

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: P834499

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-2LO-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834499
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-LD4-2LO-50-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

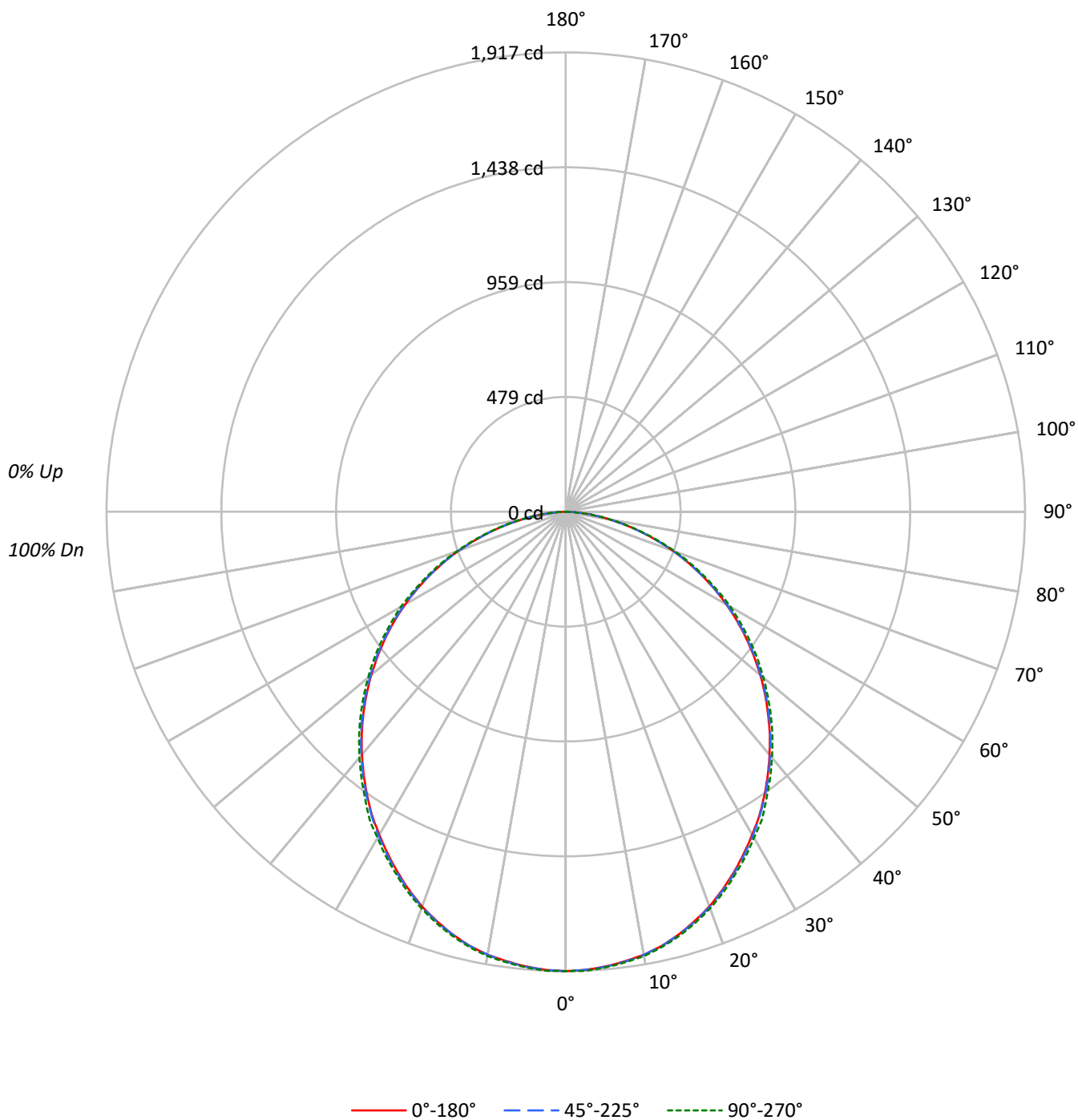
Lumens per Lamp: N/A
Luminaire Lumens: 5179.6 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5158	5158	5158
5°	5145	5149	5155
10°	5128	5129	5145
15°	5086	5089	5104
20°	5020	5026	5044
25°	4929	4941	4963
30°	4836	4853	4882
35°	4748	4760	4798
40°	4648	4663	4705
45°	4546	4566	4612
50°	4436	4456	4508
55°	4311	4331	4402
60°	4167	4184	4278
65°	3985	3997	4074
70°	3741	3744	3825
75°	3400	3387	3466
80°	2921	2909	2958
85°	2266	2229	2242



