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

LED LCD TV

Model No.	Brand
50H8C, 50H8C+ 50H8107, 50H8D, 50H8D+ 50H8+0D, 50H8+0D1, 50H8+0D2 50H80+0D, 50H80+0D1, 50H80+0D2	Hisense

FCC ID : W9HLCDF0106

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

Prepared By : Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-F17092
Date of Test : Feb 08-20, 2017
Date of Report : Mar 03, 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
50H8C, 50H8C+ 50H8107, 50H8D, 50H8D+ 50H8+0D, 50H8+0D1, 50H8+0D2 50H80+0D, 50H80+0D1, 50H80+0D2	Hisense	120V/60Hz

Test Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART B CLASS B OCTOBER 2015 AND ANSI C63.4-2014

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. To determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B (Class B) limits both radiated and conducted emissions.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report shows that the EUT (M/N: Refer to Sec2.1) which was tested in 3m anechoic chamber Feb 08-20, 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.F17093, a Verification report.

Date of Test : Feb 08-20, 2017 Date of Report : Mar 03, 2017

Producer : Tina Liang
TINA LIANG / Assistant

Review : Byron Wu
BYRON WU / Deputy Assistant Manager

AUDIX® 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 OCTOBER 2015 AND ANSI C63.4-2014	15.107(a) Class B	Pass
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B OCTOBER 2015 AND ANSI C63.4-2014	15.109(a) Class B	Pass

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description : LED LCD TV

Type of EUT : ☑ Production ☐ Pre-product ☐ Pro-type

Model No.	Brand
50H8C, 50H8C+ 50H8107, 50H8D, 50H8D+ 50H8+0D, 50H8+0D1, 50H8+0D2 50H80+0D, 50H80+0D1, 50H80+0D2	Hisense

Note#1 : The above models are all the same except for model number. 50H8C model was tested and recorded 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.

WIFI Modular : FCC ID: PPQ-WCBN4511R

LCD Panel : Manufacturer : Hisense
M/N : HD500DU-B53\LD

Tuner : Manufacturer : SILICON LABS
M/N : Si2151-A10

Max Resolution : 3840*2160@60Hz

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

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#1

(3) One USB#2Port
: Connected with Hard-Disk#2

(4) One Service Port
: Do not open to customer

(5) One AUDIO OUT Port
: Connected with Earphone#1

(6) One HDMI1/MHL Port
: Connected with Mobile Phone

(7) One HDMI2 Port
: Connected with PC

(8) One USB#3Port
: Connected with Hard-Disk#3

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#2

(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, C-Tick

2.2.2 Modem

Manufacturer : TP-LINK
Model Number : TM-EC5658V
Serial Number : 07123301053
Data Cable : Unshielded, Detachable, 1.5m
Certificate : CE/EMC, FCC DoC, VCCI, UL, CCC

2.2.3 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

2.2.4 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

2.2.5 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	:	A010022-486006
Data Cable	:	Shielded, Detachable, 1.8m.
Certificate	:	CE, FCC DoC

2.2.8 Hard Disk #2

Manufacturer	:	Tetasys
Model Number	:	F12
Serial Number	:	A010022-4860010X
Data Cable	:	Shielded, Detachable, 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, 1.8m.
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 Mobile Phone

Manufacturer : SAMSUNG
Model Number : GT-I9100G
Serial Number : 69351520011519

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
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

