

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: P974056

Luminaire Tested: FLR2-22-60HE-L950-CA125

Issue Date: 3/13/2025

**Test Information**

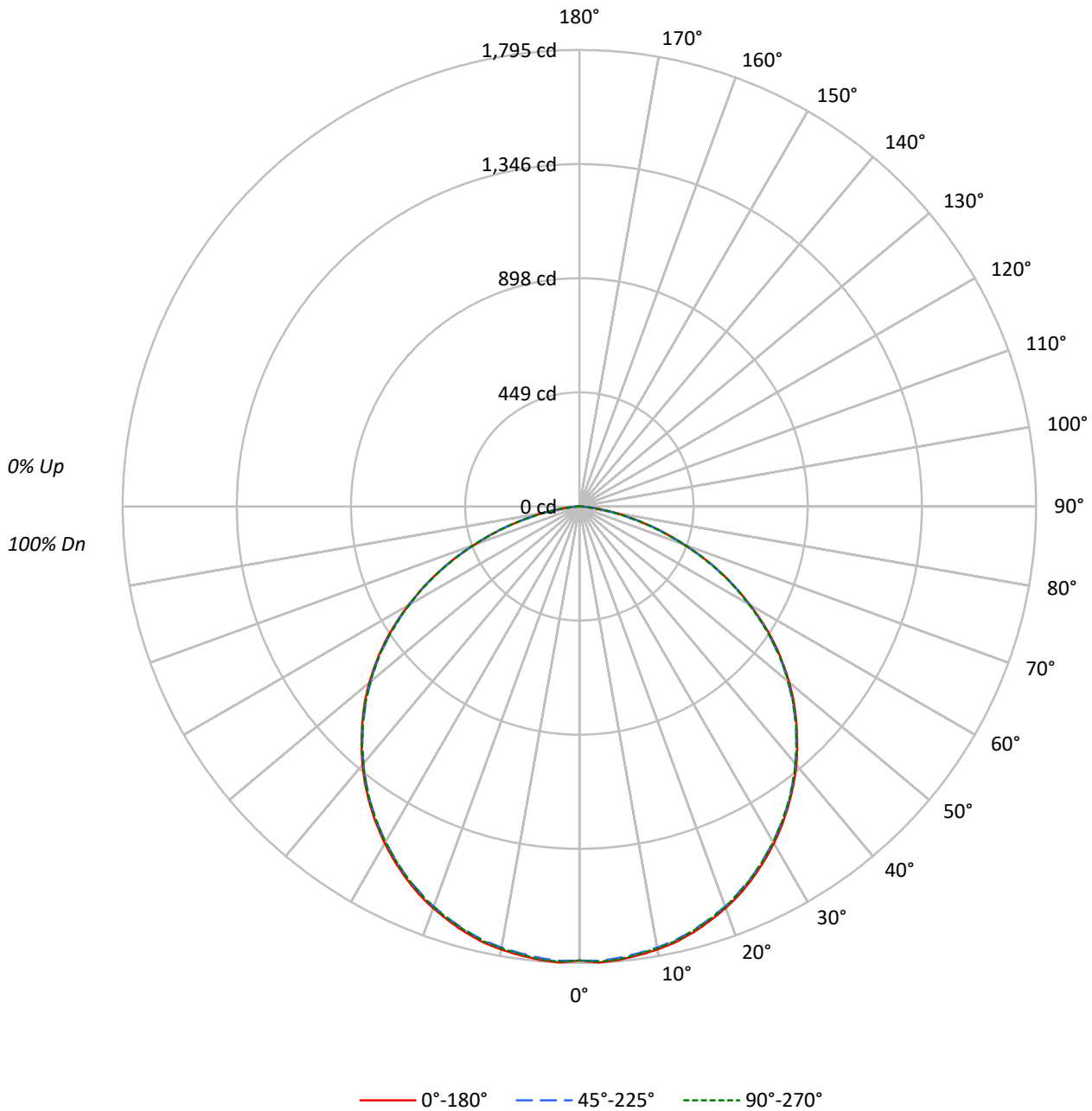
Test Method: LM-79-2019  
Report Number: P974056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-60HE-L950-CA125  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4993.2 lumens  
Efficiency: N/A  
Efficacy: 105.3 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): 47.4  
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  |     |     |     | 10  | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |
| 1   | 109 | 105 | 101 | 97  | 107 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 89  | 91  | 89  | 87  | 85  |
| 2   | 99  | 91  | 85  | 79  | 97  | 90  | 83  | 78  | 86  | 81  | 76  | 83  | 78  | 75  | 80  | 76  | 73  | 71  |
| 3   | 91  | 80  | 72  | 66  | 88  | 79  | 71  | 65  | 76  | 69  | 64  | 73  | 68  | 63  | 70  | 66  | 62  | 60  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |
| 5   | 76  | 64  | 55  | 48  | 74  | 62  | 54  | 48  | 60  | 53  | 47  | 58  | 52  | 47  | 57  | 51  | 46  | 44  |
| 6   | 71  | 57  | 48  | 42  | 69  | 56  | 48  | 42  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 41  | 39  |
| 7   | 65  | 52  | 43  | 37  | 64  | 51  | 43  | 37  | 50  | 42  | 37  | 48  | 41  | 36  | 47  | 41  | 36  | 34  |
| 8   | 61  | 47  | 39  | 33  | 59  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 32  | 43  | 37  | 32  | 30  |
| 9   | 57  | 43  | 35  | 30  | 55  | 43  | 35  | 30  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 34  | 29  | 27  |
| 10  | 53  | 40  | 32  | 27  | 52  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 26  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4805 | 4805 | 4805 |
| 5°  | 4835 | 4814 | 4829 |
| 10° | 4834 | 4813 | 4822 |
