

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027068GZU-002

ISSUE DATE

02 December 2025

REVISION DATE

None

NUMBER OF PAGES

14

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

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Report No.: 251027068GZU-002

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. SLOCH77730XXX

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: QGZ251023107.
<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 SLOCH77730XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027068-002.
<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>	14 November 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:	SLOCH77730XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For SLOCH77730XXX

Criteria	Result
Total Lumen Output	2699.4 lm
Total Power	49.5 W
Luminaire Efficacy	54.6 lm/W
S/MH(C0/180)	1.25
S/MH(C90/270)	1.37
Correlated Color Temperature (CCT)	2960 K
Color Rendering Index (CRI)	94
R9	66
Chromaticity Coordinate (x)	0.4370
Chromaticity Coordinate (y)	0.3993
Chromaticity Coordinate (u')	0.2527
Chromaticity Coordinate (v')	0.5195

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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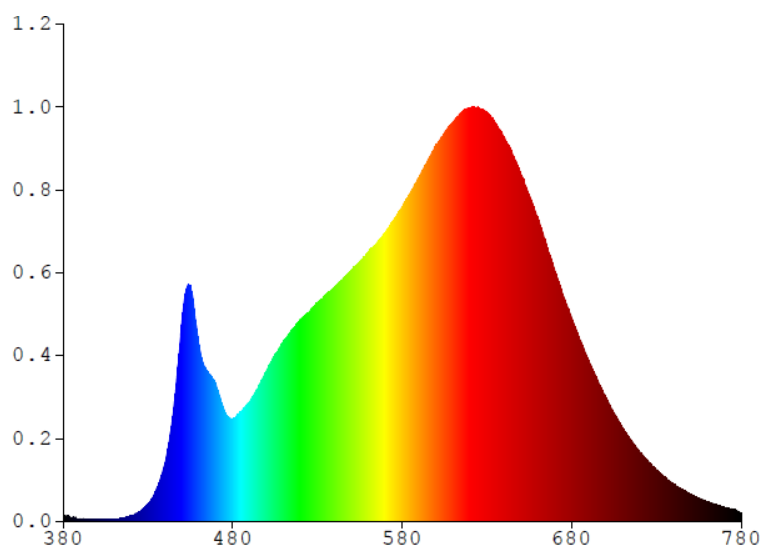
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For SLOCH77730XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	3.4236	480	52.8760	580	163.150	680	105.3900	780	4.1533
385	1.9688	485	56.7640	585	170.540	685	93.8590		
390	1.3610	490	62.0380	590	178.330	690	83.3070		
395	0.9302	495	69.3380	595	186.630	695	73.5910		
400	0.8515	500	77.9090	600	195.360	700	64.5970		
405	0.7772	505	86.3430	605	200.950	705	56.2280		
410	1.1296	510	93.3040	610	206.710	710	48.6000		
415	1.7001	515	98.6430	615	212.030	715	42.0560		
420	2.8387	520	104.9800	620	213.970	720	36.1700		
425	4.9807	525	108.4700	625	214.260	725	31.2370		
430	8.8967	530	113.3100	630	212.150	730	26.7030		
435	16.4820	535	117.6800	635	206.500	735	22.9140		
440	30.0600	540	121.2800	640	199.390	740	19.4010		
445	56.5420	545	125.6600	645	190.410	745	16.6670		
450	103.300	550	130.2000	650	179.900	750	14.1240		
455	121.730	555	134.6100	655	168.860	755	12.0410		
460	91.7450	560	139.6800	660	157.120	760	10.2690		
465	77.8940	565	143.9500	665	143.870	765	8.7699		
470	70.8020	570	149.5900	670	129.990	770	7.3836		
475	57.5370	575	156.2300	675	114.730	775	6.3026		



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77730XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

