

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-019

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REVISION DATE

None

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13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251110010GZU-019

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPD841SCTXOA

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 SLPD841SCTXOA. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-020.
<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>	11 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:	SLPD841SCTXOA
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPD841SCTXOA

Criteria	Result
Total Lumen Output	2348.3 lm
Total Power	26.7 W
Luminaire Efficacy	88.1 lm/W
S/MH(C0/180)	1.81
S/MH(C90/270)	1.83
Correlated Color Temperature (CCT)	2929 K
Color Rendering Index (CRI)	93
R9	63
Chromaticity Coordinate (x)	0.4404
Chromaticity Coordinate (y)	0.4025
Chromaticity Coordinate (u')	0.2535
Chromaticity Coordinate (v')	0.5213

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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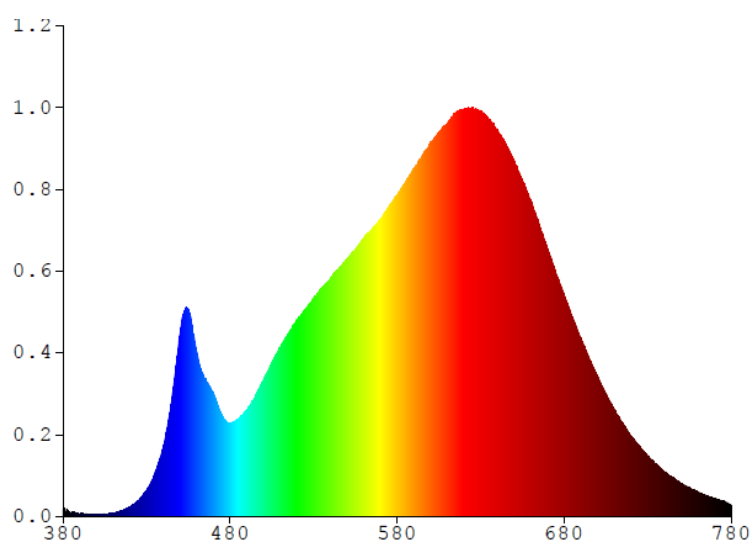
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPD841SCTXOA

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.6156	480	9.3809	580	32.4020	680	22.3640	780	1.1293
385	0.3291	485	9.8353	585	33.6950	685	20.0770		
390	0.2838	490	10.7190	590	35.0610	690	17.9410		
395	0.1813	495	12.1110	595	36.3300	695	15.9470		
400	0.2299	500	13.7670	600	37.7300	700	14.1120		
405	0.2231	505	15.4900	605	38.7010	705	12.3930		
410	0.3336	510	17.0150	610	39.5970	710	10.8150		
415	0.5644	515	18.4560	615	40.6480	715	9.3856		
420	0.9745	520	19.8590	620	41.0280	720	8.1384		
425	1.5915	525	20.8260	625	41.1870	725	7.0506		
430	2.6610	530	21.9800	630	40.9250	730	6.1079		
435	4.3880	535	23.0100	635	40.0320	735	5.2745		
440	7.0361	540	23.9460	640	38.9830	740	4.5304		
445	11.6120	545	24.9800	645	37.5650	745	3.9239		
450	18.3850	550	25.9260	650	35.8820	750	3.3802		
455	20.8380	555	26.9040	655	33.8480	755	2.8950		
460	16.5770	560	28.0050	660	31.8520	760	2.4653		
465	13.9140	565	28.9460	665	29.4850	765	2.1242		
470	12.4220	570	29.9090	670	27.0110	770	1.8115		
475	10.2670	575	31.2210	675	24.1300	775	1.5560		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD841SCTXOA

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

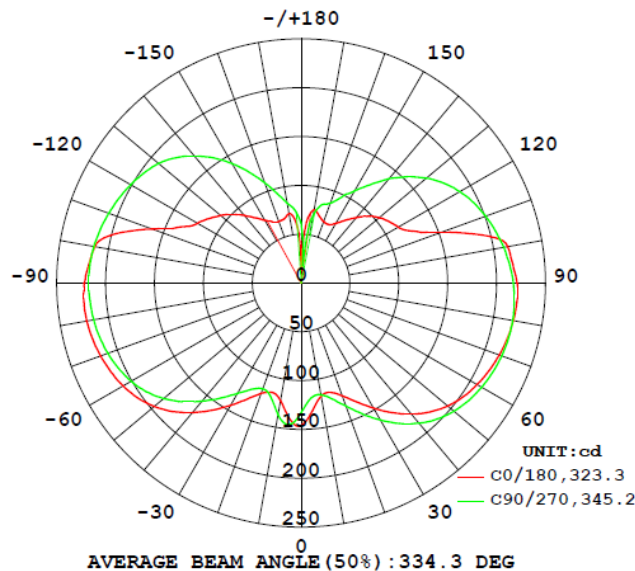
Photometric Measurements at 25°C – Distribution Method

