

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: P741883

Luminaire Tested: LD4D10D010-EU4DR150210IC9027-4LBS1B

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P741883
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-EU4DR150210IC9027-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 965.7 lumens
Efficiency: N/A
Efficacy: 82.5 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

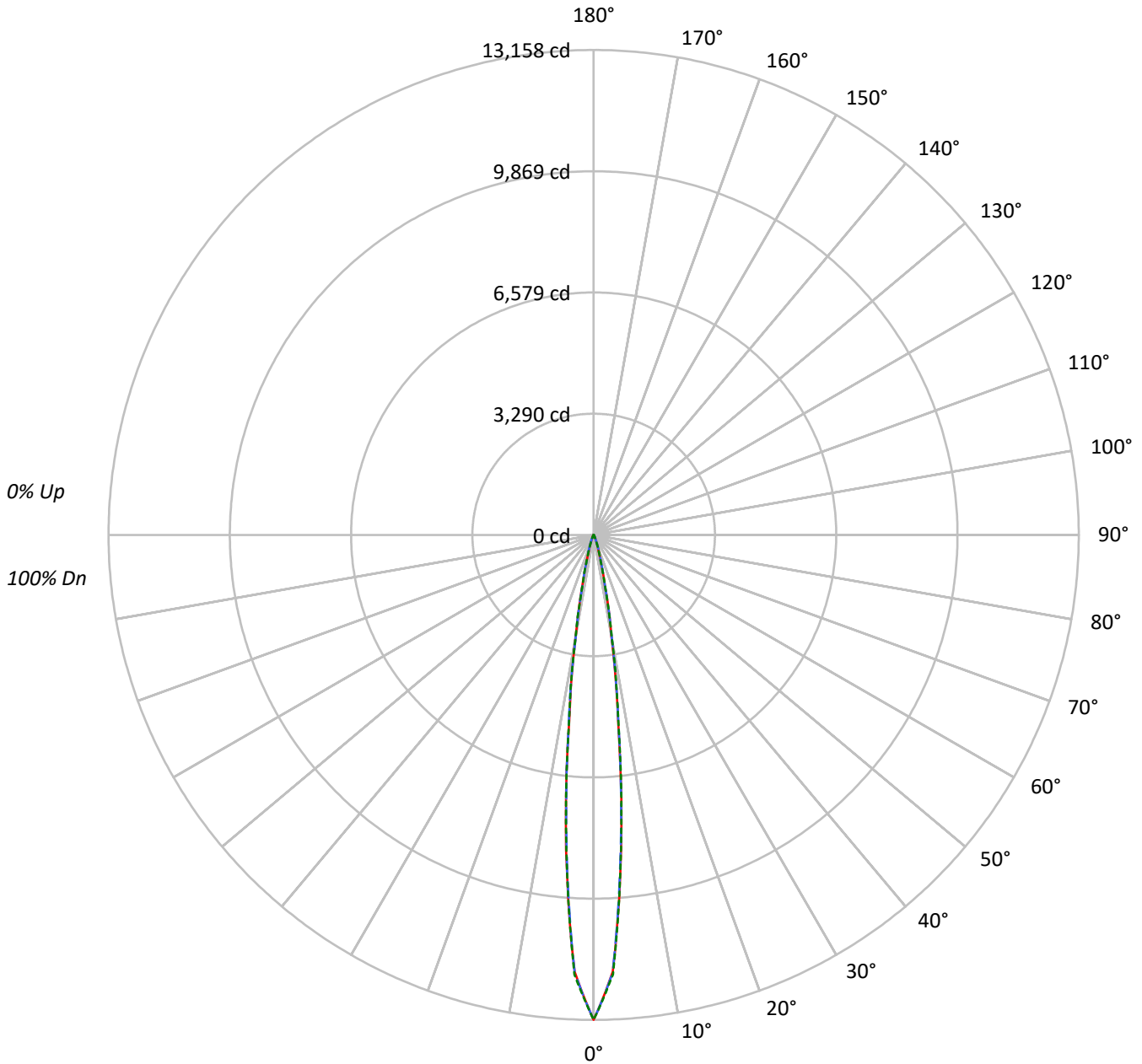


Downlight



TEST NUMBER: P741883
CATALOG NUMBER: LD4D10D010-EU4DR150210IC9027-4LBS1B

Luminous Intensity Polar Plot





TEST NUMBER: P741883

CATALOG NUMBER: LD4D10D010-EU4DR150210IC9027-4LBS1B

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° | 1480481 | 1480481 | 1480481 |
| 5° | 869994 | 858734 | 865523 |
| 10° | 259656 | 261476 | 265479 |
| 15° | 64587 | 65846 | 63814 |
| 20° | 19327 | 22379 | 19736 |
| 25° | 6809 | 8678 | 6902 |
| 30° | 2501 | 3295 | 2546 |
| 35° | 1256 | 1416 | 1213 |
| 40° | 788 | 873 | 788 |
| 45° | 588 | 623 | 588 |
| 50° | 466 | 466 | 466 |
| 55° | 390 | 390 | 390 |
| 60° | 316 | 316 | 316 |
| 65° | 236 | 236 | 236 |
| 70° | 205 | 205 | 205 |
| 75° | 128 | 128 | 166 |
| 80° | 87 | 87 | 87 |
| 85° | 50 | 50 | 50 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 623 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 626.3 | 64.9 |
| 10°-20° | 257.6 | 26.7 |
| 20°-30° | 51.2 | 5.3 |
| 30°-40° | 12.8 | 1.3 |
| 40°-50° | 6.7 | 0.7 |
| 50°-60° | 5.0 | 0.5 |
| 60°-70° | 3.5 | 0.4 |
| 70°-80° | 2.0 | 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 |
| <hr/> | | |
| 0°-30° | 935.1 | 96.8 |
| 0°-40° | 947.9 | 98.2 |
| 0°-60° | 959.6 | 99.4 |
| 0°-90° | 965.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 965.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 13158 | 13158 | 13158 | 13158 | 13158 | |
| 5° | 8560 | 8472 | 8450 | 8508 | 8516 | 625 |
| 15° | 744 | 758 | 758 | 745 | 735 | 255 |
| 25° | 87 | 99 | 111 | 99 | 89 | 46 |
| 35° | 17 | 18 | 20 | 18 | 17 | 12 |
| 45° | 8 | 8 | 9 | 8 | 8 | 7 |
