

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: P858988

Luminaire Tested: **LD4C50D010 EU4509035 4LBMDDWLI**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P858988
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: LD4C50D010 EU4509035 4LBMDDWLI
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBMDDW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Summary

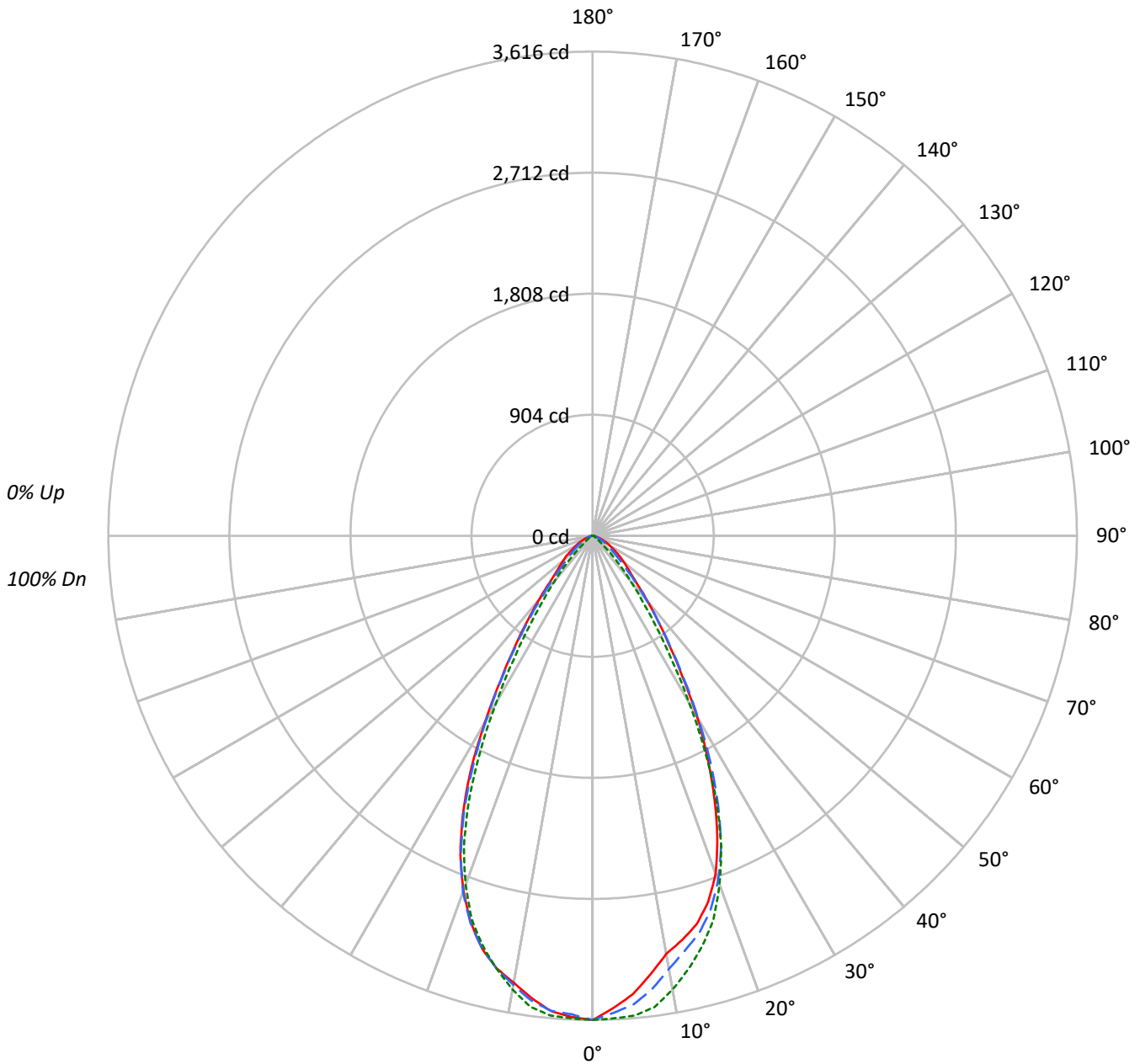
Lumens per Lamp: N/A
Luminaire Lumens: 3292.0 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
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 | | | | 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 | | | | 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° | 444263 | 444263 | 444263 |
| 5° | 423922 | 443555 | 439424 |
| 10° | 395378 | 429173 | 422898 |
| 15° | 381803 | 403107 | 405956 |
| 20° | 351201 | 362157 | 368733 |
| 25° | 291088 | 296388 | 310771 |
| 30° | 221442 | 204802 | 227783 |
| 35° | 149931 | 122711 | 151611 |
| 40° | 102110 | 70308 | 98967 |
| 45° | 70834 | 35408 | 66960 |
| 50° | 57644 | 14411 | 53898 |
| 55° | 46650 | 8974 | 42474 |
| 60° | 37053 | 6855 | 33613 |
| 65° | 29215 | 5669 | 25988 |
| 70° | 22055 | 5029 | 20043 |
| 75° | 15901 | 3987 | 14572 |
| 80° | 11886 | 3962 | 9905 |
| 85° | 7894 | 3947 | 7894 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 332.5 | 10.1 |
| 10°-20° | 873.6 | 26.5 |
| 20°-30° | 1002.3 | 30.4 |
| 30°-40° | 608.9 | 18.5 |
| 40°-50° | 260.9 | 7.9 |
| 50°-60° | 125.2 | 3.8 |
| 60°-70° | 60.9 | 1.8 |
| 70°-80° | 22.6 | 0.7 |
| 80°-90° | 5.2 | 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° | 2208.3 | 67.1 |
| 0°-40° | 2817.2 | 85.6 |
| 0°-60° | 3203.3 | 97.3 |
| 0°-90° | 3292.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3292.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 3616 | 3616 | 3616 | 3616 | 3616 | |
