

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: P748310

Luminaire Tested: LD4D45BD010-EU4DR3040509024-4LBDP1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P748310
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: LD4D45BD010-EU4DR3040509024-4LBDP1LI
Description: 4 INCH ROUND DEEP 45° CUTOFF 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: 3620.6 lumens
Efficiency: N/A
Efficacy: 93.6 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): 38.7
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

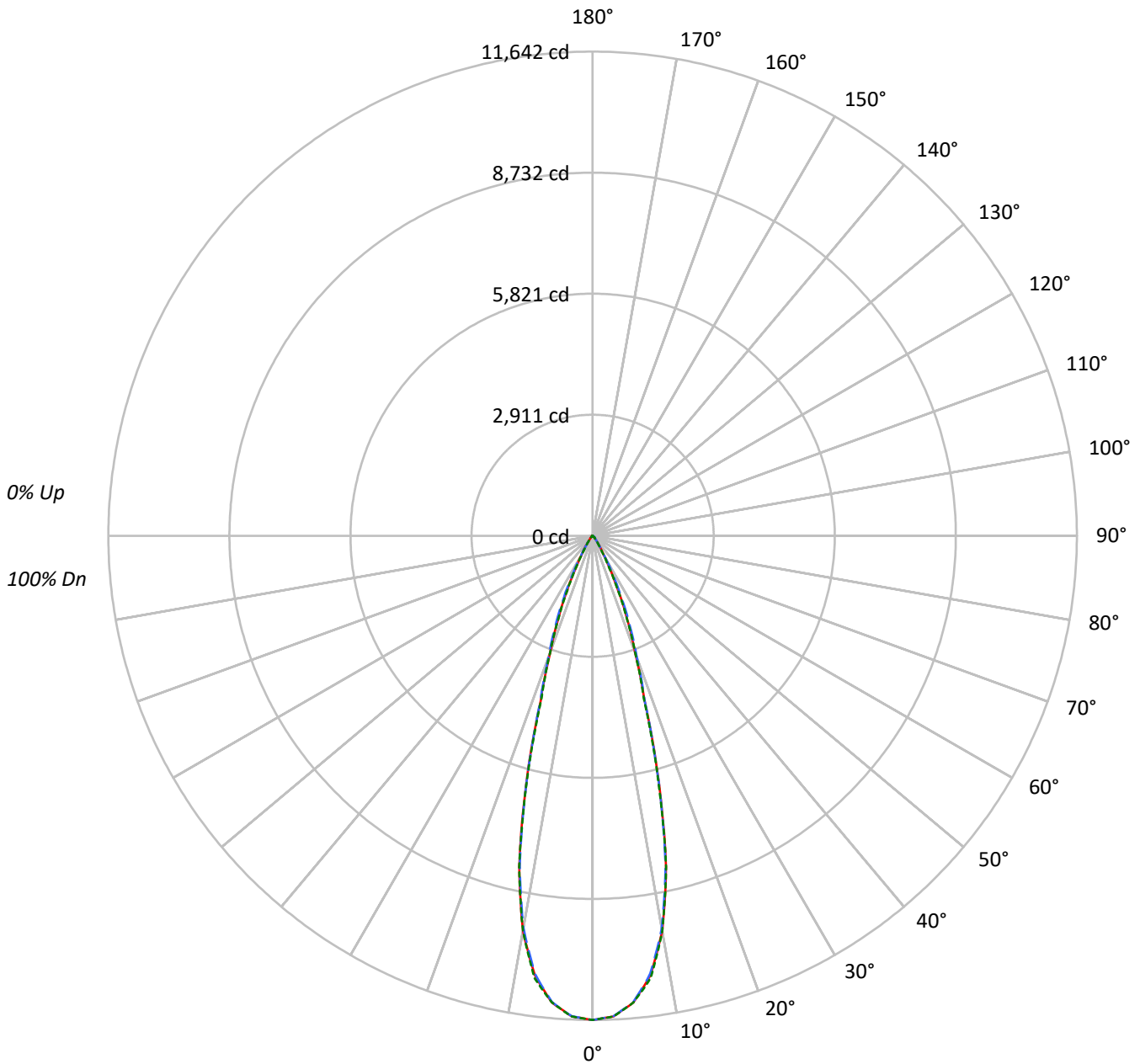


Downlight

TEST NUMBER: P748310

CATALOG NUMBER: LD4D45BD010-EU4DR3040509024-4LBDP1LI

Luminous Intensity Polar Plot





TEST NUMBER: P748310

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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 | 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° | 891118 | 891118 | 891118 |
| 5° | 865532 | 864525 | 865578 |
| 10° | 749681 | 744396 | 749510 |
| 15° | 489131 | 486508 | 484059 |
| 20° | 243219 | 252350 | 242893 |
| 25° | 122521 | 138162 | 120012 |
| 30° | 49054 | 53446 | 42743 |
| 35° | 22753 | 21791 | 18268 |
| 40° | 9822 | 10911 | 9253 |
| 45° | 6928 | 8595 | 6993 |
| 50° | 2382 | 6264 | 2513 |
| 55° | 1375 | 2589 | 1455 |
| 60° | 964 | 1133 | 964 |
| 65° | 616 | 616 | 616 |
| 70° | 380 | 246 | 380 |
| 75° | 0 | 177 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 8595 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1023.7 | 28.3 |
| 10°-20° | 1648.7 | 45.5 |
| 20°-30° | 712.5 | 19.7 |
| 30°-40° | 162.4 | 4.5 |
| 40°-50° | 55.7 | 1.5 |
| 50°-60° | 13.6 | 0.4 |
| 60°-70° | 3.5 | 0.1 |
| 70°-80° | 0.4 | 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° | 3384.9 | 93.5 |
| 0°-40° | 3547.3 | 98.0 |
| 0°-60° | 3616.7 | 99.9 |
| 0°-90° | 3620.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3620.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 11642 | 11642 | 11642 | 11642 | 11642 | |
