

# TEST REPORT

REPORT NUMBER: B08GE6003-FCC-PART15B

ON

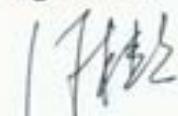
Type of Equipment: GSM Mobile Phone  
Type of Designation: S7  
Manufacturer: SODIFF BMT

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

China Telecommunication Technology Labs.

Month date, year  
Aug, 01, 2008

Signature



He Guili  
Director

**FCC ID:** WJG-S7  
**Report Date:** 2008-08-01

**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.

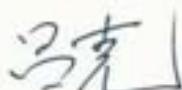
The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

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

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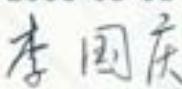
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**1.2 Testers**

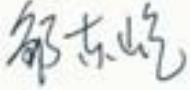
Name: Lv Ke  
 Position: Engineer  
 Department: Department of EMC test  
 Signature: 

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

Editor of this test report:

Name: Li Guoqing  
 Position: Engineer  
 Department: Department of EMC test  
 Date: 2008-08-01  
 Signature: 

Technical responsibility for area of testing:

Name: Zou Dongyi  
 Position: Manager  
 Department: Department of EMC test  
 Date: 2008-08-01  
 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](mailto: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: SODIFF BMT  
Address: 678-7, ChangMan-Ri, GwangTan-Myun, Paju-City,  
Gyeonggi-Do, Korea  
Country: Rep. Of Korea  
Telephone: +82.70.7096.0713  
Fax: +82.31.441.0171  
Contact: Mr. Steve Noh  
Telephone: +82.10.8568.4145  
Email: [Sinoh76@sodiff.net](mailto:Sinoh76@sodiff.net)

### 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: SODIFF BMT  
 Name: GSM Mobile phone  
 Model Number: S7  
 Serial Number: --  
 Production Status: Production  
 Receipt date of test item: 2008-07-24

### 2.2 Outline of EUT

E.U.T. is a GSM/GPRS Mobile 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	SODIFF BMT	S7	--	None
B	adapter	Shenzhen Zhong Xin Tong Co.,Ltd. ZHUHAI REMINDA COMMUNICATION DEVELOPMENT CO., LTD.	ZXTSC01-5005 00	--	None
C	battery	SHENZHEN BAK BATTERY CO.,LTD	BAT-02	--	None
D	Earphone	SANG FAI ELECTRONICAL PRODUCTS CO., LTD.	SF-600KM-1	--	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) Version of hardware and software

HW Version(Handset): 2.0

SW Version(Handset): SGP500 MXC1NC\_MT2706BV105\_MP

### (b) Adaptor information:

Input: 100-240VAC 50/60Hz 0.2A

Output: 5.0V 500mA

### (c) Battery information:

3.7VDC 680mAh

## 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.

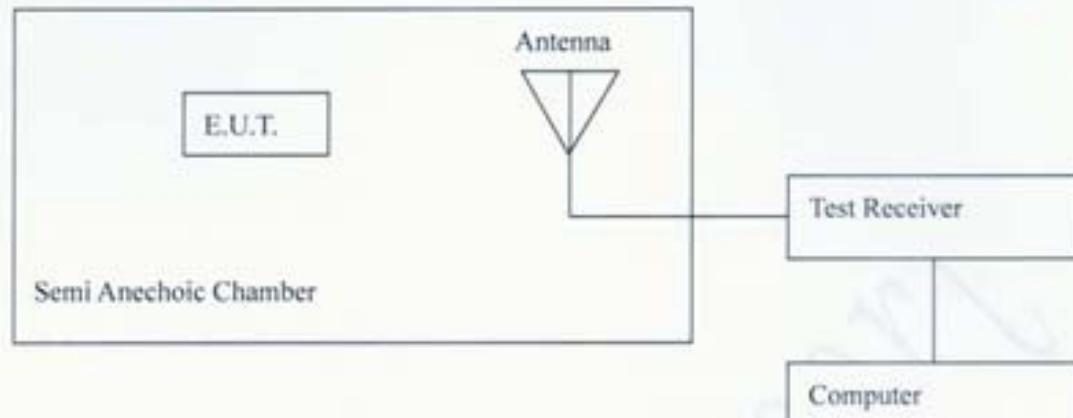
## 4 Test Results

### 4.1 Radiated Emission

<b>Specifications:</b>	15.109, ANSI C63.4-2003					
<b>Date of Tests</b>	2008-07-25					
<b>Test conditions:</b>	Ambient Temperature: 15°C-35°C Relative Humidity: 30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	TX on					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
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	2008-06-13	Normal
<b>Ancillary Equipment used</b>						
996	PC	HP	VL400	CN11205610	--	Normal

<b>Limit Level Construction:</b> According to Part 15.109(a).			
<b>Limits</b>			
Frequency [MHz]	Field Strength [ $\mu$ V/m]	Field Strength [dB $\mu$ 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.