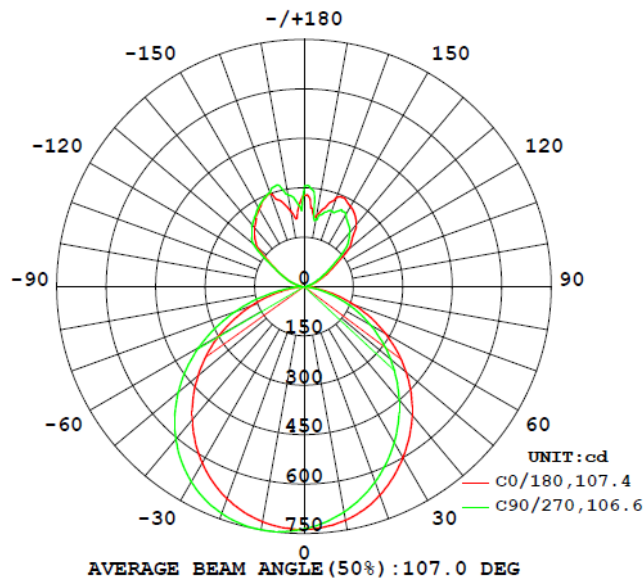
Photometric Measurements at 25°C – Distribution Method

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')
SLOCH77730XXX								
S2510270 68-002	base-up	2960	94	66	0.4370	0.3993	0.2527	0.5195

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)
SLOCH77730XXX							
S2510270 68-002	base-up	120.3	412.3	49.5	0.998	2699.4	54.6

Intensity (Candlepower) Summary at 25°C - Candelas



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77730XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	737.0	737.0	736.5	736.3	735.9
5	732.4	726.8	722.5	719.5	718.9
10	720.4	709.8	701.4	696.7	695.3
15	701.2	685.4	673.3	667.5	666.2
20	673.5	653.0	639.1	631.4	630.7
25	638.9	616.8	601.3	592.1	590.8
30	599.8	577.3	559.6	549.4	547.0
35	557.0	533.7	514.0	502.2	499.5
40	510.5	485.3	464.5	452.1	449.1
45	459.6	433.0	412.3	400.0	396.9
50	404.4	378.2	358.0	346.3	343.0
55	345.8	321.1	301.8	291.0	288.0
60	285.0	262.5	244.7	235.1	232.3
65	222.5	202.9	187.6	179.2	176.9
70	160.2	144.0	131.7	124.9	122.8
75	99.9	87.7	78.8	73.8	72.0
80	46.4	38.7	32.9	29.5	28.3
85	8.0	5.9	5.4	4.4	4.4
90	0.8	1.0	1.2	1.2	1.2
95	4.1	3.6	3.0	3.1	3.6
100	7.3	7.8	7.1	5.8	7.3
105	17.5	18.8	16.5	14.1	15.0
110	34.7	30.8	29.9	25.6	27.7
115	56.3	48.8	45.7	43.3	43.2
120	83.1	76.5	69.7	60.1	64.0
125	115.4	111.6	101.1	81.7	95.8
130	174.4	164.0	149.8	131.1	143.2
135	207.2	199.6	195.5	180.9	190.7
140	248.1	231.7	223.0	209.7	216.6
145	268.2	250.5	240.0	229.1	233.5
150	282.1	265.8	254.5	247.0	253.0
155	294.6	270.9	259.1	243.1	255.3
160	287.4	254.3	230.8	240.8	244.3
165	249.3	228.6	213.2	228.5	232.6
170	218.2	211.7	207.8	202.3	207.0
175	240.5	278.1	287.0	293.9	295.4
180	278.0	297.1	296.5	310.1	304.4

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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77730XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
SLOCH77730XXX		
0-30	567.7	21.0
0-40	924.6	34.3
0-60	1607.4	59.6
0-90	1969.2	73.0
60-90	361.8	13.4
0-180	2699.4	100.0

Beam Angle

Total Beam Angle(°)

