

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: P835122

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835122
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-OPL-LD4-2HI-40-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

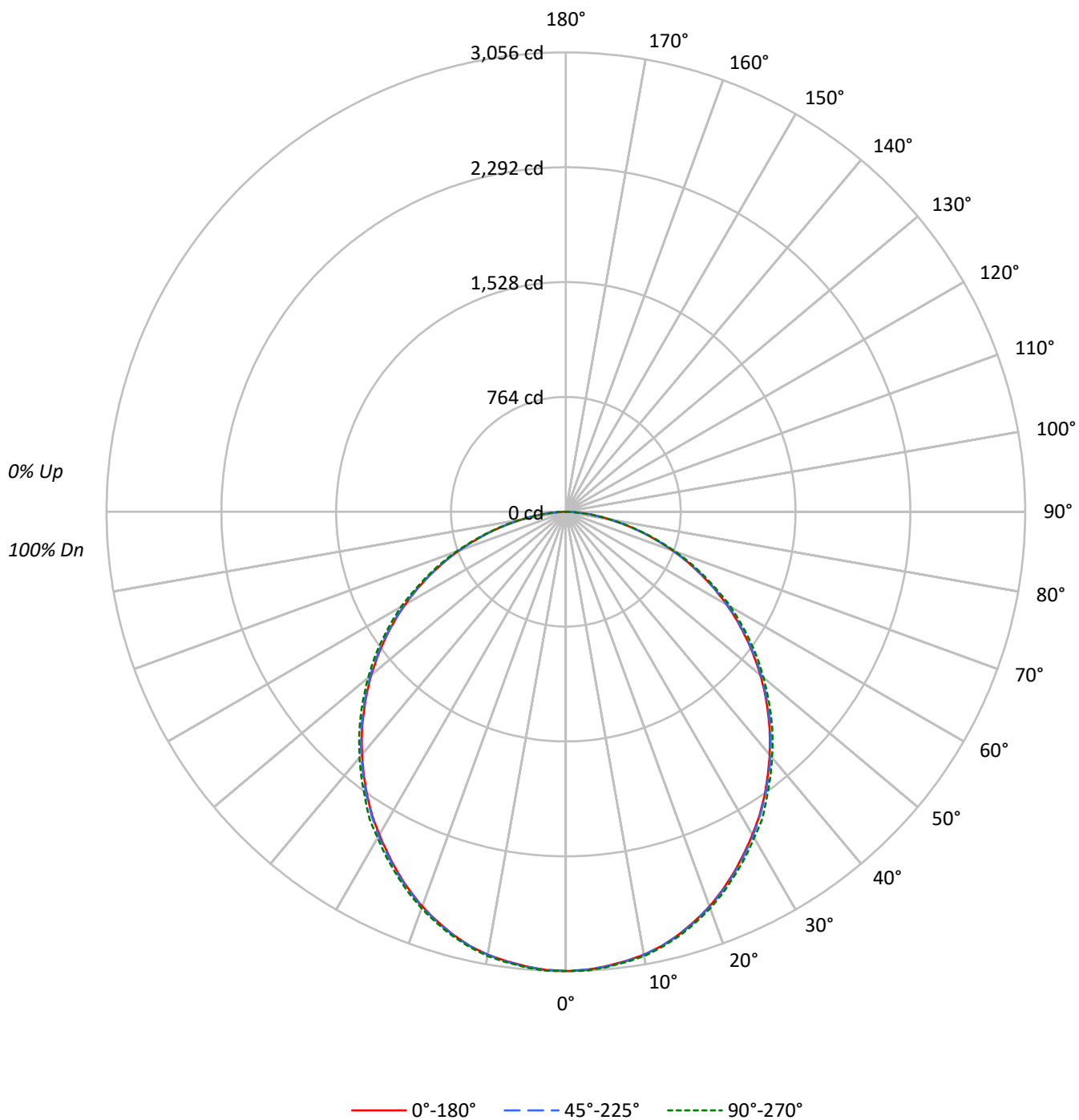
Lumens per Lamp: N/A
Luminaire Lumens: 8255.6 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4111	4111	4111
5°	4100	4103	4108
10°	4087	4088	4100
15°	4053	4056	4067
20°	4001	4005	4020
25°	3928	3938	3955
30°	3854	3867	3891
35°	3784	3793	3824
40°	3704	3716	3750
45°	3623	3639	3676
50°	3535	3551	3592
55°	3435	3451	3508
60°	3321	3335	3409
65°	3176	3186	3246
70°	2981	2984	3048
75°	2709	2700	2762
80°	2328	2318	2358
85°	1806	1777	1788

