

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: P781659

Luminaire Tested: LER4D45BD010-EC4DR6540509050-4LBS1MW

Issue Date: 2/2/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P781659  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-147)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LER4D45BD010-EC4DR6540509050-4LBS1MW  
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 65° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3847.6 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.96  
Luminous Opening: Circular (Dia: 0.48' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.7  
Input Voltage (V): NR  
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

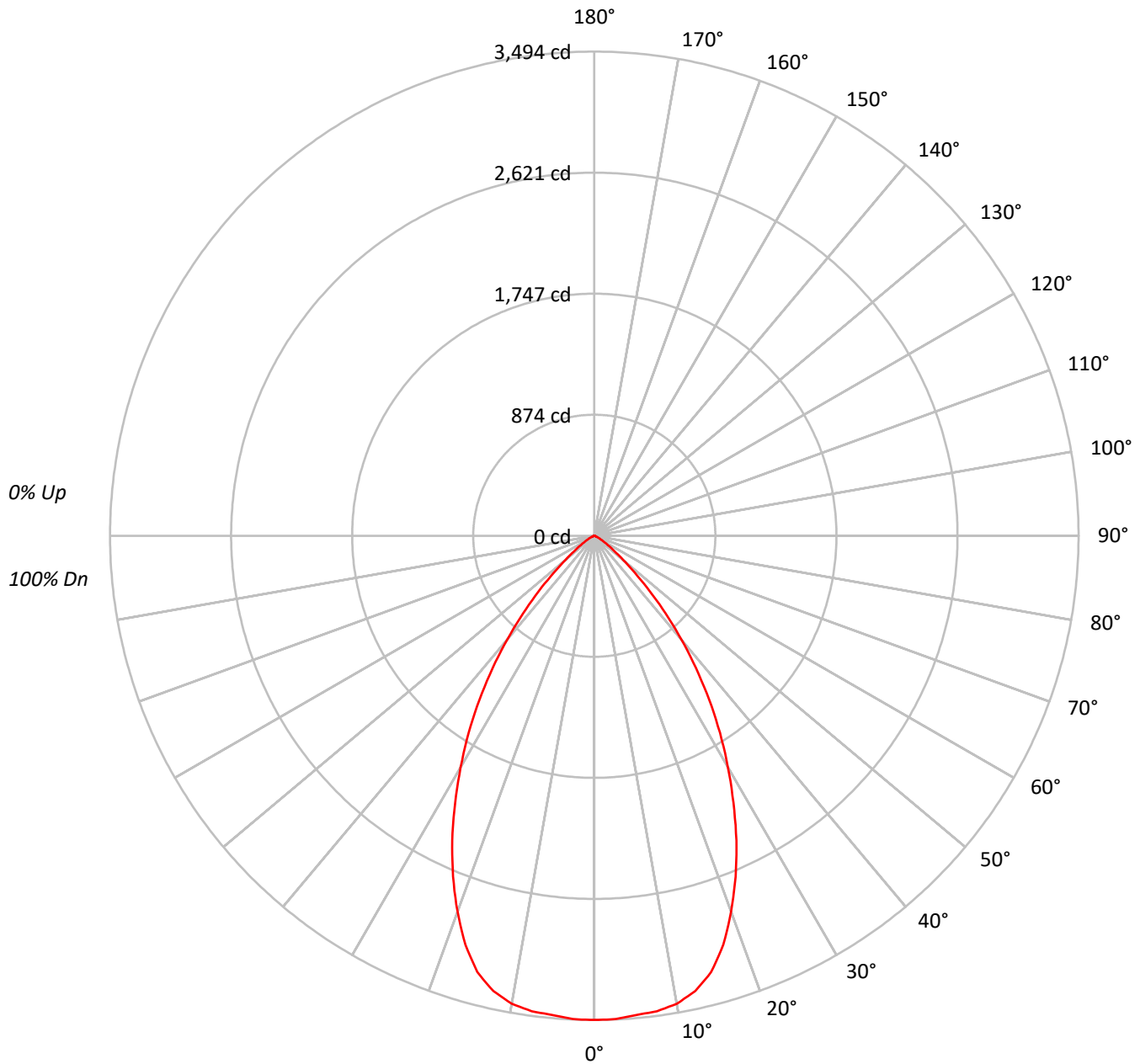


Downlight

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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 | 107 | 105 | 111 | 108 | 105 | 103 | 104 | 102 | 100 |  | 100 | 99  | 97  |  | 97  |
| 2   | 107 | 102 | 97  | 94  | 105 | 100 | 96  | 92  | 97  | 93  | 90  |  | 94  | 91  | 88  |  | 91  |
| 3   | 101 | 94  | 88  | 84  | 99  | 92  | 87  | 83  | 90  | 86  | 82  |  | 87  | 84  | 81  |  | 85  |
| 4   | 95  | 87  | 81  | 76  | 93  | 86  | 80  | 76  | 84  | 79  | 75  |  | 82  | 77  | 74  |  | 80  |
| 5   | 90  | 81  | 74  | 70  | 88  | 80  | 74  | 69  | 78  | 73  | 69  |  | 76  | 72  | 68  |  | 75  |
| 6   | 85  | 75  | 69  | 64  | 83  | 74  | 68  | 64  | 73  | 67  | 63  |  | 71  | 67  | 63  |  | 70  |
| 7   | 80  | 70  | 64  | 59  | 79  | 69  | 63  | 59  | 68  | 63  | 59  |  | 67  | 62  | 58  |  | 66  |
| 8   | 76  | 66  | 59  | 55  | 75  | 65  | 59  | 55  | 64  | 58  | 54  |  | 63  | 58  | 54  |  | 62  |
| 9   | 72  | 61  | 55  | 51  | 71  | 61  | 55  | 51  | 60  | 54  | 51  |  | 59  | 54  | 50  |  | 58  |
| 10  | 68  | 58  | 52  | 47  | 67  | 57  | 51  | 47  | 57  | 51  | 47  |  | 56  | 51  | 47  |  | 55  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 204040 |
| 5°  | 203524 |
| 10° | 203350 |
