

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-026

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None

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Report No.: 250623168GZU-026

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLTB66427XXXCG

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 SLTB66427XXXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-028.

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: 23 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:	SLTB66427XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLTB66427XXXCG

Criteria	Result
Total Lumen Output	81.0 lm
Total Power	8.7 W
Luminaire Efficacy	9.3 lm/W
S/MH(C0/180)	1.34
S/MH(C90/270)	1.44
Correlated Color Temperature (CCT)	2581 K
Color Rendering Index (CRI)	91
R9	48
Chromaticity Coordinate (x)	0.4741
Chromaticity Coordinate (y)	0.4197
Chromaticity Coordinate (u')	0.2675
Chromaticity Coordinate (v')	0.5329

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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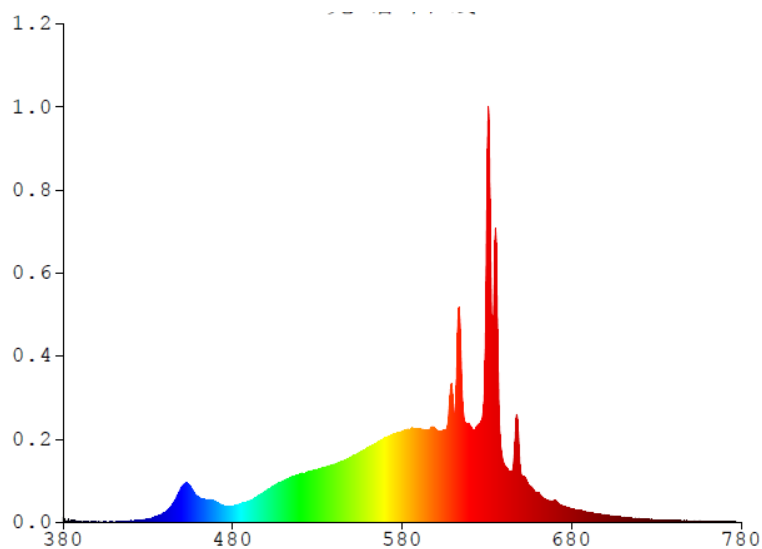
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLTB66427XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.1125	480	0.3284	580	1.8519	680	0.2765	780	0.0000
385	0.0367	485	0.3814	585	1.8820	685	0.2350		
390	0.0174	490	0.4350	590	1.8803	690	0.2052		
395	0.0056	495	0.5275	595	1.8715	695	0.1726		
400	0.0000	500	0.6470	600	1.8689	700	0.1441		
405	0.0000	505	0.7481	605	1.8540	705	0.1246		
410	0.0001	510	0.8397	610	2.4273	710	0.1025		
415	0.0145	515	0.9176	615	2.9868	715	0.0883		
420	0.0347	520	0.9890	620	1.9610	720	0.0731		
425	0.0367	525	1.0248	625	1.9765	725	0.0557		
430	0.0717	530	1.0624	630	6.5914	730	0.0491		
435	0.1146	535	1.1168	635	5.9107	735	0.0402		
440	0.1966	540	1.1662	640	1.1868	740	0.0378		
445	0.3897	545	1.2397	645	1.0370	745	0.0291		
450	0.7166	550	1.3198	650	1.0188	750	0.0285		
455	0.7204	555	1.4109	655	0.7467	755	0.0261		
460	0.5039	560	1.5152	660	0.5990	760	0.0233		
465	0.4565	565	1.6092	665	0.4609	765	0.0186		
470	0.4090	570	1.7072	670	0.4507	770	0.0173		
475	0.3250	575	1.7836	675	0.3180	775	0.0155		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66427XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

