

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: P867058

Luminaire Tested: PRLX-2002-L-935-117L-G-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-70)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-935-117L-G-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 7
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

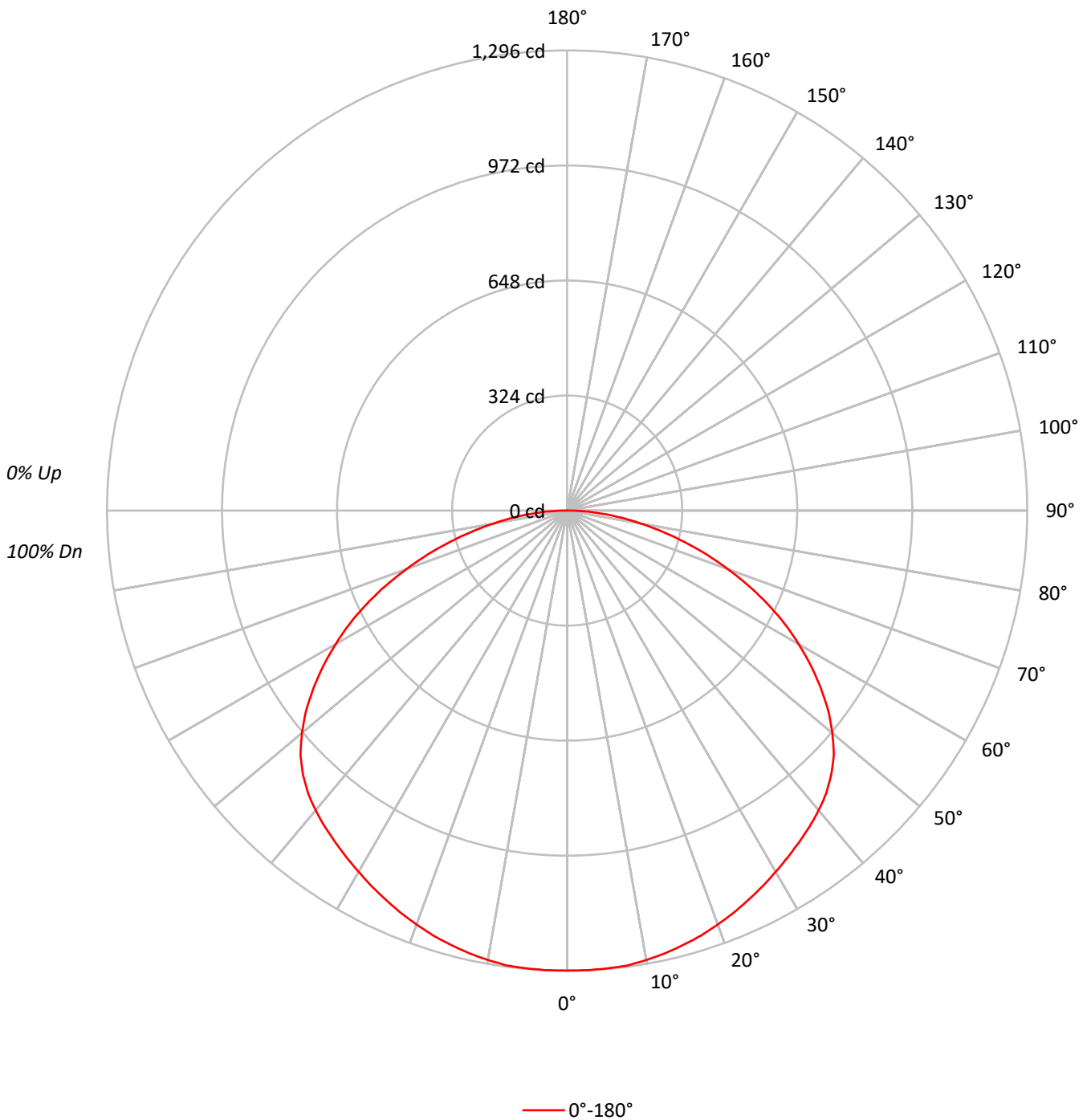
Lumens per Lamp: N/A
Luminaire Lumens: 4430.4 lumens
Efficiency: N/A
Efficacy: 46.5 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 95.2
Input Voltage (V): 120
Input Current (Ain): 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 | 101 | 96 | 93 | 96 | 93 | 90 | 92 | 89 | 87 | 89 | 86 | 84 | 82 |
| 2 | 98 | 89 | 82 | 75 | 95 | 87 | 80 | 75 | 83 | 78 | 73 | 80 | 75 | 71 | 77 | 73 | 69 | 67 |
| 3 | 88 | 77 | 69 | 62 | 86 | 76 | 68 | 61 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 51 | 64 | 57 | 51 | 62 | 55 | 50 | 59 | 54 | 49 | 47 |
| 5 | 74 | 60 | 51 | 44 | 72 | 59 | 50 | 44 | 57 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 40 |
| 6 | 68 | 54 | 45 | 38 | 66 | 53 | 44 | 38 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 42 | 37 | 35 |
| 7 | 63 | 49 | 40 | 33 | 61 | 48 | 39 | 33 | 46 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 30 |
| 8 | 58 | 44 | 36 | 29 | 57 | 44 | 35 | 29 | 42 | 35 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 27 |
| 9 | 54 | 41 | 32 | 26 | 53 | 40 | 32 | 26 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 24 |
| 10 | 51 | 37 | 29 | 24 | 50 | 37 | 29 | 24 | 36 | 29 | 24 | 35 | 28 | 23 | 34 | 28 | 23 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 6392 |
| 5° | 6411 |
| 10° | 6438 |
| 15° | 6469 |
| 20° | 6512 |
| 25° | 6582 |
| 30° | 6693 |
| 35° | 6863 |
| 40° | 7097 |
| 45° | 7340 |
| 50° | 7484 |
| 55° | 7501 |
| 60° | 7434 |
| 65° | 7277 |
| 70° | 6934 |
| 75° | 6525 |
| 80° | 6001 |
| 85° | 5536 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 7514 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 123.3 | 2.8 |
| 10°-20° | 358.0 | 8.1 |
| 20°-30° | 558.6 | 12.6 |
| 30°-40° | 714.7 | 16.1 |
| 40°-50° | 809.8 | 18.3 |
| 50°-60° | 778.2 | 17.6 |
| 60°-70° | 614.9 | 13.9 |
| 70°-80° | 362.6 | 8.2 |
| 80°-90° | 110.3 | 2.5 |
| 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° | 1039.9 | 23.5 |
| 0°-40° | 1754.6 | 39.6 |
| 0°-60° | 3342.6 | 75.4 |
| 0°-90° | 4430.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4430.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1296 | |
| 5° | 1294 | 123 |
| 15° | 1266 | 358 |
| 25° | 1209 | 559 |
