

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: P745987

Luminaire Tested: LD4D30D010-EU4DR3020359027-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P745987
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: LD4D30D010-EU4DR3020359027-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2799.5 lumens
Efficiency: N/A
Efficacy: 96.5 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): 29
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

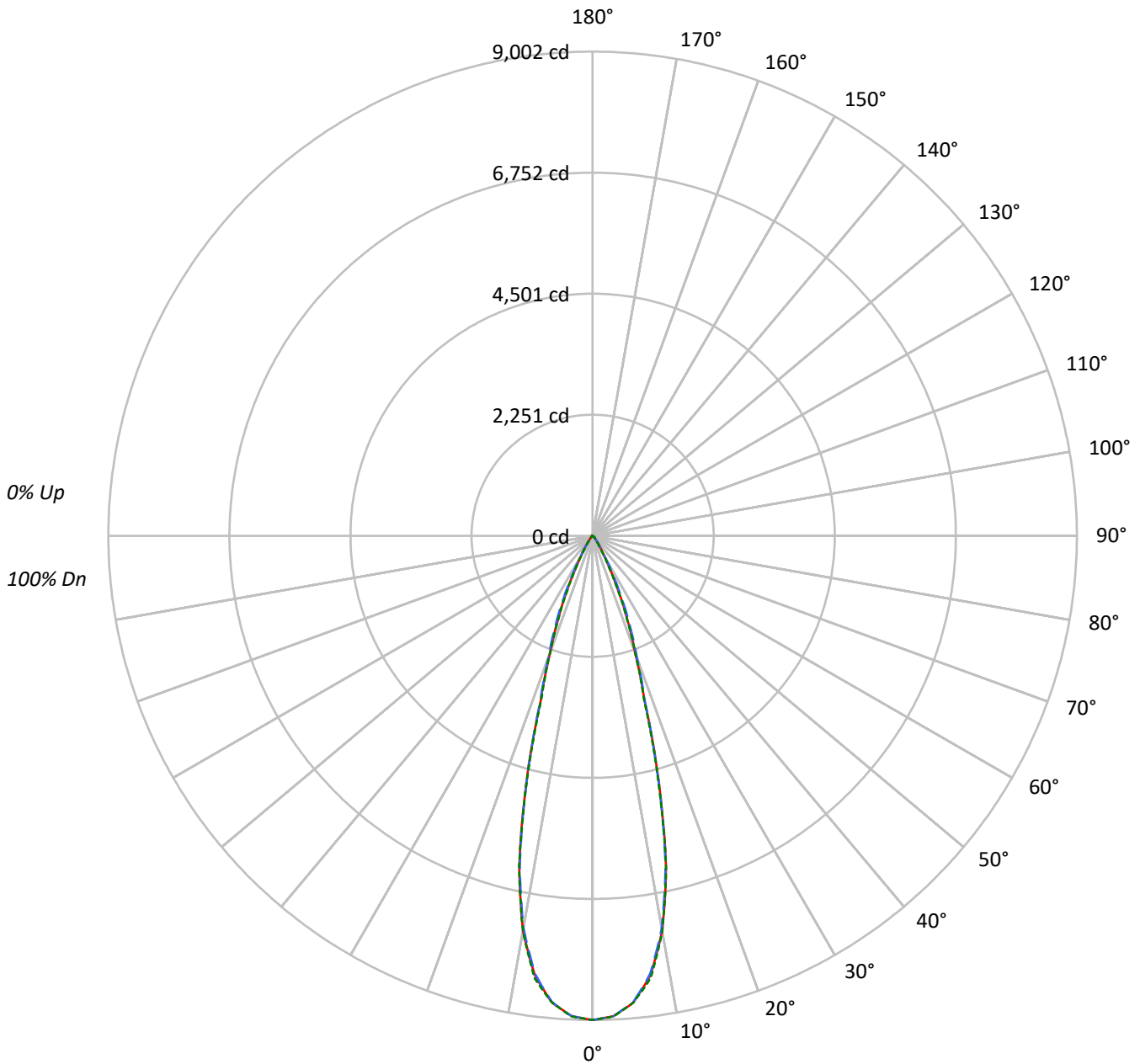


Downlight



TEST NUMBER: P745987
CATALOG NUMBER: LD4D30D010-EU4DR3020359027-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P745987

