

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250623168GZU-003

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REVISION DATE

None

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Report format for LM-79_G

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Report No.: 250623168GZU-003

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLBA75827XXXXX

Remark: "XXXXX" 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 SLBA75827XXXXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250623168-007.
<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>	10 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:	SLBA75827XXXXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLBA75827XXXXX

Criteria	Result
Total Lumen Output	1117.7 lm
Total Power	18.2 W
Luminaire Efficacy	61.3 lm/W
S/MH(C0/180)	0.97
S/MH(C90/270)	1.00
Correlated Color Temperature (CCT)	2623 K
Color Rendering Index (CRI)	91
R9	65
Chromaticity Coordinate (x)	0.4683
Chromaticity Coordinate (y)	0.4154
Chromaticity Coordinate (u')	0.2657
Chromaticity Coordinate (v')	0.5304

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

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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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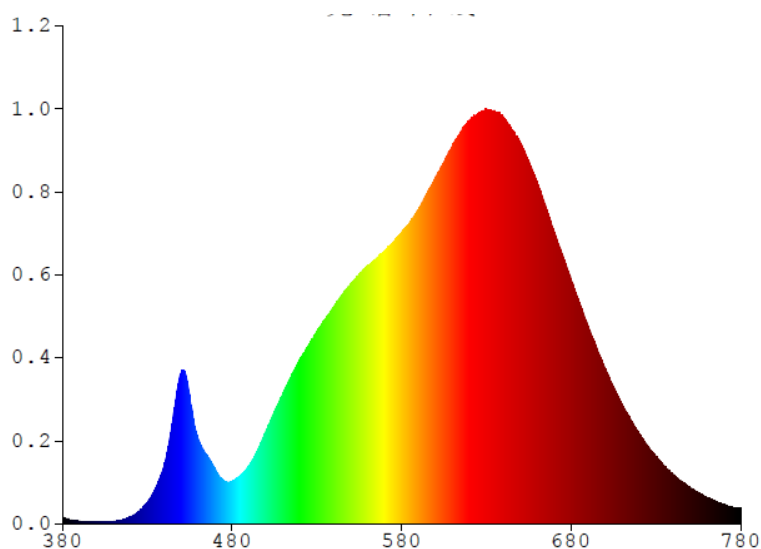
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLBA75827XXXXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.6817	480	4.4506	580	30.4740	680	25.5770	780	1.6752
385	0.3699	485	5.0671	585	31.5740	685	23.0970		
390	0.2855	490	6.1329	590	32.8920	690	20.7160		
395	0.1975	495	7.6274	595	34.5780	695	18.4630		
400	0.1693	500	9.6862	600	36.2940	700	16.2850		
405	0.2030	505	11.7130	605	37.8840	705	14.3710		
410	0.2635	510	13.6510	610	39.6430	710	12.5230		
415	0.4278	515	15.4900	615	41.0960	715	10.9540		
420	0.7493	520	17.2360	620	42.2660	720	9.4756		
425	1.3146	525	18.6640	625	42.9580	725	8.1967		
430	2.2350	530	20.1530	630	43.4650	730	7.0559		
435	3.7482	535	21.4000	635	43.2990	735	6.0572		
440	6.1873	540	22.6780	640	42.5910	740	5.2052		
445	10.7910	545	23.9950	645	41.3070	745	4.4382		
450	15.8340	550	25.1400	650	39.9810	750	3.8360		
455	13.3340	555	26.1050	655	38.0070	755	3.2859		
460	8.9226	560	27.0950	660	35.7450	760	2.7665		
465	7.2483	565	27.7680	665	33.2680	765	2.4156		
470	5.7299	570	28.5960	670	30.5470	770	2.0428		
475	4.5492	575	29.4860	675	27.5930	775	1.7594		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75827XXXXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

