

Test Report

Report Number: L25016

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: ALU5BC2ADNNNGN

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 24, 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: L25016
Manufacturer: Dialight Corporation
Product Name: Area Light 11K
Description: Area Light
Model Number: ALU5BC2ADNNNGN

Report Summary

Sample number L25016
Dialight unit model number ALU5BC2ADNNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	10384 (lumens)	10493 (lumens)
Electrical Power:	72.0 (W)	72.1 (W)
Luminous Efficacy:	144.3 (lumens/W)	145.5 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	72.0 (W)
	Power Factor (120VAC):	0.9970
	Current ATHD % (120VAC):	6.95
Secondary Voltage:	Input Power (277VAC):	69.6 (W)
	Power Factor (277VAC):	0.9830
	Current ATHD % (277VAC):	4.60

Color Measurements:

Correlated Color Temperature (CCT):	5116 (K)
Color Rendering Index (CRI):	87.55
Chromaticity Coordinate (x):	0.342
Chromaticity Coordinate (y):	0.347
Chromaticity Coordinate (u')	0.211
Chromaticity Coordinate (v')	0.482
DUV:	-0.0012

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25016.

Dialight unit model number ALU5BC2ADNNGN

Test Conditions:

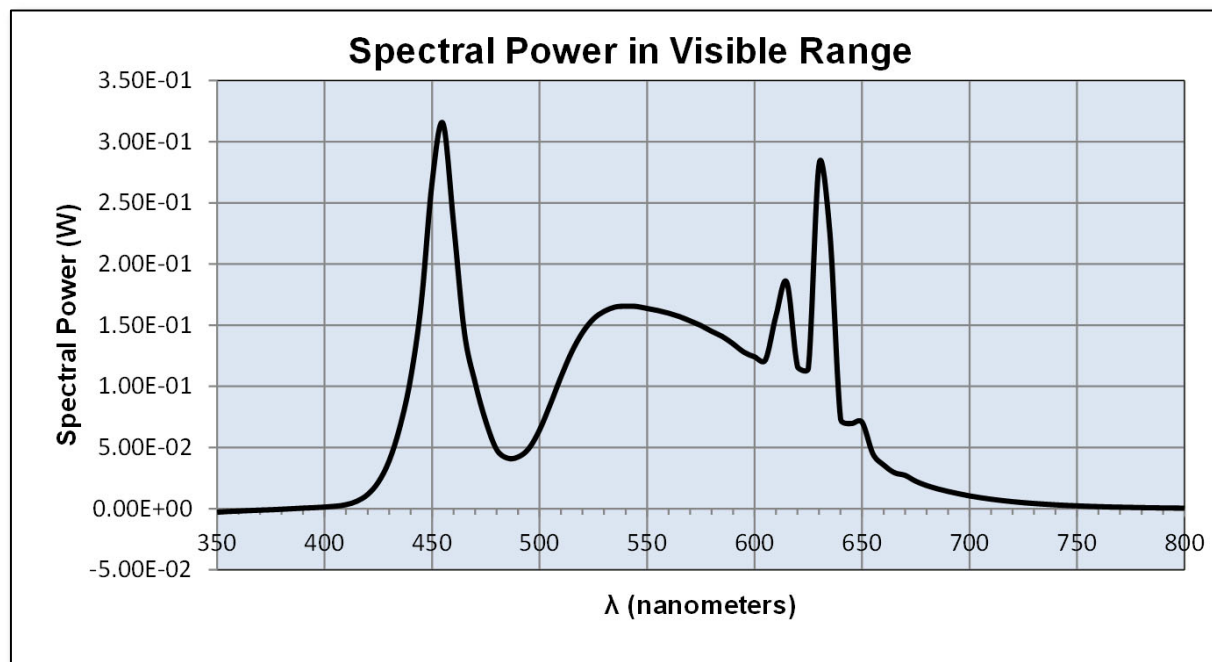
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 120.9 (VAC)
Input Current: 0.597 (A)
Input Power: 72.0 (W)
Input Power Factor: 0.9970
Current ATHD: 6.95 (%)

Photometric measurements:

Luminous Flux: 10383.8 (lumens)
Luminous Efficacy: 144.3 (lumens/W)
Correlated Color Temperature (CCT): 5116 (K)
CRI -Ra: 87.55
CRI -R9: 65.01
DUV: -0.0012
CIE Coordinate (x): 0.342
CIE Coordinate (y): 0.347
CIE Coordinate (u'): 0.211
CIE Coordinate (v'): 0.482
TM30_Rf: 84.0
TM30_Rg: 100.9
TM30_Rcs_hue1: -6.43 %