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.1	3.5
10°-20°	515.3	9.9
20°-30°	767.1	14.8
30°-40°	907.1	17.5
40°-50°	926.0	17.9
50°-60°	826.4	16.0
60°-70°	622.5	12.0
70°-80°	347.1	6.7
80°-90°	87.0	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°	1463.5	28.3
0°-40°	2370.6	45.8
0°-60°	4123.1	79.6
0°-90°	5179.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5179.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1917	1917	1917	1917	1917	
5°	1905	1908	1906	1907	1908	181
15°	1826	1828	1827	1828	1832	515
25°	1660	1662	1664	1668	1672	765
35°	1445	1444	1449	1454	1460	904
45°	1195	1194	1200	1206	1212	922
55°	919	918	923	930	938	821
65°	626	624	628	633	640	619
75°	327	324	326	327	333	347
85°	73	71	72	71	73	88
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1916.9	1916.9	1916.9	1916.9	1916.9
2.5°	1913.7	1916.9	1912.9	1913.7	1917.3
5°	1904.6	1908.2	1906.2	1906.6	1908.5
7.5°	1891.9	1896.6	1893.9	1894.7	1896.6
10°	1876.8	1880.4	1877.2	1879.2	1882.8
12.5°	1855.4	1857.0	1855.4	1856.2	1860.1
15°	1825.6	1827.6	1826.8	1828.4	1832.0
17.5°	1790.7	1793.1	1792.7	1795.8	1798.6
20°	1753.0	1753.4	1755.0	1758.1	1761.3
22.5°	1708.5	1709.7	1711.3	1715.7	1718.8
25°	1660.1	1662.1	1664.1	1668.4	1671.6
27.5°	1608.9	1610.9	1613.7	1618.4	1623.6
30°	1556.5	1556.5	1561.7	1566.4	1571.2
32.5°	1503.7	1501.8	1506.5	1512.5	1524.0
35°	1445.4	1443.8	1449.0	1454.5	1460.5
37.5°	1384.7	1383.5	1389.4	1395.4	1401.0
40°	1323.2	1321.6	1327.5	1333.5	1339.4
42.5°	1260.1	1259.3	1264.8	1270.8	1277.1
45°	1194.6	1194.2	1199.7	1205.7	1212.0
47.5°	1127.9	1127.1	1132.7	1139.0	1144.6
50°	1059.6	1058.8	1064.4	1070.8	1076.7
52.5°	989.4	989.4	994.6	1000.1	1009.2
55°	918.8	917.6	923.1	929.5	938.2
57.5°	847.3	845.7	850.9	857.2	865.2
60°	774.3	772.7	777.5	783.8	794.9
62.5°	700.5	698.1	702.9	708.8	715.6
65°	625.9	623.5	627.8	633.4	639.8
67.5°	550.9	548.1	552.4	557.2	563.2
70°	475.5	472.7	475.8	480.6	486.2
72.5°	400.4	397.7	400.4	402.4	409.2
75°	327.0	324.2	325.8	327.4	333.4
77.5°	255.6	252.8	256.0	256.8	260.3
80°	188.5	185.7	187.7	188.1	190.9
82.5°	127.4	125.0	127.8	125.8	128.2
85°	73.4	71.4	72.2	71.4	72.6
87.5°	29.0	27.4	27.8	26.2	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)