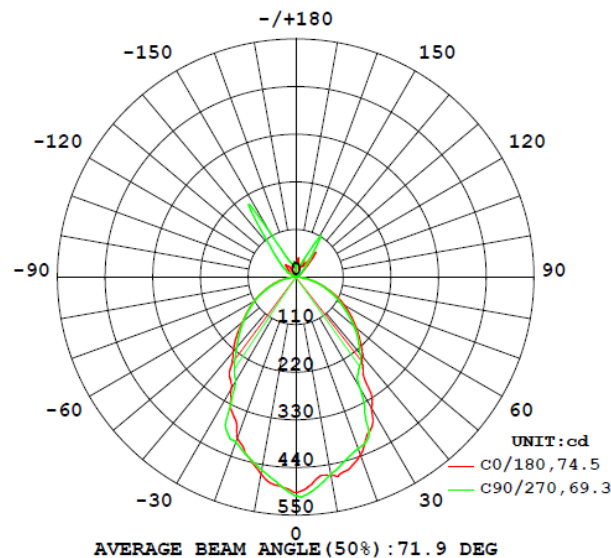
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31' Chromaticit y Coordinate (x)	CIE 31' Chromaticit y Coordinate (y)	CIE 76' Chromaticit y Coordinate (u')	CIE 76' Chromaticit y Coordinate (v')
					SLBA75827XXXXX			
S2506231 68-007	base-up	2623	91	65	0.4683	0.4154	0.2657	0.5304

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)
						SLBA75827XXXXX	
S2506231 68-007	base-up	120.1	154.4	18.2	0.984	1117.7	61.3

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75827XXXXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	497.3	498.5	499.8	500.6	505.8
5	475.6	484.5	496.9	500.9	492.6
10	464.0	480.9	485.3	475.2	463.6
15	461.6	460.3	453.8	447.8	439.3
20	437.0	437.8	432.6	427.1	421.9
25	396.7	396.6	400.2	409.0	401.1
30	349.5	356.7	356.3	322.4	297.2
35	270.6	266.6	261.5	264.9	256.5
40	240.2	243.7	242.5	239.4	230.7
45	210.7	211.2	214.4	209.1	203.7
50	181.9	182.7	185.7	177.0	174.8
55	155.1	155.7	156.1	148.4	145.4
60	128.9	129.9	128.2	124.1	119.2
65	102.6	104.0	102.3	99.8	94.8
70	76.1	77.2	77.1	75.4	71.2
75	51.9	53.1	54.1	53.3	50.4
80	29.6	31.1	32.6	33.8	31.1
85	12.4	13.2	15.1	15.5	13.2
90	4.6	4.6	6.4	5.4	3.6
95	4.3	6.7	6.6	5.4	3.7
100	5.0	6.6	7.4	5.2	4.0
105	2.5	5.4	5.4	3.8	2.9
110	1.6	2.3	2.7	2.5	1.5
115	4.7	2.5	1.5	1.4	1.3
120	10.0	9.8	7.2	3.0	3.3
125	16.9	21.9	16.2	10.5	11.0
130	24.1	34.6	24.0	16.6	17.5
135	37.4	53.4	37.2	25.4	26.7
140	68.0	92.7	60.3	39.9	41.4
145	37.4	104.1	117.0	70.0	72.0
150	37.0	106.9	110.5	109.0	98.6
155	27.3	63.2	59.1	42.3	47.2
160	21.2	36.1	34.1	29.9	31.3
165	25.4	30.8	28.8	32.2	29.7
170	43.3	31.1	30.9	30.5	31.1
175	34.4	29.2	34.4	34.1	28.8
180	25.2	25.3	25.6	16.5	12.8

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

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75827XXXXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLBA75827XXXXX		
0-30	341.0	30.5
0-40	504.4	45.1
0-60	784.6	70.2
0-90	943.0	84.4
60-90	158.4	14.2
0-180	1117.7	100.0

Beam Angle

Total Beam Angle(°)

