

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: P567035

Luminaire Tested: **4SNX-93HL-SLW-UNV-L935-CD**

Issue Date: 9/15/2022



Test Information

Test Method: LM-79-08
Report Number: P567035
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-93HL-SLW-UNV-L935-CD
Description: 4FT 9300 LUMEN, SNX FIXTURE WITH 3500K, 90CRI LEDS AND SLW LENS
Light Source: -
Ballast/Driver: -

Summary

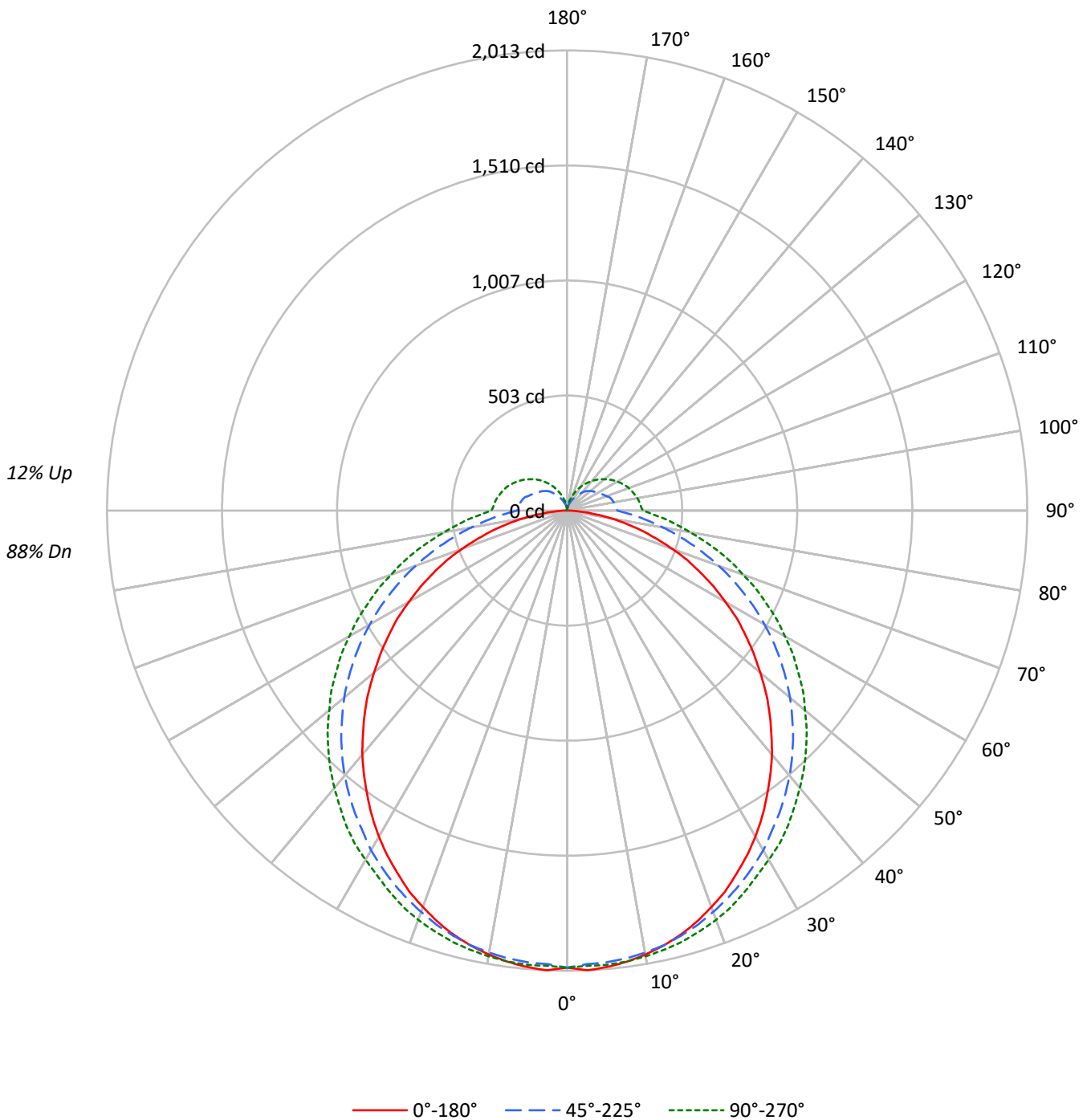
Lumens per Lamp: N/A
Luminaire Lumens: 7198.1 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

