

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: P979573

Luminaire Tested: PRLX-240-940-LL8-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-240-940-LL8-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 240 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

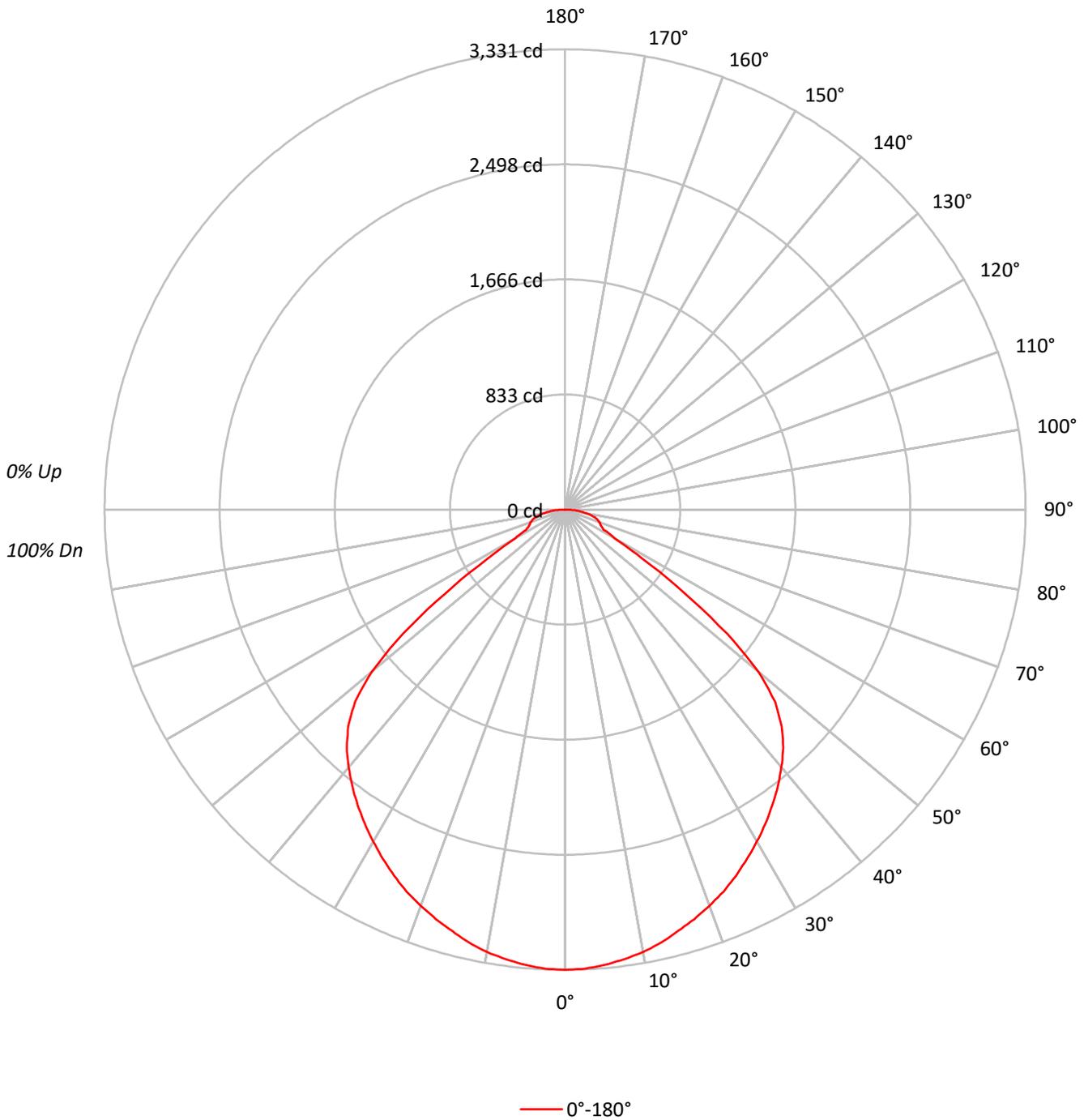
Lumens per Lamp: N/A
Luminaire Lumens: 7453.4 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.37
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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 | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 98 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 88 |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 82 | 87 | 83 | 80 | 84 | 81 | 78 | 76 |
| 3 | 94 | 85 | 78 | 72 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 73 | 69 | 76 | 72 | 68 | 66 |
| 4 | 87 | 77 | 69 | 63 | 85 | 75 | 68 | 62 | 73 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 60 | 58 |
| 5 | 81 | 69 | 61 | 55 | 79 | 68 | 61 | 55 | 66 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 53 | 51 |
| 6 | 75 | 63 | 55 | 49 | 73 | 62 | 54 | 49 | 60 | 53 | 48 | 59 | 52 | 48 | 57 | 52 | 47 | 46 |
| 7 | 70 | 57 | 49 | 44 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 54 | 47 | 43 | 52 | 47 | 42 | 41 |
| 8 | 65 | 52 | 45 | 39 | 64 | 52 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 38 | 37 |
| 9 | 61 | 48 | 41 | 35 | 59 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 |
| 10 | 57 | 45 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 41 | 36 | 32 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 33537 |
| 5° | 33443 |
| 10° | 33253 |
| 15° | 32907 |
| 20° | 32697 |
| 25° | 32488 |
| 30° | 32262 |
| 35° | 32120 |
| 40° | 31998 |
| 45° | 31561 |
| 50° | 28580 |
| 55° | 18573 |
| 60° | 8383 |
| 65° | 6886 |
| 70° | 7787 |
| 75° | 8672 |
| 80° | 9086 |
| 85° | 9335 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 31561 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 314.0 | 4.2 |
| 10°-20° | 891.9 | 12.0 |
| 20°-30° | 1347.9 | 18.1 |
| 30°-40° | 1635.7 | 21.9 |
| 40°-50° | 1686.3 | 22.6 |
| 50°-60° | 956.4 | 12.8 |
| 60°-70° | 302.5 | 4.1 |
| 70°-80° | 230.8 | 3.1 |
| 80°-90° | 88.0 | 1.2 |
| 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° | 2553.8 | 34.3 |
| 0°-40° | 4189.4 | 56.2 |
| 0°-60° | 6832.1 | 91.7 |
| 0°-90° | 7453.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 7453.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3331 | |
| 5° | 3309 | 314 |
| 15° | 3157 | 892 |
| 25° | 2924 | 1348 |
