

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-008

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250227200GZU-008

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPC62927XX

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 SLPC62927XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-016.
<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:	SLPC62927XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPC62927XX

Criteria	Result
Total Lumen Output	1385.2 lm
Total Power	23.5 W
Luminaire Efficacy	59.0 lm/W
S/MH(C0/180)	1.25
S/MH(C90/270)	0.89
Correlated Color Temperature (CCT)	2595 K
Color Rendering Index (CRI)	97
R9	98
Chromaticity Coordinate (x)	0.4676
Chromaticity Coordinate (y)	0.4105
Chromaticity Coordinate (u')	0.2675
Chromaticity Coordinate (v')	0.5285

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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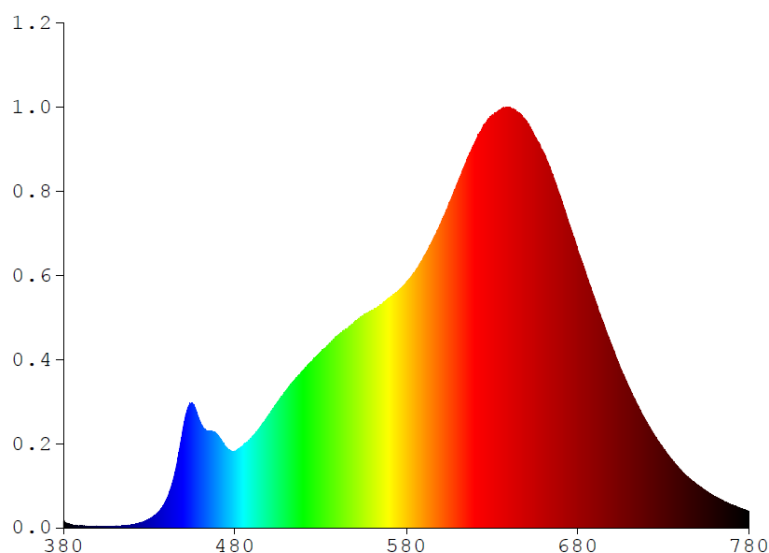
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPC62927XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	2.6675	480	35.8920	580	115.610	680	130.2000	780	7.6022
385	1.4527	485	39.0510	585	120.520	685	118.5200		
390	1.0394	490	42.8690	590	127.320	690	107.3200		
395	0.6945	495	47.7440	595	134.830	695	95.9180		
400	0.6821	500	53.3970	600	143.110	700	85.1000		
405	0.6100	505	59.1510	605	152.950	705	74.7330		
410	0.6310	510	64.7210	610	162.610	710	65.6190		
415	0.9540	515	69.6860	615	172.450	715	57.4350		
420	1.5151	520	74.2830	620	181.380	720	49.7880		
425	2.4110	525	78.1870	625	189.400	725	42.9740		
430	4.1453	530	82.6760	630	194.120	730	36.9700		
435	7.1794	535	86.7630	635	197.000	735	31.8910		
440	13.1640	540	90.5870	640	197.710	740	27.0920		
445	25.7120	545	93.4120	645	195.190	745	23.1580		
450	47.4020	550	96.8640	650	191.300	750	20.0710		
455	58.5480	555	99.8540	655	183.880	755	17.1350		
460	49.2460	560	102.2100	660	176.670	760	14.6780		
465	45.4480	565	104.8100	665	166.520	765	12.5620		
470	43.4570	570	108.1900	670	155.030	770	10.6700		
475	37.8050	575	111.2400	675	140.350	775	9.1559		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62927XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

