

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: **4SNLED-LD5-34SL-SLN-UNV-L930-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: 4SNLED-LD5-34SL-SLN-UNV-L930-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
SQUARE NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

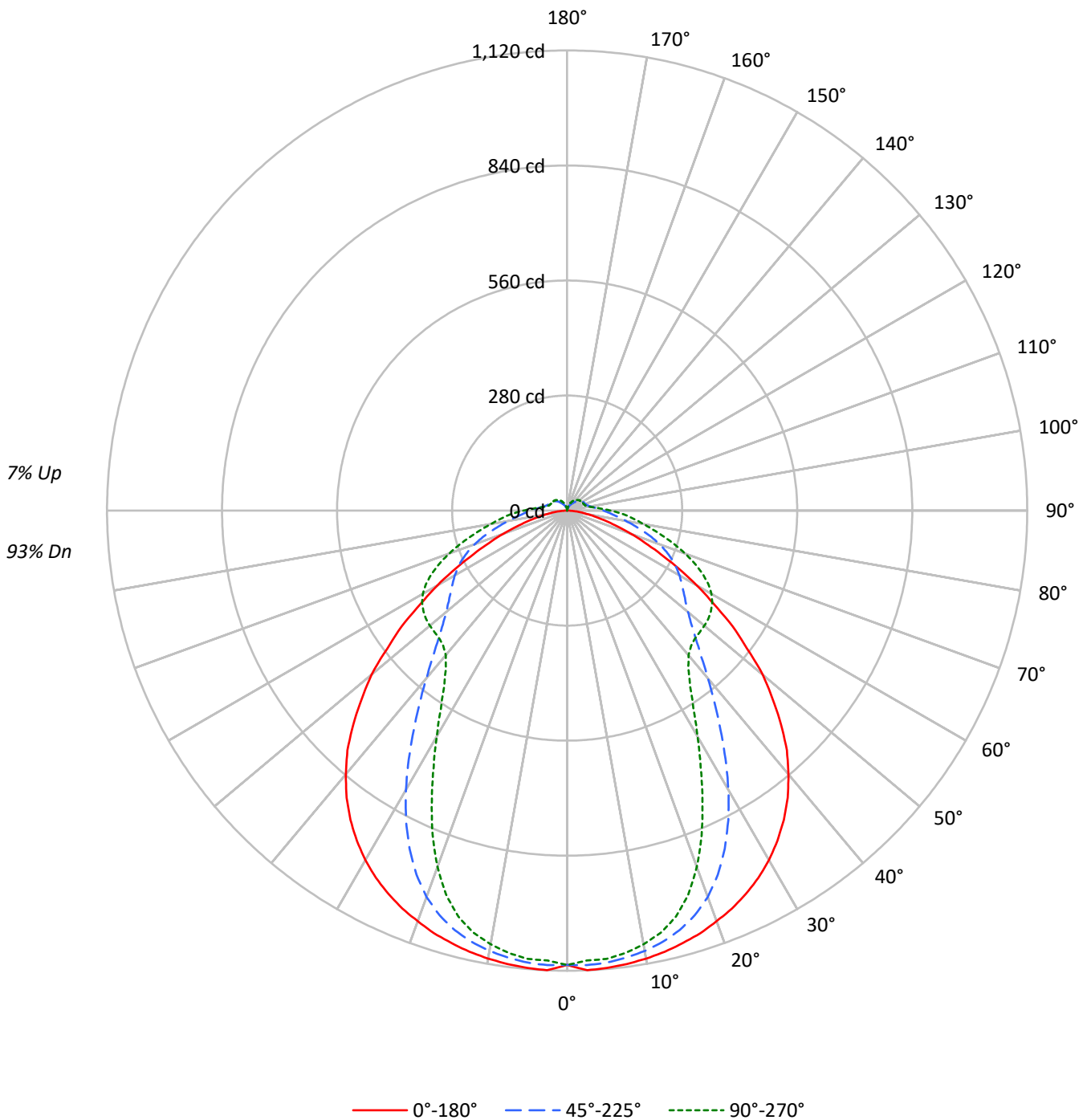
Lumens per Lamp: N/A  
Luminaire Lumens: 2781.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 25  
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





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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°  | 8936 | 8936 | 8936 |
| 5°  | 9040 | 8739 | 8602 |
| 10° | 9036 | 8498 | 8248 |
| 15° | 9039 | 8213 | 7778 |
| 20° | 9043 | 7790 | 6985 |
| 25° | 9047 | 7137 | 5915 |
| 30° | 9004 | 6281 | 4865 |
| 35° | 8876 | 5343 | 4077 |
| 40° | 8615 | 4526 | 3685 |
| 45° | 8160 | 3933 | 3658 |
| 50° | 7538 | 3596 | 3786 |
| 55° | 6637 | 3456 | 3918 |
| 60° | 5599 | 3406 | 3973 |
| 65° | 4503 | 3331 | 3849 |
| 70° | 3619 | 3159 | 3550 |
| 75° | 2729 | 2859 | 3150 |
| 80° | 2012 | 2567 | 2802 |
| 85° | 1346 | 2423 | 2578 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 104.6  | 3.8       |
| 10°-20°   | 295.7  | 10.6      |
| 20°-30°   | 413.4  | 14.9      |
| 30°-40°   | 428.8  | 15.4      |
| 40°-50°   | 396.1  | 14.2      |
| 50°-60°   | 353.7  | 12.7      |
| 60°-70°   | 286.6  | 10.3      |
| 70°-80°   | 190.6  | 6.9       |
| 80°-90°   | 109.2  | 3.9       |
| 90°-100°  | 60.4   | 2.2       |
| 100°-110° | 40.9   | 1.5       |
| 110°-120° | 34.1   | 1.2       |
| 120°-130° | 27.7   | 1.0       |
| 130°-140° | 20.0   | 0.7       |
| 140°-150° | 12.0   | 0.4       |
| 150°-160° | 5.8    | 0.2       |
| 160°-170° | 1.5    | 0.1       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 813.7  | 29.3      |
| 0°-40°    | 1242.5 | 44.7      |
| 0°-60°    | 1992.3 | 71.6      |
| 0°-90°    | 2578.7 | 92.7      |
| 90°-120°  | 135.4  | 4.9       |
| 90°-150°  | 195.1  | 7.0       |
| 90°-180°  | 202.0  | 7.3       |
| 0°-180°   | 2781.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1106 | 1106  | 1106 | 1106  | 1106 |      |
| 5°   | 1117 | 1099  | 1104 | 1097  | 1095 | 106  |
| 15°  | 1090 | 1066  | 1057 | 1033  | 1023 | 308  |
| 25°  | 1029 | 984   | 908  | 813   | 780  | 474  |
