# APPLICATION OF CERTIFICATION For

TTE Technology Inc.

## LCD TV

Brand Name	Model Number
RCA	L22HD41

FCC ID: W8UL22HD41

Prepared for: TTE Technology Inc.

101 West 103rd Street, Indianapolis, IN 46290, United States

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-F09066

Date of Test : Mar.05, 2009

Date of Report : Mar.21, 2009

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# TEST REPORT CERTIFICATION

Applicant : TTE Technology Inc.

Manufacturer #1 : TCL King Electrical Appliances (Huizhou) Co., Ltd.

Manufacturer #2 : Manufacturas Avanzadas S A

EUT Description : LCD TV

FCC ID W8UL22HD41

(A) MODEL NO.& Brand Name Model Number RCA L22HD41

(B) SERIAL NO. : N/A

(C) TEST VOLTAGE : AC 120V/60Hz

Measurement Standard Used:

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

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 for radiated and conducted emissions. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

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

Date of Test:	Mar.05, 2009
Prepared by:	Daisy Ye/ Assistant
Reviewer:	Richzhy Zhong / Assistant Manager
	AUDIXI <sup>®</sup> 信華科技(深圳)有限公司 Audix Technology (Shenzhen) Co., Ltd. EMC 部門報告專用章
Approved & Authorized Signer: _	Stamp only for EMC Dept. Report  Signature:

# 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	Limits	Results				
Power Line Conducted Emission Test	FCC Part 15: 2008	Class B	PASS				
Tower Eme conducted Emission Test	ANSI C63.4: 2003	Class B					
Radiated Emission Test	FCC Part 15: 2008	Class B	PASS				
Radiated Effission Test	ANSI C63.4: 2003	Class B	IASS				

# 2. GENERAL INFORMATION

# 2.1.Description of Device (EUT)

Description : LCD TV

Model Number :

Brand Name	Model Number		
RCA	L22HD41		

Chassis : RS95

Power : IPL22C

FCC ID : W8UL22HD41

Applicant : TTE Technology Inc.

101 West 103rd Street, Indianapolis, IN 46290, United States

Manufacturer #1: TCL King Electrical Appliances (Huizhou) Co., Ltd.

Section 19, Zhongkai Development Zone for New and High Level

TECH Industries, Huizhou, Guangdong 516006, China

Manufacturer #2: Manufacturas Avanzadas S A

Parque Industrial Salvarcar, Blvd Independencia 2151,

CD Juarez, Chih, Mexico

Power Cord : Unshielded, Undetachable, 1.5m

Date of Test : Mar.05, 2009

Date of Receipt: Mar.03, 2009

Sample Type : Prototype production

# 2.2.Tested Supporting System Details

#### 2.2.1.PC

EMC CODE : Test PC L

M/N : CR6

S/N : L38N404 Manufacturer : Lenovo

Power cord : Unshielded, detachabled, 1.8m

FCC ID : By DoC BSMI ID : R33B65

#### 2.2.2. USB Keyboard

EMC CODE : ACS-EMC-K07R

M/N : KU-0225 SN : 0019402 Manufacturer : Lenovo

Data Cable : Shielded, Undetachabled, 1.5m

FCC ID : By DoC BSMI ID : R31310

#### **2.2.3. PRINTER**

EMC CODE : ACS-EMC-PT03

M/N : EN8060A S/N : 908A1001201

Manufacturer : OKIPAGE

Data Cable : Shielded, Detachabled, 1.5m

Power Cord : Unshielded, Detachabled, 1.8m

FCC ID : By DoC BSMI ID : 3882A463

#### 2.2.4. USB MOUSE

EMC CODE : ACS-EMC-M01R

M/N : M056UO S/N : 512022645

Manufacturer : Dell

Data Cable : Shielded, Undetachabled, 1.8m

FCC ID : By DoC BSMI ID : R41108

#### 2.2.5. HDD

EMC CODE : ACS-EMC-HDD01

M/N : F12-UF

S/N : A0100215-5390031

Manufacturer : Terasys

Data Cable : Shielded, Detachabled, 1.8m

FCC ID : By DoC BSMI ID : 4912A022

### 2.2.6. HEADPHONE

EMC CODE : ACS-EMC-EP01

M/N : OV880V
Manufacturer : OVANN

Data Cable : Shielded, Undetachabled, 4.0m

#### 2.2.7. Cables

Audio CableShielded, Detachabled, 1.8mVGA CableShielded, Detachabled, 1.8m

(With two cores)

# 2.3. 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 : Jun. 13, 2006 File on Federal

Communication Commission Registration Number: 90454

3m & 10m Anechoic Chamber : Jan. 31, 2007 File on Federal

Communication Commission Registration Number: 794232

EMC Lab. : Accredited by DATech, German

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

Feb. 02, 2009

Accredited by NVLAP, USA NVLAP Code: 200372-0

Apr. 01, 2008

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

Test Item	Uncertainty	Memo
Uncertainty for Conduction emission test in No. 1 Conduction	2.88dB	
Uncertainty for Radiation Emission test in	3.86 dB	Polarize: V
3m chamber	4.3 dB	Polarize: H
Uncertainty for Radiation Emission test in	3.82 dB	Distance: 3m Polarize: V
10m chamber	3.80 dB	Distance: 3m Polarize: H
Uncertainty for test site temperature and	0.1℃	
humidity	1%	

