

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: P866212

Luminaire Tested: PRLX-2002-M-930-07L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866212
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-41)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-930-07L-G-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

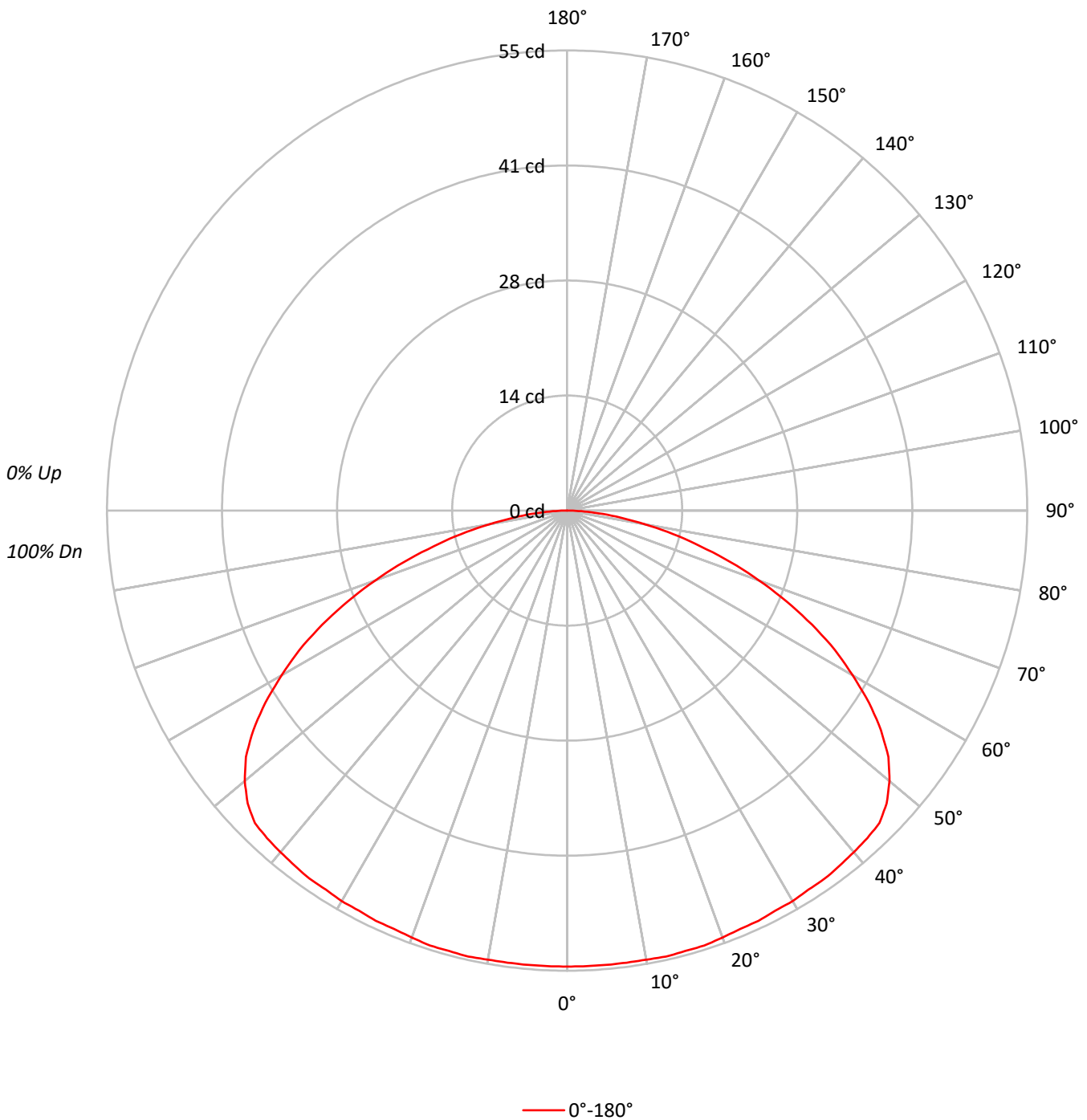
Lumens per Lamp: N/A
Luminaire Lumens: 214.6 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 8.2
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 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 93 | 90 | | 92 | 89 | 87 | | 89 | 86 | 84 | 82 |
| 2 | 97 | 88 | 81 | 75 | 95 | 86 | 80 | 74 | 83 | 77 | 72 | | 80 | 75 | 71 | | 76 | 72 | 69 | 67 |
| 3 | 88 | 77 | 68 | 61 | 85 | 75 | 67 | 60 | 72 | 65 | 59 | | 69 | 63 | 58 | | 67 | 61 | 57 | 55 |
| 4 | 80 | 67 | 58 | 51 | 78 | 66 | 57 | 50 | 63 | 56 | 49 | | 61 | 54 | 49 | | 59 | 53 | 48 | 46 |
| 5 | 73 | 59 | 50 | 43 | 71 | 58 | 49 | 42 | 56 | 48 | 42 | | 54 | 47 | 41 | | 52 | 46 | 41 | 39 |
| 6 | 67 | 53 | 43 | 37 | 65 | 52 | 43 | 37 | 50 | 42 | 36 | | 48 | 41 | 36 | | 47 | 40 | 35 | 33 |
| 7 | 62 | 48 | 38 | 32 | 60 | 47 | 38 | 32 | 45 | 37 | 32 | | 44 | 37 | 31 | | 42 | 36 | 31 | 29 |
| 8 | 57 | 43 | 34 | 28 | 56 | 42 | 34 | 28 | 41 | 33 | 28 | | 40 | 33 | 28 | | 39 | 32 | 27 | 25 |
| 9 | 53 | 39 | 31 | 25 | 52 | 39 | 31 | 25 | 38 | 30 | 25 | | 36 | 30 | 25 | | 35 | 29 | 24 | 23 |
| 10 | 50 | 36 | 28 | 22 | 49 | 36 | 28 | 22 | 35 | 27 | 22 | | 34 | 27 | 22 | | 33 | 26 | 22 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-----|
| | 0° |
| 0° | 434 |
| 5° | 435 |
| 10° | 440 |
| 15° | 449 |
| 20° | 460 |
