

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: P241405

Luminaire Tested: **FVS8M-4-LD4-30-3LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-4-LD4-30-3LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
4FT LENGTH, 3-MODULE LED WITH P125 LENS
Light Source: (252) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

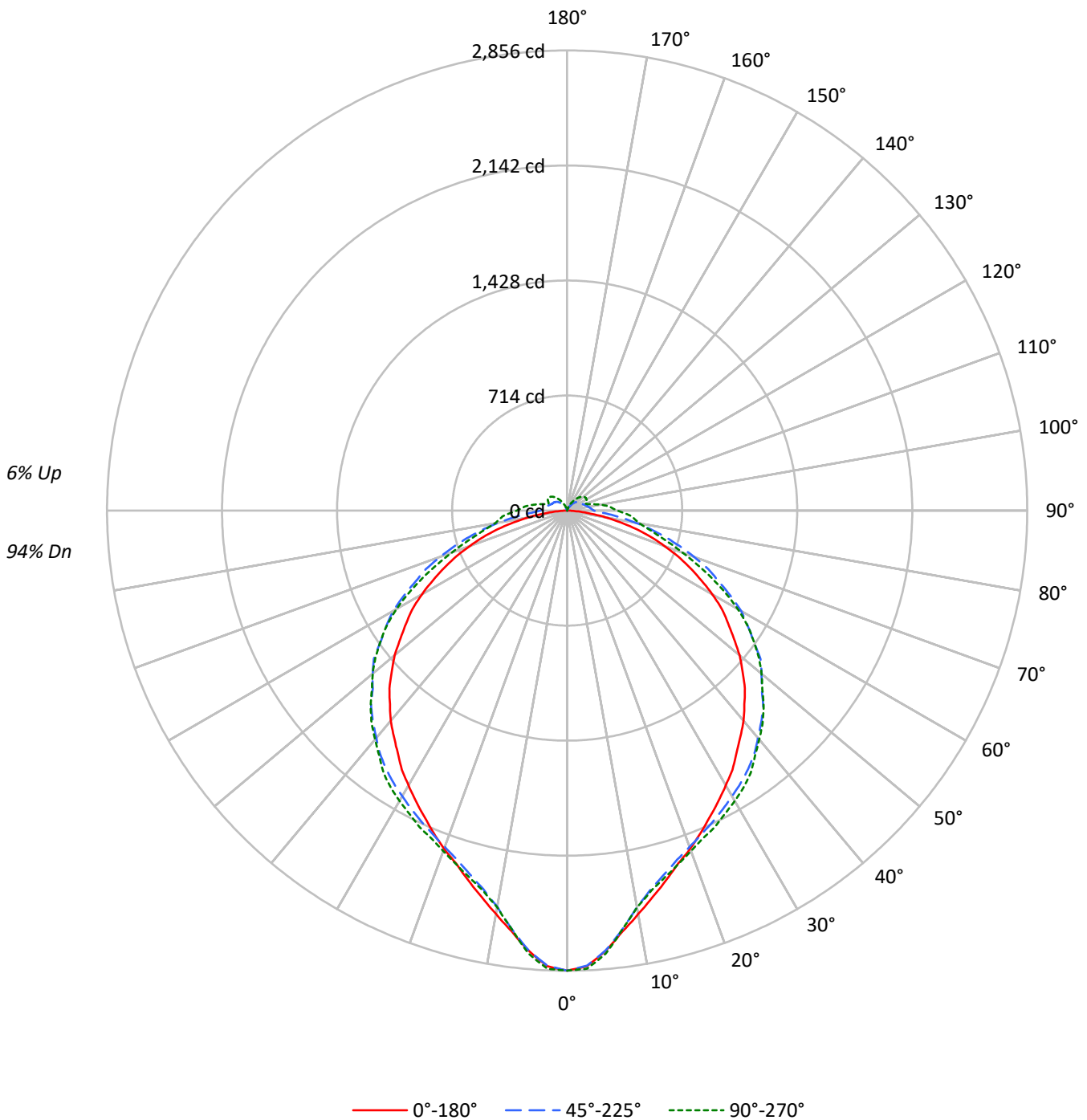
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8002.0 lumens
Efficiency: N/A
Efficacy: 238.9 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.09 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 3.73' x H: 0.15')
CIE Type: Direct

