

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: P867083

Luminaire Tested: PRLX-2002-L-935-32L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-68)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-935-32L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 2
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

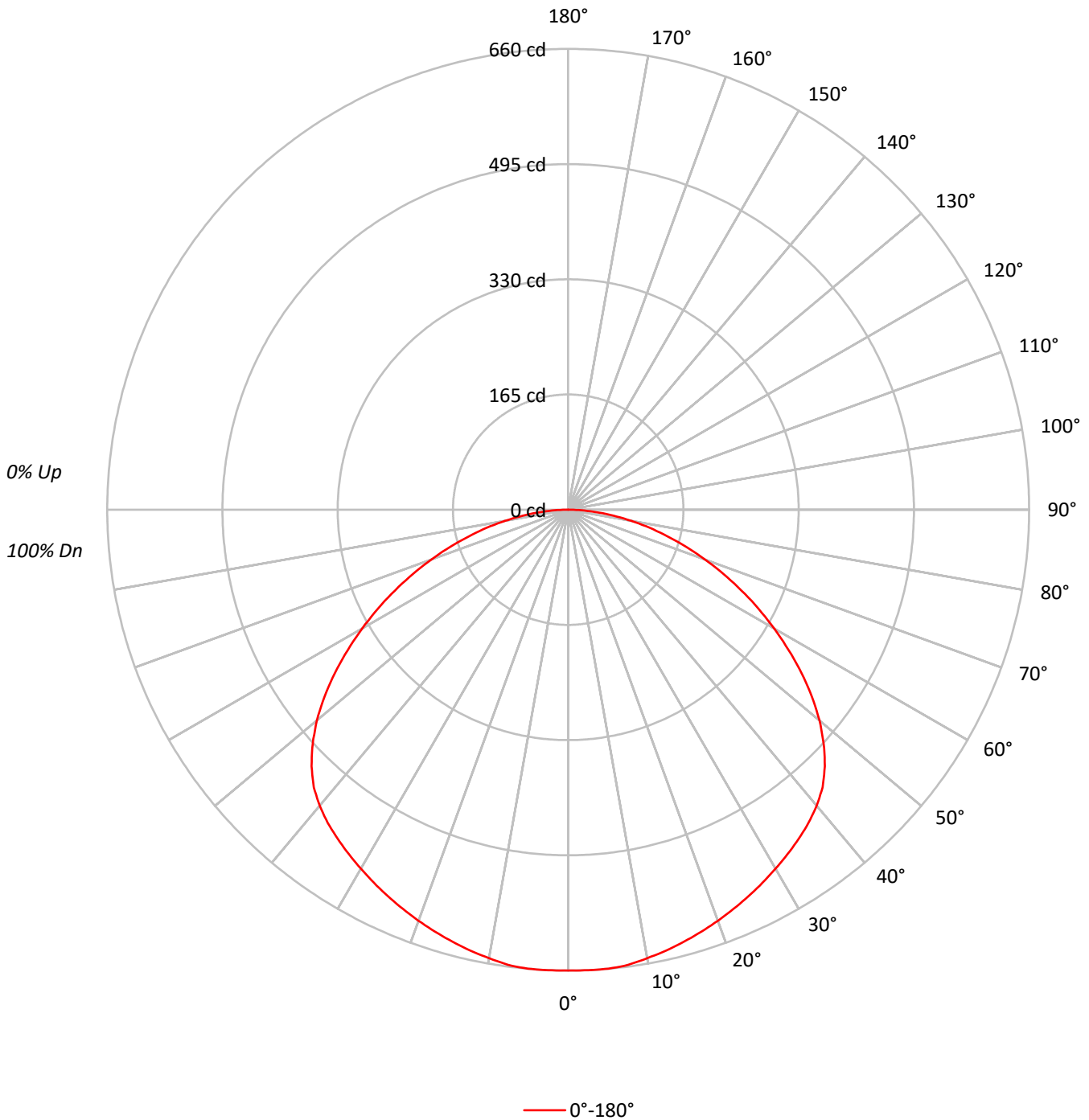
Lumens per Lamp: N/A
Luminaire Lumens: 2123.6 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.49
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 26.1
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 | 94 | 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 | 27 | 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 | 24 | | 35 | 29 | 24 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3256 |
| 5° | 3268 |
| 10° | 3267 |
| 15° | 3272 |
| 20° | 3289 |
| 25° | 3325 |
| 30° | 3382 |
| 35° | 3466 |
| 40° | 3564 |
| 45° | 3626 |
| 50° | 3605 |
| 55° | 3510 |
| 60° | 3363 |
| 65° | 3192 |
| 70° | 3001 |
| 75° | 2798 |
| 80° | 2597 |
| 85° | 2315 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3626 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.8 | 3.0 |
| 10°-20° | 181.1 | 8.5 |
| 20°-30° | 282.2 | 13.3 |
| 30°-40° | 360.6 | 17.0 |
| 40°-50° | 399.2 | 18.8 |
| 50°-60° | 363.9 | 17.1 |
| 60°-70° | 271.1 | 12.8 |
| 70°-80° | 156.5 | 7.4 |
| 80°-90° | 46.4 | 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° | 526.0 | 24.8 |
| 0°-40° | 886.6 | 41.7 |
| 0°-60° | 1649.7 | 77.7 |
| 0°-90° | 2123.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2123.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 660 | |
| 5° | 660 | 63 |
| 15° | 640 | 181 |
| 25° | 611 | 282 |
| 35° | 575 | 361 |
| 45° | 520 | 399 |
| 55° | 408 | 364 |
| 65° | 273 | 271 |
| 75° | 147 | 156 |
| 85° | 41 | 46 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 659.9 |
| 2.5° | 660.2 |
| 5° | 659.9 |
| 7.5° | 657.7 |
| 10° | 652.2 |
| 12.5° | 646.8 |
| 15° | 640.5 |
| 17.5° | 633.7 |
| 20° | 626.5 |
| 22.5° | 618.8 |
| 25° | 610.8 |
| 27.5° | 602.5 |
| 30° | 593.7 |
| 32.5° | 584.8 |
| 35° | 575.4 |
