

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: P973644

Luminaire Tested: FLR2-22-45-L940-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973644
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: FLR2-22-45-L940-CP125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

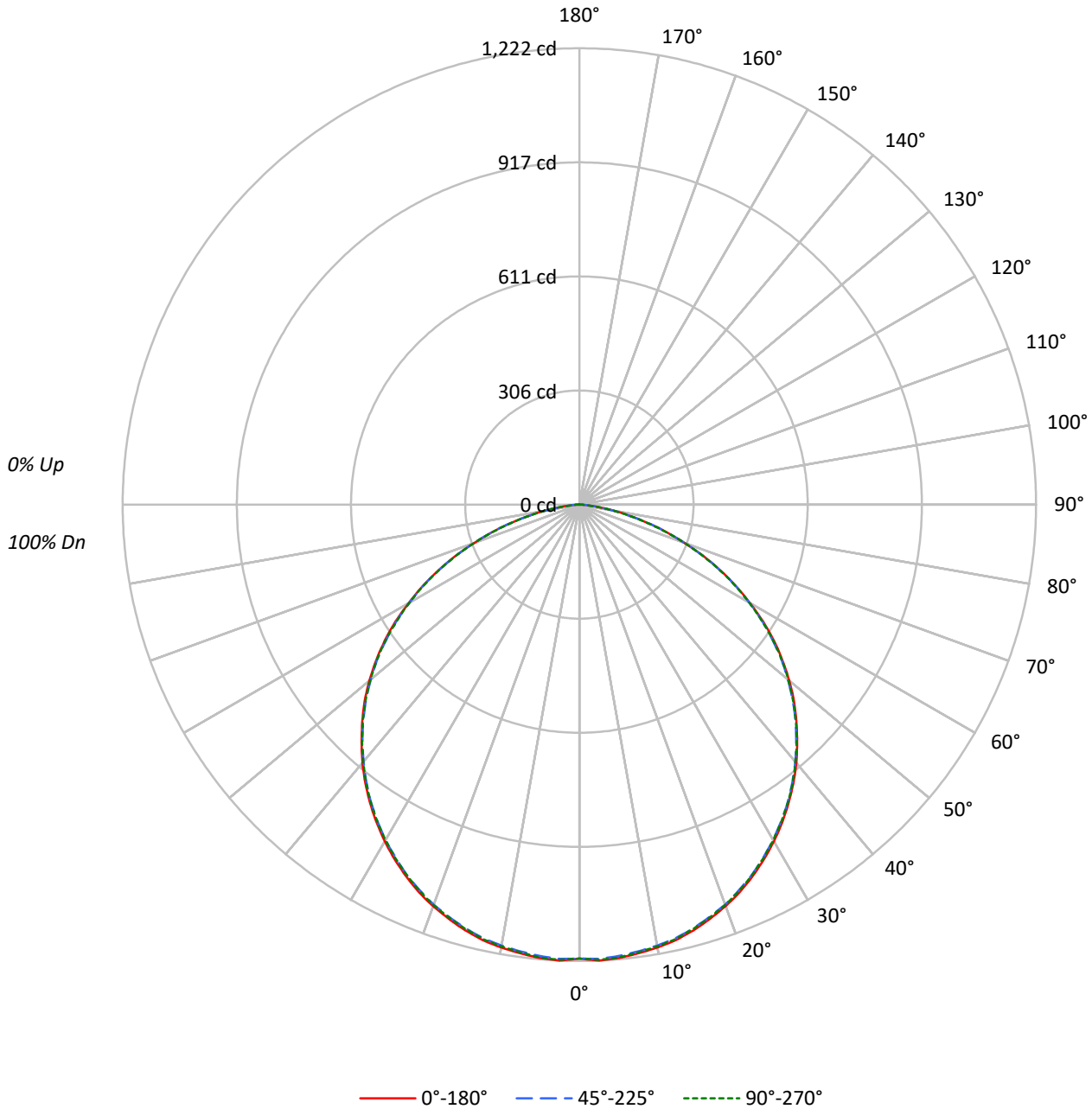
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3399.4 lumens
Efficiency: N/A
Efficacy: 94.2 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): 36.1
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: P973644
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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° | 3271 | 3271 | 3271 |
| 5° | 3292 | 3277 | 3288 |
| 10° | 3291 | 3277 | 3283 |
| 15° | 3288 | 3273 | 3278 |
| 20° | 3277 | 3264 | 3268 |
| 25° | 3259 | 3246 | 3248 |
| 30° | 3236 | 3222 | 3224 |
| 35° | 3207 | 3194 | 3197 |
| 40° | 3173 | 3157 | 3160 |
| 45° | 3126 | 3111 | 3117 |
| 50° | 3071 | 3049 | 3055 |
| 55° | 2983 | 2959 | 2969 |
| 60° | 2837 | 2824 | 2824 |
| 65° | 2649 | 2644 | 2634 |
| 70° | 2345 | 2357 | 2351 |
| 75° | 1975 | 1960 | 1944 |
| 80° | 1420 | 1396 | 1384 |
| 85° | 741 | 741 | 719 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3126 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 115.1 | 3.4 |
| 10°-20° | 331.0 | 9.7 |
| 20°-30° | 503.0 | 14.8 |
| 30°-40° | 608.0 | 17.9 |
| 40°-50° | 631.1 | 18.6 |
| 50°-60° | 564.2 | 16.6 |
| 60°-70° | 410.2 | 12.1 |
| 70°-80° | 201.7 | 5.9 |
| 80°-90° | 35.0 | 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° | 949.1 | 27.9 |
| 0°-40° | 1557.2 | 45.8 |
| 0°-60° | 2752.4 | 81.0 |
| 0°-90° | 3399.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3399.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1216 | 1216 | 1216 | 1216 | 1216 | |
| 5° | 1219 | 1204 | 1213 | 1209 | 1217 | 116 |
| 15° | 1180 | 1167 | 1175 | 1172 | 1176 | 333 |
| 25° | 1098 | 1086 | 1093 | 1091 | 1094 | 506 |
| 35° | 976 | 969 | 972 | 973 | 973 | 611 |
| 45° | 821 | 818 | 818 | 819 | 819 | 634 |
| 55° | 636 | 632 | 631 | 632 | 633 | 567 |
| 65° | 416 | 418 | 415 | 415 | 414 | 410 |
| 75° | 190 | 192 | 188 | 189 | 187 | 202 |
| 85° | 24 | 25 | 24 | 24 | 23 | 35 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973644
 CATALOG NUMBER: FLR2-22-45-L940-CP125