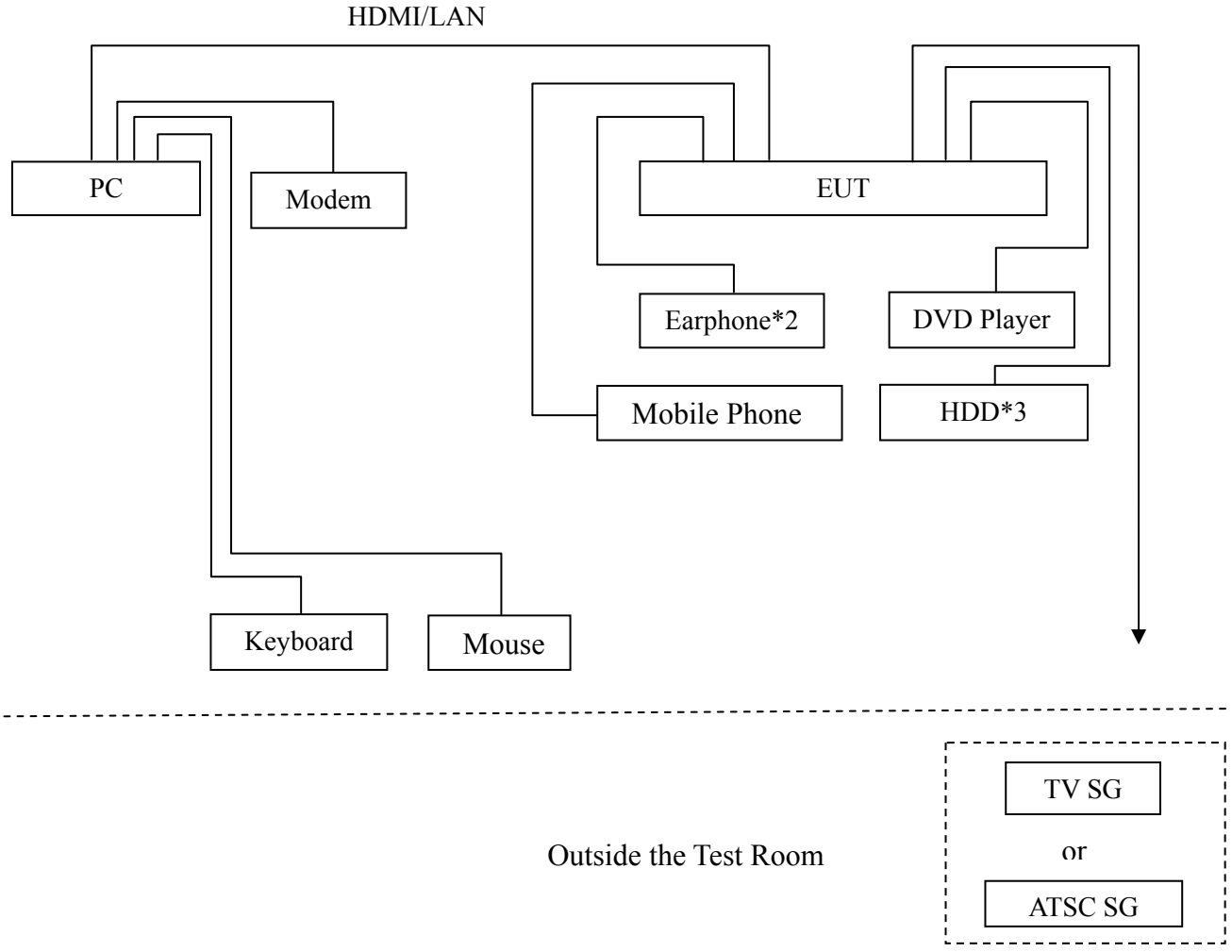
3.1 Test Equipment

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

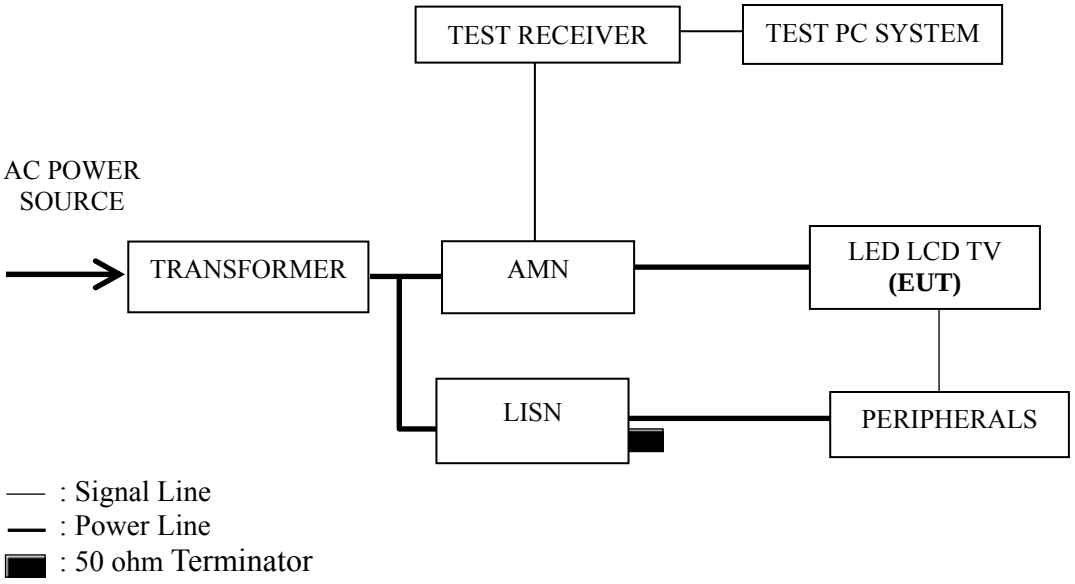
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2016	Apr 26, 2017
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 20, 2016	Mar 19, 2017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

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

3.5.10 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
MHL
HDMI1080P
USB Play
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	P13
HDMI2 3840*2160@60Hz & 1kHz Playing	P14
HDMI3 3840*2160@60Hz & 1kHz Playing	P15
HDMI4 3840*2160@60Hz & 1kHz Playing	P16
HDMI1 1920*1080@60Hz & 1kHz Playing	P17
HDMI1 1280*1024@60Hz & 1kHz playing	P18
HDMI1 640*480@60Hz & 1kHz playing	P19
MHL	P20
HDMI1080P	P21
USB Play	P22
LAN Play	P23
Wifi	P24

NOTE 1 – Factor = Cable Loss + AMN Factor.
NOTE 2 – Emission Level = Meter Reading + Factor.
NOTE 3 – "QP" means "Quasi-Peak" values, "AV" means "Average" values.
NOTE 4 – The worst case is for HDMI 640*480@60Hz & 1kHz playing test mode. The worst emission is detected at 3.399MHz (Quasi-Peak Value) with corrected signal level of 48.27 dB (μV) (limit is 56.00 dB (μV)), when the Neutral of the EUT is connected to AMN.

EUT	:	LED LCD TV	Temperature	:	22℃
Model No.	:	50H8C	Humidity	:	48%RH
Test Mode	:	HDMI1 3840*2160@60Hz & 1kHz Playing	Date of Test	:	Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.182	34.10	10.55	44.65	64.42	19.77	QP
	0.452	32.29	10.42	42.71	56.85	14.14	
	0.679	**32.90**	**10.40**	**43.30**	**56.00**	**12.70**	
	1.568	27.91	10.40	38.31	56.00	17.69	
	3.399	33.40	10.43	43.83	56.00	12.17	
	14.213	20.90	10.54	31.44	60.00	28.56	
	0.182	23.50	10.55	34.05	54.42	20.37	AV
	0.452	17.49	10.42	27.91	46.85	18.94	
	0.679	16.50	10.40	26.90	46.00	19.10	
	1.568	11.51	10.40	21.91	46.00	24.09	
	3.399	20.30	10.43	30.73	46.00	15.27	
	14.213	14.50	10.54	25.04	50.00	24.96	
Neutral	0.180	35.99	10.55	46.54	64.50	17.96	QP
	0.444	32.10	10.41	42.51	56.98	14.47	
	0.679	**32.60**	**10.39**	**42.99**	**56.00**	**13.01**	
	1.568	28.00	10.42	38.42	56.00	17.58	
	3.399	33.90	10.47	44.37	56.00	11.63	
	14.213	20.90	10.64	31.54	60.00	28.46	
	0.180	23.59	10.55	34.14	54.50	20.36	AV
	0.444	15.40	10.41	25.81	46.98	21.17	
	0.679	16.30	10.39	26.69	46.00	19.31	
	1.568	11.30	10.42	21.72	46.00	24.28	
	3.399	20.20	10.47	30.67	46.00	15.33	
	14.213	14.30	10.64	24.94	50.00	25.06	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	48%RH	
Test Mode	:	HDMI2 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 08, 2017	

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.179	37.39	10.56	47.95	64.54	16.59	QP
	0.450	35.09	10.42	45.51	56.87	11.36	
	0.675	**36.40**	**10.40**	**46.80**	**56.00**	**9.20**	
	1.559	30.71	10.40	41.11	56.00	14.89	
	3.387	34.80	10.43	45.23	56.00	10.77	
	14.490	24.40	10.55	34.95	60.00	25.05	
	0.179	25.99	10.56	36.55	54.54	17.99	AV
	0.450	18.39	10.42	28.81	46.87	18.06	
	0.675	18.00	10.40	28.40	46.00	17.60	
	1.559	15.21	10.40	25.61	46.00	20.39	
	3.387	22.40	10.43	32.83	46.00	13.17	
	14.490	17.40	10.55	27.95	50.00	22.05	
Neutral	0.179	38.09	10.55	48.64	64.53	15.89	QP
	0.430	34.70	10.41	45.11	57.26	12.15	
	0.690	**36.40**	**10.39**	**46.79**	**56.00**	**9.21**	
	1.331	30.90	10.41	41.31	56.00	14.69	
	3.429	35.20	10.47	45.67	56.00	10.33	
	14.301	24.20	10.64	34.84	60.00	25.16	
	0.179	26.79	10.55	37.34	54.53	17.19	AV
	0.430	16.20	10.41	26.61	47.26	20.65	
	0.690	17.40	10.39	27.79	46.00	18.21	
	1.331	14.50	10.41	24.91	46.00	21.09	
	3.429	22.20	10.47	32.67	46.00	13.33	
	14.301	17.50	10.64	28.14	50.00	21.86	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	48%RH	
Test Mode	:	HDMI3 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 08, 2017	

