

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: P567604

Luminaire Tested: **8SNX-180HL-LN-UNV-L840-CD**

Issue Date: 9/15/2022



Test Information

Test Method: LM-79-08
Report Number: P567604
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-180HL-LN-UNV-L840-CD
Description: 8FT 18000 LUMEN, SNX FIXTURE WITH 4000K, 80CRI LEDS AND LN LENS
Light Source: -
Ballast/Driver: -

Summary

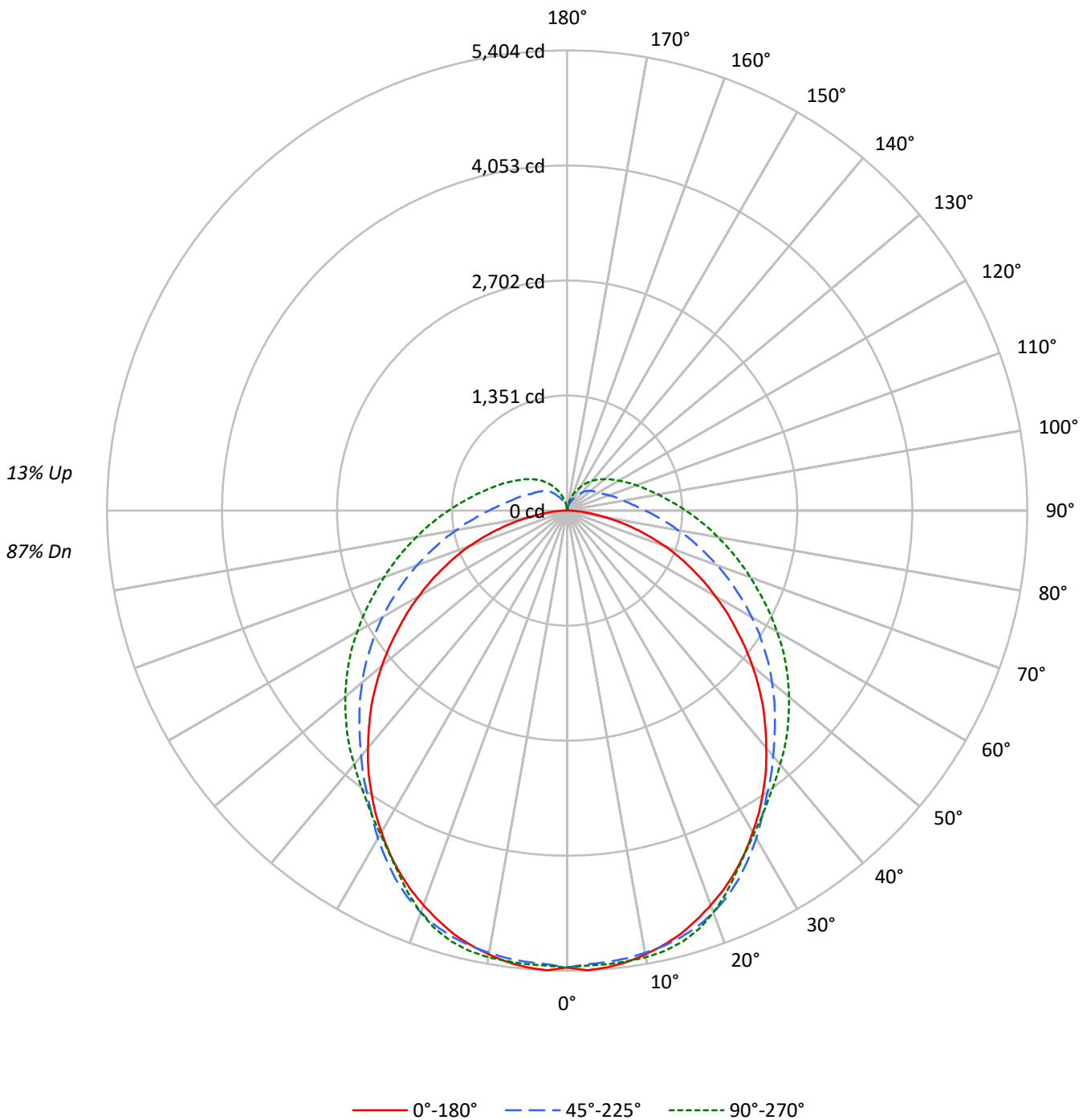
Lumens per Lamp: N/A
Luminaire Lumens: 19367.0 lumens
Efficiency: N/A
Efficacy: 150.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 128.8
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

