

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-011

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None

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Report format for LM-79_G

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Report No.: 251027067GZU-011

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV83127XXXCG

Remark: "XXX" represents the color of the appearance.

RENDERED TO

Visual Comfort & Co.

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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: QGZ251023107.
<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 SLV83127XXXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-009.
<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>	20 November 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:	SLV83127XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV83127XXXCG

Criteria	Result
Total Lumen Output	164.2 lm
Total Power	8.2 W
Luminaire Efficacy	20.0 lm/W
S/MH(C0/180)	1.71
S/MH(C90/270)	0.46
Correlated Color Temperature (CCT)	2355 K
Color Rendering Index (CRI)	92
R9	48
Chromaticity Coordinate (x)	0.4884
Chromaticity Coordinate (y)	0.4119
Chromaticity Coordinate (u')	0.2804
Chromaticity Coordinate (v')	0.5322

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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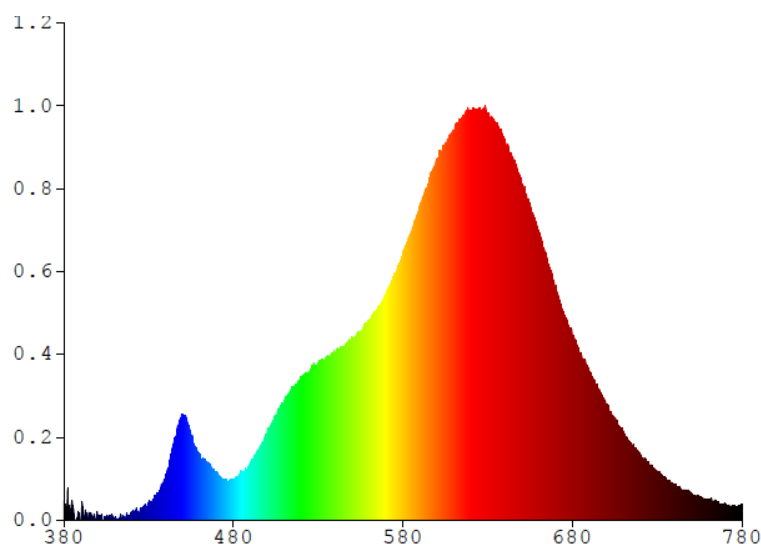
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV83127XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.1731	480	0.2440	580	1.6137	680	1.1100	780	0.0951
385	0.0896	485	0.2857	585	1.7442	685	1.0112		
390	0.0000	490	0.3467	590	1.9052	690	0.8973		
395	0.0164	495	0.4362	595	2.0323	695	0.7972		
400	0.0112	500	0.5394	600	2.1804	700	0.7037		
405	0.0000	505	0.6337	605	2.2765	705	0.6171		
410	0.0168	510	0.7173	610	2.3455	710	0.5369		
415	0.0206	515	0.8079	615	2.4360	715	0.4608		
420	0.0321	520	0.8690	620	2.4622	720	0.4001		
425	0.0660	525	0.8942	625	2.4892	725	0.3521		
430	0.1109	530	0.9544	630	2.4571	730	0.2855		
435	0.1617	535	0.9706	635	2.3848	735	0.2580		
440	0.2662	540	1.0060	640	2.2940	740	0.2195		
445	0.4811	545	1.0478	645	2.1863	745	0.1795		
450	0.6377	550	1.1067	650	2.0462	750	0.1673		
455	0.5103	555	1.1360	655	1.9125	755	0.1296		
460	0.3956	560	1.2015	660	1.7387	760	0.1248		
465	0.3346	565	1.2795	665	1.5906	765	0.1081		
470	0.2914	570	1.3606	670	1.4148	770	0.0930		
475	0.2481	575	1.4878	675	1.2220	775	0.0896		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83127XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

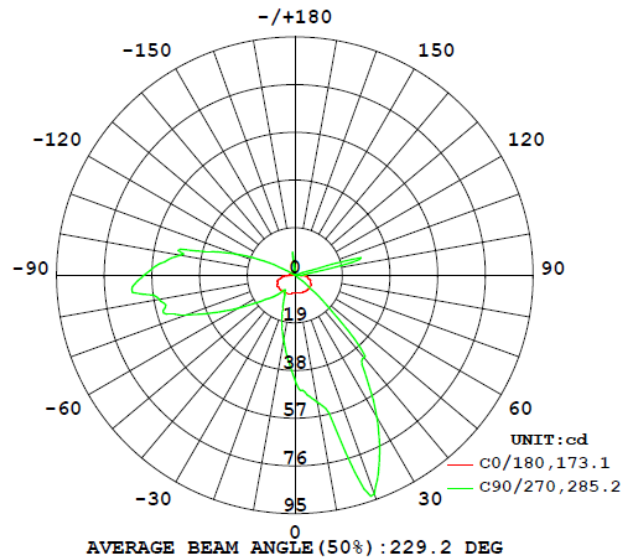
Photometric Measurements at 25°C – Distribution Method

