

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-009

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None

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Report format for LM-79_G

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Report No.: 251027067GZU-009

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV82827XXCG

Remark: "XXX" represents the color of the appearance.

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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<u>TEST:</u>	Electrical and Photometric as required to the IES LM-79 test standard.
<u>AUTHORIZATION:</u>	The testing performed was authorized by signed quote number: QGZ251023107.
<u>STANDARDS USED:</u>	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
<u>DESCRIPTION OF SAMPLE:</u>	The client submitted one sample of model SLV82827XXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-006.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	Guangzhou Xiongyi Precision Metalworking Co., Ltd Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450
<u>DATES OF TESTS:</u>	19 November 2025
<u>ISSUED BY:</u>	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
<u>TEST LOCATION:</u>	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:	SLV82827XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV82827XXXCG

Criteria	Result
Total Lumen Output	593.6 lm
Total Power	18.9 W
Luminaire Efficacy	31.5 lm/W
S/MH(C0/180)	2.63
S/MH(C90/270)	4.20
Correlated Color Temperature (CCT)	2458 K
Color Rendering Index (CRI)	92
R9	48
Chromaticity Coordinate (x)	0.4793
Chromaticity Coordinate (y)	0.4117
Chromaticity Coordinate (u')	0.2746
Chromaticity Coordinate (v')	0.5307

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: 3.958A DC

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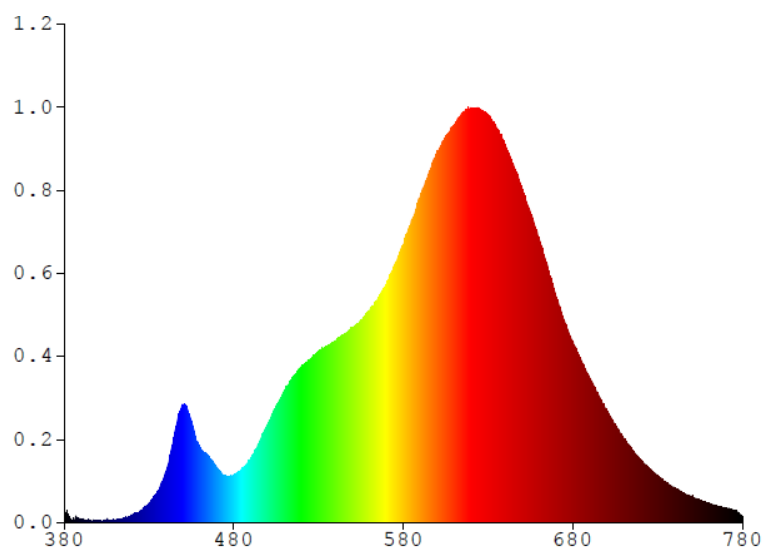
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV82827XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	1.1456	580	6.7312	680	4.3958	780	0.1334
385	0.0350	485	1.3163	585	7.3450	685	3.9225		
390	0.0247	490	1.5509	590	7.9000	690	3.5002		
395	0.0458	495	1.9415	595	8.4567	695	3.0951		
400	0.0148	500	2.3803	600	9.0056	700	2.7126		
405	0.0320	505	2.8081	605	9.3713	705	2.3726		
410	0.0433	510	3.2055	610	9.6311	710	2.0354		
415	0.1107	515	3.5211	615	9.9350	715	1.7549		
420	0.1598	520	3.8070	620	10.0550	720	1.5269		
425	0.2891	525	3.9473	625	10.0310	725	1.3148		
430	0.4692	530	4.1496	630	9.8722	730	1.1284		
435	0.7401	535	4.2860	635	9.5527	735	0.9640		
440	1.2377	540	4.3923	640	9.1521	740	0.8381		
445	2.1150	545	4.5428	645	8.6612	745	0.7093		
450	2.8428	550	4.6984	650	8.0967	750	0.6392		
455	2.4383	555	4.8941	655	7.4674	755	0.5447		
460	1.8239	560	5.1286	660	6.9033	760	0.4685		
465	1.6114	565	5.4168	665	6.2282	765	0.3977		
470	1.3347	570	5.7785	670	5.4777	770	0.3447		
475	1.1360	575	6.2585	675	4.7913	775	0.2957		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82827XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

