

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: P566981

Luminaire Tested: **4SNX-90HL-LW-UNV-L950-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566981  
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-90HL-LW-UNV-L950-CD  
Description: 4FT 9000 LUMEN, SNX FIXTURE WITH 5000K, 90CRI LEDS AND LW LENS  
Light Source: -  
Ballast/Driver: -

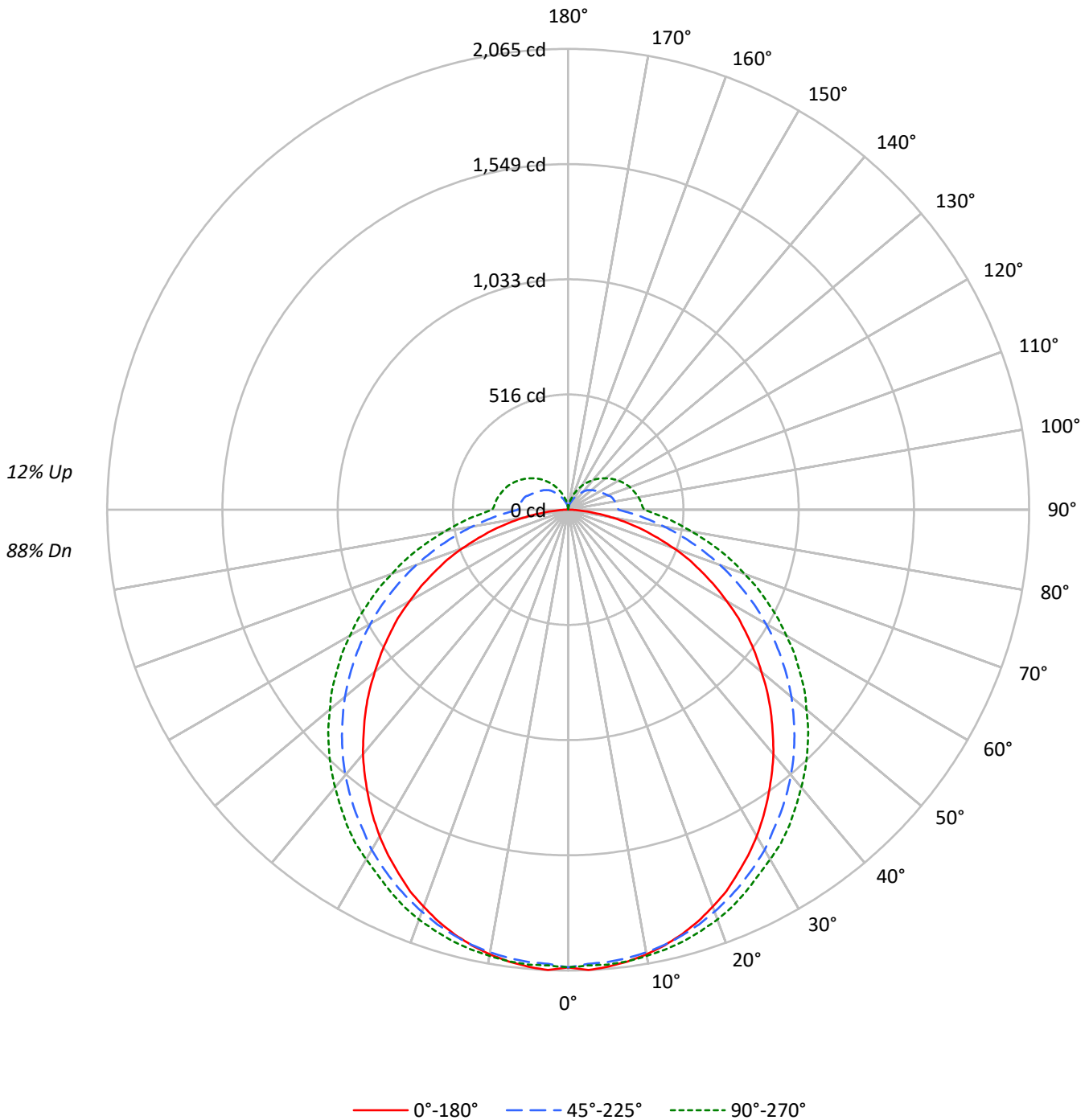
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7383.0 lumens  
Efficiency: N/A  
Efficacy: 114.6 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: 0.17')  
CIE Type: Semi-Direct

Input Watts (W): 64.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°  | 22074 | 22074 | 22074 |
| 5°  | 22132 | 21058 | 20886 |
| 10° | 21949 | 20227 | 19859 |
| 15° | 21708 | 19403 | 18923 |
| 20° | 21356 | 18570 | 18017 |
| 25° | 20945 | 17760 | 17091 |
| 30° | 20501 | 16967 | 16237 |
| 35° | 19952 | 16137 | 15471 |
| 40° | 19413 | 15360 | 14639 |
| 45° | 18771 | 14541 | 13845 |
| 50° | 18032 | 13695 | 13002 |
| 55° | 17310 | 12767 | 12167 |
| 60° | 16475 | 11790 | 11268 |
| 65° | 15459 | 10727 | 10338 |
| 70° | 14173 | 9579  | 9330  |
| 75° | 12378 | 8320  | 8366  |
| 80° | 9887  | 7061  | 7262  |
| 85° | 6350  | 5851  | 6340  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 194.7  | 2.6       |
| 10°-20°   | 560.0  | 7.6       |
| 20°-30°   | 851.9  | 11.5      |
| 30°-40°   | 1035.9 | 14.0      |
| 40°-50°   | 1095.9 | 14.8      |
| 50°-60°   | 1027.3 | 13.9      |
| 60°-70°   | 845.1  | 11.4      |
| 70°-80°   | 584.8  | 7.9       |
| 80°-90°   | 325.2  | 4.4       |
| 90°-100°  | 214.2  | 2.9       |
| 100°-110° | 192.1  | 2.6       |
| 110°-120° | 159.0  | 2.2       |
| 120°-130° | 122.9  | 1.7       |
| 130°-140° | 87.0   | 1.2       |
| 140°-150° | 52.5   | 0.7       |
| 150°-160° | 25.2   | 0.3       |
