

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: P865789

Luminaire Tested: PRLX-2004-S-930-15L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-S-930-15L-G-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

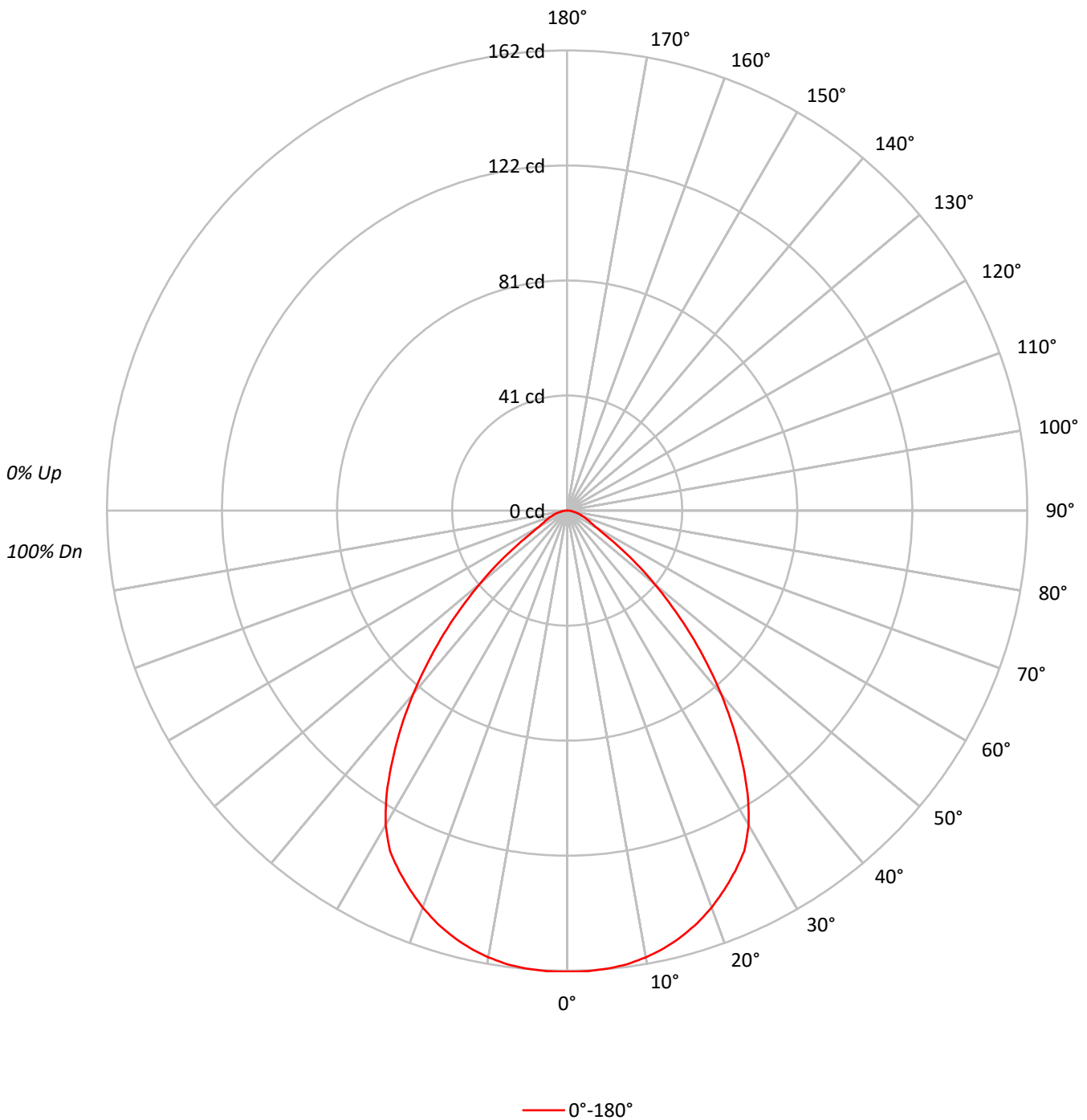
Lumens per Lamp: N/A
Luminaire Lumens: 271.9 lumens
Efficiency: N/A
Efficacy: 17.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.16
Luminous Opening: Circular (Dia: 0.92' x H: 0')
CIE Type: Direct

