

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: P776988

Luminaire Tested: LERS4D02D010-EC4DR150210IC9030-4LBS1B

Issue Date: 2/2/2024

Test Information

Test Method: LM-79-2019
Report Number: P776988
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-EC4DR150210IC9030-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 15° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 347.7 lumens
Efficiency: N/A
Efficacy: 68.2 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



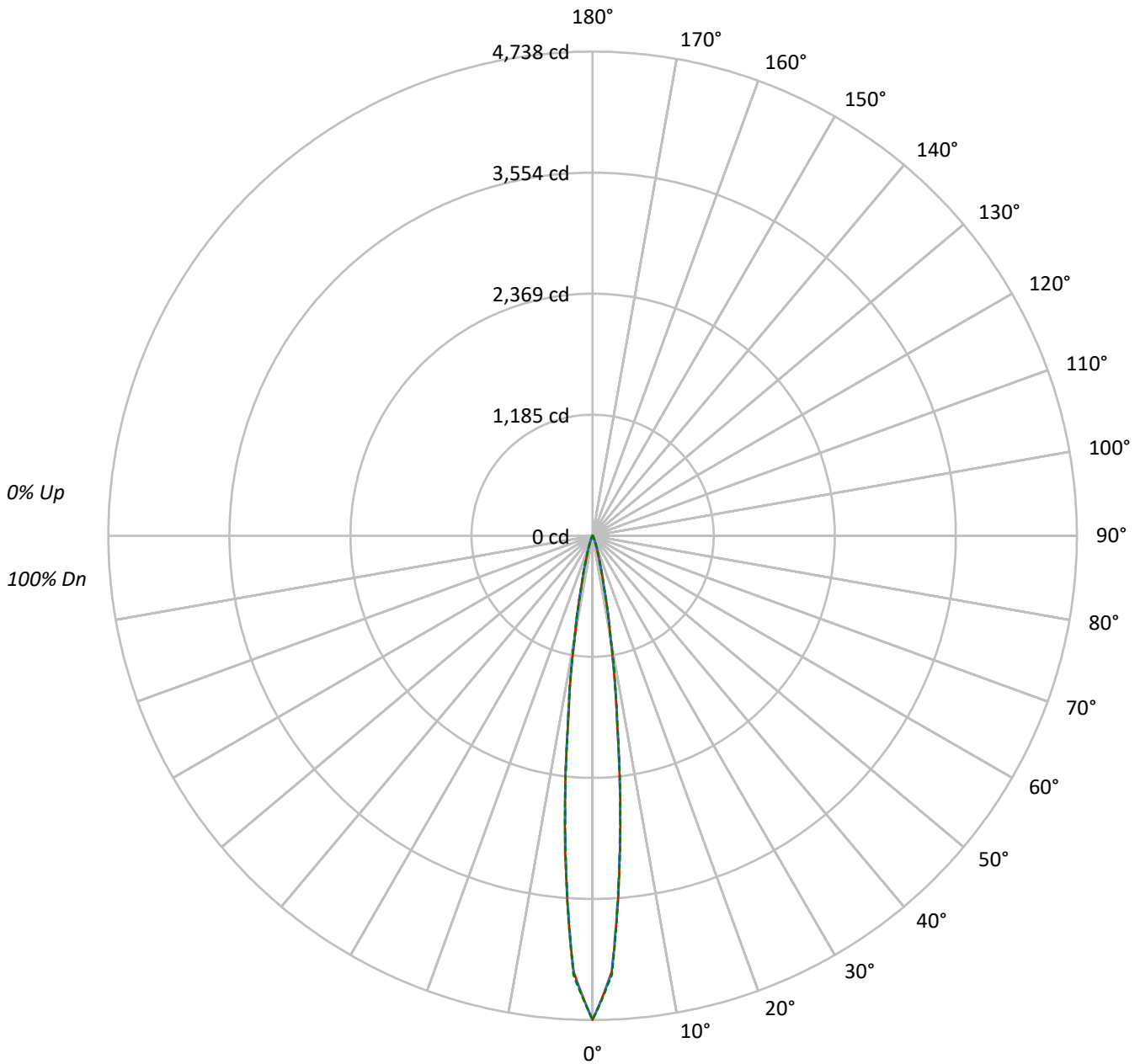
Downlight



TEST NUMBER: P776988

CATALOG NUMBER: LERS4D02D010-EC4DR150210IC9030-4LBS1B

Luminous Intensity Polar Plot





TEST NUMBER: P776988

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | | | | | | |
| RC | 80 | | | | | 70 | | | | | 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° | 533097 | 533097 | 533097 |
| 5° | 313281 | 309216 | 311665 |
| 10° | 93494 | 94157 | 95594 |
| 15° | 23260 | 23712 | 22982 |
| 20° | 6955 | 8060 | 7102 |
| 25° | 2454 | 3124 | 2485 |
| 30° | 899 | 1183 | 914 |
| 35° | 450 | 508 | 436 |
| 40° | 284 | 312 | 284 |
| 45° | 210 | 224 | 210 |
| 50° | 167 | 167 | 167 |
| 55° | 139 | 139 | 139 |
| 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: 224 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 225.5 | 64.9 |
| 10°-20° | 92.8 | 26.7 |
| 20°-30° | 18.4 | 5.3 |
| 30°-40° | 4.6 | 1.3 |
| 40°-50° | 2.4 | 0.7 |
| 50°-60° | 1.8 | 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 |
| 0°-30° | 336.7 | 96.8 |
| 0°-40° | 341.3 | 98.2 |
| 0°-60° | 345.5 | 99.4 |
