

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-016

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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.: 251110010GZU-016

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLLS83927XXX

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: QGZ251106008.
<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 SLLS83927XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-018.
<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>	10 December 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:	SLLS83927XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLLS83927XXX

Criteria	Result
Total Lumen Output	1649.6 lm
Total Power	32.6 W
Luminaire Efficacy	50.7 lm/W
S/MH(C0/180)	1.57
S/MH(C90/270)	1.64
Correlated Color Temperature (CCT)	2585 K
Color Rendering Index (CRI)	92
R9	57
Chromaticity Coordinate (x)	0.4720
Chromaticity Coordinate (y)	0.4167
Chromaticity Coordinate (u')	0.2675
Chromaticity Coordinate (v')	0.5315

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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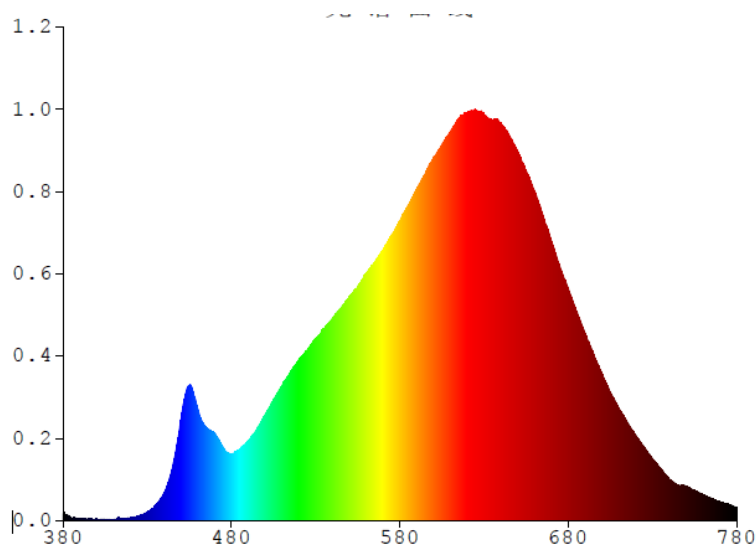
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLLS83927XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.5889	480	5.9883	580	26.9660	680	20.8900	780	1.1662
385	0.2492	485	6.4629	585	28.4050	685	18.8200		
390	0.1547	490	7.1955	590	29.8330	690	16.8680		
395	0.1988	495	8.2044	595	31.1630	695	14.9990		
400	0.1773	500	9.5327	600	32.7040	700	13.2300		
405	0.0797	505	10.8700	605	33.7770	705	11.5400		
410	0.0871	510	12.1050	610	34.9690	710	10.1330		
415	0.1747	515	13.3490	615	36.1890	715	8.8808		
420	0.2646	520	14.4790	620	36.7170	720	7.7063		
425	0.4389	525	15.3390	625	36.8790	725	6.5952		
430	0.7585	530	16.3620	630	36.5190	730	5.5921		
435	1.3958	535	17.2940	635	36.0330	735	4.6906		
440	2.5038	540	18.1680	640	35.7410	740	3.7424		
445	4.7860	545	19.1200	645	34.6390	745	3.2032		
450	9.1464	550	20.1100	650	33.2040	750	3.0865		
455	12.2050	555	21.1070	655	31.4650	755	2.7130		
460	10.0450	560	22.2430	660	29.6730	760	2.3410		
465	8.3419	565	23.2120	665	27.5130	765	2.0079		
470	7.8751	570	24.3550	670	25.1460	770	1.7238		
475	6.6007	575	25.6760	675	22.4830	775	1.4875		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS83927XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

