

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: P778004

Luminaire Tested: LERS4D10D010-EC4DR300210IC9040-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P778004
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: LERS4D10D010-EC4DR300210IC9040-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1044.9 lumens
Efficiency: N/A
Efficacy: 89.3 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): 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



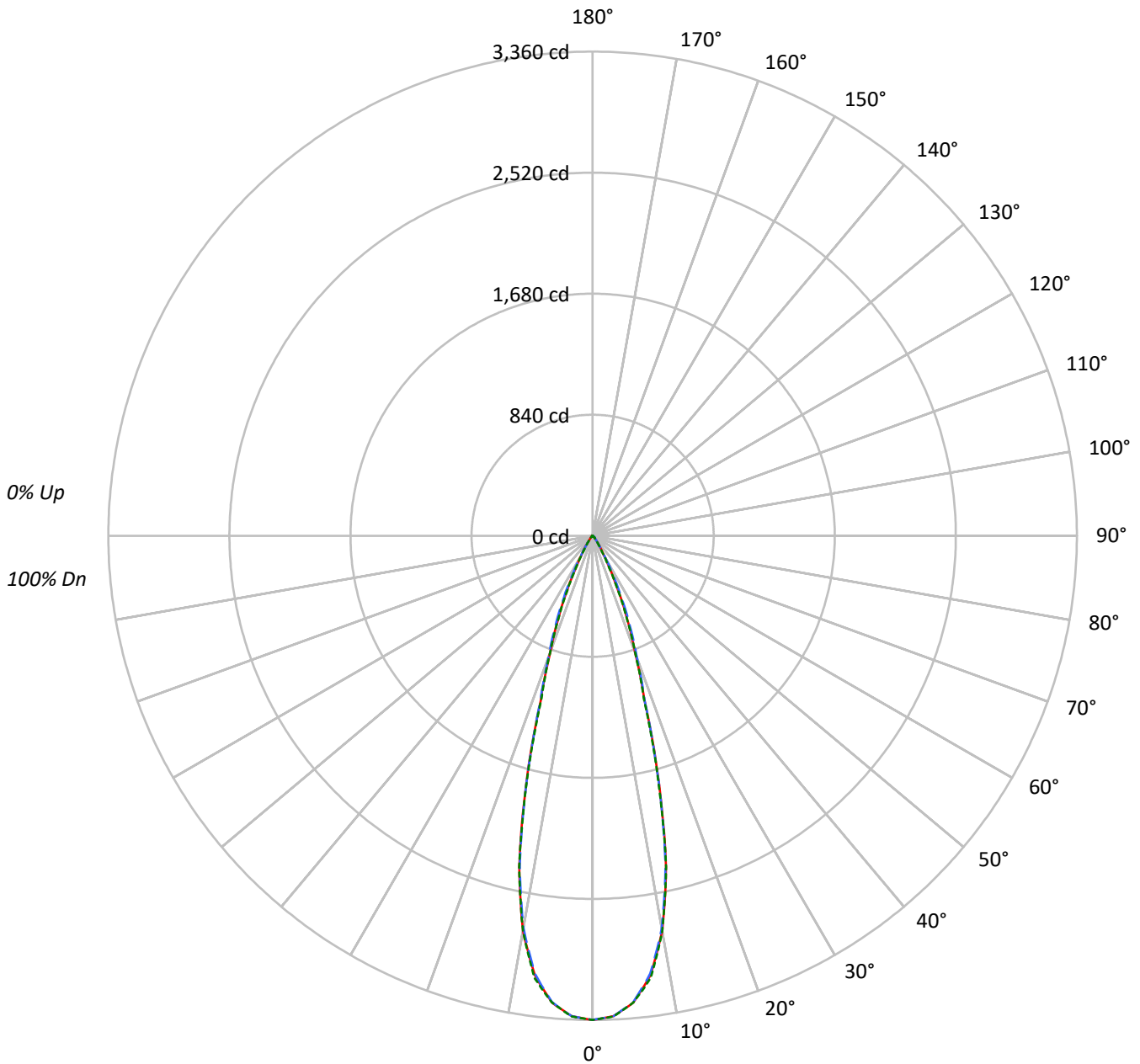
Downlight



TEST NUMBER: P778004

CATALOG NUMBER: LERS4D10D010-EC4DR300210IC9040-4LBS1B

Luminous Intensity Polar Plot





TEST NUMBER: P778004

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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° | 257171 | 257171 | 257171 |
| 5° | 249785 | 249493 | 249801 |
| 10° | 216353 | 214830 | 216299 |
| 15° | 141164 | 140404 | 139698 |
| 20° | 70190 | 72821 | 70101 |
| 25° | 35362 | 39872 | 34636 |
| 30° | 14159 | 15423 | 12339 |
| 35° | 6560 | 6289 | 5270 |
| 40° | 2838 | 3147 | 2668 |
| 45° | 1992 | 2479 | 2013 |
| 50° | 691 | 1810 | 726 |
| 55° | 400 | 747 | 427 |
| 60° | 276 | 321 | 276 |
| 65° | 181 | 181 | 181 |
| 70° | 112 | 67 | 112 |
| 75° | 0 | 59 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 2479 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 295.4 | 28.3 |
| 10°-20° | 475.8 | 45.5 |
| 20°-30° | 205.6 | 19.7 |
| 30°-40° | 46.9 | 4.5 |
| 40°-50° | 16.1 | 1.5 |
| 50°-60° | 3.9 | 0.4 |
| 60°-70° | 1.0 | 0.1 |
| 70°-80° | 0.1 | 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° | 976.9 | 93.5 |
| 0°-40° | 1023.7 | 98.0 |
| 0°-60° | 1043.8 | 99.9 |
| 0°-90° | 1044.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1044.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 3360 | 3360 | 3360 | 3360 | 3360 | |
| 5° | 3251 | 3248 | 3247 | 3254 | 3251 | 296 |
