

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: P1356890

Luminaire Tested: 2ASL4-20VHE-3-92765-UNV\_5000K

Issue Date: 2/17/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1356890  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/17/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: 2ASL4-20VHE-3-92765-UNV\_5000K  
Description: 2FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 5000K LEDS 3 ROW  
Light Source: -  
Ballast/Driver: -

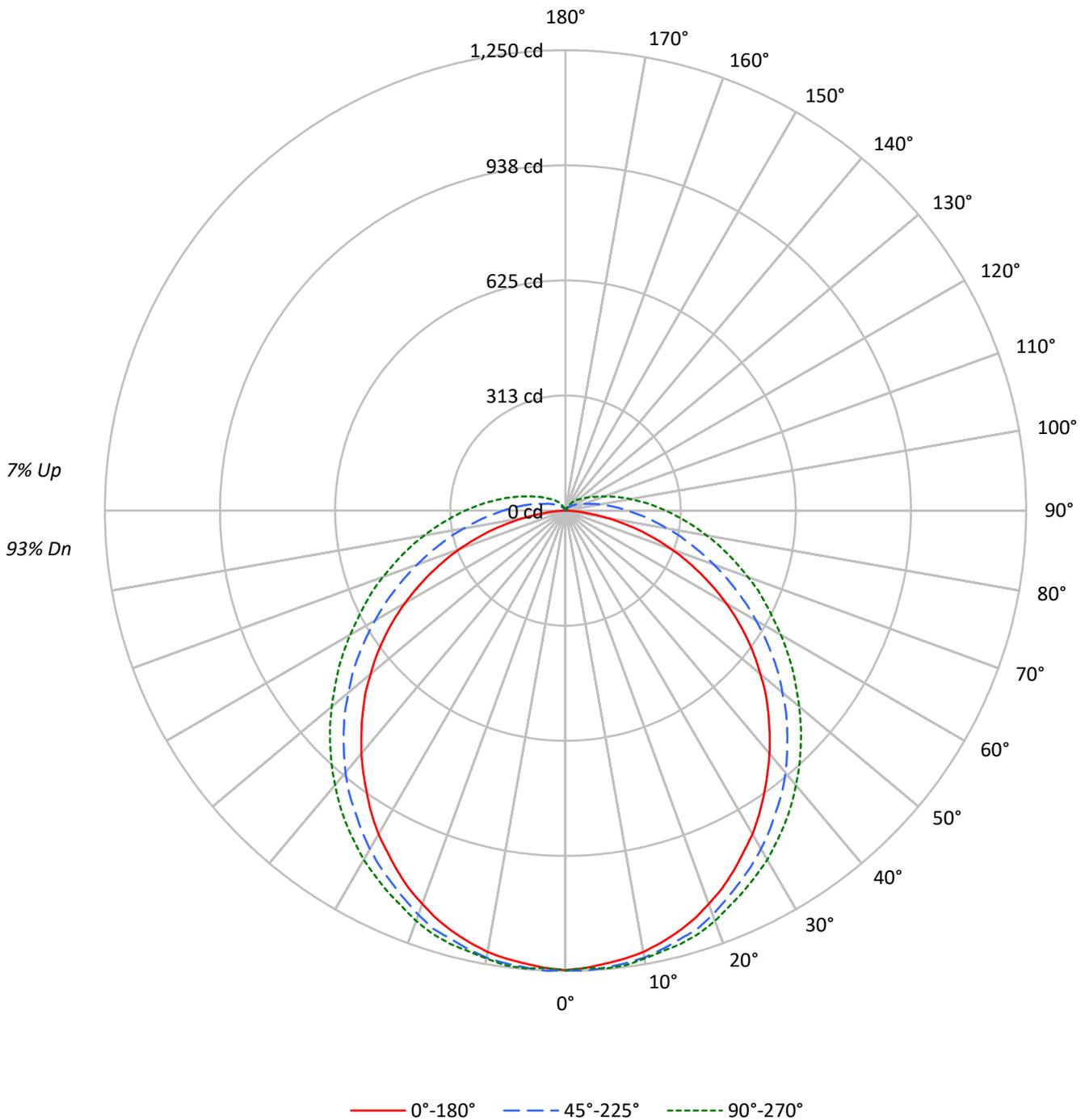
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4243.0 lumens  
Efficiency: N/A  
Efficacy: 116.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1.98' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 36.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	96	96	96	96	96	96	93
1	105	100	95	91	102	97	92	88	91	88	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	63	63	63	61
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	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	35	29	41	34	28	39	32	28	37	32	27	27	27	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	24	24	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	22	22	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	20361	20361	20361
5°	20134	19945	19895
10°	19974	19529	19392
15°	19706	19018	18966
20°	19361	18530	18485
25°	18965	17926	17938
30°	18548	17398	17475
35°	18042	16806	16960
40°	17571	16260	16417
45°	17061	15607	15873
50°	16483	14907	15307
55°	15856	14234	14798
60°	15052	13455	14283
65°	14040	12700	13853
70°	12758	11947	13519
75°	10939	11243	13287
80°	8264	10684	13191
85°	4547	10447	13385

