

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: P745735

Luminaire Tested: LD4D30D010-EU4DR1515309024-4LBDP1H

Issue Date: 2/2/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P745735  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D30D010-EU4DR1515309024-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-SPECULAR CLEAR TRIM, WITH 15° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2359.8 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.23  
Luminous Opening: Vertical Cylinder (Dia: 0.35' x H: 0.35')  
CIE Type: Direct

Input Watts (W): 29  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



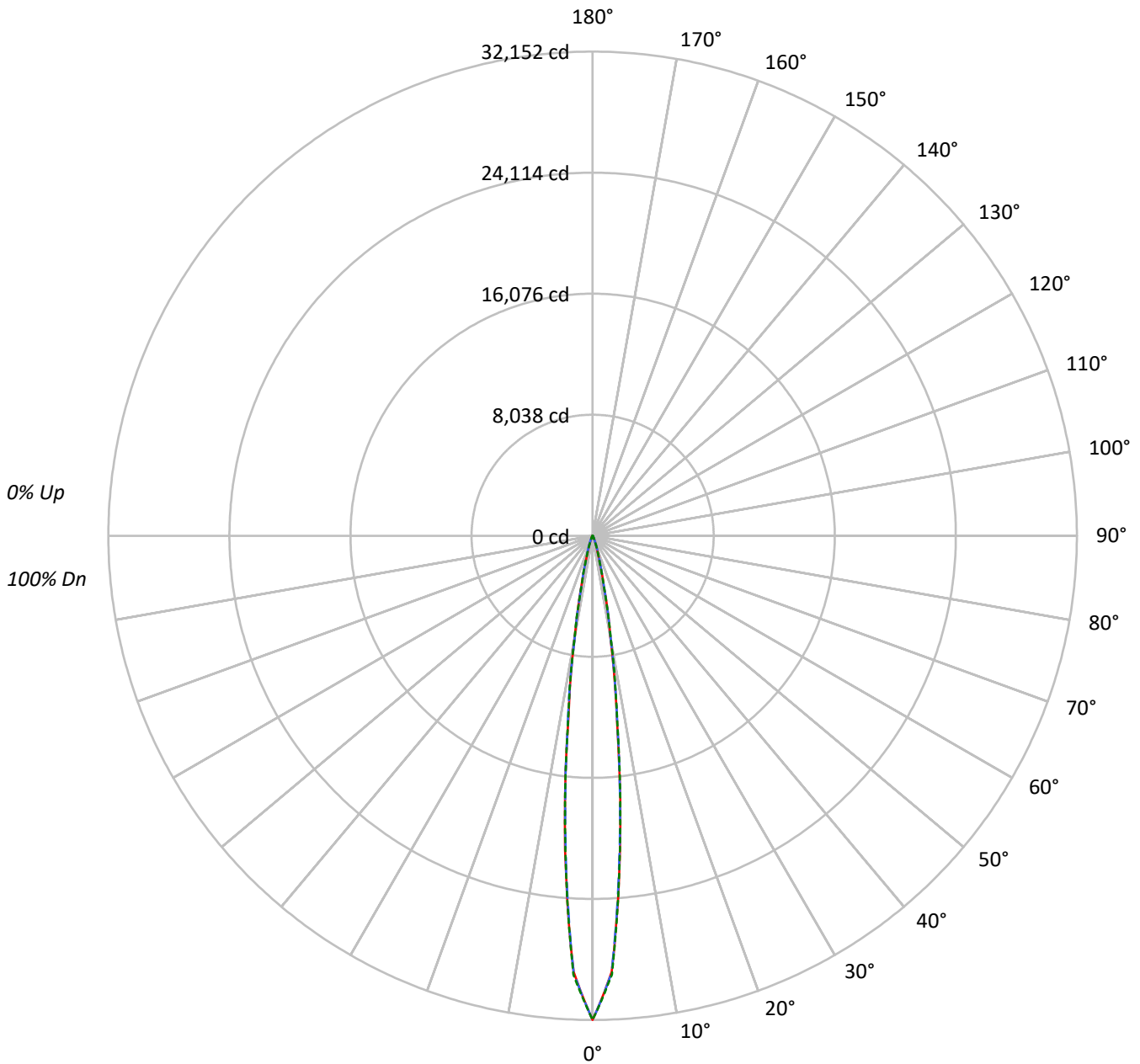
Downlight



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### Luminous Intensity Polar Plot





