

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P1357178

Luminaire Tested: 4ASL4-20HE-2-92765-UNV_3000K

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-7)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: 4ASL4-20HE-2-92765-UNV_3000K
Description: 4FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 3000K LEDS 2 ROW
Light Source: -
Ballast/Driver: -

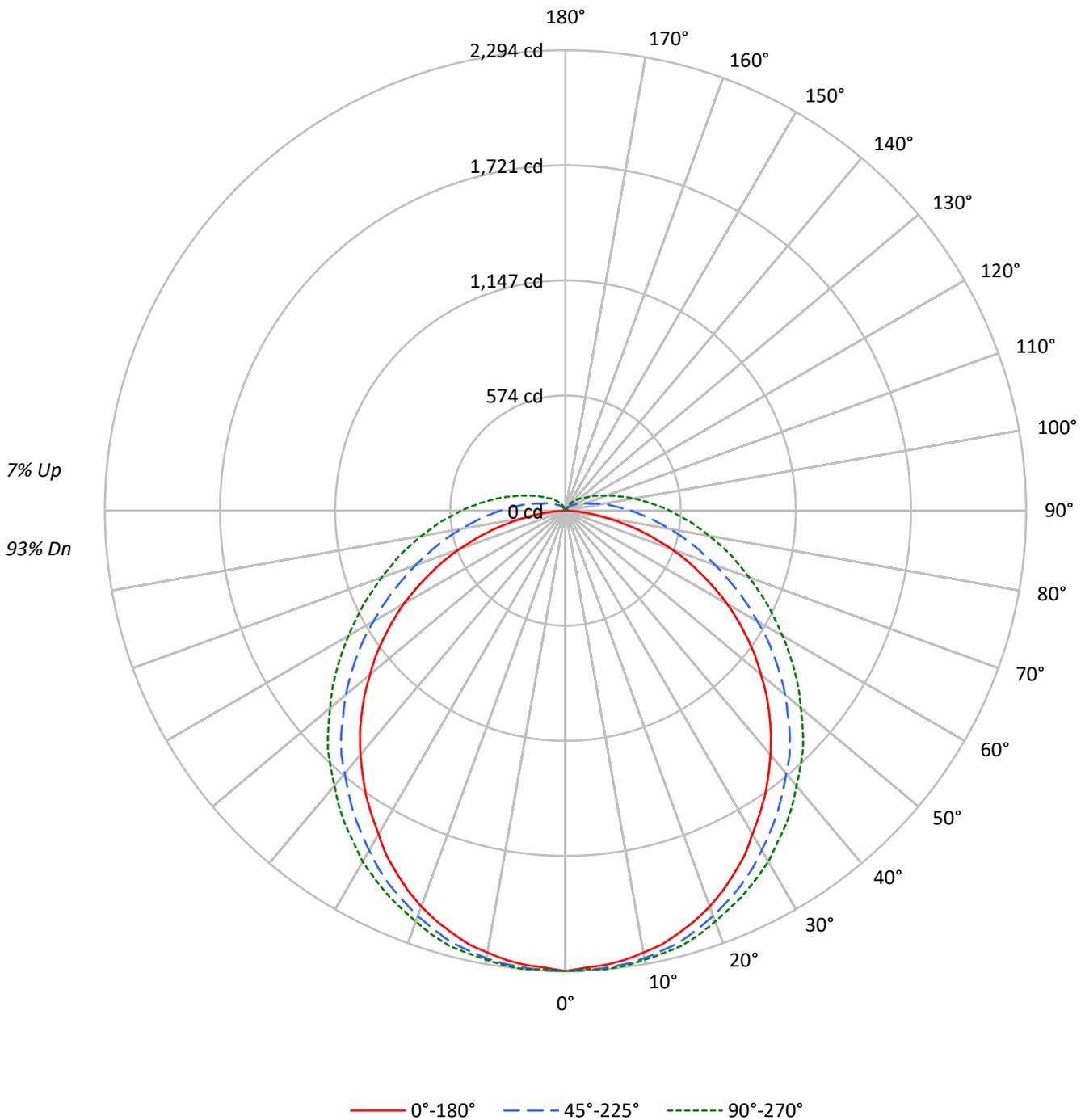
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7876.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 74.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	95	95	95	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	65	70	66	63	63	63	63	60
3	86	75	66	59	83	73	65	58	69	62	56	65	59	55	62	57	53	53	53	53	50
4	79	66	57	50	76	64	56	49	61	54	48	58	51	46	55	49	45	45	45	45	42
5	72	59	50	43	70	57	49	42	54	47	41	52	45	40	49	43	39	39	39	39	36
6	67	53	44	37	64	52	43	37	49	41	36	47	40	35	44	39	34	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	34	29	41	33	28	39	32	28	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	29	24	24	24	24	22
10	50	37	29	24	49	36	28	23	35	28	23	33	27	22	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18618	18618	18618
5°	18471	18248	18192
10°	18345	17911	17749
15°	18178	17543	17394
20°	17960	17078	16895
25°	17615	16619	16464
30°	17182	16095	16036
35°	16845	15608	15540
40°	16453	15082	15017
45°	16057	14630	14636
50°	15545	14031	14070
55°	15054	13386	13621
60°	14451	12663	13143
65°	13511	11990	12773
70°	12456	11357	12434
75°	10923	10870	12322
80°	8513	10438	12284
85°	5167	10424	12635

