

Test Report

Report Number: L25033

Date: Nov 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: ALU5NC2BDNNNGN

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: November 12, 2025 through November 18, 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

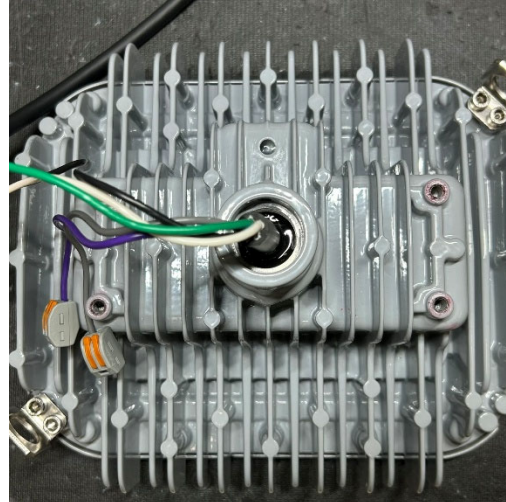
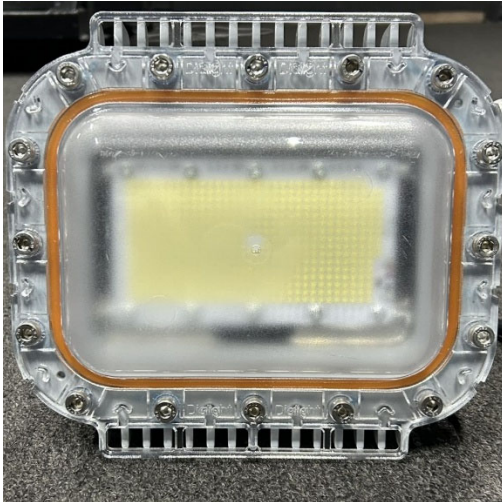
Description of sample:

Sample Number: L25033
Manufacturer: Dialight Corporation
Product Name: Area Light 13K
Description: Area Light
Model Number: ALU5NC2BDNNNGN

Report Summary

Sample number L25033
Dialight unit model number ALU5NC2BDNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	13160 (lumens)	13415 (lumens)
Electrical Power:	75.6 (W)	75.7 (W)
Luminous Efficacy:	174.1 (lumens/W)	177.3 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	75.6 (W)
	Power Factor (120VAC):	0.9968
	Current ATHD % (120VAC):	7.15
Secondary Voltage:	Input Power (277VAC):	73.8 (W)
	Power Factor (277VAC):	0.9860
	Current ATHD % (277VAC):	4.72

Color Measurements:

Correlated Color Temperature (CCT):	4963 (K)
Color Rendering Index (CRI):	82.56
Chromaticity Coordinate (x):	0.346
Chromaticity Coordinate (y):	0.355
Chromaticity Coordinate (u')	0.211
Chromaticity Coordinate (v')	0.487
DUV:	0.0012

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25033.

Dialight unit model number ALU5NC2BDNNGN

Test Conditions:

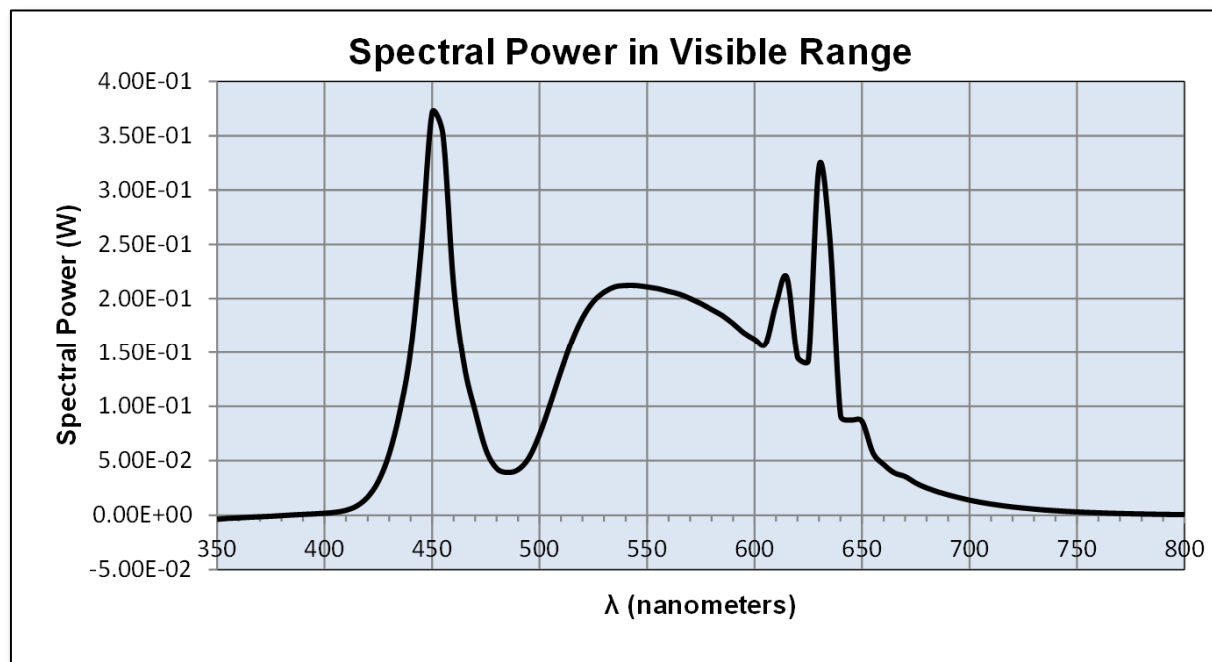
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 121.0 (VAC)
Input Current: 0.627 (A)
Input Power: 75.6 (W)
Input Power Factor: 0.9968
Current ATHD: 7.15 (%)

Photometric measurements:

Luminous Flux: 13160.3 (lumens)
Luminous Efficacy: 174.1 (lumens/W)
Correlated Color Temperature (CCT): 4963 (K)
CRI -Ra: 82.56
CRI -R9: 43.27
DUV: 0.0012
CIE Coordinate (x): 0.346
CIE Coordinate (y): 0.355
CIE Coordinate (u'): 0.211
CIE Coordinate (v'): 0.487
TM30_Rf: 80.5
TM30_Rg: 100.4
TM30_Rcs_hue1: -8.57 %



