

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



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: P835691

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-6STD-50-120-EDD**

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: P835691
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-LD4-6STD-50-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

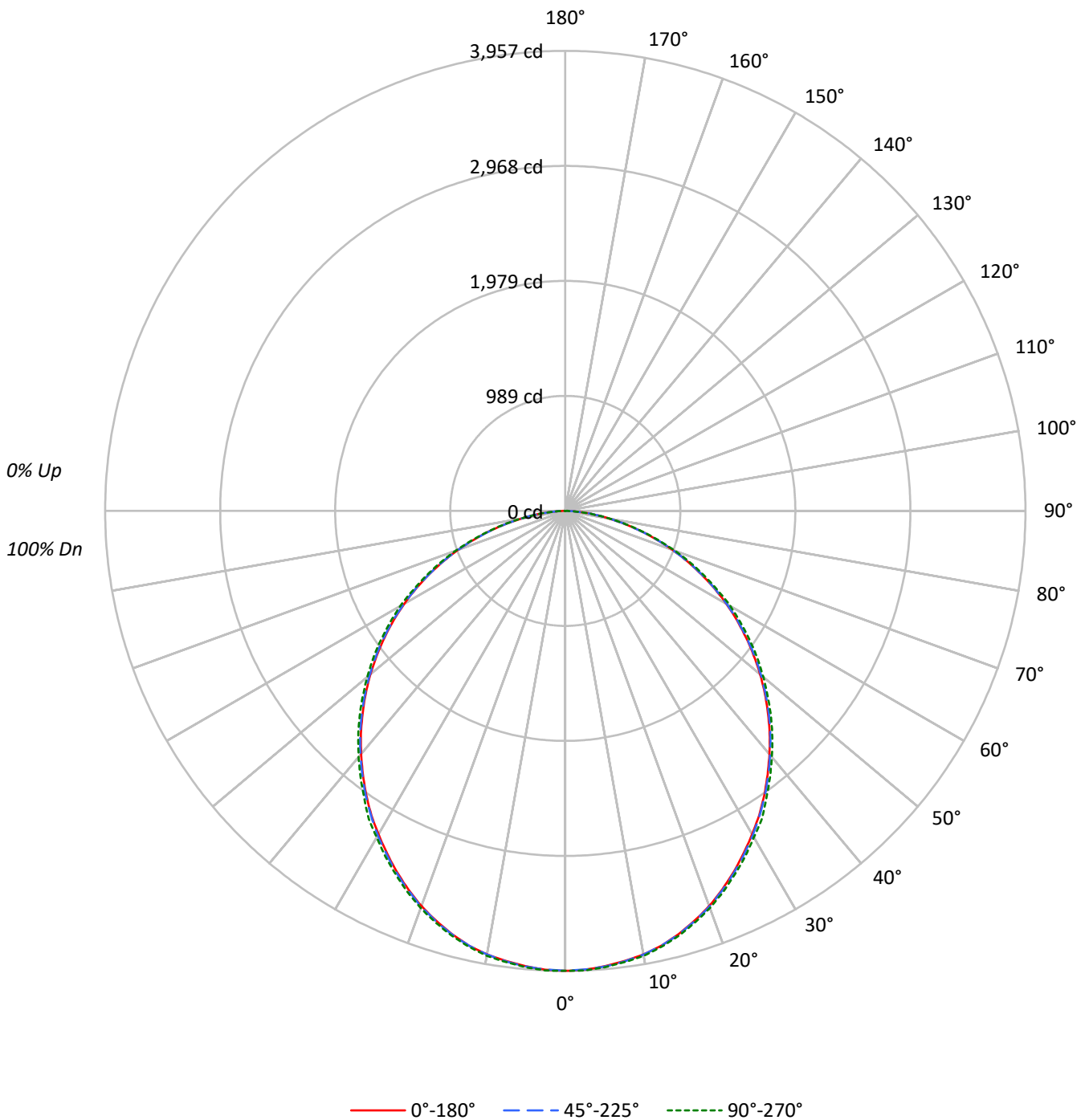
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10689.3 lumens
Efficiency: N/A
Efficacy: 107.0 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): 99.9
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