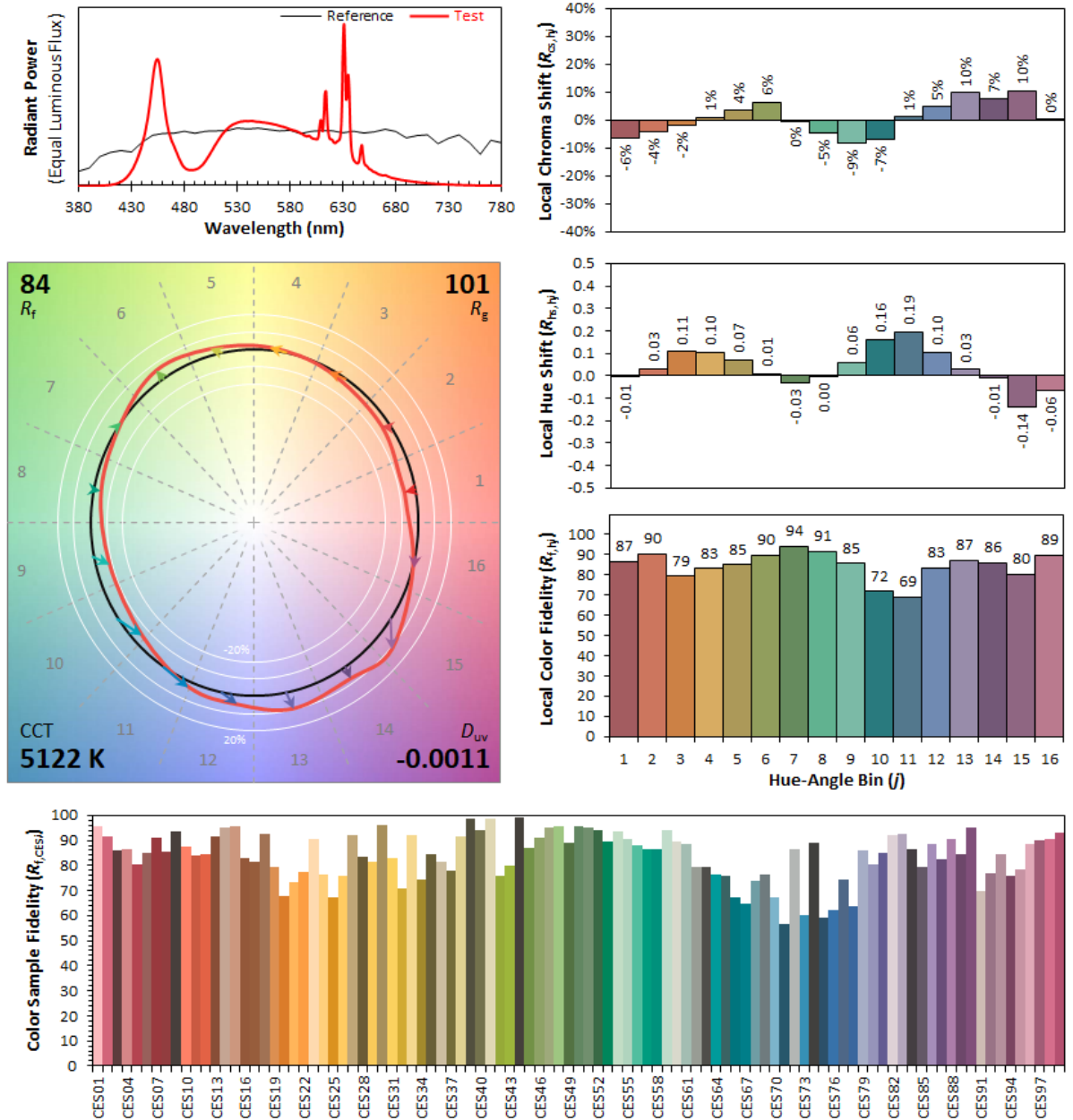
Test Results: Integrating Sphere

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	-0.00288	490	0.04228	630	0.28175	770	0.00123
355	-0.00231	495	0.04921	635	0.22544	775	0.00106
360	-0.00195	500	0.06447	640	0.07326	780	0.00090
365	-0.00152	505	0.08544	645	0.06966	785	0.00078
370	-0.00117	510	0.10815	650	0.07066	790	0.00064
375	-0.00086	515	0.12845	655	0.04491	795	0.00053
380	-0.00044	520	0.14414	660	0.03576	800	0.00046
385	0.00000	525	0.15511	665	0.02947		
390	0.00047	530	0.16134	670	0.02726		
395	0.00087	535	0.16483	675	0.02244		
400	0.00132	540	0.16557	680	0.01892		
405	0.00201	545	0.16537	685	0.01627		
410	0.00331	550	0.16370	690	0.01407		
415	0.00610	555	0.16200	695	0.01220		
420	0.01159	560	0.15985	700	0.01044		
425	0.02174	565	0.15708	705	0.00899		
430	0.03910	570	0.15353	710	0.00775		
435	0.06674	575	0.14974	715	0.00668		
440	0.10667	580	0.14499	720	0.00575		
445	0.16885	585	0.14073	725	0.00495		
450	0.26710	590	0.13476	730	0.00426		
455	0.31514	595	0.12801	735	0.00366		
460	0.23279	600	0.12413	740	0.00313		
465	0.14428	605	0.12148	745	0.00271		
470	0.10299	610	0.115825	750	0.00231		
475	0.07121	615	0.18495	755	0.00198		
480	0.04838	620	0.11587	760	0.00169		
