

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: P739097

Luminaire Tested: LD4D02D010-EU4DR300210IC9035-4LBDP1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P739097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D02D010-EU4DR300210IC9035-4LBDP1B  
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 289.3 lumens  
Efficiency: N/A  
Efficacy: 56.7 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 5.1  
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



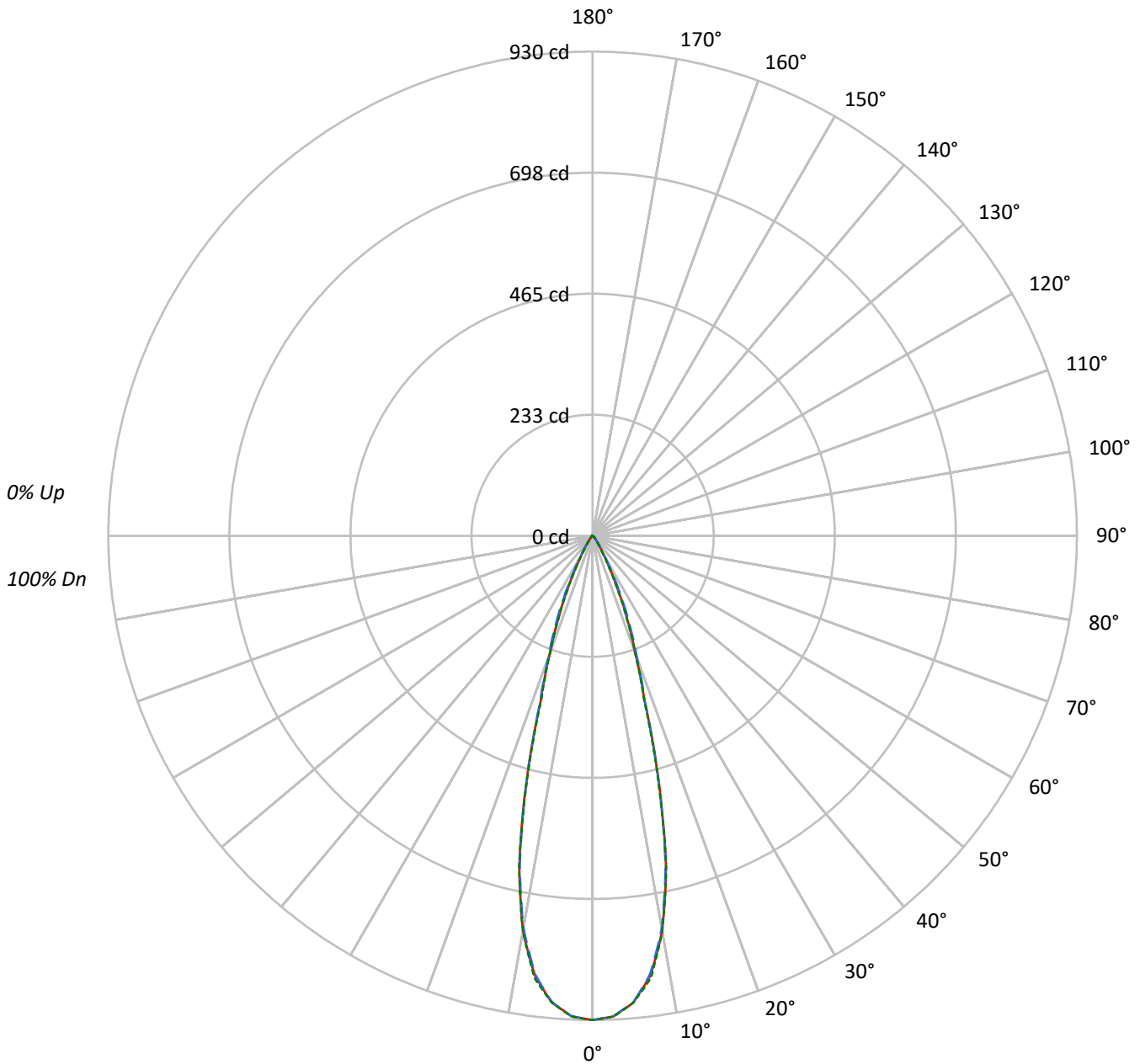
Downlight



TEST NUMBER: P739097

CATALOG NUMBER: LD4D02D010-EU4DR300210IC9035-4LBDP1B

### Luminous Intensity Polar Plot





TEST NUMBER: P739097

CATALOG NUMBER: LD4D02D010-EU4DR300210IC9035-4LBDP1B

**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 | 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 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |    |    |    |    |    | 96  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98  | 99  | 97  | 96  | 97  | 95  | 94  | 92  |    |    |    |    |    | 92  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 93  | 96  | 93  | 91  | 94  | 92  | 90  | 89  |    |    |    |    |    | 89  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 103 | 98  | 93  | 90  | 102 | 96  | 93  | 90  | 94  | 91  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 85  |    |    |    |    |    | 85  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 100 | 94  | 89  | 86  | 98  | 93  | 89  | 86  | 91  | 88  | 85  | 90  | 86  | 84  | 88  | 86  | 83  | 82  |    |    |    |    |    | 82  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 97  | 90  | 85  | 82  | 95  | 89  | 85  | 82  | 88  | 84  | 81  | 87  | 83  | 81  | 85  | 83  | 80  | 79  |    |    |    |    |    | 79  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 94  | 87  | 82  | 79  | 92  | 86  | 82  | 79  | 85  | 81  | 78  | 84  | 81  | 78  | 83  | 80  | 78  | 77  |    |    |    |    |    | 77  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  | 82  | 78  | 76  | 81  | 78  | 75  | 80  | 77  | 75  | 74  |    |    |    |    |    | 74  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  | 80  | 76  | 73  | 79  | 75  | 73  | 78  | 75  | 73  | 72  |    |    |    |    |    | 72  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 85  | 78  | 74  | 71  | 85  | 78  | 74  | 71  | 77  | 73  | 71  | 76  | 73  | 71  | 76  | 73  | 70  | 69  |    |    |    |    |    | 69  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 71193 | 71193 | 71193 |
| 5°  | 69145 | 69068 | 69152 |
| 10° | 59894 | 59475 | 59879 |
| 15° | 39075 | 38869 | 38671 |
| 20° | 19435 | 20160 | 19403 |
| 25° | 9788  | 11038 | 9586  |
| 30° | 3915  | 4269  | 3412  |
| 35° | 1822  | 1738  | 1458  |
| 40° | 779   | 869   | 739   |
| 45° | 552   | 693   | 563   |
| 50° | 191   | 500   | 202   |
| 55° | 107   | 200   | 120   |
| 60° | 77    | 92    | 77    |
| 65° | 54    | 54    | 54    |
| 70° | 22    | 22    | 22    |
| 75° | 0     | 30    | 0     |
| 80° | 0     | 0     | 0     |
| 85° | 0     | 0     | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 693 cd/sqm



