

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

250722187GZU-004

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None

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Report No.: 250722187GZU-004

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLCH63127XXX

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: QGZ250722038.
<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 SLCH63127XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S250722187-003.
<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 August 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:	SLCH63127XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLCH63127XXX

Criteria	Result
Total Lumen Output	1297.3 lm
Total Power	23.7 W
Luminaire Efficacy	54.7 lm/W
S/MH(C0/180)	1.49
S/MH(C90/270)	1.28
Correlated Color Temperature (CCT)	2540 K
Color Rendering Index (CRI)	91
R9	81
Chromaticity Coordinate (x)	0.4609
Chromaticity Coordinate (y)	0.3923
Chromaticity Coordinate (u')	0.2717
Chromaticity Coordinate (v')	0.5203

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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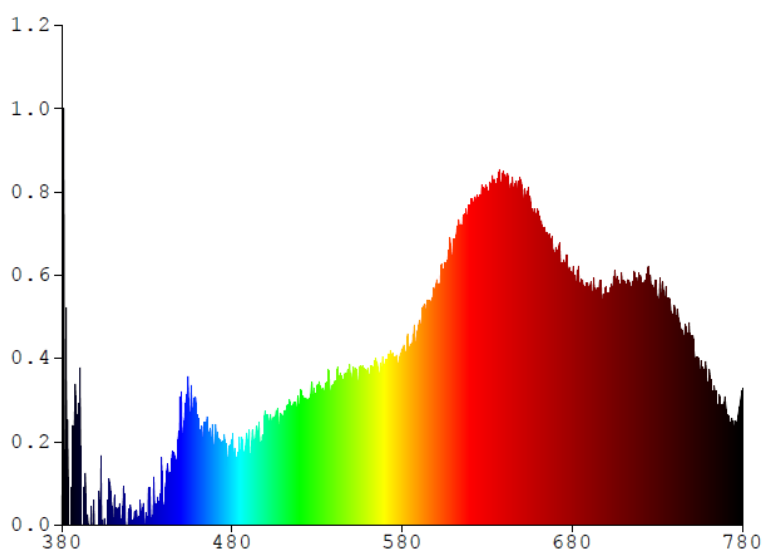
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLCH63127XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.0146	480	0.0252	580	0.0581	680	0.0820	780	0.0450
385	0.0000	485	0.0245	585	0.0596	685	0.0792		
390	0.0128	490	0.0306	590	0.0669	690	0.0788		
395	0.0034	495	0.0297	595	0.0739	695	0.0765		
400	0.0000	500	0.0333	600	0.0796	700	0.0767		
405	0.0022	505	0.0317	605	0.0858	705	0.0826		
410	0.0020	510	0.0359	610	0.0933	710	0.0807		
415	0.0000	515	0.0392	615	0.0991	715	0.0785		
420	0.0035	520	0.0404	620	0.1050	720	0.0827		
425	0.0028	525	0.0406	625	0.1082	725	0.0827		
430	0.0006	530	0.0460	630	0.1085	730	0.0754		
435	0.0046	535	0.0463	635	0.1114	735	0.0772		
440	0.0039	540	0.0467	640	0.1145	740	0.0723		
445	0.0222	545	0.0481	645	0.1131	745	0.0632		
450	0.0363	550	0.0496	650	0.1102	750	0.0608		
455	0.0371	555	0.0520	655	0.1085	755	0.0483		
460	0.0346	560	0.0519	660	0.1029	760	0.0451		
465	0.0305	565	0.0517	665	0.0967	765	0.0390		
470	0.0300	570	0.0536	670	0.0900	770	0.0409		
475	0.0196	575	0.0533	675	0.0867	775	0.0309		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63127XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

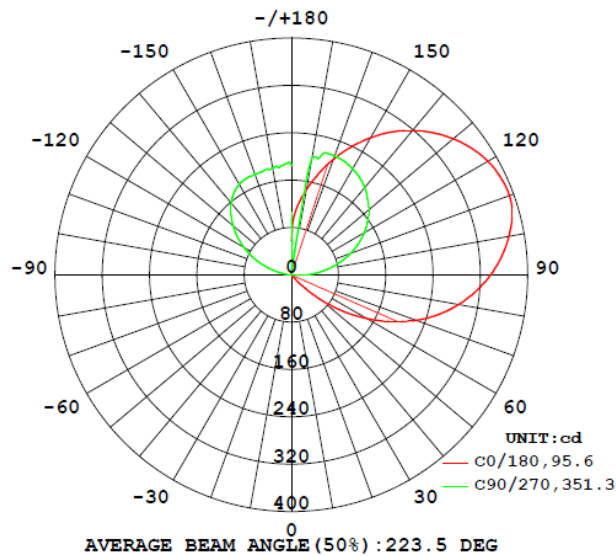
Photometric Measurements at 25°C – Distribution Method

