

Test Report

Report Number: L25017

Date: Jul 29, 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: ALU7BC2ADNNNGN

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 23, 2025 through July 25, 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

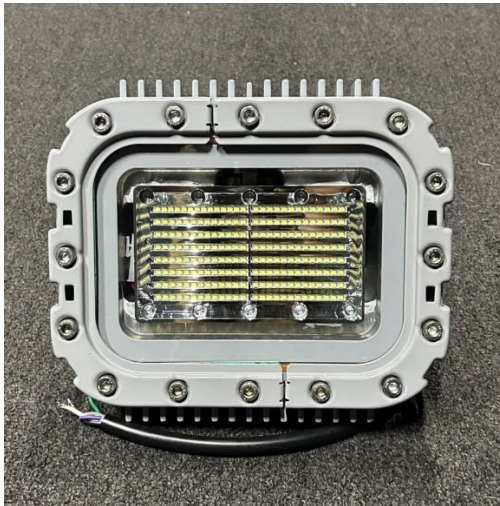
Description of sample:

Sample Number: L25017
Manufacturer: Dialight Corporation
Product Name: Area Light 11K
Description: Area Light
Model Number: ALU7BC2ADNNNGN

Report Summary

Sample number L25017
Dialight unit model number ALU7BC2ADNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	11254 (lumens)	11421 (lumens)
Electrical Power:	73.9 (W)	73.5 (W)
Luminous Efficacy:	152.2 (lumens/W)	155.3 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	73.9 (W)
	Power Factor (120VAC):	0.9892
	Current ATHD % (120VAC):	10.89
Secondary Voltage:	Input Power (277VAC):	70.5 (W)
	Power Factor (277VAC):	0.9893
	Current ATHD % (277VAC):	8.14

Color Measurements:

Correlated Color Temperature (CCT):	5132 (K)
Color Rendering Index (CRI):	86.90
Chromaticity Coordinate (x):	0.341
Chromaticity Coordinate (y):	0.348
Chromaticity Coordinate (u')	0.210
Chromaticity Coordinate (v')	0.482
DUV:	-0.0005

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25017.

Dialight unit model number ALU7BC2ADNNGN

Test Conditions:

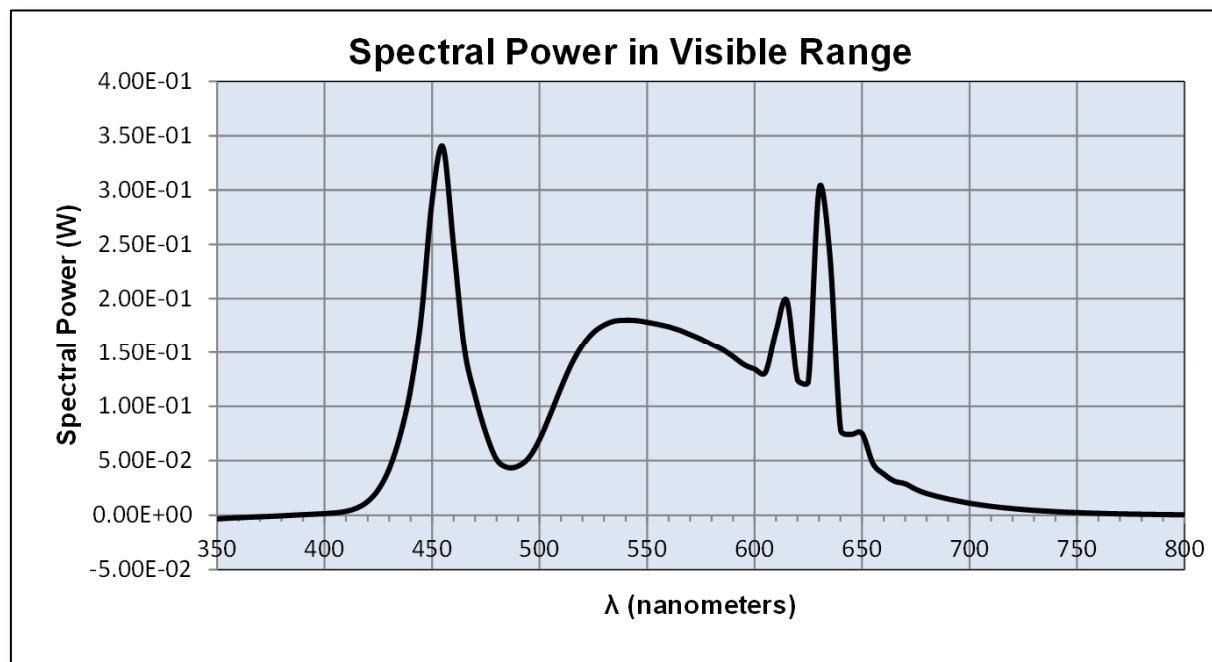
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 120.9 (VAC)
Input Current: 0.618 (A)
Input Power: 73.9 (W)
Input Power Factor: 0.9892
Current ATHD: 10.89 (%)

