

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: P867371

Luminaire Tested: PRLX-2004-L-940-100L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867371
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-72)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-940-100L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

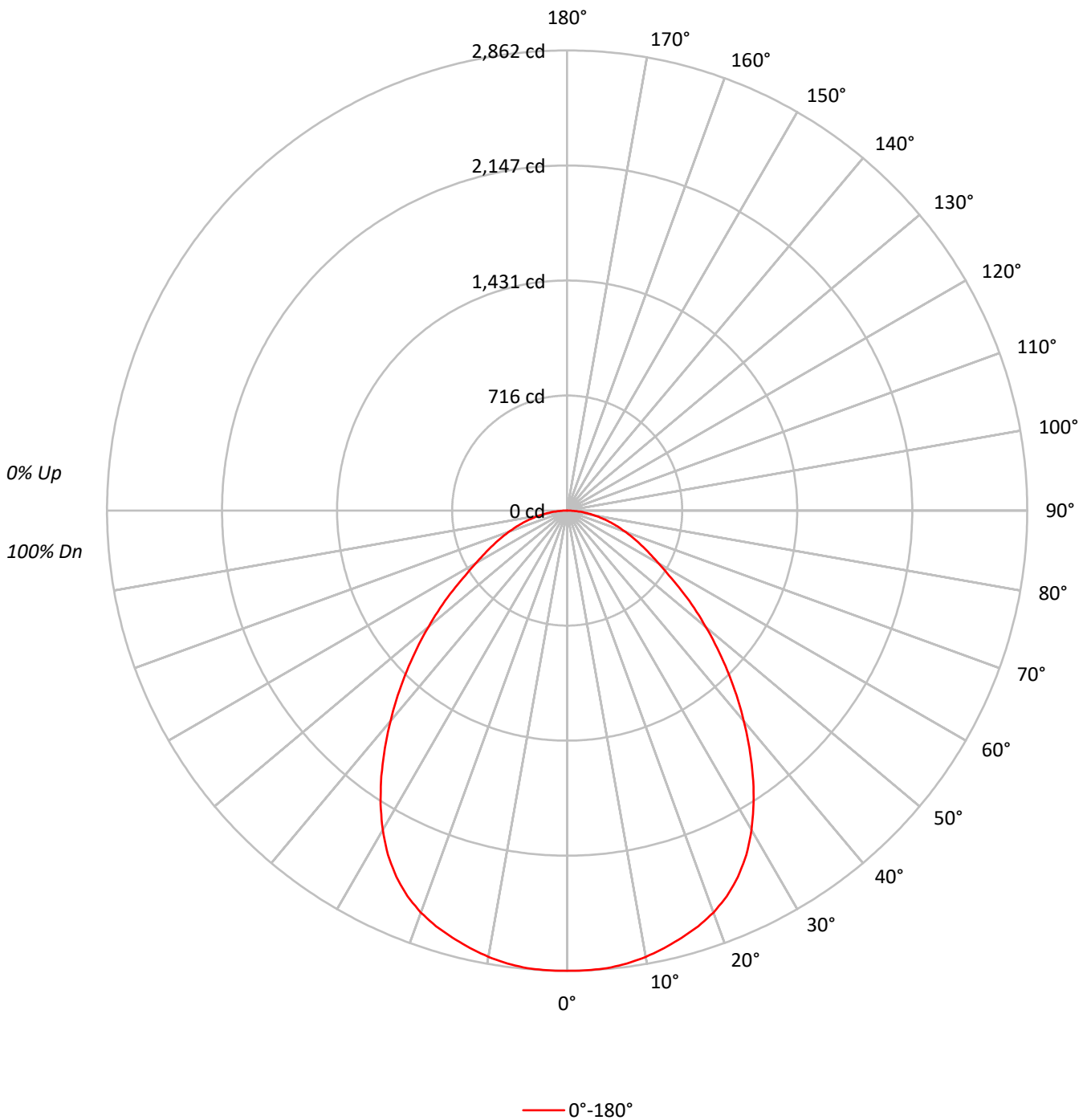
Lumens per Lamp: N/A
Luminaire Lumens: 6214.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.22
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
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 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 82 | 99 | 92 | 86 | 81 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 6 | 74 | 62 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 53 | 46 | 42 | 51 | 46 | 41 | 39 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 47 | 42 | 37 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 36 | 32 | 43 | 36 | 32 | 42 | 36 | 31 | 41 | 35 | 31 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 14122 |
| 5° | 14148 |
| 10° | 14121 |
| 15° | 14055 |
| 20° | 13970 |
| 25° | 13686 |
| 30° | 13069 |
| 35° | 12132 |
| 40° | 11012 |
| 45° | 9830 |
| 50° | 8640 |
| 55° | 7461 |
| 60° | 6470 |
| 65° | 5941 |
| 70° | 5547 |
| 75° | 5204 |
| 80° | 4907 |
| 85° | 4625 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9830 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 271.4 | 4.4 |
| 10°-20° | 776.5 | 12.5 |
| 20°-30° | 1152.4 | 18.5 |
| 30°-40° | 1255.1 | 20.2 |
| 40°-50° | 1088.2 | 17.5 |
| 50°-60° | 782.0 | 12.6 |
| 60°-70° | 507.2 | 8.2 |
| 70°-80° | 290.2 | 4.7 |
| 80°-90° | 90.9 | 1.5 |
| 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° | 2200.4 | 35.4 |
| 0°-40° | 3455.4 | 55.6 |
| 0°-60° | 5325.6 | 85.7 |
| 0°-90° | 6214.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6214.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2862 | |
| 5° | 2857 | 271 |
| 15° | 2752 | 777 |
| 25° | 2514 | 1152 |
| 35° | 2014 | 1255 |
| 45° | 1409 | 1088 |
| 55° | 867 | 782 |
| 65° | 509 | 507 |
| 75° | 273 | 290 |
| 85° | 82 | 91 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2862.3 |
| 2.5° | 2862.3 |
| 5° | 2856.7 |
| 7.5° | 2841.8 |
| 10° | 2818.6 |
| 12.5° | 2787.0 |
| 15° | 2751.7 |
