

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: P973951

Luminaire Tested: FLR2-22-35HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973951
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

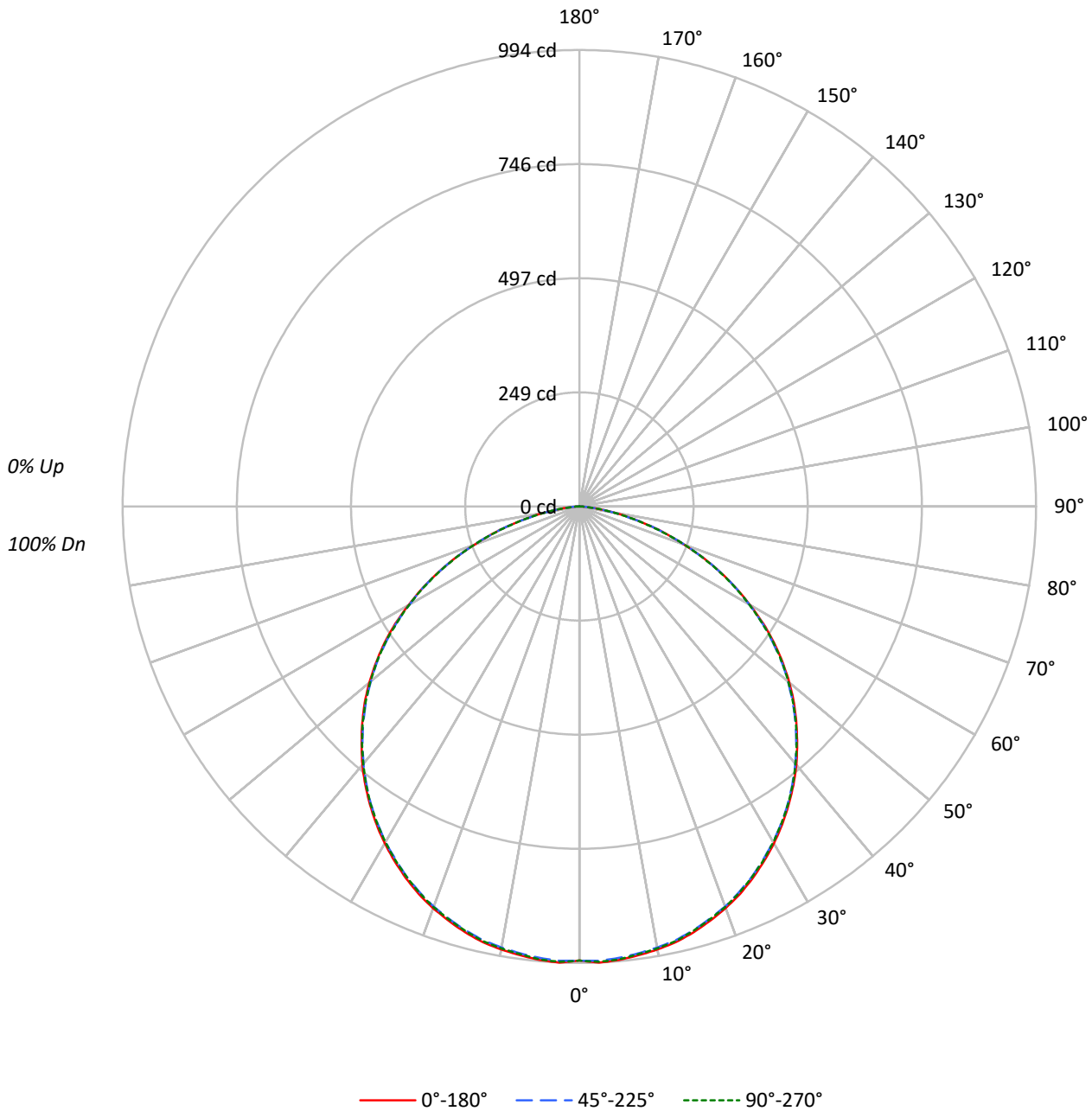
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2765.4 lumens
Efficiency: N/A
Efficacy: 101.7 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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CATALOG NUMBER: FLR2-22-35HE-L940-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P973951
 CATALOG NUMBER: FLR2-22-35HE-L940-CP250

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 | 63 | 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 | 71 | 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 | 50 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 | | | | | | 34 | | | | | | | | | | | | | | |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 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 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 | | | | | | 25 | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2661 | 2661 | 2661 |
| 5° | 2678 | 2666 | 2675 |
| 10° | 2677 | 2665 | 2670 |
| 15° | 2675 | 2663 | 2666 |
| 20° | 2666 | 2655 | 2659 |
| 25° | 2651 | 2640 | 2642 |
| 30° | 2632 | 2621 | 2623 |
| 35° | 2608 | 2598 | 2600 |
| 40° | 2581 | 2568 | 2570 |
| 45° | 2543 | 2531 | 2536 |
| 50° | 2498 | 2480 | 2485 |
| 55° | 2427 | 2407 | 2416 |
| 60° | 2308 | 2298 | 2298 |
| 65° | 2155 | 2151 | 2143 |
| 70° | 1908 | 1917 | 1913 |
| 75° | 1606 | 1594 | 1581 |
| 80° | 1155 | 1136 | 1127 |
| 85° | 602 | 602 | 584 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2543 cd/sqm



