

Report Number: HST200903-0540-FCC-E

# **Test Report**

Applicant: EU3C Company Limited

Address of Unit 8, 17/F Tower 1, China Hong Kong City, 33 Canton Rd.,

Applicant: Tsimshatsui, HK

**Equipment Under Test (EUT):** 

EUT Name: FilmScan35 II-2.5-TV out

Model No.: SCND502T1231

Serial No.: Not supplied by client

Standards: FCC PART15 SUBPART B: 2007

Date of Receipt: Mar. 26, 2009

**Date of Test**: Mar. 26, 2009 – Apr. 7, 2009

Date of Issue: Apr. 20, 2009

Test Result : PASS\*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Henly.xie / Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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.

All test results in this report can be traceable to National or International Standards.

The test report prepare by:

Guangzhou Huesent Testing Service Co.,Ltd.

No.91, Dongguanzhuang Road, Guangzhou, China.

Tel: 86-20-28263298 Fax: 86-20-28263237 http://www.hst.org.cn E-mail:hst@hst.org.cn



## 2. Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B: 2007	ANSI C63.4:2003	Class B	PASS
Conducted Emission (150KHz to 30MHz)	FCC PART 15, SUBPART B: 2007	ANSI C63.4:2003	Class B	PASS



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#### 4. General Information

4.1 Client Information

Applicant: EU3C Company Limited

Address of Unit 8, 17/F Tower 1, China Hong Kong City, 33 Canton Rd.,

Applicant: Tsimshatsui, HK

4.2 General Description of E.U.T.

EUT Name: FilmScan35 II-2.5-TV out

Trade Name: EU3C

Item No.: See the model number shown on cover page.

Serial No.: Not supplied by client

4.3 Details of E.U.T.

Power Supply: AC/DC adapter, manufactory: MLF; model: MLF-012W0501500;

input: 100-240VAC, 50/60Hz, 0.3A Max; output: 5VDC/1A.

Power Cord: 1.10 m USB cable with a core, 2.90 m Video cable with a core.

4.4 Description of Support Units

Samsung's Notebook (model: R455, Li Shin International Electronic's adapter: model: AD-9019S, input: 100-240VAC1.5A, 50-60Hz, output: 19VDC4.74A) ) or Guangdong Changhong 19" LCD TV (model: LT19GX680AUB ).

4.5 Standards Applicable for Testing

The standard used was FCC PART 15, SUBPART B, CLASS B 2007

4.6 Test Location

Huesent Testing Service Ltd.

No. 91, Dongguanzhuang Road, Guangzhou City, Guangdong Province, P.R. China

Tel: 86-20-28263298 Fax: 86-20-28263237

All tests were subcontract to the laboratory following:

CEPREI (headquarters) lab.

No.110, Dongguanzhuang Road, Tianhe District, Guangzhou city, Guangdong Province,

P.R. China

Tel: 86-20-87237178 Fax: 86-20-87236171 Email: emc@ceprei.biz

FCC- Registration No: 258518 on Mar 25, 2005

4.8 Deviation from Standards

None.

4.9 Abnormalities from Standard Conditions

None.



# **5. Equipments Used during Test**

No.	Test item.	Name of Equipment's	Name of Equipment's Model/Type	
1	CE	EMI Receiver	R&S ESCS 30	2008-6-8
2	CE	LISN	R&S ESH3-Z5	2008-6-8
3	CE	Shielding Room	DG ZongZhou 5x3x3 m	2008-6-8
4	RE	EMI Receiver	R&S ESCS 30	2008-6-8
5	RE	Anechoic Chamber	Lindgren FACT-4	2008-6-8
		Antenna	SCHAFFNER CBL6112B	2008-6-8
Note:				
/				



#### 6. Test Results

6.1 Conducted Emissions Mains Terminals, 150 kHz to 30MHz

Test Requirement: FCC Part 15 B
Test Method: ANSI C63.4
Class / Severity: Class B

Detector: Peak for pre-scan (9kHz Resolution Bandwidth)

Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

Test Date: Mar. 31, 2009

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.0°C Humidity:55% RH Atmospheric Pressure: 103.0kPa

**EUT Operation:** 

1. Connect the EUT via an USB cable to an AC/DC adapter or Notebook in 120VAC/60Hz.

2. Pre-test the EUT work normally in three modes: previewing/ scanning/ transmit data, then select the worst case: scanning mode to measure during the whole test.

