

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-014

ISSUE DATE

11 August 2025

REVISION DATE

None

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DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 250623168GZU-014

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLBA79127X

Remark: "X" 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 SLBA79127X. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-015.
<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:	SLBA79127X
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLBA79127X

Criteria	Result
Total Lumen Output	1899.3 lm
Total Power	30.4 W
Luminaire Efficacy	62.4 lm/W
S/MH(C0/180)	1.01
S/MH(C90/270)	1.01
Correlated Color Temperature (CCT)	2768 K
Color Rendering Index (CRI)	91
R9	66
Chromaticity Coordinate (x)	0.4540
Chromaticity Coordinate (y)	0.4086
Chromaticity Coordinate (u')	0.2596
Chromaticity Coordinate (v')	0.5257

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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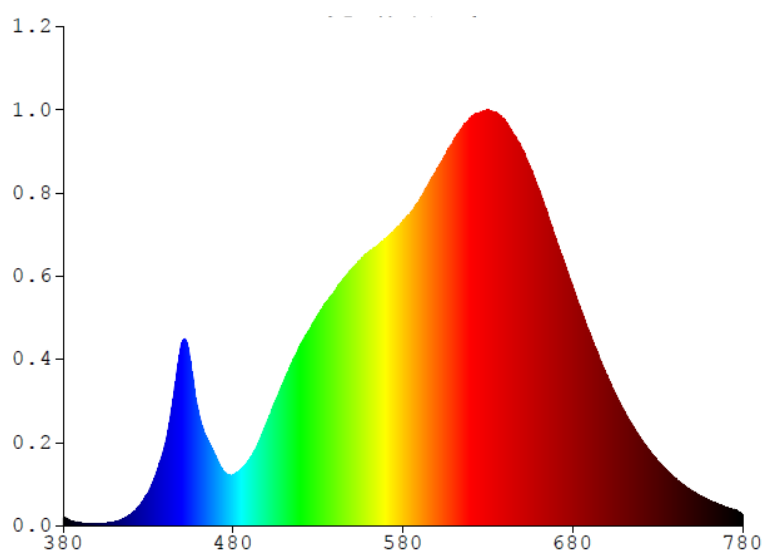
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLBA79127X

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	2.7239	480	15.5410	580	92.6510	680	72.7430	780	3.4419
385	1.3375	485	17.4070	585	95.5420	685	65.4190		
390	0.8176	490	20.5800	590	99.2840	690	58.5650		
395	0.7418	495	25.2500	595	103.870	695	52.2400		
400	0.7002	500	31.7630	600	108.500	700	45.7790		
405	0.7886	505	38.0280	605	112.750	705	40.3180		
410	1.1459	510	44.1670	610	117.240	710	35.1590		
415	2.1614	515	50.0750	615	121.110	715	30.7680		
420	3.6501	520	55.3840	620	124.110	720	26.5900		
425	6.2628	525	59.7290	625	125.580	725	23.0580		
430	10.1060	530	64.2080	630	126.350	730	19.8490		
435	16.1790	535	67.9610	635	125.830	735	17.0580		
440	24.9070	540	71.4630	640	123.310	740	14.5980		
445	39.6600	545	75.0050	645	119.100	745	12.4820		
450	55.7810	550	78.1580	650	114.760	750	10.7430		
455	49.4000	555	80.7750	655	109.000	755	9.1909		
460	33.6570	560	83.4400	660	102.320	760	7.8729		
465	26.1220	565	85.1140	665	95.3120	765	6.6986		
470	20.8240	570	87.4240	670	87.3310	770	5.7636		
475	16.4400	575	89.8060	675	78.6600	775	4.9944		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA79127X

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

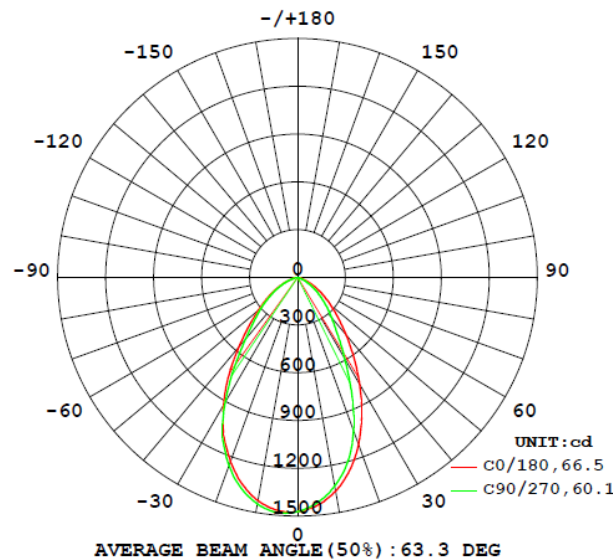
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit y	Chromaticit y	Chromaticit y	Chromaticit y
					Coordinate (x)	Coordinate (y)	Coordinate (u')	Coordinate (v')
SLBA79127X								
S2506231 68-015	base-up	2768	91	66	0.4540	0.4086	0.2596	0.5257

