

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: P741937

Luminaire Tested: LD4D10D010-EU4DR150210IC9050-4LBS1LI

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P741937
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-EU4DR150210IC9050-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1196.0 lumens
Efficiency: N/A
Efficacy: 102.2 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): 11.7
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

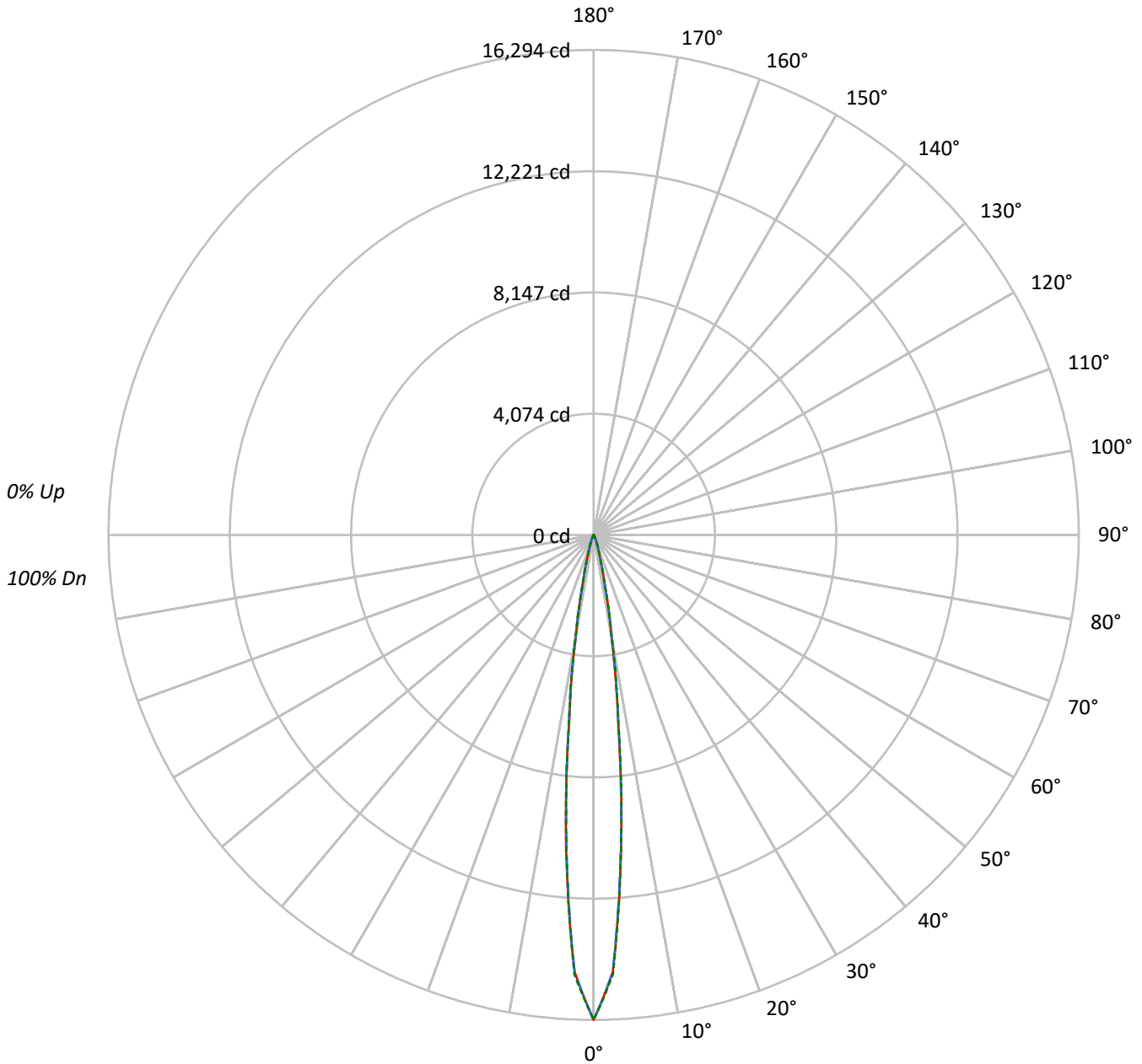


Downlight



TEST NUMBER: P741937
CATALOG NUMBER: LD4D10D010-EU4DR150210IC9050-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P741937

