

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: P580812

Luminaire Tested: **HVSL8-8-LD4-1LO-30-UNV-O-EDD**

Issue Date: 12/16/2022

Test Information

Test Method: LM-79-08
Report Number: P580812
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-30-UNV-O-EDD
Description: 8 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

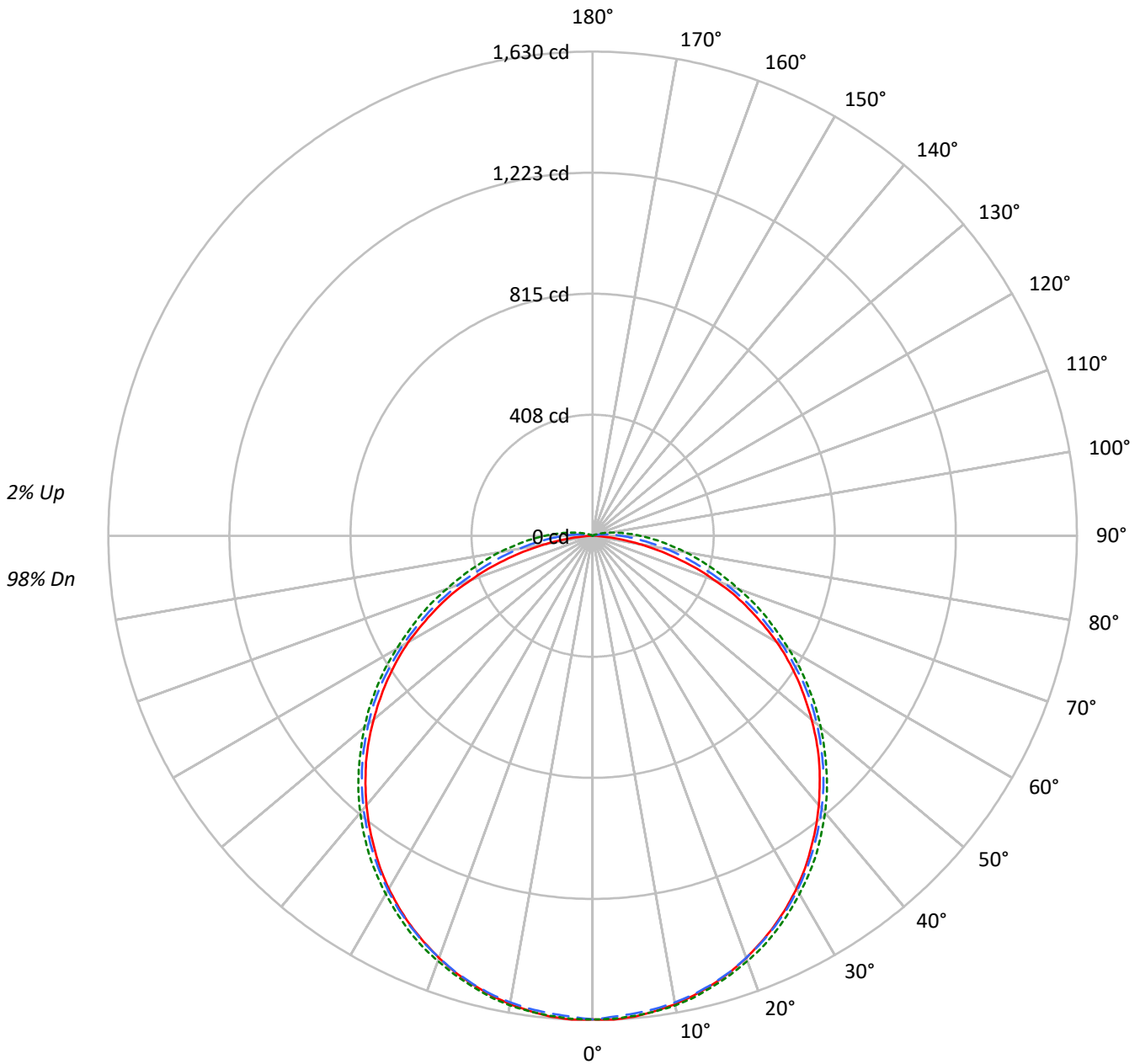
Lumens per Lamp: N/A
Luminaire Lumens: 4923.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 47.4
Input Voltage (V): NR
Input Current (A_{in}): 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: P580812

