

Test Report

Report Number: L25032

Date: Nov 5, 2025

Issued by:

Dialight Optics Laboratory
1501 Route 34 South, Farmingdale, NJ 07727

Test of one Area Light

Unit manufacturer: Dialight Corporation
Unit model number: ALU7NC2BDNNNGN

Issued to:

Dialight Corporation
1501 Route 34 South, Farmingdale, NJ 07727

Tests performed: Photometric characterization and temperature measurement per the described standards.

Dates of test: October 31, 2025 through November 3, 2025

Standards used: All tests are performed in accordance with procedures and guidelines prescribed by the American National Standards Institute (ANSI) or Illuminating Engineering Society of North America (IES):

- IES LM-79:2019: Optical and Electrical Measurements of Solid-State Lighting Products
- ANSI/UL 1598:2008: Underwriters Laboratories Inc. Standard for Safety: Luminaires

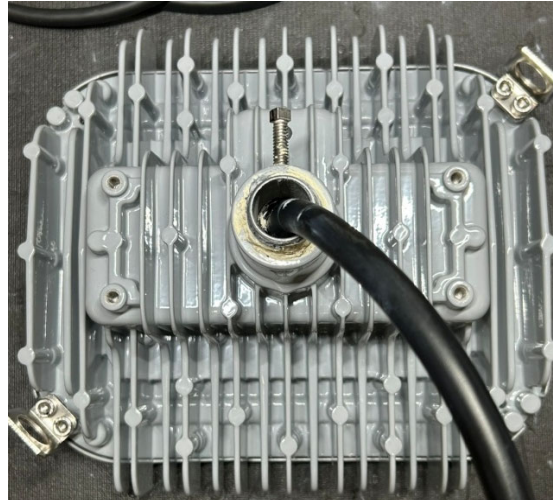
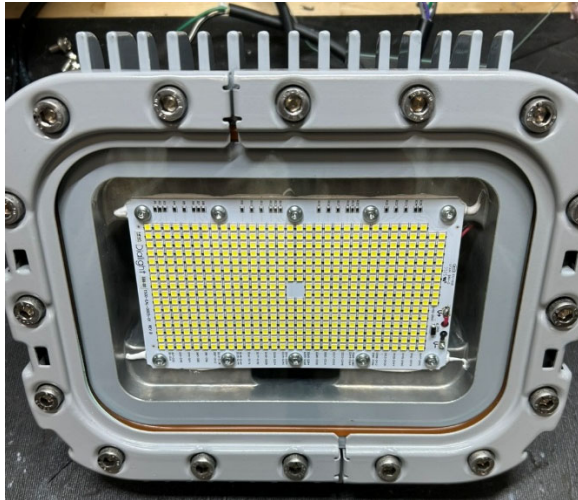
Description of sample:

Sample Number: L25032
Manufacturer: Dialight Corporation
Product Name: Area Light 13K
Description: Area Light
Model Number: ALU7NC2BDNNNGN

Report Summary

Sample number L25032
Dialight unit model number ALU7NC2BDNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	13189 (lumens)	13399 (lumens)
Electrical Power:	75.9 (W)	75.7 (W)
Luminous Efficacy:	173.8 (lumens/W)	177 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	75.9 (W)
	Power Factor (120VAC):	0.9968
	Current ATHD % (120VAC):	6.98
Secondary Voltage:	Input Power (277VAC):	74.0 (W)
	Power Factor (277VAC):	0.9859
	Current ATHD % (277VAC):	4.72

Color Measurements:

Correlated Color Temperature (CCT):	4975 (K)
Color Rendering Index (CRI):	81.82
Chromaticity Coordinate (x):	0.346
Chromaticity Coordinate (y):	0.357
Chromaticity Coordinate (u')	0.210
Chromaticity Coordinate (v')	0.487
DUV:	0.0021

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25032.

Dialight unit model number ALU7NC2BDNNGN

Test Conditions:

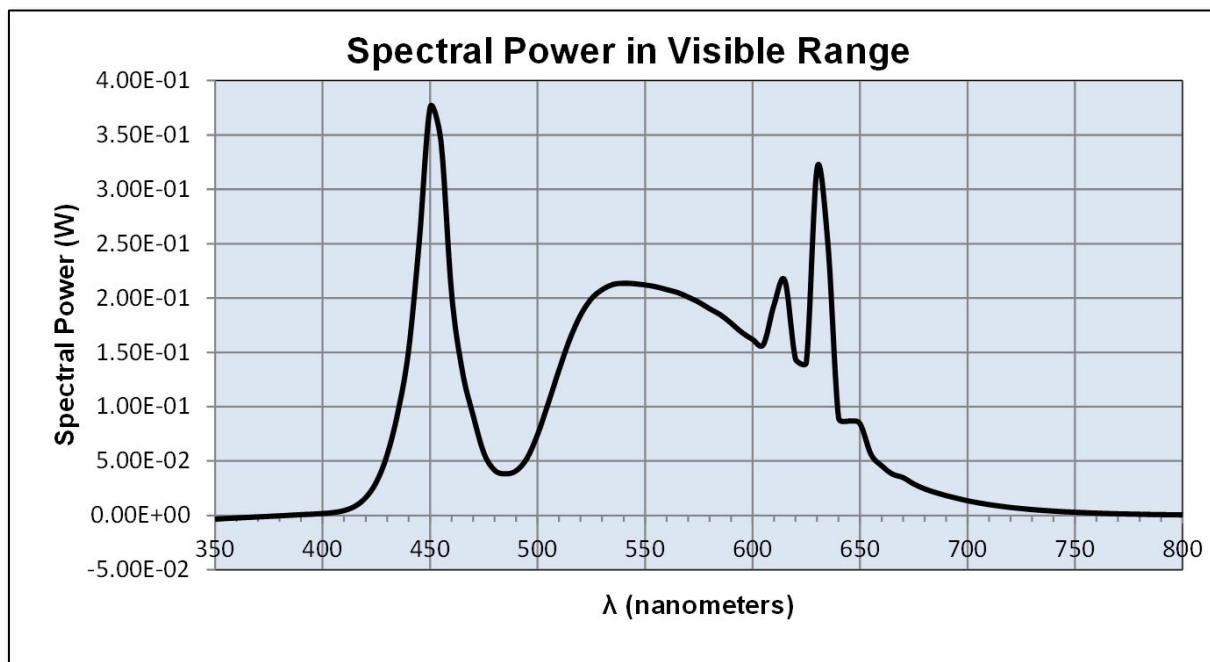
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 120.7 (VAC)
Input Current: 0.631 (A)
Input Power: 75.9 (W)
Input Power Factor: 0.9968
Current ATHD: 6.98 (%)

Photometric measurements:

Luminous Flux: 13189.3 (lumens)
Luminous Efficacy: 173.8 (lumens/W)
Correlated Color Temperature (CCT): 4975 (K)
CRI -Ra: 81.82
CRI -R9: 39.62
DUV: 0.0021
CIE Coordinate (x): 0.346
CIE Coordinate (y): 0.357
CIE Coordinate (u'): 0.210
CIE Coordinate (v'): 0.487
TM30_Rf: 80.2
TM30_Rg: 100.3
TM30_Rcs_hue1: -8.91 %



