FCC ID:W8ULE32HDE3010

APPLICATION OF CERTIFICATION For

TTE Technology Inc.

LCD TV

Brand Name	Model Number
TCL	LE32HDE3010; LE32HDE3011

FCC ID: W8ULE32HDE3010

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-F13091

Date of Test : Mar.17~Apr.01, 2013

Date of Report : Apr.19, 2013



FCC ID:W8ULE32HDE3010

TABLE OF CONTENTS

De	scripi	<u>uon</u>	Page
Te	st Rep	port Certification	
1.	SUN	MMARY OF STANDARDS AND RESULTS	1-1
	1.1.	Description of Standards and Results	1-1
2.	GEN	NERAL INFORMATION	
_,	2.1.	Description of Device (EUT)	
	2.2.	Tested Supporting System Details	
	2.3.	Block diagram of connection between the EUT and simulators	
	2.4.	Test Facility	2-4
	2.5.	Measurement Uncertainty (95% confidence levels, k=2)	2-4
3.	POV	WER LINE CONDUCTED EMISSION TEST	3-1
	3.1.	Test Equipment	3-1
	3.2.	Block Diagram of Test Setup	3-1
	3.3.	Power Line Conducted Emission Test Limits	
	3.4.	Configuration of EUT on Test	3-1
	3.5.	Operating Condition of EUT	
	3.6.	Test Procedure	
	3.7.	Conducted Disturbance at Mains Terminals Test Results	
4.	RAI	DIATED EMISSION TEST	4-1
	4.1.	Test Equipment	
	4.2.	Block Diagram of Test Setup	
	4.3.	Radiated Emission Limit	
	4.4.	EUT Configuration on Test	
	4.5.	Operating Condition of EUT	
	4.6. 4.7.	Test Procedure	
_			
5.		VIATION TO TEST SPECIFICATIONS	
6.	PHO	OTOGRAPH	
	6.1.	Photos of Power Line Conducted Emission Test	
	6.2.	Photos of Radiated Emission Test (In Anechoic Chamber)	6-2
7.	PHO	OTOS OF THE EUT	7-1



FCC ID: W8ULE32HDE3010

TEST REPORT CERTIFICATION

Applicant

: TTE Technology Inc.

Manufacturer

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

EUT Description

LCD TV

FCC ID

W8ULE32HDE3010

(A) Model No. &:

Brand Name

Brand Name Model Number

TCL LE32HDE3010; LE32HDE3011

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

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2012, ANSI C63.4: 2009 ICES-003 Issue 4 February 2012.

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.

Signature:

Date of Test: Mar.17~Apr.01, 2013 Report of date: Apr.19, 2013

Prepared by:

Reviewed by:

信奉科技(深圳)有限公司 Zeng / Supervisor

Lisa Liang / Assistant

Audix Technology (Shenzhen) Co., Ltd.

EMC部門報告専用章

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						
Description of Test Item	Standard	Results	Remarks			
Power Line Conducted Emission Test	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 4.05dB at 0.44443 MHz			
Radiated Emission Test (30-1000MHz)	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 3.28dB at 742.500MHz			
Radiated Emission Test (1-6GHz)	FCC Part 15: 2012 ANSI C63.4: 2009	PASS	Meets Class B Limit Minimum passing margin is 7.65dB at 1952.741MHz			



2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description : LCD TV

Model Number&:

Brand Name

Brand Name	Model Number
TCL	LE32HDE3010; LE32HDE3011

Only the Model name, appearance color and shell is different

FCC ID : W8ULE32HDE3010

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 and High-Level Tech Industries, Huizhou, Guangdong Province, China, 516006.

FREQUENCIES USED AND GENERATED WITHIN DEVICE					
LVDS(HD) 8MHz 7					
LVDS(FHD)	75MHz				
IF	6MHz				
DC-DC	U302->385KHz				
DDR	390MHz				
AMP	384KHz				

Power Cord : Unshielded, Undetachable, 2.0m

Date of Test : Mar.17~Apr.01, 2013

Date of Receipt : Mar.16, 2013

Sample Type : Prototype production

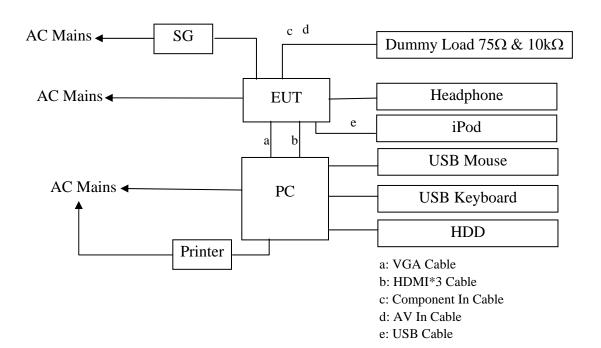


2.2.Tested Supporting System Details

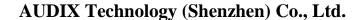
	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type		
1.	Personal	Test PC M	DELL	Studio 540	224XK2X	☑FCC DoC ☑BSMI ID:R33002		
1.	Computer	Power Cord: Unshie Display Card: HD34						
2.	USB Keyboard	ACS-EMC- K04R	DELL	SK-8115	CN-ODJ313-7161 6-6BB-049J	☑ FCC DoC ☑BSMI ID: T3A002		
2.	CSB Reyboard	Power Cord: shielde	ower Cord: shielded, Undetachable, 2.0m					
3.	Headphone	ACS-EMC-EP03	OVANN	OV880V	N/A	□FCC ID □BSMI ID		
	110map none	Cable: Shielded, Une	detachabled, 4.0n	ı				
		ACS-EMC-PT04	НР	C9079A	N/A	☑FCC DoC ☑BSMI ID: R33001		
4.	Printer	USD Cables Shielded Detechabled 1.9m						
5.	USB Mouse	ACS-EMC-M04R	DELL	M056UO	512024282	☑ FCC DoC ☑BSMI ID: R41108		
	OSB Wouse	Power Cord: shielde	d, Undetachable,	1.8m				
6.	iPod nano	ACS-EMC-IP03	APPLE	A1199	YM711H3LVQ5	☑FCC DoC ☑BSMI ID: R33057		
	ii ou nano	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 Component In Cable: Unshielded, Detachable, 1.5m (10ΚΩ &75Ω) AV Cable: Unshielded, Detachable, 1.5m							
9.	D-Sub Cable: Shielded Detachable 1.5m							



2.3.Block diagram of connection between the EUT and simulators



(EUT: LCD TV)





2.4.Test Facility

Site Description

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

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

3m Anechoic Chamber : Certificated by FCC, USA

Registration Number: 90454 Valid Date: Feb.22, 2015

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

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

EMC Lab. : Certificated by DAkkS, Germany

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

Valid Date: Feb.01, 2014

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

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

Test Item	Uncertainty
Uncertainty for Conduction emission test	3.48 dB(9KHz to 150KHz)
in No. 1 Conduction	3.06 dB(150KHz to 30MHz)
	3.6 dB(30~200MHz, Polarize: H)
Uncertainty for Radiation Emission test	3.8dB(30~200MHz, Polarize: V)
in 10m chamber	4.2dB(200M~1GHz, Polarize: H)
	3.8dB(200M~1GHz, Polarize: V)
Uncertainty for Radiated Emission test in	3.1dB (Distance: 3m Polarization: V)
3m chamber (1GHz-18GHz)	3.7 dB (Distance: 3m Polarization: H)
Uncertainty for disturbance voltage at the	$2.0 \text{ dB } (30\text{MHz} \sim 1000\text{MHz})$
antenna terminals	0.24 dB (1000MHz~2150MHz)
Uncertainty for test site temperature	3%
and humidity	0.6℃

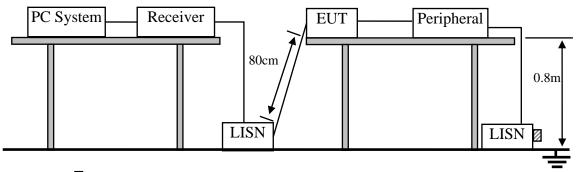


3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	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(µV)	dB(µV)		
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 : LE32HDE3010

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 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: 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 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.: LE32HDE3010