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CATALOG NUMBER: 8SNX-180HL-LN-UNV-L840-CD

Luminous Intensity Polar Plot





TEST NUMBER: P567604

CATALOG NUMBER: 8SNX-180HL-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° | 28874 | 28874 | 28874 |
| 5° | 29038 | 27581 | 27303 |
| 10° | 28819 | 26542 | 26043 |
| 15° | 28526 | 25557 | 24773 |
| 20° | 28032 | 24446 | 23153 |
| 25° | 27498 | 23095 | 21255 |
| 30° | 26775 | 21573 | 19669 |
| 35° | 26004 | 20021 | 18487 |
| 40° | 25120 | 18776 | 17529 |
| 45° | 24260 | 17673 | 16704 |
| 50° | 23231 | 16658 | 15871 |
| 55° | 22020 | 15638 | 15056 |
| 60° | 20876 | 14620 | 14204 |
| 65° | 19612 | 13593 | 13423 |
| 70° | 18179 | 12631 | 12717 |
| 75° | 15900 | 11693 | 12136 |
| 80° | 12922 | 10888 | 11643 |
| 85° | 9336 | 10328 | 11361 |



TEST NUMBER: P567604

CATALOG NUMBER: 8SNX-180HL-LN-UNV-L840-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 509.7 | 2.6 |
| 10°-20° | 1465.3 | 7.6 |
| 20°-30° | 2182.0 | 11.3 |
| 30°-40° | 2574.7 | 13.3 |
| 40°-50° | 2685.1 | 13.9 |
| 50°-60° | 2523.3 | 13.0 |
| 60°-70° | 2130.9 | 11.0 |
| 70°-80° | 1610.1 | 8.3 |
| 80°-90° | 1109.9 | 5.7 |
| 90°-100° | 776.7 | 4.0 |
| 100°-110° | 579.6 | 3.0 |
| 110°-120° | 436.9 | 2.3 |
| 120°-130° | 325.9 | 1.7 |
| 130°-140° | 228.7 | 1.2 |
| 140°-150° | 138.3 | 0.7 |
| 150°-160° | 66.1 | 0.3 |
| 160°-170° | 21.2 | 0.1 |
| 170°-180° | 2.5 | 0.0 |
| 0°-30° | 4157.0 | 21.5 |
| 0°-40° | 6731.7 | 34.8 |
| 0°-60° | 11940.2 | 61.7 |
| 0°-90° | 16791.1 | 86.7 |
| 90°-120° | 1793.2 | 9.3 |
| 90°-150° | 2486.1 | 12.8 |
| 90°-180° | 2576.0 | 13.3 |
| 0°-180° | 19367.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5365 | 5365 | 5365 | 5365 | 5365 | |
| 5° | 5385 | 5375 | 5322 | 5362 | 5349 | 511 |
| 15° | 5148 | 5171 | 5184 | 5250 | 5240 | 1450 |
| 25° | 4676 | 4771 | 4771 | 4728 | 4692 | 2151 |
| 35° | 4016 | 4163 | 4084 | 4117 | 4127 | 2511 |
| 45° | 3254 | 3415 | 3451 | 3592 | 3658 | 2506 |
| 55° | 2417 | 2623 | 2824 | 3050 | 3132 | 2168 |
| 65° | 1609 | 1865 | 2180 | 2466 | 2561 | 1598 |
| 75° | 824 | 1143 | 1583 | 1914 | 2036 | 878 |
| 85° | 187 | 588 | 1097 | 1458 | 1586 | 210 |
| 90° | 3 | 417 | 916 | 1267 | 1392 | 13 |
| 95° | 3 | 325 | 775 | 1110 | 1225 | 3 |
| 105° | 7 | 233 | 598 | 867 | 965 | 7 |
| 115° | 7 | 200 | 463 | 690 | 778 | 7 |
| 125° | 10 | 171 | 391 | 565 | 637 | 9 |
| 135° | 10 | 131 | 325 | 460 | 516 | 8 |
| 145° | 13 | 95 | 227 | 351 | 394 | 7 |
| 155° | 13 | 62 | 138 | 223 | 259 | 6 |
| 165° | 16 | 39 | 72 | 98 | 131 | 5 |
| 175° | 16 | 16 | 20 | 20 | 10 | 2 |
| 180° | 10 | 10 | 10 | 10 | 10 | |



