

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-007

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None

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Report format for LM-79_G

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Report No.: 250227200GZU-007

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPC62827XX

Remark: "XX" are denoted appearance color.

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: QGZ250224121.
<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 SLPC62827XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-015.
<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>	14 March 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:	SLPC62827XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPC62827XX

Criteria	Result
Total Lumen Output	880.5 lm
Total Power	14.7 W
Luminaire Efficacy	59.7 lm/W
S/MH(C0/180)	1.27
S/MH(C90/270)	1.31
Correlated Color Temperature (CCT)	2614 K
Color Rendering Index (CRI)	97
R9	99
Chromaticity Coordinate (x)	0.4655
Chromaticity Coordinate (y)	0.4095
Chromaticity Coordinate (u')	0.2667
Chromaticity Coordinate (v')	0.5278

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: 3.948A DC

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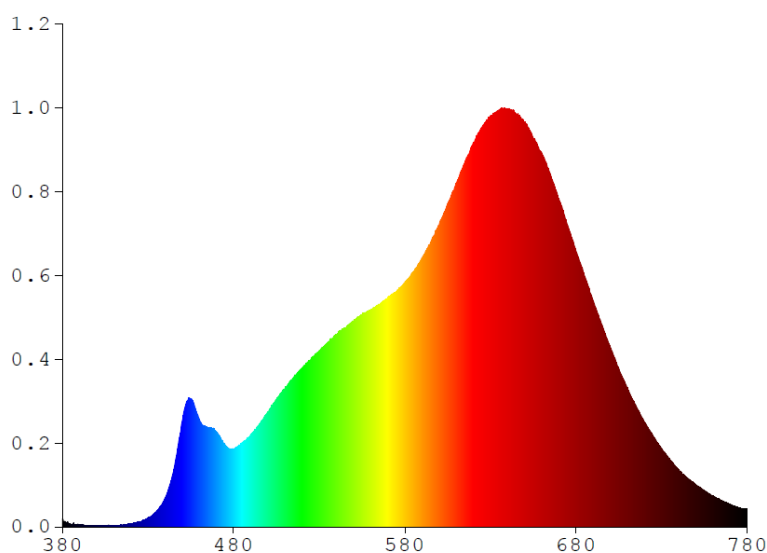
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPC62827XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	2.5574	480	24.3490	580	76.2580	680	85.7080	780	5.7157
385	0.7210	485	26.2540	585	79.5490	685	77.8950		
390	0.6241	490	28.8570	590	83.8480	690	70.3400		
395	0.4310	495	32.0750	595	88.7240	695	62.9060		
400	0.3590	500	35.8170	600	94.1820	700	55.8070		
405	0.3867	505	39.7810	605	100.730	705	49.0480		
410	0.4835	510	43.2390	610	107.160	710	42.9590		
415	0.5586	515	46.5450	615	113.620	715	37.5600		
420	0.9558	520	49.6000	620	119.740	720	32.5560		
425	1.5767	525	52.0760	625	124.700	725	28.1070		
430	2.7625	530	55.0170	630	128.280	730	24.1980		
435	4.8611	535	57.5430	635	130.100	735	20.8430		
440	8.9440	540	60.0450	640	130.440	740	17.6530		
445	17.6500	545	61.9470	645	128.580	745	15.1210		
450	32.8210	550	64.1580	650	126.270	750	13.0550		
455	39.9690	555	66.1740	655	121.080	755	11.2420		
460	33.3880	560	67.6680	660	116.490	760	9.5772		
465	30.9510	565	69.2830	665	109.810	765	8.1361		
470	29.6040	570	71.5310	670	101.870	770	6.9719		
475	25.4280	575	73.4100	675	92.2930	775	5.9783		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62827XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

