

TEST REPORT

Product Name: Fixed LED (spot light)

Product Model: SP-DKP-F170-16P-RDM

Test Category: High and low temperature testing

Customer: TPK OPTOELECTRONIC TECH CO., LTD

Tested by: Huang Wenliang

Checked by: Chen Hairui

report time: JUL 25, 2025

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-DKP-F170-16P-RDM
Detection Purposes	Whether SP-DKP-F170-16P-RDM samples can light up normally after high and low temperature tests
Test time	Start 2025-7-22 End: 2025-7-25

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

Test method and procedure:
1 Light up and age the SP-DKP-F170-16P-RDM sample for 2 hours to confirm that the luminaires are functioning properly
2 Place the SP-DKP-F170-16P-RDM in a constant temperature and humidity chamber and set the parameters 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-DKP-F170-16P-RDM 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

Table 4 Parameters of Temperature Shock Test

Environment			High temperature * °C	Exposure time h	Number of cycles
Indoor	IP20	- 20	70	1	15
	IP20 and above	- 20	70	2	15
Outdoors		-40	70	2	20
* For luminaires that are not suitable for high temperatures of 70 ° C (if the luminaire uses a material with a heat distortion temperature lower than 70 ° C), the high temperature can be set according to their claimed maximum tolerance temperature. b The choice of exposure time is related to the heat capacity of the luminaire. The method for determining the product exposure time can be seen in Appendix A. If the manufacturer can provide relevant information to prove that the product has A specific exposure time, the exposure time claimed by the manufacturer may be used.					

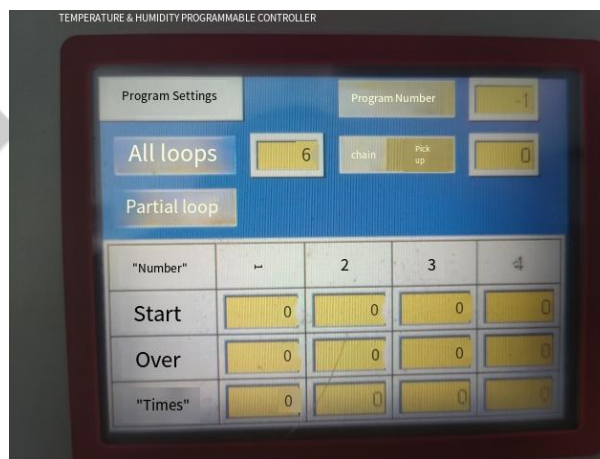
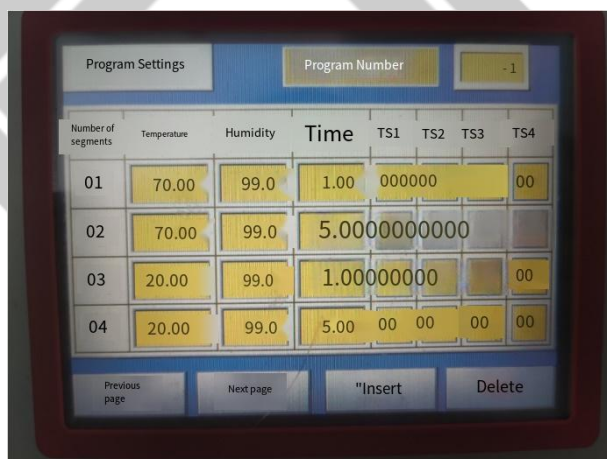
After the test, the label of the sample should be free of cracking, curling or peeling, the sample should be free of obvious damage, and the change in luminous flux measured in accordance with GB/T9468-2008 relative to the initial luminous flux should not exceed 10%.

Test data

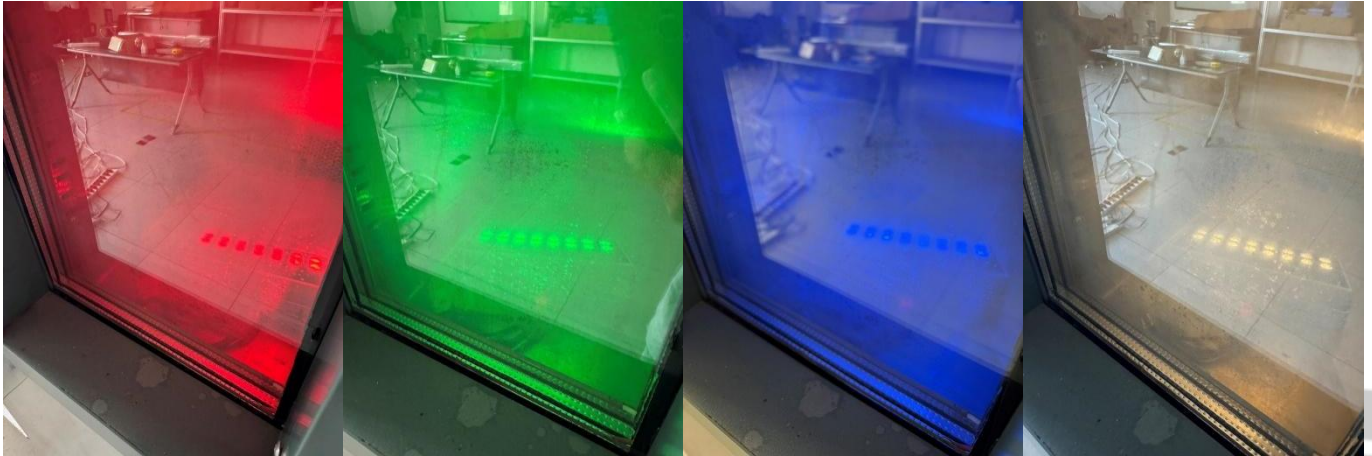
1. Before the test: Light up the lamp and let it age for 2 hours to confirm that the lamp is functioning properly



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 no signal loss, uncontrollability or non-illumination is found



(6H)

(12H)

(18H)

(24H)

4. After testing: Connect the luminaires and confirm that they are functioning properly (monochrome R-G-B-W-all lit)

