



## IP54 Test Report

Applicant : SUNLUX IOT TECHNOLOGY(GUANGDONG) INC.

Address : RM.401, NO.7 KEHUI FIRST STREET, SCIENCE ROAD, SCIENCE CITY, LOUGANG DISTRICT, GUANGZHOU, CHINA

Sample Description:

Product : Barcode Scanner

Brand Name/Trade Name : **SUNLUX** 

Model No. : XL-3610, XL-3610A, XL-3600, XL-9610, XL-9600, XL-3202A, XL-3650, XL-3630, XL-3200, XL-3200A, XL-3200B, XL-3220, XL-3220B, XL-3600GSQ, XL-3600HD, XL-3600SR, XL-3100, XL-3100A, XL-3500, XL-9611, XL-9612, XL-9616, XL-9618, XL-9619

Electrical Rating : N/A

Manufacturer : SUNLUX IOT TECHNOLOGY(GUANGDONG) INC.

Address : RM.401, NO.7 KEHUI FIRST STREET, SCIENCE ROAD, SCIENCE CITY, LOUGANG DISTRICT, GUANGZHOU, CHINA

Date of receipt of test item : Jan. 04, 2021

Date (s) of performance of test : Jan. 04, 2021 to Jan. 06, 2021

Date of issue : Jan. 06, 2021

Service Requested : Perform the IP54 test as customer's requirement

Method : As specified in EN 60529:1991+A1:2000+A2:2013

Conclusion : Pass

Testing by:

Kevin Yao  
Testing Engineer  
Shenzhen HUAKE Testing Technology Co., Ltd.

Reviewed by:

Dendi Wei  
Project Engineer  
Shenzhen HUAKE Testing Technology Co., Ltd.



- The results reported in this test report shall refer only to the sample actually checked and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
- This report shall not be reported except in full without prior authorization from Shenzhen HUAKE Testing Technology Co., Ltd.
- The services are provided subject to the terms and condition of the company, which can be furnished upon request.

