

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: P867223

Luminaire Tested: PRLX-2004-L-927-67L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867223
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-927-67L-L-X-X-WHHR-X
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

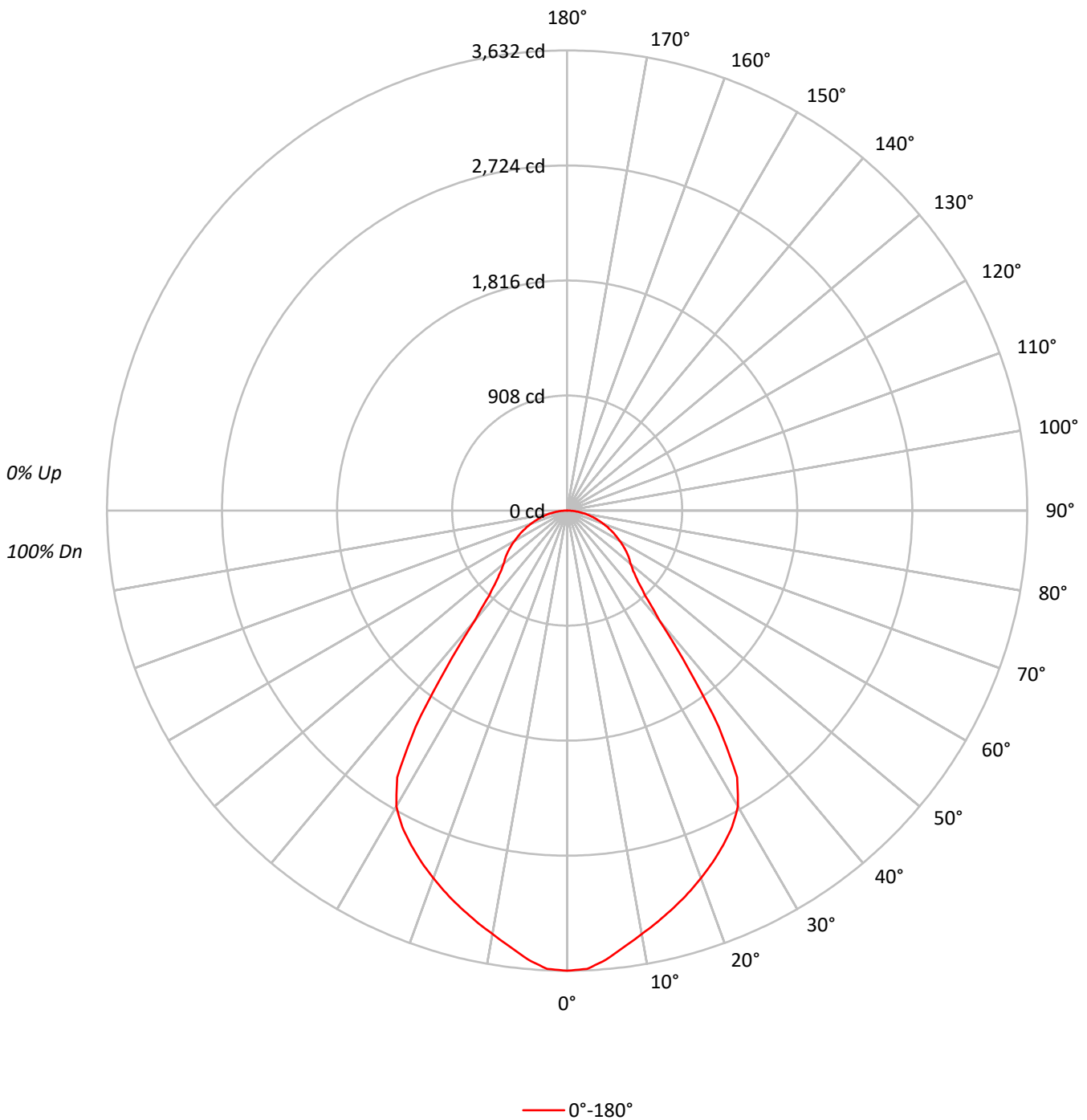
Lumens per Lamp: N/A
Luminaire Lumens: 5677.5 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.05
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 50.4
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: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P867223

CATALOG NUMBER: PRLX-2004-L-927-67L-L-X-X-WHHR-X

Luminous Intensity Polar Plot





TEST NUMBER: P867223

CATALOG NUMBER: PRLX-2004-L-927-67L-L-X-X-WHHR-X

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° | 17917 |
| 5° | 17614 |
| 10° | 17003 |
| 15° | 16578 |
| 20° | 16209 |
| 25° | 15860 |
| 30° | 15359 |
| 35° | 12576 |
| 40° | 7302 |
| 45° | 5523 |
| 50° | 5018 |
| 55° | 4933 |
| 60° | 4757 |
| 65° | 4567 |
| 70° | 4385 |
| 75° | 4196 |
| 80° | 4018 |
| 85° | 3849 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5523 cd/sqm