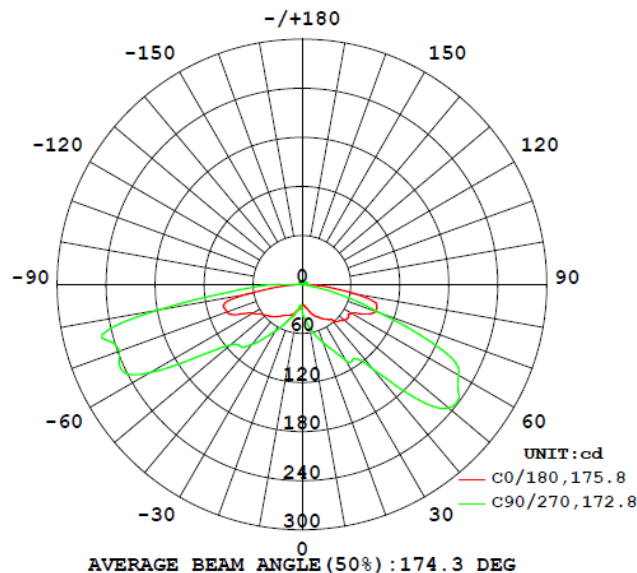
Photometric Measurements at 25°C – Distribution Method

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')
SLV82827XXXCG								
S2510270 67-006	base-up	2458	92	48	0.4793	0.4117	0.2746	0.5307

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 Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
SLV82827XXXCG							
S2510270 67-006	base-up	120.1	158.7	18.9	0.990	593.6	31.5

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82827XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	27.1	30.3	34.9	36.1	31.5
5	25.0	39.8	44.3	46.1	42.3
10	28.7	47.4	56.3	58.9	53.1
15	33.7	56.8	67.3	70.8	64.2
20	39.3	65.4	79.2	83.9	75.6
25	43.4	74.7	93.2	100.8	88.0
30	47.7	85.0	114.2	117.8	106.9
35	52.2	99.3	112.2	118.5	110.9
40	56.5	98.8	148.5	170.5	134.4
45	63.1	130.5	215.5	233.4	196.3
50	68.0	181.7	238.6	243.9	234.5
55	69.5	195.4	230.3	233.1	233.9
60	70.6	189.5	225.1	235.3	221.7
65	86.2	166.3	168.4	159.7	189.3
70	95.9	105.3	89.0	83.4	102.0
75	94.8	53.0	42.9	37.3	50.5
80	66.0	15.3	10.0	8.7	12.7
85	28.4	4.8	2.2	1.9	2.6
90	7.8	4.1	2.1	1.8	2.3
95	6.4	3.3	1.8	1.6	2.0
100	5.6	2.8	1.7	1.5	1.8
105	3.2	4.9	2.4	2.3	2.4
110	1.6	4.8	6.8	6.3	6.5
115	0.0	1.5	3.8	5.1	4.5
120	0.0	0.3	1.5	1.7	1.4
125	0.0	0.0	1.2	1.5	1.6
130	0.0	0.0	0.0	1.9	0.3
135	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0
155	0.1	0.0	0.0	0.0	0.0
160	0.1	0.1	0.1	0.1	0.1
165	0.3	0.3	0.1	0.1	0.1
170	0.0	0.1	0.0	0.2	0.2
175	0.1	0.1	0.1	0.0	0.0
180	0.1	0.1	0.1	0.1	0.0

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82827XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV82827XXXCG		
0-30	42.0	7.1
0-40	87.9	14.8
0-60	282.3	47.6
0-90	579.2	97.6
60-90	296.9	50.0
0-180	593.6	100.0

