

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: P866280

Luminaire Tested: PRLX-2002-M-935-07L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-53)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-M-935-07L-L-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

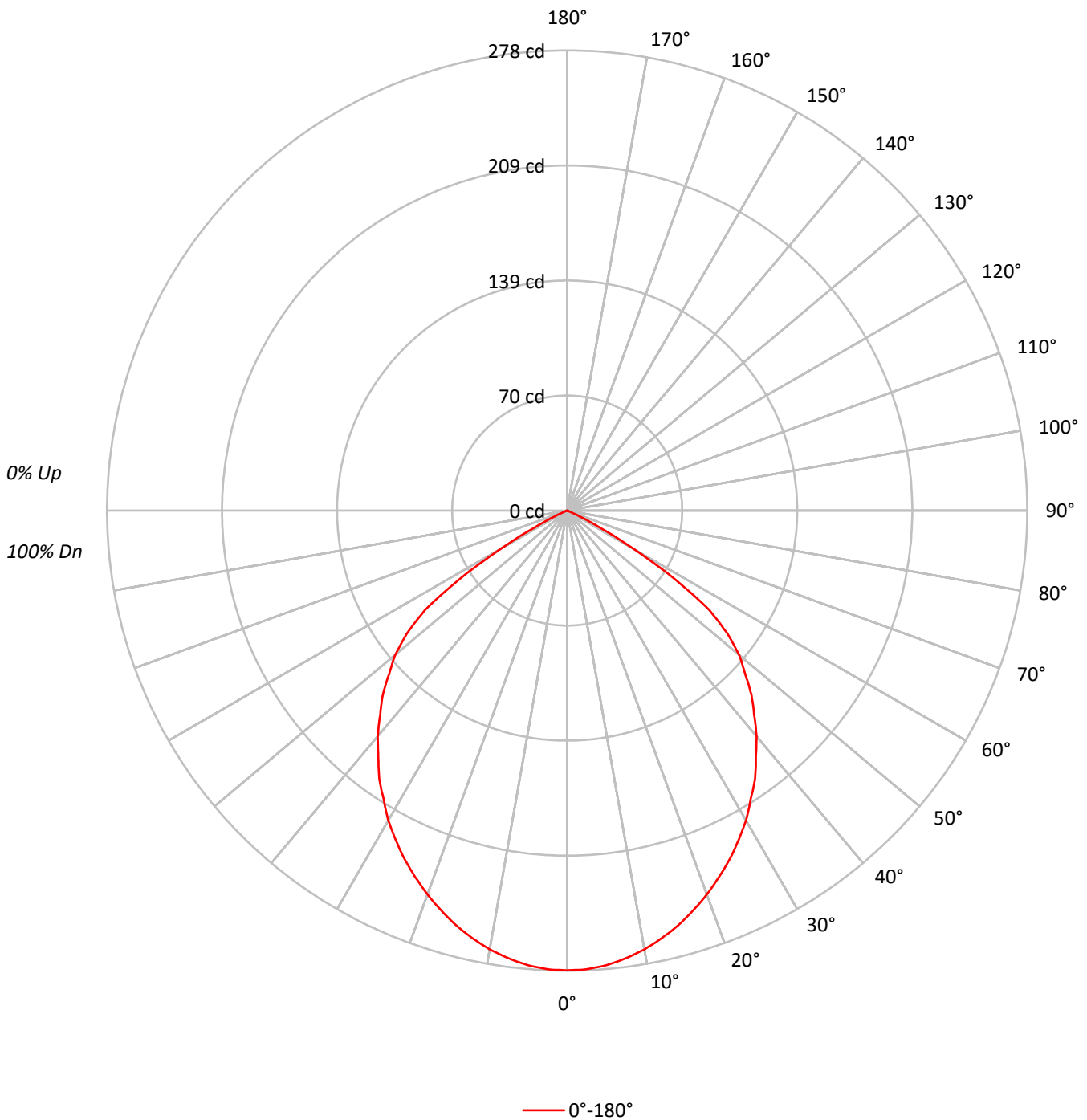
Lumens per Lamp: N/A
Luminaire Lumens: 552.7 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 8.2
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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 95 | 93 | 92 | 90 |
| 2 | 104 | 97 | 92 | 88 | 101 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 86 | 83 | 81 | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 75 | 83 | 78 | 74 | 81 | 76 | 73 | 78 | 75 | 71 | 69 |
| 4 | 89 | 79 | 72 | 66 | 87 | 78 | 71 | 66 | 75 | 69 | 65 | 73 | 68 | 64 | 71 | 67 | 63 | 61 |
| 5 | 83 | 71 | 64 | 58 | 81 | 70 | 63 | 58 | 68 | 62 | 57 | 67 | 61 | 57 | 65 | 60 | 56 | 54 |
| 6 | 77 | 65 | 57 | 51 | 75 | 64 | 57 | 51 | 62 | 56 | 51 | 61 | 55 | 50 | 59 | 54 | 50 | 48 |
| 7 | 71 | 59 | 51 | 46 | 70 | 58 | 51 | 46 | 57 | 50 | 45 | 56 | 50 | 45 | 54 | 49 | 45 | 43 |
| 8 | 67 | 54 | 47 | 41 | 65 | 54 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 |
| 9 | 62 | 50 | 43 | 37 | 61 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 46 | 41 | 37 | 35 |
| 10 | 59 | 46 | 39 | 34 | 57 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 43 | 38 | 34 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 2210 |
| 5° | 2202 |
| 10° | 2175 |
| 15° | 2137 |
| 20° | 2089 |
| 25° | 2040 |
| 30° | 1985 |
| 35° | 1922 |
| 40° | 1849 |
| 45° | 1772 |
| 50° | 1678 |
| 55° | 1454 |
| 60° | 743 |
| 65° | 145 |
| 70° | 14 |
| 75° | 18 |
| 80° | 18 |
| 85° | 18 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1772 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 26.1 | 4.7 |
| 10°-20° | 73.0 | 13.2 |
| 20°-30° | 107.0 | 19.3 |
| 30°-40° | 123.4 | 22.3 |
| 40°-50° | 121.0 | 21.9 |
| 50°-60° | 87.9 | 15.9 |
| 60°-70° | 13.5 | 2.4 |
| 70°-80° | 0.6 | 0.1 |
| 80°-90° | 0.3 | 0.0 |
| 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° | 206.1 | 37.3 |
| 0°-40° | 329.5 | 59.6 |
| 0°-60° | 538.4 | 97.4 |
| 0°-90° | 552.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 552.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 278 | |
| 5° | 276 | 26 |
| 15° | 259 | 73 |
| 25° | 232 | 107 |
| 35° | 198 | 123 |
| 45° | 158 | 121 |
