

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: P567458

Luminaire Tested: **8SNX-162HL-LN-UNV-L830-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P567458  
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: 8SNX-162HL-LN-UNV-L830-CD  
Description: 8FT 16200 LUMEN, SNX FIXTURE WITH 3000K, 80CRI LEDS AND LN LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

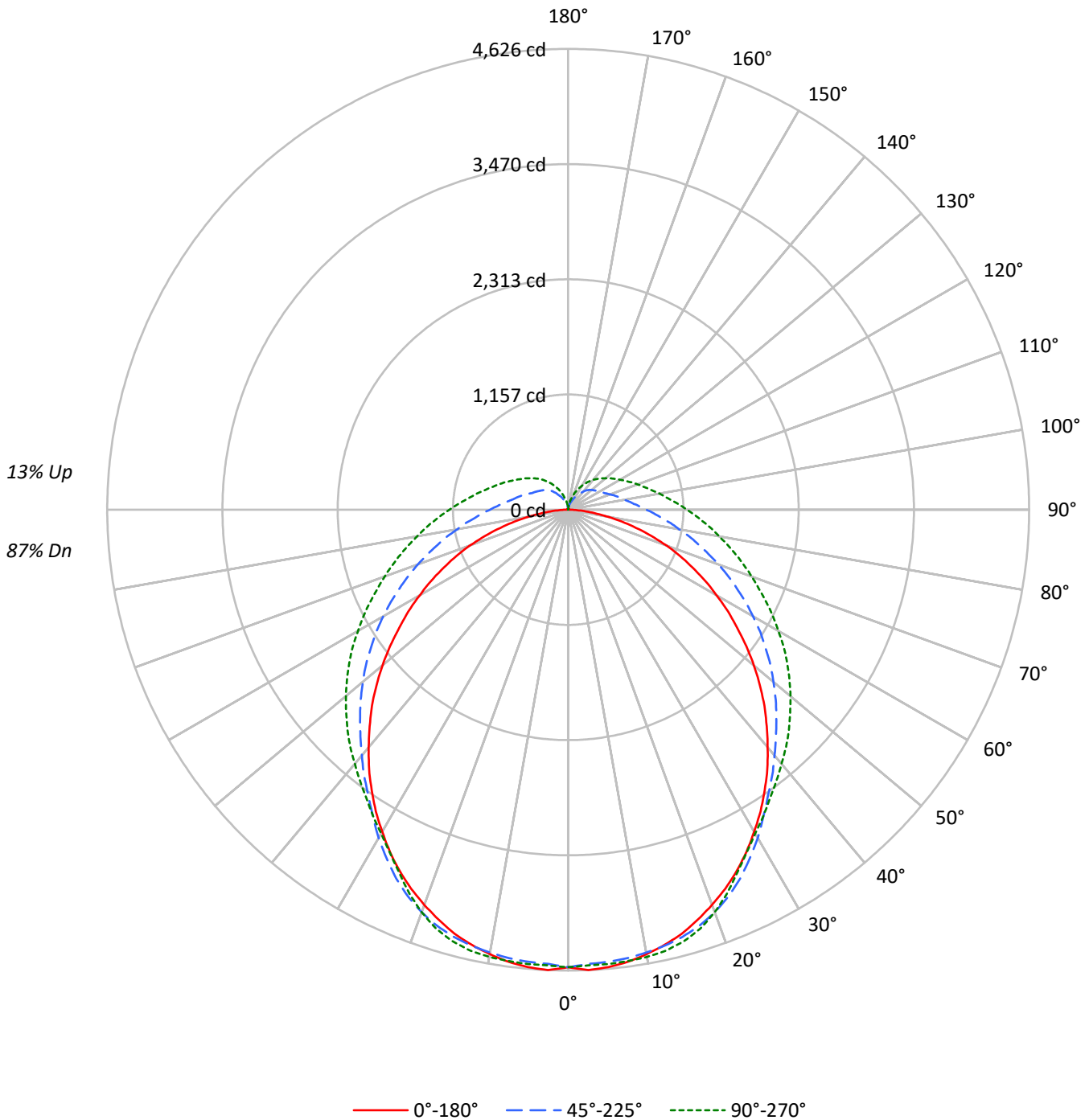
Lumens per Lamp: N/A  
Luminaire Lumens: 16578.0 lumens  
Efficiency: N/A  
Efficacy: 150.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.17')  
CIE Type: Semi-Direct

