

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: P567539

Luminaire Tested: **8SNX-174HL-FDL-UNV-L835-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P567539  
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-174HL-FDL-UNV-L835-CD  
Description: 8FT 17400 LUMEN, SNX FIXTURE WITH 3500K, 80CRI LEDS AND FDL LENS  
Light Source: -  
Ballast/Driver: -

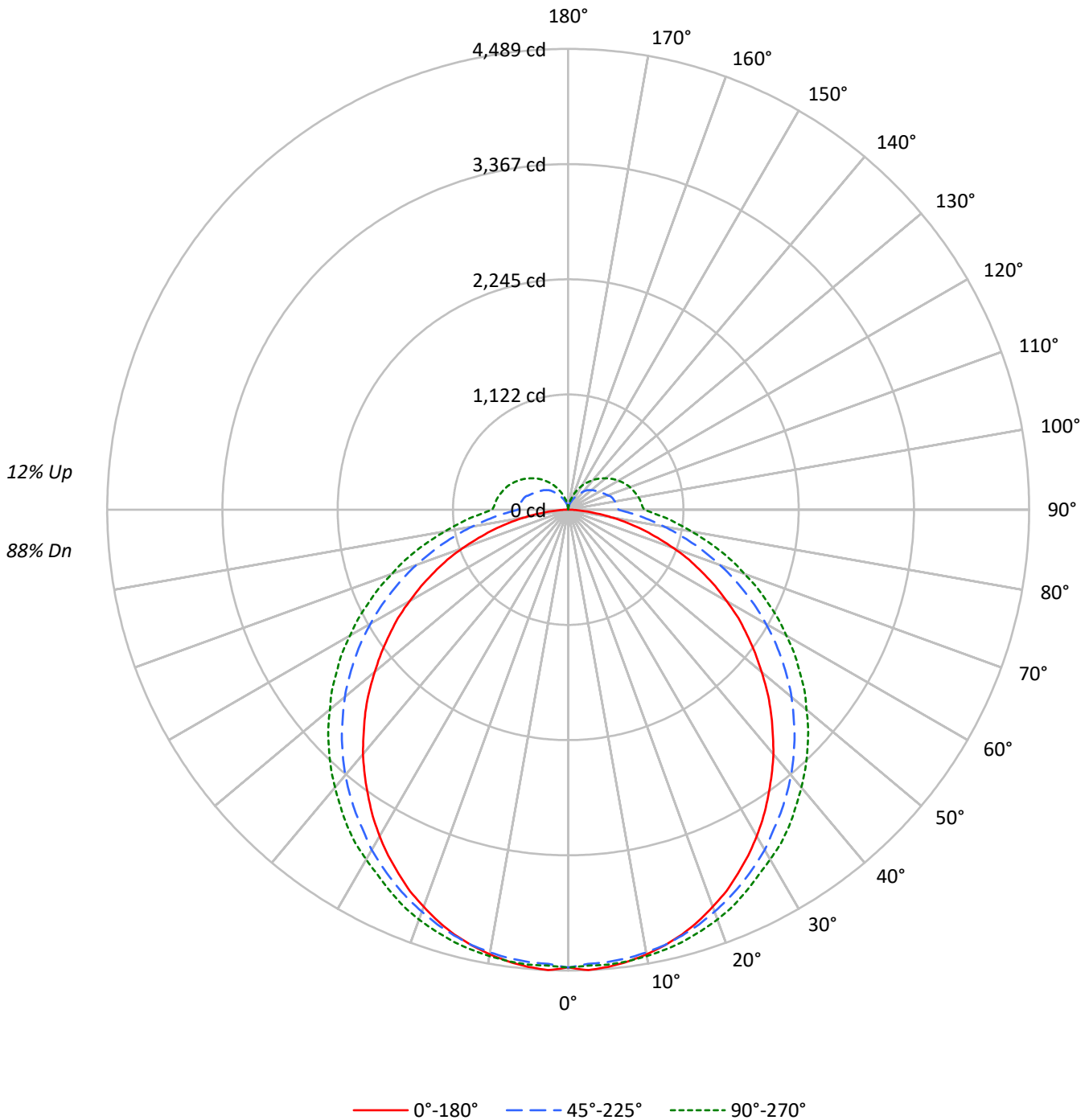
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16052.9 lumens  
Efficiency: N/A  
Efficacy: 129.0 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): 124.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°  | 23998 | 23998 | 23998 |
| 5°  | 24138 | 23645 | 23684 |
| 10° | 24015 | 23430 | 23439 |
| 15° | 23831 | 23171 | 23210 |
| 20° | 23525 | 22858 | 22949 |
| 25° | 23157 | 22540 | 22600 |
| 30° | 22756 | 22221 | 22301 |
| 35° | 22243 | 21838 | 22094 |
| 40° | 21748 | 21522 | 21773 |
| 45° | 21148 | 21156 | 21503 |
| 50° | 20450 | 20768 | 21161 |
| 55° | 19792 | 20287 | 20856 |
| 60° | 19032 | 19776 | 20482 |
| 65° | 18107 | 19190 | 20116 |
| 70° | 16932 | 18549 | 19701 |
| 75° | 15251 | 17855 | 19560 |
| 80° | 12909 | 17452 | 19403 |
| 85° | 9611  | 17906 | 20453 |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 423.3   | 2.6       |
| 10°-20°   | 1217.7  | 7.6       |
| 20°-30°   | 1852.4  | 11.5      |
| 30°-40°   | 2252.3  | 14.0      |
| 40°-50°   | 2382.9  | 14.8      |
| 50°-60°   | 2233.7  | 13.9      |
| 60°-70°   | 1837.6  | 11.4      |
| 70°-80°   | 1271.4  | 7.9       |
| 80°-90°   | 707.0   | 4.4       |
| 90°-100°  | 465.8   | 2.9       |
| 100°-110° | 417.7   | 2.6       |
| 110°-120° | 345.7   | 2.2       |
| 120°-130° | 267.3   | 1.7       |
| 130°-140° | 189.2   | 1.2       |
| 140°-150° | 114.1   | 0.7       |
| 150°-160° | 54.8    | 0.3       |
| 160°-170° | 17.9    | 0.1       |
