

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-024

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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.: 250623168GZU-024

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLTB66827XXXCG

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: QGZ250619128.

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 SLTB66827XXXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-024.

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: 17 July 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:	SLTB66827XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLTB66827XXXCG

Criteria	Result
Total Lumen Output	80.8 lm
Total Power	7.4 W
Luminaire Efficacy	10.9 lm/W
S/MH(C0/180)	1.42
S/MH(C90/270)	1.25
Correlated Color Temperature (CCT)	2578 K
Color Rendering Index (CRI)	91
R9	48
Chromaticity Coordinate (x)	0.4744
Chromaticity Coordinate (y)	0.4198
Chromaticity Coordinate (u')	0.2677
Chromaticity Coordinate (v')	0.5330

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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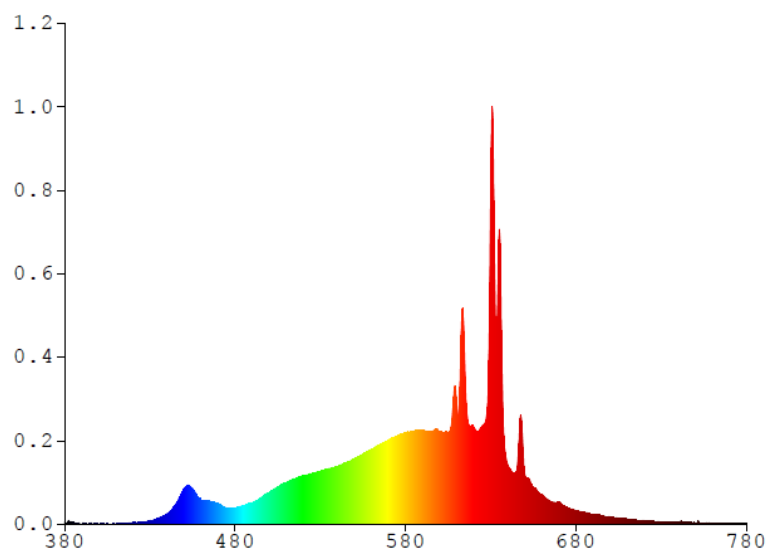
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLTB66827XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0529	480	0.3194	580	1.8230	680	0.2722	780	0.0188
385	0.0525	485	0.3741	585	1.8603	685	0.2375		
390	0.0000	490	0.4371	590	1.8709	690	0.2030		
395	0.0081	495	0.5158	595	1.8477	695	0.1743		
400	0.0101	500	0.6412	600	1.8571	700	0.1483		
405	0.0095	505	0.7424	605	1.8341	705	0.1219		
410	0.0095	510	0.8259	610	2.3828	710	0.1017		
415	0.0087	515	0.9018	615	2.9306	715	0.0847		
420	0.0221	520	0.9686	620	1.9401	720	0.0716		
425	0.0348	525	1.0114	625	1.9576	725	0.0593		
430	0.0655	530	1.0477	630	6.5822	730	0.0504		
435	0.1151	535	1.1068	635	5.8673	735	0.0402		
440	0.2024	540	1.1527	640	1.1813	740	0.0368		
445	0.3758	545	1.2178	645	1.0323	745	0.0338		
450	0.7052	550	1.3067	650	1.0102	750	0.0279		
455	0.7044	555	1.3988	655	0.7394	755	0.0248		
460	0.4888	560	1.4968	660	0.5924	760	0.0225		
465	0.4582	565	1.5842	665	0.4591	765	0.0185		
470	0.4068	570	1.6774	670	0.4446	770	0.0173		
475	0.3210	575	1.7602	675	0.3171	775	0.0153		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66827XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

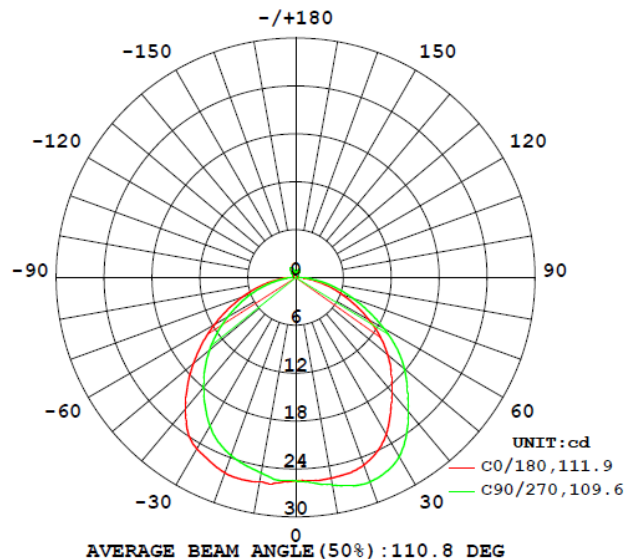
Photometric Measurements at 25°C – Distribution Method