TEST NUMBER: P739097

CATALOG NUMBER: LD4D02D010-EU4DR300210IC9035-4LBDP1B

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.8   | 28.3      |
| 10°-20°   | 131.7  | 45.5      |
| 20°-30°   | 56.9   | 19.7      |
| 30°-40°   | 13.0   | 4.5       |
| 40°-50°   | 4.5    | 1.5       |
| 50°-60°   | 1.1    | 0.4       |
| 60°-70°   | 0.3    | 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°    | 270.4  | 93.5      |
| 0°-40°    | 283.4  | 98.0      |
| 0°-60°    | 288.9  | 99.9      |
| 0°-90°    | 289.3  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 289.3  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 930 | 930   | 930 | 930   | 930 |      |
| 5°  | 900 | 899   | 899 | 901   | 900 | 82   |
| 15° | 493 | 487   | 490 | 489   | 488 | 132  |
| 25° | 116 | 120   | 131 | 117   | 114 | 55   |
| 35° | 20  | 20    | 19  | 18    | 16  | 13   |
| 45° | 5   | 6     | 6   | 6     | 5   | 4    |
| 55° | 1   | 1     | 2   | 1     | 1   | 1    |
| 65° | 0   | 0     | 0   | 0     | 0   | 0    |
| 75° | 0   | 0     | 0   | 0     | 0   | 0    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P739097

CATALOG NUMBER: LD4D02D010-EU4DR300210IC9035-4LBDP1B

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 930.1 | 930.1 | 930.1 | 930.1 | 930.1 |
| 2.5°  | 923.9 | 923.3 | 923.7 | 924.1 | 924.3 |
| 5°    | 899.9 | 899.1 | 898.9 | 900.8 | 900.0 |
| 7.5°  | 851.6 | 850.4 | 848.5 | 852.7 | 856.7 |
| 10°   | 770.6 | 769.2 | 765.2 | 767.2 | 770.4 |
| 12.5° | 651.0 | 646.6 | 646.5 | 652.9 | 652.0 |
| 15°   | 493.1 | 487.2 | 490.5 | 488.9 | 488.0 |
| 17.5° | 331.6 | 329.3 | 333.7 | 332.4 | 326.7 |
| 20°   | 238.6 | 239.1 | 247.5 | 243.3 | 238.2 |
| 22.5° | 174.1 | 176.2 | 186.2 | 175.3 | 171.3 |
| 25°   | 115.9 | 120.3 | 130.7 | 117.2 | 113.5 |
| 27.5° | 71.3  | 73.3  | 83.8  | 70.4  | 68.4  |
| 30°   | 44.3  | 43.3  | 48.3  | 41.5  | 38.6  |
| 32.5° | 29.1  | 27.8  | 29.4  | 26.4  | 24.1  |
| 35°   | 19.5  | 19.9  | 18.6  | 18.5  | 15.6  |
| 37.5° | 12.1  | 14.0  | 12.3  | 13.2  | 10.0  |
| 40°   | 7.8   | 10.1  | 8.7   | 9.6   | 7.4   |
| 42.5° | 6.4   | 7.8   | 7.2   | 7.6   | 6.6   |
| 45°   | 5.1   | 6.4   | 6.4   | 6.4   | 5.2   |
| 47.5° | 2.8   | 4.2   | 5.4   | 4.4   | 3.0   |
| 50°   | 1.6   | 2.1   | 4.2   | 2.2   | 1.7   |
| 52.5° | 1.1   | 1.3   | 2.9   | 1.3   | 1.1   |
| 55°   | 0.8   | 0.9   | 1.5   | 0.9   | 0.9   |
| 57.5° | 0.6   | 0.7   | 0.8   | 0.7   | 0.6   |
| 60°   | 0.5   | 0.5   | 0.6   | 0.6   | 0.5   |
| 62.5° | 0.3   | 0.3   | 0.4   | 0.3   | 0.3   |
| 65°   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   |
| 67.5° | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   |
| 70°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   |
| 72.5° | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   |
| 75°   | 0.0   | 0.0   | 0.1   | 0.0   | 0.0   |
| 77.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 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

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

Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)