

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: P867020

Luminaire Tested: PRLX-2002-L-930-48L-L-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-83)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-L-930-48L-L-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

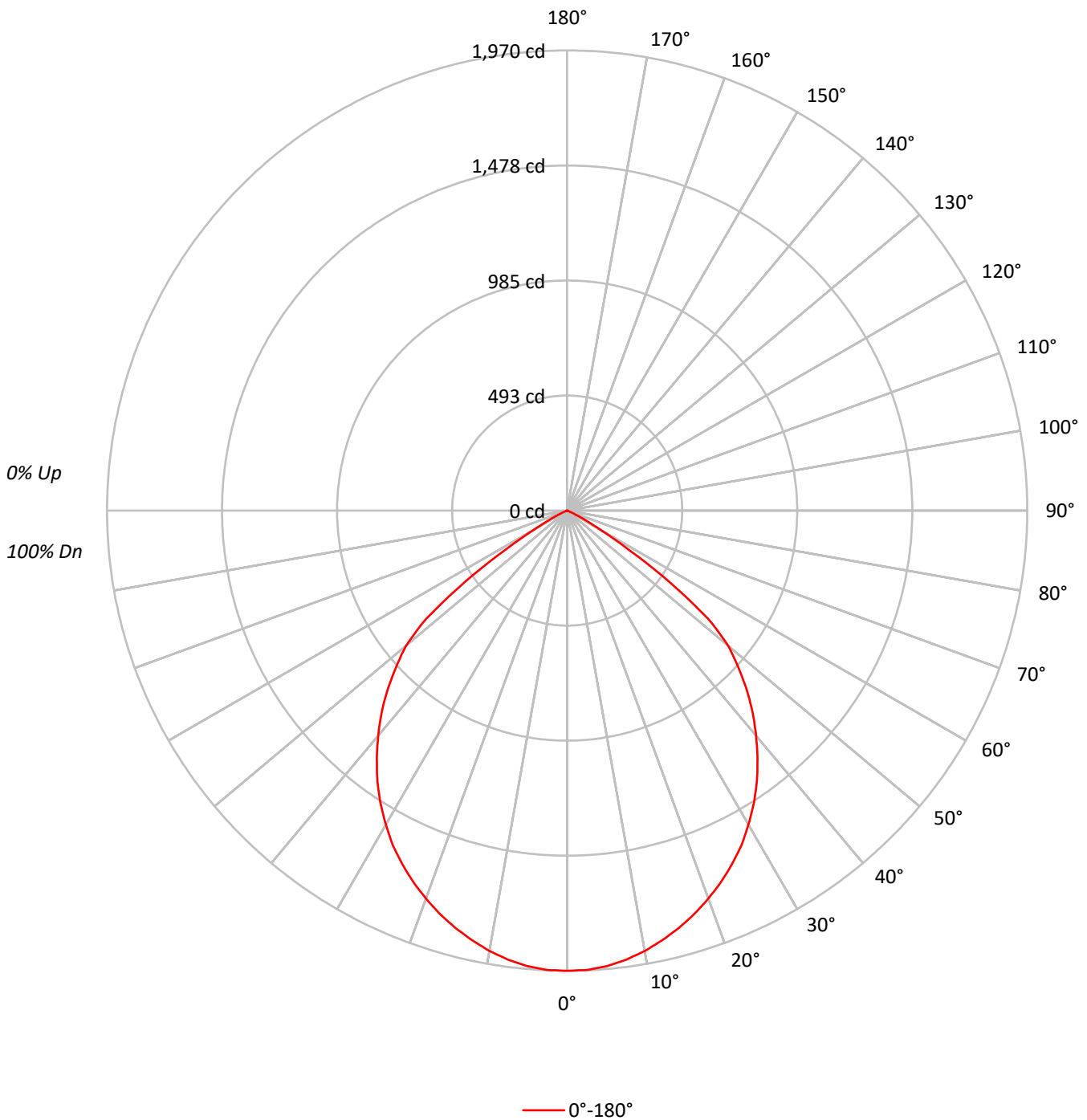
Lumens per Lamp: N/A
Luminaire Lumens: 3726.4 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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: 0.5 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 | 112 | 109 | 105 | 103 | 109 | 106 | 104 | 101 | 102 | 100 | 98 | | 98 | 97 | 95 | | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | | 90 | 87 | 84 | | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 77 | 84 | 79 | 75 | | 82 | 78 | 74 | | 79 | 76 | 73 | 71 |
| 4 | 90 | 80 | 73 | 68 | 88 | 79 | 72 | 67 | 77 | 71 | 66 | | 75 | 70 | 66 | | 73 | 68 | 65 | 63 |
| 5 | 84 | 73 | 65 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | | 68 | 63 | 58 | | 66 | 62 | 58 | 56 |
| 6 | 78 | 66 | 59 | 53 | 76 | 66 | 58 | 53 | 64 | 57 | 53 | | 62 | 57 | 52 | | 61 | 56 | 52 | 50 |
| 7 | 73 | 61 | 53 | 48 | 71 | 60 | 53 | 48 | 59 | 52 | 47 | | 57 | 51 | 47 | | 56 | 51 | 47 | 45 |
| 8 | 68 | 56 | 48 | 43 | 66 | 55 | 48 | 43 | 54 | 47 | 43 | | 53 | 47 | 43 | | 52 | 46 | 42 | 41 |
| 9 | 64 | 52 | 44 | 39 | 62 | 51 | 44 | 39 | 50 | 43 | 39 | | 49 | 43 | 39 | | 48 | 43 | 39 | 37 |
| 10 | 60 | 48 | 41 | 36 | 59 | 47 | 40 | 36 | 46 | 40 | 36 | | 45 | 40 | 35 | | 45 | 39 | 35 | 34 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 9721 |
| 5° | 9693 |
| 10° | 9589 |
| 15° | 9446 |
| 20° | 9282 |
| 25° | 9092 |
| 30° | 8846 |
