

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: P567636

Luminaire Tested: **8SNX-186HL-FDL-UNV-L840-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P567636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2204-622-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8SNX-186HL-FDL-UNV-L840-CD  
Description: 8FT 18600 LUMEN, SNX FIXTURE WITH 4000K, 80CRI LEDS AND FDL LENS  
Light Source: -  
Ballast/Driver: -

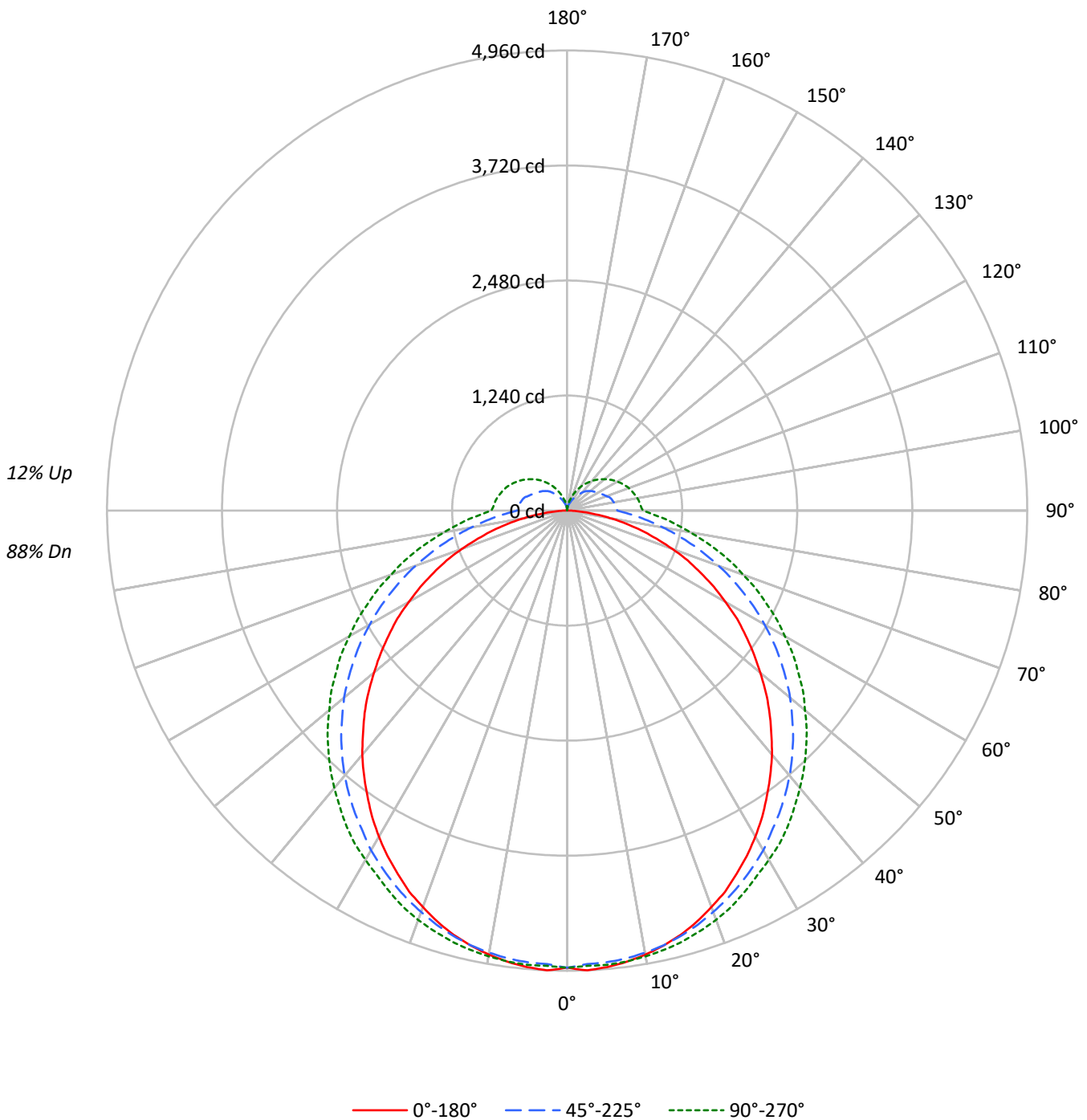
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17738.0 lumens  
Efficiency: N/A  
Efficacy: 131.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.04')  
CIE Type: Semi-Direct  
  
Input Watts (W): 134.8  
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

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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 | 105 | 105 | 105 | 98 | 98 | 98 | 91 | 91 | 91 | 88 |
| 1   | 105 | 99  | 95  | 90  | 101 | 96  | 92  | 88  | 89  | 86  | 83  | 84 | 81 | 78 | 78 | 76 | 74 | 71 |
| 2   | 95  | 86  | 79  | 72  | 91  | 83  | 76  | 71  | 77  | 72  | 67  | 72 | 68 | 64 | 68 | 64 | 61 | 58 |
| 3   | 86  | 75  | 66  | 60  | 82  | 72  | 65  | 58  | 68  | 61  | 56  | 63 | 58 | 53 | 59 | 55 | 51 | 48 |
| 4   | 78  | 66  | 57  | 50  | 75  | 64  | 56  | 49  | 60  | 53  | 47  | 56 | 50 | 45 | 53 | 48 | 43 | 41 |
| 5   | 72  | 59  | 50  | 43  | 69  | 57  | 48  | 42  | 54  | 46  | 41  | 50 | 44 | 39 | 47 | 42 | 38 | 35 |
| 6   | 66  | 53  | 44  | 37  | 64  | 51  | 43  | 37  | 48  | 41  | 35  | 45 | 39 | 34 | 43 | 37 | 33 | 31 |
| 7   | 61  | 48  | 39  | 33  | 59  | 46  | 38  | 32  | 44  | 36  | 31  | 41 | 35 | 30 | 39 | 33 | 29 | 27 |
| 8   | 57  | 43  | 35  | 29  | 55  | 42  | 34  | 29  | 40  | 33  | 28  | 38 | 31 | 27 | 36 | 30 | 26 | 24 |
| 9   | 53  | 40  | 32  | 26  | 51  | 39  | 31  | 26  | 37  | 30  | 25  | 35 | 29 | 24 | 33 | 27 | 23 | 21 |
| 10  | 50  | 37  | 29  | 23  | 48  | 36  | 28  | 23  | 34  | 27  | 22  | 32 | 26 | 22 | 31 | 25 | 21 | 19 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 26516 | 26516 | 26516 |
| 5°  | 26671 | 26126 | 26171 |
| 10° | 26536 | 25889 | 25899 |
| 15° | 26332 | 25603 | 25647 |
| 20° | 25994 | 25257 | 25358 |