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')
SLV83127XXXCG								
S2510270 67-009	base-up	2355	92	48	0.4884	0.4119	0.2804	0.5322

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)
SLV83127XXXCG							
S2510270 67-009	base-up	120.1	69.3	8.2	0.986	164.2	20.0

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83127XXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	7.0	11.8	28.1	38.5	41.6
5	7.1	14.0	33.8	44.4	46.7
10	7.2	16.3	38.2	48.6	51.3
15	7.3	18.9	40.7	54.7	63.8
20	7.4	22.0	46.3	89.0	92.6
25	7.5	23.9	71.6	78.7	79.7
30	7.6	25.3	63.2	65.1	65.6
35	7.7	26.5	50.7	49.8	49.8
40	7.6	34.2	37.0	36.9	42.7
45	7.7	33.9	24.8	30.6	24.9
50	7.4	28.3	13.4	9.7	8.7
55	7.5	19.6	6.7	2.4	2.0
60	7.7	10.3	2.6	1.2	0.9
65	6.9	2.6	2.6	1.0	0.7
70	6.6	2.8	2.6	0.9	0.6
75	5.9	4.0	2.4	1.0	0.7
80	5.2	4.0	2.7	1.3	0.9
85	4.3	3.1	2.9	1.9	1.6
90	0.6	2.6	2.7	2.3	2.1
95	1.0	1.9	3.8	3.5	3.0
100	2.0	1.3	10.1	12.3	8.8
105	1.6	0.8	0.6	17.6	27.4
110	1.4	0.4	0.1	0.6	3.2
115	1.1	0.1	0.0	0.0	0.0
120	0.7	0.0	0.0	0.0	0.0
125	0.6	0.0	0.0	0.0	0.0
130	0.3	0.0	0.0	0.0	0.0
135	0.2	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.1	0.1
145	0.0	0.1	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0
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 SLV83127XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV83127XXXCG		
0-30	24.4	14.9
0-40	38.5	23.4
0-60	59.8	36.4
0-90	114.0	69.4
60-90	54.2	33.0
0-180	164.2	100.0

Beam Angle

Total Beam Angle(°)