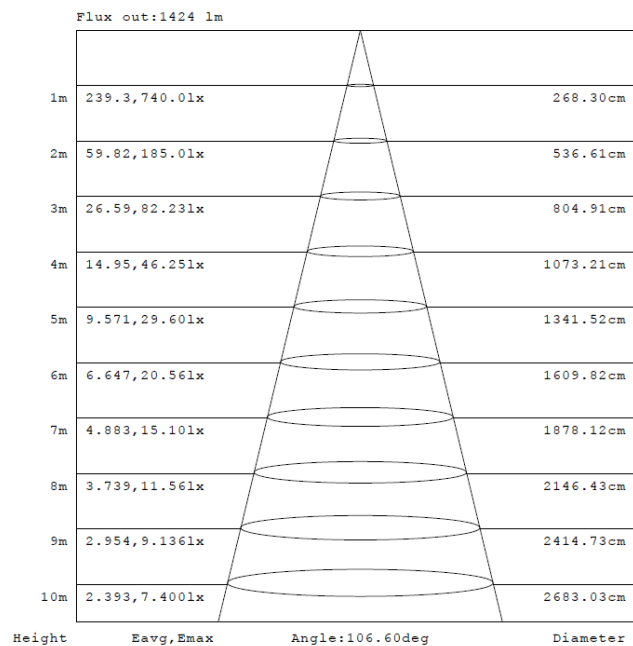
107.0

Illumination Plots

Model No.: SLOCH77730XXX

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

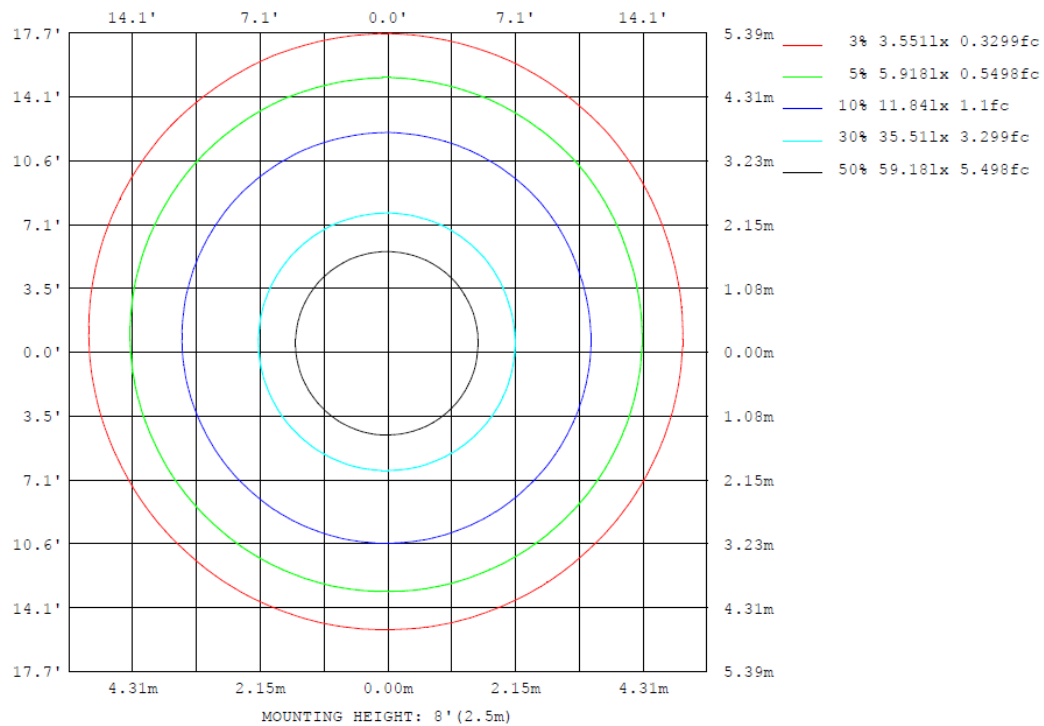
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77730XXX

Model No.: SLOCH77730XXX

Mount Height: 2.5 m

Isoillumination Plot



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TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For SLOCH77730XXX

