

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: P866178

Luminaire Tested: PRLX-2002-M-927-35L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-52)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-M-927-35L-L-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

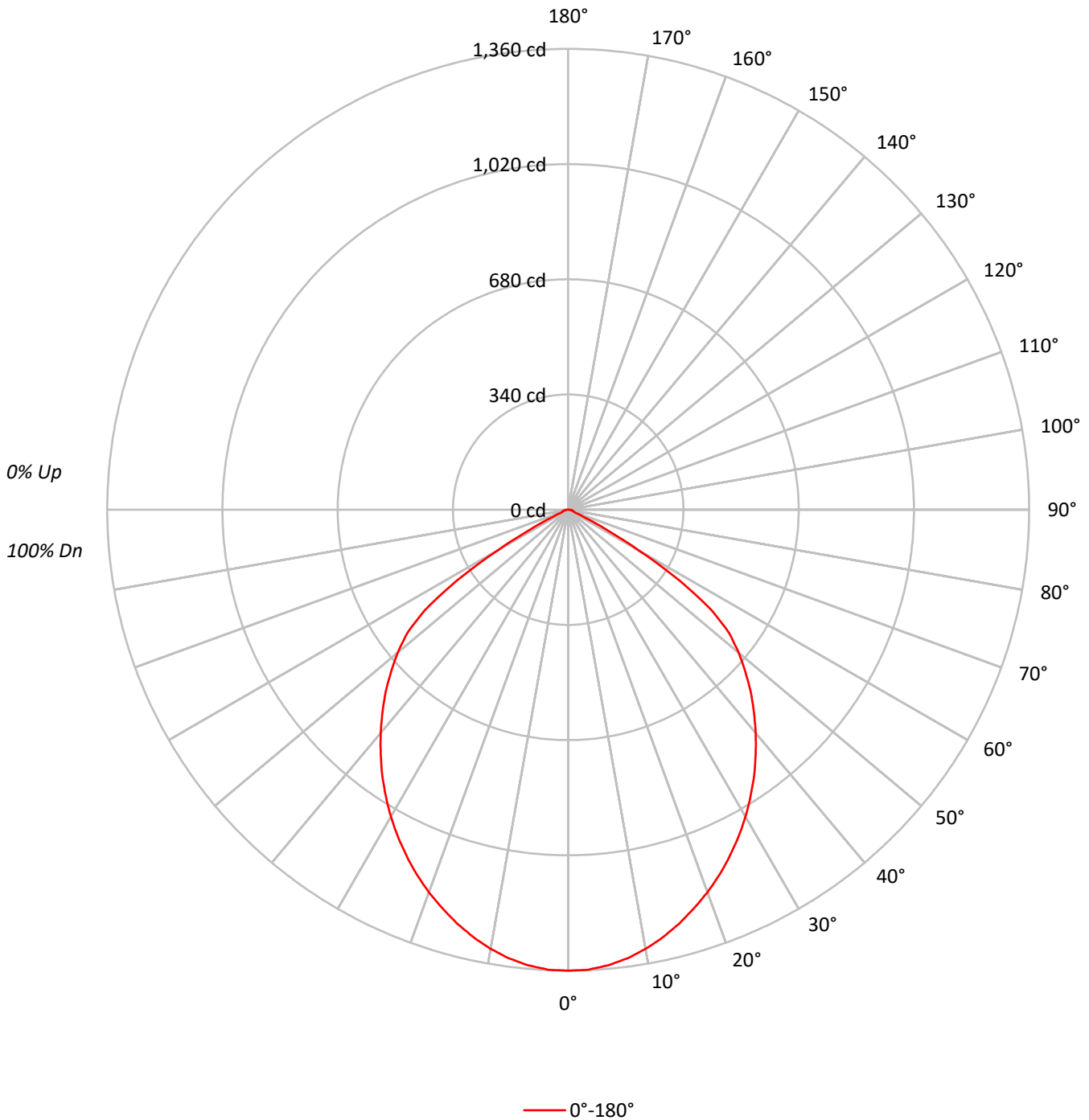
Lumens per Lamp: N/A
Luminaire Lumens: 2724.7 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 |
| 2 | 103 | 97 | 91 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 80 | 78 |
| 3 | 96 | 87 | 80 | 75 | 93 | 86 | 79 | 74 | 83 | 77 | 73 | 80 | 76 | 72 | 78 | 74 | 71 | 69 |
| 4 | 89 | 78 | 71 | 65 | 86 | 77 | 70 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 71 | 66 | 62 | 60 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 63 | 57 | 68 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 |
| 6 | 76 | 64 | 56 | 51 | 74 | 64 | 56 | 51 | 62 | 55 | 50 | 60 | 54 | 50 | 59 | 53 | 49 | 48 |
| 7 | 71 | 59 | 51 | 45 | 69 | 58 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 45 | 54 | 48 | 44 | 43 |
| 8 | 66 | 54 | 46 | 41 | 65 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 40 | 50 | 44 | 40 | 38 |
| 9 | 62 | 50 | 42 | 37 | 61 | 49 | 42 | 37 | 48 | 41 | 37 | 47 | 41 | 37 | 46 | 40 | 36 | 35 |
| 10 | 58 | 46 | 39 | 34 | 57 | 45 | 38 | 34 | 45 | 38 | 34 | 44 | 38 | 33 | 43 | 37 | 33 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 10824 |
| 5° | 10780 |
| 10° | 10632 |
| 15° | 10416 |
| 20° | 10172 |
| 25° | 9900 |
| 30° | 9610 |
| 35° | 9289 |
| 40° | 8937 |
| 45° | 8572 |
| 50° | 8123 |
| 55° | 7157 |
| 60° | 3816 |
| 65° | 1003 |
| 70° | 414 |
| 75° | 464 |
| 80° | 527 |
| 85° | 648 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8572 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 127.8 | 4.7 |
| 10°-20° | 356.1 | 13.1 |
| 20°-30° | 519.3 | 19.1 |
| 30°-40° | 597.6 | 21.9 |
| 40°-50° | 586.4 | 21.5 |
| 50°-60° | 434.4 | 15.9 |
| 60°-70° | 80.2 | 2.9 |
| 70°-80° | 15.8 | 0.6 |
| 80°-90° | 7.1 | 0.3 |
| 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° | 1003.2 | 36.8 |
| 0°-40° | 1600.8 | 58.8 |
| 0°-60° | 2621.5 | 96.2 |
| 0°-90° | 2724.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2724.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1360 | |
| 5° | 1350 | 128 |
| 15° | 1265 | 356 |
| 25° | 1128 | 519 |
| 35° | 956 | 598 |
| 45° | 762 | 586 |
| 55° | 516 | 434 |
| 65° | 53 | 80 |
| 75° | 15 | 16 |
