

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: P867293

Luminaire Tested: PRLX-2004-L-930-83L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867293
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-85)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-930-83L-L-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

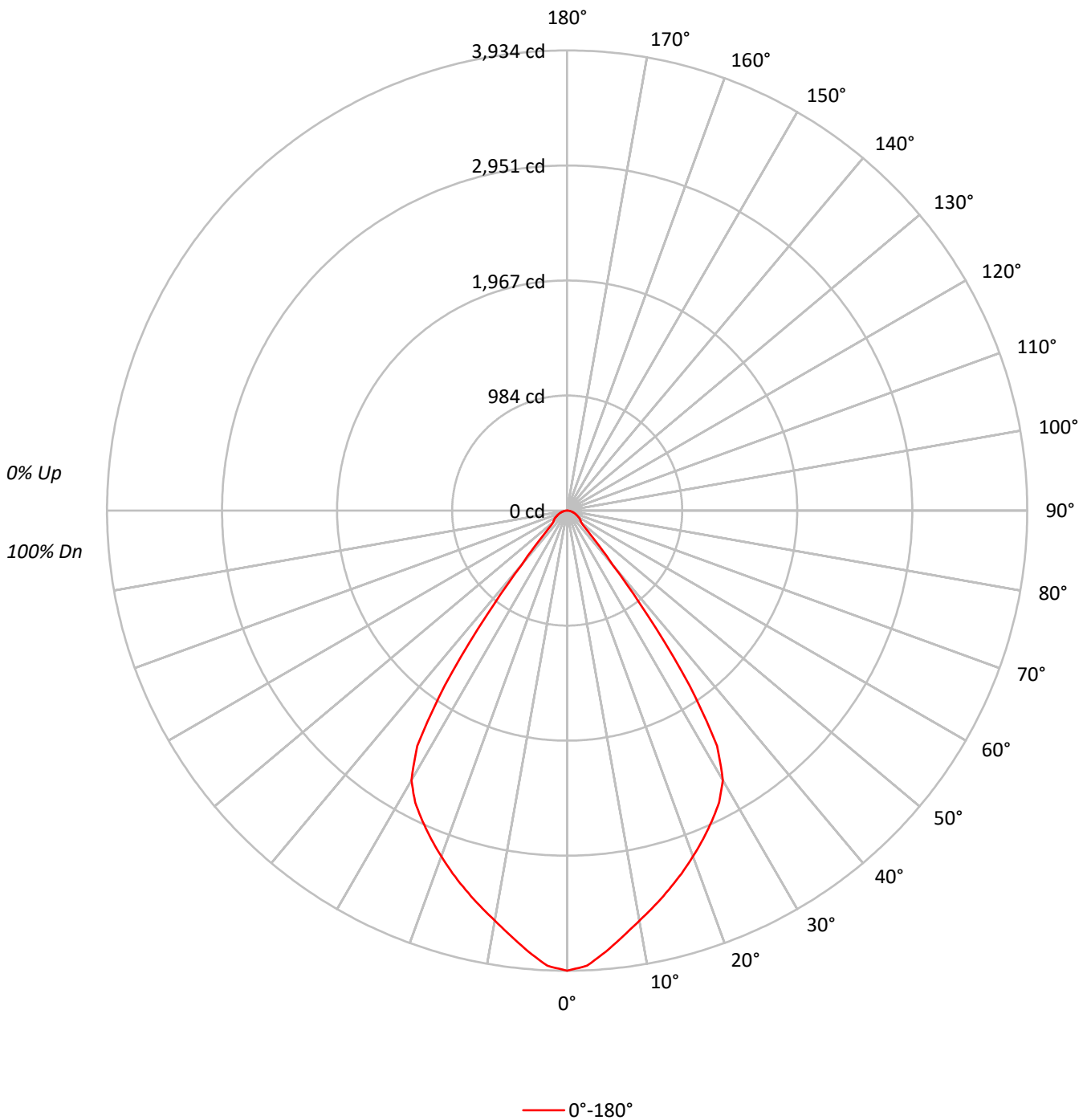
Lumens per Lamp: N/A
Luminaire Lumens: 4212.8 lumens
Efficiency: N/A
Efficacy: 65.3 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.99
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (Ain): 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 | 63 | 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° | 19409 |
| 5° | 18750 |
| 10° | 17835 |
| 15° | 17143 |
| 20° | 16518 |
| 25° | 15936 |
| 30° | 15166 |
| 35° | 11001 |
| 40° | 3909 |
| 45° | 1721 |
| 50° | 1190 |
| 55° | 1174 |
| 60° | 1107 |
| 65° | 1044 |
| 70° | 979 |
| 75° | 926 |
| 80° | 872 |
| 85° | 810 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1721 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 354.2 | 8.4 |
| 10°-20° | 945.1 | 22.4 |
| 20°-30° | 1345.5 | 31.9 |
| 30°-40° | 1066.9 | 25.3 |
| 40°-50° | 223.6 | 5.3 |
| 50°-60° | 121.2 | 2.9 |
| 60°-70° | 88.8 | 2.1 |
| 70°-80° | 51.5 | 1.2 |
| 80°-90° | 16.0 | 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° | 2644.9 | 62.8 |
| 0°-40° | 3711.8 | 88.1 |
| 0°-60° | 4056.5 | 96.3 |
| 0°-90° | 4212.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4212.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3934 | |
| 5° | 3786 | 354 |
| 15° | 3356 | 945 |
| 25° | 2927 | 1346 |
| 35° | 1826 | 1067 |
| 45° | 247 | 224 |
| 55° | 136 | 121 |
| 65° | 89 | 89 |
| 75° | 49 | 51 |
| 85° | 14 | 16 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3933.8 |
| 2.5° | 3894.5 |
| 5° | 3785.8 |
| 7.5° | 3669.3 |
| 10° | 3559.9 |
| 12.5° | 3458.4 |
| 15° | 3356.2 |
| 17.5° | 3253.3 |
| 20° | 3146.0 |
| 22.5° | 3038.8 |
| 25° | 2927.3 |
| 27.5° | 2812.9 |
| 30° | 2662.1 |
| 32.5° | 2384.7 |
| 35° | 1826.4 |
| 37.5° | 1122.3 |
