

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: P859191

Luminaire Tested: **LD4C60D010 EU4609030 4LBMDSWMW**

Issue Date: 4/12/2024



Test Information

Test Method: LM-79-08
Report Number: P859191
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 EU4609030 4LBMDSWMW
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBMDSW TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

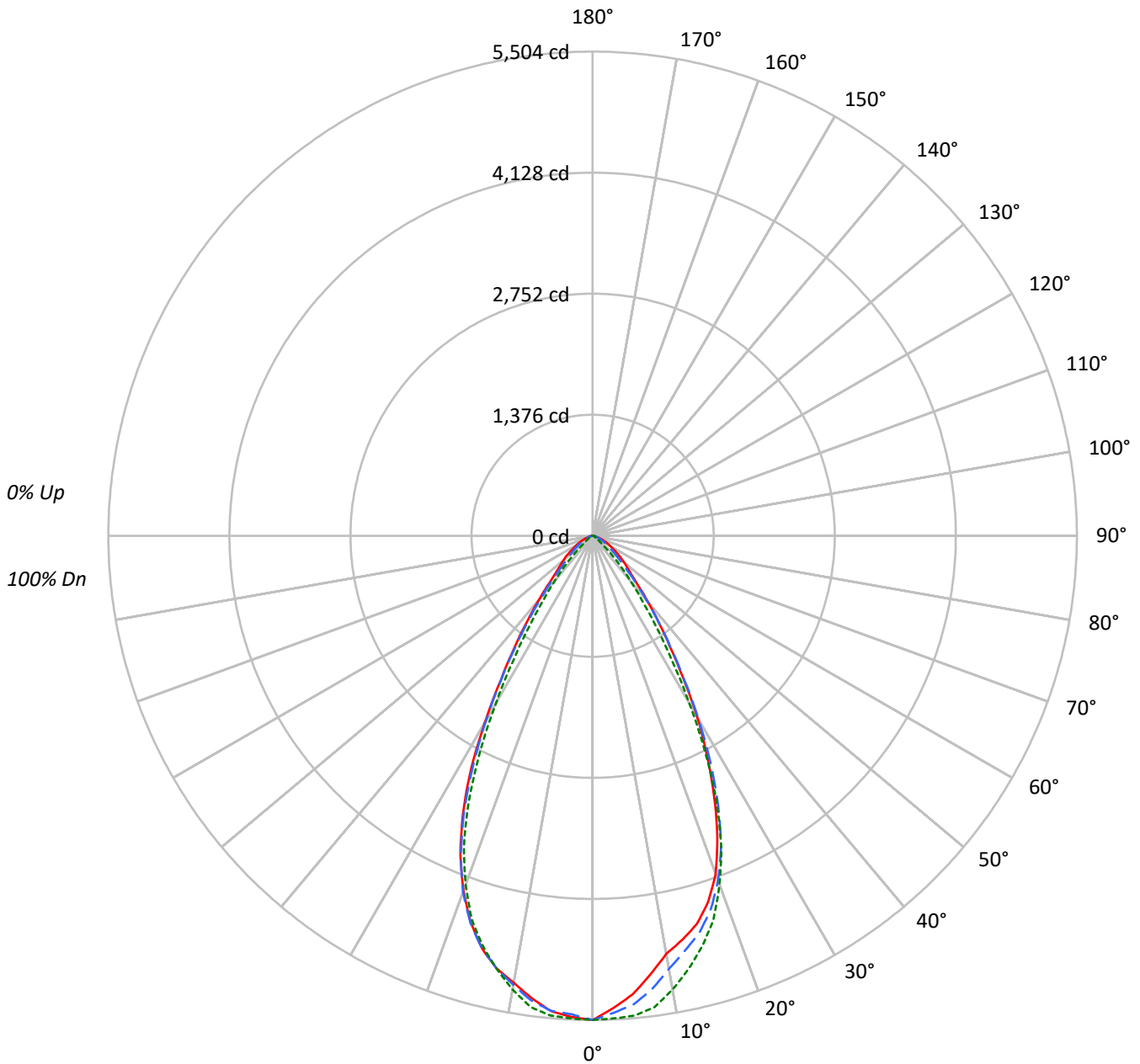
Lumens per Lamp: N/A
Luminaire Lumens: 5011.1 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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 | 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° | 676247 | 676247 | 676247 |
| 5° | 645286 | 675167 | 668866 |
| 10° | 601838 | 653271 | 643728 |
| 15° | 581170 | 613602 | 617927 |
| 20° | 534601 | 551270 | 561271 |
| 25° | 443085 | 451150 | 473042 |
| 30° | 337071 | 311749 | 346718 |
| 35° | 228219 | 186781 | 230769 |
| 40° | 155418 | 107017 | 150655 |
| 45° | 107824 | 53912 | 101917 |
| 50° | 87746 | 21941 | 82050 |
| 55° | 71003 | 13665 | 64642 |
| 60° | 56390 | 10443 | 51181 |
| 65° | 44477 | 8663 | 39535 |
