

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623213GZU-003

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REVISION DATE

None

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DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250623213GZU-003

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLFL53727XXX

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: QGZ250623117.
<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 SLFL53727XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623213-003.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	LEEDARSON XIAMEN ECO LIGHTING CO LTD Xingtai Industrial Park, Economic Development Zone of Changtai County, Zhangzhou City, Fujian
<u>DATES OF TESTS:</u>	08 July 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:	SLFL53727XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLFL53727XXX

Criteria	Result
Total Lumen Output	237.6 lm
Total Power	2.8 W
Luminaire Efficacy	85.1 lm/W
S/MH(C0/180)	0.08
S/MH(C90/270)	0.04
Correlated Color Temperature (CCT)	2755 K
Color Rendering Index (CRI)	94
R9	64
Chromaticity Coordinate (x)	0.4552
Chromaticity Coordinate (y)	0.4091
Chromaticity Coordinate (u')	0.2601
Chromaticity Coordinate (v')	0.5261

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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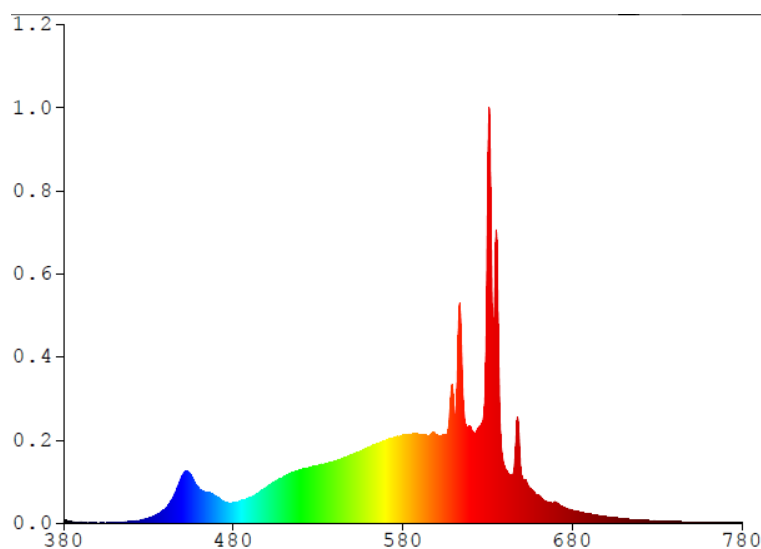
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLFL53727XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.1294	480	1.0846	580	4.6745	680	0.6915	780	0.0607
385	0.0637	485	1.2142	585	4.7471	685	0.5844		
390	0.0689	490	1.3786	590	4.7255	690	0.5011		
395	0.0305	495	1.6280	595	4.6718	695	0.4220		
400	0.0106	500	1.9434	600	4.7095	700	0.3607		
405	0.0190	505	2.2496	605	4.7077	705	0.2974		
410	0.0199	510	2.4887	610	6.3925	710	0.2539		
415	0.0538	515	2.6940	615	8.1195	715	0.2173		
420	0.0946	520	2.8433	620	5.1087	720	0.1812		
425	0.1634	525	2.9718	625	5.1332	725	0.1539		
430	0.2765	530	3.0799	630	17.1390	730	0.1295		
435	0.4817	535	3.1911	635	15.5220	735	0.1105		
440	0.7953	540	3.3043	640	3.0143	740	0.0991		
445	1.4673	545	3.4601	645	2.6097	745	0.0797		
450	2.5509	550	3.6470	650	2.6244	750	0.0714		
455	2.5600	555	3.8414	655	1.8667	755	0.0652		
460	1.8389	560	4.0521	660	1.4964	760	0.0539		
465	1.6365	565	4.2318	665	1.1476	765	0.0451		
470	1.4337	570	4.4142	670	1.1435	770	0.0409		
475	1.1288	575	4.5654	675	0.8007	775	0.0316		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53727XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

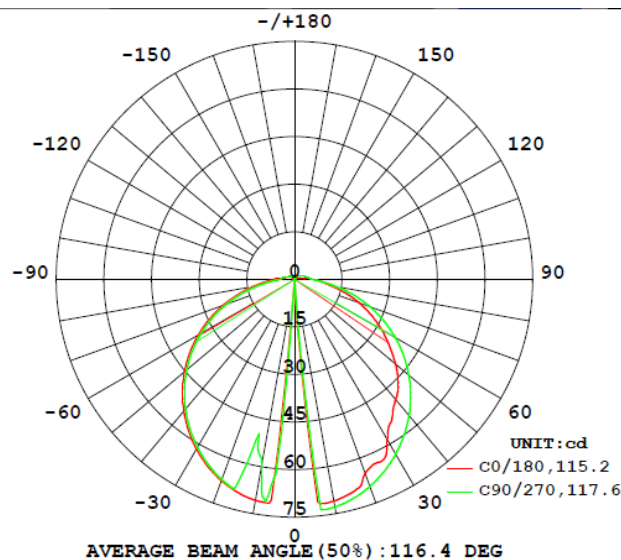
Photometric Measurements at 25°C – Distribution Method