| 25° | 25588 | 24906 | 24972 |
| 30° | 25144 | 24554 | 24642 |
| 35° | 24577 | 24131 | 24413 |
| 40° | 24032 | 23781 | 24059 |
| 45° | 23368 | 23377 | 23760 |
| 50° | 22597 | 22948 | 23383 |
| 55° | 21869 | 22417 | 23045 |
| 60° | 21030 | 21851 | 22632 |
| 65° | 20007 | 21204 | 22228 |
| 70° | 18708 | 20497 | 21769 |
| 75° | 16853 | 19729 | 21612 |
| 80° | 14266 | 19283 | 21440 |
| 85° | 10625 | 19785 | 22598 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 467.7   | 2.6       |
| 10°-20°   | 1345.5  | 7.6       |
| 20°-30°   | 2046.8  | 11.5      |
| 30°-40°   | 2488.8  | 14.0      |
| 40°-50°   | 2633.0  | 14.8      |
| 50°-60°   | 2468.1  | 13.9      |
| 60°-70°   | 2030.5  | 11.4      |
| 70°-80°   | 1404.9  | 7.9       |
| 80°-90°   | 781.2   | 4.4       |
| 90°-100°  | 514.7   | 2.9       |
| 100°-110° | 461.5   | 2.6       |
| 110°-120° | 382.0   | 2.2       |
| 120°-130° | 295.3   | 1.7       |
| 130°-140° | 209.1   | 1.2       |
| 140°-150° | 126.1   | 0.7       |
| 150°-160° | 60.6    | 0.3       |
| 160°-170° | 19.8    | 0.1       |
| 170°-180° | 2.4     | 0.0       |
| 0°-30°    | 3860.1  | 21.8      |
| 0°-40°    | 6348.8  | 35.8      |
| 0°-60°    | 11450.0 | 64.6      |
| 0°-90°    | 15666.6 | 88.3      |
| 90°-120°  | 1358.2  | 7.7       |
| 90°-150°  | 1988.6  | 11.2      |
| 90°-180°  | 2071.0  | 11.7      |
| 0°-180°   | 17738.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 4927 | 4927  | 4927 | 4927  | 4927 |      |
| 5°   | 4939 | 4930  | 4887 | 4927  | 4915 | 469  |
| 15°  | 4732 | 4748  | 4745 | 4808  | 4808 | 1334 |
| 25°  | 4319 | 4380  | 4432 | 4529  | 4532 | 1991 |
| 35°  | 3754 | 3855  | 3985 | 4113  | 4149 | 2350 |
| 45°  | 3086 | 3247  | 3445 | 3600  | 3642 | 2379 |
| 55°  | 2348 | 2558  | 2804 | 2980  | 3041 | 2102 |
| 65°  | 1589 | 1816  | 2099 | 2306  | 2369 | 1575 |
| 75°  | 826  | 1066  | 1379 | 1598  | 1686 | 876  |
| 85°  | 182  | 453   | 766  | 978   | 1063 | 210  |
| 90°  | 3    | 255   | 541  | 744   | 817  | 12   |
| 95°  | 3    | 243   | 526  | 720   | 790  | 2    |
| 105° | 3    | 210   | 492  | 677   | 738  | 3    |
| 115° | 6    | 182   | 416  | 601   | 668  | 5    |
| 125° | 6    | 155   | 355  | 513   | 577  | 5    |
