

Test Report

Report Number: L25023

Date: Aug 27, 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: ALU7WC26DNNNGN

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: August 26, 2025 through August 26, 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

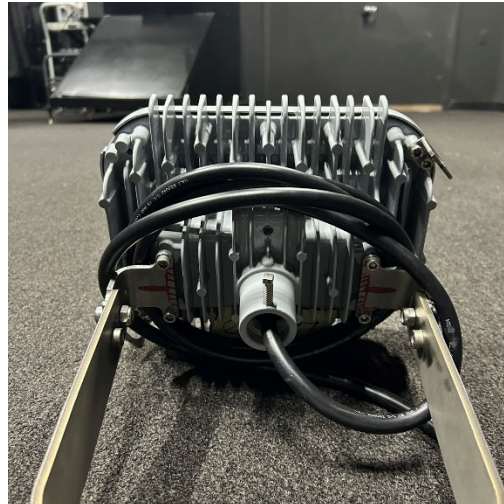
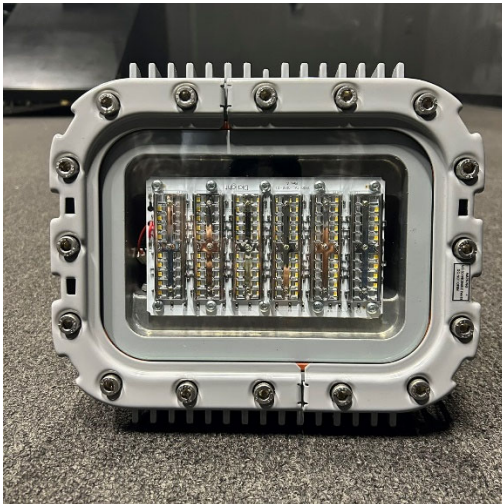
Description of sample:

Sample Number: L25023
Manufacturer: Dialight Corporation
Product Name: Area Light 6K Wide
Description: Area Light
Model Number: ALU7WC26DNNNGN

Report Summary

Sample number L25023
Dialight unit model number ALU7WC26DNNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	6115 (lumens)	6164 (lumens)
Electrical Power:	50.1 (W)	50.1 (W)
Luminous Efficacy:	122.2 (lumens/W)	123 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	50.1 (W)
	Power Factor (120VAC):	0.9971
	Current ATHD % (120VAC):	5.60
Secondary Voltage:	Input Power (277VAC):	49.4 (W)
	Power Factor (277VAC):	0.9722
	Current ATHD % (277VAC):	4.31

Color Measurements:

Correlated Color Temperature (CCT):	5044 (K)
Color Rendering Index (CRI):	83.02
Chromaticity Coordinate (x):	0.344
Chromaticity Coordinate (y):	0.353
Chromaticity Coordinate (u')	0.210
Chromaticity Coordinate (v')	0.485
DUV:	0.0012

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25023.

Dialight unit model number ALU7WC26DNNNGN

Test Conditions:

