

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-009

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None

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Report format for LM-79_G

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Report No.: 250227200GZU-009

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOWS71727OB

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 SLOWS71727OB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-009.

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: 14 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:	SLOWS717270B
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOWS717270B

Criteria	Result
Total Lumen Output	168.3 lm
Total Power	14.7 W
Luminaire Efficacy	11.5 lm/W
S/MH(C0/180)	0.52
S/MH(C90/270)	1.41
Correlated Color Temperature (CCT)	2633 K
Color Rendering Index (CRI)	95
R9	72
Chromaticity Coordinate (x)	0.4628
Chromaticity Coordinate (y)	0.4072
Chromaticity Coordinate (u')	0.2660
Chromaticity Coordinate (v')	0.5265

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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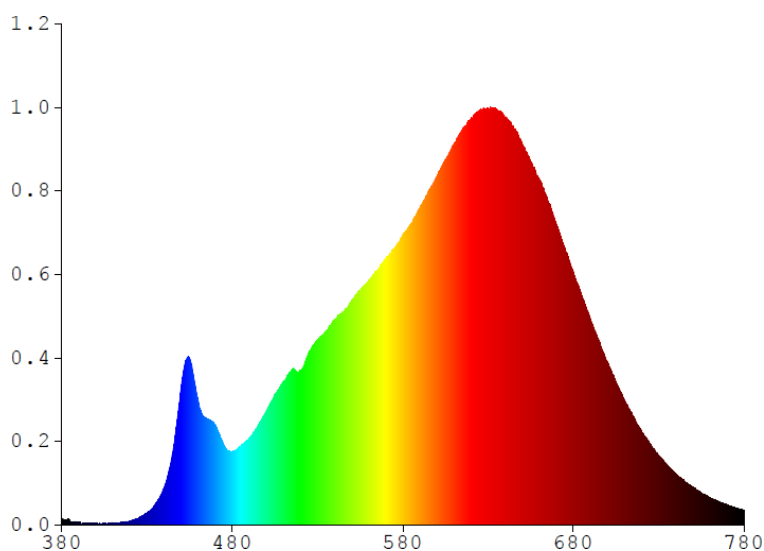
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOWS717270B

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.2027	480	4.3275	580	17.1840	680	14.9390	780	0.8817
385	0.1358	485	4.6736	585	17.8600	685	13.5440		
390	0.1552	490	5.1681	590	18.7730	690	12.1890		
395	0.0543	495	5.8868	595	19.7620	695	10.8960		
400	0.0375	500	6.7747	600	20.6580	700	9.6548		
405	0.0640	505	7.7112	605	21.6080	705	8.4607		
410	0.1094	510	8.5011	610	22.5580	710	7.3816		
415	0.1593	515	9.1895	615	23.4460	715	6.4342		
420	0.2339	520	9.1959	620	24.0680	720	5.5720		
425	0.3988	525	10.1510	625	24.5750	725	4.7978		
430	0.7113	530	10.9600	630	24.6450	730	4.1395		
435	1.2589	535	11.4850	635	24.6500	735	3.5737		
440	2.2225	540	12.1690	640	24.1390	740	3.0298		
445	4.2617	545	12.5870	645	23.5100	745	2.6228		
450	8.1262	550	13.2660	650	22.6020	750	2.2451		
455	9.8220	555	13.8820	655	21.4750	755	1.8997		
460	7.3346	560	14.4910	660	20.5060	760	1.6458		
465	6.2567	565	15.0850	665	19.2130	765	1.3906		
470	5.9086	570	15.7730	670	17.8030	770	1.2143		
475	4.7209	575	16.3710	675	16.1150	775	1.0220		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS717270B

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

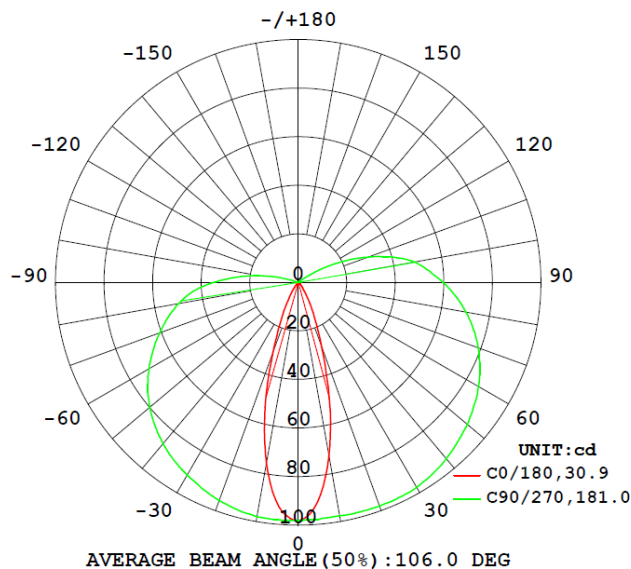
Photometric Measurements at 25°C – Distribution Method

