

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

LED LCD TV

Model No.:

Model No.	Brand
55H8D,55H8D+,55H8+0D,55H8+0D1, 55H80+0D,55H80+0D1,55H8C,55H8C+, 55DU80+0,55DU8+00,55H8107	Hisense

FCC ID : W9HLCDF0109

Prepared For : Hisense Electric Co., Ltd.
No.218 Qianwangang Road, Economy & Technology
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Report No. : ACI-F17087A1
Date of Test : Jun 01- Jul 10, 2017
Date of Report : Jul 11, 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. : Refer to Sec.2.1
 Brand : Hisense
 Power Supply : 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 Jun 01- Jul 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.F17225, a Verification report.

Date of Test : Jun 01- Jul 10, 2017 Date of Report : Jul 11, 2017

Producer : HUI MIN YAN
 HUI MIN YAN / Assistant

Review : Byron Wu
 BYRON WU / Deputy Assistant Manager

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

Signatory : 
 Authorized Signature EMC BYRON KWO / Assistant General Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

Description of Test Item	Standard	Limits	Results
EMISSION			
Conducted Disturbance at the Mains Terminal	FCC RULES AND REGULATIONS PART 15 SUBPART B AND ANSI C63.4-2014	15.107(a) Class B	Pass
		Minimum passing margin is 10.01dB at 0.156MHz	
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 3.16dB at 742.259MHz (Horizontal, 2.0m/150°)	

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

- Description : LED LCD TV
- Type of EUT : Production Pre-product Pro-type
- Model No : 55H8D,55H8D+,55H8+0D,55H8+0D1,
55H80+0D,55H80+0D1,55H8C,55H8C+,
55DU80+0,55DU8+00,55H8107
- Note #1 : The above models are all the same except for model number. 55H8D 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.
- Note #4 : The modified histories of report are as follows:

Report No.	Model No.	Rev. Summary	Edition No.	Data of Rev.
ACI-F17087	55H8C,55H8C+,55H8D, 55H8D+,55H8107	Original Report	0	Feb 24, 2017
ACI- F17087A1	55H8C,55H8C+,55H8D, 55H8D+,55H8107, 55H8+0D,55H8+0D1, 55H80+0D,55H80+0D1, 55DU80+0,55DU8+00	1. To add six new model name 2. To change LCD Panel and Power Board	Rev. A1	Jul 03, 2017

- 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, Chih., 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 : HD550M3U51-TA

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 (Lab provide)	:	Shielded, Detachable, 1.00m

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 : 6935152011519

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

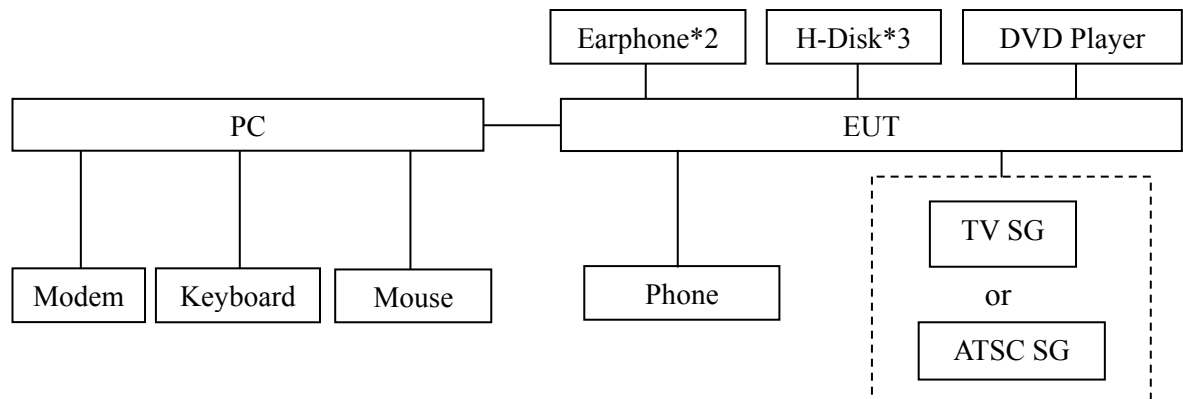
3.1 Test Equipment

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

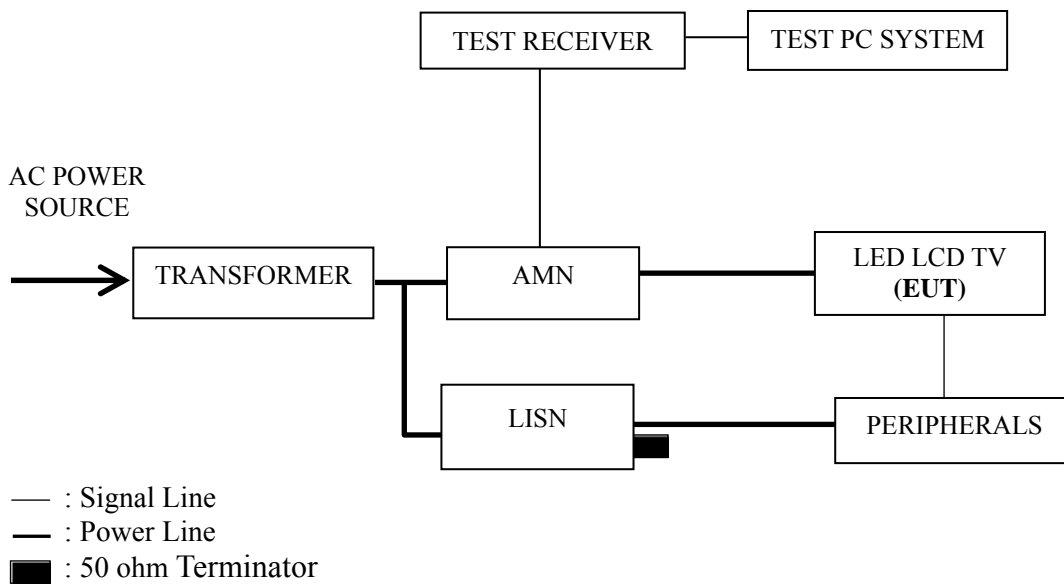
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R&S	ESCI	101302	Apr 27, 2017	Apr 26, 2018
2.	Artificial Mains Network (AMN)	R&S	ENV4200	100125	Jun 25, 2016	Jun 24, 2017
3.	Line Impedance Stabilization Network (LISN)	Kyoritsu	KNW-407	8-1280-4	Mar 17, 2017	Mar 16, 2018
4.	50Ω Terminator	Anritsu	BNC	001	Mar 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 In BT mode, set the EUT play digital media through BT.
- 3.5.11 The other peripherals devices were driven and operated during the test.
- 3.5.12 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
BT