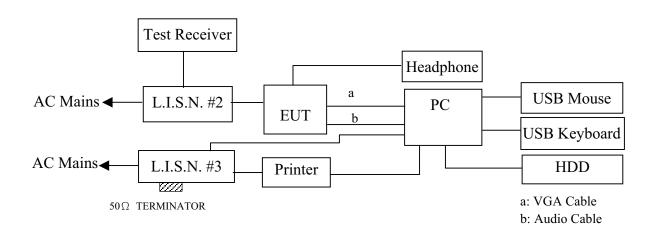
# 3. POWER LINE CONDUCTED EMISSION TEST

# 3.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100843	Oct.24, 08	1 Year
2.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	May 10,08	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May 10,08	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May 10,08	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	Nov.10, 08	1/2 Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	Nov.10, 08	1/2 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	Nov.10, 08	1/2 Year

# 3.2.Block Diagram of Test Setup

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



(EUT: LCD TV)

# 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.

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

# 3.4. Configuration of EUT on Test

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

#### 3.4.1.LCD TV (EUT)

Model Number : L22HD41 Serial Number : N/A

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

# 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turn on the power of all equipment.
- 3.5.3. Let the EUT work in test mode (Running "H" Pattern and Playing Music 640\*480 60Hz/ Running "H" Pattern and Playing Music 800\*600 60Hz/ Running "H" Pattern and Playing Music 1024\*768 60Hz) and measure it.

## 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. 2#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2003 on conducted Emission test.

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

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

## 3.7. Conducted Disturbance at Mains Terminals Test Results

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

The EUT with the following test modes was tested and selected (mode 3) to read Q.P values and Average values, all the test results are listed in next pages.

EUT: LCD TV Model No. : L22HD41

Test Date: Mar.05, 2009 Temperature: 23 ℃ Humidity: 54%

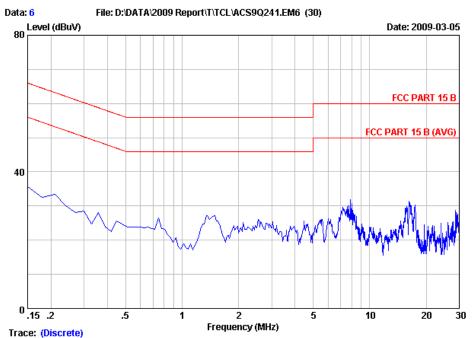
## The details of test modes are as follows:

NO.	NO. Test Mode	Resolution &	Reference Test Data No.		
NO.	rest Mode	Frequency	VA	VB	
1.		640*480 60Hz	#6	#5	
2.	Running "H" Pattern and Playing Music	800*600 60Hz	#4	#3	
3. ※		1024*768 60Hz	#2	#1	

(\* Worst test mode)



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Site no :Audix No.1 Conduction :6 Data no

:\*\* KNW407 1# Dis./Ant. :FCC PART 15 B Limit

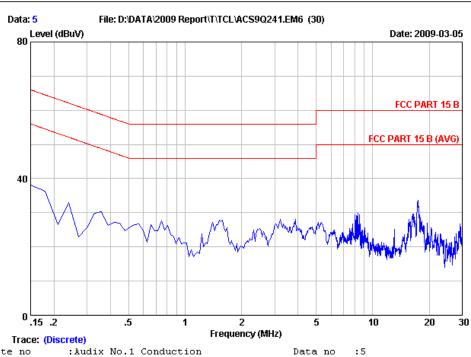
Env./Ins. :Temp:23'C Humi:54% Engineer :leo

EUT :LCD TV M/N:L22HD41

Power Rating :AC 120V/60Hz

Test Mode :Running"H" Pattern And Playing Music

:640\*480@60Hz



Site no

Dis./Ant. KNW407 1# : \* \* :FCC PART 15 B Limit

Env./Ins. :Temp:23'C Humi:54% Engineer :leo

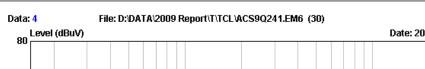
EUT :LCD TV M/N:L22HD41 Power Rating :AC 120V/60Hz

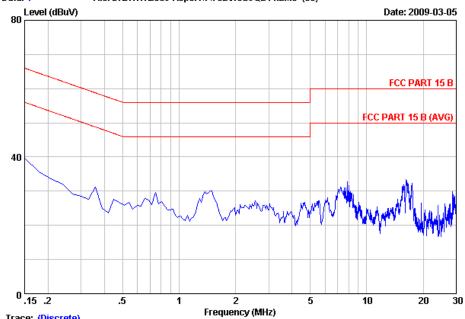
:Running"H" Pattern And Playing Music Test Mode

:640\*480@60Hz



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Trace: (Discrete)

Site no :Audix No.1 Conduction Data no :4

:\*\* KNW407 1# Dis./Ant. :FCC PART 15 B Limit

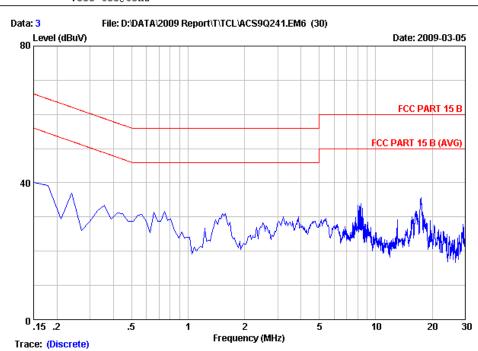
Env./Ins. :Temp:23'C Humi:54% Engineer :leo

