

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: P748951

Luminaire Tested: LD4D45BD010-EU4DR7040509027-4LBS1LI

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748951  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-76)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D45BD010-EU4DR7040509027-4LBS1LI  
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 70° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4462.5 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.04  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct

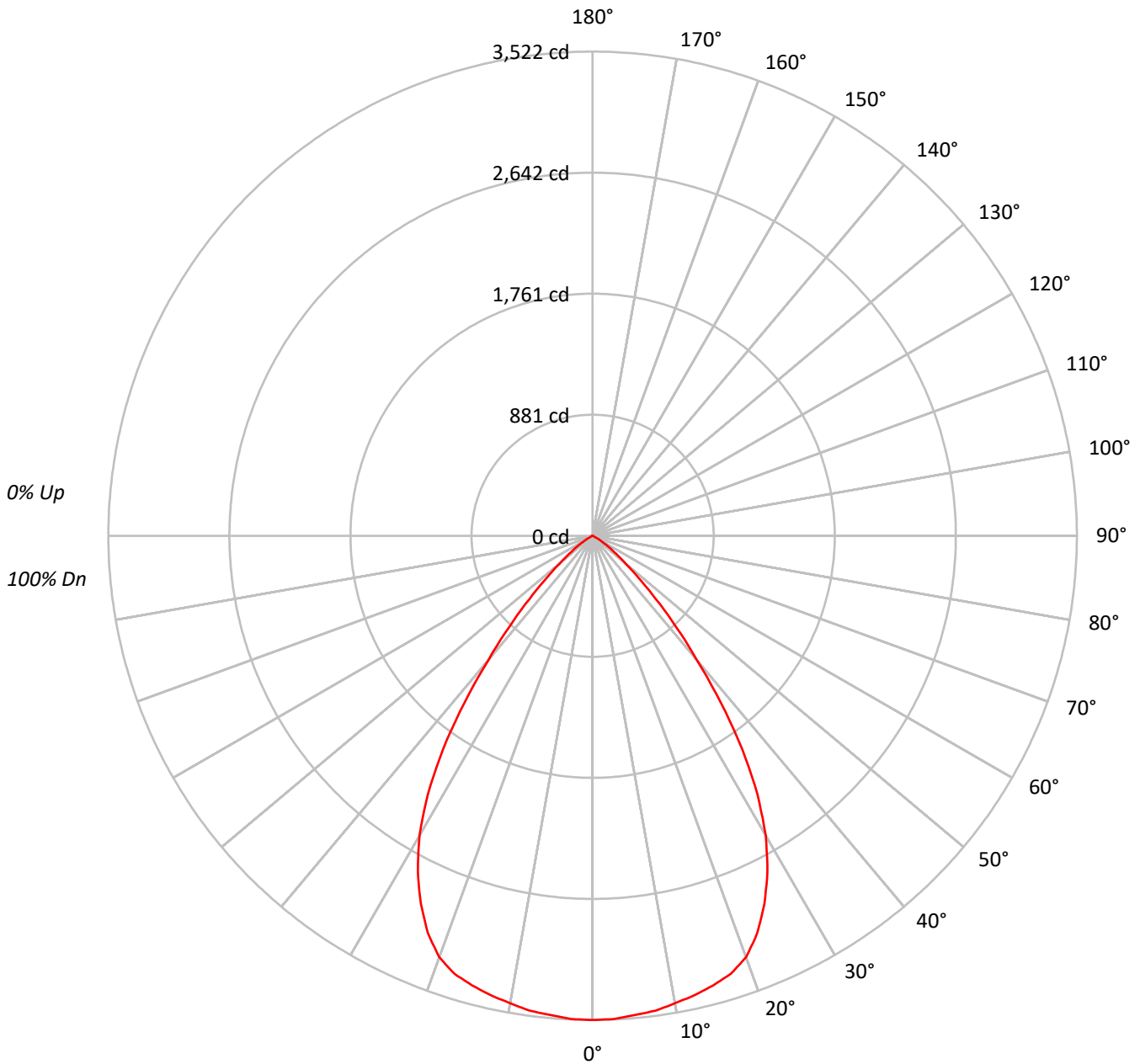
Input Watts (W): 38.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



