

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: P865623

Luminaire Tested: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865623
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 2
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

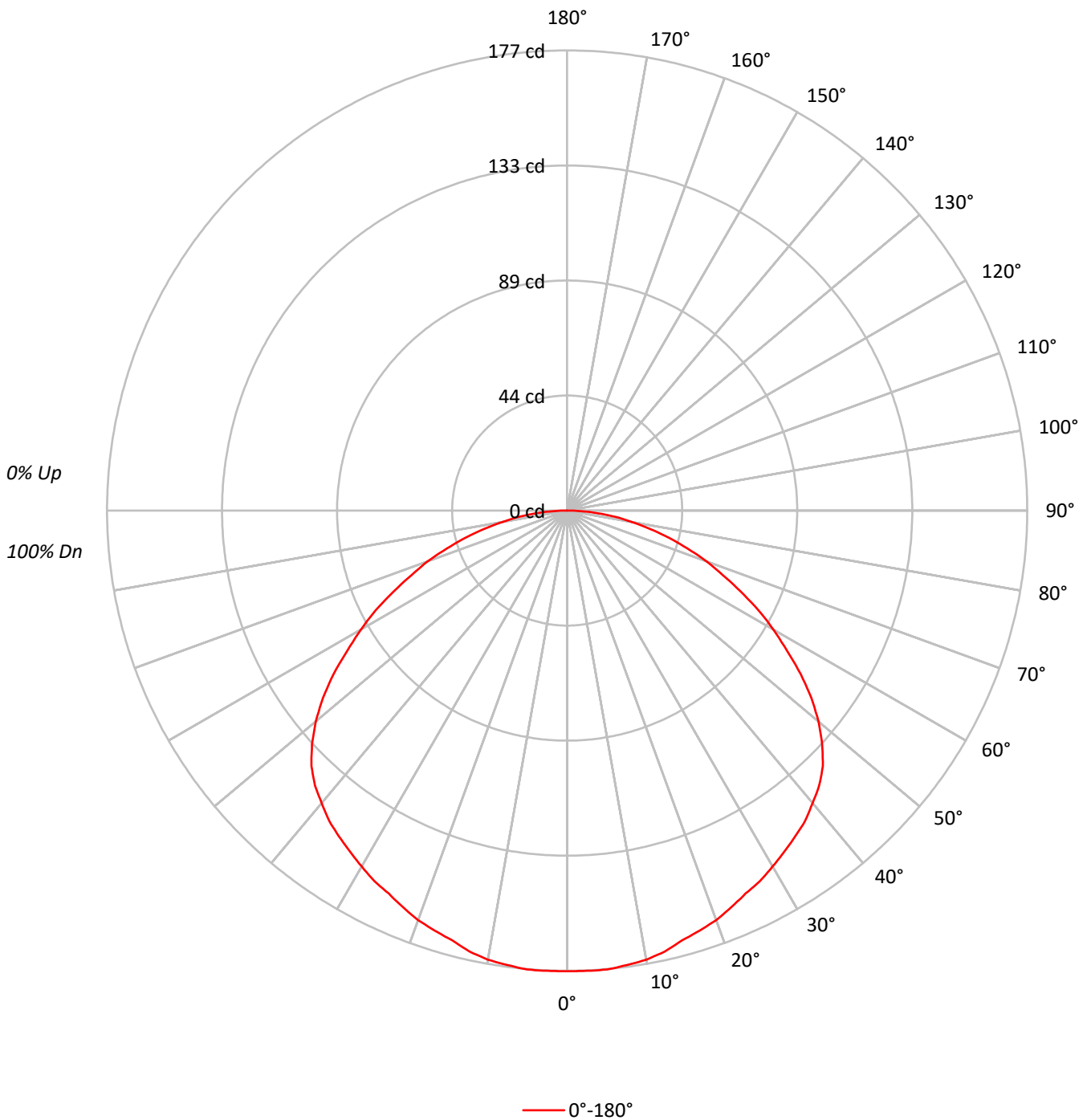
Lumens per Lamp: N/A
Luminaire Lumens: 570.5 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.49
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 10.5
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

TEST NUMBER: P865623

CATALOG NUMBER: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X

Luminous Intensity Polar Plot





TEST NUMBER: P865623

CATALOG NUMBER: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X

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 | 87 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 82 | 76 | 95 | 88 | 81 | 76 | 84 | 78 | 74 | 81 | 76 | 72 | 78 | 74 | 70 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 77 | 69 | 62 | 74 | 67 | 61 | 71 | 65 | 60 | 68 | 63 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | 63 | 56 | 51 | 60 | 55 | 50 | 48 |
| 5 | 75 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 39 | 51 | 44 | 38 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 37 | 31 | 57 | 45 | 36 | 30 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 28 |
| 9 | 55 | 41 | 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 | 29 | 24 | 36 | 29 | 24 | 35 | 29 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3329 |
| 5° | 3341 |
| 10° | 3346 |
| 15° | 3327 |
| 20° | 3350 |
| 25° | 3368 |
| 30° | 3429 |
| 35° | 3509 |
| 40° | 3602 |
| 45° | 3695 |
| 50° | 3688 |
| 55° | 3593 |
| 60° | 3441 |
| 65° | 3267 |
| 70° | 3131 |
| 75° | 2947 |
| 80° | 2715 |
| 85° | 2608 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 47.5°
 Luminance: 3701 cd/sqm

