

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

LED LCD TV

Model No.:

Model No.	Brand
65H8D, 65H8D+, 65H8D+0D 65H8+0D1 , 65H8+0D2 , 65H80+0D 65H80+0D1, 65H80+0D2	Hisense

FCC ID : W9HLCDF0138

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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
		Minimum passing margin is 3.48dB at 0.150MHz	
Radiated Disturbance	FCC RULES AND REGULATIONS PART 15 SUBPART B AND ANSI C63.4-2014	15.109(a) Class B	Pass
		Minimum passing margin is 3.04dB at 906.482MHz (Vertical, 1.30m/120°)	

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	:	65H8D, 65H8D+, 65H8D+0D, 65H8+0D 65H8+0D2, 65H80+0D, 65H80+0D1, 65H80+0D2
Note #1	:	The above models are all the same except for model number. 65H8D model is tested and recorded in the report.
Note #2	:	“+” represents any of the Arabic numeral.
Note #3	:	The tuner port comply with the 15.111 requirement.
Brand	:	Hisense
RF module FCC ID	:	PPQ-WCBN4511R
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, China, CP 32557
Factory #3	:	HISENSE ELECTRONICA MEXICO,S.A. DE C.V. Blvd. Hisense #3510 Parque Industrial Rosarito, C.P. 22710 Playas de Rosarito, B.C.
LCD Panel	:	Manufacturer : Hisense M/N : HD650M5U52
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

LAN Cable : Unshielded, Detachable, 1.50m

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

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 Mobile Phone

Manufacturer : SAMSUNG
Model Number : GT-I9100G
Serial Number : 69351520011519
Certificate : CE/EMC

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 = 4.3dB(Horizontal)
U = 4.6dB (Vertical)

Radiated Emission Expanded Uncertainty (200M-1GHz):
U = 4.3dB (Horizontal)
U = 5.5dB (Vertical)

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

3 CONDUCTED EMISSION TEST

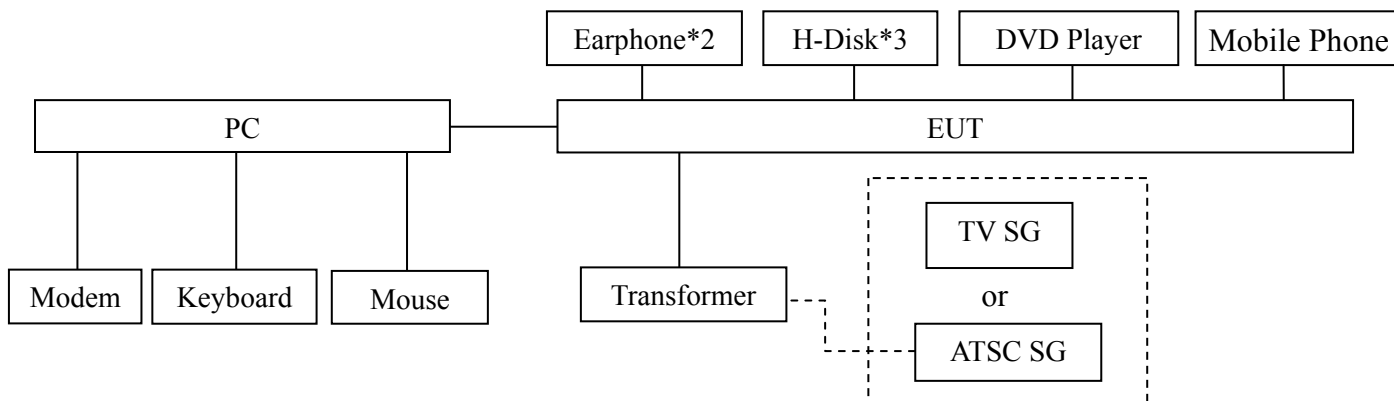
3.1 Test Equipment

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

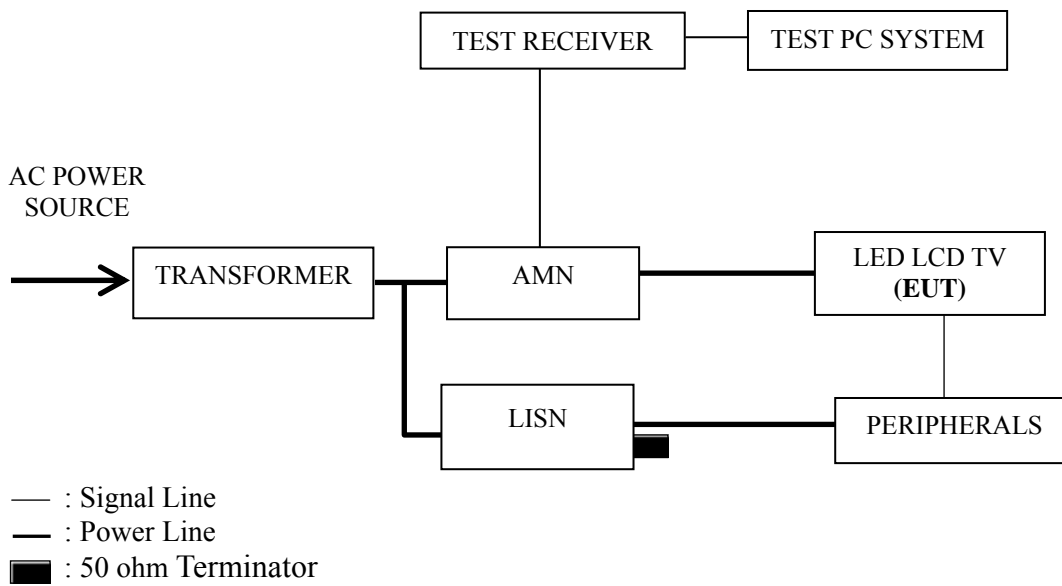
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2017	Apr 26, 2018
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2017	Jun 24, 2018
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 17, 2017	Mar 16, 2018
4.	50Ω Terminator	Anritsu	BNC	001	Mar 20, 2017	Sep 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
HDMI1 1920*1080@60Hz & 1kHz playing
HDMI1 1280*1024@60Hz & 1kHz playing
HDMI1 640*480@60Hz & 1kHz playing
HDMI2 3840*2160@60Hz & 1kHz playing
HDMI3 3840*2160@30Hz & 1kHz playing
HDMI4 3840*2160@30Hz & 1kHz playing
HDMI1080P
USB Play
LAN Play
WIFI
MHL

