

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: P777062

Luminaire Tested: LERS4D02D010-EC4DR300210IC9030-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P777062
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: LERS4D02D010-EC4DR300210IC9030-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 376.1 lumens
Efficiency: N/A
Efficacy: 73.8 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): 5.1
Input Voltage (V): NR
Input Current (A_{in}): 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



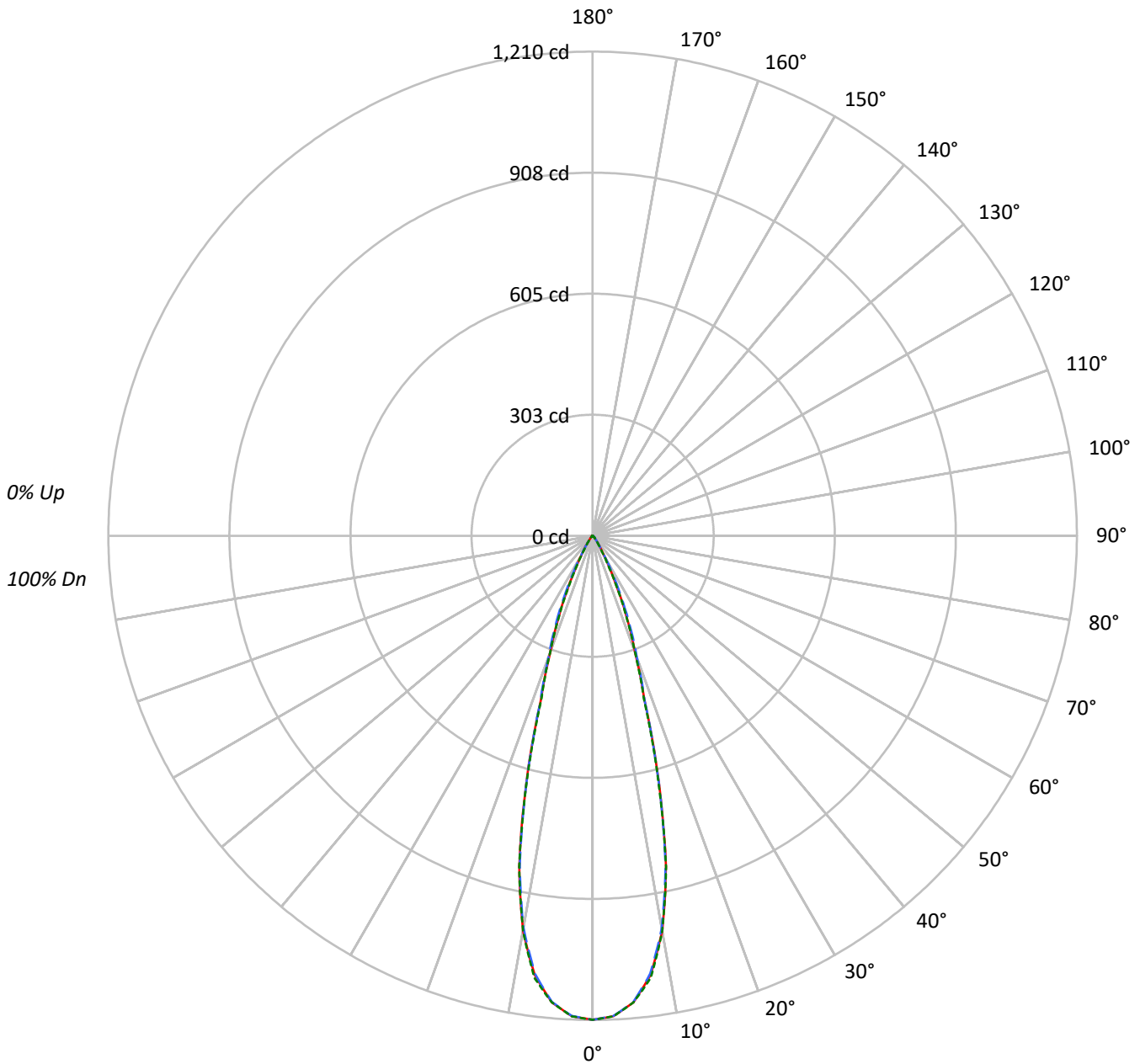
Downlight



TEST NUMBER: P777062

CATALOG NUMBER: LERS4D02D010-EC4DR300210IC9030-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P777062

