

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P843485

Luminaire Tested: **LD4C20DE010B50 EU4C20B50 4LBMLI**

Issue Date: 2/17/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P843485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P208178)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C20DE010B50 EU4C20B50 4LBMLI  
Description: 4in Downlight with BioUp LEDs  
Light Source: -  
Ballast/Driver:

**Summary**

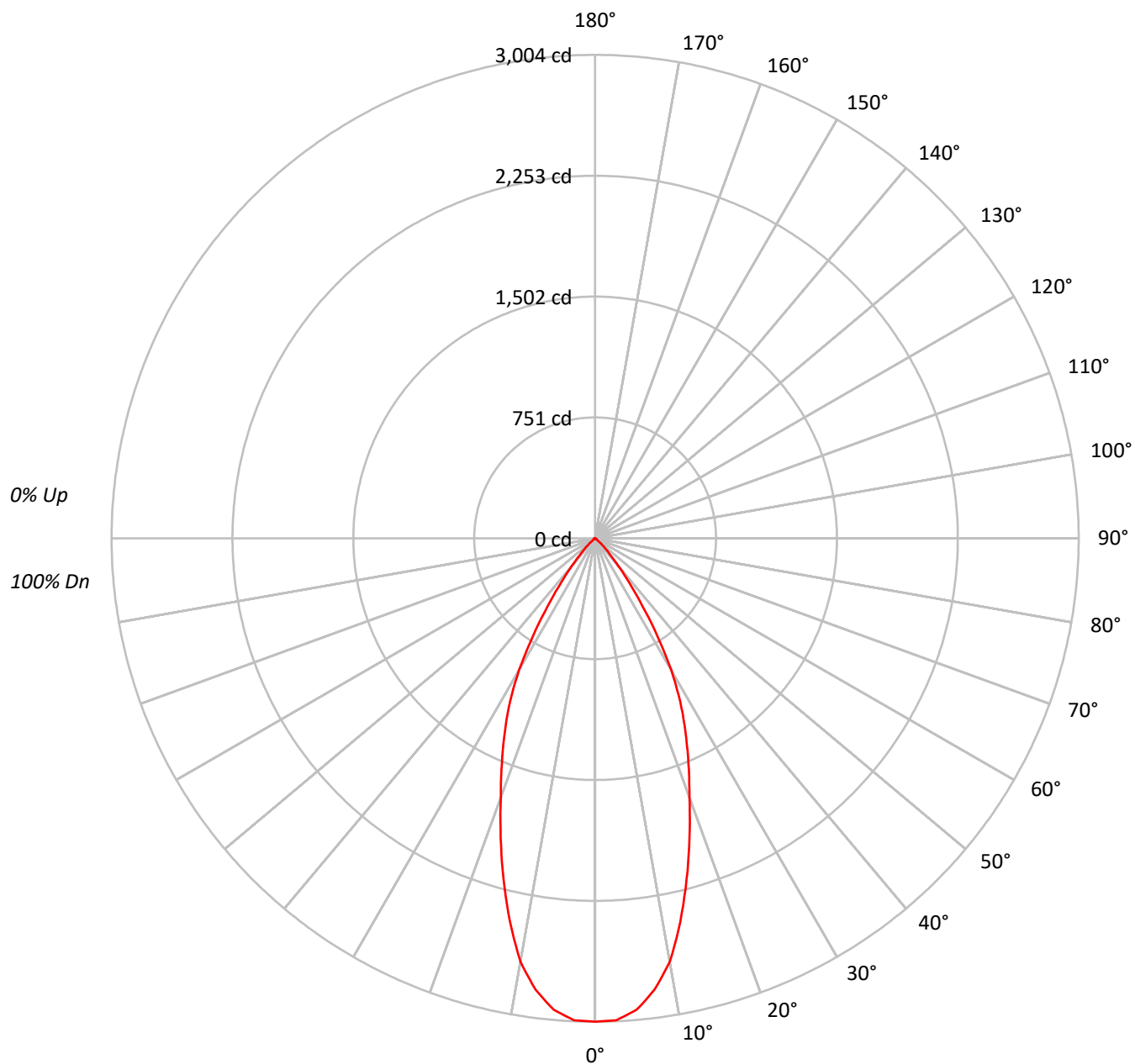
Lumens per Lamp: N/A  
Luminaire Lumens: 1905.9 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.76  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.8  
Input Voltage (V):  
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: 25 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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 |  | 101 | 100 | 99  |  | 98  |
| 2   | 109 | 104 | 100 | 97  | 107 | 102 | 99  | 96  | 99  | 96  | 94  |  | 96  | 94  | 92  |  | 94  |
| 3   | 104 | 98  | 93  | 89  | 102 | 96  | 92  | 89  | 94  | 90  | 87  |  | 91  | 88  | 86  |  | 89  |
| 4   | 99  | 92  | 87  | 83  | 97  | 91  | 86  | 82  | 89  | 85  | 81  |  | 87  | 83  | 80  |  | 85  |
| 5   | 94  | 87  | 81  | 77  | 93  | 86  | 81  | 77  | 84  | 79  | 76  |  | 82  | 78  | 75  |  | 81  |
| 6   | 90  | 82  | 76  | 72  | 89  | 81  | 76  | 72  | 80  | 75  | 71  |  | 78  | 74  | 71  |  | 77  |
| 7   | 86  | 77  | 72  | 68  | 85  | 77  | 71  | 68  | 75  | 71  | 67  |  | 74  | 70  | 67  |  | 73  |
| 8   | 82  | 73  | 68  | 64  | 81  | 73  | 67  | 64  | 72  | 67  | 64  |  | 71  | 66  | 63  |  | 70  |
| 9   | 79  | 70  | 64  | 60  | 78  | 69  | 64  | 60  | 68  | 63  | 60  |  | 67  | 63  | 60  |  | 67  |
| 10  | 75  | 66  | 61  | 57  | 74  | 66  | 61  | 57  | 65  | 60  | 57  |  | 64  | 60  | 57  |  | 64  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 369101 |
