

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: P566922

Luminaire Tested: **4SNX-87HL-LN-UNV-L930-CD**

Issue Date: 9/15/2022



Test Information

Test Method: LM-79-08
Report Number: P566922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2204-622-3)
Test Lab: INNOVATION CENTER
Issue Date: 9/15/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNX-87HL-LN-UNV-L930-CD
Description: 4FT 8700 LUMEN, SNX FIXTURE WITH 3000K, 90CRI LEDS AND LN LENS
Light Source: -
Ballast/Driver: -

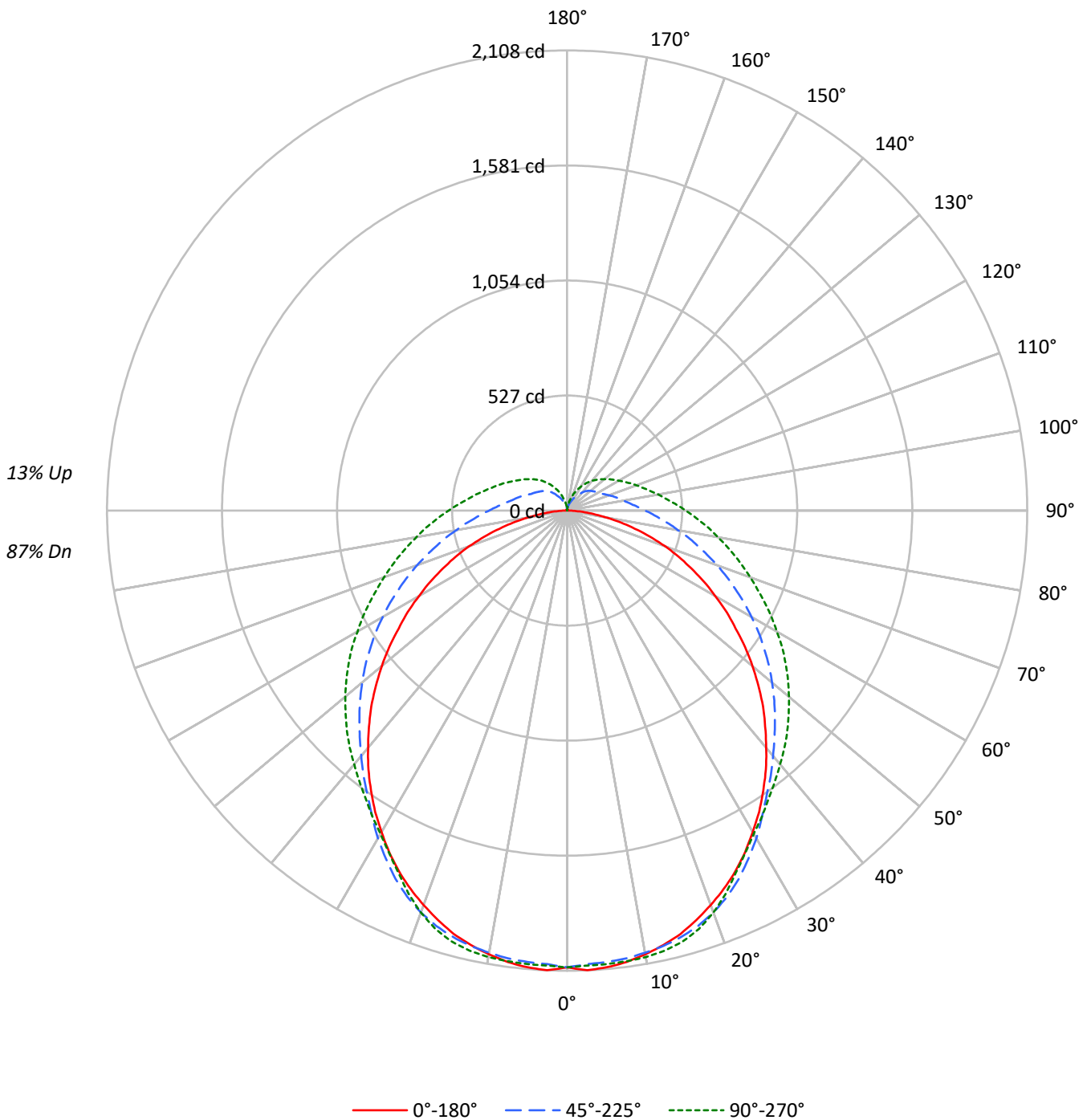
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7553.0 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.17')
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