TEST NUMBER: P835691

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-6STD-50-120-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | 0 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 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 | 86 | 84 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 83 | 77 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 72 | 72 | 72 | 72 | 70 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 62 | 70 | 65 | 61 | 61 | 61 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 65 | 58 | 53 | 62 | 57 | 53 | 53 | 53 | 53 | 51 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 51 | 46 | 46 | 46 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 40 | 40 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 36 | 36 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 32 | 32 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 29 | 29 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 27 | 27 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10645 | 10645 | 10645 |
| 5° | 10617 | 10626 | 10639 |
| 10° | 10583 | 10586 | 10617 |
| 15° | 10496 | 10503 | 10533 |
| 20° | 10360 | 10372 | 10409 |
| 25° | 10172 | 10197 | 10243 |
| 30° | 9981 | 10014 | 10075 |
| 35° | 9799 | 9823 | 9901 |
| 40° | 9592 | 9624 | 9710 |
| 45° | 9382 | 9422 | 9519 |
| 50° | 9155 | 9196 | 9302 |
| 55° | 8896 | 8938 | 9084 |
| 60° | 8600 | 8635 | 8829 |
| 65° | 8224 | 8250 | 8407 |
| 70° | 7720 | 7726 | 7894 |
| 75° | 7017 | 6991 | 7153 |
| 80° | 6028 | 6003 | 6106 |
| 85° | 4678 | 4604 | 4628 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 373.8 | 3.5 |
| 10°-20° | 1063.4 | 9.9 |
| 20°-30° | 1583.0 | 14.8 |
| 30°-40° | 1872.0 | 17.5 |
| 40°-50° | 1911.1 | 17.9 |
| 50°-60° | 1705.6 | 16.0 |
| 60°-70° | 1284.6 | 12.0 |
| 70°-80° | 716.4 | 6.7 |
| 80°-90° | 179.5 | 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° | 3020.2 | 28.3 |
| 0°-40° | 4892.2 | 45.8 |
| 0°-60° | 8508.9 | 79.6 |
| 0°-90° | 10689.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 10689.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 3956 | 3956 | 3956 | 3956 | 3956 | |
| 5° | 3930 | 3938 | 3934 | 3935 | 3939 | 373 |
| 15° | 3768 | 3772 | 3770 | 3773 | 3781 | 1062 |
| 25° | 3426 | 3430 | 3434 | 3443 | 3450 | 1578 |
| 35° | 2983 | 2980 | 2990 | 3002 | 3014 | 1865 |
| 45° | 2465 | 2464 | 2476 | 2488 | 2501 | 1902 |
| 55° | 1896 | 1894 | 1905 | 1918 | 1936 | 1695 |
| 65° | 1292 | 1287 | 1296 | 1307 | 1320 | 1277 |
| 75° | 675 | 669 | 672 | 676 | 688 | 715 |
| 85° | 152 | 147 | 149 | 147 | 150 | 182 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 3955.9 | 3955.9 | 3955.9 | 3955.9 | 3955.9 |
| 2.5° | 3949.4 | 3955.9 | 3947.7 | 3949.4 | 3956.7 |
| 5° | 3930.5 | 3937.9 | 3933.8 | 3934.6 | 3938.7 |
| 7.5° | 3904.3 | 3914.2 | 3908.4 | 3910.1 | 3914.2 |
| 10° | 3873.2 | 3880.6 | 3874.0 | 3878.1 | 3885.5 |
| 12.5° | 3829.0 | 3832.3 | 3829.0 | 3830.6 | 3838.8 |
| 15° | 3767.5 | 3771.6 | 3770.0 | 3773.3 | 3780.7 |
| 17.5° | 3695.5 | 3700.4 | 3699.6 | 3706.1 | 3711.9 |
| 20° | 3617.7 | 3618.5 | 3621.8 | 3628.3 | 3634.9 |
| 22.5° | 3525.9 | 3528.4 | 3531.7 | 3540.7 | 3547.2 |
| 25° | 3426.0 | 3430.1 | 3434.2 | 3443.2 | 3449.8 |
| 27.5° | 3320.4 | 3324.5 | 3330.2 | 3340.0 | 3350.7 |
| 30° | 3212.2 | 3212.2 | 3222.9 | 3232.7 | 3242.5 |
| 32.5° | 3103.3 | 3099.2 | 3109.0 | 3121.3 | 3145.1 |
| 35° | 2982.9 | 2979.6 | 2990.3 | 3001.8 | 3014.0 |
| 37.5° | 2857.6 | 2855.1 | 2867.4 | 2879.7 | 2891.2 |
| 40° | 2730.7 | 2727.4 | 2739.7 | 2751.9 | 2764.2 |
| 42.5° | 2600.4 | 2598.8 | 2610.3 | 2622.5 | 2635.6 |
| 45° | 2465.3 | 2464.5 | 2475.9 | 2488.2 | 2501.3 |
| 47.5° | 2327.7 | 2326.1 | 2337.5 | 2350.6 | 2362.1 |
| 50° | 2186.8 | 2185.2 | 2196.6 | 2209.7 | 2222.0 |
| 52.5° | 2041.8 | 2041.8 | 2052.5 | 2064.0 | 2082.8 |
| 55° | 1896.1 | 1893.6 | 1905.1 | 1918.2 | 1936.2 |
| 57.5° | 1748.6 | 1745.4 | 1756.0 | 1769.1 | 1785.5 |
| 60° | 1597.9 | 1594.7 | 1604.5 | 1617.6 | 1640.5 |
| 62.5° | 1445.6 | 1440.7 | 1450.5 | 1462.8 | 1476.7 |
| 65° | 1291.6 | 1286.7 | 1295.7 | 1307.2 | 1320.3 |
| 67.5° | 1136.8 | 1131.1 | 1140.1 | 1149.9 | 1162.2 |
| 70° | 981.2 | 975.5 | 982.0 | 991.8 | 1003.3 |
| 72.5° | 826.4 | 820.7 | 826.4 | 830.5 | 844.4 |
| 75° | 674.9 | 669.1 | 672.4 | 675.7 | 688.0 |
| 77.5° | 527.5 | 521.7 | 528.3 | 529.9 | 537.3 |
| 80° | 389.0 | 383.3 | 387.4 | 388.2 | 394.0 |
| 82.5° | 262.9 | 258.0 | 263.7 | 259.6 | 264.5 |
| 85° | 151.5 | 147.4 | 149.1 | 147.4 | 149.9 |
| 87.5° | 59.8 | 56.5 | 57.3 | 54.1 | 54.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)