| 35° | 2613 | 1636 |
| 45° | 2216 | 1686 |
| 55° | 1058 | 956 |
| 65° | 289 | 302 |
| 75° | 223 | 231 |
| 85° | 81 | 88 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3330.7 |
| 2.5° | 3325.8 |
| 5° | 3308.7 |
| 7.5° | 3281.7 |
| 10° | 3252.3 |
| 12.5° | 3210.7 |
| 15° | 3156.8 |
| 17.5° | 3107.8 |
| 20° | 3051.5 |
| 22.5° | 2992.7 |
| 25° | 2924.2 |
| 27.5° | 2850.7 |
| 30° | 2774.8 |
| 32.5° | 2696.4 |
| 35° | 2613.1 |
| 37.5° | 2527.4 |
| 40° | 2434.4 |
| 42.5° | 2336.4 |
| 45° | 2216.4 |
| 47.5° | 2059.6 |
| 50° | 1824.5 |
| 52.5° | 1479.2 |
| 55° | 1058.0 |
| 57.5° | 663.7 |
| 60° | 416.3 |
| 62.5° | 315.9 |
| 65° | 289.0 |
| 67.5° | 276.7 |
| 70° | 264.5 |
| 72.5° | 247.4 |
| 75° | 222.9 |
| 77.5° | 193.5 |
| 80° | 156.7 |
| 82.5° | 120.0 |
| 85° | 80.8 |
| 87.5° | 44.1 |
| 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 | 18.84 | 20.31 | 19.21 | 20.62 | 20.94 | 18.84 | 20.31 | 19.21 | 20.62 | 20.94 |
| | 3H | 19.73 | 21.04 | 20.11 | 21.37 | 21.73 | 19.73 | 21.04 | 20.11 | 21.37 | 21.73 |
| | 4H | 20.34 | 21.56 | 20.74 | 21.91 | 22.29 | 20.34 | 21.56 | 20.74 | 21.91 | 22.29 |
| | 6H | 20.94 | 22.06 | 21.35 | 22.43 | 22.82 | 20.94 | 22.06 | 21.35 | 22.43 | 22.82 |
| | 8H | 21.18 | 22.25 | 21.60 | 22.64 | 23.04 | 21.18 | 22.25 | 21.60 | 22.64 | 23.04 |
| | 12H | 21.36 | 22.38 | 21.79 | 22.77 | 23.20 | 21.36 | 22.38 | 21.79 | 22.77 | 23.20 |
| 4H | 2H | 18.97 | 20.19 | 19.37 | 20.54 | 20.92 | 18.97 | 20.19 | 19.37 | 20.54 | 20.92 |
| | 3H | 20.21 | 21.21 | 20.62 | 21.61 | 22.01 | 20.21 | 21.21 | 20.62 | 21.61 | 22.01 |
| | 4H | 21.03 | 21.93 | 21.46 | 22.34 | 22.78 | 21.03 | 21.93 | 21.46 | 22.34 | 22.78 |
| | 6H | 21.84 | 22.62 | 22.30 | 23.06 | 23.52 | 21.84 | 22.62 | 22.30 | 23.06 | 23.52 |
| | 8H | 22.16 | 22.88 | 22.62 | 23.33 | 23.80 | 22.16 | 22.88 | 22.62 | 23.33 | 23.80 |
| | 12H | 22.42 | 23.07 | 22.90 | 23.55 | 24.02 | 22.42 | 23.07 | 22.90 | 23.55 | 24.02 |
| 8H | 4H | 21.34 | 22.07 | 21.81 | 22.52 | 22.99 | 21.34 | 22.07 | 21.81 | 22.52 | 22.99 |
| | 6H | 22.31 | 22.92 | 22.81 | 23.41 | 23.89 | 22.31 | 22.92 | 22.81 | 23.41 | 23.89 |
| | 8H | 22.73 | 23.29 | 23.25 | 23.80 | 24.29 | 22.73 | 23.29 | 23.25 | 23.80 | 24.29 |
| | 12H | 23.10 | 23.60 | 23.61 | 24.09 | 24.66 | 23.10 | 23.60 | 23.61 | 24.09 | 24.66 |
| 12H | 4H | 21.39 | 22.04 | 21.87 | 22.52 | 22.99 | 21.39 | 22.04 | 21.87 | 22.52 | 22.99 |
| | 6H | 22.39 | 22.95 | 22.91 | 23.46 | 23.95 | 22.39 | 22.95 | 22.91 | 23.46 | 23.95 |
| | 8H | 22.89 | 23.38 | 23.40 | 23.87 | 24.44 | 22.89 | 23.38 | 23.40 | 23.87 | 24.44 |