

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-025

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None

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Report No.: 250623168GZU-025

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLTB66627XXXCG

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 SLTB66627XXXCG. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-027.

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: 21 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:	SLTB66627XXXCG
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLTB66627XXXCG

Criteria	Result
Total Lumen Output	86.5 lm
Total Power	8.8 W
Luminaire Efficacy	9.9 lm/W
S/MH(C0/180)	1.19
S/MH(C90/270)	1.27
Correlated Color Temperature (CCT)	2587 K
Color Rendering Index (CRI)	91
R9	49
Chromaticity Coordinate (x)	0.4732
Chromaticity Coordinate (y)	0.4191
Chromaticity Coordinate (u')	0.2672
Chromaticity Coordinate (v')	0.5325

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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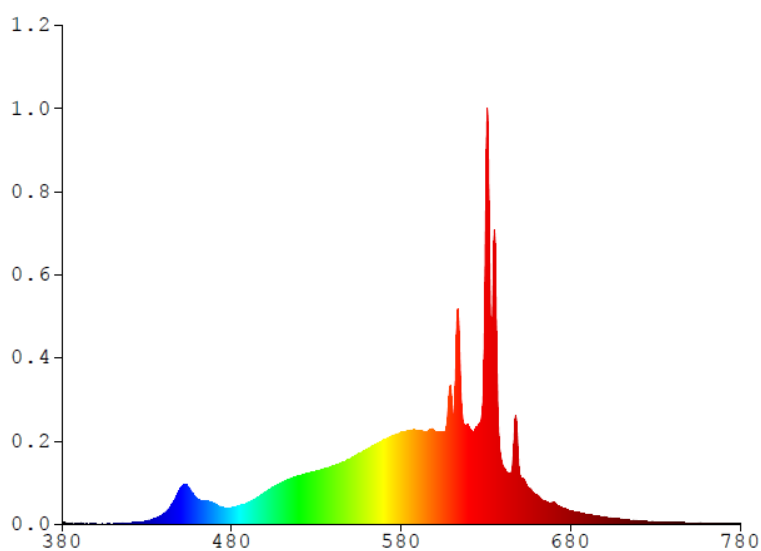
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLTB66627XXXCG

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0522	480	0.5748	580	3.1925	680	0.4765	780	0.0339
385	0.0346	485	0.6543	585	3.2467	685	0.4062		
390	0.0337	490	0.7671	590	3.2500	690	0.3491		
395	0.0000	495	0.9183	595	3.2258	695	0.3040		
400	0.0214	500	1.1218	600	3.2292	700	0.2501		
405	0.0098	505	1.3094	605	3.1982	705	0.2127		
410	0.0096	510	1.4554	610	4.1907	710	0.1765		
415	0.0227	515	1.5895	615	5.1213	715	0.1486		
420	0.0401	520	1.7061	620	3.3939	720	0.1212		
425	0.0792	525	1.7643	625	3.4037	725	0.1026		
430	0.1277	530	1.8435	630	11.3820	730	0.0841		
435	0.2093	535	1.9345	635	10.2000	735	0.0728		
440	0.3605	540	2.0191	640	2.0464	740	0.0665		
445	0.6975	545	2.1359	645	1.7943	745	0.0557		
450	1.2547	550	2.2777	650	1.7627	750	0.0470		
455	1.2546	555	2.4479	655	1.2860	755	0.0442		
460	0.8812	560	2.6148	660	1.0302	760	0.0382		
465	0.8069	565	2.7761	665	0.8039	765	0.0354		
470	0.7235	570	2.9375	670	0.7689	770	0.0287		
475	0.5865	575	3.0735	675	0.5496	775	0.0267		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66627XXXCG

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

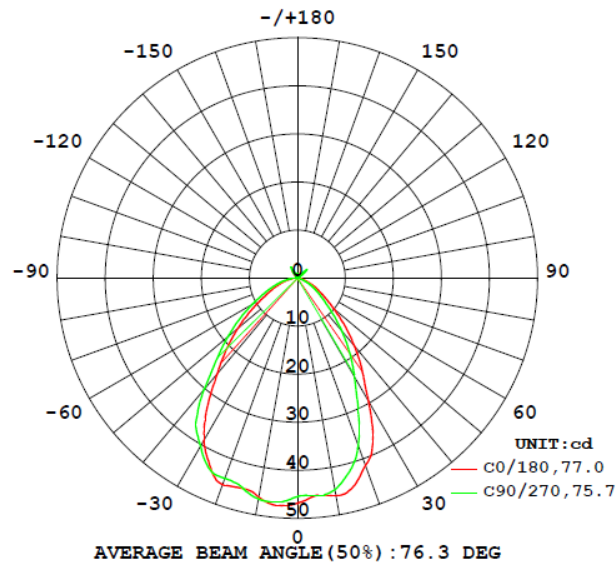
Photometric Measurements at 25°C – Distribution Method

