : May 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
Vertical	80.081	21.43	9.10	0.89	--	31.42	40.00	8.58	QP
	128.113	20.60	12.63	1.17	--	34.40	43.50	9.10	
	219.075	22.02	10.84	1.54	--	34.40	46.00	11.60	
	460.727	21.58	16.90	2.17	--	40.65	46.00	5.35	
	766.057	16.83	19.80	2.83	--	39.46	46.00	6.54	
	890.728	16.12	21.30	3.07	--	40.49	46.00	5.51	
	1248.794	51.99	24.66	3.70	36.08	44.27	74.00	29.73	PK
	1628.010	45.86	26.15	4.23	35.59	40.65	74.00	33.35	
	2346.389	47.35	28.14	5.14	35.20	45.43	74.00	28.57	
	1248.794	37.54	24.66	3.70	36.08	29.82	54.00	24.18	AV
	1628.010	30.10	26.15	4.23	35.59	24.89	54.00	29.11	
	2346.389	32.62	28.14	5.14	35.20	30.70	54.00	23.30	

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI2 3840*2160@60Hz Date of Test : May 10, 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	80.081	21.31	9.10	0.89	31.30	40.00	8.70
	140.835	19.20	13.01	1.24	33.45	43.50	10.05
	219.845	22.64	10.90	1.54	35.08	46.00	10.92
	350.477	21.29	15.20	1.92	38.41	46.00	7.59
	475.499	19.74	17.32	2.22	39.28	46.00	6.72
	899.790	17.16	21.10	3.09	41.35	46.00	4.65
Vertical	82.071	21.56	9.57	0.90	32.03	40.00	7.97
	129.015	20.98	12.62	1.18	34.78	43.50	8.72
	234.168	20.03	11.86	1.59	33.48	46.00	12.52
	449.556	20.33	16.90	2.16	39.39	46.00	6.61
	768.748	15.58	19.90	2.85	38.33	46.00	7.67
	890.728	14.27	21.30	3.07	38.64	46.00	7.36

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI3 3840*2160@60Hz Date of Test : May 10, 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	77.865	20.76	8.79	0.88	30.43	40.00	9.57
	164.908	20.81	11.20	1.35	33.36	43.50	10.14
	349.250	21.81	15.16	1.90	38.87	46.00	7.13
	647.386	17.34	19.63	2.61	39.58	46.00	6.42
	890.728	17.74	21.30	3.07	42.11	46.00	3.89
	945.640	16.26	21.57	3.16	40.99	46.00	5.01
Vertical	80.927	22.68	9.26	0.89	32.83	40.00	7.17
	128.113	19.98	12.63	1.17	33.78	43.50	9.72
	297.224	20.00	13.80	1.75	35.55	46.00	10.45
	462.346	21.63	16.96	2.19	40.78	46.00	5.22
	766.057	15.05	19.80	2.83	37.68	46.00	8.32
	890.728	13.26	21.30	3.07	37.63	46.00	8.37

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI4 3840*2160@60Hz Date of Test : May 10, 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	80.081	20.27	9.10	0.89	30.26	40.00	9.74
	140.835	18.81	13.01	1.24	33.06	43.50	10.44
	345.595	21.09	15.07	1.90	38.06	46.00	7.94
	468.876	18.10	17.20	2.20	37.50	46.00	8.50
	640.611	17.24	19.70	2.59	39.53	46.00	6.47
	891.150	16.96	21.23	3.07	41.26	46.00	4.74
Vertical	80.927	22.95	9.26	0.89	33.10	40.00	6.90
	129.015	19.20	12.62	1.18	33.00	43.50	10.50
	219.075	20.48	10.84	1.54	32.86	46.00	13.14
	465.040	18.83	17.08	2.19	38.10	46.00	7.90
	763.376	17.19	19.80	2.83	39.82	46.00	6.18
	890.728	15.85	21.30	3.07	40.22	46.00	5.78