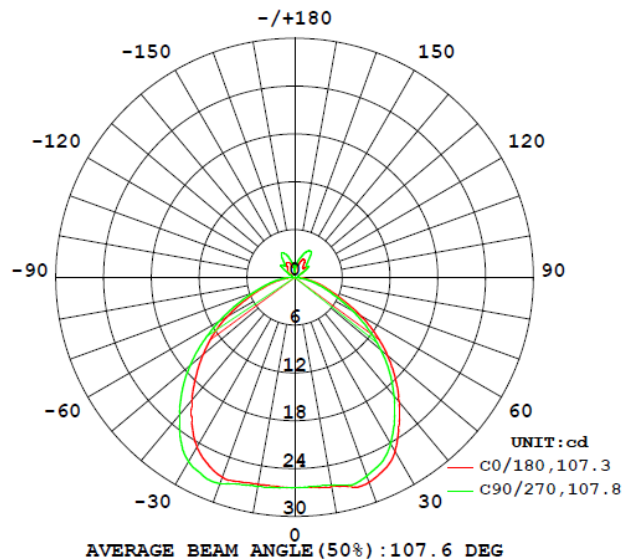
Photometric Measurements at 25°C – Distribution Method

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')
SLTB66427XXXCG								
S2506231 68-028	base-up	2581	91	48	0.4741	0.4197	0.2675	0.5329

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
						Flux (Lumens)	Efficacy (Lumens Per Watt)
SLTB66427XXXCG							
S2506231 68-028	base-up	120.1	141.6	8.7	0.511	81.0	9.3

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66427XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	26.4	26.4	26.4	26.4	26.4
5	26.5	26.4	26.4	26.3	26.3
10	26.7	26.6	26.6	26.5	26.5
15	27.2	27.3	27.2	27.1	27.0
20	27.3	27.3	26.9	26.7	26.5
25	26.6	26.1	25.8	26.0	25.7
30	25.2	24.4	24.4	24.3	24.1
35	22.9	22.8	22.1	22.1	21.9
40	20.4	20.5	19.7	19.6	19.4
45	17.9	17.8	17.2	17.0	16.9
50	15.2	15.0	14.6	14.4	14.1
55	12.4	12.2	11.7	11.6	11.3
60	9.5	9.0	8.6	8.5	8.4
65	6.6	6.2	6.0	5.9	5.8
70	4.6	4.2	4.1	4.1	3.9
75	3.1	2.8	2.6	2.6	2.5
80	1.8	1.6	1.4	1.4	1.3
85	0.8	0.7	0.6	0.6	0.5
90	0.3	0.4	0.4	0.4	0.3
95	0.3	0.3	0.2	0.3	0.3
100	0.3	0.3	0.3	0.4	0.3
105	0.3	0.4	0.4	0.5	0.4
110	0.4	0.5	0.5	0.6	0.5
115	0.5	0.6	0.6	0.7	0.6
120	0.8	0.9	1.0	1.1	1.0
125	1.6	1.7	1.9	2.1	1.9
130	1.9	1.8	2.2	2.3	2.2
135	1.8	1.4	1.9	2.1	2.0
140	1.6	1.7	2.2	2.6	2.6
145	2.1	2.4	3.0	3.4	3.6
150	2.6	2.6	3.1	3.7	3.9
155	2.5	2.4	2.8	3.4	3.6
160	2.1	2.0	2.4	2.8	3.0
165	1.6	1.8	2.0	2.2	2.5
170	1.4	1.4	1.6	1.8	1.8
175	1.1	0.8	0.9	1.0	1.1
180	0.0	0.0	0.0	0.0	0.0

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66427XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLTB66427XXXCG		
0-30	22.3	27.5
0-40	36.6	45.2
0-60	61.9	76.4
0-90	73.2	90.4
60-90	11.3	14.0
0-180	81.0	100.0

Beam Angle

Total Beam Angle(°)

