

### APPLICATION OF CERTIFICATION

For

TTE Technology Inc.

### LCD TV

Brand Name	Model Number		
TCL	55FS3750; 55FS3850; 55FS3850G; 55FS3850R; 55FS3850B; 55FS3850T; 55FS3850D; 55FS3850H; 55FS3850A; 55FS3850P; 55FS3850S; 55FS3710; 55FS3790; 55FS3800; 55FS3810; 55FS3810G; 55FS3810M; 55FS3810R; 55FS3810B; 55FS3810T; 55FS3810D; 55FS3810H; 55FS3810A; 55FS3810P; 55FS3810S		

FCC ID: W8U55FS3850

Prepared for: TTE Technology Inc.

2455 Anselmo Drive, Suite 101, Corona, CA 92879

Prepared By: Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496 Fax: (0755) 26632877

Report Number : ACS-F15176

Date of Test : Jun.10~24, 2015

Date of Report : Jul.07, 2015



# TABLE OF CONTENTS

<u>De</u>	Description			
Te	est Report Certification			
1.	SUMMARY OF STANDARDS AND RESULTS	1-2		
	1.1. Description of Standards and Results	1-2		
2.	GENERAL INFORMATION	2-1		
	2.1. Description of Device (EUT)	2-1		
	2.2. Tested Supporting System Details			
	2.3. Block diagram of connection between the EUT and simu	lators2-3		
	2.4. Test Facility			
	2.5. Measurement Uncertainty (95% confidence levels, k=2).			
<b>3.</b>	POWER LINE CONDUCTED EMISSION MEASURE	MENT3-1		
	3.1. Test Equipment	3-1		
	3.2. Block Diagram of Test Setup			
	3.3. Power Line Conducted Emission Test Limits			
	3.4. Configuration of EUT on Test			
	3.5. Operating Condition of EUT			
	<ul><li>3.6. Test Procedure</li><li>3.7. Conducted Emission at Mains Terminals Test Results</li></ul>			
4.	RADIATED EMISSION MEASUREMENT			
	4.1. Test Equipment			
	4.2. Block Diagram of Test Setup			
	4.3. Radiated Emission Limit			
	4.4. EUT Configuration on Test			
	4.6. Test Procedure			
	4.7. Radiated Emission Test Results			
5.	DEVIATION TO TEST SPECIFICATIONS			
6.	PHOTOGRAPH			
	6.1. Photos of Power Line Conducted Emission Test			
	6.2. Photos of Radiated Emission Test (In Anechoic Chamber			
7.	PHOTOS OF THE EUT			



FCC ID: W8U55FS3850

## TEST REPORT CERTIFICATION

Applicant : TTE Technology Inc.

Manufacturer : TCL King Electrical Appliances (Huizhou) Co., Ltd.

EUT Description : LCD TV

FCC ID : W8U55FS3850

(A) Model No. &:

Brand Name

Brand Name	Model Number
0	55FS3750; 55FS3850; 55FS3850G; 55FS3850R;
	55FS3850B; 55FS3850T; 55FS3850D; 55FS3850H;
	55FS3850A; 55FS3850P; 55FS3850S; 55FS3710;
TCL	55FS3790; 55FS3800; 55FS3810; 55FS3810G;
	55FS3810M; 55FS3810R; 55FS3810B; 55FS3810T;
	55FS3810D; 55FS3810H; 55FS3810A; 55FS3810P;
	55FS3810S

(B) Power Supply : AC 120V/60Hz (C) Test Voltage : AC 120V/60Hz

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2014

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) 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 conducted and radiated emissions. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed of full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The 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.

Date of Test:	Jun.10~24, 2015	_Report of date: _	Jul.07, 2015	_
Prepared by:	April Tseng /Assistant	_Reviewed by : _	Sun Zeng / Assistant Manager	r
	AUD	IX <sup>®</sup> 信業科技 (深圳 Audix Technolog EMC 部 門 报	gy (Shenzhen) Co., Ltd.	

Approved & Authorized Signer:

Signature: David Jin / Manager



# AUDIX Technology (Shenzhen) Co., Ltd.

FCC ID: W8U55FS3850 Page 1-1

# **Modified History**

Edition No.	Date of Rev.	Summary	Report No.
0	May.12, 2015	Original Report.	ACS-F15137
Rev. 1	Jul.07, 2015	1. Power transformer and backlight different, different Structure and appearance.	ACS-F15176

### Remark for Rev.1:

- 1. This report is an additional version with original report number ACS-F15137. The different with original report are See the above table of REV.1.
- 2. Through evaluation of the above difference, the CE, RE test needed to be re-performed. The EUT was retested and all the test data were recorded in this report.
- 3. This report is based on report of ACS-F15137.



FCC ID: W8U55FS3850 Page 1-2

## 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.

EMISSION				
<b>Description of Test Item</b>	Standard Results		Remarks	
Power Line Conducted Emission Test	FCC Part 15: 2014 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 6.18 dB at 2.834 MHz	
Radiated Emission Test (30-1000MHz)	FCC Part 15: 2014 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 3.25 dB at 670.35 MHz	
Radiated Emission Test (1-18GHz)	FCC Part 15: 2014 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 8.46 dB at 2053.60MHz	



FCC ID: W8U55FS3850 Page 2-1

### 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description : LCD TV

Model Number& Brand Name

Brand Name	Model Number		
	55FS3750; 55FS3850; 55FS3850G; 55FS3850R;		
	55FS3850B; 55FS3850T; 55FS3850D;		
	55FS3850H; 55FS3850A; 55FS3850P;		
TCL	55FS3850S; 55FS3710; 55FS3790; 55FS3800;		
ICL	55FS3810; 55FS3810G; 55FS3810M;		
	55FS3810R; 55FS3810B; 55FS3810T;		
	55FS3810D; 55FS3810H; 55FS3810A;		
	55FS3810P; 55FS3810S; 55FS3850G		

(All 55 " models are identical except for different appearance (only for color, silk-screen and decorative parts) and model number for trading purpose.)

FCC ID : W8U55FS3850

Test Mode : 55FS3750

Applicant : TTE Technology Inc.

2455 Anselmo Drive, Suite 101, Corona, CA 92879

Manufacturer : TCL King Electrical Appliances (Huizhou) Co., Ltd.

Section 19, Zhongkai Development Zone for New and High Level

TECH Industries, Huizhou, Guangdong 516006, P.R. China.

FREQUENCIES USED AND GENERATED WITHIN DEVICE				
LVDS (HD) 78MHZ				
LVDS (FHD) 75MHZ				
IF 6MHz				
IC	800MHz			

Internal photos of the EUT shows AC sockets line, FCC WIRE line, debug with the countermeasure scheme, these countermeasures and EUT production together.

Date of Test : Jun.10~24, 2015

Date of Receipt : Jun.08, 2015

Sample Type : Prototype production



FCC ID: W8U55FS3850 Page 2-2

# 2.2.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type	
1.	Personal	Test PC S	DELL	Vostro 470	2SP05W1	☑FCC DoC ☑BSMI ID:R33002	
1.	Computer	Power Cord: Unshie Display Card: HD34					
2.	USB Keyboard	ACS-EMC- K04R	DELL	SK-8115	CN-ODJ313-71616 -6BB-049J	☑ FCC DoC ☑BSMI ID: T3A002	
	OSB Hey source	Data Cable: shielded	l, Undetachable, 2	2.0m			
		ACS-EMC-PT04	НР	C9079A	N/A	☑FCC DoC ☑BSMI ID: R33001	
3.	Printer	USB Cable: Shielded, Detachabled, 1.8m Power Cord: Unshielded, Detachabled, 1.8m Power Adapter: HP, M/N: 0957-2119, BSMI ID: R33030, DC Cable: Unshielded, Detachabled, 1.5m					
4.	USB Mouse	ACS-EMC-M04R	DELL	M056UO	512024282	☑ FCC DoC ☑BSMI ID: R41108	
	OSB Wouse	Data Cable: shielded	l, Undetachable, 1	1.8m			
5.	iPod	ACS-EMC-IP01	APPLE	A1199	YM711H3LVQ5	☑FCC DoC ☑BSMI ID: R33057	
	11 00	Data Cable: Shielded	d, Detachabled, 1	.0m			
6.	HDD	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-539001 8	☑FCC DoC ☑BSMI ID: 4912A022	
	USB Cable: Shielded, Detachable, 1.8m						
7.	Headphone	ACS-EMC-EP02	OVANN	OV880V	N/A	N/A	
/.	пеационе	USB Cable: Shielded, Detachabled, 4.0m					
	Power Cable: Unshielded, Detachable, 1.8m						