Input Watts (W): 110.2  
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

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### Luminous Intensity Polar Plot





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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 | 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°  | 24716 | 24716 | 24716 |
| 5°  | 24857 | 23609 | 23372 |
| 10° | 24669 | 22720 | 22293 |
| 15° | 24418 | 21877 | 21205 |
| 20° | 23996 | 20926 | 19819 |
| 25° | 23538 | 19769 | 18194 |
| 30° | 22919 | 18466 | 16837 |
| 35° | 22259 | 17138 | 15824 |
| 40° | 21503 | 16073 | 15005 |
| 45° | 20766 | 15128 | 14298 |
| 50° | 19885 | 14259 | 13585 |
| 55° | 18849 | 13386 | 12888 |
| 60° | 17869 | 12514 | 12159 |
| 65° | 16788 | 11635 | 11490 |
| 70° | 15561 | 10812 | 10886 |
| 75° | 13610 | 10010 | 10388 |
| 80° | 11062 | 9320  | 9967  |
| 85° | 7990  | 8841  | 9725  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 436.3   | 2.6       |
| 10°-20°   | 1254.3  | 7.6       |
| 20°-30°   | 1867.8  | 11.3      |
| 30°-40°   | 2203.9  | 13.3      |
| 40°-50°   | 2298.5  | 13.9      |
| 50°-60°   | 2159.9  | 13.0      |
| 60°-70°   | 1824.1  | 11.0      |
| 70°-80°   | 1378.2  | 8.3       |
| 80°-90°   | 950.0   | 5.7       |
| 90°-100°  | 664.8   | 4.0       |
| 100°-110° | 496.1   | 3.0       |
| 110°-120° | 374.0   | 2.3       |
| 120°-130° | 278.9   | 1.7       |
| 130°-140° | 195.8   | 1.2       |
| 140°-150° | 118.4   | 0.7       |
| 150°-160° | 56.6    | 0.3       |
| 160°-170° | 18.1    | 0.1       |
| 170°-180° | 2.2     | 0.0       |
| 0°-30°    | 3558.4  | 21.5      |
| 0°-40°    | 5762.3  | 34.8      |
| 0°-60°    | 10220.7 | 61.7      |
| 0°-90°    | 14373.0 | 86.7      |
| 90°-120°  | 1535.0  | 9.3       |
| 90°-150°  | 2128.0  | 12.8      |
| 90°-180°  | 2205.0  | 13.3      |
| 0°-180°   | 16578.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 4592 | 4592  | 4592 | 4592  | 4592 |      |
| 5°   | 4609 | 4601  | 4556 | 4590  | 4578 | 437  |
| 15°  | 4407 | 4427  | 4438 | 4494  | 4486 | 1241 |
| 25°  | 4002 | 4084  | 4084 | 4047  | 4016 | 1841 |
| 35°  | 3437 | 3564  | 3496 | 3524  | 3533 | 2150 |
| 45°  | 2785 | 2923  | 2954 | 3075  | 3131 | 2145 |
| 55°  | 2069 | 2246  | 2417 | 2611  | 2681 | 1856 |
| 65°  | 1377 | 1596  | 1866 | 2111  | 2192 | 1368 |
| 75°  | 705  | 978   | 1355 | 1638  | 1742 | 751  |