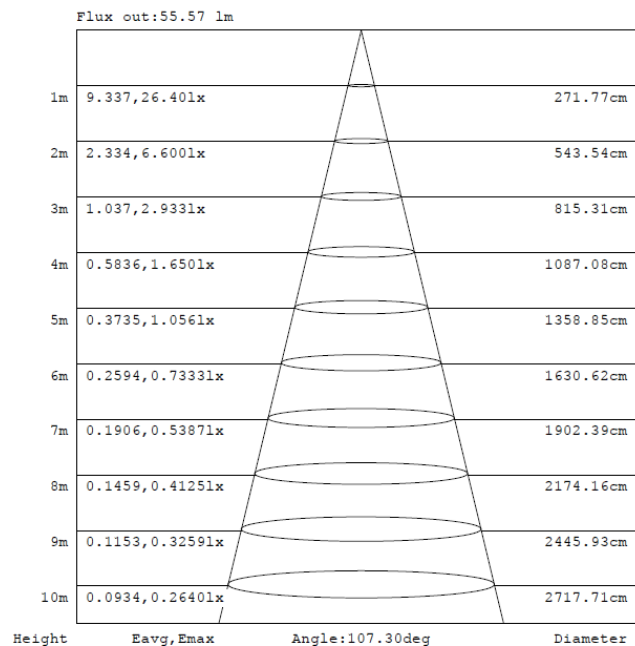
107.6

Illumination Plots

Model No.: SLTB66427XXXCG

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

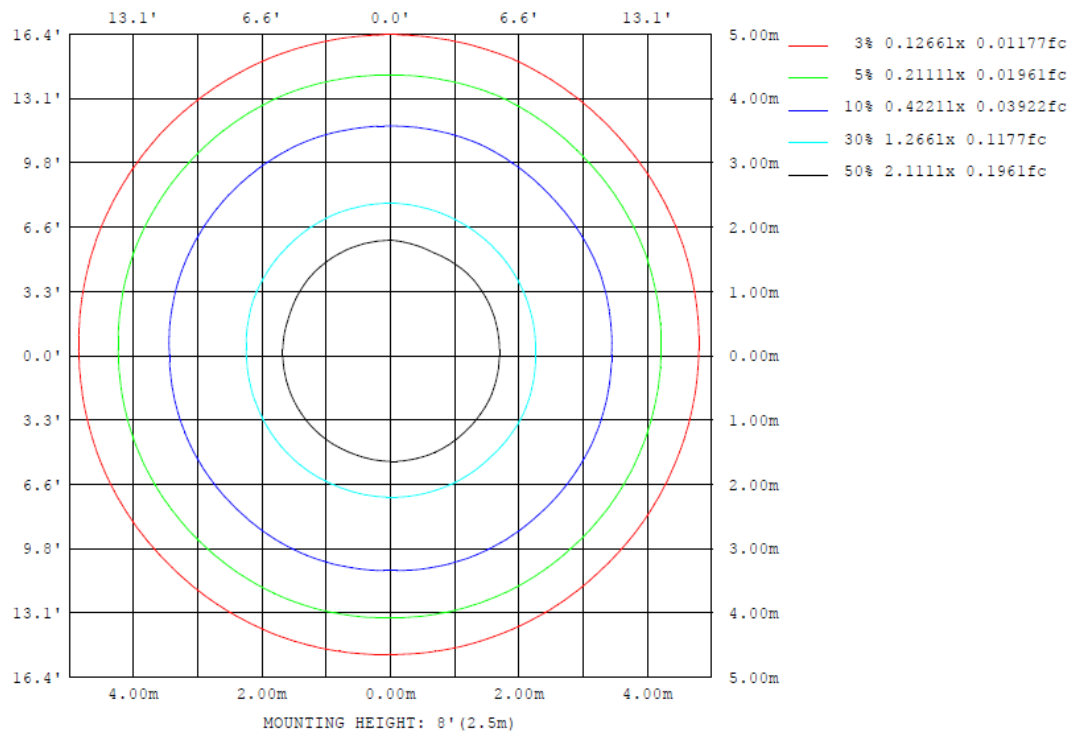
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66427XXXCG

