

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-050

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None

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Report format for LM-79_G

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Report No.: 251110010GZU-050

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV84827XXXCA

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: QGZ251106008.
<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 SLV84827XXXCA. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-041.
<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 January 2026
<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:	SLV84827XXXCA
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV84827XXXCA

Criteria	Result
Total Lumen Output	1049.3 lm
Total Power	14.6 W
Luminaire Efficacy	71.7 lm/W
S/MH(C0/180)	4.20
S/MH(C90/270)	2.11
Correlated Color Temperature (CCT)	2736 K
Color Rendering Index (CRI)	92
R9	70
Chromaticity Coordinate (x)	0.4557
Chromaticity Coordinate (y)	0.4077
Chromaticity Coordinate (u')	0.2611
Chromaticity Coordinate (v')	0.5256

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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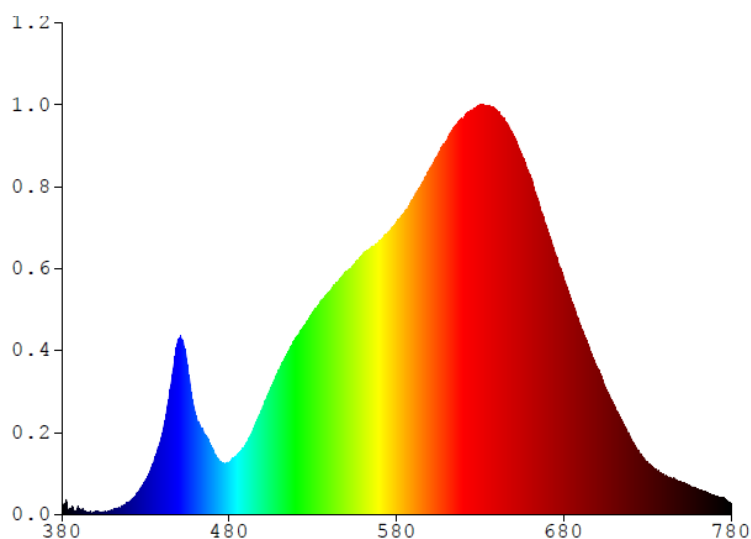
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV84827XXXCA

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0666	480	1.0865	580	6.1510	680	4.9745	780	0.2288
385	0.1342	485	1.2432	585	6.3734	685	4.4591		
390	0.0555	490	1.4726	590	6.6220	690	3.9716		
395	0.0380	495	1.8299	595	6.9431	695	3.5429		
400	0.0597	500	2.2580	600	7.2811	700	3.0992		
405	0.0351	505	2.6723	605	7.5812	705	2.6620		
410	0.0993	510	3.0405	610	7.8621	710	2.3041		
415	0.1311	515	3.3842	615	8.1720	715	1.9623		
420	0.2462	520	3.7370	620	8.3160	720	1.6130		
425	0.4473	525	3.9238	625	8.4845	725	1.3186		
430	0.7204	530	4.2525	630	8.5837	730	1.1064		
435	1.0964	535	4.5023	635	8.5956	735	0.9554		
440	1.6789	540	4.7017	640	8.4896	740	0.8233		
445	2.6830	545	4.8773	645	8.2740	745	0.7455		
450	3.6921	550	5.0913	650	7.9511	750	0.6846		
455	3.1269	555	5.2591	655	7.5740	755	0.6149		
460	2.0871	560	5.4584	660	7.1098	760	0.5271		
465	1.6981	565	5.6391	665	6.5905	765	0.4677		
470	1.3871	570	5.7633	670	6.0181	770	0.4003		
475	1.1140	575	5.9354	675	5.3947	775	0.3463		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84827XXXCA

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

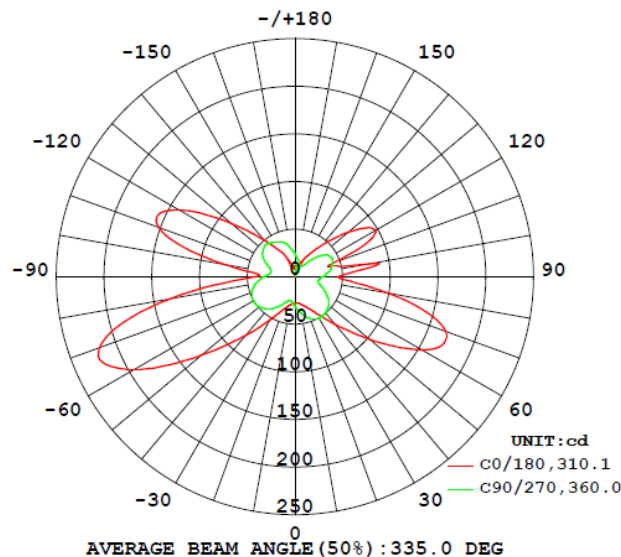
Photometric Measurements at 25°C – Distribution Method