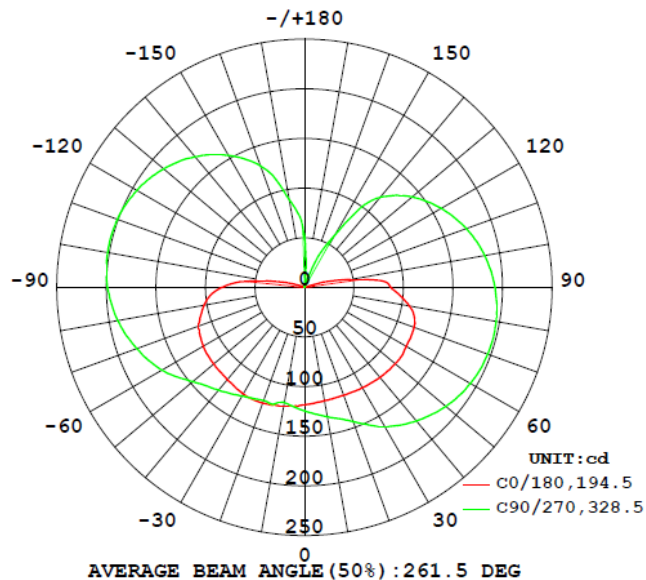
Photometric Measurements at 25°C – Distribution Method

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')
SLLS83927XXX								
S2511100 10-018	base-up	2585	92	57	0.4720	0.4167	0.2675	0.5315

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)
SLLS83927XXX							
S2511100 10-018	base-up	120.1	273.0	32.6	0.99	1649.6	50.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS83927XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	118.3	117.7	120.5	122.9	124.5
5	117.0	118.8	123.0	126.2	128.1
10	116.0	120.3	125.8	129.8	132.3
15	115.5	122.2	128.6	134.1	137.1
20	115.5	123.8	131.8	138.9	143.9
25	116.0	125.5	135.2	146.2	152.9
30	116.8	127.0	139.4	154.9	162.0
35	117.5	128.7	145.7	163.4	169.3
40	118.4	130.5	152.6	169.7	175.6
45	119.1	132.2	159.0	175.6	181.3
50	119.7	133.7	163.5	180.8	186.4
55	120.0	136.2	167.5	185.3	190.3
60	118.6	139.3	170.8	188.7	193.5
65	118.4	142.3	172.7	191.3	195.7
70	117.7	143.6	173.7	192.5	196.8
75	114.6	144.2	173.2	192.9	197.1
80	107.6	142.6	171.4	192.2	196.4
85	97.0	137.7	168.7	190.3	194.8
90	87.3	131.3	165.4	187.8	192.2
95	78.1	124.5	161.6	184.6	189.0
100	47.4	117.0	157.2	180.4	184.7
105	23.7	109.4	152.1	175.4	179.9
110	5.9	102.4	146.3	169.6	173.8
115	3.0	95.9	140.2	162.7	167.0
120	2.5	89.4	133.6	155.4	159.5
125	2.4	80.5	126.4	147.3	151.1
130	2.4	65.9	118.3	138.6	141.9
135	2.4	54.6	107.7	128.0	131.4
140	2.5	44.3	88.5	115.4	118.8
145	2.6	28.0	63.9	92.1	96.4
150	2.7	13.7	46.7	60.5	60.5
155	2.8	9.2	24.6	40.0	39.3
160	2.9	7.4	9.9	12.9	12.3
165	2.9	5.2	5.8	6.1	3.6
170	2.9	3.5	1.3	0.3	0.2
175	2.8	0.3	0.7	4.8	14.3
180	0.8	0.7	11.2	40.0	51.6

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS83927XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLLS83927XXX		
0-30	107.4	6.5
0-40	193.3	11.7
0-60	438.5	26.6
0-90	932.0	56.5
60-90	493.5	29.9
0-180	1649.6	100.0

Beam Angle

Total Beam Angle(°)

