

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: PrentaLux

Report Number: P867134

Luminaire Tested: PRLX-2002-L-940-15L-L-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867134
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-82)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-940-15L-L-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

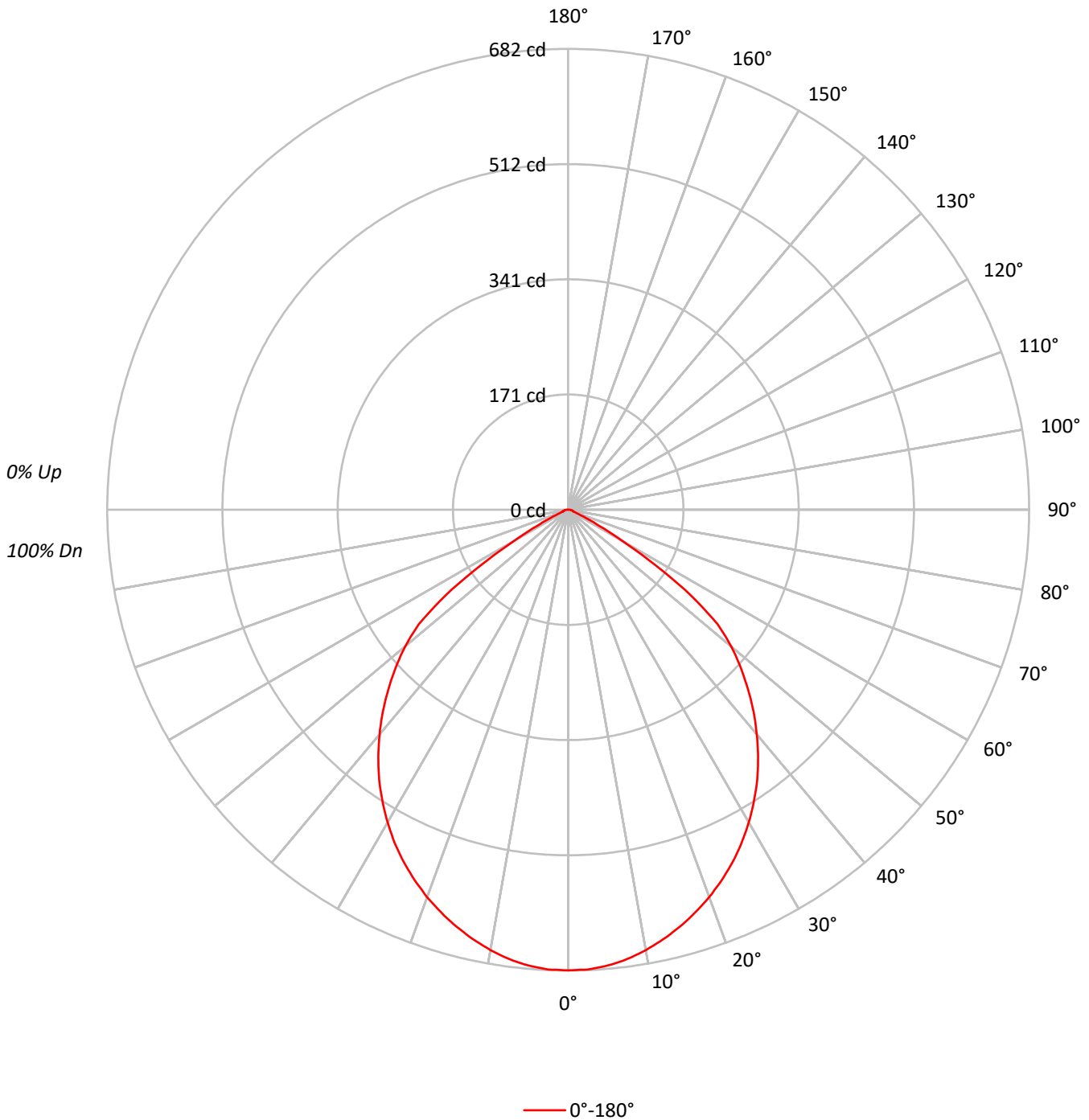
Lumens per Lamp: N/A
Luminaire Lumens: 1339.8 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 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 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 90 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 91 | 86 | 92 | 88 | 84 | 89 | 86 | 83 | 86 | 83 | 81 | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 75 | 83 | 78 | 74 | 81 | 76 | 73 | 78 | 75 | 71 | 69 |
| 4 | 89 | 79 | 72 | 66 | 87 | 78 | 71 | 66 | 75 | 70 | 65 | 73 | 68 | 64 | 71 | 67 | 63 | 61 |
| 5 | 83 | 72 | 64 | 58 | 81 | 71 | 63 | 58 | 69 | 62 | 57 | 67 | 61 | 57 | 65 | 60 | 56 | 54 |
| 6 | 77 | 65 | 57 | 52 | 75 | 64 | 57 | 52 | 63 | 56 | 51 | 61 | 55 | 51 | 60 | 54 | 50 | 48 |
| 7 | 72 | 60 | 52 | 46 | 70 | 59 | 51 | 46 | 57 | 51 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 43 |
| 8 | 67 | 55 | 47 | 42 | 65 | 54 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 50 | 45 | 41 | 39 |
| 9 | 63 | 50 | 43 | 38 | 61 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 37 | 47 | 41 | 37 | 36 |
| 10 | 59 | 47 | 39 | 35 | 58 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 43 | 38 | 34 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3363 |
| 5° | 3353 |
| 10° | 3316 |
| 15° | 3263 |
| 20° | 3203 |
| 25° | 3133 |
| 30° | 3045 |
| 35° | 2937 |
| 40° | 2797 |
| 45° | 2624 |
| 50° | 2418 |
| 55° | 1923 |
| 60° | 905 |
| 65° | 327 |
| 70° | 126 |
| 75° | 139 |
| 80° | 159 |
| 85° | 192 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2624 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.1 | 4.8 |
| 10°-20° | 180.0 | 13.4 |
| 20°-30° | 264.8 | 19.8 |
| 30°-40° | 304.2 | 22.7 |
| 40°-50° | 289.8 | 21.6 |
| 50°-60° | 190.6 | 14.2 |
| 60°-70° | 35.2 | 2.6 |
| 70°-80° | 7.7 | 0.6 |
| 80°-90° | 3.4 | 0.3 |
| 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° | 508.9 | 38.0 |
| 0°-40° | 813.2 | 60.7 |
| 0°-60° | 1293.5 | 96.5 |
| 0°-90° | 1339.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1339.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 682 | |
| 5° | 677 | 64 |
| 15° | 639 | 180 |
| 25° | 576 | 265 |
| 35° | 488 | 304 |
| 45° | 376 | 290 |
| 55° | 224 | 191 |
| 65° | 28 | 35 |
| 75° | 7 | 8 |
| 85° | 3 | 3 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 681.7 |
| 2.5° | 681.0 |
| 5° | 677.1 |
| 7.5° | 670.7 |
| 10° | 661.9 |
| 12.5° | 651.0 |
| 15° | 638.8 |
| 17.5° | 625.0 |
| 20° | 610.1 |
| 22.5° | 593.5 |
| 25° | 575.5 |
| 27.5° | 555.8 |
| 30° | 534.4 |
| 32.5° | 511.5 |
| 35° | 487.6 |
| 37.5° | 461.5 |
| 40° | 434.2 |
| 42.5° | 406.2 |
| 45° | 376.1 |
| 47.5° | 346.3 |
| 50° | 315.0 |
| 52.5° | 278.5 |
| 55° | 223.5 |
| 57.5° | 153.2 |
| 60° | 91.7 |
| 62.5° | 51.6 |
| 65° | 28.0 |
| 67.5° | 14.1 |
| 70° | 8.7 |
| 72.5° | 8.0 |
| 75° | 7.3 |
| 77.5° | 6.6 |
| 80° | 5.6 |
| 82.5° | 4.6 |
| 85° | 3.4 |
| 87.5° | 1.8 |
| 90° | 0.0 |

