

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: P973593

Luminaire Tested: FLR2-22-20-L935-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973593
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: FLR2-22-20-L935-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

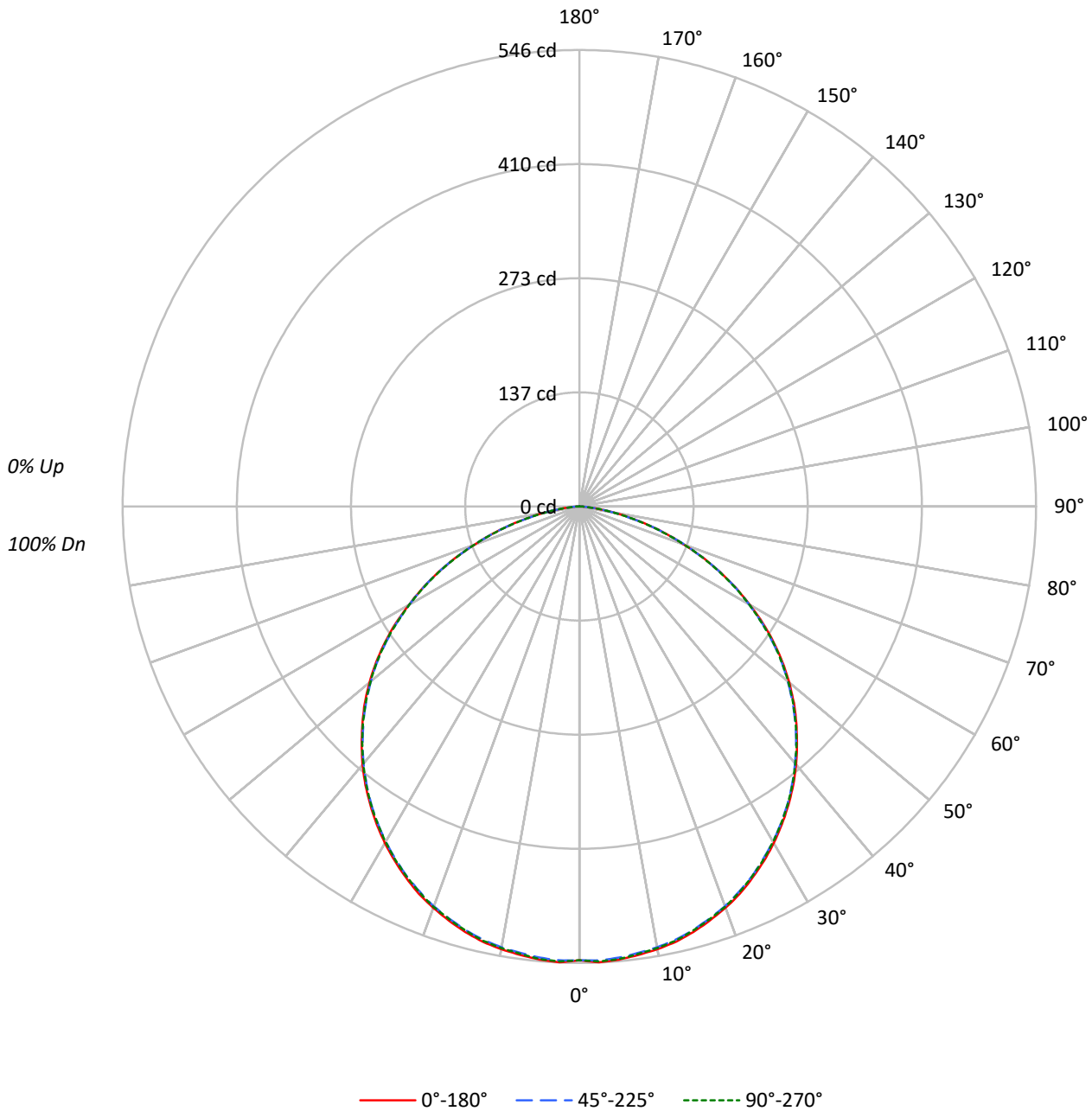
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1517.8 lumens
Efficiency: N/A
Efficacy: 100.5 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): 15.1
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: P973593
 CATALOG NUMBER: FLR2-22-20-L935-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° | 1461 | 1461 | 1461 |
| 5° | 1470 | 1463 | 1468 |
| 10° | 1469 | 1463 | 1466 |
| 15° | 1468 | 1462 | 1463 |
| 20° | 1463 | 1457 | 1459 |
| 25° | 1455 | 1449 | 1450 |
| 30° | 1445 | 1439 | 1440 |
| 35° | 1432 | 1426 | 1427 |
| 40° | 1417 | 1410 | 1411 |
| 45° | 1396 | 1389 | 1392 |
| 50° | 1371 | 1361 | 1364 |
| 55° | 1332 | 1321 | 1326 |
| 60° | 1266 | 1261 | 1261 |
| 65° | 1182 | 1181 | 1176 |
| 70° | 1047 | 1053 | 1050 |
| 75° | 882 | 874 | 868 |
| 80° | 634 | 623 | 618 |
| 85° | 330 | 330 | 321 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1396 cd/sqm



