

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: P567498

Luminaire Tested: **8SNX-168HL-LC-UNV-L830-CD**

Issue Date: 9/15/2022



Test Information

Test Method: LM-79-08
Report Number: P567498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2205-663-3)
Test Lab: INNOVATION CENTER
Issue Date: 9/15/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8SNX-168HL-LC-UNV-L830-CD
Description: 8FT 16800 LUMEN, SNX FIXTURE WITH 3000K, 80CRI LEDS AND LC LENS
Light Source: -
Ballast/Driver: -

Summary

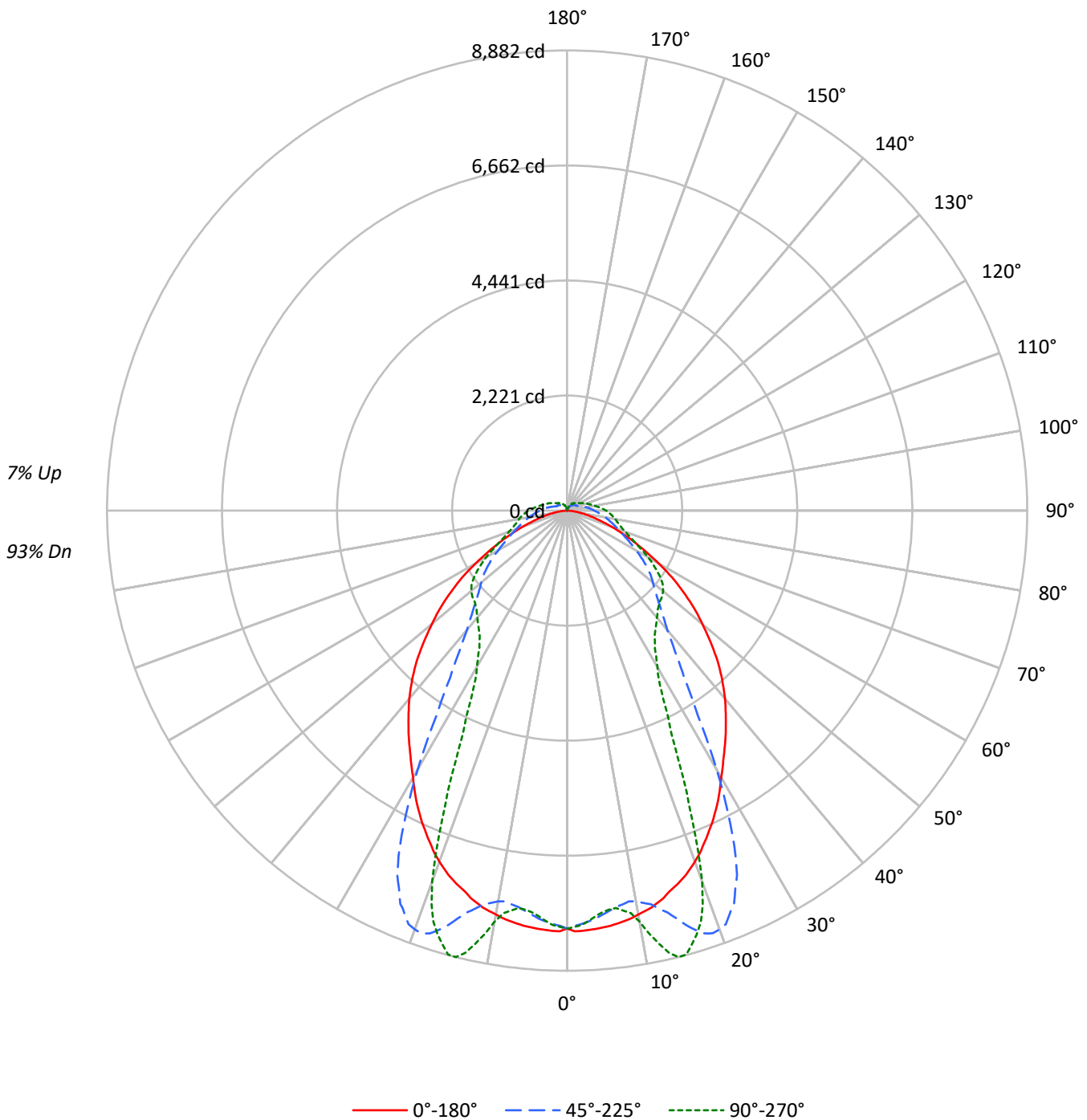
Lumens per Lamp: N/A
Luminaire Lumens: 17928.0 lumens
Efficiency: N/A
Efficacy: 154.8 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.89 / 1.01
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 115.8
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: P567498

