

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: P867361

Luminaire Tested: PRLX-2004-L-935-83L-G-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867361
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: Pentalux
Catalog Number: PRLX-2004-L-935-83L-G-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

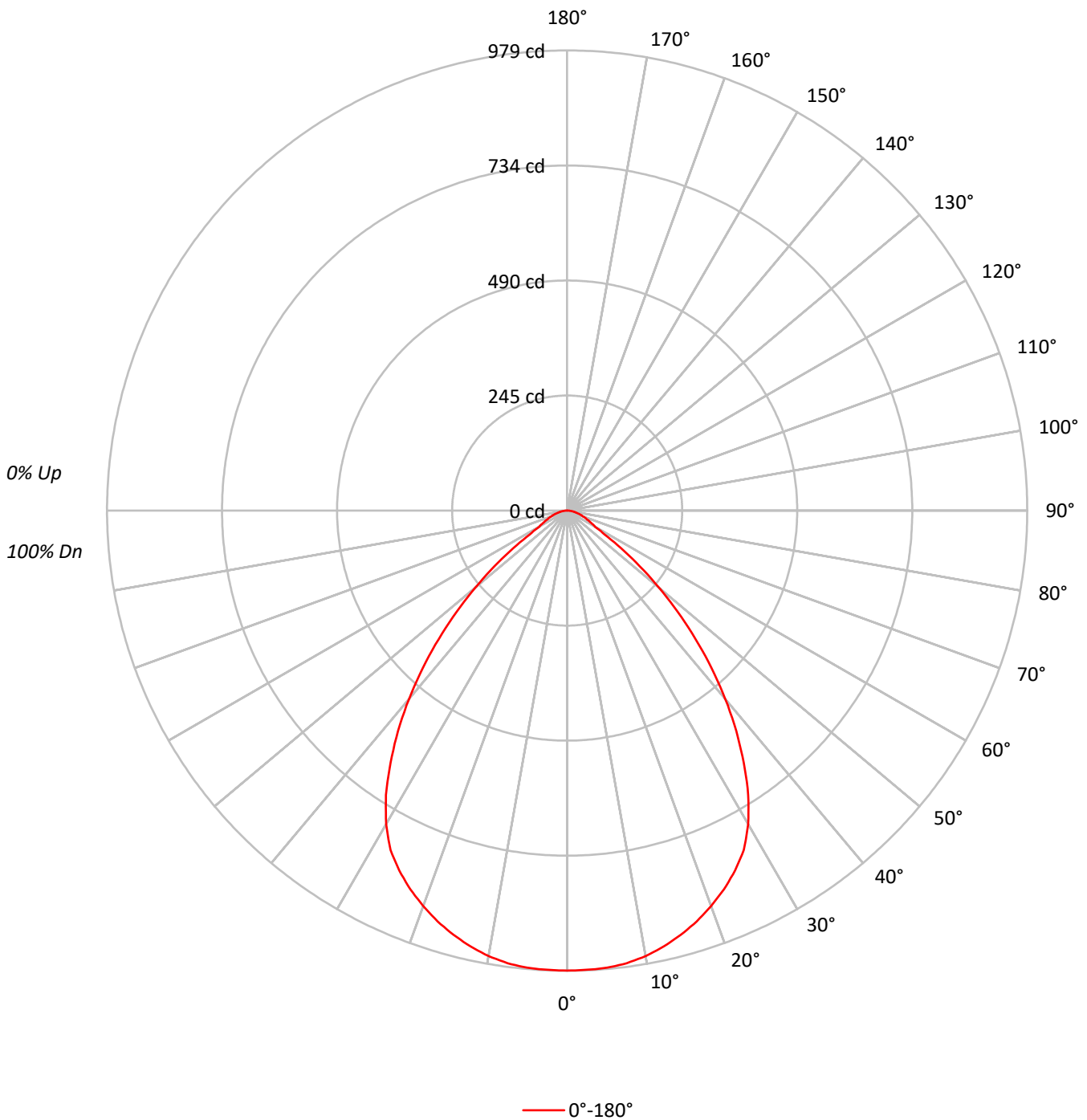
Lumens per Lamp: N/A
Luminaire Lumens: 1662.0 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.17
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
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: P867361

CATALOG NUMBER: PRLX-2004-L-935-83L-G-X-X-BRSS-X

Luminous Intensity Polar Plot





TEST NUMBER: P867361

CATALOG NUMBER: PRLX-2004-L-935-83L-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° | 4829 |
| 5° | 4836 |
| 10° | 4822 |
| 15° | 4772 |
| 20° | 4700 |
| 25° | 4600 |
| 30° | 4389 |
| 35° | 3946 |
| 40° | 3373 |
| 45° | 2695 |
| 50° | 1956 |
| 55° | 1201 |
| 60° | 678 |
| 65° | 578 |
| 70° | 512 |
| 75° | 465 |
| 80° | 421 |
| 85° | 374 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2695 cd/sqm

