

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: P866302

Luminaire Tested: PRLX-2002-M-935-35L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-935-35L-G-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

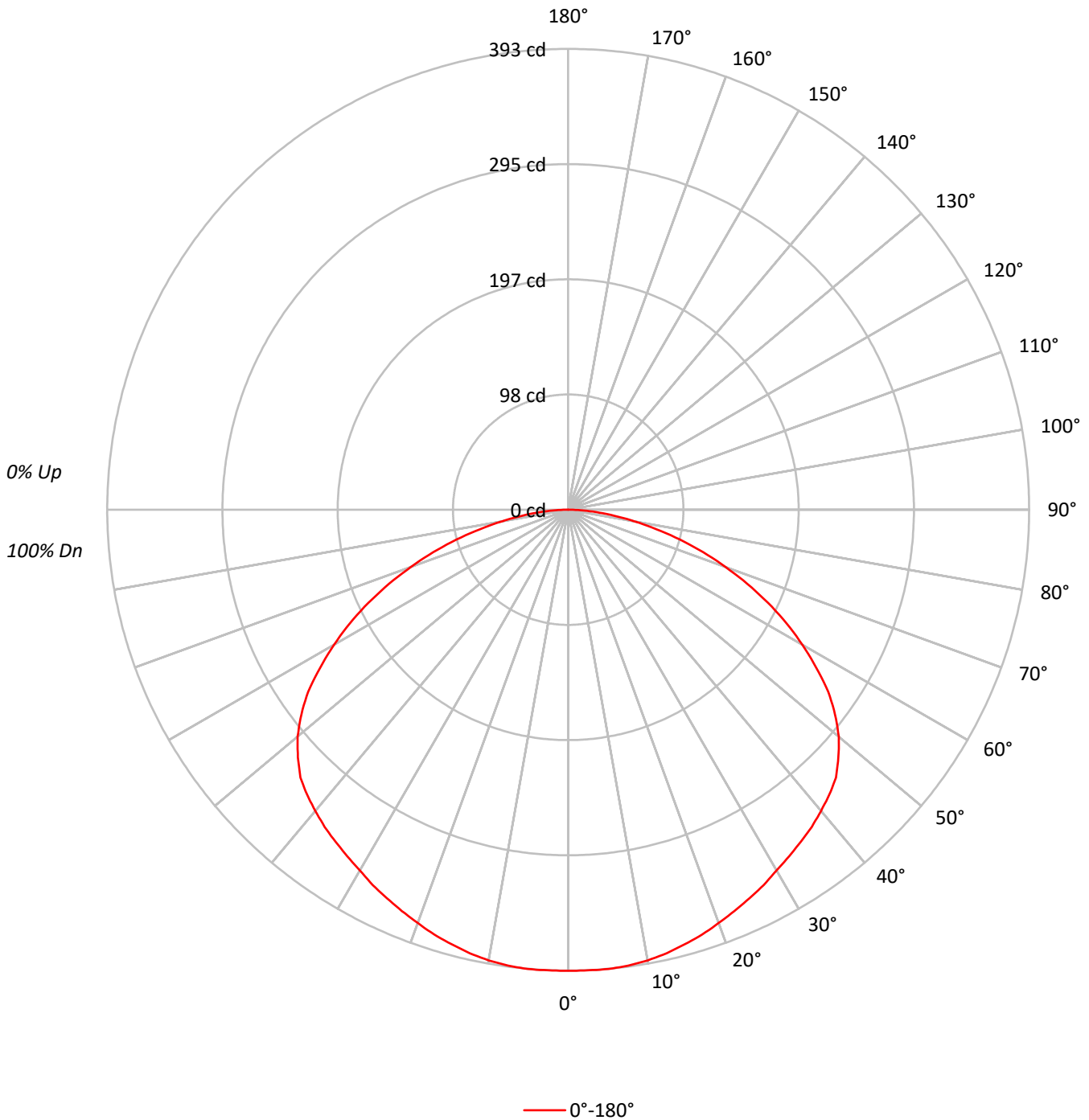
Lumens per Lamp: N/A
Luminaire Lumens: 1338.2 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.53
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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 | 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 | 64 | 59 | | 68 | 63 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 52 | 64 | 57 | 51 | | 62 | 55 | 50 | | 60 | 54 | 50 | 47 |
| 5 | 74 | 61 | 51 | 44 | 72 | 59 | 51 | 44 | 57 | 49 | 44 | | 55 | 48 | 43 | | 53 | 47 | 43 | 40 |
| 6 | 68 | 54 | 45 | 38 | 66 | 53 | 44 | 38 | 51 | 44 | 38 | | 50 | 43 | 37 | | 48 | 42 | 37 | 35 |
| 7 | 63 | 49 | 40 | 33 | 61 | 48 | 39 | 33 | 47 | 39 | 33 | | 45 | 38 | 33 | | 44 | 37 | 33 | 31 |
| 8 | 58 | 44 | 36 | 30 | 57 | 44 | 35 | 30 | 42 | 35 | 29 | | 41 | 34 | 29 | | 40 | 34 | 29 | 27 |
| 9 | 55 | 41 | 32 | 26 | 53 | 40 | 32 | 26 | 39 | 31 | 26 | | 38 | 31 | 26 | | 37 | 31 | 26 | 24 |
| 10 | 51 | 37 | 29 | 24 | 50 | 37 | 29 | 24 | 36 | 29 | 24 | | 35 | 28 | 24 | | 34 | 28 | 23 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3128 |
| 5° | 3140 |
| 10° | 3153 |
| 15° | 3160 |
| 20° | 3176 |
| 25° | 3210 |
| 30° | 3263 |
| 35° | 3358 |
| 40° | 3482 |
| 45° | 3633 |
| 50° | 3727 |
| 55° | 3755 |
| 60° | 3672 |
| 65° | 3539 |
| 70° | 3315 |
| 75° | 3037 |
| 80° | 2653 |
| 85° | 2163 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 3755 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 37.4 | 2.8 |
| 10°-20° | 108.5 | 8.1 |
| 20°-30° | 168.9 | 12.6 |
| 30°-40° | 216.9 | 16.2 |
| 40°-50° | 248.1 | 18.5 |
| 50°-60° | 240.3 | 18.0 |
| 60°-70° | 185.5 | 13.9 |
| 70°-80° | 104.5 | 7.8 |
| 80°-90° | 28.0 | 2.1 |
| 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° | 314.8 | 23.5 |
| 0°-40° | 531.7 | 39.7 |
| 0°-60° | 1020.1 | 76.2 |
| 0°-90° | 1338.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1338.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 393 | |
| 5° | 393 | 37 |
| 15° | 384 | 108 |
| 25° | 366 | 169 |
| 35° | 346 | 217 |
| 45° | 323 | 248 |
| 55° | 271 | 240 |
| 65° | 188 | 186 |
| 75° | 99 | 105 |
| 85° | 24 | 28 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 393.2 |