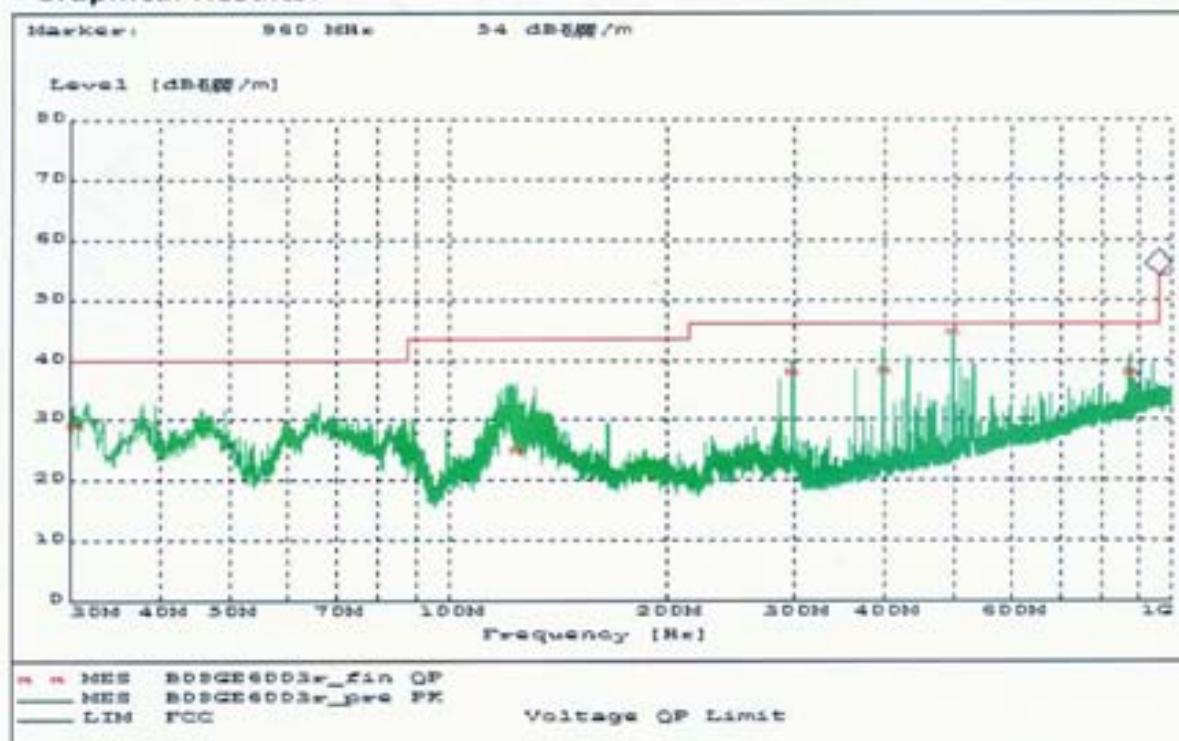
Note: --

## Test Data:

Frequency [MHz]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Antenna Height [cm]	Turntable Azimuth [degree]	Antenna Polarisation (V/H)
30.360000	28.8	40	100	224	VERTICAL
123.960000	24.5	43.5	100	45	VERTICAL
298.320000	37.5	46	100	99	HORIZONTAL
399.720000	38.0	46	105	312	HORIZONTAL
497.760000	44.5	46	100	21	HORIZONTAL
877.560000	37.6	46	100	297	HORIZONTAL

Remarks: --

## Graphical Results:



## Graphical results

#### 4.2 Conducted Emission

<b>Specifications:</b>	15.107, ANSI C63.4-2003					
<b>Date of Tests</b>	2008-08-01					
<b>Test conditions:</b>	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa					
<b>Operation Mode</b>	TX on					
<b>Test Results:</b>	Pass					
<b>Test equipment Used:</b>						
Asset Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
7330	EMI Test Receiver	R/S	ES140	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)	G841450323	2008-06-13	Normal
<b>Ancillary Equipment used</b>						
996	PC	HP	VL400	CN11205610	--	Normal