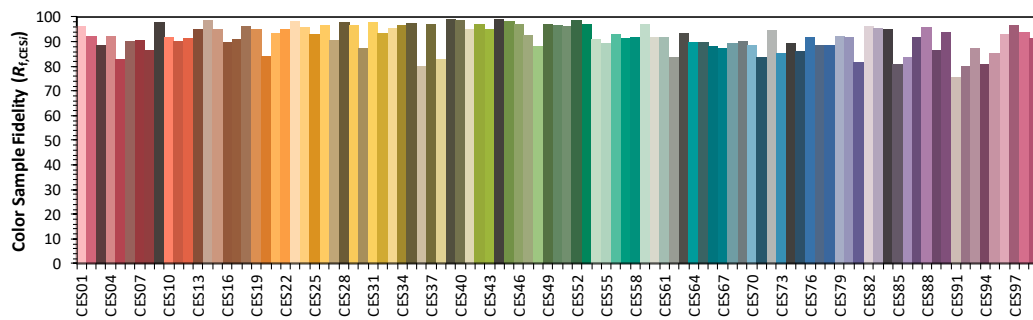
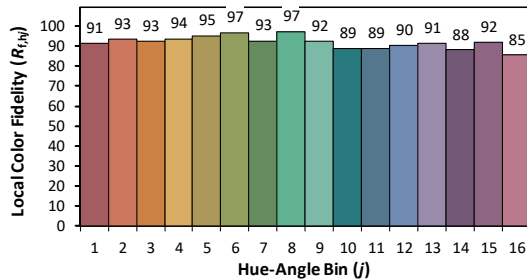
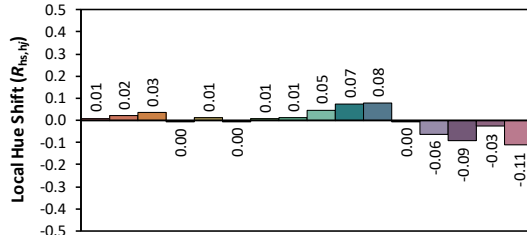
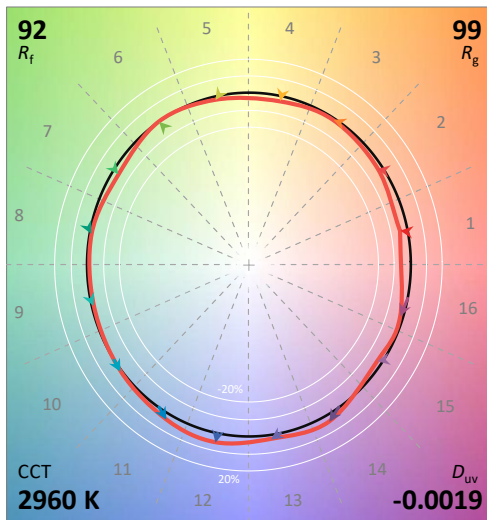
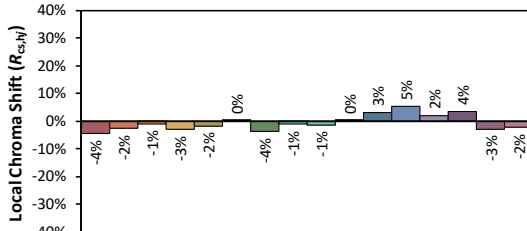
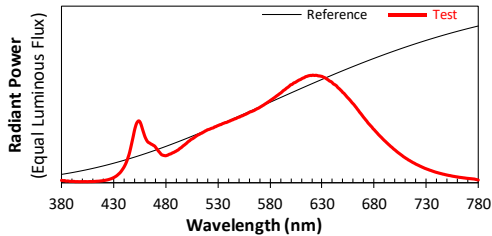
ANSI/IES TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/14

