

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: P867048

Luminaire Tested: PRLX-2002-L-935-100L-G-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867048
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-71)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-L-935-100L-G-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

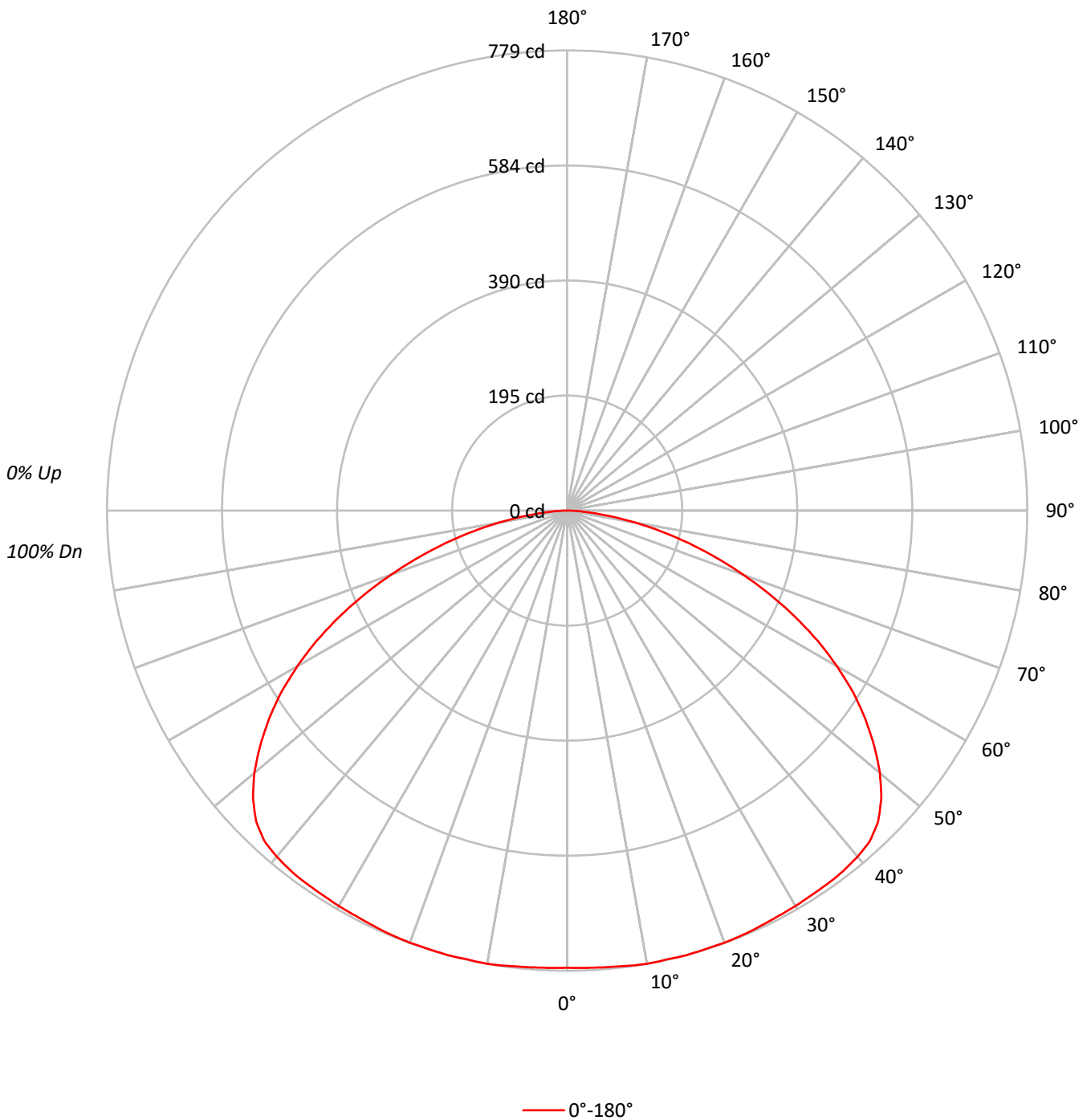
Lumens per Lamp: N/A
Luminaire Lumens: 2953.8 lumens
Efficiency: N/A
Efficacy: 37.2 lumens/watt
Spacing Criteria (0/90/45): 1.52 / 1.52 / 1.65
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P867048