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 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
HDMI1 1920*1080@60Hz & 1kHz playing	P15
HDMI1 1280*1024@60Hz & 1kHz playing	P16
HDMI1 640*480@60Hz & 1kHz playing	P17
HDMI2 3840*2160@60Hz & 1kHz playing	P18
HDMI3 3840*2160@30Hz & 1kHz playing	P19
HDMI4 3840*2160@30Hz & 1kHz playing	P20
HDMI1080P	P21
USB Play	P22
LAN Play	P23
WIFI	P24
MHL	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.

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Jul 08, 2017
3840*2160@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark	
Line	0.150	51.90	10.60	62.50	65.98	3.48	QP	
	0.385	30.94	10.42	41.36	58.17	16.81		
	0.775	26.17	10.39	36.56	56.00	19.44		
	1.645	23.67	10.40	34.07	56.00	21.93		
	2.962	26.82	10.43	37.25	56.00	18.75		
	5.713	23.84	10.47	34.31	60.00	25.69		
	0.150	37.00	10.60	47.60	55.98	8.38	AV	
	0.385	25.94	10.42	36.36	48.17	11.81		
	0.775	13.17	10.39	23.56	46.00	22.44		
	1.645	14.67	10.40	25.07	46.00	20.93		
	2.962	15.82	10.43	26.25	46.00	19.75		
	5.713	17.84	10.47	28.31	50.00	21.69		
	Neutral	0.150	51.92	10.52	62.44	65.98	3.54	QP
		0.381	29.51	10.40	39.91	58.25	18.34	
0.759		27.66	10.39	38.05	56.00	17.95		
1.680		28.05	10.41	38.46	56.00	17.54		
2.962		26.86	10.44	37.30	56.00	18.70		
5.221		22.33	10.47	32.80	60.00	27.20		
0.150		37.20	10.52	47.72	55.98	8.26	AV	
0.381		23.51	10.40	33.91	48.25	14.34		
0.759		15.66	10.39	26.05	46.00	19.95		
1.680		19.05	10.41	29.46	46.00	16.54		
2.962		17.86	10.44	28.30	46.00	17.70		
5.221		15.33	10.47	25.80	50.00	24.20		

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Jul 08, 2017
1920*1080@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark	
Line	0.150	50.85	10.60	61.45	65.98	4.53	QP	
	0.385	28.76	10.42	39.18	58.17	18.99		
	0.654	28.64	10.38	39.02	56.00	16.98		
	0.890	27.14	10.39	37.53	56.00	18.47		
	1.662	25.75	10.40	36.15	56.00	19.85		
	5.058	25.72	10.46	36.18	60.00	23.82		
	0.150	33.60	10.60	44.20	55.98	11.78	AV	
	0.385	23.76	10.42	34.18	48.17	13.99		
	0.654	22.64	10.38	33.02	46.00	12.98		
	0.890	21.14	10.39	31.53	46.00	14.47		
	1.662	16.75	10.40	27.15	46.00	18.85		
	5.058	17.72	10.46	28.18	50.00	21.82		
	Neutral	0.151	50.62	10.52	61.14	65.97	4.83	QP
		0.385	27.56	10.40	37.96	58.17	20.21	
0.914		27.18	10.39	37.57	56.00	18.43		
1.172		26.71	10.39	37.10	56.00	18.90		
2.962		25.56	10.44	36.00	56.00	20.00		
4.501		24.13	10.47	34.60	56.00	21.40		
0.151		33.40	10.52	43.92	55.97	12.05	AV	
0.385		21.56	10.40	31.96	48.17	16.21		
0.914		21.18	10.39	31.57	46.00	14.43		
1.172		17.71	10.39	28.10	46.00	17.90		
2.962		18.56	10.44	29.00	46.00	17.00		
4.501		15.13	10.47	25.60	46.00	20.40		

