#### FCC ID:W8UL40FHDF12TA

### APPLICATION OF CERTIFICATION For

TTE Technology Inc.

#### LCD TV

Brand Name	Model Number
TCL	L40FHDF12TA

FCC ID: W8UL40FHDF12TA

Prepared for: TTE Technology Inc.

5541 West 74th Street, Indianapolis, IN 46268, 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

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Report Number : ACS-F11063

Date of Test : Feb.23~Mar.17, 2011

Date of Report : Mar.17, 2011



#### FCC ID:W8UL40FHDF12TA

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FCC ID: W8UL40FHDF12TA

#### **TEST** REPORT CERTIFICATION

**Applicant** 

TTE Technology Inc.

Manufacturer

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

**EUT Description** 

LCD TV

FCC ID

W8UL40FHDF12TA

(A) Model No. &

Brand Name Model Number

L40FHDF12TA

**Brand Name** 

(B) Serial No.

: N/A

(C) Test Voltage

: AC 120V/60Hz

TCL

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2008, ANSI C63.4-2003 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.

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.

Date of Test: Feb.23<sup>-</sup> Mar.17, 2011 Report of date: Mar.17, 2011

AUDIX)

Prepared by:

Reviewer by:

Sun Zeng / Supervisor

Blove Ye / Assistant

® 信華科技 (深圳) 有限公司

Audix Technology (Shenzhen) Co., Ltd.

EMC部門報告專用章

Stamp only for EMC Dept. Report

Approved & Authorized Signer:

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: 2008 ANSI C63.4: 2003	PASS	Meets Class B Limit Minimum passing margin is 14.15dB at 4.299MHz			
Radiated Emission Test	FCC Part 15: 2008 ANSI C63.4: 2003	PASS	Meets Class B Limit Minimum passing margin is 3.12dB at 390.850MHz			



# 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description : LCD TV

Model Number : Brand Name Model Number

TCL L40FHDF12TA

FCC ID : W8UL40FHDF12TA

Applicant : TTE Technology Inc.

5541 West 74th Street, Indianapolis, IN 46268, 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					
X54M1	45-OSC54M-0Y1CR 54MHz				
LVDS CLOCK	75MHZ				
IF	44MHz				
DC-DC	U302->385KHz	U303->1MHz			
DDR	390MHz				
AMP	384KHz				

Power Cord : Unshielded, Undetachable, 1.5m

Date of Test : Feb.23~Mar.17, 2011

Date of Receipt : Feb.22, 2011

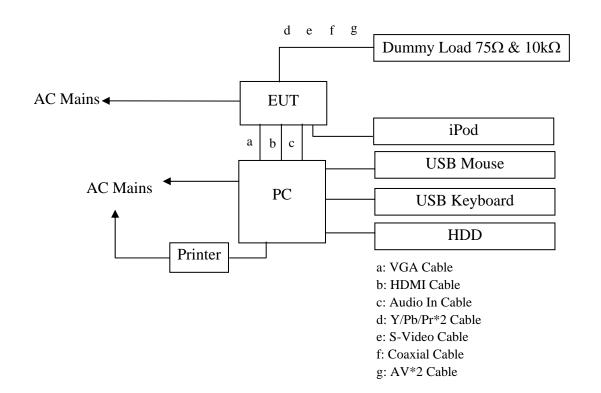
Sample Type : Prototype production



# 2.2.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type		
1.	Personal Computer	Test PC N	DELL	Studio 540		☑FCC DoC ☑BSMI ID:R33002		
		Power Cord: Unshiel Display Card: HD365						
2.	USB Mouse	ACS-EMC-M02R	DELL	M056UO	512024264	☑ FCC DoC ☑BSMI ID: R41108		
		Data Cable: shielded	, Undetachable,	1.8m				
3.	Printer	ACS-EMC-PT04	НР	C9079A	N/A	☑FCC DoC ☑BSMI ID: R33001		
3.	Finter	USB Cable: Shielded Power Cord: Unshiel DC Cable: Unshielde	ded, Detachable	ed, 1.8m				
4.	USB Keyboard	ACS-EMC- K02R	DELL	SK-8115	CN-ORH656-65 890-686-007J	☑ FCC DoC ☑BSMI ID: T3A002		
		Data Cable: shielded	, Undetachable,	2.0m				
5.	iPod	ACS-EMC-IP01	APPLE	A1199	YM706MLDVQ 5	☑FCC DoC ☑BSMI ID: R33057		
		Data Cable: Shielded	, Detachabled, 1	1.0m				
6.	HDD	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-53900 31	☑FCC DoC ☑BSMI ID: 4912A022		
		USB Cable: Shielded	l, Detachable, 1.	8m				
7.	Dummy Load ( $10 \mathrm{K}\Omega~\&75\Omega$ )	,,						
8.	HDMI Cable	Shielded, Detachable	e, 1.8m					
9.	D-Sub Cable	Shielded, Detachable	e, 1.5m					
10.	Audio Cable	Unshielded, Detacha	ble, 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 : Mar. 31, 2009 File on Federal

Communication Commission Registration Number: 90454

3m & 10m Anechoic Chamber : Dec.30, 2009 File on Federal

Communication Commission Registration Number: 794232

EMC Lab. : Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Feb,02, 2009

Accredited by NVLAP, USA NVLAP Code: 200372-0

Apr. 01, 2010

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

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.22 dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test	4.20 dB (Polarize: V)
in 3m chamber	4.66 dB (Polarize: H)
Uncertainty for test site temperature and	0.3℃
humidity	2%

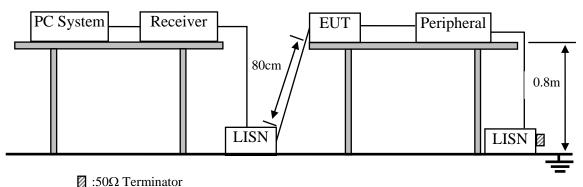


#### 3. POWER LINE CONDUCTED EMISSION TEST

### 3.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Nov.05, 10	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 10	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 10	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 10	1Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 10	1 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 10	1 Year

#### 3.2.Block Diagram of Test Setup



☑ .3022 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.

# 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 : L40FHDF12TA

Serial Number : N/A

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

<sup>2.</sup> The lower limit shall apply at the transition frequencies.



#### 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 4.2.
- 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 blackground, set the contrast control to maximum, set the brightness control to maximum and measure it.
- 3.5.4. The PC system was running the program "1kHz signal Playing" and sending sound to EUT.
- 3.5.5. 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 C63.4-2003 on conducted Emission test.

The bandwidth of test receiver (R&S TEST RECEIVER ESHS10) is set at 10kHz.

