

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: FAIL-SAFE

Report Number: P573552

Luminaire Tested: **FLD4C-45-D010 FEU4C-X-90-40 F4X-M-X-H**

Issue Date: 3/1/2023



Test Information

Test Method: LM-79-08
Report Number: P573552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P207151)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/1/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FLD4C-45-D010 FEU4C-X-90-40 F4X-M-X-H
Description: 4 INCH FAIL-SAFE LED DOWNLIGHT WITH 4000K, 90 CRI LEDS, 4LBMH TRIM

Light Source: -
Ballast/Driver: -

Summary

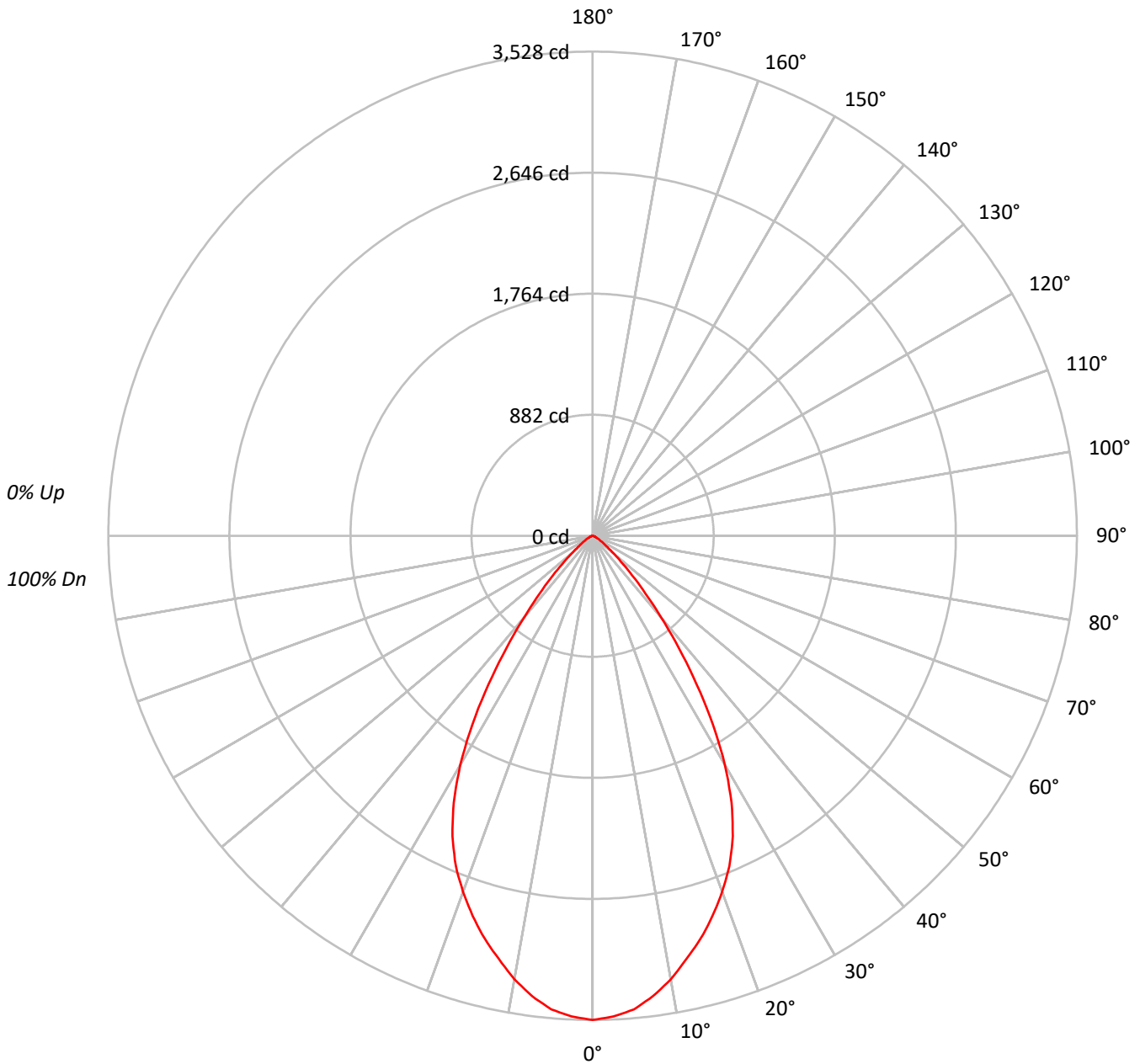
Lumens per Lamp: N/A
Luminaire Lumens: 3558.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
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 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 95 | 93 | | | | 93 |
| 2 | 107 | 102 | 98 | 94 | 105 | 100 | 96 | 93 | 97 | 94 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | | | | 85 |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 82 | 86 | 83 | 80 | 79 | | | | 79 |
| 4 | 96 | 88 | 82 | 77 | 94 | 86 | 81 | 77 | 84 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 73 | | | | 73 |
| 5 | 90 | 82 | 75 | 71 | 89 | 81 | 75 | 70 | 79 | 74 | 70 | 77 | 73 | 69 | 75 | 72 | 69 | 67 | | | | 67 |
| 6 | 86 | 76 | 70 | 65 | 84 | 75 | 69 | 65 | 74 | 68 | 64 | 72 | 68 | 64 | 71 | 67 | 64 | 62 | | | | 62 |
| 7 | 81 | 71 | 65 | 60 | 80 | 70 | 64 | 60 | 69 | 64 | 60 | 68 | 63 | 59 | 67 | 62 | 59 | 58 | | | | 58 |
| 8 | 77 | 67 | 60 | 56 | 75 | 66 | 60 | 56 | 65 | 59 | 56 | 64 | 59 | 55 | 63 | 58 | 55 | 54 | | | | 54 |
| 9 | 73 | 63 | 56 | 52 | 72 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 59 | 55 | 52 | 50 | | | | 50 |
