

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: P735824

Luminaire Tested: PRLX-UHBS-2436-MV-L84050-CLER(5000K\_L36\_277V)

Issue Date: 1/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P735824  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-243-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-UHBS-2436-MV-L84050-CLER(5000K\_L36\_277V)  
Description: PRENALLUX LARGE HIGH BAY LUMINAIRE WITH CLEAR SHADE  
LIGHT LEVEL 3 - 36,0000 NOMINAL LUMENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

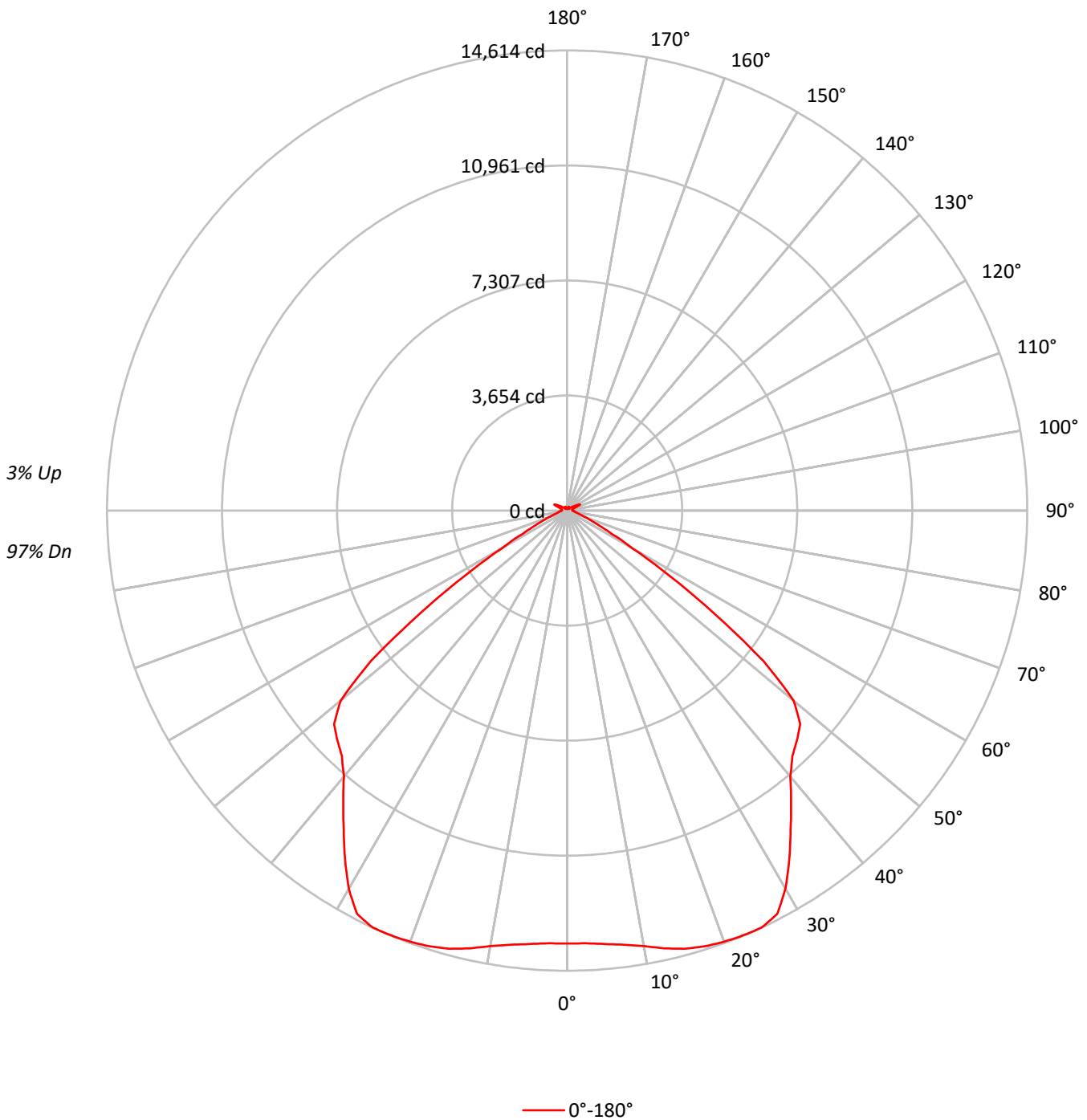
Lumens per Lamp: N/A  
Luminaire Lumens: 36055.7 lumens  
Efficiency: N/A  
Efficacy: 156.8 lumens/watt  
Spacing Criteria (0/90/45): 1.39 / 1.39 / 1.46  
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 1.04')  
CIE Type: Direct

