

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251110010GZU-011

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 251110010GZU-011

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLWS84527XXXCA

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: QGZ251106008.

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 SLWS84527XXXCA. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251110010-003.

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: 26 November 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:	SLWS84527XXXCA
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLWS84527XXXCA

Criteria	Result
Total Lumen Output	453.2 lm
Total Power	7.5 W
Luminaire Efficacy	60.1 lm/W
S/MH(C0/180)	3.24
S/MH(C90/270)	0.45
Correlated Color Temperature (CCT)	2393 K
Color Rendering Index (CRI)	93
R9	73
Chromaticity Coordinate (x)	0.4855
Chromaticity Coordinate (y)	0.4127
Chromaticity Coordinate (u')	0.2782
Chromaticity Coordinate (v')	0.5320

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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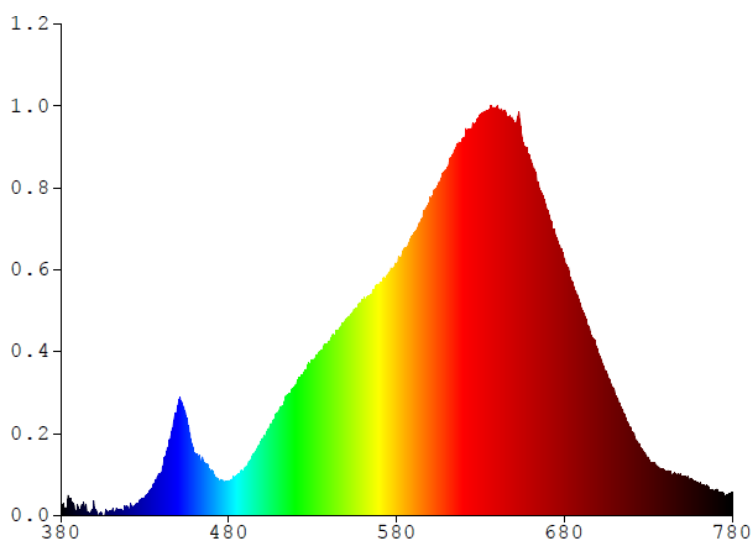
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLWS84527XXXCA

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	0.2035	580	1.5166	680	1.5523	780	0.1384
385	0.0000	485	0.2456	585	1.6117	685	1.4034		
390	0.0647	490	0.2848	590	1.6882	690	1.2550		
395	0.0641	495	0.3699	595	1.7897	695	1.1303		
400	0.0188	500	0.4629	600	1.9224	700	0.9890		
405	0.0000	505	0.5501	605	2.0023	705	0.8667		
410	0.0301	510	0.6354	610	2.0991	710	0.7388		
415	0.0134	515	0.7258	615	2.2066	715	0.6226		
420	0.0543	520	0.7904	620	2.2684	720	0.5044		
425	0.0398	525	0.8678	625	2.3399	725	0.4124		
430	0.1024	530	0.9416	630	2.3957	730	0.3495		
435	0.1839	535	0.9927	635	2.4424	735	0.2977		
440	0.2488	540	1.0471	640	2.4757	740	0.2581		
445	0.4487	545	1.1117	645	2.4419	745	0.2497		
450	0.6746	550	1.1781	650	2.3685	750	0.2366		
455	0.5731	555	1.2321	655	2.2639	755	0.2182		
460	0.3734	560	1.2958	660	2.1473	760	0.1981		
465	0.3182	565	1.3231	665	1.9801	765	0.1751		
470	0.2726	570	1.4039	670	1.8395	770	0.1507		
475	0.2168	575	1.4570	675	1.6575	775	0.1310		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS84527XXXCA

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

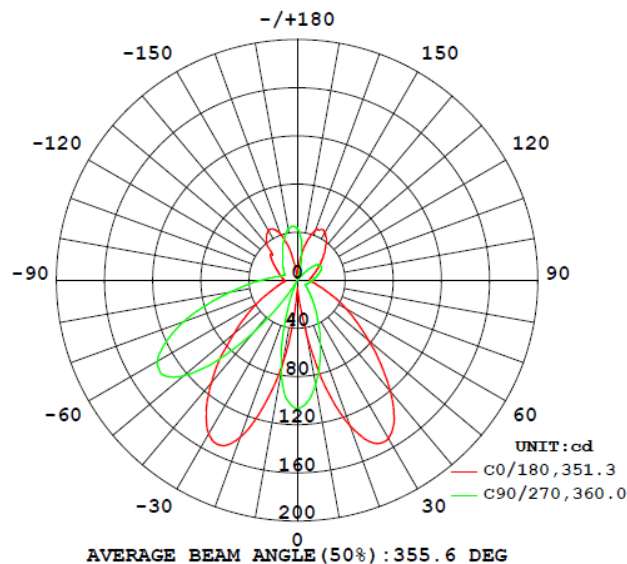
Photometric Measurements at 25°C – Distribution Method

