TEST REPORT

Product name:	**LED bulb**
Model and Specification:	**DS-14V-0004-06A**
Applicant:	**Zhongshan Kerisheng supply chain Management Co., LTD**
Factory:	**Guangdong Shengpu Lighting Technology Co., Ltd.**

Guangdong Tsaint Hi-tech Co., Ltd.

TEST REPORT
IEC 62612:2013/AMD2:2018

Self-ballasted LED lamps for general lighting services with supply voltages 50 V - Performance requirements

NB/COPANT 1737:2022

Eficiencia energética - Fuentes de iluminación LED - Especificaciones y etiquetado

Report Number.....:	TSGK-2025-1437-R
Date of issue.....:	2025-06-12
Total number of pages.....	15 pages
Name of Testing Laboratory preparing the Report.....:	Guangdong Tsaint Hi-tech Co., Ltd. 1,2,3,4,6,& -1/F., No.5, Gufeng South Road, Guzhen, Zhongshan, Guangdong, China
Applicant's name.....:	Zhongshan Kerisheng supply chain Management Co., LTD
Address.....:	Card 04, 33rd Floor, Lihe Commercial Center, 98 Tongxing Road, Guzhen Town, Zhongshan City
Test specification:	
Standard.....:	IEC 62612:2013/AMD2:2018 NB/COPANT 1737:2022 Applicant's special requirements
Test procedure.....:	--
Non-standard test method.....:	N/A
Test Report Form No.....:	--
Test Report Form(s) Originator.....:	--
Master TRF.....:	--

General disclaimer:

The test results presented in this report relate only to the object tested.
This reportshall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description.....:	LED bulb
Trade Mark.....:	
Name and address of manufacturer:	Guangdong Shengpu Lighting Technology Co., Ltd. Factory No. 03, 1st Floor, Building 2, No. 11, Gaoxin East Road, Jianghai District, Jiangmen City (Multiple Business Licenses at One Address)
Model/Type reference.....:	DS-14V-0004-06A
Ratings.....:	See 'General product information and other remarks'

List of Attachments (including a total number of pages in each attachment):

1.This test report includes: cover page, 1 page; NB/COPANT 1737:2022 and IEC 62612 report, 14 pages.

2.Appendix I: Photos of tested samples, totally 2 pages.

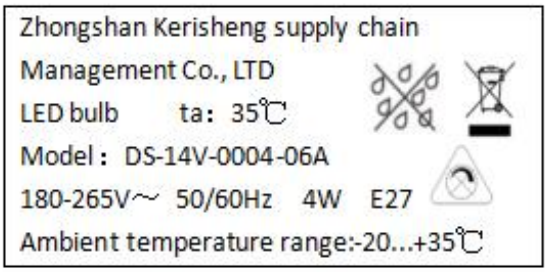
Summary of testing:

Tests performed (name of test and test clause):	**Testing location:**
Cl. 5, Marking; Cl. 6, Dimensions; Cl. 8, Lamp input; Cl. 9, Light output; Cl. 10, Colour nomenclature, variation and rendering; Cl. 11, Lamp life.	Guangdong Tsaint Hi-tech Co.,Ltd. 1,2,3,4,6,& -1/F., No.5, Gufeng South Road, Guzhen, Zhongshan, Guangdong, China

Copy of marking plate:

The artwork below maybe only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

Representative:



Rated luminous flux: 340lm

CCT: 2700K

Photometric code: 827/669

Remark:

1. The marking labels for other models are identical as above expect model name and ratings.

Test item particulars..... :	
Classification of installation and use..... :	For indoor use only
Supply Connection..... :	E27
Possible test case verdicts:	
- test case does not apply to the test object..... :	N/A
- test object does meet the requirement..... :	P (Pass)
- test object does not meet the requirement..... :	F (Fail)
Testing..... :	
Date of receipt of test item..... :	2024-08-29
Date (s) of performance of tests..... :	2024-08-29 to 2025-05-16
Tested by (name + signature)..... :	Liu guangming
Compiled by (+ signature)..... :	Wang juan
Approved by (+ signature)..... :	Fuyu Jiang

General remarks:

"(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 / ☒ point is used as the decimal separator.

