

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: P867347

Luminaire Tested: PRLX-2004-L-935-48L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-72)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-935-48L-G-X-X-WHHR-X
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

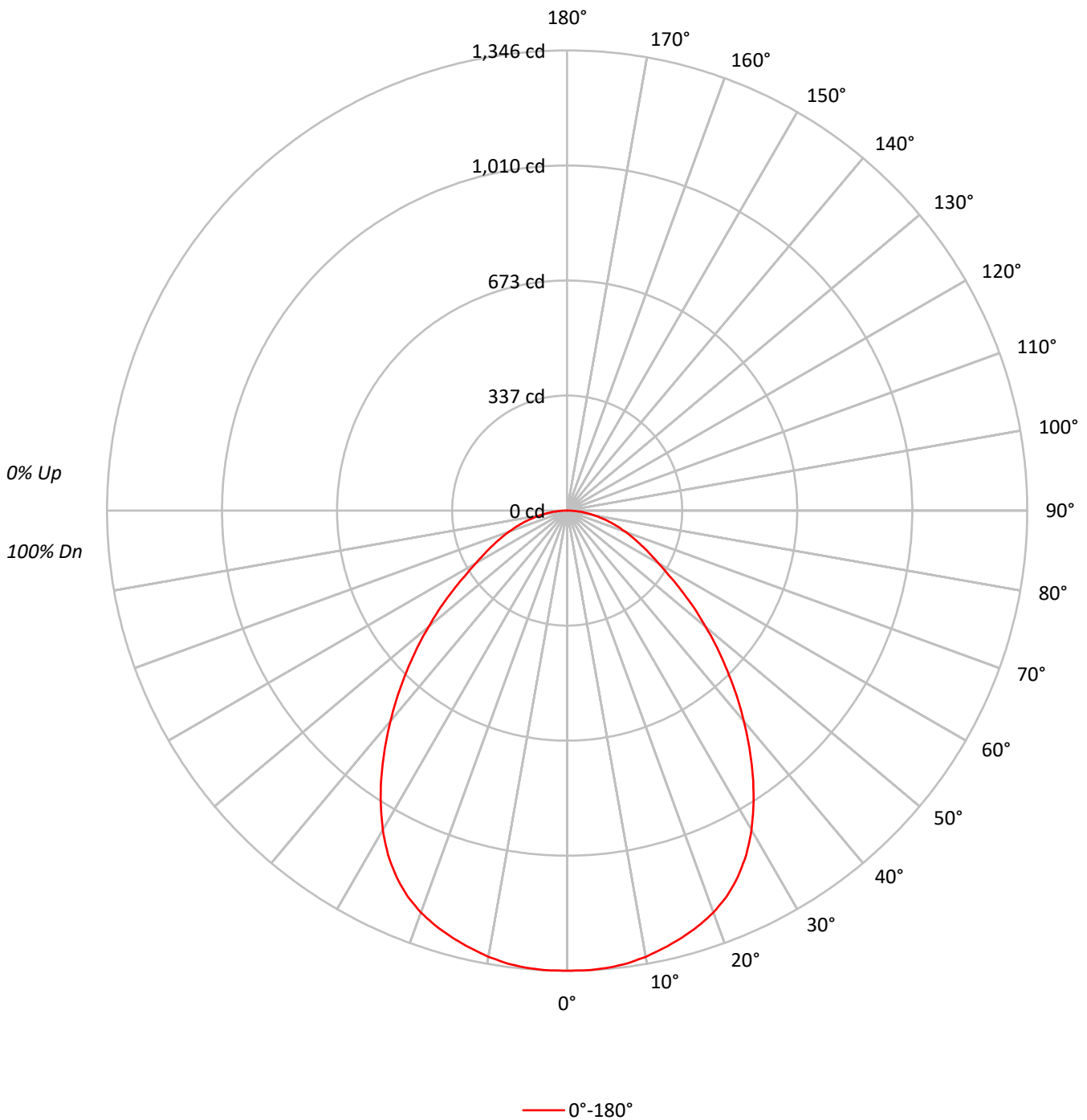
Lumens per Lamp: N/A
Luminaire Lumens: 2921.8 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.22
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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: P867347

CATALOG NUMBER: PRLX-2004-L-935-48L-G-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 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 82 | 99 | 92 | 86 | 81 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 6 | 74 | 62 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 53 | 46 | 42 | 51 | 46 | 41 | 39 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 47 | 42 | 37 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 36 | 32 | 43 | 36 | 32 | 42 | 36 | 31 | 41 | 35 | 31 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 6640 |
| 5° | 6652 |
| 10° | 6640 |
| 15° | 6609 |
| 20° | 6568 |
| 25° | 6435 |
| 30° | 6145 |
| 35° | 5704 |
| 40° | 5178 |
| 45° | 4622 |
| 50° | 4062 |
| 55° | 3508 |
| 60° | 3042 |
| 65° | 2794 |
| 70° | 2608 |
| 75° | 2448 |
| 80° | 2307 |
| 85° | 2174 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4622 cd/sqm

