

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: P973302

Luminaire Tested: FLR2-14-70HE-L950-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-70HE-L950-CP125
Description: 1*4 FLR-2.0 7000 Lumen High Efficacy at 5000CCT & 90 CRI Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

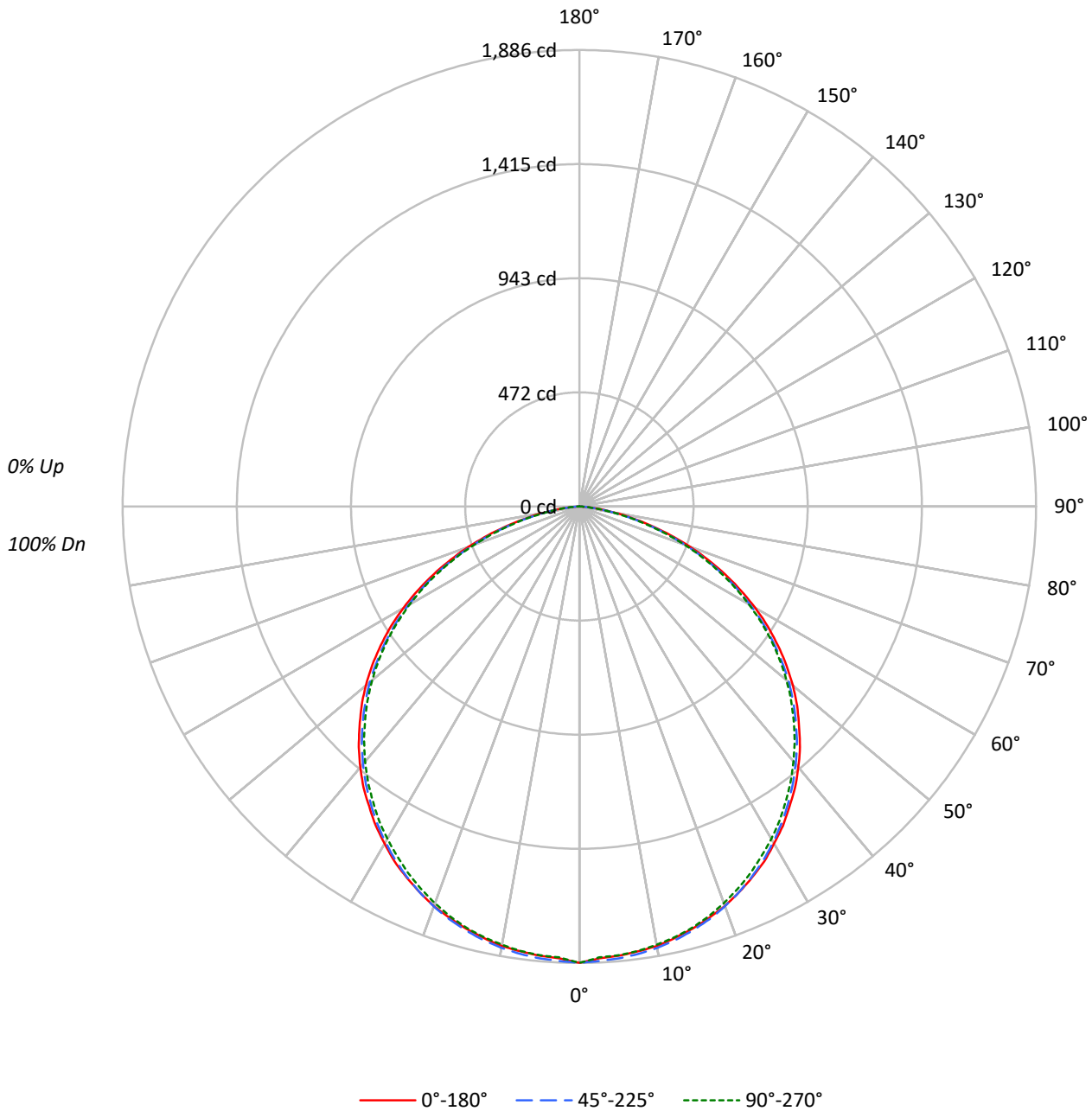
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5277.2 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 52.5
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: P973302
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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 | 62 | 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 | 70 | 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 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 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 | 39 | 32 | 27 | 38 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5074 | 5074 | 5074 |
| 5° | 5034 | 5064 | 5028 |
| 10° | 5039 | 5060 | 5024 |
| 15° | 5031 | 5051 | 5020 |
| 20° | 5031 | 5035 | 4995 |
| 25° | 5019 | 5010 | 4963 |
| 30° | 4998 | 4976 | 4928 |
| 35° | 4971 | 4933 | 4884 |
| 40° | 4943 | 4882 | 4833 |
| 45° | 4883 | 4814 | 4764 |
| 50° | 4819 | 4731 | 4675 |
| 55° | 4698 | 4588 | 4544 |
| 60° | 4515 | 4389 | 4351 |
| 65° | 4229 | 4104 | 4060 |
| 70° | 3813 | 3659 | 3629 |
| 75° | 3197 | 3035 | 3003 |
| 80° | 2321 | 2165 | 2104 |
| 85° | 1229 | 1084 | 988 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4883 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 178.6 | 3.4 |
| 10°-20° | 512.9 | 9.7 |
| 20°-30° | 779.2 | 14.8 |
| 30°-40° | 942.5 | 17.9 |
| 40°-50° | 979.6 | 18.6 |
| 50°-60° | 877.0 | 16.6 |
| 60°-70° | 639.7 | 12.1 |
| 70°-80° | 315.0 | 6.0 |
| 80°-90° | 52.7 | 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° | 1470.6 | 27.9 |
| 0°-40° | 2413.2 | 45.7 |
| 0°-60° | 4269.8 | 80.9 |
| 0°-90° | 5277.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5277.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1886 | 1886 | 1886 | 1886 | 1886 | |
| 5° | 1864 | 1884 | 1874 | 1892 | 1861 | 177 |
| 15° | 1806 | 1822 | 1813 | 1828 | 1802 | 510 |
| 25° | 1690 | 1699 | 1687 | 1695 | 1672 | 779 |
| 35° | 1513 | 1516 | 1502 | 1508 | 1487 | 948 |
| 45° | 1283 | 1281 | 1265 | 1267 | 1252 | 991 |
| 55° | 1001 | 993 | 978 | 976 | 968 | 894 |
| 65° | 664 | 656 | 645 | 640 | 638 | 656 |
| 75° | 308 | 302 | 292 | 289 | 289 | 328 |
| 85° | 40 | 38 | 35 | 31 | 32 | 57 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973302
 CATALOG NUMBER: FLR2-14-70HE-L950-CP125

