

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: P865670

Luminaire Tested: PRLX-2002-S-935-15L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865670
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-S-935-15L-G-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

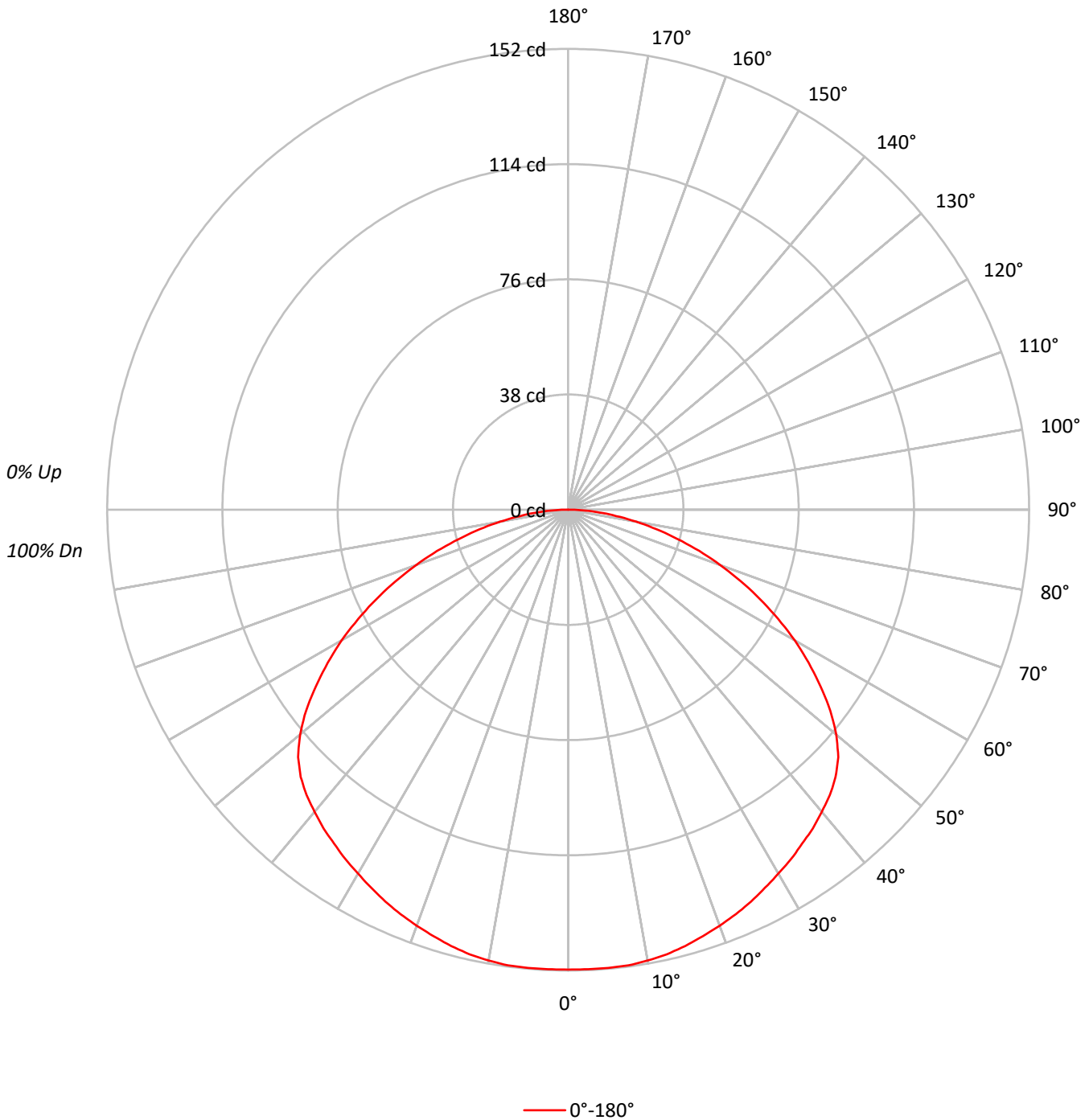
Lumens per Lamp: N/A
Luminaire Lumens: 513.8 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.53
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

