

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: P980403

Luminaire Tested: PRLX-243-935-LL3-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980403
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-243-935-LL3-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

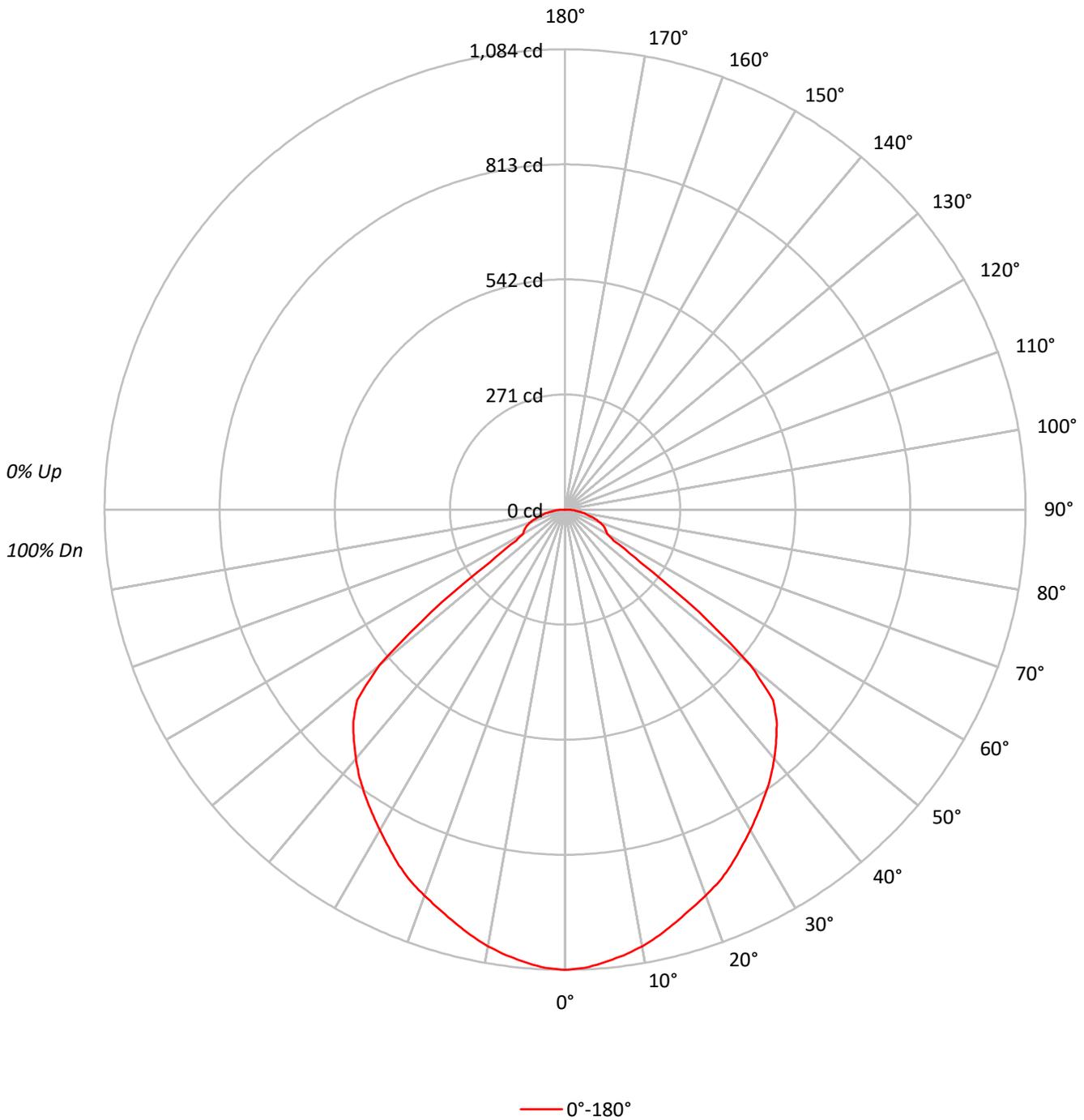
Lumens per Lamp: N/A
Luminaire Lumens: 2290.8 lumens
Efficiency: N/A
Efficacy: 152.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 5348 |
| 5° | 5302 |
| 10° | 5233 |
| 15° | 5139 |
| 20° | 5080 |
| 25° | 5033 |
| 30° | 4968 |
| 35° | 4944 |
| 40° | 4934 |
| 45° | 4916 |
| 50° | 4361 |
| 55° | 1867 |
| 60° | 1126 |
| 65° | 1202 |
| 70° | 1239 |
| 75° | 1201 |
| 80° | 1156 |
| 85° | 1172 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4916 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.4 | 4.4 |
| 10°-20° | 284.1 | 12.4 |
| 20°-30° | 425.7 | 18.6 |
| 30°-40° | 514.0 | 22.4 |
| 40°-50° | 534.7 | 23.3 |
| 50°-60° | 240.5 | 10.5 |
| 60°-70° | 100.9 | 4.4 |
| 70°-80° | 66.7 | 2.9 |
| 80°-90° | 22.7 | 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° | 811.2 | 35.4 |
| 0°-40° | 1325.2 | 57.8 |
| 0°-60° | 2100.4 | 91.7 |
| 0°-90° | 2290.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2290.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1084 | |
| 5° | 1070 | 101 |
| 15° | 1006 | 284 |
| 25° | 925 | 426 |
| 35° | 821 | 514 |
| 45° | 705 | 535 |
| 55° | 217 | 241 |
| 65° | 103 | 101 |
| 75° | 63 | 67 |
| 85° | 21 | 23 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1083.9 |
| 2.5° | 1080.9 |
| 5° | 1070.5 |
| 7.5° | 1058.7 |
| 10° | 1044.6 |
| 12.5° | 1026.8 |
| 15° | 1006.1 |
| 17.5° | 986.1 |
| 20° | 967.6 |
| 22.5° | 948.3 |
| 25° | 924.6 |
| 27.5° | 897.9 |
| 30° | 872.0 |
| 32.5° | 846.1 |
| 35° | 820.9 |
| 37.5° | 794.9 |
| 40° | 766.0 |
| 42.5° | 735.7 |
| 45° | 704.6 |
| 47.5° | 663.8 |
| 50° | 568.2 |
| 52.5° | 397.1 |
| 55° | 217.1 |
| 57.5° | 135.6 |
