

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: P980121

Luminaire Tested: PRLX-242-935-LL7-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980121
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-242-935-LL7-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

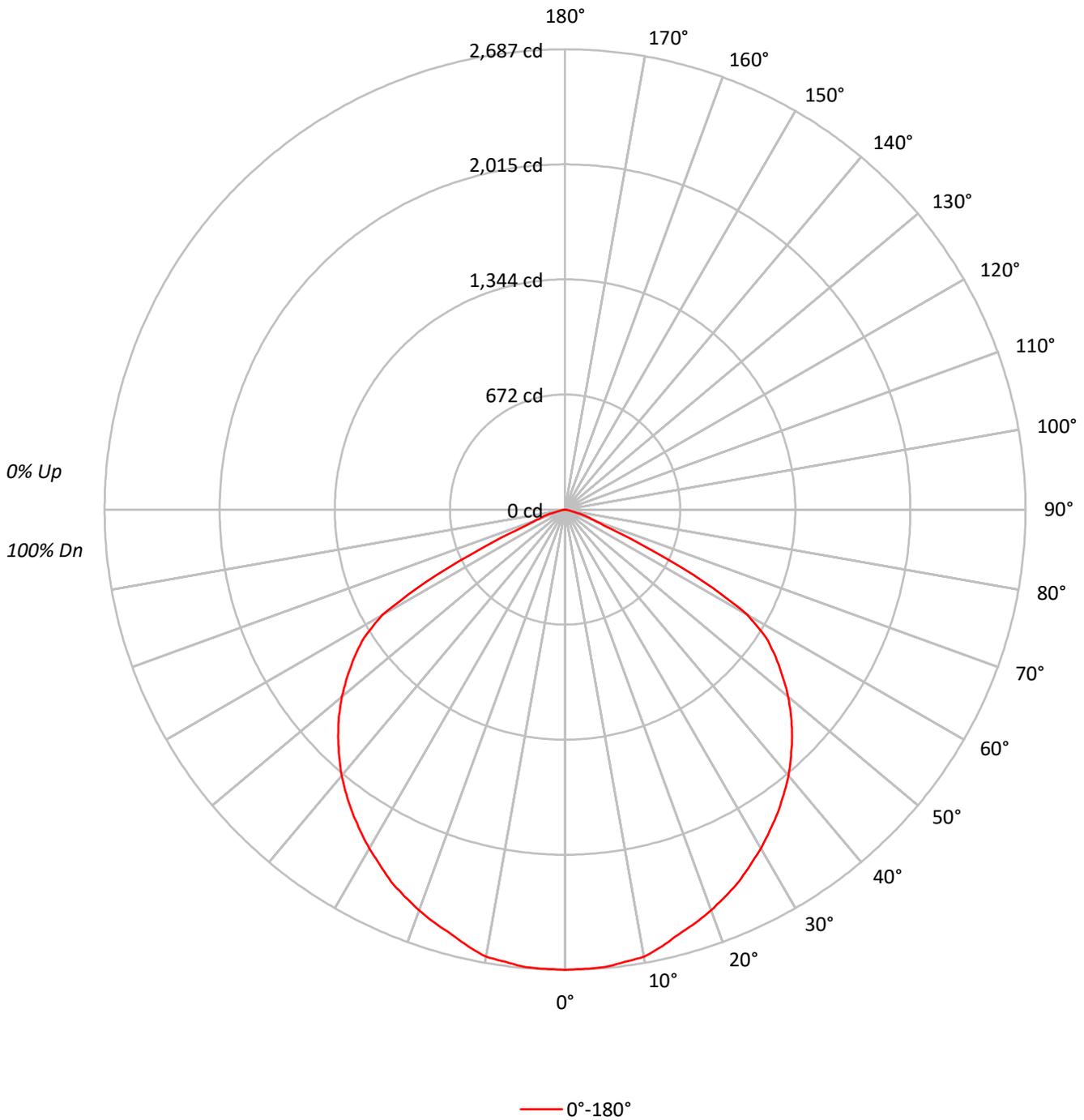
Lumens per Lamp: N/A
Luminaire Lumens: 6886.1 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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





TEST NUMBER: P980121

CATALOG NUMBER: PRLX-242-935-LL7-C-U-S-WHTE-X

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

AVERAGE LUMINANCE (cd/sqm):

| 0° | |
|-----|-------|
| 0° | 12026 |
| 5° | 12046 |
| 10° | 12049 |
| 15° | 11888 |
| 20° | 11860 |
| 25° | 11845 |
| 30° | 11809 |
| 35° | 11811 |
| 40° | 11850 |
| 45° | 11856 |
| 50° | 11836 |
| 55° | 11695 |
| 60° | 10994 |
| 65° | 5628 |
| 70° | 2266 |
| 75° | 1067 |
| 80° | 206 |
| 85° | 308 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11856 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 254.7 | 3.7 |
| 10°-20° | 726.1 | 10.5 |
| 20°-30° | 1104.6 | 16.0 |
| 30°-40° | 1353.6 | 19.7 |
| 40°-50° | 1444.4 | 21.0 |
| 50°-60° | 1331.8 | 19.3 |
| 60°-70° | 586.4 | 8.5 |
| 70°-80° | 78.5 | 1.1 |
| 80°-90° | 6.0 | 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° | 2085.5 | 30.3 |
| 0°-40° | 3439.0 | 49.9 |
| 0°-60° | 6215.3 | 90.3 |
| 0°-90° | 6886.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6886.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2687 | |
| 5° | 2682 | 255 |
| 15° | 2566 | 726 |
| 25° | 2399 | 1105 |
| 35° | 2162 | 1354 |
| 45° | 1873 | 1444 |
| 55° | 1499 | 1332 |
| 65° | 532 | 586 |
| 75° | 62 | 79 |
| 85° | 6 | 6 |
| 90° | 0 | |

