

FCC Maximum Permissible Exposure

TEST REPORT

For

**The GSM fixed wireless phone(business type)
Model Number: KT1000**

**Report Number : WT118002443
FCC ID: ZMXKAERKT1000**

Test Laboratory : Shenzhen Academy of Metrology and Quality Inspection
Site Location : National Testing Center for Digital Electronic Products
Site Location : Bldg. Metrology and Quality Inspection, Longzhu Road, Shenzhen, Guangdong, China
Tel : 0086-755-26941599
Fax : 0086-755-26941545
Web : www.smq.com.cn

Test report declaration

Applicant : SHANDONG KAER ELECTRIC CO., LTD
Address : No. 58 Dalian Road, Weihai, Shandong
Manufacturer : SHANDONG KAER ELECTRIC CO., LTD
Address : No. 58 Dalian Road, Weihai, Shandong
EUT Description : The GSM fixed wireless phone(business type)
Model No : KT1000

Test Standards:

CFR 47 Part 2.1091 and Part 1.1310

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the compliance of the applicable standards stated above. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results.

The results documented in this report only apply to the tested sample, under the conditions and modes of operation as described herein.

The test report shall not be reproduced in part without written approval of the laboratory.

Project Engineer:

Date: 2011.09.22

(Tony Wang)

Checked by:

Date: 2011.09.22

(Ryan Chen)

Approved by:

Date: 2011.09.22

(Peter Lin)

TABLE OF CONTENTS

TEST REPORT DECLARATION	2
1. SUMMARY OF SAR TEST REPORT	4
1.1. Results	4
2. GENERAL INFORMATION	5
2.1. Report information.....	5
2.2. Laboratory Accreditation and Relationship to Customer	5
3. DESCRIPTION OF THE DEVICE UNDER TEST (DUT)	7
3.1. DUT Description	7
3.2. Applied Standards and Limit.....	7
4. TEST CONDITIONS AND CALCULATION METHOD.....	9
4.1. Temperature and Humidity	9
4.2. Maximum Permissible Exposure (MPE) Calculation Method	9
5. DESCRIPTION OF THE TEST EQUIPMENTS	10
5.1. Measurement equipment	10
6. CALCULATED RESULT	11
APPENDIX A: DUT PHOTOS.....	12

1. SUMMARY OF SAR TEST REPORT

1.1. Results

Band type	GSM850	PCS1900
Power Density(mW/cm ²)	0.561	0.281
Limit of Power Density(mW/cm ²)	0.57	1.0
Result	Passed	Passed

2. GENERAL INFORMATION

2.1. Report information

2.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

2.1.3. Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at Bldg. of Metrology & Quality Inspection, Longzhu Road, Nanshan District, Shenzhen, Guangdong, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number are 97379(open area test site) and 274801(semi anechoic chamber).

The Laboratory is registered to perform emission tests with Industry Canada (IC), and the registration number is IC4174.

TUV Rhineland accredits the Laboratory for conformance to IEC and EN standards, the registration number is E2024086Z02.

3. DESCRIPTION OF THE DEVICE UNDER TEST (DUT)

3.1.DUT Description

Frequency Bands	GSM850/PCS1900
Modulation Mode	GMSK
Device class	C
Power Class	GSM850:4 PCS1900:1
Antenna type	External Antenna
Battery Model	513048AP
Battery Specification	3.7V ,800mAh
Hardware Version	V1.10
Software Version	V1.03

3.2.Applied Standards and Limit

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 20mm normally can be maintained between the user and the device.

(A) Limits for Occupational/Controlled Exposures

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
0.3-3.0	614	1.63	* (100)	6
3.0-30	1842/ f	4.89 / f	* (900 / f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
0.3-1.34	614	1.63	* (100)	30
1.34-30	824/ f	2.19 / f	* (180 / f ²)	30
30-300	27.5	0.073	1.0	30
300-1500	-	-	f/1500	30
1500-100000	-	-	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

4. TEST CONDITIONS AND CALCULATION METHOD

4.1. Temperature and Humidity

Ambient temperature (°C):	23
Ambient humidity (RH %):	58

4.2. Maximum Permissible Exposure (MPE) Calculation Method

$$S = P' / 4\pi R^2$$

P' equals to the maximum measured power output plus the maximum antenna gain in dBm and then to mW