Model No.: SLTB66427XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66427XXXCG

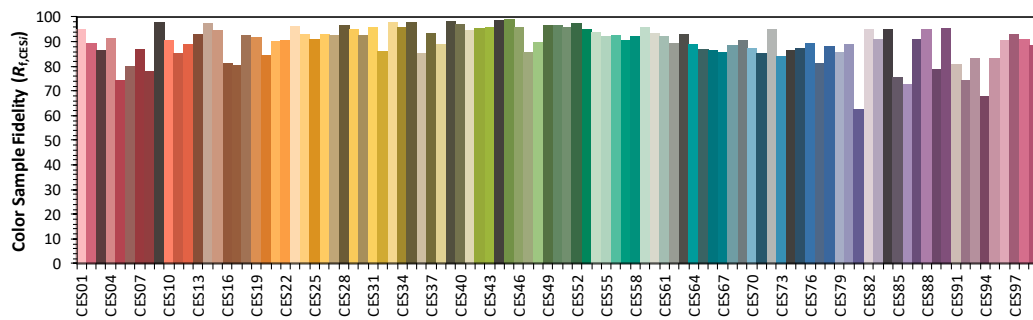
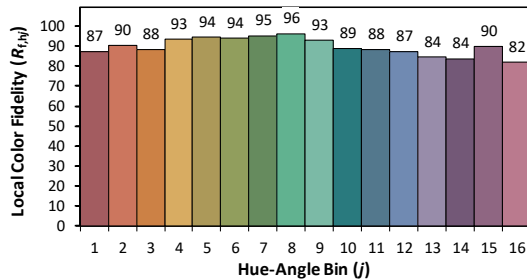
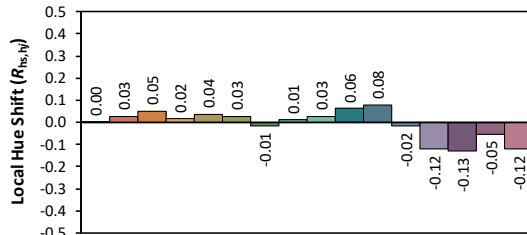
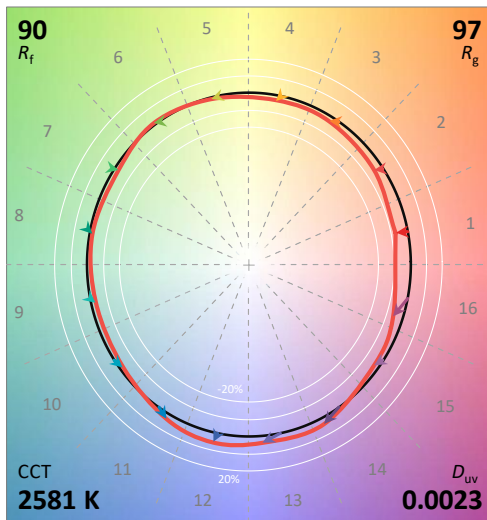
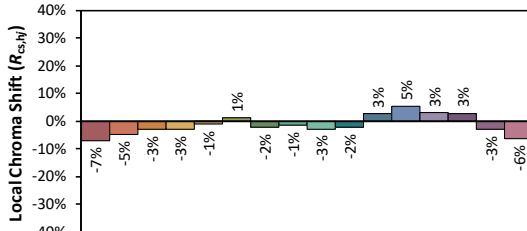
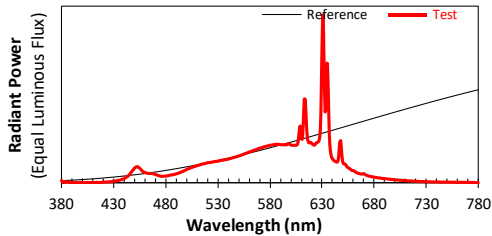
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/23

