

No. 1 Workshop, M-10, Middle Section, Science & Technology Park,

District Shenzhen, China 518057

Telephone: +86 (0) 755 2601 2053 Report No.: SZEM130900523002

Fax: +86 (0) 755 2671 0594 Page: 1 of 14

# **Human Exposure Report**

Application No.: SZEM1309005230RF

Applicant/Manufacturer: Tektos Limited

Address of Applicant/ Room F, 20/F, Kwong Ga factory Building, 64 Victoria Road, Kennedy Town,

Manufacturer: Hong Kong

Factory: 1, Shenzhen Allcomm Electronic Company Limited

2, Shenzhen Dapter Electronic Science Co., Ltd

**Address of Factory:** 1, Tang Xia Yong Village, Song Gang Town, Baoan District, Shenzhen,

Guang Dong, P.R.C.

2, 4th Floor, Building C, LongDa Industrial Area, LiaoKeng village,

Shiyan Town, Baoan District, Shenzhen, China

**Equipment Under Test (EUT):** 

EUT Name: Qimini pocket Model No.: QIMP0B

Standards: 47 CFR PART 1, Subpart I, Section 1.1310

**Date of Receipt**: 2013-09-17

**Date of Test**: 2013-10-16 to 2013-12-04

**Date of Issue:** 2013-12-05

Test Result : PASS\*

#### Authorized Signature:



Starry Li EMC Laboratory Project Engineer

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<sup>\*</sup> This report is just a test result base on the test method and limit requirement shown in the form on the second page. 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..



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### 3 General Information

#### 3.1 Details of E.U.T.

Power Supply: USB cable by 5V 2A USB Cable: 26cm(Unshielded)

#### 3.2 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
Resistance	Supply by Client	N/A
DC power	ATTEN	APS3005Si
Mobile phone	HUAWEI	HUAWEI T8833

#### 3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.



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#### 3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

#### VCCI

The 3m Semi-anechoic chamber, Full-anechoic Chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197, G-416, T-1153 and C-2383 respectively.

#### FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

#### Industry Canada (IC)

Two 3m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1 & 4620C-2.

#### 3.5 Deviation from Standards

None.

#### 3.6 Abnormalities from Standard Conditions

None.

### 4 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2014-06-10
2	Shielding effectiveness of Anechoic Chamber	ChangZhou ZhongYu	854	SEL0169	2014-06-10
3	Electric Filed Meter	Schaffner	EMC20	EMC068	2014-05-08
4	DC Electronic Load	ITECH	IT8512C	SZE073-10	2014-07-09



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#### 5 Test Results

#### 5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 10cm

Test voltage: AC 120V 60Hz

Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)		
	(A) Limits for Occupational/Controlled Exposures					
0.3-3.0	614	1.63	*(100)	6		
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6		
30-300	61.4	0.163	1.0	6		
300-1500	/	/	f/300	6		
1500-100,000	/	/	5	6		
	(B) Limits for General Population/Uncontrolled Exposure					
0.3-1.34	614	1.63	*(100)	30		
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30		
30-300	27.5	0.073	0.2	30		
300-1500	/	/	f/1500	30		
1500-100,000	/	/	1.0	30		

F=frequency in MHz

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

#### 5.1.1 E.U.T. Operation

#### **Operating Environment:**

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

#### **EUT Operation:**

This device has been tested the worst status of full load and the device has been tested with mobile phone at zero charge, intermediate charge, and full charge.

<sup>\*=</sup>Plane-wave equivalent power density



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#### 5.1.2 Measurement Data

1:Output Voltage=DC 5V; The max output power =7W; Calculation of resistor value=3.57 $\Omega$  Electric Field Emissions

Test Position	Probe Measure Result(V/m)	Limit(V/m)
Side 1	2.01	614
Side 2	1.78	614
Side 3	1.86	614
Side 4	2.21	614
Тор	2.52	614
Bottom	2.03	614

#### **Magnetic Field Emissions**

Test Position	Probe Measure Result(A/m)	Limit(A/m)
Side 1	0.0053	1.63
Side 2	0.0042	1.63
Side 3	0.0046	1.63
Side 4	0.0062	1.63
Тор	0.0075	1.63
Bottom	0.0055	1.63



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### 2:Mobile phone has been charge at zero charge, intermediate charge, and full charge. Electric Field Emissions

Test Position Probe M		be Measure Result(V/m)	asure Result(V/m)	
	zero charge	intermediate charge	full charge	Limit(V/m)
Side 1	0.69	0.66	0.60	614
Side 2	0.78	0.63	0.69	614
Side 3	0.86	0.78	0.71	614
Side 4	0.89	0.67	0.86	614
Тор	1.50	1.70	1.01	614
Bottom	0.94	0.98	0.66	614

#### **Magnetic Field Emissions**

Test Position	Pro	Limit(A/m)		
	zero charge	intermediate charge	full charge	,
Side 1	0.0019	0.0017	0.0014	1.63
Side 2	0.0020	0.0014	0.0019	1.63
Side 3	0.0023	0.0020	0.0020	1.63
Side 4	0.0027	0.0018	0.0023	1.63
Тор	0.0036	0.0039	0.0033	1.63
Bottom	0.0029	0.0031	0.0017	1.63



