

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: P753800

Luminaire Tested: LD4D80BD010-EU4DR3070959030-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P753800
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: LD4D80BD010-EU4DR3070959030-4LBS1LI
Description: 4 INCH ROUND SHALLOW 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: 8214.2 lumens
Efficiency: N/A
Efficacy: 104.1 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

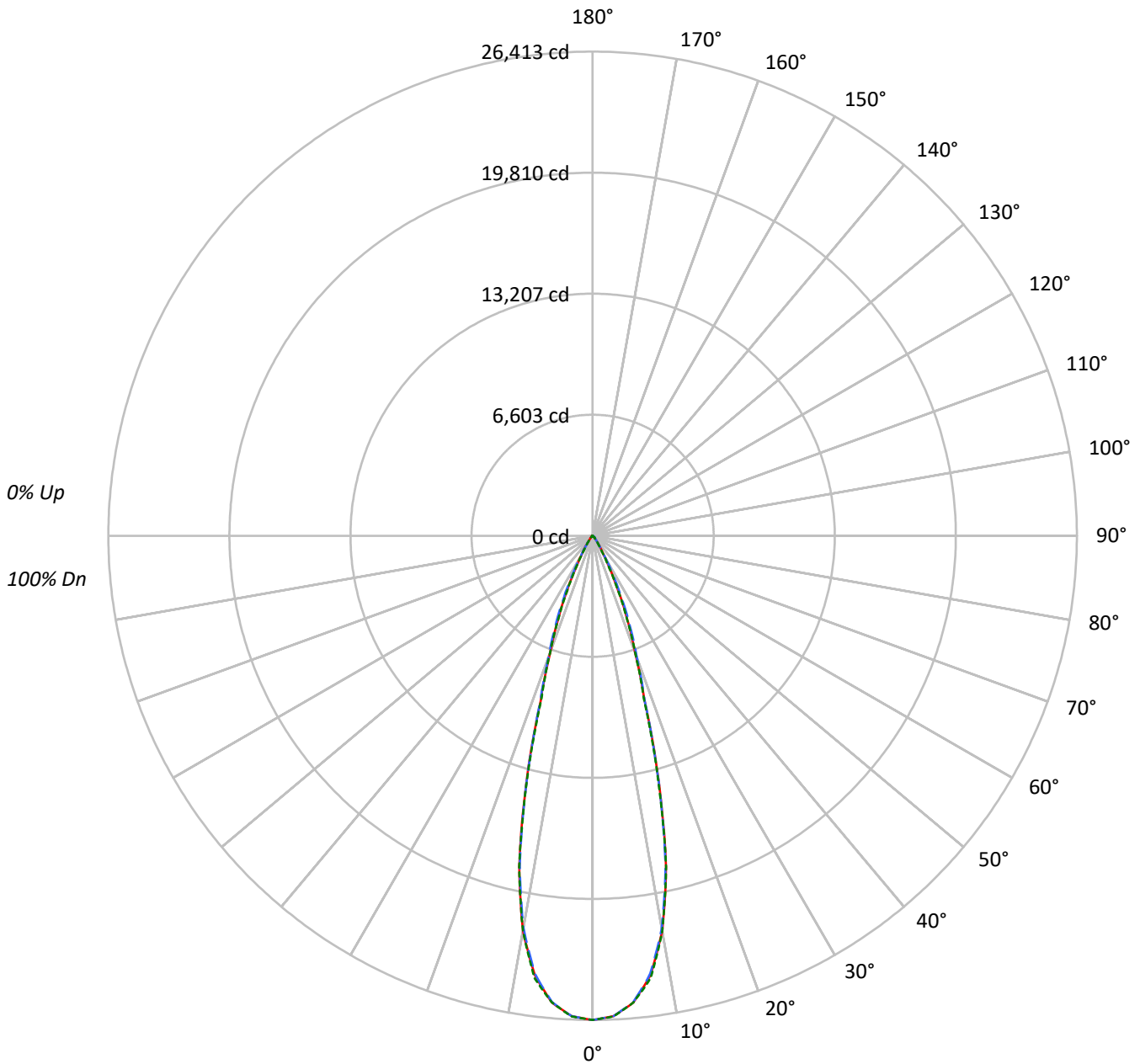
Input Watts (W): 78.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

