

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: P835092

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4HI-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835092
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-LD4-4HI-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

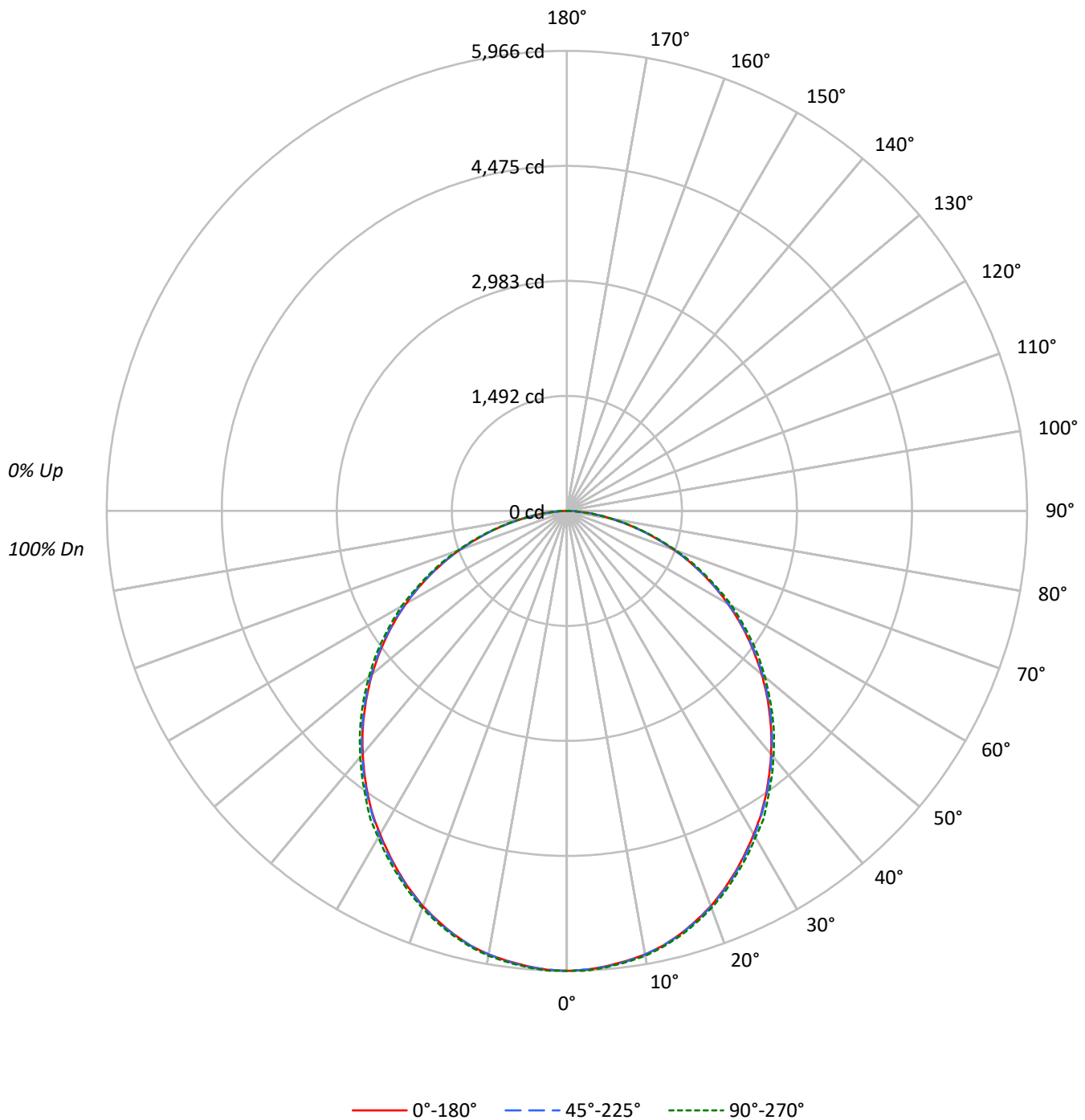
Lumens per Lamp: N/A
Luminaire Lumens: 16118.0 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 176
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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8026	8026	8026
5°	8005	8011	8021
10°	7979	7981	8005
15°	7913	7918	7941
20°	7811	7819	7848
25°	7669	7688	7722
30°	7525	7550	7596
35°	7388	7406	7465
40°	7232	7256	7321
45°	7073	7104	7177
50°	6902	6933	7013
55°	6707	6739	6849
60°	6484	6510	6657
65°	6201	6220	6338
70°	5820	5825	5952
75°	5290	5271	5393
80°	4545	4526	4603
85°	3528	3470	3489