| 35° | 8527 |
| 40° | 8103 |
| 45° | 7587 |
| 50° | 6916 |
| 55° | 4624 |
| 60° | 1643 |
| 65° | 379 |
| 70° | 61 |
| 75° | 65 |
| 80° | 85 |
| 85° | 96 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7587 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 185.4 | 5.0 |
| 10°-20° | 521.2 | 14.0 |
| 20°-30° | 768.6 | 20.6 |
| 30°-40° | 883.2 | 23.7 |
| 40°-50° | 836.2 | 22.4 |
| 50°-60° | 476.1 | 12.8 |
| 60°-70° | 50.5 | 1.4 |
| 70°-80° | 3.6 | 0.1 |
| 80°-90° | 1.7 | 0.0 |
| 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° | 1475.2 | 39.6 |
| 0°-40° | 2358.4 | 63.3 |
| 0°-60° | 3670.7 | 98.5 |
| 0°-90° | 3726.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3726.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1970 | |
| 5° | 1957 | 185 |
| 15° | 1849 | 521 |
| 25° | 1670 | 769 |
| 35° | 1416 | 883 |
| 45° | 1087 | 836 |
| 55° | 538 | 476 |
| 65° | 32 | 50 |
| 75° | 3 | 4 |
| 85° | 2 | 2 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1970.2 |
| 2.5° | 1968.1 |
| 5° | 1957.1 |
| 7.5° | 1939.0 |
| 10° | 1914.0 |
| 12.5° | 1883.6 |
| 15° | 1849.4 |
| 17.5° | 1810.5 |
| 20° | 1767.8 |
| 22.5° | 1721.3 |
| 25° | 1670.2 |
| 27.5° | 1615.2 |
| 30° | 1552.7 |
| 32.5° | 1486.8 |
| 35° | 1415.8 |
| 37.5° | 1338.8 |
| 40° | 1258.1 |
| 42.5° | 1176.6 |
| 45° | 1087.4 |
| 47.5° | 994.8 |
| 50° | 901.0 |
| 52.5° | 760.7 |
| 55° | 537.6 |
| 57.5° | 320.8 |
| 60° | 166.5 |
| 62.5° | 83.3 |
| 65° | 32.5 |
| 67.5° | 6.3 |
| 70° | 4.2 |
| 72.5° | 3.8 |
| 75° | 3.4 |
| 77.5° | 3.0 |
| 80° | 3.0 |
| 82.5° | 2.1 |
| 85° | 1.7 |
| 87.5° | 0.8 |
| 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 | 13.80 | 15.16 | 14.16 | 15.47 | 15.79 | 13.80 | 15.16 | 14.16 | 15.47 | 15.79 |
