

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-010

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None

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Report format for LM-79_G

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Report No.: 250227200GZU-010

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOWS71827OB

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 SLOWS71827OB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-010.

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: 17 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:	SLOWS71827OB
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOWS71827OB

Criteria	Result
Total Lumen Output	207.6 lm
Total Power	17.8 W
Luminaire Efficacy	11.7 lm/W
S/MH(C0/180)	0.57
S/MH(C90/270)	1.45
Correlated Color Temperature (CCT)	2634 K
Color Rendering Index (CRI)	95
R9	72
Chromaticity Coordinate (x)	0.4626
Chromaticity Coordinate (y)	0.4070
Chromaticity Coordinate (u')	0.2659
Chromaticity Coordinate (v')	0.5264

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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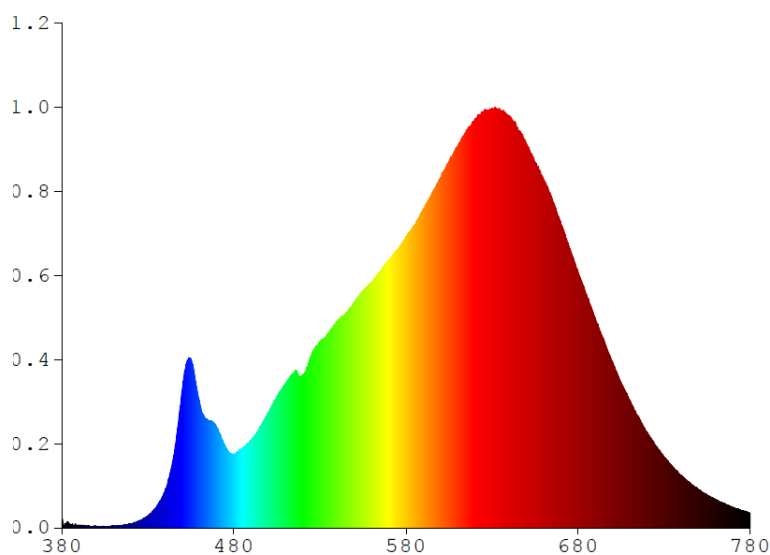
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOWS718270B

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.5247	480	5.5684	580	22.1270	680	19.3480	780	1.1059
385	0.2120	485	6.0483	585	22.9990	685	17.6210		
390	0.2062	490	6.6627	590	24.1970	690	15.8810		
395	0.1042	495	7.6400	595	25.3820	695	14.2140		
400	0.0754	500	8.7771	600	26.5960	700	12.5370		
405	0.0995	505	9.9597	605	27.7940	705	10.9800		
410	0.1142	510	10.9640	610	28.9830	710	9.6526		
415	0.1761	515	11.8170	615	30.1250	715	8.4381		
420	0.2931	520	11.6160	620	31.0110	720	7.2560		
425	0.5139	525	13.1040	625	31.6040	725	6.2159		
430	0.9176	530	14.1800	630	31.8330	730	5.3677		
435	1.5855	535	14.8120	635	31.6920	735	4.6160		
440	2.8613	540	15.6660	640	31.2530	740	3.9700		
445	5.4106	545	16.2960	645	30.2050	745	3.3889		
450	10.4470	550	17.0960	650	29.1120	750	2.8817		
455	12.7800	555	17.9950	655	27.7220	755	2.4901		
460	9.5142	560	18.6380	660	26.4160	760	2.1403		
465	8.1865	565	19.4840	665	24.8910	765	1.8431		
470	7.6094	570	20.3560	670	23.0300	770	1.5664		
475	6.1600	575	21.0920	675	20.8220	775	1.3339		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS71827OB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

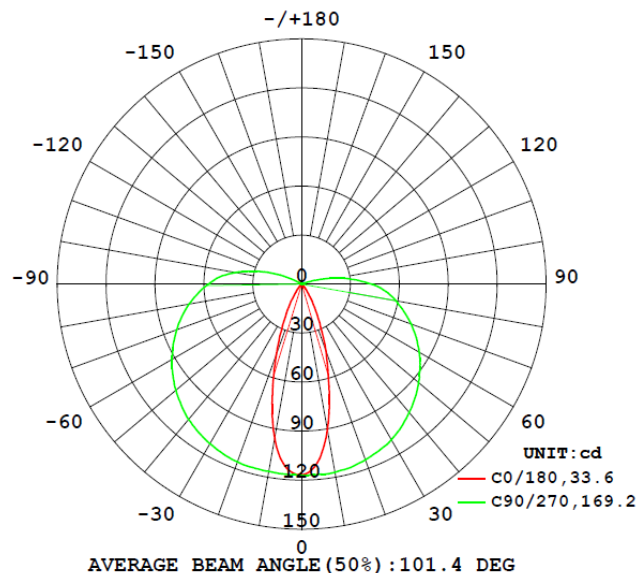
Photometric Measurements at 25°C – Distribution Method