Model: SLOCH77730XXX



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

x 0.4370
 y 0.3993
 u' 0.2527
 v' 0.5195

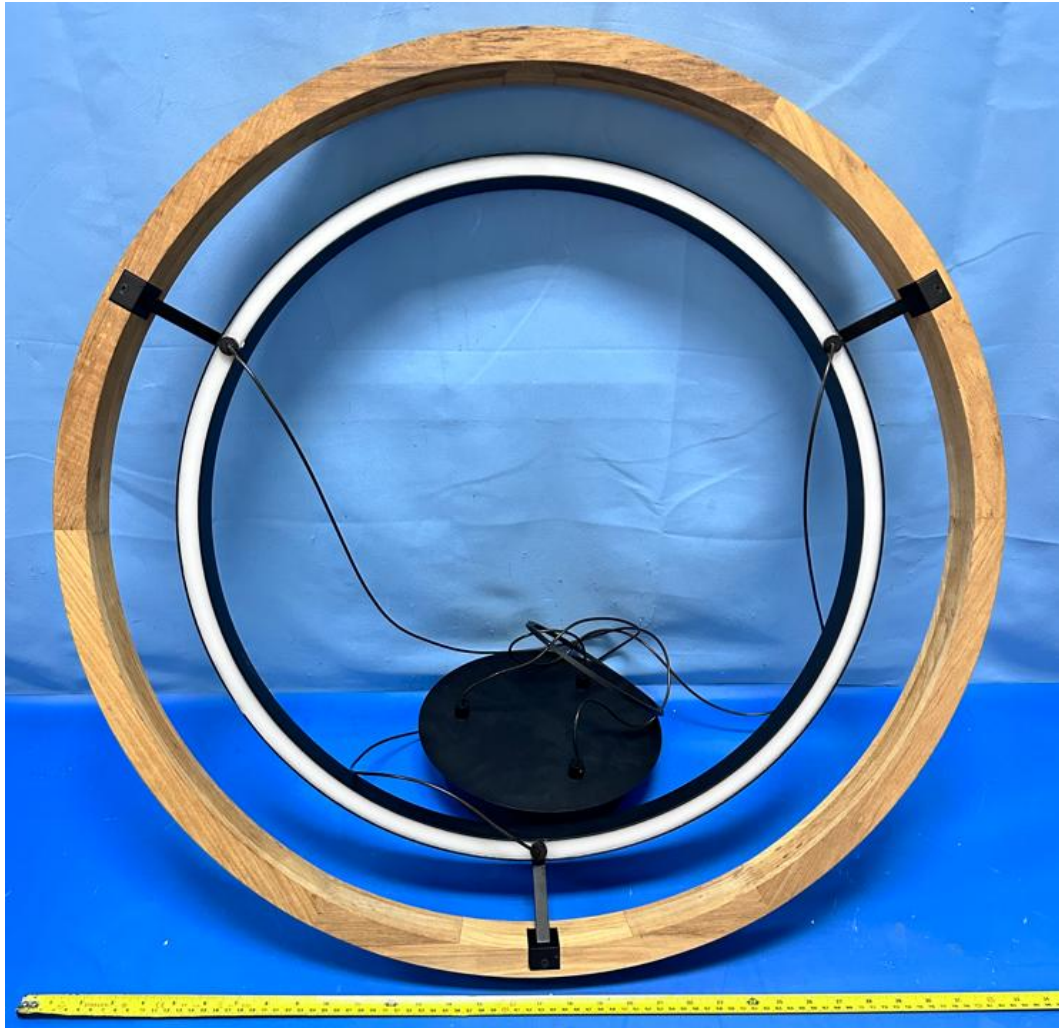
CIE 13.3-1995
(CRI)
 R_a 94
 R_g 66

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)

