

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



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: P755334

Luminaire Tested: LD4D90BD010-EU4DR3070959024-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755334
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: LD4D90BD010-EU4DR3070959024-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7949.2 lumens
Efficiency: N/A
Efficacy: 80.4 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): 98.9
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

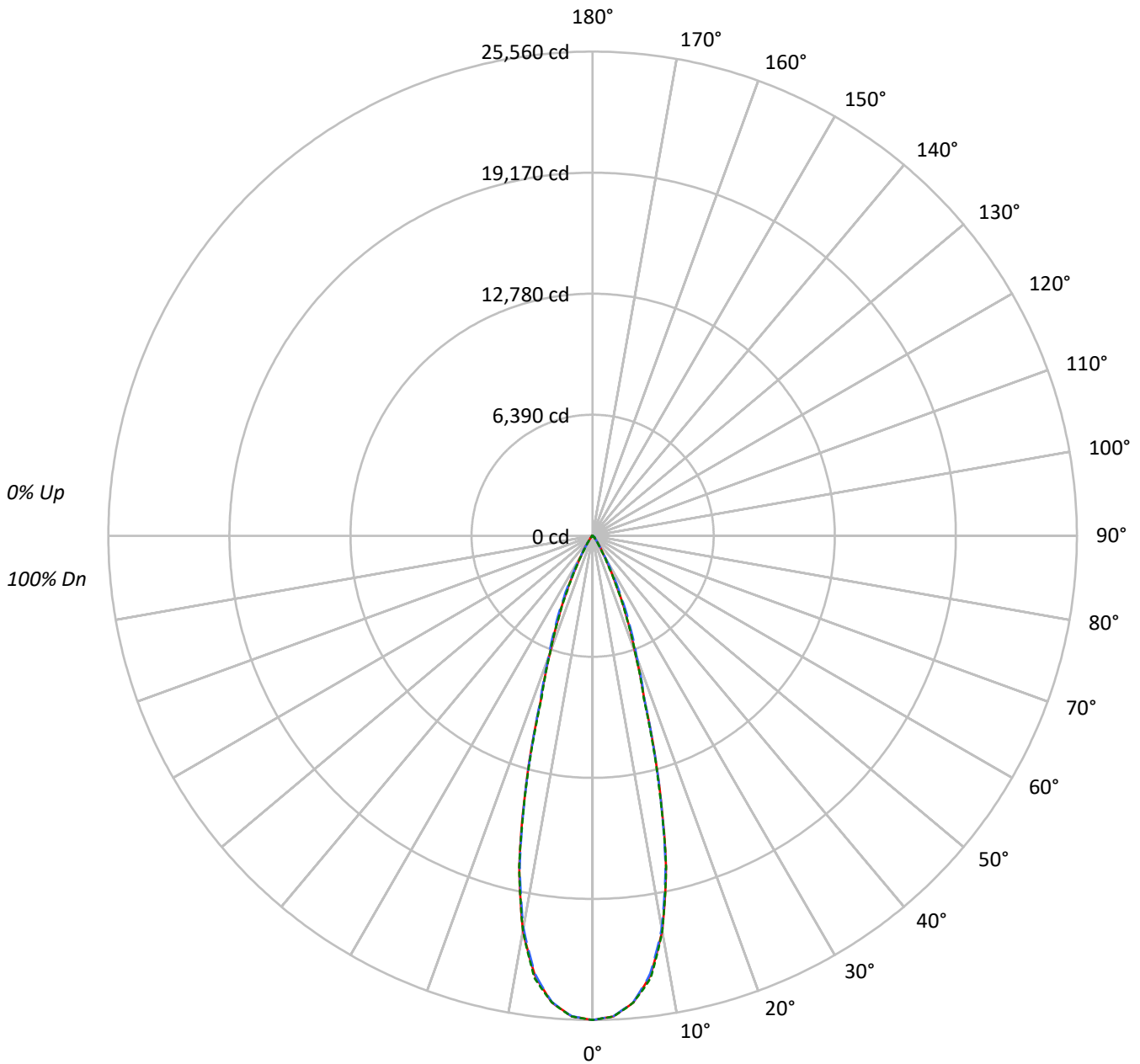


Downlight

TEST NUMBER: P755334

CATALOG NUMBER: LD4D90BD010-EU4DR3070959024-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P755334