| 170°-180° | 2.2     | 0.0       |
| 0°-30°    | 3493.4  | 21.8      |
| 0°-40°    | 5745.7  | 35.8      |
| 0°-60°    | 10362.3 | 64.6      |
| 0°-90°    | 14178.3 | 88.3      |
| 90°-120°  | 1229.1  | 7.7       |
| 90°-150°  | 1799.7  | 11.2      |
| 90°-180°  | 1875.0  | 11.7      |
| 0°-180°   | 16052.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 4459 | 4459  | 4459 | 4459  | 4459 |      |
| 5°   | 4470 | 4462  | 4423 | 4459  | 4448 | 424  |
| 15°  | 4283 | 4297  | 4294 | 4352  | 4352 | 1207 |
| 25°  | 3909 | 3964  | 4011 | 4099  | 4102 | 1802 |
| 35°  | 3398 | 3488  | 3607 | 3722  | 3755 | 2126 |
| 45°  | 2793 | 2939  | 3117 | 3258  | 3296 | 2153 |
| 55°  | 2125 | 2315  | 2537 | 2697  | 2752 | 1902 |
| 65°  | 1438 | 1644  | 1900 | 2086  | 2144 | 1426 |
| 75°  | 748  | 965   | 1248 | 1446  | 1526 | 793  |
| 85°  | 165  | 410   | 693  | 885   | 962  | 190  |
| 90°  | 3    | 231   | 489  | 674   | 740  | 11   |
| 95°  | 3    | 220   | 476  | 652   | 715  | 2    |
| 105° | 3    | 190   | 445  | 613   | 668  | 3    |
| 115° | 6    | 165   | 377  | 544   | 605  | 4    |
| 125° | 6    | 140   | 322  | 465   | 522  | 5    |
| 135° | 6    | 110   | 269  | 382   | 429  | 4    |
| 145° | 6    | 80    | 187  | 289   | 324  | 3    |
| 155° | 8    | 55    | 116  | 184   | 214  | 4    |
| 165° | 8    | 36    | 63   | 85    | 110  | 2    |
| 175° | 8    | 14    | 19   | 19    | 11   | 1    |
| 180° | 6    | 6     | 6    | 6     | 6    |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 4458.9 | 4458.9 | 4458.9 | 4458.9 | 4458.9 |
| 2.5°   | 4489.1 | 4475.4 | 4428.7 | 4458.9 | 4445.2 |
| 5°     | 4469.9 | 4461.7 | 4423.2 | 4458.9 | 4447.9 |
| 7.5°   | 4439.7 | 4436.9 | 4406.7 | 4447.9 | 4436.9 |
| 10°    | 4398.4 | 4403.9 | 4379.2 | 4423.2 | 4414.9 |
| 12.5°  | 4346.2 | 4354.4 | 4343.4 | 4392.9 | 4387.4 |