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)
SLBA79127X							
S2506231 68-015	base-up	120.0	255.5	30.4	0.992	1899.3	62.4

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA79127X

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	1471.3	1470.9	1470.8	1470.9	1472.0
5	1436.7	1424.5	1418.1	1415.8	1421.1
10	1365.5	1341.4	1325.6	1322.6	1332.6
15	1256.9	1219.4	1196.1	1192.7	1206.0
20	1115.3	1065.3	1027.4	1010.9	1024.3
25	950.3	888.6	829.0	792.5	802.6
30	778.3	707.0	632.1	585.4	589.2
35	614.0	543.0	474.4	434.9	436.8
40	476.1	412.7	357.6	331.0	333.7
45	359.2	311.1	272.5	254.3	257.1
50	269.5	234.1	203.2	186.2	186.9
55	197.7	168.7	143.2	130.1	130.9
60	134.7	112.1	92.1	81.2	81.9
65	81.5	63.8	48.7	40.0	40.5
70	39.5	27.8	18.4	13.9	13.5
75	14.3	10.2	8.3	7.4	7.4
80	6.5	5.1	4.0	3.5	3.5
85	2.6	1.7	1.1	0.7	0.7
90	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1
100	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1
110	0.1	0.1	0.1	0.1	0.1
115	0.2	0.2	0.2	0.2	0.2
120	0.3	0.3	0.3	0.3	0.3
125	0.4	0.4	0.4	0.5	0.5
130	0.6	0.6	0.7	0.7	0.7
135	0.8	0.9	0.9	0.9	0.9
140	1.1	1.1	1.2	1.2	1.2
145	1.3	1.3	1.4	1.4	1.4
150	1.5	1.5	1.6	1.7	1.7
155	1.6	1.7	1.8	1.8	1.8
160	1.8	1.8	1.9	1.9	1.9
165	1.8	1.8	1.9	1.9	1.9
170	1.7	1.7	1.8	1.8	1.8
175	1.6	1.6	1.7	1.7	1.7
180	1.5	1.5	1.5	1.5	1.6

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA79127X

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLBA79127X		
0-30	949.4	50.0
0-40	1338.7	70.5
0-60	1789.4	94.2
0-90	1896.3	99.8
60-90	106.9	5.6
0-180	1899.3	100.0

Beam Angle

Total Beam Angle(°)