TEST NUMBER: P753800
CATALOG NUMBER: LD4D80BD010-EU4DR3070959030-4LBS1LI

Luminous Intensity Polar Plot





TEST NUMBER: P753800

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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 | 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° | 2021710 | 2021710 | 2021710 |
| 5° | 1963669 | 1961379 | 1963769 |
| 10° | 1700839 | 1688846 | 1700435 |
| 15° | 1109711 | 1103752 | 1098205 |
| 20° | 551806 | 572512 | 551065 |
| 25° | 277963 | 313451 | 272270 |
| 30° | 111294 | 121264 | 96967 |
| 35° | 51617 | 49440 | 41442 |
| 40° | 22282 | 24750 | 20993 |
| 45° | 15718 | 19517 | 15858 |
| 50° | 5406 | 14206 | 5716 |
| 55° | 3109 | 5885 | 3283 |
| 60° | 2189 | 2587 | 2189 |
| 65° | 1413 | 1413 | 1413 |
| 70° | 873 | 582 | 873 |
| 75° | 0 | 384 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 19517 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 2322.6 | 28.3 |
| 10°-20° | 3740.6 | 45.5 |
| 20°-30° | 1616.4 | 19.7 |
| 30°-40° | 368.4 | 4.5 |
| 40°-50° | 126.5 | 1.5 |
| 50°-60° | 30.9 | 0.4 |
| 60°-70° | 8.0 | 0.1 |
| 70°-80° | 0.8 | 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° | 7679.5 | 93.5 |
| 0°-40° | 8047.9 | 98.0 |
| 0°-60° | 8205.3 | 99.9 |
| 0°-90° | 8214.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8214.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 26413 | 26413 | 26413 | 26413 | 26413 | |
| 5° | 25557 | 25532 | 25527 | 25580 | 25558 | 2325 |
| 15° | 14004 | 13835 | 13929 | 13883 | 13859 | 3750 |
| 25° | 3291 | 3416 | 3711 | 3329 | 3224 | 1575 |
| 35° | 552 | 564 | 529 | 525 | 444 | 375 |
| 45° | 145 | 180 | 180 | 180 | 146 | 103 |
| 55° | 23 | 25 | 44 | 26 | 25 | 23 |
| 65° | 8 | 8 | 8 | 8 | 8 | 8 |
| 75° | 0 | 0 | 1 | 0 | 0 | 1 |
| 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° | 26412.6 | 26412.6 | 26412.6 | 26412.6 | 26412.6 |
| 2.5° | 26237.5 | 26219.4 | 26229.8 | 26242.7 | 26247.9 |
| 5° | 25556.7 | 25532.1 | 25526.9 | 25580.1 | 25558.0 |
| 7.5° | 24183.5 | 24148.5 | 24095.3 | 24215.9 | 24328.7 |
| 10° | 21883.0 | 21844.1 | 21728.7 | 21785.7 | 21877.8 |
| 12.5° | 18486.8 | 18361.0 | 18358.4 | 18539.9 | 18515.3 |
| 15° | 14003.8 | 13835.2 | 13928.6 | 13883.2 | 13858.6 |
| 17.5° | 9417.1 | 9352.3 | 9476.8 | 9439.2 | 9277.1 |
| 20° | 6774.3 | 6791.2 | 7028.5 | 6909.2 | 6765.2 |
| 22.5° | 4943.3 | 5004.2 | 5285.6 | 4978.3 | 4865.5 |
| 25° | 3291.2 | 3415.7 | 3711.4 | 3328.8 | 3223.8 |
| 27.5° | 2024.3 | 2081.3 | 2380.9 | 1998.3 | 1941.3 |
| 30° | 1259.2 | 1230.6 | 1372.0 | 1177.5 | 1097.1 |
| 32.5° | 826.0 | 789.7 | 835.1 | 749.5 | 684.7 |
| 35° | 552.4 | 564.1 | 529.1 | 525.2 | 443.5 |
| 37.5° | 344.9 | 396.8 | 350.1 | 373.5 | 285.3 |
| 40° | 223.0 | 287.9 | 247.7 | 273.6 | 210.1 |
| 42.5° | 182.8 | 221.7 | 203.6 | 216.6 | 186.7 |
| 45° | 145.2 | 180.3 | 180.3 | 180.3 | 146.5 |
| 47.5° | 80.4 | 120.6 | 154.3 | 123.2 | 85.6 |
| 50° | 45.4 | 60.9 | 119.3 | 63.5 | 48.0 |
| 52.5° | 31.1 | 35.0 | 81.7 | 36.3 | 32.4 |
| 55° | 23.3 | 24.6 | 44.1 | 25.9 | 24.6 |
| 57.5° | 18.2 | 19.5 | 23.3 | 19.5 | 18.2 |
| 60° | 14.3 | 14.3 | 16.9 | 15.6 | 14.3 |
| 62.5° | 10.4 | 10.4 | 11.7 | 10.4 | 10.4 |
| 65° | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 |
| 67.5° | 3.9 | 5.2 | 5.2 | 5.2 | 5.2 |
| 70° | 3.9 | 2.6 | 2.6 | 2.6 | 3.9 |
| 72.5° | 2.6 | 1.3 | 1.3 | 1.3 | 1.3 |
| 75° | 0.0 | 0.0 | 1.3 | 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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