

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: P741939

Luminaire Tested: LD4D10D010-EU4DR150210IC9050-4LBSQW1B

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P741939
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: LD4D10D010-EU4DR150210IC9050-4LBSQW1B
Description: 4 INCH SQAURE DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 935.2 lumens
Efficiency: N/A
Efficacy: 79.9 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): 11.7
Input Voltage (V): NR
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: 24 FT

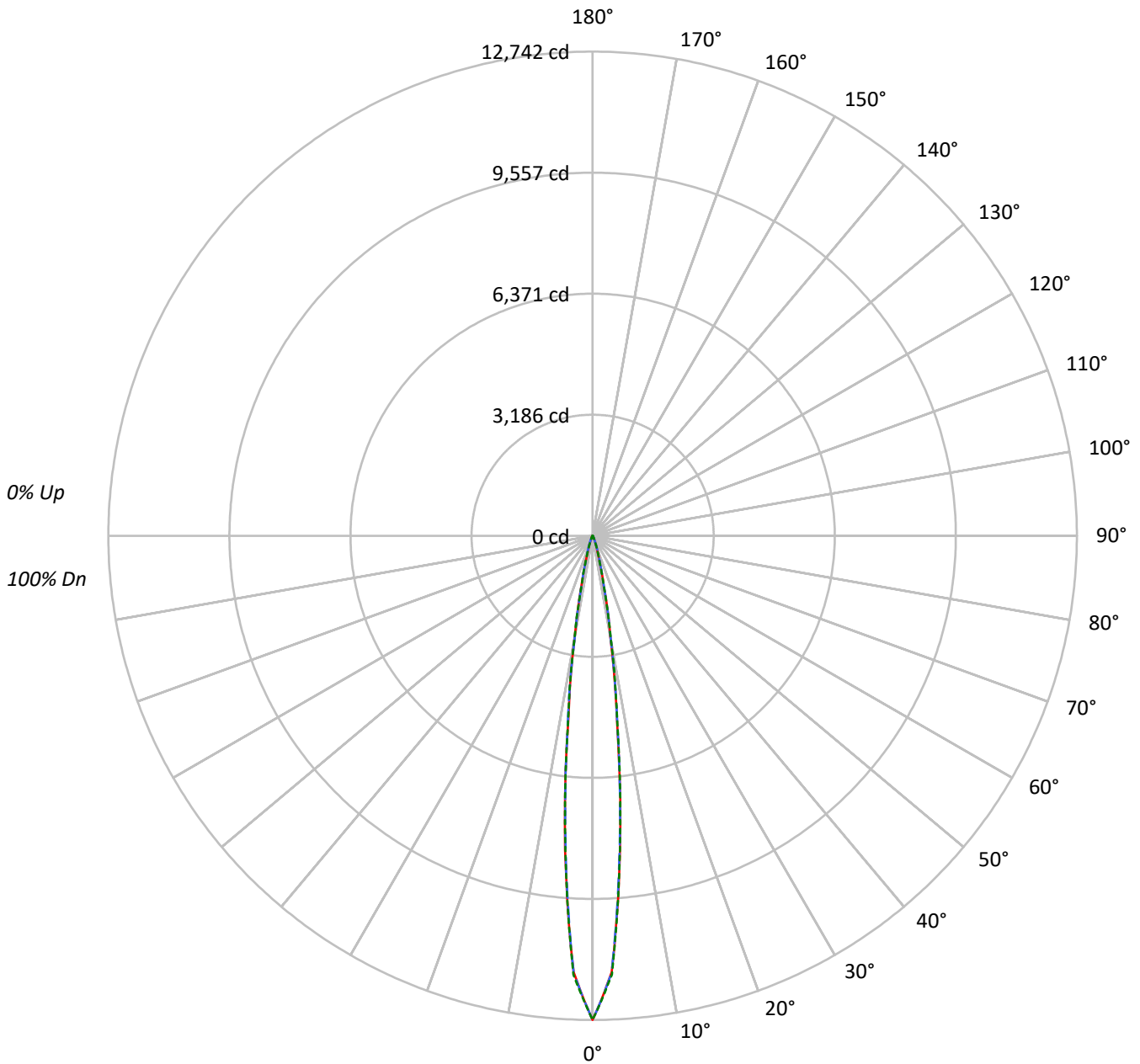


Downlight



TEST NUMBER: P741939
CATALOG NUMBER: LD4D10D010-EU4DR150210IC9050-4LBSQW1B

Luminous Intensity Polar Plot





TEST NUMBER: P741939

CATALOG NUMBER: LD4D10D010-EU4DR150210IC9050-4LBSQW1B

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|---------|---------|---------|
| 0° | 1433774 | 1433774 | 1433774 |
| 5° | 842554 | 831650 | 838225 |
| 10° | 251464 | 253227 | 257100 |
| 15° | 62546 | 63770 | 61799 |
| 20° | 18713 | 21675 | 19114 |
| 25° | 6598 | 8405 | 6684 |
| 30° | 2426 | 3190 | 2464 |
| 35° | 1213 | 1373 | 1176 |
| 40° | 767 | 845 | 767 |
| 45° | 567 | 602 | 567 |
| 50° | 452 | 452 | 452 |
| 55° | 376 | 376 | 376 |
| 60° | 302 | 302 | 302 |
| 65° | 228 | 228 | 228 |
| 70° | 197 | 197 | 197 |
| 75° | 121 | 121 | 166 |
| 80° | 87 | 87 | 87 |
| 85° | 42 | 42 | 42 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 602 cd/sqm



TEST NUMBER: P741939

CATALOG NUMBER: LD4D10D010-EU4DR150210IC9050-4LBSQW1B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 606.6 | 64.9 |
| 10°-20° | 249.5 | 26.7 |
| 20°-30° | 49.6 | 5.3 |
| 30°-40° | 12.4 | 1.3 |
| 40°-50° | 6.5 | 0.7 |
| 50°-60° | 4.8 | 0.5 |
| 60°-70° | 3.4 | 0.4 |
| 70°-80° | 1.9 | 0.2 |
| 80°-90° | 0.6 | 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° | 905.6 | 96.8 |
| 0°-40° | 918.0 | 98.2 |
| 0°-60° | 929.3 | 99.4 |
| 0°-90° | 935.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 935.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 12742 | 12742 | 12742 | 12742 | 12742 | |
| 5° | 8290 | 8205 | 8183 | 8240 | 8248 | 605 |
| 15° | 720 | 734 | 734 | 721 | 712 | 247 |
| 25° | 85 | 96 | 108 | 96 | 86 | 44 |
