

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: P866727

Luminaire Tested: PRLX-2001-L-930-100L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-76)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-L-930-100L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

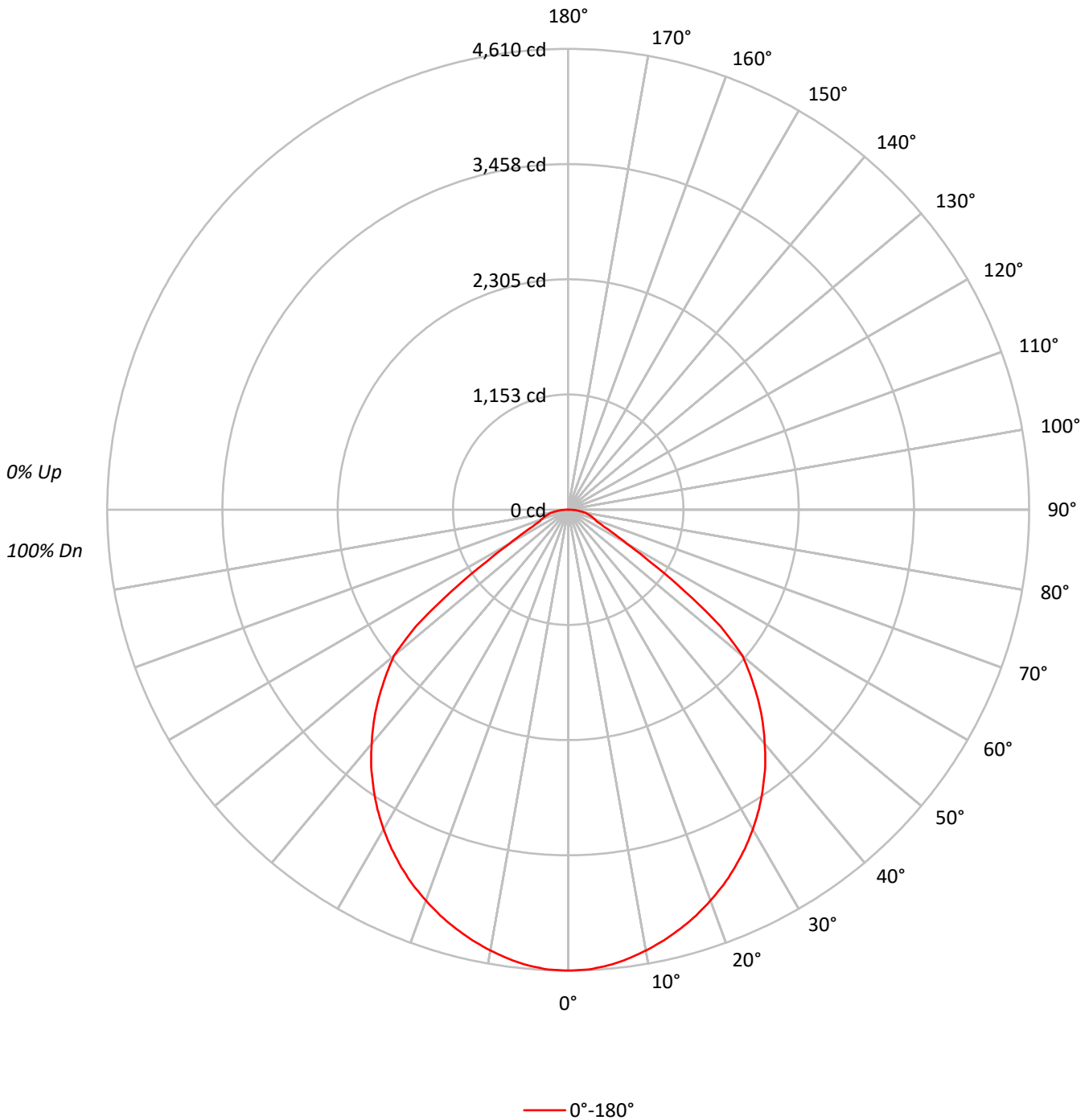
Lumens per Lamp: N/A
Luminaire Lumens: 9694.8 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
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: 0.333 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 | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 99 | 101 | 98 | 96 | | 97 | 95 | 93 | | 93 | 91 | 90 | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 90 | 86 | 82 | | 87 | 84 | 80 | | 84 | 81 | 79 | 77 |
| 3 | 95 | 86 | 79 | 73 | 92 | 84 | 78 | 73 | 81 | 76 | 71 | | 79 | 74 | 70 | | 76 | 72 | 69 | 67 |
| 4 | 88 | 77 | 70 | 64 | 86 | 76 | 69 | 63 | 74 | 67 | 62 | | 71 | 66 | 62 | | 69 | 65 | 61 | 59 |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | | 65 | 59 | 55 | | 63 | 58 | 54 | 52 |
| 6 | 75 | 63 | 55 | 50 | 74 | 63 | 55 | 49 | 61 | 54 | 49 | | 59 | 53 | 49 | | 58 | 52 | 48 | 46 |
| 7 | 70 | 58 | 50 | 44 | 69 | 57 | 50 | 44 | 56 | 49 | 44 | | 54 | 48 | 44 | | 53 | 47 | 43 | 41 |
| 8 | 66 | 53 | 45 | 40 | 64 | 52 | 45 | 40 | 51 | 44 | 40 | | 50 | 44 | 39 | | 49 | 43 | 39 | 37 |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 41 | 36 | | 46 | 40 | 36 | | 45 | 40 | 36 | 34 |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | | 43 | 37 | 33 | | 42 | 37 | 32 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 25204 |
| 5° | 25117 |
| 10° | 24858 |
| 15° | 24554 |
| 20° | 24207 |
| 25° | 23806 |
| 30° | 23305 |
| 35° | 22662 |
| 40° | 21830 |
| 45° | 20748 |
| 50° | 19361 |
| 55° | 13597 |
| 60° | 7362 |
| 65° | 5011 |
| 70° | 4555 |
| 75° | 4837 |
| 80° | 5204 |
| 85° | 5564 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20748 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 433.7 | 4.5 |
| 10°-20° | 1223.4 | 12.6 |
| 20°-30° | 1817.1 | 18.7 |
| 30°-40° | 2121.7 | 21.9 |
| 40°-50° | 2065.2 | 21.3 |
| 50°-60° | 1285.0 | 13.3 |
| 60°-70° | 414.2 | 4.3 |
| 70°-80° | 240.3 | 2.5 |
| 80°-90° | 94.0 | 1.0 |
| 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° | 3474.3 | 35.8 |
| 0°-40° | 5596.0 | 57.7 |
| 0°-60° | 8946.2 | 92.3 |
| 0°-90° | 9694.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9694.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4610 | |
| 5° | 4577 | 434 |
| 15° | 4338 | 1223 |
| 25° | 3947 | 1817 |
