

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: P580702

Luminaire Tested: **HVSL8-2-LD4-2STD-35-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580702
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: HVSL8-2-LD4-2STD-35-UNV-O-EDD
Description: 2 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

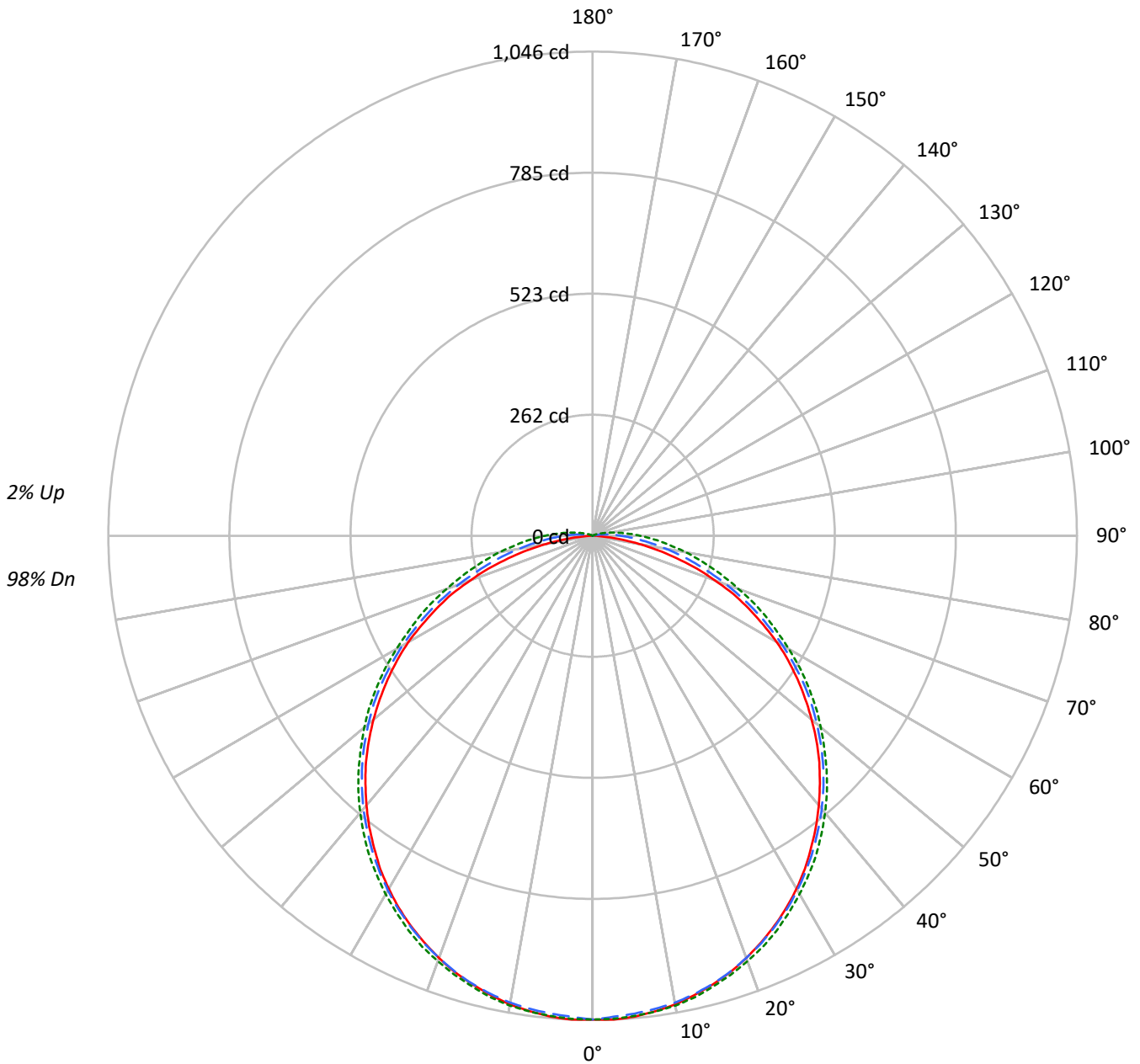
Lumens per Lamp: N/A
Luminaire Lumens: 3159.9 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 33.7
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

