

Test Report

Report Number: L25024

Date: Aug 28, 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: ALU5WC26DNNNGN

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 27, 2025 through August 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

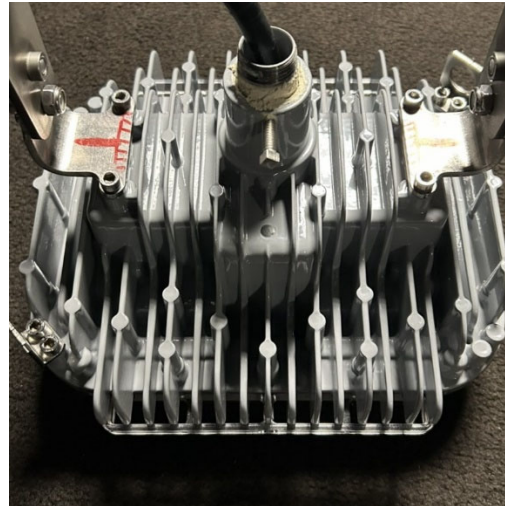
Description of sample:

Sample Number: L25024
Manufacturer: Dialight Corporation
Product Name: Area Light 6K Wide
Description: Area Light
Model Number: ALU5WC26DNNNGN

Report Summary

Sample number L25024
Dialight unit model number ALU5WC26DNNNGN

Photograph(s) of sample:



*Photographs not to scale. For reference only.

Summary of Results:

	<u>Integrating Sphere</u>	<u>Goniophotometer</u>
Luminous Flux:	6232 (lumens)	6212 (lumens)
Electrical Power:	50.1 (W)	50.1 (W)
Luminous Efficacy:	124.4 (lumens/W)	124 (lumens/W)

Electrical Measurements:

Primary Voltage:	Input Power (120VAC):	50.1 (W)
	Power Factor (120VAC):	0.9972
	Current ATHD % (120VAC):	5.50
Secondary Voltage:	Input Power (277VAC):	49.4 (W)
	Power Factor (277VAC):	0.9724
	Current ATHD % (277VAC):	4.34

Color Measurements:

Correlated Color Temperature (CCT):	5062 (K)
Color Rendering Index (CRI):	83.53
Chromaticity Coordinate (x):	0.344
Chromaticity Coordinate (y):	0.352
Chromaticity Coordinate (u'):	0.210
Chromaticity Coordinate (v'):	0.484
DUV:	0.0007

Test Results: Integrating Sphere

Results include unit color, flux, efficacy and electrical power for sample number L25024.

Dialight unit model number ALU5WC26DNNNGN

Test Conditions:

