



中国认可  
国际互认  
检测  
TESTING  
CNAS L2264

# EN 55022&24 Test Report

<b>Applicant</b>	ID TECH
<b>Brand</b>	ID TECH
<b>Product</b>	EMV L1-L2 Chip and MagStripe Reader
<b>Model</b>	IDEM-851P
<b>Report No.</b>	RXA1608-0179EMC03
<b>Date of issue</b>	September 13, 2016

## TA Technology (Shanghai) Co., Ltd.

*No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China*

*TEL: +86-021-50791141/2/3*

*FAX: +86-021-50791141/2/3-8000*

## GENERAL SUMMARY

<b>Reference Standard(s)</b>	<p><b>EN 55024:2010</b> Information technology equipment- Immunity characteristics- Limits and methods of measurement</p> <p><b>EN 61000-4-2: 2009:</b> Electromagnetic compatibility (EMC)—Part 4-2: Testing and measurement techniques—Electrostatic discharge immunity test</p>
<b>Conclusion</b>	Test results refer to Chapter 2 of this test report.
<b>Comment</b>	The test result only responds to the measured sample.

Approved by Guangchang FanGuangchang Fan  
DirectorRevised by Wei LiuWei Liu  
EMC ManagerPerformed by Yunpu LiYunpu Li  
EMC Engineer

## TABLE OF CONTENT

1. Competence and Warranties.....	4
1.1. Notes of the test report .....	4
1.2. Testing laboratory .....	4
1.3. Applicant Information .....	5
1.4. Manufacturer Information.....	5
1.5. Information of EUT.....	6
1.6. Test Date .....	6
2. Test results.....	7
2.1. Electrostatic Discharge .....	7
1. Main Test Instrument.....	10
ANNEX A: The EUT Appearance .....	11
ANNEX B: Test Configuration .....	13

## 1. Competence and Warranties

### 1.1. Notes of the test report

**TA Technology (Shanghai) Co., Ltd.** has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS), and accreditation number: L2264.

**TA Technology (Shanghai) Co., Ltd.** guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

**TA Technology (Shanghai) Co., Ltd.** is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. The sample under test was selected by the Client. This report only refers to the item that has undergone the test.

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of **TA Technology (Shanghai) Co., Ltd.**

If the electrical report is inconsistent with the printed one, it should be subject to the latter.

### 1.2. Testing laboratory

Company: TA Technology (Shanghai) Co., Ltd.  
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong  
City: Shanghai  
Post code: 201201  
Country: P. R. China  
Contact: Xu Kai  
Telephone: +86-021-50791141/2/3  
Fax: +86-021-50791141/2/3-8000  
Website: <http://www.ta-shanghai.com>  
E-mail: [xukai@ta-shanghai.com](mailto:xukai@ta-shanghai.com)

### 1.3. Applicant Information

Company: ID TECH

Address: 10721 Walker Street, Cypress, CA 90630, United State

### 1.4. Manufacturer Information

Company: ID TECH

Address: 10721 Walker Street, Cypress, CA 90630, United State

## 1.5. Information of EUT

### General information

SN:	632T000007
Hardware Version:	80146301
Software Version:	0.99.010

## 1.6. Test Date

The test is performed from August 25, 2016 to September 2, 2016.

