

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: P740103

Luminaire Tested: LD4D05D010-EU4DR300210IC9030-4LBS1H

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P740103
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: LD4D05D010-EU4DR300210IC9030-4LBS1H
Description: 4 INCH ROUND SHALLOW SEMI-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: 653.1 lumens
Efficiency: N/A
Efficacy: 87.1 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): 7.5
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

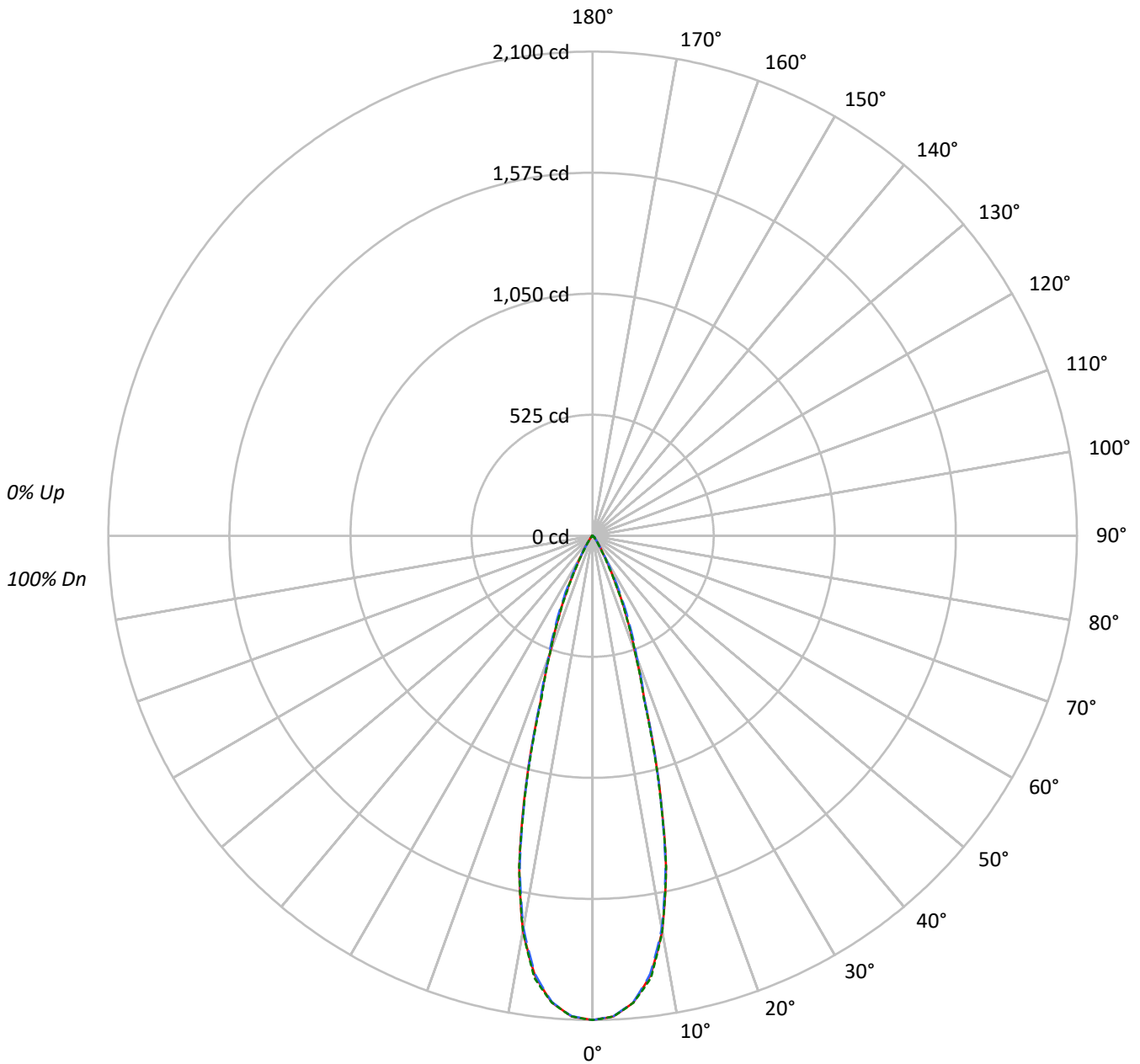


Downlight



TEST NUMBER: P740103
CATALOG NUMBER: LD4D05D010-EU4DR300210IC9030-4LBS1H

Luminous Intensity Polar Plot





TEST NUMBER: P740103

CATALOG NUMBER: LD4D05D010-EU4DR300210IC9030-4LBS1H

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 | 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 | 87 | 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° | 160756 | 160756 | 160756 |
| 5° | 156138 | 155954 | 156153 |
| 10° | 135240 | 134284 | 135209 |
| 15° | 88238 | 87762 | 87326 |
| 20° | 43872 | 45526 | 43815 |
| 25° | 22102 | 24923 | 21646 |
| 30° | 8847 | 9643 | 7716 |
| 35° | 4102 | 3934 | 3289 |
| 40° | 1779 | 1968 | 1669 |
| 45° | 1256 | 1548 | 1256 |
| 50° | 429 | 1131 | 453 |
| 55° | 240 | 467 | 254 |
| 60° | 168 | 199 | 168 |
| 65° | 109 | 109 | 109 |
| 70° | 67 | 45 | 67 |
| 75° | 0 | 30 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 1548 cd/sqm



TEST NUMBER: P740103

CATALOG NUMBER: LD4D05D010-EU4DR300210IC9030-4LBS1H

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 184.7 | 28.3 |
| 10°-20° | 297.4 | 45.5 |
| 20°-30° | 128.5 | 19.7 |
| 30°-40° | 29.3 | 4.5 |
| 40°-50° | 10.1 | 1.5 |
| 50°-60° | 2.4 | 0.4 |
| 60°-70° | 0.6 | 0.1 |
| 70°-80° | 0.1 | 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° | 610.6 | 93.5 |
| 0°-40° | 639.9 | 98.0 |
| 0°-60° | 652.4 | 99.9 |
| 0°-90° | 653.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 653.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2100 | 2100 | 2100 | 2100 | 2100 | |
