

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: P751446

Luminaire Tested: LD4D65D010-EU4DR3055659027-4LBS1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P751446  
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: LD4D65D010-EU4DR3055659027-4LBS1H  
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6639.6 lumens  
Efficiency: N/A  
Efficacy: 91.2 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

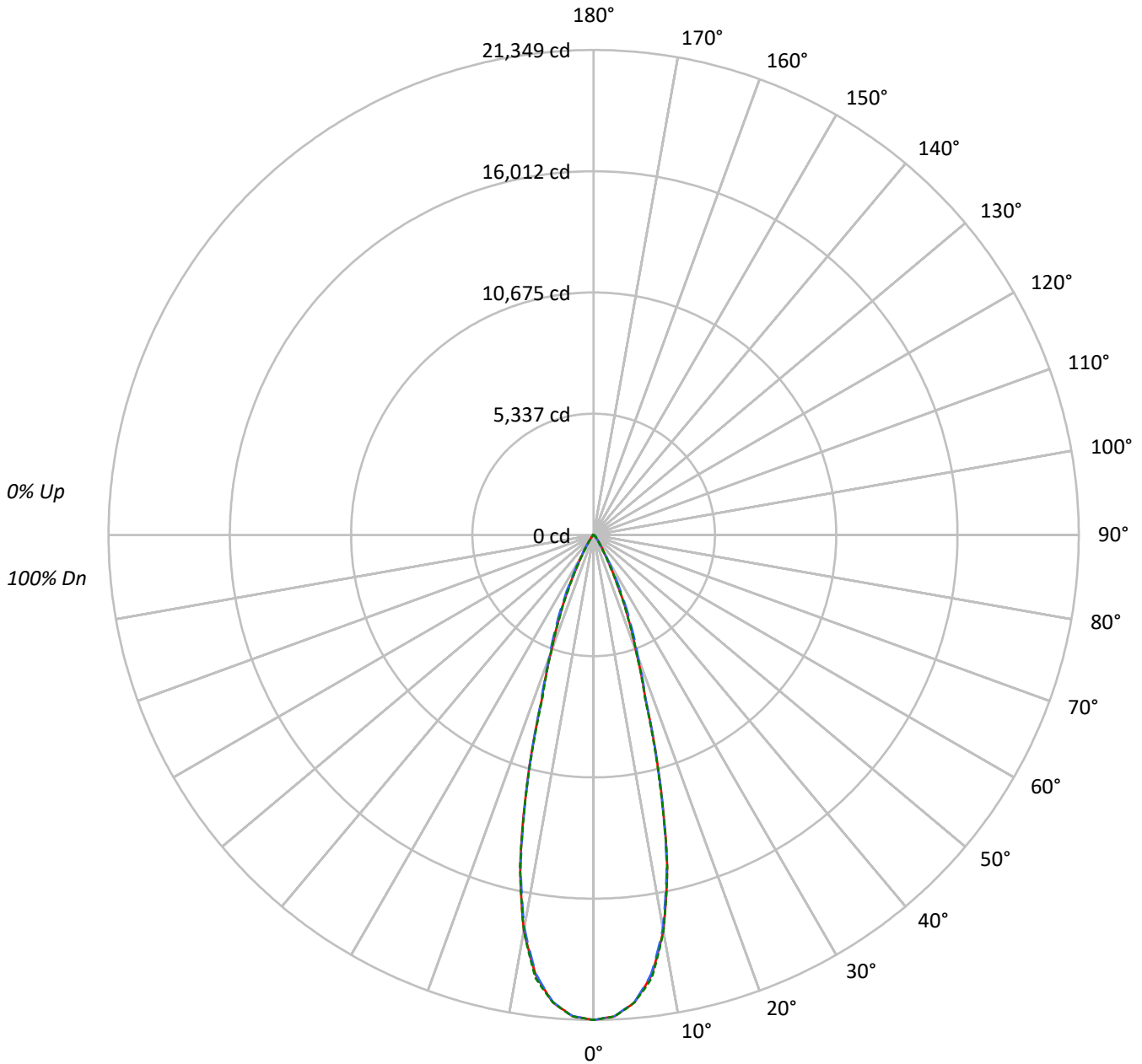
Input Watts (W): 72.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



