

Test Report

Report Number: L25012

Date: Jul 21, 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: ALU7AC2ADNNNGN

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: July 18, 2025 through July 28, 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

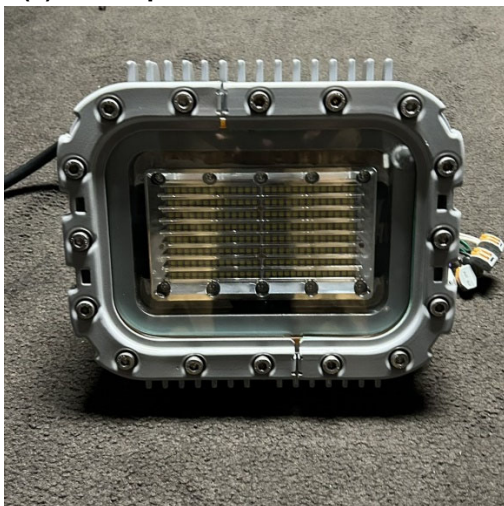
Description of sample:

Sample Number: L25012
Manufacturer: Dialight Corporation
Product Name: Area Light 11K
Description: Area Light
Model Number: ALU7AC2ADNNNGN

Report Summary

Sample number L25012
Dialight unit model number ALU7AC2ADNNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	11158 (lumens)	11058 (lumens)
Electrical Power:	74.0 (W)	73.6 (W)
Luminous Efficacy:	152.7 (lumens/W)	150.3 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	74.0 (W)
	Power Factor (120VAC):	0.9894
	Current ATHD % (120VAC):	10.80
Secondary Voltage:	Input Power (277VAC):	70.7 (W)
	Power Factor (277VAC):	0.9894
	Current ATHD % (277VAC):	8.10

Color Measurements:

Correlated Color Temperature (CCT):	5145 (K)
Color Rendering Index (CRI):	86.67
Chromaticity Coordinate (x):	0.341
Chromaticity Coordinate (y):	0.348
Chromaticity Coordinate (u'):	0.210
Chromaticity Coordinate (v'):	0.482
DUV:	-0.0003

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25012.

Dialight unit model number ALU7AC2ADNNGN

Test Conditions:

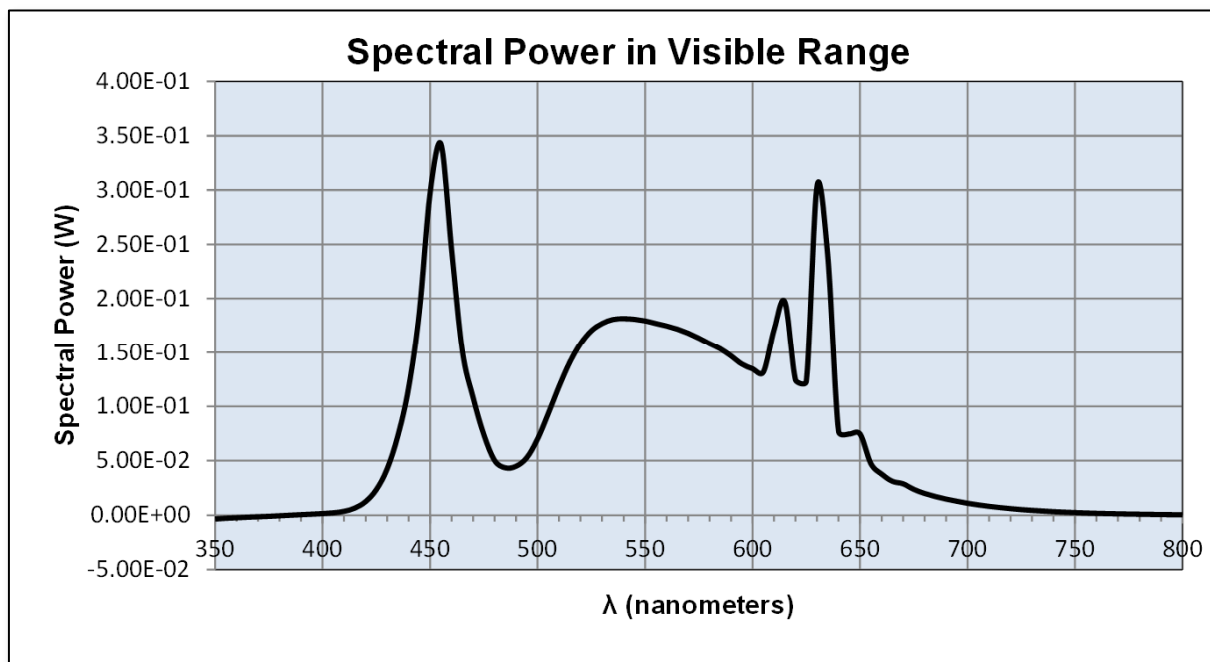
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 120.9 (VAC)
Input Current: 0.619 (A)
Input Power: 74.0 (W)
Input Power Factor: 0.9894
Current ATHD: 10.80 (%)