| 5° | 11265 | 11254 | 11252 | 11275 | 11265 | 1025 |
| 15° | 6172 | 6098 | 6139 | 6119 | 6108 | 1653 |
| 25° | 1451 | 1506 | 1636 | 1467 | 1421 | 694 |
| 35° | 244 | 249 | 233 | 232 | 196 | 165 |
| 45° | 64 | 79 | 79 | 79 | 65 | 45 |
| 55° | 10 | 11 | 19 | 11 | 11 | 10 |
| 65° | 3 | 3 | 3 | 3 | 3 | 3 |
| 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° | 11642.0 | 11642.0 | 11642.0 | 11642.0 | 11642.0 |
| 2.5° | 11564.8 | 11556.8 | 11561.4 | 11567.1 | 11569.4 |
| 5° | 11264.7 | 11253.9 | 11251.6 | 11275.0 | 11265.3 |
| 7.5° | 10659.4 | 10644.0 | 10620.6 | 10673.7 | 10723.4 |
| 10° | 9645.4 | 9628.3 | 9577.4 | 9602.6 | 9643.2 |
| 12.5° | 8148.5 | 8093.0 | 8091.9 | 8171.9 | 8161.0 |
| 15° | 6172.5 | 6098.2 | 6139.4 | 6119.4 | 6108.5 |
| 17.5° | 4150.8 | 4122.2 | 4177.1 | 4160.5 | 4089.1 |
| 20° | 2985.9 | 2993.4 | 3098.0 | 3045.4 | 2981.9 |
| 22.5° | 2178.9 | 2205.7 | 2329.8 | 2194.3 | 2144.6 |
| 25° | 1450.7 | 1505.5 | 1635.9 | 1467.2 | 1421.0 |
| 27.5° | 892.2 | 917.4 | 1049.4 | 880.8 | 855.7 |
| 30° | 555.0 | 542.4 | 604.7 | 519.0 | 483.6 |
| 32.5° | 364.1 | 348.1 | 368.1 | 330.4 | 301.8 |
| 35° | 243.5 | 248.6 | 233.2 | 231.5 | 195.5 |
| 37.5° | 152.0 | 174.9 | 154.3 | 164.6 | 125.7 |
| 40° | 98.3 | 126.9 | 109.2 | 120.6 | 92.6 |
| 42.5° | 80.6 | 97.7 | 89.7 | 95.5 | 82.3 |
| 45° | 64.0 | 79.4 | 79.4 | 79.4 | 64.6 |
| 47.5° | 35.4 | 53.2 | 68.0 | 54.3 | 37.7 |
| 50° | 20.0 | 26.9 | 52.6 | 28.0 | 21.1 |
| 52.5° | 13.7 | 15.4 | 36.0 | 16.0 | 14.3 |
| 55° | 10.3 | 10.9 | 19.4 | 11.4 | 10.9 |
| 57.5° | 8.0 | 8.6 | 10.3 | 8.6 | 8.0 |
| 60° | 6.3 | 6.3 | 7.4 | 6.9 | 6.3 |
| 62.5° | 4.6 | 4.6 | 5.1 | 4.6 | 4.6 |
| 65° | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| 67.5° | 1.7 | 2.3 | 2.3 | 2.3 | 2.3 |
| 70° | 1.7 | 1.1 | 1.1 | 1.1 | 1.7 |
| 72.5° | 1.1 | 0.6 | 0.6 | 0.6 | 0.6 |
| 75° | 0.0 | 0.0 | 0.6 | 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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