

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: P980513

Luminaire Tested: PRLX-243-940-LL6-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-LL6-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

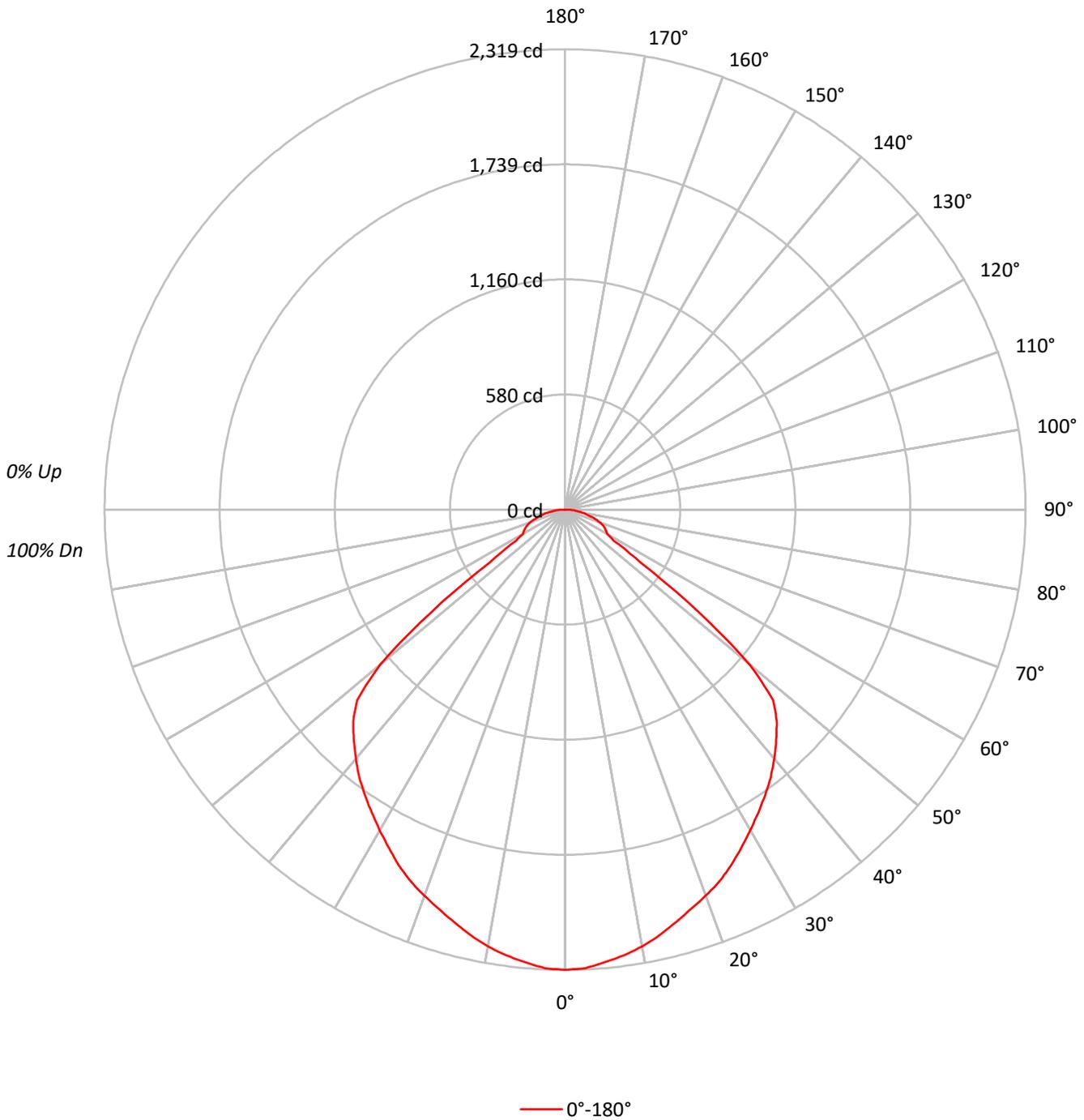
Lumens per Lamp: N/A
Luminaire Lumens: 4901.7 lumens
Efficiency: N/A
Efficacy: 146.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 99 | 100 | 98 | 95 | 97 | 95 | 93 | 93 | 91 | 90 | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 90 | 86 | 82 | 87 | 84 | 80 | 84 | 81 | 79 | 77 |
| 3 | 95 | 86 | 79 | 73 | 92 | 84 | 78 | 73 | 81 | 76 | 71 | 79 | 74 | 70 | 76 | 72 | 69 | 67 |
| 4 | 88 | 77 | 70 | 64 | 86 | 76 | 69 | 63 | 74 | 67 | 63 | 71 | 66 | 62 | 69 | 65 | 61 | 59 |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 52 |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 55 | 50 | 61 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 48 | 46 |
| 7 | 70 | 58 | 50 | 44 | 69 | 57 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 43 | 42 |
| 8 | 66 | 53 | 45 | 40 | 64 | 53 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 39 | 49 | 43 | 39 | 37 |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 45 | 40 | 36 | 34 |
| 10 | 58 | 45 | 38 | 33 | 56 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 42 | 37 | 33 | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 11442 |
| 5° | 11345 |
| 10° | 11198 |
| 15° | 10996 |
| 20° | 10870 |
| 25° | 10770 |
| 30° | 10630 |
| 35° | 10580 |
| 40° | 10557 |
| 45° | 10519 |
| 50° | 9333 |
| 55° | 3996 |
| 60° | 2409 |
| 65° | 2572 |
| 70° | 2653 |
| 75° | 2568 |
| 80° | 2478 |
| 85° | 2513 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10519 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 216.9 | 4.4 |
| 10°-20° | 607.9 | 12.4 |
| 20°-30° | 911.0 | 18.6 |
| 30°-40° | 1099.8 | 22.4 |
| 40°-50° | 1144.1 | 23.3 |
| 50°-60° | 514.7 | 10.5 |
| 60°-70° | 216.0 | 4.4 |
| 70°-80° | 142.8 | 2.9 |
| 80°-90° | 48.6 | 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° | 1735.8 | 35.4 |
| 0°-40° | 2835.6 | 57.9 |
| 0°-60° | 4494.4 | 91.7 |
| 0°-90° | 4901.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4901.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2319 | |
| 5° | 2291 | 217 |
| 15° | 2153 | 608 |
| 25° | 1978 | 911 |
| 35° | 1756 | 1100 |
| 45° | 1508 | 1144 |
| 55° | 464 | 515 |
| 65° | 220 | 216 |
| 75° | 135 | 143 |