## 2. Test results

### 2.1. Electrostatic Discharge

#### Ambient condition

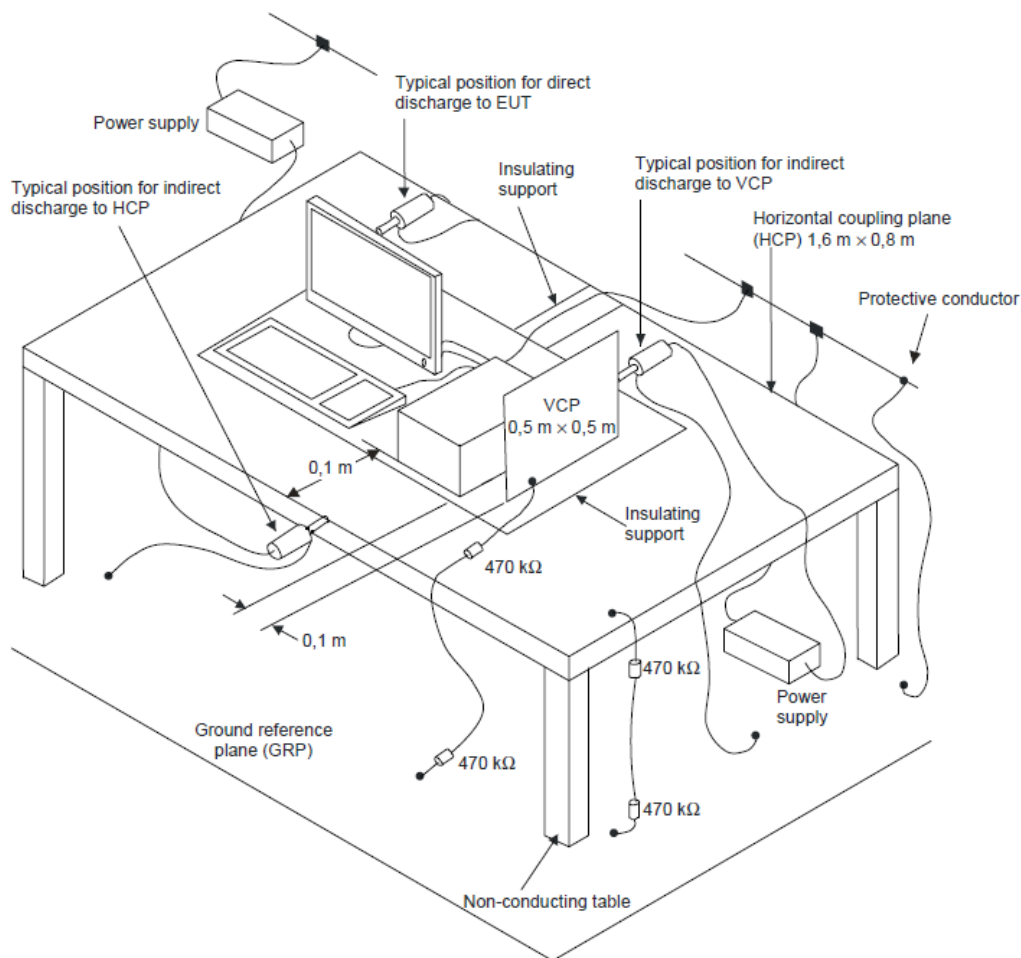
Temperature	Relative humidity	Pressure
23°C ~25°C	40%~45%	101.5kPa

#### Methods of Measurement

The basic test procedure was in accordance with IEC 61000-4-2:

- a) The EUT was located 0.1 m minimum from all side of the HCP (dimensions 1.6m x0.8m).
- b) The support units were located another table 30 cm away from the EUT, but direct support unit was/were located at same location as EUT on the HCP and keep at a distance of 10 cm with EUT.
- c) The time interval between two successive single discharges was at least 1 second.
- d) Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.
- e) Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were complete.
- f) At least ten single discharges (in the most sensitive polarity) were applied at the front edge of each HCP opposite the center point of each unit of the EUT and 0.1 meters from the front of the EUT. The long axis of the discharge electrode was in the plane of the HCP and perpendicular to its front edge during the discharge.
- g) At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane (VCP) in sufficiently different positions that the four faces of the EUT were completely illuminated. The VCP (dimensions 0.5m x 0.5m) was placed vertically to and 0.1 meters from the EUT.

### Test Setup



### Test Specifications

Criteria	During test	After Test
A	Shall operate as intended May show degradation of performance Shall be no loss of function Shall be no unintentional transmissions	Shall operate as intended May show degradation of performance Shall be no loss of function Shall be no loss of stored data or user programmable functions
B	May show loss of function (one or more) May show degradation of performance No unintentional all transmissions	Function shall be self-recoverable Shall operate as intended after recovering Shall be no degradation of performance Shall be no loss of stored data or user Programmable functions
C	May be loss of function (one or more)	Functions shall be recoverable by the operator Shall operate as intended after recovering Shall be degradation of performance

Note: The Required Passing Criterion is criteria B.



**Test Results**

<b>Coupling</b>	<b>Voltage</b>	<b>Performance Criterion</b>	<b>Required Passing Criterion</b>	<b>Results</b>
<b>Air Discharge</b>	±4kV	A	B	PASS
	±8kV	A	B	PASS
	±12kV	A	B	PASS
<b>Contact Discharge</b>	±2kV	A	B	PASS
	±4kV	A	B	PASS
	±8kV	A	B	PASS
<b>Horizontal Coupling Plane</b>	±2kV	A	B	PASS
	±4kV	A	B	PASS
<b>Vertical Coupling Plane</b>	±2kV	A	B	PASS
	±4kV	A	B	PASS

### 3. Main Test Instrument

Table 1: List of Main Instruments

No.	Name	Type	Manufacturer	Serial Number	Calibration Date	Calibration Date
01	Electro-Static Discharger Generator	Nosieken	ESS-2002EX	ES1111144	2015-03-16	2017-03-15

\*\*\*END OF REPORT BODY\*\*\*

## ANNEX A: The EUT Appearance



a: Front





b: Back

**Picture 1 Constituents of EUT**

## ANNEX B: Test Configuration



Picture 2 Electrostatic Discharge Test Setup