

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: P835773

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-3HI-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835773
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-OPL-LD4-3HI-40-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

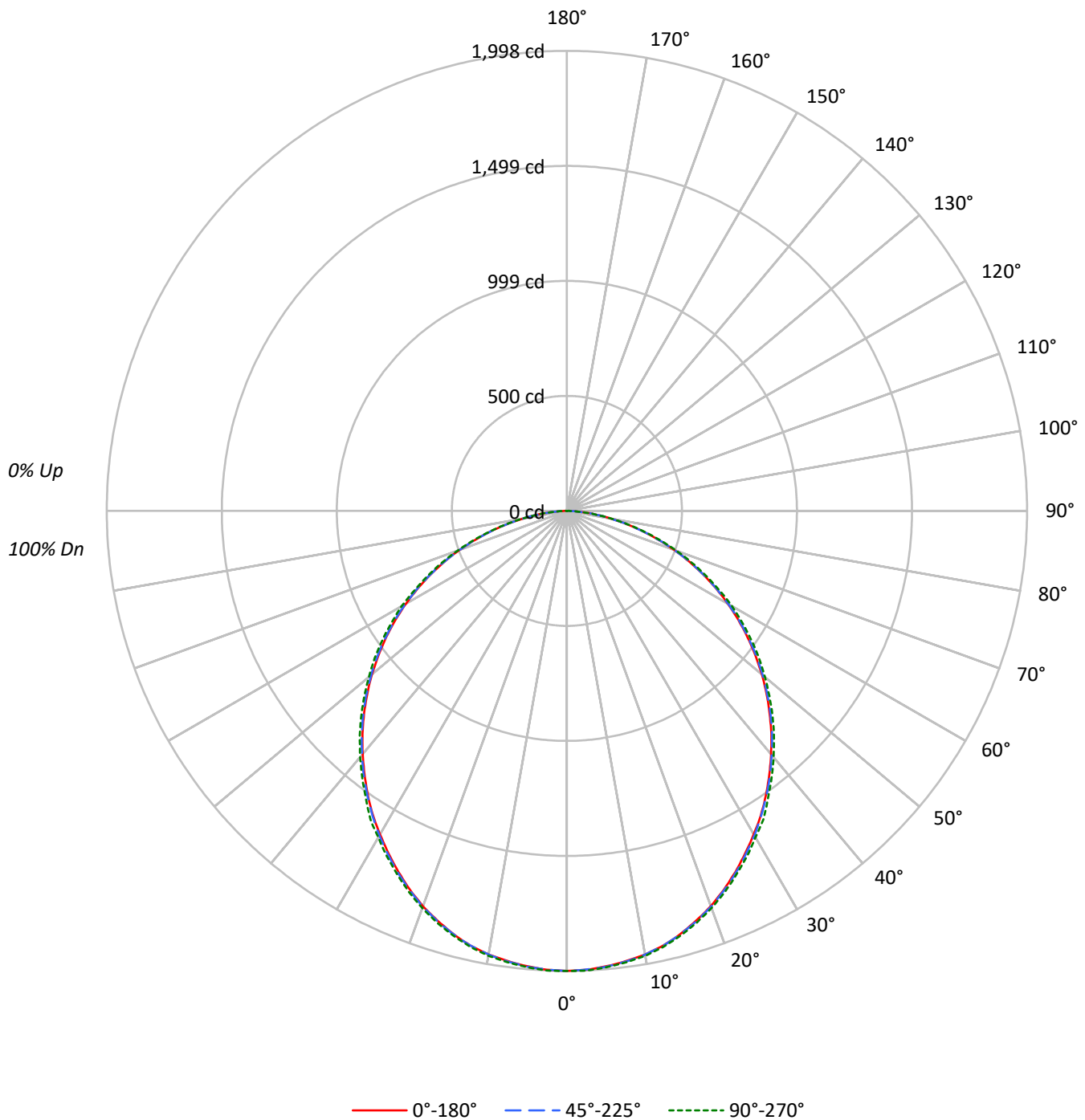
Lumens per Lamp: N/A
Luminaire Lumens: 5398.9 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66
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	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°	5377	5377	5377
5°	5363	5367	5374
10°	5345	5347	5363
15°	5301	5305	5320
20°	5233	5238	5257
25°	5138	5150	5173
30°	5041	5058	5089
35°	4949	4961	5001
40°	4845	4861	4904
45°	4738	4759	4808
50°	4624	4645	4698
55°	4493	4514	4588
60°	4344	4362	4459
65°	4154	4167	4246
70°	3899	3902	3987
75°	3544	3531	3613
80°	3045	3033	3084
85°	2362	2325	2337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.8	3.5
10°-20°	537.1	9.9
20°-30°	799.5	14.8
30°-40°	945.5	17.5
40°-50°	965.2	17.9
50°-60°	861.4	16.0
60°-70°	648.8	12.0
70°-80°	361.8	6.7
80°-90°	90.7	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°	1525.4	28.3
0°-40°	2470.9	45.8
0°-60°	4297.6	79.6
0°-90°	5398.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5398.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1998	1998	1998	1998	1998	
5°	1985	1989	1987	1987	1989	189
15°	1903	1905	1904	1906	1910	536
25°	1730	1732	1734	1739	1742	797
35°	1507	1505	1510	1516	1522	942
45°	1245	1245	1250	1257	1263	960
55°	958	956	962	969	978	856
