

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: P565698

Luminaire Tested: **2SNX-40HL-LC-UNV-L830-CD**

Issue Date: 9/15/2022



Test Information

Test Method: LM-79-08
Report Number: P565698
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: 2SNX-40HL-LC-UNV-L830-CD
Description: 2FT 4000 LUMEN, SNX FIXTURE WITH 3000K, 80CRI LEDS AND LC LENS
Light Source: -
Ballast/Driver: -

Summary

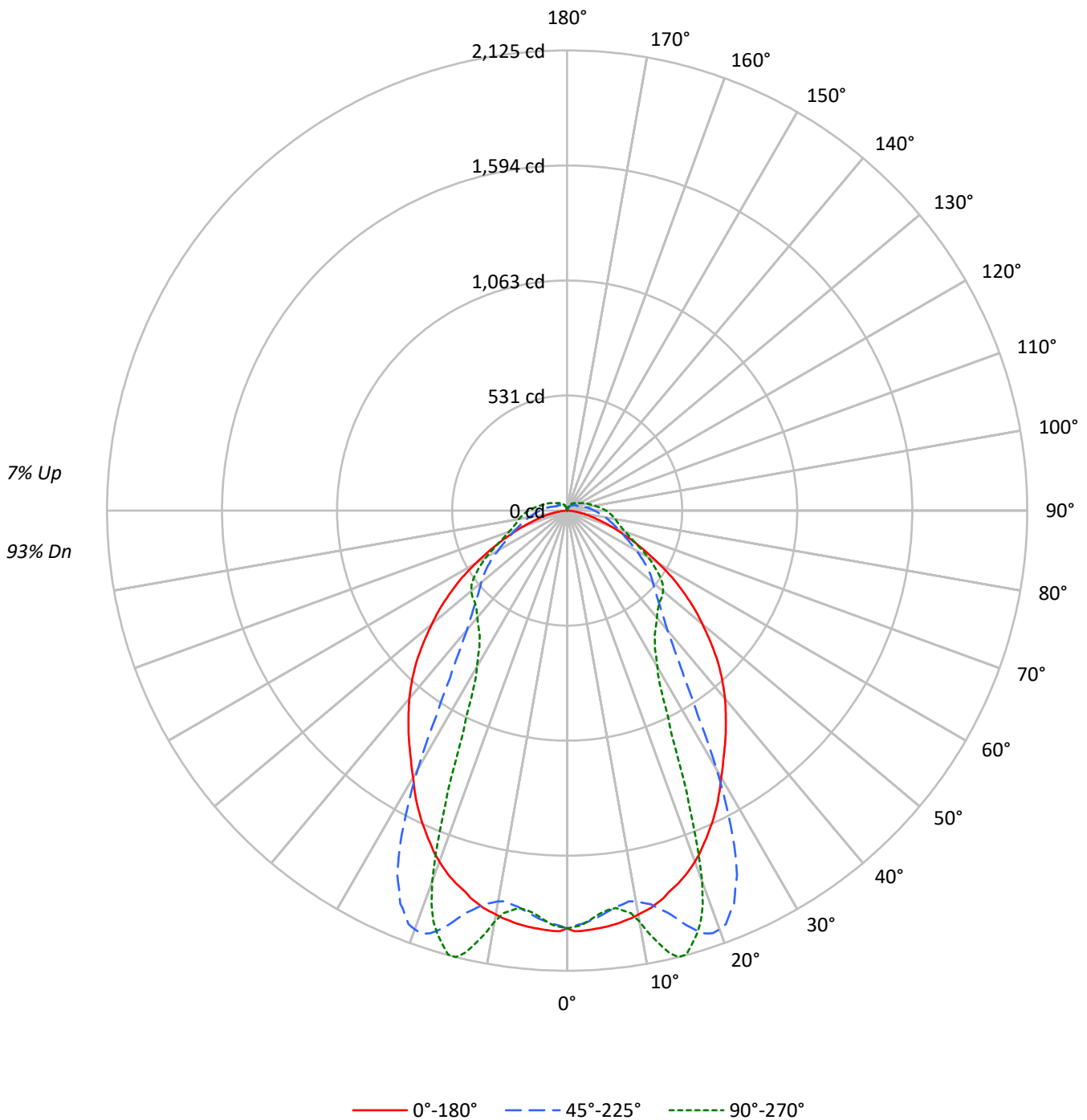
Lumens per Lamp: N/A
Luminaire Lumens: 4289.0 lumens
Efficiency: N/A
Efficacy: 155.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.89 / 1.01
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 27.55
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: P565698