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
BT	P26

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°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Jun 01, 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	0.157	43.94	10.58	54.52	65.60	11.08	QP
	0.389	33.30	10.44	43.74	58.08	14.34	
	0.604	31.05	10.40	41.45	56.00	14.55	
	1.153	31.74	10.41	42.15	56.00	13.85	
	2.033	32.20	10.42	42.62	56.00	13.38	
	2.678	31.81	10.43	42.24	56.00	13.76	
	AV	0.157	32.94	10.58	43.52	55.60	12.08
		0.389	19.30	10.44	29.74	48.08	18.34
		0.604	15.05	10.40	25.45	46.00	20.55
		1.153	18.74	10.41	29.15	46.00	16.85
		2.033	20.20	10.42	30.62	46.00	15.38
		2.678	22.81	10.43	33.24	46.00	12.76
Neutral	0.156	45.07	10.57	55.64	65.65	10.01	QP
	0.385	33.54	10.43	43.97	58.17	14.20	
	0.604	31.41	10.39	41.80	56.00	14.20	
	0.933	32.86	10.41	43.27	56.00	12.73	
	1.374	31.70	10.42	42.12	56.00	13.88	
	2.133	31.03	10.44	41.47	56.00	14.53	
	AV	0.156	32.07	10.57	42.64	55.65	13.01
		0.385	21.54	10.43	31.97	48.17	16.20
		0.604	14.41	10.39	24.80	46.00	21.20
		0.933	18.86	10.41	29.27	46.00	16.73
		1.374	15.70	10.42	26.12	46.00	19.88
		2.133	20.03	10.44	30.47	46.00	15.53

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Jun 01, 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	0.155	43.78	10.58	54.36	65.74	11.38	QP
	0.381	32.73	10.44	43.17	58.25	15.08	
	0.598	32.05	10.40	42.45	56.00	13.55	
	0.909	30.23	10.41	40.64	56.00	15.36	
	2.155	31.26	10.42	41.68	56.00	14.32	
	2.622	31.68	10.43	42.11	56.00	13.89	
	AV	0.155	31.78	10.58	42.36	55.74	13.38
		0.381	19.73	10.44	30.17	48.25	18.08
		0.598	15.05	10.40	25.45	46.00	20.55
		0.909	19.23	10.41	29.64	46.00	16.36
		2.155	20.26	10.42	30.68	46.00	15.32
		2.622	22.68	10.43	33.11	46.00	12.89
Neutral	0.155	44.00	10.57	54.57	65.74	11.17	QP
	0.385	33.44	10.43	43.87	58.17	14.30	
	0.598	32.81	10.39	43.20	56.00	12.80	
	0.890	32.38	10.41	42.79	56.00	13.21	
	1.585	31.51	10.43	41.94	56.00	14.06	
	2.622	30.43	10.46	40.89	56.00	15.11	
	AV	0.155	31.00	10.57	41.57	55.74	14.17
		0.385	21.44	10.43	31.87	48.17	16.30
		0.598	14.81	10.39	25.20	46.00	20.80
		0.890	18.38	10.41	28.79	46.00	17.21
		1.585	15.51	10.43	25.94	46.00	20.06
		2.622	21.43	10.46	31.89	46.00	14.11

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : HDMI1 Date of Test : Jun 01, 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	0.155	42.77	10.58	53.35	65.74	12.39	QP
	0.381	31.41	10.44	41.85	58.25	16.40	
	0.598	32.34	10.40	42.74	56.00	13.26	
	0.796	31.56	10.41	41.97	56.00	14.03	
	1.535	31.82	10.41	42.23	56.00	13.77	
	2.155	32.02	10.42	42.44	56.00	13.56	
	0.155	31.77	10.58	42.35	55.74	13.39	AV
	0.381	20.41	10.44	30.85	48.25	17.40	
	0.598	18.34	10.40	28.74	46.00	17.26	
	0.796	17.56	10.41	27.97	46.00	18.03	
	1.535	22.82	10.41	33.23	46.00	12.77	
	2.155	20.02	10.42	30.44	46.00	15.56	
Neutral	0.155	44.02	10.57	54.59	65.74	11.15	QP
	0.385	31.68	10.43	42.11	58.17	16.06	
	0.592	31.96	10.40	42.36	56.00	13.64	
	0.796	31.00	10.40	41.40	56.00	14.60	
	1.585	31.73	10.43	42.16	56.00	13.84	
	2.334	32.04	10.45	42.49	56.00	13.51	
	0.155	33.02	10.57	43.59	55.74	12.15	AV
	0.385	22.68	10.43	33.11	48.17	15.06	
	0.592	14.96	10.40	25.36	46.00	20.64	
	0.796	18.00	10.40	28.40	46.00	17.60	
	1.585	15.73	10.43	26.16	46.00	19.84	
	2.334	21.04	10.45	31.49	46.00	14.51	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : HDMI1 640*480@60Hz Date of Test : Jun 01, 2017
& 1kHz Playing

