

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-031

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None

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Report format for LM-79_G

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Report No.: 250623168GZU-031

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLTB75727XXXXX

Remark: "XXXXX" 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: QGZ250619128.
<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 SLTB75727XXXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-033.
<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>	24 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:	SLTB75727XXXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLTB75727XXXXX

Criteria	Result
Total Lumen Output	258.0 lm
Total Power	4.0 W
Luminaire Efficacy	63.9 lm/W
S/MH(C0/180)	0.44
S/MH(C90/270)	0.60
Correlated Color Temperature (CCT)	2755 K
Color Rendering Index (CRI)	90
R9	61
Chromaticity Coordinate (x)	0.4567
Chromaticity Coordinate (y)	0.4119
Chromaticity Coordinate (u')	0.2599
Chromaticity Coordinate (v')	0.5274

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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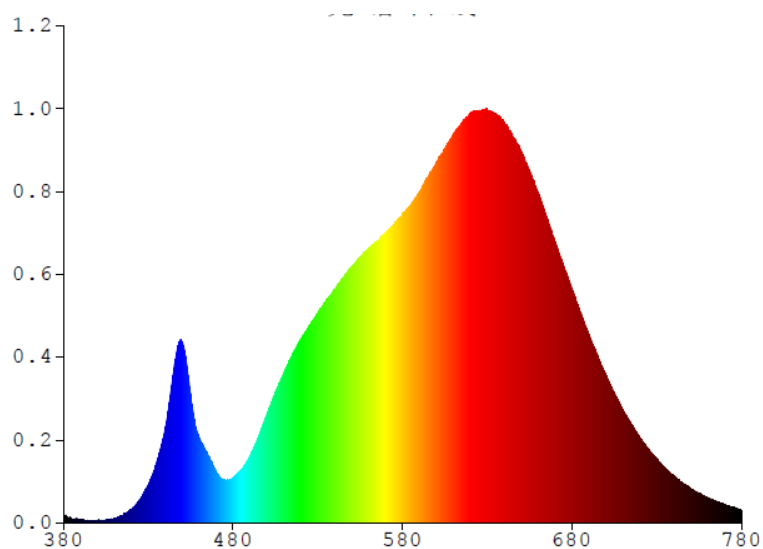
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLTB75727XXXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.2378	480	1.5835	580	10.8760	680	8.2556	780	0.4374
385	0.1300	485	1.8716	585	11.2230	685	7.4318		
390	0.0942	490	2.3590	590	11.6750	690	6.6401		
395	0.0789	495	3.0144	595	12.1750	695	5.9415		
400	0.0900	500	3.8303	600	12.6940	700	5.2070		
405	0.0866	505	4.5879	605	13.1790	705	4.5816		
410	0.1632	510	5.2823	610	13.6940	710	3.9938		
415	0.2664	515	5.9304	615	14.0830	715	3.4933		
420	0.4811	520	6.4721	620	14.3930	720	3.0195		
425	0.8246	525	6.9489	625	14.5260	725	2.6207		
430	1.3295	530	7.3965	630	14.5890	730	2.2537		
435	2.1229	535	7.8335	635	14.4390	735	1.9373		
440	3.3188	540	8.2352	640	14.1240	740	1.6650		
445	5.3188	545	8.6366	645	13.6270	745	1.4221		
450	6.3888	550	9.0266	650	13.1330	750	1.2188		
455	4.4598	555	9.3743	655	12.4220	755	1.0430		
460	3.0111	560	9.7031	660	11.6430	760	0.8908		
465	2.4176	565	9.9250	665	10.8170	765	0.7637		
470	1.8203	570	10.2080	670	9.9234	770	0.6512		
475	1.5201	575	10.5200	675	8.9087	775	0.5635		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB75727XXXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