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

### 3.7. Conducted Disturbance 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.

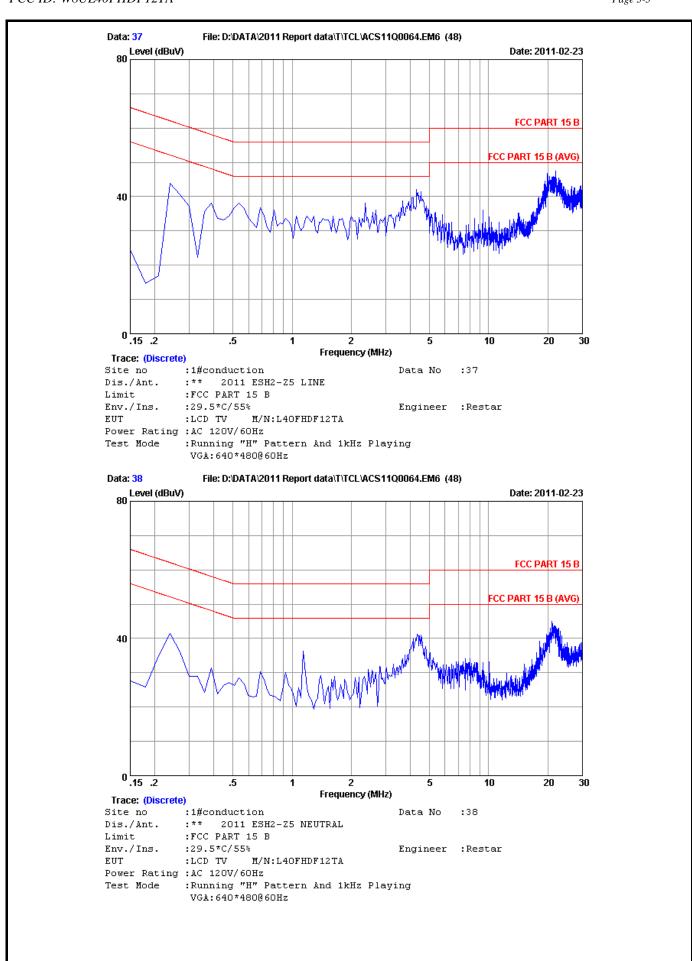
EUT: LCD TV Model No.: L40FHDF12TA

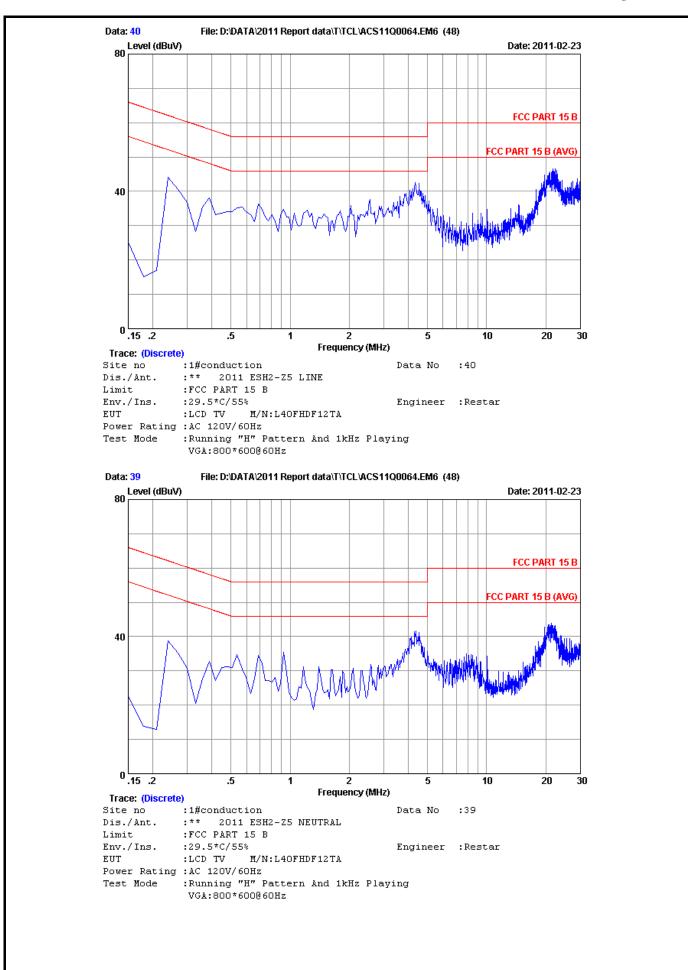
Test Date: Feb.23, 2011 Temperature: 29.5°C Humidity: 55%

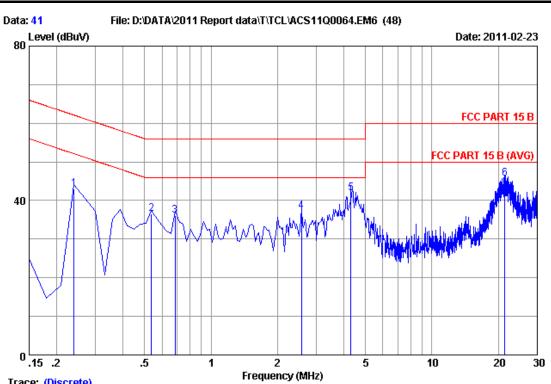
The details of test modes are as follows:

No	Test Mode	Resolution & Frequency	Reference Test Data No.		
No. Test Mod	Test Mode	Resolution & Prequency	LINE	NEUTRAL	
1.		640*480 @60Hz	#37	#38	
2.	VGA	800*600 @ 60Hz	#40	#39	
3. ※		1024*768 @60Hz	#41	#42	
4.	HDMI1	1080P	#44	#43	
5.	HDMI2	1080P	#45	#46	
6.	HDMI3	1080P	#48	#47	

(\* Worst test mode)







Trace: (Discrete)

Site no :1#conduction Data No

: \* \* 2011 ESH2-Z5 LINE Dis./Ant.

:FCC PART 15 B Limit

Env./Ins. :29.5\*C/55% Engineer : Restar

EUT :LCD TV M/N:L40FHDF12TA

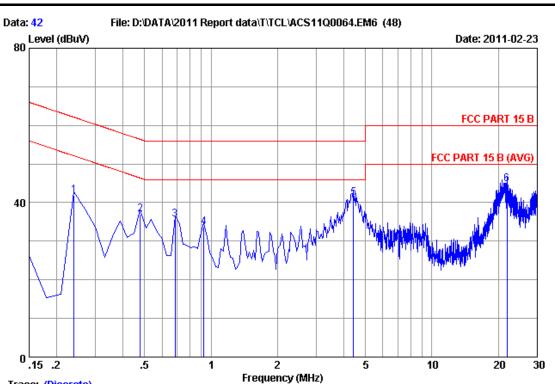
Power Rating : AC 120V/60Hz

:Running "H" Pattern And 1kHz Playing

VGA:1024\*768@60Hz

		LISN	Cable		Emissio	n		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.23955	0.17	9.88	32.97	43.02	62.11	19.09	QP
2	0.53805	0.19	9.88	26.46	36.53	56.00	19.47	QP
3	0.68730	0.19	9.89	26.11	36.19	56.00	19.81	QP
4	2.568	0.32	9.93	26.93	37.18	56.00	18.82	QP
5	4.299	0.36	9.94	31.55	41.85	56.00	14.15	QP
6	21.344	1.06	10.09	34.44	45.59	60.00	14.41	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



Trace: (Discrete)

Site no :1#conduction Data No :42

: \*\* Dis./Ant. 2011 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

:29.5\*C/55% Env./Ins. Engineer : Restar

:LCD TV M/N:L40FHDF12TA

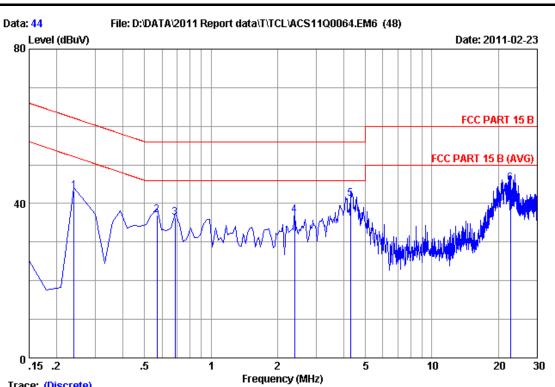
Power Rating : AC 120V/60Hz

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

VGA:1024\*768@60Hz

		LISN	Cable		Emissio	n		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.23955	0.21	9.88	31.70	41.79	62.11	20.32	QP
2	0.47835	0.22	9.88	26.95	37.05	56.37	19.32	QP
3	0.68730	0.23	9.89	25.47	35.59	56.00	20.41	QP
4	0.92610	0.24	9.89	23.61	33.74	56.00	22.26	QP
5	4.419	0.32	9.94	31.00	41.26	56.00	14.74	QP
6	21.881	0.82	10.09	33.93	44.84	60.00	15.16	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)



