

TEST REPORT

Applicant Name & Address: GUANGZHOU HOBART LIGHTS LIMITED
No. 1 Chuangjia Road, Baiyun District, Guangzhou City, Guangdong Province, China,510080

Manufacturer Name & Address: GUANGZHOU HOBART LIGHTS LIMITED
No. 1 Chuangjia Road, Baiyun District, Guangzhou City, Guangdong Province, China,510080

Product Name: LED Scene Light

Model No.: SL1-1

Variants: SL1-2、SL1-3、SL1-4

Trade mark: Hobart Lights

Electrical Rating: DC 12V/24V

Date Received: 31- October -2022

Date Test Conducted: 04- November -2022~08- November -2022

Report No.: SQT2211049

Prepared by: Guangzhou Shuntai Quality Technical Service Co., Ltd.

Test Standard(s): ISO 20653-2013: Road vehicles — Degrees of protection (IP code) — Protection of electrical equipment against foreign objects, water and access

Test Result: Pass

Conclusion: In the configuration tested, the EUT complied with the standards specified above.

Prepared and Checked By:



Sam Ye
Project Engineer

Approved by:



Signature

Lily Li
Technical Supervisor

11-November-2022 Issued Date

Note: 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.

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1. Description of version

Report No.	Version No.	Issue Date	Description	Approved
SQT2211049	V0	11-November-2022	Original	Valid

2. Test summary

Test Item	Test Method	Result
IP6KX Test	ISO 20653-2013	Correct
IPX9K Test		Correct
Remark:		
1. The symbol "N/A" in above table means <u>Not Applicable</u> . 2. When determining the test results, measurement uncertainty of tests has been considered.		

3. LABORATORY MEASUREMENTS

3.1 Configuration Information

Product name	LED Scene Light	
Category	Component	
Model No.	SL1-1	
Variants	SL1-2、SL1-3、SL1-4 The above models have the same circuit design, wiring diagram and components except for different model names and connectors	
Software version/ Hardware version	N/A	
Sample Shape	Square/ Round / Irregular / Others	
Sample Type	Mini / Small / Small and medium / Medium / Large	
Quantity of sample	1 pcs	
Sample No.	1#	Q2210097-001
Packing status	Outer packing / No packing	
Sample quality before test	Conformity product/ Non conformity product	

Note: The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

3.2 Explanation of test method deviation

The test method deviates from the standard method: **yes/no**

If yes, please explain in details: ---

4. IP69K TEST

4.1. Test Requirement

IP6KX (Protection against access to hazardous parts):

The probe with a diameter of 1.0 mm does not enter the specimen case.

IP6KX (Protection against solid foreign objects):

Dust shall not penetrate.

IPX9K test (Execution of the tests for protection against ingress of water):

No harmful effects or impair performance, no water enters the inside of the sample.

4.2. Used Test Equipment

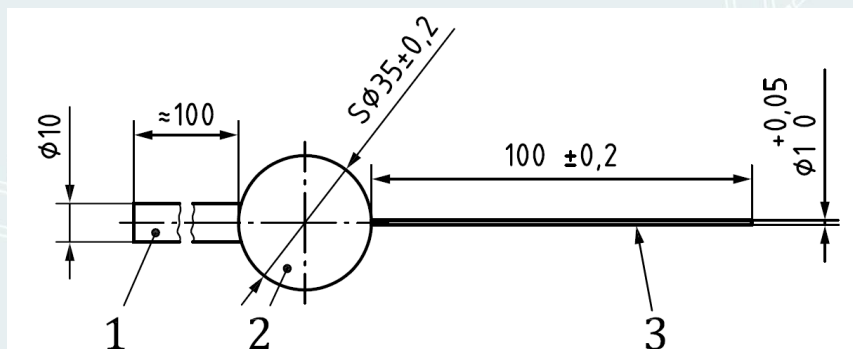
Equipment	Equipment No.	Manufacturer	Model No.	Calibration Due
Dust Test Device	GZST/YQ-HJ-02	AUCHNO	OJN-9608	2023-07-10
IP4X Test Tool	GZST/YQ-HJ-11	CH	CH-I04	2023-02-09
High Temperature & Pressure Jet Waterproof Test Chamber	GZST/YQ-HJ-14	JYOTS	JY-FS9B-1000L	2023-02-09
DC Power Supply	GZST/YQ-EMC-16	UNIT	UTP1306S	2023-07-06

4.3. Test Setup and Procedure

1) IP6KX (Protection against solid foreign objects) Test conditions

The sample was subjected to a metal protection test using a metal probe having a diameter of 1.0 mm