485	0.04137	625	0.11464	765	0.00143		

IES TM-30-18 Color Rendition Report



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

x **0.3416**
y **0.3466**
u' **0.2110**
v' **0.4817**

CIE 13.3-1995
(CRI)

R_a 87
 R_g 64

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 L25016.

Dialight unit model number ALU5BC2ADNNNGN

Electrical Measurements:

Input Voltage: 120.5 (VAC)
Input current: 0.60 (A)
Input Power: 72.12 (W)
Power Factor: 0.9966

Photometric measurements:

Absolute Luminous Flux: 10492.5 (lumens)
Luminous Efficacy: 145.5 (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	4068	4068	4068	4068	4068	
5.00	4070	4071	4084	4089	4077	413
15.00	4027	4007	3993	4003	3990	1136
25.00	3953	3928	3849	3719	3676	1767
35.00	3630	3607	3520	3333	3213	2157
45.00	2720	2803	2949	2855	2704	2123
55.00	1295	1499	2054	2303	2103	1567
65.00	321	386	791	1449	1387	852
75.00	122	127	181	497	735	422
85.00	49	52	63	103	177	76
90.00	41	42	45	66	101	

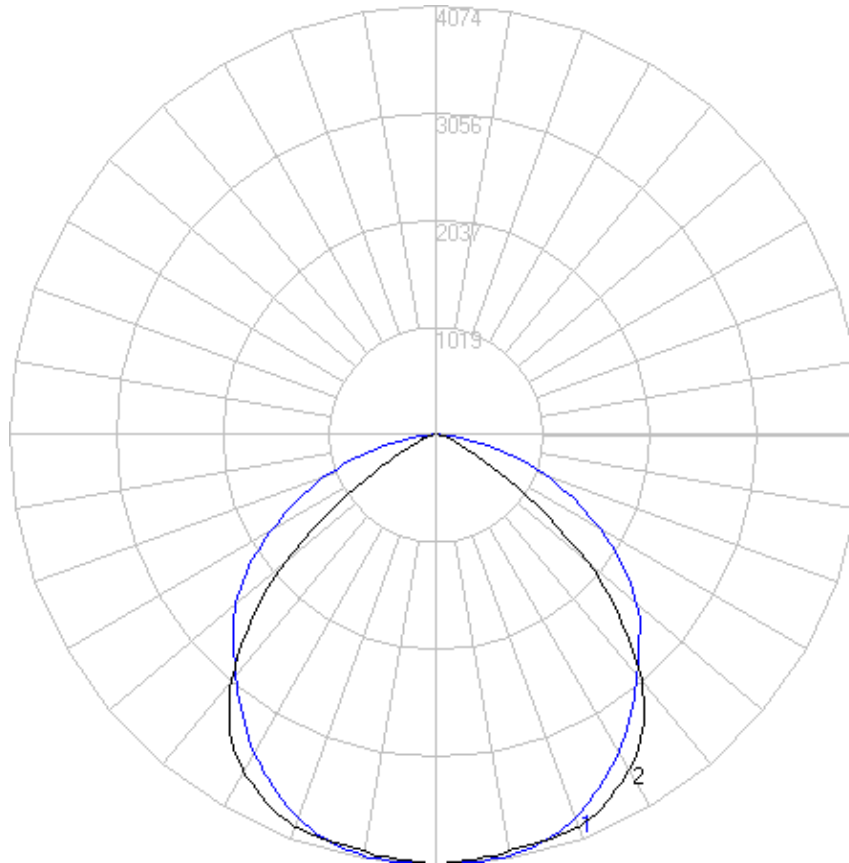
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	3253.48	31.42	31.42
0 to 40	5356.73	51.73	51.73
0 to 60	9047.27	87.37	87.37
0 to 90	10355.10	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	10355.10	100.00	100.00