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark	
Line	0.155	42.91	10.58	53.49	65.74	12.25	QP	
	0.385	32.52	10.44	42.96	58.17	15.21		
	0.598	32.34	10.40	42.74	56.00	13.26		
	0.796	31.73	10.41	42.14	56.00	13.86		
	1.585	32.13	10.41	42.54	56.00	13.46		
	2.155	31.79	10.42	42.21	56.00	13.79		
	Line	0.155	30.91	10.58	41.49	55.74	14.25	AV
		0.385	19.52	10.44	29.96	48.17	18.21	
		0.598	16.34	10.40	26.74	46.00	19.26	
		0.796	18.73	10.41	29.14	46.00	16.86	
		1.585	18.13	10.41	28.54	46.00	17.46	
		2.155	23.79	10.42	34.21	46.00	11.79	
Neutral	0.155	44.05	10.57	54.62	65.74	11.12	QP	
	0.381	31.67	10.43	42.10	58.25	16.15		
	0.598	31.90	10.39	42.29	56.00	13.71		
	1.141	32.05	10.41	42.46	56.00	13.54		
	1.585	31.82	10.43	42.25	56.00	13.75		
	2.384	32.17	10.45	42.62	56.00	13.38		
	Neutral	0.155	32.05	10.57	42.62	55.74	13.12	AV
		0.381	22.67	10.43	33.10	48.25	15.15	
		0.598	14.90	10.39	25.29	46.00	20.71	
		1.141	18.05	10.41	28.46	46.00	17.54	
		1.585	16.82	10.43	27.25	46.00	18.75	
		2.384	20.17	10.45	30.62	46.00	15.38	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : HDMI2 Date of Test : Jun 01, 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	0.156	42.14	10.58	52.72	65.65	12.93	QP
	0.385	33.97	10.44	44.41	58.17	13.76	
	0.611	31.09	10.40	41.49	56.00	14.51	
	0.899	31.23	10.41	41.64	56.00	14.36	
	1.160	32.99	10.41	43.40	56.00	12.60	
	2.066	31.95	10.42	42.37	56.00	13.63	
	0.156	31.14	10.58	41.72	55.65	13.93	AV
	0.385	19.97	10.44	30.41	48.17	17.76	
	0.611	15.09	10.40	25.49	46.00	20.51	
	0.899	18.23	10.41	28.64	46.00	17.36	
	1.160	20.99	10.41	31.40	46.00	14.60	
	2.066	22.95	10.42	33.37	46.00	12.63	
Neutral	0.156	43.52	10.57	54.09	65.65	11.56	QP
	0.385	33.32	10.43	43.75	58.17	14.42	
	0.604	31.97	10.39	42.36	56.00	13.64	
	1.010	32.54	10.41	42.95	56.00	13.05	
	1.388	31.53	10.42	41.95	56.00	14.05	
	2.133	31.93	10.44	42.37	56.00	13.63	
	0.156	32.52	10.57	43.09	55.65	12.56	AV
	0.385	21.32	10.43	31.75	48.17	16.42	
	0.604	15.97	10.39	26.36	46.00	19.64	
	1.010	18.54	10.41	28.95	46.00	17.05	
	1.388	15.53	10.42	25.95	46.00	20.05	
	2.133	20.93	10.44	31.37	46.00	14.63	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : HDMI3 Date of Test : Jun 01, 2017
3840*2160@30Hz &
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	0.156	42.12	10.58	52.70	65.65	12.95	QP
	0.385	32.36	10.44	42.80	58.17	15.37	
	0.611	31.61	10.40	42.01	56.00	13.99	
	0.953	32.16	10.41	42.57	56.00	13.43	
	1.388	31.37	10.42	41.79	56.00	14.21	
	2.155	31.48	10.42	41.90	56.00	14.10	
	0.156	31.12	10.58	41.70	55.65	13.95	AV
	0.385	18.36	10.44	28.80	48.17	19.37	
	0.611	16.61	10.40	27.01	46.00	18.99	
	0.953	18.16	10.41	28.57	46.00	17.43	
	1.388	20.37	10.42	30.79	46.00	15.21	
	2.155	22.48	10.42	32.90	46.00	13.10	
Neutral	0.156	44.04	10.57	54.61	65.65	11.04	QP
	0.381	33.49	10.43	43.92	58.25	14.33	
	0.604	31.97	10.39	42.36	56.00	13.64	
	0.813	32.22	10.40	42.62	56.00	13.38	
	1.602	31.71	10.43	42.14	56.00	13.86	
	2.088	31.24	10.44	41.68	56.00	14.32	
	0.156	32.04	10.57	42.61	55.65	13.04	AV
	0.381	21.49	10.43	31.92	48.25	16.33	
	0.604	14.97	10.39	25.36	46.00	20.64	
	0.813	18.22	10.40	28.62	46.00	17.38	
	1.602	15.71	10.43	26.14	46.00	19.86	
	2.088	20.24	10.44	30.68	46.00	15.32	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.156	42.23	10.58	52.81	65.65	12.84	QP
	0.381	33.10	10.44	43.54	58.25	14.71	
	0.604	31.43	10.40	41.83	56.00	14.17	
	0.909	31.36	10.41	41.77	56.00	14.23	
	1.374	32.92	10.42	43.34	56.00	12.66	
	2.178	31.15	10.42	41.57	56.00	14.43	
	0.156	32.23	10.58	42.81	55.65	12.84	AV
	0.381	19.10	10.44	29.54	48.25	18.71	
	0.604	15.43	10.40	25.83	46.00	20.17	
	0.909	18.36	10.41	28.77	46.00	17.23	
	1.374	20.92	10.42	31.34	46.00	14.66	
	2.178	22.15	10.42	32.57	46.00	13.43	
Neutral	0.156	43.13	10.57	53.70	65.65	11.95	QP
	0.381	33.42	10.43	43.85	58.25	14.40	
	0.611	31.30	10.39	41.69	56.00	14.31	
	0.813	32.02	10.40	42.42	56.00	13.58	
	1.602	31.94	10.43	42.37	56.00	13.63	
	2.500	31.86	10.45	42.31	56.00	13.69	
	0.156	32.13	10.57	42.70	55.65	12.95	AV
	0.381	21.42	10.43	31.85	48.25	16.40	
	0.611	14.30	10.39	24.69	46.00	21.31	
	0.813	18.02	10.40	28.42	46.00	17.58	
	1.602	15.94	10.43	26.37	46.00	19.63	
	2.500	20.86	10.45	31.31	46.00	14.69	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C
 Model No. : 55H8D Humidity : 48%RH
 Test Mode : HDMI 1080P Date of Test : Jun 01, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	42.24	10.58	52.82	65.82	13.00	QP
	0.381	32.87	10.44	43.31	58.25	14.94	
	0.598	31.31	10.40	41.71	56.00	14.29	
	1.153	31.08	10.41	41.49	56.00	14.51	
	1.585	31.08	10.41	41.49	56.00	14.51	
	2.422	31.56	10.43	41.99	56.00	14.01	
	AV	0.153	31.24	10.58	41.82	55.82	14.00
		0.381	20.87	10.44	31.31	48.25	16.94
		0.598	15.31	10.40	25.71	46.00	20.29
		1.153	18.08	10.41	28.49	46.00	17.51
		1.585	20.08	10.41	30.49	46.00	15.51
		2.422	22.56	10.43	32.99	46.00	13.01
Neutral	0.155	44.08	10.57	54.65	65.74	11.09	QP
	0.385	33.57	10.43	44.00	58.17	14.17	
	0.598	32.54	10.39	42.93	56.00	13.07	
	1.153	31.41	10.41	41.82	56.00	14.18	
	1.568	31.06	10.43	41.49	56.00	14.51	
	2.110	31.49	10.44	41.93	56.00	14.07	
	AV	0.155	32.08	10.57	42.65	55.74	13.09
		0.385	21.57	10.43	32.00	48.17	16.17
		0.598	14.54	10.39	24.93	46.00	21.07
		1.153	18.41	10.41	28.82	46.00	17.18
		1.568	15.06	10.43	25.49	46.00	20.51
		2.110	20.49	10.44	30.93	46.00	15.07

