

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-007

ISSUE DATE

26 January 2026

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

© 2024 INTERTEK



Report No.: 251027067GZU-007

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLV82627XXXWG

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

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

7400 LINDER AVE. SKOKIE, IL, 60077

Email: jrivero@visualcomfort.com

Phone No.: 847-410-4552

<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 SLV82627XXXWG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-011.
<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

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

TEST REPORT

SUMMARY

Model Number:	SLV82627XXXWG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLV82627XXXWG

Criteria	Result
Total Lumen Output	460.1 lm
Total Power	16.1 W
Luminaire Efficacy	28.5 lm/W
S/MH(C0/180)	1.73
S/MH(C90/270)	0.43
Correlated Color Temperature (CCT)	2406 K
Color Rendering Index (CRI)	92
R9	47
Chromaticity Coordinate (x)	0.4846
Chromaticity Coordinate (y)	0.4130
Chromaticity Coordinate (u')	0.2774
Chromaticity Coordinate (v')	0.5320

Remark:

N/A

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

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

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

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

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

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

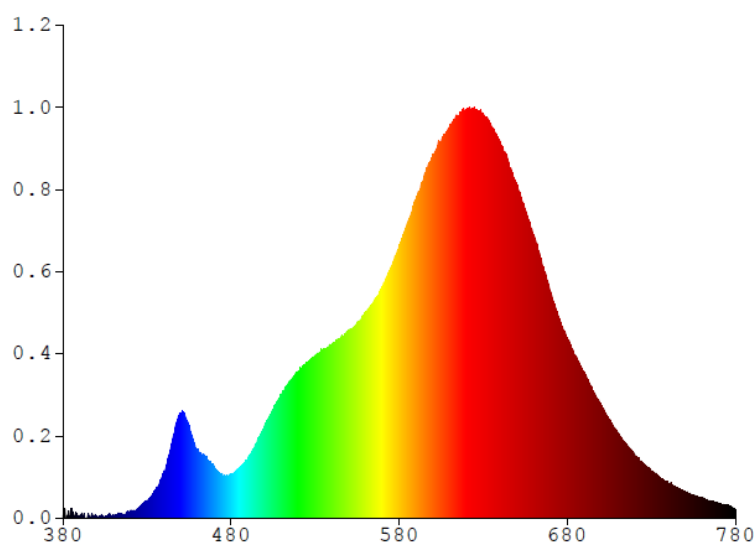
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLV82627XXXWG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0000	480	0.6828	580	4.2314	680	2.7928	780	0.1338
385	0.1534	485	0.7787	585	4.5809	685	2.5168		
390	0.0000	490	0.9132	590	4.9497	690	2.2399		
395	0.0727	495	1.1608	595	5.3219	695	1.9664		
400	0.0189	500	1.4348	600	5.6350	700	1.7412		
405	0.0199	505	1.6723	605	5.8270	705	1.5264		
410	0.0517	510	1.9184	610	6.0750	710	1.3235		
415	0.0740	515	2.1322	615	6.2285	715	1.1479		
420	0.1131	520	2.2841	620	6.3332	720	0.9885		
425	0.1460	525	2.4127	625	6.3425	725	0.8539		
430	0.2665	530	2.5206	630	6.2755	730	0.7270		
435	0.4372	535	2.6187	635	6.0620	735	0.6389		
440	0.7280	540	2.7008	640	5.8240	740	0.5463		
445	1.1830	545	2.7899	645	5.5245	745	0.4697		
450	1.6266	550	2.9112	650	5.1691	750	0.4068		
455	1.4217	555	3.0227	655	4.7666	755	0.3591		
460	1.0721	560	3.1889	660	4.3837	760	0.3111		
465	0.9325	565	3.3629	665	3.9329	765	0.2629		
470	0.7943	570	3.5895	670	3.5088	770	0.2295		
475	0.6452	575	3.8859	675	3.0312	775	0.2091		



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82627XXXWG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

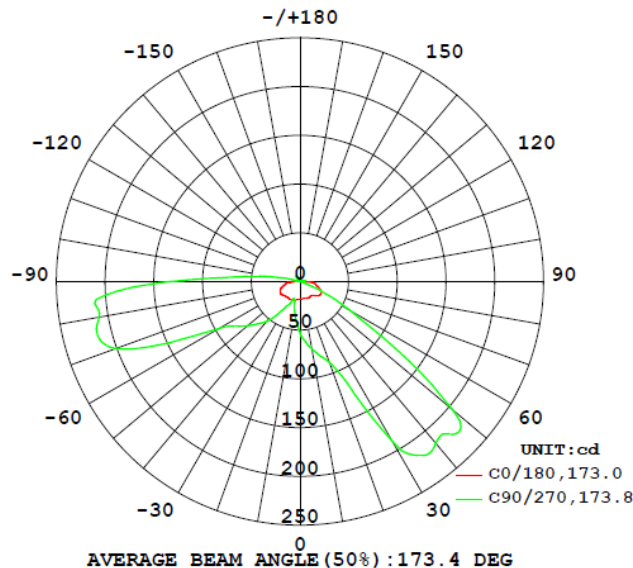
Photometric Measurements at 25°C – Distribution Method