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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2687.4 |
| 2.5° | 2683.5 |
| 5° | 2681.5 |
| 7.5° | 2663.6 |
| 10° | 2651.6 |
| 12.5° | 2611.8 |
| 15° | 2566.0 |
| 17.5° | 2530.2 |
| 20° | 2490.4 |
| 22.5° | 2444.6 |
| 25° | 2398.8 |
| 27.5° | 2339.1 |
| 30° | 2285.3 |
| 32.5° | 2223.6 |
| 35° | 2161.9 |
| 37.5° | 2096.2 |
| 40° | 2028.5 |
| 42.5° | 1950.9 |
| 45° | 1873.3 |
| 47.5° | 1789.6 |
| 50° | 1700.1 |
| 52.5° | 1600.5 |
| 55° | 1499.0 |
| 57.5° | 1391.5 |
| 60° | 1228.3 |
| 62.5° | 913.7 |
| 65° | 531.5 |
| 67.5° | 246.8 |
| 70° | 173.2 |
| 72.5° | 129.4 |
| 75° | 61.7 |
| 77.5° | 17.9 |
| 80° | 8.0 |
| 82.5° | 8.0 |
| 85° | 6.0 |
| 87.5° | 4.0 |
| 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 | 21.48 | 23.03 | 21.84 | 23.34 | 23.66 | 21.48 | 23.03 | 21.84 | 23.34 | 23.66 |
| | 3H | 21.53 | 22.90 | 21.90 | 23.23 | 23.59 | 21.53 | 22.90 | 21.90 | 23.23 | 23.59 |
| | 4H | 21.49 | 22.78 | 21.89 | 23.13 | 23.50 | 21.49 | 22.78 | 21.89 | 23.13 | 23.50 |
| | 6H | 21.43 | 22.61 | 21.84 | 22.98 | 23.37 | 21.43 | 22.61 | 21.84 | 22.98 | 23.37 |
| | 8H | 21.40 | 22.52 | 21.82 | 22.91 | 23.31 | 21.40 | 22.52 | 21.82 | 22.91 | 23.31 |
| | 12H | 21.37 | 22.44 | 21.80 | 22.82 | 23.25 | 21.37 | 22.44 | 21.80 | 22.82 | 23.25 |
| 4H | 2H | 21.57 | 22.86 | 21.97 | 23.21 | 23.59 | 21.57 | 22.86 | 21.97 | 23.21 | 23.59 |
| | 3H | 21.66 | 22.71 | 22.08 | 23.11 | 23.51 | 21.66 | 22.71 | 22.08 | 23.11 | 23.51 |
| | 4H | 21.63 | 22.56 | 22.06 | 22.98 | 23.42 | 21.63 | 22.56 | 22.06 | 22.98 | 23.42 |
| | 6H | 21.57 | 22.38 | 22.03 | 22.82 | 23.28 | 21.57 | 22.38 | 22.03 | 22.82 | 23.28 |
| | 8H | 21.53 | 22.28 | 21.99 | 22.72 | 23.19 | 21.53 | 22.28 | 21.99 | 22.72 | 23.19 |
| | 12H | 21.49 | 22.16 | 21.98 | 22.64 | 23.11 | 21.49 | 22.16 | 21.98 | 22.64 | 23.11 |
| 8H | 4H | 21.54 | 22.29 | 22.01 | 22.74 | 23.21 | 21.54 | 22.29 | 22.01 | 22.74 | 23.21 |
| | 6H | 21.46 | 22.08 | 21.96 | 22.57 | 23.05 | 21.46 | 22.08 | 21.96 | 22.57 | 23.05 |
| | 8H | 21.41 | 21.96 | 21.92 | 22.47 | 22.96 | 21.41 | 21.96 | 21.92 | 22.47 | 22.96 |
| | 12H | 21.37 | 21.87 | 21.88 | 22.36 | 22.92 | 21.37 | 21.87 | 21.88 | 22.36 | 22.92 |
| 12H | 4H | 21.51 | 22.18 | 21.99 | 22.66 | 23.13 | 21.51 | 22.18 | 21.99 | 22.66 | 23.13 |
| | 6H | 21.41 | 21.96 | 21.92 | 22.47 | 22.96 | 21.41 | 21.96 | 21.92 | 22.47 | 22.96 |
| | 8H | 21.37 | 21.87 | 21.88 | 22.36 | 22.92 | 21.37 | 21.87 | 21.88 | 22.36 | 22.92 |