

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: P974461

Luminaire Tested: FLR2-24-45-L950-CP125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P974461  
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: FLR2-24-45-L950-CP125  
Description: SHAPER SENSE CIRCLE  
  
Light Source: FLR2-24-45-L950-CP125  
Ballast/Driver: -

**Summary**

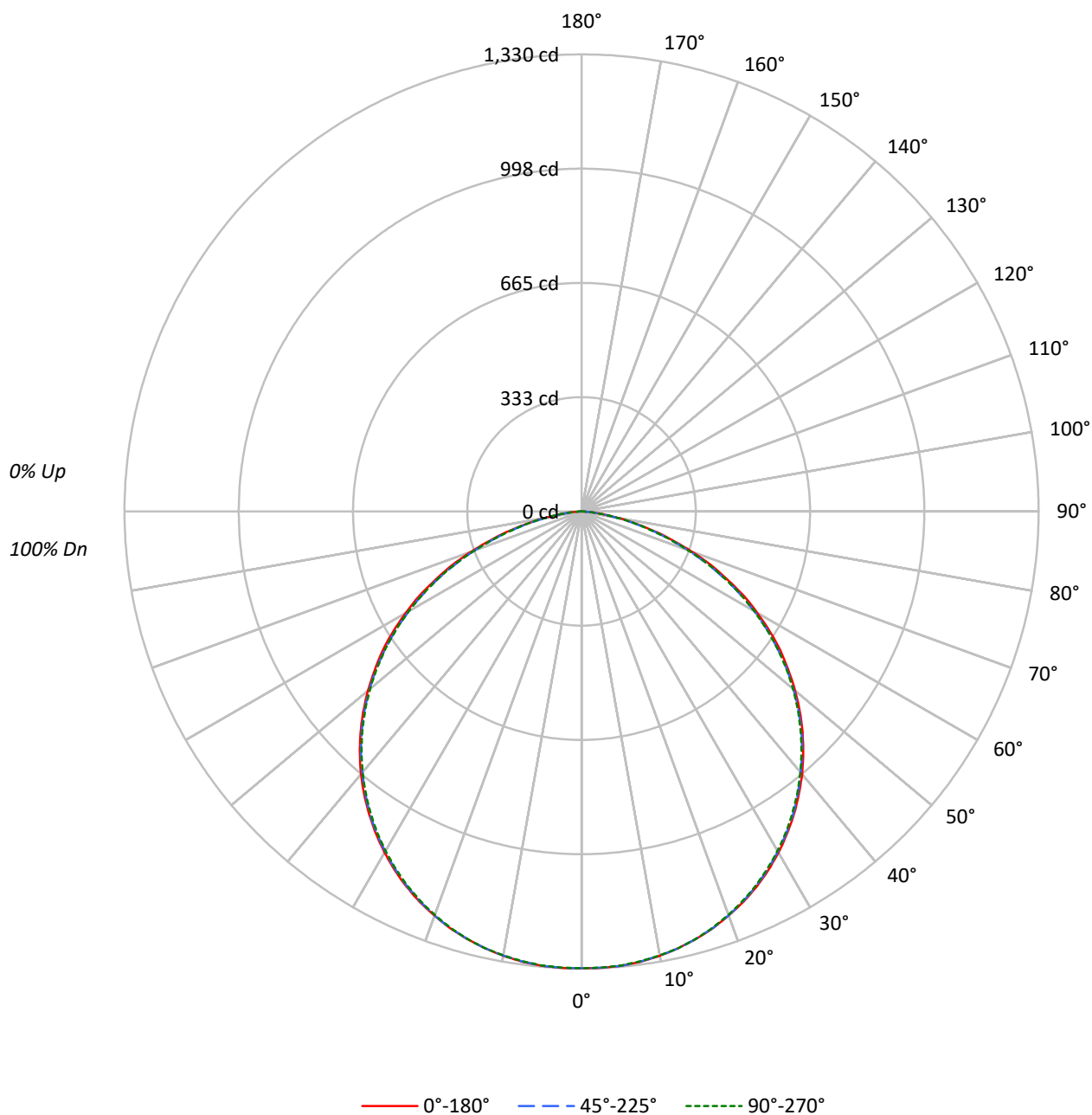
Lumens per Lamp: N/A  
Luminaire Lumens: 3757.5 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.6  
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  |     |     |     |    | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     |     | 50  |     |     |     |     | 30  |     |     |     |    | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 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°  | 1789 | 1789 | 1789 |
| 5°  | 1792 | 1792 | 1791 |
| 10° | 1794 | 1793 | 1792 |
| 15° | 1794 | 1793 | 1793 |
| 20° | 1792 | 1792 | 1789 |
| 25° | 1789 | 1785 | 1783 |
| 30° | 1781 | 1776 | 1772 |
| 35° | 1769 | 1765 | 1758 |
| 40° | 1754 | 1743 | 1740 |
| 45° | 1731 | 1721 | 1716 |
| 50° | 1698 | 1685 | 1680 |
| 55° | 1658 | 1635 | 1633 |
| 60° | 1589 | 1561 | 1561 |
| 65° | 1487 | 1452 | 1457 |
| 70° | 1338 | 1297 | 1293 |
| 75° | 1123 | 1079 | 1074 |
| 80° | 821  | 780  | 813  |
| 85° | 465  | 428  | 434  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1731 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 126.2  | 3.4       |
| 10°-20°   | 363.5  | 9.7       |
| 20°-30°   | 554.3  | 14.8      |
| 30°-40°   | 671.6  | 17.9      |
| 40°-50°   | 697.6  | 18.6      |
| 50°-60°   | 624.0  | 16.6      |
| 60°-70°   | 454.8  | 12.1      |
| 70°-80°   | 225.2  | 6.0       |
| 80°-90°   | 40.3   | 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°    | 1044.0 | 27.8      |
| 0°-40°    | 1715.6 | 45.7      |
| 0°-60°    | 3037.2 | 80.8      |
| 0°-90°    | 3757.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3757.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1330 | 1330  | 1330 | 1330  | 1330 |      |
| 5°  | 1327 | 1328  | 1327 | 1327  | 1326 | 126  |
| 15° | 1288 | 1288  | 1288 | 1288  | 1288 | 364  |
| 25° | 1205 | 1204  | 1203 | 1202  | 1201 | 555  |
| 35° | 1077 | 1076  | 1074 | 1072  | 1070 | 674  |
| 45° | 910  | 908   | 904  | 902   | 902  | 701  |