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L830-CD

Luminous Intensity Polar Plot





TEST NUMBER: P567498

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L830-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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 96 | 96 | 96 | 93 | | | | |
| 1 | 107 | 103 | 99 | 95 | 104 | 100 | 96 | 93 | 94 | 91 | 89 | 89 | 87 | 85 | 85 | 83 | 81 | 78 | | | | |
| 2 | 99 | 91 | 84 | 79 | 95 | 88 | 83 | 78 | 84 | 79 | 75 | 80 | 76 | 72 | 76 | 72 | 69 | 67 | | | | |
| 3 | 91 | 81 | 73 | 67 | 88 | 79 | 72 | 66 | 75 | 69 | 64 | 71 | 66 | 62 | 68 | 64 | 60 | 58 | | | | |
| 4 | 84 | 73 | 64 | 58 | 81 | 71 | 63 | 57 | 68 | 61 | 56 | 64 | 59 | 54 | 62 | 57 | 53 | 51 | | | | |
| 5 | 78 | 66 | 57 | 51 | 75 | 64 | 56 | 51 | 61 | 55 | 49 | 59 | 53 | 48 | 56 | 51 | 47 | 45 | | | | |
| 6 | 72 | 60 | 51 | 45 | 70 | 58 | 51 | 45 | 56 | 49 | 44 | 54 | 48 | 43 | 52 | 46 | 42 | 40 | | | | |
| 7 | 67 | 55 | 46 | 41 | 65 | 54 | 46 | 40 | 51 | 45 | 40 | 49 | 43 | 39 | 48 | 42 | 38 | 36 | | | | |
| 8 | 63 | 50 | 42 | 37 | 61 | 49 | 42 | 36 | 47 | 41 | 36 | 46 | 40 | 35 | 44 | 39 | 35 | 33 | | | | |
| 9 | 59 | 46 | 39 | 34 | 57 | 46 | 38 | 33 | 44 | 37 | 33 | 42 | 36 | 32 | 41 | 36 | 32 | 30 | | | | |
| 10 | 56 | 43 | 36 | 31 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 30 | 38 | 33 | 29 | 27 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 43415 | 43415 | 43415 |
| 5° | 43545 | 40569 | 39740 |
| 10° | 43104 | 38565 | 39407 |
| 15° | 42179 | 40158 | 41951 |
| 20° | 40983 | 41866 | 35110 |
| 25° | 39006 | 37566 | 21588 |
| 30° | 36525 | 27987 | 15624 |
| 35° | 34512 | 19321 | 13180 |
| 40° | 32717 | 14998 | 12147 |
| 45° | 30613 | 12771 | 11488 |
| 50° | 27843 | 11464 | 11277 |
| 55° | 24917 | 10369 | 10434 |
| 60° | 21129 | 8973 | 9025 |
| 65° | 17184 | 7817 | 7532 |
| 70° | 13485 | 7026 | 6632 |
| 75° | 10457 | 6532 | 6184 |
| 80° | 7359 | 6187 | 6122 |
| 85° | 4095 | 5903 | 6079 |