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')
SLFL53727XXX								
S2506232 13-003	base-up	2755	94	64	0.4552	0.4091	0.2601	0.5261

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)
SLFL53727XXX							
S2506232 13-003	base-up	120.1	55.9	2.8	0.416	237.6	85.1

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53727XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	0.0	0.0	0.0	0.0	0.0
5	42.2	42.9	28.2	29.6	29.2
10	71.0	71.2	72.1	73.2	72.9
15	69.6	69.8	70.8	71.9	71.5
20	65.1	67.7	68.8	69.8	69.5
25	63.6	65.0	66.1	67.2	66.8
30	58.5	61.9	63.0	64.0	63.7
35	53.6	58.3	59.4	60.4	60.1
40	49.6	54.3	55.4	56.3	56.1
45	46.2	49.9	51.0	51.9	51.7
50	41.5	45.2	46.3	47.1	47.0
55	36.4	40.2	41.2	42.0	41.9
60	31.7	34.9	35.9	36.7	36.6
65	26.6	29.3	30.3	31.0	31.0
70	21.6	23.6	24.6	25.2	25.3
75	16.5	18.0	18.8	19.3	19.3
80	11.8	12.8	13.5	13.6	13.6
85	8.3	8.9	9.0	8.8	8.6
90	5.8	6.5	6.4	6.0	5.6
95	3.5	5.1	5.2	5.0	4.8
100	2.5	4.5	4.5	4.4	4.3
105	2.1	4.0	3.9	3.8	3.8
110	1.4	3.4	3.4	3.3	3.3
115	0.9	2.8	2.9	2.8	2.8
120	0.7	2.4	2.6	2.5	2.4
125	0.8	2.0	2.2	2.2	2.1
130	0.9	1.6	1.9	1.8	1.8
135	0.8	1.3	1.5	1.5	1.5
140	0.6	1.0	1.2	1.2	1.2
145	0.5	0.8	0.9	0.9	0.9
150	0.4	0.6	0.7	0.7	0.7
155	0.3	0.5	0.5	0.5	0.5
160	0.3	0.4	0.4	0.4	0.4
165	0.3	0.4	0.4	0.4	0.4
170	0.3	0.4	0.4	0.4	0.4
175	0.3	0.3	0.3	0.4	0.4
180	0.1	0.1	0.1	0.1	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53727XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLFL53727XXX		
0-30	54.4	22.9
0-40	90.8	38.2
0-60	165.0	69.5
0-90	222.6	93.7
60-90	57.6	24.2
0-180	237.6	100.0

Beam Angle

Total Beam Angle(°)

