

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-013

ISSUE DATE

31 December 2025

REVISION DATE

None

NUMBER OF PAGES

14

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251110010GZU-013

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLCH84027X

Remark: "X" 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 SLCH84027X. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-015.
<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>	05 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:	SLCH84027X
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLCH84027X

Criteria	Result
Total Lumen Output	921.1 lm
Total Power	24.8 W
Luminaire Efficacy	37.2 lm/W
S/MH(C0/180)	1.84
S/MH(C90/270)	1.40
Correlated Color Temperature (CCT)	2517 K
Color Rendering Index (CRI)	92
R9	57
Chromaticity Coordinate (x)	0.4793
Chromaticity Coordinate (y)	0.4197
Chromaticity Coordinate (u')	0.2709
Chromaticity Coordinate (v')	0.5337

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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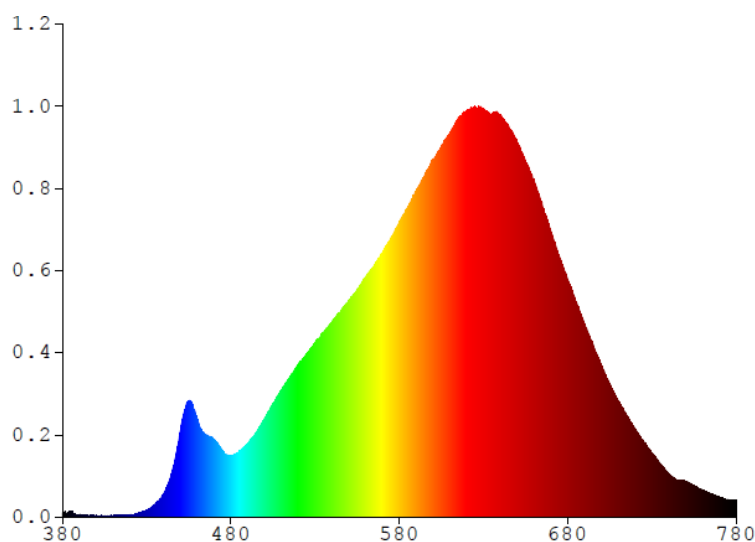
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLCH84027X

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.3288	480	3.8922	580	18.9090	680	15.2580	780	1.0811
385	0.1756	485	4.2275	585	19.8630	685	13.7760		
390	0.0795	490	4.7175	590	20.9100	690	12.3880		
395	0.0300	495	5.3994	595	21.8880	695	11.0910		
400	0.1248	500	6.3310	600	22.9860	700	9.7249		
405	0.0601	505	7.2529	605	23.7420	705	8.5339		
410	0.0864	510	8.1383	610	24.6460	710	7.4637		
415	0.1035	515	8.9842	615	25.5800	715	6.5391		
420	0.1580	520	9.7896	620	26.0340	720	5.6621		
425	0.2709	525	10.4540	625	26.3320	725	4.8337		
430	0.4566	530	11.1850	630	26.1690	730	4.1381		
435	0.8179	535	11.8460	635	25.8820	735	3.4199		
440	1.4742	540	12.4910	640	25.8120	740	2.7909		
445	2.8529	545	13.1640	645	25.0350	745	2.3607		
450	5.5243	550	13.8870	650	24.0510	750	2.3011		
455	7.4659	555	14.6010	655	22.8050	755	2.0305		
460	6.3012	560	15.4280	660	21.6140	760	1.7489		
465	5.3013	565	16.0920	665	19.9320	765	1.5102		
470	5.0164	570	16.9520	670	18.3270	770	1.3030		
475	4.2597	575	17.9030	675	16.4550	775	1.1146		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH84027X

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

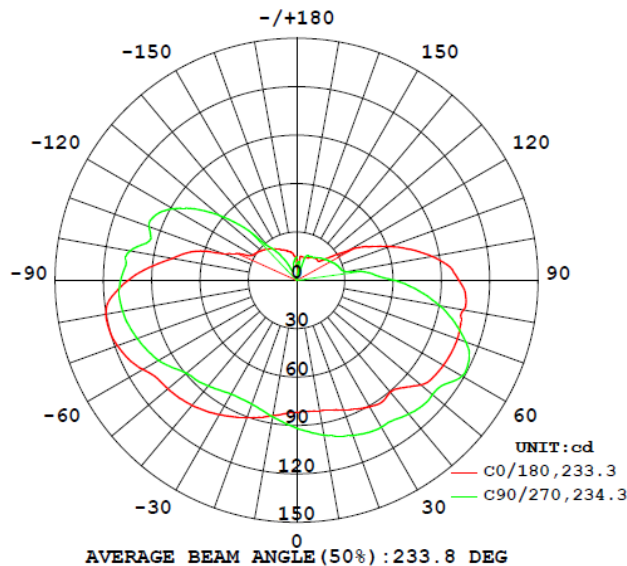
Photometric Measurements at 25°C – Distribution Method

