FCC ID:W8ULE40FHDE3000

APPLICATION OF CERTIFICATION For

TTE Technology Inc.

LCD TV

Brand Name	Model Number
TCL	LE40FHDE3000

FCC ID: W8ULE40FHDE3000

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-F12276

Date of Test : Nov.29~Dec.21, 2012

Date of Report : Dec.31, 2012



FCC ID:W8ULE40FHDE3000

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FCC ID: W8ULE40FHDE3000

TEST REPORT CERTIFICATION

Applicant

TTE Technology Inc.

Manufacturer

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

EUT Description

LCD TV

FCC ID

W8ULE40FHDE3000

(A) Model No. & :
Brand Name

Brand Name Model Number
TCL LE40FHDE3000

(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 2011, 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: Nov.29° Dec.21, 2012 Report of date: Dec.31, 2012

Prepared by: Julia 2hi

Julia Zhu/ Assistant Reviewed by:

Julia Zhu/ Assistant Andix Technology Sun Ze

Audix Technology Sun Zeng Supervisor

EMC部門報告年月東

Stamp only for EMC Dept. Report

Signature: Jan le 7/3/1-

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					
Description of Test Item	Standard	Results	Remarks		
Power Line Conducted Emission Test	FCC Part 15: 2011 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 18.74 dB at 4.647MHz		
Radiated Emission Test (30-1000MHz)	FCC Part 15: 2011 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 1.41dB at 114.010MHz		
Radiated Emission Test (1-2GHz)	FCC Part 15: 2011 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 6.18dB at 1560.150MHz		



2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description : LCD TV

Model Number&:
Brand Name

Brand Name	Model Number
	LE40FHDE3000
TCL	LE50FHDE3000
ICL	LE58FHDE3000X
	LE58FHDE3100X

Only the Model Name is difference.

FCC ID : W8ULE40FHDE3000

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					
X54M1	45-OSC54M-0Y1CR	54MHz			
LVDS CLOCK	81.43MHZ				
IF	44MHz				
DC-DC	U302->385KHz	U303->1MHz			
DDR	390MHz				
AMP	384KHz				

Power Cord : Unshielded, Undetachable, 1.8m

Date of Test : Nov.29~Dec.21, 2012

Date of Receipt : Nov.28, 2012

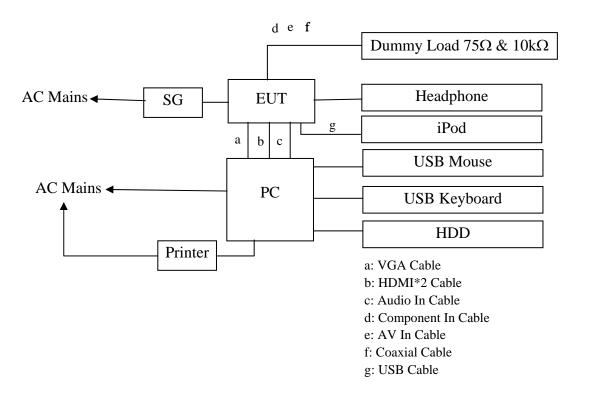
Sample Type : Prototype production



2.2.Tested Supporting System Details

	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type			
1.	Personal Computer	Test PC M	DELL	Studio 540	224XK2X	☑FCC DoC ☑BSMI ID:R33002			
	Computer		ower Cord: Unshielded, Detachable, 1.8m isplay 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			
		Cable: Shielded, Un	detachabled, 4.0n	1					
		ACS-EMC-PT04	НР	C9079A	N/A	☑FCC DoC ☑BSMI ID: R33001			
4.	Printer	USB Cable: Shielded, Detachabled, 1.8m Power Cord: Unshielded, Detachabled, 1.8m Power Adapter: HP, M/N: 0957-2119, BSMI ID: R33030, DC Cable: Unshielded, Detachabled, 1.5m							
5.	USB Mouse	ACS-EMC-M04R	DELL	M056UO		☑ FCC DoC ☑BSMI ID: R41108			
		Data Cable: shielded	l, Undetachable, 1	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, Detachable, 1.8m							
8.	Dummy Load (10KΩ &75Ω) Component In Cable: Unshielded, Detachabled, 1.5m AV Cable: Unshielded, Detachable, 1.5m Coaxial Cable: Unshielded, Detachable, 1.5m								
D-Sub Cable: Shielded, Detachable, 1.5m HDMI Cable: Shielded, Detachable, 1.8m 9. Audio Cable: Unshielded, Detachable, 1.5m AV Cable: Unshielded, Detachable, 1.5m Coaxial Cable: Unshielded, 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: Dec.30, 2012

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, 2013

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℃

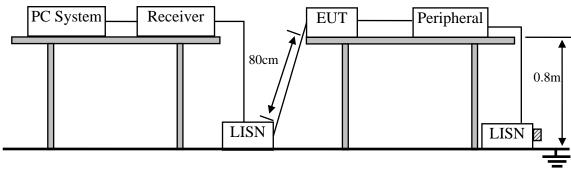


3. POWER LINE CONDUCTED EMISSION MEASUREMENT

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	50Ω	No. 1	May.08, 12	1 Year
5.	Terminator	Hubersuhner	50Ω	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.

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 : LE40FHDE3000

Serial Number : N/A

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

^{2.} 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 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 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: 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. : LE40FHDE3000

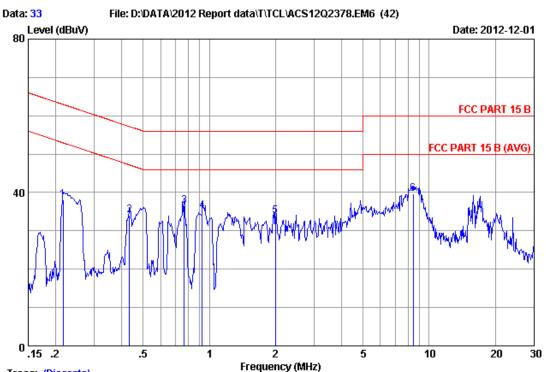
Test Date: Dec.01, 2012 Temperature: 24.3°C Humidity: 68%

The details of test modes are as follows:

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

(* Worst test mode)





Data No

:33

Trace: (Discrete)

Site no :1#conduction

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

:FCC PART 15 B Limit

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

:LCD TV M/N:LE40FHDE3000

Power Rating :AC 120V/60Hz

:PC Mode Test Mode

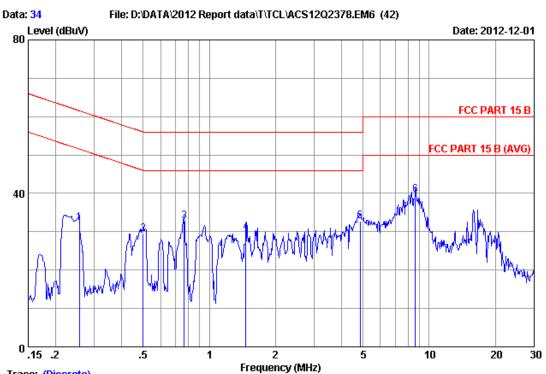
:Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

		Cable		Emission	ı		
No	Freq	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dBuA)	(dBuA)	(dBuA)	(dB)	
1	0.21620	9.95	28.05	38.19	62.96	24.77	QP
2	0.43281	9.95	23.89	34.03	57.20	23.17	QP
3	0.76702	9.95	26.43	36.58	56.00	19.42	QP
4	0.92821	9.94	25.01	35.16	56.00	20.84	QP
5	2.001	9.94	23.72	33.90	56.00	22.10	QP
6	8.456	9.96	29.35	39.72	60.00	20.28	QP

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Data No

:34

Trace: (Discrete)

Dis./Ant.

