

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P740881

Luminaire Tested: LD4D08D010-EU4DR150210IC9030-4LBDP1MW

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P740881
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D08D010-EU4DR150210IC9030-4LBDP1MW
Description: 4 INCH ROUND DEEP 45° CUTOFF MATTE WHITE TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 731.2 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.23
Luminous Opening: Vertical Cylinder (Dia: 0.35' x H: 0.35')
CIE Type: Direct

Input Watts (W): 8.9
Input Voltage (V): NR
Input Current (A_{in}): 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: 24 FT

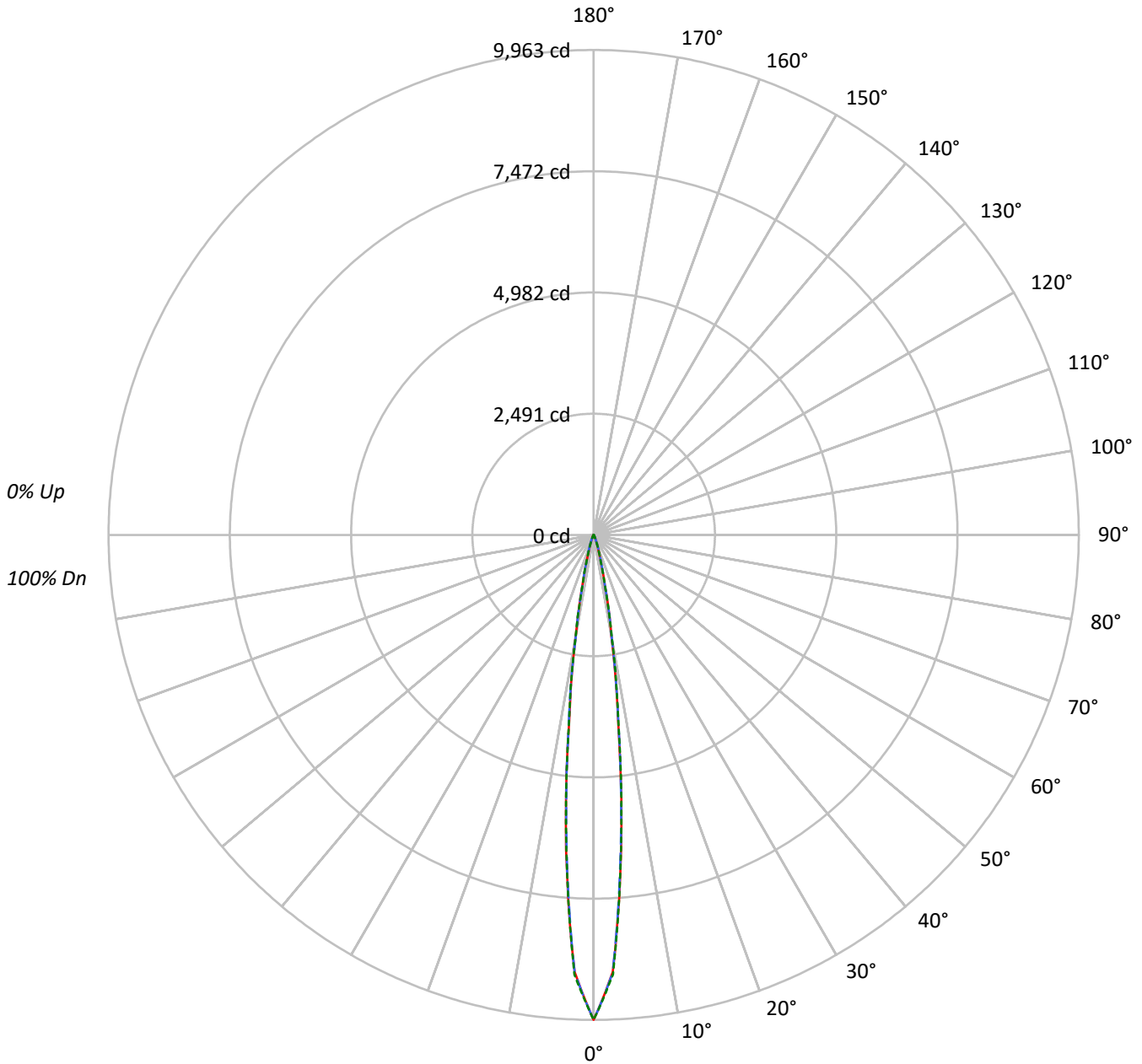


Downlight



TEST NUMBER: P740881
CATALOG NUMBER: LD4D08D010-EU4DR150210IC9030-4LBDP1MW

Luminous Intensity Polar Plot





TEST NUMBER: P740881

CATALOG NUMBER: LD4D08D010-EU4DR150210IC9030-4LBDP1MW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | 100 | | | | | | | | | | | | | |
| 1 | 116 | 114 | 112 | 111 | 113 | 112 | 110 | 109 | 108 | 107 | 106 | 104 | 103 | 103 | 101 | 100 | 100 | 98 | | | | | | 98 | | | | | | | | | | | | | |
| 2 | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 104 | 105 | 103 | 102 | 102 | 101 | 100 | 100 | 98 | 98 | 96 | | | | | | 96 | | | | | | | | | | | | | |
| 3 | 110 | 106 | 103 | 101 | 108 | 105 | 102 | 100 | 103 | 100 | 99 | 100 | 99 | 97 | 98 | 97 | 96 | 94 | | | | | | 94 | | | | | | | | | | | | | |
| 4 | 108 | 103 | 100 | 98 | 106 | 102 | 99 | 97 | 100 | 98 | 96 | 99 | 97 | 95 | 97 | 95 | 94 | 93 | | | | | | 93 | | | | | | | | | | | | | |