| 60° | 114.1 |
| 62.5° | 108.9 |
| 65° | 103.0 |
| 67.5° | 95.6 |
| 70° | 85.9 |
| 72.5° | 74.8 |
| 75° | 63.0 |
| 77.5° | 51.9 |
| 80° | 40.7 |
| 82.5° | 30.4 |
| 85° | 20.7 |
| 87.5° | 11.9 |
| 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 | 9.57 | 11.02 | 9.93 | 11.33 | 11.65 | 9.57 | 11.02 | 9.93 | 11.33 | 11.65 |
| | 3H | 11.66 | 12.95 | 12.04 | 13.28 | 13.64 | 11.66 | 12.95 | 12.04 | 13.28 | 13.64 |
| | 4H | 12.49 | 13.69 | 12.89 | 14.04 | 14.42 | 12.49 | 13.69 | 12.89 | 14.04 | 14.42 |
| | 6H | 13.14 | 14.24 | 13.55 | 14.61 | 15.00 | 13.14 | 14.24 | 13.55 | 14.61 | 15.00 |
| | 8H | 13.37 | 14.42 | 13.80 | 14.81 | 15.21 | 13.37 | 14.42 | 13.80 | 14.81 | 15.21 |
| | 12H | 13.55 | 14.56 | 13.98 | 14.94 | 15.37 | 13.55 | 14.56 | 13.98 | 14.94 | 15.37 |
| 4H | 2H | 10.23 | 11.43 | 10.63 | 11.78 | 12.16 | 10.23 | 11.43 | 10.63 | 11.78 | 12.16 |
| | 3H | 12.57 | 13.56 | 12.99 | 13.96 | 14.36 | 12.57 | 13.56 | 12.99 | 13.96 | 14.36 |
| | 4H | 13.54 | 14.42 | 13.97 | 14.83 | 15.27 | 13.54 | 14.42 | 13.97 | 14.83 | 15.27 |
| | 6H | 14.32 | 15.08 | 14.78 | 15.53 | 15.99 | 14.32 | 15.08 | 14.78 | 15.53 | 15.99 |
| | 8H | 14.60 | 15.32 | 15.07 | 15.76 | 16.23 | 14.60 | 15.32 | 15.07 | 15.76 | 16.23 |
| | 12H | 14.84 | 15.48 | 15.32 | 15.96 | 16.43 | 14.84 | 15.48 | 15.32 | 15.96 | 16.43 |
| 8H | 4H | 13.89 | 14.60 | 14.35 | 15.05 | 15.52 | 13.89 | 14.60 | 14.35 | 15.05 | 15.52 |
| | 6H | 14.81 | 15.40 | 15.31 | 15.90 | 16.38 | 14.81 | 15.40 | 15.31 | 15.90 | 16.38 |
| | 8H | 15.19 | 15.72 | 15.70 | 16.24 | 16.73 | 15.19 | 15.72 | 15.70 | 16.24 | 16.73 |
| | 12H | 15.52 | 16.00 | 16.03 | 16.50 | 17.06 | 15.52 | 16.00 | 16.03 | 16.50 | 17.06 |
| 12H | 4H | 13.93 | 14.56 | 14.41 | 15.04 | 15.52 | 13.93 | 14.56 | 14.41 | 15.04 | 15.52 |
| | 6H | 14.88 | 15.42 | 15.40 | 15.93 | 16.42 | 14.88 | 15.42 | 15.40 | 15.93 | 16.42 |
| | 8H | 15.33 | 15.81 | 15.84 | 16.30 | 16.87 | 15.33 | 15.81 | 15.84 | 16.30 | 16.87 |