

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: P866915

Luminaire Tested: PRLX-2001-L-940-83L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-62)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-L-940-83L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

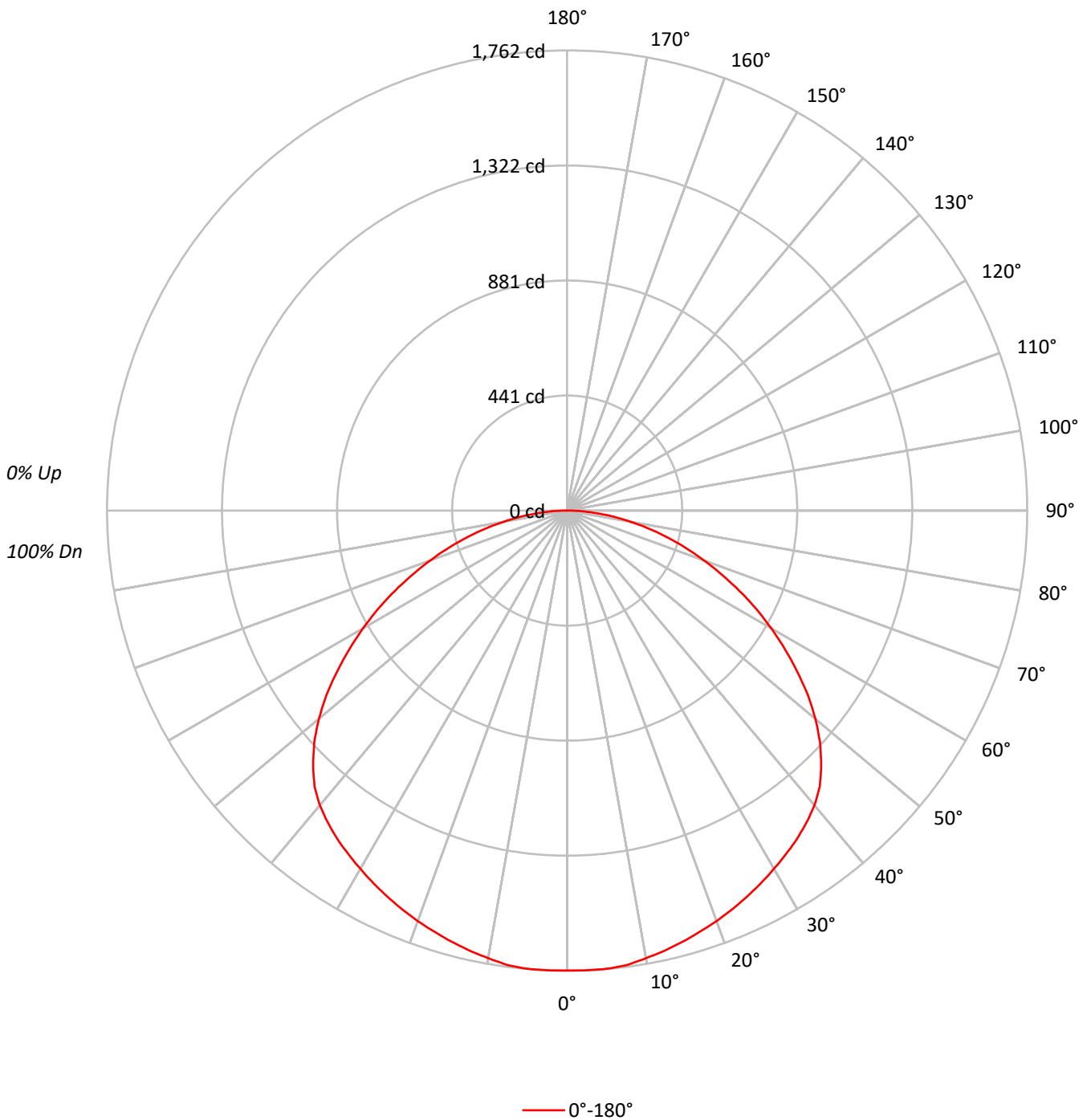
Lumens per Lamp: N/A
Luminaire Lumens: 5653.5 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.48
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | | 93 | 90 | 88 | | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | | 81 | 76 | 72 | | 78 | 74 | 71 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | | 71 | 65 | 60 | | 68 | 64 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | | 63 | 56 | 51 | | 61 | 55 | 51 | 48 |
| 5 | 75 | 62 | 52 | 45 | 73 | 60 | 52 | 45 | 58 | 51 | 45 | | 56 | 49 | 44 | | 54 | 48 | 44 | 42 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 46 | 39 | 52 | 45 | 39 | | 51 | 44 | 39 | | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 34 | 47 | 40 | 34 | | 46 | 39 | 34 | | 45 | 38 | 34 | 32 |
| 8 | 59 | 45 | 37 | 31 | 58 | 45 | 36 | 31 | 43 | 36 | 30 | | 42 | 35 | 30 | | 41 | 35 | 30 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | | 39 | 32 | 27 | | 38 | 31 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | | 36 | 29 | 25 | | 35 | 29 | 24 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 9628 |
| 5° | 9665 |
| 10° | 9661 |
| 15° | 9675 |
| 20° | 9730 |
| 25° | 9838 |
| 30° | 9998 |
| 35° | 10241 |
| 40° | 10516 |
| 45° | 10635 |
| 50° | 10552 |
| 55° | 10253 |
| 60° | 9864 |
| 65° | 9416 |
| 70° | 8911 |
| 75° | 8371 |
| 80° | 7792 |
| 85° | 6962 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10635 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 167.5 | 3.0 |
| 10°-20° | 483.2 | 8.5 |
| 20°-30° | 753.2 | 13.3 |
| 30°-40° | 961.2 | 17.0 |
| 40°-50° | 1058.1 | 18.7 |
| 50°-60° | 961.4 | 17.0 |
| 60°-70° | 721.2 | 12.8 |
| 70°-80° | 421.5 | 7.5 |
| 80°-90° | 126.2 | 2.2 |
| 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° | 1403.9 | 24.8 |
| 0°-40° | 2365.1 | 41.8 |
| 0°-60° | 4384.5 | 77.6 |
| 0°-90° | 5653.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5653.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1761 | |
| 5° | 1761 | 167 |
| 15° | 1710 | 483 |
| 25° | 1631 | 753 |
| 35° | 1534 | 961 |
| 45° | 1376 | 1058 |
| 55° | 1076 | 961 |
| 65° | 728 | 721 |
| 75° | 396 | 422 |