| 55° | 6 | 6 | 6 | 6 | 6 | 5 |
| 65° | 3 | 3 | 3 | 3 | 3 | 4 |
| 75° | 2 | 2 | 2 | 2 | 2 | 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° | 13157.5 | 13157.5 | 13157.5 | 13157.5 | 13157.5 |
| 2.5° | 11868.6 | 11878.6 | 11882.5 | 11894.2 | 11937.6 |
| 5° | 8560.5 | 8472.5 | 8449.7 | 8508.2 | 8516.5 |
| 7.5° | 5070.9 | 5088.8 | 5153.9 | 5168.4 | 5116.0 |
| 10° | 2782.8 | 2805.6 | 2802.3 | 2822.3 | 2845.2 |
| 12.5° | 1423.1 | 1405.3 | 1399.7 | 1422.6 | 1390.8 |
| 15° | 743.6 | 757.5 | 758.1 | 744.7 | 734.7 |
| 17.5° | 399.9 | 416.1 | 442.8 | 421.1 | 387.7 |
| 20° | 236.2 | 250.6 | 273.5 | 255.7 | 241.2 |
| 22.5° | 145.9 | 157.6 | 173.8 | 159.9 | 148.2 |
| 25° | 87.4 | 99.1 | 111.4 | 98.6 | 88.6 |
| 27.5° | 51.8 | 61.8 | 69.6 | 61.3 | 51.2 |
| 30° | 33.4 | 39.0 | 44.0 | 38.4 | 34.0 |
| 32.5° | 23.4 | 25.6 | 27.8 | 25.6 | 23.4 |
| 35° | 17.3 | 18.4 | 19.5 | 18.4 | 16.7 |
| 37.5° | 13.4 | 14.5 | 15.0 | 13.9 | 12.8 |
| 40° | 11.1 | 11.7 | 12.3 | 11.7 | 11.1 |
| 42.5° | 9.5 | 10.0 | 10.0 | 10.0 | 9.5 |
| 45° | 8.4 | 8.4 | 8.9 | 8.4 | 8.4 |
| 47.5° | 7.2 | 7.2 | 7.8 | 7.2 | 7.2 |
| 50° | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 |
| 52.5° | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 |
| 55° | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 |
| 57.5° | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 60° | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| 62.5° | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 |
| 65° | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| 67.5° | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| 70° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 72.5° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 75° | 1.7 | 1.7 | 1.7 | 1.7 | 2.2 |
| 77.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 80° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 82.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 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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