

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-056

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REVISION DATE

None

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Report No.: 251110010GZU-056

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLPC82027XXX

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 SLPC82027XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-035.
<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>	08 January 2026
<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:	SLPC82027XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLPC82027XXX

Criteria	Result
Total Lumen Output	987.9 lm
Total Power	12.1 W
Luminaire Efficacy	81.8 lm/W
S/MH(C0/180)	1.23
S/MH(C90/270)	1.59
Correlated Color Temperature (CCT)	2613 K
Color Rendering Index (CRI)	93
R9	63
Chromaticity Coordinate (x)	0.4667
Chromaticity Coordinate (y)	0.4113
Chromaticity Coordinate (u')	0.2666
Chromaticity Coordinate (v')	0.5287

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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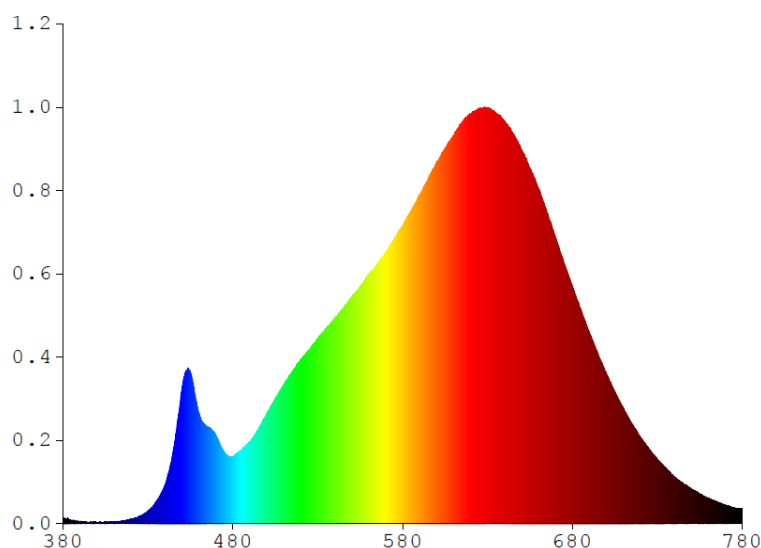
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLPC82027XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	1.5119	480	16.0420	580	71.3690	680	56.8740	780	3.6054
385	0.7265	485	17.6620	585	75.0090	685	51.2970		
390	0.4344	490	19.6710	590	78.7930	690	45.8330		
395	0.3600	495	22.5160	595	82.5700	695	40.7270		
400	0.3094	500	26.3270	600	86.7960	700	35.9490		
405	0.4692	505	29.9320	605	89.9140	705	31.6840		
410	0.4805	510	33.3550	610	93.0530	710	27.6960		
415	0.6800	515	36.3930	615	96.3020	715	24.0200		
420	1.0083	520	39.3660	620	98.2720	720	20.7950		
425	1.7694	525	41.6750	625	99.3790	725	18.0140		
430	2.9666	530	44.2950	630	99.6740	730	15.4310		
435	5.3068	535	46.8690	635	98.4340	735	13.3410		
440	9.1691	540	49.1770	640	96.5810	740	11.2010		
445	17.5700	545	51.5930	645	93.6460	745	9.6659		
450	31.8550	550	54.3480	650	89.7430	750	8.3397		
455	36.3110	555	56.8630	655	85.1720	755	7.1524		
460	26.5090	560	59.7290	660	80.3820	760	6.1289		
465	23.2930	565	62.2270	665	74.6180	765	5.2434		
470	21.2590	570	64.9900	670	68.7080	770	4.4963		
475	17.0980	575	68.2600	675	61.4730	775	3.8052		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC82027XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

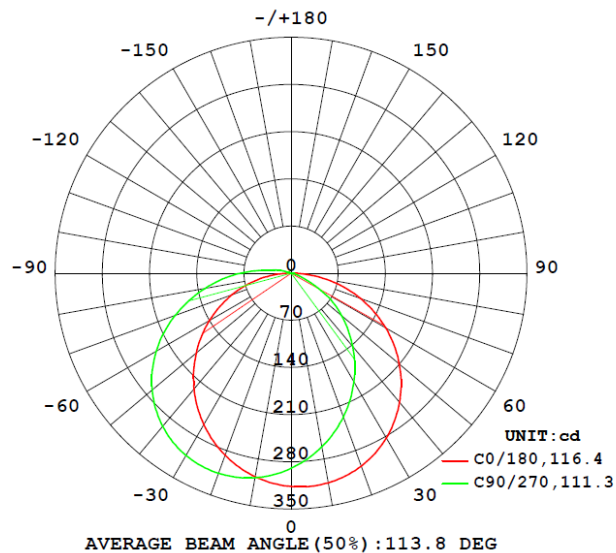
Photometric Measurements at 25°C – Distribution Method