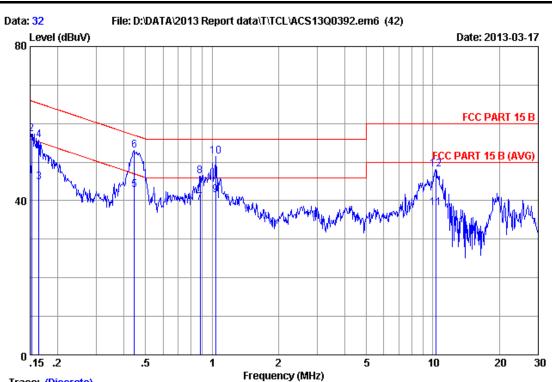
Test Date: Mar.17, 2013 Temperature: 25.2℃ Humidity: 52%

The details of test modes are as follows:

No.	Test Mode	Immust Dont	Resolution &	Reference Test Data No.	
NO.	Test Mode	Input Port	Frequency	Line	Neutral
1. 💥			640*480@60Hz	#32	#31
2.	PC Mode	VGA	1024*768@60Hz	#34	#33
3.			1366*768@60Hz	#36	#35
4.		HDMI 1	1920*1080@60Hz	#38	#37
5.		HDMI 2	1920*1080@60Hz	#40	#39
6.		HDMI 3	1920*1080@60Hz	#42	#41

(* Worst test mode)





Trace: (Discrete)

Site no :1#conduction Data No

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

:FCC PART 15 B Limit

Engineer :Nick_Huang Env./Ins. :25.2*C/52%

:LCD TV M/N:LE32HDE3010

Power Rating :AC 120V/60Hz

Test Mode :PC Mode

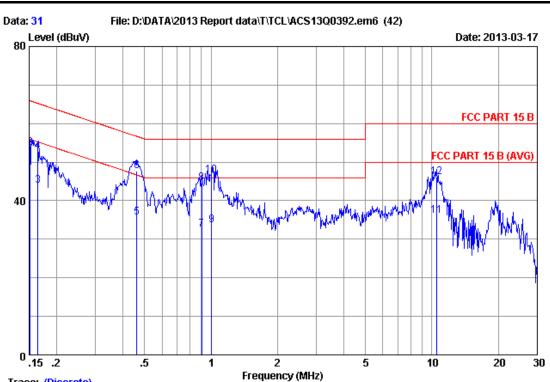
Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15240	0.19	0.14	46.10	46.43	55.87	9.44	Average
2	0.15240	0.19	0.14	57.01	57.34	65.87	8.53	QP
3	0.16414	0.19	0.14	44.47	44.80	55.25	10.45	Average
4	0.16414	0.19	0.14	55.41	55.74	65.25	9.51	QP
5	0.44443	0.19	0.15	42.52	42.86	46.98	4.12	Average
6	0.44443	0.19	0.15	52.59	52.93	56.98	4.05	QP
7	0.88499	0.21	0.14	39.07	39.42	46.00	6.58	Average
8	0.88499	0.21	0.14	46.05	46.40	56.00	9.60	QP
9	1.037	0.21	0.14	41.19	41.54	46.00	4.46	Average
10	1.037	0.21	0.14	51.12	51.47	56.00	4.53	QP
11	10.288	0.47	0.17	37.49	38.13	50.00	11.87	Average
12	10.288	0.47	0.17	47.47	48.11	60.00	11.89	QP

^{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

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

:FCC PART 15 B Limit

Engineer :Nick_Huang Env./Ins. :25.2*C/52%

:LCD TV M/N:LE32HDE3010

Power Rating :AC 120V/60Hz

Test Mode :PC Mode

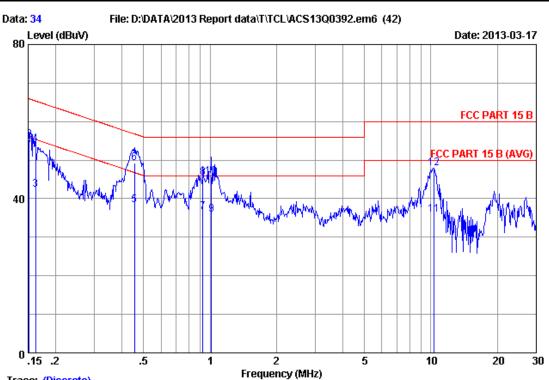
Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15160	0.21	0.14	44.48	44.83	55.91	11.08	Average
2	0.15160	0.21	0.14	53.45	53.80	65.91	12.11	QP
3	0.16414	0.21	0.14	43.52	43.87	55.25	11.38	Average
4	0.16414	0.21	0.14	52.50	52.85	65.25	12.40	QP
5	0.46122	0.23	0.15	35.23	35.61	46.67	11.06	Average
6	0.46122	0.23	0.15	47.27	47.65	56.67	9.02	QP
7	0.90874	0.24	0.14	32.14	32.52	46.00	13.48	Average
8	0.90874	0.24	0.14	44.17	44.55	56.00	11.45	QP
9	1.005	0.24	0.14	33.23	33.61	46.00	12.39	Average
10	1.005	0.24	0.14	46.22	46.60	56.00	9.40	QP
11	10.508	0.47	0.17	35.47	36.11	50.00	13.89	Average
12	10.508	0.47	0.17	45.41	46.05	60.00	13.95	QP

^{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 :34

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

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

Test Mode : PC Mode

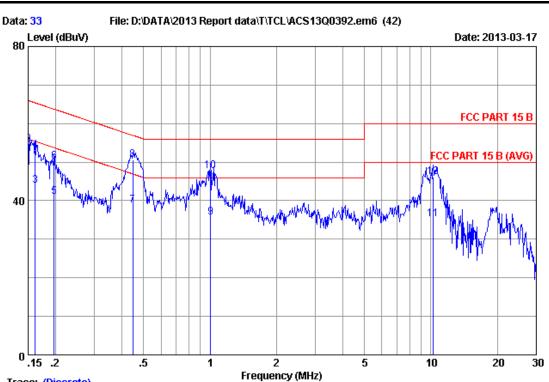
Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15160	0.19	0.14	43.98	44.31	55.91	11.60	Average
2	0.15160	0.19	0.14	54.95	55.28	65.91	10.63	QP
3	0.16241	0.19	0.14	41.94	42.27	55.34	13.07	Average
4	0.16241	0.19	0.14	53.92	54.25	65.34	11.09	QP
5	0.45395	0.19	0.15	37.93	38.27	46.80	8.53	Average
6	0.45395	0.19	0.15	48.95	49.29	56.80	7.51	QP
7	0.92821	0.21	0.14	36.25	36.60	46.00	9.40	Average
8	0.92821	0.21	0.14	45.05	45.40	56.00	10.60	QP
9	1.016	0.21	0.14	35.48	35.83	46.00	10.17	Average
10	1.016	0.21	0.14	45.41	45.76	56.00	10.24	QP
11	10.288	0.47	0.17	35.32	35.96	50.00	14.04	Average
12	10.288	0.47	0.17	47.38	48.02	60.00	11.98	QP

^{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 :33

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

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

Test Mode : PC Mode

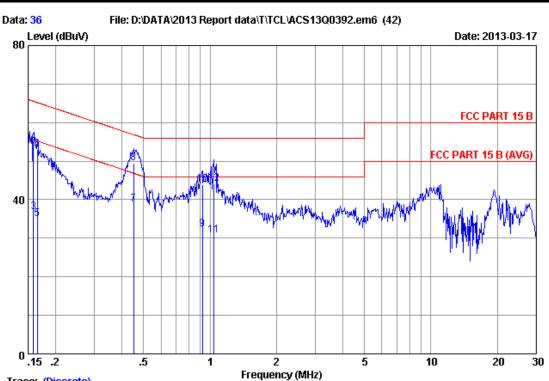
Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.21	0.14	44.28	44.63	56.00	11.37	Average
2	0.15000	0.21	0.14	54.23	54.58	66.00	11.42	QP
3	0.16155	0.21	0.14	43.62	43.97	55.38	11.41	Average
4	0.16155	0.21	0.14	52.60	52.95	65.38	12.43	QP
5	0.19654	0.21	0.14	40.70	41.05	53.76	12.71	Average
6	0.19654	0.21	0.14	49.80	50.15	63.76	13.61	QP
7	0.44679	0.23	0.15	38.35	38.73	46.93	8.20	Average
8	0.44679	0.23	0.15	50.31	50.69	56.93	6.24	QP
9	1.005	0.24	0.14	35.37	35.75	46.00	10.25	Average
10	1.005	0.24	0.14	47.39	47.77	56.00	8.23	QP
11	10.233	0.45	0.17	34.67	35.29	50.00	14.71	Average
12	10.233	0.45	0.17	45.61	46.23	60.00	13.77	QP

