

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: P867175

Luminaire Tested: PRLX-2004-L-927-100L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-84)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-927-100L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

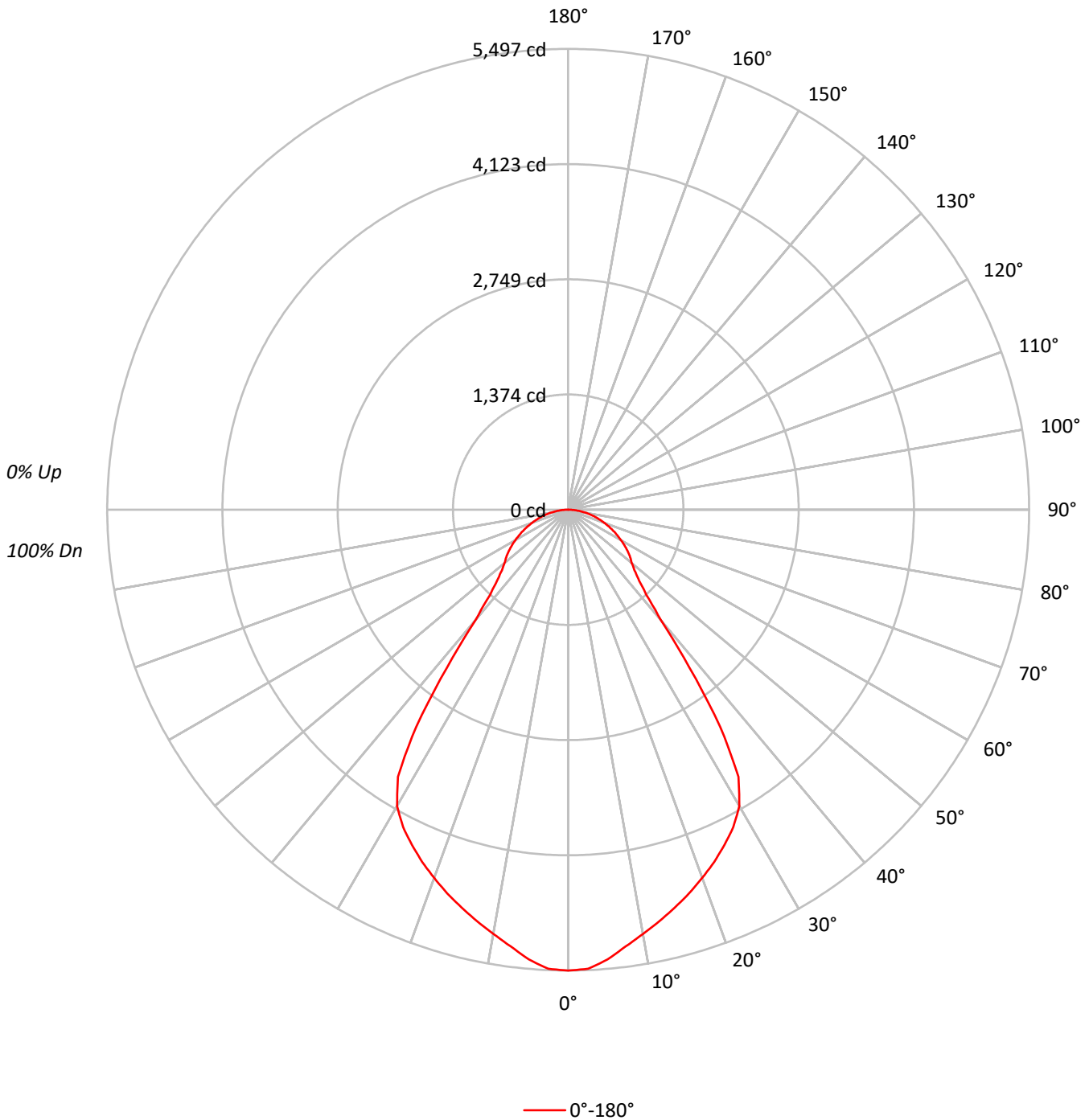
Lumens per Lamp: N/A
Luminaire Lumens: 8594.7 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.05
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P867175