| 5° | 3438 | 3513 | 3597 | 3560 | 3563 | 319 |
| 15° | 3002 | 3072 | 3169 | 3189 | 3192 | 836 |
| 25° | 2147 | 2217 | 2186 | 2270 | 2293 | 974 |
| 35° | 1000 | 1014 | 818 | 988 | 1011 | 641 |
| 45° | 408 | 363 | 204 | 327 | 385 | 331 |
| 55° | 218 | 162 | 42 | 145 | 198 | 197 |
| 65° | 100 | 67 | 20 | 61 | 89 | 102 |
| 75° | 34 | 22 | 8 | 20 | 31 | 37 |
| 85° | 6 | 6 | 3 | 3 | 6 | 8 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P858988

CATALOG NUMBER: LD4C50D010 EU4509035 4LBMDDWLI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3616.2 | 3616.2 | 3616.2 | 3616.2 | 3616.2 | 3616.2 | 3616.2 | 3616.2 | 3616.2 |
| 2.5° | 3529.6 | 3568.7 | 3566.0 | 3599.5 | 3607.8 | 3599.5 | 3577.1 | 3599.5 | 3596.7 |
| 5° | 3437.5 | 3482.2 | 3512.9 | 3568.7 | 3596.7 | 3591.1 | 3560.4 | 3566.0 | 3563.2 |
| 7.5° | 3303.5 | 3359.3 | 3412.4 | 3496.1 | 3549.2 | 3546.4 | 3501.7 | 3493.3 | 3482.2 |
| 10° | 3169.4 | 3222.5 | 3283.9 | 3370.5 | 3440.3 | 3451.5 | 3406.8 | 3395.6 | 3390.0 |
| 12.5° | 3091.2 | 3133.1 | 3175.0 | 3250.4 | 3311.8 | 3334.2 | 3309.0 | 3311.8 | 3309.0 |
| 15° | 3001.9 | 3043.8 | 3071.7 | 3127.5 | 3169.4 | 3200.1 | 3189.0 | 3205.7 | 3191.8 |
| 17.5° | 2867.8 | 2918.1 | 2929.3 | 2971.2 | 3001.9 | 3021.4 | 3032.6 | 3049.3 | 3027.0 |
| 20° | 2686.3 | 2725.4 | 2739.4 | 2756.1 | 2770.1 | 2795.2 | 2828.7 | 2845.5 | 2820.4 |
| 22.5° | 2432.2 | 2507.6 | 2504.8 | 2496.4 | 2510.4 | 2518.8 | 2571.8 | 2599.8 | 2580.2 |
| 25° | 2147.4 | 2225.6 | 2217.2 | 2183.7 | 2186.5 | 2203.2 | 2270.3 | 2306.6 | 2292.6 |
| 27.5° | 1848.6 | 1921.2 | 1901.7 | 1837.4 | 1820.7 | 1845.8 | 1932.4 | 1974.3 | 1965.9 |
| 30° | 1561.0 | 1608.4 | 1577.7 | 1463.2 | 1443.7 | 1474.4 | 1586.1 | 1628.0 | 1605.7 |
