

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: P835004

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5STD-35-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835004
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-LD4-5STD-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

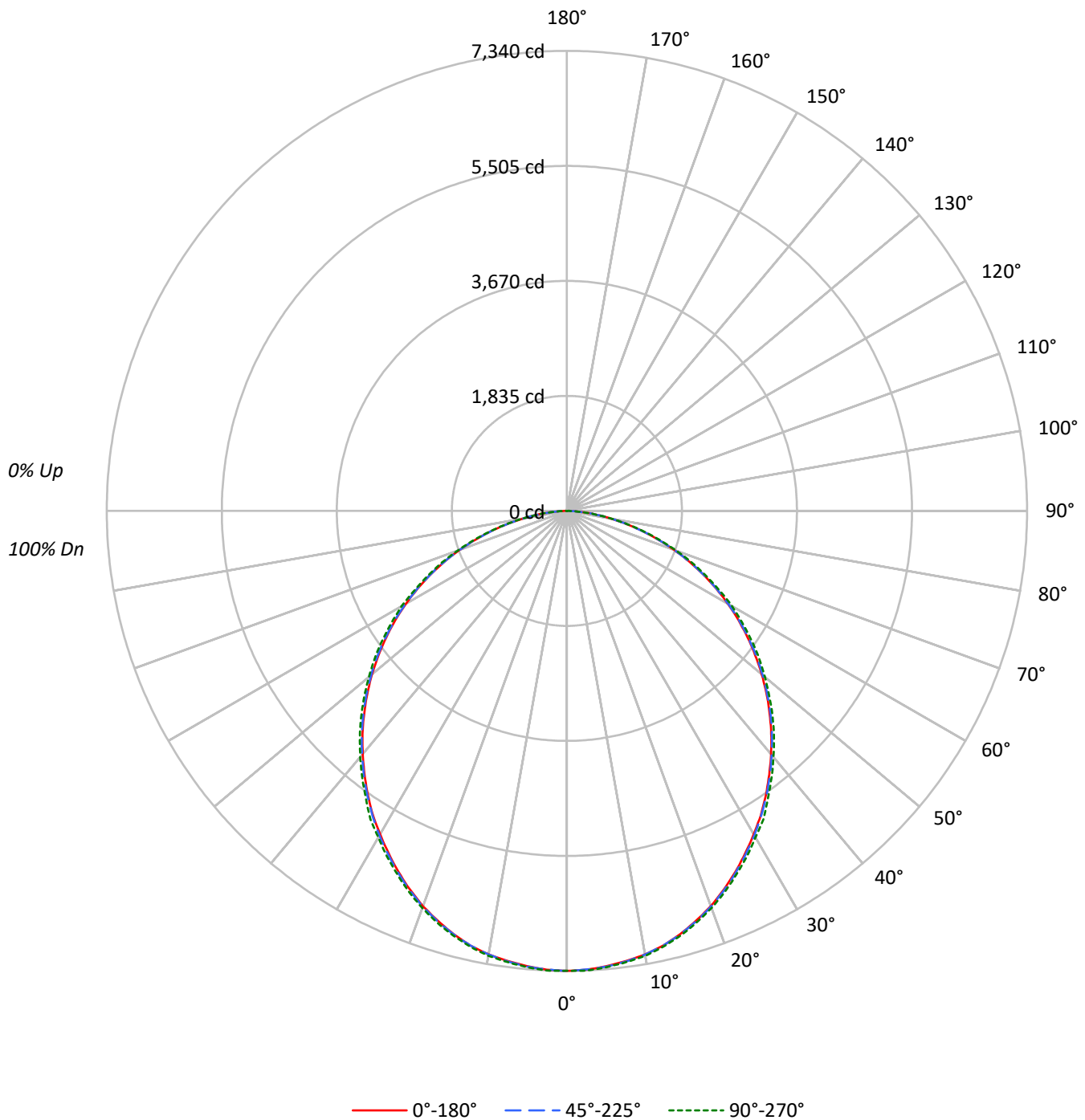
Lumens per Lamp: N/A
Luminaire Lumens: 19830.2 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 166.5
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°	9874	9874	9874
5°	9848	9856	9869
10°	9817	9819	9848
15°	9736	9742	9770
20°	9610	9620	9655
25°	9436	9458	9501
30°	9258	9289	9346
35°	9089	9112	9184
40°	8897	8927	9007
45°	8702	8740	8830
50°	8492	8530	8629
55°	8251	8290	8426
60°	7977	8010	8190
65°	7628	7653	7798
70°	7161	7167	7322
75°	6509	6485	6635
80°	5592	5569	5663
85°	4340	4269	4293

