

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: P866148

Luminaire Tested: PRLX-2002-M-927-07L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866148
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: Prenalux
Catalog Number: PRLX-2002-M-927-07L-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

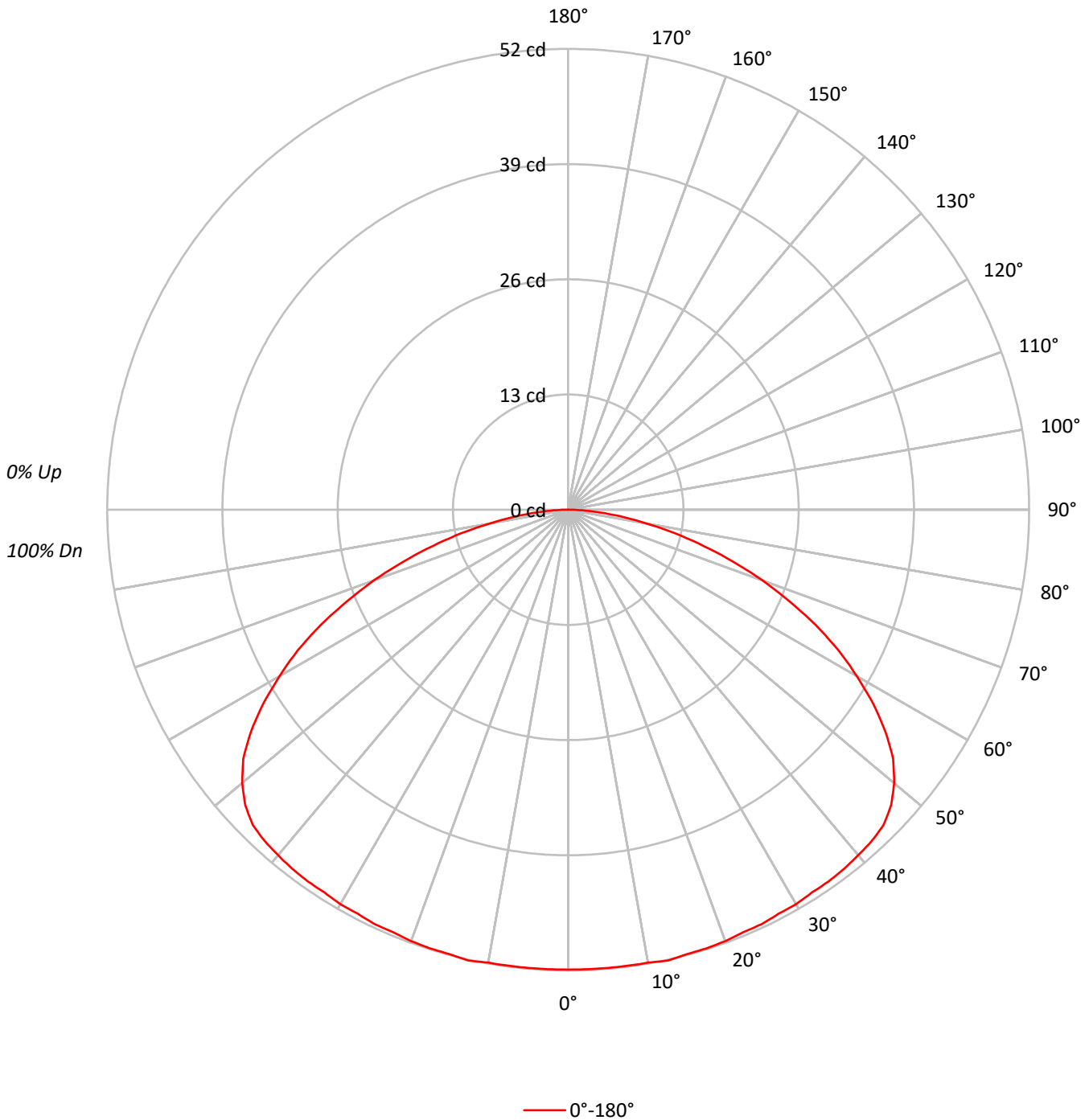
Lumens per Lamp: N/A
Luminaire Lumens: 204.6 lumens
Efficiency: N/A
Efficacy: 25.0 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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° | 413 |
| 5° | 414 |
| 10° | 419 |
| 15° | 427 |
| 20° | 439 |
| 25° | 453 |
| 30° | 472 |
| 35° | 497 |
| 40° | 529 |
| 45° | 566 |
| 50° | 594 |
| 55° | 606 |
| 60° | 598 |
| 65° | 580 |
| 70° | 542 |
| 75° | 486 |
| 80° | 412 |
| 85° | 329 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 606 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 5.0 | 2.4 |
| 10°-20° | 14.7 | 7.2 |
| 20°-30° | 23.9 | 11.7 |
| 30°-40° | 32.1 | 15.7 |
| 40°-50° | 38.7 | 18.9 |
| 50°-60° | 38.8 | 19.0 |
| 60°-70° | 30.3 | 14.8 |
| 70°-80° | 16.8 | 8.2 |
| 80°-90° | 4.3 | 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° | 43.5 | 21.3 |
| 0°-40° | 75.7 | 37.0 |
| 0°-60° | 153.2 | 74.8 |
| 0°-90° | 204.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 204.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|----|------|
| 0° | 52 | |
| 5° | 52 | 5 |
| 15° | 52 | 15 |
| 25° | 52 | 24 |
| 35° | 51 | 32 |
| 45° | 50 | 39 |
| 55° | 44 | 39 |
| 65° | 31 | 30 |
| 75° | 16 | 17 |
| 85° | 4 | 4 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|------|
| 0° | 51.9 |
| 2.5° | 51.9 |
| 5° | 51.9 |
| 7.5° | 51.9 |
| 10° | 51.9 |
| 12.5° | 52.1 |
| 15° | 51.9 |
| 17.5° | 51.9 |
| 20° | 51.8 |
| 22.5° | 51.6 |
| 25° | 51.6 |
| 27.5° | 51.4 |
| 30° | 51.4 |
| 32.5° | 51.2 |
| 35° | 51.2 |
| 37.5° | 51.1 |
| 40° | 50.9 |
| 42.5° | 50.7 |
| 45° | 50.3 |
| 47.5° | 49.4 |
| 50° | 48.0 |
| 52.5° | 46.2 |