| 135° | 6    | 122   | 298  | 422   | 474  | 5    |
| 145° | 6    | 88    | 207  | 319   | 358  | 4    |
| 155° | 9    | 61    | 128  | 204   | 237  | 4    |
| 165° | 9    | 40    | 70   | 94    | 122  | 3    |
| 175° | 9    | 15    | 21   | 21    | 12   | 1    |
| 180° | 6    | 6     | 6    | 6     | 6    |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 4926.9 | 4926.9 | 4926.9 | 4926.9 | 4926.9 |
| 2.5°   | 4960.3 | 4945.2 | 4893.5 | 4926.9 | 4911.7 |
| 5°     | 4939.1 | 4930.0 | 4887.4 | 4926.9 | 4914.8 |
| 7.5°   | 4905.7 | 4902.6 | 4869.2 | 4914.8 | 4902.6 |
| 10°    | 4860.1 | 4866.2 | 4838.8 | 4887.4 | 4878.3 |
| 12.5°  | 4802.4 | 4811.5 | 4799.4 | 4854.0 | 4848.0 |
| 15°    | 4732.5 | 4747.7 | 4744.7 | 4808.5 | 4808.5 |
| 17.5°  | 4647.5 | 4668.7 | 4680.9 | 4753.8 | 4753.8 |
| 20°    | 4547.2 | 4580.6 | 4604.9 | 4683.9 | 4696.1 |
| 22.5°  | 4447.0 | 4486.5 | 4522.9 | 4604.9 | 4623.2 |
| 25°    | 4319.4 | 4380.2 | 4431.8 | 4529.0 | 4532.0 |
| 27.5°  | 4194.9 | 4261.7 | 4331.6 | 4425.7 | 4434.8 |
| 30°    | 4058.2 | 4143.2 | 4228.3 | 4319.4 | 4346.8 |
| 32.5°  | 3912.4 | 4006.5 | 4100.7 | 4222.2 | 4258.7 |
| 35°    | 3754.4 | 3854.7 | 3985.3 | 4112.9 | 4149.3 |
| 37.5°  | 3596.5 | 3708.9 | 3860.7 | 3991.4 | 4024.8 |
| 40°    | 3435.5 | 3560.0 | 3730.1 | 3863.8 | 3903.3 |
| 42.5°  | 3256.3 | 3408.1 | 3590.4 | 3733.2 | 3778.7 |
| 45°    | 3086.2 | 3247.2 | 3444.6 | 3599.5 | 3642.0 |
| 47.5°  | 2906.9 | 3077.1 | 3289.7 | 3453.7 | 3502.3 |
| 50°    | 2715.6 | 2910.0 | 3137.8 | 3301.8 | 3347.4 |
| 52.5°  | 2536.4 | 2733.8 | 2973.8 | 3143.9 | 3207.7 |
| 55°    | 2348.0 | 2557.6 | 2803.7 | 2979.9 | 3040.6 |
| 57.5°  | 2171.9 | 2372.3 | 2636.6 | 2812.8 | 2888.7 |
| 60°    | 1971.4 | 2193.1 | 2457.4 | 2648.8 | 2709.5 |
| 62.5°  | 1783.1 | 2007.8 | 2281.2 | 2478.7 | 2548.5 |
| 65°    | 1588.6 | 1816.5 | 2099.0 | 2305.5 | 2369.3 |
| 67.5°  | 1406.4 | 1631.2 | 1919.7 | 2123.3 | 2205.3 |
| 70°    | 1205.9 | 1442.8 | 1737.5 | 1947.1 | 2016.9 |
| 72.5°  | 1008.5 | 1254.5 | 1555.2 | 1780.0 | 1859.0 |
| 75°    | 826.2  | 1066.2 | 1379.1 | 1597.8 | 1685.8 |
| 77.5°  | 650.0  | 893.0  | 1209.0 | 1433.7 | 1509.7 |
| 80°    | 473.9  | 729.0  | 1051.0 | 1272.7 | 1345.6 |