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1215.6 | 1215.6 | 1215.6 | 1215.6 | 1215.6 |
| 2.5° | 1222.3 | 1208.1 | 1217.1 | 1211.8 | 1220.1 |
| 5° | 1218.6 | 1204.3 | 1213.3 | 1208.8 | 1217.1 |
| 7.5° | 1211.8 | 1197.6 | 1206.6 | 1202.1 | 1208.8 |
| 10° | 1204.3 | 1189.3 | 1199.1 | 1194.6 | 1201.3 |
| 12.5° | 1194.6 | 1180.3 | 1189.3 | 1185.5 | 1191.5 |
| 15° | 1180.3 | 1166.8 | 1175.0 | 1172.0 | 1176.5 |
| 17.5° | 1163.0 | 1149.5 | 1157.8 | 1155.5 | 1159.3 |
| 20° | 1144.2 | 1131.5 | 1139.7 | 1137.5 | 1141.2 |
| 22.5° | 1123.2 | 1109.7 | 1117.2 | 1115.7 | 1118.7 |
| 25° | 1097.7 | 1085.7 | 1093.2 | 1090.9 | 1093.9 |
| 27.5° | 1070.7 | 1059.4 | 1065.4 | 1065.4 | 1066.9 |
| 30° | 1041.4 | 1030.9 | 1036.9 | 1036.9 | 1037.6 |
| 32.5° | 1009.8 | 1001.6 | 1005.3 | 1006.1 | 1006.1 |
| 35° | 976.1 | 969.3 | 972.3 | 973.1 | 973.1 |
| 37.5° | 940.8 | 934.0 | 936.3 | 937.8 | 937.8 |
| 40° | 903.2 | 897.2 | 898.7 | 900.2 | 899.5 |
| 42.5° | 862.7 | 858.2 | 858.9 | 860.4 | 860.4 |
| 45° | 821.4 | 817.6 | 817.6 | 819.1 | 819.1 |
| 47.5° | 779.3 | 775.6 | 774.1 | 775.6 | 775.6 |
| 50° | 733.5 | 729.8 | 728.3 | 729.8 | 729.8 |
| 52.5° | 685.5 | 681.7 | 681.7 | 681.7 | 682.5 |
| 55° | 635.9 | 632.2 | 630.7 | 632.2 | 632.9 |
| 57.5° | 583.4 | 581.9 | 579.6 | 580.4 | 578.1 |
| 60° | 527.1 | 527.1 | 524.8 | 526.3 | 524.8 |
| 62.5° | 472.3 | 473.8 | 471.5 | 471.5 | 470.0 |
| 65° | 416.0 | 417.5 | 415.2 | 415.2 | 413.7 |
| 67.5° | 358.1 | 360.4 | 357.4 | 357.4 | 355.9 |
| 70° | 298.1 | 302.6 | 299.6 | 300.3 | 298.8 |
| 72.5° | 244.0 | 246.3 | 243.3 | 243.3 | 241.8 |
| 75° | 190.0 | 191.5 | 188.5 | 189.2 | 187.0 |
| 77.5° | 136.6 | 138.9 | 135.9 | 136.6 | 135.9 |
| 80° | 91.6 | 92.4 | 90.1 | 90.8 | 89.3 |
| 82.5° | 53.3 | 54.1 | 53.3 | 52.6 | 51.8 |
| 85° | 24.0 | 24.8 | 24.0 | 24.0 | 23.3 |
| 87.5° | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)