

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-008

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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.: 251027067GZU-008

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV82727XXCG

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: 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 SLV82727XXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-008.
<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>	19 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:	SLV82727XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV82727XXXCG

Criteria	Result
Total Lumen Output	239.9 lm
Total Power	8.1 W
Luminaire Efficacy	29.5 lm/W
S/MH(C0/180)	1.44
S/MH(C90/270)	4.23
Correlated Color Temperature (CCT)	2386 K
Color Rendering Index (CRI)	92
R9	48
Chromaticity Coordinate (x)	0.4866
Chromaticity Coordinate (y)	0.4134
Chromaticity Coordinate (u')	0.2785
Chromaticity Coordinate (v')	0.5324

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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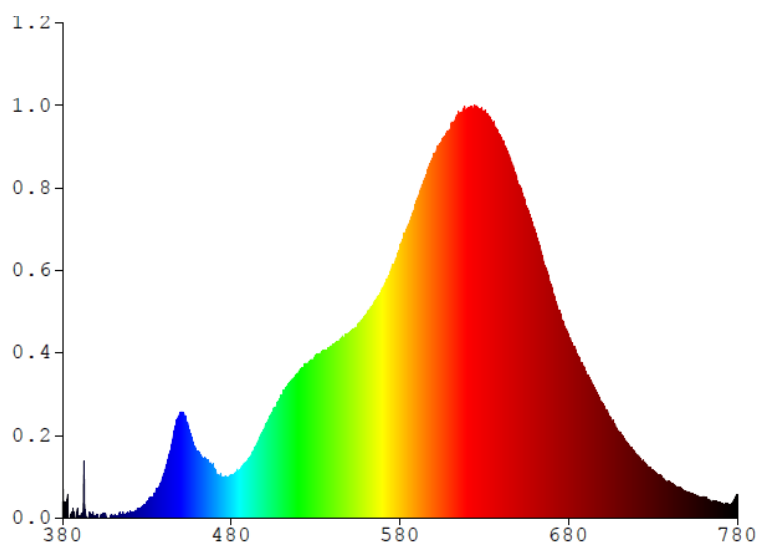
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV82727XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0246	480	0.3733	580	2.4519	680	1.6415	780	0.2174
385	0.0415	485	0.4333	585	2.6507	685	1.4766		
390	0.0210	490	0.5276	590	2.8739	690	1.3171		
395	0.0000	495	0.6697	595	3.0683	695	1.1898		
400	0.0144	500	0.8203	600	3.2920	700	1.0356		
405	0.0110	505	0.9817	605	3.4208	705	0.9061		
410	0.0259	510	1.0991	610	3.5178	710	0.7766		
415	0.0275	515	1.2300	615	3.6572	715	0.6736		
420	0.0604	520	1.3172	620	3.6990	720	0.5777		
425	0.0857	525	1.3857	625	3.7169	725	0.5087		
430	0.1470	530	1.4457	630	3.6557	730	0.4375		
435	0.2210	535	1.5021	635	3.5710	735	0.3773		
440	0.3871	540	1.5667	640	3.4342	740	0.3228		
445	0.6876	545	1.6041	645	3.2649	745	0.2813		
450	0.9512	550	1.6589	650	3.0241	750	0.2329		
455	0.7887	555	1.7523	655	2.8073	755	0.2061		
460	0.5878	560	1.8213	660	2.5828	760	0.1960		
465	0.5337	565	1.9625	665	2.3190	765	0.1481		
470	0.4455	570	2.0878	670	2.0894	770	0.1220		
475	0.3718	575	2.2529	675	1.7869	775	0.1113		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82727XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

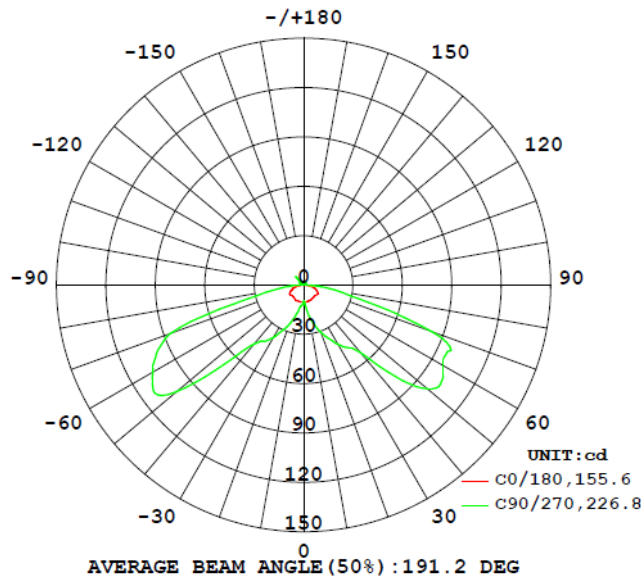
Photometric Measurements at 25°C – Distribution Method