CATALOG NUMBER: LERS4D02D010-EC4DR300210IC9030-4LBS1LI

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 | 87 | 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° | 92587 | 92587 | 92587 |
| 5° | 89921 | 89821 | 89929 |
| 10° | 77887 | 77336 | 77872 |
| 15° | 50819 | 50549 | 50296 |
| 20° | 25268 | 26221 | 25235 |
| 25° | 12728 | 14349 | 12466 |
| 30° | 5091 | 5559 | 4437 |
| 35° | 2364 | 2261 | 1897 |
| 40° | 1019 | 1129 | 959 |
| 45° | 714 | 898 | 725 |
| 50° | 250 | 643 | 262 |
| 55° | 147 | 267 | 147 |
| 60° | 92 | 107 | 92 |
| 65° | 54 | 54 | 54 |
| 70° | 45 | 22 | 45 |
| 75° | 0 | 30 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 898 cd/sqm



TEST NUMBER: P777062

CATALOG NUMBER: LERS4D02D010-EC4DR300210IC9030-4LBS1LI

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.4 | 28.3 |
| 10°-20° | 171.3 | 45.5 |
| 20°-30° | 74.0 | 19.7 |
| 30°-40° | 16.9 | 4.5 |
| 40°-50° | 5.8 | 1.5 |
| 50°-60° | 1.4 | 0.4 |
| 60°-70° | 0.3 | 0.1 |
| 70°-80° | 0.0 | 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° | 351.7 | 93.5 |
| 0°-40° | 368.5 | 98.0 |
| 0°-60° | 375.7 | 99.9 |
| 0°-90° | 376.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 376.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1210 | 1210 | 1210 | 1210 | 1210 | |
| 5° | 1170 | 1169 | 1169 | 1171 | 1170 | 106 |
| 15° | 641 | 634 | 638 | 636 | 635 | 172 |
| 25° | 151 | 156 | 170 | 152 | 148 | 72 |
| 35° | 25 | 26 | 24 | 24 | 20 | 17 |
| 45° | 7 | 8 | 8 | 8 | 7 | 5 |
| 55° | 1 | 1 | 2 | 1 | 1 | 1 |
| 65° | 0 | 0 | 0 | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P777062

CATALOG NUMBER: LERS4D02D010-EC4DR300210IC9030-4LBS1LI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1209.6 | 1209.6 | 1209.6 | 1209.6 | 1209.6 |
| 2.5° | 1201.5 | 1200.7 | 1201.1 | 1201.8 | 1202.0 |
| 5° | 1170.3 | 1169.2 | 1169.0 | 1171.4 | 1170.4 |
| 7.5° | 1107.5 | 1105.9 | 1103.4 | 1108.9 | 1114.1 |
| 10° | 1002.1 | 1000.3 | 995.0 | 997.6 | 1001.9 |
| 12.5° | 846.6 | 840.8 | 840.7 | 849.0 | 847.9 |
| 15° | 641.3 | 633.6 | 637.9 | 635.7 | 634.7 |
| 17.5° | 431.3 | 428.3 | 434.0 | 432.2 | 424.8 |
| 20° | 310.2 | 311.0 | 321.9 | 316.4 | 309.8 |
| 22.5° | 226.4 | 229.2 | 242.1 | 228.0 | 222.8 |
| 25° | 150.7 | 156.4 | 169.9 | 152.5 | 147.6 |
| 27.5° | 92.7 | 95.3 | 109.0 | 91.5 | 88.9 |
| 30° | 57.6 | 56.4 | 62.9 | 53.9 | 50.2 |
| 32.5° | 37.8 | 36.2 | 38.2 | 34.3 | 31.3 |
| 35° | 25.3 | 25.8 | 24.2 | 24.1 | 20.3 |
| 37.5° | 15.8 | 18.2 | 16.0 | 17.1 | 13.1 |
| 40° | 10.2 | 13.2 | 11.3 | 12.5 | 9.6 |
| 42.5° | 8.4 | 10.1 | 9.3 | 9.9 | 8.5 |
| 45° | 6.6 | 8.3 | 8.3 | 8.3 | 6.7 |
| 47.5° | 3.7 | 5.5 | 7.0 | 5.6 | 3.9 |
| 50° | 2.1 | 2.8 | 5.4 | 2.9 | 2.2 |
| 52.5° | 1.4 | 1.6 | 3.7 | 1.7 | 1.5 |
| 55° | 1.1 | 1.1 | 2.0 | 1.2 | 1.1 |
| 57.5° | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| 60° | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 |
| 62.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 65° | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 67.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 70° | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 72.5° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 75° | 0.0 | 0.0 | 0.1 | 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
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)