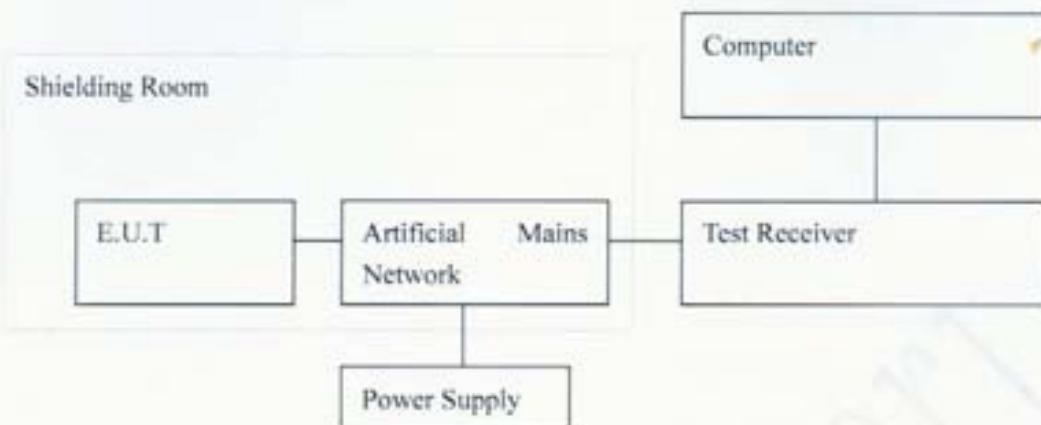
**Limit Level Construction:**

According to Part 15.107 (a)

<b>Limits for Conducted Emission</b>		
<b>Frequency of Emission [MHz]</b>	<b>Conducted limit [dB<math>\mu</math>V]</b>	
	<b>Quasi-peak</b>	<b>Average</b>
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

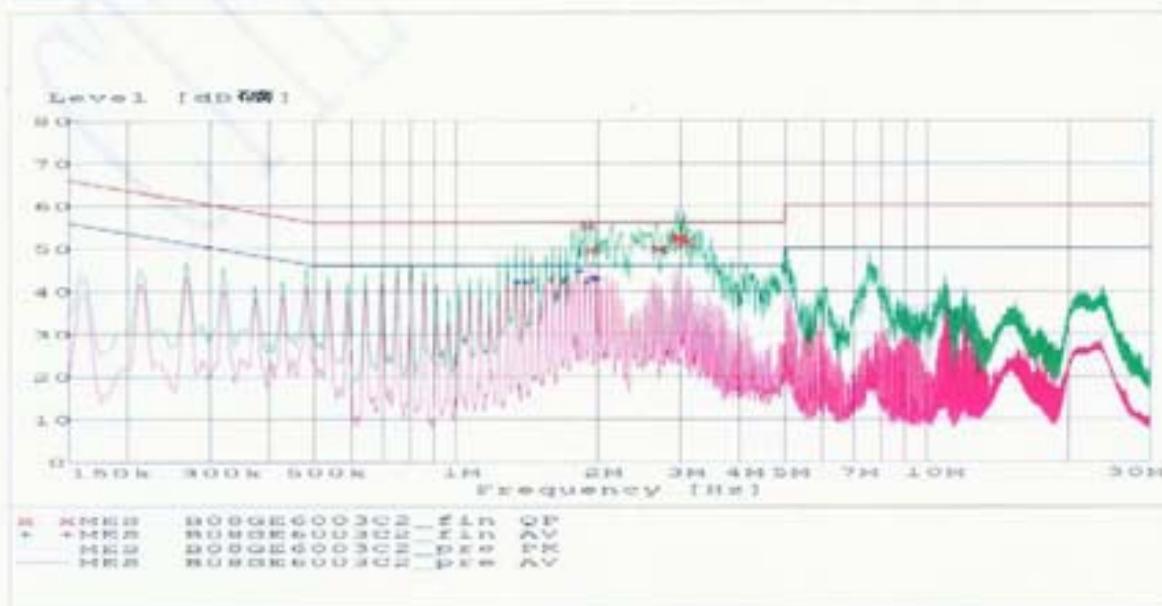
**Test Method:**

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 $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Line	PE
QP	1.878000	55.3	56	0.7	N	GND
QP	1.927500	49.7	56	6.3	L1	GND
QP	2.674500	49.9	56	6.1	N	GND
QP	2.949000	52.1	56	3.9	L1	GND
QP	2.953500	52.8	56	3.2	L1	GND
QP	3.052500	51.5	56	4.5	L1	GND
AV	1.342500	42.2	46	3.8	N	GND
AV	1.396500	42.1	46	3.9	L1	GND
AV	1.824000	44.7	46	2.3	N	GND
AV	1.878000	42.0	46	4.0	L1	GND
AV	1.932000	43.1	46	2.9	N	GND
AV	1.986000	42.8	46	3.2	L1	GND