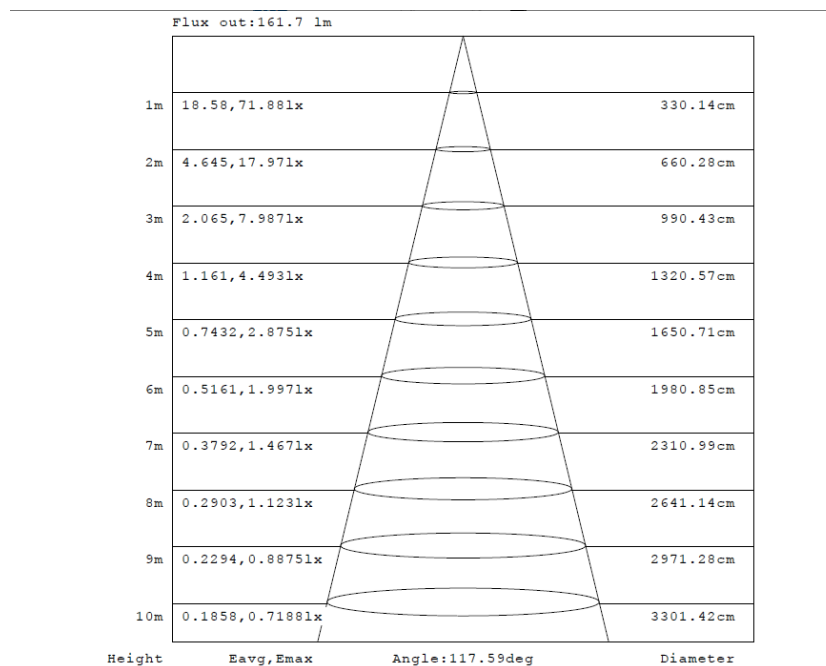
116.4

Illumination Plots

Model No.: SLFL53727XXX

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

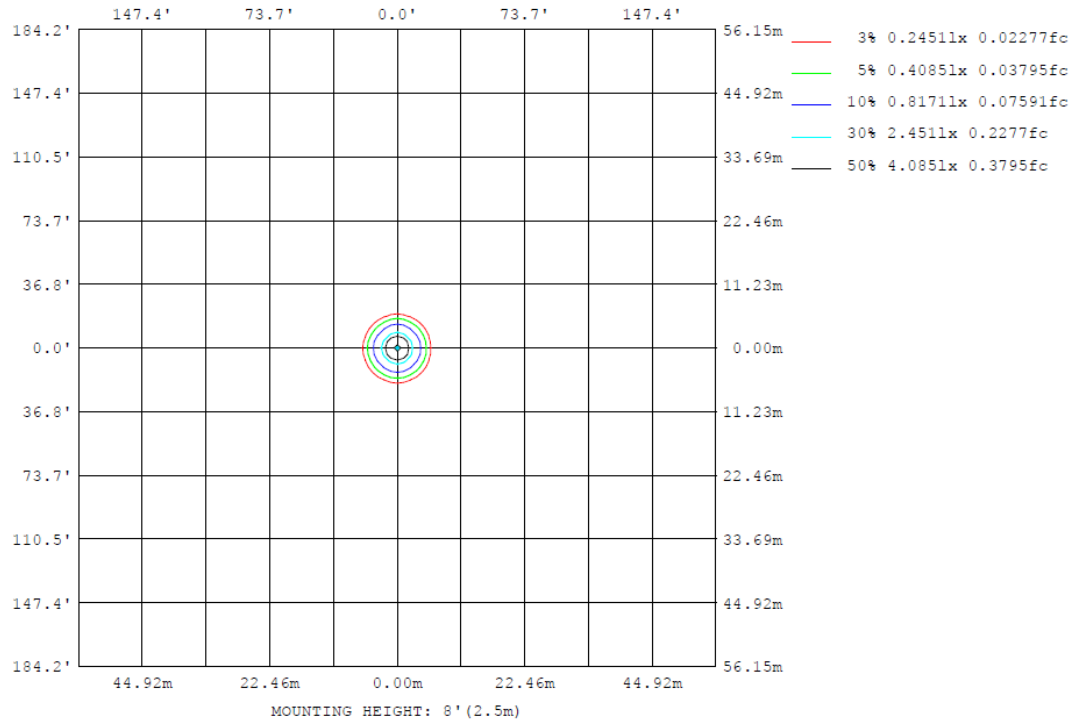
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53727XXX

Model No.: SLFL53727XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53727XXX

