

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: P867393

Luminaire Tested: PRLX-2004-L-940-15L-G-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-73)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-940-15L-G-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

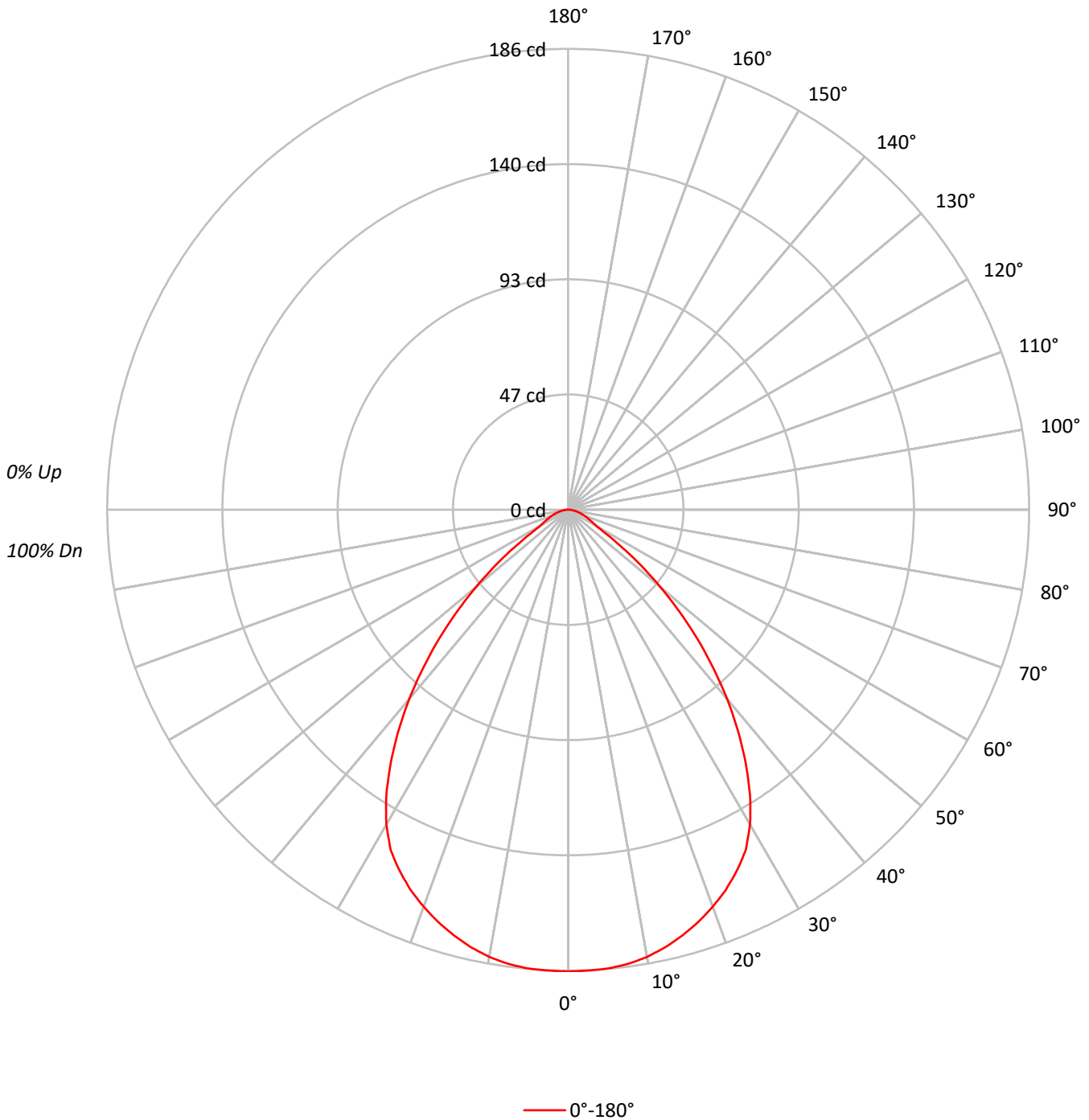
Lumens per Lamp: N/A
Luminaire Lumens: 316.5 lumens
Efficiency: N/A
Efficacy: 19.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.17
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 16.4
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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | | 98 | 96 | 95 | | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | | 90 | 87 | 84 | | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | | 82 | 78 | 74 | | 80 | 76 | 73 | 71 |
| 4 | 91 | 81 | 74 | 69 | 89 | 80 | 73 | 68 | 78 | 72 | 67 | | 75 | 70 | 67 | | 73 | 69 | 66 | 64 |
| 5 | 85 | 74 | 67 | 61 | 83 | 73 | 66 | 61 | 71 | 65 | 60 | | 69 | 64 | 60 | | 68 | 63 | 59 | 57 |
| 6 | 79 | 68 | 61 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 55 | | 64 | 58 | 54 | | 62 | 58 | 54 | 52 |
| 7 | 74 | 63 | 55 | 50 | 72 | 62 | 55 | 50 | 60 | 54 | 49 | | 59 | 53 | 49 | | 58 | 53 | 49 | 47 |
| 8 | 69 | 58 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 50 | 45 | | 55 | 49 | 45 | | 54 | 49 | 45 | 43 |
| 9 | 65 | 54 | 46 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 41 | | 51 | 45 | 41 | | 50 | 45 | 41 | 39 |
| 10 | 62 | 50 | 43 | 38 | 60 | 49 | 43 | 38 | 48 | 42 | 38 | | 48 | 42 | 38 | | 47 | 42 | 38 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-----|
| | 0° |
| 0° | 920 |
| 5° | 921 |
| 10° | 918 |
| 15° | 909 |
| 20° | 895 |
| 25° | 876 |
| 30° | 836 |
| 35° | 752 |
| 40° | 642 |
| 45° | 514 |
| 50° | 372 |
| 55° | 229 |
| 60° | 129 |
| 65° | 110 |
| 70° | 98 |
| 75° | 88 |
| 80° | 80 |
| 85° | 74 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 514 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 17.7 | 5.6 |
| 10°-20° | 50.1 | 15.8 |
| 20°-30° | 73.8 | 23.3 |
| 30°-40° | 77.5 | 24.5 |
| 40°-50° | 56.6 | 17.9 |
| 50°-60° | 24.9 | 7.9 |
| 60°-70° | 9.5 | 3.0 |
| 70°-80° | 4.9 | 1.6 |
| 80°-90° | 1.5 | 0.5 |
| 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° | 141.6 | 44.7 |
| 0°-40° | 219.1 | 69.2 |
| 0°-60° | 300.6 | 95.0 |
| 0°-90° | 316.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 316.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 186 | |
