

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P580370

Luminaire Tested: **HVSL2-3-LD4-STD-50-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580370
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-6)
Test Lab: INNOVATION CENTER
Issue Date: 12/16/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: HVSL2-3-LD4-STD-50-UNV-O-EDD
Description: 3 FOOT, 2INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

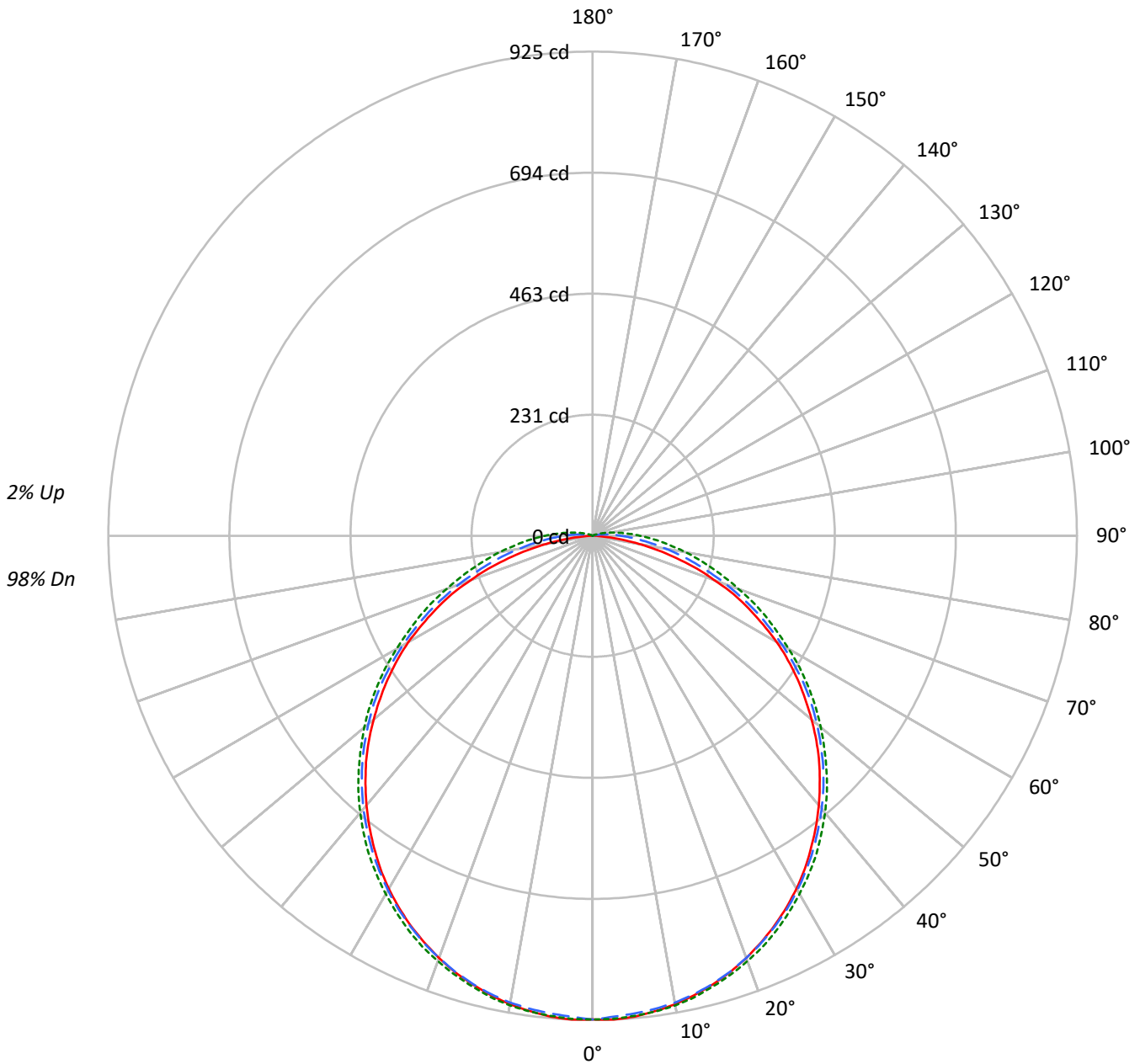
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2794.0 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 24.5
Input Voltage (V): NR
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: 25 FT

TEST NUMBER: P580370
CATALOG NUMBER: HVSL2-3-LD4-STD-50-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580370

