

TEST REPORT

Report reference No. : **UN250217001-IK**

Tested by (name + signature)..... : Zheng

Supervised by (name + signature)..... : Liu

Approved by (name + signature)..... : Nicolas

Date of issue..... : 2025-02-17

Name : Shenzhen Unicorn Lighting Co, Ltd.

Address : 6F, Rong Chuang intelligent Bld. A, Longsheng Road,
Shangfen, Minzhi, Longhua District, Shenzhen, China

Standard..... : IEC 62262:2002+AMD1:2021

Test procedure : IK08

Test result : Pass

Test item description : Street light

Trademark :



Model and/or type reference :

ST024P,ST040P,ST050P,ST060P,ST080P,ST100P,ST1
20P,ST150P,ST180P,ST200P,ST240P

Rating(s) (V; Hz)..... : 100-277V~, 50/60Hz, Class I, 240W Max. IK08

1、 Conclusion

The sample(s) was/were detected and according to the results, the conclusion are as follows:

Test Item(s)		Testing Standard(s)	Standard(s) Decision Basis	Conclus ion
Article	Name			
3	IK08	IEC 62262:2002+AMD1:2021	Applicant's requirement (see this report Section 3.4)	Pass

2、 Sample information(s)

The following information of sample(s) was/were submitted and identified by applicant:

Product Model : ST120P
 Manufacturer : Shenzhen Unicorn Lighting Co, Ltd.
 Address : 6F, Rong Chuang intelligent Bld. A, Longsheng Road, Shangfen, Minzhi, Longhua District, Shenzhen, China
 Sample Quantity : 1Pc

3、 Test Item: IK08

3.1 Sample number: UN250217001

3.2 Test standard(s): IEC 62262:2002+AMD1:2021

3.3 Test conditions:

1. Energy:5 J;
2. Quality:1.7 kg;
3. Altitude:300 mm.

Table 1 of IEC 62262-2002:

Table 1- Relation between IK code and impact energy

IKcode	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Impact energy Joule	a	0,14	0,2	0,35	0,5	0,7	1	2	5	10	20
Not protected according to this standard											

NOTE 1 When higher impact energy is required the value of 50 Joule is recommended.

NOTE 2 A characteristic group numeral of two figures has been chosen to avoid confusion with some former national standards which used a single numeral for a specific impact energy.

Table 2 of IEC 60068-2-75:

Table 2- Height of tall

Energy J	0,14	0,2		(0,3)	0,35	(0,4)	0,5		0,7	1	2	5	10	20	50
Equivalent mass kg	0,25	(0,2)	0,25	(0,2)	0,25	(0,2)	(0,2)	0,25	0,25	0,25	0,5	1,7	5	5	10
Height of tall mm±1%	56	(100)	80	(150)	140	(200)	(250)	200	280	400	400	300	200	400	500

NOTES

1 See note in 3.2.2.

2 In this part of IEC 60068, the energy, J, is calculated taking the standard acceleration due to the earth's Gravity(g_n), rounded up to the nearest whole number, that is 10m/s².

Table 1 of IEC 60068-2-75

Table 1 - Co-ordinated characteristics of the striking elements

Energy value J	≤1 ±10%	2 ±5%	5 ±5%	10 ±5%	20 ±5%	50 ±5%
Equivalent mass ±2% kg	0,25 (0,2)	0,5	1,7	5	5	10
Material	Polyamide ¹⁾	Steel ²⁾				
R mm	10	25	25	50	50	50
D mm	18,5 (20)	35	60	80	100	125
f mm	6,2 (10)	7	10	20	20	25
r mm	--	--	6	--	10	17
l mm	To be adjusted to match the equivalent mass, see annex A.					

1) 85≤HRR≤100, Rockwell hardness according to ISO 2039-2.

2) Fe 490-2, according to ISO 1052: Rockwell hardness: HRE 80...85 according to ISO 6508.

NOTE - The values shown in brackets for the equivalent mass and the diameter of the striking element for the energy value equal to or less than 1 J are those in the current test Ef. The values currently in test Eg are also shown for these two parameters. For co-ordination purposes, the values in brackets will be deleted five years from the publication of this standard.

3.4 Decision Basis:

The shell should not be damaged.

3.5 Test result(s):

Sample No.	Test result(s)	Conclusion
UN250217001	After the test, the shell is not damaged.	Pass

3.6 Test Photos

Photo 1 Overall view



Photo 2 Overall view



Test Photos

Photo 3 IK08 test



Photo 4 IK08 test



----- 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.