CATALOG NUMBER: LD4D30D010-EU4DR3020359027-4LBS1LI

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 | | | | | | | | | | | | | | | | | | | |
| 1 | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99 | 99 | 98 | 96 | | | | | | | | | | | | | | | | | | | |
| 2 | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98 | 99 | 97 | 96 | 97 | 95 | 94 | 92 | | | | | | | | | | | | | | | | | | | |
| 3 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 93 | 96 | 93 | 91 | 94 | 92 | 90 | 89 | | | | | | | | | | | | | | | | | | | |
| 4 | 103 | 98 | 93 | 90 | 102 | 96 | 93 | 90 | 94 | 91 | 89 | 93 | 90 | 88 | 91 | 89 | 87 | 85 | | | | | | | | | | | | | | | | | | | |
| 5 | 100 | 94 | 89 | 86 | 98 | 93 | 89 | 86 | 91 | 88 | 85 | 90 | 86 | 84 | 88 | 86 | 83 | 82 | | | | | | | | | | | | | | | | | | | |
| 6 | 97 | 90 | 85 | 82 | 95 | 89 | 85 | 82 | 88 | 84 | 81 | 87 | 83 | 81 | 85 | 83 | 80 | 79 | | | | | | | | | | | | | | | | | | | |
| 7 | 94 | 87 | 82 | 79 | 92 | 86 | 82 | 79 | 85 | 81 | 78 | 84 | 81 | 78 | 83 | 80 | 78 | 77 | | | | | | | | | | | | | | | | | | | |
| 8 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 75 | 80 | 77 | 75 | 74 | | | | | | | | | | | | | | | | | | | |
| 9 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 73 | 72 | | | | | | | | | | | | | | | | | | | |
| 10 | 85 | 78 | 74 | 71 | 85 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 71 | 76 | 73 | 70 | 69 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 689021 | 689021 | 689021 |
| 5° | 669240 | 668456 | 669270 |
| 10° | 579659 | 575571 | 579527 |
| 15° | 378198 | 376169 | 374275 |
| 20° | 188065 | 195119 | 187813 |
| 25° | 94735 | 106820 | 92792 |
| 30° | 37926 | 41329 | 33047 |
| 35° | 17595 | 16848 | 14119 |
| 40° | 7594 | 8433 | 7154 |
| 45° | 5358 | 6646 | 5412 |
| 50° | 1846 | 4847 | 1941 |
| 55° | 1068 | 2002 | 1121 |
| 60° | 750 | 873 | 750 |
| 65° | 471 | 471 | 471 |
| 70° | 291 | 201 | 291 |
| 75° | 0 | 148 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6646 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 791.6 | 28.3 |
| 10°-20° | 1274.8 | 45.5 |
| 20°-30° | 550.9 | 19.7 |
| 30°-40° | 125.6 | 4.5 |
| 40°-50° | 43.1 | 1.5 |
| 50°-60° | 10.5 | 0.4 |
| 60°-70° | 2.7 | 0.1 |
| 70°-80° | 0.3 | 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° | 2617.3 | 93.5 |
| 0°-40° | 2742.8 | 98.0 |
| 0°-60° | 2796.5 | 99.9 |
| 0°-90° | 2799.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2799.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 9002 | 9002 | 9002 | 9002 | 9002 | |
| 5° | 8710 | 8702 | 8700 | 8718 | 8710 | 792 |
| 15° | 4773 | 4715 | 4747 | 4732 | 4723 | 1278 |
| 25° | 1122 | 1164 | 1265 | 1134 | 1099 | 537 |
| 35° | 188 | 192 | 180 | 179 | 151 | 128 |
| 45° | 50 | 61 | 61 | 61 | 50 | 35 |
| 55° | 8 | 8 | 15 | 9 | 8 | 8 |
| 65° | 3 | 3 | 3 | 3 | 3 | 3 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 9001.7 | 9001.7 | 9001.7 | 9001.7 | 9001.7 |
| 2.5° | 8942.0 | 8935.8 | 8939.4 | 8943.8 | 8945.5 |
| 5° | 8710.0 | 8701.6 | 8699.8 | 8717.9 | 8710.4 |
| 7.5° | 8242.0 | 8230.0 | 8211.9 | 8253.0 | 8291.5 |
| 10° | 7457.9 | 7444.7 | 7405.3 | 7424.8 | 7456.2 |
| 12.5° | 6300.5 | 6257.6 | 6256.7 | 6318.6 | 6310.2 |
| 15° | 4772.6 | 4715.2 | 4747.0 | 4731.5 | 4723.1 |
| 17.5° | 3209.4 | 3187.3 | 3229.8 | 3216.9 | 3161.7 |
| 20° | 2308.8 | 2314.5 | 2395.4 | 2354.7 | 2305.7 |
| 22.5° | 1684.7 | 1705.5 | 1801.4 | 1696.7 | 1658.2 |
| 25° | 1121.7 | 1164.1 | 1264.8 | 1134.5 | 1098.7 |
| 27.5° | 689.9 | 709.3 | 811.4 | 681.1 | 661.6 |
| 30° | 429.1 | 419.4 | 467.6 | 401.3 | 373.9 |
| 32.5° | 281.5 | 269.2 | 284.6 | 255.4 | 233.4 |
| 35° | 188.3 | 192.2 | 180.3 | 179.0 | 151.1 |
| 37.5° | 117.6 | 135.2 | 119.3 | 127.3 | 97.2 |
| 40° | 76.0 | 98.1 | 84.4 | 93.3 | 71.6 |
| 42.5° | 62.3 | 75.6 | 69.4 | 73.8 | 63.7 |
| 45° | 49.5 | 61.4 | 61.4 | 61.4 | 50.0 |
| 47.5° | 27.4 | 41.1 | 52.6 | 42.0 | 29.2 |
| 50° | 15.5 | 20.8 | 40.7 | 21.7 | 16.3 |
| 52.5° | 10.6 | 11.9 | 27.8 | 12.4 | 11.1 |
| 55° | 8.0 | 8.4 | 15.0 | 8.8 | 8.4 |
| 57.5° | 6.2 | 6.6 | 8.0 | 6.6 | 6.2 |
| 60° | 4.9 | 4.9 | 5.7 | 5.3 | 4.9 |
| 62.5° | 3.6 | 3.6 | 4.0 | 3.6 | 3.6 |
| 65° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 67.5° | 1.3 | 1.8 | 1.8 | 1.8 | 1.8 |
| 70° | 1.3 | 0.9 | 0.9 | 0.9 | 1.3 |
| 72.5° | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 |
| 75° | 0.0 | 0.0 | 0.5 | 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

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Scaled Data Report





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

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