| 70° | 33585 | 7651 | 30532 |
| 75° | 24208 | 6076 | 22215 |
| 80° | 18041 | 6014 | 15069 |
| 85° | 11981 | 6061 | 11981 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 506.1 | 10.1 |
| 10°-20° | 1329.7 | 26.5 |
| 20°-30° | 1525.7 | 30.4 |
| 30°-40° | 926.8 | 18.5 |
| 40°-50° | 397.2 | 7.9 |
| 50°-60° | 190.6 | 3.8 |
| 60°-70° | 92.7 | 1.8 |
| 70°-80° | 34.4 | 0.7 |
| 80°-90° | 7.9 | 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° | 3361.5 | 67.1 |
| 0°-40° | 4288.3 | 85.6 |
| 0°-60° | 4876.1 | 97.3 |
| 0°-90° | 5011.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5011.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 5504 | 5504 | 5504 | 5504 | 5504 | |
| 5° | 5232 | 5347 | 5475 | 5420 | 5424 | 486 |
| 15° | 4569 | 4676 | 4824 | 4854 | 4858 | 1272 |
| 25° | 3269 | 3375 | 3328 | 3456 | 3490 | 1483 |
| 35° | 1522 | 1543 | 1245 | 1505 | 1539 | 975 |
| 45° | 621 | 553 | 310 | 497 | 587 | 504 |
| 55° | 332 | 246 | 64 | 221 | 302 | 299 |
| 65° | 153 | 102 | 30 | 94 | 136 | 155 |
| 75° | 51 | 34 | 13 | 30 | 47 | 56 |
| 85° | 8 | 8 | 4 | 4 | 8 | 12 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P859191

