

TEST REPORT

Report No.: BCTC2504448235-3E

Applicant: GEM ONE NV

Product Name: RFID Keypad Reader

Test Model: OX-V4-ACC-KP

Tested Date: 2025-04-16 to 2025-05-23

Issued Date: 2025-06-05

Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2AYCQ-OXV4ACCKP

Product Name: RFID Keypad Reader

Trademark: N/A

Model/Type reference: OX-V4-ACC-KP,SK2-RX

Prepared For: GEM ONE NV

Address: Brabantstraat 15, 8790, Waregem, Belgium

Manufacturer: Secukey Technology Co.,Ltd.

Address: Floor 5, Building 13, Longbi Industrial Park, Bantian Sub District, Longgang District, Shenzhen, China.

Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2025-04-16

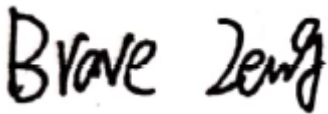
Sample tested Date: 2025-04-16 to 2025-05-23

Report No.: BCTC2504448235-3E

Test Standards: FCC CFR 47 part1, 1.1307(b), 1.1310
KDB 680106 D01 Wireless Power Transfer v04

Test Results: PASS

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

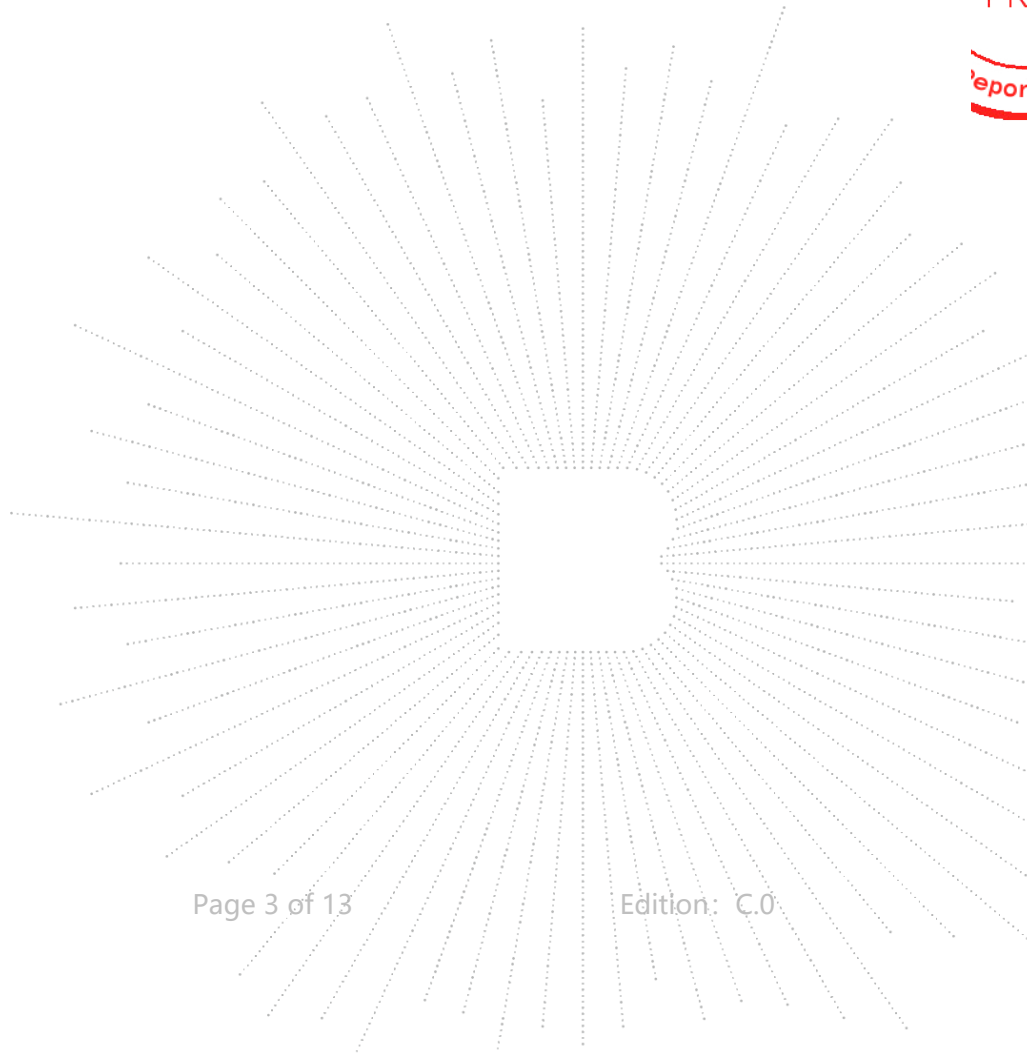
The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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(Note: N/A Means Not Applicable)

