

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250227200GZU-003

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None

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Report No.: 250227200GZU-003

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOWS71527OB

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 SLOWS71527OB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250227200-007.

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:	SLOWS715270B
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOWS715270B

Criteria	Result
Total Lumen Output	77.4 lm
Total Power	7.6 W
Luminaire Efficacy	10.2 lm/W
S/MH(C0/180)	0.52
S/MH(C90/270)	1.39
Correlated Color Temperature (CCT)	2642 K
Color Rendering Index (CRI)	94
R9	70
Chromaticity Coordinate (x)	0.4628
Chromaticity Coordinate (y)	0.4085
Chromaticity Coordinate (u')	0.2654
Chromaticity Coordinate (v')	0.5270

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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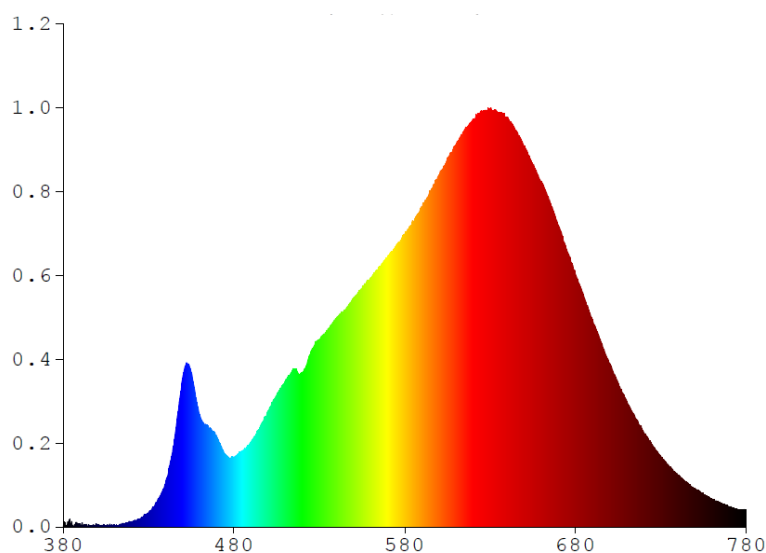
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOWS715270B

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0582	480	2.0822	580	8.7116	680	7.4877	780	0.5197
385	0.1362	485	2.2521	585	9.0559	685	6.8070		
390	0.0727	490	2.5291	590	9.5277	690	6.1371		
395	0.0610	495	2.9353	595	9.9868	695	5.4709		
400	0.0583	500	3.4524	600	10.4730	700	4.8489		
405	0.0408	505	3.9236	605	10.9740	705	4.2621		
410	0.0368	510	4.3461	610	11.3850	710	3.7129		
415	0.0680	515	4.6810	615	11.8120	715	3.2291		
420	0.1453	520	4.5895	620	12.1240	720	2.7822		
425	0.2369	525	5.2227	625	12.3690	725	2.4160		
430	0.4196	530	5.5887	630	12.4120	730	2.0772		
435	0.7525	535	5.8853	635	12.3520	735	1.7995		
440	1.3416	540	6.2227	640	12.1870	740	1.5399		
445	2.5367	545	6.4508	645	11.7950	745	1.3203		
450	4.4313	550	6.8110	650	11.3260	750	1.1324		
455	4.5695	555	7.1077	655	10.7430	755	0.9687		
460	3.3104	560	7.4159	660	10.2790	760	0.8108		
465	2.9768	565	7.7231	665	9.6421	765	0.7012		
470	2.6628	570	8.0524	670	8.9469	770	0.5952		
475	2.1540	575	8.3749	675	8.0924	775	0.5179		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS71527OB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