Photometric measurements:

Luminous Flux: 11158.5 (lumens)
Luminous Efficacy: 152.7 (lumens/W)
Correlated Color Temperature (CCT): 5145 (K)
CRI -Ra: 86.67
CRI -R9: 60.84
DUV: -0.0003
CIE Coordinate (x): 0.341
CIE Coordinate (y): 0.348
CIE Coordinate (u'): 0.210
CIE Coordinate (v'): 0.482
TM30_Rf: 83.6
TM30_Rg: 100.6
TM30_Rcs_hue1: -6.85 %



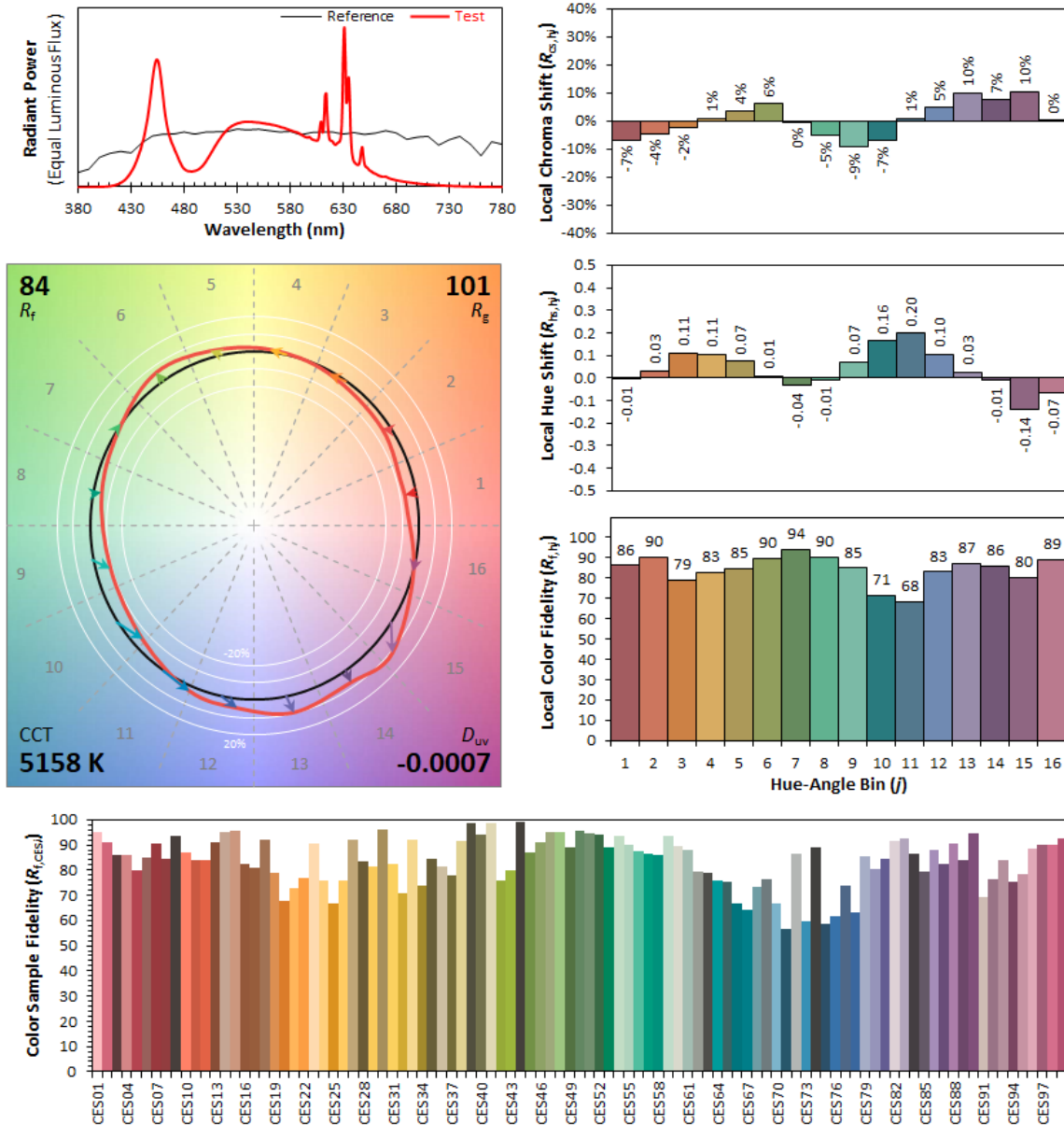
Test Results: Integrating Sphere

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	-0.00344	490	0.04508	630	0.30423	770	0.00127
355	-0.00274	495	0.05297	635	0.23817	775	0.00110
360	-0.00226	500	0.07022	640	0.07679	780	0.00094
365	-0.00177	505	0.09370	645	0.07479	785	0.00078
370	-0.00136	510	0.11875	650	0.07462	790	0.00065
375	-0.00097	515	0.14100	655	0.04750	795	0.00055
380	-0.00047	520	0.15829	660	0.03784	800	0.00045
385	0.00005	525	0.17013	665	0.03123		
390	0.00057	530	0.17687	670	0.02891		
395	0.00100	535	0.18060	675	0.02374		
400	0.00149	540	0.18133	680	0.02003		
405	0.00223	545	0.18078	685	0.01722		
410	0.00360	550	0.17933	690	0.01485		
415	0.00660	555	0.17689	695	0.01288		
