

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-040

ISSUE DATE

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REVISION DATE

None

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DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250623168GZU-040

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLFL75127XXXXX

Remark: "XXXXX" represents the color of the appearance.

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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<u>TEST:</u>	Electrical and Photometric as required to the IES LM-79 test standard.
<u>AUTHORIZATION:</u>	The testing performed was authorized by signed quote number: QGZ250619128.
<u>STANDARDS USED:</u>	The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:
IES LM-79-24	Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI C78.377-2017 (R2022)	Specifications of the Chromaticity of Solid State Lighting Products
<u>DESCRIPTION OF SAMPLE:</u>	The client submitted one sample of model SLFL75127XXXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-026.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	Guangzhou Xiongyi Precision Metalworking Co., Ltd Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450
<u>DATES OF TESTS:</u>	05 August 2025
<u>ISSUED BY:</u>	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
<u>TEST LOCATION:</u>	Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China

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TEST REPORT

SUMMARY

Model Number:	SLFL75127XXXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLFL75127XXXXX

Criteria	Result
Total Lumen Output	265.2 lm
Total Power	4.1 W
Luminaire Efficacy	65.2 lm/W
S/MH(C0/180)	0.12
S/MH(C90/270)	0.74
Correlated Color Temperature (CCT)	2728 K
Color Rendering Index (CRI)	92
R9	70
Chromaticity Coordinate (x)	0.4579
Chromaticity Coordinate (y)	0.4107
Chromaticity Coordinate (u')	0.2612
Chromaticity Coordinate (v')	0.5271

Remark:

N/A

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TEST REPORT

EQUIPMENT LIST

Equipment Used	Model Number	Control Number
Goniophotometer System	Go-R5000	SA063-16
KONICA MINOLTA - Illuminance meter	CX-2B_WL	SA063-16-01
Standard Lamp	D215S	SA063-16-06
Digital Power Meter	PLM3000	SA063-16-09
AC power source for Goniophotometer	PCR-1000WH	SA063-16-10
Temperature Meter	S500-TH	SA047-182

GENERAL REMARK

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When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

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TEST REPORT

TEST METHOD

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IES LM-79

Light Distribution and Output Measurements

Light Distribution and total light output (luminous flux) were measured using a Go-R5000 Type-C Rotating Mirror Goniophotometer. Temperature 25°C and relative humidity of 60% was measured at a position in the testing laboratory.

The lamp rotates only around the fixed vertical axle in the prescribed burning position. The lamp and mirror permit the measurement of luminous intensity at the direction of any horizontal or vertical angle without tilting the lamp. The lamp was allowed to stabilize before measurements were made.

Chromaticity Measurements

Chromaticity was measured using a 2 meters integrating sphere spectral lamp measurement system, 4 π geometry, with an interior coating reflectance no less than 95 %. Temperature was measured at a position inside the sphere shielded from direct light. Relative humidity of 65% was measured at a position in the testing laboratory.

Spectral radiant flux measurements were made using spectroradiometer attached to the detector port of the integrating sphere. Each lamp was allowed to stabilise before measurements were made. The calibration of the integrating sphere spectroradiometer system is by the reference/standard lamps which are traceable to National Institute of Metrology P.R. CHINA. Lamp efficacy (lumens per watt) for each lamp model was then computed based on the luminous flux result. Electrical measurements including voltage, power and power factor were measured using YOKOGAWA - Digital Power Meter., model WT310E.

Correction factor (self-absorption) has been considered when doing measurement.

Standard lamp used for Goniophotometer method:

Model: D215S

Current: 4.809A DC

Standard lamp used for integrating sphere:

Model: D204

Current: 3.958A DC

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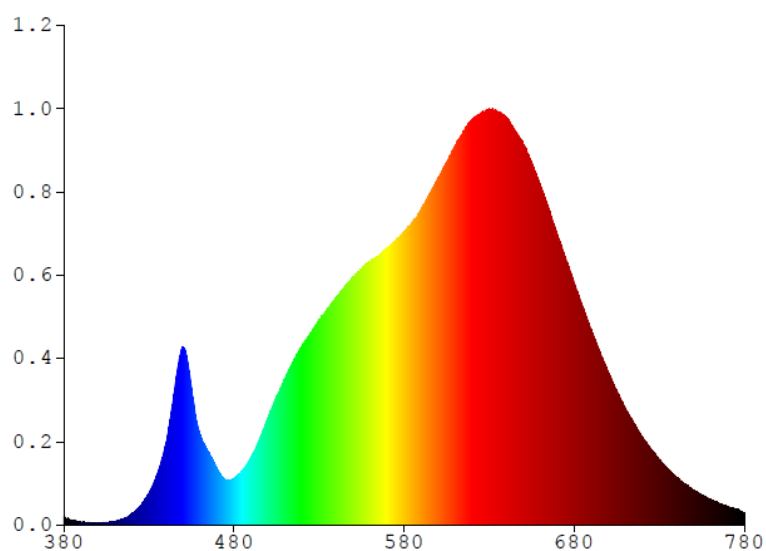
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLFL75127XXXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.4821	480	2.4897	580	15.7100	680	12.9390	780	0.6296
385	0.2333	485	2.9243	585	16.2110	685	11.6730		
390	0.1633	490	3.6126	590	16.8600	690	10.4500		
395	0.0942	495	4.6045	595	17.7240	695	9.2648		
400	0.1115	500	5.7397	600	18.5780	700	8.1635		
405	0.1482	505	6.8684	605	19.3960	705	7.1800		
410	0.2051	510	7.8388	610	20.3050	710	6.2475		
415	0.3462	515	8.7721	615	21.0730	715	5.4604		
420	0.5943	520	9.6091	620	21.6960	720	4.7157		
425	1.0179	525	10.2560	625	22.0230	725	4.0905		
430	1.6948	530	10.9710	630	22.2500	730	3.5021		
435	2.7442	535	11.5780	635	22.0730	735	3.0121		
440	4.3670	540	12.1310	640	21.8230	740	2.5583		
445	7.1559	545	12.7410	645	21.1240	745	2.1998		
450	9.5206	550	13.2560	650	20.3720	750	1.8801		
455	7.2614	555	13.7140	655	19.3660	755	1.6113		
460	4.8415	560	14.1040	660	18.2290	760	1.3752		
465	3.8953	565	14.4130	665	16.9330	765	1.1760		
470	2.9943	570	14.8020	670	15.5620	770	1.0078		
475	2.4146	575	15.1910	675	13.9950	775	0.8510		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL75127XXXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

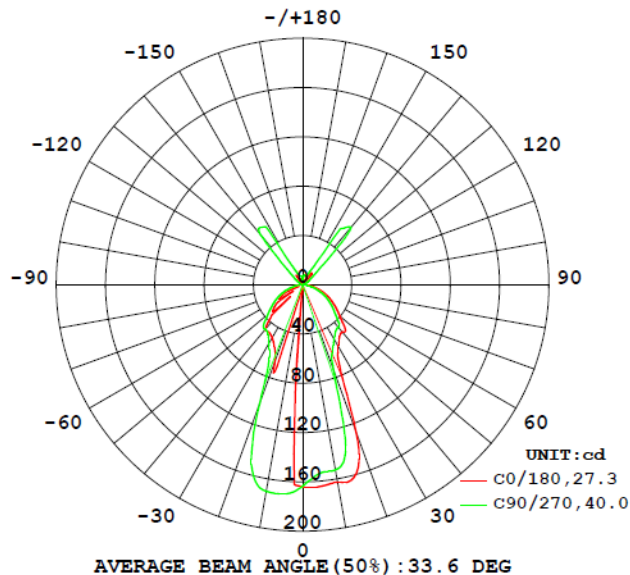
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit	Chromaticit	Chromaticit	Chromaticit
					y	y	y	y
					Coordinate	Coordinate	Coordinate	Coordinate
					(x)	(y)	(u')	(v')
SLFL75127XXXXX								
S2506231 68-026	base-up	2728	92	70	0.4579	0.4107	0.2612	0.5271

Photometric and Electrical Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute	Lumen
						Luminous Flux (Lumens)	Efficacy (Lumens Per Watt)
SLFL75127XXXXX							
S2506231 68-026	base-up	120.1	47.3	4.1	0.717	265.2	65.2