| 35°  | 919  | 818   | 651  | 546   | 522  | 574  |
| 45°  | 736  | 583   | 443  | 427   | 440  | 566  |
| 55°  | 492  | 372   | 346  | 402   | 427  | 438  |
| 65°  | 251  | 225   | 282  | 345   | 363  | 254  |
| 75°  | 98   | 122   | 190  | 233   | 242  | 107  |
| 85°  | 20   | 57    | 112  | 143   | 147  | 23   |
| 90°  | 1    | 40    | 88   | 107   | 106  | 2    |
| 95°  | 1    | 34    | 70   | 75    | 73   | 1    |
| 105° | 0    | 29    | 50   | 49    | 47   | 1    |
| 115° | 0    | 26    | 45   | 44    | 43   | 0    |
| 125° | 0    | 23    | 39   | 41    | 40   | 1    |
| 135° | 1    | 17    | 31   | 36    | 36   | 1    |
| 145° | 1    | 11    | 22   | 28    | 30   | 1    |
| 155° | 1    | 7     | 14   | 18    | 22   | 0    |
| 165° | 1    | 4     | 7    | 9     | 12   | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-SLN-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1105.8 | 1105.8 | 1105.8 | 1105.8 | 1105.8 |
| 2.5°   | 1119.8 | 1101.5 | 1107.3 | 1102.5 | 1096.2 |
| 5°     | 1117.4 | 1098.6 | 1104.4 | 1096.7 | 1095.3 |
| 7.5°   | 1113.0 | 1094.3 | 1097.7 | 1088.5 | 1086.1 |
| 10°    | 1107.3 | 1087.6 | 1088.1 | 1075.1 | 1071.7 |
| 12.5°  | 1099.6 | 1078.0 | 1075.1 | 1057.3 | 1052.5 |
| 15°    | 1089.5 | 1066.4 | 1057.3 | 1033.3 | 1023.2 |
| 17.5°  | 1078.4 | 1051.5 | 1032.8 | 995.8  | 979.9  |
| 20°    | 1063.5 | 1033.3 | 1000.6 | 944.4  | 923.2  |
| 22.5°  | 1048.6 | 1011.2 | 958.8  | 883.8  | 855.4  |
| 25°    | 1029.4 | 983.8  | 907.8  | 812.7  | 779.5  |
| 27.5°  | 1007.8 | 951.6  | 849.2  | 739.6  | 704.1  |
| 30°    | 982.3  | 912.6  | 784.8  | 668.0  | 634.4  |
| 32.5°  | 952.5  | 868.9  | 717.0  | 603.6  | 572.4  |
| 35°    | 919.4  | 818.4  | 650.7  | 546.4  | 521.9  |
| 37.5°  | 881.4  | 763.2  | 589.2  | 500.3  | 484.4  |
| 40°    | 838.1  | 703.1  | 532.5  | 464.7  | 459.4  |
| 42.5°  | 791.5  | 644.5  | 484.0  | 441.7  | 446.5  |
| 45°    | 736.3  | 583.4  | 443.1  | 427.2  | 440.2  |
| 47.5°  | 678.1  | 523.8  | 409.9  | 419.1  | 437.8  |
| 50°    | 621.9  | 468.6  | 384.0  | 413.8  | 435.9  |
| 52.5°  | 552.2  | 419.1  | 363.3  | 409.0  | 433.0  |
| 55°    | 492.1  | 372.0  | 346.0  | 402.3  | 427.2  |
| 57.5°  | 422.9  | 329.7  | 330.6  | 393.6  | 418.6  |
