

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: P600630

Luminaire Tested: PRLX-235-90-40K-LL1-UNV-STD-X-X-WHHR-SR-X

Issue Date: 7/6/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-582-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/6/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PentaLux  
Catalog Number: PRLX-235-90-40K-LL1-UNV-STD-X-X-WHHR-SR-X  
Description: PentaLux 200 SERIES 3D PRINTED LUMINAIRE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

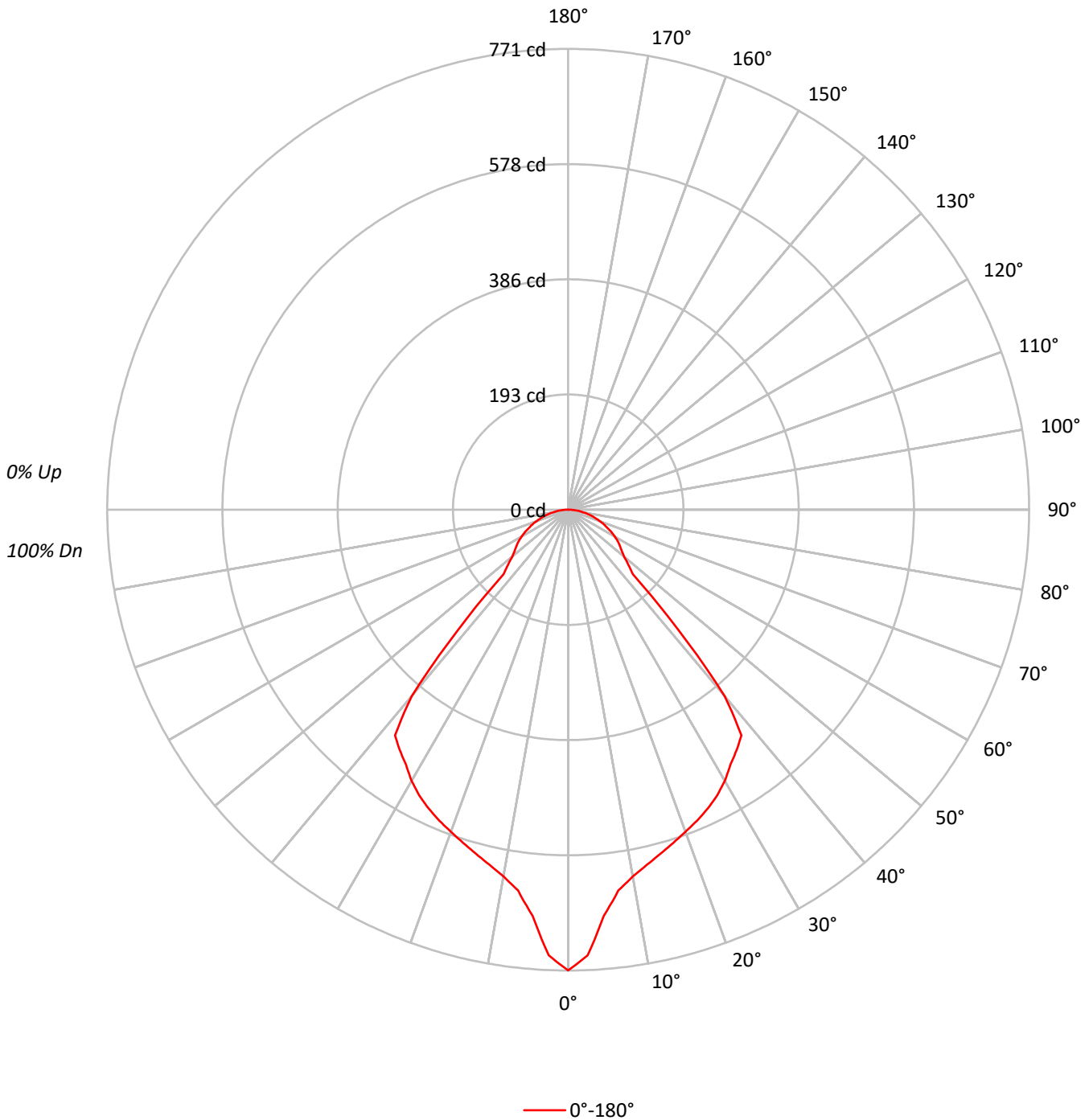
Lumens per Lamp: N/A  
Luminaire Lumens: 1170.8 lumens  
Efficiency: N/A  
Efficacy: 123.2 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.17  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.5  
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  | 50  | 30 | 10 | 0  |     |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    | 100 |
| 1   | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 99  | 100 | 98  | 95  | 97  | 95  | 93  | 93  | 91  | 90  | 88  |    |    |    | 88  |
| 2   | 103 | 96  | 90  | 86  | 100 | 94  | 89  | 85  | 91  | 86  | 83  | 88  | 84  | 81  | 85  | 82  | 79  | 77  |    |    |    | 77  |
| 3   | 95  | 87  | 80  | 74  | 93  | 85  | 79  | 74  | 82  | 77  | 72  | 80  | 75  | 71  | 77  | 73  | 70  | 68  |    |    |    | 68  |
| 4   | 89  | 79  | 71  | 65  | 87  | 77  | 70  | 65  | 75  | 69  | 64  | 73  | 68  | 63  | 71  | 66  | 63  | 61  |    |    |    | 61  |
| 5   | 83  | 72  | 64  | 58  | 81  | 71  | 63  | 58  | 69  | 62  | 57  | 67  | 61  | 57  | 65  | 60  | 56  | 54  |    |    |    | 54  |
| 6   | 77  | 66  | 58  | 52  | 75  | 65  | 57  | 52  | 63  | 56  | 52  | 61  | 56  | 51  | 60  | 55  | 51  | 49  |    |    |    | 49  |
| 7   | 72  | 60  | 53  | 47  | 71  | 60  | 52  | 47  | 58  | 52  | 47  | 57  | 51  | 46  | 56  | 50  | 46  | 44  |    |    |    | 44  |
| 8   | 68  | 56  | 48  | 43  | 66  | 55  | 48  | 43  | 54  | 47  | 43  | 53  | 47  | 42  | 52  | 46  | 42  | 41  |    |    |    | 41  |
| 9   | 64  | 52  | 44  | 39  | 62  | 51  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 37  |    |    |    | 37  |
