

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: P866872

Luminaire Tested: PRLX-2001-L-940-133L-G-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866872  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-67)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2001-L-940-133L-G-X-X-BLAK-X  
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,  
TAPERED DRUM WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 8  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

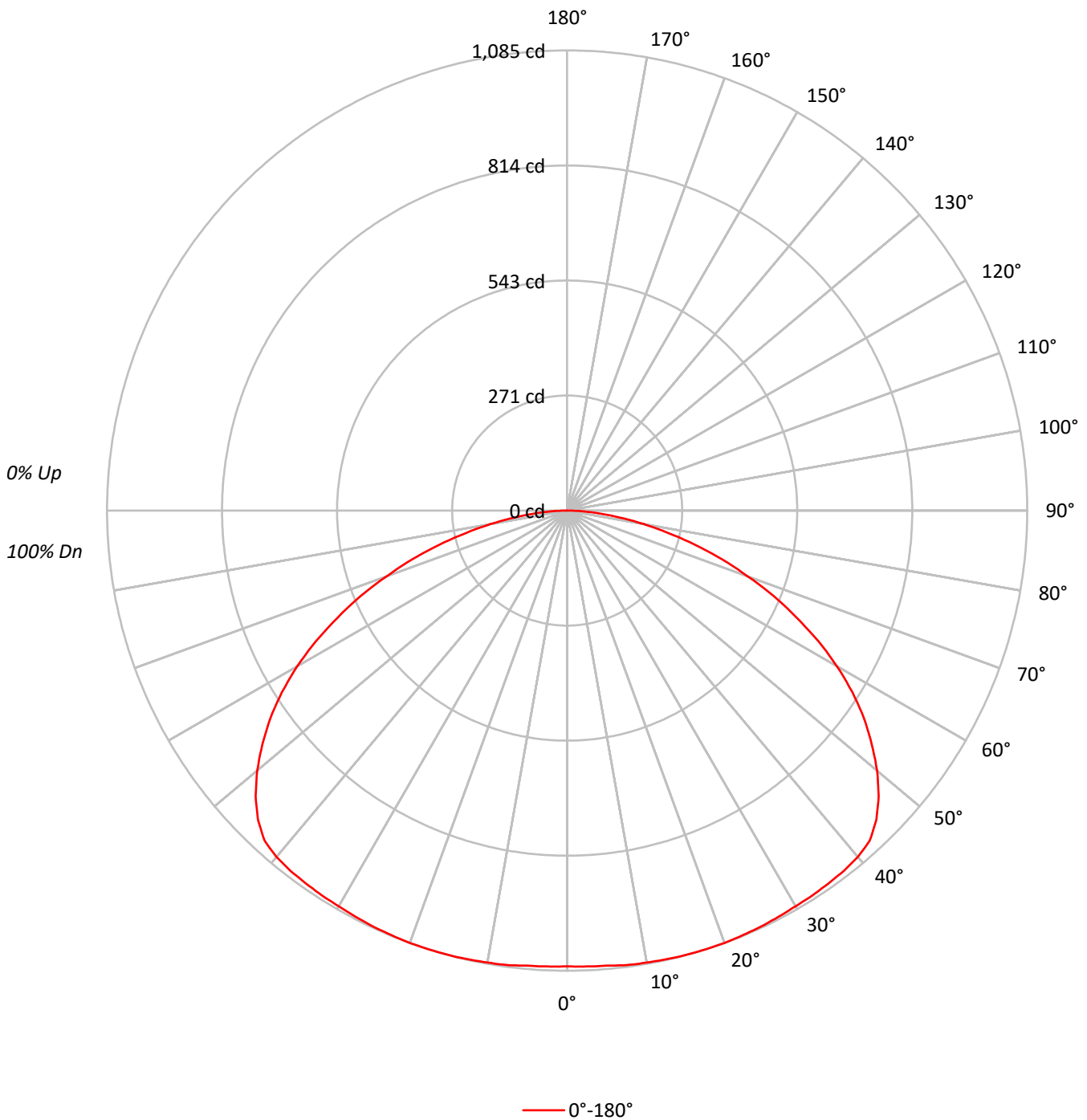
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4146.1 lumens  
Efficiency: N/A  
Efficacy: 37.1 lumens/watt  
Spacing Criteria (0/90/45): 1.53 / 1.53 / 1.64  
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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 108 | 103 | 98  | 94  | 105 | 101 | 97  | 93  | 96  | 93  | 90  | 92  | 90  | 87  | 89  | 87  | 84  |
| 2   | 98  | 89  | 81  | 75  | 95  | 87  | 80  | 74  | 83  | 78  | 73  | 80  | 75  | 71  | 77  | 73  | 69  |
| 3   | 88  | 77  | 68  | 62  | 86  | 75  | 67  | 61  | 72  | 66  | 60  | 70  | 64  | 59  | 67  | 62  | 58  |
| 4   | 80  | 68  | 58  | 51  | 78  | 66  | 58  | 51  | 64  | 56  | 50  | 61  | 55  | 49  | 59  | 53  | 49  |
| 5   | 73  | 60  | 50  | 43  | 71  | 59  | 50  | 43  | 57  | 49  | 43  | 55  | 48  | 42  | 53  | 47  | 42  |
| 6   | 68  | 54  | 44  | 37  | 66  | 53  | 44  | 37  | 51  | 43  | 37  | 49  | 42  | 36  | 47  | 41  | 36  |
| 7   | 62  | 48  | 39  | 33  | 61  | 47  | 39  | 32  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 37  | 32  |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 28  | 40  | 33  | 28  | 39  | 33  | 28  |
| 9   | 54  | 40  | 31  | 26  | 52  | 39  | 31  | 25  | 38  | 31  | 25  | 37  | 30  | 25  | 36  | 30  | 25  |
| 10  | 50  | 37  | 28  | 23  | 49  | 36  | 28  | 23  | 35  | 28  | 23  | 34  | 27  | 23  | 33  | 27  | 23  |

