

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: P748998

Luminaire Tested: LD4D45BD010-EU4DR7040509050-4LBDP1H

Issue Date: 2/5/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748998  
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-EU4DR7040509050-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-SPECULAR CLEAR TRIM, WITH 70° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4431.4 lumens  
Efficiency: N/A  
Efficacy: 114.5 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

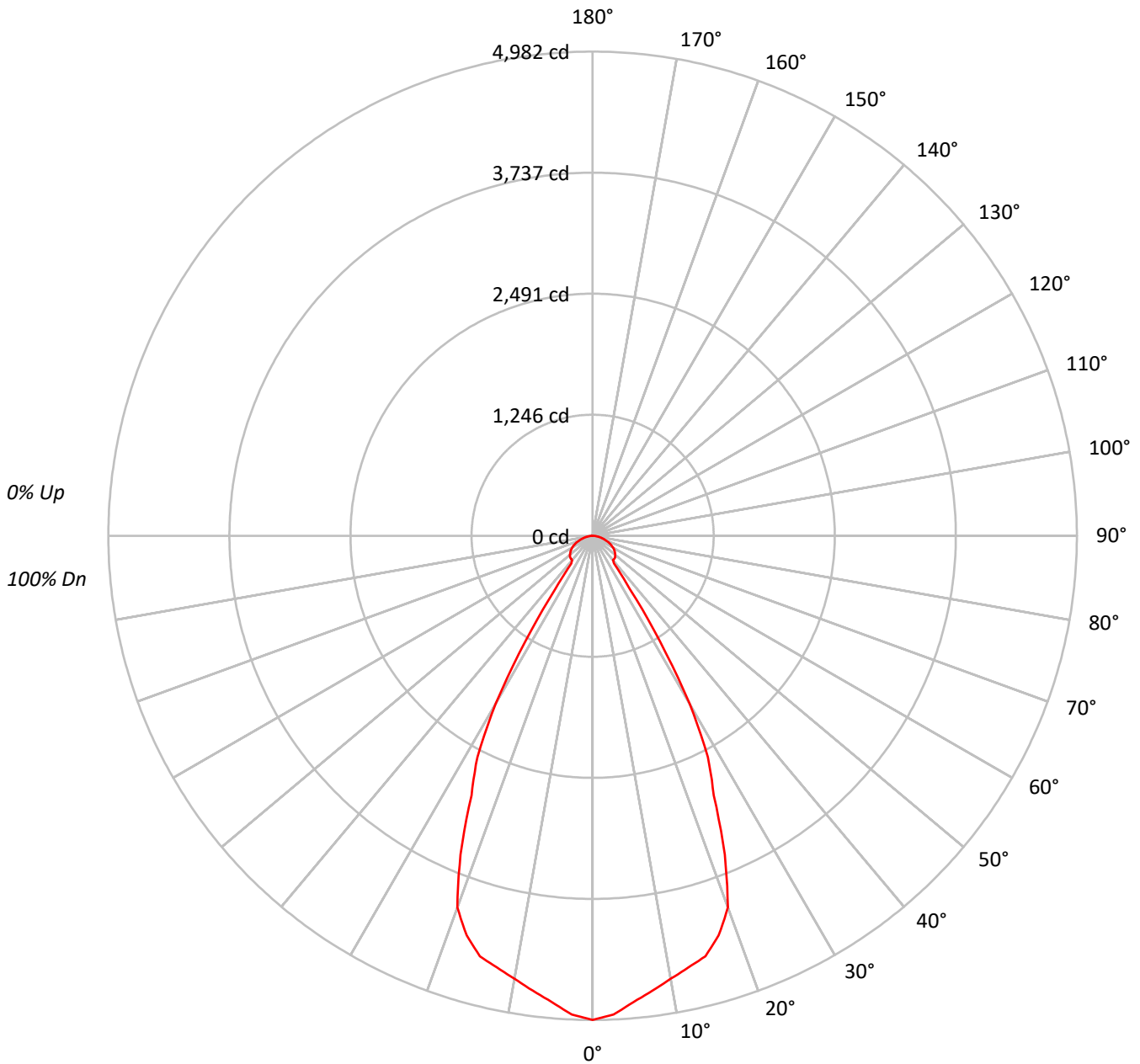


Downlight

TEST NUMBER: P748998

CATALOG NUMBER: LD4D45BD010-EU4DR7040509050-4LBDP1H

### Luminous Intensity Polar Plot





TEST NUMBER: P748998  
 CATALOG NUMBER: LD4D45BD010-EU4DR7040509050-4LBDP1H

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

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

|     | 0°     |
|-----|--------|
| 0°  | 544348 |
| 5°  | 528177 |
| 10° | 513448 |
| 15° | 506710 |
| 20° | 473161 |
| 25° | 355471 |
| 30° | 251280 |
| 35° | 89006  |
| 40° | 46797  |
| 45° | 49848  |
| 50° | 51623  |
| 55° | 52594  |
| 60° | 52926  |
| 65° | 51810  |
| 70° | 48877  |
| 75° | 45297  |
| 80° | 40206  |
| 85° | 32594  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 57.5°  
 Luminance: 52932 cd/sqm



TEST NUMBER: P748998

CATALOG NUMBER: LD4D45BD010-EU4DR7040509050-4LBDP1H

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 454.2  | 10.3      |
| 10°-20°   | 1245.9 | 28.1      |
| 20°-30°   | 1372.2 | 31.0      |
| 30°-40°   | 524.3  | 11.8      |
| 40°-50°   | 247.5  | 5.6       |
| 50°-60°   | 246.1  | 5.6       |
