

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: P866361

Luminaire Tested: PRLX-2002-M-940-25L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-M-940-25L-L-U-S-X-X-BRSS-X
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

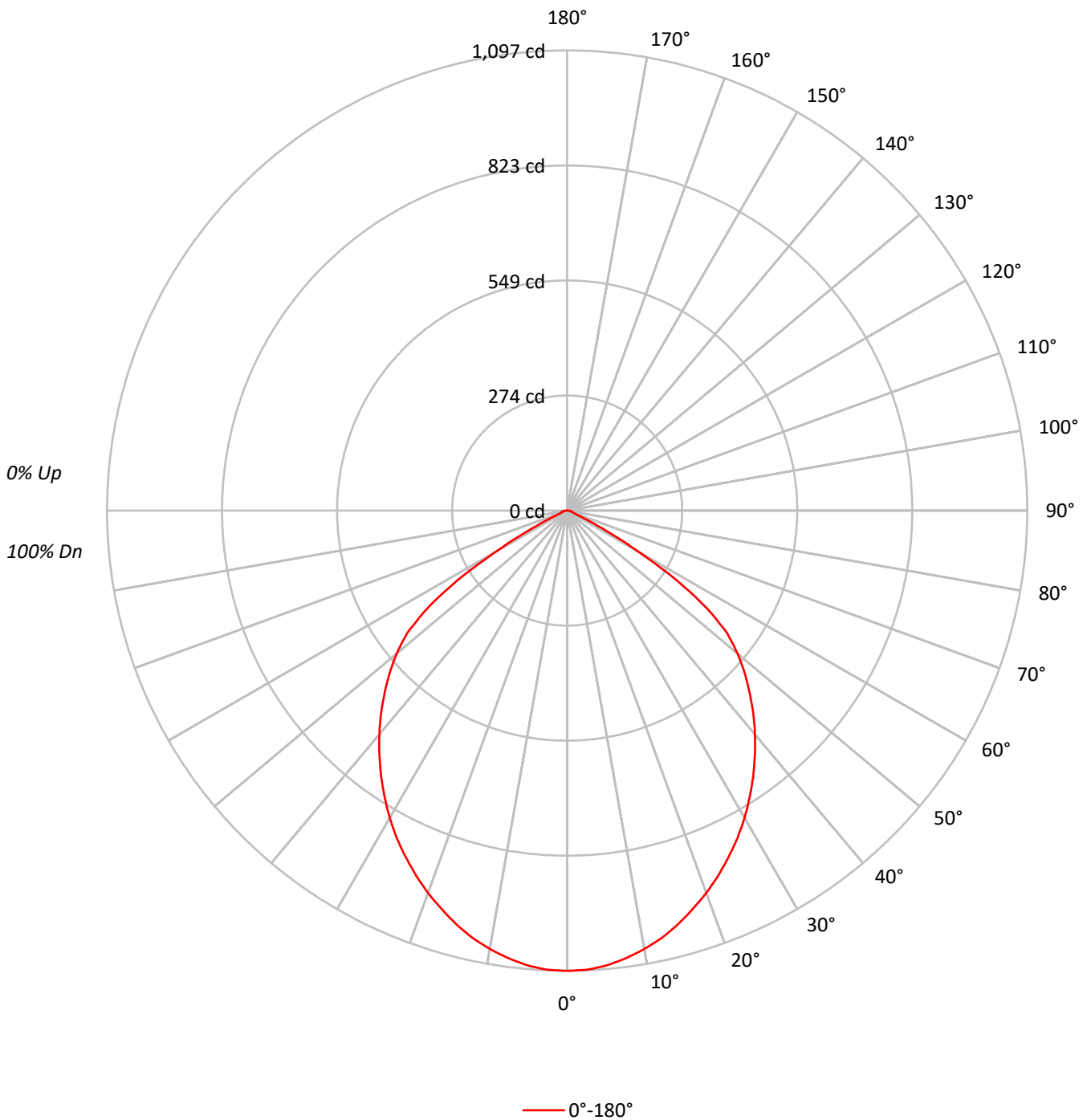
Lumens per Lamp: N/A
Luminaire Lumens: 2202.8 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 21.7
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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | | 98 | 96 | 94 | | 94 | 93 | 91 | 89 |
| 2 | 103 | 97 | 91 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | | 89 | 85 | 82 | | 86 | 83 | 80 | 78 |
| 3 | 96 | 87 | 80 | 75 | 93 | 86 | 79 | 74 | 83 | 77 | 73 | | 80 | 76 | 72 | | 78 | 74 | 71 | 69 |
| 4 | 89 | 78 | 71 | 65 | 86 | 77 | 70 | 65 | 75 | 69 | 64 | | 73 | 67 | 63 | | 71 | 66 | 62 | 60 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 62 | 57 | 68 | 61 | 56 | | 66 | 60 | 56 | | 64 | 59 | 55 | 53 |
| 6 | 76 | 64 | 56 | 51 | 74 | 63 | 56 | 51 | 62 | 55 | 50 | | 60 | 54 | 50 | | 59 | 53 | 49 | 48 |
| 7 | 71 | 59 | 51 | 45 | 69 | 58 | 51 | 45 | 57 | 50 | 45 | | 55 | 49 | 45 | | 54 | 48 | 44 | 43 |
| 8 | 66 | 54 | 46 | 41 | 65 | 53 | 46 | 41 | 52 | 45 | 40 | | 51 | 45 | 40 | | 50 | 44 | 40 | 38 |
| 9 | 62 | 50 | 42 | 37 | 61 | 49 | 42 | 37 | 48 | 41 | 37 | | 47 | 41 | 37 | | 46 | 40 | 36 | 35 |
| 10 | 58 | 46 | 39 | 34 | 57 | 45 | 38 | 34 | 44 | 38 | 34 | | 44 | 38 | 33 | | 43 | 37 | 33 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 8728 |
| 5° | 8693 |
| 10° | 8573 |
| 15° | 8409 |
| 20° | 8212 |
| 25° | 7998 |
| 30° | 7770 |
| 35° | 7510 |
| 40° | 7234 |