Input Watts (W): 33.5
Input Voltage (V): 120
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

TEST NUMBER: P241405
CATALOG NUMBER: FVS8M-4-LD4-30-3LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241405

CATALOG NUMBER: FVS8M-4-LD4-30-3LO-P125-UNV-EDC1

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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 | 94 |
| 1 | 106 | 101 | 97 | 92 | 103 | 98 | 94 | 90 | 93 | 89 | 86 | 88 | 85 | 83 | 83 | 81 | 79 | 76 |
| 2 | 96 | 88 | 81 | 74 | 93 | 85 | 79 | 73 | 81 | 75 | 70 | 76 | 72 | 68 | 72 | 69 | 65 | 63 |
| 3 | 88 | 77 | 68 | 61 | 84 | 75 | 67 | 60 | 71 | 64 | 59 | 67 | 61 | 57 | 64 | 59 | 55 | 53 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 58 | 51 | 63 | 55 | 50 | 59 | 53 | 48 | 57 | 51 | 47 | 45 |
| 5 | 73 | 60 | 51 | 44 | 71 | 59 | 50 | 44 | 56 | 48 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 38 |
| 6 | 68 | 54 | 45 | 39 | 65 | 53 | 44 | 38 | 50 | 43 | 37 | 48 | 42 | 36 | 46 | 40 | 36 | 33 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 46 | 38 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | 29 |
| 8 | 58 | 45 | 36 | 30 | 56 | 44 | 36 | 30 | 42 | 35 | 29 | 40 | 34 | 29 | 38 | 33 | 28 | 26 |
| 9 | 55 | 41 | 33 | 27 | 53 | 40 | 32 | 27 | 39 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 25 | 24 |
| 10 | 51 | 38 | 30 | 25 | 49 | 37 | 29 | 24 | 36 | 29 | 24 | 34 | 28 | 24 | 33 | 27 | 23 | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12762 | 12762 | 12762 |
| 5° | 12263 | 12097 | 12138 |
| 10° | 11461 | 10970 | 10909 |
| 15° | 10873 | 10288 | 10269 |
| 20° | 10473 | 9890 | 9879 |
| 25° | 10156 | 9678 | 9670 |
| 30° | 9938 | 9534 | 9503 |
| 35° | 9739 | 9443 | 9361 |
| 40° | 9625 | 9290 | 9095 |
| 45° | 9488 | 9163 | 8893 |
| 50° | 9283 | 8952 | 8632 |
| 55° | 8998 | 8672 | 8332 |
| 60° | 8721 | 8417 | 7865 |
| 65° | 8208 | 7808 | 7057 |
| 70° | 7579 | 7212 | 6155 |
| 75° | 6709 | 6369 | 5401 |
| 80° | 5153 | 5354 | 5109 |
| 85° | 2867 | 4218 | 5738 |



