

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: P573504

Luminaire Tested: **FLD4C-45-D010 FEU4C-X-90-30 F4X-W-X-H**

Issue Date: 3/1/2023



Test Information

Test Method: LM-79-08
Report Number: P573504
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P206636)
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-90-30 F4X-W-X-H
Description: 4 INCH FAIL-SAFE LED DOWNLIGHT WITH 3000K, 90 CRI LEDS, 4LBWH TRIM

Light Source: -
Ballast/Driver: -

Summary

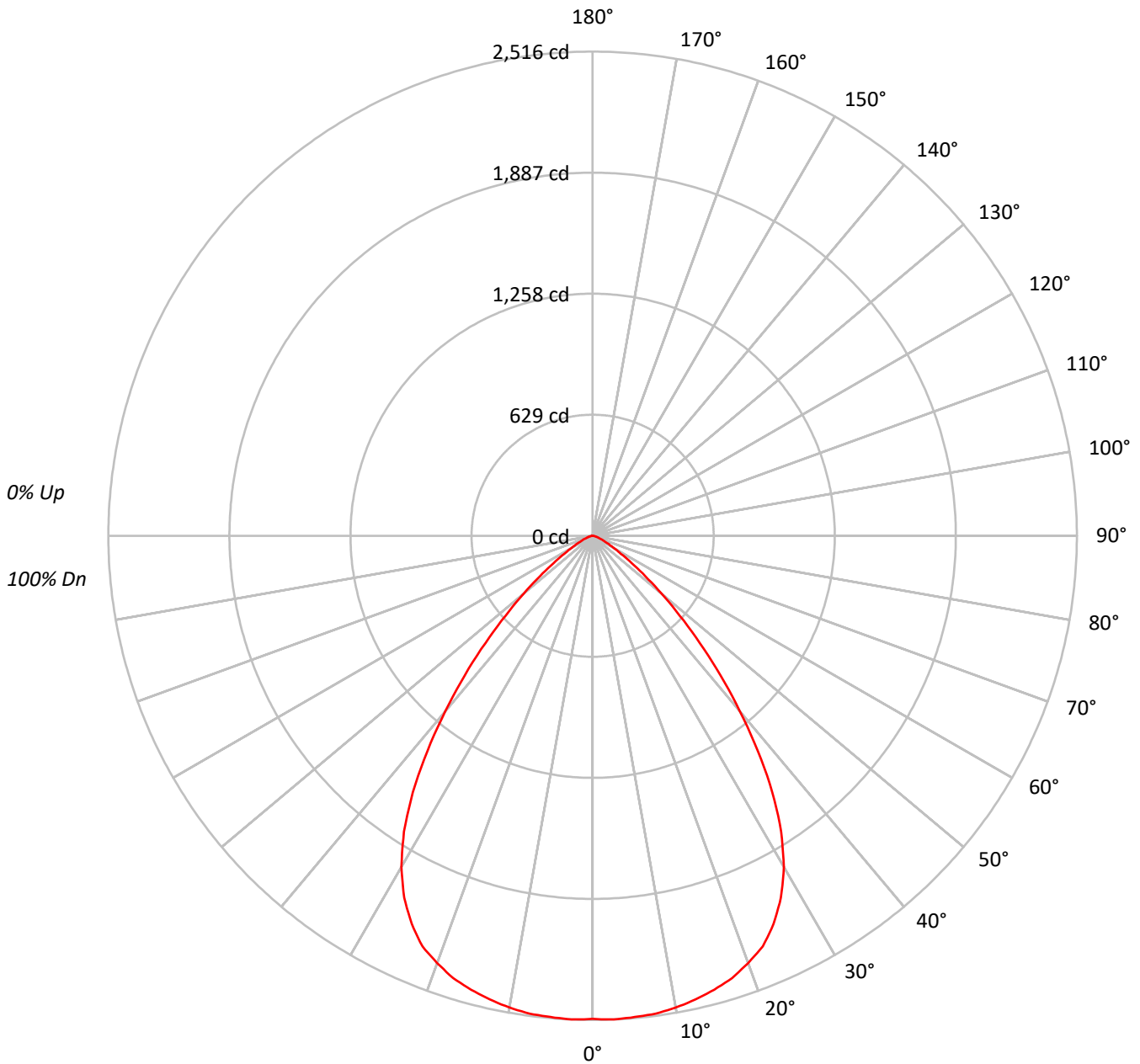
Lumens per Lamp: N/A
Luminaire Lumens: 3895.0 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.13
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P573504