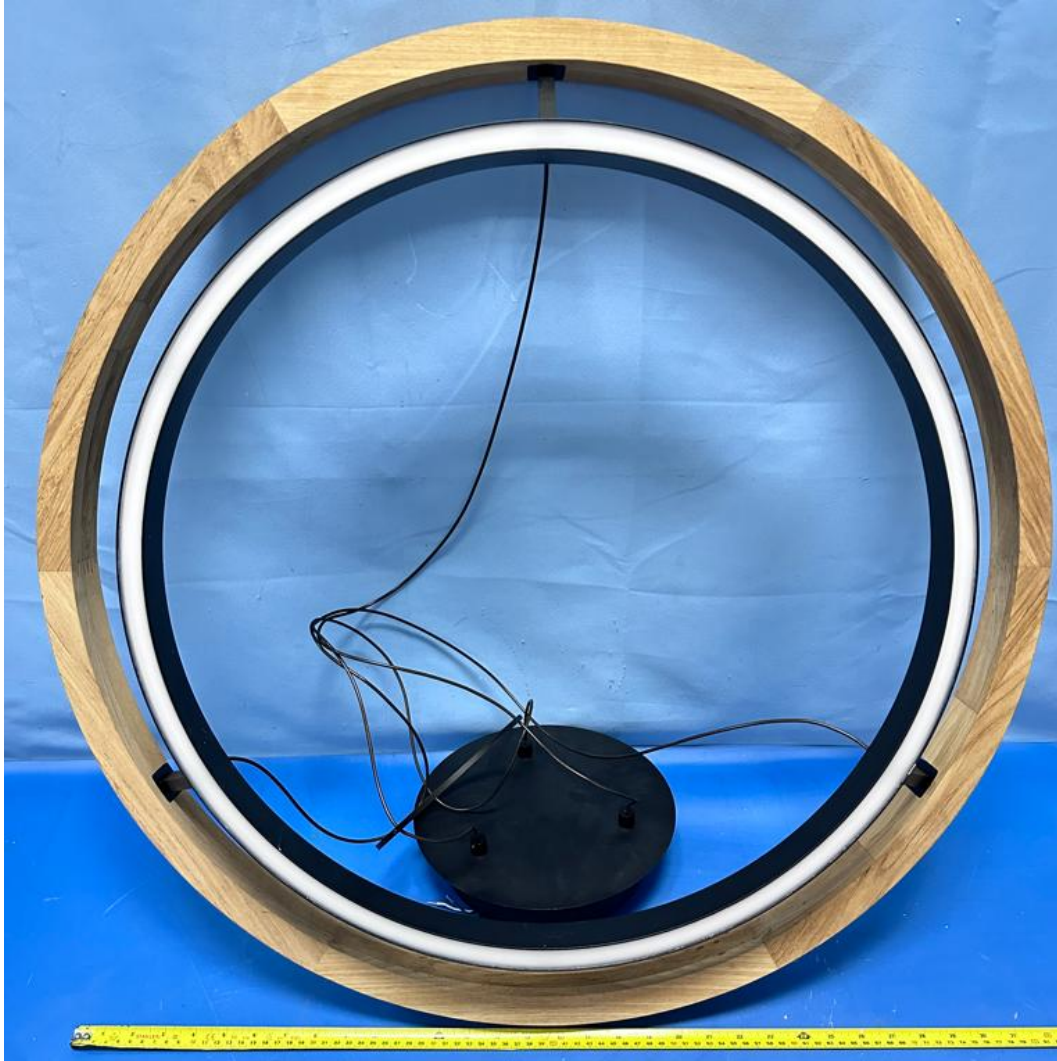


External view of SLOCH77730XXX

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TEST REPORT

PRODUCT PICTURE (not to scale)

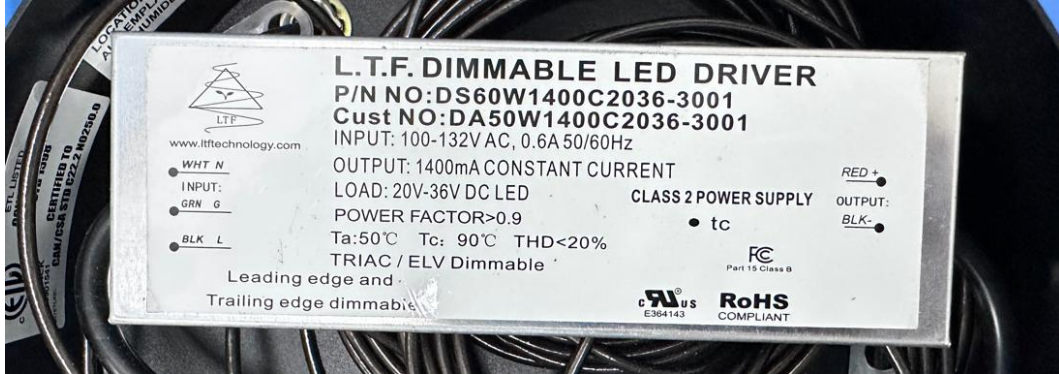


External view of SLOCH77730XXX

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TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver DA50W1400C2036-3001



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 *****