#### 6.1.2 Plan View of Test Setup

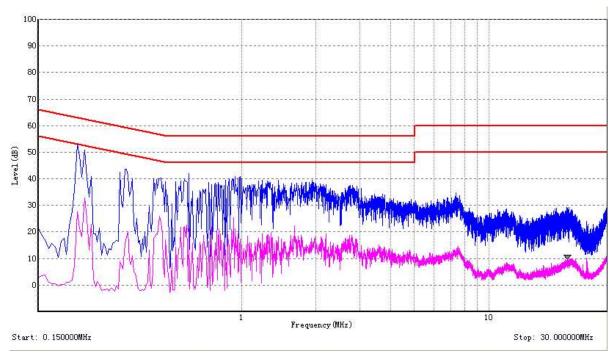
#### 6.1.3 Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with
maximized emission were detected when Peak measurement level is over Average Limit.



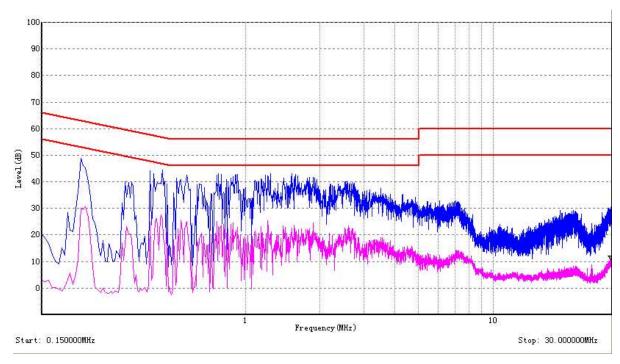
# Live Line, Mode: Scanning With Adapter Power Supplied Peak Scan



Freq. (MHz)	Line	QP (dBµV)	Transd ucer (dB)	QP limit (dBµV)	Margin (dB)	ΑV (dBμV)	Transd ucer (dB)	AV limit (dBµV)	Margin (dB)
0.230	Live	50.85	3.99	62.48	-11.63	32.78	3.99	52.48	-19.70
0.465	Live	40.14	3.54	56.65	-16.51	26.02	3.54	46.65	-20.63
0.595	Live	38.96	3.50	56.00	-17.04	22.53	3.50	46.00	-23.47
0.925	Live	39.69	3.50	56.00	-16.31	25.32	3.50	46.00	-20.68
7.470	Live	32.00	3.22	60.00	-28.00	14.52	3.22	50.00	-35.48
20.71	Live	29.05	3.73	60.00	-30.95	10.44	3.73	50.00	-39.56



# Neutral Line, Mode: Scanning With Adapter Power Supplied Peak Scan

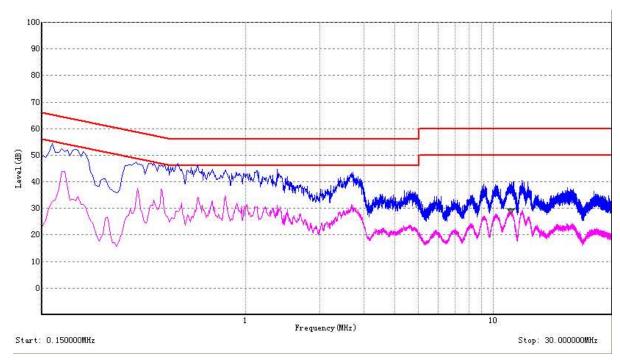


Freq. (MHz)	Line	QP (dBµV)	Transd ucer (dB)	QP limit (dBµV)	Margin (dB)	ΑV (dBμV)	Transd ucer (dB)	AV limit (dBµV)	Margin (dB)
0.225	Neutral	45.39	4.02	62.70	-17.31	30.69	4.02	52.70	-22.01
0.455	Neutral	39.23	3.55	56.87	-17.64	27.69	3.55	46.87	-19.18
0.545	Neutral	40.87	3.51	56.00	-15.13	25.56	3.51	46.00	-20.44
1.225	Neutral	37.10	3.49	56.00	-18.90	25.28	3.49	46.00	-20.72
7.020	Neutral	30.18	3.23	60.00	-29.82	14.29	3.23	50.00	-35.71
29.92	Neutral	29.94	4.08	60.00	-30.06	11.22	4.08	50.00	-38.78