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.153	42.91	10.58	53.49	65.82	12.33	QP
	0.385	32.76	10.44	43.20	58.17	14.97	
	0.598	31.98	10.40	42.38	56.00	13.62	
	0.796	31.76	10.41	42.17	56.00	13.83	
	1.585	32.93	10.41	43.34	56.00	12.66	
	2.422	31.23	10.43	41.66	56.00	14.34	
	0.153	31.91	10.58	42.49	55.82	13.33	AV
	0.385	18.76	10.44	29.20	48.17	18.97	
	0.598	15.98	10.40	26.38	46.00	19.62	
	0.796	18.76	10.41	29.17	46.00	16.83	
	1.585	19.93	10.41	30.34	46.00	15.66	
	2.422	22.23	10.43	32.66	46.00	13.34	
Neutral	0.155	44.07	10.57	54.64	65.74	11.10	QP
	0.385	32.61	10.43	43.04	58.17	15.13	
	0.598	31.08	10.39	41.47	56.00	14.53	
	0.914	32.37	10.41	42.78	56.00	13.22	
	1.367	31.37	10.42	41.79	56.00	14.21	
	2.178	31.83	10.44	42.27	56.00	13.73	
	0.155	31.07	10.57	41.64	55.74	14.10	AV
	0.385	21.61	10.43	32.04	48.17	16.13	
	0.598	15.08	10.39	25.47	46.00	20.53	
	0.914	18.37	10.41	28.78	46.00	17.22	
	1.367	15.37	10.42	25.79	46.00	20.21	
	2.178	20.83	10.44	31.27	46.00	14.73	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

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

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.155	42.78	10.58	53.36	65.74	12.38	QP
	0.381	32.19	10.44	42.63	58.25	15.62	
	0.598	31.00	10.40	41.40	56.00	14.60	
	0.796	31.68	10.41	42.09	56.00	13.91	
	1.585	32.95	10.41	43.36	56.00	12.64	
	2.422	31.57	10.43	42.00	56.00	14.00	
	0.155	31.78	10.58	42.36	55.74	13.38	AV
	0.381	19.19	10.44	29.63	48.25	18.62	
	0.598	15.00	10.40	25.40	46.00	20.60	
	0.796	18.68	10.41	29.09	46.00	16.91	
	1.585	20.95	10.41	31.36	46.00	14.64	
	2.422	22.57	10.43	33.00	46.00	13.00	
Neutral	0.155	44.02	10.57	54.59	65.74	11.15	QP
	0.381	32.59	10.43	43.02	58.25	15.23	
	0.598	31.03	10.39	41.42	56.00	14.58	
	1.129	32.06	10.41	42.47	56.00	13.53	
	1.568	31.84	10.43	42.27	56.00	13.73	
	1.991	31.83	10.44	42.27	56.00	13.73	
	0.155	32.02	10.57	42.59	55.74	13.15	AV
	0.381	21.59	10.43	32.02	48.25	16.23	
	0.598	14.03	10.39	24.42	46.00	21.58	
	1.129	18.06	10.41	28.47	46.00	17.53	
	1.568	16.84	10.43	27.27	46.00	18.73	
	1.991	22.83	10.44	33.27	46.00	12.73	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : WIFI Date of Test : Jun 01, 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	0.153	43.10	10.58	53.68	65.82	12.14	QP
	0.389	32.56	10.44	43.00	58.08	15.08	
	0.598	31.74	10.40	42.14	56.00	13.86	
	0.923	31.04	10.41	41.45	56.00	14.55	
	1.585	31.50	10.41	41.91	56.00	14.09	
	2.110	31.55	10.42	41.97	56.00	14.03	
	0.153	32.10	10.58	42.68	55.82	13.14	AV
	0.389	19.56	10.44	30.00	48.08	18.08	
	0.598	16.74	10.40	27.14	46.00	18.86	
	0.923	19.04	10.41	29.45	46.00	16.55	
	1.585	19.50	10.41	29.91	46.00	16.09	
	2.110	20.55	10.42	30.97	46.00	15.03	
Neutral	0.155	43.99	10.57	54.56	65.74	11.18	QP
	0.385	33.86	10.43	44.29	58.17	13.88	
	0.598	31.87	10.39	42.26	56.00	13.74	
	0.796	32.28	10.40	42.68	56.00	13.32	
	1.153	31.83	10.41	42.24	56.00	13.76	
	1.991	31.52	10.44	41.96	56.00	14.04	
	0.155	30.99	10.57	41.56	55.74	14.18	AV
	0.385	21.86	10.43	32.29	48.17	15.88	
	0.598	14.87	10.39	25.26	46.00	20.74	
	0.796	19.28	10.40	29.68	46.00	16.32	
	1.153	15.83	10.41	26.24	46.00	19.76	
	1.991	20.52	10.44	30.96	46.00	15.04	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 48%RH