Site no :1#conduction

:** 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Engineer :Nick_Huang Env./Ins. :24.3*C/68%

EUT :LCD TV M/N:LE40FHDE3000

Power Rating : AC 120V/60Hz

:PC Mode Test Mode

:Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

		Cable		Emission	ı			
No	Freq	Loss	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB)	(dBuA)	(dBuA)	(dBuA)	(dB)		
								-
1	0.25615	9.95	22.13	32.30	61.56	29.26	QP	
2	0.49937	9.95	19.28	29.46	56.01	26.55	QP	
3	0.76702	9.95	22.46	32.65	56.00	23.35	QP	
4	1.464	9.94	19.56	29.76	56.00	26.24	QP	
5	4.848	9.95	22.56	32.85	56.00	23.15	QP	
6	8.637	9.96	29.22	39.60	60.00	20.40	QP	
3 4 5	0.49937 0.76702 1.464 4.848	9.95 9.95 9.94 9.95	19.28 22.46 19.56 22.56	29.46 32.65 29.76 32.85	56.01 56.00 56.00 56.00	26.55 23.35 26.24 23.15	QP QP QP QP	

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

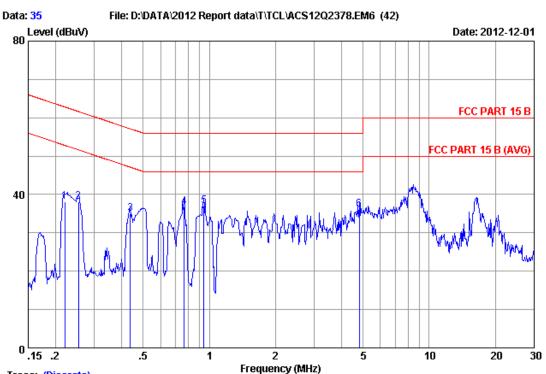
^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

AUDIX Technology (Shenzhen) Co., Ltd.

:35

Data No

FCC ID: W8ULE40FHDE3000 Page 3-5



Trace: (Discrete)

Site no :1#conduction

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

Limit :FCC PART 15 B

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

EUT :LCD TV M/N:LE40FHDE3000

Power Rating :AC 120V/60Hz

Test Mode : PC Mode

:Running "H" Pattern And 1KHz Playing

VGA:1024*708@60Hz

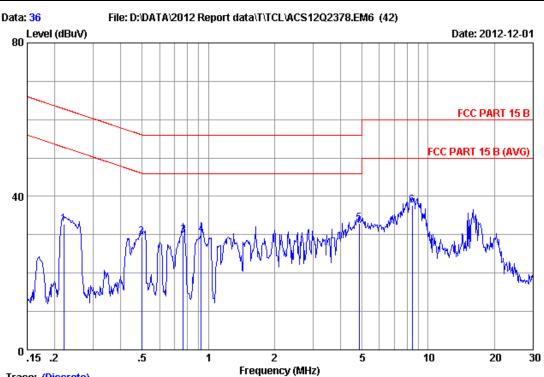
No 	Freq (MHz)	Cable Loss (dB)	Reading (dBuA)	Emission Level (dBuA)	Limits (dBuA)	Margin (dB)	Remark	
1	0.21967	9.95	28.05	38.19	62.83	24.64	QP	
2	0.25345	9.95	27.95	38.09	61.64	23.55	QP	
3	0.43742	9.95	24.89	35.03	57.11	22.08	QP	
4	0.76702	9.95	26.69	36.84	56.00	19.16	QP	
5	0.94308	9.94	26.87	37.02	56.00	18.98	QP	
6	4.797	9.95	25.73	35.99	56.00	20.01	QP	

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

AUDIX Technology (Shenzhen) Co., Ltd.

FCC ID: W8ULE40FHDE3000 *Page 3-6*



Data No

:36

Trace: (Discrete)

Dis./Ant.

Site no :1#conduction

:** 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

EUT :LCD TV M/N:LE40FHDE3000

Power Rating : AC 120V/60Hz

:PC Mode Test Mode

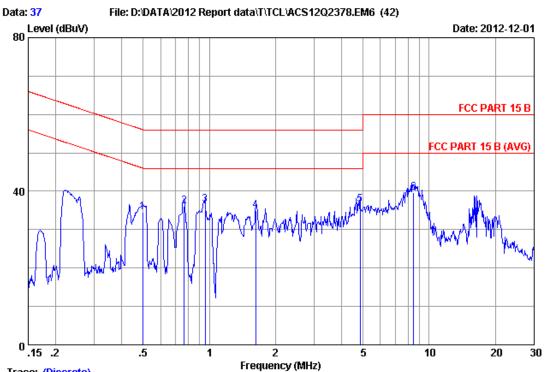
:Running "H" Pattern And 1KHz Playing

VGA:1024*708@60Hz

		Cable		Emission	ı		
No	Freq (MHz)	Loss (dB)	Reading (dBuA)	Level (dBuA)	Limits (dBuA)	Margin (dB)	Remark
1	0.21967	9.95	22.54	32.70	62.83	30.13	QP
2	0.49673	9.95	19.28	29.46	56.05	26.59	QP
3	0.76702	9.95	19.72	29.91	56.00	26.09	QP
4	0.92821	9.94	19.98	30.16	56.00	25.84	QP
5	4.848	9.95	22.62	32.91	56.00	23.09	QP
6	8.456	9.96	27.27	37.65	60.00	22.35	QP

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Trace: (Discrete)