**AVERAGE LUMINANCE (cd/sqm):**

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5875 |
| 5°  | 5911 |
| 10° | 6007 |
| 15° | 6139 |
| 20° | 6310 |
| 25° | 6528 |
| 30° | 6800 |
| 35° | 7164 |
| 40° | 7607 |
| 45° | 7973 |
| 50° | 8115 |
| 55° | 8145 |
| 60° | 8038 |
| 65° | 7724 |
| 70° | 7238 |
| 75° | 6594 |
| 80° | 5758 |
| 85° | 4522 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 8145 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 103.0  | 2.5       |
| 10°-20°   | 307.3  | 7.4       |
| 20°-30°   | 500.5  | 12.1      |
| 30°-40°   | 673.9  | 16.3      |
| 40°-50°   | 791.4  | 19.1      |
| 50°-60°   | 761.2  | 18.4      |
| 60°-70°   | 590.4  | 14.2      |
| 70°-80°   | 331.4  | 8.0       |
| 80°-90°   | 86.8   | 2.1       |
| 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°    | 910.9  | 22.0      |
| 0°-40°    | 1584.9 | 38.2      |
| 0°-60°    | 3137.5 | 75.7      |
| 0°-90°    | 4146.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4146.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1075 |      |
| 5°  | 1077 | 103  |
| 15° | 1085 | 307  |
| 25° | 1082 | 501  |
| 35° | 1074 | 674  |
| 45° | 1031 | 791  |
| 55° | 855  | 761  |
| 65° | 597  | 590  |
| 75° | 312  | 331  |
| 85° | 72   | 87   |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1074.7 |
| 2.5°  | 1076.0 |
| 5°    | 1077.2 |
| 7.5°  | 1081.0 |
| 10°   | 1082.2 |
| 12.5° | 1083.5 |
| 15°   | 1084.7 |
| 17.5° | 1084.7 |
| 20°   | 1084.7 |
| 22.5° | 1083.5 |
| 25°   | 1082.2 |
| 27.5° | 1079.7 |
| 30°   | 1077.2 |
| 32.5° | 1076.0 |
| 35°   | 1073.5 |
| 37.5° | 1071.0 |
| 40°   | 1066.0 |
| 42.5° | 1056.1 |
| 45°   | 1031.2 |
| 47.5° | 996.4  |
| 50°   | 954.1  |
| 52.5° | 905.6  |
| 55°   | 854.6  |
| 57.5° | 797.4  |
| 60°   | 735.2  |
| 62.5° | 668.0  |
| 65°   | 597.1  |
| 67.5° | 527.4  |
| 70°   | 452.8  |
| 72.5° | 383.1  |
| 75°   | 312.2  |
| 77.5° | 243.8  |
| 80°   | 182.9  |
| 82.5° | 124.4  |
| 85°   | 72.1   |
| 87.5° | 31.1   |
| 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 | 19.87            | 21.59 | 20.23 | 21.90 | 22.22 | 19.87          | 21.59 | 20.23 | 21.90 | 22.22 |
|                 | 3H   | 21.69            | 23.25 | 22.07 | 23.58 | 23.94 | 21.69          | 23.25 | 22.07 | 23.58 | 23.94 |