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')
SLV82727XXXCG								
S2510270 67-008	base-up	2386	92	48	0.4866	0.4134	0.2785	0.5324

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)
SLV82727XXXCG							
S2510270 67-008	base-up	120.2	68.8	8.1	0.984	239.9	29.5

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82727XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	10.6	10.2	9.9	9.9	9.9
5	10.6	9.9	10.2	11.0	12.0
10	10.5	10.0	13.7	17.6	19.0
15	10.3	10.6	19.0	23.5	25.0
20	10.2	13.2	23.0	28.7	30.5
25	10.1	16.3	26.8	33.7	35.8
30	9.9	18.4	30.2	38.6	41.6
35	9.8	20.5	32.9	43.4	46.3
40	9.6	21.9	36.8	48.3	53.6
45	9.5	23.9	41.1	64.8	78.5
50	9.7	25.2	52.1	87.7	98.2
55	10.1	25.6	65.9	97.0	102.2
60	10.0	27.3	72.1	94.3	97.8
65	9.0	31.7	69.5	88.8	96.1
70	8.0	33.9	64.1	85.2	82.5
75	6.6	31.8	45.9	44.3	40.7
80	4.9	16.4	22.5	22.1	21.5
85	3.1	7.1	9.2	9.2	8.9
90	1.2	2.8	1.9	1.7	1.2
95	0.9	2.7	2.0	0.8	0.6
100	0.8	2.2	1.5	0.7	0.6
105	0.5	1.1	1.0	0.6	0.4
110	0.2	0.3	0.7	0.5	0.4
115	0.0	0.0	0.7	0.7	0.6
120	0.0	0.0	1.3	1.0	0.8
125	0.0	0.0	0.4	2.0	2.2
130	0.0	0.0	0.0	0.6	1.0
135	0.0	0.0	0.0	0.1	0.2
140	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	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 SLV82727XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV82727XXXCG		
0-30	16.7	7.0
0-40	35.4	14.8
0-60	122.8	51.2
0-90	234.4	97.7
60-90	111.6	46.5
0-180	239.9	100.0

Beam Angle

Total Beam Angle(°)