TEST NUMBER: P566922
CATALOG NUMBER: 4SNX-87HL-LN-UNV-L930-CD

Luminous Intensity Polar Plot





TEST NUMBER: P566922

CATALOG NUMBER: 4SNX-87HL-LN-UNV-L930-CD

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 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 104 | 104 | 104 | 96 | 96 | 96 | 90 | 90 | 90 | 87 | | | | | | | | |
| 1 | 104 | 98 | 93 | 89 | 100 | 95 | 90 | 86 | 88 | 84 | 81 | 82 | 79 | 76 | 76 | 74 | 72 | 68 | | | | | | | | |
| 2 | 94 | 85 | 77 | 71 | 90 | 82 | 75 | 69 | 76 | 70 | 66 | 71 | 66 | 62 | 66 | 62 | 59 | 56 | | | | | | | | |
| 3 | 85 | 74 | 65 | 58 | 81 | 71 | 63 | 57 | 66 | 60 | 54 | 62 | 56 | 52 | 58 | 53 | 49 | 46 | | | | | | | | |
| 4 | 78 | 65 | 56 | 49 | 74 | 63 | 55 | 48 | 59 | 52 | 46 | 55 | 49 | 44 | 51 | 46 | 42 | 39 | | | | | | | | |
| 5 | 71 | 58 | 49 | 42 | 68 | 56 | 48 | 41 | 53 | 45 | 40 | 49 | 43 | 38 | 46 | 41 | 36 | 34 | | | | | | | | |
| 6 | 66 | 52 | 43 | 37 | 63 | 51 | 42 | 36 | 47 | 40 | 35 | 44 | 38 | 33 | 42 | 36 | 32 | 29 | | | | | | | | |
| 7 | 61 | 47 | 38 | 32 | 58 | 46 | 38 | 32 | 43 | 36 | 30 | 41 | 34 | 29 | 38 | 33 | 28 | 26 | | | | | | | | |
| 8 | 57 | 43 | 35 | 29 | 54 | 42 | 34 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 35 | 29 | 25 | 23 | | | | | | | | |
| 9 | 53 | 39 | 31 | 26 | 51 | 38 | 31 | 25 | 36 | 29 | 24 | 34 | 28 | 24 | 32 | 27 | 23 | 21 | | | | | | | | |
| 10 | 50 | 36 | 28 | 23 | 48 | 35 | 28 | 23 | 34 | 27 | 22 | 32 | 26 | 21 | 30 | 25 | 21 | 19 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22521 | 22521 | 22521 |
| 5° | 22608 | 21486 | 21296 |
| 10° | 22397 | 20653 | 20314 |
| 15° | 22127 | 19865 | 19323 |
| 20° | 21702 | 18982 | 18060 |
| 25° | 21243 | 17914 | 16578 |
| 30° | 20639 | 16716 | 15342 |
| 35° | 19994 | 15496 | 14419 |
| 40° | 19262 | 14517 | 13673 |
| 45° | 18545 | 13650 | 13029 |
| 50° | 17691 | 12850 | 12379 |
| 55° | 16692 | 12048 | 11744 |
| 60° | 15736 | 11247 | 11079 |
| 65° | 14669 | 10440 | 10470 |
| 70° | 13450 | 9685 | 9919 |
| 75° | 11568 | 8946 | 9466 |
| 80° | 9115 | 8309 | 9081 |
| 85° | 6107 | 7854 | 8861 |



