

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-023

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None

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Report No.: 250623168GZU-023

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLTB66527XXXALB

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: QGZ250619128.

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 SLTB66527XXXALB. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-023.

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: 17 July 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:	SLTB66527XXXALB
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLTB66527XXXALB

Criteria	Result
Total Lumen Output	118.9 lm
Total Power	8.1 W
Luminaire Efficacy	14.6 lm/W
S/MH(C0/180)	1.97
S/MH(C90/270)	1.87
Correlated Color Temperature (CCT)	2549 K
Color Rendering Index (CRI)	91
R9	49
Chromaticity Coordinate (x)	0.4756
Chromaticity Coordinate (y)	0.4180
Chromaticity Coordinate (u')	0.2693
Chromaticity Coordinate (v')	0.5325

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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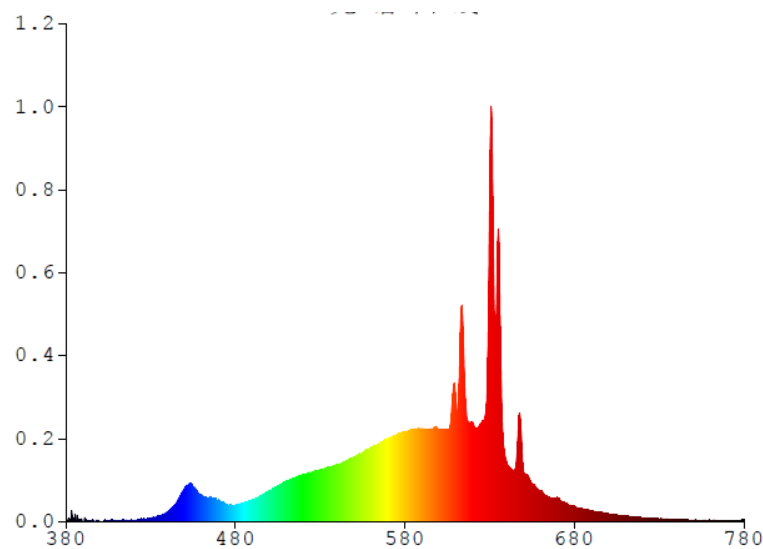
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLTB66527XXXALB

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0238	480	0.1155	580	0.6226	680	0.1037	780	0.0135
385	0.0041	485	0.1280	585	0.6352	685	0.0873		
390	0.0000	490	0.1514	590	0.6433	690	0.0752		
395	0.0053	495	0.1800	595	0.6432	695	0.0609		
400	0.0030	500	0.2171	600	0.6369	700	0.0524		
405	0.0060	505	0.2478	605	0.6354	705	0.0477		
410	0.0081	510	0.2767	610	0.8433	710	0.0397		
415	0.0003	515	0.3037	615	1.0333	715	0.0307		
420	0.0050	520	0.3211	620	0.6802	720	0.0278		
425	0.0151	525	0.3367	625	0.6827	725	0.0232		
430	0.0214	530	0.3589	630	2.2462	730	0.0196		
435	0.0376	535	0.3719	635	2.0178	735	0.0184		
440	0.0694	540	0.3954	640	0.4101	740	0.0130		
445	0.1234	545	0.4181	645	0.3600	745	0.0106		
450	0.2282	550	0.4455	650	0.3557	750	0.0091		
455	0.2421	555	0.4787	655	0.2619	755	0.0074		
460	0.1846	560	0.5147	660	0.2161	760	0.0071		
465	0.1699	565	0.5439	665	0.1719	765	0.0049		
470	0.1521	570	0.5733	670	0.1660	770	0.0025		
475	0.1174	575	0.6011	675	0.1223	775	0.0050		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66527XXXALB