TEST NUMBER: P867361

CATALOG NUMBER: PRLX-2004-L-935-83L-G-X-X-BRSS-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 92.8 | 5.6 |
| 10°-20° | 263.3 | 15.8 |
| 20°-30° | 387.6 | 23.3 |
| 30°-40° | 406.9 | 24.5 |
| 40°-50° | 297.0 | 17.9 |
| 50°-60° | 130.9 | 7.9 |
| 60°-70° | 49.9 | 3.0 |
| 70°-80° | 25.9 | 1.6 |
| 80°-90° | 7.6 | 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° | 743.7 | 44.7 |
| 0°-40° | 1150.6 | 69.2 |
| 0°-60° | 1578.5 | 95.0 |
| 0°-90° | 1662.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1662.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 979 | |
| 5° | 976 | 93 |
| 15° | 934 | 263 |
| 25° | 845 | 388 |
| 35° | 655 | 407 |
| 45° | 386 | 297 |
| 55° | 140 | 131 |
| 65° | 50 | 50 |
| 75° | 24 | 26 |
| 85° | 7 | 8 |
| 90° | 0 | |

TEST NUMBER: P867361

CATALOG NUMBER: PRLX-2004-L-935-83L-G-X-X-BRSS-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 978.7 |
| 2.5° | 977.9 |
| 5° | 976.4 |
| 7.5° | 971.3 |
| 10° | 962.4 |
| 12.5° | 949.8 |
| 15° | 934.3 |
| 17.5° | 916.6 |
| 20° | 895.2 |
| 22.5° | 872.3 |
| 25° | 845.0 |
| 27.5° | 813.9 |
| 30° | 770.4 |
| 32.5° | 717.2 |
| 35° | 655.1 |
| 37.5° | 590.9 |
| 40° | 523.7 |
| 42.5° | 455.0 |
| 45° | 386.3 |
| 47.5° | 318.3 |
| 50° | 254.8 |
| 52.5° | 195.0 |
| 55° | 139.6 |
| 57.5° | 94.5 |
| 60° | 68.7 |
| 62.5° | 58.3 |
| 65° | 49.5 |
| 67.5° | 42.1 |
| 70° | 35.5 |
| 72.5° | 29.5 |
| 75° | 24.4 |
| 77.5° | 19.2 |
| 80° | 14.8 |
| 82.5° | 11.1 |
| 85° | 6.6 |
| 87.5° | 3.0 |
| 90° | 0.0 |

TEST NUMBER: P867361
 CATALOG NUMBER: PRLX-2004-L-935-83L-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 | 8.30 | 9.60 | 8.66 | 9.91 | 10.23 | 8.30 | 9.60 | 8.66 | 9.91 | 10.23 |
| | 3H | 9.18 | 10.33 | 9.56 | 10.66 | 11.03 | 9.18 | 10.33 | 9.56 | 10.66 | 11.03 |
| | 4H | 9.54 | 10.61 | 9.94 | 10.96 | 11.34 | 9.54 | 10.61 | 9.94 | 10.96 | 11.34 |
| | 6H | 9.80 | 10.78 | 10.21 | 11.15 | 11.55 | 9.80 | 10.78 | 10.21 | 11.15 | 11.55 |
| | 8H | 9.89 | 10.82 | 10.32 | 11.21 | 11.62 | 9.89 | 10.82 | 10.32 | 11.21 | 11.62 |
| | 12H | 9.95 | 10.84 | 10.38 | 11.22 | 11.65 | 9.95 | 10.84 | 10.38 | 11.22 | 11.65 |
| 4H | 2H | 8.53 | 9.60 | 8.93 | 9.95 | 10.33 | 8.53 | 9.60 | 8.93 | 9.95 | 10.33 |
| | 3H | 9.63 | 10.50 | 10.04 | 10.90 | 11.31 | 9.63 | 10.50 | 10.04 | 10.90 | 11.31 |
| | 4H | 10.10 | 10.88 | 10.54 | 11.30 | 11.74 | 10.10 | 10.88 | 10.54 | 11.30 | 11.74 |
| | 6H | 10.48 | 11.15 | 10.95 | 11.60 | 12.07 | 10.48 | 11.15 | 10.95 | 11.60 | 12.07 |
| | 8H | 10.62 | 11.25 | 11.09 | 11.69 | 12.17 | 10.62 | 11.25 | 11.09 | 11.69 | 12.17 |
| | 12H | 10.72 | 11.27 | 11.20 | 11.75 | 12.23 | 10.72 | 11.27 | 11.20 | 11.75 | 12.23 |
| 8H | 4H | 10.23 | 10.86 | 10.70 | 11.31 | 11.78 | 10.23 | 10.86 | 10.70 | 11.31 | 11.78 |
| | 6H | 10.72 | 11.23 | 11.22 | 11.73 | 12.21 | 10.72 | 11.23 | 11.22 | 11.73 | 12.21 |
| | 8H | 10.93 | 11.39 | 11.45 | 11.91 | 12.40 | 10.93 | 11.39 | 11.45 | 11.91 | 12.40 |
| | 12H | 11.09 | 11.50 | 11.61 | 12.00 | 12.57 | 11.09 | 11.50 | 11.61 | 12.00 | 12.57 |
| 12H | 4H | 10.23 | 10.78 | 10.71 | 11.26 | 11.74 | 10.23 | 10.78 | 10.71 | 11.26 | 11.74 |
| | 6H | 10.74 | 11.20 | 11.26 | 11.71 | 12.21 | 10.74 | 11.20 | 11.26 | 11.71 | 12.21 |
| | 8H | 10.99 | 11.40 | 11.51 | 11.90 | 12.47 | 10.99 | 11.40 | 11.51 | 11.90 | 12.47 |