TEST NUMBER: P567498

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L830-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 750.6 | 4.2 |
| 10°-20° | 2293.7 | 12.8 |
| 20°-30° | 3088.4 | 17.2 |
| 30°-40° | 2922.9 | 16.3 |
| 40°-50° | 2579.9 | 14.4 |
| 50°-60° | 2095.4 | 11.7 |
| 60°-70° | 1425.1 | 7.9 |
| 70°-80° | 917.0 | 5.1 |
| 80°-90° | 609.8 | 3.4 |
| 90°-100° | 419.0 | 2.3 |
| 100°-110° | 281.3 | 1.6 |
| 110°-120° | 198.4 | 1.1 |
| 120°-130° | 141.7 | 0.8 |
| 130°-140° | 100.0 | 0.6 |
| 140°-150° | 62.1 | 0.3 |
| 150°-160° | 30.3 | 0.2 |
| 160°-170° | 10.6 | 0.1 |
| 170°-180° | 1.8 | 0.0 |
| 0°-30° | 6132.7 | 34.2 |
| 0°-40° | 9055.6 | 50.5 |
| 0°-60° | 13730.9 | 76.6 |
| 0°-90° | 16682.7 | 93.1 |
| 90°-120° | 898.7 | 5.0 |
| 90°-150° | 1202.5 | 6.7 |
| 90°-180° | 1245.0 | 6.9 |
| 0°-180° | 17928.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 8067 | 8067 | 8067 | 8067 | 8067 | |
| 5° | 8075 | 8001 | 7829 | 7823 | 7785 | 766 |
| 15° | 7612 | 7563 | 8146 | 8866 | 8874 | 2146 |
| 25° | 6632 | 7864 | 7760 | 5636 | 4766 | 3044 |
| 35° | 5330 | 7478 | 3942 | 3036 | 2943 | 3335 |
| 45° | 4106 | 5031 | 2494 | 2464 | 2516 | 3152 |
| 55° | 2734 | 2975 | 1872 | 2091 | 2171 | 2442 |
| 65° | 1410 | 1604 | 1254 | 1393 | 1437 | 1415 |
| 75° | 542 | 758 | 884 | 991 | 1037 | 590 |
| 85° | 82 | 323 | 627 | 794 | 849 | 108 |
| 90° | 3 | 224 | 523 | 704 | 750 | 5 |
| 95° | 3 | 172 | 441 | 597 | 638 | 2 |
| 105° | 6 | 120 | 290 | 408 | 457 | 5 |
| 115° | 6 | 104 | 214 | 304 | 342 | 6 |
| 125° | 8 | 88 | 183 | 230 | 246 | 8 |
| 135° | 11 | 68 | 150 | 192 | 203 | 8 |
| 145° | 11 | 49 | 107 | 148 | 162 | 7 |
| 155° | 14 | 30 | 66 | 98 | 112 | 6 |
| 165° | 14 | 19 | 36 | 49 | 60 | 4 |
| 175° | 16 | 16 | 16 | 16 | 14 | 2 |
| 180° | 14 | 14 | 14 | 14 | 14 | |



