

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: P865627

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-19)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-S-930-10L-L-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 2
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

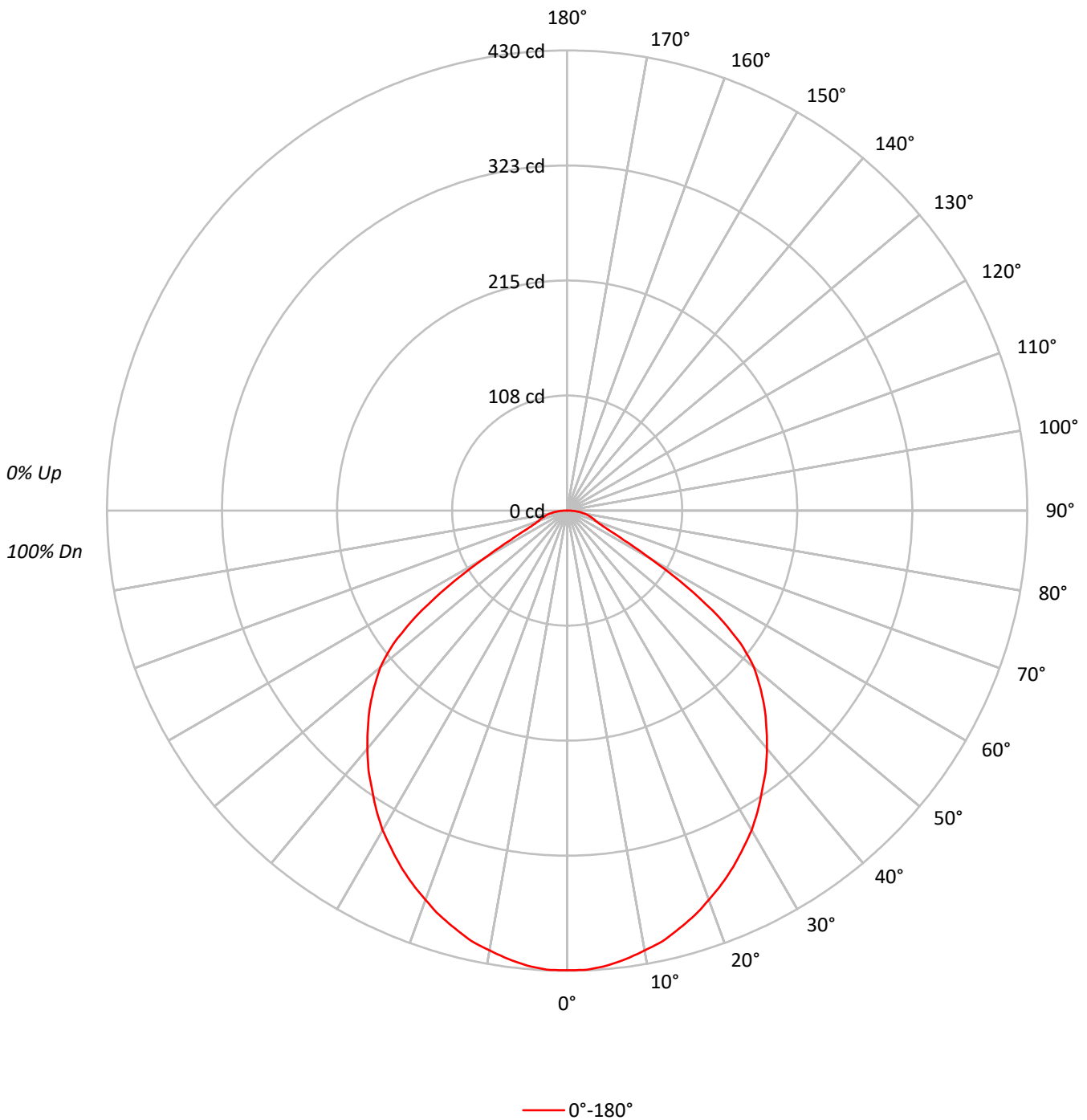
Lumens per Lamp: N/A
Luminaire Lumens: 953.4 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

