

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: P867409

Luminaire Tested: PRLX-2004-L-940-48L-G-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-73)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-940-48L-G-X-X-BRSS-X
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

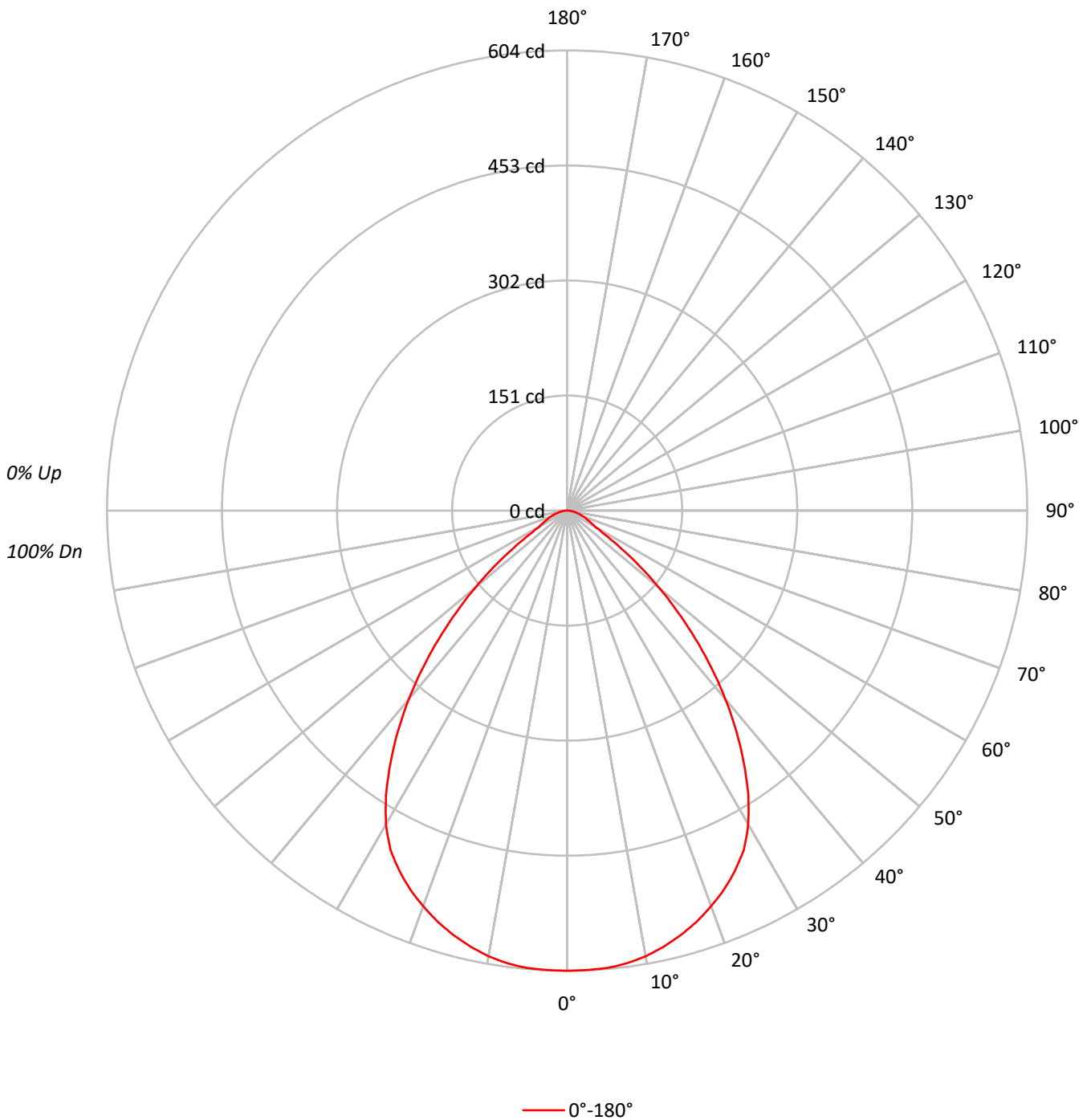
Lumens per Lamp: N/A
Luminaire Lumens: 1025.7 lumens
Efficiency: N/A
Efficacy: 27.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.17
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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: P867409

