

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P859214

Luminaire Tested: **LD4C60D010 EU4609035 4LBMDSWWMH**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P859214
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2309-186-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C60D010 EU4609035 4LBMDSWWMH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBMDSW TRIM WITH WMH FINISH
Light Source: -
Ballast/Driver: -

Summary

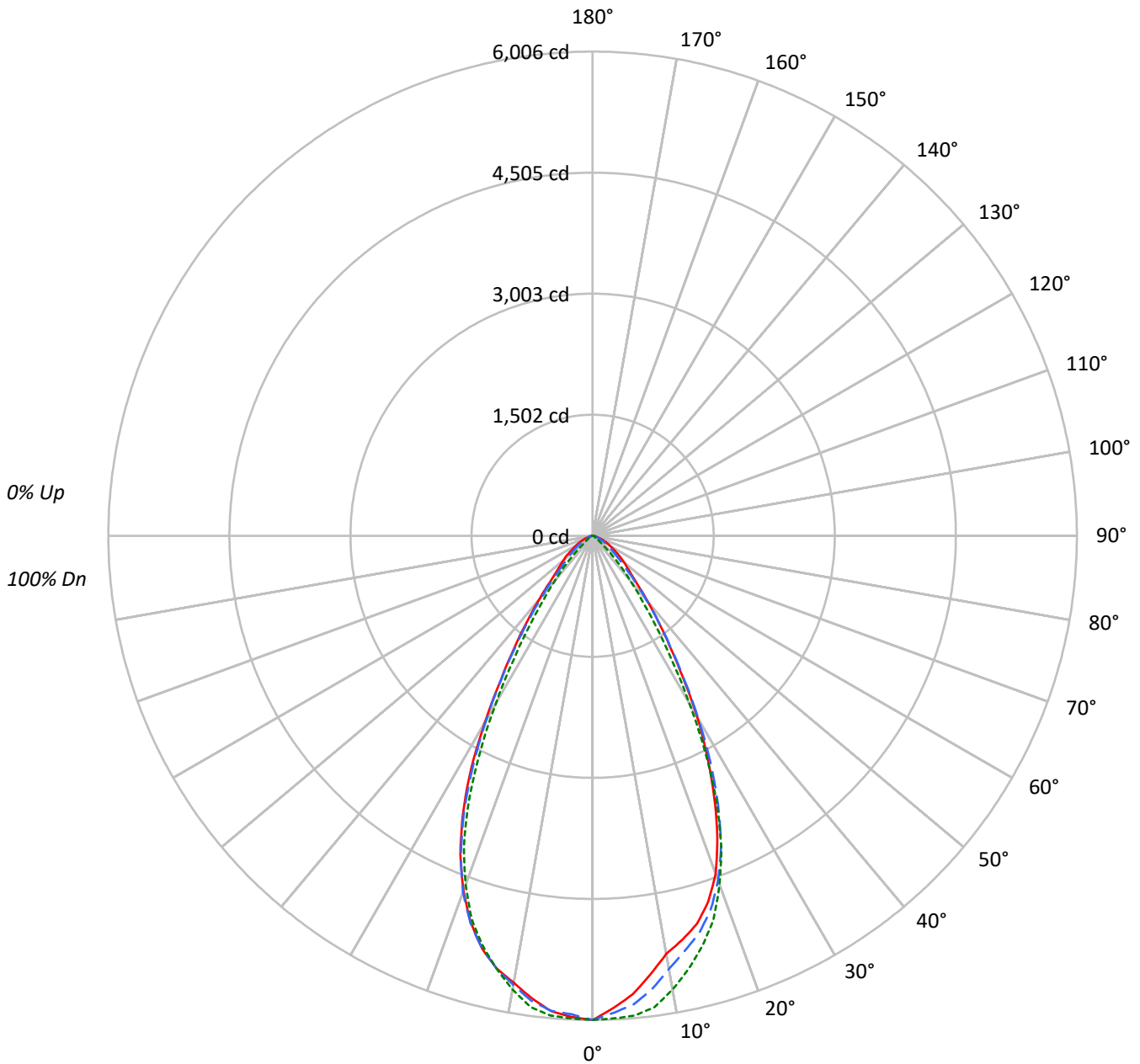
Lumens per Lamp: N/A
Luminaire Lumens: 5468.0 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
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: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF | 20 | | | | | 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 | 113 | 110 | 107 | 105 | 111 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 95 | 94 | 92 | | | | | 92 | | | |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 81 | 85 | 83 | 80 | 78 | | | | | 78 | | | |
| 4 | 96 | 88 | 82 | 77 | 94 | 86 | 81 | 77 | 84 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 | | | | | 72 | | | |
| 5 | 91 | 82 | 75 | 71 | 89 | 81 | 75 | 71 | 79 | 74 | 70 | 77 | 73 | 69 | 76 | 72 | 69 | 67 | | | | | 67 | | | |
| 6 | 86 | 76 | 70 | 66 | 84 | 76 | 70 | 65 | 74 | 69 | 65 | 73 | 68 | 64 | 71 | 67 | 64 | 62 | | | | | 62 | | | |
| 7 | 81 | 72 | 65 | 61 | 80 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 64 | 60 | 67 | 63 | 60 | 58 | | | | | 58 | | | |
| 8 | 77 | 67 | 61 | 57 | 76 | 67 | 61 | 57 | 66 | 60 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 55 | | | | | 55 | | | |
| 9 | 74 | 63 | 57 | 53 | 72 | 63 | 57 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 51 | | | | | 51 | | | |
