

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: P865801

Luminaire Tested: PRLX-2004-S-930-20L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-24)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-S-930-20L-L-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

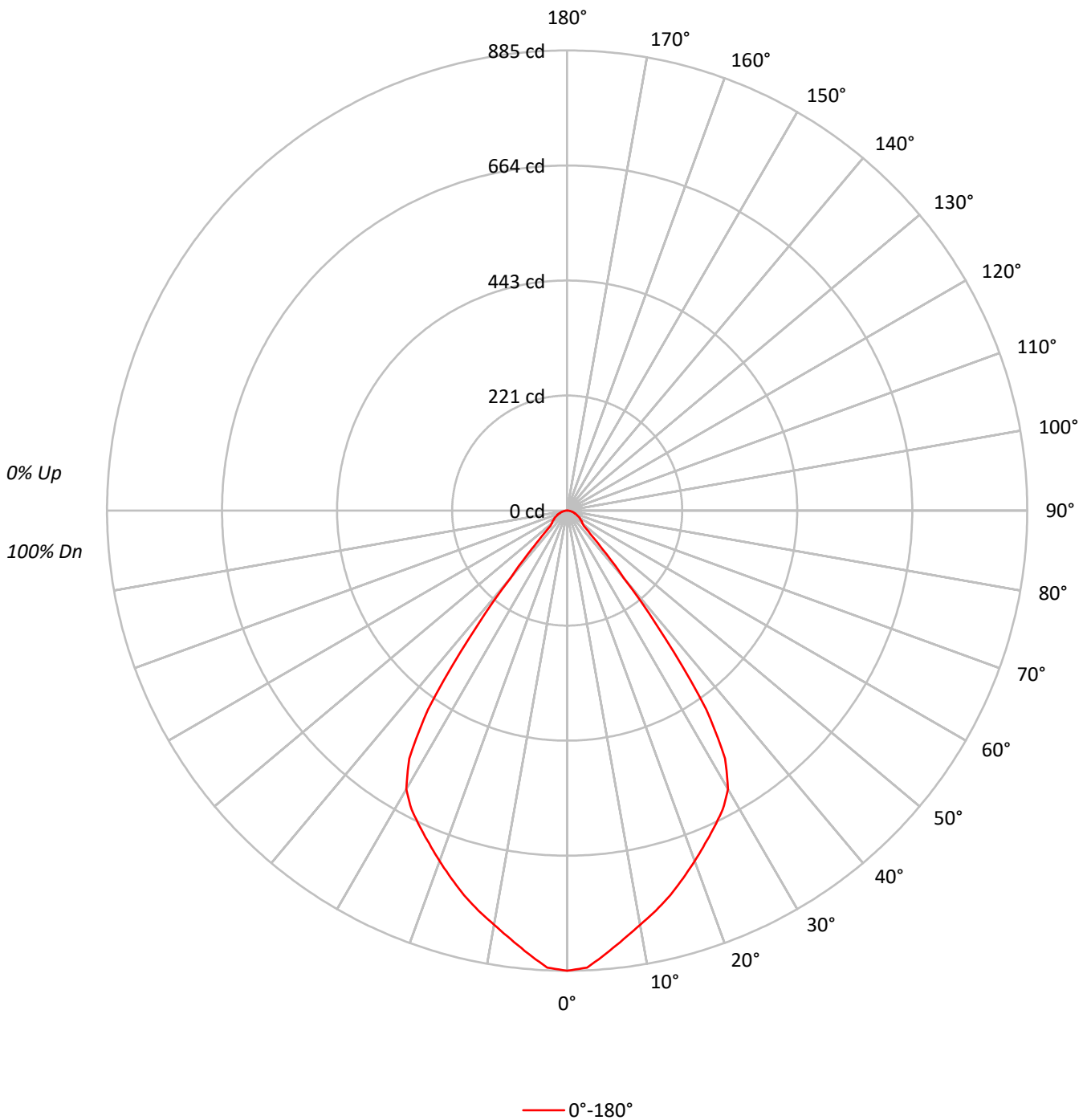
Lumens per Lamp: N/A
Luminaire Lumens: 996.6 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.02
Luminous Opening: Circular (Dia: 0.92' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 95 | 94 | 92 | | | | 92 |
| 2 | 106 | 101 | 96 | 92 | 104 | 99 | 95 | 91 | 96 | 92 | 89 | 93 | 90 | 87 | 90 | 88 | 86 | 84 | | | | 84 |
| 3 | 100 | 93 | 87 | 83 | 98 | 92 | 86 | 82 | 89 | 85 | 81 | 86 | 83 | 80 | 84 | 81 | 78 | 77 | | | | 77 |
| 4 | 94 | 86 | 80 | 75 | 93 | 85 | 79 | 75 | 83 | 78 | 74 | 81 | 76 | 73 | 79 | 75 | 72 | 70 | | | | 70 |
| 5 | 89 | 80 | 73 | 69 | 87 | 79 | 73 | 68 | 77 | 72 | 68 | 75 | 71 | 67 | 74 | 70 | 67 | 65 | | | | 65 |
| 6 | 84 | 74 | 68 | 63 | 83 | 74 | 67 | 63 | 72 | 67 | 62 | 71 | 66 | 62 | 69 | 65 | 62 | 60 | | | | 60 |
| 7 | 80 | 69 | 63 | 58 | 78 | 69 | 62 | 58 | 67 | 62 | 58 | 66 | 61 | 57 | 65 | 60 | 57 | 56 | | | | 56 |
| 8 | 75 | 65 | 58 | 54 | 74 | 64 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 53 | 61 | 57 | 53 | 52 | | | | 52 |
| 9 | 71 | 61 | 54 | 50 | 70 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 58 | 53 | 50 | 48 | | | | 48 |
| 10 | 68 | 57 | 51 | 47 | 67 | 57 | 51 | 47 | 56 | 50 | 47 | 55 | 50 | 46 | 54 | 50 | 46 | 45 | | | | 45 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 14433 |
| 5° | 14007 |
| 10° | 13397 |
| 15° | 12929 |