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')
SLV84827XXXCA								
S2511100 10-041	base-up	2736	92	70	0.4557	0.4077	0.2611	0.5256

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)
SLV84827XXXCA							
S2511100 10-041	base-up	120.2	123.3	14.6	0.99	1049.3	71.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84827XXXCA

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	27.8	27.7	28.5	29.5	31.1
5	28.1	30.4	32.6	33.2	34.9
10	28.9	34.8	38.2	37.4	39.1
15	30.8	42.0	45.3	42.5	43.7
20	33.8	52.8	54.8	47.2	46.7
25	38.1	68.9	63.8	50.0	48.8
30	44.3	88.4	73.0	52.4	50.3
35	53.2	112.1	83.0	54.2	50.6
40	65.3	142.0	94.2	54.5	49.7
45	81.2	176.7	100.9	53.6	48.3
50	102.4	206.6	103.1	51.7	46.0
55	127.6	225.8	101.8	48.8	43.2
60	154.0	229.8	96.9	44.7	38.6
65	170.0	220.2	86.9	40.0	34.2
70	168.1	184.3	71.8	34.4	29.4
75	142.3	152.1	59.1	29.0	25.8
80	99.3	139.6	53.7	26.7	24.9
85	59.8	149.1	55.1	27.1	26.2
90	45.4	172.6	61.9	29.6	29.3
95	62.2	194.0	69.1	33.9	32.9
100	78.9	196.4	74.3	36.9	37.0
105	44.0	185.5	74.9	40.4	39.8
110	42.5	158.3	73.3	41.6	41.7
115	80.9	104.9	67.9	42.8	43.3
120	97.5	64.3	61.7	42.7	42.7
125	89.6	43.7	50.0	41.5	40.4
130	73.1	25.7	35.4	36.2	34.1
135	56.4	16.5	26.0	28.3	27.0
140	42.7	15.9	17.3	21.3	19.0
145	32.5	15.4	13.3	14.9	14.1
150	25.0	14.2	13.4	13.3	13.1
155	18.9	11.7	12.6	12.5	7.8
160	14.9	10.9	10.6	9.1	3.9
165	12.5	10.3	8.3	2.4	14.5
170	11.1	11.3	10.4	14.6	18.7
175	10.5	11.7	14.0	19.8	21.0
180	11.0	15.1	22.0	22.5	24.0

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84827XXXCA

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV84827XXXCA		
0-30	36.1	3.4
0-40	77.5	7.4
0-60	239.2	22.8
0-90	570.6	54.4
60-90	331.4	31.6
0-180	1049.3	100.0

