

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: P866602

Luminaire Tested: PRLX-2004-M-940-07L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866602
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-56)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-M-940-07L-L-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,
BELL WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

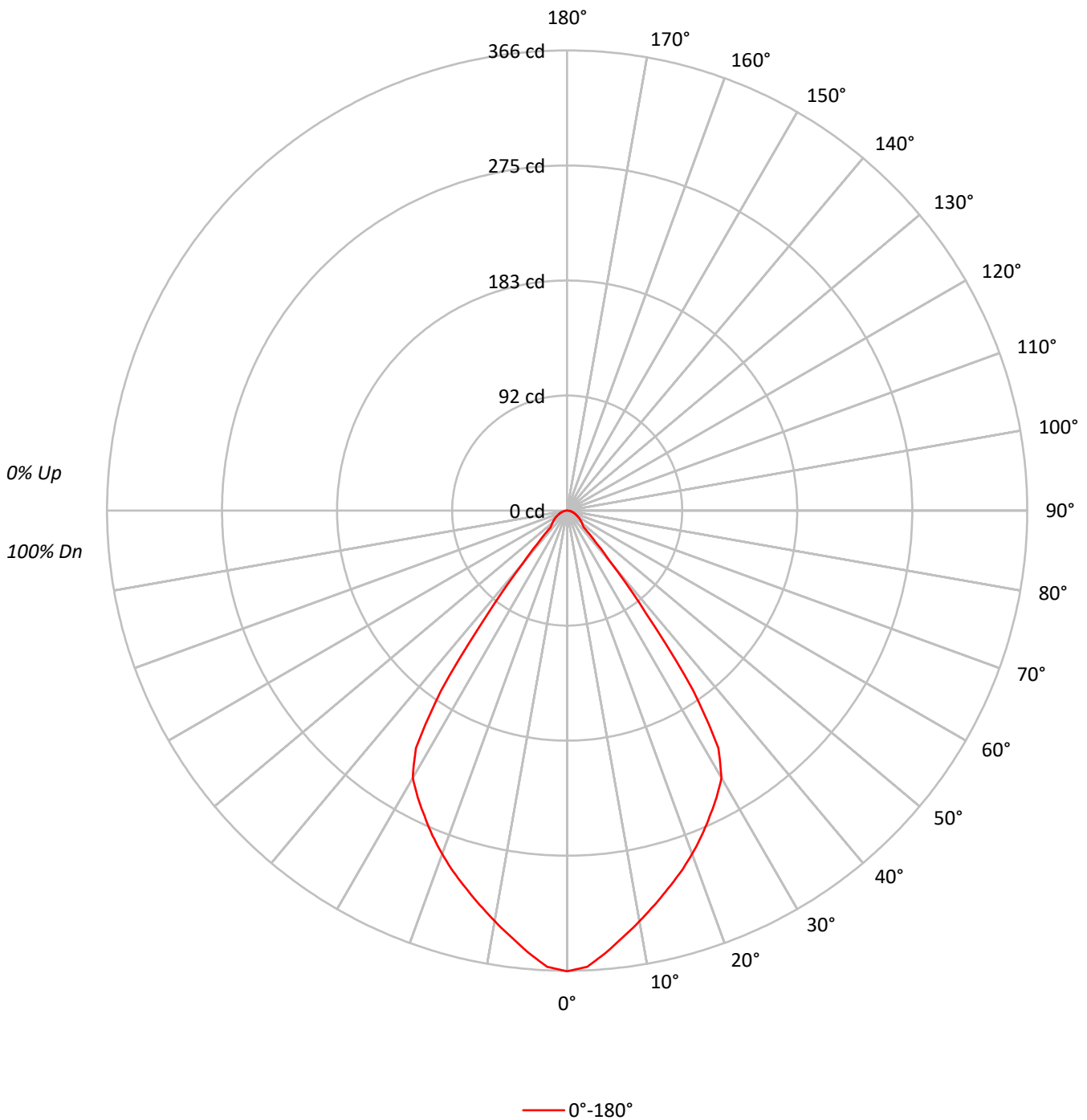
Lumens per Lamp: N/A
Luminaire Lumens: 388.2 lumens
Efficiency: N/A
Efficacy: 47.3 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 8.2
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 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 |
| 2 | 106 | 101 | 97 | 93 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | 84 |
| 3 | 101 | 93 | 88 | 84 | 98 | 92 | 87 | 83 | 89 | 85 | 82 | 87 | 83 | 80 | 85 | 82 | 79 | 77 |
| 4 | 95 | 87 | 81 | 76 | 93 | 85 | 80 | 76 | 83 | 78 | 75 | 81 | 77 | 74 | 79 | 76 | 73 | 71 |
| 5 | 90 | 81 | 74 | 70 | 88 | 80 | 74 | 69 | 78 | 73 | 69 | 76 | 72 | 68 | 74 | 71 | 67 | 66 |
| 6 | 85 | 75 | 69 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 67 | 63 | 70 | 66 | 62 | 61 |
| 7 | 80 | 70 | 64 | 59 | 79 | 70 | 63 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 61 | 58 | 57 |
| 8 | 76 | 66 | 59 | 55 | 75 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 53 |
| 9 | 72 | 62 | 55 | 51 | 71 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 58 | 54 | 51 | 49 |
| 10 | 68 | 58 | 52 | 48 | 67 | 58 | 52 | 48 | 57 | 51 | 48 | 56 | 51 | 47 | 55 | 51 | 47 | 46 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 2915 |
| 5° | 2819 |
| 10° | 2680 |
| 15° | 2562 |
| 20° | 2460 |
| 25° | 2355 |
| 30° | 2255 |
| 35° | 1702 |
| 40° | 566 |
| 45° | 210 |
| 50° | 191 |
| 55° | 175 |
| 60° | 158 |
| 65° | 145 |
| 70° | 137 |
| 75° | 132 |
| 80° | 119 |
| 85° | 110 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 210 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 33.0 | 8.5 |
| 10°-20° | 87.6 | 22.6 |
| 20°-30° | 123.6 | 31.8 |
| 30°-40° | 99.9 | 25.7 |
| 40°-50° | 19.1 | 4.9 |
| 50°-60° | 11.3 | 2.9 |
| 60°-70° | 7.7 | 2.0 |
| 70°-80° | 4.5 | 1.2 |
| 80°-90° | 1.4 | 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° | 244.2 | 62.9 |
| 0°-40° | 344.1 | 88.7 |
| 0°-60° | 374.6 | 96.5 |
| 0°-90° | 388.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 388.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 366 | |