| 35° | 1139 | 715 |
| 45° | 1052 | 810 |
| 55° | 872 | 778 |
| 65° | 623 | 615 |
| 75° | 342 | 363 |
| 85° | 98 | 110 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1295.5 |
| 2.5° | 1295.5 |
| 5° | 1294.4 |
| 7.5° | 1292.4 |
| 10° | 1285.1 |
| 12.5° | 1276.8 |
| 15° | 1266.4 |
| 17.5° | 1254.9 |
| 20° | 1240.3 |
| 22.5° | 1225.8 |
| 25° | 1209.1 |
| 27.5° | 1192.5 |
| 30° | 1174.8 |
| 32.5° | 1157.1 |
| 35° | 1139.4 |
| 37.5° | 1121.7 |
| 40° | 1101.9 |
| 42.5° | 1080.1 |
| 45° | 1052.0 |
| 47.5° | 1018.7 |
| 50° | 975.0 |
| 52.5° | 927.1 |
| 55° | 872.0 |
| 57.5° | 814.8 |
| 60° | 753.4 |
| 62.5° | 690.9 |
| 65° | 623.3 |
| 67.5° | 553.6 |
| 70° | 480.7 |
| 72.5° | 412.1 |
| 75° | 342.3 |
| 77.5° | 274.7 |
| 80° | 211.2 |
| 82.5° | 151.9 |
| 85° | 97.8 |
| 87.5° | 49.9 |
| 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 | 19.45 | 21.16 | 19.81 | 21.47 | 21.78 | 19.45 | 21.16 | 19.81 | 21.47 | 21.78 |
| | 3H | 21.36 | 22.91 | 21.74 | 23.24 | 23.60 | 21.36 | 22.91 | 21.74 | 23.24 | 23.60 |
| | 4H | 22.09 | 23.55 | 22.48 | 23.90 | 24.27 | 22.09 | 23.55 | 22.48 | 23.90 | 24.27 |
| | 6H | 22.63 | 23.99 | 23.04 | 24.36 | 24.75 | 22.63 | 23.99 | 23.04 | 24.36 | 24.75 |
| | 8H | 22.82 | 24.12 | 23.24 | 24.51 | 24.91 | 22.82 | 24.12 | 23.24 | 24.51 | 24.91 |
| | 12H | 22.96 | 24.21 | 23.39 | 24.59 | 25.01 | 22.96 | 24.21 | 23.39 | 24.59 | 25.01 |
| 4H | 2H | 20.13 | 21.60 | 20.53 | 21.94 | 22.32 | 20.13 | 21.60 | 20.53 | 21.94 | 22.32 |
| | 3H | 22.26 | 23.50 | 22.67 | 23.89 | 24.29 | 22.26 | 23.50 | 22.67 | 23.89 | 24.29 |
| | 4H | 23.12 | 24.24 | 23.55 | 24.65 | 25.08 | 23.12 | 24.24 | 23.55 | 24.65 | 25.08 |
| | 6H | 23.80 | 24.78 | 24.25 | 25.22 | 25.67 | 23.80 | 24.78 | 24.25 | 25.22 | 25.67 |
| | 8H | 24.04 | 24.96 | 24.49 | 25.40 | 25.86 | 24.04 | 24.96 | 24.49 | 25.40 | 25.86 |
| | 12H | 24.23 | 25.06 | 24.70 | 25.53 | 26.00 | 24.23 | 25.06 | 24.70 | 25.53 | 26.00 |
| 8H | 4H | 23.46 | 24.38 | 23.92 | 24.82 | 25.29 | 23.46 | 24.38 | 23.92 | 24.82 | 25.29 |
| | 6H | 24.27 | 25.04 | 24.76 | 25.53 | 26.00 | 24.27 | 25.04 | 24.76 | 25.53 | 26.00 |
| | 8H | 24.59 | 25.28 | 25.10 | 25.79 | 26.27 | 24.59 | 25.28 | 25.10 | 25.79 | 26.27 |
| | 12H | 24.87 | 25.48 | 25.37 | 25.97 | 26.53 | 24.87 | 25.48 | 25.37 | 25.97 | 26.53 |
| 12H | 4H | 23.51 | 24.34 | 23.99 | 24.81 | 25.28 | 23.51 | 24.34 | 23.99 | 24.81 | 25.28 |
| | 6H | 24.34 | 25.04 | 24.85 | 25.54 | 26.02 | 24.34 | 25.04 | 24.85 | 25.54 | 26.02 |
| | 8H | 24.73 | 25.34 | 25.23 | 25.83 | 26.39 | 24.73 | 25.34 | 25.23 | 25.83 | 26.39 |