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')
SLOWS717270B								
S2502272 00-009	base-up	2633	95	72	0.4628	0.4072	0.2660	0.5265

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)
SLOWS717270B							
S2502272 00-009	base-up	120.1	123.9	14.7	0.987	168.3	11.5

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS717270B

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	98.1	98.0	98.0	98.1	98.0
5	90.9	94.2	95.9	97.4	97.8
10	72.5	80.7	88.5	95.6	97.6
15	49.6	61.7	77.2	93.3	97.9
20	28.4	40.8	63.8	89.8	98.0
25	15.8	24.7	49.2	85.4	97.9
30	8.4	14.9	35.3	80.2	97.5
35	4.1	8.6	25.2	74.5	96.3
40	2.2	4.7	18.0	68.5	94.8
45	1.2	2.8	13.1	62.7	92.9
50	0.6	1.7	9.3	57.0	90.9
55	0.3	1.0	6.7	51.6	88.4
60	0.1	0.6	4.7	46.5	85.7
65	0.1	0.4	3.5	41.7	82.5
70	0.0	0.2	2.8	37.5	78.8
75	0.0	0.1	2.2	33.7	74.7
80	0.0	0.1	1.8	30.3	70.1
85	0.0	0.1	1.5	27.4	65.1
90	0.0	0.1	1.3	24.6	59.7
95	0.0	0.1	1.1	22.2	54.2
100	0.0	0.0	1.0	19.9	48.7
105	0.0	0.0	0.8	16.6	40.4
110	0.0	0.0	0.6	12.6	30.8
115	0.0	0.1	0.4	8.6	21.0
120	0.1	0.1	0.3	4.6	11.5
125	0.1	0.1	0.2	1.5	3.6
130	0.1	0.1	0.1	0.4	0.9
135	0.1	0.1	0.1	0.2	0.4
140	0.1	0.1	0.1	0.2	0.2
145	0.1	0.1	0.1	0.1	0.1
150	0.2	0.2	0.1	0.1	0.1
155	0.2	0.2	0.2	0.1	0.1
160	0.2	0.2	0.2	0.1	0.1
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	0.1	0.2	0.2	0.2
180	0.2	0.2	0.2	0.2	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS717270B

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOWS717270B		
0-30	51.3	30.5
0-40	72.4	43.0
0-60	109.9	65.3
0-90	151.8	90.3
60-90	41.9	25.0
0-180	168.3	100.0

Beam Angle

Total Beam Angle(°)

