

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: P742165

Luminaire Tested: LD4D10D010-EU4DR300210IC9050-4LBDP1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P742165  
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: LD4D10D010-EU4DR300210IC9050-4LBDP1B  
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 842.3 lumens  
Efficiency: N/A  
Efficacy: 72.0 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): 11.7  
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



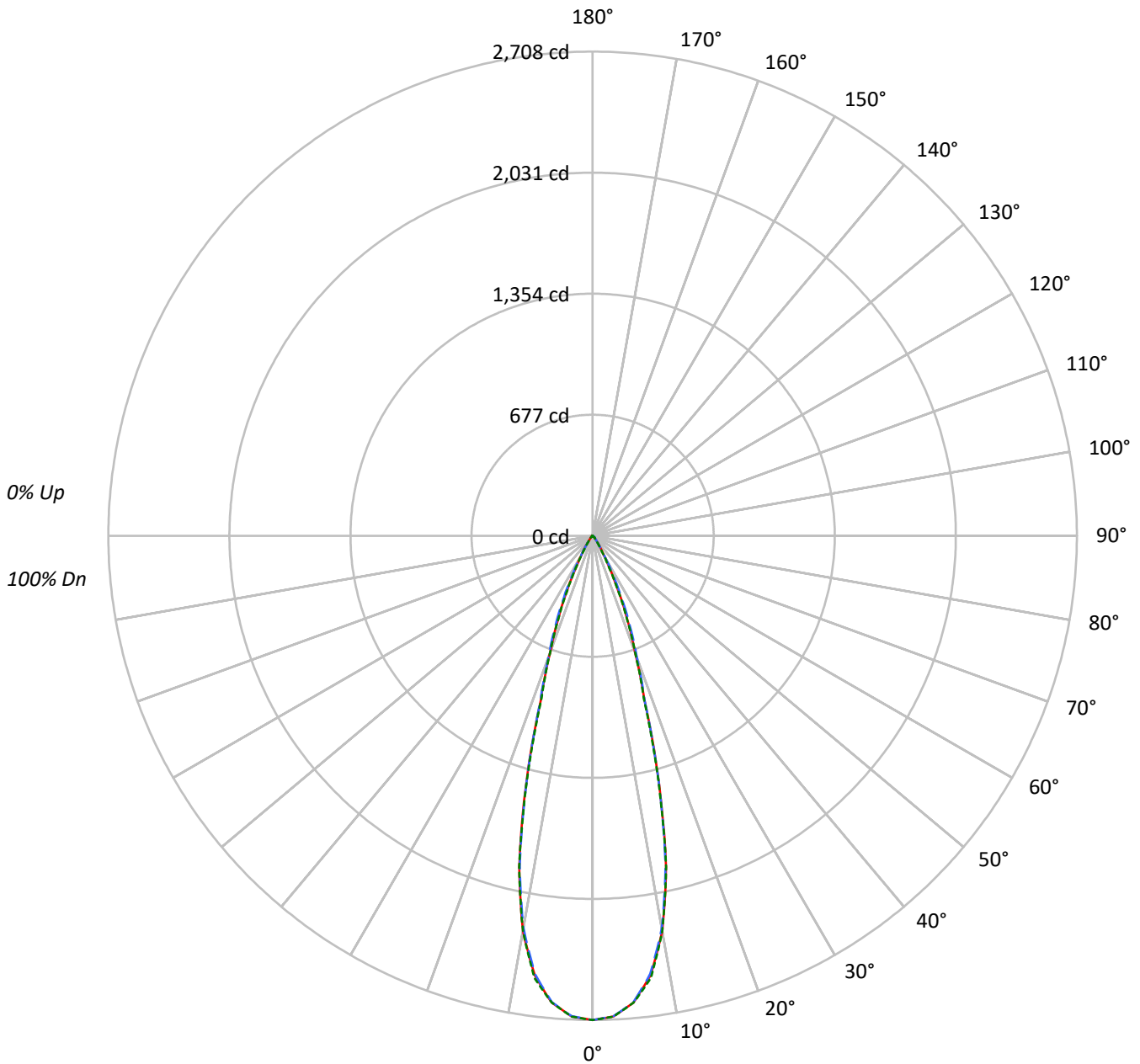
Downlight



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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 | 0 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98  | 99  | 97  | 96  | 97  | 95  | 94  | 92  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 93  | 96  | 93  | 91  | 94  | 92  | 90  | 89  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 103 | 98  | 93  | 90  | 102 | 96  | 93  | 90  | 94  | 91  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 85  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 100 | 94  | 89  | 86  | 98  | 93  | 89  | 86  | 91  | 88  | 85  | 90  | 86  | 84  | 88  | 86  | 83  | 82  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 97  | 90  | 85  | 82  | 95  | 89  | 85  | 82  | 88  | 84  | 81  | 87  | 83  | 81  | 85  | 83  | 80  | 79  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 94  | 87  | 82  | 79  | 92  | 86  | 82  | 79  | 85  | 81  | 78  | 84  | 81  | 78  | 83  | 80  | 78  | 77  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  | 82  | 78  | 76  | 81  | 78  | 75  | 80  | 77  | 75  | 74  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  | 80  | 76  | 73  | 79  | 75  | 73  | 78  | 75  | 73  | 72  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 85  | 78  | 74  | 71  | 85  | 78  | 74  | 71  | 77  | 73  | 71  | 76  | 73  | 71  | 76  | 73  | 70  | 69  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 207318 | 207318 | 207318 |
| 5°  | 201364 | 201125 | 201371 |
| 10° | 174413 | 173177 | 174366 |
| 15° | 113794 | 113184 | 112613 |
| 20° | 56579  | 58705  | 56506  |
| 25° | 28504  | 32144  | 27921  |
| 30° | 11410  | 12436  | 9943   |
| 35° | 5298   | 5074   | 4252   |
| 40° | 2288   | 2538   | 2148   |
| 45° | 1613   | 2003   | 1624   |
| 50° | 548    | 1465   | 583    |
| 55° | 320    | 601    | 334    |
| 60° | 230    | 260    | 230    |
| 65° | 145    | 145    | 145    |
| 70° | 90     | 67     | 90     |
| 75° | 0      | 30     | 0      |
| 80° | 0      | 0      | 0      |
| 85° | 0      | 0      | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 2003 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 238.2  | 28.3      |
| 10°-20°   | 383.6  | 45.5      |
| 20°-30°   | 165.7  | 19.7      |
| 30°-40°   | 37.8   | 4.5       |
