

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: P1357182

Luminaire Tested: 4ASL4-20HE-2-92765-UNV_6500K

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357182
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_6500K
Description: 4FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 6500K LEDS 2 ROW
Light Source: -
Ballast/Driver: -

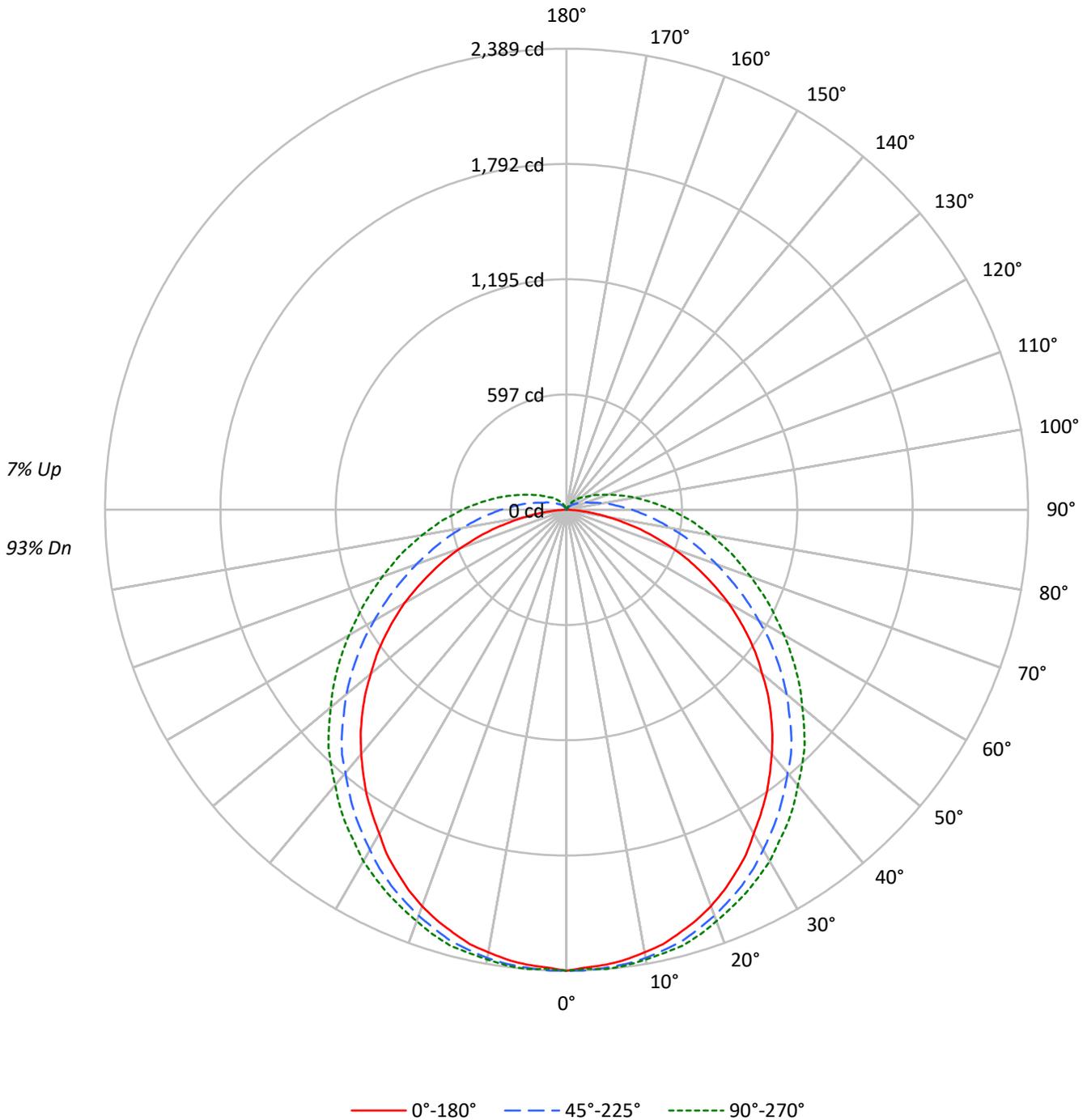
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8201.0 lumens
Efficiency: N/A
Efficacy: 109.5 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				
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°	19387	19387	19387
5°	19232	19001	18943
10°	19102	18650	18481
15°	18928	18267	18112
20°	18700	17783	17592
25°	18342	17306	17144
30°	17891	16760	16698
35°	17540	16252	16181
40°	17132	15705	15636
45°	16719	15233	15239
50°	16187	14609	14651
55°	15676	13939	14183
60°	15047	13186	13686
65°	14069	12485	13301
70°	12969	11825	12946
75°	11371	11318	12830
80°	8867	10868	12790
85°	5382	10855	13156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16719 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.6	2.8
10°-20°	651.2	7.9
20°-30°	986.8	12.0
30°-40°	1193.5	14.6
40°-50°	1258.2	15.3
50°-60°	1174.3	14.3
60°-70°	969.5	11.8
70°-80°	703.3	8.6
80°-90°	444.4	5.4
90°-100°	265.2	3.2
100°-110°	152.0	1.9
110°-120°	86.3	1.1
120°-130°	49.3	0.6
130°-140°	26.7	0.3
140°-150°	11.7	0.1
150°-160°	2.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1864.5	22.7
0°-40°	3058.0	37.3
0°-60°	5490.5	66.9
0°-90°	7607.6	92.8
90°-120°	503.6	6.1
90°-150°	591.2	7.2
90°-180°	593.0	7.2
0°-180°	8201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2389	2389	2389	2389	2389	
5°	2366	2389	2381	2381	2389	225
15°	2269	2299	2314	2321	2336	640
25°	2073	2103	2148	2178	2194	955
35°	1803	1848	1916	1968	1991	1127
45°	1495	1555	1645	1713	1743	1153
55°	1149	1217	1322	1412	1450	1027
65°	774	856	984	1104	1157	768
75°	398	503	684	826	886	419