| 5° | 353 | 33 |
| 15° | 311 | 88 |
| 25° | 268 | 124 |
| 35° | 175 | 100 |
| 45° | 19 | 19 |
| 55° | 13 | 11 |
| 65° | 8 | 8 |
| 75° | 4 | 4 |
| 85° | 1 | 1 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 366.4 |
| 2.5° | 363.2 |
| 5° | 353.0 |
| 7.5° | 341.9 |
| 10° | 331.7 |
| 12.5° | 321.2 |
| 15° | 311.0 |
| 17.5° | 301.1 |
| 20° | 290.6 |
| 22.5° | 279.8 |
| 25° | 268.3 |
| 27.5° | 257.3 |
| 30° | 245.5 |
| 32.5° | 223.9 |
| 35° | 175.2 |
| 37.5° | 103.4 |
| 40° | 54.5 |
| 42.5° | 30.6 |
| 45° | 18.7 |
| 47.5° | 16.4 |
| 50° | 15.4 |
| 52.5° | 14.0 |
| 55° | 12.6 |
| 57.5° | 11.4 |
| 60° | 9.9 |
| 62.5° | 8.9 |
| 65° | 7.7 |
| 67.5° | 6.7 |
| 70° | 5.9 |
| 72.5° | 5.1 |
| 75° | 4.3 |
| 77.5° | 3.4 |
| 80° | 2.6 |
| 82.5° | 2.0 |
| 85° | 1.2 |
| 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 | 0.71 | 1.76 | 1.07 | 2.07 | 2.39 | 0.71 | 1.76 | 1.07 | 2.07 | 2.39 |
| | 3H | 2.17 | 3.09 | 2.55 | 3.43 | 3.80 | 2.17 | 3.09 | 2.55 | 3.43 | 3.80 |
| | 4H | 2.78 | 3.64 | 3.19 | 3.99 | 4.38 | 2.78 | 3.64 | 3.19 | 3.99 | 4.38 |
| | 6H | 3.22 | 4.01 | 3.64 | 4.38 | 4.78 | 3.22 | 4.01 | 3.64 | 4.38 | 4.78 |
| | 8H | 3.38 | 4.12 | 3.82 | 4.51 | 4.92 | 3.38 | 4.12 | 3.82 | 4.51 | 4.92 |
| | 12H | 3.48 | 4.19 | 3.92 | 4.57 | 5.00 | 3.48 | 4.19 | 3.92 | 4.57 | 5.00 |
| 4H | 2H | 1.12 | 1.98 | 1.53 | 2.34 | 2.72 | 1.12 | 1.98 | 1.53 | 2.34 | 2.72 |
| | 3H | 2.82 | 3.53 | 3.24 | 3.93 | 4.34 | 2.82 | 3.53 | 3.24 | 3.93 | 4.34 |
| | 4H | 3.57 | 4.20 | 4.01 | 4.62 | 5.07 | 3.57 | 4.20 | 4.01 | 4.62 | 5.07 |
| | 6H | 4.14 | 4.68 | 4.61 | 5.13 | 5.60 | 4.14 | 4.68 | 4.61 | 5.13 | 5.60 |
| | 8H | 4.35 | 4.85 | 4.82 | 5.30 | 5.77 | 4.35 | 4.85 | 4.82 | 5.30 | 5.77 |
| | 12H | 4.49 | 4.93 | 4.98 | 5.41 | 5.89 | 4.49 | 4.93 | 4.98 | 5.41 | 5.89 |
| 8H | 4H | 3.79 | 4.29 | 4.27 | 4.74 | 5.22 | 3.79 | 4.29 | 4.27 | 4.74 | 5.22 |
| | 6H | 4.49 | 4.89 | 5.00 | 5.40 | 5.88 | 4.49 | 4.89 | 5.00 | 5.40 | 5.88 |
| | 8H | 4.79 | 5.15 | 5.32 | 5.67 | 6.17 | 4.79 | 5.15 | 5.32 | 5.67 | 6.17 |
| | 12H | 5.03 | 5.34 | 5.55 | 5.84 | 6.42 | 5.03 | 5.34 | 5.55 | 5.84 | 6.42 |
| 12H | 4H | 3.79 | 4.23 | 4.28 | 4.71 | 5.19 | 3.79 | 4.23 | 4.28 | 4.71 | 5.19 |
| | 6H | 4.53 | 4.89 | 5.06 | 5.41 | 5.91 | 4.53 | 4.89 | 5.06 | 5.41 | 5.91 |
| | 8H | 4.89 | 5.20 | 5.42 | 5.70 | 6.28 | 4.89 | 5.20 | 5.42 | 5.70 | 6.28 |