

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: P835143

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-3HI-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835143
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-LD4-3HI-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

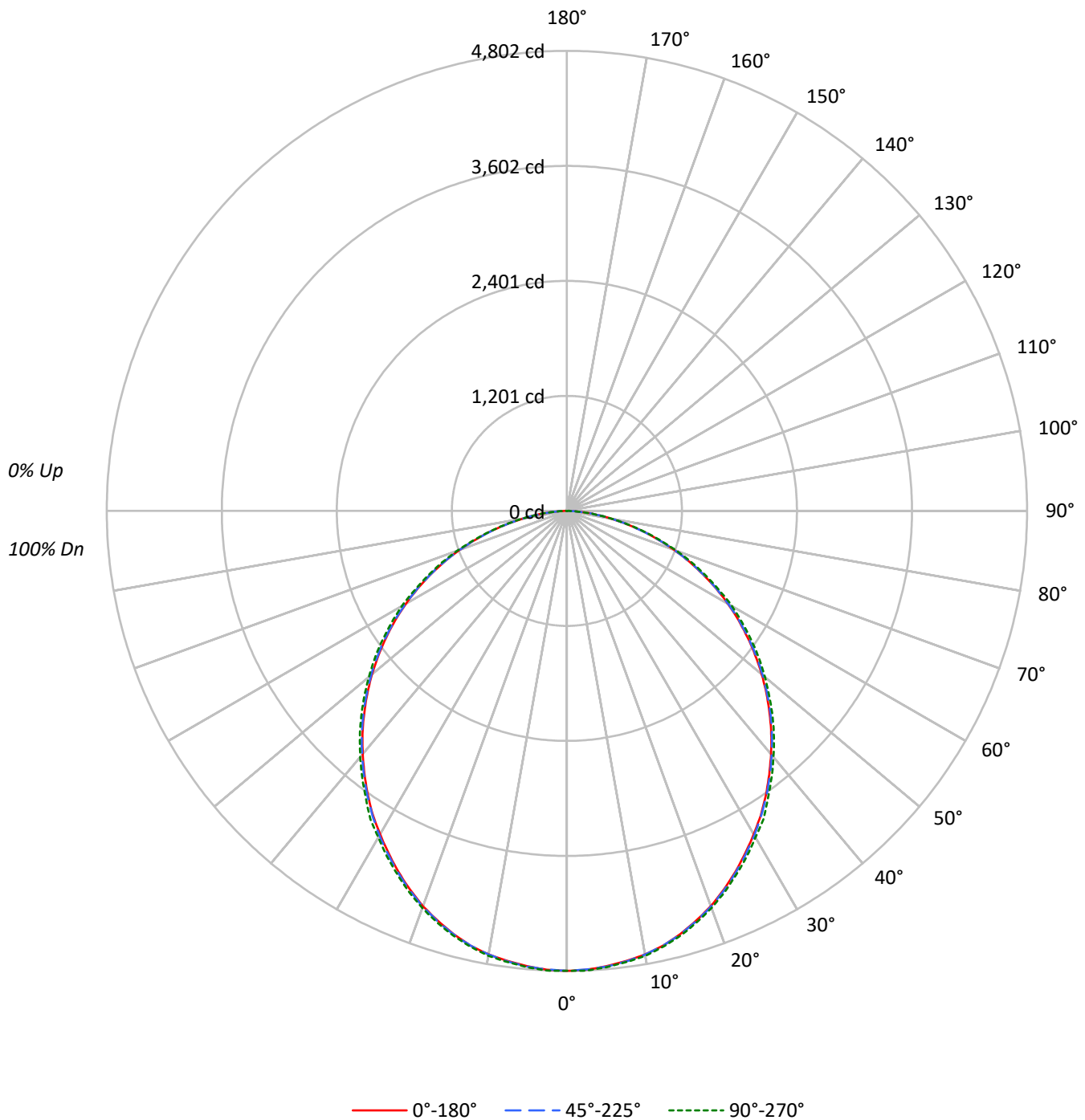
Lumens per Lamp: N/A
Luminaire Lumens: 12972.6 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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°	6460	6460	6460
5°	6443	6448	6456
10°	6422	6423	6442
15°	6369	6373	6391
20°	6286	6294	6316
25°	6173	6187	6215
30°	6057	6077	6114
35°	5946	5961	6008
40°	5821	5840	5892
45°	5693	5718	5776
50°	5555	5580	5645
55°	5398	5423	5512
60°	5219	5240	5357
65°	4990	5006	5101
70°	4685	4688	4790
75°	4258	4243	4340
80°	3658	3643	3704
85°	2839	2793	2808

