

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: P867415

Luminaire Tested: PRLX-2004-L-940-67L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867415
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: Pentalux
Catalog Number: PRLX-2004-L-940-67L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

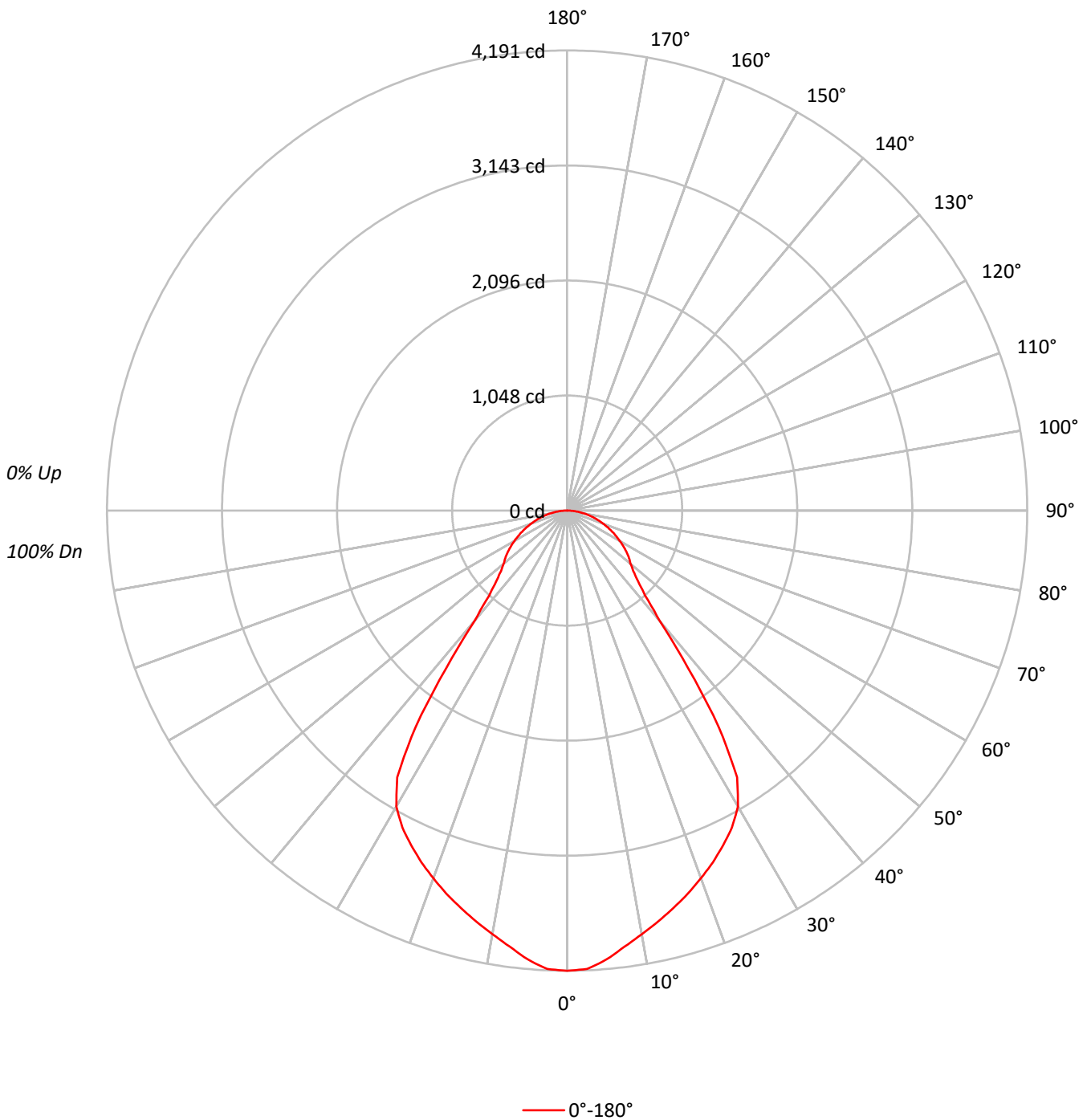
Lumens per Lamp: N/A
Luminaire Lumens: 6552.8 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.05
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 50.4
Input Voltage (V): 120
Input Current (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: P867415

CATALOG NUMBER: PRLX-2004-L-940-67L-L-X-X-WHHR-X

Luminous Intensity Polar Plot



TEST NUMBER: P867415

CATALOG NUMBER: PRLX-2004-L-940-67L-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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 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° | 20679 |
| 5° | 20330 |
| 10° | 19624 |
| 15° | 19134 |
| 20° | 18708 |
| 25° | 18305 |
| 30° | 17727 |
| 35° | 14514 |
| 40° | 8428 |
| 45° | 6374 |
| 50° | 5792 |
| 55° | 5694 |
| 60° | 5490 |
| 65° | 5271 |
| 70° | 5062 |
| 75° | 4842 |
| 80° | 4637 |
| 85° | 4444 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6374 cd/sqm

