

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-025

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None

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Report No.: 251110010GZU-025

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV84227XXXCA

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

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

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TEST: Electrical and Photometric as required to the IES LM-79 test standard.

AUTHORIZATION: The testing performed was authorized by signed quote number: QGZ251106008.

STANDARDS USED: 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

DESCRIPTION OF SAMPLE: The client submitted one sample of model SLV84227XXXCA. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-009.

MANUFACTURER /FACTORY & ADDRESS: Guangzhou Xiongyi Precision Metalworking Co., Ltd
Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450

DATES OF TESTS: 02 December 2025

ISSUED BY: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

TEST LOCATION: 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:	SLV84227XXXCA
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV84227XXXCA

Criteria	Result
Total Lumen Output	903.0 lm
Total Power	14.6 W
Luminaire Efficacy	62.1 lm/W
S/MH(C0/180)	3.89
S/MH(C90/270)	1.57
Correlated Color Temperature (CCT)	2508 K
Color Rendering Index (CRI)	93
R9	72
Chromaticity Coordinate (x)	0.4746
Chromaticity Coordinate (y)	0.4108
Chromaticity Coordinate (u')	0.2720
Chromaticity Coordinate (v')	0.5296

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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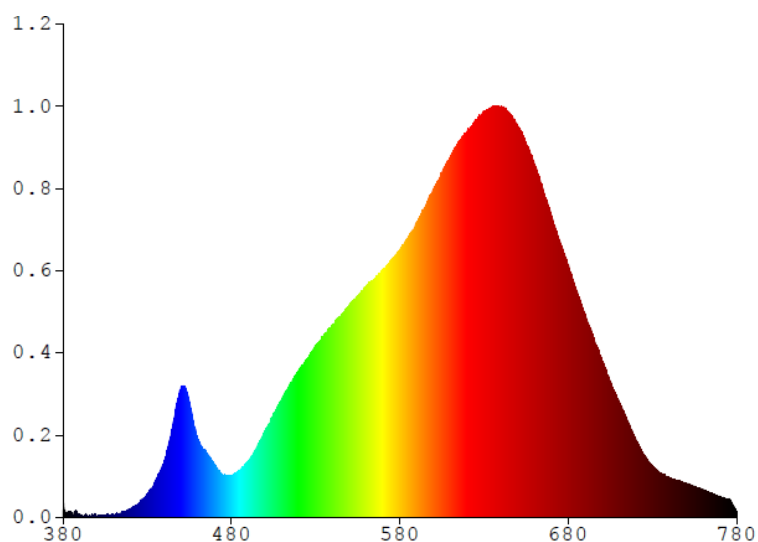
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV84227XXXCA

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0091	480	0.9849	580	6.3731	680	6.0153	780	0.1246
385	0.1023	485	1.1186	585	6.6743	685	5.4047		
390	0.0505	490	1.3456	590	7.0117	690	4.8418		
395	0.0200	495	1.6721	595	7.3805	695	4.2866		
400	0.0229	500	2.0682	600	7.7987	700	3.7282		
405	0.0545	505	2.4495	605	8.2060	705	3.2417		
410	0.0479	510	2.8255	610	8.5646	710	2.7870		
415	0.1298	515	3.2042	615	8.9517	715	2.3203		
420	0.1926	520	3.5022	620	9.1921	720	1.8750		
425	0.3425	525	3.7814	625	9.4748	725	1.4890		
430	0.5410	530	4.0766	630	9.6566	730	1.2150		
435	0.8792	535	4.3498	635	9.7931	735	1.0621		
440	1.3192	540	4.5899	640	9.7933	740	0.9373		
445	2.1490	545	4.8033	645	9.6398	745	0.8777		
450	3.0857	550	5.0594	650	9.3096	750	0.8077		
455	2.7362	555	5.2886	655	8.9184	755	0.7438		
460	1.8755	560	5.4851	660	8.3753	760	0.6676		
465	1.5302	565	5.6846	665	7.8268	765	0.5806		
470	1.2534	570	5.9176	670	7.1899	770	0.4971		
475	0.9936	575	6.1271	675	6.4651	775	0.4190		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84227XXXCA