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 CATALOG NUMBER: FLR2-22-35HE-L940-CP250

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 93.6 | 3.4 |
| 10°-20° | 269.3 | 9.7 |
| 20°-30° | 409.2 | 14.8 |
| 30°-40° | 494.6 | 17.9 |
| 40°-50° | 513.4 | 18.6 |
| 50°-60° | 459.0 | 16.6 |
| 60°-70° | 333.7 | 12.1 |
| 70°-80° | 164.1 | 5.9 |
| 80°-90° | 28.5 | 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° | 772.1 | 27.9 |
| 0°-40° | 1266.8 | 45.8 |
| 0°-60° | 2239.1 | 81.0 |
| 0°-90° | 2765.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2765.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 989 | 989 | 989 | 989 | 989 | |
| 5° | 991 | 980 | 987 | 983 | 990 | 94 |
| 15° | 960 | 949 | 956 | 953 | 957 | 271 |
| 25° | 893 | 883 | 889 | 888 | 890 | 412 |
| 35° | 794 | 788 | 791 | 792 | 792 | 497 |
| 45° | 668 | 665 | 665 | 666 | 666 | 515 |
| 55° | 517 | 514 | 513 | 514 | 515 | 461 |
| 65° | 338 | 340 | 338 | 338 | 336 | 334 |
| 75° | 154 | 156 | 153 | 154 | 152 | 164 |
| 85° | 20 | 20 | 20 | 20 | 19 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973951
 CATALOG NUMBER: FLR2-22-35HE-L940-CP250

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 988.9 | 988.9 | 988.9 | 988.9 | 988.9 |
| 2.5° | 994.4 | 982.8 | 990.1 | 985.8 | 992.5 |
| 5° | 991.3 | 979.7 | 987.0 | 983.4 | 990.1 |
| 7.5° | 985.8 | 974.2 | 981.5 | 977.9 | 983.4 |
| 10° | 979.7 | 967.5 | 975.4 | 971.8 | 977.3 |
| 12.5° | 971.8 | 960.2 | 967.5 | 964.4 | 969.3 |
| 15° | 960.2 | 949.2 | 955.9 | 953.4 | 957.1 |
| 17.5° | 946.1 | 935.1 | 941.8 | 940.0 | 943.1 |
| 20° | 930.9 | 920.5 | 927.2 | 925.4 | 928.4 |
| 22.5° | 913.7 | 902.8 | 908.9 | 907.6 | 910.1 |
| 25° | 893.0 | 883.2 | 889.3 | 887.5 | 889.9 |
| 27.5° | 871.0 | 861.8 | 866.7 | 866.7 | 867.9 |
| 30° | 847.2 | 838.6 | 843.5 | 843.5 | 844.1 |
| 32.5° | 821.5 | 814.8 | 817.9 | 818.5 | 818.5 |
| 35° | 794.0 | 788.5 | 791.0 | 791.6 | 791.6 |
| 37.5° | 765.3 | 759.8 | 761.7 | 762.9 | 762.9 |
| 40° | 734.8 | 729.9 | 731.1 | 732.3 | 731.7 |
| 42.5° | 701.8 | 698.1 | 698.7 | 700.0 | 700.0 |
| 45° | 668.2 | 665.2 | 665.2 | 666.4 | 666.4 |
| 47.5° | 634.0 | 631.0 | 629.7 | 631.0 | 631.0 |
| 50° | 596.7 | 593.7 | 592.5 | 593.7 | 593.7 |
| 52.5° | 557.7 | 554.6 | 554.6 | 554.6 | 555.2 |
| 55° | 517.3 | 514.3 | 513.1 | 514.3 | 514.9 |
| 57.5° | 474.6 | 473.4 | 471.5 | 472.1 | 470.3 |
| 60° | 428.8 | 428.8 | 426.9 | 428.2 | 426.9 |
| 62.5° | 384.2 | 385.4 | 383.6 | 383.6 | 382.4 |
| 65° | 338.4 | 339.6 | 337.8 | 337.8 | 336.5 |
| 67.5° | 291.3 | 293.2 | 290.7 | 290.7 | 289.5 |
| 70° | 242.5 | 246.1 | 243.7 | 244.3 | 243.1 |
| 72.5° | 198.5 | 200.3 | 197.9 | 197.9 | 196.7 |
| 75° | 154.5 | 155.8 | 153.3 | 153.9 | 152.1 |
| 77.5° | 111.2 | 113.0 | 110.6 | 111.2 | 110.6 |
| 80° | 74.5 | 75.1 | 73.3 | 73.9 | 72.7 |
| 82.5° | 43.4 | 44.0 | 43.4 | 42.8 | 42.1 |
| 85° | 19.5 | 20.2 | 19.5 | 19.5 | 18.9 |
| 87.5° | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)