

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-004

ISSUE DATE

26 January 2026

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251027067GZU-004

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV83327XXCG

Remark: "XXX" represents the color of the appearance.

RENDERED TO

Visual Comfort & Co.

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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: QGZ251023107.
<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 SLV83327XXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-005.
<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>	19 November 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:	SLV83327XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV83327XXXCG

Criteria	Result
Total Lumen Output	600.6 lm
Total Power	26.5 W
Luminaire Efficacy	22.7 lm/W
S/MH(C0/180)	3.07
S/MH(C90/270)	0.27
Correlated Color Temperature (CCT)	2388 K
Color Rendering Index (CRI)	91
R9	46
Chromaticity Coordinate (x)	0.4862
Chromaticity Coordinate (y)	0.4130
Chromaticity Coordinate (u')	0.2785
Chromaticity Coordinate (v')	0.5322

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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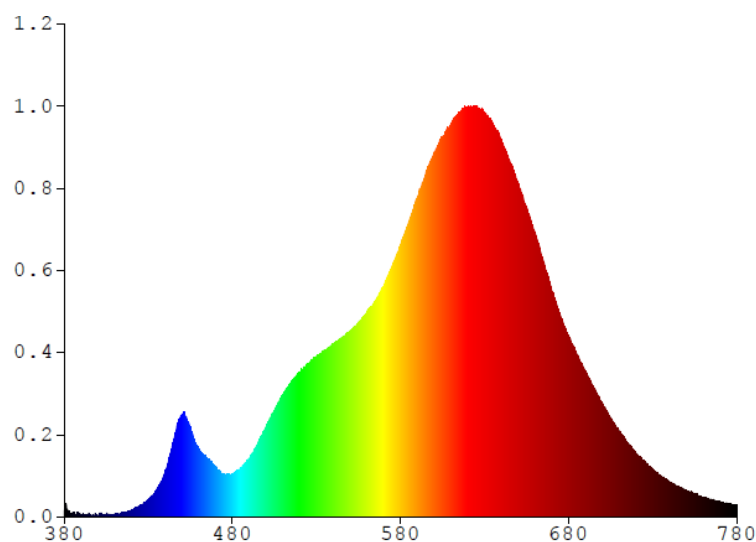
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV83327XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.1200	480	0.9407	580	5.9664	680	3.9741	780	0.2537
385	0.0768	485	1.0764	585	6.4661	685	3.5680		
390	0.0210	490	1.2740	590	7.0067	690	3.2128		
395	0.0189	495	1.6033	595	7.5180	695	2.8496		
400	0.0000	500	1.9701	600	7.9925	700	2.4935		
405	0.0649	505	2.3281	605	8.3138	705	2.1819		
410	0.0605	510	2.6665	610	8.5869	710	1.8823		
415	0.1015	515	2.9542	615	8.8840	715	1.6308		
420	0.1629	520	3.1691	620	8.9889	720	1.4001		
425	0.2296	525	3.3259	625	9.0001	725	1.2030		
430	0.3665	530	3.5158	630	8.8897	730	1.0389		
435	0.5977	535	3.6529	635	8.6352	735	0.8986		
440	0.9999	540	3.7805	640	8.2673	740	0.7695		
445	1.6633	545	3.9293	645	7.8051	745	0.6730		
450	2.2436	550	4.0778	650	7.3342	750	0.5910		
455	1.9551	555	4.2662	655	6.7820	755	0.4951		
460	1.4939	560	4.4886	660	6.2157	760	0.4359		
465	1.2940	565	4.7320	665	5.6130	765	0.3844		
470	1.0861	570	5.0575	670	4.9647	770	0.3343		
475	0.9444	575	5.4914	675	4.3342	775	0.2886		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83327XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