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')
SLPC82027XXX								
S2511100 10-035	base-up	2613	93	63	0.4667	0.4113	0.2666	0.5287

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)
SLPC82027XXX							
S2511100 10-035	base-up	120.1	102.0	12.1	0.98	987.9	81.8

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC82027XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	316.4	311.9	302.7	297.3	289.4
5	317.4	305.2	292.6	286.0	276.6
10	315.8	295.8	280.0	272.3	261.8
15	311.5	283.9	265.2	256.7	245.2
20	304.5	269.6	248.2	239.1	227.0
25	294.8	253.0	229.4	219.9	207.3
30	282.4	234.2	208.9	199.0	186.3
35	267.5	213.4	186.8	177.0	164.6
40	250.2	191.1	163.4	154.4	142.4
45	230.9	167.3	139.4	131.2	120.0
50	209.5	142.3	115.0	108.0	97.8
55	186.5	116.4	90.5	85.0	76.2
60	161.9	90.1	66.3	61.3	51.0
65	136.3	63.9	43.0	38.6	28.8
70	109.5	38.3	20.1	18.5	14.3
75	81.9	13.0	6.7	7.9	6.8
80	53.6	1.5	1.3	1.8	2.4
85	24.2	0.1	0.1	0.8	0.1
90	3.0	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1
100	0.1	0.1	0.2	0.2	0.2
105	0.1	0.2	0.2	0.2	0.2
110	0.1	0.2	0.3	0.3	0.3
115	0.1	0.2	0.3	0.3	0.3
120	0.2	0.3	0.4	0.4	0.4
125	0.2	0.4	0.4	0.4	0.4
130	0.3	0.4	0.5	0.5	0.5
135	0.3	0.5	0.5	0.5	0.5
140	0.4	0.5	0.5	0.5	0.5
145	0.4	0.5	0.5	0.5	0.5
150	0.5	0.5	0.5	0.5	0.5
155	0.5	0.5	0.5	0.5	0.5
160	0.5	0.5	0.5	0.5	0.5
165	0.5	0.5	0.5	0.5	0.5
170	0.5	0.5	0.4	0.5	0.4
175	0.5	0.4	0.4	0.4	0.4
180	0.5	0.4	0.4	0.4	0.4

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC82027XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLPC82027XXX		
0-30	231.6	23.4
0-40	381.9	38.7
0-60	690.1	69.9
0-90	952.7	96.4
60-90	262.6	26.5
0-180	987.9	100.0

