

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-016

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None

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Report format for LM-79_G

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Report No.: 250227200GZU-016

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOWS72027OB

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 SLOWS72027OB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-012.

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: 26 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:	SLOWS720270B
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOWS720270B

Criteria	Result
Total Lumen Output	390.9 lm
Total Power	33.1 W
Luminaire Efficacy	11.8 lm/W
S/MH(C0/180)	0.71
S/MH(C90/270)	1.49
Correlated Color Temperature (CCT)	2638 K
Color Rendering Index (CRI)	95
R9	72
Chromaticity Coordinate (x)	0.4629
Chromaticity Coordinate (y)	0.4080
Chromaticity Coordinate (u')	0.2656
Chromaticity Coordinate (v')	0.5268

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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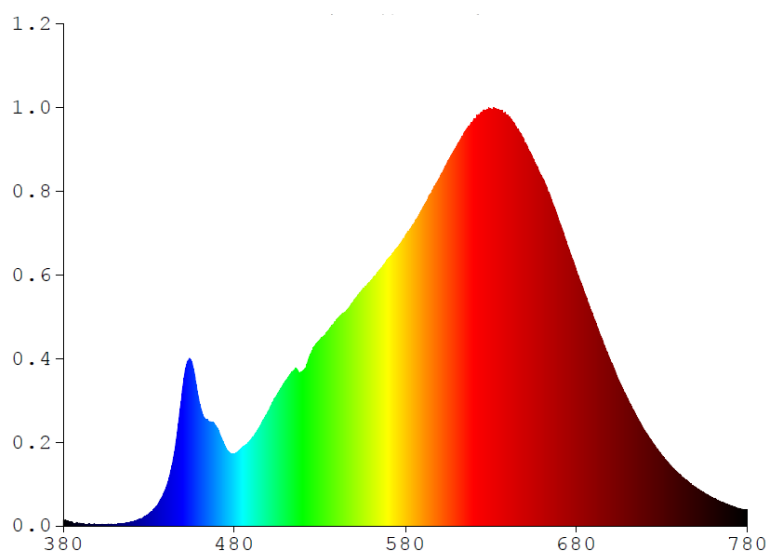
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOWS720270B

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.6640	480	8.7951	580	35.4570	680	31.0030	780	1.9252
385	0.4674	485	9.6522	585	36.8640	685	28.1880		
390	0.2110	490	10.6350	590	38.7080	690	25.3930		
395	0.2014	495	12.1660	595	40.5970	695	22.6760		
400	0.1797	500	14.0560	600	42.4490	700	19.9740		
405	0.1368	505	15.9730	605	44.4810	705	17.5500		
410	0.2046	510	17.6730	610	46.3050	710	15.3960		
415	0.2976	515	18.9700	615	48.1270	715	13.4160		
420	0.4905	520	18.8910	620	49.5530	720	11.5550		
425	0.8554	525	21.1080	625	50.4840	725	9.9839		
430	1.4601	530	22.7370	630	50.8340	730	8.5486		
435	2.5228	535	23.8240	635	50.6500	735	7.3784		
440	4.5949	540	25.2040	640	49.9740	740	6.3106		
445	8.9260	545	26.1130	645	48.4330	745	5.4157		
450	17.0190	550	27.4970	650	46.6530	750	4.6020		
455	19.9280	555	28.8460	655	44.5510	755	3.9713		
460	14.5950	560	29.9160	660	42.4300	760	3.3872		
465	12.7530	565	31.2190	665	39.8910	765	2.8875		
470	11.9000	570	32.6330	670	36.9800	770	2.4723		
475	9.4174	575	33.8560	675	33.4060	775	2.1259		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS72027OB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

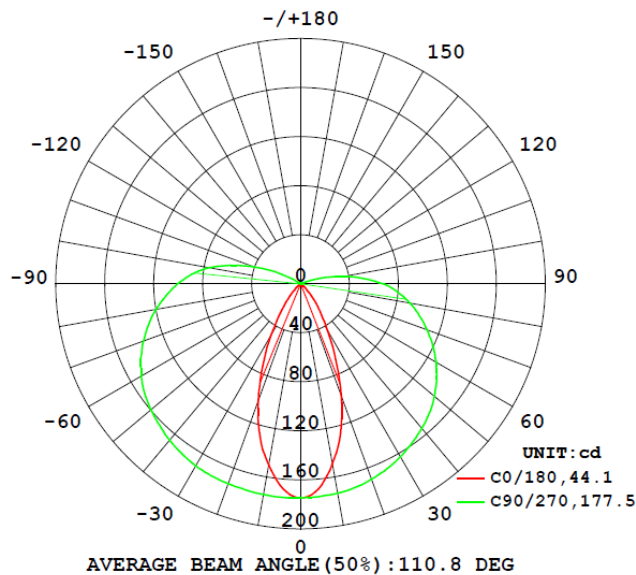
Photometric Measurements at 25°C – Distribution Method

