

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: P744431

Luminaire Tested: LD4D20D010-EU4DR5020359030-4LBCSSQMB

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P744431  
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: LD4D20D010-EU4DR5020359030-4LBCSSQMB  
Description: 4 INCH SQAURE SHALLOW CAST MATTE BLACK TRIM, WITH 50° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1847.0 lumens  
Efficiency: N/A  
Efficacy: 80.0 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): 23.1  
Input Voltage (V): NR  
Input Current (Ain): 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

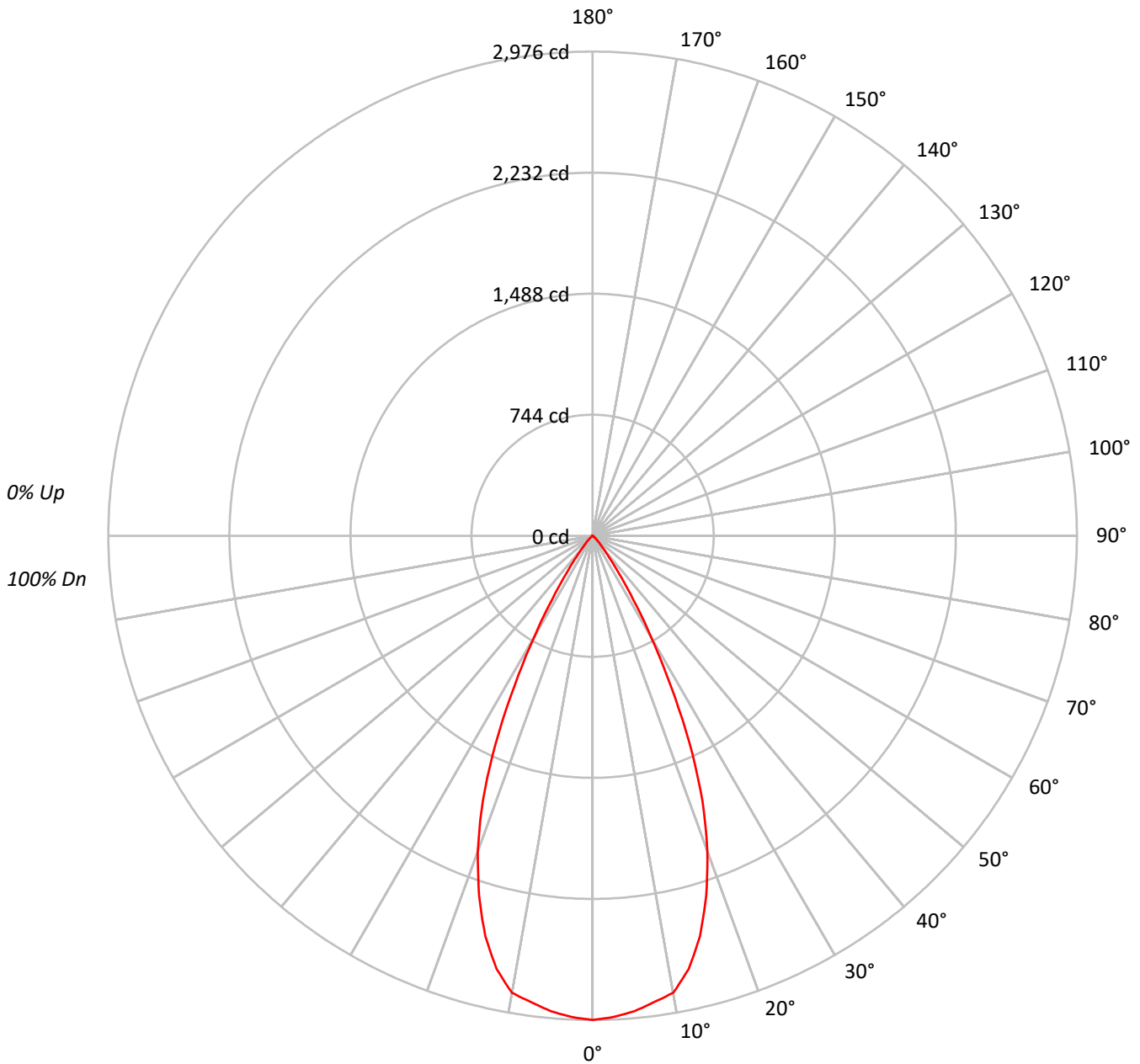


Downlight



TEST NUMBER: P744431  
CATALOG NUMBER: LD4D20D010-EU4DR5020359030-4LBCSSQMB

### Luminous Intensity Polar Plot





TEST NUMBER: P744431  
 CATALOG NUMBER: LD4D20D010-EU4DR5020359030-4LBCSSQMB

**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   | 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°  | 325160 |
| 5°  | 321752 |
| 10° | 316452 |
| 15° | 288161 |
| 20° | 239778 |
| 25° | 170213 |
| 30° | 90093  |
| 35° | 36707  |
| 40° | 13635  |
| 45° | 6243   |
| 50° | 2567   |
| 55° | 1333   |
| 60° | 656    |
| 65° | 181    |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6243 cd/sqm



TEST NUMBER: P744431

CATALOG NUMBER: LD4D20D010-EU4DR5020359030-4LBCSSQMB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 277.3  | 15.0      |
| 10°-20°   | 700.8  | 37.9      |
| 20°-30°   | 629.5  | 34.1      |
| 30°-40°   | 197.1  | 10.7      |
| 40°-50°   | 34.5   | 1.9       |
| 50°-60°   | 6.9    | 0.4       |
| 60°-70°   | 1.0    | 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°    | 1607.5 | 87.0      |
| 0°-40°    | 1804.6 | 97.7      |
| 0°-60°    | 1846.0 | 99.9      |
| 0°-90°    | 1847.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1847.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2976 |      |
| 5°  | 2934 | 277  |
| 15° | 2548 | 701  |
| 25° | 1412 | 629  |
| 35° | 275  | 197  |
| 45° | 40   | 35   |
| 55° | 7    | 7    |
| 65° | 1    | 1    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



TEST NUMBER: P744431

CATALOG NUMBER: LD4D20D010-EU4DR5020359030-4LBCSSQMB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2976.0 |
| 2.5°  | 2961.2 |
| 5°    | 2933.6 |
| 7.5°  | 2891.5 |
| 10°   | 2852.3 |
| 12.5° | 2726.8 |
| 15°   | 2547.5 |
| 17.5° | 2319.6 |
| 20°   | 2062.2 |
| 22.5° | 1764.4 |
| 25°   | 1411.9 |
| 27.5° | 1038.0 |
| 30°   | 714.1  |
| 32.5° | 464.9  |
| 35°   | 275.2  |
| 37.5° | 158.1  |
| 40°   | 95.6   |
| 42.5° | 62.2   |
| 45°   | 40.4   |
| 47.5° | 24.6   |
| 50°   | 15.1   |
| 52.5° | 10.3   |
| 55°   | 7.0    |
| 57.5° | 4.8    |
| 60°   | 3.0    |
| 62.5° | 1.8    |
| 65°   | 0.7    |
| 67.5° | 0.2    |
| 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

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)