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Report



1. Version

Report No.	Issue Date	Description	Approved
BCTC2504448235-3E	2025-06-13	Original	Valid

2. Product Information

2.1 Product Information

Model/Type reference:	OX-V4-ACC-KP,SK2-RX
Model differences:	The following models of units we produce are identical in electrical, mechanical and physical structure; The difference is only in the model name, we finally have OX-V4-ACC-KP as test model.
Operation Frequency:	125kHz
Type of Modulation:	ASK
Antenna installation:	Internal antenna
Ratings:	DC 12V
Hardware Version:	N/A
Software Version:	N/A

2.2 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	RFID Keypad Reader	N/A	OX-V4-ACC-KP	N/A	EUT
E-2	N/A	N/A	N/A	N/A	N/A

Notes:

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.

2.3 Test Mode

Test Mode 1	TX Mode
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3. Test Facility And Test Instrument Used

3.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

3.2 Test Instrument Used

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Electromagnet-ic radiation tester	Wavecontrol	SMP160	19SN0980	May 14, 2024	May 15, 2025
Electromagne-tic field probe	Wavecontrol	WP400-3	20WP120082	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Electromagnet-ic radiation tester	Wavecontrol	SMP160	19SN0980	May 14, 2025	May 13, 2026
Electromagne-tic field probe	Wavecontrol	WP400-3	20WP120082	May 14, 2025	May 13, 2026
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\

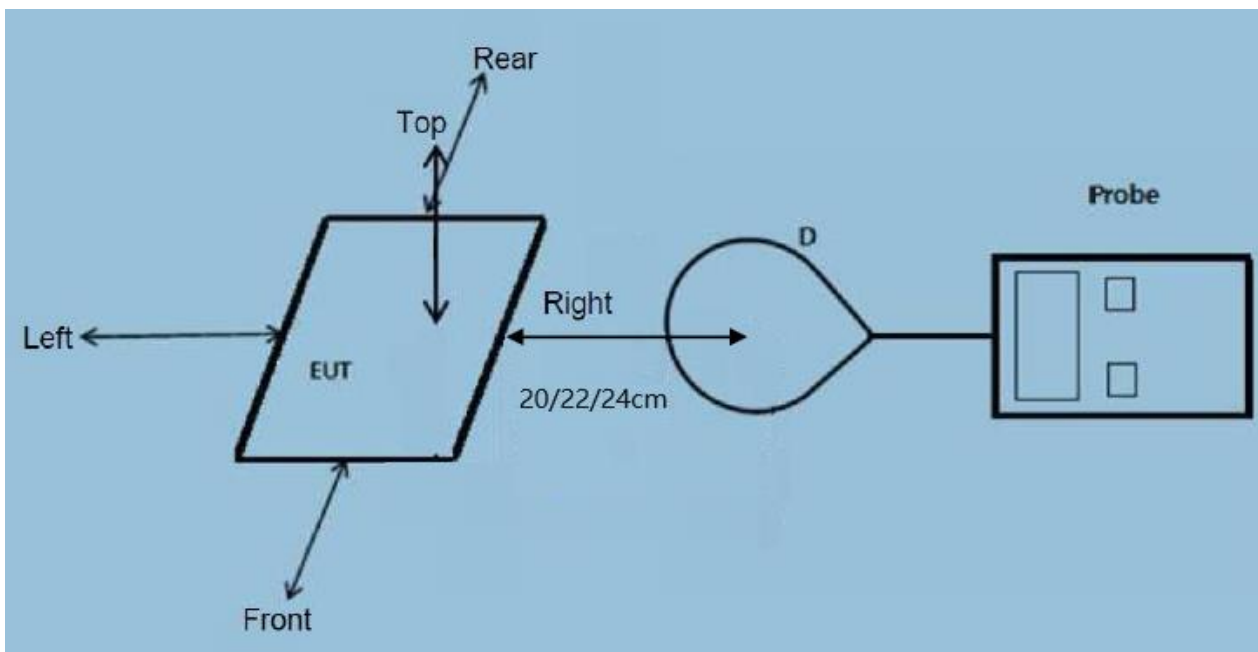
BCTC CO., LTD.

