

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: P843463

Luminaire Tested: **LD4C20DE010B2750 EU4C20B35 4LBWLI**

Issue Date: 2/17/2023



Test Information

Test Method: LM-79-08
Report Number: P843463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P208077)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C20DE010B2750 EU4C20B35 4LBWLI
Description: 4in Downlight with BioUp LEDs
Light Source: -
Ballast/Driver:

Summary

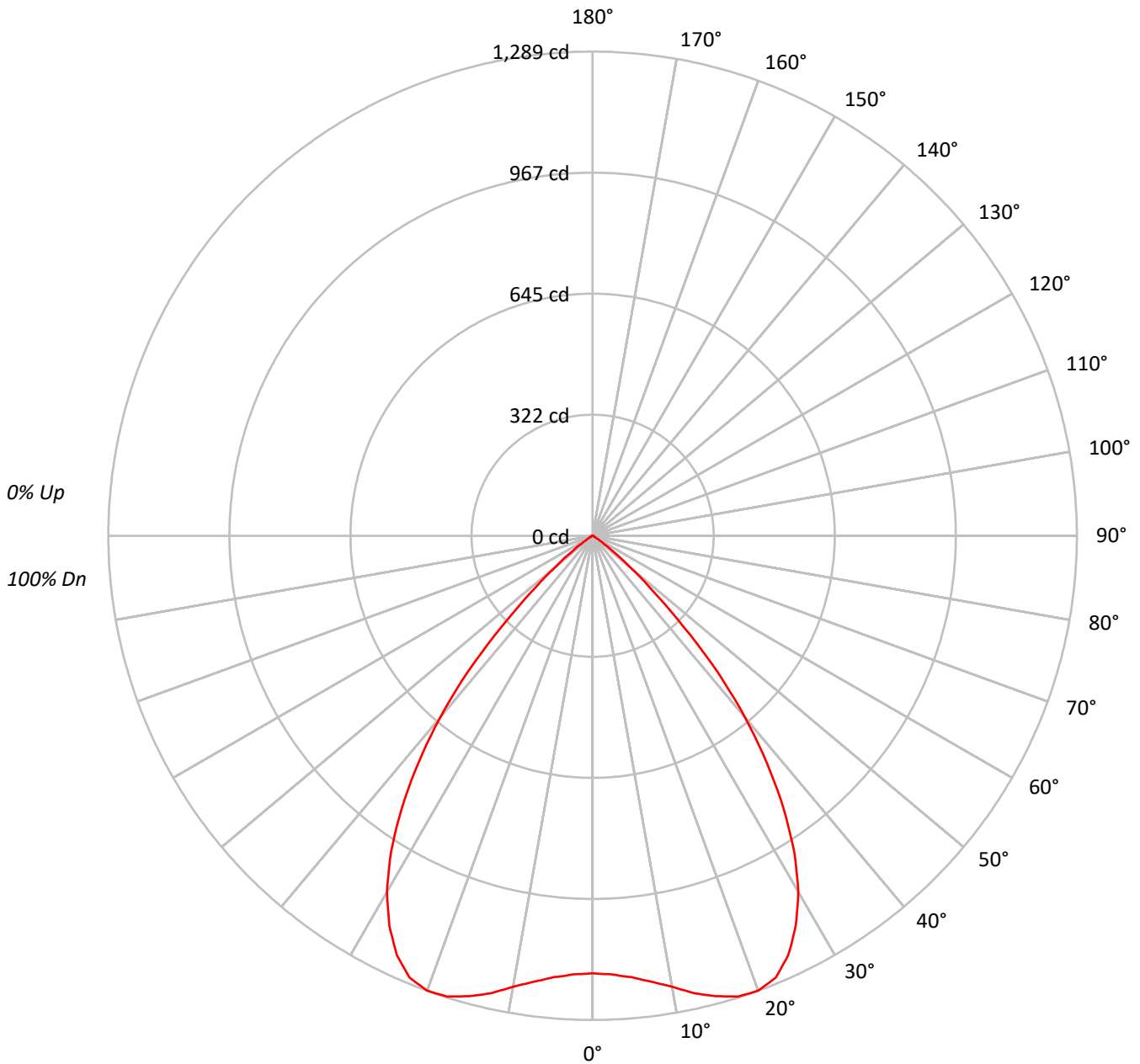
Lumens per Lamp: N/A
Luminaire Lumens: 1900.5 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V):
Input Current (Ain): 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 | 100 | 100 |
| 1 | 113 | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 | 92 | 92 | 92 |
| 2 | 106 | 101 | 97 | 93 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 93 | 90 | 88 | 90 | 88 | 86 | 84 | 84 | 84 | 84 |
| 3 | 100 | 93 | 87 | 83 | 98 | 92 | 86 | 82 | 89 | 85 | 81 | 86 | 83 | 80 | 84 | 81 | 78 | 77 | 77 | 77 | 77 |
| 4 | 94 | 86 | 79 | 75 | 92 | 84 | 79 | 74 | 82 | 77 | 73 | 80 | 76 | 72 | 78 | 75 | 72 | 70 | 70 | 70 | 70 |
| 5 | 88 | 79 | 72 | 68 | 87 | 78 | 72 | 67 | 76 | 71 | 67 | 74 | 70 | 66 | 73 | 69 | 65 | 64 | 64 | 64 | 64 |
| 6 | 83 | 73 | 66 | 62 | 82 | 72 | 66 | 61 | 71 | 65 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 58 | 58 | 58 | 58 |
| 7 | 78 | 68 | 61 | 56 | 77 | 67 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 63 | 59 | 55 | 54 | 54 | 54 | 54 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 | 49 | 49 | 49 |
| 9 | 69 | 59 | 52 | 48 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 45 | 45 | 45 | 45 |