:1#conduction Site no Data No :37

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

:FCC PART 15 B Limit

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

:LCD TV M/N:LE40FHDE3000 EUT

Power Rating : AC 120V/60Hz

Test Mode :PC Mode

:Running "H" Pattern And 1KHz Playing

VGA:1920*1080@60Hz

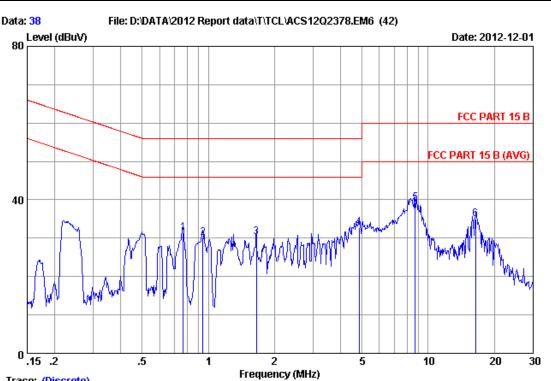
Freq (MHz)	Cable Loss (dB)	Reading (dBuA)	Emission Level (dBuA)	Limits (dBuA)	Margin (dB)	Remark	_
0.49673	9.95	24.47	34.61	56.05	21.44	QP	
0.76702	9.95	25.93	36.08	56.00	19.92	QP	
0.95819	9.94	26.49	36.64	56.00	19.36	QP	
1.628	9.94	24.75	34.92	56.00	21.08	QP	
4.848	9.95	26.39	36.65	56.00	19.35	QP	
8.501	9.96	29.28	39.66	60.00	20.34	QP	
	(MHz) 0.49673 0.76702 0.95819 1.628 4.848	Freq Loss (MHz) (dB) 0.49673 9.95 0.76702 9.95 0.95819 9.94 1.628 9.94 4.848 9.95	Freq Loss Reading (MHz) (dB) (dBuA) 0.49673 9.95 24.47 0.76702 9.95 25.93 0.95819 9.94 26.49 1.628 9.94 24.75 4.848 9.95 26.39	Freq Loss Reading Level (MHz) (dB) (dBuA) (dBuA) 0.49673 9.95 24.47 34.61 0.76702 9.95 25.93 36.08 0.95819 9.94 26.49 36.64 1.628 9.94 24.75 34.92 4.848 9.95 26.39 36.65	Freq Loss Reading Level Limits (MHz) (dB) (dBuA) (dBuA) (dBuA) (dBuA) 0.49673 9.95 24.47 34.61 56.05 0.76702 9.95 25.93 36.08 56.00 0.95819 9.94 26.49 36.64 56.00 1.628 9.94 24.75 34.92 56.00 4.848 9.95 26.39 36.65 56.00	Freq (MHz) Loss (dB) Reading (dBuA) Level (dBuA) Limits (dBuA) Margin (dB) 0.49673 9.95 24.47 34.61 56.05 21.44 0.76702 9.95 25.93 36.08 56.00 19.92 0.95819 9.94 26.49 36.64 56.00 19.36 1.628 9.94 24.75 34.92 56.00 21.08 4.848 9.95 26.39 36.65 56.00 19.35	Freq Loss Reading Level Limits Margin Remark (MHz) (dB) (dBuA) (dBuA) (dBuA) (dBuA) (dB) 0.49673 9.95 24.47 34.61 56.05 21.44 QP 0.76702 9.95 25.93 36.08 56.00 19.92 QP 0.95819 9.94 26.49 36.64 56.00 19.36 QP 1.628 9.94 24.75 34.92 56.00 21.08 QP 4.848 9.95 26.39 36.65 56.00 19.35 QP

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

AUDIX Technology (Shenzhen) Co., Ltd.

FCC ID: W8ULE40FHDE3000 *Page 3-8*



Data No

:38

Trace: (Discrete)

Dis./Ant.

Site no :1#conduction

:** 2012 ESH2-Z5 NEUTRAL

Limit :FCC PART 15 B

:24.3*C/68% Engineer :Nick_Huang Env./Ins.

:LCD TV M/N:LE40FHDE3000

Power Rating : AC 120V/60Hz

Test Mode :PC Mode

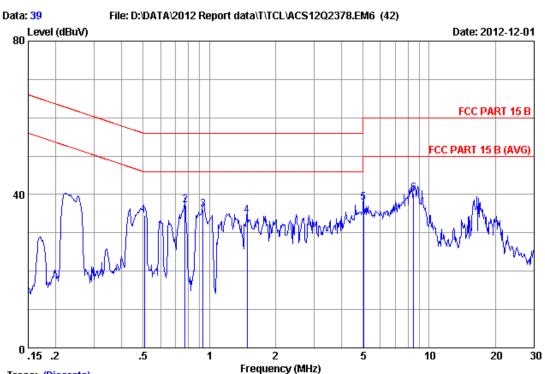
:Running "H" Pattern And 1KHz Playing

VGA:1920*1080@60Hz

No	Freq (MHz)	Cable Loss (dB)	Reading (dBuA)	Emission Level (dBuA)	n Limits (dBuA)	Margin (dB)	Remark	
1	0.76702	9.95	21.22	31.41	56.00	24.59	QP	
2	0.94308	9.94	19.96	30.14	56.00	25.86	QP	
3	1.654	9.94	20.13	30.34	56.00	25.66	QP	
4	4.848	9.95	22.50	32.79	56.00	23.21	QP	
5	8.729	9.96	28.77	39.15	60.00	20.85	QP	
6	16.398	10.01	24.18	34.95	60.00	25.05	QP	

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

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



:39

Trace: (Discrete)

Site no :1#conduction Data No

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

:FCC PART 15 B Limit

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

:LCD TV M/N:LE40FHDE3000

Power Rating :AC 120V/60Hz

:PC Mode Test Mode

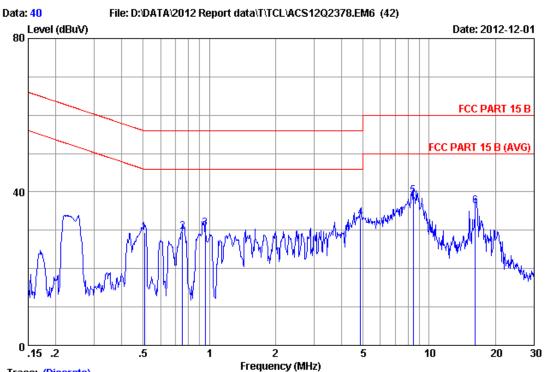
:Running "H" Pattern And 1KHz Playing

HDMI 1:1920*1080@60Hz

No 	Freq (MHz)	Cable Loss (dB)	Reading (dBuA)	Emission Level (dBuA)	Limits (dBuA)	Margin (dB)	Remark	
1	0.50737	9.95	24.37	34.51	56.00	21.49	QP	
2	0.77519	9.95	27.07	37.22	56.00	18.78	QP	
3	0.93810	9.94	26.05	36.20	56.00	19.80	QP	
4	1.487	9.94	24.34	34.50	56.00	21.50	QP	
5	5.031	9.95	27.66	37.92	60.00	22.08	QP	
6	8.501	9.96	29.88	40.26	60.00	19.74	QP	

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Trace: (Discrete)