^{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 :36

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

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

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

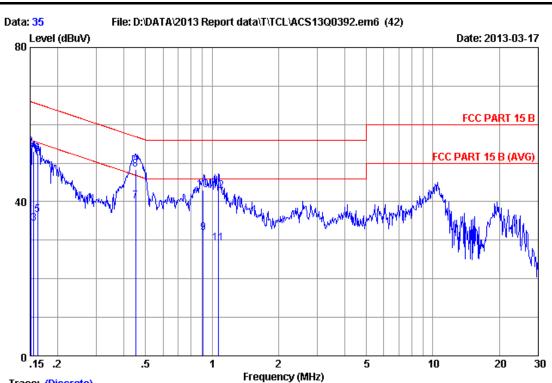
Running "H" Pattern And 1KHz Playing

VGA:1366*768@60Hz

No 	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.19	0.14	33.11	33.44	56.00	22.56	Average
2	0.15000	0.19	0.14	54.21	54.54	66.00	11.46	QP
3	0.15900	0.19	0.14	36.41	36.74	55.52	18.78	Average
4	0.15900	0.19	0.14	54.51	54.84	65.52	10.68	QP
5	0.16500	0.19	0.14	34.70	35.03	55.21	20.18	Average
6	0.16500	0.19	0.14	52.80	53.13	65.21	12.08	QP
7	0.45100	0.19	0.15	38.40	38.74	46.86	8.12	Average
8	0.45100	0.19	0.15	49.20	49.54	56.86	7.32	QP
9	0.92300	0.21	0.14	31.90	32.25	46.00	13.75	Average
10	0.92300	0.21	0.14	43.60	43.95	56.00	12.05	QP
11	1.037	0.21	0.14	30.30	30.65	46.00	15.35	Average
12	1.037	0.21	0.14	43.80	44.15	56.00	11.85	QP

^{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

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

:FCC PART 15 B Limit

Engineer :Nick_Huang Env./Ins. :25.2*C/52%

:LCD TV M/N:LE32HDE3010 EUT

Power Rating :AC 120V/60Hz

Test Mode :PC Mode

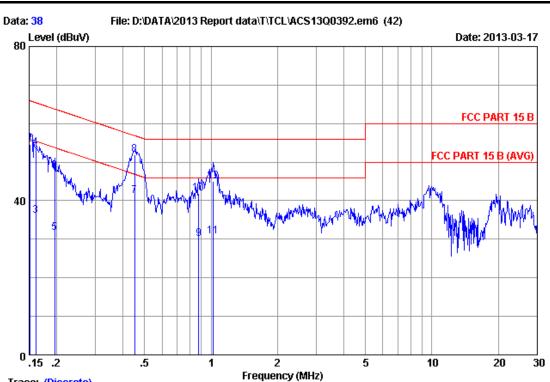
Running "H" Pattern And 1KHz Playing

VGA:1366*768@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15100	0.21	0.14	35.00	35.35	55.94	20.59	Average
2	0.15100	0.21	0.14	53.90	54.25	65.94	11.69	QP
3	0.15600	0.21	0.14	33.90	34.25	55.67	21.42	Average
4	0.15600	0.21	0.14	52.70	53.05	65.67	12.62	QP
5	0.16200	0.21	0.14	36.30	36.65	55.36	18.71	Average
6	0.16200	0.21	0.14	52.10	52.45	65.36	12.91	QP
7	0.45100	0.23	0.15	39.79	40.17	46.86	6.69	Average
8	0.45100	0.23	0.15	47.99	48.37	56.86	8.49	QP
9	0.91300	0.24	0.14	31.50	31.88	46.00	14.12	Average
10	0.91300	0.24	0.14	42.70	43.08	56.00	12.92	QP
11	1.070	0.24	0.14	28.80	29.18	46.00	16.82	Average
12	1.070	0.24	0.14	42.50	42.88	56.00	13.12	QP

^{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 :38

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

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

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

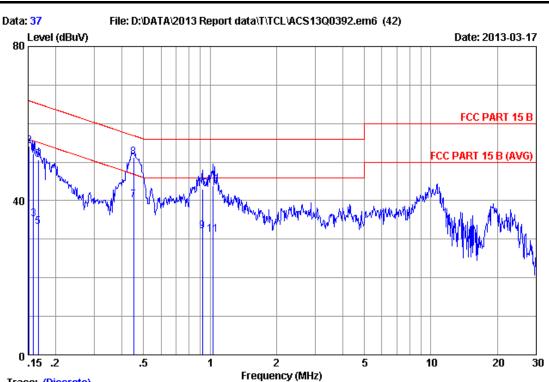
Running "H" Pattern And 1KHz Playing

HDMI 1:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15100	0.19	0.14	32.91	33.24	55.94	22.70	Average
2	0.15100	0.19	0.14	54.31	54.64	65.94	11.30	QP
3	0.16100	0.19	0.14	35.71	36.04	55.41	19.37	Average
4	0.16100	0.19	0.14	53.31	53.64	65.41	11.77	QP
5	0.19600	0.19	0.14	31.20	31.53	53.78	22.25	Average
6	0.19600	0.19	0.14	47.40	47.73	63.78	16.05	QP
7	0.45100	0.19	0.15	41.00	41.34	46.86	5.52	Average
8	0.45100	0.19	0.15	51.50	51.84	56.86	5.02	QP
9	0.88000	0.21	0.14	29.80	30.15	46.00	15.85	Average
10	0.88000	0.21	0.14	41.60	41.95	56.00	14.05	QP
11	1.021	0.21	0.14	30.40	30.75	46.00	15.25	Average
12	1.021	0.21	0.14	44.70	45.05	56.00	10.95	QP

^{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 :37

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

:FCC PART 15 B Limit

Engineer :Nick_Huang Env./Ins. :25.2*C/52%

:LCD TV M/N:LE32HDE3010

Power Rating :AC 120V/60Hz

Test Mode :PC Mode

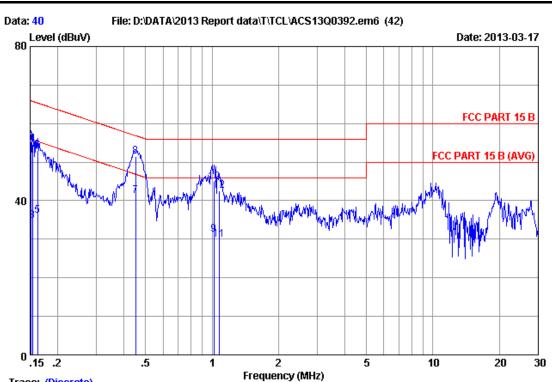
Running "H" Pattern And 1KHz Playing

HDMI 1:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15200	0.21	0.14	32.90	33.25	55.89	22.64	Average
2	0.15200	0.21	0.14	53.80	54.15	65.89	11.74	QP
3	0.15900	0.21	0.14	34.80	35.15	55.52	20.37	Average
4	0.15900	0.21	0.14	51.70	52.05	65.52	13.47	QP
5	0.16700	0.21	0.14	32.90	33.25	55.11	21.86	Average
6	0.16700	0.21	0.14	50.20	50.55	65.11	14.56	QP
7	0.45100	0.23	0.15	39.79	40.17	46.86	6.69	Average
8	0.45100	0.23	0.15	50.89	51.27	56.86	5.59	QP
9	0.92300	0.24	0.14	31.80	32.18	46.00	13.82	Average
10	0.92300	0.24	0.14	42.60	42.98	56.00	13.02	QP
11	1.031	0.24	0.14	30.80	31.18	46.00	14.82	Average
12	1.031	0.24	0.14	43.50	43.88	56.00	12.12	QP

