

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: P777002

Luminaire Tested: LERS4D02D010-EC4DR150210IC9050-4LBS1LI

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P777002
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: LERS4D02D010-EC4DR150210IC9050-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 417.0 lumens
Efficiency: N/A
Efficacy: 81.8 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 (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



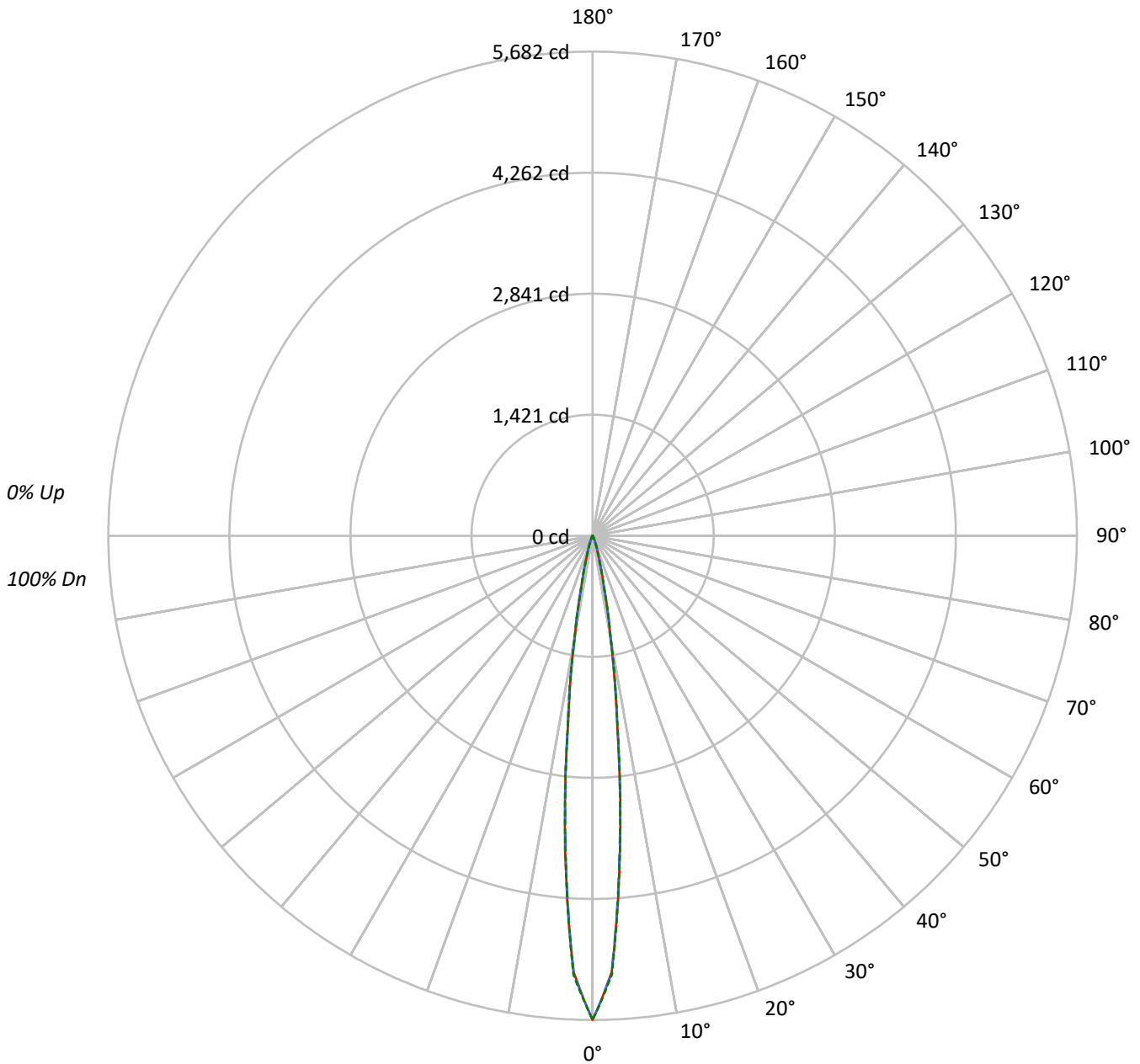
Downlight



TEST NUMBER: P777002

CATALOG NUMBER: LERS4D02D010-EC4DR150210IC9050-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P777002

