

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: P752281

Luminaire Tested: LD4D70BD010-EU4DR3070959050-4LBSQW1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P752281  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D70BD010-EU4DR3070959050-4LBSQW1B  
Description: 4 INCH SQAURE DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

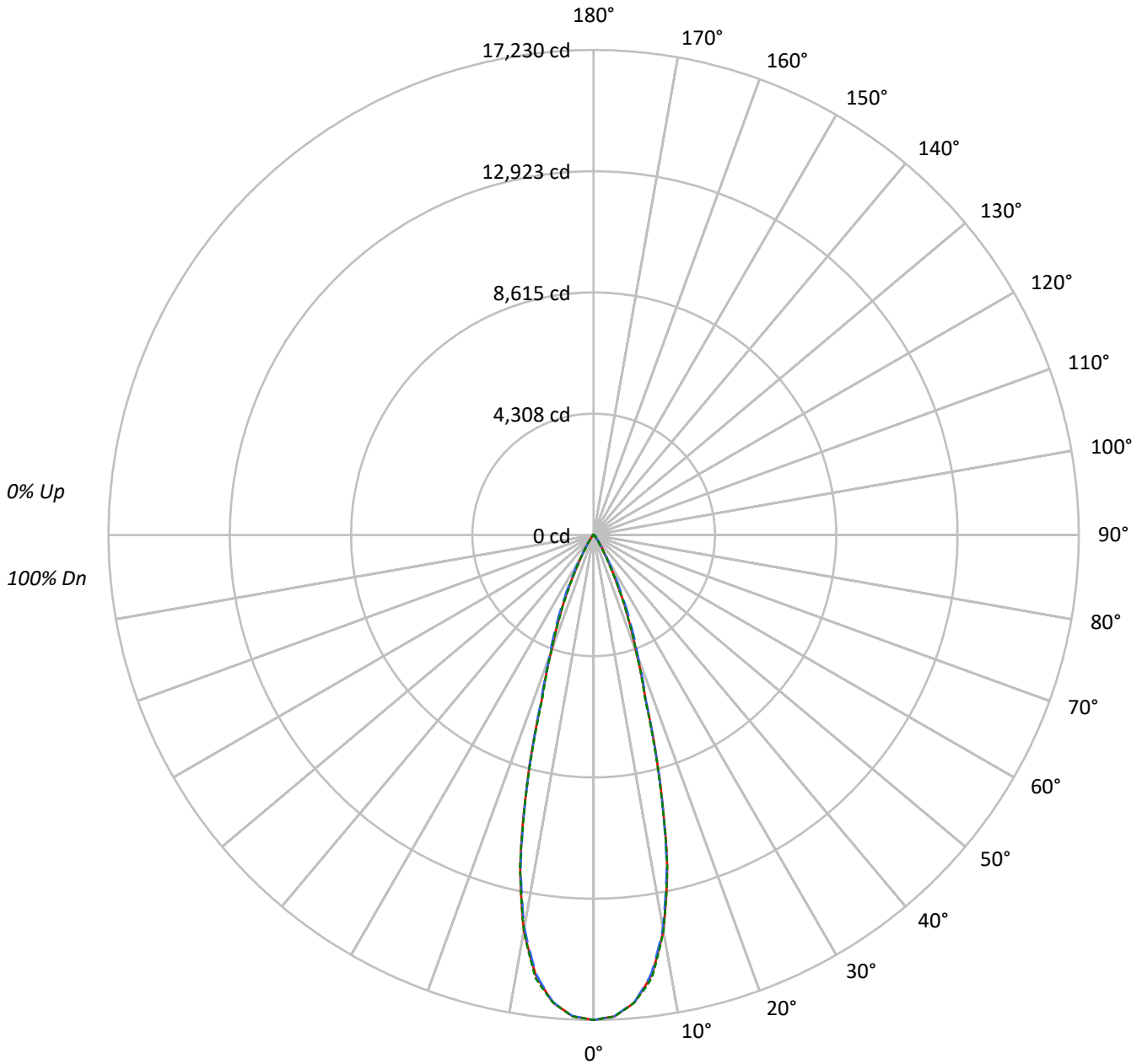
Lumens per Lamp: N/A  
Luminaire Lumens: 5358.6 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 66.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 50  |     |     |     |     |     |     |     |     | 30 |    |    |    |    |     |  |  |  | 10 |  |  |  |  |  |  |  |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 | 50 | 30 | 10 | 0   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |     |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    |    | 100 |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |    |    |    |    |    | 96  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98  | 99  | 97  | 96  | 97  | 95  | 94  | 92  |    |    |    |    |    | 92  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 93  | 96  | 93  | 91  | 94  | 92  | 90  | 89  |    |    |    |    |    | 89  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 103 | 98  | 93  | 90  | 102 | 96  | 93  | 90  | 94  | 91  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 85  |    |    |    |    |    | 85  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 100 | 94  | 89  | 86  | 98  | 93  | 89  | 86  | 91  | 88  | 85  | 90  | 86  | 84  | 88  | 86  | 83  | 82  |    |    |    |    |    | 82  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 97  | 90  | 85  | 82  | 95  | 89  | 85  | 82  | 88  | 84  | 81  | 87  | 83  | 81  | 85  | 83  | 80  | 79  |    |    |    |    |    | 79  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 94  | 87  | 82  | 79  | 92  | 86  | 82  | 79  | 85  | 81  | 78  | 84  | 81  | 78  | 83  | 80  | 78  | 77  |    |    |    |    |    | 77  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  | 82  | 78  | 76  | 81  | 78  | 75  | 80  | 77  | 75  | 74  |    |    |    |    |    | 74  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  | 80  | 76  | 73  | 79  | 75  | 73  | 78  | 75  | 73  | 72  |    |    |    |    |    | 72  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 85  | 78  | 74  | 71  | 85  | 78  | 74  | 71  | 77  | 73  | 71  | 76  | 73  | 71  | 76  | 73  | 70  | 69  |    |    |    |    |    | 69  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°      | 45°     | 90°     |
