

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: P980201

Luminaire Tested: PRLX-242-940-62L-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P980201  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-940-62L-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

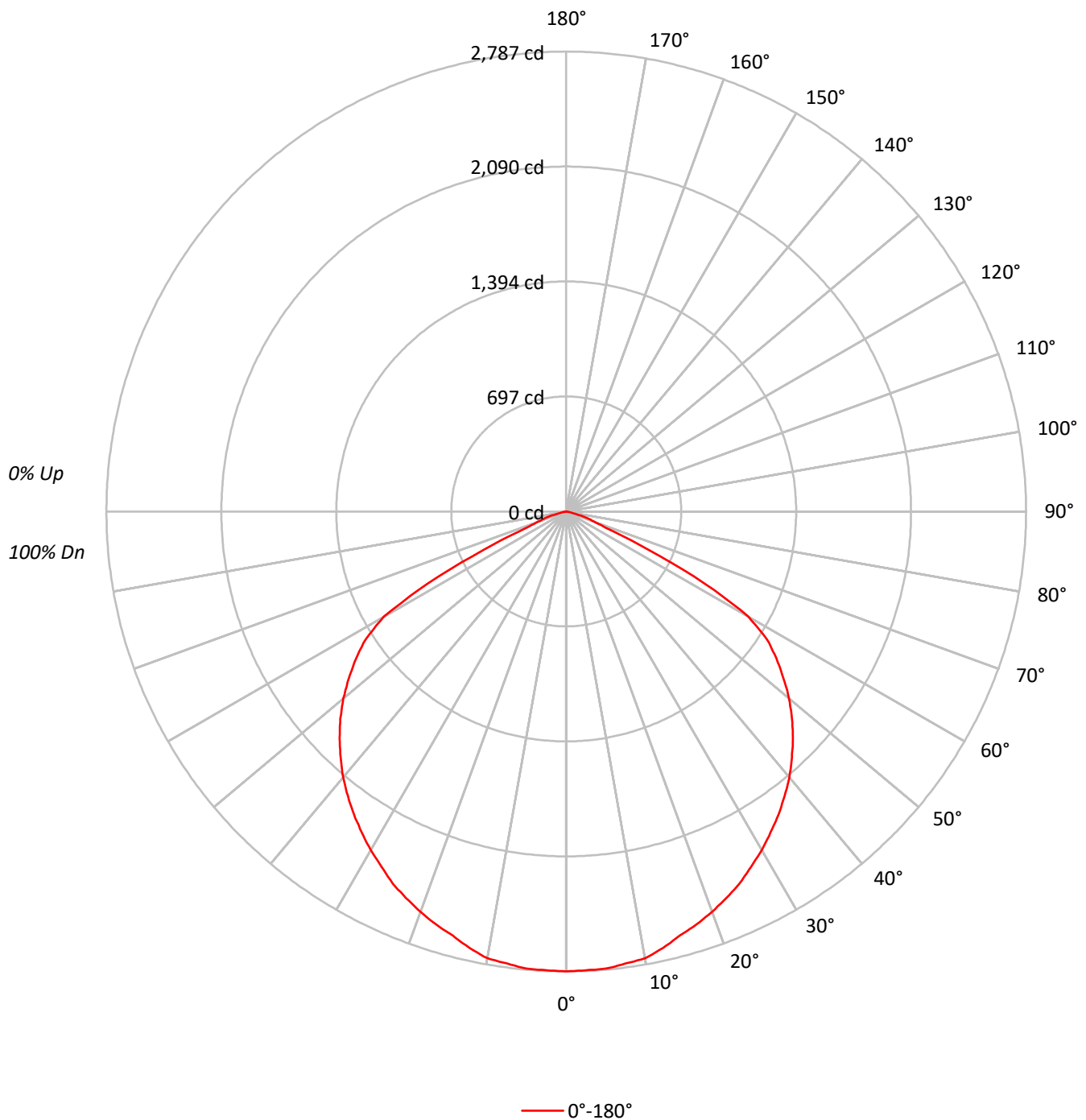
Lumens per Lamp: N/A  
Luminaire Lumens: 7142.1 lumens  
Efficiency: N/A  
Efficacy: 148.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 48  
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: NR  
Operation Time: NR  
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   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 98  | 95  | 96  | 94  | 92  | 93  | 91  | 90  |
| 2   | 102 | 95  | 89  | 84  | 99  | 93  | 87  | 83  | 89  | 85  | 81  | 86  | 82  | 79  | 83  | 80  | 77  |
| 3   | 93  | 84  | 76  | 71  | 91  | 82  | 75  | 70  | 79  | 74  | 69  | 77  | 72  | 68  | 74  | 70  | 66  |
| 4   | 86  | 75  | 67  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 58  |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 51  | 62  | 56  | 51  | 60  | 55  | 50  |
| 6   | 73  | 60  | 52  | 46  | 71  | 59  | 51  | 45  | 57  | 50  | 45  | 56  | 49  | 45  | 54  | 49  | 44  |
| 7   | 68  | 55  | 46  | 40  | 66  | 54  | 46  | 40  | 52  | 45  | 40  | 51  | 44  | 40  | 49  | 44  | 39  |
| 8   | 63  | 50  | 42  | 36  | 61  | 49  | 41  | 36  | 48  | 41  | 36  | 47  | 40  | 35  | 45  | 40  | 35  |
| 9   | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 32  |
| 10  | 55  | 42  | 34  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 12473 |
| 5°  | 12493 |
| 10° | 12497 |
| 15° | 12330 |
| 20° | 12301 |
| 25° | 12285 |
| 30° | 12248 |
| 35° | 12250 |
| 40° | 12291 |
| 45° | 12296 |
| 50° | 12275 |
| 55° | 12130 |
| 60° | 11402 |
| 65° | 5838  |
| 70° | 2350  |
| 75° | 1107  |
| 80° | 214   |
| 85° | 318   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12296 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 264.2  | 3.7       |
