

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979821

Luminaire Tested: PRLX-241-940-LL1-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979821  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-241-940-LL1-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

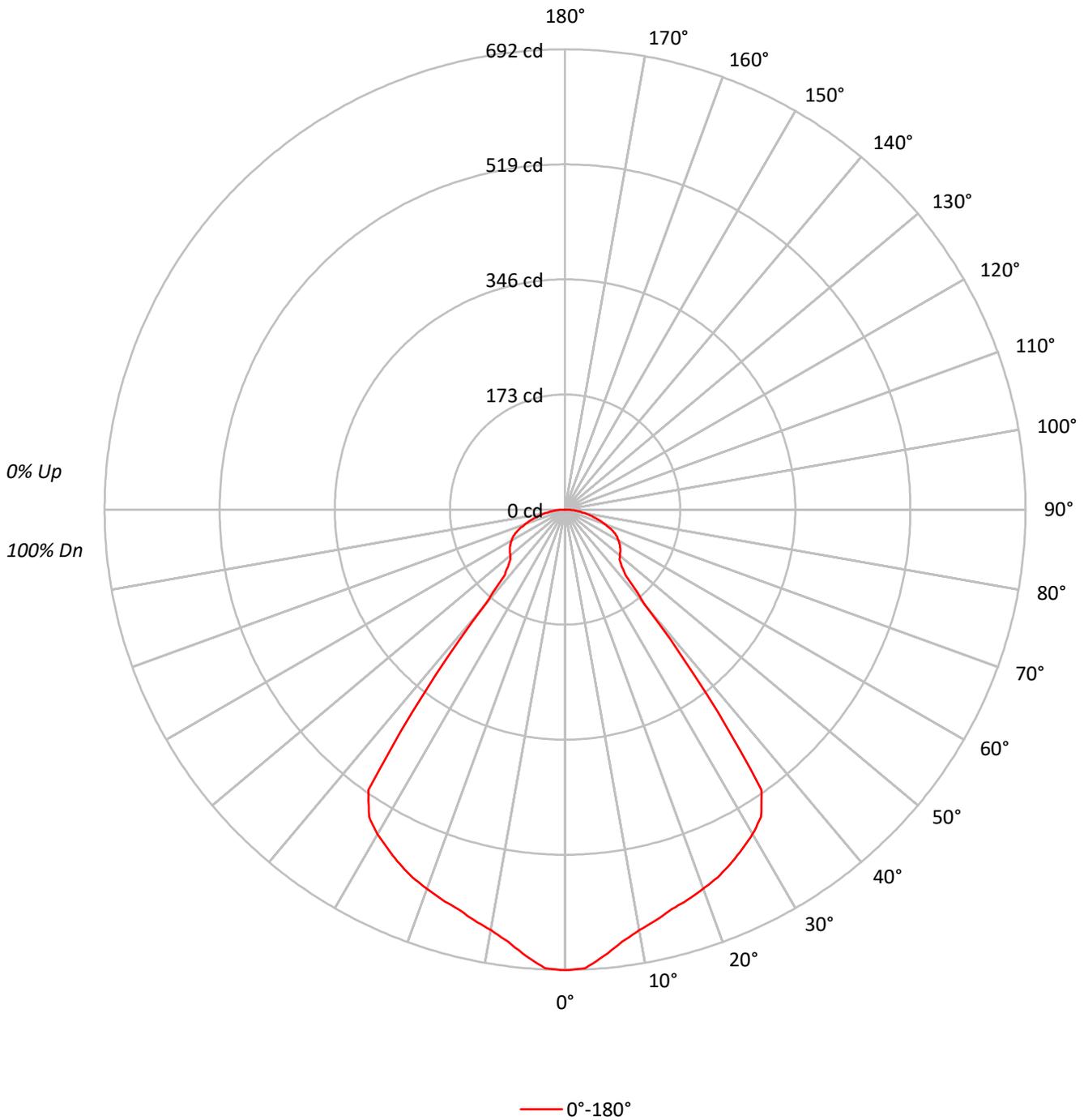
Lumens per Lamp: N/A  
Luminaire Lumens: 1117.4 lumens  
Efficiency: N/A  
Efficacy: 149.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.09  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.5  
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: 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 | 105 | 101 | 98  | 100 | 98  | 95  | 97  | 94  | 92  | 93  | 91  | 90  | 88  |    |    |    | 88  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 91  | 86  | 83  | 87  | 84  | 81  | 85  | 82  | 79  | 77  |    |    |    | 77  |
| 3   | 95  | 87  | 80  | 74  | 93  | 85  | 79  | 74  | 82  | 77  | 73  | 80  | 75  | 71  | 77  | 73  | 70  | 68  |    |    |    | 68  |
| 4   | 89  | 79  | 71  | 66  | 87  | 78  | 71  | 65  | 75  | 69  | 65  | 73  | 68  | 64  | 71  | 67  | 63  | 61  |    |    |    | 61  |
| 5   | 83  | 72  | 64  | 59  | 81  | 71  | 64  | 59  | 69  | 63  | 58  | 67  | 62  | 57  | 65  | 61  | 57  | 55  |    |    |    | 55  |
| 6   | 78  | 66  | 59  | 53  | 76  | 65  | 58  | 53  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 56  | 52  | 50  |    |    |    | 50  |
| 7   | 73  | 61  | 54  | 48  | 71  | 60  | 53  | 48  | 59  | 53  | 48  | 58  | 52  | 48  | 56  | 51  | 47  | 45  |    |    |    | 45  |
| 8   | 69  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 48  | 44  | 54  | 48  | 44  | 53  | 47  | 43  | 42  |    |    |    | 42  |
| 9   | 65  | 53  | 46  | 41  | 63  | 52  | 45  | 41  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 40  | 38  |    |    |    | 38  |
| 10  | 61  | 49  | 42  | 38  | 60  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 36  |    |    |    | 36  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5339 |
| 5°  | 5213 |
| 10° | 5026 |
| 15° | 4961 |
| 20° | 4978 |
| 25° | 5002 |
| 30° | 5017 |