Remarks: --

**Graphical results:**

Graphical results

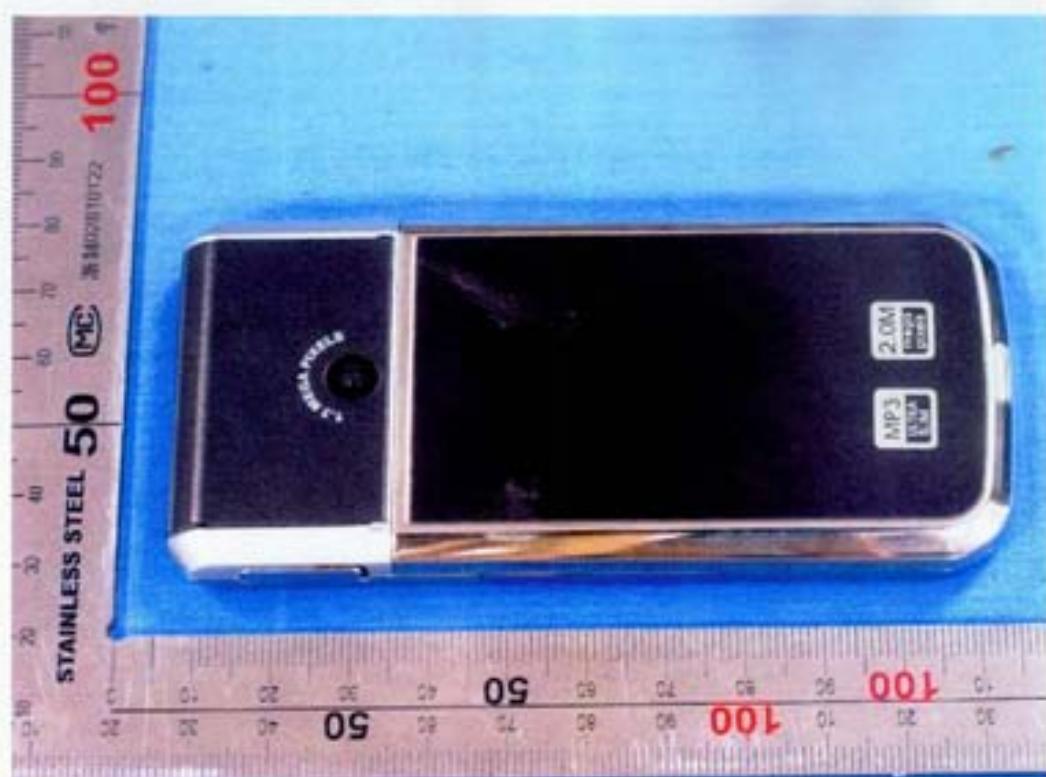
## Annex A External Photos