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')
SLCH84027X								
S2511100 10-015	base-up	2517	92	57	0.4793	0.4197	0.2709	0.5337

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)
SLCH84027X							
S2511100 10-015	base-up	120.2	207.7	24.8	0.99	921.1	37.2

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH84027X

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	81.8	83.8	87.9	90.2	91.5
5	81.5	85.3	90.2	92.9	94.4
10	82.0	86.7	92.6	95.5	97.3
15	83.3	88.6	94.9	98.0	99.9
20	85.5	91.3	97.0	100.3	102.3
25	88.0	94.5	98.9	102.2	104.1
30	90.5	96.2	100.4	103.6	105.1
35	92.1	97.6	100.2	104.6	105.6
40	90.6	98.8	99.7	105.1	108.3
45	94.0	99.8	99.6	109.0	110.1
50	100.7	100.4	99.1	113.4	110.2
55	104.0	100.3	105.6	116.1	112.3
60	105.2	99.4	109.8	117.1	118.6
65	106.0	100.6	111.1	116.5	118.1
70	106.2	104.9	109.2	111.8	111.9
75	105.4	104.4	101.9	102.2	101.7
80	105.4	98.6	92.8	90.6	90.1
85	105.3	93.1	80.9	76.9	76.5
90	100.8	84.9	67.3	63.3	61.1
95	95.8	72.4	52.1	44.7	47.3
100	85.5	59.1	33.9	37.5	33.8
105	73.9	45.7	28.8	30.0	28.2
110	61.6	27.6	25.6	27.6	27.0
115	49.6	21.6	23.7	26.1	25.6
120	36.6	19.5	22.2	24.7	24.0
125	25.2	18.2	20.6	23.1	22.5
130	18.8	17.5	19.2	21.5	21.1
135	18.2	17.2	18.3	19.7	19.9
140	18.1	17.1	17.4	18.3	18.7
145	17.3	17.2	17.1	17.5	17.8
150	16.2	17.4	17.0	17.2	17.3
155	15.2	17.0	16.6	16.6	16.8
160	14.9	16.4	8.3	8.9	15.0
165	15.1	7.0	9.9	5.1	0.2
170	15.3	11.8	13.8	11.9	8.0
175	2.8	15.2	17.2	12.6	11.3
180	6.5	18.0	17.4	14.8	9.9

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH84027X

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLCH84027X		
0-30	76.2	8.3
0-40	135.5	14.7
0-60	304.3	33.0
0-90	621.7	67.5
60-90	317.4	34.5
0-180	921.1	100.0

