

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: P744124

Luminaire Tested: LD4D20D010-EU4DR3020359030-4LBDP1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744124
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D20D010-EU4DR3020359030-4LBDP1LI
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1890.7 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 23.1
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

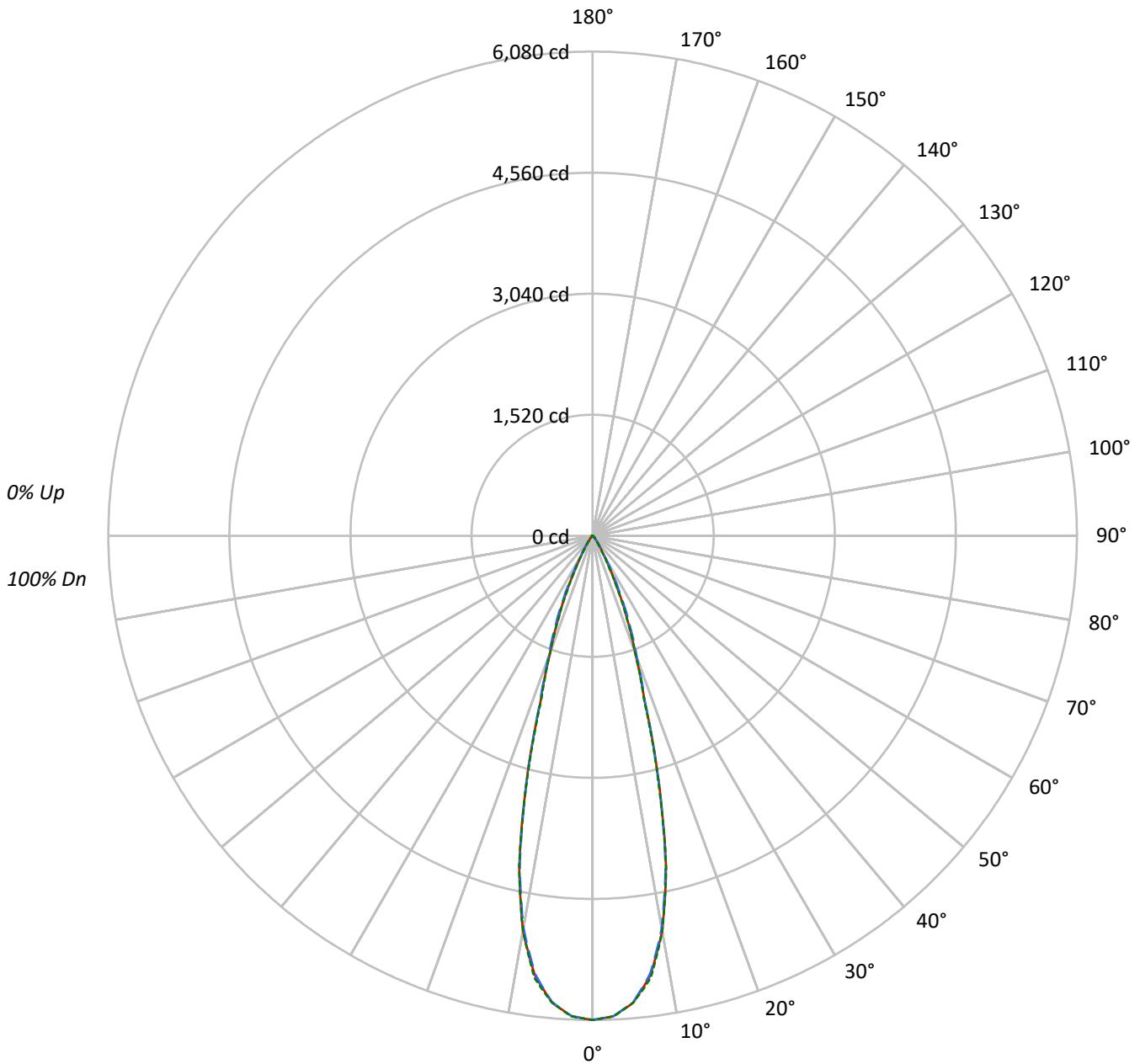


Downlight



TEST NUMBER: P744124
CATALOG NUMBER: LD4D20D010-EU4DR3020359030-4LBDP1LI

Luminous Intensity Polar Plot





TEST NUMBER: P744124

CATALOG NUMBER: LD4D20D010-EU4DR3020359030-4LBDP1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---|--|---|
| RF | 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 | 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 | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99 | 99 | 98 | 96 | | | | | | | | |
| 2 | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98 | 99 | 97 | 96 | 97 | 95 | 94 | 92 | | | | | | | | |
| 3 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 93 | 96 | 93 | 91 | 94 | 92 | 90 | 89 | | | | | | | | |
| 4 | 103 | 98 | 93 | 90 | 102 | 96 | 93 | 90 | 94 | 91 | 89 | 93 | 90 | 88 | 91 | 89 | 87 | 85 | | | | | | | | |
| 5 | 100 | 94 | 89 | 86 | 98 | 93 | 89 | 86 | 91 | 88 | 85 | 90 | 86 | 84 | 88 | 86 | 83 | 82 | | | | | | | | |
| 6 | 97 | 90 | 85 | 82 | 95 | 89 | 85 | 82 | 88 | 84 | 81 | 87 | 83 | 81 | 85 | 83 | 80 | 79 | | | | | | | | |
| 7 | 94 | 87 | 82 | 79 | 92 | 86 | 82 | 79 | 85 | 81 | 78 | 84 | 81 | 78 | 83 | 80 | 78 | 77 | | | | | | | | |
| 8 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 75 | 80 | 77 | 75 | 74 | | | | | | | | |
| 9 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 73 | 72 | | | | | | | | |
| 10 | 85 | 78 | 74 | 71 | 85 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 71 | 76 | 73 | 70 | 69 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 465353 | 465353 | 465353 |
| 5° | 451994 | 451464 | 452017 |
| 10° | 391497 | 388738 | 391404 |
| 15° | 255434 | 254063 | 252779 |
| 20° | 127014 | 131779 | 126843 |
| 25° | 63984 | 72151 | 62667 |
| 30° | 25623 | 27912 | 22317 |
| 35° | 11877 | 11381 | 9540 |
| 40° | 5126 | 5695 | 4836 |
| 45° | 3616 | 4492 | 3648 |
| 50° | 1238 | 3263 | 1322 |
| 55° | 721 | 1348 | 761 |
| 60° | 505 | 597 | 505 |
| 65° | 326 | 326 | 326 |
| 70° | 201 | 134 | 201 |