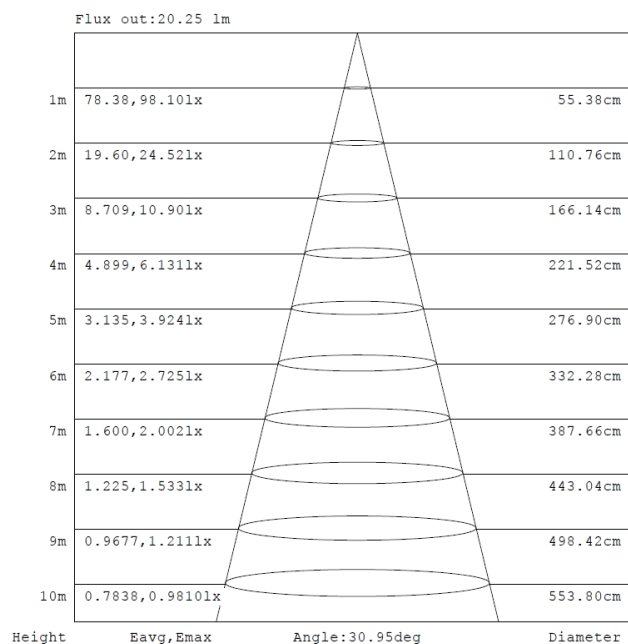
106.0

Illumination Plots

Model No.: SLOWS717270B

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

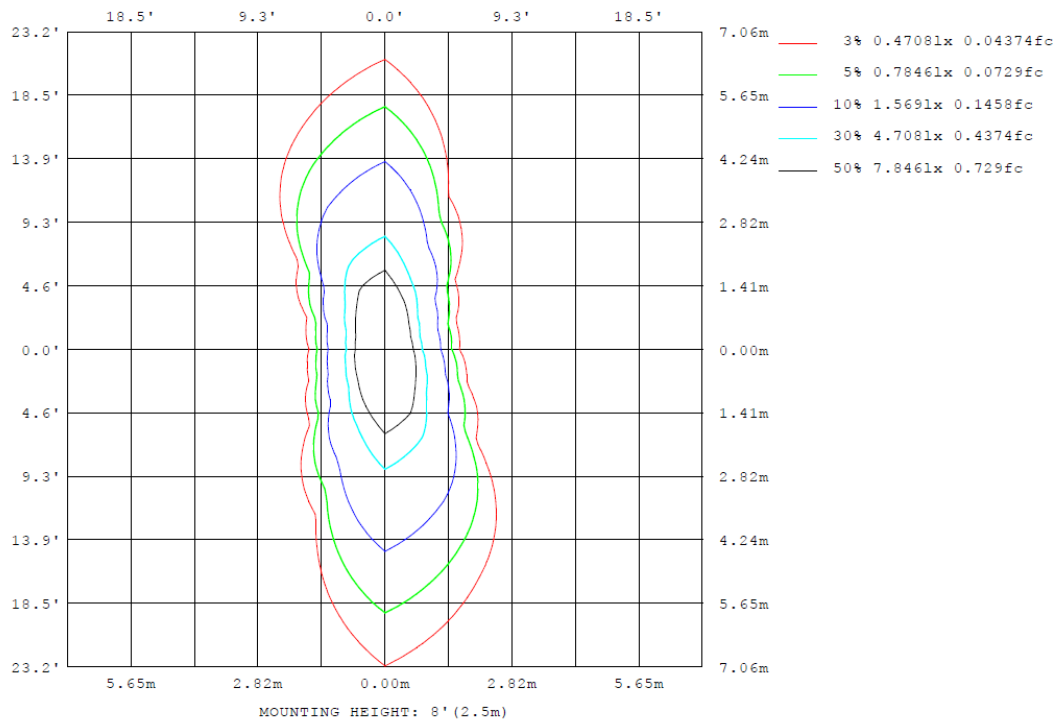
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS717270B

Model No.: SLOWS717270B

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS717270B

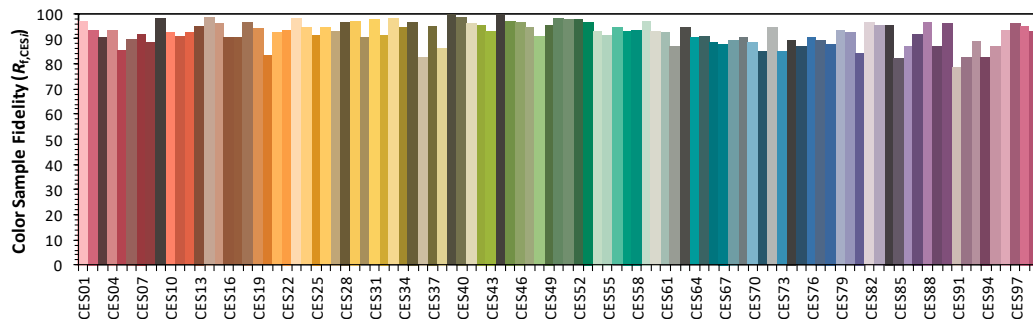
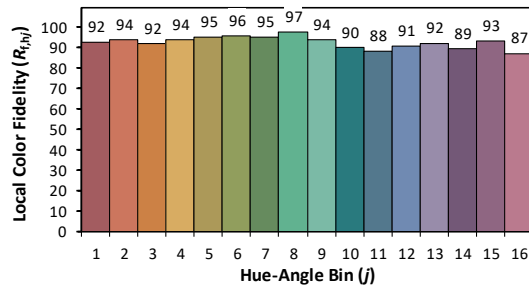
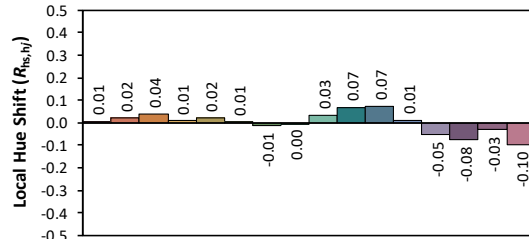
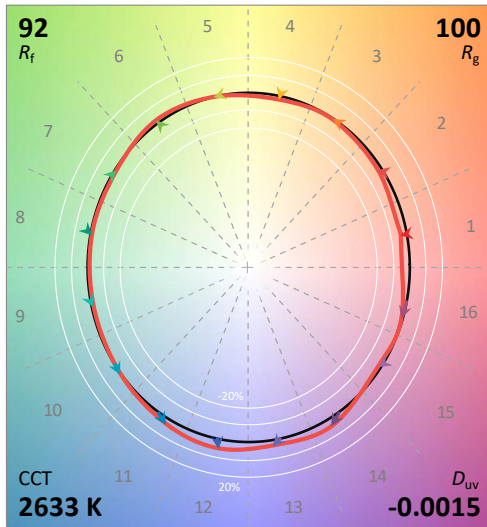
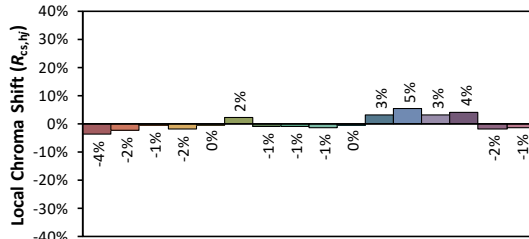
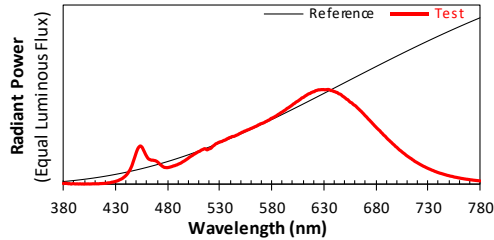
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/14