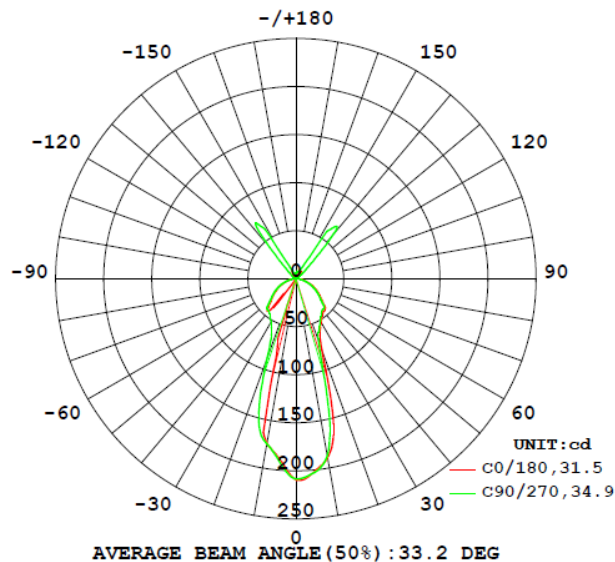
Photometric Measurements at 25°C – Distribution Method

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')
SLTB75727XXXXX								
S2506231 68-033	base-up	2755	90	61	0.4567	0.4119	0.2599	0.5274

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)
SLTB75727XXXXX							
S2506231 68-033	base-up	120.0	45.1	4.0	0.747	258.0	63.9

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB75727XXXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	209.2	209.1	208.8	208.5	208.2
5	203.0	203.1	203.7	203.9	203.2
10	189.2	189.4	189.5	187.7	187.4
15	149.6	140.6	132.4	123.1	125.2
20	78.5	73.9	70.6	68.4	69.5
25	59.4	58.5	57.4	57.0	57.5
30	52.6	51.6	50.8	50.4	50.8
35	47.5	46.5	46.1	46.1	45.8
40	44.6	44.1	44.2	46.1	42.8
45	43.6	42.7	40.6	39.0	41.7
50	35.6	34.4	33.6	32.9	34.0
55	30.1	29.3	28.7	28.2	28.6
60	25.2	24.3	23.8	23.4	23.7
65	20.3	19.5	19.0	18.7	18.8
70	15.3	14.6	14.0	13.6	14.0
75	10.6	10.0	10.0	9.4	10.0
80	6.3	5.8	5.3	5.0	5.2
85	2.5	2.2	1.9	1.7	1.8
90	1.0	1.0	1.0	1.0	1.0
95	1.8	2.0	2.0	2.0	1.9
100	1.9	1.4	1.3	1.2	1.3
105	0.6	0.6	0.6	0.6	0.6
110	0.4	0.5	0.5	0.5	0.5
115	1.0	1.5	1.9	1.9	1.9
120	1.4	3.0	3.3	3.4	3.4
125	2.3	4.7	5.2	5.4	5.3
130	3.6	7.8	8.6	8.9	8.8
135	5.7	16.5	19.0	20.7	19.9
140	9.1	54.0	60.7	63.2	61.5
145	9.8	64.0	62.4	61.2	63.2
150	3.5	20.0	18.1	17.0	18.2
155	1.9	9.5	9.2	9.1	9.5
160	1.6	6.8	7.0	7.0	7.2
165	1.7	6.2	6.8	7.0	7.0
170	2.2	5.7	8.1	8.4	8.6
175	1.6	1.5	2.2	3.7	4.3
180	0.2	0.2	0.2	0.1	0.1

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB75727XXXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLTB75727XXXXX		
0-30	78.4	30.4
0-40	106.5	41.3
0-60	163.8	63.5
0-90	196.6	76.2
60-90	32.8	12.7
0-180	258.0	100.0

Beam Angle

Total Beam Angle(°)