| 15°    | 4283.0 | 4296.7 | 4294.0 | 4351.7 | 4351.7 |
| 17.5°  | 4206.0 | 4225.2 | 4236.2 | 4302.2 | 4302.2 |
| 20°    | 4115.3 | 4145.5 | 4167.5 | 4239.0 | 4250.0 |
| 22.5°  | 4024.6 | 4060.3 | 4093.3 | 4167.5 | 4184.0 |
| 25°    | 3909.1 | 3964.1 | 4010.8 | 4098.8 | 4101.5 |
| 27.5°  | 3796.4 | 3856.9 | 3920.1 | 4005.3 | 4013.6 |
| 30°    | 3672.7 | 3749.7 | 3826.6 | 3909.1 | 3933.8 |
| 32.5°  | 3540.7 | 3626.0 | 3711.2 | 3821.1 | 3854.1 |
| 35°    | 3397.8 | 3488.5 | 3606.7 | 3722.2 | 3755.2 |
| 37.5°  | 3254.8 | 3356.5 | 3494.0 | 3612.2 | 3642.4 |
| 40°    | 3109.1 | 3221.8 | 3375.8 | 3496.7 | 3532.5 |
| 42.5°  | 2946.9 | 3084.4 | 3249.3 | 3378.5 | 3419.8 |
| 45°    | 2793.0 | 2938.7 | 3117.4 | 3257.6 | 3296.1 |
| 47.5°  | 2630.8 | 2784.8 | 2977.2 | 3125.6 | 3169.6 |
| 50°    | 2457.6 | 2633.6 | 2839.7 | 2988.2 | 3029.4 |
| 52.5°  | 2295.4 | 2474.1 | 2691.3 | 2845.2 | 2903.0 |
| 55°    | 2125.0 | 2314.7 | 2537.3 | 2696.8 | 2751.8 |
| 57.5°  | 1965.5 | 2147.0 | 2386.1 | 2545.6 | 2614.3 |
| 60°    | 1784.1 | 1984.8 | 2224.0 | 2397.1 | 2452.1 |
| 62.5°  | 1613.7 | 1817.1 | 2064.5 | 2243.2 | 2306.4 |
| 65°    | 1437.7 | 1643.9 | 1899.6 | 2086.5 | 2144.2 |
| 67.5°  | 1272.8 | 1476.2 | 1737.4 | 1921.6 | 1995.8 |
| 70°    | 1091.4 | 1305.8 | 1572.4 | 1762.1 | 1825.3 |
| 72.5°  | 912.7  | 1135.3 | 1407.5 | 1610.9 | 1682.4 |
| 75°    | 747.7  | 964.9  | 1248.1 | 1446.0 | 1525.7 |
| 77.5°  | 588.3  | 808.2  | 1094.1 | 1297.5 | 1366.3 |
| 80°    | 428.8  | 659.8  | 951.2  | 1151.8 | 1217.8 |
| 82.5°  | 283.1  | 525.1  | 813.7  | 1014.4 | 1085.9 |
| 85°    | 164.9  | 409.6  | 692.8  | 885.2  | 962.2  |
| 87.5°  | 71.5   | 310.6  | 580.0  | 769.7  | 833.0  |
| 90°    | 2.7    | 230.9  | 489.3  | 673.5  | 739.5  |
| 92.5°  | 2.7    | 225.4  | 478.3  | 659.8  | 723.0  |
| 95°    | 2.7    | 219.9  | 475.6  | 651.5  | 714.7  |