Photometric measurements:

Luminous Flux: 11253.7 (lumens)
Luminous Efficacy: 152.2 (lumens/W)
Correlated Color Temperature (CCT): 5132 (K)
CRI -Ra: 86.90
CRI -R9: 61.75
DUV: -0.0005
CIE Coordinate (x): 0.341
CIE Coordinate (y): 0.348
CIE Coordinate (u'): 0.210
CIE Coordinate (v'): 0.482
TM30_Rf: 83.7
TM30_Rg: 100.7
TM30_Rcs_hue1: -6.77 %



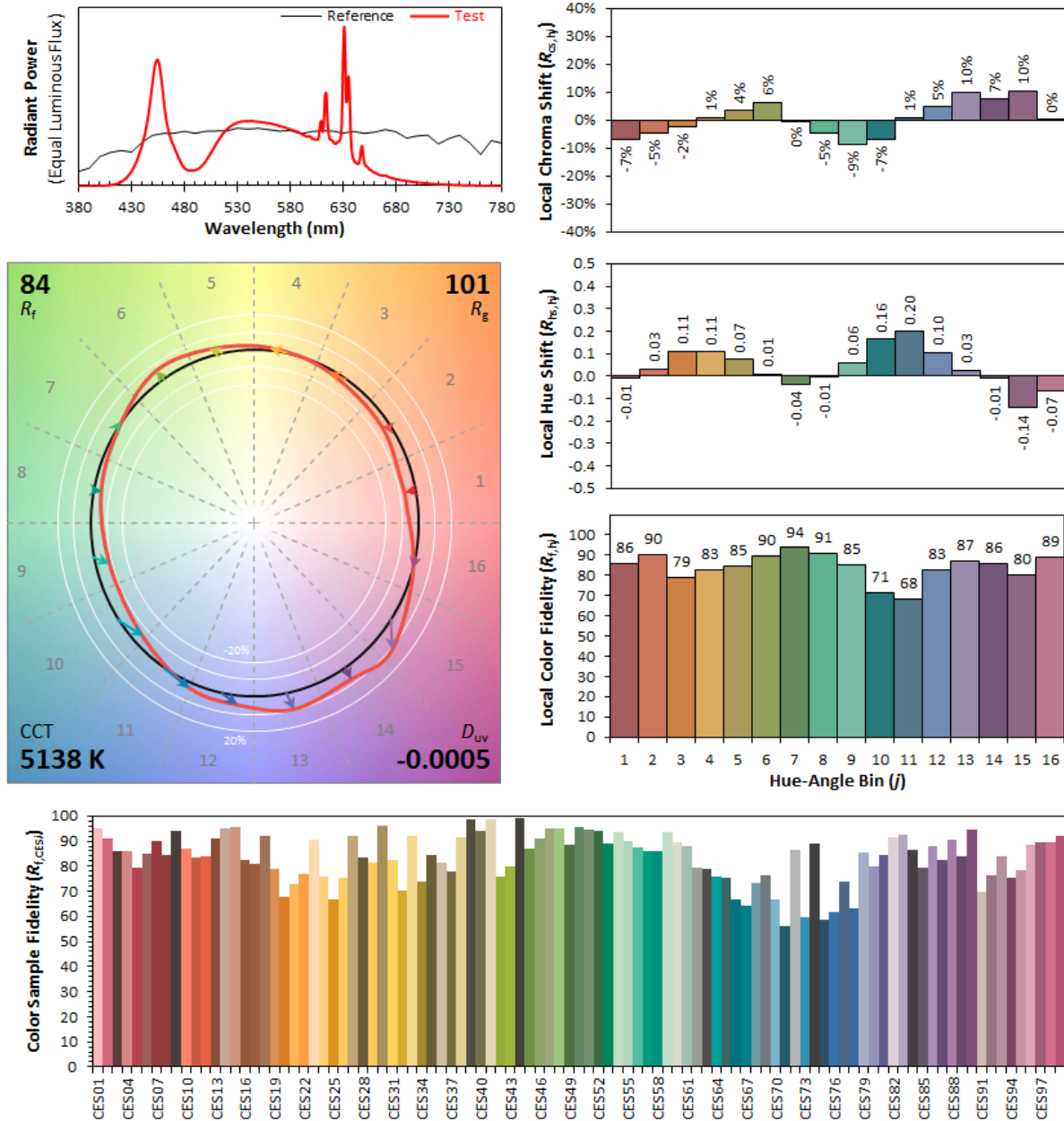
Test Results: Integrating Sphere

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	-0.00333	490	0.04518	630	0.30125	770	0.00129
355	-0.00266	495	0.05287	635	0.24010	775	0.00111
360	-0.00226	500	0.06965	640	0.07819	780	0.00095
365	-0.00177	505	0.09271	645	0.07437	785	0.00080
370	-0.00135	510	0.11738	650	0.07506	790	0.00066
375	-0.00098	515	0.13967	655	0.04769	795	0.00054
380	-0.00050	520	0.15673	660	0.03799	800	0.00045
385	0.00006	525	0.16867	665	0.03134		
390	0.00054	530	0.17558	670	0.02895		
395	0.00102	535	0.17936	675	0.02380		
400	0.00150	540	0.18003	680	0.02004		
405	0.00219	545	0.17980	685	0.01727		
410	0.00361	550	0.17817	690	0.01491		
415	0.00662	555	0.17631	695	0.01290		
420	0.01258	560	0.17402	700	0.01104		
425	0.02362	565	0.17090	705	0.00952		
430	0.04239	570	0.16682	710	0.00822		
435	0.07239	575	0.16256	715	0.00706		
440	0.11580	580	0.15738	720	0.00610		
445	0.18400	585	0.15257	725	0.00522		
450	0.29065	590	0.14591	730	0.00450		
455	0.33985	595	0.13857	735	0.00387		
460	0.24834	600	0.13439	740	0.00332		