| 15° | 4830 | 4808 | 4815 |
| 20° | 4813 | 4794 | 4800 |
| 25° | 4787 | 4768 | 4771 |
| 30° | 4753 | 4732 | 4736 |
| 35° | 4710 | 4692 | 4695 |
| 40° | 4660 | 4637 | 4641 |
| 45° | 4591 | 4571 | 4579 |
| 50° | 4511 | 4479 | 4488 |
| 55° | 4382 | 4346 | 4362 |
| 60° | 4167 | 4149 | 4149 |
| 65° | 3890 | 3883 | 3869 |
| 70° | 3445 | 3462 | 3453 |
| 75° | 2901 | 2878 | 2855 |
| 80° | 2084 | 2050 | 2033 |
| 85° | 1090 | 1090 | 1056 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4591 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 169.1  | 3.4       |
| 10°-20°   | 486.2  | 9.7       |
| 20°-30°   | 738.9  | 14.8      |
| 30°-40°   | 893.1  | 17.9      |
| 40°-50°   | 927.0  | 18.6      |
| 50°-60°   | 828.8  | 16.6      |
| 60°-70°   | 602.6  | 12.1      |
| 70°-80°   | 296.3  | 5.9       |
| 80°-90°   | 51.4   | 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°    | 1394.2 | 27.9      |
| 0°-40°    | 2287.2 | 45.8      |
| 0°-60°    | 4043.0 | 81.0      |
| 0°-90°    | 4993.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4993.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1786 | 1786  | 1786 | 1786  | 1786 |      |
| 5°  | 1790 | 1769  | 1782 | 1776  | 1788 | 170  |
| 15° | 1734 | 1714  | 1726 | 1722  | 1728 | 489  |
| 25° | 1612 | 1595  | 1606 | 1602  | 1607 | 743  |
| 35° | 1434 | 1424  | 1428 | 1429  | 1429 | 897  |
| 45° | 1206 | 1201  | 1201 | 1203  | 1203 | 931  |
| 55° | 934  | 929   | 926  | 929   | 930  | 833  |
| 65° | 611  | 613   | 610  | 610   | 608  | 603  |
| 75° | 279  | 281   | 277  | 278   | 275  | 296  |
| 85° | 35   | 36    | 35   | 35    | 34   | 52   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1785.5 | 1785.5 | 1785.5 | 1785.5 | 1785.5 |
| 2.5°  | 1795.4 | 1774.5 | 1787.7 | 1780.0 | 1792.1 |
| 5°    | 1789.9 | 1769.0 | 1782.2 | 1775.6 | 1787.7 |
