

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: P748971

Luminaire Tested: LD4D45BD010-EU4DR7040509035-4LBDP1B

Issue Date: 2/5/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748971  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-73)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D45BD010-EU4DR7040509035-4LBDP1B  
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 70° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2445.7 lumens  
Efficiency: N/A  
Efficacy: 63.2 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.82  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct

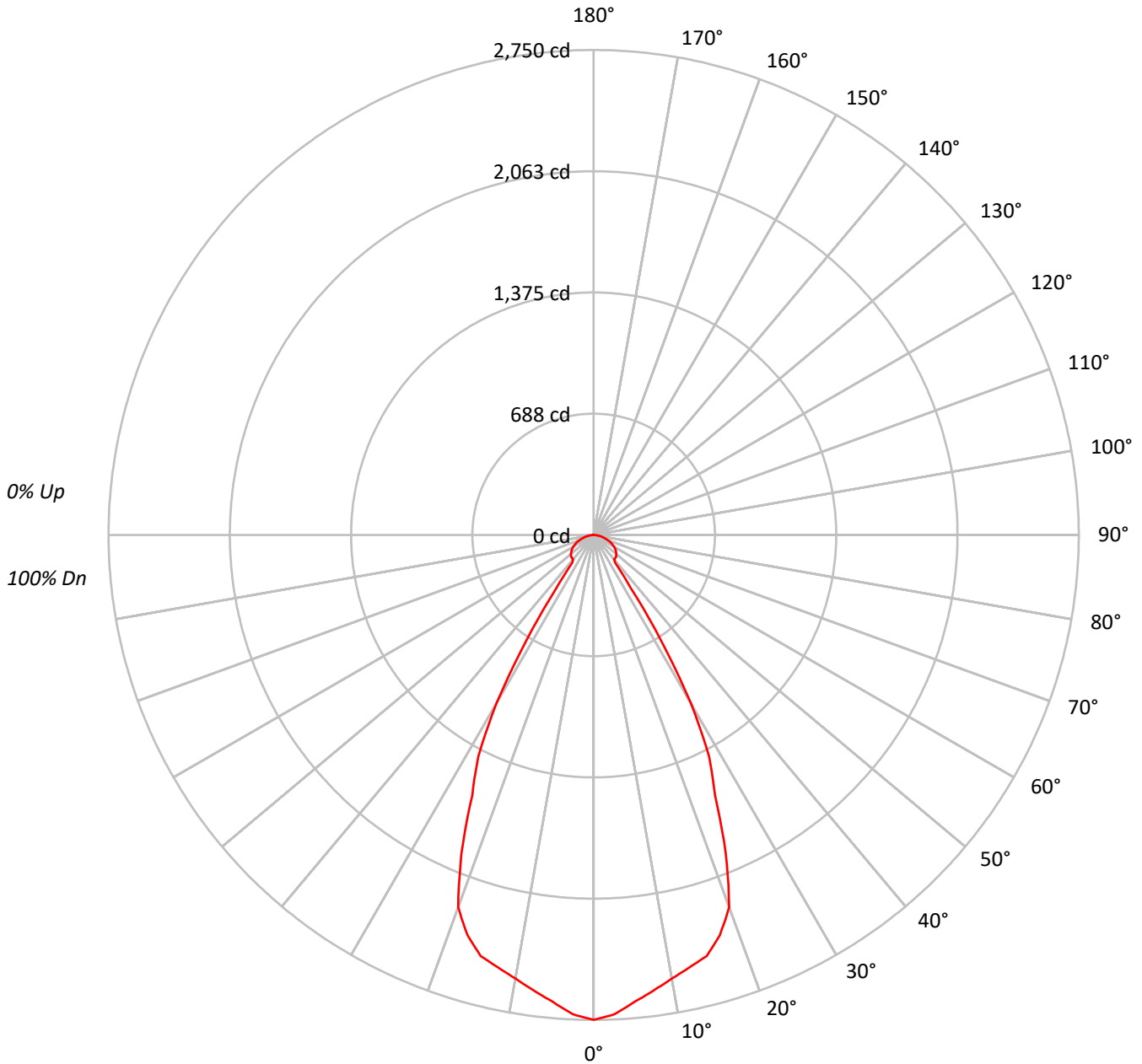
Input Watts (W): 38.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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 | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    | 100 |
| 1   | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 95  | 94  | 93  | 91  |    |    | 91  |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 87  | 85  | 83  |    |    | 83  |
| 3   | 100 | 92  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 84  | 80  | 86  | 82  | 79  | 83  | 80  | 78  | 76  |    |    | 76  |
| 4   | 94  | 86  | 80  | 75  | 92  | 85  | 79  | 74  | 82  | 77  | 73  | 80  | 76  | 73  | 78  | 75  | 72  | 70  |    |    | 70  |
| 5   | 89  | 80  | 74  | 69  | 87  | 79  | 73  | 69  | 77  | 72  | 68  | 75  | 71  | 67  | 74  | 70  | 67  | 65  |    |    | 65  |
| 6   | 85  | 75  | 68  | 64  | 83  | 74  | 68  | 64  | 73  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 62  | 61  |    |    | 61  |
| 7   | 80  | 70  | 64  | 59  | 79  | 70  | 64  | 59  | 68  | 63  | 59  | 67  | 62  | 59  | 66  | 62  | 58  | 57  |    |    | 57  |
| 8   | 77  | 66  | 60  | 56  | 75  | 66  | 60  | 56  | 65  | 59  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 53  |    |    | 53  |
| 9   | 73  | 63  | 57  | 52  | 72  | 62  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 52  | 60  | 55  | 52  | 50  |    |    | 50  |
| 10  | 70  | 59  | 53  | 49  | 69  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 57  | 52  | 49  | 48  |    |    | 48  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 300423 |
| 5°  | 291492 |