Beam Angle

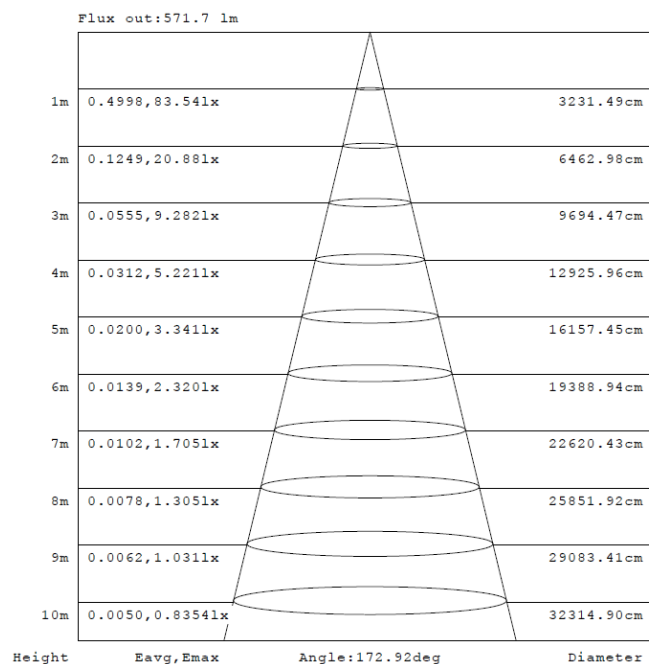
Total Beam Angle(°)
174.3

Illumination Plots

Model No.: SLV82827XXXCG

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

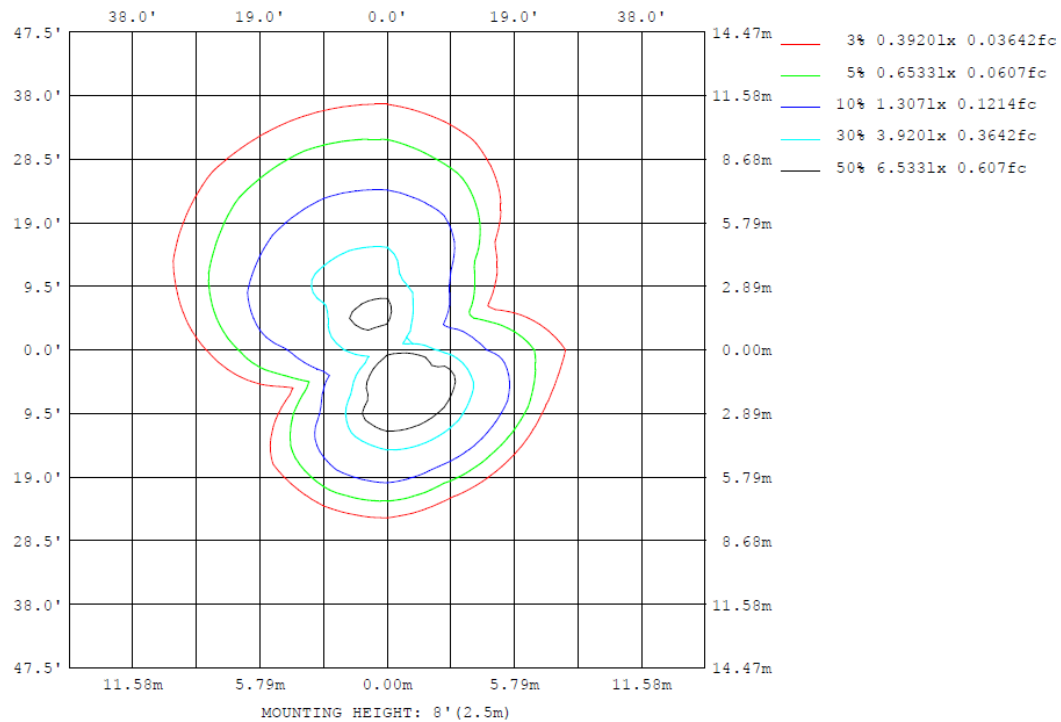
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82827XXXCG

Model No.: SLV82827XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82827XXXCG

