

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: P688444

Luminaire Tested: FLR-WL-22-L3C3 (LOW)-40-CA125

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688444
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2303-938-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR-WL-22-L3C3 (LOW)-40-CA125
Description: Fail-Safe - FLR Fully Luminous Recessed 2X2 4000K Luminaire at Low Lumen setting for Wet location
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

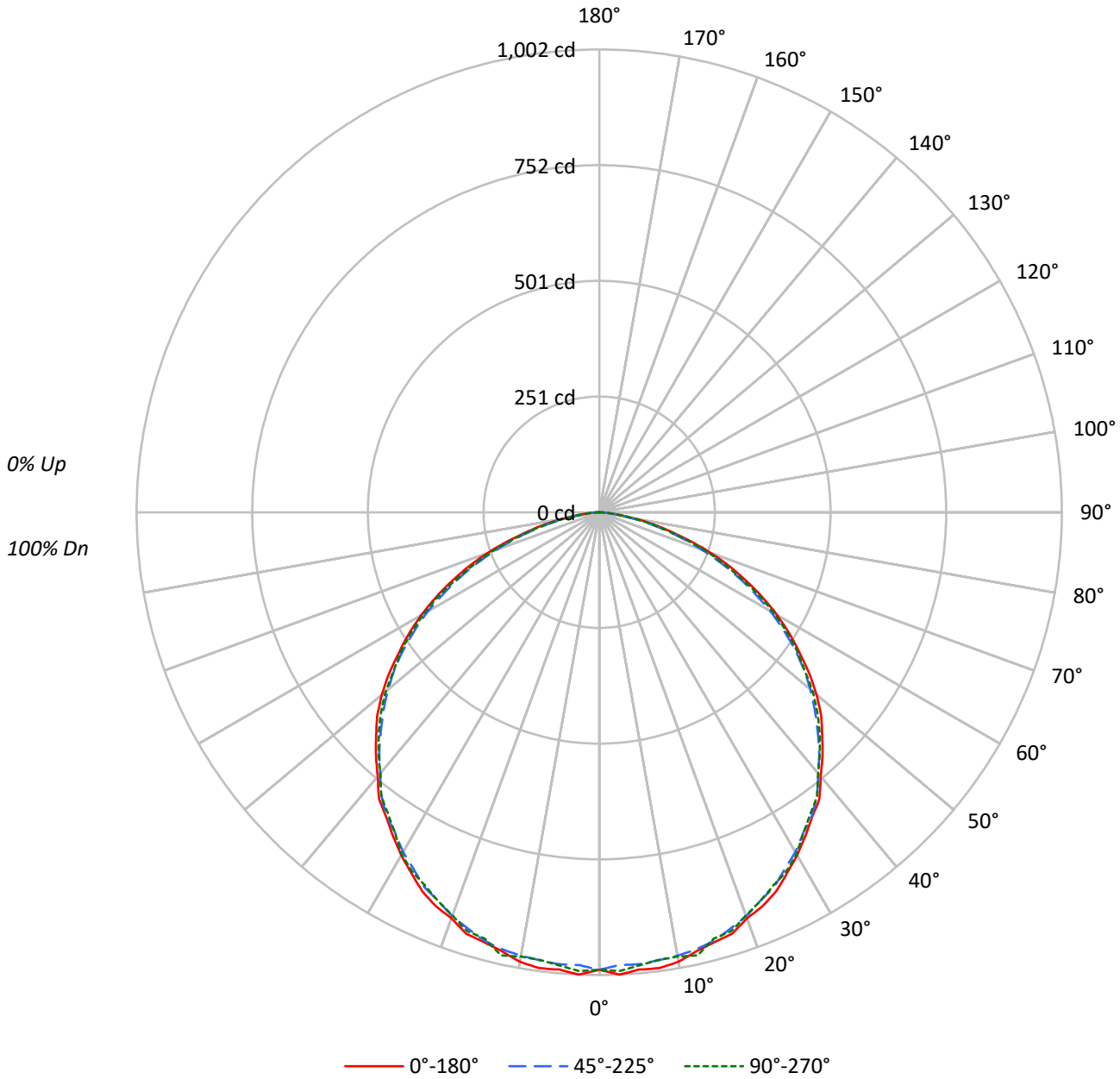
Lumens per Lamp: N/A
Luminaire Lumens: 2782.6 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688444
CATALOG NUMBER: FLR-WL-22-L3C3 (LOW)-40-CA125

Luminous Intensity Polar Plot



TEST NUMBER: P688444
 CATALOG NUMBER: FLR-WL-22-L3C3 (LOW)-40-CA125

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 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 | 0 |
| 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 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 91 | 85 | 79 | 97 | 90 | 83 | 78 | 86 | 81 | 76 | 83 | 79 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 68 | 63 | 71 | 66 | 62 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | 44 |
| 6 | 71 | 57 | 48 | 42 | 69 | 56 | 48 | 42 | 55 | 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 | 33 | 43 | 37 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 35 | 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° | 2665 | 2665 | 2665 |
| 5° | 2685 | 2654 | 2662 |
| 10° | 2701 | 2664 | 2669 |
| 15° | 2684 | 2676 | 2663 |
| 20° | 2679 | 2665 | 2660 |
| 25° | 2690 | 2660 | 2648 |
| 30° | 2664 | 2640 | 2657 |
| 35° | 2643 | 2637 | 2619 |
| 40° | 2621 | 2593 | 2590 |
| 45° | 2600 | 2545 | 2568 |
| 50° | 2572 | 2498 | 2526 |
| 55° | 2481 | 2425 | 2453 |
| 60° | 2392 | 2301 | 2352 |
| 65° | 2236 | 2111 | 2162 |
| 70° | 2020 | 1854 | 1937 |
| 75° | 1651 | 1511 | 1563 |
| 80° | 1184 | 1060 | 1106 |
| 85° | 648 | 556 | 571 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2600 cd/sqm

