

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: P580817

Luminaire Tested: **HVSL8-8-LD4-1LO-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580817
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: HVSL8-8-LD4-1LO-50-UNV-O-EDD-90
Description: 8 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

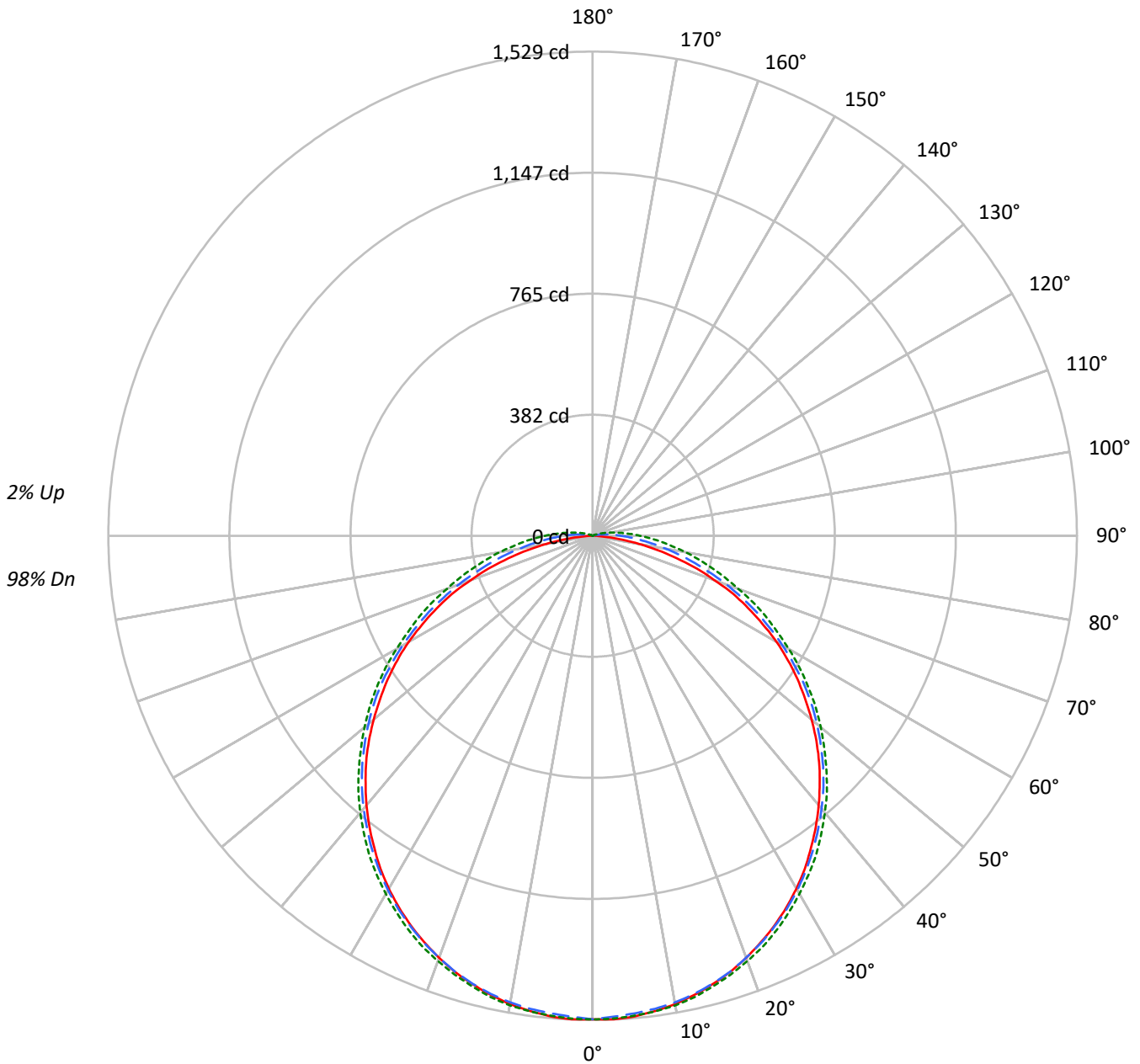
Lumens per Lamp: N/A
Luminaire Lumens: 4617.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 47.4
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: HVSL8-8-LD4-1LO-50-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580817