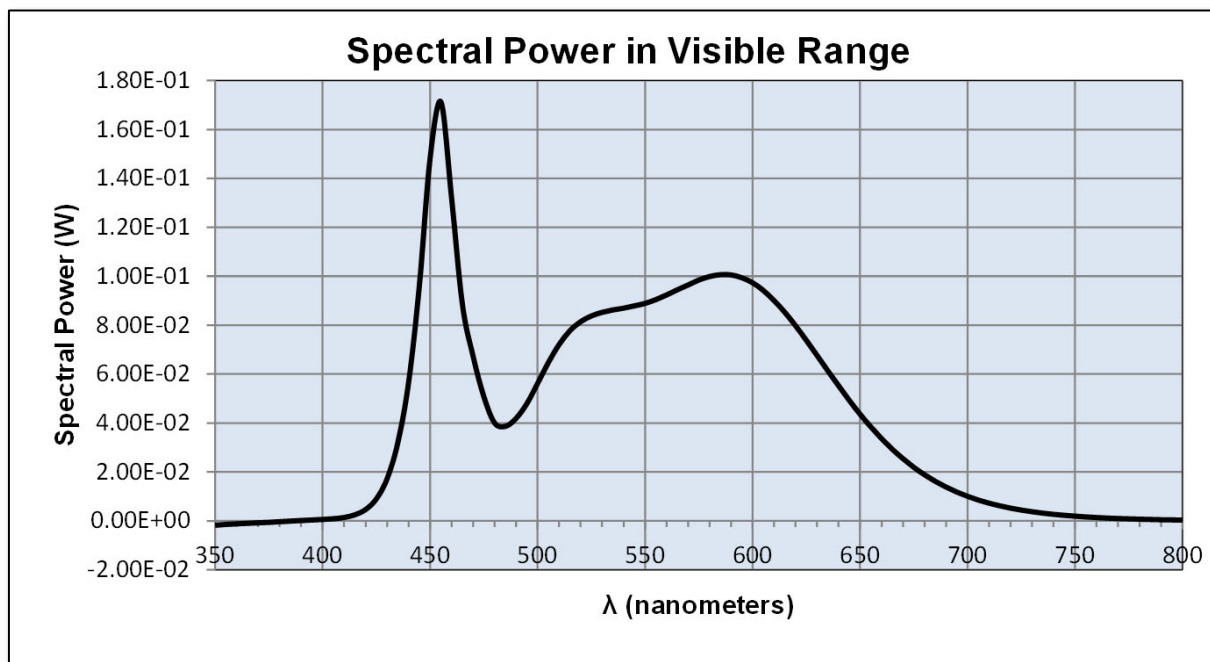
Ambient Temperature: 25 ± 1.2 (°C)
Ambient Relative Humidity: 10 to 65 (%RH)

Electrical Measurements:

Input Voltage: 121.3 (VAC)
Input Current: 0.414 (A)
Input Power: 50.1 (W)
Input Power Factor: 0.9972
Current ATHD: 5.50 (%)

Photometric measurements:

Luminous Flux: 6232.4 (lumens)
Luminous Efficacy: 124.4 (lumens/W)
Correlated Color Temperature (CCT): 5062 (K)
CRI -Ra: 83.53
CRI -R9: 6.42
DUV: 0.0007
CIE Coordinate (x): 0.344
CIE Coordinate (y): 0.352
CIE Coordinate (u'): 0.210
CIE Coordinate (v'): 0.484
TM30_Rf: 83.2
TM30_Rg: 95.2
TM30_Rcs_hue1: -12.64 %