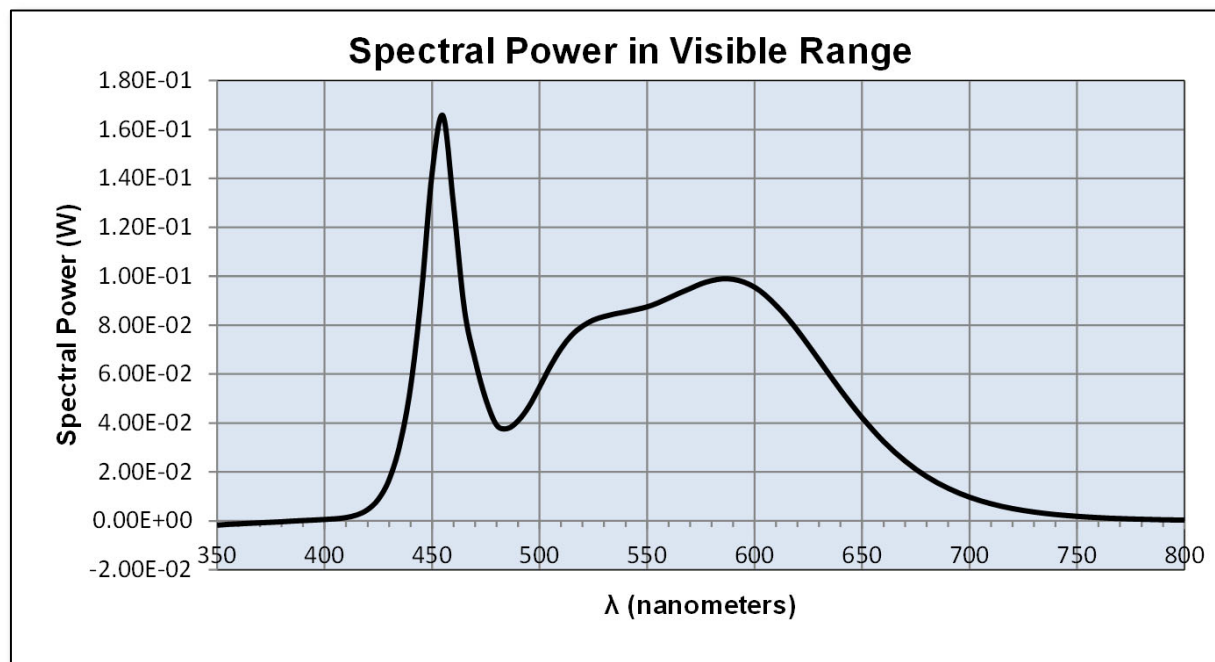
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 121.0 (VAC)
Input Current: 0.415 (A)
Input Power: 50.1 (W)
Input Power Factor: 0.9971
Current ATHD: 5.60 (%)

Photometric measurements:

Luminous Flux: 6114.8 (lumens)
Luminous Efficacy: 122.2 (lumens/W)
Correlated Color Temperature (CCT): 5044 (K)
CRI -Ra: 83.02
CRI -R9: 3.54
DUV: 0.0012
CIE Coordinate (x): 0.344
CIE Coordinate (y): 0.353
CIE Coordinate (u'): 0.210
CIE Coordinate (v'): 0.485
TM30_Rf: 83.0
TM30_Rg: 94.9
TM30_Rcs_hue1: -12.98 %