| 85°  | 160  | 503   | 939  | 1248  | 1358 | 180  |
| 90°  | 3    | 357   | 784  | 1085  | 1192 | 11   |
| 95°  | 3    | 278   | 663  | 950   | 1048 | 2    |
| 105° | 6    | 200   | 512  | 742   | 826  | 6    |
| 115° | 6    | 171   | 396  | 590   | 666  | 6    |
| 125° | 8    | 146   | 334  | 483   | 545  | 8    |
| 135° | 8    | 112   | 278  | 394   | 441  | 7    |
| 145° | 11   | 82    | 194  | 301   | 337  | 6    |
| 155° | 11   | 53    | 118  | 191   | 222  | 5    |
| 165° | 14   | 34    | 62   | 84    | 112  | 4    |
| 175° | 14   | 14    | 17   | 17    | 8    | 1    |
| 180° | 8    | 8     | 8    | 8     | 8    |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 4592.4 | 4592.4 | 4592.4 | 4592.4 | 4592.4 |
| 2.5°   | 4626.1 | 4614.9 | 4564.3 | 4592.4 | 4578.4 |
| 5°     | 4609.3 | 4600.8 | 4555.9 | 4589.6 | 4578.4 |
| 7.5°   | 4578.4 | 4575.6 | 4541.8 | 4581.2 | 4569.9 |
| 10°    | 4530.6 | 4539.0 | 4513.7 | 4567.1 | 4558.7 |
| 12.5°  | 4474.4 | 4491.2 | 4482.8 | 4541.8 | 4533.4 |
| 15°    | 4406.9 | 4426.6 | 4437.8 | 4494.0 | 4485.6 |
| 17.5°  | 4317.0 | 4353.5 | 4378.8 | 4423.8 | 4409.7 |
| 20°    | 4221.4 | 4272.0 | 4300.1 | 4322.6 | 4300.1 |
| 22.5°  | 4117.4 | 4184.9 | 4201.7 | 4190.5 | 4168.0 |
| 25°    | 4002.2 | 4083.7 | 4083.7 | 4047.2 | 4016.3 |
| 27.5°  | 3872.9 | 3974.1 | 3946.0 | 3903.8 | 3878.5 |
| 30°    | 3732.4 | 3853.2 | 3805.5 | 3757.7 | 3752.1 |
| 32.5°  | 3591.9 | 3718.3 | 3648.1 | 3636.8 | 3645.3 |
| 35°    | 3437.3 | 3563.8 | 3496.3 | 3524.4 | 3532.8 |
| 37.5°  | 3282.7 | 3409.2 | 3364.2 | 3406.4 | 3431.7 |
| 40°    | 3114.1 | 3249.0 | 3220.9 | 3296.8 | 3330.5 |
| 42.5°  | 2948.3 | 3088.8 | 3086.0 | 3184.3 | 3234.9 |
| 45°    | 2785.2 | 2923.0 | 2953.9 | 3074.7 | 3130.9 |
| 47.5°  | 2608.2 | 2748.7 | 2824.6 | 2965.1 | 3021.3 |
| 50°    | 2433.9 | 2585.7 | 2689.7 | 2847.1 | 2911.7 |
| 52.5°  | 2254.0 | 2414.2 | 2557.6 | 2731.8 | 2799.3 |
| 55°    | 2068.6 | 2245.6 | 2417.1 | 2611.0 | 2681.3 |
| 57.5°  | 1902.7 | 2082.6 | 2285.0 | 2484.5 | 2566.0 |
| 60°    | 1720.0 | 1919.6 | 2141.6 | 2352.4 | 2433.9 |
| 62.5°  | 1554.2 | 1759.4 | 2006.7 | 2228.8 | 2315.9 |
| 65°    | 1377.2 | 1596.4 | 1866.2 | 2110.7 | 2192.2 |
| 67.5°  | 1214.2 | 1439.0 | 1734.1 | 1981.4 | 2071.4 |
| 70°    | 1045.5 | 1284.4 | 1604.8 | 1866.2 | 1958.9 |
| 72.5°  | 871.3  | 1124.2 | 1475.5 | 1753.8 | 1849.3 |