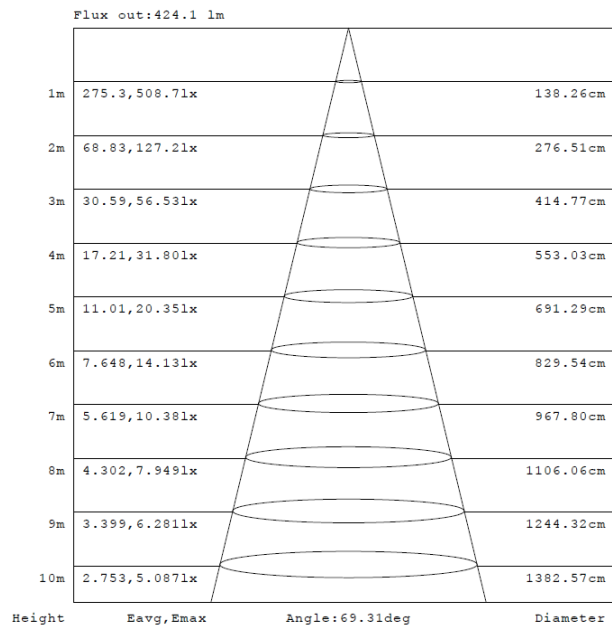
71.9

Illumination Plots

Model No.: SLBA75827XXXXX

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

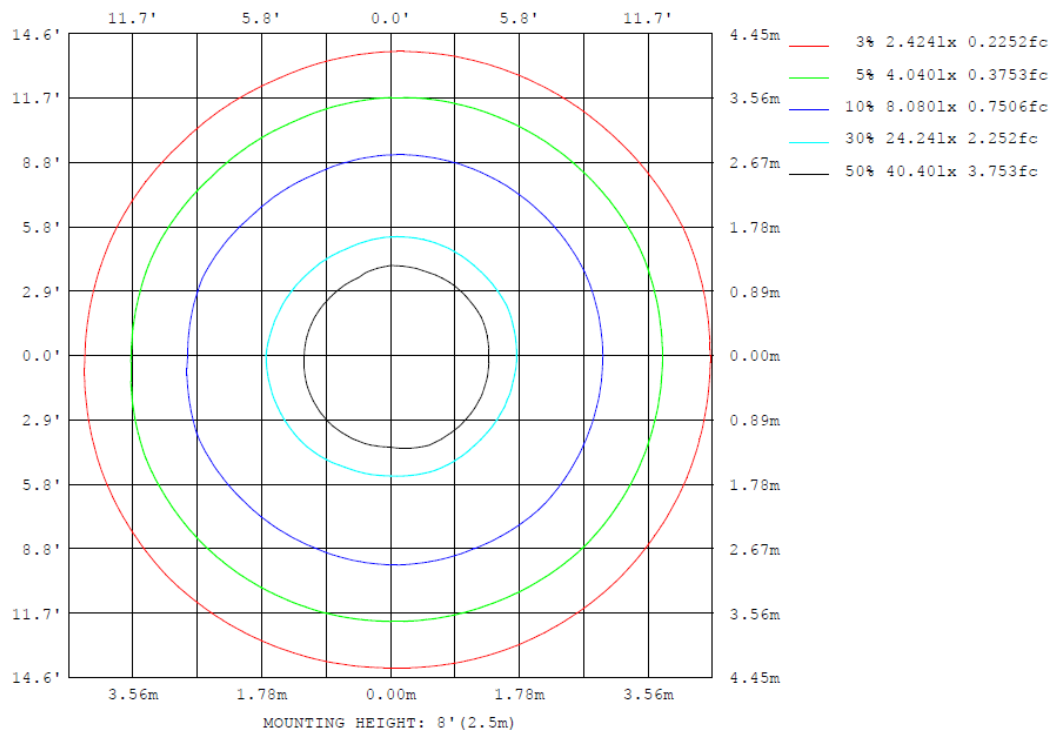
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75827XXXXX

Model No.: SLBA75827XXXXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLBA75827XXXXX

