#### FCC ID:W8ULE39FHDE3010

# APPLICATION OF CERTIFICATION For

TTE Technology Inc.

#### LCD TV

Brand Name	Model Number
TCL	LE39FHDE3010; LE39FHDE3011

FCC ID: W8ULE39FHDE3010

Prepared for: TTE Technology Inc.

1255 Graphite Drive, Corona, CA 92881, U.S.A.

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

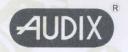
Report Number : ACS- F13102
Date of Test : Mar.29, 2013
Date of Report : Apr.25, 2013



#### FCC ID:W8ULE39FHDE3010

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FCC ID: W8ULE39FHDE3010

### TEST REPORT CERTIFICATION

Applicant

TTE Technology Inc.

Manufacturer

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

**EUT** Description

LCD TV

FCC ID

W8ULE39FHDE3010

(A) Model No. &:

Brand Name

Brand Name Model Number

TCL LE39FHDE3010; LE39FHDE3011

(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 2012,

ANSI C63.4: 2009

ICES-003 Issue 4 February 2004.

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: Mar.29,2013 Report of date: Apr.25, 2013

Prepared by:

Reviewed by:

Sun Zeng / Supervisor

Julia Zhu / Assistant

Audix Technology (Shenzhen) Co., Ltd. EMC 部門報告專用章

Stamp only for EMC Dept. Report

® 信擎科技 (深圳) 有限公司

Approved & Authorized Signer:

Signature: Lu / Manager

Ken Lu / 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.

EMISSION						
<b>Description of Test Item</b>	Standard	Results	Remarks			
Power Line Conducted Emission Test	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 17.91 dB at 0.53782MHz			
Radiated Emission Test (30-1000MHz)	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 6.26dB at 99.840MHz			
Radiated Emission Test (1-2GHz)	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 7.12dB at 1602.523MHz			



### 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description : LCD TV

Model Number : LE39FHDE3010; LE39FHDE3011

Only the before of article decorated box is different

FCC ID : W8ULE39FHDE3010

Applicant : TTE Technology Inc.

1255 Graphite Drive, Corona, CA 92881, U.S.A.

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

Section 19, Zhongkai Development Zone for New & High-Level Tech Industries, Huizhou, Guangdong Province, China, 516006.

FREQUENCIES USED AND GENERATED WITHIN DEVICE					
LVDS (HD)	78MHZ				
LVDS (FHD)	75MHZ				
IF	6MHz				
DC-DC	U302->385KHz				
DDR	390MHz				
AMP	384KHz				

Power Cord : Unshielded, Undetachable, 2.0m

Date of Test : Mar.29, 2013

Date of Receipt : Mar.28,2013

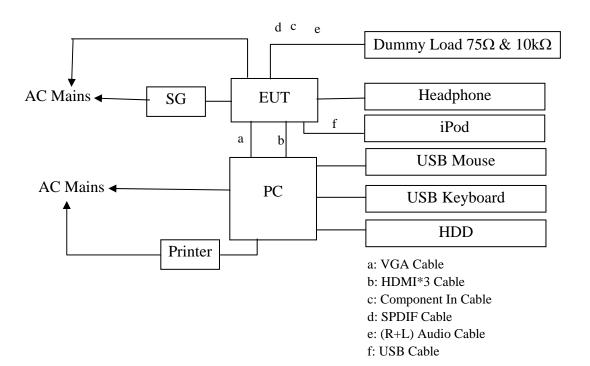
Sample Type : Prototype production



# 2.2.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type			
1.	Personal	Test PC M	DELL	Studio 540	224XK2X	☑FCC DoC ☑BSMI ID:R33002			
	Computer		ower Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)						
2.	USB Keyboard	ACS-EMC- K04R	DELL	SK-8115	CN-ODJ313-7161 6-6BB-049J	☑ FCC DoC ☑BSMI ID: T3A002			
		Data Cable: shielded	l, Undetachable, 2	2.0m					
3.	Headphone	ACS-EMC-EP03	OVANN	OV880V	N/A	□FCC ID □BSMI ID			
	Troub Priorio	Cable: Shielded, Un	detachabled, 4.0n	1					
		ACS-EMC-PT04	НР	C9079A	N/A	☑FCC DoC ☑BSMI ID: R33001			
4.									
5.	USB Mouse	ACS-EMC-M04R	DELL	M056UO	512024282	☑ FCC DoC ☑BSMI ID: R41108			
		Data Cable: shielded, Undetachable, 1.8m							
6.	iPod nano	ACS-EMC-IP03	APPLE	A1199	YM711H3LVQ5	☑FCC DoC ☑BSMI ID: R33057			
		Data Cable: Shielded	d, Detachabled, 1.	.0m					
7.	HDD	ACS-EMC-HDD03	Terasys	F12-UF	A0100215-53900 30	☑FCC DoC ☑BSMI ID: 4912A022			
		USB Cable: Shielded	d, Detachable, 1.8	3m					
8.	Dummy Load (10KΩ &75Ω)  Component In Cable: Unshielded, Detachabled, 1.5m  SPDIF Cable: Unshielded, Detachable, 1.5m  (R+L) Cable: Shielded, Detachable, 1.5m								
9.	D-Sub Cable: Shielded Detachable 1.5m								

# 2.3.Block diagram of connection between the EUT and simulators



(EUT: LCD TV)



#### 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: Feb.22, 2015

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

Registration Number: 794232 Valid Date: Oct.31, 2015

EMC Lab. : Certificated by DAkkS, Germany

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

Valid Date: Feb.01, 2014

Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2014

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

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.06 dB
	3.6 dB(30~200MHz, Polarize: H)
Uncertainty for Radiation Emission test	3.8 dB(30~200MHz, Polarize: V)
in 3m chamber	4.2 dB(200M~1GHz, Polarize: H)
	3.8 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in	3.1dB(Distance: 3m Polarize: V)
3m chamber (1GHz-18GHz)	3.7 dB(Distance: 3m Polarize: H)
Uncertainty for test site temperature	3%
and humidity	0.6℃

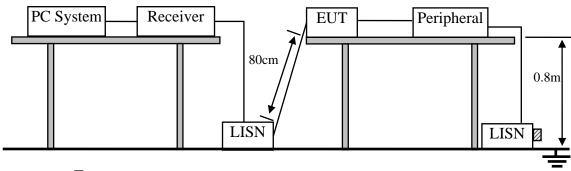


#### 3. POWER LINE CONDUCTED EMISSION MEASUREMENT

#### 3.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.31, 12	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Oct.31, 12	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 12	1 Year
4.	Terminator	Hubersuhner	$50\Omega$	No. 1	May.08, 12	1 Year
5.	Terminator	Hubersuhner	$50\Omega$	No. 2	May.08, 12	1 Year
6.	RF Cable	Fujikura	3D-2W	No.1	May.08, 12	1Year
7.	Coaxial Switch	Anritsu	MP59B	M50564	May.08, 12	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 12	1 Year

### 3.2.Block Diagram of Test Setup



☑ :50Ω 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 : LE39FHDE3010

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 ESHS10) is set at 9kHz.