HDMI Cable: Shielded, Detachable, 1.8m
8. AV In: Unshielded, Detachable, 1.8m
USB Cable: Unshielded, Detachable, 1.8m
TV Cable: Unshielded, Detachable, 1.8m

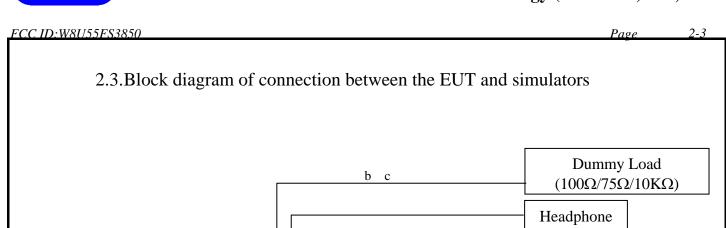
iPod

USB Keyboard

USB Mouse

HDD





a: HDMI Cable

PC

b: HDMI \*2 Cable

c: AV In Cable

d: USB Cable

e: TV Cable

(EUT: LCD TV)

AC Mains ←

AC Mains ◆

SG

**EUT** 

Printer



FCC ID:W8U55FS3850 Page 2-4

## 2.4. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen

Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

3m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 90454 Valid Date: Dec.30, 2017

3m & 10m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 794232

Valid Date: Oct.31, 2015

EMC Lab. : Accredited by DAkkS, Germany

Registration No: D-PL-12151-01-00

Valid Date: Dec.15, 2016

: Accredited by NVLAP, USA

NVLAP Code: 200372-0 Valid Date: Mar.31, 2016

## 2.5. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.1 dB(150kHz to 30MHz)
	3.3dB(30~200MHz, Polarize: H)
Uncertainty for Radiation Emission test	3.3dB(30~200MHz, Polarize: V)
in 3m chamber	3.5dB(200M~1GHz, Polarize: H)
	3.4dB(200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in	5.1dB(Distance: 3m, Polarize: V)
3m chamber (1GHz-18GHz)	5.3dB(Distance: 3m, Polarize: H)
Uncertainty for test site temperature	3%
and humidity	0.6

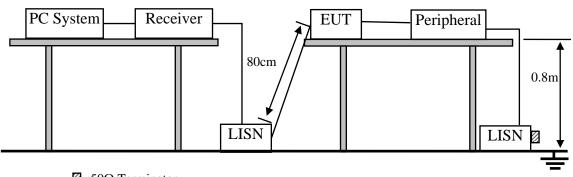


## 3. POWER LINE CONDUCTED EMISSION MEASUREMENT

# 3.1.Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1# Shielding Room	AUDIX	N/A	N/A	Apr.17,15	1 Year
Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.28,15	1 Year
L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	100429	Oct.29,14	1 Year
L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	Apr.28,15	1 Year
Terminator	Hubersuhner	50Ω	No.1	Apr.28,15	1 Year
Terminator	Hubersuhner	50Ω	No.2	Apr.28,15	1 Year
RF Cable	MIYAZAKI	3D-2W	No.1	Apr.28,15	1Year
Coaxial Switch	Anritsu	MP59B	6200766906	Apr.28,15	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101838	Oct.29,14	1 Year
MPEG2 Measurement Generator	ROHDE&SCHW ARZ	DVG	100319	Oct.29,14	1 Year
TV Transmitter	ROHDE&SCHW ARZ	SFQ	100521	Apr.28,15	1 Year
Signal Generator	HP	8648A	3625U00573	Apr.28,15	1 Year
Pattern Generator	Philips	PM5418	LO625020	Apr.28,15	1 Year
Test Software	AUDIX	E3	6.100913a	N/A	N/A
	1# Shielding Room Test Receiver L.I.S.N.#1 L.I.S.N.#3 Terminator Terminator RF Cable Coaxial Switch Pulse Limiter MPEG2 Measurement Generator TV Transmitter Signal Generator Pattern Generator	1# Shielding RoomAUDIXTest ReceiverRohde & SchwarzL.I.S.N.#1Rohde & SchwarzL.I.S.N.#3KyoritsuTerminatorHubersuhnerTerminatorHubersuhnerRF CableMIYAZAKICoaxial SwitchAnritsuPulse LimiterRohde & SchwarzMPEG2 Measurement GeneratorROHDE&SCHW ARZTV TransmitterROHDE&SCHW ARZSignal GeneratorHPPattern GeneratorPhilips	1# Shielding RoomAUDIXN/ATest ReceiverRohde & SchwarzESCIL.I.S.N.#1Rohde & SchwarzESH2-Z5L.I.S.N.#3KyoritsuKNW-242CTerminatorHubersuhner50ΩTerminatorHubersuhner50ΩRF CableMIYAZAKI3D-2WCoaxial SwitchAnritsuMP59BPulse LimiterRohde & SchwarzESH3-Z2MPEG2 Measurement GeneratorROHDE&SCHW ARZDVGTV TransmitterROHDE&SCHW ARZSFQSignal GeneratorHP8648APattern GeneratorPhilipsPM5418	1# Shielding Room         AUDIX         N/A         N/A           Test Receiver         Rohde & Schwarz         ESCI         100842           L.I.S.N.#1         Rohde & Schwarz         ESH2-Z5         100429           L.I.S.N.#3         Kyoritsu         KNW-242C         8-1920-1           Terminator         Hubersuhner         50Ω         No.1           Terminator         Hubersuhner         50Ω         No.2           RF Cable         MIYAZAKI         3D-2W         No.1           Coaxial Switch         Anritsu         MP59B         6200766906           Pulse Limiter         Rohde & Schwarz         ESH3-Z2         101838           MPEG2 Measurement Generator         ROHDE&SCHW ARZ         DVG         100319           TV Transmitter         ROHDE&SCHW ARZ         SFQ         100521           Signal Generator         HP         8648A         3625U00573           Pattern Generator         Philips         PM5418         LO625020	1# Shielding Room         AUDIX         N/A         N/A         Apr.17,15           Test Receiver         Rohde & Schwarz         ESCI         100842         Apr.28,15           L.I.S.N.#1         Rohde & Schwarz         ESH2-Z5         100429         Oct.29,14           L.I.S.N.#3         Kyoritsu         KNW-242C         8-1920-1         Apr.28,15           Terminator         Hubersuhner         50Ω         No.1         Apr.28,15           Terminator         Hubersuhner         50Ω         No.2         Apr.28,15           RF Cable         MIYAZAKI         3D-2W         No.1         Apr.28,15           Coaxial Switch         Anritsu         MP59B         6200766906         Apr.28,15           Pulse Limiter         Rohde & Schwarz         ESH3-Z2         101838         Oct.29,14           MPEG2 Measurement Generator         ROHDE&SCHW ARZ         DVG         100319         Oct.29,14           TV Transmitter         ROHDE&SCHW ARZ         SFQ         100521         Apr.28,15           Signal Generator         HP         8648A         3625U00573         Apr.28,15           Pattern Generator         Philips         PM5418         LO625020         Apr.28,15

# 3.2.Block Diagram of Test Setup



 $\square$  :50 $\Omega$  Terminator

## 3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	$dB(\mu V)$	$dB(\mu V)$		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
500kHz ~ 5MHz	56	46		
5MHz ~ 30MHz	60	50		

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.



## 3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 3.4.1.LCD TV (EUT)

Model Number : 55FS3750 Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Detail, in Section 2.2.

## 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turn on the power of all equipment.
- 3.5.3. PC system ran the Self-test program "EMC Test. exe" by windows XP and sent "H" Character to LCD TV (EUT), the Screen of EUT displayed and filled with "H" pattern, use white letters on a black ground, set the contrast control to maximum, set the brightness control to maximum and measure it.
- 3.5.4. The other peripheral devices were driven and operated in turn during all testing.

### 3.6.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.# 3). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2009 on conducted Emission test.

The bandwidth of test receiver (R&S TEST RECEIVER ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 3.7.