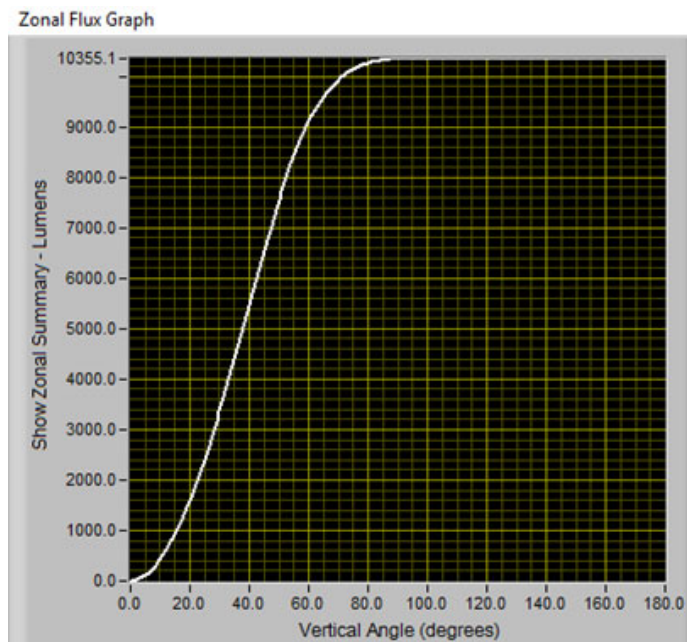
Test Results: Goniometer

Results continued from previous page.

Polar Plot:



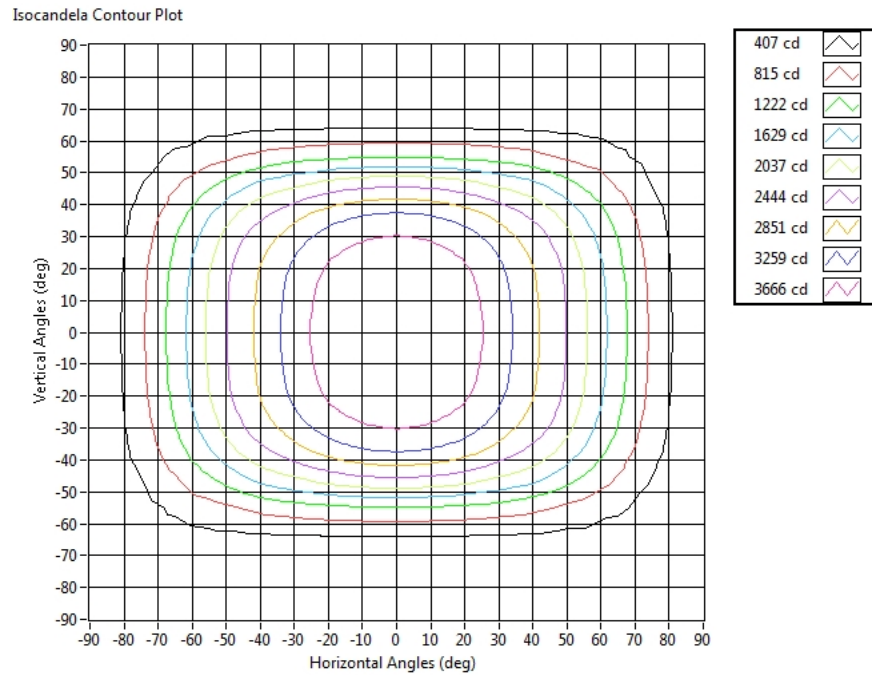
Zonal Flux:



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	4.76	6.14	1017.1
4	9.53	12.29	254.3
6	14.29	18.43	113.0
8	19.05	24.57	63.6
10	23.82	30.71	40.7
12	28.58	36.86	28.3
14	33.34	43.00	20.8
16	38.10	49.14	15.9
18	42.87	55.28	12.6
20	47.63	61.43	10.2

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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