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

#### 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. : LE39FHDE3010

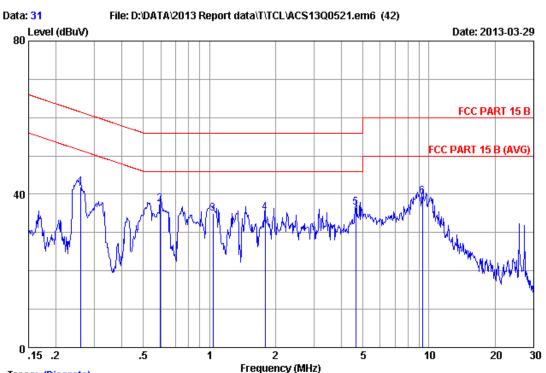
Test Date: Mar.29, 2013 Temperature: 25°C Humidity: 60%

The details of test modes are as follows:

No.	Test Mode	Input Port	Resolution &	Reference Test Data No.		
			Frequency	Line	Neutral	
1.			640*480 @60Hz	#31	#32	
2.	PC Mode	VGA	1024*768 @ 60Hz	#34	#33	
3.			1920*1080@60Hz	#35	#36	
4. ※		HDMI 1	1920*1080@60Hz	#38	#37	
5.		HDMI 2	1920*1080@60Hz	#39	#40	
6.		HDMI 3	1920*1080@60Hz	#42	#41	

(\* Worst test mode)





Data No

:31

Trace: (Discrete)

:1#conduction Site no

Dis./Ant. :\*\* 2012 ESH2-Z5 LINE

:FCC PART 15 B Limit

Env./Ins. :25\*C/60% Engineer :Dota-YAO

:LCD TV M/N:LE39FHDE3010

Power Rating : AC 120V/60Hz

:PC Mode Test Mode

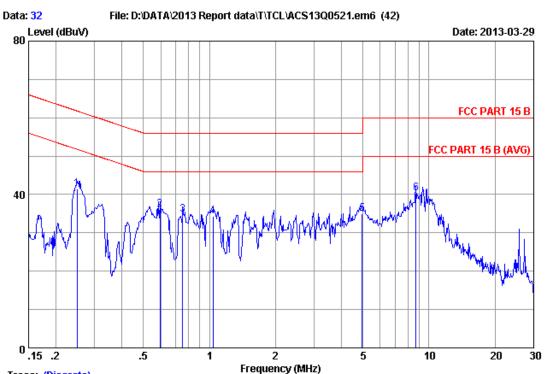
Running "H" Pattern And 1KHz Playing

VGA:640\*480@60Hz

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.26025	0.19	0.15	41.63	41.97	61.42	19.45	QP
2	0.59478	0.20	0.15	37.14	37.49	56.00	18.51	QP
3	1.037	0.21	0.14	34.69	35.04	56.00	20.96	QP
4	1.790	0.23	0.14	34.91	35.28	56.00	20.72	QP
5	4.647	0.30	0.15	36.08	36.53	56.00	19.47	QP
6	9.352	0.43	0.17	38.79	39.39	60.00	20.61	QP

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





:32

Trace: (Discrete)

:1#conduction Site no Data No

Dis./Ant. :\*\* 2012 ESH2-Z5 NEUTRAL

:FCC PART 15 B Limit

Env./Ins. :25\*C/60% Engineer :Dota-YAO

:LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

:PC Mode Test Mode

Running "H" Pattern And 1KHz Playing

VGA:640\*480@60Hz

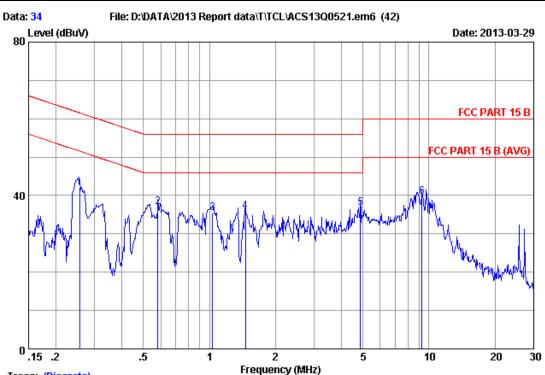
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24945	0.21	0.15	41.15	41.51	61.78	20.27	QP
2	0.59478	0.24	0.15	35.68	36.07	56.00	19.93	QP
3	0.75493	0.24	0.15	34.38	34.77	56.00	21.23	QP
4	1.037	0.24	0.14	33.97	34.35	56.00	21.65	QP
5	4.952	0.34	0.15	34.48	34.97	56.00	21.03	QP
6	8.729	0.42	0.16	39.65	40.23	60.00	19.77	QP

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

Data No



FCC ID: W8ULE39FHDE3010 *Page 3-5* 



Trace: (Discrete)

:1#conduction Site no

Dis./Ant. :\*\* 2012 ESH2-Z5 LINE

:FCC PART 15 B Limit

Env./Ins. :25\*C/60% Engineer :Dota-YAO

:LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

:PC Mode Test Mode

Running "H" Pattern And 1KHz Playing

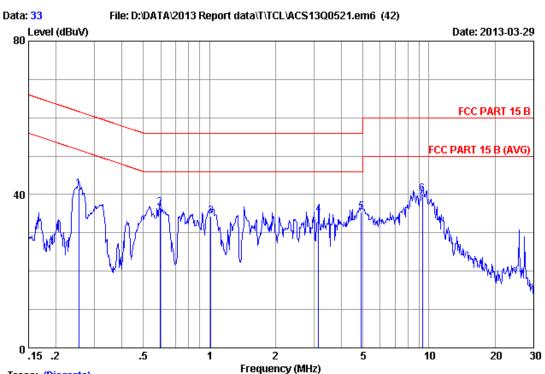
VGA:1024\*768@60Hz

		LISN	Cable		Emission	ι		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.25615	0.19	0.15	41.89	42.23	61.56	19.33	QP
2	0.58231	0.19	0.15	36.71	37.05	56.00	18.95	QP
3	1.032	0.21	0.14	34.99	35.34	56.00	20.66	QP
4	1.456	0.22	0.14	35.45	35.81	56.00	20.19	QP
5	4.874	0.31	0.15	36.23	36.69	56.00	19.31	QP
6	9.302	0.43	0.17	39.08	39.68	60.00	20.32	QP

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

Data No

FCC ID: W8ULE39FHDE3010 Page 3-6



Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :25\*C/60% Engineer :Dota-YAO

EUT :LCD TV M/N:LE39FHDE3010

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

Running "H" Pattern And 1KHz Playing

VGA:1024\*768@60Hz

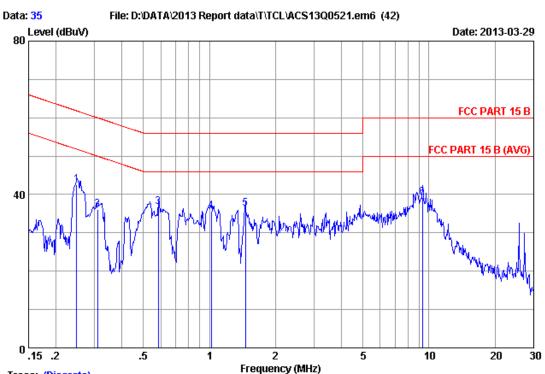
Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
0.25345	0.22	0.15	40.98	41.35	61.64	20.29	QP
0.59478	0.24	0.15	36.16	36.55	56.00	19.45	QP
1.016	0.24	0.14	34.01	34.39	56.00	21.61	QP
3.140	0.31	0.14	34.28	34.73	56.00	21.27	QP
4.926	0.34	0.15	35.02	35.51	56.00	20.49	QP
9.352	0.43	0.17	39.55	40.15	60.00	19.85	QP
	0.25345 0.59478 1.016 3.140 4.926	Freq Factor (MHz) (dB)  0.25345 0.22 0.59478 0.24 1.016 0.24 3.140 0.31 4.926 0.34	Freq Factor Loss (MHz) (dB) (dB) 0.25345 0.22 0.15 0.59478 0.24 0.15 1.016 0.24 0.14 3.140 0.31 0.14 4.926 0.34 0.15	Freq Factor Loss Reading (MHz) (dB) (dB) (dBuV)  0.25345 0.22 0.15 40.98 0.59478 0.24 0.15 36.16 1.016 0.24 0.14 34.01 3.140 0.31 0.14 34.28 4.926 0.34 0.15 35.02	Freq Factor Loss Reading Level (MHz) (dB) (dB) (dBuV) (dBuV)  0.25345 0.22 0.15 40.98 41.35  0.59478 0.24 0.15 36.16 36.55  1.016 0.24 0.14 34.01 34.39  3.140 0.31 0.14 34.28 34.73  4.926 0.34 0.15 35.02 35.51	Freq Factor Loss Reading Level Limits (MHz) (dB) (dB) (dBuV) (dBuV) (dBuV)  0.25345 0.22 0.15 40.98 41.35 61.64  0.59478 0.24 0.15 36.16 36.55 56.00  1.016 0.24 0.14 34.01 34.39 56.00  3.140 0.31 0.14 34.28 34.73 56.00  4.926 0.34 0.15 35.02 35.51 56.00	Freq (MHz)         Factor (dB)         Loss (dB)         Reading (dBuV)         Level (dBuV)         Limits (dBuV)         Margin (dBuV)           0.25345         0.22         0.15         40.98         41.35         61.64         20.29           0.59478         0.24         0.15         36.16         36.55         56.00         19.45           1.016         0.24         0.14         34.01         34.39         56.00         21.61           3.140         0.31         0.14         34.28         34.73         56.00         21.27           4.926         0.34         0.15         35.02         35.51         56.00         20.49