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')
SLTB66627XXXCG								
S2506231 68-027	base-up	2587	91	49	0.4732	0.4191	0.2672	0.5325

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)
SLTB66627XXXCG							
S2506231 68-027	base-up	120.1	142.9	8.8	0.510	86.5	9.9

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66627XXXCG

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	46.8	45.5	45.5	45.4	45.4
5	45.4	45.9	45.7	45.5	45.3
10	45.9	45.0	43.8	44.0	44.7
15	44.9	41.5	40.3	40.8	41.7
20	41.5	37.3	34.6	35.5	37.0
25	37.1	30.1	27.8	28.2	29.9
30	29.6	23.7	22.4	22.6	23.9
35	23.5	18.5	17.3	17.7	19.0
40	18.5	13.9	12.6	13.3	14.4
45	13.9	9.9	8.9	9.5	10.2
50	9.8	7.0	6.3	6.6	7.2
55	6.9	5.0	4.5	4.8	5.2
60	5.0	3.5	3.0	3.3	3.7
65	3.5	2.2	1.8	2.0	2.3
70	2.2	1.2	0.9	1.0	1.3
75	1.2	0.5	0.4	0.4	0.5
80	0.6	0.3	0.3	0.2	0.3
85	0.3	0.2	0.3	0.2	0.3
90	0.2	0.3	0.3	0.3	0.3
95	0.3	0.3	0.4	0.4	0.4
100	0.3	0.3	0.4	0.4	0.4
105	0.3	0.4	0.5	0.5	0.5
110	0.3	0.5	0.6	0.6	0.6
115	0.4	0.5	0.5	0.5	0.6
120	0.4	0.6	0.7	0.6	0.6
125	0.5	1.1	1.4	1.2	1.0
130	0.9	2.4	2.7	2.5	2.2
135	1.4	1.4	1.3	1.5	1.8
140	0.7	0.8	0.8	1.0	1.2
145	0.5	0.5	0.6	0.7	0.8
150	0.3	0.6	0.8	0.8	0.8
155	0.5	0.7	0.9	0.9	0.9
160	0.6	0.7	0.9	0.9	0.9
165	0.6	0.7	0.7	0.8	0.7
170	0.7	0.5	0.3	0.4	0.4
175	0.5	0.1	0.1	0.1	0.1
180	0.1	0.7	0.8	0.8	0.9

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66627XXXCG

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLTB66627XXXCG		
0-30	34.2	39.5
0-40	51.7	59.7
0-60	74.0	85.5
0-90	82.4	95.2
60-90	8.4	9.7
0-180	86.5	100.0

Beam Angle

Total Beam Angle(°)