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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° | 3082 | 3082 | 3082 |
| 5° | 3082 | 3017 | 3016 |
| 10° | 3066 | 2966 | 2956 |
| 15° | 3046 | 2910 | 2883 |
| 20° | 3023 | 2847 | 2813 |
| 25° | 2995 | 2782 | 2741 |
| 30° | 2963 | 2712 | 2660 |
| 35° | 2920 | 2635 | 2579 |
| 40° | 2875 | 2553 | 2485 |
| 45° | 2828 | 2464 | 2384 |
| 50° | 2765 | 2361 | 2275 |
| 55° | 2697 | 2248 | 2154 |
| 60° | 2617 | 2099 | 2014 |
| 65° | 2480 | 1933 | 1874 |
| 70° | 2278 | 1736 | 1713 |
| 75° | 1988 | 1519 | 1565 |
| 80° | 1541 | 1307 | 1431 |
| 85° | 888 | 1095 | 1303 |



TEST NUMBER: P580817

CATALOG NUMBER: HVSL8-8-LD4-1LO-50-UNV-O-EDD-90

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 144.5 | 3.1 |
| 10°-20° | 414.5 | 9.0 |
| 20°-30° | 628.9 | 13.6 |
| 30°-40° | 760.5 | 16.5 |
| 40°-50° | 793.5 | 17.2 |
| 50°-60° | 725.5 | 15.7 |
| 60°-70° | 565.6 | 12.2 |
| 70°-80° | 353.8 | 7.7 |
| 80°-90° | 160.7 | 3.5 |
| 90°-100° | 53.9 | 1.2 |
| 100°-110° | 13.5 | 0.3 |
| 110°-120° | 2.1 | 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° | 1187.9 | 25.7 |
| 0°-40° | 1948.4 | 42.2 |
| 0°-60° | 3467.4 | 75.1 |
| 0°-90° | 4547.5 | 98.5 |
| 90°-120° | 69.5 | 1.5 |
| 90°-150° | 69.5 | 1.5 |
| 90°-180° | 70.0 | 1.5 |
| 0°-180° | 4617.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1527 | 1527 | 1527 | 1527 | 1527 | |
| 5° | 1524 | 1521 | 1514 | 1521 | 1521 | 145 |
| 15° | 1466 | 1468 | 1464 | 1473 | 1472 | 414 |
| 25° | 1358 | 1359 | 1361 | 1372 | 1374 | 626 |
| 35° | 1202 | 1208 | 1213 | 1225 | 1230 | 753 |
| 45° | 1012 | 1020 | 1029 | 1039 | 1044 | 779 |
| 55° | 789 | 799 | 814 | 825 | 831 | 705 |
| 65° | 542 | 552 | 571 | 594 | 603 | 537 |
| 75° | 275 | 292 | 334 | 374 | 388 | 293 |
| 85° | 48 | 88 | 151 | 199 | 217 | 60 |
| 90° | 0 | 33 | 89 | 134 | 150 | 2 |
| 95° | 0 | 9 | 46 | 84 | 96 | 0 |
| 105° | 1 | 1 | 8 | 22 | 30 | 1 |
| 115° | 1 | 1 | 1 | 4 | 6 | 1 |
| 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: P580817