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')
SLTB66827XXXCG								
S2506231 68-024	base-up	2578	91	48	0.4744	0.4198	0.2677	0.5330

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)
SLTB66827XXXCG							
S2506231 68-024	base-up	120.2	124.4	7.4	0.495	80.8	10.9

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66827XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	25.5	25.5	25.5	25.5	25.5
5	25.5	25.6	25.7	25.8	25.8
10	25.5	25.8	26.1	26.3	26.4
15	25.4	25.9	26.4	26.8	27.0
20	25.0	25.5	26.3	26.9	27.2
25	24.1	24.7	25.6	26.5	26.9
30	22.7	23.4	24.5	25.5	25.9
35	20.7	21.7	23.1	23.8	24.2
40	18.8	20.1	21.3	22.0	22.0
45	16.9	18.1	19.0	19.7	19.8
50	15.1	15.9	16.4	17.2	17.8
55	12.9	13.4	13.9	14.6	15.5
60	10.6	11.0	11.5	12.1	12.8
65	8.3	8.8	9.2	9.7	10.1
70	6.2	6.7	7.0	7.5	7.6
75	4.3	4.7	5.0	5.4	5.5
80	2.5	2.9	3.1	3.5	3.5
85	1.2	1.4	1.6	1.9	1.9
90	0.5	0.5	0.6	0.8	0.7
95	0.5	0.5	0.6	0.7	0.6
100	0.4	0.4	0.5	0.6	0.5
105	0.3	0.4	0.4	0.6	0.4
110	0.3	0.4	0.4	0.6	0.4
115	0.3	0.4	0.5	0.6	0.4
120	0.4	0.5	0.5	0.5	0.4
125	0.4	0.5	0.6	0.6	0.5
130	0.5	0.6	0.6	0.6	0.6
135	0.6	0.7	0.7	0.7	0.6
140	0.7	0.8	0.9	0.8	0.7
145	0.8	0.9	1.0	1.0	0.8
150	1.0	1.0	1.2	1.1	1.0
155	1.1	1.1	1.3	1.2	1.1
160	1.0	1.0	1.2	1.2	1.1
165	0.8	0.8	1.0	1.0	0.9
170	0.5	0.5	0.6	0.6	0.6
175	0.1	0.2	0.2	0.2	0.2
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 SLTB66827XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLTB66827XXXCG		
0-30	21.3	26.3
0-40	35.2	43.6
0-60	61.4	76.0
0-90	77.0	95.3
60-90	15.6	19.3
0-180	80.8	100.0

Beam Angle

Total Beam Angle(°)

