

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: P580837

Luminaire Tested: **HVSL8-8-LD4-2LO-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580837
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-LD4-2LO-35-UNV-O-EDD-90
Description: 8 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

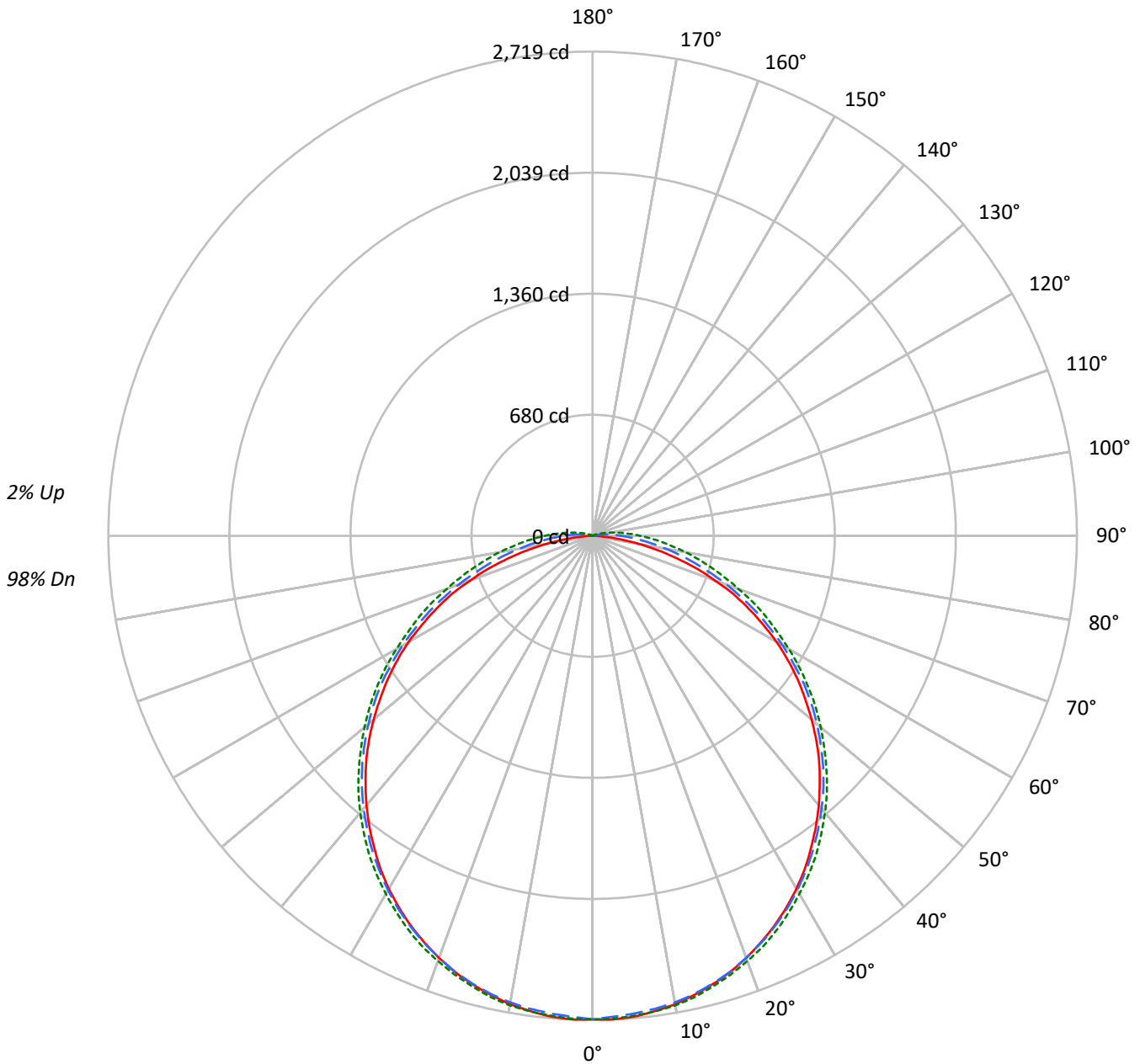
Lumens per Lamp: N/A
Luminaire Lumens: 8211.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 95.1
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-LD4-2LO-35-UNV-O-EDD-90