| 45° | 6923 |
| 50° | 6567 |
| 55° | 5656 |
| 60° | 3119 |
| 65° | 879 |
| 70° | 351 |
| 75° | 375 |
| 80° | 426 |
| 85° | 520 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6923 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.0 | 4.7 |
| 10°-20° | 287.5 | 13.1 |
| 20°-30° | 419.5 | 19.0 |
| 30°-40° | 483.4 | 21.9 |
| 40°-50° | 474.6 | 21.5 |
| 50°-60° | 348.0 | 15.8 |
| 60°-70° | 68.2 | 3.1 |
| 70°-80° | 12.9 | 0.6 |
| 80°-90° | 5.8 | 0.3 |
| 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° | 810.0 | 36.8 |
| 0°-40° | 1293.4 | 58.7 |
| 0°-60° | 2116.0 | 96.1 |
| 0°-90° | 2202.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2202.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1097 | |
| 5° | 1088 | 103 |
| 15° | 1021 | 288 |
| 25° | 911 | 420 |
| 35° | 773 | 483 |
| 45° | 615 | 475 |
| 55° | 408 | 348 |
| 65° | 47 | 68 |
| 75° | 12 | 13 |
| 85° | 6 | 6 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1097.1 |
| 2.5° | 1095.7 |
| 5° | 1088.5 |
| 7.5° | 1076.3 |
| 10° | 1061.2 |
| 12.5° | 1043.3 |
| 15° | 1021.0 |
| 17.5° | 995.9 |
| 20° | 970.0 |
| 22.5° | 941.3 |
| 25° | 911.1 |
| 27.5° | 879.6 |
| 30° | 845.8 |
| 32.5° | 809.9 |
| 35° | 773.3 |
| 37.5° | 735.2 |
| 40° | 696.5 |
| 42.5° | 657.0 |
| 45° | 615.3 |
| 47.5° | 574.4 |
| 50° | 530.6 |
| 52.5° | 481.1 |
| 55° | 407.8 |
| 57.5° | 312.3 |
| 60° | 196.0 |
| 62.5° | 105.5 |
| 65° | 46.7 |
| 67.5° | 21.5 |
| 70° | 15.1 |
| 72.5° | 13.6 |
| 75° | 12.2 |
| 77.5° | 10.8 |
| 80° | 9.3 |
| 82.5° | 7.9 |
| 85° | 5.7 |
| 87.5° | 2.9 |
| 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 | 17.07 | 18.50 | 17.44 | 18.81 | 19.13 | 17.07 | 18.50 | 17.44 | 18.81 | 19.13 |