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Jul 08, 2017
1280*1024@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.151	50.77	10.60	61.37	65.97	4.60	QP
	0.385	28.97	10.42	39.39	58.17	18.78	
	0.647	26.60	10.38	36.98	56.00	19.02	
	1.172	25.09	10.39	35.48	56.00	20.52	
	1.716	24.82	10.41	35.23	56.00	20.77	
	2.993	23.96	10.43	34.39	56.00	21.61	
	0.151	33.70	10.60	44.30	55.97	11.67	AV
	0.385	22.97	10.42	33.39	48.17	14.78	
	0.647	21.60	10.38	31.98	46.00	14.02	
	1.172	18.09	10.39	28.48	46.00	17.52	
	1.716	18.82	10.41	29.23	46.00	16.77	
	2.993	19.96	10.43	30.39	46.00	15.61	
Neutral	0.150	50.64	10.52	61.16	65.98	4.82	QP
	0.381	28.13	10.40	38.53	58.25	19.72	
	0.743	28.85	10.40	39.25	56.00	16.75	
	1.153	26.00	10.39	36.39	56.00	19.61	
	1.680	26.44	10.41	36.85	56.00	19.15	
	2.474	24.95	10.43	35.38	56.00	20.62	
	0.150	33.40	10.52	43.92	55.98	12.06	AV
	0.381	23.13	10.40	33.53	48.25	14.72	
	0.743	19.85	10.40	30.25	46.00	15.75	
	1.153	19.00	10.39	29.39	46.00	16.61	
	1.680	18.44	10.41	28.85	46.00	17.15	
	2.474	16.95	10.43	27.38	46.00	18.62	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI1 640*480@60Hz Date of Test : Jul 08, 2017
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.150	51.83	10.60	62.43	65.98	3.55	QP
	0.385	27.47	10.42	37.89	58.17	20.28	
	0.727	27.30	10.39	37.69	56.00	18.31	
	1.698	27.26	10.41	37.67	56.00	18.33	
	2.993	26.12	10.43	36.55	56.00	19.45	
	5.058	24.10	10.46	34.56	60.00	25.44	
	0.150	35.96	10.60	46.56	55.98	9.42	AV
	0.385	23.47	10.42	33.89	48.17	14.28	
	0.727	21.30	10.39	31.69	46.00	14.31	
	1.698	21.26	10.41	31.67	46.00	14.33	
	2.993	14.12	10.43	24.55	46.00	21.45	
	5.058	17.10	10.46	27.56	50.00	22.44	
Neutral	0.151	51.56	10.52	62.08	65.96	3.88	QP
	0.385	28.46	10.40	38.86	58.17	19.31	
	0.743	28.77	10.40	39.17	56.00	16.83	
	1.153	28.37	10.39	38.76	56.00	17.24	
	1.680	25.02	10.41	35.43	56.00	20.57	
	4.574	25.19	10.47	35.66	56.00	20.34	
	0.151	35.70	10.52	46.22	55.96	9.74	AV
	0.385	20.46	10.40	30.86	48.17	17.31	
	0.743	19.77	10.40	30.17	46.00	15.83	
	1.153	19.37	10.39	29.76	46.00	16.24	
	1.680	17.02	10.41	27.43	46.00	18.57	
	4.574	17.19	10.47	27.66	46.00	18.34	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI2 Date of Test : Jul 08, 2017
3840*2160@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.151	51.40	10.60	62.00	65.97	3.97	QP
	0.385	25.97	10.42	36.39	58.17	21.78	
	0.751	27.29	10.39	37.68	56.00	18.32	
	1.153	26.90	10.39	37.29	56.00	18.71	
	1.698	26.80	10.41	37.21	56.00	18.79	
	3.681	24.22	10.45	34.67	56.00	21.33	
	AV	0.151	36.10	10.60	46.70	55.97	9.27
		0.385	21.97	10.42	32.39	48.17	15.78
		0.751	22.29	10.39	32.68	46.00	13.32
		1.153	19.90	10.39	30.29	46.00	15.71
		1.698	21.80	10.41	32.21	46.00	13.79
		3.681	19.22	10.45	29.67	46.00	16.33
Neutral	0.150	51.67	10.52	62.19	65.98	3.79	QP
	0.385	28.32	10.40	38.72	58.17	19.45	
	0.751	28.96	10.39	39.35	56.00	16.65	
	1.172	26.47	10.39	36.86	56.00	19.14	
	1.662	25.72	10.41	36.13	56.00	19.87	
	5.005	23.05	10.47	33.52	60.00	26.48	
	AV	0.150	35.90	10.52	46.42	55.98	9.56
		0.385	23.32	10.40	33.72	48.17	14.45
		0.751	15.96	10.39	26.35	46.00	19.65
		1.172	19.47	10.39	29.86	46.00	16.14
		1.662	18.72	10.41	29.13	46.00	16.87
		5.005	16.05	10.47	26.52	50.00	23.48

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI3 Date of Test : Jul 08, 2017
3840*2160@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.150	50.86	10.60	61.46	65.98	4.52	QP
	0.385	28.61	10.42	39.03	58.17	19.14	
	0.686	29.97	10.38	40.35	56.00	15.65	
	1.662	25.37	10.40	35.77	56.00	20.23	
	2.931	25.23	10.43	35.66	56.00	20.34	
	5.058	26.39	10.46	36.85	60.00	23.15	
	0.150	36.20	10.60	46.80	55.98	9.18	AV
	0.385	22.61	10.42	33.03	48.17	15.14	
	0.686	23.97	10.38	34.35	46.00	11.65	
	1.662	21.37	10.40	31.77	46.00	14.23	
	2.931	19.23	10.43	29.66	46.00	16.34	
	5.058	19.39	10.46	29.85	50.00	20.15	
Neutral	0.151	50.53	10.52	61.05	65.94	4.89	QP
	0.385	29.44	10.40	39.84	58.17	18.33	
	0.751	29.12	10.39	39.51	56.00	16.49	
	1.160	28.00	10.39	38.39	56.00	17.61	
	2.422	27.84	10.43	38.27	56.00	17.73	
	5.774	24.30	10.48	34.78	60.00	25.22	
	0.151	35.60	10.52	46.12	55.94	9.82	AV
	0.385	24.44	10.40	34.84	48.17	13.33	
	0.751	24.12	10.39	34.51	46.00	11.49	
	1.160	21.00	10.39	31.39	46.00	14.61	
	2.422	20.84	10.43	31.27	46.00	14.73	
	5.774	18.30	10.48	28.78	50.00	21.22	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI4 Date of Test : Jul 08, 2017
3840*2160@60Hz &
1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.151	50.78	10.60	61.38	65.97	4.59	QP
	0.389	26.76	10.41	37.17	58.08	20.91	
	0.779	28.39	10.39	38.78	56.00	17.22	
	1.153	27.66	10.39	38.05	56.00	17.95	
	1.680	25.90	10.40	36.30	56.00	19.70	
	2.736	24.98	10.42	35.40	56.00	20.60	
	AV	0.151	36.00	10.60	46.60	55.97	9.37
		0.389	22.76	10.41	33.17	48.08	14.91
		0.779	21.39	10.39	31.78	46.00	14.22
		1.153	20.66	10.39	31.05	46.00	14.95
		1.680	20.90	10.40	31.30	46.00	14.70
		2.736	18.98	10.42	29.40	46.00	16.60
Neutral	0.151	51.61	10.52	62.13	65.97	3.84	QP
	0.389	29.32	10.40	39.72	58.08	18.36	
	0.708	28.89	10.39	39.28	56.00	16.72	
	0.899	29.71	10.39	40.10	56.00	15.90	
	1.698	27.62	10.42	38.04	56.00	17.96	
	2.962	25.48	10.44	35.92	56.00	20.08	
	AV	0.151	35.80	10.52	46.32	55.97	9.65
		0.389	24.32	10.40	34.72	48.08	13.36
		0.708	21.89	10.39	32.28	46.00	13.72
		0.899	25.71	10.39	36.10	46.00	9.90
		1.698	19.62	10.42	30.04	46.00	15.96
		2.962	18.48	10.44	28.92	46.00	17.08

