

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: P867152

Luminaire Tested: PRLX-2002-L-940-48L-G-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867152
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-71)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-L-940-48L-G-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

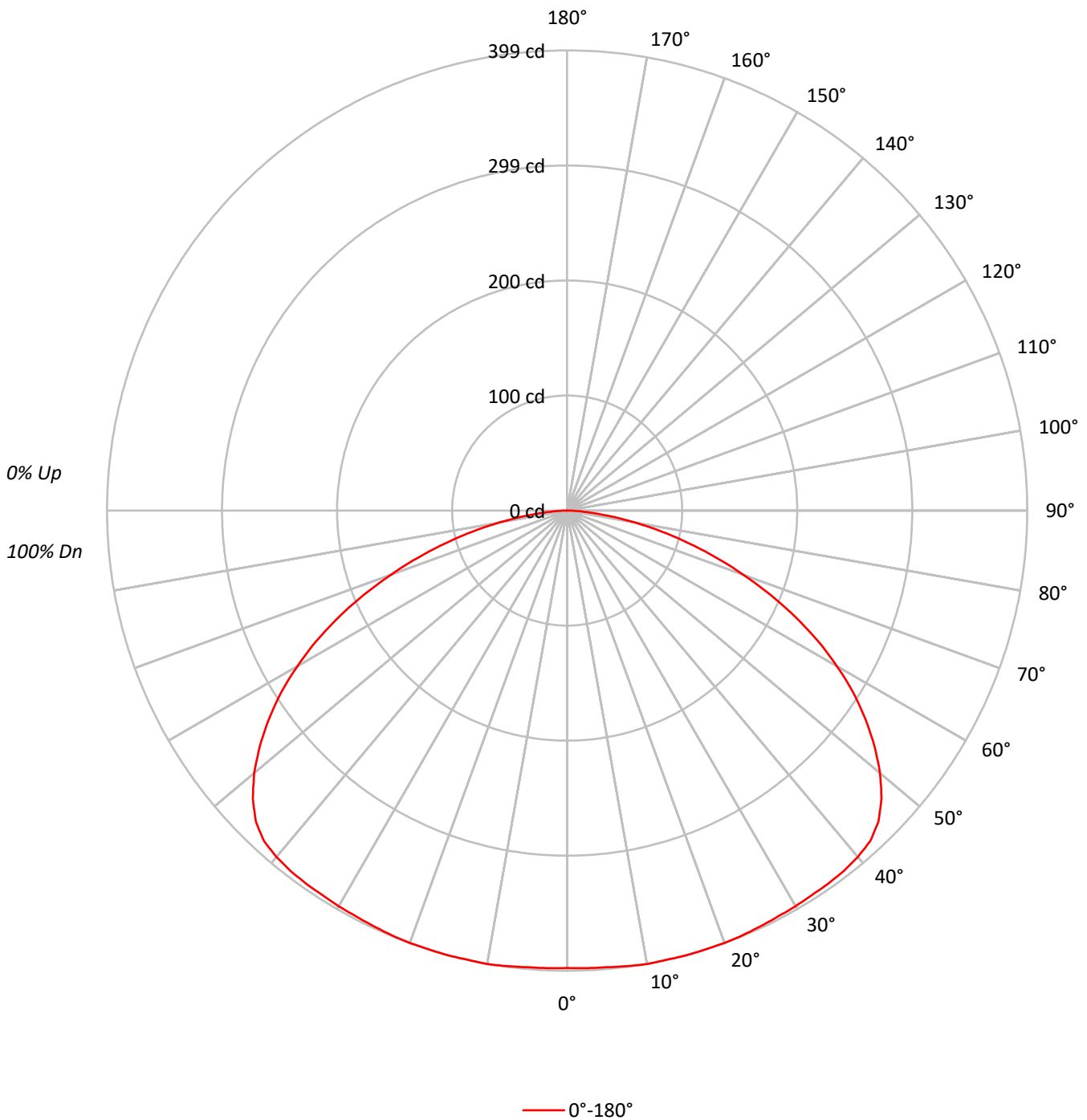
Lumens per Lamp: N/A
Luminaire Lumens: 1513.7 lumens
Efficiency: N/A
Efficacy: 40.4 lumens/watt
Spacing Criteria (0/90/45): 1.52 / 1.52 / 1.65
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | | 93 | 90 | 87 | | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | | 80 | 76 | 71 | | 77 | 73 | 70 | 68 |
| 3 | 89 | 77 | 69 | 62 | 86 | 76 | 68 | 61 | 73 | 66 | 60 | | 70 | 64 | 59 | | 67 | 62 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 51 | 64 | 56 | 51 | | 62 | 55 | 50 | | 59 | 54 | 49 | 47 |
| 5 | 74 | 60 | 51 | 44 | 72 | 59 | 50 | 44 | 57 | 49 | 43 | | 55 | 48 | 43 | | 53 | 47 | 42 | 40 |
| 6 | 68 | 54 | 44 | 38 | 66 | 53 | 44 | 37 | 51 | 43 | 37 | | 49 | 42 | 37 | | 48 | 41 | 36 | 34 |
| 7 | 63 | 48 | 39 | 33 | 61 | 48 | 39 | 33 | 46 | 38 | 32 | | 44 | 37 | 32 | | 43 | 37 | 32 | 30 |
| 8 | 58 | 44 | 35 | 29 | 56 | 43 | 35 | 29 | 42 | 34 | 29 | | 41 | 34 | 28 | | 39 | 33 | 28 | 26 |
| 9 | 54 | 40 | 32 | 26 | 53 | 39 | 31 | 26 | 38 | 31 | 26 | | 37 | 30 | 25 | | 36 | 30 | 25 | 23 |
| 10 | 50 | 37 | 29 | 23 | 49 | 36 | 28 | 23 | 35 | 28 | 23 | | 34 | 28 | 23 | | 33 | 27 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 1957 |
| 5° | 1969 |
| 10° | 2000 |
| 15° | 2040 |
| 20° | 2094 |
| 25° | 2164 |
| 30° | 2257 |
| 35° | 2378 |
