

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: P866671

Luminaire Tested: PRLX-2001-L-927-117L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-76)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-L-927-117L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 7
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

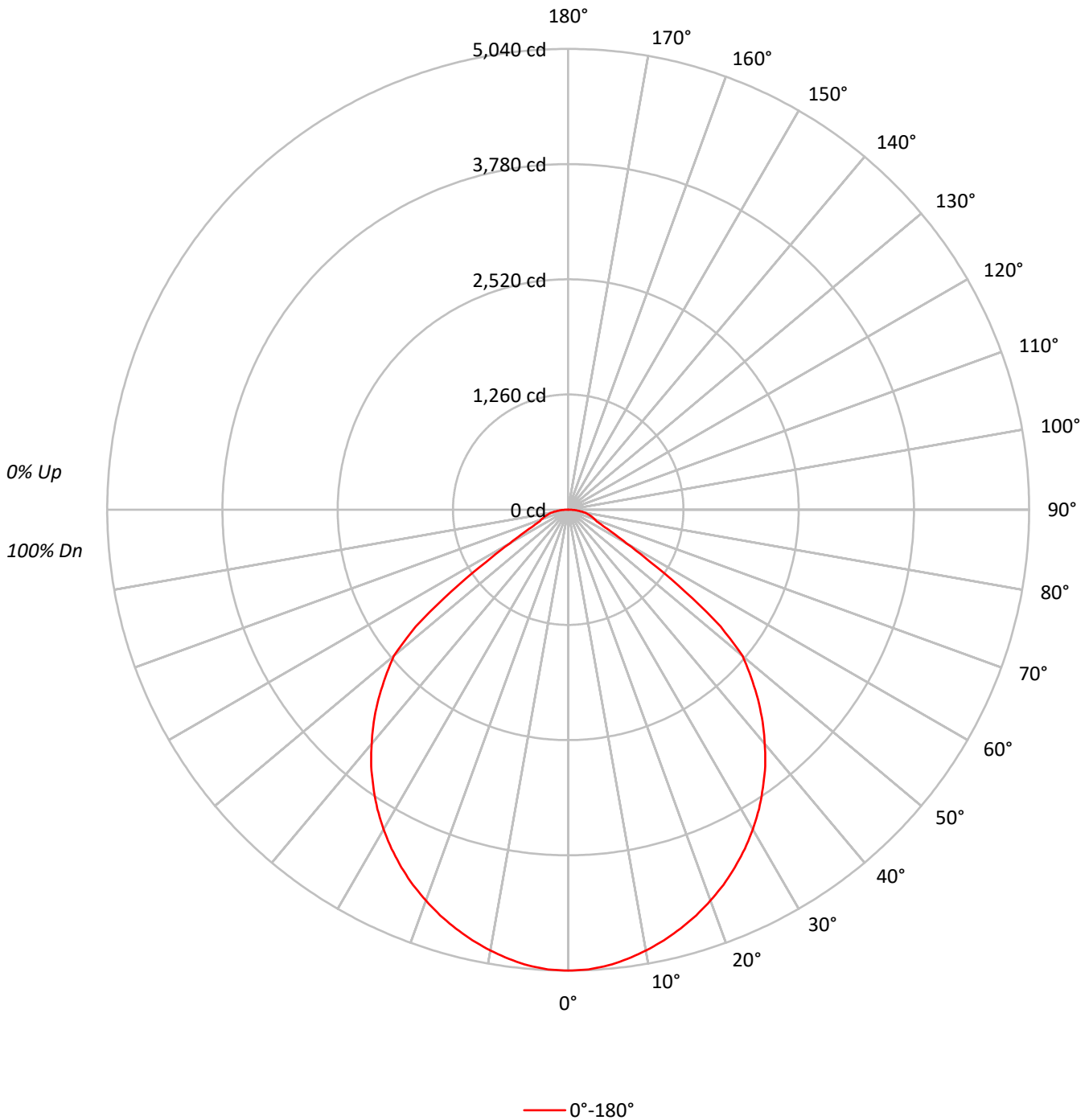
Lumens per Lamp: N/A
Luminaire Lumens: 10598.4 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 95.2
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 | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 91 | 90 | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 90 | 86 | 82 | 87 | 84 | 80 | 84 | 81 | 79 | 77 |
| 3 | 95 | 86 | 79 | 73 | 92 | 84 | 78 | 73 | 81 | 76 | 71 | 79 | 74 | 70 | 76 | 72 | 69 | 67 |
| 4 | 88 | 77 | 70 | 64 | 86 | 76 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 62 | 69 | 65 | 61 | 59 |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 52 |
| 6 | 75 | 63 | 55 | 50 | 74 | 63 | 55 | 49 | 61 | 54 | 49 | 59 | 53 | 49 | 58 | 52 | 48 | 46 |
| 7 | 70 | 58 | 50 | 44 | 69 | 57 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 44 | 53 | 47 | 43 | 41 |
| 8 | 66 | 53 | 45 | 40 | 64 | 52 | 45 | 40 | 51 | 44 | 40 | 50 | 44 | 39 | 49 | 43 | 39 | 37 |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 45 | 40 | 36 | 34 |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 42 | 37 | 32 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 27554 |
| 5° | 27458 |
| 10° | 27175 |
| 15° | 26843 |
| 20° | 26464 |
| 25° | 26025 |
| 30° | 25477 |
| 35° | 24774 |
| 40° | 23865 |
| 45° | 22682 |
| 50° | 21165 |
| 55° | 14865 |
| 60° | 8047 |
| 65° | 5478 |
| 70° | 4979 |
| 75° | 5289 |
| 80° | 5689 |
| 85° | 6078 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22682 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 474.2 | 4.5 |
| 10°-20° | 1337.4 | 12.6 |
| 20°-30° | 1986.5 | 18.7 |
| 30°-40° | 2319.4 | 21.9 |
| 40°-50° | 2257.7 | 21.3 |
| 50°-60° | 1404.8 | 13.3 |
| 60°-70° | 452.9 | 4.3 |
| 70°-80° | 262.7 | 2.5 |
| 80°-90° | 102.7 | 1.0 |
| 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° | 3798.1 | 35.8 |
| 0°-40° | 6117.5 | 57.7 |
| 0°-60° | 9780.1 | 92.3 |
| 0°-90° | 10598.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 10598.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5040 | |
| 5° | 5004 | 474 |
| 15° | 4743 | 1337 |
| 25° | 4314 | 1987 |
| 35° | 3712 | 2319 |
| 45° | 2934 | 2258 |
| 55° | 1560 | 1405 |
