

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: P979873

Luminaire Tested: PRLX-241-940-48L-F-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P979873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-241-940-48L-F-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH FROSTED LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

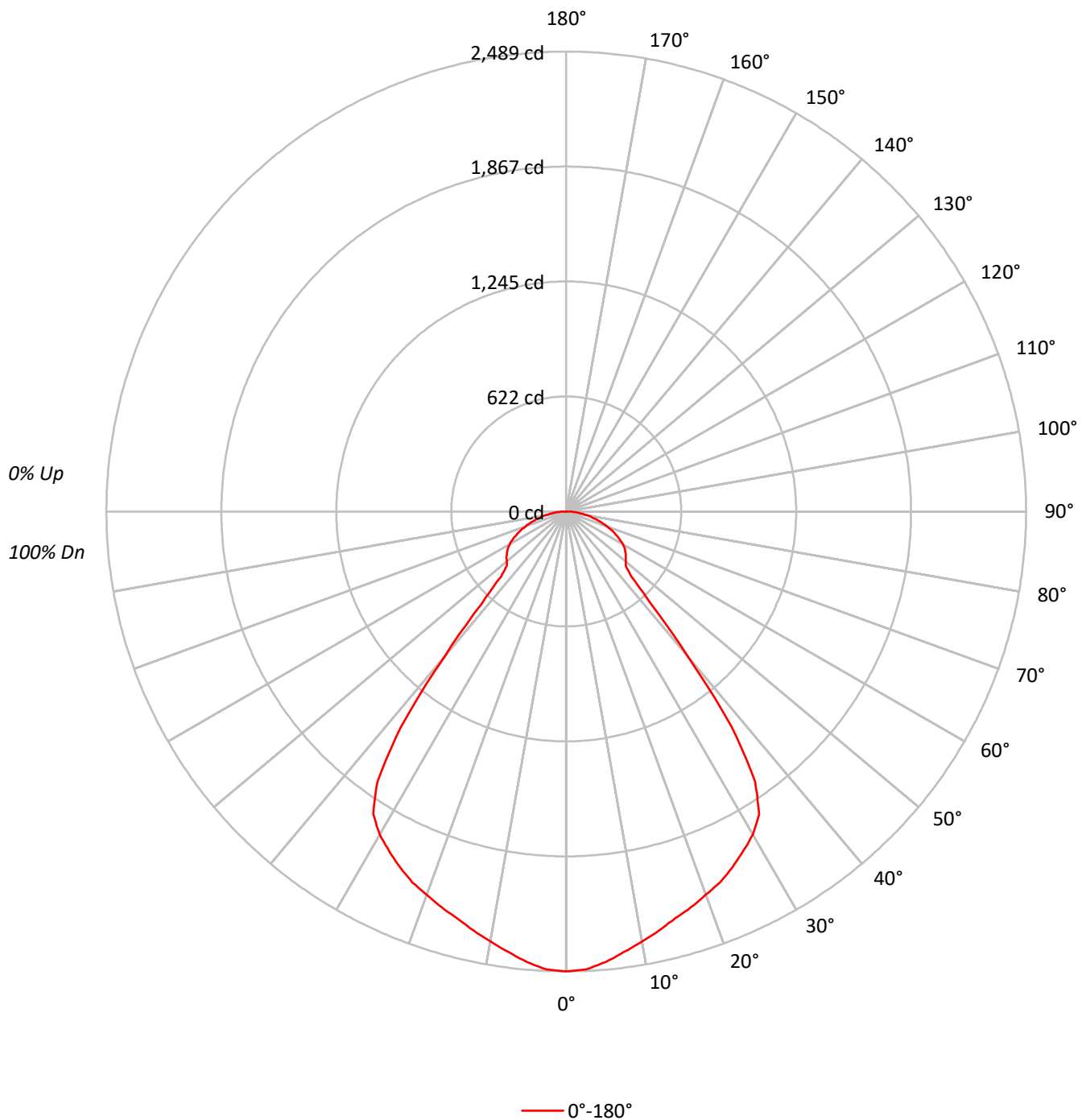
Lumens per Lamp: N/A  
Luminaire Lumens: 4221.2 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.12  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.5  
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