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

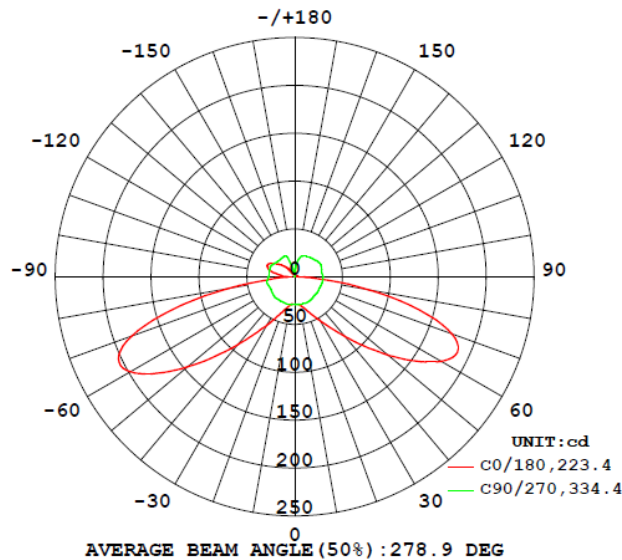
Photometric Measurements at 25°C – Distribution Method

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')
SLV84227XXXCA								
S2511100 10-009	base-up	2508	93	72	0.4746	0.4108	0.2720	0.5296

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	Lumen Efficacy
						Flux (Lumens)	(Lumens Per Watt)
SLV84227XXXCA							
S2511100 10-009	base-up	120.2	122.9	14.6	0.99	903.0	62.1

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84227XXXCA

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	29.0	29.0	29.0	29.0	29.0
5	29.4	29.2	29.2	29.1	29.0
10	29.9	29.4	29.2	29.5	29.4
15	33.0	31.9	30.3	30.0	29.6
20	37.6	35.8	32.6	29.6	29.7
25	44.3	41.4	35.4	30.2	30.0
30	53.1	48.7	39.3	30.9	29.7
35	65.1	58.2	43.9	31.4	29.5
40	81.1	70.5	48.6	32.2	29.0
45	102.4	86.6	53.8	33.0	28.8
50	127.3	106.0	60.0	33.9	28.8
55	153.6	128.0	66.6	35.6	28.8
60	176.6	149.4	74.7	37.0	28.7
65	187.3	170.3	82.9	38.0	28.5
70	174.8	186.0	92.1	39.6	28.8
75	135.4	195.9	102.2	41.2	29.2
80	78.7	198.9	109.8	42.2	29.4
85	25.6	198.3	114.3	43.1	29.5
90	4.4	203.2	115.6	43.4	29.7
95	2.9	211.2	114.9	42.5	29.1
100	3.6	222.6	112.8	41.8	28.7
105	3.2	219.9	109.1	42.2	29.3
110	2.6	205.1	104.1	41.9	29.8
115	2.3	187.4	93.6	41.5	30.1
120	2.7	163.2	83.9	40.0	29.9
125	3.1	132.8	72.9	37.8	28.9
130	2.2	104.9	62.0	34.5	27.7
135	1.6	81.6	52.4	32.2	26.8
140	1.1	61.1	44.6	30.0	26.2
145	0.8	44.6	38.5	28.0	25.5
150	0.6	32.0	33.7	26.3	24.7
155	0.5	23.3	29.1	24.6	23.9
160	0.4	17.1	22.6	23.0	23.2
165	0.3	6.7	18.2	19.2	20.4
170	0.3	3.1	12.7	15.1	16.0
175	0.2	1.1	5.9	8.7	10.0
180	3.0	3.0	1.9	2.9	0.3

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84227XXXCA

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV84227XXXCA		
0-30	29.1	3.2
0-40	58.9	6.5
0-60	184.4	20.4
0-90	508.1	56.3
60-90	323.7	35.9
0-180	903.0	100.0