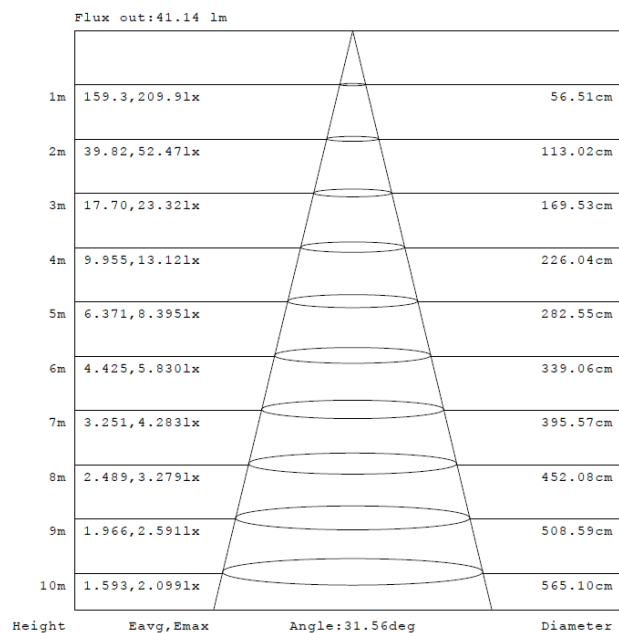
33.2

Illumination Plots

Model No.: SLTB75727XXXXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

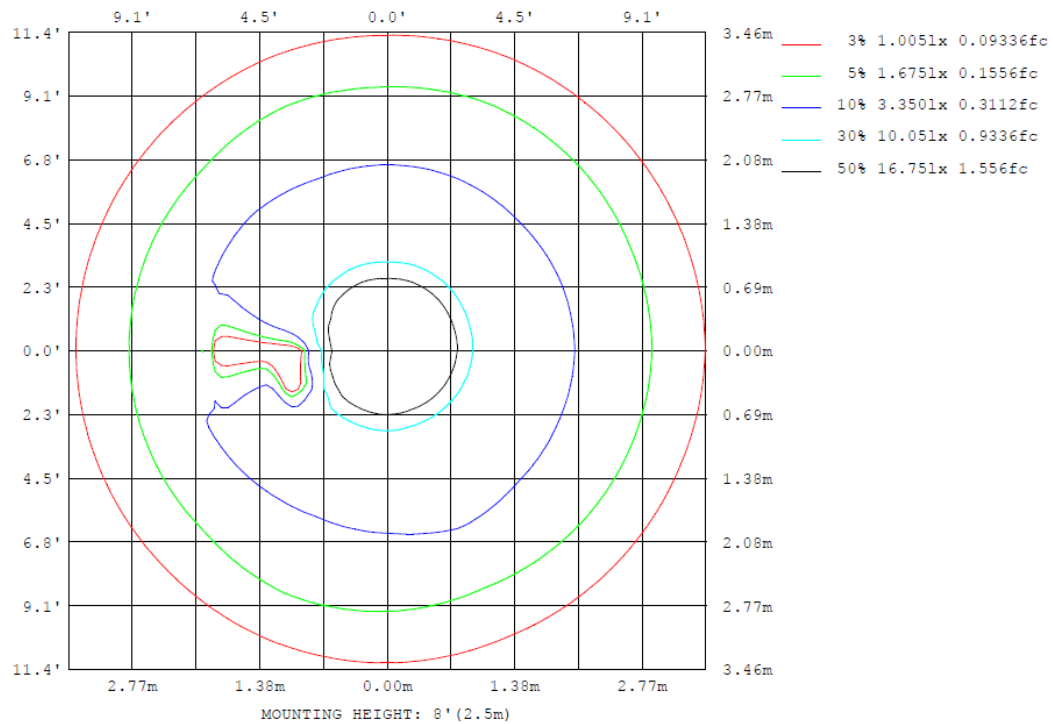
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB75727XXXXX

Model No.: SLTB75727XXXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB75727XXXXX