| 10 | 66 | 55 | 48 | 44 | 65 | 54 | 48 | 44 | 53 | 48 | 44 | 53 | 47 | 44 | 52 | 47 | 43 | 42 | 42 | 42 | 42 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 143063 |
| 5° | 145484 |
| 10° | 152056 |
| 15° | 161388 |
| 20° | 168469 |
| 25° | 167002 |
| 30° | 155321 |
| 35° | 132864 |
| 40° | 101228 |
| 45° | 59367 |
| 50° | 25362 |
| 55° | 7475 |
| 60° | 2138 |
| 65° | 1250 |
| 70° | 790 |
| 75° | 1044 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 113.9 | 6.0 |
| 10°-20° | 359.4 | 18.9 |
| 20°-30° | 560.6 | 29.5 |
| 30°-40° | 545.5 | 28.7 |
| 40°-50° | 272.4 | 14.3 |
| 50°-60° | 42.2 | 2.2 |
| 60°-70° | 5.1 | 0.3 |
| 70°-80° | 1.4 | 0.1 |
| 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° | 1033.9 | 54.4 |
| 0°-40° | 1579.4 | 83.1 |
| 0°-60° | 1894.0 | 99.7 |
| 0°-90° | 1900.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1900.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1164 | |
| 5° | 1180 | 114 |
| 15° | 1269 | 359 |
| 25° | 1232 | 561 |
| 35° | 886 | 545 |
| 45° | 342 | 272 |
| 55° | 35 | 42 |
| 65° | 4 | 5 |
| 75° | 2 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1164.5 |
| 2.5° | 1168.8 |
| 5° | 1179.7 |
| 7.5° | 1197.1 |
| 10° | 1218.9 |
| 12.5° | 1247.2 |
| 15° | 1268.9 |
| 17.5° | 1286.4 |
| 20° | 1288.6 |
| 22.5° | 1273.3 |
| 25° | 1232.0 |
| 27.5° | 1171.0 |
| 30° | 1094.9 |
| 32.5° | 999.1 |
| 35° | 885.9 |
| 37.5° | 761.8 |
| 40° | 631.2 |
| 42.5° | 491.9 |
| 45° | 341.7 |
| 47.5° | 219.8 |
| 50° | 132.7 |
| 52.5° | 71.8 |
| 55° | 34.9 |
| 57.5° | 15.2 |
| 60° | 8.7 |
| 62.5° | 6.6 |
| 65° | 4.3 |
| 67.5° | 4.3 |
| 70° | 2.2 |
| 72.5° | 2.2 |
| 75° | 2.2 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180°







(END OF REPORT)