## Live Line, Mode: Transmitting Data with Notebook

#### **Peak Scan**

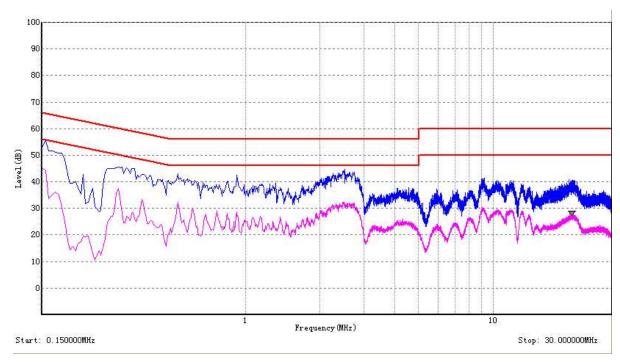


Freq. (MHz)	Line	QP (dBµV)	Transd ucer (dB)	QP limit (dBµV)	Margin (dB)	ΑV (dBμV)	Transd ucer (dB)	AV limit (dBµV)	Margin (dB)
0.180	Live	52.56	4.62	64.57	-12.01	44.01	4.62	54.57	-10.56
0.365	Live	46.65	3.65	58.63	-11.98	37.62	3.65	48.63	-11.01
0.825	Live	44.21	3.50	56.00	-11.79	34.90	3.50	46.00	-11.10
2.670	Live	42.48	3.41	56.00	-13.52	31.35	3.41	46.00	-14.65
11.79	Live	38.85	3.27	60.00	-21.15	28.96	3.27	50.00	-21.04
13.08	Live	38.69	3.34	60.00	-21.31	29.13	3.34	50.00	-20.87



## **Neutral Line, Mode: Transmitting Data with Notebook**

#### **Peak Scan**



Freq. (MHz)	Line	QP (dBµV)	Transd ucer (dB)	QP limit (dBµV)	Margin (dB)	ΑV (dBμV)	Transd ucer (dB)	AV limit (dBµV)	Margin (dB)
0.150	Neutral	52.83	5.29	66.00	-13.17	45.27	5.29	56.00	-10.73
0.305	Neutral	45.69	3.77	60.17	-14.48	37.62	3.77	50.17	-12.55
0.530	Neutral	43.02	3.52	56.00	-12.98	32.35	3.52	46.00	-13.65
2.475	Neutral	43.59	3.43	56.00	-12.41	32.34	3.43	46.00	-13.66
9.030	Neutral	40.45	3.20	60.00	-19.55	30.40	3.20	50.00	-19.60
20.78	Neutral	40.67	3.73	60.00	-19.33	28.04	3.73	50.00	-21.96



#### 6.2 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Class: Class B

Detector: Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximised peak within 6dB of limit

Test Date: Apr. 7, 2009

#### 6.2.1 E.U.T. Operation

Operating Environment:

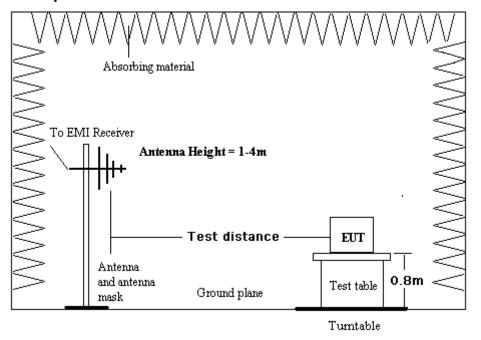
Temperature: 22°C Humidity:55% RH Atmospheric Pressure: 103.0kPa

**EUT Operation:** 

1. Connect the EUT via an USB cable to an AC/DC adapter or Notebook in 120VAC/60Hz.

2. Pre-test the EUT work normally in three modes: previewing/ scanning/ transmit data, then select the worst cases: scanning mode and transmit data with PC host for final measurement during the whole test.