Data No

Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2011 ESH2-Z5 LINE

:FCC PART 15 B Limit

Env./Ins. :29.5\*C/55% Engineer : Restar

EUT :LCD TV M/N:L40FHDF12TA

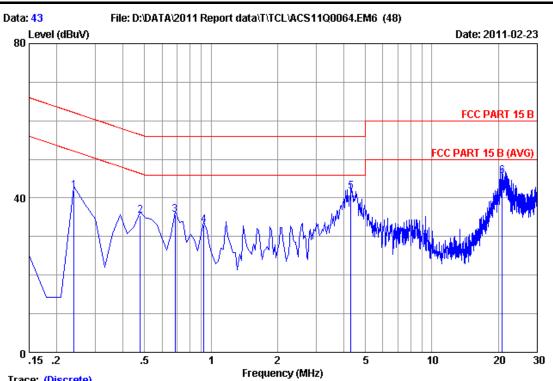
Power Rating :AC 120V/60Hz

:Running "H" Pattern And 1kHz Playing

HDMI 1:1080P

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.23955	0.17	9.88	33.11	43.16	62.11	18.95	QP
2	0.56790	0.19	9.88	26.81	36.88	56.00	19.12	QP
3	0.68730	0.19	9.89	26.29	36.37	56.00	19.63	QP
4	2.389	0.32	9.92	26.77	37.01	56.00	18.99	QP
5	4.269	0.36	9.94	30.89	41.19	56.00	14.81	QP
6	22.687	1.12	10.10	34.05	45.27	60.00	14.73	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



Trace: (Discrete)

Site no :1#conduction Data No

:\*\* 2011 ESH2-Z5 NEUTRAL Dis./Ant.

:FCC PART 15 B Limit

Env./Ins. :29.5\*C/55% Engineer : Restar

EUT :LCD TV M/N:L40FHDF12TA

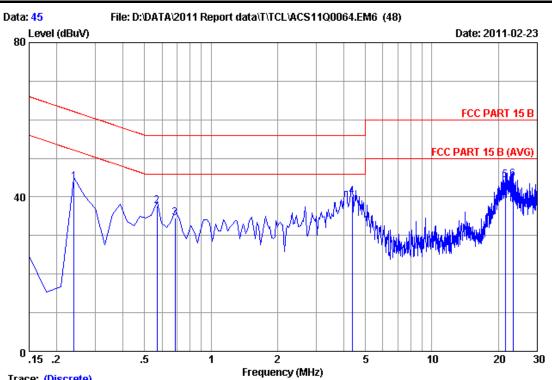
Power Rating :AC 120V/60Hz

:Running "H" Pattern And 1kHz Playing

HDMI 1:1080P

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.23955	0.21	9.88	31.82	41.91	62.11	20.20	QP
2	0.47835	0.22	9.88	25.27	35.37	56.37	21.00	QP
3	0.68730	0.23	9.89	25.49	35.61	56.00	20.39	QP
4	0.92610	0.24	9.89	22.75	32.88	56.00	23.12	QP
5	4.299	0.32	9.94	31.43	41.69	56.00	14.31	QP
6	20.836	0.79	10.09	34.89	45.77	60.00	14.23	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



Trace: (Discrete)

Site no :1#conduction Data No

:\*\* 2011 ESH2-Z5 LINE Dis./Ant.

:FCC PART 15 B Limit

Env./Ins. :29.5\*C/55% Engineer : Restar

EUT :LCD TV M/N:L40FHDF12TA

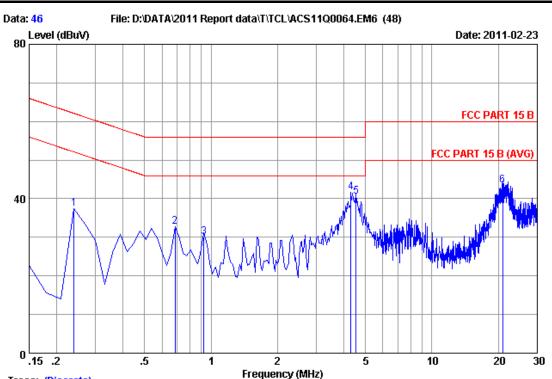
Power Rating :AC 120V/60Hz

:Running "H" Pattern And 1kHz Playing

HDMI 2:1080P

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.23955	0.17	9.88	33.87	43.92	62.11	18.19	QP
2	0.56790	0.19	9.88	27.67	37.74	56.00	18.26	QP
3	0.68730	0.19	9.89	24.57	34.65	56.00	21.35	QP
4	4.359	0.36	9.94	29.83	40.13	56.00	15.87	QP
5	21.493	1.06	10.09	33.22	44.37	60.00	15.63	QP
6	23.314	1.16	10.11	33.34	44.61	60.00	15.39	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



Trace: (Discrete)

Site no :1#conduction

Data No :46

Dis./Ant. :\*\* 2011 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :29.5\*C/55% Engineer :Restar

EUT :LCD TV M/N:L40FHDF12TA

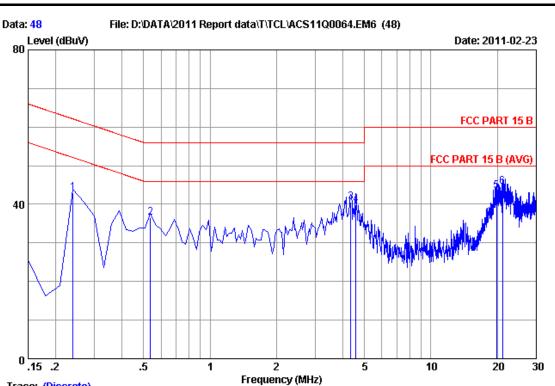
Power Rating :AC 120V/60Hz

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

HDMI 2:1080P

		LISN	Cable					
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.23955	0.21	9.88	27.34	37.43	62.11	24.68	QP
2	0.68730	0.23	9.89	22.65	32.77	56.00	23.23	QP
3	0.92610	0.24	9.89	19.96	30.09	56.00	25.91	QP
4	4.299	0.32	9.94	31.48	41.74	56.00	14.26	QP
5	4.538	0.32	9.94	30.24	40.50	56.00	15.50	QP
6	20.955	0.79	10.09	32.67	43.55	60.00	16.45	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



Trace: (Discrete)

Site no :1#conduction Data No

Dis./Ant. :\*\* 2011 ESH2-Z5 LINE

:FCC PART 15 B Limit

:29.5\*C/55% Env./Ins.

Engineer : Restar

:LCD TV M/N:L40FHDF12TA EUT

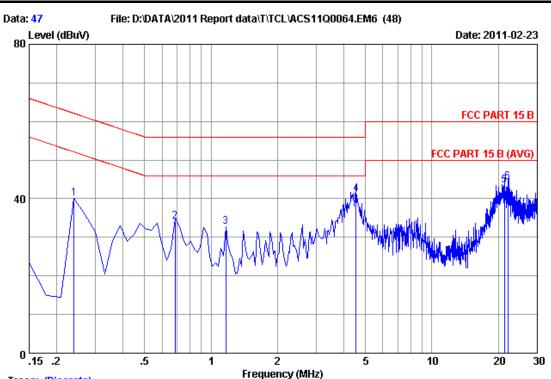
Power Rating :AC 120V/60Hz

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

HDMI 3:1080P

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissio Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.23955	0.17	9.88	32.86	42.91	62.11	19.20	QP
2	0.53805	0.19	9.88	26.54	36.61	56.00	19.39	QP
3	4.329	0.36	9.94	30.17	40.47	56.00	15.53	QP
4	4.568	0.36	9.94	29.58	39.88	56.00	16.12	QP
5	19.851	0.99	10.08	32.35	43.42	60.00	16.58	QP
6	21.075	1.04	10.09	33.45	44.58	60.00	15.42	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



Data No

:47

Trace: (Discrete)

Site no :1#conduction

Dis./Ant. :\*\* 2011 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :29.5\*C/55% Engineer :Restar

EUT :LCD TV M/N:L40FHDF12TA

Power Rating :AC 120V/60Hz

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

HDMI 3:1080P

		LISN	Cable	Cable Emission				
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.23955	0.21	9.88	30.05	40.14	62.11	21.97	QP
2	0.68730	0.23	9.89	23.92	34.04	56.00	21.96	QP
3	1.165	0.25	9.89	22.51	32.65	56.00	23.35	QP
4	4.538	0.32	9.94	30.96	41.22	56.00	14.78	QP
5	21.314	0.80	10.09	32.60	43.49	60.00	16.51	QP
6	22.060	0.82	10.10	33.39	44.31	60.00	15.69	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.