CATALOG NUMBER: PRLX-2002-L-935-100L-G-X-X-BLAK-X

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 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | | 93 | 90 | 87 | | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | | 80 | 76 | 71 | | 77 | 73 | 70 | 68 |
| 3 | 89 | 77 | 69 | 62 | 86 | 76 | 68 | 61 | 73 | 66 | 60 | | 70 | 64 | 59 | | 67 | 62 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 51 | 64 | 56 | 51 | | 62 | 55 | 50 | | 59 | 54 | 49 | 47 |
| 5 | 74 | 60 | 51 | 44 | 72 | 59 | 50 | 44 | 57 | 49 | 43 | | 55 | 48 | 43 | | 53 | 47 | 42 | 40 |
| 6 | 68 | 54 | 44 | 38 | 66 | 53 | 44 | 37 | 51 | 43 | 37 | | 49 | 42 | 37 | | 48 | 41 | 36 | 34 |
| 7 | 63 | 48 | 39 | 33 | 61 | 48 | 39 | 33 | 46 | 38 | 32 | | 44 | 37 | 32 | | 43 | 37 | 32 | 30 |
| 8 | 58 | 44 | 35 | 29 | 56 | 43 | 35 | 29 | 42 | 34 | 29 | | 41 | 34 | 28 | | 39 | 33 | 28 | 26 |
| 9 | 54 | 40 | 32 | 26 | 53 | 39 | 31 | 26 | 38 | 31 | 26 | | 37 | 30 | 25 | | 36 | 30 | 25 | 23 |
| 10 | 50 | 37 | 29 | 23 | 49 | 36 | 28 | 23 | 35 | 28 | 23 | | 34 | 28 | 23 | | 33 | 27 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3818 |
| 5° | 3842 |
| 10° | 3904 |
| 15° | 3981 |
| 20° | 4087 |
| 25° | 4223 |
| 30° | 4404 |
| 35° | 4640 |
| 40° | 4927 |
| 45° | 5195 |
| 50° | 5305 |
| 55° | 5303 |
| 60° | 5205 |
| 65° | 4974 |
| 70° | 4569 |
| 75° | 4053 |
| 80° | 3310 |
| 85° | 2213 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 5313 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 74.2 | 2.5 |
| 10°-20° | 220.7 | 7.5 |
| 20°-30° | 359.0 | 12.2 |
| 30°-40° | 483.5 | 16.4 |
| 40°-50° | 570.9 | 19.3 |
| 50°-60° | 549.5 | 18.6 |
| 60°-70° | 420.2 | 14.2 |
| 70°-80° | 225.7 | 7.6 |
| 80°-90° | 50.2 | 1.7 |
| 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° | 653.9 | 22.1 |
| 0°-40° | 1137.4 | 38.5 |
| 0°-60° | 2257.8 | 76.4 |
| 0°-90° | 2953.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2953.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 774 | |
| 5° | 776 | 74 |
| 15° | 779 | 221 |
| 25° | 776 | 359 |
| 35° | 770 | 484 |
| 45° | 745 | 571 |
| 55° | 616 | 549 |
| 65° | 426 | 420 |
| 75° | 213 | 226 |
| 85° | 39 | 50 |
| 90° | 0 | |