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

Data No



FCC ID: W8ULE39FHDE3010 Page 3-7



Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 LINE

Limit :FCC PART 15 B

Env./Ins. :25\*C/60% Engineer :Dota-YAO

EUT :LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

Test Mode : PC Mode

Running "H" Pattern And 1KHz Playing

VGA:1920\*1080@60Hz

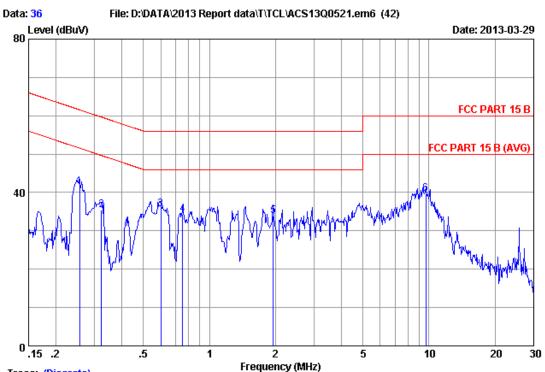
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24814	0.19	0.15	42.14	42.48	61.82	19.34	QP
2	0.30998	0.19	0.15	35.74	36.08	59.97	23.89	QP
3	0.58540	0.19	0.15	36.49	36.83	56.00	19.17	QP
4	1.021	0.21	0.14	35.25	35.60	56.00	20.40	QP
5	1.456	0.22	0.14	35.87	36.23	56.00	19.77	QP
6	9.352	0.43	0.17	38.65	39.25	60.00	20.75	QP

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

Data No



FCC ID: W8ULE39FHDE3010 *Page 3-8* 



Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 NEUTRAL

:FCC PART 15 B Limit

Env./Ins. :25\*C/60% Engineer :Dota-YAO

:LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

:PC Mode Test Mode

Running "H" Pattern And 1KHz Playing

VGA:1920\*1080@60Hz

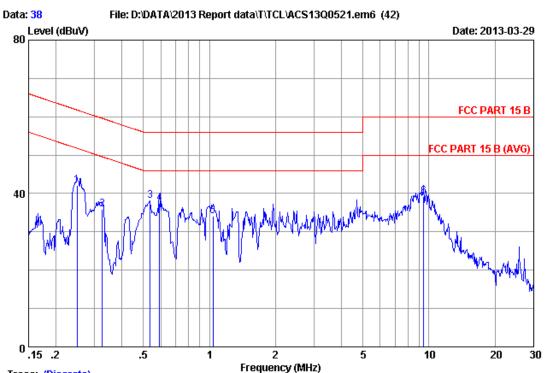
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.25615	0.22	0.15	41.02	41.39	61.56	20.17	QP
2	0.32169	0.22	0.15	35.16	35.53	59.66	24.13	QP
3	0.60112	0.24	0.15	35.36	35.75	56.00	20.25	QP
4	0.75493	0.24	0.15	33.83	34.22	56.00	21.78	QP
5	1.949	0.28	0.14	33.46	33.88	56.00	22.12	QP
6	9.654	0.44	0.17	39.10	39.71	60.00	20.29	QP

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

Data No



Page 3-9 FCC ID: W8ULE39FHDE3010



Trace: (Discrete)

:1#conduction Site no

Dis./Ant. :\*\* 2012 ESH2-Z5 LINE

:FCC PART 15 B Limit

Env./Ins. :25\*C/60% Engineer :Dota-YAO

:LCD TV M/N:LE39FHDE3010

Power Rating : AC 120V/60Hz

:PC Mode Test Mode

Running "H" Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

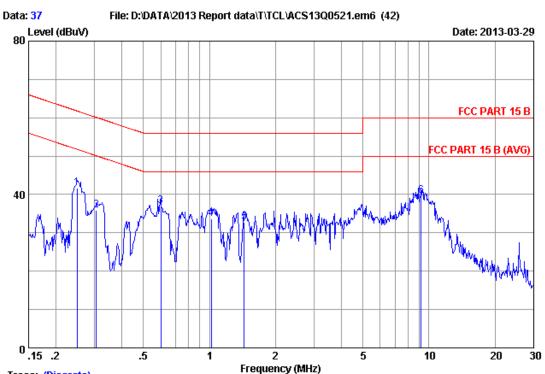
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24945	0.19	0.15	41.87	42.21	61.78	19.57	QP
2	0.32512	0.19	0.15	35.56	35.90	59.57	23.67	QP
3	0.53782	0.19	0.15	37.75	38.09	56.00	17.91	QP
4	0.59164	0.20	0.15	37.02	37.37	56.00	18.63	QP
5	1.037	0.21	0.14	33.81	34.16	56.00	21.84	QP
6	9.451	0.44	0.17	38.50	39.11	60.00	20.89	QP

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

Data No



FCC ID: W8ULE39FHDE3010 Page 3-10



Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :25\*C/60% Engineer :Dota-YAO

EUT :LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

Test Mode : PC Mode

Running "H" Pattern And 1KHz Playing

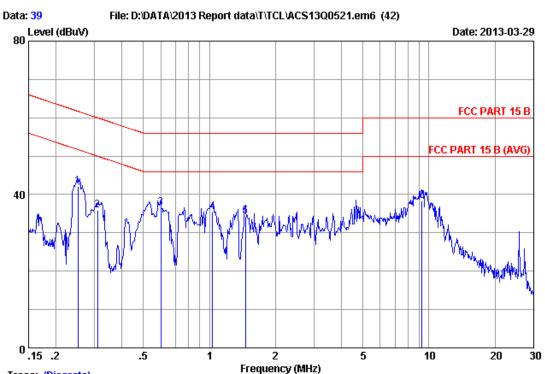
HDMI 1:1920\*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24945	0.21	0.15	41.39	41.75	61.78	20.03	QP
2	0.30509	0.22	0.15	35.60	35.97	60.10	24.13	QP
3	0.60112	0.24	0.15	36.50	36.89	56.00	19.11	QP
4	1.021	0.24	0.14	33.21	33.59	56.00	22.41	QP
5	1.441	0.26	0.14	32.31	32.71	56.00	23.29	QP
6	9.204	0.43	0.17	39.18	39.78	60.00	20.22	QP

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



FCC ID: W8ULE39FHDE3010 Page 3-11



Trace: (Discrete)

:1#conduction Site no Data No

Dis./Ant. :\*\* 2012 ESH2-Z5 LINE

:FCC PART 15 B Limit

Env./Ins. :25\*C/60% Engineer :Dota-YAO

:LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

:PC Mode Test Mode

Running "H" Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

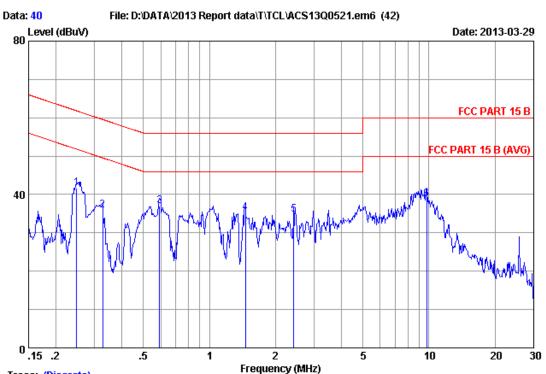
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.25211	0.19	0.15	41.89	42.23	61.69	19.46	QP
2	0.30998	0.19	0.15	35.56	35.90	59.97	24.07	QP
3	0.60112	0.20	0.15	36.20	36.55	56.00	19.45	QP
4	1.032	0.21	0.14	35.05	35.40	56.00	20.60	QP
5	1.456	0.22	0.14	33.91	34.27	56.00	21.73	QP
6	9.302	0.43	0.17	37.70	38.30	60.00	21.70	QP

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

Data No



FCC ID: W8ULE39FHDE3010 Page 3-12



Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :25\*C/60% Engineer :Dota-YAO

