

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: G2-2210-802-15

Luminaire Tested: PRLX-411-FR-120-CL-RHL-TFWHST-DW-WH

Test Date: 1/9/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: G2-2210-802-15  
Test Lab: COOPER LIGHTING SOLUTIONS  
Test Date: 1/9/2023  
Issue Date: 1/9/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-411-FR-120-CL-RHL-TFWHST-DW-WH  
Description: 400-SERIES 3D PRINTED LED LAMP BASED DECORATIVE LUMINAIRE, CLEAR (TRANSLUCENT) SHADE, FROSTED LAMP  
Light Source: 1 PHILIPS 60W FROSTED BULB  
FROSTED BULB - 60W EQUIVALENT 929002036204 8.8A19/PER/930/P/E26/DIM  
6/1FB T20. PHILIPS  
Ballast/Driver: INTEGRAL TO LAMP

**Summary**

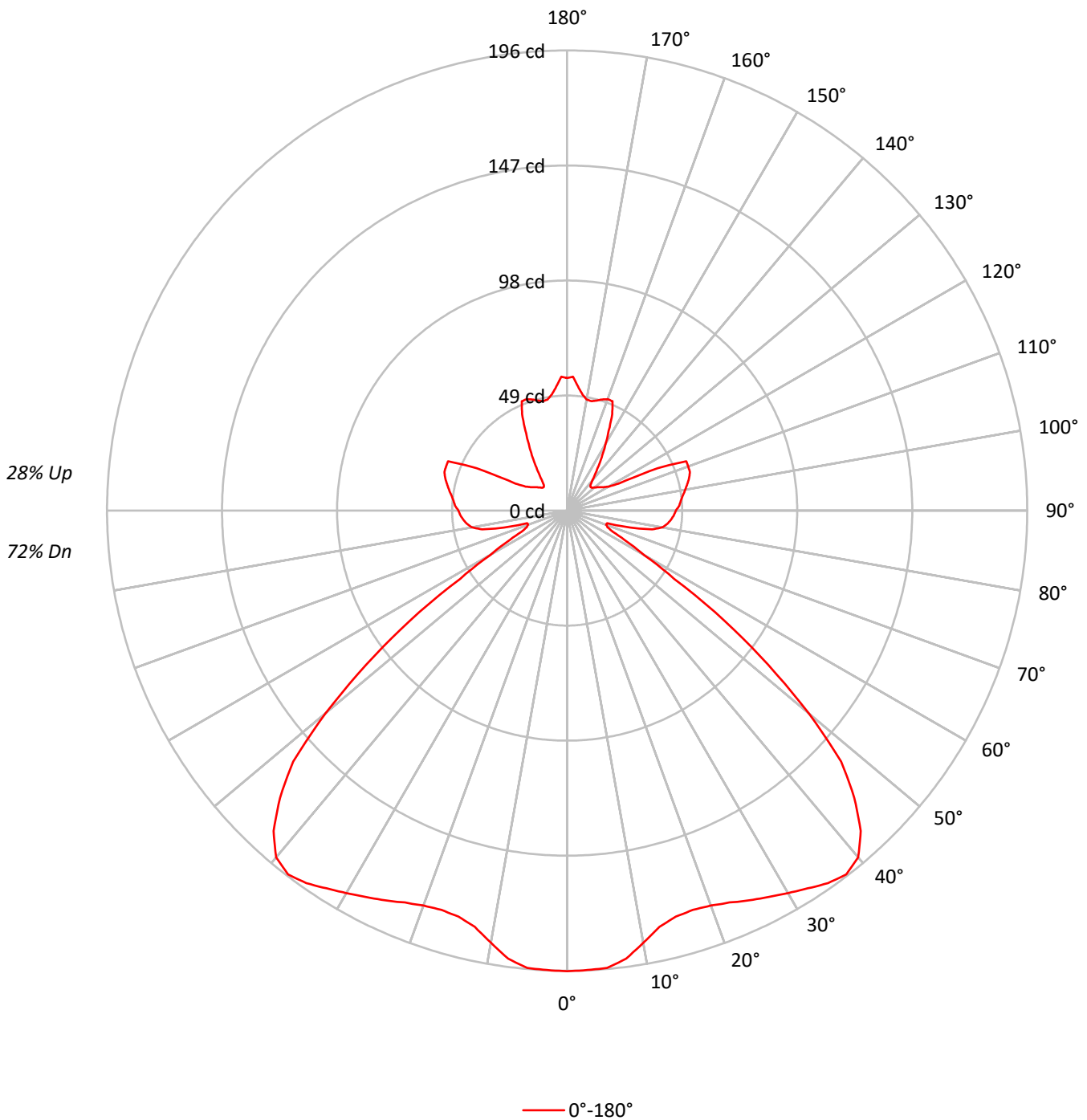
Lumens per Lamp: N/A  
Luminaire Lumens: 812.0 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Spacing Criteria (0/90/45): 1.53 / 1.53 / 1.54  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 1.17')  
CIE Type: Semi-Direct