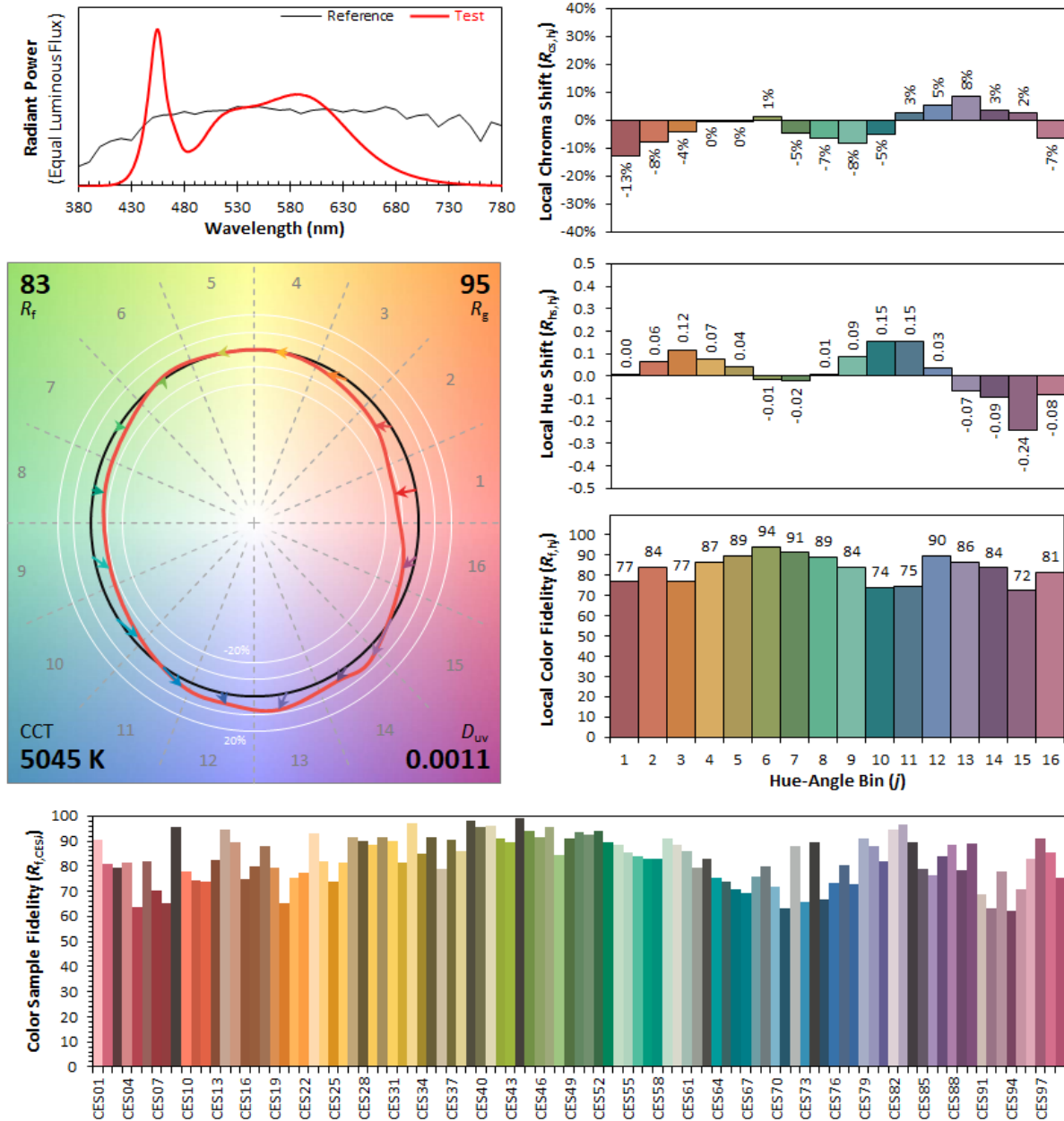
Test Results: Integrating Sphere

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	-0.00173	490	0.04093	630	0.06574	770	0.00096
355	-0.00139	495	0.04677	635	0.05951	775	0.00081
360	-0.00120	500	0.05479	640	0.05348	780	0.00068
365	-0.00096	505	0.06321	645	0.04770	785	0.00057
370	-0.00077	510	0.07048	650	0.04221	790	0.00047
375	-0.00057	515	0.07602	655	0.03716	795	0.00040
380	-0.00033	520	0.07966	660	0.03245	800	0.00033
385	-0.00007	525	0.08212	665	0.02824		
390	0.00016	530	0.08356	670	0.02449		
395	0.00037	535	0.08464	675	0.02110		
400	0.00060	540	0.08548	680	0.01818		
405	0.00088	545	0.08643	685	0.01559		
410	0.00138	550	0.08751	690	0.01334		
415	0.00245	555	0.08911	695	0.01139		
420	0.00461	560	0.09107	700	0.00969		
425	0.00885	565	0.09313	705	0.00825		
430	0.01687	570	0.09498	710	0.00701		
435	0.03125	575	0.09691	715	0.00594		
440	0.05486	580	0.09824	720	0.00505		
445	0.09261	585	0.09897	725	0.00428		
450	0.14234	590	0.09878	730	0.00363		
455	0.16569	595	0.09763	735	0.00307		
460	0.12880	600	0.09554	740	0.00261		
465	0.08671	605	0.09230	745	0.00221		
470	0.06570	610	0.08808	750	0.00187		
475	0.04965	615	0.08332	755	0.00159		
480	0.03917	620	0.07782	760	0.00133		
485	0.03777	625	0.07186	765	0.00112		

IES TM-30-18 Color Rendition Report



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

x 0.3441
 y 0.3530
 u' 0.2102
 v' 0.4852

CIE 13.3-1995
(CRI)

R_a 83
 R_g 4

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 L25023.

