

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: P749132

Luminaire Tested: LD4D50D010-EU4DR3040509035-4LBS1H

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P749132
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: LD4D50D010-EU4DR3040509035-4LBS1H
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5027.0 lumens
Efficiency: N/A
Efficacy: 107.0 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

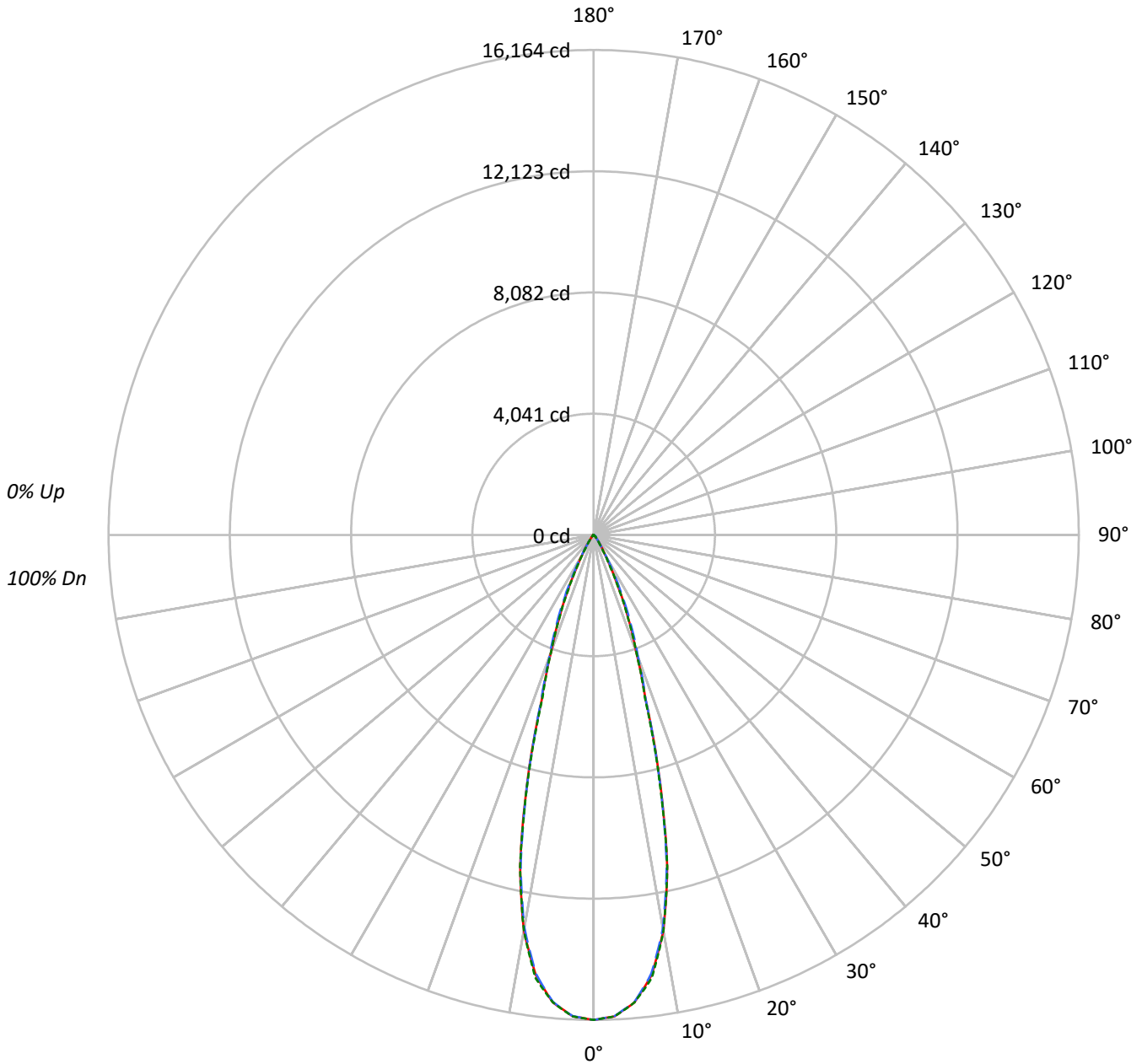
Input Watts (W): 47
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