Input Watts (W): 7.8  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.0682  
Voltage Rise (V): NR  
Power Factor: 0.9511  
Total Harmonic Distortion (THDi): 24.0%  
Frequency (hertz): 60  
Stabilization Time: 0.333 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): 25.5  
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   | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 95 | 95 | 95 |  | 85 | 85 | 85 |  | 76 | 76 | 76 | 72 |
| 1   | 101 | 96  | 92  | 88  | 96  | 91  | 87  | 84  | 82 | 79 | 76 |  | 73 | 71 | 69 |  | 65 | 64 | 62 | 58 |
| 2   | 93  | 85  | 78  | 73  | 87  | 80  | 75  | 69  | 72 | 68 | 64 |  | 65 | 61 | 58 |  | 58 | 55 | 53 | 49 |
| 3   | 85  | 75  | 67  | 61  | 80  | 71  | 64  | 59  | 64 | 59 | 54 |  | 58 | 53 | 50 |  | 52 | 48 | 45 | 42 |
| 4   | 78  | 67  | 58  | 52  | 74  | 64  | 56  | 50  | 58 | 51 | 47 |  | 52 | 47 | 43 |  | 47 | 43 | 40 | 37 |
| 5   | 72  | 60  | 51  | 45  | 68  | 57  | 49  | 43  | 52 | 45 | 40 |  | 47 | 42 | 38 |  | 42 | 38 | 35 | 32 |
| 6   | 66  | 54  | 45  | 39  | 63  | 51  | 44  | 38  | 47 | 40 | 35 |  | 42 | 37 | 33 |  | 38 | 34 | 31 | 28 |
| 7   | 61  | 49  | 40  | 35  | 58  | 46  | 39  | 33  | 42 | 36 | 31 |  | 39 | 33 | 29 |  | 35 | 31 | 27 | 25 |
| 8   | 57  | 44  | 36  | 31  | 54  | 42  | 35  | 30  | 39 | 32 | 28 |  | 35 | 30 | 26 |  | 32 | 28 | 24 | 22 |
| 9   | 53  | 40  | 33  | 27  | 50  | 39  | 31  | 27  | 35 | 29 | 25 |  | 32 | 27 | 23 |  | 30 | 25 | 22 | 20 |
| 10  | 50  | 37  | 30  | 25  | 47  | 36  | 29  | 24  | 33 | 27 | 22 |  | 30 | 25 | 21 |  | 27 | 23 | 20 | 18 |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 1976 |
| 5°  | 1778 |
| 10° | 1561 |
| 15° | 1391 |
| 20° | 1311 |
| 25° | 1277 |
| 30° | 1260 |
| 35° | 1259 |
| 40° | 1225 |
| 45° | 1084 |
| 50° | 836  |
| 55° | 511  |
| 60° | 239  |
| 65° | 137  |
| 70° | 116  |
| 75° | 188  |
| 80° | 291  |
| 85° | 330  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1084 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 18.4   | 2.3       |
| 10°-20°   | 51.0   | 6.3       |
| 20°-30°   | 85.0   | 10.5      |
| 30°-40°   | 121.0  | 14.9      |
| 40°-50°   | 131.1  | 16.1      |
| 50°-60°   | 73.2   | 9.0       |
| 60°-70°   | 23.9   | 2.9       |
| 70°-80°   | 29.7   | 3.7       |
| 80°-90°   | 48.2   | 5.9       |
| 90°-100°  | 53.1   | 6.5       |
| 100°-110° | 56.6   | 7.0       |
| 110°-120° | 40.0   | 4.9       |
| 120°-130° | 15.8   | 1.9       |
| 130°-140° | 11.4   | 1.4       |
