

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: P580137

Luminaire Tested: **HVSL12-2-LD4-2HI-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580137
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: HVSL12-2-LD4-2HI-50-UNV-O-EDD-90
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

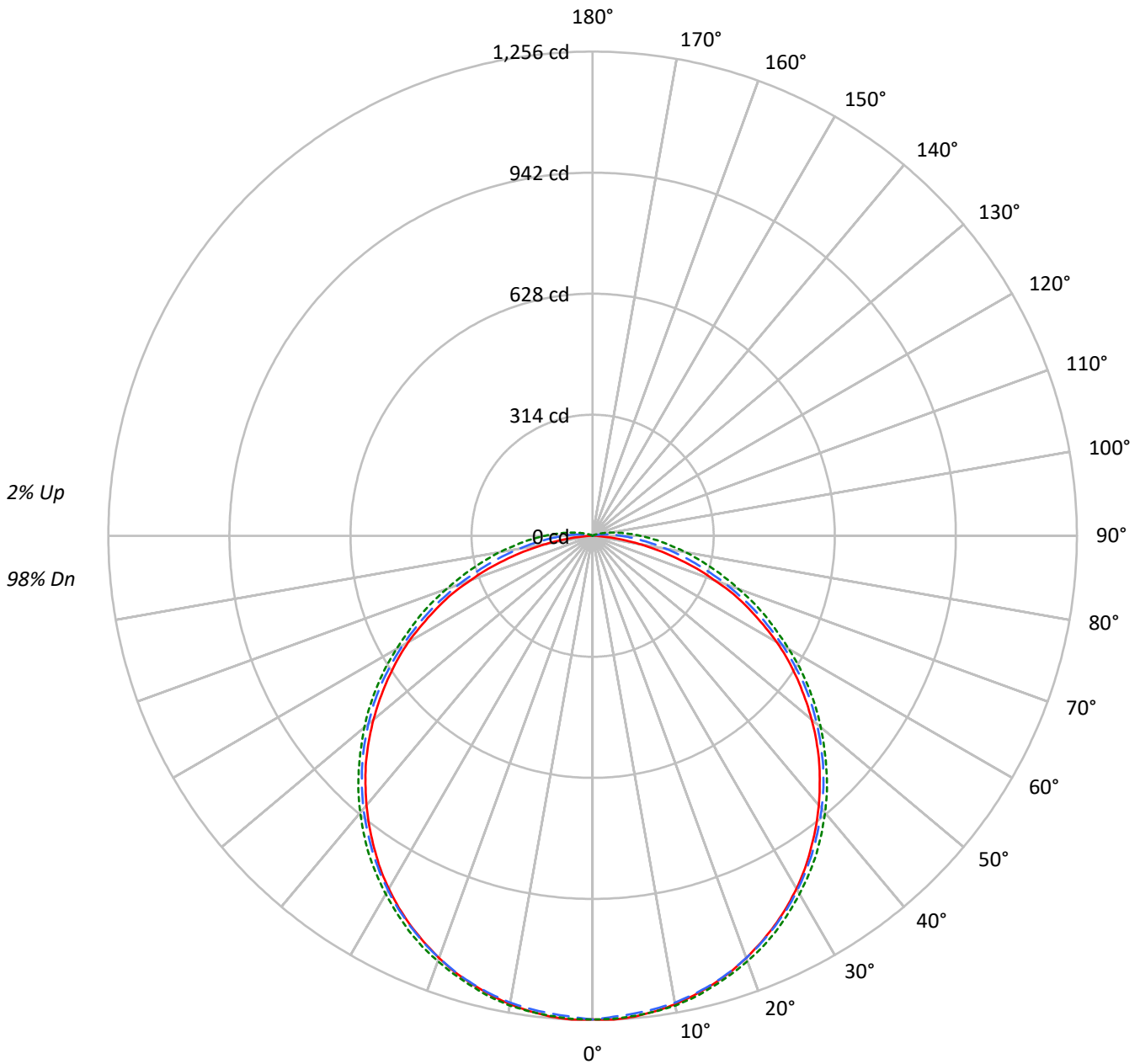
Lumens per Lamp: N/A
Luminaire Lumens: 3794.0 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 45.6
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: P580137

