

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: PORTFOLIO

Report Number: P1500383

Luminaire Tested: LD4C15D010 EU4159035 4LBMH

Issue Date: 2/8/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P1500383  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P207151)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/8/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4C15D010 EU4159035 4LBMH  
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS AND 4LBM TRIM FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

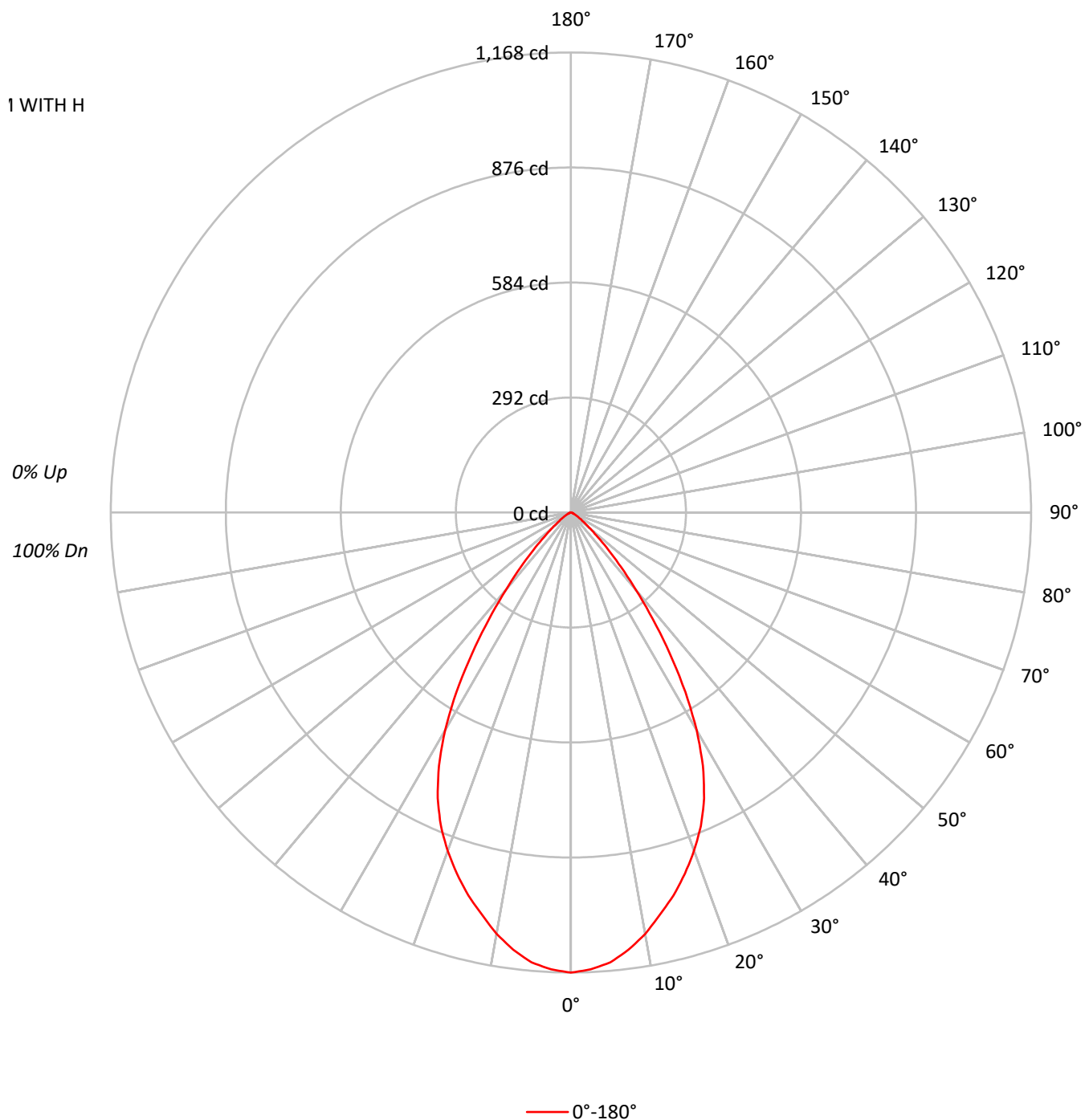
Lumens per Lamp: N/A  
Luminaire Lumens: 1178.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 15.8  
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: 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  |
| 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   | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 |  | 100 | 99  | 97  |  | 97  |
| 2   | 107 | 102 | 98  | 94  | 105 | 100 | 96  | 93  | 97  | 94  | 91  |  | 94  | 91  | 89  |  | 91  |
| 3   | 101 | 94  | 89  | 85  | 99  | 93  | 88  | 84  | 90  | 86  | 83  |  | 88  | 84  | 82  |  | 86  |
| 4   | 96  | 88  | 82  | 77  | 94  | 86  | 81  | 77  | 84  | 80  | 76  |  | 82  | 78  | 75  |  | 80  |
| 5   | 90  | 82  | 75  | 71  | 89  | 81  | 75  | 70  | 79  | 74  | 70  |  | 77  | 73  | 69  |  | 75  |
| 6   | 86  | 76  | 70  | 65  | 84  | 75  | 69  | 65  | 74  | 68  | 64  |  | 72  | 68  | 64  |  | 71  |
| 7   | 81  | 71  | 65  | 60  | 80  | 70  | 64  | 60  | 69  | 64  | 60  |  | 68  | 63  | 59  |  | 67  |
| 8   | 77  | 67  | 60  | 56  | 75  | 66  | 60  | 56  | 65  | 59  | 56  |  | 64  | 59  | 55  |  | 63  |
| 9   | 73  | 63  | 56  | 52  | 72  | 62  | 56  | 52  | 61  | 56  | 52  |  | 60  | 55  | 52  |  | 59  |
| 10  | 69  | 59  | 53  | 49  | 68  | 59  | 53  | 49  | 58  | 52  | 49  |  | 57  | 52  | 48  |  | 56  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 143505 |
| 5°  | 141414 |