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')
SLOWS71827OB								
S2502272 00-010	base-up	2634	95	72	0.4626	0.4070	0.2659	0.5264

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)
SLOWS71827OB							
S2502272 00-010	base-up	120.1	149.5	17.8	0.989	207.6	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 SLOWS718270B

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	116.7	113.1	115.0	116.4	116.9
5	109.8	100.1	108.2	115.3	117.0
10	90.8	78.9	96.5	112.6	116.9
15	64.8	56.5	81.1	108.4	116.0
20	43.3	39.0	64.4	102.8	114.3
25	26.0	24.7	50.2	96.4	112.3
30	14.4	14.8	38.6	89.7	109.9
35	7.2	8.2	28.4	82.2	106.5
40	3.5	4.4	21.0	74.4	102.6
45	1.9	2.6	15.2	66.9	98.4
50	0.9	1.6	10.6	59.7	93.6
55	0.5	0.9	7.5	53.1	88.7
60	0.2	0.5	5.4	47.1	83.3
65	0.1	0.3	3.8	41.9	77.6
70	0.1	0.2	2.9	37.2	71.4
75	0.0	0.1	2.3	32.8	64.9
80	0.0	0.1	1.9	28.9	58.6
85	0.0	0.1	1.5	25.2	51.8
90	0.0	0.1	1.2	20.6	42.9
95	0.0	0.0	0.9	15.4	32.6
100	0.0	0.0	0.6	10.4	22.1
105	0.0	0.0	0.3	5.7	12.0
110	0.0	0.0	0.2	1.8	3.8
115	0.0	0.0	0.1	0.5	1.1
120	0.0	0.0	0.1	0.3	0.6
125	0.1	0.1	0.1	0.2	0.2
130	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1
140	0.1	0.1	0.1	0.1	0.2
145	0.1	0.2	0.1	0.1	0.2
150	0.2	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	0.1
180	0.2	0.2	0.1	0.1	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS71827OB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOWS71827OB		
0-30	65.2	31.4
0-40	93.1	44.9
0-60	140.9	67.9
0-90	191.3	92.1
60-90	50.4	24.2
0-180	207.6	100.0

Beam Angle

Total Beam Angle(°)

