

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: P566824

Luminaire Tested: **4SNX-81HL-LN-UNV-L840-CD**

Issue Date: 9/15/2022



Test Information

Test Method: LM-79-08
Report Number: P566824
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-81HL-LN-UNV-L840-CD
Description: 4FT 8100 LUMEN, SNX FIXTURE WITH 4000K, 80CRI LEDS AND LN LENS
Light Source: -
Ballast/Driver: -

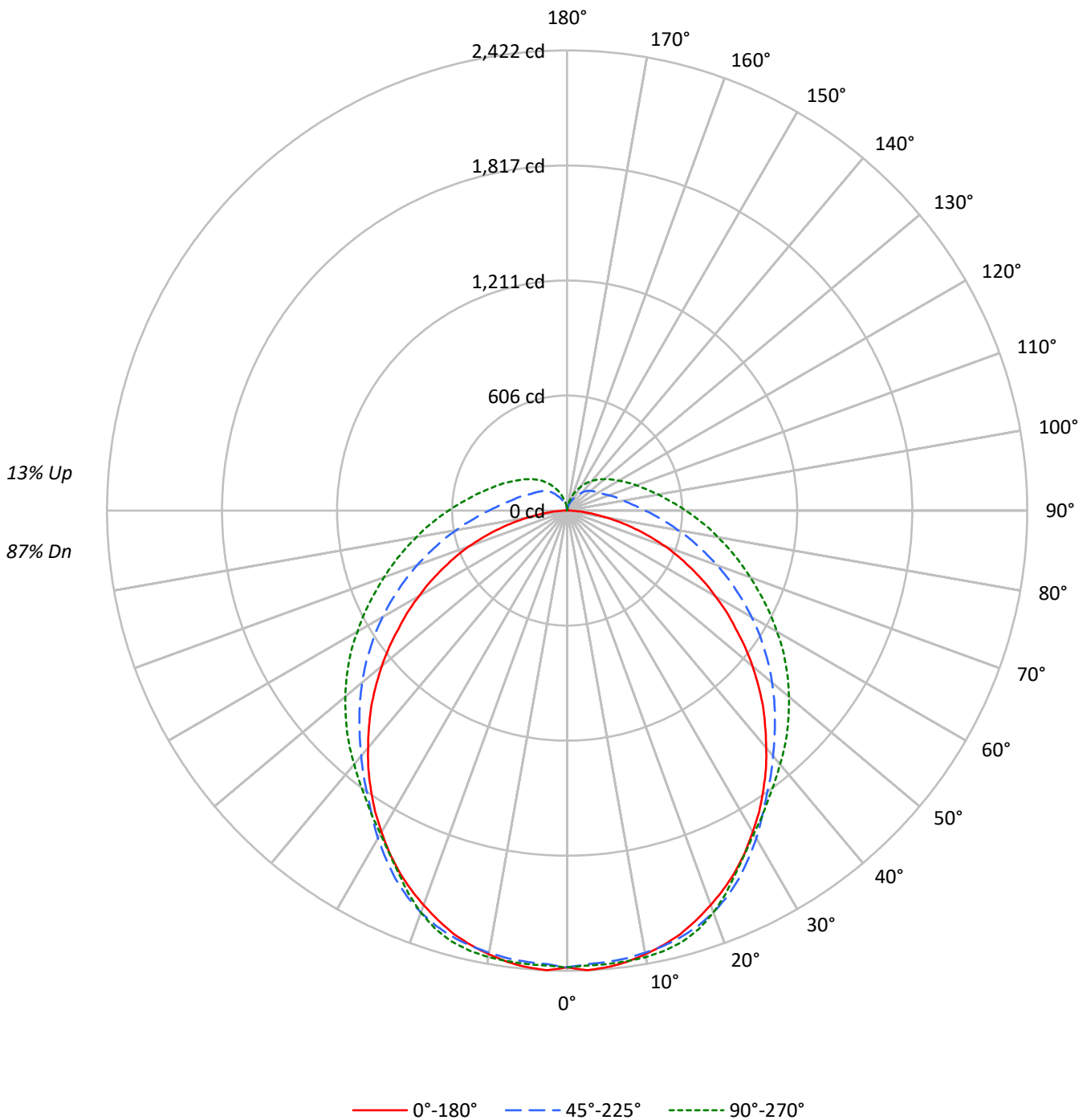
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8678.0 lumens
Efficiency: N/A
Efficacy: 157.5 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): 55.1
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: P566824
CATALOG NUMBER: 4SNX-81HL-LN-UNV-L840-CD