| 55° | 707  | 702   | 697  | 697   | 696  | 630  |
| 65° | 467  | 463   | 456  | 458   | 458  | 463  |
| 75° | 216  | 213   | 208  | 211   | 207  | 230  |
| 85° | 30   | 28    | 28   | 28    | 28   | 42   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1329.5 | 1329.5 | 1329.5 | 1329.5 | 1329.5 |
| 2.5°  | 1329.5 | 1329.0 | 1329.0 | 1329.5 | 1328.5 |
| 5°    | 1327.1 | 1327.6 | 1327.1 | 1327.1 | 1326.1 |
| 7.5°  | 1321.8 | 1321.4 | 1320.9 | 1321.4 | 1319.9 |
| 10°   | 1312.8 | 1312.8 | 1312.3 | 1312.8 | 1311.8 |
| 12.5° | 1301.8 | 1301.8 | 1301.8 | 1302.3 | 1301.8 |
| 15°   | 1288.0 | 1287.5 | 1287.5 | 1288.4 | 1287.5 |
| 17.5° | 1271.7 | 1271.3 | 1271.3 | 1270.8 | 1269.8 |
| 20°   | 1251.7 | 1251.7 | 1251.2 | 1250.8 | 1249.3 |
| 22.5° | 1230.2 | 1229.8 | 1228.3 | 1228.3 | 1226.4 |
| 25°   | 1205.0 | 1203.5 | 1202.6 | 1202.1 | 1200.7 |
| 27.5° | 1177.3 | 1175.4 | 1174.0 | 1173.0 | 1171.6 |
| 30°   | 1146.3 | 1144.4 | 1142.9 | 1141.5 | 1140.6 |
| 32.5° | 1112.9 | 1111.9 | 1109.6 | 1109.1 | 1107.2 |
| 35°   | 1077.1 | 1075.7 | 1074.3 | 1072.3 | 1070.4 |
| 37.5° | 1039.0 | 1037.5 | 1034.2 | 1033.2 | 1031.8 |
| 40°   | 998.4  | 996.5  | 992.2  | 992.2  | 990.8  |
| 42.5° | 955.0  | 953.1  | 950.2  | 948.3  | 947.4  |
| 45°   | 909.7  | 907.8  | 904.4  | 902.5  | 901.6  |
| 47.5° | 861.5  | 860.1  | 856.3  | 854.8  | 853.4  |
| 50°   | 811.4  | 809.5  | 805.2  | 804.3  | 802.8  |
| 52.5° | 758.9  | 758.0  | 752.3  | 751.8  | 750.4  |
| 55°   | 706.9  | 701.7  | 696.9  | 696.9  | 696.0  |
| 57.5° | 649.7  | 645.9  | 639.7  | 639.7  | 638.7  |
| 60°   | 590.6  | 587.2  | 580.1  | 581.0  | 580.1  |
| 62.5° | 532.8  | 525.7  | 519.0  | 521.9  | 519.5  |
| 65°   | 467.0  | 463.2  | 456.0  | 457.9  | 457.5  |
| 67.5° | 406.9  | 399.7  | 393.1  | 396.9  | 395.0  |
| 70°   | 340.1  | 336.3  | 329.6  | 333.4  | 328.7  |
| 72.5° | 277.1  | 273.8  | 267.1  | 271.4  | 266.7  |
| 75°   | 216.1  | 212.8  | 207.5  | 211.3  | 206.6  |
| 77.5° | 158.4  | 156.0  | 151.2  | 155.0  | 156.0  |
| 80°   | 105.9  | 103.0  | 100.7  | 104.0  | 104.9  |
| 82.5° | 62.0   | 60.1   | 59.2   | 59.6   | 62.0   |
| 85°   | 30.1   | 27.7   | 27.7   | 28.1   | 28.1   |
| 87.5° | 8.1    | 7.2    | 8.1    | 8.6    | 9.1    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)