

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: P980070

Luminaire Tested: PRLX-242-935-LL2-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980070
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-935-LL2-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

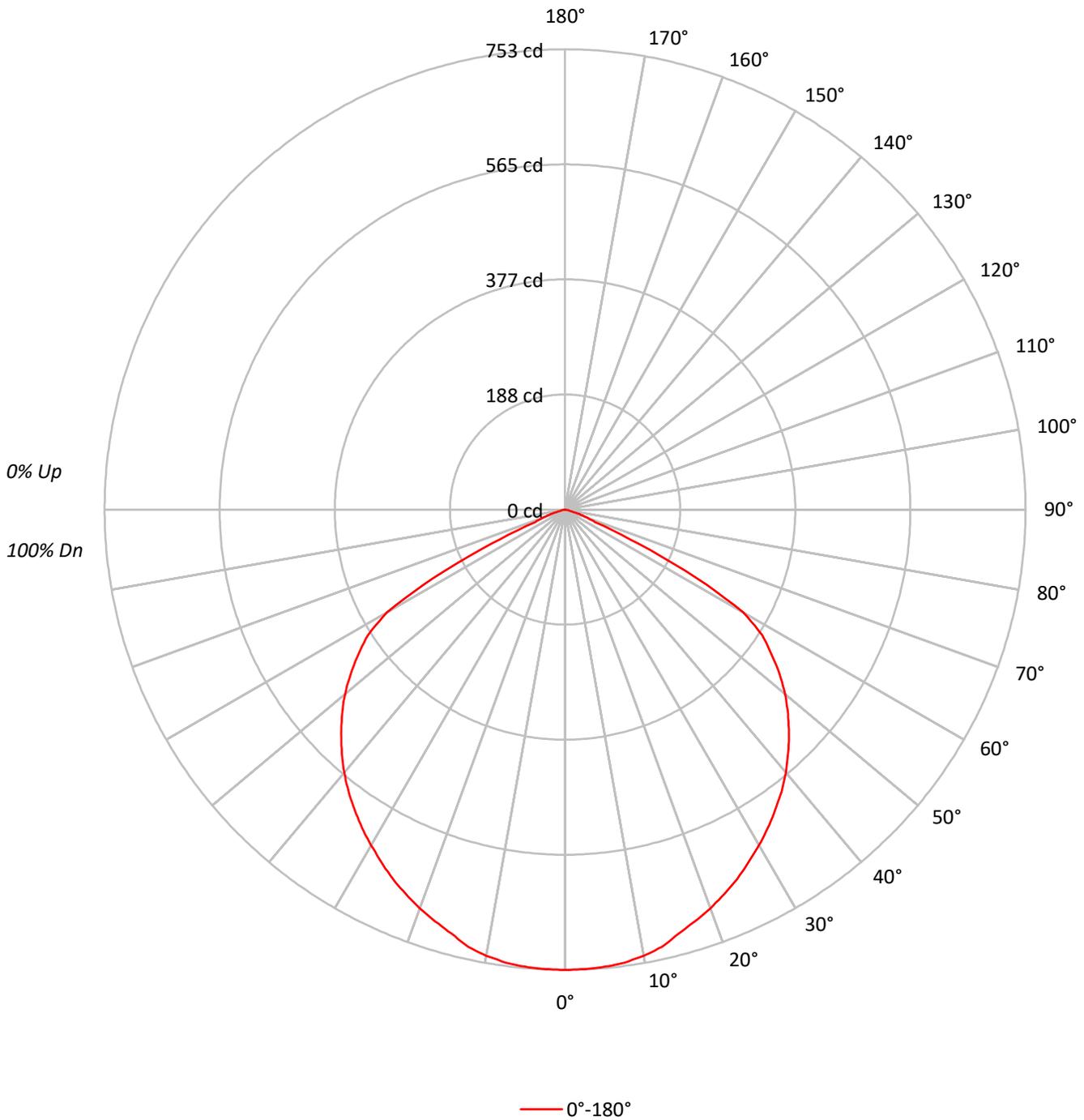
Lumens per Lamp: N/A
Luminaire Lumens: 1887.2 lumens
Efficiency: N/A
Efficacy: 171.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P980070
CATALOG NUMBER: PRLX-242-935-LL2-C-U-S-BLAK-X

Luminous Intensity Polar Plot





TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-LL2-C-U-S-BLAK-X

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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 92 | 90 | 88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | 86 | 83 | 79 | 84 | 80 | 78 | 76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 71 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 61 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 73 | 61 | 52 | 46 | 71 | 60 | 52 | 46 | 58 | 51 | 46 | 56 | 50 | 45 | 55 | 49 | 45 | 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 68 | 55 | 47 | 41 | 66 | 54 | 46 | 41 | 53 | 46 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 63 | 50 | 42 | 36 | 62 | 49 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 59 | 46 | 38 | 33 | 58 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 55 | 42 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|------|
| | 0° |
| 0° | 3370 |
| 5° | 3373 |
| 10° | 3368 |
| 15° | 3327 |
| 20° | 3307 |
| 25° | 3292 |
| 30° | 3276 |
| 35° | 3275 |
| 40° | 3281 |
| 45° | 3276 |
| 50° | 3270 |
| 55° | 3215 |
| 60° | 3012 |
| 65° | 1405 |
| 70° | 472 |
| 75° | 147 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3276 cd/sqm

TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-LL2-C-U-S-BLAK-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 71.4 | 3.8 |
| 10°-20° | 203.0 | 10.8 |
| 20°-30° | 307.2 | 16.3 |
| 30°-40° | 375.5 | 19.9 |
| 40°-50° | 399.4 | 21.2 |
| 50°-60° | 366.6 | 19.4 |
| 60°-70° | 150.5 | 8.0 |
| 70°-80° | 13.6 | 0.7 |
| 80°-90° | 0.0 | 0.0 |
| 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° | 581.6 | 30.8 |
| 0°-40° | 957.1 | 50.7 |
| 0°-60° | 1723.1 | 91.3 |
| 0°-90° | 1887.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1887.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 753 | |
| 5° | 751 | 71 |
| 15° | 718 | 203 |
| 25° | 667 | 307 |
| 35° | 600 | 375 |
| 45° | 518 | 399 |
| 55° | 412 | 367 |
| 65° | 133 | 150 |
| 75° | 8 | 14 |
| 85° | 0 | 0 |
| 90° | 0 | |

TEST NUMBER: P980070

CATALOG NUMBER: PRLX-242-935-LL2-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 753.1 |
| 2.5° | 752.5 |
| 5° | 750.8 |
| 7.5° | 747.4 |
| 10° | 741.2 |
| 12.5° | 732.7 |
| 15° | 718.1 |
| 17.5° | 706.2 |
| 20° | 694.4 |
| 22.5° | 680.8 |
| 25° | 666.7 |
| 27.5° | 650.3 |
| 30° | 634.0 |
| 32.5° | 617.6 |
| 35° | 599.5 |
| 37.5° | 581.5 |
| 40° | 561.7 |
| 42.5° | 540.2 |
| 45° | 517.7 |
| 47.5° | 494.5 |
| 50° | 469.7 |
| 52.5° | 442.0 |
| 55° | 412.1 |
| 57.5° | 382.2 |
| 60° | 336.5 |
| 62.5° | 242.7 |
| 65° | 132.7 |
| 67.5° | 53.1 |
| 70° | 36.1 |
| 72.5° | 24.8 |
| 75° | 8.5 |
| 77.5° | 0.6 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



TEST NUMBER: P980070
 CATALOG NUMBER: PRLX-242-935-LL2-C-U-S-BLAK-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 | 17.01 | 18.55 | 17.38 | 18.86 | 19.18 | 17.01 | 18.55 | 17.38 | 18.86 | 19.18 |
| | 3H | 17.00 | 18.36 | 17.37 | 18.69 | 19.05 | 17.00 | 18.36 | 17.37 | 18.69 | 19.05 |
| | 4H | 16.95 | 18.22 | 17.35 | 18.57 | 18.95 | 16.95 | 18.22 | 17.35 | 18.57 | 18.95 |
| | 6H | 16.88 | 18.05 | 17.30 | 18.42 | 18.81 | 16.88 | 18.05 | 17.30 | 18.42 | 18.81 |
| | 8H | 16.85 | 17.96 | 17.27 | 18.35 | 18.75 | 16.85 | 17.96 | 17.27 | 18.35 | 18.75 |
| | 12H | 16.82 | 17.88 | 17.25 | 18.26 | 18.69 | 16.82 | 17.88 | 17.25 | 18.26 | 18.69 |
| 4H | 2H | 17.07 | 18.34 | 17.47 | 18.69 | 19.07 | 17.07 | 18.34 | 17.47 | 18.69 | 19.07 |
| | 3H | 17.08 | 18.11 | 17.49 | 18.51 | 18.92 | 17.08 | 18.11 | 17.49 | 18.51 | 18.92 |
| | 4H | 17.02 | 17.94 | 17.45 | 18.36 | 18.80 | 17.02 | 17.94 | 17.45 | 18.36 | 18.80 |
| | 6H | 16.96 | 17.75 | 17.42 | 18.20 | 18.66 | 16.96 | 17.75 | 17.42 | 18.20 | 18.66 |
| | 8H | 16.91 | 17.66 | 17.38 | 18.10 | 18.57 | 16.91 | 17.66 | 17.38 | 18.10 | 18.57 |
| | 12H | 16.88 | 17.54 | 17.36 | 18.02 | 18.49 | 16.88 | 17.54 | 17.36 | 18.02 | 18.49 |
| 8H | 4H | 16.92 | 17.66 | 17.39 | 18.11 | 18.58 | 16.92 | 17.66 | 17.39 | 18.11 | 18.58 |
| | 6H | 16.84 | 17.44 | 17.34 | 17.94 | 18.42 | 16.84 | 17.44 | 17.34 | 17.94 | 18.42 |
| | 8H | 16.78 | 17.33 | 17.30 | 17.84 | 18.33 | 16.78 | 17.33 | 17.30 | 17.84 | 18.33 |
| | 12H | 16.74 | 17.23 | 17.26 | 17.72 | 18.29 | 16.74 | 17.23 | 17.26 | 17.72 | 18.29 |
| 12H | 4H | 16.89 | 17.55 | 17.37 | 18.03 | 18.50 | 16.89 | 17.55 | 17.37 | 18.03 | 18.50 |
| | 6H | 16.78 | 17.33 | 17.30 | 17.84 | 18.33 | 16.78 | 17.33 | 17.30 | 17.84 | 18.33 |
| | 8H | 16.74 | 17.23 | 17.26 | 17.72 | 18.29 | 16.74 | 17.23 | 17.26 | 17.72 | 18.29 |