

Test report

Product Name: Fixed LED lamp (wall wash lamp)

Product Name: **LWW-PZT-W38A-L12-RDM**

Test Category: IK rating test

Commissioned by: TPK OPTOELECTRONIC TECH CO., LTD

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TPK OPTOELECTRONIC TECH CO., LTD

Test report

Test items	IK protection level test
Test subjects	LWW-PZT-W38A-L12-RDM
Purpose of Detection	Verify the IK protection level of LWW-PZT-W38A-L12-RDM glass
Test time	2024-11-28
Testing equipment	Standard number: GB/T 2423.55-2006 Standard name: Environmental testing for electrical and electronic products - Part 2: Test methods Test Eh: Environmental testing for electric and electronic products- Part 2: Test methods- Test Eh: hammer tests IK grade test tooling equipment, 0.25KG, 0.5KG metal hammers, tape measures

Final conclusion of the test: The protection level of the LWW-PZT-W38A-L12-RDM IK grade surface glass against external mechanical impact meets the requirements of IK06; The results of this test are only responsible for the sample results.

Methods and procedures of the experiment:
Refer to GB/T 2423.55-2006 (IEC 60068-2-75:1997) Environmental tests for electrical and electronic products - Part 2: Test methods Test Eh: Hammering test shall be conducted in accordance with the content of GBT 20138-2006 (IEC62262:2002) standard for protection of enclosures of electrical equipment against external mechanical impact

Test data:
1. Record the state of the sample before the test.



The product is intact.

2. 1 Test the fixed impact hammer as required by IK06 grade (400mm height, 0.25KG weight, 1J energy).



0.25KG metal hammer



height 400MM

2. 2 Record the appearance data of the sample after the impact, test result: no breakage of the glass after hammering



The glass did not break

3. 1 Test with a fixed impact hammer as required by IK07 grade (400mm height, 0.5KG weight, 2J energy).



0.5KG metal hammer



height 400MM

3.2 Record the appearance data of the sample after the impact, test result: Glass breaks after hammering



The glass is completely broken

Appendix: IK Level Test standard Reference table

IK Code	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Collision Energy /J	a	0.14	0.2	0.35	0.5	0.7	one	2	5	10	20

Note 1: If higher collision energy is required, 50J is recommended

Note 2: Some national standards use one digit to represent the specified collision energy. To avoid confusion, two digits are used to represent the characteristic number.

a According to this standard, it is unprotected.

表 1 IK 代码及其相应碰撞能量的对应关系

IK 代码	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
碰撞 能量/J	a	0.14	0.2	0.35	0.5	0.7	1	2	5	10	20

注 1: 如要求更高的碰撞能量, 推荐取值 50J。

注2:有些国家标准使用一位数字表示规定的碰撞能量,为避免与之混淆,故特征数字选用两位数字表示。

^a 按本标准为无防护。

To avoid secondary impacts caused by rebound, braking can be achieved by grasping the impact element instead of the swing bar after the initial impact. To prevent the pendulum from deforming.

Table 2 Drop Height

Energy / J	0.14	0.2		(0.3)	0.35	(0.4)	0.5		0.7	one	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
Drop height, ±1%/mm	56	(100).	80	(150).	140	(200).	(250).	200	280	400	400	300	200	400	500

Note 1: See Note 3.2.2.
Note 2: The energy unit in this section, joule (J), is derived from the standard gravitational acceleration (ga). g, rounded to 10 m/s².

为了避免因反弹产生的二次撞击,在初次撞击后可用抓住撞击元件而非摆杆的方法制动。以避免摆杆变形。

表 2 跌落高度

能量/ J	0.14	0.2		(0.3)	0.35	(0.4)	0.5		0.7	1	2	5	10	20	50
等效质量/ 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
跌落高度, ±1%/mm	56	(100)	80	(150)	140	(200)	(250)	200	280	400	400	300	200	400	500

注 1: 见 3.2.2 注。
注 2: 本部分的能量单位焦耳(J)由标准重力加速度(g_n)导出。g_n 经圆整取值为 10 m/s²。

Test results:

The above test data proved that the IK07 grade 2J, 0.5KG weight, 400MM height test showed glass breakage after hammering. In accordance with the national standard GB/T 20138-2006 /IEC 62262:2002 Test Section 4.4 and GB/T 20138-2006 /IEC The **IK grade** of the **surface glass** of **LWW-PZT-W38A-L12-RDM** is determined **only by IK06** in accordance with the content of Table 1 of Article 4.2 of 62262:2002 and Article 6