EUT :LCD TV M/N:L22HD41

Power Rating :AC 120V/60Hz

Test Mode :Running"H" Pattern And Playing Music

:800\*600@60Hz



Site no :Audix No.1 Conduction Data no :3

Dis./Ant. : \*\* KNW407 1# Limit :FCC PART 15 B

:Temp:23'C Humi:54% :LCD TV M/N:L22HD41 Env./Ins. Engineer :leo

EUT

Power Rating : AC 120V/60Hz

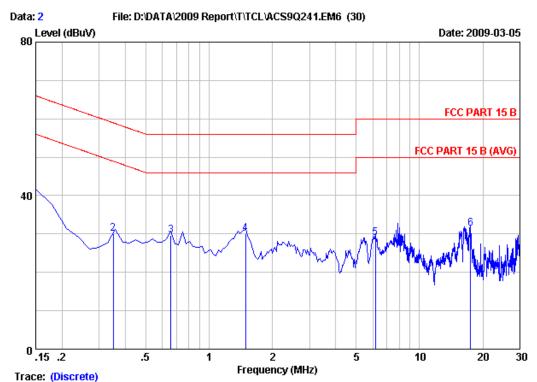
:Running"H" Pattern And Playing Music Test Mode

:800\*600@60Hz



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Site no : Audix No.1 Conduction Data no :2

Dis./Ant. :\*\* KNW407 1# VA

Limit :FCC PART 15 B

Env./Ins. :Temp:23'C Humi:54% Engineer :leo

EUT :LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz

Test Mode :Running"H" Pattern And Playing Music

: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	0.26	9.67	30.67	40.60	66.00	25.40	QP
2	0.35000	0.24	9.88	19.99	30.11	58.96	28.85	QP
3	0.65700	0.20	9.87	19.50	29.57	56.00	26.43	QP
4	1.490	0.10	9.90	20.11	30.11	56.00	25.89	QP
5	6.180	0.16	9.94	18.98	29.08	60.00	30.92	QP
6	17.460	0.36	10.06	20.91	31.33	60.00	28.67	QP

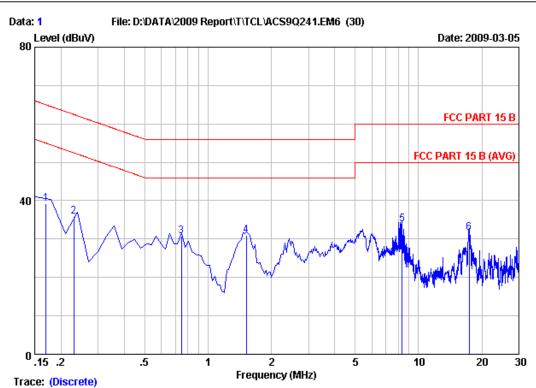
Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading

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.



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Engineer :leo



Site no : Audix No.1 Conduction Data no :1

Dis./Ant. :\*\* KNW407 1# VB

Limit :FCC PART 15 B

Env./Ins. :Temp:23'C Humi:54%

EUT :LCD TV M/N:L22HD41

Power Rating :AC 120V/60Hz

Test Mode : Running"H" Pattern And Playing Music

:1024\*768@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17000	0.18	9.77	29.31	39.26	64.96	25.70	QP
2	0.23000	0.12	9.90	25.90	35.92	62.45	26.53	QP
3	0.74700	0.10	9.88	20.71	30.69	56.00	25.31	QP
4	1.520	0.06	9.90	20.99	30.95	56.00	25.05	QP
5	8.350	0.08	9.96	23.76	33.80	60.00	26.20	QP
6	17.400	0.34	10.06	21.31	31.71	60.00	28.29	QP

Remarks: 1.Emission Level=LISN Factor+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 TEST

# 4.1.Test Equipment

For frequency range 30MHz~1000MHz (At Anechoic Chamber)

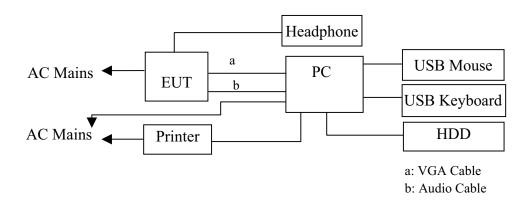
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.05,08	1/2 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May 10, 08	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May 10, 08	1 Year
4	Amplifier	HP	8447D	2648A04738	Nov.04, 08	1/2 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Nov.10, 08	1 Year
6	RF Cable	JINGCHENG	JBY400	3# Chamber No.1	Nov.01, 08	1/2 Year
7	RF Cable	JINGCHENG	JBY400	3# Chamber No.2	Nov.01, 08	1/2 Year
8	RF Cable	JINGCHENG	JBY400	3# Chamber No.3	Nov.01, 08	1/2 Year
9	RF Cable	JINGCHENG	JBY400	3# Chamber No.4	Nov.01, 08	1/2 Year
10	Coaxial Switch	Anritsu	MP59B	M73989	Nov.01, 08	1/2 Year

For frequency range Above 1000MHz (At Anechoic Chamber)

				,		
Item	Equipment	Manufacturer	Model No.	Serial No.	II act ( 'al	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.10, 08	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May.27, 08	1.5 Year
3	Amplifier	Agilent	8449B	3008A02495	Nov.24,08	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.28, 08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	271471/4	May.28, 08	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	29086/2	May.28, 08	1 Year