Site no :1#conduction Data No :40

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

Limit :FCC PART 15 B

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

EUT :LCD TV M/N:LE40FHDE3000

Power Rating : AC 120V/60Hz

Test Mode : PC Mode

:Running "H" Pattern And 1KHz Playing

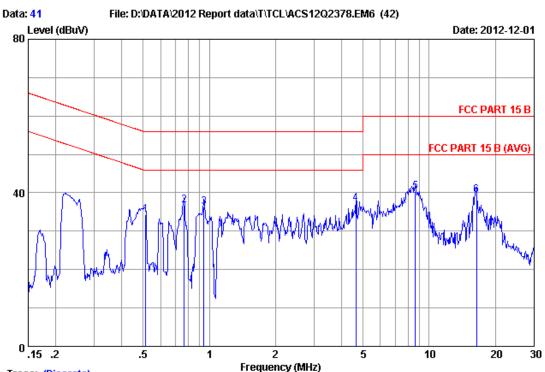
HDMI 1:1920*1080@60Hz

		Cable		Emission	ì		
No	Freq	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dBuA)	(dBuA)	(dBuA)	(dB)	
1	0.50737	9.95	19.18	29.36	56.00	26.64	QP
2	0.75493	9.95	19.46	29.65	56.00	26.35	QP
3	0.95819	9.94	20.26	30.44	56.00	25.56	QP
4	4.874	9.95	22.90	33.19	56.00	22.81	QP
5	8.456	9.96	28.55	38.93	60.00	21.07	QP
6	16.226	10.00	25.54	36.28	60.00	23.72	QP

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

^{2.}If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





Trace: (Discrete)

Site no :1#conduction Data No :41

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

Limit :FCC PART 15 B

Env./Ins. :24.3*C/68% Engineer :Nick_Huang

EUT :LCD TV M/N:LE40FHDE3000

Power Rating :AC 120V/60Hz

Test Mode : PC Mode

:Running "H" Pattern And 1KHz Playing

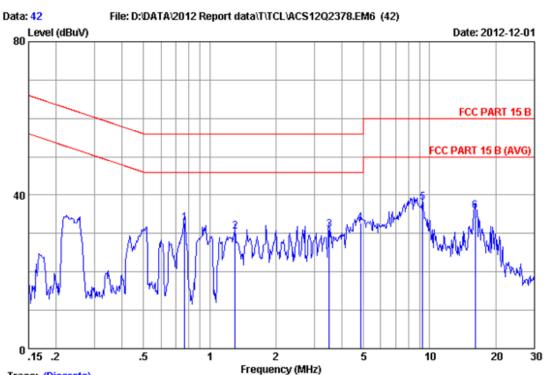
HDMI 2:1920*1080@60Hz

Freq (MHz)	Cable Loss (dB)	Reading (dBuA)	Emission Level (dBuA)	Limits (dBuA)	Margin (dB)	Remark	
0.51278	9.95	24.07	34.21	56.00	21.79	QP	
0.76702	9.95	26.71	36.86	56.00	19.14	QP	
0.94308	9.94	26.27	36.42	56.00	19.58	QP	
4.647	9.95	27.01	37.26	56.00	18.74	QP	
8.637	9.96	29.91	40.29	60.00	19.71	QP	
16.398	10.01	28.52	39.39	60.00	20.61	QP	
	(MHz) 0.51278 0.76702 0.94308 4.647 8.637	Freq Loss (MHz) (dB) 0.51278 9.95 0.76702 9.95 0.94308 9.94 4.647 9.95 8.637 9.96	Freq Loss Reading (MHz) (dB) (dBuA) 0.51278 9.95 24.07 0.76702 9.95 26.71 0.94308 9.94 26.27 4.647 9.95 27.01 8.637 9.96 29.91	Freq Loss Reading Level (MHz) (dB) (dBuA) (dBuA) 0.51278 9.95 24.07 34.21 0.76702 9.95 26.71 36.86 0.94308 9.94 26.27 36.42 4.647 9.95 27.01 37.26 8.637 9.96 29.91 40.29	Freq Loss Reading Level Limits (MHz) (dB) (dBuA) (dBuA) (dBuA) (dBuA) 0.51278 9.95 24.07 34.21 56.00 0.76702 9.95 26.71 36.86 56.00 0.94308 9.94 26.27 36.42 56.00 4.647 9.95 27.01 37.26 56.00 8.637 9.96 29.91 40.29 60.00	(MHz) (dB) (dBuA) (dBuA) (dBuA) (dBuA) (dBuA) 0.51278 9.95 24.07 34.21 56.00 21.79 0.76702 9.95 26.71 36.86 56.00 19.14 0.94308 9.94 26.27 36.42 56.00 19.58 4.647 9.95 27.01 37.26 56.00 18.74 8.637 9.96 29.91 40.29 60.00 19.71	Freq Loss Reading Level Limits Margin Remark (MHz) (dB) (dBuA) (dBuA) (dBuA) (dBuA) (dB) 0.51278 9.95 24.07 34.21 56.00 21.79 QP 0.76702 9.95 26.71 36.86 56.00 19.14 QP 0.94308 9.94 26.27 36.42 56.00 19.58 QP 4.647 9.95 27.01 37.26 56.00 18.74 QP 8.637 9.96 29.91 40.29 60.00 19.71 QP

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





Data No

:42

Trace: (Discrete)

Site no :1#conduction

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

Limit :FCC PART 15 B

Env./Ins. :24.3 *C/68% Engineer :Nick_Huang

EUT :LCD TV M/N:LE40FHDE3000

Power Rating : AC 120V/60Hz

Test Mode : PC Mode

:Running "H" Pattern And 1KHz Playing

HDMI 2:1920*1080@60Hz

	Cable		Emission	ı		
Freq	Loss	Reading	Level	Limits	Margin	Remark
(MHz)	(dB)	(dBuA)	(dBuA)	(dBuA)	(dB)	
0.76702	9.95	22.58	32.77	56.00	23.23	QP
1.303	9.94	20.26	30.46	56.00	25.54	QP
3.491	9.94	20.63	30.89	56.00	25.11	QP
4.848	9.95	22.42	32.71	56.00	23.29	QP
9.302	9.97	27.68	38.08	60.00	21.92	QP
16.140	10.00	25.20	35.94	60.00	24.06	QP
	0.76702 1.303 3.491 4.848 9.302	Freq Loss (MHz) (dB) 0.76702 9.95 1.303 9.94 3.491 9.94 4.848 9.95 9.302 9.97	Freq Loss Reading (MHz) (dB) (dBuA) 0.76702 9.95 22.58 1.303 9.94 20.26 3.491 9.94 20.63 4.848 9.95 22.42 9.302 9.97 27.68	Freq Loss Reading Level (MHz) (dB) (dBu&) (dBu&) 0.76702 9.95 22.58 32.77 1.303 9.94 20.26 30.46 3.491 9.94 20.63 30.89 4.848 9.95 22.42 32.71 9.302 9.97 27.68 38.08	Freq Loss Reading Level Limits (MHz) (dB) (dBuÅ) (dBuÅ) (dBuÅ) (dBuÅ) 0.76702 9.95 22.58 32.77 56.00 1.303 9.94 20.26 30.46 56.00 3.491 9.94 20.63 30.89 56.00 4.848 9.95 22.42 32.71 56.00 9.302 9.97 27.68 38.08 60.00	Freq (MHz) Loss (dB) Reading (dBuÅ) Level (dBuÅ) Limits (dBuÅ) Margin (dBuÅ) 0.76702 9.95 22.58 32.77 56.00 23.23 1.303 9.94 20.26 30.46 56.00 25.54 3.491 9.94 20.63 30.89 56.00 25.11 4.848 9.95 22.42 32.71 56.00 23.29 9.302 9.97 27.68 38.08 60.00 21.92

