

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-008

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REVISION DATE

None

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Report No.: 250623168GZU-008

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPC76227XXX

Remark: "XXX" 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 SLPC76227XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-006.
<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>	09 July 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:	SLPC76227XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPC76227XXX

Criteria	Result
Total Lumen Output	705.8 lm
Total Power	12.1 W
Luminaire Efficacy	58.6 lm/W
S/MH(C0/180)	1.27
S/MH(C90/270)	1.25
Correlated Color Temperature (CCT)	2625 K
Color Rendering Index (CRI)	93
R9	62
Chromaticity Coordinate (x)	0.4649
Chromaticity Coordinate (y)	0.4098
Chromaticity Coordinate (u')	0.2661
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: 3.958A DC

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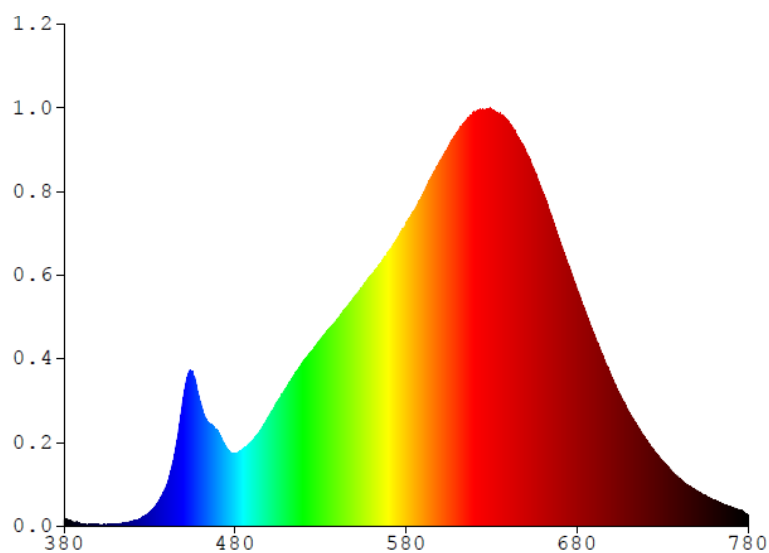
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPC76227XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.2643	480	3.5029	580	14.7060	680	11.5210	780	0.5079
385	0.1926	485	3.7934	585	15.3810	685	10.4200		
390	0.1184	490	4.1667	590	16.1470	690	9.3121		
395	0.0947	495	4.6696	595	16.9940	695	8.3186		
400	0.0840	500	5.3937	600	17.7830	700	7.2855		
405	0.0784	505	6.0887	605	18.5010	705	6.4277		
410	0.0867	510	6.7327	610	19.1690	710	5.5800		
415	0.1546	515	7.3881	615	19.7150	715	4.9117		
420	0.2437	520	8.0325	620	20.1000	720	4.2464		
425	0.3972	525	8.5095	625	20.2710	725	3.6869		
430	0.6705	530	9.0870	630	20.2510	730	3.1639		
435	1.1779	535	9.5754	635	20.1000	735	2.7213		
440	1.9977	540	10.0860	640	19.6710	740	2.3033		
445	3.6550	545	10.6130	645	18.9730	745	1.9782		
450	6.3708	550	11.1720	650	18.2610	750	1.7279		
455	7.4674	555	11.6880	655	17.3040	755	1.4785		
460	5.9405	560	12.2720	660	16.2200	760	1.2674		
465	5.0080	565	12.7660	665	15.0940	765	1.0863		
470	4.5714	570	13.3580	670	13.8400	770	0.9347		
475	3.8028	575	14.0000	675	12.4700	775	0.7936		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC76227XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