CATALOG NUMBER: PRLX-2004-L-927-100L-L-X-X-WHHR-X

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 | 98 | 100 | 98 | 95 | 97 | 94 | 92 | 93 | 91 | 90 | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 91 | 86 | 82 | 87 | 84 | 81 | 85 | 82 | 79 | 77 |
| 3 | 95 | 87 | 80 | 74 | 93 | 85 | 79 | 74 | 82 | 77 | 72 | 80 | 75 | 71 | 77 | 73 | 70 | 68 |
| 4 | 89 | 79 | 71 | 66 | 87 | 77 | 70 | 65 | 75 | 69 | 64 | 73 | 68 | 63 | 71 | 66 | 63 | 61 |
| 5 | 83 | 72 | 64 | 59 | 81 | 71 | 64 | 58 | 69 | 63 | 58 | 67 | 61 | 57 | 65 | 60 | 57 | 55 |
| 6 | 78 | 66 | 58 | 53 | 76 | 65 | 58 | 53 | 63 | 57 | 52 | 62 | 56 | 52 | 60 | 55 | 51 | 50 |
| 7 | 73 | 61 | 53 | 48 | 71 | 60 | 53 | 48 | 59 | 52 | 48 | 57 | 52 | 47 | 56 | 51 | 47 | 45 |
| 8 | 68 | 57 | 49 | 44 | 67 | 56 | 49 | 44 | 55 | 48 | 44 | 53 | 48 | 43 | 52 | 47 | 43 | 41 |
| 9 | 64 | 53 | 45 | 40 | 63 | 52 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 38 |
| 10 | 61 | 49 | 42 | 37 | 60 | 49 | 42 | 37 | 48 | 41 | 37 | 47 | 41 | 37 | 46 | 41 | 37 | 35 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 27123 |
| 5° | 26665 |
| 10° | 25739 |
| 15° | 25096 |
| 20° | 24537 |
| 25° | 24009 |
| 30° | 23251 |
| 35° | 19037 |
| 40° | 11054 |
| 45° | 8360 |
| 50° | 7597 |
| 55° | 7468 |
| 60° | 7201 |
| 65° | 6914 |
| 70° | 6640 |
| 75° | 6350 |
| 80° | 6080 |
| 85° | 5831 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8360 cd/sqm

TEST NUMBER: P867175

CATALOG NUMBER: PRLX-2004-L-927-100L-L-X-X-WHHR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 505.6 | 5.9 |
| 10°-20° | 1385.4 | 16.1 |
| 20°-30° | 2028.9 | 23.6 |
| 30°-40° | 1886.4 | 21.9 |
| 40°-50° | 961.1 | 11.2 |
| 50°-60° | 773.1 | 9.0 |
| 60°-70° | 587.0 | 6.8 |
| 70°-80° | 353.6 | 4.1 |
| 80°-90° | 113.6 | 1.3 |
| 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° | 3919.9 | 45.6 |
| 0°-40° | 5806.3 | 67.6 |
| 0°-60° | 7540.5 | 87.7 |
| 0°-90° | 8594.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8594.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5497 | |
| 5° | 5384 | 506 |
| 15° | 4913 | 1385 |
| 25° | 4410 | 2029 |
| 35° | 3161 | 1886 |
| 45° | 1198 | 961 |
| 55° | 868 | 773 |
| 65° | 592 | 587 |
| 75° | 333 | 354 |
| 85° | 103 | 114 |
| 90° | 0 | |

