

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: P218331

Luminaire Tested: **4SNLED-LD5-44SL-LW-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P218331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-44SL-LW-UNV-L830-CD1-U
Description: LED STRIP LIGHT - SNLED SERIES 4FOOT

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4320.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.3 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

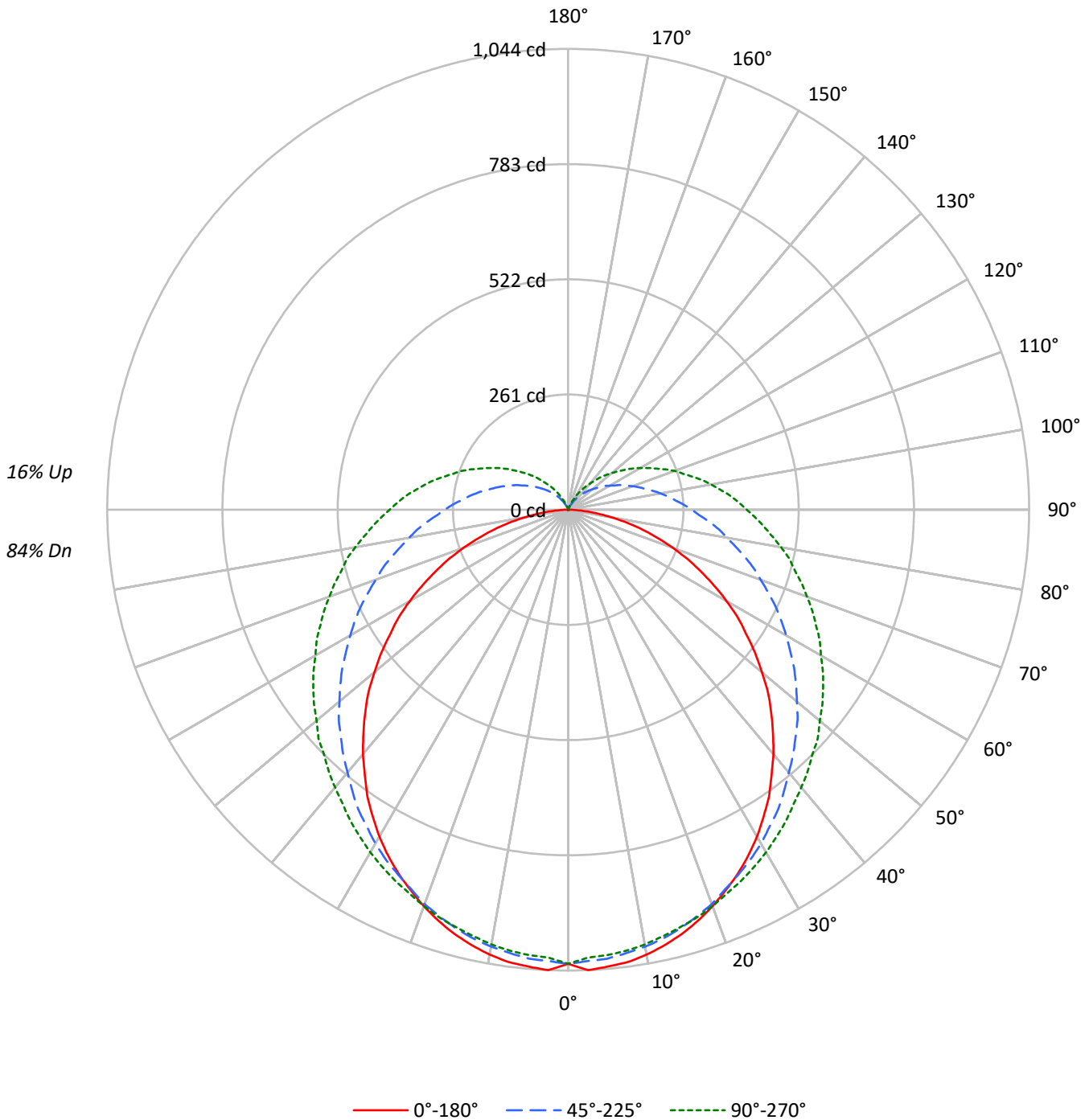
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P218331

