

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: P834969

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5HI-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834969
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-LD4-5HI-27-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

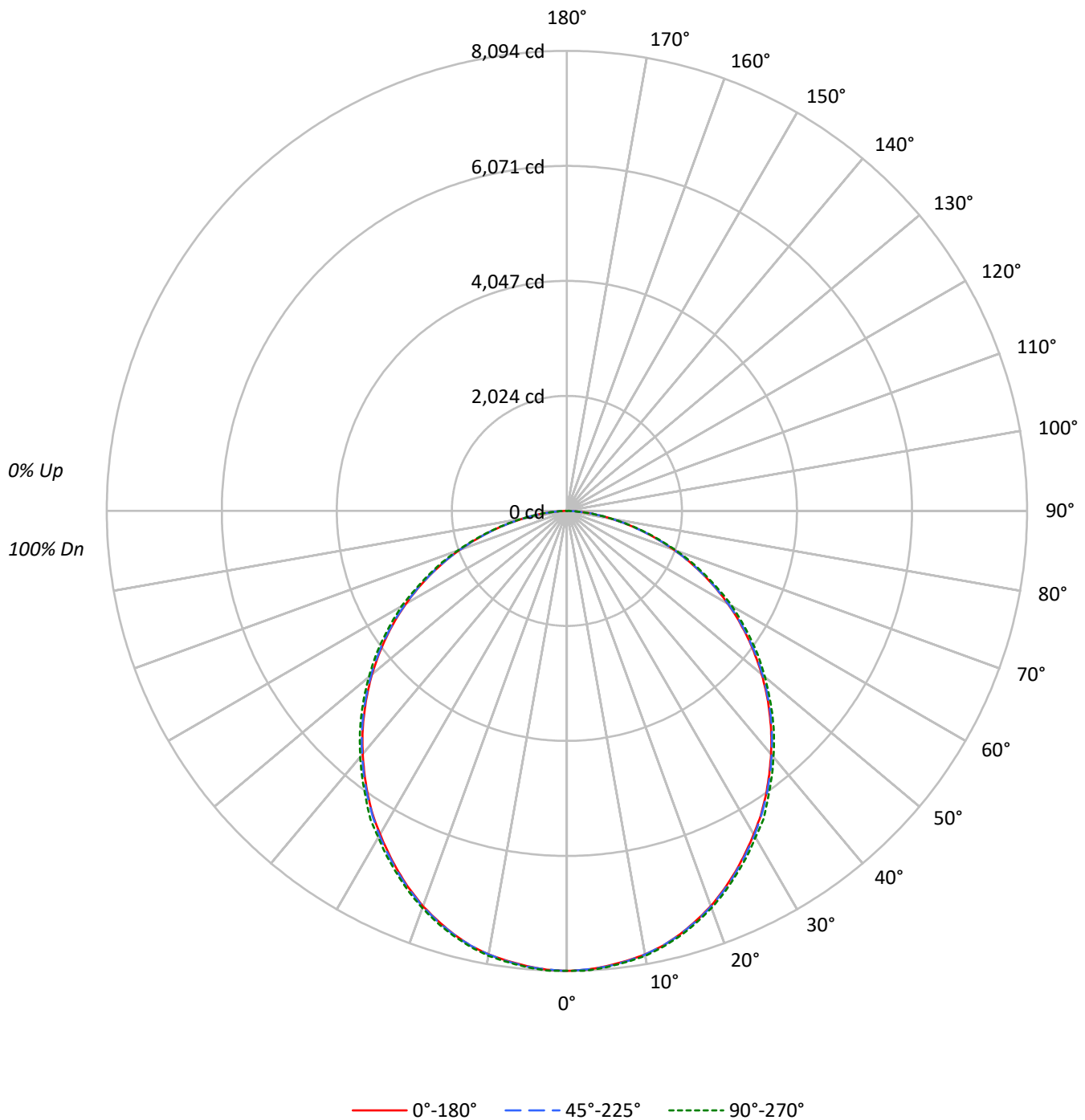
Lumens per Lamp: N/A
Luminaire Lumens: 21867.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 220
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