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

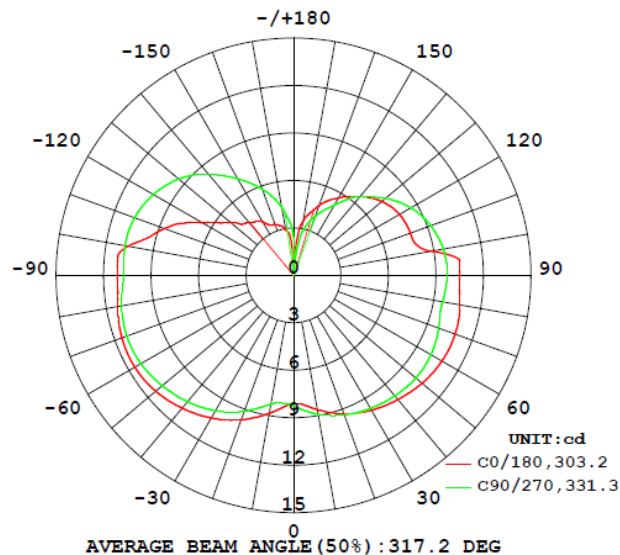
Photometric Measurements at 25°C – Distribution Method

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')
SLTB66527XXXALB								
S2506231 68-023	base-up	2549	91	49	0.4756	0.4180	0.2693	0.5325

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)
SLTB66527XXXALB							
S2506231 68-023	base-up	120.2	134.2	8.1	0.505	118.9	14.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66527XXXALB

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	8.1	8.2	8.2	8.2	8.3
5	8.2	8.5	8.5	8.6	8.6
10	8.6	8.9	8.9	8.9	8.9
15	9.0	9.2	9.2	9.2	9.2
20	9.3	9.5	9.5	9.4	9.4
25	9.6	9.7	9.7	9.6	9.6
30	9.8	9.9	9.9	9.7	9.7
35	10.1	10.1	10.0	9.8	9.8
40	10.2	10.2	10.2	9.9	9.9
45	10.4	10.3	10.3	10.0	10.0
50	10.6	10.4	10.3	10.0	10.1
55	10.7	10.5	10.4	10.0	10.1
60	10.8	10.5	10.4	9.9	10.0
65	10.9	10.4	10.3	9.8	9.9
70	10.9	10.4	10.2	9.7	9.8
75	10.8	10.2	10.1	9.6	9.6
80	10.7	10.2	10.1	9.6	9.6
85	10.5	10.3	10.2	9.7	9.6
90	10.5	10.4	10.3	9.8	9.7
95	10.6	10.5	10.3	9.9	9.7
100	8.9	10.4	10.3	9.8	9.6
105	7.9	10.3	10.2	9.7	9.4
110	7.9	10.1	10.0	9.4	9.2
115	7.8	9.8	9.7	9.1	8.9
120	7.7	9.4	9.4	8.8	8.6
125	7.6	8.7	9.0	8.4	8.1
130	7.3	8.0	8.5	8.0	7.6
135	6.9	7.2	8.0	7.5	7.0
140	6.5	6.5	7.3	7.0	6.5
145	6.1	5.8	6.6	6.4	5.9
150	5.7	5.2	5.8	5.6	5.1
155	5.2	4.6	4.9	4.8	4.6
160	4.7	4.1	4.1	4.1	4.0
165	4.1	3.6	3.4	3.4	3.4
170	3.5	2.4	2.6	2.6	2.5
175	2.1	0.2	0.2	0.2	0.4
180	0.0	1.5	1.7	2.5	2.4

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66527XXXALB

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLTB66527XXXALB		
0-30	7.9	6.6
0-40	14.3	12.0
0-60	32.2	27.1
0-90	65.9	55.4
60-90	33.7	28.3
0-180	118.9	100.0

Beam Angle

Total Beam Angle(°)