| 10°-20°   | 753.1  | 10.5      |
| 20°-30°   | 1145.7 | 16.0      |
| 30°-40°   | 1403.9 | 19.7      |
| 40°-50°   | 1498.1 | 21.0      |
| 50°-60°   | 1381.3 | 19.3      |
| 60°-70°   | 608.2  | 8.5       |
| 70°-80°   | 81.4   | 1.1       |
| 80°-90°   | 6.2    | 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°    | 2163.0 | 30.3      |
| 0°-40°    | 3566.9 | 49.9      |
| 0°-60°    | 6446.3 | 90.3      |
| 0°-90°    | 7142.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7142.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2787 |      |
| 5°  | 2781 | 264  |
| 15° | 2661 | 753  |
| 25° | 2488 | 1146 |
| 35° | 2242 | 1404 |
| 45° | 1943 | 1498 |
| 55° | 1555 | 1381 |
| 65° | 551  | 608  |
| 75° | 64   | 81   |
| 85° | 6    | 6    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2787.3 |
| 2.5°  | 2783.2 |
| 5°    | 2781.1 |
| 7.5°  | 2762.6 |
| 10°   | 2750.2 |
| 12.5° | 2708.9 |
| 15°   | 2661.4 |
| 17.5° | 2624.2 |
| 20°   | 2582.9 |
| 22.5° | 2535.4 |
| 25°   | 2488.0 |
| 27.5° | 2426.0 |
| 30°   | 2370.3 |
| 32.5° | 2306.3 |
| 35°   | 2242.3 |
| 37.5° | 2174.1 |
| 40°   | 2103.9 |
| 42.5° | 2023.4 |
| 45°   | 1942.9 |
| 47.5° | 1856.2 |
| 50°   | 1763.2 |
| 52.5° | 1660.0 |
| 55°   | 1554.7 |
| 57.5° | 1443.2 |
| 60°   | 1273.9 |
| 62.5° | 947.7  |
| 65°   | 551.3  |
| 67.5° | 256.0  |
| 70°   | 179.6  |
| 72.5° | 134.2  |
| 75°   | 64.0   |
| 77.5° | 18.6   |
| 80°   | 8.3    |
| 82.5° | 8.3    |
| 85°   | 6.2    |
| 87.5° | 4.1    |
| 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 | 21.61            | 23.16 | 21.97 | 23.47 | 23.78 | 21.61          | 23.16 | 21.97 | 23.47 | 23.78 |
|                 | 3H   | 21.65            | 23.03 | 22.03 | 23.36 | 23.72 | 21.65          | 23.03 | 22.03 | 23.36 | 23.72 |
|                 | 4H   | 21.62            | 22.90 | 22.02 | 23.25 | 23.63 | 21.62          | 22.90 | 22.02 | 23.25 | 23.63 |
|                 | 6H   | 21.56            | 22.74 | 21.97 | 23.11 | 23.50 | 21.56          | 22.74 | 21.97 | 23.11 | 23.50 |