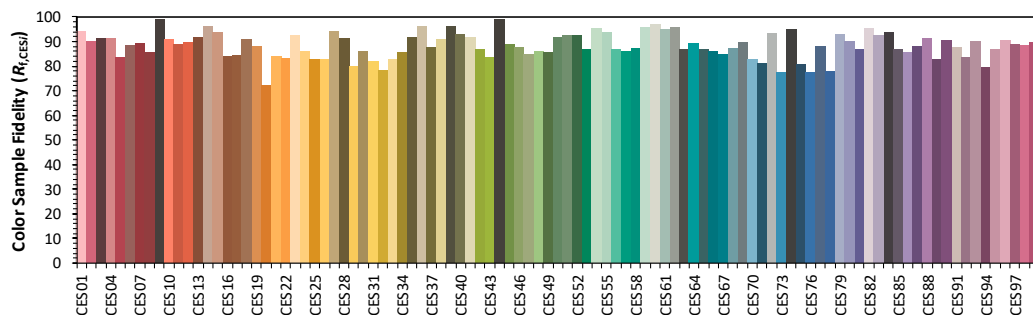
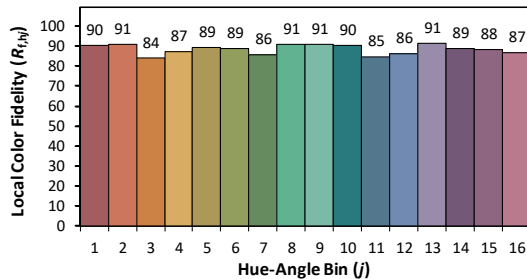
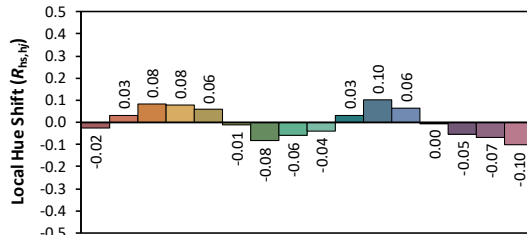
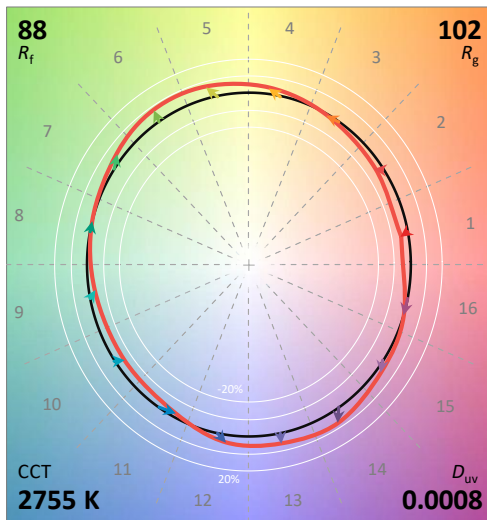
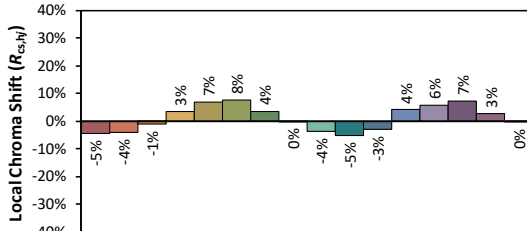
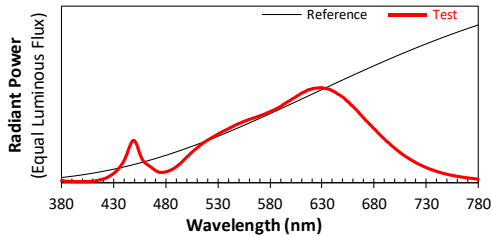
ANSI/IES +B3:X+B3:X238TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/24

