

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: P979652

Luminaire Tested: PRLX-241-927-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-927-LL8-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 241 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

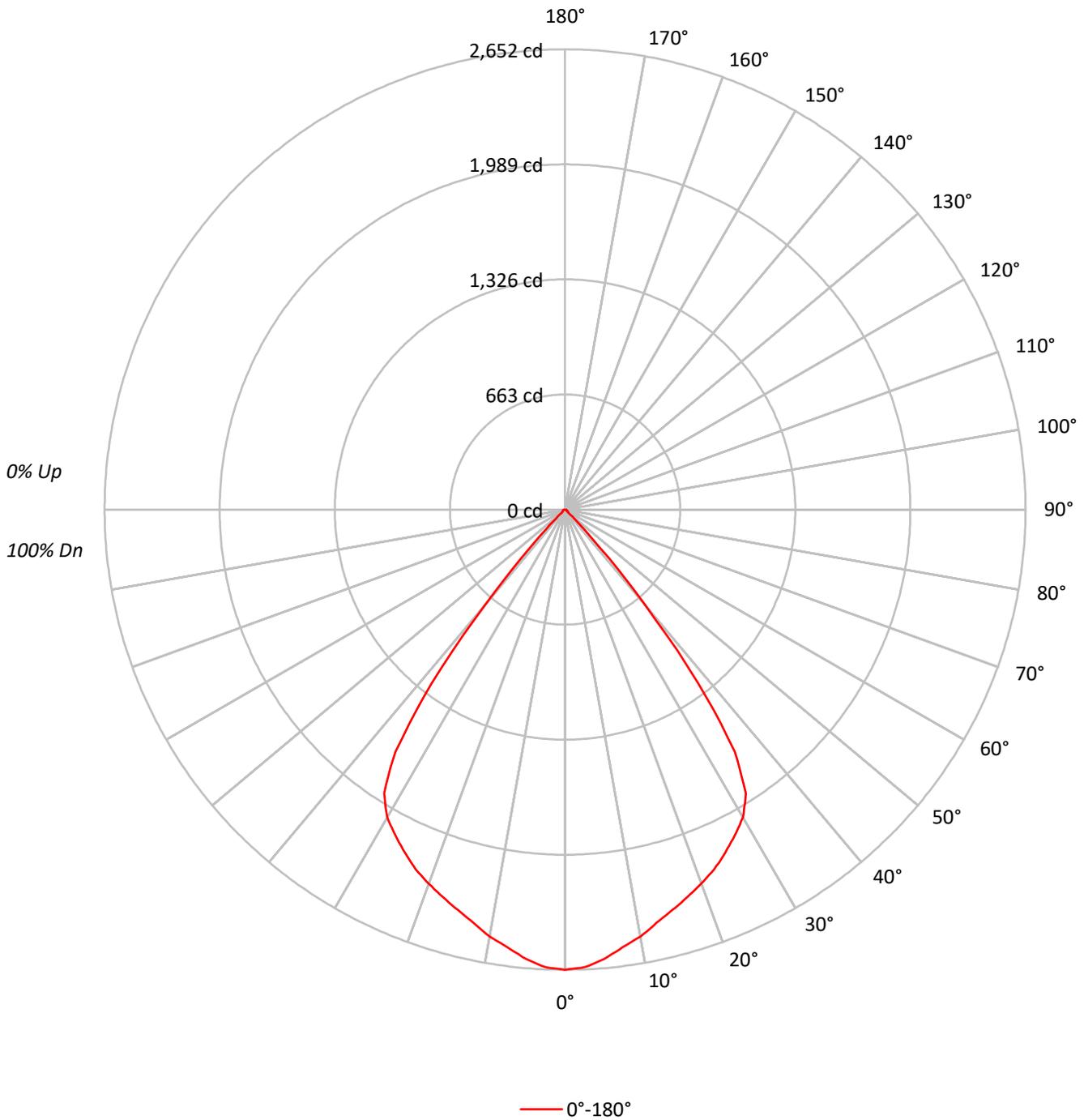
Lumens per Lamp: N/A
Luminaire Lumens: 3070.8 lumens
Efficiency: N/A
Efficacy: 49.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.07
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 |
| 2 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 93 | 97 | 94 | 91 | 94 | 92 | 89 | 92 | 89 | 88 | 86 |
| 3 | 102 | 95 | 90 | 86 | 100 | 93 | 89 | 85 | 91 | 87 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 79 |
| 4 | 96 | 88 | 82 | 78 | 94 | 87 | 82 | 77 | 85 | 80 | 77 | 83 | 79 | 76 | 81 | 78 | 75 | 73 |
| 5 | 91 | 82 | 76 | 71 | 89 | 81 | 75 | 71 | 79 | 74 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 68 |
| 6 | 86 | 77 | 70 | 66 | 84 | 76 | 70 | 65 | 74 | 69 | 65 | 73 | 68 | 65 | 71 | 67 | 64 | 63 |
| 7 | 81 | 71 | 65 | 61 | 80 | 71 | 65 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 |
| 8 | 77 | 67 | 61 | 56 | 76 | 66 | 60 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 55 | 54 |
| 9 | 73 | 63 | 56 | 52 | 72 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 59 | 55 | 52 | 50 |
| 10 | 69 | 59 | 53 | 49 | 68 | 58 | 53 | 49 | 58 | 52 | 49 | 57 | 52 | 48 | 56 | 52 | 48 | 47 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 20443 |
| 5° | 20104 |
| 10° | 19560 |
| 15° | 19065 |
| 20° | 18819 |
| 25° | 18558 |
| 30° | 18232 |
| 35° | 16029 |
| 40° | 7116 |
| 45° | 893 |
| 50° | 206 |
| 55° | 231 |
| 60° | 233 |
| 65° | 235 |
| 70° | 194 |
| 75° | 194 |
| 80° | 191 |
| 85° | 195 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 893 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 244.6 | 8.0 |
| 10°-20° | 674.9 | 22.0 |
| 20°-30° | 1005.0 | 32.7 |
| 30°-40° | 969.9 | 31.6 |
| 40°-50° | 141.1 | 4.6 |
| 50°-60° | 14.7 | 0.5 |
| 60°-70° | 12.0 | 0.4 |
| 70°-80° | 6.8 | 0.2 |
| 80°-90° | 1.8 | 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° | 1924.6 | 62.7 |
| 0°-40° | 2894.4 | 94.3 |
| 0°-60° | 3050.2 | 99.3 |
| 0°-90° | 3070.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3070.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2652 | |
| 5° | 2598 | 245 |
| 15° | 2389 | 675 |
| 25° | 2182 | 1005 |
| 35° | 1703 | 970 |
| 45° | 82 | 141 |
| 55° | 17 | 15 |
| 65° | 13 | 12 |
| 75° | 6 | 7 |
| 85° | 2 | 2 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2651.8 |
| 2.5° | 2638.9 |
| 5° | 2597.9 |
| 7.5° | 2544.0 |
| 10° | 2498.7 |
| 12.5° | 2438.4 |
| 15° | 2388.8 |
| 17.5° | 2341.3 |
| 20° | 2293.9 |
| 22.5° | 2244.3 |
| 25° | 2181.8 |
| 27.5° | 2117.1 |
| 30° | 2048.1 |
| 32.5° | 1938.2 |
| 35° | 1703.2 |
| 37.5° | 1261.2 |
| 40° | 707.1 |
| 42.5° | 293.2 |
| 45° | 81.9 |
| 47.5° | 25.9 |
| 50° | 17.2 |
| 52.5° | 17.2 |
| 55° | 17.2 |
| 57.5° | 15.1 |
| 60° | 15.1 |
| 62.5° | 12.9 |
| 65° | 12.9 |
| 67.5° | 10.8 |
| 70° | 8.6 |
| 72.5° | 8.6 |
| 75° | 6.5 |
| 77.5° | 4.3 |
| 80° | 4.3 |
| 82.5° | 2.2 |
| 85° | 2.2 |
| 87.5° | 0.0 |
| 90° | 0.0 |

