

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: P834403

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834403
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
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

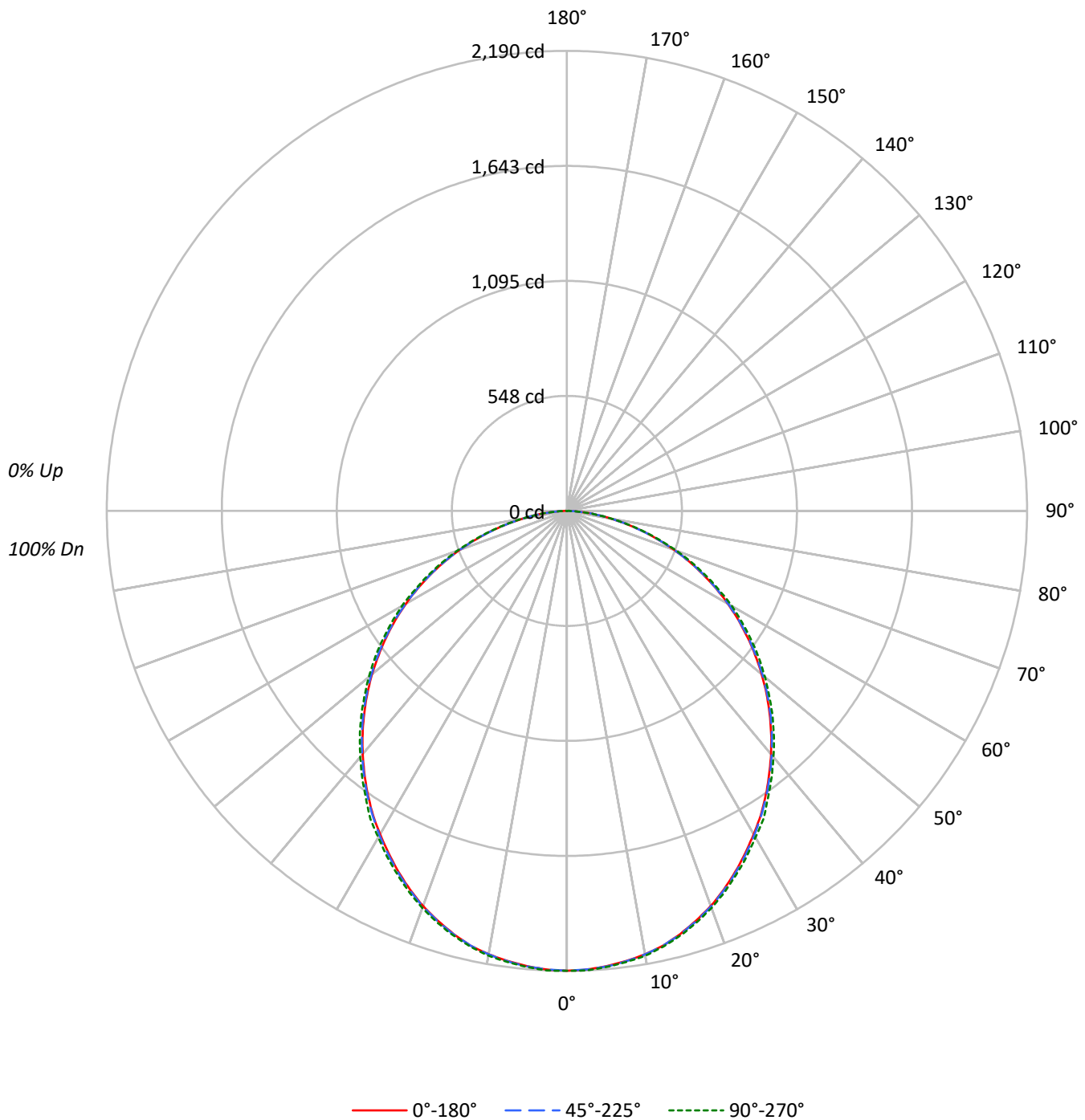
Lumens per Lamp: N/A
Luminaire Lumens: 5915.4 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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