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL75127XXXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	163.8	163.7	163.6	163.4	163.3
5	164.2	159.3	155.8	153.9	154.0
10	162.7	157.2	154.3	153.2	152.5
15	161.6	154.8	149.4	143.3	135.0
20	126.8	113.4	96.3	82.4	73.2
25	69.7	65.5	61.9	59.7	57.7
30	58.1	56.5	54.7	53.0	51.1
35	52.1	51.5	50.1	48.6	46.7
40	50.0	50.4	47.5	48.4	45.2
45	48.3	45.8	44.9	41.1	40.2
50	39.3	38.4	36.7	34.8	33.6
55	33.2	32.2	30.7	29.6	28.5
60	27.9	26.9	25.7	24.7	23.5
65	22.7	21.7	20.8	19.7	18.4
70	17.3	16.4	15.8	14.5	13.4
75	12.3	11.6	11.2	9.9	8.8
80	7.6	6.9	6.3	5.4	4.5
85	3.5	3.0	2.4	1.9	1.4
90	1.1	0.9	0.8	0.9	1.0
95	1.3	1.3	1.3	1.6	1.9
100	2.2	2.2	1.8	1.6	1.7
105	1.2	1.2	1.0	0.8	0.8
110	0.5	0.7	0.8	0.8	1.0
115	1.0	1.9	2.3	2.4	2.5
120	1.6	3.2	3.6	3.9	4.1
125	2.6	5.0	5.5	5.9	6.3
130	4.1	8.1	8.9	9.6	10.5
135	6.8	17.3	19.4	22.5	26.0
140	11.6	52.2	56.9	60.5	60.9
145	11.8	56.8	58.8	57.5	56.0
150	4.9	20.3	18.6	16.7	15.2
155	2.7	9.7	9.2	9.4	9.2
160	2.3	7.1	6.8	7.3	7.5
165	2.2	6.4	6.6	7.1	7.5
170	2.6	6.4	7.5	7.8	8.1
175	2.8	3.6	4.5	4.9	4.7
180	0.3	0.2	0.1	0.1	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL75127XXXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLFL75127XXXXX		
0-30	78.5	29.6
0-40	109.7	41.4
0-60	168.7	63.6
0-90	201.6	76.0
60-90	32.9	12.4
0-180	265.2	100.0

Beam Angle

Total Beam Angle(°)

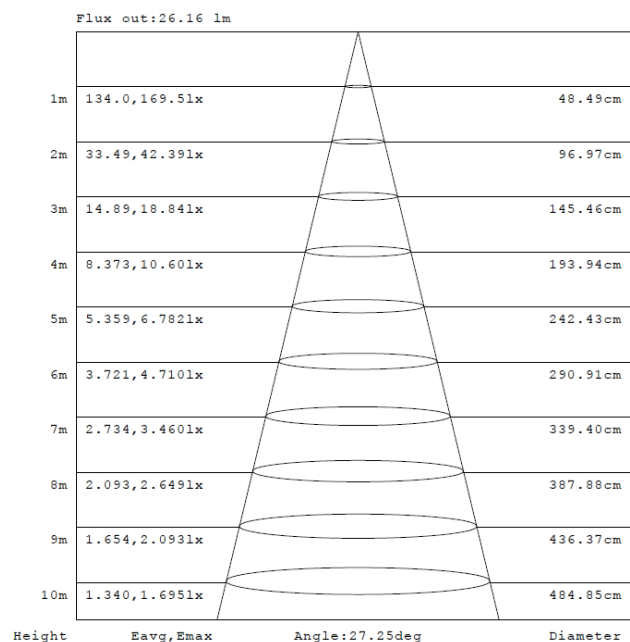
33.6

Illumination Plots

Model No.: SLFL75127XXXXX

Mount Height: 2.5 m

Illuminance - Cone of Light



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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TEST REPORT

