

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: P866667

Luminaire Tested: PRLX-2001-L-927-100L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866667
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-62)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-L-927-100L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

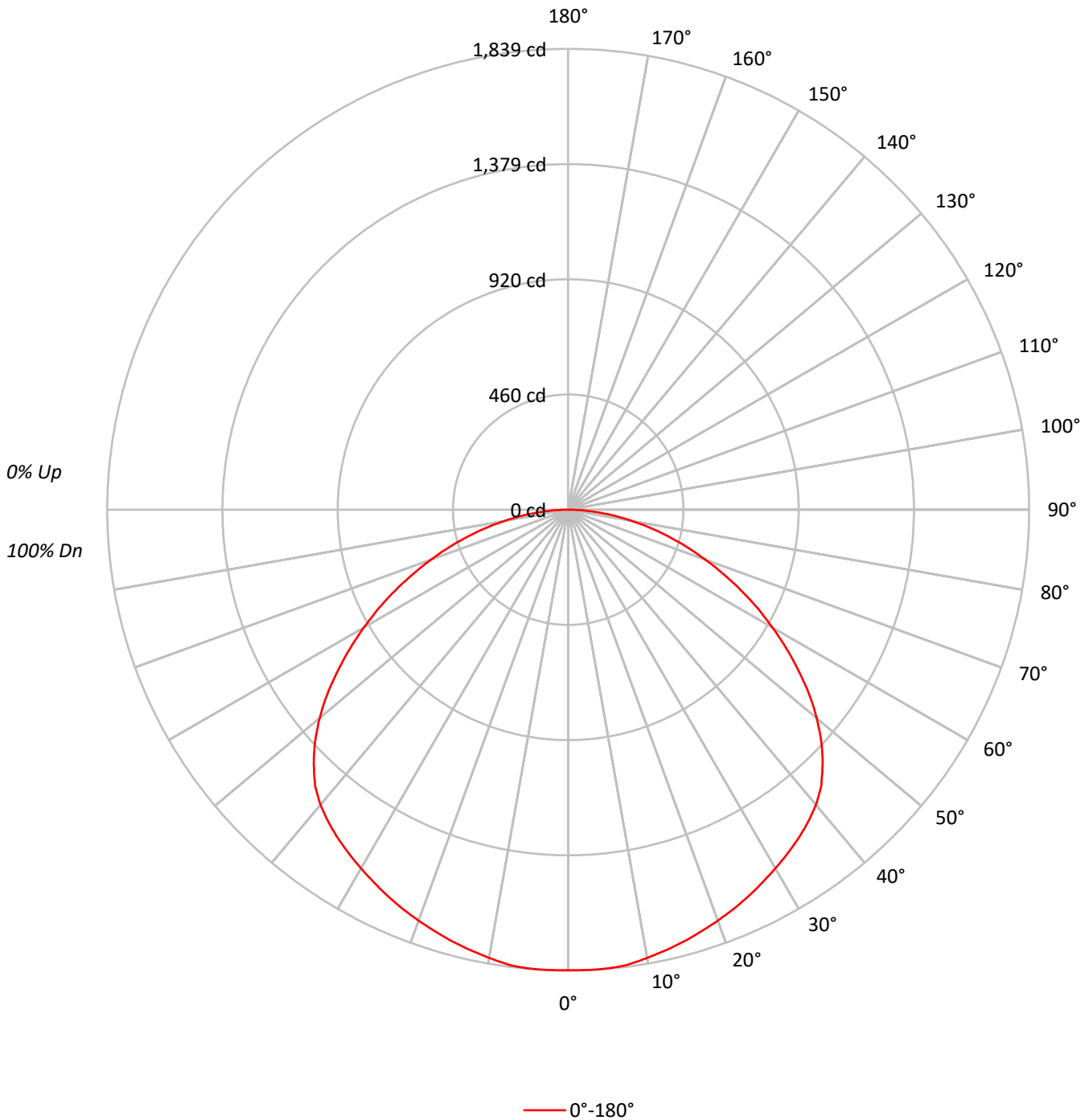
Lumens per Lamp: N/A
Luminaire Lumens: 5899.6 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.48
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | | 93 | 90 | 88 | | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | | 81 | 76 | 72 | | 78 | 74 | 71 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | | 71 | 65 | 60 | | 68 | 64 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | | 63 | 56 | 51 | | 61 | 55 | 51 | 48 |
| 5 | 75 | 62 | 52 | 45 | 73 | 60 | 52 | 45 | 58 | 51 | 45 | | 56 | 49 | 44 | | 54 | 48 | 44 | 42 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 46 | 39 | 52 | 45 | 39 | | 51 | 44 | 39 | | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 34 | 47 | 40 | 34 | | 46 | 39 | 34 | | 45 | 38 | 34 | 32 |
| 8 | 59 | 45 | 37 | 31 | 58 | 45 | 36 | 31 | 43 | 36 | 30 | | 42 | 35 | 30 | | 41 | 35 | 30 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | | 39 | 32 | 27 | | 38 | 31 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | | 36 | 29 | 25 | | 35 | 29 | 24 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 10047 |
| 5° | 10085 |
| 10° | 10082 |
| 15° | 10096 |
| 20° | 10154 |
| 25° | 10265 |
| 30° | 10433 |
| 35° | 10687 |
| 40° | 10974 |
| 45° | 11098 |
| 50° | 11011 |
| 55° | 10699 |
| 60° | 10293 |
| 65° | 9826 |
| 70° | 9299 |
| 75° | 8736 |
| 80° | 8132 |
| 85° | 7270 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11098 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 174.8 | 3.0 |
| 10°-20° | 504.2 | 8.5 |
| 20°-30° | 786.0 | 13.3 |
| 30°-40° | 1003.1 | 17.0 |
| 40°-50° | 1104.1 | 18.7 |
| 50°-60° | 1003.2 | 17.0 |
| 60°-70° | 752.6 | 12.8 |
| 70°-80° | 439.9 | 7.5 |
| 80°-90° | 131.7 | 2.2 |
| 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° | 1465.0 | 24.8 |
| 0°-40° | 2468.0 | 41.8 |
| 0°-60° | 4575.4 | 77.6 |
| 0°-90° | 5899.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5899.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1838 | |
| 5° | 1838 | 175 |
| 15° | 1784 | 504 |
| 25° | 1702 | 786 |
| 35° | 1601 | 1003 |
| 45° | 1436 | 1104 |
| 55° | 1122 | 1003 |
| 65° | 760 | 753 |