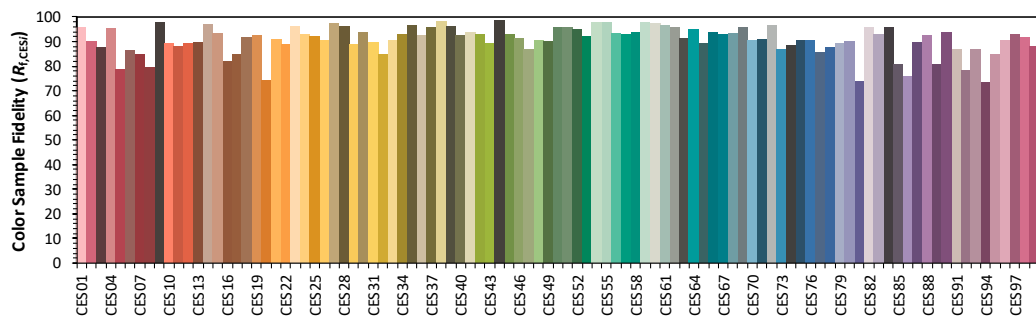
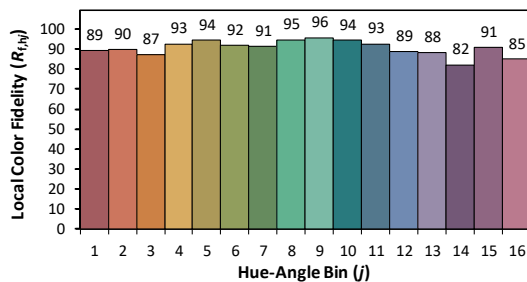
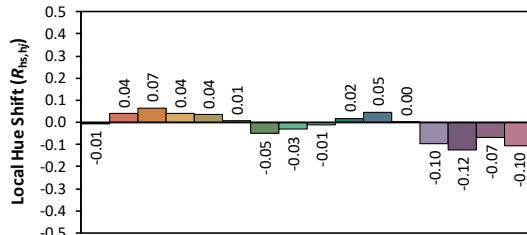
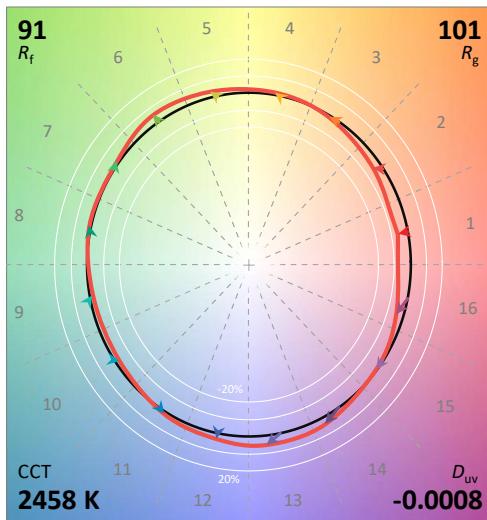
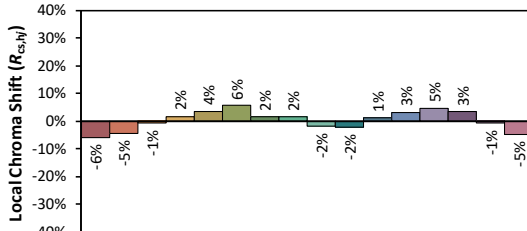
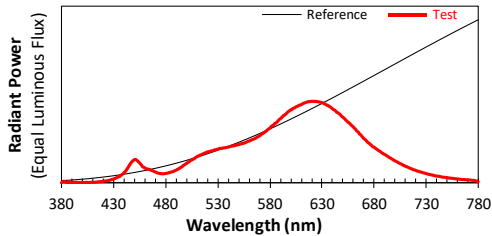
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/19

