

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623213GZU-002

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250623213GZU-002

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLFL53627XXX

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: QGZ250623117.
<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 SLFL53627XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623213-002.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	LEEDARSON XIAMEN ECO LIGHTING CO LTD Xingtai Industrial Park, Economic Development Zone of Changtai County, Zhangzhou City, Fujian
<u>DATES OF TESTS:</u>	07 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:	SLFL53627XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLFL53627XXX

Criteria	Result
Total Lumen Output	297.8 lm
Total Power	5.3 W
Luminaire Efficacy	55.9 lm/W
S/MH(C0/180)	0.06
S/MH(C90/270)	0.04
Correlated Color Temperature (CCT)	2778 K
Color Rendering Index (CRI)	94
R9	62
Chromaticity Coordinate (x)	0.4533
Chromaticity Coordinate (y)	0.4086
Chromaticity Coordinate (u')	0.2592
Chromaticity Coordinate (v')	0.5256

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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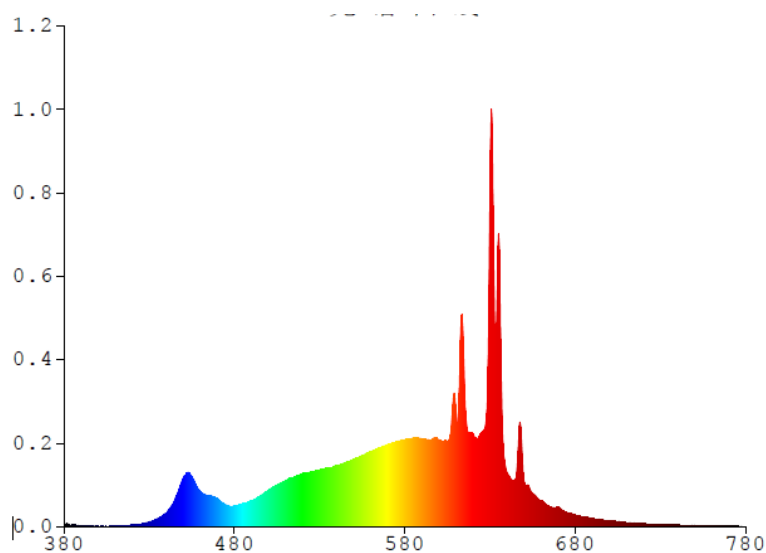
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLFL53627XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.3155	480	1.7040	580	7.1621	680	0.9693	780	0.0000
385	0.1251	485	1.9247	585	7.2802	685	0.8203		
390	0.0558	490	2.1447	590	7.2353	690	0.6995		
395	0.0441	495	2.4890	595	7.1045	695	0.5983		
400	0.0465	500	3.0049	600	7.1568	700	0.4995		
405	0.0375	505	3.4273	605	7.0504	705	0.4138		
410	0.0533	510	3.7897	610	9.4321	710	0.3525		
415	0.0878	515	4.0977	615	11.7270	715	0.2983		
420	0.1359	520	4.3590	620	7.6322	720	0.2543		
425	0.2165	525	4.5124	625	7.7192	725	0.2123		
430	0.3915	530	4.6704	630	27.0800	730	0.1835		
435	0.6668	535	4.8145	635	24.0040	735	0.1533		
440	1.1342	540	5.0078	640	4.4452	740	0.1318		
445	2.1768	545	5.2577	645	3.8656	745	0.1123		
450	3.9810	550	5.5223	650	3.7904	750	0.1045		
455	4.1104	555	5.8271	655	2.7385	755	0.0773		
460	2.8826	560	6.1550	660	2.1789	760	0.0713		
465	2.5779	565	6.4467	665	1.6526	765	0.0640		
470	2.3099	570	6.7453	670	1.6364	770	0.0540		
475	1.7844	575	6.9730	675	1.1284	775	0.0448		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53627XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