| 15° | 197083 |
| 20° | 179414 |
| 25° | 156348 |
| 30° | 130043 |
| 35° | 103040 |
| 40° | 74365  |
| 45° | 46980  |
| 50° | 24487  |
| 55° | 13013  |
| 60° | 6833   |
| 65° | 3759   |
| 70° | 1571   |
| 75° | 1738   |
| 80° | 1211   |
| 85° | 1005   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 46980 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 330.4  | 8.6       |
| 10°-20°   | 904.7  | 23.5      |
| 20°-30°   | 1105.8 | 28.7      |
| 30°-40°   | 897.3  | 23.3      |
| 40°-50°   | 447.1  | 11.6      |
| 50°-60°   | 124.7  | 3.2       |
| 60°-70°   | 28.4   | 0.7       |
| 70°-80°   | 7.4    | 0.2       |
| 80°-90°   | 1.9    | 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°    | 2340.9 | 60.8      |
| 0°-40°    | 3238.2 | 84.2      |
| 0°-60°    | 3810.0 | 99.0      |
| 0°-90°    | 3847.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3847.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3494 |      |
| 5°  | 3472 | 330  |
| 15° | 3260 | 905  |
| 25° | 2426 | 1106 |
| 35° | 1445 | 897  |
| 45° | 569  | 447  |
| 55° | 128  | 125  |
| 65° | 27   | 28   |
| 75° | 8    | 7    |
| 85° | 2    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3493.6 |
| 2.5°  | 3491.0 |
| 5°    | 3471.5 |
| 7.5°  | 3460.2 |
| 10°   | 3428.9 |
| 12.5° | 3365.2 |
| 15°   | 3259.5 |
| 17.5° | 3094.1 |
| 20°   | 2886.7 |
| 22.5° | 2662.9 |
| 25°   | 2426.2 |
| 27.5° | 2173.1 |
| 30°   | 1928.3 |
| 32.5° | 1686.5 |
| 35°   | 1445.2 |
| 37.5° | 1204.4 |
| 40°   | 975.4  |
| 42.5° | 760.8  |
| 45°   | 568.8  |
| 47.5° | 396.3  |
| 50°   | 269.5  |
| 52.5° | 185.8  |
| 55°   | 127.8  |
| 57.5° | 86.2   |
| 60°   | 58.5   |
| 62.5° | 40.6   |
| 65°   | 27.2   |
| 67.5° | 13.9   |
| 70°   | 9.2    |
| 72.5° | 8.7    |
| 75°   | 7.7    |
| 77.5° | 5.1    |
| 80°   | 3.6    |
| 82.5° | 2.6    |
| 85°   | 1.5    |
| 87.5° | 1.0    |
| 90°   | 0.0    |



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— 0°-180°







(END OF REPORT)