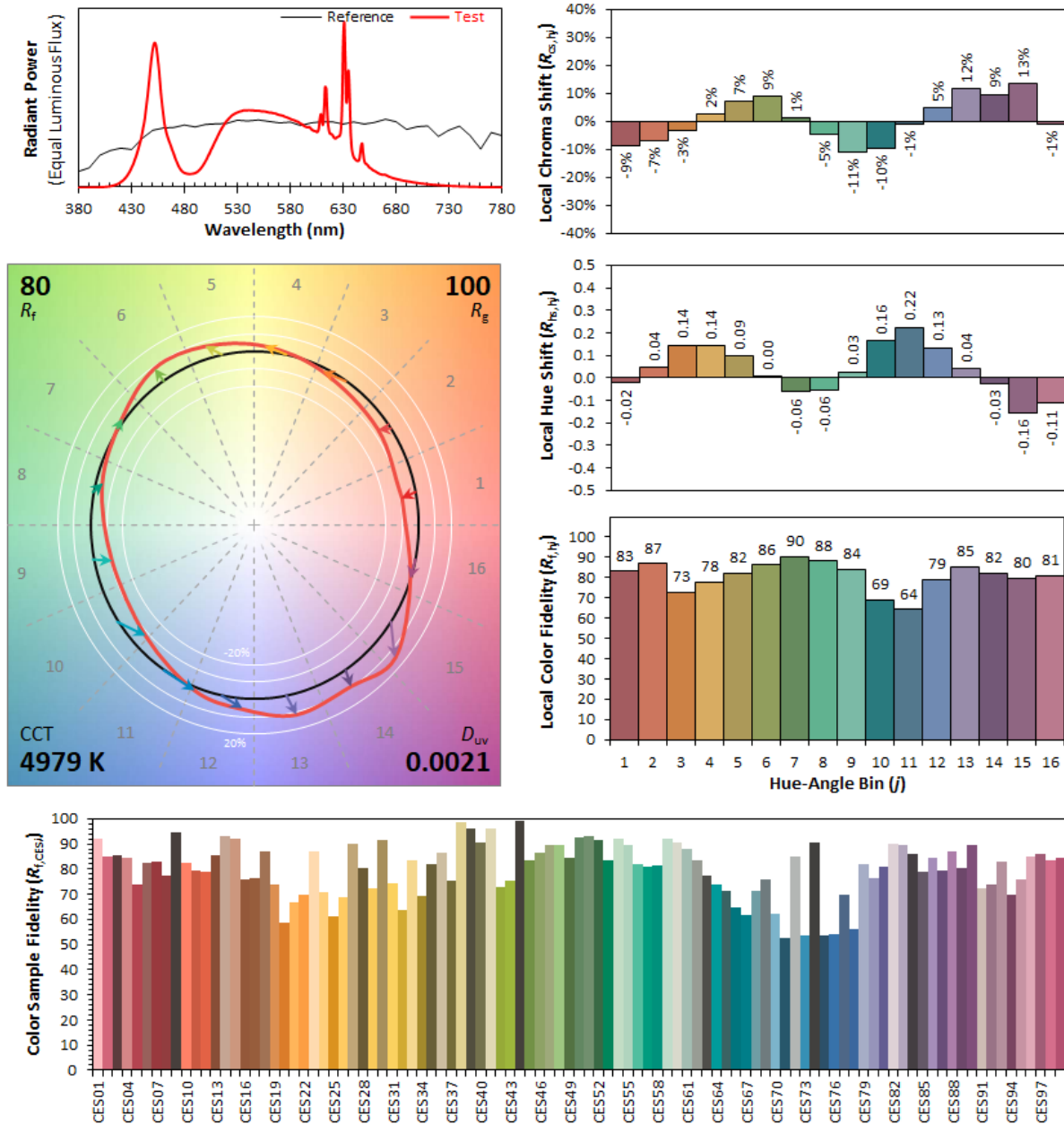
Test Results: Integrating Sphere

Results continued from previous page.

Tabulated Spectral Power in Visible Range:

$\lambda(\text{nm})$	(W/nm)	$\lambda(\text{nm})$	(W/nm)	$\lambda(\text{nm})$	(W/nm)	$\lambda(\text{nm})$	(W/nm)
350	-0.00343	490	0.04105	630	0.31967	770	0.00156
355	-0.00274	495	0.05240	635	0.25036	775	0.00134
360	-0.00229	500	0.07454	640	0.08951	780	0.00115
365	-0.00176	505	0.10353	645	0.08694	785	0.00096
370	-0.00129	510	0.13413	650	0.08429	790	0.00080
375	-0.00084	515	0.16242	655	0.05645	795	0.00068
380	-0.00034	520	0.18436	660	0.04575	800	0.00056
385	0.00026	525	0.19936	665	0.03815		
390	0.00079	530	0.20764	670	0.03486		
395	0.00119	535	0.21248	675	0.02895		
400	0.00181	540	0.21359	680	0.02451		
405	0.00268	545	0.21319	685	0.02111		
410	0.00451	550	0.21208	690	0.01824		
415	0.00847	555	0.21039	695	0.01583		
420	0.01633	560	0.20778	700	0.01349		
425	0.03073	565	0.20515	705	0.01163		
430	0.05571	570	0.20087	710	0.00999		
435	0.09486	575	0.19615	715	0.00861		
440	0.15197	580	0.19012	720	0.00738		
445	0.25315	585	0.18461	725	0.00636		
450	0.37544	590	0.17688	730	0.00545		
455	0.34459	595	0.16837	735	0.00470		
460	0.20407	600	0.16191	740	0.00401		
465	0.13272	605	0.15711	745	0.00343		
470	0.09199	610	0.19399	750	0.00297		
475	0.05753	615	0.21603	755	0.00254		
480	0.04156	620	0.14367	760	0.00214		
485	0.03834	625	0.14061	765	0.00183		

IES TM-30-18 Color Rendition Report



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

x 0.3461
 y 0.3567
 u' 0.2101
 v' 0.4873

CIE 13.3-1995
(CRI)

R_a 82
 R_g 39

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

Test Results: Goniometer

Results include unit flux, distribution, efficacy, and electrical power for sample number L25032.