^{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 LINE

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

Test Mode : PC Mode

Running "H" Pattern And 1KHz Playing

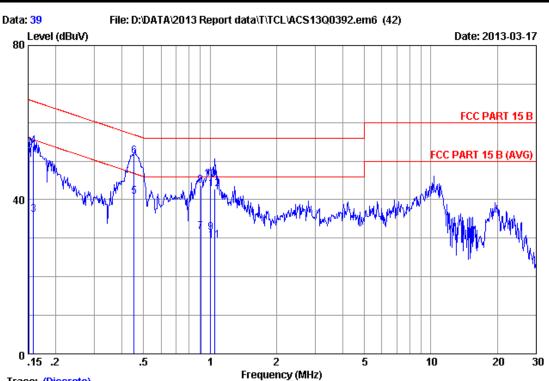
HDMI 2:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15100	0.19	0.14	32.81	33.14	55.94	22.80	Average
2	0.15100	0.19	0.14	55.01	55.34	65.94	10.60	QP
3	0.15400	0.19	0.14	34.51	34.84	55.78	20.94	Average
4	0.15400	0.19	0.14	54.31	54.64	65.78	11.14	QP
5	0.16200	0.19	0.14	35.71	36.04	55.36	19.32	Average
6	0.16200	0.19	0.14	52.81	53.14	65.36	12.22	QP
7	0.45100	0.19	0.15	40.80	41.14	46.86	5.72	Average
8	0.45100	0.19	0.15	51.10	51.44	56.86	5.42	QP
9	1.021	0.21	0.14	30.90	31.25	46.00	14.75	Average
10	1.021	0.21	0.14	44.50	44.85	56.00	11.15	QP
11	1.082	0.21	0.14	29.50	29.85	46.00	16.15	Average
12	1.082	0.21	0.14	42.10	42.45	56.00	13.55	QP

^{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.



Page 3-12 FCC ID: W8ULE32HDE3010



Trace: (Discrete)

Site no :1#conduction Data No

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

:FCC PART 15 B Limit

Engineer :Nick_Huang Env./Ins. :25.2*C/52%

:LCD TV M/N:LE32HDE3010 EUT

Power Rating :AC 120V/60Hz

Test Mode :PC Mode

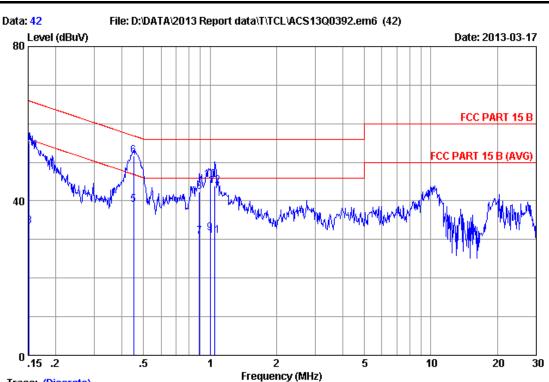
Running "H" Pattern And 1KHz Playing

HDMI 2:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emissior Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15200	0.21	0.14	32.80	33.15	55.89	22.74	Average
2	0.15200	0.21	0.14	53.20	53.55	65.89	12.34	QP
3	0.15900	0.21	0.14	35.70	36.05	55.52	19.47	Average
4	0.15900	0.21	0.14	53.60	53.95	65.52	11.57	QP
5	0.45300	0.23	0.15	40.49	40.87	46.82	5.95	Average
6	0.45300	0.23	0.15	50.79	51.17	56.82	5.65	QP
7	0.90800	0.24	0.14	31.30	31.68	46.00	14.32	Average
8	0.90800	0.24	0.14	43.20	43.58	56.00	12.42	QP
9	1.004	0.24	0.14	31.10	31.48	46.00	14.52	Average
10	1.004	0.24	0.14	44.80	45.18	56.00	10.82	QP
11	1.054	0.24	0.14	29.10	29.48	46.00	16.52	Average
12	1.054	0.24	0.14	42.50	42.88	56.00	13.12	QP

^{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 :42

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

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

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

Running "H" Pattern And 1KHz Playing

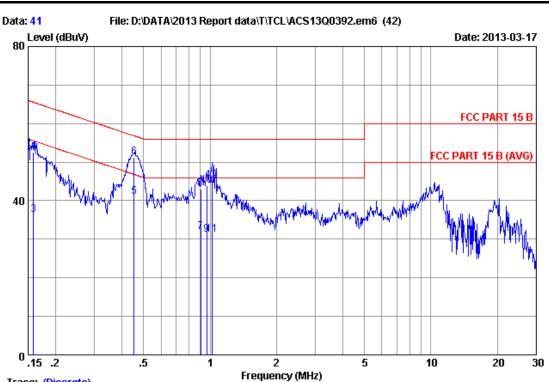
HDMI 3:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.19	0.14	32.41	32.74	56.00	23.26	Average
2	0.15000	0.19	0.14	54.11	54.44	66.00	11.56	QP
3	0.15200	0.19	0.14	33.01	33.34	55.89	22.55	Average
4	0.15200	0.19	0.14	54.61	54.94	65.89	10.95	QP
5	0.45100	0.19	0.15	38.70	39.04	46.86	7.82	Average
6	0.45100	0.19	0.15	51.30	51.64	56.86	5.22	QP
7	0.89400	0.21	0.14	30.40	30.75	46.00	15.25	Average
8	0.89400	0.21	0.14	42.00	42.35	56.00	13.65	QP
9	0.99900	0.21	0.14	31.30	31.65	46.00	14.35	Average
10	0.99900	0.21	0.14	45.20	45.55	56.00	10.45	QP
11	1.054	0.21	0.14	30.70	31.05	46.00	14.95	Average
12	1.054	0.21	0.14	43.60	43.95	56.00	12.05	QP

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

Limit :FCC PART 15 B

Env./Ins. :25.2*C/52% Engineer :Nick_Huang

EUT :LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

Test Mode : PC Mode

Running "H" Pattern And 1KHz Playing

HDMI 3:1920*1080@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.21	0.14	32.90	33.25	56.00	22.75	Average
2	0.15000	0.21	0.14	53.20	53.55	66.00	12.45	QP
3	0.15900	0.21	0.14	36.00	36.35	55.52	19.17	Average
4	0.15900	0.21	0.14	52.20	52.55	65.52	12.97	QP
5	0.45300	0.23	0.15	40.69	41.07	46.82	5.75	Average
6	0.45300	0.23	0.15	50.79	51.17	56.82	5.65	QP
7	0.90800	0.24	0.14	31.40	31.78	46.00	14.22	Average
8	0.90800	0.24	0.14	42.70	43.08	56.00	12.92	QP
9	0.96800	0.24	0.14	30.90	31.28	46.00	14.72	Average
10	0.96800	0.24	0.14	43.50	43.88	56.00	12.12	QP
11	1.021	0.24	0.14	30.80	31.18	46.00	14.82	Average
12	1.021	0.24	0.14	44.90	45.28	56.00	10.72	QP