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : HDMI 1080P Date of Test : Jul 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark	
Line	0.151	50.78	10.60	61.38	65.97	4.59	QP	
	0.381	27.05	10.42	37.47	58.25	20.78		
	0.767	28.81	10.39	39.20	56.00	16.80		
	1.172	25.86	10.39	36.25	56.00	19.75		
	2.213	25.91	10.41	36.32	56.00	19.68		
	5.594	24.59	10.47	35.06	60.00	24.94		
	0.151	33.50	10.60	44.10	55.97	11.87	AV	
	0.381	20.05	10.42	30.47	48.25	17.78		
	0.767	23.81	10.39	34.20	46.00	11.80		
	1.172	19.86	10.39	30.25	46.00	15.75		
	2.213	17.91	10.41	28.32	46.00	17.68		
	5.594	17.59	10.47	28.06	50.00	21.94		
	Neutral	0.150	50.64	10.52	61.16	65.98	4.82	QP
		0.389	28.63	10.40	39.03	58.08	19.05	
0.751		27.51	10.39	37.90	56.00	18.10		
1.172		24.70	10.39	35.09	56.00	20.91		
2.201		26.69	10.42	37.11	56.00	18.89		
5.653		25.99	10.48	36.47	60.00	23.53		
0.150		33.40	10.52	43.92	55.98	12.06	AV	
0.389		23.63	10.40	34.03	48.08	14.05		
0.751		20.51	10.39	30.90	46.00	15.10		
1.172		20.70	10.39	31.09	46.00	14.91		
2.201		21.69	10.42	32.11	46.00	13.89		
5.653		18.99	10.48	29.47	50.00	20.53		

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.151	50.79	10.60	61.39	65.97	4.58	QP
	0.385	27.26	10.42	37.68	58.17	20.49	
	0.661	27.33	10.38	37.71	56.00	18.29	
	0.909	26.70	10.39	37.09	56.00	18.91	
	1.680	25.94	10.40	36.34	56.00	19.66	
	2.962	25.25	10.43	35.68	56.00	20.32	
	0.151	33.60	10.60	44.20	55.97	11.77	AV
	0.385	23.26	10.42	33.68	48.17	14.49	
	0.661	21.33	10.38	31.71	46.00	14.29	
	0.909	20.70	10.39	31.09	46.00	14.91	
	1.680	19.94	10.40	30.34	46.00	15.66	
	2.962	21.25	10.43	31.68	46.00	14.32	
Neutral	0.150	50.64	10.52	61.16	65.98	4.82	QP
	0.385	31.11	10.40	41.51	58.17	16.66	
	0.727	27.11	10.40	37.51	56.00	18.49	
	1.172	27.05	10.39	37.44	56.00	18.56	
	1.680	26.94	10.41	37.35	56.00	18.65	
	5.805	26.20	10.48	36.68	60.00	23.32	
	0.150	33.40	10.52	43.92	55.98	12.06	AV
	0.385	23.11	10.40	33.51	48.17	14.66	
	0.727	21.11	10.40	31.51	46.00	14.49	
	1.172	21.05	10.39	31.44	46.00	14.56	
	1.680	20.94	10.41	31.35	46.00	14.65	
	5.805	20.20	10.48	30.68	50.00	19.32	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.150	50.85	10.60	61.45	65.98	4.53	QP
	0.381	29.37	10.42	39.79	58.25	18.46	
	0.716	29.76	10.39	40.15	56.00	15.85	
	1.160	26.55	10.39	36.94	56.00	19.06	
	2.474	26.82	10.42	37.24	56.00	18.76	
	5.774	24.04	10.47	34.51	60.00	25.49	
	0.150	33.60	10.60	44.20	55.98	11.78	AV
	0.381	23.37	10.42	33.79	48.25	14.46	
	0.716	23.76	10.39	34.15	46.00	11.85	
	1.160	18.55	10.39	28.94	46.00	17.06	
	2.474	18.82	10.42	29.24	46.00	16.76	
	5.774	17.04	10.47	27.51	50.00	22.49	
Neutral	0.150	50.65	10.52	61.17	65.98	4.81	QP
	0.385	29.62	10.40	40.02	58.17	18.15	
	0.743	28.16	10.40	38.56	56.00	17.44	
	1.172	26.71	10.39	37.10	56.00	18.90	
	1.680	27.83	10.41	38.24	56.00	17.76	
	4.822	25.94	10.47	36.41	56.00	19.59	
	0.150	33.50	10.52	44.02	55.98	11.96	AV
	0.385	23.62	10.40	34.02	48.17	14.15	
	0.743	21.16	10.40	31.56	46.00	14.44	
	1.172	19.71	10.39	30.10	46.00	15.90	
	1.680	19.83	10.41	30.24	46.00	15.76	
	4.822	17.94	10.47	28.41	46.00	17.59	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