Input Watts (W): 67.4
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P567035

CATALOG NUMBER: 4SNX-93HL-SLW-UNV-L935-CD

Luminous Intensity Polar Plot





TEST NUMBER: P567035

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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° | 21520 | 21520 | 21520 |
| 5° | 21617 | 20972 | 20941 |
| 10° | 21477 | 20558 | 20440 |
| 15° | 21282 | 20112 | 19968 |
| 20° | 20978 | 19624 | 19475 |
| 25° | 20618 | 19134 | 18914 |
| 30° | 20226 | 18641 | 18397 |
| 35° | 19733 | 18091 | 17952 |
| 40° | 19254 | 17588 | 17407 |
| 45° | 18677 | 17030 | 16890 |
| 50° | 18008 | 16436 | 16299 |
| 55° | 17366 | 15743 | 15708 |
| 60° | 16625 | 14991 | 15028 |
| 65° | 15721 | 14133 | 14305 |
| 70° | 14571 | 13167 | 13471 |
| 75° | 12942 | 12053 | 12707 |
| 80° | 10665 | 10949 | 11742 |
| 85° | 7387 | 9961 | 11112 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 189.8 | 2.6 |
| 10°-20° | 546.0 | 7.6 |
| 20°-30° | 830.6 | 11.5 |
| 30°-40° | 1009.9 | 14.0 |
| 40°-50° | 1068.5 | 14.8 |
| 50°-60° | 1001.6 | 13.9 |
| 60°-70° | 824.0 | 11.4 |
| 70°-80° | 570.1 | 7.9 |
| 80°-90° | 317.0 | 4.4 |
| 90°-100° | 208.8 | 2.9 |
| 100°-110° | 187.3 | 2.6 |
| 110°-120° | 155.0 | 2.2 |
| 120°-130° | 119.8 | 1.7 |
| 130°-140° | 84.8 | 1.2 |
| 140°-150° | 51.2 | 0.7 |
| 150°-160° | 24.6 | 0.3 |
| 160°-170° | 8.0 | 0.1 |
| 170°-180° | 1.0 | 0.0 |
| 0°-30° | 1566.4 | 21.8 |
| 0°-40° | 2576.3 | 35.8 |
| 0°-60° | 4646.4 | 64.6 |
| 0°-90° | 6357.4 | 88.3 |
| 90°-120° | 551.2 | 7.7 |
| 90°-150° | 807.0 | 11.2 |
| 90°-180° | 841.0 | 11.7 |
| 0°-180° | 7198.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1999 | 1999 | 1999 | 1999 | 1999 | |
| 5° | 2004 | 2001 | 1983 | 1999 | 1994 | 190 |
| 15° | 1920 | 1927 | 1925 | 1951 | 1951 | 541 |
| 25° | 1753 | 1778 | 1798 | 1838 | 1839 | 808 |
| 35° | 1524 | 1564 | 1617 | 1669 | 1684 | 953 |
| 45° | 1252 | 1318 | 1398 | 1461 | 1478 | 965 |
| 55° | 953 | 1038 | 1138 | 1209 | 1234 | 853 |
| 65° | 645 | 737 | 852 | 936 | 962 | 639 |
| 75° | 335 | 433 | 560 | 648 | 684 | 356 |
| 85° | 74 | 184 | 311 | 397 | 431 | 85 |
| 90° | 1 | 104 | 219 | 302 | 332 | 5 |
| 95° | 1 | 99 | 213 | 292 | 320 | 1 |
| 105° | 1 | 85 | 200 | 275 | 300 | 1 |
| 115° | 2 | 74 | 169 | 244 | 271 | 2 |
| 125° | 2 | 63 | 144 | 208 | 234 | 2 |
| 135° | 2 | 49 | 121 | 171 | 192 | 2 |
| 145° | 2 | 36 | 84 | 129 | 146 | 2 |
| 155° | 4 | 25 | 52 | 83 | 96 | 2 |
| 165° | 4 | 16 | 28 | 38 | 49 | 1 |
| 175° | 4 | 6 | 9 | 9 | 5 | 0 |
| 180° | 2 | 2 | 2 | 2 | 2 | |



