

TEST REPORT

REPORT NUMBER: I08GE7032-FCC-PART15B

ON

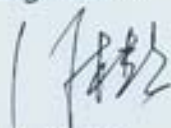
Type of Equipment: Windows Mobile Smart Phone
Type of Designation: Vodafone 1231
Manufacturer: ZTE CORPORATION

ACCORDING TO
Part 15B: Radio Frequency Devices, Sep 20, 2007

China Telecommunication Technology Labs.

Month date, year
Nov,21, 2008

Signature



He Guili
Director

FCC ID: Q78-VDF1231

Report Date: 2008-11-21

Test Firm Name: China Telecommunication Technology Labs

Registration Number: 840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 15B. The sample tested was found to comply with the requirements defined in the applied rules.

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1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 15B.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

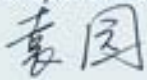
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FCC Parts 15B
Equipment: Vodafone 1231

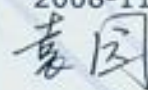
REPORT NO.: I08GE7032-FCC-PART15B

1.2 Testers

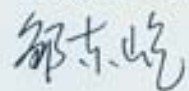
Name: Yuan Yuan
Position: Engineer
Department: Department of EMC test
Signature: 

Name: Li Dongjin
Position: Engineer
Department: Department of EMC test
Signature: 

Editor of this test report:

Name: Yuan Yuan
Position: Engineer
Department: Department of EMC test
Date: 2008-11-21
Signature: 

Technical responsibility for area of testing:

Name: Zou Dongyi
Position: Manager
Department: Department of EMC test
Date: 2008-11-21
Signature: 

1.3 Testing Laboratory information

1.3.1 Location

Name: China Telecommunication Technology Labs.
Address: No. 11, Yue Tan Nan Jie, Xi Cheng District
BEIJING
P. R. CHINA, 100083
Tel: +86 10 68094053
Fax: +86 10 68011404
Email: emc@chinattl.com

1.3.2 Details of accreditation status

Accredited by: China National Accreditation Service for Conformity
Assessment (CNAS)
Registration number: CNAS Registration No. CNAS L0570
Standard: ISO/IEC 17025:2005

1.3.3 Test location, where different from section 1.3.1

Name: -----
Street: -----
City: -----
Country: -----
Telephone: -----
Fax: -----
Postcode: -----

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: ZTE CORPORATION

Address: ZTE Plaza, Keji Road South, Hi-Tech Industrial
Park, Nanshan District, Shenzhen, Guangdong,
518057, P.R.China

Country: China

Telephone: +86-021-68897541

Fax: +86-21-50701080

Contact: Zhangmin

Telephone: 021-68897541

Email: Zhang.min13@zte.com.cn

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: --

Address: --

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: --

Address: --

2 Test Item

2.1 General Information

Manufacturer: ZTE CORPORATION
 Name: Windows Mobile Smart Phone
 Model Number: Vodafone 1231
 Serial Number: --
 Production Status: Production
 Receipt date of test item: 2008-11-14

2.2 Outline of EUT

E.U.T. is a Windows Mobile Smart Phone.

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	handset	ZTE CORPORATION	Vodafone 1231	--	None
B	adapter	ZTE CORPORATION, RD, Dokocom	STC-A22O50U5-A	--	None
C	battery	ZTE CORPORATION, RD, SCUD	Li3711T42P3h513857	--	None
D	Earphone	Merry Electronics Ltd Full-Sound Electrical Products.Ltd	HMZ3-C4-OMTP	--	None

Cables:

Item	Cable Type	Manufacturer	Length	Shield	Quantity	Remarks
1	DC cable on Adapter	Unknown	1.0 m	No	1	None

2.5 Other Information

(a) Adaptor information:

Input: 100-240VAC 50/60Hz 200mA

Output: 5.0VDC 700mA

(b) Battery information:

3.7VDC 1100mAh

3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

Specification Clause	Name of Test	Result
15.109	Radiated Emission	Pass
15.107	Conducted Emission	Pass
Note: The EUT complies with the requirements of the Class B digital devices.		

