

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: P973867

Luminaire Tested: FLR2-22-35HE-L935-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973867
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: FLR2-22-35HE-L935-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

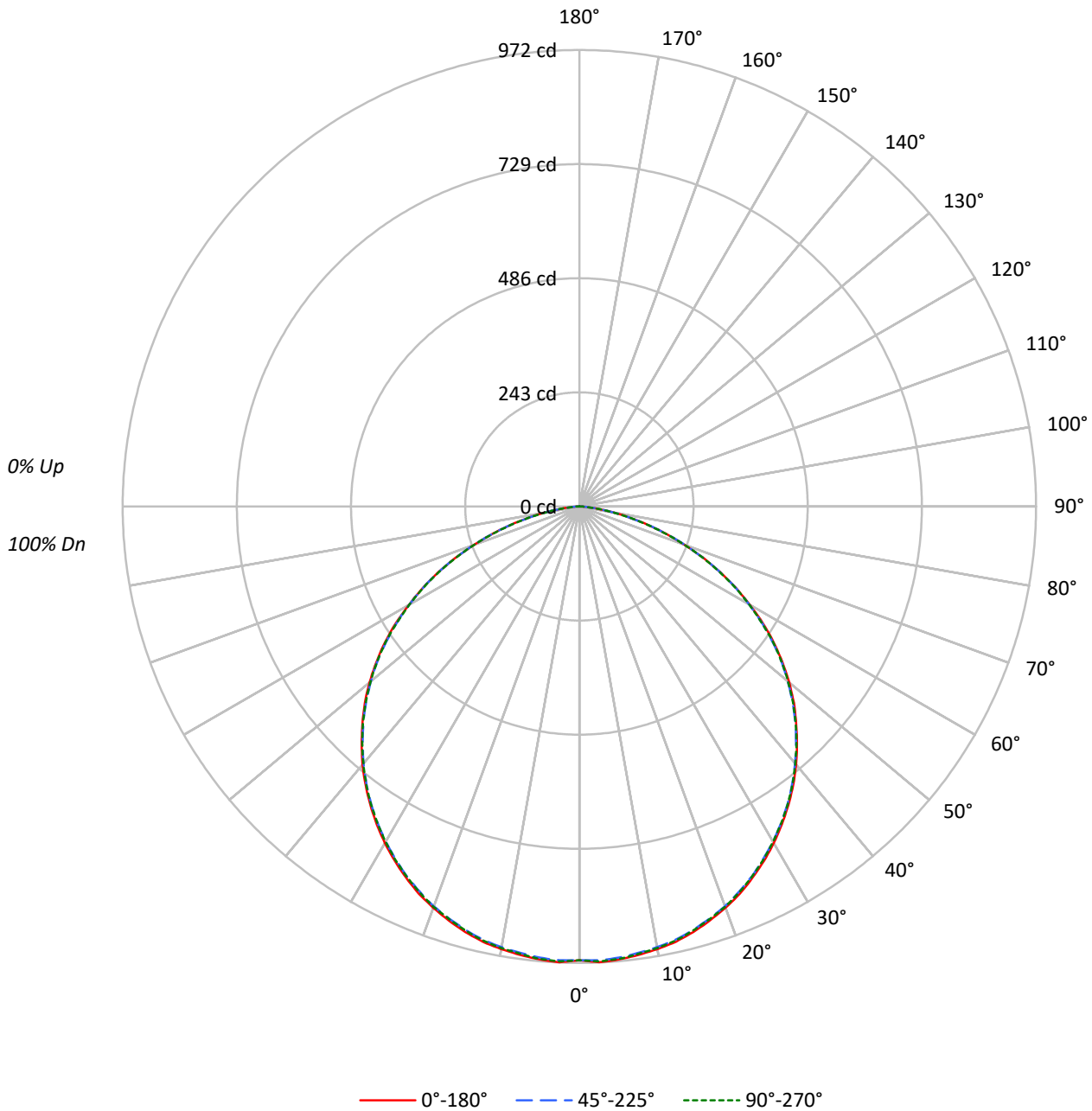
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2701.9 lumens
Efficiency: N/A
Efficacy: 99.3 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): 27.2
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 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | |
| 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° | 2600 | 2600 | 2600 |
| 5° | 2616 | 2605 | 2613 |
| 10° | 2616 | 2604 | 2609 |
| 15° | 2613 | 2602 | 2605 |
| 20° | 2605 | 2594 | 2598 |
| 25° | 2591 | 2580 | 2582 |
| 30° | 2572 | 2561 | 2563 |
| 35° | 2549 | 2539 | 2541 |
| 40° | 2522 | 2509 | 2511 |
| 45° | 2484 | 2473 | 2478 |
| 50° | 2441 | 2424 | 2428 |
| 55° | 2371 | 2352 | 2360 |
| 60° | 2255 | 2245 | 2245 |
| 65° | 2105 | 2101 | 2094 |
| 70° | 1864 | 1873 | 1869 |
| 75° | 1570 | 1557 | 1545 |
| 80° | 1128 | 1110 | 1100 |
| 85° | 590 | 590 | 571 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2484 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 91.5 | 3.4 |
| 10°-20° | 263.1 | 9.7 |
| 20°-30° | 399.8 | 14.8 |
| 30°-40° | 483.2 | 17.9 |
| 40°-50° | 501.6 | 18.6 |
| 50°-60° | 448.4 | 16.6 |
| 60°-70° | 326.1 | 12.1 |
| 70°-80° | 160.3 | 5.9 |
| 80°-90° | 27.8 | 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° | 754.4 | 27.9 |
| 0°-40° | 1237.6 | 45.8 |
| 0°-60° | 2187.7 | 81.0 |
| 0°-90° | 2701.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2701.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 966 | 966 | 966 | 966 | 966 | |
| 5° | 968 | 957 | 964 | 961 | 967 | 92 |
| 15° | 938 | 927 | 934 | 932 | 935 | 265 |
| 25° | 872 | 863 | 869 | 867 | 870 | 402 |
| 35° | 776 | 770 | 773 | 773 | 773 | 485 |
| 45° | 653 | 650 | 650 | 651 | 651 | 504 |
| 55° | 505 | 502 | 501 | 502 | 503 | 451 |
| 65° | 331 | 332 | 330 | 330 | 329 | 326 |
| 75° | 151 | 152 | 150 | 150 | 149 | 160 |
| 85° | 19 | 20 | 19 | 19 | 18 | 28 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973867
 CATALOG NUMBER: FLR2-22-35HE-L935-CP250

