

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: METALUX

Report Number: P#

Luminaire Tested: **8SNLED-LD5-170HL-SLN-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27402)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8SNLED-LD5-170HL-SLN-UNV-L850-CD1-U  
Description: 8FT LINEAR SNLED LED FIXTURE  
SQUARE NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

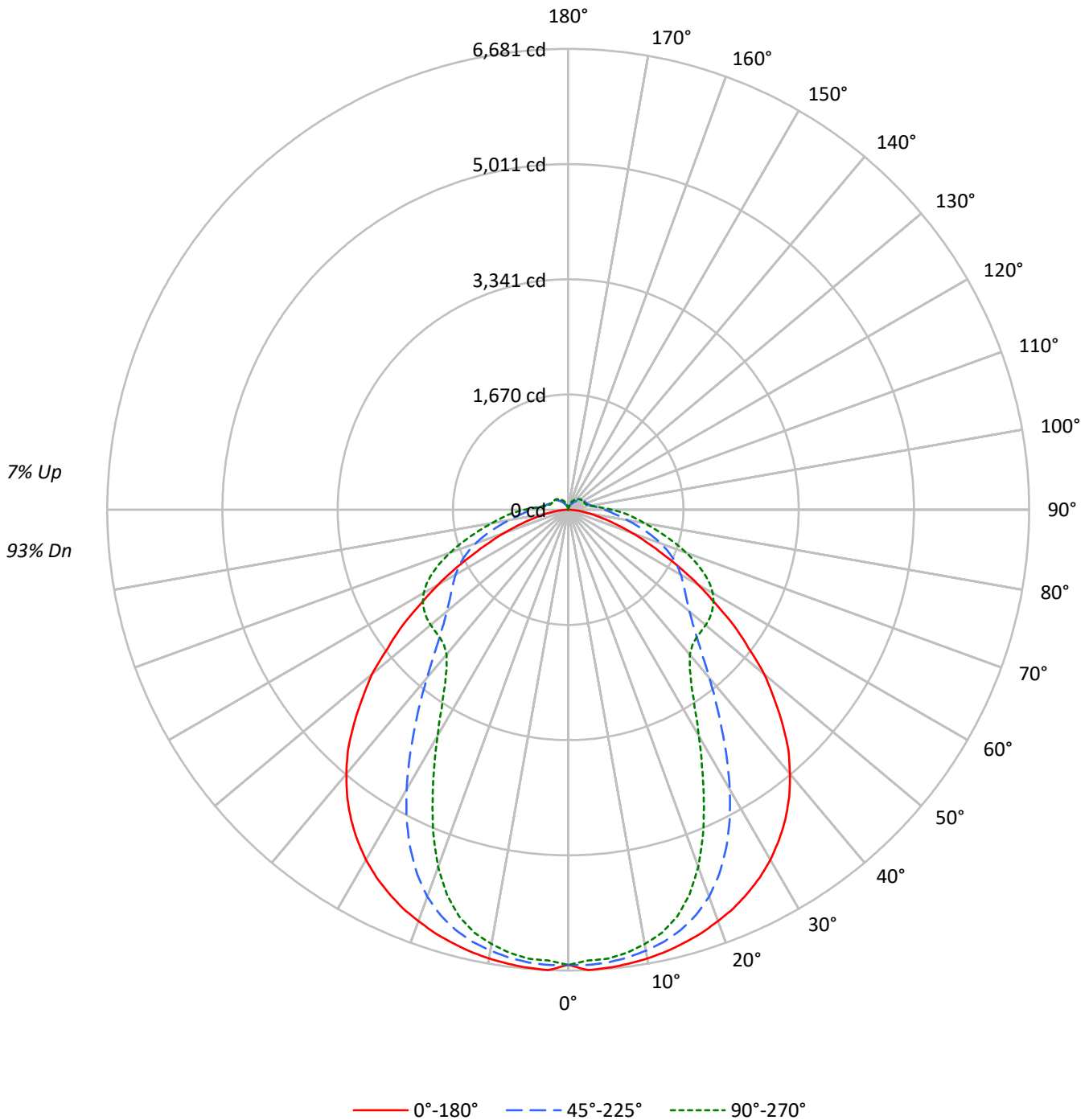
Lumens per Lamp: N/A  
Luminaire Lumens: 16593.0 lumens  
Efficiency: N/A  
Efficacy: 133.8 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 124  
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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### Luminous Intensity Polar Plot