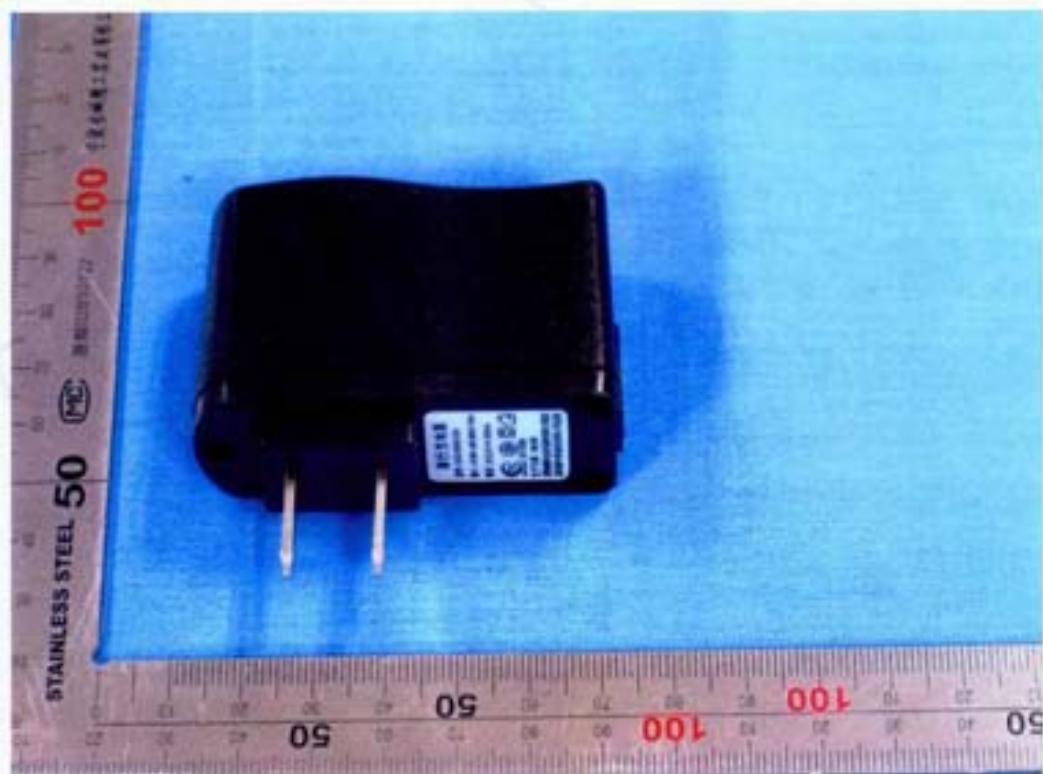
Front view with clip close



Front view with clip open



Back view



Adaptor



Cable



Battery