# 4. RADIATED EMISSION TEST

### 4.1.Test Equipment

#### 4.1.1.For frequency range 30MHz~1000MHz

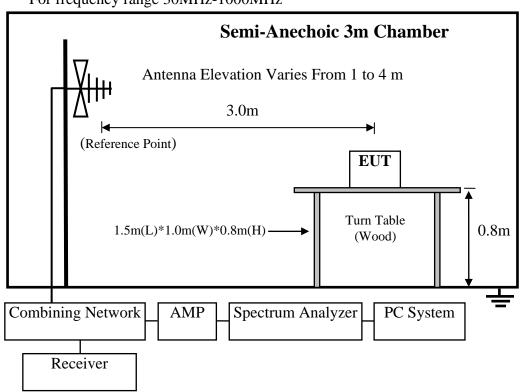
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.06,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 10	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 10	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 10	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 10	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 10	1 Year

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

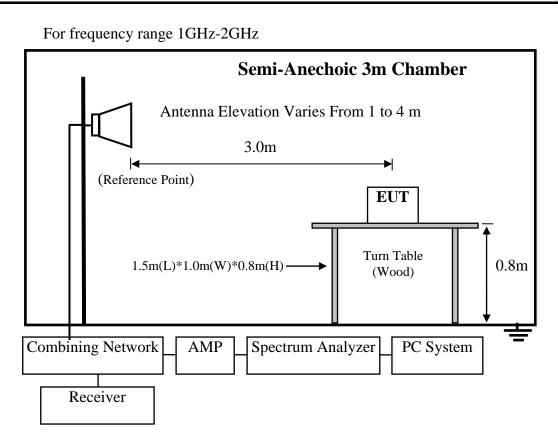
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
	Spectrum	Agilent	E7405A	MY45116588	May 08 10	1 Voor
1	Analyzer	Agnem	E7403A	W1143110366	Wiay.08, 10	1 Teal
2	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28622/2	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 10	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)	$dB(\mu V)/m$		
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 C63.4-2003 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.: L40FHDF12TA

#### 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.16~17, 2011 Temperature: 24°C Humidity: 56%

The details of test modes are as follows:

NO.	Test Mode	Resolution & Frequency	Reference Test Data No.			
NO.	Test Wode	Resolution & Frequency	Horizontal	Vertical		
1.		640*480 @60Hz	#22	#21		
2.	VGA	800*600 @ 60Hz	#20	#19		
3.		1024*768 @60Hz	#18	#17		
4. 💥	HDMI 1	1080P	#24	#23		
5.	HDMI 2	1080P	#25	#26		
6.	HDMI 3	1080P	#27	#28		

(\* Worst test mode)



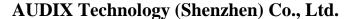
FCC ID: W8UL40FHDF12TA Page 4-4

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

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

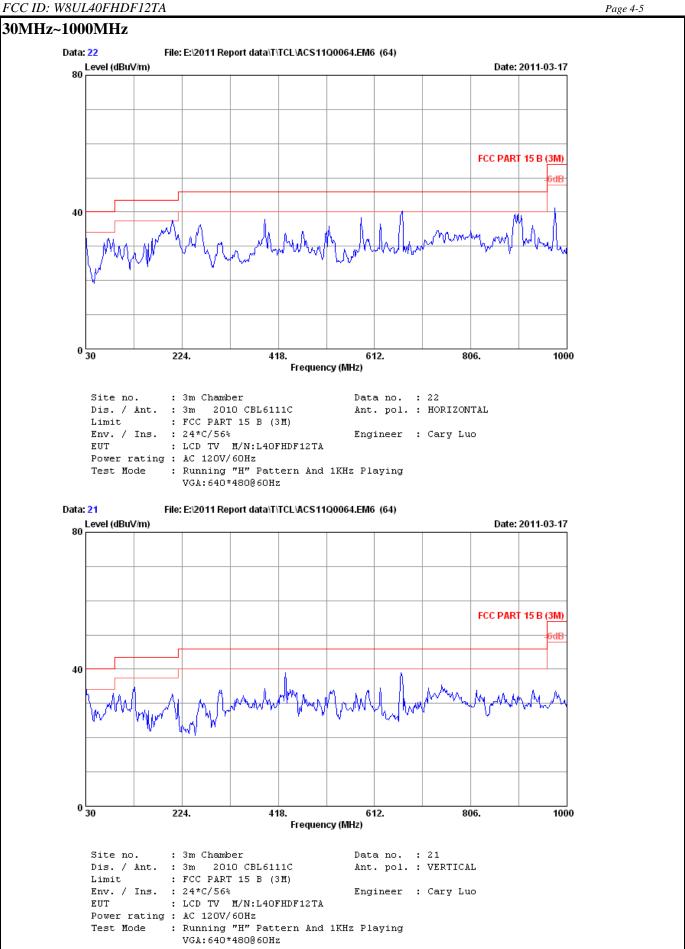
Note: For all the emissions above 1GHz, the peak measured level comply with peak limit, so the average level were deemed to comply with average limit.

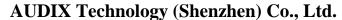
Test Da	ite: Mar.17, 201	1 Temperature: 24°C	Humidity: 56%			
NO.	Test Mode	Resolution & Frequency	Reference Test Data No.			
NO.	Test Wiode	Resolution & Frequency	Horizontal	Vertical		
1.	VGA	1024*768 @60Hz	#13, #14	#15, #16		
2.	HDMI 1	1080P	#1, #2	#3, #4		
3.	HDMI 2	1080P	#7, #8	#5, #6		
4.	HDMI 3	1080P	#11, #12	#9, #10		



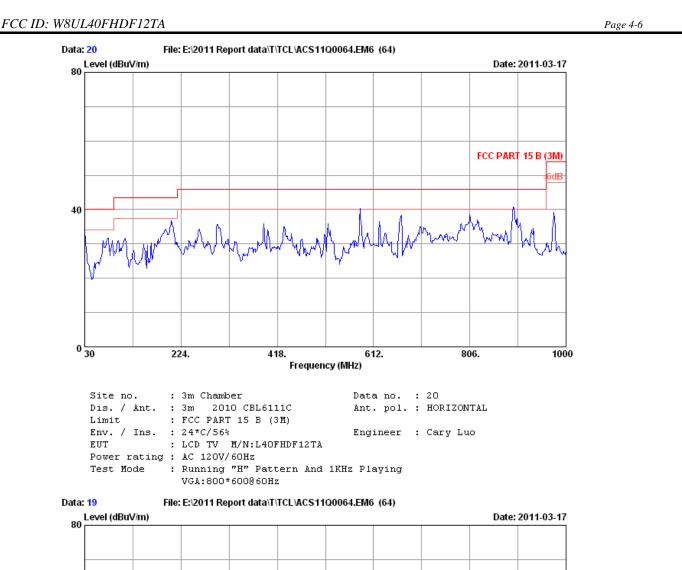


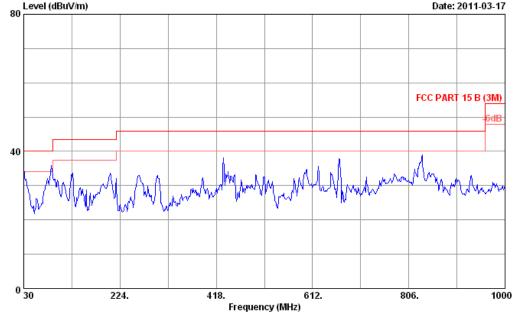
FCC ID: W8UL40FHDF12TA











Site no. : 3m Chamber Data no. : 19 Ant. pol. : VERTICAL : 3m 2010 CBL6111C Dis. / Ant. : FCC PART 15 B (3M) Limit