4. Method Of Measurement

4.1 Applicable Standard

According to §1.1307(b)(1), 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 guidelines. According to §1.1310 and §2.1093 RF exposure is calculated. According KDB 680106 D01 v04:

4.2 Block Diagram Of Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 20/22/24 cm measured from the center of the probe(s) to the edge of the device

4.3 Limit

Limits for Occupational / Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

Limits for General Population / Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180 / f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1	30

4.4 Test procedure

- The RF exposure test was performed on 360 degree turn table in anechoic chamber.
- The measurement probe was placed at test distance (20/22/24cm) which is between the edge of the charger and the geometric centre of probe.
- The turn table was rotated 360 degree to search of highest strength.
- The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- The EUT were measured according to the dictates of KDB 680106 D01 v04.

4.5 E and H field Strength

E-Field test results the electric field strength at 20cm around the EUT.

Battery level	Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position Top	50% Limits Test (V/m)	Limits Test (V/m)
1%	0.125	0.241	0.247	0.236	0.225	0.217	0.239	307	614
50%	0.125	0.256	0.225	0.269	0.242	0.252	0.268	307	614
99%	0.125	0.253	0.219	0.220	0.225	0.208	0.221	307	614

H-Field test results the electric field strength at 20cm around the EUT.

Battery level	Frequency Range (MHz)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position Top(uT)	50% Limits Test (uT)	Limits Test (uT)
1%	0.125	0.215	0.227	0.243	0.221	0.226	0.247	1.019	2.038
50%	0.125	0.247	0.225	0.219	0.247	0.254	0.245	1.019	2.038
99%	0.125	0.267	0.231	0.235	0.253	0.238	0.237	1.019	2.038

Battery level	Frequency Range (MHz)	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position Top(A/m)	50% Limits Test (A/m)	Limits Test (A/m)
1%	0.125	0.179	0.184	0.216	0.186	0.179	0.236	0.815	1.63
50%	0.125	0.185	0.167	0.225	0.182	0.223	0.184	0.815	1.63
99%	0.125	0.163	0.158	0.197	0.173	0.186	0.211	0.815	1.63

Note: A/m=uT÷1.25

E-Field test results the electric field strength at 22cm around the EUT.

Battery level	Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position Top	50% Limits Test (V/m)	Limits Test (V/m)
1%	0.125	0.231	0.226	0.246	0.209	0.226	0.242	307	614
50%	0.125	0.248	0.248	0.236	0.248	0.214	0.236	307	614
99%	0.125	0.269	0.225	0.284	0.219	0.223	0.228	307	614

H-Field test results the electric field strength at 22cm around the EUT.

Battery level	Frequency Range (MHz)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position Top(uT)	50% Limits Test (uT)	Limits Test (uT)
1%	0.125	0.236	0.219	0.252	0.237	0.264	0.245	1.019	2.038
50%	0.125	0.224	0.238	0.247	0.226	0.253	0.223	1.019	2.038
99%	0.125	0.256	0.242	0.259	0.233	0.267	0.266	1.019	2.038

Battery level	Frequency Range (MHz)	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position Top(A/m)	50% Limits Test (A/m)	Limits Test (A/m)
1%	0.125	0.186	0.177	0.232	0.221	0.193	0.215	0.815	1.63
50%	0.125	0.194	0.159	0.247	0.196	0.218	0.204	0.815	1.63
99%	0.125	0.166	0.163	0.205	0.188	0.163	0.237	0.815	1.63

Note: A/m = uT ÷ 1.25

E-Field test results the electric field strength at 24cm around the EUT.