CATALOG NUMBER: HVSL12-2-LD4-2HI-50-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580137

CATALOG NUMBER: HVSL12-2-LD4-2HI-50-UNV-O-EDD-90

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° | 6753 | 6753 | 6753 |
| 5° | 6716 | 6619 | 6657 |
| 10° | 6647 | 6517 | 6569 |
| 15° | 6565 | 6402 | 6453 |
| 20° | 6479 | 6270 | 6340 |
| 25° | 6380 | 6134 | 6223 |
| 30° | 6268 | 5989 | 6084 |
| 35° | 6133 | 5826 | 5947 |
| 40° | 5992 | 5655 | 5780 |
| 45° | 5840 | 5468 | 5596 |
| 50° | 5648 | 5249 | 5397 |
| 55° | 5439 | 5008 | 5174 |
| 60° | 5192 | 4690 | 4907 |
| 65° | 4816 | 4332 | 4648 |
| 70° | 4294 | 3907 | 4342 |
| 75° | 3580 | 3439 | 4088 |
| 80° | 2565 | 2985 | 3897 |
| 85° | 1233 | 2533 | 3792 |



TEST NUMBER: P580137

CATALOG NUMBER: HVSL12-2-LD4-2HI-50-UNV-O-EDD-90

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 118.7 | 3.1 |
| 10°-20° | 340.6 | 9.0 |
| 20°-30° | 516.8 | 13.6 |
| 30°-40° | 624.9 | 16.5 |
| 40°-50° | 652.1 | 17.2 |
| 50°-60° | 596.2 | 15.7 |
| 60°-70° | 464.8 | 12.2 |
| 70°-80° | 290.7 | 7.7 |
| 80°-90° | 132.0 | 3.5 |
| 90°-100° | 44.3 | 1.2 |
| 100°-110° | 11.1 | 0.3 |
| 110°-120° | 1.8 | 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° | 976.2 | 25.7 |
| 0°-40° | 1601.1 | 42.2 |
| 0°-60° | 2849.3 | 75.1 |
| 0°-90° | 3736.9 | 98.5 |
| 90°-120° | 57.1 | 1.5 |
| 90°-150° | 57.1 | 1.5 |
| 90°-180° | 57.0 | 1.5 |
| 0°-180° | 3794.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1255 | 1255 | 1255 | 1255 | 1255 | |
| 5° | 1252 | 1250 | 1244 | 1250 | 1250 | 119 |
| 15° | 1204 | 1207 | 1203 | 1210 | 1210 | 340 |
| 25° | 1116 | 1117 | 1118 | 1128 | 1129 | 514 |
| 35° | 988 | 992 | 997 | 1007 | 1011 | 618 |
| 45° | 831 | 839 | 845 | 854 | 858 | 641 |
| 55° | 649 | 656 | 668 | 678 | 683 | 580 |
| 65° | 446 | 454 | 469 | 488 | 496 | 441 |
| 75° | 226 | 240 | 274 | 307 | 319 | 241 |
| 85° | 39 | 72 | 124 | 164 | 178 | 49 |
| 90° | 0 | 27 | 73 | 110 | 123 | 2 |
| 95° | 0 | 7 | 38 | 69 | 79 | 0 |
| 105° | 1 | 1 | 6 | 18 | 25 | 1 |
| 115° | 1 | 1 | 1 | 3 | 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: P580137