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CATALOG NUMBER: HVSL8-2-LD4-2STD-35-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580702

CATALOG NUMBER: HVSL8-2-LD4-2STD-35-UNV-O-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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° | 8437 | 8437 | 8437 |
| 5° | 8390 | 8228 | 8257 |
| 10° | 8304 | 8061 | 8092 |
| 15° | 8202 | 7879 | 7893 |
| 20° | 8094 | 7679 | 7700 |
| 25° | 7971 | 7474 | 7504 |
| 30° | 7832 | 7257 | 7282 |
| 35° | 7663 | 7021 | 7061 |
| 40° | 7487 | 6774 | 6803 |
| 45° | 7296 | 6505 | 6526 |
| 50° | 7057 | 6198 | 6226 |
| 55° | 6796 | 5863 | 5897 |
| 60° | 6486 | 5434 | 5513 |
| 65° | 6017 | 4958 | 5132 |
| 70° | 5366 | 4401 | 4689 |
| 75° | 4473 | 3793 | 4285 |
| 80° | 3204 | 3195 | 3918 |
| 85° | 1542 | 2587 | 3568 |



TEST NUMBER: P580702

CATALOG NUMBER: HVSL8-2-LD4-2STD-35-UNV-O-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 98.9 | 3.1 |
| 10°-20° | 283.7 | 9.0 |
| 20°-30° | 430.5 | 13.6 |
| 30°-40° | 520.5 | 16.5 |
| 40°-50° | 543.1 | 17.2 |
| 50°-60° | 496.5 | 15.7 |
| 60°-70° | 387.1 | 12.3 |
| 70°-80° | 242.1 | 7.7 |
| 80°-90° | 110.0 | 3.5 |
| 90°-100° | 36.9 | 1.2 |
| 100°-110° | 9.2 | 0.3 |
| 110°-120° | 1.5 | 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° | 813.1 | 25.7 |
| 0°-40° | 1333.6 | 42.2 |
| 0°-60° | 2373.2 | 75.1 |
| 0°-90° | 3112.4 | 98.5 |
| 90°-120° | 47.5 | 1.5 |
| 90°-150° | 47.5 | 1.5 |
| 90°-180° | 48.0 | 1.5 |
| 0°-180° | 3159.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1045 | 1045 | 1045 | 1045 | 1045 | |
| 5° | 1043 | 1041 | 1036 | 1041 | 1041 | 99 |
| 15° | 1003 | 1005 | 1002 | 1008 | 1008 | 283 |
| 25° | 930 | 930 | 931 | 939 | 941 | 428 |
| 35° | 823 | 827 | 830 | 838 | 842 | 515 |
| 45° | 692 | 698 | 704 | 711 | 714 | 533 |
| 55° | 540 | 547 | 557 | 565 | 569 | 483 |
| 65° | 371 | 378 | 391 | 406 | 413 | 367 |
| 75° | 188 | 200 | 229 | 256 | 266 | 200 |
| 85° | 32 | 60 | 103 | 136 | 149 | 41 |
| 90° | 0 | 22 | 61 | 91 | 102 | 1 |
| 95° | 0 | 6 | 32 | 57 | 66 | 0 |
| 105° | 0 | 1 | 5 | 15 | 20 | 1 |
| 115° | 1 | 1 | 1 | 3 | 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: P580702