CATALOG NUMBER: HVSL2-3-LD4-STD-50-UNV-O-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| RF | 20 | | | | 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 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 101 | 101 | 101 | 98 | | | |
| 1 | 108 | 102 | 98 | 94 | 105 | 100 | 96 | 92 | 95 | 92 | 89 | 91 | 88 | 86 | 87 | 85 | 83 | 81 | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 77 | 73 | 79 | 75 | 71 | 76 | 72 | 69 | 67 | | | |
| 3 | 89 | 78 | 69 | 63 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 64 | 59 | 67 | 62 | 58 | 56 | | | |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 52 | 65 | 57 | 52 | 62 | 56 | 51 | 60 | 54 | 50 | 47 | | | |
| 5 | 75 | 61 | 52 | 45 | 72 | 60 | 52 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 | | | |
| 6 | 69 | 55 | 46 | 40 | 67 | 54 | 46 | 39 | 52 | 45 | 39 | 50 | 44 | 38 | 49 | 43 | 38 | 36 | | | |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 47 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 34 | 32 | | | |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 30 | 41 | 35 | 30 | 28 | | | |
| 9 | 55 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 25 | | | |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 23 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19894 | 19894 | 19894 |
| 5° | 19830 | 18585 | 18293 |
| 10° | 19674 | 17494 | 16933 |
| 15° | 19481 | 16459 | 15661 |
| 20° | 19273 | 15458 | 14521 |
| 25° | 19030 | 14508 | 13472 |
| 30° | 18753 | 13586 | 12454 |
| 35° | 18406 | 12666 | 11505 |
| 40° | 18044 | 11763 | 10552 |
| 45° | 17654 | 10853 | 9615 |
| 50° | 17154 | 9907 | 8694 |
| 55° | 16611 | 8943 | 7771 |
| 60° | 15966 | 7869 | 6817 |
| 65° | 14943 | 6767 | 5910 |
| 70° | 13488 | 5603 | 4976 |
| 75° | 11450 | 4442 | 4127 |
| 80° | 8465 | 3364 | 3348 |
| 85° | 4351 | 2366 | 2611 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 87.4 | 3.1 |
| 10°-20° | 250.8 | 9.0 |
| 20°-30° | 380.6 | 13.6 |
| 30°-40° | 460.2 | 16.5 |
| 40°-50° | 480.2 | 17.2 |
| 50°-60° | 439.0 | 15.7 |
| 60°-70° | 342.2 | 12.2 |
| 70°-80° | 214.1 | 7.7 |
| 80°-90° | 97.2 | 3.5 |
| 90°-100° | 32.6 | 1.2 |
| 100°-110° | 8.2 | 0.3 |
| 110°-120° | 1.3 | 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° | 718.9 | 25.7 |
| 0°-40° | 1179.1 | 42.2 |
| 0°-60° | 2098.3 | 75.1 |
| 0°-90° | 2751.9 | 98.5 |
| 90°-120° | 42.1 | 1.5 |
| 90°-150° | 42.1 | 1.5 |
| 90°-180° | 42.0 | 1.5 |
| 0°-180° | 2794.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 924 | 924 | 924 | 924 | 924 | |
| 5° | 922 | 920 | 916 | 921 | 921 | 88 |
| 15° | 887 | 889 | 886 | 891 | 891 | 250 |
| 25° | 822 | 823 | 823 | 830 | 832 | 379 |
| 35° | 728 | 731 | 734 | 741 | 744 | 455 |
| 45° | 612 | 618 | 623 | 629 | 632 | 472 |
| 55° | 478 | 483 | 492 | 500 | 503 | 427 |
| 65° | 328 | 334 | 346 | 359 | 365 | 325 |
| 75° | 166 | 176 | 202 | 226 | 235 | 177 |
| 85° | 29 | 53 | 91 | 121 | 131 | 36 |
| 90° | 0 | 20 | 54 | 81 | 91 | 1 |
| 95° | 0 | 5 | 28 | 50 | 58 | 0 |
| 105° | 0 | 1 | 5 | 14 | 18 | 0 |
| 115° | 1 | 1 | 1 | 2 | 4 | 0 |
| 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P580370

