

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-013

ISSUE DATE

02 April 2025

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250227200GZU-013

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOWS71927OB

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 SLOWS71927OB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-011.

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: 20 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:	SLOWS71927OB
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOWS71927OB

Criteria	Result
Total Lumen Output	304.6 lm
Total Power	25.4 W
Luminaire Efficacy	12.0 lm/W
S/MH(C0/180)	0.65
S/MH(C90/270)	1.44
Correlated Color Temperature (CCT)	2640 K
Color Rendering Index (CRI)	95
R9	72
Chromaticity Coordinate (x)	0.4627
Chromaticity Coordinate (y)	0.4078
Chromaticity Coordinate (u')	0.2656
Chromaticity Coordinate (v')	0.5267

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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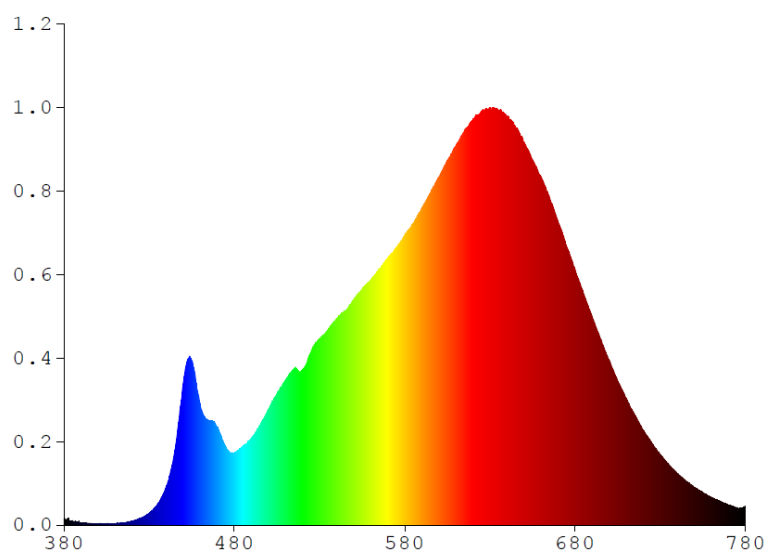
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOWS719270B

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.6993	480	7.6184	580	30.7340	680	26.9740	780	1.9637
385	0.4442	485	8.3698	585	32.0030	685	24.4160		
390	0.2412	490	9.2201	590	33.6140	690	22.0010		
395	0.1772	495	10.5790	595	35.2030	695	19.6740		
400	0.1456	500	12.2560	600	36.9050	700	17.4080		
405	0.1107	505	13.8920	605	38.6460	705	15.2310		
410	0.1907	510	15.3350	610	40.2230	710	13.3510		
415	0.2686	515	16.5390	615	41.8100	715	11.6370		
420	0.4286	520	16.4570	620	42.9960	720	10.0490		
425	0.7545	525	18.3540	625	43.9050	725	8.6400		
430	1.2490	530	19.7320	630	44.2060	730	7.4319		
435	2.2256	535	20.7440	635	44.0130	735	6.3875		
440	4.0546	540	21.8830	640	43.2910	740	5.4722		
445	7.8166	545	22.6250	645	42.1440	745	4.6671		
450	14.9270	550	23.8390	650	40.5790	750	4.0250		
455	17.4110	555	25.0140	655	38.6630	755	3.4129		
460	12.6850	560	25.9500	660	36.8720	760	2.9408		
465	11.0610	565	27.1020	665	34.7100	765	2.5248		
470	10.3820	570	28.2890	670	32.0520	770	2.1649		
475	8.2449	575	29.4190	675	29.0470	775	1.8279		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS71927OB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

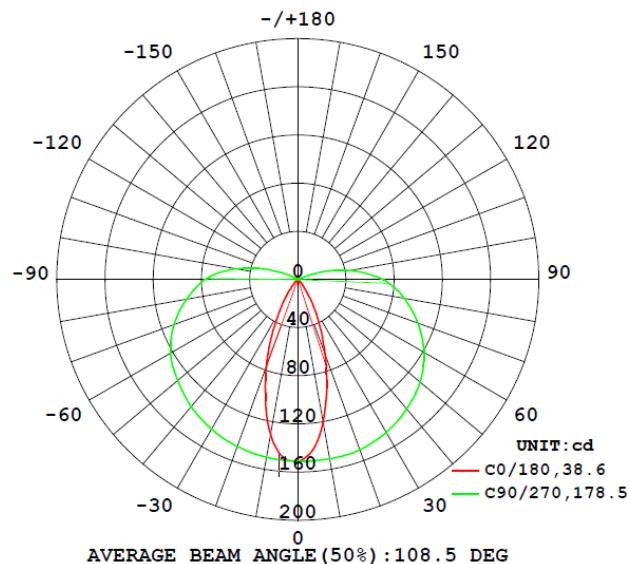
Photometric Measurements at 25°C – Distribution Method

