

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: P866810

Luminaire Tested: PRLX-2001-L-935-133L-G-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-66)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2001-L-935-133L-G-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,
TAPERED DRUM WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

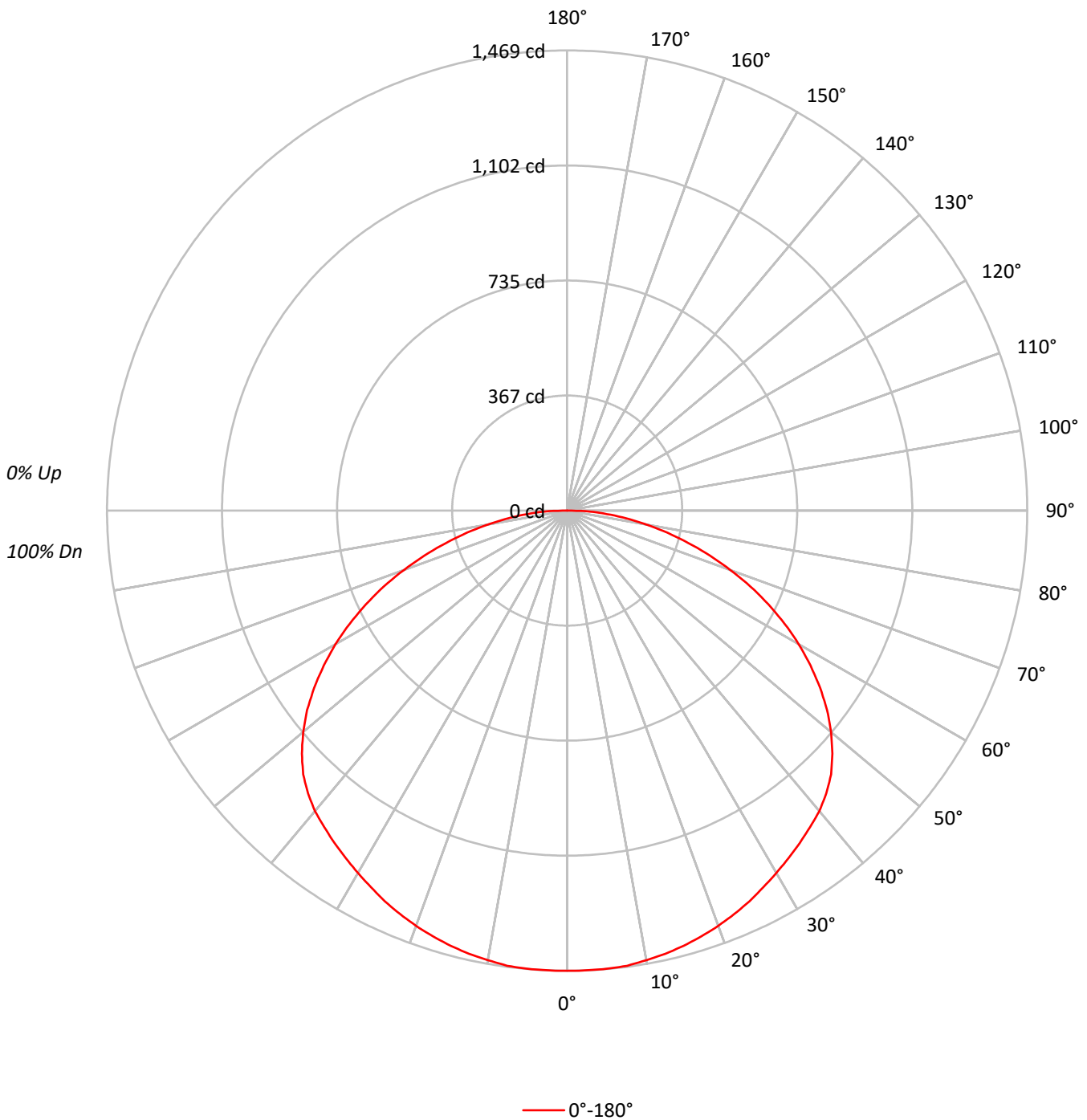
Lumens per Lamp: N/A
Luminaire Lumens: 5056.0 lumens
Efficiency: N/A
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 111.8
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 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 93 | 89 | 92 | 89 | 87 | 88 | 86 | 84 | 82 |
| 2 | 97 | 89 | 81 | 75 | 95 | 87 | 80 | 74 | 83 | 77 | 72 | 80 | 75 | 71 | 77 | 73 | 69 | 67 |
| 3 | 88 | 77 | 68 | 62 | 86 | 75 | 67 | 61 | 72 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 58 | 55 |
| 4 | 80 | 68 | 59 | 51 | 78 | 66 | 58 | 51 | 64 | 56 | 50 | 61 | 55 | 50 | 59 | 54 | 49 | 47 |
| 5 | 74 | 60 | 51 | 44 | 72 | 59 | 50 | 44 | 57 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 40 |
| 6 | 68 | 54 | 45 | 38 | 66 | 53 | 44 | 38 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 37 | 34 |
| 7 | 63 | 49 | 40 | 33 | 61 | 48 | 39 | 33 | 46 | 38 | 33 | 45 | 38 | 32 | 43 | 37 | 32 | 30 |
| 8 | 58 | 44 | 35 | 29 | 57 | 44 | 35 | 29 | 42 | 35 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 27 |
| 9 | 54 | 40 | 32 | 26 | 53 | 40 | 32 | 26 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 24 |
| 10 | 51 | 37 | 29 | 24 | 50 | 37 | 29 | 24 | 36 | 28 | 23 | 35 | 28 | 23 | 34 | 28 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 8031 |
| 5° | 8056 |
| 10° | 8089 |
| 15° | 8140 |