Beam Angle

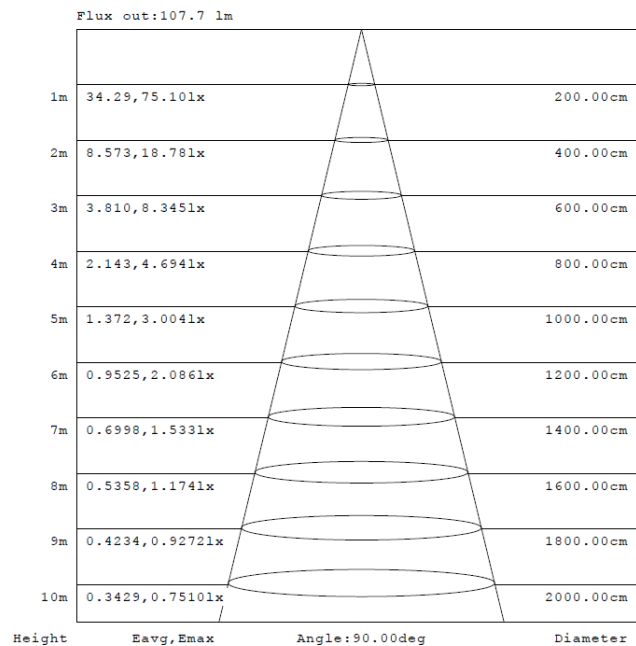
Total Beam Angle(°)
335.0

Illumination Plots

Model No.: SLV84827XXXCA

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

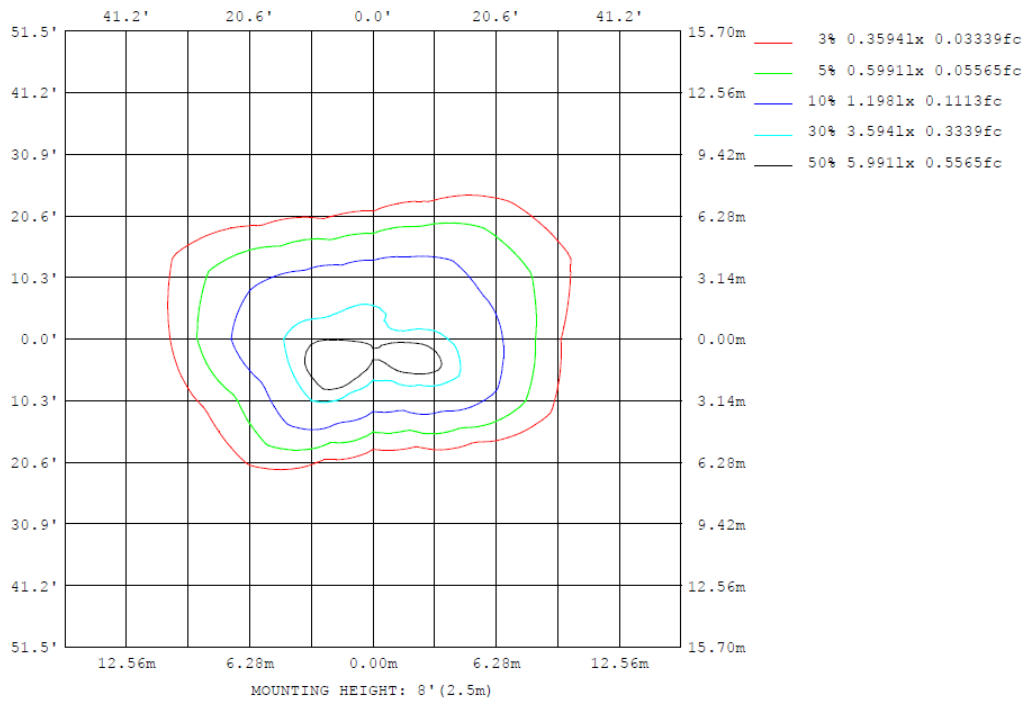
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84827XXXCA