Dialight unit model number ALU7NC2BDNNGN

Electrical Measurements:

Input Voltage: 120.5 (VAC)
Input current: 0.63 (A)
Input Power: 75.71 (W)
Power Factor: 0.9963

Photometric measurements:

Absolute Luminous Flux: 13399.1 (lumens)
Luminous Efficacy: 177.0 (lumens/W)

BUG Rating: B3 - U0 - G1

Photometric Distribution Summary:

Candlepower Summary

H/V	0.00	22.50	45.00	67.50	90.00	Lumens
0.00	4796	4796	4796	4796	4796	
5.00	4784	4786	4786	4794	4786	486
15.00	4638	4644	4641	4644	4638	1315
25.00	4355	4355	4351	4356	4352	2015
35.00	3929	3930	3925	3925	3919	2465
45.00	3349	3352	3345	3343	3345	2592
55.00	2603	2600	2595	2599	2601	2334
65.00	1676	1676	1675	1667	1662	1658
75.00	412	458	551	567	550	518
85.00	8	7	7	9	12	5
90.00	1	1	1	2	1	

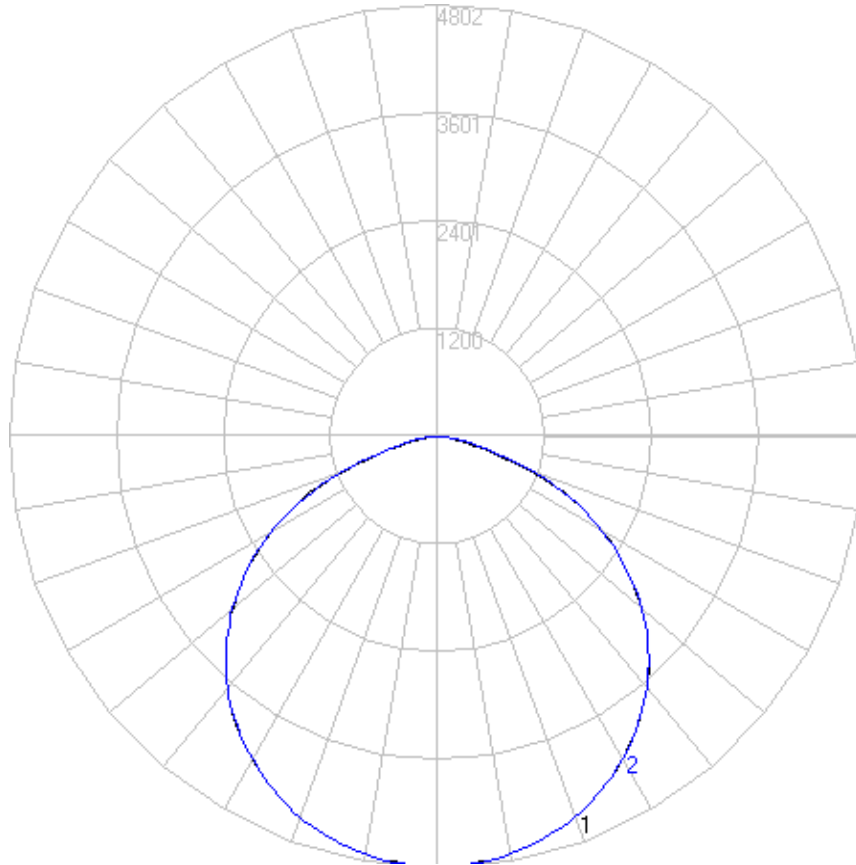
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	3770.26	28.19	28.19
0 to 40	6224.41	46.55	46.55
0 to 60	11122.63	83.18	83.18
0 to 90	13372.17	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	13372.17	100.00	100.00

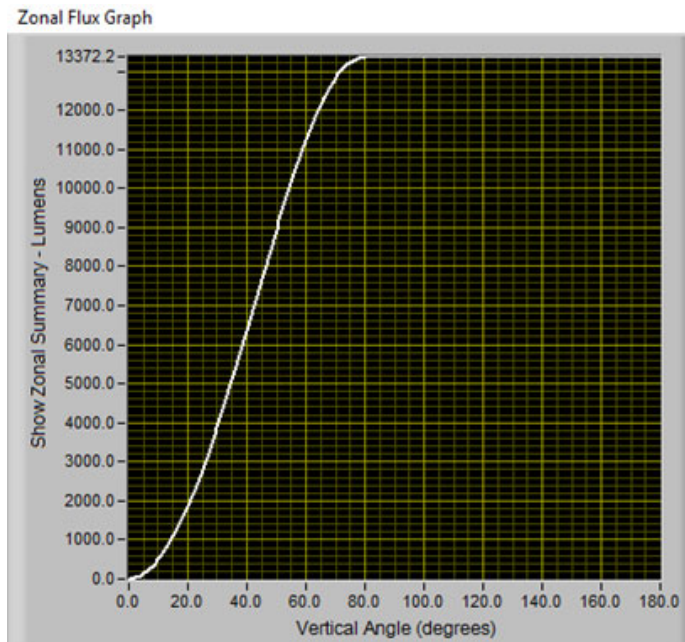
Test Results: Goniometer

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Polar Plot:



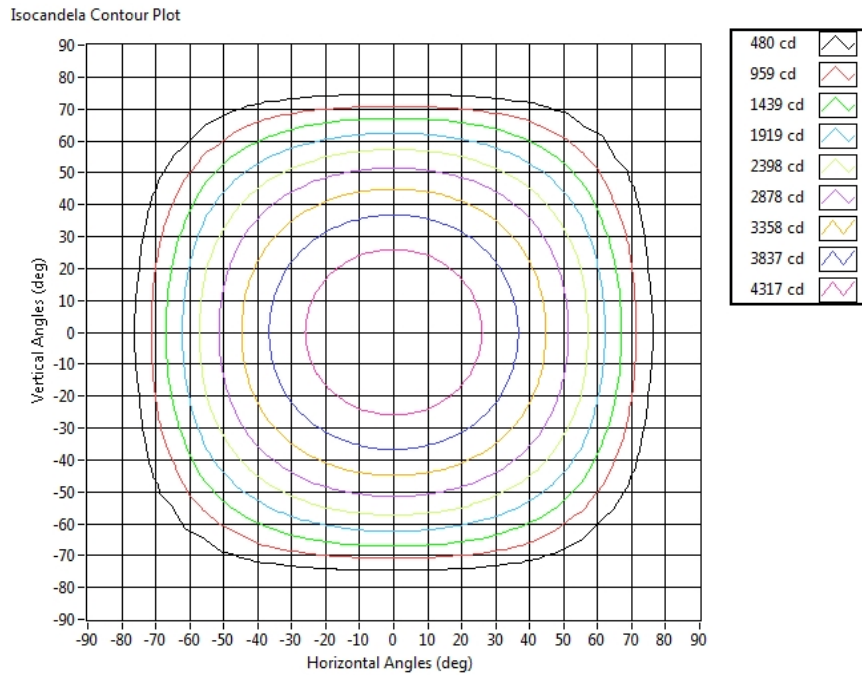
Zonal Flux:



Test Results: Goniometer

Results continued from previous page.

Illuminance Plot:



Illuminance-Cone of Light:

Mounting Height (ft)	Beam Cone Width (ft)	Orthogonal Beam Cone Width (ft)	Projected Illuminance (fc)
2	6.31	6.31	1198.9
4	12.63	12.62	299.7
6	18.94	18.93	133.2
8	25.25	25.24	74.9
10	31.57	31.55	48.0
12	37.88	37.86	33.3
14	44.19	44.17	24.5
16	50.50	50.48	18.7
18	56.82	56.79	14.8
20	63.13	63.10	12.0

Equipment Used:

Equipment Name	Model Number
Omega TC	DPI8
Type-C Moving Mirror Goniometer	6240T
Elgar AC Power Supply	CW1251P
Sorensen DC Power Supply	XHR150-7
Fluke 8808A Digit Multimeter	8808A
Step-Up Transformer	
Omega TC Meter	Dpi8-C24
Xitron Power Analyzer	XT2640
Omega Thermocouple	5TC-TT-K
Fluke 971 Humidity Meter	971
GwINSTEK DC Power Supply	GEP172679
Omega TC	TC-08
Labshere 2M sphere	Illumia Plus 2600-195
Labshere Controller	PM-150-140
Labshere Spectrometer- CDS 2600 Spectrometer	CDS-2600
Xitron Power Analyzer	XT2640
LPS-525 DC Power Supply	LPS-525
YOKOGAWA Digital Power Meter	WT310E
STS Luminous Intensity Standard Lamp for Type-C Cal	STD-EHD
STS Luminous Intensity Standard Lamp for Type-C Cal	STD-EHD
STS Luminous Intensity Standard Lamp for Type-C Cal	STD-EHD
Dialight Confirmation Sample	VEx7RB2Exxxxxx
Labisphere calibration lamp for 2M sphere	SCL-1400
Labisphere calibration lamp for 2M sphere	SCL-1400
Labisphere calibration lamp for 2M sphere	SCL-1400

Additional Notes:

Samples are received and tested in new and undamaged condition, unless otherwise noted.

The results shown in this report are representative only of the test samples submitted. This data has been issued to the assignee for further evaluation.

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