Name and address of factory (ies)..... :	Guangdong Shengpu Lighting Technology Co., Ltd. Factory No. 03, 1st Floor, Building 2, No. 11, Gaoxin East Road, Jianghai District, Jiangmen City (Multiple Business Licenses at One Address)

General product information and other remarks:

1. The products covered by this report are LED bulb, used for general lighting applications.
2. All measurements were conducted at 230V~, 50Hz; other conditions were not considered in this report.

Model number	DS-14V-0004-06A
Rated input	180-265V~, 50/60Hz
Rated power	4W
Rated luminous flux	340lm
Photometric code	827/669
Rated lifetime ($L_{70}B_{50}$)	25000h
Lumen maintenance code	9
Categories of rated chromaticity coordinate values	6-step
CCT	2700K
CRI - Ra	80
Rated efficacy	85lm/W
Directionality	Non-directional
Dimensions	(Ø64*140)mm
Displacement factor	0.9
Temperature ramping	1K/min
LED name	SMD-710-60Ma
Quantity of LEDs	4pcs

Note: The centre chromaticity coordinates is: 2700K (cx=0.463, cy=0.420).

For Energy requirement:

Requiremen	Rated value	Measured value
Power	4 W	3.87 W
Luminous flux	340 lm	355.0 lm
CCT	2700 K	2708 K
CRI - Ra	80	82.5
Power factor	0.9	0.95
EC (kWh/1000h)	4 kWh/1000h	4 kWh/1000h
efficacy ηTM	85.0 lm/W	91.8 lm/W
EE class	F	F

Energy efficiency class	Total mains efficacy ηTM (lm/W)
A (most efficient)	210 ≤ ηTM
B	185 ≤ ηTM < 210
C	160 ≤ ηTM < 185
D	135 ≤ ηTM < 160
E	110 ≤ ηTM < 135
F	85 ≤ ηTM < 110
G (least efficient)	ηTM < 85

LED specification

No.	Model name	Manufacturer	VF (V)	IF (mA)	CCT (K)
1	SMD-710-60Ma	Jiangxi Zhaochi Guangyuan Technology Co., Ltd	56	70	2700

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict
5	**MARKING**		**P**
	- rated luminous flux (lm).....:	See general product information	P
	- rated colour.....:	See general product information	P
	- rated beam angle.....:	Non-directional	N/A
	- lamp photometric code.....:	See general product information	P
	- colour variation category.....:	See general product information	P
	- rated life and the rated lumen maintenance factor(L_x) .....:	See general product information	P
	- Failure rate (F_x).....:	See general product information	P
	- peak intensity (cd).....:	Non-directional	N/A
	- rated colour rendering index.....:	See general product information	P
	- ageing time.....:	0h	N/A
	- rated efficacy (lm/W).....:	See general product information	P
	- dimensions	See general product information	P
	- displacement factor.....:	See general product information	P
	- power factor.....:	See general product information	P
	- Location of the marking	Attached on lamp surface	P

6	**DIMENSIONS**		**P**
	Dimensions as indicated by manufacturer or responsible vendor	Measured value (average): (Ø64*140)mm	P
	Not exceed the outlines of the lamp to be replaced	Not decided by client	N/A

8	**LAMP INPUT**		**P**
8.1	**Lamp power**		**P**
	Measured lamp power.....:	See annex 1	—
	The power dissipated by the LED-lamp do not exceed the rated wattage by more than 10%		P
8.2	**Displacement factor**		**P**

