

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-014

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REVISION DATE

None

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DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251027067GZU-014

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV83427XXCG

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 SLV83427XXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-014.
<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>	27 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:	SLV83427XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV83427XXXCG

Criteria	Result
Total Lumen Output	724.4 lm
Total Power	33.6 W
Luminaire Efficacy	21.5 lm/W
S/MH(C0/180)	1.31
S/MH(C90/270)	0.34
Correlated Color Temperature (CCT)	2325 K
Color Rendering Index (CRI)	91
R9	45
Chromaticity Coordinate (x)	0.4921
Chromaticity Coordinate (y)	0.4134
Chromaticity Coordinate (u')	0.2822
Chromaticity Coordinate (v')	0.5333

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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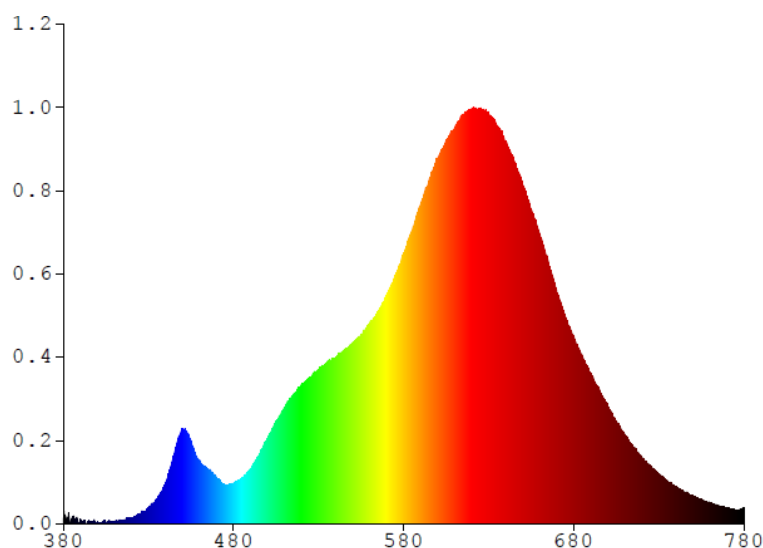
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV83427XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	0.7507	580	5.0417	680	3.5059	780	0.2968
385	0.1022	485	0.8553	585	5.4706	685	3.1389		
390	0.0874	490	1.0231	590	5.9568	690	2.7971		
395	0.0580	495	1.2833	595	6.4112	695	2.5061		
400	0.0413	500	1.5839	600	6.8306	700	2.1875		
405	0.0198	505	1.9009	605	7.1644	705	1.9070		
410	0.0520	510	2.1700	610	7.3823	710	1.6687		
415	0.0434	515	2.4002	615	7.6273	715	1.4398		
420	0.0997	520	2.5976	620	7.7467	720	1.2281		
425	0.1706	525	2.7333	625	7.7425	725	1.0741		
430	0.3007	530	2.8734	630	7.6546	730	0.9325		
435	0.4600	535	2.9989	635	7.4270	735	0.7934		
440	0.7589	540	3.0925	640	7.1422	740	0.6940		
445	1.2814	545	3.2392	645	6.7679	745	0.5825		
450	1.7779	550	3.3625	650	6.3277	750	0.5262		
455	1.5345	555	3.5344	655	5.8525	755	0.4584		
460	1.1833	560	3.7397	660	5.3999	760	0.3894		
465	1.0213	565	3.9397	665	4.8953	765	0.3288		
470	0.8584	570	4.2649	670	4.3298	770	0.2961		
475	0.7247	575	4.6305	675	3.7849	775	0.2556		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83427XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

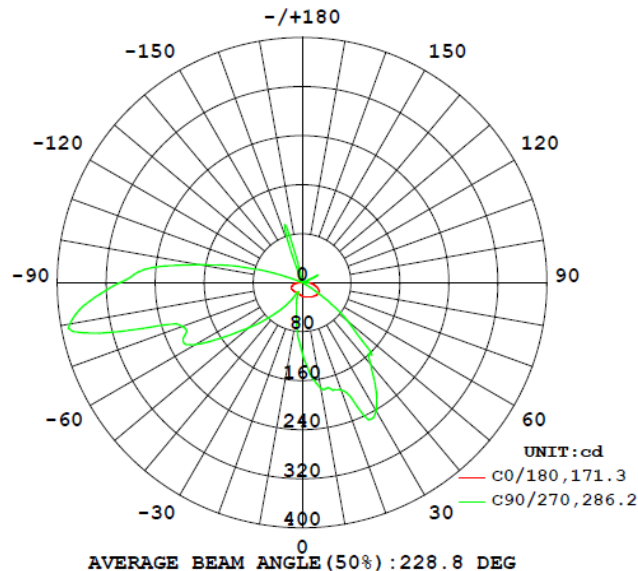
Photometric Measurements at 25°C – Distribution Method