Test Mode : WIFI Date of Test : Jul 08, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark
Line	0.150	50.82	10.60	61.42	65.98	4.56	QP
	0.381	29.12	10.42	39.54	58.25	18.71	
	0.759	29.52	10.39	39.91	56.00	16.09	
	1.172	27.12	10.39	37.51	56.00	18.49	
	2.237	25.38	10.41	35.79	56.00	20.21	
	5.362	24.12	10.47	34.59	60.00	25.41	
	0.150	33.60	10.60	44.20	55.98	11.78	AV
	0.381	23.12	10.42	33.54	48.25	14.71	
	0.759	22.52	10.39	32.91	46.00	13.09	
	1.172	21.12	10.39	31.51	46.00	14.49	
	2.237	19.38	10.41	29.79	46.00	16.21	
	5.362	18.12	10.47	28.59	50.00	21.41	
Neutral	0.151	51.61	10.52	62.13	65.97	3.84	QP
	0.385	29.46	10.40	39.86	58.17	18.31	
	0.743	28.72	10.40	39.12	56.00	16.88	
	1.160	28.16	10.39	38.55	56.00	17.45	
	1.680	26.37	10.41	36.78	56.00	19.22	
	5.594	25.26	10.48	35.74	60.00	24.26	
	0.151	35.70	10.52	46.22	55.97	9.75	AV
	0.385	23.46	10.40	33.86	48.17	14.31	
	0.743	20.72	10.40	31.12	46.00	14.88	
	1.160	22.16	10.39	32.55	46.00	13.45	
	1.680	21.37	10.41	31.78	46.00	14.22	
	5.594	16.26	10.48	26.74	50.00	23.26	

TEST ENGINEER: BYRON WU

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μ V)	Factor (dB)	Emission Level dB(μ V)	Limits dB(μ V)	Margin (dB)	Remark	
Line	0.150	51.83	10.60	62.43	65.98	3.55	QP	
	0.385	27.20	10.42	37.62	58.17	20.55		
	0.720	30.74	10.39	41.13	56.00	14.87		
	1.184	26.19	10.39	36.58	56.00	19.42		
	1.698	26.96	10.41	37.37	56.00	18.63		
	5.535	24.62	10.47	35.09	60.00	24.91		
	0.150	36.00	10.60	46.60	55.98	9.38	AV	
	0.385	21.20	10.42	31.62	48.17	16.55		
	0.720	22.74	10.39	33.13	46.00	12.87		
	1.184	20.19	10.39	30.58	46.00	15.42		
	1.698	20.96	10.41	31.37	46.00	14.63		
	5.535	16.62	10.47	27.09	50.00	22.91		
	Neutral	0.150	51.67	10.52	62.19	65.98	3.79	QP
		0.385	29.12	10.40	39.52	58.17	18.65	
0.796		28.39	10.39	38.78	56.00	17.22		
1.172		27.98	10.39	38.37	56.00	17.63		
1.716		26.00	10.42	36.42	56.00	19.58		
5.362		24.36	10.48	34.84	60.00	25.16		
0.150		35.80	10.52	46.32	55.98	9.66	AV	
0.385		23.12	10.40	33.52	48.17	14.65		
0.796		22.39	10.39	32.78	46.00	13.22		
1.172		20.98	10.39	31.37	46.00	14.63		
1.716		21.00	10.42	31.42	46.00	14.58		
5.362		18.36	10.48	28.84	50.00	21.16		

TEST ENGINEER: BYRON WU

4 RADIATED EMISSION TEST

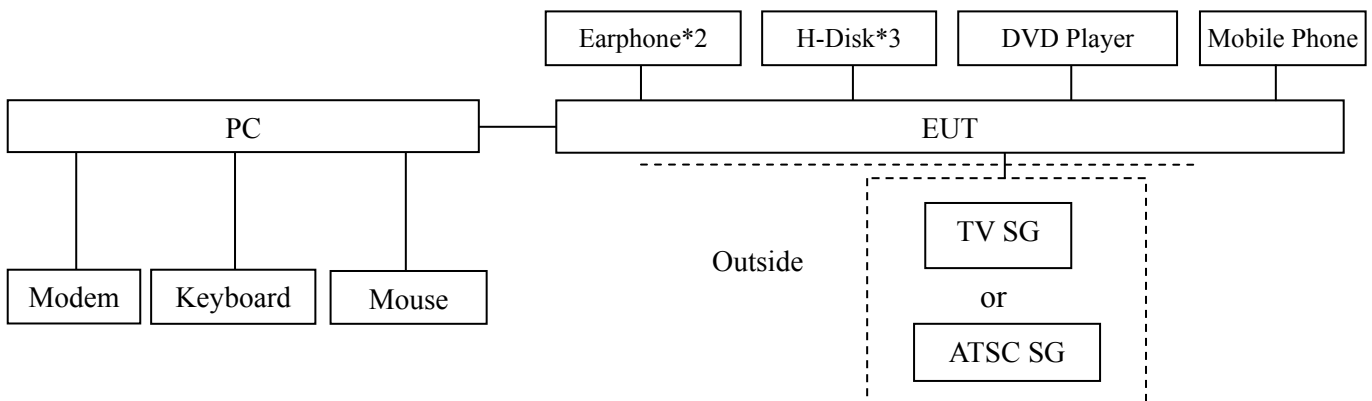
4.1 Test Equipment

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, 2017	May 06, 2018
2.	Preamplifier	Agilent	8447D	2944A06664	Apr 27, 2017	Apr 26, 2018
3.	Preamplifier	HP	8449B	3008A00864	Mar 20, 2017	Mar 19, 2018
4.	Bi-log Antenna	TESEQ	CBL6112D	23192	Mar 25, 2017	Mar 24, 2018
5.	Horn Antenna	EMCO	3115	9607-4878	May 31, 2017	May 30, 2018
6.	Spectrum	Agilent	E7405A	MY45106600	Apr 26, 2017	Apr 25, 2018
7.	Software	Audix	e3	6.2007-9-10	--	--

