

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: P865991

Luminaire Tested: PRLX-2001-M-930-45L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-M-930-45L-G-U-S-X-X-WHHR-X
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

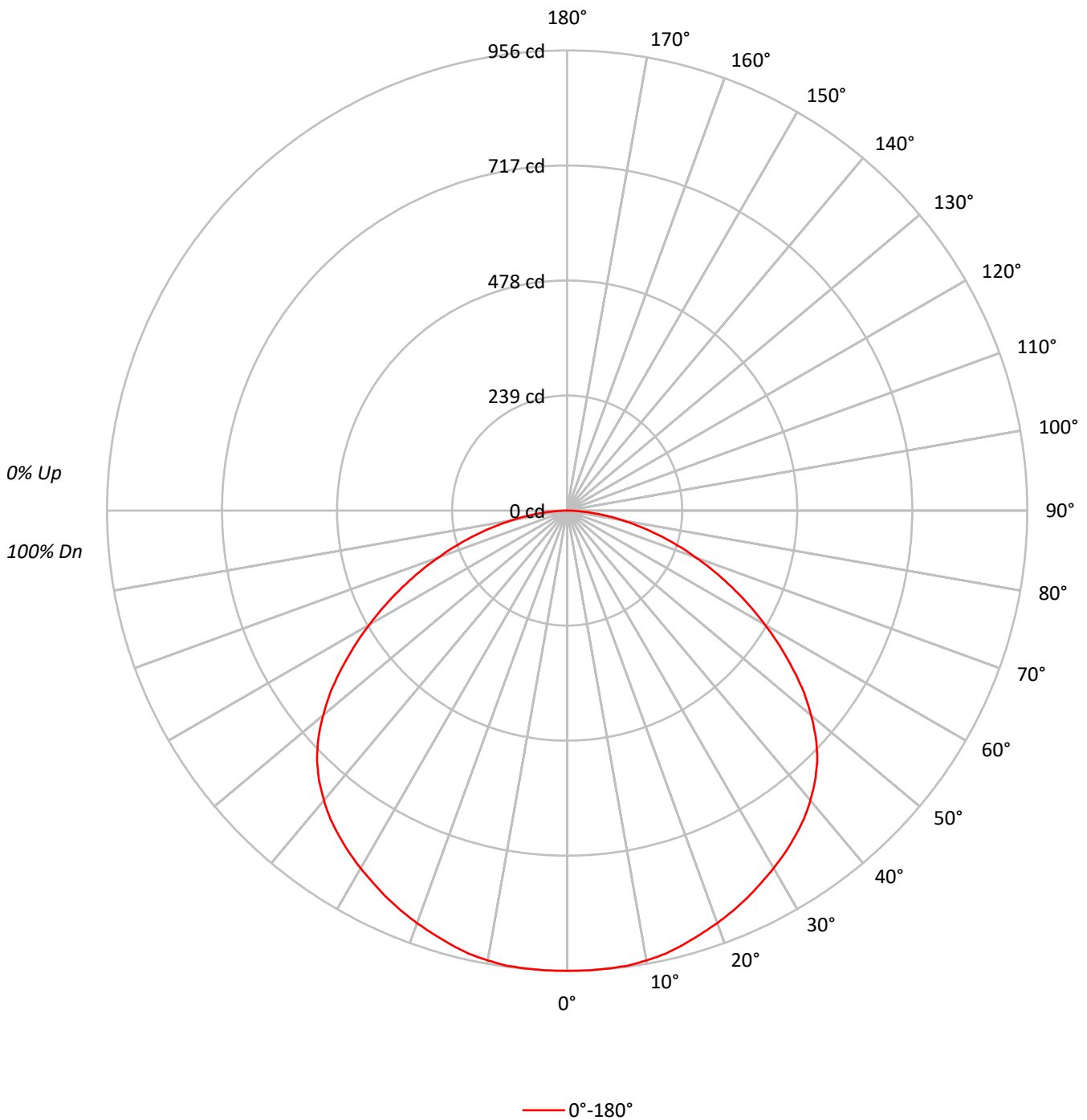
Lumens per Lamp: N/A
Luminaire Lumens: 2998.0 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.47
Luminous Opening: Circular (Dia: 1.27' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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: P865991

CATALOG NUMBER: PRLX-2001-M-930-45L-G-U-S-X-X-WHHR-X

Luminous Intensity Polar Plot





TEST NUMBER: P865991

CATALOG NUMBER: PRLX-2001-M-930-45L-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 | 109 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 50 | 41 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 26 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 8115 |
| 5° | 8136 |
| 10° | 8178 |
| 15° | 8201 |
| 20° | 8236 |
| 25° | 8304 |
| 30° | 8408 |
| 35° | 8555 |
| 40° | 8710 |
| 45° | 8820 |
| 50° | 8738 |
| 55° | 8464 |
| 60° | 8063 |
| 65° | 7594 |
| 70° | 7039 |
| 75° | 6476 |
| 80° | 5732 |
| 85° | 4664 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8820 cd/sqm