Model: SLV82827XXXCG



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

x 0.4793
 y 0.4117
 u' 0.2746
 v' 0.5307

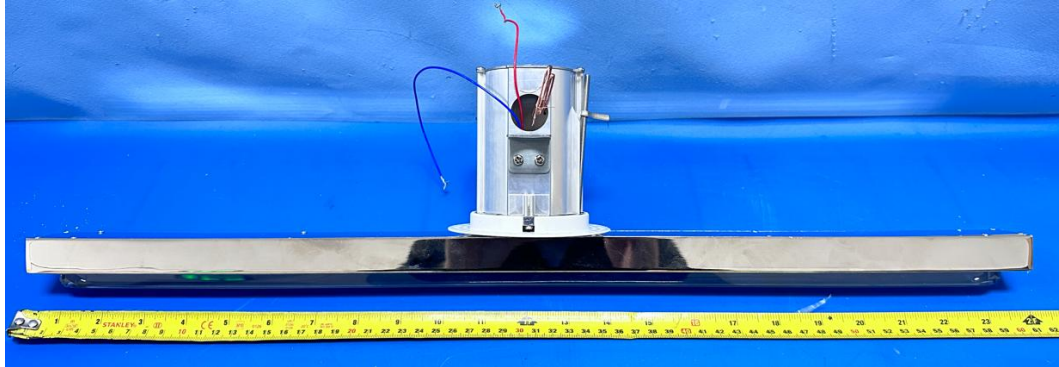
CIE 13.3-1995
(CRI)
 R_a 92
 R_g 48

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

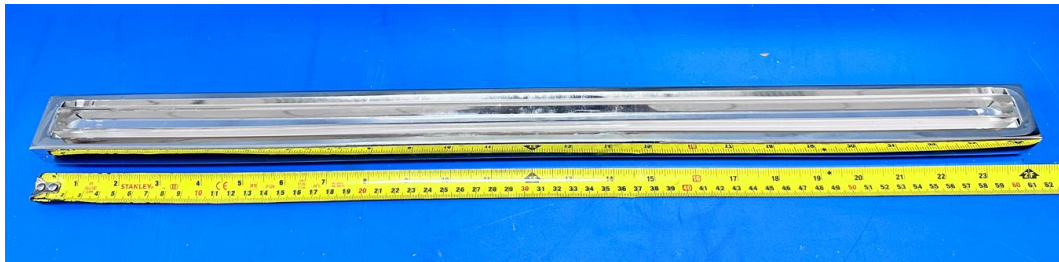
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLV82827XXXCG

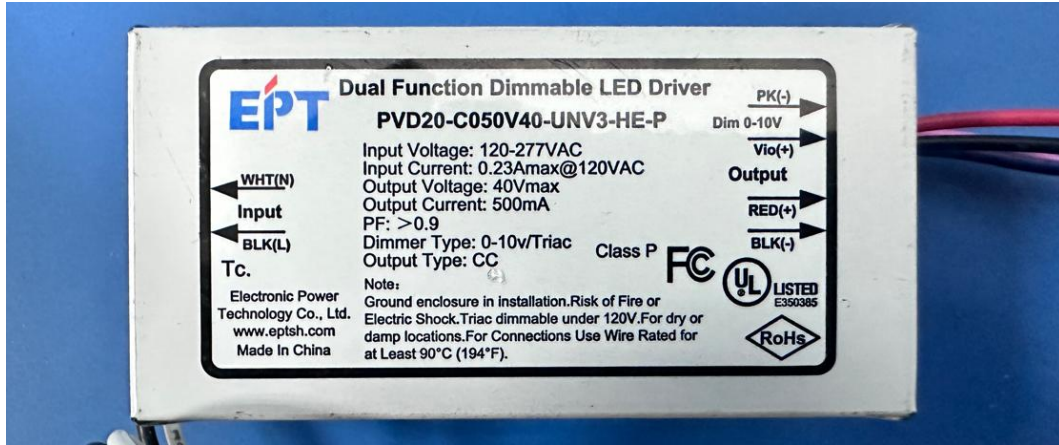


External view of SLV82827XXXCG

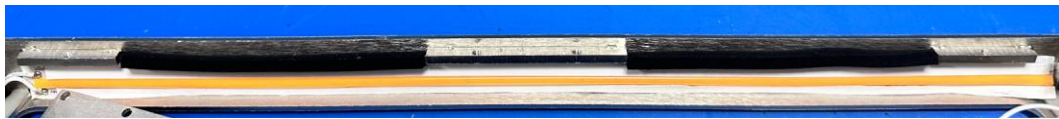
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TEST REPORT

PRODUCT PICTURE (not to scale)



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