TEST NUMBER: P#

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| RF  | 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 | 0  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |
| 0   | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1   | 107 | 102 | 97  | 93  | 103 | 99  | 94  | 91  | 93  | 90  | 87  | 88  | 85  | 83  | 83 | 81 | 79 | 76 |
| 2   | 97  | 89  | 82  | 76  | 94  | 86  | 80  | 75  | 81  | 76  | 72  | 77  | 73  | 69  | 73 | 70 | 66 | 64 |
| 3   | 89  | 78  | 70  | 64  | 86  | 76  | 69  | 63  | 72  | 66  | 61  | 68  | 63  | 59  | 65 | 61 | 57 | 54 |
| 4   | 82  | 70  | 61  | 55  | 79  | 68  | 60  | 54  | 65  | 58  | 52  | 61  | 55  | 51  | 58 | 53 | 49 | 47 |
| 5   | 75  | 63  | 54  | 47  | 73  | 61  | 53  | 47  | 58  | 51  | 46  | 55  | 49  | 44  | 53 | 48 | 43 | 41 |
| 6   | 70  | 57  | 48  | 42  | 67  | 55  | 47  | 41  | 53  | 46  | 40  | 51  | 44  | 39  | 48 | 43 | 39 | 36 |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 37  | 48  | 41  | 36  | 46  | 40  | 35  | 44 | 39 | 35 | 32 |
| 8   | 61  | 47  | 39  | 33  | 59  | 46  | 39  | 33  | 44  | 37  | 32  | 43  | 36  | 32  | 41 | 35 | 31 | 29 |
| 9   | 57  | 44  | 36  | 30  | 55  | 43  | 35  | 30  | 41  | 34  | 29  | 40  | 33  | 29  | 38 | 33 | 28 | 27 |
| 10  | 53  | 40  | 33  | 28  | 52  | 40  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  | 35 | 30 | 26 | 24 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 26659 | 26659 | 26659 |
| 5°  | 27004 | 26095 | 25663 |
| 10° | 27031 | 25397 | 24607 |
| 15° | 27078 | 24568 | 23203 |
| 20° | 27131 | 23323 | 20838 |
| 25° | 27185 | 21391 | 17646 |
| 30° | 27101 | 18840 | 14514 |
| 35° | 26765 | 16045 | 12163 |
| 40° | 26036 | 13602 | 10996 |
| 45° | 24716 | 11835 | 10912 |
| 50° | 22898 | 10832 | 11295 |
| 55° | 20233 | 10427 | 11690 |
| 60° | 17147 | 10294 | 11851 |
| 65° | 13873 | 10085 | 11482 |
| 70° | 11238 | 9587  | 10589 |
| 75° | 8587  | 8702  | 9397  |
| 80° | 6498  | 7847  | 8359  |
| 85° | 4626  | 7445  | 7688  |



