

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: P738849

Luminaire Tested: LD4D02D010-EU4DR150210IC9030-4LBCSSQMW

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P738849
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2310-195-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D02D010-EU4DR150210IC9030-4LBCSSQMW
Description: 4 INCH SQAURE SHALLOW CAST MATTE WHITE TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 331.5 lumens
Efficiency: N/A
Efficacy: 65.0 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.23
Luminous Opening: Vertical Cylinder (Dia: 0.35' x H: 0.35')
CIE Type: Direct

Input Watts (W): 5.1
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



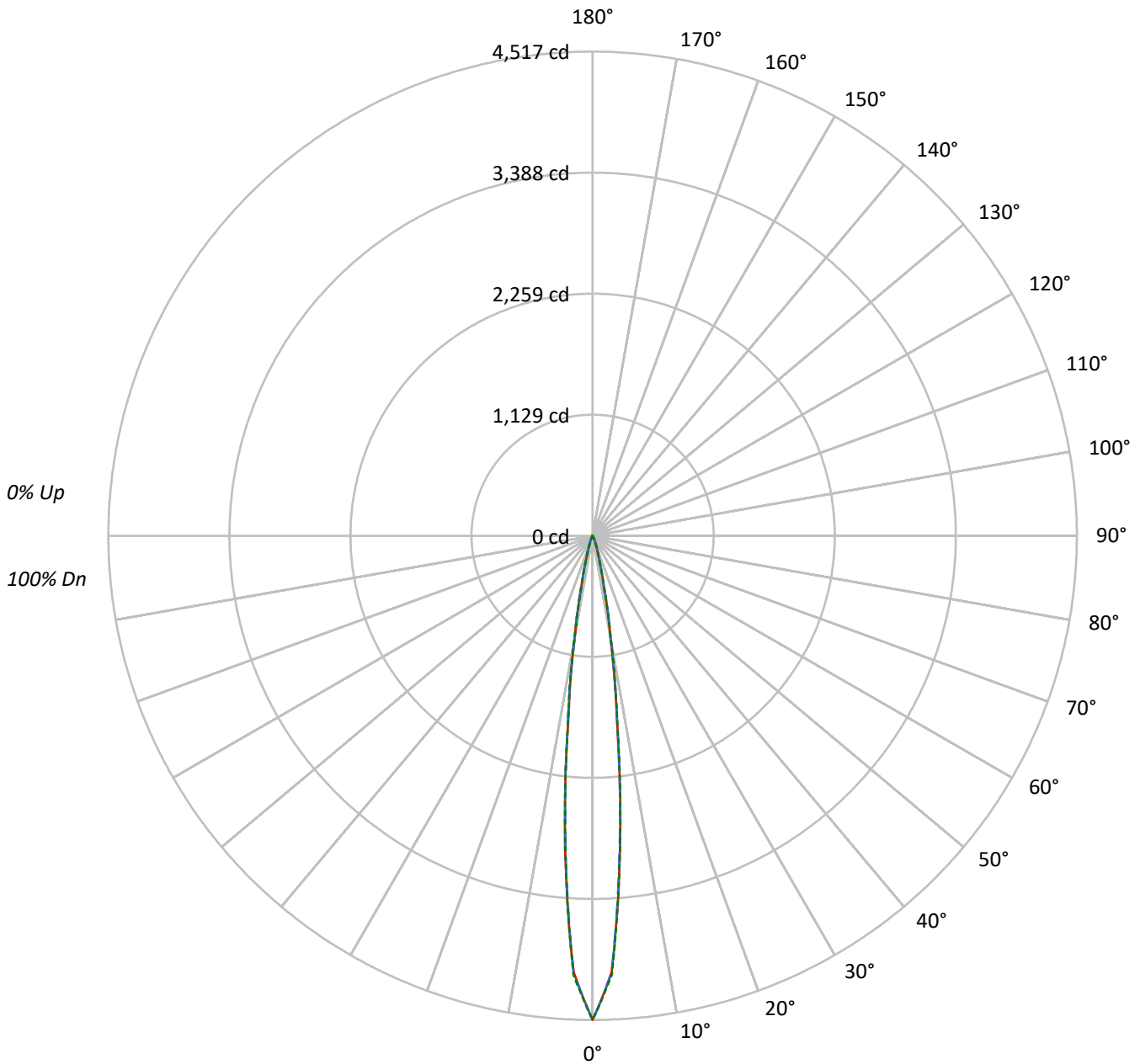
Downlight



TEST NUMBER: P738849

CATALOG NUMBER: LD4D02D010-EU4DR150210IC9030-4LBCSSQMW

Luminous Intensity Polar Plot





TEST NUMBER: P738849

CATALOG NUMBER: LD4D02D010-EU4DR150210IC9030-4LBCSSQMW

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 | 0 | | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 116 | 114 | 112 | 111 | 113 | 112 | 110 | 109 | 108 | 107 | 106 | 104 | 103 | 103 | 101 | 100 | 100 | 98 | | | | | | | | | | | | | | | | | | | |
| 2 | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 104 | 105 | 103 | 102 | 102 | 101 | 100 | 100 | 98 | 98 | 96 | | | | | | | | | | | | | | | | | | | |
| 3 | 110 | 106 | 103 | 101 | 108 | 105 | 102 | 100 | 103 | 100 | 99 | 100 | 99 | 97 | 98 | 97 | 96 | 94 | | | | | | | | | | | | | | | | | | | |