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	563.7	3.5
10°-20°	1603.4	9.9
20°-30°	2386.9	14.8
30°-40°	2822.8	17.5
40°-50°	2881.7	17.9
50°-60°	2571.7	16.0
60°-70°	1937.0	12.0
70°-80°	1080.2	6.7
80°-90°	270.6	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°	4554.0	28.3
0°-40°	7376.8	45.8
0°-60°	12830.2	79.6
0°-90°	16118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5965	5965	5965	5965	5965	
5°	5927	5938	5932	5933	5939	563
15°	5681	5687	5685	5690	5701	1601
25°	5166	5172	5178	5192	5202	2380
35°	4498	4493	4509	4526	4545	2813
45°	3717	3716	3733	3752	3772	2868
55°	2859	2855	2873	2892	2920	2556
65°	1948	1940	1954	1971	1991	1926
75°	1018	1009	1014	1019	1037	1079
85°	228	222	225	222	226	274
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5965.0	5965.0	5965.0	5965.0	5965.0
2.5°	5955.1	5965.0	5952.6	5955.1	5966.2
5°	5926.7	5937.8	5931.6	5932.9	5939.0
7.5°	5887.2	5902.0	5893.3	5895.8	5902.0
10°	5840.2	5851.3	5841.5	5847.6	5858.8
12.5°	5773.5	5778.5	5773.5	5776.0	5788.4
15°	5680.9	5687.1	5684.6	5689.6	5700.7
17.5°	5572.2	5579.7	5578.4	5588.3	5596.9
20°	5454.9	5456.2	5461.1	5471.0	5480.9
22.5°	5316.6	5320.3	5325.2	5338.8	5348.7
25°	5165.9	5172.1	5178.3	5191.9	5201.7
27.5°	5006.6	5012.8	5021.4	5036.3	5052.3
30°	4843.6	4843.6	4859.7	4874.5	4889.3
32.5°	4679.4	4673.2	4688.0	4706.5	4742.3
35°	4497.8	4492.9	4508.9	4526.2	4544.7
37.5°	4308.9	4305.2	4323.7	4342.2	4359.5
40°	4117.4	4112.5	4131.0	4149.5	4168.1
42.5°	3921.1	3918.6	3935.9	3954.4	3974.2
45°	3717.3	3716.1	3733.4	3751.9	3771.6
47.5°	3509.8	3507.4	3524.6	3544.4	3561.7
50°	3297.4	3294.9	3312.2	3332.0	3350.5
52.5°	3078.8	3078.8	3094.9	3112.2	3140.6
55°	2859.0	2855.3	2872.6	2892.3	2919.5
57.5°	2636.7	2631.7	2647.8	2667.6	2692.3
60°	2409.5	2404.5	2419.3	2439.1	2473.7
62.5°	2179.7	2172.3	2187.2	2205.7	2226.7
65°	1947.6	1940.2	1953.7	1971.0	1990.8
67.5°	1714.2	1705.5	1719.1	1733.9	1752.4
70°	1479.5	1470.9	1480.7	1495.6	1512.9
72.5°	1246.1	1237.5	1246.1	1252.3	1273.3
75°	1017.6	1009.0	1013.9	1018.9	1037.4
77.5°	795.3	786.7	796.6	799.0	810.1
80°	586.6	578.0	584.1	585.4	594.0
82.5°	396.4	389.0	397.7	391.5	398.9
85°	228.5	222.3	224.8	222.3	226.0
87.5°	90.2	85.2	86.4	81.5	81.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)