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')
SLWS84527XXXCA								
S2511100 10-003	base-up	2393	93	73	0.4855	0.4127	0.2782	0.5320

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)
SLWS84527XXXCA							
S2511100 10-003	base-up	120.1	63.9	7.5	0.98	453.2	60.1

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS84527XXXCA

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	6.8	89.0	120.3	109.3	106.3
5	13.4	121.2	127.6	110.2	101.2
10	45.3	136.9	119.7	100.5	88.3
15	92.4	137.4	104.6	85.3	72.3
20	128.7	125.6	86.5	68.7	56.7
25	149.1	107.2	67.3	53.4	43.3
30	151.6	86.8	51.1	40.7	32.6
35	140.5	67.8	38.6	30.7	24.6
40	120.7	52.7	29.1	23.2	18.8
45	98.5	40.2	22.1	17.7	14.6
50	77.9	30.5	17.2	13.8	11.5
55	60.8	22.7	13.7	11.0	9.4
60	46.9	17.3	11.3	9.1	8.0
65	35.1	13.5	9.7	7.9	7.4
70	25.5	11.0	9.2	8.3	8.8
75	19.1	9.5	10.2	9.0	9.6
80	14.8	10.0	10.9	9.8	10.4
85	12.1	10.5	11.9	10.8	11.5
90	10.6	11.3	13.0	11.9	12.6
95	10.9	12.5	14.2	13.2	13.9
100	11.8	13.8	15.6	14.8	15.6
105	12.9	15.5	17.9	16.5	17.7
110	14.5	17.6	20.7	18.1	19.9
115	16.8	19.8	23.3	19.6	22.0
120	19.6	20.5	25.6	19.9	23.2
125	23.3	14.1	26.5	15.2	21.4
130	27.3	21.8	23.8	18.5	19.6
135	31.9	36.0	16.6	12.3	12.4
140	37.0	37.0	19.3	0.9	1.3
145	42.1	40.7	21.7	0.7	0.1
150	46.2	32.1	12.0	1.4	0.1
155	46.9	20.1	0.1	0.1	0.0
160	44.6	5.8	0.0	0.1	1.3
165	35.0	0.0	3.9	4.1	10.2
170	23.2	2.1	16.4	15.5	23.6
175	7.4	11.9	29.8	28.9	36.0
180	0.0	24.4	41.4	39.5	44.0

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS84527XXXCA

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLWS84527XXXCA		
0-30	53.7	11.8
0-40	87.9	19.4
0-60	207.1	45.7
0-90	332.3	73.3
60-90	125.2	27.6
0-180	453.2	100.0

