

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: P975055

Luminaire Tested: FLR2-24-20HE-L950-CP125

Issue Date: 3/13/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P975055  
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: FLR2-24-20HE-L950-CP125  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

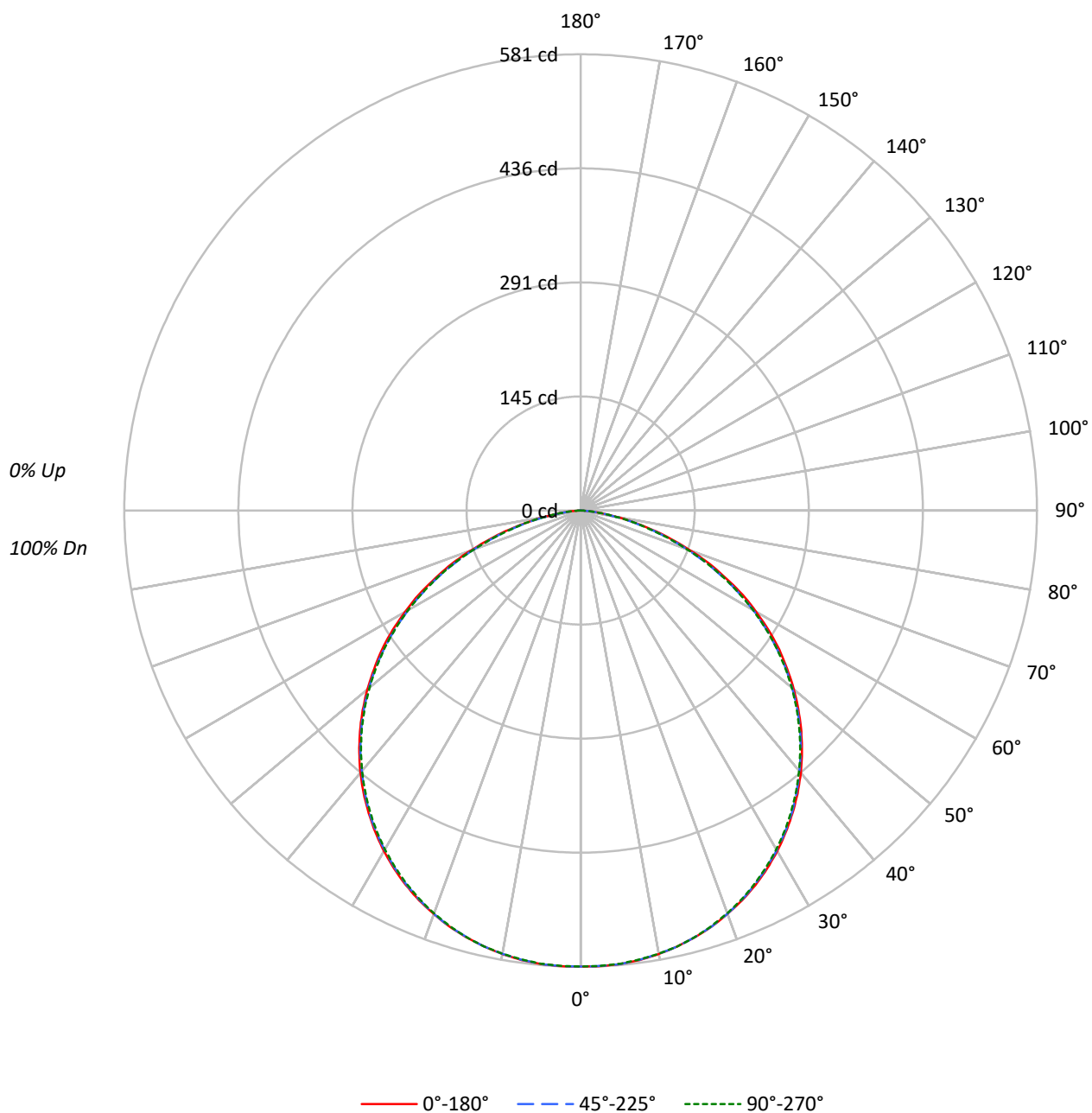
Lumens per Lamp: N/A  
Luminaire Lumens: 1641.4 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.9  
Input Voltage (V):  
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°  | 781 | 781 | 781 |
| 5°  | 783 | 783 | 782 |
| 10° | 784 | 783 | 783 |
| 15° | 784 | 783 | 783 |
| 20° | 783 | 783 | 781 |
| 25° | 781 | 780 | 779 |
| 30° | 778 | 776 | 774 |
| 35° | 773 | 771 | 768 |
| 40° | 766 | 761 | 760 |
| 45° | 756 | 752 | 750 |
| 50° | 742 | 736 | 734 |
| 55° | 724 | 714 | 713 |
| 60° | 694 | 682 | 682 |
| 65° | 649 | 634 | 636 |
| 70° | 585 | 566 | 565 |
| 75° | 491 | 471 | 469 |
| 80° | 359 | 341 | 355 |
| 85° | 202 | 187 | 190 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 756 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 55.1   | 3.4       |
| 10°-20°   | 158.8  | 9.7       |
| 20°-30°   | 242.1  | 14.8      |
| 30°-40°   | 293.4  | 17.9      |
| 40°-50°   | 304.7  | 18.6      |
| 50°-60°   | 272.6  | 16.6      |
| 60°-70°   | 198.7  | 12.1      |
| 70°-80°   | 98.4   | 6.0       |
| 80°-90°   | 17.6   | 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°    | 456.1  | 27.8      |
| 0°-40°    | 749.4  | 45.7      |
| 0°-60°    | 1326.8 | 80.8      |
| 0°-90°    | 1641.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1641.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 581 | 581   | 581 | 581   | 581 |      |
| 5°  | 580 | 580   | 580 | 580   | 579 | 55   |
| 15° | 563 | 562   | 562 | 563   | 562 | 159  |
| 25° | 526 | 526   | 525 | 525   | 524 | 243  |
| 35° | 470 | 470   | 469 | 468   | 468 | 294  |
| 45° | 397 | 397   | 395 | 394   | 394 | 306  |
| 55° | 309 | 306   | 304 | 304   | 304 | 275  |