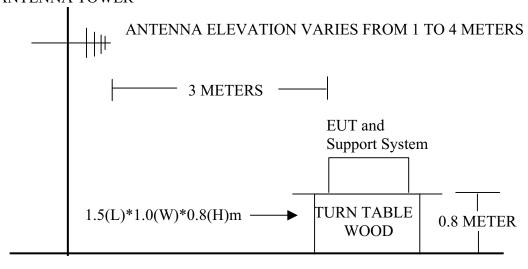
# 4.2.Block Diagram of Test Setup

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



(EUT: LCD TV)

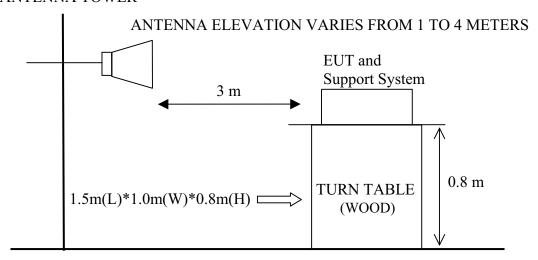
# 4.2.2. In Anechoic (3m) Chamber Test Setup Diagram for 30MHz~1000MHz ANTENNA TOWER



**GROUND PLANE** 

## 4.2.3.In Anechoic (10m) Chamber Test Setup Diagram for 1-2GHz

#### ANTENNA TOWER



**GROUND PLANE** 

#### 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	74.0 dB(μV)/m (Peak)
		54.0 dB(μV)/m (Average)

Remark : (1) Emission level  $dB\mu V = 20 \log Emission level \mu V/m$ 

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) The emissions above 1GHz should comply with average limit and peak limit.

# 4.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner that tends to maximize its emission characteristics in normal application.

#### 4.4.1. LCD TV (EUT)

Model Number : L22HD41 Serial Number : N/A

# 4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT as shown in Section 4.2.
- 4.5.2. Turn on the power of all equipment.
- 4.5.3. Let the EUT work in test mode (Running "H" Pattern and Playing Music 640\*480 60Hz/ Running "H" Pattern and Playing Music 800\*600 60Hz / Running "H" Pattern and Playing Music 1024\*768 60Hz) and test it.

#### 4.6. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2003 on Radiated Emission test.

The bandwidth setting on the test receiver (R&S TEST RECEIVER ESVS10) is 120 kHz.

The resolution bandwidth of the Agilent Spectrum Analyzer E4446A was set at 1MHz. (For above 1GHz)

The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values.

The frequency range from 1GHz to 2GHz was checked with peak and average detector, measurement distance is 3m in 10m chamber.

Finally, selected operating situations at Anechoic Chamber measurement, all the test results are listed in section 4.7.

#### 4.7. Radiated Disturbance Test Results

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

# For frequency range 30MHz~1000MHz

The EUT with the following test modes was tested and selected (mode 1) to read Q.P values, all the test results are listed in next pages.

EUT: LCD TV Model No.: L22HD41

Test Date: Mar.05, 2009 Temperature: 24°C Humidity: 47%

The details of test modes are as follows:

NO.	Test Mode	Resolution &	Reference T	Cest Data No.
NO.	rest wrode	Frequency	Horizontal	Vertical
1. 💥	Dunning "H" Dattorn and	640*480 60Hz	#25	#26
2.	Running "H" Pattern and Playing Music	800*600 60Hz	#28	#27
3.	Tidying Masic	1024*768 60Hz	#29	#30

<sup>(\*</sup> Worst test mode)

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

The EUT with below test mode  $1\sim3$  was measured within Anechoic Chamber and the test results listed in next pages.

All the PK emissions were comply with average limit, So the average level were deemed to comply with average limit

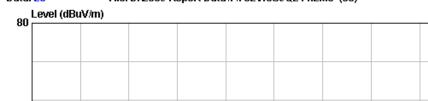
Test Date: Mar.05, 2009 Temperature: 23°C Humidity: 54%

NO.	Test Mode	Resolution &	Reference T	est Data No.
NO.	rest Mode	Frequency	Horizontal	Vertical
1.		640*480 60Hz	#1	#2
2.	Running "H" Pattern and Playing Music	800*600 60Hz	#4	#3
3.	Tidy mg Music	1024*768 60Hz	#5	#6

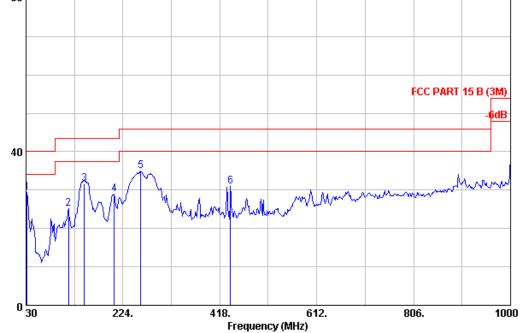


Date: 2009-03-05

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File: D:\2009 Report Data\T\TCL\ACS9Q241.EM6 (30)



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

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

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/47% Engineer : Victory

: LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And Playing Music/

640\*480@60Hz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.73	0.49	10.21	29.43	40.00	10.57	QP
2	115.360	11.53	1.01	12.61	25.15	43.50	18.35	QP
3	146.400	11.70	1.16	18.85	31.71	43.50	11.79	QP
4	206.540	10.10	1.42	17.38	28.90	43.50	14.60	QP
5	259.890	13.75	1.65	19.49	34.89	46.00	11.11	QP
6	439.340	16.90	2.32	11.72	30.94	46.00	15.06	QP