| 40° | 2525 |
| 45° | 2663 |
| 50° | 2719 |
| 55° | 2717 |
| 60° | 2667 |
| 65° | 2550 |
| 70° | 2341 |
| 75° | 2078 |
| 80° | 1696 |
| 85° | 1138 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 2723 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.0 | 2.5 |
| 10°-20° | 113.1 | 7.5 |
| 20°-30° | 183.9 | 12.2 |
| 30°-40° | 247.8 | 16.4 |
| 40°-50° | 292.6 | 19.3 |
| 50°-60° | 281.6 | 18.6 |
| 60°-70° | 215.4 | 14.2 |
| 70°-80° | 115.7 | 7.6 |
| 80°-90° | 25.7 | 1.7 |
| 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° | 335.1 | 22.1 |
| 0°-40° | 582.8 | 38.5 |
| 0°-60° | 1157.0 | 76.4 |
| 0°-90° | 1513.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1513.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 397 | |
| 5° | 398 | 38 |
| 15° | 399 | 113 |
| 25° | 398 | 184 |
| 35° | 395 | 248 |
| 45° | 382 | 293 |
| 55° | 316 | 282 |
| 65° | 218 | 215 |
| 75° | 109 | 116 |
| 85° | 20 | 26 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 396.6 |
| 2.5° | 397.1 |
| 5° | 397.5 |
| 7.5° | 398.4 |
| 10° | 399.3 |
| 12.5° | 398.9 |
| 15° | 399.3 |
| 17.5° | 398.9 |
| 20° | 398.9 |
| 22.5° | 398.4 |
| 25° | 397.5 |
| 27.5° | 396.6 |
| 30° | 396.1 |
| 32.5° | 395.2 |
| 35° | 394.8 |
| 37.5° | 393.9 |
| 40° | 392.0 |
| 42.5° | 388.9 |
| 45° | 381.6 |
| 47.5° | 369.7 |
| 50° | 354.2 |
| 52.5° | 336.0 |
| 55° | 315.9 |
| 57.5° | 294.5 |
| 60° | 270.3 |
| 62.5° | 245.3 |
| 65° | 218.4 |
| 67.5° | 190.6 |
| 70° | 162.3 |
| 72.5° | 135.4 |
| 75° | 109.0 |
| 77.5° | 83.4 |
| 80° | 59.7 |
| 82.5° | 37.8 |
| 85° | 20.1 |
| 87.5° | 6.8 |
| 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 | 16.10 | 17.81 | 16.46 | 18.12 | 18.44 | 16.10 | 17.81 | 16.46 | 18.12 | 18.44 |