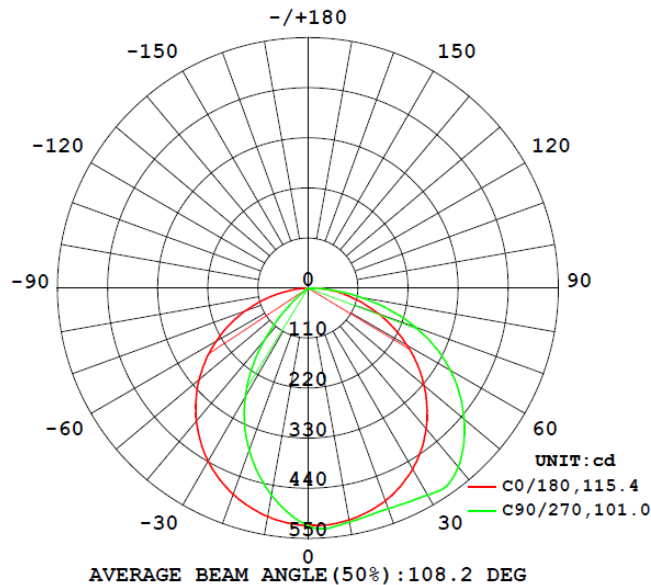
Photometric Measurements at 25°C – Distribution Method

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')
SLPC62927XX								
S2502272 00-016	base-up	2595	97	98	0.4676	0.4105	0.2675	0.5285

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	Lumen Efficacy
						Flux (Lumens)	(Lumens Per Watt)
SLPC62927XX							
S2502272 00-016	base-up	120.1	200.1	23.5	0.978	1385.2	59.0

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62927XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	521.8	521.8	521.9	522.0	521.7
5	521.6	527.5	529.7	529.4	529.3
10	517.3	523.2	521.4	521.7	522.2
15	508.9	511.6	512.8	516.3	517.3
20	496.9	498.4	505.2	513.1	515.8
25	480.4	482.2	498.1	514.3	518.8
30	459.1	463.1	492.2	518.3	525.0
35	433.5	442.0	487.2	524.3	530.8
40	403.6	421.3	484.2	509.7	513.3
45	369.8	400.2	466.9	481.3	484.2
50	332.9	379.3	434.1	445.4	447.8
55	292.8	359.9	394.6	404.2	406.6
60	251.0	325.6	350.3	358.6	360.9
65	207.8	280.9	302.0	307.3	308.8
70	164.0	232.0	248.4	249.3	250.1
75	121.3	179.7	188.6	185.2	186.0
80	82.4	122.4	122.6	117.1	118.0
85	43.4	58.6	53.8	50.3	51.5
90	3.3	2.8	4.3	3.4	4.1
95	0.1	0.1	0.1	0.0	0.0
100	0.1	0.1	0.0	0.0	0.0
105	0.2	0.1	0.0	0.0	0.0
110	0.2	0.1	0.1	0.0	0.0
115	0.2	0.1	0.1	0.0	0.0
120	0.2	0.2	0.1	0.1	0.1
125	0.3	0.2	0.2	0.1	0.1
130	0.4	0.3	0.2	0.2	0.2
135	0.4	0.4	0.3	0.3	0.3
140	0.5	0.5	0.4	0.4	0.4
145	0.6	0.6	0.5	0.5	0.5
150	0.7	0.6	0.6	0.6	0.6
155	0.7	0.7	0.7	0.7	0.7
160	0.7	0.7	0.7	0.7	0.7
165	0.8	0.8	0.8	0.8	0.8
170	0.8	0.8	0.8	0.8	0.8
175	0.7	0.8	0.8	0.8	0.8
180	0.7	0.7	0.8	0.8	0.8

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62927XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPC62927XX		
0-30	388.2	28.0
0-40	631.0	45.6
0-60	1086.4	78.4
0-90	1383.4	99.9
60-90	297.0	21.5
0-180	1385.2	100.0

Beam Angle

Total Beam Angle(°)

