

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: P580727

Luminaire Tested: **HVSL8-2-LD4-3STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580727
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-LD4-3STD-40-UNV-O-EDD-90
Description: 2 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

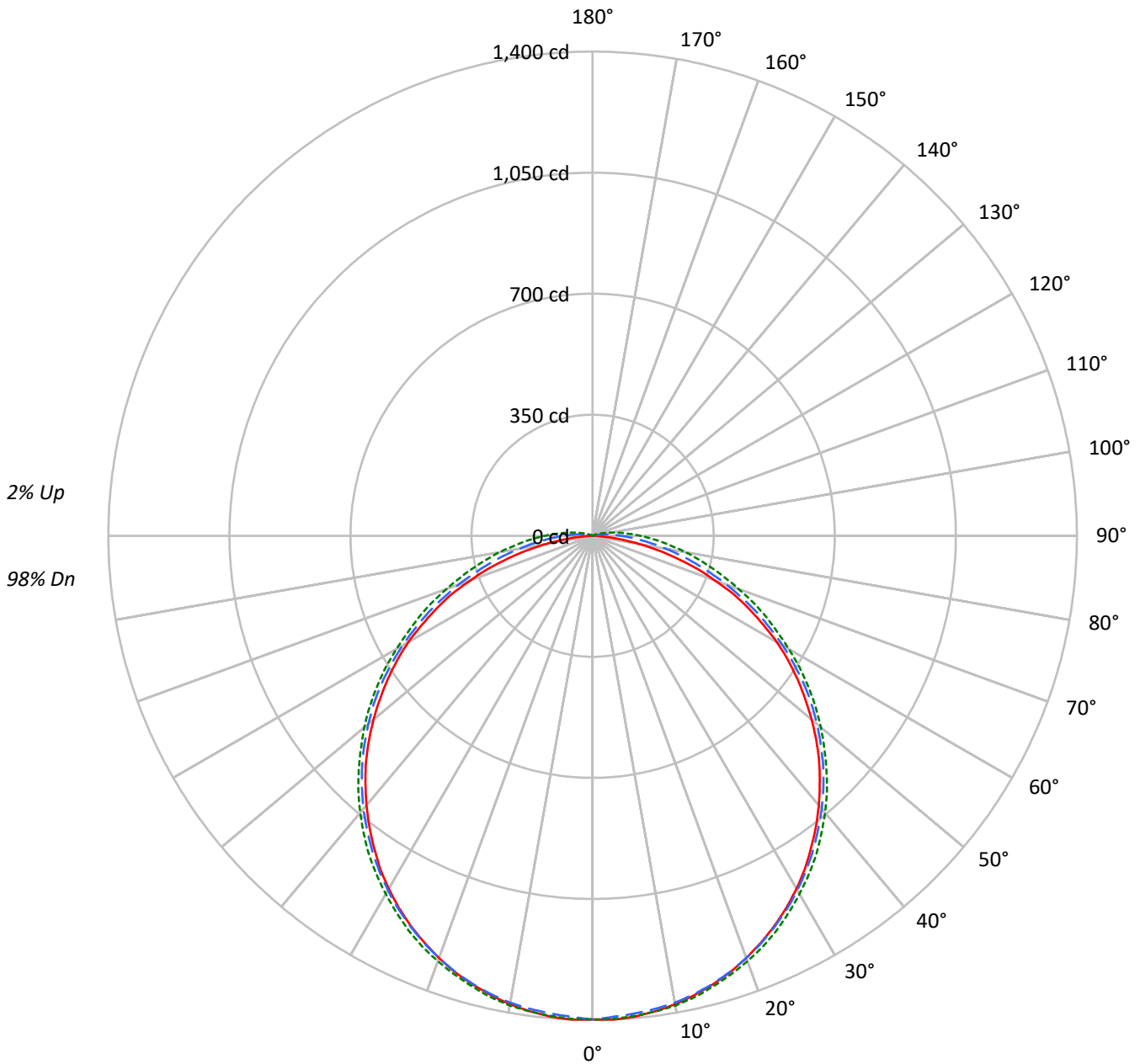
Lumens per Lamp: N/A
Luminaire Lumens: 4229.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 49.2
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: P580727