CATALOG NUMBER: 2SNX-40HL-LC-UNV-L830-CD

Luminous Intensity Polar Plot





TEST NUMBER: P565698

CATALOG NUMBER: 2SNX-40HL-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° | 41544 | 41544 | 41544 |
| 5° | 41444 | 38679 | 38028 |
| 10° | 40799 | 36641 | 37711 |
| 15° | 39701 | 38029 | 40145 |
| 20° | 38353 | 39523 | 33598 |
| 25° | 36280 | 35355 | 20659 |
| 30° | 33749 | 26259 | 14952 |
| 35° | 31660 | 18072 | 12613 |
| 40° | 29772 | 13983 | 11624 |
| 45° | 27606 | 11869 | 10993 |
| 50° | 24839 | 10616 | 10791 |
| 55° | 21942 | 9566 | 9984 |
| 60° | 18308 | 8245 | 8636 |
| 65° | 14572 | 7148 | 7208 |
| 70° | 11104 | 6391 | 6346 |
| 75° | 8229 | 5905 | 5919 |
| 80° | 5346 | 5550 | 5858 |
| 85° | 2479 | 5247 | 5817 |



TEST NUMBER: P565698

CATALOG NUMBER: 2SNX-40HL-LC-UNV-L830-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 179.6 | 4.2 |
| 10°-20° | 548.7 | 12.8 |
| 20°-30° | 738.9 | 17.2 |
| 30°-40° | 699.3 | 16.3 |
| 40°-50° | 617.2 | 14.4 |
| 50°-60° | 501.3 | 11.7 |
| 60°-70° | 340.9 | 7.9 |
| 70°-80° | 219.4 | 5.1 |
| 80°-90° | 145.9 | 3.4 |
| 90°-100° | 100.3 | 2.3 |
| 100°-110° | 67.3 | 1.6 |
| 110°-120° | 47.5 | 1.1 |
| 120°-130° | 33.9 | 0.8 |
| 130°-140° | 23.9 | 0.6 |
| 140°-150° | 14.9 | 0.3 |
| 150°-160° | 7.2 | 0.2 |
| 160°-170° | 2.5 | 0.1 |
| 170°-180° | 0.4 | 0.0 |
| 0°-30° | 1467.2 | 34.2 |
| 0°-40° | 2166.4 | 50.5 |
| 0°-60° | 3284.9 | 76.6 |
| 0°-90° | 3991.1 | 93.1 |
| 90°-120° | 215.0 | 5.0 |
| 90°-150° | 287.7 | 6.7 |
| 90°-180° | 298.0 | 6.9 |
| 0°-180° | 4289.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1930 | 1930 | 1930 | 1930 | 1930 | |
| 5° | 1932 | 1914 | 1873 | 1872 | 1862 | 183 |
| 15° | 1821 | 1809 | 1949 | 2121 | 2123 | 513 |
| 25° | 1587 | 1881 | 1856 | 1348 | 1140 | 728 |
| 35° | 1275 | 1789 | 943 | 726 | 704 | 798 |
| 45° | 982 | 1204 | 597 | 589 | 602 | 754 |
| 55° | 654 | 712 | 448 | 500 | 519 | 584 |
| 65° | 337 | 384 | 300 | 333 | 344 | 339 |
| 75° | 130 | 181 | 212 | 237 | 248 | 141 |
| 85° | 20 | 77 | 150 | 190 | 203 | 26 |
| 90° | 1 | 54 | 125 | 168 | 179 | 1 |
| 95° | 1 | 41 | 105 | 143 | 153 | 1 |
| 105° | 1 | 29 | 69 | 98 | 109 | 1 |
| 115° | 1 | 25 | 51 | 73 | 82 | 2 |
| 125° | 2 | 21 | 44 | 55 | 59 | 2 |
| 135° | 3 | 16 | 36 | 46 | 48 | 2 |
| 145° | 3 | 12 | 26 | 35 | 39 | 2 |
| 155° | 3 | 7 | 16 | 24 | 27 | 2 |
| 165° | 3 | 5 | 8 | 12 | 14 | 1 |
| 175° | 4 | 4 | 4 | 4 | 3 | 0 |
| 180° | 3 | 3 | 3 | 3 | 3 | |



