

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: P778623

Luminaire Tested: LER4D02D010-EC4DR300210IC9030-4LBS1MW

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P778623  
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: LER4D02D010-EC4DR300210IC9030-4LBS1MW  
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 340.5 lumens  
Efficiency: N/A  
Efficacy: 66.8 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 (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



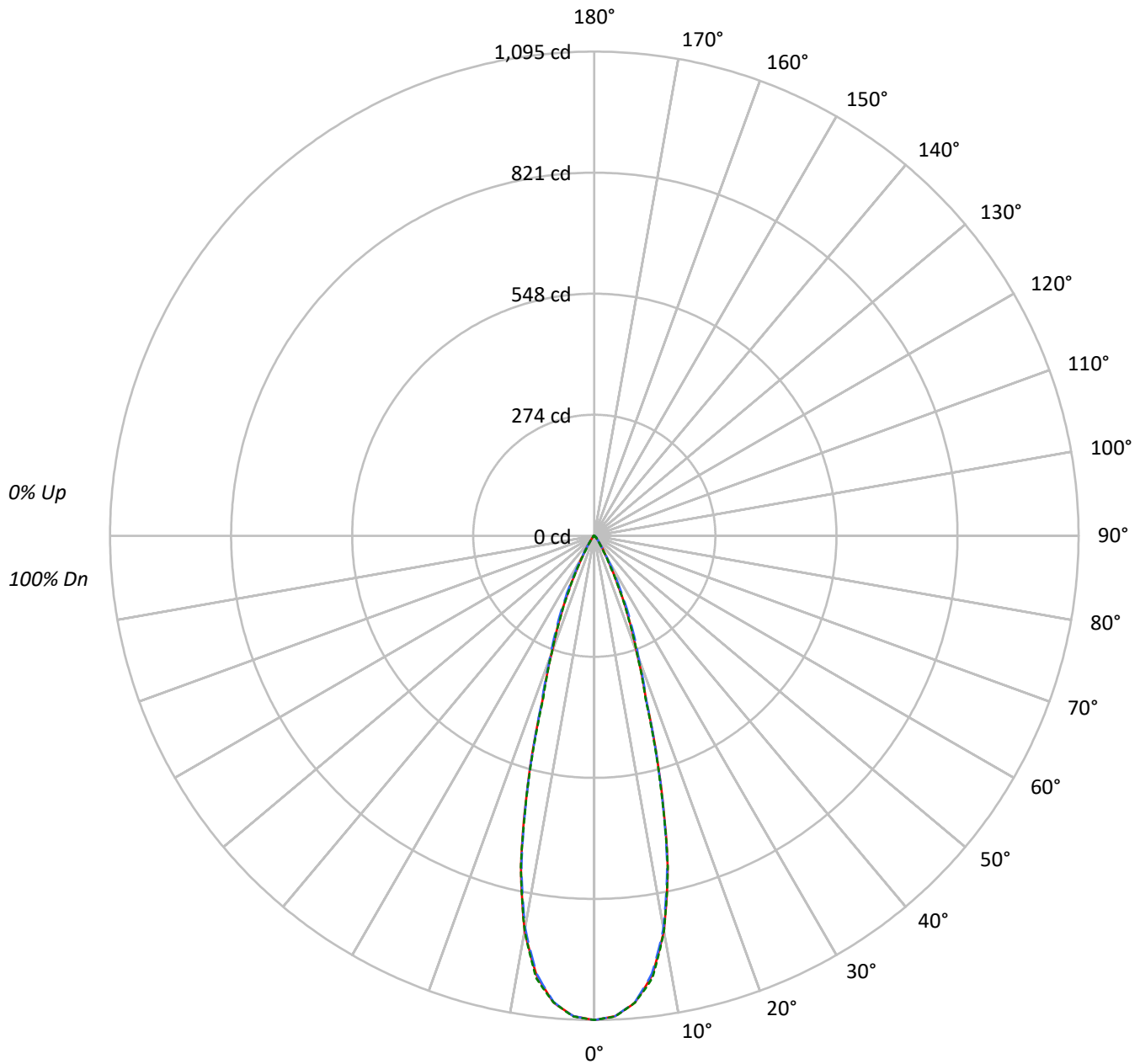
Downlight



TEST NUMBER: P778623

CATALOG NUMBER: LER4D02D010-EC4DR300210IC9030-4LBS1MW

### Luminous Intensity Polar Plot



TEST NUMBER: P778623

CATALOG NUMBER: LER4D02D010-EC4DR300210IC9030-4LBS1MW

**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 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 |  | 103 | 102 | 101 |  | 99  |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98  |  | 99  | 97  | 96  |  | 97  |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 93  |  | 96  | 93  | 91  |  | 94  |
| 4   | 103 | 98  | 93  | 90  | 102 | 96  | 93  | 90  | 94  | 91  | 89  |  | 93  | 90  | 88  |  | 91  |
| 5   | 100 | 94  | 89  | 86  | 98  | 93  | 89  | 86  | 91  | 88  | 85  |  | 90  | 86  | 84  |  | 88  |
| 6   | 97  | 90  | 85  | 82  | 95  | 89  | 85  | 82  | 88  | 84  | 81  |  | 87  | 83  | 81  |  | 85  |
| 7   | 94  | 87  | 82  | 79  | 92  | 86  | 82  | 79  | 85  | 81  | 78  |  | 84  | 81  | 78  |  | 83  |
| 8   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  | 82  | 78  | 76  |  | 81  | 78  | 75  |  | 80  |
| 9   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  | 80  | 76  | 73  |  | 79  | 75  | 73  |  | 78  |
| 10  | 85  | 78  | 74  | 71  | 85  | 78  | 74  | 71  | 77  | 73  | 71  |  | 76  | 73  | 71  |  | 76  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 83815 | 83815 | 83815 |
| 5°  | 81408 | 81308 | 81415 |
| 10° | 70511 | 70014 | 70496 |
| 15° | 46009 | 45755 | 45525 |
| 20° | 22881 | 23736 | 22848 |
| 25° | 11520 | 12989 | 11292 |
| 30° | 4614  | 5029  | 4022  |
| 35° | 2140  | 2046  | 1719  |
| 40° | 919   | 1029  | 869   |
| 45° | 649   | 801   | 660   |
| 50° | 226   | 583   | 238   |
| 55° | 133   | 240   | 133   |
| 60° | 92    | 107   | 92    |
| 65° | 54    | 54    | 54    |
| 70° | 45    | 22    | 45    |
| 75° | 0     | 30    | 0     |
| 80° | 0     | 0     | 0     |
| 85° | 0     | 0     | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 801 cd/sqm



TEST NUMBER: P778623

CATALOG NUMBER: LER4D02D010-EC4DR300210IC9030-4LBS1MW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.3   | 28.3      |
| 10°-20°   | 155.1  | 45.5      |