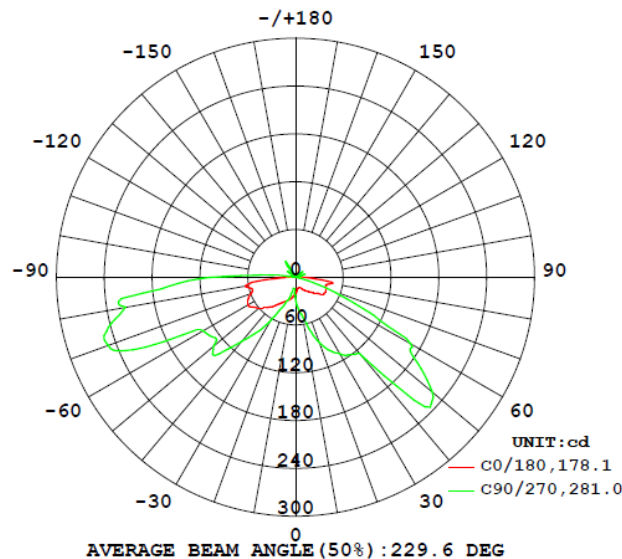
Photometric Measurements at 25°C – Distribution Method

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')
SLV83327XXXCG								
S2510270 67-005	base-up	2388	91	46	0.4862	0.4130	0.2785	0.5322

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)
SLV83327XXXCG							
S2510270 67-005	base-up	120.2	221.7	26.5	0.994	600.6	22.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83327XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	19.3	14.8	22.7	28.1	27.7
5	17.8	20.7	31.8	40.3	39.9
10	14.0	25.2	42.9	50.7	49.6
15	13.9	33.0	54.7	69.0	67.5
20	13.8	43.3	71.9	88.5	87.0
25	14.5	53.7	88.6	103.2	101.3
30	17.5	67.4	100.7	112.2	110.5
35	20.3	78.6	109.3	119.7	118.4
40	23.1	82.2	114.7	140.0	125.0
45	26.3	87.7	167.3	237.2	230.0
50	30.8	95.9	220.5	223.3	224.2
55	36.5	156.5	191.9	184.4	186.7
60	41.2	158.9	146.0	165.9	167.2
65	41.6	125.8	121.2	95.2	97.4
70	41.3	76.7	49.7	45.4	46.6
75	39.3	29.7	13.0	11.9	12.2
80	45.6	6.9	2.8	2.8	2.7
85	26.5	6.2	1.6	2.1	1.9
90	6.5	6.2	1.3	1.8	1.6
95	7.6	4.2	1.1	1.6	1.5
100	8.3	2.4	1.2	1.6	1.5
105	3.2	7.3	5.0	3.1	3.2
110	0.2	1.9	7.3	10.9	10.8
115	1.1	0.9	2.1	2.6	2.6
120	1.5	0.1	1.3	2.0	1.9
125	0.7	0.0	4.8	7.0	7.0
130	0.0	0.0	0.0	14.7	11.9
135	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83327XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV83327XXXCG		
0-30	35.7	5.9
0-40	80.5	13.4
0-60	270.9	45.1
0-90	561.5	93.5
60-90	290.6	48.4
0-180	600.9	100.0

Beam Angle

Total Beam Angle(°)

