

TEST REPORT

REPORT NUMBER: I08GE7399-FCC-PART15B

ON

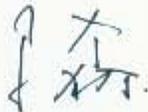
Type of Equipment: Windows Mobile Smart Phone
Type of Designation: Vodafone 1231+
Manufacturer: ZTE CORPORATION

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

China Telecommunication Technology Labs.

Month date, year
Nov, 19, 2008

Signature

A handwritten signature in black ink, appearing to be the name 'Ma Xin' written in a stylized, cursive script.

Ma Xin
Deputy Director

FCC ID: Q78-VDF1231PLUS

Report Date: 2008-11-19

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.

CONTENTS

| | |
|---|-----------|
| 1 GENERAL INFORMATION | 4 |
| 1.1 NOTES | 4 |
| 1.2 TESTERS..... | 5 |
| 1.3 TESTING LABORATORY INFORMATION | 6 |
| 1.4 DETAILS OF APPLICANT OR MANUFACTURER | 7 |
| 2 TEST ITEM | 8 |
| 2.1 GENERAL INFORMATION | 8 |
| 2.2 OUTLINE OF EUT..... | 8 |
| 2.3 MODIFICATIONS INCORPORATED IN EUT..... | 8 |
| 2.4 EQUIPMENT CONFIGURATION | 8 |
| 2.5 OTHER INFORMATION | 8 |
| 3 SUMMARY OF TEST RESULTS | 9 |
| 4 TEST RESULTS | 10 |
| 4.1 RADIATED EMISSION..... | 10 |
| 4.2 CONDUCTED EMISSION..... | 113 |
| ANNEX A EXTERNAL PHOTOS..... | 16 |
| ANNEX B INTERNAL PHOTOS..... | 19 |
| ANNEX C DEVIATIONS FROM PRESCRIBED TEST METHODS..... | 20 |

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.

China Telecommunication Technology Labs.(CTTL) authorizes the applicant or manufacturer (see section 1.4) to reproduce this report provided, and the test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CTTL Mr. He Guili.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. CTTL accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

FCC Parts 15B
Equipment: Vodafone 1231+

REPORT NO.: I08GE7399-FCC-PART15B

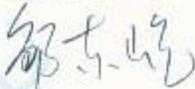
1.2 Testers

Name: An Shaogeng
Position: Engineer
Department: Department of EMC test
Signature: 

Editor of this test report:

Name: Li Guoqing
Position: Engineer
Department: Department of EMC test
Date: 2008-11-19
Signature: 

Technical responsibility for area of testing:

Name: Zou Dongyi
Position: Manager
Department: Department of EMC test
Date: 2008-11-19
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: +86-21-68896840
Fax: +86-21-50701080
Contact: Zhangmin
Telephone: 021-68896835
Email: Zhang.min13@zte.com.cn

1.4.2 Manufacturer (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: 2008-09-02

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 | STC-A22O50U5-A | -- | None |
| C | battery | ZTE CORPORATION | Li3711T42P3h513 857 | -- | 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 | 1.8 m | No | 1 | None |

2.5 Other Information

- (a) Adaptor information:
 Input: 100-240VAC 200mA
 Output: 5.0V 700mA
- (b) Battery information:
 3.7VDC

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.