465	0.15361	605	0.13113	745	0.00283		
470	0.10955	610	0.17019	750	0.00244		
475	0.07544	615	0.19814	755	0.00208		
480	0.05124	620	0.12421	760	0.00178		
485	0.04400	625	0.12269	765	0.00151		

IES TM-30-18 Color Rendition Report



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

x 0.3413
 y 0.3476
 u' 0.2104
 v' 0.4821

CIE 13.3-1995
(CRI)

R_a 87
 R_g 61

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 L25017.

Dialight unit model number ALU7BC2ADNNGN

Electrical Measurements:

Input Voltage: 120.5 (VAC)
Input current: 0.64 (A)
Input Power: 73.54 (W)
Power Factor: 0.9608

Photometric measurements:

Absolute Luminous Flux: 11421.1 (lumens)
Luminous Efficacy: 155.3 (lumens/W)

BUG Rating: B3 - U0 - G0

Photometric Distribution Summary:

Candlepower Summary

H/V	0.00	22.50	45.00	67.50	90.00	Lumens
0.00	4286	4286	4286	4286	4286	
5.00	4332	4319	4309	4318	4322	438
15.00	4408	4434	4555	4495	4399	1253
25.00	4495	4431	4340	4392	4094	1996
35.00	4369	4378	4221	3890	3653	2538
45.00	3253	3500	3808	3409	3067	2507
55.00	1201	1552	2566	2898	2375	1697
65.00	136	150	617	1778	1485	811
75.00	28	34	51	267	625	304
85.00	1	1	1	2	3	1
90.00	0	1	1	2	2	

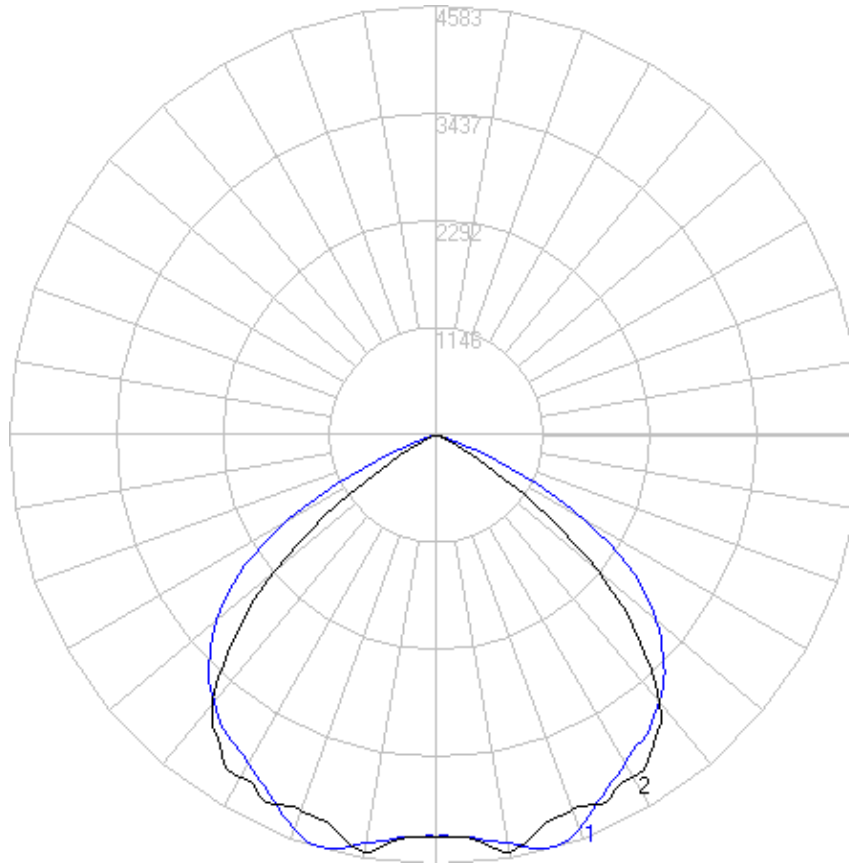
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	3619.05	31.62	31.62
0 to 40	6063.76	52.98	52.98
0 to 60	10428.09	91.12	91.12
0 to 90	11444.69	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	11444.69	100.00	100.00