Beam Angle

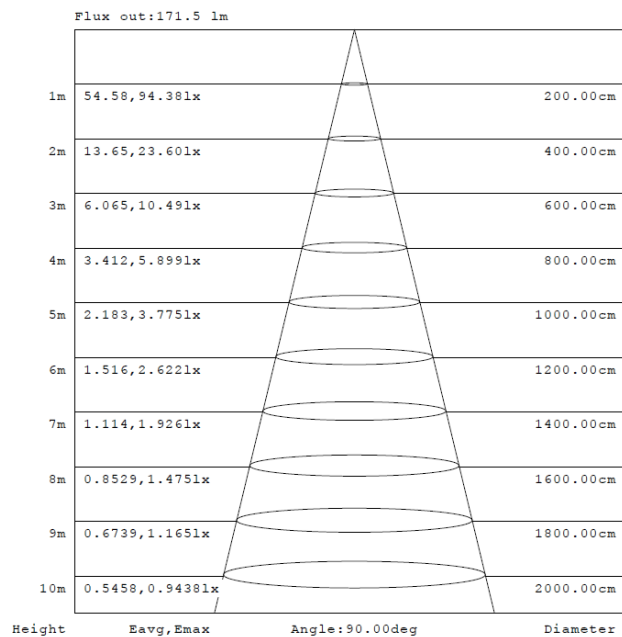
Total Beam Angle(°)
233.8

Illumination Plots

Model No.: SLCH84027X

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

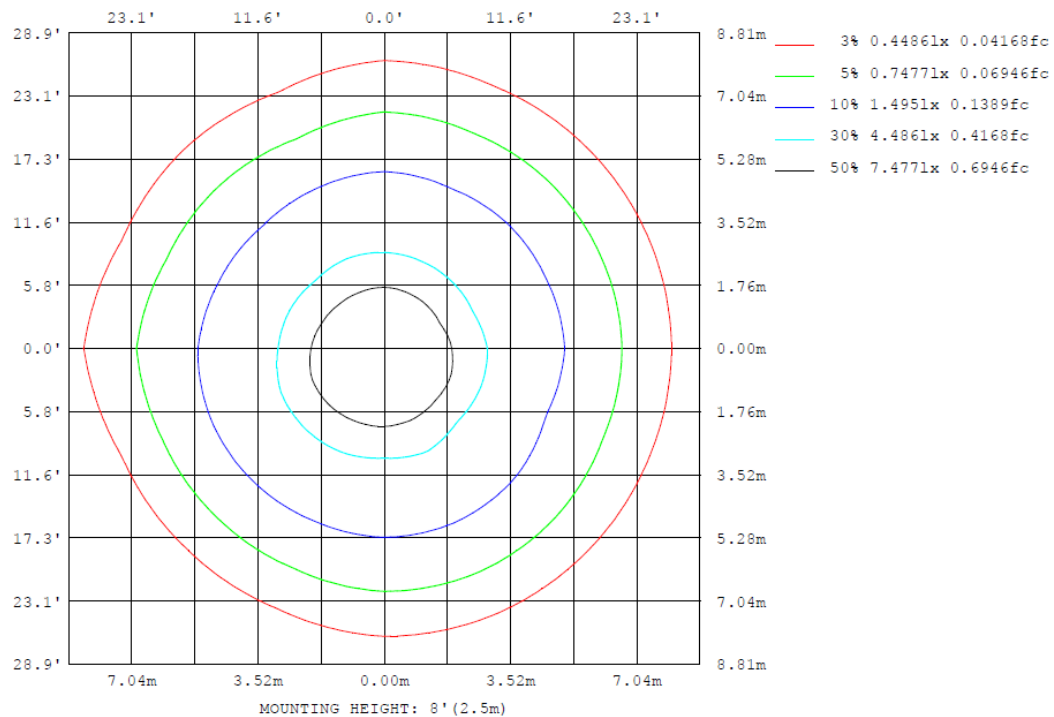
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH84027X