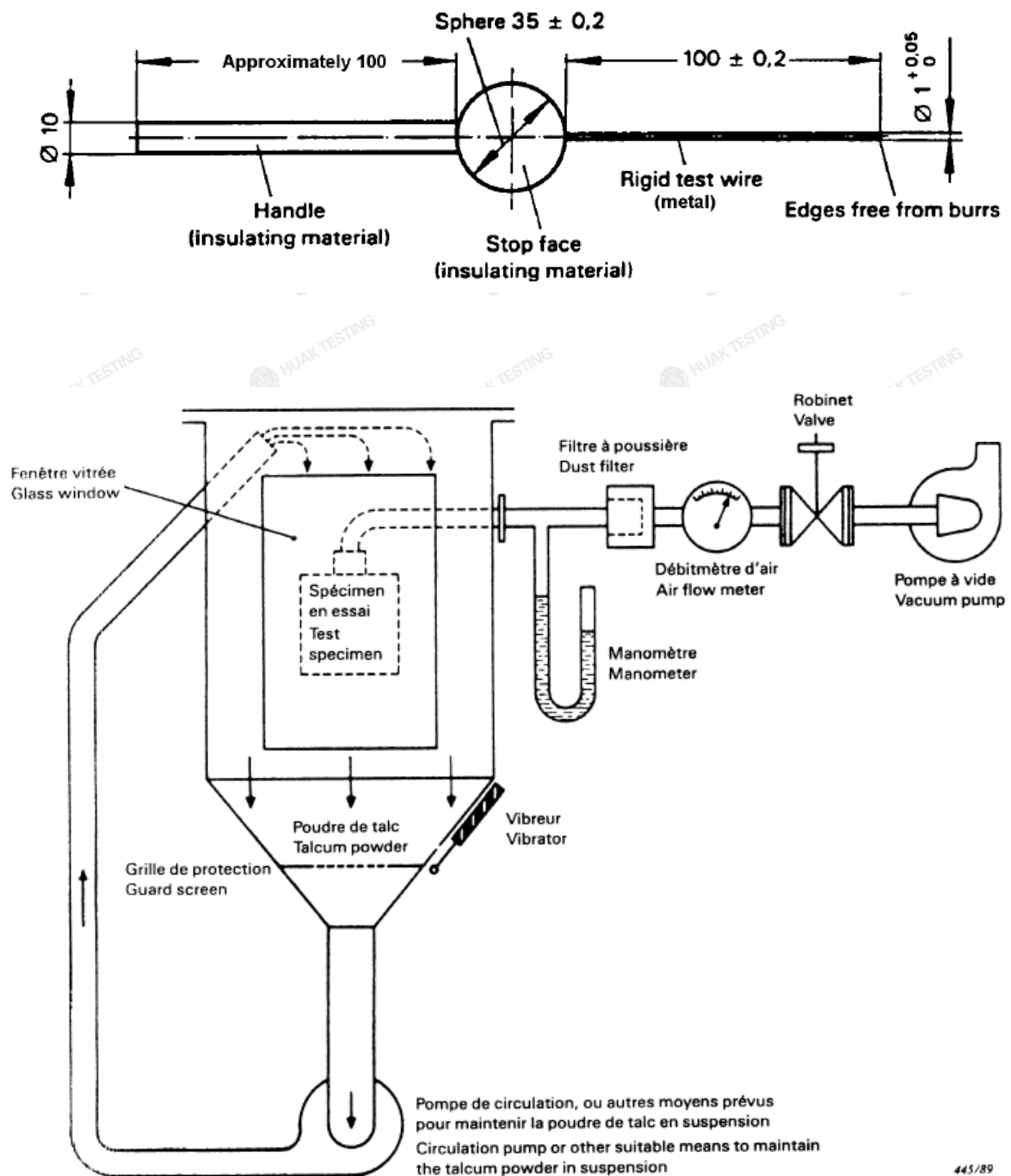
\*\*\*\*\* End of page \*\*\*\*\*



## 1. IP5X Dust-proof Test

### 1.1 Test requirement

Equipment	Model	Serial no.	Cal. Due date
Test probe	Probe D (100mm)	HK-066	2021-12-24
Push-pull scale	NK-500	HK-010	2021-12-24
Apparatus for Proving Protection Against Dust	SE-1150	HK-164	2021-12-24



445/89



## 1.2 Test method

1.2.1 The product (first characteristic IP numerals 5) shall be tested at every possible point (excluding gaskets) with a probe in accordance with test probe D of EN 61032, applied with a force  $1N \pm 10\%$ .

1.2.2 The test is made using a dust chamber.

Dust-proof sample (first characteristic IP numeral 5) shall be tested in a dust chamber similar to which talcum powder is maintained in suspension by an air current. The chamber shall contain 2 kg of powder for every cubic metre of its volume. The talcum powder used shall be able to pass through a square-meshed sieve whose nominal wire diameter is 50  $\mu m$  and whose nominal free distance between wires is 75  $\mu m$ . It shall not have been used for more than 20 tests.

The test shall proceed as follows:

- a) Enclosure where no pressure difference relative to the surrounding air is present.
- b) The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test. The test shall be continued for a period of 8h.
- c) The enclosure is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test.

All models are identical, only different in the model name and appearance, so the model XL-3610 is selected as representative model for full tests.

## 1.3 Test Result

### Conclusion: Pass

The sample complied with the requirements of the standard.

\*\*\*\*\* End of page \*\*\*\*\*



## 2. IPX4 Splash-proof Test

### 2.1 Test requirements

Equipment	Model	Serial no.	Cal. Due date
IP test chamber	KXT302B	HK-169	2021-12-24

