

## **FCC RF EXPOSURE REPORT**

For

Smart Suitcase S1
MODEL NUMBER: CWL16S1

FCC ID: 2AIUOCWL16S1

REPORT NUMBER: 4787496523-4

ISSUE DATE: February 15, 2017

Prepared for

Cowa Robotic Co., Ltd 5F, Building 64, No 421, Hongcao Road, Shanghai, China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch Room 101, Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

> Tel: +86 769 33871725 Fax: +86 769 33871725 Website: www.ul.com

## **Revision History**

Rev.	Issue Date	Revisions	Revised By
	02/15/17	Initial Issue	

# **TABLE OF CONTENTS**

1.	ATTESTATION OF TEST RESULTS	. 4
2.	TEST METHODOLOGY	. 5
3.	FACILITIES AND ACCREDITATION	. 5
1	REQUIREMENT	6

#### 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Cowa Robotic Co., Ltd

Address: 5F, Building 64, No 421, Hongcao Road, Shanghai, China

**Manufacturer Information** 

Company Name: Cowa Robotic Co., Ltd

Address: 5F, Building 64, No 421, Hongcao Road, Shanghai, China

**EUT Description** 

Product Name Smart Suitcase S1

Brand Name N/A

Model Name CWL16S1 FCC ID 2AIUOCWL16S1

Date Tested December 16, 2016 ~ February 13, 2017

#### **APPLICABLE STANDARDS**

STANDARD TEST RESULTS

FCC 47CFR§2.1091 Complies

Tested By: Checked By:

Denny Huang

**Engineer Project Associate** 

Sephenbus

Shawn Wen

Laboratory Leader

Shemy les

Approved By:

Stephen Guo

Laboratory Manager

### 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

## 3. FACILITIES AND ACCREDITATION

Test Location	Dongguan Dongdian Testing Service Co., Ltd
Address	No. 17, Zongbu Road 2, Songshan Lake Sci&Tech Park, Dongguan City, Guangdong Province, 523808, China
Accreditation Certificate	Dongguan Dongdian Testing Service Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until January 31, 2018.  Dongguan Dongdian Testing Service Co., Ltd. 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 270092, Renewal date March 11, 2015, valid time is until March 11, 2018.  The 3m Alternate Test Site of Dongguan Dongdian Testing Service Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 10288A on April 23, 2015, valid time is until April 23, 2018.

#### 4. REQUIREMENT

#### **LIMIT AND CALCULATION METHOD**

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with. Limits for General Population/Uncontrolled Exposure

#### **RF EXPOSURE LIMIT**

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E ²,  H ² or S (Minutes)
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

#### **CALCULATION METHOD**

S=PG/4πR<sup>2</sup>

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

### **CALCULATED RESULTS**

GPRS 850MHz Mode						
Frequency	Output Power	Output Power	Power Density	Power Density Limit	Test Result	
MHz	dBm	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>		
824.2	30.97	1250.26	0.41	0.55	Complies	

Note: 1. Antenna Gain=2.15dBi,  $\pi$ =3.141.

- 2. The Power comes from report 4787496523-1.
- 3. The minimum separation distance of the device is greater than 20 cm.
- 4. Owing to the maximum Calculated Result is below the limit, so it deemed to comply with the basic restrictions without testing which means that no RF exposure and SAR are required.
- 5. Calculate by WORST-CASE mode.

## **END OF REPORT**