Beam Angle

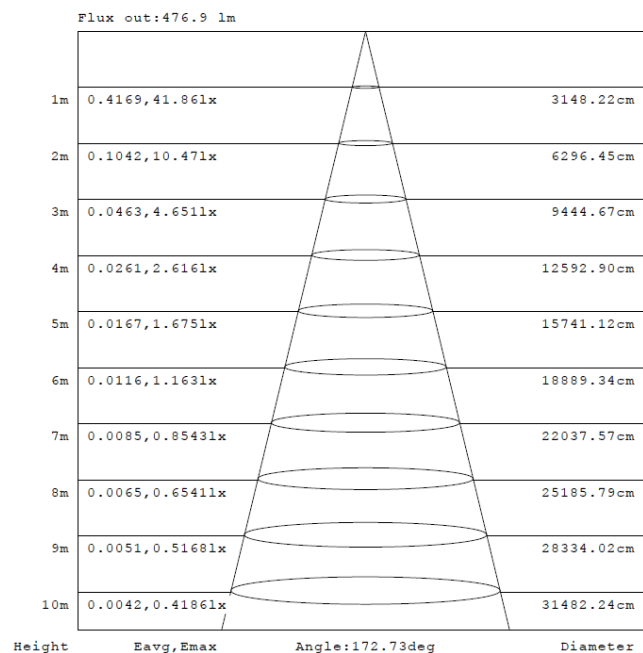
Total Beam Angle(°)
278.9

Illumination Plots

Model No.: SLV84227XXXCA

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

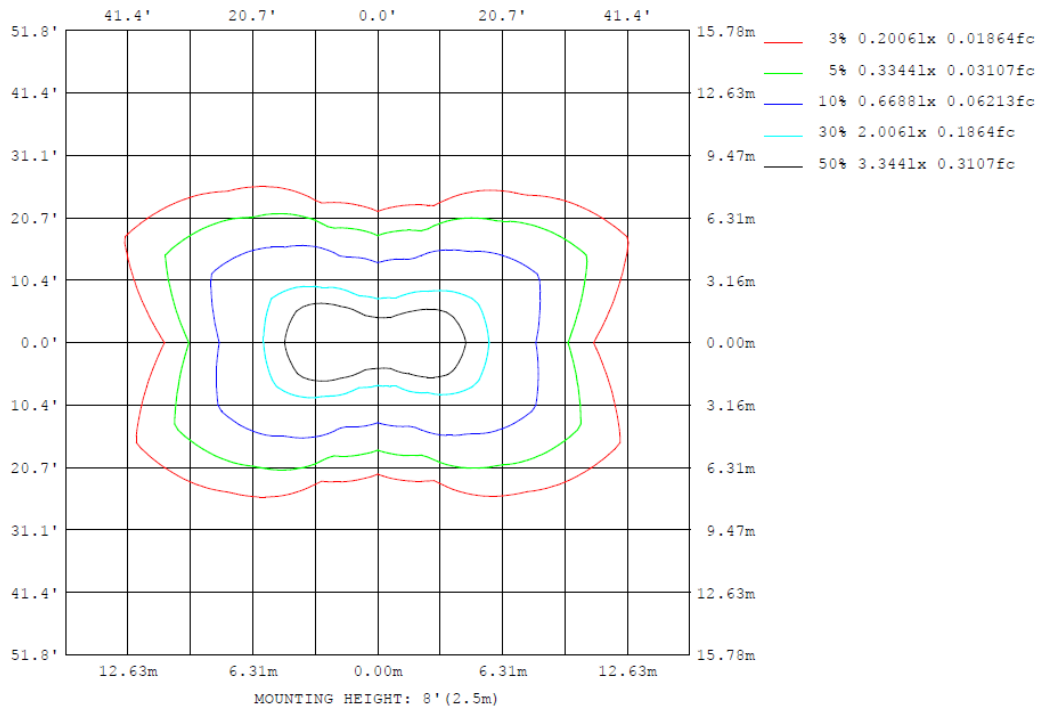
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84227XXXCA