| | 3H | 13.67 | 14.87 | 14.05 | 15.20 | 15.56 | 13.67 | 14.87 | 14.05 | 15.20 | 15.56 |
| | 4H | 13.60 | 14.71 | 14.01 | 15.06 | 15.44 | 13.60 | 14.71 | 14.01 | 15.06 | 15.44 |
| | 6H | 13.53 | 14.54 | 13.94 | 14.91 | 15.31 | 13.53 | 14.54 | 13.94 | 14.91 | 15.31 |
| | 8H | 13.49 | 14.45 | 13.92 | 14.84 | 15.24 | 13.49 | 14.45 | 13.92 | 14.84 | 15.24 |
| | 12H | 13.45 | 14.36 | 13.88 | 14.75 | 15.18 | 13.45 | 14.36 | 13.88 | 14.75 | 15.18 |
| 4H | 2H | 13.62 | 14.73 | 14.03 | 15.08 | 15.47 | 13.62 | 14.73 | 14.03 | 15.08 | 15.47 |
| | 3H | 13.50 | 14.39 | 13.91 | 14.79 | 15.20 | 13.50 | 14.39 | 13.91 | 14.79 | 15.20 |
| | 4H | 13.42 | 14.20 | 13.85 | 14.62 | 15.07 | 13.42 | 14.20 | 13.85 | 14.62 | 15.07 |
| | 6H | 13.34 | 14.02 | 13.80 | 14.46 | 14.93 | 13.34 | 14.02 | 13.80 | 14.46 | 14.93 |
| | 8H | 13.28 | 13.91 | 13.75 | 14.36 | 14.83 | 13.28 | 13.91 | 13.75 | 14.36 | 14.83 |
| | 12H | 13.23 | 13.79 | 13.72 | 14.28 | 14.75 | 13.23 | 13.79 | 13.72 | 14.28 | 14.75 |
| 8H | 4H | 13.28 | 13.91 | 13.75 | 14.36 | 14.83 | 13.28 | 13.91 | 13.75 | 14.36 | 14.83 |
| | 6H | 13.17 | 13.69 | 13.67 | 14.19 | 14.67 | 13.17 | 13.69 | 13.67 | 14.19 | 14.67 |
| | 8H | 13.10 | 13.58 | 13.63 | 14.10 | 14.59 | 13.10 | 13.58 | 13.63 | 14.10 | 14.59 |
| | 12H | 13.06 | 13.48 | 13.57 | 13.98 | 14.55 | 13.06 | 13.48 | 13.57 | 13.98 | 14.55 |
| 12H | 4H | 13.23 | 13.79 | 13.71 | 14.27 | 14.75 | 13.23 | 13.79 | 13.71 | 14.27 | 14.75 |
| | 6H | 13.10 | 13.58 | 13.63 | 14.09 | 14.59 | 13.10 | 13.58 | 13.63 | 14.09 | 14.59 |
| | 8H | 13.05 | 13.48 | 13.57 | 13.97 | 14.55 | 13.05 | 13.48 | 13.57 | 13.97 | 14.55 |