

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: P867327

Luminaire Tested: PRLX-2004-L-935-15L-L-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-84)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-L-935-15L-L-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

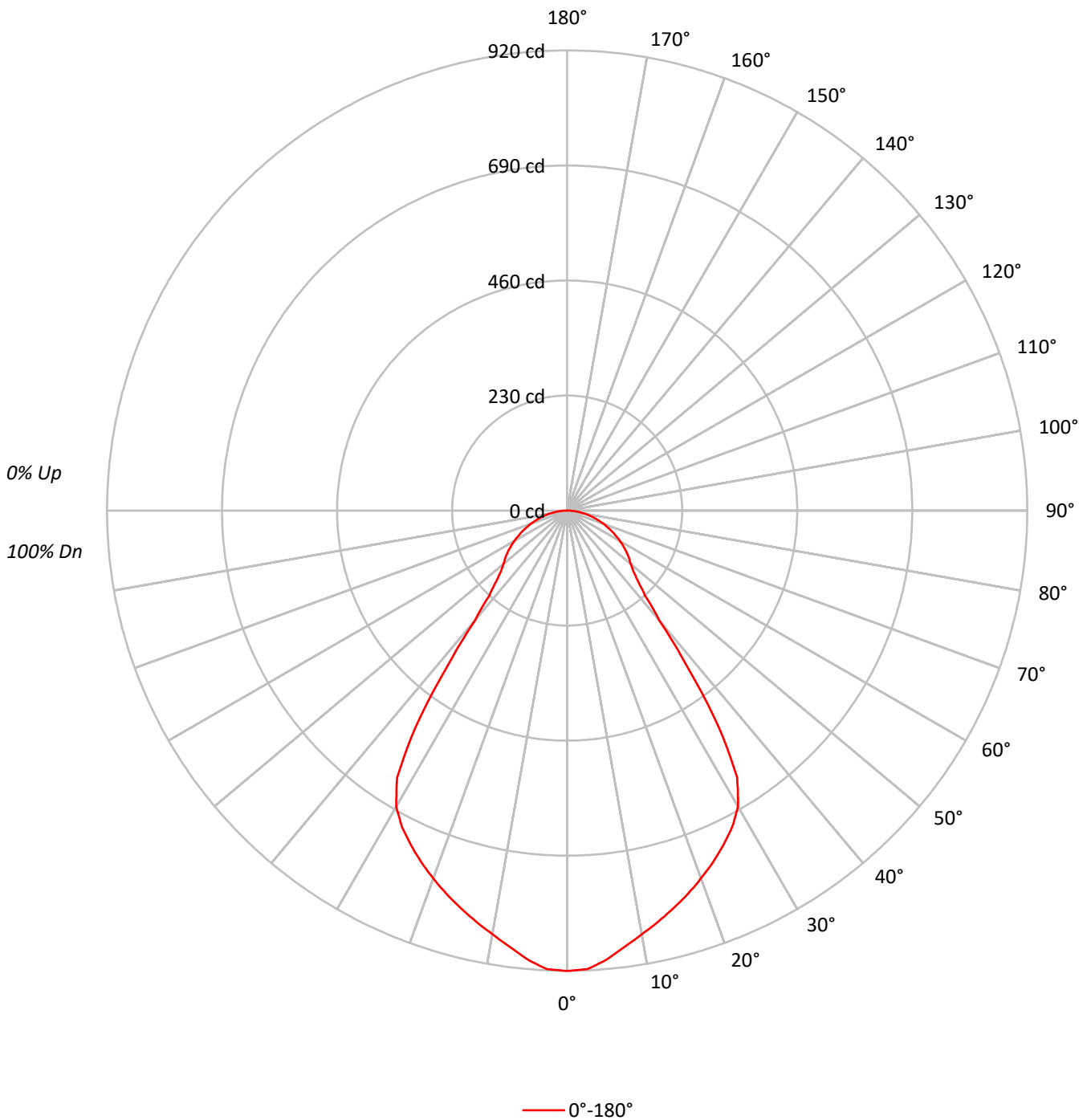
Lumens per Lamp: N/A
Luminaire Lumens: 1439.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.05
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 16.4
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 | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 98 | 100 | 98 | 95 | | 97 | 94 | 92 | | 93 | 91 | 90 | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 91 | 86 | 82 | | 87 | 84 | 81 | | 85 | 82 | 79 | 77 |
| 3 | 95 | 87 | 80 | 74 | 93 | 85 | 79 | 74 | 82 | 77 | 72 | | 80 | 75 | 71 | | 77 | 73 | 70 | 68 |
| 4 | 89 | 79 | 71 | 66 | 87 | 77 | 70 | 65 | 75 | 69 | 64 | | 73 | 68 | 63 | | 71 | 66 | 63 | 61 |
| 5 | 83 | 72 | 64 | 59 | 81 | 71 | 64 | 58 | 69 | 63 | 58 | | 67 | 61 | 57 | | 65 | 60 | 57 | 55 |
| 6 | 78 | 66 | 58 | 53 | 76 | 65 | 58 | 53 | 63 | 57 | 52 | | 62 | 56 | 52 | | 60 | 55 | 51 | 50 |
| 7 | 73 | 61 | 53 | 48 | 71 | 60 | 53 | 48 | 59 | 52 | 48 | | 57 | 52 | 47 | | 56 | 51 | 47 | 45 |
| 8 | 68 | 57 | 49 | 44 | 67 | 56 | 49 | 44 | 55 | 48 | 44 | | 53 | 48 | 43 | | 52 | 47 | 43 | 41 |
| 9 | 64 | 53 | 45 | 40 | 63 | 52 | 45 | 40 | 51 | 45 | 40 | | 50 | 44 | 40 | | 49 | 44 | 40 | 38 |
| 10 | 61 | 49 | 42 | 37 | 60 | 49 | 42 | 37 | 48 | 41 | 37 | | 47 | 41 | 37 | | 46 | 41 | 37 | 35 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 4541 |
| 5° | 4464 |
| 10° | 4310 |
| 15° | 4202 |
| 20° | 4108 |
