

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: P866805

Luminaire Tested: PRLX-2001-L-935-133L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866805
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-77)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2001-L-935-133L-L-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
TAPERED DRUM WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

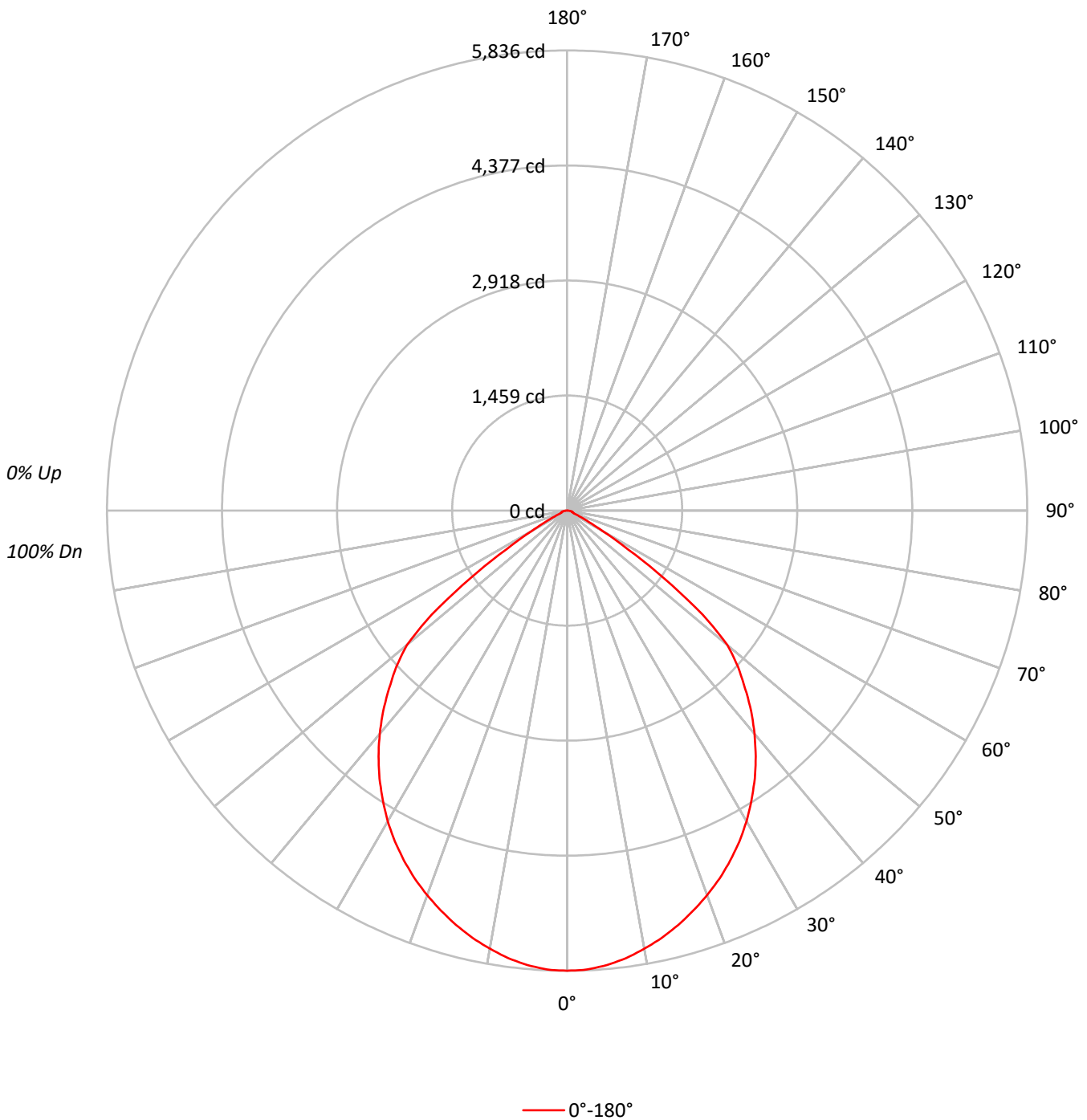
Lumens per Lamp: N/A
Luminaire Lumens: 11062.3 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.26
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 111.8
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: 0.333 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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | | 98 | 96 | 94 | | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 92 | 88 | 102 | 96 | 91 | 87 | 92 | 88 | 85 | | 89 | 86 | 83 | | 87 | 84 | 81 | 80 |
| 3 | 97 | 88 | 82 | 76 | 94 | 87 | 81 | 76 | 84 | 79 | 75 | | 81 | 77 | 73 | | 79 | 75 | 72 | 70 |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 70 | 66 | | 74 | 69 | 65 | | 72 | 68 | 64 | 62 |
| 5 | 83 | 72 | 65 | 59 | 81 | 71 | 64 | 59 | 69 | 63 | 58 | | 68 | 62 | 58 | | 66 | 61 | 57 | 55 |
| 6 | 78 | 66 | 58 | 53 | 76 | 65 | 58 | 53 | 63 | 57 | 52 | | 62 | 56 | 52 | | 60 | 55 | 51 | 50 |
| 7 | 72 | 60 | 53 | 47 | 71 | 60 | 52 | 47 | 58 | 52 | 47 | | 57 | 51 | 47 | | 56 | 50 | 46 | 45 |
| 8 | 68 | 56 | 48 | 43 | 66 | 55 | 48 | 43 | 54 | 47 | 42 | | 52 | 47 | 42 | | 51 | 46 | 42 | 40 |
| 9 | 63 | 51 | 44 | 39 | 62 | 51 | 44 | 39 | 50 | 43 | 39 | | 49 | 43 | 38 | | 48 | 42 | 38 | 37 |
| 10 | 59 | 47 | 40 | 35 | 58 | 47 | 40 | 35 | 46 | 40 | 35 | | 45 | 39 | 35 | | 44 | 39 | 35 | 33 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 31905 |