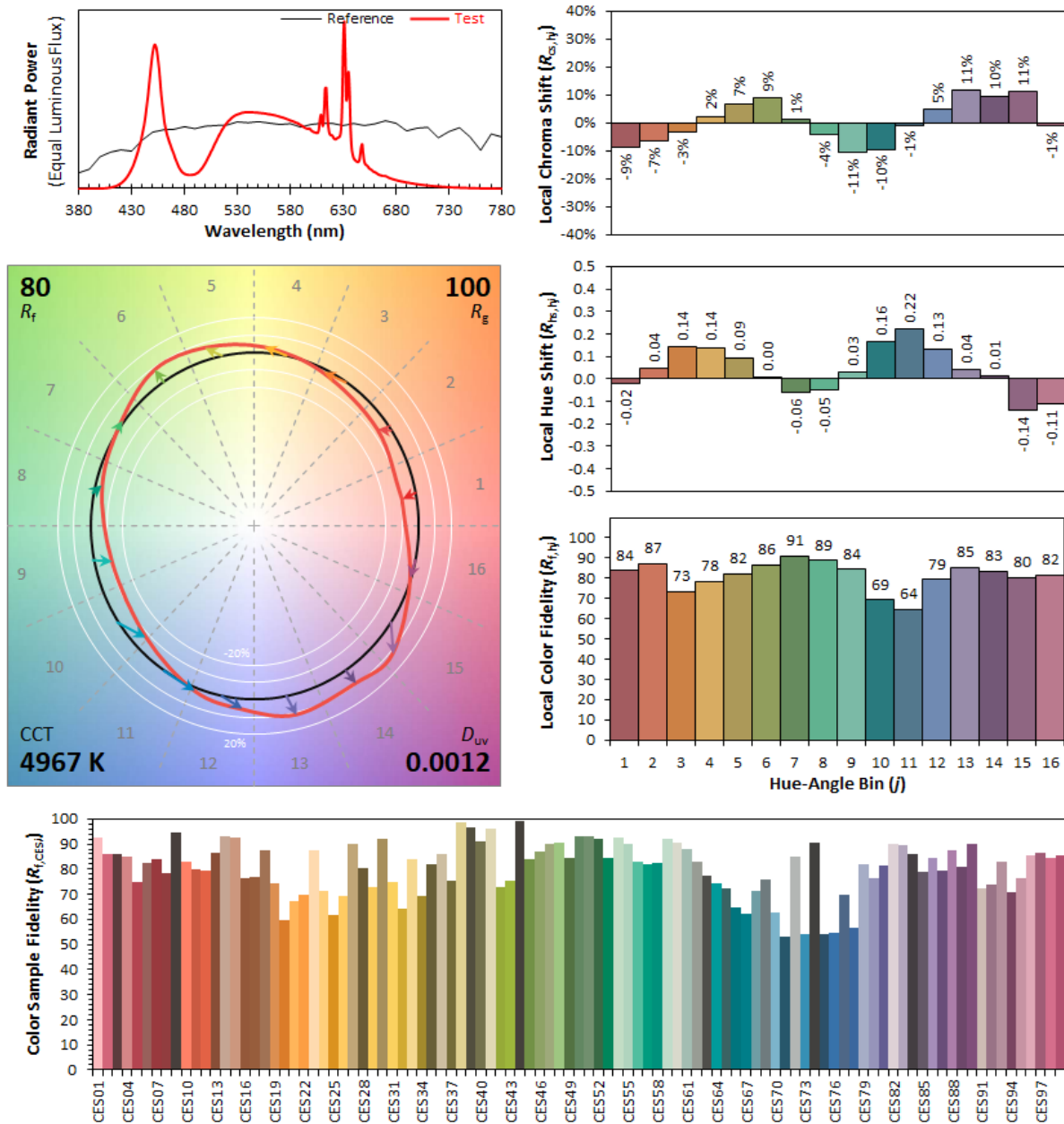
Test Results: Integrating Sphere

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	-0.00369	490	0.04187	630	0.32238	770	0.00163
355	-0.00285	495	0.05274	635	0.25535	775	0.00142
360	-0.00240	500	0.07439	640	0.09119	780	0.00120
365	-0.00181	505	0.10260	645	0.08756	785	0.00101
370	-0.00136	510	0.13291	650	0.08622	790	0.00084
375	-0.00095	515	0.16070	655	0.05751	795	0.00070
380	-0.00033	520	0.18239	660	0.04666	800	0.00058
385	0.00027	525	0.19729	665	0.03896		
390	0.00081	530	0.20599	670	0.03565		
395	0.00125	535	0.21092	675	0.02960		
400	0.00185	540	0.21214	680	0.02514		
405	0.00274	545	0.21206	685	0.02163		
410	0.00460	550	0.21083	690	0.01870		
415	0.00862	555	0.20923	695	0.01621		
420	0.01667	560	0.20670	700	0.01386		
425	0.03124	565	0.20414	705	0.01191		
430	0.05614	570	0.20009	710	0.01027		
435	0.09526	575	0.19547	715	0.00886		
440	0.15124	580	0.18992	720	0.00763		
445	0.24831	585	0.18435	725	0.00658		
450	0.37139	590	0.17683	730	0.00564		
455	0.35151	595	0.16831	735	0.00484		
460	0.21216	600	0.16219	740	0.00416		
465	0.13715	605	0.15760	745	0.00359		
470	0.09571	610	0.19516	750	0.00307		
475	0.06030	615	0.21944	755	0.00263		
480	0.04308	620	0.14509	760	0.00225		
485	0.03942	625	0.14207	765	0.00192		

IES TM-30-18 Color Rendition Report



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

x 0.3463
 y 0.3550
 u' 0.2109
 v' 0.4865

CIE 13.3-1995
(CRI)

R_a 82
 R_g 43

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 L25033.