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')
SLOWS71927OB								
S2502272 00-011	base-up	2640	95	72	0.4627	0.4078	0.2656	0.5267

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	Lumen
						Luminous Flux (Lumens)	Efficacy (Lumens Per Watt)
SLOWS71927OB							
S2502272 00-011	base-up	120.1	212.8	25.4	0.994	304.6	12.0

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS719270B

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	150.8	150.8	150.9	150.9	150.9
5	142.1	143.5	146.5	149.5	151.1
10	120.7	126.1	136.6	146.7	151.2
15	92.8	101.3	121.8	142.7	151.1
20	66.5	77.6	103.6	137.2	150.5
25	43.5	54.7	86.2	129.8	148.7
30	26.7	37.4	69.7	121.8	146.5
35	14.3	23.8	54.2	112.7	143.8
40	6.7	13.7	41.7	103.5	140.3
45	3.3	7.1	31.9	94.7	136.7
50	1.8	4.0	23.8	86.3	132.4
55	0.9	2.3	17.1	78.5	127.0
60	0.4	1.4	12.3	71.1	120.7
65	0.2	0.8	8.9	64.3	113.6
70	0.1	0.5	6.3	57.7	106.0
75	0.1	0.3	4.6	51.8	97.9
80	0.0	0.2	3.5	46.0	89.5
85	0.0	0.1	2.8	40.6	80.6
90	0.0	0.1	2.3	35.3	70.8
95	0.0	0.1	1.8	28.7	57.7
100	0.1	0.1	1.3	21.6	43.8
105	0.1	0.1	0.9	14.5	29.3
110	0.1	0.1	0.5	7.8	15.6
115	0.1	0.1	0.2	2.5	4.9
120	0.1	0.1	0.1	0.7	1.3
125	0.1	0.1	0.1	0.4	0.5
130	0.1	0.1	0.1	0.2	0.2
135	0.1	0.1	0.1	0.2	0.2
140	0.1	0.1	0.1	0.2	0.2
145	0.1	0.1	0.2	0.2	0.2
150	0.1	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2
160	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2
170	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2
180	0.2	0.2	0.1	0.1	0.2

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS71927OB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOWS71927OB		
0-30	90.4	29.7
0-40	131.2	43.1
0-60	201.8	66.2
0-90	278.3	91.4
60-90	76.5	25.2
0-180	304.6	100.0

Beam Angle

Total Beam Angle(°)