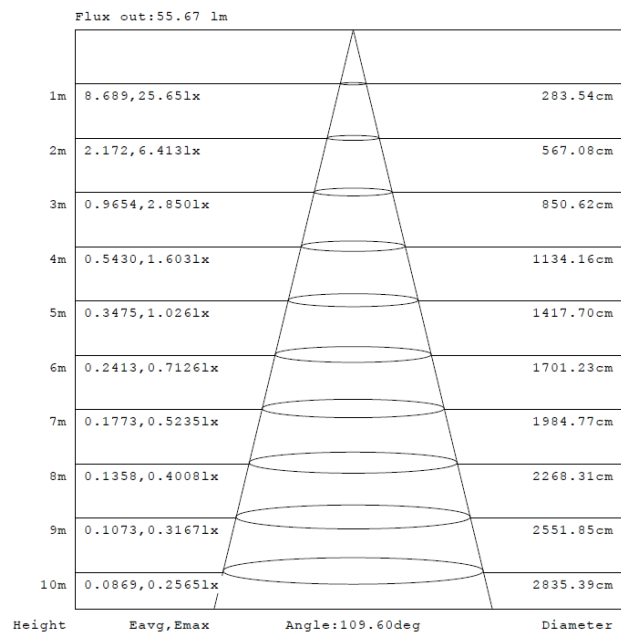
110.8

Illumination Plots

Model No.: SLTB66827XXXCG

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

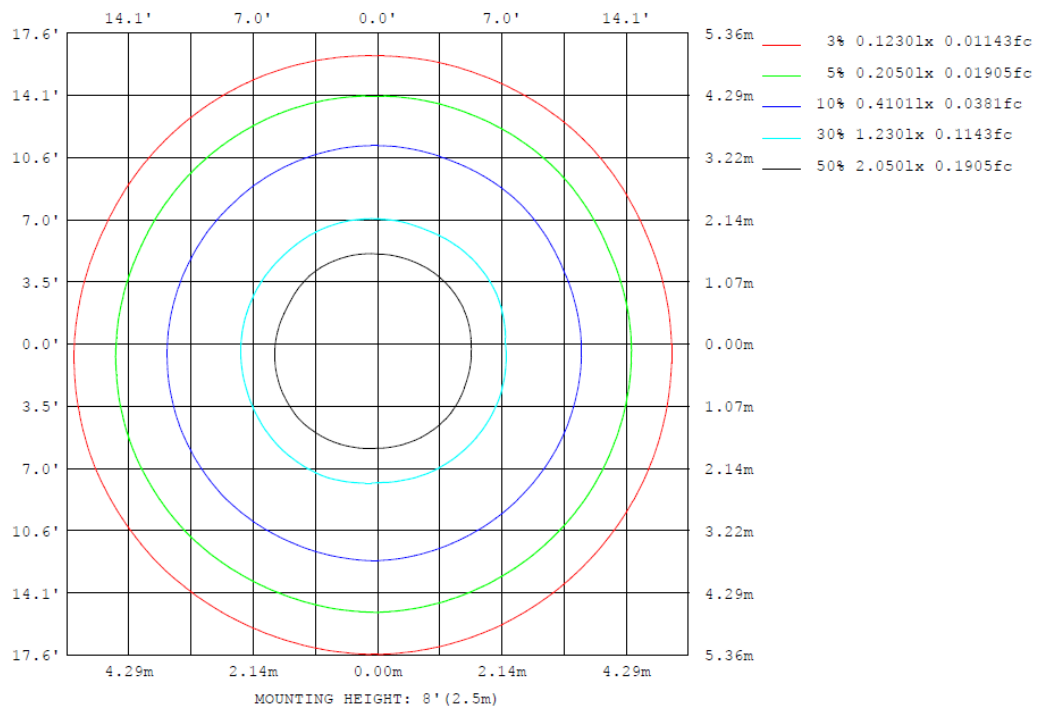
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66827XXXCG

Model No.: SLTB66827XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66827XXCG

