

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: P744871

Luminaire Tested: LD4D25D010-EU4DR1515309050-4LBSQW1B

Issue Date: 2/2/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P744871  
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: LD4D25D010-EU4DR1515309050-4LBSQW1B  
Description: 4 INCH SQAURE DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 15° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2229.9 lumens  
Efficiency: N/A  
Efficacy: 88.8 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): 25.1  
Input Voltage (V): NR  
Input Current (Ain): 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



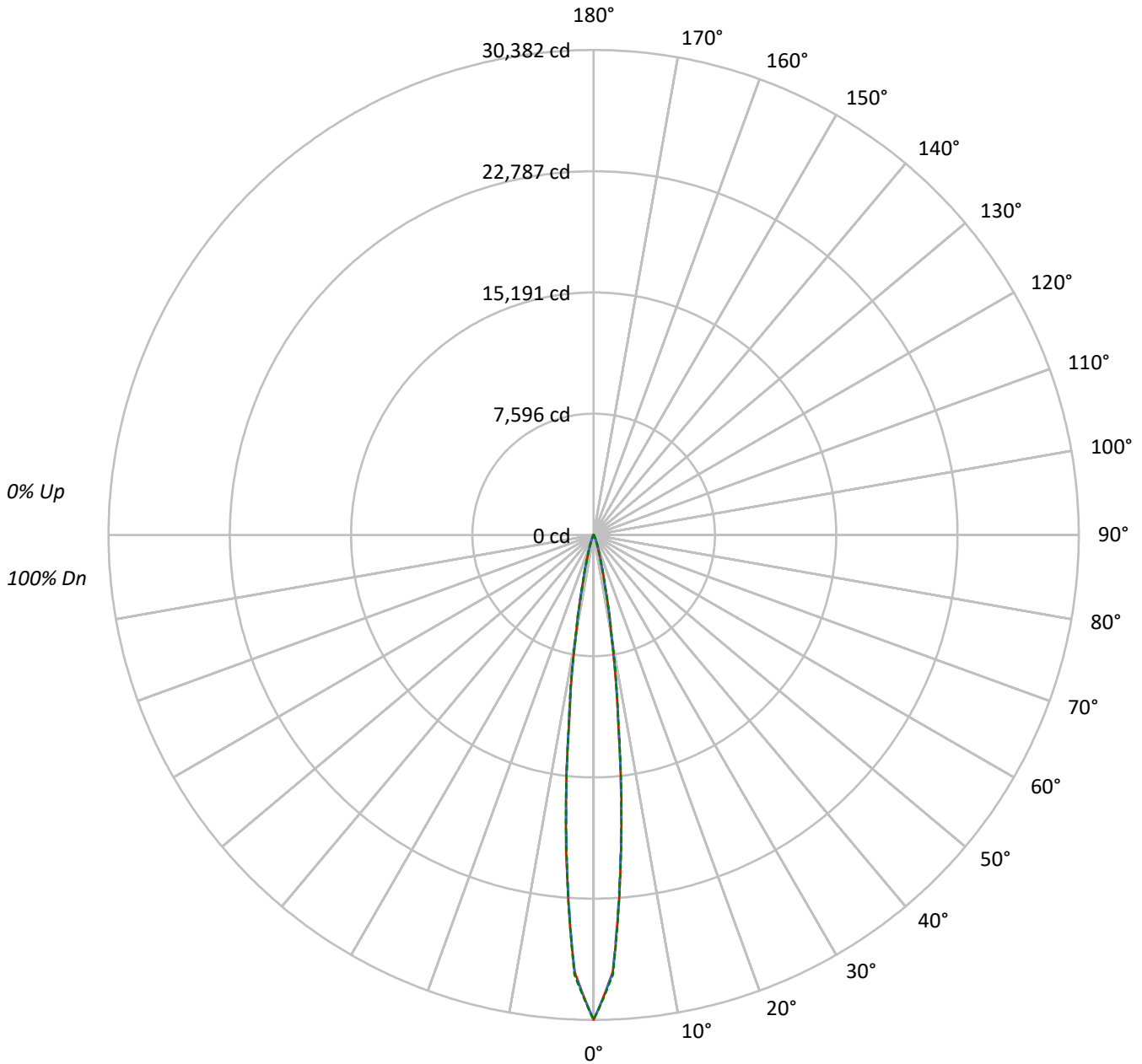
Downlight



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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°  | 3418592 | 3418592 | 3418592 |
| 5°  | 2008929 | 1982912 | 1998604 |
| 10° | 599567  | 603775  | 613012  |
| 15° | 149133  | 152043  | 147353  |
| 20° | 44618   | 51671   | 45567   |
| 25° | 15728   | 20036   | 15931   |
| 30° | 5781    | 7608    | 5878    |
| 35° | 2898    | 3268    | 2803    |
| 40° | 1825    | 2010    | 1825    |
| 45° | 1351    | 1442    | 1351    |
| 50° | 1071    | 1071    | 1071    |
| 55° | 898     | 898     | 898     |
| 60° | 723     | 723     | 723     |
| 65° | 550     | 550     | 550     |
| 70° | 468     | 468     | 468     |
| 75° | 295     | 295     | 385     |
| 80° | 205     | 205     | 205     |
| 85° | 108     | 108     | 108     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 1442 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1446.2 | 64.9      |
| 10°-20°   | 594.9  | 26.7      |
| 20°-30°   | 118.2  | 5.3       |
| 30°-40°   | 29.5   | 1.3       |
| 40°-50°   | 15.5   | 0.7       |
| 50°-60°   | 11.5   | 0.5       |
| 60°-70°   | 8.1    | 0.4       |
| 70°-80°   | 4.6    | 0.2       |
| 80°-90°   | 1.4    | 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°    | 2159.3 | 96.8      |
| 0°-40°    | 2188.8 | 98.2      |
| 0°-60°    | 2215.8 | 99.4      |
| 0°-90°    | 2229.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2229.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 30382 | 30382 | 30382 | 30382 | 30382 |      |
| 5°  | 19767 | 19564 | 19511 | 19646 | 19666 | 1444 |
| 15° | 1717  | 1749  | 1750  | 1720  | 1696  | 589  |
| 25° | 202   | 229   | 257   | 228   | 204   | 106  |
| 35° | 40    | 42    | 45    | 42    | 39    | 27   |
| 45° | 19    | 19    | 21    | 19    | 19    | 15   |