Model: SLTB66427XXXCG



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

x 0.4741
 y 0.4197
 u' 0.2675
 v' 0.5329

CIE 13.3-1995
(CRI)
 R_a 91
 R_g 48

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

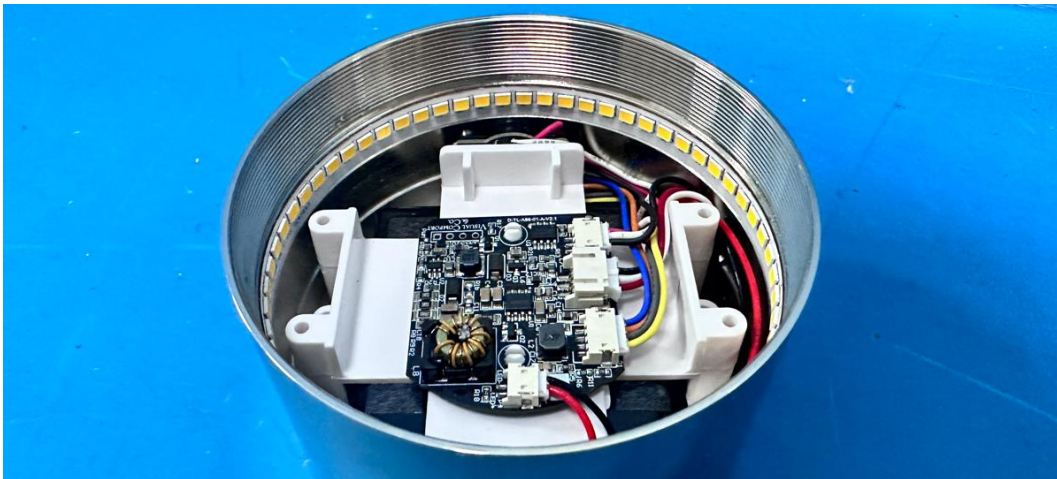
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLTB66427XXXCG

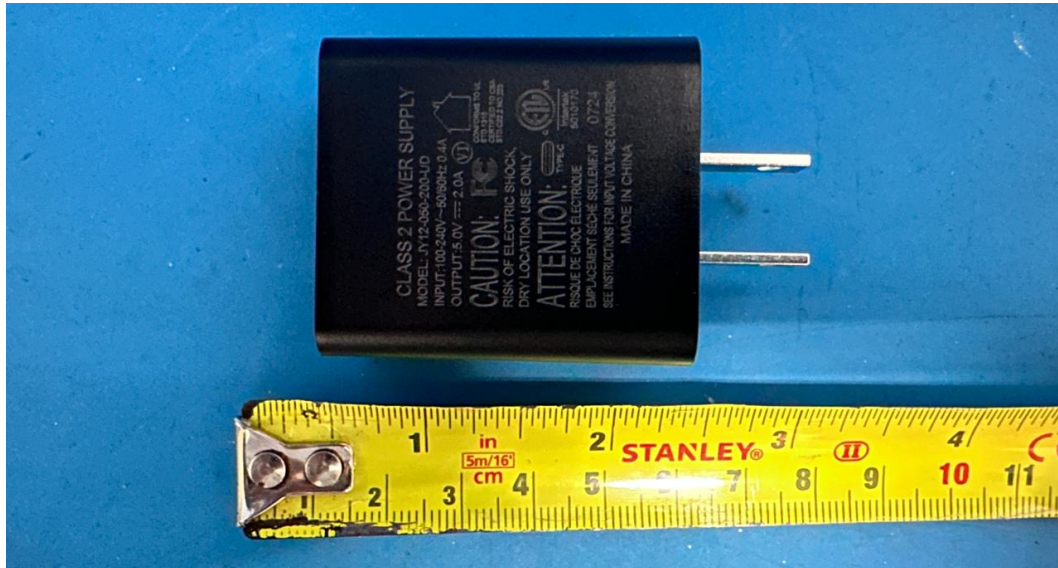


View of LED

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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 *****