

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: P980001

Luminaire Tested: PRLX-242-930-LL3-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-930-LL3-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

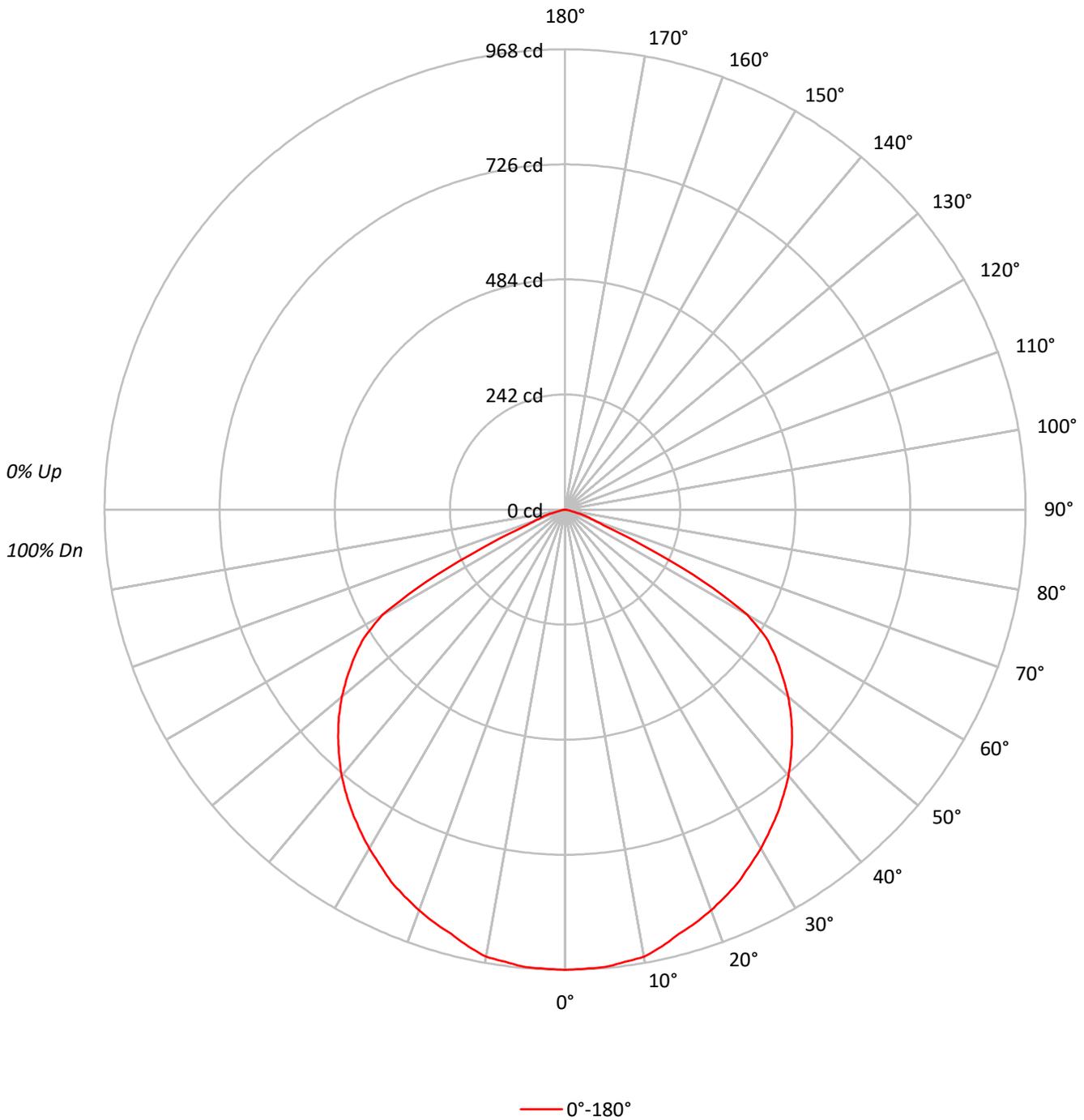
Lumens per Lamp: N/A
Luminaire Lumens: 2480.5 lumens
Efficiency: N/A
Efficacy: 165.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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 | | | | | | | | | | | | | | | | | | |
| 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 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | | | | | | | | | | | | | | | |
| | 1 | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 98 | 95 | 96 | 94 | 92 | 93 | 91 | 90 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | | | | | | | | | | | | | | | | |
| | 2 | 102 | 95 | 89 | 84 | 99 | 93 | 87 | 83 | 89 | 85 | 81 | 86 | 82 | 79 | 83 | 80 | 77 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | | | | | | | | | | | | | | | | |
| | 3 | 93 | 84 | 76 | 71 | 91 | 82 | 75 | 70 | 79 | 74 | 69 | 77 | 72 | 68 | 74 | 70 | 66 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | | | | | | | | | | | | | | | | |
| | 4 | 86 | 75 | 67 | 60 | 83 | 73 | 66 | 60 | 71 | 64 | 59 | 69 | 63 | 58 | 67 | 62 | 58 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | | | | | | | | | | | | | | | | |
| | 5 | 79 | 67 | 58 | 52 | 77 | 66 | 58 | 52 | 64 | 57 | 51 | 62 | 56 | 51 | 60 | 55 | 50 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | | | | | | | | | | | | | | | | |
| | 6 | 73 | 60 | 52 | 46 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | 56 | 49 | 45 | 54 | 49 | 44 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | | | | | | | | | | | | | | | | |
| | 7 | 68 | 55 | 46 | 40 | 66 | 54 | 46 | 40 | 52 | 45 | 40 | 51 | 44 | 40 | 49 | 44 | 39 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | | | | | | | | | | | | | | | | |
| | 8 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 35 | 45 | 40 | 35 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | | | | | | | | | | | | | | | | |
| | 9 | 59 | 46 | 38 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | | | | | | | | | | | | | | | |
| | 10 | 55 | 42 | 34 | 29 | 54 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 4332 |
| 5° | 4339 |
| 10° | 4341 |
| 15° | 4282 |
| 20° | 4272 |
| 25° | 4267 |
| 30° | 4254 |
| 35° | 4255 |
| 40° | 4269 |
| 45° | 4271 |
| 50° | 4264 |
| 55° | 4213 |
| 60° | 3960 |
| 65° | 2028 |
| 70° | 816 |
| 75° | 384 |
| 80° | 75 |
| 85° | 113 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4271 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 91.8 | 3.7 |
| 10°-20° | 261.6 | 10.5 |
| 20°-30° | 397.9 | 16.0 |
| 30°-40° | 487.6 | 19.7 |
| 40°-50° | 520.3 | 21.0 |
| 50°-60° | 479.7 | 19.3 |
| 60°-70° | 211.2 | 8.5 |
| 70°-80° | 28.3 | 1.1 |
| 80°-90° | 2.2 | 0.1 |
| 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° | 751.2 | 30.3 |
| 0°-40° | 1238.8 | 49.9 |
| 0°-60° | 2238.9 | 90.3 |
| 0°-90° | 2480.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2480.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 968 | |
| 5° | 966 | 92 |
| 15° | 924 | 262 |
| 25° | 864 | 398 |
| 35° | 779 | 488 |
| 45° | 675 | 520 |
| 55° | 540 | 480 |
| 65° | 192 | 211 |
| 75° | 22 | 28 |
| 85° | 2 | 2 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 968.1 |
| 2.5° | 966.6 |
| 5° | 965.9 |
| 7.5° | 959.5 |
| 10° | 955.2 |
| 12.5° | 940.8 |
| 15° | 924.3 |
| 17.5° | 911.4 |
| 20° | 897.1 |
| 22.5° | 880.6 |
| 25° | 864.1 |
| 27.5° | 842.6 |
| 30° | 823.2 |
| 32.5° | 801.0 |
| 35° | 778.8 |
| 37.5° | 755.1 |
| 40° | 730.7 |
| 42.5° | 702.8 |
| 45° | 674.8 |
| 47.5° | 644.7 |
| 50° | 612.4 |
| 52.5° | 576.5 |
| 55° | 540.0 |
| 57.5° | 501.2 |
| 60° | 442.4 |
| 62.5° | 329.1 |
| 65° | 191.5 |