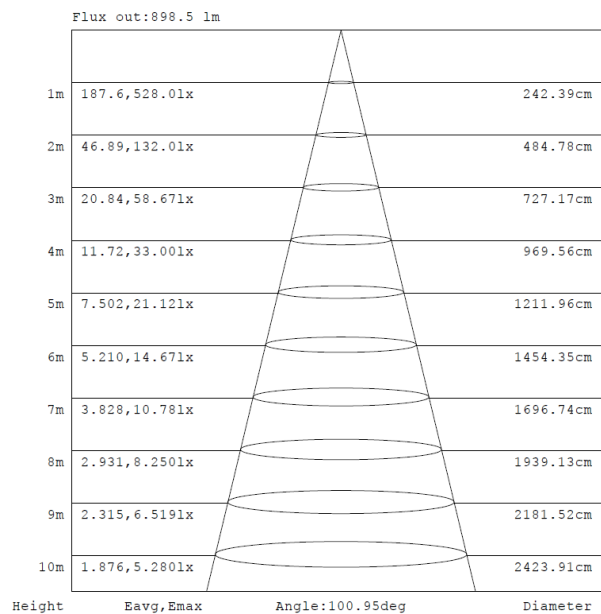
108.2

Illumination Plots

Model No.: SLPC62927XX

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

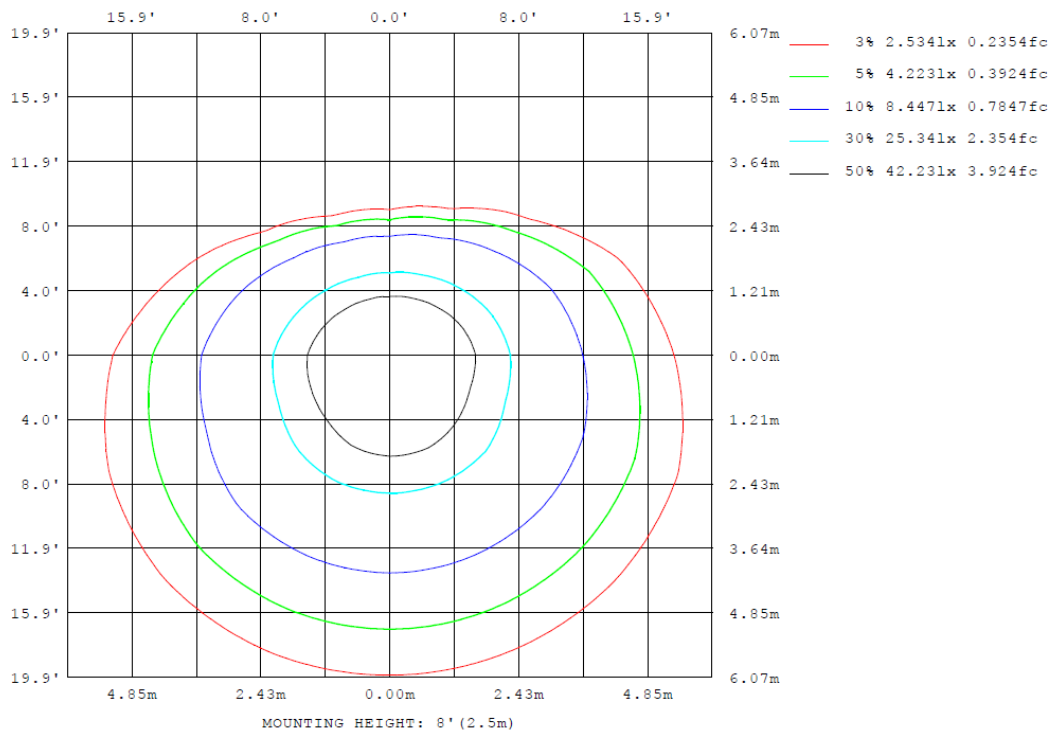
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62927XX

Model No.: SLPC62927XX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62927XX

