

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: P866355

Luminaire Tested: PRLX-2002-M-940-15L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-50)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-M-940-15L-L-U-S-X-X-WHHR-X
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 2
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

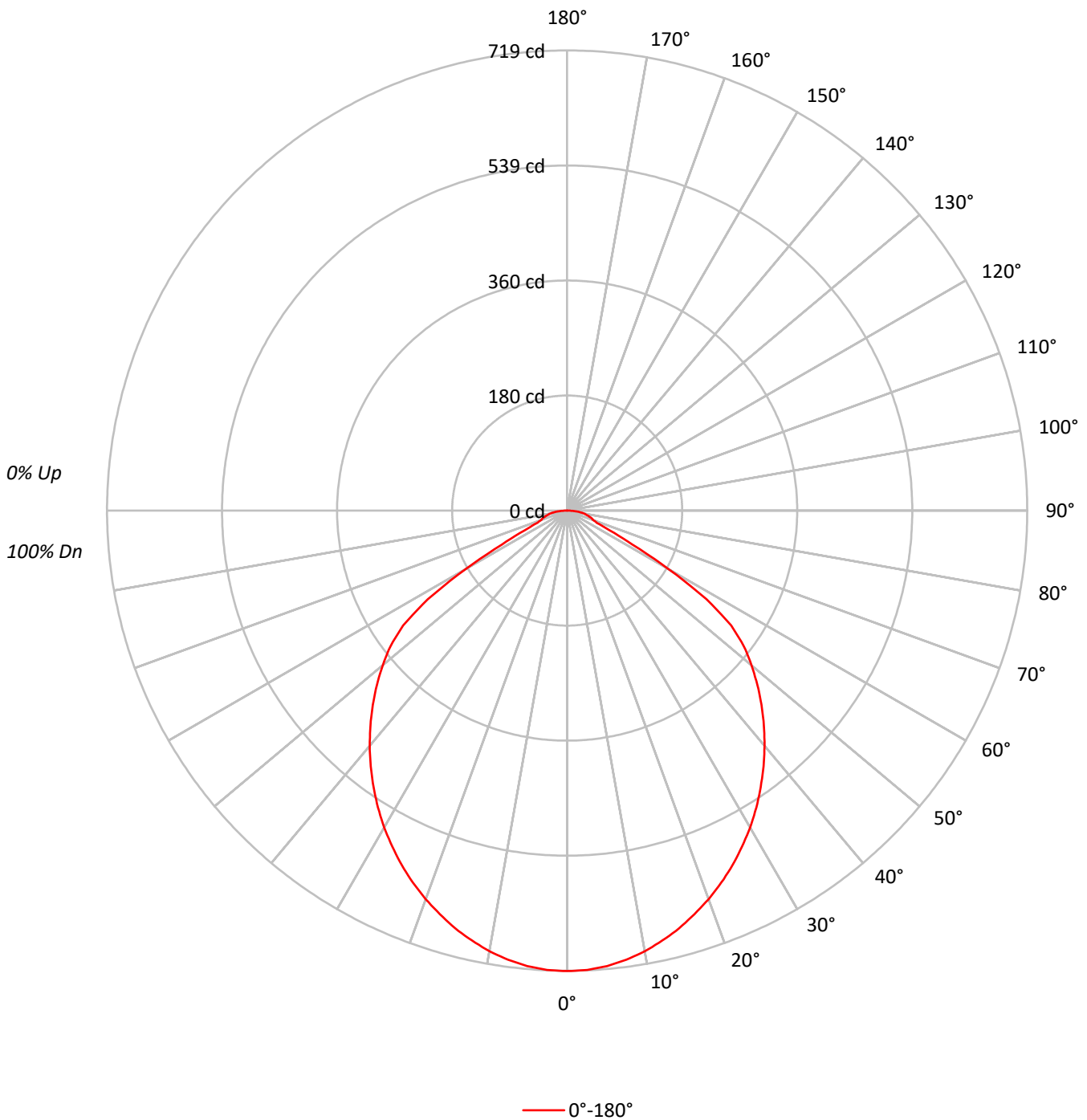
Lumens per Lamp: N/A
Luminaire Lumens: 1606.8 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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 | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 98 | 95 | | 96 | 94 | 92 | | 93 | 91 | 89 | 87 |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | | 86 | 83 | 79 | | 84 | 80 | 78 | 76 |
| 3 | 94 | 85 | 77 | 72 | 92 | 83 | 76 | 71 | 80 | 75 | 70 | | 78 | 73 | 69 | | 75 | 71 | 68 | 66 |
| 4 | 87 | 76 | 68 | 62 | 84 | 75 | 67 | 62 | 72 | 66 | 61 | | 70 | 64 | 60 | | 68 | 63 | 59 | 57 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 58 | 53 | | 63 | 57 | 53 | | 62 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 48 | 59 | 52 | 47 | | 58 | 51 | 47 | | 56 | 51 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 56 | 48 | 42 | 54 | 47 | 42 | | 53 | 46 | 42 | | 51 | 46 | 41 | 40 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | | 48 | 42 | 38 | | 47 | 42 | 37 | 36 |
| 9 | 60 | 47 | 40 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | | 45 | 38 | 34 | | 44 | 38 | 34 | 32 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | | 41 | 35 | 31 | | 41 | 35 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 5723 |
| 5° | 5705 |
| 10° | 5648 |
| 15° | 5567 |
| 20° | 5471 |
| 25° | 5366 |
| 30° | 5252 |
| 35° | 5121 |
| 40° | 4984 |
| 45° | 4832 |
| 50° | 4655 |
| 55° | 4339 |
| 60° | 2913 |
| 65° | 1378 |
| 70° | 1012 |
| 75° | 1085 |
| 80° | 1205 |
| 85° | 1333 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4832 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 67.7 | 4.2 |
| 10°-20° | 190.4 | 11.9 |
| 20°-30° | 281.5 | 17.5 |
| 30°-40° | 329.8 | 20.5 |
| 40°-50° | 331.1 | 20.6 |
| 50°-60° | 267.2 | 16.6 |
| 60°-70° | 86.4 | 5.4 |
| 70°-80° | 37.3 | 2.3 |
| 80°-90° | 15.4 | 1.0 |
| 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° | 539.6 | 33.6 |
| 0°-40° | 869.5 | 54.1 |
| 0°-60° | 1467.7 | 91.3 |
| 0°-90° | 1606.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1606.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 719 | |
| 5° | 714 | 68 |
| 15° | 676 | 190 |
| 25° | 611 | 282 |