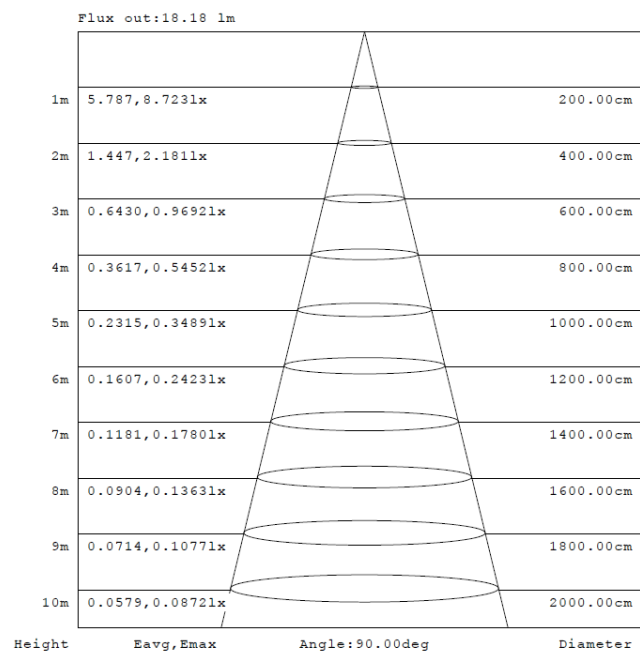
317.2

Illumination Plots

Model No.: SLTB66527XXXALB

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

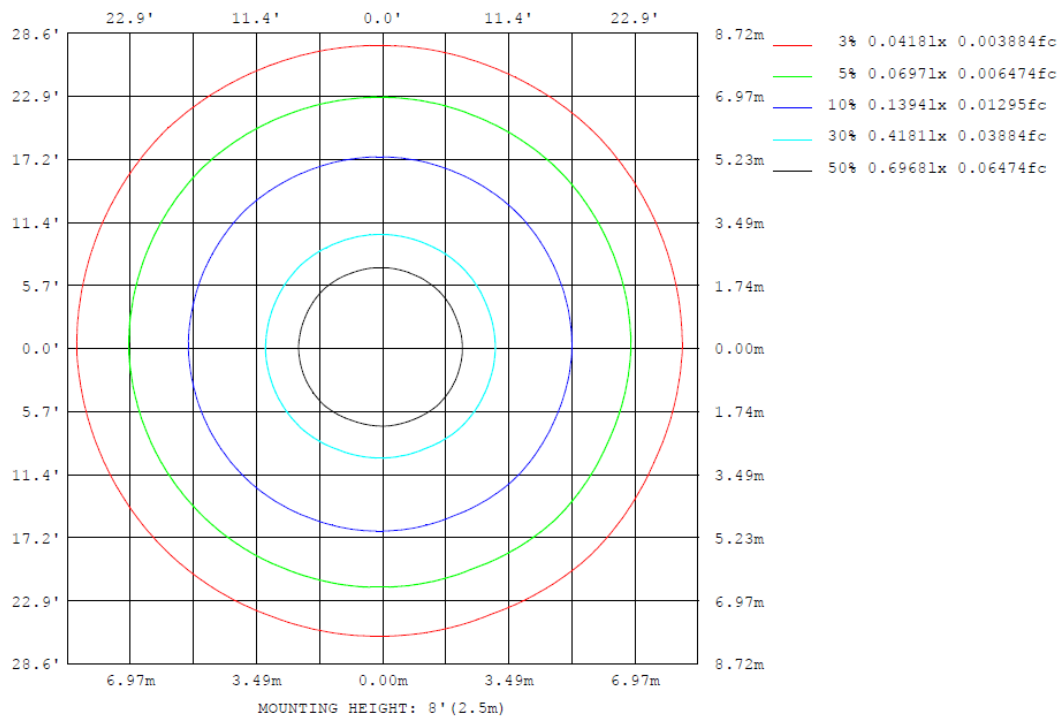
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66527XXXALB