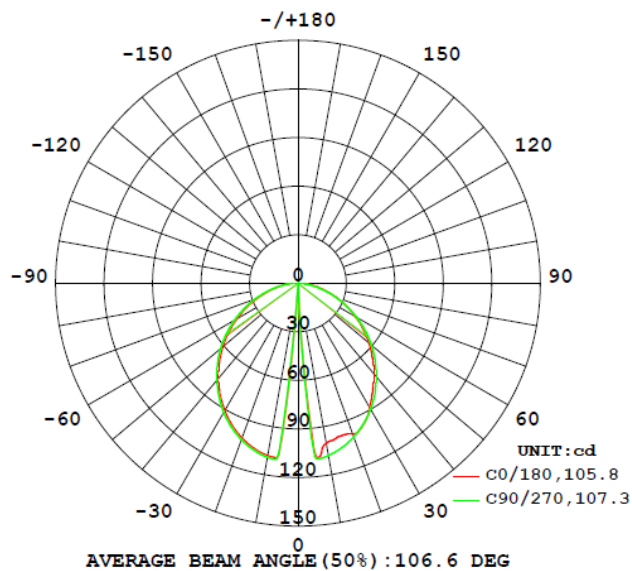
Photometric Measurements at 25°C – Distribution Method

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')
SLFL53627XXX								
S2506232 13-002	base-up	2778	94	62	0.4533	0.4086	0.2592	0.5256

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)
SLFL53627XXX							
S2506232 13-002	base-up	120.1	94.8	5.3	0.468	297.8	55.9

Intensity (Candlepower) Summary at 25°C - Candelas



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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53627XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	0.0	0.0	0.0	0.0	0.0
5	86.3	95.4	99.7	100.0	95.2
10	100.3	107.6	107.6	107.8	108.1
15	97.9	104.8	104.7	104.9	105.1
20	99.1	100.9	100.7	100.8	100.9
25	96.1	95.9	95.7	95.7	95.8
30	89.0	90.0	89.8	89.7	89.8
35	80.6	83.3	83.1	83.0	83.0
40	72.9	76.0	75.7	75.5	75.5
45	65.3	68.2	67.8	67.6	67.6
50	57.6	59.9	59.5	59.3	59.4
55	49.4	51.2	50.8	50.7	50.7
60	41.0	42.4	42.0	41.8	41.8
65	32.7	33.6	33.2	32.9	33.0
70	24.9	25.3	24.7	24.4	24.6
75	17.5	17.6	16.8	16.5	16.6
80	11.0	10.8	10.0	9.4	9.4
85	5.5	5.3	4.5	3.8	3.6
90	2.2	2.3	1.9	1.4	1.2
95	0.6	0.9	0.9	1.0	0.9
100	0.5	0.7	0.7	0.8	0.8
105	0.4	0.6	0.6	0.6	0.6
110	0.3	0.5	0.5	0.5	0.5
115	0.3	0.4	0.4	0.4	0.4
120	0.3	0.4	0.4	0.4	0.4
125	0.4	0.5	0.5	0.5	0.5
130	0.5	0.5	0.5	0.5	0.5
135	0.4	0.5	0.5	0.5	0.5
140	0.4	0.5	0.5	0.5	0.5
145	0.4	0.5	0.5	0.5	0.5
150	0.4	0.5	0.5	0.5	0.5
155	0.4	0.5	0.5	0.5	0.5
160	0.4	0.5	0.5	0.5	0.5
165	0.4	0.5	0.5	0.5	0.6
170	0.4	0.5	0.5	0.5	0.5
175	0.3	0.3	0.3	0.3	0.3
180	0.2	0.2	0.2	0.2	0.2

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53627XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLFL53627XXX		
0-30	81.6	27.4
0-40	133.9	45.0
0-60	233.3	78.3
0-90	293.7	98.6
60-90	60.4	20.3
0-180	297.8	100.0

Beam Angle

Total Beam Angle(°)

