

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: P867219

Luminaire Tested: PRLX-2004-L-927-48L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867219
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-72)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2004-L-927-48L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
BELL WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

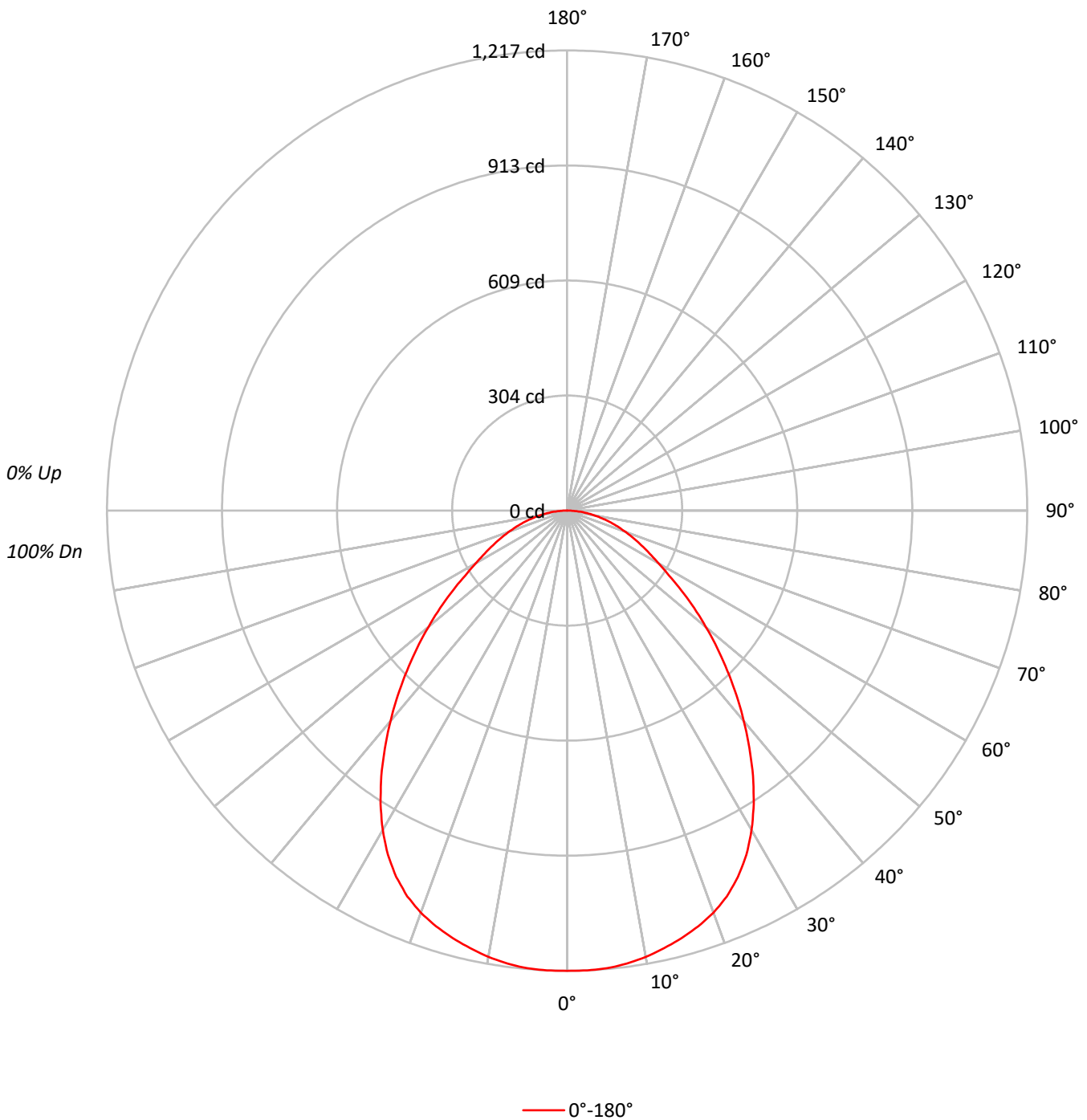
Lumens per Lamp: N/A
Luminaire Lumens: 2642.8 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.22
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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: 0.5 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 | 82 | 99 | 92 | 86 | 81 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 6 | 74 | 62 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 53 | 46 | 42 | 51 | 46 | 41 | 39 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 47 | 42 | 37 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 36 | 32 | 43 | 36 | 32 | 42 | 36 | 31 | 41 | 35 | 31 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 6006 |
| 5° | 6017 |
| 10° | 6006 |
| 15° | 5978 |
| 20° | 5941 |
| 25° | 5821 |
| 30° | 5558 |
| 35° | 5160 |
| 40° | 4684 |
| 45° | 4181 |
| 50° | 3674 |
| 55° | 3173 |
| 60° | 2752 |
| 65° | 2526 |
| 70° | 2359 |
| 75° | 2213 |
| 80° | 2088 |
| 85° | 1970 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4181 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 115.4 | 4.4 |
| 10°-20° | 330.3 | 12.5 |
| 20°-30° | 490.1 | 18.5 |
| 30°-40° | 533.8 | 20.2 |
| 40°-50° | 462.8 | 17.5 |
| 50°-60° | 332.6 | 12.6 |
| 60°-70° | 215.7 | 8.2 |
| 70°-80° | 123.4 | 4.7 |
| 80°-90° | 38.7 | 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 |
| <hr/> | | |
| 0°-30° | 935.8 | 35.4 |
| 0°-40° | 1469.6 | 55.6 |
| 0°-60° | 2265.0 | 85.7 |
| 0°-90° | 2642.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2642.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1217 | |
| 5° | 1215 | 115 |
| 15° | 1170 | 330 |
| 25° | 1069 | 490 |
| 35° | 857 | 534 |
| 45° | 599 | 463 |
| 55° | 369 | 333 |
| 65° | 216 | 216 |
| 75° | 116 | 123 |
| 85° | 35 | 39 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1217.3 |
| 2.5° | 1217.3 |
| 5° | 1215.0 |
| 7.5° | 1208.6 |