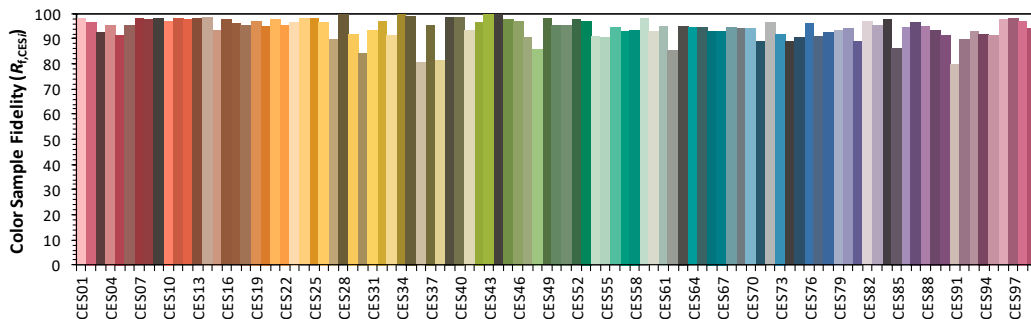
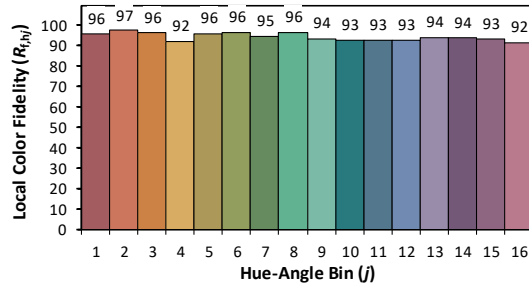
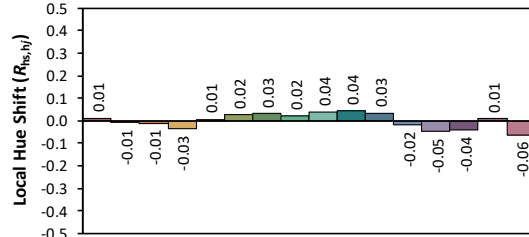
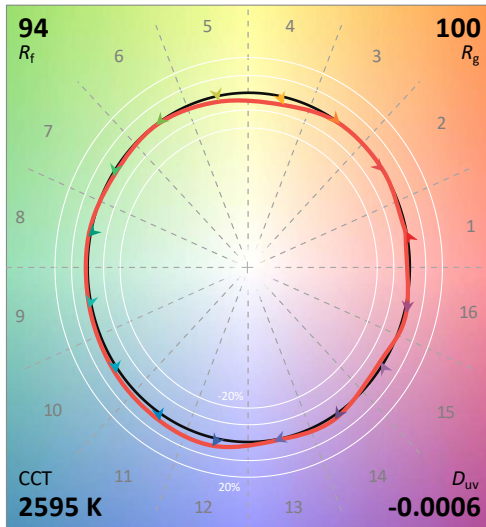
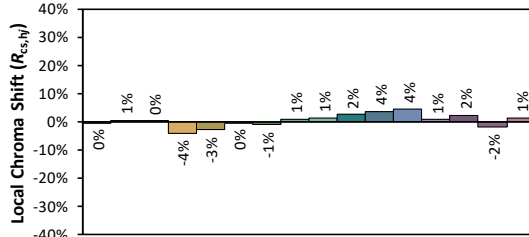
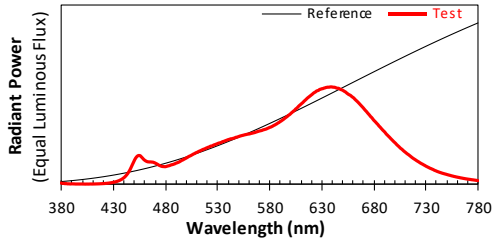
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/14

Model: SLPC62927XX



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

x 0.4676
 y 0.4105
 u' 0.2675
 v' 0.5285

CIE 13.3-1995
(CRI)

R_a 97

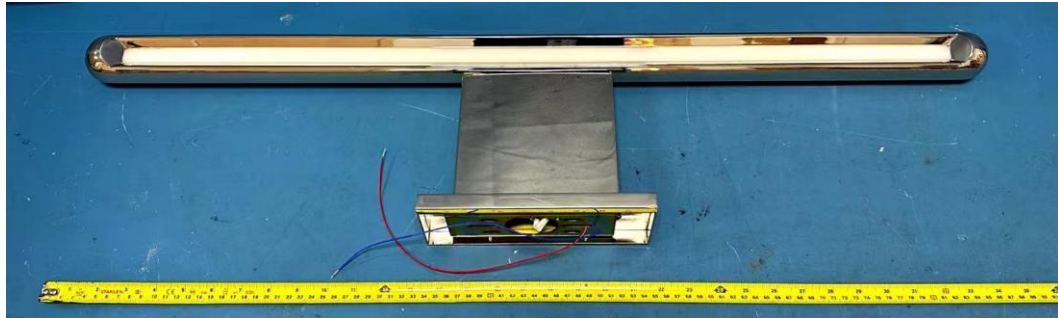
R_g 98

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 SLPC62927XX



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 *****