Peachtree City, GA 30269



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10889	10889	10889
5°	10860	10869	10883
10°	10825	10827	10860
15°	10736	10743	10773
20°	10596	10609	10647
25°	10405	10430	10477
30°	10209	10243	10306
35°	10023	10048	10128
40°	9811	9844	9932
45°	9596	9638	9736
50°	9364	9406	9515
55°	9099	9142	9291
60°	8797	8833	9031
65°	8412	8439	8599
70°	7896	7903	8074
75°	7177	7151	7316
80°	6167	6141	6244
85°	4786	4707	4733

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	764.7	3.5
10°-20°	2175.3	9.9
20°-30°	3238.3	14.8
30°-40°	3829.6	17.5
40°-50°	3909.5	17.9
50°-60°	3489.0	16.0
60°-70°	2627.9	12.0
70°-80°	1465.5	6.7
80°-90°	367.2	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°	6178.3	28.3
0°-40°	10007.9	45.8
0°-60°	17406.4	79.6
0°-90°	21867.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21867.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8093	8093	8093	8093	8093	
5°	8041	8056	8047	8049	8057	764
15°	7707	7716	7712	7719	7734	2172
25°	7008	7017	7025	7044	7057	3229
35°	6102	6095	6117	6141	6166	3816
45°	5043	5042	5065	5090	5117	3890
55°	3879	3874	3897	3924	3961	3467
65°	2642	2632	2651	2674	2701	2613
75°	1381	1369	1376	1382	1407	1464
85°	310	302	305	302	307	372
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8092.6	8092.6	8092.6	8092.6	8092.6
2.5°	8079.2	8092.6	8075.8	8079.2	8094.2
5°	8040.6	8055.7	8047.3	8049.0	8057.4
7.5°	7987.0	8007.1	7995.4	7998.7	8007.1
10°	7923.3	7938.4	7925.0	7933.4	7948.5
12.5°	7832.9	7839.6	7832.9	7836.2	7853.0
15°	7707.2	7715.6	7712.2	7718.9	7734.0
17.5°	7559.8	7569.8	7568.1	7581.5	7593.3
20°	7400.6	7402.3	7409.0	7422.4	7435.8
22.5°	7212.9	7218.0	7224.7	7243.1	7256.5
25°	7008.5	7016.9	7025.3	7043.7	7057.1
27.5°	6792.4	6800.8	6812.5	6832.6	6854.4
30°	6571.2	6571.2	6593.0	6613.1	6633.2
32.5°	6348.4	6340.0	6360.1	6385.2	6433.8
35°	6102.1	6095.4	6117.2	6140.6	6165.8
37.5°	5845.7	5840.7	5865.8	5891.0	5914.4
40°	5586.0	5579.3	5604.5	5629.6	5654.7
42.5°	5319.6	5316.3	5339.7	5364.9	5391.7
45°	5043.2	5041.5	5065.0	5090.1	5116.9
47.5°	4761.7	4758.4	4781.8	4808.6	4832.1
50°	4473.5	4470.2	4493.6	4520.4	4545.6
52.5°	4177.0	4177.0	4198.7	4222.2	4260.7
55°	3878.7	3873.7	3897.2	3924.0	3960.8
57.5°	3577.1	3570.4	3592.2	3619.0	3652.5
60°	3268.9	3262.2	3282.3	3309.1	3356.0
62.5°	2957.2	2947.2	2967.3	2992.4	3020.9
65°	2642.2	2632.2	2650.6	2674.1	2700.9
67.5°	2325.6	2313.8	2332.3	2352.4	2377.5
70°	2007.2	1995.5	2008.9	2029.0	2052.5
72.5°	1690.6	1678.8	1690.6	1698.9	1727.4
75°	1380.6	1368.9	1375.6	1382.3	1407.4
77.5°	1079.0	1067.3	1080.7	1084.0	1099.1
80°	795.9	784.1	792.5	794.2	805.9
82.5°	537.8	527.8	539.5	531.1	541.2
85°	310.0	301.6	304.9	301.6	306.6
87.5°	122.3	115.6	117.3	110.6	110.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)