TEST NUMBER: P867175

CATALOG NUMBER: PRLX-2004-L-927-100L-L-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5497.4 |
| 2.5° | 5481.3 |
| 5° | 5384.0 |
| 7.5° | 5253.6 |
| 10° | 5137.7 |
| 12.5° | 5027.5 |
| 15° | 4913.2 |
| 17.5° | 4797.4 |
| 20° | 4673.4 |
| 22.5° | 4547.9 |
| 25° | 4410.3 |
| 27.5° | 4265.5 |
| 30° | 4081.2 |
| 32.5° | 3777.9 |
| 35° | 3160.7 |
| 37.5° | 2372.1 |
| 40° | 1716.3 |
| 42.5° | 1380.0 |
| 45° | 1198.1 |
| 47.5° | 1070.2 |
| 50° | 989.7 |
| 52.5° | 931.8 |
| 55° | 868.2 |
| 57.5° | 797.4 |
| 60° | 729.8 |
| 62.5° | 659.8 |
| 65° | 592.2 |
| 67.5° | 525.4 |
| 70° | 460.3 |
| 72.5° | 396.7 |
| 75° | 333.1 |
| 77.5° | 273.6 |
| 80° | 214.0 |
| 82.5° | 158.5 |
| 85° | 103.0 |
| 87.5° | 49.1 |
| 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 | 17.45 | 18.80 | 17.81 | 19.11 | 19.43 | 17.45 | 18.80 | 17.81 | 19.11 | 19.43 |
| | 3H | 19.24 | 20.46 | 19.62 | 20.79 | 21.15 | 19.24 | 20.46 | 19.62 | 20.79 | 21.15 |
| | 4H | 19.95 | 21.09 | 20.35 | 21.44 | 21.82 | 19.95 | 21.09 | 20.35 | 21.44 | 21.82 |
| | 6H | 20.51 | 21.56 | 20.93 | 21.93 | 22.32 | 20.51 | 21.56 | 20.93 | 21.93 | 22.32 |
| | 8H | 20.71 | 21.71 | 21.14 | 22.10 | 22.50 | 20.71 | 21.71 | 21.14 | 22.10 | 22.50 |
| | 12H | 20.86 | 21.81 | 21.29 | 22.19 | 22.62 | 20.86 | 21.81 | 21.29 | 22.19 | 22.62 |
| 4H | 2H | 18.03 | 19.17 | 18.43 | 19.52 | 19.90 | 18.03 | 19.17 | 18.43 | 19.52 | 19.90 |
| | 3H | 20.05 | 21.00 | 20.47 | 21.40 | 21.80 | 20.05 | 21.00 | 20.47 | 21.40 | 21.80 |
| | 4H | 20.89 | 21.74 | 21.33 | 22.16 | 22.60 | 20.89 | 21.74 | 21.33 | 22.16 | 22.60 |
| | 6H | 21.59 | 22.33 | 22.05 | 22.78 | 23.24 | 21.59 | 22.33 | 22.05 | 22.78 | 23.24 |
| | 8H | 21.85 | 22.54 | 22.31 | 22.98 | 23.45 | 21.85 | 22.54 | 22.31 | 22.98 | 23.45 |
| | 12H | 22.04 | 22.66 | 22.53 | 23.14 | 23.61 | 22.04 | 22.66 | 22.53 | 23.14 | 23.61 |
| 8H | 4H | 21.20 | 21.89 | 21.67 | 22.33 | 22.80 | 21.20 | 21.89 | 21.67 | 22.33 | 22.80 |
| | 6H | 22.04 | 22.61 | 22.54 | 23.10 | 23.58 | 22.04 | 22.61 | 22.54 | 23.10 | 23.58 |
| | 8H | 22.39 | 22.89 | 22.91 | 23.41 | 23.90 | 22.39 | 22.89 | 22.91 | 23.41 | 23.90 |
| | 12H | 22.68 | 23.13 | 23.20 | 23.62 | 24.19 | 22.68 | 23.13 | 23.20 | 23.62 | 24.19 |
| 12H | 4H | 21.23 | 21.84 | 21.71 | 22.32 | 22.79 | 21.23 | 21.84 | 21.71 | 22.32 | 22.79 |
| | 6H | 22.11 | 22.61 | 22.62 | 23.13 | 23.62 | 22.11 | 22.61 | 22.62 | 23.13 | 23.62 |
| | 8H | 22.52 | 22.96 | 23.03 | 23.46 | 24.03 | 22.52 | 22.96 | 23.03 | 23.46 | 24.03 |