Test Mode : MHL Date of Test : Jun 01, 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	0.155	42.88	10.58	53.46	65.74	12.28	QP	
	0.381	32.03	10.44	42.47	58.25	15.78		
	0.592	31.83	10.41	42.24	56.00	13.76		
	0.796	31.41	10.41	41.82	56.00	14.18		
	1.153	32.86	10.41	43.27	56.00	12.73		
	2.133	31.72	10.42	42.14	56.00	13.86		
		0.155	33.88	10.58	44.46	55.74	11.28	AV
		0.381	20.03	10.44	30.47	48.25	17.78	
		0.592	16.83	10.41	27.24	46.00	18.76	
		0.796	18.41	10.41	28.82	46.00	17.18	
		1.153	20.86	10.41	31.27	46.00	14.73	
		2.133	22.72	10.42	33.14	46.00	12.86	
Neutral	0.153	43.04	10.57	53.61	65.82	12.21	QP	
	0.381	32.56	10.43	42.99	58.25	15.26		
	0.598	31.92	10.39	42.31	56.00	13.69		
	0.813	31.77	10.40	42.17	56.00	13.83		
	1.610	32.77	10.43	43.20	56.00	12.80		
	2.527	31.33	10.46	41.79	56.00	14.21		
		0.153	32.04	10.57	42.61	55.82	13.21	AV
		0.381	21.56	10.43	31.99	48.25	16.26	
		0.598	14.92	10.39	25.31	46.00	20.69	
		0.813	18.77	10.40	29.17	46.00	16.83	
		1.610	17.77	10.43	28.20	46.00	17.80	
		2.527	20.33	10.46	30.79	46.00	15.21	

TEST ENGINEER: KALSI CHEN

EUT : LED LCD TV Temperature : 22°C
 Model No. : 55H8D Humidity : 48%RH
 Test Mode : BT Date of Test : Jul 10, 2017

Test Line	Frequency (MHz)	Meter Reading dB(μV)	Factor (dB)	Emission Level dB(μV)	Limits dB(μV)	Margin (dB)	Remark
Line	0.155	42.80	10.59	53.39	65.74	12.35	QP
	0.385	32.81	10.42	43.23	58.17	14.94	
	0.598	31.72	10.39	42.11	56.00	13.89	
	1.153	31.29	10.39	41.68	56.00	14.32	
	1.585	32.03	10.40	42.43	56.00	13.57	
	2.201	31.18	10.41	41.59	56.00	14.41	
	AV	0.155	31.80	10.59	42.39	55.74	13.35
		0.385	19.81	10.42	30.23	48.17	17.94
		0.598	15.72	10.39	26.11	46.00	19.89
		1.153	18.29	10.39	28.68	46.00	17.32
		1.585	20.03	10.40	30.43	46.00	15.57
		2.201	22.18	10.41	32.59	46.00	13.41
Neutral	0.155	43.95	10.51	54.46	65.74	11.28	QP
	0.385	32.64	10.40	43.04	58.17	15.13	
	0.598	30.15	10.39	40.54	56.00	15.46	
	1.129	31.72	10.39	42.11	56.00	13.89	
	1.585	31.71	10.41	42.12	56.00	13.88	
	2.334	31.79	10.43	42.22	56.00	13.78	
	AV	0.155	32.95	10.51	43.46	55.74	12.28
		0.385	21.64	10.40	32.04	48.17	16.13
		0.598	15.15	10.39	25.54	46.00	20.46
		1.129	18.72	10.39	29.11	46.00	16.89
		1.585	16.71	10.41	27.12	46.00	18.88
		2.334	20.79	10.43	31.22	46.00	14.78

TEST ENGINEER: KALSI CHEN

4 RADIATED EMISSION TEST

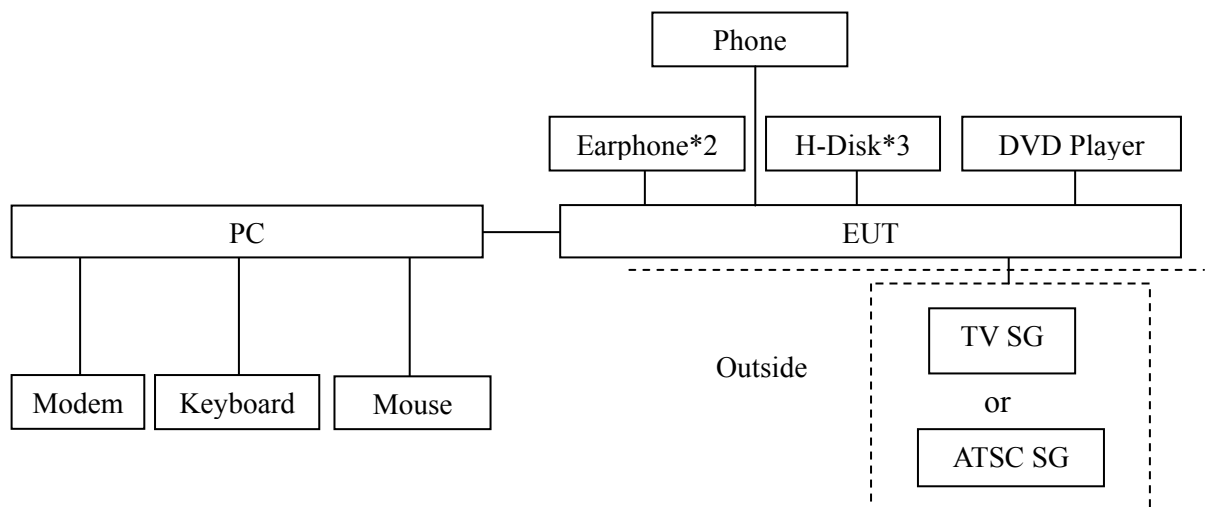
4.1 Test Equipment

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	23193	May 15, 2017	May 14, 2018
5.	Horn Antenna	EMCO	3115	9607-4878	Jun 03, 2017	Jun 02, 2018
6.	Spectrum	Agilent	E7405A	MY45106600	Apr 26, 2017	Apr 25, 2018
7.	Software	Audix	e3	6.2007-9-10	--	--