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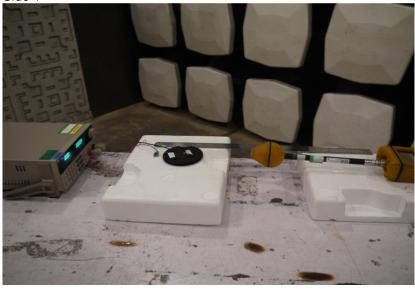
## 6 Photographs

### 6.1 Test photos

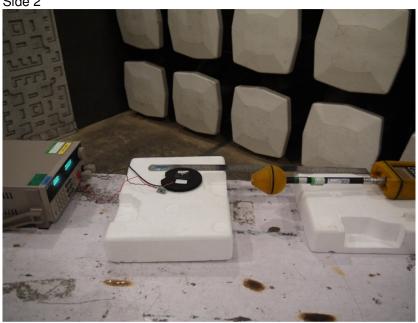
**Test Model No.: QIMP0B** 

Test with full load

Side 1



Side 2



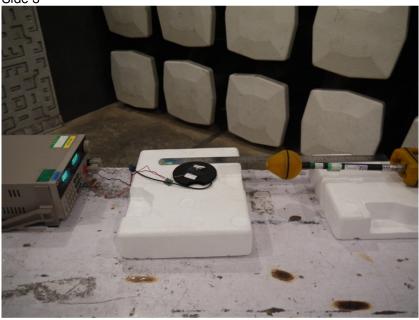
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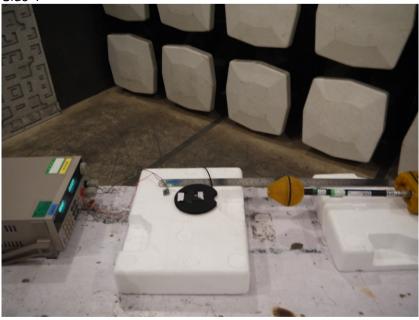
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#### Side 3



#### Side 4





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#### **Bottom**





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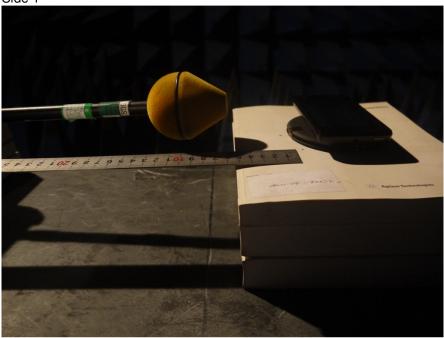
Test with mobile phone at zero charge, intermediate charge, full charge







Side 1

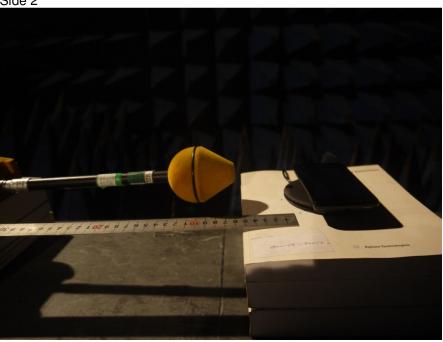




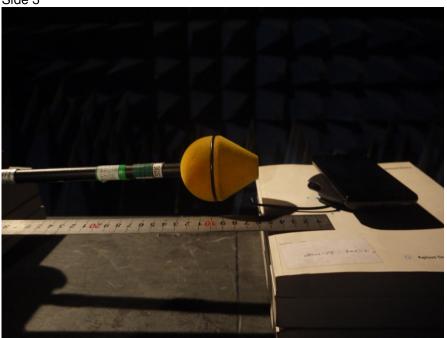
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Side 2



Side 3





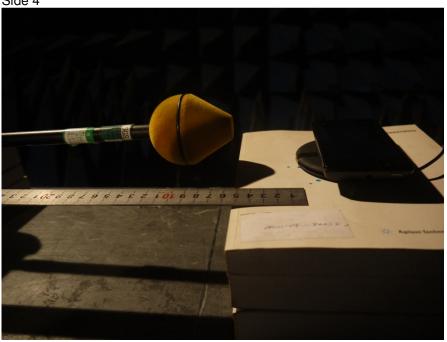
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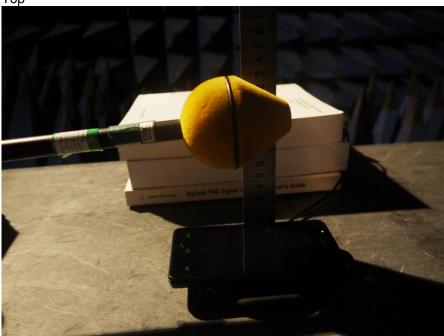
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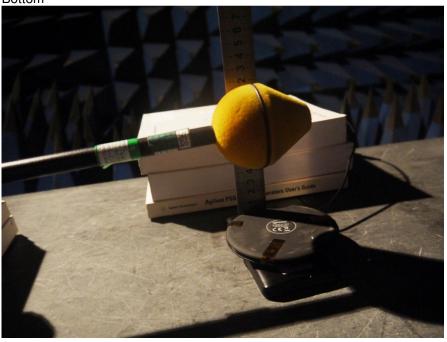




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#### 6.2 EUT photos

Test Model No.: QIMP0B

Refer to Report No. SZEM130900523001 for EUT external and internal photos.