| 97.5°  | 2.7    | 217.2  | 470.1  | 646.0  | 706.5  |
| 100°   | 2.7    | 208.9  | 461.8  | 635.0  | 695.5  |
| 102.5° | 2.7    | 197.9  | 453.6  | 624.0  | 681.8  |
| 105°   | 2.7    | 189.7  | 445.3  | 613.0  | 668.0  |
| 107.5° | 2.7    | 181.4  | 431.6  | 599.3  | 654.3  |
| 110°   | 2.7    | 173.2  | 409.6  | 585.5  | 640.5  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°   | 67.5° | 90°   |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.7 | 170.4 | 393.1 | 566.3 | 624.0 |
| 115°   | 5.5 | 164.9 | 376.6 | 544.3 | 604.8 |
| 117.5° | 5.5 | 162.2 | 362.9 | 522.3 | 585.5 |
| 120°   | 5.5 | 153.9 | 349.1 | 503.1 | 563.5 |
| 122.5° | 5.5 | 145.7 | 335.4 | 483.8 | 544.3 |
| 125°   | 5.5 | 140.2 | 321.6 | 464.6 | 522.3 |
| 127.5° | 5.5 | 132.0 | 310.6 | 445.3 | 497.6 |
| 130°   | 5.5 | 126.5 | 296.9 | 423.3 | 475.6 |
| 132.5° | 5.5 | 118.2 | 283.1 | 401.4 | 450.8 |
| 135°   | 5.5 | 110.0 | 269.4 | 382.1 | 428.8 |
| 137.5° | 5.5 | 99.0  | 252.9 | 360.1 | 404.1 |
| 140°   | 5.5 | 90.7  | 230.9 | 338.1 | 379.4 |
| 142.5° | 5.5 | 85.2  | 208.9 | 313.4 | 351.9 |
| 145°   | 5.5 | 79.7  | 186.9 | 288.6 | 324.4 |
| 147.5° | 5.5 | 74.2  | 167.7 | 263.9 | 296.9 |
| 150°   | 5.5 | 66.0  | 148.4 | 241.9 | 269.4 |
| 152.5° | 8.2 | 60.5  | 132.0 | 214.4 | 241.9 |
| 155°   | 8.2 | 55.0  | 115.5 | 184.2 | 214.4 |
| 157.5° | 8.2 | 49.5  | 99.0  | 153.9 | 186.9 |
| 160°   | 8.2 | 44.0  | 85.2  | 126.5 | 159.4 |
| 162.5° | 8.2 | 41.2  | 74.2  | 104.5 | 134.7 |
| 165°   | 8.2 | 35.7  | 63.2  | 85.2  | 110.0 |
| 167.5° | 8.2 | 27.5  | 52.2  | 66.0  | 90.7  |
| 170°   | 8.2 | 22.0  | 41.2  | 46.7  | 68.7  |
| 172.5° | 8.2 | 16.5  | 30.2  | 33.0  | 35.7  |
| 175°   | 8.2 | 13.7  | 19.2  | 19.2  | 11.0  |
| 177.5° | 8.2 | 11.0  | 11.0  | 11.0  | 5.5   |
| 180°   | 5.5 | 5.5   | 5.5   | 5.5   | 5.5   |

(END OF REPORT)