TTL Test Report

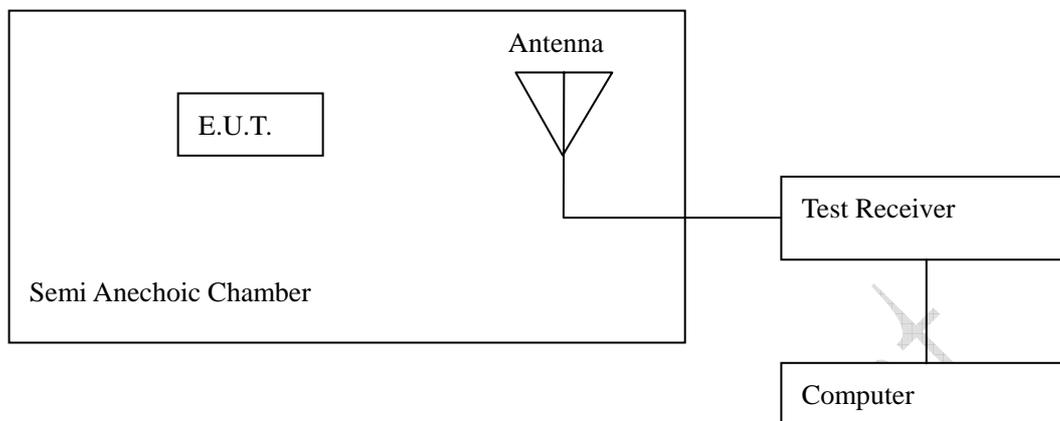
4 Test Results

4.1 Radiated Emission

| Specifications: | 15.109, ANSI C63.4-2003 | | | | | |
|-----------------------------|--|--------------|-----------------|---------------|------------|--------|
| Date of Tests | 2008-09-09 | | | | | |
| Test conditions: | Ambient Temperature: 15°C -35°C 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 | R/S | HL562 | 100013 | 2009-07-23 | 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 | 2009-06-12 | Normal |

| Limit Level Construction: According to Part 15.109(a). | | | |
|--|-----------------------------|-------------------------------|--------------------------|
| Limits | | | |
| Frequency [MHz] | Field Strength [μ V/m] | Field Strength [dB μ V/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.

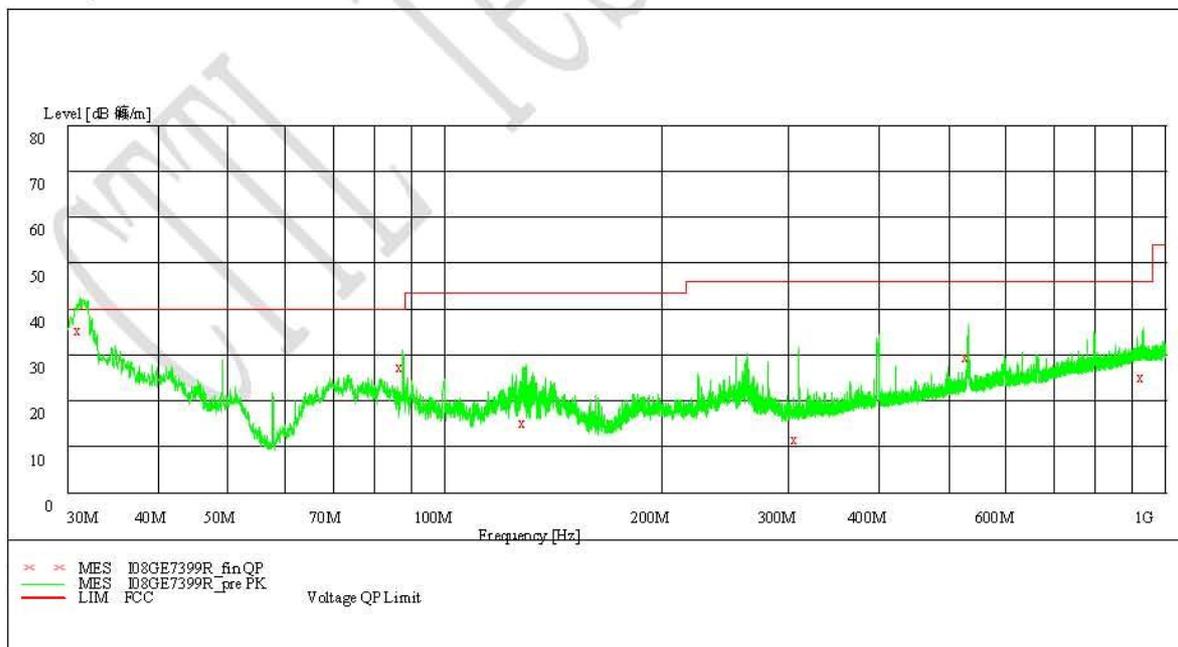
Note: --

Test Data:

| Frequency [MHz] | Level [dBµV/m] | Limit [dBµV/m] | Antenna Height [cm] | Turntable Azimuth [degree] | Antenna Polarisation (V/H) |
|-----------------|----------------|----------------|---------------------|----------------------------|----------------------------|
| 31.260000 | 38.30 | 40.0 | 100 | 314 | VERTICAL |
| 87.600000 | 30.30 | 40.0 | 211 | 96 | HORIZONTAL |
| 129.720000 | 18.30 | 43.5 | 100 | 148 | VERTICAL |
| 309.360000 | 14.60 | 46.0 | 151 | 199 | VERTICAL |
| 532.980000 | 32.50 | 46.0 | 100 | 93 | VERTICAL |
| 932.460000 | 28.00 | 46.0 | 100 | 75 | VERTICAL |

Remarks: --

Graphical Results:



Graphical results

4.2 Conducted Emission

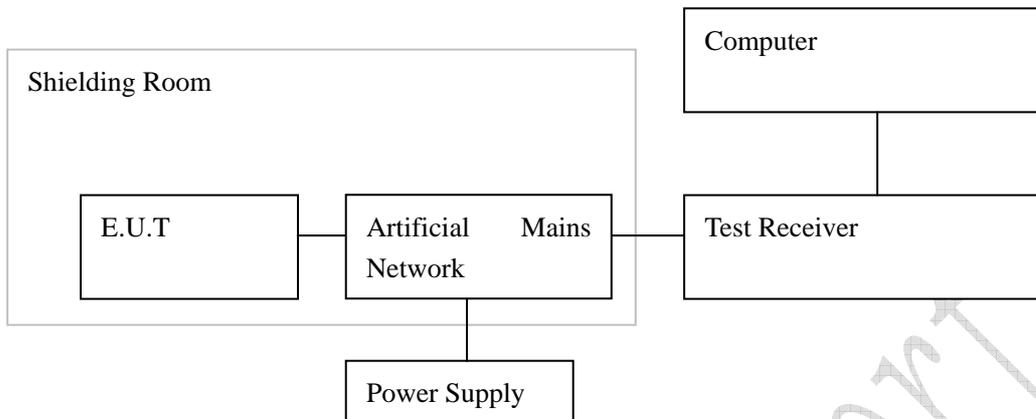
| Specifications: | 15.107, ANSI C63.4-2003 | | | | | |
|-----------------------------|---|--------------|--------------|---------------|------------|--------|
| Date of Tests | 2008-09-10 | | | | | |
| Test conditions: | Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa | | | | | |
| 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 | 2009-06-12 | 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: --