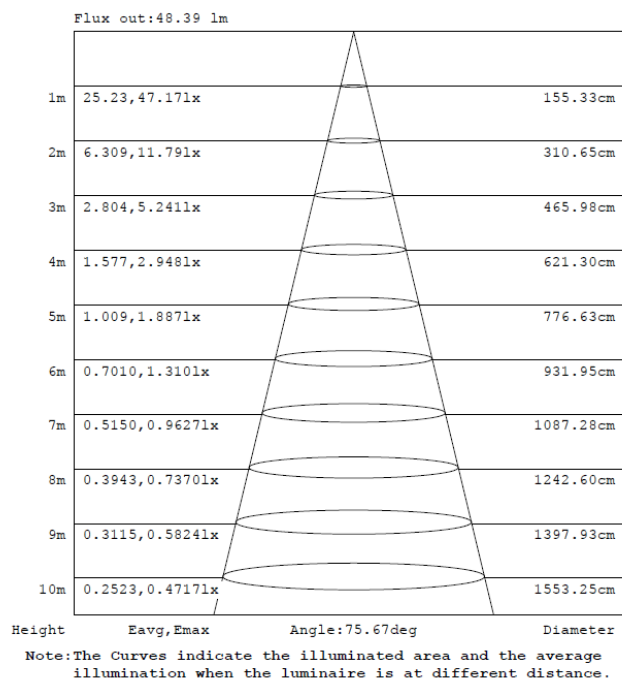
76.3

Illumination Plots

Model No.: SLTB66627XXXCG

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

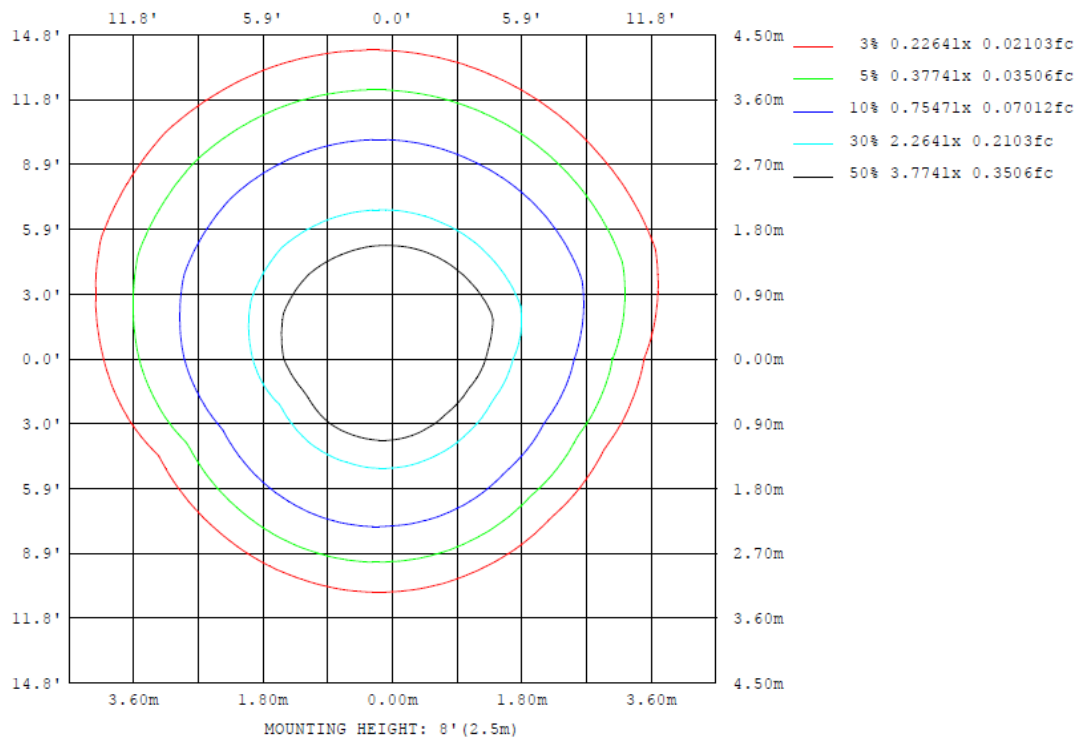
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66627XXXCG