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')
SLV82627XXXWG								
S2510270 67-011	base-up	2406	92	47	0.4846	0.4130	0.2774	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)
SLV82627XXXWG							
S2510270 67-011	base-up	120.0	135.7	16.1	0.991	460.1	28.5

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82627XXXWG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	18.3	20.8	34.0	49.6	53.2
5	18.1	25.0	41.9	58.5	61.5
10	18.0	29.8	49.8	66.5	70.1
15	18.0	34.6	55.6	74.2	78.6
20	18.4	39.4	61.2	82.1	88.4
25	18.7	42.7	68.3	99.2	115.4
30	19.1	44.8	76.0	161.9	188.4
35	18.6	48.4	91.8	206.5	218.0
40	18.6	51.3	145.0	212.4	216.5
45	20.4	56.5	168.6	208.3	222.2
50	23.1	70.2	167.7	212.7	203.3
55	24.7	89.0	163.8	134.1	119.8
60	25.1	94.7	138.3	62.7	59.0
65	23.9	94.0	61.8	32.6	28.8
70	21.5	60.3	29.8	8.4	6.5
75	18.2	24.6	8.5	1.2	1.0
80	16.4	8.2	2.6	1.1	1.0
85	11.5	4.7	2.1	0.9	0.9
90	3.1	4.2	1.6	1.0	0.9
95	2.3	3.5	1.5	1.2	1.2
100	1.6	2.1	1.5	1.7	1.9
105	0.9	1.4	2.8	4.5	5.1
110	0.3	0.4	3.9	4.0	3.9
115	0.0	0.0	1.0	1.1	1.2
120	0.0	0.0	0.1	0.3	0.5
125	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0
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

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82627XXXWG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLV82627XXXWG		
0-30	36.0	7.8
0-40	82.5	17.9
0-60	220.5	47.9
0-90	421.6	91.6
60-90	201.1	43.7
0-180	460.1	100.0

Beam Angle

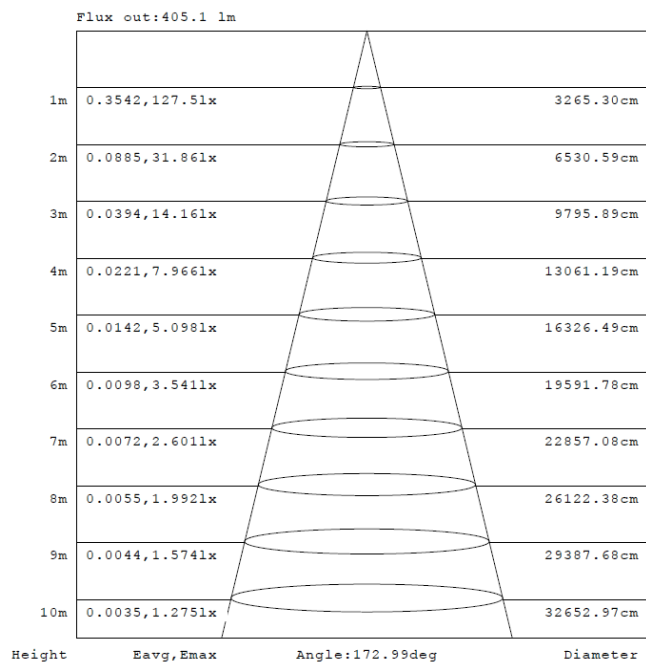
Total Beam Angle(°)
173.4

Illumination Plots

Model No.: SLV82627XXXWG

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.