| 20° | 8208 |
| 25° | 8301 |
| 30° | 8432 |
| 35° | 8644 |
| 40° | 8937 |
| 45° | 9212 |
| 50° | 9354 |
| 55° | 9392 |
| 60° | 9341 |
| 65° | 9171 |
| 70° | 8857 |
| 75° | 8481 |
| 80° | 8066 |
| 85° | 7997 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 9395 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 139.8 | 2.8 |
| 10°-20° | 406.5 | 8.0 |
| 20°-30° | 635.4 | 12.6 |
| 30°-40° | 812.2 | 16.1 |
| 40°-50° | 916.3 | 18.1 |
| 50°-60° | 879.3 | 17.4 |
| 60°-70° | 700.4 | 13.9 |
| 70°-80° | 425.2 | 8.4 |
| 80°-90° | 140.9 | 2.8 |
| 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° | 1181.7 | 23.4 |
| 0°-40° | 1994.0 | 39.4 |
| 0°-60° | 3789.5 | 75.0 |
| 0°-90° | 5056.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5056.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1469 | |
| 5° | 1468 | 140 |
| 15° | 1438 | 407 |
| 25° | 1376 | 635 |
| 35° | 1295 | 812 |
| 45° | 1192 | 916 |
| 55° | 985 | 879 |
| 65° | 709 | 700 |
| 75° | 402 | 425 |
| 85° | 128 | 141 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1469.1 |
| 2.5° | 1469.1 |
| 5° | 1468.0 |
| 7.5° | 1465.6 |
| 10° | 1457.2 |
| 12.5° | 1448.9 |
| 15° | 1438.2 |
| 17.5° | 1425.1 |
| 20° | 1410.8 |
| 22.5° | 1394.1 |
| 25° | 1376.2 |
| 27.5° | 1356.0 |
| 30° | 1335.7 |
| 32.5° | 1315.4 |
| 35° | 1295.2 |
| 37.5° | 1273.7 |
| 40° | 1252.3 |
| 42.5° | 1224.9 |
| 45° | 1191.5 |
| 47.5° | 1148.6 |
| 50° | 1099.8 |
| 52.5° | 1046.2 |
| 55° | 985.4 |
| 57.5° | 921.0 |
| 60° | 854.3 |
| 62.5° | 782.8 |
| 65° | 709.0 |
| 67.5° | 633.9 |
| 70° | 554.1 |
| 72.5° | 477.8 |
| 75° | 401.5 |
| 77.5° | 327.7 |
| 80° | 256.2 |
| 82.5° | 189.5 |
| 85° | 127.5 |
| 87.5° | 72.7 |