| 4 | 108 | 103 | 100 | 98 | 106 | 102 | 99 | 97 | 100 | 98 | 96 | 99 | 97 | 95 | 97 | 95 | 94 | 93 | | | | | | | | | | | | | | | | | | | |
| 5 | 106 | 101 | 98 | 95 | 104 | 100 | 97 | 95 | 98 | 96 | 94 | 97 | 95 | 93 | 96 | 94 | 92 | 92 | | | | | | | | | | | | | | | | | | | |
| 6 | 104 | 99 | 95 | 93 | 102 | 98 | 95 | 93 | 97 | 94 | 92 | 96 | 93 | 92 | 95 | 93 | 91 | 90 | | | | | | | | | | | | | | | | | | | |
| 7 | 102 | 97 | 94 | 91 | 101 | 96 | 93 | 91 | 95 | 93 | 91 | 94 | 92 | 90 | 93 | 91 | 90 | 89 | | | | | | | | | | | | | | | | | | | |
| 8 | 100 | 95 | 92 | 90 | 99 | 95 | 92 | 90 | 94 | 91 | 89 | 93 | 91 | 89 | 92 | 90 | 89 | 88 | | | | | | | | | | | | | | | | | | | |
| 9 | 99 | 93 | 90 | 88 | 98 | 93 | 90 | 88 | 92 | 90 | 88 | 92 | 89 | 88 | 91 | 89 | 88 | 87 | | | | | | | | | | | | | | | | | | | |
| 10 | 97 | 92 | 89 | 87 | 96 | 92 | 89 | 87 | 91 | 89 | 87 | 91 | 88 | 87 | 90 | 88 | 86 | 86 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 508230 | 508230 | 508230 |
| 5° | 298657 | 294795 | 297122 |
| 10° | 89137 | 89762 | 91134 |
| 15° | 22175 | 22600 | 21905 |
| 20° | 6636 | 7683 | 6775 |
| 25° | 2337 | 2976 | 2368 |
| 30° | 861 | 1131 | 876 |
| 35° | 428 | 487 | 414 |
| 40° | 270 | 298 | 270 |
| 45° | 203 | 217 | 203 |
| 50° | 160 | 160 | 160 |
| 55° | 132 | 132 | 132 |
| 60° | 105 | 105 | 105 |
| 65° | 79 | 79 | 79 |
| 70° | 73 | 73 | 73 |
| 75° | 45 | 45 | 60 |
| 80° | 32 | 32 | 32 |
| 85° | 17 | 17 | 17 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 217 cd/sqm



