

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: P973818

Luminaire Tested: FLR2-22-25HE-L835-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973818
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: FLR2-22-25HE-L835-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

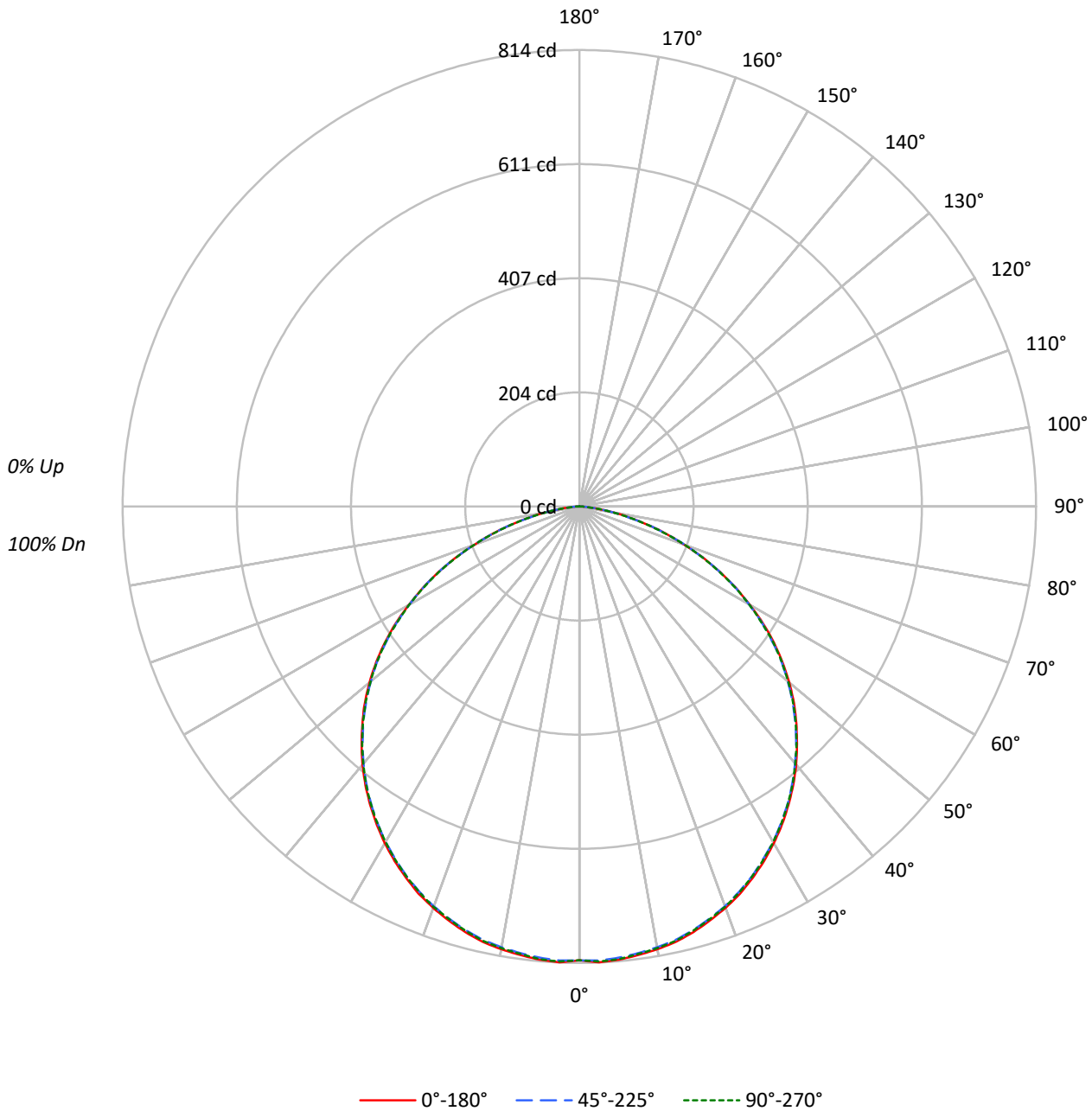
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2263.4 lumens
Efficiency: N/A
Efficacy: 117.9 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): 19.2
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: P973818
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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° | 2178 | 2178 | 2178 |
| 5° | 2192 | 2182 | 2189 |
| 10° | 2191 | 2181 | 2185 |
| 15° | 2189 | 2179 | 2182 |
| 20° | 2182 | 2173 | 2176 |
| 25° | 2170 | 2161 | 2163 |
| 30° | 2155 | 2145 | 2147 |
| 35° | 2135 | 2127 | 2128 |
| 40° | 2113 | 2102 | 2104 |
| 45° | 2081 | 2072 | 2076 |
| 50° | 2045 | 2030 | 2034 |
| 55° | 1986 | 1970 | 1977 |
| 60° | 1889 | 1880 | 1880 |
| 65° | 1763 | 1760 | 1754 |
| 70° | 1562 | 1570 | 1566 |
| 75° | 1315 | 1305 | 1294 |
| 80° | 945 | 930 | 922 |
| 85° | 494 | 494 | 479 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2081 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 76.6 | 3.4 |
| 10°-20° | 220.4 | 9.7 |
| 20°-30° | 334.9 | 14.8 |
| 30°-40° | 404.8 | 17.9 |
| 40°-50° | 420.2 | 18.6 |
| 50°-60° | 375.6 | 16.6 |
| 60°-70° | 273.1 | 12.1 |
| 70°-80° | 134.3 | 5.9 |
| 80°-90° | 23.3 | 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° | 631.9 | 27.9 |
| 0°-40° | 1036.8 | 45.8 |
| 0°-60° | 1832.6 | 81.0 |
| 0°-90° | 2263.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2263.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 809 | 809 | 809 | 809 | 809 | |
| 5° | 811 | 802 | 808 | 805 | 810 | 77 |
| 15° | 786 | 777 | 782 | 780 | 783 | 222 |
| 25° | 731 | 723 | 728 | 726 | 728 | 337 |
| 35° | 650 | 645 | 647 | 648 | 648 | 407 |
| 45° | 547 | 544 | 544 | 545 | 545 | 422 |
| 55° | 423 | 421 | 420 | 421 | 421 | 377 |
| 65° | 277 | 278 | 276 | 276 | 275 | 273 |
| 75° | 126 | 128 | 126 | 126 | 124 | 134 |
| 85° | 16 | 16 | 16 | 16 | 16 | 23 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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 CATALOG NUMBER: FLR2-22-25HE-L835-CP187

