

TEST REPORT

Product Name: Fixed LED (spot light)

Product Model: SP-PZT-R170-12P

Test Category: High and low temperature testing

Customer: TPK OPTOELECTRONIC TECH CO., LTD

Tested by: Huang Wenliang

Checked by: Chen Hairui

report time: Mar 15, 2026

广东泰然实业有限公司
TPK OPTOELECTRONIC TECH CO., LTD

Inspection report

Test items	High and low temperature testing
Test object	SP-PZT-R170-12P
Detection Purposes	Whether SP-PZT-R170-12P samples can light up normally after high and low temperature tests
Test time	Start 2026-3-12 End: 2026-3-15

Testing instruments: controlled constant temperature and humidity chamber, connecting wires, power supply

Test method and procedure:

1 Light up the SP-PZT-R170-12P sample that has been aged for 2 hours to confirm that the luminaire is functioning properly

2 Place the SP-PZT-R170-12P in a constant temperature and humidity chamber with parameters set at -20 ° C to 70 ° C, with one cycle every 4 hours for a total of 6 cycles (24 hours).

3 Test whether the lamps can be lit normally after the experiment is completed

Test results: SP-PZT-R170-12P lights up continuously at ambient temperature -20 ° C to 70 ° C, with 2 hours of high temperature and 2 hours of low temperature as one cycle; For a total of 6 cycles of 24 hours, no dead lamp or other uncontrollable conditions occurred in the lamp. The conclusion of this experiment is only responsible for the sample.

Standard requirements: GB/T 33721-2017

GB/T 33721—2017

表 4 温度冲击试验参数

环境		低温 ℃	高温 ^a ℃	暴露时间 ^b h	循环次数 次
室内	IP20	-20	70	1	15
	IP20 以上	-20	70	2	15
室外		-40	70	2	20

^a 对不适用 70 °C 高温的灯具(如灯具中选择了热变形温度低于 70 °C 的材料),可按照其声称的最高耐受温度设定高温。

^b 暴露时间的选择与灯具的热容量有关,产品暴露时间的确定方法可见附录 A。如制造商能够提供相关信息来证明产品具有特殊的暴露时间,则可采用制造商声称的暴露时间。

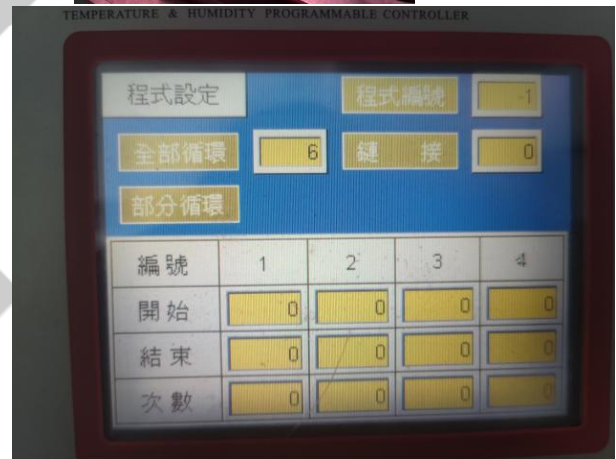
试验后,样品的标贴应无开裂、卷曲或脱落,样品无明显的损坏,且按 GB/T 9468—2008 规定测得的光通量相对于初始光通量的变化不应超过 10%。

Test data

1. Before the test: Light up the lamp and let it age for 2 hours to confirm that the lamp is functioning properly



2 Light up the lamp and place it in temperature environments of -20°C to 70°C for 2 hours each, 4 hours as one cycle, for a total of 6 cycles (24 hours).



3 Confirm at intervals during the test that the sample is not found to be unlit



(6H)



(12H)



(18H)



(24H)

4. After testing: Connect the luminaire and confirm that the luminaire is functioning properly (R-G-B-W-RGBW)

