

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: P580861

Luminaire Tested: **HVSL8-8-LD4-3LO-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580861
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-LD4-3LO-35-UNV-O-EDD-90
Description: 8 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

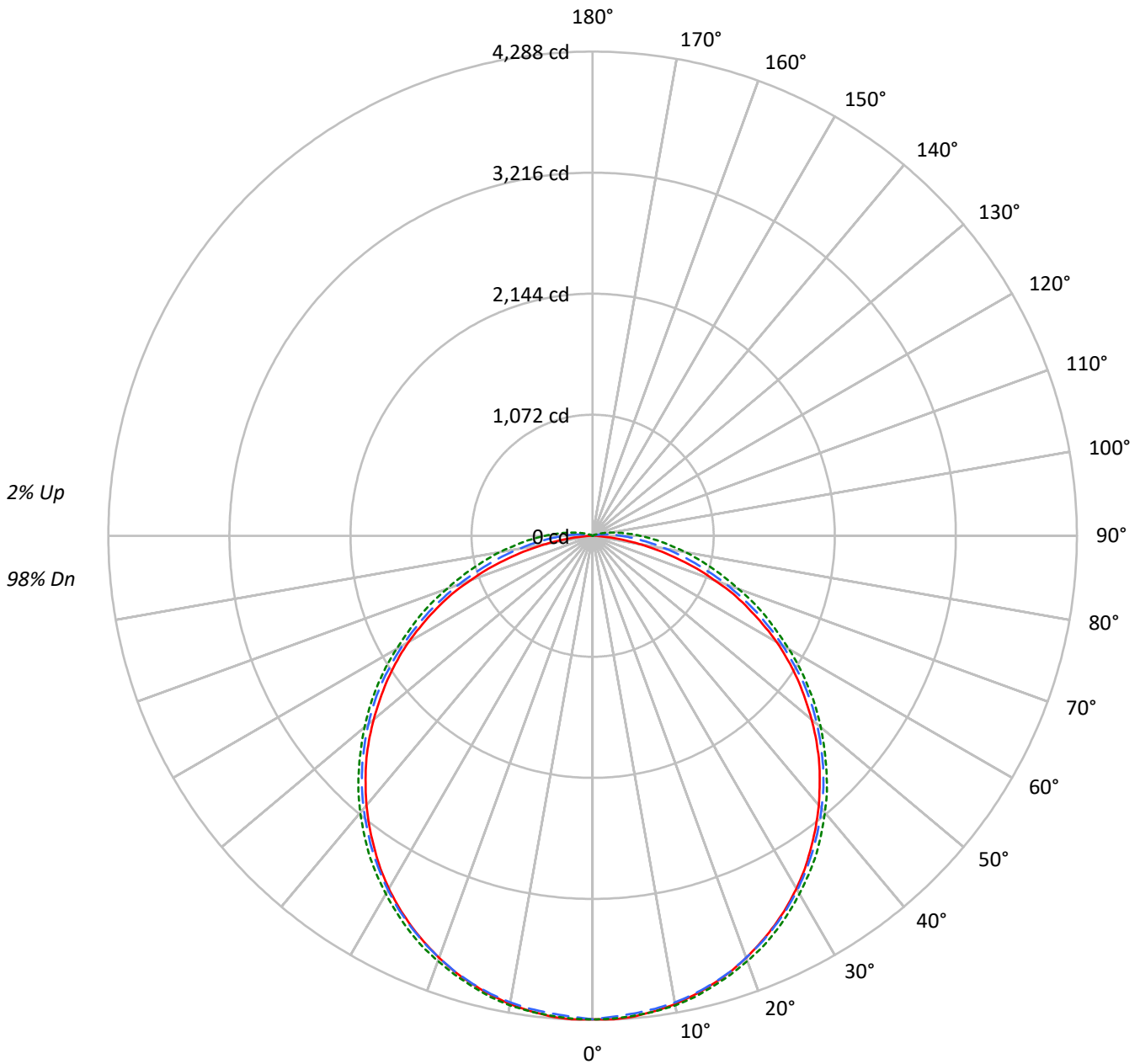
Lumens per Lamp: N/A
Luminaire Lumens: 12948.0 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 139
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