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')
SLOWS72027OB								
S2502272 00-012	base-up	2638	95	72	0.4629	0.4080	0.2656	0.5268

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 Efficacy
						Flux (Lumens)	(Lumens Per Watt)
SLOWS72027OB							
S2502272 00-012	base-up	120.1	276.9	33.1	0.994	390.9	11.8

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS720270B

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	174.7	174.6	174.5	174.7	174.7
5	167.9	169.1	171.6	173.6	174.2
10	149.4	153.7	162.5	171.4	173.5
15	126.2	134.0	149.3	167.0	172.0
20	97.0	109.3	134.3	160.9	169.5
25	68.1	83.2	117.2	153.9	166.5
30	44.4	59.3	99.0	146.1	162.9
35	28.1	40.4	81.2	137.8	158.6
40	16.7	27.4	64.7	129.3	154.0
45	7.5	17.8	50.8	120.9	149.0
50	3.7	9.6	39.3	111.9	142.8
55	1.9	5.2	30.3	102.5	135.7
60	0.9	3.0	24.1	93.4	127.7
65	0.4	1.8	19.3	84.5	119.1
70	0.2	1.1	15.3	76.0	109.9
75	0.1	0.6	12.1	67.9	100.5
80	0.0	0.4	9.4	60.4	90.8
85	0.0	0.3	7.2	52.7	79.7
90	0.0	0.2	5.5	44.1	67.4
95	0.1	0.1	4.0	33.8	51.8
100	0.0	0.1	2.6	23.4	35.9
105	0.0	0.1	1.3	13.2	20.2
110	0.0	0.0	0.4	4.2	6.4
115	0.0	0.0	0.2	0.9	1.1
120	0.0	0.0	0.1	0.4	0.5
125	0.0	0.1	0.1	0.2	0.2
130	0.0	0.1	0.1	0.2	0.2
135	0.1	0.1	0.2	0.2	0.2
140	0.1	0.1	0.2	0.2	0.2
145	0.1	0.2	0.2	0.2	0.2
150	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.3	0.3	0.2
160	0.2	0.2	0.3	0.3	0.2
165	0.2	0.2	0.3	0.3	0.2
170	0.2	0.2	0.3	0.2	0.3
175	0.2	0.2	0.2	0.2	0.2
180	0.2	0.2	0.2	0.2	0.2

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS72027OB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOWS72027OB		
0-30	110.9	28.4
0-40	164.3	42.0
0-60	256.8	65.7
0-90	356.0	91.1
60-90	99.2	25.4
0-180	390.9	100.0

Beam Angle

Total Beam Angle(°)