CATALOG NUMBER: HVSL12-2-LD4-2HI-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1254.8 | 1254.8 | 1254.8 | 1254.8 | 1254.8 |
| 2.5° | 1256.3 | 1254.5 | 1248.9 | 1254.5 | 1254.2 |
| 5° | 1252.2 | 1249.8 | 1244.2 | 1250.1 | 1250.1 |
| 7.5° | 1243.9 | 1243.0 | 1238.0 | 1244.8 | 1244.8 |
| 10° | 1234.1 | 1233.8 | 1229.7 | 1237.1 | 1237.4 |
| 12.5° | 1220.5 | 1221.7 | 1217.8 | 1224.9 | 1225.8 |
| 15° | 1204.5 | 1206.6 | 1203.4 | 1210.2 | 1209.9 |
| 17.5° | 1187.1 | 1188.3 | 1185.9 | 1193.6 | 1193.3 |
| 20° | 1165.5 | 1167.0 | 1165.2 | 1173.2 | 1174.1 |
| 22.5° | 1141.5 | 1143.6 | 1143.3 | 1151.6 | 1154.0 |
| 25° | 1116.1 | 1117.0 | 1118.2 | 1127.6 | 1129.4 |
| 27.5° | 1088.0 | 1089.5 | 1091.5 | 1100.1 | 1101.9 |
| 30° | 1057.2 | 1059.6 | 1062.0 | 1070.8 | 1073.2 |
| 32.5° | 1024.7 | 1027.1 | 1030.0 | 1041.5 | 1042.7 |
| 35° | 988.0 | 992.4 | 996.6 | 1006.6 | 1010.8 |
| 37.5° | 951.3 | 956.9 | 960.8 | 971.4 | 974.7 |
| 40° | 912.6 | 918.2 | 924.4 | 935.6 | 937.7 |
| 42.5° | 872.0 | 878.6 | 886.0 | 896.0 | 899.6 |
| 45° | 831.2 | 838.6 | 845.4 | 853.7 | 857.8 |
| 47.5° | 787.2 | 794.5 | 802.8 | 812.3 | 815.0 |
| 50° | 741.6 | 750.2 | 759.0 | 767.9 | 772.7 |
| 52.5° | 694.9 | 705.2 | 715.3 | 724.7 | 729.2 |
| 55° | 648.7 | 656.4 | 668.5 | 678.3 | 682.7 |
| 57.5° | 600.8 | 607.3 | 618.2 | 634.2 | 636.6 |
| 60° | 552.0 | 557.9 | 569.1 | 582.2 | 587.5 |
| 62.5° | 498.1 | 506.1 | 518.0 | 534.5 | 539.3 |
| 65° | 445.8 | 453.5 | 469.2 | 487.8 | 495.5 |
| 67.5° | 395.2 | 397.9 | 418.0 | 437.5 | 449.9 |
| 70° | 335.4 | 345.5 | 368.9 | 392.8 | 402.3 |
| 72.5° | 284.0 | 294.0 | 319.8 | 347.9 | 359.7 |
| 75° | 225.7 | 239.6 | 274.5 | 307.3 | 318.9 |
| 77.5° | 174.5 | 189.9 | 233.1 | 266.2 | 279.5 |
| 80° | 121.9 | 145.8 | 192.9 | 230.1 | 244.6 |
| 82.5° | 76.6 | 106.2 | 156.5 | 195.5 | 208.3 |
| 85° | 39.0 | 72.2 | 123.9 | 163.9 | 178.4 |
| 87.5° | 10.4 | 46.7 | 96.4 | 134.6 | 149.4 |
| 90° | 0.3 | 26.9 | 73.1 | 109.7 | 123.1 |
| 92.5° | 0.3 | 15.1 | 54.4 | 87.3 | 100.9 |
| 95° | 0.3 | 7.1 | 37.9 | 68.6 | 79.3 |
| 97.5° | 0.3 | 3.0 | 26.0 | 51.8 | 62.4 |
| 100° | 0.3 | 1.5 | 16.6 | 37.6 | 46.7 |
| 102.5° | 0.6 | 0.9 | 10.4 | 26.9 | 34.3 |
| 105° | 0.6 | 0.9 | 6.2 | 18.3 | 24.6 |



TEST NUMBER: P580137

CATALOG NUMBER: HVSL12-2-LD4-2HI-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.9 | 0.9 | 1.2 | 5.0 | 7.4 |
| 115° | 0.9 | 0.9 | 1.2 | 3.3 | 4.7 |
| 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° | 0.6 | 0.9 | 3.5 | 12.4 | 16.9 |
| 110° | 0.9 | 0.9 | 2.1 | 7.7 | 11.2 |



(END OF REPORT)