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.179	37.59	10.56	48.15	64.53	16.38	QP
	0.450	35.40	10.42	45.82	56.87	11.05	
	0.679	**36.50**	**10.40**	**46.90**	**56.00**	**9.10**	
	1.297	30.79	10.41	41.20	56.00	14.80	
	3.398	35.50	10.43	45.93	56.00	10.07	
	14.497	24.40	10.55	34.95	60.00	25.05	
	0.179	26.19	10.56	36.75	54.53	17.78	AV
	0.450	18.10	10.42	28.52	46.87	18.35	
	0.679	17.20	10.40	27.60	46.00	18.40	
	1.297	13.49	10.41	23.90	46.00	22.10	
	3.398	22.10	10.43	32.53	46.00	13.47	
	14.497	18.50	10.55	29.05	50.00	20.95	
Neutral	0.177	38.39	10.55	48.94	64.60	15.66	QP
	0.449	35.10	10.41	45.51	56.89	11.38	
	0.691	**36.30**	**10.39**	**46.69**	**56.00**	**9.31**	
	1.104	31.30	10.40	41.70	56.00	14.30	
	3.479	35.40	10.47	45.87	56.00	10.13	
	14.199	24.20	10.64	34.84	60.00	25.16	
	0.177	26.39	10.55	36.94	54.60	17.66	AV
	0.449	20.10	10.41	30.51	46.89	16.38	
	0.691	17.30	10.39	27.69	46.00	18.31	
	1.104	16.70	10.40	27.10	46.00	18.90	
	3.479	22.20	10.47	32.67	46.00	13.33	
	14.199	18.10	10.64	28.74	50.00	21.26	

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	48%RH	
Test Mode	:	HDMI4 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 08, 2017	

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.179	37.69	10.56	48.25	64.55	16.30	QP
	0.442	35.20	10.42	45.62	57.03	11.41	
	0.681	**35.70**	**10.40**	**46.10**	**56.00**	**9.90**	
	1.330	30.99	10.41	41.40	56.00	14.60	
	3.397	34.80	10.43	45.23	56.00	10.77	
	14.501	24.90	10.55	35.45	60.00	24.55	
	0.179	26.39	10.56	36.95	54.55	17.60	AV
	0.442	19.10	10.42	29.52	47.03	17.51	
	0.681	19.20	10.40	29.60	46.00	16.40	
	1.330	14.19	10.41	24.60	46.00	21.40	
	3.397	22.10	10.43	32.53	46.00	13.47	
	14.501	18.00	10.55	28.55	50.00	21.45	
Neutral	0.182	38.40	10.54	48.94	64.39	15.45	QP
	0.446	35.00	10.41	45.41	56.95	11.54	
	0.676	35.40	10.39	45.79	56.00	10.21	
	1.430	33.50	10.42	43.92	56.00	12.08	
	3.392	**36.50**	**10.47**	**46.97**	**56.00**	**9.03**	
	14.228	24.50	10.64	35.14	60.00	24.86	
	0.182	27.90	10.54	38.44	54.39	15.95	AV
	0.446	18.10	10.41	28.51	46.95	18.44	
	0.676	19.10	10.39	29.49	46.00	16.51	
	1.430	16.20	10.42	26.62	46.00	19.38	
	3.392	22.70	10.47	33.17	46.00	12.83	
	14.228	18.10	10.64	28.74	50.00	21.26	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	48%RH	
Test Mode	:	HDMI1 1920*1080@60Hz & 1kHz Playing	Date of Test :	Feb 08, 2017	

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	29.99	10.56	40.55	64.50	23.95	QP
	0.435	27.80	10.42	38.22	57.15	18.93	
	0.679	**28.60**	**10.40**	**39.00**	**56.00**	**17.00**	
	1.568	24.01	10.40	34.41	56.00	21.59	
	3.436	27.50	10.43	37.93	56.00	18.07	
	14.517	16.70	10.55	27.25	60.00	32.75	
	0.180	19.19	10.56	29.75	54.50	24.75	AV
	0.435	9.70	10.42	20.12	47.15	27.03	
	0.679	12.40	10.40	22.80	46.00	23.20	
	1.568	7.71	10.40	18.11	46.00	27.89	
	3.436	14.70	10.43	25.13	46.00	20.87	
	14.517	9.90	10.55	20.45	50.00	29.55	
Neutral	0.178	32.59	10.55	43.14	64.59	21.45	QP
	0.447	**29.50**	**10.41**	**39.91**	**56.93**	**17.02**	
	0.679	29.90	10.39	40.29	56.00	15.71	
	1.045	25.60	10.40	36.00	56.00	20.00	
	3.399	31.20	10.47	41.67	56.00	14.33	
	14.517	17.99	10.65	28.64	60.00	31.36	
	0.178	19.69	10.55	30.24	54.59	24.35	AV
	0.447	13.50	10.41	23.91	46.93	23.02	
	0.679	13.80	10.39	24.19	46.00	21.81	
	1.045	5.40	10.40	15.80	46.00	30.20	
	3.399	17.90	10.47	28.37	46.00	17.63	
	14.517	11.29	10.65	21.94	50.00	28.06	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	48%RH	
Test Mode	:	HDMI1 1280*1024@60Hz & 1kHz playing	Date of Test :	Feb 08, 2017	

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	38.29	10.56	48.85	64.50	15.65	QP
	0.444	35.70	10.42	46.12	56.98	10.86	
	0.679	**36.70**	**10.40**	**47.10**	**56.00**	**8.90**	
	1.568	31.21	10.40	41.61	56.00	14.39	
	3.364	32.90	10.43	43.33	56.00	12.67	
	14.672	24.70	10.55	35.25	60.00	24.75	
	0.180	27.19	10.56	37.75	54.50	16.75	AV
	0.444	19.20	10.42	29.62	46.98	17.36	
	0.679	19.80	10.40	30.20	46.00	15.80	
	1.568	14.81	10.40	25.21	46.00	20.79	
	3.364	21.20	10.43	31.63	46.00	14.37	
	14.672	18.20	10.55	28.75	50.00	21.25	
Neutral	0.182	38.60	10.54	49.14	64.42	15.28	QP
	0.447	35.50	10.41	45.91	56.93	11.02	
	0.679	36.20	10.39	46.59	56.00	9.41	
	1.082	33.70	10.40	44.10	56.00	11.90	
	3.399	**37.40**	**10.47**	**47.87**	**56.00**	**8.13**	
	14.213	24.30	10.64	34.94	60.00	25.06	
	0.182	27.40	10.54	37.94	54.42	16.48	AV
	0.447	19.60	10.41	30.01	46.93	16.92	
	0.679	19.70	10.39	30.09	46.00	15.91	
	1.082	19.20	10.40	29.60	46.00	16.40	
	3.399	23.50	10.47	33.97	46.00	12.03	
	14.213	18.10	10.64	28.74	50.00	21.26	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	48%RH	
Test Mode	:	HDMI1 640*480@60Hz & 1kHz playing	Date of Test :	Feb 08, 2017	