Luminous Intensity Polar Plot





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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° | 5481 | 5481 | 5481 |
| 5° | 5480 | 5365 | 5364 |
| 10° | 5454 | 5276 | 5256 |
| 15° | 5417 | 5176 | 5127 |
| 20° | 5377 | 5063 | 5002 |
| 25° | 5327 | 4947 | 4875 |
| 30° | 5269 | 4823 | 4730 |
| 35° | 5192 | 4686 | 4587 |
| 40° | 5114 | 4541 | 4419 |
| 45° | 5030 | 4383 | 4239 |
| 50° | 4917 | 4199 | 4045 |
| 55° | 4797 | 3997 | 3831 |
| 60° | 4654 | 3733 | 3581 |
| 65° | 4410 | 3437 | 3333 |
| 70° | 4052 | 3086 | 3046 |
| 75° | 3534 | 2702 | 2784 |
| 80° | 2742 | 2325 | 2545 |
| 85° | 1580 | 1947 | 2317 |



TEST NUMBER: P580837

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 257.0 | 3.1 |
| 10°-20° | 737.2 | 9.0 |
| 20°-30° | 1118.5 | 13.6 |
| 30°-40° | 1352.5 | 16.5 |
| 40°-50° | 1411.2 | 17.2 |
| 50°-60° | 1290.3 | 15.7 |
| 60°-70° | 1005.8 | 12.2 |
| 70°-80° | 629.2 | 7.7 |
| 80°-90° | 285.8 | 3.5 |
| 90°-100° | 95.8 | 1.2 |
| 100°-110° | 24.0 | 0.3 |
| 110°-120° | 3.8 | 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° | 2112.7 | 25.7 |
| 0°-40° | 3465.1 | 42.2 |
| 0°-60° | 6166.6 | 75.1 |
| 0°-90° | 8087.4 | 98.5 |
| 90°-120° | 123.6 | 1.5 |
| 90°-150° | 123.6 | 1.5 |
| 90°-180° | 124.0 | 1.5 |
| 0°-180° | 8211.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2716 | 2716 | 2716 | 2716 | 2716 | |
| 5° | 2710 | 2705 | 2693 | 2706 | 2706 | 257 |
| 15° | 2607 | 2611 | 2604 | 2619 | 2618 | 736 |
| 25° | 2416 | 2417 | 2420 | 2440 | 2444 | 1113 |
| 35° | 2138 | 2148 | 2157 | 2179 | 2188 | 1338 |
| 45° | 1799 | 1815 | 1830 | 1848 | 1857 | 1386 |
| 55° | 1404 | 1421 | 1447 | 1468 | 1478 | 1254 |
| 65° | 965 | 981 | 1015 | 1056 | 1072 | 955 |
| 75° | 488 | 519 | 594 | 665 | 690 | 521 |
| 85° | 84 | 156 | 268 | 355 | 386 | 107 |
| 90° | 1 | 58 | 158 | 238 | 266 | 3 |
| 95° | 1 | 15 | 82 | 148 | 172 | 0 |
| 105° | 1 | 2 | 13 | 40 | 53 | 1 |
| 115° | 2 | 2 | 3 | 7 | 10 | 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: P580837