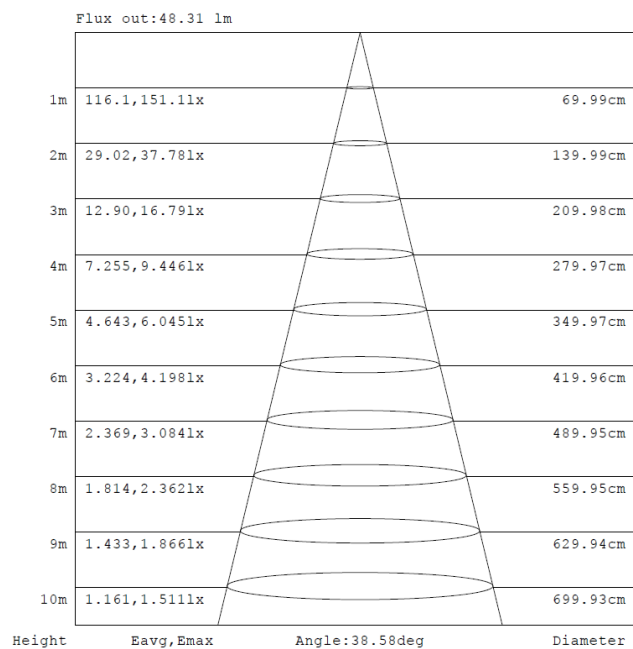
108.5

Illumination Plots

Model No.: SLOWS71927OB

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

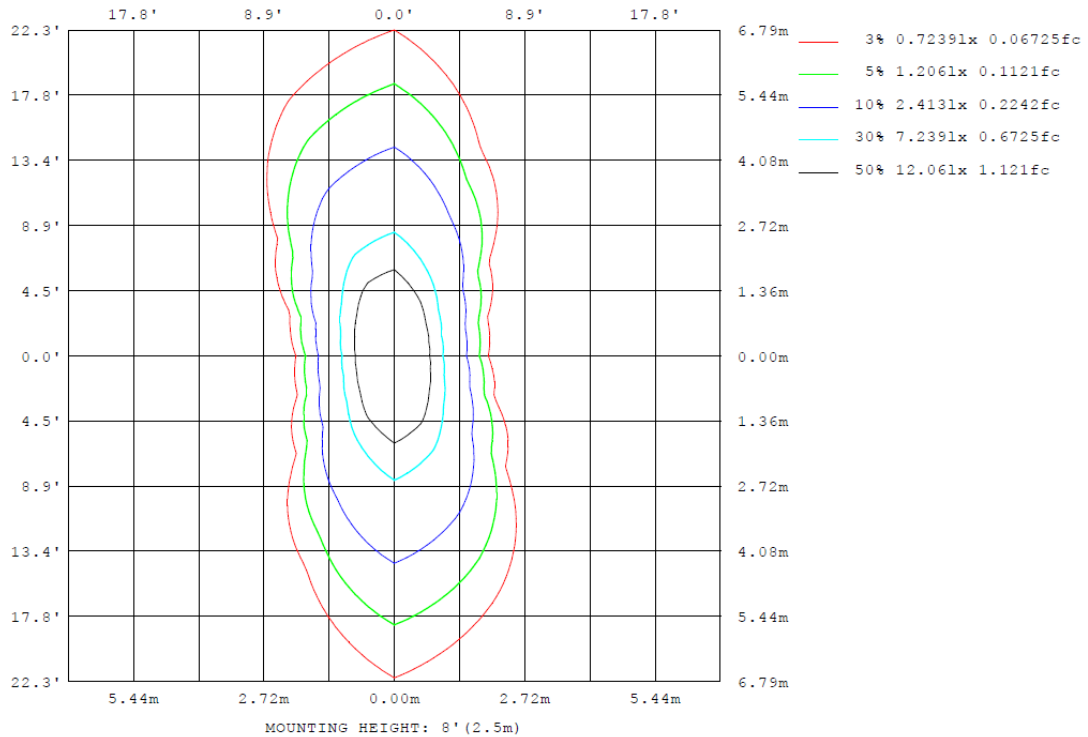
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS719270B