| 140°-150° | 14.8   | 1.8       |
| 150°-160° | 20.1   | 2.5       |
| 160°-170° | 13.9   | 1.7       |
| 170°-180° | 4.9    | 0.6       |
| 0°-30°    | 154.4  | 19.0      |
| 0°-40°    | 275.4  | 33.9      |
| 0°-60°    | 479.7  | 59.1      |
| 0°-90°    | 581.5  | 71.6      |
| 90°-120°  | 149.7  | 18.4      |
| 90°-150°  | 191.7  | 23.6      |
| 90°-180°  | 231.0  | 28.4      |
| 0°-180°   | 812.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | Flux |
|------|-----|------|
| 0°   | 196 |      |
| 5°   | 196 | 18   |
| 15°  | 179 | 51   |
| 25°  | 183 | 85   |
| 35°  | 194 | 121  |
| 45°  | 173 | 131  |
| 55°  | 82  | 73   |
| 65°  | 22  | 24   |
| 75°  | 28  | 30   |
| 85°  | 44  | 36   |
| 90°  | 46  | 25   |
| 95°  | 49  | 40   |
| 105° | 54  | 57   |
| 115° | 43  | 40   |
| 125° | 17  | 16   |
| 135° | 14  | 11   |
| 145° | 23  | 15   |
| 155° | 45  | 20   |
| 165° | 48  | 14   |
| 175° | 53  | 5    |
| 180° | 56  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    |
|--------|-------|
| 0°     | 196.2 |
| 2.5°   | 195.9 |
| 5°     | 195.5 |
| 7.5°   | 192.5 |
| 10°    | 186.9 |
| 12.5°  | 181.6 |
| 15°    | 179.0 |
| 17.5°  | 178.3 |
| 20°    | 179.0 |
| 22.5°  | 180.7 |
| 25°    | 183.2 |
| 27.5°  | 185.6 |
| 30°    | 188.1 |
| 32.5°  | 190.8 |
| 35°    | 193.7 |
| 37.5°  | 195.3 |
| 40°    | 192.8 |
| 42.5°  | 185.1 |
| 45°    | 173.0 |
| 47.5°  | 158.3 |
| 50°    | 134.3 |
| 52.5°  | 107.9 |
| 55°    | 82.0  |
| 57.5°  | 54.1  |
| 60°    | 38.0  |
| 62.5°  | 28.7  |
| 65°    | 21.5  |
| 67.5°  | 18.6  |
| 70°    | 17.7  |
| 72.5°  | 17.8  |
| 75°    | 27.8  |
| 77.5°  | 37.0  |
| 80°    | 41.2  |
| 82.5°  | 43.1  |
| 85°    | 44.4  |
| 87.5°  | 45.5  |
| 90°    | 46.3  |
| 92.5°  | 47.8  |
| 95°    | 48.6  |
| 97.5°  | 49.7  |
| 100°   | 51.1  |
| 102.5° | 52.4  |
| 105°   | 53.8  |
| 107.5° | 54.8  |
| 110°   | 54.9  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°   |
|--------|------|
| 112.5° | 54.9 |
| 115°   | 42.6 |
| 117.5° | 24.8 |
| 120°   | 20.4 |
| 122.5° | 18.6 |
| 125°   | 17.4 |
| 127.5° | 16.3 |
| 130°   | 15.3 |
| 132.5° | 14.4 |
| 135°   | 14.1 |
| 137.5° | 14.6 |
| 140°   | 16.6 |
| 142.5° | 19.5 |
| 145°   | 23.3 |
| 147.5° | 27.9 |
| 150°   | 32.8 |
| 152.5° | 38.4 |
| 155°   | 45.4 |
| 157.5° | 50.4 |
| 160°   | 50.5 |
| 162.5° | 49.6 |
| 165°   | 48.5 |
| 167.5° | 47.7 |
| 170°   | 48.0 |
| 172.5° | 49.9 |
| 175°   | 53.0 |
| 177.5° | 57.1 |
| 180°   | 56.5 |

(END OF REPORT)