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16057 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.6	2.8
10°-20°	625.4	7.9
20°-30°	947.6	12.0
30°-40°	1146.2	14.6
40°-50°	1208.3	15.3
50°-60°	1127.8	14.3
60°-70°	931.1	11.8
70°-80°	675.4	8.6
80°-90°	426.7	5.4
90°-100°	254.7	3.2
100°-110°	146.0	1.9
110°-120°	82.9	1.1
120°-130°	47.3	0.6
130°-140°	25.6	0.3
140°-150°	11.2	0.1
150°-160°	2.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1790.6	22.7
0°-40°	2936.8	37.3
0°-60°	5272.9	66.9
0°-90°	7306.1	92.8
90°-120°	483.7	6.1
90°-150°	567.8	7.2
90°-180°	570.0	7.2
0°-180°	7876.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2294	2294	2294	2294	2294	
5°	2273	2294	2287	2287	2294	216
15°	2179	2208	2222	2229	2244	615
25°	1991	2020	2063	2092	2107	917
35°	1732	1775	1840	1890	1912	1082
45°	1436	1493	1580	1645	1674	1107
55°	1104	1169	1270	1356	1392	987
65°	743	822	945	1060	1111	738
75°	382	483	656	794	851	402
85°	72	224	418	563	620	88
90°	0	137	325	462	519	3
95°	0	87	245	375	426	0
105°	0	29	137	238	274	0
115°	0	14	79	144	173	0
125°	0	7	50	94	108	0
135°	0	0	29	58	72	0
145°	0	0	14	36	43	0
155°	0	0	0	7	14	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2294.2	2294.2	2294.2	2294.2	2294.2
2.5°	2279.8	2301.4	2294.2	2287.0	2287.0
5°	2272.6	2294.2	2287.0	2287.0	2294.2
7.5°	2258.1	2279.8	2279.8	2279.8	2287.0
10°	2236.5	2265.3	2265.3	2265.3	2272.6
12.5°	2214.8	2236.5	2243.7	2250.9	2258.1
15°	2178.8	2207.6	2222.1	2229.3	2243.7
17.5°	2142.7	2164.3	2186.0	2207.6	2214.8
20°	2099.4	2128.3	2149.9	2171.6	2178.8
22.5°	2048.9	2077.8	2106.6	2128.3	2142.7
25°	1991.2	2020.0	2063.3	2092.2	2106.6
27.5°	1933.5	1962.3	2012.8	2048.9	2063.3
30°	1861.3	1904.6	1955.1	1998.4	2020.0
32.5°	1796.4	1839.7	1897.4	1947.9	1962.3
35°	1731.5	1774.8	1839.7	1890.2	1911.8
37.5°	1659.3	1709.8	1774.8	1832.5	1854.1
40°	1587.2	1637.7	1709.8	1774.8	1789.2
42.5°	1515.0	1565.5	1652.1	1709.8	1731.5
45°	1435.7	1493.4	1580.0	1644.9	1673.8
47.5°	1356.3	1414.0	1500.6	1572.8	1601.6
50°	1269.7	1334.7	1428.5	1500.6	1529.5
52.5°	1190.4	1255.3	1349.1	1428.5	1464.5
55°	1103.8	1168.7	1269.7	1356.3	1392.4
57.5°	1017.2	1082.2	1190.4	1284.2	1320.2
60°	930.7	995.6	1103.8	1212.0	1248.1
62.5°	836.9	909.0	1024.5	1132.7	1176.0
65°	743.1	822.4	945.1	1060.5	1111.0
67.5°	656.5	735.9	865.7	995.6	1038.9
70°	562.7	649.3	793.6	923.5	974.0
72.5°	468.9	562.7	721.4	858.5	909.0