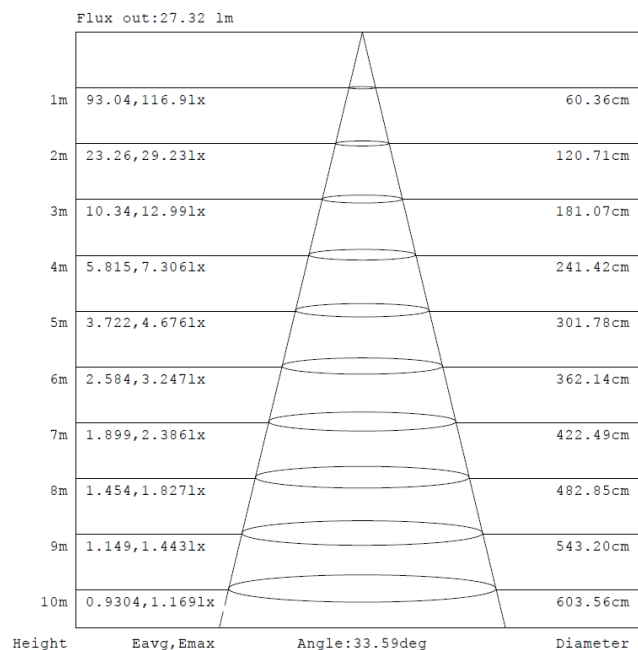
101.4

Illumination Plots

Model No.: SLOWS71827OB

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

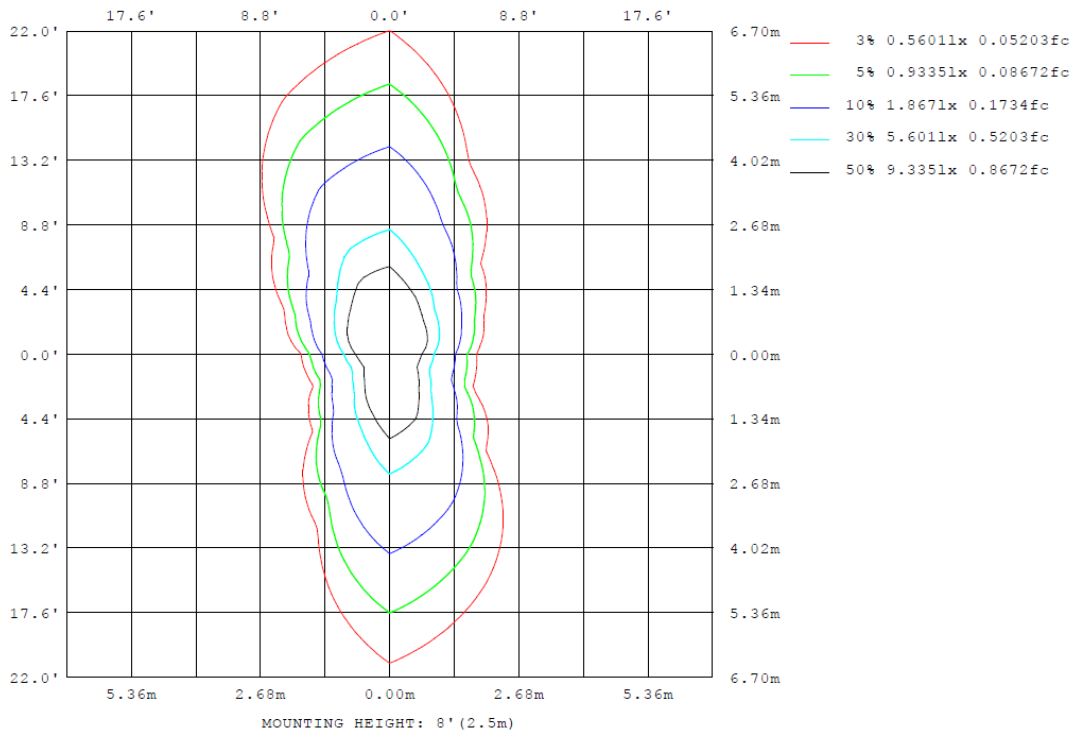
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS718270B

Model No.: SLOWS718270B

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS718270B

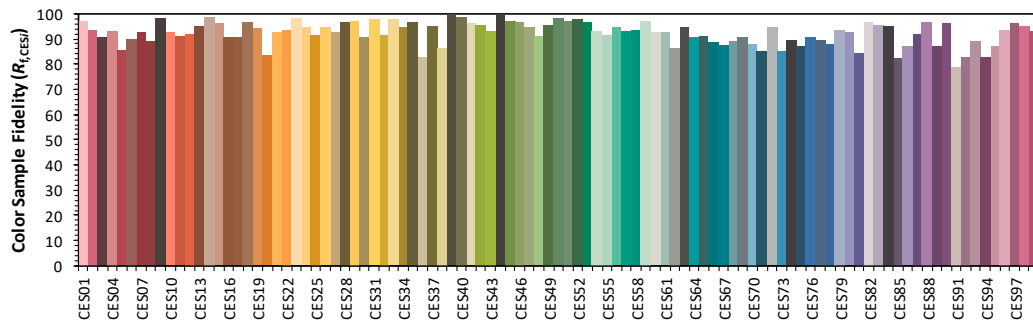
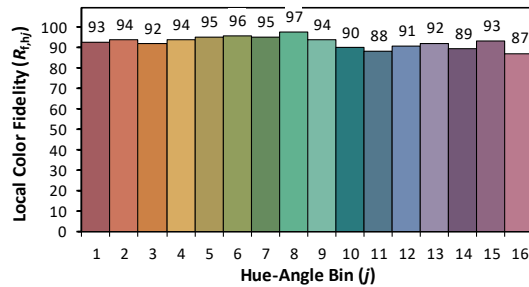
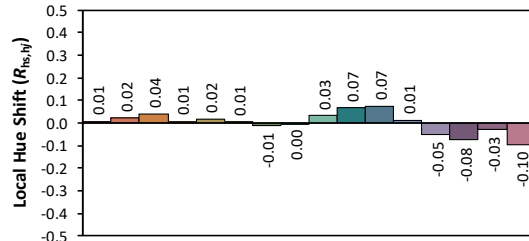
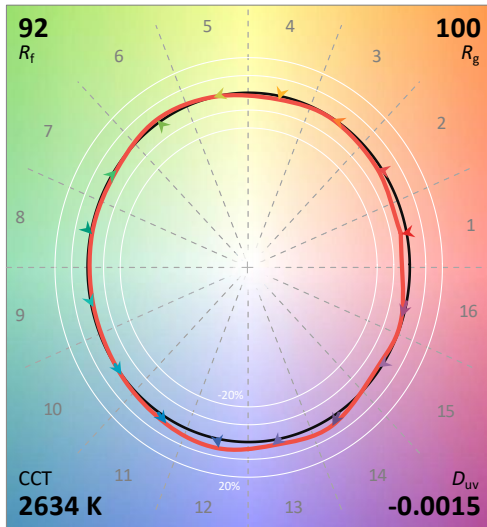
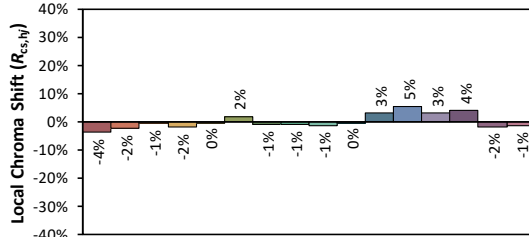
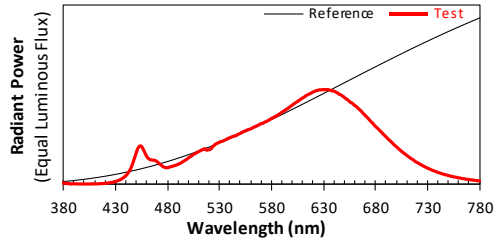
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/17

