

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: P980311

Luminaire Tested: PRLX-243-930-LL2-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-930-LL2-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

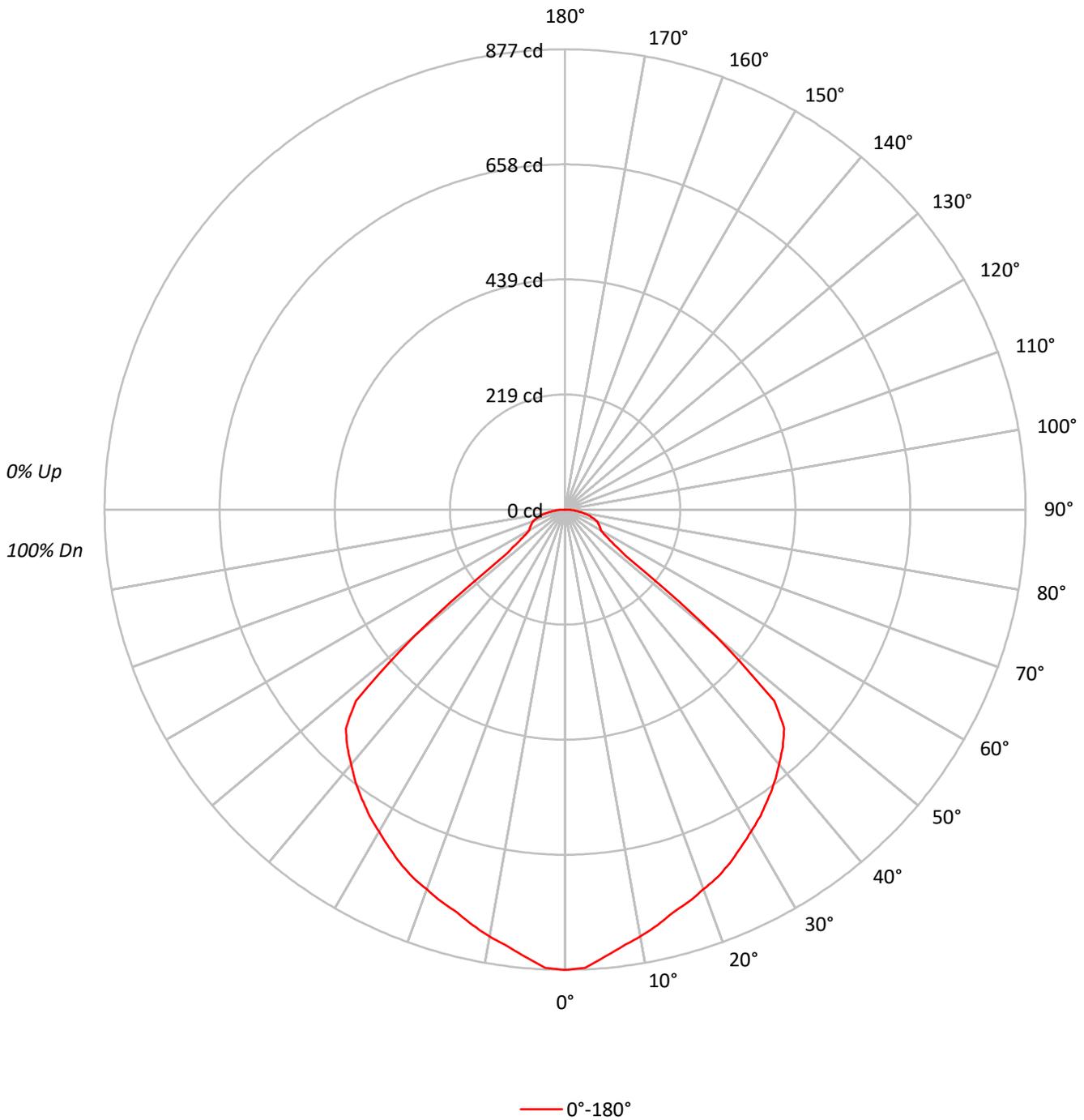
Lumens per Lamp: N/A
Luminaire Lumens: 1770.0 lumens
Efficiency: N/A
Efficacy: 160.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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 | 104 | 100 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 92 | 90 | 88 | | | | 88 |
| 2 | 103 | 96 | 91 | 86 | 100 | 94 | 89 | 85 | 91 | 87 | 83 | 88 | 84 | 81 | 85 | 82 | 79 | 77 | | | | 77 |
| 3 | 95 | 87 | 80 | 74 | 93 | 85 | 79 | 74 | 82 | 77 | 72 | 80 | 75 | 71 | 77 | 73 | 70 | 68 | | | | 68 |
| 4 | 88 | 78 | 71 | 65 | 86 | 77 | 70 | 65 | 75 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 62 | 60 | | | | 60 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 63 | 57 | 68 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 | | | | 53 |
| 6 | 76 | 65 | 57 | 51 | 75 | 64 | 56 | 51 | 62 | 55 | 50 | 60 | 55 | 50 | 59 | 54 | 50 | 48 | | | | 48 |
| 7 | 71 | 59 | 51 | 46 | 70 | 58 | 51 | 46 | 57 | 50 | 45 | 56 | 50 | 45 | 54 | 49 | 45 | 43 | | | | 43 |
| 8 | 67 | 54 | 47 | 41 | 65 | 54 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 40 | 39 | | | | 39 |
| 9 | 62 | 50 | 43 | 37 | 61 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 46 | 41 | 37 | 35 | | | | 35 |
| 10 | 59 | 46 | 39 | 34 | 57 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 43 | 38 | 34 | 32 | | | | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 4327 |
| 5° | 4240 |
| 10° | 4139 |
| 15° | 4061 |
| 20° | 4042 |
| 25° | 4045 |
| 30° | 4038 |
| 35° | 4058 |
| 40° | 4082 |
| 45° | 4117 |
| 50° | 2861 |
| 55° | 931 |
| 60° | 777 |
| 65° | 842 |
| 70° | 922 |
| 75° | 959 |
| 80° | 915 |
| 85° | 928 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4117 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.8 | 4.6 |
| 10°-20° | 225.1 | 12.7 |
| 20°-30° | 342.4 | 19.3 |
| 30°-40° | 421.9 | 23.8 |
| 40°-50° | 432.9 | 24.5 |
| 50°-60° | 125.8 | 7.1 |
| 60°-70° | 71.2 | 4.0 |
| 70°-80° | 52.0 | 2.9 |
| 80°-90° | 17.9 | 1.0 |
| 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° | 648.3 | 36.6 |
| 0°-40° | 1070.2 | 60.5 |
| 0°-60° | 1628.9 | 92.0 |
| 0°-90° | 1770.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1770.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 877 | |
| 5° | 856 | 81 |
| 15° | 795 | 225 |
