

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: P776984

Luminaire Tested: LERS4D02D010-EC4DR150210IC9027-4LBS1B

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P776984
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-EC4DR150210IC9027-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 336.8 lumens
Efficiency: N/A
Efficacy: 66.0 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 (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



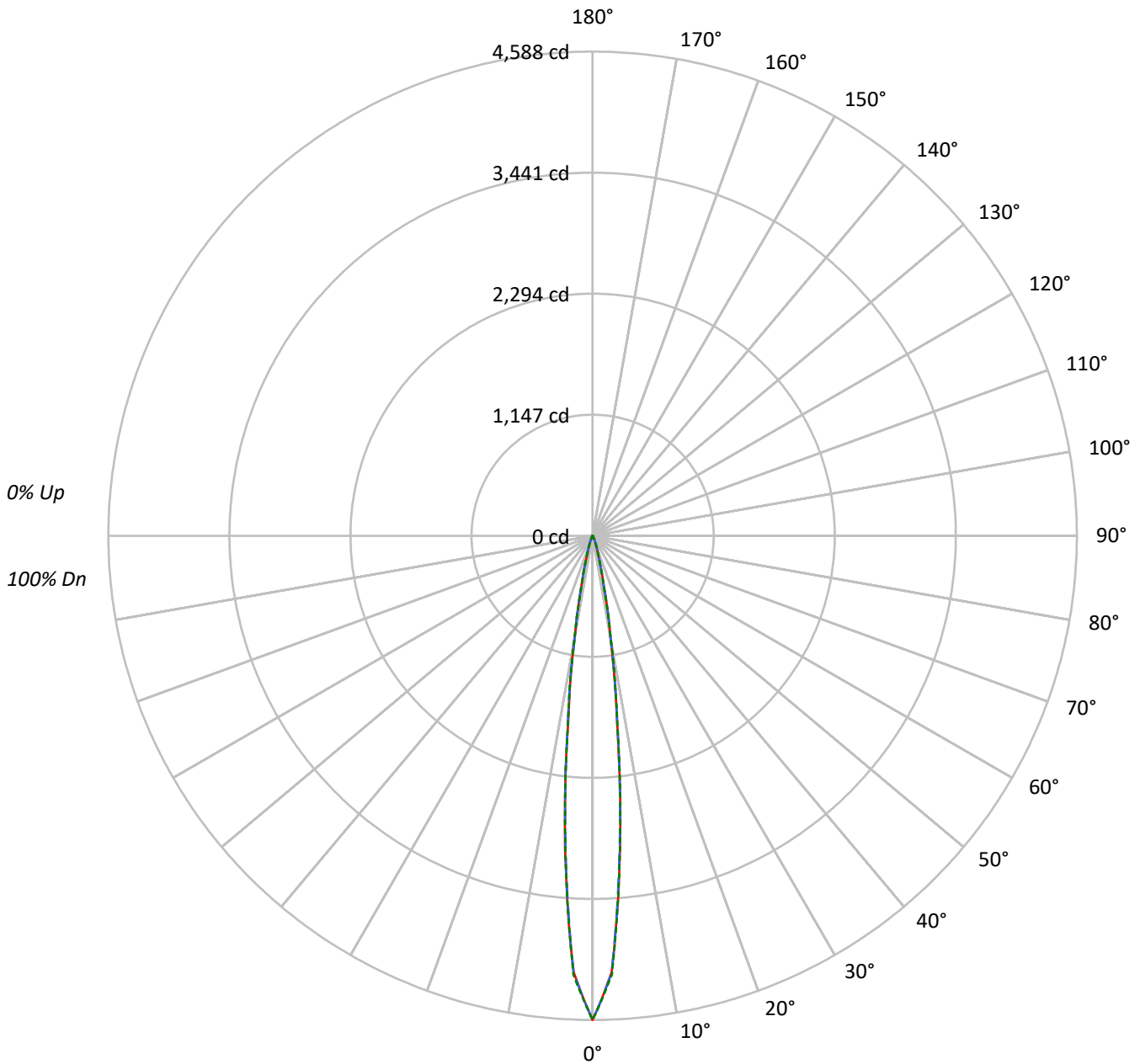
Downlight



TEST NUMBER: P776984

CATALOG NUMBER: LERS4D02D010-EC4DR150210IC9027-4LBS1B

Luminous Intensity Polar Plot





TEST NUMBER: P776984

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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 | 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 | 98 | 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 | 93 | 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 | 87 | 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° | 516298 | 516298 | 516298 |
| 5° | 303403 | 299470 | 301838 |
| 10° | 90546 | 91180 | 92580 |
| 15° | 22522 | 22965 | 22253 |
| 20° | 6742 | 7806 | 6881 |
| 25° | 2376 | 3023 | 2407 |
| 30° | 876 | 1146 | 884 |
| 35° | 436 | 494 | 421 |
| 40° | 277 | 305 | 277 |
| 45° | 203 | 217 | 203 |
| 50° | 160 | 160 | 160 |
| 55° | 132 | 132 | 132 |
| 60° | 112 | 112 | 112 |
| 65° | 86 | 86 | 86 |
| 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



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 218.4 | 64.9 |
| 10°-20° | 89.8 | 26.7 |
| 20°-30° | 17.8 | 5.3 |
| 30°-40° | 4.5 | 1.3 |
| 40°-50° | 2.3 | 0.7 |
| 50°-60° | 1.7 | 0.5 |
| 60°-70° | 1.3 | 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 |
| <hr/> | | |
| 0°-30° | 326.1 | 96.8 |
