

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: P866434

Luminaire Tested: PRLX-2004-M-927-35L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866434
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-56)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-M-927-35L-L-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,
BELL WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

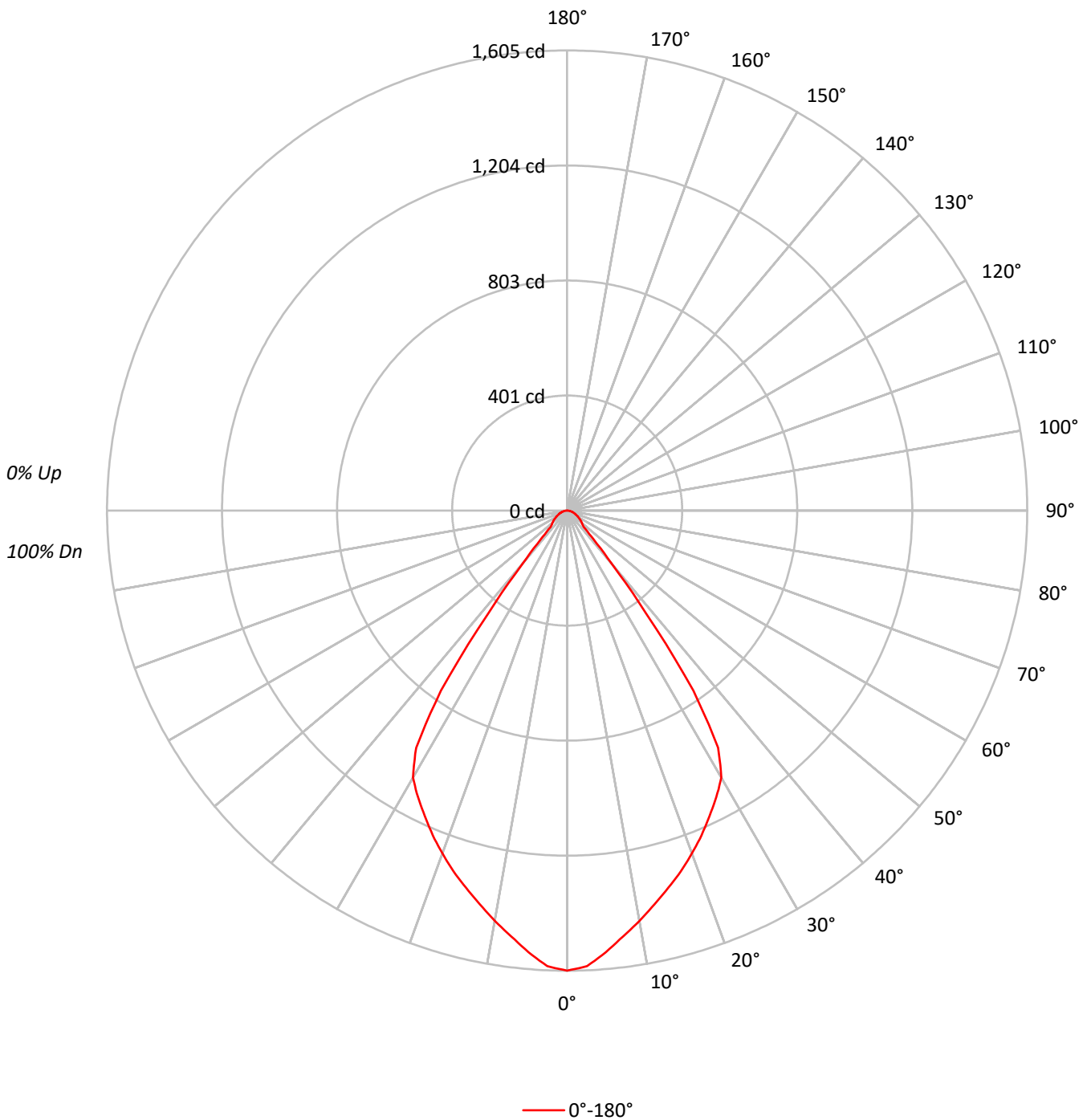
Lumens per Lamp: N/A
Luminaire Lumens: 1700.0 lumens
Efficiency: N/A
Efficacy: 56.7 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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: 0.333 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 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 |
| 2 | 106 | 101 | 97 | 93 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | 84 |
| 3 | 101 | 93 | 88 | 84 | 98 | 92 | 87 | 83 | 89 | 85 | 82 | 87 | 83 | 80 | 85 | 82 | 79 | 77 |
| 4 | 95 | 87 | 81 | 76 | 93 | 85 | 80 | 76 | 83 | 78 | 75 | 81 | 77 | 74 | 79 | 76 | 73 | 71 |
| 5 | 90 | 81 | 74 | 70 | 88 | 80 | 74 | 69 | 78 | 73 | 69 | 76 | 72 | 68 | 74 | 71 | 67 | 66 |
| 6 | 85 | 75 | 69 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 67 | 63 | 70 | 66 | 62 | 61 |
| 7 | 80 | 70 | 64 | 59 | 79 | 70 | 63 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 61 | 58 | 57 |
| 8 | 76 | 66 | 59 | 55 | 75 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 53 |
| 9 | 72 | 62 | 55 | 51 | 71 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 58 | 54 | 51 | 49 |
| 10 | 68 | 58 | 52 | 48 | 67 | 58 | 52 | 48 | 57 | 51 | 48 | 56 | 51 | 47 | 55 | 51 | 47 | 46 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 12767 |
| 5° | 12347 |
| 10° | 11737 |
| 15° | 11220 |
| 20° | 10774 |
| 25° | 10314 |
| 30° | 9879 |
| 35° | 7452 |
| 40° | 2481 |
| 45° | 919 |
| 50° | 835 |
| 55° | 764 |
| 60° | 692 |
| 65° | 634 |
| 70° | 600 |
| 75° | 572 |
| 80° | 527 |
| 85° | 484 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 919 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 144.6 | 8.5 |
| 10°-20° | 383.7 | 22.6 |
| 20°-30° | 541.3 | 31.8 |
| 30°-40° | 437.5 | 25.7 |
| 40°-50° | 83.7 | 4.9 |
| 50°-60° | 49.5 | 2.9 |
| 60°-70° | 33.8 | 2.0 |
| 70°-80° | 19.7 | 1.2 |
| 80°-90° | 6.2 | 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° | 1069.6 | 62.9 |
| 0°-40° | 1507.2 | 88.7 |
| 0°-60° | 1640.4 | 96.5 |
| 0°-90° | 1700.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1700.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1605 | |