Dialight unit model number ALU5NC2BDNNNGN

Electrical Measurements:

Input Voltage:	120.4	(VAC)
Input current:	0.63	(A)
Input Power:	75.65	(W)
Power Factor:	0.9963	

Photometric measurements:

Absolute Luminous Flux:	13415.4	(lumens)
Luminous Efficacy:	177.3	(lumens/W)

BUG Rating: B3 - U0 - G2

Photometric Distribution Summary:

Candlepower Summary

H/V	0.00	22.50	45.00	67.50	90.00	Lumens
0.00	4585	4585	4585	4585	4585	
5.00	4568	4563	4559	4567	4554	463
15.00	4397	4381	4376	4381	4371	1243
25.00	4054	4033	4029	4031	4040	1872
35.00	3590	3559	3518	3523	3550	2238
45.00	3095	2981	2912	2992	3058	2366
55.00	2551	2529	2383	2294	2326	2182
65.00	1726	1717	1736	1607	1588	1650
75.00	689	738	831	870	863	828
85.00	223	211	215	228	219	154
90.00	127	115	111	116	123	

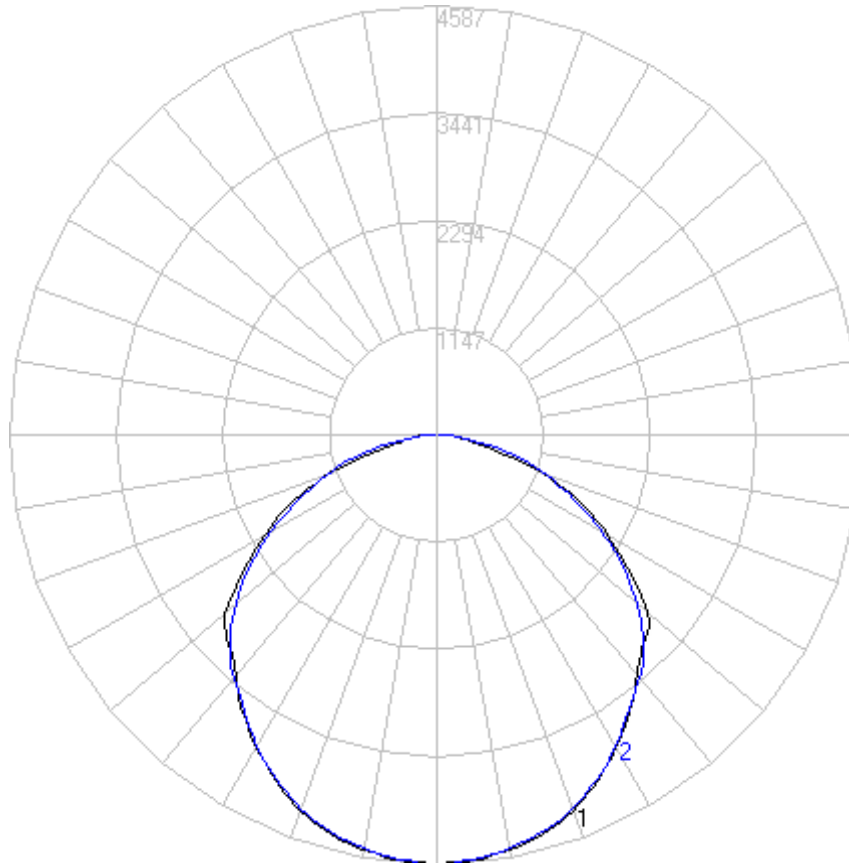
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	3561.50	26.96	26.96
0 to 40	5820.96	44.06	44.06
0 to 60	10433.55	78.97	78.97
0 to 90	13212.53	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	13212.53	100.00	100.00