Model No.: SLCH84027X

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH84027X

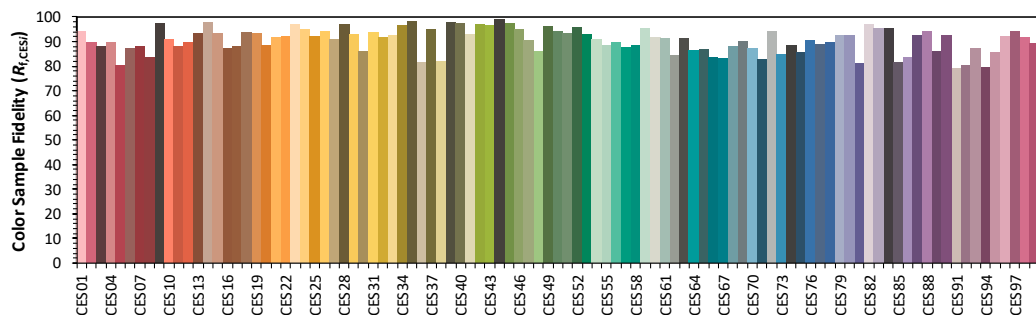
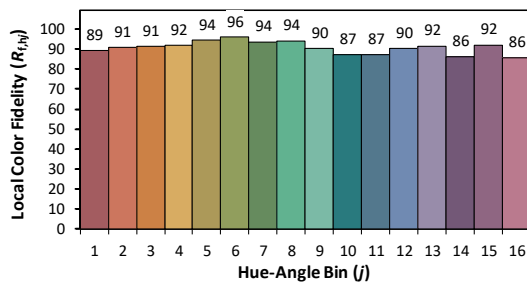
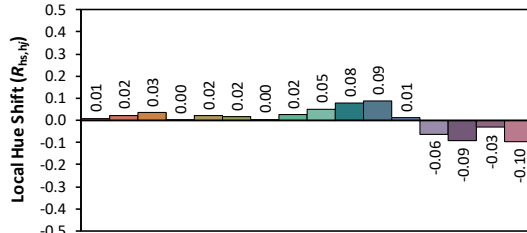
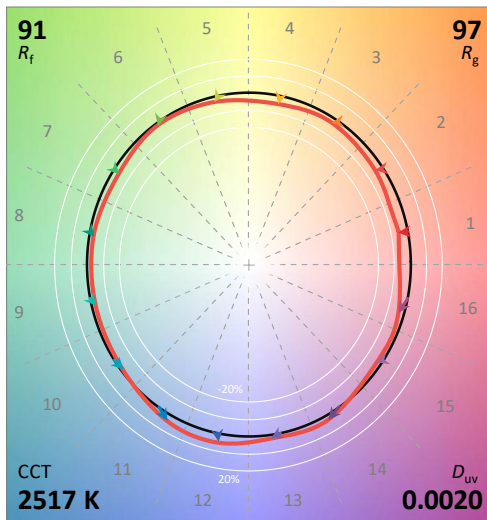
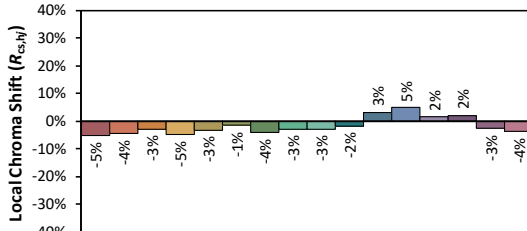
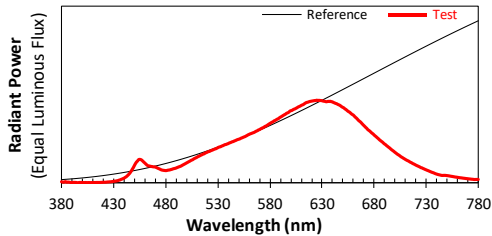
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/12/5

Model: SLCH84027X



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

x 0.4793
 y 0.4197
 u' 0.2709
 v' 0.5337

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 SLCH84027X

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TEST REPORT

PRODUCT PICTURE (not to scale)

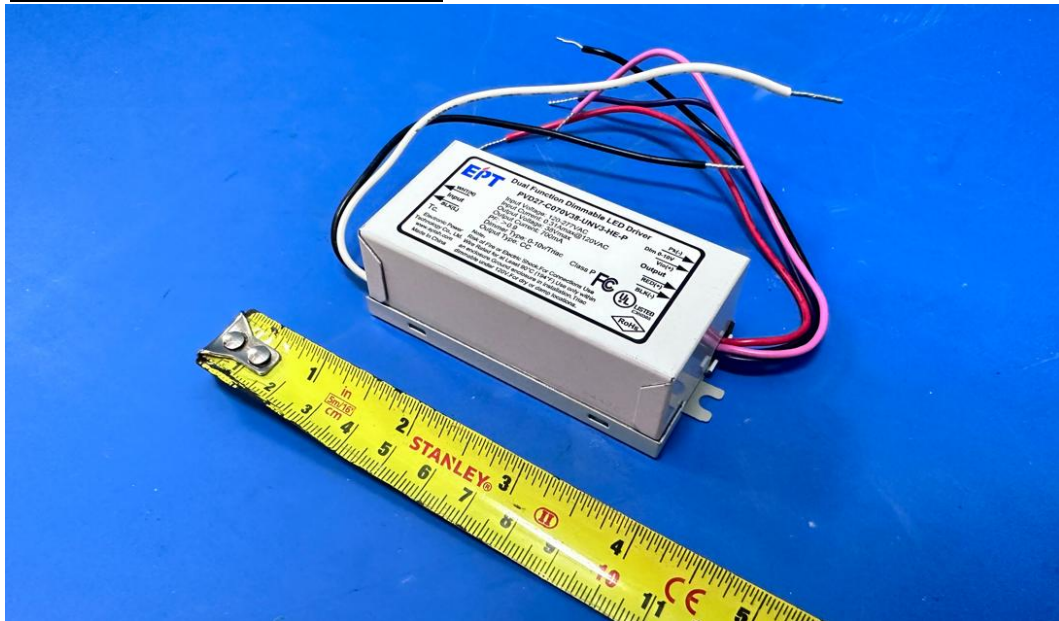


External view of SLCH84027X

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD27-C070V38-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 *****