Model: SLOWS718270B



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

x 0.4626
 y 0.4070
 u' 0.2659
 v' 0.5264

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.

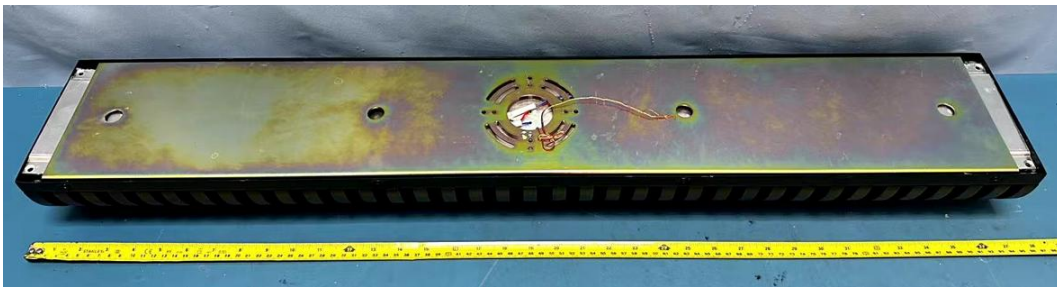
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TEST REPORT

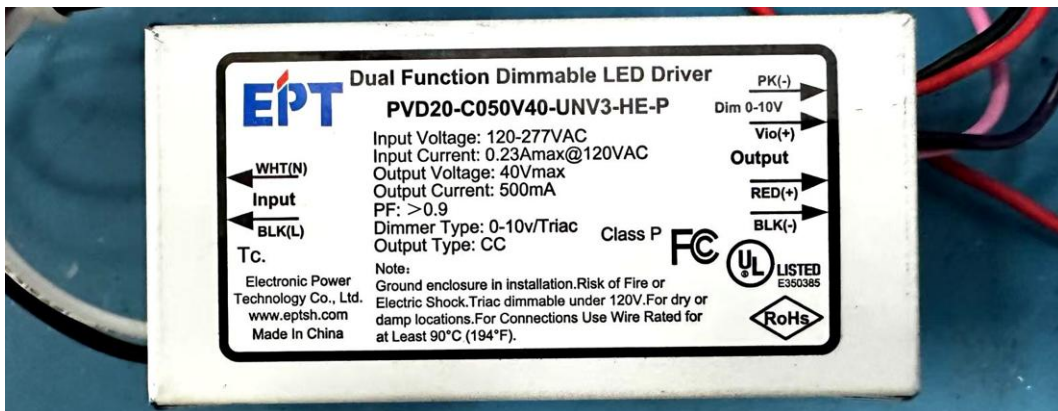
PRODUCT PICTURE (not to scale)



External view of SLOWS718270B



External view of SLOWS718270B



View of LED driver PVD20-C050V40-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 *****