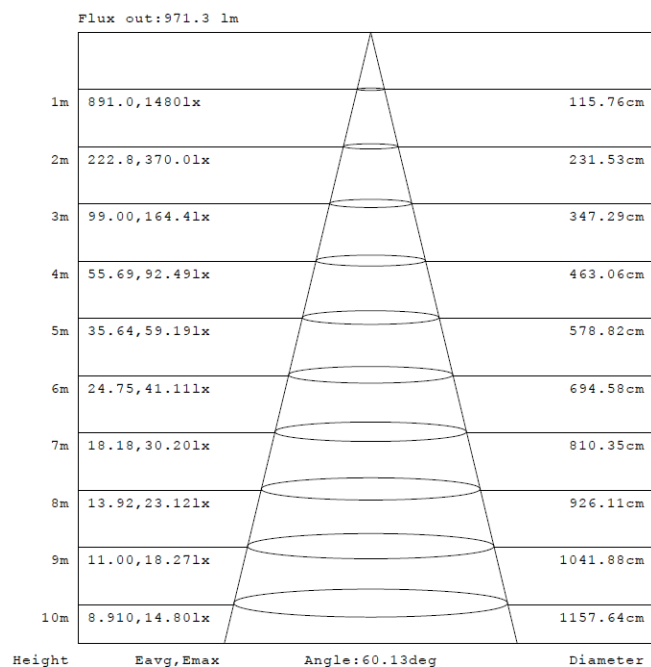
63.3

Illumination Plots

Model No.: SLBA79127X

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

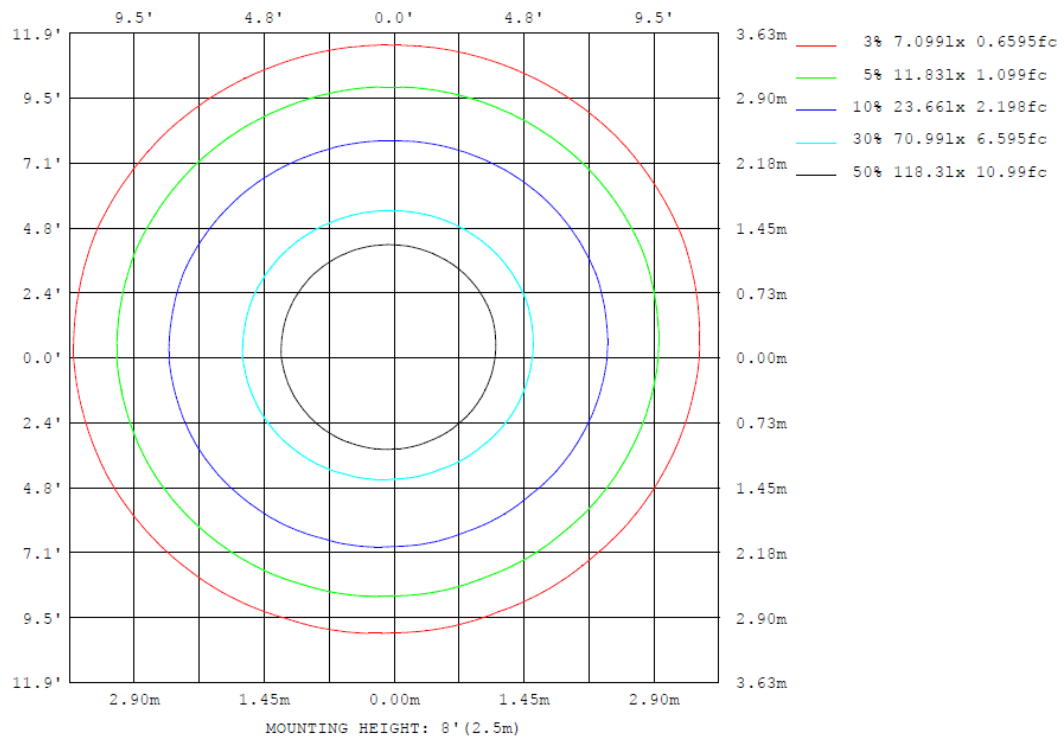
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA79127X