Downlight

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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| 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   | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99  | 97  | 97  | 95  | 94  | 93  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 107 | 102 | 97  | 94  | 105 | 100 | 96  | 92  | 97  | 93  | 90  | 94  | 91  | 88  | 91  | 89  | 87  | 85  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 101 | 94  | 88  | 84  | 99  | 92  | 87  | 83  | 90  | 85  | 82  | 87  | 84  | 81  | 85  | 82  | 79  | 78  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 95  | 87  | 81  | 76  | 93  | 86  | 80  | 76  | 83  | 78  | 75  | 81  | 77  | 74  | 79  | 76  | 73  | 71  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 89  | 80  | 74  | 69  | 88  | 79  | 73  | 69  | 78  | 72  | 68  | 76  | 71  | 68  | 74  | 70  | 67  | 65  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 84  | 75  | 68  | 63  | 83  | 74  | 68  | 63  | 72  | 67  | 63  | 71  | 66  | 62  | 69  | 65  | 62  | 60  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 80  | 69  | 63  | 58  | 78  | 69  | 62  | 58  | 67  | 62  | 58  | 66  | 61  | 57  | 65  | 61  | 57  | 56  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 75  | 65  | 58  | 54  | 74  | 64  | 58  | 54  | 63  | 57  | 53  | 62  | 57  | 53  | 61  | 56  | 53  | 51  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 71  | 61  | 54  | 50  | 70  | 60  | 54  | 50  | 59  | 53  | 50  | 58  | 53  | 49  | 57  | 53  | 49  | 48  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 67  | 57  | 50  | 46  | 66  | 56  | 50  | 46  | 55  | 50  | 46  | 55  | 50  | 46  | 54  | 49  | 46  | 44  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 384838 |
| 5°  | 383884 |
| 10° | 383053 |
| 15° | 382940 |
| 20° | 379201 |
| 25° | 356207 |
| 30° | 317566 |
| 35° | 253187 |
| 40° | 168118 |
| 45° | 100514 |
| 50° | 52116  |
| 55° | 27393  |
| 60° | 9681   |
| 65° | 155    |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 100514 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 332.9  | 7.5       |
| 10°-20°   | 954.6  | 21.4      |
| 20°-30°   | 1346.7 | 30.2      |
| 30°-40°   | 1162.6 | 26.1      |
| 40°-50°   | 520.6  | 11.7      |
| 50°-60°   | 136.3  | 3.1       |
| 60°-70°   | 8.9    | 0.2       |
| 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°    | 2634.2 | 59.0      |
| 0°-40°    | 3796.8 | 85.1      |
| 0°-60°    | 4453.7 | 99.8      |
| 0°-90°    | 4462.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4462.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3522 |      |
| 5°  | 3500 | 333  |
| 15° | 3385 | 955  |
| 25° | 2955 | 1347 |
| 35° | 1898 | 1163 |
| 45° | 650  | 521  |
| 55° | 144  | 136  |
| 65° | 1    | 9    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3522.2 |
| 2.5°  | 3518.4 |
| 5°    | 3500.1 |
| 7.5°  | 3484.9 |
| 10°   | 3452.6 |
| 12.5° | 3423.4 |
| 15°   | 3385.4 |
| 17.5° | 3341.7 |
| 20°   | 3261.3 |
| 22.5° | 3128.9 |
| 25°   | 2954.7 |
| 27.5° | 2752.7 |
| 30°   | 2517.1 |
| 32.5° | 2228.9 |
| 35°   | 1898.2 |
| 37.5° | 1533.4 |
| 40°   | 1178.7 |
| 42.5° | 895.6  |
| 45°   | 650.5  |
| 47.5° | 448.4  |
| 50°   | 306.6  |
| 52.5° | 211.5  |
| 55°   | 143.8  |
| 57.5° | 86.8   |
| 60°   | 44.3   |
| 62.5° | 13.9   |
| 65°   | 0.6    |
| 67.5° | 0.0    |
| 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    |

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





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— 0°-180°

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