Beam Angle

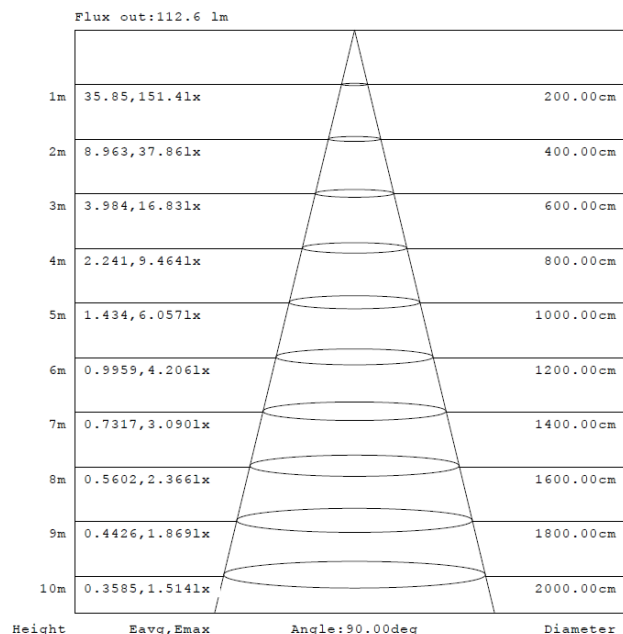
Total Beam Angle(°)
355.6

Illumination Plots

Model No.: SLWS84527XXXCA

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

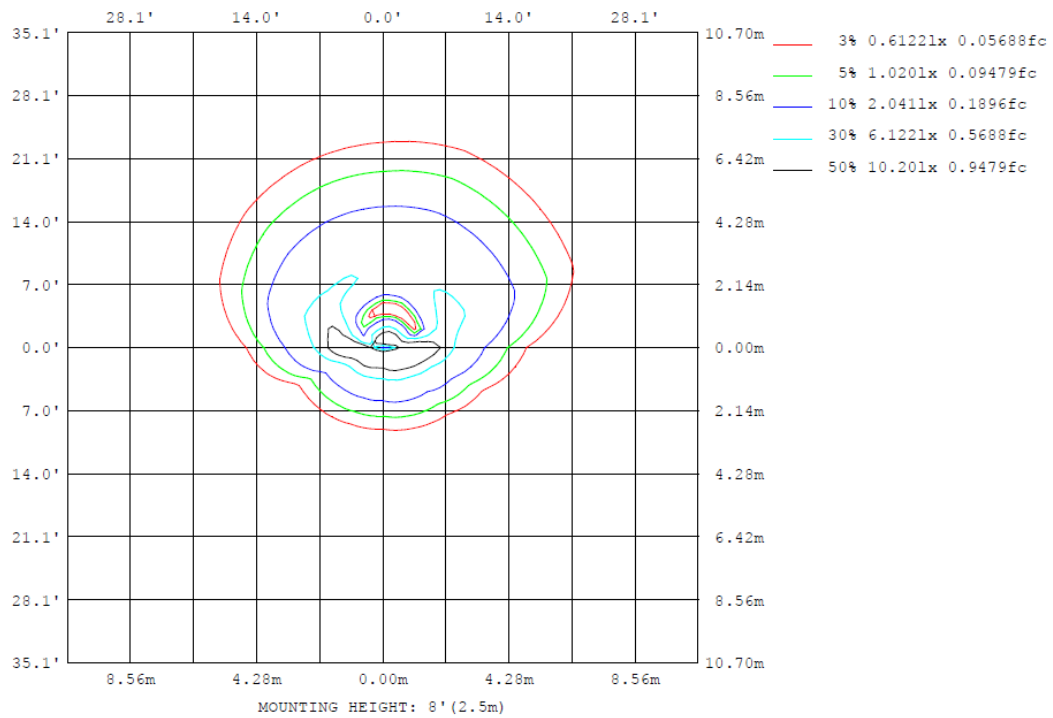
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS84527XXXCA

Model No.: SLWS84527XXXCA

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLWS84527XXXCA

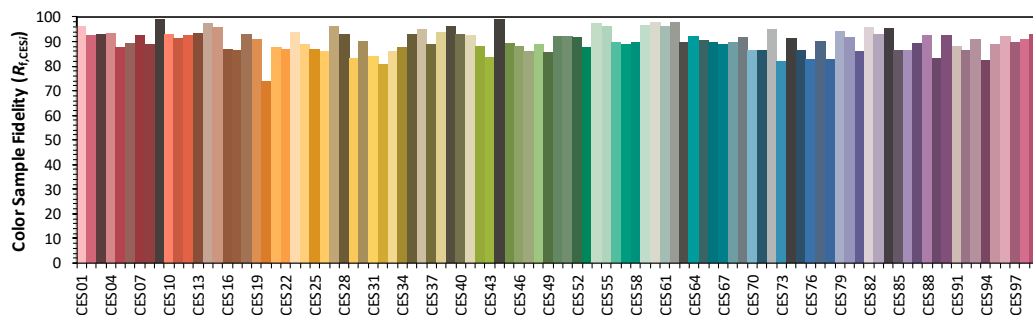
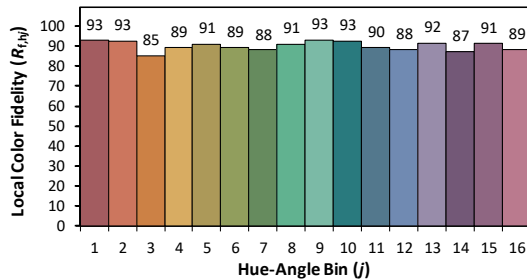
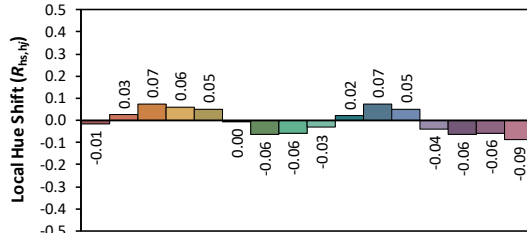
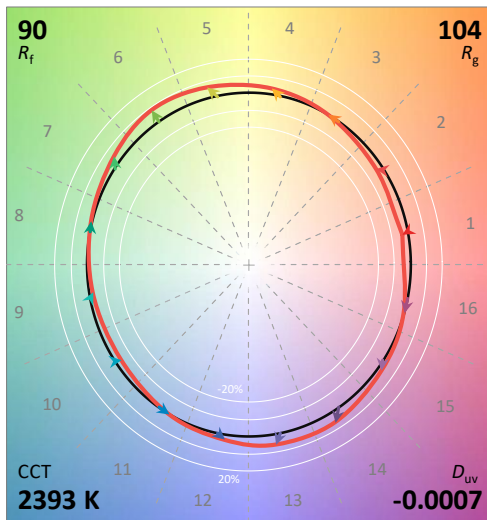
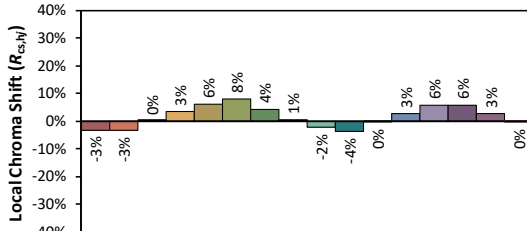
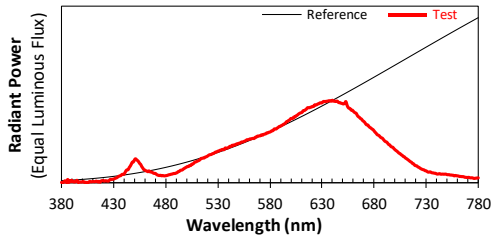
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/26