Downlight

TEST NUMBER: P751446  
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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 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98  | 99  | 97  | 96  | 97  | 95  | 94  | 92  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 93  | 96  | 93  | 91  | 94  | 92  | 90  | 89  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 103 | 98  | 93  | 90  | 102 | 96  | 93  | 90  | 94  | 91  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 85  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 100 | 94  | 89  | 86  | 98  | 93  | 89  | 86  | 91  | 88  | 85  | 90  | 86  | 84  | 88  | 86  | 83  | 82  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 97  | 90  | 85  | 82  | 95  | 89  | 85  | 82  | 88  | 84  | 81  | 87  | 83  | 81  | 85  | 83  | 80  | 79  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 94  | 87  | 82  | 79  | 92  | 86  | 82  | 79  | 85  | 81  | 78  | 84  | 81  | 78  | 83  | 80  | 78  | 77  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  | 82  | 78  | 76  | 81  | 78  | 75  | 80  | 77  | 75  | 74  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  | 80  | 76  | 73  | 79  | 75  | 73  | 78  | 75  | 73  | 72  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 85  | 78  | 74  | 71  | 85  | 78  | 74  | 71  | 77  | 73  | 71  | 76  | 73  | 71  | 76  | 73  | 70  | 69  |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°      | 45°     | 90°     |
|-----|---------|---------|---------|
| 0°  | 1634156 | 1634156 | 1634156 |
| 5°  | 1587243 | 1585391 | 1587327 |
| 10° | 1374793 | 1365101 | 1374467 |
| 15° | 896982  | 892171  | 887686  |
| 20° | 446027  | 462767  | 445433  |
| 25° | 224679  | 253360  | 220076  |
| 30° | 89958   | 98019   | 78380   |
| 35° | 41722   | 39965   | 33499   |
| 40° | 18016   | 20004   | 16966   |
| 45° | 12708   | 15772   | 12817   |
| 50° | 4370    | 11479   | 4620    |
| 55° | 2522    | 4751    | 2656    |
| 60° | 1760    | 2082    | 1760    |
| 65° | 1141    | 1141    | 1141    |
| 70° | 694     | 470     | 694     |
| 75° | 0       | 296     | 0       |
| 80° | 0       | 0       | 0       |
| 85° | 0       | 0       | 0       |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 15772 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1877.4 | 28.3      |
| 10°-20°   | 3023.5 | 45.5      |
| 20°-30°   | 1306.5 | 19.7      |
| 30°-40°   | 297.8  | 4.5       |
| 40°-50°   | 102.2  | 1.5       |
| 50°-60°   | 25.0   | 0.4       |
| 60°-70°   | 6.5    | 0.1       |
| 70°-80°   | 0.7    | 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°    | 6207.4 | 93.5      |
| 0°-40°    | 6505.2 | 98.0      |
| 0°-60°    | 6632.4 | 99.9      |
| 0°-90°    | 6639.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6639.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 21349 | 21349 | 21349 | 21349 | 21349 |      |
| 5°  | 20658 | 20638 | 20634 | 20676 | 20659 | 1879 |
| 15° | 11319 | 11183 | 11259 | 11222 | 11202 | 3031 |
| 25° | 2660  | 2761  | 3000  | 2691  | 2606  | 1273 |
| 35° | 446   | 456   | 428   | 424   | 358   | 303  |
| 45° | 117   | 146   | 146   | 146   | 118   | 83   |
| 55° | 19    | 20    | 36    | 21    | 20    | 18   |
| 65° | 6     | 6     | 6     | 6     | 6     | 6    |
| 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°    | 21349.4 | 21349.4 | 21349.4 | 21349.4 | 21349.4 |
| 2.5°  | 21207.9 | 21193.3 | 21201.6 | 21212.1 | 21216.3 |
| 5°    | 20657.6 | 20637.7 | 20633.5 | 20676.5 | 20658.7 |
| 7.5°  | 19547.6 | 19519.3 | 19476.3 | 19573.8 | 19665.0 |
| 10°   | 17688.1 | 17656.7 | 17563.4 | 17609.5 | 17683.9 |
| 12.5° | 14942.9 | 14841.3 | 14839.2 | 14985.9 | 14966.0 |
| 15°   | 11319.3 | 11183.1 | 11258.6 | 11221.9 | 11202.0 |
| 17.5° | 7611.9  | 7559.5  | 7660.1  | 7629.7  | 7498.7  |
| 20°   | 5475.7  | 5489.3  | 5681.2  | 5584.7  | 5468.4  |
| 22.5° | 3995.7  | 4044.9  | 4272.4  | 4024.0  | 3932.8  |
| 25°   | 2660.3  | 2760.9  | 2999.9  | 2690.7  | 2605.8  |
| 27.5° | 1636.2  | 1682.3  | 1924.5  | 1615.3  | 1569.1  |
| 30°   | 1017.8  | 994.7   | 1109.0  | 951.8   | 886.8   |
| 32.5° | 667.7   | 638.3   | 675.0   | 605.9   | 553.4   |
| 35°   | 446.5   | 456.0   | 427.7   | 424.5   | 358.5   |
| 37.5° | 278.8   | 320.7   | 283.0   | 301.9   | 230.6   |
| 40°   | 180.3   | 232.7   | 200.2   | 221.2   | 169.8   |
| 42.5° | 147.8   | 179.2   | 164.6   | 175.0   | 150.9   |
| 45°   | 117.4   | 145.7   | 145.7   | 145.7   | 118.4   |
| 47.5° | 65.0    | 97.5    | 124.7   | 99.6    | 69.2    |
| 50°   | 36.7    | 49.3    | 96.4    | 51.4    | 38.8    |
| 52.5° | 25.2    | 28.3    | 66.0    | 29.3    | 26.2    |
| 55°   | 18.9    | 19.9    | 35.6    | 21.0    | 19.9    |
| 57.5° | 14.7    | 15.7    | 18.9    | 15.7    | 14.7    |
| 60°   | 11.5    | 11.5    | 13.6    | 12.6    | 11.5    |
| 62.5° | 8.4     | 8.4     | 9.4     | 8.4     | 8.4     |
| 65°   | 6.3     | 6.3     | 6.3     | 6.3     | 6.3     |
| 67.5° | 3.1     | 4.2     | 4.2     | 4.2     | 4.2     |
| 70°   | 3.1     | 2.1     | 2.1     | 2.1     | 3.1     |
| 72.5° | 2.1     | 1.0     | 1.0     | 1.0     | 1.0     |
| 75°   | 0.0     | 0.0     | 1.0     | 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



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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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