| 25° | 4020 |
| 30° | 3893 |
| 35° | 3187 |
| 40° | 1851 |
| 45° | 1400 |
| 50° | 1272 |
| 55° | 1251 |
| 60° | 1206 |
| 65° | 1158 |
| 70° | 1112 |
| 75° | 1064 |
| 80° | 1017 |
| 85° | 974 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1400 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 84.7 | 5.9 |
| 10°-20° | 232.0 | 16.1 |
| 20°-30° | 339.7 | 23.6 |
| 30°-40° | 315.8 | 21.9 |
| 40°-50° | 160.9 | 11.2 |
| 50°-60° | 129.5 | 9.0 |
| 60°-70° | 98.3 | 6.8 |
| 70°-80° | 59.2 | 4.1 |
| 80°-90° | 19.0 | 1.3 |
| 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° | 656.3 | 45.6 |
| 0°-40° | 972.1 | 67.6 |
| 0°-60° | 1262.5 | 87.7 |
| 0°-90° | 1439.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1439.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 920 | |
| 5° | 901 | 85 |
| 15° | 823 | 232 |
| 25° | 738 | 340 |
| 35° | 529 | 316 |
| 45° | 201 | 161 |
| 55° | 145 | 129 |
| 65° | 99 | 98 |
| 75° | 56 | 59 |
| 85° | 17 | 19 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 920.4 |
| 2.5° | 917.7 |
| 5° | 901.4 |
| 7.5° | 879.6 |
| 10° | 860.2 |
| 12.5° | 841.7 |
| 15° | 822.6 |
| 17.5° | 803.2 |
| 20° | 782.5 |
| 22.5° | 761.4 |
| 25° | 738.4 |
| 27.5° | 714.2 |
| 30° | 683.3 |
| 32.5° | 632.5 |
| 35° | 529.2 |
| 37.5° | 397.2 |
| 40° | 287.4 |
| 42.5° | 231.0 |
| 45° | 200.6 |
| 47.5° | 179.2 |
| 50° | 165.7 |
| 52.5° | 156.0 |
| 55° | 145.4 |
| 57.5° | 133.5 |
| 60° | 122.2 |
| 62.5° | 110.5 |
| 65° | 99.2 |
| 67.5° | 88.0 |
| 70° | 77.1 |
| 72.5° | 66.4 |
| 75° | 55.8 |
| 77.5° | 45.8 |
| 80° | 35.8 |
| 82.5° | 26.5 |
| 85° | 17.2 |
| 87.5° | 8.2 |
| 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 | 11.24 | 12.59 | 11.60 | 12.90 | 13.22 | 11.24 | 12.59 | 11.60 | 12.90 | 13.22 |