CATALOG NUMBER: HVSL8-2-LD4-2STD-35-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1045.1 | 1045.1 | 1045.1 | 1045.1 | 1045.1 |
| 2.5° | 1046.4 | 1044.9 | 1040.2 | 1044.9 | 1044.6 |
| 5° | 1042.9 | 1040.9 | 1036.3 | 1041.2 | 1041.2 |
| 7.5° | 1036.0 | 1035.3 | 1031.1 | 1036.8 | 1036.8 |
| 10° | 1027.9 | 1027.6 | 1024.2 | 1030.4 | 1030.6 |
| 12.5° | 1016.6 | 1017.5 | 1014.3 | 1020.3 | 1021.0 |
| 15° | 1003.3 | 1005.0 | 1002.3 | 1007.9 | 1007.7 |
| 17.5° | 988.7 | 989.7 | 987.7 | 994.1 | 993.9 |
| 20° | 970.7 | 972.0 | 970.5 | 977.1 | 977.9 |
| 22.5° | 950.8 | 952.5 | 952.3 | 959.2 | 961.1 |
| 25° | 929.6 | 930.3 | 931.3 | 939.2 | 940.7 |
| 27.5° | 906.2 | 907.4 | 909.1 | 916.3 | 917.8 |
| 30° | 880.6 | 882.5 | 884.5 | 891.9 | 893.9 |
| 32.5° | 853.5 | 855.4 | 857.9 | 867.5 | 868.5 |
| 35° | 822.9 | 826.6 | 830.0 | 838.4 | 841.9 |
| 37.5° | 792.4 | 797.0 | 800.2 | 809.1 | 811.8 |
| 40° | 760.1 | 764.8 | 769.9 | 779.3 | 781.0 |
| 42.5° | 726.3 | 731.7 | 737.9 | 746.3 | 749.2 |
| 45° | 692.3 | 698.5 | 704.1 | 711.0 | 714.5 |
| 47.5° | 655.6 | 661.8 | 668.7 | 676.6 | 678.8 |
| 50° | 617.7 | 624.8 | 632.2 | 639.6 | 643.5 |
| 52.5° | 578.7 | 587.4 | 595.7 | 603.6 | 607.3 |
| 55° | 540.3 | 546.7 | 556.8 | 564.9 | 568.6 |
| 57.5° | 500.4 | 505.8 | 514.9 | 528.2 | 530.2 |
| 60° | 459.7 | 464.7 | 474.0 | 484.9 | 489.3 |
| 62.5° | 414.9 | 421.6 | 431.4 | 445.2 | 449.1 |
| 65° | 371.3 | 377.7 | 390.8 | 406.3 | 412.7 |
| 67.5° | 329.2 | 331.4 | 348.1 | 364.4 | 374.7 |
| 70° | 279.4 | 287.8 | 307.2 | 327.2 | 335.1 |
| 72.5° | 236.5 | 244.9 | 266.3 | 289.7 | 299.6 |
| 75° | 188.0 | 199.6 | 228.6 | 256.0 | 265.6 |
| 77.5° | 145.4 | 158.2 | 194.1 | 221.7 | 232.8 |
| 80° | 101.5 | 121.5 | 160.6 | 191.7 | 203.8 |
| 82.5° | 63.8 | 88.4 | 130.3 | 162.9 | 173.5 |
| 85° | 32.5 | 60.1 | 103.2 | 136.5 | 148.6 |
| 87.5° | 8.6 | 38.9 | 80.3 | 112.1 | 124.4 |
| 90° | 0.2 | 22.4 | 60.9 | 91.4 | 102.5 |
| 92.5° | 0.2 | 12.6 | 45.3 | 72.7 | 84.0 |
| 95° | 0.2 | 5.9 | 31.5 | 57.2 | 66.0 |
| 97.5° | 0.2 | 2.5 | 21.7 | 43.1 | 52.0 |
| 100° | 0.2 | 1.2 | 13.8 | 31.3 | 38.9 |
| 102.5° | 0.5 | 0.7 | 8.6 | 22.4 | 28.6 |
| 105° | 0.5 | 0.7 | 5.2 | 15.3 | 20.4 |



TEST NUMBER: P580702

CATALOG NUMBER: HVSL8-2-LD4-2STD-35-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.7 | 0.7 | 1.0 | 4.2 | 6.2 |
| 115° | 0.7 | 0.7 | 1.0 | 2.7 | 3.9 |
| 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° | 0.5 | 0.7 | 3.0 | 10.3 | 14.0 |
| 110° | 0.7 | 0.7 | 1.7 | 6.4 | 9.4 |



(END OF REPORT)