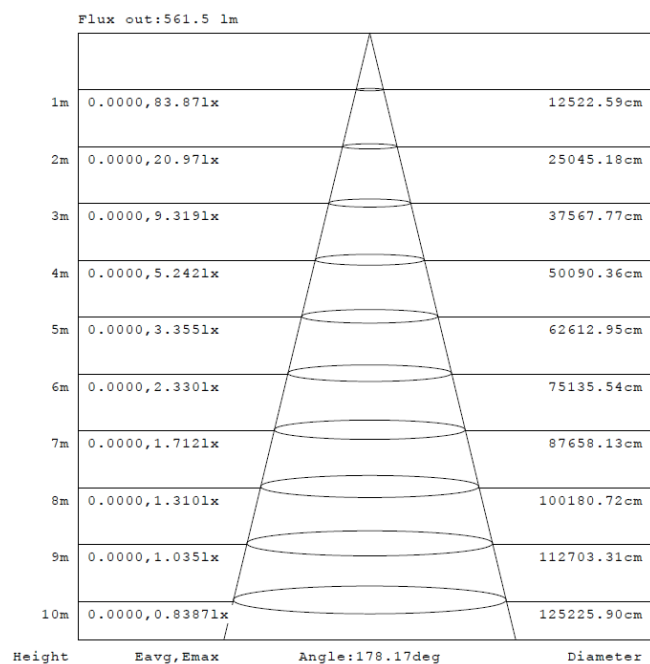
229.6

Illumination Plots

Model No.: SLV83327XXXCG

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

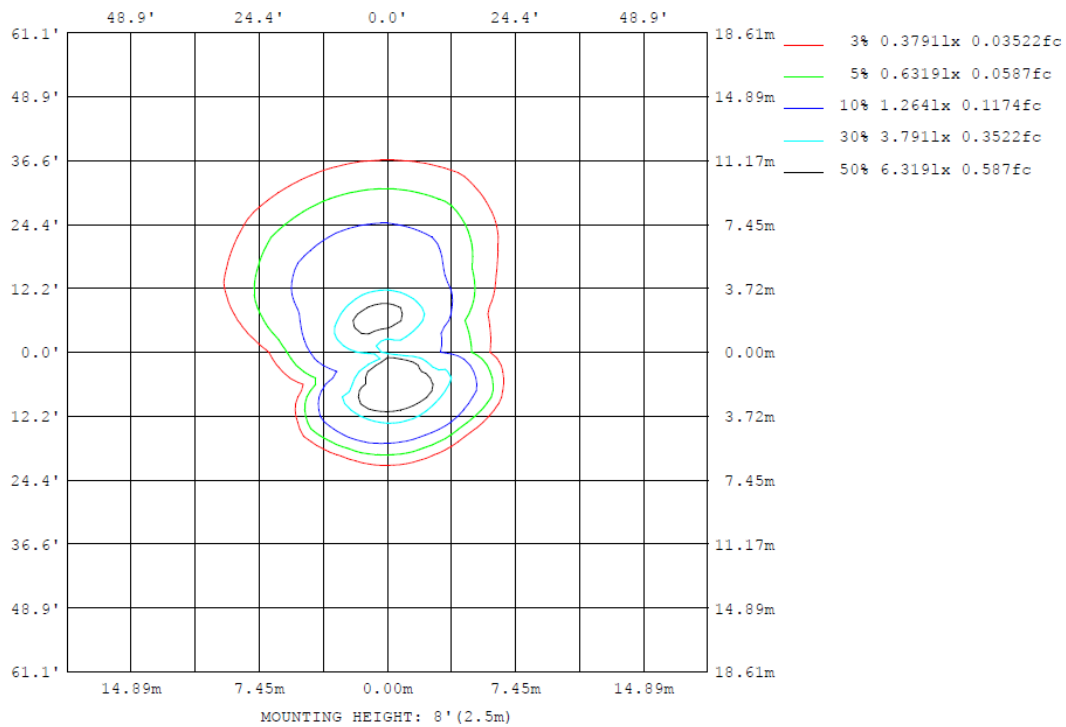
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83327XXXCG

Model No.: SLV83327XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83327XXXCG