CATALOG NUMBER: HVSL8-8-LD4-1LO-30-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580812

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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° | 3286 | 3286 | 3286 |
| 5° | 3286 | 3217 | 3216 |
| 10° | 3270 | 3163 | 3152 |
| 15° | 3248 | 3103 | 3074 |
| 20° | 3224 | 3036 | 2999 |
| 25° | 3194 | 2966 | 2923 |
| 30° | 3159 | 2892 | 2836 |
| 35° | 3113 | 2809 | 2750 |
| 40° | 3066 | 2723 | 2650 |
| 45° | 3016 | 2628 | 2542 |
| 50° | 2948 | 2518 | 2425 |
| 55° | 2876 | 2397 | 2297 |
| 60° | 2790 | 2238 | 2147 |
| 65° | 2644 | 2061 | 1999 |
| 70° | 2430 | 1850 | 1826 |
| 75° | 2119 | 1620 | 1669 |
| 80° | 1643 | 1394 | 1526 |
| 85° | 948 | 1167 | 1389 |



TEST NUMBER: P580812

CATALOG NUMBER: HVSL8-8-LD4-1LO-30-UNV-O-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 154.1 | 3.1 |
| 10°-20° | 442.0 | 9.0 |
| 20°-30° | 670.6 | 13.6 |
| 30°-40° | 810.9 | 16.5 |
| 40°-50° | 846.1 | 17.2 |
| 50°-60° | 773.6 | 15.7 |
| 60°-70° | 603.0 | 12.2 |
| 70°-80° | 377.2 | 7.7 |
| 80°-90° | 171.3 | 3.5 |
| 90°-100° | 57.4 | 1.2 |
| 100°-110° | 14.4 | 0.3 |
| 110°-120° | 2.3 | 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° | 1266.7 | 25.7 |
| 0°-40° | 2077.6 | 42.2 |
| 0°-60° | 3697.3 | 75.1 |
| 0°-90° | 4848.9 | 98.5 |
| 90°-120° | 74.1 | 1.5 |
| 90°-150° | 74.1 | 1.5 |
| 90°-180° | 74.0 | 1.5 |
| 0°-180° | 4923.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1628 | 1628 | 1628 | 1628 | 1628 | |
| 5° | 1625 | 1622 | 1614 | 1622 | 1622 | 154 |
| 15° | 1563 | 1566 | 1561 | 1570 | 1570 | 441 |
| 25° | 1448 | 1449 | 1451 | 1463 | 1466 | 667 |
| 35° | 1282 | 1288 | 1293 | 1306 | 1312 | 802 |
| 45° | 1079 | 1088 | 1097 | 1108 | 1113 | 831 |
| 55° | 842 | 852 | 868 | 880 | 886 | 752 |
| 65° | 578 | 588 | 609 | 633 | 643 | 572 |
| 75° | 293 | 311 | 356 | 399 | 414 | 312 |
| 85° | 51 | 94 | 161 | 213 | 232 | 64 |
| 90° | 0 | 35 | 95 | 142 | 160 | 2 |
| 95° | 0 | 9 | 49 | 89 | 103 | 0 |
| 105° | 1 | 1 | 8 | 24 | 32 | 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: P580812