TEST NUMBER: P567035

CATALOG NUMBER: 4SNX-93HL-SLW-UNV-L935-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1999.3 | 1999.3 | 1999.3 | 1999.3 | 1999.3 |
| 2.5° | 2012.9 | 2006.7 | 1985.8 | 1999.3 | 1993.2 |
| 5° | 2004.3 | 2000.6 | 1983.3 | 1999.3 | 1994.4 |
| 7.5° | 1990.7 | 1989.5 | 1975.9 | 1994.4 | 1989.5 |
| 10° | 1972.2 | 1974.7 | 1963.6 | 1983.3 | 1979.6 |
| 12.5° | 1948.8 | 1952.5 | 1947.6 | 1969.7 | 1967.3 |
| 15° | 1920.4 | 1926.6 | 1925.4 | 1951.3 | 1951.3 |
| 17.5° | 1885.9 | 1894.6 | 1899.5 | 1929.1 | 1929.1 |
| 20° | 1845.2 | 1858.8 | 1868.7 | 1900.7 | 1905.6 |
| 22.5° | 1804.6 | 1820.6 | 1835.4 | 1868.7 | 1876.1 |
| 25° | 1752.8 | 1777.5 | 1798.4 | 1837.9 | 1839.1 |
| 27.5° | 1702.3 | 1729.4 | 1757.7 | 1795.9 | 1799.6 |
| 30° | 1646.8 | 1681.3 | 1715.8 | 1752.8 | 1763.9 |
| 32.5° | 1587.6 | 1625.8 | 1664.1 | 1713.4 | 1728.1 |
| 35° | 1523.5 | 1564.2 | 1617.2 | 1669.0 | 1683.8 |
| 37.5° | 1459.4 | 1505.0 | 1566.7 | 1619.7 | 1633.2 |
| 40° | 1394.1 | 1444.6 | 1513.7 | 1567.9 | 1583.9 |
| 42.5° | 1321.4 | 1383.0 | 1457.0 | 1514.9 | 1533.4 |
| 45° | 1252.4 | 1317.7 | 1397.8 | 1460.7 | 1477.9 |
| 47.5° | 1179.6 | 1248.7 | 1334.9 | 1401.5 | 1421.2 |
| 50° | 1102.0 | 1180.9 | 1273.3 | 1339.9 | 1358.4 |
| 52.5° | 1029.2 | 1109.4 | 1206.7 | 1275.8 | 1301.7 |
| 55° | 952.8 | 1037.9 | 1137.7 | 1209.2 | 1233.9 |
| 57.5° | 881.3 | 962.7 | 1069.9 | 1141.4 | 1172.2 |
| 60° | 800.0 | 890.0 | 997.2 | 1074.9 | 1099.5 |
| 62.5° | 723.6 | 814.8 | 925.7 | 1005.8 | 1034.2 |
| 65° | 644.7 | 737.1 | 851.7 | 935.6 | 961.5 |
| 67.5° | 570.7 | 661.9 | 779.0 | 861.6 | 894.9 |
| 70° | 489.4 | 585.5 | 705.1 | 790.1 | 818.5 |
| 72.5° | 409.2 | 509.1 | 631.1 | 722.3 | 754.4 |
| 75° | 335.3 | 432.7 | 559.6 | 648.4 | 684.1 |
| 77.5° | 263.8 | 362.4 | 490.6 | 581.8 | 612.6 |
| 80° | 192.3 | 295.8 | 426.5 | 516.5 | 546.1 |
| 82.5° | 127.0 | 235.4 | 364.9 | 454.8 | 486.9 |
| 85° | 74.0 | 183.7 | 310.6 | 396.9 | 431.4 |
| 87.5° | 32.0 | 139.3 | 260.1 | 345.1 | 373.5 |
| 90° | 1.2 | 103.5 | 219.4 | 302.0 | 331.6 |
| 92.5° | 1.2 | 101.1 | 214.5 | 295.8 | 324.2 |
| 95° | 1.2 | 98.6 | 213.2 | 292.1 | 320.5 |
| 97.5° | 1.2 | 97.4 | 210.8 | 289.7 | 316.8 |
| 100° | 1.2 | 93.7 | 207.1 | 284.7 | 311.9 |
| 102.5° | 1.2 | 88.7 | 203.4 | 279.8 | 305.7 |
| 105° | 1.2 | 85.1 | 199.7 | 274.9 | 299.5 |
| 107.5° | 1.2 | 81.4 | 193.5 | 268.7 | 293.4 |
| 110° | 1.2 | 77.7 | 183.7 | 262.6 | 287.2 |