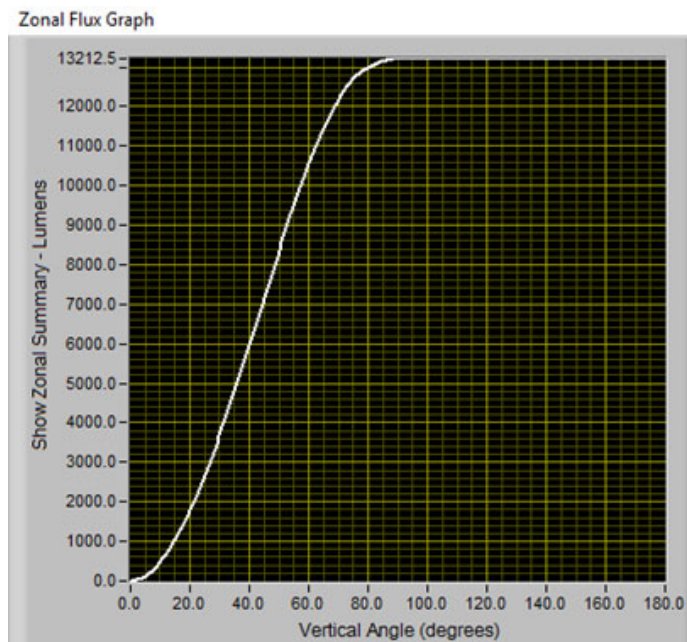
Test Results: Goniometer

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Polar Plot:



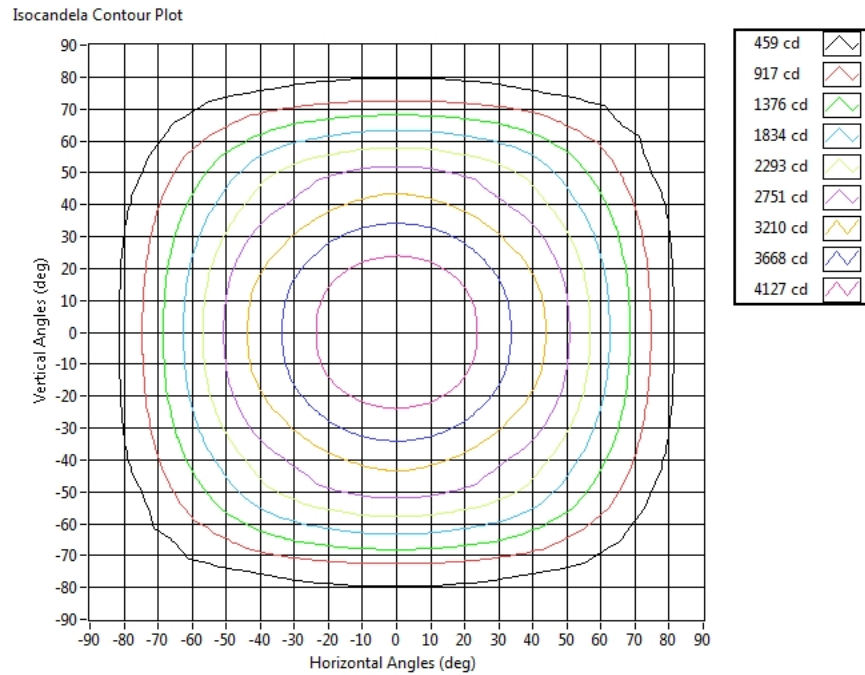
Zonal Flux:



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	6.20	5.94	1146.2
4	12.40	11.89	286.6
6	18.61	17.83	127.4
8	24.81	23.78	71.6
10	31.01	29.72	45.8
12	37.21	35.67	31.8
14	43.42	41.61	23.4
16	49.62	47.56	17.9
18	55.82	53.50	14.2
20	62.02	59.45	11.5

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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