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17061 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.3	2.8
10°-20°	339.8	8.0
20°-30°	513.7	12.1
30°-40°	622.0	14.7
40°-50°	653.3	15.4
50°-60°	609.5	14.4
60°-70°	503.7	11.9
70°-80°	362.7	8.5
80°-90°	225.4	5.3
90°-100°	132.1	3.1
100°-110°	75.5	1.8
110°-120°	42.7	1.0
120°-130°	24.5	0.6
130°-140°	13.2	0.3
140°-150°	5.6	0.1
150°-160°	1.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	971.8	22.9
0°-40°	1593.8	37.6
0°-60°	2856.6	67.3
0°-90°	3948.3	93.1
90°-120°	250.3	5.9
90°-150°	293.6	6.9
90°-180°	295.0	7.0
0°-180°	4243.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1235	1245	1245	1245	1248	117
15°	1183	1199	1204	1212	1217	334
25°	1079	1097	1116	1131	1142	497
35°	939	965	996	1025	1038	588
45°	778	807	851	887	903	600
55°	599	633	685	734	752	535
65°	405	444	511	576	599	400
75°	208	259	350	426	457	220
85°	39	117	220	298	327	48
90°	0	70	169	241	272	2
95°	0	44	127	195	223	0
105°	0	16	70	122	143	0
115°	0	8	42	75	88	0
125°	0	5	26	49	57	0
135°	0	0	16	31	39	0
145°	0	0	8	18	21	0
155°	0	0	0	5	8	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°	1247.9	1247.9	1247.9	1247.9	1247.9
2.5°	1242.7	1250.5	1250.5	1242.7	1242.7
5°	1235.0	1245.3	1245.3	1245.3	1247.9
7.5°	1227.2	1240.1	1240.1	1240.1	1245.3
10°	1216.8	1229.8	1232.4	1232.4	1235.0
12.5°	1201.2	1216.8	1219.4	1222.0	1224.6
15°	1183.1	1198.6	1203.8	1211.6	1216.8
17.5°	1162.3	1180.5	1190.8	1198.6	1203.8
20°	1136.4	1154.5	1167.5	1177.9	1185.7
22.5°	1110.4	1126.0	1141.6	1154.5	1162.3
25°	1079.3	1097.4	1115.6	1131.2	1141.6
27.5°	1045.6	1066.3	1089.7	1107.8	1118.2
30°	1014.4	1035.2	1061.1	1084.5	1094.9
32.5°	978.1	1001.5	1030.0	1053.3	1066.3
35°	939.2	965.1	996.3	1024.8	1037.8
37.5°	900.3	926.2	965.1	993.7	1006.6
40°	861.4	887.3	928.8	959.9	972.9
42.5°	819.8	845.8	889.9	923.6	939.2
45°	778.3	806.9	851.0	887.3	902.9
47.5°	736.8	765.4	812.1	851.0	866.5
50°	690.1	721.3	768.0	812.1	827.6
52.5°	646.0	677.1	729.0	773.1	788.7
55°	599.3	633.0	684.9	734.2	752.4
57.5°	552.6	586.3	640.8	692.7	713.5
60°	503.3	539.6	596.7	651.2	674.6
62.5°	454.0	492.9	555.2	612.3	635.6
65°	404.7	443.6	511.1	576.0	599.3
67.5°	355.4	396.9	469.6	537.0	565.6
70°	306.1	350.2	428.1	498.1	526.7
72.5°	256.8	303.5	389.2	461.8	490.3
75°	207.6	259.4	350.2	425.5	456.6
77.5°	158.3	217.9	316.5	391.8	422.9