| 5° | 31752 |
| 10° | 31319 |
| 15° | 30792 |
| 20° | 30203 |
| 25° | 29533 |
| 30° | 28717 |
| 35° | 27681 |
| 40° | 26386 |
| 45° | 24688 |
| 50° | 22568 |
| 55° | 14321 |
| 60° | 5680 |
| 65° | 2173 |
| 70° | 1314 |
| 75° | 1434 |
| 80° | 1612 |
| 85° | 1794 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24688 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 547.8 | 5.0 |
| 10°-20° | 1533.2 | 13.9 |
| 20°-30° | 2253.6 | 20.4 |
| 30°-40° | 2589.4 | 23.4 |
| 40°-50° | 2460.2 | 22.2 |
| 50°-60° | 1364.1 | 12.3 |
| 60°-70° | 212.9 | 1.9 |
| 70°-80° | 71.4 | 0.6 |
| 80°-90° | 29.7 | 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° | 4334.5 | 39.2 |
| 0°-40° | 6924.0 | 62.6 |
| 0°-60° | 10748.3 | 97.2 |
| 0°-90° | 11062.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 11062.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5836 | |
| 5° | 5786 | 548 |
| 15° | 5440 | 1533 |
| 25° | 4896 | 2254 |
| 35° | 4148 | 2589 |
| 45° | 3193 | 2460 |
| 55° | 1502 | 1364 |
| 65° | 168 | 213 |
| 75° | 68 | 71 |
| 85° | 29 | 30 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5836.1 |
| 2.5° | 5826.5 |
| 5° | 5786.0 |
| 7.5° | 5725.3 |
| 10° | 5641.9 |
| 12.5° | 5550.1 |
| 15° | 5440.5 |
| 17.5° | 5320.1 |
| 20° | 5191.5 |
| 22.5° | 5052.1 |
| 25° | 4896.0 |
| 27.5° | 4731.5 |
| 30° | 4549.2 |
| 32.5° | 4353.8 |
| 35° | 4147.7 |
| 37.5° | 3929.6 |
| 40° | 3697.3 |
| 42.5° | 3455.4 |
| 45° | 3193.3 |
| 47.5° | 2939.5 |
| 50° | 2653.5 |
| 52.5° | 2166.2 |
| 55° | 1502.5 |
| 57.5° | 913.9 |
| 60° | 519.5 |
| 62.5° | 308.6 |
| 65° | 168.0 |
| 67.5° | 91.7 |
| 70° | 82.2 |
| 72.5° | 75.1 |
| 75° | 67.9 |
| 77.5° | 60.8 |
| 80° | 51.2 |
| 82.5° | 40.5 |
| 85° | 28.6 |
| 87.5° | 14.3 |