Engineer : Cary Luo

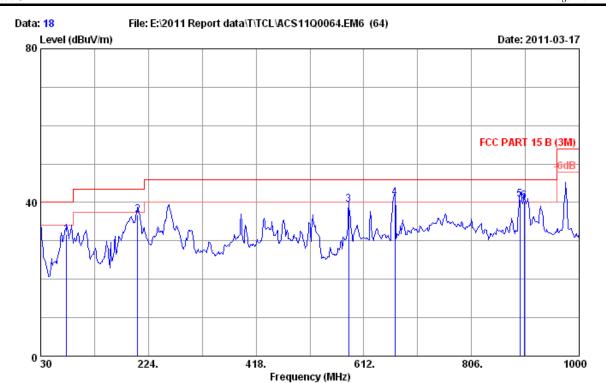
: 24\*C/56% : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

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

VGA:800\*600@60Hz

FCC ID: W8UL40FHDF12TA Page 4-7



Site no. : 3m Chamber Data no. : 18

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

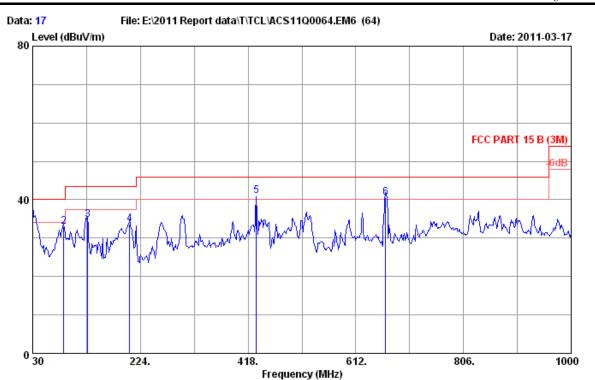
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024\*768@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	76.560	7.47	0.97	23.31	31.75	40.00	8.25	QP
2	204.600	10.10	1.76	24.91	36.77	43.50	6.73	QP
3	584.840	19.70	4.03	15.65	39.38	46.00	6.62	QP
4	668.260	20.76	4.38	16.12	41.26	46.00	4.74	QP
5	893.300	22.87	5.18	12.63	40.68	46.00	5.32	QP
6	901.060	22.83	5.20	12.39	40.42	46.00	5.58	QP

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





Site no. : 3m Chamber Data no. : 17
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

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

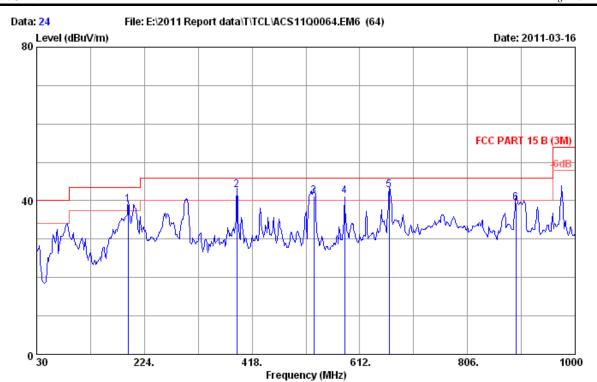
VGA:1024\*768@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.61	13.60	34.21	40.00	5.79	QP
2	86.260	8.54	1.03	23.32	32.89	40.00	7.11	QP
3	128.940	12.18	1.13	21.43	34.74	43.50	8.76	QP
4	204.600	10.10	1.76	21.80	33.66	43.50	9.84	QP
5	432.550	17.42	3.12	20.56	41.10	46.00	4.90	QP
6	665.400	20.71	4.37	15.40	40.48	46.00	5.52	QP

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

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

FCC ID: W8UL40FHDF12TA Page 4-9



Site no. : 3m Chamber Data no. : 24

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

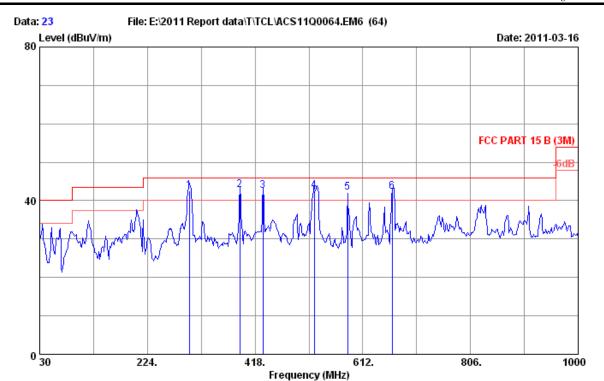
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI1:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	194.900	9.70	1.66	27.54	38.90	43.50	4.60	QP
2	390.560	16.31	2.87	23.60	42.78	46.00	3.22	QP
3	529.550	18.30	3.72	19.14	41.16	46.00	4.84	QP
4	584.840	19.70	4.03	17.47	41.20	46.00	4.80	QP
5	664.800	20.69	4.36	17.80	42.85	46.00	3.15	QP
6	893.300	22.87	5.18	11.30	39.35	46.00	6.65	QP

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

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



Site no. : 3m Chamber Data no. : 23
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

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

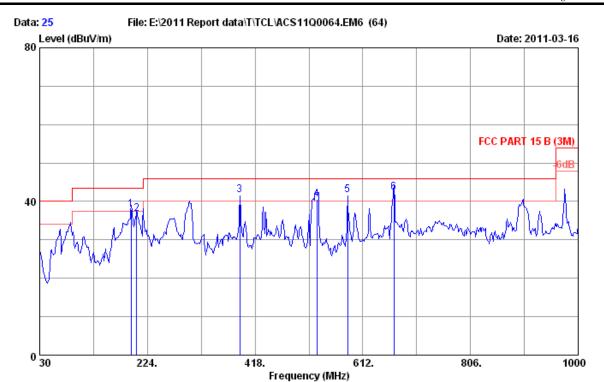
HDMI1:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	299.660	13.70	2.48	26.47	42.65	46.00	3.35	QP
2	390.850	16.31	2.87	23.70	42.88	46.00	3.12	QP
3	432.100	17.42	3.12	22.10	42.64	46.00	3.36	QP
4	524.700	18.35	3.69	20.46	42.50	46.00	3.50	QP
5	584.840	19.70	4.03	18.32	42.05	46.00	3.95	QP
6	665.350	20.71	4.37	17.25	42.33	46.00	3.67	QP