| | 3H | 16.98 | 18.24 | 17.36 | 18.56 | 18.93 | 16.98 | 18.24 | 17.36 | 18.56 | 18.93 |
| | 4H | 16.92 | 18.09 | 17.33 | 18.44 | 18.83 | 16.92 | 18.09 | 17.33 | 18.44 | 18.83 |
| | 6H | 16.87 | 17.94 | 17.28 | 18.31 | 18.71 | 16.87 | 17.94 | 17.28 | 18.31 | 18.71 |
| | 8H | 16.84 | 17.86 | 17.27 | 18.25 | 18.65 | 16.84 | 17.86 | 17.27 | 18.25 | 18.65 |
| | 12H | 16.81 | 17.78 | 17.24 | 18.17 | 18.60 | 16.81 | 17.78 | 17.24 | 18.17 | 18.60 |
| 4H | 2H | 16.93 | 18.10 | 17.33 | 18.45 | 18.83 | 16.93 | 18.10 | 17.33 | 18.45 | 18.83 |
| | 3H | 16.85 | 17.79 | 17.26 | 18.20 | 18.60 | 16.85 | 17.79 | 17.26 | 18.20 | 18.60 |
| | 4H | 16.79 | 17.63 | 17.23 | 18.05 | 18.49 | 16.79 | 17.63 | 17.23 | 18.05 | 18.49 |
| | 6H | 16.75 | 17.47 | 17.21 | 17.92 | 18.38 | 16.75 | 17.47 | 17.21 | 17.92 | 18.38 |
| | 8H | 16.71 | 17.39 | 17.18 | 17.83 | 18.30 | 16.71 | 17.39 | 17.18 | 17.83 | 18.30 |
| | 12H | 16.69 | 17.29 | 17.17 | 17.77 | 18.24 | 16.69 | 17.29 | 17.17 | 17.77 | 18.24 |
| 8H | 4H | 16.68 | 17.35 | 17.14 | 17.80 | 18.27 | 16.68 | 17.35 | 17.14 | 17.80 | 18.27 |
| | 6H | 16.62 | 17.18 | 17.12 | 17.67 | 18.15 | 16.62 | 17.18 | 17.12 | 17.67 | 18.15 |
| | 8H | 16.58 | 17.09 | 17.10 | 17.60 | 18.09 | 16.58 | 17.09 | 17.10 | 17.60 | 18.09 |
| | 12H | 16.57 | 17.02 | 17.08 | 17.52 | 18.08 | 16.57 | 17.02 | 17.08 | 17.52 | 18.08 |
| 12H | 4H | 16.63 | 17.24 | 17.12 | 17.72 | 18.19 | 16.63 | 17.24 | 17.12 | 17.72 | 18.19 |
| | 6H | 16.56 | 17.07 | 17.08 | 17.58 | 18.07 | 16.56 | 17.07 | 17.08 | 17.58 | 18.07 |
| | 8H | 16.55 | 17.00 | 17.06 | 17.50 | 18.06 | 16.55 | 17.00 | 17.06 | 17.50 | 18.06 |