85°	75	233	436	586	646	92
90°	0	143	338	481	541	3
95°	0	90	255	391	443	0
105°	0	30	143	248	286	0
115°	0	15	83	150	180	0
125°	0	8	53	98	113	0
135°	0	0	30	60	75	0
145°	0	0	15	38	45	0
155°	0	0	0	8	15	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°	2388.9	2388.9	2388.9	2388.9	2388.9
2.5°	2373.8	2396.4	2388.9	2381.4	2381.4
5°	2366.3	2388.9	2381.4	2381.4	2388.9
7.5°	2351.3	2373.8	2373.8	2373.8	2381.4
10°	2328.8	2358.8	2358.8	2358.8	2366.3
12.5°	2306.2	2328.8	2336.3	2343.8	2351.3
15°	2268.7	2298.7	2313.7	2321.3	2336.3
17.5°	2231.1	2253.6	2276.2	2298.7	2306.2
20°	2186.0	2216.1	2238.6	2261.2	2268.7
22.5°	2133.5	2163.5	2193.6	2216.1	2231.1
25°	2073.4	2103.4	2148.5	2178.5	2193.6
27.5°	2013.3	2043.3	2095.9	2133.5	2148.5
30°	1938.1	1983.2	2035.8	2080.9	2103.4
32.5°	1870.5	1915.6	1975.7	2028.3	2043.3
35°	1802.9	1848.0	1915.6	1968.2	1990.7
37.5°	1727.8	1780.4	1848.0	1908.1	1930.6
40°	1652.7	1705.3	1780.4	1848.0	1863.0
42.5°	1577.6	1630.1	1720.3	1780.4	1802.9
45°	1494.9	1555.0	1645.2	1712.8	1742.8
47.5°	1412.3	1472.4	1562.5	1637.7	1667.7
50°	1322.1	1389.7	1487.4	1562.5	1592.6
52.5°	1239.5	1307.1	1404.8	1487.4	1525.0
55°	1149.4	1217.0	1322.1	1412.3	1449.8
57.5°	1059.2	1126.8	1239.5	1337.2	1374.7
60°	969.1	1036.7	1149.4	1262.0	1299.6
62.5°	871.4	946.5	1066.7	1179.4	1224.5
65°	773.8	856.4	984.1	1104.3	1156.9
67.5°	683.6	766.2	901.5	1036.7	1081.8
70°	585.9	676.1	826.3	961.6	1014.1
72.5°	488.3	585.9	751.2	893.9	946.5
75°	398.1	503.3	683.6	826.3	886.4
77.5°	300.5	428.2	616.0	766.2	818.8
80°	217.9	353.1	548.4	706.1	758.7
82.5°	142.7	285.5	488.3	646.0	698.6
85°	75.1	232.9	435.7	585.9	646.0
87.5°	22.5	180.3	383.1	533.4	585.9
90°	0.0	142.7	338.0	480.8	540.9
92.5°	0.0	112.7	293.0	435.7	488.3
95°	0.0	90.1	255.4	390.6	443.2
97.5°	0.0	75.1	225.4	353.1	398.1
100°	0.0	60.1	195.3	315.5	360.6
102.5°	0.0	45.1	165.3	277.9	323.0
105°	0.0	30.0	142.7	247.9	285.5
107.5°	0.0	22.5	120.2	217.9	255.4