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P218331

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L830-CD1-U

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 | 115 | 115 | 115 | 115 | | 111 | 111 | 111 | 111 | | 102 | 102 | 102 | | 95 | 95 | 95 | | 88 | 88 | 88 | 84 | |
| 1 | 102 | 96 | 91 | 86 | | 98 | 93 | 88 | 83 | | 85 | 81 | 78 | | 79 | 76 | 73 | | 73 | 70 | 68 | 65 | |
| 2 | 92 | 83 | 75 | 68 | | 88 | 79 | 72 | 66 | | 73 | 67 | 62 | | 67 | 63 | 58 | | 62 | 58 | 55 | 52 | |
| 3 | 83 | 72 | 63 | 56 | | 79 | 69 | 61 | 54 | | 64 | 57 | 51 | | 59 | 53 | 48 | | 54 | 49 | 45 | 42 | |
| 4 | 76 | 63 | 54 | 46 | | 72 | 61 | 52 | 45 | | 56 | 49 | 43 | | 52 | 46 | 41 | | 48 | 43 | 38 | 36 | |
| 5 | 70 | 56 | 46 | 39 | | 66 | 54 | 45 | 39 | | 50 | 42 | 37 | | 46 | 40 | 35 | | 43 | 37 | 33 | 30 | |
| 6 | 64 | 50 | 41 | 34 | | 61 | 48 | 40 | 33 | | 45 | 37 | 32 | | 42 | 35 | 30 | | 39 | 33 | 29 | 26 | |
| 7 | 59 | 45 | 36 | 30 | | 57 | 44 | 35 | 29 | | 41 | 33 | 28 | | 38 | 31 | 27 | | 35 | 30 | 25 | 23 | |
| 8 | 55 | 41 | 32 | 26 | | 53 | 40 | 32 | 26 | | 37 | 30 | 25 | | 35 | 28 | 24 | | 32 | 27 | 23 | 21 | |
| 9 | 51 | 38 | 29 | 24 | | 49 | 36 | 29 | 23 | | 34 | 27 | 22 | | 32 | 26 | 21 | | 30 | 24 | 20 | 18 | |
| 10 | 48 | 35 | 27 | 21 | | 46 | 34 | 26 | 21 | | 32 | 25 | 20 | | 30 | 24 | 19 | | 28 | 22 | 18 | 17 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16574 | 16574 | 16574 |
| 5° | 16743 | 15512 | 15067 |
| 10° | 16623 | 14557 | 13911 |
| 15° | 16413 | 13680 | 12884 |
| 20° | 16148 | 12857 | 12019 |
| 25° | 15860 | 12069 | 11246 |
| 30° | 15534 | 11398 | 10574 |
| 35° | 15152 | 10760 | 9952 |
| 40° | 14689 | 10103 | 9394 |
| 45° | 14225 | 9553 | 8915 |
| 50° | 13674 | 9027 | 8505 |
| 55° | 13052 | 8548 | 8153 |
| 60° | 12457 | 8071 | 7794 |
| 65° | 11604 | 7659 | 7508 |
| 70° | 10621 | 7226 | 7231 |
| 75° | 9351 | 6883 | 6988 |
| 80° | 7390 | 6547 | 6812 |
| 85° | 4869 | 6306 | 6628 |