420	0.01256	560	0.17459	700	0.01101		
425	0.02361	565	0.17171	705	0.00948		
430	0.04253	570	0.16791	710	0.00817		
435	0.07306	575	0.16329	715	0.00704		
440	0.11727	580	0.15813	720	0.00603		
445	0.18768	585	0.15324	725	0.00520		
450	0.29762	590	0.14660	730	0.00446		
455	0.34257	595	0.13911	735	0.00386		
460	0.24486	600	0.13474	740	0.00329		
465	0.15118	605	0.13167	745	0.00281		
470	0.10816	610	0.12721	750	0.00241		
475	0.07397	615	0.12382	755	0.00207		
480	0.05033	620	0.12011	760	0.00175		
485	0.04359	625	0.11707	765	0.00150		

IES TM-30-18 Color Rendition Report



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

x 0.3407
 y 0.3467
 u' 0.2104
 v' 0.4816

CIE 13.3-1995
(CRI)

R_a 87
 R_g 62

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 L25012.

Dialight unit model number ALU7AC2ADNNGN

Electrical Measurements:

Input Voltage: 120.5 (VAC)
Input current: 0.64 (A)
Input Power: 73.59 (W)
Power Factor: 0.9603

Photometric measurements:

Absolute Luminous Flux: 11058.4 (lumens)
Luminous Efficacy: 150.3 (lumens/W)

BUG Rating: B3 - U0 - G1

Photometric Distribution Summary:

Candlepower Summary

H/V	0.00	45.00	90.00	135.00	180.00	Lumens
0.00	5215	5215	5215	5215	5215	
5.00	5149	5184	5261	5210	5220	527
15.00	5281	5221	5292	4793	4188	1381
25.00	5791	5348	4929	3448	1836	1897
35.00	6186	5497	4350	1481	336	2170
45.00	4840	5397	3634	306	273	2141
55.00	1909	3875	2725	204	220	1360
65.00	103	1111	1640	148	111	426
75.00	50	56	587	53	31	119
85.00	1	2	2	1	1	1
90.00	1	1	1	1	1	

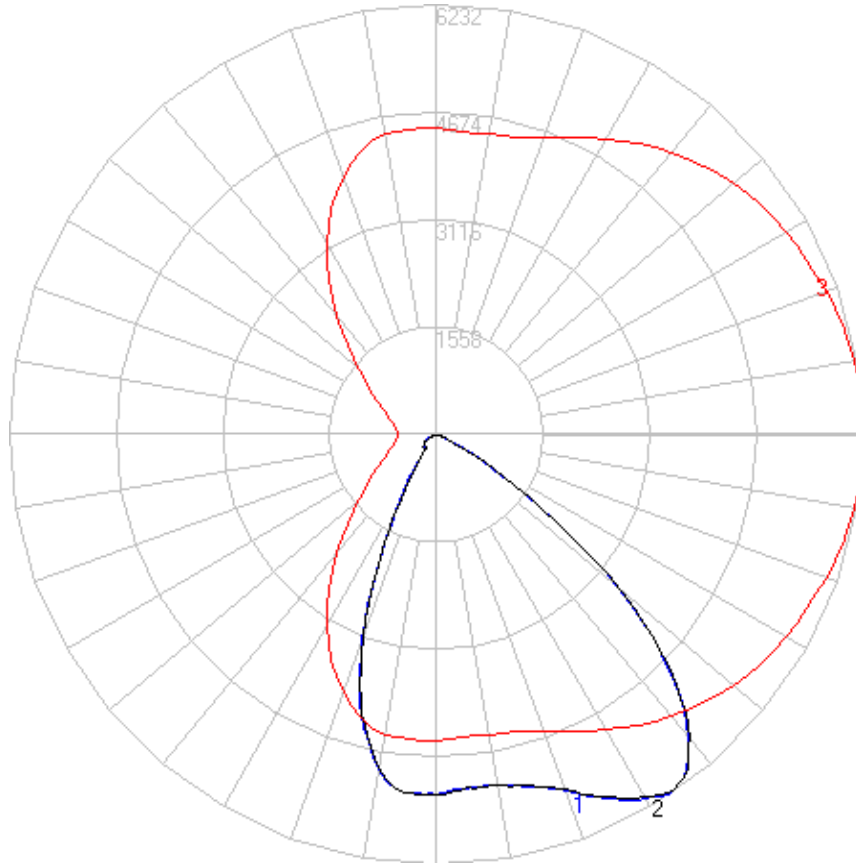
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	3926.08	35.58	35.58
0 to 40	6228.05	56.44	56.44
0 to 60	10117.87	91.70	91.70
0 to 90	11034.06	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	11034.06	100.00	100.00

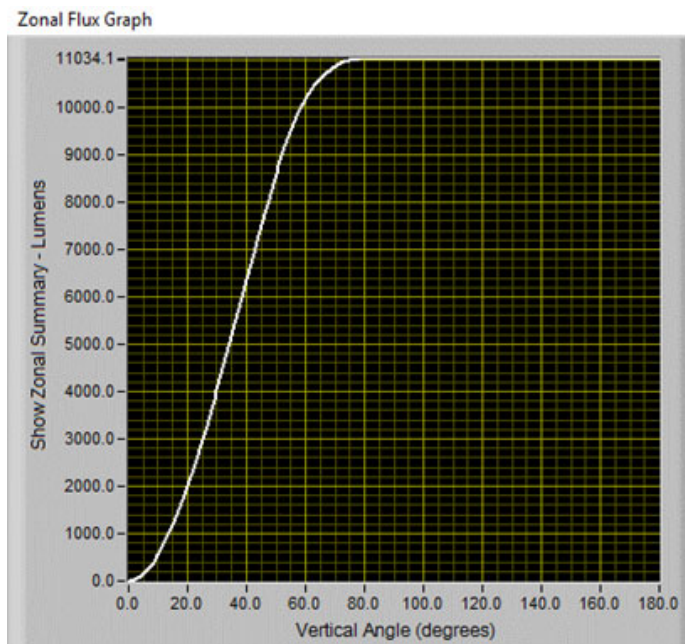
Test Results: Goniometer

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Polar Plot:



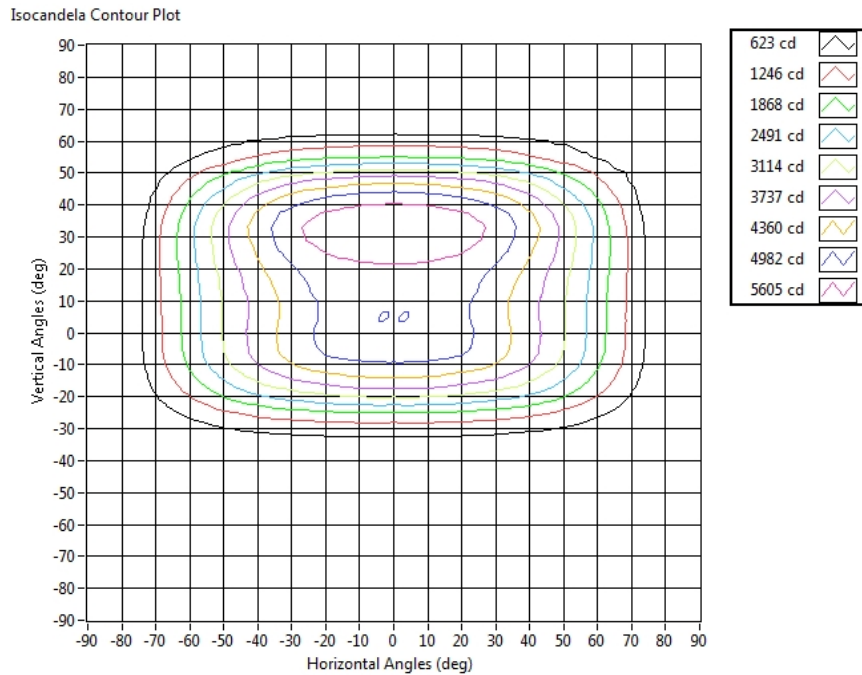
Zonal Flux:



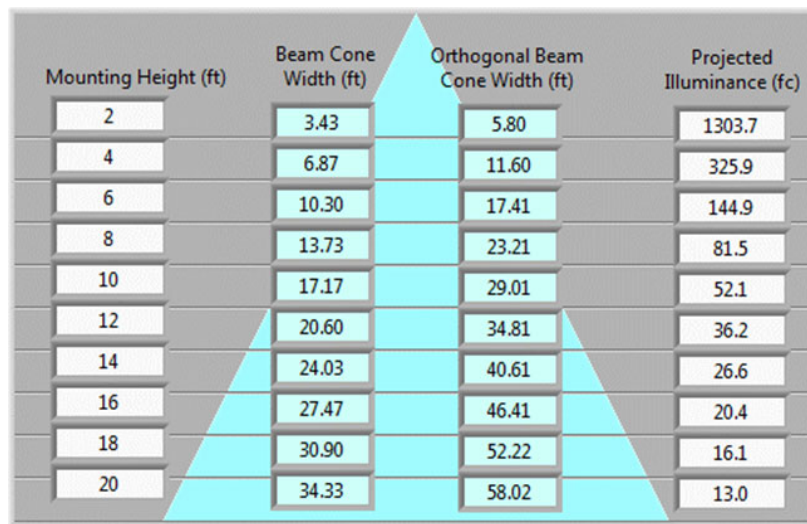
Test Results: Goniometer

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Illuminance Plot:



Illuminance-Cone of Light:



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
LabSphere calibration lamp for 2M sphere	SCL-1400
LabSphere calibration lamp for 2M sphere	SCL-1400
LabSphere 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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