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	38.19	10.56	48.75	64.50	15.75	QP
	0.447	35.60	10.42	46.02	56.93	10.91	
	0.679	36.10	10.40	46.50	56.00	9.50	
	1.071	32.50	10.40	42.90	56.00	13.10	
	3.399	**36.50**	**10.43**	**46.93**	**56.00**	**9.07**	
	14.517	24.50	10.55	35.05	60.00	24.95	
	0.180	26.49	10.56	37.05	54.50	17.45	AV
	0.447	19.50	10.42	29.92	46.93	17.01	
	0.679	19.70	10.40	30.10	46.00	15.90	
	1.071	17.40	10.40	27.80	46.00	18.20	
	3.399	22.80	10.43	33.23	46.00	12.77	
	14.517	18.20	10.55	28.75	50.00	21.25	
Neutral	0.180	39.19	10.55	49.74	64.50	14.76	QP
	0.440	35.20	10.41	45.61	57.07	11.46	
	0.679	36.00	10.39	46.39	56.00	9.61	
	1.094	33.10	10.40	43.50	56.00	12.50	
	3.399	**37.80**	**10.47**	**48.27**	**56.00**	**7.73**	
	14.517	25.19	10.65	35.84	60.00	24.16	
	0.180	26.79	10.55	37.34	54.50	17.16	AV
	0.440	17.80	10.41	28.21	47.07	18.86	
	0.679	19.78	10.39	30.17	46.00	15.83	
	1.094	17.70	10.40	28.10	46.00	17.90	
	3.399	23.60	10.47	34.07	46.00	11.93	
	14.517	18.39	10.65	29.04	50.00	20.96	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity	:	48%RH
Test Mode	:	MHL	Date of Test	:	Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	37.69	10.56	48.25	64.50	16.25	QP
	0.435	35.00	10.42	45.42	57.15	11.73	
	0.686	**36.90**	**10.40**	**47.30**	**56.00**	**8.70**	
	1.324	31.09	10.41	41.50	56.00	14.5	
	3.399	35.90	10.43	46.33	56.00	9.67	
	14.063	23.40	10.54	33.94	60.00	26.06	
	0.180	26.09	10.56	36.65	54.50	17.85	AV
	0.435	16.60	10.42	27.02	47.15	20.13	
	0.686	18.30	10.40	28.70	46.00	17.30	
	1.324	14.89	10.41	25.30	46.00	20.70	
	3.399	22.80	10.43	33.23	46.00	12.77	
	14.063	16.80	10.54	27.34	50.00	22.66	
Neutral	0.182	38.70	10.54	49.24	64.42	15.18	QP
	0.452	35.39	10.41	45.80	56.85	11.05	
	0.686	**36.60**	**10.39**	**46.99**	**56.00**	**9.01**	
	1.071	32.10	10.40	42.50	56.00	13.50	
	3.399	35.60	10.47	46.07	56.00	9.93	
	13.841	21.90	10.63	32.53	60.00	27.47	
	0.182	27.10	10.54	37.64	54.42	16.78	AV
	0.452	20.29	10.41	30.70	46.85	16.15	
	0.686	17.50	10.39	27.89	46.00	18.11	
	1.071	16.80	10.40	27.20	46.00	18.80	
	3.399	22.20	10.47	32.67	46.00	13.33	
	13.841	15.40	10.63	26.03	50.00	23.97	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity	:	48%RH
Test Mode	:	HDMI1080P	Date of Test	:	Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	38.09	10.56	48.65	64.50	15.85	QP
	0.444	35.50	10.42	45.92	56.98	11.06	
	0.679	36.00	10.40	46.40	56.00	9.60	
	1.310	31.19	10.41	41.60	56.00	14.40	
	3.399	**37.00**	**10.43**	**47.43**	**56.00**	**8.57**	
	14.364	25.10	10.54	35.64	60.00	24.36	
	0.180	26.79	10.56	37.35	54.50	17.15	AV
	0.444	18.80	10.42	29.22	46.98	17.76	
	0.679	19.70	10.40	30.10	46.00	15.90	
	1.310	14.79	10.41	25.20	46.00	20.80	
	3.399	22.90	10.43	33.33	46.00	12.67	
	14.364	17.10	10.54	27.64	50.00	22.36	
Neutral	0.186	37.89	10.54	48.43	64.20	15.77	QP
	0.435	35.00	10.41	45.41	57.15	11.74	
	0.679	**35.70**	**10.39**	**46.09**	**56.00**	**9.91**	
	1.082	33.80	10.40	44.20	56.00	11.80	
	3.399	35.40	10.47	45.87	56.00	10.13	
	14.213	24.70	10.64	35.34	60.00	24.66	
	0.186	25.49	10.54	36.03	54.20	18.17	AV
	0.435	16.40	10.41	26.81	47.15	20.34	
	0.679	19.30	10.39	29.69	46.00	16.31	
	1.082	19.90	10.40	30.30	46.00	15.70	
	3.399	22.20	10.47	32.67	46.00	13.33	
	14.213	18.30	10.64	28.94	50.00	21.06	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity	:	48%RH
Test Mode	:	USB Play	Date of Test	:	Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	37.79	10.56	48.35	64.50	16.15	QP
	0.444	35.40	10.42	45.82	56.98	11.16	
	0.679	**35.80**	**10.40**	**46.20**	**56.00**	**9.80**	
	1.585	31.11	10.40	41.51	56.00	14.49	
	3.399	34.70	10.43	45.13	56.00	10.87	
	14.213	24.80	10.54	35.34	60.00	24.66	
	0.180	26.19	10.56	36.75	54.50	17.75	AV
	0.444	18.30	10.42	28.72	46.98	18.26	
	0.679	19.20	10.40	29.60	46.00	16.40	
	1.585	14.91	10.40	25.31	46.00	20.69	
	3.399	22.20	10.43	32.63	46.00	13.37	
	14.213	18.40	10.54	28.94	50.00	21.06	
Neutral	0.186	37.59	10.54	48.13	64.20	16.07	QP
	0.440	35.10	10.41	45.51	57.07	11.56	
	0.679	35.70	10.39	46.09	56.00	9.91	
	1.310	32.20	10.41	42.61	56.00	13.39	
	3.399	**35.70**	**10.47**	**46.17**	**56.00**	**9.83**	
	14.517	24.79	10.65	35.44	60.00	24.56	
	0.186	25.39	10.54	35.93	54.20	18.27	AV
	0.440	17.10	10.41	27.51	47.07	19.56	
	0.679	19.70	10.39	30.09	46.00	15.91	
	1.310	14.70	10.41	25.11	46.00	20.89	
	3.399	22.20	10.47	32.67	46.00	13.33	
	14.517	17.89	10.65	28.54	50.00	21.46	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature	:	22℃
Model No.	:	50H8C	Humidity	:	48%RH
Test Mode	:	LAN Play	Date of Test	:	Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.180	37.89	10.56	48.45	64.50	16.05	QP
	0.447	35.50	10.42	45.92	56.93	11.01	
	0.679	**35.80**	**10.40**	**46.20**	**56.00**	**9.80**	
	1.324	30.99	10.41	41.40	56.00	14.60	
	3.399	34.90	10.43	45.33	56.00	10.67	
	14.517	25.00	10.55	35.55	60.00	24.45	
	0.180	26.59	10.56	37.15	54.50	17.35	AV
	0.447	19.30	10.42	29.72	46.93	17.21	
	0.679	19.40	10.40	29.80	46.00	16.20	
	1.324	14.39	10.41	24.80	46.00	21.20	
	3.399	22.30	10.43	32.73	46.00	13.27	
	14.517	18.10	10.55	28.65	50.00	21.35	
Neutral	0.182	38.60	10.54	49.14	64.42	15.28	QP
	0.444	35.20	10.41	45.61	56.98	11.37	
	0.679	35.60	10.39	45.99	56.00	10.01	
	1.433	33.70	10.42	44.12	56.00	11.88	
	3.399	**36.60**	**10.47**	**47.07**	**56.00**	**8.93**	
	14.213	24.70	10.64	35.34	60.00	24.66	
	0.182	28.00	10.54	38.54	54.42	15.88	AV
	0.444	18.20	10.41	28.61	46.98	18.37	
	0.679	19.20	10.39	29.59	46.00	16.41	
	1.433	16.40	10.42	26.82	46.00	19.18	
	3.399	22.90	10.47	33.37	46.00	12.63	
	14.213	18.40	10.64	29.04	50.00	20.96	