TEST NUMBER: P867223

CATALOG NUMBER: PRLX-2004-L-927-67L-L-X-X-WHHR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 334.0 | 5.9 |
| 10°-20° | 915.2 | 16.1 |
| 20°-30° | 1340.2 | 23.6 |
| 30°-40° | 1246.1 | 21.9 |
| 40°-50° | 634.9 | 11.2 |
| 50°-60° | 510.7 | 9.0 |
| 60°-70° | 387.8 | 6.8 |
| 70°-80° | 233.6 | 4.1 |
| 80°-90° | 75.0 | 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° | 2589.4 | 45.6 |
| 0°-40° | 3835.5 | 67.6 |
| 0°-60° | 4981.1 | 87.7 |
| 0°-90° | 5677.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5677.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3632 | |
| 5° | 3556 | 334 |
| 15° | 3246 | 915 |
| 25° | 2913 | 1340 |
| 35° | 2088 | 1246 |
| 45° | 792 | 635 |
| 55° | 574 | 511 |
| 65° | 391 | 388 |
| 75° | 220 | 234 |
| 85° | 68 | 75 |
| 90° | 0 | |

TEST NUMBER: P867223

CATALOG NUMBER: PRLX-2004-L-927-67L-L-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3631.5 |
| 2.5° | 3620.8 |
| 5° | 3556.5 |
| 7.5° | 3470.4 |
| 10° | 3393.9 |
| 12.5° | 3321.0 |
| 15° | 3245.6 |
| 17.5° | 3169.0 |
| 20° | 3087.2 |
| 22.5° | 3004.2 |
| 25° | 2913.4 |
| 27.5° | 2817.7 |
| 30° | 2696.0 |
| 32.5° | 2495.6 |
| 35° | 2087.9 |
| 37.5° | 1567.0 |
| 40° | 1133.8 |
| 42.5° | 911.6 |
| 45° | 791.5 |
| 47.5° | 706.9 |
| 50° | 653.8 |
| 52.5° | 615.5 |
| 55° | 573.5 |
| 57.5° | 526.8 |
| 60° | 482.1 |
| 62.5° | 435.9 |
| 65° | 391.2 |
| 67.5° | 347.1 |
| 70° | 304.0 |
| 72.5° | 262.0 |
| 75° | 220.1 |
| 77.5° | 180.7 |
| 80° | 141.4 |
| 82.5° | 104.7 |
| 85° | 68.0 |
| 87.5° | 32.4 |
| 90° | 0.0 |

TEST NUMBER: P867223

CATALOG NUMBER: PRLX-2004-L-927-67L-L-X-X-WHHR-X

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 | 16.01 | 17.36 | 16.37 | 17.67 | 17.99 | 16.01 | 17.36 | 16.37 | 17.67 | 17.99 |
| | 3H | 17.80 | 19.02 | 18.18 | 19.35 | 19.71 | 17.80 | 19.02 | 18.18 | 19.35 | 19.71 |
| | 4H | 18.51 | 19.65 | 18.91 | 20.00 | 20.38 | 18.51 | 19.65 | 18.91 | 20.00 | 20.38 |
| | 6H | 19.07 | 20.12 | 19.49 | 20.49 | 20.88 | 19.07 | 20.12 | 19.49 | 20.49 | 20.88 |
| | 8H | 19.27 | 20.27 | 19.70 | 20.66 | 21.06 | 19.27 | 20.27 | 19.70 | 20.66 | 21.06 |
| | 12H | 19.42 | 20.37 | 19.85 | 20.75 | 21.18 | 19.42 | 20.37 | 19.85 | 20.75 | 21.18 |
| 4H | 2H | 16.59 | 17.73 | 16.99 | 18.08 | 18.46 | 16.59 | 17.73 | 16.99 | 18.08 | 18.46 |
| | 3H | 18.61 | 19.56 | 19.03 | 19.96 | 20.36 | 18.61 | 19.56 | 19.03 | 19.96 | 20.36 |
| | 4H | 19.45 | 20.30 | 19.89 | 20.72 | 21.16 | 19.45 | 20.30 | 19.89 | 20.72 | 21.16 |
| | 6H | 20.15 | 20.89 | 20.61 | 21.34 | 21.80 | 20.15 | 20.89 | 20.61 | 21.34 | 21.80 |
| | 8H | 20.41 | 21.10 | 20.87 | 21.54 | 22.01 | 20.41 | 21.10 | 20.87 | 21.54 | 22.01 |
| | 12H | 20.60 | 21.22 | 21.09 | 21.70 | 22.17 | 20.60 | 21.22 | 21.09 | 21.70 | 22.17 |
| 8H | 4H | 19.76 | 20.45 | 20.23 | 20.89 | 21.36 | 19.76 | 20.45 | 20.23 | 20.89 | 21.36 |
| | 6H | 20.60 | 21.17 | 21.10 | 21.66 | 22.14 | 20.60 | 21.17 | 21.10 | 21.66 | 22.14 |
| | 8H | 20.95 | 21.45 | 21.47 | 21.97 | 22.46 | 20.95 | 21.45 | 21.47 | 21.97 | 22.46 |
| | 12H | 21.24 | 21.69 | 21.76 | 22.18 | 22.75 | 21.24 | 21.69 | 21.76 | 22.18 | 22.75 |
| 12H | 4H | 19.79 | 20.40 | 20.27 | 20.88 | 21.35 | 19.79 | 20.40 | 20.27 | 20.88 | 21.35 |
| | 6H | 20.67 | 21.17 | 21.18 | 21.69 | 22.18 | 20.67 | 21.17 | 21.18 | 21.69 | 22.18 |
| | 8H | 21.08 | 21.52 | 21.59 | 22.02 | 22.59 | 21.08 | 21.52 | 21.59 | 22.02 | 22.59 |