TEST NUMBER: P565698

CATALOG NUMBER: 2SNX-40HL-LC-UNV-L830-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1929.8 | 1929.8 | 1929.8 | 1929.8 | 1929.8 |
| 1° | 1942.9 | 1937.0 | 1917.4 | 1927.9 | 1922.6 |
| 2° | 1942.3 | 1932.5 | 1910.2 | 1922.0 | 1915.4 |
| 3° | 1939.0 | 1928.5 | 1899.7 | 1906.9 | 1897.1 |
| 4° | 1935.7 | 1923.3 | 1888.6 | 1888.6 | 1877.5 |
| 5° | 1931.8 | 1914.1 | 1872.9 | 1871.6 | 1862.4 |
| 6° | 1927.2 | 1906.9 | 1859.1 | 1857.8 | 1852.6 |
| 7° | 1920.7 | 1894.5 | 1844.1 | 1853.2 | 1849.3 |
| 8° | 1912.8 | 1882.7 | 1836.2 | 1859.1 | 1865.0 |
| 9° | 1905.6 | 1868.3 | 1827.0 | 1877.5 | 1882.0 |
| 10° | 1893.8 | 1855.2 | 1832.9 | 1914.1 | 1927.9 |
| 11° | 1884.0 | 1844.1 | 1846.0 | 1950.1 | 1991.4 |
| 12° | 1874.2 | 1832.3 | 1858.5 | 1995.3 | 2045.7 |
| 13° | 1857.8 | 1823.1 | 1886.0 | 2044.4 | 2096.2 |
| 14° | 1843.4 | 1815.9 | 1912.8 | 2094.2 | 2125.0 |
| 15° | 1821.1 | 1809.3 | 1948.8 | 2121.1 | 2123.0 |
| 16° | 1806.1 | 1804.8 | 1990.7 | 2123.0 | 2086.3 |
| 17° | 1789.0 | 1802.8 | 2024.8 | 2089.0 | 2045.7 |
| 18° | 1770.1 | 1806.7 | 2053.0 | 2046.4 | 1996.6 |
| 19° | 1748.4 | 1810.7 | 2064.7 | 1987.5 | 1923.3 |
| 20° | 1724.9 | 1816.5 | 2058.2 | 1925.9 | 1822.4 |
| 21° | 1701.3 | 1824.4 | 2045.7 | 1861.1 | 1690.2 |
| 22.5° | 1657.4 | 1843.4 | 1986.8 | 1679.0 | 1471.4 |
| 23° | 1645.0 | 1847.3 | 1973.1 | 1622.1 | 1414.5 |
| 24° | 1614.2 | 1863.7 | 1910.2 | 1489.1 | 1263.9 |
| 25° | 1586.7 | 1881.4 | 1856.5 | 1348.3 | 1140.1 |
| 26° | 1555.9 | 1894.5 | 1775.3 | 1218.7 | 1064.1 |
| 27° | 1525.8 | 1902.3 | 1683.0 | 1117.8 | 979.0 |
| 28° | 1491.1 | 1910.8 | 1582.8 | 1030.7 | 914.8 |
| 29° | 1458.3 | 1912.2 | 1483.9 | 961.3 | 864.4 |
| 30° | 1423.0 | 1905.6 | 1379.8 | 905.7 | 833.0 |
| 32.5° | 1345.7 | 1869.6 | 1125.0 | 799.6 | 754.4 |
| 35° | 1275.0 | 1789.0 | 943.0 | 726.2 | 704.0 |
| 37.5° | 1203.6 | 1662.0 | 815.3 | 680.4 | 673.2 |
| 40° | 1133.5 | 1511.4 | 719.0 | 643.7 | 645.0 |
| 42.5° | 1059.5 | 1356.2 | 652.9 | 613.6 | 619.5 |
| 45° | 982.3 | 1203.6 | 596.6 | 589.4 | 601.8 |
| 47.5° | 896.5 | 1064.1 | 552.0 | 573.6 | 592.6 |
| 50° | 815.3 | 926.0 | 517.3 | 558.6 | 578.2 |
| 52.5° | 738.0 | 812.7 | 485.9 | 533.0 | 556.0 |
| 55° | 654.2 | 711.8 | 447.9 | 500.3 | 519.3 |
| 57.5° | 574.3 | 620.8 | 408.0 | 459.7 | 476.7 |
| 60° | 486.6 | 531.1 | 367.4 | 415.8 | 432.2 |
| 62.5° | 407.3 | 454.5 | 332.7 | 372.0 | 385.1 |
| 65° | 337.2 | 383.7 | 299.9 | 333.3 | 343.8 |



