

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: P866521

Luminaire Tested: PRLX-2004-M-930-65L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-55)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-M-930-65L-L-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 7
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

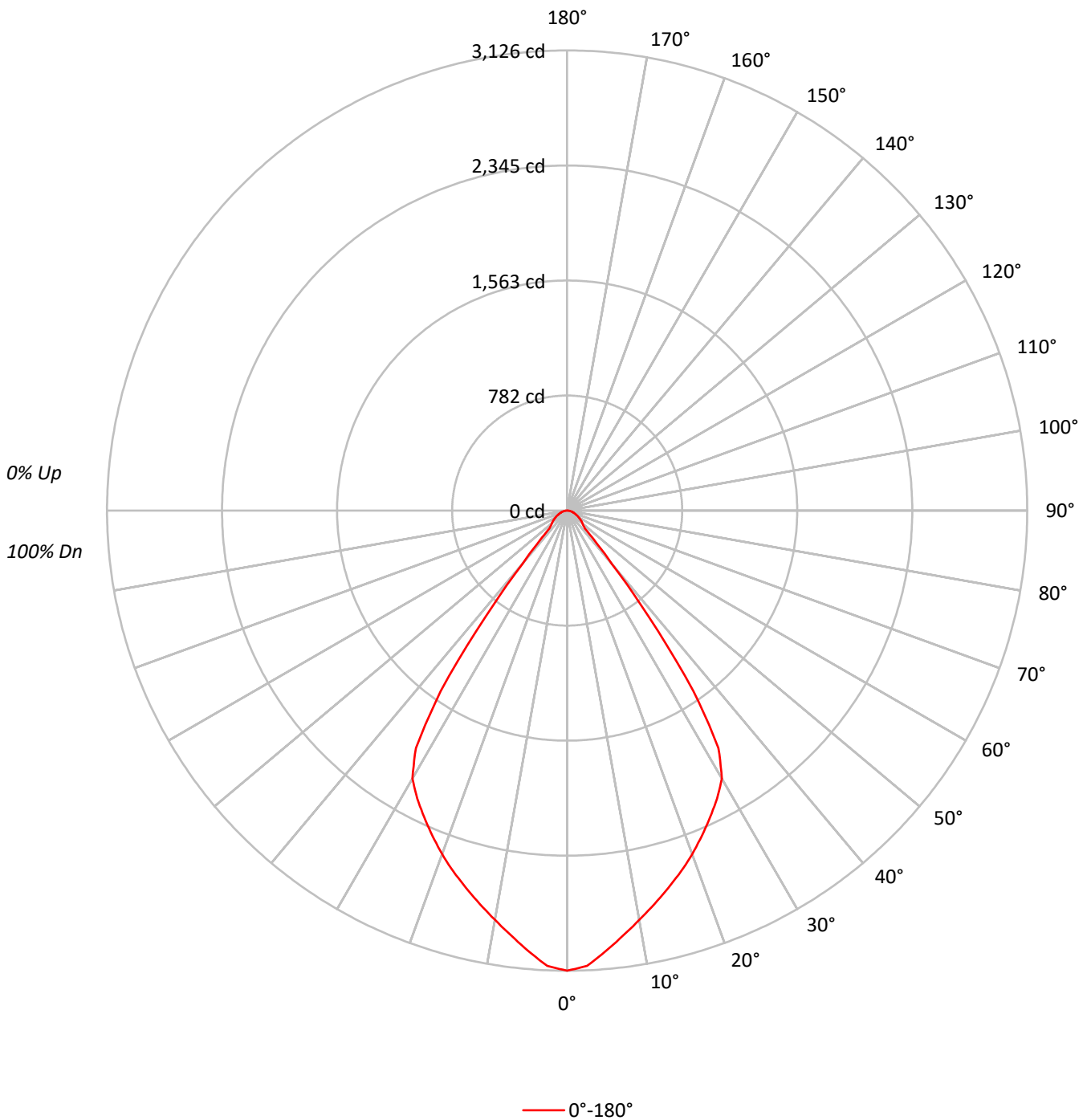
Lumens per Lamp: N/A
Luminaire Lumens: 3336.5 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 58.6
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