| 160°-170° | 8.3    | 0.1       |
| 170°-180° | 1.0    | 0.0       |
| 0°-30°    | 1606.7 | 21.8      |
| 0°-40°    | 2642.5 | 35.8      |
| 0°-60°    | 4765.8 | 64.6      |
| 0°-90°    | 6520.8 | 88.3      |
| 90°-120°  | 565.3  | 7.7       |
| 90°-150°  | 827.7  | 11.2      |
| 90°-180°  | 862.0  | 11.7      |
| 0°-180°   | 7383.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2051 | 2051  | 2051 | 2051  | 2051 |      |
| 5°   | 2056 | 2052  | 2034 | 2051  | 2046 | 195  |
| 15°  | 1970 | 1976  | 1975 | 2001  | 2001 | 555  |
| 25°  | 1798 | 1823  | 1845 | 1885  | 1886 | 829  |
| 35°  | 1563 | 1604  | 1659 | 1712  | 1727 | 978  |
| 45°  | 1284 | 1352  | 1434 | 1498  | 1516 | 990  |
| 55°  | 977  | 1064  | 1167 | 1240  | 1266 | 875  |
| 65°  | 661  | 756   | 874  | 960   | 986  | 656  |
| 75°  | 344  | 444   | 574  | 665   | 702  | 365  |
| 85°  | 76   | 188   | 319  | 407   | 442  | 87   |
| 90°  | 1    | 106   | 225  | 310   | 340  | 5    |
| 95°  | 1    | 101   | 219  | 300   | 329  | 1    |
| 105° | 1    | 87    | 205  | 282   | 307  | 1    |
| 115° | 2    | 76    | 173  | 250   | 278  | 2    |
| 125° | 2    | 64    | 148  | 214   | 240  | 2    |
| 135° | 2    | 51    | 124  | 176   | 197  | 2    |
| 145° | 2    | 37    | 86   | 133   | 149  | 2    |
| 155° | 4    | 25    | 53   | 85    | 99   | 2    |
| 165° | 4    | 16    | 29   | 39    | 51   | 1    |
| 175° | 4    | 6     | 9    | 9     | 5    | 0    |
| 180° | 2    | 2     | 2    | 2     | 2    |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2050.7 | 2050.7 | 2050.7 | 2050.7 | 2050.7 |
| 2.5°   | 2064.6 | 2058.3 | 2036.8 | 2050.7 | 2044.4 |
| 5°     | 2055.8 | 2052.0 | 2034.3 | 2050.7 | 2045.7 |
| 7.5°   | 2041.9 | 2040.6 | 2026.7 | 2045.7 | 2040.6 |
| 10°    | 2022.9 | 2025.4 | 2014.0 | 2034.3 | 2030.5 |
| 12.5°  | 1998.9 | 2002.7 | 1997.6 | 2020.4 | 2017.8 |
| 15°    | 1969.8 | 1976.1 | 1974.9 | 2001.4 | 2001.4 |
| 17.5°  | 1934.4 | 1943.2 | 1948.3 | 1978.6 | 1978.6 |
| 20°    | 1892.7 | 1906.6 | 1916.7 | 1949.6 | 1954.6 |
| 22.5°  | 1851.0 | 1867.4 | 1882.6 | 1916.7 | 1924.3 |
| 25°    | 1797.8 | 1823.1 | 1844.6 | 1885.1 | 1886.4 |
| 27.5°  | 1746.0 | 1773.8 | 1802.9 | 1842.1 | 1845.9 |
| 30°    | 1689.1 | 1724.5 | 1759.9 | 1797.8 | 1809.2 |
| 32.5°  | 1628.4 | 1667.6 | 1706.8 | 1757.4 | 1772.6 |
| 35°    | 1562.7 | 1604.4 | 1658.8 | 1711.9 | 1727.0 |
| 37.5°  | 1496.9 | 1543.7 | 1606.9 | 1661.3 | 1675.2 |
| 40°    | 1429.9 | 1481.8 | 1552.6 | 1608.2 | 1624.6 |
| 42.5°  | 1355.3 | 1418.6 | 1494.4 | 1553.8 | 1572.8 |
| 45°    | 1284.5 | 1351.5 | 1433.7 | 1498.2 | 1515.9 |
| 47.5°  | 1209.9 | 1280.7 | 1369.2 | 1437.5 | 1457.8 |
| 50°    | 1130.3 | 1211.2 | 1306.0 | 1374.3 | 1393.3 |
| 52.5°  | 1055.7 | 1137.9 | 1237.8 | 1308.6 | 1335.1 |
| 55°    | 977.3  | 1064.5 | 1167.0 | 1240.3 | 1265.6 |
| 57.5°  | 904.0  | 987.4  | 1097.4 | 1170.8 | 1202.4 |
| 60°    | 820.5  | 912.8  | 1022.8 | 1102.5 | 1127.8 |
| 62.5°  | 742.2  | 835.7  | 949.5  | 1031.7 | 1060.8 |
| 65°    | 661.2  | 756.1  | 873.6  | 959.6  | 986.2  |
| 67.5°  | 585.4  | 678.9  | 799.0  | 883.8  | 917.9  |
| 70°    | 501.9  | 600.5  | 723.2  | 810.4  | 839.5  |
| 72.5°  | 419.8  | 522.2  | 647.3  | 740.9  | 773.8  |
| 75°    | 343.9  | 443.8  | 574.0  | 665.0  | 701.7  |
| 77.5°  | 270.6  | 371.7  | 503.2  | 596.8  | 628.4  |
| 80°    | 197.2  | 303.4  | 437.5  | 529.7  | 560.1  |
| 82.5°  | 130.2  | 241.5  | 374.2  | 466.5  | 499.4  |
| 85°    | 75.9   | 188.4  | 318.6  | 407.1  | 442.5  |
| 87.5°  | 32.9   | 142.9  | 266.8  | 354.0  | 383.1  |
| 90°    | 1.3    | 106.2  | 225.0  | 309.8  | 340.1  |
| 92.5°  | 1.3    | 103.7  | 220.0  | 303.4  | 332.5  |
| 95°    | 1.3    | 101.1  | 218.7  | 299.6  | 328.7  |
| 97.5°  | 1.3    | 99.9   | 216.2  | 297.1  | 324.9  |
| 100°   | 1.3    | 96.1   | 212.4  | 292.1  | 319.9  |
| 102.5° | 1.3    | 91.0   | 208.6  | 287.0  | 313.5  |
| 105°   | 1.3    | 87.2   | 204.8  | 281.9  | 307.2  |
| 107.5° | 1.3    | 83.4   | 198.5  | 275.6  | 300.9  |
| 110°   | 1.3    | 79.7   | 188.4  | 269.3  | 294.6  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°   | 67.5° | 90°   |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 1.3 | 78.4  | 180.8 | 260.4 | 287.0 |
| 115°   | 2.5 | 75.9  | 173.2 | 250.3 | 278.1 |
| 117.5° | 2.5 | 74.6  | 166.9 | 240.2 | 269.3 |
| 120°   | 2.5 | 70.8  | 160.6 | 231.4 | 259.2 |
| 122.5° | 2.5 | 67.0  | 154.2 | 222.5 | 250.3 |
| 125°   | 2.5 | 64.5  | 147.9 | 213.7 | 240.2 |
| 127.5° | 2.5 | 60.7  | 142.9 | 204.8 | 228.8 |
| 130°   | 2.5 | 58.2  | 136.5 | 194.7 | 218.7 |
| 132.5° | 2.5 | 54.4  | 130.2 | 184.6 | 207.3 |
| 135°   | 2.5 | 50.6  | 123.9 | 175.7 | 197.2 |
| 137.5° | 2.5 | 45.5  | 116.3 | 165.6 | 185.9 |
| 140°   | 2.5 | 41.7  | 106.2 | 155.5 | 174.5 |
| 142.5° | 2.5 | 39.2  | 96.1  | 144.1 | 161.8 |
| 145°   | 2.5 | 36.7  | 86.0  | 132.8 | 149.2 |
| 147.5° | 2.5 | 34.1  | 77.1  | 121.4 | 136.5 |
| 150°   | 2.5 | 30.3  | 68.3  | 111.3 | 123.9 |
| 152.5° | 3.8 | 27.8  | 60.7  | 98.6  | 111.3 |
| 155°   | 3.8 | 25.3  | 53.1  | 84.7  | 98.6  |
| 157.5° | 3.8 | 22.8  | 45.5  | 70.8  | 86.0  |
| 160°   | 3.8 | 20.2  | 39.2  | 58.2  | 73.3  |
| 162.5° | 3.8 | 19.0  | 34.1  | 48.0  | 62.0  |
| 165°   | 3.8 | 16.4  | 29.1  | 39.2  | 50.6  |
| 167.5° | 3.8 | 12.6  | 24.0  | 30.3  | 41.7  |
| 170°   | 3.8 | 10.1  | 19.0  | 21.5  | 31.6  |
| 172.5° | 3.8 | 7.6   | 13.9  | 15.2  | 16.4  |
| 175°   | 3.8 | 6.3   | 8.9   | 8.9   | 5.1   |
| 177.5° | 3.8 | 5.1   | 5.1   | 5.1   | 2.5   |
| 180°   | 2.5 | 2.5   | 2.5   | 2.5   | 2.5   |

(END OF REPORT)