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

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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 | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 98 | 95 | 96 | 94 | 92 | 93 | 91 | 90 | 88 |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | 87 | 83 | 80 | 84 | 81 | 78 | 76 |
| 3 | 94 | 85 | 78 | 72 | 92 | 83 | 77 | 71 | 80 | 75 | 70 | 78 | 73 | 69 | 75 | 71 | 68 | 66 |
| 4 | 87 | 76 | 68 | 62 | 85 | 75 | 68 | 62 | 72 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 60 | 58 |
| 5 | 80 | 69 | 60 | 54 | 78 | 68 | 60 | 54 | 66 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | 51 |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 38 | 63 | 51 | 44 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 38 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 37 | 32 | 55 | 44 | 36 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 8068 |
| 5° | 8050 |
| 10° | 7962 |
| 15° | 7864 |
| 20° | 7738 |
| 25° | 7613 |
| 30° | 7479 |
| 35° | 7292 |
| 40° | 7121 |
| 45° | 6933 |
| 50° | 6666 |
| 55° | 5659 |
| 60° | 3377 |
| 65° | 1880 |
| 70° | 1565 |
| 75° | 1633 |
| 80° | 1774 |
| 85° | 1854 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6933 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 40.4 | 4.2 |
| 10°-20° | 114.0 | 12.0 |
| 20°-30° | 169.2 | 17.7 |
| 30°-40° | 199.2 | 20.9 |
| 40°-50° | 200.8 | 21.1 |
| 50°-60° | 148.8 | 15.6 |
| 60°-70° | 47.7 | 5.0 |
| 70°-80° | 24.0 | 2.5 |
| 80°-90° | 9.3 | 1.0 |
| 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° | 323.6 | 33.9 |
| 0°-40° | 522.8 | 54.8 |
| 0°-60° | 872.4 | 91.5 |
| 0°-90° | 953.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 953.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 430 | |
| 5° | 427 | 40 |
| 15° | 404 | 114 |
| 25° | 367 | 169 |
| 35° | 318 | 199 |
| 45° | 261 | 201 |
| 55° | 173 | 149 |
| 65° | 42 | 48 |
| 75° | 22 | 24 |
| 85° | 9 | 9 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 429.5 |
| 2.5° | 429.5 |
| 5° | 426.9 |
| 7.5° | 422.6 |
| 10° | 417.4 |
| 12.5° | 412.2 |
| 15° | 404.4 |
| 17.5° | 396.6 |
| 20° | 387.1 |
| 22.5° | 377.6 |
| 25° | 367.3 |
| 27.5° | 356.0 |
| 30° | 344.8 |
| 32.5° | 331.8 |
| 35° | 318.0 |
| 37.5° | 305.0 |
| 40° | 290.4 |
| 42.5° | 275.7 |
| 45° | 261.0 |
| 47.5° | 244.6 |
| 50° | 228.1 |
| 52.5° | 204.8 |
| 55° | 172.8 |
| 57.5° | 132.2 |
| 60° | 89.9 |
| 62.5° | 59.6 |
| 65° | 42.3 |
| 67.5° | 32.8 |
| 70° | 28.5 |
| 72.5° | 25.9 |
| 75° | 22.5 |
| 77.5° | 19.9 |
| 80° | 16.4 |
| 82.5° | 13.0 |
| 85° | 8.6 |
| 87.5° | 4.3 |
| 90° | 0.0 |



TEST NUMBER: P865627
 CATALOG NUMBER: PRLX-2002-S-930-10L-L-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 | 16.94 | 18.43 | 17.31 | 18.75 | 19.06 | 16.94 | 18.43 | 17.31 | 18.75 | 19.06 |
| | 3H | 17.19 | 18.51 | 17.57 | 18.84 | 19.20 | 17.19 | 18.51 | 17.57 | 18.84 | 19.20 |
| | 4H | 17.35 | 18.58 | 17.75 | 18.93 | 19.31 | 17.35 | 18.58 | 17.75 | 18.93 | 19.31 |
| | 6H | 17.54 | 18.68 | 17.95 | 19.05 | 19.44 | 17.54 | 18.68 | 17.95 | 19.05 | 19.44 |
| | 8H | 17.63 | 18.71 | 18.06 | 19.10 | 19.50 | 17.63 | 18.71 | 18.06 | 19.10 | 19.50 |
| | 12H | 17.70 | 18.73 | 18.13 | 19.11 | 19.54 | 17.70 | 18.73 | 18.13 | 19.11 | 19.54 |
| 4H | 2H | 16.94 | 18.18 | 17.34 | 18.53 | 18.91 | 16.94 | 18.18 | 17.34 | 18.53 | 18.91 |
| | 3H | 17.32 | 18.33 | 17.74 | 18.74 | 19.14 | 17.32 | 18.33 | 17.74 | 18.74 | 19.14 |
| | 4H | 17.58 | 18.49 | 18.02 | 18.91 | 19.35 | 17.58 | 18.49 | 18.02 | 18.91 | 19.35 |
| | 6H | 17.91 | 18.70 | 18.37 | 19.14 | 19.60 | 17.91 | 18.70 | 18.37 | 19.14 | 19.60 |
| | 8H | 18.06 | 18.79 | 18.52 | 19.24 | 19.71 | 18.06 | 18.79 | 18.52 | 19.24 | 19.71 |
| | 12H | 18.19 | 18.84 | 18.67 | 19.32 | 19.79 | 18.19 | 18.84 | 18.67 | 19.32 | 19.79 |
| 8H | 4H | 17.65 | 18.39 | 18.12 | 18.83 | 19.30 | 17.65 | 18.39 | 18.12 | 18.83 | 19.30 |
| | 6H | 18.09 | 18.70 | 18.58 | 19.19 | 19.67 | 18.09 | 18.70 | 18.58 | 19.19 | 19.67 |
| | 8H | 18.31 | 18.86 | 18.82 | 19.37 | 19.86 | 18.31 | 18.86 | 18.82 | 19.37 | 19.86 |
| | 12H | 18.52 | 19.01 | 19.03 | 19.51 | 20.07 | 18.52 | 19.01 | 19.03 | 19.51 | 20.07 |
| 12H | 4H | 17.65 | 18.31 | 18.14 | 18.79 | 19.26 | 17.65 | 18.31 | 18.14 | 18.79 | 19.26 |
| | 6H | 18.11 | 18.66 | 18.62 | 19.17 | 19.66 | 18.11 | 18.66 | 18.62 | 19.17 | 19.66 |
| | 8H | 18.38 | 18.88 | 18.90 | 19.37 | 19.94 | 18.38 | 18.88 | 18.90 | 19.37 | 19.94 |