| 25° | 743 | 342 |
| 35° | 674 | 422 |
| 45° | 590 | 433 |
| 55° | 108 | 126 |
| 65° | 72 | 71 |
| 75° | 50 | 52 |
| 85° | 16 | 18 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 877.0 |
| 2.5° | 874.3 |
| 5° | 856.2 |
| 7.5° | 839.3 |
| 10° | 826.2 |
| 12.5° | 811.4 |
| 15° | 795.0 |
| 17.5° | 783.6 |
| 20° | 769.9 |
| 22.5° | 758.4 |
| 25° | 743.1 |
| 27.5° | 725.6 |
| 30° | 708.7 |
| 32.5° | 692.3 |
| 35° | 673.7 |
| 37.5° | 655.1 |
| 40° | 633.8 |
| 42.5° | 613.6 |
| 45° | 590.1 |
| 47.5° | 540.4 |
| 50° | 372.7 |
| 52.5° | 146.4 |
| 55° | 108.2 |
| 57.5° | 89.1 |
| 60° | 78.7 |
| 62.5° | 75.4 |
| 65° | 72.1 |
| 67.5° | 68.3 |
| 70° | 63.9 |
| 72.5° | 57.9 |
| 75° | 50.3 |
| 77.5° | 41.0 |
| 80° | 32.2 |
| 82.5° | 24.0 |
| 85° | 16.4 |
| 87.5° | 9.3 |
| 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 | 7.62 | 9.03 | 7.98 | 9.34 | 9.66 | 7.62 | 9.03 | 7.98 | 9.34 | 9.66 |
| | 3H | 10.04 | 11.29 | 10.41 | 11.62 | 11.98 | 10.04 | 11.29 | 10.41 | 11.62 | 11.98 |
| | 4H | 11.09 | 12.26 | 11.49 | 12.61 | 13.00 | 11.09 | 12.26 | 11.49 | 12.61 | 13.00 |
| | 6H | 11.88 | 12.96 | 12.29 | 13.32 | 13.72 | 11.88 | 12.96 | 12.29 | 13.32 | 13.72 |
| | 8H | 12.15 | 13.18 | 12.58 | 13.57 | 13.97 | 12.15 | 13.18 | 12.58 | 13.57 | 13.97 |
| | 12H | 12.37 | 13.35 | 12.80 | 13.73 | 14.16 | 12.37 | 13.35 | 12.80 | 13.73 | 14.16 |
| 4H | 2H | 8.36 | 9.53 | 8.76 | 9.88 | 10.27 | 8.36 | 9.53 | 8.76 | 9.88 | 10.27 |
| | 3H | 11.06 | 12.01 | 11.47 | 12.42 | 12.82 | 11.06 | 12.01 | 11.47 | 12.42 | 12.82 |
| | 4H | 12.25 | 13.11 | 12.68 | 13.53 | 13.97 | 12.25 | 13.11 | 12.68 | 13.53 | 13.97 |
| | 6H | 13.16 | 13.91 | 13.62 | 14.35 | 14.82 | 13.16 | 13.91 | 13.62 | 14.35 | 14.82 |
| | 8H | 13.49 | 14.19 | 13.96 | 14.63 | 15.10 | 13.49 | 14.19 | 13.96 | 14.63 | 15.10 |
| | 12H | 13.75 | 14.38 | 14.24 | 14.86 | 15.33 | 13.75 | 14.38 | 14.24 | 14.86 | 15.33 |
| 8H | 4H | 12.67 | 13.37 | 13.14 | 13.81 | 14.28 | 12.67 | 13.37 | 13.14 | 13.81 | 14.28 |
| | 6H | 13.73 | 14.30 | 14.22 | 14.80 | 15.28 | 13.73 | 14.30 | 14.22 | 14.80 | 15.28 |
| | 8H | 14.15 | 14.67 | 14.66 | 15.18 | 15.67 | 14.15 | 14.67 | 14.66 | 15.18 | 15.67 |
| | 12H | 14.52 | 14.98 | 15.03 | 15.48 | 16.04 | 14.52 | 14.98 | 15.03 | 15.48 | 16.04 |
| 12H | 4H | 12.72 | 13.34 | 13.20 | 13.82 | 14.29 | 12.72 | 13.34 | 13.20 | 13.82 | 14.29 |
| | 6H | 13.81 | 14.33 | 14.33 | 14.84 | 15.33 | 13.81 | 14.33 | 14.33 | 14.84 | 15.33 |
| | 8H | 14.30 | 14.77 | 14.81 | 15.26 | 15.83 | 14.30 | 14.77 | 14.81 | 15.26 | 15.83 |