| 37.5° | 565.4 |
| 40° | 553.4 |
| 42.5° | 539.1 |
| 45° | 519.7 |
| 47.5° | 496.2 |
| 50° | 469.7 |
| 52.5° | 439.7 |
| 55° | 408.0 |
| 57.5° | 374.3 |
| 60° | 340.8 |
| 62.5° | 307.1 |
| 65° | 273.4 |
| 67.5° | 240.8 |
| 70° | 208.0 |
| 72.5° | 177.4 |
| 75° | 146.8 |
| 77.5° | 119.4 |
| 80° | 91.4 |
| 82.5° | 65.1 |
| 85° | 40.9 |
| 87.5° | 18.9 |
| 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 | 16.63 | 18.31 | 16.99 | 18.62 | 18.94 | 16.63 | 18.31 | 16.99 | 18.62 | 18.94 |
| | 3H | 18.38 | 19.90 | 18.76 | 20.22 | 20.58 | 18.38 | 19.90 | 18.76 | 20.22 | 20.58 |
| | 4H | 19.04 | 20.48 | 19.44 | 20.82 | 21.20 | 19.04 | 20.48 | 19.44 | 20.82 | 21.20 |
| | 6H | 19.56 | 20.89 | 19.97 | 21.26 | 21.65 | 19.56 | 20.89 | 19.97 | 21.26 | 21.65 |
| | 8H | 19.74 | 21.01 | 20.16 | 21.40 | 21.79 | 19.74 | 21.01 | 20.16 | 21.40 | 21.79 |
| | 12H | 19.86 | 21.08 | 20.29 | 21.46 | 21.89 | 19.86 | 21.08 | 20.29 | 21.46 | 21.89 |
| 4H | 2H | 17.25 | 18.68 | 17.65 | 19.03 | 19.40 | 17.25 | 18.68 | 17.65 | 19.03 | 19.40 |
| | 3H | 19.22 | 20.43 | 19.63 | 20.82 | 21.22 | 19.22 | 20.43 | 19.63 | 20.82 | 21.22 |
| | 4H | 20.02 | 21.11 | 20.45 | 21.52 | 21.96 | 20.02 | 21.11 | 20.45 | 21.52 | 21.96 |
| | 6H | 20.68 | 21.63 | 21.13 | 22.07 | 22.52 | 20.68 | 21.63 | 21.13 | 22.07 | 22.52 |
| | 8H | 20.90 | 21.80 | 21.36 | 22.24 | 22.70 | 20.90 | 21.80 | 21.36 | 22.24 | 22.70 |
| | 12H | 21.08 | 21.88 | 21.55 | 22.36 | 22.82 | 21.08 | 21.88 | 21.55 | 22.36 | 22.82 |
| 8H | 4H | 20.34 | 21.24 | 20.80 | 21.68 | 22.14 | 20.34 | 21.24 | 20.80 | 21.68 | 22.14 |
| | 6H | 21.13 | 21.87 | 21.62 | 22.36 | 22.83 | 21.13 | 21.87 | 21.62 | 22.36 | 22.83 |
| | 8H | 21.43 | 22.10 | 21.94 | 22.61 | 23.09 | 21.43 | 22.10 | 21.94 | 22.61 | 23.09 |
| | 12H | 21.69 | 22.28 | 22.19 | 22.77 | 23.33 | 21.69 | 22.28 | 22.19 | 22.77 | 23.33 |
| 12H | 4H | 20.39 | 21.19 | 20.86 | 21.67 | 22.13 | 20.39 | 21.19 | 20.86 | 21.67 | 22.13 |
| | 6H | 21.19 | 21.86 | 21.70 | 22.37 | 22.85 | 21.19 | 21.86 | 21.70 | 22.37 | 22.85 |
| | 8H | 21.56 | 22.15 | 22.06 | 22.64 | 23.20 | 21.56 | 22.15 | 22.06 | 22.64 | 23.20 |