75°	382.4	483.4	656.5	793.6	851.3
77.5°	288.6	411.2	591.6	735.9	786.4
80°	209.2	339.1	526.7	678.2	728.7
82.5°	137.1	274.1	468.9	620.4	670.9
85°	72.1	223.6	418.4	562.7	620.4
87.5°	21.6	173.1	367.9	512.2	562.7
90°	0.0	137.1	324.7	461.7	519.4
92.5°	0.0	108.2	281.4	418.4	468.9
95°	0.0	86.6	245.3	375.2	425.7
97.5°	0.0	72.1	216.4	339.1	382.4
100°	0.0	57.7	187.6	303.0	346.3
102.5°	0.0	43.3	158.7	266.9	310.2
105°	0.0	28.9	137.1	238.1	274.1
107.5°	0.0	21.6	115.4	209.2	245.3
110°	0.0	21.6	108.2	180.4	216.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.4	93.8	165.9	194.8
115°	0.0	14.4	79.4	144.3	173.1
117.5°	0.0	14.4	72.1	129.9	158.7
120°	0.0	14.4	64.9	115.4	137.1
122.5°	0.0	7.2	57.7	101.0	122.6
125°	0.0	7.2	50.5	93.8	108.2
127.5°	0.0	7.2	43.3	86.6	101.0
130°	0.0	7.2	43.3	79.4	93.8
132.5°	0.0	0.0	36.1	72.1	86.6
135°	0.0	0.0	28.9	57.7	72.1
137.5°	0.0	0.0	28.9	50.5	64.9
140°	0.0	0.0	21.6	50.5	57.7
142.5°	0.0	0.0	14.4	43.3	50.5
145°	0.0	0.0	14.4	36.1	43.3
147.5°	0.0	0.0	7.2	28.9	36.1
150°	0.0	0.0	7.2	21.6	28.9
152.5°	0.0	0.0	0.0	14.4	21.6
155°	0.0	0.0	0.0	7.2	14.4
157.5°	0.0	0.0	0.0	0.0	7.2
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.47	21.01	19.94	21.47	21.96	21.53	23.07	22.00	23.53	24.02
	3H	20.97	22.37	21.46	22.84	23.38	23.98	25.38	24.47	25.85	26.38
	4H	21.45	22.78	21.96	23.27	23.81	25.19	26.52	25.70	27.01	27.55
	6H	21.73	22.97	22.25	23.47	24.03	26.46	27.70	26.98	28.20	28.76
	8H	21.78	22.97	22.31	23.49	24.06	27.12	28.31	27.65	28.83	29.40
	12H	21.80	22.93	22.34	23.45	24.05	27.85	28.99	28.39	29.51	30.10
4H	2H	20.35	21.68	20.86	22.17	22.71	21.96	23.29	22.47	23.78	24.32
	3H	22.09	23.23	22.61	23.76	24.32	24.64	25.78	25.16	26.31	26.87
	4H	22.70	23.74	23.24	24.28	24.88	26.03	27.06	26.57	27.60	28.20
	6H	23.10	24.02	23.66	24.59	25.20	27.50	28.41	28.05	28.98	29.59
	8H	23.20	24.06	23.77	24.63	25.26	28.26	29.12	28.83	29.69	30.32
	12H	23.25	24.03	23.83	24.63	25.26	29.12	29.90	29.70	30.49	31.13
8H	4H	23.40	24.26	23.96	24.83	25.45	26.25	27.11	26.81	27.68	28.30
	6H	23.98	24.72	24.58	25.32	25.96	27.89	28.62	28.49	29.23	29.86
	8H	24.17	24.83	24.78	25.45	26.09	28.80	29.46	29.41	30.08	30.73
	12H	24.29	24.88	24.90	25.49	26.20	29.84	30.43	30.45	31.04	31.75
12H	4H	23.60	24.38	24.18	24.98	25.61	26.26	27.04	26.84	27.63	28.26
	6H	24.29	24.95	24.90	25.57	26.21	27.93	28.59	28.54	29.21	29.85
	8H	24.58	25.17	25.19	25.77	26.48	28.91	29.50	29.52	30.11	30.82