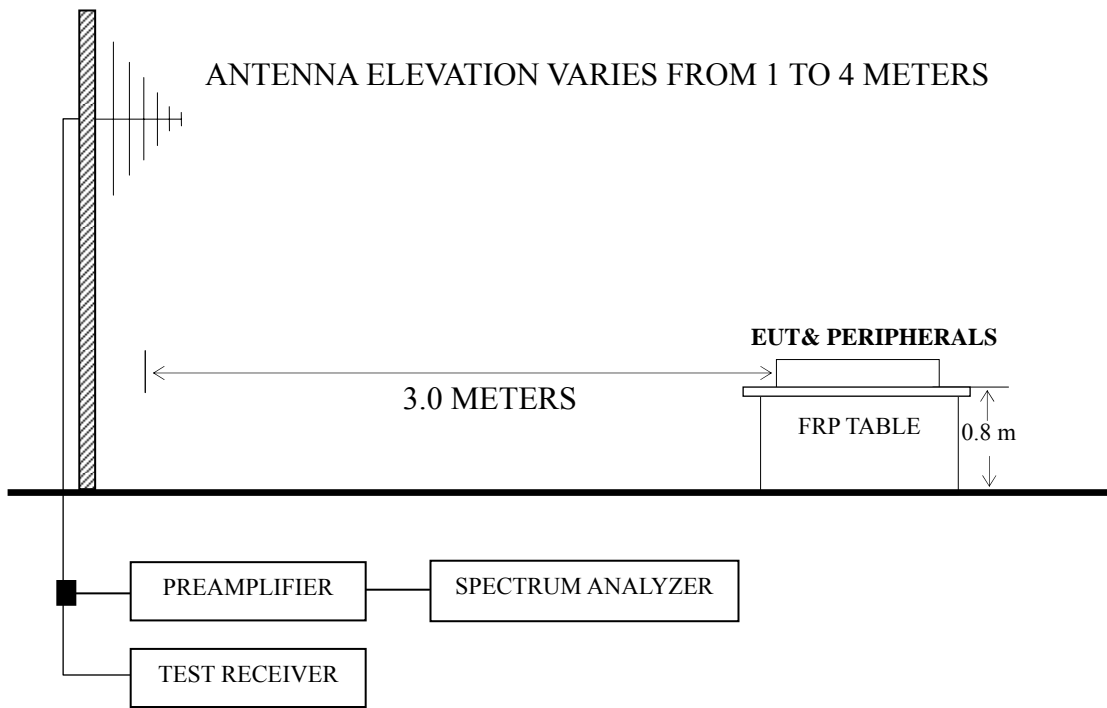
4.2 Block Diagram of Test Setup

4.2.1 EUT & Peripherals



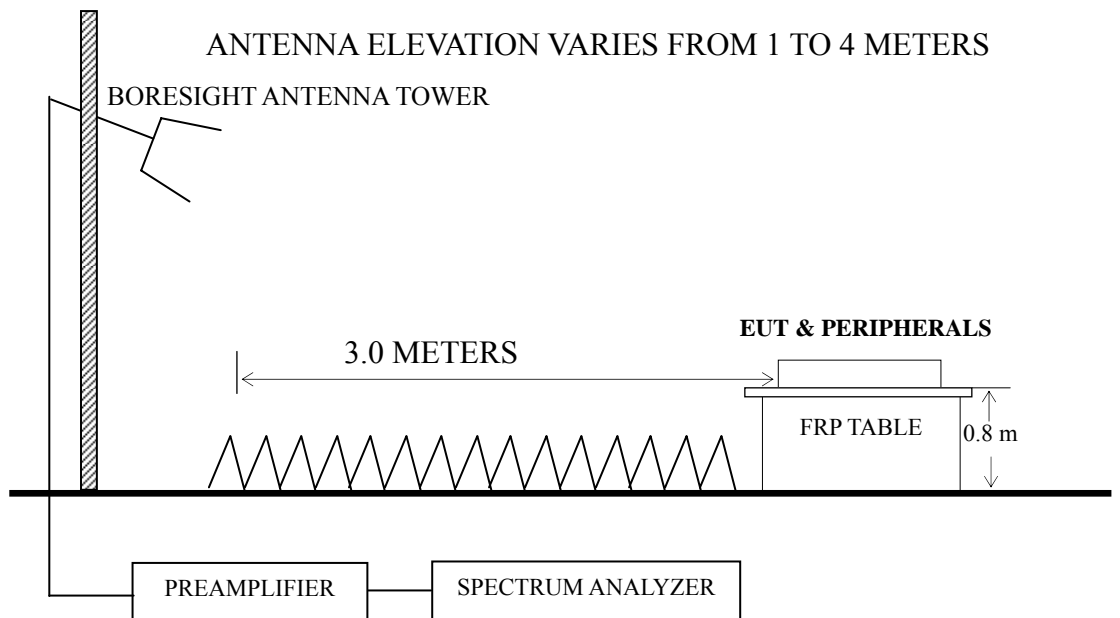
4.2.2 Radiated emission test setup

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 5 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	P31
HDMI2 3840*2160@60Hz & 1kHz playing	P32
HDMI3 3840*2160@30Hz & 1kHz playing	P33
HDMI4 3840*2160@30Hz & 1kHz playing	P34-P35
HDMI4 1920*1080@60Hz & 1kHz playing	P36
HDMI4 1280*1024@60Hz & 1kHz playing	P37
HDMI4 640*480@60Hz & 1kHz playing	P38
HDMI1080P	P39
USB Play	P40
LAN Play	P41
WIFI	P42
MHL	P43
BT	P44

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°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : HDMI1 3840*2160@60Hz & 1kHz Playing Date of Test : Jun 08, 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	78.965	22.74	9.15	0.86	32.75	40.00	7.25
	204.955	24.42	9.90	1.51	35.83	43.50	7.67
	558.730	16.60	18.70	2.43	37.73	46.00	8.27
	663.473	18.75	19.95	2.64	41.34	46.00	4.66
	739.661	19.49	20.50	2.76	42.75	46.00	3.25
	890.728	17.37	21.00	3.03	41.40	46.00	4.60
Vertical	39.994	17.66	13.04	0.65	31.35	40.00	8.65
	75.977	23.63	8.59	0.84	33.06	40.00	6.94
	197.200	22.82	9.63	1.48	33.93	43.50	9.57
	663.473	20.18	19.95	2.64	42.77	46.00	3.23
	719.200	18.52	20.48	2.73	41.73	46.00	4.27
	890.728	16.86	21.00	3.03	40.89	46.00	5.11

