

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: P#

Luminaire Tested: **LD4C20D010 EX4C209035 4LCSQWLI**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2105-247-13)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C20D010 EX4C209035 4LCSQWLI
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LCSQW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

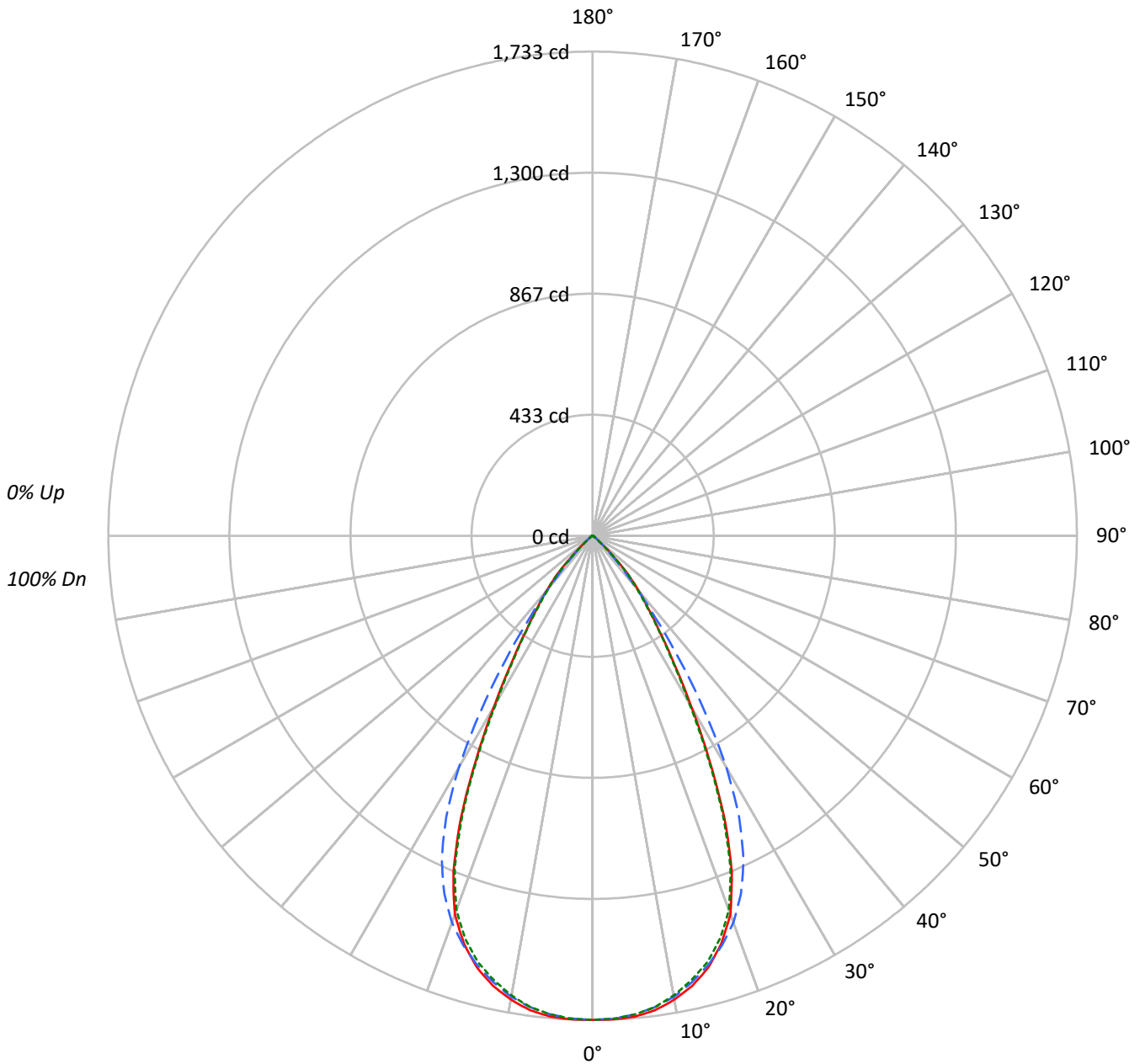
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1551.0 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.91 / 0.9
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V):
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





TEST NUMBER: P#

CATALOG NUMBER: LD4C20D010 EX4C209035 4LCSQWLI

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 | 114 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 100 | 98 | 97 | 96 | 95 | 94 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 93 | 95 | 93 | 91 | 93 | 91 | 89 | 87 | | | | | | | | | | | | | | | | | | | |
| 3 | 103 | 96 | 91 | 88 | 101 | 95 | 90 | 87 | 92 | 89 | 85 | 90 | 87 | 84 | 88 | 85 | 83 | 81 | | | | | | | | | | | | | | | | | | | |
| 4 | 98 | 90 | 85 | 80 | 96 | 89 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 | | | | | | | | | | | | | | | | | | | |
| 5 | 93 | 84 | 79 | 74 | 91 | 84 | 78 | 74 | 82 | 77 | 73 | 80 | 76 | 73 | 79 | 75 | 72 | 71 | | | | | | | | | | | | | | | | | | | |
| 6 | 88 | 79 | 73 | 69 | 87 | 79 | 73 | 69 | 77 | 72 | 68 | 76 | 71 | 68 | 74 | 71 | 68 | 66 | | | | | | | | | | | | | | | | | | | |
| 7 | 84 | 75 | 69 | 65 | 82 | 74 | 68 | 64 | 73 | 68 | 64 | 71 | 67 | 64 | 70 | 66 | 63 | 62 | | | | | | | | | | | | | | | | | | | |
| 8 | 80 | 70 | 64 | 60 | 79 | 70 | 64 | 60 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 59 | 58 | | | | | | | | | | | | | | | | | | | |
| 9 | 76 | 66 | 61 | 57 | 75 | 66 | 60 | 57 | 65 | 60 | 56 | 64 | 60 | 56 | 63 | 59 | 56 | 55 | | | | | | | | | | | | | | | | | | | |
| 10 | 72 | 63 | 57 | 53 | 71 | 62 | 57 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 52 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 167167 | 167167 | 167167 |
| 5° | 167341 | 166575 | 166575 |
| 10° | 165141 | 164171 | 163661 |
| 15° | 159788 | 159029 | 157960 |
| 20° | 147984 | 151209 | 146341 |
| 25° | 118984 | 136018 | 117419 |
| 30° | 78537 | 106647 | 76665 |
| 35° | 49084 | 64043 | 48188 |
| 40° | 32031 | 29676 | 30784 |
| 45° | 15420 | 11844 | 14560 |
| 50° | 3888 | 4713 | 3648 |
| 55° | 2136 | 1935 | 2069 |
| 60° | 1467 | 1235 | 1389 |
| 65° | 1005 | 913 | 1005 |
| 70° | 790 | 677 | 790 |
| 75° | 596 | 596 | 596 |
| 80° | 445 | 667 | 667 |
| 85° | 443 | 886 | 886 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 162.9 | 10.5 |
| 10°-20° | 444.9 | 28.7 |
| 20°-30° | 530.3 | 34.2 |
| 30°-40° | 300.3 | 19.4 |
| 40°-50° | 92.8 | 6.0 |
| 50°-60° | 12.9 | 0.8 |
| 60°-70° | 4.4 | 0.3 |
| 70°-80° | 1.8 | 0.1 |
| 80°-90° | 0.7 | 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° | 1138.1 | 73.4 |
| 0°-40° | 1438.4 | 92.7 |
| 0°-60° | 1544.1 | 99.6 |
| 0°-90° | 1551.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1551.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1732 | 1732 | 1732 | 1732 | 1732 | |
| 5° | 1728 | 1724 | 1720 | 1719 | 1720 | 164 |
| 15° | 1600 | 1597 | 1592 | 1586 | 1581 | 446 |
| 25° | 1118 | 1183 | 1278 | 1185 | 1103 | 498 |
| 35° | 417 | 454 | 544 | 456 | 409 | 271 |
| 45° | 113 | 132 | 87 | 128 | 107 | 93 |
| 55° | 13 | 13 | 12 | 12 | 12 | 13 |
| 65° | 4 | 4 | 4 | 4 | 4 | 5 |
| 75° | 2 | 2 | 2 | 2 | 2 | 2 |
| 85° | 0 | 1 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: LD4C20D010 EX4C209035 4LCSQWLI

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1732.5 | 1732.5 | 1732.5 | 1732.5 | 1732.5 |
| 2.5° | 1732.9 | 1730.1 | 1729.3 | 1728.5 | 1730.1 |
| 5° | 1727.7 | 1723.7 | 1719.8 | 1718.6 | 1719.8 |
| 7.5° | 1713.0 | 1709.0 | 1702.2 | 1700.7 | 1701.8 |
| 10° | 1685.5 | 1681.9 | 1675.6 | 1672.0 | 1670.4 |
| 12.5° | 1649.3 | 1643.3 | 1637.4 | 1633.4 | 1629.4 |
| 15° | 1599.6 | 1596.8 | 1592.0 | 1585.6 | 1581.3 |
| 17.5° | 1530.7 | 1534.7 | 1537.5 | 1524.7 | 1513.2 |
| 20° | 1441.2 | 1455.9 | 1472.6 | 1446.7 | 1425.2 |
| 22.5° | 1301.5 | 1343.6 | 1386.2 | 1337.3 | 1289.5 |
| 25° | 1117.6 | 1182.9 | 1277.6 | 1184.8 | 1102.9 |
| 27.5° | 903.1 | 985.8 | 1135.1 | 986.2 | 891.1 |
| 30° | 704.9 | 790.0 | 957.2 | 778.9 | 688.1 |
| 32.5° | 541.3 | 605.0 | 747.8 | 595.4 | 529.7 |
| 35° | 416.7 | 454.5 | 543.7 | 455.7 | 409.1 |
| 37.5° | 324.0 | 343.1 | 365.8 | 336.3 | 314.4 |
| 40° | 254.3 | 255.1 | 235.6 | 251.1 | 244.4 |
| 42.5° | 188.7 | 187.9 | 144.9 | 183.1 | 184.3 |
| 45° | 113.0 | 131.7 | 86.8 | 128.2 | 106.7 |
| 47.5° | 53.7 | 74.4 | 52.1 | 70.4 | 49.8 |
| 50° | 25.9 | 35.8 | 31.4 | 33.4 | 24.3 |
| 52.5° | 17.5 | 18.3 | 17.9 | 17.5 | 16.7 |
| 55° | 12.7 | 12.7 | 11.5 | 12.3 | 12.3 |
| 57.5° | 9.6 | 9.6 | 8.4 | 9.2 | 9.2 |
| 60° | 7.6 | 7.2 | 6.4 | 7.2 | 7.2 |
| 62.5° | 5.6 | 5.6 | 4.8 | 5.6 | 5.6 |
| 65° | 4.4 | 4.4 | 4.0 | 4.4 | 4.4 |
| 67.5° | 3.6 | 3.6 | 2.8 | 3.6 | 3.2 |
| 70° | 2.8 | 2.8 | 2.4 | 2.8 | 2.8 |
| 72.5° | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 75° | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 77.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 80° | 0.8 | 0.8 | 1.2 | 1.2 | 1.2 |
| 82.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 85° | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 |
| 87.5° | 0.4 | 0.4 | 0.8 | 0.8 | 0.8 |
| 90° | 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)