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

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

FCC ID: W8UL40FHDF12TA Page 4-11



Site no. : 3m Chamber Data no. : 25

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

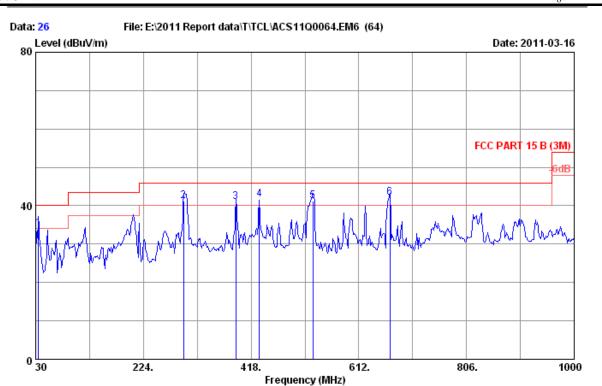
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI2:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	194.900	9.70	1.66	26.60	37.96	43.50	5.54	QP
2	204.600	10.10	1.76	24.84	36.70	43.50	6.80	QP
3	390.840	16.31	2.87	22.47	41.65	46.00	4.35	QP
4	529.550	18.30	3.72	18.47	40.49	46.00	5.51	QP
5	584.840	19.70	4.03	18.00	41.73	46.00	4.27	QP
6	668.150	20.76	4.38	17.30	42.44	46.00	3.56	QP

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

FCC ID: W8UL40FHDF12TA Page 4-12



Engineer : Cary Luo

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

EUT : LCD TV M/N:L40FHDF12TA

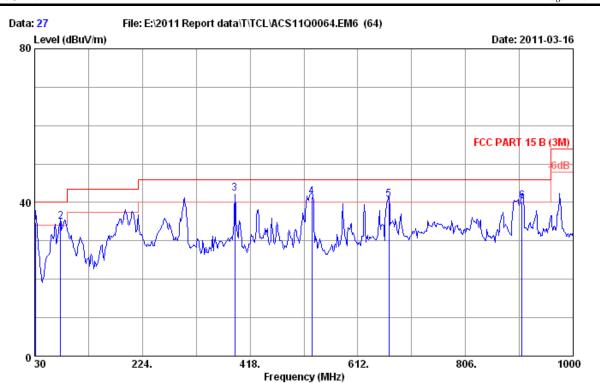
Power rating : AC 120V/60Hz

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

HDMI2:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.850	17.20	0.65	16.36	34.21	40.00	5.79	QP
2	296.750	13.70	2.46	25.17	41.33	46.00	4.67	QP
3	390.840	16.31	2.87	21.90	41.08	46.00	4.92	QP
4	432.550	17.42	3.12	21.23	41.77	46.00	4.23	QP
5	529.550	18.30	3.72	19.30	41.32	46.00	4.68	QP
6	668.260	20.76	4.38	17.07	42.21	46.00	3.79	QP

FCC ID: W8UL40FHDF12TA Page 4-13



Site no. : 3m Chamber Data no. : 27

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

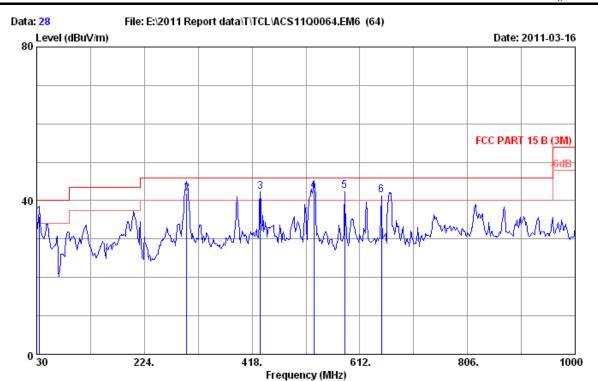
Power rating : AC 120V/60Hz

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

HDMI3:1080P

No	o. Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.88	0.63	15.27	34.78	40.00	5.22	QP
2	76.560	7.47	0.97	26.47	34.91	40.00	5.09	QP
3	390.840	16.31	2.87	23.23	42.41	46.00	3.59	QP
4	529.550	18.30	3.72	19.44	41.46	46.00	4.54	QP
5	668.260	20.76	4.38	15.57	40.71	46.00	5.29	QP
6	907.850	23.04	5.23	12.14	40.41	46.00	5.59	QP

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



Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power rating : AC 120V/60Hz

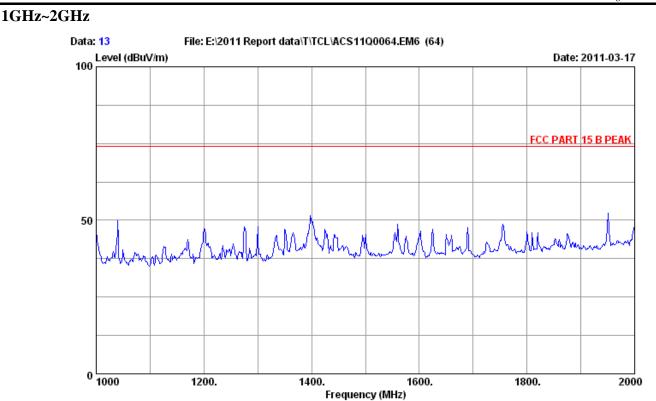
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI3:1080P

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.850	17.20	0.65	17.92	35.77	40.00	4.23	QP
2	300.100	13.70	2.48	25.80	41.98	46.00	4.02	QP
3	432.550	17.42	3.12	21.90	42.44	46.00	3.56	QP
4	529.375	18.30	3.72	20.60	42.62	46.00	3.38	QP
5	584.840	19.70	4.03	18.90	42.63	46.00	3.37	QP
6	650.800	20.42	4.31	16.80	41.53	46.00	4.47	QP

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

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



Site no. : 3m Chamber Data no. : 13

Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 2009 3115

Limit : FCC PART 15 B PEAK Env. / Ins. : 24\*C/56% Engineer : Cary Luo

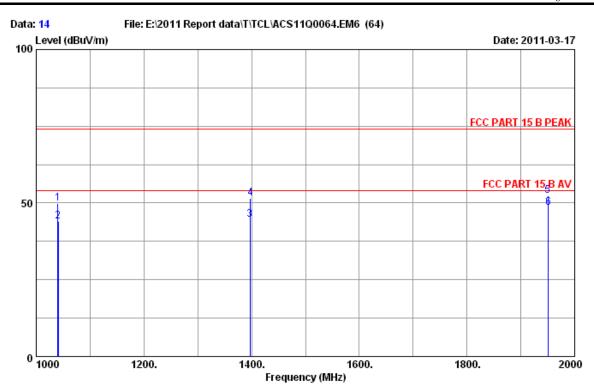
: LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

VGA: 1024\*768@60Hz

FCC ID: W8UL40FHDF12TA Page 4-16



Site no. : 3m Chamber Data no. : 14

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

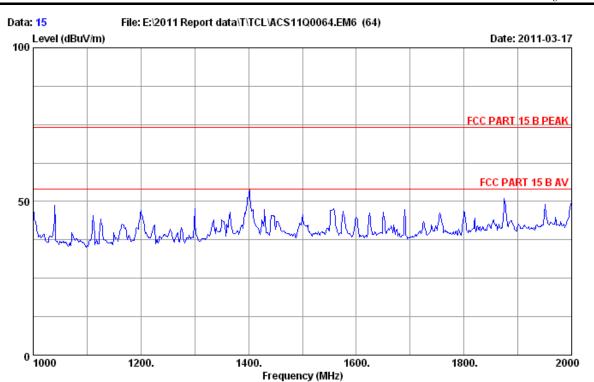
VGA:1024\*768@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1040.000	25.39	4.01	36.57	56.90	49.73	74.00	24.27	Peak
2	1040.850	25.39	4.01	36.57	51.25	44.08	54.00	9.92	Average
3	1397.360	25.24	4.49	35.66	50.63	44.70	54.00	9.30	Average
4	1398.000	25.24	4.49	35.66	57.45	51.52	74.00	22.48	Peak
5	1950.000	26.19	5.26	34.23	55.08	52.30	74.00	21.70	Peak
6	1951.020	26.19	5.26	34.23	51.25	48.47	54.00	5.53	Average