Input Watts (W): 15.6
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: P865789

CATALOG NUMBER: PRLX-2004-S-930-15L-G-U-S-X-X-BRSS-X

Luminous Intensity Polar Plot





TEST NUMBER: P865789

CATALOG NUMBER: PRLX-2004-S-930-15L-G-U-S-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 | 98 | | 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 | 75 | | 80 | 76 | 73 | 72 |
| 4 | 91 | 81 | 74 | 69 | 89 | 80 | 73 | 68 | 78 | 72 | 68 | | 76 | 71 | 67 | | 74 | 69 | 66 | 64 |
| 5 | 85 | 74 | 67 | 62 | 83 | 73 | 66 | 61 | 71 | 65 | 61 | | 69 | 64 | 60 | | 68 | 63 | 60 | 58 |
| 6 | 79 | 68 | 61 | 55 | 78 | 67 | 60 | 55 | 66 | 59 | 55 | | 64 | 59 | 54 | | 63 | 58 | 54 | 52 |
| 7 | 74 | 63 | 55 | 50 | 73 | 62 | 55 | 50 | 61 | 54 | 50 | | 59 | 54 | 49 | | 58 | 53 | 49 | 47 |
| 8 | 70 | 58 | 51 | 46 | 68 | 57 | 50 | 46 | 56 | 50 | 45 | | 55 | 49 | 45 | | 54 | 49 | 45 | 43 |
| 9 | 66 | 54 | 47 | 42 | 64 | 53 | 47 | 42 | 52 | 46 | 42 | | 51 | 46 | 41 | | 50 | 45 | 41 | 40 |
| 10 | 62 | 50 | 43 | 39 | 61 | 50 | 43 | 39 | 49 | 43 | 38 | | 48 | 42 | 38 | | 47 | 42 | 38 | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 2647 |
| 5° | 2651 |
| 10° | 2645 |
| 15° | 2622 |
| 20° | 2581 |
| 25° | 2519 |
| 30° | 2407 |
| 35° | 2134 |
| 40° | 1795 |
| 45° | 1416 |
| 50° | 1017 |
| 55° | 631 |
| 60° | 372 |
| 65° | 316 |
| 70° | 277 |
| 75° | 252 |
| 80° | 216 |
| 85° | 225 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1416 cd/sqm

TEST NUMBER: P865789

CATALOG NUMBER: PRLX-2004-S-930-15L-G-U-S-X-X-BRSS-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 15.4 | 5.7 |
| 10°-20° | 43.8 | 16.1 |
| 20°-30° | 64.3 | 23.6 |
| 30°-40° | 66.6 | 24.5 |
| 40°-50° | 47.3 | 17.4 |
| 50°-60° | 20.9 | 7.7 |
| 60°-70° | 8.3 | 3.0 |
| 70°-80° | 4.3 | 1.6 |
| 80°-90° | 1.3 | 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° | 123.4 | 45.4 |
| 0°-40° | 190.0 | 69.9 |
| 0°-60° | 258.2 | 94.9 |
| 0°-90° | 271.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 271.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 162 | |
| 5° | 162 | 15 |
| 15° | 155 | 44 |
| 25° | 140 | 64 |
| 35° | 107 | 67 |
| 45° | 61 | 47 |
| 55° | 22 | 21 |
| 65° | 8 | 8 |
| 75° | 4 | 4 |
| 85° | 1 | 1 |
| 90° | 0 | |