Model No.: SLV84227XXXCA

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV84227XXXCA

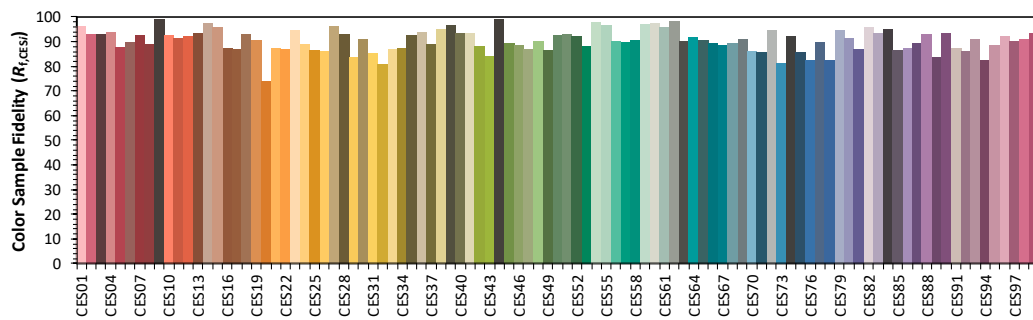
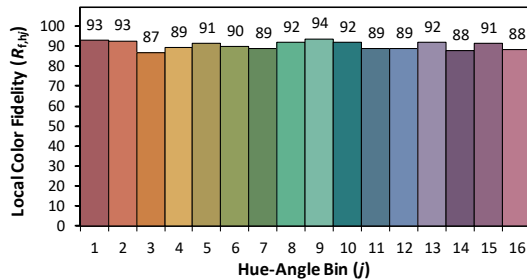
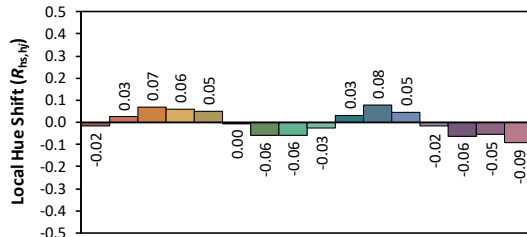
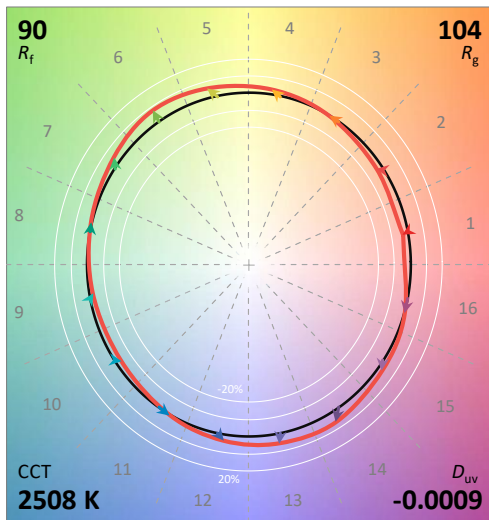
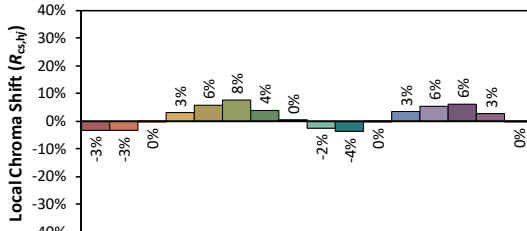
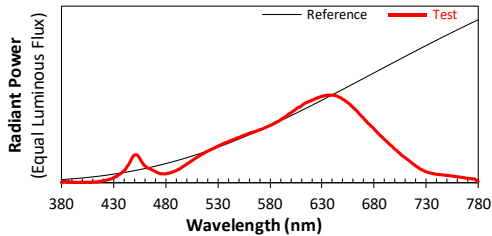
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/12/2