| 25° | 475 |
| 30° | 495 |
| 35° | 522 |
| 40° | 554 |
| 45° | 594 |
| 50° | 623 |
| 55° | 635 |
| 60° | 627 |
| 65° | 608 |
| 70° | 568 |
| 75° | 507 |
| 80° | 431 |
| 85° | 347 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 635 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 5.2 | 2.4 |
| 10°-20° | 15.4 | 7.2 |
| 20°-30° | 25.0 | 11.7 |
| 30°-40° | 33.7 | 15.7 |
| 40°-50° | 40.5 | 18.9 |
| 50°-60° | 40.7 | 19.0 |
| 60°-70° | 31.8 | 14.8 |
| 70°-80° | 17.6 | 8.2 |
| 80°-90° | 4.5 | 2.1 |
| 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° | 45.7 | 21.3 |
| 0°-40° | 79.3 | 37.0 |
| 0°-60° | 160.6 | 74.8 |
| 0°-90° | 214.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 214.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|----|------|
| 0° | 54 | |
| 5° | 54 | 5 |
| 15° | 54 | 15 |
| 25° | 54 | 25 |
| 35° | 54 | 34 |
| 45° | 53 | 41 |
| 55° | 46 | 41 |
| 65° | 32 | 32 |
| 75° | 16 | 18 |
| 85° | 4 | 5 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|------|
| 0° | 54.5 |
| 2.5° | 54.5 |
| 5° | 54.5 |
| 7.5° | 54.5 |
| 10° | 54.5 |
| 12.5° | 54.6 |
| 15° | 54.5 |
| 17.5° | 54.5 |
| 20° | 54.3 |
| 22.5° | 54.1 |
| 25° | 54.1 |
| 27.5° | 53.9 |
| 30° | 53.9 |
| 32.5° | 53.7 |
| 35° | 53.7 |
| 37.5° | 53.5 |
| 40° | 53.3 |
| 42.5° | 53.1 |
| 45° | 52.8 |
| 47.5° | 51.8 |
| 50° | 50.3 |
| 52.5° | 48.4 |
| 55° | 45.8 |
| 57.5° | 42.8 |
| 60° | 39.4 |
| 62.5° | 36.1 |
| 65° | 32.3 |
| 67.5° | 28.4 |
| 70° | 24.4 |
| 72.5° | 20.5 |
| 75° | 16.5 |
| 77.5° | 13.0 |
| 80° | 9.4 |
| 82.5° | 6.4 |
| 85° | 3.8 |
| 87.5° | 1.7 |
| 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 | 11.12 | 12.85 | 11.48 | 13.17 | 13.48 | 11.12 | 12.85 | 11.48 | 13.17 | 13.48 |
