

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-005

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250227200GZU-005

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPC62627XX

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 SLPC62627XX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-013.
<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>	12 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:	SLPC62627XX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPC62627XX

Criteria	Result
Total Lumen Output	446.1 lm
Total Power	7.9 W
Luminaire Efficacy	56.2 lm/W
S/MH(C0/180)	1.26
S/MH(C90/270)	1.12
Correlated Color Temperature (CCT)	2636 K
Color Rendering Index (CRI)	97
R9	99
Chromaticity Coordinate (x)	0.4645
Chromaticity Coordinate (y)	0.4105
Chromaticity Coordinate (u')	0.2655
Chromaticity Coordinate (v')	0.5280

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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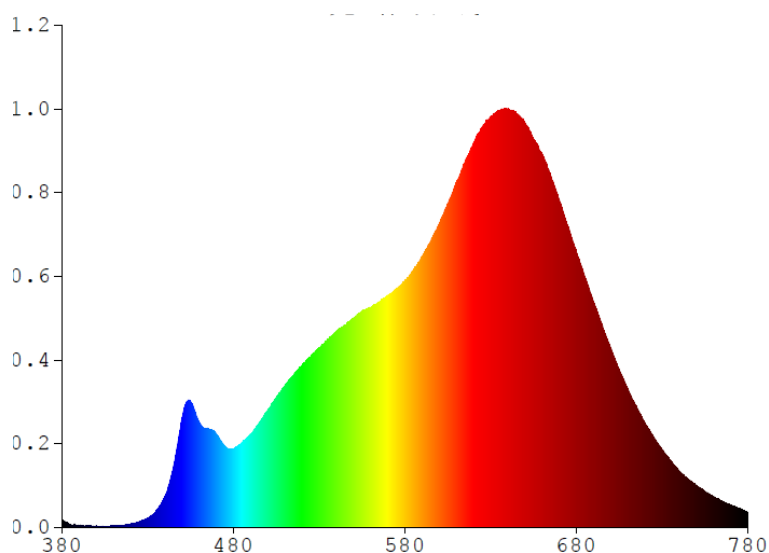
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPC62627XX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.9378	480	12.5420	580	39.5810	680	44.0290	780	2.3641
385	0.4531	485	13.6100	585	41.2430	685	40.0320		
390	0.3249	490	14.9820	590	43.3930	690	36.1140		
395	0.2480	495	16.7350	595	45.8600	695	32.4080		
400	0.2578	500	18.7470	600	48.6550	700	28.7060		
405	0.2139	505	20.7890	605	51.8940	705	25.2050		
410	0.2175	510	22.6980	610	55.2350	710	22.1080		
415	0.3102	515	24.3620	615	58.5140	715	19.3530		
420	0.5532	520	25.9380	620	61.5260	720	16.7290		
425	0.8761	525	27.3080	625	64.1830	725	14.4460		
430	1.5279	530	28.8090	630	65.8700	730	12.4530		
435	2.6515	535	30.1550	635	66.7170	735	10.6810		
440	4.9423	540	31.4470	640	67.0520	740	9.0349		
445	9.6028	545	32.3700	645	66.1430	745	7.7644		
450	17.3100	550	33.5220	650	64.7980	750	6.7439		
455	20.1640	555	34.5690	655	62.1710	755	5.7325		
460	16.8610	560	35.1940	660	59.8290	760	4.9476		
465	15.8700	565	36.0460	665	56.3310	765	4.2071		
470	14.9750	570	37.1840	670	52.3510	770	3.5817		
475	12.9380	575	38.1530	675	47.4530	775	3.0546		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62627XX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

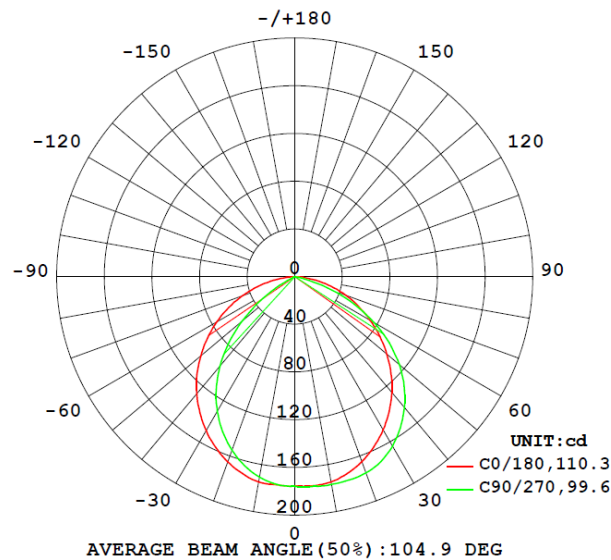
Photometric Measurements at 25°C – Distribution Method