| 7.5°  | 1780.0 | 1759.0 | 1772.3 | 1765.7 | 1775.6 |
| 10°   | 1769.0 | 1746.9 | 1761.3 | 1754.6 | 1764.6 |
| 12.5° | 1754.6 | 1733.7 | 1746.9 | 1741.4 | 1750.2 |
| 15°   | 1733.7 | 1713.8 | 1726.0 | 1721.5 | 1728.2 |
| 17.5° | 1708.3 | 1688.5 | 1700.6 | 1697.3 | 1702.8 |
| 20°   | 1680.7 | 1662.0 | 1674.1 | 1670.8 | 1676.3 |
| 22.5° | 1649.9 | 1630.0 | 1641.0 | 1638.8 | 1643.2 |
| 25°   | 1612.4 | 1594.7 | 1605.7 | 1602.4 | 1606.9 |
| 27.5° | 1572.7 | 1556.1 | 1564.9 | 1564.9 | 1567.1 |
| 30°   | 1529.7 | 1514.2 | 1523.0 | 1523.0 | 1524.1 |
| 32.5° | 1483.3 | 1471.2 | 1476.7 | 1477.8 | 1477.8 |
| 35°   | 1433.7 | 1423.8 | 1428.2 | 1429.3 | 1429.3 |
| 37.5° | 1381.9 | 1371.9 | 1375.3 | 1377.5 | 1377.5 |
| 40°   | 1326.7 | 1317.9 | 1320.1 | 1322.3 | 1321.2 |
| 42.5° | 1267.2 | 1260.6 | 1261.7 | 1263.9 | 1263.9 |
| 45°   | 1206.5 | 1201.0 | 1201.0 | 1203.2 | 1203.2 |
| 47.5° | 1144.8 | 1139.2 | 1137.0 | 1139.2 | 1139.2 |
| 50°   | 1077.5 | 1072.0 | 1069.8 | 1072.0 | 1072.0 |
| 52.5° | 1006.9 | 1001.4 | 1001.4 | 1001.4 | 1002.5 |
| 55°   | 934.1  | 928.6  | 926.4  | 928.6  | 929.7  |
| 57.5° | 856.9  | 854.7  | 851.4  | 852.5  | 849.2  |
| 60°   | 774.2  | 774.2  | 770.9  | 773.1  | 770.9  |
| 62.5° | 693.7  | 695.9  | 692.6  | 692.6  | 690.4  |
| 65°   | 611.0  | 613.2  | 609.9  | 609.9  | 607.7  |
| 67.5° | 526.1  | 529.4  | 525.0  | 525.0  | 522.8  |
| 70°   | 437.8  | 444.4  | 440.0  | 441.1  | 438.9  |
| 72.5° | 358.4  | 361.7  | 357.3  | 357.3  | 355.1  |
| 75°   | 279.0  | 281.2  | 276.8  | 277.9  | 274.6  |
| 77.5° | 200.7  | 204.0  | 199.6  | 200.7  | 199.6  |
| 80°   | 134.5  | 135.7  | 132.3  | 133.4  | 131.2  |
| 82.5° | 78.3   | 79.4   | 78.3   | 77.2   | 76.1   |
| 85°   | 35.3   | 36.4   | 35.3   | 35.3   | 34.2   |
| 87.5° | 8.8    | 8.8    | 8.8    | 8.8    | 8.8    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)