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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   | 116 | 114 | 112 | 111 | 113 | 112 | 110 | 109 | 108 | 107 | 106 | 104 | 103 | 103 | 101 | 100 | 100 | 98  |    |    |    |    |    | 98  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 104 | 105 | 103 | 102 | 102 | 101 | 100 | 100 | 98  | 98  | 96  |    |    |    |    |    | 96  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 110 | 106 | 103 | 101 | 108 | 105 | 102 | 100 | 103 | 100 | 99  | 100 | 99  | 97  | 98  | 97  | 96  | 94  |    |    |    |    |    | 94  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 108 | 103 | 100 | 98  | 106 | 102 | 99  | 97  | 100 | 98  | 96  | 99  | 97  | 95  | 97  | 95  | 94  | 93  |    |    |    |    |    | 93  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 106 | 101 | 98  | 95  | 104 | 100 | 97  | 95  | 98  | 96  | 94  | 97  | 95  | 93  | 96  | 94  | 92  | 92  |    |    |    |    |    | 92  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 104 | 99  | 95  | 93  | 102 | 98  | 95  | 93  | 97  | 94  | 92  | 96  | 93  | 92  | 95  | 93  | 91  | 90  |    |    |    |    |    | 90  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 102 | 97  | 94  | 91  | 101 | 96  | 93  | 91  | 95  | 93  | 91  | 94  | 92  | 90  | 93  | 91  | 90  | 89  |    |    |    |    |    | 89  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 100 | 95  | 92  | 90  | 99  | 95  | 92  | 90  | 94  | 91  | 89  | 93  | 91  | 89  | 92  | 90  | 89  | 88  |    |    |    |    |    | 88  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 99  | 93  | 90  | 88  | 98  | 93  | 90  | 88  | 92  | 90  | 88  | 92  | 89  | 88  | 91  | 89  | 88  | 87  |    |    |    |    |    | 87  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 97  | 92  | 89  | 87  | 96  | 92  | 89  | 87  | 91  | 89  | 87  | 91  | 88  | 87  | 90  | 88  | 86  | 86  |    |    |    |    |    | 86  |  |  |  |    |  |  |  |  |  |  |  |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°      | 45°     | 90°     |
|-----|---------|---------|---------|
| 0°  | 3617685 | 3617685 | 3617685 |
| 5°  | 2125924 | 2098393 | 2114989 |
| 10° | 634492  | 638933  | 648712  |
| 15° | 157819  | 160894  | 155934  |
| 20° | 47220   | 54682   | 48218   |
| 25° | 16647   | 21205   | 16858   |
| 30° | 6118    | 8050    | 6215    |
| 35° | 3065    | 3457    | 2963    |
| 40° | 1932    | 2123    | 1932    |
| 45° | 1428    | 1526    | 1428    |
| 50° | 1133    | 1133    | 1133    |
| 55° | 947     | 947     | 947     |
| 60° | 765     | 765     | 765     |
| 65° | 585     | 585     | 585     |
| 70° | 497     | 497     | 497     |
| 75° | 310     | 310     | 408     |
| 80° | 213     | 213     | 213     |
| 85° | 116     | 116     | 116     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 1526 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1530.5 | 64.9      |
| 10°-20°   | 629.5  | 26.7      |
| 20°-30°   | 125.0  | 5.3       |
| 30°-40°   | 31.2   | 1.3       |
| 40°-50°   | 16.4   | 0.7       |
| 50°-60°   | 12.2   | 0.5       |
| 60°-70°   | 8.6    | 0.4       |
| 70°-80°   | 4.9    | 0.2       |
| 80°-90°   | 1.5    | 0.1       |
| 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°    | 2285.0 | 96.8      |