# AUDIX Technology (Shenzhen) Co., Ltd.

Page 3-3

### 3.7. Conducted Emission at Mains Terminals Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test modes were tested and selected to read Q.P values and average values, all the test results are listed in next pages.

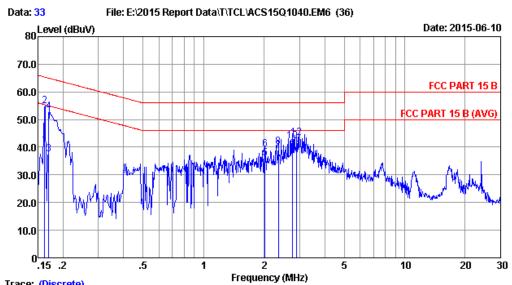
EUT: LCD TV Model No.: 55FS3750

Test Date: Jun.10, 2015 Temperature: 24.3 Humidity: 57%

The details of test modes are as follows:

The wo	rst for video test mo	de			
No.	Test Mode	Input Port	Resolution &		e Test Data
			Frequency	Line	Neutral
1.		HDMI 1	1920*1080/60Hz	# 33	# 34
2.	PC Mode	HDMI 2	1920*1080/60Hz	# 31	# 32
3.		HDMI 3	1920*1080/60Hz	# 29	# 30
4.	TX Mode(WIFI)			# 35	# 36

Worst test mode)



:1# Conduction Data No Site no :33

Dis./Lisn :2014 ESH2-Z5 LINE Limit :FCC PART 15 B

Env./Ins. :24.3\*C/57% Engineer : Kevin\_He

:LCD TV M/N:55FS3750 EUT

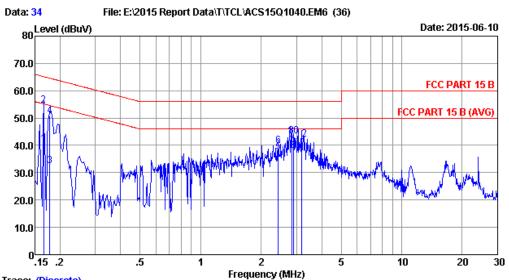
Power Rating : AC 120V/60Hz

Test Mode :Running "H' Pattern And 1kHz Playing

HDMI 1:1920\*1080@60Hz

		LISN	Cable		Emission	ı		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.162	0.14	9.92	30.80	40.86	55.36	14.50	Average
2	0.162	0.14	9.92	44.90	54.96	65.36	10.40	QP
3	0.170	0.14	9.92	27.30	37.36	54.96	17.60	Average
4	0.170	0.14	9.92	42.80	52.86	64.96	12.10	QP
5	2.023	0.18	9.99	25.70	35.87	46.00	10.13	Average
6	2.023	0.18	9.99	29.09	39.26	56.00	16.74	QP
7	2.358	0.19	10.00	28.40	38.59	46.00	7.41	Average
8	2.358	0.19	10.00	30.01	40.20	56.00	15.80	QP
9	2.767	0.20	10.00	29.10	39.30	46.00	6.70	Average
10	2.767	0.20	10.00	31.90	42.10	56.00	13.90	QP
11	2.902	0.20	10.00	29.10	39.30	46.00	6.70	Average
12	2.902	0.20	10.00	33.10	43.30	56.00	12.70	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Site no :1# Conduction Data No :34

Dis./Lisn :2014 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B
Env./Ins. :24.3\*C/57%

Env./Ins. :24.3\*C/57% Engineer :Kevin\_He

EUT :LCD TV M/N:55FS3750
Power Rating :AC 120V/60Hz

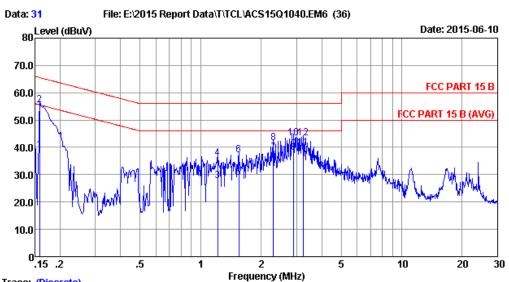
Test Mode : Running "H' Pattern And 1kHz Playing

HDMI 1:1920\*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.166	0.13	9.92	30.50	40.55	55.16	14.61	Average
2	0.166	0.13	9.92	44.70	54.75	65.16	10.41	QP
3	0.178	0.13	9.93	22.40	32.46	54.58	22.12	Average
4	0.178	0.13	9.93	40.70	50.76	64.58	13.82	QP
5	2.435	0.22	10.00	27.40	37.62	46.00	8.38	Average
6	2.435	0.22	10.00	29.63	39.85	56.00	16.15	QP
7	2.834	0.22	10.00	29.60	39.82	46.00	6.18	Average
8	2.834	0.22	10.00	33.30	43.52	56.00	12.48	QP
9	2.902	0.22	10.00	29.10	39.32	46.00	6.68	Average
10	2.902	0.22	10.00	33.20	43.42	56.00	12.58	QP
11	3.173	0.23	10.01	29.29	39.53	46.00	6.47	Average
12	3.173	0.23	10.01	32.09	42.33	56.00	13.67	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





:1# Conduction Data No Site no :31

Dis./Lisn :2014 ESH2-Z5 LINE :FCC PART 15 B Limit

Engineer :Kevin\_He Env./Ins. :24.3\*C/57%

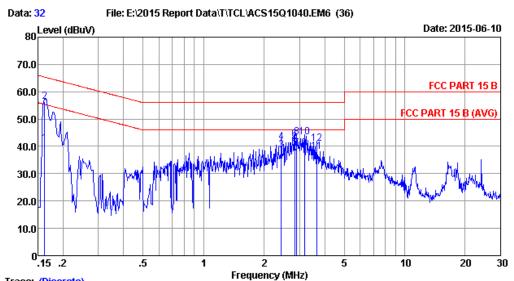
:LCD TV M/N:55FS3750

Power Rating :AC 120V/60Hz Test Mode :Running "H' Pattern And 1kHz Playing

HDMI 2:1920\*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	0.14	9.92	28.90	38.96	55.57	16.61	Average
2	0.158	0.14	9.92	45.50	55.56	65.57	10.01	QP
3	1.216	0.16	9.96	17.60	27.72	46.00	18.28	Average
4	1.216	0.16	9.96	25.89	36.01	56.00	19.99	QP
5	1.552	0.18	9.97	18.70	28.85	46.00	17.15	Average
6	1.552	0.18	9.97	26.95	37.10	56.00	18.90	QP
7	2.297	0.19	10.00	27.80	37.99	46.00	8.01	Average
8	2.297	0.19	10.00	31.37	41.56	56.00	14.44	QP
9	2.902	0.20	10.00	29.10	39.30	46.00	6.70	Average
10	2.902	0.20	10.00	33.20	43.40	56.00	12.60	QP
11	3.241	0.21	10.01	29.60	39.82	46.00	6.18	Average
12	3.241	0.21	10.01	33.09	43.31	56.00	12.69	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



:1# Conduction Data No Site no :32

:2014 ESH2-Z5 NEUTRAL Dis./Lisn :FCC PART 15 B Limit

Engineer :Kevin\_He Env./Ins. :24.3\*C/57%

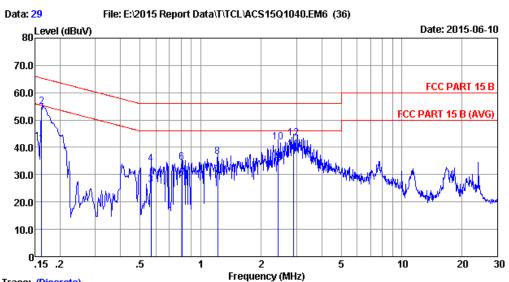
:LCD TV M/N:55FS3750

Power Rating :AC 120V/60Hz Test Mode :Running "H' Pattern And 1kHz Playing

HDMI 2:1920\*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	0.13	9.92	30.90	40.95	55.36	14.41	Average
2	0.162	0.13	9.92	46.30	56.35	65.36	9.01	QP
3	2.435	0.22	10.00	28.40	38.62	46.00	7.38	Average
4	2.435	0.22	10.00	31.47	41.69	56.00	14.31	QP
5	2.834	0.22	10.00	29.30	39.52	46.00	6.48	Average
6	2.834	0.22	10.00	32.20	42.42	56.00	13.58	QP
7	2.902	0.22	10.00	29.00	39.22	46.00	6.78	Average
8	2.902	0.22	10.00	33.30	43.52	56.00	12.48	QP
9	3.173	0.23	10.01	29.09	39.33	46.00	6.67	Average
10	3.173	0.23	10.01	33.03	43.27	56.00	12.73	QP
11	3.642	0.25	10.03	27.89	38.17	46.00	7.83	Average
12	3.642	0.25	10.03	30.62	40.90	56.00	15.10	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