TEST NUMBER: P241405

CATALOG NUMBER: FVS8M-4-LD4-30-3LO-P125-UNV-EDC1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 254.4 | 3.2 |
| 10°-20° | 664.9 | 8.3 |
| 20°-30° | 986.5 | 12.3 |
| 30°-40° | 1212.9 | 15.2 |
| 40°-50° | 1296.4 | 16.2 |
| 50°-60° | 1224.7 | 15.3 |
| 60°-70° | 972.5 | 12.2 |
| 70°-80° | 608.3 | 7.6 |
| 80°-90° | 278.7 | 3.5 |
| 90°-100° | 151.8 | 1.9 |
| 100°-110° | 108.3 | 1.4 |
| 110°-120° | 83.4 | 1.0 |
| 120°-130° | 71.9 | 0.9 |
| 130°-140° | 50.7 | 0.6 |
| 140°-150° | 26.4 | 0.3 |
| 150°-160° | 9.0 | 0.1 |
| 160°-170° | 1.2 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1905.8 | 23.8 |
| 0°-40° | 3118.7 | 39.0 |
| 0°-60° | 5639.8 | 70.5 |
| 0°-90° | 7499.4 | 93.7 |
| 90°-120° | 343.4 | 4.3 |
| 90°-150° | 492.4 | 6.2 |
| 90°-180° | 503.0 | 6.3 |
| 0°-180° | 8002.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2856 | 2856 | 2856 | 2856 | 2856 | |
| 5° | 2743 | 2741 | 2740 | 2751 | 2759 | 255 |
| 15° | 2374 | 2361 | 2335 | 2341 | 2354 | 670 |
| 25° | 2097 | 2116 | 2134 | 2165 | 2168 | 968 |
| 35° | 1834 | 1895 | 1958 | 1985 | 1987 | 1150 |
| 45° | 1560 | 1636 | 1721 | 1726 | 1725 | 1200 |
| 55° | 1219 | 1330 | 1411 | 1422 | 1414 | 1092 |
| 65° | 841 | 952 | 1035 | 1029 | 990 | 833 |
| 75° | 445 | 537 | 627 | 620 | 576 | 468 |
| 85° | 81 | 166 | 258 | 313 | 401 | 101 |
| 90° | 2 | 79 | 165 | 232 | 312 | 4 |
| 95° | 1 | 68 | 148 | 208 | 268 | 0 |
| 105° | 1 | 55 | 121 | 152 | 152 | 1 |
| 115° | 1 | 46 | 101 | 120 | 130 | 1 |
| 125° | 1 | 37 | 92 | 124 | 139 | 1 |
| 135° | 1 | 24 | 73 | 105 | 120 | 1 |
| 145° | 1 | 10 | 43 | 72 | 81 | 1 |
| 155° | 1 | 2 | 17 | 35 | 40 | 1 |
| 165° | 2 | 1 | 1 | 6 | 9 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P241405

CATALOG NUMBER: FVS8M-4-LD4-30-3LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2855.5 | 2855.5 | 2855.5 | 2855.5 | 2855.5 |
| 2.5° | 2830.1 | 2830.1 | 2826.6 | 2839.4 | 2845.7 |
| 5° | 2742.8 | 2741.1 | 2740.5 | 2750.9 | 2759.0 |
| 7.5° | 2634.7 | 2634.7 | 2622.0 | 2621.4 | 2622.5 |
| 10° | 2542.8 | 2529.5 | 2497.1 | 2503.4 | 2499.4 |
| 12.5° | 2455.5 | 2443.3 | 2405.2 | 2409.8 | 2415.6 |
| 15° | 2374.5 | 2360.6 | 2335.2 | 2341.0 | 2353.7 |
| 17.5° | 2295.9 | 2296.5 | 2271.0 | 2299.4 | 2299.4 |
| 20° | 2233.4 | 2228.2 | 2221.3 | 2245.0 | 2247.9 |
| 22.5° | 2165.8 | 2168.1 | 2175.0 | 2204.5 | 2201.6 |
| 25° | 2097.0 | 2115.5 | 2134.0 | 2165.2 | 2167.5 |
| 27.5° | 2033.4 | 2060.6 | 2090.6 | 2129.4 | 2120.7 |
| 30° | 1969.2 | 2010.3 | 2047.3 | 2088.9 | 2081.4 |
| 32.5° | 1908.5 | 1958.2 | 2005.1 | 2042.6 | 2038.0 |
| 35° | 1833.9 | 1894.6 | 1957.7 | 1985.4 | 1987.1 |
| 37.5° | 1766.3 | 1839.1 | 1906.8 | 1930.5 | 1916.0 |
| 40° | 1703.8 | 1781.9 | 1842.6 | 1863.4 | 1854.2 |
| 42.5° | 1628.1 | 1707.9 | 1782.5 | 1788.8 | 1795.8 |
| 45° | 1559.9 | 1636.2 | 1721.2 | 1725.8 | 1724.7 |
| 47.5° | 1475.5 | 1574.3 | 1636.8 | 1655.9 | 1643.1 |
| 50° | 1397.4 | 1489.3 | 1574.9 | 1588.8 | 1575.5 |
| 52.5° | 1302.6 | 1402.0 | 1512.5 | 1507.8 | 1499.8 |
| 55° | 1219.3 | 1330.4 | 1410.7 | 1422.3 | 1414.2 |
| 57.5° | 1139.0 | 1241.9 | 1329.2 | 1338.4 | 1326.9 |
| 60° | 1041.8 | 1134.4 | 1247.1 | 1241.3 | 1224.0 |
| 62.5° | 939.5 | 1043.0 | 1140.7 | 1135.5 | 1108.3 |
| 65° | 841.2 | 952.2 | 1034.9 | 1028.6 | 990.4 |
| 67.5° | 745.8 | 842.4 | 949.3 | 924.5 | 870.1 |
| 70° | 642.3 | 730.8 | 836.0 | 814.6 | 763.2 |
| 72.5° | 545.2 | 633.1 | 729.1 | 717.5 | 662.6 |
| 75° | 445.2 | 537.1 | 626.7 | 620.4 | 576.4 |
| 77.5° | 340.0 | 433.6 | 526.1 | 534.8 | 508.8 |
| 80° | 244.6 | 335.3 | 429.0 | 452.7 | 452.7 |
| 82.5° | 153.8 | 243.4 | 340.5 | 377.0 | 424.9 |
| 85° | 80.9 | 166.5 | 258.4 | 312.8 | 400.7 |
| 87.5° | 26.0 | 111.0 | 199.5 | 263.1 | 354.4 |
| 90° | 1.7 | 79.2 | 165.4 | 231.8 | 312.2 |
| 92.5° | 0.6 | 71.7 | 154.9 | 218.5 | 284.5 |
| 95° | 0.6 | 68.2 | 148.0 | 208.1 | 268.3 |
| 97.5° | 0.6 | 64.2 | 141.1 | 195.4 | 238.8 |
| 100° | 0.6 | 60.7 | 133.6 | 182.7 | 210.5 |
| 102.5° | 0.6 | 57.8 | 127.8 | 168.2 | 179.2 |
| 105° | 0.6 | 54.9 | 121.4 | 151.5 | 151.5 |
| 107.5° | 0.6 | 53.2 | 115.6 | 137.0 | 132.4 |
| 110° | 0.6 | 50.9 | 109.9 | 126.0 | 124.3 |