Luminous Intensity Polar Plot





TEST NUMBER: P566824

CATALOG NUMBER: 4SNX-81HL-LN-UNV-L840-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 | 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° | 25876 | 25876 | 25876 |
| 5° | 25976 | 24686 | 24468 |
| 10° | 25732 | 23730 | 23339 |
| 15° | 25423 | 22824 | 22201 |
| 20° | 24934 | 21809 | 20750 |
| 25° | 24407 | 20582 | 19048 |
| 30° | 23714 | 19205 | 17627 |
| 35° | 22973 | 17805 | 16567 |
| 40° | 22131 | 16680 | 15709 |
| 45° | 21307 | 15682 | 14969 |
| 50° | 20326 | 14765 | 14223 |
| 55° | 19179 | 13842 | 13492 |
| 60° | 18079 | 12923 | 12730 |
| 65° | 16855 | 11996 | 12029 |
| 70° | 15455 | 11127 | 11396 |
| 75° | 13292 | 10278 | 10876 |
| 80° | 10474 | 9545 | 10435 |
| 85° | 7019 | 9024 | 10181 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 228.4 | 2.6 |
| 10°-20° | 656.6 | 7.6 |
| 20°-30° | 977.7 | 11.3 |
| 30°-40° | 1153.7 | 13.3 |
| 40°-50° | 1203.2 | 13.9 |
| 50°-60° | 1130.7 | 13.0 |
| 60°-70° | 954.8 | 11.0 |
| 70°-80° | 721.4 | 8.3 |
| 80°-90° | 497.3 | 5.7 |
| 90°-100° | 348.0 | 4.0 |
| 100°-110° | 259.7 | 3.0 |
| 110°-120° | 195.8 | 2.3 |
| 120°-130° | 146.0 | 1.7 |
| 130°-140° | 102.5 | 1.2 |
| 140°-150° | 62.0 | 0.7 |
| 150°-160° | 29.6 | 0.3 |
| 160°-170° | 9.5 | 0.1 |
| 170°-180° | 1.1 | 0.0 |
| 0°-30° | 1862.7 | 21.5 |
| 0°-40° | 3016.4 | 34.8 |
| 0°-60° | 5350.2 | 61.7 |
| 0°-90° | 7523.8 | 86.7 |
| 90°-120° | 803.5 | 9.3 |
| 90°-150° | 1114.0 | 12.8 |
| 90°-180° | 1154.0 | 13.3 |
| 0°-180° | 8678.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2404 | 2404 | 2404 | 2404 | 2404 | |
| 5° | 2413 | 2408 | 2385 | 2402 | 2397 | 229 |
| 15° | 2307 | 2317 | 2323 | 2352 | 2348 | 650 |
| 25° | 2095 | 2138 | 2138 | 2119 | 2102 | 964 |
| 35° | 1799 | 1866 | 1830 | 1845 | 1849 | 1125 |
| 45° | 1458 | 1530 | 1546 | 1610 | 1639 | 1123 |
| 55° | 1083 | 1176 | 1265 | 1367 | 1404 | 972 |
| 65° | 721 | 836 | 977 | 1105 | 1148 | 716 |
| 75° | 369 | 512 | 709 | 858 | 912 | 393 |
| 85° | 84 | 263 | 491 | 653 | 711 | 94 |
| 90° | 2 | 187 | 410 | 568 | 624 | 6 |
| 95° | 2 | 146 | 347 | 497 | 549 | 1 |
| 105° | 3 | 104 | 268 | 388 | 432 | 3 |
| 115° | 3 | 90 | 207 | 309 | 349 | 3 |
| 125° | 4 | 76 | 175 | 253 | 285 | 4 |
| 135° | 4 | 59 | 146 | 206 | 231 | 3 |
| 145° | 6 | 43 | 102 | 157 | 176 | 3 |
| 155° | 6 | 28 | 62 | 100 | 116 | 3 |
| 165° | 7 | 18 | 32 | 44 | 59 | 2 |
| 175° | 7 | 7 | 9 | 9 | 4 | 1 |
| 180° | 4 | 4 | 4 | 4 | 4 | |