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')
SLV83427XXXCG								
S2510270 67-014	base-up	2326	91	45	0.4921	0.4134	0.2822	0.5333

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)
SLV83427XXXCG							
S2510270 67-014	base-up	120.0	282.2	33.6	0.993	724.4	21.5

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83427XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	22.0	15.7	50.8	78.5	114.0
5	22.7	16.6	67.1	104.1	148.9
10	23.5	22.2	86.7	133.9	174.4
15	24.3	27.8	108.7	161.3	179.2
20	25.3	32.8	128.7	166.2	186.4
25	26.4	39.4	135.2	176.3	239.7
30	27.4	47.9	142.0	211.1	242.0
35	28.4	57.6	161.6	225.8	210.1
40	29.2	65.3	163.6	198.2	174.3
45	30.1	68.5	146.3	162.1	156.9
50	31.1	70.0	115.9	130.5	96.4
55	32.0	70.9	78.8	91.6	50.3
60	31.9	71.6	43.0	45.0	14.2
65	30.8	68.9	11.7	11.0	3.3
70	27.9	48.5	5.3	3.6	2.6
75	23.9	20.5	5.9	2.9	2.3
80	19.2	7.0	5.4	2.5	2.2
85	15.3	10.7	5.0	2.4	2.4
90	4.7	9.1	6.7	2.9	4.2
95	4.6	7.1	10.6	8.3	10.9
100	4.2	6.2	4.3	8.6	5.0
105	4.6	2.7	2.7	4.3	4.2
110	2.6	1.8	1.4	3.6	5.5
115	2.0	1.1	0.3	7.7	22.8
120	1.8	0.6	0.3	4.5	1.0
125	1.7	0.3	0.4	0.3	0.3
130	1.5	0.4	0.3	0.3	0.3
135	1.4	0.5	0.4	0.3	0.3
140	1.5	1.1	0.7	0.3	0.5
145	1.6	1.2	2.3	0.8	3.4
150	1.6	3.5	1.4	2.6	0.3
155	1.6	2.3	1.1	0.6	1.1
160	1.6	1.1	0.5	0.4	2.1
165	1.5	1.1	0.7	1.7	2.2
170	1.3	1.0	2.2	2.4	0.4
175	1.1	0.4	1.3	0.4	0.3
180	1.4	0.7	0.3	0.3	0.2

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83427XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV83427XXXCG		
0-30	61.9	8.5
0-40	118.8	16.4
0-60	257.5	35.6
0-90	564.7	78.0
60-90	307.2	42.4
0-180	724.4	100.0

