

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: P580260

Luminaire Tested: **HVSL12-8-LD4-1LO-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580260
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: HVSL12-8-LD4-1LO-30-UNV-O-EDD
Description: 8 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

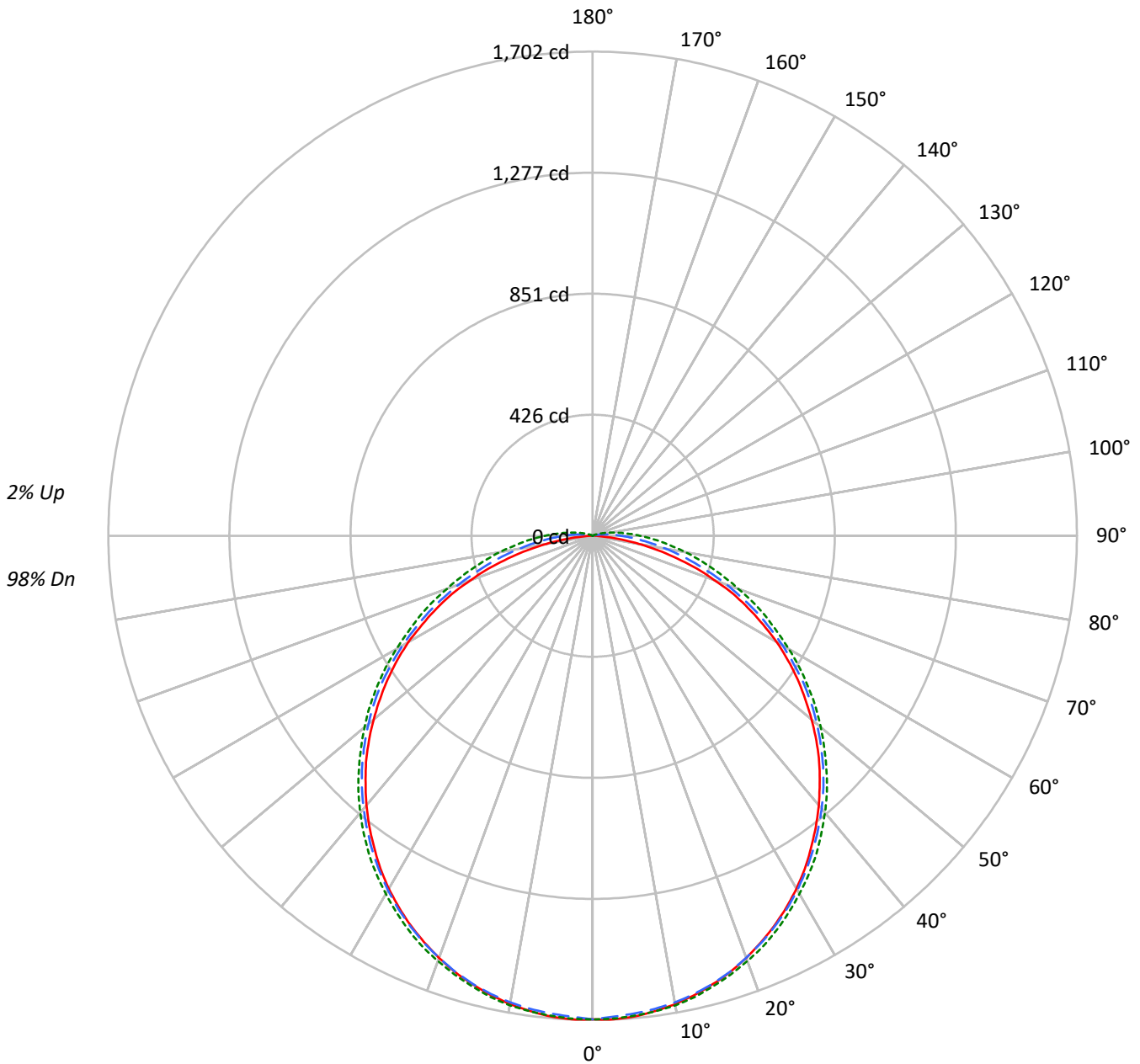
Lumens per Lamp: N/A
Luminaire Lumens: 5140.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 48.7
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