| 55° | 43.7 |
| 57.5° | 40.8 |
| 60° | 37.6 |
| 62.5° | 34.4 |
| 65° | 30.8 |
| 67.5° | 27.0 |
| 70° | 23.3 |
| 72.5° | 19.5 |
| 75° | 15.8 |
| 77.5° | 12.4 |
| 80° | 9.0 |
| 82.5° | 6.1 |
| 85° | 3.6 |
| 87.5° | 1.6 |
| 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 | 10.95 | 12.68 | 11.31 | 13.00 | 13.31 | 10.95 | 12.68 | 11.31 | 13.00 | 13.31 |
| | 3H | 12.78 | 14.36 | 13.16 | 14.68 | 15.04 | 12.78 | 14.36 | 13.16 | 14.68 | 15.04 |
| | 4H | 13.43 | 14.91 | 13.82 | 15.26 | 15.63 | 13.43 | 14.91 | 13.82 | 15.26 | 15.63 |
| | 6H | 13.87 | 15.26 | 14.28 | 15.62 | 16.01 | 13.87 | 15.26 | 14.28 | 15.62 | 16.01 |
| | 8H | 14.00 | 15.33 | 14.43 | 15.72 | 16.11 | 14.00 | 15.33 | 14.43 | 15.72 | 16.11 |
| | 12H | 14.09 | 15.36 | 14.51 | 15.74 | 16.17 | 14.09 | 15.36 | 14.51 | 15.74 | 16.17 |
| 4H | 2H | 11.62 | 13.11 | 12.02 | 13.46 | 13.83 | 11.62 | 13.11 | 12.02 | 13.46 | 13.83 |
| | 3H | 13.66 | 14.91 | 14.07 | 15.31 | 15.71 | 13.66 | 14.91 | 14.07 | 15.31 | 15.71 |
| | 4H | 14.42 | 15.56 | 14.85 | 15.97 | 16.41 | 14.42 | 15.56 | 14.85 | 15.97 | 16.41 |
| | 6H | 14.99 | 15.99 | 15.44 | 16.43 | 16.88 | 14.99 | 15.99 | 15.44 | 16.43 | 16.88 |
| | 8H | 15.16 | 16.10 | 15.62 | 16.54 | 17.00 | 15.16 | 16.10 | 15.62 | 16.54 | 17.00 |
| | 12H | 15.28 | 16.13 | 15.76 | 16.60 | 17.07 | 15.28 | 16.13 | 15.76 | 16.60 | 17.07 |
| 8H | 4H | 14.73 | 15.67 | 15.19 | 16.11 | 16.57 | 14.73 | 15.67 | 15.19 | 16.11 | 16.57 |
| | 6H | 15.40 | 16.18 | 15.90 | 16.67 | 17.14 | 15.40 | 16.18 | 15.90 | 16.67 | 17.14 |
| | 8H | 15.64 | 16.34 | 16.14 | 16.84 | 17.32 | 15.64 | 16.34 | 16.14 | 16.84 | 17.32 |
| | 12H | 15.82 | 16.44 | 16.33 | 16.93 | 17.49 | 15.82 | 16.44 | 16.33 | 16.93 | 17.49 |
| 12H | 4H | 14.77 | 15.61 | 15.25 | 16.08 | 16.55 | 14.77 | 15.61 | 15.25 | 16.08 | 16.55 |
| | 6H | 15.45 | 16.15 | 15.96 | 16.66 | 17.14 | 15.45 | 16.15 | 15.96 | 16.66 | 17.14 |
| | 8H | 15.74 | 16.36 | 16.25 | 16.85 | 17.41 | 15.74 | 16.36 | 16.25 | 16.85 | 17.41 |