TEST NUMBER: P566922

CATALOG NUMBER: 4SNX-87HL-LN-UNV-L930-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 198.8 | 2.6 |
| 10°-20° | 571.5 | 7.6 |
| 20°-30° | 851.0 | 11.3 |
| 30°-40° | 1004.1 | 13.3 |
| 40°-50° | 1047.2 | 13.9 |
| 50°-60° | 984.1 | 13.0 |
| 60°-70° | 831.0 | 11.0 |
| 70°-80° | 627.9 | 8.3 |
| 80°-90° | 432.8 | 5.7 |
| 90°-100° | 302.9 | 4.0 |
| 100°-110° | 226.0 | 3.0 |
| 110°-120° | 170.4 | 2.3 |
| 120°-130° | 127.1 | 1.7 |
| 130°-140° | 89.2 | 1.2 |
| 140°-150° | 53.9 | 0.7 |
| 150°-160° | 25.8 | 0.3 |
| 160°-170° | 8.3 | 0.1 |
| 170°-180° | 1.0 | 0.0 |
| 0°-30° | 1621.2 | 21.5 |
| 0°-40° | 2625.3 | 34.8 |
| 0°-60° | 4656.6 | 61.7 |
| 0°-90° | 6548.4 | 86.7 |
| 90°-120° | 699.3 | 9.3 |
| 90°-150° | 969.5 | 12.8 |
| 90°-180° | 1005.0 | 13.3 |
| 0°-180° | 7553.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2092 | 2092 | 2092 | 2092 | 2092 | |
| 5° | 2100 | 2096 | 2076 | 2091 | 2086 | 199 |
| 15° | 2008 | 2017 | 2022 | 2048 | 2044 | 565 |
| 25° | 1823 | 1861 | 1861 | 1844 | 1830 | 839 |
| 35° | 1566 | 1624 | 1593 | 1606 | 1610 | 979 |
| 45° | 1269 | 1332 | 1346 | 1401 | 1426 | 977 |
| 55° | 942 | 1023 | 1101 | 1190 | 1222 | 846 |
| 65° | 627 | 727 | 850 | 962 | 999 | 623 |
| 75° | 321 | 446 | 617 | 746 | 794 | 342 |
| 85° | 73 | 229 | 428 | 568 | 618 | 82 |
| 90° | 1 | 163 | 357 | 494 | 543 | 5 |
| 95° | 1 | 127 | 302 | 433 | 478 | 1 |
| 105° | 3 | 91 | 233 | 338 | 376 | 3 |
| 115° | 3 | 78 | 180 | 269 | 304 | 3 |
| 125° | 4 | 67 | 152 | 220 | 248 | 3 |
| 135° | 4 | 51 | 127 | 179 | 201 | 3 |
| 145° | 5 | 37 | 88 | 137 | 154 | 3 |
| 155° | 5 | 24 | 54 | 87 | 101 | 2 |
| 165° | 6 | 15 | 28 | 38 | 51 | 2 |
| 175° | 6 | 6 | 8 | 8 | 4 | 1 |
| 180° | 4 | 4 | 4 | 4 | 4 | |



TEST NUMBER: P566922

CATALOG NUMBER: 4SNX-87HL-LN-UNV-L930-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2092.3 | 2092.3 | 2092.3 | 2092.3 | 2092.3 |
| 2.5° | 2107.7 | 2102.6 | 2079.5 | 2092.3 | 2085.9 |
| 5° | 2100.0 | 2096.2 | 2075.7 | 2091.0 | 2085.9 |
| 7.5° | 2085.9 | 2084.6 | 2069.3 | 2087.2 | 2082.1 |
| 10° | 2064.2 | 2068.0 | 2056.5 | 2080.8 | 2077.0 |
| 12.5° | 2038.5 | 2046.2 | 2042.4 | 2069.3 | 2065.4 |
| 15° | 2007.8 | 2016.8 | 2021.9 | 2047.5 | 2043.7 |
| 17.5° | 1966.8 | 1983.5 | 1995.0 | 2015.5 | 2009.1 |
| 20° | 1923.3 | 1946.3 | 1959.2 | 1969.4 | 1959.2 |
| 22.5° | 1875.9 | 1906.7 | 1914.3 | 1909.2 | 1899.0 |
| 25° | 1823.4 | 1860.6 | 1860.6 | 1843.9 | 1829.8 |
| 27.5° | 1764.5 | 1810.6 | 1797.8 | 1778.6 | 1767.1 |
| 30° | 1700.5 | 1755.6 | 1733.8 | 1712.0 | 1709.5 |
| 32.5° | 1636.5 | 1694.1 | 1662.1 | 1657.0 | 1660.8 |
| 35° | 1566.0 | 1623.7 | 1592.9 | 1605.7 | 1609.6 |
| 37.5° | 1495.6 | 1553.2 | 1532.7 | 1552.0 | 1563.5 |
| 40° | 1418.8 | 1480.2 | 1467.4 | 1502.0 | 1517.4 |
| 42.5° | 1343.2 | 1407.3 | 1406.0 | 1450.8 | 1473.8 |
| 45° | 1269.0 | 1331.7 | 1345.8 | 1400.9 | 1426.5 |
| 47.5° | 1188.3 | 1252.3 | 1286.9 | 1350.9 | 1376.5 |
| 50° | 1108.9 | 1178.1 | 1225.4 | 1297.1 | 1326.6 |
| 52.5° | 1027.0 | 1099.9 | 1165.2 | 1244.6 | 1275.4 |
| 55° | 942.4 | 1023.1 | 1101.2 | 1189.6 | 1221.6 |
| 57.5° | 866.9 | 948.8 | 1041.0 | 1132.0 | 1169.1 |
| 60° | 783.7 | 874.6 | 975.7 | 1071.8 | 1108.9 |
| 62.5° | 708.1 | 801.6 | 914.3 | 1015.4 | 1055.1 |
| 65° | 627.4 | 727.3 | 850.2 | 961.6 | 998.8 |
| 67.5° | 553.2 | 655.6 | 790.1 | 902.7 | 943.7 |
| 70° | 476.3 | 585.2 | 731.2 | 850.2 | 892.5 |
| 72.5° | 397.0 | 512.2 | 672.3 | 799.0 | 842.6 |
| 75° | 321.4 | 445.6 | 617.2 | 746.5 | 793.9 |
| 77.5° | 251.0 | 381.6 | 567.3 | 700.4 | 746.5 |
| 80° | 181.8 | 324.0 | 514.8 | 653.1 | 700.4 |
| 82.5° | 120.4 | 274.0 | 472.5 | 610.8 | 660.7 |
| 85° | 73.0 | 229.2 | 427.7 | 568.5 | 618.5 |
| 87.5° | 33.3 | 192.1 | 391.8 | 531.4 | 580.1 |
| 90° | 1.3 | 162.6 | 357.3 | 494.3 | 542.9 |
| 92.5° | 1.3 | 142.1 | 329.1 | 462.3 | 509.6 |
| 95° | 1.3 | 126.8 | 302.2 | 432.8 | 477.6 |
| 97.5° | 1.3 | 116.5 | 281.7 | 404.6 | 448.2 |
| 100° | 1.3 | 106.3 | 261.2 | 379.0 | 423.8 |
| 102.5° | 2.6 | 97.3 | 245.9 | 356.0 | 398.2 |
| 105° | 2.6 | 90.9 | 233.0 | 338.0 | 376.5 |
| 107.5° | 2.6 | 87.1 | 219.0 | 320.1 | 356.0 |
| 110° | 2.6 | 83.2 | 203.6 | 302.2 | 338.0 |