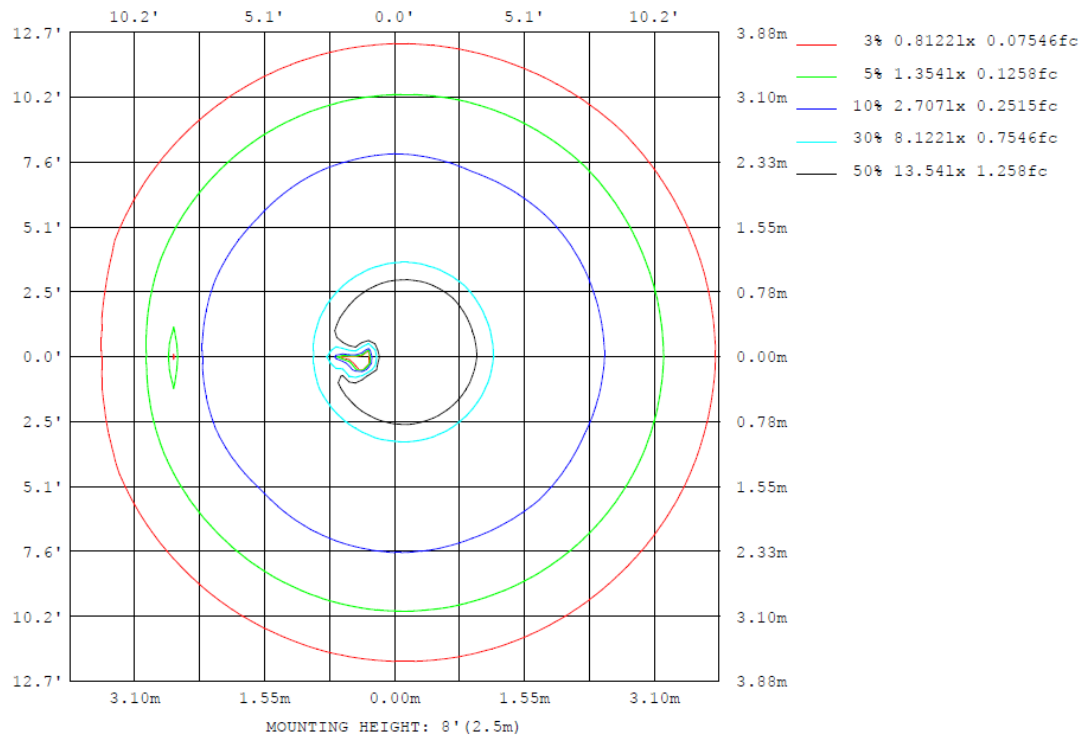
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL75127XXXXX

Model No.: SLFL75127XXXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

水 RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL75127XXXXX

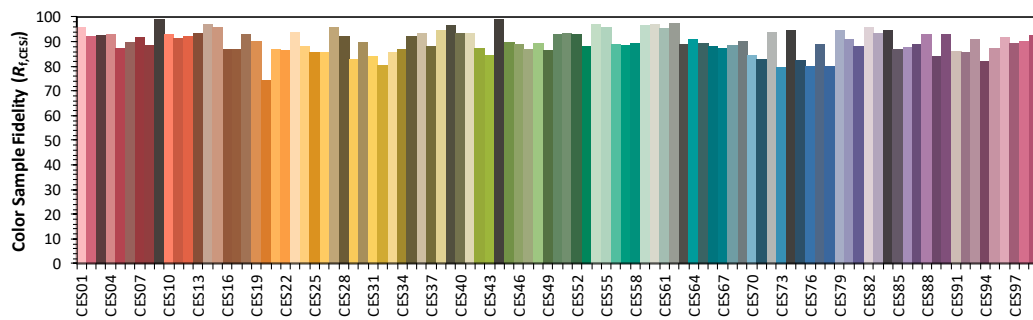
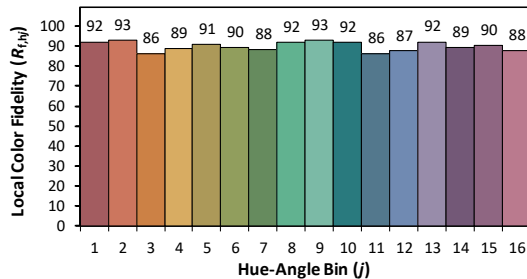
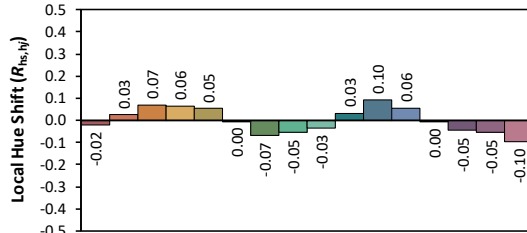
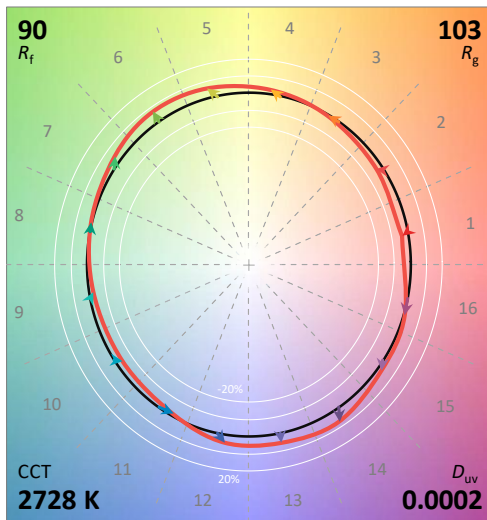
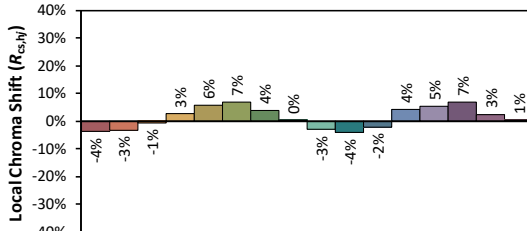
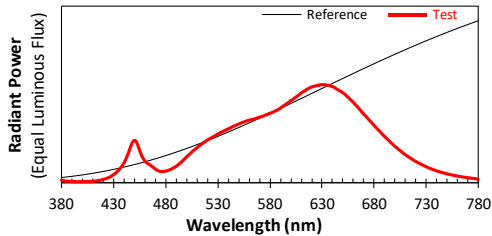
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/8/5