EUT :LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

Test Mode : PC Mode

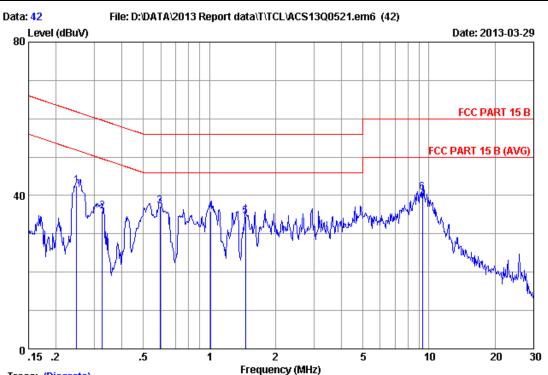
Running "H" Pattern And 1KHz Playing

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	0.24814	0.21	0.15	41.39	41.75	61.82	20.07	QP
2	0.32685	0.22	0.15	35.46	35.83	59.53	23.70	QP
3	0.59164	0.23	0.15	36.67	37.05	56.00	18.95	QP
4	1.456	0.26	0.14	34.89	35.29	56.00	20.71	QP
5	2.422	0.29	0.14	34.44	34.87	56.00	21.13	QP
6	9.757	0.44	0.17	38.14	38.75	60.00	21.25	QP

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





Data No

:42

Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 LINE

Limit :FCC PART 15 B

Env./Ins. :25\*C/60% Engineer :Dota-YAO

EUT :LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

Test Mode : PC Mode

Running "H" Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

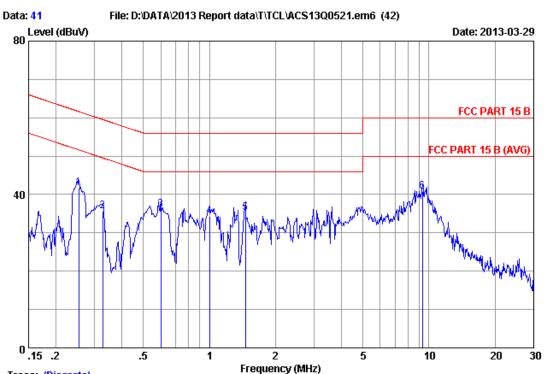
No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.24814	0.19	0.15	42.30	42.64	61.82	19.18	QP
2	0.32512	0.19	0.15	35.58	35.92	59.57	23.65	QP
3	0.59478	0.20	0.15	36.82	37.17	56.00	18.83	QP
4	1.016	0.21	0.14	35.51	35.86	56.00	20.14	QP
5	1.456	0.22	0.14	34.27	34.63	56.00	21.37	QP
6	9.352	0.43	0.17	40.14	40.74	60.00	19.26	QP

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

Data No



FCC ID: W8ULE39FHDE3010 Page 3-14



Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :25\*C/60% Engineer :Dota-YAO

EUT :LCD TV M/N:LE39FHDE3010

Power Rating :AC 120V/60Hz

Test Mode : PC 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	0.25345	0.22	0.15	41.36	41.73	61.64	19.91	QP
2	0.32685	0.22	0.15	35.36	35.73	59.53	23.80	QP
3	0.60112	0.24	0.15	35.64	36.03	56.00	19.97	QP
4	0.99968	0.24	0.14	34.01	34.39	56.00	21.61	QP
5	1.456	0.26	0.14	34.81	35.21	56.00	20.79	QP
6	9.352	0.43	0.17	40.20	40.80	60.00	19.20	QP

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



# AUDIX Technology (Shenzhen) Co., Ltd.

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# 4. RADIATED EMISSION MEASUREMENT

### 4.1.Test Equipment

4.1.1.For frequency range 30MHz~1000MHz

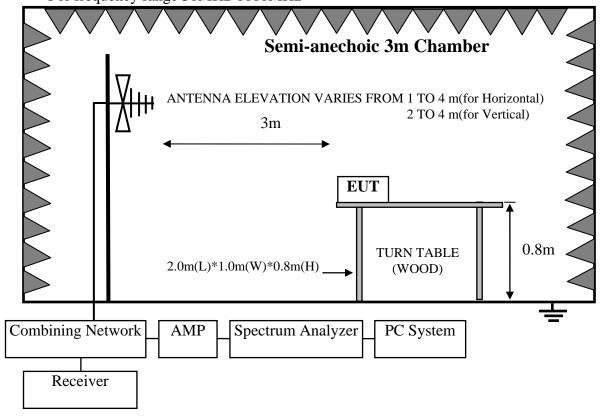
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24,12	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 12	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 12	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 12	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Dec.26, 10	2.0 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	May.08, 12	1 Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 12	1 Year

#### 4.1.2.For frequency range 1GHz~2GHz

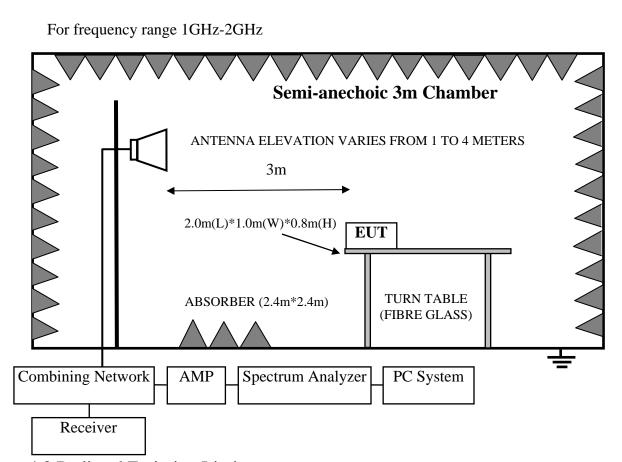
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 12	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	June.05, 12	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 12	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	May.08, 12	1 Year

### 4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz







#### 4.3. Radiated Emission Limit

Frequency	Distance	Field Strengths Limits
MHz	(Meters)	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 Disturbance Test Results

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

EUT: LCD TV Model No. : LE39FHDE3010

#### 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: Mar.29,2013 Temperature: 24°C Humidity: 56%

The details of test modes are as follows:

No.	Test Mode	Input Port	Resolution &	Reference Test Data No.		
		_	Frequency	Horizontal	Vertical	
1.			640*480 @60Hz	#42	#41	
2.		VGA	1024*768 @ 60Hz	#39	#40	
3. ※	PC Mode		1920*1080@60Hz	#38	#37	
4.	PC Wiode	HDMI 1	1920*1080@60Hz	#35	#36	
5.		HDMI 2	1920*1080@60Hz	#34	#33	
6.		HDMI 3	1920*1080@60Hz	#31	#32	

(\* Worst test mode)



#### For frequency range 1GHz~2GHz

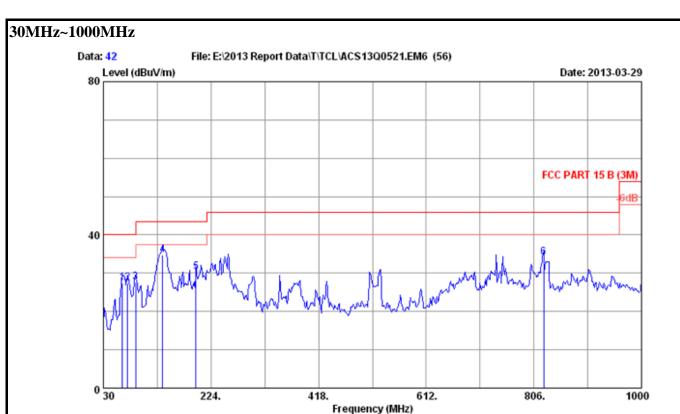
The EUT with below test mode were measured within Anechoic Chamber and the test results listed in next pages

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: Mar.29, 2013 Temperature: 24°C Humidity: 56%

NO.	Test Mode	Desclution & Frequency	Reference Test Data No.		
NO.	Test Mode	Resolution & Frequency	Horizontal	Vertical	
1.	VGA	1920*1080 @60Hz	#44	#43	
2.	HDMI 1	1920*1080 @60Hz	#49	#50	
3.	HDMI 2	1920*1080 @60Hz	#48	#47	
4.	HDMI 3	1920*1080 @60Hz	#45	#46	