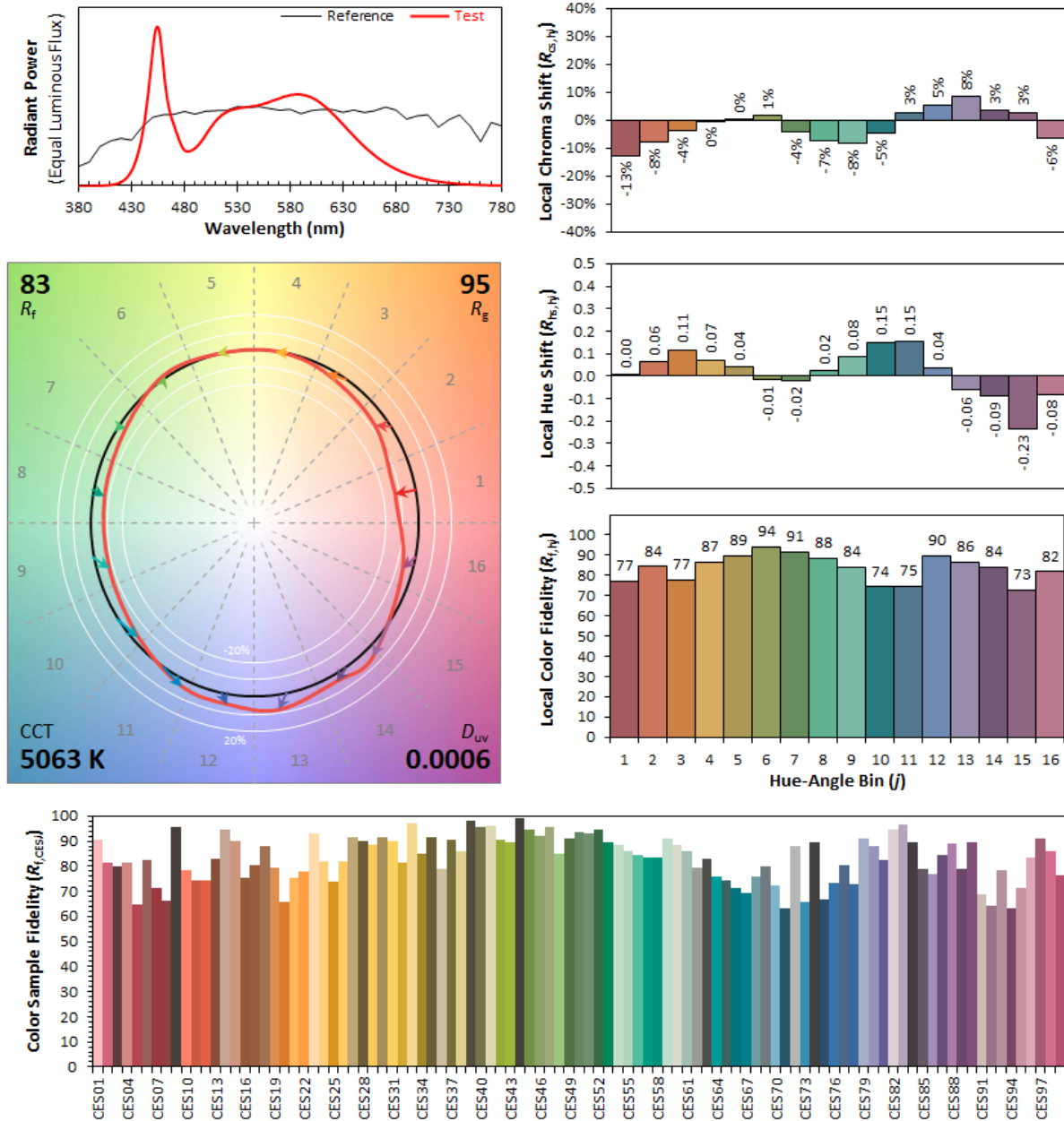
Test Results: Integrating Sphere

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	-0.00175	490	0.04195	630	0.06761	770	0.00099
355	-0.00141	495	0.04795	635	0.06132	775	0.00084
360	-0.00120	500	0.05618	640	0.05524	780	0.00071
365	-0.00097	505	0.06473	645	0.04925	785	0.00060
370	-0.00076	510	0.07214	650	0.04360	790	0.00050
375	-0.00058	515	0.07775	655	0.03845	795	0.00041
380	-0.00033	520	0.08145	660	0.03363	800	0.00035
385	-0.00007	525	0.08378	665	0.02927		
390	0.00018	530	0.08526	670	0.02541		
395	0.00038	535	0.08626	675	0.02189		
400	0.00061	540	0.08698	680	0.01886		
405	0.00090	545	0.08791	685	0.01616		
410	0.00142	550	0.08893	690	0.01383		
415	0.00251	555	0.09048	695	0.01180		
420	0.00467	560	0.09238	700	0.01004		
425	0.00902	565	0.09449	705	0.00852		
430	0.01725	570	0.09647	710	0.00724		
435	0.03209	575	0.09847	715	0.00616		
440	0.05667	580	0.09991	720	0.00523		
445	0.09613	585	0.10067	725	0.00445		
450	0.14839	590	0.10057	730	0.00376		
455	0.17129	595	0.09939	735	0.00318		
460	0.13191	600	0.09735	740	0.00270		
465	0.08860	605	0.09421	745	0.00228		
470	0.06725	610	0.09004	750	0.00194		
475	0.05076	615	0.08527	755	0.00164		
480	0.04002	620	0.07978	760	0.00138		
485	0.03864	625	0.07382	765	0.00117		

IES TM-30-18 Color Rendition Report



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

x 0.3435
 y 0.3515
 u' 0.2103
 v' 0.4844

CIE 13.3-1995
(CRI)

R_a 84
 R_g 6

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 L25024.