CATALOG NUMBER: LERS4D02D010-EC4DR150210IC9050-4LBS1LI

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 639395 | 639395 | 639395 |
| 5° | 375732 | 370874 | 373801 |
| 10° | 112137 | 112921 | 114656 |
| 15° | 27890 | 28437 | 27560 |
| 20° | 8346 | 9663 | 8526 |
| 25° | 2945 | 3747 | 2976 |
| 30° | 1078 | 1423 | 1101 |
| 35° | 545 | 610 | 523 |
| 40° | 341 | 376 | 341 |
| 45° | 252 | 266 | 252 |
| 50° | 202 | 202 | 202 |
| 55° | 167 | 167 | 167 |
| 60° | 133 | 133 | 133 |
| 65° | 100 | 100 | 100 |
| 70° | 88 | 88 | 88 |
| 75° | 53 | 53 | 76 |
| 80° | 39 | 39 | 39 |
| 85° | 17 | 17 | 17 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 266 cd/sqm



TEST NUMBER: P777002

CATALOG NUMBER: LERS4D02D010-EC4DR150210IC9050-4LBS1LI

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 270.5 | 64.9 |
| 10°-20° | 111.3 | 26.7 |
| 20°-30° | 22.1 | 5.3 |
| 30°-40° | 5.5 | 1.3 |
| 40°-50° | 2.9 | 0.7 |
| 50°-60° | 2.1 | 0.5 |
| 60°-70° | 1.5 | 0.4 |
| 70°-80° | 0.9 | 0.2 |
| 80°-90° | 0.3 | 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° | 403.9 | 96.8 |
| 0°-40° | 409.4 | 98.2 |
| 0°-60° | 414.4 | 99.4 |
| 0°-90° | 417.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 417.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5682 | 5682 | 5682 | 5682 | 5682 | |
| 5° | 3697 | 3659 | 3649 | 3674 | 3678 | 270 |
| 15° | 321 | 327 | 327 | 322 | 317 | 110 |
| 25° | 38 | 43 | 48 | 43 | 38 | 20 |
| 35° | 8 | 8 | 8 | 8 | 7 | 5 |
| 45° | 4 | 4 | 4 | 4 | 4 | 3 |
| 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: P777002

CATALOG NUMBER: LERS4D02D010-EC4DR150210IC9050-4LBS1LI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5682.5 | 5682.5 | 5682.5 | 5682.5 | 5682.5 |
| 2.5° | 5125.8 | 5130.1 | 5131.8 | 5136.9 | 5155.6 |
| 5° | 3697.1 | 3659.1 | 3649.3 | 3674.5 | 3678.1 |
| 7.5° | 2190.0 | 2197.7 | 2225.9 | 2232.1 | 2209.5 |
| 10° | 1201.8 | 1211.7 | 1210.2 | 1218.9 | 1228.8 |
| 12.5° | 614.6 | 606.9 | 604.5 | 614.4 | 600.7 |
| 15° | 321.1 | 327.2 | 327.4 | 321.6 | 317.3 |
| 17.5° | 172.7 | 179.7 | 191.2 | 181.9 | 167.4 |
| 20° | 102.0 | 108.3 | 118.1 | 110.4 | 104.2 |
| 22.5° | 63.0 | 68.1 | 75.1 | 69.0 | 64.0 |
| 25° | 37.8 | 42.8 | 48.1 | 42.6 | 38.2 |
| 27.5° | 22.4 | 26.7 | 30.1 | 26.5 | 22.1 |
| 30° | 14.4 | 16.8 | 19.0 | 16.6 | 14.7 |
| 32.5° | 10.1 | 11.1 | 12.0 | 11.1 | 10.1 |
| 35° | 7.5 | 7.9 | 8.4 | 7.9 | 7.2 |
| 37.5° | 5.8 | 6.3 | 6.5 | 6.0 | 5.5 |
| 40° | 4.8 | 5.1 | 5.3 | 5.1 | 4.8 |
| 42.5° | 4.1 | 4.3 | 4.3 | 4.3 | 4.1 |
| 45° | 3.6 | 3.6 | 3.8 | 3.6 | 3.6 |
| 47.5° | 3.1 | 3.1 | 3.4 | 3.1 | 3.1 |
| 50° | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 |
| 52.5° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 55° | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| 57.5° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 60° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| 62.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 65° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 67.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 70° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 72.5° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 75° | 0.7 | 0.7 | 0.7 | 0.7 | 1.0 |
| 77.5° | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 80° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 82.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 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)