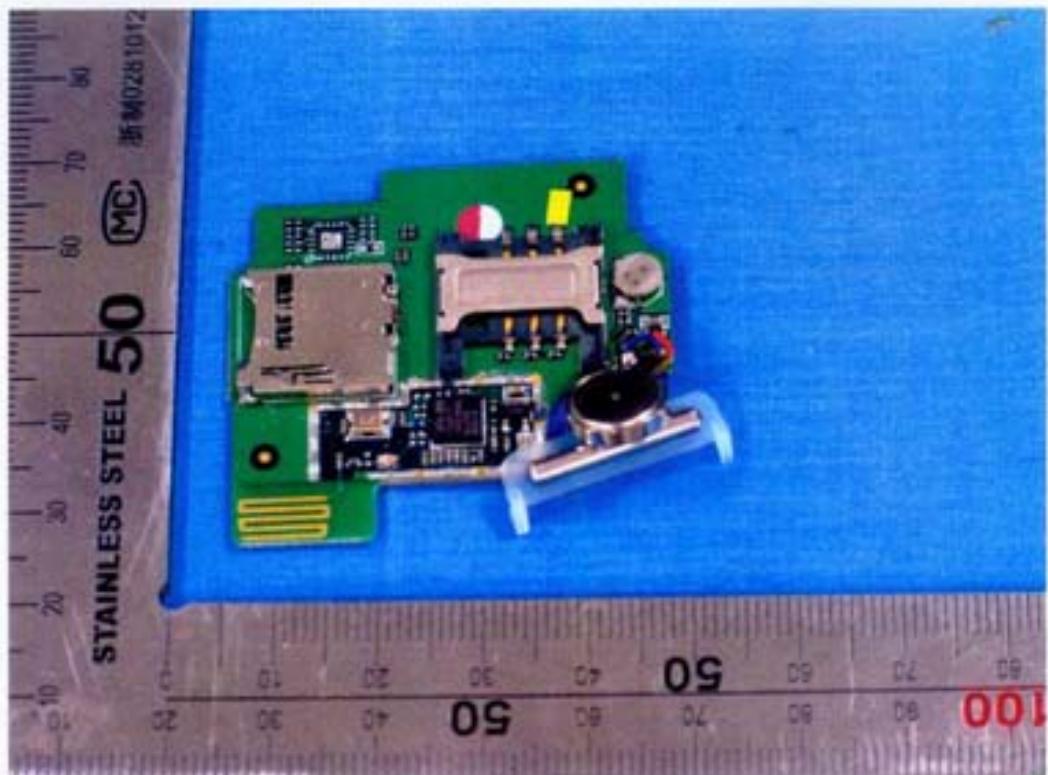
FCC Parts 15B  
Equipment: S7

REPORT NO.: B08GE6003-FCC-PART15B

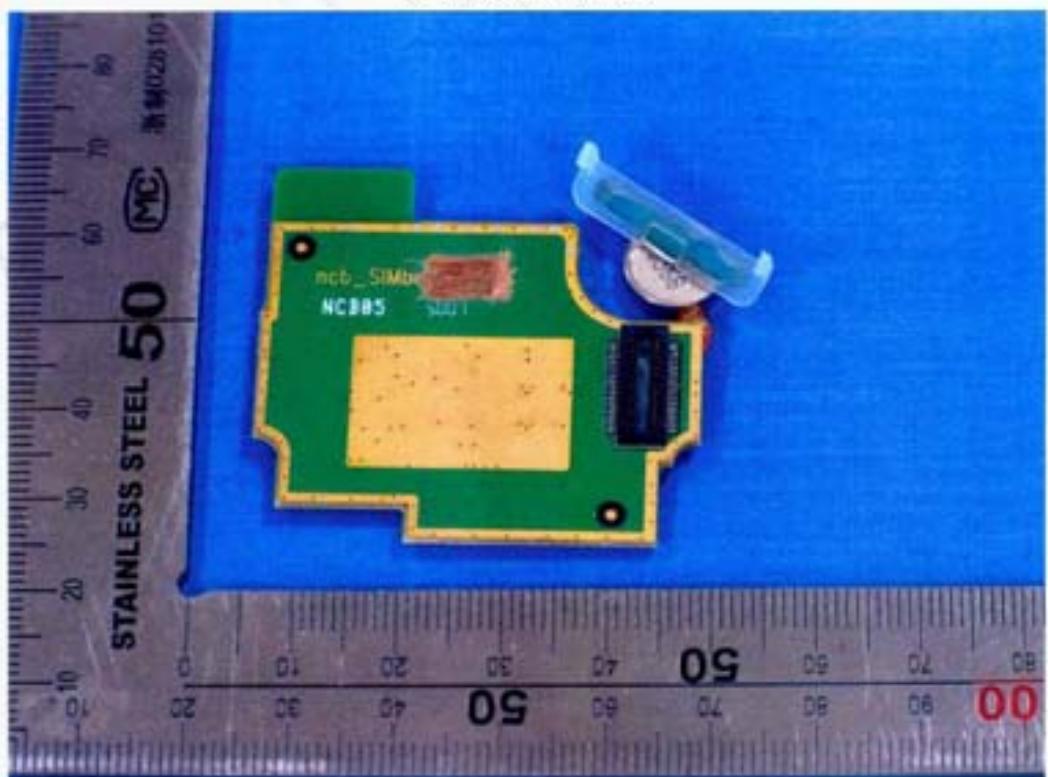