TEST NUMBER: P567604

CATALOG NUMBER: 8SNX-180HL-LN-UNV-L840-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5365.0 | 5365.0 | 5365.0 | 5365.0 | 5365.0 |
| 2.5° | 5404.4 | 5391.3 | 5332.2 | 5365.0 | 5348.6 |
| 5° | 5384.7 | 5374.9 | 5322.3 | 5361.7 | 5348.6 |
| 7.5° | 5348.6 | 5345.3 | 5305.9 | 5351.9 | 5338.8 |
| 10° | 5292.8 | 5302.6 | 5273.1 | 5335.5 | 5325.6 |
| 12.5° | 5227.1 | 5246.8 | 5237.0 | 5305.9 | 5296.1 |
| 15° | 5148.3 | 5171.3 | 5184.4 | 5250.1 | 5240.3 |
| 17.5° | 5043.2 | 5085.9 | 5115.5 | 5168.0 | 5151.6 |
| 20° | 4931.6 | 4990.7 | 5023.5 | 5049.8 | 5023.5 |
| 22.5° | 4810.1 | 4888.9 | 4908.6 | 4895.5 | 4869.2 |
| 25° | 4675.5 | 4770.7 | 4770.7 | 4728.0 | 4691.9 |
| 27.5° | 4524.5 | 4642.7 | 4609.8 | 4560.6 | 4531.0 |
| 30° | 4360.3 | 4501.5 | 4445.7 | 4389.9 | 4383.3 |
| 32.5° | 4196.1 | 4343.9 | 4261.8 | 4248.7 | 4258.5 |
| 35° | 4015.6 | 4163.3 | 4084.5 | 4117.3 | 4127.2 |
| 37.5° | 3835.0 | 3982.7 | 3930.2 | 3979.4 | 4009.0 |
| 40° | 3638.0 | 3795.6 | 3762.7 | 3851.4 | 3890.8 |
| 42.5° | 3444.3 | 3608.4 | 3605.1 | 3720.1 | 3779.2 |
| 45° | 3253.8 | 3414.7 | 3450.8 | 3592.0 | 3657.7 |
| 47.5° | 3047.0 | 3211.1 | 3299.8 | 3464.0 | 3529.6 |
| 50° | 2843.4 | 3020.7 | 3142.2 | 3326.0 | 3401.6 |
| 52.5° | 2633.3 | 2820.4 | 2987.9 | 3191.4 | 3270.2 |
| 55° | 2416.6 | 2623.4 | 2823.7 | 3050.2 | 3132.3 |
| 57.5° | 2222.8 | 2433.0 | 2669.4 | 2902.5 | 2997.7 |
| 60° | 2009.4 | 2242.5 | 2501.9 | 2748.2 | 2843.4 |
| 62.5° | 1815.7 | 2055.4 | 2344.3 | 2603.7 | 2705.5 |
| 65° | 1608.8 | 1865.0 | 2180.2 | 2465.8 | 2561.0 |
| 67.5° | 1418.4 | 1681.1 | 2025.8 | 2314.8 | 2419.8 |
| 70° | 1221.4 | 1500.5 | 1874.8 | 2180.2 | 2288.5 |
| 72.5° | 1017.8 | 1313.3 | 1723.8 | 2048.8 | 2160.5 |
| 75° | 824.1 | 1142.6 | 1582.6 | 1914.2 | 2035.7 |
| 77.5° | 643.5 | 978.4 | 1454.5 | 1796.0 | 1914.2 |
| 80° | 466.2 | 830.7 | 1319.9 | 1674.5 | 1796.0 |
| 82.5° | 308.6 | 702.6 | 1211.6 | 1566.2 | 1694.2 |
| 85° | 187.2 | 587.7 | 1096.6 | 1457.8 | 1585.9 |
| 87.5° | 85.4 | 492.5 | 1004.7 | 1362.6 | 1487.4 |
| 90° | 3.3 | 417.0 | 916.1 | 1267.4 | 1392.1 |
| 92.5° | 3.3 | 364.5 | 843.8 | 1185.3 | 1306.8 |
| 95° | 3.3 | 325.1 | 774.9 | 1109.8 | 1224.7 |
| 97.5° | 3.3 | 298.8 | 722.3 | 1037.5 | 1149.2 |
| 100° | 3.3 | 272.5 | 669.8 | 971.9 | 1086.8 |
| 102.5° | 6.6 | 249.5 | 630.4 | 912.8 | 1021.1 |
| 105° | 6.6 | 233.1 | 597.6 | 866.8 | 965.3 |
| 107.5° | 6.6 | 223.3 | 561.5 | 820.8 | 912.8 |
| 110° | 6.6 | 213.4 | 522.1 | 774.9 | 866.8 |



