

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: P865831

Luminaire Tested: PRLX-2004-S-935-15L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-S-935-15L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

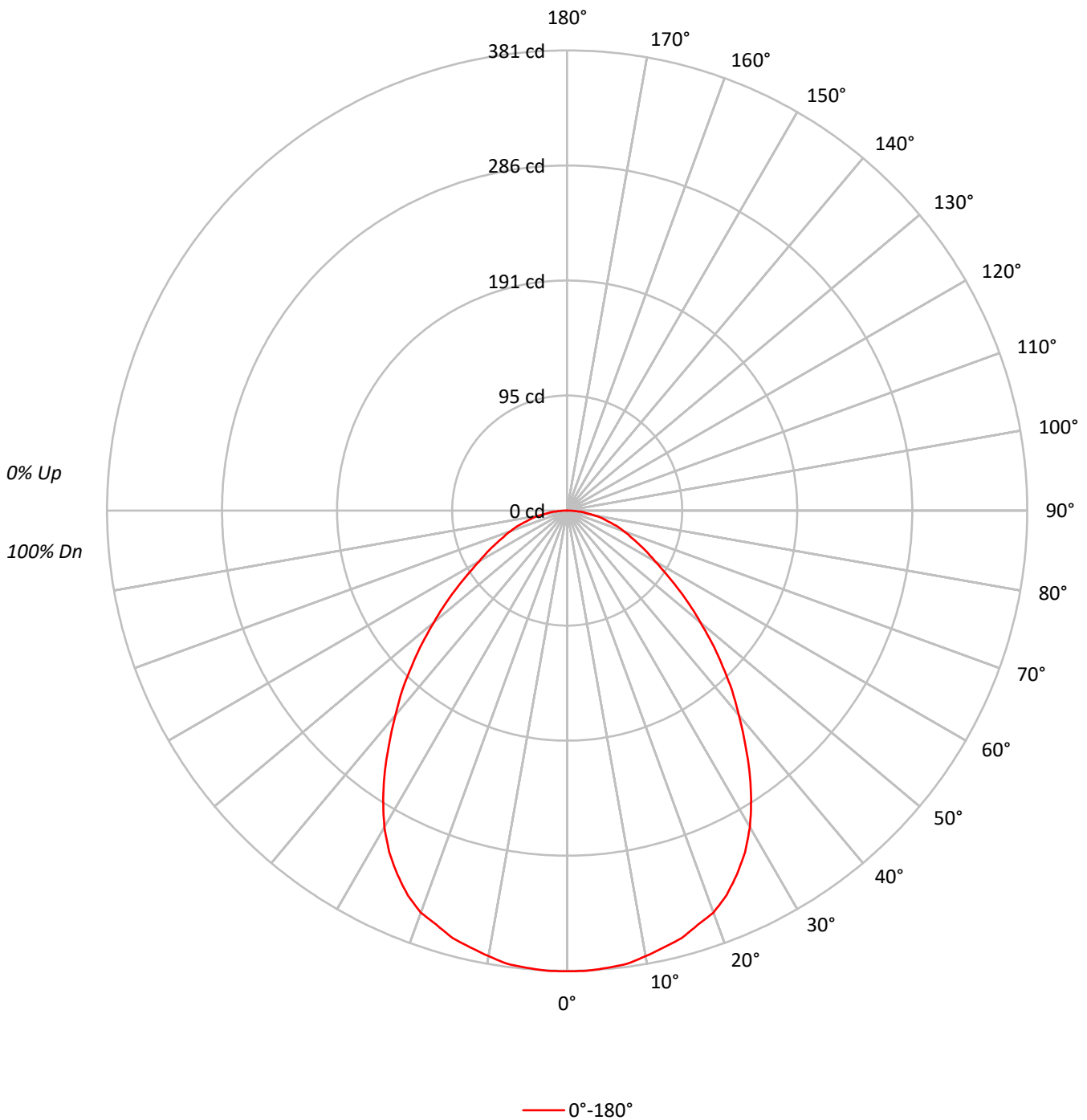
Lumens per Lamp: N/A
Luminaire Lumens: 812.1 lumens
Efficiency: N/A
Efficacy: 52.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.21
Luminous Opening: Circular (Dia: 0.92' x H: 0')
CIE Type: Direct

Input Watts (W): 15.6
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 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 86 | 82 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 43 | 67 | 56 | 48 | 42 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 38 | 63 | 51 | 44 | 38 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 36 |
| 9 | 61 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 44 | 39 | 34 | 33 |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 6221 |
| 5° | 6222 |
| 10° | 6204 |
| 15° | 6187 |
| 20° | 6148 |
| 25° | 5984 |
| 30° | 5699 |
| 35° | 5243 |
| 40° | 4710 |
| 45° | 4196 |
| 50° | 3651 |
| 55° | 3165 |
| 60° | 2743 |
| 65° | 2512 |
| 70° | 2394 |
| 75° | 2225 |
| 80° | 2170 |
| 85° | 2040 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4196 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 36.1 | 4.4 |
| 10°-20° | 103.2 | 12.7 |
| 20°-30° | 152.6 | 18.8 |
| 30°-40° | 164.0 | 20.2 |
| 40°-50° | 140.4 | 17.3 |
| 50°-60° | 100.3 | 12.3 |
| 60°-70° | 65.3 | 8.0 |
| 70°-80° | 38.3 | 4.7 |
| 80°-90° | 12.0 | 1.5 |
| 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° | 291.9 | 35.9 |
| 0°-40° | 455.9 | 56.1 |
| 0°-60° | 696.6 | 85.8 |
| 0°-90° | 812.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 812.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 381 | |
| 5° | 380 | 36 |
| 15° | 366 | 103 |
| 25° | 332 | 153 |
| 35° | 263 | 164 |
| 45° | 182 | 140 |
| 55° | 111 | 100 |
| 65° | 65 | 65 |
| 75° | 35 | 38 |
| 85° | 11 | 12 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 381.4 |
| 2.5° | 381.4 |
| 5° | 380.0 |
| 7.5° | 378.6 |
| 10° | 374.6 |
| 12.5° | 370.5 |
| 15° | 366.4 |
| 17.5° | 359.6 |
| 20° | 354.2 |
| 22.5° | 344.7 |
| 25° | 332.5 |
| 27.5° | 318.9 |
| 30° | 302.6 |
| 32.5° | 283.6 |
| 35° | 263.3 |
| 37.5° | 241.6 |
| 40° | 221.2 |
| 42.5° | 202.2 |
| 45° | 181.9 |
| 47.5° | 162.9 |
| 50° | 143.9 |
| 52.5° | 127.6 |
| 55° | 111.3 |
| 57.5° | 96.4 |
| 60° | 84.1 |
| 62.5° | 74.6 |
| 65° | 65.1 |
| 67.5° | 57.0 |
| 70° | 50.2 |
| 72.5° | 43.4 |
| 75° | 35.3 |
| 77.5° | 29.9 |
| 80° | 23.1 |
| 82.5° | 16.3 |
| 85° | 10.9 |
| 87.5° | 5.4 |
| 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 | 14.92 | 16.41 | 15.28 | 16.72 | 17.04 | 14.92 | 16.41 | 15.28 | 16.72 | 17.04 |
| | 3H | 16.45 | 17.79 | 16.82 | 18.11 | 18.48 | 16.45 | 17.79 | 16.82 | 18.11 | 18.48 |
| | 4H | 17.06 | 18.32 | 17.46 | 18.67 | 19.05 | 17.06 | 18.32 | 17.46 | 18.67 | 19.05 |
| | 6H | 17.58 | 18.74 | 18.00 | 19.11 | 19.50 | 17.58 | 18.74 | 18.00 | 19.11 | 19.50 |
| | 8H | 17.76 | 18.86 | 18.18 | 19.25 | 19.65 | 17.76 | 18.86 | 18.18 | 19.25 | 19.65 |
| | 12H | 17.88 | 18.94 | 18.31 | 19.32 | 19.75 | 17.88 | 18.94 | 18.31 | 19.32 | 19.75 |
| 4H | 2H | 15.41 | 16.67 | 15.81 | 17.02 | 17.40 | 15.41 | 16.67 | 15.81 | 17.02 | 17.40 |
| | 3H | 17.20 | 18.24 | 17.61 | 18.64 | 19.05 | 17.20 | 18.24 | 17.61 | 18.64 | 19.05 |
| | 4H | 17.95 | 18.89 | 18.38 | 19.31 | 19.75 | 17.95 | 18.89 | 18.38 | 19.31 | 19.75 |
| | 6H | 18.62 | 19.43 | 19.07 | 19.88 | 20.34 | 18.62 | 19.43 | 19.07 | 19.88 | 20.34 |
| | 8H | 18.84 | 19.61 | 19.30 | 20.05 | 20.52 | 18.84 | 19.61 | 19.30 | 20.05 | 20.52 |
| | 12H | 19.02 | 19.70 | 19.50 | 20.18 | 20.65 | 19.02 | 19.70 | 19.50 | 20.18 | 20.65 |
| 8H | 4H | 18.24 | 19.01 | 18.71 | 19.45 | 19.92 | 18.24 | 19.01 | 18.71 | 19.45 | 19.92 |
| | 6H | 19.04 | 19.68 | 19.54 | 20.17 | 20.65 | 19.04 | 19.68 | 19.54 | 20.17 | 20.65 |
| | 8H | 19.35 | 19.92 | 19.86 | 20.43 | 20.92 | 19.35 | 19.92 | 19.86 | 20.43 | 20.92 |
| | 12H | 19.61 | 20.12 | 20.12 | 20.61 | 21.18 | 19.61 | 20.12 | 20.12 | 20.61 | 21.18 |
| 12H | 4H | 18.27 | 18.96 | 18.76 | 19.44 | 19.91 | 18.27 | 18.96 | 18.76 | 19.44 | 19.91 |
| | 6H | 19.10 | 19.67 | 19.61 | 20.18 | 20.67 | 19.10 | 19.67 | 19.61 | 20.18 | 20.67 |
| | 8H | 19.47 | 19.97 | 19.98 | 20.46 | 21.03 | 19.47 | 19.97 | 19.98 | 20.46 | 21.03 |