Earphone

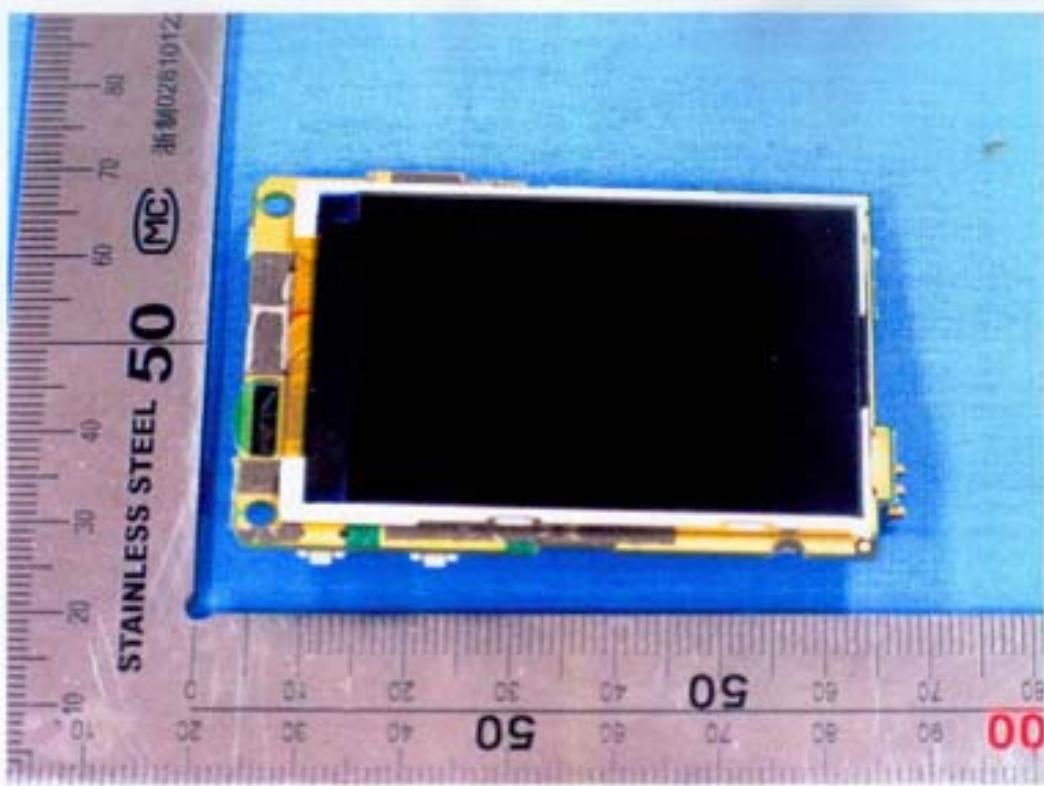
## Annex B Internal Photos



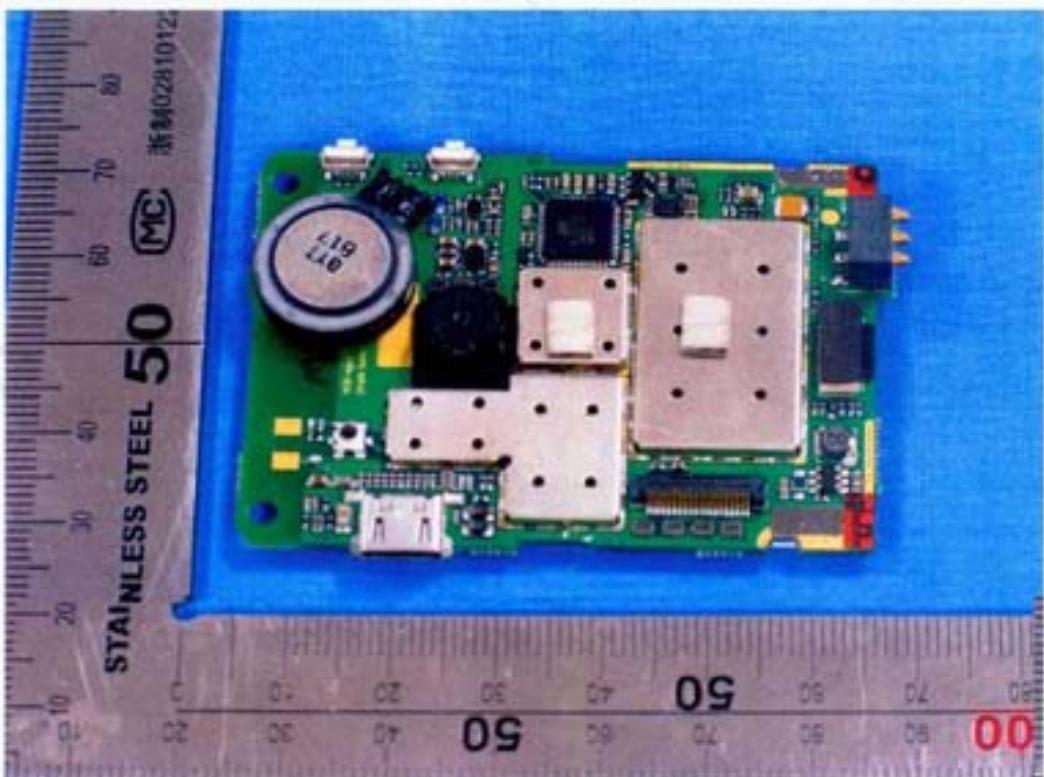
Main board (face)