| | 3H | 13.04 | 14.25 | 13.42 | 14.58 | 14.94 | 13.04 | 14.25 | 13.42 | 14.58 | 14.94 |
| | 4H | 13.74 | 14.88 | 14.15 | 15.23 | 15.61 | 13.74 | 14.88 | 14.15 | 15.23 | 15.61 |
| | 6H | 14.30 | 15.35 | 14.72 | 15.72 | 16.11 | 14.30 | 15.35 | 14.72 | 15.72 | 16.11 |
| | 8H | 14.50 | 15.50 | 14.93 | 15.89 | 16.29 | 14.50 | 15.50 | 14.93 | 15.89 | 16.29 |
| | 12H | 14.65 | 15.60 | 15.08 | 15.98 | 16.41 | 14.65 | 15.60 | 15.08 | 15.98 | 16.41 |
| 4H | 2H | 11.82 | 12.96 | 12.23 | 13.31 | 13.69 | 11.82 | 12.96 | 12.23 | 13.31 | 13.69 |
| | 3H | 13.85 | 14.79 | 14.26 | 15.19 | 15.60 | 13.85 | 14.79 | 14.26 | 15.19 | 15.60 |
| | 4H | 14.69 | 15.54 | 15.12 | 15.95 | 16.40 | 14.69 | 15.54 | 15.12 | 15.95 | 16.40 |
| | 6H | 15.38 | 16.12 | 15.84 | 16.57 | 17.03 | 15.38 | 16.12 | 15.84 | 16.57 | 17.03 |
| | 8H | 15.64 | 16.33 | 16.10 | 16.77 | 17.24 | 15.64 | 16.33 | 16.10 | 16.77 | 17.24 |
| | 12H | 15.83 | 16.45 | 16.32 | 16.93 | 17.40 | 15.83 | 16.45 | 16.32 | 16.93 | 17.40 |
| 8H | 4H | 14.99 | 15.68 | 15.46 | 16.13 | 16.60 | 14.99 | 15.68 | 15.46 | 16.13 | 16.60 |
| | 6H | 15.83 | 16.40 | 16.33 | 16.89 | 17.37 | 15.83 | 16.40 | 16.33 | 16.89 | 17.37 |
| | 8H | 16.18 | 16.68 | 16.70 | 17.20 | 17.69 | 16.18 | 16.68 | 16.70 | 17.20 | 17.69 |
| | 12H | 16.47 | 16.92 | 16.99 | 17.41 | 17.98 | 16.47 | 16.92 | 16.99 | 17.41 | 17.98 |
| 12H | 4H | 15.02 | 15.63 | 15.50 | 16.11 | 16.59 | 15.02 | 15.63 | 15.50 | 16.11 | 16.59 |
| | 6H | 15.90 | 16.40 | 16.42 | 16.92 | 17.41 | 15.90 | 16.40 | 16.42 | 16.92 | 17.41 |
| | 8H | 16.31 | 16.75 | 16.82 | 17.25 | 17.82 | 16.31 | 16.75 | 16.82 | 17.25 | 17.82 |