4 Test Results

4.1 Radiated Emission

Specifications:	15.109, ANSI C63.4-2003					
Date of Tests	2008-11-19					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Operation Mode	TX on					
Test Results:	Pass					
Test equipment Used:						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7805	EMI Test Receiver	R/S	ESI26	100211	2009-01-03	Normal
7330	Ultra Broadband Antenna	SCHWARZBECK	VULB 9160	--	2010-10-26	Normal
7330	Double-Ridged Horn Antenna	R/S	HF906	100037	2009-01-14	Normal
713	Fully-Anechoic Chamber	ETS	11.8m×6.5m×6.3m	--	2010-11-17	Normal
023	Wireless Communications Test Set	Agilent	8960(E5515C)	GB41450323	2009-06-13	Normal

Limit Level Construction:

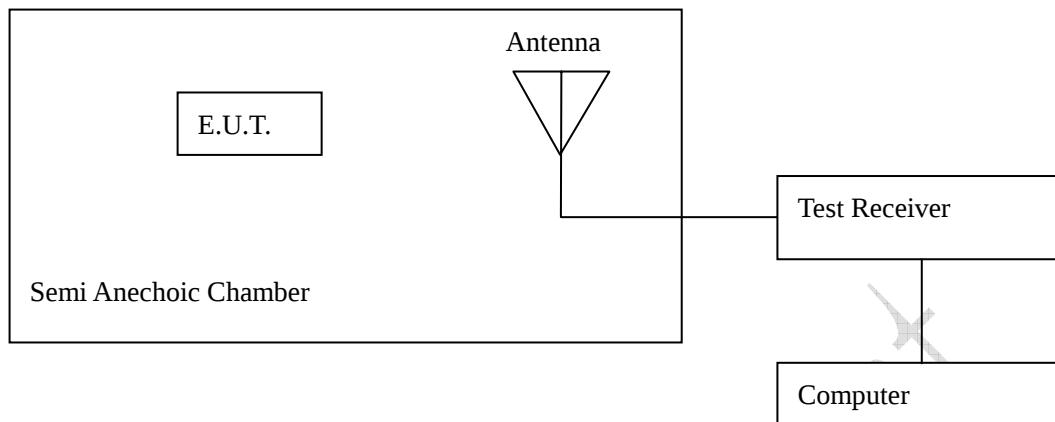
According to Part 15.109(a).

Limits

Frequency [MHz]	Field Strength [$\mu\text{V}/\text{m}$]	Field Strength [dB $\mu\text{V}/\text{m}$]	Measurement distance [m]
30 - 88	100	40.0	3
88 - 216	150	43.5	3
216 - 960	200	46.0	3
Above 960	500	54.0	3

Note: The tighter limit applies at the band edges.

Test Configuration



The measuring distance between E.U.T and antenna is 3m.

Test Setup:

The EUT was placed in an anechoic chamber, see figure RE. The EUT is tested as tabletop EUT. The EUT is positioned on an 80cm height wood table.

The EUT is used as the peripheral equipment of the PC.

The setup is according to Figure 11a of ANSI C63.4-2003.

The Wireless Communications Test Set (Test Simulator) was used to set the TX channel and power level and modulate the TX signal with different bit patterns. The test was done using an automated test system, where all test equipments were controlled by a computer.