|-----|---------|---------|---------|
| 0°  | 1318881 | 1318881 | 1318881 |
| 5°  | 1281021 | 1279523 | 1281083 |
| 10° | 1109560 | 1101733 | 1109295 |
| 15° | 723929  | 720039  | 716425  |
| 20° | 359978  | 373483  | 359497  |
| 25° | 181328  | 204477  | 177620  |
| 30° | 72599   | 79104   | 63257   |
| 35° | 33677   | 32256   | 27033   |
| 40° | 14538   | 16147   | 13689   |
| 45° | 10251   | 12730   | 10349   |
| 50° | 3525    | 9264    | 3727    |
| 55° | 2028    | 3843    | 2149    |
| 60° | 1424    | 1684    | 1424    |
| 65° | 924     | 924     | 924     |
| 70° | 559     | 380     | 559     |
| 75° | 0       | 237     | 0       |
| 80° | 0       | 0       | 0       |
| 85° | 0       | 0       | 0       |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 12730 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1515.2 | 28.3      |
| 10°-20°   | 2440.2 | 45.5      |
| 20°-30°   | 1054.5 | 19.7      |
| 30°-40°   | 240.3  | 4.5       |
| 40°-50°   | 82.5   | 1.5       |
| 50°-60°   | 20.2   | 0.4       |
| 60°-70°   | 5.2    | 0.1       |
| 70°-80°   | 0.5    | 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°    | 5009.8 | 93.5      |
| 0°-40°    | 5250.1 | 98.0      |
| 0°-60°    | 5352.8 | 99.9      |
| 0°-90°    | 5358.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5358.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 17230 | 17230 | 17230 | 17230 | 17230 |      |
| 5°  | 16672 | 16656 | 16653 | 16687 | 16673 | 1516 |
| 15° | 9136  | 9026  | 9086  | 9057  | 9041  | 2446 |
| 25° | 2147  | 2228  | 2421  | 2172  | 2103  | 1028 |
| 35° | 360   | 368   | 345   | 343   | 289   | 244  |
| 45° | 95    | 118   | 118   | 118   | 96    | 67   |
| 55° | 15    | 16    | 29    | 17    | 16    | 15   |
| 65° | 5     | 5     | 5     | 5     | 5     | 5    |
| 75° | 0     | 0     | 1     | 0     | 0     | 1    |
| 85° | 0     | 0     | 0     | 0     | 0     | 0    |
| 90° | 0     | 0     | 0     | 0     | 0     | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 17230.5 | 17230.5 | 17230.5 | 17230.5 | 17230.5 |