TEST NUMBER: P#

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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 624.2   | 3.8       |
| 10°-20°   | 1764.4  | 10.6      |
| 20°-30°   | 2466.4  | 14.9      |
| 30°-40°   | 2558.3  | 15.4      |
| 40°-50°   | 2363.5  | 14.2      |
| 50°-60°   | 2110.1  | 12.7      |
| 60°-70°   | 1710.1  | 10.3      |
| 70°-80°   | 1137.4  | 6.9       |
| 80°-90°   | 651.3   | 3.9       |
| 90°-100°  | 360.3   | 2.2       |
| 100°-110° | 244.0   | 1.5       |
| 110°-120° | 203.2   | 1.2       |
| 120°-130° | 165.2   | 1.0       |
| 130°-140° | 119.1   | 0.7       |
| 140°-150° | 71.8    | 0.4       |
| 150°-160° | 34.5    | 0.2       |
| 160°-170° | 8.9     | 0.1       |
| 170°-180° | 0.0     | 0.0       |
| 0°-30°    | 4855.0  | 29.3      |
| 0°-40°    | 7413.3  | 44.7      |
| 0°-60°    | 11886.9 | 71.6      |
| 0°-90°    | 15385.8 | 92.7      |
| 90°-120°  | 807.5   | 4.9       |
| 90°-150°  | 1163.7  | 7.0       |
| 90°-180°  | 1207.0  | 7.3       |
| 0°-180°   | 16593.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 6598 | 6598  | 6598 | 6598  | 6598 |      |
| 5°   | 6667 | 6555  | 6589 | 6544  | 6535 | 634  |
| 15°  | 6500 | 6363  | 6308 | 6165  | 6105 | 1837 |
| 25°  | 6142 | 5870  | 5417 | 4849  | 4651 | 2830 |
| 35°  | 5486 | 4883  | 3882 | 3260  | 3114 | 3422 |
| 45°  | 4393 | 3481  | 2644 | 2549  | 2627 | 3378 |
| 55°  | 2936 | 2219  | 2065 | 2400  | 2549 | 2611 |
| 65°  | 1500 | 1342  | 1680 | 2059  | 2168 | 1516 |
| 75°  | 582  | 728   | 1133 | 1388  | 1445 | 638  |
| 85°  | 118  | 338   | 668  | 854   | 877  | 135  |
| 90°  | 6    | 238   | 528  | 637   | 631  | 9    |
| 95°  | 6    | 201   | 419  | 447   | 433  | 4    |
| 105° | 3    | 175   | 301  | 292   | 278  | 3    |
| 115° | 3    | 158   | 267  | 264   | 255  | 3    |
| 125° | 3    | 135   | 235  | 247   | 241  | 3    |
| 135° | 6    | 100   | 186  | 218   | 218  | 4    |
| 145° | 6    | 63    | 129  | 169   | 181  | 4    |
| 155° | 6    | 40    | 80   | 106   | 129  | 3    |
| 165° | 6    | 23    | 40   | 52    | 69   | 1    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 6598.0 | 6598.0 | 6598.0 | 6598.0 | 6598.0 |
| 2.5°   | 6681.2 | 6572.2 | 6606.6 | 6578.0 | 6540.7 |
| 5°     | 6666.9 | 6555.0 | 6589.4 | 6543.6 | 6535.0 |
| 7.5°   | 6641.1 | 6529.2 | 6549.3 | 6494.8 | 6480.5 |
| 10°    | 6606.6 | 6489.1 | 6491.9 | 6414.5 | 6394.5 |
| 12.5°  | 6560.8 | 6431.7 | 6414.5 | 6308.4 | 6279.8 |
| 15°    | 6500.5 | 6362.9 | 6308.4 | 6165.1 | 6104.8 |
| 17.5°  | 6434.6 | 6274.0 | 6162.2 | 5941.4 | 5846.8 |
| 20°    | 6345.7 | 6165.1 | 5970.1 | 5634.6 | 5508.4 |
| 22.5°  | 6256.8 | 6033.1 | 5720.6 | 5273.3 | 5104.1 |
| 25°    | 6142.1 | 5869.7 | 5416.6 | 4848.9 | 4651.0 |
| 27.5°  | 6013.1 | 5677.6 | 5066.8 | 4413.0 | 4200.8 |
| 30°    | 5861.1 | 5445.3 | 4682.6 | 3985.8 | 3785.1 |
| 32.5°  | 5683.3 | 5184.4 | 4278.3 | 3601.5 | 3415.2 |
| 35°    | 5485.5 | 4883.3 | 3882.5 | 3260.3 | 3114.1 |