CATALOG NUMBER: HVSL2-3-LD4-STD-50-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 924.1 | 924.1 | 924.1 | 924.1 | 924.1 |
| 2.5° | 925.2 | 923.9 | 919.7 | 923.9 | 923.7 |
| 5° | 922.1 | 920.4 | 916.2 | 920.6 | 920.6 |
| 7.5° | 916.0 | 915.4 | 911.7 | 916.7 | 916.7 |
| 10° | 908.8 | 908.6 | 905.6 | 911.0 | 911.2 |
| 12.5° | 898.8 | 899.7 | 896.9 | 902.1 | 902.7 |
| 15° | 887.1 | 888.6 | 886.2 | 891.2 | 891.0 |
| 17.5° | 874.2 | 875.1 | 873.3 | 879.0 | 878.8 |
| 20° | 858.3 | 859.4 | 858.1 | 864.0 | 864.6 |
| 22.5° | 840.7 | 842.2 | 842.0 | 848.1 | 849.8 |
| 25° | 821.9 | 822.6 | 823.4 | 830.4 | 831.7 |
| 27.5° | 801.2 | 802.3 | 803.8 | 810.2 | 811.5 |
| 30° | 778.6 | 780.3 | 782.1 | 788.6 | 790.3 |
| 32.5° | 754.6 | 756.3 | 758.5 | 767.0 | 767.9 |
| 35° | 727.6 | 730.9 | 733.9 | 741.3 | 744.4 |
| 37.5° | 700.6 | 704.7 | 707.6 | 715.4 | 717.8 |
| 40° | 672.0 | 676.2 | 680.8 | 689.0 | 690.6 |
| 42.5° | 642.2 | 647.0 | 652.4 | 659.8 | 662.5 |
| 45° | 612.1 | 617.6 | 622.6 | 628.7 | 631.7 |
| 47.5° | 579.7 | 585.1 | 591.2 | 598.2 | 600.2 |
| 50° | 546.1 | 552.4 | 559.0 | 565.5 | 569.0 |
| 52.5° | 511.7 | 519.3 | 526.7 | 533.7 | 537.0 |
| 55° | 477.7 | 483.4 | 492.3 | 499.5 | 502.8 |
| 57.5° | 442.4 | 447.2 | 455.3 | 467.1 | 468.8 |
| 60° | 406.5 | 410.9 | 419.1 | 428.7 | 432.6 |
| 62.5° | 366.8 | 372.7 | 381.4 | 393.6 | 397.1 |
| 65° | 328.3 | 334.0 | 345.5 | 359.2 | 364.9 |
| 67.5° | 291.0 | 293.0 | 307.8 | 322.2 | 331.3 |
| 70° | 247.0 | 254.4 | 271.6 | 289.3 | 296.3 |
| 72.5° | 209.1 | 216.5 | 235.5 | 256.2 | 264.9 |
| 75° | 166.2 | 176.5 | 202.2 | 226.3 | 234.8 |
| 77.5° | 128.5 | 139.9 | 171.7 | 196.1 | 205.9 |
| 80° | 89.8 | 107.4 | 142.0 | 169.5 | 180.2 |
| 82.5° | 56.4 | 78.2 | 115.2 | 144.0 | 153.4 |
| 85° | 28.8 | 53.2 | 91.3 | 120.7 | 131.4 |
| 87.5° | 7.6 | 34.4 | 71.0 | 99.1 | 110.0 |
| 90° | 0.2 | 19.8 | 53.8 | 80.8 | 90.6 |
| 92.5° | 0.2 | 11.1 | 40.1 | 64.3 | 74.3 |
| 95° | 0.2 | 5.2 | 27.9 | 50.5 | 58.4 |
| 97.5° | 0.2 | 2.2 | 19.2 | 38.1 | 46.0 |
| 100° | 0.2 | 1.1 | 12.2 | 27.7 | 34.4 |
| 102.5° | 0.4 | 0.7 | 7.6 | 19.8 | 25.3 |
| 105° | 0.4 | 0.7 | 4.6 | 13.5 | 18.1 |



TEST NUMBER: P580370

CATALOG NUMBER: HVSL2-3-LD4-STD-50-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.7 | 0.7 | 0.9 | 3.7 | 5.4 |
| 115° | 0.7 | 0.7 | 0.9 | 2.4 | 3.5 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|--------|-----|-----|-----|-----|------|
| 107.5° | 0.4 | 0.7 | 2.6 | 9.1 | 12.4 |
| 110° | 0.7 | 0.7 | 1.5 | 5.7 | 8.3 |



(END OF REPORT)