CATALOG NUMBER: HVSL8-2-LD4-3STD-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580727

CATALOG NUMBER: HVSL8-2-LD4-3STD-40-UNV-O-EDD-90

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° | 11292 | 11292 | 11292 |
| 5° | 11229 | 11011 | 11050 |
| 10° | 11113 | 10788 | 10829 |
| 15° | 10976 | 10544 | 10563 |
| 20° | 10832 | 10276 | 10305 |
| 25° | 10667 | 10003 | 10043 |
| 30° | 10480 | 9712 | 9744 |
| 35° | 10255 | 9396 | 9449 |
| 40° | 10019 | 9066 | 9105 |
| 45° | 9764 | 8707 | 8733 |
| 50° | 9443 | 8296 | 8333 |
| 55° | 9095 | 7847 | 7892 |
| 60° | 8681 | 7273 | 7377 |
| 65° | 8053 | 6634 | 6868 |
| 70° | 7181 | 5890 | 6274 |
| 75° | 5986 | 5077 | 5734 |
| 80° | 4287 | 4277 | 5243 |
| 85° | 2063 | 3465 | 4773 |



TEST NUMBER: P580727

CATALOG NUMBER: HVSL8-2-LD4-3STD-40-UNV-O-EDD-90

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.4 | 3.1 |
| 10°-20° | 379.7 | 9.0 |
| 20°-30° | 576.1 | 13.6 |
| 30°-40° | 696.6 | 16.5 |
| 40°-50° | 726.8 | 17.2 |
| 50°-60° | 664.5 | 15.7 |
| 60°-70° | 518.0 | 12.2 |
| 70°-80° | 324.1 | 7.7 |
| 80°-90° | 147.2 | 3.5 |
| 90°-100° | 49.3 | 1.2 |
| 100°-110° | 12.4 | 0.3 |
| 110°-120° | 1.9 | 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° | 1088.1 | 25.7 |
| 0°-40° | 1784.7 | 42.2 |
| 0°-60° | 3176.1 | 75.1 |
| 0°-90° | 4165.3 | 98.5 |
| 90°-120° | 63.7 | 1.5 |
| 90°-150° | 63.7 | 1.5 |
| 90°-180° | 64.0 | 1.5 |
| 0°-180° | 4229.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1399 | 1399 | 1399 | 1399 | 1399 | |
| 5° | 1396 | 1393 | 1387 | 1393 | 1393 | 133 |
| 15° | 1343 | 1345 | 1341 | 1349 | 1349 | 379 |
| 25° | 1244 | 1245 | 1246 | 1257 | 1259 | 573 |
| 35° | 1101 | 1106 | 1111 | 1122 | 1127 | 689 |
| 45° | 926 | 935 | 942 | 952 | 956 | 714 |
| 55° | 723 | 732 | 745 | 756 | 761 | 646 |
| 65° | 497 | 506 | 523 | 544 | 552 | 492 |
| 75° | 252 | 267 | 306 | 343 | 355 | 268 |
| 85° | 44 | 80 | 138 | 183 | 199 | 55 |
| 90° | 0 | 30 | 81 | 122 | 137 | 2 |
| 95° | 0 | 8 | 42 | 76 | 88 | 0 |
| 105° | 1 | 1 | 7 | 20 | 27 | 1 |
| 115° | 1 | 1 | 1 | 4 | 5 | 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: P580727