TEST NUMBER: P979873

CATALOG NUMBER: PRLX-241-940-48L-F-U-S-WHTE-X

### Luminous Intensity Polar Plot



TEST NUMBER: P979873

CATALOG NUMBER: PRLX-241-940-48L-F-U-S-WHTE-X

**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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 98  | 95  |  | 96  | 94  | 92  |  | 93  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 90  | 86  | 82  |  | 87  | 84  | 81  |  | 84  |
| 3   | 95  | 86  | 80  | 74  | 93  | 85  | 79  | 73  | 82  | 77  | 72  |  | 79  | 75  | 71  |  | 77  |
| 4   | 89  | 78  | 71  | 65  | 87  | 77  | 70  | 65  | 75  | 69  | 64  |  | 73  | 67  | 63  |  | 71  |
| 5   | 83  | 72  | 64  | 58  | 81  | 71  | 63  | 58  | 69  | 62  | 57  |  | 67  | 61  | 57  |  | 65  |
| 6   | 77  | 66  | 58  | 52  | 76  | 65  | 58  | 52  | 63  | 57  | 52  |  | 62  | 56  | 51  |  | 60  |
| 7   | 72  | 61  | 53  | 48  | 71  | 60  | 53  | 47  | 58  | 52  | 47  |  | 57  | 51  | 47  |  | 56  |
| 8   | 68  | 56  | 49  | 43  | 67  | 55  | 48  | 43  | 54  | 48  | 43  |  | 53  | 47  | 43  |  | 52  |
| 9   | 64  | 52  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 44  | 40  |  | 50  | 44  | 39  |  | 49  |
| 10  | 60  | 49  | 42  | 37  | 59  | 48  | 41  | 37  | 47  | 41  | 37  |  | 46  | 41  | 36  |  | 46  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 19186 |
| 5°  | 18941 |
| 10° | 18502 |
| 15° | 18194 |
| 20° | 18116 |
| 25° | 18082 |
| 30° | 17978 |
| 35° | 16769 |
| 40° | 10322 |
| 45° | 5427  |
| 50° | 5038  |
| 55° | 5263  |
| 60° | 5450  |
| 65° | 5407  |
| 70° | 5252  |
| 75° | 5004  |
| 80° | 4715  |
| 85° | 4343  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 62.5°

Luminance: 5453 cd/sqm

TEST NUMBER: P979873

CATALOG NUMBER: PRLX-241-940-48L-F-U-S-WHTE-X

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 230.9  | 5.5       |
| 10°-20°   | 645.1  | 15.3      |
| 20°-30°   | 979.4  | 23.2      |
| 30°-40°   | 1043.6 | 24.7      |
| 40°-50°   | 445.9  | 10.6      |
| 50°-60°   | 349.7  | 8.3       |
| 60°-70°   | 292.3  | 6.9       |
| 70°-80°   | 178.1  | 4.2       |
| 80°-90°   | 56.3   | 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°    | 1855.4 | 44.0      |
| 0°-40°    | 2899.0 | 68.7      |
| 0°-60°    | 3694.5 | 87.5      |
| 0°-90°    | 4221.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4221.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2489 |      |
| 5°  | 2448 | 231  |
| 15° | 2280 | 645  |
| 25° | 2126 | 979  |
| 35° | 1782 | 1044 |
| 45° | 498  | 446  |
| 55° | 392  | 350  |
| 65° | 296  | 292  |
| 75° | 168  | 178  |
| 85° | 49   | 56   |
| 90° | 0    |      |

