

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P981020

Luminaire Tested: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P981020  
TEST IS SCALED FROM ( FO44195.PSO)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/11/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE  
Description: PrentaLux 3-INCH CYLINDER, WIDE FLOOD OPTIC  
2300 LUMENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

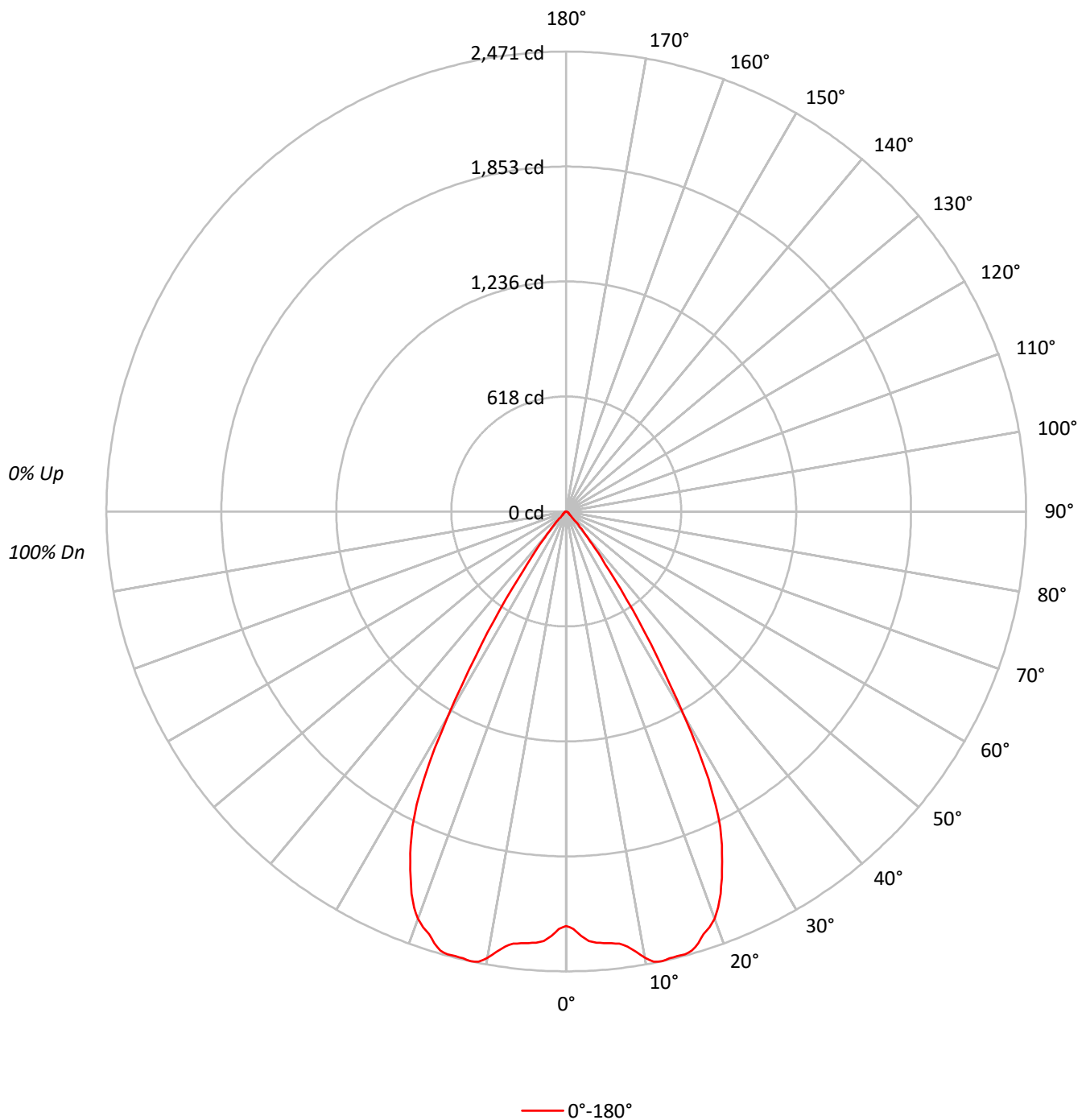
Lumens per Lamp: N/A  
Luminaire Lumens: 2207.2 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 1.07 / 1.07 / 0.89  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 22.5  
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

TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

### Luminous Intensity Polar Plot



TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |  | 100 |
| 1   | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 |  | 101 | 100 | 99  |  | 94  |
| 2   | 108 | 104 | 100 | 97  | 106 | 102 | 99  | 96  | 99  | 96  | 94  |  | 96  | 94  | 92  |  | 88  |
| 3   | 103 | 97  | 93  | 89  | 101 | 96  | 92  | 88  | 93  | 90  | 87  |  | 91  | 88  | 85  |  | 82  |
| 4   | 98  | 91  | 86  | 82  | 97  | 90  | 85  | 82  | 88  | 84  | 81  |  | 86  | 83  | 80  |  | 77  |
| 5   | 94  | 86  | 80  | 76  | 92  | 85  | 80  | 76  | 83  | 79  | 75  |  | 82  | 78  | 75  |  | 73  |
| 6   | 89  | 81  | 75  | 71  | 88  | 80  | 75  | 71  | 79  | 74  | 70  |  | 77  | 73  | 70  |  | 68  |
| 7   | 85  | 76  | 71  | 67  | 84  | 76  | 70  | 66  | 74  | 70  | 66  |  | 73  | 69  | 66  |  | 64  |
| 8   | 81  | 72  | 67  | 63  | 80  | 72  | 66  | 62  | 71  | 66  | 62  |  | 70  | 65  | 62  |  | 60  |
| 9   | 78  | 68  | 63  | 59  | 77  | 68  | 63  | 59  | 67  | 62  | 59  |  | 66  | 62  | 58  |  | 57  |
| 10  | 74  | 65  | 59  | 56  | 73  | 64  | 59  | 56  | 64  | 59  | 55  |  | 63  | 58  | 55  |  | 54  |

**AVERAGE LUMINANCE (cd/sqm):**

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 488228 |
| 5°  | 512457 |
| 10° | 542319 |
| 15° | 559436 |
| 20° | 543667 |
| 25° | 479133 |
| 30° | 321239 |
| 35° | 136095 |
| 40° | 45170  |
| 45° | 11536  |
| 50° | 7300   |
| 55° | 5887   |
| 60° | 4517   |
| 65° | 3373   |
| 70° | 2693   |
| 75° | 2796   |
| 80° | 3662   |
| 85° | 4026   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11536 cd/sqm

TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 224.5  | 10.2      |
| 10°-20°   | 688.2  | 31.2      |
| 20°-30°   | 874.9  | 39.6      |
| 30°-40°   | 350.0  | 15.9      |
| 40°-50°   | 43.7   | 2.0       |
| 50°-60°   | 14.1   | 0.6       |
| 60°-70°   | 6.7    | 0.3       |
| 70°-80°   | 3.6    | 0.2       |
| 80°-90°   | 1.5    | 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°    | 1787.6 | 81.0      |
| 0°-40°    | 2137.6 | 96.8      |
| 0°-60°    | 2195.4 | 99.5      |
| 0°-90°    | 2207.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2207.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2226 |      |
| 5°  | 2328 | 225  |
| 15° | 2464 | 688  |
| 25° | 1980 | 875  |
| 35° | 508  | 350  |
| 45° | 37   | 44   |
| 55° | 15   | 14   |
| 65° | 6    | 7    |
| 75° | 3    | 4    |
| 85° | 2    | 2    |
| 90° | 0    |      |

TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

**CANDELA DISTRIBUTION (FULL):**

| 0°  |        |
|-----|--------|
| 0°  | 2226.5 |
| 1°  | 2242.9 |
| 2°  | 2282.9 |
| 3°  | 2312.3 |
| 4°  | 2322.9 |
| 5°  | 2328.1 |
| 6°  | 2332.3 |
| 7°  | 2339.7 |
| 8°  | 2360.2 |
| 9°  | 2395.4 |
| 10° | 2435.6 |
| 11° | 2464.4 |
| 12° | 2470.7 |
| 13° | 2464.4 |
| 14° | 2463.0 |
| 15° | 2464.3 |
| 16° | 2454.0 |
| 17° | 2425.6 |
| 18° | 2387.7 |
| 19° | 2363.9 |
| 20° | 2329.8 |
| 21° | 2279.5 |
| 22° | 2216.4 |
| 23° | 2139.1 |
| 24° | 2059.8 |
| 25° | 1980.3 |
| 26° | 1885.6 |
| 27° | 1768.3 |
| 28° | 1629.5 |
| 29° | 1455.7 |
| 30° | 1268.7 |
| 31° | 1084.7 |
| 32° | 919.7  |
| 33° | 775.3  |
| 34° | 640.7  |
| 35° | 508.4  |
| 36° | 395.5  |
| 37° | 311.4  |
| 38° | 251.1  |
| 39° | 202.1  |
| 40° | 157.8  |
| 41° | 124.2  |
| 42° | 98.4   |
| 43° | 75.1   |
| 44° | 52.7   |

TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

**CANDELA DISTRIBUTION (continued):**

|     | 0°   |
|-----|------|
| 45° | 37.2 |
| 46° | 30.0 |
| 47° | 27.1 |
| 48° | 24.9 |
| 49° | 23.1 |
| 50° | 21.4 |
| 51° | 19.7 |
| 52° | 18.1 |
| 53° | 16.8 |
| 54° | 15.7 |
| 55° | 15.4 |
| 56° | 15.3 |
| 57° | 14.8 |
| 58° | 14.0 |
| 59° | 12.7 |
| 60° | 10.3 |
| 61° | 8.3  |
| 62° | 7.6  |
| 63° | 7.5  |
| 64° | 7.1  |
| 65° | 6.5  |
| 66° | 6.3  |
| 67° | 6.1  |
| 68° | 5.8  |
| 69° | 5.0  |
| 70° | 4.2  |
| 71° | 3.7  |
| 72° | 3.6  |
| 73° | 3.4  |
| 74° | 3.4  |
| 75° | 3.3  |
| 76° | 3.3  |
| 77° | 3.3  |
| 78° | 3.2  |
| 79° | 3.1  |
| 80° | 2.9  |
| 81° | 2.8  |
| 82° | 2.6  |
| 83° | 2.4  |
| 84° | 2.0  |
| 85° | 1.6  |
| 86° | 0.9  |
| 87° | 0.3  |
| 88° | 0.1  |
| 89° | 0.1  |

TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

CANDELA DISTRIBUTION (continued):

90° |  $\overset{0^\circ}{\rule{1.5cm}{0.4pt}}$   
0.0

TEST NUMBER: P981020

CATALOG NUMBER: PRLX-CYL3-10-930-23L-WD-U-S-X-X-WHTE

**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 | 7.97             | 8.89  | 8.34  | 9.20  | 9.52  | 7.97           | 8.89  | 8.34  | 9.20  | 9.52  |
|                 | 3H   | 8.59             | 9.40  | 8.97  | 9.73  | 10.10 | 8.59           | 9.40  | 8.97  | 9.73  | 10.10 |
|                 | 4H   | 8.81             | 9.56  | 9.22  | 9.91  | 10.30 | 8.81           | 9.56  | 9.22  | 9.91  | 10.30 |
|                 | 6H   | 9.20             | 9.88  | 9.62  | 10.25 | 10.65 | 9.20           | 9.88  | 9.62  | 10.25 | 10.65 |
|                 | 8H   | 9.42             | 10.06 | 9.86  | 10.45 | 10.86 | 9.42           | 10.06 | 9.86  | 10.45 | 10.86 |
|                 | 12H  | 9.53             | 10.14 | 9.97  | 10.52 | 10.96 | 9.53           | 10.14 | 9.97  | 10.52 | 10.96 |
| 4H              | 2H   | 7.99             | 8.74  | 8.40  | 9.09  | 9.48  | 7.99           | 8.74  | 8.40  | 9.09  | 9.48  |
|                 | 3H   | 8.72             | 9.33  | 9.14  | 9.74  | 10.15 | 8.72           | 9.33  | 9.14  | 9.74  | 10.15 |
|                 | 4H   | 9.07             | 9.62  | 9.51  | 10.04 | 10.49 | 9.07           | 9.62  | 9.51  | 10.04 | 10.49 |
|                 | 6H   | 9.68             | 10.14 | 10.15 | 10.59 | 11.07 | 9.68           | 10.14 | 10.15 | 10.59 | 11.07 |
|                 | 8H   | 10.02            | 10.45 | 10.49 | 10.90 | 11.37 | 10.02          | 10.45 | 10.49 | 10.90 | 11.37 |
|                 | 12H  | 10.24            | 10.61 | 10.73 | 11.10 | 11.58 | 10.24          | 10.61 | 10.73 | 11.10 | 11.58 |
| 8H              | 4H   | 9.17             | 9.60  | 9.65  | 10.06 | 10.53 | 9.17           | 9.60  | 9.65  | 10.06 | 10.53 |
|                 | 6H   | 9.99             | 10.33 | 10.51 | 10.84 | 11.32 | 9.99           | 10.33 | 10.51 | 10.84 | 11.32 |
|                 | 8H   | 10.48            | 10.78 | 11.01 | 11.30 | 11.80 | 10.48          | 10.78 | 11.01 | 11.30 | 11.80 |
|                 | 12H  | 10.85            | 11.10 | 11.37 | 11.60 | 12.19 | 10.85          | 11.10 | 11.37 | 11.60 | 12.19 |
| 12H             | 4H   | 9.18             | 9.55  | 9.68  | 10.04 | 10.52 | 9.18           | 9.55  | 9.68  | 10.04 | 10.52 |
|                 | 6H   | 10.07            | 10.37 | 10.61 | 10.89 | 11.39 | 10.07          | 10.37 | 10.61 | 10.89 | 11.39 |
|                 | 8H   | 10.64            | 10.89 | 11.16 | 11.39 | 11.97 | 10.64          | 10.89 | 11.16 | 11.39 | 11.97 |

END OF REPORT