TEST NUMBER: P566824

CATALOG NUMBER: 4SNX-81HL-LN-UNV-L840-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2404.0 | 2404.0 | 2404.0 | 2404.0 | 2404.0 |
| 2.5° | 2421.6 | 2415.7 | 2389.3 | 2404.0 | 2396.6 |
| 5° | 2412.8 | 2408.4 | 2384.8 | 2402.5 | 2396.6 |
| 7.5° | 2396.6 | 2395.1 | 2377.5 | 2398.1 | 2392.2 |
| 10° | 2371.6 | 2376.0 | 2362.8 | 2390.7 | 2386.3 |
| 12.5° | 2342.2 | 2351.0 | 2346.6 | 2377.5 | 2373.1 |
| 15° | 2306.9 | 2317.2 | 2323.1 | 2352.5 | 2348.1 |
| 17.5° | 2259.8 | 2278.9 | 2292.2 | 2315.7 | 2308.3 |
| 20° | 2209.8 | 2236.2 | 2251.0 | 2262.7 | 2251.0 |
| 22.5° | 2155.3 | 2190.6 | 2199.5 | 2193.6 | 2181.8 |
| 25° | 2095.0 | 2137.7 | 2137.7 | 2118.6 | 2102.4 |
| 27.5° | 2027.3 | 2080.3 | 2065.6 | 2043.5 | 2030.3 |
| 30° | 1953.8 | 2017.0 | 1992.0 | 1967.0 | 1964.1 |
| 32.5° | 1880.2 | 1946.4 | 1909.6 | 1903.8 | 1908.2 |
| 35° | 1799.3 | 1865.5 | 1830.2 | 1844.9 | 1849.3 |
| 37.5° | 1718.4 | 1784.6 | 1761.0 | 1783.1 | 1796.4 |
| 40° | 1630.1 | 1700.7 | 1686.0 | 1725.7 | 1743.4 |
| 42.5° | 1543.3 | 1616.9 | 1615.4 | 1666.9 | 1693.4 |
| 45° | 1458.0 | 1530.1 | 1546.2 | 1609.5 | 1638.9 |
| 47.5° | 1365.3 | 1438.8 | 1478.6 | 1552.1 | 1581.6 |
| 50° | 1274.1 | 1353.5 | 1408.0 | 1490.3 | 1524.2 |
| 52.5° | 1179.9 | 1263.8 | 1338.8 | 1430.0 | 1465.3 |
| 55° | 1082.8 | 1175.5 | 1265.2 | 1366.8 | 1403.5 |
| 57.5° | 996.0 | 1090.2 | 1196.1 | 1300.6 | 1343.2 |
| 60° | 900.4 | 1004.8 | 1121.1 | 1231.4 | 1274.1 |
| 62.5° | 813.6 | 921.0 | 1050.4 | 1166.7 | 1212.3 |
| 65° | 720.9 | 835.7 | 976.9 | 1104.9 | 1147.5 |
| 67.5° | 635.6 | 753.3 | 907.7 | 1037.2 | 1084.3 |
| 70° | 547.3 | 672.3 | 840.1 | 976.9 | 1025.4 |
| 72.5° | 456.1 | 588.5 | 772.4 | 918.0 | 968.1 |
| 75° | 369.3 | 512.0 | 709.1 | 857.7 | 912.2 |
| 77.5° | 288.4 | 438.4 | 651.7 | 804.8 | 857.7 |
| 80° | 208.9 | 372.2 | 591.4 | 750.3 | 804.8 |
| 82.5° | 138.3 | 314.8 | 542.9 | 701.8 | 759.1 |
| 85° | 83.9 | 263.3 | 491.4 | 653.2 | 710.6 |
| 87.5° | 38.3 | 220.7 | 450.2 | 610.6 | 666.5 |
| 90° | 1.5 | 186.8 | 410.5 | 567.9 | 623.8 |
| 92.5° | 1.5 | 163.3 | 378.1 | 531.1 | 585.5 |
| 95° | 1.5 | 145.7 | 347.2 | 497.3 | 548.8 |
| 97.5° | 1.5 | 133.9 | 323.7 | 464.9 | 514.9 |
| 100° | 1.5 | 122.1 | 300.1 | 435.5 | 487.0 |
| 102.5° | 2.9 | 111.8 | 282.5 | 409.0 | 457.5 |
| 105° | 2.9 | 104.5 | 267.8 | 388.4 | 432.5 |
| 107.5° | 2.9 | 100.0 | 251.6 | 367.8 | 409.0 |
| 110° | 2.9 | 95.6 | 233.9 | 347.2 | 388.4 |