:1# Conduction Data No Site no :29

Dis./Lisn :2014 ESH2-Z5 LINE :FCC PART 15 B Limit Env./Ins. :24.3\*C/57%

Engineer :Kevin\_He

:LCD TV M/N:55FS3750

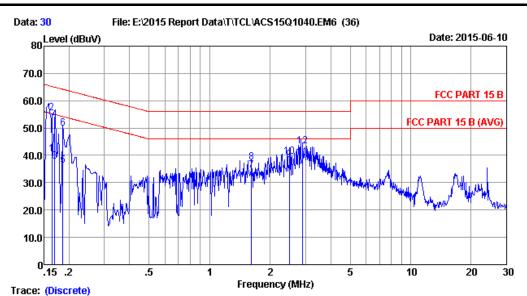
Power Rating :AC 120V/60Hz Test Mode :Running "H' Pattern And 1kHz Playing

HDMI 3:1920\*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	0.14	9.92	31.20	41.26	55.36	14.10	Average
2	0.162	0.14	9.92	44.90	54.96	65.36	10.40	QP
3	0.567	0.15	9.94	16.30	26.39	46.00	19.61	Average
4	0.567	0.15	9.94	23.72	33.81	56.00	22.19	QP
5	0.809	0.15	9.95	18.40	28.50	46.00	17.50	Average
6	0.809	0.15	9.95	24.57	34.67	56.00	21.33	QP
7	1.216	0.16	9.96	19.80	29.92	46.00	16.08	Average
8	1.216	0.16	9.96	26.43	36.55	56.00	19.45	QP
9	2.435	0.20	10.00	24.50	34.70	46.00	11.30	Average
10	2.435	0.20	10.00	31.75	41.95	56.00	14.05	QP
11	2.902	0.20	10.00	29.20	39.40	46.00	6.60	Average
12	2.902	0.20	10.00	33.10	43.30	56.00	12.70	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





Data No

:30

Site no :1# Conduction

Dis./Lisn :2014 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :24.3\*C/57% Engineer :Kevin\_He

EUT :LCD TV M/N:55FS3750

Power Rating :AC 120V/60Hz

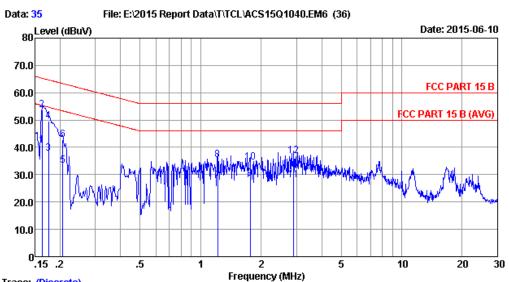
Test Mode : Running "H' Pattern And 1kHz Playing

HDMI 3:1920\*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.164	0.13	9.92	30.50	40.55	55.26	14.71	Average
2	0.164	0.13	9.92	45.40	55.45	65.26	9.81	QP
3	0.170	0.13	9.92	27.70	37.75	54.96	17.21	Average
4	0.170	0.13	9.92	43.20	53.25	64.96	11.71	QP
5	0.186	0.13	9.93	26.29	36.35	54.20	17.85	Average
6	0.186	0.13	9.93	39.71	49.77	64.20	14.43	QP
7	1.619	0.19	9.97	24.40	34.56	46.00	11.44	Average
8	1.619	0.19	9.97	27.24	37.40	56.00	18.60	QP
9	2.494	0.22	10.00	28.30	38.52	46.00	7.48	Average
10	2.494	0.22	10.00	29.20	39.42	56.00	16.58	QP
11	2.902	0.22	10.00	29.10	39.32	46.00	6.68	Average
12	2.902	0.22	10.00	33.10	43.32	56.00	12.68	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.





:1# Conduction Site no Data No :35

:2014 ESH2-Z5 LINE Dis./Lisn :FCC PART 15 B Limit Env./Ins. :24.3\*C/57%

Engineer : Kevin\_He :LCD TV M/N:55FS3750

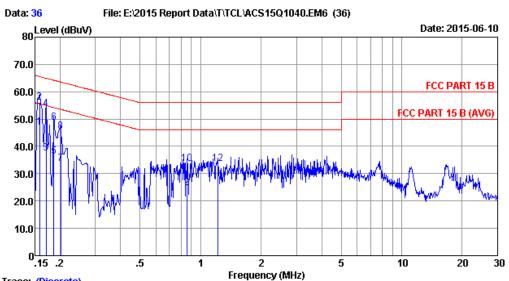
Power Rating :AC 120V/60Hz Test Mode :TX Mode(WIFI)

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	0.14	9.92	30.80	40.86	55.34	14.48	Average
2	0.162	0.14	9.92	43.61	53.67	65.34	11.67	QP
3	0.175	0.14	9.93	27.59	37.66	54.72	17.06	Average
4	0.175	0.14	9.93	39.52	49.59	64.72	15.13	QP
5	0.206	0.13	9.93	23.40	33.46	53.36	19.90	Average
6	0.206	0.13	9.93	32.66	42.72	63.36	20.64	QP
7	1.216	0.16	9.96	17.70	27.82	46.00	18.18	Average
8	1.216	0.16	9.96	25.43	35.55	56.00	20.45	QP
9	1.762	0.18	9.97	18.50	28.65	46.00	17.35	Average
10	1.762	0.18	9.97	24.26	34.41	56.00	21.59	QP
11	2.900	0.20	10.00	17.80	28.00	46.00	18.00	Average
12	2.900	0.20	10.00	26.62	36.82	56.00	19.18	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

:36





Trace: (Discrete)

:1# Conduction Site no Data No

:2014 ESH2-Z5 NEUTRAL Dis./Lisn

:FCC PART 15 B Limit

Engineer : Kevin\_He Env./Ins. :24.3\*C/57%

:LCD TV M/N:55FS3750 Power Rating :AC 120V/60Hz Test Mode :TX Mode(WIFI)

		LISN	Cable		Emissio:	n		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.158	0.13	9.92	36.80	46.85	55.56	8.71	Average
2	0.158	0.13	9.92	46.02	56.07	65.56	9.49	QP
3	0.170	0.13	9.92	27.50	37.55	54.94	17.39	Average
4	0.170	0.13	9.92	43.79	53.84	64.94	11.10	QP
5	0.186	0.13	9.93	26.29	36.35	54.20	17.85	Average
6	0.186	0.13	9.93	38.71	48.77	64.20	15.43	QP
7	0.202	0.13	9.93	23.50	33.56	53.54	19.98	Average
8	0.202	0.13	9.93	35.34	45.40	63.54	18.14	QP
9	0.857	0.17	9.95	14.70	24.82	46.00	21.18	Average
10	0.857	0.17	9.95	23.43	33.55	56.00	22.45	QP
11	1.216	0.18	9.96	16.90	27.04	46.00	18.96	Average
12	1.216	0.18	9.96	23.49	33.63	56.00	22.37	QP