| 10° | 135502 |
| 15° | 127989 |
| 20° | 119468 |
| 25° | 108443 |
| 30° | 90549  |
| 35° | 65600  |
| 40° | 41056  |
| 45° | 23472  |
| 50° | 12232  |
| 55° | 6854   |
| 60° | 4374   |
| 65° | 2587   |
| 70° | 1904   |
| 75° | 854    |
| 80° | 1273   |
| 85° | 0      |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 23472 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 107.5  | 9.1       |
| 10°-20°   | 282.0  | 23.9      |
| 20°-30°   | 362.4  | 30.8      |
| 30°-40°   | 272.6  | 23.1      |
| 40°-50°   | 109.5  | 9.3       |
| 50°-60°   | 31.1   | 2.6       |
| 60°-70°   | 9.9    | 0.8       |
| 70°-80°   | 2.8    | 0.2       |
| 80°-90°   | 0.2    | 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       |
| <hr/>     |        |           |
| 0°-30°    | 751.8  | 63.8      |
| 0°-40°    | 1024.5 | 87.0      |
| 0°-60°    | 1165.1 | 98.9      |
| 0°-90°    | 1178.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1178.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1168 |      |
| 5°  | 1147 | 107  |
| 15° | 1006 | 282  |
| 25° | 800  | 362  |
| 35° | 437  | 273  |
| 45° | 135  | 110  |
| 55° | 32   | 31   |
| 65° | 9    | 10   |
| 75° | 2    | 3    |
| 85° | 0    | 0    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1168.1 |
| 2.5°  | 1160.9 |
| 5°    | 1146.7 |
| 7.5°  | 1120.0 |
| 10°   | 1086.2 |
| 12.5° | 1045.4 |
| 15°   | 1006.3 |
| 17.5° | 961.8  |
| 20°   | 913.8  |
| 22.5° | 862.3  |
| 25°   | 800.0  |
| 27.5° | 725.3  |
| 30°   | 638.3  |
| 32.5° | 540.5  |
| 35°   | 437.4  |
| 37.5° | 341.3  |
| 40°   | 256.0  |
| 42.5° | 188.5  |
| 45°   | 135.1  |
| 47.5° | 92.5   |
| 50°   | 64.0   |
| 52.5° | 44.5   |
| 55°   | 32.0   |
| 57.5° | 23.1   |
| 60°   | 17.8   |
| 62.5° | 12.5   |
| 65°   | 8.9    |
| 67.5° | 7.1    |
| 70°   | 5.3    |
| 72.5° | 3.6    |
| 75°   | 1.8    |
| 77.5° | 1.8    |
| 80°   | 1.8    |
| 82.5° | 0.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |

(END OF REPORT)