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Luminous Intensity Polar Plot





TEST NUMBER: P580861

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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° | 8643 | 8643 | 8643 |
| 5° | 8642 | 8461 | 8458 |
| 10° | 8600 | 8319 | 8289 |
| 15° | 8542 | 8162 | 8086 |
| 20° | 8478 | 7984 | 7888 |
| 25° | 8400 | 7801 | 7687 |
| 30° | 8309 | 7605 | 7459 |
| 35° | 8188 | 7389 | 7233 |
| 40° | 8064 | 7161 | 6969 |
| 45° | 7932 | 6911 | 6685 |
| 50° | 7754 | 6622 | 6379 |
| 55° | 7565 | 6304 | 6041 |
| 60° | 7339 | 5887 | 5647 |
| 65° | 6955 | 5420 | 5257 |
| 70° | 6390 | 4867 | 4803 |
| 75° | 5573 | 4260 | 4390 |
| 80° | 4323 | 3667 | 4013 |
| 85° | 2493 | 3071 | 3653 |



TEST NUMBER: P580861

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 405.2 | 3.1 |
| 10°-20° | 1162.4 | 9.0 |
| 20°-30° | 1763.8 | 13.6 |
| 30°-40° | 2132.7 | 16.5 |
| 40°-50° | 2225.3 | 17.2 |
| 50°-60° | 2034.6 | 15.7 |
| 60°-70° | 1586.1 | 12.2 |
| 70°-80° | 992.2 | 7.7 |
| 80°-90° | 450.6 | 3.5 |
| 90°-100° | 151.0 | 1.2 |
| 100°-110° | 37.9 | 0.3 |
| 110°-120° | 6.0 | 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° | 3331.5 | 25.7 |
| 0°-40° | 5464.2 | 42.2 |
| 0°-60° | 9724.2 | 75.1 |
| 0°-90° | 12753.1 | 98.5 |
| 90°-120° | 194.9 | 1.5 |
| 90°-150° | 194.9 | 1.5 |
| 90°-180° | 195.0 | 1.5 |
| 0°-180° | 12948.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4282 | 4282 | 4282 | 4282 | 4282 | |
| 5° | 4273 | 4265 | 4246 | 4266 | 4266 | 406 |
| 15° | 4111 | 4118 | 4107 | 4130 | 4129 | 1160 |
| 25° | 3809 | 3812 | 3816 | 3848 | 3854 | 1755 |
| 35° | 3372 | 3387 | 3401 | 3435 | 3450 | 2110 |
| 45° | 2837 | 2862 | 2885 | 2914 | 2928 | 2186 |
| 55° | 2214 | 2240 | 2282 | 2315 | 2330 | 1978 |
| 65° | 1521 | 1548 | 1601 | 1665 | 1691 | 1505 |
| 75° | 770 | 818 | 937 | 1049 | 1088 | 821 |
| 85° | 133 | 246 | 423 | 559 | 609 | 169 |
| 90° | 1 | 92 | 249 | 374 | 420 | 5 |
| 95° | 1 | 24 | 129 | 234 | 271 | 1 |
| 105° | 2 | 3 | 21 | 63 | 84 | 2 |
| 115° | 3 | 3 | 4 | 11 | 16 | 2 |
| 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: P580861

