

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-LD5-56SL-SLN-UNV-L835-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-LD5-56SL-SLN-UNV-L835-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
SQUARE NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

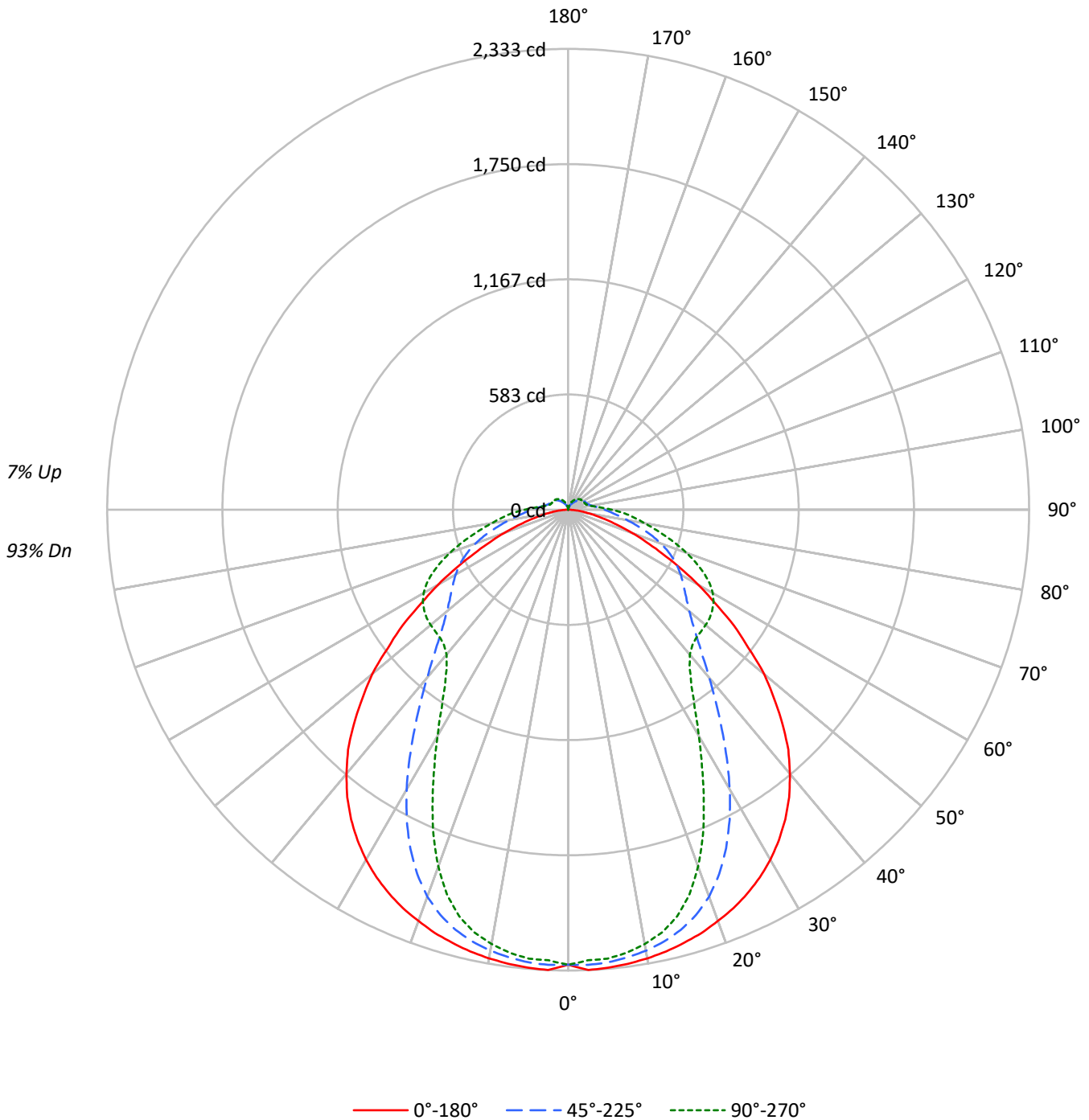
Lumens per Lamp: N/A  
Luminaire Lumens: 5793.0 lumens  
Efficiency: N/A  
Efficacy: 125.9 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