| 17.5° | 2710.9 |
| 20° | 2660.7 |
| 22.5° | 2596.6 |
| 25° | 2514.0 |
| 27.5° | 2413.7 |
| 30° | 2293.9 |
| 32.5° | 2159.2 |
| 35° | 2014.3 |
| 37.5° | 1862.0 |
| 40° | 1709.7 |
| 42.5° | 1559.3 |
| 45° | 1408.8 |
| 47.5° | 1266.7 |
| 50° | 1125.6 |
| 52.5° | 995.6 |
| 55° | 867.4 |
| 57.5° | 751.3 |
| 60° | 655.7 |
| 62.5° | 577.7 |
| 65° | 508.9 |
| 67.5° | 443.9 |
| 70° | 384.5 |
| 72.5° | 326.9 |
| 75° | 273.0 |
| 77.5° | 222.0 |
| 80° | 172.7 |
| 82.5° | 126.3 |
| 85° | 81.7 |
| 87.5° | 39.9 |
| 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 | 17.95 | 19.45 | 18.32 | 19.76 | 20.08 | 17.95 | 19.45 | 18.32 | 19.76 | 20.08 |
| | 3H | 19.46 | 20.81 | 19.84 | 21.14 | 21.50 | 19.46 | 20.81 | 19.84 | 21.14 | 21.50 |
| | 4H | 20.06 | 21.32 | 20.46 | 21.67 | 22.05 | 20.06 | 21.32 | 20.46 | 21.67 | 22.05 |
| | 6H | 20.54 | 21.71 | 20.95 | 22.07 | 22.47 | 20.54 | 21.71 | 20.95 | 22.07 | 22.47 |
| | 8H | 20.71 | 21.82 | 21.14 | 22.21 | 22.61 | 20.71 | 21.82 | 21.14 | 22.21 | 22.61 |
| | 12H | 20.83 | 21.90 | 21.26 | 22.28 | 22.71 | 20.83 | 21.90 | 21.26 | 22.28 | 22.71 |
| 4H | 2H | 18.45 | 19.71 | 18.85 | 20.06 | 20.44 | 18.45 | 19.71 | 18.85 | 20.06 | 20.44 |
| | 3H | 20.20 | 21.25 | 20.62 | 21.65 | 22.05 | 20.20 | 21.25 | 20.62 | 21.65 | 22.05 |
| | 4H | 20.94 | 21.88 | 21.37 | 22.30 | 22.74 | 20.94 | 21.88 | 21.37 | 22.30 | 22.74 |
| | 6H | 21.56 | 22.38 | 22.01 | 22.82 | 23.28 | 21.56 | 22.38 | 22.01 | 22.82 | 23.28 |
| | 8H | 21.78 | 22.55 | 22.24 | 22.99 | 23.46 | 21.78 | 22.55 | 22.24 | 22.99 | 23.46 |
| | 12H | 21.95 | 22.64 | 22.44 | 23.12 | 23.59 | 21.95 | 22.64 | 22.44 | 23.12 | 23.59 |
| 8H | 4H | 21.22 | 21.99 | 21.68 | 22.43 | 22.90 | 21.22 | 21.99 | 21.68 | 22.43 | 22.90 |
| | 6H | 21.97 | 22.60 | 22.46 | 23.09 | 23.57 | 21.97 | 22.60 | 22.46 | 23.09 | 23.57 |
| | 8H | 22.27 | 22.84 | 22.79 | 23.35 | 23.84 | 22.27 | 22.84 | 22.79 | 23.35 | 23.84 |
| | 12H | 22.53 | 23.04 | 23.04 | 23.53 | 24.10 | 22.53 | 23.04 | 23.04 | 23.53 | 24.10 |
| 12H | 4H | 21.24 | 21.93 | 21.73 | 22.41 | 22.88 | 21.24 | 21.93 | 21.73 | 22.41 | 22.88 |
| | 6H | 22.02 | 22.59 | 22.53 | 23.10 | 23.59 | 22.02 | 22.59 | 22.53 | 23.10 | 23.59 |
| | 8H | 22.39 | 22.89 | 22.90 | 23.39 | 23.95 | 22.39 | 22.89 | 22.90 | 23.39 | 23.95 |