

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: P865427

Luminaire Tested: PRLX-2001-S-927-10L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-S-927-10L-L-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 2
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

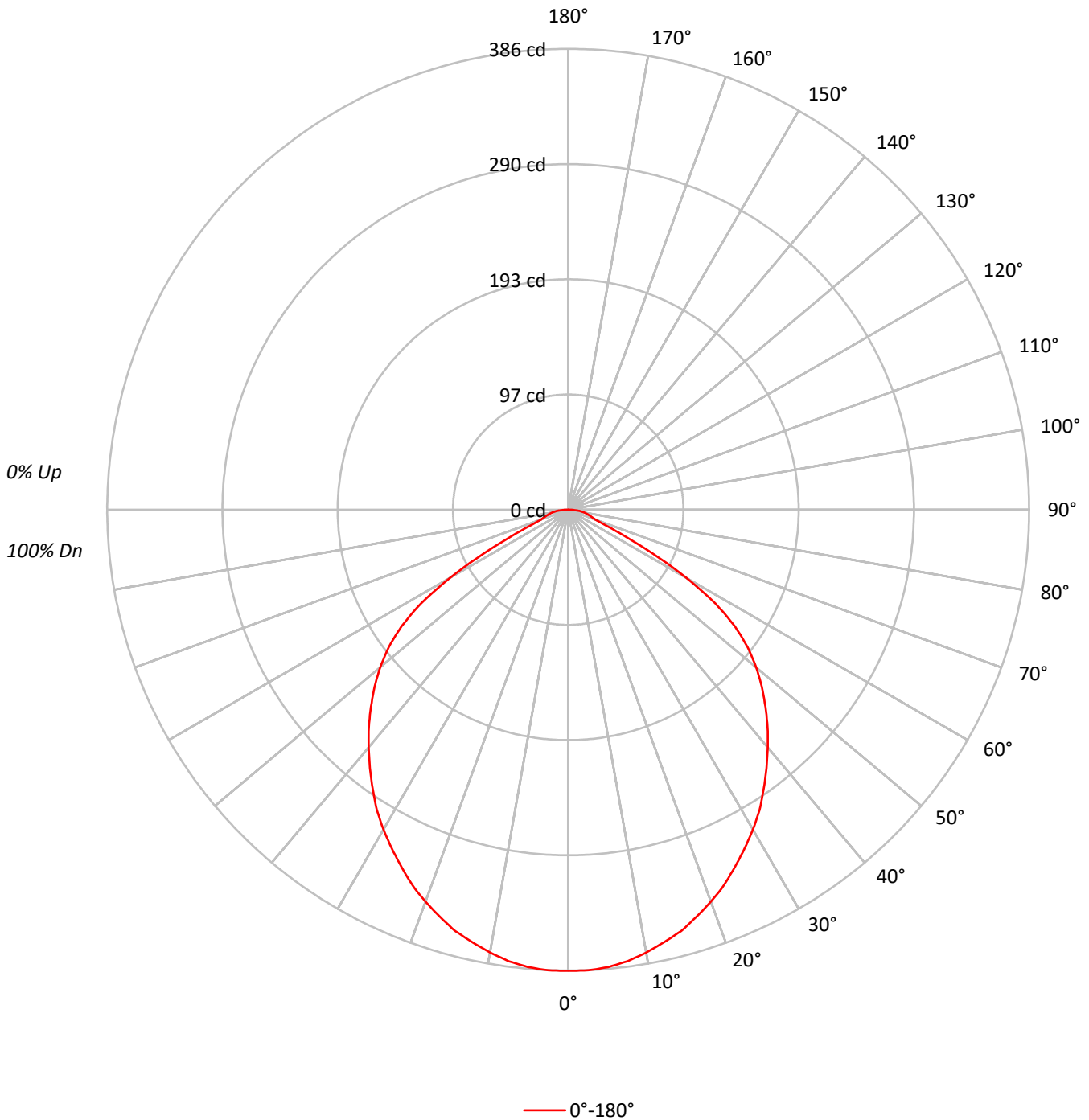
Lumens per Lamp: N/A
Luminaire Lumens: 883.8 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Circular (Dia: 0.92' x H: 0')
CIE Type: Direct

