

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: P743826

Luminaire Tested: LD4D20D010-EU4DR1015209035-4LBDP1MW

Issue Date: 2/2/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P743826  
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-EU4DR1015209035-4LBDP1MW  
Description: 4 INCH ROUND DEEP 45° CUTOFF MATTE WHITE TRIM, WITH 10° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1894.0 lumens  
Efficiency: N/A  
Efficacy: 82.0 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<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



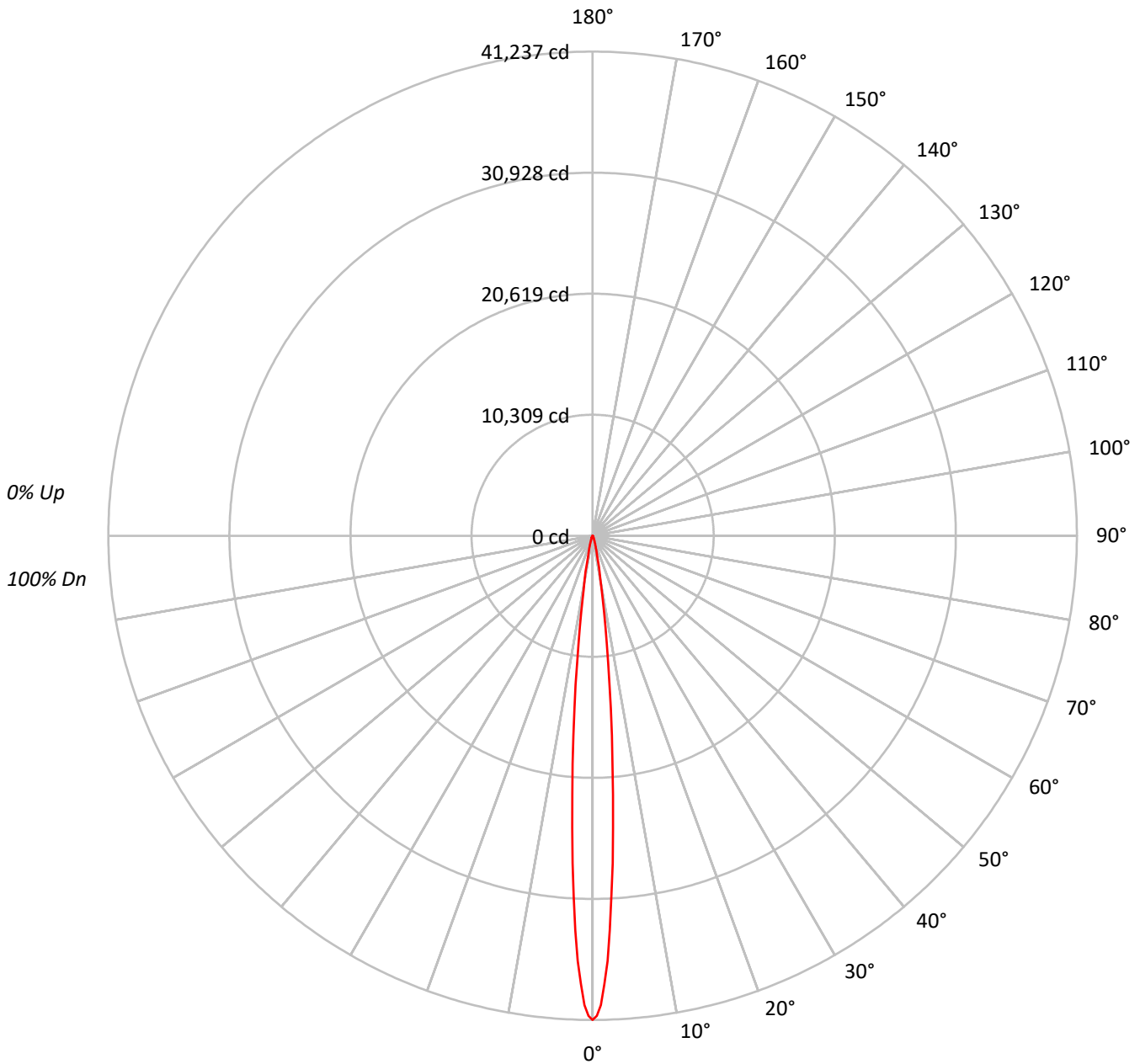
Downlight



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

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 4505619 |
| 5°  | 2136552 |
| 10° | 438171  |
| 15° | 120298  |
| 20° | 48486   |
| 25° | 25980   |
| 30° | 15367   |
| 35° | 10004   |
| 40° | 6675    |
| 45° | 4342    |
| 50° | 2397    |
| 55° | 1791    |
| 60° | 1027    |
| 65° | 0       |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4342 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1346.7 | 71.1      |
| 10°-20°   | 364.4  | 19.2      |
| 20°-30°   | 104.3  | 5.5       |
| 30°-40°   | 47.6   | 2.5       |
| 40°-50°   | 21.9   | 1.2       |
| 50°-60°   | 7.3    | 0.4       |
| 60°-70°   | 1.7    | 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°    | 1815.5 | 95.9      |
| 0°-40°    | 1863.1 | 98.4      |
| 0°-60°    | 1892.2 | 99.9      |
| 0°-90°    | 1894.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1894.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 41237 |      |
| 5°  | 19480 | ###  |
| 15° | 1064  | 364  |
| 25° | 216   | 104  |
| 35° | 75    | 48   |
| 45° | 28    | 22   |
| 55° | 9     | 7    |
| 65° | 0     | 2    |
| 75° | 0     | 0    |
| 85° | 0     | 0    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |         |
|-------|---------|
| 0°    | 41237.3 |
| 0.5°  | 40881.2 |
| 1°    | 39967.7 |
| 1.5°  | 38206.1 |
| 2°    | 36233.7 |
| 2.5°  | 33628.9 |
| 3°    | 30733.5 |
| 3.5°  | 27931.9 |
| 4°    | 24910.1 |
| 4.5°  | 22127.2 |
| 5°    | 19480.2 |
| 5.5°  | 17081.5 |
| 6°    | 14795.2 |
| 6.5°  | 12785.3 |
| 7°    | 10892.6 |
| 7.5°  | 9276.3  |
| 8°    | 7842.7  |
| 8.5°  | 6587.1  |
| 9°    | 5500.2  |
| 9.5°  | 4670.9  |
| 10°   | 3949.4  |
| 12.5° | 1883.4  |
| 15°   | 1063.5  |
| 17.5° | 646.5   |
| 20°   | 417.0   |
| 22.5° | 290.5   |
| 25°   | 215.5   |
| 27.5° | 159.3   |
| 30°   | 121.8   |
| 32.5° | 93.7    |
| 35°   | 75.0    |
| 37.5° | 56.2    |
| 40°   | 46.8    |
| 42.5° | 37.5    |
| 45°   | 28.1    |
| 47.5° | 18.7    |
| 50°   | 14.1    |
| 52.5° | 9.4     |
| 55°   | 9.4     |
| 57.5° | 4.7     |
| 60°   | 4.7     |
| 62.5° | 4.7     |
| 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)