Input Watts (W): 229.9  
Input Voltage (V): 277  
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   | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 97 |
| 1   | 110 | 106 | 103 | 100 | 107 | 104 | 101 | 98  | 99  | 97  | 94  | 95  | 93  | 91  | 91 | 89 | 88 | 86 |
| 2   | 102 | 95  | 90  | 85  | 99  | 93  | 88  | 84  | 89  | 85  | 81  | 86  | 82  | 79  | 82 | 79 | 77 | 75 |
| 3   | 94  | 85  | 78  | 73  | 92  | 84  | 77  | 72  | 80  | 75  | 70  | 77  | 73  | 69  | 74 | 71 | 67 | 65 |
| 4   | 87  | 77  | 69  | 63  | 85  | 75  | 68  | 63  | 72  | 66  | 61  | 70  | 65  | 60  | 67 | 63 | 59 | 57 |
| 5   | 81  | 69  | 61  | 55  | 78  | 68  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 61 | 56 | 52 | 50 |
| 6   | 75  | 63  | 55  | 49  | 73  | 62  | 54  | 48  | 59  | 53  | 48  | 58  | 52  | 47  | 56 | 51 | 47 | 45 |
| 7   | 69  | 57  | 49  | 43  | 68  | 56  | 48  | 43  | 54  | 48  | 43  | 53  | 47  | 42  | 51 | 46 | 42 | 40 |
| 8   | 65  | 52  | 44  | 39  | 63  | 51  | 44  | 39  | 50  | 43  | 38  | 48  | 42  | 38  | 47 | 42 | 37 | 36 |
| 9   | 60  | 48  | 40  | 35  | 59  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 34  | 43 | 38 | 34 | 32 |
| 10  | 57  | 44  | 37  | 32  | 55  | 44  | 36  | 32  | 42  | 36  | 31  | 41  | 35  | 31  | 40 | 35 | 31 | 29 |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 64558 |
| 5°  | 60984 |
| 10° | 58890 |
| 15° | 57982 |
| 20° | 56771 |
| 25° | 55595 |
| 30° | 51931 |
| 35° | 45941 |
| 40° | 40942 |
| 45° | 38575 |
| 50° | 35638 |
| 55° | 22121 |
| 60° | 9658  |
| 65° | 4680  |
| 70° | 2664  |
| 75° | 1735  |
| 80° | 1362  |
| 85° | 1177  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 38575 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1325.8  | 3.7       |
| 10°-20°   | 4080.0  | 11.3      |
| 20°-30°   | 6690.7  | 18.6      |
| 30°-40°   | 7759.7  | 21.5      |
| 40°-50°   | 7952.8  | 22.1      |
| 50°-60°   | 5165.6  | 14.3      |
| 60°-70°   | 1241.9  | 3.4       |
| 70°-80°   | 419.6   | 1.2       |
| 80°-90°   | 237.9   | 0.7       |
| 90°-100°  | 177.0   | 0.5       |
| 100°-110° | 203.2   | 0.6       |
| 110°-120° | 375.0   | 1.0       |
| 120°-130° | 203.5   | 0.6       |
| 130°-140° | 69.3    | 0.2       |
| 140°-150° | 63.1    | 0.2       |
| 150°-160° | 60.4    | 0.2       |
| 160°-170° | 25.0    | 0.1       |
| 170°-180° | 5.1     | 0.0       |
| 0°-30°    | 12096.4 | 33.5      |
| 0°-40°    | 19856.1 | 55.1      |