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')
SLPC62627XX								
S2502272 00-013	base-up	2636	97	99	0.4645	0.4105	0.2655	0.5280

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)
SLPC62627XX							
S2502272 00-013	base-up	120.1	68.3	7.9	0.967	446.1	56.2

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62627XX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	175.9	175.9	175.9	175.9	175.9
5	175.9	176.2	176.2	176.5	176.6
10	174.8	176.1	177.7	176.7	177.0
15	170.8	173.4	176.3	176.0	176.5
20	164.9	168.7	173.2	174.3	175.0
25	157.4	162.6	168.9	170.5	171.1
30	148.4	155.3	162.5	163.6	164.0
35	138.3	146.8	153.7	154.2	154.6
40	127.0	137.2	142.8	143.0	143.2
45	114.3	126.0	130.3	129.9	129.9
50	101.0	112.9	116.3	114.8	114.6
55	87.3	98.8	100.7	97.3	96.6
60	73.2	83.8	83.1	77.8	76.7
65	59.1	67.9	63.7	56.7	55.3
70	45.4	51.2	43.4	35.1	33.6
75	31.5	33.6	22.2	13.9	12.6
80	17.9	15.1	3.3	0.0	0.0
85	5.2	0.1	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0
105	0.1	0.0	0.0	0.0	0.0
110	0.1	0.0	0.0	0.0	0.0
115	0.1	0.1	0.0	0.0	0.0
120	0.1	0.1	0.1	0.0	0.0
125	0.1	0.1	0.1	0.1	0.1
130	0.1	0.1	0.1	0.1	0.1
135	0.2	0.1	0.1	0.1	0.1
140	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2
150	0.2	0.2	0.2	0.2	0.2
155	0.3	0.3	0.2	0.2	0.2
160	0.3	0.3	0.3	0.3	0.3
165	0.3	0.3	0.3	0.3	0.3
170	0.3	0.3	0.3	0.3	0.3
175	0.3	0.3	0.3	0.3	0.3
180	0.3	0.3	0.3	0.3	0.3

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62627XX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPC62627XX		
0-30	137.9	30.9
0-40	224.3	50.3
0-60	381.6	85.5
0-90	445.5	99.9
60-90	63.9	14.4
0-180	446.1	100.0

Beam Angle

Total Beam Angle(°)