TEST NUMBER: P241405

CATALOG NUMBER: FVS8M-4-LD4-30-3LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 0.6 | 48.6 | 105.2 | 120.3 | 124.3 |
| 115° | 0.6 | 46.3 | 101.2 | 120.3 | 129.5 |
| 117.5° | 0.6 | 43.9 | 98.9 | 122.6 | 134.7 |
| 120° | 0.6 | 41.6 | 97.7 | 124.9 | 138.8 |
| 122.5° | 0.6 | 39.3 | 95.4 | 125.5 | 139.9 |
| 125° | 0.6 | 37.0 | 91.9 | 123.7 | 139.3 |
| 127.5° | 0.6 | 34.1 | 88.5 | 120.8 | 137.0 |
| 130° | 0.6 | 30.6 | 83.8 | 116.8 | 133.6 |
| 132.5° | 1.2 | 27.2 | 79.2 | 111.0 | 127.8 |
| 135° | 1.2 | 23.7 | 73.4 | 105.2 | 120.3 |
| 137.5° | 1.2 | 19.7 | 67.1 | 97.1 | 111.0 |
| 140° | 1.2 | 16.2 | 59.6 | 89.0 | 101.2 |
| 142.5° | 1.2 | 12.7 | 51.5 | 80.4 | 90.8 |
| 145° | 1.2 | 9.8 | 43.4 | 71.7 | 80.9 |
| 147.5° | 1.2 | 6.9 | 36.4 | 61.3 | 70.0 |
| 150° | 1.2 | 5.2 | 29.5 | 52.6 | 59.6 |
| 152.5° | 1.2 | 3.5 | 22.5 | 42.8 | 49.7 |
| 155° | 1.2 | 1.7 | 16.8 | 34.7 | 40.5 |
| 157.5° | 1.2 | 1.2 | 11.6 | 26.0 | 30.6 |
| 160° | 1.7 | 0.6 | 7.5 | 17.9 | 22.5 |
| 162.5° | 1.7 | 0.6 | 4.0 | 11.0 | 15.0 |
| 165° | 1.7 | 0.6 | 1.2 | 5.8 | 8.7 |
| 167.5° | 1.7 | 0.6 | 0.0 | 1.7 | 3.5 |
| 170° | 1.7 | 0.6 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)