

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250821045GZU-004

ISSUE DATE

20 October 2025

REVISION DATE

None

NUMBER OF PAGES

12

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250821045GZU-004

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLWS56427CCXXX

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

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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TEST: Electrical and Photometric as required to the IES LM-79 test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number: QGZ250818132.

STANDARDS USED: 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

DESCRIPTION OF SAMPLE: The client submitted one sample of model SLWS56427CCXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250821045-004.

MANUFACTURER /FACTORY & ADDRESS: Guangzhou Xiongyi Precision Metalworking Co., Ltd
Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450

DATES OF TESTS: 09 September 2025

ISSUED BY: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

TEST LOCATION: 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:	SLWS56427CCXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLWS56427CCXXX

Criteria	Result
Total Lumen Output	913.5 lm
Total Power	11.1 W
Luminaire Efficacy	82.5 lm/W
S/MH(C0/180)	1.16
S/MH(C90/270)	1.01
Correlated Color Temperature (CCT)	2717 K
Color Rendering Index (CRI)	93
R9	61
Chromaticity Coordinate (x)	0.4577
Chromaticity Coordinate (y)	0.4088
Chromaticity Coordinate (u')	0.2619
Chromaticity Coordinate (v')	0.5263

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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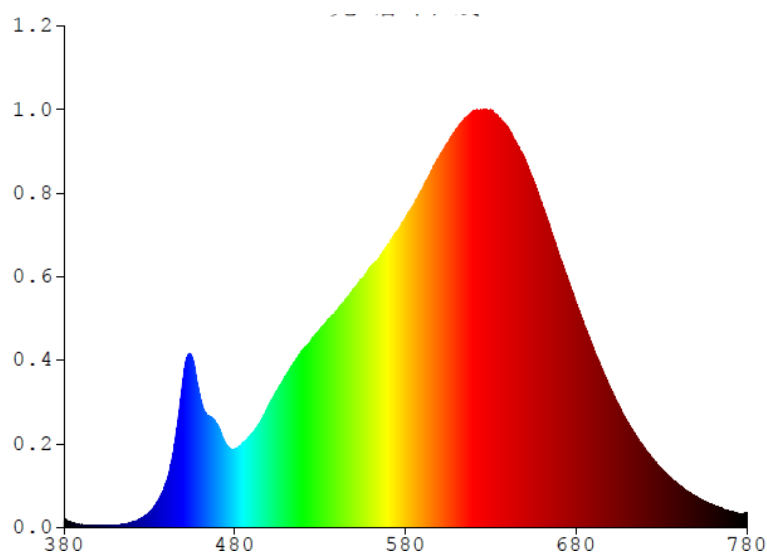
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLWS56427CCXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.5987	480	7.6295	580	30.3900	680	22.0800	780	1.4422
385	0.3624	485	8.3267	585	31.7810	685	19.8100		
390	0.2463	490	9.2153	590	33.2780	690	17.6350		
395	0.2133	495	10.3650	595	35.0640	695	15.7220		
400	0.1449	500	12.0280	600	36.3980	700	13.6830		
405	0.2009	505	13.5040	605	37.7910	705	11.9870		
410	0.2085	510	14.8730	610	39.1810	710	10.3790		
415	0.3334	515	16.1880	615	40.2160	715	9.0551		
420	0.5274	520	17.4410	620	40.8990	720	7.8506		
425	0.8856	525	18.4810	625	40.9650	725	6.7807		
430	1.5293	530	19.4800	630	40.9160	730	5.7779		
435	2.6202	535	20.3900	635	40.2790	735	4.9678		
440	4.5130	540	21.3370	640	39.3400	740	4.2186		
445	8.4527	545	22.4060	645	37.7550	745	3.5903		
450	14.8690	550	23.4930	650	36.1430	750	3.0682		
455	16.6640	555	24.5480	655	34.0750	755	2.6090		
460	12.6400	560	25.6670	660	31.8530	760	2.2479		
465	10.8530	565	26.5330	665	29.3300	765	1.9134		
470	10.0380	570	27.7940	670	26.7870	770	1.6186		
475	8.1618	575	29.0510	675	24.0480	775	1.3843		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS56427CCXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