| 5° | 2032 | 2030 | 2030 | 2034 | 2032 | 185 |
| 15° | 1114 | 1100 | 1108 | 1104 | 1102 | 298 |
| 25° | 262 | 272 | 295 | 265 | 256 | 125 |
| 35° | 44 | 45 | 42 | 42 | 35 | 30 |
| 45° | 12 | 14 | 14 | 14 | 12 | 8 |
| 55° | 2 | 2 | 4 | 2 | 2 | 2 |
| 65° | 1 | 1 | 1 | 1 | 1 | 1 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P740103

CATALOG NUMBER: LD4D05D010-EU4DR300210IC9030-4LBS1H

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2100.2 | 2100.2 | 2100.2 | 2100.2 | 2100.2 |
| 2.5° | 2086.3 | 2084.8 | 2085.7 | 2086.7 | 2087.1 |
| 5° | 2032.1 | 2030.2 | 2029.7 | 2034.0 | 2032.3 |
| 7.5° | 1922.9 | 1920.1 | 1915.9 | 1925.5 | 1934.5 |
| 10° | 1740.0 | 1736.9 | 1727.7 | 1732.3 | 1739.6 |
| 12.5° | 1470.0 | 1460.0 | 1459.8 | 1474.2 | 1472.3 |
| 15° | 1113.5 | 1100.1 | 1107.5 | 1103.9 | 1102.0 |
| 17.5° | 748.8 | 743.6 | 753.5 | 750.6 | 737.7 |
| 20° | 538.6 | 540.0 | 558.9 | 549.4 | 537.9 |
| 22.5° | 393.0 | 397.9 | 420.3 | 395.9 | 386.9 |
| 25° | 261.7 | 271.6 | 295.1 | 264.7 | 256.3 |
| 27.5° | 160.9 | 165.5 | 189.3 | 158.9 | 154.4 |
| 30° | 100.1 | 97.9 | 109.1 | 93.6 | 87.3 |
| 32.5° | 65.7 | 62.8 | 66.4 | 59.6 | 54.4 |
| 35° | 43.9 | 44.9 | 42.1 | 41.8 | 35.2 |
| 37.5° | 27.4 | 31.6 | 27.8 | 29.7 | 22.7 |
| 40° | 17.8 | 22.9 | 19.7 | 21.8 | 16.7 |
| 42.5° | 14.6 | 17.6 | 16.2 | 17.2 | 14.8 |
| 45° | 11.6 | 14.3 | 14.3 | 14.3 | 11.6 |
| 47.5° | 6.4 | 9.6 | 12.3 | 9.8 | 6.8 |
| 50° | 3.6 | 4.9 | 9.5 | 5.0 | 3.8 |
| 52.5° | 2.5 | 2.8 | 6.5 | 2.9 | 2.6 |
| 55° | 1.8 | 1.9 | 3.5 | 2.1 | 1.9 |
| 57.5° | 1.4 | 1.5 | 1.8 | 1.5 | 1.4 |
| 60° | 1.1 | 1.1 | 1.3 | 1.3 | 1.1 |
| 62.5° | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 |
| 65° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 67.5° | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 |
| 70° | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| 72.5° | 0.2 | 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)