TEST ENGINEER: BYRON WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity	:	48%RH
Test Mode	:	Wifi	Date of Test	:	Feb 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.185	36.50	10.55	47.05	64.25	17.20	QP
	0.450	35.40	10.42	45.82	56.87	11.05	
	0.686	**36.80**	**10.40**	**47.20**	**56.00**	**8.80**	
	1.819	31.60	10.41	42.01	56.00	13.99	
	3.399	35.70	10.43	46.13	56.00	9.87	
	14.183	24.60	10.54	35.14	60.00	24.86	
	0.185	25.10	10.55	35.65	54.25	18.60	AV
	0.450	20.50	10.42	30.92	46.87	15.95	
	0.686	17.90	10.40	28.30	46.00	17.70	
	1.819	17.50	10.41	27.91	46.00	18.09	
	3.399	22.50	10.43	32.93	46.00	13.07	
	14.183	18.70	10.54	29.24	50.00	20.76	
Neutral	0.180	38.89	10.55	49.44	64.50	15.06	QP
	0.444	35.10	10.41	45.51	56.98	11.47	
	0.686	**36.60**	**10.39**	**46.99**	**56.00**	**9.01**	
	1.433	33.50	10.42	43.92	56.00	12.08	
	3.399	35.90	10.47	46.37	56.00	9.63	
	14.213	24.50	10.64	35.14	60.00	24.86	
	0.180	26.39	10.55	36.94	54.50	17.56	AV
	0.444	18.00	10.41	28.41	46.98	18.57	
	0.686	17.90	10.39	28.29	46.00	17.71	
	1.433	16.20	10.42	26.62	46.00	19.38	
	3.399	22.30	10.47	32.77	46.00	13.23	
	14.213	18.00	10.64	28.64	50.00	21.36	