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 809.3 | 809.3 | 809.3 | 809.3 | 809.3 |
| 2.5° | 813.8 | 804.3 | 810.3 | 806.8 | 812.3 |
| 5° | 811.3 | 801.8 | 807.8 | 804.8 | 810.3 |
| 7.5° | 806.8 | 797.3 | 803.3 | 800.3 | 804.8 |
| 10° | 801.8 | 791.8 | 798.3 | 795.3 | 799.8 |
| 12.5° | 795.3 | 785.8 | 791.8 | 789.3 | 793.3 |
| 15° | 785.8 | 776.8 | 782.3 | 780.3 | 783.3 |
| 17.5° | 774.3 | 765.3 | 770.8 | 769.3 | 771.8 |
| 20° | 761.8 | 753.3 | 758.8 | 757.3 | 759.8 |
| 22.5° | 747.8 | 738.9 | 743.8 | 742.8 | 744.8 |
| 25° | 730.9 | 722.9 | 727.9 | 726.4 | 728.4 |
| 27.5° | 712.9 | 705.4 | 709.4 | 709.4 | 710.4 |
| 30° | 693.4 | 686.4 | 690.4 | 690.4 | 690.9 |
| 32.5° | 672.4 | 666.9 | 669.4 | 669.9 | 669.9 |
| 35° | 649.9 | 645.4 | 647.4 | 647.9 | 647.9 |
| 37.5° | 626.4 | 621.9 | 623.4 | 624.4 | 624.4 |
| 40° | 601.4 | 597.4 | 598.4 | 599.4 | 598.9 |
| 42.5° | 574.4 | 571.4 | 571.9 | 572.9 | 572.9 |
| 45° | 546.9 | 544.4 | 544.4 | 545.4 | 545.4 |
| 47.5° | 518.9 | 516.4 | 515.4 | 516.4 | 516.4 |
| 50° | 488.4 | 485.9 | 484.9 | 485.9 | 485.9 |
| 52.5° | 456.4 | 453.9 | 453.9 | 453.9 | 454.4 |
| 55° | 423.4 | 420.9 | 419.9 | 420.9 | 421.4 |
| 57.5° | 388.4 | 387.4 | 385.9 | 386.4 | 384.9 |
| 60° | 350.9 | 350.9 | 349.4 | 350.4 | 349.4 |
| 62.5° | 314.4 | 315.4 | 313.9 | 313.9 | 312.9 |
| 65° | 276.9 | 277.9 | 276.4 | 276.4 | 275.4 |
| 67.5° | 238.5 | 240.0 | 238.0 | 238.0 | 237.0 |
| 70° | 198.5 | 201.5 | 199.5 | 200.0 | 199.0 |
| 72.5° | 162.5 | 164.0 | 162.0 | 162.0 | 161.0 |
| 75° | 126.5 | 127.5 | 125.5 | 126.0 | 124.5 |
| 77.5° | 91.0 | 92.5 | 90.5 | 91.0 | 90.5 |
| 80° | 61.0 | 61.5 | 60.0 | 60.5 | 59.5 |
| 82.5° | 35.5 | 36.0 | 35.5 | 35.0 | 34.5 |
| 85° | 16.0 | 16.5 | 16.0 | 16.0 | 15.5 |
| 87.5° | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)