

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: P973110

Luminaire Tested: FLR2-14-30HE-L930-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973110
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: FLR2-14-30HE-L930-CA080
Description: 1*4 FLR-2.0 3000 Lumen High Efficacy at 3000CCT & 90 CRI Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

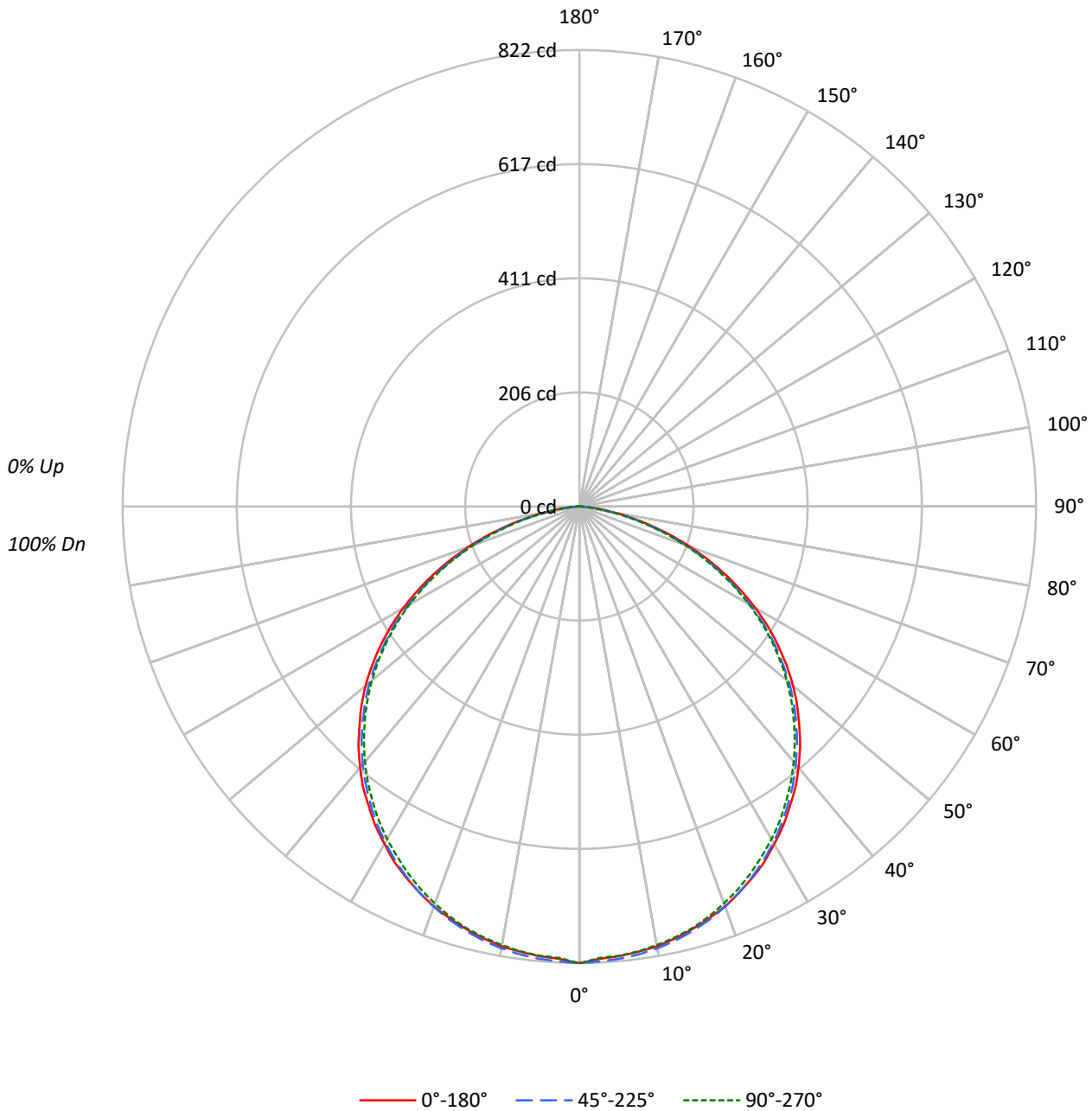
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2302.1 lumens
Efficiency: N/A
Efficacy: 102.8 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): 22.4
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





TEST NUMBER: P973110
 CATALOG NUMBER: FLR2-14-30HE-L930-CA080

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 | 101 | 97 | 107 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 91 | 89 | 87 | 85 | | | | | | 85 | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 85 | 79 | 97 | 90 | 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 | 58 | 53 | 51 | | | | | | 51 | | | | | | | | | | | | | | |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | 44 | | | | | | 44 | | | | | | | | | | | | | | |
| 6 | 70 | 57 | 48 | 42 | 69 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 41 | 39 | | | | | | 39 | | | | | | | | | | | | | | |
| 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 | 40 | 34 | 29 | 27 | | | | | | 27 | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 | | | | | | 25 | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2213 | 2213 | 2213 |
| 5° | 2196 | 2209 | 2193 |
| 10° | 2198 | 2208 | 2192 |
| 15° | 2195 | 2203 | 2190 |
| 20° | 2194 | 2196 | 2179 |
| 25° | 2189 | 2185 | 2165 |
| 30° | 2180 | 2171 | 2150 |
| 35° | 2168 | 2152 | 2131 |
| 40° | 2156 | 2130 | 2108 |
| 45° | 2130 | 2100 | 2078 |
| 50° | 2102 | 2064 | 2040 |
| 55° | 2049 | 2001 | 1982 |
| 60° | 1970 | 1915 | 1898 |
| 65° | 1845 | 1791 | 1771 |
| 70° | 1663 | 1596 | 1583 |
| 75° | 1394 | 1324 | 1310 |
| 80° | 1013 | 944 | 917 |
| 85° | 537 | 472 | 432 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2130 cd/sqm