Dimensions in millimetres



Key:

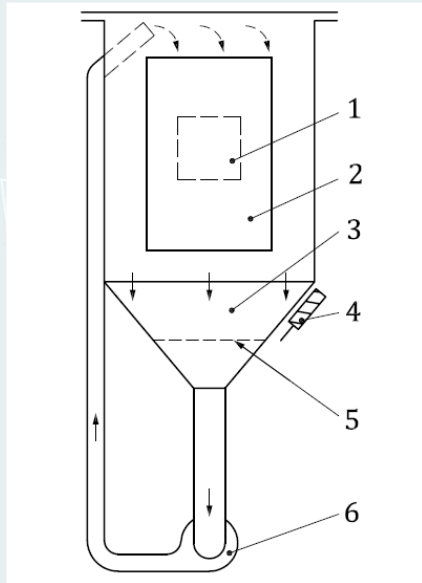
- 1 handle (insulating material)
- 2 stop face (insulating material)
- 3 rigid test wire (metal) (edges free from burrs)

2) IP6KX (Dust-tight) Test conditions

Dust: talcum powder;

Dust concentration: 2kg/m³;

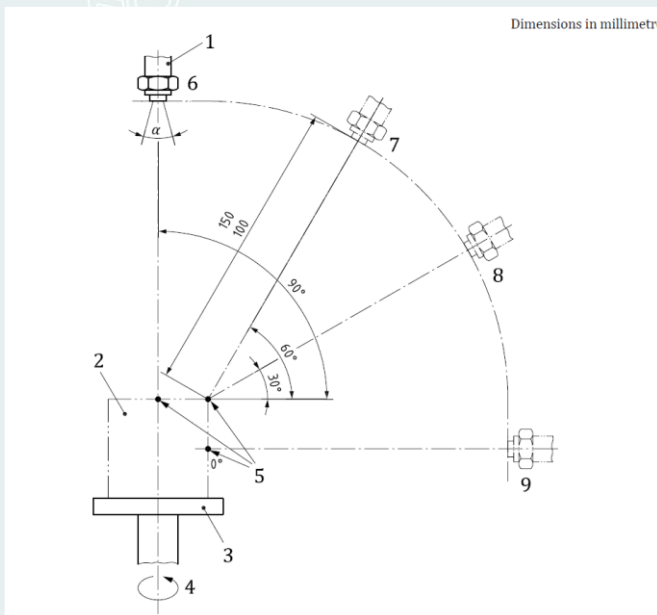
Test time: 6s movement of the air/dust mixture, 15 min break, 20 such cycles shall be performed



Key:

- 1 DUT
- 2 glass window
- 3 dust
- 4 vibrator
- 5 protective grating
- 6 circulating pump or other equipment for suspending the dust

3) IPX9K (Protected against the effects of temporary immersion in water) test conditions



The sample is set up speed (5±1) r/min spray at 0°, 30°, 60°, 90°

Distance:

(100 to 150) mm;

Water flow rate:

(14 to 16) L/min;

Water pressure:

approx.(8000 to 10000) kPa;

Water temperature:

(80±5)°C;

Exposure time:

30s per position.

- | | | | |
|---|---|---|------------|
| 1 | fan jet nozzle | 6 | position 1 |
| 2 | DUT | 7 | position 2 |
| 3 | turntable/holder | 8 | position 3 |
| 4 | swivel axis | 9 | position 4 |
| 5 | reference points (0°, 30°, 60°, 90°) endorsing cylinder for DUT | | |

4.4. Test Results

Results: Pass

Test Level: IP69K

Test Date: 04/11/2022~08/11/2022

Temperature and humidity: 26.8°C/52%RH

IP6KX (Protection against solid foreign objects)

The probe with a diameter of 1.0 mm does not enter the specimen enclosure and adequate clearance shall be kept.	CORRECT
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Conclusion

No damage to the sample before and after the test. The function of sample is normal before and after the test.
Meet the requirement.

IP6KX (Dust-tight)

After the test, the protection is satisfactory, no dust is observable inside the enclosure, the function is normal.	CORRECT
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Conclusion

No damage to the sample before and after the test. The function of sample is normal before and after the test.
Meet the requirement.

IPX9K (Protected against the effects of temporary immersion in water) test

After the waterproof test, there is no water inside the sample, the function is normal.	CORRECT
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Conclusion

No damage to the sample before and after the test. The function of sample is normal before and after the test.
Meet the requirement.