| 75°    | 705.4  | 978.1  | 1354.7 | 1638.5 | 1742.5 |
| 77.5°  | 550.9  | 837.5  | 1245.1 | 1537.4 | 1638.5 |
| 80°    | 399.1  | 711.1  | 1129.8 | 1433.4 | 1537.4 |
| 82.5°  | 264.2  | 601.5  | 1037.1 | 1340.6 | 1450.2 |
| 85°    | 160.2  | 503.1  | 938.7  | 1247.9 | 1357.5 |
| 87.5°  | 73.1   | 421.6  | 860.0  | 1166.4 | 1273.2 |
| 90°    | 2.8    | 356.9  | 784.1  | 1084.9 | 1191.7 |
| 92.5°  | 2.8    | 312.0  | 722.3  | 1014.6 | 1118.6 |
| 95°    | 2.8    | 278.2  | 663.3  | 950.0  | 1048.3 |
| 97.5°  | 2.8    | 255.8  | 618.3  | 888.1  | 983.7  |
| 100°   | 2.8    | 233.3  | 573.3  | 831.9  | 930.3  |
| 102.5° | 5.6    | 213.6  | 539.6  | 781.3  | 874.1  |
| 105°   | 5.6    | 199.5  | 511.5  | 742.0  | 826.3  |
| 107.5° | 5.6    | 191.1  | 480.6  | 702.6  | 781.3  |
| 110°   | 5.6    | 182.7  | 446.9  | 663.3  | 742.0  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°   | 22.5° | 45°   | 67.5° | 90°   |
|--------|------|-------|-------|-------|-------|
| 112.5° | 5.6  | 177.1 | 421.6 | 629.6 | 705.4 |
| 115°   | 5.6  | 171.4 | 396.3 | 590.2 | 666.1 |
| 117.5° | 5.6  | 168.6 | 382.2 | 559.3 | 632.4 |
| 120°   | 8.4  | 160.2 | 365.4 | 531.2 | 601.5 |
| 122.5° | 8.4  | 151.8 | 348.5 | 508.7 | 570.5 |
| 125°   | 8.4  | 146.1 | 334.5 | 483.4 | 545.2 |
| 127.5° | 8.4  | 137.7 | 320.4 | 460.9 | 517.1 |
| 130°   | 8.4  | 129.3 | 309.2 | 438.4 | 491.8 |
| 132.5° | 8.4  | 120.9 | 295.1 | 416.0 | 466.5 |
| 135°   | 8.4  | 112.4 | 278.2 | 393.5 | 441.3 |
| 137.5° | 8.4  | 104.0 | 261.4 | 371.0 | 416.0 |
| 140°   | 8.4  | 95.6  | 238.9 | 348.5 | 390.7 |
| 142.5° | 8.4  | 87.1  | 216.4 | 326.0 | 362.6 |
| 145°   | 11.2 | 81.5  | 193.9 | 300.7 | 337.3 |
| 147.5° | 11.2 | 73.1  | 171.4 | 275.4 | 306.3 |
| 150°   | 11.2 | 67.5  | 154.6 | 250.1 | 278.2 |
| 152.5° | 11.2 | 59.0  | 137.7 | 222.0 | 250.1 |
| 155°   | 11.2 | 53.4  | 118.0 | 191.1 | 222.0 |
| 157.5° | 11.2 | 47.8  | 101.2 | 160.2 | 193.9 |
| 160°   | 11.2 | 45.0  | 87.1  | 132.1 | 165.8 |
| 162.5° | 14.1 | 39.3  | 73.1  | 106.8 | 137.7 |
| 165°   | 14.1 | 33.7  | 61.8  | 84.3  | 112.4 |
| 167.5° | 14.1 | 28.1  | 50.6  | 64.6  | 87.1  |
| 170°   | 14.1 | 22.5  | 39.3  | 45.0  | 67.5  |
| 172.5° | 14.1 | 16.9  | 28.1  | 30.9  | 33.7  |
| 175°   | 14.1 | 14.1  | 16.9  | 16.9  | 8.4   |
| 177.5° | 14.1 | 14.1  | 11.2  | 8.4   | 2.8   |
| 180°   | 8.4  | 8.4   | 8.4   | 8.4   | 8.4   |

(END OF REPORT)