TEST NUMBER: P979873

CATALOG NUMBER: PRLX-241-940-48L-F-U-S-WHTE-X

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2488.8 |
| 2.5°  | 2480.9 |
| 5°    | 2447.6 |
| 7.5°  | 2404.8 |
| 10°   | 2363.6 |
| 12.5° | 2322.4 |
| 15°   | 2279.6 |
| 17.5° | 2246.3 |
| 20°   | 2208.2 |
| 22.5° | 2173.4 |
| 25°   | 2125.8 |
| 27.5° | 2073.5 |
| 30°   | 2019.6 |
| 32.5° | 1943.5 |
| 35°   | 1781.8 |
| 37.5° | 1472.7 |
| 40°   | 1025.7 |
| 42.5° | 676.9  |
| 45°   | 497.8  |
| 47.5° | 435.9  |
| 50°   | 420.1  |
| 52.5° | 407.4  |
| 55°   | 391.6  |
| 57.5° | 375.7  |
| 60°   | 353.5  |
| 62.5° | 326.6  |
| 65°   | 296.4  |
| 67.5° | 264.7  |
| 70°   | 233.0  |
| 72.5° | 199.7  |
| 75°   | 168.0  |
| 77.5° | 137.9  |
| 80°   | 106.2  |
| 82.5° | 77.7   |
| 85°   | 49.1   |
| 87.5° | 26.9   |
| 90°   | 0.0    |

TEST NUMBER: P979873

CATALOG NUMBER: PRLX-241-940-48L-F-U-S-WHTE-X

**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 | 16.27            | 17.61 | 16.63 | 17.92 | 18.24 | 16.27          | 17.61 | 16.63 | 17.92 | 18.24 |
|                 | 3H   | 18.27            | 19.47 | 18.65 | 19.80 | 20.17 | 18.27          | 19.47 | 18.65 | 19.80 | 20.17 |
|                 | 4H   | 19.03            | 20.15 | 19.43 | 20.51 | 20.89 | 19.03          | 20.15 | 19.43 | 20.51 | 20.89 |
|                 | 6H   | 19.61            | 20.65 | 20.03 | 21.02 | 21.42 | 19.61          | 20.65 | 20.03 | 21.02 | 21.42 |
|                 | 8H   | 19.82            | 20.80 | 20.24 | 21.19 | 21.60 | 19.82          | 20.80 | 20.24 | 21.19 | 21.60 |
|                 | 12H  | 19.95            | 20.90 | 20.38 | 21.28 | 21.71 | 19.95          | 20.90 | 20.38 | 21.28 | 21.71 |
| 4H              | 2H   | 16.94            | 18.06 | 17.34 | 18.41 | 18.80 | 16.94          | 18.06 | 17.34 | 18.41 | 18.80 |
|                 | 3H   | 19.14            | 20.08 | 19.55 | 20.48 | 20.88 | 19.14          | 20.08 | 19.55 | 20.48 | 20.88 |
|                 | 4H   | 20.02            | 20.87 | 20.46 | 21.28 | 21.73 | 20.02          | 20.87 | 20.46 | 21.28 | 21.73 |
|                 | 6H   | 20.74            | 21.47 | 21.20 | 21.92 | 22.38 | 20.74          | 21.47 | 21.20 | 21.92 | 22.38 |
|                 | 8H   | 20.99            | 21.67 | 21.46 | 22.12 | 22.59 | 20.99          | 21.67 | 21.46 | 22.12 | 22.59 |
|                 | 12H  | 21.17            | 21.78 | 21.66 | 22.26 | 22.74 | 21.17          | 21.78 | 21.66 | 22.26 | 22.74 |
| 8H              | 4H   | 20.34            | 21.03 | 20.81 | 21.47 | 21.94 | 20.34          | 21.03 | 20.81 | 21.47 | 21.94 |
|                 | 6H   | 21.20            | 21.76 | 21.70 | 22.25 | 22.73 | 21.20          | 21.76 | 21.70 | 22.25 | 22.73 |
|                 | 8H   | 21.54            | 22.04 | 22.06 | 22.55 | 23.04 | 21.54          | 22.04 | 22.06 | 22.55 | 23.04 |
|                 | 12H  | 21.82            | 22.26 | 22.33 | 22.75 | 23.32 | 21.82          | 22.26 | 22.33 | 22.75 | 23.32 |
| 12H             | 4H   | 20.37            | 20.98 | 20.86 | 21.46 | 21.93 | 20.37          | 20.98 | 20.86 | 21.46 | 21.93 |
|                 | 6H   | 21.26            | 21.76 | 21.78 | 22.28 | 22.77 | 21.26          | 21.76 | 21.78 | 22.28 | 22.77 |
|                 | 8H   | 21.67            | 22.11 | 22.18 | 22.60 | 23.17 | 21.67          | 22.11 | 22.18 | 22.60 | 23.17 |