| 10 | 70 | 60 | 54 | 50 | 69 | 60 | 54 | 50 | 59 | 53 | 50 | 58 | 53 | 50 | 57 | 53 | 49 | 48 | | | | | 48 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 737919 | 737919 | 737919 |
| 5° | 704136 | 736742 | 729873 |
| 10° | 656727 | 712851 | 702435 |
| 15° | 634168 | 669565 | 674283 |
| 20° | 583353 | 601538 | 612455 |
| 25° | 483493 | 492291 | 516189 |
| 30° | 367812 | 340178 | 378338 |
| 35° | 249036 | 203818 | 251810 |
| 40° | 169595 | 116784 | 164399 |
| 45° | 117657 | 58829 | 111212 |
| 50° | 95735 | 23929 | 89543 |
| 55° | 77493 | 14908 | 70532 |
| 60° | 61550 | 11401 | 55849 |
| 65° | 48546 | 9448 | 43139 |
| 70° | 36638 | 8333 | 33334 |
| 75° | 26439 | 6598 | 24208 |
| 80° | 19668 | 6580 | 16414 |
| 85° | 13109 | 6484 | 13109 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 552.3 | 10.1 |
| 10°-20° | 1451.0 | 26.5 |
| 20°-30° | 1664.8 | 30.4 |
| 30°-40° | 1011.3 | 18.5 |
| 40°-50° | 433.4 | 7.9 |
| 50°-60° | 207.9 | 3.8 |
| 60°-70° | 101.1 | 1.8 |
| 70°-80° | 37.5 | 0.7 |
| 80°-90° | 8.6 | 0.2 |
| 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° | 3668.1 | 67.1 |
| 0°-40° | 4679.4 | 85.6 |
| 0°-60° | 5320.7 | 97.3 |
| 0°-90° | 5468.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5468.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 6006 | 6006 | 6006 | 6006 | 6006 | |
| 5° | 5710 | 5835 | 5974 | 5914 | 5918 | 530 |
| 15° | 4986 | 5102 | 5264 | 5297 | 5302 | 1388 |
| 25° | 3567 | 3683 | 3632 | 3771 | 3808 | 1618 |
| 35° | 1660 | 1684 | 1359 | 1642 | 1679 | 1064 |
| 45° | 677 | 603 | 339 | 543 | 640 | 550 |
| 55° | 362 | 269 | 70 | 241 | 329 | 327 |
| 65° | 167 | 111 | 32 | 102 | 148 | 169 |
| 75° | 56 | 37 | 14 | 32 | 51 | 61 |
| 85° | 9 | 9 | 5 | 5 | 9 | 13 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P859214