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')
SLCH63127XXX								
S2507221 87-003	base-up	2540	91	81	0.4609	0.3923	0.2717	0.5203

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)
SLCH63127XXX							
S2507221 87-003	base-up	120.1	198.9	23.7	0.993	1297.3	54.7

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63127XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	0.7	0.6	0.8	0.9	1.0
5	0.7	1.3	3.8	2.1	1.0
10	0.7	8.2	7.7	3.6	1.1
15	0.6	15.6	11.9	4.9	0.9
20	0.6	24.1	16.8	6.4	0.8
25	0.7	34.0	22.7	8.4	0.7
30	0.8	45.7	29.9	10.8	0.7
35	1.0	59.4	38.4	13.4	0.6
40	1.3	75.5	48.4	16.2	0.6
45	27.4	93.9	60.5	19.3	0.5
50	67.0	114.9	74.7	23.1	0.5
55	108.0	138.4	91.2	27.7	0.5
60	147.9	164.2	110.9	33.6	0.4
65	187.0	193.0	132.6	41.7	0.4
70	224.7	224.5	157.2	53.3	0.8
75	258.4	255.5	185.4	69.4	1.6
80	287.9	283.9	213.2	90.5	2.7
85	314.1	308.9	239.2	114.8	7.2
90	337.1	330.1	262.4	138.0	22.7
95	356.8	347.2	282.4	160.3	43.7
100	373.5	360.8	298.9	181.3	65.3
105	386.8	371.2	311.9	200.1	86.5
110	392.5	378.1	321.5	216.6	106.6
115	390.7	381.6	328.1	230.4	125.4
120	384.0	381.6	331.8	241.8	142.4
125	372.7	378.6	332.5	250.2	158.0
130	357.7	372.5	330.4	256.0	171.0
135	339.6	363.5	325.9	258.6	182.6
140	318.9	351.9	317.5	259.3	193.1
145	294.9	337.5	308.0	258.5	201.1
150	267.5	320.5	297.1	255.8	207.3
155	238.2	301.1	283.8	250.8	211.9
160	207.7	279.3	265.0	244.1	214.1
165	176.6	245.1	241.9	235.5	213.4
170	146.3	169.2	169.0	215.4	199.9
175	115.7	85.8	40.9	36.4	0.4
180	43.9	0.0	95.5	110.7	93.7

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63127XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLCH63127XXX		
0-30	4.6	0.4
0-40	12.4	1.0
0-60	60.5	4.7
0-90	293.9	22.7
60-90	233.4	18.0
0-180	1297.3	100.0

Beam Angle

Total Beam Angle(°)