TEST NUMBER: P567498

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L830-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 8066.7 | 8066.7 | 8066.7 | 8066.7 | 8066.7 |
| 1° | 8121.5 | 8096.8 | 8014.7 | 8058.5 | 8036.6 |
| 2° | 8118.7 | 8077.7 | 7984.6 | 8033.9 | 8006.5 |
| 3° | 8105.0 | 8061.2 | 7940.8 | 7970.9 | 7929.9 |
| 4° | 8091.4 | 8039.3 | 7894.3 | 7894.3 | 7847.7 |
| 5° | 8074.9 | 8001.0 | 7828.6 | 7823.1 | 7784.8 |
| 6° | 8055.8 | 7970.9 | 7771.1 | 7765.6 | 7743.7 |
| 7° | 8028.4 | 7918.9 | 7708.1 | 7746.5 | 7730.0 |
| 8° | 7995.5 | 7869.6 | 7675.3 | 7771.1 | 7795.7 |
| 9° | 7965.4 | 7809.4 | 7637.0 | 7847.7 | 7866.9 |
| 10° | 7916.2 | 7754.7 | 7661.6 | 8001.0 | 8058.5 |
| 11° | 7875.1 | 7708.1 | 7716.3 | 8151.6 | 8324.0 |
| 12° | 7834.0 | 7658.9 | 7768.4 | 8340.4 | 8551.2 |
| 13° | 7765.6 | 7620.5 | 7883.3 | 8545.7 | 8762.0 |
| 14° | 7705.4 | 7590.4 | 7995.5 | 8753.8 | 8882.4 |
| 15° | 7612.3 | 7563.1 | 8146.1 | 8866.0 | 8874.2 |
| 16° | 7549.4 | 7543.9 | 8321.3 | 8874.2 | 8720.9 |
| 17° | 7478.2 | 7535.7 | 8463.6 | 8731.9 | 8551.2 |
| 18° | 7398.8 | 7552.1 | 8581.3 | 8553.9 | 8345.9 |
| 19° | 7308.5 | 7568.5 | 8630.6 | 8307.6 | 8039.3 |
| 20° | 7210.0 | 7593.2 | 8603.2 | 8050.3 | 7617.8 |
| 21° | 7111.4 | 7626.0 | 8551.2 | 7779.3 | 7064.9 |
| 22.5° | 6928.0 | 7705.4 | 8304.9 | 7018.3 | 6150.6 |
| 23° | 6876.0 | 7721.8 | 8247.4 | 6780.2 | 5912.5 |
| 24° | 6747.4 | 7790.3 | 7984.6 | 6224.5 | 5282.9 |
| 25° | 6632.4 | 7864.2 | 7760.1 | 5636.0 | 4765.6 |
| 26° | 6503.7 | 7918.9 | 7420.7 | 5094.0 | 4448.1 |
| 27° | 6377.8 | 7951.8 | 7034.8 | 4672.5 | 4092.2 |
| 28° | 6232.7 | 7987.3 | 6616.0 | 4308.5 | 3824.0 |
| 29° | 6095.9 | 7992.8 | 6202.6 | 4018.3 | 3613.2 |
| 30° | 5948.1 | 7965.4 | 5767.4 | 3785.6 | 3481.8 |
| 32.5° | 5625.1 | 7814.9 | 4702.6 | 3342.2 | 3153.3 |
| 35° | 5329.5 | 7478.2 | 3941.7 | 3035.6 | 2942.6 |
| 37.5° | 5031.1 | 6947.2 | 3407.9 | 2844.0 | 2813.9 |
| 40° | 4738.2 | 6317.6 | 3005.5 | 2690.7 | 2696.2 |
| 42.5° | 4428.9 | 5668.9 | 2729.1 | 2564.8 | 2589.5 |
| 45° | 4105.9 | 5031.1 | 2493.6 | 2463.5 | 2515.5 |
| 47.5° | 3747.3 | 4448.1 | 2307.5 | 2397.8 | 2477.2 |
| 50° | 3407.9 | 3870.5 | 2162.4 | 2334.9 | 2417.0 |
| 52.5° | 3084.9 | 3396.9 | 2031.0 | 2228.1 | 2323.9 |
| 55° | 2734.5 | 2975.4 | 1872.3 | 2091.3 | 2170.7 |
| 57.5° | 2400.6 | 2594.9 | 1705.3 | 1921.6 | 1992.7 |
| 60° | 2033.8 | 2219.9 | 1535.6 | 1738.2 | 1806.6 |
| 62.5° | 1702.6 | 1899.7 | 1390.5 | 1554.8 | 1609.5 |
| 65° | 1409.7 | 1604.0 | 1253.7 | 1393.3 | 1437.1 |