| 85° | 44 | 49 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2319.2 |
| 2.5° | 2312.9 |
| 5° | 2290.7 |
| 7.5° | 2265.3 |
| 10° | 2235.2 |
| 12.5° | 2197.2 |
| 15° | 2152.8 |
| 17.5° | 2110.0 |
| 20° | 2070.3 |
| 22.5° | 2029.1 |
| 25° | 1978.4 |
| 27.5° | 1921.3 |
| 30° | 1865.8 |
| 32.5° | 1810.4 |
| 35° | 1756.5 |
| 37.5° | 1701.0 |
| 40° | 1639.1 |
| 42.5° | 1574.1 |
| 45° | 1507.6 |
| 47.5° | 1420.4 |
| 50° | 1215.9 |
| 52.5° | 849.7 |
| 55° | 464.5 |
| 57.5° | 290.1 |
| 60° | 244.1 |
| 62.5° | 233.0 |
| 65° | 220.3 |
| 67.5° | 204.5 |
| 70° | 183.9 |
| 72.5° | 160.1 |
| 75° | 134.7 |
| 77.5° | 111.0 |
| 80° | 87.2 |
| 82.5° | 65.0 |
| 85° | 44.4 |
| 87.5° | 25.4 |
| 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 | 12.21 | 13.66 | 12.58 | 13.97 | 14.29 | 12.21 | 13.66 | 12.58 | 13.97 | 14.29 |
| | 3H | 14.30 | 15.59 | 14.68 | 15.92 | 16.28 | 14.30 | 15.59 | 14.68 | 15.92 | 16.28 |
| | 4H | 15.13 | 16.33 | 15.53 | 16.68 | 17.06 | 15.13 | 16.33 | 15.53 | 16.68 | 17.06 |
| | 6H | 15.78 | 16.88 | 16.19 | 17.25 | 17.64 | 15.78 | 16.88 | 16.19 | 17.25 | 17.64 |
| | 8H | 16.01 | 17.06 | 16.44 | 17.45 | 17.86 | 16.01 | 17.06 | 16.44 | 17.45 | 17.86 |
| | 12H | 16.19 | 17.20 | 16.62 | 17.58 | 18.01 | 16.19 | 17.20 | 16.62 | 17.58 | 18.01 |
| 4H | 2H | 12.87 | 14.07 | 13.27 | 14.42 | 14.80 | 12.87 | 14.07 | 13.27 | 14.42 | 14.80 |
| | 3H | 15.22 | 16.20 | 15.63 | 16.60 | 17.00 | 15.22 | 16.20 | 15.63 | 16.60 | 17.00 |
| | 4H | 16.18 | 17.06 | 16.61 | 17.48 | 17.92 | 16.18 | 17.06 | 16.61 | 17.48 | 17.92 |
| | 6H | 16.96 | 17.72 | 17.42 | 18.17 | 18.63 | 16.96 | 17.72 | 17.42 | 18.17 | 18.63 |
| | 8H | 17.25 | 17.96 | 17.71 | 18.41 | 18.88 | 17.25 | 17.96 | 17.71 | 18.41 | 18.88 |
| | 12H | 17.48 | 18.12 | 17.97 | 18.60 | 19.07 | 17.48 | 18.12 | 17.97 | 18.60 | 19.07 |
| 8H | 4H | 16.53 | 17.25 | 17.00 | 17.69 | 18.16 | 16.53 | 17.25 | 17.00 | 17.69 | 18.16 |
| | 6H | 17.45 | 18.05 | 17.95 | 18.54 | 19.02 | 17.45 | 18.05 | 17.95 | 18.54 | 19.02 |
| | 8H | 17.83 | 18.37 | 18.35 | 18.88 | 19.37 | 17.83 | 18.37 | 18.35 | 18.88 | 19.37 |
| | 12H | 18.17 | 18.65 | 18.68 | 19.14 | 19.71 | 18.17 | 18.65 | 18.68 | 19.14 | 19.71 |
| 12H | 4H | 16.57 | 17.20 | 17.05 | 17.69 | 18.16 | 16.57 | 17.20 | 17.05 | 17.69 | 18.16 |
| | 6H | 17.52 | 18.06 | 18.04 | 18.57 | 19.06 | 17.52 | 18.06 | 18.04 | 18.57 | 19.06 |
| | 8H | 17.97 | 18.45 | 18.48 | 18.94 | 19.51 | 17.97 | 18.45 | 18.48 | 18.94 | 19.51 |