| 55° | 13    | 13    | 13    | 13    | 13    | 11   |
| 65° | 8     | 8     | 8     | 8     | 8     | 8    |
| 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°    | 30382.1 | 30382.1 | 30382.1 | 30382.1 | 30382.1 |
| 2.5°  | 27405.9 | 27429.0 | 27438.0 | 27465.1 | 27565.4 |
| 5°    | 19767.3 | 19564.1 | 19511.3 | 19646.4 | 19665.7 |
| 7.5°  | 11709.4 | 11750.5 | 11901.0 | 11934.5 | 11813.5 |
| 10°   | 6425.7  | 6478.5  | 6470.8  | 6517.1  | 6569.8  |
| 12.5° | 3286.2  | 3245.0  | 3232.2  | 3284.9  | 3211.6  |
| 15°   | 1717.0  | 1749.2  | 1750.5  | 1719.6  | 1696.5  |
| 17.5° | 923.5   | 960.8   | 1022.5  | 972.4   | 895.2   |
| 20°   | 545.3   | 578.8   | 631.5   | 590.4   | 556.9   |
| 22.5° | 337.0   | 364.0   | 401.3   | 369.1   | 342.1   |
| 25°   | 201.9   | 228.9   | 257.2   | 227.7   | 204.5   |
| 27.5° | 119.6   | 142.8   | 160.8   | 141.5   | 118.3   |
| 30°   | 77.2    | 90.0    | 101.6   | 88.7    | 78.5    |
| 32.5° | 54.0    | 59.2    | 64.3    | 59.2    | 54.0    |
| 35°   | 39.9    | 42.4    | 45.0    | 42.4    | 38.6    |
| 37.5° | 30.9    | 33.4    | 34.7    | 32.2    | 29.6    |
| 40°   | 25.7    | 27.0    | 28.3    | 27.0    | 25.7    |
| 42.5° | 21.9    | 23.2    | 23.2    | 23.2    | 21.9    |
| 45°   | 19.3    | 19.3    | 20.6    | 19.3    | 19.3    |
| 47.5° | 16.7    | 16.7    | 18.0    | 16.7    | 16.7    |
| 50°   | 15.4    | 15.4    | 15.4    | 15.4    | 15.4    |
| 52.5° | 14.1    | 14.1    | 14.1    | 14.1    | 14.1    |
| 55°   | 12.9    | 12.9    | 12.9    | 12.9    | 12.9    |
| 57.5° | 11.6    | 11.6    | 11.6    | 11.6    | 11.6    |
| 60°   | 10.3    | 10.3    | 10.3    | 10.3    | 10.3    |
| 62.5° | 9.0     | 9.0     | 9.0     | 9.0     | 9.0     |
| 65°   | 7.7     | 7.7     | 7.7     | 7.7     | 7.7     |
| 67.5° | 7.7     | 7.7     | 7.7     | 7.7     | 7.7     |
| 70°   | 6.4     | 6.4     | 6.4     | 6.4     | 6.4     |
| 72.5° | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     |
| 75°   | 3.9     | 3.9     | 3.9     | 3.9     | 5.1     |
| 77.5° | 3.9     | 3.9     | 3.9     | 3.9     | 3.9     |
| 80°   | 2.6     | 2.6     | 2.6     | 2.6     | 2.6     |
| 82.5° | 2.6     | 2.6     | 2.6     | 2.6     | 2.6     |
| 85°   | 1.3     | 1.3     | 1.3     | 1.3     | 1.3     |
| 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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Scaled Data Report



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