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 966.1 | 966.1 | 966.1 | 966.1 | 966.1 |
| 2.5° | 971.5 | 960.2 | 967.3 | 963.2 | 969.7 |
| 5° | 968.5 | 957.2 | 964.4 | 960.8 | 967.3 |
| 7.5° | 963.2 | 951.8 | 959.0 | 955.4 | 960.8 |
| 10° | 957.2 | 945.3 | 953.0 | 949.4 | 954.8 |
| 12.5° | 949.4 | 938.1 | 945.3 | 942.3 | 947.0 |
| 15° | 938.1 | 927.4 | 933.9 | 931.5 | 935.1 |
| 17.5° | 924.4 | 913.6 | 920.2 | 918.4 | 921.4 |
| 20° | 909.5 | 899.3 | 905.9 | 904.1 | 907.1 |
| 22.5° | 892.7 | 882.0 | 888.0 | 886.8 | 889.2 |
| 25° | 872.5 | 862.9 | 868.9 | 867.1 | 869.5 |
| 27.5° | 851.0 | 842.0 | 846.8 | 846.8 | 848.0 |
| 30° | 827.7 | 819.3 | 824.1 | 824.1 | 824.7 |
| 32.5° | 802.6 | 796.1 | 799.1 | 799.6 | 799.6 |
| 35° | 775.8 | 770.4 | 772.8 | 773.4 | 773.4 |
| 37.5° | 747.7 | 742.4 | 744.2 | 745.3 | 745.3 |
| 40° | 717.9 | 713.1 | 714.3 | 715.5 | 714.9 |
| 42.5° | 685.7 | 682.1 | 682.7 | 683.9 | 683.9 |
| 45° | 652.8 | 649.9 | 649.9 | 651.1 | 651.1 |
| 47.5° | 619.4 | 616.4 | 615.3 | 616.4 | 616.4 |
| 50° | 583.0 | 580.0 | 578.9 | 580.0 | 580.0 |
| 52.5° | 544.8 | 541.9 | 541.9 | 541.9 | 542.4 |
| 55° | 505.4 | 502.5 | 501.3 | 502.5 | 503.1 |
| 57.5° | 463.7 | 462.5 | 460.7 | 461.3 | 459.5 |
| 60° | 418.9 | 418.9 | 417.1 | 418.3 | 417.1 |
| 62.5° | 375.4 | 376.6 | 374.8 | 374.8 | 373.6 |
| 65° | 330.6 | 331.8 | 330.0 | 330.0 | 328.8 |
| 67.5° | 284.7 | 286.4 | 284.1 | 284.1 | 282.9 |
| 70° | 236.9 | 240.5 | 238.1 | 238.7 | 237.5 |
| 72.5° | 193.9 | 195.7 | 193.3 | 193.3 | 192.2 |
| 75° | 151.0 | 152.2 | 149.8 | 150.4 | 148.6 |
| 77.5° | 108.6 | 110.4 | 108.0 | 108.6 | 108.0 |
| 80° | 72.8 | 73.4 | 71.6 | 72.2 | 71.0 |
| 82.5° | 42.4 | 43.0 | 42.4 | 41.8 | 41.2 |
| 85° | 19.1 | 19.7 | 19.1 | 19.1 | 18.5 |
| 87.5° | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)