

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-004

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None

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Report format for LM-79_G

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Report No.: 250227200GZU-004

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOWS71627OB

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: QGZ250224121.

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 SLOWS71627OB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-008.

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: 11 March 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:	SLOWS716270B
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOWS716270B

Criteria	Result
Total Lumen Output	128.1 lm
Total Power	11.0 W
Luminaire Efficacy	11.7 lm/W
S/MH(C0/180)	0.49
S/MH(C90/270)	1.51
Correlated Color Temperature (CCT)	2642 K
Color Rendering Index (CRI)	95
R9	72
Chromaticity Coordinate (x)	0.4624
Chromaticity Coordinate (y)	0.4076
Chromaticity Coordinate (u')	0.2655
Chromaticity Coordinate (v')	0.5266

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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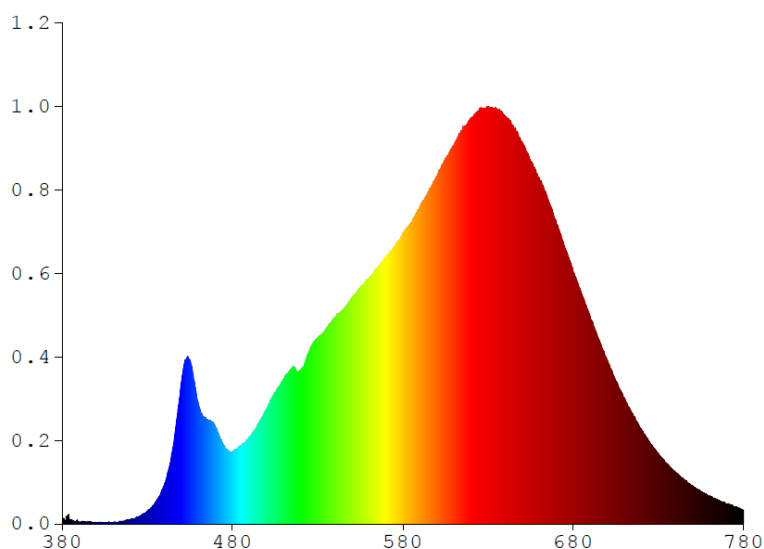
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOWS716270B

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	3.3027	580	13.2650	680	11.4740	780	0.6097
385	0.1592	485	3.5732	585	13.7540	685	10.4440		
390	0.0952	490	3.9749	590	14.5030	690	9.3762		
395	0.0452	495	4.5639	595	15.1690	695	8.3988		
400	0.0441	500	5.2374	600	15.8120	700	7.4275		
405	0.0618	505	5.9959	605	16.6690	705	6.5128		
410	0.0773	510	6.6175	610	17.2800	710	5.7127		
415	0.0963	515	7.1111	615	18.0110	715	4.9904		
420	0.2003	520	7.0110	620	18.5130	720	4.3186		
425	0.3267	525	7.8591	625	18.9290	725	3.7018		
430	0.5673	530	8.4988	630	18.9510	730	3.1862		
435	1.0160	535	8.9245	635	18.9220	735	2.7502		
440	1.7914	540	9.4171	640	18.5700	740	2.3524		
445	3.4506	545	9.7971	645	18.0690	745	2.0043		
450	6.4312	550	10.2930	650	17.3860	750	1.7384		
455	7.4376	555	10.7720	655	16.5180	755	1.4696		
460	5.4617	560	11.1590	660	15.7630	760	1.2784		
465	4.7602	565	11.6920	665	14.8150	765	1.0785		
470	4.4050	570	12.1790	670	13.7040	770	0.9183		
475	3.5647	575	12.6450	675	12.3920	775	0.7902		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS71627OB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