S = Power density(mW/cm²)

R = 20cm

π = 3.1416

5. DESCRIPTION OF THE TEST EQUIPMENTS

5.1. Measurement equipment

No.	Equipment	Model No.	Manufacturer	Serial No.	Last Calibration Data	Period
1	Call Tester	CMU 200	R&S	SB3441	2011.03.24	1year

6. CALCULATED RESULT

Band type	Max Conducted Power(dBm)	Antenna Gain(dBi)	P' (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Test Result
GSM850	32.5	2	2818	0.561	0.57	Complies
PCS1900	29.5	2	1410	0.281	1.0	Complies

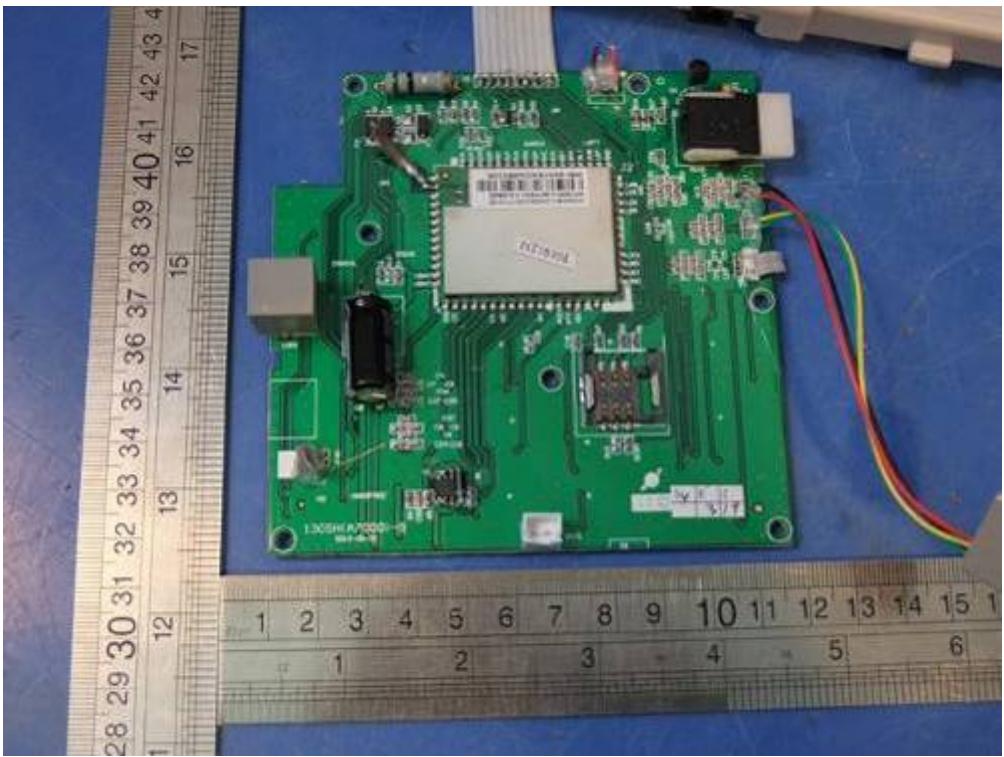
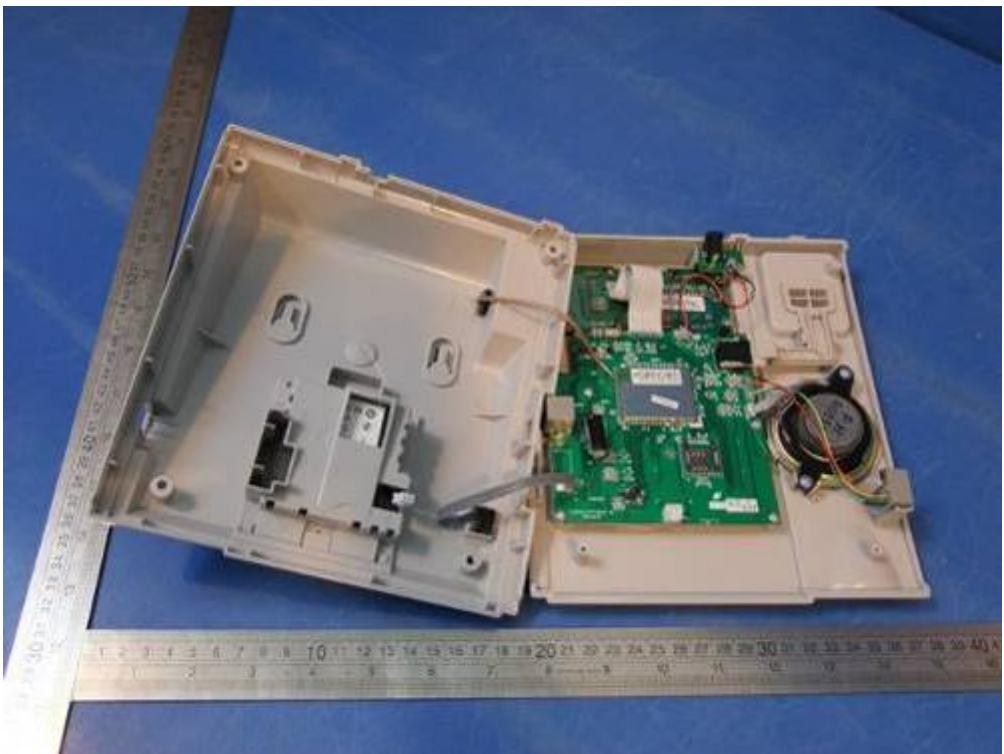
A