| | 3H | 12.95 | 14.53 | 13.33 | 14.85 | 15.21 | 12.95 | 14.53 | 13.33 | 14.85 | 15.21 |
| | 4H | 13.59 | 15.08 | 13.99 | 15.43 | 15.80 | 13.59 | 15.08 | 13.99 | 15.43 | 15.80 |
| | 6H | 14.04 | 15.42 | 14.45 | 15.78 | 16.17 | 14.04 | 15.42 | 14.45 | 15.78 | 16.17 |
| | 8H | 14.17 | 15.49 | 14.59 | 15.88 | 16.28 | 14.17 | 15.49 | 14.59 | 15.88 | 16.28 |
| | 12H | 14.25 | 15.52 | 14.68 | 15.90 | 16.33 | 14.25 | 15.52 | 14.68 | 15.90 | 16.33 |
| 4H | 2H | 11.79 | 13.28 | 12.18 | 13.62 | 14.00 | 11.79 | 13.28 | 12.18 | 13.62 | 14.00 |
| | 3H | 13.83 | 15.08 | 14.24 | 15.48 | 15.88 | 13.83 | 15.08 | 14.24 | 15.48 | 15.88 |
| | 4H | 14.59 | 15.73 | 15.02 | 16.14 | 16.57 | 14.59 | 15.73 | 15.02 | 16.14 | 16.57 |
| | 6H | 15.15 | 16.15 | 15.60 | 16.59 | 17.04 | 15.15 | 16.15 | 15.60 | 16.59 | 17.04 |
| | 8H | 15.32 | 16.26 | 15.78 | 16.70 | 17.16 | 15.32 | 16.26 | 15.78 | 16.70 | 17.16 |
| | 12H | 15.45 | 16.29 | 15.93 | 16.76 | 17.23 | 15.45 | 16.29 | 15.93 | 16.76 | 17.23 |
| 8H | 4H | 14.90 | 15.83 | 15.35 | 16.27 | 16.73 | 14.90 | 15.83 | 15.35 | 16.27 | 16.73 |
| | 6H | 15.57 | 16.35 | 16.06 | 16.83 | 17.30 | 15.57 | 16.35 | 16.06 | 16.83 | 17.30 |
| | 8H | 15.80 | 16.50 | 16.31 | 17.00 | 17.49 | 15.80 | 16.50 | 16.31 | 17.00 | 17.49 |
| | 12H | 15.99 | 16.60 | 16.49 | 17.09 | 17.65 | 15.99 | 16.60 | 16.49 | 17.09 | 17.65 |
| 12H | 4H | 14.93 | 15.77 | 15.41 | 16.25 | 16.71 | 14.93 | 15.77 | 15.41 | 16.25 | 16.71 |
| | 6H | 15.62 | 16.32 | 16.12 | 16.82 | 17.30 | 15.62 | 16.32 | 16.12 | 16.82 | 17.30 |
| | 8H | 15.90 | 16.52 | 16.41 | 17.01 | 17.57 | 15.90 | 16.52 | 16.41 | 17.01 | 17.57 |