Site no. : 3m Chamber Data no. : 42

Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

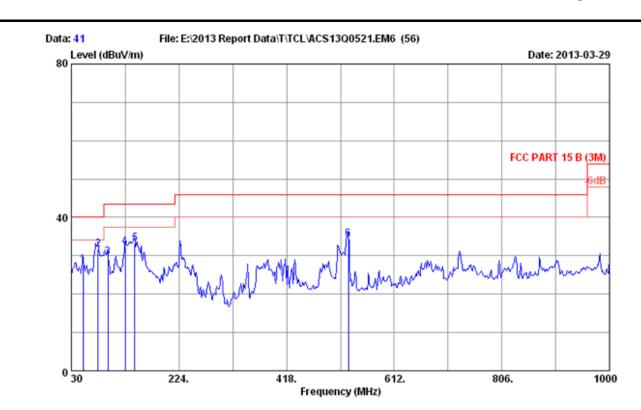
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:640\*480@60Hz

Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)			_	Remark
		0.60	14 70		40.00	10 50	^n
63.950	11.99	0.69	14.79	27.47	40.00	12.53	QP
73.650	10.26	0.72	16.47	27.45	40.00	12.55	QP
88.200	9.41	0.79	17.34	27.54	43.50	15.96	QP
136.700	13.27	0.93	20.56	34.76	43.50	8.74	QP
196.840	10.08	1.06	19.18	30.32	43.50	13.18	QP
823.460	20.86	2.72	10.45	34.03	46.00	11.97	QP
	(MHz) 63.950 73.650 88.200 136.700 196.840	Freq. Factor (MHz) (dB/m) 63.950 11.99 73.650 10.26 88.200 9.41 136.700 13.27 196.840 10.08	Freq. Factor Loss (MHz) (dB/m) (dB) 63.950 11.99 0.69 73.650 10.26 0.72 88.200 9.41 0.79 136.700 13.27 0.93 196.840 10.08 1.06	Freq. Factor Loss Reading (MHz) (dB/m) (dB) (dBuV)  63.950 11.99 0.69 14.79 73.650 10.26 0.72 16.47 88.200 9.41 0.79 17.34 136.700 13.27 0.93 20.56 196.840 10.08 1.06 19.18	Freq. Factor Loss Reading Level (MHz) (dB/m) (dB) (dBuV) (dBuV/m)  63.950 11.99 0.69 14.79 27.47 73.650 10.26 0.72 16.47 27.45 88.200 9.41 0.79 17.34 27.54 136.700 13.27 0.93 20.56 34.76 196.840 10.08 1.06 19.18 30.32	Freq. Factor Loss Reading Level Limits (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (63.950 11.99 0.69 14.79 27.47 40.00 73.650 10.26 0.72 16.47 27.45 40.00 88.200 9.41 0.79 17.34 27.54 43.50 136.700 13.27 0.93 20.56 34.76 43.50 196.840 10.08 1.06 19.18 30.32 43.50	Freq. Factor Loss Reading Level Limits Margin (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (dB)  63.950 11.99 0.69 14.79 27.47 40.00 12.53 73.650 10.26 0.72 16.47 27.45 40.00 12.55 88.200 9.41 0.79 17.34 27.54 43.50 15.96 136.700 13.27 0.93 20.56 34.76 43.50 8.74 196.840 10.08 1.06 19.18 30.32 43.50 13.18

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





Site no. : 3m Chamber Data no. : 41
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

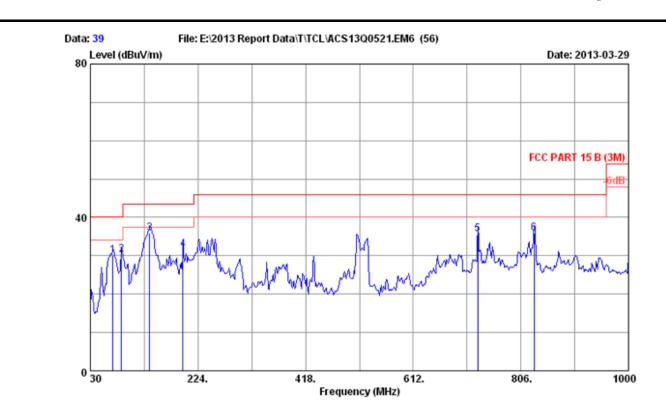
VGA:640\*480@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
1	51.340	13.43	0.63	13.59	27.65	40.00	12.35	QP
2	78.500	9.52	0.76	21.31	31.59	40.00	8.41	QP
3	95.960	9.86	0.82	19.05	29.73	43.50	13.77	QP
4	127.000	12.62	0.91	18.75	32.28	43.50	11.22	QP
5	144.460	13.80	0.94	18.46	33.20	43.50	10.30	QP
6	529.550	17.04	1.91	15.44	34.39	46.00	11.61	QP

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

The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 39

Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

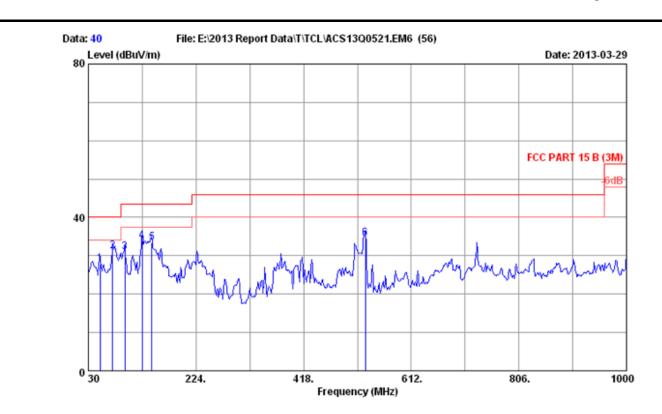
Test Mode : Running "H" Pattern And 1KHz Playing

VGA: 1024\*768@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	70 740			10.64		40.00		ΔD
1	70.740	10.71	0.72	18.64	30.07	40.00	9.93	QP
2	86.260	9.38	0.79	20.03	30.20	40.00	9.80	QP
3	136.700	13.27	0.93	21.75	35.95	43.50	7.55	QP
4	196.840	10.08	1.06	20.40	31.54	43.50	11.96	QP
5	728.400	20.01	2.50	13.07	35.58	46.00	10.42	QP
6	830.250	20.91	2.73	12.18	35.82	46.00	10.18	QP

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





Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

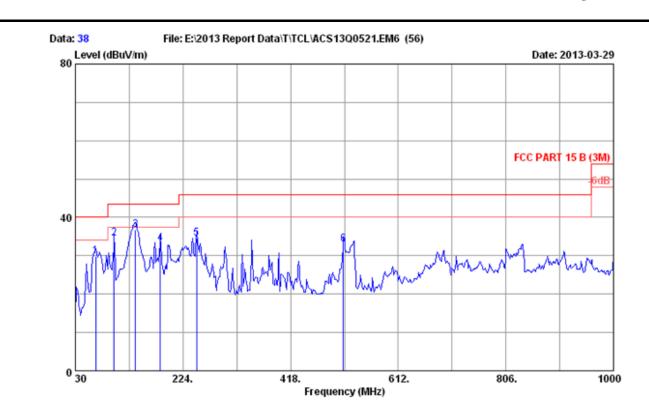
VGA: 1024\*768@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
1	51.340	13.43	0.63	13.76	27.82	40.00	12.18	QP
2	73.650	10.26	0.72	20.17	31.15	40.00	8.85	QP
3	95.960	9.86	0.82	20.20	30.88	43.50	12.62	QP
4	127.000	12.62	0.91	20.31	33.84	43.50	9.66	QP
5	144.460	13.80	0.94	18.66	33.40	43.50	10.10	QP
6	529.550	17.04	1.91	15.56	34.51	46.00	11.49	QP

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

The emission levels that are 20dB below the official limit are not reported.





