

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: P974250

Luminaire Tested: FLR2-24-30-L935-CP250

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974250  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-24-30-L935-CP250  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-30-L935-CP250  
Ballast/Driver: -

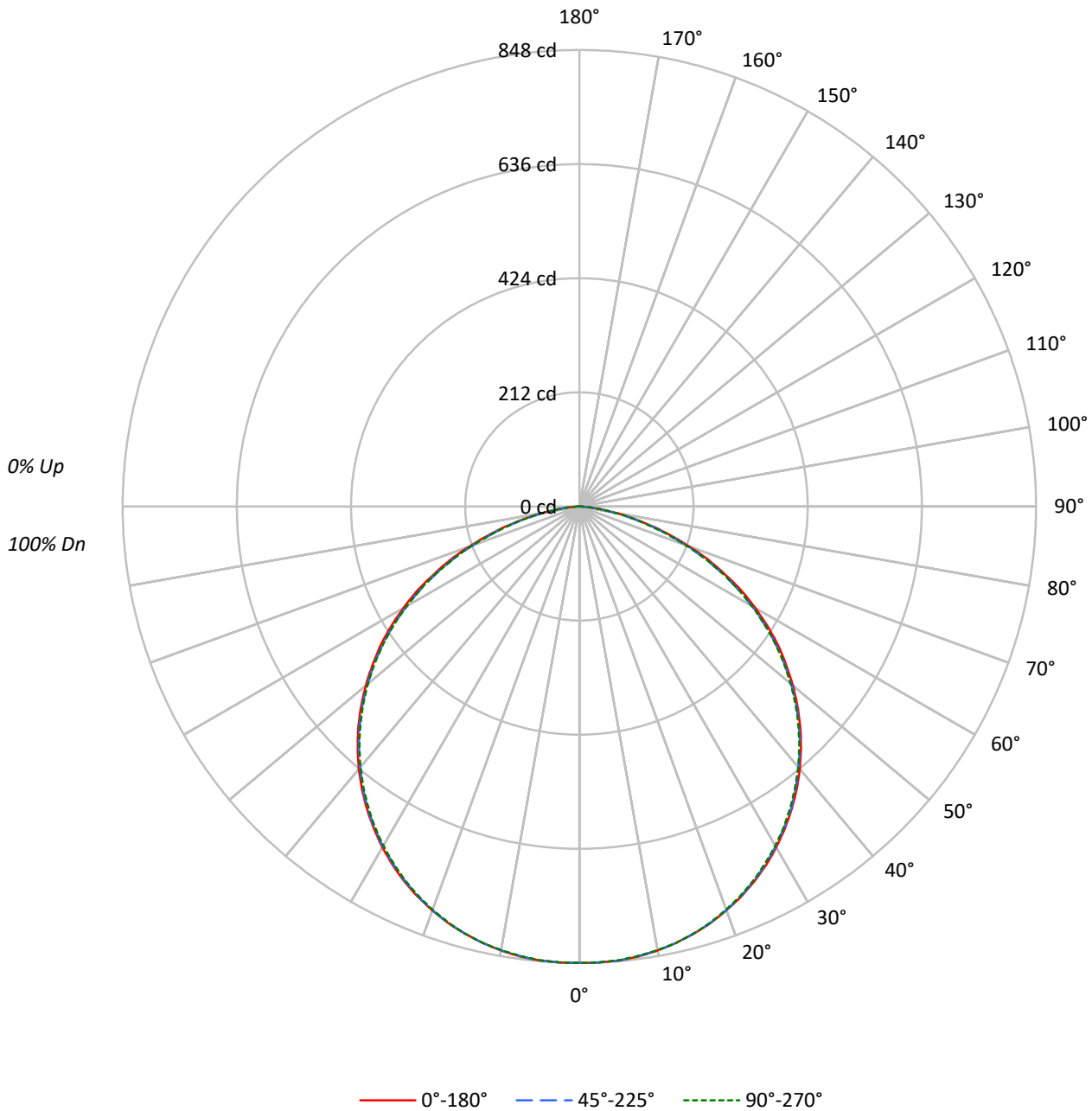
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2397.0 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.7  
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





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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 | 100 | 97  | 106 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 89  | 87  | 85  |    |    |    |    |    | 85  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 2   | 99  | 91  | 85  | 79  | 97  | 89  | 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  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 57  | 53  | 51  |    |    |    |    |    | 51  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 5   | 76  | 64  | 55  | 48  | 74  | 62  | 54  | 48  | 60  | 53  | 47  | 58  | 52  | 47  | 56  | 51  | 46  | 44  |    |    |    |    |    | 44  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 6   | 70  | 57  | 48  | 42  | 69  | 56  | 48  | 42  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 41  | 38  |    |    |    |    |    | 38  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 7   | 65  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 49  | 42  | 37  | 48  | 41  | 36  | 47  | 41  | 36  | 34  |    |    |    |    |    | 34  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 8   | 61  | 47  | 39  | 33  | 59  | 47  | 38  | 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  | 39  | 33  | 29  | 27  |    |    |    |    |    | 27  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 27  | 38  | 31  | 26  | 37  | 31  | 26  | 25  |    |    |    |    |    | 25  |  |  |  |    |  |  |  |  |  |  |  |  |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1141 | 1141 | 1141 |
| 5°  | 1143 | 1143 | 1143 |
| 10° | 1144 | 1144 | 1143 |
| 15° | 1144 | 1144 | 1144 |
| 20° | 1143 | 1143 | 1141 |
| 25° | 1141 | 1139 | 1137 |
| 30° | 1136 | 1133 | 1130 |
| 35° | 1129 | 1126 | 1122 |
| 40° | 1119 | 1112 | 1110 |
| 45° | 1104 | 1098 | 1094 |
| 50° | 1083 | 1075 | 1072 |
| 55° | 1058 | 1043 | 1042 |
| 60° | 1014 | 996  | 996  |
| 65° | 948  | 926  | 929  |
| 70° | 854  | 827  | 825  |
| 75° | 717  | 688  | 685  |
| 80° | 524  | 497  | 518  |
| 85° | 296  | 273  | 278  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1104 cd/sqm