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

TEST REPORT

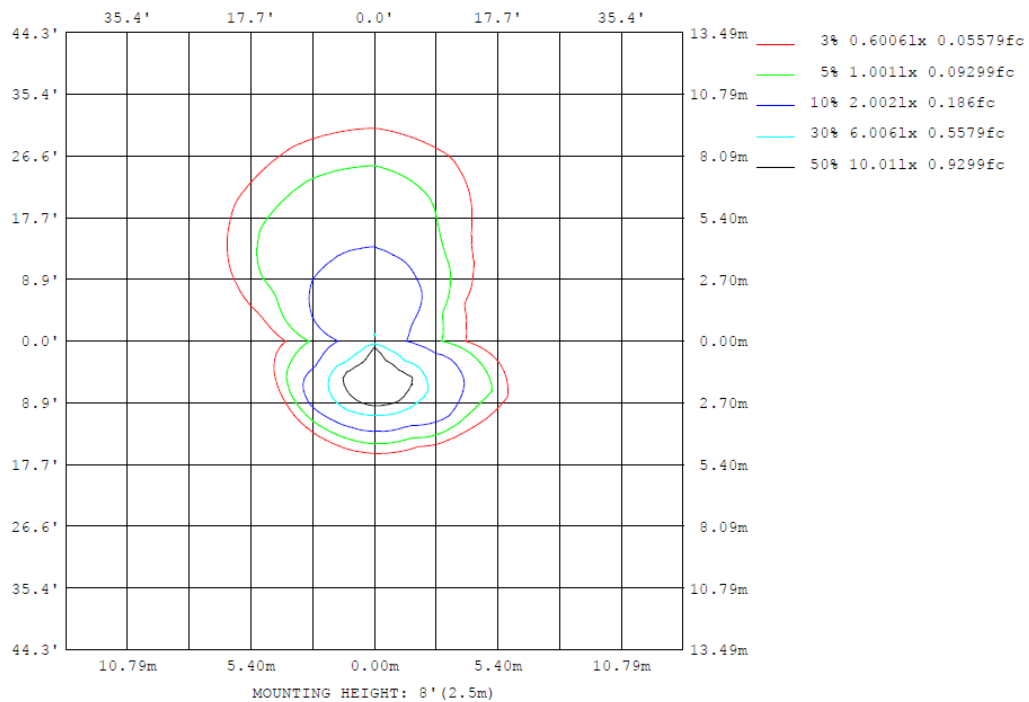
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82627XXXWG

Model No.: SLV82627XXXWG

Mount Height: 2.5 m

Isoillumination Plot



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLV82627XXXWG

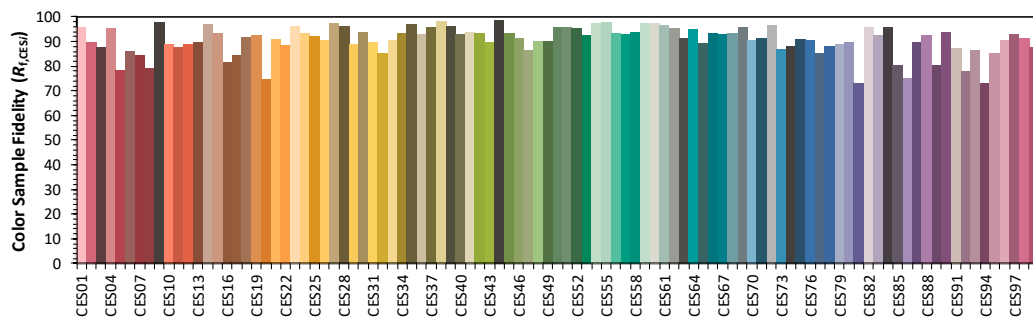
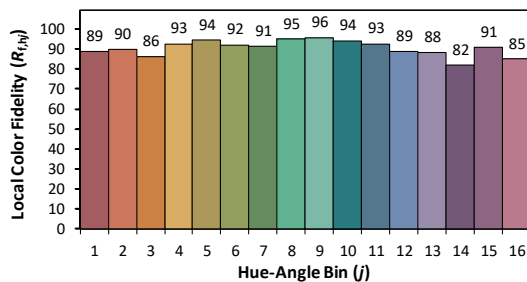
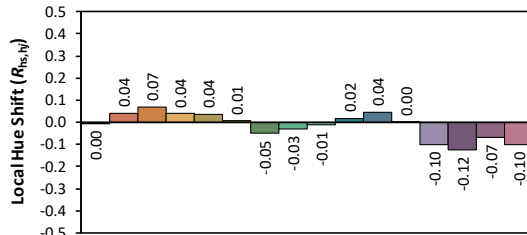
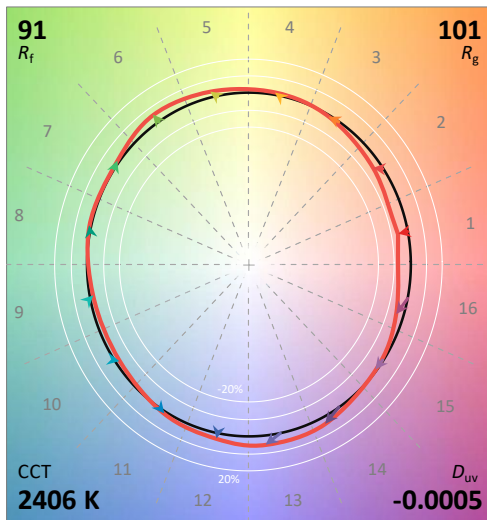
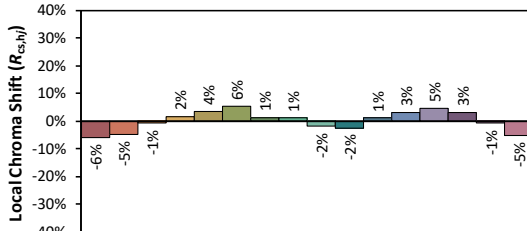
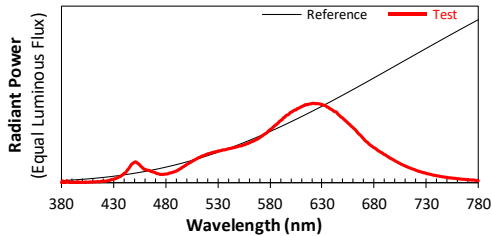
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/20