4 RADIATED EMISSION TEST

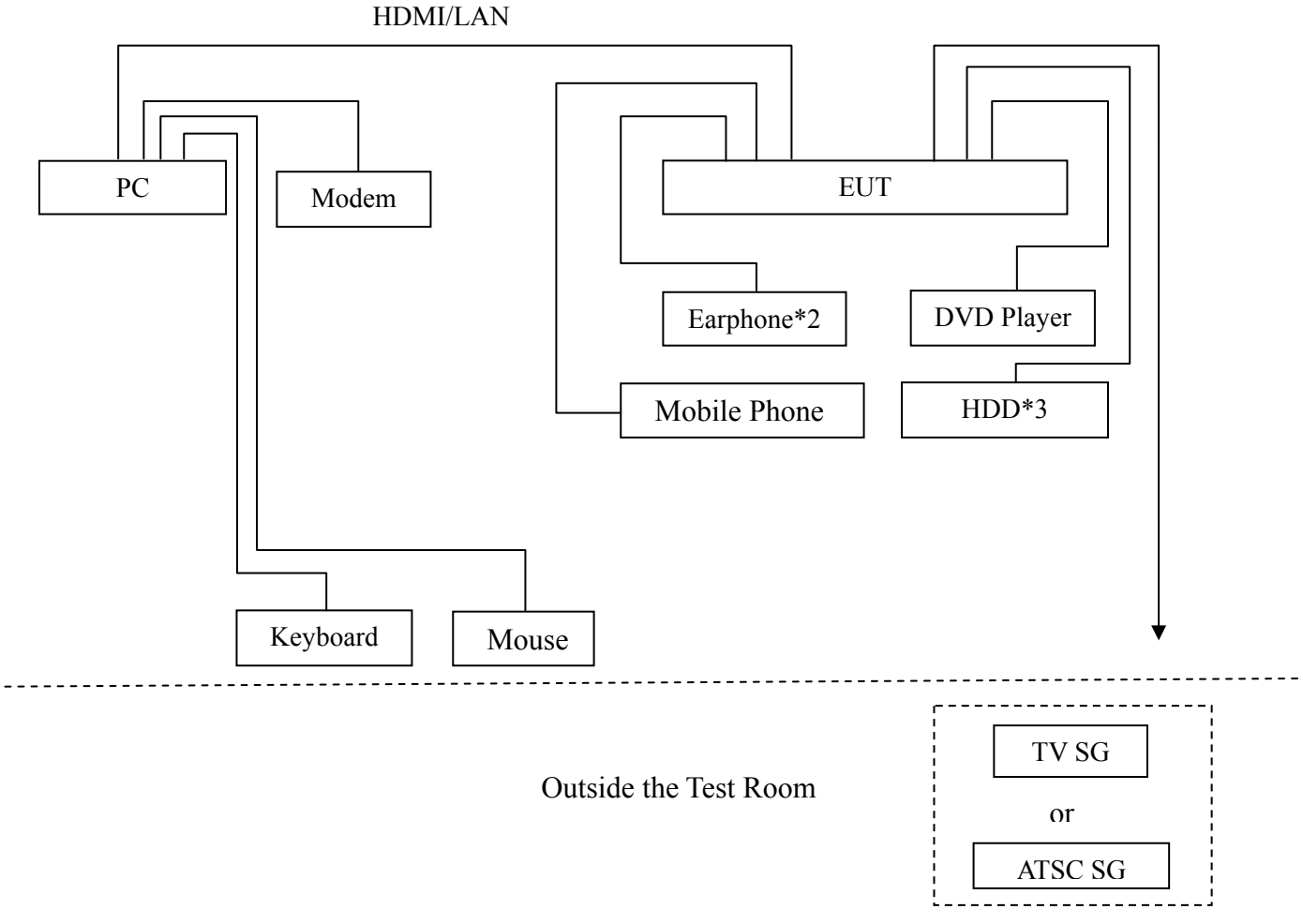
4.1 Test Equipment

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	--	--

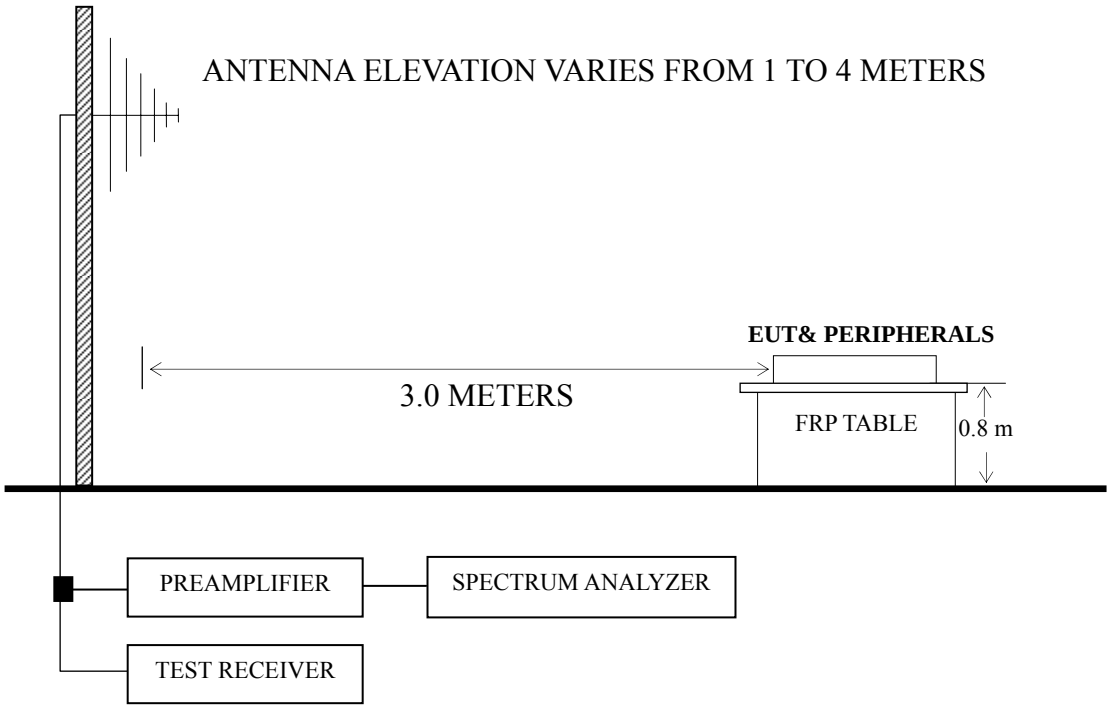
4.2 Block Diagram of Test Setup

4.2.1 EUT & Peripherals



4.2.2 Radiated emission test setup

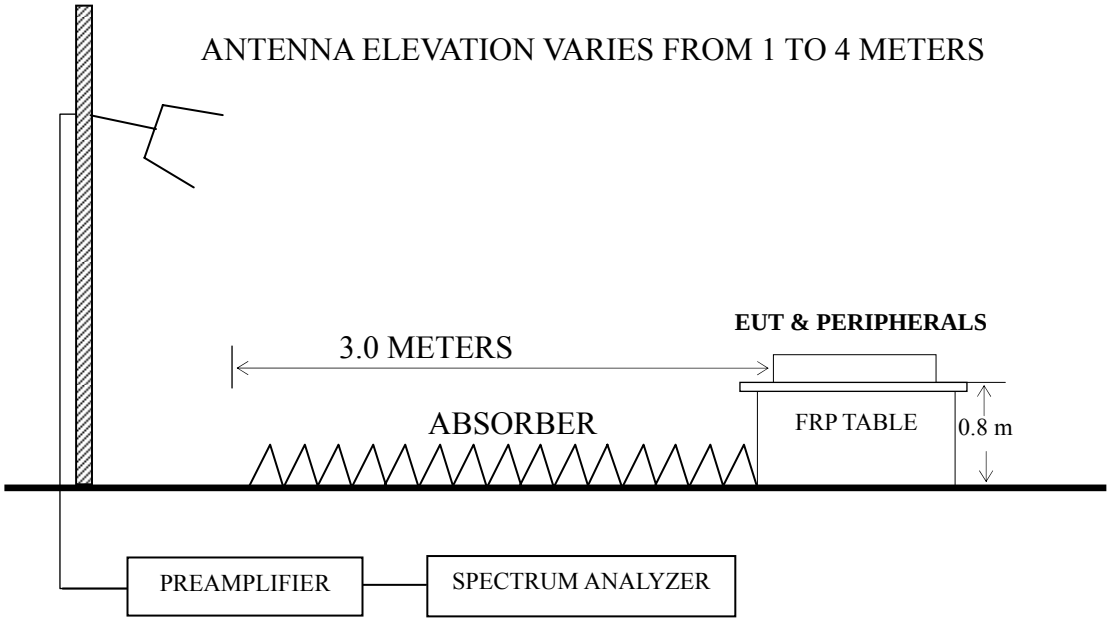
4.2.2.1 Below 1GHz



■ : 50 ohm Coaxial Switch

4.2.2.2 Above 1GHz

BORE-SIGHT ANTENNA TOWER



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

Frequency (MHz)	Distance (m)	Field strength limits	
		(μV/m)	dB (μV/m)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0

NOTE 1 - Emission Level dB (μV/m) = 20 log Emission Level (μV/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.