TEST NUMBER: P218331

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 97.4 | 2.3 |
| 10°-20° | 278.6 | 6.4 |
| 20°-30° | 423.4 | 9.8 |
| 30°-40° | 518.2 | 12.0 |
| 40°-50° | 559.4 | 12.9 |
| 50°-60° | 549.2 | 12.7 |
| 60°-70° | 494.7 | 11.5 |
| 70°-80° | 409.6 | 9.5 |
| 80°-90° | 315.0 | 7.3 |
| 90°-100° | 237.5 | 5.5 |
| 100°-110° | 174.7 | 4.0 |
| 110°-120° | 120.6 | 2.8 |
| 120°-130° | 76.4 | 1.8 |
| 130°-140° | 42.3 | 1.0 |
| 140°-150° | 18.3 | 0.4 |
| 150°-160° | 4.6 | 0.1 |
| 160°-170° | 0.1 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 799.3 | 18.5 |
| 0°-40° | 1317.5 | 30.5 |
| 0°-60° | 2426.2 | 56.2 |
| 0°-90° | 3645.4 | 84.4 |
| 90°-120° | 532.8 | 12.3 |
| 90°-150° | 669.9 | 15.5 |
| 90°-180° | 675.0 | 15.6 |
| 0°-180° | 4320.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1029 | 1029 | 1029 | 1029 | 1029 | |
| 5° | 1039 | 1034 | 1021 | 1021 | 1013 | 99 |
| 15° | 995 | 992 | 982 | 987 | 979 | 280 |
| 25° | 909 | 909 | 912 | 930 | 928 | 419 |
| 35° | 793 | 801 | 829 | 855 | 860 | 495 |
| 45° | 650 | 679 | 728 | 772 | 782 | 502 |
| 55° | 492 | 547 | 624 | 687 | 705 | 442 |
| 65° | 332 | 407 | 518 | 596 | 619 | 329 |
| 75° | 174 | 277 | 414 | 503 | 531 | 184 |
| 85° | 39 | 171 | 321 | 417 | 446 | 44 |
| 90° | 0 | 132 | 280 | 376 | 404 | 2 |
| 95° | 3 | 104 | 244 | 337 | 368 | 1 |
| 105° | 0 | 65 | 181 | 264 | 290 | 0 |
| 115° | 0 | 42 | 132 | 200 | 220 | 0 |
| 125° | 0 | 26 | 91 | 142 | 158 | 0 |
| 135° | 0 | 16 | 57 | 93 | 104 | 0 |
| 145° | 0 | 5 | 28 | 52 | 57 | 0 |
| 155° | 0 | 3 | 8 | 16 | 18 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P218331