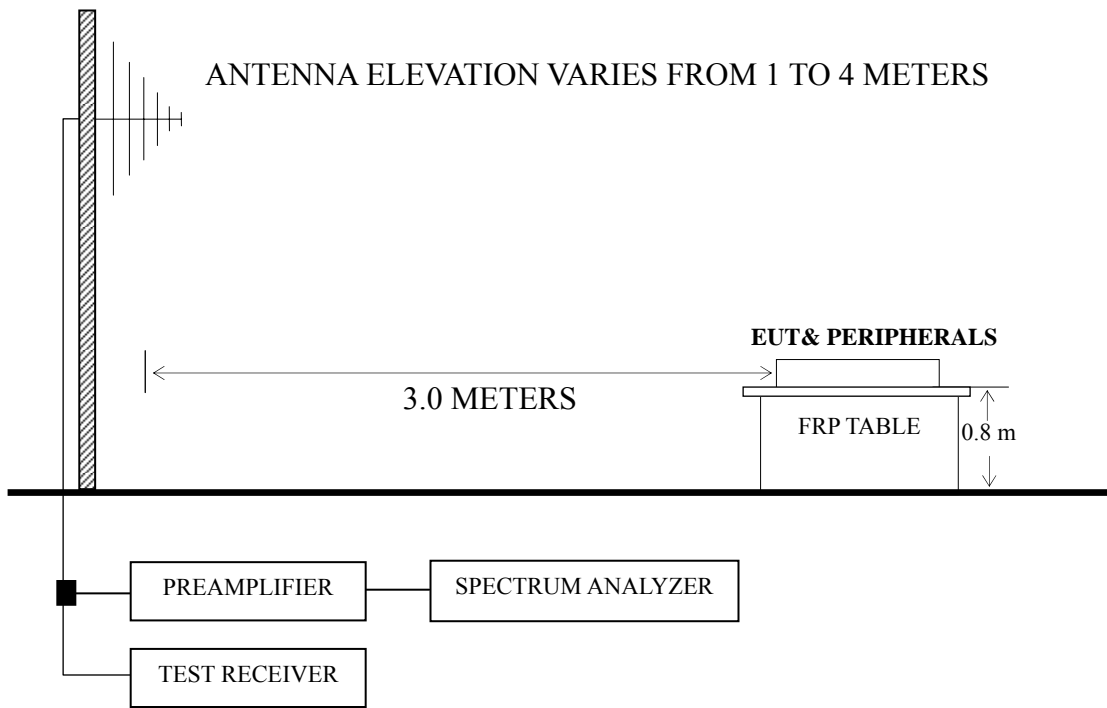
4.2 Block Diagram of Test Setup

4.2.1 EUT & Peripherals



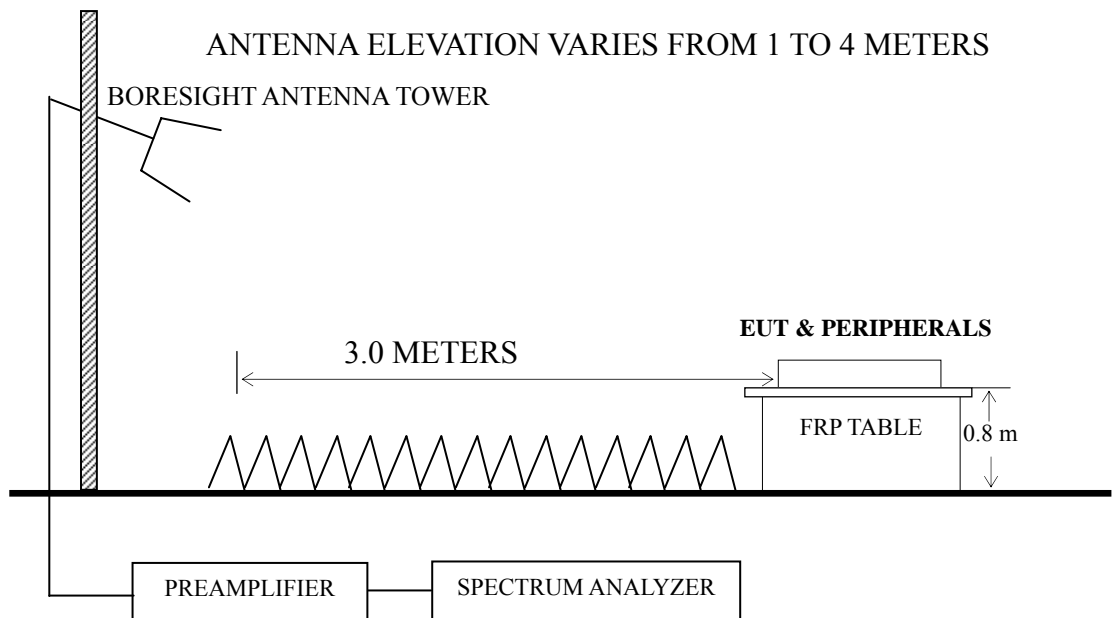
4.2.2 Radiated emission test setup

4.2.2.1 Below 1GHz



■ : 50 ohm Coaxial Switch

4.2.2.2 Above 1GHz



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.

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	P38
HDMI1080P	P39
USB Play	P40
LAN Play	P41
WIFI	P42
MHL	P43

NOTE 1 – Emission Level = Antenna Factor + Cable Loss + Meter Reading. (< 1GHz);

Emission Level = Antenna Factor + Cable Loss – Preamp Factor + 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.

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI1 3840*2160@60Hz Date of Test : Jul 09, 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	60.918	28.07	6.64	0.78	35.49	40.00	4.51
	102.001	24.21	12.84	1.01	38.06	43.50	5.44
	155.910	25.81	11.29	1.31	38.41	43.50	5.09
	245.951	20.69	12.66	1.63	34.98	46.00	11.02
	724.261	16.55	20.47	2.74	39.76	46.00	6.24
	866.088	17.87	21.00	2.98	41.85	46.00	4.15
Vertical	34.037	17.70	16.90	0.59	35.19	40.00	4.81
	57.999	28.04	6.90	0.77	35.71	40.00	4.29
	154.821	23.81	11.40	1.30	36.51	43.50	6.99
	297.224	21.24	13.90	1.76	36.90	46.00	9.10
	704.226	16.79	20.47	2.71	39.97	46.00	6.03
	875.247	18.43	21.03	3.01	42.47	46.00	3.53

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI2 3840*2160@60Hz Date of Test : Jul 09, 2017
& 1kHz playing