Site no. : 3m Chamber Data no. : 38

Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

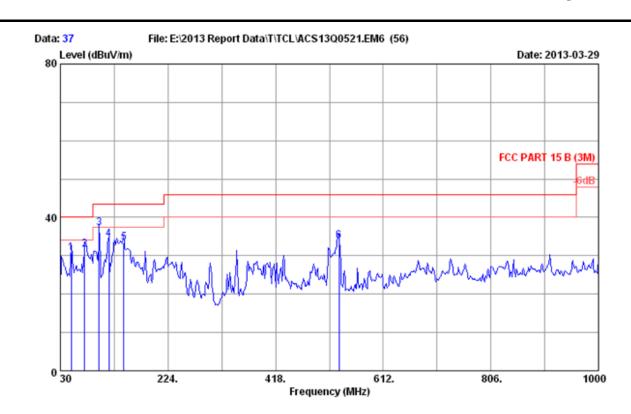
Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	_	Remark
1	66.860	11.43	0.69	17.79	29.91	40.00	10.09	QP
2	99.840	10.14	0.85	23.63	34.62	43.50	8.88	QP
3	138.640	13.41	0.93	22.32	36.66	43.50	6.84	QP
4	183.260	11.29	1.03	20.92	33.24	43.50	10.26	QP
5	248.250	11.55	1.16	21.87	34.58	46.00	11.42	QP
6	513.060	16.75	1.87	14.38	33.00	46.00	13.00	QP

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



Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

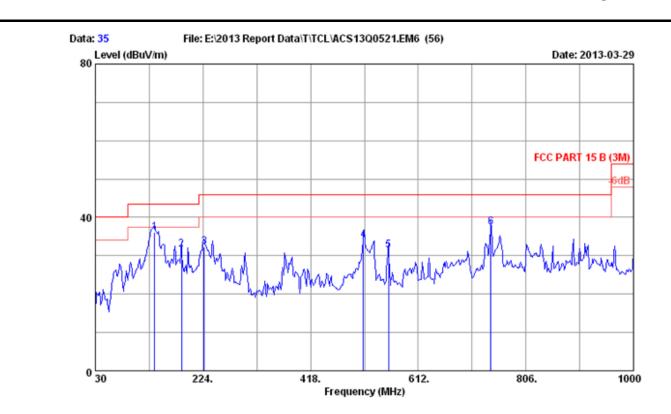
Test Mode : Running "H" Pattern And 1KHz Playing

VGA: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	49.400	13.55	0.63	16.60	30.78	40.00	9.22	OP
2	73.650	10.26	0.72	20.68	31.66	40.00	8.34	QP
3	99.840	10.14	0.85	26.25	37.24	43.50	6.26	QP
4	117.300	11.94	0.88	21.49	34.31	43.50	9.19	QP
5	144.460	13.80	0.94	18.75	33.49	43.50	10.01	QP
6	532.460	17.09	1.93	14.94	33.96	46.00	12.04	QP

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





Site no. : 3m Chamber Data no. : 35

Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

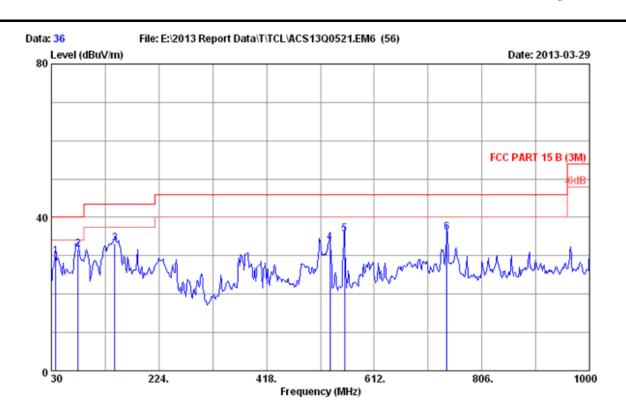
Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		Margin (dB)	Remark
	126 700	12 27		21 04	26 14	42 50	7 36	OD.
1	136.700	13.27	0.93	21.94	36.14	43.50	7.36	QP
2	185.200	11.05	1.03	19.61	31.69	43.50	11.81	QP
3	225.940	10.98	1.12	20.24	32.34	46.00	13.66	QP
4	513.060	16.75	1.87	15.54	34.16	46.00	11.84	QP
5	558.650	17.54	1.99	11.99	31.52	46.00	14.48	QP
6	742.950	20.19	2.54	14.66	37.39	46.00	8.61	QP

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



Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

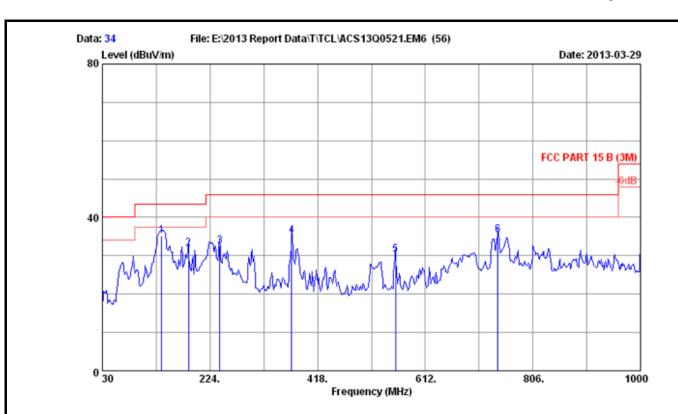
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_			_	Remark
27 760	12 77	0 51	15 60	20 07	40 00	10 02	OB
37.700	13.77	0.51	15.09	29.97	40.00	10.03	QP
78.500	9.52	0.76	21.35	31.63	40.00	8.37	QP
144.460	13.80	0.94	18.53	33.27	43.50	10.23	QP
532.460	17.09	1.93	14.32	33.34	46.00	12.66	QP
558.650	17.54	1.99	16.12	35.65	46.00	10.35	QP
742.950	20.19	2.54	13.35	36.08	46.00	9.92	QP
	37.760 78.500 144.460 532.460 558.650	Freq. Factor (MHz) (dB/m) 37.760 13.77 78.500 9.52 144.460 13.80 532.460 17.09 558.650 17.54	Freq. Factor Loss (MHz) (dB/m) (dB) 37.760 13.77 0.51 78.500 9.52 0.76 144.460 13.80 0.94 532.460 17.09 1.93 558.650 17.54 1.99	Freq. Factor Loss Reading (MHz) (dB/m) (dB) (dBuV)  37.760 13.77 0.51 15.69 78.500 9.52 0.76 21.35 144.460 13.80 0.94 18.53 532.460 17.09 1.93 14.32 558.650 17.54 1.99 16.12	Freq. Factor Loss Reading Level (MHz) (dB/m) (dB) (dBuV) (dBuV/m)  37.760 13.77 0.51 15.69 29.97 78.500 9.52 0.76 21.35 31.63 144.460 13.80 0.94 18.53 33.27 532.460 17.09 1.93 14.32 33.34 558.650 17.54 1.99 16.12 35.65	Freq. Factor Loss Reading Level Limits (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m)  37.760 13.77 0.51 15.69 29.97 40.00 78.500 9.52 0.76 21.35 31.63 40.00 144.460 13.80 0.94 18.53 33.27 43.50 532.460 17.09 1.93 14.32 33.34 46.00 558.650 17.54 1.99 16.12 35.65 46.00	Freq. Factor Loss Reading Level Limits Margin (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (dB)  37.760 13.77 0.51 15.69 29.97 40.00 10.03 78.500 9.52 0.76 21.35 31.63 40.00 8.37 144.460 13.80 0.94 18.53 33.27 43.50 10.23 532.460 17.09 1.93 14.32 33.34 46.00 12.66 558.650 17.54 1.99 16.12 35.65 46.00 10.35

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

The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 34

Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

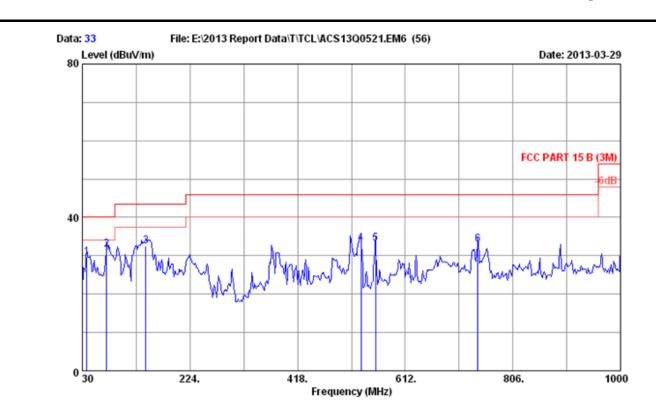
Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
	126 700				25 11	42 50		O.D.
1	136.700	13.27	0.93	20.91	35.11	43.50	8.39	QP
2	185.200	11.05	1.03	19.86	31.94	43.50	11.56	QP
3	241.460	11.47	1.15	19.85	32.47	46.00	13.53	QP
4	371.440	14.25	1.48	19.49	35.22	46.00	10.78	QP
5	558.650	17.54	1.99	10.76	30.29	46.00	15.71	QP
6	742.950	20.19	2.54	12.78	35.51	46.00	10.49	QP