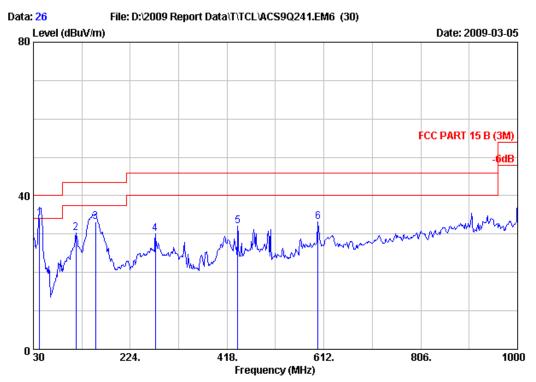
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

- 2. The emission levels that are 20dB below the official  $\,$ limit are not reported.
- 3. The worst emission was detected at 31.94 MHz with corrected signal level of 29.43dB $\mu$ V/m (Limit is 40.00dB $\mu$ V/m) when the antenna was at horizontal polarization and at 2.0m high and the turn table was at 145°.
- 4.0° was the table front facing the antenna. Degree is calculated from  $0^{\circ}$  clockwise facing the antenna.



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Site no. : 3m Chamber Data no. : 26
Dis. / Ant. : 3m CBL6111C Ant. pol. : VERTICAL

Limit : FCC PART 15 B (3M)

Env. / Ins. : 24\*C/47% Engineer : Victory

EUT : LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And Playing Music/

640\*480@60Hz

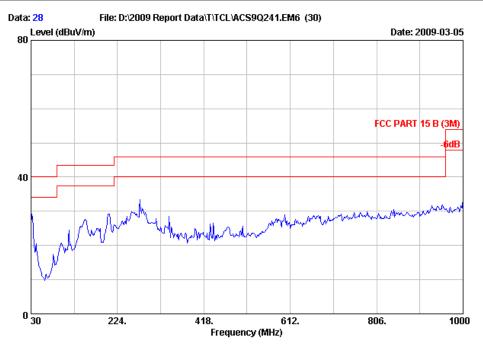
_		Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	1	42.610	12.79	0.56	20.69	34.04	40.00	5.96	QP
	2	115.360	11.53	1.01	17.72	30.26	43.50	13.24	QP
	3	154.160	11.29	1.19	20.74	33.22	43.50	10.28	QP
	4	274.440	13.11	1.72	15.24	30.07	46.00	15.93	QP
	5	439.340	16.90	2.32	12.96	32.18	46.00	13.82	QP
	6	600.360	19.47	2.90	10.93	33.30	46.00	12.70	QP

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

- 3. The worst emission was detected at42.61MHz with corrected signal level of 34.04dB $\mu$ V/m (Limit is 40.00dB $\mu$ V/m) when the antenna was at vertical polarization and at 1.0m high and the turn table was at 310°.
- 4.0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.



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Site no. : 3m Chamber Data no. : 28

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

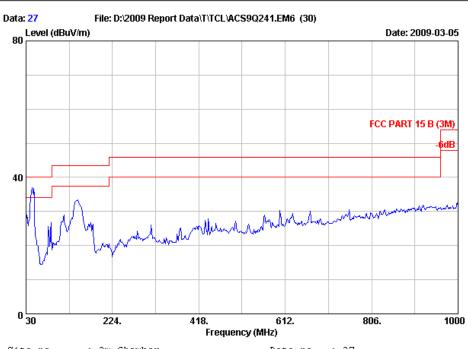
: FCC PART 15 B (3M)

Env. / Ins. : 24\*C/47% Engineer : Victory

: LCD TV M/N:L22HD41 EIIT Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And Playing Music/

800 \* 600@ 60Hz



Data no. : 27 Ant. pol. : VERTICAL Site no. : 3m Chamber Dis. / Ant. : 3m CBL6111C Limit : FCC PART 15 B (3M) : 24\*C/47% Env. / Ins. Engineer : Victory

EUT : LCD TV M/N:L22HD41

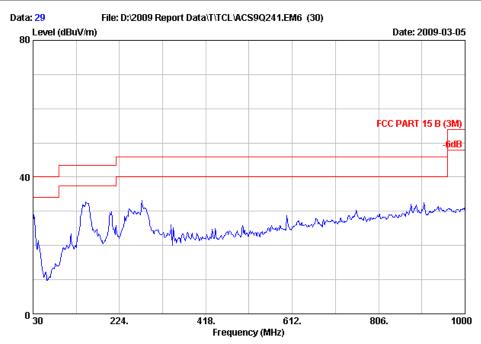
Power Rating : AC 120V/60Hz

: Running "H" Pattern And Playing Music/ Test Mode

800\*600@60Hz



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

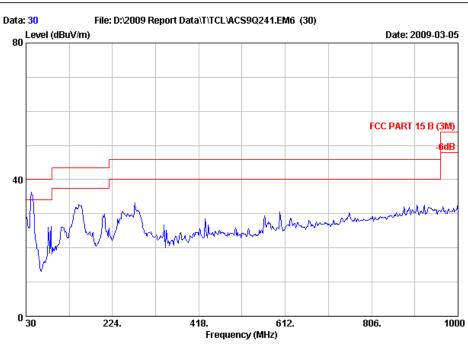
Dis. / Ant. : 3m CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B (3M)

Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And Playing Music/

1024\*768@60Hz



Site no. : 3m Chamber Data no. : 30
Dis. / Ant. : 3m CBL6111C Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24\*C/47\* Engineer : Victory