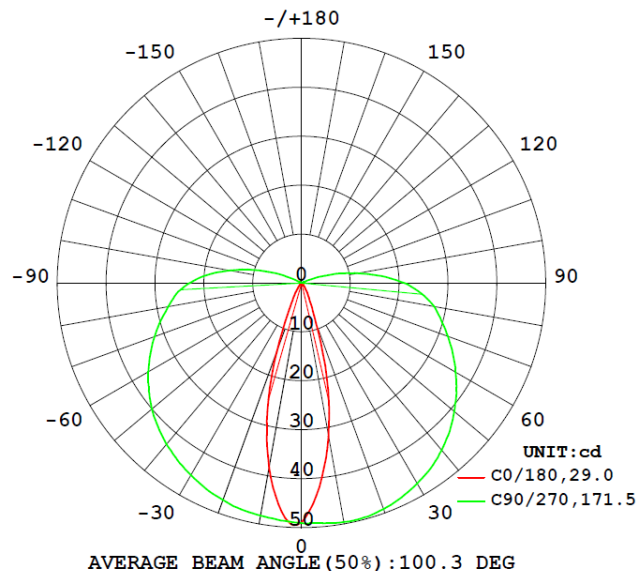
Photometric Measurements at 25°C – Distribution Method

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')
SLOWS71527OB								
S2502272 00-007	base-up	2642	94	70	0.4628	0.4085	0.2654	0.5270

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)
SLOWS71527OB							
S2502272 00-007	base-up	120.1	64.2	7.6	0.986	77.4	10.2

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS715270B

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	48.9	48.9	47.7	48.4	49.1
5	41.8	43.0	43.1	46.9	49.3
10	31.8	34.6	37.5	45.2	49.6
15	20.1	24.7	31.2	43.2	49.6
20	8.7	14.3	24.3	41.0	49.1
25	4.2	6.5	17.2	38.6	48.3
30	2.4	3.8	10.7	36.0	47.3
35	1.3	2.4	6.4	33.5	46.2
40	0.6	1.4	4.5	30.9	44.6
45	0.3	0.8	3.3	28.3	42.8
50	0.2	0.5	2.5	25.8	40.8
55	0.1	0.3	1.9	23.4	38.7
60	0.1	0.2	1.5	21.1	36.5
65	0.0	0.1	1.1	19.1	34.2
70	0.0	0.1	0.9	17.3	31.9
75	0.0	0.1	0.7	15.7	29.6
80	0.0	0.1	0.6	14.3	27.5
85	0.0	0.1	0.5	12.7	24.6
90	0.1	0.1	0.4	10.9	21.1
95	0.1	0.1	0.3	8.4	16.5
100	0.0	0.0	0.2	6.0	11.8
105	0.0	0.0	0.2	3.8	7.5
110	0.0	0.0	0.1	1.7	3.6
115	0.0	0.0	0.1	0.5	1.0
120	0.0	0.0	0.0	0.2	0.3
125	0.0	0.0	0.0	0.1	0.2
130	0.0	0.0	0.0	0.1	0.1
135	0.0	0.0	0.1	0.1	0.1
140	0.0	0.0	0.1	0.1	0.1
145	0.0	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 SLOWS715270B

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOWS715270B		
0-30	24.1	31.2
0-40	33.8	43.6
0-60	51.0	65.8
0-90	70.9	91.5
60-90	19.9	25.7
0-180	77.4	100.0