TEST NUMBER: P979652
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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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6H | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 |
| | 8H | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 |
| | 12H | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 |
| 4H | 2H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3H | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4H | 0.00 | 0.00 | 0.00 | 0.07 | 0.52 | 0.00 | 0.00 | 0.00 | 0.07 | 0.52 |
| | 6H | 0.00 | 0.09 | 0.08 | 0.54 | 1.01 | 0.00 | 0.09 | 0.08 | 0.54 | 1.01 |
| | 8H | 0.00 | 0.19 | 0.22 | 0.64 | 1.12 | 0.00 | 0.19 | 0.22 | 0.64 | 1.12 |
| | 12H | 0.00 | 0.27 | 0.38 | 0.76 | 1.24 | 0.00 | 0.27 | 0.38 | 0.76 | 1.24 |
| 8H | 4H | 0.00 | 0.00 | 0.00 | 0.18 | 0.65 | 0.00 | 0.00 | 0.00 | 0.18 | 0.65 |
| | 6H | 0.00 | 0.31 | 0.46 | 0.81 | 1.30 | 0.00 | 0.31 | 0.46 | 0.81 | 1.30 |
| | 8H | 0.15 | 0.46 | 0.69 | 0.99 | 1.48 | 0.15 | 0.46 | 0.69 | 0.99 | 1.48 |
| | 12H | 0.41 | 0.68 | 0.93 | 1.18 | 1.76 | 0.41 | 0.68 | 0.93 | 1.18 | 1.76 |
| 12H | 4H | 0.00 | 0.00 | 0.00 | 0.15 | 0.63 | 0.00 | 0.00 | 0.00 | 0.15 | 0.63 |
| | 6H | 0.00 | 0.29 | 0.51 | 0.81 | 1.31 | 0.00 | 0.29 | 0.51 | 0.81 | 1.31 |
| | 8H | 0.22 | 0.49 | 0.75 | 0.99 | 1.57 | 0.22 | 0.49 | 0.75 | 0.99 | 1.57 |