| 5 | 106 | 101 | 98 | 95 | 104 | 100 | 97 | 95 | 98 | 96 | 94 | 97 | 95 | 93 | 96 | 94 | 92 | 92 | | | | | | 92 | | | | | | | | | | | | | |
| 6 | 104 | 99 | 95 | 93 | 102 | 98 | 95 | 93 | 97 | 94 | 92 | 96 | 93 | 92 | 95 | 93 | 91 | 90 | | | | | | 90 | | | | | | | | | | | | | |
| 7 | 102 | 97 | 94 | 91 | 101 | 96 | 93 | 91 | 95 | 93 | 91 | 94 | 92 | 90 | 93 | 91 | 90 | 89 | | | | | | 89 | | | | | | | | | | | | | |
| 8 | 100 | 95 | 92 | 90 | 99 | 95 | 92 | 90 | 94 | 91 | 89 | 93 | 91 | 89 | 92 | 90 | 89 | 88 | | | | | | 88 | | | | | | | | | | | | | |
| 9 | 99 | 93 | 90 | 88 | 98 | 93 | 90 | 88 | 92 | 90 | 88 | 92 | 89 | 88 | 91 | 89 | 88 | 87 | | | | | | 87 | | | | | | | | | | | | | |
| 10 | 97 | 92 | 89 | 87 | 96 | 92 | 89 | 87 | 91 | 89 | 87 | 91 | 88 | 87 | 90 | 88 | 86 | 86 | | | | | | 86 | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|---------|---------|---------|
| 0° | 1121036 | 1121036 | 1121036 |
| 5° | 658769 | 650242 | 655384 |
| 10° | 196608 | 197989 | 201022 |
| 15° | 48909 | 49856 | 48318 |
| 20° | 14630 | 16946 | 14941 |
| 25° | 5157 | 6575 | 5227 |
| 30° | 1894 | 2494 | 1924 |
| 35° | 951 | 1075 | 922 |
| 40° | 597 | 660 | 597 |
| 45° | 441 | 469 | 441 |
| 50° | 355 | 355 | 355 |
| 55° | 292 | 292 | 292 |
| 60° | 239 | 239 | 239 |
| 65° | 178 | 178 | 178 |
| 70° | 154 | 154 | 154 |
| 75° | 98 | 98 | 128 |
| 80° | 63 | 63 | 63 |
| 85° | 33 | 33 | 33 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 469 cd/sqm