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

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 18615 | 18615 | 18615 |
| 5°  | 18830 | 18203 | 17919 |
| 10° | 18823 | 17701 | 17182 |
| 15° | 18829 | 17107 | 16201 |
| 20° | 18837 | 16226 | 14550 |
| 25° | 18846 | 14868 | 12322 |
| 30° | 18755 | 13083 | 10135 |
| 35° | 18488 | 11131 | 8493  |
| 40° | 17947 | 9427  | 7678  |
| 45° | 16996 | 8193  | 7620  |
| 50° | 15701 | 7490  | 7887  |
| 55° | 13825 | 7199  | 8163  |
| 60° | 11665 | 7096  | 8275  |
| 65° | 9383  | 6938  | 8017  |
| 70° | 7537  | 6580  | 7394  |
| 75° | 5682  | 5955  | 6562  |
| 80° | 4194  | 5348  | 5836  |
| 85° | 2801  | 5046  | 5368  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 217.9  | 3.8       |
| 10°-20°   | 616.0  | 10.6      |
| 20°-30°   | 861.1  | 14.9      |
| 30°-40°   | 893.2  | 15.4      |
| 40°-50°   | 825.1  | 14.2      |
| 50°-60°   | 736.7  | 12.7      |
| 60°-70°   | 597.0  | 10.3      |
| 70°-80°   | 397.1  | 6.9       |
| 80°-90°   | 227.4  | 3.9       |
| 90°-100°  | 125.8  | 2.2       |
| 100°-110° | 85.2   | 1.5       |
| 110°-120° | 70.9   | 1.2       |
| 120°-130° | 57.7   | 1.0       |
| 130°-140° | 41.6   | 0.7       |
| 140°-150° | 25.1   | 0.4       |
| 150°-160° | 12.0   | 0.2       |
| 160°-170° | 3.1    | 0.1       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 1695.0 | 29.3      |
| 0°-40°    | 2588.2 | 44.7      |
| 0°-60°    | 4150.0 | 71.6      |
| 0°-90°    | 5371.5 | 92.7      |
| 90°-120°  | 281.9  | 4.9       |
| 90°-150°  | 406.3  | 7.0       |
| 90°-180°  | 421.0  | 7.3       |
| 0°-180°   | 5793.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2304 | 2304  | 2304 | 2304  | 2304 |      |
| 5°   | 2328 | 2288  | 2300 | 2284  | 2282 | 221  |
| 15°  | 2270 | 2221  | 2202 | 2152  | 2131 | 641  |
| 25°  | 2144 | 2049  | 1891 | 1693  | 1624 | 988  |
| 35°  | 1915 | 1705  | 1356 | 1138  | 1087 | 1195 |
| 45°  | 1534 | 1215  | 923  | 890   | 917  | 1179 |
| 55°  | 1025 | 775   | 721  | 838   | 890  | 912  |
| 65°  | 524  | 468   | 587  | 719   | 757  | 529  |
| 75°  | 203  | 254   | 395  | 484   | 505  | 223  |
| 85°  | 41   | 118   | 233  | 298   | 306  | 47   |
| 90°  | 2    | 83    | 184  | 222   | 220  | 3    |
| 95°  | 2    | 70    | 146  | 156   | 151  | 1    |
| 105° | 1    | 61    | 105  | 102   | 97   | 1    |
| 115° | 1    | 55    | 93   | 92    | 89   | 1    |
| 125° | 1    | 47    | 82   | 86    | 84   | 1    |
| 135° | 2    | 35    | 65   | 76    | 76   | 1    |
| 145° | 2    | 22    | 45   | 59    | 63   | 1    |
| 155° | 2    | 14    | 28   | 37    | 45   | 1    |
| 165° | 2    | 8     | 14   | 18    | 24   | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLN-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2303.5 | 2303.5 | 2303.5 | 2303.5 | 2303.5 |
| 2.5°   | 2332.6 | 2294.5 | 2306.5 | 2296.5 | 2283.5 |
| 5°     | 2327.6 | 2288.5 | 2300.5 | 2284.5 | 2281.5 |
| 7.5°   | 2318.5 | 2279.5 | 2286.5 | 2267.5 | 2262.5 |
| 10°    | 2306.5 | 2265.5 | 2266.5 | 2239.5 | 2232.5 |
| 12.5°  | 2290.5 | 2245.5 | 2239.5 | 2202.4 | 2192.4 |
| 15°    | 2269.5 | 2221.4 | 2202.4 | 2152.4 | 2131.3 |
| 17.5°  | 2246.5 | 2190.4 | 2151.4 | 2074.3 | 2041.2 |