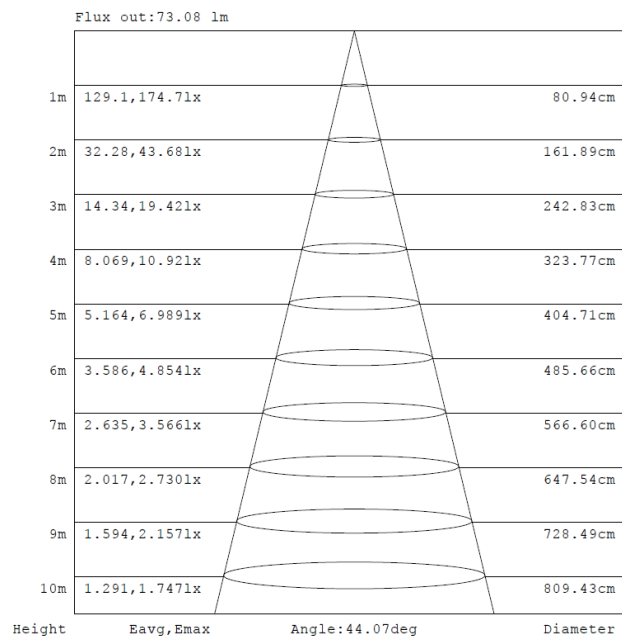
110.8

Illumination Plots

Model No.: SLOWS72027OB

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

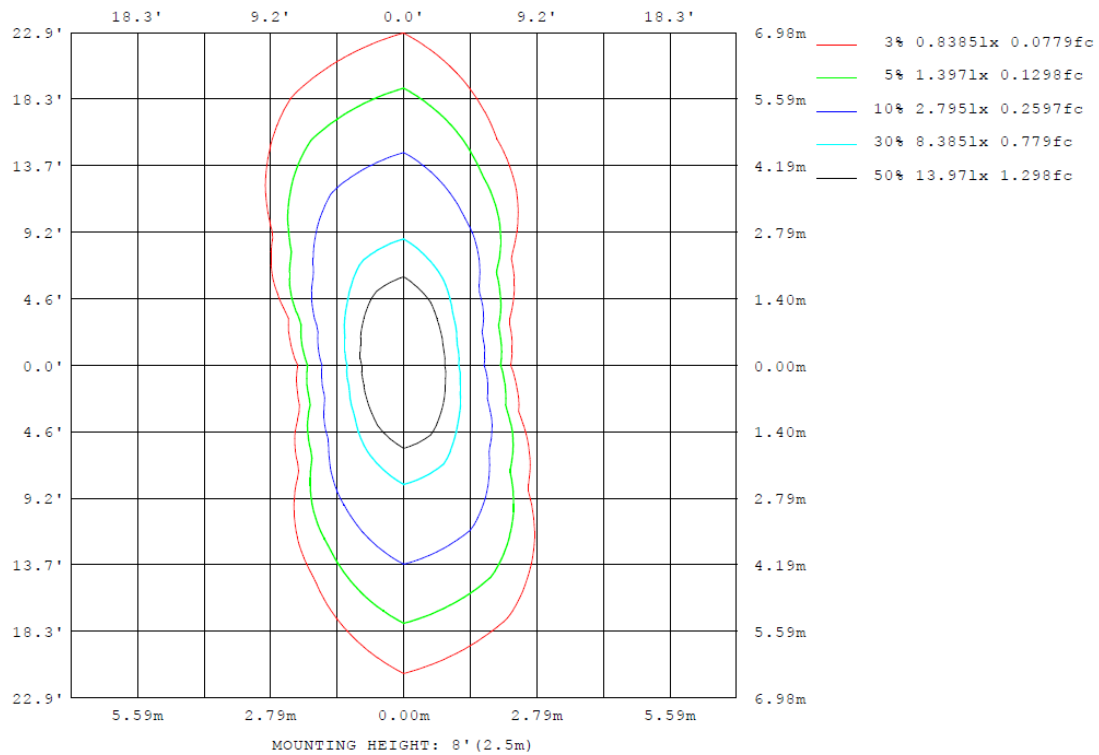
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS720270B

Model No.: SLOWS720270B

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS720270B

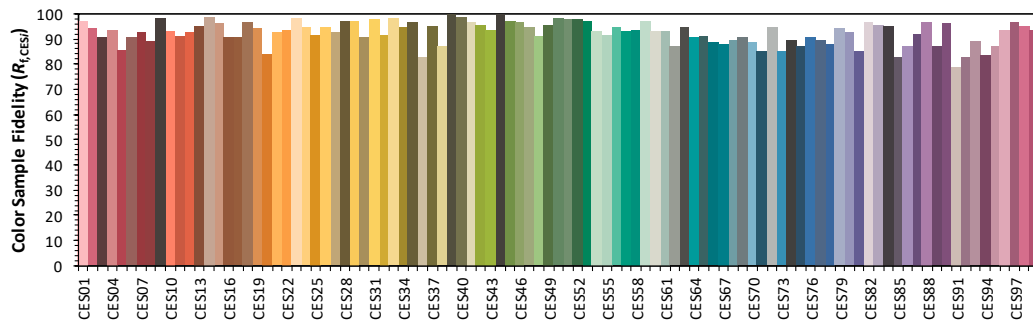
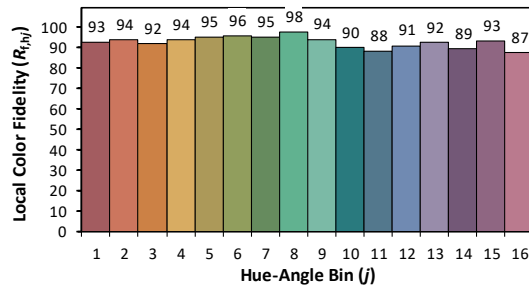
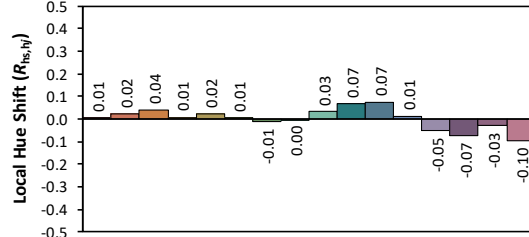
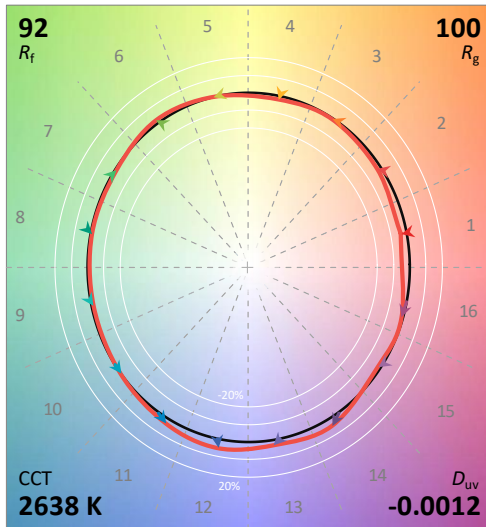
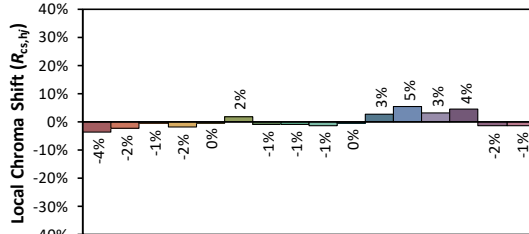
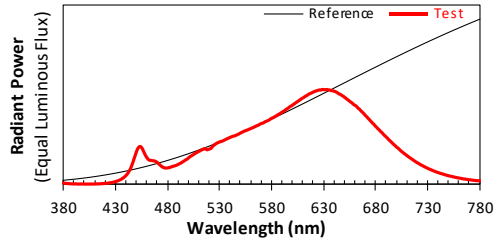
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/26

Model: SLOWS720270B



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

x 0.4629
 y 0.4080
 u' 0.2656
 v' 0.5268

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.

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TEST REPORT

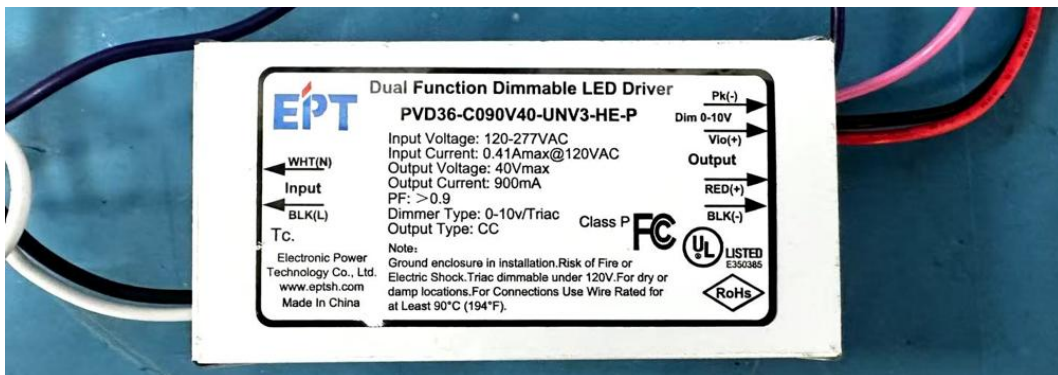
PRODUCT PICTURE (not to scale)



External view of SLOWS720270B



External view of SLOWS720270B



View of LED driver PVD36-C090V40-UNV3-HE-P

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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 *****