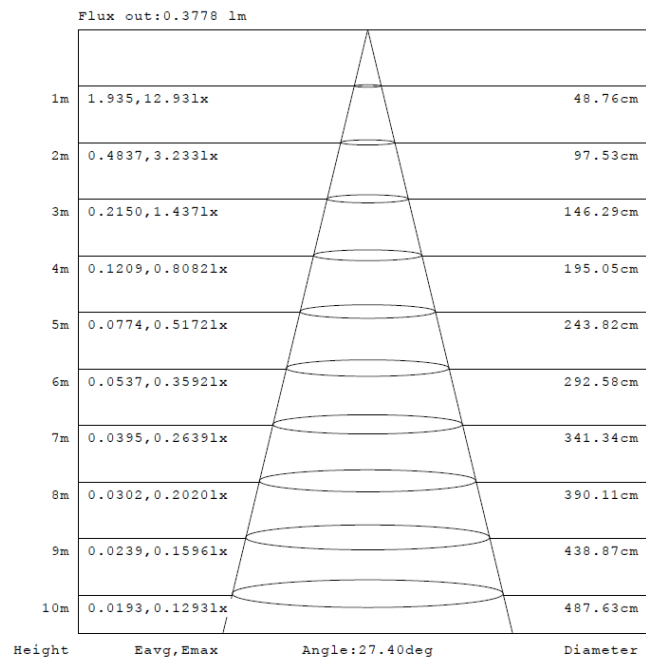
223.5

Illumination Plots

Model No.: SLCH63127XXX

Mount Height: 2.5 m

Illuminance - Cone of Light



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TEST REPORT

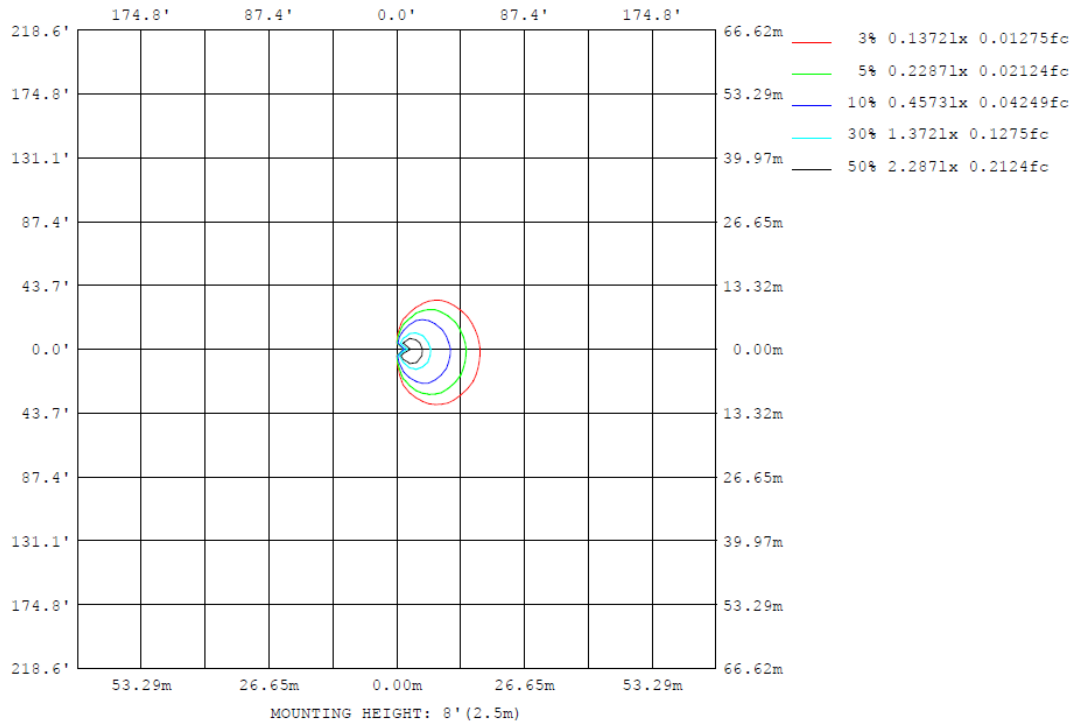
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63127XXX

Model No.: SLCH63127XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLCH63127XXX