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')
SLPD841SCTXOA								
S2511100 10-020	base-up	2929	93	63	0.4404	0.4025	0.2535	0.5213

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)
SLPD841SCTXOA							
S2511100 10-020	base-up	120.1	223.1	26.7	0.99	2348.3	88.1

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD841SCTXOA

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	145.9	134.7	131.0	131.2	132.6
5	131.4	119.4	117.9	117.9	118.3
10	117.7	116.0	118.7	118.2	116.2
15	115.9	122.4	127.8	127.0	122.8
20	122.9	133.5	141.0	139.8	134.1
25	134.3	147.0	156.0	154.7	147.7
30	147.9	161.1	171.2	169.9	162.0
35	162.0	174.7	185.4	184.2	175.4
40	175.1	186.7	197.6	196.5	187.3
45	186.6	196.4	207.4	206.5	196.9
50	195.8	203.8	214.5	213.7	204.1
55	202.6	209.1	219.6	218.9	209.3
60	207.8	213.0	223.4	222.9	213.3
65	212.0	216.4	226.4	225.9	216.3
70	215.6	219.0	228.4	228.2	218.3
75	218.4	220.6	229.8	229.5	219.4
80	220.4	221.2	230.0	229.9	219.7
85	221.5	221.0	229.4	229.2	218.9
90	220.9	219.5	227.4	227.2	217.0
95	217.4	217.4	224.8	224.2	214.1
100	214.6	214.7	221.6	220.5	210.5
105	191.2	210.3	216.9	215.9	205.9
110	152.8	204.9	211.2	210.6	200.7
115	126.1	197.8	204.0	204.6	194.7
120	114.9	189.6	195.0	197.2	187.5
125	110.1	179.5	183.4	187.5	178.3
130	104.4	166.9	169.0	175.1	167.3
135	97.1	152.3	153.4	160.5	154.2
140	87.9	136.7	137.2	143.8	139.6
145	78.7	120.9	121.3	126.8	123.4
150	70.8	105.5	106.8	111.5	109.1
155	66.4	90.2	95.0	98.1	97.3
160	67.3	82.0	87.0	89.0	87.3
165	71.4	80.9	83.6	84.7	83.2
170	76.4	71.0	70.0	72.3	69.3
175	62.5	20.0	16.7	18.7	17.8
180	13.3	56.7	62.3	61.1	58.8

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD841SCTXOA

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPD841SCTXOA		
0-30	110.8	4.7
0-40	213.9	9.1
0-60	546.5	23.3
0-90	1241.6	52.9
60-90	695.1	29.6
0-180	2348.3	100.0

Beam Angle

Total Beam Angle(°)