-----

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

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



Site no. : 3m Chamber Data no. : 15
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

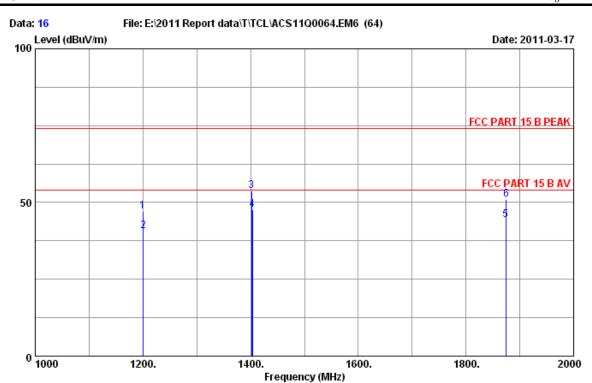
EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

VGA:1024\*768@60Hz

FCC ID: W8UL40FHDF12TA Page 4-18



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

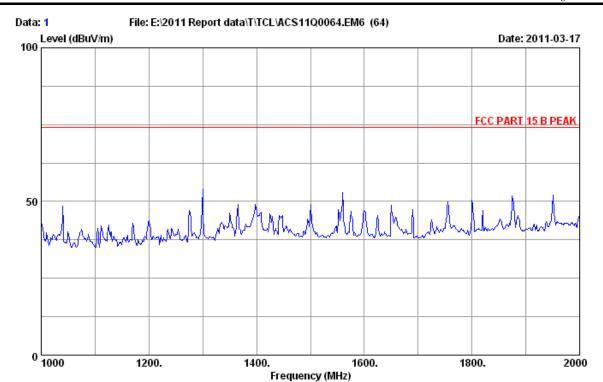
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024\*768@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1200.000	25.32	4.24	36.18	53.58	46.96	74.00	27.04	Peak
2	1200.930	25.32	4.24	36.18	47.23	40.61	54.00	13.39	Average
3	1402.000	25.23	4.52	35.66	59.68	53.77	74.00	20.23	Peak
4	1403.240	25.23	4.52	35.66	53.57	47.66	54.00	6.34	Average
5	1874.170	26.01	5.14	34.42	47.68	44.41	54.00	9.59	Average
6	1875.000	26.01	5.14	34.42	54.26	50.99	74.00	23.01	Peak

-----

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



Site no. : 3m Chamber Data no. : 1

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

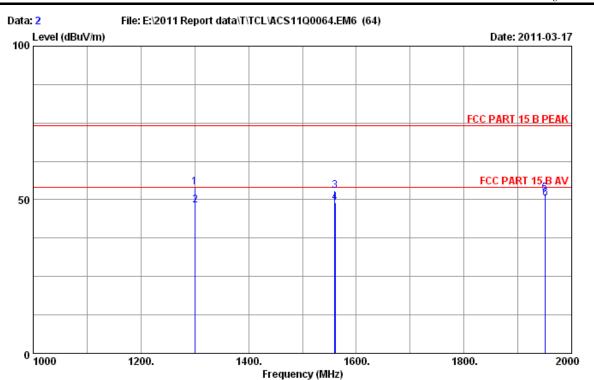
EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

HDMI1:1080P

FCC ID: W8UL40FHDF12TA Page 4-20



Site no. : 3m Chamber Data no. : 2

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

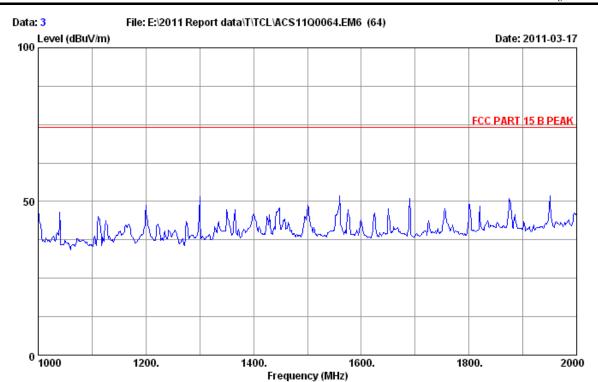
Power Rating : AC 120V/60Hz

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

HDMI1:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1300.000	25.28	4.38	35.92	60.31	54.05	74.00	19.95	Peak
2	1301.020	25.28	4.38	35.92	54.35	48.09	54.00	5.91	Average
3	1560.000	25.35	4.72	35.27	58.23	53.03	74.00	20.97	Peak
4	1560.650	25.35	4.72	35.27	54.24	49.04	54.00	4.96	Average
5	1950.000	26.19	5.26	34.23	54.85	52.07	74.00	21.93	Peak
6	1950.740	26.19	5.26	34.23	53.14	50.36	54.00	3.64	Average

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



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

Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

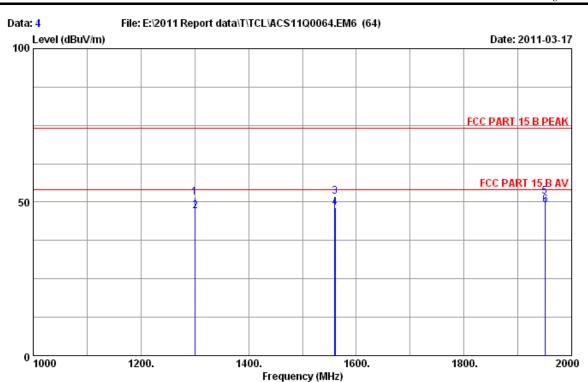
Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

HDMI1:1080P



Site no. : 3m Chamber Data no. : 4

Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

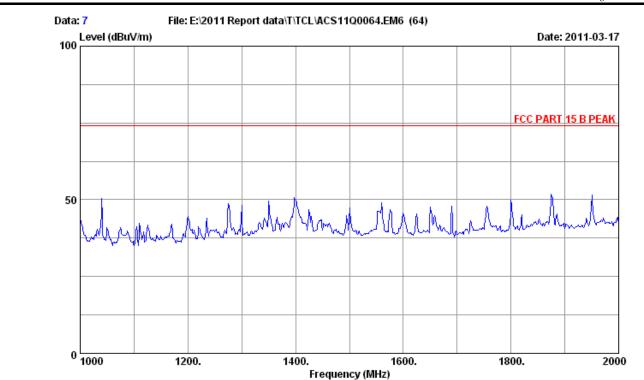
HDMI1:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	
1	1300.000	25.28	4.38	35.92	57.70	51.44	74.00	22.56	Peak
2	1300.680	25.28	4.38	35.92	53.20	46.94	54.00	7.06	Average
3	1560.000	25.35	4.72	35.27	57.11	51.91	74.00	22.09	Peak
4	1560.820	25.35	4.72	35.27	53.47	48.27	54.00	5.73	Average
5	1950.000	26.19	5.26	34.23	54.51	51.73	74.00	22.27	Peak
6	1951.070	26.19	5.26	34.23	51.68	48.90	54.00	5.10	Average

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

FCC ID: W8UL40FHDF12TA Page 4-23



Site no. : 3m Chamber Data no. : 7

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

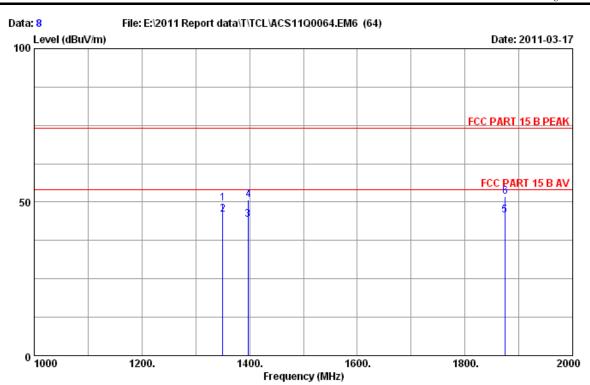
EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