TEST NUMBER: P567035

CATALOG NUMBER: 4SNX-93HL-SLW-UNV-L935-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 1.2 | 76.4 | 176.3 | 253.9 | 279.8 |
| 115° | 2.5 | 74.0 | 168.9 | 244.1 | 271.2 |
| 117.5° | 2.5 | 72.7 | 162.7 | 234.2 | 262.6 |
| 120° | 2.5 | 69.0 | 156.5 | 225.6 | 252.7 |
| 122.5° | 2.5 | 65.3 | 150.4 | 216.9 | 244.1 |
| 125° | 2.5 | 62.9 | 144.2 | 208.3 | 234.2 |
| 127.5° | 2.5 | 59.2 | 139.3 | 199.7 | 223.1 |
| 130° | 2.5 | 56.7 | 133.1 | 189.8 | 213.2 |
| 132.5° | 2.5 | 53.0 | 127.0 | 180.0 | 202.2 |
| 135° | 2.5 | 49.3 | 120.8 | 171.3 | 192.3 |
| 137.5° | 2.5 | 44.4 | 113.4 | 161.5 | 181.2 |
| 140° | 2.5 | 40.7 | 103.5 | 151.6 | 170.1 |
| 142.5° | 2.5 | 38.2 | 93.7 | 140.5 | 157.8 |
| 145° | 2.5 | 35.7 | 83.8 | 129.4 | 145.5 |
| 147.5° | 2.5 | 33.3 | 75.2 | 118.3 | 133.1 |
| 150° | 2.5 | 29.6 | 66.6 | 108.5 | 120.8 |
| 152.5° | 3.7 | 27.1 | 59.2 | 96.1 | 108.5 |
| 155° | 3.7 | 24.7 | 51.8 | 82.6 | 96.1 |
| 157.5° | 3.7 | 22.2 | 44.4 | 69.0 | 83.8 |
| 160° | 3.7 | 19.7 | 38.2 | 56.7 | 71.5 |
| 162.5° | 3.7 | 18.5 | 33.3 | 46.8 | 60.4 |
| 165° | 3.7 | 16.0 | 28.4 | 38.2 | 49.3 |
| 167.5° | 3.7 | 12.3 | 23.4 | 29.6 | 40.7 |
| 170° | 3.7 | 9.9 | 18.5 | 21.0 | 30.8 |
| 172.5° | 3.7 | 7.4 | 13.6 | 14.8 | 16.0 |
| 175° | 3.7 | 6.2 | 8.6 | 8.6 | 4.9 |
| 177.5° | 3.7 | 4.9 | 4.9 | 4.9 | 2.5 |
| 180° | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |

(END OF REPORT)