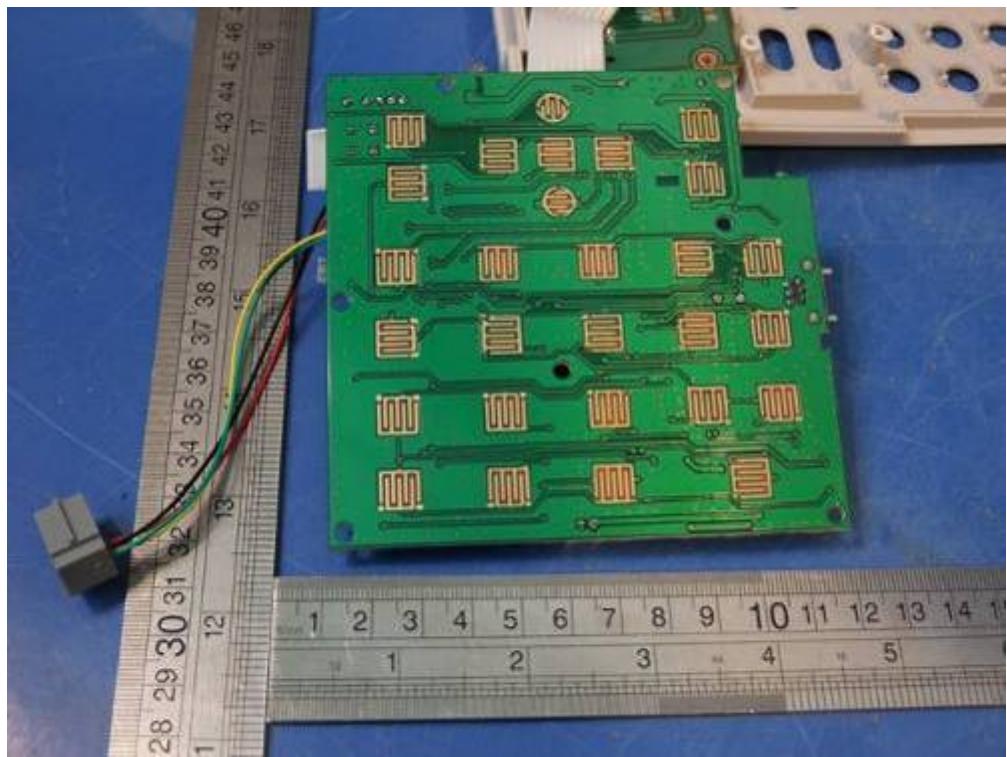
APPENDIX A: DUT Photos

External photos



Internal photos





Adaptor photos