| 35° | 3396 | 2122 |
| 45° | 2684 | 2065 |
| 55° | 1427 | 1285 |
| 65° | 387 | 414 |
| 75° | 229 | 240 |
| 85° | 89 | 94 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4610.4 |
| 2.5° | 4605.3 |
| 5° | 4576.9 |
| 7.5° | 4533.8 |
| 10° | 4477.9 |
| 12.5° | 4414.2 |
| 15° | 4338.4 |
| 17.5° | 4255.7 |
| 20° | 4161.0 |
| 22.5° | 4061.2 |
| 25° | 3946.6 |
| 27.5° | 3824.4 |
| 30° | 3691.8 |
| 32.5° | 3551.5 |
| 35° | 3395.6 |
| 37.5° | 3236.4 |
| 40° | 3059.0 |
| 42.5° | 2879.1 |
| 45° | 2683.6 |
| 47.5° | 2479.6 |
| 50° | 2276.4 |
| 52.5° | 1921.7 |
| 55° | 1426.6 |
| 57.5° | 972.0 |
| 60° | 673.3 |
| 62.5° | 502.8 |
| 65° | 387.4 |
| 67.5° | 309.9 |
| 70° | 285.0 |
| 72.5° | 257.4 |
| 75° | 229.0 |
| 77.5° | 198.9 |
| 80° | 165.3 |
| 82.5° | 129.1 |
| 85° | 88.7 |
| 87.5° | 44.8 |
| 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 | 18.52 | 19.97 | 18.88 | 20.28 | 20.60 | 18.52 | 19.97 | 18.88 | 20.28 | 20.60 |
| | 3H | 19.00 | 20.28 | 19.37 | 20.61 | 20.98 | 19.00 | 20.28 | 19.37 | 20.61 | 20.98 |
| | 4H | 19.32 | 20.52 | 19.72 | 20.87 | 21.25 | 19.32 | 20.52 | 19.72 | 20.87 | 21.25 |
| | 6H | 19.67 | 20.77 | 20.08 | 21.14 | 21.53 | 19.67 | 20.77 | 20.08 | 21.14 | 21.53 |
| | 8H | 19.82 | 20.87 | 20.25 | 21.26 | 21.66 | 19.82 | 20.87 | 20.25 | 21.26 | 21.66 |
| | 12H | 19.95 | 20.95 | 20.38 | 21.34 | 21.76 | 19.95 | 20.95 | 20.38 | 21.34 | 21.76 |
| 4H | 2H | 18.60 | 19.80 | 19.00 | 20.15 | 20.53 | 18.60 | 19.80 | 19.00 | 20.15 | 20.53 |
| | 3H | 19.29 | 20.27 | 19.70 | 20.68 | 21.08 | 19.29 | 20.27 | 19.70 | 20.68 | 21.08 |
| | 4H | 19.76 | 20.64 | 20.20 | 21.06 | 21.50 | 19.76 | 20.64 | 20.20 | 21.06 | 21.50 |
| | 6H | 20.29 | 21.05 | 20.75 | 21.49 | 21.96 | 20.29 | 21.05 | 20.75 | 21.49 | 21.96 |
| | 8H | 20.52 | 21.23 | 20.98 | 21.68 | 22.14 | 20.52 | 21.23 | 20.98 | 21.68 | 22.14 |
| | 12H | 20.72 | 21.35 | 21.20 | 21.83 | 22.31 | 20.72 | 21.35 | 21.20 | 21.83 | 22.31 |
| 8H | 4H | 19.93 | 20.64 | 20.39 | 21.09 | 21.55 | 19.93 | 20.64 | 20.39 | 21.09 | 21.55 |
| | 6H | 20.60 | 21.19 | 21.10 | 21.68 | 22.16 | 20.60 | 21.19 | 21.10 | 21.68 | 22.16 |
| | 8H | 20.92 | 21.46 | 21.44 | 21.97 | 22.46 | 20.92 | 21.46 | 21.44 | 21.97 | 22.46 |
| | 12H | 21.23 | 21.71 | 21.74 | 22.20 | 22.77 | 21.23 | 21.71 | 21.74 | 22.20 | 22.77 |
| 12H | 4H | 19.94 | 20.58 | 20.43 | 21.06 | 21.53 | 19.94 | 20.58 | 20.43 | 21.06 | 21.53 |
| | 6H | 20.65 | 21.18 | 21.16 | 21.69 | 22.18 | 20.65 | 21.18 | 21.16 | 21.69 | 22.18 |
| | 8H | 21.04 | 21.52 | 21.55 | 22.01 | 22.58 | 21.04 | 21.52 | 21.55 | 22.01 | 22.58 |