| 0°-90° | 347.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 347.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 4738 | 4738 | 4738 | 4738 | 4738 | |
| 5° | 3083 | 3051 | 3043 | 3064 | 3067 | 225 |
| 15° | 268 | 273 | 273 | 268 | 265 | 92 |
| 25° | 32 | 36 | 40 | 36 | 32 | 17 |
| 35° | 6 | 7 | 7 | 7 | 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° | 4737.8 | 4737.8 | 4737.8 | 4737.8 | 4737.8 |
| 2.5° | 4273.7 | 4277.3 | 4278.7 | 4283.0 | 4298.6 |
| 5° | 3082.6 | 3050.9 | 3042.6 | 3063.7 | 3066.7 |
| 7.5° | 1826.0 | 1832.4 | 1855.9 | 1861.1 | 1842.2 |
| 10° | 1002.0 | 1010.3 | 1009.1 | 1016.3 | 1024.5 |
| 12.5° | 512.5 | 506.0 | 504.0 | 512.3 | 500.8 |
| 15° | 267.8 | 272.8 | 273.0 | 268.2 | 264.6 |
| 17.5° | 144.0 | 149.8 | 159.5 | 151.6 | 139.6 |
| 20° | 85.0 | 90.3 | 98.5 | 92.1 | 86.8 |
| 22.5° | 52.5 | 56.8 | 62.6 | 57.6 | 53.4 |
| 25° | 31.5 | 35.7 | 40.1 | 35.5 | 31.9 |
| 27.5° | 18.7 | 22.3 | 25.1 | 22.1 | 18.5 |
| 30° | 12.0 | 14.0 | 15.8 | 13.8 | 12.2 |
| 32.5° | 8.4 | 9.2 | 10.0 | 9.2 | 8.4 |
| 35° | 6.2 | 6.6 | 7.0 | 6.6 | 6.0 |
| 37.5° | 4.8 | 5.2 | 5.4 | 5.0 | 4.6 |
| 40° | 4.0 | 4.2 | 4.4 | 4.2 | 4.0 |
| 42.5° | 3.4 | 3.6 | 3.6 | 3.6 | 3.4 |
| 45° | 3.0 | 3.0 | 3.2 | 3.0 | 3.0 |
| 47.5° | 2.6 | 2.6 | 2.8 | 2.6 | 2.6 |
| 50° | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| 52.5° | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| 55° | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 57.5° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 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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