

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P748639

Luminaire Tested: LD4D45BD010-EU4DR5040509027-4LBS1LI

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-44)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D45BD010-EU4DR5040509027-4LBS1LI  
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 50° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4586.1 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 0.8 / 0.8 / 0.73  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct

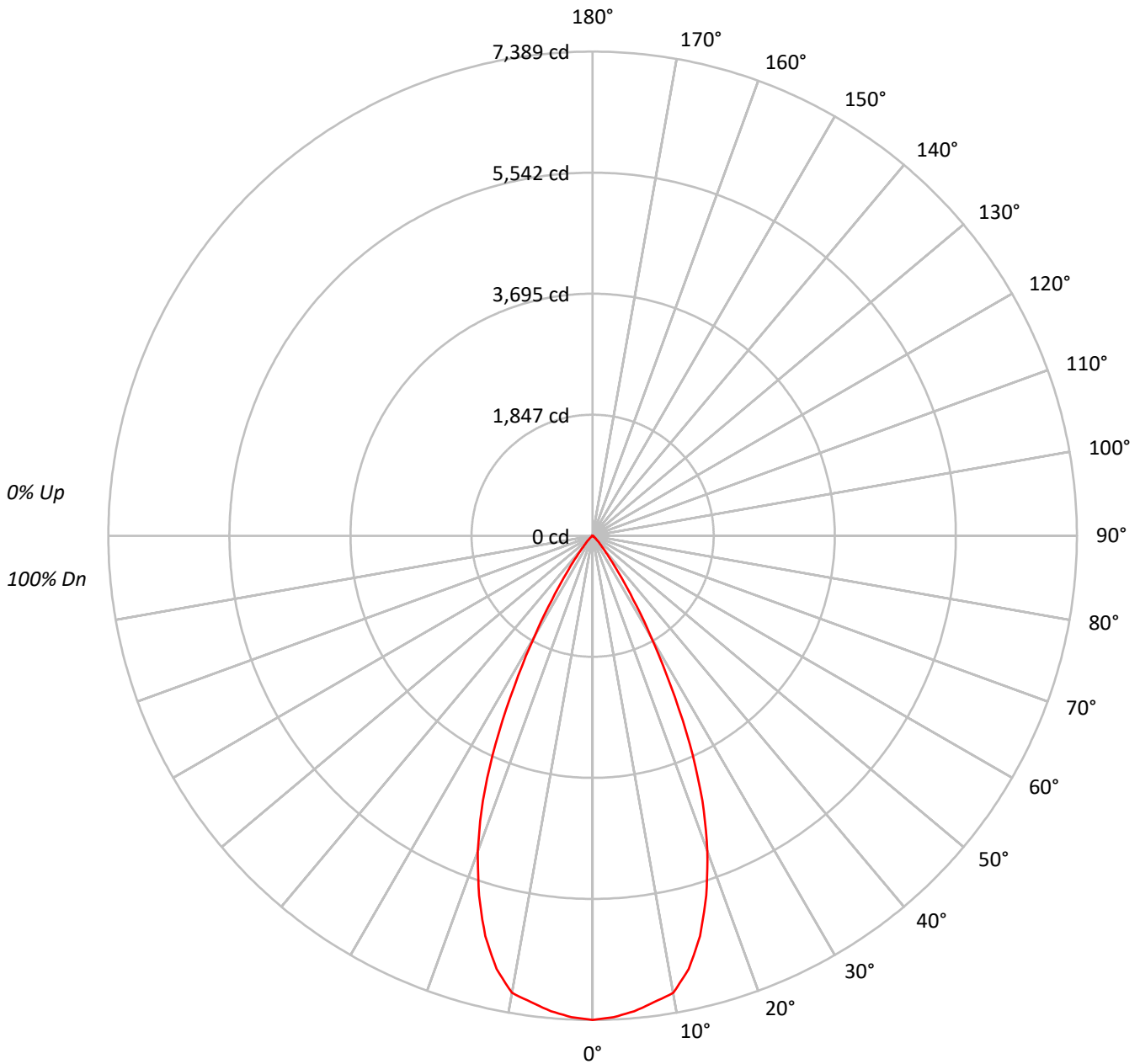
Input Watts (W): 38.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