| 20° | 12450 |
| 25° | 12068 |
| 30° | 11652 |
| 35° | 9292 |
| 40° | 3607 |
| 45° | 1435 |
| 50° | 964 |
| 55° | 933 |
| 60° | 904 |
| 65° | 799 |
| 70° | 744 |
| 75° | 763 |
| 80° | 648 |
| 85° | 655 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1435 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.2 | 8.0 |
| 10°-20° | 215.4 | 21.6 |
| 20°-30° | 308.8 | 31.0 |
| 30°-40° | 266.7 | 26.8 |
| 40°-50° | 58.6 | 5.9 |
| 50°-60° | 29.4 | 2.9 |
| 60°-70° | 21.2 | 2.1 |
| 70°-80° | 12.5 | 1.3 |
| 80°-90° | 3.8 | 0.4 |
| 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° | 604.4 | 60.7 |
| 0°-40° | 871.2 | 87.4 |
| 0°-60° | 959.1 | 96.2 |
| 0°-90° | 996.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 996.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 885 | |
| 5° | 856 | 80 |
| 15° | 766 | 215 |
| 25° | 671 | 309 |
| 35° | 467 | 267 |
| 45° | 62 | 59 |
| 55° | 33 | 29 |
| 65° | 21 | 21 |
| 75° | 12 | 13 |
| 85° | 4 | 4 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 884.9 |
| 2.5° | 879.7 |
| 5° | 855.5 |
| 7.5° | 831.3 |
| 10° | 808.9 |
| 12.5° | 788.1 |
| 15° | 765.7 |
| 17.5° | 741.5 |
| 20° | 717.3 |
| 22.5° | 693.1 |
| 25° | 670.6 |
| 27.5° | 648.1 |
| 30° | 618.7 |
| 32.5° | 565.2 |
| 35° | 466.7 |
| 37.5° | 309.4 |
| 40° | 169.4 |
| 42.5° | 100.2 |
| 45° | 62.2 |
| 47.5° | 43.2 |
| 50° | 38.0 |
| 52.5° | 36.3 |
| 55° | 32.8 |
| 57.5° | 29.4 |
| 60° | 27.7 |
| 62.5° | 24.2 |
| 65° | 20.7 |
| 67.5° | 19.0 |
| 70° | 15.6 |
| 72.5° | 13.8 |
| 75° | 12.1 |
| 77.5° | 10.4 |
| 80° | 6.9 |
| 82.5° | 5.2 |
| 85° | 3.5 |