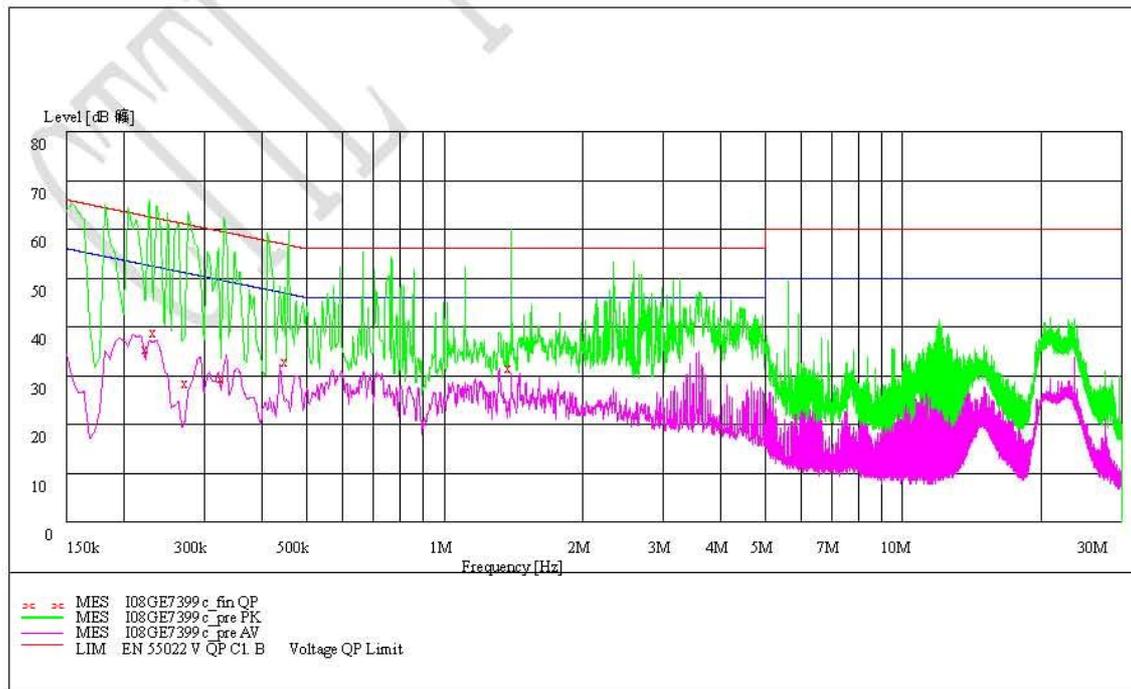
Test Data:

| Detector (QP/AV) | Frequency (MHz) | Level (dBµV) | Limit (dBµV) | Margin (dB) | Line | PE |
|------------------|-----------------|--------------|--------------|-------------|------|-----|
| AV | 0.226500 | 38.20 | 63 | 24.3 | L1 | GND |
| AV | 0.235500 | 41.70 | 62 | 20.5 | L1 | GND |
| AV | 0.276000 | 31.30 | 61 | 29.6 | L1 | GND |
| AV | 0.330000 | 32.30 | 60 | 27.1 | L1 | GND |
| AV | 0.456000 | 35.60 | 57 | 21.2 | L1 | GND |
| AV | 1.396500 | 34.20 | 56 | 21.8 | L1 | GND |

Remarks: --

Graphical results:

CE graphical results



Annex A External Photos



Front view



Back view



Adaptor



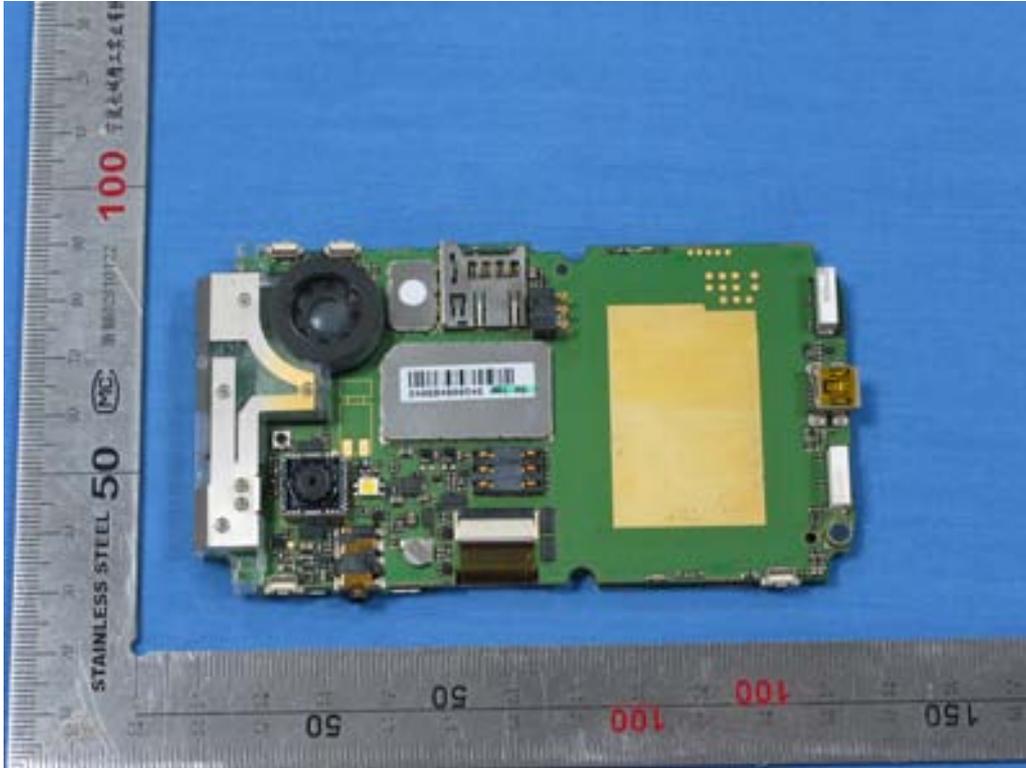
Battery



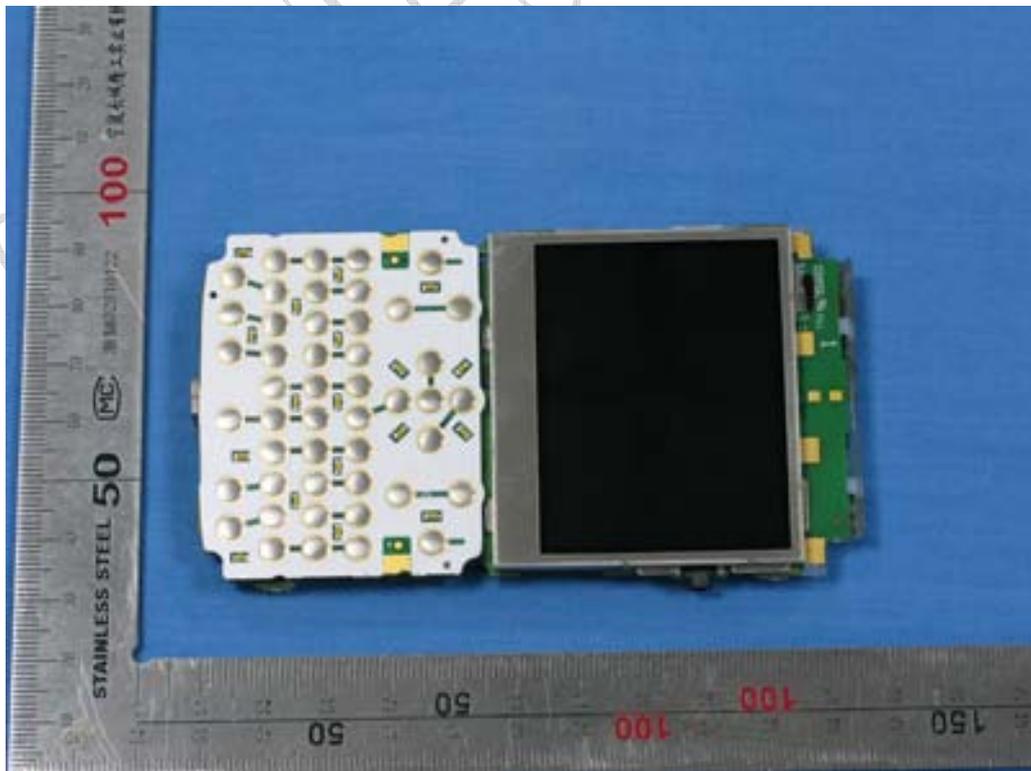
Earphone

TTL TEST

Annex B Internal Photos



Main board (face)



Main board (back)

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

_____ **The End of this Report** _____

China Test Report