

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: P780227

Luminaire Tested: LER4D20D010-EC4DR4020359027-4LBS1MW

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P780227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-28)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LER4D20D010-EC4DR4020359027-4LBS1MW  
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 40° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1864.2 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.6  
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



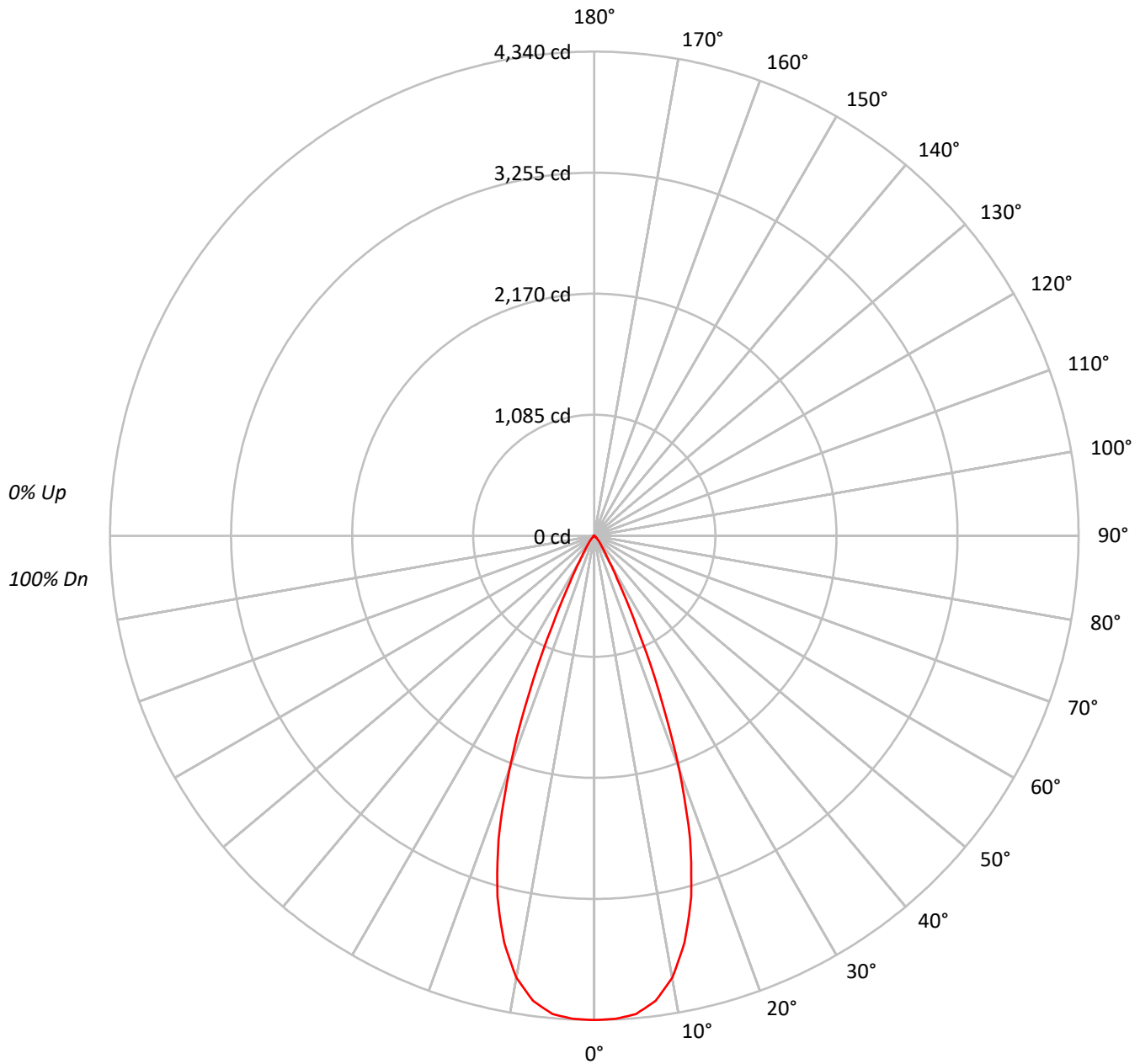
Downlight



TEST NUMBER: P780227

CATALOG NUMBER: LER4D20D010-EC4DR4020359027-4LBS1MW

### Luminous Intensity Polar Plot



TEST NUMBER: P780227

CATALOG NUMBER: LER4D20D010-EC4DR4020359027-4LBS1MW

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

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 |  | 103 | 101 | 100 |  | 99  |
| 2   | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 99  | 102 | 99  | 97  |  | 99  | 97  | 95  |  | 96  |
| 3   | 106 | 101 | 97  | 94  | 104 | 100 | 96  | 93  | 97  | 94  | 92  |  | 95  | 93  | 90  |  | 93  |
| 4   | 102 | 97  | 92  | 89  | 101 | 95  | 91  | 88  | 93  | 90  | 87  |  | 92  | 89  | 86  |  | 90  |
| 5   | 99  | 92  | 88  | 84  | 97  | 91  | 87  | 84  | 90  | 86  | 83  |  | 88  | 85  | 83  |  | 87  |
| 6   | 95  | 88  | 84  | 80  | 94  | 88  | 83  | 80  | 86  | 82  | 80  |  | 85  | 82  | 79  |  | 84  |
| 7   | 92  | 85  | 80  | 77  | 91  | 84  | 80  | 77  | 83  | 79  | 76  |  | 82  | 79  | 76  |  | 81  |
| 8   | 89  | 82  | 77  | 74  | 88  | 81  | 77  | 74  | 80  | 76  | 73  |  | 79  | 76  | 73  |  | 78  |
| 9   | 86  | 79  | 74  | 71  | 85  | 78  | 74  | 71  | 77  | 73  | 71  |  | 77  | 73  | 70  |  | 76  |
| 10  | 83  | 76  | 71  | 68  | 82  | 75  | 71  | 68  | 75  | 71  | 68  |  | 74  | 70  | 68  |  | 73  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 474235 |