CATALOG NUMBER: HVSL8-8-LD4-1LO-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1527.0 | 1527.0 | 1527.0 | 1527.0 | 1527.0 |
| 2.5° | 1528.8 | 1526.7 | 1519.8 | 1526.7 | 1526.3 |
| 5° | 1523.8 | 1520.9 | 1514.1 | 1521.3 | 1521.3 |
| 7.5° | 1513.7 | 1512.6 | 1506.5 | 1514.8 | 1514.8 |
| 10° | 1501.8 | 1501.5 | 1496.4 | 1505.4 | 1505.8 |
| 12.5° | 1485.3 | 1486.7 | 1482.0 | 1490.7 | 1491.7 |
| 15° | 1465.8 | 1468.3 | 1464.4 | 1472.7 | 1472.3 |
| 17.5° | 1444.6 | 1446.0 | 1443.1 | 1452.5 | 1452.1 |
| 20° | 1418.3 | 1420.1 | 1418.0 | 1427.7 | 1428.8 |
| 22.5° | 1389.2 | 1391.7 | 1391.3 | 1401.4 | 1404.3 |
| 25° | 1358.2 | 1359.3 | 1360.7 | 1372.2 | 1374.4 |
| 27.5° | 1324.0 | 1325.8 | 1328.3 | 1338.8 | 1340.9 |
| 30° | 1286.6 | 1289.4 | 1292.3 | 1303.1 | 1306.0 |
| 32.5° | 1247.0 | 1249.8 | 1253.4 | 1267.5 | 1268.9 |
| 35° | 1202.3 | 1207.7 | 1212.8 | 1225.0 | 1230.0 |
| 37.5° | 1157.7 | 1164.5 | 1169.2 | 1182.2 | 1186.1 |
| 40° | 1110.5 | 1117.4 | 1124.9 | 1138.6 | 1141.1 |
| 42.5° | 1061.2 | 1069.1 | 1078.1 | 1090.4 | 1094.7 |
| 45° | 1011.5 | 1020.5 | 1028.8 | 1038.9 | 1043.9 |
| 47.5° | 957.9 | 966.9 | 977.0 | 988.5 | 991.7 |
| 50° | 902.5 | 912.9 | 923.7 | 934.5 | 940.3 |
| 52.5° | 845.6 | 858.2 | 870.4 | 881.9 | 887.3 |
| 55° | 789.4 | 798.8 | 813.5 | 825.4 | 830.8 |
| 57.5° | 731.1 | 739.0 | 752.4 | 771.8 | 774.7 |
| 60° | 671.7 | 678.9 | 692.6 | 708.4 | 714.9 |
| 62.5° | 606.2 | 615.9 | 630.3 | 650.5 | 656.2 |
| 65° | 542.5 | 551.8 | 570.9 | 593.6 | 603.0 |
| 67.5° | 480.9 | 484.2 | 508.6 | 532.4 | 547.5 |
| 70° | 408.2 | 420.5 | 448.9 | 478.1 | 489.6 |
| 72.5° | 345.6 | 357.8 | 389.1 | 423.3 | 437.7 |
| 75° | 274.7 | 291.6 | 334.1 | 374.0 | 388.1 |
| 77.5° | 212.4 | 231.1 | 283.7 | 324.0 | 340.2 |
| 80° | 148.3 | 177.5 | 234.7 | 280.1 | 297.7 |
| 82.5° | 93.2 | 129.2 | 190.4 | 237.9 | 253.4 |
| 85° | 47.5 | 87.8 | 150.8 | 199.4 | 217.1 |
| 87.5° | 12.6 | 56.9 | 117.4 | 163.8 | 181.8 |
| 90° | 0.4 | 32.8 | 88.9 | 133.6 | 149.8 |
| 92.5° | 0.4 | 18.4 | 66.2 | 106.2 | 122.8 |
| 95° | 0.4 | 8.6 | 46.1 | 83.5 | 96.5 |
| 97.5° | 0.4 | 3.6 | 31.7 | 63.0 | 76.0 |
| 100° | 0.4 | 1.8 | 20.2 | 45.7 | 56.9 |
| 102.5° | 0.7 | 1.1 | 12.6 | 32.8 | 41.8 |
| 105° | 0.7 | 1.1 | 7.6 | 22.3 | 29.9 |



TEST NUMBER: P580817

CATALOG NUMBER: HVSL8-8-LD4-1LO-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 1.1 | 1.1 | 1.4 | 6.1 | 9.0 |
| 115° | 1.1 | 1.1 | 1.4 | 4.0 | 5.8 |
| 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° | 0.7 | 1.1 | 4.3 | 15.1 | 20.5 |
| 110° | 1.1 | 1.1 | 2.5 | 9.4 | 13.7 |



(END OF REPORT)