Beam Angle

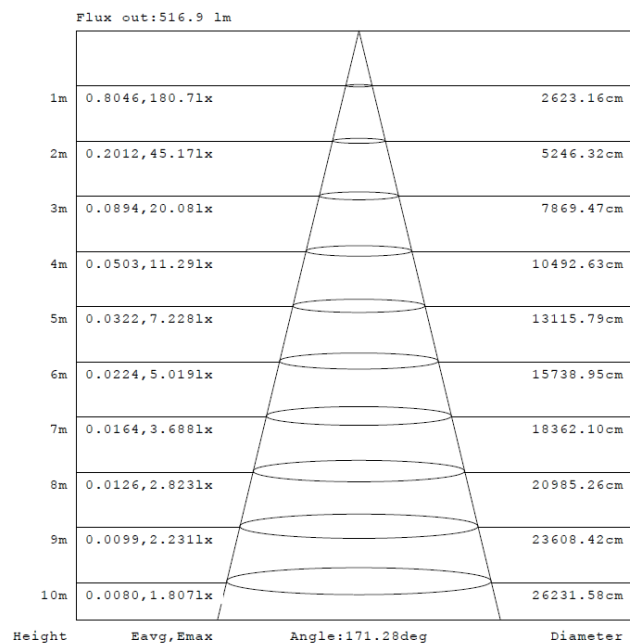
Total Beam Angle(°)
228.8

Illumination Plots

Model No.: SLV83427XXXCG

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

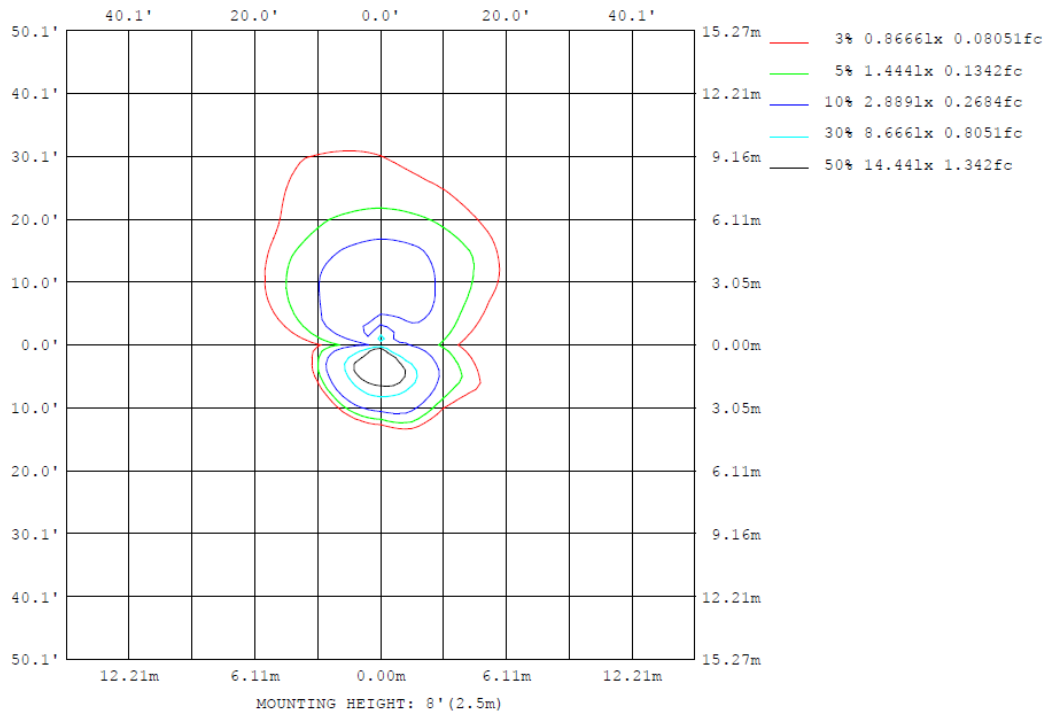
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83427XXXCG

Model No.: SLV83427XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83427XXXCG

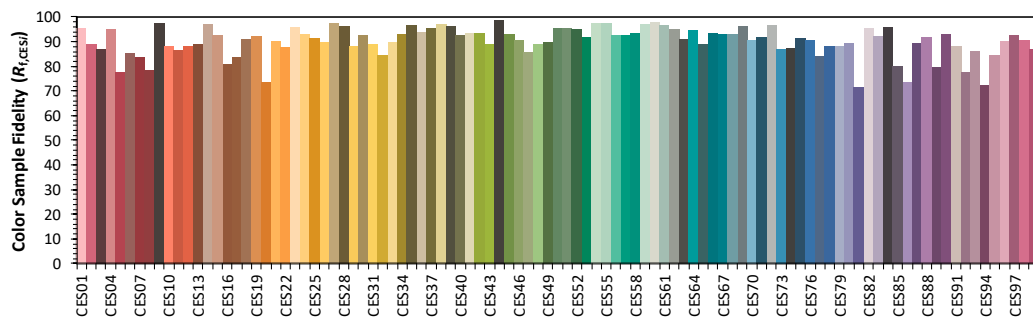
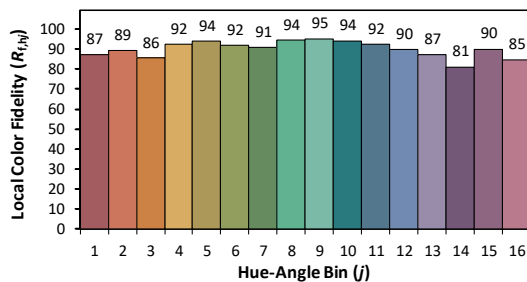
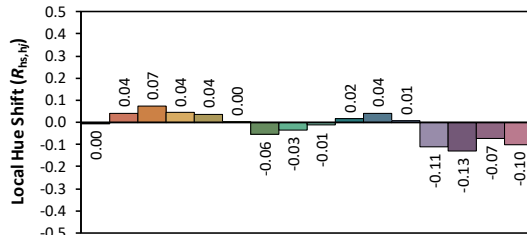
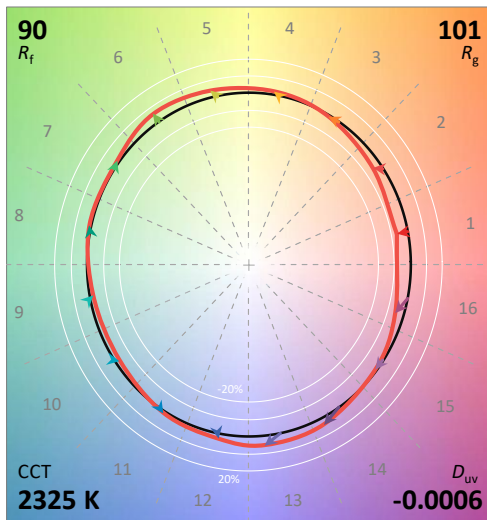
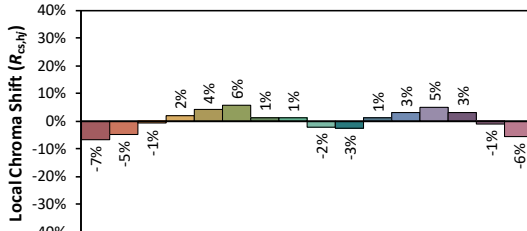
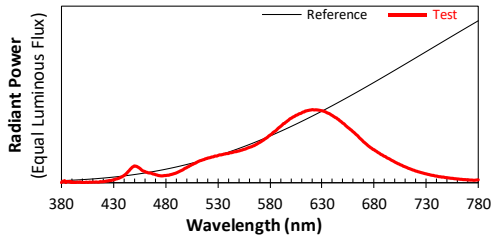
ANSI/IES+B3:X17 TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/27