CATALOG NUMBER: LD4D10D010-EU4DR150210IC9050-4LBS1LI

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° | 1833456 | 1833456 | 1833456 |
| 5° | 1077429 | 1063475 | 1071890 |
| 10° | 321566 | 323815 | 328769 |
| 15° | 79986 | 81541 | 79031 |
| 20° | 23933 | 27713 | 24440 |
| 25° | 8437 | 10750 | 8546 |
| 30° | 3100 | 4081 | 3153 |
| 35° | 1554 | 1750 | 1503 |
| 40° | 980 | 1079 | 980 |
| 45° | 721 | 770 | 721 |
| 50° | 577 | 577 | 577 |
| 55° | 480 | 480 | 480 |
| 60° | 386 | 386 | 386 |
| 65° | 293 | 293 | 293 |
| 70° | 249 | 249 | 249 |
| 75° | 159 | 159 | 212 |
| 80° | 110 | 110 | 110 |
| 85° | 58 | 58 | 58 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 770 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 775.7 | 64.9 |
| 10°-20° | 319.0 | 26.7 |
| 20°-30° | 63.4 | 5.3 |
| 30°-40° | 15.8 | 1.3 |
| 40°-50° | 8.3 | 0.7 |
| 50°-60° | 6.2 | 0.5 |
| 60°-70° | 4.3 | 0.4 |
| 70°-80° | 2.5 | 0.2 |
| 80°-90° | 0.8 | 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° | 1158.1 | 96.8 |
| 0°-40° | 1173.9 | 98.2 |
| 0°-60° | 1188.4 | 99.4 |
| 0°-90° | 1196.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1196.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 16294 | 16294 | 16294 | 16294 | 16294 | |
| 5° | 10602 | 10493 | 10464 | 10537 | 10547 | 774 |
| 15° | 921 | 938 | 939 | 922 | 910 | 316 |
| 25° | 108 | 123 | 138 | 122 | 110 | 57 |
| 35° | 21 | 23 | 24 | 23 | 21 | 15 |
| 45° | 10 | 10 | 11 | 10 | 10 | 8 |
| 55° | 7 | 7 | 7 | 7 | 7 | 6 |
| 65° | 4 | 4 | 4 | 4 | 4 | 4 |
| 75° | 2 | 2 | 2 | 2 | 3 | 2 |
| 85° | 1 | 1 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|---------|---------|---------|---------|---------|
| 0° | 16294.5 | 16294.5 | 16294.5 | 16294.5 | 16294.5 |
| 2.5° | 14698.3 | 14710.8 | 14715.6 | 14730.1 | 14783.9 |
| 5° | 10601.6 | 10492.6 | 10464.3 | 10536.8 | 10547.1 |
| 7.5° | 6280.0 | 6302.0 | 6382.8 | 6400.7 | 6335.8 |
| 10° | 3446.3 | 3474.5 | 3470.4 | 3495.2 | 3523.5 |
| 12.5° | 1762.4 | 1740.4 | 1733.5 | 1761.8 | 1722.4 |
| 15° | 920.9 | 938.1 | 938.8 | 922.3 | 909.9 |
| 17.5° | 495.3 | 515.3 | 548.4 | 521.5 | 480.1 |
| 20° | 292.5 | 310.4 | 338.7 | 316.6 | 298.7 |
| 22.5° | 180.7 | 195.2 | 215.2 | 198.0 | 183.5 |
| 25° | 108.3 | 122.8 | 138.0 | 122.1 | 109.7 |
| 27.5° | 64.2 | 76.6 | 86.2 | 75.9 | 63.5 |
| 30° | 41.4 | 48.3 | 54.5 | 47.6 | 42.1 |
| 32.5° | 29.0 | 31.7 | 34.5 | 31.7 | 29.0 |
| 35° | 21.4 | 22.8 | 24.1 | 22.8 | 20.7 |
| 37.5° | 16.6 | 17.9 | 18.6 | 17.2 | 15.9 |
| 40° | 13.8 | 14.5 | 15.2 | 14.5 | 13.8 |
| 42.5° | 11.7 | 12.4 | 12.4 | 12.4 | 11.7 |
| 45° | 10.3 | 10.3 | 11.0 | 10.3 | 10.3 |
| 47.5° | 9.0 | 9.0 | 9.7 | 9.0 | 9.0 |
| 50° | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 |
| 52.5° | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 |
| 55° | 6.9 | 6.9 | 6.9 | 6.9 | 6.9 |
| 57.5° | 6.2 | 6.2 | 6.2 | 6.2 | 6.2 |
| 60° | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| 62.5° | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| 65° | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| 67.5° | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| 70° | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| 72.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 75° | 2.1 | 2.1 | 2.1 | 2.1 | 2.8 |
| 77.5° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 80° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 82.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 85° | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 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

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Scaled Data Report





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

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