



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

Report No: L112510202



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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-LES24IN

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

Manufacturer:	Arktura
Model Number:	SGL-STR-3.5W-3500K-LES24IN
Driver Model Number:	N/A

Photometric & Electrical Test Results

Total Lumens:	641.00
Efficacy:	82.65
Input Voltage (VDC):	24.00
Input Current (Amp):	0.3232
Input Power (W):	7.76
Input Power Factor:	1.0000
Current ATHD (%):	N/A

Test Condition

Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:50
Total Operating Time (Hours):	1:10



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 : L112510202.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L112510202

[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)

[ISSUEDATE] 11/7/2025

[MANUFAC] Arktura

[LUMCAT] SGL-STR-3.5W-3500K-LES24IN

[LUMINAIRE] Arktura SoftGrid Light Straight 2ft 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	641
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	83
Total Luminaire Watts	7.76
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	2.04 ft
Luminous Width (90-270)	0.27 ft
Luminous Height	0.04 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3602	3530	3583
55	3411	3347	3456
65	3103	3094	3261
75	2601	2719	3012
85	1464	2282	2745

IES INDOOR REPORT
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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>
0	206	206	206	206	206	206	206	206	206
5	205	206	206	207	206	206	206	205	205
10	202	203	204	205	205	204	204	202	202
15	197	199	200	202	201	201	200	197	197
20	190	193	194	197	196	195	195	190	190
25	182	185	187	190	190	188	188	182	182
30	171	176	178	182	181	180	179	172	172
35	160	165	168	173	172	170	169	162	161
40	147	153	156	162	162	159	157	150	148
45	133	140	143	150	149	147	145	136	135
50	119	126	130	137	137	134	132	122	120
55	103	111	115	123	123	120	117	108	105
60	87	96	100	109	108	105	102	92	89
65	70	79	84	93	93	89	87	76	73
70	53	63	68	78	78	74	71	59	56
75	37	47	52	62	62	58	54	42	39
80	21	31	37	46	47	43	39	27	22
85	8	16	24	32	33	30	25	15	8
90	0	0	0	0	0	0	0	0	0

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	75.91	N.A.	11.80
0-30	161.85	N.A.	25.30
0-40	266.57	N.A.	41.60
0-60	479.95	N.A.	74.90
0-80	618.26	N.A.	96.50
0-90	640.64	N.A.	100.00
10-90	621.07	N.A.	96.90
20-40	190.65	N.A.	29.80
20-50	301.08	N.A.	47.00
40-70	296.68	N.A.	46.30
60-80	138.31	N.A.	21.60
70-80	55.01	N.A.	8.60
80-90	22.38	N.A.	3.50
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	640.64	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	19.57
10-20	56.34
20-30	85.94
30-40	104.72
40-50	110.43
50-60	102.96
60-70	83.30
70-80	55.01
80-90	22.38
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

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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	72	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	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	22

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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	15.8	17.5	16.1	17.8	18.1	17.0	18.6	17.3	19.0	19.3
	3H	17.4	18.9	17.8	19.2	19.6	19.2	20.7	19.5	21.0	21.4
	4H	18.0	19.4	18.4	19.8	20.1	20.1	21.6	20.5	21.9	22.3
	6H	18.3	19.7	18.7	20.0	20.4	21.1	22.4	21.5	22.8	23.2
	8H	18.4	19.7	18.8	20.1	20.5	21.5	22.8	21.9	23.1	23.5
	12H	18.4	19.7	18.9	20.0	20.5	21.9	23.1	22.3	23.5	23.9