TEST NUMBER: P867347

CATALOG NUMBER: PRLX-2004-L-935-48L-G-X-X-WHHR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 127.6 | 4.4 |
| 10°-20° | 365.1 | 12.5 |
| 20°-30° | 541.8 | 18.5 |
| 30°-40° | 590.1 | 20.2 |
| 40°-50° | 511.7 | 17.5 |
| 50°-60° | 367.7 | 12.6 |
| 60°-70° | 238.5 | 8.2 |
| 70°-80° | 136.5 | 4.7 |
| 80°-90° | 42.8 | 1.5 |
| 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° | 1034.6 | 35.4 |
| 0°-40° | 1624.7 | 55.6 |
| 0°-60° | 2504.0 | 85.7 |
| 0°-90° | 2921.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2921.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1346 | |
| 5° | 1343 | 128 |
| 15° | 1294 | 365 |
| 25° | 1182 | 542 |
| 35° | 947 | 590 |
| 45° | 662 | 512 |
| 55° | 408 | 368 |
| 65° | 239 | 238 |
| 75° | 128 | 136 |
| 85° | 38 | 43 |
| 90° | 0 | |

TEST NUMBER: P867347

CATALOG NUMBER: PRLX-2004-L-935-48L-G-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1345.8 |
| 2.5° | 1345.8 |
| 5° | 1343.2 |
| 7.5° | 1336.2 |
| 10° | 1325.3 |
| 12.5° | 1310.4 |
| 15° | 1293.8 |
| 17.5° | 1274.6 |
| 20° | 1251.0 |
| 22.5° | 1220.9 |
| 25° | 1182.0 |
| 27.5° | 1134.9 |
| 30° | 1078.6 |
| 32.5° | 1015.2 |
| 35° | 947.1 |
| 37.5° | 875.5 |
| 40° | 803.9 |
| 42.5° | 733.2 |
| 45° | 662.4 |
| 47.5° | 595.6 |
| 50° | 529.2 |
| 52.5° | 468.1 |
| 55° | 407.8 |
| 57.5° | 353.3 |
| 60° | 308.3 |
| 62.5° | 271.6 |
| 65° | 239.3 |
| 67.5° | 208.7 |
| 70° | 180.8 |
| 72.5° | 153.7 |
| 75° | 128.4 |
| 77.5° | 104.4 |
| 80° | 81.2 |
| 82.5° | 59.4 |
| 85° | 38.4 |
| 87.5° | 18.8 |
| 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 | 15.33 | 16.83 | 15.70 | 17.14 | 17.46 | 15.33 | 16.83 | 15.70 | 17.14 | 17.46 |
| | 3H | 16.84 | 18.19 | 17.22 | 18.51 | 18.88 | 16.84 | 18.19 | 17.22 | 18.51 | 18.88 |
| | 4H | 17.44 | 18.70 | 17.84 | 19.05 | 19.43 | 17.44 | 18.70 | 17.84 | 19.05 | 19.43 |
| | 6H | 17.92 | 19.08 | 18.33 | 19.45 | 19.84 | 17.92 | 19.08 | 18.33 | 19.45 | 19.84 |
| | 8H | 18.09 | 19.20 | 18.52 | 19.59 | 19.99 | 18.09 | 19.20 | 18.52 | 19.59 | 19.99 |
| | 12H | 18.21 | 19.27 | 18.64 | 19.66 | 20.09 | 18.21 | 19.27 | 18.64 | 19.66 | 20.09 |
| 4H | 2H | 15.83 | 17.09 | 16.23 | 17.44 | 17.82 | 15.83 | 17.09 | 16.23 | 17.44 | 17.82 |
| | 3H | 17.58 | 18.63 | 17.99 | 19.03 | 19.43 | 17.58 | 18.63 | 17.99 | 19.03 | 19.43 |
| | 4H | 18.32 | 19.26 | 18.75 | 19.68 | 20.12 | 18.32 | 19.26 | 18.75 | 19.68 | 20.12 |
| | 6H | 18.94 | 19.76 | 19.39 | 20.20 | 20.66 | 18.94 | 19.76 | 19.39 | 20.20 | 20.66 |
| | 8H | 19.16 | 19.93 | 19.62 | 20.37 | 20.84 | 19.16 | 19.93 | 19.62 | 20.37 | 20.84 |
| | 12H | 19.33 | 20.02 | 19.82 | 20.50 | 20.97 | 19.33 | 20.02 | 19.82 | 20.50 | 20.97 |
| 8H | 4H | 18.60 | 19.36 | 19.06 | 19.81 | 20.28 | 18.60 | 19.36 | 19.06 | 19.81 | 20.28 |
| | 6H | 19.34 | 19.98 | 19.84 | 20.47 | 20.95 | 19.34 | 19.98 | 19.84 | 20.47 | 20.95 |
| | 8H | 19.65 | 20.22 | 20.16 | 20.73 | 21.22 | 19.65 | 20.22 | 20.16 | 20.73 | 21.22 |
| | 12H | 19.91 | 20.42 | 20.42 | 20.91 | 21.47 | 19.91 | 20.42 | 20.42 | 20.91 | 21.47 |
| 12H | 4H | 18.62 | 19.31 | 19.11 | 19.79 | 20.26 | 18.62 | 19.31 | 19.11 | 19.79 | 20.26 |
| | 6H | 19.40 | 19.97 | 19.91 | 20.48 | 20.97 | 19.40 | 19.97 | 19.91 | 20.48 | 20.97 |
| | 8H | 19.77 | 20.27 | 20.28 | 20.77 | 21.33 | 19.77 | 20.27 | 20.28 | 20.77 | 21.33 |