#### 6.2.2 Test Setup



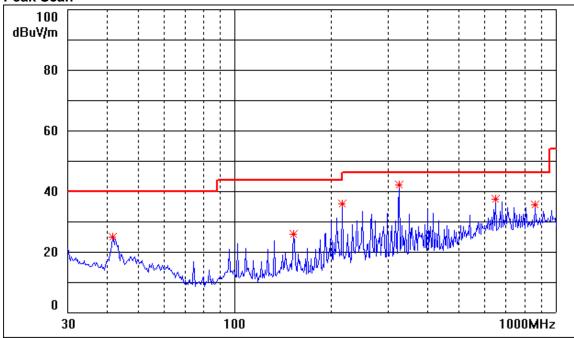
#### 6.2.3 Measurement Data

An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bilog antenna with 2 orthogonal polarities



## Horizontal, Mode: Scanning with Adapter Power Supplied

#### **Peak Scan**



#### **Quasi-peak measurement**

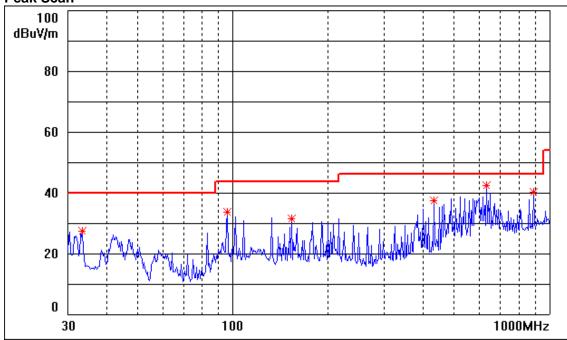
Frequency	Level	Transducer	Limit	Margin
MHz	dBuV/m	dB	dBuV/m	dB
41.7	24.8	13.3	40	-15.2
151.9	25.9	10.7	43.5	-17.6
216.0	35.6	12.8	43.5	-7.9
324.0	41.9	16.9	46	-4.1
648.0	37.2	24.0	46	-8.8
864.0	35.4	26.7	46	-10.6

#### Note:



## Vertical, Mode: Scanning with Adapter Power Supplied





#### **Quasi-peak measurement**

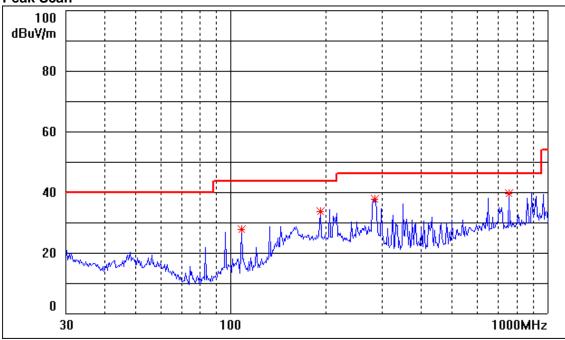
Frequency	Level	Transducer	Limit	Margin
MHz	dBuV/m	dB	dBuV/m	dB
33.4	27.2	16.6	40	-12.8
96.0	33.7	10.2	43.5	-9.8
153.6	31.5	10.8	43.5	-12.0
432.0	37.2	19.1	46	-8.8
631.4	42.3	24.1	46	-3.7
892.5	40.3	27.4	46	-5.7