| 35° | 4844 |
| 40° | 1871 |
| 45° | 1315 |
| 50° | 1287 |
| 55° | 1362 |
| 60° | 1432 |
| 65° | 1476 |
| 70° | 1427 |
| 75° | 1349 |
| 80° | 1261 |
| 85° | 1168 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 65°  
 Luminance: 1476 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.2   | 5.7       |
| 10°-20°   | 176.2  | 15.8      |
| 20°-30°   | 271.1  | 24.3      |
| 30°-40°   | 275.8  | 24.7      |
| 40°-50°   | 98.8   | 8.8       |
| 50°-60°   | 90.3   | 8.1       |
| 60°-70°   | 78.9   | 7.1       |
| 70°-80°   | 48.0   | 4.3       |
| 80°-90°   | 15.1   | 1.3       |
| 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°    | 510.5  | 45.7      |
| 0°-40°    | 786.3  | 70.4      |
| 0°-60°    | 975.4  | 87.3      |
| 0°-90°    | 1117.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1117.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 692 |      |
| 5°  | 674 | 63   |
| 15° | 622 | 176  |
| 25° | 588 | 271  |
| 35° | 515 | 276  |
| 45° | 121 | 99   |
| 55° | 101 | 90   |
| 65° | 81  | 79   |
| 75° | 45  | 48   |
| 85° | 13  | 15   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 692.5 |
| 2.5°  | 690.1 |
| 5°    | 673.7 |
| 7.5°  | 655.3 |
| 10°   | 642.1 |
| 12.5° | 632.1 |
| 15°   | 621.6 |
| 17.5° | 614.8 |
| 20°   | 606.8 |
| 22.5° | 598.8 |
| 25°   | 588.0 |
| 27.5° | 576.0 |
| 30°   | 563.6 |
| 32.5° | 547.9 |
| 35°   | 514.7 |
| 37.5° | 348.5 |
| 40°   | 185.9 |
| 42.5° | 135.4 |
| 45°   | 120.6 |
| 47.5° | 111.4 |
| 50°   | 107.3 |
| 52.5° | 104.5 |
| 55°   | 101.3 |
| 57.5° | 97.3  |
| 60°   | 92.9  |
| 62.5° | 87.7  |
| 65°   | 80.9  |
| 67.5° | 72.1  |
| 70°   | 63.3  |
| 72.5° | 54.1  |
| 75°   | 45.3  |
| 77.5° | 36.9  |
| 80°   | 28.4  |
| 82.5° | 20.8  |
| 85°   | 13.2  |
| 87.5° | 7.2   |
| 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 | 11.53            | 12.85 | 11.89 | 13.16 | 13.48 | 11.53          | 12.85 | 11.89 | 13.16 | 13.48 |
|                 | 3H   | 13.69            | 14.87 | 14.07 | 15.20 | 15.57 | 13.69          | 14.87 | 14.07 | 15.20 | 15.57 |