Model: SLWS84527XXXCA



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

x 0.4855
 y 0.4127
 u' 0.2782
 v' 0.5320

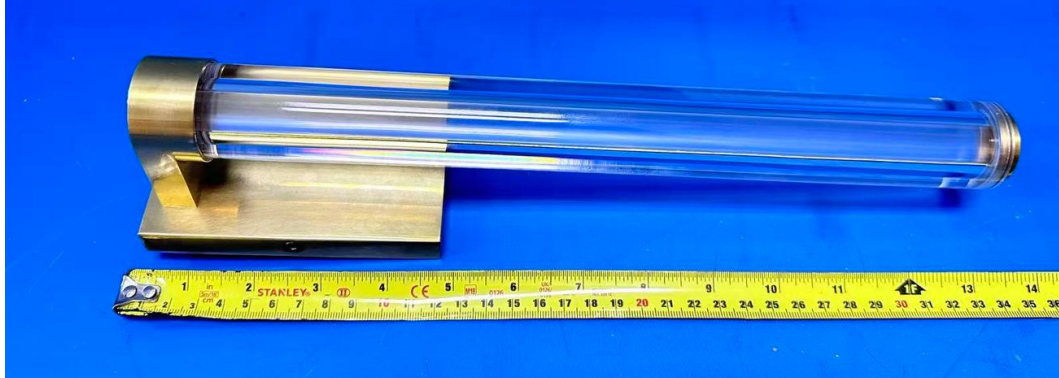
CIE 13.3-1995
(CRI)
 R_a 93
 R_g 73

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

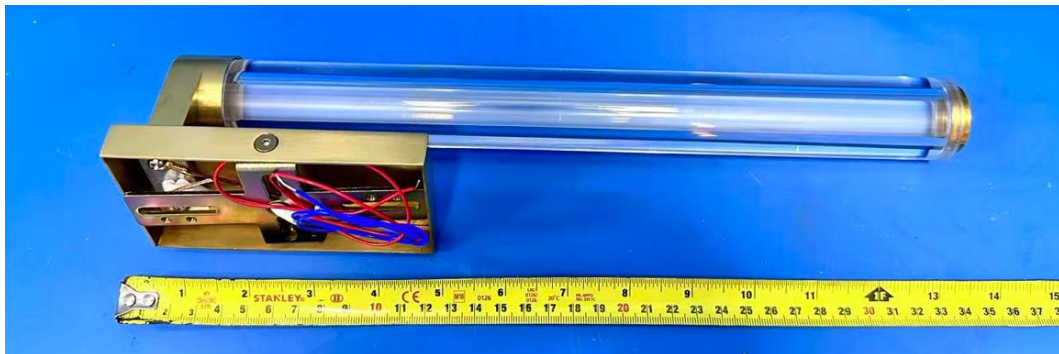
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLWS84527XXXCA



External view of SLWS84527XXXCA



View of LED driver PTB10W-0200-38-VCC1 (AB2612)

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

TEST REPORT

PRODUCT PICTURE (not to scale)



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 *****