<sup>2.</sup> If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



# 4. RADIATED EMISSION MEASUREMENT

# 4.1.Test Equipment

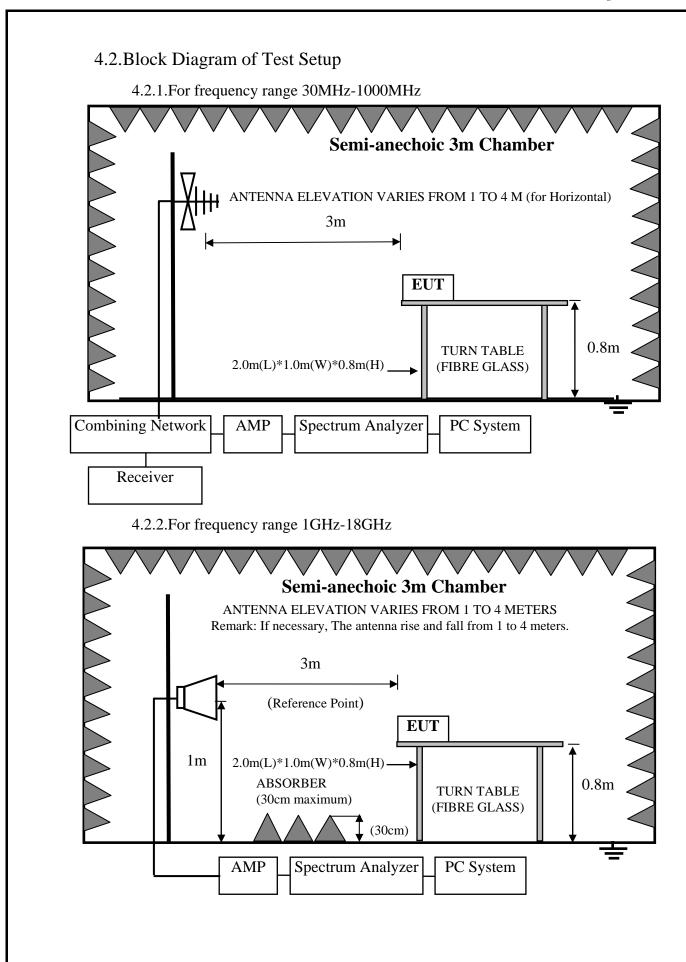
4.1.1.For frequency range 30MHz~1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Nov.23,14	1 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	Apr.28,15	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	Apr.28,15	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.28,15	1 Year
5.	Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-493	May.06,15	1 Year
6.	RF Cable	MIYAZAKI	CFD400-N W(3.5M)	No.3	Apr.28,15	1 Year
7.	RF Cable	MIYAZAKI	CFD400-L W(22M)	No.7	Apr.28,15	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.28,15	1 Year
9.	MPEG2 Measurement Generator	ROHDE&SCHWA RZ	DVG	100319	Oct.29,14	1 Year
10.	TV Transmitter	ROHDE&SCHWA RZ	SFQ	100521	Apr.28,15	1 Year
11.	Signal Generator	HP	8648A	3625U00573	Apr.28,15	1 Year
12.	Pattern Generator	Philips	PM5418	LO625020	Apr.28,15	1 Year
13.	Test Software	AUDIX	ЕЗ	6.2009-5-21a( n)	N/A	N/A

## 4.1.2.For frequency range 1GHz~18GHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Nov.02,14	1 Year
2.	Spectrum Analyzer	Agilent	E4407B	MY41440292	Apr.28,15	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	Feb.03,15	1 Year
4.	Horn Antenna	ETS	3115	9510-4877	Sep.20,14	1 Year
5.	Amplifier	Agilent	83017A	MY53270084	May.25,15	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX106	505238/6+2861 6/2	Apr.28,15	1 Year
7.	MPEG2 Measurement Generator	ROHDE&SC HWARZ	DVG	100319	Oct.29,14	1 Year
8.	TV Transmitter	ROHDE&SC HWARZ	SFQ	100521	Apr.28,15	1 Year
9.	Pattern Generator	Philips	PM5418	LO625020	Apr.28,15	1 Year
10.	Test Software	AUDIX	E3	6.2009-5-21a(n)	N/A	N/A







### 4.3. Radiated Emission Limit

Frequency MHz	Distance (Meters)	Field Strengths Limits dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0
Above 1000	3	74(Peak)54(Average)

Remark: (1) Emission level = Antenna Factor + Cable Loss + Reading Emission level = Antenna Factor - Amp Factor + Cable Loss + Reading (above 1000MHz)

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

## 4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.4

## 4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.5. except the test set up replaced by Section 4.2.

### 4.6.Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2009 on Radiated Emission test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz.



### 4.7. Radiated Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

EUT: LCD TV Model No.: 55FS3750

## For frequency range 30MHz~1000MHz

The EUT with the following test modes were tested and selected to read Q.P values, all the test results are listed in next pages.

Test Date: Jun.24, 2015 Temperature: 24 Humidity: 56%

#### The details of test modes are as follows:

The details of test modes are as follows:										
The wor	rst for video test mo	de								
No.	Test Mode	Input Port	Resolution &	Reference Test Data No.						
		1	Frequency	Horizontal	Vertical					
The Worst for Video Resolution of original report										
1.		HDMI 1	1920*1080/60Hz	# 33	# 34					
2.	PC Mode	HDMI 2	1920*1080/60Hz	# 32	# 31					
3.		HDMI 3	1920*1080/60Hz	# 29	# 30					
4.	TX Mode(WIFI)			# 49	# 50					

Worst test mode)

### For frequency range 1GHz~18GHz

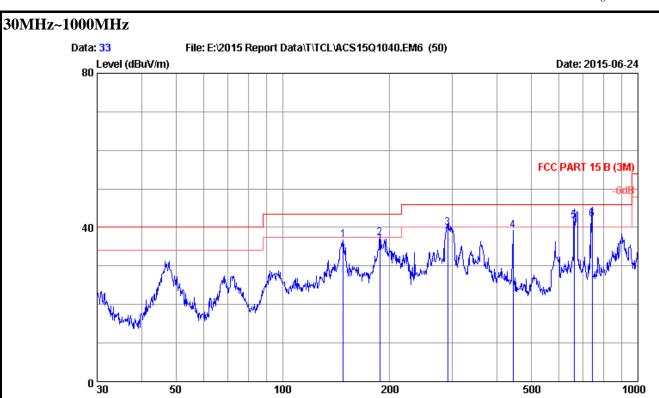
The EUT with below test mode were measured within Anechoic Chamber and the test results listed in next pages

Note: For all the emissions above 1GHz, the peak measured level comply with peak limit, so the average level were deemed to comply with average limit.

Test Date: Jun.24, 2015 Temperature: 24 Humidity: 56%

The wo	The worst for video test mode									
N.T.	T . M. 1	T . D .	Resolution &	Reference Test Data No.						
No.	Test Mode	Input Port	Frequency	Horizontal	Vertical					
The Worst for Video Resolution of original report										
1.		HDMI 1	1920*1080/60Hz	# 41	# 42					
2.	PC Mode	HDMI 2	1920*1080/60Hz	# 44	# 43					
3.		HDMI 3	1920*1080/60Hz	# 45	# 46					
4.	TX Mode(WIFI)			# 48	# 47					

( Worst test mode)



Site no. : 3m Chamber Data no. : 33

Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : HORIZONTAL

Frequency (MHz)

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Even\_Deng

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz Test Mode : PC Mode

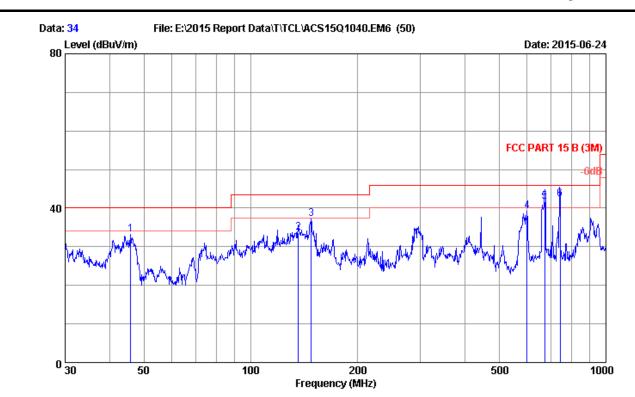
Fest Mode : PC Mode Running"H"Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	147.92	11.40	1.29	24.15	36.84	43.50	6.66	QP
2	187.75	9.70	1.46	26.06	37.22	43.50	6.28	QP
3	291.04	13.75	1.87	24.30	39.92	46.00	6.08	QP
4	444.85	17.20	2.36	19.77	39.33	46.00	6.67	QP
5	661.15	19.90	2.91	18.94	41.75	46.00	4.25	QP
6	742.66	20.60	3.12	18.35	42.07	46.00	3.93	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.





Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

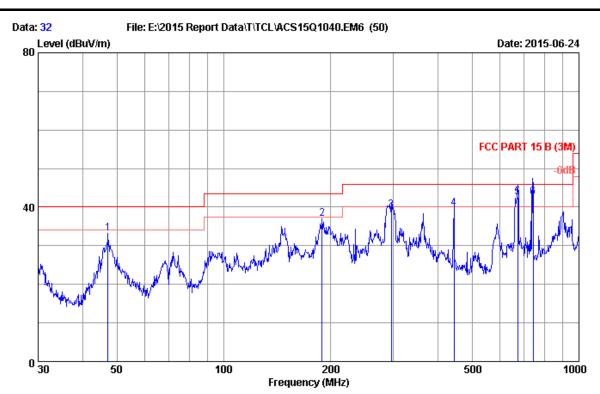
Running"H"Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	45.86	10.27	0.81	22.14	33.22	40.00	6.78	QP
2	135.98	12.30	1.24	20.21	33.75	43.50	9.75	QP
3	147.92	11.40	1.29	24.50	37.19	43.50	6.31	QP
4	599.32	19.20	2.77	17.30	39.27	46.00	6.73	QP
5	672.84	19.96	2.95	18.82	41.73	46.00	4.27	QP
6	742.66	20.60	3.12	18.68	42.40	46.00	3.60	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.





: 3m Chamber Site no. Data no. : 32

Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : HORIZONTAL

: FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56%

Engineer : Even\_Deng EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

: PC Mode Test Mode

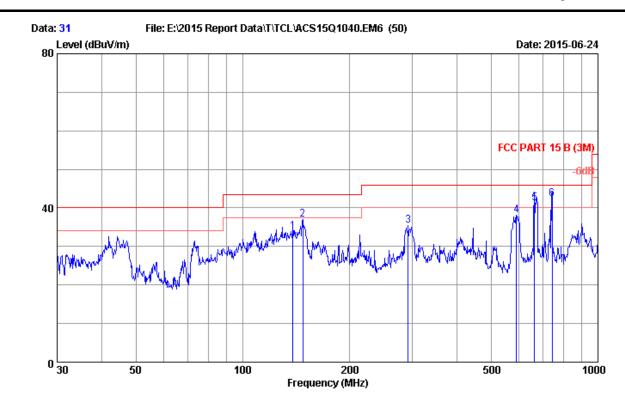
Running"H"Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	47.16	9.79	0.81	22.54	33.14	40.00	6.86	QP
2	189.07	9.70	1.46	25.73	36.89	43.50	6.61	QP
3	296.18	13.90	1.87	23.43	39.20	46.00	6.80	QP
4	444.85	17.20	2.36	20.17	39.73	46.00	6.27	QP
5	672.84	19.96	2.95	19.71	42.62	46.00	3.38	QP
6	742.66	20.60	3.12	18.74	42.46	46.00	3.54	QP

<sup>2.</sup> The emission levels that are 20dB below the official  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($ limit are not reported.





Site no. : 3m Chamber Data no. : 31
Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

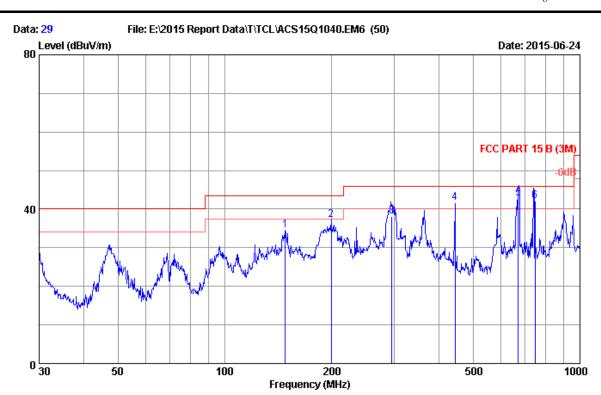
Test Mode : PC Mode

Running"H"Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	138.39	11.98	1.27	20.64	33.89	43.50	9.61	QP
2	147.40	11.43	1.29	24.25	36.97	43.50	6.53	QP
3	292.06	13.80	1.87	19.71	35.38	46.00	10.62	QP
4	588.91	19.20	2.74	16.21	38.15	46.00	7.85	QP
5	663.47	19.90	2.93	18.37	41.20	46.00	4.80	QP
6	742.26	20.60	3.12	18.54	42.26	46.00	3.74	QP

<sup>2.</sup> The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 29

Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : HORIZONTAL

: FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56%

Engineer : Even\_Deng EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

: PC Mode Test Mode

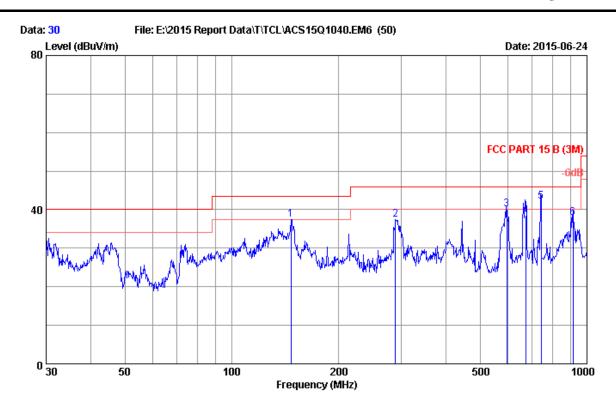
Running"H"Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
147.92	11.40	1.29	21.96	34.65	43.50	8.85	QP
199.29	10.26	1.49	25.40	37.15	43.50	6.35	QP
295.50	13.88	1.87	22.30	38.05	46.00	7.95	QP
445.50	17.20	2.36	22.10	41.66	46.00	4.34	QP
670.35	19.91	2.95	19.89	42.75	46.00	3.25	QP
746.90	20.60	3.14	18.40	42.14	46.00	3.86	QP
	(MHz) 147.92 199.29 295.50 445.50 670.35	Freq. Factor (MHz) (dB/m) 147.92 11.40 199.29 10.26 295.50 13.88 445.50 17.20 670.35 19.91	Freq. Factor Loss (MHz) (dB/m) (dB) 147.92 11.40 1.29 199.29 10.26 1.49 295.50 13.88 1.87 445.50 17.20 2.36 670.35 19.91 2.95	Freq. Factor Loss Reading (MHz) (dB/m) (dB) (dBuV)  147.92 11.40 1.29 21.96 199.29 10.26 1.49 25.40 295.50 13.88 1.87 22.30 445.50 17.20 2.36 22.10 670.35 19.91 2.95 19.89	Freq. Factor Loss Reading Level (MHz) (dB/m) (dB) (dBuV) (dBuV/m)  147.92 11.40 1.29 21.96 34.65 199.29 10.26 1.49 25.40 37.15 295.50 13.88 1.87 22.30 38.05 445.50 17.20 2.36 22.10 41.66 670.35 19.91 2.95 19.89 42.75	Freq. Factor Loss Reading Level Limits (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m)  147.92 11.40 1.29 21.96 34.65 43.50 199.29 10.26 1.49 25.40 37.15 43.50 295.50 13.88 1.87 22.30 38.05 46.00 445.50 17.20 2.36 22.10 41.66 46.00 670.35 19.91 2.95 19.89 42.75 46.00	Freq. Factor Loss Reading Level Limits Margin (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (dB)  147.92 11.40 1.29 21.96 34.65 43.50 8.85 199.29 10.26 1.49 25.40 37.15 43.50 6.35 295.50 13.88 1.87 22.30 38.05 46.00 7.95 445.50 17.20 2.36 22.10 41.66 46.00 4.34 670.35 19.91 2.95 19.89 42.75 46.00 3.25

- 2. The emission levels that are 20dB below the official limit are not reported.
- 3. The worst emission was detected at 670.35 MHz with corrected signal level of 42.75 dB $\mu$ V/m (Limit is 46.00 dB $\mu$ V/m) when the antenna was at horizontal polarization and at 1.0m high and the turn table was at 75°.
- 4.  $0^{\circ}$  was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.