| 2.5° | 393.2 |
| 5° | 393.2 |
| 7.5° | 392.2 |
| 10° | 390.3 |
| 12.5° | 387.5 |
| 15° | 383.7 |
| 17.5° | 379.9 |
| 20° | 375.1 |
| 22.5° | 370.4 |
| 25° | 365.7 |
| 27.5° | 360.9 |
| 30° | 355.2 |
| 32.5° | 350.5 |
| 35° | 345.7 |
| 37.5° | 341.0 |
| 40° | 335.3 |
| 42.5° | 329.6 |
| 45° | 322.9 |
| 47.5° | 312.5 |
| 50° | 301.1 |
| 52.5° | 286.8 |
| 55° | 270.7 |
| 57.5° | 250.7 |
| 60° | 230.8 |
| 62.5° | 209.9 |
| 65° | 188.0 |
| 67.5° | 165.3 |
| 70° | 142.5 |
| 72.5° | 120.6 |
| 75° | 98.8 |
| 77.5° | 76.9 |
| 80° | 57.9 |
| 82.5° | 39.9 |
| 85° | 23.7 |
| 87.5° | 10.4 |
| 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 | 17.08 | 18.78 | 17.45 | 19.10 | 19.41 | 17.08 | 18.78 | 17.45 | 19.10 | 19.41 |
| | 3H | 18.90 | 20.44 | 19.28 | 20.77 | 21.13 | 18.90 | 20.44 | 19.28 | 20.77 | 21.13 |
| | 4H | 19.56 | 21.02 | 19.96 | 21.37 | 21.74 | 19.56 | 21.02 | 19.96 | 21.37 | 21.74 |
| | 6H | 20.03 | 21.38 | 20.44 | 21.74 | 22.13 | 20.03 | 21.38 | 20.44 | 21.74 | 22.13 |
| | 8H | 20.17 | 21.47 | 20.60 | 21.86 | 22.25 | 20.17 | 21.47 | 20.60 | 21.86 | 22.25 |
| | 12H | 20.27 | 21.51 | 20.70 | 21.89 | 22.32 | 20.27 | 21.51 | 20.70 | 21.89 | 22.32 |
| 4H | 2H | 17.74 | 19.20 | 18.14 | 19.54 | 19.92 | 17.74 | 19.20 | 18.14 | 19.54 | 19.92 |
| | 3H | 19.77 | 21.00 | 20.18 | 21.39 | 21.79 | 19.77 | 21.00 | 20.18 | 21.39 | 21.79 |
| | 4H | 20.56 | 21.67 | 20.99 | 22.08 | 22.51 | 20.56 | 21.67 | 20.99 | 22.08 | 22.51 |
| | 6H | 21.14 | 22.12 | 21.60 | 22.56 | 23.01 | 21.14 | 22.12 | 21.60 | 22.56 | 23.01 |
| | 8H | 21.34 | 22.25 | 21.79 | 22.69 | 23.15 | 21.34 | 22.25 | 21.79 | 22.69 | 23.15 |
| | 12H | 21.47 | 22.29 | 21.95 | 22.77 | 23.24 | 21.47 | 22.29 | 21.95 | 22.77 | 23.24 |
| 8H | 4H | 20.87 | 21.78 | 21.33 | 22.22 | 22.69 | 20.87 | 21.78 | 21.33 | 22.22 | 22.69 |
| | 6H | 21.57 | 22.33 | 22.06 | 22.82 | 23.29 | 21.57 | 22.33 | 22.06 | 22.82 | 23.29 |
| | 8H | 21.83 | 22.51 | 22.34 | 23.02 | 23.50 | 21.83 | 22.51 | 22.34 | 23.02 | 23.50 |
| | 12H | 22.03 | 22.64 | 22.54 | 23.13 | 23.68 | 22.03 | 22.64 | 22.54 | 23.13 | 23.68 |
| 12H | 4H | 20.90 | 21.73 | 21.38 | 22.20 | 22.67 | 20.90 | 21.73 | 21.38 | 22.20 | 22.67 |
| | 6H | 21.63 | 22.31 | 22.13 | 22.81 | 23.30 | 21.63 | 22.31 | 22.13 | 22.81 | 23.30 |
| | 8H | 21.94 | 22.54 | 22.45 | 23.03 | 23.59 | 21.94 | 22.54 | 22.45 | 23.03 | 23.59 |