

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: P835110

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-4HI-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835110
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-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

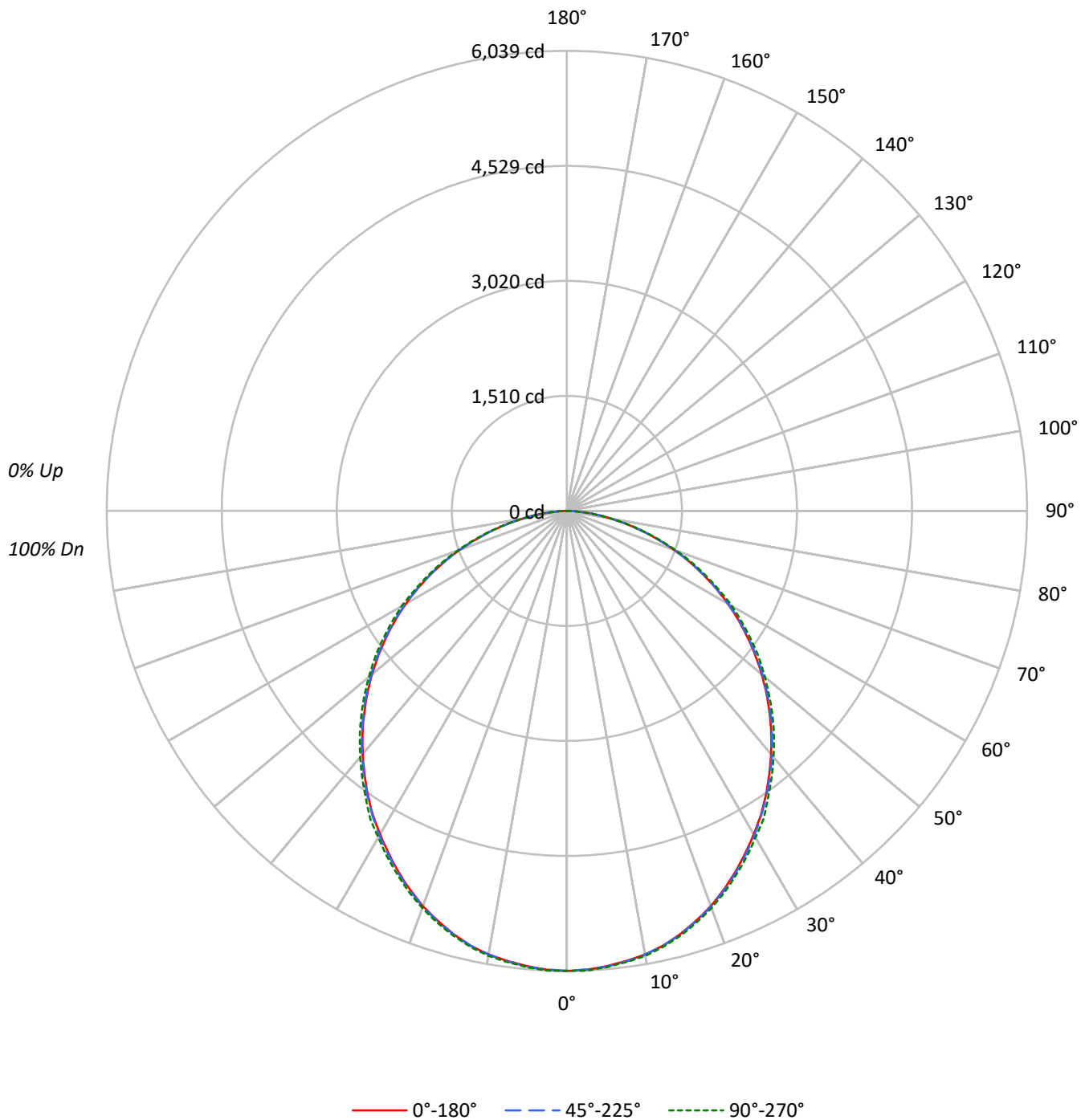
Lumens per Lamp: N/A
Luminaire Lumens: 16314.6 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	8124	8124	8124
5°	8102	8109	8119
10°	8077	8078	8102
15°	8010	8015	8038
20°	7906	7915	7943
25°	7763	7781	7817
30°	7617	7642	7689
35°	7478	7496	7556
40°	7320	7344	7410
45°	7160	7191	7264
50°	6986	7018	7099
55°	6788	6821	6932
60°	6563	6590	6738
65°	6276	6296	6415
70°	5891	5896	6024
75°	5355	5335	5459
80°	4601	4582	4659
85°	3571	3512	3532