Model No.: SLOWS719270B

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS719270B

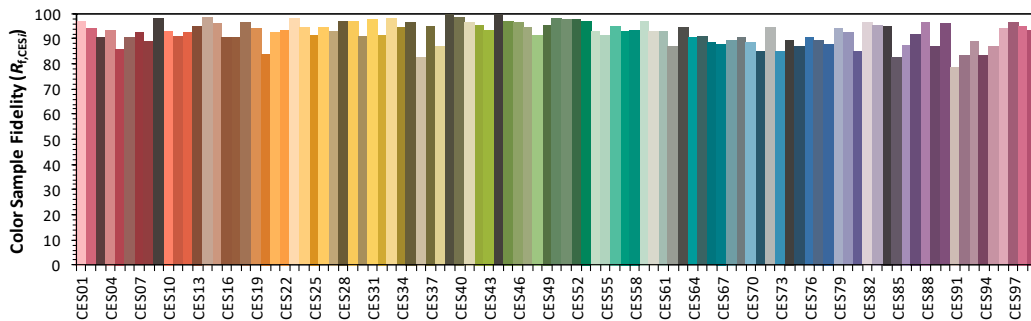
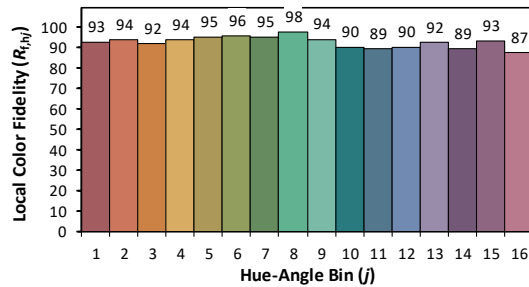
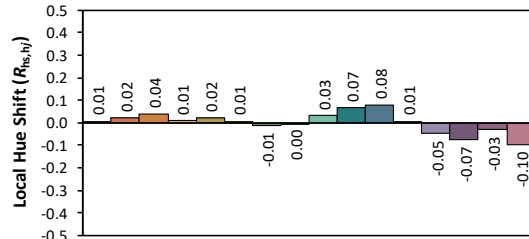
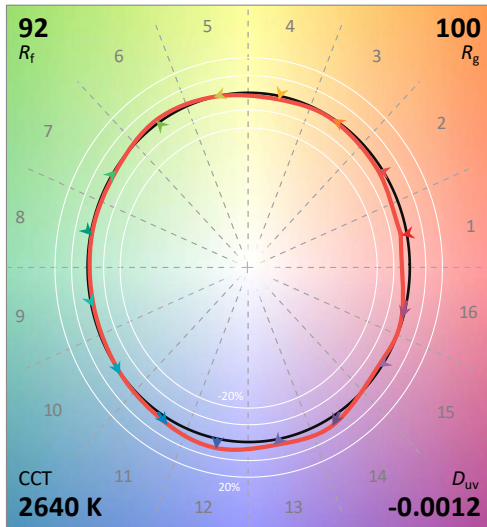
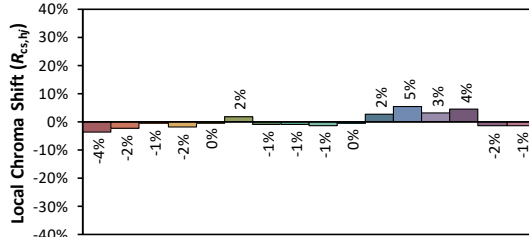
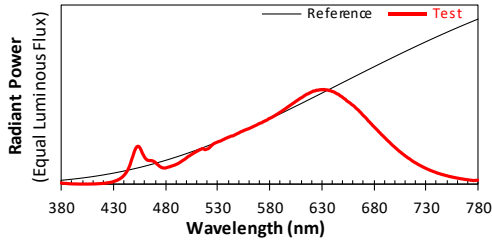
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/20

Model: SLOWS719270B



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

x 0.4627
 y 0.4078
 u' 0.2656
 v' 0.5267

CIE 13.3-1995
(CRI)

R_a 95

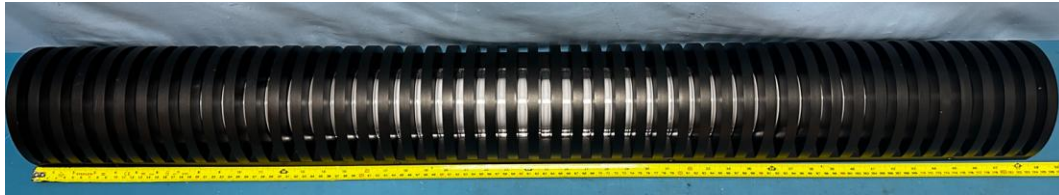
R_g 72

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

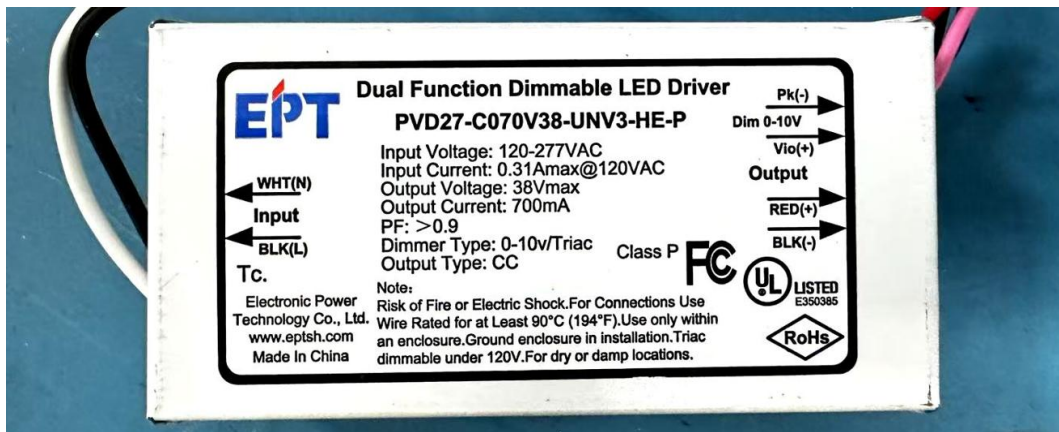
PRODUCT PICTURE (not to scale)



External view of SLOWS719270B



External view of SLOWS719270B



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

***** 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 *****