| 0°-40° | 330.6 | 98.1 |
| 0°-60° | 334.6 | 99.3 |
| 0°-90° | 336.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 336.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 4588 | 4588 | 4588 | 4588 | 4588 | |
| 5° | 2985 | 2955 | 2947 | 2967 | 2970 | 218 |
| 15° | 259 | 264 | 264 | 260 | 256 | 89 |
| 25° | 30 | 35 | 39 | 34 | 31 | 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 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 4588.5 | 4588.5 | 4588.5 | 4588.5 | 4588.5 |
| 2.5° | 4139.0 | 4142.5 | 4143.8 | 4147.9 | 4163.1 |
| 5° | 2985.4 | 2954.7 | 2946.7 | 2967.1 | 2970.0 |
| 7.5° | 1768.4 | 1774.6 | 1797.4 | 1802.4 | 1784.1 |
| 10° | 970.4 | 978.4 | 977.2 | 984.2 | 992.2 |
| 12.5° | 496.3 | 490.1 | 488.1 | 496.1 | 485.0 |
| 15° | 259.3 | 264.2 | 264.4 | 259.7 | 256.2 |
| 17.5° | 139.5 | 145.1 | 154.4 | 146.8 | 135.2 |
| 20° | 82.4 | 87.4 | 95.4 | 89.2 | 84.1 |
| 22.5° | 50.9 | 55.0 | 60.6 | 55.7 | 51.7 |
| 25° | 30.5 | 34.6 | 38.8 | 34.4 | 30.9 |
| 27.5° | 18.1 | 21.6 | 24.3 | 21.4 | 17.9 |
| 30° | 11.7 | 13.6 | 15.3 | 13.4 | 11.8 |
| 32.5° | 8.2 | 8.9 | 9.7 | 8.9 | 8.2 |
| 35° | 6.0 | 6.4 | 6.8 | 6.4 | 5.8 |
| 37.5° | 4.7 | 5.1 | 5.2 | 4.9 | 4.5 |
| 40° | 3.9 | 4.1 | 4.3 | 4.1 | 3.9 |
| 42.5° | 3.3 | 3.5 | 3.5 | 3.5 | 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° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 62.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 65° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 67.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 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

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Scaled Data Report





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

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