| 20°-30°   | 67.0   | 19.7      |
| 30°-40°   | 15.3   | 4.5       |
| 40°-50°   | 5.2    | 1.5       |
| 50°-60°   | 1.3    | 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°    | 318.4  | 93.5      |
| 0°-40°    | 333.6  | 98.0      |
| 0°-60°    | 340.1  | 99.9      |
| 0°-90°    | 340.5  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 340.5  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1095 | 1095  | 1095 | 1095  | 1095 |      |
| 5°  | 1060 | 1058  | 1058 | 1060  | 1060 | 96   |
| 15° | 581  | 574   | 577  | 576   | 574  | 155  |
| 25° | 136  | 142   | 154  | 138   | 134  | 65   |
| 35° | 23   | 23    | 22   | 22    | 18   | 16   |
| 45° | 6    | 7     | 7    | 7     | 6    | 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: P778623

CATALOG NUMBER: LER4D02D010-EC4DR300210IC9030-4LBS1MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1095.0 | 1095.0 | 1095.0 | 1095.0 | 1095.0 |
| 2.5°  | 1087.7 | 1086.9 | 1087.4 | 1087.9 | 1088.1 |
| 5°    | 1059.5 | 1058.5 | 1058.2 | 1060.5 | 1059.6 |
| 7.5°  | 1002.5 | 1001.1 | 998.9  | 1003.9 | 1008.6 |
| 10°   | 907.2  | 905.5  | 900.8  | 903.1  | 907.0  |
| 12.5° | 766.4  | 761.2  | 761.1  | 768.6  | 767.6  |
| 15°   | 580.6  | 573.6  | 577.4  | 575.5  | 574.5  |
| 17.5° | 390.4  | 387.7  | 392.9  | 391.3  | 384.6  |
| 20°   | 280.9  | 281.5  | 291.4  | 286.4  | 280.5  |
| 22.5° | 204.9  | 207.5  | 219.1  | 206.4  | 201.7  |
| 25°   | 136.4  | 141.6  | 153.8  | 138.0  | 133.7  |
| 27.5° | 83.9   | 86.3   | 98.7   | 82.8   | 80.5   |
| 30°   | 52.2   | 51.0   | 56.9   | 48.8   | 45.5   |
| 32.5° | 34.3   | 32.7   | 34.6   | 31.1   | 28.4   |
| 35°   | 22.9   | 23.4   | 21.9   | 21.8   | 18.4   |
| 37.5° | 14.3   | 16.4   | 14.5   | 15.5   | 11.8   |
| 40°   | 9.2    | 11.9   | 10.3   | 11.3   | 8.7    |
| 42.5° | 7.6    | 9.2    | 8.4    | 9.0    | 7.7    |
| 45°   | 6.0    | 7.4    | 7.4    | 7.4    | 6.1    |
| 47.5° | 3.3    | 5.0    | 6.4    | 5.1    | 3.6    |
| 50°   | 1.9    | 2.5    | 4.9    | 2.6    | 2.0    |
| 52.5° | 1.3    | 1.4    | 3.4    | 1.5    | 1.3    |
| 55°   | 1.0    | 1.0    | 1.8    | 1.1    | 1.0    |
| 57.5° | 0.7    | 0.8    | 1.0    | 0.8    | 0.7    |
| 60°   | 0.6    | 0.6    | 0.7    | 0.6    | 0.6    |
| 62.5° | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    |
| 65°   | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    |
| 67.5° | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    |
| 70°   | 0.2    | 0.1    | 0.1    | 0.1    | 0.2    |
| 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    |



Report Generated By 670245859 / DESKTOP-T8S5UU9





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







(END OF REPORT)