| 2.5°  | 17116.3 | 17104.5 | 17111.2 | 17119.7 | 17123.1 |
| 5°    | 16672.2 | 16656.1 | 16652.7 | 16687.4 | 16673.0 |
| 7.5°  | 15776.3 | 15753.5 | 15718.8 | 15797.4 | 15871.0 |
| 10°   | 14275.6 | 14250.2 | 14174.9 | 14212.1 | 14272.2 |
| 12.5° | 12060.0 | 11977.9 | 11976.2 | 12094.7 | 12078.6 |
| 15°   | 9135.5  | 9025.5  | 9086.4  | 9056.8  | 9040.8  |
| 17.5° | 6143.4  | 6101.1  | 6182.3  | 6157.7  | 6052.0  |
| 20°   | 4419.3  | 4430.3  | 4585.1  | 4507.3  | 4413.4  |
| 22.5° | 3224.8  | 3264.6  | 3448.1  | 3247.6  | 3174.0  |
| 25°   | 2147.0  | 2228.3  | 2421.1  | 2171.6  | 2103.1  |
| 27.5° | 1320.5  | 1357.8  | 1553.2  | 1303.6  | 1266.4  |
| 30°   | 821.4   | 802.8   | 895.0   | 768.1   | 715.7   |
| 32.5° | 538.9   | 515.2   | 544.8   | 489.0   | 446.7   |
| 35°   | 360.4   | 368.0   | 345.2   | 342.6   | 289.3   |
| 37.5° | 225.0   | 258.9   | 228.4   | 243.6   | 186.1   |
| 40°   | 145.5   | 187.8   | 161.6   | 178.5   | 137.0   |
| 42.5° | 119.3   | 144.7   | 132.8   | 141.3   | 121.8   |
| 45°   | 94.7    | 117.6   | 117.6   | 117.6   | 95.6    |
| 47.5° | 52.4    | 78.7    | 100.7   | 80.4    | 55.8    |
| 50°   | 29.6    | 39.8    | 77.8    | 41.5    | 31.3    |
| 52.5° | 20.3    | 22.8    | 53.3    | 23.7    | 21.1    |
| 55°   | 15.2    | 16.1    | 28.8    | 16.9    | 16.1    |
| 57.5° | 11.8    | 12.7    | 15.2    | 12.7    | 11.8    |
| 60°   | 9.3     | 9.3     | 11.0    | 10.2    | 9.3     |
| 62.5° | 6.8     | 6.8     | 7.6     | 6.8     | 6.8     |
| 65°   | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     |
| 67.5° | 2.5     | 3.4     | 3.4     | 3.4     | 3.4     |
| 70°   | 2.5     | 1.7     | 1.7     | 1.7     | 2.5     |
| 72.5° | 1.7     | 0.8     | 0.8     | 0.8     | 0.8     |
| 75°   | 0.0     | 0.0     | 0.8     | 0.0     | 0.0     |
| 77.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 80°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 82.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 85°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal  
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Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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Scaled Data Report



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Scaled Data Report



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