65°	652	650	654	660	667	645
75°	341	338	340	341	348	361
85°	76	74	75	74	76	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1998.0	1998.0	1998.0	1998.0	1998.0
2.5°	1994.7	1998.0	1993.9	1994.7	1998.4
5°	1985.2	1988.9	1986.9	1987.3	1989.3
7.5°	1972.0	1976.9	1974.0	1974.9	1976.9
10°	1956.2	1960.0	1956.7	1958.7	1962.5
12.5°	1933.9	1935.6	1933.9	1934.7	1938.9
15°	1902.9	1904.9	1904.1	1905.8	1909.5
17.5°	1866.5	1869.0	1868.5	1871.9	1874.8
20°	1827.2	1827.6	1829.2	1832.6	1835.9
22.5°	1780.8	1782.1	1783.7	1788.3	1791.6
25°	1730.4	1732.4	1734.5	1739.1	1742.4
27.5°	1677.0	1679.1	1682.0	1686.9	1692.3
30°	1622.4	1622.4	1627.8	1632.8	1637.7
32.5°	1567.4	1565.3	1570.3	1576.5	1588.5
35°	1506.6	1504.9	1510.3	1516.1	1522.3
37.5°	1443.3	1442.1	1448.3	1454.5	1460.3
40°	1379.2	1377.5	1383.7	1389.9	1396.1
42.5°	1313.4	1312.6	1318.4	1324.6	1331.2
45°	1245.1	1244.7	1250.5	1256.7	1263.3
47.5°	1175.6	1174.8	1180.6	1187.2	1193.0
50°	1104.5	1103.7	1109.5	1116.1	1122.3
52.5°	1031.3	1031.3	1036.7	1042.4	1052.0
55°	957.6	956.4	962.2	968.8	977.9
57.5°	883.2	881.5	886.9	893.5	901.8
60°	807.1	805.4	810.4	817.0	828.6
62.5°	730.1	727.6	732.6	738.8	745.8
65°	652.4	649.9	654.4	660.2	666.8
67.5°	574.2	571.3	575.8	580.8	587.0
70°	495.6	492.7	496.0	501.0	506.7
72.5°	417.4	414.5	417.4	419.5	426.5
75°	340.9	338.0	339.6	341.3	347.5
77.5°	266.4	263.5	266.8	267.6	271.4
80°	196.5	193.6	195.7	196.1	199.0
82.5°	132.8	130.3	133.2	131.1	133.6
85°	76.5	74.5	75.3	74.5	75.7
87.5°	30.2	28.5	29.0	27.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)