| 32.5° | 1251.0 | 1287.3 | 1273.4 | 1133.7 | 1100.2 | 1130.9 | 1262.2 | 1301.3 | 1276.1 |
| 35° | 999.7 | 1033.2 | 1013.7 | 848.9 | 818.2 | 851.7 | 988.5 | 1033.2 | 1010.9 |
| 37.5° | 801.4 | 826.6 | 801.4 | 625.5 | 597.6 | 631.1 | 762.3 | 821.0 | 793.1 |
| 40° | 636.7 | 656.2 | 622.7 | 460.8 | 438.4 | 455.2 | 578.0 | 636.7 | 617.1 |
| 42.5° | 502.6 | 516.6 | 480.3 | 337.9 | 312.8 | 335.1 | 435.6 | 488.7 | 477.5 |
| 45° | 407.7 | 407.7 | 363.0 | 234.6 | 203.8 | 226.2 | 326.7 | 382.6 | 385.4 |
| 47.5° | 349.1 | 340.7 | 284.8 | 156.4 | 117.3 | 148.0 | 259.7 | 318.3 | 326.7 |
| 50° | 301.6 | 290.4 | 234.6 | 114.5 | 75.4 | 106.1 | 215.0 | 273.7 | 282.0 |
| 52.5° | 259.7 | 251.3 | 195.5 | 89.4 | 53.1 | 81.0 | 181.5 | 237.4 | 245.7 |
| 55° | 217.8 | 212.2 | 162.0 | 69.8 | 41.9 | 61.4 | 145.2 | 192.7 | 198.3 |
| 57.5° | 178.7 | 170.3 | 131.2 | 58.6 | 33.5 | 50.3 | 120.1 | 159.2 | 164.8 |
| 60° | 150.8 | 142.4 | 106.1 | 47.5 | 27.9 | 39.1 | 97.7 | 131.2 | 136.8 |
| 62.5° | 125.7 | 117.3 | 86.6 | 39.1 | 22.3 | 33.5 | 78.2 | 106.1 | 111.7 |
| 65° | 100.5 | 94.9 | 67.0 | 30.7 | 19.5 | 25.1 | 61.4 | 83.8 | 89.4 |
| 67.5° | 81.0 | 75.4 | 53.1 | 25.1 | 16.8 | 19.5 | 47.5 | 67.0 | 72.6 |
| 70° | 61.4 | 55.8 | 39.1 | 19.5 | 14.0 | 16.8 | 36.3 | 50.3 | 55.8 |
| 72.5° | 44.7 | 41.9 | 30.7 | 16.8 | 11.2 | 14.0 | 25.1 | 36.3 | 41.9 |
| 75° | 33.5 | 30.7 | 22.3 | 11.2 | 8.4 | 11.2 | 19.5 | 27.9 | 30.7 |
| 77.5° | 22.3 | 22.3 | 16.8 | 8.4 | 8.4 | 8.4 | 14.0 | 19.5 | 19.5 |
| 80° | 16.8 | 14.0 | 11.2 | 5.6 | 5.6 | 5.6 | 8.4 | 14.0 | 14.0 |
| 82.5° | 11.2 | 8.4 | 8.4 | 5.6 | 5.6 | 5.6 | 5.6 | 8.4 | 8.4 |
| 85° | 5.6 | 5.6 | 5.6 | 2.8 | 2.8 | 2.8 | 2.8 | 5.6 | 5.6 |
| 87.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 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)