| 10  | 60  | 48  | 41  | 36  | 59  | 48  | 41  | 36  | 47  | 40  | 36  | 46  | 40  | 36  | 45  | 40  | 36  | 34  |    |    |    | 34  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5942 |
| 5°  | 5277 |
| 10° | 4875 |
| 15° | 4755 |
| 20° | 4704 |
| 25° | 4694 |
| 30° | 4662 |
| 35° | 4621 |
| 40° | 4096 |
| 45° | 1667 |
| 50° | 1467 |
| 55° | 1419 |
| 60° | 1389 |
| 65° | 1332 |
| 70° | 1278 |
| 75° | 1227 |
| 80° | 1176 |
| 85° | 1159 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1667 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.5   | 5.4       |
| 10°-20°   | 168.4  | 14.4      |
| 20°-30°   | 254.2  | 21.7      |
| 30°-40°   | 303.2  | 25.9      |
| 40°-50°   | 156.8  | 13.4      |
| 50°-60°   | 94.5   | 8.1       |
| 60°-70°   | 72.4   | 6.2       |
| 70°-80°   | 43.4   | 3.7       |
| 80°-90°   | 14.3   | 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°    | 486.2  | 41.5      |
| 0°-40°    | 789.3  | 67.4      |
| 0°-60°    | 1040.6 | 88.9      |
| 0°-90°    | 1170.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1170.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 771 |      |
| 5°  | 682 | 63   |
| 15° | 596 | 168  |
| 25° | 552 | 254  |
| 35° | 491 | 303  |
| 45° | 153 | 157  |
| 55° | 106 | 95   |
| 65° | 73  | 72   |
| 75° | 41  | 43   |
| 85° | 13  | 14   |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 770.8 |
| 2.5°  | 746.3 |
| 5°    | 681.9 |
| 7.5°  | 642.7 |
| 10°   | 622.8 |
| 12.5° | 608.5 |
| 15°   | 595.8 |
| 17.5° | 584.4 |
| 20°   | 573.4 |
| 22.5° | 563.2 |
| 25°   | 551.8 |
| 27.5° | 539.2 |
| 30°   | 523.7 |
| 32.5° | 505.3 |
| 35°   | 491.0 |
| 37.5° | 475.9 |
| 40°   | 407.0 |
| 42.5° | 271.2 |
| 45°   | 152.9 |
| 47.5° | 136.2 |
| 50°   | 122.3 |
| 52.5° | 112.6 |
| 55°   | 105.6 |
| 57.5° | 98.3  |
| 60°   | 90.1  |
| 62.5° | 81.6  |
| 65°   | 73.0  |
| 67.5° | 64.8  |
| 70°   | 56.7  |
| 72.5° | 48.5  |
| 75°   | 41.2  |
| 77.5° | 33.4  |
| 80°   | 26.5  |
| 82.5° | 19.6  |
| 85°   | 13.1  |
| 87.5° | 6.5   |
| 90°   | 0.0   |

(END OF REPORT)