^{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 TEST

4.1.Test Equipment

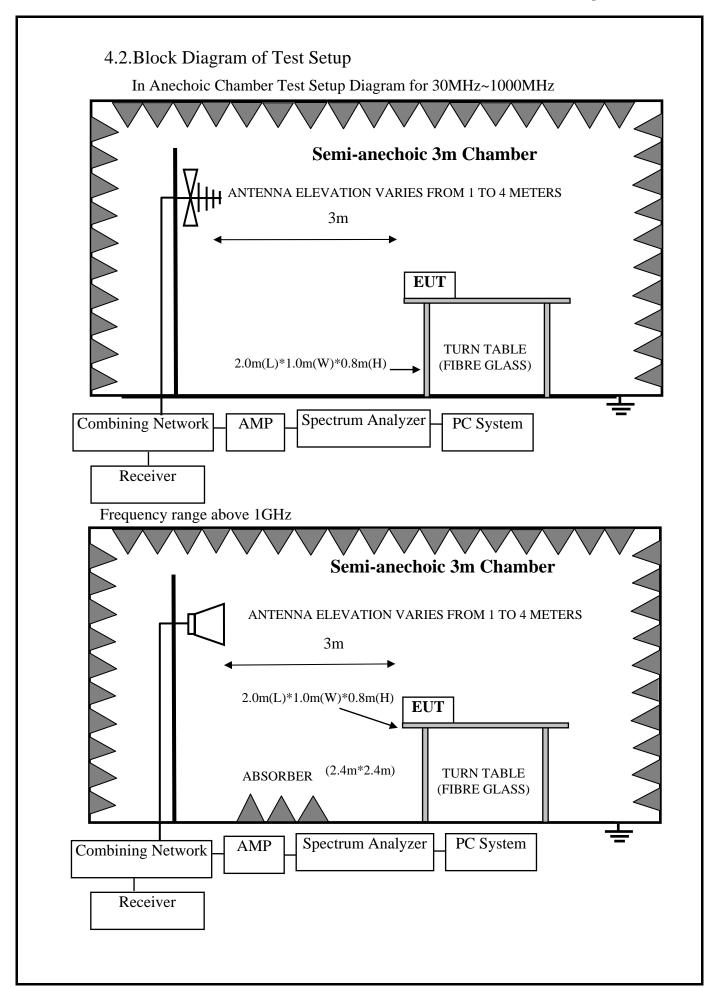
4.1.1. For frequency range 30MHz~1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	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	Trilog-Broadba	SCHWARZBECK	VULB	9168-429	Nov.27, 12	1.0 Year
	nd Antenna		9168			
6	RF Cable	MIYAZAKI	CFD400-N	3# Chamber No.1	May.08, 12	1 Year
			L			
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







4.3. 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.)

Page 4-4

EUT: LCD TV Model No. : LE32HDE3010

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.31, 2013 Temperature: 24°C Humidity: 56%

The details of test modes are as follows:

No.	Tost Mode	Input Dort	Resolution &	Reference Te	st Data No.
NO.	Test Mode	Input Port	Frequency	Horizontal	Vertical
1.		640*480@60Hz		#6	#5
2.		VGA	1024*768@60Hz	#4	#3
3.	PC Mode		1366*768@60Hz	#2	#1
4. 💥	re wiode	HDMI 1	1920*1080@60Hz	#7	#8
5.		HDMI 2	1920*1080@60Hz	#10	#9
6.		HDMI 3	1920*1080@60Hz	#11	#12

(* 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:Apr.01, 2013 Temperature: 24°C Humidity: 56%

NO.	Test Mode	Pasalution & Fraguency	Reference Test Data No.			
NO.	Test Wode	Resolution & Frequency	Horizontal	Vertical		
1.	VGA	1366*768@60Hz	#44	#43		
2.	HDMI 1	1920*1080@60Hz	#45	#46		
3.	HDMI 2	1920*1080@60Hz	#48	#47		
4.	HDMI 3	1920*1080@60Hz	#49	#50		





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

Frequency (MHz)

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

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

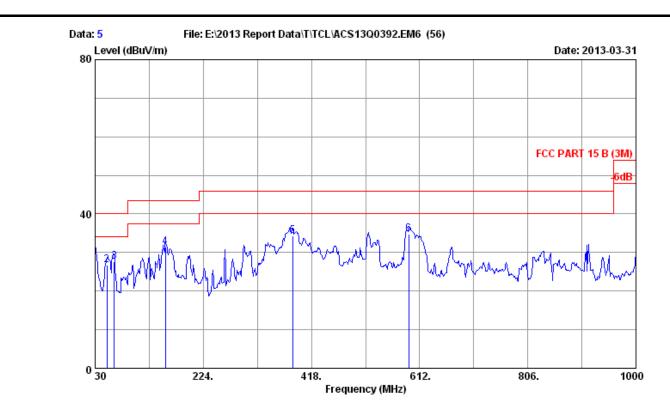
VGA:640*480@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	49.400	13.55	0.63	9.96	24.14	40.00	15.86	QP
2	63.950	11.99	0.69	15.27	27.95	40.00	12.05	QP
3	156.100	14.15	0.97	11.26	26.38	43.50	17.12	QP
4	194.900	10.19	1.04	18.30	29.53	43.50	13.97	QP
5	340.400	13.68	1.39	17.43	32.50	46.00	13.50	QP
6	519.850	16.87	1.89	14.37	33.13	46.00	12.87	QP

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

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

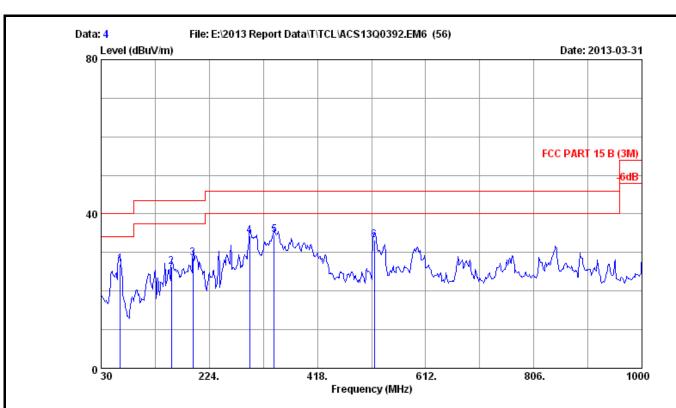
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:640*480@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		Margin (dB)	Remark
	1	30.000	13.22	0.45	15.89	29.56	40.00	10.44	QP
	2	51.340	13.43	0.63	12.62	26.68	40.00	13.32	QP
	3	63.950	11.99	0.69	15.04	27.72	40.00	12.28	QP
	4	156.100	14.15	0.97	16.27	31.39	43.50	12.11	QP
	5	384.050	14.47	1.52	18.44	34.43	46.00	11.57	QP
	6	592.600	18.17	2.09	14.58	34.84	46.00	11.16	QP

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

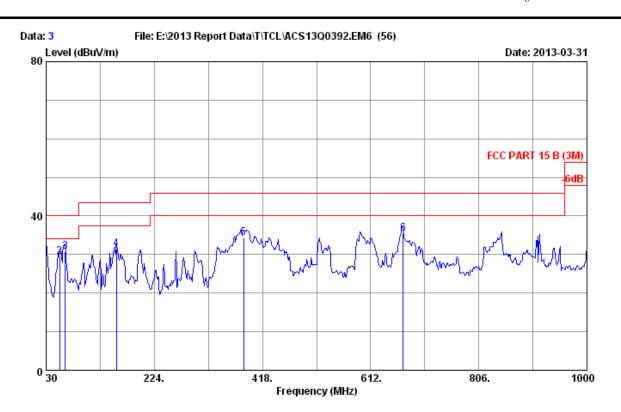
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
	1	63.950	11.99	0.69	14.27	26.95	40.00	13.05	QP
	2	156.100	14.15	0.97	11.26	26.38	43.50	17.12	QP
	3	194.900	10.19	1.04	17.30	28.53	43.50	14.97	QP
	4	296.750	12.73	1.27	20.21	34.21	46.00	11.79	QP
	5	340.400	13.68	1.39	19.43	34.50	46.00	11.50	QP
	6	519.850	16.87	1.89	14.37	33.13	46.00	12.87	QP

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

Page 4-9



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

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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

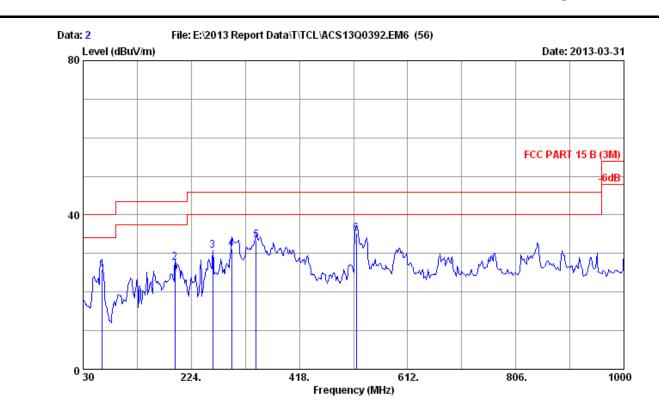
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1024*768@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		Margin (dB)	Remark
	1	30.000	13.22	0.45	16.89	30.56	40.00	9.44	QP
	2	54.250	13.20	0.63	15.51	29.34	40.00	10.66	QP
	3	63.950	11.99	0.69	18.04	30.72	40.00	9.28	QP
	4	156.100	14.15	0.97	16.27	31.39	43.50	12.11	QP
	5	384.050	14.47	1.52	18.44	34.43	46.00	11.57	QP
	6	670.200	19.34	2.32	13.80	35.46	46.00	10.54	QP