Dialight unit model number ALU7WC26DNNNGN

Electrical Measurements:

Input Voltage: 120.5 (VAC)
Input current: 0.42 (A)
Input Power: 50.12 (W)
Power Factor: 0.9958

Photometric measurements:

Absolute Luminous Flux: 6164.1 (lumens)
Luminous Efficacy: 123.0 (lumens/W)

BUG Rating: B2 - U0 - G2

Photometric Distribution Summary:

Candlepower Summary

H/V	0.00	45.00	90.00	135.00	180.00	Lumens
0.00	1449	1449	1449	1449	1449	
5.00	1565	1491	1403	1376	1413	148
15.00	1627	1768	1522	1336	1286	422
25.00	1373	1793	1510	1382	1067	624
35.00	1197	1643	1524	1295	923	767
45.00	846	1501	1557	1146	749	793
55.00	568	1231	2043	1058	500	785
65.00	184	1422	2490	1103	98	709
75.00	20	972	944	865	34	386
85.00	3	8	12	13	6	4
90.00	1	3	1	1	1	

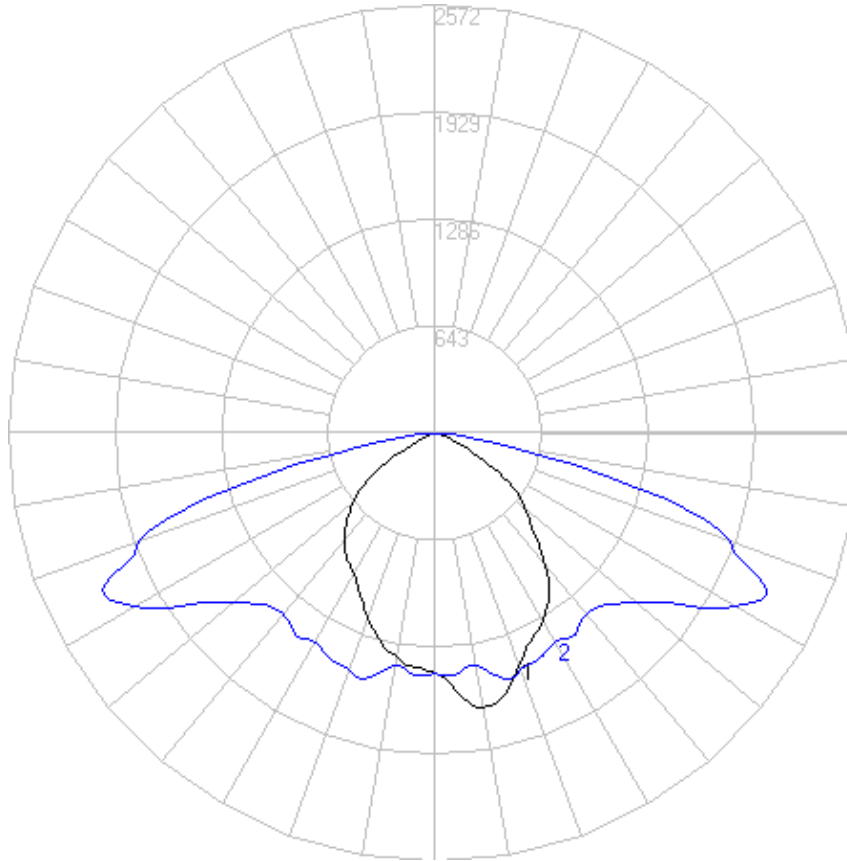
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	1264.59	20.52	20.52
0 to 40	2140.70	34.74	34.74
0 to 60	4175.88	67.77	67.77
0 to 90	6161.65	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	6161.65	100.00	100.00