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

The frequency range from 1 GHz to2 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	P29-P30
HDMI2 3840*2160@60Hz & 1kHz Playing	P31
HDMI3 3840*2160@60Hz & 1kHz Playing	P32
HDMI4 3840*2160@60Hz & 1kHz Playing	P33
HDMI3 1920*1080@60Hz & 1kHz Playing	P34
HDMI3 1280*1024@60Hz & 1kHz playing	P35
HDMI3 640*480@60Hz & 1kHz playing	P36
MHL	P37
HDMI1080P	P38
USB Play	P39
LAN Play	P40
Wifi	P41

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 HDMI3 3840*2160@60Hz & 1kHz Playing test mode. The worst emission at horizontal polarization was detected at 709.182MHz with corrected signal level of 42.21dB (μV/m) (limit is 46.00 dB (μV/m)), when the antenna was 1.95 m height and the turntable was at 140°. The worst emission at vertical polarization was detected at 663.473MHz with corrected signal level of 42.72dB (μV/m) (limit is 46.00dB (μV/m)), when the antenna was 1.3 m height and the turntable was at 5°.

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI1 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	85.898	23.75	10.20	0.93	34.88	40.00	5.12
	164.908	21.63	11.10	1.35	34.08	43.50	9.42
	223.733	23.53	11.20	1.56	36.29	46.00	9.71
	593.050	18.75	18.25	2.50	39.50	46.00	6.50
	719.200	19.76	19.27	2.75	41.78	46.00	4.22
	890.728	**17.94**	**21.10**	**3.07**	**42.11**	**46.00**	**3.89**
Vertical	82.071	24.46	9.41	0.90	34.77	40.00	5.23
	92.139	24.53	11.13	0.96	36.62	43.50	6.88
	163.182	24.95	11.19	1.34	37.48	43.50	6.02
	230.099	24.40	11.50	1.58	37.48	46.00	8.52
	663.473	20.21	19.25	2.65	42.11	46.00	3.89
	890.728	**18.30**	**21.10**	**3.07**	**42.47**	**46.00**	**3.53**

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI2 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	84.999	24.25	10.10	0.92	35.27	40.00	4.73
	218.309	21.60	10.98	1.54	34.12	46.00	11.88
	428.019	14.77	16.38	2.10	33.25	46.00	12.75
	590.974	17.20	18.17	2.50	37.87	46.00	8.13
	709.182	**19.99**	**19.20**	**2.73**	**41.92**	**46.00**	**4.08**
	893.857	17.67	21.13	3.07	41.87	46.00	4.13
Vertical	82.938	24.28	9.59	0.90	34.77	40.00	5.23
	90.855	23.04	10.93	0.95	34.92	43.50	8.58
	162.611	24.55	11.21	1.34	37.10	43.50	6.40
	230.099	24.40	11.50	1.58	37.48	46.00	8.52
	640.611	19.82	19.20	2.59	41.61	46.00	4.39
	887.610	**17.59**	**21.10**	**3.07**	**41.76**	**46.00**	**4.24**

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI3 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	85.898	24.19	10.20	0.93	--	35.32	40.00	4.68	QP
	132.221	21.85	12.86	1.19	--	35.90	43.50	7.60	
	163.755	25.44	11.16	1.34	--	37.94	43.50	5.56	
	297.224	23.63	13.60	1.75	--	38.98	46.00	7.02	
	709.182	**20.28**	**19.20**	**2.73**	--	**42.21**	**46.00**	**3.79**	
	890.728	17.89	21.10	3.07	--	42.06	46.00	3.94	
	1310.693	54.31	24.91	3.79	35.99	47.02	74.00	26.98	PK
	2077.235	50.14	27.65	4.76	35.20	47.35	74.00	26.65	
	3103.070	50.37	30.73	5.97	35.08	51.99	74.00	22.01	
	1310.693	33.39	24.91	3.79	35.99	26.10	54.00	27.90	AV
	2077.235	30.95	27.65	4.76	35.20	28.16	54.00	25.84	
	3103.070	29.00	30.73	5.97	35.08	30.62	54.00	23.38	

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI3 3840*2160@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	75.977	24.47	8.41	0.87	--	33.75	40.00	6.25	QP
	84.999	23.29	10.10	0.92	--	34.31	40.00	5.69	
	164.908	24.69	11.10	1.35	--	37.14	43.50	6.36	
	297.224	22.52	13.60	1.75	--	37.87	46.00	8.13	
	663.473	**20.82**	**19.25**	**2.65**	--	**42.72**	**46.00**	**3.28**	
	890.728	18.26	21.10	3.07	--	42.43	46.00	3.57	
	1308.346	65.46	24.90	3.79	36.00	58.15	74.00	15.85	PK
	2594.039	48.15	28.83	5.40	35.20	47.18	74.00	26.82	
	4432.448	42.41	33.50	7.31	34.06	49.16	74.00	24.84	
	1308.346	44.63	24.90	3.79	36.00	37.32	54.00	16.68	AV
	2594.039	27.66	28.83	5.40	35.20	26.69	54.00	27.31	
	4432.448	21.72	33.50	7.31	34.06	28.47	54.00	25.53	

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI3 1920*1080@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	85.898	24.44	10.20	0.93	35.57	40.00	4.43
	148.963	23.05	12.16	1.28	36.49	43.50	7.01
	230.099	23.79	11.50	1.58	36.87	46.00	9.13
	446.414	19.97	16.73	2.15	38.85	46.00	7.15
	742.259	19.38	19.57	2.79	41.74	46.00	4.26
	890.728	**17.76**	**21.10**	**3.07**	**41.93**	**46.00**	**4.07**
Vertical	75.977	24.82	8.41	0.87	34.10	40.00	5.90
	148.963	23.32	12.16	1.28	36.76	43.50	6.74
	227.691	24.61	11.42	1.57	37.60	46.00	8.40
	446.414	20.58	16.73	2.15	39.46	46.00	6.54
	665.804	**19.68**	**19.30**	**2.65**	**41.63**	**46.00**	**4.37**
	890.728	16.76	21.10	3.07	40.93	46.00	5.07

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI3 1280*1024@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	**85.898**	**24.44**	**10.20**	**0.93**	**35.57**	**40.00**	**4.43**
	220.617	21.96	11.05	1.55	34.56	46.00	11.44
	432.546	19.92	16.44	2.12	38.48	46.00	7.52
	539.478	19.40	17.60	2.36	39.36	46.00	6.64
	665.804	18.87	19.30	2.65	40.82	46.00	5.18
	900.147	17.19	21.20	3.09	41.48	46.00	4.52
Vertical	75.977	23.98	8.41	0.87	33.26	40.00	6.74
	90.855	23.17	10.93	0.95	35.05	43.50	8.45
	145.861	22.34	12.48	1.26	36.08	43.50	7.42
	432.546	19.59	16.44	2.12	38.15	46.00	7.85
	539.478	18.12	17.60	2.36	38.08	46.00	7.92
	663.473	**19.46**	**19.25**	**2.65**	**41.36**	**46.00**	**4.64**

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	HDMI3 640*480@60Hz & 1kHz Playing	Date of Test :	Feb 20, 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	85.898	23.60	10.20	0.93	34.73	40.00	5.27
	219.845	24.83	11.00	1.54	37.37	46.00	8.63
	426.521	16.48	16.37	2.10	34.95	46.00	11.05
	663.473	19.24	19.25	2.65	41.14	46.00	4.86
	719.200	17.56	19.27	2.75	39.58	46.00	6.42
	890.728	**17.16**	**21.10**	**3.07**	**41.33**	**46.00**	**4.67**
Vertical	**75.977**	**25.54**	**8.41**	**0.87**	**34.82**	**40.00**	**5.18**
	96.099	23.52	11.78	0.98	36.28	43.50	7.22
	144.842	22.84	12.60	1.26	36.70	43.50	6.80
	163.755	24.61	11.16	1.34	37.11	43.50	6.39
	638.369	18.27	19.18	2.59	40.04	46.00	5.96
	663.473	18.66	19.25	2.65	40.56	46.00	5.44

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	60%RH	
Test Mode	:	MHL	Date of Test :	Feb 20, 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	**86.503**	**23.48**	**10.30**	**0.93**	**34.71**	**40.00**	**5.29**
	95.093	20.73	11.66	0.98	33.37	43.50	10.13
	223.733	24.11	11.20	1.56	36.87	46.00	9.13
	422.058	17.67	16.33	2.09	36.09	46.00	9.91
	714.173	18.04	19.25	2.75	40.04	46.00	5.96
	903.309	14.03	21.25	3.09	38.37	46.00	7.63
Vertical	**73.359**	**24.65**	**8.02**	**0.86**	**33.53**	**40.00**	**6.47**
	96.436	22.36	11.85	0.99	35.20	43.50	8.30
	158.668	22.19	11.35	1.32	34.86	43.50	8.64
	234.168	21.53	11.74	1.59	34.86	46.00	11.14
	629.477	14.90	19.10	2.58	36.58	46.00	9.42
	952.094	10.97	21.70	3.16	35.83	46.00	10.17

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	60%RH	
Test Mode	:	HDMI1080P	Date of Test :	Feb 20, 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	84.702	22.64	10.01	0.92	33.57	40.00	6.43
	173.205	22.54	10.73	1.38	34.65	43.50	8.85
	222.170	22.99	11.15	1.55	35.69	46.00	10.31
	422.058	19.41	16.33	2.09	37.83	46.00	8.17
	714.173	**18.86**	**19.25**	**2.75**	**40.86**	**46.00**	**5.14**
	952.094	14.05	21.70	3.16	38.91	46.00	7.09
Vertical	**74.135**	**25.54**	**8.13**	**0.86**	**34.53**	**40.00**	**5.47**
	94.760	21.89	11.60	0.97	34.46	43.50	9.04
	142.824	20.38	12.82	1.25	34.45	43.50	9.05
	233.349	21.13	11.68	1.58	34.39	46.00	11.61
	629.477	16.23	19.10	2.58	37.91	46.00	8.09
	714.173	16.55	19.25	2.75	38.55	46.00	7.45

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :		22℃
Model No.	:	50H8C	Humidity	:	60%RH
Test Mode	:	USB Play	Date of Test	:	Feb 20, 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	85.298	22.99	10.15	0.92	34.06	40.00	5.94
	166.068	21.83	11.07	1.35	34.25	43.50	9.25
	226.099	22.88	11.34	1.56	35.78	46.00	10.22
	416.179	20.02	16.26	2.07	38.35	46.00	7.65
	638.369	18.73	19.18	2.59	40.50	46.00	5.50
	815.968	**17.48**	**20.30**	**2.94**	**40.72**	**46.00**	**5.28**
Vertical	**73.617**	**25.27**	**8.07**	**0.86**	**34.20**	**40.00**	**5.80**
	90.855	21.95	10.93	0.95	33.83	43.50	9.67
	144.842	21.19	12.60	1.26	35.05	43.50	8.45
	225.308	23.69	11.30	1.56	36.55	46.00	9.45
	609.922	13.61	18.60	2.54	34.75	46.00	11.25
	887.610	11.66	21.10	3.07	35.83	46.00	10.17

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃	
Model No.	:	50H8C	Humidity :	60%RH	
Test Mode	:	LAN Play	Date of Test :	Feb 20, 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	23.62	8.24	0.86	32.72	40.00	7.28
	86.503	**22.89**	**10.30**	**0.93**	**34.12**	**40.00**	**5.88**
	94.760	20.74	11.60	0.97	33.31	43.50	10.19
	204.238	22.52	10.27	1.49	34.28	43.50	9.22
	631.688	13.96	19.12	2.58	35.66	46.00	10.34
	815.968	13.48	20.30	2.94	36.72	46.00	9.28
Vertical	**74.919**	**24.80**	**8.30**	**0.86**	**33.96**	**40.00**	**6.04**
	92.139	21.99	11.13	0.96	34.08	43.50	9.42
	146.888	20.31	12.41	1.27	33.99	43.50	9.51
	620.710	13.73	18.80	2.56	35.09	46.00	10.91
	903.309	10.68	21.25	3.09	35.02	46.00	10.98
	955.438	13.68	21.75	3.18	38.61	46.00	7.39

TEST ENGINEER: CAESAR WU

EUT	:	LED LCD TV	Temperature :	22℃
Model No.	:	50H8C	Humidity :	60%RH
Test Mode	:	Wifi	Date of Test :	Feb 20, 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	**85.298**	**23.52**	**10.15**	**0.92**	**34.59**	**40.00**	**5.41**
	92.462	20.02	11.20	0.96	32.18	43.50	11.32
	221.392	20.17	11.10	1.55	32.82	46.00	13.18
	406.088	15.82	16.25	2.06	34.13	46.00	11.87
	601.427	14.18	18.45	2.52	35.15	46.00	10.85
	724.261	18.01	19.33	2.77	40.11	46.00	5.89
Vertical	**82.359**	**23.07**	**9.41**	**0.90**	**33.38**	**40.00**	**6.62**
	146.374	21.32	12.48	1.26	35.06	43.50	8.44
	226.099	21.68	11.34	1.56	34.58	46.00	11.42
	475.499	15.00	17.16	2.22	34.38	46.00	11.62
	647.386	14.50	19.27	2.61	36.38	46.00	9.62
	721.726	15.27	19.30	2.75	37.32	46.00	8.68

TEST ENGINEER: CAESAR 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 II Figure 23

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

APPENDIX I

PHOTOGRAPHS OF TEST

APPENDIX II

PHOTOGRAPHS OF EUT