| 65° | 424 | 453 |
| 75° | 250 | 263 |
| 85° | 97 | 103 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5040.2 |
| 2.5° | 5034.6 |
| 5° | 5003.5 |
| 7.5° | 4956.4 |
| 10° | 4895.3 |
| 12.5° | 4825.6 |
| 15° | 4742.8 |
| 17.5° | 4652.4 |
| 20° | 4548.9 |
| 22.5° | 4439.7 |
| 25° | 4314.5 |
| 27.5° | 4180.9 |
| 30° | 4035.9 |
| 32.5° | 3882.5 |
| 35° | 3712.1 |
| 37.5° | 3538.0 |
| 40° | 3344.1 |
| 42.5° | 3147.4 |
| 45° | 2933.8 |
| 47.5° | 2710.7 |
| 50° | 2488.6 |
| 52.5° | 2100.8 |
| 55° | 1559.6 |
| 57.5° | 1062.6 |
| 60° | 736.0 |
| 62.5° | 549.7 |
| 65° | 423.5 |
| 67.5° | 338.8 |
| 70° | 311.5 |
| 72.5° | 281.4 |
| 75° | 250.4 |
| 77.5° | 217.4 |
| 80° | 180.7 |
| 82.5° | 141.2 |
| 85° | 96.9 |
| 87.5° | 48.9 |
| 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 | 18.83 | 20.28 | 19.19 | 20.59 | 20.91 | 18.83 | 20.28 | 19.19 | 20.59 | 20.91 |
| | 3H | 19.30 | 20.59 | 19.68 | 20.92 | 21.28 | 19.30 | 20.59 | 19.68 | 20.92 | 21.28 |
| | 4H | 19.63 | 20.83 | 20.03 | 21.18 | 21.56 | 19.63 | 20.83 | 20.03 | 21.18 | 21.56 |
| | 6H | 19.98 | 21.08 | 20.39 | 21.45 | 21.84 | 19.98 | 21.08 | 20.39 | 21.45 | 21.84 |
| | 8H | 20.13 | 21.18 | 20.56 | 21.57 | 21.97 | 20.13 | 21.18 | 20.56 | 21.57 | 21.97 |
| | 12H | 20.26 | 21.26 | 20.69 | 21.64 | 22.07 | 20.26 | 21.26 | 20.69 | 21.64 | 22.07 |
| 4H | 2H | 18.91 | 20.11 | 19.31 | 20.46 | 20.84 | 18.91 | 20.11 | 19.31 | 20.46 | 20.84 |
| | 3H | 19.60 | 20.58 | 20.01 | 20.99 | 21.39 | 19.60 | 20.58 | 20.01 | 20.99 | 21.39 |
| | 4H | 20.07 | 20.95 | 20.51 | 21.37 | 21.81 | 20.07 | 20.95 | 20.51 | 21.37 | 21.81 |
| | 6H | 20.60 | 21.36 | 21.06 | 21.80 | 22.27 | 20.60 | 21.36 | 21.06 | 21.80 | 22.27 |
| | 8H | 20.83 | 21.54 | 21.29 | 21.99 | 22.45 | 20.83 | 21.54 | 21.29 | 21.99 | 22.45 |
| | 12H | 21.03 | 21.66 | 21.51 | 22.14 | 22.62 | 21.03 | 21.66 | 21.51 | 22.14 | 22.62 |
| 8H | 4H | 20.24 | 20.95 | 20.70 | 21.40 | 21.86 | 20.24 | 20.95 | 20.70 | 21.40 | 21.86 |
| | 6H | 20.91 | 21.50 | 21.40 | 21.99 | 22.47 | 20.91 | 21.50 | 21.40 | 21.99 | 22.47 |
| | 8H | 21.23 | 21.77 | 21.75 | 22.28 | 22.77 | 21.23 | 21.77 | 21.75 | 22.28 | 22.77 |
| | 12H | 21.54 | 22.02 | 22.05 | 22.51 | 23.07 | 21.54 | 22.02 | 22.05 | 22.51 | 23.07 |
| 12H | 4H | 20.25 | 20.89 | 20.74 | 21.37 | 21.84 | 20.25 | 20.89 | 20.74 | 21.37 | 21.84 |
| | 6H | 20.96 | 21.49 | 21.47 | 22.00 | 22.49 | 20.96 | 21.49 | 21.47 | 22.00 | 22.49 |
| | 8H | 21.35 | 21.83 | 21.86 | 22.32 | 22.89 | 21.35 | 21.83 | 21.86 | 22.32 | 22.89 |