TEST NUMBER: P566922

CATALOG NUMBER: 4SNX-87HL-LN-UNV-L930-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.6 | 80.7 | 192.1 | 286.8 | 321.4 |
| 115° | 2.6 | 78.1 | 180.5 | 268.9 | 303.5 |
| 117.5° | 2.6 | 76.8 | 174.1 | 254.8 | 288.1 |
| 120° | 3.8 | 73.0 | 166.5 | 242.0 | 274.0 |
| 122.5° | 3.8 | 69.1 | 158.8 | 231.8 | 259.9 |
| 125° | 3.8 | 66.6 | 152.4 | 220.2 | 248.4 |
| 127.5° | 3.8 | 62.7 | 146.0 | 210.0 | 235.6 |
| 130° | 3.8 | 58.9 | 140.9 | 199.8 | 224.1 |
| 132.5° | 3.8 | 55.1 | 134.5 | 189.5 | 212.6 |
| 135° | 3.8 | 51.2 | 126.8 | 179.3 | 201.0 |
| 137.5° | 3.8 | 47.4 | 119.1 | 169.0 | 189.5 |
| 140° | 3.8 | 43.5 | 108.8 | 158.8 | 178.0 |
| 142.5° | 3.8 | 39.7 | 98.6 | 148.5 | 165.2 |
| 145° | 5.1 | 37.1 | 88.4 | 137.0 | 153.7 |
| 147.5° | 5.1 | 33.3 | 78.1 | 125.5 | 139.6 |
| 150° | 5.1 | 30.7 | 70.4 | 114.0 | 126.8 |
| 152.5° | 5.1 | 26.9 | 62.7 | 101.2 | 114.0 |
| 155° | 5.1 | 24.3 | 53.8 | 87.1 | 101.2 |
| 157.5° | 5.1 | 21.8 | 46.1 | 73.0 | 88.4 |
| 160° | 5.1 | 20.5 | 39.7 | 60.2 | 75.5 |
| 162.5° | 6.4 | 17.9 | 33.3 | 48.7 | 62.7 |
| 165° | 6.4 | 15.4 | 28.2 | 38.4 | 51.2 |
| 167.5° | 6.4 | 12.8 | 23.0 | 29.5 | 39.7 |
| 170° | 6.4 | 10.2 | 17.9 | 20.5 | 30.7 |
| 172.5° | 6.4 | 7.7 | 12.8 | 14.1 | 15.4 |
| 175° | 6.4 | 6.4 | 7.7 | 7.7 | 3.8 |
| 177.5° | 6.4 | 6.4 | 5.1 | 3.8 | 1.3 |
| 180° | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |

(END OF REPORT)