Dialight unit model number ALU5WC26DNNNGN

Electrical Measurements:

Input Voltage: 120.5 (VAC)
Input current: 0.42 (A)
Input Power: 50.09 (W)
Power Factor: 0.9957

Photometric measurements:

Absolute Luminous Flux: 6211.6 (lumens)
Luminous Efficacy: 124.0 (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	1384	1384	1384	1384	1384	
5.00	1346	1377	1417	1468	1495	144
15.00	1211	1273	1392	1619	1540	395
25.00	1023	1219	1331	1578	1346	581
35.00	871	1090	1267	1401	1127	687
45.00	710	919	1186	1232	855	702
55.00	540	737	1426	1000	613	678
65.00	176	708	1622	1078	251	556
75.00	70	689	1810	1082	84	524
85.00	41	331	537	448	39	130
90.00	33	165	246	198	31	

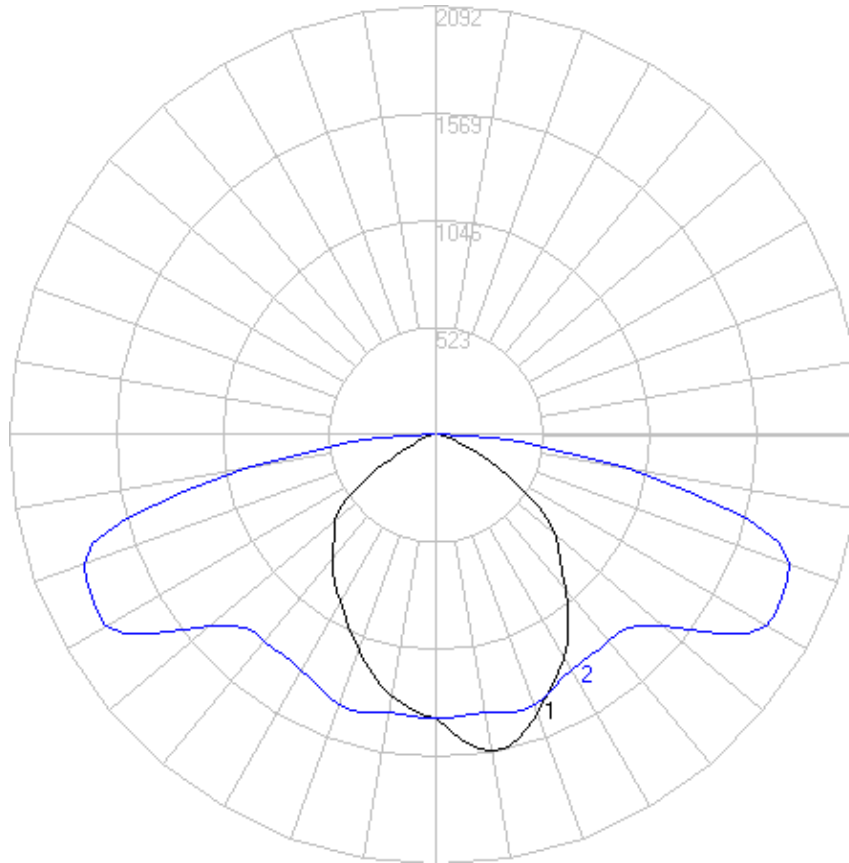
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0 to 30	1155.14	19.12	19.12
0 to 40	1928.51	31.92	31.92
0 to 60	3751.48	62.09	62.09
0 to 90	6041.75	100.00	100.00
90 to 180	0.00	0.00	0.00
0 to 180	6041.75	100.00	100.00