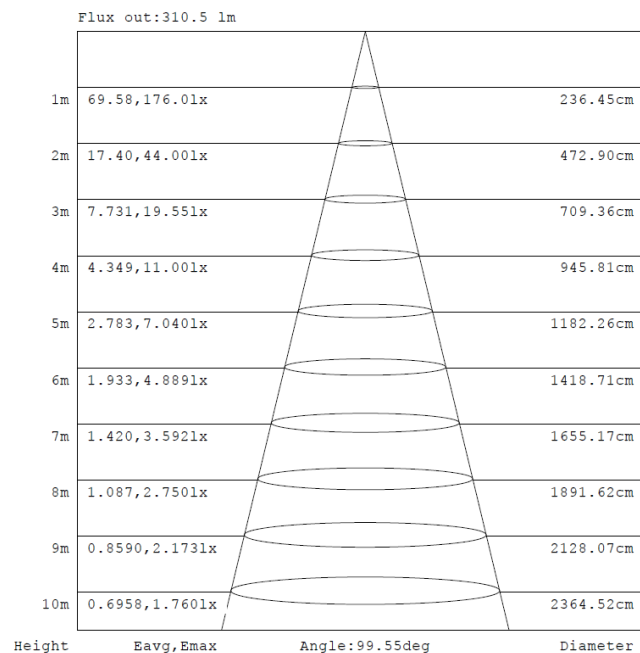
104.9

Illumination Plots

Model No.: SLPC62627XX

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

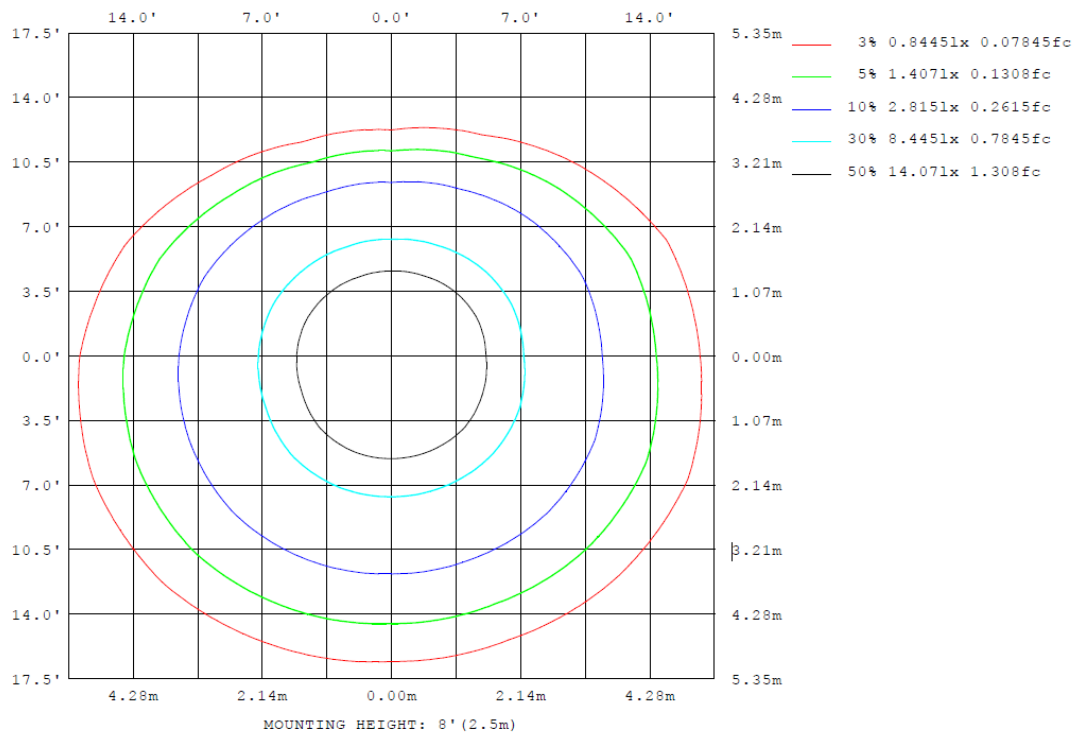
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62627XX

Model No.: SLPC62627XX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC62627XX

