

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: P865568

Luminaire Tested: PRLX-2001-S-940-25L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865568
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-S-940-25L-L-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS,
TAPERED DRUM WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

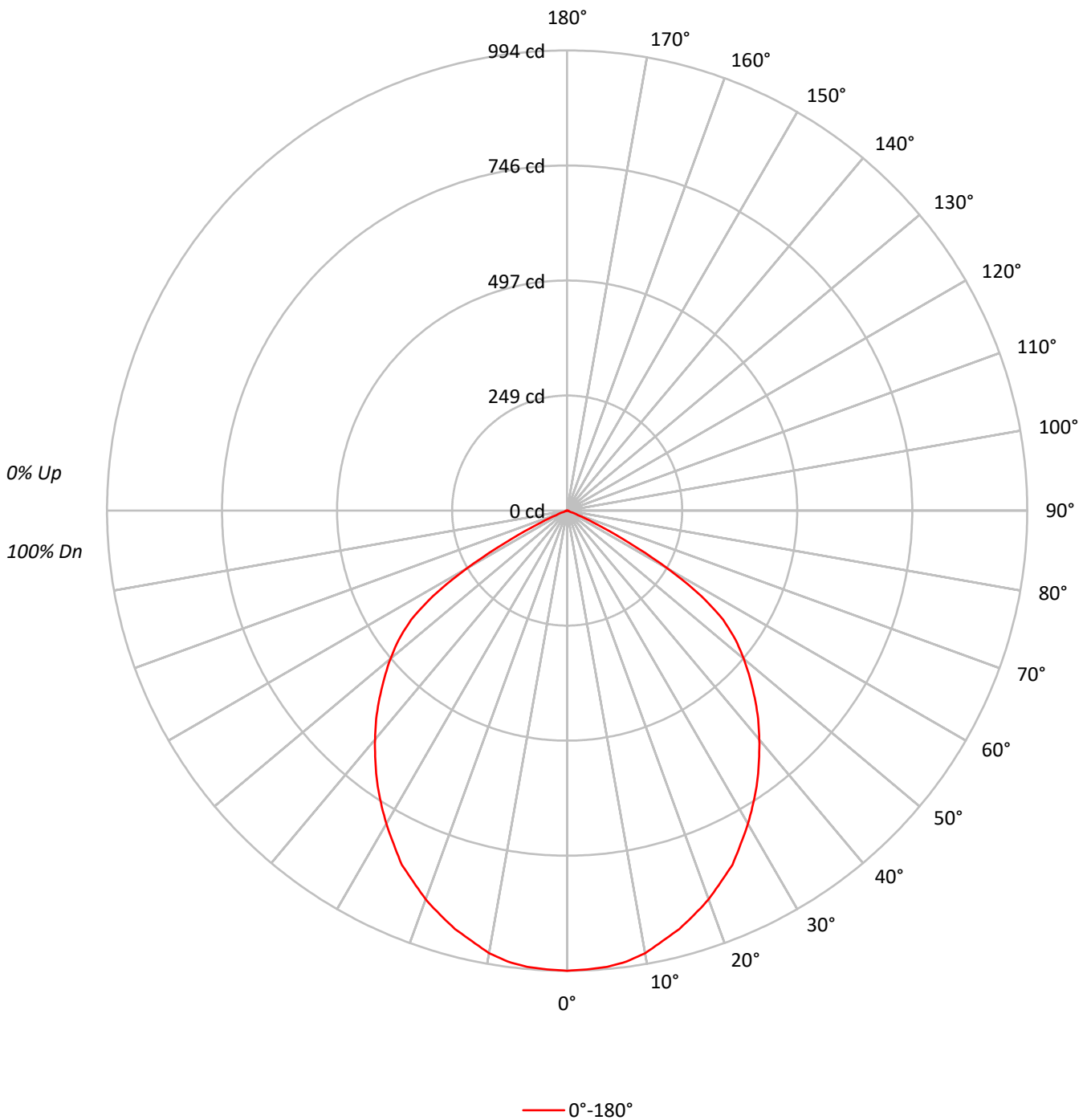
Lumens per Lamp: N/A
Luminaire Lumens: 2085.6 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.29
Luminous Opening: Circular (Dia: 0.92' x H: 0')
CIE Type: Direct

Input Watts (W): 29.1
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: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P865568

CATALOG NUMBER: PRLX-2001-S-940-25L-L-U-S-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 | 111 | 108 | 104 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 |
| 2 | 103 | 97 | 91 | 87 | 101 | 95 | 90 | 86 | 91 | 87 | 84 | 88 | 85 | 82 | 85 | 83 | 80 | 78 |
| 3 | 95 | 87 | 80 | 74 | 93 | 85 | 79 | 74 | 82 | 77 | 72 | 80 | 75 | 71 | 77 | 73 | 70 | 68 |
| 4 | 88 | 78 | 70 | 64 | 86 | 77 | 70 | 64 | 74 | 68 | 63 | 72 | 67 | 62 | 70 | 65 | 62 | 60 |
| 5 | 82 | 70 | 62 | 56 | 80 | 69 | 62 | 56 | 67 | 61 | 56 | 65 | 60 | 55 | 64 | 59 | 54 | 53 |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 55 | 50 | 61 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 47 |
| 7 | 70 | 58 | 50 | 44 | 69 | 57 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 43 | 42 |
| 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 | 36 | 32 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 16216 |
| 5° | 16202 |
| 10° | 16078 |
| 15° | 15800 |
| 20° | 15510 |
| 25° | 15198 |
| 30° | 14714 |
| 35° | 14252 |
| 40° | 13748 |
| 45° | 13219 |
| 50° | 12644 |
| 55° | 11707 |
| 60° | 8243 |
| 65° | 2709 |
| 70° | 224 |
| 75° | 145 |
| 80° | 216 |
| 85° | 430 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13219 cd/sqm

