

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: P743970

Luminaire Tested: LD4D20D010-EU4DR2015309030-4LBS1B

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P743970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D20D010-EU4DR2015309030-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 20° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1924.7 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.36
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

Input Watts (W): 23.1
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

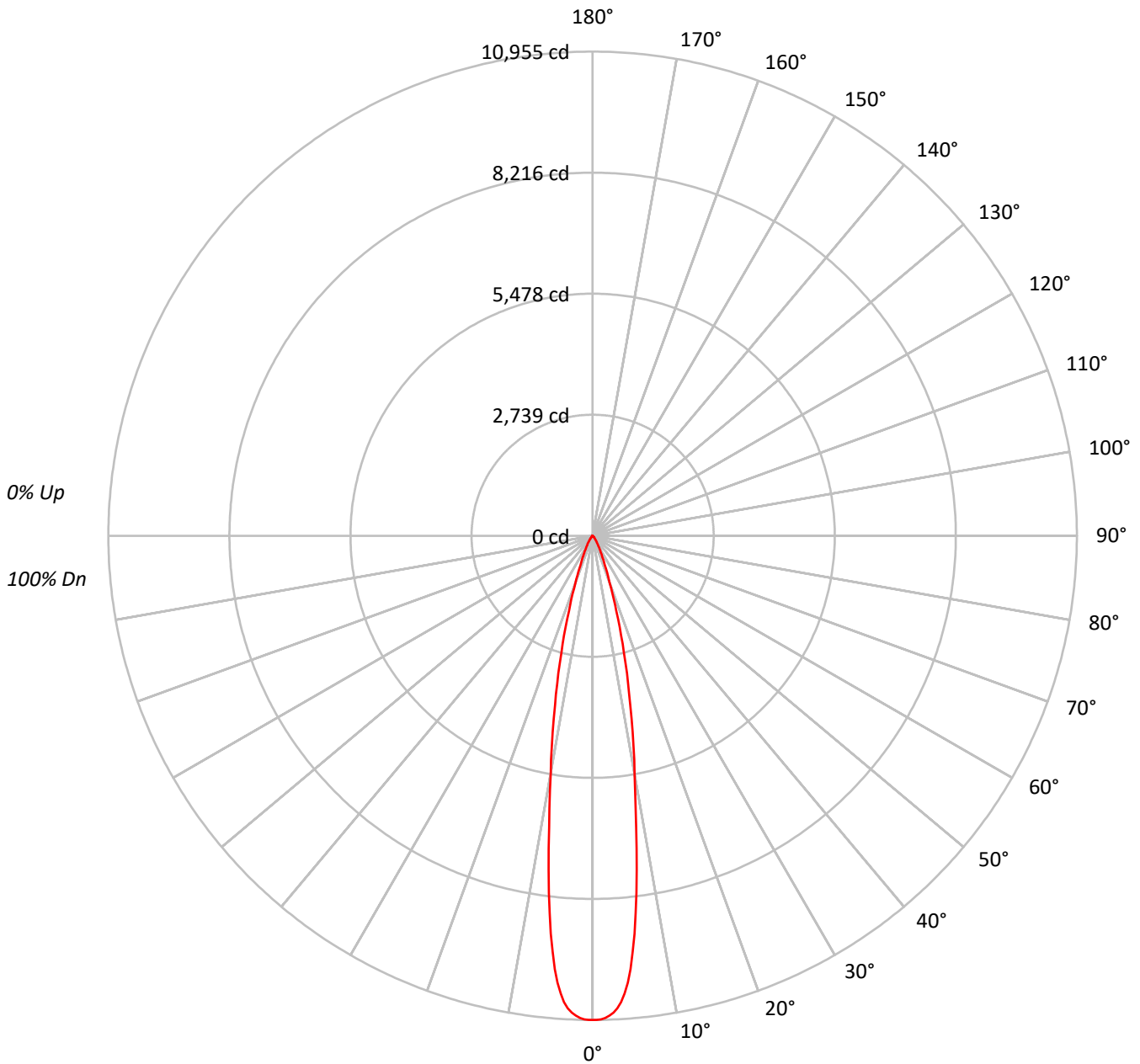


Downlight



TEST NUMBER: P743970
CATALOG NUMBER: LD4D20D010-EU4DR2015309030-4LBS1B

Luminous Intensity Polar Plot





TEST NUMBER: P743970

CATALOG NUMBER: LD4D20D010-EU4DR2015309030-4LBS1B

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 | 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 | 113 | 111 | 109 | 108 | 107 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 97 | 98 | 96 | 95 | 94 | | | | | | | | | | | | | | |
| 2 | 111 | 108 | 105 | 102 | 109 | 106 | 104 | 101 | 103 | 101 | 99 | 100 | 99 | 97 | 98 | 96 | 95 | 94 | 98 | 96 | 95 | 94 | | | | | | | | | | | | | | | |
| 3 | 108 | 103 | 100 | 97 | 106 | 102 | 99 | 96 | 100 | 97 | 95 | 97 | 95 | 93 | 95 | 93 | 92 | 91 | 95 | 93 | 92 | 91 | | | | | | | | | | | | | | | |
| 4 | 105 | 99 | 96 | 93 | 103 | 98 | 95 | 92 | 96 | 93 | 91 | 95 | 92 | 90 | 93 | 91 | 89 | 88 | 93 | 91 | 89 | 88 | | | | | | | | | | | | | | | |
| 5 | 102 | 96 | 92 | 89 | 100 | 95 | 91 | 89 | 94 | 90 | 88 | 92 | 89 | 87 | 91 | 88 | 86 | 85 | 91 | 88 | 86 | 85 | | | | | | | | | | | | | | | |
| 6 | 99 | 93 | 89 | 86 | 98 | 92 | 88 | 86 | 91 | 87 | 85 | 90 | 87 | 84 | 88 | 86 | 84 | 83 | 88 | 86 | 84 | 83 | | | | | | | | | | | | | | | |
| 7 | 96 | 90 | 86 | 83 | 95 | 89 | 86 | 83 | 88 | 85 | 82 | 87 | 84 | 82 | 86 | 84 | 82 | 81 | 86 | 84 | 82 | 81 | | | | | | | | | | | | | | | |
| 8 | 94 | 87 | 83 | 81 | 93 | 87 | 83 | 80 | 86 | 83 | 80 | 85 | 82 | 80 | 84 | 82 | 80 | 79 | 84 | 82 | 80 | 79 | | | | | | | | | | | | | | | |
| 9 | 91 | 85 | 81 | 78 | 91 | 85 | 81 | 78 | 84 | 80 | 78 | 83 | 80 | 78 | 82 | 80 | 78 | 77 | 82 | 80 | 78 | 77 | | | | | | | | | | | | | | | |