| 15° | 1781 | 1760 | 1772 | 1766 | 1763 | 477 |
| 25° | 419 | 434 | 472 | 424 | 410 | 200 |
| 35° | 70 | 72 | 67 | 67 | 56 | 48 |
| 45° | 18 | 23 | 23 | 23 | 19 | 13 |
| 55° | 3 | 3 | 6 | 3 | 3 | 3 |
| 65° | 1 | 1 | 1 | 1 | 1 | 1 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P778004

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 3359.8 | 3359.8 | 3359.8 | 3359.8 | 3359.8 |
| 2.5° | 3337.6 | 3335.3 | 3336.6 | 3338.2 | 3338.9 |
| 5° | 3250.9 | 3247.8 | 3247.1 | 3253.9 | 3251.1 |
| 7.5° | 3076.2 | 3071.8 | 3065.1 | 3080.4 | 3094.7 |
| 10° | 2783.6 | 2778.7 | 2764.0 | 2771.2 | 2782.9 |
| 12.5° | 2351.6 | 2335.6 | 2335.3 | 2358.4 | 2355.2 |
| 15° | 1781.4 | 1759.9 | 1771.8 | 1766.0 | 1762.9 |
| 17.5° | 1197.9 | 1189.7 | 1205.5 | 1200.7 | 1180.1 |
| 20° | 861.7 | 863.9 | 894.0 | 878.9 | 860.6 |
| 22.5° | 628.8 | 636.5 | 672.4 | 633.3 | 618.9 |
| 25° | 418.7 | 434.5 | 472.1 | 423.5 | 410.1 |
| 27.5° | 257.5 | 264.8 | 302.9 | 254.2 | 246.9 |
| 30° | 160.2 | 156.5 | 174.5 | 149.8 | 139.6 |
| 32.5° | 105.1 | 100.4 | 106.2 | 95.3 | 87.1 |
| 35° | 70.2 | 71.7 | 67.3 | 66.8 | 56.4 |
| 37.5° | 43.9 | 50.5 | 44.5 | 47.5 | 36.3 |
| 40° | 28.4 | 36.6 | 31.5 | 34.8 | 26.7 |
| 42.5° | 23.3 | 28.2 | 25.9 | 27.6 | 23.8 |
| 45° | 18.4 | 22.9 | 22.9 | 22.9 | 18.6 |
| 47.5° | 10.3 | 15.4 | 19.7 | 15.7 | 10.9 |
| 50° | 5.8 | 7.7 | 15.2 | 8.1 | 6.1 |
| 52.5° | 4.0 | 4.5 | 10.4 | 4.6 | 4.1 |
| 55° | 3.0 | 3.2 | 5.6 | 3.3 | 3.2 |
| 57.5° | 2.3 | 2.5 | 3.0 | 2.5 | 2.3 |
| 60° | 1.8 | 1.8 | 2.1 | 2.0 | 1.8 |
| 62.5° | 1.3 | 1.3 | 1.5 | 1.3 | 1.3 |
| 65° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 67.5° | 0.5 | 0.7 | 0.7 | 0.7 | 0.7 |
| 70° | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 |
| 72.5° | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| 75° | 0.0 | 0.0 | 0.2 | 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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