

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: P835037

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4STD-50-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835037
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-LD4-4STD-50-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

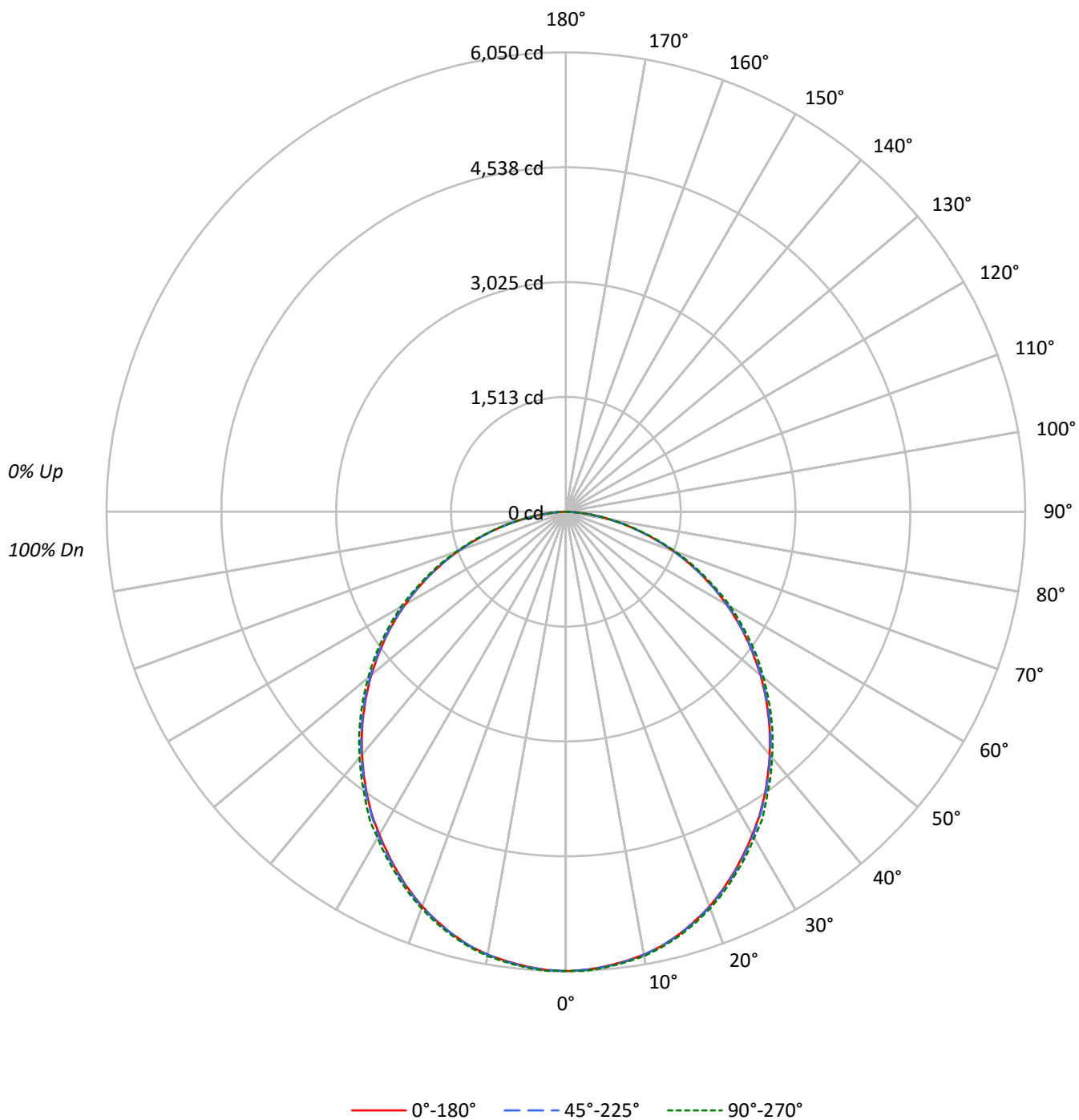
Lumens per Lamp: N/A
Luminaire Lumens: 16345.6 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 133.2
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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8139	8139	8139
5°	8118	8125	8135
10°	8092	8094	8118
15°	8025	8030	8053
20°	7921	7930	7959
25°	7778	7796	7831
30°	7631	7657	7704
35°	7492	7511	7570
40°	7334	7358	7424
45°	7173	7204	7278
50°	7000	7031	7112
55°	6801	6834	6945
60°	6575	6602	6751
65°	6288	6308	6428
70°	5902	5908	6035
75°	5365	5345	5469
80°	4610	4590	4668
85°	3577	3518	3538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	571.6	3.5
10°-20°	1626.0	9.9
20°-30°	2420.6	14.8
30°-40°	2862.6	17.5
40°-50°	2922.4	17.9
50°-60°	2608.0	16.0
60°-70°	1964.4	12.0
70°-80°	1095.5	6.7
80°-90°	274.4	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°	4618.3	28.3
0°-40°	7480.9	45.8
0°-60°	13011.3	79.6
0°-90°	16345.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16345.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6049	6049	6049	6049	6049	
5°	6010	6022	6015	6017	6023	571
15°	5761	5767	5765	5770	5781	1624
25°	5239	5245	5251	5265	5275	2413
35°	4561	4556	4573	4590	4609	2852
45°	3770	3768	3786	3805	3825	2908
55°	2899	2896	2913	2933	2961	2592