Model No.: SLTB66527XXXALB

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66527XXXALB

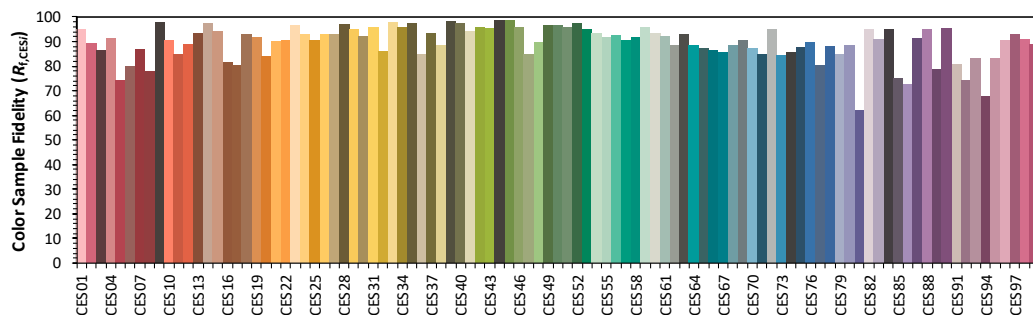
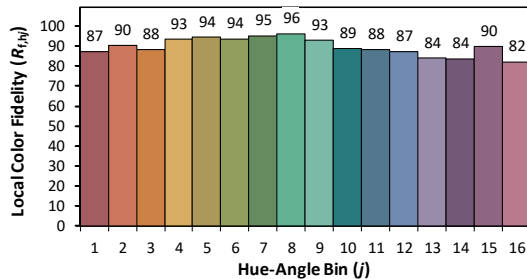
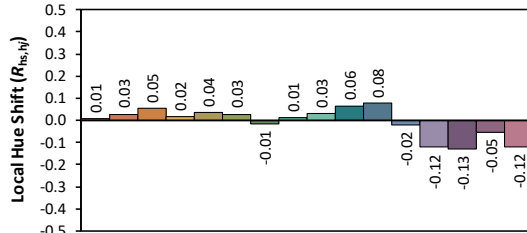
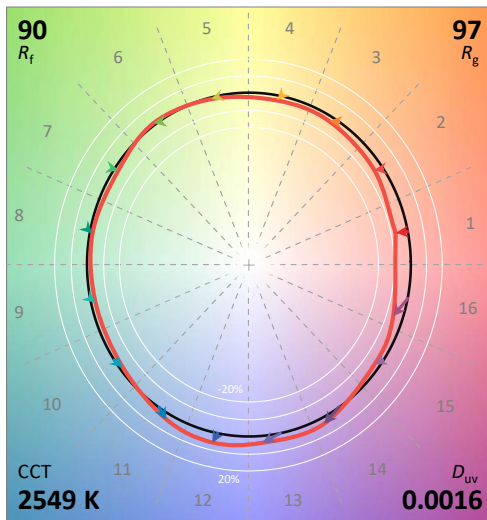
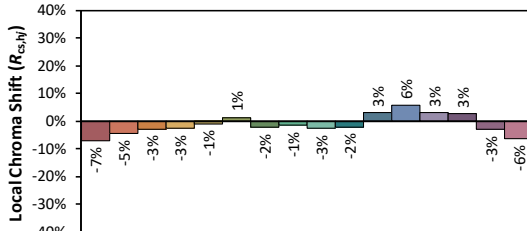
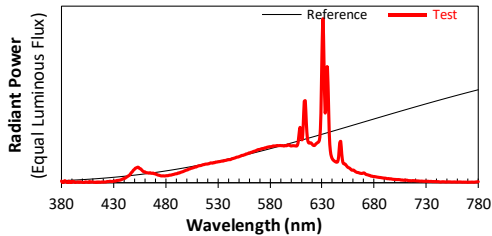
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/17