TEST NUMBER: P738849

CATALOG NUMBER: LD4D02D010-EU4DR150210IC9030-4LBCSSQMW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 215.0 | 64.9 |
| 10°-20° | 88.4 | 26.7 |
| 20°-30° | 17.6 | 5.3 |
| 30°-40° | 4.4 | 1.3 |
| 40°-50° | 2.3 | 0.7 |
| 50°-60° | 1.7 | 0.5 |
| 60°-70° | 1.2 | 0.4 |
| 70°-80° | 0.7 | 0.2 |
| 80°-90° | 0.2 | 0.1 |
| 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° | 321.0 | 96.8 |
| 0°-40° | 325.4 | 98.2 |
| 0°-60° | 329.4 | 99.4 |
| 0°-90° | 331.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 331.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 4517 | 4517 | 4517 | 4517 | 4517 | |
| 5° | 2939 | 2908 | 2901 | 2921 | 2924 | 215 |
| 15° | 255 | 260 | 260 | 256 | 252 | 88 |
| 25° | 30 | 34 | 38 | 34 | 30 | 16 |
| 35° | 6 | 6 | 7 | 6 | 6 | 4 |
| 45° | 3 | 3 | 3 | 3 | 3 | 2 |
| 55° | 2 | 2 | 2 | 2 | 2 | 2 |
| 65° | 1 | 1 | 1 | 1 | 1 | 1 |
| 75° | 1 | 1 | 1 | 1 | 1 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P738849

CATALOG NUMBER: LD4D02D010-EU4DR150210IC9030-4LBCSSQMW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 4516.8 | 4516.8 | 4516.8 | 4516.8 | 4516.8 |
| 2.5° | 4074.3 | 4077.8 | 4079.1 | 4083.1 | 4098.0 |
| 5° | 2938.7 | 2908.5 | 2900.7 | 2920.7 | 2923.6 |
| 7.5° | 1740.8 | 1746.9 | 1769.3 | 1774.2 | 1756.3 |
| 10° | 955.3 | 963.1 | 962.0 | 968.9 | 976.7 |
| 12.5° | 488.5 | 482.4 | 480.5 | 488.4 | 477.5 |
| 15° | 255.3 | 260.0 | 260.2 | 255.6 | 252.2 |
| 17.5° | 137.3 | 142.8 | 152.0 | 144.6 | 133.1 |
| 20° | 81.1 | 86.0 | 93.9 | 87.8 | 82.8 |
| 22.5° | 50.1 | 54.1 | 59.7 | 54.9 | 50.9 |
| 25° | 30.0 | 34.0 | 38.2 | 33.8 | 30.4 |
| 27.5° | 17.8 | 21.2 | 23.9 | 21.0 | 17.6 |
| 30° | 11.5 | 13.4 | 15.1 | 13.2 | 11.7 |
| 32.5° | 8.0 | 8.8 | 9.6 | 8.8 | 8.0 |
| 35° | 5.9 | 6.3 | 6.7 | 6.3 | 5.7 |
| 37.5° | 4.6 | 5.0 | 5.2 | 4.8 | 4.4 |
| 40° | 3.8 | 4.0 | 4.2 | 4.0 | 3.8 |
| 42.5° | 3.3 | 3.4 | 3.4 | 3.4 | 3.3 |
| 45° | 2.9 | 2.9 | 3.1 | 2.9 | 2.9 |
| 47.5° | 2.5 | 2.5 | 2.7 | 2.5 | 2.5 |
| 50° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 52.5° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 55° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| 57.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 60° | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 62.5° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 65° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 67.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 70° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 72.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 75° | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 |
| 77.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 80° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 82.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 85° | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 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
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)