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1028.6 | 1028.6 | 1028.6 | 1028.6 | 1028.6 |
| 2.5° | 1044.1 | 1036.3 | 1023.4 | 1023.4 | 1015.6 |
| 5° | 1038.9 | 1033.7 | 1020.8 | 1020.8 | 1013.0 |
| 7.5° | 1033.7 | 1028.6 | 1013.0 | 1015.6 | 1007.8 |
| 10° | 1023.4 | 1018.2 | 1005.2 | 1007.8 | 1000.1 |
| 12.5° | 1010.4 | 1005.2 | 994.9 | 997.5 | 989.7 |
| 15° | 994.9 | 992.3 | 981.9 | 987.1 | 979.3 |
| 17.5° | 976.7 | 974.2 | 966.4 | 974.2 | 969.0 |
| 20° | 956.0 | 956.0 | 950.8 | 961.2 | 956.0 |
| 22.5° | 932.7 | 932.7 | 930.1 | 945.7 | 940.5 |
| 25° | 909.4 | 909.4 | 912.0 | 930.1 | 927.5 |
| 27.5° | 883.5 | 886.1 | 893.8 | 914.6 | 912.0 |
| 30° | 855.0 | 860.2 | 873.1 | 896.4 | 896.4 |
| 32.5° | 823.9 | 829.1 | 849.8 | 878.3 | 878.3 |
| 35° | 792.8 | 800.6 | 829.1 | 855.0 | 860.2 |
| 37.5° | 756.5 | 769.5 | 803.2 | 834.2 | 839.4 |
| 40° | 722.8 | 741.0 | 777.2 | 813.5 | 821.3 |
| 42.5° | 686.6 | 709.9 | 753.9 | 795.4 | 803.2 |
| 45° | 650.3 | 678.8 | 728.0 | 772.1 | 782.4 |
| 47.5° | 614.0 | 645.1 | 704.7 | 751.3 | 766.9 |
| 50° | 572.6 | 611.4 | 676.2 | 730.6 | 743.6 |
| 52.5° | 533.7 | 577.8 | 650.3 | 707.3 | 725.4 |
| 55° | 492.3 | 546.7 | 624.4 | 686.6 | 704.7 |
| 57.5° | 456.0 | 510.4 | 595.9 | 665.8 | 684.0 |
| 60° | 414.5 | 474.1 | 570.0 | 639.9 | 660.7 |
| 62.5° | 373.1 | 443.0 | 544.1 | 619.2 | 642.5 |
| 65° | 331.6 | 406.8 | 518.2 | 595.9 | 619.2 |
| 67.5° | 292.8 | 373.1 | 489.7 | 572.6 | 598.5 |
| 70° | 251.3 | 339.4 | 463.8 | 549.3 | 575.2 |
| 72.5° | 212.4 | 308.3 | 440.4 | 525.9 | 554.4 |
| 75° | 173.6 | 277.2 | 414.5 | 502.6 | 531.1 |
| 77.5° | 137.3 | 248.7 | 388.6 | 481.9 | 513.0 |
| 80° | 98.5 | 220.2 | 365.3 | 458.6 | 489.7 |
| 82.5° | 67.4 | 194.3 | 344.6 | 437.9 | 466.3 |
| 85° | 38.9 | 171.0 | 321.3 | 417.1 | 445.6 |
| 87.5° | 15.5 | 150.3 | 297.9 | 393.8 | 424.9 |
| 90° | 0.0 | 132.1 | 279.8 | 375.7 | 404.2 |
| 92.5° | 0.0 | 116.6 | 261.7 | 354.9 | 386.0 |
| 95° | 2.6 | 103.6 | 243.5 | 336.8 | 367.9 |
| 97.5° | 0.0 | 90.7 | 228.0 | 318.7 | 347.2 |
| 100° | 0.0 | 82.9 | 212.4 | 300.5 | 329.0 |
| 102.5° | 0.0 | 72.5 | 196.9 | 282.4 | 310.9 |
| 105° | 0.0 | 64.8 | 181.4 | 264.3 | 290.2 |
| 107.5° | 0.0 | 59.6 | 168.4 | 248.7 | 272.0 |
| 110° | 0.0 | 51.8 | 155.4 | 233.2 | 256.5 |



TEST NUMBER: P218331

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 0.0 | 46.6 | 142.5 | 215.0 | 238.4 |
| 115° | 0.0 | 41.5 | 132.1 | 199.5 | 220.2 |
| 117.5° | 0.0 | 38.9 | 119.2 | 183.9 | 204.7 |
| 120° | 0.0 | 33.7 | 108.8 | 171.0 | 189.1 |
| 122.5° | 0.0 | 31.1 | 101.0 | 155.4 | 173.6 |
| 125° | 0.0 | 25.9 | 90.7 | 142.5 | 158.0 |
| 127.5° | 0.0 | 23.3 | 80.3 | 129.5 | 142.5 |
| 130° | 0.0 | 20.7 | 72.5 | 116.6 | 129.5 |
| 132.5° | 0.0 | 18.1 | 64.8 | 103.6 | 116.6 |
| 135° | 0.0 | 15.5 | 57.0 | 93.3 | 103.6 |
| 137.5° | 0.0 | 13.0 | 49.2 | 80.3 | 90.7 |
| 140° | 0.0 | 10.4 | 41.5 | 70.0 | 77.7 |
| 142.5° | 0.0 | 7.8 | 36.3 | 59.6 | 67.4 |
| 145° | 0.0 | 5.2 | 28.5 | 51.8 | 57.0 |
| 147.5° | 0.0 | 5.2 | 23.3 | 41.5 | 46.6 |
| 150° | 0.0 | 2.6 | 15.5 | 33.7 | 36.3 |
| 152.5° | 0.0 | 2.6 | 13.0 | 25.9 | 25.9 |
| 155° | 0.0 | 2.6 | 7.8 | 15.5 | 18.1 |
| 157.5° | 0.0 | 0.0 | 5.2 | 10.4 | 10.4 |
| 160° | 0.0 | 0.0 | 2.6 | 5.2 | 7.8 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)