

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: P973779

Luminaire Tested: FLR2-22-50HE-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973779
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: FLR2-22-50HE-L930-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

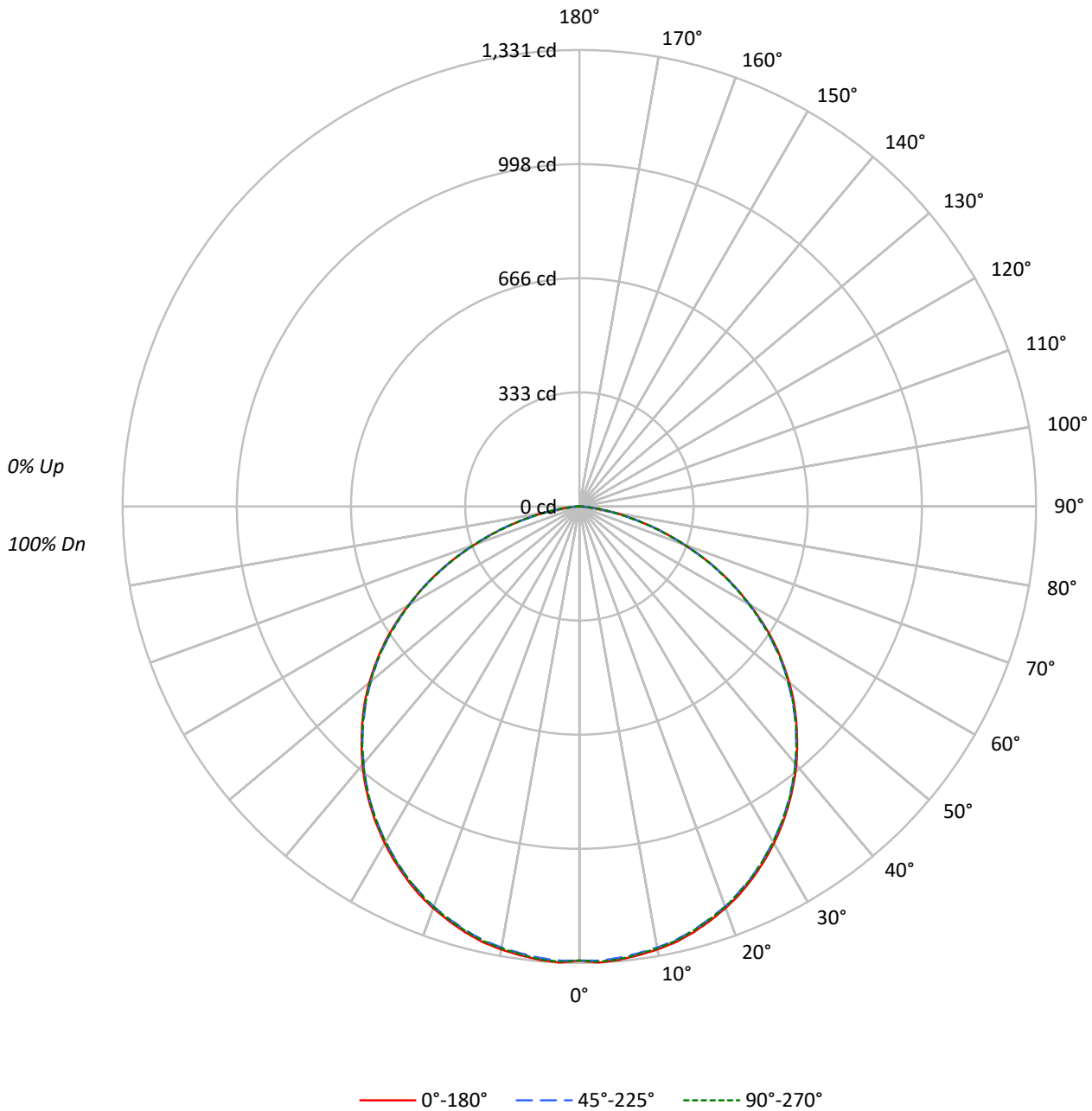
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3702.3 lumens
Efficiency: N/A
Efficacy: 92.6 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): 40
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: P973779
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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° | 3563 | 3563 | 3563 |
| 5° | 3585 | 3569 | 3581 |
| 10° | 3584 | 3568 | 3575 |
| 15° | 3581 | 3565 | 3570 |
| 20° | 3569 | 3555 | 3559 |
| 25° | 3550 | 3535 | 3537 |
| 30° | 3524 | 3509 | 3512 |
| 35° | 3492 | 3479 | 3482 |
| 40° | 3456 | 3438 | 3441 |
| 45° | 3405 | 3389 | 3395 |
| 50° | 3345 | 3321 | 3327 |
| 55° | 3249 | 3223 | 3234 |
| 60° | 3089 | 3076 | 3076 |
| 65° | 2884 | 2879 | 2869 |
| 70° | 2554 | 2567 | 2561 |
| 75° | 2151 | 2133 | 2117 |
| 80° | 1547 | 1520 | 1508 |
| 85° | 809 | 809 | 781 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3405 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 125.4 | 3.4 |
| 10°-20° | 360.5 | 9.7 |
| 20°-30° | 547.8 | 14.8 |
| 30°-40° | 662.2 | 17.9 |
| 40°-50° | 687.3 | 18.6 |
| 50°-60° | 614.5 | 16.6 |
| 60°-70° | 446.8 | 12.1 |
| 70°-80° | 219.7 | 5.9 |
| 80°-90° | 38.1 | 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° | 1033.7 | 27.9 |
| 0°-40° | 1695.9 | 45.8 |
| 0°-60° | 2997.7 | 81.0 |
| 0°-90° | 3702.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3702.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1324 | 1324 | 1324 | 1324 | 1324 | |
| 5° | 1327 | 1312 | 1321 | 1316 | 1326 | 126 |
| 15° | 1286 | 1271 | 1280 | 1276 | 1281 | 363 |
| 25° | 1196 | 1182 | 1191 | 1188 | 1191 | 551 |
| 35° | 1063 | 1056 | 1059 | 1060 | 1060 | 665 |
| 45° | 895 | 890 | 890 | 892 | 892 | 690 |