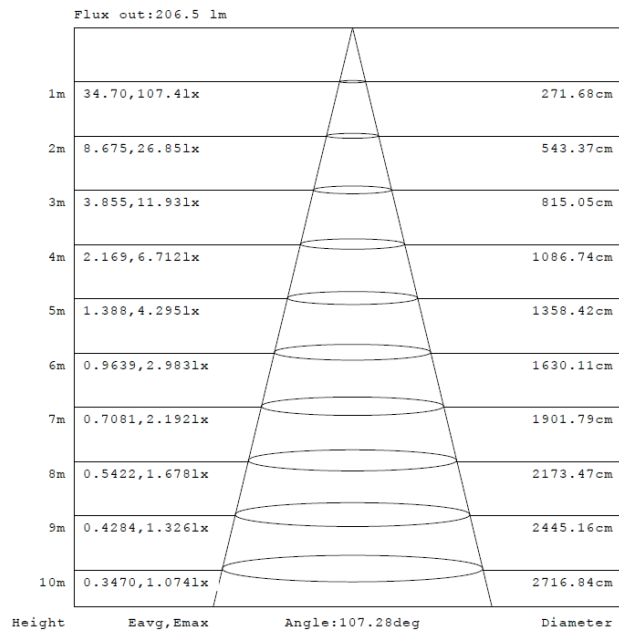
106.6

Illumination Plots

Model No.: SLFL53627XXX

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

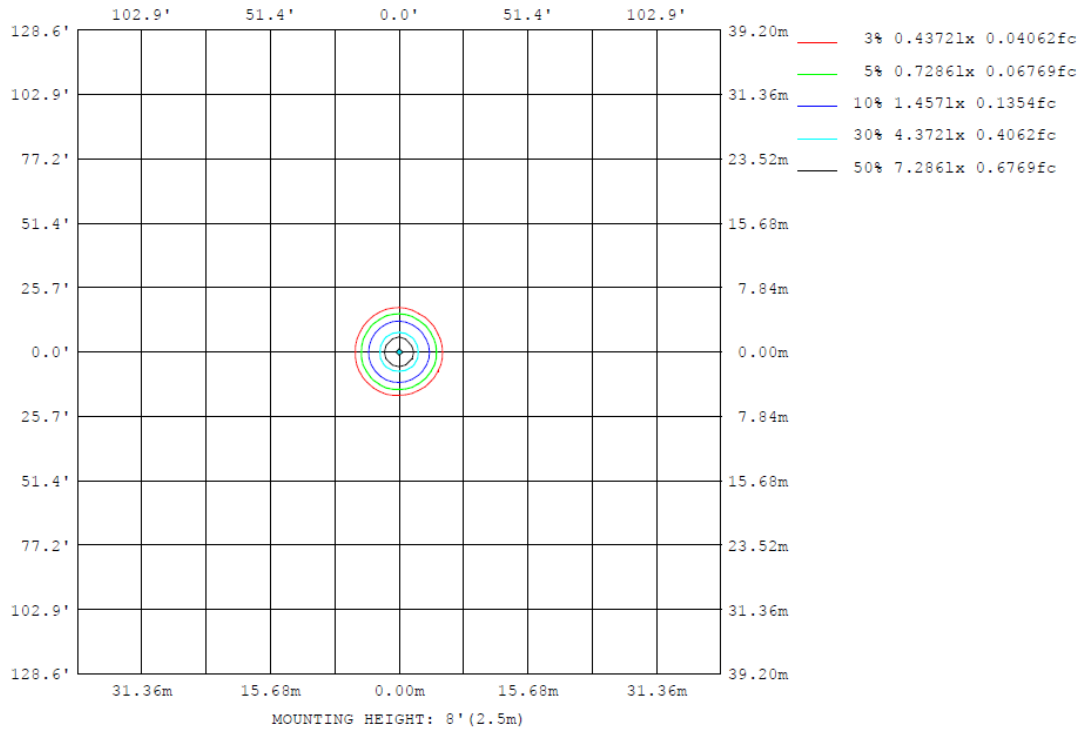
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53627XXX

Model No.: SLFL53627XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLFL53627XXX