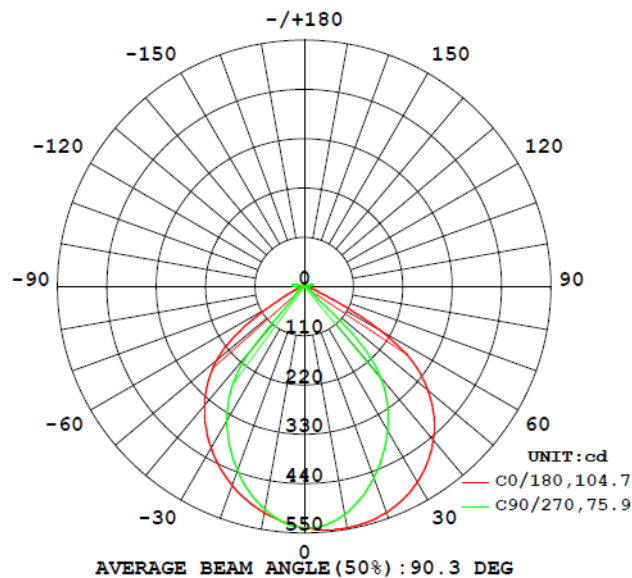
Photometric Measurements at 25°C – Distribution Method

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')
SLWS56427CCXXX								
S2508210 45-004	base-up	2717	93	61	0.4577	0.4088	0.2619	0.5263

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)
SLWS56427CCXXX							
S2508210 45-004	base-up	120.1	93.1	11.1	0.990	913.5	82.5

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS56427CCXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	538.3	539.0	539.0	538.8	538.5
5	545.2	544.4	541.5	537.8	534.0
10	547.3	543.7	534.7	524.4	516.8
15	544.3	536.6	518.3	500.1	488.6
20	536.5	522.6	494.4	469.1	454.3
25	522.7	502.6	463.9	432.3	414.4
30	503.8	475.6	428.3	390.5	371.4
35	478.8	442.5	386.3	344.2	323.4
40	447.2	401.2	336.1	287.9	265.1
45	408.4	349.9	267.3	200.7	167.2
50	359.7	272.3	115.5	40.2	29.5
55	297.1	133.1	34.5	21.4	19.2
60	194.5	56.0	20.2	15.4	13.5
65	74.3	26.4	15.5	10.8	9.7
70	31.8	12.0	13.6	8.9	8.1
75	16.8	13.5	11.1	7.7	6.9
80	6.4	16.0	10.9	8.8	8.7
85	1.5	21.1	12.5	9.7	8.8
90	0.2	17.7	13.3	10.6	10.4
95	0.1	11.3	11.3	12.1	12.6
100	0.1	2.7	8.0	16.5	17.2
105	0.1	0.1	6.4	18.1	19.3
110	0.1	0.1	0.5	14.7	16.8
115	0.1	0.1	0.1	0.5	3.8
120	0.2	0.1	0.1	0.1	0.1
125	0.2	0.2	0.2	0.2	0.2
130	0.3	0.3	0.3	0.2	0.2
135	0.4	0.4	0.4	0.3	0.3
140	0.5	0.5	0.5	0.5	0.5
145	0.6	0.6	0.6	0.5	0.5
150	0.7	0.7	0.6	0.6	0.6
155	0.7	0.7	0.7	0.7	0.7
160	0.8	0.8	0.8	0.8	0.8
165	0.8	0.8	0.8	0.8	0.8
170	0.8	0.8	0.8	0.8	0.8
175	0.8	0.8	0.8	0.8	0.7
180	0.7	0.7	0.7	0.7	0.7

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS56427CCXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLWS56427CCXXX		
0-30	393.7	43.1
0-40	617.9	67.6
0-60	845.7	92.6
0-90	893.2	97.8
60-90	47.5	5.2
0-180	913.5	100.0

