

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: P866005

Luminaire Tested: PRLX-2001-M-930-65L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866005
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-35)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2001-M-930-65L-G-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,
TAPERED DRUM WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 7
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

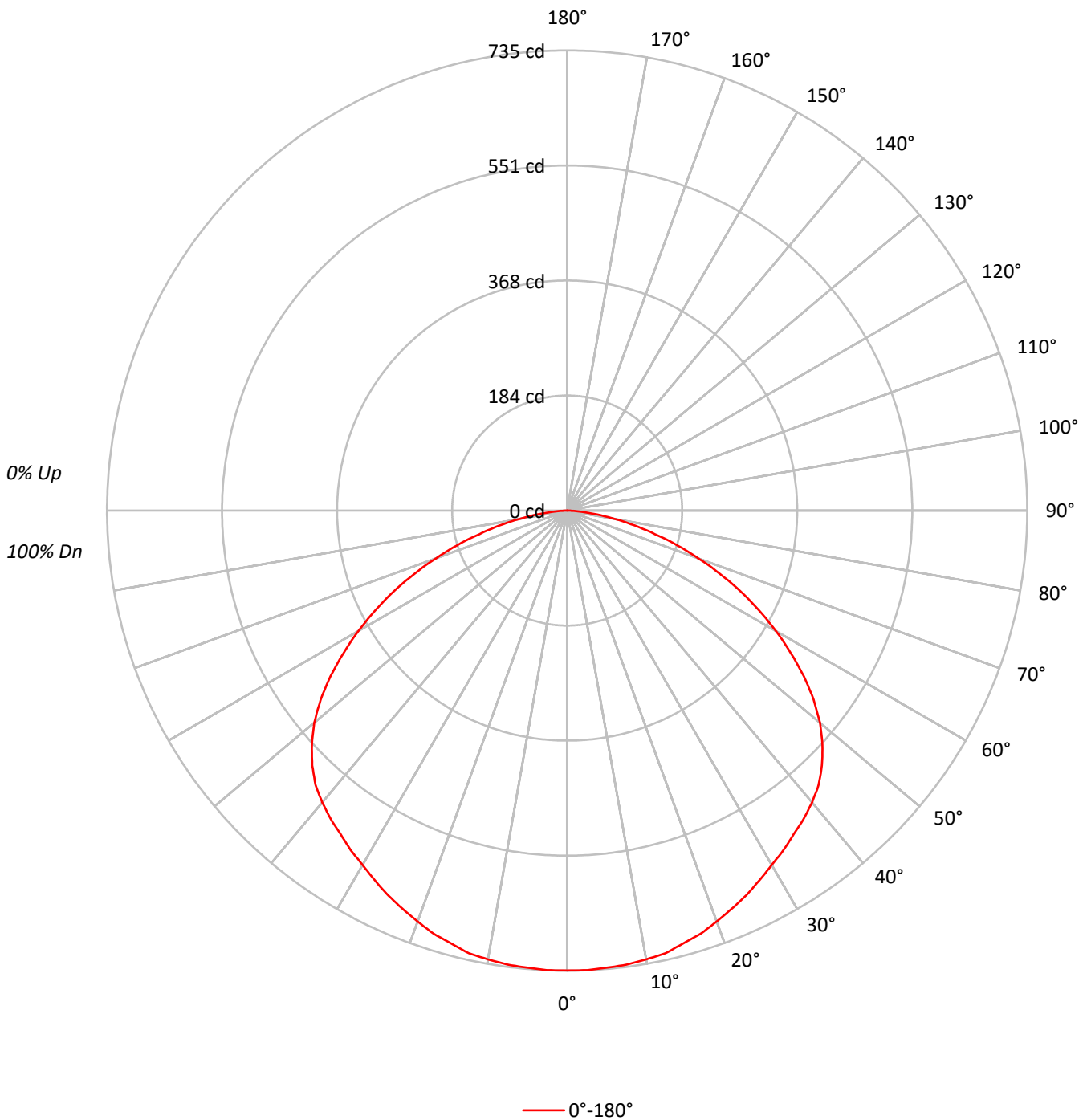
Lumens per Lamp: N/A
Luminaire Lumens: 2324.6 lumens
Efficiency: N/A
Efficacy: 39.7 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.33 / 1.49
Luminous Opening: Circular (Dia: 1.27' x H: 0')
CIE Type: Direct