Model No.: SLBA79127X

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA79127X

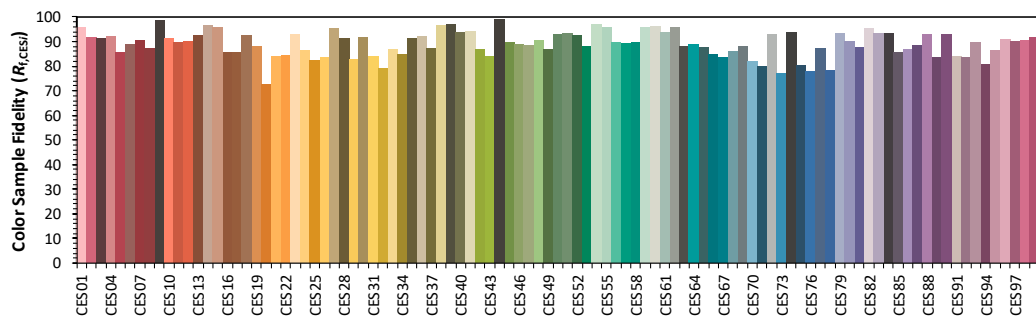
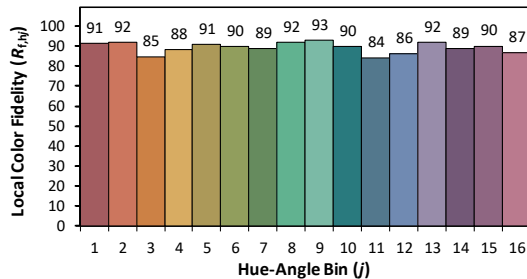
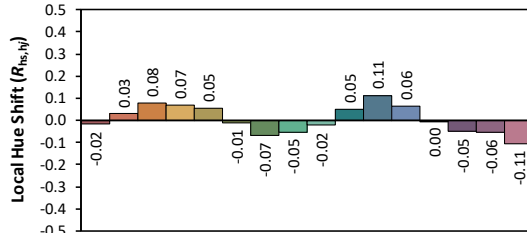
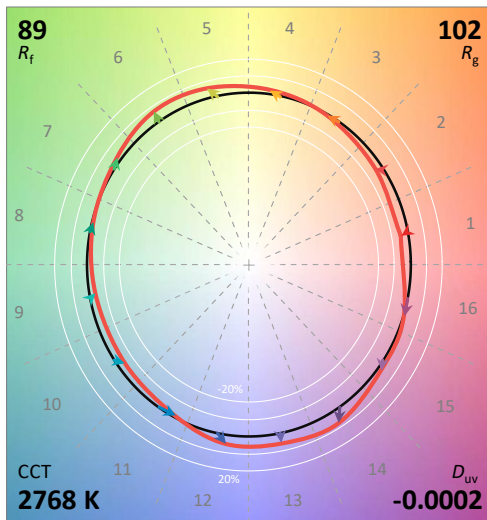
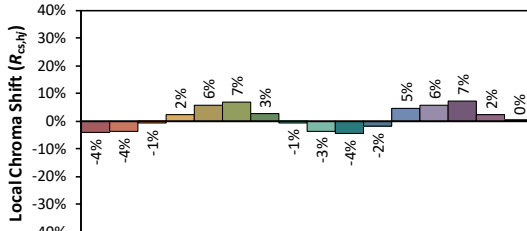
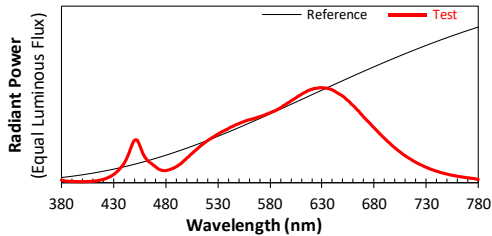
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/11

Model: SLBA79127X



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

x 0.4540
 y 0.4086
 u' 0.2596
 v' 0.5257

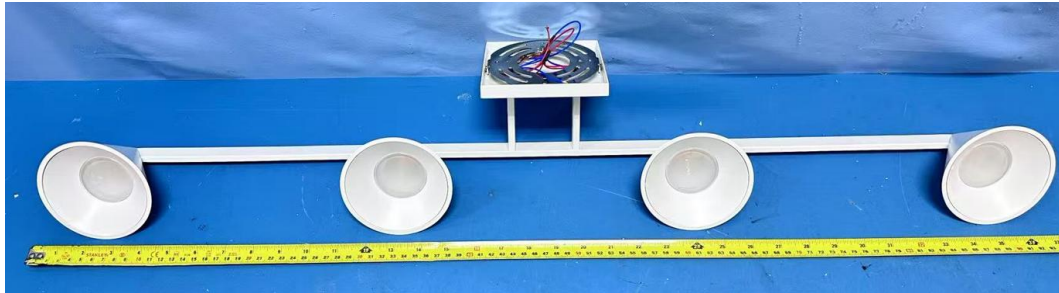
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 66

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

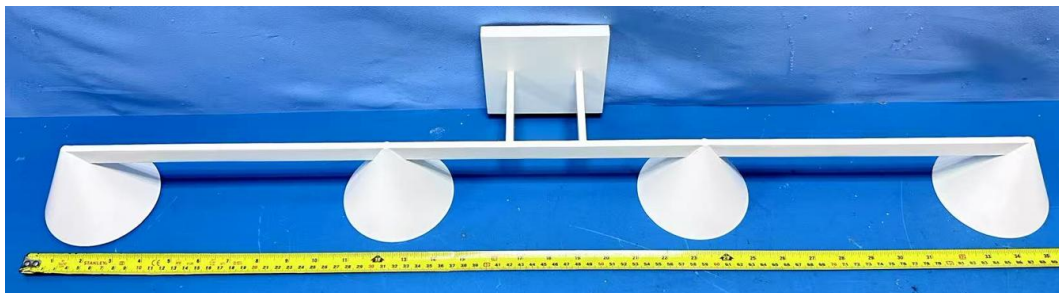
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLBA79127X



External view of SLBA79127X



View of LED driver PVD36-C090V40-UNV3-HE-P

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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 *****