| 5° | 1546 | 145 |
| 15° | 1362 | 384 |
| 25° | 1175 | 541 |
| 35° | 767 | 438 |
| 45° | 82 | 84 |
| 55° | 55 | 49 |
| 65° | 34 | 34 |
| 75° | 19 | 20 |
| 85° | 5 | 6 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1604.7 |
| 2.5° | 1590.5 |
| 5° | 1546.1 |
| 7.5° | 1497.3 |
| 10° | 1452.9 |
| 12.5° | 1406.7 |
| 15° | 1362.3 |
| 17.5° | 1318.8 |
| 20° | 1272.6 |
| 22.5° | 1225.5 |
| 25° | 1174.9 |
| 27.5° | 1126.9 |
| 30° | 1075.4 |
| 32.5° | 980.4 |
| 35° | 767.3 |
| 37.5° | 452.9 |
| 40° | 238.9 |
| 42.5° | 134.1 |
| 45° | 81.7 |
| 47.5° | 71.9 |
| 50° | 67.5 |
| 52.5° | 61.3 |
| 55° | 55.1 |
| 57.5° | 49.7 |
| 60° | 43.5 |
| 62.5° | 39.1 |
| 65° | 33.7 |
| 67.5° | 29.3 |
| 70° | 25.8 |
| 72.5° | 22.2 |
| 75° | 18.6 |
| 77.5° | 15.1 |
| 80° | 11.5 |
| 82.5° | 8.9 |
| 85° | 5.3 |
| 87.5° | 2.7 |
| 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 | 5.81 | 6.86 | 6.18 | 7.17 | 7.49 | 5.81 | 6.86 | 6.18 | 7.17 | 7.49 |
| | 3H | 7.28 | 8.20 | 7.66 | 8.54 | 8.91 | 7.28 | 8.20 | 7.66 | 8.54 | 8.91 |
| | 4H | 7.88 | 8.74 | 8.29 | 9.09 | 9.48 | 7.88 | 8.74 | 8.29 | 9.09 | 9.48 |
| | 6H | 8.34 | 9.13 | 8.76 | 9.50 | 9.90 | 8.34 | 9.13 | 8.76 | 9.50 | 9.90 |
| | 8H | 8.51 | 9.25 | 8.94 | 9.64 | 10.05 | 8.51 | 9.25 | 8.94 | 9.64 | 10.05 |
| | 12H | 8.61 | 9.32 | 9.04 | 9.70 | 10.13 | 8.61 | 9.32 | 9.04 | 9.70 | 10.13 |
| 4H | 2H | 6.23 | 7.09 | 6.64 | 7.44 | 7.83 | 6.23 | 7.09 | 6.64 | 7.44 | 7.83 |
| | 3H | 7.93 | 8.64 | 8.35 | 9.05 | 9.45 | 7.93 | 8.64 | 8.35 | 9.05 | 9.45 |
| | 4H | 8.67 | 9.30 | 9.11 | 9.72 | 10.17 | 8.67 | 9.30 | 9.11 | 9.72 | 10.17 |
| | 6H | 9.26 | 9.80 | 9.73 | 10.25 | 10.72 | 9.26 | 9.80 | 9.73 | 10.25 | 10.72 |
| | 8H | 9.48 | 9.98 | 9.95 | 10.43 | 10.90 | 9.48 | 9.98 | 9.95 | 10.43 | 10.90 |
| | 12H | 9.63 | 10.06 | 10.12 | 10.55 | 11.03 | 9.63 | 10.06 | 10.12 | 10.55 | 11.03 |
| 8H | 4H | 8.89 | 9.40 | 9.37 | 9.85 | 10.32 | 8.89 | 9.40 | 9.37 | 9.85 | 10.32 |
| | 6H | 9.62 | 10.02 | 10.13 | 10.52 | 11.01 | 9.62 | 10.02 | 10.13 | 10.52 | 11.01 |
| | 8H | 9.93 | 10.29 | 10.46 | 10.81 | 11.31 | 9.93 | 10.29 | 10.46 | 10.81 | 11.31 |
| | 12H | 10.17 | 10.48 | 10.70 | 10.98 | 11.56 | 10.17 | 10.48 | 10.70 | 10.98 | 11.56 |
| 12H | 4H | 8.90 | 9.33 | 9.39 | 9.82 | 10.30 | 8.90 | 9.33 | 9.39 | 9.82 | 10.30 |
| | 6H | 9.66 | 10.02 | 10.19 | 10.54 | 11.04 | 9.66 | 10.02 | 10.19 | 10.54 | 11.04 |
| | 8H | 10.04 | 10.34 | 10.56 | 10.84 | 11.42 | 10.04 | 10.34 | 10.56 | 10.84 | 11.42 |