| 82.5°  | 312.9  | 580.2  | 899.1  | 1120.9 | 1199.8 |
| 85°    | 182.3  | 452.6  | 765.5  | 978.1  | 1063.1 |
| 87.5°  | 79.0   | 343.2  | 640.9  | 850.5  | 920.4  |
| 90°    | 3.0    | 255.2  | 540.7  | 744.2  | 817.1  |
| 92.5°  | 3.0    | 249.1  | 528.5  | 729.0  | 798.9  |
| 95°    | 3.0    | 243.0  | 525.5  | 719.9  | 789.8  |
| 97.5°  | 3.0    | 240.0  | 519.4  | 713.8  | 780.7  |
| 100°   | 3.0    | 230.9  | 510.3  | 701.7  | 768.5  |
| 102.5° | 3.0    | 218.7  | 501.2  | 689.5  | 753.3  |
| 105°   | 3.0    | 209.6  | 492.1  | 677.4  | 738.1  |
| 107.5° | 3.0    | 200.5  | 476.9  | 662.2  | 722.9  |
| 110°   | 3.0    | 191.4  | 452.6  | 647.0  | 707.8  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°   | 67.5° | 90°   |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 3.0 | 188.3 | 434.4 | 625.7 | 689.5 |
| 115°   | 6.1 | 182.3 | 416.1 | 601.4 | 668.3 |
| 117.5° | 6.1 | 179.2 | 401.0 | 577.1 | 647.0 |
| 120°   | 6.1 | 170.1 | 385.8 | 555.9 | 622.7 |
| 122.5° | 6.1 | 161.0 | 370.6 | 534.6 | 601.4 |
| 125°   | 6.1 | 154.9 | 355.4 | 513.3 | 577.1 |
| 127.5° | 6.1 | 145.8 | 343.2 | 492.1 | 549.8 |
| 130°   | 6.1 | 139.7 | 328.1 | 467.8 | 525.5 |
| 132.5° | 6.1 | 130.6 | 312.9 | 443.5 | 498.2 |
| 135°   | 6.1 | 121.5 | 297.7 | 422.2 | 473.9 |
| 137.5° | 6.1 | 109.4 | 279.5 | 397.9 | 446.5 |
| 140°   | 6.1 | 100.2 | 255.2 | 373.6 | 419.2 |
| 142.5° | 6.1 | 94.2  | 230.9 | 346.3 | 388.8 |
| 145°   | 6.1 | 88.1  | 206.6 | 318.9 | 358.4 |
| 147.5° | 6.1 | 82.0  | 185.3 | 291.6 | 328.1 |
| 150°   | 6.1 | 72.9  | 164.0 | 267.3 | 297.7 |
| 152.5° | 9.1 | 66.8  | 145.8 | 236.9 | 267.3 |
| 155°   | 9.1 | 60.8  | 127.6 | 203.5 | 236.9 |
| 157.5° | 9.1 | 54.7  | 109.4 | 170.1 | 206.6 |
| 160°   | 9.1 | 48.6  | 94.2  | 139.7 | 176.2 |
| 162.5° | 9.1 | 45.6  | 82.0  | 115.4 | 148.8 |
| 165°   | 9.1 | 39.5  | 69.9  | 94.2  | 121.5 |
| 167.5° | 9.1 | 30.4  | 57.7  | 72.9  | 100.2 |
| 170°   | 9.1 | 24.3  | 45.6  | 51.6  | 75.9  |
| 172.5° | 9.1 | 18.2  | 33.4  | 36.5  | 39.5  |
| 175°   | 9.1 | 15.2  | 21.3  | 21.3  | 12.2  |
| 177.5° | 9.1 | 12.2  | 12.2  | 12.2  | 6.1   |
| 180°   | 6.1 | 6.1   | 6.1   | 6.1   | 6.1   |

(END OF REPORT)