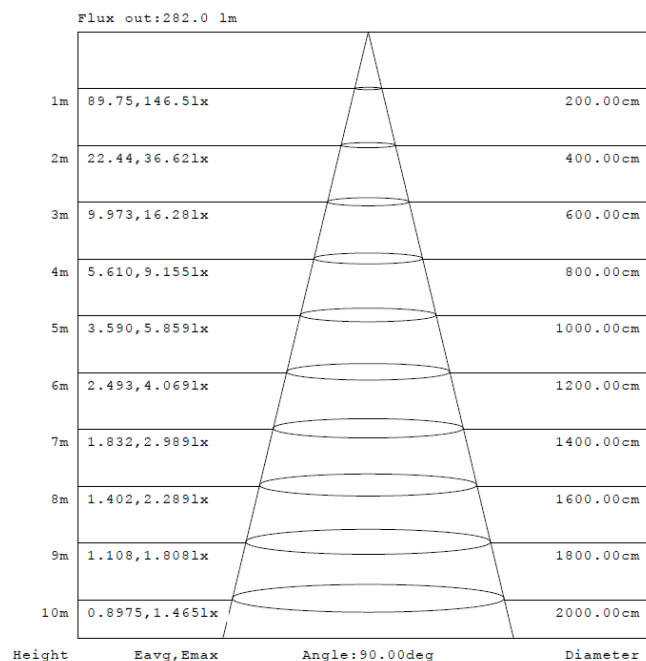
334.3

Illumination Plots

Model No.: SLPD841SCTXOA

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

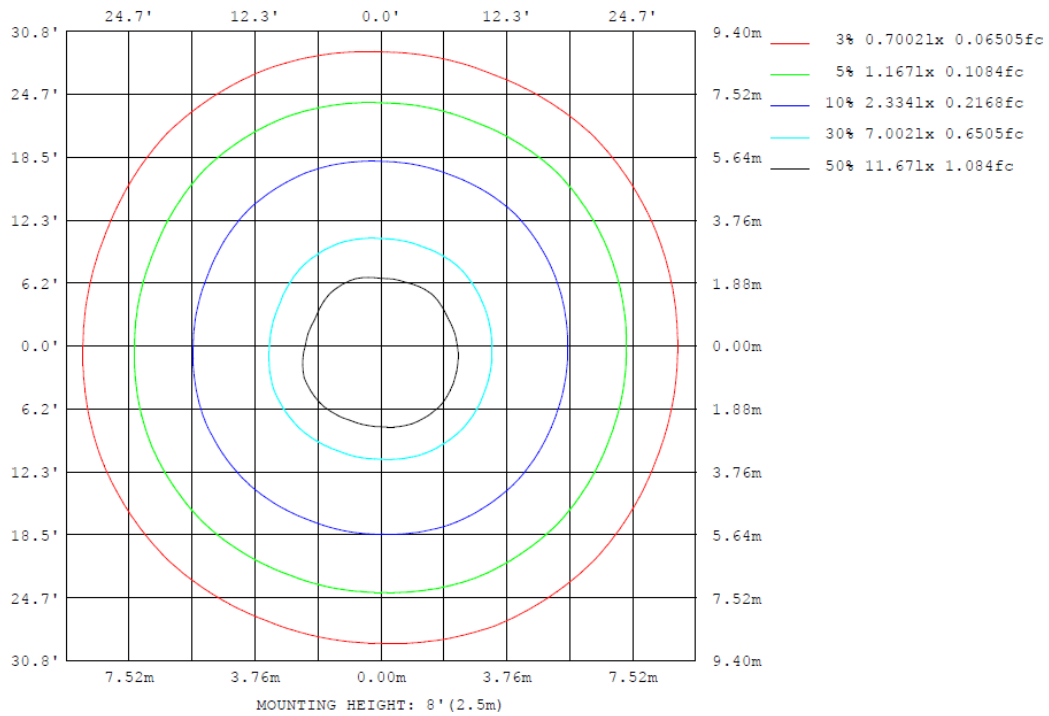
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD841SCTXOA

