

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: P600745

Luminaire Tested: PRLX-215-90-40K-LL8-UNV-STD-X-X-WHHR-BR-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600745  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-582-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/6/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PentaLux  
Catalog Number: PRLX-215-90-40K-LL8-UNV-STD-X-X-WHHR-BR-X  
Description: PentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6023.5 lumens  
Efficiency: N/A  
Efficacy: 83.4 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.85  
Luminous Opening: Circular (Dia: 1' x H: 0')  
CIE Type: Direct

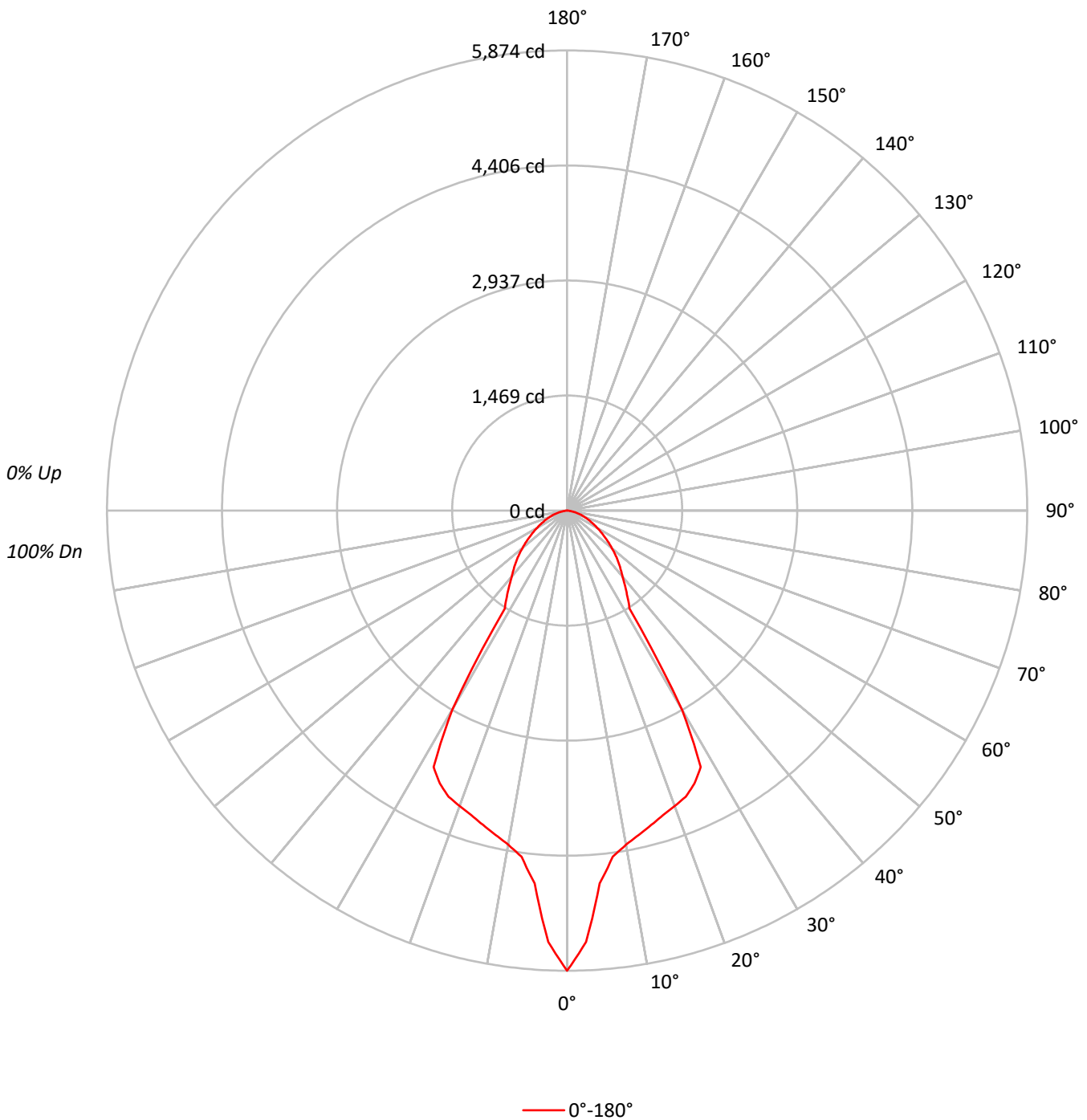
Input Watts (W): 72.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99  | 97  |  | 98  | 96  | 94  |  | 95  | 93  | 92  | 90  |
| 2   | 104 | 98  | 93  | 89  | 102 | 96  | 92  | 87  | 93  | 89  | 86  |  | 90  | 87  | 84  |  | 87  | 84  | 82  | 80  |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  |  | 82  | 78  | 75  |  | 80  | 77  | 74  | 72  |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  |  | 76  | 71  | 67  |  | 74  | 70  | 67  | 65  |
| 5   | 85  | 75  | 68  | 63  | 84  | 74  | 67  | 62  | 72  | 66  | 62  |  | 70  | 65  | 61  |  | 69  | 64  | 61  | 59  |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 56  |  | 66  | 60  | 56  |  | 64  | 59  | 56  | 54  |
| 7   | 76  | 65  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  |  | 61  | 56  | 52  |  | 60  | 55  | 51  | 50  |
| 8   | 71  | 60  | 53  | 48  | 70  | 60  | 53  | 48  | 58  | 52  | 48  |  | 57  | 52  | 48  |  | 56  | 51  | 47  | 46  |
| 9   | 68  | 56  | 49  | 45  | 66  | 56  | 49  | 45  | 55  | 49  | 45  |  | 54  | 48  | 44  |  | 53  | 48  | 44  | 43  |
| 10  | 64  | 53  | 46  | 42  | 63  | 52  | 46  | 42  | 51  | 46  | 42  |  | 51  | 45  | 41  |  | 50  | 45  | 41  | 40  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 80501 |