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	63.983	24.37	6.76	0.79	31.92	40.00	8.08
	125.886	22.02	12.86	1.16	36.04	43.50	7.46
	154.821	25.52	11.40	1.30	38.22	43.50	5.28
	247.682	23.13	12.78	1.64	37.55	46.00	8.45
	714.173	15.95	20.45	2.73	39.13	46.00	6.87
	869.130	16.96	21.00	2.98	40.94	46.00	5.06
Vertical	34.037	19.06	16.90	0.59	36.55	40.00	3.45
	54.071	25.85	7.40	0.75	34.00	40.00	6.00
	154.821	23.88	11.40	1.30	36.58	43.50	6.92
	297.224	21.20	13.90	1.76	36.86	46.00	9.14
	719.200	16.94	20.48	2.73	40.15	46.00	5.85
	872.183	18.00	21.00	2.98	41.98	46.00	4.02

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI3 3840*2160@60Hz & 1kHz playing Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	125.886	21.63	12.86	1.16	35.65	43.50	7.85
	155.910	24.62	11.29	1.31	37.22	43.50	6.28
	247.682	21.83	12.78	1.64	36.25	46.00	9.75
	449.556	14.12	17.60	2.19	33.91	46.00	12.09
	699.305	17.06	20.50	2.69	40.25	46.00	5.75
	896.997	18.01	20.93	3.03	41.97	46.00	4.03
Vertical	34.037	18.21	16.90	0.59	35.70	40.00	4.30
	52.945	26.16	7.57	0.74	34.47	40.00	5.53
	146.888	22.62	11.79	1.27	35.68	43.50	7.82
	297.224	19.83	13.90	1.76	35.49	46.00	10.51
	701.761	16.24	20.47	2.69	39.40	46.00	6.60
	872.183	18.92	21.00	2.98	42.90	46.00	3.10

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI4 3840*2160@60Hz & 1kHz playing Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)	Remark
Horizontal	63.092	22.71	6.73	0.79	--	30.23	40.00	9.77	QP
	125.886	22.68	12.86	1.16	--	36.70	43.50	6.80	
	146.888	24.96	11.79	1.27	--	38.02	43.50	5.48	
	247.682	21.30	12.78	1.64	--	35.72	46.00	10.28	
	721.726	16.74	20.50	2.73	--	39.97	46.00	6.03	
	893.857	17.06	20.97	3.03	--	41.06	46.00	4.94	
	1475.227	52.43	25.52	3.86	35.77	46.04	74.00	27.96	PK
	2062.401	48.17	27.62	4.53	35.20	45.12	74.00	28.88	
	4400.794	41.32	33.46	6.67	34.07	47.38	74.00	26.62	
	1475.227	36.84	25.52	3.86	35.77	30.45	54.00	23.55	AV
	2062.401	31.00	27.62	4.53	35.20	27.95	54.00	26.05	
4400.794	28.63	33.46	6.67	34.07	34.69	54.00	19.31		

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI4 3840*2160@60Hz & 1kHz playing Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)	Remark
Vertical	34.037	18.21	16.90	0.59	--	35.70	40.00	4.30	QP
	54.071	25.23	7.40	0.75	--	33.38	40.00	6.62	
	146.888	21.13	11.79	1.27	--	34.19	43.50	9.31	
	447.982	13.77	17.57	2.17	--	33.51	46.00	12.49	
	704.226	16.95	20.47	2.71	--	40.13	46.00	5.87	
	906.482	18.81	21.10	3.05	--	42.96	46.00	3.04	PK
	1191.952	56.98	24.42	3.52	36.17	48.75	74.00	25.25	
	2359.035	53.46	28.17	4.78	35.20	51.21	74.00	22.79	
	4081.772	40.60	32.94	6.07	34.17	45.44	74.00	28.56	AV
	1191.952	40.63	24.42	3.52	36.17	32.40	54.00	21.60	
	2359.035	38.32	28.17	4.78	35.20	36.07	54.00	17.93	
4081.772	25.56	32.94	6.07	34.17	30.40	54.00	23.60		

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI4 1920*1080@60Hz Date of Test : Jul 09, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	125.886	21.99	12.86	1.16	36.01	43.50	7.49
	152.130	25.40	11.50	1.29	38.19	43.50	5.31
	247.682	22.42	12.78	1.64	36.84	46.00	9.16
	449.556	14.89	17.60	2.19	34.68	46.00	11.32
	734.491	17.89	20.43	2.76	41.08	46.00	4.92
	869.130	17.15	21.00	2.98	41.13	46.00	4.87
Vertical	34.037	18.52	16.90	0.59	36.01	40.00	3.99
	60.918	27.16	6.64	0.78	34.58	40.00	5.42
	148.963	23.13	11.64	1.28	36.05	43.50	7.45
	599.321	15.71	19.50	2.50	37.71	46.00	8.29
	704.226	15.65	20.47	2.71	38.83	46.00	7.17
	869.130	17.81	21.00	2.98	41.79	46.00	4.21

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI4 1280*1024@60Hz Date of Test : Jul 09, 2017
& 1kHz Playing

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	62.651	22.58	6.71	0.79	30.08	40.00	9.92
	146.888	23.66	11.79	1.27	36.72	43.50	6.78
	247.682	22.44	12.78	1.64	36.86	46.00	9.14
	477.169	12.73	17.96	2.25	32.94	46.00	13.06
	750.108	16.29	20.70	2.78	39.77	46.00	6.23
	896.997	17.17	20.93	3.03	41.13	46.00	4.87
Vertical	34.037	18.37	16.90	0.59	35.86	40.00	4.14
	52.945	26.52	7.57	0.74	34.83	40.00	5.17
	146.888	22.58	11.79	1.27	35.64	43.50	7.86
	588.905	14.73	19.50	2.48	36.71	46.00	9.29
	719.200	15.33	20.48	2.73	38.54	46.00	7.46
	869.130	18.20	21.00	2.98	42.18	46.00	3.82