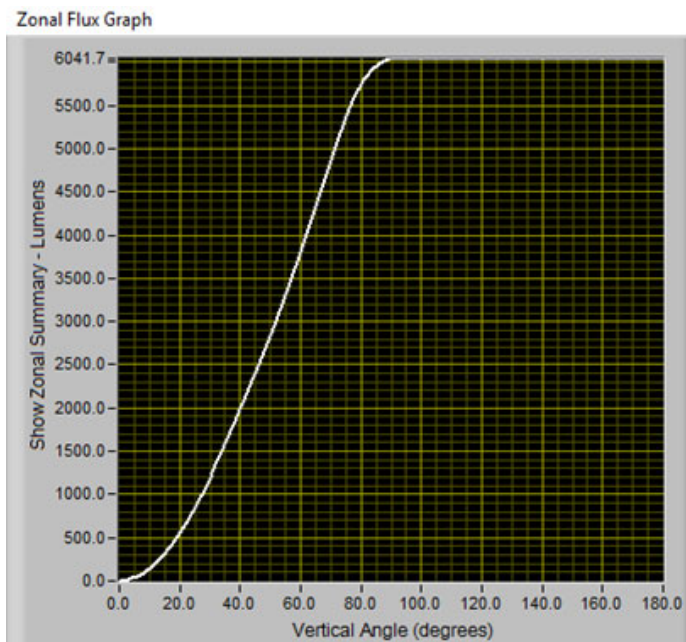
Test Results: Goniometer

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Polar Plot:



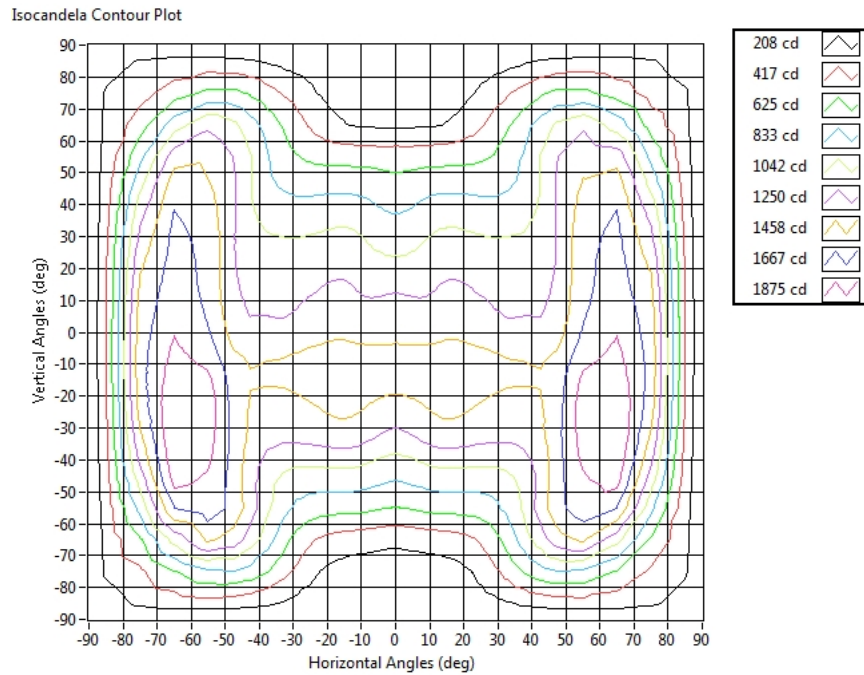
Zonal Flux:



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	4.87	32.00	346.1
4	9.75	64.00	86.5
6	14.62	96.01	38.5
8	19.49	128.01	21.6
10	24.36	160.01	13.8
12	29.24	192.01	9.6
14	34.11	224.01	7.1
16	38.98	256.02	5.4
18	43.85	288.02	4.3
20	48.73	320.02	3.5

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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