

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: P867280

Luminaire Tested: PRLX-2004-L-930-48L-G-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-75)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-L-930-48L-G-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

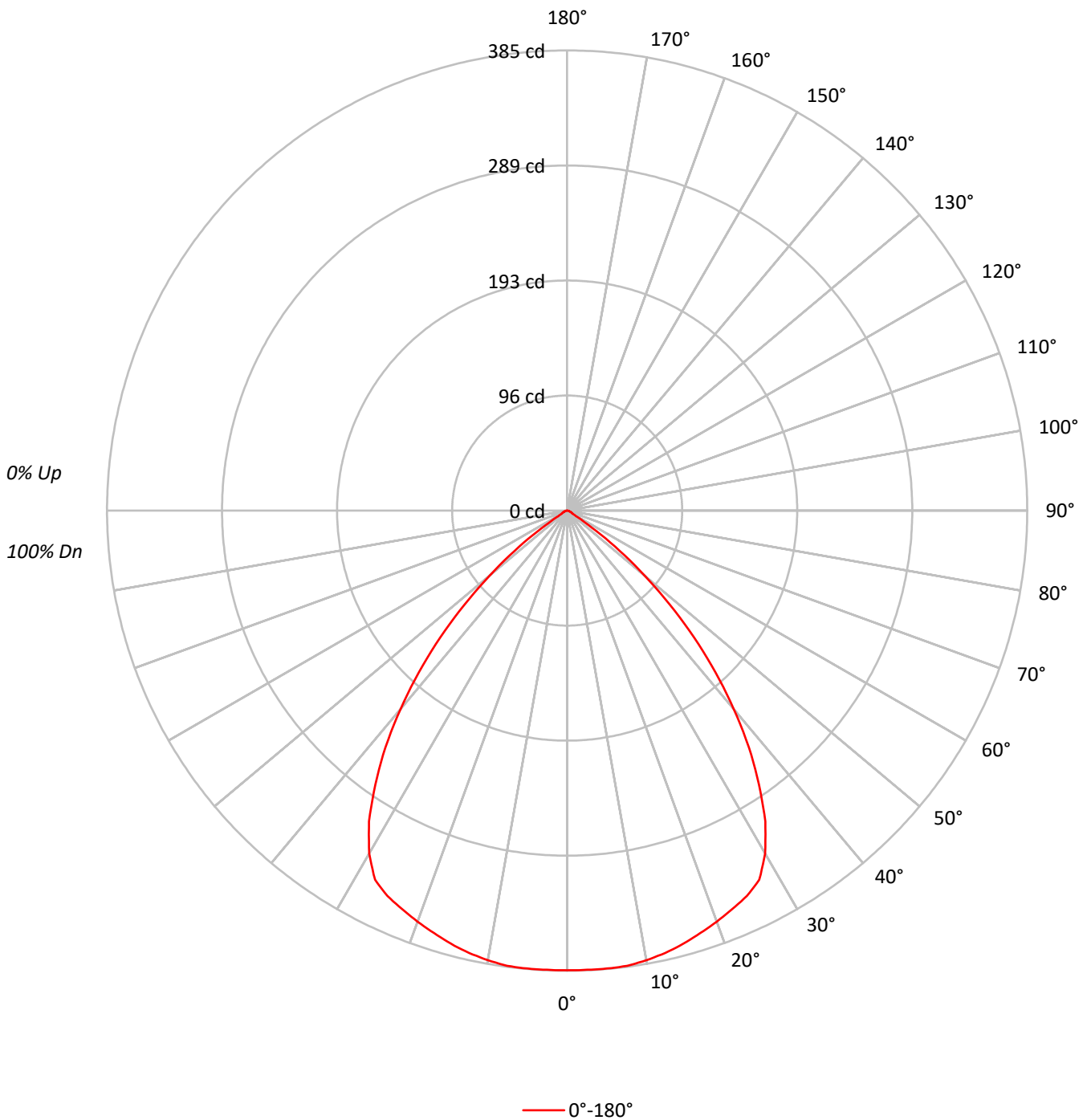
Lumens per Lamp: N/A
Luminaire Lumens: 630.9 lumens
Efficiency: N/A
Efficacy: 16.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.19
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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

