

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: P866447

Luminaire Tested: PRLX-2004-M-927-55L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-M-927-55L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

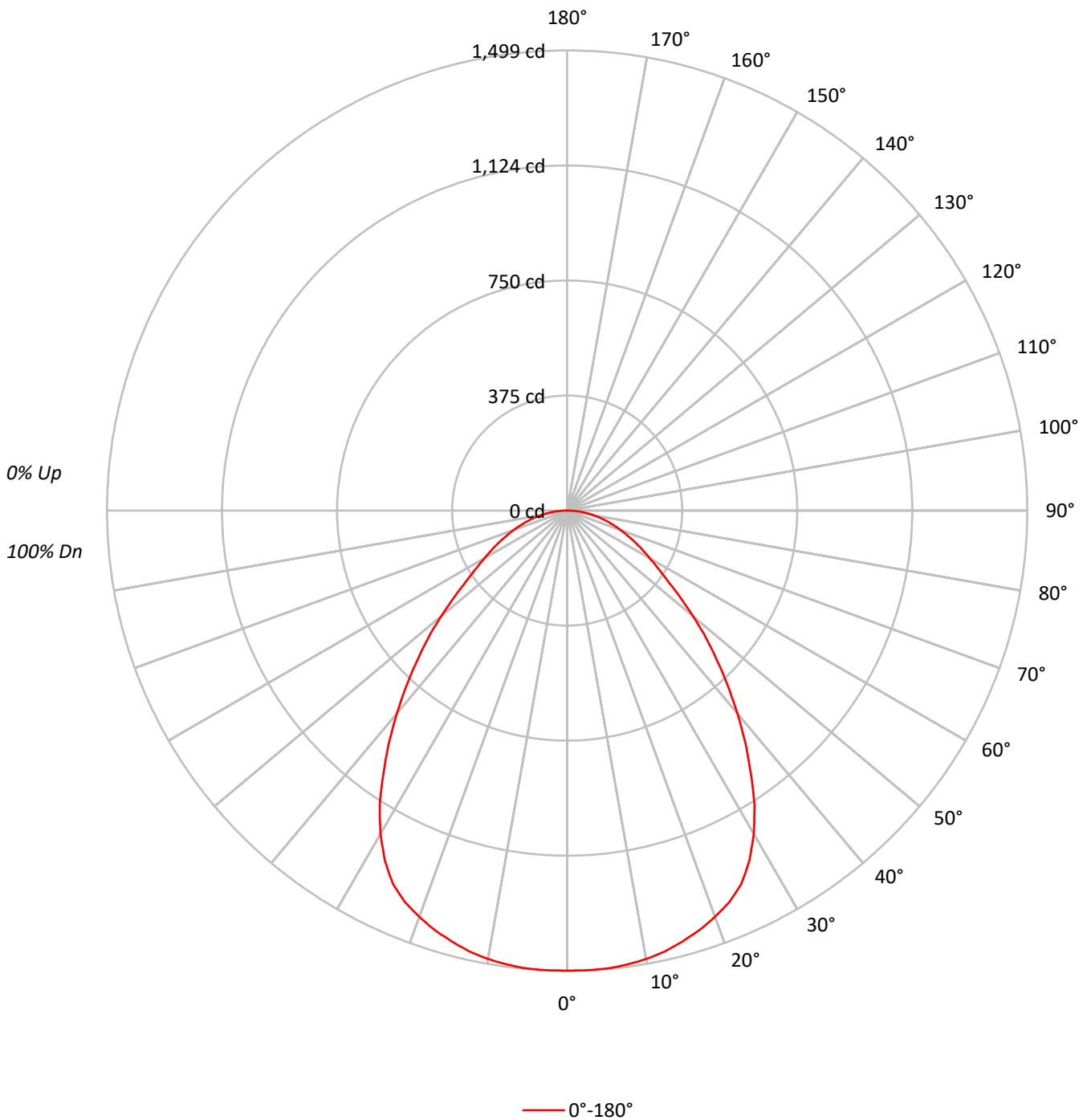
Lumens per Lamp: N/A
Luminaire Lumens: 3147.6 lumens
Efficiency: N/A
Efficacy: 65.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.2
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 48.3
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 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 78 | 83 | 79 | 77 | 75 |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 70 | 67 | 65 |
| 4 | 87 | 76 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | 57 |
| 5 | 80 | 69 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 59 | 53 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 6 | 75 | 62 | 54 | 48 | 73 | 61 | 54 | 48 | 60 | 53 | 48 | 58 | 52 | 47 | 57 | 51 | 47 | 45 |
| 7 | 70 | 57 | 49 | 43 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 42 | 40 |
| 8 | 65 | 53 | 45 | 39 | 64 | 52 | 44 | 39 | 51 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 38 | 37 |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 33 |
| 10 | 57 | 45 | 38 | 33 | 56 | 45 | 37 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 11924 |
| 5° | 11958 |
| 10° | 11984 |
| 15° | 11965 |
| 20° | 11921 |
| 25° | 11785 |
| 30° | 11166 |
| 35° | 10124 |
| 40° | 8956 |
| 45° | 7772 |
| 50° | 6615 |
| 55° | 5555 |
| 60° | 4952 |
| 65° | 4597 |
| 70° | 4317 |
| 75° | 4119 |
| 80° | 3963 |
| 85° | 3825 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7772 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 142.5 | 4.5 |
| 10°-20° | 410.1 | 13.0 |
| 20°-30° | 613.0 | 19.5 |
| 30°-40° | 650.6 | 20.7 |
| 40°-50° | 534.4 | 17.0 |
| 50°-60° | 365.5 | 11.6 |
| 60°-70° | 243.0 | 7.7 |
| 70°-80° | 142.3 | 4.5 |
| 80°-90° | 46.3 | 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° | 1165.6 | 37.0 |
| 0°-40° | 1816.2 | 57.7 |
| 0°-60° | 2716.1 | 86.3 |
| 0°-90° | 3147.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3147.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1499 | |
| 5° | 1497 | 142 |
| 15° | 1453 | 410 |
| 25° | 1342 | 613 |
| 35° | 1042 | 651 |
| 45° | 691 | 534 |
| 55° | 400 | 366 |
| 65° | 244 | 243 |
| 75° | 134 | 142 |
| 85° | 42 | 46 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1498.8 |
| 2.5° | 1498.8 |
| 5° | 1497.4 |
| 7.5° | 1491.8 |
| 10° | 1483.4 |
| 12.5° | 1470.9 |
| 15° | 1452.7 |
| 17.5° | 1433.2 |
| 20° | 1408.1 |
| 22.5° | 1380.2 |
| 25° | 1342.5 |
| 27.5° | 1285.3 |
| 30° | 1215.5 |
| 32.5° | 1135.9 |
| 35° | 1042.4 |
| 37.5° | 953.1 |
| 40° | 862.4 |
| 42.5° | 774.5 |
| 45° | 690.8 |
| 47.5° | 614.0 |
| 50° | 534.5 |
| 52.5° | 463.3 |
| 55° | 400.5 |
| 57.5° | 351.7 |
| 60° | 311.2 |
| 62.5° | 276.3 |
| 65° | 244.2 |
| 67.5° | 213.5 |
| 70° | 185.6 |
| 72.5° | 159.1 |
| 75° | 134.0 |
| 77.5° | 110.2 |
| 80° | 86.5 |
| 82.5° | 64.2 |
| 85° | 41.9 |
| 87.5° | 20.9 |
| 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 | 16.74 | 18.21 | 17.11 | 18.53 | 18.84 | 16.74 | 18.21 | 17.11 | 18.53 | 18.84 |
| | 3H | 18.32 | 19.64 | 18.70 | 19.97 | 20.33 | 18.32 | 19.64 | 18.70 | 19.97 | 20.33 |
| | 4H | 18.96 | 20.20 | 19.36 | 20.55 | 20.93 | 18.96 | 20.20 | 19.36 | 20.55 | 20.93 |
| | 6H | 19.48 | 20.63 | 19.90 | 20.99 | 21.39 | 19.48 | 20.63 | 19.90 | 20.99 | 21.39 |
| | 8H | 19.67 | 20.76 | 20.10 | 21.15 | 21.55 | 19.67 | 20.76 | 20.10 | 21.15 | 21.55 |
| | 12H | 19.82 | 20.86 | 20.25 | 21.24 | 21.67 | 19.82 | 20.86 | 20.25 | 21.24 | 21.67 |
| 4H | 2H | 17.27 | 18.50 | 17.67 | 18.85 | 19.23 | 17.27 | 18.50 | 17.67 | 18.85 | 19.23 |
| | 3H | 19.09 | 20.12 | 19.50 | 20.52 | 20.92 | 19.09 | 20.12 | 19.50 | 20.52 | 20.92 |
| | 4H | 19.87 | 20.79 | 20.30 | 21.21 | 21.65 | 19.87 | 20.79 | 20.30 | 21.21 | 21.65 |
| | 6H | 20.53 | 21.34 | 20.99 | 21.78 | 22.24 | 20.53 | 21.34 | 20.99 | 21.78 | 22.24 |
| | 8H | 20.78 | 21.53 | 21.24 | 21.98 | 22.44 | 20.78 | 21.53 | 21.24 | 21.98 | 22.44 |
| | 12H | 20.97 | 21.65 | 21.46 | 22.13 | 22.60 | 20.97 | 21.65 | 21.46 | 22.13 | 22.60 |
| 8H | 4H | 20.16 | 20.91 | 20.62 | 21.36 | 21.82 | 20.16 | 20.91 | 20.62 | 21.36 | 21.82 |
| | 6H | 20.96 | 21.59 | 21.46 | 22.08 | 22.56 | 20.96 | 21.59 | 21.46 | 22.08 | 22.56 |
| | 8H | 21.30 | 21.86 | 21.82 | 22.37 | 22.86 | 21.30 | 21.86 | 21.82 | 22.37 | 22.86 |
| | 12H | 21.59 | 22.09 | 22.10 | 22.58 | 23.14 | 21.59 | 22.09 | 22.10 | 22.58 | 23.14 |
| 12H | 4H | 20.19 | 20.86 | 20.67 | 21.34 | 21.81 | 20.19 | 20.86 | 20.67 | 21.34 | 21.81 |
| | 6H | 21.03 | 21.59 | 21.54 | 22.10 | 22.59 | 21.03 | 21.59 | 21.54 | 22.10 | 22.59 |
| | 8H | 21.43 | 21.92 | 21.94 | 22.42 | 22.98 | 21.43 | 21.92 | 21.94 | 22.42 | 22.98 |