|                 | 4H   | 14.47            | 15.58 | 14.87 | 15.93 | 16.32 | 14.47          | 15.58 | 14.87 | 15.93 | 16.32 |
|                 | 6H   | 15.06            | 16.09 | 15.47 | 16.46 | 16.85 | 15.06          | 16.09 | 15.47 | 16.46 | 16.85 |
|                 | 8H   | 15.26            | 16.24 | 15.69 | 16.63 | 17.03 | 15.26          | 16.24 | 15.69 | 16.63 | 17.03 |
|                 | 12H  | 15.40            | 16.33 | 15.83 | 16.72 | 17.15 | 15.40          | 16.33 | 15.83 | 16.72 | 17.15 |
| 4H              | 2H   | 12.28            | 13.39 | 12.68 | 13.74 | 14.12 | 12.28          | 13.39 | 12.68 | 13.74 | 14.12 |
|                 | 3H   | 14.60            | 15.52 | 15.01 | 15.93 | 16.33 | 14.60          | 15.52 | 15.01 | 15.93 | 16.33 |
|                 | 4H   | 15.49            | 16.33 | 15.93 | 16.75 | 17.19 | 15.49          | 16.33 | 15.93 | 16.75 | 17.19 |
|                 | 6H   | 16.21            | 16.93 | 16.67 | 17.38 | 17.84 | 16.21          | 16.93 | 16.67 | 17.38 | 17.84 |
|                 | 8H   | 16.46            | 17.13 | 16.93 | 17.58 | 18.05 | 16.46          | 17.13 | 16.93 | 17.58 | 18.05 |
|                 | 12H  | 16.64            | 17.24 | 17.13 | 17.73 | 18.20 | 16.64          | 17.24 | 17.13 | 17.73 | 18.20 |
| 8H              | 4H   | 15.82            | 16.49 | 16.28 | 16.94 | 17.41 | 15.82          | 16.49 | 16.28 | 16.94 | 17.41 |
|                 | 6H   | 16.67            | 17.22 | 17.17 | 17.72 | 18.20 | 16.67          | 17.22 | 17.17 | 17.72 | 18.20 |
|                 | 8H   | 17.01            | 17.50 | 17.53 | 18.02 | 18.51 | 17.01          | 17.50 | 17.53 | 18.02 | 18.51 |
|                 | 12H  | 17.29            | 17.72 | 17.80 | 18.22 | 18.79 | 17.29          | 17.72 | 17.80 | 18.22 | 18.79 |
| 12H             | 4H   | 15.84            | 16.44 | 16.33 | 16.93 | 17.40 | 15.84          | 16.44 | 16.33 | 16.93 | 17.40 |
|                 | 6H   | 16.73            | 17.23 | 17.25 | 17.74 | 18.23 | 16.73          | 17.23 | 17.25 | 17.74 | 18.23 |
|                 | 8H   | 17.14            | 17.57 | 17.65 | 18.06 | 18.63 | 17.14          | 17.57 | 17.65 | 18.06 | 18.63 |