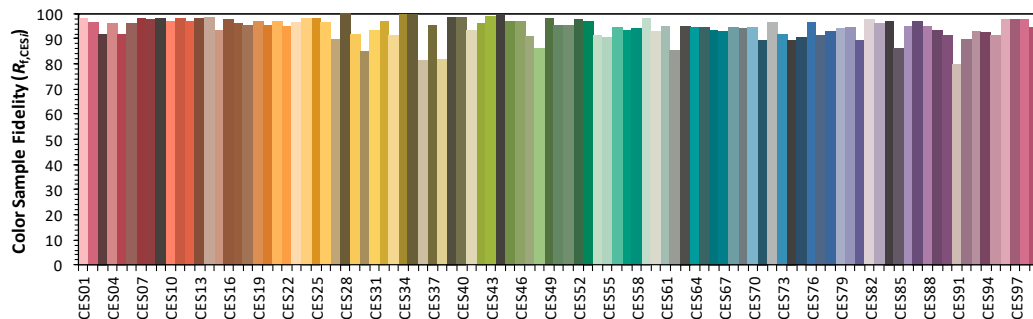
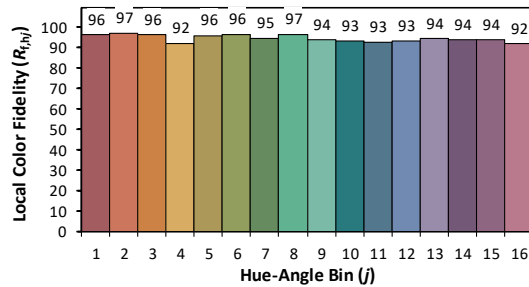
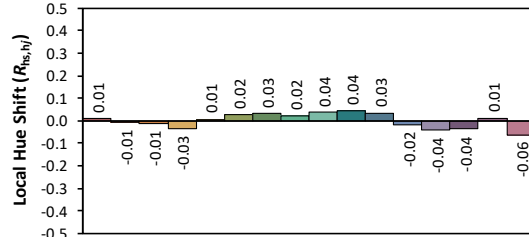
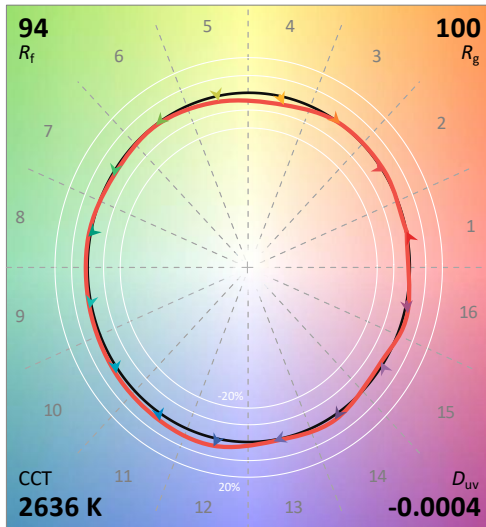
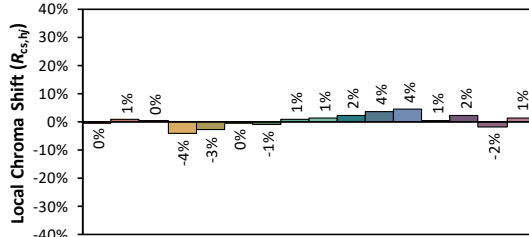
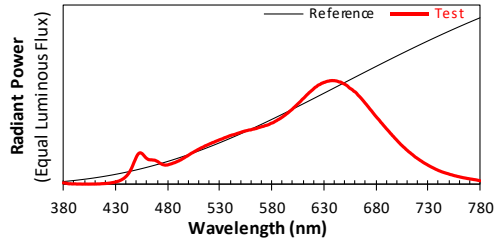
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/12

Model: SLPC62627XX



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

x 0.4645
 y 0.4105
 u' 0.2655
 v' 0.5280

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.

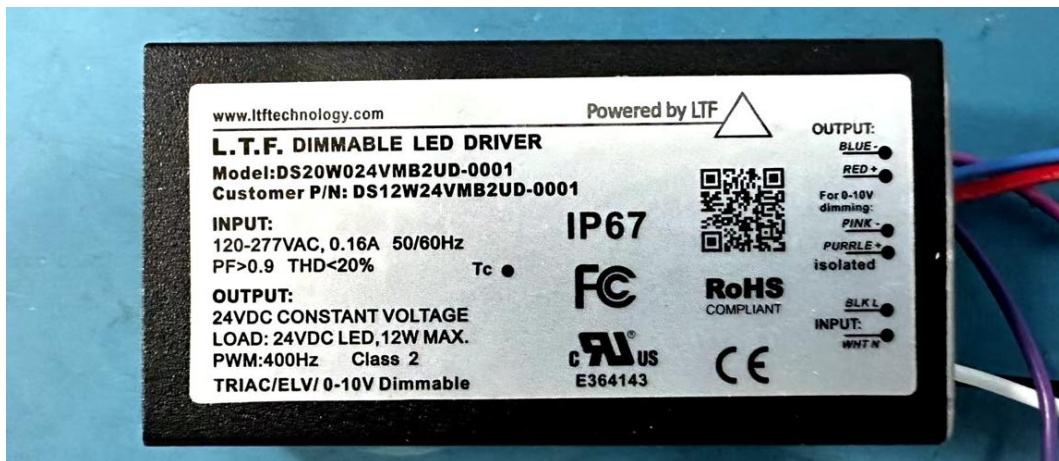
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLPC62627XX



View of LED driver DS12W24VMB2UD-0001

***** 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 *****