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: 0.333 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 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 72 | 77 | 73 | 70 | 68 |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 59 | 56 |
| 4 | 81 | 68 | 59 | 52 | 79 | 67 | 59 | 52 | 65 | 57 | 51 | 62 | 56 | 50 | 60 | 54 | 50 | 47 |
| 5 | 74 | 61 | 51 | 45 | 72 | 60 | 51 | 44 | 57 | 50 | 44 | 55 | 49 | 43 | 54 | 48 | 43 | 41 |
| 6 | 68 | 54 | 45 | 39 | 66 | 54 | 45 | 38 | 52 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 35 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 34 | 29 | 27 |
| 9 | 55 | 41 | 32 | 27 | 53 | 40 | 32 | 27 | 39 | 32 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 24 |
| 10 | 51 | 38 | 29 | 24 | 50 | 37 | 29 | 24 | 36 | 29 | 24 | 35 | 28 | 24 | 34 | 28 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 2850 |
| 5° | 2860 |
| 10° | 2880 |
| 15° | 2898 |
| 20° | 2919 |
| 25° | 2956 |
| 30° | 3006 |
| 35° | 3084 |
| 40° | 3190 |
| 45° | 3313 |
| 50° | 3372 |
| 55° | 3327 |
| 60° | 3242 |
| 65° | 3102 |
| 70° | 2927 |
| 75° | 2707 |
| 80° | 2456 |
| 85° | 2220 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 3372 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 14.5 | 2.8 |
| 10°-20° | 42.1 | 8.2 |
| 20°-30° | 65.8 | 12.8 |
| 30°-40° | 84.4 | 16.4 |
| 40°-50° | 95.9 | 18.7 |
| 50°-60° | 90.7 | 17.6 |
| 60°-70° | 69.1 | 13.4 |
| 70°-80° | 39.7 | 7.7 |
| 80°-90° | 11.7 | 2.3 |
| 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° | 122.4 | 23.8 |
| 0°-40° | 206.8 | 40.2 |
| 0°-60° | 393.4 | 76.6 |
| 0°-90° | 513.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 513.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 152 | |
| 5° | 152 | 14 |
| 15° | 149 | 42 |
| 25° | 143 | 66 |
| 35° | 134 | 84 |
| 45° | 125 | 96 |
| 55° | 102 | 91 |
| 65° | 70 | 69 |
| 75° | 37 | 40 |
| 85° | 10 | 12 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 151.7 |
| 2.5° | 151.7 |
| 5° | 151.7 |
| 7.5° | 151.6 |
| 10° | 151.0 |
| 12.5° | 150.2 |
| 15° | 149.0 |
| 17.5° | 147.5 |
| 20° | 146.0 |
| 22.5° | 144.4 |
| 25° | 142.6 |
| 27.5° | 140.6 |
| 30° | 138.6 |
| 32.5° | 136.7 |
| 35° | 134.5 |
| 37.5° | 132.5 |
| 40° | 130.1 |
| 42.5° | 127.7 |
| 45° | 124.7 |
| 47.5° | 120.8 |
| 50° | 115.4 |
| 52.5° | 109.0 |
| 55° | 101.6 |
| 57.5° | 94.0 |
| 60° | 86.3 |
| 62.5° | 78.0 |
| 65° | 69.8 |
| 67.5° | 61.6 |
| 70° | 53.3 |
| 72.5° | 45.3 |
| 75° | 37.3 |
| 77.5° | 29.9 |
| 80° | 22.7 |
| 82.5° | 16.0 |
| 85° | 10.3 |
| 87.5° | 5.3 |
| 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 | 16.58 | 18.28 | 16.95 | 18.59 | 18.91 | 16.58 | 18.28 | 16.95 | 18.59 | 18.91 |
| | 3H | 18.39 | 19.93 | 18.76 | 20.25 | 20.61 | 18.39 | 19.93 | 18.76 | 20.25 | 20.61 |
| | 4H | 19.06 | 20.51 | 19.46 | 20.86 | 21.23 | 19.06 | 20.51 | 19.46 | 20.86 | 21.23 |
| | 6H | 19.56 | 20.91 | 19.97 | 21.27 | 21.66 | 19.56 | 20.91 | 19.97 | 21.27 | 21.66 |
| | 8H | 19.73 | 21.02 | 20.15 | 21.41 | 21.80 | 19.73 | 21.02 | 20.15 | 21.41 | 21.80 |
| | 12H | 19.85 | 21.08 | 20.28 | 21.47 | 21.89 | 19.85 | 21.08 | 20.28 | 21.47 | 21.89 |
| 4H | 2H | 17.23 | 18.68 | 17.62 | 19.02 | 19.40 | 17.23 | 18.68 | 17.62 | 19.02 | 19.40 |
| | 3H | 19.25 | 20.47 | 19.66 | 20.87 | 21.27 | 19.25 | 20.47 | 19.66 | 20.87 | 21.27 |
| | 4H | 20.05 | 21.16 | 20.48 | 21.57 | 22.01 | 20.05 | 21.16 | 20.48 | 21.57 | 22.01 |
| | 6H | 20.69 | 21.66 | 21.14 | 22.10 | 22.55 | 20.69 | 21.66 | 21.14 | 22.10 | 22.55 |
| | 8H | 20.90 | 21.81 | 21.36 | 22.25 | 22.72 | 20.90 | 21.81 | 21.36 | 22.25 | 22.72 |
| | 12H | 21.07 | 21.89 | 21.55 | 22.36 | 22.83 | 21.07 | 21.89 | 21.55 | 22.36 | 22.83 |
| 8H | 4H | 20.37 | 21.28 | 20.83 | 21.72 | 22.19 | 20.37 | 21.28 | 20.83 | 21.72 | 22.19 |
| | 6H | 21.13 | 21.89 | 21.62 | 22.38 | 22.85 | 21.13 | 21.89 | 21.62 | 22.38 | 22.85 |
| | 8H | 21.42 | 22.11 | 21.93 | 22.61 | 23.09 | 21.42 | 22.11 | 21.93 | 22.61 | 23.09 |
| | 12H | 21.67 | 22.28 | 22.18 | 22.77 | 23.32 | 21.67 | 22.28 | 22.18 | 22.77 | 23.32 |
| 12H | 4H | 20.41 | 21.23 | 20.89 | 21.71 | 22.18 | 20.41 | 21.23 | 20.89 | 21.71 | 22.18 |
| | 6H | 21.19 | 21.88 | 21.70 | 22.38 | 22.87 | 21.19 | 21.88 | 21.70 | 22.38 | 22.87 |
| | 8H | 21.55 | 22.15 | 22.05 | 22.64 | 23.20 | 21.55 | 22.15 | 22.05 | 22.64 | 23.20 |