

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: P866143

Luminaire Tested: PRLX-2001-M-940-75L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866143
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2001-M-940-75L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

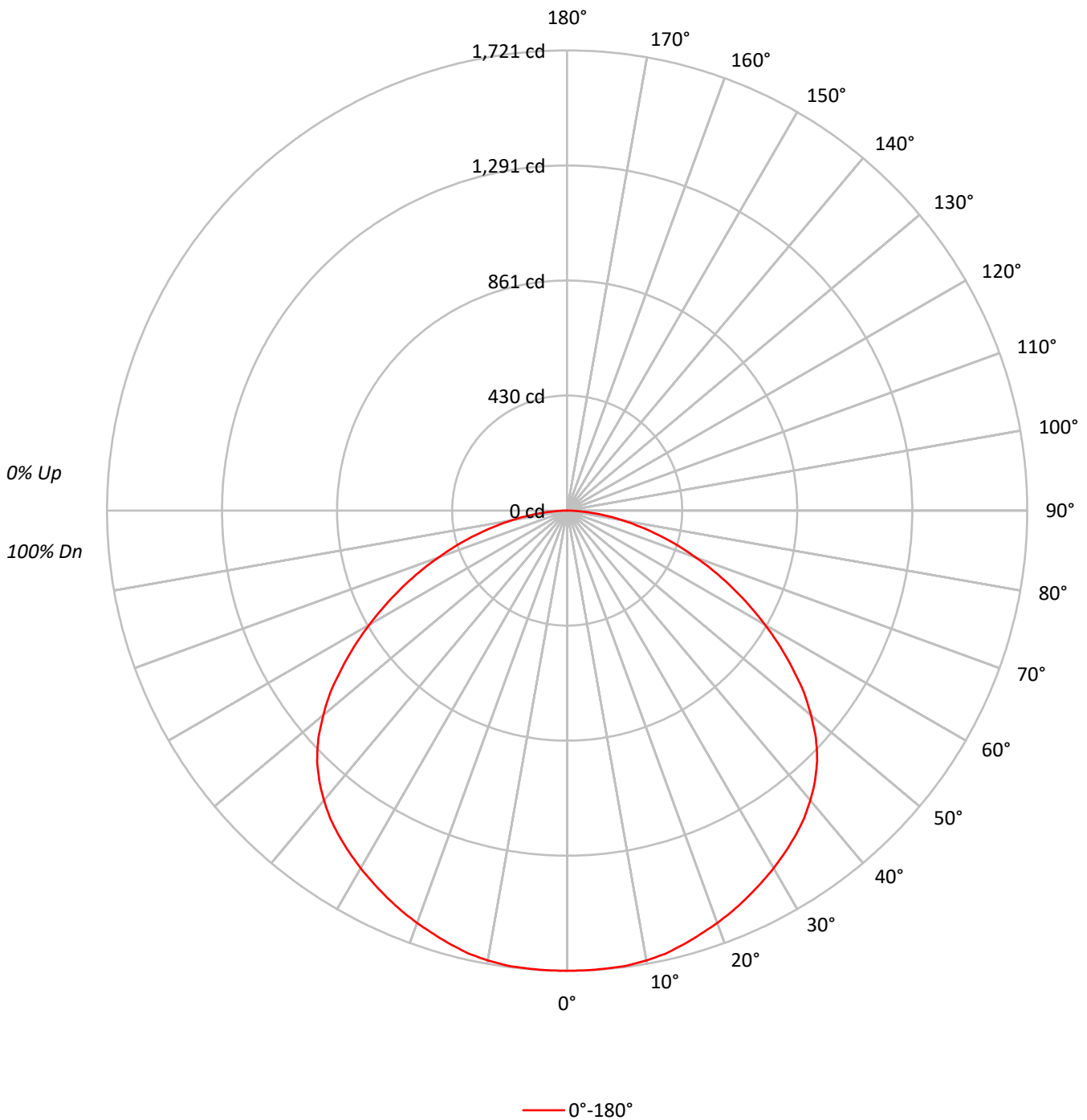
Lumens per Lamp: N/A
Luminaire Lumens: 5395.6 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.47
Luminous Opening: Circular (Dia: 1.27' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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: 0.333 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 | 109 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 50 | 41 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 26 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 14605 |
| 5° | 14642 |
| 10° | 14719 |
| 15° | 14760 |
| 20° | 14823 |
| 25° | 14945 |
| 30° | 15133 |
| 35° | 15397 |
| 40° | 15677 |
| 45° | 15873 |
| 50° | 15726 |
| 55° | 15233 |
| 60° | 14513 |
| 65° | 13668 |
| 70° | 12666 |
| 75° | 11653 |
| 80° | 10316 |
| 85° | 8393 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15873 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 163.8 | 3.0 |
| 10°-20° | 474.7 | 8.8 |
| 20°-30° | 736.8 | 13.7 |
| 30°-40° | 930.8 | 17.3 |
| 40°-50° | 1016.1 | 18.8 |
| 50°-60° | 919.4 | 17.0 |
| 60°-70° | 674.6 | 12.5 |
| 70°-80° | 376.8 | 7.0 |
| 80°-90° | 102.6 | 1.9 |
| 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° | 1375.4 | 25.5 |
| 0°-40° | 2306.1 | 42.7 |
| 0°-60° | 4241.6 | 78.6 |
| 0°-90° | 5395.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5395.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1721 | |
| 5° | 1719 | 164 |
| 15° | 1680 | 475 |
| 25° | 1596 | 737 |
| 35° | 1486 | 931 |
| 45° | 1323 | 1016 |
| 55° | 1030 | 919 |
| 65° | 681 | 675 |
| 75° | 355 | 377 |
| 85° | 86 | 103 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1721.1 |
| 2.5° | 1721.1 |
| 5° | 1718.9 |
| 7.5° | 1716.8 |
| 10° | 1708.1 |
| 12.5° | 1697.4 |
| 15° | 1680.1 |
| 17.5° | 1660.7 |
| 20° | 1641.4 |
| 22.5° | 1619.8 |
| 25° | 1596.1 |
| 27.5° | 1570.3 |
| 30° | 1544.4 |