| 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 | 20.20 | 21.91 | 20.56 | 22.22 | 22.53 | 20.20 | 21.91 | 20.56 | 22.22 | 22.53 |
| | 3H | 22.16 | 23.71 | 22.53 | 24.04 | 24.40 | 22.16 | 23.71 | 22.53 | 24.04 | 24.40 |
| | 4H | 22.92 | 24.39 | 23.31 | 24.73 | 25.11 | 22.92 | 24.39 | 23.31 | 24.73 | 25.11 |
| | 6H | 23.52 | 24.88 | 23.93 | 25.24 | 25.63 | 23.52 | 24.88 | 23.93 | 25.24 | 25.63 |
| | 8H | 23.73 | 25.04 | 24.16 | 25.43 | 25.83 | 23.73 | 25.04 | 24.16 | 25.43 | 25.83 |
| | 12H | 23.91 | 25.16 | 24.33 | 25.54 | 25.97 | 23.91 | 25.16 | 24.33 | 25.54 | 25.97 |
| 4H | 2H | 20.89 | 22.36 | 21.28 | 22.70 | 23.08 | 20.89 | 22.36 | 21.28 | 22.70 | 23.08 |
| | 3H | 23.07 | 24.31 | 23.48 | 24.71 | 25.10 | 23.07 | 24.31 | 23.48 | 24.71 | 25.10 |
| | 4H | 23.96 | 25.09 | 24.39 | 25.50 | 25.94 | 23.96 | 25.09 | 24.39 | 25.50 | 25.94 |
| | 6H | 24.71 | 25.70 | 25.16 | 26.13 | 26.59 | 24.71 | 25.70 | 25.16 | 26.13 | 26.59 |
| | 8H | 24.98 | 25.91 | 25.44 | 26.35 | 26.81 | 24.98 | 25.91 | 25.44 | 26.35 | 26.81 |
| | 12H | 25.21 | 26.05 | 25.69 | 26.52 | 26.99 | 25.21 | 26.05 | 25.69 | 26.52 | 26.99 |
| 8H | 4H | 24.33 | 25.26 | 24.79 | 25.70 | 26.16 | 24.33 | 25.26 | 24.79 | 25.70 | 26.16 |
| | 6H | 25.21 | 25.99 | 25.70 | 26.47 | 26.95 | 25.21 | 25.99 | 25.70 | 26.47 | 26.95 |
| | 8H | 25.58 | 26.28 | 26.09 | 26.78 | 27.27 | 25.58 | 26.28 | 26.09 | 26.78 | 27.27 |
| | 12H | 25.91 | 26.53 | 26.42 | 27.02 | 27.58 | 25.91 | 26.53 | 26.42 | 27.02 | 27.58 |
| 12H | 4H | 24.38 | 25.22 | 24.86 | 25.69 | 26.16 | 24.38 | 25.22 | 24.86 | 25.69 | 26.16 |
| | 6H | 25.30 | 26.00 | 25.80 | 26.50 | 26.98 | 25.30 | 26.00 | 25.80 | 26.50 | 26.98 |
| | 8H | 25.73 | 26.35 | 26.24 | 26.84 | 27.40 | 25.73 | 26.35 | 26.24 | 26.84 | 27.40 |