| 67.5° | 88.9 |
| 70° | 62.4 |
| 72.5° | 46.6 |
| 75° | 22.2 |
| 77.5° | 6.5 |
| 80° | 2.9 |
| 82.5° | 2.9 |
| 85° | 2.2 |
| 87.5° | 1.4 |
| 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 | 17.93 | 19.48 | 18.30 | 19.79 | 20.11 | 17.93 | 19.48 | 18.30 | 19.79 | 20.11 |
| | 3H | 17.98 | 19.35 | 18.36 | 19.68 | 20.04 | 17.98 | 19.35 | 18.36 | 19.68 | 20.04 |
| | 4H | 17.94 | 19.23 | 18.34 | 19.58 | 19.96 | 17.94 | 19.23 | 18.34 | 19.58 | 19.96 |
| | 6H | 17.88 | 19.07 | 18.30 | 19.43 | 19.82 | 17.88 | 19.07 | 18.30 | 19.43 | 19.82 |
| | 8H | 17.85 | 18.97 | 18.28 | 19.36 | 19.76 | 17.85 | 18.97 | 18.28 | 19.36 | 19.76 |
| | 12H | 17.82 | 18.89 | 18.25 | 19.27 | 19.70 | 17.82 | 18.89 | 18.25 | 19.27 | 19.70 |
| 4H | 2H | 18.03 | 19.31 | 18.43 | 19.66 | 20.04 | 18.03 | 19.31 | 18.43 | 19.66 | 20.04 |
| | 3H | 18.12 | 19.16 | 18.53 | 19.56 | 19.97 | 18.12 | 19.16 | 18.53 | 19.56 | 19.97 |
| | 4H | 18.08 | 19.01 | 18.51 | 19.43 | 19.87 | 18.08 | 19.01 | 18.51 | 19.43 | 19.87 |
| | 6H | 18.02 | 18.83 | 18.48 | 19.27 | 19.73 | 18.02 | 18.83 | 18.48 | 19.27 | 19.73 |
| | 8H | 17.98 | 18.73 | 18.44 | 19.18 | 19.64 | 17.98 | 18.73 | 18.44 | 19.18 | 19.64 |
| | 12H | 17.95 | 18.62 | 18.43 | 19.09 | 19.57 | 17.95 | 18.62 | 18.43 | 19.09 | 19.57 |
| 8H | 4H | 17.99 | 18.74 | 18.46 | 19.19 | 19.66 | 17.99 | 18.74 | 18.46 | 19.19 | 19.66 |
| | 6H | 17.91 | 18.53 | 18.41 | 19.02 | 19.50 | 17.91 | 18.53 | 18.41 | 19.02 | 19.50 |
| | 8H | 17.86 | 18.42 | 18.38 | 18.93 | 19.42 | 17.86 | 18.42 | 18.38 | 18.93 | 19.42 |
| | 12H | 17.83 | 18.32 | 18.34 | 18.81 | 19.38 | 17.83 | 18.32 | 18.34 | 18.81 | 19.38 |
| 12H | 4H | 17.96 | 18.63 | 18.44 | 19.11 | 19.58 | 17.96 | 18.63 | 18.44 | 19.11 | 19.58 |
| | 6H | 17.86 | 18.41 | 18.37 | 18.92 | 19.41 | 17.86 | 18.41 | 18.37 | 18.92 | 19.41 |
| | 8H | 17.82 | 18.32 | 18.34 | 18.81 | 19.38 | 17.82 | 18.32 | 18.34 | 18.81 | 19.38 |