| 85° | 111 | 126 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1761.2 |
| 2.5° | 1761.9 |
| 5° | 1761.2 |
| 7.5° | 1755.0 |
| 10° | 1740.3 |
| 12.5° | 1725.7 |
| 15° | 1709.5 |
| 17.5° | 1691.0 |
| 20° | 1672.5 |
| 22.5° | 1652.4 |
| 25° | 1630.9 |
| 27.5° | 1607.7 |
| 30° | 1583.8 |
| 32.5° | 1559.9 |
| 35° | 1534.5 |
| 37.5° | 1505.9 |
| 40° | 1473.5 |
| 42.5° | 1431.9 |
| 45° | 1375.6 |
| 47.5° | 1313.2 |
| 50° | 1240.7 |
| 52.5° | 1162.0 |
| 55° | 1075.7 |
| 57.5° | 990.1 |
| 60° | 902.2 |
| 62.5° | 816.6 |
| 65° | 727.9 |
| 67.5° | 640.8 |
| 70° | 557.5 |
| 72.5° | 477.3 |
| 75° | 396.3 |
| 77.5° | 322.3 |
| 80° | 247.5 |
| 82.5° | 177.4 |
| 85° | 111.0 |
| 87.5° | 51.7 |
| 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 | 20.35 | 22.02 | 20.71 | 22.34 | 22.65 | 20.35 | 22.02 | 20.71 | 22.34 | 22.65 |
| | 3H | 22.12 | 23.64 | 22.50 | 23.96 | 24.32 | 22.12 | 23.64 | 22.50 | 23.96 | 24.32 |
| | 4H | 22.80 | 24.24 | 23.20 | 24.58 | 24.96 | 22.80 | 24.24 | 23.20 | 24.58 | 24.96 |
| | 6H | 23.34 | 24.67 | 23.75 | 25.03 | 25.42 | 23.34 | 24.67 | 23.75 | 25.03 | 25.42 |
| | 8H | 23.52 | 24.79 | 23.94 | 25.18 | 25.58 | 23.52 | 24.79 | 23.94 | 25.18 | 25.58 |
| | 12H | 23.65 | 24.87 | 24.08 | 25.25 | 25.68 | 23.65 | 24.87 | 24.08 | 25.25 | 25.68 |
| 4H | 2H | 20.97 | 22.41 | 21.37 | 22.75 | 23.13 | 20.97 | 22.41 | 21.37 | 22.75 | 23.13 |
| | 3H | 22.98 | 24.18 | 23.38 | 24.58 | 24.98 | 22.98 | 24.18 | 23.38 | 24.58 | 24.98 |
| | 4H | 23.80 | 24.89 | 24.23 | 25.30 | 25.73 | 23.80 | 24.89 | 24.23 | 25.30 | 25.73 |
| | 6H | 24.47 | 25.42 | 24.92 | 25.86 | 26.32 | 24.47 | 25.42 | 24.92 | 25.86 | 26.32 |
| | 8H | 24.70 | 25.60 | 25.16 | 26.04 | 26.50 | 24.70 | 25.60 | 25.16 | 26.04 | 26.50 |
| | 12H | 24.88 | 25.69 | 25.36 | 26.16 | 26.63 | 24.88 | 25.69 | 25.36 | 26.16 | 26.63 |
| 8H | 4H | 24.13 | 25.02 | 24.58 | 25.46 | 25.93 | 24.13 | 25.02 | 24.58 | 25.46 | 25.93 |
| | 6H | 24.93 | 25.68 | 25.42 | 26.16 | 26.64 | 24.93 | 25.68 | 25.42 | 26.16 | 26.64 |
| | 8H | 25.24 | 25.91 | 25.75 | 26.42 | 26.90 | 25.24 | 25.91 | 25.75 | 26.42 | 26.90 |
| | 12H | 25.50 | 26.10 | 26.01 | 26.59 | 27.15 | 25.50 | 26.10 | 26.01 | 26.59 | 27.15 |
| 12H | 4H | 24.17 | 24.98 | 24.65 | 25.45 | 25.92 | 24.17 | 24.98 | 24.65 | 25.45 | 25.92 |
| | 6H | 25.00 | 25.67 | 25.50 | 26.17 | 26.66 | 25.00 | 25.67 | 25.50 | 26.17 | 26.66 |
| | 8H | 25.37 | 25.97 | 25.88 | 26.46 | 27.02 | 25.37 | 25.97 | 25.88 | 26.46 | 27.02 |