CATALOG NUMBER: LD4C60D010 EU4609030 4LBMSWMMW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5504.5 | 5504.5 | 5504.5 | 5504.5 | 5504.5 | 5504.5 | 5504.5 | 5504.5 | 5504.5 |
| 2.5° | 5372.7 | 5432.3 | 5428.0 | 5479.0 | 5491.8 | 5479.0 | 5445.0 | 5479.0 | 5474.8 |
| 5° | 5232.5 | 5300.5 | 5347.2 | 5432.3 | 5474.8 | 5466.3 | 5419.5 | 5428.0 | 5423.7 |
| 7.5° | 5028.4 | 5113.5 | 5194.2 | 5321.7 | 5402.5 | 5398.2 | 5330.2 | 5317.5 | 5300.5 |
| 10° | 4824.4 | 4905.2 | 4998.7 | 5130.5 | 5236.7 | 5253.7 | 5185.7 | 5168.7 | 5160.2 |
| 12.5° | 4705.4 | 4769.2 | 4832.9 | 4947.7 | 5041.2 | 5075.2 | 5036.9 | 5041.2 | 5036.9 |
| 15° | 4569.4 | 4633.1 | 4675.6 | 4760.7 | 4824.4 | 4871.2 | 4854.2 | 4879.7 | 4858.4 |
| 17.5° | 4365.4 | 4441.9 | 4458.9 | 4522.6 | 4569.4 | 4599.1 | 4616.1 | 4641.6 | 4607.6 |
| 20° | 4089.1 | 4148.6 | 4169.8 | 4195.3 | 4216.6 | 4254.8 | 4305.8 | 4331.3 | 4293.1 |
| 22.5° | 3702.3 | 3817.0 | 3812.8 | 3800.0 | 3821.3 | 3834.0 | 3914.8 | 3957.3 | 3927.5 |
| 25° | 3268.7 | 3387.7 | 3375.0 | 3324.0 | 3328.2 | 3353.7 | 3455.7 | 3511.0 | 3489.7 |
| 27.5° | 2813.9 | 2924.4 | 2894.7 | 2796.9 | 2771.4 | 2809.6 | 2941.4 | 3005.2 | 2992.4 |
| 30° | 2376.1 | 2448.3 | 2401.6 | 2227.3 | 2197.6 | 2244.3 | 2414.3 | 2478.1 | 2444.1 |
| 32.5° | 1904.3 | 1959.5 | 1938.3 | 1725.7 | 1674.7 | 1721.5 | 1921.3 | 1980.8 | 1942.5 |
| 35° | 1521.7 | 1572.7 | 1543.0 | 1292.2 | 1245.4 | 1296.4 | 1504.7 | 1572.7 | 1538.7 |
| 37.5° | 1219.9 | 1258.2 | 1219.9 | 952.1 | 909.6 | 960.6 | 1160.4 | 1249.7 | 1207.2 |
| 40° | 969.1 | 998.9 | 947.9 | 701.3 | 667.3 | 692.8 | 879.9 | 969.1 | 939.4 |
| 42.5° | 765.1 | 786.4 | 731.1 | 514.3 | 476.1 | 510.1 | 663.1 | 743.9 | 726.9 |
| 45° | 620.6 | 620.6 | 552.6 | 357.0 | 310.3 | 344.3 | 497.3 | 582.3 | 586.6 |
| 47.5° | 531.3 | 518.6 | 433.6 | 238.0 | 178.5 | 225.3 | 395.3 | 484.6 | 497.3 |
| 50° | 459.1 | 442.1 | 357.0 | 174.3 | 114.8 | 161.5 | 327.3 | 416.6 | 429.3 |
| 52.5° | 395.3 | 382.6 | 297.5 | 136.0 | 80.8 | 123.3 | 276.3 | 361.3 | 374.1 |
| 55° | 331.5 | 323.0 | 246.5 | 106.3 | 63.8 | 93.5 | 221.0 | 293.3 | 301.8 |
| 57.5° | 272.0 | 259.3 | 199.8 | 89.3 | 51.0 | 76.5 | 182.8 | 242.3 | 250.8 |
| 60° | 229.5 | 216.8 | 161.5 | 72.3 | 42.5 | 59.5 | 148.8 | 199.8 | 208.3 |
| 62.5° | 191.3 | 178.5 | 131.8 | 59.5 | 34.0 | 51.0 | 119.0 | 161.5 | 170.0 |
| 65° | 153.0 | 144.5 | 102.0 | 46.8 | 29.8 | 38.3 | 93.5 | 127.5 | 136.0 |
| 67.5° | 123.3 | 114.8 | 80.8 | 38.3 | 25.5 | 29.8 | 72.3 | 102.0 | 110.5 |
| 70° | 93.5 | 85.0 | 59.5 | 29.8 | 21.3 | 25.5 | 55.3 | 76.5 | 85.0 |
| 72.5° | 68.0 | 63.8 | 46.8 | 25.5 | 17.0 | 21.3 | 38.3 | 55.3 | 63.8 |
| 75° | 51.0 | 46.8 | 34.0 | 17.0 | 12.8 | 17.0 | 29.8 | 42.5 | 46.8 |
| 77.5° | 34.0 | 34.0 | 25.5 | 12.8 | 12.8 | 12.8 | 21.3 | 29.8 | 29.8 |
| 80° | 25.5 | 21.3 | 17.0 | 8.5 | 8.5 | 8.5 | 12.8 | 21.3 | 21.3 |
| 82.5° | 17.0 | 12.8 | 12.8 | 8.5 | 8.5 | 8.5 | 8.5 | 12.8 | 12.8 |
| 85° | 8.5 | 8.5 | 8.5 | 4.3 | 4.3 | 4.3 | 4.3 | 8.5 | 8.5 |
| 87.5° | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| 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)