

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: P865604

Luminaire Tested: PRLX-2002-S-927-25L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-S-927-25L-G-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

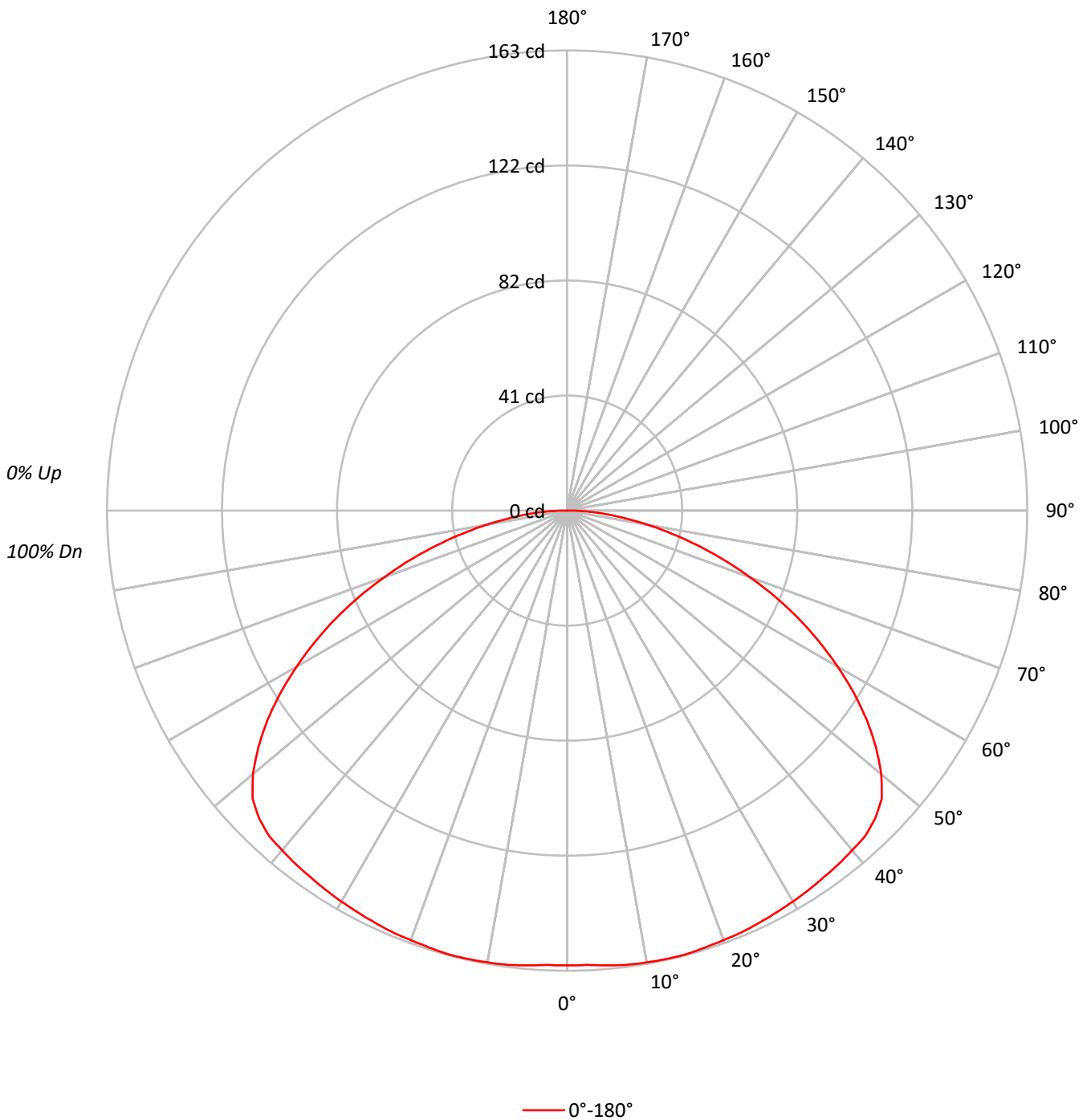
Lumens per Lamp: N/A
Luminaire Lumens: 624.7 lumens
Efficiency: N/A
Efficacy: 21.5 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.65
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 29.1
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 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 93 | 89 | | 92 | 89 | 87 | | 89 | 86 | 84 | 82 |
| 2 | 97 | 88 | 81 | 75 | 95 | 87 | 80 | 74 | 83 | 77 | 72 | | 80 | 75 | 71 | | 77 | 73 | 69 | 67 |
| 3 | 88 | 77 | 68 | 61 | 86 | 75 | 67 | 61 | 72 | 65 | 59 | | 69 | 63 | 58 | | 67 | 62 | 57 | 55 |
| 4 | 80 | 67 | 58 | 51 | 78 | 66 | 57 | 51 | 63 | 56 | 50 | | 61 | 54 | 49 | | 59 | 53 | 48 | 46 |
| 5 | 73 | 60 | 50 | 43 | 71 | 58 | 50 | 43 | 56 | 48 | 42 | | 54 | 47 | 42 | | 52 | 46 | 41 | 39 |
| 6 | 67 | 53 | 44 | 37 | 65 | 52 | 43 | 37 | 50 | 42 | 37 | | 49 | 42 | 36 | | 47 | 41 | 36 | 34 |
| 7 | 62 | 48 | 39 | 32 | 60 | 47 | 38 | 32 | 46 | 38 | 32 | | 44 | 37 | 32 | | 43 | 36 | 31 | 29 |
| 8 | 58 | 43 | 35 | 28 | 56 | 43 | 34 | 28 | 41 | 34 | 28 | | 40 | 33 | 28 | | 39 | 33 | 28 | 26 |
| 9 | 54 | 40 | 31 | 25 | 52 | 39 | 31 | 25 | 38 | 30 | 25 | | 37 | 30 | 25 | | 36 | 29 | 25 | 23 |
| 10 | 50 | 36 | 28 | 23 | 49 | 36 | 28 | 23 | 35 | 28 | 23 | | 34 | 27 | 22 | | 33 | 27 | 22 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3026 |
| 5° | 3049 |
| 10° | 3100 |
| 15° | 3164 |
| 20° | 3236 |
| 25° | 3339 |
| 30° | 3468 |