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.7	3.5
10°-20°	1290.5	9.9
20°-30°	1921.1	14.8
30°-40°	2271.9	17.5
40°-50°	2319.3	17.9
50°-60°	2069.9	16.0
60°-70°	1559.0	12.0
70°-80°	869.4	6.7
80°-90°	217.8	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°	3665.3	28.3
0°-40°	5937.2	45.8
0°-60°	10326.4	79.6
0°-90°	12972.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12972.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4801	4801	4801	4801	4801	
5°	4770	4779	4774	4775	4780	453
15°	4572	4577	4575	4579	4588	1289
25°	4158	4163	4168	4179	4187	1915
35°	3620	3616	3629	3643	3658	2264
45°	2992	2991	3005	3020	3036	2308
55°	2301	2298	2312	2328	2350	2057
65°	1568	1562	1572	1586	1602	1550
75°	819	812	816	820	835	868
85°	184	179	181	179	182	221
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4800.9	4800.9	4800.9	4800.9	4800.9
2.5°	4793.0	4800.9	4791.0	4793.0	4801.9
5°	4770.1	4779.0	4774.1	4775.1	4780.0
7.5°	4738.3	4750.2	4743.3	4745.3	4750.2
10°	4700.5	4709.5	4701.5	4706.5	4715.4
12.5°	4646.8	4650.8	4646.8	4648.8	4658.8
15°	4572.3	4577.3	4575.3	4579.3	4588.2
17.5°	4484.8	4490.8	4489.8	4497.8	4504.7
20°	4390.4	4391.4	4395.4	4403.3	4411.3
22.5°	4279.1	4282.1	4286.0	4297.0	4304.9
25°	4157.8	4162.8	4167.8	4178.7	4186.6
27.5°	4029.6	4034.6	4041.5	4053.4	4066.4
30°	3898.4	3898.4	3911.3	3923.2	3935.2
32.5°	3766.2	3761.2	3773.1	3788.1	3816.9
35°	3620.1	3616.1	3629.0	3642.9	3657.8
37.5°	3468.0	3465.0	3479.9	3494.8	3508.7
40°	3313.9	3309.9	3324.9	3339.8	3354.7
42.5°	3155.9	3153.9	3167.8	3182.7	3198.6
45°	2991.9	2990.9	3004.8	3019.7	3035.6
47.5°	2824.9	2822.9	2836.8	2852.7	2866.6
50°	2653.9	2651.9	2665.9	2681.8	2696.7
52.5°	2478.0	2478.0	2490.9	2504.8	2527.7
55°	2301.1	2298.1	2312.0	2327.9	2349.8
57.5°	2122.1	2118.2	2131.1	2147.0	2166.9
60°	1939.3	1935.3	1947.2	1963.1	1990.9
62.5°	1754.4	1748.4	1760.3	1775.2	1792.1
65°	1567.5	1561.5	1572.5	1586.4	1602.3
67.5°	1379.6	1372.7	1383.6	1395.5	1410.5
70°	1190.8	1183.8	1191.8	1203.7	1217.6
72.5°	1002.9	996.0	1002.9	1007.9	1024.8
75°	819.0	812.1	816.1	820.0	834.9
77.5°	640.1	633.2	641.1	643.1	652.0
80°	472.1	465.2	470.2	471.1	478.1
82.5°	319.1	313.1	320.1	315.1	321.1
85°	183.9	178.9	180.9	178.9	181.9
87.5°	72.6	68.6	69.6	65.6	65.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)