Beam Angle

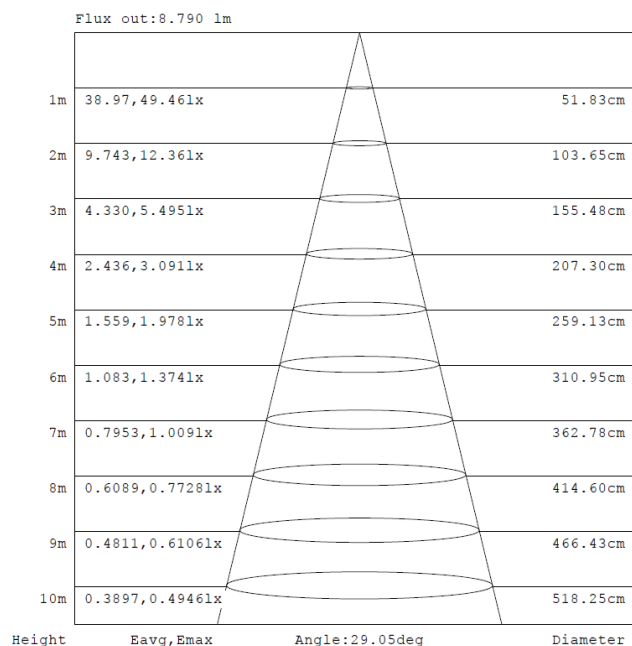
Total Beam Angle(°)
100.3

Illumination Plots

Model No.: SLOWS715270B

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

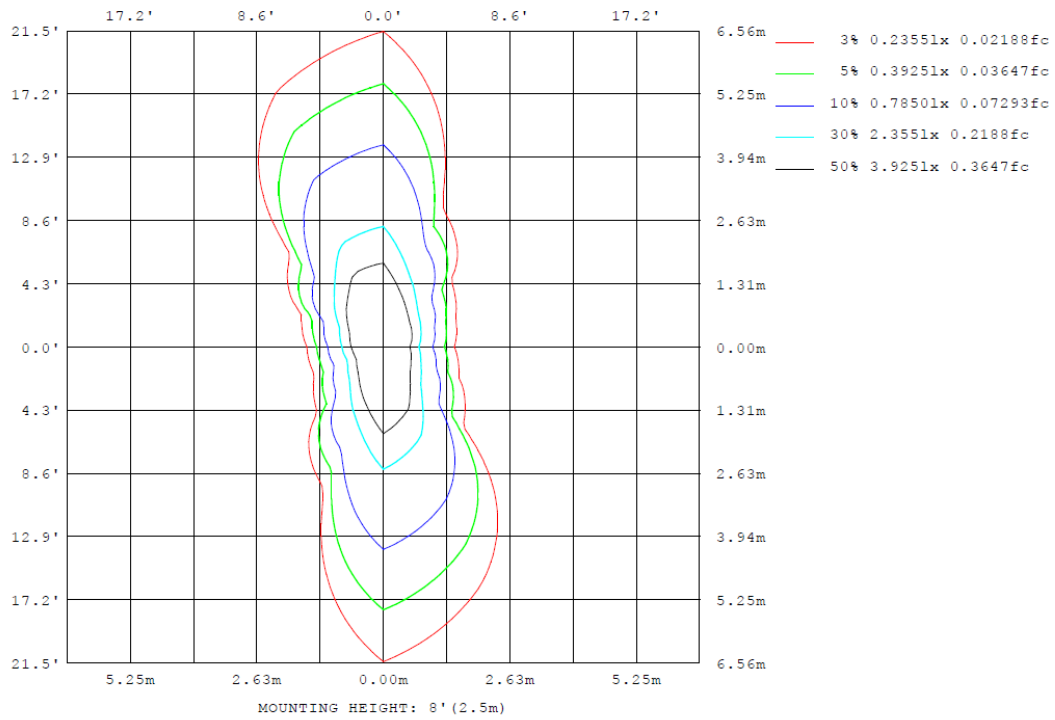
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS715270B