TEST NUMBER: P867280

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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 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99 | | 99 | 98 | 96 | | 96 | 94 | 93 | 91 |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | | 92 | 89 | 86 | | 89 | 87 | 84 | 83 |
| 3 | 99 | 91 | 86 | 81 | 97 | 90 | 85 | 80 | 87 | 83 | 79 | | 85 | 81 | 78 | | 82 | 79 | 76 | 75 |
| 4 | 93 | 84 | 77 | 72 | 91 | 83 | 76 | 72 | 80 | 75 | 71 | | 78 | 74 | 70 | | 76 | 72 | 69 | 67 |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 69 | 65 | 74 | 68 | 64 | | 72 | 67 | 63 | | 71 | 66 | 63 | 61 |
| 6 | 81 | 71 | 64 | 59 | 80 | 70 | 63 | 58 | 68 | 62 | 58 | | 67 | 62 | 58 | | 65 | 61 | 57 | 55 |
| 7 | 76 | 65 | 58 | 53 | 75 | 65 | 58 | 53 | 63 | 57 | 53 | | 62 | 56 | 52 | | 61 | 56 | 52 | 51 |
| 8 | 72 | 60 | 53 | 49 | 70 | 60 | 53 | 48 | 59 | 53 | 48 | | 58 | 52 | 48 | | 56 | 51 | 48 | 46 |
| 9 | 67 | 56 | 49 | 45 | 66 | 56 | 49 | 44 | 55 | 49 | 44 | | 54 | 48 | 44 | | 53 | 48 | 44 | 42 |
| 10 | 64 | 52 | 45 | 41 | 62 | 52 | 45 | 41 | 51 | 45 | 41 | | 50 | 45 | 41 | | 49 | 44 | 41 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 1898 |
| 5° | 1905 |
| 10° | 1914 |
| 15° | 1917 |
| 20° | 1922 |
| 25° | 1937 |
| 30° | 1887 |
| 35° | 1685 |
| 40° | 1396 |
| 45° | 1047 |
| 50° | 649 |
| 55° | 251 |
| 60° | 54 |
| 65° | 44 |
| 70° | 36 |
| 75° | 32 |
| 80° | 37 |
| 85° | 23 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1047 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 36.6 | 5.8 |
| 10°-20° | 106.0 | 16.8 |
| 20°-30° | 163.2 | 25.9 |
| 30°-40° | 173.2 | 27.5 |
| 40°-50° | 115.0 | 18.2 |
| 50°-60° | 30.5 | 4.8 |
| 60°-70° | 3.9 | 0.6 |
| 70°-80° | 1.8 | 0.3 |
| 80°-90° | 0.6 | 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° | 305.8 | 48.5 |
| 0°-40° | 479.0 | 75.9 |
| 0°-60° | 624.5 | 99.0 |
| 0°-90° | 630.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 630.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 385 | |
| 5° | 385 | 37 |
| 15° | 375 | 106 |
| 25° | 356 | 163 |
| 35° | 280 | 173 |
| 45° | 150 | 115 |
| 55° | 29 | 31 |
| 65° | 4 | 4 |
| 75° | 2 | 2 |
| 85° | 0 | 1 |
| 90° | 0 | |

TEST NUMBER: P867280

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 384.6 |
| 2.5° | 384.6 |
| 5° | 384.6 |
| 7.5° | 384.2 |
| 10° | 382.0 |
| 12.5° | 379.1 |
| 15° | 375.3 |
| 17.5° | 370.6 |
| 20° | 366.0 |
| 22.5° | 360.9 |
| 25° | 355.8 |
| 27.5° | 348.2 |
| 30° | 331.3 |
| 32.5° | 308.5 |
| 35° | 279.8 |
| 37.5° | 249.8 |
| 40° | 216.8 |
| 42.5° | 183.8 |
| 45° | 150.0 |
| 47.5° | 116.6 |
| 50° | 84.5 |
| 52.5° | 55.4 |
| 55° | 29.2 |
| 57.5° | 9.7 |
| 60° | 5.5 |
| 62.5° | 4.6 |
| 65° | 3.8 |
| 67.5° | 3.4 |
| 70° | 2.5 |
| 72.5° | 2.1 |
| 75° | 1.7 |
| 77.5° | 1.3 |
| 80° | 1.3 |
| 82.5° | 0.8 |
| 85° | 0.4 |
| 87.5° | 0.4 |
| 90° | 0.0 |



TEST NUMBER: P867280
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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 | 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 |