

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: P867196

Luminaire Tested: PRLX-2004-L-927-15L-L-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-87)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-L-927-15L-L-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 1
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

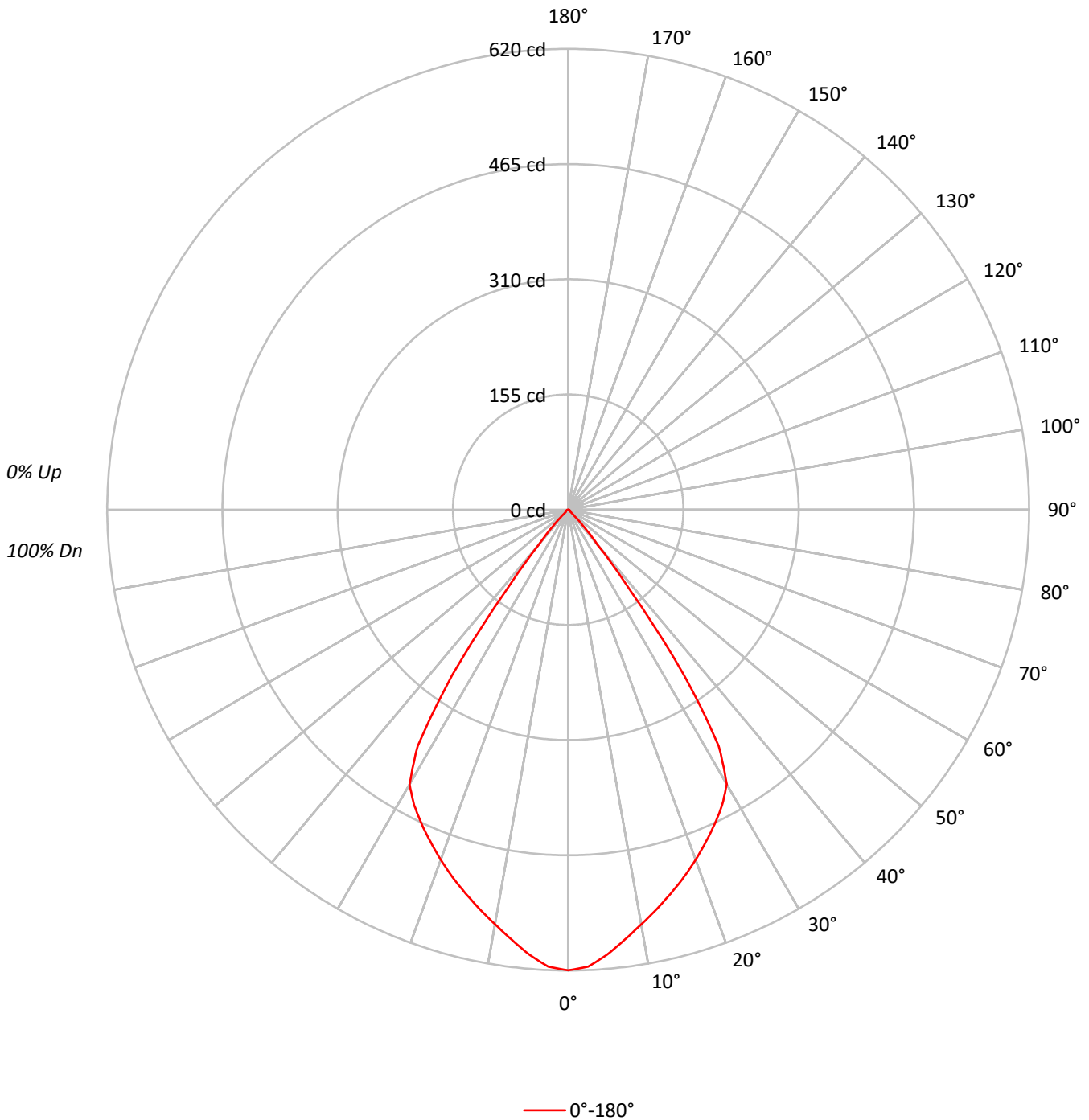
Lumens per Lamp: N/A
Luminaire Lumens: 601.8 lumens
Efficiency: N/A
Efficacy: 36.7 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.05 / 0.98
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 16.4
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 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 |
| 2 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 87 |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 83 | 87 | 84 | 82 | 81 |
| 4 | 97 | 89 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 |
| 5 | 92 | 84 | 78 | 73 | 90 | 83 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 72 | 78 | 74 | 71 | 70 |
| 6 | 87 | 78 | 72 | 68 | 86 | 78 | 72 | 68 | 76 | 71 | 67 | 75 | 70 | 67 | 73 | 69 | 66 | 65 |
| 7 | 83 | 74 | 68 | 63 | 82 | 73 | 67 | 63 | 72 | 66 | 63 | 70 | 66 | 62 | 69 | 65 | 62 | 61 |
| 8 | 79 | 69 | 63 | 59 | 78 | 69 | 63 | 59 | 68 | 62 | 59 | 66 | 62 | 58 | 65 | 61 | 58 | 57 |
| 9 | 75 | 65 | 59 | 55 | 74 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 54 | 53 |
| 10 | 71 | 61 | 56 | 52 | 70 | 61 | 55 | 52 | 60 | 55 | 51 | 59 | 55 | 51 | 59 | 54 | 51 | 50 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3057 |
| 5° | 2976 |
| 10° | 2838 |
| 15° | 2729 |
| 20° | 2632 |
| 25° | 2540 |
| 30° | 2430 |
| 35° | 1639 |
| 40° | 395 |
| 45° | 101 |
| 50° | 35 |
| 55° | 34 |
| 60° | 32 |
| 65° | 28 |
| 70° | 26 |
| 75° | 25 |
| 80° | 26 |
| 85° | 23 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 101 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 56.2 | 9.3 |
| 10°-20° | 150.5 | 25.0 |
| 20°-30° | 214.5 | 35.6 |
| 30°-40° | 157.0 | 26.1 |
| 40°-50° | 15.9 | 2.6 |
| 50°-60° | 3.5 | 0.6 |
| 60°-70° | 2.4 | 0.4 |
| 70°-80° | 1.4 | 0.2 |
| 80°-90° | 0.4 | 0.1 |
| 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° | 421.2 | 70.0 |
| 0°-40° | 578.2 | 96.1 |
| 0°-60° | 597.6 | 99.3 |
| 0°-90° | 601.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 601.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 620 | |
| 5° | 601 | 56 |
| 15° | 534 | 150 |
| 25° | 466 | 215 |
| 35° | 272 | 157 |
| 45° | 14 | 16 |
| 55° | 4 | 3 |
| 65° | 2 | 2 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |

TEST NUMBER: P867196

CATALOG NUMBER: PRLX-2004-L-927-15L-L-X-X-BLAK-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 619.7 |
| 2.5° | 615.4 |
| 5° | 600.9 |
| 7.5° | 583.3 |
| 10° | 566.4 |
| 12.5° | 550.3 |
| 15° | 534.2 |
| 17.5° | 518.0 |
| 20° | 501.2 |
| 22.5° | 483.8 |
| 25° | 466.5 |
| 27.5° | 448.3 |
| 30° | 426.6 |
| 32.5° | 376.8 |
| 35° | 272.2 |
| 37.5° | 138.4 |
| 40° | 61.4 |
| 42.5° | 32.5 |
| 45° | 14.5 |
| 47.5° | 5.1 |
| 50° | 4.6 |
| 52.5° | 4.3 |
| 55° | 3.9 |
| 57.5° | 3.5 |
| 60° | 3.2 |
| 62.5° | 2.8 |
| 65° | 2.4 |
| 67.5° | 2.1 |
| 70° | 1.8 |
| 72.5° | 1.6 |
| 75° | 1.3 |
| 77.5° | 1.1 |
| 80° | 0.9 |
| 82.5° | 0.6 |
| 85° | 0.4 |
| 87.5° | 0.2 |
| 90° | 0.0 |



TEST NUMBER: P867196
 CATALOG NUMBER: PRLX-2004-L-927-15L-L-X-X-BLAK-X

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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4H | 2H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8H | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12H | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |