

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: P566935

Luminaire Tested: **4SNX-87HL-SLW-UNV-L835-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566935  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2204-622-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNX-87HL-SLW-UNV-L835-CD  
Description: 4FT 8700 LUMEN, SNX FIXTURE WITH 3500K, 80CRI LEDS AND SLW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

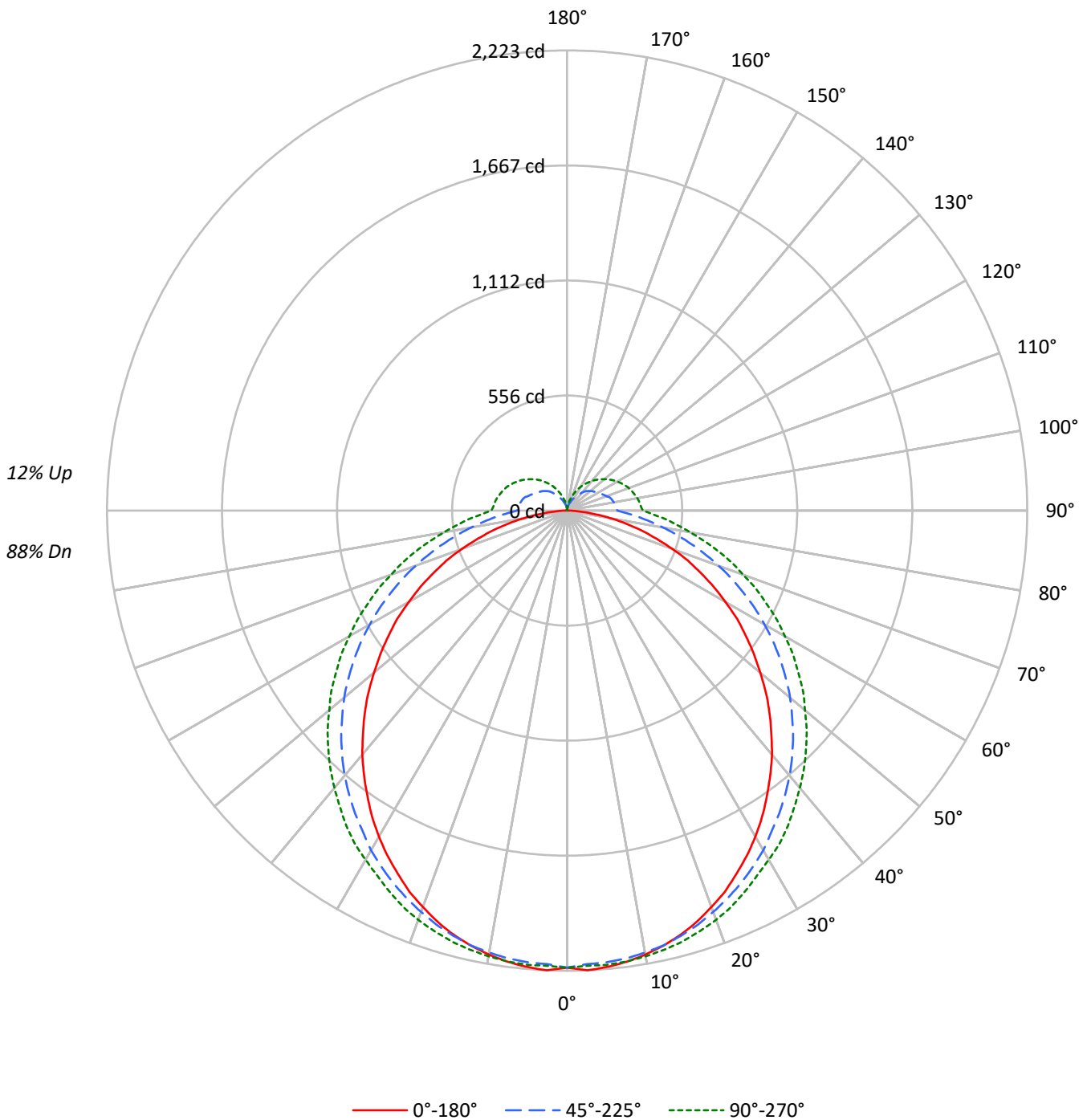
Lumens per Lamp: N/A  
Luminaire Lumens: 7949.0 lumens  
Efficiency: N/A  
Efficacy: 127.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.08')  
CIE Type: Semi-Direct

Input Watts (W): 62.2  
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   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 91 | 91 | 91 | 88 |
| 1   | 105 | 99  | 95  | 90  | 101 | 96  | 92  | 88  | 89  | 86  | 83  | 84 | 81 | 78 | 78 | 76 | 74 | 71 |
| 2   | 95  | 86  | 79  | 72  | 91  | 83  | 76  | 71  | 77  | 72  | 67  | 72 | 68 | 64 | 68 | 64 | 61 | 58 |
| 3   | 86  | 75  | 66  | 60  | 82  | 72  | 65  | 58  | 68  | 61  | 56  | 63 | 58 | 53 | 59 | 55 | 51 | 48 |
| 4   | 78  | 66  | 57  | 50  | 75  | 64  | 56  | 49  | 60  | 53  | 47  | 56 | 50 | 45 | 53 | 48 | 43 | 41 |
| 5   | 72  | 59  | 50  | 43  | 69  | 57  | 48  | 42  | 54  | 46  | 41  | 50 | 44 | 39 | 47 | 42 | 38 | 35 |
| 6   | 66  | 53  | 44  | 37  | 64  | 51  | 43  | 37  | 48  | 41  | 35  | 45 | 39 | 34 | 43 | 37 | 33 | 31 |
| 7   | 61  | 48  | 39  | 33  | 59  | 46  | 38  | 32  | 44  | 36  | 31  | 41 | 35 | 30 | 39 | 33 | 29 | 27 |
| 8   | 57  | 43  | 35  | 29  | 55  | 42  | 34  | 29  | 40  | 33  | 28  | 38 | 31 | 27 | 36 | 30 | 26 | 24 |
| 9   | 53  | 40  | 32  | 26  | 51  | 39  | 31  | 26  | 37  | 30  | 25  | 35 | 29 | 24 | 33 | 27 | 23 | 21 |
| 10  | 50  | 37  | 29  | 23  | 48  | 36  | 28  | 23  | 34  | 27  | 22  | 32 | 26 | 22 | 31 | 25 | 21 | 19 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 23766 | 23766 | 23766 |
| 5°  | 23873 | 23160 | 23126 |
| 10° | 23719 | 22702 | 22573 |
| 15° | 23503 | 22210 | 22051 |
| 20° | 23167 | 21671 | 21508 |
| 25° | 22769 | 21129 | 20888 |
| 30° | 22336 | 20586 | 20316 |
| 35° | 21792 | 19978 | 19825 |
| 40° | 21263 | 19423 | 19223 |
| 45° | 20625 | 18806 | 18652 |
| 50° | 19886 | 18152 | 17999 |
| 55° | 19178 | 17385 | 17346 |
| 60° | 18358 | 16554 | 16596 |
| 65° | 17359 | 15608 | 15797 |
| 70° | 16090 | 14540 | 14877 |
| 75° | 14293 | 13311 | 14033 |
| 80° | 11780 | 12091 | 12966 |
| 85° | 8156  | 11000 | 12271 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 209.6  | 2.6       |
| 10°-20°   | 603.0  | 7.6       |
| 20°-30°   | 917.3  | 11.5      |
| 30°-40°   | 1115.3 | 14.0      |
| 40°-50°   | 1180.0 | 14.8      |
| 50°-60°   | 1106.1 | 13.9      |
| 60°-70°   | 909.9  | 11.4      |
| 70°-80°   | 629.6  | 7.9       |
| 80°-90°   | 350.1  | 4.4       |
| 90°-100°  | 230.6  | 2.9       |
| 100°-110° | 206.8  | 2.6       |
| 110°-120° | 171.2  | 2.2       |
| 120°-130° | 132.3  | 1.7       |
| 130°-140° | 93.7   | 1.2       |
| 140°-150° | 56.5   | 0.7       |
| 150°-160° | 27.1   | 0.3       |
| 160°-170° | 8.9    | 0.1       |
| 170°-180° | 1.1    | 0.0       |
| 0°-30°    | 1729.8 | 21.8      |
| 0°-40°    | 2845.1 | 35.8      |
| 0°-60°    | 5131.1 | 64.6      |
| 0°-90°    | 7020.7 | 88.3      |
| 90°-120°  | 608.6  | 7.7       |
| 90°-150°  | 891.2  | 11.2      |
| 90°-180°  | 928.0  | 11.7      |
| 0°-180°   | 7949.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2208 | 2208  | 2208 | 2208  | 2208 |      |
| 5°   | 2213 | 2209  | 2190 | 2208  | 2202 | 210  |
| 15°  | 2121 | 2128  | 2126 | 2155  | 2155 | 598  |
| 25°  | 1936 | 1963  | 1986 | 2030  | 2031 | 892  |
| 35°  | 1682 | 1727  | 1786 | 1843  | 1859 | 1053 |
| 45°  | 1383 | 1455  | 1544 | 1613  | 1632 | 1066 |
| 55°  | 1052 | 1146  | 1256 | 1335  | 1363 | 942  |
| 65°  | 712  | 814   | 941  | 1033  | 1062 | 706  |
| 75°  | 370  | 478   | 618  | 716   | 756  | 393  |
| 85°  | 82   | 203   | 343  | 438   | 476  | 94   |
| 90°  | 1    | 114   | 242  | 334   | 366  | 5    |
| 95°  | 1    | 109   | 236  | 323   | 354  | 1    |
| 105° | 1    | 94    | 220  | 304   | 331  | 1    |
| 115° | 3    | 82    | 186  | 270   | 300  | 2    |
| 125° | 3    | 69    | 159  | 230   | 259  | 2    |
| 135° | 3    | 54    | 133  | 189   | 212  | 2    |
| 145° | 3    | 40    | 93   | 143   | 161  | 2    |
| 155° | 4    | 27    | 57   | 91    | 106  | 2    |
| 165° | 4    | 18    | 31   | 42    | 54   | 1    |
| 175° | 4    | 7     | 10   | 10    | 5    | 0    |
| 180° | 3    | 3     | 3    | 3     | 3    |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2207.9 | 2207.9 | 2207.9 | 2207.9 | 2207.9 |
| 2.5°   | 2222.9 | 2216.1 | 2193.0 | 2207.9 | 2201.1 |
| 5°     | 2213.4 | 2209.3 | 2190.2 | 2207.9 | 2202.5 |
| 7.5°   | 2198.4 | 2197.0 | 2182.1 | 2202.5 | 2197.0 |
| 10°    | 2178.0 | 2180.7 | 2168.4 | 2190.2 | 2186.1 |
| 12.5°  | 2152.1 | 2156.2 | 2150.8 | 2175.3 | 2172.5 |
| 15°    | 2120.8 | 2127.6 | 2126.3 | 2154.8 | 2154.8 |
| 17.5°  | 2082.7 | 2092.2 | 2097.7 | 2130.3 | 2130.3 |
| 20°    | 2037.8 | 2052.7 | 2063.6 | 2099.0 | 2104.5 |
| 22.5°  | 1992.8 | 2010.5 | 2026.9 | 2063.6 | 2071.8 |
| 25°    | 1935.7 | 1962.9 | 1986.0 | 2029.6 | 2031.0 |
| 27.5°  | 1879.9 | 1909.8 | 1941.1 | 1983.3 | 1987.4 |
| 30°    | 1818.6 | 1856.7 | 1894.8 | 1935.7 | 1947.9 |
| 32.5°  | 1753.3 | 1795.5 | 1837.7 | 1892.1 | 1908.5 |
| 35°    | 1682.5 | 1727.4 | 1785.9 | 1843.1 | 1859.4 |
| 37.5°  | 1611.7 | 1662.1 | 1730.1 | 1788.7 | 1803.6 |
| 40°    | 1539.6 | 1595.4 | 1671.6 | 1731.5 | 1749.2 |
| 42.5°  | 1459.2 | 1527.3 | 1609.0 | 1673.0 | 1693.4 |
| 45°    | 1383.0 | 1455.2 | 1543.6 | 1613.1 | 1632.1 |
| 47.5°  | 1302.7 | 1378.9 | 1474.2 | 1547.7 | 1569.5 |
| 50°    | 1216.9 | 1304.1 | 1406.2 | 1479.7 | 1500.1 |
| 52.5°  | 1136.6 | 1225.1 | 1332.7 | 1408.9 | 1437.5 |
| 55°    | 1052.2 | 1146.2 | 1256.4 | 1335.4 | 1362.6 |
| 57.5°  | 973.3  | 1063.1 | 1181.6 | 1260.5 | 1294.5 |
| 60°    | 883.4  | 982.8  | 1101.2 | 1187.0 | 1214.2 |
| 62.5°  | 799.0  | 899.8  | 1022.3 | 1110.8 | 1142.1 |
| 65°    | 711.9  | 814.0  | 940.6  | 1033.2 | 1061.8 |
| 67.5°  | 630.3  | 731.0  | 860.3  | 951.5  | 988.3  |
| 70°    | 540.4  | 646.6  | 778.6  | 872.6  | 903.9  |
| 72.5°  | 451.9  | 562.2  | 697.0  | 797.7  | 833.1  |
| 75°    | 370.3  | 477.8  | 618.0  | 716.0  | 755.5  |
| 77.5°  | 291.3  | 400.2  | 541.8  | 642.5  | 676.5  |
| 80°    | 212.4  | 326.7  | 471.0  | 570.4  | 603.0  |
| 82.5°  | 140.2  | 260.0  | 402.9  | 502.3  | 537.7  |
| 85°    | 81.7   | 202.8  | 343.0  | 438.3  | 476.4  |
| 87.5°  | 35.4   | 153.8  | 287.2  | 381.1  | 412.5  |
| 90°    | 1.4    | 114.3  | 242.3  | 333.5  | 366.2  |
| 92.5°  | 1.4    | 111.6  | 236.9  | 326.7  | 358.0  |
| 95°    | 1.4    | 108.9  | 235.5  | 322.6  | 353.9  |
| 97.5°  | 1.4    | 107.5  | 232.8  | 319.9  | 349.8  |
| 100°   | 1.4    | 103.5  | 228.7  | 314.4  | 344.4  |
| 102.5° | 1.4    | 98.0   | 224.6  | 309.0  | 337.6  |
| 105°   | 1.4    | 93.9   | 220.5  | 303.6  | 330.8  |
| 107.5° | 1.4    | 89.8   | 213.7  | 296.7  | 324.0  |
| 110°   | 1.4    | 85.8   | 202.8  | 289.9  | 317.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°   | 67.5° | 90°   |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 1.4 | 84.4  | 194.7 | 280.4 | 309.0 |
| 115°   | 2.7 | 81.7  | 186.5 | 269.5 | 299.5 |
| 117.5° | 2.7 | 80.3  | 179.7 | 258.6 | 289.9 |
| 120°   | 2.7 | 76.2  | 172.9 | 249.1 | 279.1 |
| 122.5° | 2.7 | 72.1  | 166.1 | 239.6 | 269.5 |
| 125°   | 2.7 | 69.4  | 159.3 | 230.0 | 258.6 |
| 127.5° | 2.7 | 65.3  | 153.8 | 220.5 | 246.4 |
| 130°   | 2.7 | 62.6  | 147.0 | 209.6 | 235.5 |
| 132.5° | 2.7 | 58.5  | 140.2 | 198.7 | 223.2 |
| 135°   | 2.7 | 54.4  | 133.4 | 189.2 | 212.4 |
| 137.5° | 2.7 | 49.0  | 125.2 | 178.3 | 200.1 |
| 140°   | 2.7 | 44.9  | 114.3 | 167.4 | 187.9 |
| 142.5° | 2.7 | 42.2  | 103.5 | 155.2 | 174.2 |
| 145°   | 2.7 | 39.5  | 92.6  | 142.9 | 160.6 |
| 147.5° | 2.7 | 36.8  | 83.0  | 130.7 | 147.0 |
| 150°   | 2.7 | 32.7  | 73.5  | 119.8 | 133.4 |
| 152.5° | 4.1 | 29.9  | 65.3  | 106.2 | 119.8 |
| 155°   | 4.1 | 27.2  | 57.2  | 91.2  | 106.2 |
| 157.5° | 4.1 | 24.5  | 49.0  | 76.2  | 92.6  |
| 160°   | 4.1 | 21.8  | 42.2  | 62.6  | 79.0  |
| 162.5° | 4.1 | 20.4  | 36.8  | 51.7  | 66.7  |
| 165°   | 4.1 | 17.7  | 31.3  | 42.2  | 54.4  |
| 167.5° | 4.1 | 13.6  | 25.9  | 32.7  | 44.9  |
| 170°   | 4.1 | 10.9  | 20.4  | 23.1  | 34.0  |
| 172.5° | 4.1 | 8.2   | 15.0  | 16.3  | 17.7  |
| 175°   | 4.1 | 6.8   | 9.5   | 9.5   | 5.4   |
| 177.5° | 4.1 | 5.4   | 5.4   | 5.4   | 2.7   |
| 180°   | 2.7 | 2.7   | 2.7   | 2.7   | 2.7   |

(END OF REPORT)