TEST NUMBER: P566824

CATALOG NUMBER: 4SNX-81HL-LN-UNV-L840-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.9 | 92.7 | 220.7 | 329.6 | 369.3 |
| 115° | 2.9 | 89.7 | 207.4 | 309.0 | 348.7 |
| 117.5° | 2.9 | 88.3 | 200.1 | 292.8 | 331.0 |
| 120° | 4.4 | 83.9 | 191.3 | 278.1 | 314.8 |
| 122.5° | 4.4 | 79.4 | 182.4 | 266.3 | 298.7 |
| 125° | 4.4 | 76.5 | 175.1 | 253.0 | 285.4 |
| 127.5° | 4.4 | 72.1 | 167.7 | 241.3 | 270.7 |
| 130° | 4.4 | 67.7 | 161.8 | 229.5 | 257.5 |
| 132.5° | 4.4 | 63.3 | 154.5 | 217.7 | 244.2 |
| 135° | 4.4 | 58.8 | 145.7 | 206.0 | 231.0 |
| 137.5° | 4.4 | 54.4 | 136.8 | 194.2 | 217.7 |
| 140° | 4.4 | 50.0 | 125.1 | 182.4 | 204.5 |
| 142.5° | 4.4 | 45.6 | 113.3 | 170.7 | 189.8 |
| 145° | 5.9 | 42.7 | 101.5 | 157.4 | 176.5 |
| 147.5° | 5.9 | 38.3 | 89.7 | 144.2 | 160.4 |
| 150° | 5.9 | 35.3 | 80.9 | 130.9 | 145.7 |
| 152.5° | 5.9 | 30.9 | 72.1 | 116.2 | 130.9 |
| 155° | 5.9 | 28.0 | 61.8 | 100.0 | 116.2 |
| 157.5° | 5.9 | 25.0 | 53.0 | 83.9 | 101.5 |
| 160° | 5.9 | 23.5 | 45.6 | 69.1 | 86.8 |
| 162.5° | 7.4 | 20.6 | 38.3 | 55.9 | 72.1 |
| 165° | 7.4 | 17.7 | 32.4 | 44.1 | 58.8 |
| 167.5° | 7.4 | 14.7 | 26.5 | 33.8 | 45.6 |
| 170° | 7.4 | 11.8 | 20.6 | 23.5 | 35.3 |
| 172.5° | 7.4 | 8.8 | 14.7 | 16.2 | 17.7 |
| 175° | 7.4 | 7.4 | 8.8 | 8.8 | 4.4 |
| 177.5° | 7.4 | 7.4 | 5.9 | 4.4 | 1.5 |
| 180° | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |

(END OF REPORT)