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

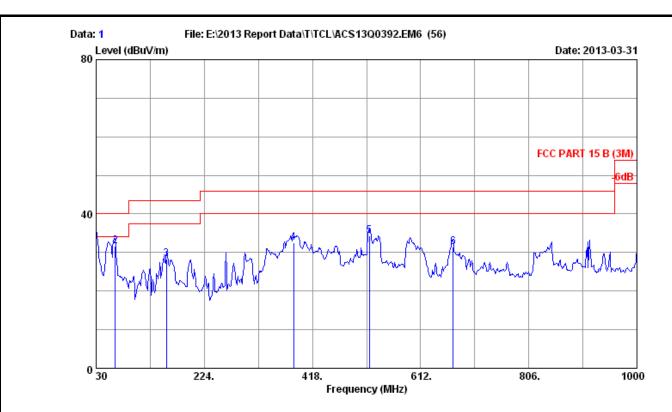
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1366*768@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
	1	63.950	11.99	0.69	13.27	25.95	40.00	14.05	QP
	2	194.900	10.19	1.04	16.30	27.53	43.50	15.97	QP
	3	262.800	11.86	1.19	17.71	30.76	46.00	15.24	QP
	4	296.750	12.73	1.27	17.21	31.21	46.00	14.79	QP
	5	340.400	13.68	1.39	18.43	33.50	46.00	12.50	QP
	6	519.850	16.87	1.89	16.37	35.13	46.00	10.87	QP

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

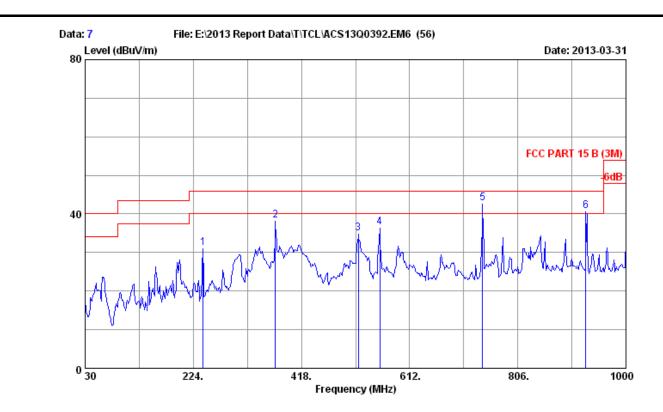
Test Mode : Running "H" Pattern And 1KHz Playing

VGA:1366*768@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	13.22	0.45	18.89	32.56	40.00	7.44	QP
2	63.950	11.99	0.69	19.04	31.72	40.00	8.28	QP
3	156.100	14.15	0.97	13.27	28.39	43.50	15.11	QP
4	384.050	14.47	1.52	16.44	32.43	46.00	13.57	QP
5	519.850	16.87	1.89	15.54	34.30	46.00	11.70	QP
6	670.200	19.34	2.32	9.80	31.46	46.00	14.54	QP

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

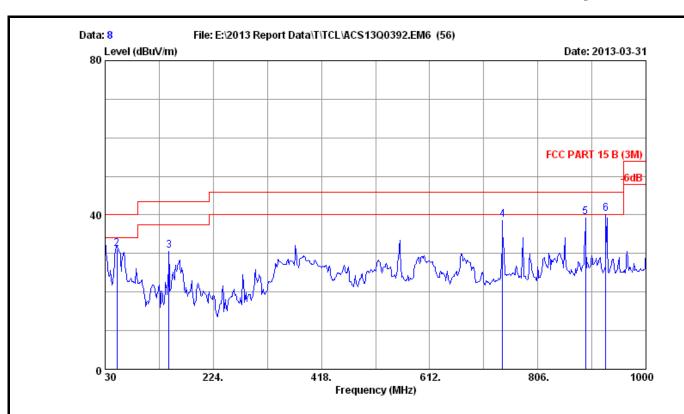
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 1:1920*1080@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
	1	241.460	11.47	1.15	18.66	31.28	46.00	14.72	QP
	2	371.440	14.25	1.48	22.55	38.28	46.00	7.72	QP
	3	519.850	16.87	1.89	16.32	35.08	46.00	10.92	QP
	4	558.650	17.54	1.99	17.00	36.53	46.00	9.47	QP
	5	742.500	20.18	2.54	20.00	42.72	46.00	3.28	QP
	6	928.210	21.99	2.84	16.00	40.83	46.00	5.17	QP

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





Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

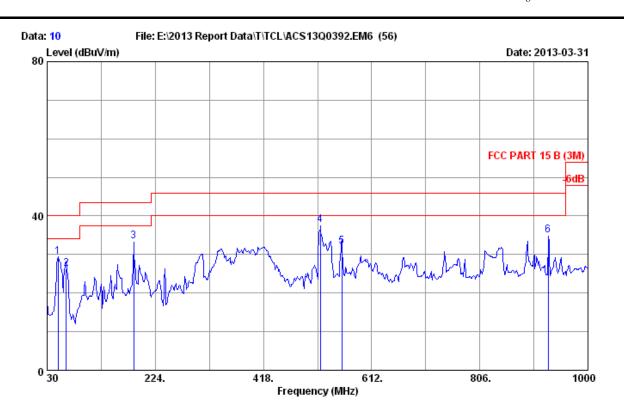
Power rating : AC 120V/60Hz

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

HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	13.22	0.45	18.33	32.00	40.00	8.00	QP
2	51.340	13.43	0.63	17.03	31.09	40.00	8.91	QP
3	144.460	13.80	0.94	15.91	30.65	43.50	12.85	QP
4	742.500	20.18	2.54	15.99	38.71	46.00	7.29	QP
5	891.360	21.53	2.80	15.02	39.35	46.00	6.65	QP
6	928.250	21.99	2.84	15.42	40.25	46.00	5.75	QP

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



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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

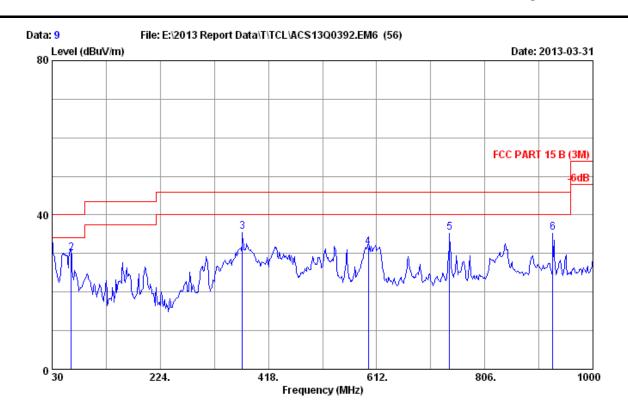
Test Mode : Running "H" Pattern And 1KHz Playing

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	49.400	13.55	0.63	15.19	29.37	40.00	10.63	QP
	2	63.950	11.99	0.69	13.52	26.20	40.00	13.80	QP
	3	185.200	11.05	1.03	21.45	33.53	43.50	9.97	QP
	4	519.850	16.87	1.89	18.85	37.61	46.00	8.39	QP
	5	558.650	17.54	1.99	12.59	32.12	46.00	13.88	QP
	6	928.400	21.99	2.84	10.20	35.03	46.00	10.97	QP