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	570.5	3.5
10°-20°	1622.9	9.9
20°-30°	2416.0	14.8
30°-40°	2857.2	17.5
40°-50°	2916.8	17.9
50°-60°	2603.1	16.0
60°-70°	1960.6	12.0
70°-80°	1093.4	6.7
80°-90°	273.9	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°	4609.5	28.3
0°-40°	7466.7	45.8
0°-60°	12986.6	79.6
0°-90°	16314.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16314.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6038	6038	6038	6038	6038	
5°	5999	6010	6004	6005	6012	570
15°	5750	5756	5754	5759	5770	1621
25°	5229	5235	5241	5255	5265	2409
35°	4553	4548	4564	4581	4600	2847
45°	3763	3761	3779	3798	3818	2902
55°	2894	2890	2908	2928	2955	2587
65°	1971	1964	1978	1995	2015	1950
75°	1030	1021	1026	1031	1050	1092
85°	231	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°	6037.7	6037.7	6037.7	6037.7	6037.7
2.5°	6027.7	6037.7	6025.2	6027.7	6039.0
5°	5999.0	6010.2	6004.0	6005.2	6011.5
7.5°	5959.0	5974.0	5965.2	5967.7	5974.0
10°	5911.5	5922.7	5912.7	5919.0	5930.2
12.5°	5844.0	5849.0	5844.0	5846.5	5859.0
15°	5750.2	5756.5	5754.0	5759.0	5770.2
17.5°	5640.2	5647.7	5646.4	5656.4	5665.2
20°	5521.4	5522.7	5527.7	5537.7	5547.7
22.5°	5381.4	5385.2	5390.2	5403.9	5413.9
25°	5228.9	5235.2	5241.4	5255.2	5265.2
27.5°	5067.7	5073.9	5082.7	5097.7	5113.9
30°	4902.7	4902.7	4918.9	4933.9	4948.9
32.5°	4736.4	4730.2	4745.2	4763.9	4800.2
35°	4552.7	4547.7	4563.9	4581.4	4600.2
37.5°	4361.4	4357.7	4376.4	4395.2	4412.7
40°	4167.6	4162.6	4181.4	4200.1	4218.9
42.5°	3968.9	3966.4	3983.9	4002.6	4022.6
45°	3762.6	3761.4	3778.9	3797.6	3817.6
47.5°	3552.6	3550.1	3567.6	3587.6	3605.1
50°	3337.6	3335.1	3352.6	3372.6	3391.4
52.5°	3116.4	3116.4	3132.6	3150.1	3178.9
55°	2893.9	2890.1	2907.6	2927.6	2955.1
57.5°	2668.8	2663.8	2680.1	2700.1	2725.1
60°	2438.8	2433.8	2448.8	2468.8	2503.8
62.5°	2206.3	2198.8	2213.8	2232.6	2253.8
65°	1971.3	1963.8	1977.6	1995.1	2015.1
67.5°	1735.1	1726.3	1740.1	1755.1	1773.8
70°	1497.6	1488.8	1498.8	1513.8	1531.3
72.5°	1261.3	1252.5	1261.3	1267.5	1288.8
75°	1030.0	1021.3	1026.3	1031.3	1050.0
77.5°	805.0	796.3	806.3	808.8	820.0
80°	593.8	585.0	591.3	592.5	601.3
82.5°	401.3	393.8	402.5	396.3	403.8
85°	231.3	225.0	227.5	225.0	228.8
87.5°	91.3	86.3	87.5	82.5	82.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)