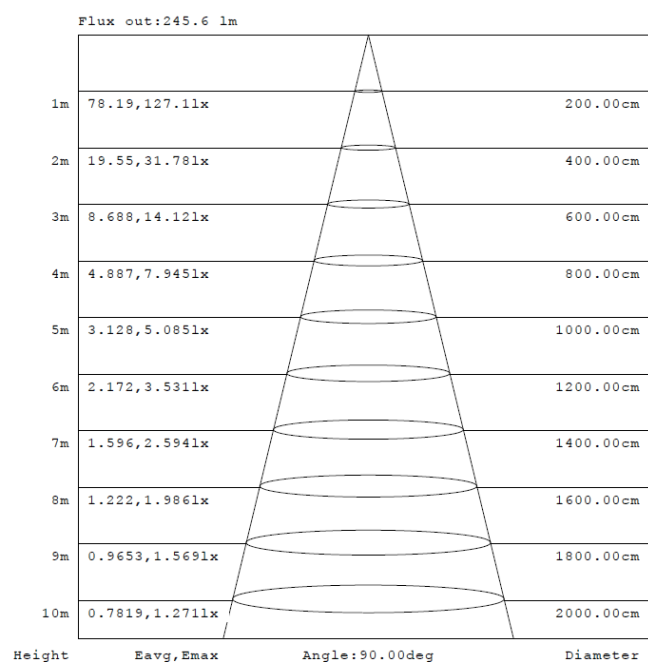
261.5

Illumination Plots

Model No.: SLLS83927XXX

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

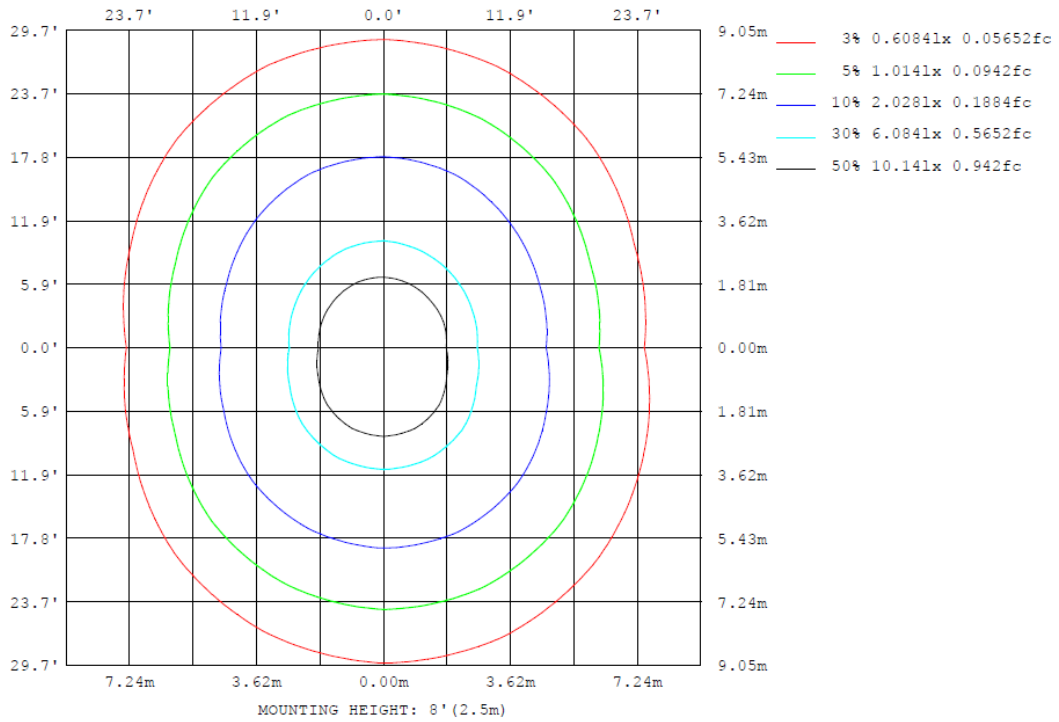
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS83927XXX

Model No.: SLLS83927XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLLS83927XXX