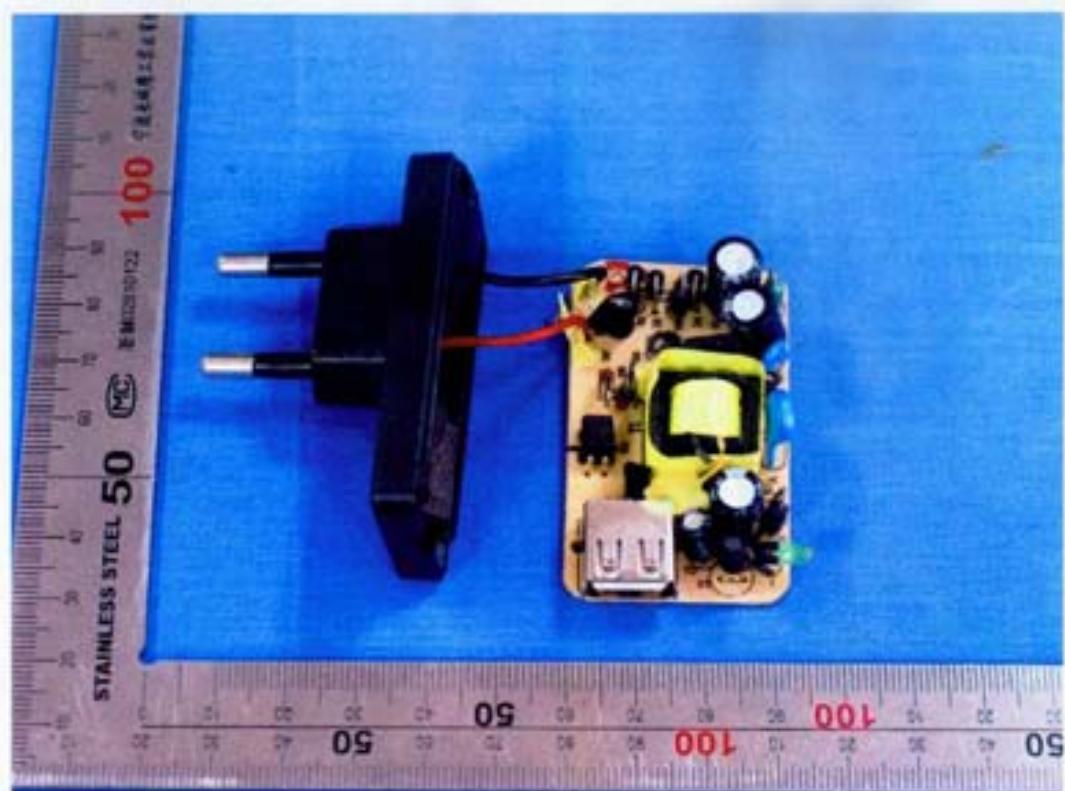
Main board (back)



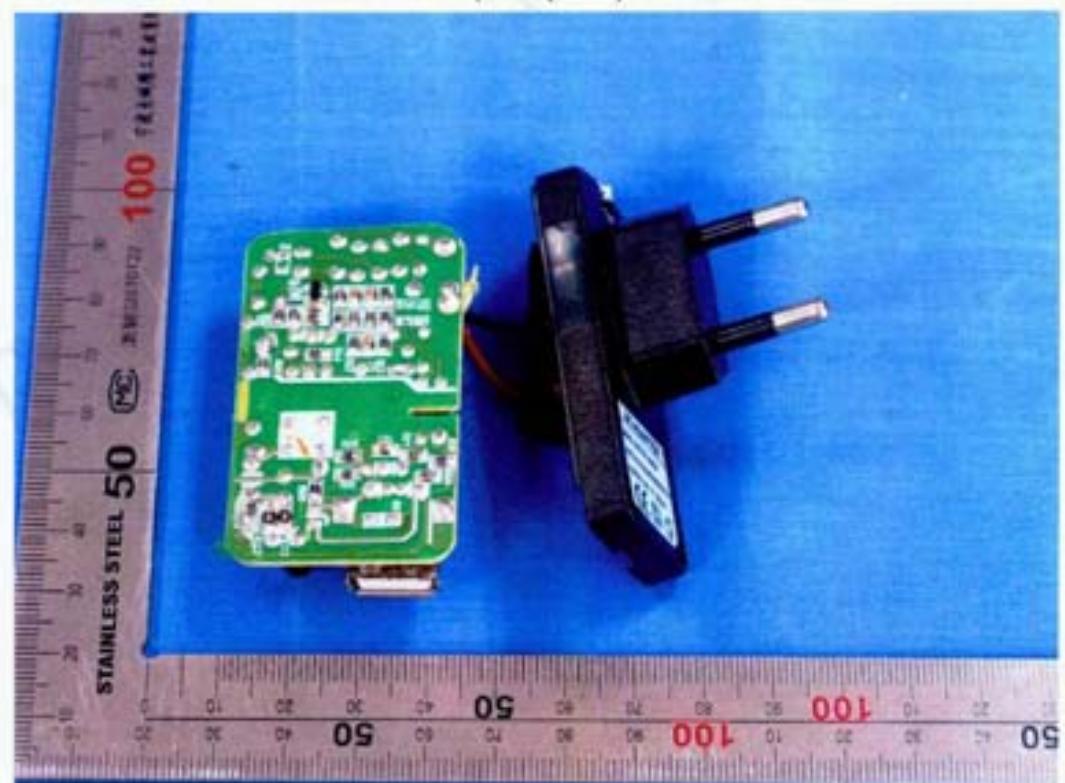
LCD (face)



LCD(back)



Adaptor (face)



Adaptor (back)

## ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

\_\_\_\_\_ The End of this Report \_\_\_\_\_