TEST NUMBER: P865623

CATALOG NUMBER: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 16.8 | 3.0 |
| 10°-20° | 48.5 | 8.5 |
| 20°-30° | 75.2 | 13.2 |
| 30°-40° | 95.9 | 16.8 |
| 40°-50° | 106.7 | 18.7 |
| 50°-60° | 97.8 | 17.1 |
| 60°-70° | 73.1 | 12.8 |
| 70°-80° | 42.9 | 7.5 |
| 80°-90° | 13.5 | 2.4 |
| 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° | 140.5 | 24.6 |
| 0°-40° | 236.4 | 41.4 |
| 0°-60° | 440.9 | 77.3 |
| 0°-90° | 570.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 570.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 177 | |
| 5° | 177 | 17 |
| 15° | 171 | 48 |
| 25° | 162 | 75 |
| 35° | 153 | 96 |
| 45° | 139 | 107 |
| 55° | 110 | 98 |
| 65° | 74 | 73 |
| 75° | 41 | 43 |
| 85° | 12 | 14 |
| 90° | 0 | |

TEST NUMBER: P865623

CATALOG NUMBER: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 177.2 |
| 2.5° | 177.2 |
| 5° | 177.2 |
| 7.5° | 176.3 |
| 10° | 175.4 |
| 12.5° | 173.7 |
| 15° | 171.1 |
| 17.5° | 169.4 |
| 20° | 167.6 |
| 22.5° | 165.1 |
| 25° | 162.5 |
| 27.5° | 160.7 |
| 30° | 158.1 |
| 32.5° | 155.5 |
| 35° | 153.0 |
| 37.5° | 150.4 |
| 40° | 146.9 |
| 42.5° | 143.5 |
| 45° | 139.1 |
| 47.5° | 133.1 |
| 50° | 126.2 |
| 52.5° | 118.4 |
| 55° | 109.7 |
| 57.5° | 100.2 |
| 60° | 91.6 |
| 62.5° | 83.0 |
| 65° | 73.5 |
| 67.5° | 64.8 |
| 70° | 57.0 |
| 72.5° | 48.4 |
| 75° | 40.6 |
| 77.5° | 32.8 |
| 80° | 25.1 |
| 82.5° | 19.0 |
| 85° | 12.1 |
| 87.5° | 6.0 |
| 90° | 0.0 |



TEST NUMBER: P865623
 CATALOG NUMBER: PRLX-2002-S-930-10L-G-U-S-X-X-WHHR-X

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 | 16.68 | 18.36 | 17.04 | 18.68 | 18.99 | 16.68 | 18.36 | 17.04 | 18.68 | 18.99 |
| | 3H | 18.46 | 19.99 | 18.84 | 20.31 | 20.67 | 18.46 | 19.99 | 18.84 | 20.31 | 20.67 |
| | 4H | 19.16 | 20.60 | 19.56 | 20.94 | 21.32 | 19.16 | 20.60 | 19.56 | 20.94 | 21.32 |
| | 6H | 19.69 | 21.03 | 20.10 | 21.39 | 21.78 | 19.69 | 21.03 | 20.10 | 21.39 | 21.78 |
| | 8H | 19.89 | 21.17 | 20.31 | 21.56 | 21.95 | 19.89 | 21.17 | 20.31 | 21.56 | 21.95 |
| | 12H | 20.04 | 21.26 | 20.47 | 21.64 | 22.07 | 20.04 | 21.26 | 20.47 | 21.64 | 22.07 |
| 4H | 2H | 17.31 | 18.74 | 17.70 | 19.09 | 19.46 | 17.31 | 18.74 | 17.70 | 19.09 | 19.46 |
| | 3H | 19.32 | 20.53 | 19.73 | 20.93 | 21.33 | 19.32 | 20.53 | 19.73 | 20.93 | 21.33 |
| | 4H | 20.16 | 21.25 | 20.59 | 21.66 | 22.10 | 20.16 | 21.25 | 20.59 | 21.66 | 22.10 |
| | 6H | 20.83 | 21.79 | 21.28 | 22.23 | 22.68 | 20.83 | 21.79 | 21.28 | 22.23 | 22.68 |
| | 8H | 21.08 | 21.98 | 21.54 | 22.42 | 22.89 | 21.08 | 21.98 | 21.54 | 22.42 | 22.89 |
| | 12H | 21.29 | 22.10 | 21.76 | 22.57 | 23.04 | 21.29 | 22.10 | 21.76 | 22.57 | 23.04 |
| 8H | 4H | 20.49 | 21.39 | 20.95 | 21.83 | 22.30 | 20.49 | 21.39 | 20.95 | 21.83 | 22.30 |
| | 6H | 21.29 | 22.05 | 21.79 | 22.53 | 23.01 | 21.29 | 22.05 | 21.79 | 22.53 | 23.01 |
| | 8H | 21.64 | 22.31 | 22.14 | 22.82 | 23.30 | 21.64 | 22.31 | 22.14 | 22.82 | 23.30 |
| | 12H | 21.93 | 22.53 | 22.44 | 23.02 | 23.58 | 21.93 | 22.53 | 22.44 | 23.02 | 23.58 |
| 12H | 4H | 20.53 | 21.34 | 21.01 | 21.82 | 22.29 | 20.53 | 21.34 | 21.01 | 21.82 | 22.29 |
| | 6H | 21.37 | 22.04 | 21.87 | 22.55 | 23.03 | 21.37 | 22.04 | 21.87 | 22.55 | 23.03 |
| | 8H | 21.78 | 22.38 | 22.28 | 22.86 | 23.42 | 21.78 | 22.38 | 22.28 | 22.86 | 23.42 |