TEST NUMBER: P865568

CATALOG NUMBER: PRLX-2001-S-940-25L-L-U-S-X-X-BLAK-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 93.9 | 4.5 |
| 10°-20° | 263.6 | 12.6 |
| 20°-30° | 387.5 | 18.6 |
| 30°-40° | 447.3 | 21.4 |
| 40°-50° | 442.1 | 21.2 |
| 50°-60° | 354.5 | 17.0 |
| 60°-70° | 91.9 | 4.4 |
| 70°-80° | 2.7 | 0.1 |
| 80°-90° | 2.2 | 0.1 |
| 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° | 744.9 | 35.7 |
| 0°-40° | 1192.2 | 57.2 |
| 0°-60° | 1988.8 | 95.4 |
| 0°-90° | 2085.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2085.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 994 | |
| 5° | 990 | 94 |
| 15° | 936 | 264 |
| 25° | 844 | 387 |
| 35° | 716 | 447 |
| 45° | 573 | 442 |
| 55° | 412 | 354 |
| 65° | 70 | 92 |
| 75° | 2 | 3 |
| 85° | 2 | 2 |
| 90° | 0 | |

TEST NUMBER: P865568

CATALOG NUMBER: PRLX-2001-S-940-25L-L-U-S-X-X-BLAK-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 994.2 |
| 2.5° | 991.9 |
| 5° | 989.6 |
| 7.5° | 982.5 |
| 10° | 970.8 |
| 12.5° | 952.1 |
| 15° | 935.7 |
| 17.5° | 914.7 |
| 20° | 893.6 |
| 22.5° | 867.9 |
| 25° | 844.5 |
| 27.5° | 811.8 |
| 30° | 781.3 |
| 32.5° | 748.6 |
| 35° | 715.8 |
| 37.5° | 680.8 |
| 40° | 645.7 |
| 42.5° | 610.6 |
| 45° | 573.1 |
| 47.5° | 535.7 |
| 50° | 498.3 |
| 52.5° | 458.5 |
| 55° | 411.7 |
| 57.5° | 343.9 |
| 60° | 252.7 |
| 62.5° | 152.1 |
| 65° | 70.2 |
| 67.5° | 25.7 |
| 70° | 4.7 |
| 72.5° | 2.3 |
| 75° | 2.3 |
| 77.5° | 2.3 |
| 80° | 2.3 |
| 82.5° | 2.3 |
| 85° | 2.3 |
| 87.5° | 2.3 |
| 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 | 20.46 | 21.91 | 20.82 | 22.22 | 22.54 | 20.46 | 21.91 | 20.82 | 22.22 | 22.54 |
| | 3H | 20.36 | 21.63 | 20.73 | 21.96 | 22.33 | 20.36 | 21.63 | 20.73 | 21.96 | 22.33 |
| | 4H | 20.29 | 21.48 | 20.69 | 21.83 | 22.21 | 20.29 | 21.48 | 20.69 | 21.83 | 22.21 |
| | 6H | 20.22 | 21.31 | 20.64 | 21.68 | 22.07 | 20.22 | 21.31 | 20.64 | 21.68 | 22.07 |
| | 8H | 20.18 | 21.22 | 20.61 | 21.61 | 22.01 | 20.18 | 21.22 | 20.61 | 21.61 | 22.01 |
| | 12H | 20.15 | 21.14 | 20.58 | 21.52 | 21.95 | 20.15 | 21.14 | 20.58 | 21.52 | 21.95 |
| 4H | 2H | 20.36 | 21.55 | 20.76 | 21.90 | 22.28 | 20.36 | 21.55 | 20.76 | 21.90 | 22.28 |
| | 3H | 20.27 | 21.22 | 20.68 | 21.63 | 22.03 | 20.27 | 21.22 | 20.68 | 21.63 | 22.03 |
| | 4H | 20.19 | 21.04 | 20.62 | 21.46 | 21.90 | 20.19 | 21.04 | 20.62 | 21.46 | 21.90 |
| | 6H | 20.12 | 20.85 | 20.58 | 21.30 | 21.76 | 20.12 | 20.85 | 20.58 | 21.30 | 21.76 |
| | 8H | 20.07 | 20.75 | 20.53 | 21.20 | 21.67 | 20.07 | 20.75 | 20.53 | 21.20 | 21.67 |
| | 12H | 20.03 | 20.63 | 20.51 | 21.12 | 21.59 | 20.03 | 20.63 | 20.51 | 21.12 | 21.59 |
| 8H | 4H | 20.06 | 20.75 | 20.53 | 21.19 | 21.66 | 20.06 | 20.75 | 20.53 | 21.19 | 21.66 |
| | 6H | 19.97 | 20.53 | 20.47 | 21.03 | 21.51 | 19.97 | 20.53 | 20.47 | 21.03 | 21.51 |
| | 8H | 19.91 | 20.42 | 20.43 | 20.93 | 21.42 | 19.91 | 20.42 | 20.43 | 20.93 | 21.42 |
| | 12H | 19.86 | 20.32 | 20.38 | 20.81 | 21.38 | 19.86 | 20.32 | 20.38 | 20.81 | 21.38 |
| 12H | 4H | 20.02 | 20.63 | 20.51 | 21.11 | 21.58 | 20.02 | 20.63 | 20.51 | 21.11 | 21.58 |
| | 6H | 19.91 | 20.42 | 20.42 | 20.93 | 21.42 | 19.91 | 20.42 | 20.42 | 20.93 | 21.42 |
| | 8H | 19.86 | 20.32 | 20.37 | 20.81 | 21.38 | 19.86 | 20.32 | 20.37 | 20.81 | 21.38 |