| 37.5°  | 5258.9 | 4553.5 | 3515.5 | 2985.0 | 2890.4 |
| 40°    | 5000.9 | 4195.1 | 3177.2 | 2772.8 | 2741.3 |
| 42.5°  | 4722.7 | 3845.3 | 2887.5 | 2635.2 | 2663.9 |
| 45°    | 4393.0 | 3481.1 | 2643.8 | 2549.2 | 2626.6 |
| 47.5°  | 4046.0 | 3125.5 | 2445.9 | 2500.4 | 2612.3 |
| 50°    | 3710.5 | 2795.8 | 2291.1 | 2468.9 | 2600.8 |
| 52.5°  | 3294.7 | 2500.4 | 2167.8 | 2440.2 | 2583.6 |
| 55°    | 2936.3 | 2219.4 | 2064.6 | 2400.1 | 2549.2 |
| 57.5°  | 2523.4 | 1967.1 | 1972.8 | 2348.5 | 2497.6 |
| 60°    | 2179.3 | 1737.7 | 1883.9 | 2276.8 | 2420.1 |
| 62.5°  | 1829.4 | 1531.2 | 1786.4 | 2182.1 | 2311.2 |
| 65°    | 1499.7 | 1342.0 | 1680.3 | 2058.8 | 2167.8 |
| 67.5°  | 1224.4 | 1169.9 | 1559.9 | 1909.7 | 2001.5 |
| 70°    | 992.1  | 1012.2 | 1428.0 | 1743.4 | 1820.8 |
| 72.5°  | 762.7  | 866.0  | 1284.6 | 1565.6 | 1631.6 |
| 75°    | 582.1  | 728.3  | 1132.6 | 1387.9 | 1445.2 |
| 77.5°  | 430.1  | 607.9  | 995.0  | 1227.3 | 1276.0 |
| 80°    | 304.0  | 501.8  | 866.0  | 1086.8 | 1124.0 |
| 82.5°  | 203.6  | 412.9  | 759.9  | 960.6  | 995.0  |
| 85°    | 117.6  | 338.4  | 668.1  | 854.5  | 877.4  |
| 87.5°  | 48.7   | 281.0  | 593.6  | 745.5  | 757.0  |
| 90°    | 5.7    | 238.0  | 527.6  | 636.6  | 630.8  |
| 92.5°  | 5.7    | 215.1  | 470.3  | 533.3  | 519.0  |
| 95°    | 5.7    | 200.7  | 418.7  | 447.3  | 433.0  |
| 97.5°  | 5.7    | 192.1  | 372.8  | 384.2  | 369.9  |
| 100°   | 2.9    | 186.4  | 341.2  | 341.2  | 326.9  |
| 102.5° | 2.9    | 180.7  | 318.3  | 309.7  | 298.2  |
| 105°   | 2.9    | 174.9  | 301.1  | 292.5  | 278.1  |
| 107.5° | 2.9    | 172.0  | 289.6  | 281.0  | 266.7  |
| 110°   | 2.9    | 166.3  | 281.0  | 272.4  | 260.9  |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°   | 67.5° | 90°   |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.9 | 163.4 | 275.3 | 269.5 | 255.2 |
| 115°   | 2.9 | 157.7 | 266.7 | 263.8 | 255.2 |
| 117.5° | 2.9 | 152.0 | 260.9 | 260.9 | 252.3 |
| 120°   | 2.9 | 146.2 | 252.3 | 258.1 | 249.5 |
| 122.5° | 2.9 | 140.5 | 243.7 | 252.3 | 243.7 |
| 125°   | 2.9 | 134.8 | 235.1 | 246.6 | 240.9 |
| 127.5° | 5.7 | 126.2 | 223.7 | 240.9 | 235.1 |
| 130°   | 2.9 | 117.6 | 212.2 | 235.1 | 232.3 |
| 132.5° | 5.7 | 109.0 | 200.7 | 226.5 | 226.5 |
| 135°   | 5.7 | 100.4 | 186.4 | 217.9 | 217.9 |
| 137.5° | 5.7 | 88.9  | 172.0 | 206.5 | 209.3 |
| 140°   | 5.7 | 80.3  | 157.7 | 195.0 | 200.7 |
| 142.5° | 5.7 | 71.7  | 143.4 | 183.5 | 192.1 |
| 145°   | 5.7 | 63.1  | 129.0 | 169.2 | 180.7 |
| 147.5° | 5.7 | 57.3  | 114.7 | 152.0 | 169.2 |
| 150°   | 5.7 | 48.7  | 103.2 | 137.6 | 154.8 |
| 152.5° | 5.7 | 43.0  | 91.8  | 123.3 | 143.4 |
| 155°   | 5.7 | 40.1  | 80.3  | 106.1 | 129.0 |
| 157.5° | 5.7 | 34.4  | 68.8  | 91.8  | 114.7 |
| 160°   | 5.7 | 28.7  | 57.3  | 80.3  | 97.5  |
| 162.5° | 5.7 | 25.8  | 48.7  | 66.0  | 86.0  |
| 165°   | 5.7 | 22.9  | 40.1  | 51.6  | 68.8  |
| 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   |

(END OF REPORT)