

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-012

ISSUE DATE

11 August 2025

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250623168GZU-012

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLBA75927XXXXX

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 SLBA75927XXXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-013.
<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>	11 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:	SLBA75927XXXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLBA75927XXXXX

Criteria	Result
Total Lumen Output	1122.4 lm
Total Power	14.5 W
Luminaire Efficacy	77.3 lm/W
S/MH(C0/180)	1.06
S/MH(C90/270)	1.06
Correlated Color Temperature (CCT)	2667 K
Color Rendering Index (CRI)	91
R9	66
Chromaticity Coordinate (x)	0.4633
Chromaticity Coordinate (y)	0.4124
Chromaticity Coordinate (u')	0.2639
Chromaticity Coordinate (v')	0.5285

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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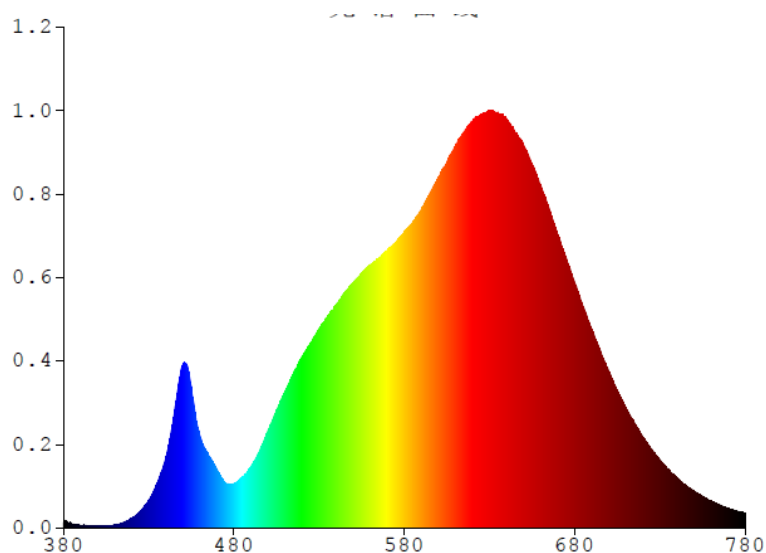
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLBA75927XXXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.6233	480	4.6298	580	30.9200	680	25.6420	780	1.5460
385	0.3578	485	5.3170	585	31.9540	685	23.1160		
390	0.2577	490	6.4035	590	33.2510	690	20.7150		
395	0.1825	495	7.9944	595	34.9500	695	18.5350		
400	0.1872	500	10.1430	600	36.6780	700	16.3640		
405	0.2573	505	12.2600	605	38.1770	705	14.3500		
410	0.3268	510	14.2610	610	39.9270	710	12.5640		
415	0.5441	515	16.1350	615	41.3600	715	11.0010		
420	0.9763	520	17.8660	620	42.5080	720	9.4973		
425	1.6864	525	19.3250	625	43.1940	725	8.2460		
430	2.8538	530	20.8050	630	43.6030	730	7.1280		
435	4.6691	535	22.0950	635	43.4500	735	6.1090		
440	7.2913	540	23.2520	640	42.7070	740	5.2466		
445	11.9300	545	24.5120	645	41.3590	745	4.4906		
450	17.0170	550	25.5810	650	40.0230	750	3.8580		
455	14.5940	555	26.6220	655	38.0030	755	3.3036		
460	9.6768	560	27.5330	660	35.8190	760	2.8247		
465	7.6845	565	28.1070	665	33.3750	765	2.4208		
470	6.0850	570	29.0050	670	30.6280	770	2.0479		
475	4.7400	575	29.8410	675	27.6520	775	1.7715		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75927XXXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

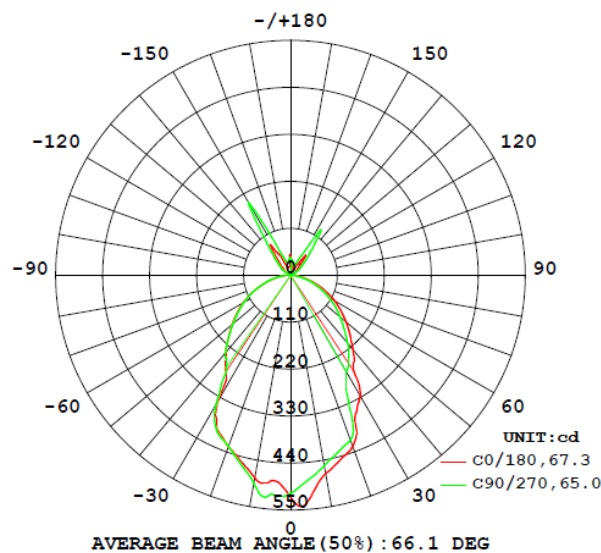
Photometric Measurements at 25°C – Distribution Method

