

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



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P835596

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-4HI-20-120-EDD**

Issue Date: 5/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P835596  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-2-INS-OPL-LD4-4HI-20-120-EDD  
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens  
Light Source: 2000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

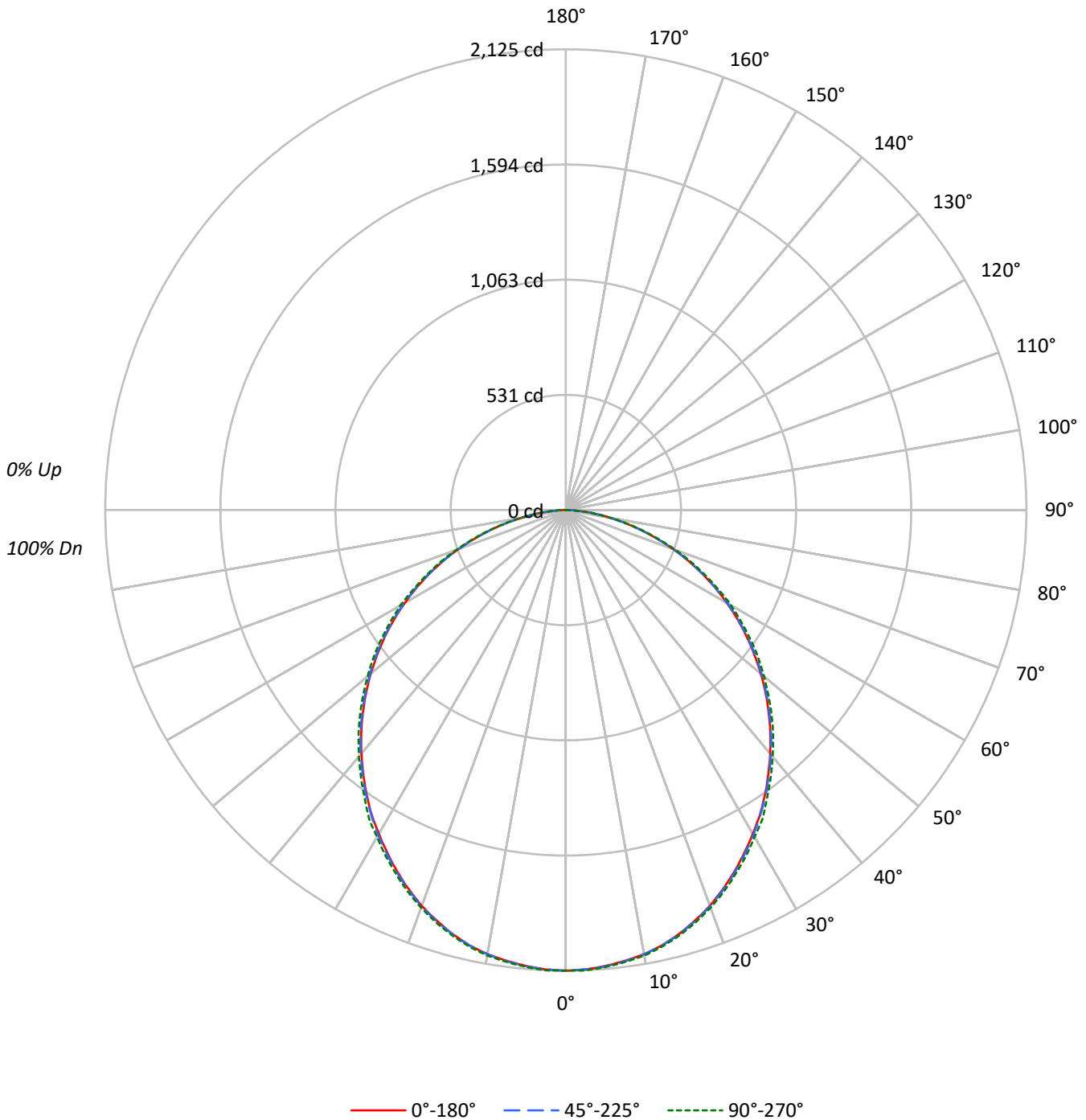
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5741.3 lumens  
Efficiency: N/A  
Efficacy: 65.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 88  
Input Voltage (V): 120  
Input Current (Ain): 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: 28.75 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