Model: SLOWS717270B



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

x 0.4628
 y 0.4072
 u' 0.2660
 v' 0.5265

CIE 13.3-1995
(CRI)

R_a 95

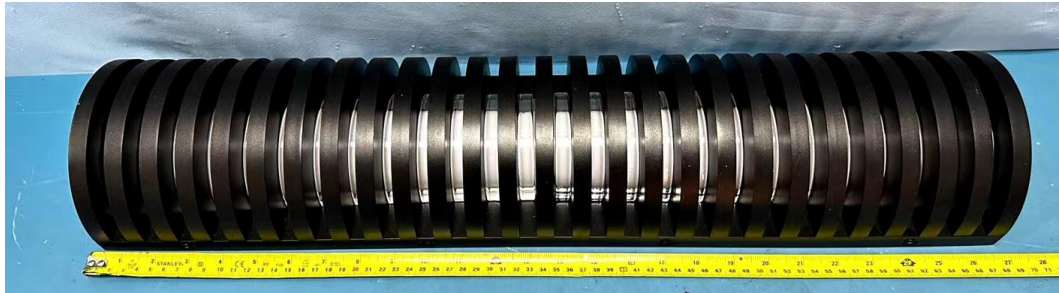
R_g 72

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

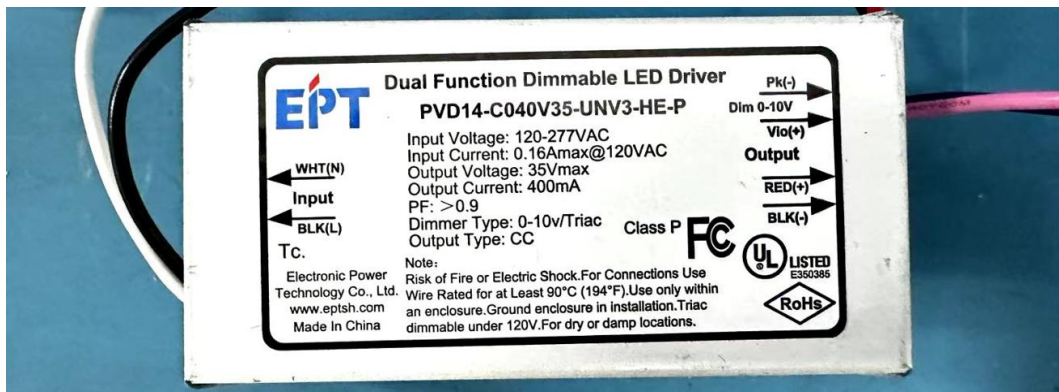
PRODUCT PICTURE (not to scale)



External view of SLOWS717270B



External view of SLOWS717270B



View of LED driver PVD14-C040V35-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 *****