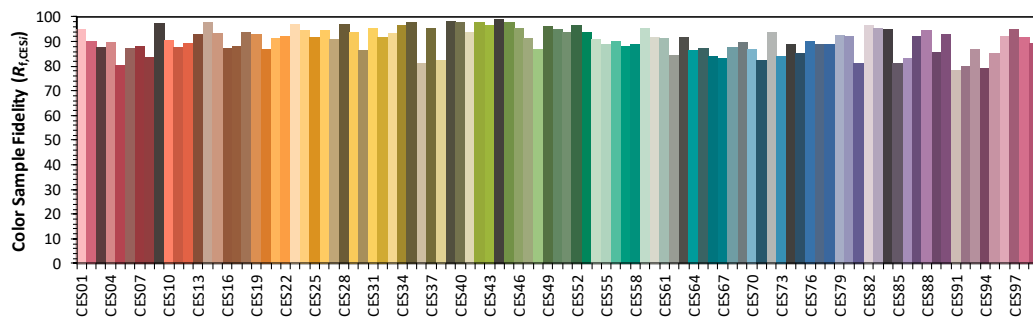
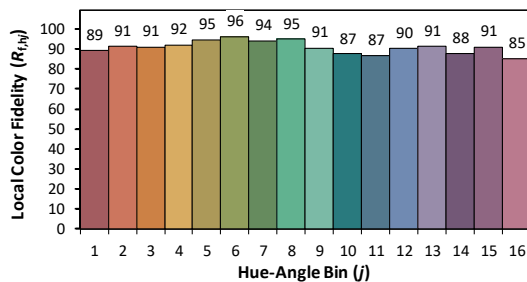
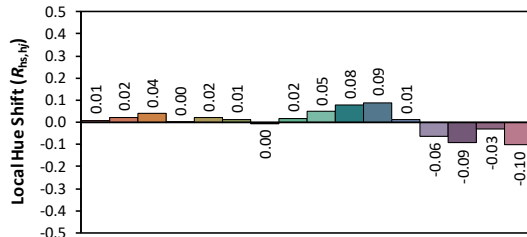
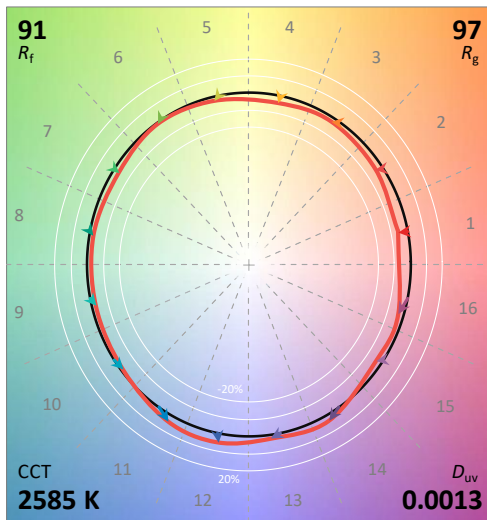
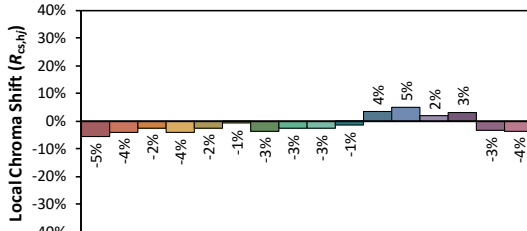
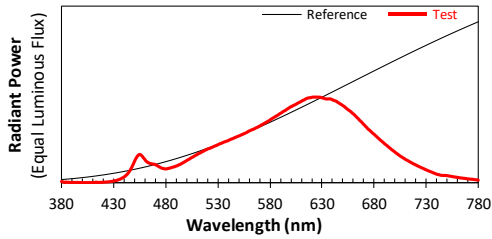
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/12/10