Model: SLV82627XXXWG



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

x 0.4846
 y 0.4130
 u' 0.2774
 v' 0.5320

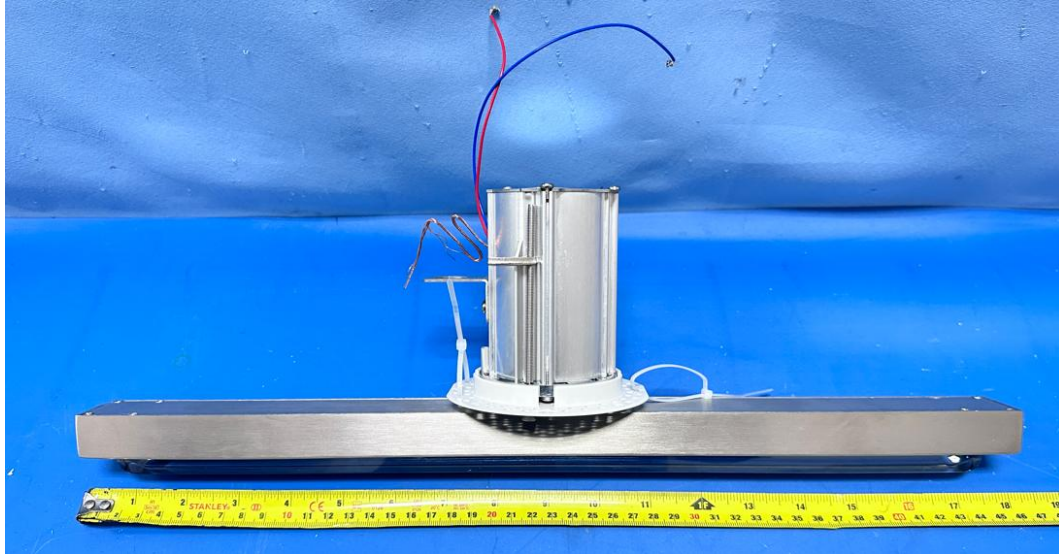
CIE 13.3-1995
(CRI)
 R_a 92
 R_g 47

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

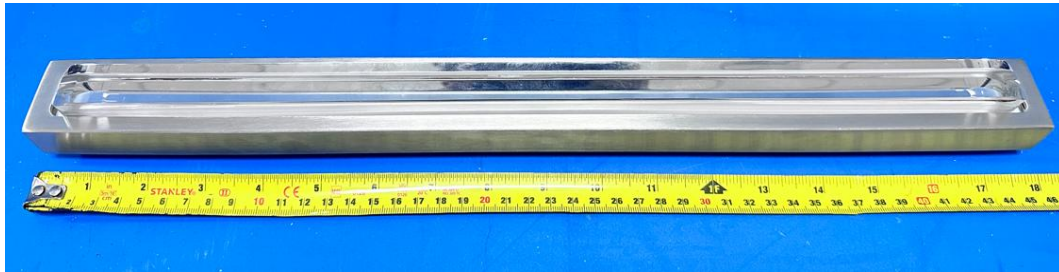
***** End of Page *****

TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLV82627XXXWG



External view of SLV82627XXXWG

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

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 *****