TEST NUMBER: P567498

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L830-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 67.5° | 1149.7 | 1357.7 | 1141.4 | 1259.1 | 1300.2 |
| 70° | 906.0 | 1125.0 | 1042.9 | 1149.7 | 1193.4 |
| 72.5° | 709.0 | 930.7 | 960.8 | 1059.3 | 1103.1 |
| 75° | 542.0 | 758.2 | 884.1 | 990.9 | 1037.4 |
| 77.5° | 402.4 | 618.6 | 813.0 | 936.1 | 985.4 |
| 80° | 265.5 | 492.7 | 750.0 | 886.9 | 944.4 |
| 82.5° | 167.0 | 396.9 | 687.1 | 837.6 | 897.8 |
| 85° | 82.1 | 323.0 | 626.8 | 793.8 | 848.6 |
| 87.5° | 27.4 | 268.3 | 572.1 | 750.0 | 796.5 |
| 90° | 2.7 | 224.5 | 522.8 | 703.5 | 750.0 |
| 92.5° | 2.7 | 194.3 | 481.8 | 648.7 | 695.3 |
| 95° | 2.7 | 172.4 | 440.7 | 596.7 | 637.8 |
| 97.5° | 2.7 | 156.0 | 402.4 | 542.0 | 585.8 |
| 100° | 2.7 | 139.6 | 361.3 | 490.0 | 536.5 |
| 102.5° | 5.5 | 128.7 | 325.7 | 446.2 | 495.4 |
| 105° | 5.5 | 120.4 | 290.1 | 407.9 | 457.1 |
| 107.5° | 5.5 | 115.0 | 260.0 | 377.7 | 424.3 |
| 110° | 5.5 | 109.5 | 238.1 | 350.4 | 399.6 |
| 112.5° | 5.5 | 106.8 | 224.5 | 325.7 | 372.3 |
| 115° | 5.5 | 104.0 | 213.5 | 303.8 | 342.2 |
| 117.5° | 8.2 | 101.3 | 205.3 | 281.9 | 312.0 |
| 120° | 8.2 | 95.8 | 199.8 | 262.8 | 287.4 |
| 122.5° | 8.2 | 90.3 | 191.6 | 246.4 | 265.5 |
| 125° | 8.2 | 87.6 | 183.4 | 229.9 | 246.4 |
| 127.5° | 8.2 | 82.1 | 175.2 | 216.2 | 232.7 |
| 130° | 10.9 | 76.6 | 167.0 | 205.3 | 219.0 |
| 132.5° | 10.9 | 71.2 | 158.8 | 199.8 | 210.8 |
| 135° | 10.9 | 68.4 | 150.5 | 191.6 | 202.6 |
| 137.5° | 10.9 | 63.0 | 142.3 | 183.4 | 194.3 |
| 140° | 10.9 | 57.5 | 131.4 | 172.4 | 183.4 |
| 142.5° | 10.9 | 54.7 | 120.4 | 161.5 | 172.4 |
| 145° | 10.9 | 49.3 | 106.8 | 147.8 | 161.5 |
| 147.5° | 13.7 | 46.5 | 95.8 | 136.9 | 147.8 |
| 150° | 13.7 | 41.1 | 84.9 | 125.9 | 136.9 |
| 152.5° | 13.7 | 35.6 | 73.9 | 112.2 | 123.2 |
| 155° | 13.7 | 30.1 | 65.7 | 98.5 | 112.2 |
| 157.5° | 13.7 | 27.4 | 57.5 | 82.1 | 98.5 |
| 160° | 13.7 | 24.6 | 49.3 | 71.2 | 84.9 |
| 162.5° | 13.7 | 21.9 | 43.8 | 60.2 | 73.9 |
| 165° | 13.7 | 19.2 | 35.6 | 49.3 | 60.2 |
| 167.5° | 16.4 | 19.2 | 30.1 | 38.3 | 49.3 |
| 170° | 16.4 | 19.2 | 24.6 | 30.1 | 38.3 |
| 172.5° | 16.4 | 16.4 | 19.2 | 21.9 | 24.6 |
| 175° | 16.4 | 16.4 | 16.4 | 16.4 | 13.7 |
| 177.5° | 16.4 | 16.4 | 16.4 | 13.7 | 13.7 |



TEST NUMBER: P567498

CATALOG NUMBER: 8SNX-168HL-LC-UNV-L830-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|------|-------|------|-------|------|
| 180° | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 |

(END OF REPORT)