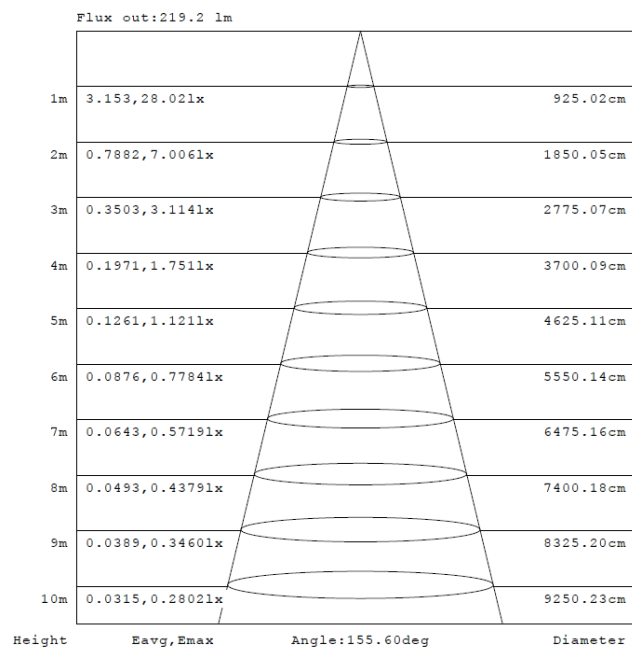
191.2

Illumination Plots

Model No.: SLV82727XXXCG

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

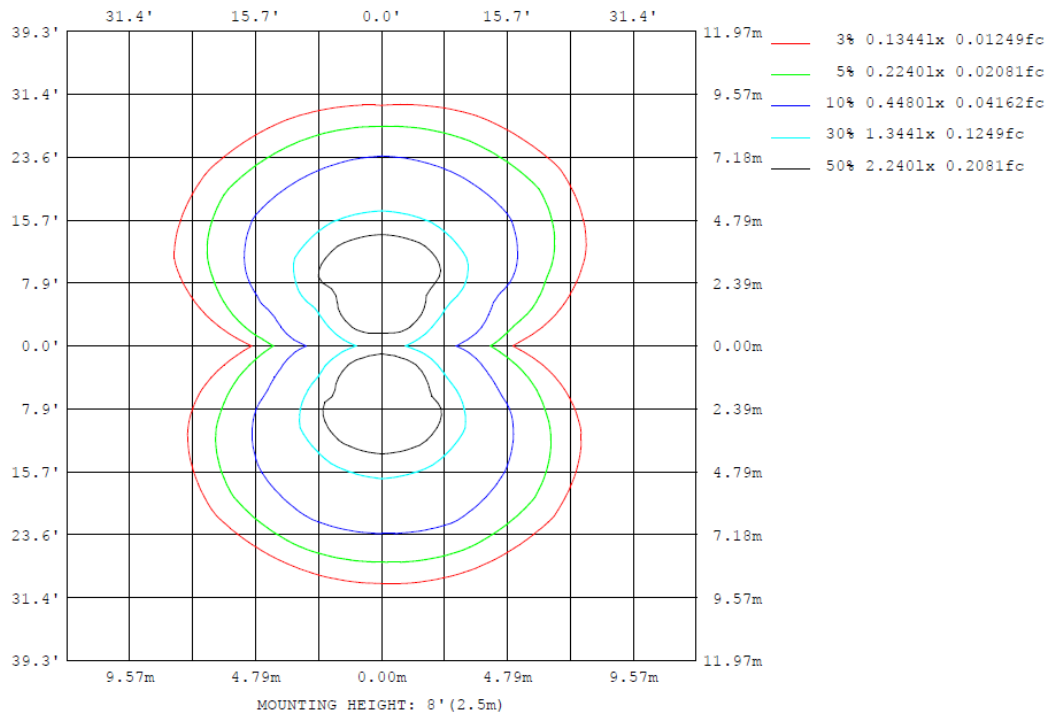
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82727XXXCG

Model No.: SLV82727XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82727XXXCG

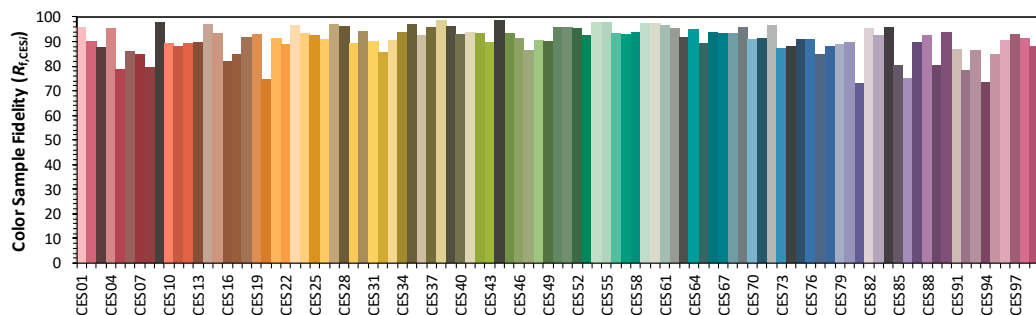
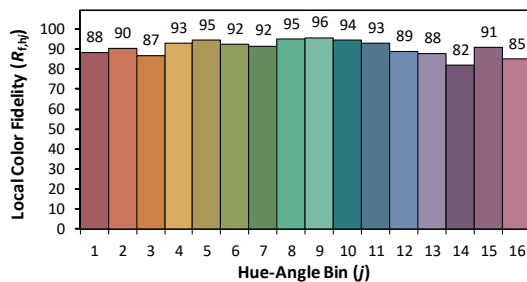
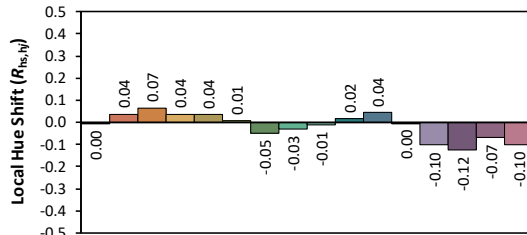
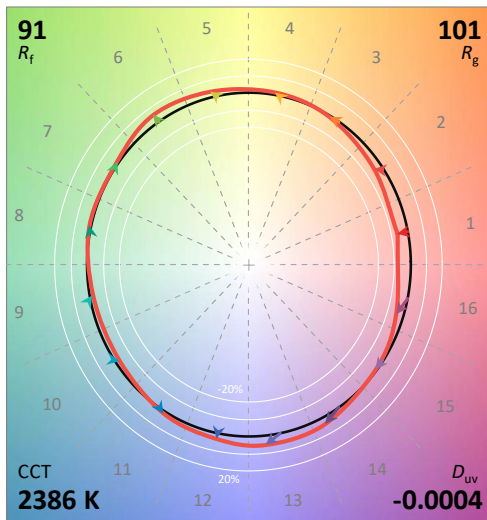
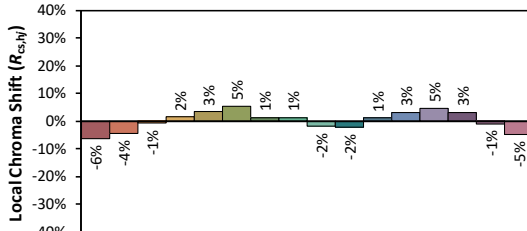
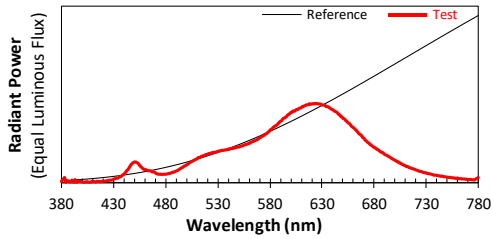
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/19