Model: SLLS83927XXX



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

x 0.4720
 y 0.4167
 u' 0.2675
 v' 0.5315

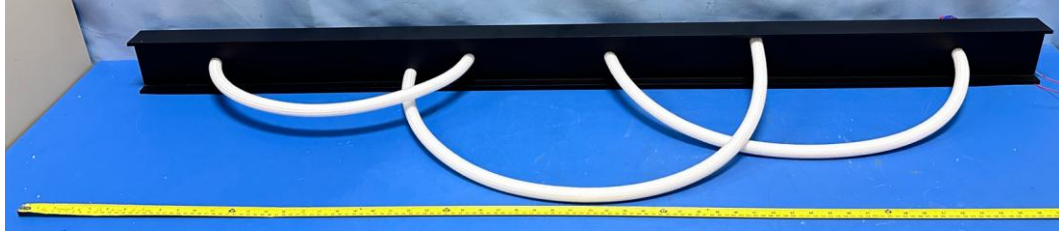
CIE 13.3-1995
(CRI)
 R_a 92
 R_g 57

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

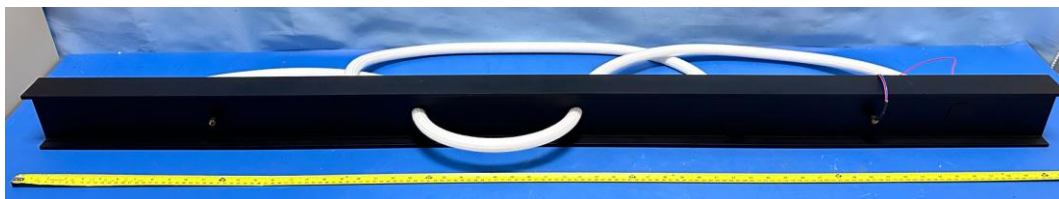
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TEST REPORT

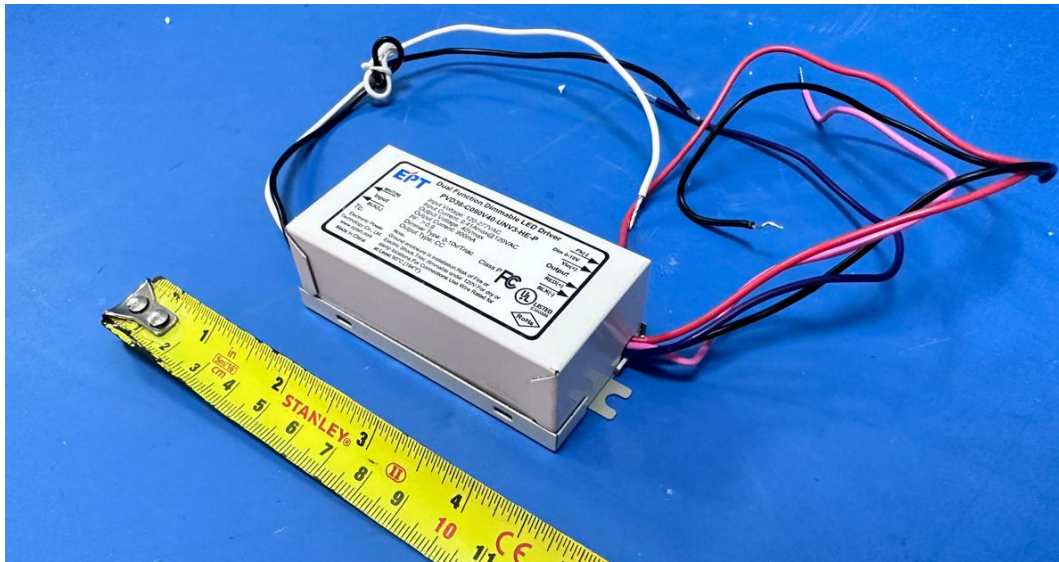
PRODUCT PICTURE (not to scale)



External view of SLLS83927XXX



External view of SLLS83927XXX



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