



Tel:+86-0760-8755 3128 URL: www.aoce-lab.com

**TEST REPORT  
EN IEC 60598-1**

**Luminaires**

**Part 1: General requirement and tests**

<b>Report reference No.</b> .....	AOCE240713744-IP
Tested by (name + signature).....	Vick Tan <i>Vick Tan</i>
Supervised by (name + signature).....	Tom Wu <i>TOM Wu</i>
Approved by (name + signature).....	Sanji Guan <i>Sanji Guan</i>
Date of issue.....	2024-07-17
<b>Testing Laboratory Name</b> .....	<b>Zhongshan AOCE Testing Technology Co., Ltd.</b>
Address .....	Disika, 1/F., No.42, Chang'an South Road, Henglan, Zhongshan, Guangdong, China
<b>Applicant's Name</b> .....	Shenzhen Unicorn Lighting Co, Ltd.
Address .....	6F, Rong Chuang intelligent Bld. A, Longsheng Road, Shangfen, Minzhi, Longhua District, Shenzhen, China
Standard.....	EN IEC 60598-1:2021+A11:2022 Clause 9.2.2 & 9.2.7 IP66
Test procedure .....	IP66
Non-standard test method .....	N/A
<b>Test Report Form No.</b>	TRF.EN 60598_1A
TRF originator.....	AOCE
Master TRF .....	Dated 2023-03
Test result .....	Pass
<b>Test item description</b> .....	LED STREET LIGHT
Trademark .....	/
Manufacturer.....	Dongguan Hysone Renewable Energy Co., Ltd. Floor 7, Building 3, No.,96 Qingbin East Road, Qingxi Town,523648 Dongguan City,Guangdong, PEOPLE'S REPUBLIC OF CHINA
Model and/or type reference .....	ST200PE, other model's name see the page 3.
Rating(s) (V; Hz).....	110-277V~, 50/60Hz, Class I, 305W Max. IP66

**Summary of testing:****Testing location:**

Zhongshan AOCE Testing Technology Co., Ltd.

Disika, 1/F., No.42, Chang'an South Road, Henglan, Zhongshan, Guangdong, China

**Tests performed (name of test and test clause):**

- EN IEC 60598-1:2021+A11:2022

**Marking label, instruction manual, packing text:** Instructions and marking shall be in a language acceptable for the country where the equipment is to be used.

**Other product properties:** Depending on the country where the equipment is to be used, national deviations may be considered. Samples of the modified product may be tested again according to relevant clauses of the product standard, modified by national deviations.

**Summary of compliance with National Differences:**

N/A

**Copy of marking plate**

<b>Test item particulars</b> ..... :	
Supply Connection..... :	Non-detachable cables with plug
Protection class..... :	Class I
Degree of protection..... :	IP66
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object..... :	N (N/A)
- test object does meet the requirement..... :	P (Pass)
- test object does not meet the requirement..... :	F (Fail)
<b>Testing</b> ..... :	
Date of receipt of test item..... :	2024-07-05
Date(s) of performance of tests..... :	2024-07-05 to 2024-07-17
Attachment No. 1: Photo documentation.	
<b>General remarks:</b>	
The test results presented in this report relate only to the object tested.	
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.	
"(See Enclosure #)" refers to additional information appended to the report.	
"(See appended table)" refers to a table appended to the report.	
Throughout this report a comma is used as the decimal separator.	
Clause numbers between brackets refer to clause in EN 60598-1	
<b>General product information:</b>	
This product is LED STREET LIGHT. for outdoor use only.	
All model's name:ST200PE, ST018P, ST024P, ST030P, ST040P, ST050P, ST060P, ST070P, ST080P, ST090P, ST100P, ST105P, ST120P, ST150P, ST180P, ST200P, ST220P, ST240P, ST300P, ST305P, ST018PE, ST024PE, ST030PE, ST040PE, ST050PE, ST060PE, ST070PE, ST080PE, ST090PE, ST100PE, ST105PE, ST120PE, ST150PE, ST180PE, ST240PE,. have are same construction and BOM, only the size shape and power different with marketing.	
All tests were conducted on the representative model ST200PE.	

EN IEC 60598-1			
Clause	Requirement + Test	Result - Remark	Verdict
<b>0</b>	<b>GENERAL TEST REQUIREMENTS</b>		<b>P</b>
0.1	Information for luminaire design considered..... :	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—
0.3	More sections applicable..... :	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Section/s:	—
<b>2</b>	<b>CLASSIFICATION OF LUMINAIRES</b>		<b>P</b>
2.2	Type of protection .....	Class I	P
2.3	Degree of protection..... :	IP66	P
2.4	Luminaire suitable for direct mounting on normally flammable surfaces..... :	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
2.5	Luminaire for normal use .....	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	—
	Luminaire for rough service .....	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	—
<b>(9)</b>	<b>RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE</b>		<b>P</b>
(-)	If IP > IP 20 the order of tests as specified in clause 1.12		P
(9.2)	Tests for ingress of dust, solid objects and moisture:		P
	- classification according to IP..... :	IP66	—
	- mounting position during test..... :	As in normal use	—
	- fixing screws tightened; torque (Nm)..... :	0.33Nm	—
	- tests according to clauses..... :	Clause 9.2.2& 9.2.7	—
	- electric strength test afterwards	1554V	P
	a) no deposit in dust-proof luminaire		N/A
	b) no talcum in dust-tight luminaire	IP6X	P
	c) no trace of water on current-carrying parts or on insulation where it could become a hazard		P
	c.1) For luminaires without drain holes – no water entry	IPX6	P
	c.2) For luminaires with drain holes – no hazardous water entry		N/A
	d) no water in watertight, pressure watertight, high pressure and temperature water jet-proof or high pressure and cold water jet-proof luminaire		N/A
	e) no contact with live parts (IP 2X)		N/A
	e) no entry into enclosure (IP 3X and IP 4X)		N/A
	e) no contact with live parts through drain holes and ventilation slots (IP3X and IP4X)		N/A

<b>EN IEC 60598-1</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	f) no trace of water on part of lamp requiring protection from splashing water		N/A
	g) no damage of protective shield or glass envelope		N/A
9.3	Humidity test 48 h		N/A

**Attachment No. 1**  
**Photo documentation**

**Photo 1 Overall view**



**Photo 2 Overall view**



Photo 3 Dustproof test view



Photo 4 Dustproof test view



**Photo 3 Waterproof test view**



**Photo 4 Waterproof test view**



----- END OF THE REPORT -----

# STATEMENT

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

If you have any objection to this report, please submit it to the test unit within 15 days from the date of receipt of the report.

Test Laboratory: Zhongshan AOCE Testing Technology Co., Ltd.

Address: Disika, 1/F., No.42, Chang'an South Road, Henglan, Zhongshan, Guangdong, China

TEL: +86-760-87553128

URL: [www.aoce-lab.com](http://www.aoce-lab.com)

E-Mail: [guanlilin@aoce-lab.com](mailto:guanlilin@aoce-lab.com)