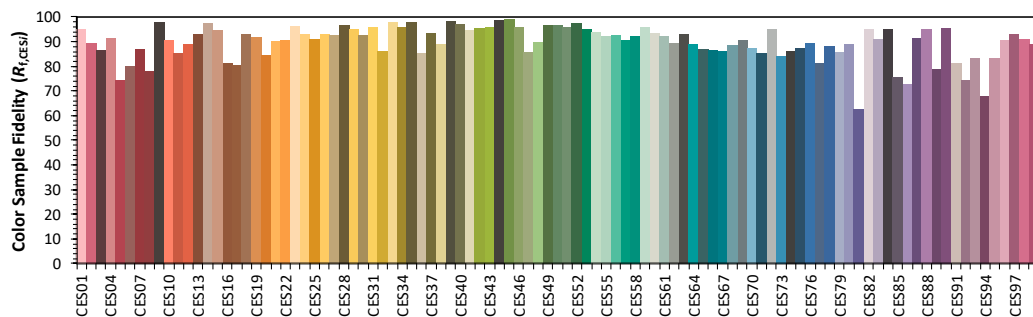
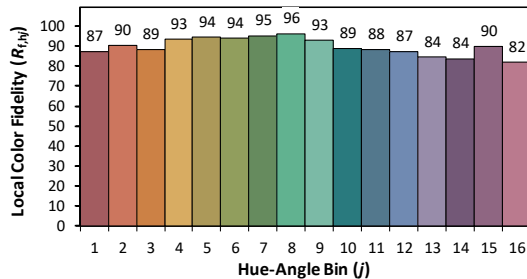
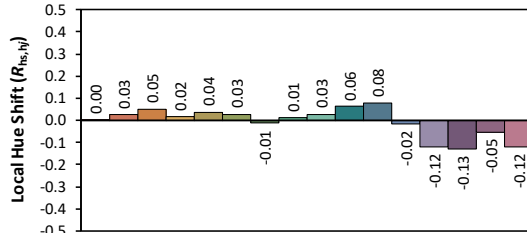
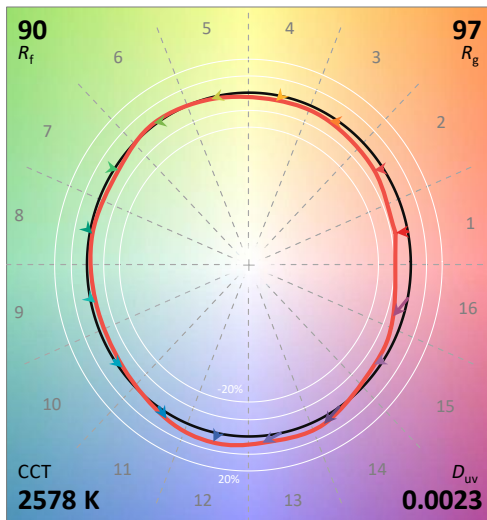
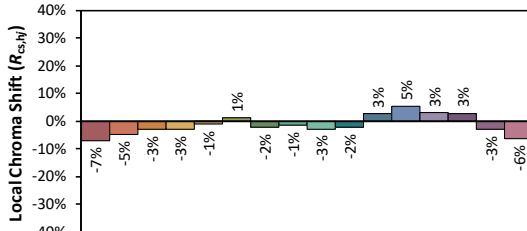
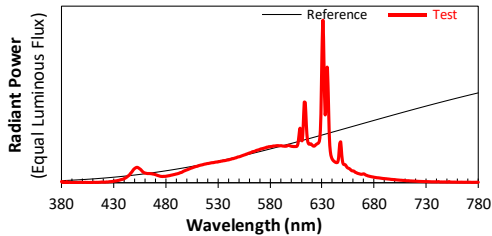
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/17

Model: SLTB66827XXCG



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

x 0.4744
 y 0.4198
 u' 0.2677
 v' 0.5330

CIE 13.3-1995
(CRI)
 R_a 91
 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 SLTB66827XXXCG

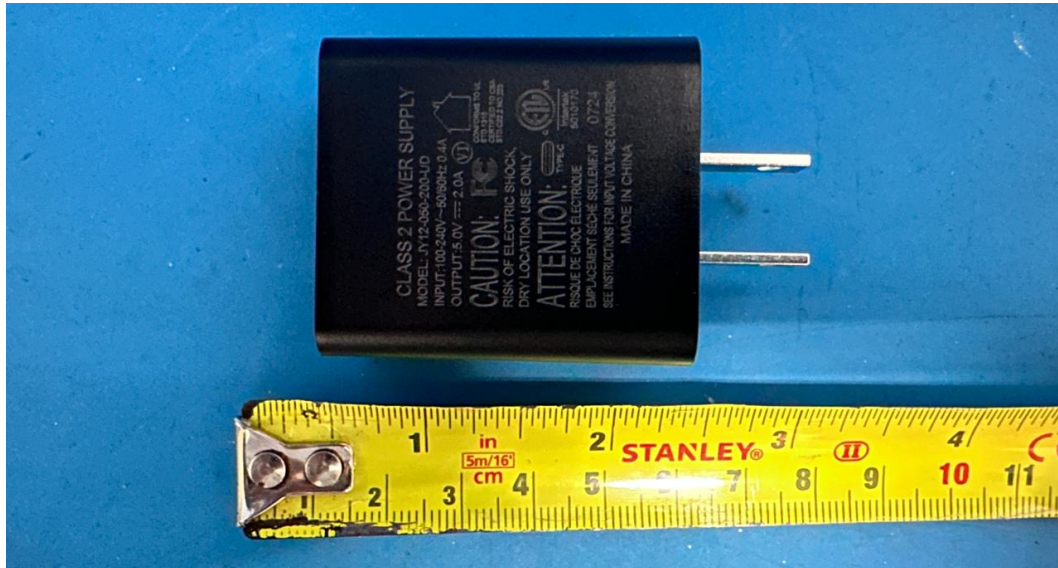


View of LED

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver JY12-050-200-UD

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****