Input Watts (W): 58.6
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: 0.333 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 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | | 94 | 91 | 88 | | 90 | 88 | 86 | 84 |
| 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | | 82 | 77 | 73 | | 79 | 75 | 72 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | | 72 | 66 | 61 | | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 53 | 66 | 59 | 53 | | 63 | 57 | 52 | | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | | 57 | 50 | 45 | | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 46 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 39 | | 51 | 44 | 39 | | 50 | 43 | 39 | 37 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | | 46 | 39 | 34 | | 45 | 39 | 34 | 32 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | | 42 | 36 | 31 | | 41 | 35 | 30 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | | 39 | 32 | 27 | | 38 | 32 | 27 | 25 |
| 10 | 52 | 39 | 30 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | | 36 | 29 | 25 | | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 6235 |
| 5° | 6244 |
| 10° | 6271 |
| 15° | 6288 |
| 20° | 6307 |
| 25° | 6345 |
| 30° | 6404 |
| 35° | 6537 |
| 40° | 6741 |
| 45° | 6909 |
| 50° | 6961 |
| 55° | 6829 |
| 60° | 6543 |
| 65° | 6144 |
| 70° | 5533 |
| 75° | 4761 |
| 80° | 3802 |
| 85° | 2356 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 6961 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.8 | 3.0 |
| 10°-20° | 202.4 | 8.7 |
| 20°-30° | 312.7 | 13.5 |
| 30°-40° | 396.1 | 17.0 |
| 40°-50° | 442.8 | 19.0 |
| 50°-60° | 411.0 | 17.7 |
| 60°-70° | 301.9 | 13.0 |
| 70°-80° | 155.8 | 6.7 |
| 80°-90° | 32.2 | 1.4 |
| 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° | 584.9 | 25.2 |
| 0°-40° | 981.0 | 42.2 |
| 0°-60° | 1834.8 | 78.9 |
| 0°-90° | 2324.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2324.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 735 | |
| 5° | 733 | 70 |
| 15° | 716 | 202 |
| 25° | 678 | 313 |
| 35° | 631 | 396 |
| 45° | 576 | 443 |
| 55° | 462 | 411 |
| 65° | 306 | 302 |
| 75° | 145 | 156 |
| 85° | 24 | 32 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 734.7 |
| 2.5° | 734.7 |
| 5° | 733.0 |
| 7.5° | 731.3 |
| 10° | 727.8 |
| 12.5° | 724.4 |
| 15° | 715.7 |
| 17.5° | 708.8 |
| 20° | 698.4 |
| 22.5° | 688.1 |
| 25° | 677.7 |
| 27.5° | 665.6 |
| 30° | 653.5 |
| 32.5° | 643.1 |
| 35° | 631.0 |
| 37.5° | 620.6 |
| 40° | 608.5 |
| 42.5° | 594.7 |
| 45° | 575.7 |
| 47.5° | 553.2 |
| 50° | 527.3 |
| 52.5° | 496.2 |
| 55° | 461.6 |
| 57.5° | 423.6 |
| 60° | 385.5 |
| 62.5° | 345.8 |
| 65° | 306.0 |
| 67.5° | 264.5 |
| 70° | 223.0 |
| 72.5° | 185.0 |
| 75° | 145.2 |
| 77.5° | 110.6 |
| 80° | 77.8 |
| 82.5° | 48.4 |
| 85° | 24.2 |
| 87.5° | 6.9 |
| 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 | 19.07 | 20.74 | 19.44 | 21.05 | 21.37 | 19.07 | 20.74 | 19.44 | 21.05 | 21.37 |
| | 3H | 20.71 | 22.22 | 21.09 | 22.55 | 22.91 | 20.71 | 22.22 | 21.09 | 22.55 | 22.91 |
| | 4H | 21.26 | 22.68 | 21.65 | 23.02 | 23.40 | 21.26 | 22.68 | 21.65 | 23.02 | 23.40 |
| | 6H | 21.60 | 22.92 | 22.01 | 23.28 | 23.67 | 21.60 | 22.92 | 22.01 | 23.28 | 23.67 |
| | 8H | 21.68 | 22.94 | 22.11 | 23.33 | 23.73 | 21.68 | 22.94 | 22.11 | 23.33 | 23.73 |
| | 12H | 21.72 | 22.92 | 22.15 | 23.30 | 23.73 | 21.72 | 22.92 | 22.15 | 23.30 | 23.73 |
| 4H | 2H | 19.68 | 21.10 | 20.08 | 21.45 | 21.82 | 19.68 | 21.10 | 20.08 | 21.45 | 21.82 |
| | 3H | 21.52 | 22.71 | 21.93 | 23.11 | 23.50 | 21.52 | 22.71 | 21.93 | 23.11 | 23.50 |
| | 4H | 22.17 | 23.25 | 22.60 | 23.66 | 24.09 | 22.17 | 23.25 | 22.60 | 23.66 | 24.09 |
| | 6H | 22.62 | 23.56 | 23.07 | 24.00 | 24.45 | 22.62 | 23.56 | 23.07 | 24.00 | 24.45 |
| | 8H | 22.73 | 23.61 | 23.19 | 24.05 | 24.51 | 22.73 | 23.61 | 23.19 | 24.05 | 24.51 |
| | 12H | 22.79 | 23.58 | 23.27 | 24.05 | 24.52 | 22.79 | 23.58 | 23.27 | 24.05 | 24.52 |
| 8H | 4H | 22.42 | 23.30 | 22.88 | 23.74 | 24.21 | 22.42 | 23.30 | 22.88 | 23.74 | 24.21 |
| | 6H | 22.96 | 23.68 | 23.45 | 24.17 | 24.65 | 22.96 | 23.68 | 23.45 | 24.17 | 24.65 |
| | 8H | 23.11 | 23.76 | 23.62 | 24.27 | 24.75 | 23.11 | 23.76 | 23.62 | 24.27 | 24.75 |
| | 12H | 23.21 | 23.78 | 23.71 | 24.27 | 24.83 | 23.21 | 23.78 | 23.71 | 24.27 | 24.83 |
| 12H | 4H | 22.44 | 23.23 | 22.92 | 23.70 | 24.17 | 22.44 | 23.23 | 22.92 | 23.70 | 24.17 |
| | 6H | 22.98 | 23.63 | 23.49 | 24.14 | 24.63 | 22.98 | 23.63 | 23.49 | 24.14 | 24.63 |
| | 8H | 23.18 | 23.75 | 23.68 | 24.24 | 24.80 | 23.18 | 23.75 | 23.68 | 24.24 | 24.80 |