CATALOG NUMBER: PRLX-2004-L-940-48L-G-X-X-BRSS-X

Luminous Intensity Polar Plot





TEST NUMBER: P867409

CATALOG NUMBER: PRLX-2004-L-940-48L-G-X-X-BRSS-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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 74 | 80 | 76 | 73 | 71 |
| 4 | 91 | 81 | 74 | 69 | 89 | 80 | 73 | 68 | 78 | 72 | 67 | 75 | 70 | 67 | 73 | 69 | 66 | 64 |
| 5 | 85 | 74 | 67 | 61 | 83 | 73 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 60 | 68 | 63 | 59 | 57 |
| 6 | 79 | 68 | 61 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 55 | 64 | 58 | 54 | 62 | 58 | 54 | 52 |
| 7 | 74 | 63 | 55 | 50 | 72 | 62 | 55 | 50 | 60 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 47 |
| 8 | 69 | 58 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 43 |
| 9 | 65 | 54 | 46 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 |
| 10 | 62 | 50 | 43 | 38 | 60 | 49 | 43 | 38 | 48 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 2980 |
| 5° | 2985 |
| 10° | 2976 |
| 15° | 2946 |
| 20° | 2901 |
| 25° | 2839 |
| 30° | 2709 |
| 35° | 2436 |
| 40° | 2082 |
| 45° | 1663 |
| 50° | 1207 |
| 55° | 741 |
| 60° | 418 |
| 65° | 356 |
| 70° | 316 |
| 75° | 286 |
| 80° | 259 |
| 85° | 232 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1663 cd/sqm

TEST NUMBER: P867409

CATALOG NUMBER: PRLX-2004-L-940-48L-G-X-X-BRSS-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 57.2 | 5.6 |
| 10°-20° | 162.5 | 15.8 |
| 20°-30° | 239.2 | 23.3 |
| 30°-40° | 251.1 | 24.5 |
| 40°-50° | 183.3 | 17.9 |
| 50°-60° | 80.8 | 7.9 |
| 60°-70° | 30.8 | 3.0 |
| 70°-80° | 16.0 | 1.6 |
| 80°-90° | 4.7 | 0.5 |
| 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° | 459.0 | 44.8 |
| 0°-40° | 710.2 | 69.2 |
| 0°-60° | 974.3 | 95.0 |
| 0°-90° | 1025.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1025.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 604 | |
| 5° | 603 | 57 |
| 15° | 577 | 163 |
| 25° | 522 | 239 |
| 35° | 404 | 251 |
| 45° | 238 | 183 |
| 55° | 86 | 81 |
| 65° | 30 | 31 |
| 75° | 15 | 16 |
| 85° | 4 | 5 |
| 90° | 0 | |

TEST NUMBER: P867409

CATALOG NUMBER: PRLX-2004-L-940-48L-G-X-X-BRSS-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 604.0 |
| 2.5° | 603.6 |
| 5° | 602.7 |
| 7.5° | 599.5 |
| 10° | 594.0 |
| 12.5° | 586.2 |
| 15° | 576.7 |
| 17.5° | 565.7 |
| 20° | 552.5 |
| 22.5° | 538.4 |
| 25° | 521.5 |
| 27.5° | 502.4 |
| 30° | 475.5 |
| 32.5° | 442.6 |
| 35° | 404.4 |
| 37.5° | 364.7 |
| 40° | 323.2 |
| 42.5° | 280.8 |
| 45° | 238.4 |
| 47.5° | 196.5 |
| 50° | 157.3 |
| 52.5° | 120.3 |
| 55° | 86.2 |
| 57.5° | 58.4 |
| 60° | 42.4 |
| 62.5° | 36.0 |
| 65° | 30.5 |
| 67.5° | 26.0 |
| 70° | 21.9 |
| 72.5° | 18.2 |
| 75° | 15.0 |
| 77.5° | 11.9 |
| 80° | 9.1 |
| 82.5° | 6.8 |
| 85° | 4.1 |
| 87.5° | 1.8 |
| 90° | 0.0 |