| 32.5° | 1516.4 |
| 35° | 1486.3 |
| 37.5° | 1454.0 |
| 40° | 1415.2 |
| 42.5° | 1372.1 |
| 45° | 1322.6 |
| 47.5° | 1262.3 |
| 50° | 1191.2 |
| 52.5° | 1115.8 |
| 55° | 1029.6 |
| 57.5° | 943.5 |
| 60° | 855.1 |
| 62.5° | 766.8 |
| 65° | 680.7 |
| 67.5° | 596.7 |
| 70° | 510.5 |
| 72.5° | 433.0 |
| 75° | 355.4 |
| 77.5° | 280.0 |
| 80° | 211.1 |
| 82.5° | 146.5 |
| 85° | 86.2 |
| 87.5° | 38.8 |
| 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 | 21.71 | 23.38 | 22.08 | 23.69 | 24.01 | 21.71 | 23.38 | 22.08 | 23.69 | 24.01 |
| | 3H | 23.40 | 24.91 | 23.78 | 25.24 | 25.60 | 23.40 | 24.91 | 23.78 | 25.24 | 25.60 |
| | 4H | 24.03 | 25.45 | 24.43 | 25.80 | 26.17 | 24.03 | 25.45 | 24.43 | 25.80 | 26.17 |
| | 6H | 24.49 | 25.80 | 24.90 | 26.17 | 26.56 | 24.49 | 25.80 | 24.90 | 26.17 | 26.56 |
| | 8H | 24.63 | 25.89 | 25.05 | 26.28 | 26.67 | 24.63 | 25.89 | 25.05 | 26.28 | 26.67 |
| | 12H | 24.72 | 25.93 | 25.15 | 26.31 | 26.74 | 24.72 | 25.93 | 25.15 | 26.31 | 26.74 |
| 4H | 2H | 22.32 | 23.74 | 22.71 | 24.08 | 24.46 | 22.32 | 23.74 | 22.71 | 24.08 | 24.46 |
| | 3H | 24.23 | 25.42 | 24.64 | 25.81 | 26.21 | 24.23 | 25.42 | 24.64 | 25.81 | 26.21 |
| | 4H | 24.98 | 26.06 | 25.41 | 26.47 | 26.91 | 24.98 | 26.06 | 25.41 | 26.47 | 26.91 |
| | 6H | 25.56 | 26.50 | 26.02 | 26.94 | 27.40 | 25.56 | 26.50 | 26.02 | 26.94 | 27.40 |
| | 8H | 25.75 | 26.63 | 26.21 | 27.08 | 27.54 | 25.75 | 26.63 | 26.21 | 27.08 | 27.54 |
| | 12H | 25.89 | 26.68 | 26.37 | 27.15 | 27.62 | 25.89 | 26.68 | 26.37 | 27.15 | 27.62 |
| 8H | 4H | 25.28 | 26.16 | 25.74 | 26.60 | 27.07 | 25.28 | 26.16 | 25.74 | 26.60 | 27.07 |
| | 6H | 25.98 | 26.71 | 26.47 | 27.20 | 27.67 | 25.98 | 26.71 | 26.47 | 27.20 | 27.67 |
| | 8H | 26.23 | 26.89 | 26.74 | 27.40 | 27.88 | 26.23 | 26.89 | 26.74 | 27.40 | 27.88 |
| | 12H | 26.43 | 27.02 | 26.94 | 27.51 | 28.07 | 26.43 | 27.02 | 26.94 | 27.51 | 28.07 |
| 12H | 4H | 25.31 | 26.10 | 25.79 | 26.58 | 27.05 | 25.31 | 26.10 | 25.79 | 26.58 | 27.05 |
| | 6H | 26.03 | 26.69 | 26.53 | 27.19 | 27.68 | 26.03 | 26.69 | 26.53 | 27.19 | 27.68 |
| | 8H | 26.34 | 26.93 | 26.85 | 27.42 | 27.97 | 26.34 | 26.93 | 26.85 | 27.42 | 27.97 |