Figure RE

Test Method

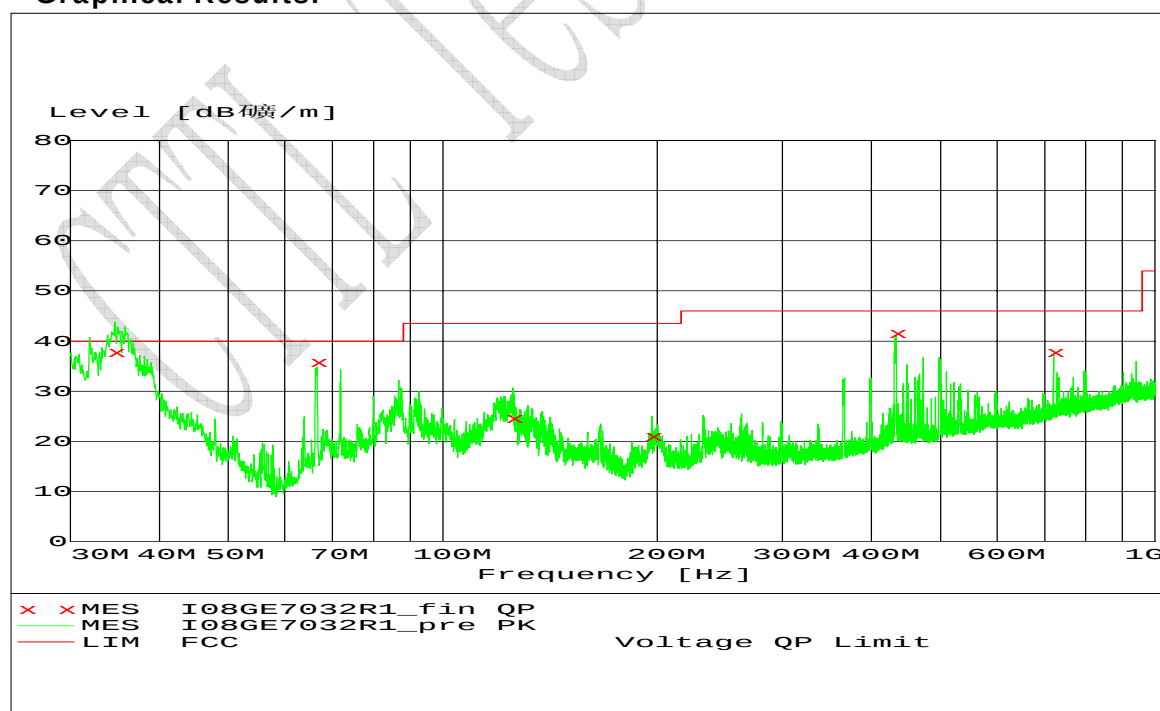
During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. The measurement was done by the automated test system.

Note: --

Test Data:

Frequency [MHz]	Level [dBμV/m]	Limit [dBμV/m]	Antenna Height [cm]	Turntable Azimuth [degree]	Antenna Polarisation (V/H)
34.620000	37.8	40	100	224	VERTICAL
66.600000	35.9	40	100	141	VERTICAL
125.400000	24.7	43	100	225	VERTICAL
196.620000	21.0	43	128	102	HORIZONTAL
433.020000	41.5	46	100	282	HORIZONTAL
720.120000	37.8	46	120	2	HORIZONTAL
Remarks: --					

Graphical Results:



Graphical results

4.2 Conducted Emission

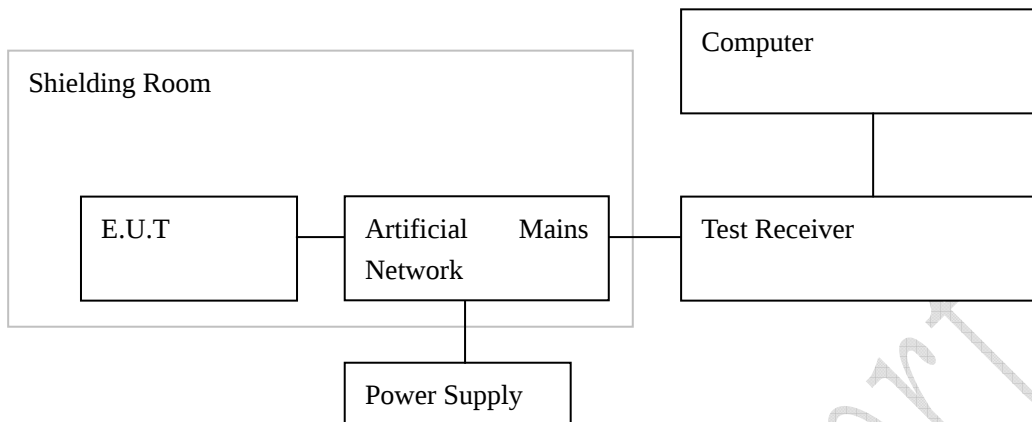
Specifications:	15.107, ANSI C63.4-2003					
Date of Tests	2008-11-20					
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa					
Operation Mode	TX on					
Test Results:	Pass					
Test equipment Used:						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7330	EMI Test Receiver	R/S	ESI40	839283/007	2009-02-03	Normal
7330	Artificial Mains Network	R/S	ESH2-Z5	837480/002	2009-01-09	Normal
714	Shielding Room	ETS	--	19003	2010-11-17	Normal
023	Wireless Communications Test Set	Agilent	8960(E5515C)	GB41450323	2009-06-13	Normal

Limit Level Construction:
According to Part 15.107 (a)

Limits for Conducted Emission		
Frequency of Emission [MHz]	Conducted limit [dBμV]	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

* Decreases with the logarithm of the frequency.

Test Configuration



Test Setup:

The EUT was placed in a shielding room, see figure CE. The EUT is positioned on an 80cm height wood table. The EUT is used as the peripheral equipment of the PC.

The setup is according to Figure 10a of ANSI C63.4-2003.

The Wireless Communications Test Set (Test Simulator) was used to set the TX channel and power level and modulate the TX signal with different bit patterns. The test was done using an automated test system, where all test equipments were controlled by a computer.



Figure CE

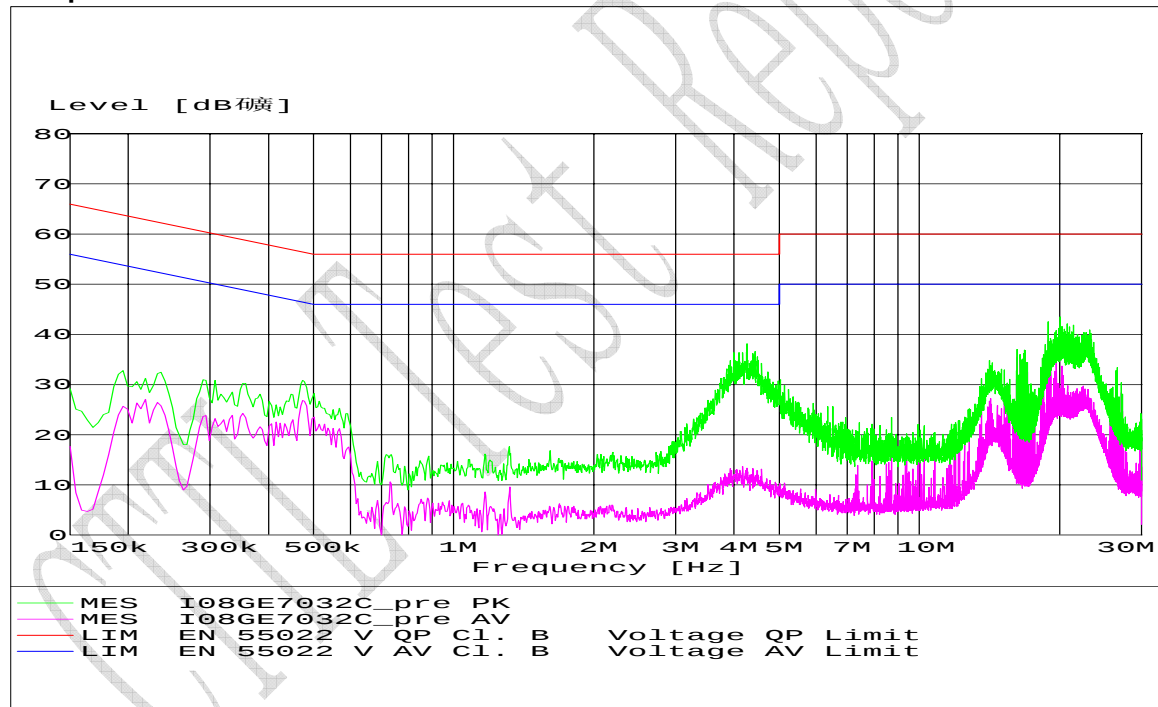
Test Method:

During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. The AC power line of the Notebook was connected to the artificial mains network then to EMI receiver. The measurement was done by the automated test system.

Note: --

Test Data:

Detector (QP/AV)	Frequency (MHz)	Level (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	PE
--	--	--	--	--	--	--
Remarks: --						

Graphical results:

CE graphical results

Annex A External Photos



Front view



Back view

FCC Parts 15B
Equipment: Vodafone 1231

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Adaptor



Battery

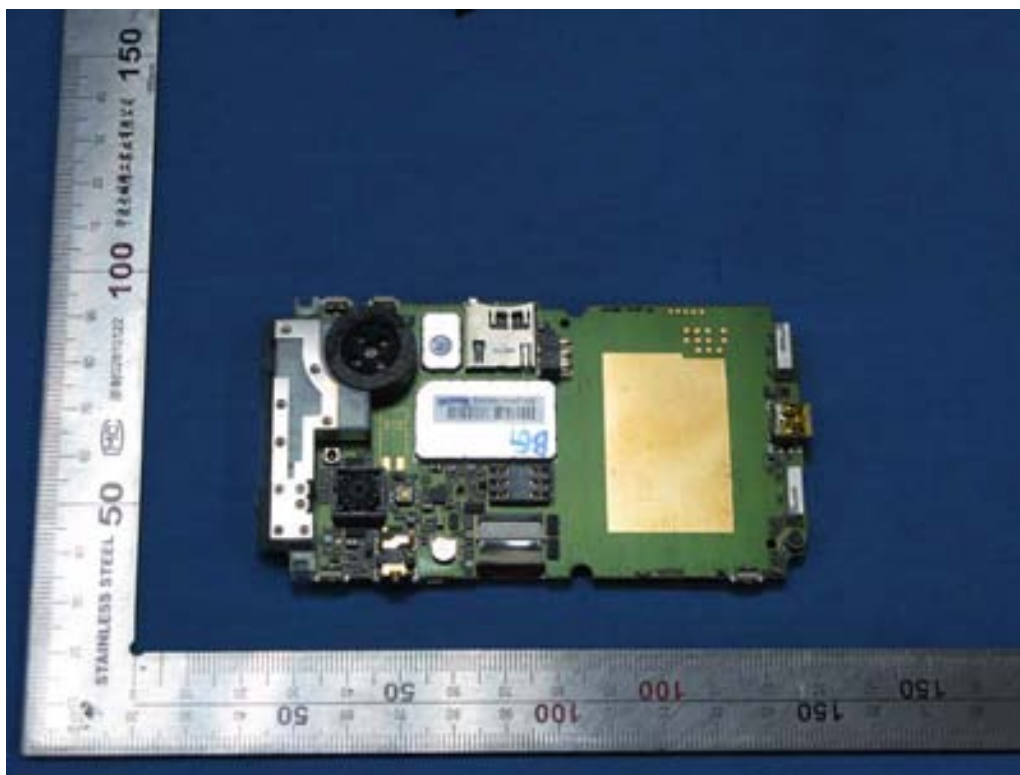
FCC Parts 15B
Equipment: Vodafone 1231

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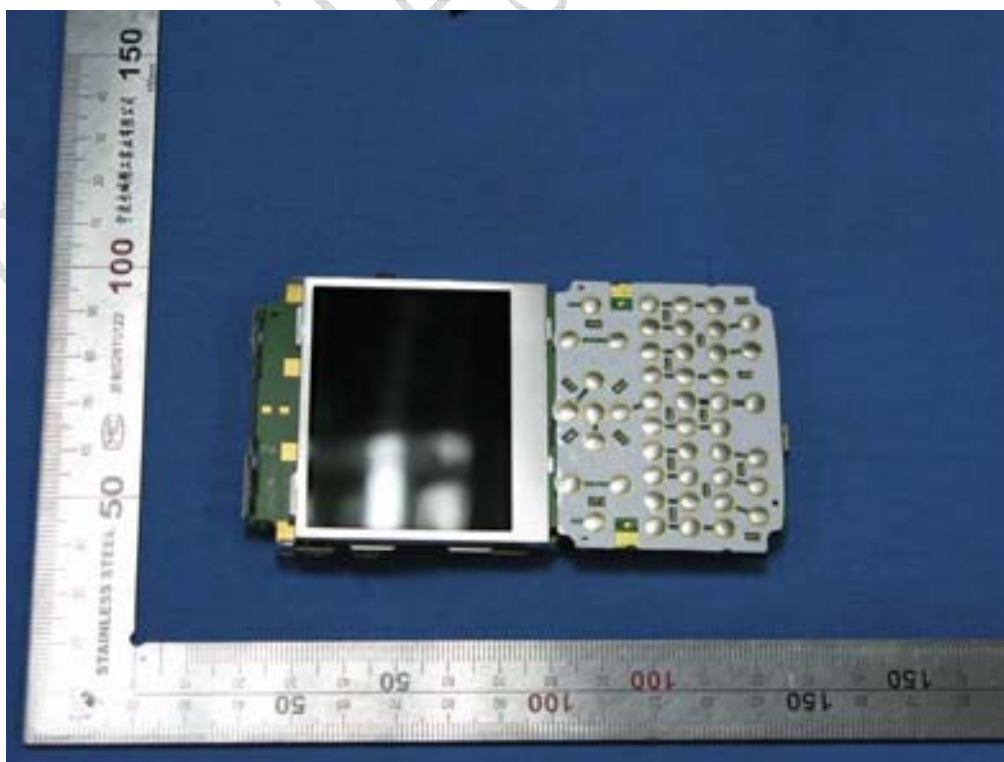