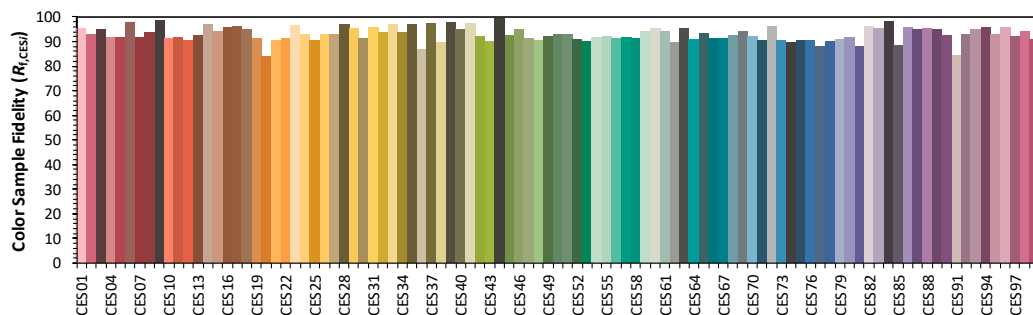
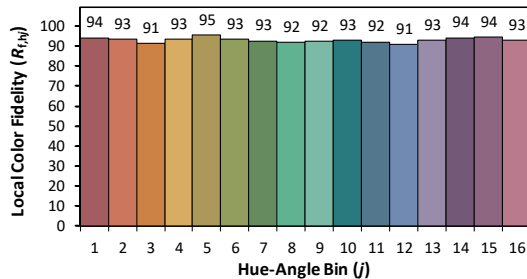
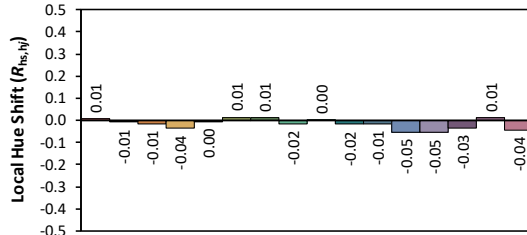
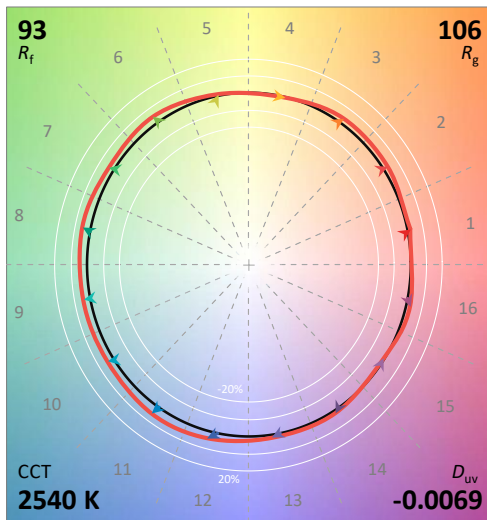
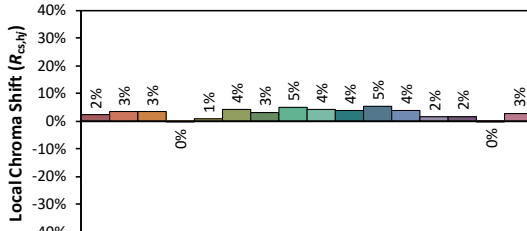
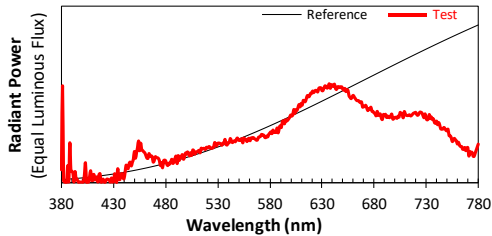
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/8/11

Model: SLCH63127XXX



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

x 0.4609
 y 0.3923
 u' 0.2717
 v' 0.5203

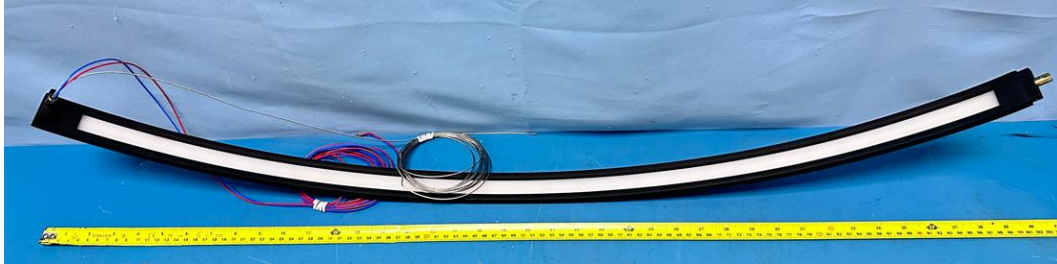
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 81

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

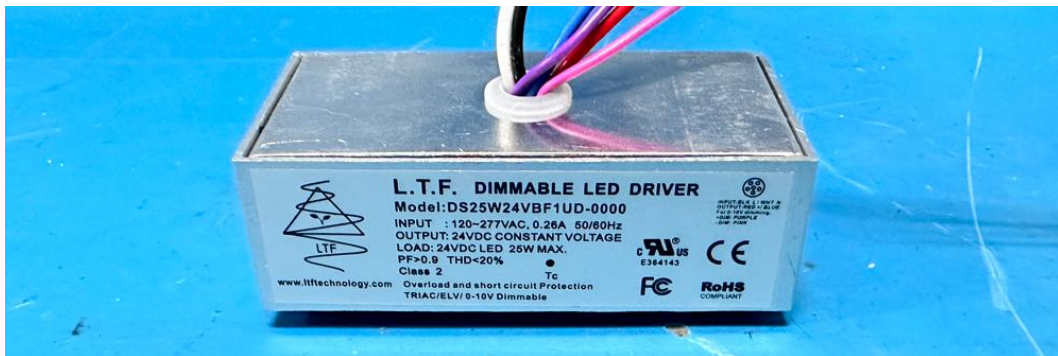
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TEST REPORT

PRODUCT PICTURE (not to scale)



External view of SLCH63127XXX



View of LED driver DS25W24VBF1UD-0000



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 *****