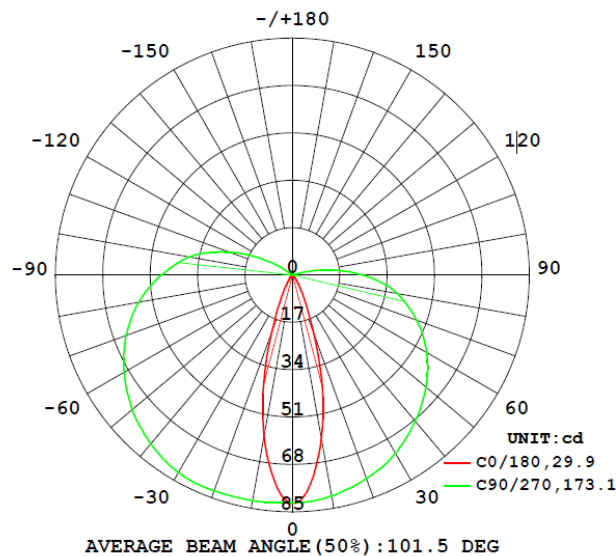
Photometric Measurements at 25°C – Distribution Method

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')
SLOWS71627OB								
S2502272 00-008	base-up	2642	95	72	0.4624	0.4076	0.2655	0.5266

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)
SLOWS71627OB							
S2502272 00-008	base-up	120.1	92.1	11.0	0.991	128.1	11.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS716270B

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	82.0	74.0	77.3	80.8	81.8
5	75.2	59.8	68.2	77.9	81.4
10	59.7	43.3	57.0	73.5	80.5
15	41.4	25.9	44.6	67.9	79.2
20	22.4	13.9	31.8	62.0	77.7
25	11.2	7.6	20.3	56.0	76.1
30	5.9	4.4	13.2	49.8	73.9
35	3.1	2.5	8.5	43.7	71.3
40	1.7	1.5	5.8	37.9	68.5
45	0.9	0.9	3.9	32.6	65.5
50	0.5	0.5	2.7	27.6	62.5
55	0.3	0.3	2.0	23.3	59.2
60	0.1	0.2	1.5	19.5	55.6
65	0.1	0.1	1.1	16.3	51.6
70	0.1	0.1	0.8	13.6	47.4
75	0.0	0.1	0.6	11.4	42.7
80	0.0	0.0	0.5	9.6	38.1
85	0.0	0.0	0.4	7.8	32.1
90	0.0	0.0	0.3	6.0	25.2
95	0.0	0.0	0.2	4.2	17.9
100	0.0	0.0	0.1	2.4	10.6
105	0.0	0.0	0.1	0.9	4.0
110	0.0	0.0	0.1	0.3	0.9
115	0.0	0.0	0.0	0.1	0.4
120	0.0	0.0	0.1	0.1	0.2
125	0.0	0.0	0.1	0.1	0.1
130	0.0	0.1	0.1	0.1	0.1
135	0.0	0.1	0.1	0.1	0.1
140	0.0	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1
150	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1
160	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1
170	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1
180	0.1	0.1	0.1	0.1	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS716270B

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOWS716270B		
0-30	41.3	32.2
0-40	58.1	45.3
0-60	86.9	67.9
0-90	117.0	91.4
60-90	30.1	23.5
0-180	128.1	100.0