| 35° | 3635 |
| 40° | 3852 |
| 45° | 4099 |
| 50° | 4246 |
| 55° | 4248 |
| 60° | 4159 |
| 65° | 4018 |
| 70° | 3779 |
| 75° | 3484 |
| 80° | 3137 |
| 85° | 2802 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 4255 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 15.5 | 2.5 |
| 10°-20° | 46.0 | 7.4 |
| 20°-30° | 74.5 | 11.9 |
| 30°-40° | 99.6 | 15.9 |
| 40°-50° | 118.5 | 19.0 |
| 50°-60° | 115.5 | 18.5 |
| 60°-70° | 89.2 | 14.3 |
| 70°-80° | 51.0 | 8.2 |
| 80°-90° | 14.9 | 2.4 |
| 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° | 136.0 | 21.8 |
| 0°-40° | 235.6 | 37.7 |
| 0°-60° | 469.6 | 75.2 |
| 0°-90° | 624.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 624.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 161 | |
| 5° | 162 | 15 |
| 15° | 163 | 46 |
| 25° | 161 | 75 |
| 35° | 158 | 100 |
| 45° | 154 | 119 |
| 55° | 130 | 115 |
| 65° | 90 | 89 |
| 75° | 48 | 51 |
| 85° | 13 | 15 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 161.1 |
| 2.5° | 161.1 |
| 5° | 161.7 |
| 7.5° | 162.3 |
| 10° | 162.5 |
| 12.5° | 162.7 |
| 15° | 162.7 |
| 17.5° | 162.3 |
| 20° | 161.9 |
| 22.5° | 161.7 |
| 25° | 161.1 |
| 27.5° | 160.5 |
| 30° | 159.9 |
| 32.5° | 159.3 |
| 35° | 158.5 |
| 37.5° | 157.9 |
| 40° | 157.1 |
| 42.5° | 156.3 |
| 45° | 154.3 |
| 47.5° | 151.1 |
| 50° | 145.3 |
| 52.5° | 137.9 |
| 55° | 129.7 |
| 57.5° | 120.5 |
| 60° | 110.7 |
| 62.5° | 100.7 |
| 65° | 90.4 |
| 67.5° | 79.8 |
| 70° | 68.8 |
| 72.5° | 58.4 |
| 75° | 48.0 |
| 77.5° | 38.2 |
| 80° | 29.0 |
| 82.5° | 20.4 |
| 85° | 13.0 |
| 87.5° | 6.8 |
| 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 | 17.59 | 19.32 | 17.95 | 19.63 | 19.95 | 17.59 | 19.32 | 17.95 | 19.63 | 19.95 |