TEST NUMBER: P867415

CATALOG NUMBER: PRLX-2004-L-940-67L-L-X-X-WHHR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 385.5 | 5.9 |
| 10°-20° | 1056.3 | 16.1 |
| 20°-30° | 1546.8 | 23.6 |
| 30°-40° | 1438.2 | 21.9 |
| 40°-50° | 732.7 | 11.2 |
| 50°-60° | 589.5 | 9.0 |
| 60°-70° | 447.6 | 6.8 |
| 70°-80° | 269.6 | 4.1 |
| 80°-90° | 86.6 | 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° | 2988.6 | 45.6 |
| 0°-40° | 4426.8 | 67.6 |
| 0°-60° | 5749.0 | 87.7 |
| 0°-90° | 6552.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6552.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4191 | |
| 5° | 4105 | 386 |
| 15° | 3746 | 1056 |
| 25° | 3362 | 1547 |
| 35° | 2410 | 1438 |
| 45° | 914 | 733 |
| 55° | 662 | 589 |
| 65° | 452 | 448 |
| 75° | 254 | 270 |
| 85° | 78 | 87 |
| 90° | 0 | |

TEST NUMBER: P867415

CATALOG NUMBER: PRLX-2004-L-940-67L-L-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 4191.3 |
| 2.5° | 4179.0 |
| 5° | 4104.8 |
| 7.5° | 4005.4 |
| 10° | 3917.1 |
| 12.5° | 3833.0 |
| 15° | 3745.9 |
| 17.5° | 3657.6 |
| 20° | 3563.1 |
| 22.5° | 3467.4 |
| 25° | 3362.5 |
| 27.5° | 3252.0 |
| 30° | 3111.6 |
| 32.5° | 2880.3 |
| 35° | 2409.7 |
| 37.5° | 1808.5 |
| 40° | 1308.5 |
| 42.5° | 1052.1 |
| 45° | 913.5 |
| 47.5° | 815.9 |
| 50° | 754.6 |
| 52.5° | 710.4 |
| 55° | 661.9 |
| 57.5° | 608.0 |
| 60° | 556.4 |
| 62.5° | 503.1 |
| 65° | 451.5 |
| 67.5° | 400.6 |
| 70° | 350.9 |
| 72.5° | 302.4 |
| 75° | 254.0 |
| 77.5° | 208.6 |
| 80° | 163.2 |
| 82.5° | 120.9 |
| 85° | 78.5 |
| 87.5° | 37.4 |
| 90° | 0.0 |

TEST NUMBER: P867415
 CATALOG NUMBER: PRLX-2004-L-940-67L-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 | 16.50 | 17.86 | 16.87 | 18.17 | 18.49 | 16.50 | 17.86 | 16.87 | 18.17 | 18.49 |
| | 3H | 18.30 | 19.52 | 18.68 | 19.85 | 20.21 | 18.30 | 19.52 | 18.68 | 19.85 | 20.21 |
| | 4H | 19.01 | 20.15 | 19.41 | 20.50 | 20.88 | 19.01 | 20.15 | 19.41 | 20.50 | 20.88 |
| | 6H | 19.57 | 20.62 | 19.98 | 20.99 | 21.38 | 19.57 | 20.62 | 19.98 | 20.99 | 21.38 |
| | 8H | 19.77 | 20.77 | 20.20 | 21.16 | 21.56 | 19.77 | 20.77 | 20.20 | 21.16 | 21.56 |
| | 12H | 19.92 | 20.87 | 20.35 | 21.25 | 21.68 | 19.92 | 20.87 | 20.35 | 21.25 | 21.68 |
| 4H | 2H | 17.09 | 18.23 | 17.49 | 18.58 | 18.96 | 17.09 | 18.23 | 17.49 | 18.58 | 18.96 |
| | 3H | 19.11 | 20.06 | 19.52 | 20.46 | 20.86 | 19.11 | 20.06 | 19.52 | 20.46 | 20.86 |
| | 4H | 19.95 | 20.80 | 20.39 | 21.22 | 21.66 | 19.95 | 20.80 | 20.39 | 21.22 | 21.66 |
| | 6H | 20.65 | 21.39 | 21.11 | 21.83 | 22.30 | 20.65 | 21.39 | 21.11 | 21.83 | 22.30 |
| | 8H | 20.91 | 21.59 | 21.37 | 22.04 | 22.51 | 20.91 | 21.59 | 21.37 | 22.04 | 22.51 |
| | 12H | 21.10 | 21.71 | 21.59 | 22.20 | 22.67 | 21.10 | 21.71 | 21.59 | 22.20 | 22.67 |
| 8H | 4H | 20.26 | 20.95 | 20.72 | 21.39 | 21.86 | 20.26 | 20.95 | 20.72 | 21.39 | 21.86 |
| | 6H | 21.10 | 21.66 | 21.60 | 22.16 | 22.64 | 21.10 | 21.66 | 21.60 | 22.16 | 22.64 |
| | 8H | 21.45 | 21.95 | 21.97 | 22.47 | 22.96 | 21.45 | 21.95 | 21.97 | 22.47 | 22.96 |
| | 12H | 21.74 | 22.19 | 22.25 | 22.68 | 23.25 | 21.74 | 22.19 | 22.25 | 22.68 | 23.25 |
| 12H | 4H | 20.29 | 20.90 | 20.77 | 21.38 | 21.85 | 20.29 | 20.90 | 20.77 | 21.38 | 21.85 |
| | 6H | 21.16 | 21.67 | 21.68 | 22.18 | 22.67 | 21.16 | 21.67 | 21.68 | 22.18 | 22.67 |
| | 8H | 21.58 | 22.02 | 22.09 | 22.52 | 23.08 | 21.58 | 22.02 | 22.09 | 22.52 | 23.08 |