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 CATALOG NUMBER: FLR2-24-30-L935-CP250

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.5   | 3.4       |
| 10°-20°   | 231.9  | 9.7       |
| 20°-30°   | 353.6  | 14.8      |
| 30°-40°   | 428.4  | 17.9      |
| 40°-50°   | 445.0  | 18.6      |
| 50°-60°   | 398.1  | 16.6      |
| 60°-70°   | 290.1  | 12.1      |
| 70°-80°   | 143.7  | 6.0       |
| 80°-90°   | 25.7   | 1.1       |
| 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°    | 666.0  | 27.8      |
| 0°-40°    | 1094.4 | 45.7      |
| 0°-60°    | 1937.5 | 80.8      |
| 0°-90°    | 2397.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2397.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 848 | 848   | 848 | 848   | 848 |      |
| 5°  | 847 | 847   | 847 | 847   | 846 | 81   |
| 15° | 822 | 821   | 821 | 822   | 821 | 232  |
| 25° | 769 | 768   | 767 | 767   | 766 | 354  |
| 35° | 687 | 686   | 685 | 684   | 683 | 430  |
| 45° | 580 | 579   | 577 | 576   | 575 | 447  |
| 55° | 451 | 448   | 445 | 445   | 444 | 402  |
| 65° | 298 | 296   | 291 | 292   | 292 | 295  |
| 75° | 138 | 136   | 132 | 135   | 132 | 147  |
| 85° | 19  | 18    | 18  | 18    | 18  | 27   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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 CATALOG NUMBER: FLR2-24-30-L935-CP250

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 848.1 | 848.1 | 848.1 | 848.1 | 848.1 |
| 2.5°  | 848.1 | 847.8 | 847.8 | 848.1 | 847.5 |
| 5°    | 846.6 | 846.9 | 846.6 | 846.6 | 846.0 |
| 7.5°  | 843.2 | 842.9 | 842.6 | 842.9 | 842.0 |
| 10°   | 837.5 | 837.5 | 837.2 | 837.5 | 836.9 |
| 12.5° | 830.5 | 830.5 | 830.5 | 830.8 | 830.5 |
| 15°   | 821.6 | 821.3 | 821.3 | 821.9 | 821.3 |
| 17.5° | 811.3 | 811.0 | 811.0 | 810.7 | 810.1 |
| 20°   | 798.5 | 798.5 | 798.2 | 797.9 | 797.0 |
| 22.5° | 784.8 | 784.5 | 783.6 | 783.6 | 782.4 |
| 25°   | 768.7 | 767.8 | 767.2 | 766.9 | 766.0 |
| 27.5° | 751.0 | 749.8 | 748.9 | 748.3 | 747.4 |
| 30°   | 731.3 | 730.0 | 729.1 | 728.2 | 727.6 |
| 32.5° | 710.0 | 709.3 | 707.8 | 707.5 | 706.3 |
| 35°   | 687.1 | 686.2 | 685.3 | 684.1 | 682.9 |
| 37.5° | 662.8 | 661.9 | 659.7 | 659.1 | 658.2 |
| 40°   | 636.9 | 635.7 | 633.0 | 633.0 | 632.1 |
| 42.5° | 609.2 | 608.0 | 606.2 | 605.0 | 604.4 |
| 45°   | 580.3 | 579.1 | 577.0 | 575.8 | 575.1 |
| 47.5° | 549.6 | 548.7 | 546.2 | 545.3 | 544.4 |
| 50°   | 517.6 | 516.4 | 513.7 | 513.1 | 512.2 |
| 52.5° | 484.2 | 483.5 | 479.9 | 479.6 | 478.7 |
| 55°   | 451.0 | 447.6 | 444.6 | 444.6 | 444.0 |
| 57.5° | 414.5 | 412.0 | 408.1 | 408.1 | 407.5 |
| 60°   | 376.7 | 374.6 | 370.0 | 370.7 | 370.0 |
| 62.5° | 339.9 | 335.4 | 331.1 | 332.9 | 331.4 |
| 65°   | 297.9 | 295.5 | 290.9 | 292.1 | 291.8 |
| 67.5° | 259.6 | 255.0 | 250.8 | 253.2 | 252.0 |
| 70°   | 217.0 | 214.5 | 210.3 | 212.7 | 209.7 |
| 72.5° | 176.8 | 174.7 | 170.4 | 173.2 | 170.1 |
| 75°   | 137.9 | 135.7 | 132.4 | 134.8 | 131.8 |
| 77.5° | 101.0 | 99.5  | 96.5  | 98.9  | 99.5  |
| 80°   | 67.6  | 65.7  | 64.2  | 66.3  | 66.9  |
| 82.5° | 39.6  | 38.3  | 37.7  | 38.0  | 39.6  |
| 85°   | 19.2  | 17.7  | 17.7  | 18.0  | 18.0  |
| 87.5° | 5.2   | 4.6   | 5.2   | 5.5   | 5.8   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)