| 0°-60°    | 32974.5 | 91.5      |
| 0°-90°    | 34873.9 | 96.7      |
| 90°-120°  | 755.2   | 2.1       |
| 90°-150°  | 1091.2  | 3.0       |
| 90°-180°  | 1182.0  | 3.3       |
| 0°-180°   | 36055.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°    | Flux |
|------|-------|------|
| 0°   | 13747 |      |
| 5°   | 13815 | ###  |
| 15°  | 14407 | 4080 |
| 25°  | 14614 | 6691 |
| 35°  | 12370 | 7760 |
| 45°  | 10318 | 7953 |
| 55°  | 5698  | 5166 |
| 65°  | 1122  | 1242 |
| 75°  | 373   | 420  |
| 85°  | 216   | 188  |
| 90°  | 170   | 95   |
| 95°  | 158   | 132  |
| 105° | 180   | 203  |
| 115° | 452   | 375  |
| 125° | 223   | 204  |
| 135° | 80    | 69   |
| 145° | 102   | 63   |
| 155° | 134   | 60   |
| 165° | 85    | 25   |
| 175° | 51    | 5    |
| 180° | 51    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°     |         |
|--------|---------|
| 0°     | 13747.3 |
| 2.5°   | 13753.1 |
| 5°     | 13815.4 |
| 7.5°   | 13906.5 |
| 10°    | 14040.4 |
| 12.5°  | 14237.6 |
| 15°    | 14407.2 |
| 17.5°  | 14513.3 |
| 20°    | 14569.9 |
| 22.5°  | 14603.3 |
| 25°    | 14613.7 |
| 27.5°  | 14446.4 |
| 30°    | 13869.6 |
| 32.5°  | 13130.2 |
| 35°    | 12370.0 |
| 37.5°  | 11682.4 |
| 40°    | 11029.5 |
| 42.5°  | 10584.2 |
| 45°    | 10317.7 |
| 47.5°  | 10040.9 |
| 50°    | 9391.4  |
| 52.5°  | 7860.6  |
| 55°    | 5697.6  |
| 57.5°  | 3854.1  |
| 60°    | 2411.0  |
| 62.5°  | 1600.0  |
| 65°    | 1122.4  |
| 67.5°  | 816.7   |
| 70°    | 607.9   |
| 72.5°  | 464.9   |
| 75°    | 372.6   |
| 77.5°  | 313.8   |
| 80°    | 272.2   |
| 82.5°  | 239.9   |
| 85°    | 215.7   |
| 87.5°  | 196.1   |
| 90°    | 169.6   |
| 92.5°  | 161.5   |
| 95°    | 158.0   |
| 97.5°  | 160.3   |
| 100°   | 168.4   |
| 102.5° | 174.2   |
| 105°   | 180.0   |
| 107.5° | 203.0   |
| 110°   | 256.1   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    |
|--------|-------|
| 112.5° | 354.2 |
| 115°   | 452.2 |
| 117.5° | 416.4 |
| 120°   | 325.3 |
| 122.5° | 269.9 |
| 125°   | 222.6 |
| 127.5° | 177.7 |
| 130°   | 135.0 |
| 132.5° | 101.5 |
| 135°   | 79.6  |
| 137.5° | 70.4  |
| 140°   | 71.5  |
| 142.5° | 83.1  |
| 145°   | 101.5 |
| 147.5° | 120.0 |
| 150°   | 133.8 |
| 152.5° | 137.3 |
| 155°   | 133.8 |
| 157.5° | 124.6 |
| 160°   | 113.1 |
| 162.5° | 99.2  |
| 165°   | 85.4  |
| 167.5° | 71.5  |
| 170°   | 58.8  |
| 172.5° | 53.1  |
| 175°   | 50.8  |
| 177.5° | 50.8  |
| 180°   | 50.8  |

(END OF REPORT)