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

^{2.} If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



4. RADIATED EMISSION MEASUREMENT

4.1.Test Equipment

4.1.1.For frequency range 30MHz~1000MHz

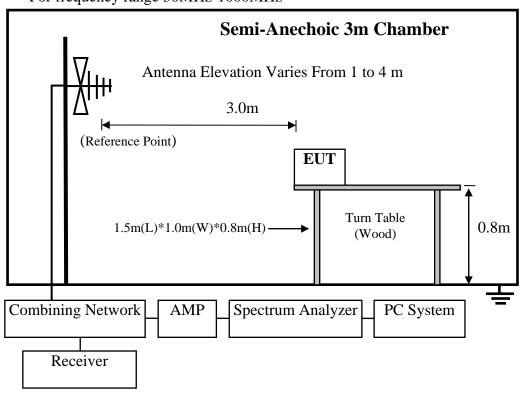
_						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24,12	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 12	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 12	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 12	1 Year
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

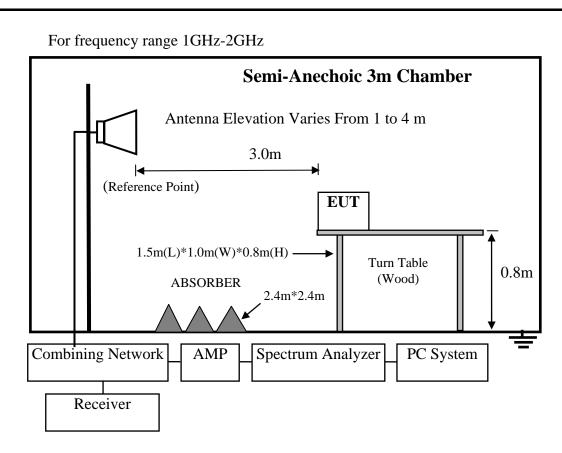
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 12	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	June.05, 12	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 12	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 12	1 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. : LE40FHDE3000

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: Nov.29, 2012 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	#41	#42	
2.		VGA	1024*768 @ 60Hz	#40	#39	
3. 💥	PC Mode		1920*1080@60Hz	#38	#37	
4.		HDMI 1	1920*1080@60Hz	#34	#33	
5.		HDMI 2	1920*1080@60Hz	#36	#35	

(* Worst test mode)



For frequency range 1GHz~2GHz

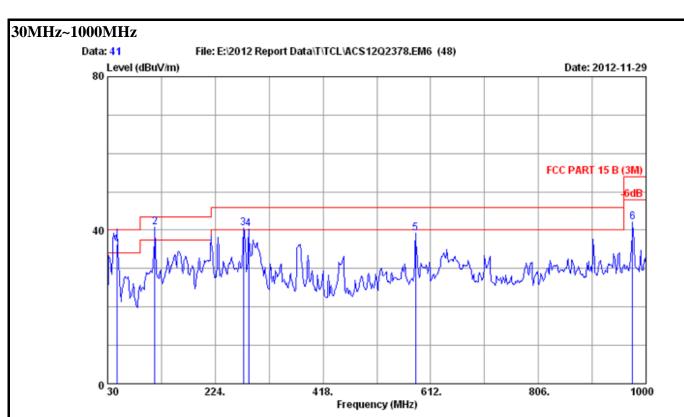
The EUT with below test mode were measured within Anechoic Chamber and the test results listed in next pages

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: Dec.03,	2012	Temperature: 24°C	Humidity: 56%

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





Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

Power rating : AC 120V/60Hz

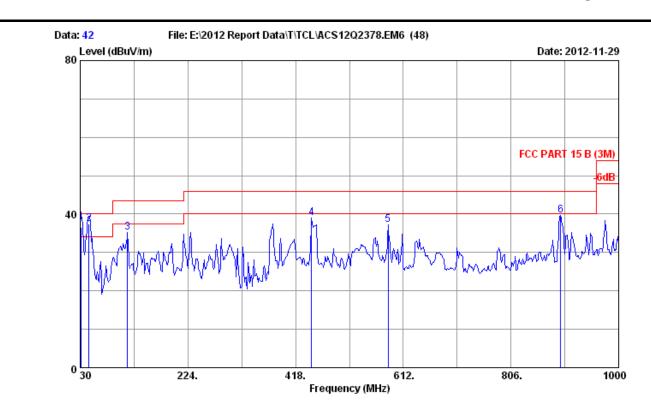
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	47.460	9.64	0.57	26.20	36.41	40.00	3.59	QP
2	115.360	10.89	0.88	28.93	40.70	43.50	2.80	QP
3	274.440	13.18	1.23	26.25	40.66	46.00	5.34	QP
4	284.140	13.46	1.24	25.65	40.35	46.00	5.65	QP
5	584.840	20.09	2.07	17.17	39.33	46.00	6.67	QP
6	975.750	24.59	2.89	14.56	42.04	54.00	11.96	QP

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





Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

Power rating : AC 120V/60Hz

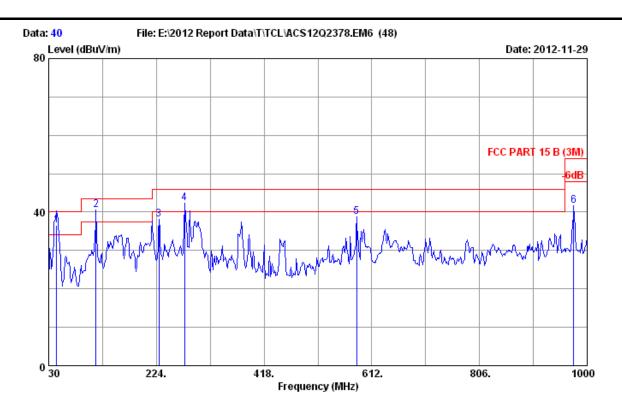
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.970	18.17	0.45	17.99	36.61	40.00	3.39	QP
2	45.520	10.56	0.57	26.30	37.43	40.00	2.57	QP
3	115.360	10.89	0.88	23.49	35.26	43.50	8.24	QP
4	447.100	17.61	1.69	19.62	38.92	46.00	7.08	QP
5	584.840	20.09	2.07	14.95	37.11	46.00	8.89	QP
6	895.240	23.48	2.81	13.39	39.68	46.00	6.32	QP