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

	0°	45°	90°
0°	5718	5718	5718
5°	5703	5707	5715
10°	5684	5685	5702
15°	5638	5641	5657
20°	5564	5571	5591
25°	5464	5477	5502
30°	5361	5379	5412
35°	5263	5276	5318
40°	5152	5169	5215
45°	5039	5061	5113
50°	4917	4939	4996
55°	4778	4800	4879
60°	4619	4638	4742
65°	4417	4431	4515
70°	4146	4150	4240
75°	3769	3755	3842
80°	3239	3225	3279
85°	2513	2473	2485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.8	3.5
10°-20°	571.1	9.9
20°-30°	850.2	14.8
30°-40°	1005.5	17.5
40°-50°	1026.5	17.9
50°-60°	916.1	16.0
60°-70°	690.0	12.0
70°-80°	384.8	6.7
80°-90°	96.4	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1622.1	28.3
0°-40°	2627.6	45.8
0°-60°	4570.1	79.6
0°-90°	5741.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5741.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2125	2125	2125	2125	2125	
5°	2111	2115	2113	2113	2116	201
15°	2024	2026	2025	2027	2031	570
25°	1840	1842	1844	1849	1853	848
35°	1602	1600	1606	1612	1619	1002
45°	1324	1324	1330	1336	1344	1021
55°	1018	1017	1023	1030	1040	910
65°	694	691	696	702	709	686
75°	362	359	361	363	370	384
85°	81	79	80	79	80	98
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2124.7	2124.7	2124.7	2124.7	2124.7
2.5°	2121.2	2124.7	2120.3	2121.2	2125.2
5°	2111.1	2115.1	2112.9	2113.3	2115.5
7.5°	2097.0	2102.3	2099.2	2100.1	2102.3
10°	2080.3	2084.3	2080.7	2082.9	2086.9
12.5°	2056.5	2058.3	2056.5	2057.4	2061.8
15°	2023.6	2025.8	2024.9	2026.6	2030.6
17.5°	1984.8	1987.5	1987.0	1990.6	1993.6
20°	1943.1	1943.5	1945.3	1948.8	1952.3
22.5°	1893.8	1895.1	1896.9	1901.7	1905.2
25°	1840.1	1842.3	1844.5	1849.4	1852.9
27.5°	1783.4	1785.6	1788.6	1793.9	1799.6
30°	1725.3	1725.3	1731.0	1736.3	1741.6
32.5°	1666.8	1664.6	1669.9	1676.5	1689.2
35°	1602.1	1600.4	1606.1	1612.2	1618.8
37.5°	1534.8	1533.5	1540.1	1546.7	1552.9
40°	1466.6	1464.9	1471.5	1478.1	1484.7
42.5°	1396.7	1395.8	1402.0	1408.6	1415.6
45°	1324.1	1323.7	1329.8	1336.4	1343.5
47.5°	1250.2	1249.3	1255.5	1262.5	1268.7
50°	1174.5	1173.7	1179.8	1186.9	1193.5
52.5°	1096.7	1096.7	1102.4	1108.6	1118.7
55°	1018.4	1017.1	1023.2	1030.3	1039.9
57.5°	939.2	937.4	943.2	950.2	959.0
60°	858.3	856.5	861.8	868.8	881.1
62.5°	776.4	773.8	779.1	785.7	793.1
65°	693.7	691.1	695.9	702.1	709.1
67.5°	610.6	607.5	612.3	617.6	624.2
70°	527.0	523.9	527.4	532.7	538.9
72.5°	443.9	440.8	443.9	446.1	453.5
75°	362.5	359.4	361.2	362.9	369.5
77.5°	283.3	280.2	283.7	284.6	288.6
80°	209.0	205.9	208.1	208.5	211.6
82.5°	141.2	138.6	141.6	139.4	142.1
85°	81.4	79.2	80.1	79.2	80.5
87.5°	32.1	30.4	30.8	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)