CATALOG NUMBER: HVSL8-8-LD4-1LO-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1628.2 | 1628.2 | 1628.2 | 1628.2 | 1628.2 |
| 2.5° | 1630.2 | 1627.8 | 1620.6 | 1627.8 | 1627.5 |
| 5° | 1624.8 | 1621.7 | 1614.4 | 1622.1 | 1622.1 |
| 7.5° | 1614.0 | 1612.9 | 1606.4 | 1615.2 | 1615.2 |
| 10° | 1601.4 | 1601.0 | 1595.6 | 1605.2 | 1605.6 |
| 12.5° | 1583.7 | 1585.2 | 1580.3 | 1589.5 | 1590.6 |
| 15° | 1563.0 | 1565.7 | 1561.4 | 1570.3 | 1569.9 |
| 17.5° | 1540.3 | 1541.9 | 1538.8 | 1548.8 | 1548.4 |
| 20° | 1512.3 | 1514.2 | 1511.9 | 1522.3 | 1523.4 |
| 22.5° | 1481.2 | 1483.9 | 1483.5 | 1494.3 | 1497.3 |
| 25° | 1448.2 | 1449.4 | 1450.9 | 1463.2 | 1465.5 |
| 27.5° | 1411.7 | 1413.7 | 1416.4 | 1427.5 | 1429.8 |
| 30° | 1371.8 | 1374.9 | 1378.0 | 1389.5 | 1392.6 |
| 32.5° | 1329.6 | 1332.7 | 1336.5 | 1351.5 | 1353.0 |
| 35° | 1282.0 | 1287.8 | 1293.1 | 1306.2 | 1311.6 |
| 37.5° | 1234.4 | 1241.7 | 1246.7 | 1260.5 | 1264.7 |
| 40° | 1184.1 | 1191.4 | 1199.5 | 1214.1 | 1216.8 |
| 42.5° | 1131.5 | 1140.0 | 1149.6 | 1162.6 | 1167.2 |
| 45° | 1078.6 | 1088.2 | 1097.0 | 1107.7 | 1113.1 |
| 47.5° | 1021.4 | 1031.0 | 1041.7 | 1054.0 | 1057.5 |
| 50° | 962.3 | 973.4 | 984.9 | 996.4 | 1002.6 |
| 52.5° | 901.6 | 915.1 | 928.1 | 940.4 | 946.2 |
| 55° | 841.8 | 851.7 | 867.5 | 880.1 | 885.9 |
| 57.5° | 779.6 | 788.0 | 802.2 | 822.9 | 826.0 |
| 60° | 716.2 | 723.9 | 738.5 | 755.4 | 762.3 |
| 62.5° | 646.4 | 656.7 | 672.1 | 693.6 | 699.7 |
| 65° | 578.4 | 588.4 | 608.8 | 632.9 | 642.9 |
| 67.5° | 512.8 | 516.3 | 542.4 | 567.7 | 583.8 |
| 70° | 435.3 | 448.3 | 478.6 | 509.7 | 522.0 |
| 72.5° | 368.5 | 381.5 | 414.9 | 451.4 | 466.7 |
| 75° | 292.9 | 310.9 | 356.2 | 398.8 | 413.8 |
| 77.5° | 226.5 | 246.4 | 302.5 | 345.5 | 362.7 |
| 80° | 158.1 | 189.2 | 250.3 | 298.6 | 317.4 |
| 82.5° | 99.4 | 137.8 | 203.0 | 253.7 | 270.2 |
| 85° | 50.7 | 93.7 | 160.8 | 212.6 | 231.5 |
| 87.5° | 13.4 | 60.6 | 125.1 | 174.6 | 193.8 |
| 90° | 0.4 | 34.9 | 94.8 | 142.4 | 159.7 |
| 92.5° | 0.4 | 19.6 | 70.6 | 113.2 | 130.9 |
| 95° | 0.4 | 9.2 | 49.1 | 89.0 | 102.9 |
| 97.5° | 0.4 | 3.8 | 33.8 | 67.2 | 81.0 |
| 100° | 0.4 | 1.9 | 21.5 | 48.7 | 60.6 |
| 102.5° | 0.8 | 1.2 | 13.4 | 34.9 | 44.5 |
| 105° | 0.8 | 1.2 | 8.1 | 23.8 | 31.9 |



TEST NUMBER: P580812

CATALOG NUMBER: HVSL8-8-LD4-1LO-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 1.2 | 1.2 | 1.5 | 6.5 | 9.6 |
| 115° | 1.2 | 1.2 | 1.5 | 4.2 | 6.1 |
| 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 | 4.6 | 16.1 | 21.9 |
| 110° | 1.2 | 1.2 | 2.7 | 10.0 | 14.6 |



(END OF REPORT)