UGR Viewed Endwise

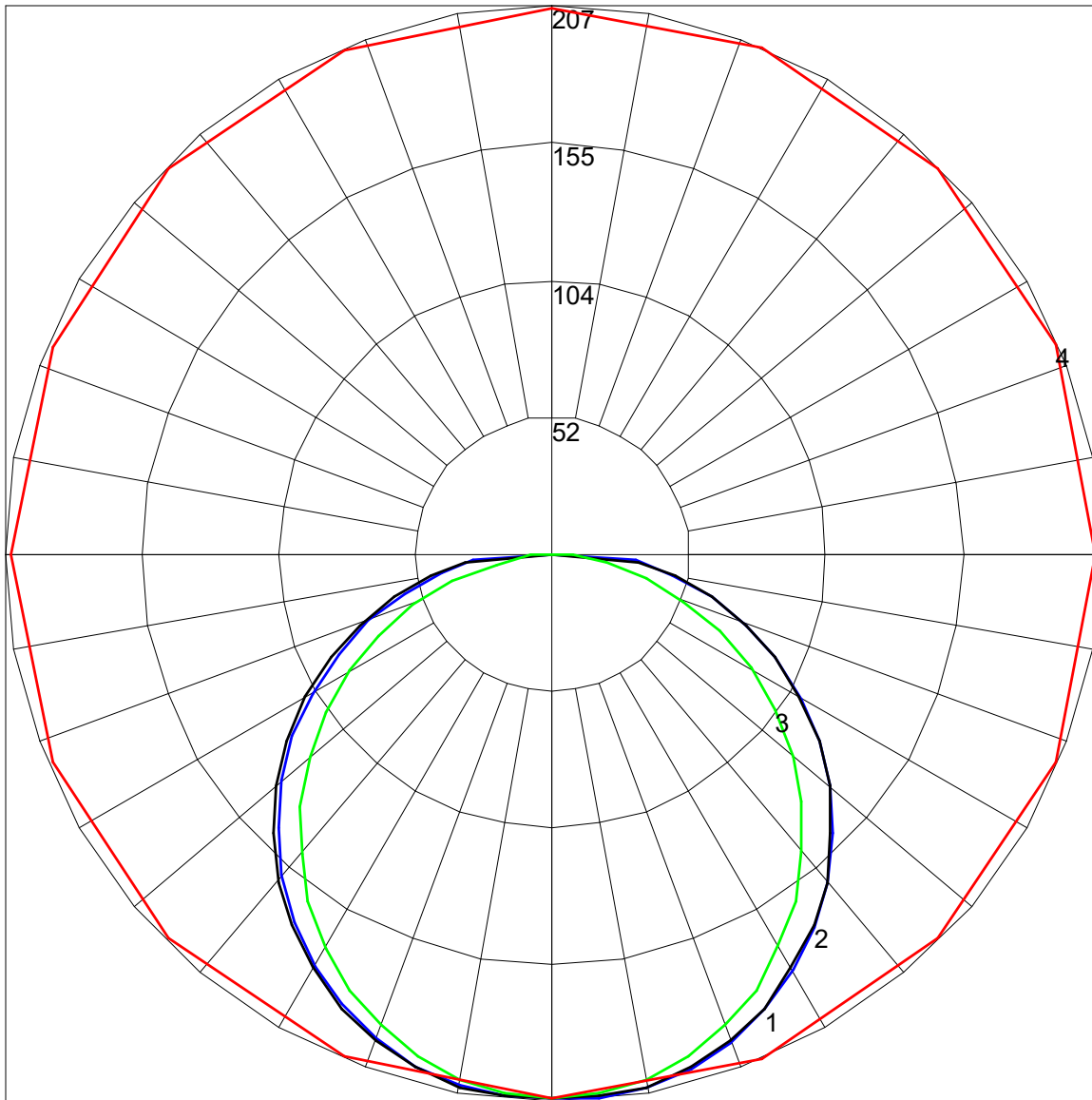
4H	2H	16.6	18.0	17.0	18.3	18.7	17.5	19.0	17.9	19.3	19.7
	3H	18.4	19.7	18.8	20.1	20.5	19.9	21.2	20.4	21.6	22.0
	4H	19.2	20.3	19.6	20.7	21.1	21.1	22.2	21.5	22.6	23.0
	6H	19.7	20.6	20.1	21.1	21.5	22.1	23.1	22.6	23.6	24.0
	8H	19.8	20.7	20.3	21.2	21.6	22.7	23.6	23.1	24.0	24.5
	12H	19.9	20.7	20.3	21.2	21.6	23.2	24.0	23.7	24.5	25.0

8H	4H	19.7	20.6	20.1	21.0	21.5	21.4	22.3	21.8	22.7	23.2
	6H	20.3	21.1	20.8	21.6	22.1	22.6	23.4	23.1	23.8	24.3
	8H	20.5	21.2	21.0	21.7	22.2	23.2	23.9	23.7	24.4	24.9
	12H	20.7	21.3	21.2	21.8	22.4	23.9	24.5	24.4	25.0	25.5

12H	4H	19.8	20.6	20.3	21.1	21.6	21.4	22.2	21.8	22.7	23.1
	6H	20.5	21.2	21.0	21.7	22.2	22.6	23.3	23.1	23.8	24.3
	8H	20.8	21.4	21.3	21.9	22.5	23.3	23.9	23.8	24.4	25.0

Maximum UGR = 25.5

POLAR GRAPH



Maximum Candela = 207 Located At Horizontal Angle = 67.5, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (67.5 - 247.5) (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 (5) (Through Max. Cd.)