Model: SLTB66527XXXALB



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

x 0.4756
 y 0.4180
 u' 0.2693
 v' 0.5325

CIE 13.3-1995
(CRI)
 R_a 91
 R_g 49

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

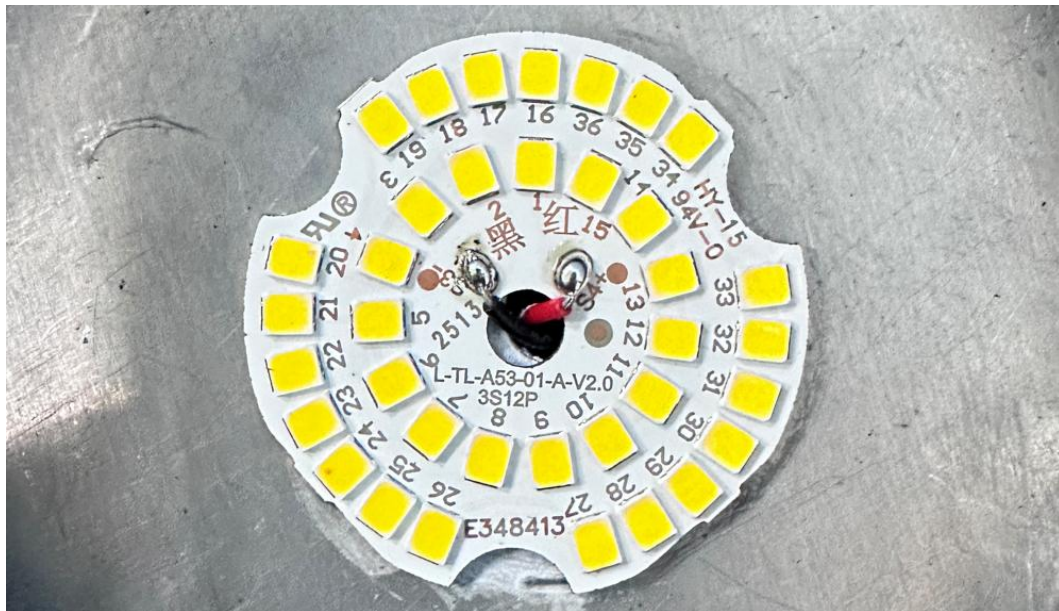
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLTB66527XXXALB

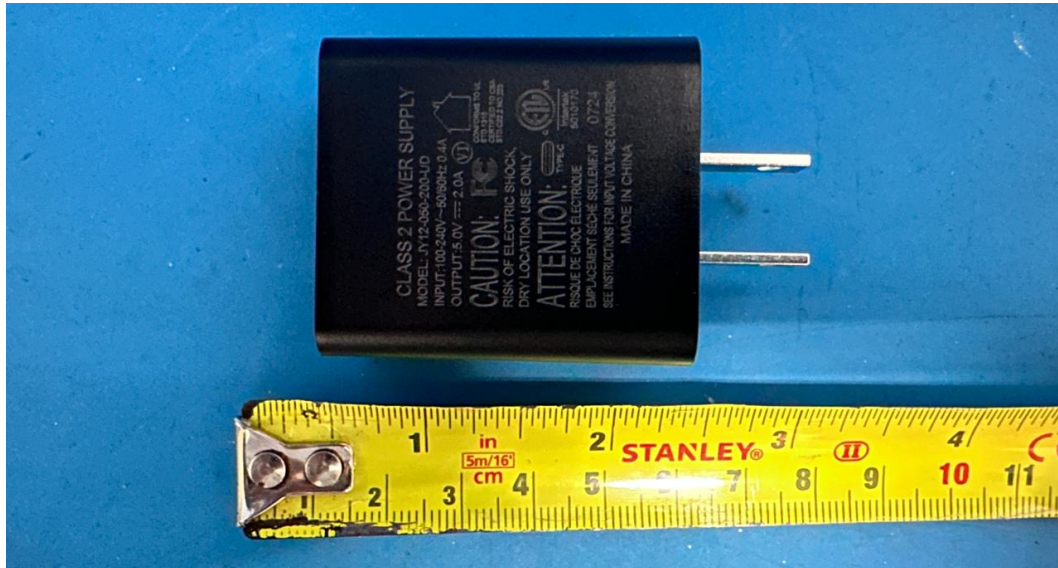


View of LED

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver JY12-050-200-UD

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****