4.5. Test Photos

IP6KX



Fig.1-1 Before test



Fig.1-2 Function check before test



Fig.1-3 Function check before test



Fig.1-4 IP6KX during test



Fig.1-5 Before IP6KX test



Fig.1-6 After IP6KX test

IPX9K



Fig.1-7 Before IPX9K test



Fig.1-8 IPX9K during test

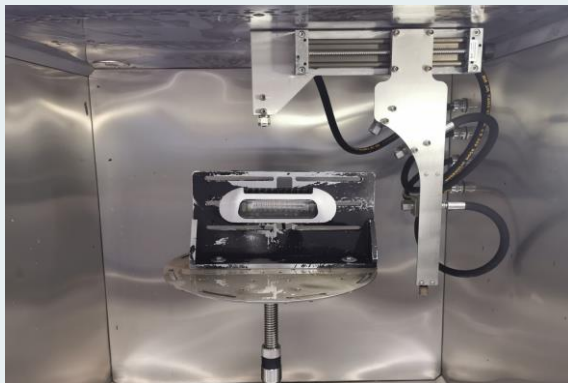


Fig.1-9 After IPX9K test



Fig.1-10 IPX9K Setup



Fig.1-11 After test



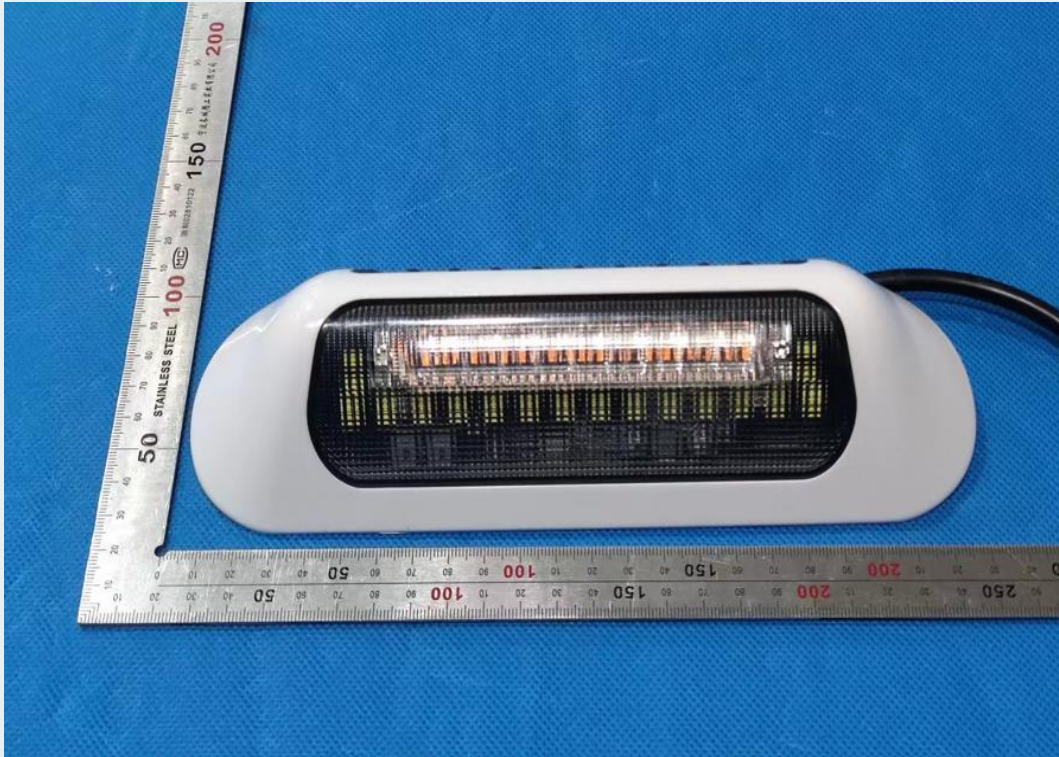
Fig.1-12 Function check after test



Fig.1-13 Function check after test

5. Photographs of EUT

EUT photo 1



EUT photo 2



Statement

1. The report is invalid without "special stamp for inspection and testing".
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3. The report is invalid without the signature and seal of the person preparing, reviewing and approving it.
4. The report is invalid if altered.
5. If there is any objection concerning the report, please inform us within 15 days from the date of receiving the report
6. This test is only responsible for incoming samples, and the report is only valid for this test.

GuangZhou ShunTai Quality Technical Service Co., Ltd.
Room 206A, 2F, 4# Plant, No.63 Punan Road, Huangpu District, Guangzhou, China, 510760

Tel: 0086-020-29840423

E-mail: service@gzst-test.com

Web: www.gzst-test.com

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