| 40°-50°   | 13.0   | 1.5       |
| 50°-60°   | 3.2    | 0.4       |
| 60°-70°   | 0.8    | 0.1       |
| 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°    | 787.5  | 93.5      |
| 0°-40°    | 825.3  | 98.0      |
| 0°-60°    | 841.4  | 99.9      |
| 0°-90°    | 842.3  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 842.3  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2708 | 2708  | 2708 | 2708  | 2708 |      |
| 5°  | 2621 | 2618  | 2618 | 2623  | 2621 | 238  |
| 15° | 1436 | 1419  | 1428 | 1424  | 1421 | 385  |
| 25° | 338  | 350   | 381  | 341   | 331  | 162  |
| 35° | 57   | 58    | 54   | 54    | 46   | 38   |
| 45° | 15   | 18    | 18   | 18    | 15   | 11   |
| 55° | 2    | 2     | 4    | 3     | 2    | 2    |
| 65° | 1    | 1     | 1    | 1     | 1    | 1    |
| 75° | 0    | 0     | 0    | 0     | 0    | 0    |
| 85° | 0    | 0     | 0    | 0     | 0    | 0    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2708.5 | 2708.5 | 2708.5 | 2708.5 | 2708.5 |
| 2.5°  | 2690.5 | 2688.7 | 2689.7 | 2691.0 | 2691.6 |
| 5°    | 2620.7 | 2618.2 | 2617.6 | 2623.1 | 2620.8 |
| 7.5°  | 2479.9 | 2476.3 | 2470.9 | 2483.2 | 2494.8 |
| 10°   | 2244.0 | 2240.0 | 2228.1 | 2234.0 | 2243.4 |
| 12.5° | 1895.7 | 1882.8 | 1882.5 | 1901.2 | 1898.6 |
| 15°   | 1436.0 | 1418.7 | 1428.3 | 1423.7 | 1421.1 |
| 17.5° | 965.7  | 959.0  | 971.8  | 967.9  | 951.3  |
| 20°   | 694.6  | 696.4  | 720.7  | 708.5  | 693.7  |
| 22.5° | 506.9  | 513.1  | 542.0  | 510.5  | 498.9  |
| 25°   | 337.5  | 350.2  | 380.6  | 341.4  | 330.6  |
| 27.5° | 207.6  | 213.4  | 244.1  | 204.9  | 199.0  |
| 30°   | 129.1  | 126.2  | 140.7  | 120.7  | 112.5  |
| 32.5° | 84.7   | 81.0   | 85.7   | 76.8   | 70.2   |
| 35°   | 56.7   | 57.9   | 54.3   | 53.9   | 45.5   |
| 37.5° | 35.4   | 40.7   | 35.9   | 38.3   | 29.3   |
| 40°   | 22.9   | 29.5   | 25.4   | 28.1   | 21.5   |
| 42.5° | 18.7   | 22.7   | 20.9   | 22.2   | 19.1   |
| 45°   | 14.9   | 18.5   | 18.5   | 18.5   | 15.0   |
| 47.5° | 8.3    | 12.4   | 15.8   | 12.6   | 8.8    |
| 50°   | 4.6    | 6.2    | 12.3   | 6.5    | 4.9    |
| 52.5° | 3.2    | 3.6    | 8.4    | 3.7    | 3.3    |
| 55°   | 2.4    | 2.5    | 4.5    | 2.6    | 2.5    |
| 57.5° | 1.8    | 2.0    | 2.4    | 2.0    | 1.8    |
| 60°   | 1.5    | 1.5    | 1.7    | 1.6    | 1.5    |
| 62.5° | 1.1    | 1.1    | 1.2    | 1.1    | 1.1    |
| 65°   | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    |
| 67.5° | 0.4    | 0.5    | 0.5    | 0.5    | 0.5    |
| 70°   | 0.4    | 0.3    | 0.3    | 0.3    | 0.4    |
| 72.5° | 0.3    | 0.1    | 0.1    | 0.1    | 0.1    |
| 75°   | 0.0    | 0.0    | 0.1    | 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

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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