HDMI2:1080P

FCC ID: W8UL40FHDF12TA Page 4-24



Site no. : 3m Chamber Data no. : 8

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

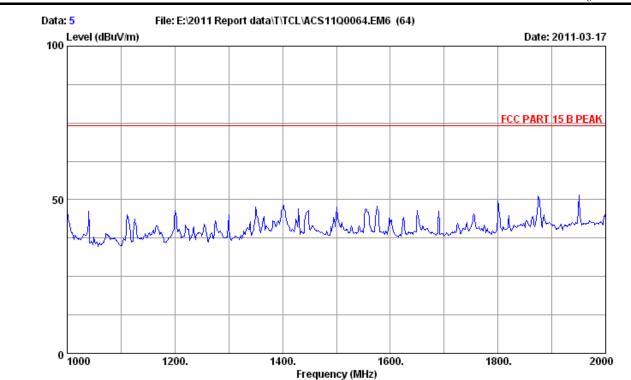
HDMI2:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1350.000	25.26	4.45	35.79	55.66	49.58	74.00	24.42	Peak
2	1350.350	25.26	4.45	35.79	52.13	46.05	54.00	7.95	Average
3	1397.420	25.24	4.49	35.66	50.28	44.35	54.00	9.65	Average
4	1398.000	25.24	4.49	35.66	56.54	50.61	74.00	23.39	Peak
5	1874.150	26.01	5.14	34.42	48.98	45.71	54.00	8.29	Average
6	1875.000	26.01	5.14	34.42	55.12	51.85	74.00	22.15	Peak

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

FCC ID: W8UL40FHDF12TA Page 4-25



Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

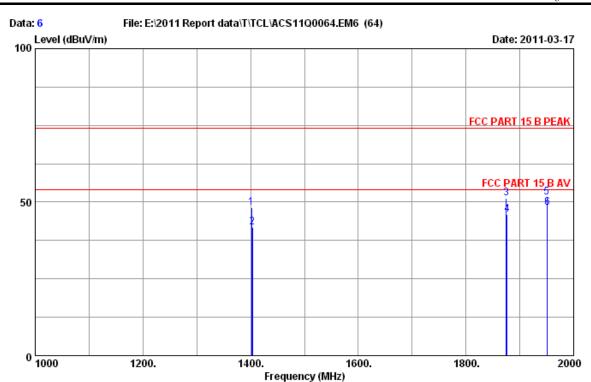
Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

HDMI2:1080P



Site no. : 3m Chamber Data no. : 6

Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

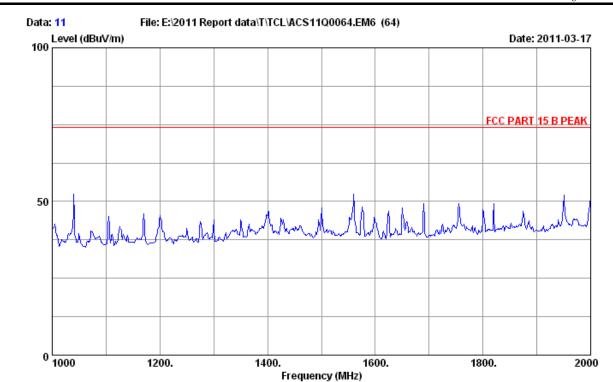
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI2:1080P

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	$(\mathtt{MHz})$	(dB/m)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	
1	1402.000	25.23	4.52	35.66	54.17	48.26	74.00	25.74	Peak
2	1403.140	25.23	4.52	35.66	47.83	41.92	54.00	12.08	Average
3	1875.000	26.01	5.14	34.42	54.47	51.20	74.00	22.80	Peak
4	1876.250	26.04	5.16	34.42	49.25	46.03	54.00	7.97	Average
5	1950.000	26.19	5.26	34.23	54.44	51.66	74.00	22.34	Peak
6	1950.830	26.19	5.26	34.23	51.03	48.25	54.00	5.75	Average

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



Site no. : 3m Chamber Data no. : 11

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

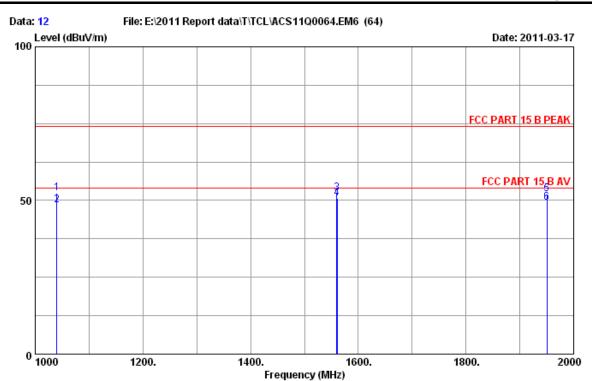
Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

HDMI3:1080P



Site no. : 3m Chamber Data no. : 12

Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

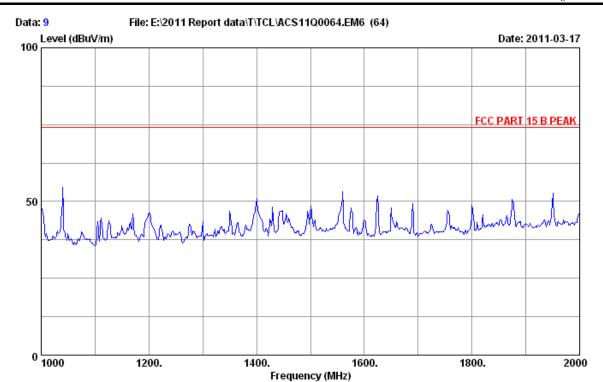
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI3:1080P

Remark
 Peak
Average
Peak
Average
Peak
Average
P A P

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



Site no. : 3m Chamber Data no. : 9

Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

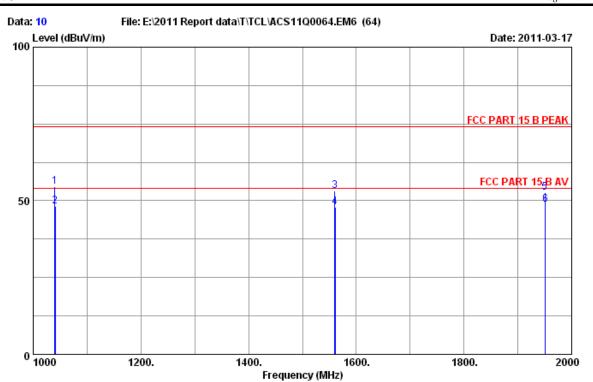
EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

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

HDMI3:1080P

FCC ID: W8UL40FHDF12TA Page 4-30



Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15 B PEAK

Env. / Ins. : 24\*C/56% Engineer : Cary Luo

EUT : LCD TV M/N:L40FHDF12TA

Power Rating : AC 120V/60Hz

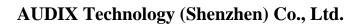
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI3:1080P

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	1040.000	25.39	4.01	36.57	61.75	54.58	74.00	19.42	Peak
2	1041.230	25.39	4.01	36.57	55.34	48.17	54.00	5.83	Average
3	1560.000	25.35	4.72	35.27	58.47	53.27	74.00	20.73	Peak
4	1560.893	25.35	4.72	35.27	53.23	48.03	54.00	5.97	Average
5	1950.000	26.19	5.26	34.23	55.49	52.71	74.00	21.29	Peak
6	1950.760	26.19	5.26	34.23	51.52	48.74	54.00	5.26	Average

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





FCC ID: W8UL40FHDF12TA Page 5-1 5. DEVIATION TO TEST SPECIFICATIONS [NONE]