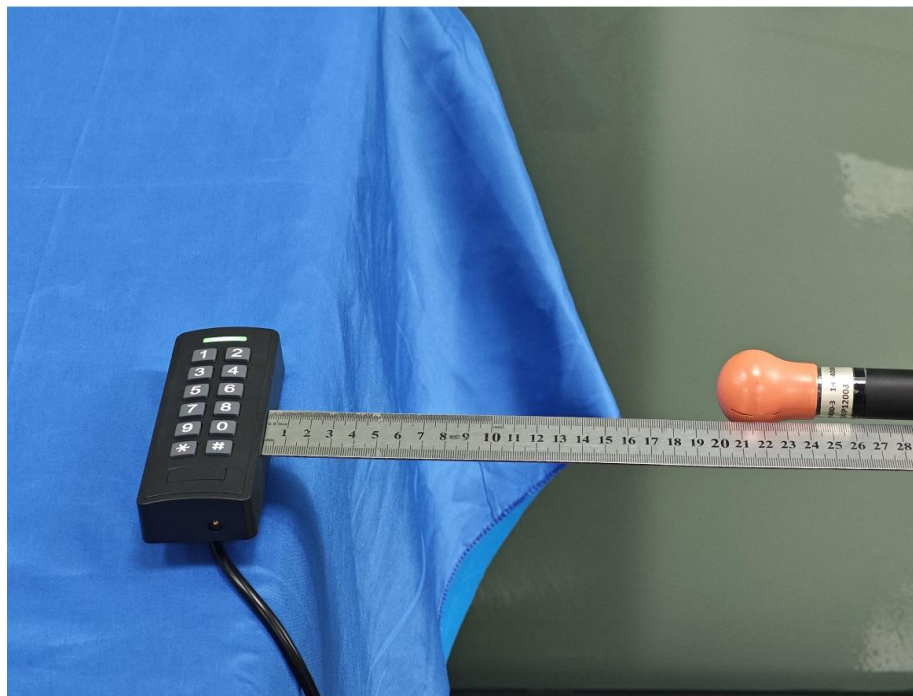
Battery level	Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position Top	50% Limits Test (V/m)	Limits Test (V/m)
1%	0.125	0.236	0.247	0.246	0.234	0.236	0.220	307	614
50%	0.125	0.228	0.233	0.258	0.256	0.242	0.258	307	614
99%	0.125	0.247	0.215	0.237	0.218	0.211	0.237	307	614

H-Field test results the electric field strength at 24cm around the EUT.

Battery level	Frequency Range (MHz)	Test Position A(uT)	Test Position B(uT)	Test Position C(uT)	Test Position D(uT)	Test Position E(uT)	Test Position Top(uT)	50% Limits Test (uT)	Limits Test (uT)
1%	0.125	0.245	0.214	0.223	0.237	0.242	0.233	1.019	2.038
50%	0.125	0.226	0.256	0.255	0.251	0.236	0.218	1.019	2.038
99%	0.125	0.233	0.217	0.262	0.246	0.209	0.236	1.019	2.038

Battery level	Frequency Range (MHz)	Test Position A(A/m)	Test Position B(A/m)	Test Position C(A/m)	Test Position D(A/m)	Test Position E(A/m)	Test Position Top(A/m)	50% Limits Test (A/m)	Limits Test (A/m)
1%	0.125	0.189	0.189	0.229	0.180	0.166	0.204	0.815	1.63
50%	0.125	0.167	0.162	0.207	0.184	0.214	0.189	0.815	1.63
99%	0.125	0.155	0.136	0.153	0.177	0.188	0.219	0.815	1.63

Note: A/m = uT ÷ 1.25

5. Photographs Of Test Set-Up

STATEMENT

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. The quality system of our laboratory is in accordance with ISO/IEC17025.
8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

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***** END *****