

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: P866871

Luminaire Tested: PRLX-2001-L-940-133L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866871
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-940-133L-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 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

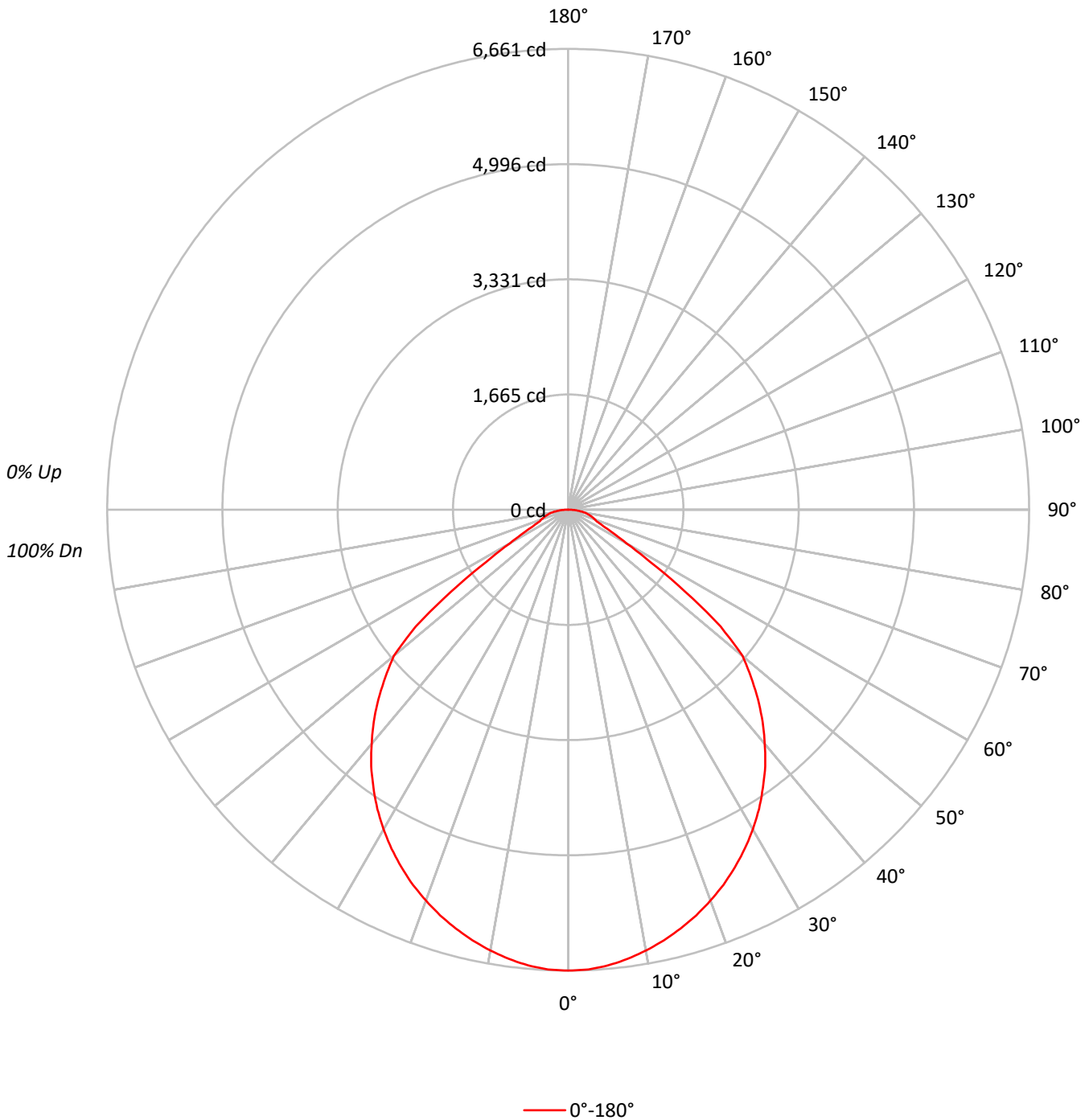
Lumens per Lamp: N/A
Luminaire Lumens: 14007.0 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 111.8
Input Voltage (V): 120
Input Current (Ain): 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° | 36416 |
| 5° | 36289 |
| 10° | 35914 |
| 15° | 35476 |
| 20° | 34975 |
| 25° | 34395 |
| 30° | 33671 |
| 35° | 32742 |
| 40° | 31540 |
| 45° | 29977 |
| 50° | 27972 |
| 55° | 19646 |
| 60° | 10635 |
| 65° | 7241 |
| 70° | 6581 |
| 75° | 6989 |
| 80° | 7518 |
| 85° | 8035 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 29977 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 626.6 | 4.5 |
| 10°-20° | 1767.6 | 12.6 |
| 20°-30° | 2625.4 | 18.7 |
| 30°-40° | 3065.4 | 21.9 |
| 40°-50° | 2983.9 | 21.3 |
| 50°-60° | 1856.6 | 13.3 |
| 60°-70° | 598.5 | 4.3 |
| 70°-80° | 347.2 | 2.5 |
| 80°-90° | 135.7 | 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° | 5019.6 | 35.8 |
| 0°-40° | 8085.0 | 57.7 |
| 0°-60° | 12925.5 | 92.3 |
| 0°-90° | 14007.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 14007.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 6661 | |
| 5° | 6613 | 627 |
| 15° | 6268 | 1768 |
| 25° | 5702 | 2625 |
| 35° | 4906 | 3065 |
| 45° | 3877 | 2984 |
| 55° | 2061 | 1857 |
| 65° | 560 | 599 |
| 75° | 331 | 347 |
| 85° | 128 | 136 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 6661.2 |
| 2.5° | 6653.7 |
| 5° | 6612.7 |
| 7.5° | 6550.5 |
| 10° | 6469.6 |
| 12.5° | 6377.6 |
| 15° | 6268.1 |
| 17.5° | 6148.7 |
| 20° | 6011.9 |
| 22.5° | 5867.6 |
| 25° | 5702.1 |
| 27.5° | 5525.5 |
| 30° | 5333.9 |
| 32.5° | 5131.2 |
| 35° | 4906.0 |
| 37.5° | 4675.9 |
| 40° | 4419.6 |
| 42.5° | 4159.7 |
| 45° | 3877.3 |