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')
SLBA75927XXXXX								
S2506231 68-013	base-up	2667	91	66	0.4633	0.4124	0.2639	0.5285

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)
SLBA75927XXXXX							
S2506231 68-013	base-up	120.0	122.8	14.5	0.986	1122.4	77.3

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75927XXXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	519.3	531.9	524.7	518.5	510.6
5	524.2	492.2	489.0	484.9	480.5
10	472.2	457.0	454.5	454.7	453.1
15	448.4	436.6	432.9	431.1	429.2
20	426.7	409.5	415.3	416.6	410.6
25	360.4	339.2	336.2	331.2	318.8
30	326.5	293.6	277.0	275.7	261.8
35	256.1	245.4	243.2	247.5	236.0
40	227.6	213.6	216.3	213.1	207.9
45	197.1	185.9	186.0	184.2	177.7
50	169.9	159.3	158.9	157.3	151.6
55	143.6	133.6	133.4	131.9	128.0
60	119.1	109.3	109.1	108.6	103.1
65	92.2	82.6	83.4	82.9	79.6
70	67.5	58.9	59.8	59.4	57.4
75	46.7	38.4	39.8	40.4	38.5
80	28.6	19.5	19.7	19.6	17.9
85	11.8	8.7	7.0	7.5	6.8
90	4.6	5.1	4.8	6.8	6.9
95	4.2	4.5	4.5	7.3	7.6
100	4.8	3.3	3.5	5.2	5.7
105	2.3	2.3	3.2	4.6	6.8
110	1.2	1.6	1.8	2.2	2.2
115	2.2	5.5	3.8	2.4	2.1
120	8.2	15.0	15.4	15.4	13.4
125	14.5	21.0	22.8	27.3	24.2
130	18.7	30.8	33.3	38.7	34.5
135	25.5	51.4	49.1	56.1	50.6
140	44.7	104.8	81.3	85.6	75.7
145	43.4	77.4	101.1	137.6	119.5
150	20.9	58.7	75.2	84.8	60.3
155	15.1	32.7	41.3	41.1	33.8
160	9.5	28.0	29.7	28.3	26.3
165	11.9	27.7	28.9	27.6	26.5
170	23.1	25.9	30.9	28.4	31.4
175	27.0	22.7	19.9	11.7	13.3
180	30.4	48.6	50.1	0.0	1.9

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75927XXXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLBA75927XXXXX		
0-30	343.9	30.6
0-40	508.3	45.3
0-60	788.4	70.2
0-90	950.2	84.7
60-90	161.8	14.5
0-180	1122.4	100.0