| 35° | 17 | 18 | 19 | 18 | 16 | 11 |
| 45° | 8 | 8 | 9 | 8 | 8 | 6 |
| 55° | 5 | 5 | 5 | 5 | 5 | 5 |
| 65° | 3 | 3 | 3 | 3 | 3 | 3 |
| 75° | 2 | 2 | 2 | 2 | 2 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P741939

CATALOG NUMBER: LD4D10D010-EU4DR150210IC9050-4LBSQW1B

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|---------|---------|---------|---------|---------|
| 0° | 12742.4 | 12742.4 | 12742.4 | 12742.4 | 12742.4 |
| 2.5° | 11494.2 | 11503.9 | 11507.7 | 11519.0 | 11561.1 |
| 5° | 8290.5 | 8205.3 | 8183.2 | 8239.8 | 8247.9 |
| 7.5° | 4911.0 | 4928.2 | 4991.4 | 5005.4 | 4954.7 |
| 10° | 2695.0 | 2717.1 | 2713.9 | 2733.3 | 2755.4 |
| 12.5° | 1378.2 | 1361.0 | 1355.6 | 1377.7 | 1347.0 |
| 15° | 720.1 | 733.6 | 734.2 | 721.2 | 711.5 |
| 17.5° | 387.3 | 403.0 | 428.8 | 407.8 | 375.4 |
| 20° | 228.7 | 242.7 | 264.9 | 247.6 | 233.6 |
| 22.5° | 141.3 | 152.7 | 168.3 | 154.8 | 143.5 |
| 25° | 84.7 | 96.0 | 107.9 | 95.5 | 85.8 |
| 27.5° | 50.2 | 59.9 | 67.4 | 59.3 | 49.6 |
| 30° | 32.4 | 37.8 | 42.6 | 37.2 | 32.9 |
| 32.5° | 22.7 | 24.8 | 27.0 | 24.8 | 22.7 |
| 35° | 16.7 | 17.8 | 18.9 | 17.8 | 16.2 |
| 37.5° | 12.9 | 14.0 | 14.6 | 13.5 | 12.4 |
| 40° | 10.8 | 11.3 | 11.9 | 11.3 | 10.8 |
| 42.5° | 9.2 | 9.7 | 9.7 | 9.7 | 9.2 |
| 45° | 8.1 | 8.1 | 8.6 | 8.1 | 8.1 |
| 47.5° | 7.0 | 7.0 | 7.6 | 7.0 | 7.0 |
| 50° | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 52.5° | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| 55° | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| 57.5° | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |
| 60° | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| 62.5° | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 65° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| 67.5° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| 70° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 72.5° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 75° | 1.6 | 1.6 | 1.6 | 1.6 | 2.2 |
| 77.5° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 80° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 82.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 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)