Model: SLTB75727XXXXX



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

x 0.4567
 y 0.4119
 u' 0.2599
 v' 0.5274

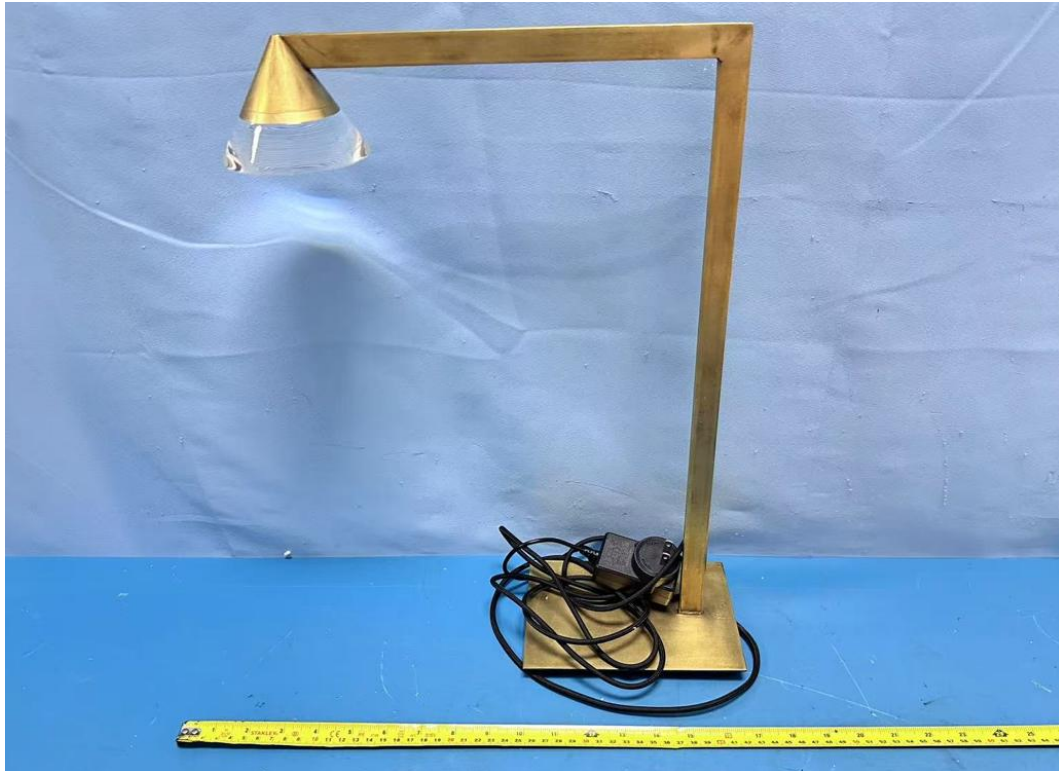
CIE 13.3-1995
(CRI)
 R_a 90
 R_g 61

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 SLTB75727XXXXX

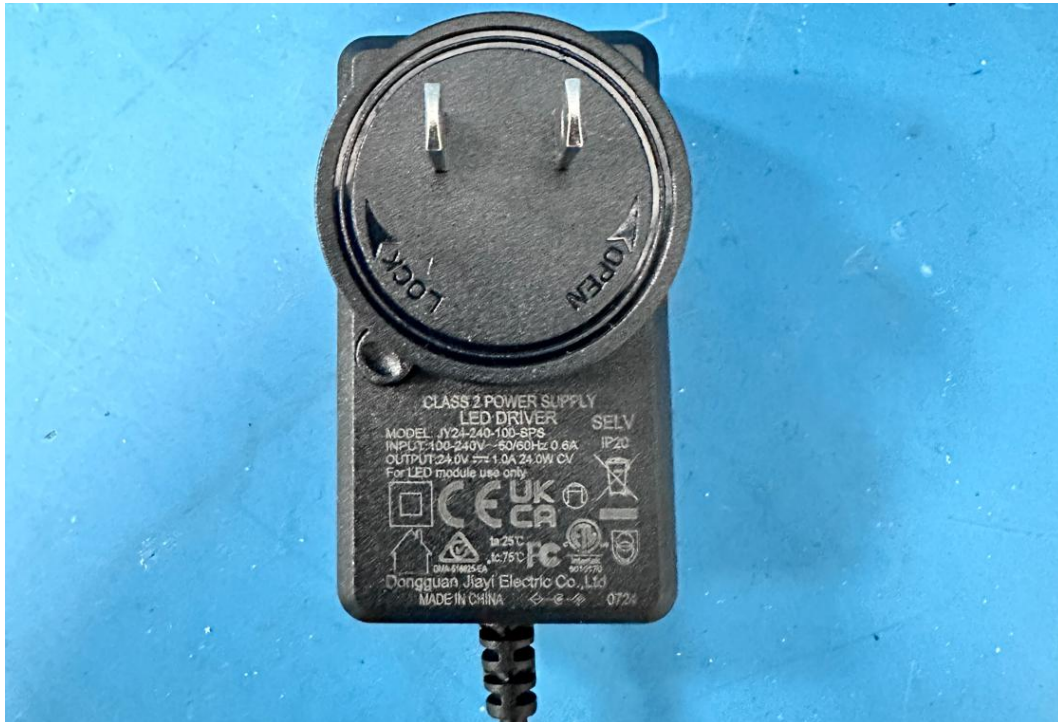


View of LED

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver JY24-240-100-SPS

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

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