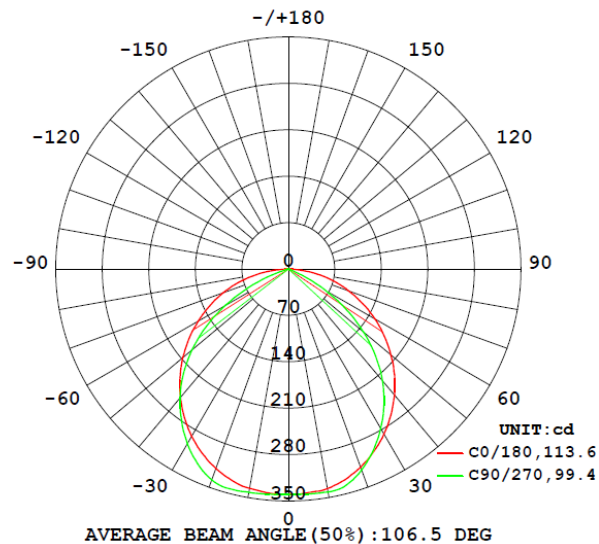
Photometric Measurements at 25°C – Distribution Method

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')
SLPC62827XX								
S2502272 00-015	base-up	2614	97	99	0.4655	0.4095	0.2667	0.5278

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 Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
SLPC62827XX							
S2502272 00-015	base-up	120.2	127.7	14.7	0.961	880.5	59.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62827XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	340.4	339.6	339.5	339.9	340.2
5	338.6	336.7	337.6	339.7	340.4
10	336.4	332.8	335.5	339.9	341.3
15	328.7	325.7	331.9	336.6	337.2
20	317.7	316.4	323.6	322.6	322.2
25	303.8	305.0	306.7	302.6	301.8
30	287.5	291.1	285.0	278.9	277.7
35	268.8	272.4	260.1	252.3	250.7
40	248.2	248.8	232.8	222.8	220.4
45	225.8	222.5	203.2	189.4	185.7
50	201.6	193.9	170.5	152.0	147.4
55	176.2	163.8	134.4	111.8	106.1
60	149.8	132.1	95.5	69.6	63.6
65	123.3	98.5	55.1	28.9	23.4
70	96.8	63.0	15.4	0.2	0.1
75	70.6	26.0	0.1	0.0	0.0
80	43.8	0.2	0.0	0.0	0.0
85	14.6	0.1	0.0	0.0	0.0
90	0.1	0.1	0.1	0.0	0.0
95	0.1	0.1	0.1	0.0	0.0
100	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1
110	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1
120	0.1	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2
130	0.3	0.3	0.3	0.3	0.3
135	0.3	0.3	0.4	0.4	0.4
140	0.4	0.4	0.4	0.4	0.4
145	0.4	0.4	0.5	0.5	0.5
150	0.5	0.5	0.5	0.5	0.5
155	0.5	0.5	0.5	0.5	0.5
160	0.5	0.5	0.5	0.5	0.5
165	0.5	0.5	0.5	0.5	0.5
170	0.5	0.5	0.5	0.5	0.5
175	0.5	0.5	0.5	0.5	0.5
180	0.5	0.5	0.5	0.5	0.5

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62827XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPC62827XX		
0-30	270.8	30.8
0-40	442.1	50.2
0-60	755.4	85.8
0-90	879.3	99.9
60-90	123.9	14.1
0-180	880.5	100.0

Beam Angle

Total Beam Angle(°)