TEST NUMBER: P867048

CATALOG NUMBER: PRLX-2002-L-935-100L-G-X-X-BLAK-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 773.9 |
| 2.5° | 774.8 |
| 5° | 775.7 |
| 7.5° | 777.5 |
| 10° | 779.3 |
| 12.5° | 778.4 |
| 15° | 779.3 |
| 17.5° | 778.4 |
| 20° | 778.4 |
| 22.5° | 777.5 |
| 25° | 775.7 |
| 27.5° | 773.9 |
| 30° | 773.0 |
| 32.5° | 771.3 |
| 35° | 770.4 |
| 37.5° | 768.6 |
| 40° | 765.0 |
| 42.5° | 758.8 |
| 45° | 744.6 |
| 47.5° | 721.4 |
| 50° | 691.2 |
| 52.5° | 655.6 |
| 55° | 616.5 |
| 57.5° | 574.7 |
| 60° | 527.5 |
| 62.5° | 478.6 |
| 65° | 426.1 |
| 67.5° | 371.8 |
| 70° | 316.7 |
| 72.5° | 264.2 |
| 75° | 212.6 |
| 77.5° | 162.8 |
| 80° | 116.5 |
| 82.5° | 73.8 |
| 85° | 39.1 |
| 87.5° | 13.3 |
| 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 | 18.42 | 20.13 | 18.78 | 20.45 | 20.76 | 18.42 | 20.13 | 18.78 | 20.45 | 20.76 |
| | 3H | 20.17 | 21.73 | 20.55 | 22.05 | 22.41 | 20.17 | 21.73 | 20.55 | 22.05 | 22.41 |
| | 4H | 20.78 | 22.24 | 21.17 | 22.59 | 22.96 | 20.78 | 22.24 | 21.17 | 22.59 | 22.96 |
| | 6H | 21.17 | 22.53 | 21.58 | 22.90 | 23.29 | 21.17 | 22.53 | 21.58 | 22.90 | 23.29 |
| | 8H | 21.27 | 22.58 | 21.70 | 22.96 | 23.36 | 21.27 | 22.58 | 21.70 | 22.96 | 23.36 |
| | 12H | 21.32 | 22.57 | 21.75 | 22.95 | 23.38 | 21.32 | 22.57 | 21.75 | 22.95 | 23.38 |
| 4H | 2H | 19.07 | 20.53 | 19.46 | 20.88 | 21.25 | 19.07 | 20.53 | 19.46 | 20.88 | 21.25 |
| | 3H | 21.02 | 22.25 | 21.43 | 22.65 | 23.05 | 21.02 | 22.25 | 21.43 | 22.65 | 23.05 |
| | 4H | 21.74 | 22.86 | 22.17 | 23.27 | 23.70 | 21.74 | 22.86 | 22.17 | 23.27 | 23.70 |
| | 6H | 22.25 | 23.23 | 22.70 | 23.66 | 24.12 | 22.25 | 23.23 | 22.70 | 23.66 | 24.12 |
| | 8H | 22.39 | 23.30 | 22.84 | 23.74 | 24.20 | 22.39 | 23.30 | 22.84 | 23.74 | 24.20 |
| | 12H | 22.47 | 23.29 | 22.94 | 23.76 | 24.23 | 22.47 | 23.29 | 22.94 | 23.76 | 24.23 |
| 8H | 4H | 22.03 | 22.94 | 22.49 | 23.38 | 23.85 | 22.03 | 22.94 | 22.49 | 23.38 | 23.85 |
| | 6H | 22.63 | 23.39 | 23.12 | 23.87 | 24.35 | 22.63 | 23.39 | 23.12 | 23.87 | 24.35 |
| | 8H | 22.81 | 23.50 | 23.32 | 24.00 | 24.48 | 22.81 | 23.50 | 23.32 | 24.00 | 24.48 |
| | 12H | 22.94 | 23.54 | 23.44 | 24.03 | 24.59 | 22.94 | 23.54 | 23.44 | 24.03 | 24.59 |
| 12H | 4H | 22.05 | 22.88 | 22.53 | 23.35 | 23.82 | 22.05 | 22.88 | 22.53 | 23.35 | 23.82 |
| | 6H | 22.66 | 23.35 | 23.17 | 23.85 | 24.34 | 22.66 | 23.35 | 23.17 | 23.85 | 24.34 |
| | 8H | 22.90 | 23.50 | 23.40 | 23.99 | 24.55 | 22.90 | 23.50 | 23.40 | 23.99 | 24.55 |