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





Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

Power rating : AC 120V/60Hz

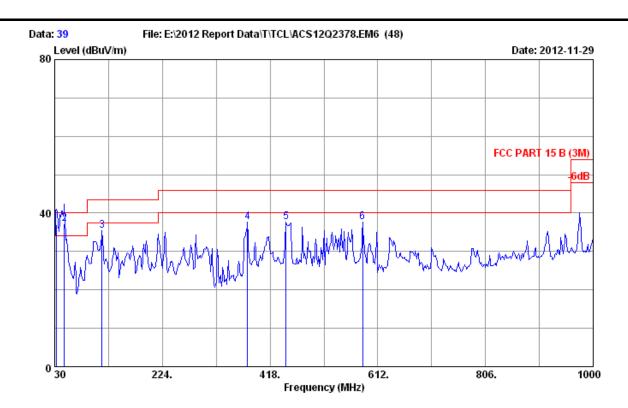
Test Mode : Running "H" Pattern And 1KHz Playing

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	44.550	11.02	0.57	24.85	36.44	40.00	3.56	QP
2	115.360	10.89	0.88	28.79	40.56	43.50	2.94	QP
3	228.850	10.66	1.12	26.41	38.19	46.00	7.81	QP
4	274.440	13.18	1.23	27.82	42.23	46.00	3.77	QP
5	584.840	20.09	2.07	16.60	38.76	46.00	7.24	QP
6	975.750	24.59	2.89	14.24	41.72	54.00	12.28	QP

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





Site no. : 3m Chamber Data no. : 39
Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

Power rating : AC 120V/60Hz

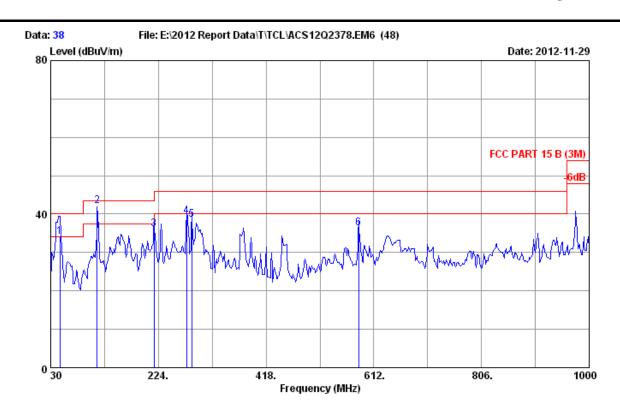
Test Mode : Running "H" Pattern And 1KHz Playing

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	32.910	17.07	0.45	19.46	36.98	40.00	3.02	QP
2	47.460	9.64	0.57	27.07	37.28	40.00	2.72	QP
3	115.360	10.89	0.88	23.68	35.45	43.50	8.05	QP
4	377.260	15.95	1.50	20.25	37.70	46.00	8.30	QP
5	447.100	17.61	1.69	18.35	37.65	46.00	8.35	QP
6	584.840	20.09	2.07	15.51	37.67	46.00	8.33	QP

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





Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

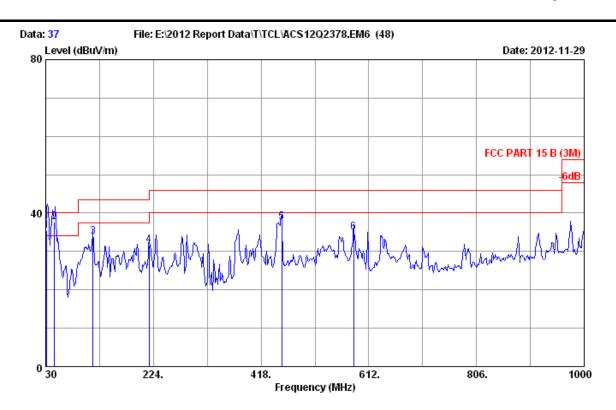
EUT : LCD TV M/N:LE40FHDE3000

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	46.200	10.23	0.57	23.21	34.01	40.00	5.99	QP
2	114.010	10.81	0.88	30.40	42.09	43.50	1.41	QP
3	216.240	9.75	1.11	25.25	36.11	46.00	9.89	QP
4	274.440	13.18	1.23	24.93	39.34	46.00	6.66	QP
5	284.140	13.46	1.24	23.81	38.51	46.00	7.49	QP
6	584.840	20.09	2.07	14.11	36.27	46.00	9.73	QP



Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

Power rating : AC 120V/60Hz

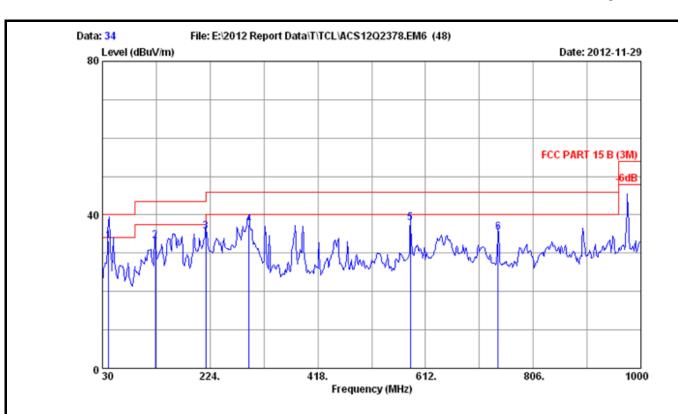
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1920*1080@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	1	31.950	17.60	0.45	17.30	35.35	40.00	4.65	QP
	2	46.000	10.33	0.57	26.80	37.70	40.00	2.30	QP
	3	115.360	10.89	0.88	22.15	33.92	43.50	9.58	QP
	4	216.240	9.75	1.11	20.89	31.75	46.00	14.25	QP
	5	454.860	17.87	1.71	18.06	37.64	46.00	8.36	QP
	6	584.840	20.09	2.07	12.91	35.07	46.00	10.93	QP

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





Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

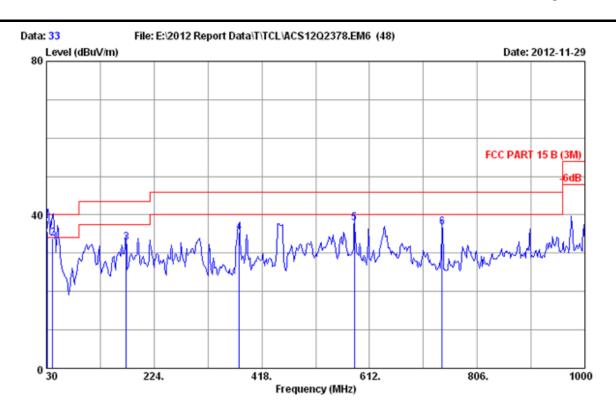
Power rating : AC 120V/60Hz

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

HDMI 1:1920*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	40.950	12.80	0.51	19.80	33.11	40.00	6.89	QP
2	125.060	11.23	0.90	21.11	33.24	43.50	10.26	QP
3	216.240	9.75	1.11	24.83	35.69	46.00	10.31	QP
4	293.840	13.72	1.27	22.55	37.54	46.00	8.46	QP
5	584.840	20.09	2.07	15.67	37.83	46.00	8.17	QP
6	742.950	22.11	2.54	10.81	35.46	46.00	10.54	QP