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict
	Measured displacement factor.....:	See annex 1	—
	The measured displacement factor for each individual lamp of the sample is not less than the marked value by more than 0,05.		P
9	**LIGHT OUTPUT**		**P**
9.1	**Luminous flux**		**P**
	Measured total luminous flux (lm).....:	See annex 1	—
	The initial luminous flux of a LED lamp measured is not less than 90% of the rated luminous flux.....:	See annex 1	P
9.2	**Luminous intensity distribution, peak intensity and beam angle**		—
9.2.3	Luminous intensity distribution	Non-directional	—
9.2.4	Peak intensity value	Non-directional	—
9.2.5	Beam angle value	Non-directional	—
9.3	**EFFICACY**		**P**
	The lamp efficacy is calculated from the measured luminous flux divided by the measured input power. Measured efficacy (lm/W) .....:	See annex 1	—
	The efficacy of LED luminaire is not less than 80% of the rated efficacy .....:	See annex 1	P
10	**CORRELATED COLOUR TEMPERATURE AND COLOUR RENDERING**		**P**
10.1	Measured initial CCT..... ..... :	See annex 1	—
	Measured CCT after an operation time of 25% of rated lamp life (max 6000 hours) .....:		—
	Not move beyond the CCT tolerance category		P
10.2	Measured initial CRI.....:	See annex 1	—
	Not have decreased by more than 3 points from the rated CRI value		P
11	**LAMP LIFE**		**P**

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict
11.2	**Lumen maintenance**		P
	Measured initial luminous flux .....:	See annex 1	—
	Measured luminous flux after an operation time of 25% of rated lamp life (max 6000 hours) .....:	See annex 2	—
	The measured flux value after an operation time of 25% of rated lamp life (max 6000 hours) not less than the maximum lumen maintenance related to the rated life	Rated lifetime ($L_{70}B_{50}$): 25000h Measured time: 6000h	P
	The measured lumen maintenance corresponds with the “lumen maintenance category”		P
11.3	**Endurance tests**		**P**
11.3.2	Temperature cycling shock test	1000h	P
	At the end of the test all the LED lamps operate and have a luminous flux within the lumen maintenance code for 15 min and show no cracks or delaminating of the label.		P
11.3.3	Supply voltage switching test	12500 cycles	P
	At the end of the test all the LED lamps operate and have a luminous flux within the lumen maintenance code for 15 min		P
11.3.4	Operational high temperature stress test	1000h @ 45°C	P
	After cooling down to room temperature, all the lamps have a luminous flux of at least 70% of the initial value for 15 min.		P

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1 **TABLE: Initial Test Results for model DS-14V-0004-06A** **P**