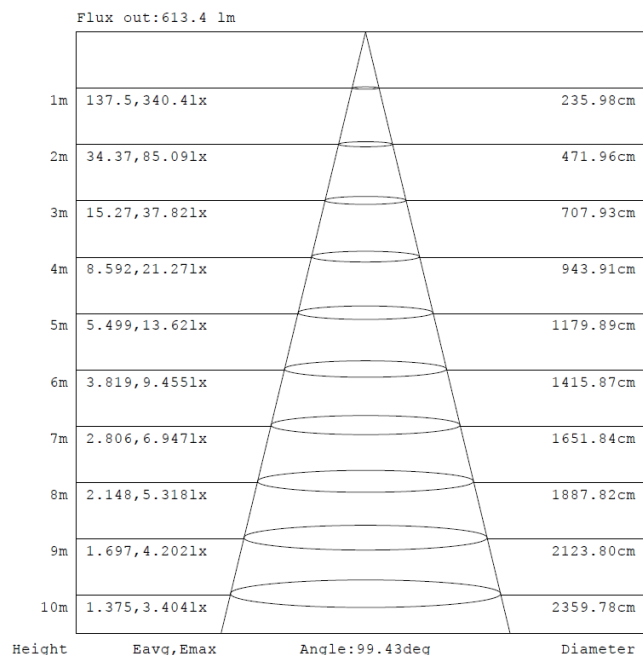
106.5

Illumination Plots

Model No.: SLPC62827XX

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

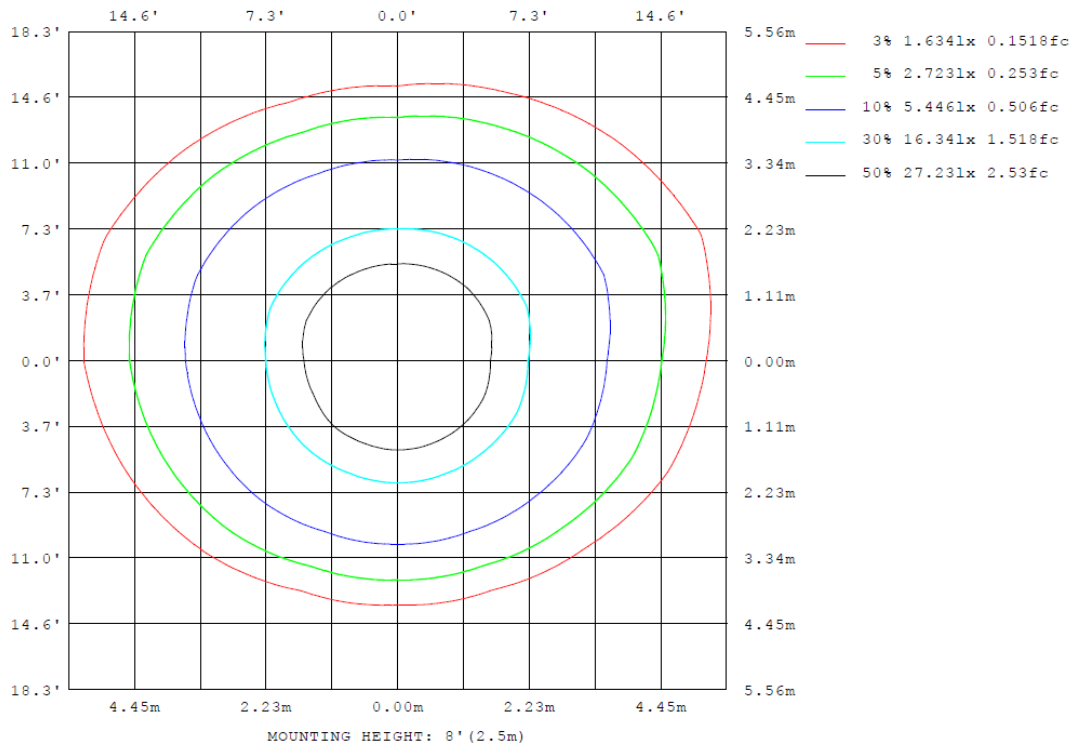
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62827XX

Model No.: SLPC62827XX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62827XX

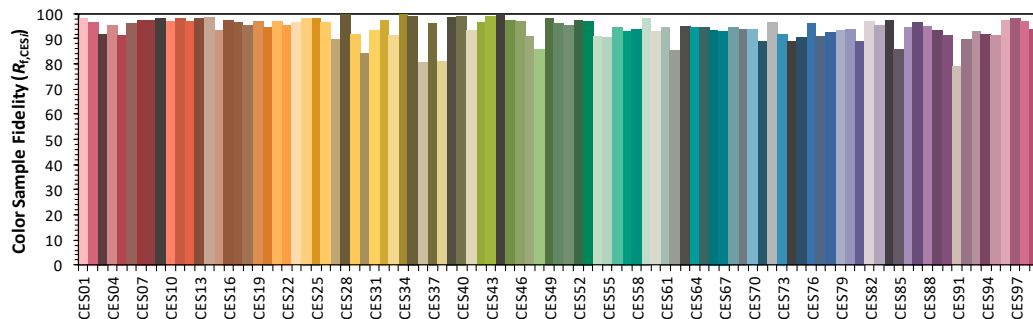
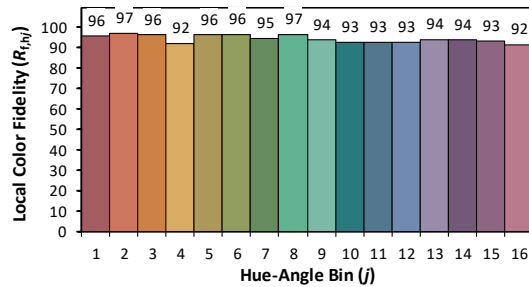
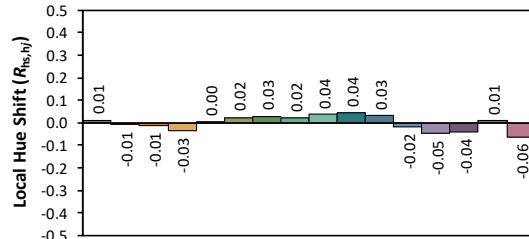
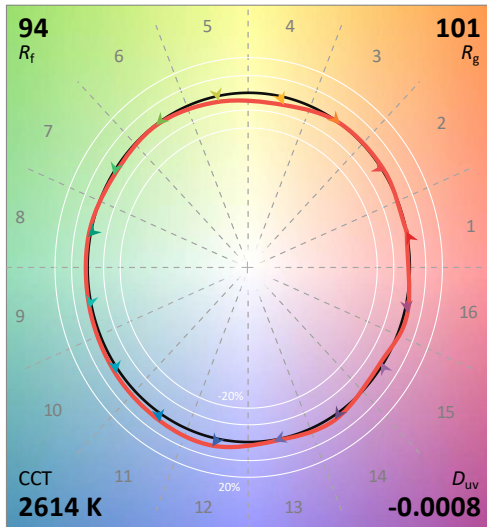
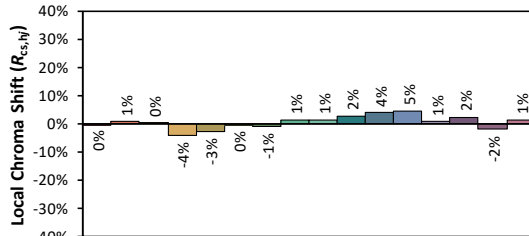
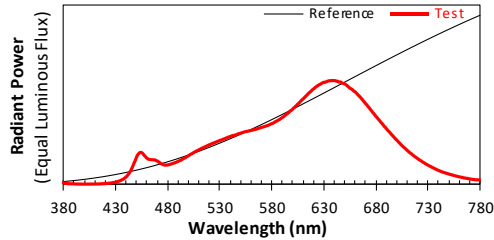
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/14

Model: SLPC62827XX



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

x 0.4655
 y 0.4095
 u' 0.2667
 v' 0.5278

CIE 13.3-1995
(CRI)

R_a 97

R_g 99

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

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

TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLPC62827XX



View of LED driver DS25W24VBF1UD-0000

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

TEST REPORT

PRODUCT PICTURE (not to scale)



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 *****