

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: P738959

Luminaire Tested: LD4D02D010-EU4DR200210IC9040-4LBS1H

Issue Date: 2/2/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P738959  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-36)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D02D010-EU4DR200210IC9040-4LBS1H  
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 20° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 421.8 lumens  
Efficiency: N/A  
Efficacy: 82.7 lumens/watt  
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.36  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct

Input Watts (W): 5.1  
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

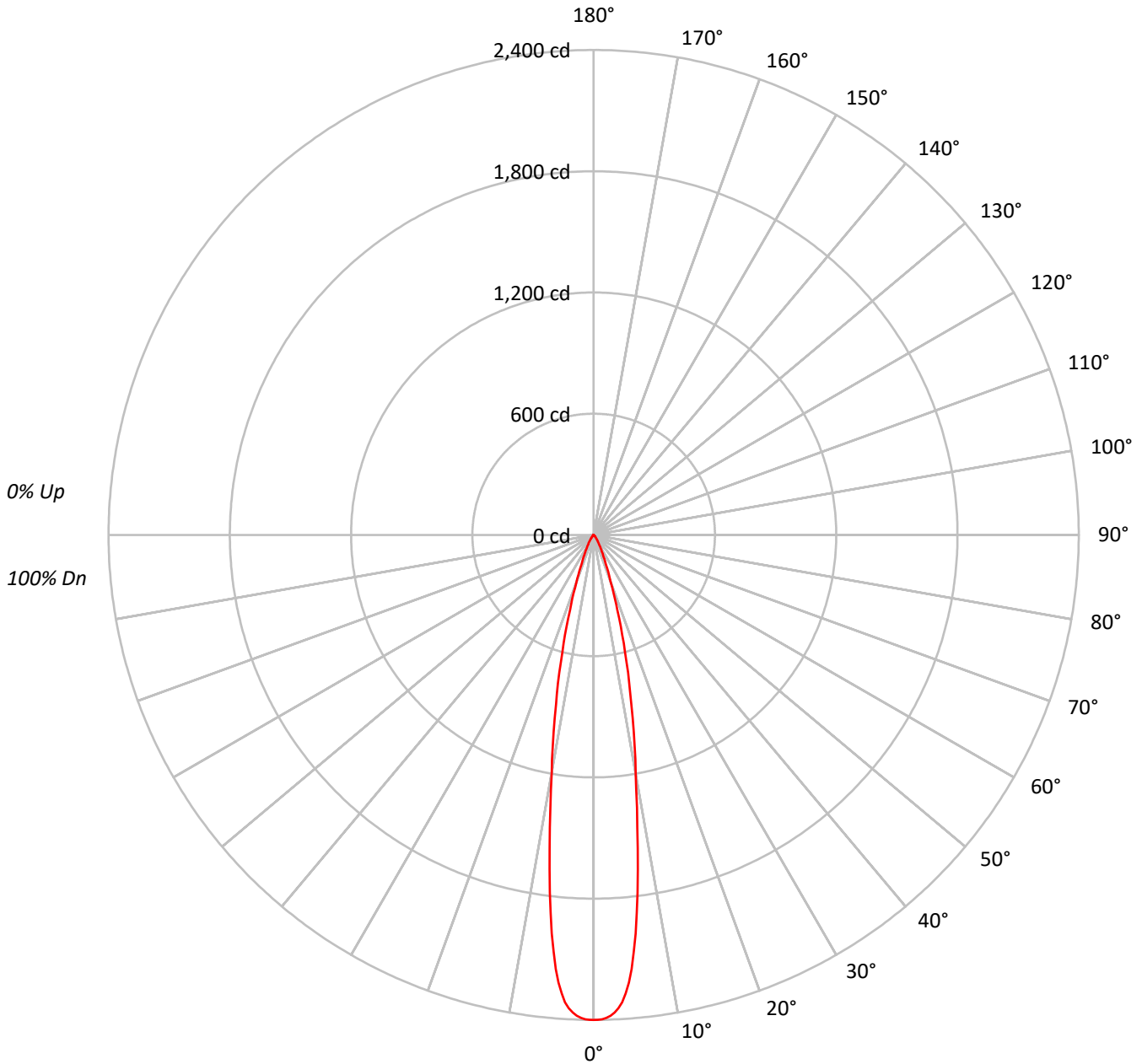


Downlight



TEST NUMBER: P738959  
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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   | 115 | 113 | 111 | 109 | 113 | 111 | 109 | 108 | 107 | 106 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 97 | 97 | 97  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 111 | 108 | 105 | 102 | 109 | 106 | 104 | 101 | 103 | 101 | 99  | 100 | 99  | 97  | 98  | 96  | 95  | 94  | 94 | 94 | 94  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 108 | 103 | 100 | 97  | 106 | 102 | 99  | 96  | 100 | 97  | 95  | 97  | 95  | 93  | 95  | 93  | 92  | 91  | 91 | 91 | 91  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 105 | 99  | 96  | 93  | 103 | 98  | 95  | 92  | 96  | 93  | 91  | 95  | 92  | 90  | 93  | 91  | 89  | 88  | 88 | 88 | 88  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 102 | 96  | 92  | 89  | 100 | 95  | 91  | 89  | 94  | 90  | 88  | 92  | 89  | 87  | 91  | 88  | 86  | 85  | 85 | 85 | 85  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 99  | 93  | 89  | 86  | 98  | 92  | 88  | 86  | 91  | 87  | 85  | 90  | 87  | 84  | 88  | 86  | 84  | 83  | 83 | 83 | 83  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 96  | 90  | 86  | 83  | 95  | 89  | 86  | 83  | 88  | 85  | 82  | 87  | 84  | 82  | 86  | 84  | 82  | 81  | 81 | 81 | 81  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 94  | 87  | 83  | 81  | 93  | 87  | 83  | 80  | 86  | 83  | 80  | 85  | 82  | 80  | 84  | 82  | 80  | 79  | 79 | 79 | 79  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 91  | 85  | 81  | 78  | 91  | 85  | 81  | 78  | 84  | 80  | 78  | 83  | 80  | 78  | 82  | 80  | 78  | 77  | 77 | 77 | 77  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 89  | 83  | 79  | 76  | 88  | 82  | 79  | 76  | 82  | 78  | 76  | 81  | 78  | 76  | 81  | 78  | 76  | 75  | 75 | 75 | 75  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 262270 |