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.7	3.5
10°-20°	821.2	9.9
20°-30°	1222.6	14.8
30°-40°	1445.8	17.5
40°-50°	1476.0	17.9
50°-60°	1317.2	16.0
60°-70°	992.1	12.0
70°-80°	553.3	6.7
80°-90°	138.6	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°	2332.5	28.3
0°-40°	3778.3	45.8
0°-60°	6571.5	79.6
0°-90°	8255.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8255.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3055	3055	3055	3055	3055	
5°	3036	3041	3038	3039	3042	288
15°	2910	2913	2912	2914	2920	820
25°	2646	2649	2652	2659	2664	1219
35°	2304	2301	2309	2318	2328	1441
45°	1904	1903	1912	1922	1932	1469
55°	1464	1462	1471	1481	1495	1309
65°	998	994	1001	1010	1020	987
75°	521	517	519	522	531	553
85°	117	114	115	114	116	140
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3055.2	3055.2	3055.2	3055.2	3055.2
2.5°	3050.2	3055.2	3048.9	3050.2	3055.9
5°	3035.6	3041.3	3038.1	3038.8	3041.9
7.5°	3015.4	3023.0	3018.5	3019.8	3023.0
10°	2991.3	2997.0	2992.0	2995.1	3000.8
12.5°	2957.2	2959.7	2957.2	2958.4	2964.8
15°	2909.7	2912.9	2911.6	2914.2	2919.9
17.5°	2854.1	2857.9	2857.2	2862.3	2866.7
20°	2794.0	2794.6	2797.1	2802.2	2807.3
22.5°	2723.1	2725.0	2727.6	2734.5	2739.6
25°	2646.0	2649.1	2652.3	2659.2	2664.3
27.5°	2564.4	2567.5	2572.0	2579.5	2587.8
30°	2480.9	2480.9	2489.1	2496.7	2504.3
32.5°	2396.7	2393.6	2401.2	2410.7	2429.0
35°	2303.8	2301.2	2309.4	2318.3	2327.8
37.5°	2207.0	2205.1	2214.6	2224.1	2232.9
40°	2108.9	2106.4	2115.9	2125.4	2134.9
42.5°	2008.4	2007.1	2015.9	2025.4	2035.6
45°	1904.0	1903.3	1912.2	1921.7	1931.8
47.5°	1797.7	1796.4	1805.3	1815.4	1824.3
50°	1688.9	1687.6	1696.5	1706.6	1716.1
52.5°	1577.0	1577.0	1585.2	1594.0	1608.6
55°	1464.4	1462.5	1471.3	1481.4	1495.4
57.5°	1350.5	1348.0	1356.2	1366.3	1379.0
60°	1234.1	1231.6	1239.2	1249.3	1267.0
62.5°	1116.5	1112.7	1120.3	1129.7	1140.5
65°	997.5	993.7	1000.7	1009.6	1019.7
67.5°	878.0	873.6	880.5	888.1	897.6
70°	757.8	753.4	758.4	766.0	774.9
72.5°	638.2	633.8	638.2	641.4	652.2
75°	521.2	516.8	519.3	521.9	531.3
77.5°	407.4	402.9	408.0	409.3	415.0
80°	300.5	296.0	299.2	299.8	304.3
82.5°	203.0	199.3	203.7	200.5	204.3
85°	117.0	113.9	115.1	113.9	115.8
87.5°	46.2	43.6	44.3	41.7	41.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)