| 10° | 283368 |
| 15° | 279654 |
| 20° | 261137 |
| 25° | 196181 |
| 30° | 138679 |
| 35° | 49125  |
| 40° | 25830  |
| 45° | 27520  |
| 50° | 28489  |
| 55° | 29031  |
| 60° | 29194  |
| 65° | 28594  |
| 70° | 26994  |
| 75° | 24991  |
| 80° | 22211  |
| 85° | 18052  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 57.5°  
 Luminance: 29222 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 250.7  | 10.3      |
| 10°-20°   | 687.6  | 28.1      |
| 20°-30°   | 757.3  | 31.0      |
| 30°-40°   | 289.3  | 11.8      |
| 40°-50°   | 136.6  | 5.6       |
| 50°-60°   | 135.8  | 5.6       |
| 60°-70°   | 108.7  | 4.4       |
| 70°-80°   | 62.5   | 2.6       |
| 80°-90°   | 17.0   | 0.7       |
| 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°    | 1695.6 | 69.3      |
| 0°-40°    | 1984.9 | 81.2      |
| 0°-60°    | 2257.4 | 92.3      |
| 0°-90°    | 2445.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2445.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2750 |      |
| 5°  | 2658 | 251  |
| 15° | 2472 | 688  |
| 25° | 1627 | 757  |
| 35° | 368  | 289  |
| 45° | 178  | 137  |
| 55° | 152  | 136  |
| 65° | 111  | 109  |
| 75° | 59   | 63   |
| 85° | 14   | 17   |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2749.6 |
| 2.5°  | 2720.9 |
| 5°    | 2657.7 |
| 7.5°  | 2605.1 |
| 10°   | 2554.1 |
| 12.5° | 2511.0 |
| 15°   | 2472.3 |
| 17.5° | 2378.7 |
| 20°   | 2245.9 |
| 22.5° | 1959.4 |
| 25°   | 1627.3 |
| 27.5° | 1416.6 |
| 30°   | 1099.2 |
| 32.5° | 710.0  |
| 35°   | 368.3  |
| 37.5° | 198.9  |
| 40°   | 181.1  |
| 42.5° | 179.8  |
| 45°   | 178.1  |
| 47.5° | 174.1  |
| 50°   | 167.6  |
| 52.5° | 160.2  |
| 55°   | 152.4  |
| 57.5° | 143.7  |
| 60°   | 133.6  |
| 62.5° | 122.3  |
| 65°   | 110.6  |
| 67.5° | 97.5   |
| 70°   | 84.5   |
| 72.5° | 71.4   |
| 75°   | 59.2   |
| 77.5° | 46.6   |
| 80°   | 35.3   |
| 82.5° | 24.8   |
| 85°   | 14.4   |
| 87.5° | 5.7    |
| 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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Scaled Data Report



— 0°-180°

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Scaled Data Report



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