

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: P743816

Luminaire Tested: LD4D20D010-EU4DR1015209030-4LBS1LI

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P743816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D20D010-EU4DR1015209030-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 10° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2017.6 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 0.17 / 0.17 / 0.18
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

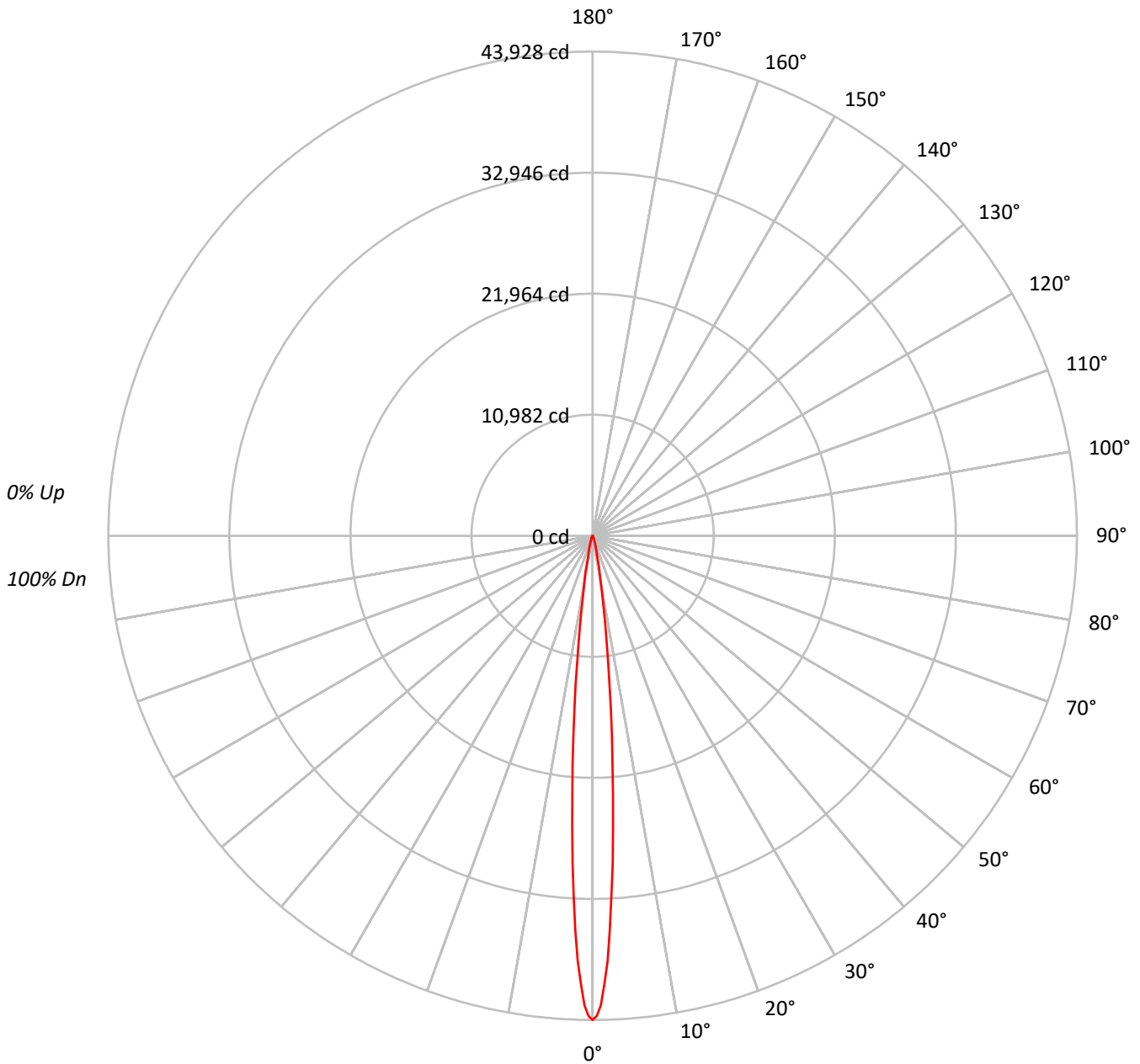


Downlight



TEST NUMBER: P743816
CATALOG NUMBER: LD4D20D010-EU4DR1015209030-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P743816