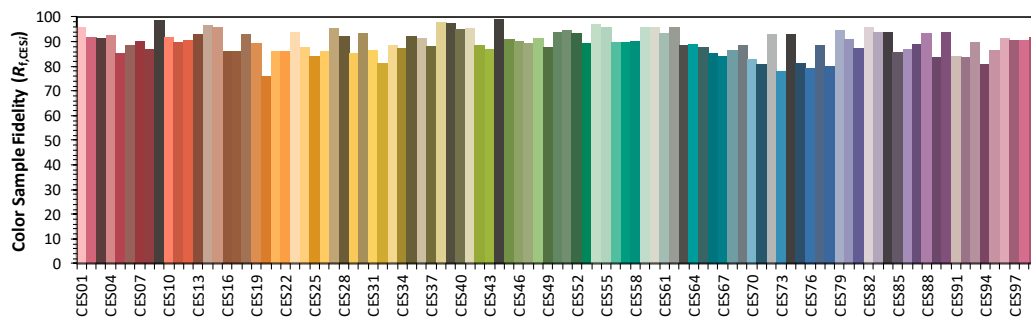
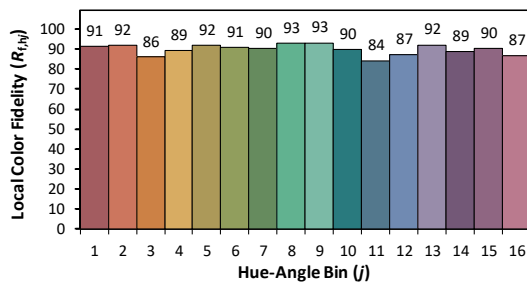
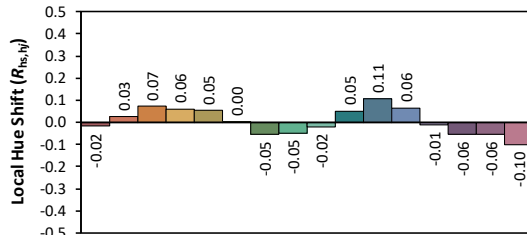
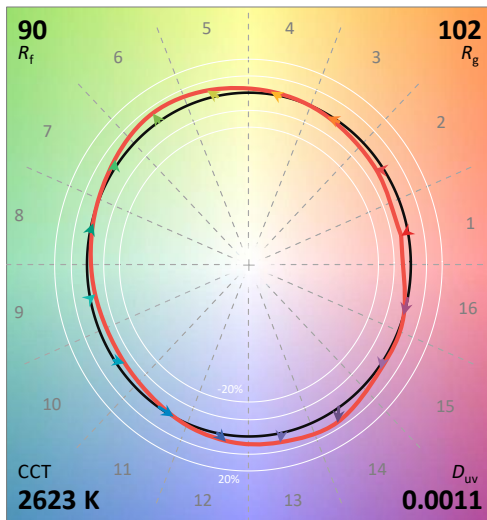
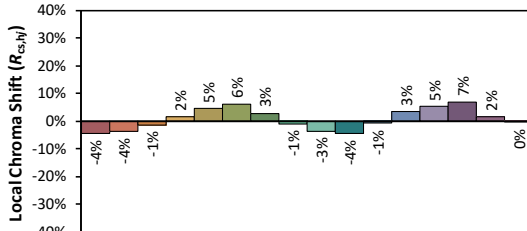
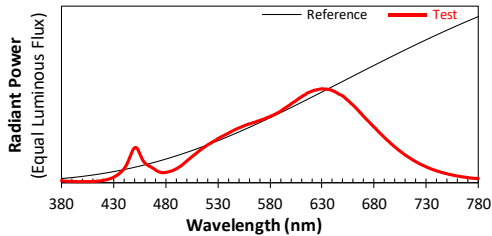
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/7/10

Model: SLBA75827XXXXX



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

x 0.4683
 y 0.4154
 u' 0.2657
 v' 0.5304

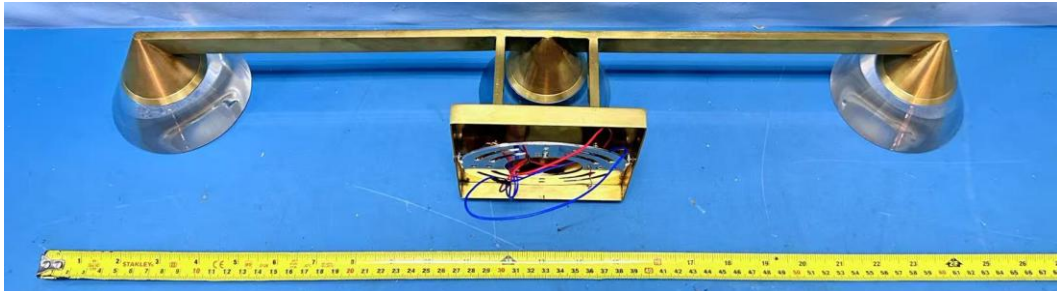
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 65

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

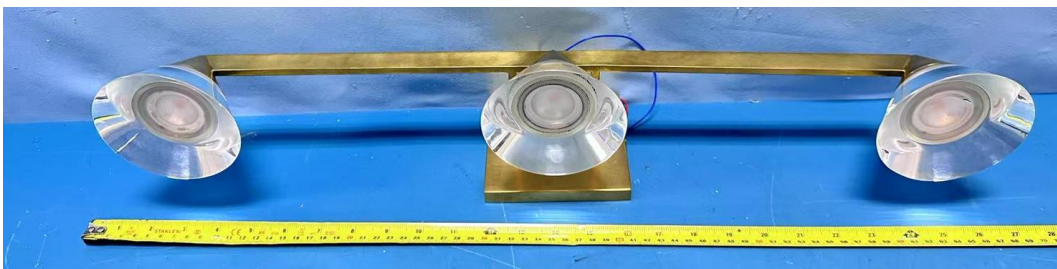
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLBA75827XXXXX



External view of SLBA75827XXXXX



View of LED driver PSS30W-0700-38-VCC1(AB2613)

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

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 *****