EUT : LCD TV M/N:L22HD41

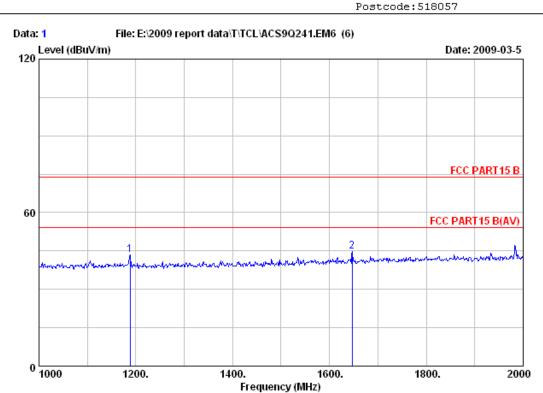
Power Rating : AC 120V/60Hz

Test Mode : Running "H" Pattern And Playing Music/

1024\*768@60Hz



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Site no. : 10# Chamber Data no. : 1

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

Limit : FCC PART15 B

Env. / Ins. : 23\*C/54% Engineer : Victory

EUT : LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz Test mode : 640\*480@60Hz

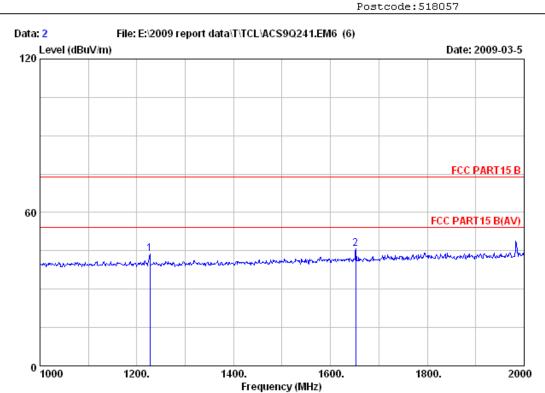
Running"H"Pattern And Playing Music

(MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB)  1 1188.000 25.47 4.74 36.10 49.23 43.34 74.00 30.66 Peak		Freq.		Cable Loss	Factor	Reading	•	Limits	_	Remark	
1 1188 000 25 47 4 74 36 10 40 23 43 24 74 00 30 66 Peeb		(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
	_	1188.000 2 1647.000					43.34 44.75	74.00 74.00	30.66 29.25	Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



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Site no. : 10# Chamber Data no. : 2

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

Limit : FCC PART15 B

Env. / Ins. : 23 \*C/54% Engineer : Victory

EUT : LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz Test mode : 640\*480@60Hz

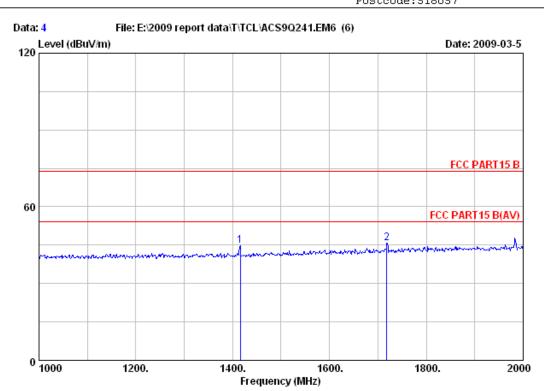
Running"H"Pattern And Playing Music

		Ant.	Cable	Amp		Emission			
	Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1227.000	25.51	4.81	36.05	49.68	43.95	74.00	30.05	Peak
2	1652.000	26.50	5.53	35.57	49.42	45.88	74.00	28.12	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



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Site no. : 10# Chamber

Data no. : 4 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115

Limit : FCC PART15 B Env. / Ins. : 23\*C/54%

Engineer : Victory

: LCD TV M/N:L22HD41 EIIT

Power Rating : AC 120V/60Hz Test mode : 800\*600@60Hz

Running"H"Pattern And Playing Music

		Ant.	Cable	Amp		Emission			
	Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1416.000	25.78	5.12	35.85	49.59	44.64	74.00	29.36	Peak
2	1718.000	26.77	5.67	35.51	48.85	45.78	74.00	28.22	Peak

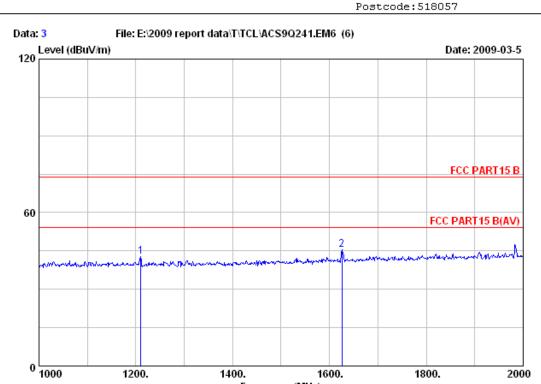
- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



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1800.

2000



: 10# Chamber Site no. Data no. : 3

1400.

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

: FCC PART15 B Limit

1200.