TEST NUMBER: P688444
 CATALOG NUMBER: FLR-WL-22-L3C3 (LOW)-40-CA125

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 93.9 | 3.4 |
| 10°-20° | 270.6 | 9.7 |
| 20°-30° | 411.9 | 14.8 |
| 30°-40° | 499.4 | 17.9 |
| 40°-50° | 519.3 | 18.7 |
| 50°-60° | 464.1 | 16.7 |
| 60°-70° | 334.6 | 12.0 |
| 70°-80° | 161.2 | 5.8 |
| 80°-90° | 27.6 | 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° | 776.4 | 27.9 |
| 0°-40° | 1275.9 | 45.9 |
| 0°-60° | 2259.2 | 81.2 |
| 0°-90° | 2782.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2782.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 990 | 990 | 990 | 990 | 990 | |
| 5° | 994 | 985 | 982 | 987 | 985 | 95 |
| 15° | 963 | 956 | 960 | 954 | 956 | 273 |
| 25° | 906 | 892 | 896 | 892 | 892 | 416 |
| 35° | 805 | 796 | 803 | 798 | 797 | 505 |
| 45° | 683 | 674 | 669 | 672 | 675 | 527 |
| 55° | 529 | 522 | 517 | 515 | 523 | 474 |
| 65° | 351 | 343 | 332 | 334 | 340 | 348 |
| 75° | 159 | 154 | 145 | 147 | 150 | 171 |
| 85° | 21 | 20 | 18 | 18 | 18 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P688444

CATALOG NUMBER: FLR-WL-22-L3C3 (LOW)-40-CA125

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|-------|-------|-------|-------|
| 0° | 990.4 | 990.4 | 990.4 | 990.4 | 990.4 |
| 2.5° | 1001.9 | 993.9 | 981.4 | 987.4 | 994.4 |
| 5° | 993.9 | 985.4 | 982.4 | 987.4 | 985.4 |
| 7.5° | 995.4 | 982.4 | 978.4 | 983.9 | 977.9 |
| 10° | 988.4 | 976.9 | 974.9 | 977.4 | 976.9 |
| 12.5° | 973.4 | 970.9 | 969.4 | 965.4 | 982.9 |
| 15° | 963.4 | 956.4 | 960.4 | 954.4 | 955.9 |
| 17.5° | 956.9 | 940.5 | 945.4 | 944.4 | 950.9 |
| 20° | 935.5 | 931.5 | 930.5 | 927.5 | 929.0 |
| 22.5° | 923.5 | 914.0 | 911.0 | 910.0 | 911.0 |
| 25° | 906.0 | 892.0 | 896.0 | 891.5 | 892.0 |
| 27.5° | 881.0 | 865.5 | 870.5 | 870.0 | 877.0 |
| 30° | 857.5 | 846.1 | 849.6 | 846.6 | 855.0 |
| 32.5° | 831.1 | 821.1 | 822.6 | 822.1 | 823.1 |
| 35° | 804.6 | 795.6 | 802.6 | 797.6 | 797.1 |
| 37.5° | 783.1 | 765.1 | 774.6 | 769.1 | 775.1 |
| 40° | 746.2 | 739.2 | 738.2 | 734.7 | 737.2 |
| 42.5° | 715.7 | 706.7 | 705.2 | 707.2 | 707.2 |
| 45° | 683.2 | 674.2 | 668.8 | 671.8 | 674.7 |
| 47.5° | 651.8 | 640.3 | 633.3 | 634.8 | 640.8 |
| 50° | 614.3 | 599.3 | 596.8 | 598.8 | 603.3 |
| 52.5° | 573.9 | 561.9 | 558.4 | 557.9 | 559.9 |
| 55° | 528.9 | 521.9 | 516.9 | 515.4 | 522.9 |
| 57.5° | 488.5 | 478.0 | 472.0 | 474.5 | 481.5 |
| 60° | 444.5 | 433.0 | 427.5 | 429.5 | 437.0 |
| 62.5° | 398.6 | 387.1 | 378.6 | 382.6 | 391.1 |
| 65° | 351.1 | 342.6 | 331.6 | 334.1 | 339.6 |
| 67.5° | 305.2 | 295.7 | 284.2 | 285.7 | 291.7 |
| 70° | 256.7 | 246.7 | 235.7 | 238.2 | 246.2 |
| 72.5° | 205.8 | 199.3 | 189.3 | 190.3 | 197.3 |
| 75° | 158.8 | 154.3 | 145.3 | 146.8 | 150.3 |
| 77.5° | 117.9 | 111.9 | 104.9 | 106.4 | 110.9 |
| 80° | 76.4 | 74.4 | 68.4 | 69.4 | 71.4 |
| 82.5° | 43.5 | 43.5 | 41.0 | 40.0 | 42.5 |
| 85° | 21.0 | 19.5 | 18.0 | 18.5 | 18.5 |
| 87.5° | 5.0 | 5.5 | 5.0 | 4.5 | 5.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)