TEST NUMBER: P580260

CATALOG NUMBER: HVSL12-8-LD4-1LO-30-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580260

CATALOG NUMBER: HVSL12-8-LD4-1LO-30-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° | 2287 | 2287 | 2287 |
| 5° | 2287 | 2251 | 2255 |
| 10° | 2276 | 2224 | 2225 |
| 15° | 2261 | 2193 | 2186 |
| 20° | 2244 | 2156 | 2147 |
| 25° | 2223 | 2118 | 2108 |
| 30° | 2199 | 2076 | 2061 |
| 35° | 2167 | 2029 | 2014 |
| 40° | 2134 | 1979 | 1958 |
| 45° | 2099 | 1924 | 1895 |
| 50° | 2052 | 1859 | 1828 |
| 55° | 2002 | 1786 | 1752 |
| 60° | 1942 | 1687 | 1662 |
| 65° | 1840 | 1576 | 1574 |
| 70° | 1691 | 1441 | 1471 |
| 75° | 1475 | 1293 | 1384 |
| 80° | 1144 | 1156 | 1320 |
| 85° | 660 | 1030 | 1284 |



TEST NUMBER: P580260

CATALOG NUMBER: HVSL12-8-LD4-1LO-30-UNV-O-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 160.9 | 3.1 |
| 10°-20° | 461.5 | 9.0 |
| 20°-30° | 700.2 | 13.6 |
| 30°-40° | 846.6 | 16.5 |
| 40°-50° | 883.4 | 17.2 |
| 50°-60° | 807.7 | 15.7 |
| 60°-70° | 629.6 | 12.2 |
| 70°-80° | 393.9 | 7.7 |
| 80°-90° | 178.9 | 3.5 |
| 90°-100° | 60.0 | 1.2 |
| 100°-110° | 15.0 | 0.3 |
| 110°-120° | 2.4 | 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° | 1322.5 | 25.7 |
| 0°-40° | 2169.1 | 42.2 |
| 0°-60° | 3860.2 | 75.1 |
| 0°-90° | 5062.6 | 98.5 |
| 90°-120° | 77.4 | 1.5 |
| 90°-150° | 77.4 | 1.5 |
| 90°-180° | 77.0 | 1.5 |
| 0°-180° | 5140.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1700 | 1700 | 1700 | 1700 | 1700 | |
| 5° | 1696 | 1693 | 1686 | 1694 | 1694 | 161 |
| 15° | 1632 | 1635 | 1630 | 1640 | 1639 | 461 |
| 25° | 1512 | 1513 | 1515 | 1528 | 1530 | 697 |
| 35° | 1338 | 1344 | 1350 | 1364 | 1369 | 838 |
| 45° | 1126 | 1136 | 1145 | 1157 | 1162 | 868 |
| 55° | 879 | 889 | 906 | 919 | 925 | 785 |
| 65° | 604 | 614 | 636 | 661 | 671 | 598 |
| 75° | 306 | 325 | 372 | 416 | 432 | 326 |
| 85° | 53 | 98 | 168 | 222 | 242 | 67 |
| 90° | 0 | 36 | 99 | 149 | 167 | 2 |
| 95° | 0 | 10 | 51 | 93 | 107 | 0 |
| 105° | 1 | 1 | 8 | 25 | 33 | 1 |
| 115° | 1 | 1 | 2 | 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: P580260

