

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: P834457

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-3LO-20-120-EDD-90**

Issue Date: 5/16/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P834457
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-OPL-LD4-3LO-20-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

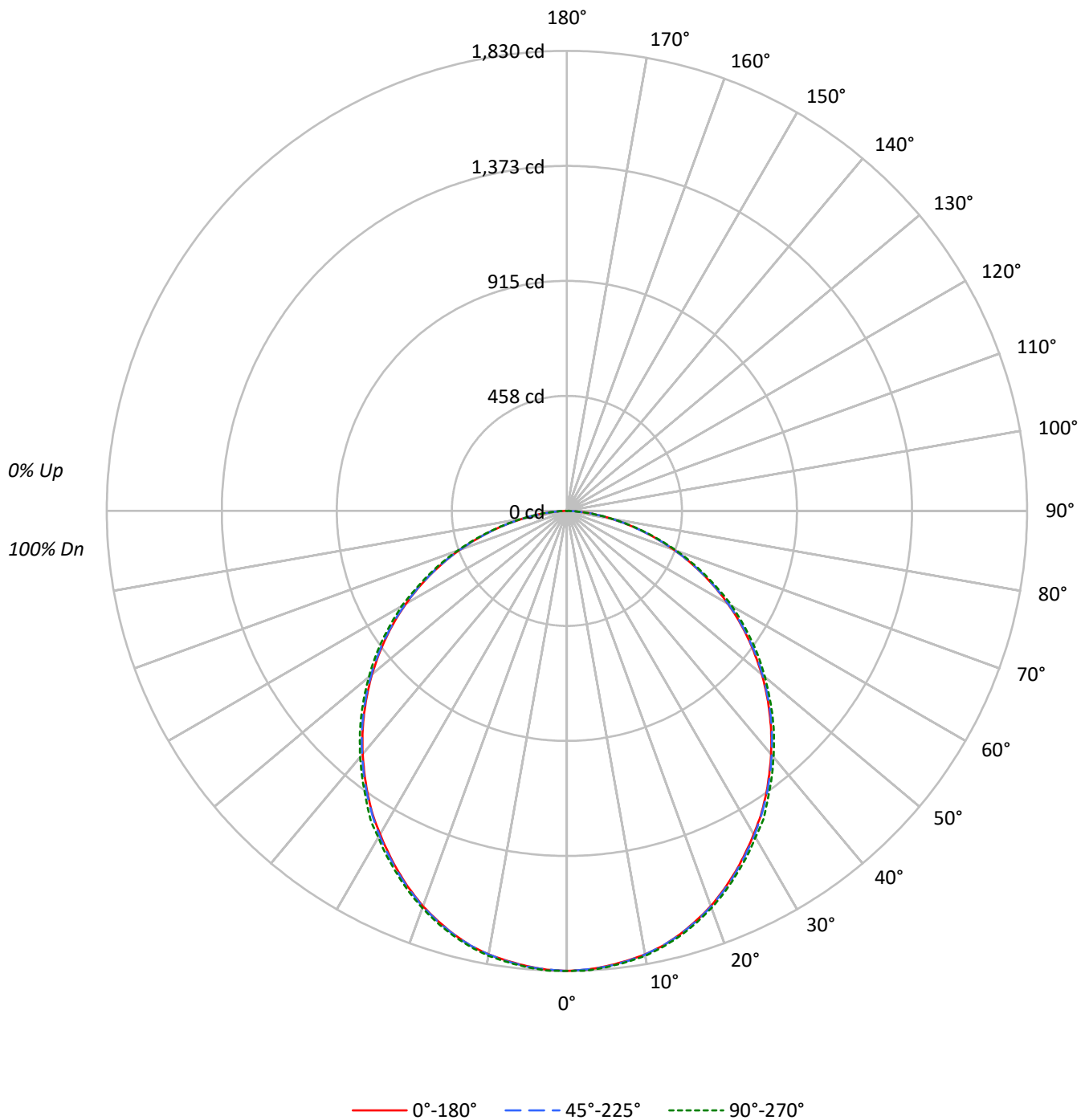
Lumens per Lamp: N/A
Luminaire Lumens: 4944.2 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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