CATALOG NUMBER: LD4C60D010 EU4609035 4LBMSWWMH

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 6006.5 | 6006.5 | 6006.5 | 6006.5 | 6006.5 | 6006.5 | 6006.5 | 6006.5 | 6006.5 |
| 2.5° | 5862.7 | 5927.7 | 5923.0 | 5978.7 | 5992.6 | 5978.7 | 5941.6 | 5978.7 | 5974.1 |
| 5° | 5709.7 | 5783.9 | 5834.9 | 5927.7 | 5974.1 | 5964.8 | 5913.8 | 5923.0 | 5918.4 |
| 7.5° | 5487.0 | 5579.8 | 5667.9 | 5807.1 | 5895.2 | 5890.6 | 5816.4 | 5802.4 | 5783.9 |
| 10° | 5264.4 | 5352.5 | 5454.6 | 5598.4 | 5714.3 | 5732.9 | 5658.7 | 5640.1 | 5630.8 |
| 12.5° | 5134.5 | 5204.1 | 5273.7 | 5398.9 | 5501.0 | 5538.1 | 5496.3 | 5501.0 | 5496.3 |
| 15° | 4986.1 | 5055.7 | 5102.1 | 5194.8 | 5264.4 | 5315.4 | 5296.9 | 5324.7 | 5301.5 |
| 17.5° | 4763.5 | 4847.0 | 4865.5 | 4935.1 | 4986.1 | 5018.6 | 5037.1 | 5065.0 | 5027.9 |
| 20° | 4462.0 | 4526.9 | 4550.1 | 4577.9 | 4601.1 | 4642.9 | 4698.5 | 4726.4 | 4684.6 |
| 22.5° | 4039.9 | 4165.1 | 4160.5 | 4146.6 | 4169.8 | 4183.7 | 4271.8 | 4318.2 | 4285.7 |
| 25° | 3566.8 | 3696.7 | 3682.8 | 3627.1 | 3631.7 | 3659.6 | 3770.9 | 3831.2 | 3808.0 |
| 27.5° | 3070.5 | 3191.1 | 3158.6 | 3052.0 | 3024.1 | 3065.9 | 3209.7 | 3279.2 | 3265.3 |
| 30° | 2592.8 | 2671.6 | 2620.6 | 2430.4 | 2398.0 | 2449.0 | 2634.5 | 2704.1 | 2667.0 |
| 32.5° | 2077.9 | 2138.2 | 2115.0 | 1883.1 | 1827.5 | 1878.5 | 2096.5 | 2161.4 | 2119.7 |
| 35° | 1660.5 | 1716.1 | 1683.7 | 1410.0 | 1359.0 | 1414.7 | 1641.9 | 1716.1 | 1679.0 |
| 37.5° | 1331.2 | 1372.9 | 1331.2 | 1039.0 | 992.6 | 1048.2 | 1266.2 | 1363.6 | 1317.3 |
| 40° | 1057.5 | 1090.0 | 1034.3 | 765.3 | 728.2 | 756.0 | 960.1 | 1057.5 | 1025.1 |
| 42.5° | 834.9 | 858.1 | 797.8 | 561.2 | 519.5 | 556.6 | 723.6 | 811.7 | 793.1 |
| 45° | 677.2 | 677.2 | 603.0 | 389.6 | 338.6 | 375.7 | 542.7 | 635.4 | 640.1 |
| 47.5° | 579.8 | 565.9 | 473.1 | 259.7 | 194.8 | 245.8 | 431.4 | 528.8 | 542.7 |
| 50° | 500.9 | 482.4 | 389.6 | 190.2 | 125.2 | 176.3 | 357.1 | 454.5 | 468.5 |
| 52.5° | 431.4 | 417.4 | 324.7 | 148.4 | 88.1 | 134.5 | 301.5 | 394.3 | 408.2 |
| 55° | 361.8 | 352.5 | 269.0 | 116.0 | 69.6 | 102.0 | 241.2 | 320.0 | 329.3 |
| 57.5° | 296.8 | 282.9 | 218.0 | 97.4 | 55.7 | 83.5 | 199.4 | 264.4 | 273.7 |
| 60° | 250.5 | 236.6 | 176.3 | 78.9 | 46.4 | 64.9 | 162.3 | 218.0 | 227.3 |
| 62.5° | 208.7 | 194.8 | 143.8 | 64.9 | 37.1 | 55.7 | 129.9 | 176.3 | 185.5 |
| 65° | 167.0 | 157.7 | 111.3 | 51.0 | 32.5 | 41.7 | 102.0 | 139.1 | 148.4 |
| 67.5° | 134.5 | 125.2 | 88.1 | 41.7 | 27.8 | 32.5 | 78.9 | 111.3 | 120.6 |
| 70° | 102.0 | 92.8 | 64.9 | 32.5 | 23.2 | 27.8 | 60.3 | 83.5 | 92.8 |
| 72.5° | 74.2 | 69.6 | 51.0 | 27.8 | 18.6 | 23.2 | 41.7 | 60.3 | 69.6 |
| 75° | 55.7 | 51.0 | 37.1 | 18.6 | 13.9 | 18.6 | 32.5 | 46.4 | 51.0 |
| 77.5° | 37.1 | 37.1 | 27.8 | 13.9 | 13.9 | 13.9 | 23.2 | 32.5 | 32.5 |
| 80° | 27.8 | 23.2 | 18.6 | 9.3 | 9.3 | 9.3 | 13.9 | 23.2 | 23.2 |
| 82.5° | 18.6 | 13.9 | 13.9 | 9.3 | 9.3 | 9.3 | 9.3 | 13.9 | 13.9 |
| 85° | 9.3 | 9.3 | 9.3 | 4.6 | 4.6 | 4.6 | 4.6 | 9.3 | 9.3 |
| 87.5° | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







(END OF REPORT)