Model No.: SLTB66627XXXCG

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLTB66627XXXCG

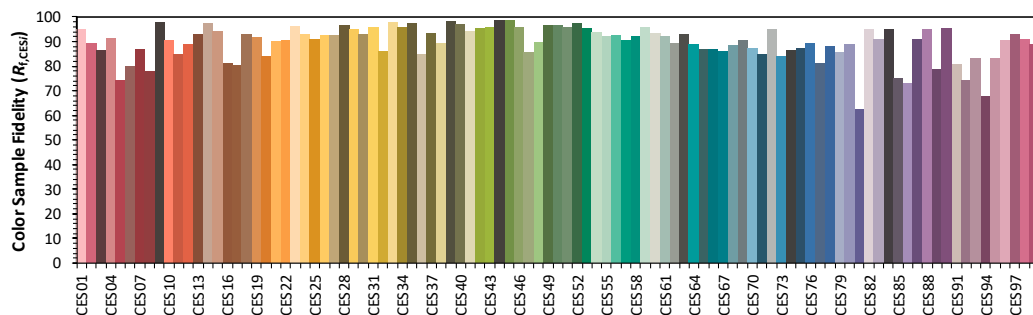
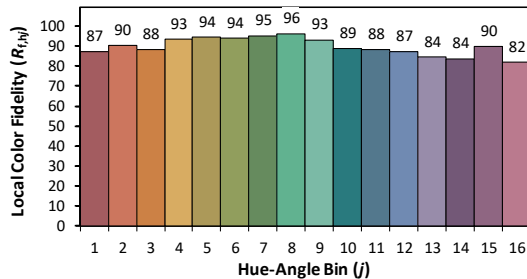
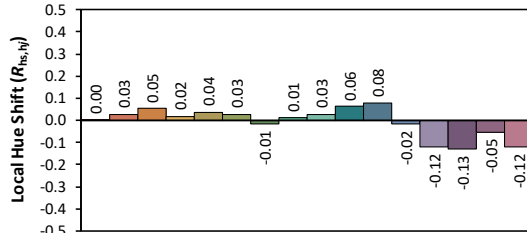
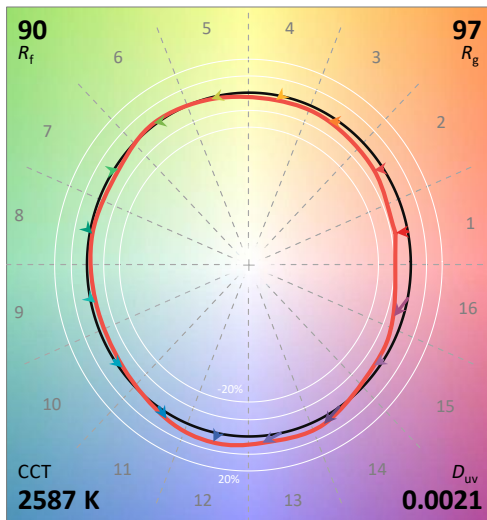
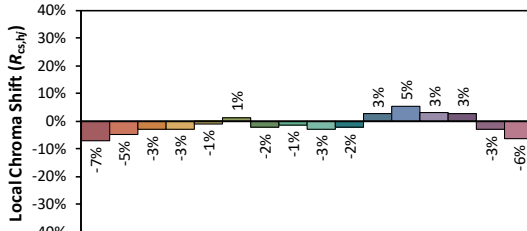
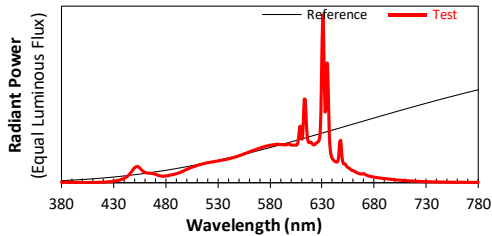
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/21

Model: SLTB66627XXXCG



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

x 0.4732
 y 0.4191
 u' 0.2672
 v' 0.5325

CIE 13.3-1995
(CRI)
 R_a 91
 R_g 49

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 SLTB66627XXXCG

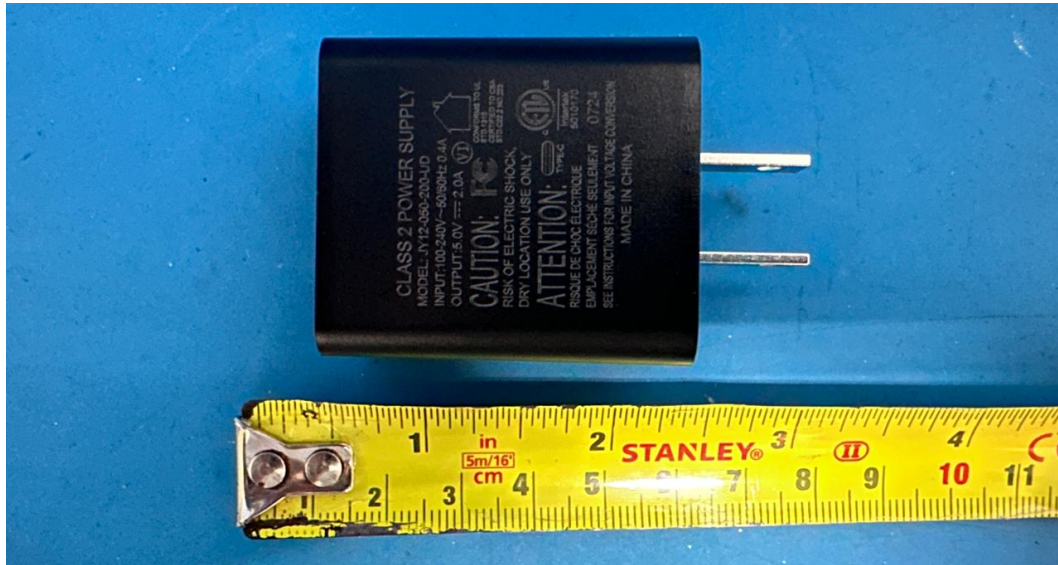


View of LED

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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 *****