CATALOG NUMBER: HVSL8-8-LD4-3LO-35-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4282.4 | 4282.4 | 4282.4 | 4282.4 | 4282.4 |
| 2.5° | 4287.5 | 4281.4 | 4262.2 | 4281.4 | 4280.4 |
| 5° | 4273.3 | 4265.3 | 4246.1 | 4266.3 | 4266.3 |
| 7.5° | 4245.1 | 4242.0 | 4224.9 | 4248.1 | 4248.1 |
| 10° | 4211.7 | 4210.7 | 4196.6 | 4221.8 | 4222.9 |
| 12.5° | 4165.3 | 4169.3 | 4156.2 | 4180.5 | 4183.5 |
| 15° | 4110.8 | 4117.9 | 4106.8 | 4130.0 | 4129.0 |
| 17.5° | 4051.2 | 4055.3 | 4047.2 | 4073.4 | 4072.4 |
| 20° | 3977.5 | 3982.6 | 3976.5 | 4003.8 | 4006.8 |
| 22.5° | 3895.8 | 3902.8 | 3901.8 | 3930.1 | 3938.2 |
| 25° | 3808.9 | 3812.0 | 3816.0 | 3848.3 | 3854.4 |
| 27.5° | 3713.0 | 3718.1 | 3725.2 | 3754.4 | 3760.5 |
| 30° | 3608.1 | 3616.1 | 3624.2 | 3654.5 | 3662.6 |
| 32.5° | 3497.0 | 3505.1 | 3515.2 | 3554.5 | 3558.6 |
| 35° | 3371.8 | 3387.0 | 3401.1 | 3435.4 | 3449.6 |
| 37.5° | 3246.6 | 3265.8 | 3278.9 | 3315.3 | 3326.4 |
| 40° | 3114.4 | 3133.6 | 3154.8 | 3193.1 | 3200.2 |
| 42.5° | 2976.1 | 2998.3 | 3023.5 | 3057.9 | 3070.0 |
| 45° | 2836.8 | 2862.0 | 2885.2 | 2913.5 | 2927.6 |
| 47.5° | 2686.4 | 2711.6 | 2739.9 | 2772.2 | 2781.2 |
| 50° | 2530.9 | 2560.2 | 2590.4 | 2620.7 | 2636.9 |
| 52.5° | 2371.4 | 2406.7 | 2441.0 | 2473.3 | 2488.5 |
| 55° | 2213.9 | 2240.1 | 2281.5 | 2314.8 | 2330.0 |
| 57.5° | 2050.4 | 2072.6 | 2109.9 | 2164.4 | 2172.5 |
| 60° | 1883.8 | 1904.0 | 1942.3 | 1986.8 | 2004.9 |
| 62.5° | 1700.0 | 1727.3 | 1767.7 | 1824.2 | 1840.4 |
| 65° | 1521.4 | 1547.6 | 1601.1 | 1664.7 | 1691.0 |
| 67.5° | 1348.7 | 1357.8 | 1426.5 | 1493.1 | 1535.5 |
| 70° | 1144.8 | 1179.1 | 1258.9 | 1340.7 | 1373.0 |
| 72.5° | 969.1 | 1003.5 | 1091.3 | 1187.2 | 1227.6 |
| 75° | 770.3 | 817.7 | 936.8 | 1048.9 | 1088.3 |
| 77.5° | 595.6 | 648.1 | 795.5 | 908.6 | 954.0 |
| 80° | 415.9 | 497.7 | 658.2 | 785.4 | 834.9 |
| 82.5° | 261.5 | 362.4 | 534.0 | 667.3 | 710.7 |
| 85° | 133.3 | 246.3 | 423.0 | 559.3 | 608.7 |
| 87.5° | 35.3 | 159.5 | 329.1 | 459.3 | 509.8 |
| 90° | 1.0 | 91.9 | 249.4 | 374.5 | 420.0 |
| 92.5° | 1.0 | 51.5 | 185.8 | 297.8 | 344.2 |
| 95° | 1.0 | 24.2 | 129.2 | 234.2 | 270.6 |
| 97.5° | 1.0 | 10.1 | 88.8 | 176.7 | 213.0 |
| 100° | 1.0 | 5.0 | 56.5 | 128.2 | 159.5 |
| 102.5° | 2.0 | 3.0 | 35.3 | 91.9 | 117.1 |
| 105° | 2.0 | 3.0 | 21.2 | 62.6 | 83.8 |



TEST NUMBER: P580861

CATALOG NUMBER: HVSL8-8-LD4-3LO-35-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|------|
| 112.5° | 3.0 | 3.0 | 4.0 | 17.2 | 25.2 |
| 115° | 3.0 | 3.0 | 4.0 | 11.1 | 16.2 |
| 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° | 2.0 | 3.0 | 12.1 | 42.4 | 57.5 |
| 110° | 3.0 | 3.0 | 7.1 | 26.2 | 38.4 |



(END OF REPORT)