



8165 E Kaiser Blvd. Anaheim, CA 92808  
www.lightlaboratory.com

Report No: L112510203



**Report No:** L112510203  
**Amendment:** N/A

**Issue Date:** 11/7/2025  
**Revision Date:** N/A

**Report Prepared For:** Arktura  
966 Sandhill Ave., Carson CA 90746

**Model Number:** SGL-STR-3.5W-3500K-LES12IN

**Test:** Photometric/Electrical Test

**Standards Used:** Appropriate part or all test guidelines were used for test performed:

*IES LM79: 2008* Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products

*ANSI/IES LM79: 2019* Approved Methods for Optical and Electrical Measurements of Solid-State Lighting Products

*ANSI/NEMA C78.377: 2017* Specification of the Chromaticity of Solid State Lighting Products

*ANSI C82.77-10:2014:* Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

**Description of Sample:** Client submitted the sample. Received in working and undamaged condition. No modifications were necessary.

**Special Test Condition:** Fixture is tested with no special conditions.

**Date of Tests:** 11/7/25

**Seasoning of Sample:** No seasoning was performed in accordance with IESNA LM-79.

#### Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S3	6/21/26
HP Power Supply	6032A	PS-DC05-S2	--
Fluke Digital Thermometer	52K/J	MT-TP05	6/25/26
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

### General Information

<b>Manufacturer:</b>	Arktura
<b>Model Number:</b>	SGL-STR-3.5W-3500K-LES12IN
<b>Driver Model Number:</b>	N/A

### Photometric & Electrical Test Results

<b>Total Lumens:</b>	317.00
<b>Efficacy:</b>	80.84
<b>Input Voltage (VDC):</b>	24.00
<b>Input Current (Amp):</b>	0.1634
<b>Input Power (W):</b>	3.92
<b>Input Power Factor:</b>	1.0000
<b>Current ATHD (%):</b>	N/A

### Test Condition

<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	0:45
<b>Total Operating Time (Hours):</b>	1:05



FIG. 1 LUMINAIRE



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## Test Methods

### Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

### Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

### Disclaimers:

The results related only to the samples as received and tested. This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

Report Prepared by :                     JG                    

Test Report Reviewed by:  
Jason Gee

*\*Attached are photometric data reports.*



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## Addendum A

### Report Amendment Log

Date	Reference No.	Revision Description	Revision By



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## Photometric Test Report

### IES INDOOR REPORT

PHOTOMETRIC FILENAME : L112510203.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L112510203  
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)  
[ISSUE DATE] 11/7/2025  
[MANUFAC] Arktura  
[LUMCAT] SGL-STR-3.5W-3500K-LES12IN  
[LUMINAIRE] Arktura SoftGrid Light Straight 1ft LES section, 3.5WFT, 3500K  
[BALLASTCAT] N/A  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[INPUT] 24VDC  
[TEST PROCEDURE] IESNA:LM-79-19

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	317
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	3.92
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	2.06 ft
Luminous Width (90-270)	0.35 ft
Luminous Height	0.04 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1386	1368	1401
55	1316	1329	1364
65	1220	1232	1304
75	1021	1108	1212
85	700	987	1187

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : L112510203.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
<b>0</b>	102	102	102	102	102	102	102	102	102
<b>5</b>	102	102	102	102	102	102	102	102	102
<b>10</b>	100	101	101	101	101	101	101	100	100
<b>15</b>	98	99	99	100	100	99	99	97	98
<b>20</b>	95	96	96	98	97	97	96	94	94
<b>25</b>	91	92	93	94	94	93	92	90	90
<b>30</b>	86	88	88	90	90	89	88	85	85
<b>35</b>	80	82	83	86	85	84	83	80	79
<b>40</b>	74	76	78	80	80	79	77	74	73
<b>45</b>	67	70	71	74	74	72	71	67	67
<b>50</b>	60	63	65	68	68	66	65	60	59
<b>55</b>	52	56	58	61	61	59	57	53	52
<b>60</b>	44	48	50	54	53	51	50	45	44
<b>65</b>	36	40	42	46	46	43	42	37	36
<b>70</b>	27	32	34	38	38	36	34	29	27
<b>75</b>	19	24	26	30	30	28	26	20	18
<b>80</b>	11	16	19	23	22	20	18	13	11
<b>85</b>	5	9	12	15	16	14	11	7	4
<b>90</b>	0	0	0	0	0	0	0	0	0