| 60°-70°   | 197.1  | 4.4       |
| 70°-80°   | 113.3  | 2.6       |
| 80°-90°   | 30.8   | 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°    | 3072.3 | 69.3      |
| 0°-40°    | 3596.6 | 81.2      |
| 0°-60°    | 4090.2 | 92.3      |
| 0°-90°    | 4431.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4431.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 4982 |      |
| 5°  | 4816 | 454  |
| 15° | 4480 | 1246 |
| 25° | 2949 | 1372 |
| 35° | 667  | 524  |
| 45° | 323  | 248  |
| 55° | 276  | 246  |
| 65° | 200  | 197  |
| 75° | 107  | 113  |
| 85° | 26   | 31   |
| 90° | 0    |      |



TEST NUMBER: P748998

CATALOG NUMBER: LD4D45BD010-EU4DR7040509050-4LBDP1H

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 4982.1 |
| 2.5°  | 4930.0 |
| 5°    | 4815.7 |
| 7.5°  | 4720.2 |
| 10°   | 4627.9 |
| 12.5° | 4549.8 |
| 15°   | 4479.6 |
| 17.5° | 4310.0 |
| 20°   | 4069.4 |
| 22.5° | 3550.4 |
| 25°   | 2948.6 |
| 27.5° | 2566.8 |
| 30°   | 1991.7 |
| 32.5° | 1286.5 |
| 35°   | 667.3  |
| 37.5° | 360.5  |
| 40°   | 328.1  |
| 42.5° | 325.8  |
| 45°   | 322.6  |
| 47.5° | 315.5  |
| 50°   | 303.7  |
| 52.5° | 290.3  |
| 55°   | 276.1  |
| 57.5° | 260.3  |
| 60°   | 242.2  |
| 62.5° | 221.7  |
| 65°   | 200.4  |
| 67.5° | 176.7  |
| 70°   | 153.0  |
| 72.5° | 129.4  |
| 75°   | 107.3  |
| 77.5° | 84.4   |
| 80°   | 63.9   |
| 82.5° | 45.0   |
| 85°   | 26.0   |
| 87.5° | 10.3   |
| 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

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



— 0°-180°

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)