Model No.: SLV84827XXXCA

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84827XXXCA

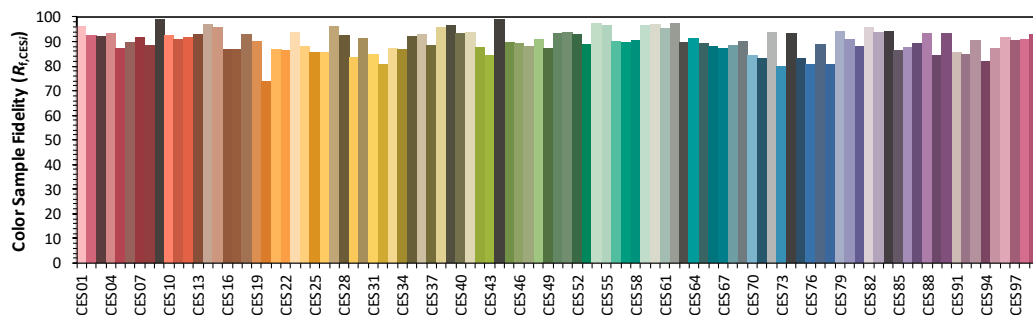
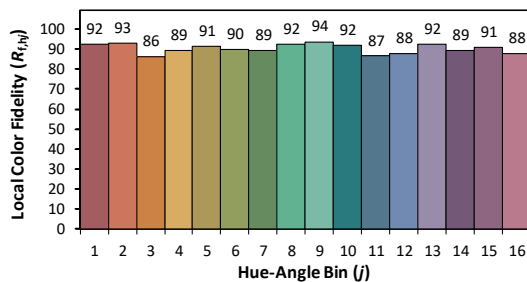
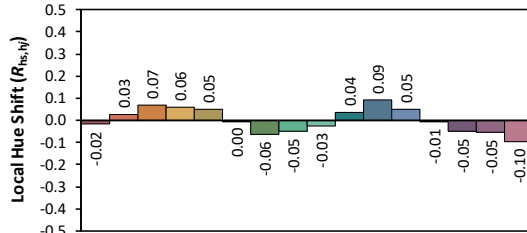
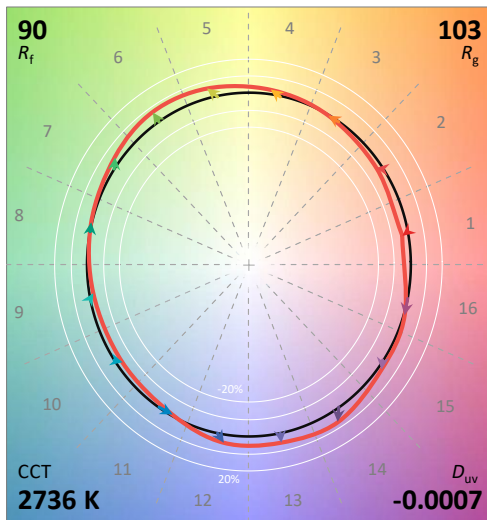
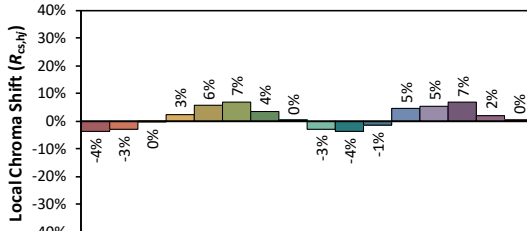
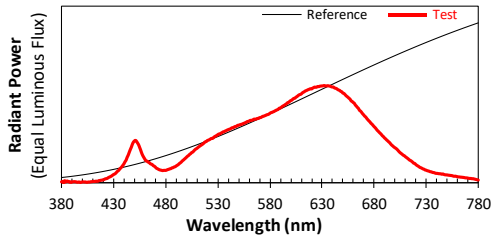
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2026/1/5

Model: SLV84827XXXCA



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

x 0.4557
 y 0.4077
 u' 0.2611
 v' 0.5256

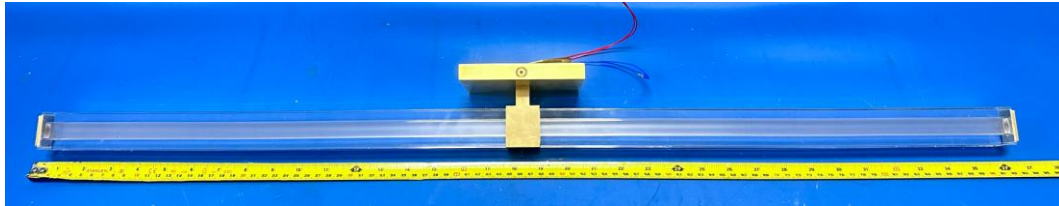
CIE 13.3-1995
(CRI)
 R_a 92
 R_g 70

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

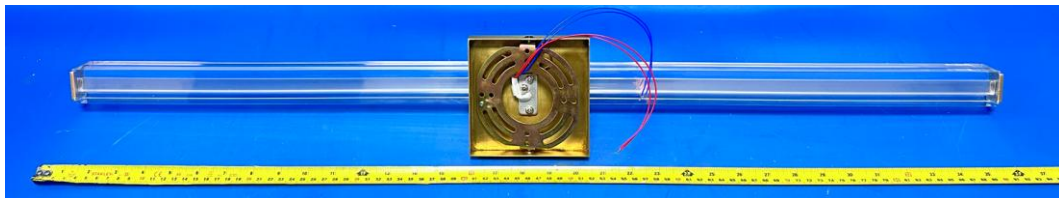
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLV84827XXXCA



External view of SLV84827XXXCA



View of LED driver PTB20W-0400-38-VCC1 (AB0258)

***** 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 *****