

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: P834424

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-1LO-35-120-EDD**

Issue Date: 5/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P834424  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-12-4-INS-OPL-LD4-1LO-35-120-EDD  
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

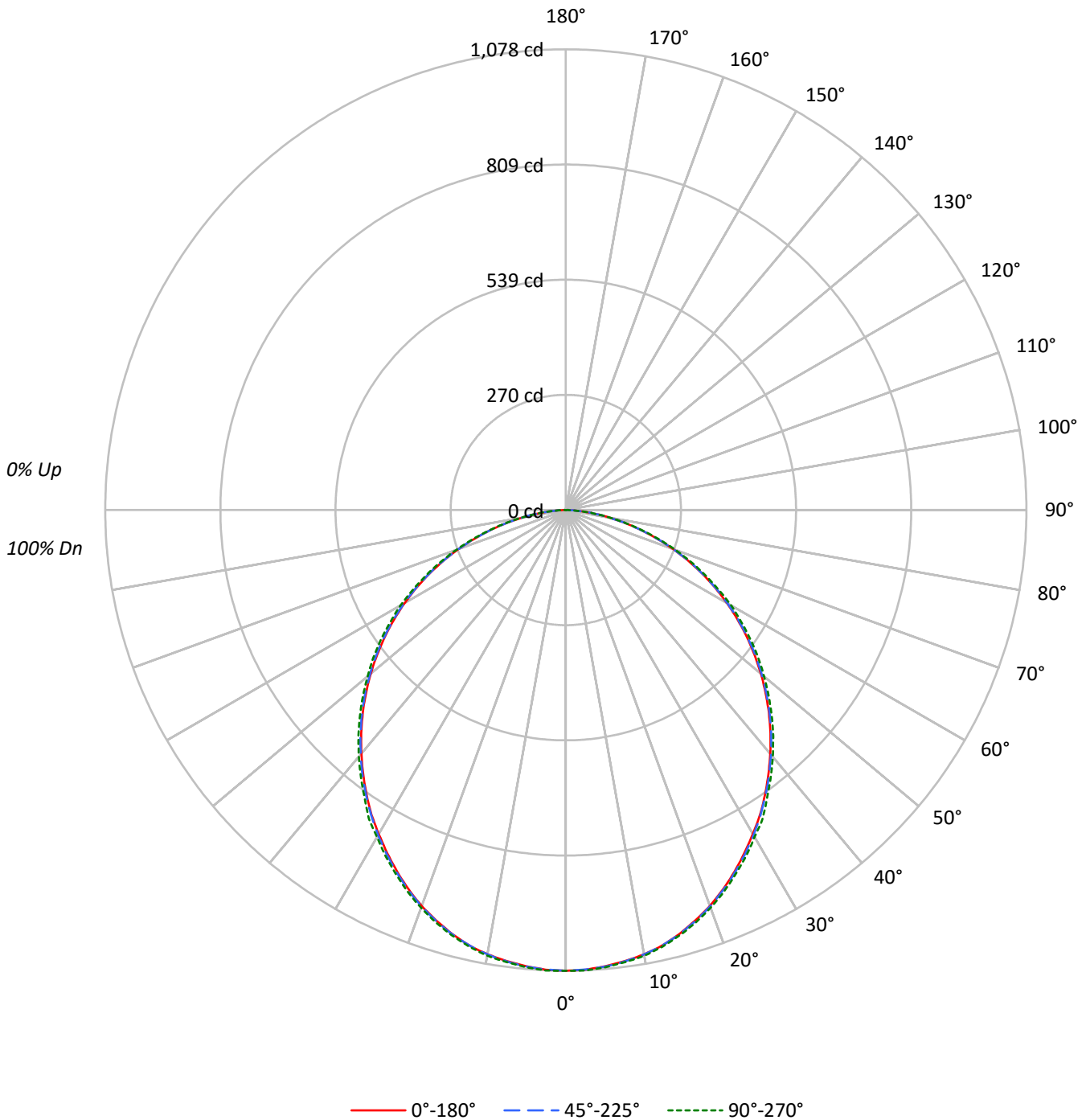
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2913.5 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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	27	27	27	27	25

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

	0°	45°	90°
0°	2901	2901	2901
5°	2894	2896	2900
10°	2885	2885	2894
15°	2861	2863	2871
20°	2824	2827	2837
25°	2773	2779	2792
30°	2720	2729	2746
35°	2671	2677	2699
40°	2615	2623	2647
45°	2557	2568	2595
50°	2495	2506	2535
55°	2425	2436	2476
60°	2344	2354	2406
65°	2241	2249	2292
70°	2104	2106	2152
75°	1912	1906	1949
80°	1643	1636	1664
85°	1275	1254	1263



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.9	3.5
10°-20°	289.8	9.9
20°-30°	431.5	14.8
30°-40°	510.2	17.5
40°-50°	520.9	17.9
50°-60°	464.9	16.0
60°-70°	350.1	12.0
70°-80°	195.3	6.7
80°-90°	48.9	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°	823.2	28.3
0°-40°	1333.4	45.8
0°-60°	2319.2	79.6
0°-90°	2913.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2913.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1071	1073	1072	1072	1074	102
15°	1027	1028	1028	1028	1030	289
25°	934	935	936	938	940	430
35°	813	812	815	818	822	508
45°	672	672	675	678	682	518
55°	517	516	519	523	528	462
65°	352	351	353	356	360	348
75°	184	182	183	184	188	195
85°	41	40	41	40	41	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1076.5	1078.2	1076.0	1076.5	1078.5
5°	1071.3	1073.3	1072.2	1072.4	1073.6
7.5°	1064.2	1066.9	1065.3	1065.7	1066.9
10°	1055.7	1057.7	1055.9	1057.0	1059.0
12.5°	1043.6	1044.5	1043.6	1044.1	1046.3
15°	1026.9	1028.0	1027.6	1028.5	1030.5
17.5°	1007.3	1008.6	1008.4	1010.2	1011.7
20°	986.0	986.3	987.2	989.0	990.7
22.5°	961.0	961.7	962.6	965.1	966.9
25°	933.8	934.9	936.0	938.5	940.3
27.5°	905.0	906.1	907.7	910.4	913.3
30°	875.5	875.5	878.4	881.1	883.8
32.5°	845.9	844.7	847.4	850.8	857.2
35°	813.0	812.1	815.0	818.2	821.5
37.5°	778.9	778.2	781.6	784.9	788.0
40°	744.3	743.4	746.7	750.1	753.4
42.5°	708.8	708.3	711.5	714.8	718.4
45°	672.0	671.7	674.9	678.2	681.8
47.5°	634.4	634.0	637.1	640.7	643.8
50°	596.0	595.6	598.7	602.3	605.6
52.5°	556.5	556.5	559.4	562.6	567.7
55°	516.8	516.1	519.3	522.8	527.7
57.5°	476.6	475.7	478.6	482.2	486.7
60°	435.5	434.6	437.3	440.9	447.1
62.5°	394.0	392.7	395.4	398.7	402.5
65°	352.0	350.7	353.2	356.3	359.9
67.5°	309.9	308.3	310.7	313.4	316.8
70°	267.4	265.9	267.7	270.3	273.5
72.5°	225.2	223.7	225.2	226.4	230.2
75°	183.9	182.4	183.3	184.2	187.5
77.5°	143.8	142.2	144.0	144.4	146.4
80°	106.0	104.5	105.6	105.8	107.4
82.5°	71.7	70.3	71.9	70.8	72.1
85°	41.3	40.2	40.6	40.2	40.9
87.5°	16.3	15.4	15.6	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)