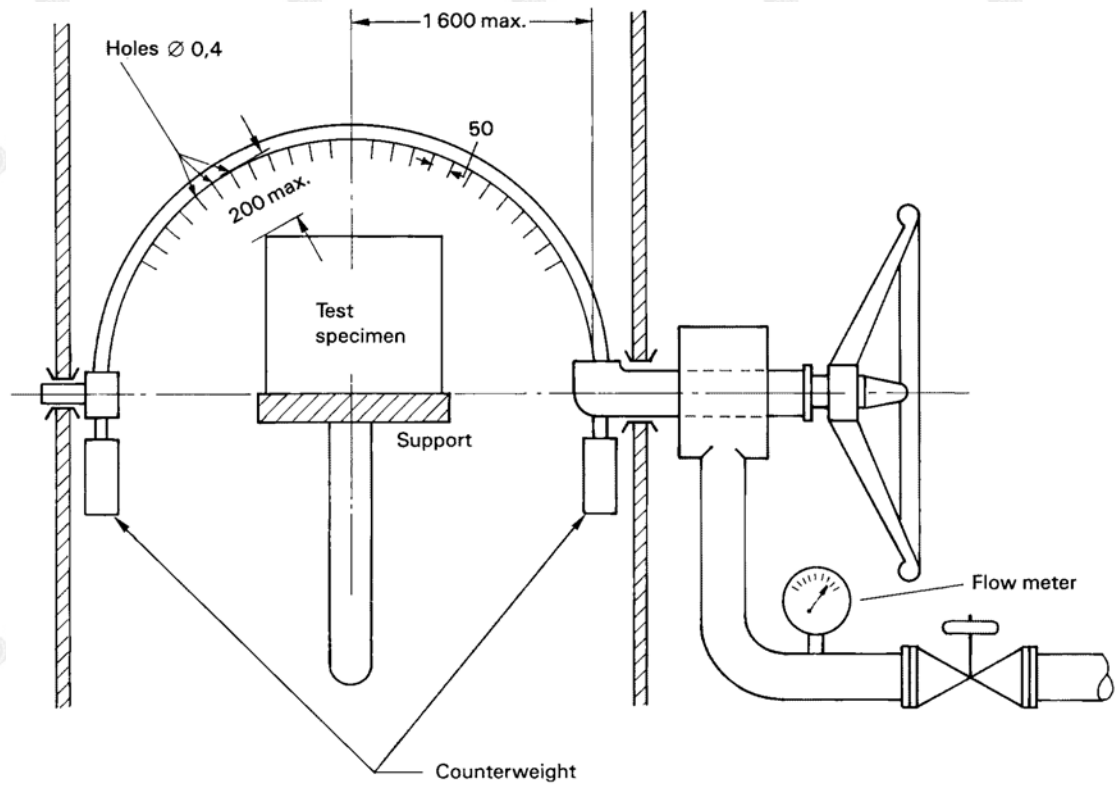


Figure 4

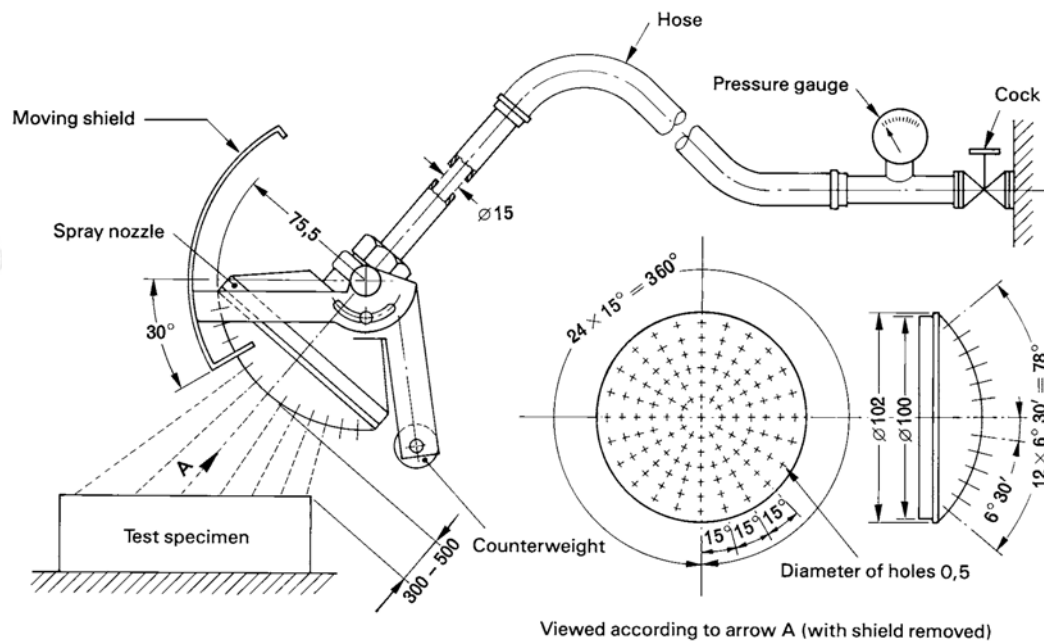






Figure 5

## 2.2 Test method

The test is made using one of the two test devices described in figure 4 and in figure 5 in accordance with the relevant product standard.

a) Conditions when using the test device as in figure 4 (oscillating tube):

The oscillating tube has spray holes over the whole 180° of the semicircle. The total flow rate is adjusted as specified in table 9 and is measured with a flow meter.

The tube is caused to oscillate through an angle of almost 360°, 180° on either side of the vertical, the time for one complete oscillation ( $2 \times 360^\circ$ ) being about 12 s.

The duration of the test is 10 min.

If not specified otherwise in the relevant product standard, the support for the enclosure under test is perforated so as to avoid acting as a baffle and the enclosure is sprayed from every direction by oscillating the tube to the limit of its travel in each direction.

b) Conditions when using the test device as in figure 5 (spray nozzle):

The counterbalanced shield is removed from the spray nozzle and the enclosure is sprayed from all practicable directions.

The rate of water flow and the spraying time per unit area are as specified in 14.2.3.

All models are identical, only different in the model name and appearance, so the model XL-3610 is selected as representative model for full tests.

## 1.3 Test Result

**Conclusion: Pass**

The sample complied with the requirements of the standard.

\*\*\*\*\* End of page \*\*\*\*\*



Product Photos



Photo 1: Overall view (before test)



Photo 2: Overall view (after test)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by HUAKE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.cer-mark.com>.

HUAKE Testing Lab TEL : +86-755 2302 9901 FAX : +86-755 2302 9901 E-mail : [service@cer-mark.com](mailto:service@cer-mark.com)

1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China





Photo 3: Internal view (after test)

-----End of report-----