Env. / Ins. : 23\*C/54% Engineer : Victory

: LCD TV M/N:L22HD41 EUT

Power Rating: AC 120V/60Hz Test mode : 800\*600@60Hz

Running"H"Pattern And Playing Music

Frequency (MHz)

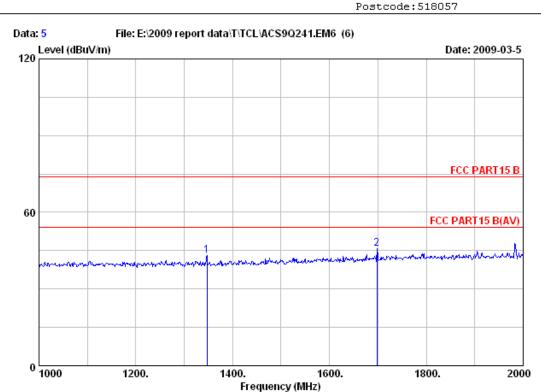
1600.

	Freq. (MHz)		Factor	Reading		Limits (dBuV/m)	_	Remark
1 2	1210.000 1626.000	25.49 26.43	 	48.63 48.96	42.83 45.30	74.00 74.00	31.17 28.70	Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



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Site no. : 10# Chamber

Data no. : 5 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 3115

: FCC PART15 B Limit

Env. / Ins. : 23\*C/54% Engineer : Victory

: LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz Test mode : 1024\*768@60Hz

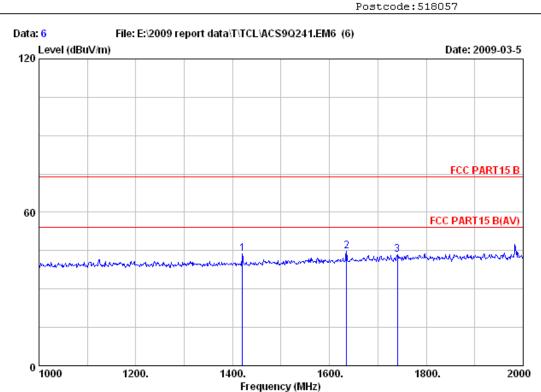
Running"H"Pattern And Playing Music

		Ant.	Cable	Amp		Emission	L		
	Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
	1247 000	25 60		25 01	40.26	42.02	74 00		D1-
1	1347.000	25.68	5.00	35.91	48.26	43.03	74.00	30.97	Peak
2	1698.000	26.70	5.64	35.54	48.95	45.75	74.00	28.25	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



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: 10# Chamber Site no.

Data no. : 6 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115

: FCC PART15 B Limit

Env. / Ins. : 23\*C/54% Engineer : Victory

: LCD TV M/N:L22HD41

Power Rating : AC 120V/60Hz Test mode : 1024\*768@60Hz

Running"H"Pattern And Playing Music

		Ant.	Cable	Amp		Emission	L		
	Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1420.000	25.80	5.12	35.85	48.69	43.76	74.00	30.24	Peak
2	1635.000	26.43	5.53	35.59	48.32	44.69	74.00	29.31	Peak
3	1740.000	26.90	5.71	35.48	46.46	43.59	74.00	30.41	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

# 5. DEVIATION TO TEST SPECIFICATIONS

[NONE]

# 6. PHOTOGRAPH

6.1. Photos of Power Line Conducted Emission Test

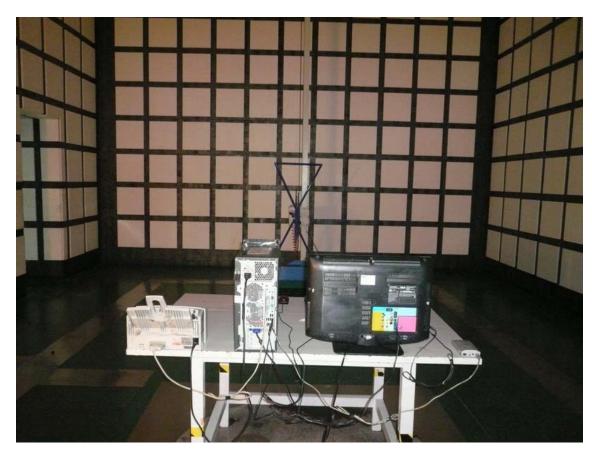




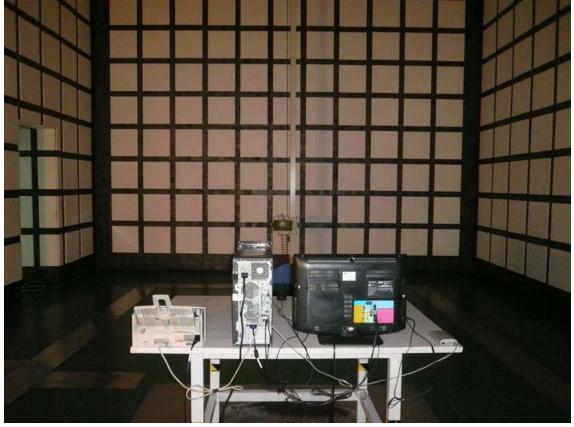
# 6.2. Photos of Radiated Emission Test (In Anechoic Chamber)