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

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

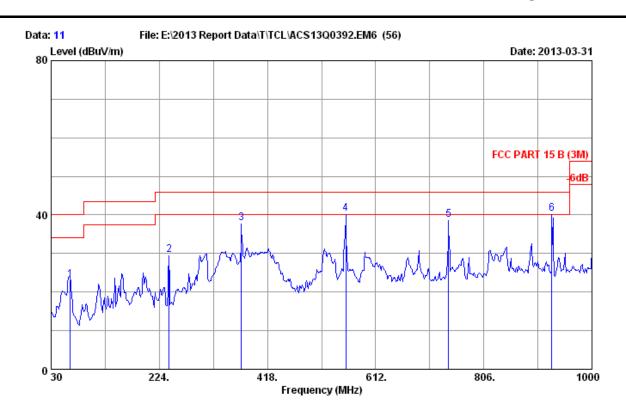
HDMI 2:1920*1080@60Hz

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		_	Remark
1	30.000	13.22	0.45	18.13	31.80	40.00	8.20	QP
2	63.950	11.99	0.69	17.47	30.15	40.00	9.85	QP
3	371.440	14.25	1.48	19.82	35.55	46.00	10.45	QP
4	597.450	18.27	2.11	11.22	31.60	46.00	14.40	QP
5	742.520	20.18	2.54	12.75	35.47	46.00	10.53	QP
6	928.230	21.99	2.84	10.62	35.45	46.00	10.55	QP

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

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





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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

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

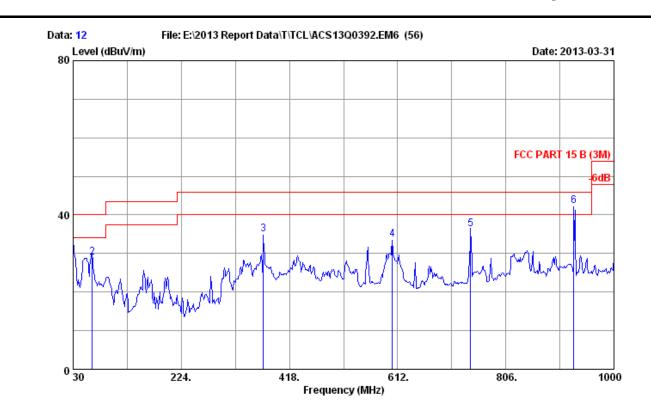
HDMI 3:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		Margin (dB)	Remark
1	63.950	11.99	0.69	10.56	23.24	40.00	16.76	QP
2	241.460	11.47	1.15	17.09	29.71	46.00	16.29	QP
3	371.440	14.25	1.48	22.20	37.93	46.00	8.07	QP
4	558.650	17.54	1.99	20.71	40.24	46.00	5.76	QP
5	742.500	20.18	2.54	16.10	38.82	46.00	7.18	QP
6	928.260	21.99	2.84	15.50	40.33	46.00	5.67	QP

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

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





Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 9168-429 Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24*C/65% Engineer : Even_Deng

EUT : LCD TV M/N:LE32HDE3010

Power rating : AC 120V/60Hz

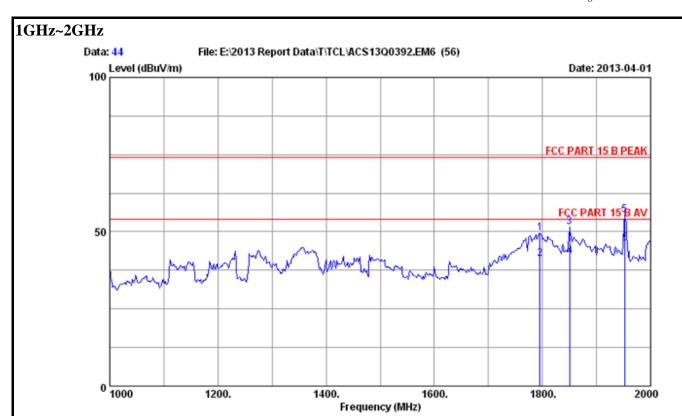
Test Mode : Running "H" Pattern And 1KHz Playing

HDMI 3:1920*1080@60Hz

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	_	Emission Level (dBuV/m)		Margin (dB)	Remark
	1	30.000	13.22	0.45	16.20	29.87	40.00	10.13	QP
	2	63.950	11.99	0.69	16.34	29.02	40.00	10.98	QP
	3	371.440	14.25	1.48	19.19	34.92	46.00	11.08	QP
	4	602.300	18.36	2.13	13.18	33.67	46.00	12.33	QP
	5	742.500	20.18	2.54	13.60	36.32	46.00	9.68	QP
	6	928.100	21.99	2.84	17.60	42.43	46.00	3.57	QP

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

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



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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

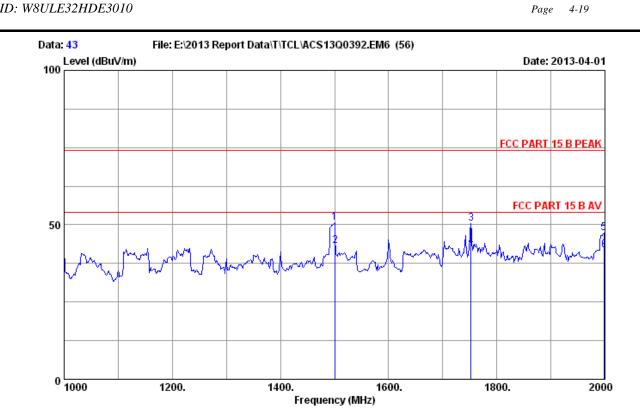
Test Mode : Running "H" Pattern And 1kHz Playing

VGA:1366*768@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq.	Factor	Loss	factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1795.000	26.74	1.75	35.62	56.78	49.65	74.00	24.35	Peak
2	1795.521	26.74	1.75	35.62	48.30	41.17	54.00	12.83	Average
3	1850.000	26.93	1.84	35.57	58.41	51.61	74.00	22.39	Peak
4	1850.854	26.93	1.84	35.57	48.91	42.11	54.00	11.89	Average
5	1952.000	27.31	1.99	35.46	61.66	55.50	74.00	18.50	Peak
6	1952.741	27.31	1.99	35.46	52.51	46.35	54.00	7.65	Average

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





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

: FCC PART 15 B PEAK Limit

Env. / Ins. : 24*C/56% Engineer : Jolly Xu

: LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

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

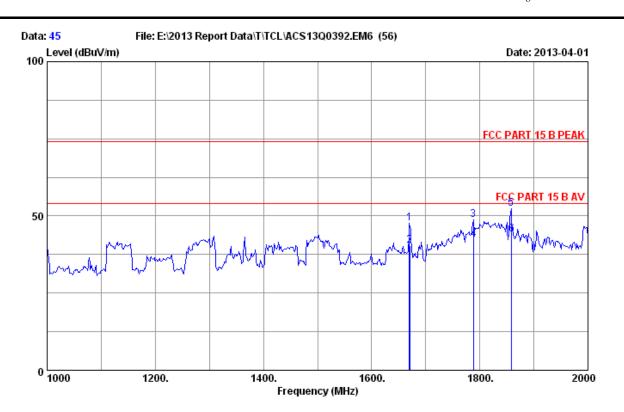
VGA:1366*768@60Hz

_	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	1500.000	25.60	1.31	35.95	59.66	50.62	74.00	23.38	Peak
	2	1500.851	25.60	1.31	35.95	52.19	43.15	54.00	10.85	Average
	3	1752.000	26.55	1.69	35.68	57.85	50.41	74.00	23.59	Peak
	4	1752.412	26.55	1.69	35.68	50.21	42.77	54.00	11.23	Average
	5	1998.000	27.50	2.05	35.40	53.27	47.42	74.00	26.58	Peak
	6	1998.621	27.50	2.05	35.40	47.50	41.65	54.00	12.35	Average

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

2. The emission levels that are 20dB below the official $% \left(1\right) =\left(1\right) ^{2}$ limit are not reported.





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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