Site no. : 3m Chamber Data no. : 30

Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Even\_Deng

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

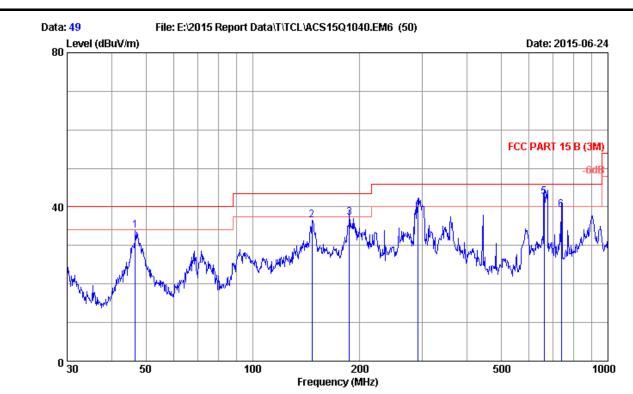
Running"H"Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	146.89	11.46	1.29	24.68	37.43	43.50	6.07	QP
2	289.00	13.70	1.84	21.95	37.49	46.00	8.51	QP
3	594.97	19.20	2.75	18.12	40.07	46.00	5.93	QP
4	671.55	19.93	2.95	15.75	38.63	46.00	7.37	QP
5	742.95	20.60	3.12	18.32	42.04	46.00	3.96	QP
6	912.86	22.14	3.51	12.32	37.97	46.00	8.03	QP

- The emission levels that are 20dB below the official limit are not reported.
- 3. The worst emission was detected at 742.95 MHz with corrected signal level of 42.04 dB $\mu$ V/m (Limit is 46.00 dB $\mu$ V/m) when the antenna was at horizontal polarization and at 1.0m high and the turn table was at 75°.
- 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.





Site no. : 3m Chamber Data no. : 49

Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56%

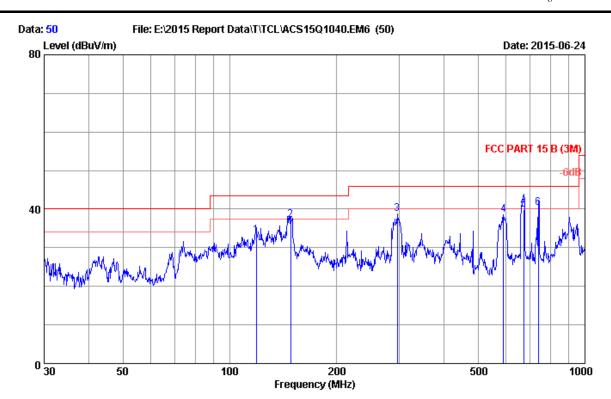
EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz Test Mode : TX Mode(WIFI)

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	46.67	9.97	0.81	23.01	33.79	40.00	6.21	QP
2	146.89	11.46	1.29	23.83	36.58	43.50	6.92	QP
3	187.10	9.70	1.46	26.11	37.27	43.50	6.23	QP
4	292.06	13.80	1.87	24.10	39.77	46.00	6.23	QP
5	661.15	19.90	2.91	19.65	42.46	46.00	3.54	QP
6	739.66	20.59	3.12	15.51	39.22	46.00	6.78	QP

<sup>2.</sup> The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2014 CBL6112D 35375 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

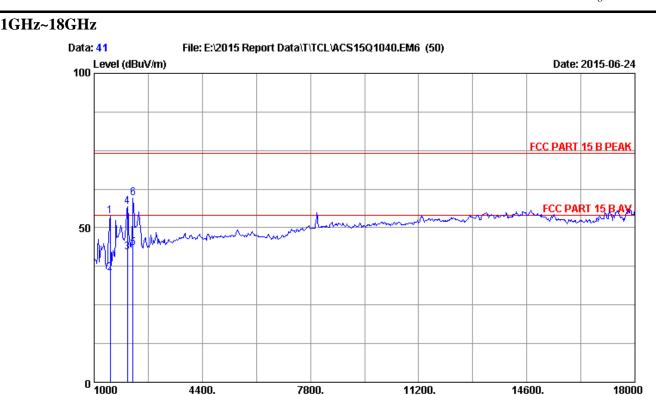
Env. / Ins. : 24\*C/56% Engineer : Even\_Deng

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz Test Mode : TX Mode(WIFI)

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	118.60	12.70	1.18	19.34	33.22	43.50	10.28	QP
2	148.44	11.38	1.29	24.46	37.13	43.50	6.37	QP
3	296.18	13.90	1.87	23.02	38.79	46.00	7.21	QP
4	588.91	19.20	2.74	16.51	38.45	46.00	7.55	QP
5	672.84	19.96	2.95	17.03	39.94	46.00	6.06	QP
6	739.66	20.59	3.12	16.63	40.34	46.00	5.66	QP





Site no. Data no. : 41 : 3m Chamber

Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : HORIZONTAL

Frequency (MHz)

: FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Even\_Deng

: LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

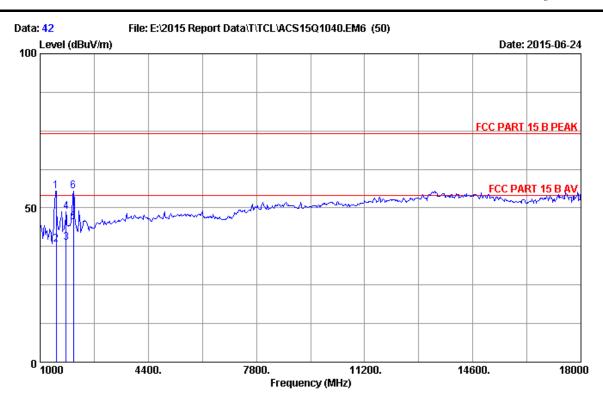
: Running"H"Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

			Ant.	Cable	Amp		Emission	ı		
	No	. Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
		(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
-										
	1	1510.00	25.45	2.43	35.66	61.49	53.71	74.00	20.29	Peak
	2	1511.69	25.46	2.43	35.66	43.11	35.34	54.00	18.66	Average
	3	2053.69	27.89	2.74	33.86	45.33	42.10	54.00	11.90	Average
	4	2054.00	27.89	2.74	33.86	60.02	56.79	74.00	17.21	Peak
	5	2223.59	28.16	2.74	33.44	45.87	43.33	54.00	10.67	Average
	6	2224.00	28.16	2.74	33.44	62.19	59.65	74.00	14.35	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.





Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

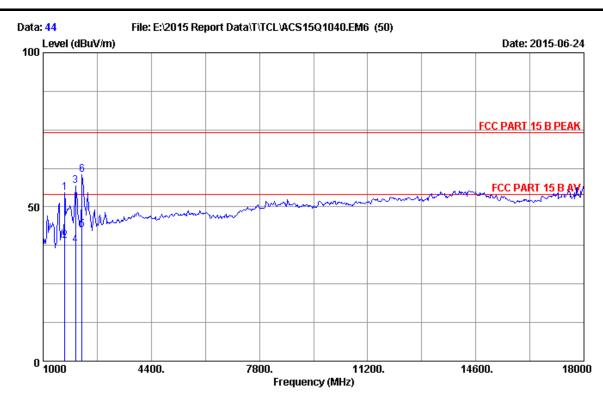
: Running"H"Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

No	. Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	n Limits (dBuV/m)	Margin (dB)	Remark
1	1510.00	25.45	2.43	35.66	63.24	55.46	74.00	18.54	Peak
2	1511.60	25.46	2.43	35.66	45.80	38.03	54.00	15.97	Average
3	1815.60	26.91	2.62	34.60	43.89	38.82	54.00	15.18	Average
4	1816.00	26.92	2.62	34.60	53.91	48.85	74.00	25.15	Peak
5	2053.60	27.89	2.74	33.86	48.77	45.54	54.00	8.46	Average
6	2054.00	27.89	2.74	33.86	58.58	55.35	74.00	18.65	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.





Site no. : 3m Chamber Data no. : 44

Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

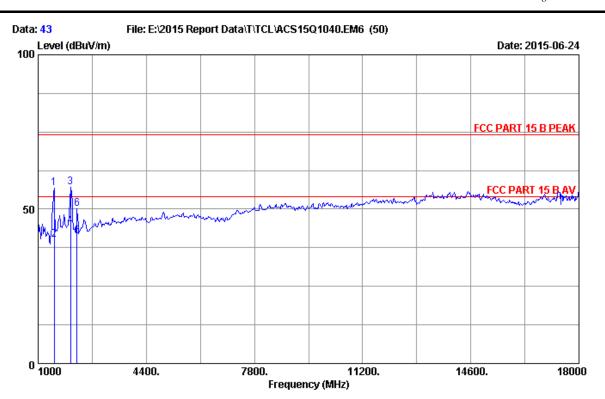
: Running"H"Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

			Ant.	Cable	Amp		Emission	ı		
_	No.	Freq.	Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	1	1680.00	26.26	2.54	35.04	60.94	54.70	74.00	19.30	Peak
	2	1681.50	26.27	2.54	35.04	45.22	38.99	54.00	15.01	Average
	3	2020.00	27.83	2.74	33.92	60.25	56.90	74.00	17.10	Peak
	4	2021.56	27.83	2.74	33.92	40.89	37.54	54.00	16.46	Average
	5	2223.15	28.16	2.74	33.44	45.22	42.68	54.00	11.32	Average
	6	2224.00	28.16	2.74	33.44	63.00	60.46	74.00	13.54	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.