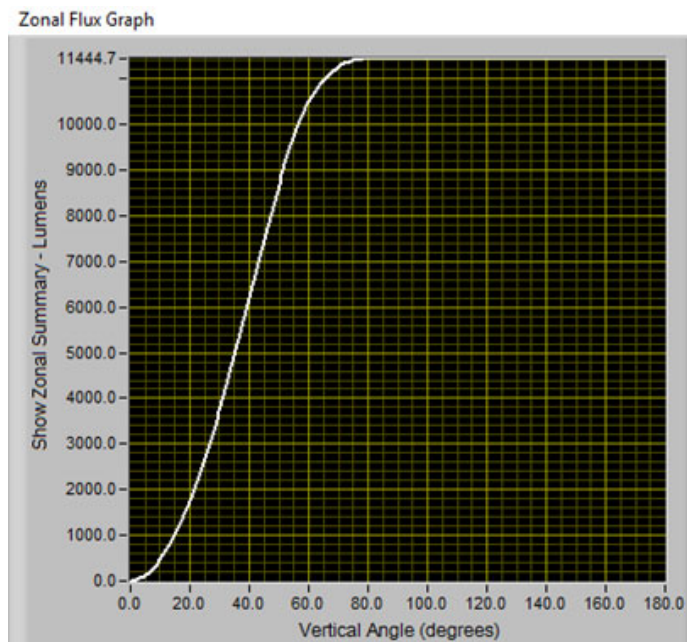
Test Results: Goniometer

Results continued from previous page.

Polar Plot:



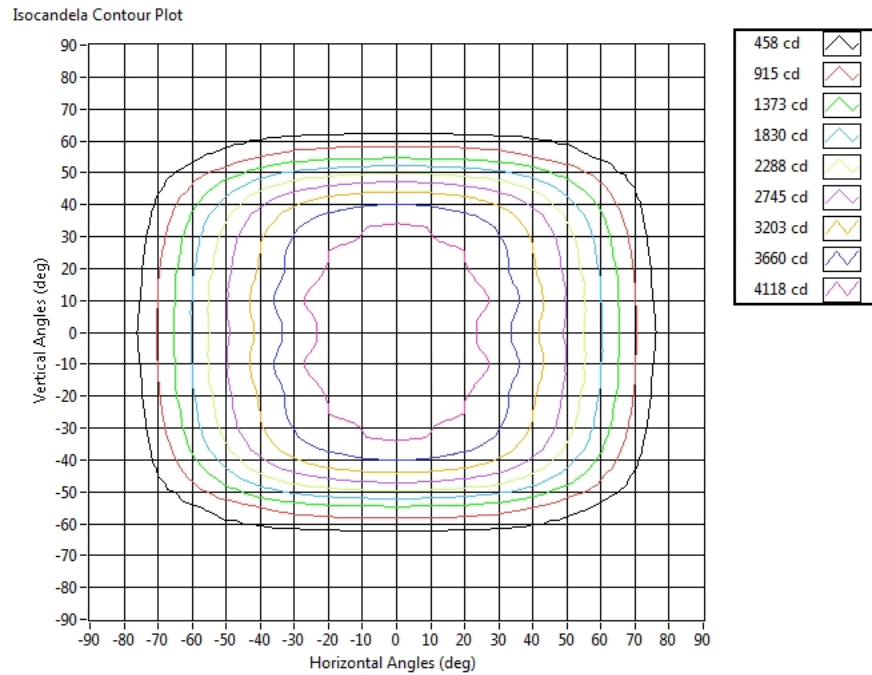
Zonal Flux:



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	4.83	6.01	1071.6
4	9.67	12.02	267.9
6	14.50	18.03	119.1
8	19.34	24.04	67.0
10	24.17	30.06	42.9
12	29.01	36.07	29.8
14	33.84	42.08	21.9
16	38.67	48.09	16.7
18	43.51	54.10	13.2
20	48.34	60.11	10.7

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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