| 10 | 69 | 59 | 53 | 49 | 68 | 59 | 53 | 49 | 58 | 52 | 49 | 57 | 52 | 48 | 56 | 52 | 48 | 47 | | | | 47 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 433427 |
| 5° | 427128 |
| 10° | 409288 |
| 15° | 386573 |
| 20° | 360837 |
| 25° | 327552 |
| 30° | 273476 |
| 35° | 198119 |
| 40° | 124017 |
| 45° | 70886 |
| 50° | 36964 |
| 55° | 20712 |
| 60° | 13194 |
| 65° | 7820 |
| 70° | 5783 |
| 75° | 2563 |
| 80° | 3820 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 324.6 | 9.1 |
| 10°-20° | 851.7 | 23.9 |
| 20°-30° | 1094.5 | 30.8 |
| 30°-40° | 823.5 | 23.1 |
| 40°-50° | 330.7 | 9.3 |
| 50°-60° | 94.0 | 2.6 |
| 60°-70° | 29.8 | 0.8 |
| 70°-80° | 8.5 | 0.2 |
| 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° | 2270.8 | 63.8 |
| 0°-40° | 3094.2 | 87.0 |
| 0°-60° | 3519.0 | 98.9 |
| 0°-90° | 3558.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3558.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3528 | |
| 5° | 3464 | 325 |
| 15° | 3039 | 852 |
| 25° | 2416 | 1095 |
| 35° | 1321 | 823 |
| 45° | 408 | 331 |
| 55° | 97 | 94 |
| 65° | 27 | 30 |
| 75° | 5 | 8 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3528.0 |
| 2.5° | 3506.5 |
| 5° | 3463.5 |
| 7.5° | 3382.9 |
| 10° | 3280.9 |
| 12.5° | 3157.5 |
| 15° | 3039.4 |
| 17.5° | 2905.1 |
| 20° | 2760.0 |
| 22.5° | 2604.5 |
| 25° | 2416.4 |
| 27.5° | 2190.8 |
| 30° | 1927.8 |
| 32.5° | 1632.4 |
| 35° | 1321.0 |
| 37.5° | 1030.9 |
| 40° | 773.3 |
| 42.5° | 569.2 |
| 45° | 408.0 |
| 47.5° | 279.3 |
| 50° | 193.4 |
| 52.5° | 134.3 |
| 55° | 96.7 |
| 57.5° | 69.8 |
| 60° | 53.7 |
| 62.5° | 37.6 |
| 65° | 26.9 |
| 67.5° | 21.5 |
| 70° | 16.1 |
| 72.5° | 10.7 |
| 75° | 5.4 |
| 77.5° | 5.4 |
| 80° | 5.4 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°







(END OF REPORT)