#### Note:



## Horizontal, Mode: Transmitting Data with Notebook





#### **Quasi-peak measurement**

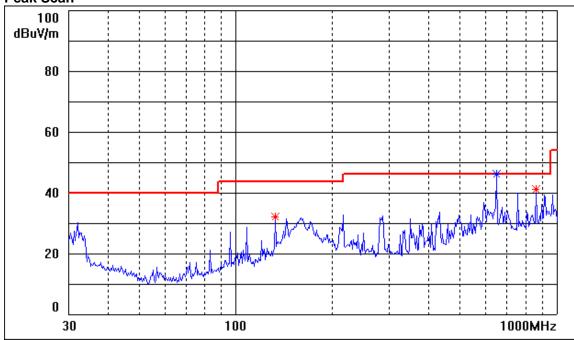
Frequency	Level	Transducer	Limit	Margin
MHz	dBuV/m	dB	dBuV/m	dB
30-88	<30	/	40	/
108	27.6	10.1	43.5	-15.9
192	33.5	11.8	43.5	-10
285.3125	37.8	15.8	46	-8.2
756	39.7	25.4	46	-6.3
960-1000	<40	/	54	/

#### Note:



## Vertical, Mode: Transmitting Data with Notebook





#### **Quasi-peak measurement**

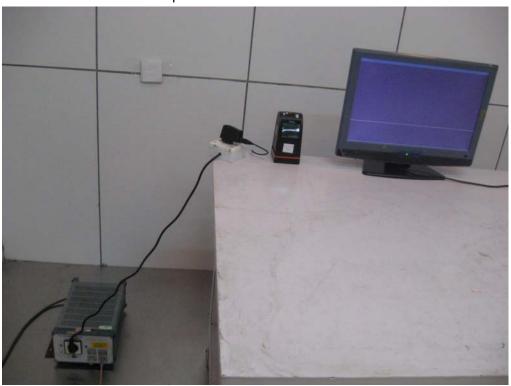
Frequency	Level	Transducer	Limit	Margin
MHz	dBuV/m	dB	dBuV/m	dB
30-88	<30	/	40	/
133.0	32.1	9.4	43.5	-11.4
648.0	45.7	24.0	46	-0.3
864.1	41.2	26.7	46	-4.8
960-1000	<40	/	54	/