Earphone

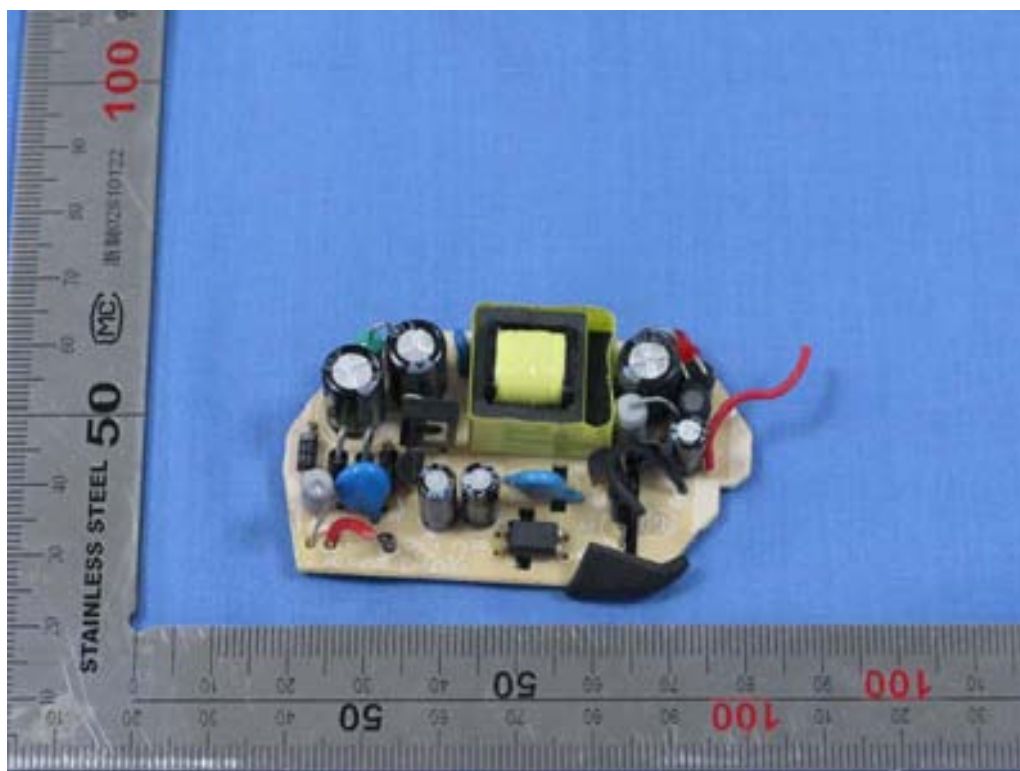
Annex B Internal Photos



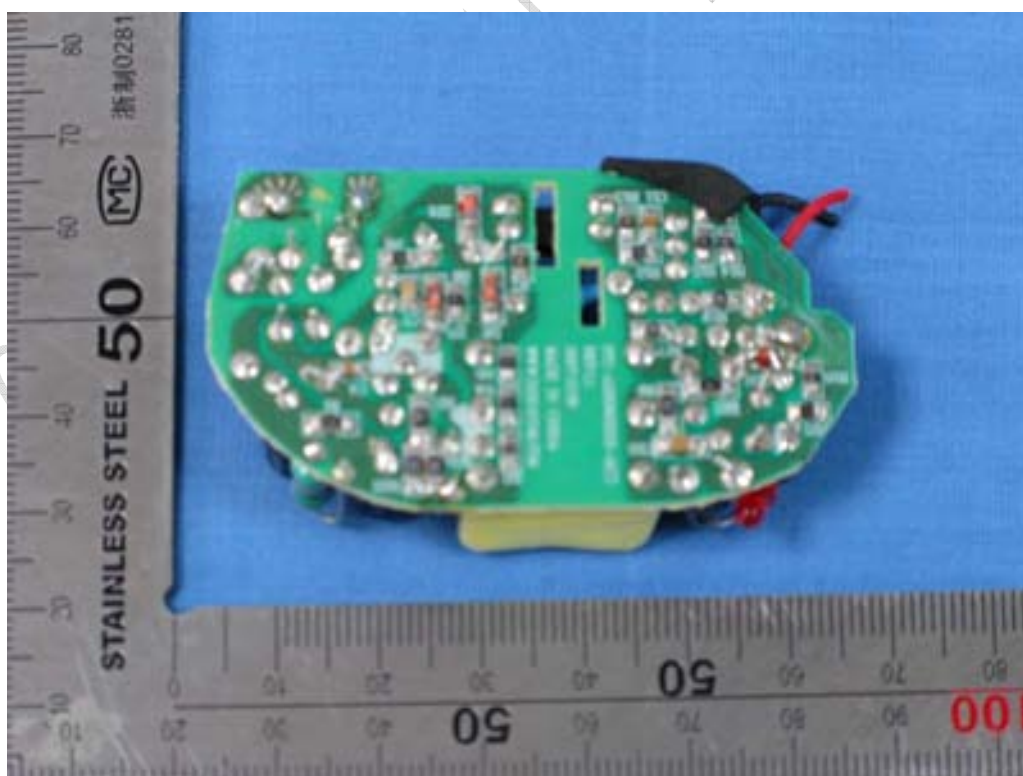
Main board (face)



Main board (back)



Adaptor face



Adaptor back

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

_____ The End of this Report _____

CTL Test Report