Beam Angle

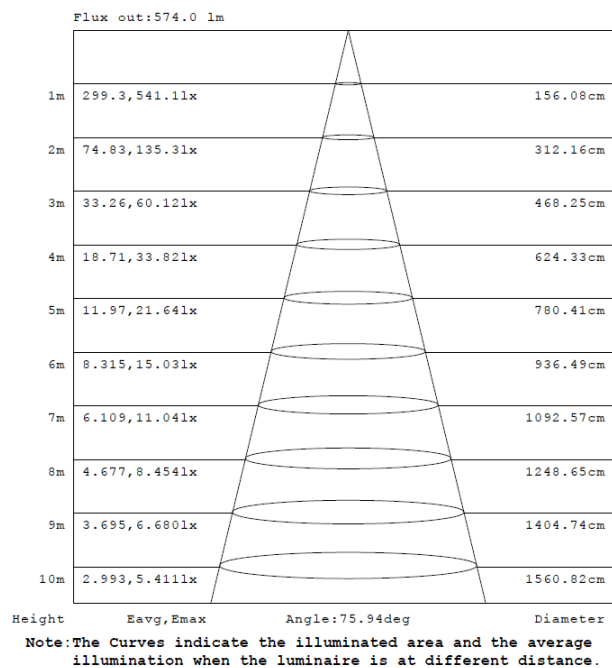
Total Beam Angle(°)
90.3

Illumination Plots

Model No.: SLWS56427CCXXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

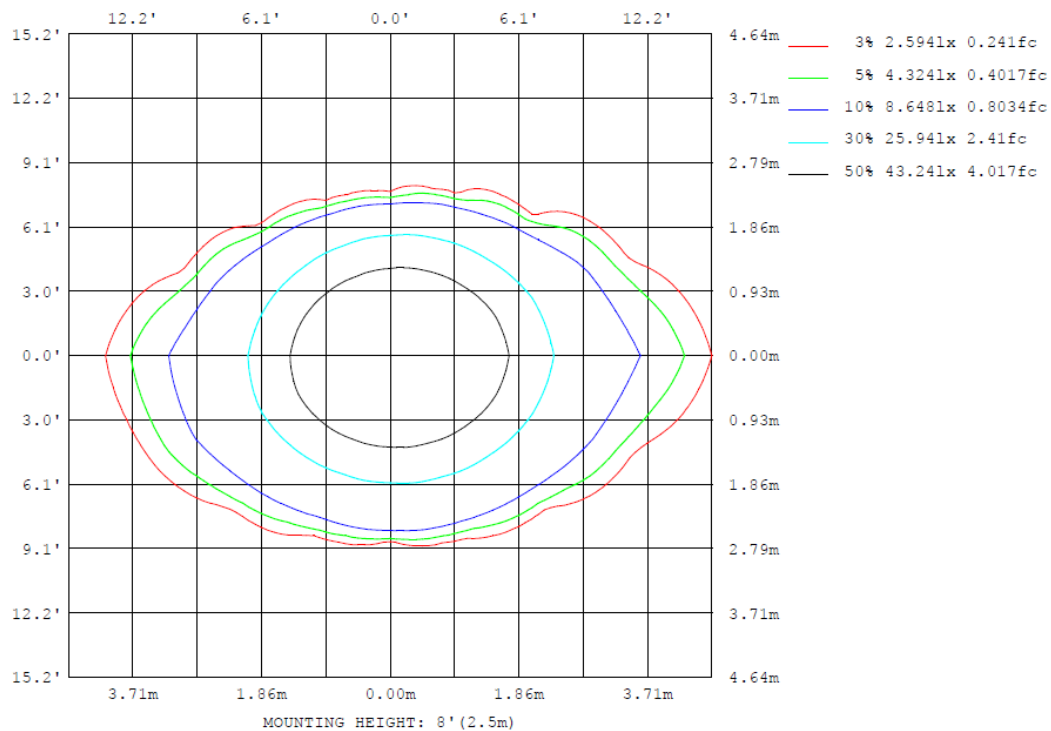
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS56427CCXXX

Model No.: SLWS56427CCXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS56427CCXXX

