

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

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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 ²)	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/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 ²)	Limit (mW/cm ²)
BT EDR: 2402-2480	4.04	2	20	0.001	1

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

*Max Power is Max tune power.

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