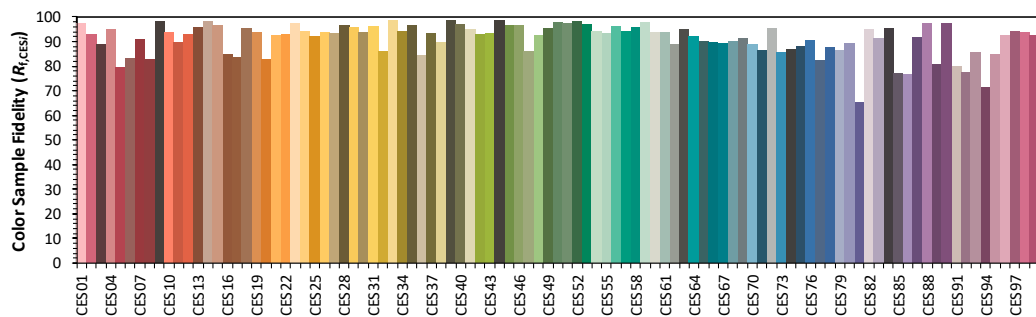
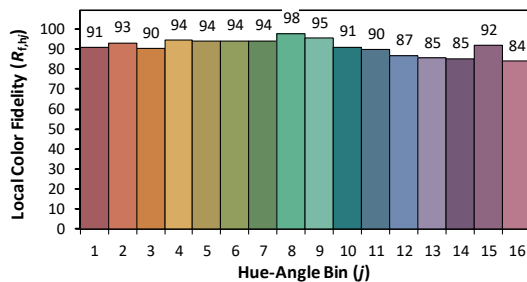
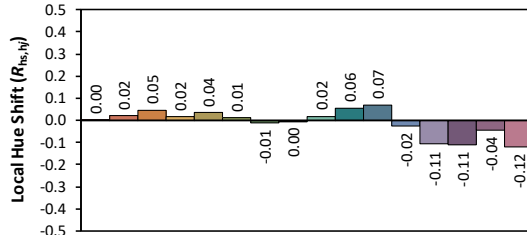
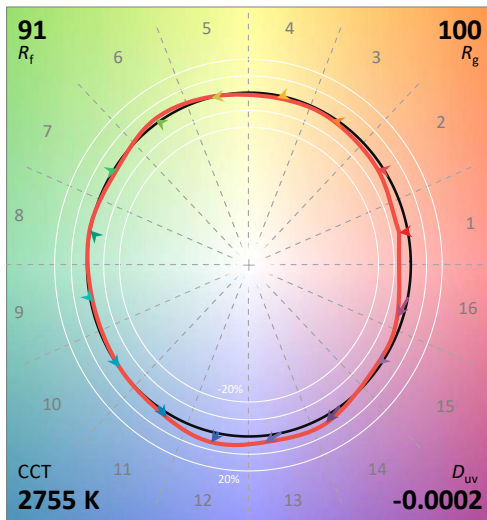
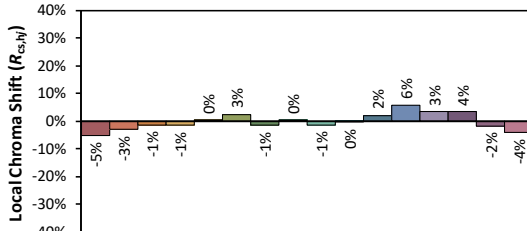
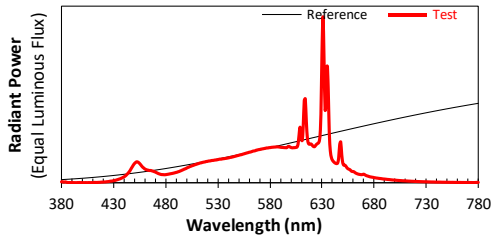
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/8

Model: SLFL53727XXX



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

x 0.4552
 y 0.4091
 u' 0.2601
 v' 0.5261

CIE 13.3-1995
(CRI)
 R_a 94
 R_g 64

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 SLFL53727XXX

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TEST REPORT

PRODUCT PICTURE (not to scale)

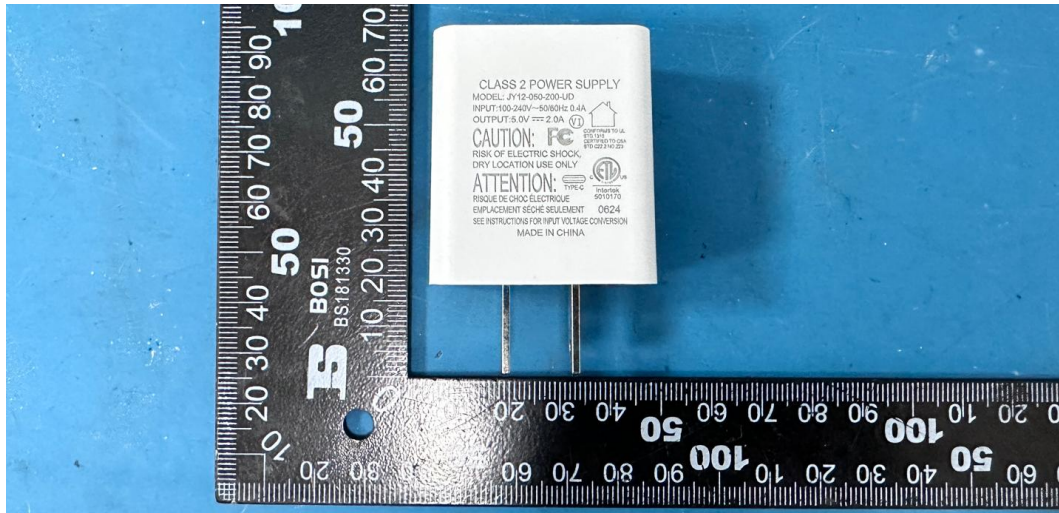


View of LED

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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 *****