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L112510203.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	37.60	N.A.	11.90
0-30	80.17	N.A.	25.30
0-40	132.01	N.A.	41.70
0-60	237.71	N.A.	75.10
0-80	305.69	N.A.	96.60
0-90	316.55	N.A.	100.00
10-90	306.85	N.A.	96.90
20-40	94.41	N.A.	29.80
20-50	149.09	N.A.	47.10
40-70	146.79	N.A.	46.40
60-80	67.98	N.A.	21.50
70-80	26.89	N.A.	8.50
80-90	10.86	N.A.	3.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	316.55	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	9.69
10-20	27.91
20-30	42.57
30-40	51.84
40-50	54.68
50-60	51.02
60-70	41.08
70-80	26.89
80-90	10.86
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

**IES INDOOR REPORT**  
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	102	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	73	80	75	71	77	73	69	67
3	88	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	23



**IES INDOOR REPORT**  
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**UGR TABLE - CORRECTED**

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size      UGR Viewed Crosswise

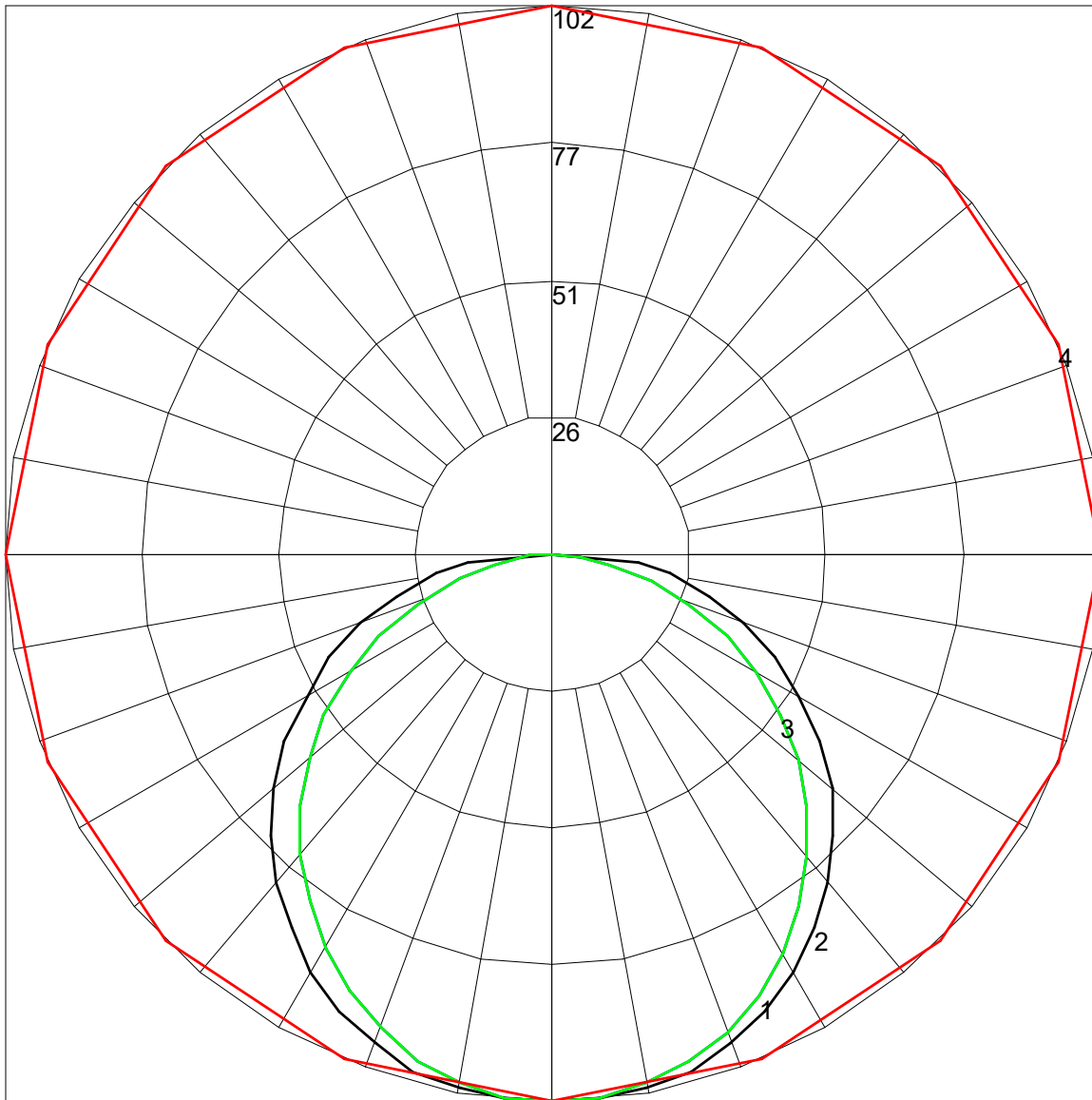
X=2H	Y=2H	12.7	14.4	13.0	14.7	15.0	13.6	15.3	14.0	15.6	16.0
	3H	14.4	15.9	14.7	16.2	16.6	15.8	17.4	16.2	17.7	18.0
	4H	15.0	16.4	15.4	16.8	17.1	16.8	18.2	17.2	18.6	18.9
	6H	15.4	16.7	15.8	17.1	17.5	17.6	19.0	18.0	19.3	19.7
	8H	15.5	16.8	15.9	17.1	17.5	18.0	19.3	18.4	19.7	20.1
	12H	15.5	16.8	15.9	17.1	17.6	18.4	19.7	18.9	20.1	20.5