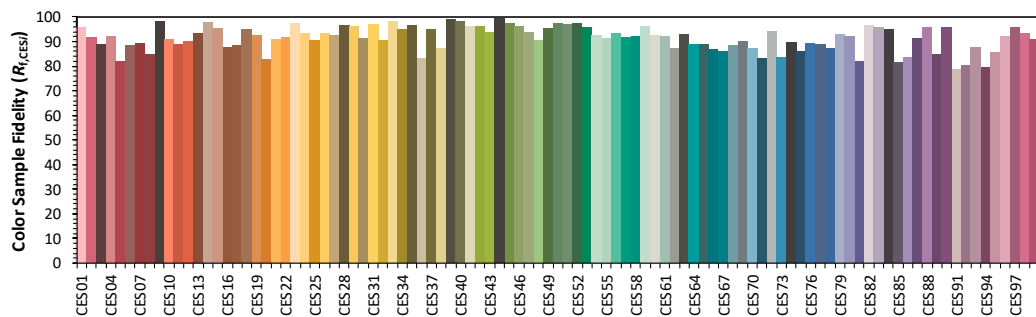
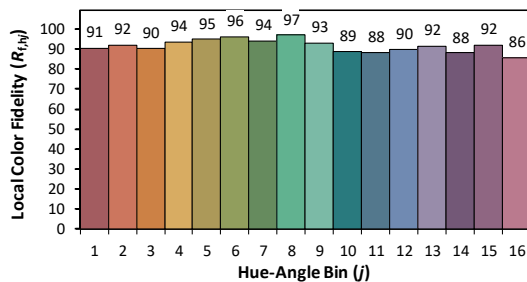
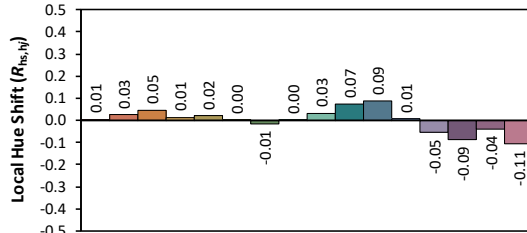
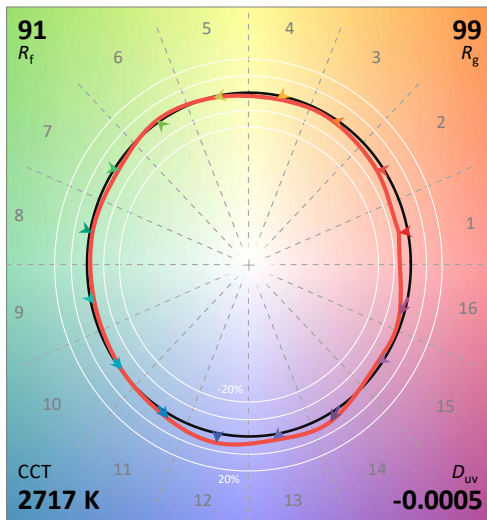
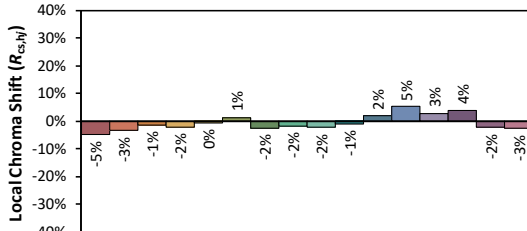
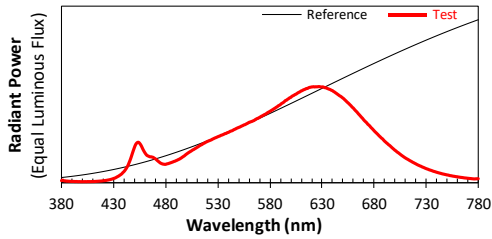
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/9/9

Model: SLWS56427CCXXX



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

x 0.4577
 y 0.4088
 u' 0.2619
 v' 0.5263

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 61

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 SLWS56427CCXXX



View of LED driver PVD11-C030V33-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 *****