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 CATALOG NUMBER: FLR2-14-30HE-L930-CA080

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.9 | 3.4 |
| 10°-20° | 223.7 | 9.7 |
| 20°-30° | 339.9 | 14.8 |
| 30°-40° | 411.2 | 17.9 |
| 40°-50° | 427.3 | 18.6 |
| 50°-60° | 382.6 | 16.6 |
| 60°-70° | 279.1 | 12.1 |
| 70°-80° | 137.4 | 6.0 |
| 80°-90° | 23.0 | 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° | 641.6 | 27.9 |
| 0°-40° | 1052.7 | 45.7 |
| 0°-60° | 1862.7 | 80.9 |
| 0°-90° | 2302.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2302.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 822 | 822 | 822 | 822 | 822 | |
| 5° | 813 | 822 | 818 | 826 | 812 | 77 |
| 15° | 788 | 795 | 791 | 798 | 786 | 222 |
| 25° | 737 | 741 | 736 | 740 | 729 | 340 |
| 35° | 660 | 662 | 655 | 658 | 649 | 413 |
| 45° | 560 | 559 | 552 | 553 | 546 | 432 |
| 55° | 437 | 433 | 427 | 426 | 422 | 390 |
| 65° | 290 | 286 | 281 | 279 | 278 | 286 |
| 75° | 134 | 132 | 127 | 126 | 126 | 143 |
| 85° | 17 | 17 | 15 | 14 | 14 | 25 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973110
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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 822.5 | 822.5 | 822.5 | 822.5 | 822.5 |
| 2.5° | 815.4 | 824.6 | 820.1 | 828.3 | 813.7 |
| 5° | 813.0 | 821.8 | 817.8 | 825.6 | 812.0 |
| 7.5° | 808.9 | 818.1 | 813.7 | 821.2 | 808.2 |
| 10° | 804.5 | 812.7 | 807.9 | 815.4 | 802.1 |
| 12.5° | 796.6 | 804.8 | 800.4 | 807.2 | 794.9 |
| 15° | 787.8 | 794.9 | 790.9 | 797.7 | 786.1 |
| 17.5° | 777.6 | 784.4 | 780.0 | 786.1 | 774.5 |
| 20° | 766.3 | 771.8 | 767.0 | 772.1 | 760.9 |
| 22.5° | 752.4 | 757.5 | 752.4 | 755.8 | 745.9 |
| 25° | 737.4 | 741.2 | 736.0 | 739.5 | 729.2 |
| 27.5° | 721.4 | 723.5 | 718.3 | 721.1 | 710.5 |
| 30° | 701.7 | 704.0 | 698.6 | 702.0 | 691.8 |
| 32.5° | 682.6 | 684.0 | 677.8 | 680.6 | 671.4 |
| 35° | 660.1 | 661.5 | 655.0 | 657.7 | 648.6 |
| 37.5° | 638.7 | 638.3 | 631.5 | 633.2 | 625.4 |
| 40° | 613.8 | 613.5 | 606.3 | 607.7 | 600.2 |
| 42.5° | 588.3 | 586.9 | 580.1 | 580.8 | 574.0 |
| 45° | 559.7 | 559.0 | 551.9 | 552.9 | 546.1 |
| 47.5° | 532.1 | 530.1 | 522.9 | 523.3 | 517.5 |
| 50° | 502.2 | 499.1 | 493.0 | 492.3 | 487.2 |
| 52.5° | 470.2 | 466.8 | 459.9 | 459.3 | 455.5 |
| 55° | 436.8 | 433.1 | 426.6 | 425.6 | 422.5 |
| 57.5° | 402.4 | 397.6 | 392.5 | 390.5 | 388.1 |
| 60° | 366.0 | 361.6 | 355.8 | 353.7 | 352.7 |
| 62.5° | 328.2 | 323.8 | 319.3 | 317.3 | 315.9 |
| 65° | 289.7 | 286.3 | 281.2 | 279.2 | 278.1 |
| 67.5° | 250.6 | 247.5 | 242.7 | 240.4 | 240.0 |
| 70° | 211.4 | 208.4 | 202.9 | 201.5 | 201.2 |
| 72.5° | 172.3 | 169.5 | 164.4 | 163.1 | 163.1 |
| 75° | 134.1 | 131.8 | 127.3 | 126.0 | 126.0 |
| 77.5° | 98.0 | 96.0 | 92.6 | 90.9 | 90.9 |
| 80° | 65.4 | 64.0 | 60.9 | 59.6 | 59.2 |
| 82.5° | 37.8 | 37.1 | 34.4 | 33.0 | 33.7 |
| 85° | 17.4 | 16.7 | 15.3 | 13.6 | 14.0 |
| 87.5° | 4.4 | 4.1 | 3.1 | 2.4 | 3.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)