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI1 1920*1080@60Hz & 1kHz Playing Date of Test : May 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)
Horizontal	80.927	21.37	9.26	0.89	31.52	40.00	8.48
	136.939	19.73	12.66	1.22	33.61	43.50	9.89
	349.250	21.25	15.16	1.90	38.31	46.00	7.69
	467.235	19.45	17.14	2.19	38.78	46.00	7.22
	742.259	18.33	19.73	2.79	40.85	46.00	5.15
	945.800	15.86	21.57	3.16	40.59	46.00	5.41
Vertical	80.927	23.11	9.26	0.89	33.26	40.00	6.74
	129.923	20.69	12.60	1.18	34.47	43.50	9.03
	216.783	21.39	10.72	1.53	33.64	46.00	12.36
	460.727	20.71	16.90	2.17	39.78	46.00	6.22
	763.376	15.36	19.80	2.83	37.99	46.00	8.01
	945.440	12.19	21.57	3.16	36.92	46.00	9.08

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI1 1280*1024@60Hz Date of Test : May 10, 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	78.965	21.23	8.93	0.88	31.04	40.00	8.96
	135.982	19.45	12.48	1.21	33.14	43.50	10.36
	234.168	20.68	11.86	1.59	34.13	46.00	11.87
	468.876	19.51	17.20	2.20	38.91	46.00	7.09
	645.120	15.03	19.63	2.61	37.27	46.00	8.73
	890.830	15.96	21.30	3.07	40.33	46.00	5.67
Vertical	80.081	22.43	9.10	0.89	32.42	40.00	7.58
	129.923	19.88	12.60	1.18	33.66	43.50	9.84
	159.784	24.47	11.35	1.32	37.14	43.50	6.36
	219.075	23.48	10.84	1.54	35.86	46.00	10.14
	462.346	20.90	16.96	2.19	40.05	46.00	5.95
	719.200	17.00	19.48	2.75	39.23	46.00	6.77

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI1 640*480@60Hz & 1kHz Playing Date of Test : May 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)
Horizontal	78.965	21.12	8.93	0.88	30.93	40.00	9.07
	130.837	20.18	12.53	1.19	33.90	43.50	9.60
	233.349	23.01	11.82	1.58	36.41	46.00	9.59
	297.224	25.74	13.80	1.75	41.29	46.00	4.71
	475.499	19.14	17.32	2.22	38.68	46.00	7.32
	955.640	16.36	21.80	3.18	41.34	46.00	4.66
Vertical	31.955	14.68	17.30	0.58	32.56	40.00	7.44
	80.927	21.49	9.26	0.89	31.64	40.00	8.36
	130.837	21.38	12.53	1.19	35.10	43.50	8.40
	216.024	22.70	10.66	1.53	34.89	46.00	11.11
	467.235	21.59	17.14	2.19	40.92	46.00	5.08
	763.376	15.86	19.80	2.83	38.49	46.00	7.51

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : HDMI1080P Date of Test : May 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)
Horizontal	78.965	22.20	8.93	0.88	32.01	40.00	7.99
	130.837	20.06	12.53	1.19	33.78	43.50	9.72
	219.075	22.39	10.84	1.54	34.77	46.00	11.23
	350.477	20.51	15.20	1.92	37.63	46.00	8.37
	742.259	16.81	19.73	2.79	39.33	46.00	6.67
	958.794	15.88	22.00	3.18	41.06	46.00	4.94
Vertical	47.994	23.78	9.20	0.69	33.67	40.00	6.33
	80.081	22.76	9.10	0.89	32.75	40.00	7.25
	132.221	19.35	12.47	1.19	33.01	43.50	10.49
	297.224	21.61	13.80	1.75	37.16	46.00	8.84
	467.940	18.73	17.14	2.19	38.06	46.00	7.94
	742.259	18.91	19.73	2.79	41.43	46.00	4.57