Model: SLV83427XXXCG



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

x 0.4921
 y 0.4134
 u' 0.2822
 v' 0.5333

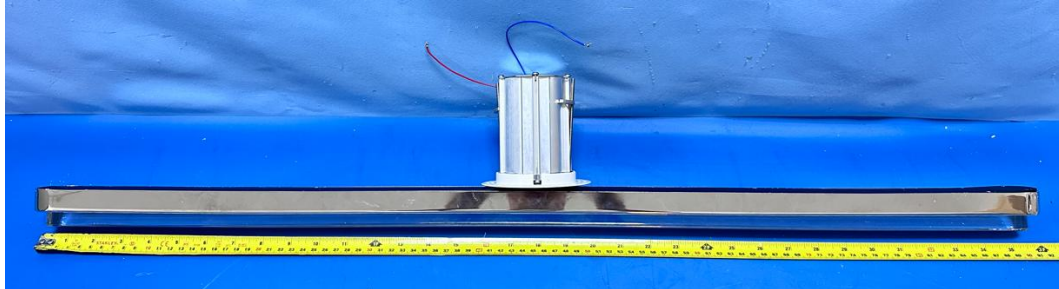
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 45

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 SLV83427XXXCG

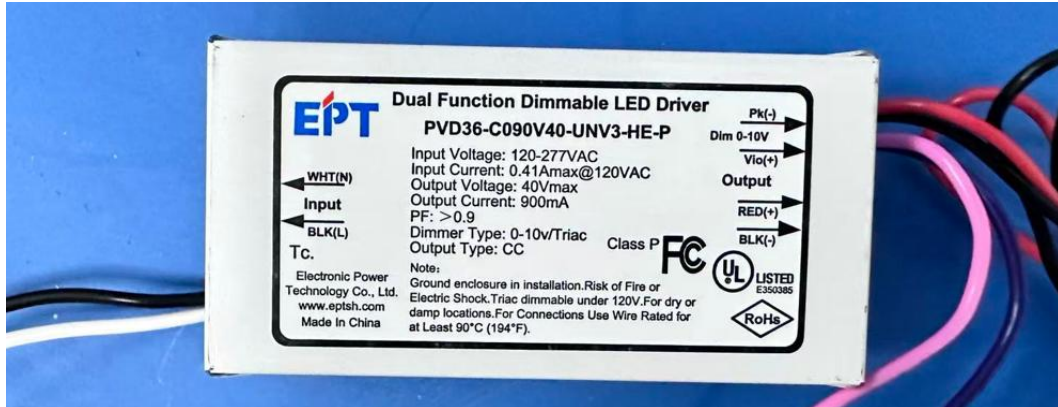


External view of SLV83427XXXCG

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD36-C090V40-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 *****