| 0°-40°    | 2316.2 | 98.2      |
| 0°-60°    | 2344.8 | 99.4      |
| 0°-90°    | 2359.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2359.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 32152 | 32152 | 32152 | 32152 | 32152 |      |
| 5°  | 20918 | 20703 | 20648 | 20790 | 20811 | 1528 |
| 15° | 1817  | 1851  | 1852  | 1820  | 1795  | 623  |
| 25° | 214   | 242   | 272   | 241   | 216   | 112  |
| 35° | 42    | 45    | 48    | 45    | 41    | 29   |
| 45° | 20    | 20    | 22    | 20    | 20    | 16   |
| 55° | 14    | 14    | 14    | 14    | 14    | 12   |
| 65° | 8     | 8     | 8     | 8     | 8     | 9    |
| 75° | 4     | 4     | 4     | 4     | 5     | 5    |
| 85° | 1     | 1     | 1     | 1     | 1     | 1    |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 32151.5 | 32151.5 | 32151.5 | 32151.5 | 32151.5 |
| 2.5°  | 29001.9 | 29026.4 | 29035.9 | 29064.5 | 29170.7 |
| 5°    | 20918.5 | 20703.4 | 20647.6 | 20790.5 | 20810.9 |
| 7.5°  | 12391.3 | 12434.8 | 12594.1 | 12629.5 | 12501.5 |
| 10°   | 6800.0  | 6855.8  | 6847.6  | 6896.6  | 6952.4  |
| 12.5° | 3477.6  | 3434.0  | 3420.4  | 3476.2  | 3398.6  |
| 15°   | 1817.0  | 1851.1  | 1852.4  | 1819.8  | 1795.3  |
| 17.5° | 977.3   | 1016.7  | 1082.1  | 1029.0  | 947.3   |
| 20°   | 577.1   | 612.5   | 668.3   | 624.7   | 589.3   |
| 22.5° | 356.6   | 385.2   | 424.7   | 390.6   | 362.0   |
| 25°   | 213.7   | 242.3   | 272.2   | 240.9   | 216.4   |
| 27.5° | 126.6   | 151.1   | 170.1   | 149.7   | 125.2   |
| 30°   | 81.7    | 95.3    | 107.5   | 93.9    | 83.0    |
| 32.5° | 57.2    | 62.6    | 68.1    | 62.6    | 57.2    |
| 35°   | 42.2    | 44.9    | 47.6    | 44.9    | 40.8    |
| 37.5° | 32.7    | 35.4    | 36.7    | 34.0    | 31.3    |
| 40°   | 27.2    | 28.6    | 29.9    | 28.6    | 27.2    |
| 42.5° | 23.1    | 24.5    | 24.5    | 24.5    | 23.1    |
| 45°   | 20.4    | 20.4    | 21.8    | 20.4    | 20.4    |
| 47.5° | 17.7    | 17.7    | 19.1    | 17.7    | 17.7    |
| 50°   | 16.3    | 16.3    | 16.3    | 16.3    | 16.3    |
| 52.5° | 15.0    | 15.0    | 15.0    | 15.0    | 15.0    |
| 55°   | 13.6    | 13.6    | 13.6    | 13.6    | 13.6    |
| 57.5° | 12.2    | 12.2    | 12.2    | 12.2    | 12.2    |
| 60°   | 10.9    | 10.9    | 10.9    | 10.9    | 10.9    |
| 62.5° | 9.5     | 9.5     | 9.5     | 9.5     | 9.5     |
| 65°   | 8.2     | 8.2     | 8.2     | 8.2     | 8.2     |
| 67.5° | 8.2     | 8.2     | 8.2     | 8.2     | 8.2     |
| 70°   | 6.8     | 6.8     | 6.8     | 6.8     | 6.8     |
| 72.5° | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     |
| 75°   | 4.1     | 4.1     | 4.1     | 4.1     | 5.4     |
| 77.5° | 4.1     | 4.1     | 4.1     | 4.1     | 4.1     |
| 80°   | 2.7     | 2.7     | 2.7     | 2.7     | 2.7     |
| 82.5° | 2.7     | 2.7     | 2.7     | 2.7     | 2.7     |
| 85°   | 1.4     | 1.4     | 1.4     | 1.4     | 1.4     |
| 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

Signify Classified - Internal  
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Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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Scaled Data Report



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