#### Note:



## 7. Photographs

## 7.1 Conducted Emission Test Setup













## 7.2 Radiated Emission Test Setup













## 7.3 EUT Constructional Details









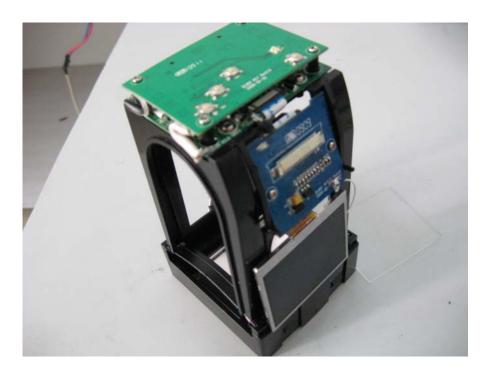


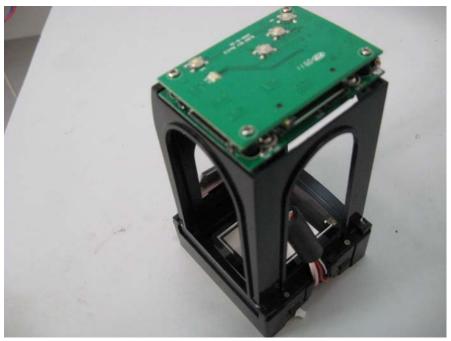






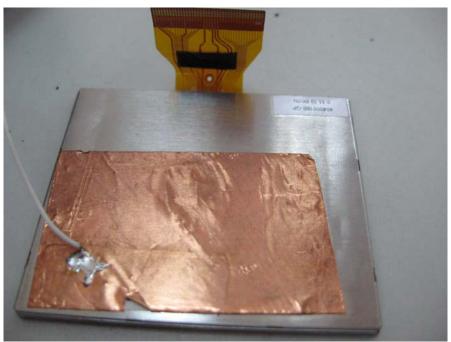




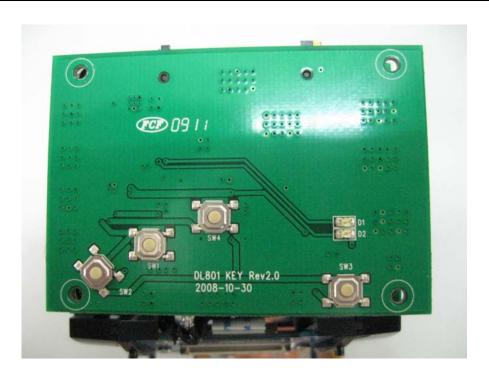


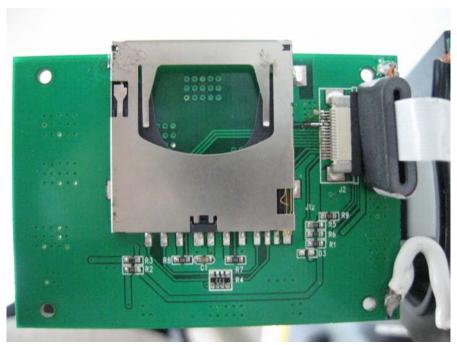






















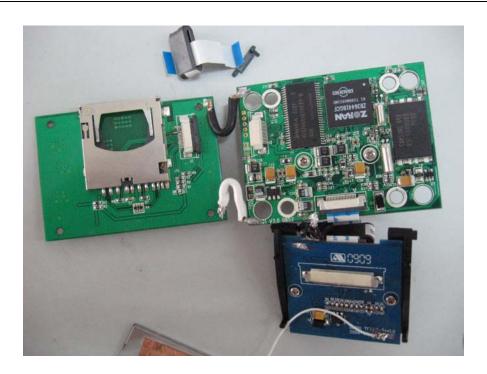








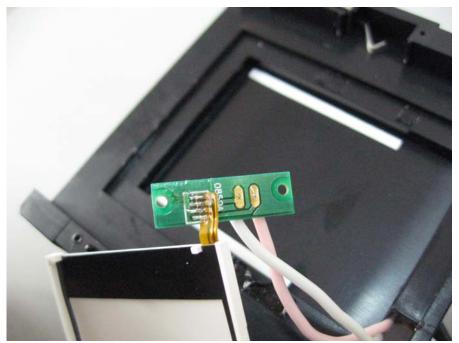




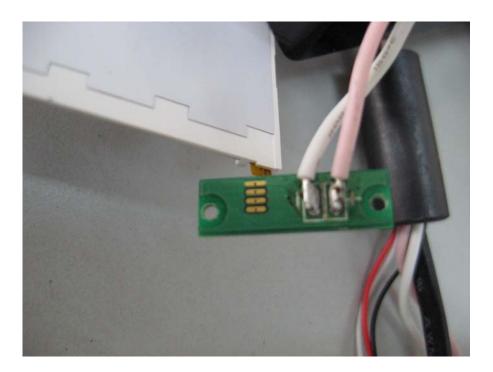


















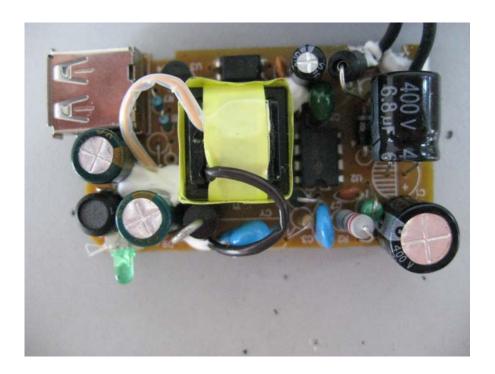


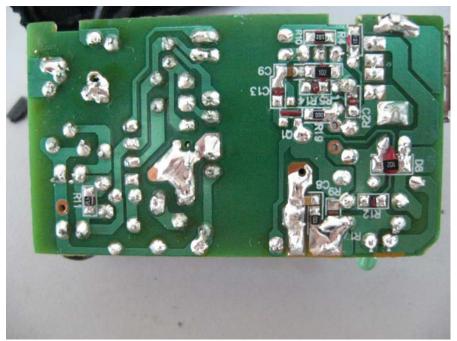












\*\*\*End of Report\*\*\*