Sample No	Test Voltage (V)	Test Current (A)	Lamp wattage (W)	Displacement factor	Power factor	Φ_{total} (lm)	Φ_{use} (lm)	Lamp efficacy (lm/W)	R9	CRI	CCT (K)	chromaticity		Colour consistency (SDCM)
												x	y	
1	230	0.084	3.89	0.99	0.95	358.2	358.2	92.08	8	82.5	2710	0.460	0.412	3.6
2	230	0.084	3.91	0.99	0.96	362.1	362.1	92.61	8	82.4	2707	0.460	0.412	3.7
3	230	0.084	3.88	0.99	0.95	352.4	352.4	90.82	8	82.3	2695	0.461	0.412	3.8
4	230	0.084	3.82	0.99	0.96	350.8	350.8	91.83	8	82.5	2711	0.460	0.412	3.7
5	230	0.084	3.91	0.99	0.95	359.9	359.9	92.05	8	82.4	2707	0.460	0.412	3.7
6	230	0.084	3.81	0.99	0.95	350.3	350.3	91.94	8	82.4	2703	0.460	0.412	3.7
7	230	0.064	3.78	0.99	0.95	352.4	352.4	93.23	10	82.9	2720	0.459	0.411	4.0
8	230	0.084	3.88	0.99	0.96	357.7	357.7	92.19	8	82.5	2713	0.460	0.412	3.6
9	230	0.084	3.82	0.99	0.95	350.9	350.9	91.86	8	82.4	2700	0.460	0.412	3.8
10	230	0.084	3.86	0.99	0.96	353.4	353.4	91.55	8	82.3	2696	0.461	0.412	3.8
11	230	0.084	3.91	0.99	0.95	361.5	361.5	92.46	8	82.5	2712	0.460	0.412	3.6
12	230	0.084	3.85	0.99	0.96	356.9	356.9	92.70	8	82.4	2699	0.461	0.412	3.8
13	230	0.085	3.82	0.99	0.95	349.6	349.6	91.52	8	82.4	2701	0.460	0.412	3.7
14	230	0.065	3.76	0.99	0.95	346.2	346.2	92.07	10	82.9	2722	0.458	0.411	4.1
15	230	0.084	3.89	0.99	0.96	352.1	352.1	90.51	8	82.4	2703	0.460	0.412	3.7
16	230	0.084	3.92	0.99	0.95	353.8	353.8	90.26	8	82.5	2712	0.460	0.412	3.6
17	230	0.065	3.95	0.99	0.96	357.6	357.6	90.53	10	82.9	2721	0.459	0.411	4.0
18	230	0.084	3.89	0.99	0.95	362.1	362.1	93.08	8	82.4	2704	0.460	0.412	3.7
19	230	0.084	3.86	0.99	0.95	353.2	353.2	91.50	8	82.5	2710	0.460	0.412	3.6
20	230	0.084	3.91	0.99	0.95	359.7	359.7	91.99	8	82.4	2706	0.460	0.412	3.7
Average	230	0.081	3.87	0.99	0.95	355.0	355.0	91.84	8	82.5	2708	0.460	0.412	3.7

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict

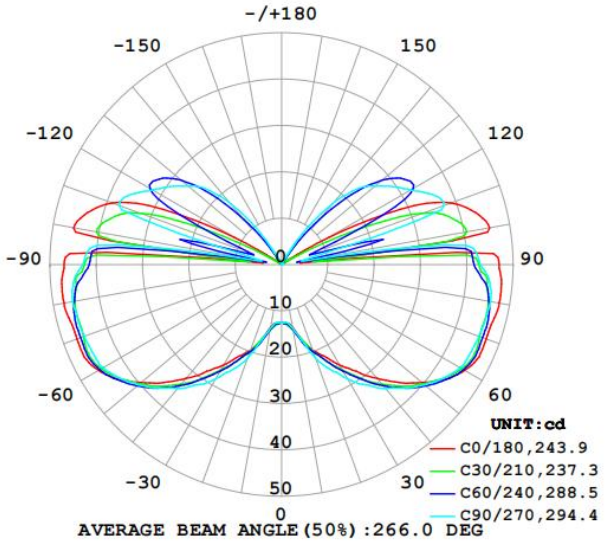
ANNEX 2	**TABLE: Test Result of Lumen Maintenance and Survival factor for model DS-14V-0004-06A**				**P**
Sample No	Test voltage (V)	Initial Φ_{total} (lm)	3000H Φ_{total} (lm)	Lumen maintenance (3000H)	Lamp survival factor
1	230	358.2	353.6	98.71%	P
2	230	362.1	358.1	98.89%	P
3	230	352.4	344.5	97.77%	P
4	230	350.8	343.1	97.81%	P
5	230	359.9	355.9	98.89%	P
6	230	350.3	347.0	99.07%	P
7	230	352.4	344.3	97.69%	P
8	230	357.7	353.9	98.95%	P
9	230	350.9	342.4	97.59%	P
10	230	353.4	346.7	98.09%	P
11	230	361.5	355.4	98.31%	P
12	230	356.9	350.6	98.23%	P
13	230	349.6	341.9	97.81%	P
14	230	346.2	339.0	97.91%	P
15	230	352.1	343.2	97.47%	P
16	230	353.8	349.3	98.73%	P
17	230	357.6	353.9	98.97%	P
18	230	362.1	355.5	98.17%	P
19	230	353.2	348.9	98.79%	P
20	230	359.7	354.7	98.61%	P
Average	**230**	**355.0**	**349.1**	**98.32%**	**100%**