| 10 | 89 | 83 | 79 | 76 | 88 | 82 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 76 | 81 | 78 | 76 | 75 | 81 | 78 | 76 | 75 | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1196962 |
| 5° | 1079880 |
| 10° | 606088 |
| 15° | 308091 |
| 20° | 130435 |
| 25° | 60218 |
| 30° | 31882 |
| 35° | 17180 |
| 40° | 9185 |
| 45° | 5424 |
| 50° | 3145 |
| 55° | 1676 |
| 60° | 1071 |
| 65° | 750 |
| 70° | 319 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5424 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 780.0 | 40.5 |
| 10°-20° | 768.0 | 39.9 |
| 20°-30° | 250.9 | 13.0 |
| 30°-40° | 85.4 | 4.4 |
| 40°-50° | 28.7 | 1.5 |
| 50°-60° | 8.6 | 0.4 |
| 60°-70° | 2.9 | 0.2 |
| 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° | 1798.9 | 93.5 |
| 0°-40° | 1884.4 | 97.9 |
| 0°-60° | 1921.7 | 99.8 |
| 0°-90° | 1924.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1924.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 10955 | |
| 5° | 9846 | 780 |
| 15° | 2724 | 768 |
| 25° | 500 | 251 |
| 35° | 129 | 85 |
| 45° | 35 | 29 |
| 55° | 9 | 9 |
| 65° | 3 | 3 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 10955.1 |
| 0.5° | 10955.1 |
| 1° | 10941.4 |
| 1.5° | 10914.1 |
| 2° | 10864.4 |
| 2.5° | 10798.0 |
| 3° | 10704.4 |
| 3.5° | 10573.7 |
| 4° | 10379.5 |
| 4.5° | 10143.5 |
| 5° | 9845.9 |
| 5.5° | 9454.8 |
| 6° | 9053.8 |
| 6.5° | 8594.3 |
| 7° | 8144.6 |
| 7.5° | 7617.8 |
| 8° | 7147.6 |
| 8.5° | 6674.5 |
| 9° | 6237.5 |
| 9.5° | 5836.5 |
| 10° | 5462.9 |
| 12.5° | 3922.6 |
| 15° | 2723.7 |
| 17.5° | 1779.4 |
| 20° | 1121.8 |
| 22.5° | 726.8 |
| 25° | 499.5 |
| 27.5° | 351.2 |
| 30° | 252.7 |
| 32.5° | 181.4 |
| 35° | 128.8 |
| 37.5° | 89.7 |
| 40° | 64.4 |
| 42.5° | 46.8 |
| 45° | 35.1 |
| 47.5° | 27.3 |
| 50° | 18.5 |
| 52.5° | 11.7 |
| 55° | 8.8 |
| 57.5° | 6.8 |
| 60° | 4.9 |
| 62.5° | 3.9 |
| 65° | 2.9 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 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



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Scaled Data Report



— 0°-180°

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Scaled Data Report



| | | |
|-------|--|-----|
| 67.5° | | 2.0 |
| 70° | | 1.0 |

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Scaled Data Report



(END OF REPORT)