

TEST REPORT

FCC ID.	2AN9R-CTAK10
Test Report No.	TCT230524E072
Date of issue	Jul. 12, 2023
Testing laboratory	SHENZHEN TONGCE TESTING LAB
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China
Applicant's name	Fujian Centerm Information Co., Ltd.
Address	#21-#22 Buildings, No.618, Jinshan Road, Jinshan Industrial Park, Cangshan District, Fuzhou City, Fujian Province, China
Manufacturer's name	Fujian Centerm Information Co., Ltd.
Address	#21-#22 Buildings, No.618, Jinshan Road, Jinshan Industrial Park, Cangshan District, Fuzhou City, Fujian Province, China
Standard(s)	KDB 447498 D01 General RF Exposure Guidance v06
Product Name	Smart POS
Trade Mark	Centerm
Model/Type reference	CTA K10
Rating(s)	Refer to EUT description of page 3
Date of receipt of test item	May 24, 2023
Date (s) of performance of test	May 24, 2023 - Jul. 12, 2023
Tested by (+signature)	Rleo LIU
Check by (+signature)	Beryl ZHAO
Approved by (+signature) :	Tomsin



General disclaimer:

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

Table of Contents

1. General Product Information	3
1.1. EUT description	3
1.2. Model(s) list.....	3
2. General Information.....	4
2.1. Test environment and mode.....	4
2.2. Description of Support Units.....	4
3. Facilities and Accreditations	5
3.1. Facilities	5
3.2. Location	5
4. Test Results and Measurement Data	6

1. General Product Information

1.1. EUT description

Product Name.....	Smart POS
Model/Type reference.....	CTA K10
Sample Number.....	TCT230524E001-0101
Operation Frequency	For BLE: 2402MHz~2480MHz For NFC: 13.56MHz
Antenna Type.....	For BLE: FPC Antenna For NFC: Internal Antenna
Antenna Gain.....	For BLE: 1.06dBi For NFC: 0dBi
Rating(s).....	Adapter Information: MODEL: A8A-050200U-US1 INPUT: AC 100-240V, 50/60Hz, 0.35A OUTPUT: DC 5V, 2.0A Rechargeable Li-ion Battery DC 7.6V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	DC 7.6V
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Transmitting mode:	Keep the EUT in continuous transmitting by select channel

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
IC Card	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

According to KDB 447498 D01 General RF Exposure Guidance v06, systems operating under the provisions of this 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 guidance.

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):

- 1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$
- 2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$
The result is rounded to one decimal place for comparison

- NFC:
The maximum peak radiation emission for the EUT is 60.85dB_uV/m at 3 m with frequency 13.56MHz, $EIRP[\text{dBm}] = E[\text{dB}\mu\text{V/m}] + 20\log(d[\text{m}]) - 104.77 = -34.38\text{dBm}$. $ERP[\text{dBm}] = EIRP[\text{dBm}] - 2.15 = -36.53\text{dBm}$

Frequency (MHz)	Max Power (dBm)	Max Power (mW)	exclusion thresholds (mW)
13.56	-36.53	0.0002	442

The 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

- [(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] $\cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, where
 - $f(\text{GHz})$ is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - When the minimum test separation distance is < 5 mm, a distance of 5 mm according is applied to determine SAR test exclusion.
 - The result is rounded to one decimal place for comparison

- BLE:

Channel	Frequency (GHz)	Max. Power (dBm)	Tune up Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up Power (mW)	Test distance (mm)	Result	exclusion thresholds for 1-g SAR
CH 19	2.440	0.56	0±1	1	1.26	5	0.39	3.0

Result:

Base on the calculation value, No SAR measurement is required.

*****END OF REPORT*****