| 5°  | 65714 |
| 10° | 60250 |
| 15° | 58938 |
| 20° | 58529 |
| 25° | 58143 |
| 30° | 46496 |
| 35° | 22449 |
| 40° | 19673 |
| 45° | 17864 |
| 50° | 15859 |
| 55° | 13935 |
| 60° | 12192 |
| 65° | 10659 |
| 70° | 9308  |
| 75° | 7853  |
| 80° | 5462  |
| 85° | 1950  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17864 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 447.2  | 7.4       |
| 10°-20°   | 1174.4 | 19.5      |
| 20°-30°   | 1720.3 | 28.6      |
| 30°-40°   | 935.0  | 15.5      |
| 40°-50°   | 709.6  | 11.8      |
| 50°-60°   | 524.8  | 8.7       |
| 60°-70°   | 329.8  | 5.5       |
| 70°-80°   | 157.5  | 2.6       |
| 80°-90°   | 24.8   | 0.4       |
| 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°    | 3341.9 | 55.5      |
| 0°-40°    | 4276.9 | 71.0      |
| 0°-60°    | 5511.3 | 91.5      |
| 0°-90°    | 6023.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6023.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 5874 |      |
| 5°  | 4777 | 447  |
| 15° | 4154 | 1174 |
| 25° | 3845 | 1720 |
| 35° | 1342 | 935  |
| 45° | 922  | 710  |
| 55° | 583  | 525  |
| 65° | 329  | 330  |
| 75° | 148  | 158  |
| 85° | 12   | 25   |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 5873.8 |
| 2.5°  | 5510.5 |
| 5°    | 4776.6 |
| 7.5°  | 4455.4 |
| 10°   | 4329.4 |
| 12.5° | 4237.9 |
| 15°   | 4153.9 |
| 17.5° | 4074.8 |
| 20°   | 4013.1 |
| 22.5° | 3953.7 |
| 25°   | 3845.0 |
| 27.5° | 3691.8 |
| 30°   | 2938.1 |
| 32.5° | 1482.7 |
| 35°   | 1341.8 |
| 37.5° | 1213.3 |
| 40°   | 1099.6 |
| 42.5° | 1008.2 |
| 45°   | 921.7  |
| 47.5° | 832.8  |
| 50°   | 743.8  |
| 52.5° | 662.3  |
| 55°   | 583.2  |
| 57.5° | 511.5  |
| 60°   | 444.8  |
| 62.5° | 385.5  |
| 65°   | 328.7  |
| 67.5° | 281.7  |
| 70°   | 232.3  |
| 72.5° | 190.3  |
| 75°   | 148.3  |
| 77.5° | 108.7  |
| 80°   | 69.2   |
| 82.5° | 39.5   |
| 85°   | 12.4   |
| 87.5° | 4.9    |
| 90°   | 0.0    |

(END OF REPORT)