Model: SLV84227XXXCA



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

x 0.4746
 y 0.4108
 u' 0.2720
 v' 0.5296

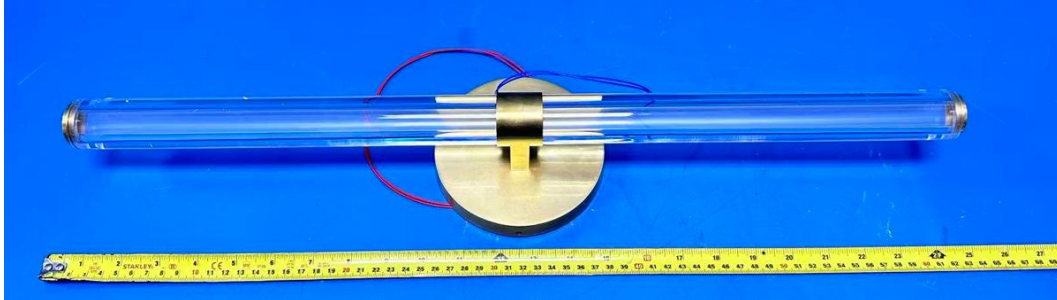
CIE 13.3-1995
(CRI)
 R_a 93
 R_g 72

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

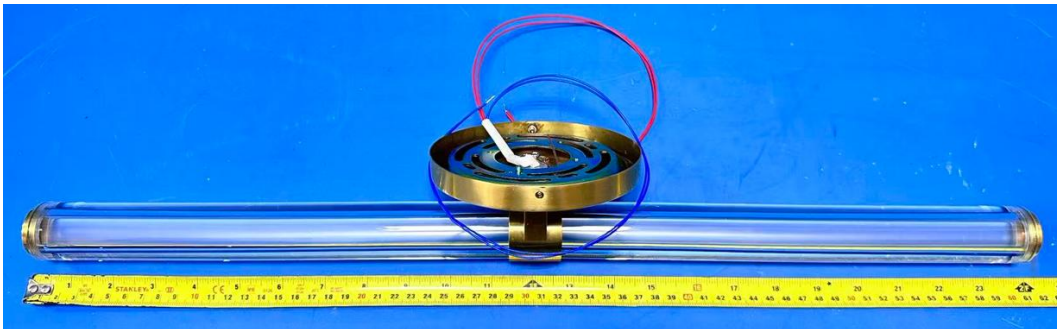
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TEST REPORT

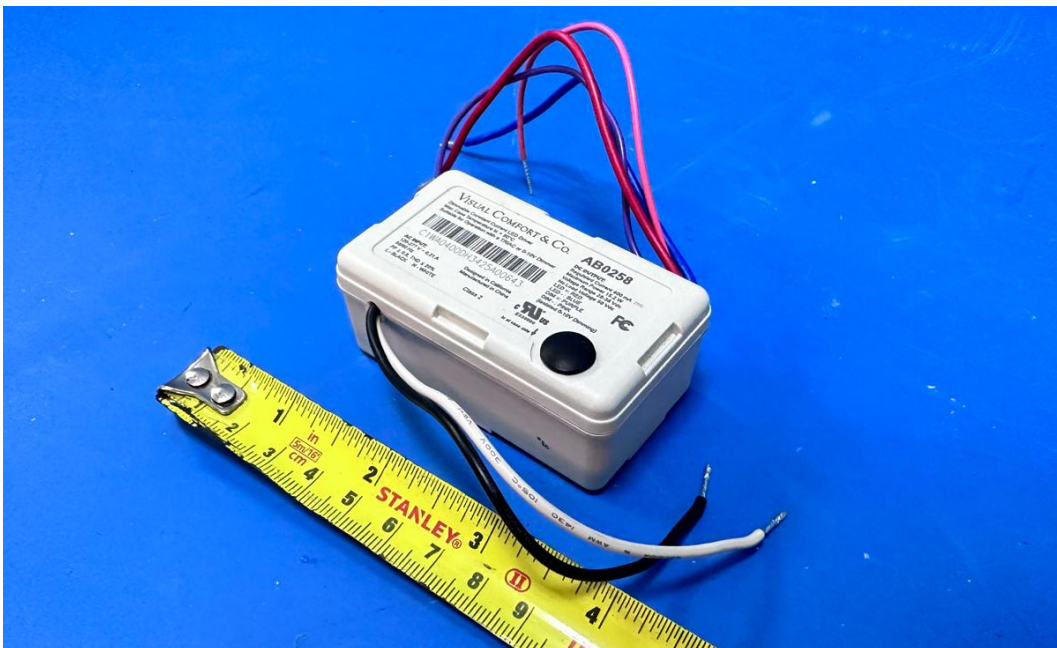
PRODUCT PICTURE (not to scale)



External view of SLV84227XXXCA



External view of SLV84227XXXCA



View of LED driver PTB20W-0400-38-VCC1 (AB0258)

***** 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 *****