| 60°    | 365.2  | 291.2  | 315.7  | 381.6  | 405.6  |
| 62.5°  | 306.6  | 256.6  | 299.4  | 365.7  | 387.4  |
| 65°    | 251.3  | 224.9  | 281.6  | 345.1  | 363.3  |
| 67.5°  | 205.2  | 196.1  | 261.4  | 320.1  | 335.5  |
| 70°    | 166.3  | 169.6  | 239.3  | 292.2  | 305.2  |
| 72.5°  | 127.8  | 145.1  | 215.3  | 262.4  | 273.5  |
| 75°    | 97.6   | 122.1  | 189.8  | 232.6  | 242.2  |
| 77.5°  | 72.1   | 101.9  | 166.8  | 205.7  | 213.9  |
| 80°    | 50.9   | 84.1   | 145.1  | 182.1  | 188.4  |
| 82.5°  | 34.1   | 69.2   | 127.4  | 161.0  | 166.8  |
| 85°    | 19.7   | 56.7   | 112.0  | 143.2  | 147.1  |
| 87.5°  | 8.2    | 47.1   | 99.5   | 125.0  | 126.9  |
| 90°    | 1.0    | 39.9   | 88.4   | 106.7  | 105.7  |
| 92.5°  | 1.0    | 36.0   | 78.8   | 89.4   | 87.0   |
| 95°    | 1.0    | 33.6   | 70.2   | 75.0   | 72.6   |
| 97.5°  | 1.0    | 32.2   | 62.5   | 64.4   | 62.0   |
| 100°   | 0.5    | 31.2   | 57.2   | 57.2   | 54.8   |
| 102.5° | 0.5    | 30.3   | 53.3   | 51.9   | 50.0   |
| 105°   | 0.5    | 29.3   | 50.5   | 49.0   | 46.6   |
| 107.5° | 0.5    | 28.8   | 48.5   | 47.1   | 44.7   |
| 110°   | 0.5    | 27.9   | 47.1   | 45.7   | 43.7   |



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.5 | 27.4  | 46.1 | 45.2  | 42.8 |
| 115°   | 0.5 | 26.4  | 44.7 | 44.2  | 42.8 |
| 117.5° | 0.5 | 25.5  | 43.7 | 43.7  | 42.3 |
| 120°   | 0.5 | 24.5  | 42.3 | 43.3  | 41.8 |
| 122.5° | 0.5 | 23.5  | 40.9 | 42.3  | 40.9 |
| 125°   | 0.5 | 22.6  | 39.4 | 41.3  | 40.4 |
| 127.5° | 1.0 | 21.1  | 37.5 | 40.4  | 39.4 |
| 130°   | 0.5 | 19.7  | 35.6 | 39.4  | 38.9 |
| 132.5° | 1.0 | 18.3  | 33.6 | 38.0  | 38.0 |
| 135°   | 1.0 | 16.8  | 31.2 | 36.5  | 36.5 |
| 137.5° | 1.0 | 14.9  | 28.8 | 34.6  | 35.1 |
| 140°   | 1.0 | 13.5  | 26.4 | 32.7  | 33.6 |
| 142.5° | 1.0 | 12.0  | 24.0 | 30.8  | 32.2 |
| 145°   | 1.0 | 10.6  | 21.6 | 28.4  | 30.3 |
| 147.5° | 1.0 | 9.6   | 19.2 | 25.5  | 28.4 |
| 150°   | 1.0 | 8.2   | 17.3 | 23.1  | 26.0 |
| 152.5° | 1.0 | 7.2   | 15.4 | 20.7  | 24.0 |
| 155°   | 1.0 | 6.7   | 13.5 | 17.8  | 21.6 |
| 157.5° | 1.0 | 5.8   | 11.5 | 15.4  | 19.2 |
| 160°   | 1.0 | 4.8   | 9.6  | 13.5  | 16.3 |
| 162.5° | 1.0 | 4.3   | 8.2  | 11.1  | 14.4 |
| 165°   | 1.0 | 3.8   | 6.7  | 8.7   | 11.5 |
| 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)