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	693.5	3.5
10°-20°	1972.7	9.9
20°-30°	2936.7	14.8
30°-40°	3472.9	17.5
40°-50°	3545.3	17.9
50°-60°	3164.0	16.0
60°-70°	2383.1	12.0
70°-80°	1329.0	6.7
80°-90°	333.0	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°	5602.8	28.3
0°-40°	9075.7	45.8
0°-60°	15785.1	79.6
0°-90°	19830.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19830.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7339	7339	7339	7339	7339	
5°	7292	7305	7298	7299	7307	693
15°	6989	6997	6994	7000	7014	1970
25°	6356	6363	6371	6388	6400	2928
35°	5534	5528	5547	5569	5591	3460
45°	4573	4572	4593	4616	4640	3528
55°	3517	3513	3534	3558	3592	3144
65°	2396	2387	2404	2425	2449	2370
75°	1252	1241	1247	1254	1276	1327
85°	281	274	276	274	278	337
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7338.8	7338.8	7338.8	7338.8	7338.8
2.5°	7326.6	7338.8	7323.6	7326.6	7340.3
5°	7291.7	7305.3	7297.7	7299.3	7306.9
7.5°	7243.0	7261.3	7250.6	7253.7	7261.3
10°	7185.3	7199.0	7186.8	7194.4	7208.1
12.5°	7103.3	7109.3	7103.3	7106.3	7121.5
15°	6989.3	6996.9	6993.9	6999.9	7013.6
17.5°	6855.6	6864.7	6863.2	6875.3	6886.0
20°	6711.3	6712.8	6718.8	6731.0	6743.2
22.5°	6541.1	6545.6	6551.7	6568.4	6580.6
25°	6355.7	6363.3	6370.9	6387.6	6399.8
27.5°	6159.7	6167.3	6177.9	6196.2	6215.9
30°	5959.1	5959.1	5978.9	5997.1	6015.4
32.5°	5757.1	5749.5	5767.7	5790.5	5834.5
35°	5533.7	5527.6	5547.4	5568.7	5591.4
37.5°	5301.2	5296.7	5319.5	5342.3	5363.5
40°	5065.7	5059.6	5082.4	5105.2	5128.0
42.5°	4824.1	4821.1	4842.4	4865.2	4889.5
45°	4573.4	4571.9	4593.2	4616.0	4640.3
47.5°	4318.2	4315.1	4336.4	4360.7	4382.0
50°	4056.8	4053.8	4075.1	4099.4	4122.2
52.5°	3787.9	3787.9	3807.7	3828.9	3863.9
55°	3517.4	3512.9	3534.2	3558.5	3591.9
57.5°	3243.9	3237.9	3257.6	3281.9	3312.3
60°	2964.4	2958.3	2976.5	3000.8	3043.4
62.5°	2681.8	2672.6	2690.9	2713.7	2739.5
65°	2396.1	2387.0	2403.7	2425.0	2449.3
67.5°	2108.9	2098.3	2115.0	2133.3	2156.0
70°	1820.3	1809.6	1821.8	1840.0	1861.3
72.5°	1533.1	1522.5	1533.1	1540.7	1566.5
75°	1252.0	1241.4	1247.4	1253.5	1276.3
77.5°	978.5	967.9	980.0	983.1	996.7
80°	721.7	711.1	718.7	720.2	730.8
82.5°	487.7	478.6	489.3	481.7	490.8
85°	281.1	273.5	276.5	273.5	278.1
87.5°	110.9	104.8	106.4	100.3	100.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)