| 5° | 186 | 18 |
| 15° | 178 | 50 |
| 25° | 161 | 74 |
| 35° | 125 | 77 |
| 45° | 74 | 57 |
| 55° | 27 | 25 |
| 65° | 9 | 10 |
| 75° | 5 | 5 |
| 85° | 1 | 1 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 186.4 |
| 2.5° | 186.2 |
| 5° | 185.9 |
| 7.5° | 184.9 |
| 10° | 183.3 |
| 12.5° | 180.9 |
| 15° | 177.9 |
| 17.5° | 174.5 |
| 20° | 170.5 |
| 22.5° | 166.1 |
| 25° | 160.9 |
| 27.5° | 155.0 |
| 30° | 146.7 |
| 32.5° | 136.6 |
| 35° | 124.8 |
| 37.5° | 112.5 |
| 40° | 99.7 |
| 42.5° | 86.6 |
| 45° | 73.6 |
| 47.5° | 60.6 |
| 50° | 48.5 |
| 52.5° | 37.1 |
| 55° | 26.6 |
| 57.5° | 18.0 |
| 60° | 13.1 |
| 62.5° | 11.1 |
| 65° | 9.4 |
| 67.5° | 8.0 |
| 70° | 6.8 |
| 72.5° | 5.6 |
| 75° | 4.6 |
| 77.5° | 3.7 |
| 80° | 2.8 |
| 82.5° | 2.1 |
| 85° | 1.3 |
| 87.5° | 0.6 |
| 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 | 2.54 | 3.84 | 2.90 | 4.15 | 4.47 | 2.54 | 3.84 | 2.90 | 4.15 | 4.47 |
| | 3H | 3.42 | 4.57 | 3.80 | 4.90 | 5.27 | 3.42 | 4.57 | 3.80 | 4.90 | 5.27 |
| | 4H | 3.77 | 4.84 | 4.17 | 5.19 | 5.57 | 3.77 | 4.84 | 4.17 | 5.19 | 5.57 |
| | 6H | 4.04 | 5.02 | 4.45 | 5.39 | 5.78 | 4.04 | 5.02 | 4.45 | 5.39 | 5.78 |
| | 8H | 4.13 | 5.06 | 4.56 | 5.45 | 5.86 | 4.13 | 5.06 | 4.56 | 5.45 | 5.86 |
| | 12H | 4.19 | 5.08 | 4.62 | 5.46 | 5.89 | 4.19 | 5.08 | 4.62 | 5.46 | 5.89 |
| 4H | 2H | 2.76 | 3.83 | 3.17 | 4.18 | 4.57 | 2.76 | 3.83 | 3.17 | 4.18 | 4.57 |
| | 3H | 3.87 | 4.74 | 4.28 | 5.14 | 5.55 | 3.87 | 4.74 | 4.28 | 5.14 | 5.55 |
| | 4H | 4.33 | 5.11 | 4.77 | 5.53 | 5.97 | 4.33 | 5.11 | 4.77 | 5.53 | 5.97 |
| | 6H | 4.72 | 5.39 | 5.18 | 5.84 | 6.30 | 4.72 | 5.39 | 5.18 | 5.84 | 6.30 |
| | 8H | 4.86 | 5.48 | 5.33 | 5.93 | 6.40 | 4.86 | 5.48 | 5.33 | 5.93 | 6.40 |
| | 12H | 4.96 | 5.51 | 5.44 | 5.99 | 6.47 | 4.96 | 5.51 | 5.44 | 5.99 | 6.47 |
| 8H | 4H | 4.47 | 5.09 | 4.94 | 5.54 | 6.01 | 4.47 | 5.09 | 4.94 | 5.54 | 6.01 |
| | 6H | 4.96 | 5.47 | 5.46 | 5.97 | 6.45 | 4.96 | 5.47 | 5.46 | 5.97 | 6.45 |
| | 8H | 5.16 | 5.62 | 5.68 | 6.14 | 6.63 | 5.16 | 5.62 | 5.68 | 6.14 | 6.63 |
| | 12H | 5.33 | 5.74 | 5.85 | 6.24 | 6.81 | 5.33 | 5.74 | 5.85 | 6.24 | 6.81 |
| 12H | 4H | 4.46 | 5.01 | 4.95 | 5.50 | 5.97 | 4.46 | 5.01 | 4.95 | 5.50 | 5.97 |
| | 6H | 4.97 | 5.43 | 5.49 | 5.95 | 6.44 | 4.97 | 5.43 | 5.49 | 5.95 | 6.44 |
| | 8H | 5.23 | 5.64 | 5.74 | 6.13 | 6.70 | 5.23 | 5.64 | 5.74 | 6.13 | 6.70 |