TEST NUMBER: P565698

CATALOG NUMBER: 2SNX-40HL-LC-UNV-L830-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 67.5° | 275.0 | 324.8 | 273.1 | 301.2 | 311.1 |
| 70° | 216.8 | 269.1 | 249.5 | 275.0 | 285.5 |
| 72.5° | 169.6 | 222.6 | 229.9 | 253.4 | 263.9 |
| 75° | 129.7 | 181.4 | 211.5 | 237.1 | 248.2 |
| 77.5° | 96.3 | 148.0 | 194.5 | 224.0 | 235.7 |
| 80° | 63.5 | 117.9 | 179.4 | 212.2 | 225.9 |
| 82.5° | 39.9 | 95.0 | 164.4 | 200.4 | 214.8 |
| 85° | 19.6 | 77.3 | 150.0 | 189.9 | 203.0 |
| 87.5° | 6.5 | 64.2 | 136.9 | 179.4 | 190.6 |
| 90° | 0.7 | 53.7 | 125.1 | 168.3 | 179.4 |
| 92.5° | 0.7 | 46.5 | 115.3 | 155.2 | 166.3 |
| 95° | 0.7 | 41.3 | 105.4 | 142.8 | 152.6 |
| 97.5° | 0.7 | 37.3 | 96.3 | 129.7 | 140.1 |
| 100° | 0.7 | 33.4 | 86.4 | 117.2 | 128.4 |
| 102.5° | 1.3 | 30.8 | 77.9 | 106.7 | 118.5 |
| 105° | 1.3 | 28.8 | 69.4 | 97.6 | 109.4 |
| 107.5° | 1.3 | 27.5 | 62.2 | 90.4 | 101.5 |
| 110° | 1.3 | 26.2 | 57.0 | 83.8 | 95.6 |
| 112.5° | 1.3 | 25.5 | 53.7 | 77.9 | 89.1 |
| 115° | 1.3 | 24.9 | 51.1 | 72.7 | 81.9 |
| 117.5° | 2.0 | 24.2 | 49.1 | 67.4 | 74.7 |
| 120° | 2.0 | 22.9 | 47.8 | 62.9 | 68.8 |
| 122.5° | 2.0 | 21.6 | 45.8 | 58.9 | 63.5 |
| 125° | 2.0 | 21.0 | 43.9 | 55.0 | 58.9 |
| 127.5° | 2.0 | 19.6 | 41.9 | 51.7 | 55.7 |
| 130° | 2.6 | 18.3 | 39.9 | 49.1 | 52.4 |
| 132.5° | 2.6 | 17.0 | 38.0 | 47.8 | 50.4 |
| 135° | 2.6 | 16.4 | 36.0 | 45.8 | 48.5 |
| 137.5° | 2.6 | 15.1 | 34.1 | 43.9 | 46.5 |
| 140° | 2.6 | 13.8 | 31.4 | 41.3 | 43.9 |
| 142.5° | 2.6 | 13.1 | 28.8 | 38.6 | 41.3 |
| 145° | 2.6 | 11.8 | 25.5 | 35.4 | 38.6 |
| 147.5° | 3.3 | 11.1 | 22.9 | 32.7 | 35.4 |
| 150° | 3.3 | 9.8 | 20.3 | 30.1 | 32.7 |
| 152.5° | 3.3 | 8.5 | 17.7 | 26.8 | 29.5 |
| 155° | 3.3 | 7.2 | 15.7 | 23.6 | 26.8 |
| 157.5° | 3.3 | 6.5 | 13.8 | 19.6 | 23.6 |
| 160° | 3.3 | 5.9 | 11.8 | 17.0 | 20.3 |
| 162.5° | 3.3 | 5.2 | 10.5 | 14.4 | 17.7 |
| 165° | 3.3 | 4.6 | 8.5 | 11.8 | 14.4 |
| 167.5° | 3.9 | 4.6 | 7.2 | 9.2 | 11.8 |
| 170° | 3.9 | 4.6 | 5.9 | 7.2 | 9.2 |
| 172.5° | 3.9 | 3.9 | 4.6 | 5.2 | 5.9 |
| 175° | 3.9 | 3.9 | 3.9 | 3.9 | 3.3 |
| 177.5° | 3.9 | 3.9 | 3.9 | 3.3 | 3.3 |



TEST NUMBER: P565698

CATALOG NUMBER: 2SNX-40HL-LC-UNV-L830-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|-----|-------|-----|-------|-----|
| 180° | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |

(END OF REPORT)