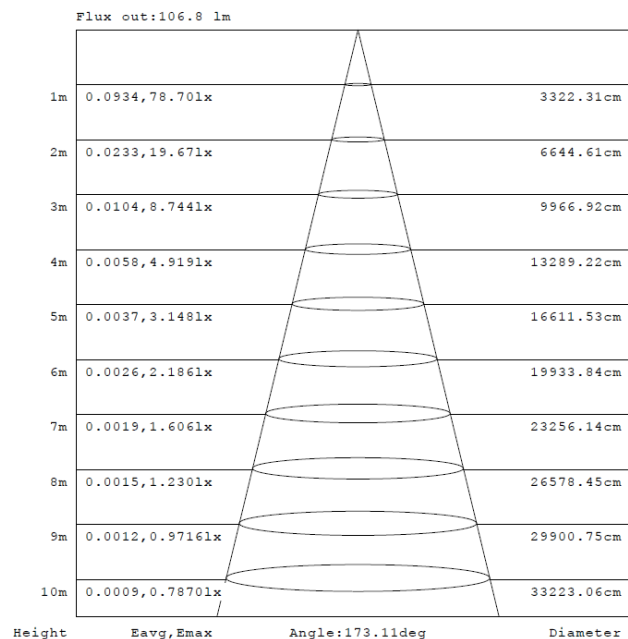
229.2

Illumination Plots

Model No.: SLV83127XXXCG

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

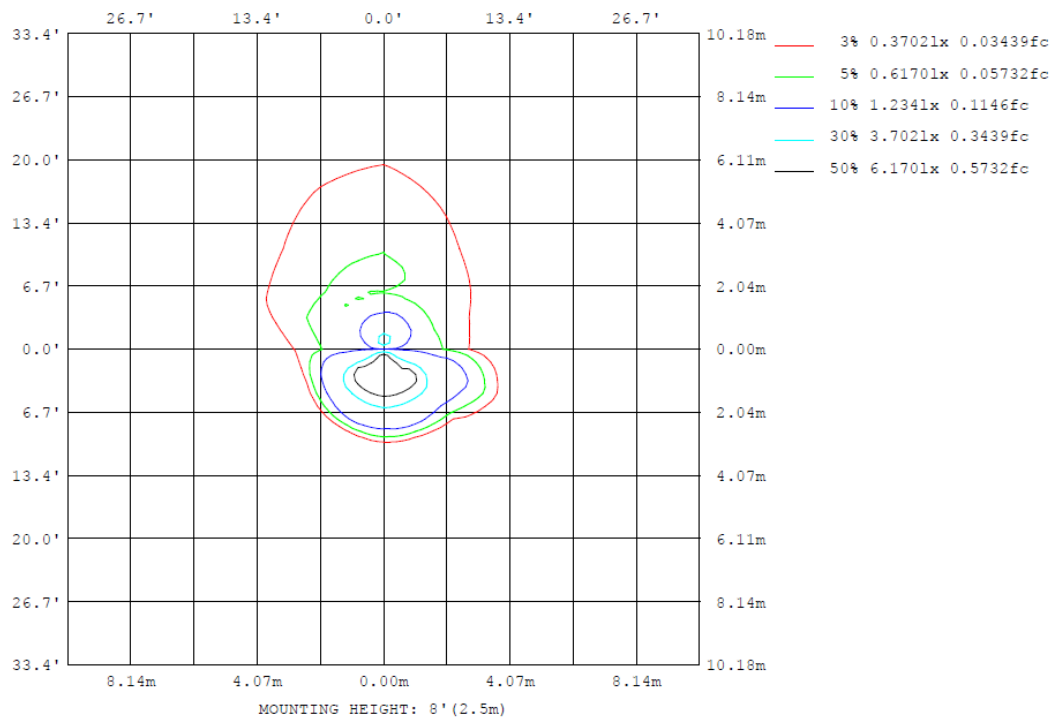
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83127XXXCG

Model No.: SLV83127XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV83127XXXCG

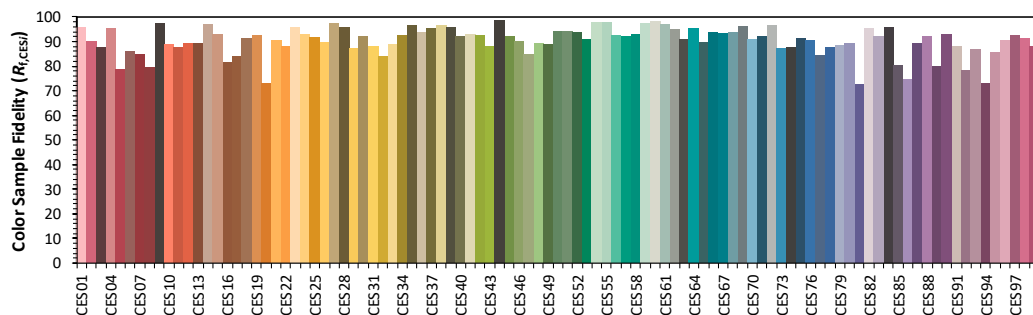
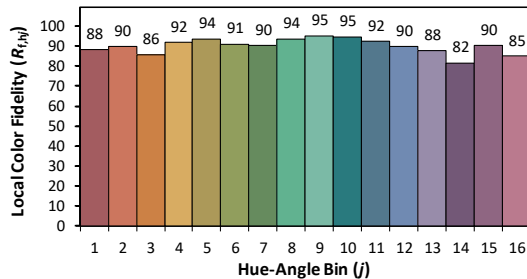
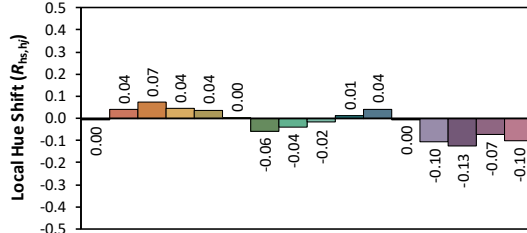
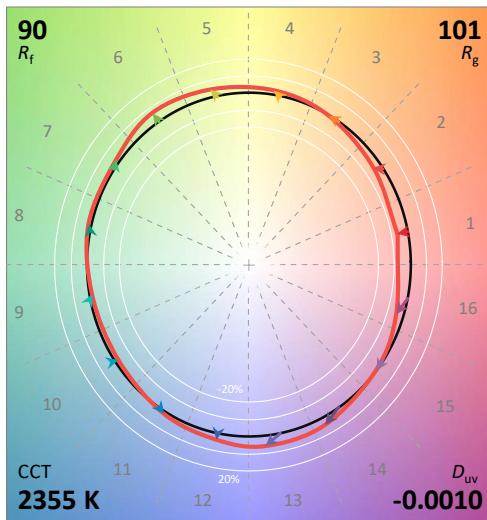
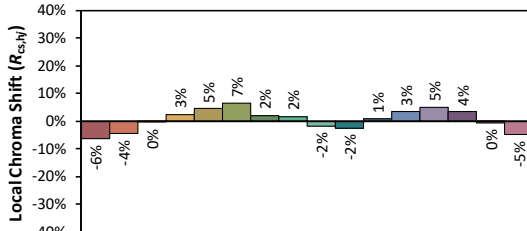
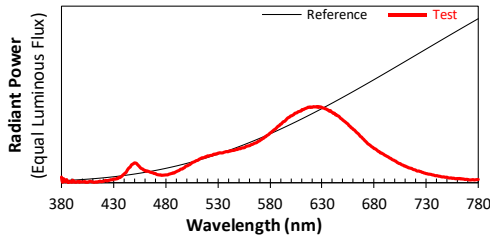
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/20