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



Site no. : 3m Chamber Data no. : 33
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

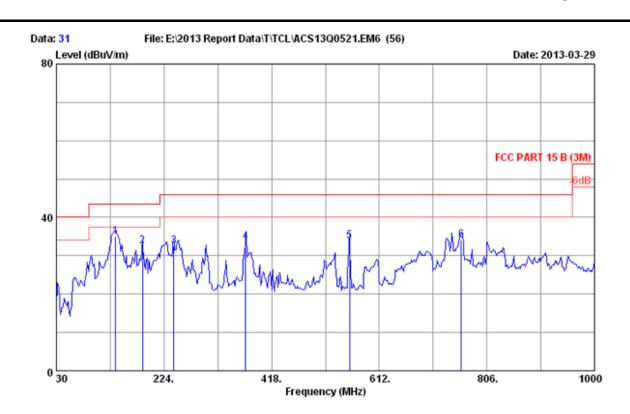
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
1	37.760	13.77	0.51	15.33	29.61	40.00	10.39	OP
2	73.650	10.26	0.72	20.61	31.59		8.41	QP
3	144.460	13.80	0.94	17.75	32.49	43.50	11.01	QP
4	532.460	17.09	1.93	14.17	33.19	46.00	12.81	QP
5	558.650	17.54	1.99	13.69	33.22	46.00	12.78	QP
6	742.950	20.19	2.54	10.26	32.99	46.00	13.01	QP

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

The emission levels that are 20dB below the official limit are not reported.



Dis. / Ant. : 3m 9168-429 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

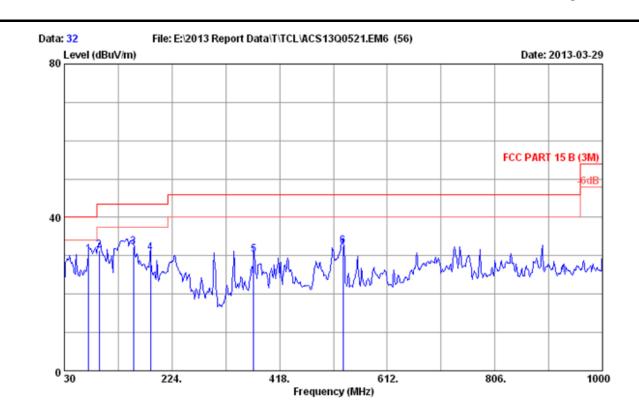
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
1	136.700	13.27	0.93	20.70	34.90	43.50	8.60	QP
2	185.200	11.05	1.03	20.48	32.56	43.50	10.94	QP
3	241.460	11.47	1.15	19.93	32.55	46.00	13.45	QP
4	371.440	14.25	1.48	17.90	33.63	46.00	12.37	QP
5	558.650	17.54	1.99	14.31	33.84	46.00	12.16	QP
6	759.440	20.37	2.58	11.25	34.20	46.00	11.80	QP

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





Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/65% Engineer : Even\_Deng

EUT : LCD TV M/N:LE39FHDE3010

Power rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

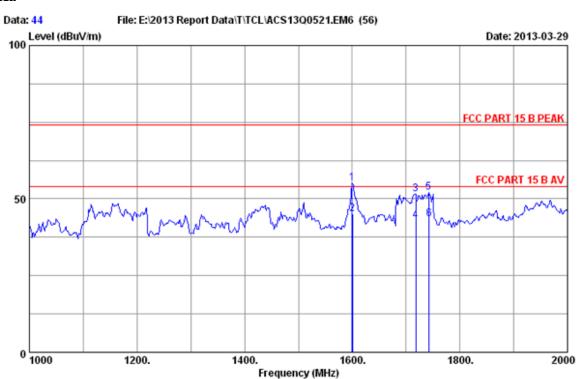
HDMI 3:1920\*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
1	73.650	10.26	0.72	19.27	30.25	40.00	9.75	OP
2	93.050	9.66	0.82	20.91	31.39		12.11	OP
3	154.160	14.15	0.97	17.30	32.42	43.50	11.08	QP
4	185.200	11.05	1.03	18.68	30.76	43.50	12.74	QP
5	371.440	14.25	1.48	14.53	30.26	46.00	15.74	QP
6	532.460	17.09	1.93	13.47	32.49	46.00	13.51	QP

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

The emission levels that are 20dB below the official limit are not reported.





Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

Power Rating : AC 120V/60Hz

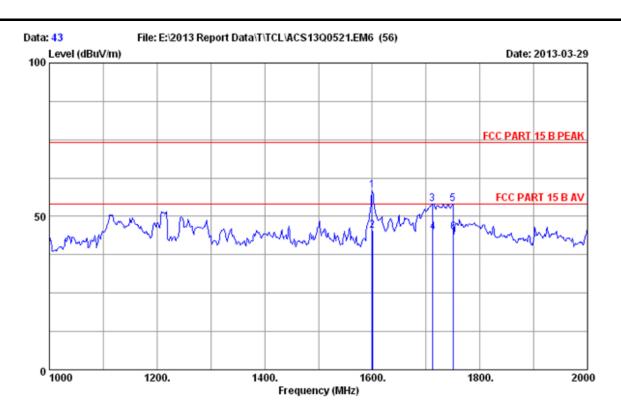
Test Mode : Running "H" Pattern And 1KHz Playing

VGA: 1920\*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
1	1600.000	25.98	1.04	33.94	62.01	55.09	74.00	18.91	Peak
2	1600.254	25.98	1.04	33.94	52.10	45.18	54.00	8.82	Average
3	1718.000	26.42	1.07	33.87	57.94	51.56	74.00	22.44	Peak
4	1718.247	26.42	1.07	33.87	49.20	42.82	54.00	11.18	Average
5	1742.000	26.55	1.08	33.85	58.21	51.99	74.00	22.01	Peak
6	1742.512	26.55	1.08	33.85	49.59	43.37	54.00	10.63	Average

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





Site no. : 3m Chamber Data no. : 43
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

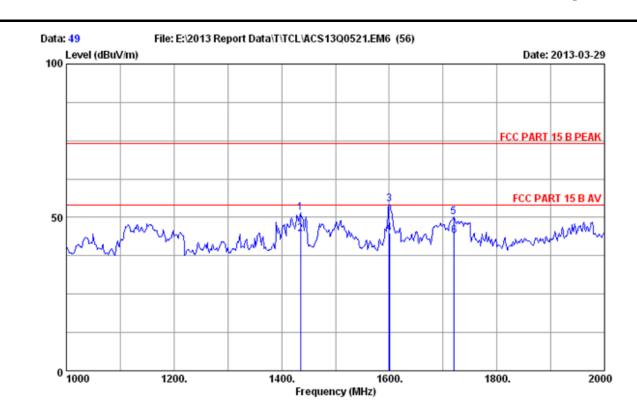
Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1920\*1080@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1600.000	25.98	1.04	33.94	65.44	58.52	74.00	15.48	Peak
2	1600.258	25.98	1.04	33.94	52.20	45.28	54.00	8.72	Average
3	1712.000	26.42	1.07	33.87	60.53	54.15	74.00	19.85	Peak
4	1712.257	26.42	1.07	33.87	51.20	44.82	54.00	9.18	Average
5	1750.000	26.55	1.08	33.85	60.24	54.02	74.00	19.98	Peak
6	1750.951	26.55	1.08	33.85	51.20	44.98	54.00	9.02	Average