| 5°  | 362828 |
| 10° | 333378 |
| 15° | 279189 |
| 20° | 223680 |
| 25° | 179717 |
| 30° | 133787 |
| 35° | 76443  |
| 40° | 35876  |
| 45° | 15237  |
| 50° | 4855   |
| 55° | 2463   |
| 60° | 1695   |
| 65° | 1366   |
| 70° | 826    |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 272.0  | 14.3      |
| 10°-20°   | 608.2  | 31.9      |
| 20°-30°   | 604.7  | 31.7      |
| 30°-40°   | 329.3  | 17.3      |
| 40°-50°   | 76.1   | 4.0       |
| 50°-60°   | 10.7   | 0.6       |
| 60°-70°   | 4.0    | 0.2       |
| 70°-80°   | 0.9    | 0.0       |
| 80°-90°   | 0.0    | 0.0       |
| 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°    | 1484.9 | 77.9      |
| 0°-40°    | 1814.2 | 95.2      |
| 0°-60°    | 1901.0 | 99.7      |
| 0°-90°    | 1905.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1905.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3004 |      |
| 5°  | 2942 | 272  |
| 15° | 2195 | 608  |
| 25° | 1326 | 605  |
| 35° | 510  | 329  |
| 45° | 88   | 76   |
| 55° | 12   | 11   |
| 65° | 5    | 4    |
| 75° | 0    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 3004.4 |
| 2.5°  | 2997.5 |
| 5°    | 2942.1 |
| 7.5°  | 2829.3 |
| 10°   | 2672.4 |
| 12.5° | 2441.9 |
| 15°   | 2195.1 |
| 17.5° | 1950.7 |
| 20°   | 1710.9 |
| 22.5° | 1515.0 |
| 25°   | 1325.8 |
| 27.5° | 1146.1 |
| 30°   | 943.1  |
| 32.5° | 717.2  |
| 35°   | 509.7  |
| 37.5° | 343.5  |
| 40°   | 223.7  |
| 42.5° | 140.7  |
| 45°   | 87.7   |
| 47.5° | 50.8   |
| 50°   | 25.4   |
| 52.5° | 13.9   |
| 55°   | 11.5   |
| 57.5° | 6.9    |
| 60°   | 6.9    |
| 62.5° | 4.7    |
| 65°   | 4.7    |
| 67.5° | 2.3    |
| 70°   | 2.3    |
| 72.5° | 2.3    |
| 75°   | 0.0    |
| 77.5° | 0.0    |
| 80°   | 0.0    |
| 82.5° | 0.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180°







(END OF REPORT)