| 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 | 17.66 | 19.03 | 18.02 | 19.35 | 19.66 | 17.66 | 19.03 | 18.02 | 19.35 | 19.66 |
| | 3H | 17.60 | 18.81 | 17.97 | 19.13 | 19.50 | 17.60 | 18.81 | 17.97 | 19.13 | 19.50 |
| | 4H | 17.57 | 18.70 | 17.98 | 19.05 | 19.43 | 17.57 | 18.70 | 17.98 | 19.05 | 19.43 |
| | 6H | 17.56 | 18.59 | 17.97 | 18.96 | 19.35 | 17.56 | 18.59 | 17.97 | 18.96 | 19.35 |
| | 8H | 17.55 | 18.52 | 17.98 | 18.92 | 19.32 | 17.55 | 18.52 | 17.98 | 18.92 | 19.32 |
| | 12H | 17.54 | 18.47 | 17.97 | 18.85 | 19.28 | 17.54 | 18.47 | 17.97 | 18.85 | 19.28 |
| 4H | 2H | 17.53 | 18.65 | 17.93 | 19.00 | 19.38 | 17.53 | 18.65 | 17.93 | 19.00 | 19.38 |
| | 3H | 17.50 | 18.40 | 17.91 | 18.80 | 19.21 | 17.50 | 18.40 | 17.91 | 18.80 | 19.21 |
| | 4H | 17.49 | 18.29 | 17.92 | 18.71 | 19.15 | 17.49 | 18.29 | 17.92 | 18.71 | 19.15 |
| | 6H | 17.51 | 18.21 | 17.98 | 18.65 | 19.12 | 17.51 | 18.21 | 17.98 | 18.65 | 19.12 |
| | 8H | 17.51 | 18.16 | 17.98 | 18.61 | 19.08 | 17.51 | 18.16 | 17.98 | 18.61 | 19.08 |
| | 12H | 17.52 | 18.09 | 18.00 | 18.58 | 19.05 | 17.52 | 18.09 | 18.00 | 18.58 | 19.05 |
| 8H | 4H | 17.40 | 18.05 | 17.87 | 18.49 | 18.96 | 17.40 | 18.05 | 17.87 | 18.49 | 18.96 |
| | 6H | 17.44 | 17.97 | 17.94 | 18.47 | 18.95 | 17.44 | 17.97 | 17.94 | 18.47 | 18.95 |
| | 8H | 17.46 | 17.94 | 17.98 | 18.46 | 18.95 | 17.46 | 17.94 | 17.98 | 18.46 | 18.95 |
| | 12H | 17.50 | 17.93 | 18.01 | 18.43 | 19.00 | 17.50 | 17.93 | 18.01 | 18.43 | 19.00 |
| 12H | 4H | 17.36 | 17.93 | 17.85 | 18.42 | 18.89 | 17.36 | 17.93 | 17.85 | 18.42 | 18.89 |
| | 6H | 17.39 | 17.88 | 17.92 | 18.40 | 18.89 | 17.39 | 17.88 | 17.92 | 18.40 | 18.89 |
| | 8H | 17.45 | 17.88 | 17.96 | 18.38 | 18.95 | 17.45 | 17.88 | 17.96 | 18.38 | 18.95 |