

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: P980081

Luminaire Tested: PRLX-242-935-23L-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P980081  
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-242-935-23L-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

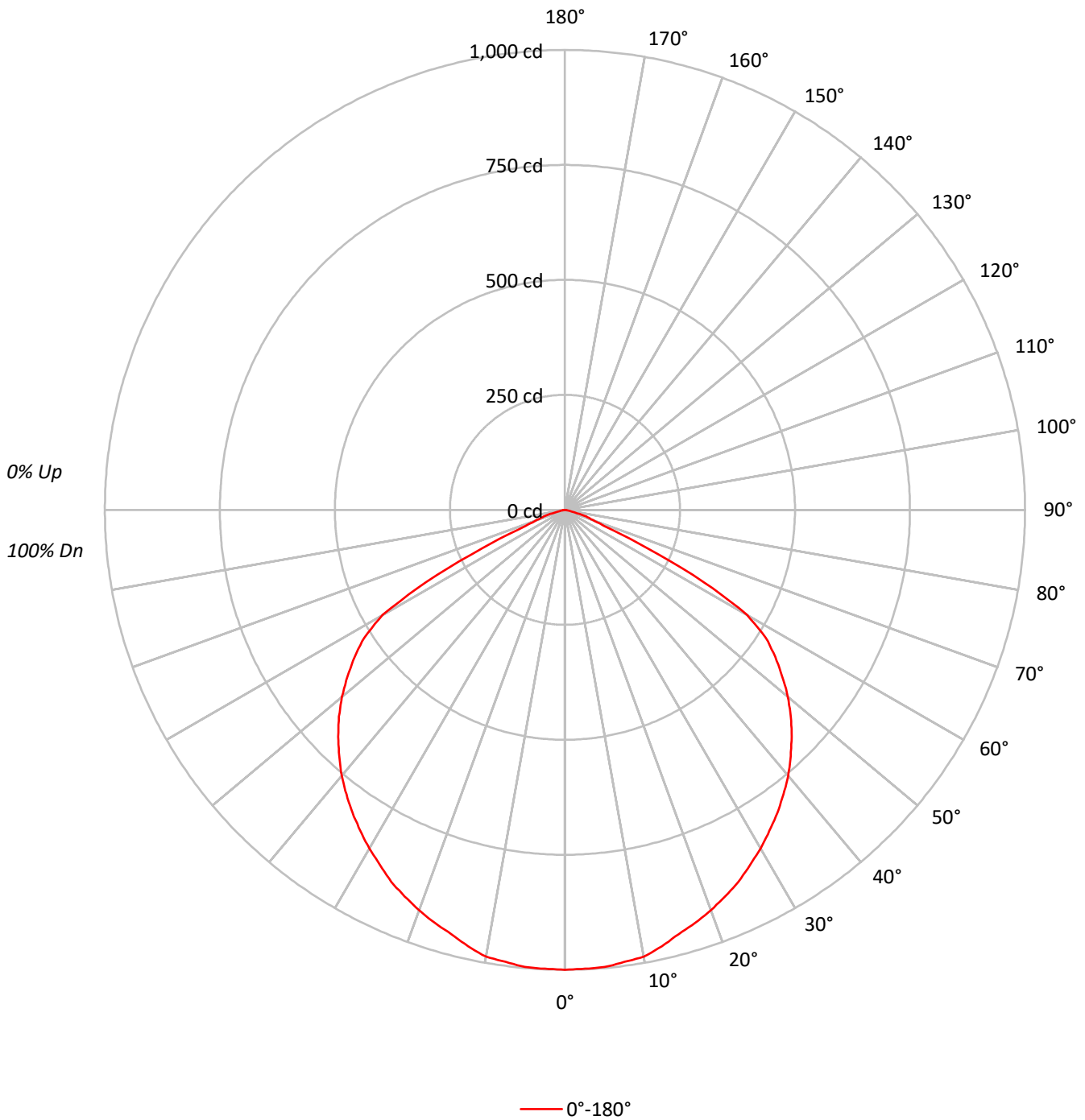
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2562.8 lumens  
Efficiency: N/A  
Efficacy: 170.9 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): 15  
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  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 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 |    |    | 100 |   |
| 1   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 98  | 95  | 96  | 94  | 92  | 93  | 91  | 90  | 88  |    |    | 88  |   |
| 2   | 102 | 95  | 89  | 84  | 99  | 93  | 87  | 83  | 89  | 85  | 81  | 86  | 82  | 79  | 83  | 80  | 77  | 75  |    |    | 75  |   |
| 3   | 93  | 84  | 76  | 71  | 91  | 82  | 75  | 70  | 79  | 74  | 69  | 77  | 72  | 68  | 74  | 70  | 66  | 64  |    |    | 64  |   |
| 4   | 86  | 75  | 67  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 58  | 56  |    |    | 56  |   |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 51  | 62  | 56  | 51  | 60  | 55  | 50  | 48  |    |    | 48  |   |
| 6   | 73  | 60  | 52  | 46  | 71  | 59  | 51  | 45  | 57  | 50  | 45  | 56  | 49  | 45  | 54  | 49  | 44  | 42  |    |    | 42  |   |
| 7   | 68  | 55  | 46  | 40  | 66  | 54  | 46  | 40  | 52  | 45  | 40  | 51  | 44  | 40  | 49  | 44  | 39  | 37  |    |    | 37  |   |
| 8   | 63  | 50  | 42  | 36  | 61  | 49  | 41  | 36  | 48  | 41  | 36  | 47  | 40  | 35  | 45  | 40  | 35  | 33  |    |    | 33  |   |
| 9   | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 32  | 30  |    |    | 30  |   |
| 10  | 55  | 42  | 34  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  | 27  |    |    | 27  |   |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 4476 |
| 5°  | 4483 |
| 10° | 4484 |
| 15° | 4424 |
| 20° | 4414 |
| 25° | 4408 |
| 30° | 4395 |
| 35° | 4396 |
| 40° | 4410 |