80°	114.2	181.6	280.2	358.0	389.2
82.5°	72.6	145.3	249.1	326.9	358.0
85°	38.9	116.7	220.5	298.4	326.9
87.5°	13.0	90.8	192.0	269.8	298.4
90°	0.0	70.0	168.6	241.3	272.4
92.5°	0.0	54.5	147.9	217.9	246.5
95°	0.0	44.1	127.1	194.6	223.1
97.5°	0.0	36.3	111.6	173.8	199.8
100°	0.0	28.5	96.0	155.7	179.0
102.5°	0.0	23.3	83.0	137.5	160.9
105°	0.0	15.6	70.0	121.9	142.7
107.5°	0.0	13.0	59.7	109.0	127.1
110°	0.0	10.4	54.5	93.4	111.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	7.8	49.3	83.0	101.2
115°	0.0	7.8	41.5	75.2	88.2
117.5°	0.0	7.8	36.3	67.5	80.4
120°	0.0	5.2	33.7	59.7	72.6
122.5°	0.0	5.2	28.5	54.5	64.9
125°	0.0	5.2	25.9	49.3	57.1
127.5°	0.0	2.6	23.3	44.1	51.9
130°	0.0	2.6	20.8	38.9	46.7
132.5°	0.0	2.6	18.2	36.3	44.1
135°	0.0	0.0	15.6	31.1	38.9
137.5°	0.0	0.0	13.0	28.5	33.7
140°	0.0	0.0	10.4	23.3	31.1
142.5°	0.0	0.0	7.8	20.8	25.9
145°	0.0	0.0	7.8	18.2	20.8
147.5°	0.0	0.0	5.2	13.0	18.2
150°	0.0	0.0	2.6	10.4	13.0
152.5°	0.0	0.0	0.0	7.8	10.4
155°	0.0	0.0	0.0	5.2	7.8
157.5°	0.0	0.0	0.0	0.0	2.6
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	19.77	21.31	20.24	21.77	22.25	21.72	23.26	22.18	23.71	24.19
	3H	21.27	22.68	21.75	23.14	23.66	24.14	25.55	24.62	26.01	26.54
	4H	21.75	23.08	22.25	23.57	24.10	25.31	26.64	25.81	27.12	27.66
	6H	22.03	23.27	22.54	23.76	24.32	26.51	27.75	27.03	28.25	28.80
	8H	22.08	23.27	22.61	23.79	24.35	27.12	28.31	27.65	28.83	29.39
	12H	22.10	23.23	22.63	23.75	24.34	27.77	28.91	28.31	29.43	30.02
4H	2H	20.63	21.96	21.14	22.45	22.98	22.15	23.49	22.66	23.97	24.51
	3H	22.37	23.50	22.88	24.03	24.59	24.81	25.94	25.32	26.47	27.03
	4H	22.97	24.01	23.51	24.55	25.14	26.15	27.18	26.68	27.72	28.31
	6H	23.37	24.29	23.93	24.85	25.46	27.54	28.46	28.10	29.02	29.63
	8H	23.47	24.33	24.03	24.89	25.51	28.26	29.12	28.82	29.68	30.30
	12H	23.51	24.30	24.09	24.89	25.51	29.03	29.82	29.61	30.41	31.03
8H	4H	23.64	24.50	24.20	25.06	25.68	26.37	27.23	26.93	27.79	28.41
	6H	24.21	24.95	24.81	25.55	26.18	27.93	28.67	28.53	29.27	29.89
	8H	24.40	25.06	25.00	25.67	26.31	28.79	29.45	29.39	30.06	30.70
	12H	24.51	25.10	25.12	25.71	26.41	29.75	30.34	30.36	30.94	31.65
12H	4H	23.82	24.60	24.40	25.19	25.82	26.38	27.16	26.96	27.75	28.37
	6H	24.50	25.16	25.10	25.77	26.41	27.97	28.63	28.58	29.25	29.89
	8H	24.78	25.37	25.38	25.97	26.67	28.90	29.49	29.50	30.09	30.79