Beam Angle

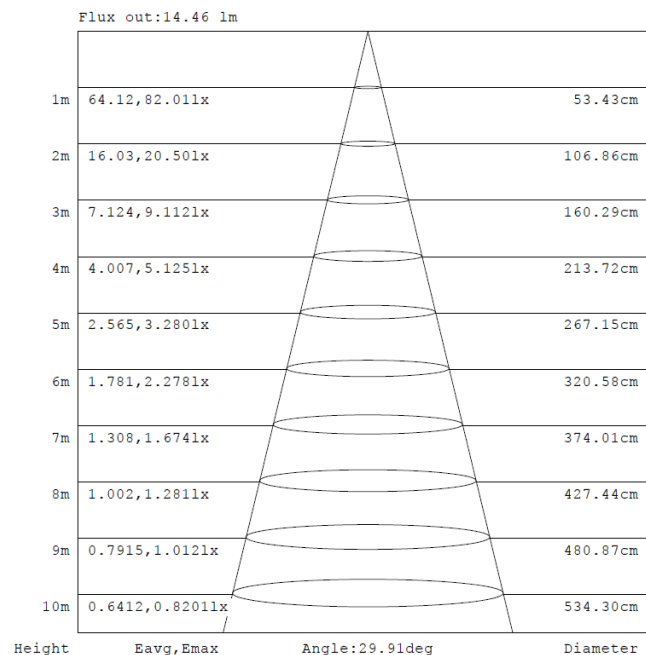
Total Beam Angle(°)
101.5

Illumination Plots

Model No.: SLOWS716270B

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

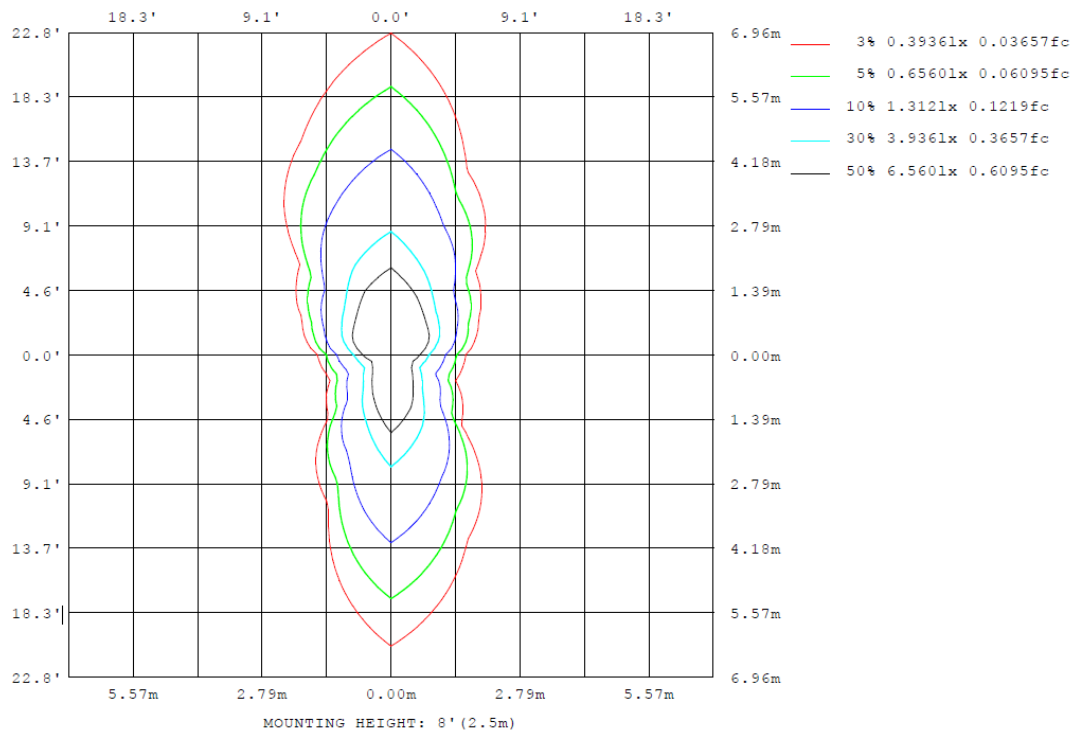
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS716270B