| | 3H | 19.42 | 20.99 | 19.80 | 21.32 | 21.68 | 19.42 | 20.99 | 19.80 | 21.32 | 21.68 |
| | 4H | 20.10 | 21.58 | 20.49 | 21.93 | 22.30 | 20.10 | 21.58 | 20.49 | 21.93 | 22.30 |
| | 6H | 20.60 | 21.97 | 21.01 | 22.33 | 22.72 | 20.60 | 21.97 | 21.01 | 22.33 | 22.72 |
| | 8H | 20.76 | 22.08 | 21.18 | 22.46 | 22.86 | 20.76 | 22.08 | 21.18 | 22.46 | 22.86 |
| | 12H | 20.88 | 22.14 | 21.30 | 22.52 | 22.95 | 20.88 | 22.14 | 21.30 | 22.52 | 22.95 |
| 4H | 2H | 18.25 | 19.73 | 18.65 | 20.08 | 20.45 | 18.25 | 19.73 | 18.65 | 20.08 | 20.45 |
| | 3H | 20.30 | 21.55 | 20.71 | 21.94 | 22.34 | 20.30 | 21.55 | 20.71 | 21.94 | 22.34 |
| | 4H | 21.10 | 22.23 | 21.53 | 22.64 | 23.08 | 21.10 | 22.23 | 21.53 | 22.64 | 23.08 |
| | 6H | 21.73 | 22.72 | 22.18 | 23.16 | 23.61 | 21.73 | 22.72 | 22.18 | 23.16 | 23.61 |
| | 8H | 21.94 | 22.87 | 22.40 | 23.31 | 23.78 | 21.94 | 22.87 | 22.40 | 23.31 | 23.78 |
| | 12H | 22.11 | 22.95 | 22.59 | 23.42 | 23.89 | 22.11 | 22.95 | 22.59 | 23.42 | 23.89 |
| 8H | 4H | 21.43 | 22.36 | 21.88 | 22.80 | 23.26 | 21.43 | 22.36 | 21.88 | 22.80 | 23.26 |
| | 6H | 22.18 | 22.95 | 22.67 | 23.44 | 23.91 | 22.18 | 22.95 | 22.67 | 23.44 | 23.91 |
| | 8H | 22.46 | 23.16 | 22.97 | 23.67 | 24.15 | 22.46 | 23.16 | 22.97 | 23.67 | 24.15 |
| | 12H | 22.71 | 23.33 | 23.21 | 23.82 | 24.37 | 22.71 | 23.33 | 23.21 | 23.82 | 24.37 |
| 12H | 4H | 21.47 | 22.31 | 21.94 | 22.78 | 23.25 | 21.47 | 22.31 | 21.94 | 22.78 | 23.25 |
| | 6H | 22.24 | 22.94 | 22.74 | 23.44 | 23.92 | 22.24 | 22.94 | 22.74 | 23.44 | 23.92 |
| | 8H | 22.59 | 23.21 | 23.09 | 23.69 | 24.25 | 22.59 | 23.21 | 23.09 | 23.69 | 24.25 |