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°	5891	5891	5891
5°	5876	5880	5888
10°	5857	5858	5875
15°	5808	5812	5829
20°	5733	5739	5760
25°	5629	5643	5668
30°	5523	5542	5576
35°	5423	5436	5479
40°	5308	5326	5374
45°	5192	5214	5268
50°	5066	5089	5148
55°	4923	4946	5027
60°	4759	4779	4886
65°	4551	4565	4652
70°	4272	4275	4368
75°	3883	3869	3958
80°	3336	3322	3378
85°	2590	2547	2560



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.9	3.5
10°-20°	588.4	9.9
20°-30°	876.0	14.8
30°-40°	1036.0	17.5
40°-50°	1057.6	17.9
50°-60°	943.8	16.0
60°-70°	710.9	12.0
70°-80°	396.4	6.7
80°-90°	99.3	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°	1671.3	28.3
0°-40°	2707.3	45.8
0°-60°	4708.7	79.6
0°-90°	5915.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5915.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2189	2189	2189	2189	2189	
5°	2175	2179	2177	2177	2180	207
15°	2085	2087	2086	2088	2092	588
25°	1896	1898	1900	1905	1909	873
35°	1651	1649	1655	1661	1668	1032
45°	1364	1364	1370	1377	1384	1052
55°	1049	1048	1054	1062	1072	938
65°	715	712	717	723	731	707
75°	374	370	372	374	381	396
85°	84	82	82	82	83	101
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2189.2	2189.2	2189.2	2189.2	2189.2
2.5°	2185.5	2189.2	2184.6	2185.5	2189.6
5°	2175.1	2179.2	2176.9	2177.4	2179.6
7.5°	2160.6	2166.1	2162.9	2163.8	2166.1
10°	2143.4	2147.5	2143.8	2146.1	2150.2
12.5°	2118.9	2120.7	2118.9	2119.8	2124.4
15°	2084.9	2087.2	2086.3	2088.1	2092.2
17.5°	2045.0	2047.8	2047.3	2050.9	2054.1
20°	2002.0	2002.4	2004.2	2007.9	2011.5
22.5°	1951.2	1952.6	1954.4	1959.4	1963.0
25°	1895.9	1898.2	1900.5	1905.4	1909.1
27.5°	1837.5	1839.7	1842.9	1848.3	1854.2
30°	1777.6	1777.6	1783.5	1789.0	1794.4
32.5°	1717.3	1715.1	1720.5	1727.3	1740.5
35°	1650.7	1648.9	1654.8	1661.1	1667.9
37.5°	1581.4	1580.0	1586.8	1593.6	1600.0
40°	1511.1	1509.3	1516.1	1522.9	1529.7
42.5°	1439.0	1438.1	1444.5	1451.3	1458.5
45°	1364.3	1363.8	1370.2	1377.0	1384.2
47.5°	1288.1	1287.2	1293.6	1300.8	1307.2
50°	1210.2	1209.3	1215.6	1222.9	1229.7
52.5°	1129.9	1129.9	1135.8	1142.2	1152.6
55°	1049.3	1047.9	1054.2	1061.5	1071.5
57.5°	967.7	965.9	971.8	979.0	988.1
60°	884.3	882.5	887.9	895.2	907.8
62.5°	800.0	797.3	802.7	809.5	817.2
65°	714.8	712.0	717.0	723.4	730.6
67.5°	629.1	625.9	630.9	636.4	643.2
70°	543.0	539.8	543.4	548.9	555.2
72.5°	457.3	454.2	457.3	459.6	467.3
75°	373.5	370.3	372.1	373.9	380.7
77.5°	291.9	288.7	292.3	293.2	297.3
80°	215.3	212.1	214.4	214.8	218.0
82.5°	145.5	142.8	145.9	143.7	146.4
85°	83.9	81.6	82.5	81.6	82.9
87.5°	33.1	31.3	31.7	29.9	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)