Model No.: SLOWS716270B

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS716270B

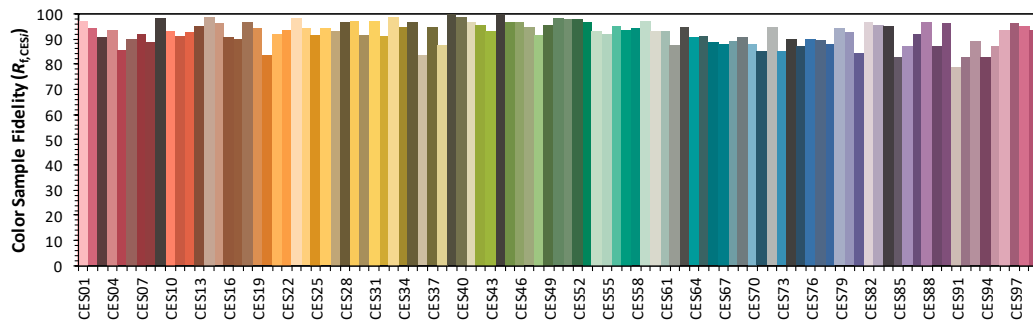
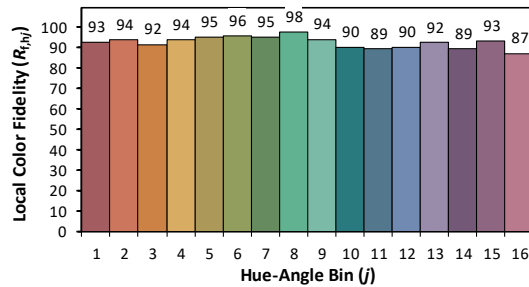
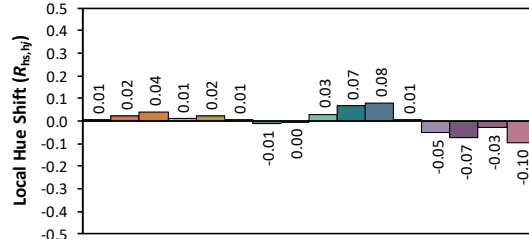
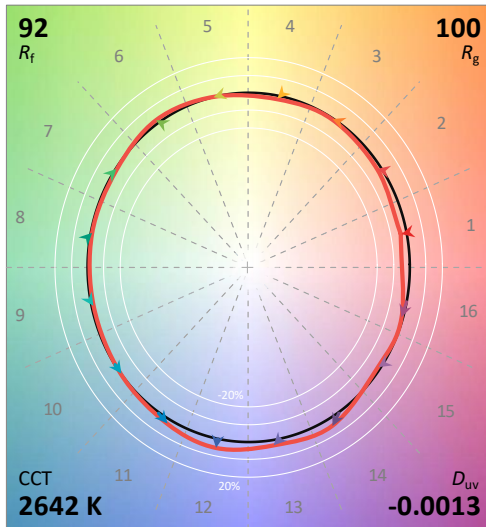
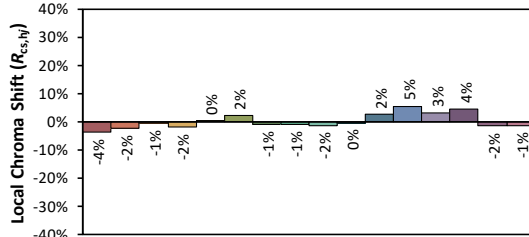
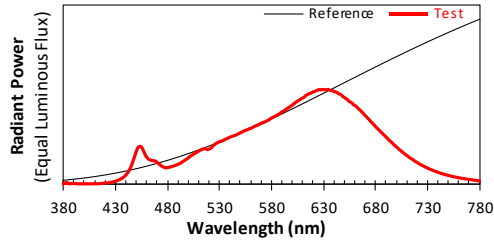
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/11

Model: SLOWS716270B



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

x 0.4624
 y 0.4076
 u' 0.2655
 v' 0.5266

CIE 13.3-1995
(CRI)

R_a 95

R_g 72

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 SLOWS716270B

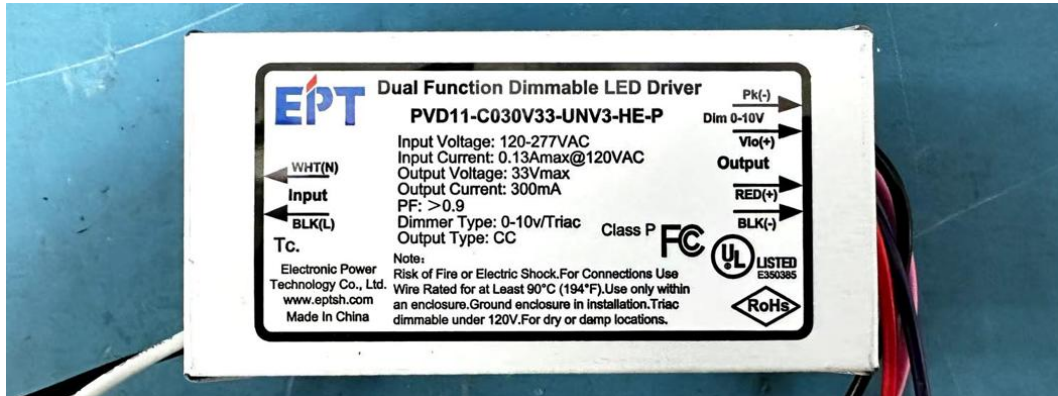


External view of SLOWS716270B

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TEST REPORT

PRODUCT PICTURE (not to scale)



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 *****