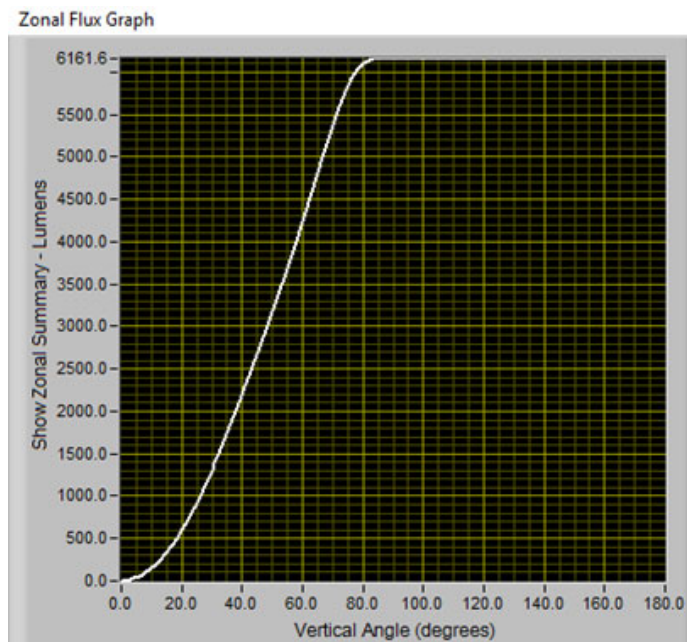
Test Results: Goniometer

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Polar Plot:



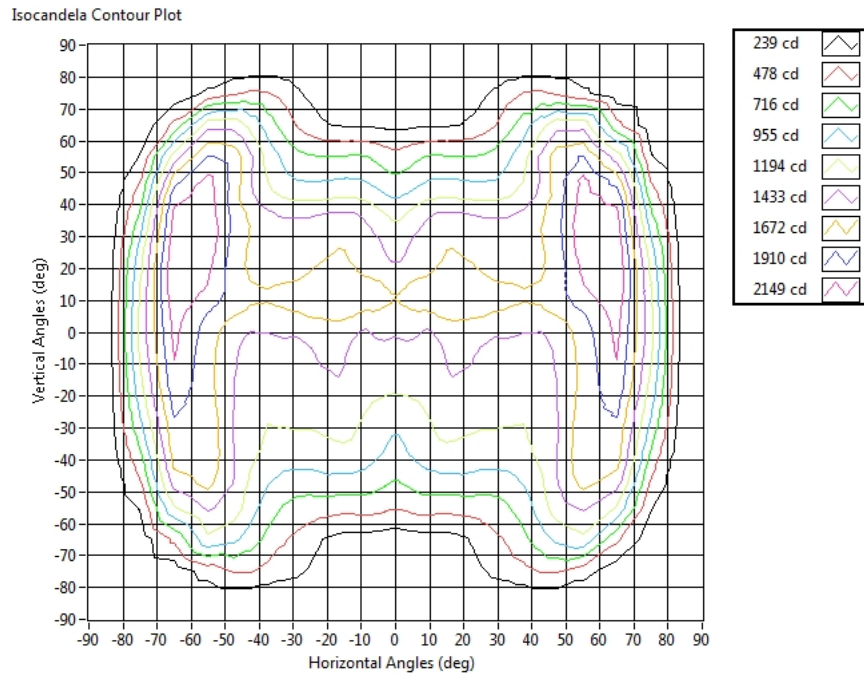
Zonal Flux:



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	4.31	17.67	362.1
4	8.62	35.35	90.5
6	12.93	53.02	40.2
8	17.25	70.69	22.6
10	21.56	88.37	14.5
12	25.87	106.04	10.1
14	30.18	123.72	7.4
16	34.49	141.39	5.7
18	38.80	159.06	4.5
20	43.12	176.74	3.6

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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Test Report Issued By:

Abriam Rodriguez
Dialight Optics Laboratory
Optics Lab Technician

Test Report Reviewed and Approved By:

Callan McCormick
Dialight Optics Laboratory
Optics Lab Engineer
Approved Signatory