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



Site no. : 3m Chamber Data no. : 33
Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

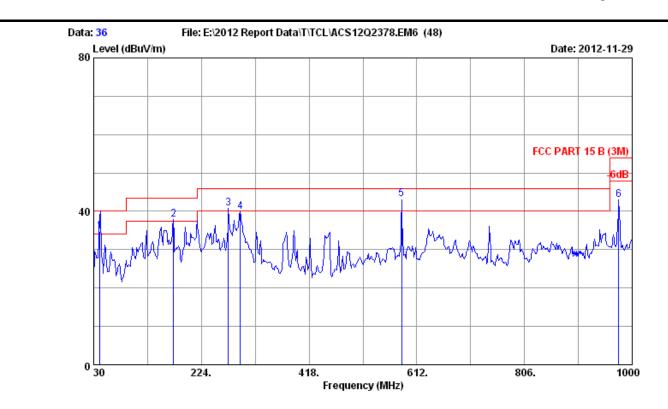
Power rating : AC 120V/60Hz

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

HDMI 1:1920*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.880	17.64	0.45	17.60	35.69	40.00	4.31	QP
2	41.250	12.64	0.51	20.80	33.95	40.00	6.05	QP
3	173.560	9.40	1.00	22.45	32.85	43.50	10.65	QP
4	377.260	15.95	1.50	17.89	35.34	46.00	10.66	QP
5	584.840	20.09	2.07	15.69	37.85	46.00	8.15	QP
6	742.950	22.11	2.54	12.18	36.83	46.00	9.17	QP

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



Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

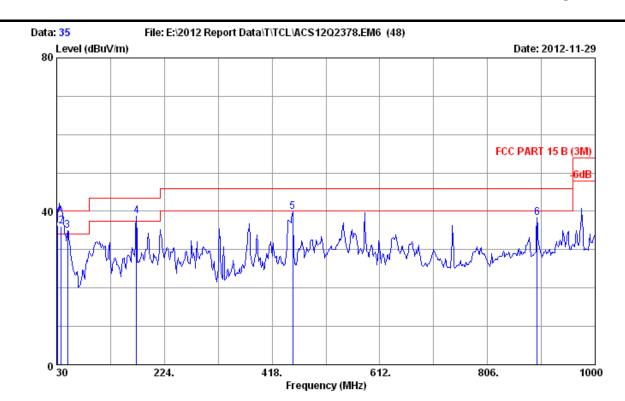
Power rating : AC 120V/60Hz

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

HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	40.950	12.80	0.51	21.50	34.81	40.00	5.19	QP
2	173.560	9.40	1.00	27.40	37.80	43.50	5.70	QP
3	272.500	13.19	1.23	26.35	40.77	46.00	5.23	QP
4	293.840	13.72	1.27	24.86	39.85	46.00	6.15	QP
5	585.020	20.09	2.07	21.10	43.26	46.00	2.74	QP
6	975.750	24.59	2.89	15.62	43.10	54.00	10.90	QP

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



Dis. / Ant. : 3m 2012 CBL6111C 2598 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/56% Engineer : Even_Deng

EUT : LCD TV M/N:LE40FHDE3000

Power rating : AC 120V/60Hz

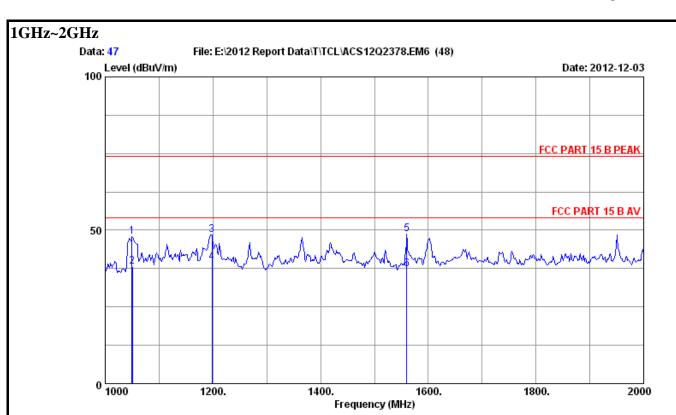
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	32.180	17.47	0.45	18.30	36.22	40.00	3.78	QP
2	37.760	14.44	0.51	21.25	36.20	40.00	3.80	QP
3	49.400	8.78	0.63	25.66	35.07	40.00	4.93	QP
4	173.560	9.40	1.00	28.40	38.80	43.50	4.70	QP
5	454.860	17.87	1.71	20.39	39.97	46.00	6.03	QP
6	895.240	23.48	2.81	11.97	38.26	46.00	7.74	QP

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





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:LE40FHDE3000

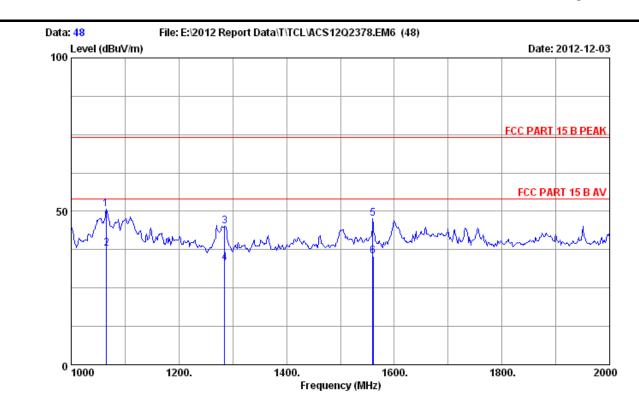
Power Rating : AC 120V/60Hz

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

VGA:1920*1080@60Hz

		Ant.	Cable	AMP		Emissior	ı		
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1050.000	23.45	0.96	34.09	57.70	48.02	74.00	25.98	Peak
2	1050.325	23.45	0.96	34.09	47.72	38.04	54.00	15.96	Average
3	1198.000	24.19	0.98	34.06	57.36	48.47	74.00	25.53	Peak
4	1198.314	24.19	0.98	34.06	48.32	39.43	54.00	14.57	Average
5	1560.000	25.85	1.03	33.96	55.77	48.69	74.00	25.31	Peak
6	1560.388	25.85	1.03	33.96	44.43	37.35	54.00	16.65	Average

