

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P973674

Luminaire Tested: FLR2-22-25-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973674
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-25-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

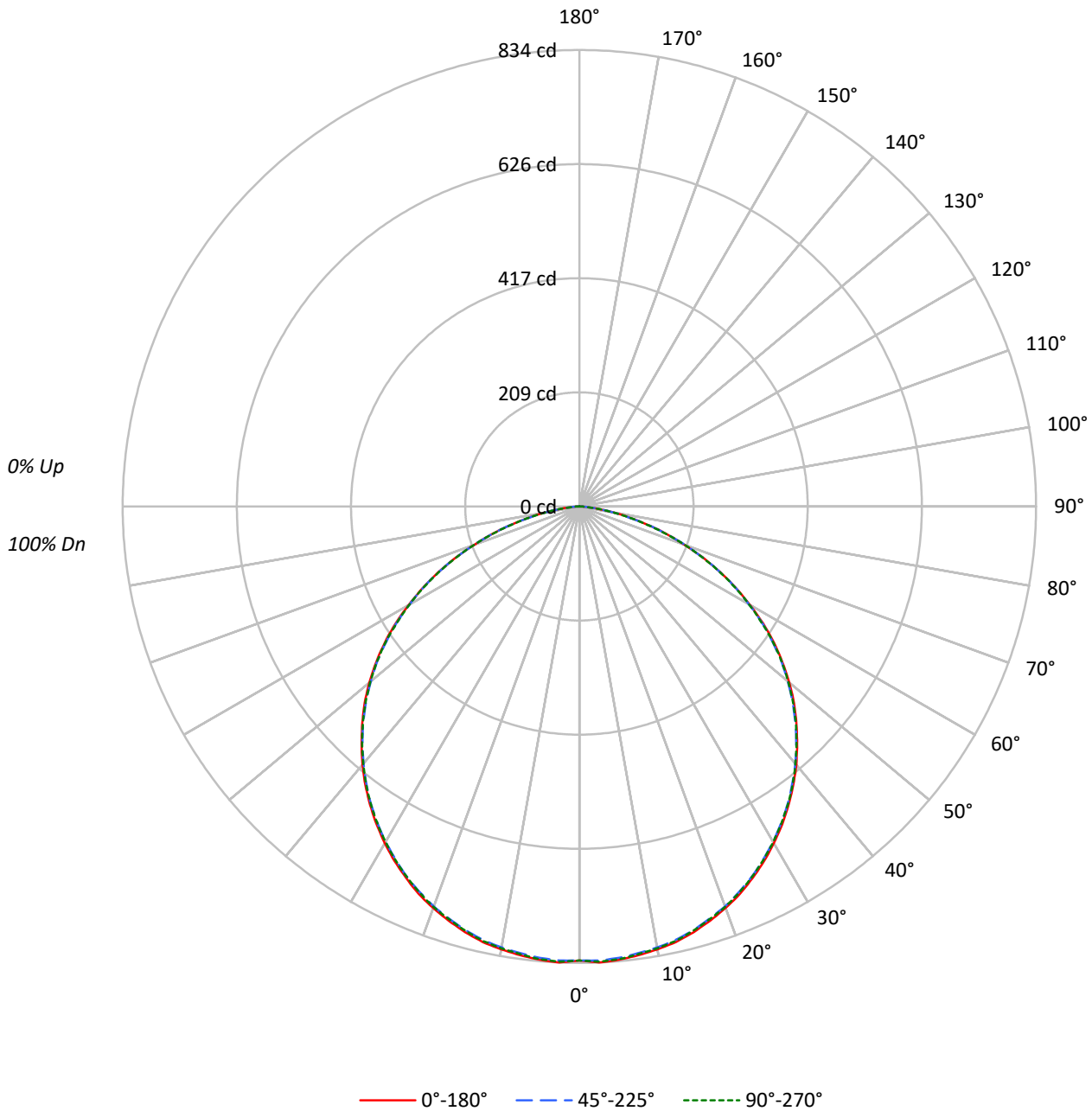
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2319.6 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