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 CATALOG NUMBER: FLR2-22-20-L935-CP250

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.4 | 3.4 |
| 10°-20° | 147.8 | 9.7 |
| 20°-30° | 224.6 | 14.8 |
| 30°-40° | 271.5 | 17.9 |
| 40°-50° | 281.8 | 18.6 |
| 50°-60° | 251.9 | 16.6 |
| 60°-70° | 183.2 | 12.1 |
| 70°-80° | 90.1 | 5.9 |
| 80°-90° | 15.6 | 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° | 423.8 | 27.9 |
| 0°-40° | 695.3 | 45.8 |
| 0°-60° | 1229.0 | 81.0 |
| 0°-90° | 1517.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1517.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 543 | 543 | 543 | 543 | 543 | |
| 5° | 544 | 538 | 542 | 540 | 543 | 52 |
| 15° | 527 | 521 | 525 | 523 | 525 | 149 |
| 25° | 490 | 485 | 488 | 487 | 488 | 226 |
| 35° | 436 | 433 | 434 | 434 | 434 | 273 |
| 45° | 367 | 365 | 365 | 366 | 366 | 283 |
| 55° | 284 | 282 | 282 | 282 | 283 | 253 |
| 65° | 186 | 186 | 185 | 185 | 185 | 183 |
| 75° | 85 | 86 | 84 | 84 | 84 | 90 |
| 85° | 11 | 11 | 11 | 11 | 10 | 16 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P973593
 CATALOG NUMBER: FLR2-22-20-L935-CP250

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 542.8 | 542.8 | 542.8 | 542.8 | 542.8 |
| 2.5° | 545.8 | 539.4 | 543.4 | 541.1 | 544.8 |
| 5° | 544.1 | 537.7 | 541.7 | 539.7 | 543.4 |
| 7.5° | 541.1 | 534.7 | 538.7 | 536.7 | 539.7 |
| 10° | 537.7 | 531.0 | 535.4 | 533.4 | 536.4 |
| 12.5° | 533.4 | 527.0 | 531.0 | 529.3 | 532.0 |
| 15° | 527.0 | 521.0 | 524.7 | 523.3 | 525.3 |
| 17.5° | 519.3 | 513.3 | 516.9 | 515.9 | 517.6 |
| 20° | 510.9 | 505.2 | 508.9 | 507.9 | 509.6 |
| 22.5° | 501.5 | 495.5 | 498.8 | 498.2 | 499.5 |
| 25° | 490.1 | 484.8 | 488.1 | 487.1 | 488.4 |
| 27.5° | 478.1 | 473.0 | 475.7 | 475.7 | 476.4 |
| 30° | 465.0 | 460.3 | 463.0 | 463.0 | 463.3 |
| 32.5° | 450.9 | 447.2 | 448.9 | 449.2 | 449.2 |
| 35° | 435.8 | 432.8 | 434.1 | 434.5 | 434.5 |
| 37.5° | 420.1 | 417.0 | 418.0 | 418.7 | 418.7 |
| 40° | 403.3 | 400.6 | 401.3 | 402.0 | 401.6 |
| 42.5° | 385.2 | 383.2 | 383.5 | 384.2 | 384.2 |
| 45° | 366.8 | 365.1 | 365.1 | 365.7 | 365.7 |
| 47.5° | 348.0 | 346.3 | 345.6 | 346.3 | 346.3 |
| 50° | 327.5 | 325.9 | 325.2 | 325.9 | 325.9 |
| 52.5° | 306.1 | 304.4 | 304.4 | 304.4 | 304.7 |
| 55° | 283.9 | 282.3 | 281.6 | 282.3 | 282.6 |
| 57.5° | 260.5 | 259.8 | 258.8 | 259.1 | 258.1 |
| 60° | 235.3 | 235.3 | 234.3 | 235.0 | 234.3 |
| 62.5° | 210.9 | 211.5 | 210.5 | 210.5 | 209.9 |
| 65° | 185.7 | 186.4 | 185.4 | 185.4 | 184.7 |
| 67.5° | 159.9 | 160.9 | 159.6 | 159.6 | 158.9 |
| 70° | 133.1 | 135.1 | 133.8 | 134.1 | 133.4 |
| 72.5° | 109.0 | 110.0 | 108.6 | 108.6 | 107.9 |
| 75° | 84.8 | 85.5 | 84.1 | 84.5 | 83.5 |
| 77.5° | 61.0 | 62.0 | 60.7 | 61.0 | 60.7 |
| 80° | 40.9 | 41.2 | 40.2 | 40.6 | 39.9 |
| 82.5° | 23.8 | 24.1 | 23.8 | 23.5 | 23.1 |
| 85° | 10.7 | 11.1 | 10.7 | 10.7 | 10.4 |
| 87.5° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)