TEST NUMBER: P749132
CATALOG NUMBER: LD4D50D010-EU4DR3040509035-4LBS1H

Luminous Intensity Polar Plot





TEST NUMBER: P749132

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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° | 1237278 | 1237278 | 1237278 |
| 5° | 1201758 | 1200352 | 1201819 |
| 10° | 1040906 | 1033561 | 1040657 |
| 15° | 679141 | 675488 | 672096 |
| 20° | 337699 | 350374 | 337251 |
| 25° | 170112 | 191826 | 166624 |
| 30° | 68109 | 74208 | 59341 |
| 35° | 31593 | 30257 | 25360 |
| 40° | 13639 | 15148 | 12850 |
| 45° | 9623 | 11940 | 9710 |
| 50° | 3310 | 8693 | 3501 |
| 55° | 1908 | 3603 | 2015 |
| 60° | 1332 | 1577 | 1332 |
| 65° | 869 | 869 | 869 |
| 70° | 537 | 358 | 537 |
| 75° | 0 | 237 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 11940 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1421.4 | 28.3 |
| 10°-20° | 2289.2 | 45.5 |
| 20°-30° | 989.2 | 19.7 |
| 30°-40° | 225.5 | 4.5 |
| 40°-50° | 77.4 | 1.5 |
| 50°-60° | 18.9 | 0.4 |
| 60°-70° | 4.9 | 0.1 |
| 70°-80° | 0.5 | 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° | 4699.8 | 93.5 |
| 0°-40° | 4925.3 | 98.0 |
| 0°-60° | 5021.6 | 99.9 |
| 0°-90° | 5027.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5027.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 16164 | 16164 | 16164 | 16164 | 16164 | |
| 5° | 15641 | 15626 | 15622 | 15655 | 15641 | 1423 |
| 15° | 8570 | 8467 | 8524 | 8496 | 8481 | 2295 |
| 25° | 2014 | 2090 | 2271 | 2037 | 1973 | 964 |
| 35° | 338 | 345 | 324 | 321 | 271 | 229 |
| 45° | 89 | 110 | 110 | 110 | 90 | 63 |
| 55° | 14 | 15 | 27 | 16 | 15 | 14 |
| 65° | 5 | 5 | 5 | 5 | 5 | 5 |
| 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° | 16164.4 | 16164.4 | 16164.4 | 16164.4 | 16164.4 |
| 2.5° | 16057.2 | 16046.1 | 16052.5 | 16060.4 | 16063.6 |
| 5° | 15640.6 | 15625.5 | 15622.3 | 15654.9 | 15641.4 |
| 7.5° | 14800.1 | 14778.7 | 14746.2 | 14820.0 | 14889.0 |
| 10° | 13392.3 | 13368.5 | 13297.8 | 13332.7 | 13389.1 |
| 12.5° | 11313.8 | 11236.8 | 11235.2 | 11346.3 | 11331.2 |
| 15° | 8570.3 | 8467.1 | 8524.2 | 8496.4 | 8481.4 |
| 17.5° | 5763.2 | 5723.6 | 5799.7 | 5776.7 | 5677.5 |
| 20° | 4145.8 | 4156.2 | 4301.4 | 4228.4 | 4140.3 |
| 22.5° | 3025.3 | 3062.6 | 3234.8 | 3046.7 | 2977.6 |
| 25° | 2014.2 | 2090.4 | 2271.3 | 2037.2 | 1972.9 |
| 27.5° | 1238.8 | 1273.8 | 1457.1 | 1223.0 | 1188.0 |
| 30° | 770.6 | 753.1 | 839.6 | 720.6 | 671.4 |
| 32.5° | 505.5 | 483.3 | 511.1 | 458.7 | 419.0 |
| 35° | 338.1 | 345.2 | 323.8 | 321.4 | 271.4 |
| 37.5° | 211.1 | 242.8 | 214.3 | 228.6 | 174.6 |
| 40° | 136.5 | 176.2 | 151.6 | 167.5 | 128.6 |
| 42.5° | 111.9 | 135.7 | 124.6 | 132.5 | 114.3 |
| 45° | 88.9 | 110.3 | 110.3 | 110.3 | 89.7 |
| 47.5° | 49.2 | 73.8 | 94.4 | 75.4 | 52.4 |
| 50° | 27.8 | 37.3 | 73.0 | 38.9 | 29.4 |
| 52.5° | 19.0 | 21.4 | 50.0 | 22.2 | 19.8 |
| 55° | 14.3 | 15.1 | 27.0 | 15.9 | 15.1 |
| 57.5° | 11.1 | 11.9 | 14.3 | 11.9 | 11.1 |
| 60° | 8.7 | 8.7 | 10.3 | 9.5 | 8.7 |
| 62.5° | 6.3 | 6.3 | 7.1 | 6.3 | 6.3 |
| 65° | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| 67.5° | 2.4 | 3.2 | 3.2 | 3.2 | 3.2 |
| 70° | 2.4 | 1.6 | 1.6 | 1.6 | 2.4 |
| 72.5° | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 |
| 75° | 0.0 | 0.0 | 0.8 | 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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