| 75° | 414 | 440 |
| 85° | 116 | 132 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1837.8 |
| 2.5° | 1838.6 |
| 5° | 1837.8 |
| 7.5° | 1831.4 |
| 10° | 1816.1 |
| 12.5° | 1800.8 |
| 15° | 1783.9 |
| 17.5° | 1764.6 |
| 20° | 1745.3 |
| 22.5° | 1724.4 |
| 25° | 1701.8 |
| 27.5° | 1677.7 |
| 30° | 1652.8 |
| 32.5° | 1627.8 |
| 35° | 1601.3 |
| 37.5° | 1571.5 |
| 40° | 1537.7 |
| 42.5° | 1494.2 |
| 45° | 1435.5 |
| 47.5° | 1370.3 |
| 50° | 1294.7 |
| 52.5° | 1212.6 |
| 55° | 1122.5 |
| 57.5° | 1033.2 |
| 60° | 941.4 |
| 62.5° | 852.1 |
| 65° | 759.6 |
| 67.5° | 668.7 |
| 70° | 581.8 |
| 72.5° | 498.1 |
| 75° | 413.6 |
| 77.5° | 336.3 |
| 80° | 258.3 |
| 82.5° | 185.1 |
| 85° | 115.9 |
| 87.5° | 53.9 |
| 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 | 20.49 | 22.17 | 20.86 | 22.48 | 22.80 | 20.49 | 22.17 | 20.86 | 22.48 | 22.80 |
| | 3H | 22.27 | 23.79 | 22.64 | 24.11 | 24.47 | 22.27 | 23.79 | 22.64 | 24.11 | 24.47 |
| | 4H | 22.95 | 24.39 | 23.35 | 24.73 | 25.11 | 22.95 | 24.39 | 23.35 | 24.73 | 25.11 |
| | 6H | 23.49 | 24.82 | 23.90 | 25.18 | 25.57 | 23.49 | 24.82 | 23.90 | 25.18 | 25.57 |
| | 8H | 23.67 | 24.94 | 24.09 | 25.33 | 25.73 | 23.67 | 24.94 | 24.09 | 25.33 | 25.73 |
| | 12H | 23.80 | 25.02 | 24.22 | 25.40 | 25.82 | 23.80 | 25.02 | 24.22 | 25.40 | 25.82 |
| 4H | 2H | 21.12 | 22.55 | 21.52 | 22.90 | 23.28 | 21.12 | 22.55 | 21.52 | 22.90 | 23.28 |
| | 3H | 23.12 | 24.33 | 23.53 | 24.73 | 25.12 | 23.12 | 24.33 | 23.53 | 24.73 | 25.12 |
| | 4H | 23.94 | 25.03 | 24.37 | 25.45 | 25.88 | 23.94 | 25.03 | 24.37 | 25.45 | 25.88 |
| | 6H | 24.61 | 25.57 | 25.07 | 26.01 | 26.46 | 24.61 | 25.57 | 25.07 | 26.01 | 26.46 |
| | 8H | 24.85 | 25.74 | 25.31 | 26.19 | 26.65 | 24.85 | 25.74 | 25.31 | 26.19 | 26.65 |
| | 12H | 25.03 | 25.83 | 25.51 | 26.31 | 26.78 | 25.03 | 25.83 | 25.51 | 26.31 | 26.78 |
| 8H | 4H | 24.27 | 25.17 | 24.73 | 25.61 | 26.08 | 24.27 | 25.17 | 24.73 | 25.61 | 26.08 |
| | 6H | 25.08 | 25.82 | 25.57 | 26.31 | 26.78 | 25.08 | 25.82 | 25.57 | 26.31 | 26.78 |
| | 8H | 25.39 | 26.06 | 25.90 | 26.57 | 27.05 | 25.39 | 26.06 | 25.90 | 26.57 | 27.05 |
| | 12H | 25.65 | 26.25 | 26.16 | 26.74 | 27.29 | 25.65 | 26.25 | 26.16 | 26.74 | 27.29 |
| 12H | 4H | 24.32 | 25.12 | 24.80 | 25.60 | 26.07 | 24.32 | 25.12 | 24.80 | 25.60 | 26.07 |
| | 6H | 25.14 | 25.82 | 25.65 | 26.32 | 26.81 | 25.14 | 25.82 | 25.65 | 26.32 | 26.81 |
| | 8H | 25.52 | 26.12 | 26.03 | 26.61 | 27.16 | 25.52 | 26.12 | 26.03 | 26.61 | 27.16 |