

FCCID: WFZSCND502E1231 Report Number: HST0805FCC0004

# **Test Report**

Applicant: EU3C Company Limited

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

**Applicant:** Taimshatsui, Kowloon, Hong Kong, P. R. China

**Equipment Under Test (EUT):** 

EUT Name: FilmScan35 flim scanner

Model No.: SCND502E1231

Serial No.: Not supplied by client

Standards: FCC PART15 SUBPART B: 2007

Date of Receipt: May 25, 2007

**Date of Test**: Jun. 3, 2008- Jun. 5, 2008

Date of Issue: Jun. 10, 2008

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



# 3. Contents

	TITLE PAGE	
1	COVER PAGE	1
2	TEST SUMMARY	2
3	CONTENTS	3
4	GENERAL INFORMATION	4
4.1	CLIENT INFORMATION	4
4.2	GENERAL DESCRIPTION OF E.U.T.	4
4.3	DETAILS OF E.U.T.	4
4.4	DESCRIPTION OF SUPPORT UNITS	4
4.5	STANDARDS APPLICABLE FOR TESTING	4
4.6	TEST LOCATION.	4
4.7	TEST FACILITY.	4
4.8	DEVIATION FROM STANDARDS	4
4.9	ABNORMALITIES FROM STANDARD CONDITIONS	4
5	EQUIPMENTS USED DURING TEST	5
6	TEST RESULTS	6
<b>6</b> 6.1	TEST RESULTS	
6.1		6
6.1 6.1.	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6
6.1 6.1. 6.1.2	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ1E.U.T. Operation	6 6
6.1 6.1. 6.1. 6.1.	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ 1E.U.T. Operation 2Plan View of Test Setup	6 6 6
6.1 6.1. 6.1. 6.1. 6.2	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6 6
6.1 6.1.2 6.1.3 6.2 6.2	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6 6 9
6.1.6.1.2 6.1.3 6.1.3 6.2 6.2.2	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6 6 9
6.1.6.1.2 6.1.3 6.1.3 6.2 6.2.2	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6 6 9 9
6.1.6.1.3 6.1.3 6.1.3 6.2.6 6.2.3	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6 6 9 9
6.1.6.1.6.1.6.2.6.2.6.2.6.2.6.2.6.2.7	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ	6 6 6 9 9 9
6.1 6.1.3 6.1.3 6.2 6.2.3 6.2.3 <b>7</b> 7.1	CONDUCTED EMISSIONS MAINS TERMINALS, 150KHZ TO 30MHZ.  1E.U.T. Operation	6 6 6 9 9 9

#### 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 Road,

Applicant: Taimshatsui, Kowloon, Hong Kong, P. R. China

4.2 General Description of E.U.T.

EUT Name: FilmScan35 flim scanner

Item No.: SCND502E1231

Serial No.: Not supplied by client

4.3 Details of E.U.T.

Power Supply: By host USB port

Power Cord: USB cord with a core, 120 cm

4.4 Description of Support Units

The EUT has been tested with a Fangzheng PC host ( model: Wenxiang 630, included PC and LCD monitor ) .

4.5 Standards Applicable for Testing

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

4.6 Test Location

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	Model/Type	Last Calibrated Date
1	CE	EMI receiver	R&S ESCS 30	2007-6-8
2	CE	LISN	R&S ESH3-Z6	2007-6-8
3	CE	Shielded room	Lindgren 3.6*2.5*3	2007-6-8
4	RE	EMI RECEIVER	R&S ESU	2007-6-8
5	RE	Anechoic chamber	Lindgren FACT-4	2007-6-8
6	RE	Antenna	ETS•Lindgren 3142B	2007-6-8
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: Jun. 3, 2008

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

Operating Environment:

Temperature: 25.0°C Humidity:55% RH Atmospheric Pressure: 1020mBar

**EUT Operation:** 

1. Connect the EUT via an USB cabal to PC host which is in 120V/60Hz.

2. Test the EUT work normally in previewing and scanning mode during the whole test.

#### 6.1.2 Plan View of Test Setup

Refer to photo in section 7

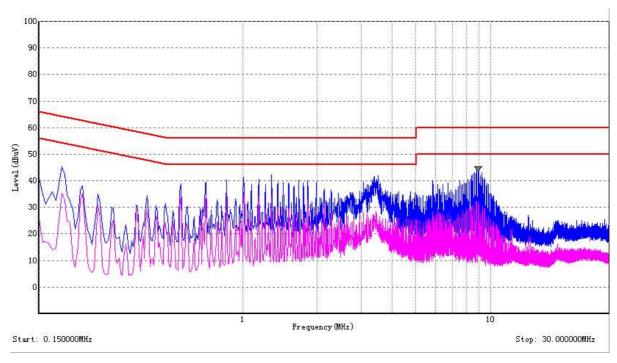
#### 6.1.3 Measurement Data

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 Peak Scan



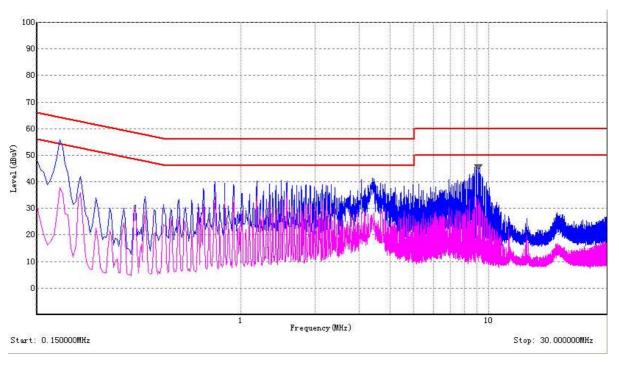
## **Quasi-peak and Average measurement**