| 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 | 6.53 | 7.59 | 6.89 | 7.91 | 8.22 | 6.53 | 7.59 | 6.89 | 7.91 | 8.22 |
| | 3H | 8.16 | 9.10 | 8.54 | 9.43 | 9.80 | 8.16 | 9.10 | 8.54 | 9.43 | 9.80 |
| | 4H | 8.83 | 9.71 | 9.24 | 10.06 | 10.45 | 8.83 | 9.71 | 9.24 | 10.06 | 10.45 |
| | 6H | 9.37 | 10.17 | 9.79 | 10.54 | 10.94 | 9.37 | 10.17 | 9.79 | 10.54 | 10.94 |
| | 8H | 9.51 | 10.27 | 9.95 | 10.66 | 11.07 | 9.51 | 10.27 | 9.95 | 10.66 | 11.07 |
| | 12H | 9.62 | 10.34 | 10.06 | 10.72 | 11.16 | 9.62 | 10.34 | 10.06 | 10.72 | 11.16 |
| 4H | 2H | 6.99 | 7.87 | 7.40 | 8.22 | 8.61 | 6.99 | 7.87 | 7.40 | 8.22 | 8.61 |
| | 3H | 8.83 | 9.55 | 9.25 | 9.96 | 10.36 | 8.83 | 9.55 | 9.25 | 9.96 | 10.36 |
| | 4H | 9.66 | 10.30 | 10.10 | 10.72 | 11.17 | 9.66 | 10.30 | 10.10 | 10.72 | 11.17 |
| | 6H | 10.32 | 10.87 | 10.79 | 11.32 | 11.79 | 10.32 | 10.87 | 10.79 | 11.32 | 11.79 |
| | 8H | 10.51 | 11.02 | 10.99 | 11.47 | 11.95 | 10.51 | 11.02 | 10.99 | 11.47 | 11.95 |
| | 12H | 10.66 | 11.11 | 11.15 | 11.60 | 12.07 | 10.66 | 11.11 | 11.15 | 11.60 | 12.07 |
| 8H | 4H | 9.93 | 10.44 | 10.41 | 10.89 | 11.37 | 9.93 | 10.44 | 10.41 | 10.89 | 11.37 |
| | 6H | 10.71 | 11.12 | 11.22 | 11.62 | 12.10 | 10.71 | 11.12 | 11.22 | 11.62 | 12.10 |
| | 8H | 10.98 | 11.34 | 11.51 | 11.86 | 12.36 | 10.98 | 11.34 | 11.51 | 11.86 | 12.36 |
| | 12H | 11.23 | 11.54 | 11.75 | 12.04 | 12.62 | 11.23 | 11.54 | 11.75 | 12.04 | 12.62 |
| 12H | 4H | 9.93 | 10.38 | 10.42 | 10.87 | 11.34 | 9.93 | 10.38 | 10.42 | 10.87 | 11.34 |
| | 6H | 10.74 | 11.11 | 11.27 | 11.63 | 12.12 | 10.74 | 11.11 | 11.27 | 11.63 | 12.12 |
| | 8H | 11.07 | 11.39 | 11.59 | 11.89 | 12.47 | 11.07 | 11.39 | 11.59 | 11.89 | 12.47 |