TEST NUMBER: P740881

CATALOG NUMBER: LD4D08D010-EU4DR150210IC9030-4LBDP1MW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 474.3 | 64.9 |
| 10°-20° | 195.1 | 26.7 |
| 20°-30° | 38.7 | 5.3 |
| 30°-40° | 9.7 | 1.3 |
| 40°-50° | 5.1 | 0.7 |
| 50°-60° | 3.8 | 0.5 |
| 60°-70° | 2.7 | 0.4 |
| 70°-80° | 1.5 | 0.2 |
| 80°-90° | 0.4 | 0.1 |
| 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° | 708.1 | 96.8 |
| 0°-40° | 717.8 | 98.2 |
| 0°-60° | 726.6 | 99.4 |
| 0°-90° | 731.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 731.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 9963 | 9963 | 9963 | 9963 | 9963 | |
| 5° | 6482 | 6416 | 6398 | 6442 | 6449 | 473 |
| 15° | 563 | 574 | 574 | 564 | 556 | 193 |
| 25° | 66 | 75 | 84 | 75 | 67 | 35 |
| 35° | 13 | 14 | 15 | 14 | 13 | 9 |
| 45° | 6 | 6 | 7 | 6 | 6 | 5 |
| 55° | 4 | 4 | 4 | 4 | 4 | 4 |
| 65° | 2 | 2 | 2 | 2 | 2 | 3 |
| 75° | 1 | 1 | 1 | 1 | 2 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P740881

CATALOG NUMBER: LD4D08D010-EU4DR150210IC9030-4LBDP1MW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 9963.0 | 9963.0 | 9963.0 | 9963.0 | 9963.0 |
| 2.5° | 8987.0 | 8994.6 | 8997.6 | 9006.4 | 9039.3 |
| 5° | 6482.1 | 6415.5 | 6398.2 | 6442.5 | 6448.8 |
| 7.5° | 3839.8 | 3853.3 | 3902.6 | 3913.6 | 3873.9 |
| 10° | 2107.1 | 2124.4 | 2121.9 | 2137.1 | 2154.4 |
| 12.5° | 1077.6 | 1064.1 | 1059.9 | 1077.2 | 1053.2 |
| 15° | 563.1 | 573.6 | 574.0 | 563.9 | 556.3 |
| 17.5° | 302.8 | 315.1 | 335.3 | 318.9 | 293.5 |
| 20° | 178.8 | 189.8 | 207.1 | 193.6 | 182.6 |
| 22.5° | 110.5 | 119.4 | 131.6 | 121.0 | 112.2 |
| 25° | 66.2 | 75.1 | 84.4 | 74.7 | 67.1 |
| 27.5° | 39.2 | 46.8 | 52.7 | 46.4 | 38.8 |
| 30° | 25.3 | 29.5 | 33.3 | 29.1 | 25.7 |
| 32.5° | 17.7 | 19.4 | 21.1 | 19.4 | 17.7 |
| 35° | 13.1 | 13.9 | 14.8 | 13.9 | 12.7 |
| 37.5° | 10.1 | 11.0 | 11.4 | 10.5 | 9.7 |
| 40° | 8.4 | 8.9 | 9.3 | 8.9 | 8.4 |
| 42.5° | 7.2 | 7.6 | 7.6 | 7.6 | 7.2 |
| 45° | 6.3 | 6.3 | 6.7 | 6.3 | 6.3 |
| 47.5° | 5.5 | 5.5 | 5.9 | 5.5 | 5.5 |
| 50° | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 |
| 52.5° | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| 55° | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 |
| 57.5° | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 60° | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| 62.5° | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 65° | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 67.5° | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 70° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 72.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 75° | 1.3 | 1.3 | 1.3 | 1.3 | 1.7 |
| 77.5° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 80° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 82.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 85° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)