UGR Viewed Endwise

4H	2H	13.5	14.9	13.9	15.2	15.6	14.2	15.6	14.6	16.0	16.4
	3H	15.4	16.6	15.8	17.0	17.4	16.6	17.8	17.0	18.2	18.6
	4H	16.2	17.3	16.6	17.7	18.1	17.7	18.8	18.2	19.2	19.7
	6H	16.7	17.7	17.2	18.1	18.6	18.8	19.7	19.2	20.2	20.6
	8H	16.9	17.8	17.3	18.2	18.7	19.2	20.2	19.7	20.6	21.1
	12H	17.0	17.8	17.5	18.3	18.8	19.8	20.6	20.2	21.1	21.5
8H	4H	16.7	17.6	17.1	18.0	18.5	18.0	18.9	18.4	19.4	19.8
	6H	17.4	18.2	17.9	18.7	19.1	19.2	20.0	19.7	20.5	20.9
	8H	17.6	18.3	18.1	18.8	19.3	19.8	20.5	20.3	21.0	21.5
	12H	17.8	18.5	18.3	18.9	19.5	20.5	21.1	21.0	21.6	22.1
12H	4H	16.8	17.6	17.3	18.1	18.6	18.0	18.9	18.5	19.3	19.8
	6H	17.6	18.3	18.1	18.7	19.3	19.3	20.0	19.8	20.4	21.0
	8H	17.9	18.5	18.4	19.0	19.6	19.9	20.6	20.4	21.0	21.6

Maximum UGR = 22.1

POLAR GRAPH



Maximum Candela = 102 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 3 - Vertical Plane Through Horizontal Angles (0 - 180)  
# 4 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)