Model No.: SLOWS715270B

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOWS715270B

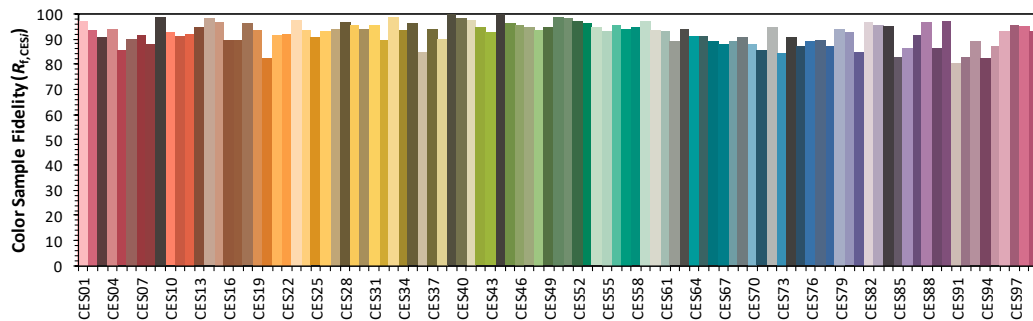
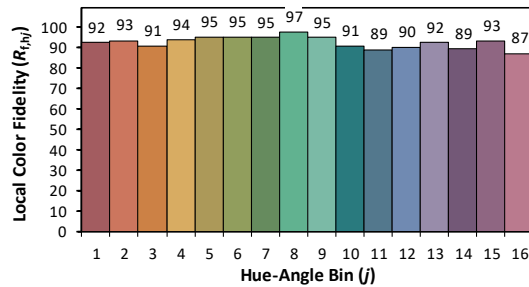
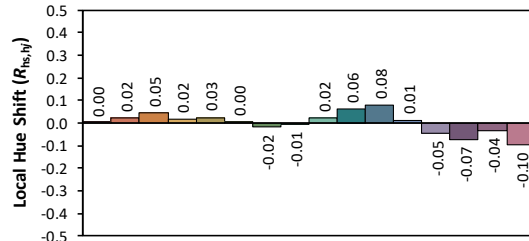
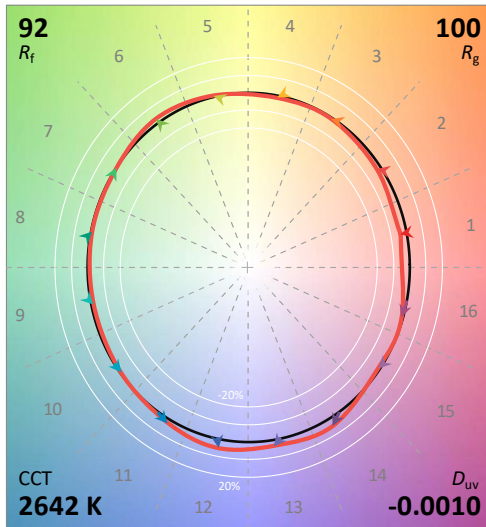
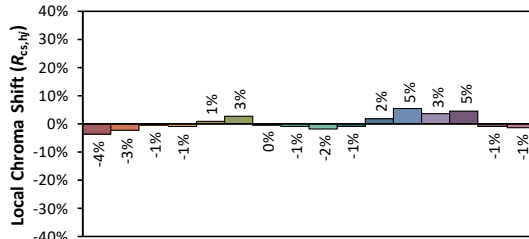
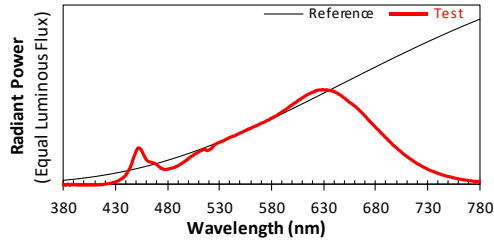
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/3/11

Model: SLOWS715270B



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

x 0.4628
 y 0.4085
 u' 0.2654
 v' 0.5270

CIE 13.3-1995
(CRI)