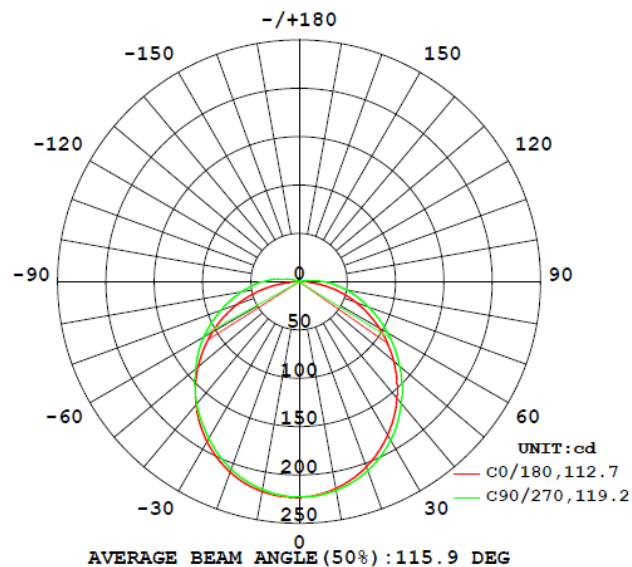
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit y	Chromaticit y	Chromaticit y	Chromaticit y
					Coordinate (x)	Coordinate (y)	Coordinate (u')	Coordinate (v')
SLPC76227XXX								
S2506231 68-006	base-up	2625	93	62	0.4649	0.4098	0.2661	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	Lumen
						Flux (Lumens)	Efficacy (Lumens Per Watt)
SLPC76227XXX							
S2506231 68-006	base-up	120.1	101.7	12.1	0.988	705.8	58.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC76227XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	223.0	222.9	222.9	222.8	222.8
5	221.1	221.1	221.4	221.7	222.1
10	217.2	217.2	217.9	218.6	219.3
15	211.4	211.4	212.4	213.5	214.5
20	203.6	203.8	205.2	206.6	207.9
25	194.2	194.4	196.2	198.0	199.4
30	183.3	183.6	185.7	187.7	189.3
35	171.0	171.5	173.9	176.0	177.7
40	157.5	158.0	160.8	162.8	164.6
45	143.0	143.8	146.5	148.8	150.6
50	127.8	128.8	131.5	134.1	135.9
55	111.9	112.9	115.8	118.9	120.8
60	95.7	96.6	100.2	103.9	105.9
65	79.2	80.0	84.6	89.1	91.1
70	62.5	63.5	69.5	74.7	76.7
75	46.1	48.2	56.0	61.1	62.9
80	29.4	33.7	42.5	48.3	50.1
85	13.0	20.9	30.2	36.0	37.6
90	1.0	10.1	19.0	24.6	26.0
95	0.1	1.7	9.0	14.0	15.2
100	0.1	0.1	1.7	5.4	6.2
105	0.1	0.1	0.1	0.2	0.7
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	0.1	0.1	0.1	0.1
125	0.1	0.1	0.2	0.2	0.2
130	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2
140	0.3	0.3	0.3	0.3	0.3
145	0.3	0.3	0.3	0.3	0.3
150	0.3	0.3	0.3	0.3	0.3
155	0.3	0.3	0.3	0.3	0.3
160	0.3	0.4	0.4	0.4	0.4
165	0.4	0.4	0.4	0.4	0.4
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 SLPC76227XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPC76227XXX		
0-30	172.6	24.5
0-40	282.7	40.1
0-60	505.3	71.6
0-90	689.0	97.6
60-90	183.7	26.0
0-180	705.8	100.0

Beam Angle

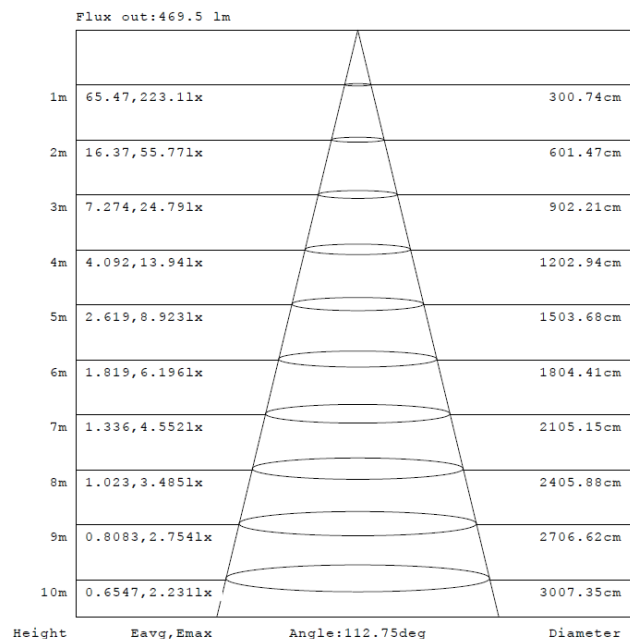
Total Beam Angle(°)
115.9

Illumination Plots

Model No.: SLPC76227XXX

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

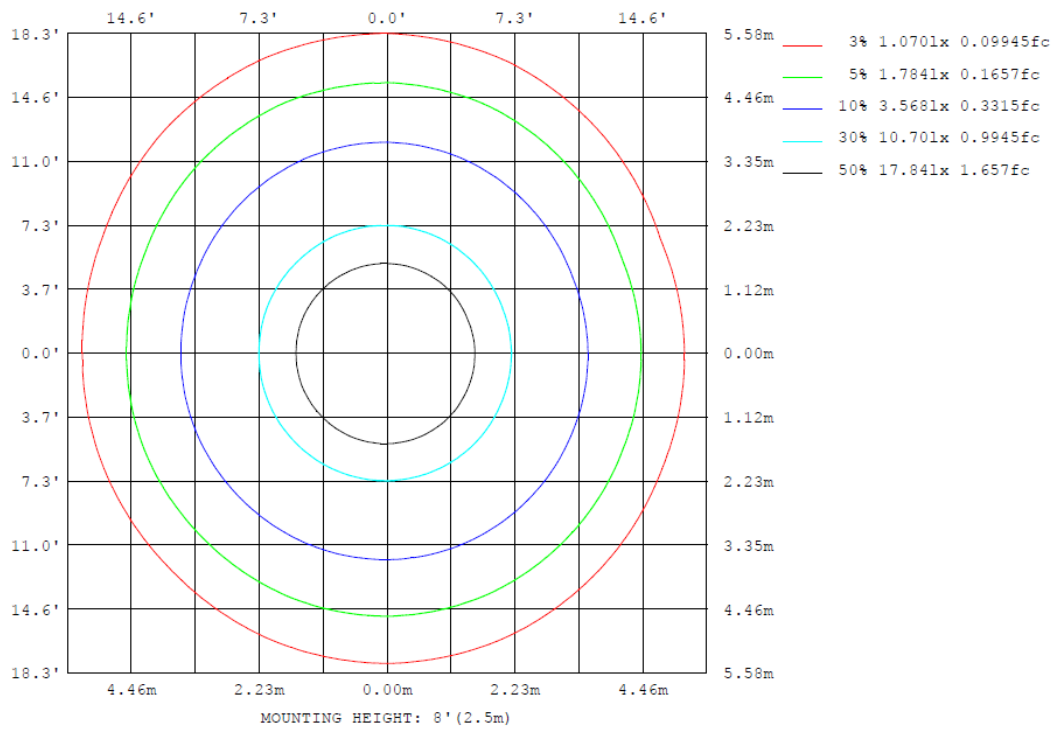
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC76227XXX

Model No.: SLPC76227XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC76227XXX

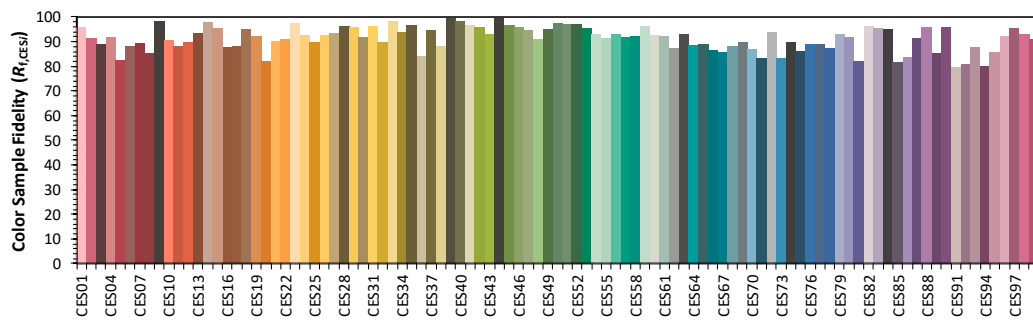
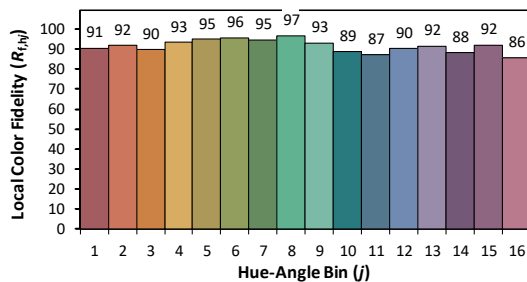
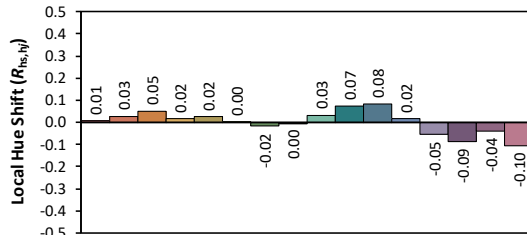
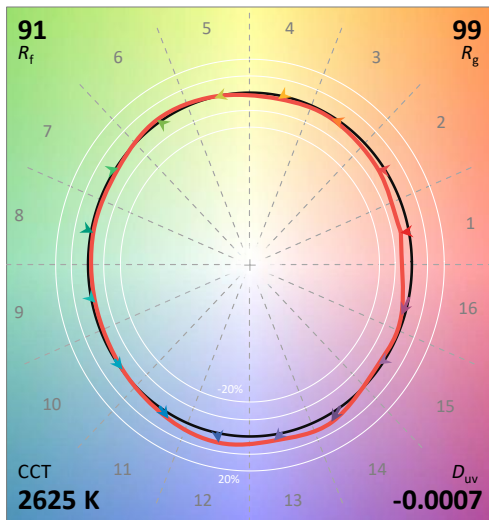
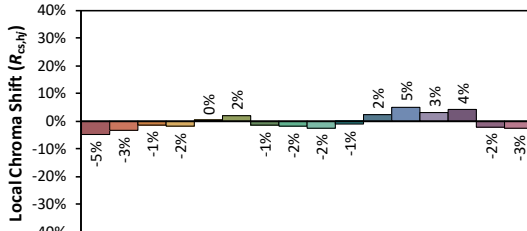
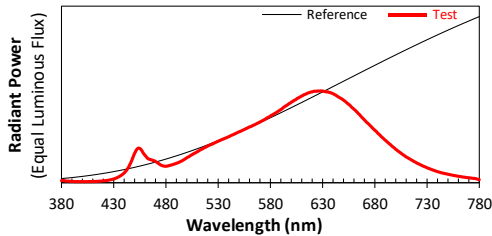
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/9

Model: SLPC76227XXX



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

x 0.4649
 y 0.4098
 u' 0.2661
 v' 0.5278

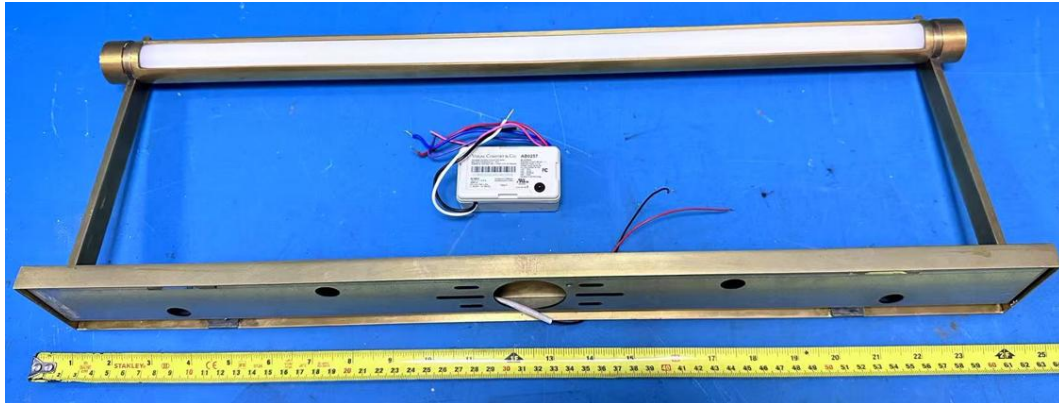
CIE 13.3-1995
(CRI)
 R_a 93
 R_g 62

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 SLPC76227XXX



View of LED driver PTB15W-0300-38-VCC1(AB0257)

***** 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 *****