TEST NUMBER: P865991

CATALOG NUMBER: PRLX-2001-M-930-45L-G-U-S-X-X-WHHR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 91.0 | 3.0 |
| 10°-20° | 263.8 | 8.8 |
| 20°-30° | 409.4 | 13.7 |
| 30°-40° | 517.2 | 17.3 |
| 40°-50° | 564.6 | 18.8 |
| 50°-60° | 510.8 | 17.0 |
| 60°-70° | 374.8 | 12.5 |
| 70°-80° | 209.4 | 7.0 |
| 80°-90° | 57.0 | 1.9 |
| 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° | 764.2 | 25.5 |
| 0°-40° | 1281.4 | 42.7 |
| 0°-60° | 2356.8 | 78.6 |
| 0°-90° | 2998.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2998.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 956 | |
| 5° | 955 | 91 |
| 15° | 934 | 264 |
| 25° | 887 | 409 |
| 35° | 826 | 517 |
| 45° | 735 | 565 |
| 55° | 572 | 511 |
| 65° | 378 | 375 |
| 75° | 198 | 209 |
| 85° | 48 | 57 |
| 90° | 0 | |

TEST NUMBER: P865991

CATALOG NUMBER: PRLX-2001-M-930-45L-G-U-S-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 956.3 |
| 2.5° | 956.3 |
| 5° | 955.1 |
| 7.5° | 953.9 |
| 10° | 949.1 |
| 12.5° | 943.1 |
| 15° | 933.5 |
| 17.5° | 922.8 |
| 20° | 912.0 |
| 22.5° | 900.0 |
| 25° | 886.9 |
| 27.5° | 872.5 |
| 30° | 858.1 |
| 32.5° | 842.6 |
| 35° | 825.8 |
| 37.5° | 807.9 |
| 40° | 786.3 |
| 42.5° | 762.4 |
| 45° | 734.9 |
| 47.5° | 701.4 |
| 50° | 661.9 |
| 52.5° | 620.0 |
| 55° | 572.1 |
| 57.5° | 524.2 |
| 60° | 475.1 |
| 62.5° | 426.1 |
| 65° | 378.2 |
| 67.5° | 331.5 |
| 70° | 283.7 |
| 72.5° | 240.6 |
| 75° | 197.5 |
| 77.5° | 155.6 |
| 80° | 117.3 |
| 82.5° | 81.4 |
| 85° | 47.9 |
| 87.5° | 21.5 |
| 90° | 0.0 |

TEST NUMBER: P865991

CATALOG NUMBER: PRLX-2001-M-930-45L-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 | 19.67 | 21.34 | 20.04 | 21.65 | 21.96 | 19.67 | 21.34 | 20.04 | 21.65 | 21.96 |
| | 3H | 21.36 | 22.87 | 21.74 | 23.19 | 23.55 | 21.36 | 22.87 | 21.74 | 23.19 | 23.55 |
| | 4H | 21.99 | 23.41 | 22.39 | 23.76 | 24.13 | 21.99 | 23.41 | 22.39 | 23.76 | 24.13 |
| | 6H | 22.44 | 23.76 | 22.86 | 24.12 | 24.51 | 22.44 | 23.76 | 22.86 | 24.12 | 24.51 |
| | 8H | 22.59 | 23.85 | 23.01 | 24.23 | 24.63 | 22.59 | 23.85 | 23.01 | 24.23 | 24.63 |
| | 12H | 22.68 | 23.88 | 23.11 | 24.27 | 24.69 | 22.68 | 23.88 | 23.11 | 24.27 | 24.69 |
| 4H | 2H | 20.27 | 21.69 | 20.67 | 22.04 | 22.42 | 20.27 | 21.69 | 20.67 | 22.04 | 22.42 |
| | 3H | 22.19 | 23.38 | 22.59 | 23.77 | 24.17 | 22.19 | 23.38 | 22.59 | 23.77 | 24.17 |
| | 4H | 22.94 | 24.02 | 23.37 | 24.43 | 24.87 | 22.94 | 24.02 | 23.37 | 24.43 | 24.87 |
| | 6H | 23.52 | 24.46 | 23.97 | 24.90 | 25.36 | 23.52 | 24.46 | 23.97 | 24.90 | 25.36 |
| | 8H | 23.71 | 24.59 | 24.17 | 25.03 | 25.50 | 23.71 | 24.59 | 24.17 | 25.03 | 25.50 |
| | 12H | 23.84 | 24.64 | 24.32 | 25.11 | 25.58 | 23.84 | 24.64 | 24.32 | 25.11 | 25.58 |
| 8H | 4H | 23.24 | 24.12 | 23.70 | 24.56 | 25.03 | 23.24 | 24.12 | 23.70 | 24.56 | 25.03 |
| | 6H | 23.93 | 24.67 | 24.43 | 25.16 | 25.63 | 23.93 | 24.67 | 24.43 | 25.16 | 25.63 |
| | 8H | 24.19 | 24.85 | 24.70 | 25.36 | 25.84 | 24.19 | 24.85 | 24.70 | 25.36 | 25.84 |
| | 12H | 24.39 | 24.98 | 24.90 | 25.47 | 26.03 | 24.39 | 24.98 | 24.90 | 25.47 | 26.03 |
| 12H | 4H | 23.27 | 24.06 | 23.75 | 24.54 | 25.01 | 23.27 | 24.06 | 23.75 | 24.54 | 25.01 |
| | 6H | 23.99 | 24.65 | 24.49 | 25.15 | 25.64 | 23.99 | 24.65 | 24.49 | 25.15 | 25.64 |
| | 8H | 24.30 | 24.88 | 24.81 | 25.37 | 25.93 | 24.30 | 24.88 | 24.81 | 25.37 | 25.93 |