CATALOG NUMBER: HVSL12-8-LD4-1LO-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1700.0 | 1700.0 | 1700.0 | 1700.0 | 1700.0 |
| 2.5° | 1702.0 | 1699.6 | 1692.0 | 1699.6 | 1699.2 |
| 5° | 1696.4 | 1693.2 | 1685.6 | 1693.6 | 1693.6 |
| 7.5° | 1685.2 | 1684.0 | 1677.2 | 1686.4 | 1686.4 |
| 10° | 1671.9 | 1671.5 | 1665.9 | 1676.0 | 1676.4 |
| 12.5° | 1653.5 | 1655.1 | 1649.9 | 1659.5 | 1660.7 |
| 15° | 1631.9 | 1634.7 | 1630.3 | 1639.5 | 1639.1 |
| 17.5° | 1608.2 | 1609.8 | 1606.6 | 1617.0 | 1616.6 |
| 20° | 1579.0 | 1581.0 | 1578.6 | 1589.4 | 1590.6 |
| 22.5° | 1546.5 | 1549.3 | 1548.9 | 1560.1 | 1563.3 |
| 25° | 1512.0 | 1513.2 | 1514.9 | 1527.7 | 1530.1 |
| 27.5° | 1474.0 | 1476.0 | 1478.8 | 1490.4 | 1492.8 |
| 30° | 1432.3 | 1435.5 | 1438.7 | 1450.7 | 1453.9 |
| 32.5° | 1388.2 | 1391.4 | 1395.4 | 1411.1 | 1412.7 |
| 35° | 1338.5 | 1344.5 | 1350.1 | 1363.8 | 1369.4 |
| 37.5° | 1288.8 | 1296.4 | 1301.7 | 1316.1 | 1320.5 |
| 40° | 1236.3 | 1243.9 | 1252.4 | 1267.6 | 1270.4 |
| 42.5° | 1181.4 | 1190.2 | 1200.3 | 1213.9 | 1218.7 |
| 45° | 1126.1 | 1136.1 | 1145.4 | 1156.6 | 1162.2 |
| 47.5° | 1066.4 | 1076.4 | 1087.6 | 1100.5 | 1104.1 |
| 50° | 1004.7 | 1016.3 | 1028.3 | 1040.4 | 1046.8 |
| 52.5° | 941.4 | 955.4 | 969.0 | 981.8 | 987.9 |
| 55° | 878.9 | 889.3 | 905.7 | 918.9 | 924.9 |
| 57.5° | 813.9 | 822.7 | 837.6 | 859.2 | 862.4 |
| 60° | 747.8 | 755.8 | 771.1 | 788.7 | 795.9 |
| 62.5° | 674.9 | 685.7 | 701.7 | 724.2 | 730.6 |
| 65° | 603.9 | 614.4 | 635.6 | 660.8 | 671.3 |
| 67.5° | 535.4 | 539.0 | 566.3 | 592.7 | 609.5 |
| 70° | 454.5 | 468.1 | 499.7 | 532.2 | 545.0 |
| 72.5° | 384.7 | 398.4 | 433.2 | 471.3 | 487.3 |
| 75° | 305.8 | 324.6 | 371.9 | 416.4 | 432.0 |
| 77.5° | 236.4 | 257.3 | 315.8 | 360.7 | 378.7 |
| 80° | 165.1 | 197.6 | 261.3 | 311.8 | 331.4 |
| 82.5° | 103.8 | 143.9 | 212.0 | 264.9 | 282.1 |
| 85° | 52.9 | 97.8 | 167.9 | 222.0 | 241.7 |
| 87.5° | 14.0 | 63.3 | 130.6 | 182.3 | 202.4 |
| 90° | 0.4 | 36.5 | 99.0 | 148.7 | 166.7 |
| 92.5° | 0.4 | 20.4 | 73.7 | 118.2 | 136.7 |
| 95° | 0.4 | 9.6 | 51.3 | 93.0 | 107.4 |
| 97.5° | 0.4 | 4.0 | 35.3 | 70.1 | 84.6 |
| 100° | 0.4 | 2.0 | 22.4 | 50.9 | 63.3 |
| 102.5° | 0.8 | 1.2 | 14.0 | 36.5 | 46.5 |
| 105° | 0.8 | 1.2 | 8.4 | 24.8 | 33.3 |



TEST NUMBER: P580260

CATALOG NUMBER: HVSL12-8-LD4-1LO-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|------|
| 112.5° | 1.2 | 1.2 | 1.6 | 6.8 | 10.0 |
| 115° | 1.2 | 1.2 | 1.6 | 4.4 | 6.4 |
| 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° | 0.8 | 1.2 | 4.8 | 16.8 | 22.8 |
| 110° | 1.2 | 1.2 | 2.8 | 10.4 | 15.2 |



(END OF REPORT)