Freq. (MHz)	Line	QP (dBµV)	Transd ucer (dB)	QP limit (dBµV)	Margin (dB)	ΑV (dBμV)	Transd ucer (dB)	AV limit (dBµV)	Margin (dB)
0.185	Live	45.2	2.5	64.4	-19.2	35.3	2.5	54.4	-19.1
0.225	Live	38.0	2.2	62.7	-24.7	34.9	2.2	52.7	-17.8
0.710	Live	39.5	2.0	56.0	-16.5	34.4	2.0	46.0	-11.6
1.005	Live	41.4	2.3	56.0	-14.7	35.5	2.3	46.0	-10.5
3.500	Live	42.1	3.4	56.0	-13.9	25.2	3.4	46.0	-20.9
8.875	Live	44.6	3.0	60.0	-15.5	32.1	3.0	50.0	-17.9



#### **Neutral Line**

#### **Peak Scan**



## **Quasi-peak and Average measurement**

Freq. (MHz)	Line	QP (dBµV)	Transd ucer (dB)	QP limit (dBµV)	Margin (dB)	ΑV (dBμV)	Transd ucer (dB)	AV limit (dBµV)	Margin (dB)
0.185	Neutral	55.7	2.5	64.4	-8.7	37.9	2.5	54.4	-16.4
0.225	Neutral	41.9	2.2	62.7	-20.8	36.0	2.2	52.7	-16.7
0.785	Neutral	40.0	2.1	56.0	-16.0	34.2	2.1	46.0	-11.8
1.455	Neutral	40.5	2.8	56.0	-15.5	33.2	2.8	46.0	-12.8
6.900	Neutral	40.9	3.2	60.0	-19.1	30.3	3.2	50.0	-19.7
9.065	Neutral	45.6	3.0	60.0	-14.4	33.5	3.0	50.0	-16.5

#### 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: Jun. 03, 2008

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

Operating Environment:

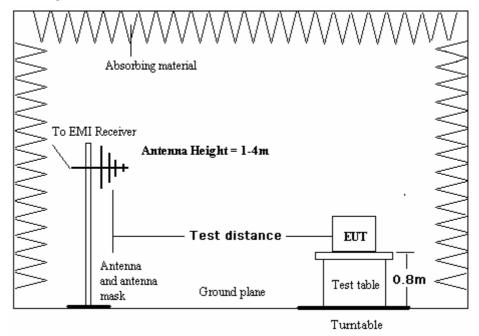
Temperature: 25°C Humidity:55% RH Atmospheric Pressure: 1020mBar

**EUT Operation:** 

1. Connect the EUT via an USB cabal to PC host which is in 120V/60Hz.

2. Test the EUT work normally in previewing and scanning mode during the whole test.

### 6.2.2 Test Setup



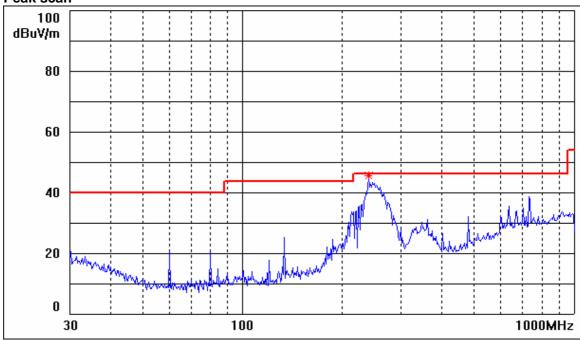
#### 6.2.3 Measurement Data

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:**





### **Quasi-peak measurement**

Frequency	Level	Transducer	Limit	Margin
MHz	dBuV/m	dB	dBuV/m	dB
60.01	21.1	7.6	40.0	-18.9
80.02	21.2	8.2	40.0	-18.8
141.40	26.0	8.8	43.5	-17.5
210.20	33.7	11.6	43.5	-9.8
240.05	42.1	13.8	46.0	-3.9
720.16	38.9	23.3	46.0	-7.1

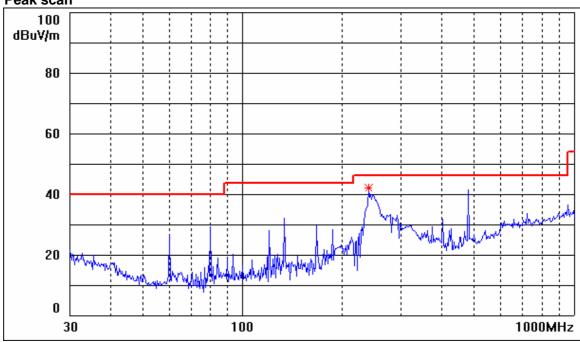
#### Note:

The transducer factor includes antenna factor and cable loss.