Model No.: SLPD841SCTXOA

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPD841SCTXOA

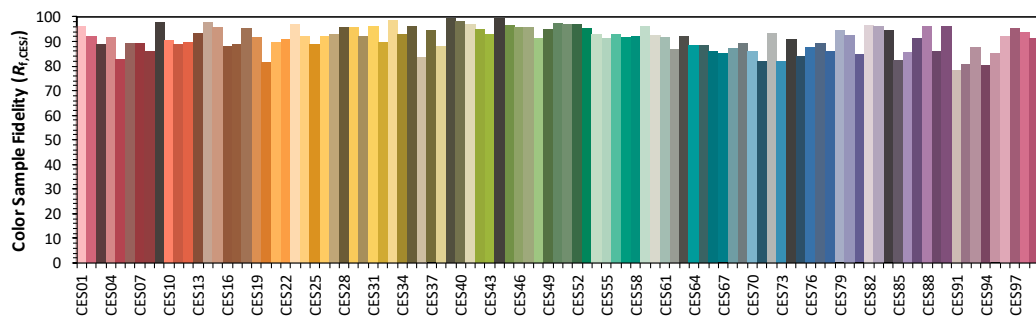
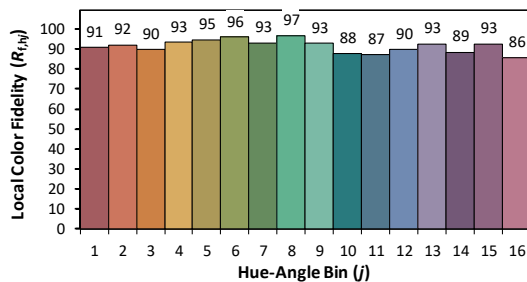
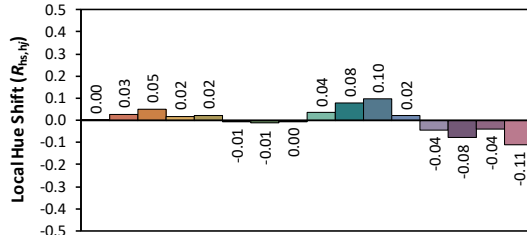
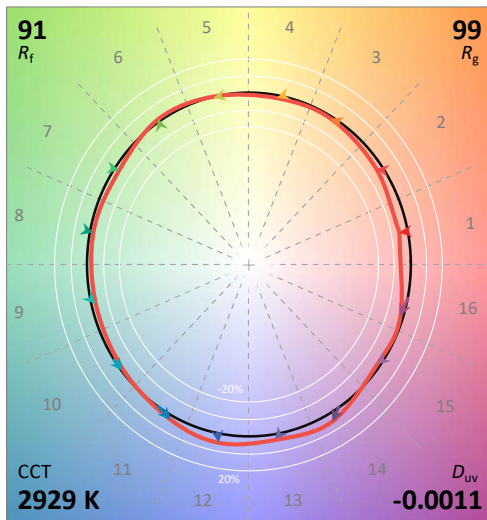
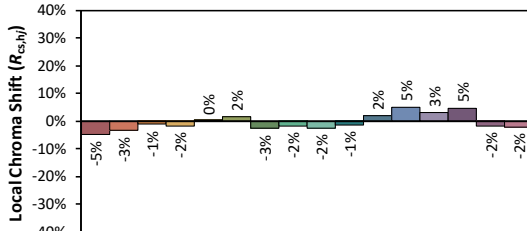
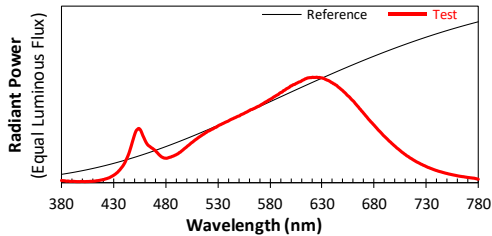
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/12/11

Model: SLPD841SCTXOA



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

x 0.4404
 y 0.4025
 u' 0.2535
 v' 0.5213

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 63

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

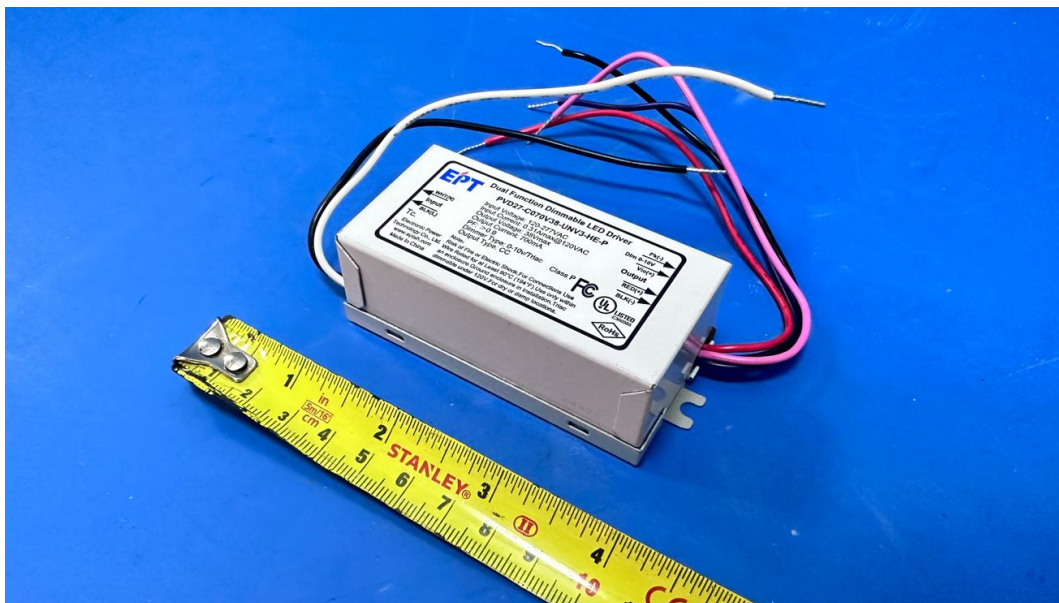
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLPD841SCTXOA



View of LED driver PVD27-C070V38-UNV3-HE-P (AB1473)

***** End of Page *****

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 *****