| 40° | 606.9 |
| 42.5° | 371.0 |
| 45° | 246.6 |
| 47.5° | 179.4 |
| 50° | 155.1 |
| 52.5° | 147.3 |
| 55° | 136.5 |
| 57.5° | 124.4 |
| 60° | 112.2 |
| 62.5° | 100.8 |
| 65° | 89.4 |
| 67.5° | 78.6 |
| 70° | 67.9 |
| 72.5° | 57.9 |
| 75° | 48.6 |
| 77.5° | 39.3 |
| 80° | 30.7 |
| 82.5° | 22.2 |
| 85° | 14.3 |
| 87.5° | 7.1 |
| 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 | 7.38 | 8.44 | 7.74 | 8.75 | 9.06 | 7.38 | 8.44 | 7.74 | 8.75 | 9.06 |
| | 3H | 9.01 | 9.94 | 9.39 | 10.28 | 10.64 | 9.01 | 9.94 | 9.39 | 10.28 | 10.64 |
| | 4H | 9.64 | 10.50 | 10.04 | 10.86 | 11.24 | 9.64 | 10.50 | 10.04 | 10.86 | 11.24 |
| | 6H | 10.11 | 10.91 | 10.53 | 11.28 | 11.68 | 10.11 | 10.91 | 10.53 | 11.28 | 11.68 |
| | 8H | 10.27 | 11.02 | 10.71 | 11.41 | 11.82 | 10.27 | 11.02 | 10.71 | 11.41 | 11.82 |
| | 12H | 10.38 | 11.10 | 10.82 | 11.48 | 11.91 | 10.38 | 11.10 | 10.82 | 11.48 | 11.91 |
| 4H | 2H | 7.87 | 8.74 | 8.28 | 9.09 | 9.48 | 7.87 | 8.74 | 8.28 | 9.09 | 9.48 |
| | 3H | 9.71 | 10.42 | 10.12 | 10.83 | 11.23 | 9.71 | 10.42 | 10.12 | 10.83 | 11.23 |
| | 4H | 10.46 | 11.10 | 10.90 | 11.52 | 11.97 | 10.46 | 11.10 | 10.90 | 11.52 | 11.97 |
| | 6H | 11.07 | 11.62 | 11.54 | 12.06 | 12.54 | 11.07 | 11.62 | 11.54 | 12.06 | 12.54 |
| | 8H | 11.28 | 11.79 | 11.75 | 12.24 | 12.71 | 11.28 | 11.79 | 11.75 | 12.24 | 12.71 |
| | 12H | 11.43 | 11.87 | 11.92 | 12.36 | 12.84 | 11.43 | 11.87 | 11.92 | 12.36 | 12.84 |
| 8H | 4H | 10.69 | 11.20 | 11.17 | 11.65 | 12.13 | 10.69 | 11.20 | 11.17 | 11.65 | 12.13 |
| | 6H | 11.44 | 11.85 | 11.95 | 12.35 | 12.84 | 11.44 | 11.85 | 11.95 | 12.35 | 12.84 |
| | 8H | 11.74 | 12.10 | 12.27 | 12.62 | 13.12 | 11.74 | 12.10 | 12.27 | 12.62 | 13.12 |
| | 12H | 11.99 | 12.30 | 12.51 | 12.80 | 13.37 | 11.99 | 12.30 | 12.51 | 12.80 | 13.37 |
| 12H | 4H | 10.70 | 11.14 | 11.19 | 11.63 | 12.10 | 10.70 | 11.14 | 11.19 | 11.63 | 12.10 |
| | 6H | 11.49 | 11.85 | 12.02 | 12.37 | 12.86 | 11.49 | 11.85 | 12.02 | 12.37 | 12.86 |
| | 8H | 11.84 | 12.15 | 12.36 | 12.65 | 13.23 | 11.84 | 12.15 | 12.36 | 12.65 | 13.23 |