30-1000MHz









# 7. PHOTOS OF THE EUT

**Figure 1**General Appearance of the EUT



Figure 2
General Appearance of the EUT







Figure 4
General Appearance of the EUT



Figure 5
General Appearance of the EUT



Figure 6
Inside of the EUT



Figure 7
Inside of the EUT



Figure 8
Inside of the EUT

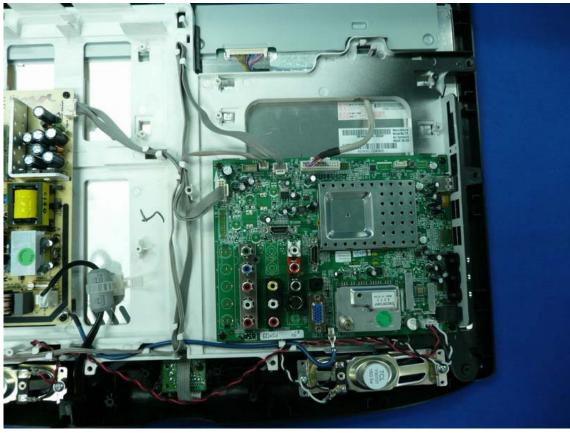


Figure 9
Inside of the EUT



Figure 10
Speaker of the EUT



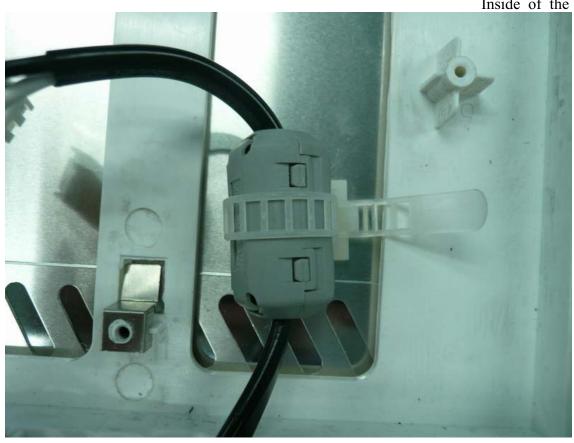
Figure 11
Speaker of the EUT



Figure 12
Speaker of the EUT



Figure 13
Inside of the EUT



**Figure 14** Inside of the EUT



Figure 15
Inside of the EUT



**Figure 16** Inside of the EUT



**Figure 17** Label of the EUT



Figure 18 Component Side of the PCB



Figure 19
Component Side of the PCB

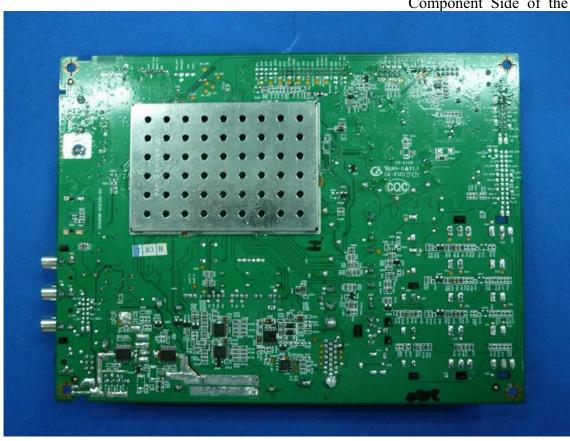


Figure 20 Tuner of the PCB



Figure 21
Component Side of the PCB



Figure 22
Component side of the PCB

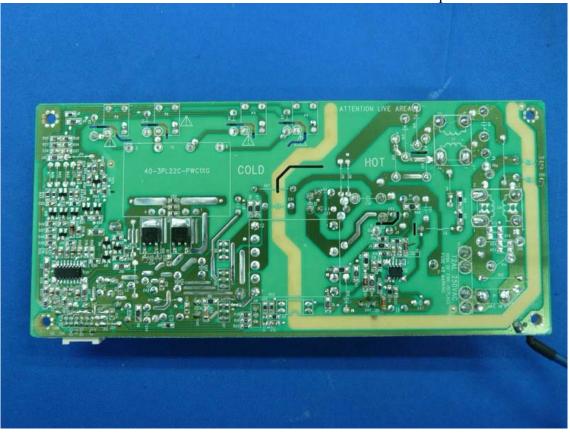


Figure 23
Component side of the PCB

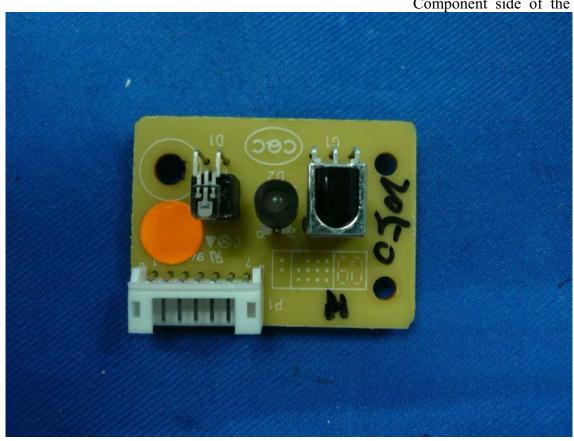


Figure 24
Component side of the PCB

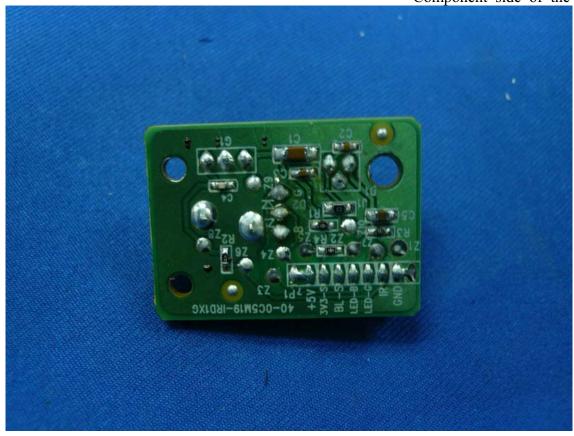


Figure 25
Component side of the PCB



Figure 26
Component side of the PCB