Downlight

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |    |    |
| RC  | 80  |     |     |     | 70  |     |     |     | 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 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 114 | 112 | 109 | 107 | 112 | 110 | 108 | 106 | 106 | 104 | 102 | 102 | 101 | 99  | 98  | 97  | 97  | 95  |    |    |
| 2   | 109 | 105 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 98  | 95  | 97  | 95  | 93  | 95  | 93  | 91  | 90  |    |    |
| 3   | 105 | 99  | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 92  | 89  | 93  | 90  | 88  | 91  | 88  | 86  | 85  |    |    |
| 4   | 100 | 94  | 89  | 85  | 99  | 93  | 88  | 85  | 90  | 87  | 84  | 89  | 85  | 83  | 87  | 84  | 82  | 80  |    |    |
| 5   | 96  | 89  | 84  | 80  | 95  | 88  | 83  | 79  | 86  | 82  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 76  |    |    |
| 6   | 92  | 84  | 79  | 75  | 91  | 83  | 79  | 75  | 82  | 78  | 74  | 81  | 77  | 74  | 79  | 76  | 74  | 72  |    |    |
| 7   | 88  | 80  | 75  | 71  | 87  | 79  | 74  | 71  | 78  | 74  | 71  | 77  | 73  | 70  | 76  | 73  | 70  | 69  |    |    |
| 8   | 85  | 76  | 71  | 67  | 84  | 76  | 71  | 67  | 75  | 70  | 67  | 74  | 70  | 67  | 73  | 69  | 66  | 65  |    |    |
| 9   | 81  | 73  | 68  | 64  | 80  | 72  | 67  | 64  | 71  | 67  | 64  | 71  | 67  | 64  | 70  | 66  | 63  | 62  |    |    |
| 10  | 78  | 70  | 64  | 61  | 77  | 69  | 64  | 61  | 68  | 64  | 61  | 68  | 64  | 61  | 67  | 63  | 60  | 59  |    |    |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 807371 |
| 5°  | 798906 |
| 10° | 785744 |
| 15° | 715487 |
| 20° | 595364 |
| 25° | 422621 |
| 30° | 223700 |
| 35° | 91154  |
| 40° | 33860  |
| 45° | 15498  |
| 50° | 6357   |
| 55° | 3315   |
| 60° | 1639   |
| 65° | 491    |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15498 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 688.5  | 15.0      |
| 10°-20°   | 1740.0 | 37.9      |
| 20°-30°   | 1562.9 | 34.1      |
| 30°-40°   | 489.4  | 10.7      |
| 40°-50°   | 85.7   | 1.9       |
| 50°-60°   | 17.1   | 0.4       |
| 60°-70°   | 2.6    | 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°    | 3991.4 | 87.0      |
| 0°-40°    | 4480.8 | 97.7      |
| 0°-60°    | 4583.5 | 99.9      |
| 0°-90°    | 4586.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4586.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 7389 |      |
| 5°  | 7284 | 688  |
| 15° | 6325 | 1740 |
| 25° | 3506 | 1563 |
| 35° | 683  | 489  |
| 45° | 100  | 86   |
| 55° | 17   | 17   |
| 65° | 2    | 3    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 7389.4 |
| 2.5°  | 7352.6 |
| 5°    | 7284.1 |
| 7.5°  | 7179.4 |
| 10°   | 7082.2 |
| 12.5° | 6770.7 |
| 15°   | 6325.3 |
| 17.5° | 5759.6 |
| 20°   | 5120.4 |
| 22.5° | 4380.9 |
| 25°   | 3505.6 |
| 27.5° | 2577.3 |
| 30°   | 1773.1 |
| 32.5° | 1154.4 |
| 35°   | 683.4  |
| 37.5° | 392.5  |
| 40°   | 237.4  |
| 42.5° | 154.5  |
| 45°   | 100.3  |
| 47.5° | 61.1   |
| 50°   | 37.4   |
| 52.5° | 25.5   |
| 55°   | 17.4   |
| 57.5° | 11.8   |
| 60°   | 7.5    |
| 62.5° | 4.4    |
| 65°   | 1.9    |
| 67.5° | 0.6    |
| 70°   | 0.0    |
| 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    |

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Scaled Data Report



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Scaled Data Report







— 0°-180°

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