| 5°  | 471934 |
| 10° | 446082 |
| 15° | 379230 |
| 20° | 258463 |
| 25° | 107837 |
| 30° | 33913  |
| 35° | 15753  |
| 40° | 8715   |
| 45° | 3987   |
| 50° | 1938   |
| 55° | 1067   |
| 60° | 546    |
| 65° | 181    |
| 70° | 64     |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3987 cd/sqm



TEST NUMBER: P780227

CATALOG NUMBER: LER4D20D010-EC4DR4020359027-4LBS1MW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 401.8  | 21.6      |
| 10°-20°   | 900.1  | 48.3      |
| 20°-30°   | 450.6  | 24.2      |
| 30°-40°   | 82.6   | 4.4       |
| 40°-50°   | 22.8   | 1.2       |
| 50°-60°   | 5.4    | 0.3       |
| 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°    | 1752.4 | 94.0      |
| 0°-40°    | 1835.0 | 98.4      |
| 0°-60°    | 1863.2 | 99.9      |
| 0°-90°    | 1864.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1864.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 4340 |      |
| 5°  | 4303 | 402  |
| 15° | 3353 | 900  |
| 25° | 894  | 451  |
| 35° | 118  | 83   |
| 45° | 26   | 23   |
| 55° | 6    | 5    |
| 65° | 1    | 1    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



TEST NUMBER: P780227

CATALOG NUMBER: LER4D20D010-EC4DR4020359027-4LBS1MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 4340.4 |
| 2.5°  | 4334.1 |
| 5°    | 4302.9 |
| 7.5°  | 4203.5 |
| 10°   | 4020.7 |
| 12.5° | 3735.7 |
| 15°   | 3352.6 |
| 17.5° | 2854.3 |
| 20°   | 2222.9 |
| 22.5° | 1515.5 |
| 25°   | 894.5  |
| 27.5° | 472.9  |
| 30°   | 268.8  |
| 32.5° | 173.7  |
| 35°   | 118.1  |
| 37.5° | 84.5   |
| 40°   | 61.1   |
| 42.5° | 41.8   |
| 45°   | 25.8   |
| 47.5° | 16.5   |
| 50°   | 11.4   |
| 52.5° | 8.1    |
| 55°   | 5.6    |
| 57.5° | 3.6    |
| 60°   | 2.5    |
| 62.5° | 1.5    |
| 65°   | 0.7    |
| 67.5° | 0.5    |
| 70°   | 0.2    |
| 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    |



Report Generated By 670245859 / DESKTOP-T8S5UU9







— 0°-180°







(END OF REPORT)