

## RF Exposure Report

**Report No.:** SA171113C54B

**FCC ID:** WIYUPT1000-LTE

**Test Model:** UPT1000, UPT1000F

**Received Date:** Feb. 13, 2018

**Test Date:** Mar. 01 ~ Mar. 06, 2018

**Issued Date:** Mar. 06, 2018

**Applicant:** CASTLES TECHNOLOGY CO., LTD.

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

**Lab Address:** No. 47-2, 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 Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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### Release Control Record

Issue No.	Description	Date Issued
SA171113C54B	Original release.	Mar. 06, 2018

## 1 Certificate of Conformity

**Product:** POS Terminal

**Brand:** CASTLES TECHNOLOGY

**Test Model:** UPT1000, UPT1000F

**Sample Status:** Identical Prototype

**Applicant:** CASTLES TECHNOLOGY CO., LTD.

**Test Date:** Mar. 01 ~ Mar. 06, 2018

**Standards:** FCC Part 2 (Section 2.1091)  
KDB 447498 D03 (January 17, 2014)  
IEEE C95.1

The above equipment 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 RF characteristics under the conditions specified in this report.

**Prepared by :**  , **Date:** Mar. 06, 2018  
Pettie Chen / Senior Specialist

**Approved by :**  , **Date:** Mar. 06, 2018  
Bruce Chen / Project Engineer

## 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**.

## 3 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
BT EDR: 2402-2480	4.04	2	20	0.001	1

Mode	Electric field (dBuV/m) @3m	Max Power (dBm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
NFC	76.17	-19.06	0.0000025	0.978

\*Max Power is Max tune power.

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