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



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:LE40FHDE3000

Power Rating : AC 120V/60Hz

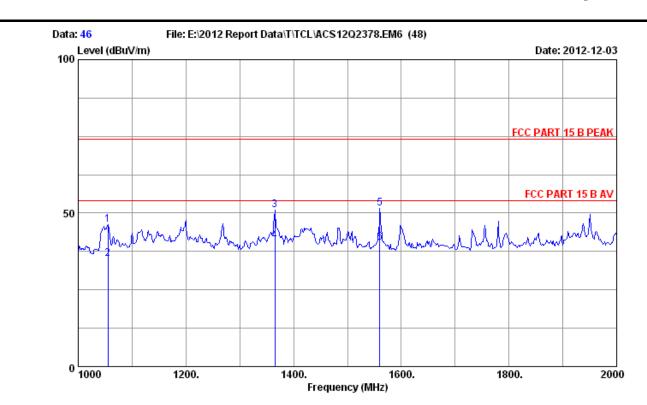
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1065.000	23.53	0.96	34.09	60.31	50.71	74.00	23.29	Peak
2	1065.287	23.53	0.96	34.09	47.53	37.93	54.00	16.07	Average
3	1285.000	24.61	0.99	34.04	53.52	45.08	74.00	28.92	Peak
4	1285.328	24.61	0.99	34.04	41.57	33.13	54.00	20.87	Average
5	1560.000	25.85	1.03	33.96	54.80	47.72	74.00	26.28	Peak
6	1560.574	25.85	1.03	33.96	42.37	35.29	54.00	18.71	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading $-\mathrm{Amp}$ Factor





Site no. : 3m Chamber

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

: FCC PART 15 B PEAK Limit

: 24*C/56% Env. / Ins. Engineer : Even_Deng

: LCD TV M/N:LE40FHDE3000

Power Rating : AC 120V/60Hz

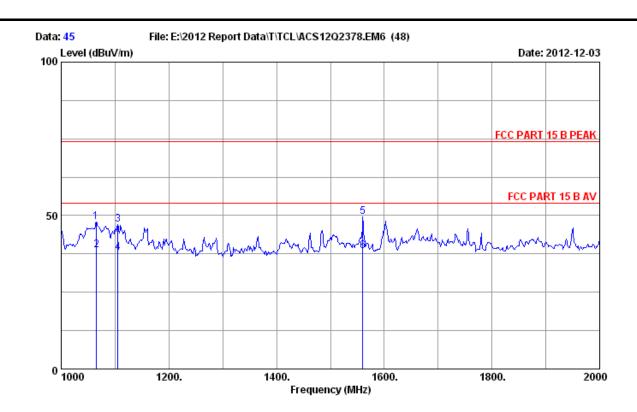
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1920*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	1055.000	23.45	0.96	34.09	55.90	46.22	74.00	27.78	Peak
2	1055.320	23.45	0.96	34.09	44.82	35.14	54.00	18.86	Average
3	1365.000	24.94	1.00	34.03	58.95	50.86	74.00	23.14	Peak
4	1365.365	24.94	1.00	34.03	48.92	40.83	54.00	13.17	Average
5	1560.000	25.85	1.03	33.96	58.55	51.47	74.00	22.53	Peak
6	1560.328	25.85	1.03	33.96	47.53	40.45	54.00	13.55	Average

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





Site no. : 3m Chamber Data no. : 45
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:LE40FHDE3000

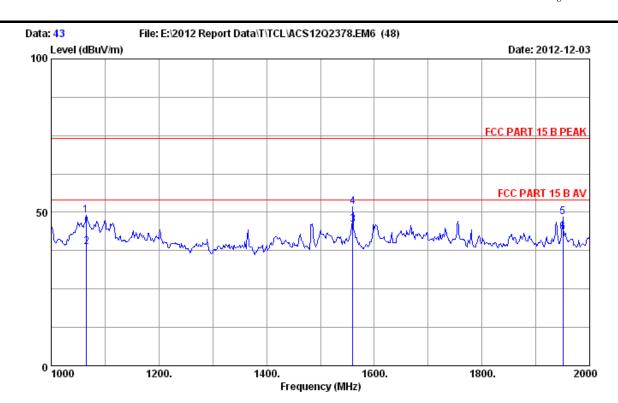
Power Rating : AC 120V/60Hz

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

HDMI 1:1920*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	1065.000	23.53	0.96	34.09	57.64	48.04	74.00	25.96	Peak
2	1065.365	23.53	0.96	34.09	48.24	38.64	54.00	15.36	Average
3	1105.000	23.70	0.96	34.08	56.38	46.96	74.00	27.04	Peak
4	1105.325	23.70	0.96	34.08	47.34	37.92	54.00	16.08	Average
5	1560.000	25.85	1.03	33.96	56.56	49.48	74.00	24.52	Peak
6	1560.258	25.85	1.03	33.96	45.53	38.45	54.00	15.55	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:LE40FHDE3000

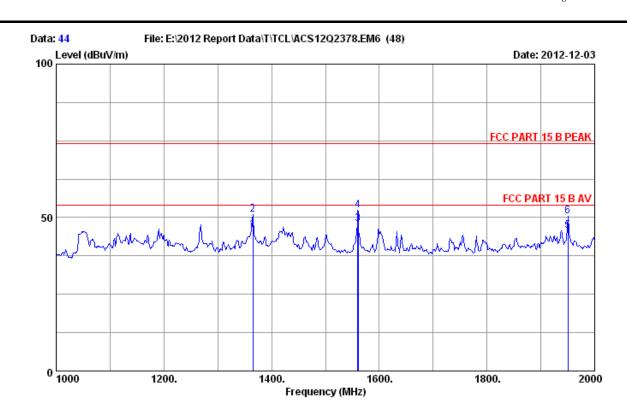
Power Rating : AC 120V/60Hz

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

HDMI 2:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1065.140	23.53	0.96	34.09	58.60	49.00	74.00	25.00	Peak
2	1065.580	23.53	0.96	34.09	48.21	38.61	54.00	15.39	Average
3	1560.130	25.85	1.03	33.96	53.02	45.94	54.00	8.06	Average
4	1560.360	25.85	1.03	33.96	58.94	51.86	74.00	22.14	Peak
5	1950.020	27.31	1.12	33.73	53.78	48.48	74.00	25.52	Peak
6	1950.240	27.31	1.12	33.73	48.69	43.39	54.00	10.61	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading $-\mathrm{Amp}$ 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:LE40FHDE3000

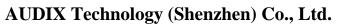
Power Rating : AC 120V/60Hz

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

HDMI 2:1920*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	1365.050	24.94	1.00	34.03	54.17	46.08	54.00	7.92	Average
2	1365.220	24.94	1.00	34.03	59.09	51.00	74.00	23.00	Peak
3	1560.150	25.85	1.03	33.96	54.90	47.82	54.00	6.18	Average
4	1560.850	25.85	1.03	33.96	59.32	52.24	74.00	21.76	Peak
5	1950.050	27.31	1.12	33.73	51.06	45.76	54.00	8.24	Average
6	1950.640	27.31	1.12	33.73	55.77	50.47	74.00	23.53	Peak

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





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5. DEVIATION TO TEST SPECIFICATIONS [NONE]