Model: SLV82727XXXCG



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

x 0.4866
 y 0.4134
 u' 0.2785
 v' 0.5324

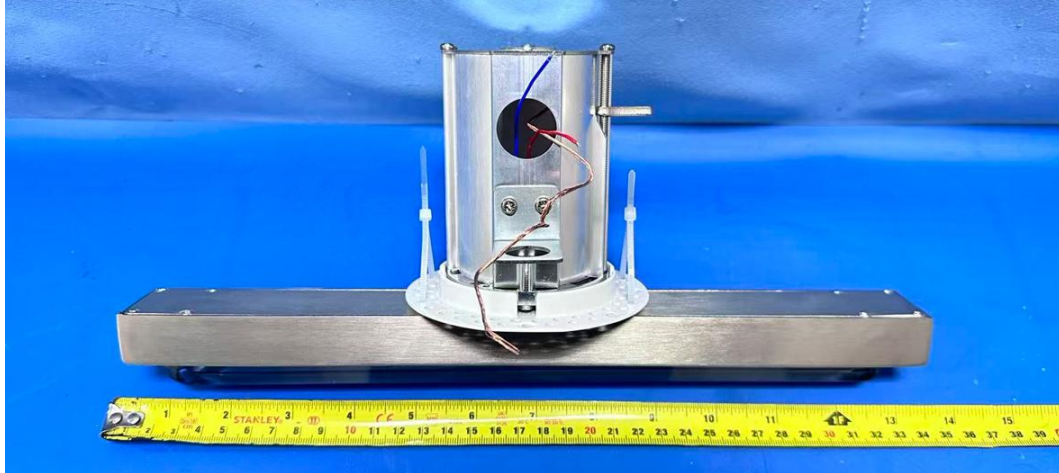
CIE 13.3-1995
(CRI)
 R_a 92
 R_g 48

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

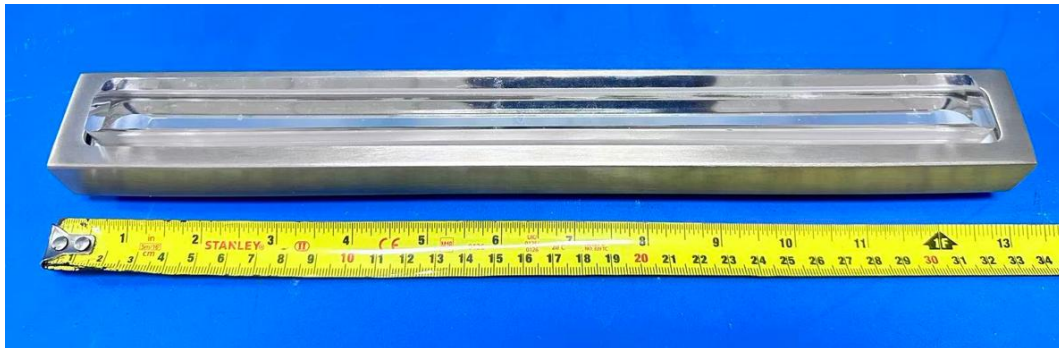
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLV82727XXXCG



External view of SLV82727XXXCG

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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 *****