| | 3H | 17.85 | 19.40 | 18.23 | 19.73 | 20.09 | 17.85 | 19.40 | 18.23 | 19.73 | 20.09 |
| | 4H | 18.46 | 19.92 | 18.85 | 20.27 | 20.64 | 18.46 | 19.92 | 18.85 | 20.27 | 20.64 |
| | 6H | 18.85 | 20.21 | 19.26 | 20.57 | 20.96 | 18.85 | 20.21 | 19.26 | 20.57 | 20.96 |
| | 8H | 18.95 | 20.25 | 19.37 | 20.64 | 21.04 | 18.95 | 20.25 | 19.37 | 20.64 | 21.04 |
| | 12H | 19.00 | 20.25 | 19.43 | 20.63 | 21.06 | 19.00 | 20.25 | 19.43 | 20.63 | 21.06 |
| 4H | 2H | 16.74 | 18.21 | 17.14 | 18.56 | 18.93 | 16.74 | 18.21 | 17.14 | 18.56 | 18.93 |
| | 3H | 18.70 | 19.93 | 19.11 | 20.33 | 20.73 | 18.70 | 19.93 | 19.11 | 20.33 | 20.73 |
| | 4H | 19.42 | 20.54 | 19.85 | 20.95 | 21.38 | 19.42 | 20.54 | 19.85 | 20.95 | 21.38 |
| | 6H | 19.93 | 20.90 | 20.38 | 21.34 | 21.79 | 19.93 | 20.90 | 20.38 | 21.34 | 21.79 |
| | 8H | 20.06 | 20.98 | 20.52 | 21.42 | 21.88 | 20.06 | 20.98 | 20.52 | 21.42 | 21.88 |
| | 12H | 20.14 | 20.97 | 20.62 | 21.44 | 21.91 | 20.14 | 20.97 | 20.62 | 21.44 | 21.91 |
| 8H | 4H | 19.71 | 20.62 | 20.16 | 21.06 | 21.52 | 19.71 | 20.62 | 20.16 | 21.06 | 21.52 |
| | 6H | 20.31 | 21.07 | 20.80 | 21.55 | 22.03 | 20.31 | 21.07 | 20.80 | 21.55 | 22.03 |
| | 8H | 20.49 | 21.17 | 21.00 | 21.68 | 22.16 | 20.49 | 21.17 | 21.00 | 21.68 | 22.16 |
| | 12H | 20.62 | 21.22 | 21.12 | 21.71 | 22.27 | 20.62 | 21.22 | 21.12 | 21.71 | 22.27 |
| 12H | 4H | 19.73 | 20.56 | 20.21 | 21.03 | 21.50 | 19.73 | 20.56 | 20.21 | 21.03 | 21.50 |
| | 6H | 20.34 | 21.03 | 20.85 | 21.53 | 22.01 | 20.34 | 21.03 | 20.85 | 21.53 | 22.01 |
| | 8H | 20.57 | 21.18 | 21.08 | 21.67 | 22.22 | 20.57 | 21.18 | 21.08 | 21.67 | 22.22 |