Model: SLV83127XXXCG



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

x 0.4884
 y 0.4119
 u' 0.2804
 v' 0.5322

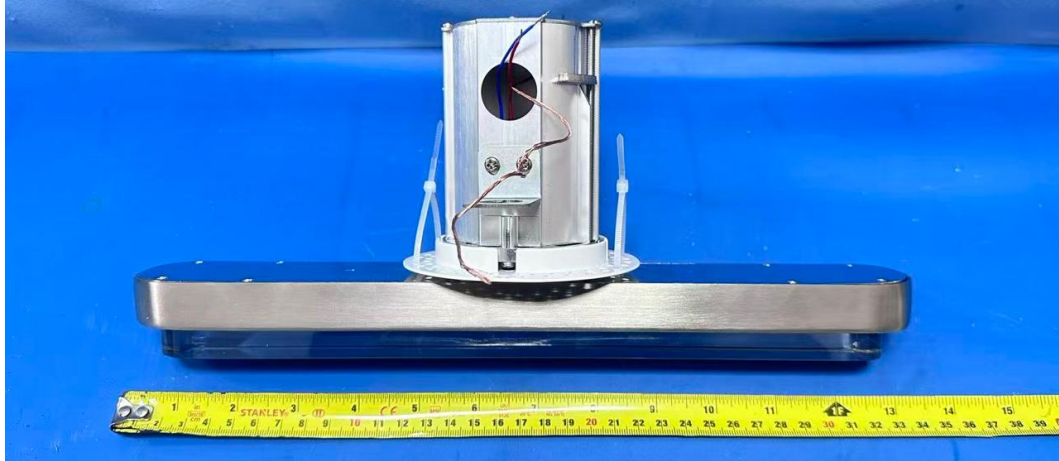
CIE 13.3-1995
(CRI)
 R_a 92
 R_g 48

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

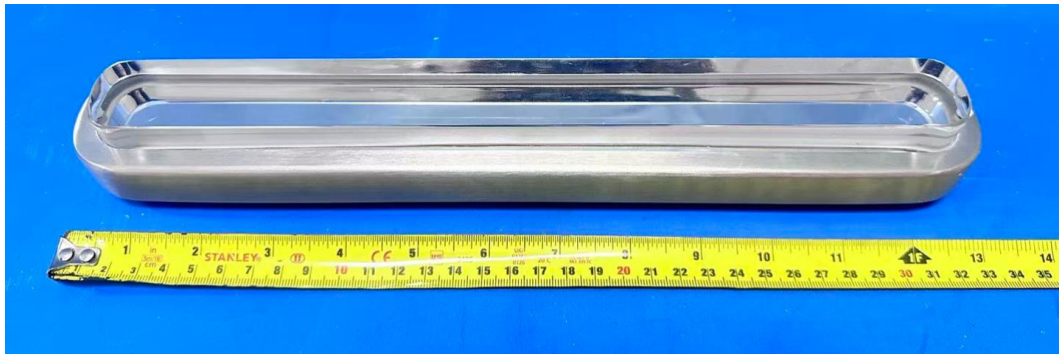
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLV83127XXXCG



External view of SLV83127XXXCG

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TEST REPORT

PRODUCT PICTURE (not to scale)



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



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 *****