Beam Angle

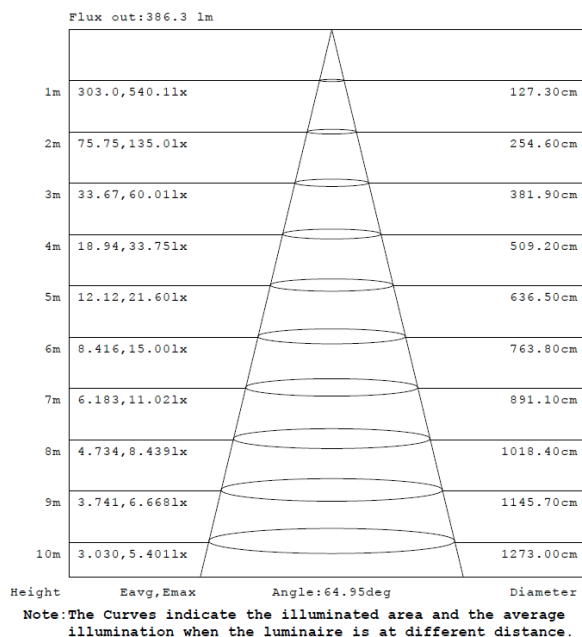
Total Beam Angle(°)
66.1

Illumination Plots

Model No.: SLBA75927XXXXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

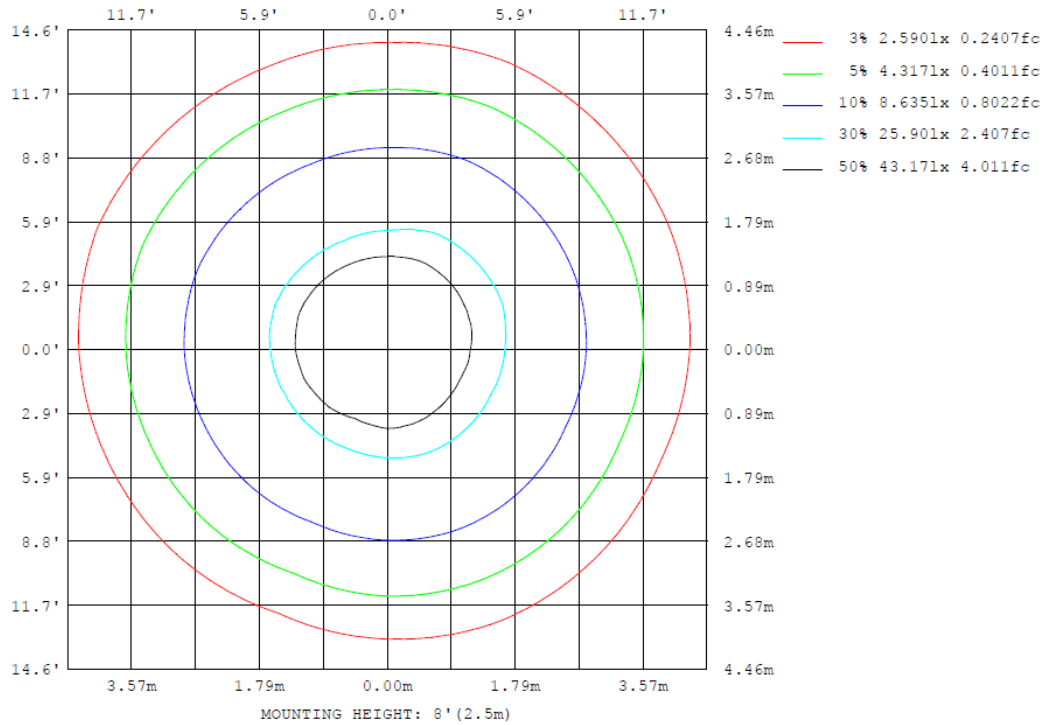
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75927XXXXX

Model No.: SLBA75927XXXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75927XXXXX

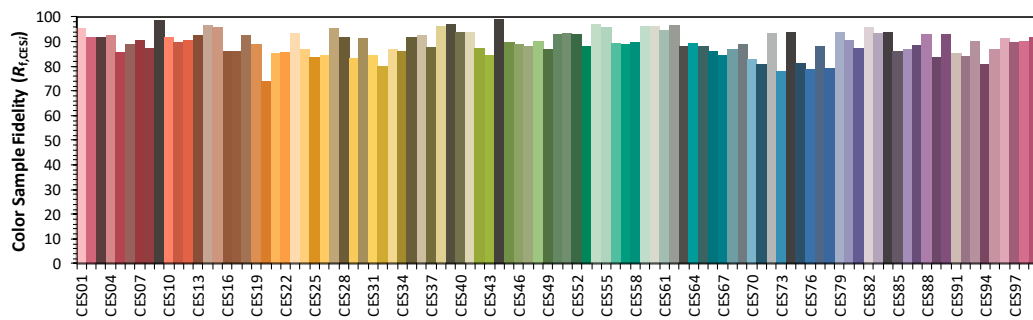
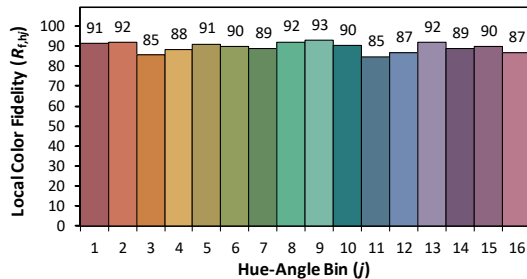
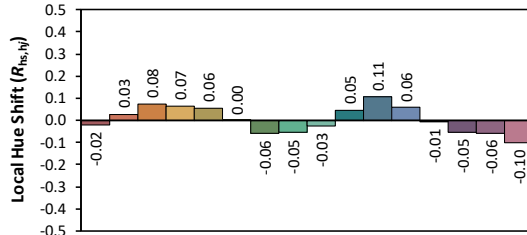
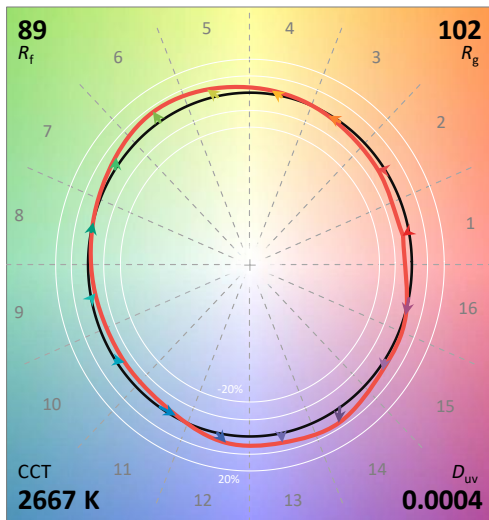
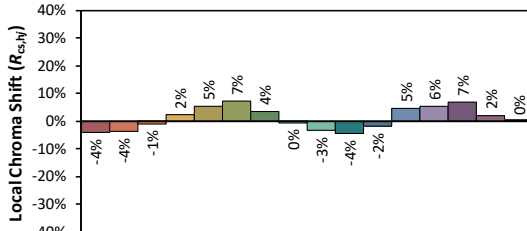
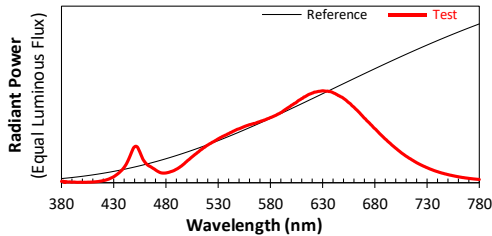
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/11