Beam Angle

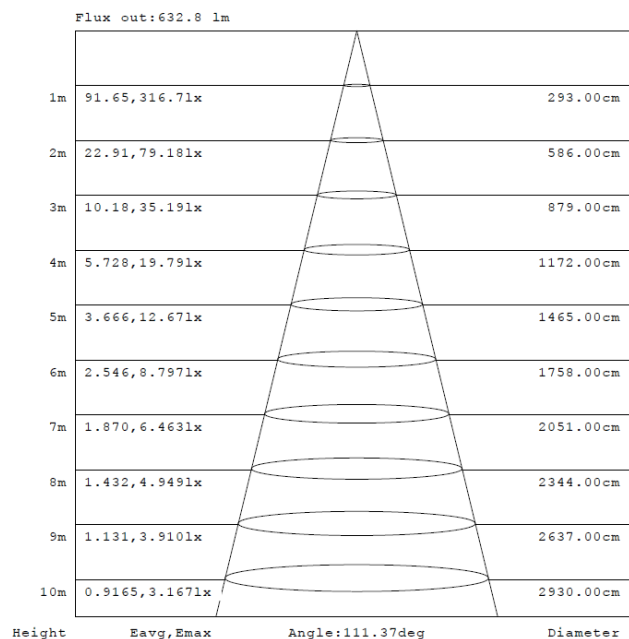
Total Beam Angle(°)
113.8

Illumination Plots

Model No.: SLPC82027XXX

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

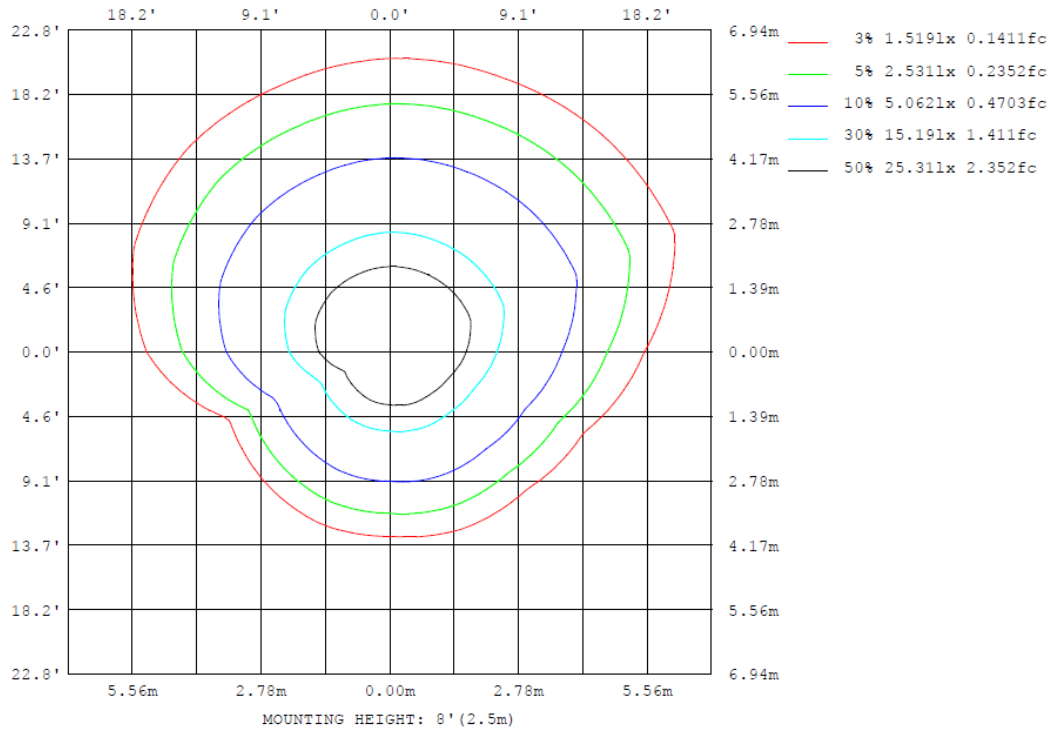
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC82027XXX

Model No.: SLPC82027XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLPC82027XXX

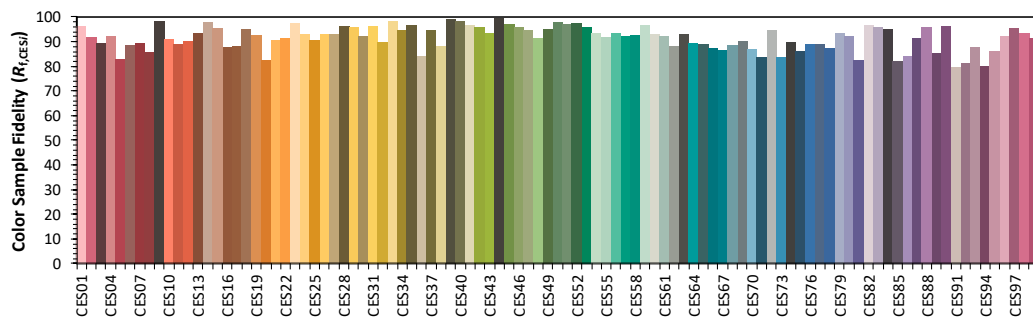
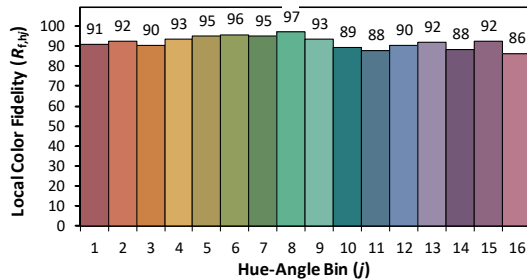
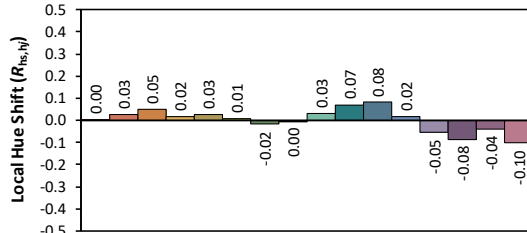
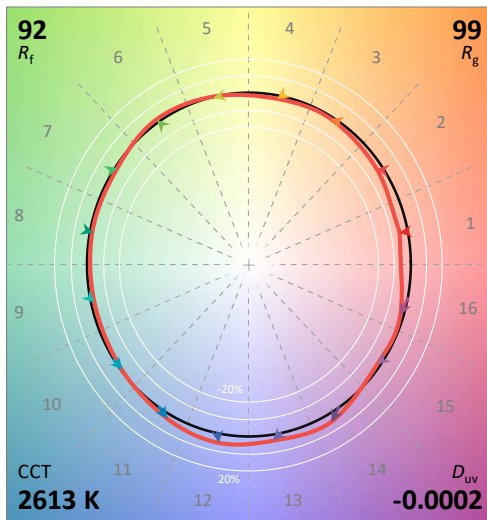
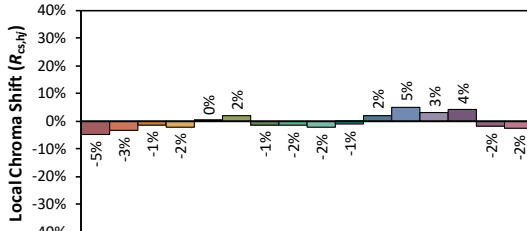
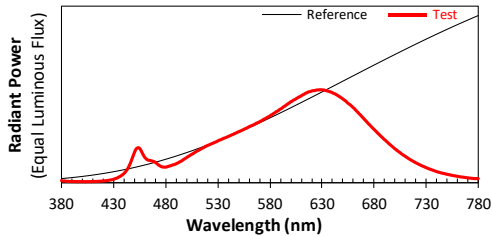
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2026/1/8