| 45° | 4412 |
| 50° | 4405 |
| 55° | 4353 |
| 60° | 4091 |
| 65° | 2095 |
| 70° | 844  |
| 75° | 398  |
| 80° | 77   |
| 85° | 113  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4412 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 94.8   | 3.7       |
| 10°-20°   | 270.2  | 10.5      |
| 20°-30°   | 411.1  | 16.0      |
| 30°-40°   | 503.7  | 19.7      |
| 40°-50°   | 537.5  | 21.0      |
| 50°-60°   | 495.7  | 19.3      |
| 60°-70°   | 218.2  | 8.5       |
| 70°-80°   | 29.3   | 1.1       |
| 80°-90°   | 2.2    | 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°    | 776.1  | 30.3      |
| 0°-40°    | 1279.9 | 49.9      |
| 0°-60°    | 2313.0 | 90.3      |
| 0°-90°    | 2562.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2562.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1000 |      |
| 5°  | 998  | 95   |
| 15° | 955  | 270  |
| 25° | 893  | 411  |
| 35° | 805  | 504  |
| 45° | 697  | 538  |
| 55° | 558  | 496  |
| 65° | 198  | 218  |
| 75° | 23   | 29   |
| 85° | 2    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1000.2 |
| 2.5°  | 998.7  |
| 5°    | 997.9  |
| 7.5°  | 991.3  |
| 10°   | 986.8  |
| 12.5° | 972.0  |
| 15°   | 955.0  |
| 17.5° | 941.6  |
| 20°   | 926.8  |
| 22.5° | 909.8  |
| 25°   | 892.7  |
| 27.5° | 870.5  |
| 30°   | 850.5  |
| 32.5° | 827.5  |
| 35°   | 804.6  |
| 37.5° | 780.1  |
| 40°   | 754.9  |
| 42.5° | 726.0  |
| 45°   | 697.1  |
| 47.5° | 666.0  |
| 50°   | 632.7  |
| 52.5° | 595.6  |
| 55°   | 557.9  |
| 57.5° | 517.9  |
| 60°   | 457.1  |
| 62.5° | 340.1  |
| 65°   | 197.8  |
| 67.5° | 91.9   |
| 70°   | 64.5   |
| 72.5° | 48.2   |
| 75°   | 23.0   |
| 77.5° | 6.7    |
| 80°   | 3.0    |
| 82.5° | 3.0    |
| 85°   | 2.2    |
| 87.5° | 1.5    |
| 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 | 18.05            | 19.59 | 18.41 | 19.91 | 20.22 | 18.05          | 19.59 | 18.41 | 19.91 | 20.22 |
|                 | 3H   | 18.09            | 19.47 | 18.47 | 19.80 | 20.16 | 18.09          | 19.47 | 18.47 | 19.80 | 20.16 |