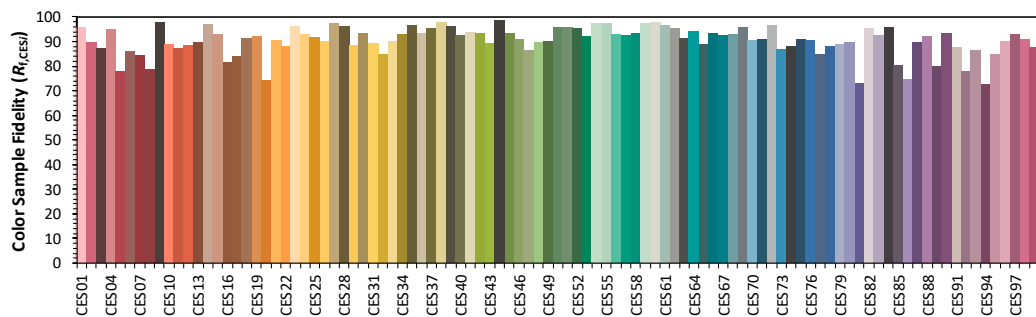
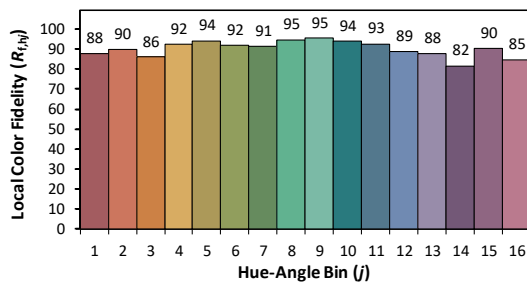
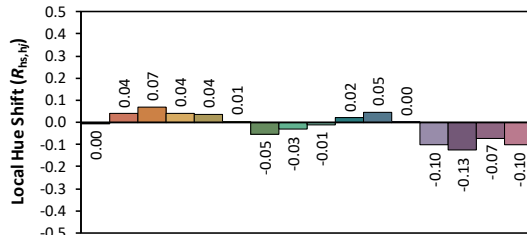
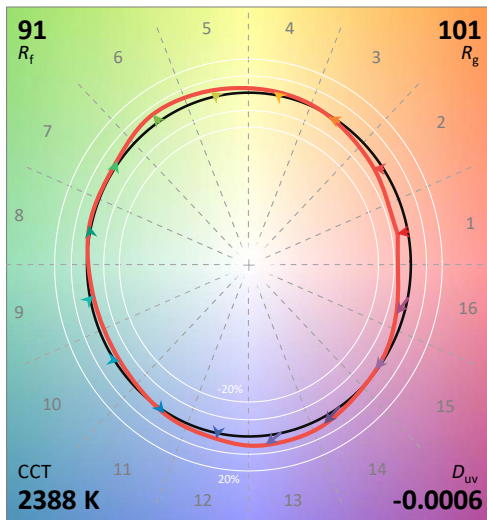
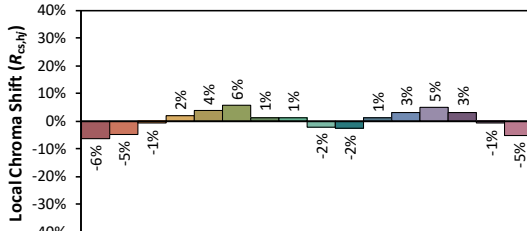
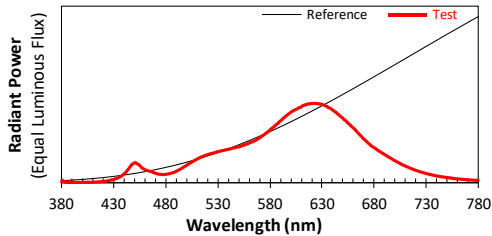
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/19

Model: SLV83327XXXCG



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

x 0.4862
 y 0.4130
 u' 0.2785
 v' 0.5322

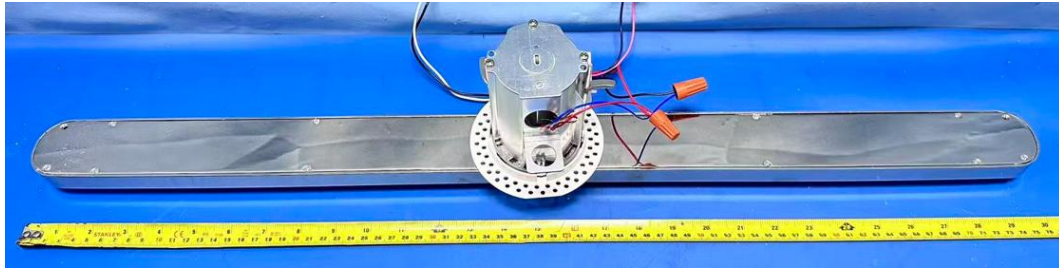
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 46

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

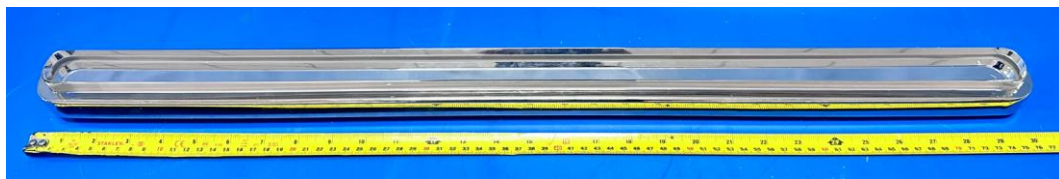
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLV83327XXXCG



External view of SLV83327XXXCG

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD27-C070V38-UNV3-HE-P



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 *****