Input Watts (W): 10.5
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 | 106 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 87 |
| 2 | 102 | 95 | 89 | 84 | 99 | 93 | 87 | 83 | 89 | 85 | 81 | 86 | 82 | 79 | 83 | 80 | 77 | 75 |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 71 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 65 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 63 | 59 | 57 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 |
| 6 | 74 | 61 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 47 | 42 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 38 | 62 | 50 | 43 | 37 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 58 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 33 | 43 | 38 | 33 | 32 |
| 10 | 56 | 43 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 40 | 34 | 30 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 6299 |
| 5° | 6297 |
| 10° | 6237 |
| 15° | 6170 |
| 20° | 6064 |
| 25° | 5942 |
| 30° | 5827 |
| 35° | 5683 |
| 40° | 5534 |
| 45° | 5386 |
| 50° | 5214 |
| 55° | 4843 |
| 60° | 3728 |
| 65° | 1976 |
| 70° | 1145 |
| 75° | 1160 |
| 80° | 1277 |
| 85° | 1497 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5386 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 36.5 | 4.1 |
| 10°-20° | 102.8 | 11.6 |
| 20°-30° | 152.2 | 17.2 |
| 30°-40° | 178.6 | 20.2 |
| 40°-50° | 180.1 | 20.4 |
| 50°-60° | 148.6 | 16.8 |
| 60°-70° | 57.3 | 6.5 |
| 70°-80° | 19.5 | 2.2 |
| 80°-90° | 8.2 | 0.9 |
| 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° | 291.5 | 33.0 |
| 0°-40° | 470.1 | 53.2 |
| 0°-60° | 798.8 | 90.4 |
| 0°-90° | 883.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 883.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 386 | |
| 5° | 385 | 36 |
| 15° | 365 | 103 |
| 25° | 330 | 152 |
| 35° | 285 | 179 |
| 45° | 234 | 180 |
| 55° | 170 | 149 |
| 65° | 51 | 57 |
| 75° | 18 | 20 |
| 85° | 8 | 8 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 386.2 |
| 2.5° | 386.2 |
| 5° | 384.6 |
| 7.5° | 381.4 |
| 10° | 376.6 |
| 12.5° | 371.0 |
| 15° | 365.4 |
| 17.5° | 357.4 |
| 20° | 349.4 |
| 22.5° | 340.6 |
| 25° | 330.2 |
| 27.5° | 319.8 |
| 30° | 309.4 |
| 32.5° | 298.2 |
| 35° | 285.4 |
| 37.5° | 272.7 |
| 40° | 259.9 |
| 42.5° | 247.1 |
| 45° | 233.5 |
| 47.5° | 219.9 |
| 50° | 205.5 |
| 52.5° | 189.5 |
| 55° | 170.3 |
| 57.5° | 146.3 |
| 60° | 114.3 |
| 62.5° | 80.0 |
| 65° | 51.2 |
| 67.5° | 32.8 |
| 70° | 24.0 |
| 72.5° | 20.8 |
| 75° | 18.4 |
| 77.5° | 16.0 |
| 80° | 13.6 |
| 82.5° | 11.2 |
| 85° | 8.0 |
| 87.5° | 4.0 |
| 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 | 17.45 | 18.96 | 17.81 | 19.27 | 19.59 | 17.45 | 18.96 | 17.81 | 19.27 | 19.59 |
| | 3H | 17.59 | 18.93 | 17.97 | 19.26 | 19.62 | 17.59 | 18.93 | 17.97 | 19.26 | 19.62 |
| | 4H | 17.65 | 18.91 | 18.05 | 19.25 | 19.63 | 17.65 | 18.91 | 18.05 | 19.25 | 19.63 |
| | 6H | 17.73 | 18.89 | 18.14 | 19.26 | 19.65 | 17.73 | 18.89 | 18.14 | 19.26 | 19.65 |
| | 8H | 17.78 | 18.88 | 18.20 | 19.27 | 19.67 | 17.78 | 18.88 | 18.20 | 19.27 | 19.67 |
| | 12H | 17.82 | 18.87 | 18.25 | 19.25 | 19.68 | 17.82 | 18.87 | 18.25 | 19.25 | 19.68 |
| 4H | 2H | 17.48 | 18.74 | 17.88 | 19.09 | 19.47 | 17.48 | 18.74 | 17.88 | 19.09 | 19.47 |
| | 3H | 17.70 | 18.73 | 18.11 | 19.13 | 19.53 | 17.70 | 18.73 | 18.11 | 19.13 | 19.53 |
| | 4H | 17.82 | 18.74 | 18.25 | 19.16 | 19.60 | 17.82 | 18.74 | 18.25 | 19.16 | 19.60 |
| | 6H | 17.99 | 18.79 | 18.45 | 19.23 | 19.69 | 17.99 | 18.79 | 18.45 | 19.23 | 19.69 |
| | 8H | 18.07 | 18.82 | 18.54 | 19.26 | 19.73 | 18.07 | 18.82 | 18.54 | 19.26 | 19.73 |
| | 12H | 18.16 | 18.83 | 18.64 | 19.31 | 19.78 | 18.16 | 18.83 | 18.64 | 19.31 | 19.78 |
| 8H | 4H | 17.81 | 18.56 | 18.28 | 19.01 | 19.47 | 17.81 | 18.56 | 18.28 | 19.01 | 19.47 |
| | 6H | 18.05 | 18.67 | 18.55 | 19.16 | 19.64 | 18.05 | 18.67 | 18.55 | 19.16 | 19.64 |
| | 8H | 18.19 | 18.75 | 18.71 | 19.26 | 19.75 | 18.19 | 18.75 | 18.71 | 19.26 | 19.75 |
| | 12H | 18.35 | 18.85 | 18.86 | 19.34 | 19.91 | 18.35 | 18.85 | 18.86 | 19.34 | 19.91 |
| 12H | 4H | 17.80 | 18.47 | 18.29 | 18.95 | 19.42 | 17.80 | 18.47 | 18.29 | 18.95 | 19.42 |
| | 6H | 18.05 | 18.60 | 18.56 | 19.12 | 19.60 | 18.05 | 18.60 | 18.56 | 19.12 | 19.60 |
| | 8H | 18.23 | 18.73 | 18.74 | 19.23 | 19.79 | 18.23 | 18.73 | 18.74 | 19.23 | 19.79 |