| 55° | 105 | 88 |
| 65° | 8 | 13 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 277.8 |
| 2.5° | 277.4 |
| 5° | 275.7 |
| 7.5° | 272.8 |
| 10° | 269.2 |
| 12.5° | 264.6 |
| 15° | 259.4 |
| 17.5° | 253.3 |
| 20° | 246.8 |
| 22.5° | 239.7 |
| 25° | 232.4 |
| 27.5° | 224.3 |
| 30° | 216.1 |
| 32.5° | 206.5 |
| 35° | 197.9 |
| 37.5° | 187.4 |
| 40° | 178.0 |
| 42.5° | 167.2 |
| 45° | 157.5 |
| 47.5° | 145.8 |
| 50° | 135.6 |
| 52.5° | 122.0 |
| 55° | 104.8 |
| 57.5° | 77.4 |
| 60° | 46.7 |
| 62.5° | 22.2 |
| 65° | 7.7 |
| 67.5° | 1.9 |
| 70° | 0.6 |
| 72.5° | 0.6 |
| 75° | 0.6 |
| 77.5° | 0.4 |
| 80° | 0.4 |
| 82.5° | 0.4 |
| 85° | 0.2 |
| 87.5° | 0.2 |
| 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 | 12.19 | 13.60 | 12.55 | 13.92 | 14.23 | 12.19 | 13.60 | 12.55 | 13.92 | 14.23 |
| | 3H | 12.07 | 13.31 | 12.45 | 13.64 | 14.01 | 12.07 | 13.31 | 12.45 | 13.64 | 14.01 |
| | 4H | 12.01 | 13.16 | 12.41 | 13.51 | 13.89 | 12.01 | 13.16 | 12.41 | 13.51 | 13.89 |
| | 6H | 11.93 | 12.99 | 12.35 | 13.36 | 13.75 | 11.93 | 12.99 | 12.35 | 13.36 | 13.75 |
| | 8H | 11.89 | 12.89 | 12.32 | 13.29 | 13.69 | 11.89 | 12.89 | 12.32 | 13.29 | 13.69 |
| | 12H | 11.86 | 12.81 | 12.29 | 13.19 | 13.62 | 11.86 | 12.81 | 12.29 | 13.19 | 13.62 |
| 4H | 2H | 12.03 | 13.18 | 12.43 | 13.53 | 13.91 | 12.03 | 13.18 | 12.43 | 13.53 | 13.91 |
| | 3H | 11.91 | 12.84 | 12.33 | 13.24 | 13.64 | 11.91 | 12.84 | 12.33 | 13.24 | 13.64 |
| | 4H | 11.83 | 12.65 | 12.27 | 13.07 | 13.51 | 11.83 | 12.65 | 12.27 | 13.07 | 13.51 |
| | 6H | 11.76 | 12.46 | 12.22 | 12.91 | 13.37 | 11.76 | 12.46 | 12.22 | 12.91 | 13.37 |
| | 8H | 11.70 | 12.36 | 12.17 | 12.81 | 13.28 | 11.70 | 12.36 | 12.17 | 12.81 | 13.28 |
| | 12H | 11.66 | 12.24 | 12.14 | 12.72 | 13.20 | 11.66 | 12.24 | 12.14 | 12.72 | 13.20 |
| 8H | 4H | 11.70 | 12.36 | 12.17 | 12.81 | 13.28 | 11.70 | 12.36 | 12.17 | 12.81 | 13.28 |
| | 6H | 11.60 | 12.14 | 12.10 | 12.64 | 13.12 | 11.60 | 12.14 | 12.10 | 12.64 | 13.12 |
| | 8H | 11.53 | 12.03 | 12.05 | 12.54 | 13.03 | 11.53 | 12.03 | 12.05 | 12.54 | 13.03 |
| | 12H | 11.48 | 11.93 | 12.00 | 12.42 | 12.99 | 11.48 | 11.93 | 12.00 | 12.42 | 12.99 |
| 12H | 4H | 11.65 | 12.24 | 12.14 | 12.72 | 13.20 | 11.65 | 12.24 | 12.14 | 12.72 | 13.20 |
| | 6H | 11.53 | 12.03 | 12.05 | 12.54 | 13.03 | 11.53 | 12.03 | 12.05 | 12.54 | 13.03 |
| | 8H | 11.48 | 11.93 | 11.99 | 12.42 | 12.99 | 11.48 | 11.93 | 11.99 | 12.42 | 12.99 |