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	80.081	22.07	9.40	0.86	32.33	40.00	7.67
	204.955	23.48	9.90	1.51	34.89	43.50	8.61
	297.224	21.05	13.90	1.76	36.71	46.00	9.29
	663.473	19.29	19.95	2.64	41.88	46.00	4.12
	737.071	18.81	20.47	2.76	42.04	46.00	3.96
	890.728	17.24	21.00	3.03	41.27	46.00	4.73
Vertical	30.962	12.91	18.21	0.56	31.68	40.00	8.32
	75.977	23.26	8.59	0.84	32.69	40.00	7.31
	204.955	20.96	9.90	1.51	32.37	43.50	11.13
	590.974	16.91	19.50	2.50	38.91	46.00	7.09
	663.473	17.66	19.95	2.64	40.25	46.00	5.75
	739.661	17.82	20.50	2.76	41.08	46.00	4.92

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : HDMI3 3840*2160@30Hz Date of Test : Jun 08, 2017
& 1kHz playing

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	80.081	22.50	9.40	0.86	32.76	40.00	7.24
	204.955	24.12	9.90	1.51	35.53	43.50	7.97
	297.224	18.38	13.90	1.76	34.04	46.00	11.96
	663.473	18.91	19.95	2.64	41.50	46.00	4.50
	742.259	19.46	20.57	2.76	42.79	46.00	3.21
	887.610	15.67	21.00	3.03	39.70	46.00	6.30
Vertical	40.988	17.40	12.86	0.66	30.92	40.00	9.08
	75.977	23.12	8.59	0.84	32.55	40.00	7.45
	204.955	21.87	9.90	1.51	33.28	43.50	10.22
	590.974	16.63	19.50	2.50	38.63	46.00	7.37
	663.473	17.60	19.95	2.64	40.19	46.00	5.81
	719.200	17.81	20.48	2.73	41.02	46.00	4.98

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Horizontal	77.051	22.97	8.84	0.85	0.00	32.66	40.00	7.34	QP
	204.955	23.42	9.90	1.51	0.00	34.83	43.50	8.67	
	556.774	14.99	18.70	2.41	0.00	36.10	46.00	9.90	
	663.473	19.55	19.95	2.64	0.00	42.14	46.00	3.86	
	742.259	19.51	20.57	2.76	0.00	42.84	46.00	3.16	
	890.728	15.70	21.00	3.03	0.00	39.73	46.00	6.27	PK
	1378.126	47.58	25.17	3.74	35.90	40.59	74.00	33.41	
	1717.915	44.43	26.49	4.09	35.49	39.52	74.00	34.48	
	2130.001	44.46	27.76	4.58	35.20	41.60	74.00	32.40	AV
	1378.126	33.35	25.17	3.74	35.90	26.36	54.00	27.64	
	1717.915	29.70	26.49	4.09	35.49	24.79	54.00	29.21	
	2130.001	30.10	27.76	4.58	35.20	27.24	54.00	26.76	

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
Vertical	72.084	24.75	8.01	0.83	0.00	33.59	40.00	6.41	QP
	204.955	22.45	9.90	1.51	0.00	33.86	43.50	9.64	
	595.133	15.98	19.50	2.50	0.00	37.98	46.00	8.02	
	668.142	18.05	20.05	2.64	0.00	40.74	46.00	5.26	
	739.661	18.59	20.50	2.76	0.00	41.85	46.00	4.15	
	890.728	14.21	21.00	3.03	0.00	38.24	46.00	7.76	PK
	1467.318	48.87	25.50	3.84	35.78	42.43	74.00	31.57	
	2418.959	56.08	28.27	4.83	35.20	53.98	74.00	20.02	
	2650.417	51.44	29.07	5.18	35.20	50.49	74.00	23.51	AV
	1467.318	33.22	25.50	3.84	35.78	26.78	54.00	27.22	
	2418.959	45.30	28.27	4.83	35.20	43.20	54.00	10.80	
	2650.417	36.84	29.07	5.18	35.20	35.89	54.00	18.11	

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : HDMI4 1920*1080@60Hz & 1kHz Playing Date of Test : Jun 08, 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	79.521	21.72	9.27	0.86	31.85	40.00	8.15
	197.200	23.39	9.63	1.48	34.50	43.50	9.00
	374.623	17.17	15.93	1.99	35.09	46.00	10.91
	663.473	19.82	19.95	2.64	42.41	46.00	3.59
	731.920	17.84	20.43	2.74	41.01	46.00	4.99
	900.147	16.01	20.90	3.05	39.96	46.00	6.04
Vertical	40.988	18.05	12.86	0.66	31.57	40.00	8.43
	77.051	23.44	8.84	0.85	33.13	40.00	6.87
	146.888	18.54	11.79	1.27	31.60	43.50	11.90
	205.675	22.95	9.90	1.51	34.36	43.50	9.14
	663.473	18.27	19.95	2.64	40.86	46.00	5.14
	719.200	17.50	20.48	2.73	40.71	46.00	5.29

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : HDMI4 1280*1024@60Hz Date of Test : Jun 08, 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	82.071	22.04	9.79	0.87	32.70	40.00	7.30
	197.200	23.41	9.63	1.48	34.52	43.50	8.98
	373.311	15.98	15.89	1.99	33.86	46.00	12.14
	663.473	19.69	19.95	2.64	42.28	46.00	3.72
	731.920	18.16	20.43	2.74	41.33	46.00	4.67
	900.147	16.24	20.90	3.05	40.19	46.00	5.81
Vertical	40.988	16.97	12.86	0.66	30.49	40.00	9.51
	75.977	23.85	8.59	0.84	33.28	40.00	6.72
	204.955	21.97	9.90	1.51	33.38	43.50	10.12
	663.473	18.39	19.95	2.64	40.98	46.00	5.02
	719.200	17.80	20.48	2.73	41.01	46.00	4.99
	972.337	10.28	21.70	3.16	35.14	54.00	18.86

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : HDMI4 640*480@60Hz & 1kHz Playing Date of Test : Jun 08, 2017