|                 | 4H   | 22.35            | 23.82 | 22.75 | 24.17 | 24.54 | 22.35          | 23.82 | 22.75 | 24.17 | 24.54 |
|                 | 6H   | 22.81            | 24.18 | 23.22 | 24.54 | 24.93 | 22.81          | 24.18 | 23.22 | 24.54 | 24.93 |
|                 | 8H   | 22.95            | 24.26 | 23.38 | 24.65 | 25.05 | 22.95          | 24.26 | 23.38 | 24.65 | 25.05 |
|                 | 12H  | 23.04            | 24.30 | 23.47 | 24.68 | 25.11 | 23.04          | 24.30 | 23.47 | 24.68 | 25.11 |
| 4H              | 2H   | 20.53            | 22.00 | 20.92 | 22.35 | 22.72 | 20.53          | 22.00 | 20.92 | 22.35 | 22.72 |
|                 | 3H   | 22.56            | 23.80 | 22.97 | 24.20 | 24.60 | 22.56          | 23.80 | 22.97 | 24.20 | 24.60 |
|                 | 4H   | 23.34            | 24.47 | 23.77 | 24.88 | 25.31 | 23.34          | 24.47 | 23.77 | 24.88 | 25.31 |
|                 | 6H   | 23.93            | 24.91 | 24.38 | 25.35 | 25.80 | 23.93          | 24.91 | 24.38 | 25.35 | 25.80 |
|                 | 8H   | 24.11            | 25.04 | 24.57 | 25.48 | 25.94 | 24.11          | 25.04 | 24.57 | 25.48 | 25.94 |
|                 | 12H  | 24.24            | 25.07 | 24.72 | 25.55 | 26.02 | 24.24          | 25.07 | 24.72 | 25.55 | 26.02 |
| 8H              | 4H   | 23.65            | 24.58 | 24.11 | 25.02 | 25.48 | 23.65          | 24.58 | 24.11 | 25.02 | 25.48 |
|                 | 6H   | 24.35            | 25.12 | 24.84 | 25.61 | 26.08 | 24.35          | 25.12 | 24.84 | 25.61 | 26.08 |
|                 | 8H   | 24.61            | 25.30 | 25.11 | 25.80 | 26.28 | 24.61          | 25.30 | 25.11 | 25.80 | 26.28 |
|                 | 12H  | 24.80            | 25.41 | 25.30 | 25.90 | 26.45 | 24.80          | 25.41 | 25.30 | 25.90 | 26.45 |
| 12H             | 4H   | 23.69            | 24.52 | 24.17 | 25.00 | 25.46 | 23.69          | 24.52 | 24.17 | 25.00 | 25.46 |
|                 | 6H   | 24.41            | 25.10 | 24.91 | 25.60 | 26.09 | 24.41          | 25.10 | 24.91 | 25.60 | 26.09 |
|                 | 8H   | 24.71            | 25.32 | 25.22 | 25.81 | 26.37 | 24.71          | 25.32 | 25.22 | 25.81 | 26.37 |