TEST NUMBER: P867409
 CATALOG NUMBER: PRLX-2004-L-940-48L-G-X-X-BRSS-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 | 6.63 | 7.93 | 7.00 | 8.25 | 8.56 | 6.63 | 7.93 | 7.00 | 8.25 | 8.56 |
| | 3H | 7.51 | 8.66 | 7.89 | 8.99 | 9.36 | 7.51 | 8.66 | 7.89 | 8.99 | 9.36 |
| | 4H | 7.86 | 8.93 | 8.27 | 9.28 | 9.67 | 7.86 | 8.93 | 8.27 | 9.28 | 9.67 |
| | 6H | 8.13 | 9.11 | 8.54 | 9.48 | 9.87 | 8.13 | 9.11 | 8.54 | 9.48 | 9.87 |
| | 8H | 8.22 | 9.15 | 8.65 | 9.54 | 9.94 | 8.22 | 9.15 | 8.65 | 9.54 | 9.94 |
| | 12H | 8.28 | 9.16 | 8.71 | 9.55 | 9.98 | 8.28 | 9.16 | 8.71 | 9.55 | 9.98 |
| 4H | 2H | 6.86 | 7.93 | 7.26 | 8.28 | 8.66 | 6.86 | 7.93 | 7.26 | 8.28 | 8.66 |
| | 3H | 7.96 | 8.83 | 8.37 | 9.23 | 9.63 | 7.96 | 8.83 | 8.37 | 9.23 | 9.63 |
| | 4H | 8.42 | 9.20 | 8.86 | 9.62 | 10.06 | 8.42 | 9.20 | 8.86 | 9.62 | 10.06 |
| | 6H | 8.81 | 9.48 | 9.27 | 9.92 | 10.39 | 8.81 | 9.48 | 9.27 | 9.92 | 10.39 |
| | 8H | 8.94 | 9.57 | 9.41 | 10.02 | 10.49 | 8.94 | 9.57 | 9.41 | 10.02 | 10.49 |
| | 12H | 9.04 | 9.59 | 9.53 | 10.08 | 10.55 | 9.04 | 9.59 | 9.53 | 10.08 | 10.55 |
| 8H | 4H | 8.56 | 9.18 | 9.03 | 9.63 | 10.10 | 8.56 | 9.18 | 9.03 | 9.63 | 10.10 |
| | 6H | 9.04 | 9.56 | 9.55 | 10.05 | 10.53 | 9.04 | 9.56 | 9.55 | 10.05 | 10.53 |
| | 8H | 9.25 | 9.71 | 9.77 | 10.23 | 10.72 | 9.25 | 9.71 | 9.77 | 10.23 | 10.72 |
| | 12H | 9.41 | 9.82 | 9.93 | 10.32 | 10.89 | 9.41 | 9.82 | 9.93 | 10.32 | 10.89 |
| 12H | 4H | 8.55 | 9.10 | 9.04 | 9.59 | 10.06 | 8.55 | 9.10 | 9.04 | 9.59 | 10.06 |
| | 6H | 9.06 | 9.52 | 9.58 | 10.04 | 10.53 | 9.06 | 9.52 | 9.58 | 10.04 | 10.53 |
| | 8H | 9.31 | 9.72 | 9.83 | 10.22 | 10.79 | 9.31 | 9.72 | 9.83 | 10.22 | 10.79 |