TEST NUMBER: P567604

CATALOG NUMBER: 8SNX-180HL-LN-UNV-L840-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|-------|-------|-------|
| 112.5° | 6.6 | 206.9 | 492.5 | 735.5 | 824.1 |
| 115° | 6.6 | 200.3 | 463.0 | 689.5 | 778.2 |
| 117.5° | 6.6 | 197.0 | 446.5 | 653.4 | 738.8 |
| 120° | 9.9 | 187.2 | 426.8 | 620.6 | 702.6 |
| 122.5° | 9.9 | 177.3 | 407.1 | 594.3 | 666.5 |
| 125° | 9.9 | 170.7 | 390.7 | 564.7 | 637.0 |
| 127.5° | 9.9 | 160.9 | 374.3 | 538.5 | 604.1 |
| 130° | 9.9 | 151.0 | 361.2 | 512.2 | 574.6 |
| 132.5° | 9.9 | 141.2 | 344.8 | 485.9 | 545.0 |
| 135° | 9.9 | 131.3 | 325.1 | 459.7 | 515.5 |
| 137.5° | 9.9 | 121.5 | 305.4 | 433.4 | 485.9 |
| 140° | 9.9 | 111.6 | 279.1 | 407.1 | 456.4 |
| 142.5° | 9.9 | 101.8 | 252.8 | 380.9 | 423.6 |
| 145° | 13.1 | 95.2 | 226.6 | 351.3 | 394.0 |
| 147.5° | 13.1 | 85.4 | 200.3 | 321.8 | 357.9 |
| 150° | 13.1 | 78.8 | 180.6 | 292.2 | 325.1 |
| 152.5° | 13.1 | 69.0 | 160.9 | 259.4 | 292.2 |
| 155° | 13.1 | 62.4 | 137.9 | 223.3 | 259.4 |
| 157.5° | 13.1 | 55.8 | 118.2 | 187.2 | 226.6 |
| 160° | 13.1 | 52.5 | 101.8 | 154.3 | 193.7 |
| 162.5° | 16.4 | 46.0 | 85.4 | 124.8 | 160.9 |
| 165° | 16.4 | 39.4 | 72.2 | 98.5 | 131.3 |
| 167.5° | 16.4 | 32.8 | 59.1 | 75.5 | 101.8 |
| 170° | 16.4 | 26.3 | 46.0 | 52.5 | 78.8 |
| 172.5° | 16.4 | 19.7 | 32.8 | 36.1 | 39.4 |
| 175° | 16.4 | 16.4 | 19.7 | 19.7 | 9.9 |
| 177.5° | 16.4 | 16.4 | 13.1 | 9.9 | 3.3 |
| 180° | 9.9 | 9.9 | 9.9 | 9.9 | 9.9 |

(END OF REPORT)