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1885.5 | 1885.5 | 1885.5 | 1885.5 | 1885.5 |
| 2.5° | 1869.1 | 1890.2 | 1880.0 | 1898.7 | 1865.2 |
| 5° | 1863.6 | 1883.9 | 1874.5 | 1892.5 | 1861.3 |
| 7.5° | 1854.3 | 1875.3 | 1865.2 | 1882.4 | 1852.7 |
| 10° | 1844.1 | 1862.8 | 1851.9 | 1869.1 | 1838.6 |
| 12.5° | 1826.2 | 1844.9 | 1834.7 | 1850.4 | 1822.3 |
| 15° | 1805.9 | 1822.3 | 1812.9 | 1828.5 | 1802.0 |
| 17.5° | 1782.5 | 1798.1 | 1787.9 | 1802.0 | 1775.4 |
| 20° | 1756.7 | 1769.2 | 1758.3 | 1770.0 | 1744.2 |
| 22.5° | 1724.7 | 1736.4 | 1724.7 | 1732.5 | 1709.9 |
| 25° | 1690.4 | 1699.0 | 1687.2 | 1695.1 | 1671.6 |
| 27.5° | 1653.7 | 1658.4 | 1646.7 | 1652.9 | 1628.7 |
| 30° | 1608.4 | 1613.9 | 1601.4 | 1609.2 | 1585.8 |
| 32.5° | 1564.7 | 1567.8 | 1553.8 | 1560.0 | 1539.0 |
| 35° | 1513.2 | 1516.3 | 1501.5 | 1507.8 | 1486.7 |
| 37.5° | 1464.1 | 1463.3 | 1447.7 | 1451.6 | 1433.6 |
| 40° | 1407.1 | 1406.3 | 1389.9 | 1393.0 | 1375.9 |
| 42.5° | 1348.6 | 1345.4 | 1329.8 | 1331.4 | 1315.8 |
| 45° | 1283.0 | 1281.4 | 1265.0 | 1267.4 | 1251.8 |
| 47.5° | 1219.8 | 1215.1 | 1198.7 | 1199.5 | 1186.2 |
| 50° | 1151.1 | 1144.1 | 1130.0 | 1128.5 | 1116.8 |
| 52.5° | 1077.7 | 1069.9 | 1054.3 | 1052.8 | 1044.2 |
| 55° | 1001.3 | 992.7 | 977.9 | 975.5 | 968.5 |
| 57.5° | 922.4 | 911.5 | 899.8 | 895.1 | 889.7 |
| 60° | 838.9 | 828.8 | 815.5 | 810.8 | 808.5 |
| 62.5° | 752.3 | 742.2 | 732.0 | 727.3 | 724.2 |
| 65° | 664.1 | 656.3 | 644.6 | 639.9 | 637.6 |
| 67.5° | 574.4 | 567.4 | 556.4 | 551.0 | 550.2 |
| 70° | 484.6 | 477.6 | 465.1 | 462.0 | 461.2 |
| 72.5° | 394.9 | 388.6 | 376.9 | 373.8 | 373.8 |
| 75° | 307.5 | 302.0 | 291.9 | 288.8 | 288.8 |
| 77.5° | 224.8 | 220.1 | 212.3 | 208.4 | 208.4 |
| 80° | 149.8 | 146.7 | 139.7 | 136.6 | 135.8 |
| 82.5° | 86.6 | 85.1 | 78.8 | 75.7 | 77.3 |
| 85° | 39.8 | 38.2 | 35.1 | 31.2 | 32.0 |
| 87.5° | 10.1 | 9.4 | 7.0 | 5.5 | 7.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)