Model: SLFL75127XXXXX



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4579
 y 0.4107
 u' 0.2612
 v' 0.5271

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 70

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

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TEST REPORT

PRODUCT PICTURE (not to scale)

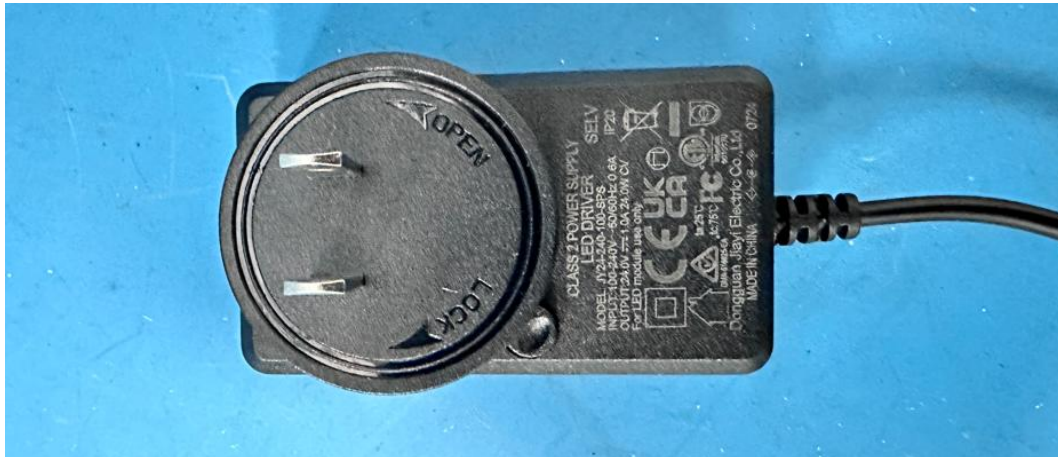


External view of SLFL75127XXXXX

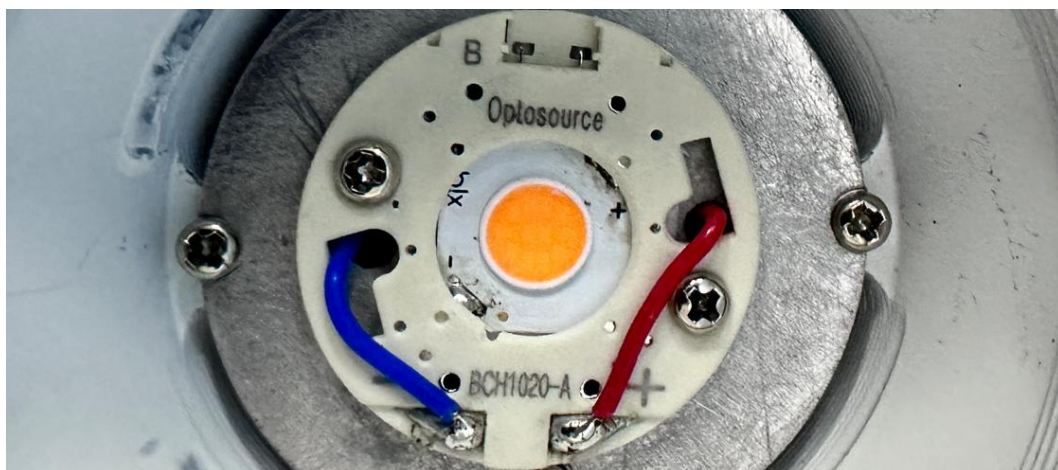
***** End of Page *****

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver JY24-240-100-SPS



View of LED

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****