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : MHL Date of Test : May 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)
Horizontal	76.244	23.39	8.57	0.87	32.83	40.00	7.17
	137.420	20.37	12.66	1.22	34.25	43.50	9.25
	227.691	22.93	11.50	1.57	36.00	46.00	10.00
	311.087	19.71	13.94	1.79	35.44	46.00	10.56
	396.242	18.09	16.37	2.03	36.49	46.00	9.51
	869.130	14.55	20.60	3.03	38.18	46.00	7.82
Vertical	78.413	23.46	8.88	0.88	33.22	40.00	6.78
	220.617	21.75	10.95	1.55	34.25	46.00	11.75
	322.189	19.17	14.23	1.83	35.23	46.00	10.77
	441.743	19.99	16.57	2.13	38.69	46.00	7.31
	656.530	14.46	19.38	2.63	36.47	46.00	9.53
	893.857	15.25	21.23	3.07	39.55	46.00	6.45

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : USB Play Date of Test : May 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)
Horizontal	78.413	22.41	8.88	0.88	32.17	40.00	7.83
	135.032	20.73	12.30	1.21	34.24	43.50	9.26
	222.950	22.09	11.10	1.55	34.74	46.00	11.26
	346.809	18.85	15.11	1.90	35.86	46.00	10.14
	480.528	18.24	17.40	2.22	37.86	46.00	8.14
	866.088	13.66	20.70	3.03	37.39	46.00	8.61
Vertical	31.620	14.74	17.47	0.58	32.79	40.00	7.21
	82.648	21.10	9.65	0.90	31.65	40.00	8.35
	129.015	20.66	12.62	1.18	34.46	43.50	9.04
	226.894	21.14	11.40	1.57	34.11	46.00	11.89
	447.982	18.51	16.83	2.15	37.49	46.00	8.51
	857.025	14.09	20.77	3.00	37.86	46.00	8.14

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : LAN Play Date of Test : May 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)
Horizontal	77.865	22.77	8.79	0.88	32.44	40.00	7.56
	137.420	20.15	12.66	1.22	34.03	43.50	9.47
	226.894	21.15	11.40	1.57	34.12	46.00	11.88
	352.943	19.78	15.31	1.92	37.01	46.00	8.99
	480.528	18.09	17.40	2.22	37.71	46.00	8.29
	875.247	13.88	20.73	3.05	37.66	46.00	8.34
Vertical	81.783	22.50	9.49	0.90	32.89	40.00	7.11
	131.297	22.43	12.50	1.19	36.12	43.50	7.38
	221.392	23.76	11.00	1.55	36.31	46.00	9.69
	300.367	20.95	13.72	1.76	36.43	46.00	9.57
	457.507	20.29	16.90	2.17	39.36	46.00	6.64
	857.025	14.20	20.77	3.00	37.97	46.00	8.03

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 50H6D Humidity : 60%RH

Test Mode : Wifi Date of Test : May 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)
Horizontal	82.648	21.63	9.65	0.90	32.18	40.00	7.82
	138.874	20.09	12.92	1.23	34.24	43.50	9.26
	236.645	20.48	11.94	1.59	34.01	46.00	11.99
	337.216	20.44	14.76	1.87	37.07	46.00	8.93
	449.556	17.85	16.90	2.16	36.91	46.00	9.09
	842.13	15.09	20.43	2.98	38.50	46.00	7.50
Vertical	47.326	22.84	9.29	0.69	32.82	40.00	7.18
	95.762	21.18	11.58	0.98	33.74	43.50	9.76
	220.617	21.92	10.95	1.55	34.42	46.00	11.58
	302.481	20.13	13.75	1.76	35.64	46.00	10.36
	457.507	19.56	16.90	2.17	38.63	46.00	7.37
	881.407	14.07	21.00	3.05	38.12	46.00	7.88

TEST ENGINEER: LEON YUN

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 Internal Photos Figure 19

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