| 75° | 0 | 89 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 4492 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 534.6 | 28.3 |
| 10°-20° | 861.0 | 45.5 |
| 20°-30° | 372.1 | 19.7 |
| 30°-40° | 84.8 | 4.5 |
| 40°-50° | 29.1 | 1.5 |
| 50°-60° | 7.1 | 0.4 |
| 60°-70° | 1.9 | 0.1 |
| 70°-80° | 0.2 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 1767.7 | 93.5 |
| 0°-40° | 1852.5 | 98.0 |
| 0°-60° | 1888.7 | 99.9 |
| 0°-90° | 1890.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1890.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 6080 | 6080 | 6080 | 6080 | 6080 | |
| 5° | 5883 | 5877 | 5876 | 5888 | 5883 | 535 |
| 15° | 3223 | 3185 | 3206 | 3196 | 3190 | 863 |
| 25° | 758 | 786 | 854 | 766 | 742 | 363 |
| 35° | 127 | 130 | 122 | 121 | 102 | 86 |
| 45° | 33 | 42 | 42 | 42 | 34 | 24 |
| 55° | 5 | 6 | 10 | 6 | 6 | 5 |
| 65° | 2 | 2 | 2 | 2 | 2 | 2 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 6079.6 | 6079.6 | 6079.6 | 6079.6 | 6079.6 |
| 2.5° | 6039.3 | 6035.1 | 6037.5 | 6040.4 | 6041.7 |
| 5° | 5882.6 | 5876.9 | 5875.7 | 5887.9 | 5882.9 |
| 7.5° | 5566.5 | 5558.4 | 5546.2 | 5574.0 | 5599.9 |
| 10° | 5037.0 | 5028.0 | 5001.5 | 5014.6 | 5035.8 |
| 12.5° | 4255.2 | 4226.3 | 4225.7 | 4267.5 | 4261.8 |
| 15° | 3223.4 | 3184.6 | 3206.1 | 3195.6 | 3189.9 |
| 17.5° | 2167.6 | 2152.7 | 2181.3 | 2172.7 | 2135.4 |
| 20° | 1559.3 | 1563.2 | 1617.8 | 1590.3 | 1557.2 |
| 22.5° | 1137.8 | 1151.9 | 1216.6 | 1145.9 | 1119.9 |
| 25° | 757.6 | 786.2 | 854.3 | 766.2 | 742.0 |
| 27.5° | 465.9 | 479.0 | 548.0 | 460.0 | 446.8 |
| 30° | 289.9 | 283.3 | 315.8 | 271.0 | 252.5 |
| 32.5° | 190.2 | 181.8 | 192.2 | 172.5 | 157.6 |
| 35° | 127.1 | 129.8 | 121.8 | 120.9 | 102.1 |
| 37.5° | 79.4 | 91.3 | 80.6 | 85.9 | 65.7 |
| 40° | 51.3 | 66.3 | 57.0 | 63.0 | 48.4 |
| 42.5° | 42.1 | 51.0 | 46.9 | 49.8 | 43.0 |
| 45° | 33.4 | 41.5 | 41.5 | 41.5 | 33.7 |
| 47.5° | 18.5 | 27.7 | 35.5 | 28.4 | 19.7 |
| 50° | 10.4 | 14.0 | 27.4 | 14.6 | 11.1 |
| 52.5° | 7.2 | 8.1 | 18.8 | 8.4 | 7.4 |
| 55° | 5.4 | 5.7 | 10.1 | 6.0 | 5.7 |
| 57.5° | 4.2 | 4.5 | 5.4 | 4.5 | 4.2 |
| 60° | 3.3 | 3.3 | 3.9 | 3.6 | 3.3 |
| 62.5° | 2.4 | 2.4 | 2.7 | 2.4 | 2.4 |
| 65° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 67.5° | 0.9 | 1.2 | 1.2 | 1.2 | 1.2 |
| 70° | 0.9 | 0.6 | 0.6 | 0.6 | 0.9 |
| 72.5° | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 |
| 75° | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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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