| 85° | 7 | 7 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1360.5 |
| 2.5° | 1358.7 |
| 5° | 1349.8 |
| 7.5° | 1335.6 |
| 10° | 1316.1 |
| 12.5° | 1292.1 |
| 15° | 1264.6 |
| 17.5° | 1233.5 |
| 20° | 1201.5 |
| 22.5° | 1166.0 |
| 25° | 1127.8 |
| 27.5° | 1087.9 |
| 30° | 1046.1 |
| 32.5° | 1001.7 |
| 35° | 956.4 |
| 37.5° | 908.5 |
| 40° | 860.5 |
| 42.5° | 810.8 |
| 45° | 761.9 |
| 47.5° | 708.7 |
| 50° | 656.3 |
| 52.5° | 598.5 |
| 55° | 516.0 |
| 57.5° | 389.9 |
| 60° | 239.8 |
| 62.5° | 123.4 |
| 65° | 53.3 |
| 67.5° | 23.1 |
| 70° | 17.8 |
| 72.5° | 16.9 |
| 75° | 15.1 |
| 77.5° | 13.3 |
| 80° | 11.5 |
| 82.5° | 9.8 |
| 85° | 7.1 |
| 87.5° | 3.6 |
| 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 | 17.87 | 19.30 | 18.23 | 19.61 | 19.93 | 17.87 | 19.30 | 18.23 | 19.61 | 19.93 |
| | 3H | 17.77 | 19.03 | 18.15 | 19.36 | 19.72 | 17.77 | 19.03 | 18.15 | 19.36 | 19.72 |
| | 4H | 17.72 | 18.89 | 18.12 | 19.24 | 19.62 | 17.72 | 18.89 | 18.12 | 19.24 | 19.62 |
| | 6H | 17.66 | 18.73 | 18.08 | 19.10 | 19.50 | 17.66 | 18.73 | 18.08 | 19.10 | 19.50 |
| | 8H | 17.63 | 18.65 | 18.06 | 19.04 | 19.44 | 17.63 | 18.65 | 18.06 | 19.04 | 19.44 |
| | 12H | 17.60 | 18.58 | 18.04 | 18.96 | 19.39 | 17.60 | 18.58 | 18.04 | 18.96 | 19.39 |
| 4H | 2H | 17.72 | 18.89 | 18.13 | 19.24 | 19.62 | 17.72 | 18.89 | 18.13 | 19.24 | 19.62 |
| | 3H | 17.64 | 18.58 | 18.05 | 18.98 | 19.38 | 17.64 | 18.58 | 18.05 | 18.98 | 19.38 |
| | 4H | 17.58 | 18.41 | 18.01 | 18.83 | 19.27 | 17.58 | 18.41 | 18.01 | 18.83 | 19.27 |
| | 6H | 17.53 | 18.25 | 17.99 | 18.70 | 19.16 | 17.53 | 18.25 | 17.99 | 18.70 | 19.16 |
| | 8H | 17.49 | 18.17 | 17.96 | 18.62 | 19.09 | 17.49 | 18.17 | 17.96 | 18.62 | 19.09 |
| | 12H | 17.47 | 18.07 | 17.95 | 18.55 | 19.02 | 17.47 | 18.07 | 17.95 | 18.55 | 19.02 |
| 8H | 4H | 17.46 | 18.14 | 17.93 | 18.58 | 19.05 | 17.46 | 18.14 | 17.93 | 18.58 | 19.05 |
| | 6H | 17.40 | 17.96 | 17.90 | 18.45 | 18.93 | 17.40 | 17.96 | 17.90 | 18.45 | 18.93 |
| | 8H | 17.36 | 17.87 | 17.88 | 18.38 | 18.88 | 17.36 | 17.87 | 17.88 | 18.38 | 18.88 |
| | 12H | 17.35 | 17.80 | 17.86 | 18.30 | 18.87 | 17.35 | 17.80 | 17.86 | 18.30 | 18.87 |
| 12H | 4H | 17.42 | 18.02 | 17.90 | 18.50 | 18.97 | 17.42 | 18.02 | 17.90 | 18.50 | 18.97 |
| | 6H | 17.34 | 17.85 | 17.86 | 18.36 | 18.85 | 17.34 | 17.85 | 17.86 | 18.36 | 18.85 |
| | 8H | 17.33 | 17.78 | 17.84 | 18.28 | 18.85 | 17.33 | 17.78 | 17.84 | 18.28 | 18.85 |