65°	1975	1968	1981	1999	2019	1953
75°	1032	1023	1028	1033	1052	1094
85°	232	225	228	225	229	278
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6049.2	6049.2	6049.2	6049.2	6049.2
2.5°	6039.2	6049.2	6036.7	6039.2	6050.5
5°	6010.4	6021.7	6015.4	6016.6	6022.9
7.5°	5970.3	5985.3	5976.6	5979.1	5985.3
10°	5922.7	5934.0	5924.0	5930.2	5941.5
12.5°	5855.1	5860.1	5855.1	5857.6	5870.1
15°	5761.2	5767.4	5764.9	5769.9	5781.2
17.5°	5650.9	5658.5	5657.2	5667.2	5676.0
20°	5532.0	5533.2	5538.2	5548.2	5558.3
22.5°	5391.7	5395.4	5400.5	5414.2	5424.3
25°	5238.9	5245.2	5251.4	5265.2	5275.2
27.5°	5077.3	5083.6	5092.4	5107.4	5123.7
30°	4912.0	4912.0	4928.3	4943.3	4958.4
32.5°	4745.4	4739.2	4754.2	4773.0	4809.3
35°	4561.3	4556.3	4572.6	4590.1	4608.9
37.5°	4369.7	4366.0	4384.7	4403.5	4421.1
40°	4175.6	4170.6	4189.4	4208.1	4226.9
42.5°	3976.4	3973.9	3991.5	4010.3	4030.3
45°	3769.8	3768.5	3786.1	3804.9	3824.9
47.5°	3559.4	3556.9	3574.4	3594.5	3612.0
50°	3344.0	3341.5	3359.0	3379.0	3397.8
52.5°	3122.3	3122.3	3138.6	3156.1	3184.9
55°	2899.4	2895.6	2913.1	2933.2	2960.7
57.5°	2673.9	2668.9	2685.2	2705.2	2730.3
60°	2443.5	2438.5	2453.5	2473.5	2508.6
62.5°	2210.5	2203.0	2218.0	2236.8	2258.1
65°	1975.1	1967.6	1981.3	1998.9	2018.9
67.5°	1738.4	1729.6	1743.4	1758.4	1777.2
70°	1500.4	1491.6	1501.7	1516.7	1534.2
72.5°	1263.7	1254.9	1263.7	1270.0	1291.3
75°	1032.0	1023.2	1028.2	1033.3	1052.0
77.5°	806.6	797.8	807.8	810.3	821.6
80°	594.9	586.1	592.4	593.6	602.4
82.5°	402.0	394.5	403.3	397.0	404.5
85°	231.7	225.4	227.9	225.4	229.2
87.5°	91.4	86.4	87.7	82.7	82.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)