| 35° | 527 | 330 |
| 45° | 430 | 331 |
| 55° | 313 | 267 |
| 65° | 73 | 86 |
| 75° | 35 | 37 |
| 85° | 15 | 15 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 719.4 |
| 2.5° | 718.6 |
| 5° | 714.3 |
| 7.5° | 707.8 |
| 10° | 699.2 |
| 12.5° | 688.0 |
| 15° | 675.9 |
| 17.5° | 661.3 |
| 20° | 646.2 |
| 22.5° | 629.4 |
| 25° | 611.3 |
| 27.5° | 591.9 |
| 30° | 571.7 |
| 32.5° | 550.1 |
| 35° | 527.3 |
| 37.5° | 504.0 |
| 40° | 479.9 |
| 42.5° | 454.9 |
| 45° | 429.5 |
| 47.5° | 403.2 |
| 50° | 376.1 |
| 52.5° | 348.1 |
| 55° | 312.8 |
| 57.5° | 258.1 |
| 60° | 183.1 |
| 62.5° | 114.6 |
| 65° | 73.2 |
| 67.5° | 50.4 |
| 70° | 43.5 |
| 72.5° | 40.1 |
| 75° | 35.3 |
| 77.5° | 31.0 |
| 80° | 26.3 |
| 82.5° | 21.1 |
| 85° | 14.6 |
| 87.5° | 7.8 |
| 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 | 16.80 | 18.30 | 17.16 | 18.61 | 18.93 | 16.80 | 18.30 | 17.16 | 18.61 | 18.93 |
| | 3H | 16.91 | 18.24 | 17.28 | 18.57 | 18.93 | 16.91 | 18.24 | 17.28 | 18.57 | 18.93 |
| | 4H | 16.99 | 18.24 | 17.39 | 18.59 | 18.96 | 16.99 | 18.24 | 17.39 | 18.59 | 18.96 |
| | 6H | 17.11 | 18.25 | 17.52 | 18.62 | 19.01 | 17.11 | 18.25 | 17.52 | 18.62 | 19.01 |
| | 8H | 17.16 | 18.25 | 17.59 | 18.64 | 19.04 | 17.16 | 18.25 | 17.59 | 18.64 | 19.04 |
| | 12H | 17.21 | 18.25 | 17.64 | 18.63 | 19.06 | 17.21 | 18.25 | 17.64 | 18.63 | 19.06 |
| 4H | 2H | 16.76 | 18.01 | 17.16 | 18.35 | 18.73 | 16.76 | 18.01 | 17.16 | 18.35 | 18.73 |
| | 3H | 16.97 | 17.98 | 17.38 | 18.38 | 18.78 | 16.97 | 17.98 | 17.38 | 18.38 | 18.78 |
| | 4H | 17.12 | 18.03 | 17.56 | 18.45 | 18.89 | 17.12 | 18.03 | 17.56 | 18.45 | 18.89 |
| | 6H | 17.34 | 18.13 | 17.80 | 18.58 | 19.04 | 17.34 | 18.13 | 17.80 | 18.58 | 19.04 |
| | 8H | 17.45 | 18.18 | 17.91 | 18.63 | 19.10 | 17.45 | 18.18 | 17.91 | 18.63 | 19.10 |
| | 12H | 17.55 | 18.21 | 18.03 | 18.69 | 19.16 | 17.55 | 18.21 | 18.03 | 18.69 | 19.16 |
| 8H | 4H | 17.14 | 17.88 | 17.60 | 18.32 | 18.79 | 17.14 | 17.88 | 17.60 | 18.32 | 18.79 |
| | 6H | 17.44 | 18.05 | 17.94 | 18.54 | 19.02 | 17.44 | 18.05 | 17.94 | 18.54 | 19.02 |
| | 8H | 17.60 | 18.16 | 18.12 | 18.67 | 19.16 | 17.60 | 18.16 | 18.12 | 18.67 | 19.16 |
| | 12H | 17.78 | 18.28 | 18.29 | 18.77 | 19.33 | 17.78 | 18.28 | 18.29 | 18.77 | 19.33 |
| 12H | 4H | 17.13 | 17.79 | 17.61 | 18.27 | 18.74 | 17.13 | 17.79 | 17.61 | 18.27 | 18.74 |
| | 6H | 17.44 | 18.00 | 17.96 | 18.51 | 19.00 | 17.44 | 18.00 | 17.96 | 18.51 | 19.00 |
| | 8H | 17.66 | 18.15 | 18.17 | 18.65 | 19.21 | 17.66 | 18.15 | 18.17 | 18.65 | 19.21 |