| 20°    | 2215.4 | 2152.4 | 2084.3 | 1967.2 | 1923.1 |
| 22.5°  | 2184.4 | 2106.3 | 1997.2 | 1841.0 | 1782.0 |
| 25°    | 2144.4 | 2049.2 | 1891.1 | 1692.9 | 1623.8 |
| 27.5°  | 2099.3 | 1982.2 | 1768.9 | 1540.7 | 1466.6 |
| 30°    | 2046.2 | 1901.1 | 1634.8 | 1391.5 | 1321.5 |
| 32.5°  | 1984.2 | 1810.0 | 1493.6 | 1257.4 | 1192.3 |
| 35°    | 1915.1 | 1704.9 | 1355.5 | 1138.2 | 1087.2 |
| 37.5°  | 1836.0 | 1589.7 | 1227.3 | 1042.1 | 1009.1 |
| 40°    | 1745.9 | 1464.6 | 1109.2 | 968.1  | 957.1  |
| 42.5°  | 1648.8 | 1342.5 | 1008.1 | 920.0  | 930.0  |
| 45°    | 1533.7 | 1215.3 | 923.0  | 890.0  | 917.0  |
| 47.5°  | 1412.6 | 1091.2 | 853.9  | 873.0  | 912.0  |
| 50°    | 1295.4 | 976.1  | 799.9  | 861.9  | 908.0  |
| 52.5°  | 1150.3 | 873.0  | 756.8  | 851.9  | 902.0  |
| 55°    | 1025.1 | 774.9  | 720.8  | 837.9  | 890.0  |
| 57.5°  | 881.0  | 686.8  | 688.8  | 819.9  | 872.0  |
| 60°    | 760.8  | 606.7  | 657.7  | 794.9  | 844.9  |
| 62.5°  | 638.7  | 534.6  | 623.7  | 761.8  | 806.9  |
| 65°    | 523.6  | 468.5  | 586.6  | 718.8  | 756.8  |
| 67.5°  | 427.5  | 408.4  | 544.6  | 666.7  | 698.8  |
| 70°    | 346.4  | 353.4  | 498.5  | 608.7  | 635.7  |
| 72.5°  | 266.3  | 302.3  | 448.5  | 546.6  | 569.6  |
| 75°    | 203.2  | 254.3  | 395.4  | 484.5  | 504.6  |
| 77.5°  | 150.2  | 212.2  | 347.4  | 428.5  | 445.5  |
| 80°    | 106.1  | 175.2  | 302.3  | 379.4  | 392.4  |
| 82.5°  | 71.1   | 144.2  | 265.3  | 335.4  | 347.4  |
| 85°    | 41.0   | 118.1  | 233.3  | 298.3  | 306.3  |
| 87.5°  | 17.0   | 98.1   | 207.2  | 260.3  | 264.3  |
| 90°    | 2.0    | 83.1   | 184.2  | 222.2  | 220.2  |
| 92.5°  | 2.0    | 75.1   | 164.2  | 186.2  | 181.2  |
| 95°    | 2.0    | 70.1   | 146.2  | 156.2  | 151.2  |
| 97.5°  | 2.0    | 67.1   | 130.1  | 134.1  | 129.1  |
| 100°   | 1.0    | 65.1   | 119.1  | 119.1  | 114.1  |
| 102.5° | 1.0    | 63.1   | 111.1  | 108.1  | 104.1  |
| 105°   | 1.0    | 61.1   | 105.1  | 102.1  | 97.1   |
| 107.5° | 1.0    | 60.1   | 101.1  | 98.1   | 93.1   |
| 110°   | 1.0    | 58.1   | 98.1   | 95.1   | 91.1   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 1.0 | 57.1  | 96.1 | 94.1  | 89.1 |
| 115°   | 1.0 | 55.1  | 93.1 | 92.1  | 89.1 |
| 117.5° | 1.0 | 53.1  | 91.1 | 91.1  | 88.1 |
| 120°   | 1.0 | 51.1  | 88.1 | 90.1  | 87.1 |
| 122.5° | 1.0 | 49.1  | 85.1 | 88.1  | 85.1 |
| 125°   | 1.0 | 47.1  | 82.1 | 86.1  | 84.1 |
| 127.5° | 2.0 | 44.0  | 78.1 | 84.1  | 82.1 |
| 130°   | 1.0 | 41.0  | 74.1 | 82.1  | 81.1 |
| 132.5° | 2.0 | 38.0  | 70.1 | 79.1  | 79.1 |
| 135°   | 2.0 | 35.0  | 65.1 | 76.1  | 76.1 |
| 137.5° | 2.0 | 31.0  | 60.1 | 72.1  | 73.1 |
| 140°   | 2.0 | 28.0  | 55.1 | 68.1  | 70.1 |
| 142.5° | 2.0 | 25.0  | 50.1 | 64.1  | 67.1 |
| 145°   | 2.0 | 22.0  | 45.0 | 59.1  | 63.1 |
| 147.5° | 2.0 | 20.0  | 40.0 | 53.1  | 59.1 |
| 150°   | 2.0 | 17.0  | 36.0 | 48.1  | 54.1 |
| 152.5° | 2.0 | 15.0  | 32.0 | 43.0  | 50.1 |
| 155°   | 2.0 | 14.0  | 28.0 | 37.0  | 45.0 |
| 157.5° | 2.0 | 12.0  | 24.0 | 32.0  | 40.0 |
| 160°   | 2.0 | 10.0  | 20.0 | 28.0  | 34.0 |
| 162.5° | 2.0 | 9.0   | 17.0 | 23.0  | 30.0 |
| 165°   | 2.0 | 8.0   | 14.0 | 18.0  | 24.0 |
| 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  |

(END OF REPORT)