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	**TABLE: Test Result of Lumen Maintenance and Survival factor for model DS-14V-0004-06A**				**P**
Sample No	Test voltage (V)	Initial Φ_{total} (lm)	6000H Φ_{total} (lm)	Lumen maintenance (6000H)	Lamp survival factor
1	230	358.2	347.4	96.99%	P
2	230	362.1	352.4	97.31%	P
3	230	352.4	343.8	97.55%	P
4	230	350.8	339.0	96.63%	P
5	230	359.9	347.7	96.61%	P
6	230	350.3	339.3	96.85%	P
7	230	352.4	344.2	97.67%	P
8	230	357.7	349.4	97.67%	P
9	230	350.9	343.4	97.87%	P
10	230	353.4	343.6	97.23%	P
11	230	361.5	353.4	97.75%	P
12	230	356.9	345.0	96.67%	P
13	230	349.6	341.6	97.71%	P
14	230	346.2	334.5	96.63%	P
15	230	352.1	341.4	96.95%	P
16	230	353.8	342.7	96.87%	P
17	230	357.6	347.3	97.11%	P
18	230	362.1	353.9	97.73%	P
19	230	353.2	343.8	97.35%	P
20	230	359.7	347.9	96.72%	P
Average	**230**	**355.0**	**345.1**	**97.19%**	**100%**

IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	TABLE: Luminous Intensity Distribution (Sample 1#) for model DS-14V-0004-06A					—
Io (cd)	Imax (cd)	Beam angle(°)	$\Phi_{90°}/\ \Phi_{total}$	$\Phi_{120°}/\ \Phi_{total}$	Φ_{total}(lm)	Factor F_{TM}
12.6	47.76	266.0	13.7%	28.9%	358.2	1.000

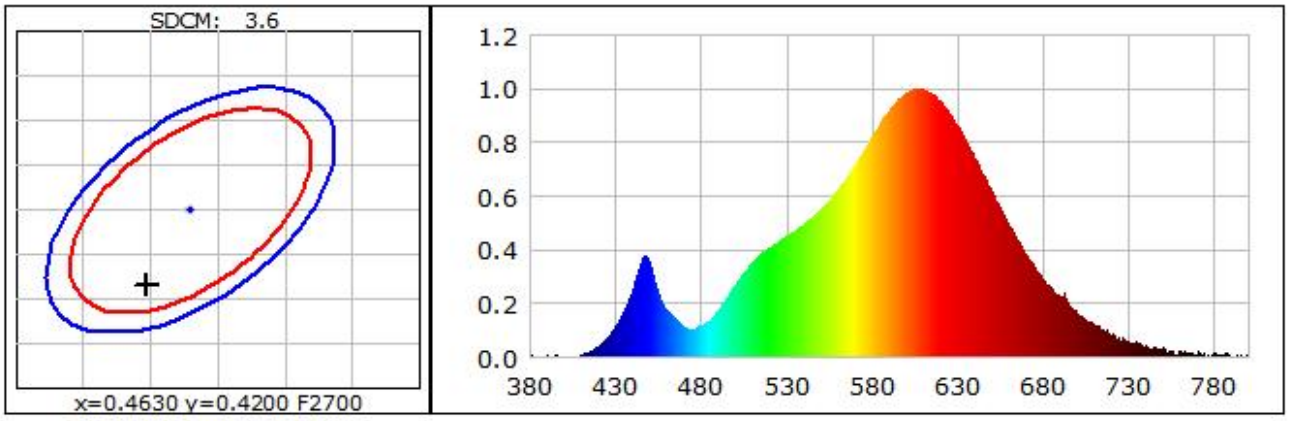


IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	TABLE: Photometric test (Sample 1#) for model DS-14V-0004-06A				—
CCT	Ra	R9	x	y	SDCM
2710K	82.5	8	0.4597	0.4117	3.6

