

# RF EXPOSURE REPORT

**REPORT NO.:** SA120903C17

**MODEL NO.:** U1 Lite(WR)

**FCC ID:** RLS-STAVL1234

**RECEIVED:** Sep. 03, 2012

**TESTED:** Oct. 06 ~ Oct. 09, 2012

**ISSUED:** Oct. 19, 2012

**APPLICANT:** SYSTEMS & TECHNOLOGY CORP.

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**ISSUED BY:** Bureau Veritas Consumer Products Services  
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## RELEASE CONTROL RECORD

| ISSUE NO.   | REASON FOR CHANGE | DATE ISSUED   |
|-------------|-------------------|---------------|
| SA120903C17 | Original release  | Oct. 18, 2012 |

## 1. CERTIFICATION

**PRODUCT:** GPS Vehicle Tracking Device

**MODEL NO.:** U1 Lite(WR)

**BRAND:** CAREU

**APPLICANT:** SYSTEMS & TECHNOLOGY CORP.

**TEST SAMPLE:** ENGINEERING SAMPLE

**TESTED:** Oct. 06 ~ Oct. 09, 2012

**STANDARDS:** FCC Part 2 (Section 2.1091)

**FCC OET Bulletin 65, Supplement C (01-01)**

**IEEE C95.1**

The above equipment (Model: U1 Lite(WR)) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**PREPARED BY** : Ivonne Wu , **DATE** : Oct. 19, 2012  
Ivonne Wu / Senior Specialist

**APPROVED BY** : Roy Wu , **DATE** : Oct. 19, 2012  
Roy Wu / Manager

## 2. RF EXPOSURE

### 2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY RANGE (MHz)                                 | ELECTRIC FIELD STRENGTH (V/m) | MAGNETIC FIELD STRENGTH (A/m) | POWER DENSITY (mW/cm <sup>2</sup> ) | AVERAGE TIME (minutes) |
|-------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE |                               |                               |                                     |                        |
| 300-1500                                              | ...                           | ...                           | F/1500                              | 30                     |
| 1500-100,000                                          | ...                           | ...                           | 1.0                                 | 30                     |

F = Frequency in MHz

### 2.2 MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

| FREQUENCY BAND<br>(MHz) | ERP<br>(dBm) | EIRP<br>(dBm) | DISTANCE<br>(cm) | POWER<br>DENSITY<br>(mW/cm <sup>2</sup> ) | LIMIT<br>(mW/cm <sup>2</sup> ) |
|-------------------------|--------------|---------------|------------------|-------------------------------------------|--------------------------------|
| 824.2MHz ~ 848.8MHz     | 26.56        | 28.71         | 20               | 0.148                                     | 0.549                          |

| FREQUENCY BAND<br>(MHz) | EIRP<br>(dBm) | DISTANCE<br>(cm) | POWER DENSITY<br>(mW/cm <sup>2</sup> ) | LIMIT<br>(mW/cm <sup>2</sup> ) |
|-------------------------|---------------|------------------|----------------------------------------|--------------------------------|
| 1850.2MHz ~ 1909.8MHz   | 30.54         | 20               | 0.225                                  | 1                              |