CATALOG NUMBER: HVSL8-2-LD4-3STD-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1398.7 | 1398.7 | 1398.7 | 1398.7 | 1398.7 |
| 2.5° | 1400.3 | 1398.4 | 1392.1 | 1398.4 | 1398.0 |
| 5° | 1395.7 | 1393.1 | 1386.8 | 1393.4 | 1393.4 |
| 7.5° | 1386.5 | 1385.5 | 1379.9 | 1387.5 | 1387.5 |
| 10° | 1375.6 | 1375.3 | 1370.7 | 1378.9 | 1379.2 |
| 12.5° | 1360.4 | 1361.8 | 1357.5 | 1365.4 | 1366.4 |
| 15° | 1342.6 | 1345.0 | 1341.3 | 1348.9 | 1348.6 |
| 17.5° | 1323.2 | 1324.5 | 1321.9 | 1330.4 | 1330.1 |
| 20° | 1299.1 | 1300.8 | 1298.8 | 1307.7 | 1308.7 |
| 22.5° | 1272.4 | 1274.7 | 1274.4 | 1283.6 | 1286.3 |
| 25° | 1244.1 | 1245.0 | 1246.4 | 1256.9 | 1258.9 |
| 27.5° | 1212.7 | 1214.4 | 1216.7 | 1226.3 | 1228.2 |
| 30° | 1178.4 | 1181.1 | 1183.7 | 1193.6 | 1196.2 |
| 32.5° | 1142.2 | 1144.8 | 1148.1 | 1161.0 | 1162.3 |
| 35° | 1101.3 | 1106.2 | 1110.8 | 1122.1 | 1126.7 |
| 37.5° | 1060.4 | 1066.7 | 1071.0 | 1082.8 | 1086.4 |
| 40° | 1017.2 | 1023.5 | 1030.4 | 1042.9 | 1045.2 |
| 42.5° | 972.0 | 979.3 | 987.5 | 998.7 | 1002.7 |
| 45° | 926.5 | 934.8 | 942.4 | 951.6 | 956.2 |
| 47.5° | 877.4 | 885.6 | 894.9 | 905.4 | 908.4 |
| 50° | 826.6 | 836.2 | 846.1 | 856.0 | 861.2 |
| 52.5° | 774.5 | 786.1 | 797.3 | 807.8 | 812.8 |
| 55° | 723.1 | 731.7 | 745.2 | 756.1 | 761.0 |
| 57.5° | 669.7 | 676.9 | 689.1 | 706.9 | 709.6 |
| 60° | 615.3 | 621.9 | 634.4 | 648.9 | 654.8 |
| 62.5° | 555.3 | 564.2 | 577.4 | 595.8 | 601.1 |
| 65° | 496.9 | 505.5 | 522.9 | 543.7 | 552.3 |
| 67.5° | 440.5 | 443.5 | 465.9 | 487.7 | 501.5 |
| 70° | 373.9 | 385.1 | 411.2 | 437.9 | 448.4 |
| 72.5° | 316.5 | 327.7 | 356.4 | 387.8 | 400.9 |
| 75° | 251.6 | 267.1 | 306.0 | 342.6 | 355.4 |
| 77.5° | 194.5 | 211.7 | 259.8 | 296.8 | 311.6 |
| 80° | 135.8 | 162.6 | 215.0 | 256.5 | 272.7 |
| 82.5° | 85.4 | 118.4 | 174.4 | 217.9 | 232.1 |
| 85° | 43.5 | 80.5 | 138.2 | 182.7 | 198.8 |
| 87.5° | 11.5 | 52.1 | 107.5 | 150.0 | 166.5 |
| 90° | 0.3 | 30.0 | 81.4 | 122.3 | 137.2 |
| 92.5° | 0.3 | 16.8 | 60.7 | 97.3 | 112.4 |
| 95° | 0.3 | 7.9 | 42.2 | 76.5 | 88.4 |
| 97.5° | 0.3 | 3.3 | 29.0 | 57.7 | 69.6 |
| 100° | 0.3 | 1.6 | 18.5 | 41.9 | 52.1 |
| 102.5° | 0.7 | 1.0 | 11.5 | 30.0 | 38.2 |
| 105° | 0.7 | 1.0 | 6.9 | 20.4 | 27.4 |



TEST NUMBER: P580727

CATALOG NUMBER: HVSL8-2-LD4-3STD-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 1.0 | 1.0 | 1.3 | 5.6 | 8.2 |
| 115° | 1.0 | 1.0 | 1.3 | 3.6 | 5.3 |
| 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 | 1.0 | 4.0 | 13.8 | 18.8 |
| 110° | 1.0 | 1.0 | 2.3 | 8.6 | 12.5 |



(END OF REPORT)