TEST NUMBER: P973674
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 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 | 109 | 105 | 101 | 97 | 107 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 91 | 89 | 87 | 85 | | | | | | 85 | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 85 | 79 | 97 | 90 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | 71 | | | | | | 71 | | | | | | | | | | | | | | |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 68 | 63 | 70 | 66 | 62 | 60 | | | | | | 60 | | | | | | | | | | | | | | |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 | | | | | | 51 | | | | | | | | | | | | | | |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | 44 | | | | | | 44 | | | | | | | | | | | | | | |
| 6 | 71 | 57 | 48 | 42 | 69 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 41 | 39 | | | | | | 39 | | | | | | | | | | | | | | |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 | | | | | | 34 | | | | | | | | | | | | | | |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 | | | | | | 30 | | | | | | | | | | | | | | |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 27 | | | | | | 27 | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 | | | | | | 25 | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2232 | 2232 | 2232 |
| 5° | 2246 | 2236 | 2243 |
| 10° | 2246 | 2236 | 2240 |
| 15° | 2244 | 2234 | 2237 |
| 20° | 2236 | 2227 | 2230 |
| 25° | 2224 | 2215 | 2216 |
| 30° | 2208 | 2198 | 2200 |
| 35° | 2188 | 2180 | 2181 |
| 40° | 2165 | 2154 | 2156 |
| 45° | 2133 | 2123 | 2127 |
| 50° | 2096 | 2081 | 2085 |
| 55° | 2036 | 2019 | 2026 |
| 60° | 1936 | 1927 | 1927 |
| 65° | 1807 | 1804 | 1798 |
| 70° | 1600 | 1608 | 1604 |
| 75° | 1347 | 1337 | 1327 |
| 80° | 969 | 953 | 945 |
| 85° | 506 | 506 | 491 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2133 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.5 | 3.4 |
| 10°-20° | 225.9 | 9.7 |
| 20°-30° | 343.2 | 14.8 |
| 30°-40° | 414.9 | 17.9 |
| 40°-50° | 430.6 | 18.6 |
| 50°-60° | 385.0 | 16.6 |
| 60°-70° | 279.9 | 12.1 |
| 70°-80° | 137.6 | 5.9 |
| 80°-90° | 23.9 | 1.0 |
| 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° | 647.7 | 27.9 |
| 0°-40° | 1062.6 | 45.8 |
| 0°-60° | 1878.2 | 81.0 |
| 0°-90° | 2319.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2319.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 830 | 830 | 830 | 830 | 830 | |
| 5° | 832 | 822 | 828 | 825 | 830 | 79 |
| 15° | 805 | 796 | 802 | 800 | 803 | 227 |
| 25° | 749 | 741 | 746 | 744 | 746 | 345 |
| 35° | 666 | 661 | 664 | 664 | 664 | 417 |
| 45° | 560 | 558 | 558 | 559 | 559 | 432 |
| 55° | 434 | 431 | 430 | 431 | 432 | 387 |
| 65° | 284 | 285 | 283 | 283 | 282 | 280 |
| 75° | 130 | 131 | 129 | 129 | 128 | 138 |
| 85° | 16 | 17 | 16 | 16 | 16 | 24 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973674
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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 829.5 | 829.5 | 829.5 | 829.5 | 829.5 |
| 2.5° | 834.1 | 824.3 | 830.5 | 826.9 | 832.5 |
| 5° | 831.5 | 821.8 | 827.9 | 824.9 | 830.5 |
| 7.5° | 826.9 | 817.2 | 823.3 | 820.2 | 824.9 |
| 10° | 821.8 | 811.5 | 818.2 | 815.1 | 819.7 |
| 12.5° | 815.1 | 805.4 | 811.5 | 809.0 | 813.1 |
| 15° | 805.4 | 796.2 | 801.8 | 799.8 | 802.8 |
| 17.5° | 793.6 | 784.4 | 790.0 | 788.5 | 791.0 |
| 20° | 780.8 | 772.1 | 777.7 | 776.2 | 778.7 |
| 22.5° | 766.5 | 757.2 | 762.4 | 761.3 | 763.4 |
| 25° | 749.0 | 740.8 | 746.0 | 744.4 | 746.5 |
| 27.5° | 730.6 | 722.9 | 727.0 | 727.0 | 728.0 |
| 30° | 710.6 | 703.4 | 707.5 | 707.5 | 708.0 |
| 32.5° | 689.1 | 683.5 | 686.0 | 686.5 | 686.5 |
| 35° | 666.0 | 661.4 | 663.5 | 664.0 | 664.0 |
| 37.5° | 642.0 | 637.3 | 638.9 | 639.9 | 639.9 |
| 40° | 616.3 | 612.2 | 613.3 | 614.3 | 613.8 |
| 42.5° | 588.7 | 585.6 | 586.1 | 587.1 | 587.1 |
| 45° | 560.5 | 557.9 | 557.9 | 559.0 | 559.0 |
| 47.5° | 531.8 | 529.2 | 528.2 | 529.2 | 529.2 |
| 50° | 500.6 | 498.0 | 497.0 | 498.0 | 498.0 |
| 52.5° | 467.8 | 465.2 | 465.2 | 465.2 | 465.7 |
| 55° | 433.9 | 431.4 | 430.4 | 431.4 | 431.9 |
| 57.5° | 398.1 | 397.1 | 395.5 | 396.0 | 394.5 |
| 60° | 359.7 | 359.7 | 358.1 | 359.1 | 358.1 |
| 62.5° | 322.3 | 323.3 | 321.7 | 321.7 | 320.7 |
| 65° | 283.8 | 284.9 | 283.3 | 283.3 | 282.3 |
| 67.5° | 244.4 | 245.9 | 243.9 | 243.9 | 242.8 |
| 70° | 203.4 | 206.5 | 204.4 | 204.9 | 203.9 |
| 72.5° | 166.5 | 168.0 | 166.0 | 166.0 | 165.0 |
| 75° | 129.6 | 130.6 | 128.6 | 129.1 | 127.6 |
| 77.5° | 93.2 | 94.8 | 92.7 | 93.2 | 92.7 |
| 80° | 62.5 | 63.0 | 61.5 | 62.0 | 61.0 |
| 82.5° | 36.4 | 36.9 | 36.4 | 35.9 | 35.4 |
| 85° | 16.4 | 16.9 | 16.4 | 16.4 | 15.9 |
| 87.5° | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)