110°	0.0	22.5	112.7	187.8	225.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	15.0	97.7	172.8	202.8
115°	0.0	15.0	82.6	150.2	180.3
117.5°	0.0	15.0	75.1	135.2	165.3
120°	0.0	15.0	67.6	120.2	142.7
122.5°	0.0	7.5	60.1	105.2	127.7
125°	0.0	7.5	52.6	97.7	112.7
127.5°	0.0	7.5	45.1	90.1	105.2
130°	0.0	7.5	45.1	82.6	97.7
132.5°	0.0	0.0	37.6	75.1	90.1
135°	0.0	0.0	30.0	60.1	75.1
137.5°	0.0	0.0	30.0	52.6	67.6
140°	0.0	0.0	22.5	52.6	60.1
142.5°	0.0	0.0	15.0	45.1	52.6
145°	0.0	0.0	15.0	37.6	45.1
147.5°	0.0	0.0	7.5	30.0	37.6
150°	0.0	0.0	7.5	22.5	30.0
152.5°	0.0	0.0	0.0	15.0	22.5
155°	0.0	0.0	0.0	7.5	15.0
157.5°	0.0	0.0	0.0	0.0	7.5
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	19.61	21.15	20.08	21.61	22.10	21.67	23.21	22.14	23.67	24.16
	3H	21.11	22.51	21.60	22.98	23.52	24.12	25.52	24.61	25.99	26.52
	4H	21.59	22.92	22.10	23.41	23.95	25.33	26.66	25.84	27.15	27.69
	6H	21.87	23.11	22.39	23.61	24.17	26.60	27.84	27.12	28.34	28.90
	8H	21.92	23.11	22.45	23.63	24.20	27.26	28.45	27.79	28.97	29.54
	12H	21.94	23.08	22.48	23.59	24.19	27.99	29.13	28.53	29.65	30.24
4H	2H	20.49	21.82	21.00	22.31	22.85	22.10	23.43	22.61	23.92	24.46
	3H	22.23	23.37	22.75	23.90	24.46	24.78	25.92	25.30	26.45	27.01
	4H	22.84	23.88	23.38	24.42	25.02	26.17	27.20	26.71	27.74	28.34
	6H	23.24	24.16	23.80	24.73	25.34	27.64	28.55	28.20	29.12	29.73
	8H	23.34	24.20	23.91	24.77	25.40	28.40	29.26	28.97	29.83	30.46
	12H	23.39	24.17	23.98	24.77	25.40	29.26	30.04	29.84	30.64	31.27
8H	4H	23.54	24.40	24.10	24.97	25.59	26.39	27.25	26.95	27.82	28.44
	6H	24.12	24.86	24.72	25.46	26.10	28.03	28.76	28.63	29.37	30.00
	8H	24.31	24.97	24.92	25.59	26.23	28.94	29.60	29.55	30.22	30.87
	12H	24.43	25.02	25.04	25.63	26.34	29.98	30.57	30.59	31.18	31.89
12H	4H	23.74	24.52	24.32	25.12	25.75	26.40	27.18	26.98	27.77	28.40
	6H	24.43	25.09	25.04	25.71	26.35	28.07	28.73	28.68	29.35	29.99
	8H	24.72	25.31	25.33	25.91	26.62	29.05	29.64	29.66	30.25	30.96