| 65° | 204 | 202   | 199 | 200   | 200 | 202  |
| 75° | 94  | 93    | 91  | 92    | 90  | 101  |
| 85° | 13  | 12    | 12  | 12    | 12  | 18   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 |
| 2.5°  | 580.8 | 580.6 | 580.6 | 580.8 | 580.4 |
| 5°    | 579.7 | 579.9 | 579.7 | 579.7 | 579.3 |
| 7.5°  | 577.4 | 577.2 | 577.0 | 577.2 | 576.6 |
| 10°   | 573.5 | 573.5 | 573.3 | 573.5 | 573.1 |
| 12.5° | 568.7 | 568.7 | 568.7 | 568.9 | 568.7 |
| 15°   | 562.6 | 562.4 | 562.4 | 562.9 | 562.4 |
| 17.5° | 555.6 | 555.4 | 555.4 | 555.1 | 554.7 |
| 20°   | 546.8 | 546.8 | 546.6 | 546.4 | 545.8 |
| 22.5° | 537.4 | 537.2 | 536.6 | 536.6 | 535.8 |
| 25°   | 526.4 | 525.8 | 525.3 | 525.1 | 524.5 |
| 27.5° | 514.3 | 513.5 | 512.8 | 512.4 | 511.8 |
| 30°   | 500.8 | 499.9 | 499.3 | 498.7 | 498.3 |
| 32.5° | 486.2 | 485.8 | 484.7 | 484.5 | 483.7 |
| 35°   | 470.5 | 469.9 | 469.3 | 468.5 | 467.6 |
| 37.5° | 453.9 | 453.2 | 451.8 | 451.4 | 450.7 |
| 40°   | 436.2 | 435.3 | 433.4 | 433.4 | 432.8 |
| 42.5° | 417.2 | 416.4 | 415.1 | 414.3 | 413.9 |
| 45°   | 397.4 | 396.6 | 395.1 | 394.3 | 393.9 |
| 47.5° | 376.3 | 375.7 | 374.1 | 373.4 | 372.8 |
| 50°   | 354.5 | 353.6 | 351.8 | 351.3 | 350.7 |
| 52.5° | 331.5 | 331.1 | 328.6 | 328.4 | 327.8 |
| 55°   | 308.8 | 306.5 | 304.5 | 304.5 | 304.0 |
| 57.5° | 283.8 | 282.2 | 279.4 | 279.4 | 279.0 |
| 60°   | 258.0 | 256.5 | 253.4 | 253.8 | 253.4 |
| 62.5° | 232.8 | 229.6 | 226.7 | 228.0 | 226.9 |
| 65°   | 204.0 | 202.3 | 199.2 | 200.1 | 199.8 |
| 67.5° | 177.8 | 174.6 | 171.7 | 173.4 | 172.5 |
| 70°   | 148.6 | 146.9 | 144.0 | 145.7 | 143.6 |
| 72.5° | 121.1 | 119.6 | 116.7 | 118.6 | 116.5 |
| 75°   | 94.4  | 92.9  | 90.6  | 92.3  | 90.2  |
| 77.5° | 69.2  | 68.1  | 66.1  | 67.7  | 68.1  |
| 80°   | 46.3  | 45.0  | 44.0  | 45.4  | 45.8  |
| 82.5° | 27.1  | 26.3  | 25.8  | 26.0  | 27.1  |
| 85°   | 13.1  | 12.1  | 12.1  | 12.3  | 12.3  |
| 87.5° | 3.5   | 3.1   | 3.5   | 3.8   | 4.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)