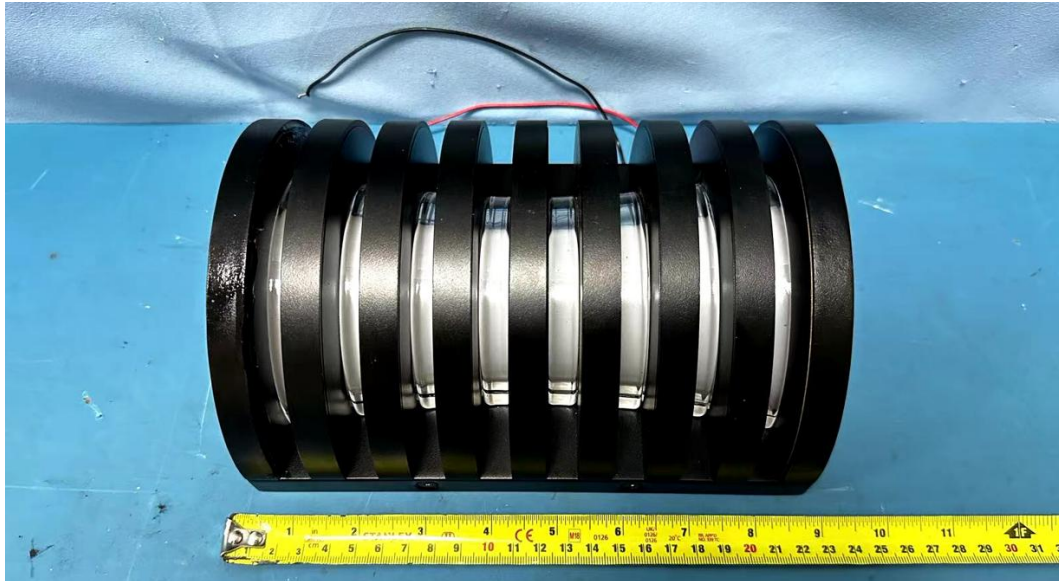
R_a 94
 R_g 70

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

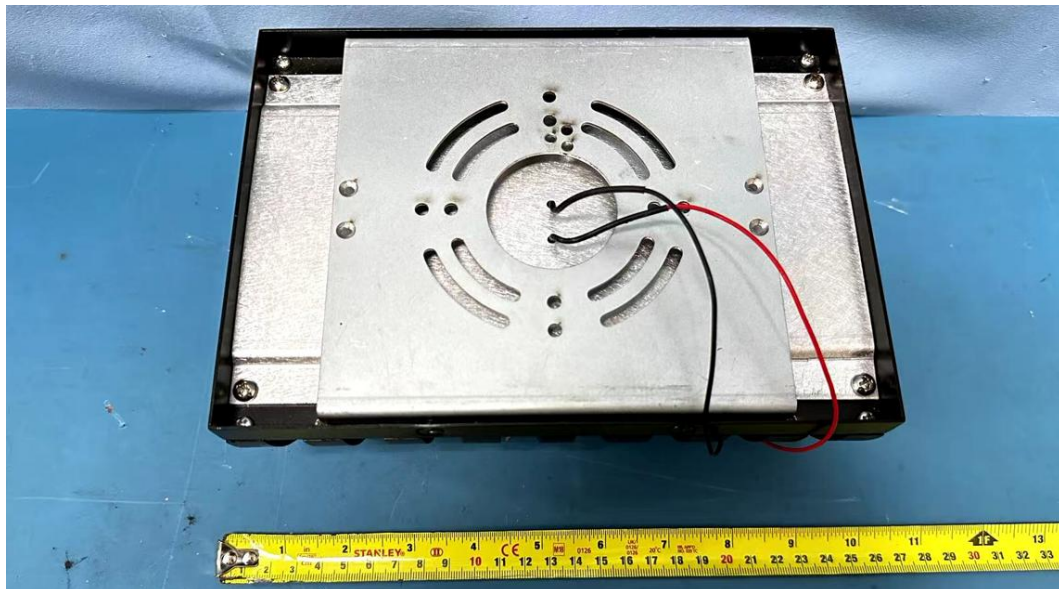
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLOWS715270B

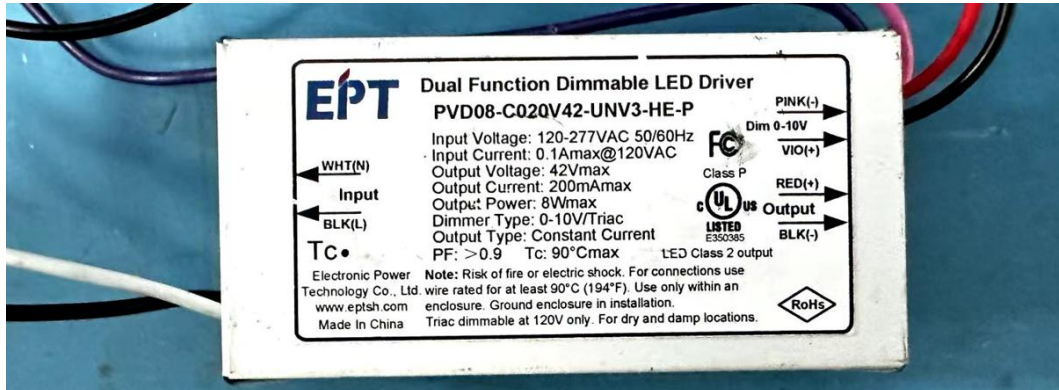


External view of SLOWS715270B

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD08-C020V42-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 *****