

# RF EXPOSURE REPORT

**REPORT NO.:** SA120522C25 R1

**MODEL NO.:** U1 Lite

**FCC ID:** RLS-STAVL1213

**RECEIVED:** May 22, 2012

**TESTED:** Jul. 27 ~ Jul. 30, 2012

**ISSUED:** Aug. 21, 2012

**APPLICANT:** SYSTEMS & TECHNOLOGY CORP.

**ADDRESS:** 18-5F, No. 79, Hsin Tai Wu Road, Sec. 1,  
Hsichih District, New Taipei City, Taiwan, R.O.C.

**ISSUED BY:** Bureau Veritas Consumer Products Services  
(H.K.) Ltd., Taoyuan Branch

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,  
New Taipei City, Taiwan (R.O.C)

**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
Shan Hsiang, Taoyuan Hsien 333, Taiwan,  
R.O.C.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120522C25	Original release	Aug. 09, 2012
SA120522C25 R1	Changed model	Aug. 21, 2012

## 1. CERTIFICATION

**PRODUCT:** GPS Vehicle Tracking Device

**MODEL NO.:** U1 Lite

**BRAND:** CAREU

**APPLICANT:** SYSTEMS & TECHNOLOGY CORP.

**TEST SAMPLE:** ENGINEERING SAMPLE

**TESTED:** Jul. 27 ~ Jul. 30, 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) 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** :  , **DATE** : Aug. 21, 2012  
Pettie Chen / Senior Specialist

**APPROVED BY** :  , **DATE** : Aug. 21, 2012  
Gary Chang / Technical 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 (MHz)	ERP (dBm)	EIRP (dBm)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
<b>GSM:</b> 824.2MHz ~ 848.8MHz	25.21	27.36	20	0.108	0.549
<b>GPRS:</b> 824.2MHz ~ 848.8MHz	24.85	27.00	20	0.100	0.549

FREQUENCY BAND (MHz)	EIRP (dBm)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
<b>GSM:</b> 1850.2MHz ~ 1909.8MHz	23.34	20	0.043	1
<b>GPRS:</b> 1850.2MHz ~ 1909.8MHz	23.00	20	0.040	1