Model: SLPC82027XXX



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

x 0.4667
 y 0.4113
 u' 0.2666
 v' 0.5287

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.

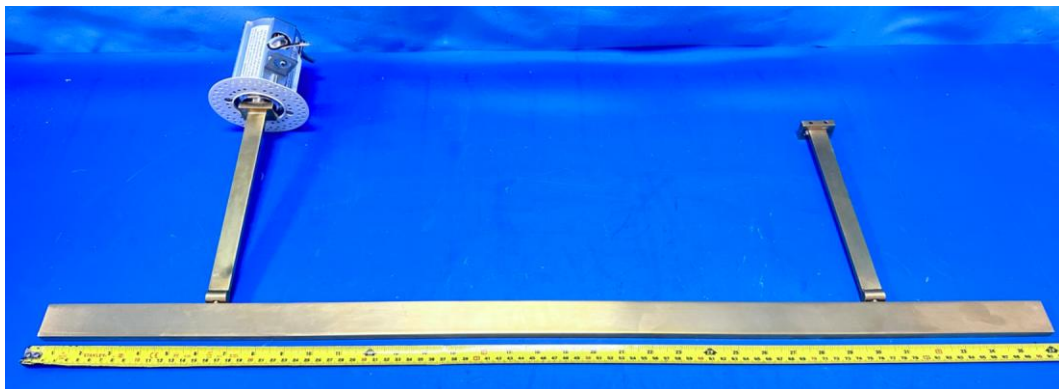
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLPC82027XXX



External view of SLPC82027XXX

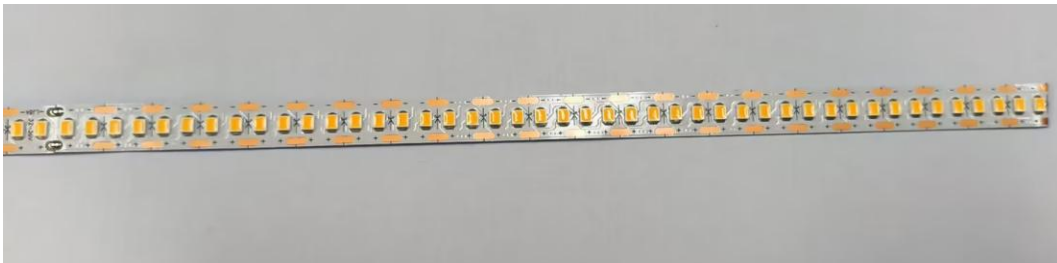
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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PTB15W-0300-38-VCC1(AB0257)



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 *****