FCC ID: W8U55FS3850 Page 4-16



Site no. : 3m Chamber Data no. : 43

Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

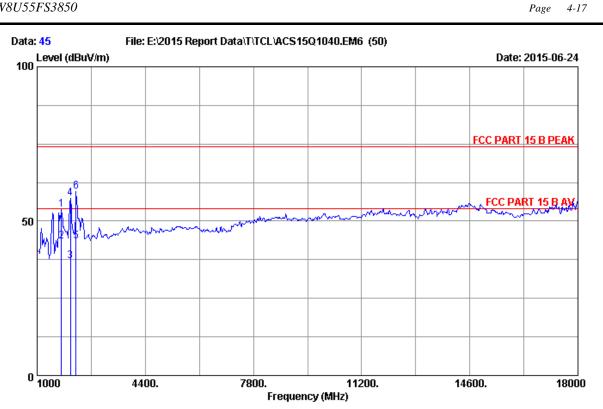
: Running"H"Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

			Ant.	Cable	Amp		Emission	1		
1	No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	1	1510.00	25.45	2.43	35.66	64.54	56.76	74.00	17.24	Peak
	2	1511.52	25.46	2.43	35.66	47.88	40.11	54.00	13.89	Average
	3	2020.00	27.83	2.74	33.92	60.39	57.04	74.00	16.96	Peak
	4	2021.50	27.83	2.74	33.92	47.89	44.54	54.00	9.46	Average
	5	2223.69	28.16	2.74	33.44	43.66	41.12	54.00	12.88	Average
	6	2224.00	28.16	2.74	33.44	52.62	50.08	74.00	23.92	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading





: 3m Chamber Site no. Data no. : 45

Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : HORIZONTAL

: FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

: Running"H"Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

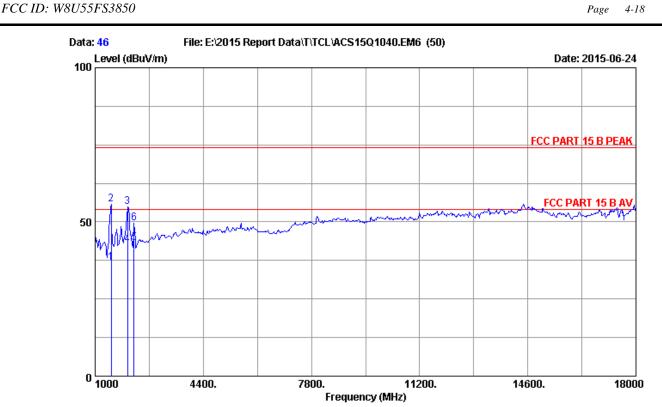
No	. Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emissior Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2 3 4 5	1765.00 1765.44 2053.96 2054.00 2223.96	26.67 26.67 27.89 27.89 28.16	2.59 2.59 2.74 2.74 2.74	34.78 34.78 33.86 33.86 33.44	59.36 49.00 40.21 60.51 45.87	53.84 43.48 36.98 57.28 43.33	74.00 54.00 54.00 74.00 54.00	20.16 10.52 17.02 16.72 10.67	Peak Average Average Peak Average
6	2224.00	28.16	2.74	33.44	62.27	59.73	74.00	14.27	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading

# AUDIX Technology (Shenzhen) Co., Ltd.

Engineer : Even\_Deng

Page 4-18



: 3m Chamber Site no. Data no. : 46 Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

: LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz

Test Mode : PC Mode

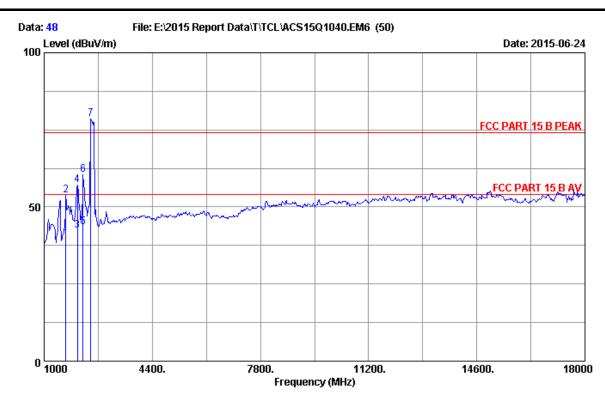
: Running"H"Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

		Ant.	Cable	Amp		Emissior	1		
No	. Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1509.78	25.45	2.43	35.66	44.52	36.74	54.00	17.26	Average
2	1510.00	25.45	2.43	35.66	63.50	55.72	74.00	18.28	Peak
3	2020.00	27.83	2.74	33.92	58.20	54.85	74.00	19.15	Peak
4	2022.81	27.84	2.74	33.92	45.88	42.54	54.00	11.46	Average
5	2223.16	28.16	2.74	33.44	45.66	43.12	54.00	10.88	Average
6	2224.00	28.16	2.74	33.44	52.22	49.68	74.00	24.32	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.





Site no. : 3m Chamber Data no. : 48

Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

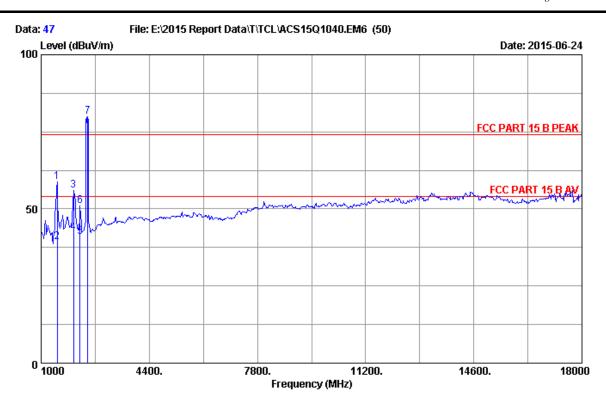
Power rating : AC 120V/60Hz Test Mode : TX Mode(WIFI)

:

No	. Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1679.54	26.26	2.54	35.04	45.66	39.42	54.00	14.58	Average
2	1680.00	26.26	2.54	35.04	60.12	53.88	74.00	20.12	Peak
3	2053.96	27.89	2.74	33.86	45.60	42.37	54.00	11.63	Average
4	2054.00	27.89	2.74	33.86	60.46	57.23	74.00	16.77	Peak
5	2223.16	28.16	2.74	33.44	45.87	43.33	54.00	10.67	Average
6	2224.00	28.16	2.74	33.44	62.99	60.45	74.00	13.55	Peak
7	2462.00	28.54	2.75	32.90	80.11	78.50			

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.





Site no. : 3m Chamber Data no. : 47
Dis. / Ant. : 3m 2014 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56%

EUT : LCD TV M/N:55FS3750

Power rating : AC 120V/60Hz Test Mode : TX Mode(WIFI)

:

			Ant.	Cable	Amp		Emission	1		
	No.	. Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
-										
	1	1510.00	25.45	2.43	35.66	66.55	58.77	74.00	15.23	Peak
	2	1511.20	25.45	2.43	35.66	46.98	39.20	54.00	14.80	Average
	3	2020.00	27.83	2.74	33.92	59.22	55.87	74.00	18.13	Peak
	4	2021.51	27.83	2.74	33.92	45.66	42.31	54.00	11.69	Average
	5	2223.96	28.16	2.74	33.44	43.60	41.06	54.00	12.94	Average
	6	2224.00	28.16	2.74	33.44	53.58	51.04	74.00	22.96	Peak
	7	2462.00	28.54	2.75	32.90	81.47	79.86			

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.

Treblin Technology (Shenzhen) edi, zie

	''
5. DEVIATION TO TEST SPECIFICATIONS [NONE]	