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-30 F4X-W-X-H

Luminous Intensity Polar Plot





TEST NUMBER: P573504

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-30 F4X-W-X-H

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 | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 97 | 96 | 96 | 94 | 93 | 91 | | | | 91 |
| 2 | 105 | 100 | 95 | 91 | 103 | 98 | 93 | 90 | 95 | 91 | 88 | 91 | 88 | 86 | 89 | 86 | 84 | 82 | | | | 82 |
| 3 | 99 | 91 | 85 | 80 | 97 | 90 | 84 | 80 | 87 | 82 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 74 | | | | 74 |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | | 67 |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 69 | 64 | 74 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 62 | 61 | | | | 61 |
| 6 | 81 | 71 | 64 | 58 | 80 | 70 | 63 | 58 | 68 | 62 | 58 | 67 | 61 | 57 | 65 | 61 | 57 | 55 | | | | 55 |
| 7 | 76 | 65 | 58 | 53 | 75 | 65 | 58 | 53 | 63 | 57 | 53 | 62 | 56 | 52 | 61 | 56 | 52 | 50 | | | | 50 |
| 8 | 72 | 60 | 53 | 49 | 70 | 60 | 53 | 49 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 46 | | | | 46 |
| 9 | 68 | 56 | 49 | 45 | 66 | 56 | 49 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 43 | | | | 43 |
| 10 | 64 | 52 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 49 | 44 | 41 | 39 | | | | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 308436 |
| 5° | 309614 |
| 10° | 310549 |
| 15° | 310566 |
| 20° | 308855 |
| 25° | 301621 |
| 30° | 281916 |
| 35° | 244132 |
| 40° | 190701 |
| 45° | 136838 |
| 50° | 88893 |
| 55° | 53204 |
| 60° | 31131 |
| 65° | 20000 |
| 70° | 13290 |
| 75° | 10063 |
| 80° | 7499 |
| 85° | 0 |



TEST NUMBER: P573504

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-30 F4X-W-X-H

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 239.1 | 6.1 |
| 10°-20° | 688.9 | 17.7 |
| 20°-30° | 1016.6 | 26.1 |
| 30°-40° | 1003.2 | 25.8 |
| 40°-50° | 613.9 | 15.8 |
| 50°-60° | 235.3 | 6.0 |
| 60°-70° | 73.6 | 1.9 |
| 70°-80° | 21.6 | 0.6 |
| 80°-90° | 2.9 | 0.1 |
| 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° | 1944.5 | 49.9 |
| 0°-40° | 2947.7 | 75.7 |
| 0°-60° | 3797.0 | 97.5 |
| 0°-90° | 3895.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3895.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2511 | |
| 5° | 2511 | 239 |
| 15° | 2442 | 689 |
| 25° | 2225 | 1017 |
| 35° | 1628 | 1003 |
| 45° | 788 | 614 |
| 55° | 248 | 235 |
| 65° | 69 | 74 |
| 75° | 21 | 22 |
| 85° | 0 | 3 |
| 90° | 0 | |



TEST NUMBER: P573504

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-30 F4X-W-X-H

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2510.6 |
| 2.5° | 2515.9 |
| 5° | 2510.6 |
| 7.5° | 2505.3 |
| 10° | 2489.4 |
| 12.5° | 2468.2 |
| 15° | 2441.8 |
| 17.5° | 2410.0 |
| 20° | 2362.4 |
| 22.5° | 2309.8 |
| 25° | 2225.1 |
| 27.5° | 2119.3 |
| 30° | 1987.3 |
| 32.5° | 1823.5 |
| 35° | 1627.8 |
| 37.5° | 1411.1 |
| 40° | 1189.1 |
| 42.5° | 983.1 |
| 45° | 787.6 |
| 47.5° | 613.0 |
| 50° | 465.1 |
| 52.5° | 343.6 |
| 55° | 248.4 |
| 57.5° | 174.3 |
| 60° | 126.7 |
| 62.5° | 95.2 |
| 65° | 68.8 |
| 67.5° | 52.9 |
| 70° | 37.0 |
| 72.5° | 26.5 |
| 75° | 21.2 |
| 77.5° | 10.6 |
| 80° | 10.6 |
| 82.5° | 5.3 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°







(END OF REPORT)