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1 | 116 | 114 | 113 | 111 | 114 | 112 | 111 | 109 | 108 | 107 | 106 | 104 | 104 | 103 | 101 | 101 | 100 | 98 | 98 | 98 | 98 |
| 2 | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 105 | 104 | 102 | 103 | 101 | 100 | 100 | 99 | 98 | 97 | 97 | 97 | 97 |
| 3 | 111 | 107 | 104 | 102 | 109 | 106 | 103 | 101 | 103 | 101 | 99 | 101 | 99 | 98 | 99 | 98 | 96 | 95 | 95 | 95 | 95 |
| 4 | 108 | 104 | 101 | 99 | 107 | 103 | 100 | 98 | 101 | 99 | 97 | 99 | 97 | 96 | 98 | 96 | 95 | 94 | 94 | 94 | 94 |
| 5 | 106 | 102 | 99 | 96 | 105 | 101 | 98 | 96 | 99 | 97 | 95 | 98 | 96 | 94 | 97 | 95 | 94 | 93 | 93 | 93 | 93 |
| 6 | 104 | 100 | 96 | 94 | 103 | 99 | 96 | 94 | 98 | 95 | 93 | 97 | 94 | 93 | 96 | 94 | 92 | 91 | 91 | 91 | 91 |
| 7 | 103 | 98 | 95 | 93 | 102 | 97 | 94 | 92 | 96 | 94 | 92 | 95 | 93 | 92 | 95 | 93 | 91 | 90 | 90 | 90 | 90 |
| 8 | 101 | 96 | 93 | 91 | 100 | 96 | 93 | 91 | 95 | 92 | 91 | 94 | 92 | 90 | 93 | 92 | 90 | 89 | 89 | 89 | 89 |
| 9 | 100 | 95 | 92 | 90 | 99 | 94 | 92 | 90 | 94 | 91 | 90 | 93 | 91 | 89 | 93 | 91 | 89 | 88 | 88 | 88 | 88 |
| 10 | 98 | 94 | 91 | 89 | 98 | 93 | 91 | 89 | 93 | 90 | 88 | 92 | 90 | 88 | 92 | 90 | 88 | 87 | 87 | 87 | 87 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 4799639 |
| 5° | 2275974 |
| 10° | 466773 |
| 15° | 128148 |
| 20° | 51648 |
| 25° | 27680 |
| 30° | 16376 |
| 35° | 10657 |
| 40° | 7117 |
| 45° | 4620 |
| 50° | 2550 |
| 55° | 1905 |
| 60° | 1093 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4620 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1434.6 | 71.1 |
| 10°-20° | 388.2 | 19.2 |
| 20°-30° | 111.1 | 5.5 |
| 30°-40° | 50.8 | 2.5 |
| 40°-50° | 23.3 | 1.2 |
| 50°-60° | 7.8 | 0.4 |
| 60°-70° | 1.8 | 0.1 |
| 70°-80° | 0.0 | 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° | 1933.9 | 95.9 |
| 0°-40° | 1984.7 | 98.4 |
| 0°-60° | 2015.7 | 99.9 |
| 0°-90° | 2017.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2017.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 43928 | |
| 5° | 20751 | ### |
| 15° | 1133 | 388 |
| 25° | 230 | 111 |
| 35° | 80 | 51 |
| 45° | 30 | 23 |
| 55° | 10 | 8 |
| 65° | 0 | 2 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|---------|
| 0° | 43928.3 |
| 0.5° | 43549.1 |
| 1° | 42575.9 |
| 1.5° | 40699.4 |
| 2° | 38598.3 |
| 2.5° | 35823.4 |
| 3° | 32739.1 |
| 3.5° | 29754.7 |
| 4° | 26535.7 |
| 4.5° | 23571.2 |
| 5° | 20751.4 |
| 5.5° | 18196.2 |
| 6° | 15760.7 |
| 6.5° | 13619.7 |
| 7° | 11603.4 |
| 7.5° | 9881.6 |
| 8° | 8354.5 |
| 8.5° | 7017.0 |
| 9° | 5859.1 |
| 9.5° | 4975.8 |
| 10° | 4207.2 |
| 12.5° | 2006.3 |
| 15° | 1132.9 |
| 17.5° | 688.7 |
| 20° | 444.2 |
| 22.5° | 309.4 |
| 25° | 229.6 |
| 27.5° | 169.7 |
| 30° | 129.8 |
| 32.5° | 99.8 |
| 35° | 79.9 |
| 37.5° | 59.9 |
| 40° | 49.9 |
| 42.5° | 39.9 |
| 45° | 29.9 |
| 47.5° | 20.0 |
| 50° | 15.0 |
| 52.5° | 10.0 |
| 55° | 10.0 |
| 57.5° | 5.0 |
| 60° | 5.0 |
| 62.5° | 5.0 |
| 65° | 0.0 |



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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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— 0°-180°

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| | | |
|-------|--|-----|
| 67.5° | | 0.0 |
| 70° | | 0.0 |

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Scaled Data Report



(END OF REPORT)