Model: SLBA75927XXXXX



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

x 0.4633
 y 0.4124
 u' 0.2639
 v' 0.5285

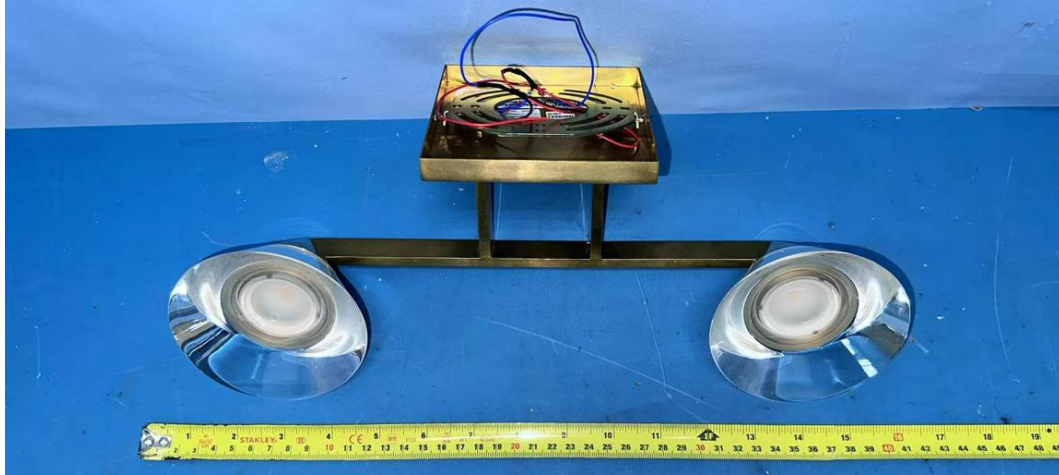
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 66

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

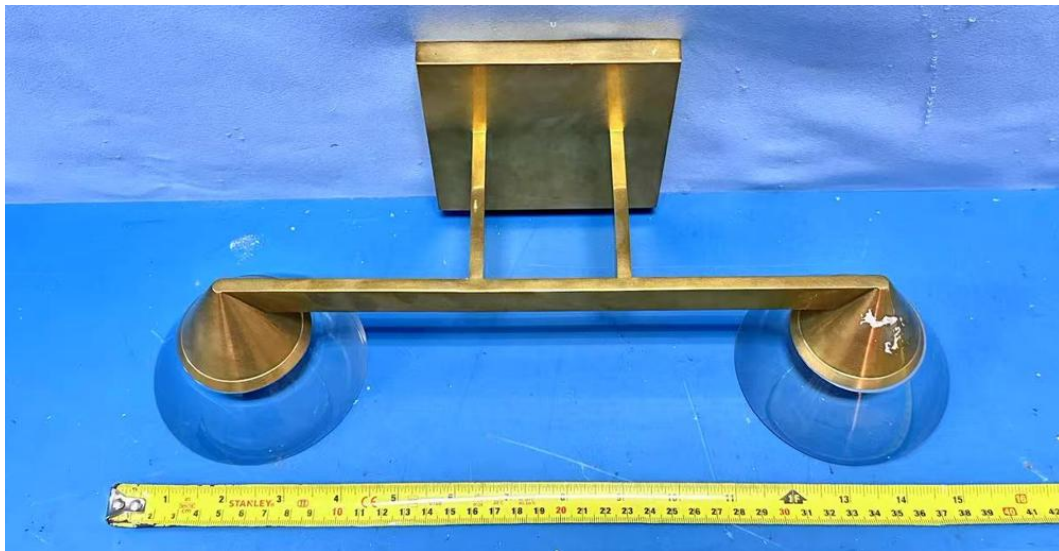
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLBA75927XXXXX



External view of SLBA75927XXXXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PTB20W-0400-38-VCC1(AB0258)



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 *****