#### Vertical:





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

Frequency	Level	Transducer	Limit	Margin
MHz	dBuV/m	dB	dBuV/m	dB
60.01	27.2	7.6	40.0	-12.8
80.02	29.8	8.2	40.0	-10.2
141.40	31.7	8.8	43.5	-11.8
171.60	29.5	10.3	43.5	-14.0
240.05	42.2	13.8	46.0	-3.8
480.10	41.7	19.2	46.0	-4.3

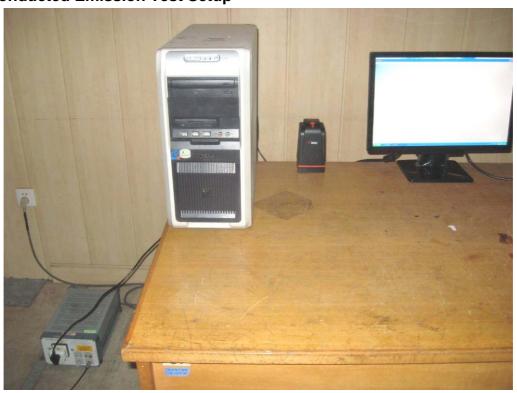
#### Note:

The transducer factor includes antenna factor and cable loss.



# 7. Photographs

# 7.1 Conducted Emission Test Setup







# 7.2 Radiated Emission Test Setup







## 7.3 EUT Constructional Details





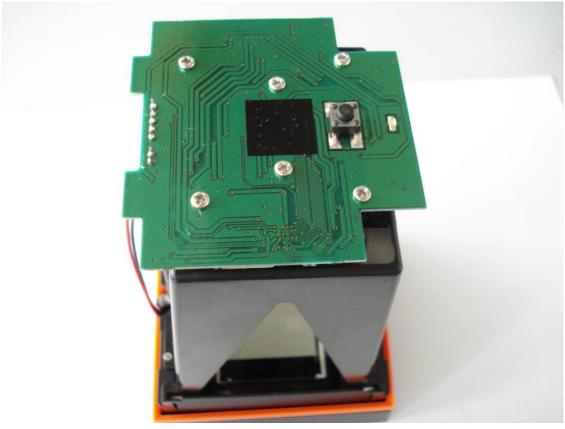




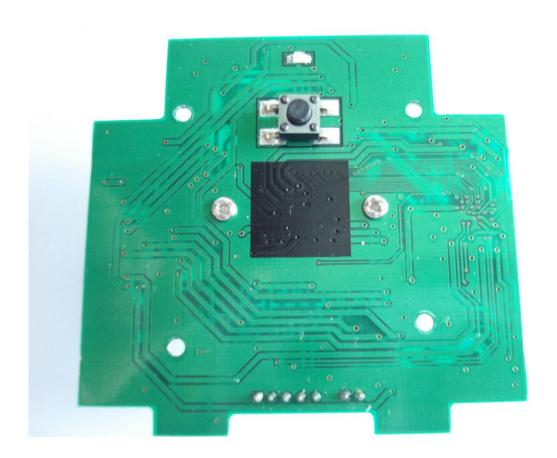


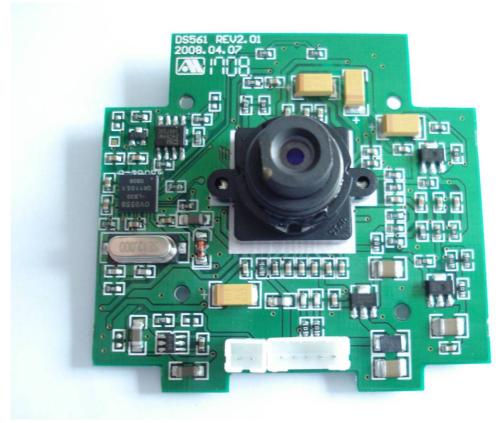












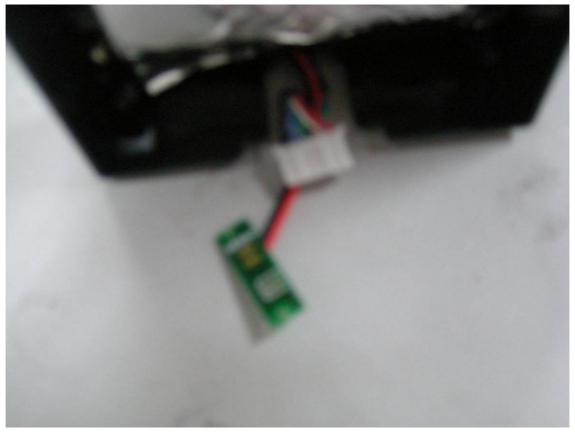
















<sup>\*\*\*</sup>End of Report\*\*\*