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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 12.21 | 13.61 | 12.57 | 13.92 | 14.24 | 12.21 | 13.61 | 12.57 | 13.92 | 14.24 |
| | 3H | 12.13 | 13.36 | 12.51 | 13.69 | 14.05 | 12.13 | 13.36 | 12.51 | 13.69 | 14.05 |
| | 4H | 12.08 | 13.22 | 12.48 | 13.57 | 13.96 | 12.08 | 13.22 | 12.48 | 13.57 | 13.96 |
| | 6H | 12.03 | 13.08 | 12.44 | 13.45 | 13.84 | 12.03 | 13.08 | 12.44 | 13.45 | 13.84 |
| | 8H | 12.00 | 13.00 | 12.43 | 13.39 | 13.79 | 12.00 | 13.00 | 12.43 | 13.39 | 13.79 |
| | 12H | 11.98 | 12.93 | 12.41 | 13.31 | 13.74 | 11.98 | 12.93 | 12.41 | 13.31 | 13.74 |
| 4H | 2H | 12.08 | 13.23 | 12.48 | 13.58 | 13.96 | 12.08 | 13.23 | 12.48 | 13.58 | 13.96 |
| | 3H | 12.01 | 12.94 | 12.43 | 13.34 | 13.74 | 12.01 | 12.94 | 12.43 | 13.34 | 13.74 |
| | 4H | 11.96 | 12.78 | 12.40 | 13.20 | 13.65 | 11.96 | 12.78 | 12.40 | 13.20 | 13.65 |
| | 6H | 11.93 | 12.64 | 12.39 | 13.09 | 13.55 | 11.93 | 12.64 | 12.39 | 13.09 | 13.55 |
| | 8H | 11.90 | 12.56 | 12.37 | 13.01 | 13.48 | 11.90 | 12.56 | 12.37 | 13.01 | 13.48 |
| | 12H | 11.88 | 12.47 | 12.37 | 12.95 | 13.43 | 11.88 | 12.47 | 12.37 | 12.95 | 13.43 |
| 8H | 4H | 11.85 | 12.51 | 12.32 | 12.96 | 13.43 | 11.85 | 12.51 | 12.32 | 12.96 | 13.43 |
| | 6H | 11.81 | 12.36 | 12.31 | 12.85 | 13.33 | 11.81 | 12.36 | 12.31 | 12.85 | 13.33 |
| | 8H | 11.79 | 12.28 | 12.31 | 12.80 | 13.29 | 11.79 | 12.28 | 12.31 | 12.80 | 13.29 |
| | 12H | 11.78 | 12.23 | 12.30 | 12.72 | 13.29 | 11.78 | 12.23 | 12.30 | 12.72 | 13.29 |
| 12H | 4H | 11.81 | 12.40 | 12.29 | 12.88 | 13.35 | 11.81 | 12.40 | 12.29 | 12.88 | 13.35 |
| | 6H | 11.76 | 12.25 | 12.28 | 12.77 | 13.26 | 11.76 | 12.25 | 12.28 | 12.77 | 13.26 |
| | 8H | 11.76 | 12.20 | 12.27 | 12.70 | 13.26 | 11.76 | 12.20 | 12.27 | 12.70 | 13.26 |