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



Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

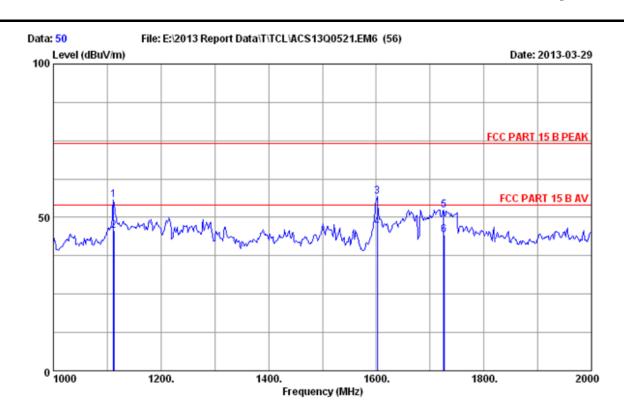
Power Rating : AC 120V/60Hz

Test 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	1435.000	25.35	1.01	34.01	59.25	51.60	74.00	22.40	Peak
2	1435.576	25.35	1.01	34.01	52.10	44.45	54.00	9.55	Average
3	1600.000	25.98	1.04	33.94	61.25	54.33	74.00	19.67	Peak
4	1600.631	25.98	1.04	33.94	51.90	44.98	54.00	9.02	Average
5	1720.000	26.42	1.07	33.87	56.49	50.11	74.00	23.89	Peak
6	1720.418	26.42	1.07	33.87	50.30	43.92	54.00	10.08	Average

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



Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

Power Rating : AC 120V/60Hz

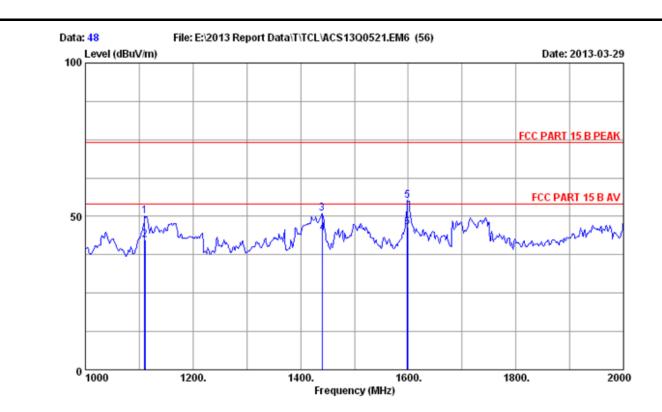
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1920\*1080@60Hz

		Ant.	Cable	AMP		Emission	ı		
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1112.000	23.78	0.97	34.08	65.00	55.67	74.00	18.33	Peak
2	1112.249	23.78	0.97	34.08	54.90	45.57	54.00	8.43	Average
3	1602.000	25.98	1.04	33.94	63.66	56.74	74.00	17.26	Peak
4	1602.523	25.98	1.04	33.94	53.80	46.88	54.00	7.12	Average
5	1725.000	26.49	1.07	33.87	58.78	52.47	74.00	21.53	Peak
6	1725.841	26.49	1.07	33.86	50.49	44.19	54.00	9.81	Average

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





Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

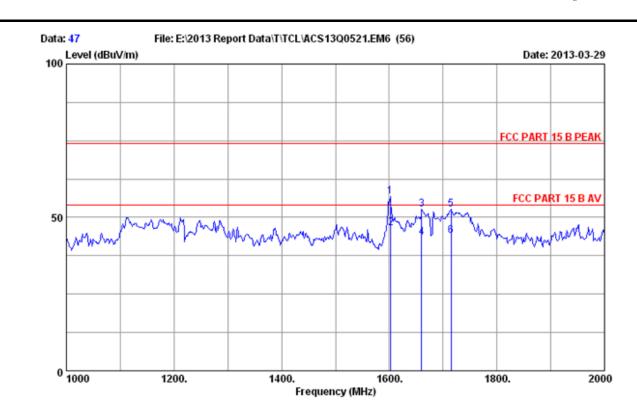
Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1110.000	23.70	0.96	34.08	59.59	50.17	74.00	23.83	Peak
2	1110.913	23.78	0.97	34.08	51.70	42.37	54.00	11.63	Average
3	1440.000	25.35	1.01	34.01	58.76	51.11	74.00	22.89	Peak
4	1440.854	25.35	1.01	34.01	52.10	44.45	54.00	9.55	Average
5	1598.000	25.98	1.04	33.94	61.98	55.06	74.00	18.94	Peak
6	1598.746	25.98	1.04	33.94	53.40	46.48	54.00	7.52	Average

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



Site no. : 3m Chamber Data no. : 47
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

Power Rating : AC 120V/60Hz

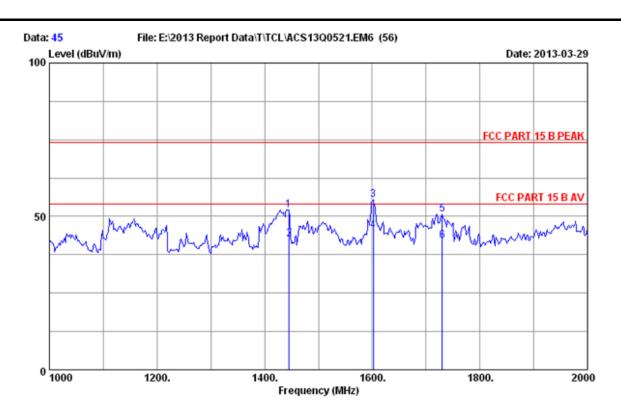
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1920\*1080@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1602.000	25.98	1.04	33.94	63.69	56.77	74.00	17.23	Peak
2	1602.851	25.98	1.04	33.94	53.50	46.58	54.00	7.42	Average
3	1660.000	26.23	1.06	33.90	59.21	52.60	74.00	21.40	Peak
4	1660.472	26.23	1.06	33.90	50.20	43.59	54.00	10.41	Average
5	1715.000	26.42	1.07	33.87	59.16	52.78	74.00	21.22	Peak
6	1715.249	26.42	1.07	33.87	50.40	44.02	54.00	9.98	Average

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





Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

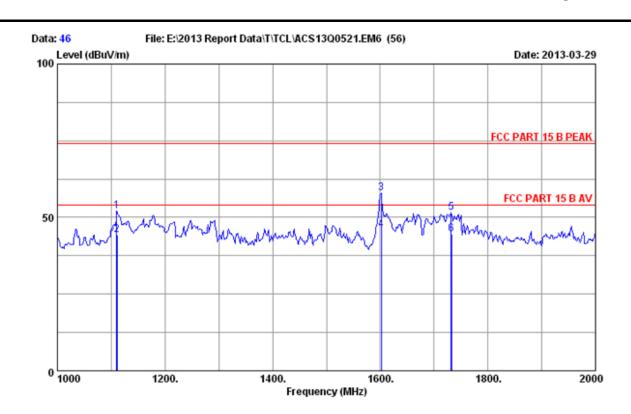
Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1445.000	25.35	1.01	34.01	59.78	52.13	74.00	21.87	Peak
2	1445.523	25.35	1.01	34.01	50.30	42.65	54.00	11.35	Average
3	1602.000	25.98	1.04	33.94	62.22	55.30	74.00	18.70	Peak
4	1602.253	25.98	1.04	33.94	52.30	45.38	54.00	8.62	Average
5	1730.000	26.49	1.07	33.86	57.04	50.74	74.00	23.26	Peak
6	1730.243	26.49	1.07	33.86	48.50	42.20	54.00	11.80	Average

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



Site no. : 3m Chamber Data no. : 46
Dis. / Ant. : 3m 2011 3115 9607-4877 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE39FHDE3010

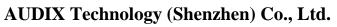
Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1920\*1080@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1110.000	23.70	0.96	34.08	61.57	52.15	74.00	21.85	Peak
2	1110.695	23.78	0.97	34.08	53.60	44.27	54.00	9.73	Average
3	1602.000	25.98	1.04	33.94	64.86	57.94	74.00	16.06	Peak
4	1602.485	25.98	1.04	33.94	52.80	45.88	54.00	8.12	Average
5	1732.000	26.49	1.07	33.86	57.87	51.57	74.00	22.43	Peak
6	1732.472	26.49	1.07	33.86	50.90	44.60	54.00	9.40	Average

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





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5. DEVIATION TO TEST SPECIFICATIONS [NONE]