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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	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4924	4924	4924
5°	4911	4915	4921
10°	4895	4896	4911
15°	4855	4858	4872
20°	4792	4797	4815
25°	4705	4716	4738
30°	4617	4632	4660
35°	4532	4544	4580
40°	4437	4451	4491
45°	4340	4358	4403
50°	4235	4253	4303
55°	4115	4134	4202
60°	3978	3994	4084
65°	3804	3816	3889
70°	3570	3574	3651
75°	3246	3234	3308
80°	2788	2777	2824
85°	2164	2127	2140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	3.5
10°-20°	491.8	9.9
20°-30°	732.2	14.8
30°-40°	865.9	17.5
40°-50°	883.9	17.9
50°-60°	788.9	16.0
60°-70°	594.2	12.0
70°-80°	331.3	6.7
80°-90°	83.0	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°	1396.9	28.3
0°-40°	2262.8	45.8
0°-60°	3935.6	79.6
0°-90°	4944.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4944.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1830	1830	1830	1830	1830	
5°	1818	1821	1820	1820	1822	173
15°	1743	1744	1744	1745	1749	491
25°	1585	1586	1588	1593	1596	730
35°	1380	1378	1383	1388	1394	863
45°	1140	1140	1145	1151	1157	880
55°	877	876	881	887	896	784
65°	597	595	599	605	611	591
75°	312	310	311	312	318	331
85°	70	68	69	68	69	84
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1829.8	1829.8	1829.8	1829.8	1829.8
2.5°	1826.7	1829.8	1826.0	1826.7	1830.1
5°	1818.0	1821.4	1819.5	1819.9	1821.8
7.5°	1805.9	1810.4	1807.8	1808.5	1810.4
10°	1791.5	1794.9	1791.9	1793.8	1797.2
12.5°	1771.0	1772.5	1771.0	1771.8	1775.6
15°	1742.6	1744.5	1743.8	1745.3	1748.7
17.5°	1709.3	1711.6	1711.2	1714.2	1716.9
20°	1673.3	1673.7	1675.2	1678.2	1681.3
22.5°	1630.9	1632.0	1633.5	1637.7	1640.7
25°	1584.6	1586.5	1588.4	1592.6	1595.6
27.5°	1535.8	1537.7	1540.3	1544.9	1549.8
30°	1485.8	1485.8	1490.7	1495.2	1499.8
32.5°	1435.4	1433.5	1438.0	1443.7	1454.7
35°	1379.7	1378.2	1383.1	1388.4	1394.1
37.5°	1321.7	1320.6	1326.3	1332.0	1337.3
40°	1263.0	1261.5	1267.2	1272.9	1278.6
42.5°	1202.8	1202.0	1207.3	1213.0	1219.1
45°	1140.3	1139.9	1145.2	1150.9	1156.9
47.5°	1076.6	1075.9	1081.2	1087.2	1092.5
50°	1011.5	1010.7	1016.0	1022.1	1027.8
52.5°	944.4	944.4	949.3	954.7	963.4
55°	877.0	875.9	881.2	887.2	895.6
57.5°	808.8	807.3	812.2	818.3	825.9
60°	739.1	737.6	742.1	748.2	758.8
62.5°	668.6	666.4	670.9	676.6	683.0
65°	597.4	595.1	599.3	604.6	610.7
67.5°	525.8	523.2	527.3	531.9	537.6
70°	453.8	451.2	454.2	458.8	464.1
72.5°	382.2	379.6	382.2	384.1	390.6
75°	312.2	309.5	311.0	312.5	318.2
77.5°	244.0	241.3	244.3	245.1	248.5
80°	179.9	177.3	179.2	179.6	182.2
82.5°	121.6	119.3	122.0	120.1	122.4
85°	70.1	68.2	68.9	68.2	69.3
87.5°	27.7	26.1	26.5	25.0	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)