| 47.5° | 3582.5 |
| 50° | 3288.9 |
| 52.5° | 2776.4 |
| 55° | 2061.2 |
| 57.5° | 1404.4 |
| 60° | 972.7 |
| 62.5° | 726.4 |
| 65° | 559.8 |
| 67.5° | 447.8 |
| 70° | 411.7 |
| 72.5° | 371.9 |
| 75° | 330.9 |
| 77.5° | 287.3 |
| 80° | 238.8 |
| 82.5° | 186.6 |
| 85° | 128.1 |
| 87.5° | 64.7 |
| 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 | 19.79 | 21.25 | 20.16 | 21.56 | 21.87 | 19.79 | 21.25 | 20.16 | 21.56 | 21.87 |
| | 3H | 20.27 | 21.56 | 20.65 | 21.89 | 22.25 | 20.27 | 21.56 | 20.65 | 21.89 | 22.25 |
| | 4H | 20.60 | 21.80 | 21.00 | 22.15 | 22.53 | 20.60 | 21.80 | 21.00 | 22.15 | 22.53 |
| | 6H | 20.95 | 22.05 | 21.36 | 22.42 | 22.81 | 20.95 | 22.05 | 21.36 | 22.42 | 22.81 |
| | 8H | 21.10 | 22.15 | 21.53 | 22.54 | 22.94 | 21.10 | 22.15 | 21.53 | 22.54 | 22.94 |
| | 12H | 21.23 | 22.23 | 21.66 | 22.61 | 23.04 | 21.23 | 22.23 | 21.66 | 22.61 | 23.04 |
| 4H | 2H | 19.88 | 21.08 | 20.28 | 21.43 | 21.81 | 19.88 | 21.08 | 20.28 | 21.43 | 21.81 |
| | 3H | 20.57 | 21.55 | 20.98 | 21.95 | 22.36 | 20.57 | 21.55 | 20.98 | 21.95 | 22.36 |
| | 4H | 21.04 | 21.92 | 21.47 | 22.34 | 22.78 | 21.04 | 21.92 | 21.47 | 22.34 | 22.78 |
| | 6H | 21.57 | 22.33 | 22.03 | 22.77 | 23.24 | 21.57 | 22.33 | 22.03 | 22.77 | 23.24 |
| | 8H | 21.80 | 22.51 | 22.26 | 22.95 | 23.42 | 21.80 | 22.51 | 22.26 | 22.95 | 23.42 |
| | 12H | 22.00 | 22.63 | 22.48 | 23.11 | 23.58 | 22.00 | 22.63 | 22.48 | 23.11 | 23.58 |
| 8H | 4H | 21.21 | 21.92 | 21.67 | 22.36 | 22.83 | 21.21 | 21.92 | 21.67 | 22.36 | 22.83 |
| | 6H | 21.87 | 22.47 | 22.37 | 22.96 | 23.44 | 21.87 | 22.47 | 22.37 | 22.96 | 23.44 |
| | 8H | 22.20 | 22.74 | 22.72 | 23.25 | 23.74 | 22.20 | 22.74 | 22.72 | 23.25 | 23.74 |
| | 12H | 22.50 | 22.98 | 23.02 | 23.48 | 24.04 | 22.50 | 22.98 | 23.02 | 23.48 | 24.04 |
| 12H | 4H | 21.22 | 21.86 | 21.71 | 22.34 | 22.81 | 21.22 | 21.86 | 21.71 | 22.34 | 22.81 |
| | 6H | 21.92 | 22.46 | 22.44 | 22.97 | 23.46 | 21.92 | 22.46 | 22.44 | 22.97 | 23.46 |
| | 8H | 22.32 | 22.80 | 22.83 | 23.29 | 23.85 | 22.32 | 22.80 | 22.83 | 23.29 | 23.85 |