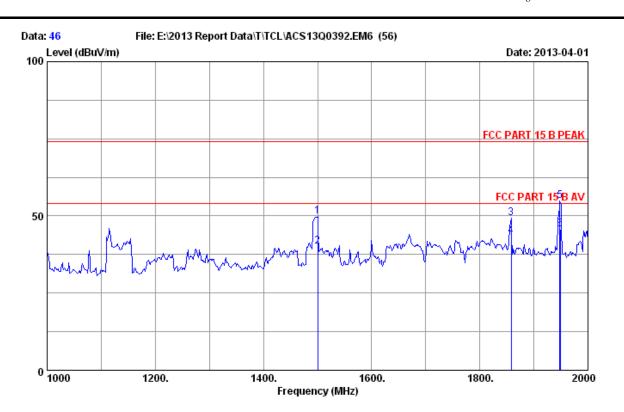
Power Rating : AC 120V/60Hz

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

HDMI 1:1920*1080@60Hz

		Ant.	Cable	AMP		Emission	n		
No.	Freq.	Factor (dB/m)	Loss	factor	Reading (dBuV)	Level	Limits (dBuV/m)	Margin (dB)	Remark
	(MHz)	(ub/m)	(dB)	(dB)	(авиу) 	(ubuv/m)		(UD) 	
1	1670.000	26.23	1.57	35.76	55.52	47.56	74.00	26.44	Peak
2	1670.451	26.23	1.57	35.76	48.31	40.35	54.00	13.65	Average
3	1788.000	26.68	1.72	35.62	56.04	48.82	74.00	25.18	Peak
4	1788.742	26.68	1.75	35.62	49.50	42.31	54.00	11.69	Average
5	1858.000	26.93	1.84	35.57	59.07	52.27	74.00	21.73	Peak
6	1858.843	26.99	1.84	35.57	50.81	44.07	54.00	9.93	Average

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



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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

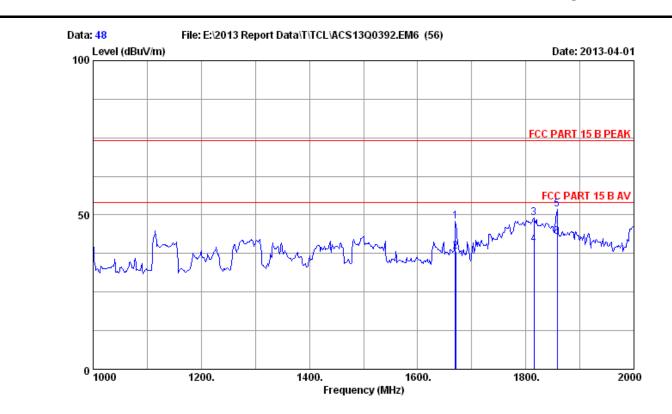
Test Mode : Running "H" Pattern And 1kHz Playing

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 (dBuV/m)	Margin (dB)	Remark
1	1500.000	25.60	1.31	35.95	58.82	49.78	74.00	24.22	Peak
2	1500.746	25.60	1.31	35.95	49.19	40.15	54.00	13.85	Average
3	1858.000	26.93	1.84	35.57	56.12	49.32	74.00	24.68	Peak
4	1858.451	26.93	1.84	35.57	50.21	43.41	54.00	10.59	Average
5	1948.000	27.31	1.96	35.46	60.99	54.80	74.00	19.20	Peak
6	1948.854	27.31	1.99	35.46	51.71	45.55	54.00	8.45	Average

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





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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

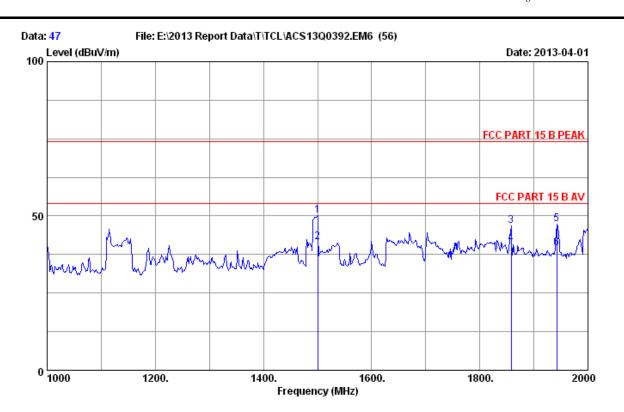
Test Mode : Running "H" Pattern And 1kHz Playing

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	1670.000	26.23	1.57	35.76	55.82	47.86	74.00	26.14	Peak
2	1670.471	26.23	1.57	35.76	46.21	38.25	54.00	15.75	Average
3	1815.000	26.80	1.78	35.59	56.14	49.13	74.00	24.87	Peak
4	1815.526	26.80	1.78	35.59	47.50	40.49	54.00	13.51	Average
5	1858.000	26.93	1.84	35.57	58.69	51.89	74.00	22.11	Peak
6	1858.157	26.93	1.84	35.57	49.71	42.91	54.00	11.09	Average

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





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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

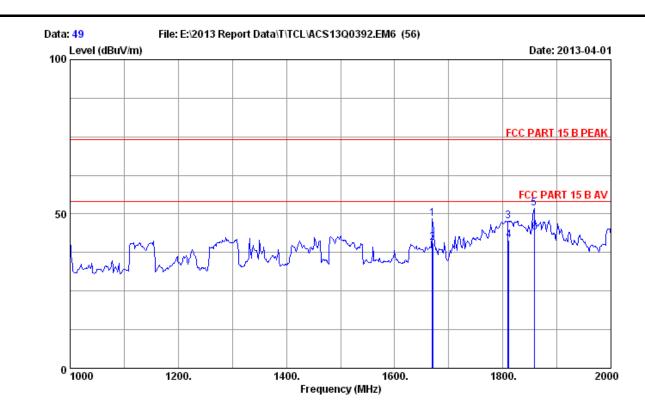
Test Mode : Running "H" Pattern And 1kHz Playing

HDMI 2:1920*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	1500.000	25.60	1.31	35.95	59.27	50.23	74.00	23.77	Peak
2	1500.163	25.60	1.31	35.95	50.60	41.56	54.00	12.44	Average
3	1858.000	26.93	1.84	35.57	53.53	46.73	74.00	27.27	Peak
4	1858.451	26.93	1.84	35.57	47.71	40.91	54.00	13.09	Average
5	1942.000	27.25	1.96	35.46	53.56	47.31	74.00	26.69	Peak
6	1942.742	27.25	1.96	35.46	45.80	39.55	54.00	14.45	Average

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





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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

Power Rating : AC 120V/60Hz

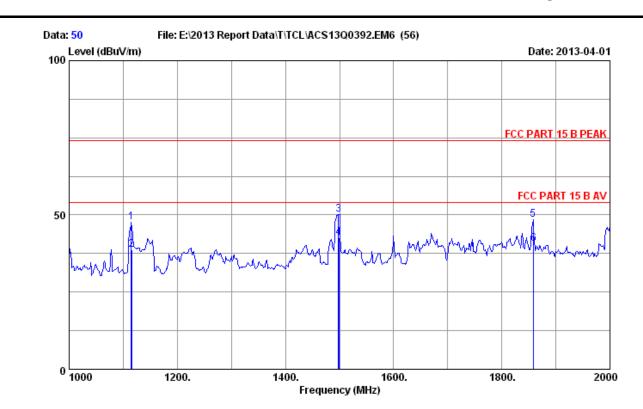
Test Mode : Running "H" Pattern And 1kHz Playing

HDMI 3:1920*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	1670.000	26.23	1.57	35.76	56.36	48.40	74.00	25.60	Peak
2	1670.751	26.23	1.57	35.76	48.71	40.75	54.00	13.25	Average
3	1810.000	26.80	1.78	35.62	54.80	47.76	74.00	26.24	Peak
4	1810.841	26.80	1.78	35.62	48.51	41.47	54.00	12.53	Average
5	1858.000	26.93	1.84	35.57	58.66	51.86	74.00	22.14	Peak
6	1858.513	26.99	1.84	35.57	50.71	43.97	54.00	10.03	Average

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





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

Limit : FCC PART 15 B PEAK

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

EUT : LCD TV M/N:LE32HDE3010

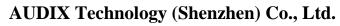
Power Rating : AC 120V/60Hz

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

HDMI 3:1920*1080@60Hz

		Ant.	Cable	AMP		Emission			
No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1115.000	23.78	0.74	36.36	59.51	47.67	74.00	26.33	Peak
2	1115.416	23.78	0.74	36.36	50.50	38.66	54.00	15.34	Average
3	1498.000	25.60	1.31	35.95	59.20	50.16	74.00	23.84	Peak
4	1498.472	25.60	1.31	35.95	51.80	42.76	54.00	11.24	Average
5	1858.000	26.93	1.84	35.57	55.35	48.55	74.00	25.45	Peak
6	1858.845	26.99	1.84	35.57	47.51	40.77	54.00	13.23	Average

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





Page 5-26

5. DEVIATION TO TEST SPECIFICATIONS [NONE]