|                 | 8H   | 21.52            | 22.65 | 21.95 | 23.04 | 23.44 | 21.52          | 22.65 | 21.95 | 23.04 | 23.44 |
|                 | 12H  | 21.49            | 22.57 | 21.92 | 22.95 | 23.38 | 21.49          | 22.57 | 21.92 | 22.95 | 23.38 |
| 4H              | 2H   | 21.70            | 22.99 | 22.10 | 23.33 | 23.71 | 21.70          | 22.99 | 22.10 | 23.33 | 23.71 |
|                 | 3H   | 21.79            | 22.84 | 22.20 | 23.24 | 23.64 | 21.79          | 22.84 | 22.20 | 23.24 | 23.64 |
|                 | 4H   | 21.75            | 22.69 | 22.19 | 23.10 | 23.54 | 21.75          | 22.69 | 22.19 | 23.10 | 23.54 |
|                 | 6H   | 21.70            | 22.50 | 22.16 | 22.95 | 23.41 | 21.70          | 22.50 | 22.16 | 22.95 | 23.41 |
|                 | 8H   | 21.65            | 22.41 | 22.12 | 22.85 | 23.32 | 21.65          | 22.41 | 22.12 | 22.85 | 23.32 |
|                 | 12H  | 21.62            | 22.29 | 22.10 | 22.77 | 23.24 | 21.62          | 22.29 | 22.10 | 22.77 | 23.24 |
| 8H              | 4H   | 21.67            | 22.42 | 22.13 | 22.86 | 23.33 | 21.67          | 22.42 | 22.13 | 22.86 | 23.33 |
|                 | 6H   | 21.59            | 22.20 | 22.09 | 22.70 | 23.18 | 21.59          | 22.20 | 22.09 | 22.70 | 23.18 |
|                 | 8H   | 21.54            | 22.09 | 22.05 | 22.60 | 23.09 | 21.54          | 22.09 | 22.05 | 22.60 | 23.09 |
|                 | 12H  | 21.50            | 21.99 | 22.01 | 22.49 | 23.05 | 21.50          | 21.99 | 22.01 | 22.49 | 23.05 |
| 12H             | 4H   | 21.63            | 22.30 | 22.12 | 22.78 | 23.25 | 21.63          | 22.30 | 22.12 | 22.78 | 23.25 |
|                 | 6H   | 21.53            | 22.09 | 22.05 | 22.60 | 23.09 | 21.53          | 22.09 | 22.05 | 22.60 | 23.09 |
|                 | 8H   | 21.50            | 21.99 | 22.01 | 22.48 | 23.05 | 21.50          | 21.99 | 22.01 | 22.48 | 23.05 |

END OF REPORT