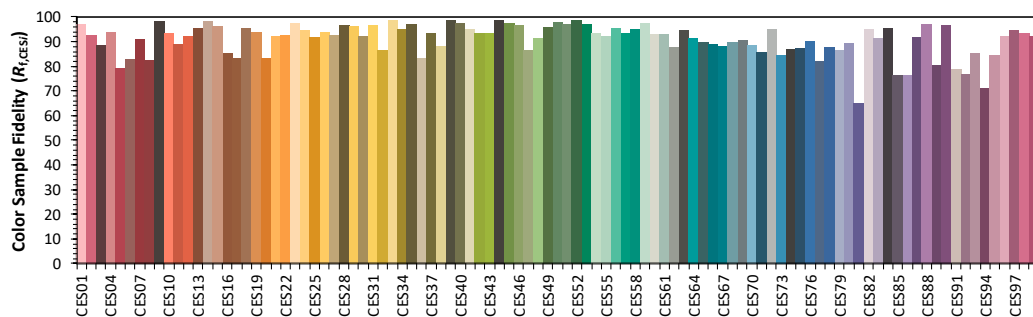
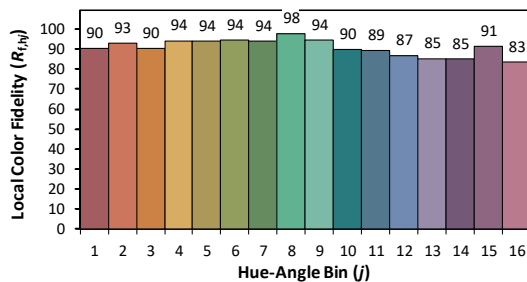
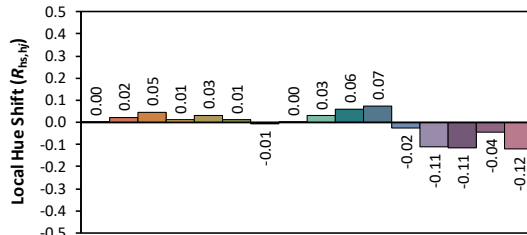
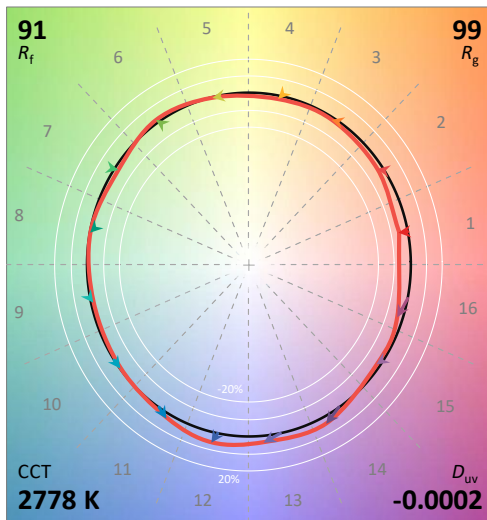
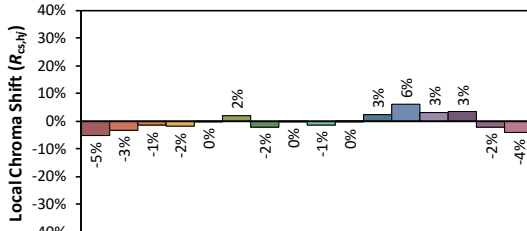
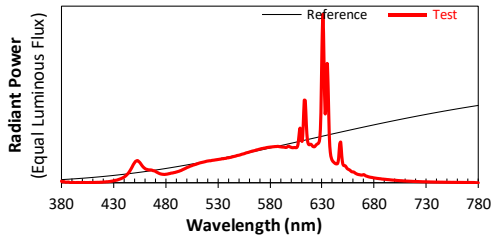
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/7

Model: SLFL53627XXX



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

x 0.4533
 y 0.4086
 u' 0.2592
 v' 0.5256

CIE 13.3-1995
(CRI)
 R_a 94
 R_g 62

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 SLFL53627XXX

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TEST REPORT

PRODUCT PICTURE (not to scale)

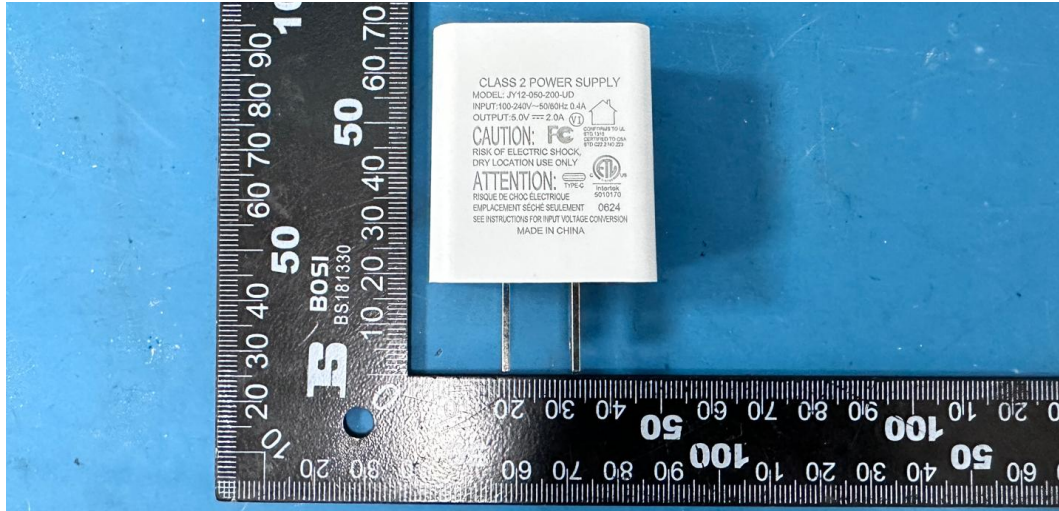


View of LED

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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 *****