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|---------|---------|---------|
| 0° | 1956487 | 1956487 | 1956487 |
| 5° | 1900326 | 1898105 | 1900418 |
| 10° | 1645965 | 1634361 | 1645577 |
| 15° | 1073917 | 1068148 | 1062775 |
| 20° | 534008 | 554046 | 533291 |
| 25° | 268993 | 303333 | 263487 |
| 30° | 107697 | 117348 | 93838 |
| 35° | 49954 | 47842 | 40105 |
| 40° | 21563 | 23951 | 20314 |
| 45° | 15220 | 18879 | 15350 |
| 50° | 5228 | 13754 | 5525 |
| 55° | 3016 | 5698 | 3176 |
| 60° | 2113 | 2495 | 2113 |
| 65° | 1358 | 1358 | 1358 |
| 70° | 850 | 559 | 850 |
| 75° | 0 | 384 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 18879 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 2247.7 | 28.3 |
| 10°-20° | 3619.9 | 45.5 |
| 20°-30° | 1564.2 | 19.7 |
| 30°-40° | 356.5 | 4.5 |
| 40°-50° | 122.4 | 1.5 |
| 50°-60° | 29.9 | 0.4 |
| 60°-70° | 7.7 | 0.1 |
| 70°-80° | 0.8 | 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° | 7431.8 | 93.5 |
| 0°-40° | 7788.3 | 98.0 |
| 0°-60° | 7940.6 | 99.9 |
| 0°-90° | 7949.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 7949.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 25560 | 25560 | 25560 | 25560 | 25560 | |
| 5° | 24732 | 24708 | 24703 | 24755 | 24734 | 2250 |
| 15° | 13552 | 13389 | 13479 | 13435 | 13412 | 3629 |
| 25° | 3185 | 3306 | 3592 | 3221 | 3120 | 1525 |
| 35° | 535 | 546 | 512 | 508 | 429 | 363 |
| 45° | 141 | 174 | 174 | 174 | 142 | 100 |
| 55° | 23 | 24 | 43 | 25 | 24 | 22 |
| 65° | 8 | 8 | 8 | 8 | 8 | 7 |
| 75° | 0 | 0 | 1 | 0 | 0 | 1 |
| 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° | 25560.5 | 25560.5 | 25560.5 | 25560.5 | 25560.5 |
| 2.5° | 25391.1 | 25373.6 | 25383.6 | 25396.1 | 25401.2 |
| 5° | 24732.3 | 24708.4 | 24703.4 | 24754.9 | 24733.5 |
| 7.5° | 23403.3 | 23369.4 | 23318.0 | 23434.7 | 23543.9 |
| 10° | 21177.0 | 21139.4 | 21027.7 | 21082.9 | 21172.0 |
| 12.5° | 17890.4 | 17768.6 | 17766.1 | 17941.8 | 17918.0 |
| 15° | 13552.1 | 13388.9 | 13479.3 | 13435.3 | 13411.5 |
| 17.5° | 9113.3 | 9050.6 | 9171.1 | 9134.7 | 8977.8 |
| 20° | 6555.8 | 6572.1 | 6801.8 | 6686.3 | 6547.0 |
| 22.5° | 4783.8 | 4842.8 | 5115.1 | 4817.7 | 4708.5 |
| 25° | 3185.0 | 3305.5 | 3591.6 | 3221.4 | 3119.8 |
| 27.5° | 1959.0 | 2014.2 | 2304.1 | 1933.9 | 1878.6 |
| 30° | 1218.5 | 1190.9 | 1327.7 | 1139.5 | 1061.7 |
| 32.5° | 799.4 | 764.3 | 808.2 | 725.4 | 662.6 |
| 35° | 534.6 | 545.9 | 512.0 | 508.2 | 429.2 |
| 37.5° | 333.8 | 384.0 | 338.8 | 361.4 | 276.1 |
| 40° | 215.8 | 278.6 | 239.7 | 264.8 | 203.3 |
| 42.5° | 176.9 | 214.6 | 197.0 | 209.6 | 180.7 |
| 45° | 140.6 | 174.4 | 174.4 | 174.4 | 141.8 |
| 47.5° | 77.8 | 116.7 | 149.3 | 119.2 | 82.8 |
| 50° | 43.9 | 59.0 | 115.5 | 61.5 | 46.4 |
| 52.5° | 30.1 | 33.9 | 79.1 | 35.1 | 31.4 |
| 55° | 22.6 | 23.8 | 42.7 | 25.1 | 23.8 |
| 57.5° | 17.6 | 18.8 | 22.6 | 18.8 | 17.6 |
| 60° | 13.8 | 13.8 | 16.3 | 15.1 | 13.8 |
| 62.5° | 10.0 | 10.0 | 11.3 | 10.0 | 10.0 |
| 65° | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 |
| 67.5° | 3.8 | 5.0 | 5.0 | 5.0 | 5.0 |
| 70° | 3.8 | 2.5 | 2.5 | 2.5 | 3.8 |
| 72.5° | 2.5 | 1.3 | 1.3 | 1.3 | 1.3 |
| 75° | 0.0 | 0.0 | 1.3 | 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 |

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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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