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	82.071	22.64	9.79	0.87	33.30	40.00	6.70
	204.955	23.80	9.90	1.51	35.21	43.50	8.29
	373.311	16.44	15.89	1.99	34.32	46.00	11.68
	663.473	19.39	19.95	2.64	41.98	46.00	4.02
	724.261	18.43	20.47	2.74	41.64	46.00	4.36
	890.728	15.73	21.00	3.03	39.76	46.00	6.24
Vertical	39.994	17.75	13.04	0.65	31.44	40.00	8.56
	77.051	23.71	8.84	0.85	33.40	40.00	6.60
	146.888	18.20	11.79	1.27	31.26	43.50	12.24
	205.675	21.99	9.90	1.51	33.40	43.50	10.10
	663.473	18.93	19.95	2.64	41.52	46.00	4.48
	719.200	18.79	20.48	2.73	42.00	46.00	4.00

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C
 Model No. : 55H8D Humidity : 60%RH
 Test Mode : HDMI1080P Date of Test : Jun 08, 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	76.244	22.98	8.65	0.84	32.47	40.00	7.53
	202.810	22.34	9.80	1.50	33.64	43.50	9.86
	368.112	16.56	15.78	1.98	34.32	46.00	11.68
	658.836	15.45	19.90	2.62	37.97	46.00	8.03
	719.200	17.68	20.48	2.73	40.89	46.00	5.11
	893.857	15.08	20.97	3.03	39.08	46.00	6.92
Vertical	40.417	17.39	12.95	0.65	30.99	40.00	9.01
	72.592	24.57	8.05	0.83	33.45	40.00	6.55
	99.528	18.31	12.73	1.00	32.04	43.50	11.46
	195.137	21.13	9.60	1.47	32.20	43.50	11.30
	622.890	13.81	19.70	2.55	36.06	46.00	9.94
	726.805	18.78	20.43	2.74	41.95	46.00	4.05

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : USB Play Date of Test : Jun 08, 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	84.702	21.13	10.24	0.90	32.27	40.00	7.73
	201.393	20.29	9.73	1.49	31.51	43.50	11.99
	362.985	15.74	15.73	1.96	33.43	46.00	12.57
	625.078	12.70	19.70	2.55	34.95	46.00	11.05
	793.396	12.09	20.80	2.85	35.74	46.00	10.26
	958.794	11.77	21.60	3.14	36.51	46.00	9.49
Vertical	71.832	24.31	7.96	0.83	33.10	40.00	6.90
	151.067	19.42	11.55	1.29	32.26	43.50	11.24
	202.810	21.75	9.80	1.50	33.05	43.50	10.45
	642.861	12.83	19.80	2.59	35.22	46.00	10.78
	760.704	11.99	20.70	2.80	35.49	46.00	10.51
	893.857	11.83	20.97	3.03	35.83	46.00	10.17

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : LAN Play Date of Test : Jun 08, 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	79.800	23.15	9.34	0.86	33.35	40.00	6.65
	204.238	22.71	9.87	1.50	34.08	43.50	9.42
	370.702	14.19	15.84	1.98	32.01	46.00	13.99
	568.613	13.73	18.90	2.45	35.08	46.00	10.92
	726.805	15.20	20.43	2.74	38.37	46.00	7.63
	887.610	14.64	21.00	3.03	38.67	46.00	7.33
Vertical	74.396	23.15	8.31	0.84	32.30	40.00	7.70
	103.806	18.22	12.88	1.03	32.13	43.50	11.37
	207.123	20.71	10.14	1.51	32.36	43.50	11.14
	618.537	12.98	19.70	2.55	35.23	46.00	10.77
	726.805	14.04	20.43	2.74	37.21	46.00	8.79
	884.503	11.55	21.05	3.01	35.61	46.00	10.39

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : WIFI Date of Test : Jun 08, 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	75.977	22.90	8.59	0.84	32.33	40.00	7.67
	153.200	19.18	11.48	1.29	31.95	43.50	11.55
	199.286	21.14	9.68	1.49	32.31	43.50	11.19
	368.112	16.47	15.78	1.98	34.23	46.00	11.77
	599.321	12.28	19.50	2.50	34.28	46.00	11.72
	774.158	13.06	20.63	2.82	36.51	46.00	9.49
Vertical	39.162	17.57	13.23	0.64	31.44	40.00	8.56
	73.617	23.85	8.22	0.83	32.90	40.00	7.10
	116.950	18.80	13.08	1.11	32.99	43.50	10.51
	207.850	20.87	10.26	1.52	32.65	43.50	10.85
	590.974	11.98	19.50	2.50	33.98	46.00	12.02
	875.247	11.90	21.03	3.01	35.94	46.00	10.06

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

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

Polarization	Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)
Horizontal	79.800	22.30	9.34	0.86	32.50	40.00	7.50
	116.950	16.86	13.08	1.11	31.05	43.50	12.45
	199.286	21.10	9.68	1.49	32.27	43.50	11.23
	374.623	15.03	15.93	1.99	32.95	46.00	13.05
	677.580	12.20	20.17	2.66	35.03	46.00	10.97
	774.158	12.30	20.63	2.82	35.75	46.00	10.25
Vertical	71.080	24.21	7.83	0.83	32.87	40.00	7.13
	103.442	17.88	12.87	1.02	31.77	43.50	11.73
	202.810	20.59	9.80	1.50	31.89	43.50	11.61
	631.688	12.57	19.73	2.57	34.87	46.00	11.13
	742.259	11.16	20.57	2.76	34.49	46.00	11.51
	881.407	7.60	21.10	3.01	31.71	46.00	14.29

TEST ENGINEER: LEON YUN

EUT : LED LCD TV Temperature : 22°C

Model No. : 55H8D Humidity : 60%RH

Test Mode : BT Date of Test : Jul 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	77.593	23.38	8.90	0.85	33.13	40.00	6.87
	148.963	21.59	11.64	1.28	34.51	43.50	8.99
	202.810	24.98	9.80	1.50	36.28	43.50	7.22
	366.823	20.46	15.77	1.98	38.21	46.00	7.79
	566.622	16.72	18.85	2.45	38.02	46.00	7.98
	706.700	17.04	20.43	2.71	40.18	46.00	5.82
Vertical	32.067	12.95	17.65	0.57	31.17	40.00	8.83
	72.338	24.64	8.05	0.83	33.52	40.00	6.48
	118.601	19.45	13.14	1.12	33.71	43.50	9.79
	202.100	22.02	9.77	1.50	33.29	43.50	10.21
	550.948	14.00	18.70	2.41	35.11	46.00	10.89
	744.866	16.75	20.63	2.76	40.14	46.00	5.86

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 Appendix Figure 25

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 W