CATALOG NUMBER: HVSL8-8-LD4-2LO-35-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2715.7 | 2715.7 | 2715.7 | 2715.7 | 2715.7 |
| 2.5° | 2718.9 | 2715.1 | 2702.9 | 2715.1 | 2714.4 |
| 5° | 2709.9 | 2704.8 | 2692.7 | 2705.5 | 2705.5 |
| 7.5° | 2692.0 | 2690.1 | 2679.2 | 2693.9 | 2693.9 |
| 10° | 2670.9 | 2670.2 | 2661.3 | 2677.3 | 2677.9 |
| 12.5° | 2641.4 | 2644.0 | 2635.7 | 2651.0 | 2653.0 |
| 15° | 2606.9 | 2611.4 | 2604.3 | 2619.0 | 2618.4 |
| 17.5° | 2569.1 | 2571.7 | 2566.5 | 2583.2 | 2582.5 |
| 20° | 2522.4 | 2525.6 | 2521.7 | 2539.0 | 2540.9 |
| 22.5° | 2470.5 | 2475.0 | 2474.3 | 2492.3 | 2497.4 |
| 25° | 2415.5 | 2417.4 | 2419.9 | 2440.4 | 2444.3 |
| 27.5° | 2354.6 | 2357.8 | 2362.3 | 2380.9 | 2384.7 |
| 30° | 2288.1 | 2293.2 | 2298.3 | 2317.5 | 2322.6 |
| 32.5° | 2217.6 | 2222.8 | 2229.2 | 2254.1 | 2256.7 |
| 35° | 2138.2 | 2147.9 | 2156.8 | 2178.6 | 2187.5 |
| 37.5° | 2058.9 | 2071.0 | 2079.4 | 2102.4 | 2109.4 |
| 40° | 1975.0 | 1987.2 | 2000.6 | 2024.9 | 2029.4 |
| 42.5° | 1887.3 | 1901.4 | 1917.4 | 1939.1 | 1946.8 |
| 45° | 1798.9 | 1814.9 | 1829.7 | 1847.6 | 1856.6 |
| 47.5° | 1703.6 | 1719.6 | 1737.5 | 1758.0 | 1763.7 |
| 50° | 1605.0 | 1623.5 | 1642.7 | 1661.9 | 1672.2 |
| 52.5° | 1503.8 | 1526.2 | 1548.0 | 1568.5 | 1578.1 |
| 55° | 1403.9 | 1420.6 | 1446.8 | 1468.0 | 1477.6 |
| 57.5° | 1300.2 | 1314.3 | 1338.0 | 1372.6 | 1377.7 |
| 60° | 1194.6 | 1207.4 | 1231.7 | 1259.9 | 1271.4 |
| 62.5° | 1078.1 | 1095.4 | 1121.0 | 1156.8 | 1167.1 |
| 65° | 964.8 | 981.4 | 1015.3 | 1055.7 | 1072.3 |
| 67.5° | 855.3 | 861.1 | 904.6 | 946.8 | 973.7 |
| 70° | 726.0 | 747.7 | 798.3 | 850.2 | 870.7 |
| 72.5° | 614.6 | 636.4 | 692.0 | 752.9 | 778.5 |
| 75° | 488.5 | 518.6 | 594.1 | 665.2 | 690.1 |
| 77.5° | 377.7 | 411.0 | 504.5 | 576.2 | 605.0 |
| 80° | 263.8 | 315.6 | 417.4 | 498.1 | 529.4 |
| 82.5° | 165.8 | 229.8 | 338.7 | 423.2 | 450.7 |
| 85° | 84.5 | 156.2 | 268.2 | 354.7 | 386.0 |
| 87.5° | 22.4 | 101.2 | 208.7 | 291.3 | 323.3 |
| 90° | 0.6 | 58.3 | 158.1 | 237.5 | 266.3 |
| 92.5° | 0.6 | 32.6 | 117.8 | 188.9 | 218.3 |
| 95° | 0.6 | 15.4 | 81.9 | 148.5 | 171.6 |
| 97.5° | 0.6 | 6.4 | 56.3 | 112.0 | 135.1 |
| 100° | 0.6 | 3.2 | 35.9 | 81.3 | 101.2 |
| 102.5° | 1.3 | 1.9 | 22.4 | 58.3 | 74.3 |
| 105° | 1.3 | 1.9 | 13.4 | 39.7 | 53.1 |



TEST NUMBER: P580837

CATALOG NUMBER: HVSL8-8-LD4-2LO-35-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|------|
| 112.5° | 1.9 | 1.9 | 2.6 | 10.9 | 16.0 |
| 115° | 1.9 | 1.9 | 2.6 | 7.0 | 10.2 |
| 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° | 1.3 | 1.9 | 7.7 | 26.9 | 36.5 |
| 110° | 1.9 | 1.9 | 4.5 | 16.6 | 24.3 |



(END OF REPORT)