| 5°  | 236620 |
| 10° | 132803 |
| 15° | 67507  |
| 20° | 28580  |
| 25° | 13189  |
| 30° | 6989   |
| 35° | 3761   |
| 40° | 2011   |
| 45° | 1190   |
| 50° | 697    |
| 55° | 362    |
| 60° | 240    |
| 65° | 155    |
| 70° | 64     |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1190 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 170.9  | 40.5      |
| 10°-20°   | 168.3  | 39.9      |
| 20°-30°   | 55.0   | 13.0      |
| 30°-40°   | 18.7   | 4.4       |
| 40°-50°   | 6.3    | 1.5       |
| 50°-60°   | 1.9    | 0.5       |
| 60°-70°   | 0.6    | 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°    | 394.2  | 93.5      |
| 0°-40°    | 412.9  | 97.9      |
| 0°-60°    | 421.1  | 99.8      |
| 0°-90°    | 421.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 421.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2400 |      |
| 5°  | 2157 | 171  |
| 15° | 597  | 168  |
| 25° | 109  | 55   |
| 35° | 28   | 19   |
| 45° | 8    | 6    |
| 55° | 2    | 2    |
| 65° | 1    | 1    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2400.4 |
| 0.5°  | 2400.4 |
| 1°    | 2397.4 |
| 1.5°  | 2391.5 |
| 2°    | 2380.6 |
| 2.5°  | 2366.0 |
| 3°    | 2345.5 |
| 3.5°  | 2316.9 |
| 4°    | 2274.3 |
| 4.5°  | 2222.6 |
| 5°    | 2157.4 |
| 5.5°  | 2071.7 |
| 6°    | 1983.8 |
| 6.5°  | 1883.2 |
| 7°    | 1784.6 |
| 7.5°  | 1669.2 |
| 8°    | 1566.2 |
| 8.5°  | 1462.5 |
| 9°    | 1366.7 |
| 9.5°  | 1278.9 |
| 10°   | 1197.0 |
| 12.5° | 859.5  |
| 15°   | 596.8  |
| 17.5° | 389.9  |
| 20°   | 245.8  |
| 22.5° | 159.2  |
| 25°   | 109.4  |
| 27.5° | 77.0   |
| 30°   | 55.4   |
| 32.5° | 39.8   |
| 35°   | 28.2   |
| 37.5° | 19.7   |
| 40°   | 14.1   |
| 42.5° | 10.3   |
| 45°   | 7.7    |
| 47.5° | 6.0    |
| 50°   | 4.1    |
| 52.5° | 2.6    |
| 55°   | 1.9    |
| 57.5° | 1.5    |
| 60°   | 1.1    |
| 62.5° | 0.9    |
| 65°   | 0.6    |



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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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Scaled Data Report





|       |  |     |
|-------|--|-----|
| 67.5° |  | 0.4 |
| 70°   |  | 0.2 |

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Scaled Data Report



(END OF REPORT)