TEST NUMBER: P865789

CATALOG NUMBER: PRLX-2004-S-930-15L-G-U-S-X-X-BRSS-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 162.3 |
| 2.5° | 162.3 |
| 5° | 161.9 |
| 7.5° | 161.1 |
| 10° | 159.7 |
| 12.5° | 157.8 |
| 15° | 155.3 |
| 17.5° | 152.3 |
| 20° | 148.7 |
| 22.5° | 144.5 |
| 25° | 140.0 |
| 27.5° | 135.1 |
| 30° | 127.8 |
| 32.5° | 118.3 |
| 35° | 107.2 |
| 37.5° | 95.9 |
| 40° | 84.3 |
| 42.5° | 72.6 |
| 45° | 61.4 |
| 47.5° | 50.3 |
| 50° | 40.1 |
| 52.5° | 30.9 |
| 55° | 22.2 |
| 57.5° | 15.4 |
| 60° | 11.4 |
| 62.5° | 9.6 |
| 65° | 8.2 |
| 67.5° | 7.0 |
| 70° | 5.8 |
| 72.5° | 4.9 |
| 75° | 4.0 |
| 77.5° | 3.2 |
| 80° | 2.3 |
| 82.5° | 1.8 |
| 85° | 1.2 |
| 87.5° | 0.5 |
| 90° | 0.0 |

TEST NUMBER: P865789

CATALOG NUMBER: PRLX-2004-S-930-15L-G-U-S-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 | 6.15 | 7.45 | 6.52 | 7.76 | 8.08 | 6.15 | 7.45 | 6.52 | 7.76 | 8.08 |
| | 3H | 7.06 | 8.20 | 7.44 | 8.53 | 8.90 | 7.06 | 8.20 | 7.44 | 8.53 | 8.90 |
| | 4H | 7.41 | 8.48 | 7.82 | 8.83 | 9.21 | 7.41 | 8.48 | 7.82 | 8.83 | 9.21 |
| | 6H | 7.67 | 8.65 | 8.09 | 9.02 | 9.41 | 7.67 | 8.65 | 8.09 | 9.02 | 9.41 |
| | 8H | 7.76 | 8.68 | 8.19 | 9.08 | 9.48 | 7.76 | 8.68 | 8.19 | 9.08 | 9.48 |
| | 12H | 7.83 | 8.71 | 8.26 | 9.09 | 9.52 | 7.83 | 8.71 | 8.26 | 9.09 | 9.52 |
| 4H | 2H | 6.39 | 7.45 | 6.79 | 7.80 | 8.19 | 6.39 | 7.45 | 6.79 | 7.80 | 8.19 |
| | 3H | 7.51 | 8.38 | 7.92 | 8.78 | 9.18 | 7.51 | 8.38 | 7.92 | 8.78 | 9.18 |
| | 4H | 7.98 | 8.76 | 8.42 | 9.18 | 9.62 | 7.98 | 8.76 | 8.42 | 9.18 | 9.62 |
| | 6H | 8.36 | 9.02 | 8.82 | 9.47 | 9.94 | 8.36 | 9.02 | 8.82 | 9.47 | 9.94 |
| | 8H | 8.49 | 9.11 | 8.96 | 9.56 | 10.03 | 8.49 | 9.11 | 8.96 | 9.56 | 10.03 |
| | 12H | 8.60 | 9.15 | 9.08 | 9.63 | 10.11 | 8.60 | 9.15 | 9.08 | 9.63 | 10.11 |
| 8H | 4H | 8.12 | 8.74 | 8.59 | 9.19 | 9.66 | 8.12 | 8.74 | 8.59 | 9.19 | 9.66 |
| | 6H | 8.59 | 9.10 | 9.09 | 9.59 | 10.07 | 8.59 | 9.10 | 9.09 | 9.59 | 10.07 |
| | 8H | 8.79 | 9.24 | 9.31 | 9.76 | 10.25 | 8.79 | 9.24 | 9.31 | 9.76 | 10.25 |
| | 12H | 8.98 | 9.38 | 9.49 | 9.88 | 10.45 | 8.98 | 9.38 | 9.49 | 9.88 | 10.45 |
| 12H | 4H | 8.11 | 8.66 | 8.60 | 9.14 | 9.62 | 8.11 | 8.66 | 8.60 | 9.14 | 9.62 |
| | 6H | 8.60 | 9.06 | 9.12 | 9.57 | 10.07 | 8.60 | 9.06 | 9.12 | 9.57 | 10.07 |
| | 8H | 8.85 | 9.26 | 9.37 | 9.75 | 10.32 | 8.85 | 9.26 | 9.37 | 9.75 | 10.32 |