| 55° | 693 | 688 | 687 | 688 | 689 | 617 |
| 65° | 453 | 455 | 452 | 452 | 451 | 447 |
| 75° | 207 | 208 | 205 | 206 | 204 | 220 |
| 85° | 26 | 27 | 26 | 26 | 25 | 38 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1323.9 | 1323.9 | 1323.9 | 1323.9 | 1323.9 |
| 2.5° | 1331.2 | 1315.7 | 1325.5 | 1319.8 | 1328.8 |
| 5° | 1327.2 | 1311.6 | 1321.4 | 1316.5 | 1325.5 |
| 7.5° | 1319.8 | 1304.3 | 1314.1 | 1309.2 | 1316.5 |
| 10° | 1311.6 | 1295.3 | 1305.9 | 1301.0 | 1308.3 |
| 12.5° | 1301.0 | 1285.5 | 1295.3 | 1291.2 | 1297.7 |
| 15° | 1285.5 | 1270.7 | 1279.7 | 1276.5 | 1281.4 |
| 17.5° | 1266.6 | 1251.9 | 1260.9 | 1258.5 | 1262.6 |
| 20° | 1246.2 | 1232.3 | 1241.3 | 1238.8 | 1242.9 |
| 22.5° | 1223.3 | 1208.6 | 1216.8 | 1215.1 | 1218.4 |
| 25° | 1195.5 | 1182.4 | 1190.6 | 1188.1 | 1191.4 |
| 27.5° | 1166.1 | 1153.8 | 1160.3 | 1160.3 | 1162.0 |
| 30° | 1134.2 | 1122.7 | 1129.3 | 1129.3 | 1130.1 |
| 32.5° | 1099.8 | 1090.8 | 1094.9 | 1095.7 | 1095.7 |
| 35° | 1063.0 | 1055.7 | 1058.9 | 1059.8 | 1059.8 |
| 37.5° | 1024.6 | 1017.2 | 1019.7 | 1021.3 | 1021.3 |
| 40° | 983.7 | 977.2 | 978.8 | 980.4 | 979.6 |
| 42.5° | 939.6 | 934.7 | 935.5 | 937.1 | 937.1 |
| 45° | 894.6 | 890.5 | 890.5 | 892.1 | 892.1 |
| 47.5° | 848.8 | 844.7 | 843.1 | 844.7 | 844.7 |
| 50° | 798.9 | 794.8 | 793.2 | 794.8 | 794.8 |
| 52.5° | 746.6 | 742.5 | 742.5 | 742.5 | 743.3 |
| 55° | 692.6 | 688.5 | 686.9 | 688.5 | 689.3 |
| 57.5° | 635.4 | 633.7 | 631.3 | 632.1 | 629.6 |
| 60° | 574.0 | 574.0 | 571.6 | 573.2 | 571.6 |
| 62.5° | 514.3 | 516.0 | 513.5 | 513.5 | 511.9 |
| 65° | 453.0 | 454.7 | 452.2 | 452.2 | 450.6 |
| 67.5° | 390.1 | 392.5 | 389.2 | 389.2 | 387.6 |
| 70° | 324.6 | 329.5 | 326.3 | 327.1 | 325.5 |
| 72.5° | 265.8 | 268.2 | 264.9 | 264.9 | 263.3 |
| 75° | 206.9 | 208.5 | 205.2 | 206.1 | 203.6 |
| 77.5° | 148.8 | 151.3 | 148.0 | 148.8 | 148.0 |
| 80° | 99.8 | 100.6 | 98.1 | 98.9 | 97.3 |
| 82.5° | 58.1 | 58.9 | 58.1 | 57.2 | 56.4 |
| 85° | 26.2 | 27.0 | 26.2 | 26.2 | 25.3 |
| 87.5° | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)