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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 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 99 | 100 | 98 | 97 | 96 | 95 | 94 | 92 |
| 2 | 106 | 101 | 96 | 93 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | 84 |
| 3 | 100 | 93 | 88 | 83 | 98 | 92 | 87 | 83 | 89 | 85 | 81 | 87 | 83 | 80 | 84 | 81 | 79 | 77 |
| 4 | 95 | 87 | 80 | 76 | 93 | 85 | 80 | 75 | 83 | 78 | 74 | 81 | 77 | 74 | 79 | 76 | 73 | 71 |
| 5 | 90 | 80 | 74 | 69 | 88 | 79 | 73 | 69 | 78 | 72 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 66 |
| 6 | 85 | 75 | 68 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 66 | 63 | 70 | 66 | 62 | 61 |
| 7 | 80 | 70 | 64 | 59 | 79 | 69 | 63 | 59 | 68 | 62 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 56 |
| 8 | 76 | 66 | 59 | 55 | 75 | 65 | 59 | 55 | 64 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 |
| 9 | 72 | 62 | 55 | 51 | 71 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 58 | 54 | 50 | 49 |
| 10 | 68 | 58 | 52 | 48 | 67 | 58 | 52 | 48 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 46 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 24867 |
| 5° | 23995 |
| 10° | 22806 |
| 15° | 21857 |
| 20° | 21033 |
| 25° | 20168 |
| 30° | 19312 |
| 35° | 14540 |
| 40° | 4902 |
| 45° | 1906 |
| 50° | 1691 |
| 55° | 1559 |
| 60° | 1430 |
| 65° | 1303 |
| 70° | 1207 |
| 75° | 1168 |
| 80° | 1109 |
| 85° | 1105 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1906 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 281.1 | 8.4 |
| 10°-20° | 747.5 | 22.4 |
| 20°-30° | 1058.0 | 31.7 |
| 30°-40° | 858.6 | 25.7 |
| 40°-50° | 168.5 | 5.1 |
| 50°-60° | 100.6 | 3.0 |
| 60°-70° | 69.3 | 2.1 |
| 70°-80° | 40.1 | 1.2 |
| 80°-90° | 12.7 | 0.4 |
| 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° | 2086.7 | 62.5 |
| 0°-40° | 2945.3 | 88.3 |
| 0°-60° | 3214.4 | 96.3 |
| 0°-90° | 3336.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3336.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3126 | |
| 5° | 3005 | 281 |
| 15° | 2654 | 747 |
| 25° | 2298 | 1058 |
| 35° | 1497 | 859 |
| 45° | 169 | 169 |
| 55° | 112 | 101 |
| 65° | 69 | 69 |
| 75° | 38 | 40 |
| 85° | 12 | 13 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3125.6 |
| 2.5° | 3096.2 |
| 5° | 3004.6 |
| 7.5° | 2911.3 |
| 10° | 2823.1 |
| 12.5° | 2738.4 |
| 15° | 2653.7 |
| 17.5° | 2570.7 |
| 20° | 2484.3 |
| 22.5° | 2390.9 |
| 25° | 2297.5 |
| 27.5° | 2205.9 |
| 30° | 2102.2 |
| 32.5° | 1912.0 |
| 35° | 1497.1 |
| 37.5° | 909.3 |
| 40° | 472.0 |
| 42.5° | 266.2 |
| 45° | 169.4 |
| 47.5° | 146.9 |
| 50° | 136.6 |
| 52.5° | 124.5 |
| 55° | 112.4 |
| 57.5° | 100.3 |
| 60° | 89.9 |
| 62.5° | 79.5 |
| 65° | 69.2 |
| 67.5° | 60.5 |
| 70° | 51.9 |
| 72.5° | 44.9 |
| 75° | 38.0 |
| 77.5° | 31.1 |
| 80° | 24.2 |
| 82.5° | 17.3 |
| 85° | 12.1 |
| 87.5° | 5.2 |
| 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 | 8.35 | 9.41 | 8.72 | 9.72 | 10.03 | 8.35 | 9.41 | 8.72 | 9.72 | 10.03 |
| | 3H | 9.85 | 10.78 | 10.23 | 11.11 | 11.48 | 9.85 | 10.78 | 10.23 | 11.11 | 11.48 |
| | 4H | 10.46 | 11.32 | 10.86 | 11.67 | 12.06 | 10.46 | 11.32 | 10.86 | 11.67 | 12.06 |
| | 6H | 10.94 | 11.73 | 11.35 | 12.10 | 12.50 | 10.94 | 11.73 | 11.35 | 12.10 | 12.50 |
| | 8H | 11.09 | 11.84 | 11.53 | 12.23 | 12.64 | 11.09 | 11.84 | 11.53 | 12.23 | 12.64 |
| | 12H | 11.21 | 11.92 | 11.65 | 12.31 | 12.74 | 11.21 | 11.92 | 11.65 | 12.31 | 12.74 |
| 4H | 2H | 8.79 | 9.66 | 9.20 | 10.01 | 10.40 | 8.79 | 9.66 | 9.20 | 10.01 | 10.40 |
| | 3H | 10.51 | 11.22 | 10.92 | 11.62 | 12.03 | 10.51 | 11.22 | 10.92 | 11.62 | 12.03 |
| | 4H | 11.25 | 11.88 | 11.69 | 12.31 | 12.75 | 11.25 | 11.88 | 11.69 | 12.31 | 12.75 |
| | 6H | 11.87 | 12.41 | 12.34 | 12.86 | 13.33 | 11.87 | 12.41 | 12.34 | 12.86 | 13.33 |
| | 8H | 12.07 | 12.58 | 12.55 | 13.03 | 13.50 | 12.07 | 12.58 | 12.55 | 13.03 | 13.50 |
| | 12H | 12.24 | 12.68 | 12.73 | 13.17 | 13.64 | 12.24 | 12.68 | 12.73 | 13.17 | 13.64 |
| 8H | 4H | 11.48 | 11.99 | 11.96 | 12.44 | 12.91 | 11.48 | 11.99 | 11.96 | 12.44 | 12.91 |
| | 6H | 12.24 | 12.64 | 12.75 | 13.14 | 13.63 | 12.24 | 12.64 | 12.75 | 13.14 | 13.63 |
| | 8H | 12.53 | 12.89 | 13.06 | 13.41 | 13.91 | 12.53 | 12.89 | 13.06 | 13.41 | 13.91 |
| | 12H | 12.80 | 13.11 | 13.32 | 13.61 | 14.19 | 12.80 | 13.11 | 13.32 | 13.61 | 14.19 |
| 12H | 4H | 11.49 | 11.92 | 11.98 | 12.41 | 12.89 | 11.49 | 11.92 | 11.98 | 12.41 | 12.89 |
| | 6H | 12.28 | 12.64 | 12.81 | 13.16 | 13.66 | 12.28 | 12.64 | 12.81 | 13.16 | 13.66 |
| | 8H | 12.64 | 12.95 | 13.16 | 13.44 | 14.02 | 12.64 | 12.95 | 13.16 | 13.44 | 14.02 |