Chromaticity coordinates: x=0.4597 y=0.4117 u(u')=0.2619 v=0.3518 v'=0.5277
CCT: Tc=2710K (duv=0.00040) Color Ratio: R=0.250 G=0.731 B=0.019
Peak Wavelength: 607.3nm Half Bandwidth: 119.2nm
Dominant Wavelength: 584.0nm Color Purity: 0.616
Color Render Index: Ra= 82.5

R1 =81	R2 =90	R3 =97	R4 =82	R5 =81	R6 =89	R7 =82	R8 =58
R9 =8	R10=77	R11=82	R12=74	R13=82	R14=99	R15=73	



IEC 62612 NB/COPANT 1737:2022			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	TABLE:Critial components information					
Object / part No.	**Code**	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1)]**
Lamp Housing Kit	C	Chengdu Tianxing Lighting Appliance Co., Ltd	ST64	glass	--	Tested with appliance
Lamp Cap	C	Guangdong Kaisheng Technology Development Co., Ltd	E27	Material:aluminium	--	Tested with appliance

Supplementary information:

[1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039.

The codes above have the following meaning:

A - The component is replaceable with another one, also certified, with equivalent characteristics

B - The component is replaceable if authorised by the test house

C - Integrated component tested together with the appliance

D - Alternative component

Test equipment list

Equipment	Brand	Model	Serial No.	Calibration due date
Full-Field Speed Goniophotometer	Everfine	GO-R5000	TSGK-R-058	2025-06-19
High Accuracy Array Spectroradiometer	Everfine	HAAS-2000	TSGK-R-058-1	2025-06-19
High Accurate Intelligent Photometer Head	Everfine	ID-1000	TSGK-R-058-2	2025-06-19
High Accurate Intelligent Photometer Head	Everfine	ID-1000	TSGK-R-058-3	2025-06-19
Digital Power Meter	Everfine	PF2010	TSGK-R-058-4	2025-06-19
AC Testing Power Source	Everfine	PCR-1000WH	TSGK-R-058-5	2025-06-19
Digital CC&CV DC Power Supply	Everfine	WY12010	TSGK-R-058-6	2025-06-19
Total Spectral Radiant Flux Standard Lamp	Everfine	D908S	TSGK-R-058-7	2025-06-19
Digital Power Meter	Inventfine	WT500	TSGK-R-021	2026-04-23
Integral Sphere	Inventfine	2M(Z)	TSGK-R-022	2026-04-28
AC Power Source	Inventfine	CHP-500	TSGK-R-024	2026-04-23
Digital CC&CV DC Power Supply	Inventfine	WL3005	TSGK-R-025	2026-04-23
Standard Light Source	Everfine	D204	TSGK-R-038	2026-05-06
Auxiliary Lamp	Everfine	D204C	TSGK-R-039	2026-05-09
Digital Power Meter	Everfine	PF310A	TSGK-R-034	2026-04-23
AC Testing Power Source	Everfine	DPS1010	TSGK-R-036	2026-04-23
Electrical Life Test System	DCUU	ELTS-D	TSGK-R-005	2025-11-21
Light Flickering Analyzer	DUOPURUI	FPM100	TSGK-R-048	2025-11-28
Goniophotometers System	Everfine	GO-2000	TSGK-R-063	2025-11-20
AC&DC Digital Power Meter	Everfine	PF9802	TSGK-R-063-1	2025-11-20
Digital CC&CV DC Power Supply	Everfine	WY3010	TSGK-R-063-2	2025-11-20
Goniophotometer Controller	Everfine	CT400	TSGK-R-063-3	2025-11-20
AC Power Source	HengXinLong	HXL-1103	TSGK-R-063-4	2025-11-27
High Accurate Intelligent Photometer Head	Everfine	ID-1000	TSGK-R-063-5	2025-12-12

Appendix I: Photos of tested samples

Picture 1.: General view of DS-14V-0004-06A