| 10° | 1198.8 |
| 12.5° | 1185.3 |
| 15° | 1170.3 |
| 17.5° | 1152.9 |
| 20° | 1131.6 |
| 22.5° | 1104.4 |
| 25° | 1069.2 |
| 27.5° | 1026.5 |
| 30° | 975.6 |
| 32.5° | 918.3 |
| 35° | 856.7 |
| 37.5° | 791.9 |
| 40° | 727.2 |
| 42.5° | 663.2 |
| 45° | 599.2 |
| 47.5° | 538.7 |
| 50° | 478.7 |
| 52.5° | 423.4 |
| 55° | 368.9 |
| 57.5° | 319.5 |
| 60° | 278.9 |
| 62.5° | 245.7 |
| 65° | 216.4 |
| 67.5° | 188.8 |
| 70° | 163.5 |
| 72.5° | 139.0 |
| 75° | 116.1 |
| 77.5° | 94.4 |
| 80° | 73.5 |
| 82.5° | 53.7 |
| 85° | 34.8 |
| 87.5° | 17.0 |
| 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 | 14.98 | 16.48 | 15.35 | 16.79 | 17.11 | 14.98 | 16.48 | 15.35 | 16.79 | 17.11 |
| | 3H | 16.49 | 17.84 | 16.87 | 18.17 | 18.53 | 16.49 | 17.84 | 16.87 | 18.17 | 18.53 |
| | 4H | 17.09 | 18.35 | 17.49 | 18.70 | 19.08 | 17.09 | 18.35 | 17.49 | 18.70 | 19.08 |
| | 6H | 17.57 | 18.74 | 17.98 | 19.10 | 19.49 | 17.57 | 18.74 | 17.98 | 19.10 | 19.49 |
| | 8H | 17.74 | 18.85 | 18.17 | 19.24 | 19.64 | 17.74 | 18.85 | 18.17 | 19.24 | 19.64 |
| | 12H | 17.86 | 18.92 | 18.29 | 19.31 | 19.74 | 17.86 | 18.92 | 18.29 | 19.31 | 19.74 |
| 4H | 2H | 15.48 | 16.74 | 15.88 | 17.09 | 17.47 | 15.48 | 16.74 | 15.88 | 17.09 | 17.47 |
| | 3H | 17.23 | 18.28 | 17.64 | 18.68 | 19.08 | 17.23 | 18.28 | 17.64 | 18.68 | 19.08 |
| | 4H | 17.97 | 18.91 | 18.40 | 19.33 | 19.77 | 17.97 | 18.91 | 18.40 | 19.33 | 19.77 |
| | 6H | 18.59 | 19.41 | 19.04 | 19.85 | 20.31 | 18.59 | 19.41 | 19.04 | 19.85 | 20.31 |
| | 8H | 18.81 | 19.58 | 19.27 | 20.02 | 20.49 | 18.81 | 19.58 | 19.27 | 20.02 | 20.49 |
| | 12H | 18.98 | 19.67 | 19.47 | 20.15 | 20.62 | 18.98 | 19.67 | 19.47 | 20.15 | 20.62 |
| 8H | 4H | 18.25 | 19.01 | 18.71 | 19.46 | 19.93 | 18.25 | 19.01 | 18.71 | 19.46 | 19.93 |
| | 6H | 18.99 | 19.63 | 19.49 | 20.12 | 20.60 | 18.99 | 19.63 | 19.49 | 20.12 | 20.60 |
| | 8H | 19.30 | 19.87 | 19.81 | 20.38 | 20.87 | 19.30 | 19.87 | 19.81 | 20.38 | 20.87 |
| | 12H | 19.56 | 20.07 | 20.07 | 20.56 | 21.13 | 19.56 | 20.07 | 20.07 | 20.56 | 21.13 |
| 12H | 4H | 18.27 | 18.96 | 18.76 | 19.44 | 19.91 | 18.27 | 18.96 | 18.76 | 19.44 | 19.91 |
| | 6H | 19.05 | 19.62 | 19.56 | 20.13 | 20.62 | 19.05 | 19.62 | 19.56 | 20.13 | 20.62 |
| | 8H | 19.42 | 19.92 | 19.93 | 20.42 | 20.98 | 19.42 | 19.92 | 19.93 | 20.42 | 20.98 |