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI4 640*480@60Hz & 1kHz Playing Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	63.092	21.89	6.73	0.79	29.41	40.00	10.59
	125.886	23.00	12.86	1.16	37.02	43.50	6.48
	146.888	24.63	11.79	1.27	37.69	43.50	5.81
	247.682	22.40	12.78	1.64	36.82	46.00	9.18
	737.071	18.20	20.47	2.76	41.43	46.00	4.57
	872.183	17.17	21.00	2.98	41.15	46.00	4.85
Vertical	34.037	18.60	16.90	0.59	36.09	40.00	3.91
	52.945	25.72	7.57	0.74	34.03	40.00	5.97
	146.888	22.68	11.79	1.27	35.74	43.50	7.76
	247.682	16.82	12.78	1.64	31.24	46.00	14.76
	726.805	14.78	20.43	2.74	37.95	46.00	8.05
	896.997	17.72	20.93	3.03	41.68	46.00	4.32

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : HDMI1080P Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	66.733	22.40	7.10	0.80	30.30	40.00	9.70
	125.007	21.90	12.90	1.15	35.95	43.50	7.55
	149.486	23.17	11.64	1.28	36.09	43.50	7.41
	245.951	25.03	12.66	1.63	39.32	46.00	6.68
	721.726	15.02	20.50	2.73	38.25	46.00	7.75
	866.088	16.62	21.00	2.98	40.60	46.00	5.40
Vertical	33.799	17.49	17.01	0.59	35.09	40.00	4.91
	66.967	25.16	7.15	0.80	33.11	40.00	6.89
	152.130	20.51	11.50	1.29	33.30	43.50	10.20
	244.232	19.18	12.48	1.63	33.29	46.00	12.71
	687.151	14.20	20.27	2.67	37.14	46.00	8.86
	869.130	17.66	21.00	2.98	41.64	46.00	4.36

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : USB Play Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	66.967	23.27	7.15	0.80	31.22	40.00	8.78
	123.266	20.37	13.02	1.14	34.53	43.50	8.97
	151.067	21.98	11.55	1.29	34.82	43.50	8.68
	244.232	23.45	12.48	1.63	37.56	46.00	8.44
	744.866	16.57	20.63	2.76	39.96	46.00	6.04
	881.407	15.11	21.10	3.01	39.22	46.00	6.78
Vertical	36.509	17.10	14.75	0.62	32.47	40.00	7.53
	67.438	24.50	7.25	0.81	32.56	40.00	7.44
	153.200	22.74	11.48	1.29	35.51	43.50	7.99
	245.090	20.86	12.60	1.63	35.09	46.00	10.91
	709.182	13.72	20.40	2.71	36.83	46.00	9.17
	893.857	15.09	20.97	3.03	39.09	46.00	6.91

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : LAN Play Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	66.499	22.67	7.10	0.80	30.57	40.00	9.43
	124.569	21.63	12.93	1.15	35.71	43.50	7.79
	153.739	22.79	11.45	1.30	35.54	43.50	7.96
	245.090	24.34	12.60	1.63	38.57	46.00	7.43
	711.674	13.62	20.42	2.71	36.75	46.00	9.25
	878.322	13.84	21.07	3.01	37.92	46.00	8.08
Vertical	33.917	15.23	16.95	0.59	32.77	40.00	7.23
	69.600	24.97	7.60	0.82	33.39	40.00	6.61
	118.186	18.48	13.12	1.12	32.72	43.50	10.78
	414.722	16.78	16.98	2.10	35.86	46.00	10.14
	724.261	15.08	20.47	2.74	38.29	46.00	7.71
	875.247	15.01	21.03	3.01	39.05	46.00	6.95

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : WIFI Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	68.151	24.84	7.35	0.81	33.00	40.00	7.00
	124.133	20.82	12.96	1.15	34.93	43.50	8.57
	151.067	23.26	11.55	1.29	36.10	43.50	7.40
	416.179	14.81	17.02	2.10	33.93	46.00	12.07
	711.674	13.88	20.42	2.71	37.01	46.00	8.99
	869.130	15.34	21.00	2.98	39.32	46.00	6.68
Vertical	33.562	15.76	17.06	0.59	33.41	40.00	6.59
	66.967	26.06	7.15	0.80	34.01	40.00	5.99
	152.130	22.38	11.50	1.29	35.17	43.50	8.33
	597.223	15.29	19.50	2.50	37.29	46.00	8.71
	737.071	15.94	20.47	2.76	39.17	46.00	6.83
	925.756	15.01	21.27	3.08	39.36	46.00	6.64

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22

Model No. : 65H8D Humidity : 60%RH

Test Mode : MHL Date of Test : Jul 09, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)
Horizontal	126.329	22.80	12.81	1.16	36.77	43.50	6.73
	152.130	23.99	11.50	1.29	36.78	43.50	6.72
	245.090	23.92	12.60	1.63	38.15	46.00	7.85
	406.088	13.58	16.60	2.08	32.26	46.00	13.74
	739.661	15.19	20.50	2.76	38.45	46.00	7.55
	887.610	15.01	21.00	3.03	39.04	46.00	6.96
Vertical	33.799	16.71	17.01	0.59	34.31	40.00	5.69
	95.093	21.18	11.97	0.97	34.12	43.50	9.38
	155.364	23.98	11.29	1.30	36.57	43.50	6.93
	247.682	22.93	12.78	1.64	37.35	46.00	8.65
	709.182	14.56	20.40	2.71	37.67	46.00	8.33
	919.287	14.92	21.20	3.08	39.20	46.00	6.80

TEST ENGINEER: LEON YUN

5 DEVIATION TO TEST SPECIFICATIONS

None.


6 DEBUG DESCRIPTION

The following components are used during the countermeasure procedures:

Name	M/N	Manufacturer	Location
SM Contact	SMR-TSL-4-3.5-5R	Qingdao Joinset	See Internal Photos Figure 25
Conductive foam	JCT-RF-40-0.12-260	Qingdao Joinset	See Internal Photos Figure 26

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

TEST ENGINEER:



(BYRON WU)