|                 | 4H   | 18.06            | 19.34 | 18.46 | 19.69 | 20.07 | 18.06          | 19.34 | 18.46 | 19.69 | 20.07 |
|                 | 6H   | 18.00            | 19.18 | 18.41 | 19.55 | 19.94 | 18.00          | 19.18 | 18.41 | 19.55 | 19.94 |
|                 | 8H   | 17.96            | 19.09 | 18.39 | 19.48 | 19.88 | 17.96          | 19.09 | 18.39 | 19.48 | 19.88 |
|                 | 12H  | 17.93            | 19.01 | 18.36 | 19.39 | 19.82 | 17.93          | 19.01 | 18.36 | 19.39 | 19.82 |
| 4H              | 2H   | 18.14            | 19.43 | 18.54 | 19.77 | 20.15 | 18.14          | 19.43 | 18.54 | 19.77 | 20.15 |
|                 | 3H   | 18.23            | 19.28 | 18.64 | 19.68 | 20.08 | 18.23          | 19.28 | 18.64 | 19.68 | 20.08 |
|                 | 4H   | 18.19            | 19.13 | 18.63 | 19.54 | 19.98 | 18.19          | 19.13 | 18.63 | 19.54 | 19.98 |
|                 | 6H   | 18.14            | 18.94 | 18.60 | 19.39 | 19.85 | 18.14          | 18.94 | 18.60 | 19.39 | 19.85 |
|                 | 8H   | 18.09            | 18.85 | 18.56 | 19.29 | 19.76 | 18.09          | 18.85 | 18.56 | 19.29 | 19.76 |
|                 | 12H  | 18.06            | 18.73 | 18.54 | 19.21 | 19.68 | 18.06          | 18.73 | 18.54 | 19.21 | 19.68 |
| 8H              | 4H   | 18.11            | 18.86 | 18.57 | 19.30 | 19.77 | 18.11          | 18.86 | 18.57 | 19.30 | 19.77 |
|                 | 6H   | 18.03            | 18.64 | 18.52 | 19.14 | 19.61 | 18.03          | 18.64 | 18.52 | 19.14 | 19.61 |
|                 | 8H   | 17.97            | 18.53 | 18.49 | 19.04 | 19.53 | 17.97          | 18.53 | 18.49 | 19.04 | 19.53 |
|                 | 12H  | 17.94            | 18.43 | 18.45 | 18.93 | 19.49 | 17.94          | 18.43 | 18.45 | 18.93 | 19.49 |
| 12H             | 4H   | 18.07            | 18.74 | 18.56 | 19.22 | 19.69 | 18.07          | 18.74 | 18.56 | 19.22 | 19.69 |
|                 | 6H   | 17.97            | 18.53 | 18.49 | 19.04 | 19.53 | 17.97          | 18.53 | 18.49 | 19.04 | 19.53 |
|                 | 8H   | 17.94            | 18.43 | 18.45 | 18.92 | 19.49 | 17.94          | 18.43 | 18.45 | 18.92 | 19.49 |