

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: P218319

Luminaire Tested: **4SNLED-LD5-37SL-LW-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P218319
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-LD5-37SL-LW-UNV-L830-CD1-U
Description: LED STRIP LIGHT - SNLED SERIES 4FOOT

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3582.0 lumens
Efficiency: N/A
Efficacy: 117.1 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

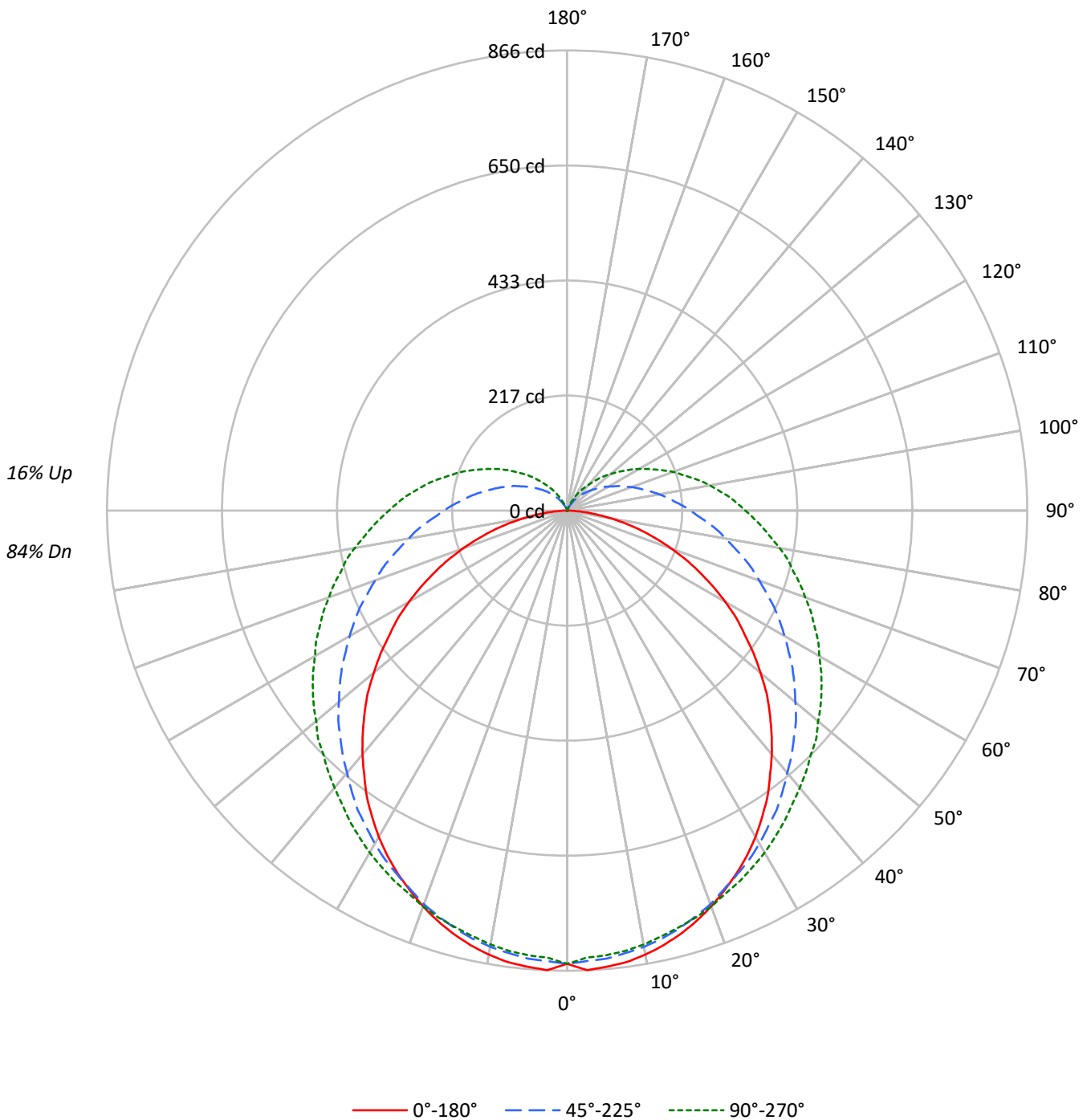
Input Watts (W): 30.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P218319

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P218319

CATALOG NUMBER: 4SNLED-LD5-37SL-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 | 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 | 64 | | | | |
| 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° | 13742 | 13742 | 13742 |
| 5° | 13883 | 12862 | 12494 |
| 10° | 13784 | 12070 | 11534 |
| 15° | 13609 | 11344 | 10683 |
| 20° | 13390 | 10661 | 9966 |
| 25° | 13150 | 10007 | 9326 |
| 30° | 12880 | 9451 | 8768 |
| 35° | 12564 | 8921 | 8252 |
| 40° | 12182 | 8378 | 7789 |
| 45° | 11795 | 7922 | 7392 |
| 50° | 11338 | 7485 | 7051 |
| 55° | 10822 | 7088 | 6760 |
| 60° | 10330 | 6692 | 6462 |
| 65° | 9624 | 6350 | 6225 |
| 70° | 8808 | 5991 | 5996 |
| 75° | 7751 | 5708 | 5794 |
| 80° | 6122 | 5429 | 5647 |
| 85° | 4030 | 5229 | 5496 |



TEST NUMBER: P218319

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.8 | 2.3 |
| 10°-20° | 231.0 | 6.4 |
| 20°-30° | 351.1 | 9.8 |
| 30°-40° | 429.6 | 12.0 |
| 40°-50° | 463.9 | 12.9 |
| 50°-60° | 455.4 | 12.7 |
| 60°-70° | 410.1 | 11.4 |
| 70°-80° | 339.6 | 9.5 |
| 80°-90° | 261.2 | 7.3 |
| 90°-100° | 196.9 | 5.5 |
| 100°-110° | 144.9 | 4.0 |
| 110°-120° | 100.0 | 2.8 |
| 120°-130° | 63.4 | 1.8 |
| 130°-140° | 35.1 | 1.0 |
| 140°-150° | 15.2 | 0.4 |
| 150°-160° | 3.8 | 0.1 |
| 160°-170° | 0.1 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 662.8 | 18.5 |
| 0°-40° | 1092.4 | 30.5 |
| 0°-60° | 2011.7 | 56.2 |
| 0°-90° | 3022.7 | 84.4 |
| 90°-120° | 441.8 | 12.3 |
| 90°-150° | 555.4 | 15.5 |
| 90°-180° | 559.0 | 15.6 |
| 0°-180° | 3582.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 853 | 853 | 853 | 853 | 853 | |
| 5° | 861 | 857 | 846 | 846 | 840 | 82 |
| 15° | 825 | 823 | 814 | 818 | 812 | 233 |
| 25° | 754 | 754 | 756 | 771 | 769 | 347 |
| 35° | 657 | 664 | 687 | 709 | 713 | 410 |
| 45° | 539 | 563 | 604 | 640 | 649 | 416 |
| 55° | 408 | 453 | 518 | 569 | 584 | 366 |
| 65° | 275 | 337 | 430 | 494 | 513 | 273 |
| 75° | 144 | 230 | 344 | 417 | 440 | 153 |
| 85° | 32 | 142 | 266 | 346 | 370 | 37 |
| 90° | 0 | 110 | 232 | 312 | 335 | 2 |
| 95° | 2 | 86 | 202 | 279 | 305 | 1 |
| 105° | 0 | 54 | 150 | 219 | 241 | 0 |
| 115° | 0 | 34 | 110 | 165 | 183 | 0 |
| 125° | 0 | 22 | 75 | 118 | 131 | 0 |
| 135° | 0 | 13 | 47 | 77 | 86 | 0 |
| 145° | 0 | 4 | 24 | 43 | 47 | 0 |
| 155° | 0 | 2 | 6 | 13 | 15 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P218319

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 852.8 | 852.8 | 852.8 | 852.8 | 852.8 |
| 2.5° | 865.7 | 859.3 | 848.6 | 848.6 | 842.1 |
| 5° | 861.4 | 857.1 | 846.4 | 846.4 | 840.0 |
| 7.5° | 857.1 | 852.8 | 840.0 | 842.1 | 835.7 |
| 10° | 848.6 | 844.3 | 833.5 | 835.7 | 829.2 |
| 12.5° | 837.8 | 833.5 | 824.9 | 827.1 | 820.6 |
| 15° | 824.9 | 822.8 | 814.2 | 818.5 | 812.0 |
| 17.5° | 809.9 | 807.7 | 801.3 | 807.7 | 803.4 |
| 20° | 792.7 | 792.7 | 788.4 | 797.0 | 792.7 |
| 22.5° | 773.4 | 773.4 | 771.2 | 784.1 | 779.8 |
| 25° | 754.0 | 754.0 | 756.2 | 771.2 | 769.1 |
| 27.5° | 732.5 | 734.7 | 741.1 | 758.3 | 756.2 |
| 30° | 708.9 | 713.2 | 724.0 | 743.3 | 743.3 |
| 32.5° | 683.1 | 687.4 | 704.6 | 728.3 | 728.3 |
| 35° | 657.4 | 663.8 | 687.4 | 708.9 | 713.2 |
| 37.5° | 627.3 | 638.0 | 666.0 | 691.7 | 696.0 |
| 40° | 599.4 | 614.4 | 644.5 | 674.5 | 681.0 |
| 42.5° | 569.3 | 588.6 | 625.1 | 659.5 | 666.0 |
| 45° | 539.2 | 562.8 | 603.7 | 640.2 | 648.8 |
| 47.5° | 509.1 | 534.9 | 584.3 | 623.0 | 635.9 |
| 50° | 474.8 | 507.0 | 560.7 | 605.8 | 616.5 |
| 52.5° | 442.5 | 479.1 | 539.2 | 586.5 | 601.5 |
| 55° | 408.2 | 453.3 | 517.7 | 569.3 | 584.3 |
| 57.5° | 378.1 | 423.2 | 494.1 | 552.1 | 567.1 |
| 60° | 343.7 | 393.1 | 472.6 | 530.6 | 547.8 |
| 62.5° | 309.3 | 367.3 | 451.1 | 513.4 | 532.8 |
| 65° | 275.0 | 337.3 | 429.6 | 494.1 | 513.4 |
| 67.5° | 242.8 | 309.3 | 406.0 | 474.8 | 496.2 |
| 70° | 208.4 | 281.4 | 384.5 | 455.4 | 476.9 |
| 72.5° | 176.2 | 255.6 | 365.2 | 436.1 | 459.7 |
| 75° | 143.9 | 229.9 | 343.7 | 416.8 | 440.4 |
| 77.5° | 113.9 | 206.2 | 322.2 | 399.6 | 425.3 |
| 80° | 81.6 | 182.6 | 302.9 | 380.2 | 406.0 |
| 82.5° | 55.9 | 161.1 | 285.7 | 363.1 | 386.7 |
| 85° | 32.2 | 141.8 | 266.4 | 345.9 | 369.5 |
| 87.5° | 12.9 | 124.6 | 247.0 | 326.5 | 352.3 |
| 90° | 0.0 | 109.6 | 232.0 | 311.5 | 335.1 |
| 92.5° | 0.0 | 96.7 | 217.0 | 294.3 | 320.1 |
| 95° | 2.1 | 85.9 | 201.9 | 279.3 | 305.0 |
| 97.5° | 0.0 | 75.2 | 189.0 | 264.2 | 287.9 |
| 100° | 0.0 | 68.7 | 176.2 | 249.2 | 272.8 |
| 102.5° | 0.0 | 60.2 | 163.3 | 234.2 | 257.8 |
| 105° | 0.0 | 53.7 | 150.4 | 219.1 | 240.6 |
| 107.5° | 0.0 | 49.4 | 139.6 | 206.2 | 225.6 |
| 110° | 0.0 | 43.0 | 128.9 | 193.3 | 212.7 |



TEST NUMBER: P218319

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 0.0 | 38.7 | 118.2 | 178.3 | 197.6 |
| 115° | 0.0 | 34.4 | 109.6 | 165.4 | 182.6 |
| 117.5° | 0.0 | 32.2 | 98.8 | 152.5 | 169.7 |
| 120° | 0.0 | 27.9 | 90.2 | 141.8 | 156.8 |
| 122.5° | 0.0 | 25.8 | 83.8 | 128.9 | 143.9 |
| 125° | 0.0 | 21.5 | 75.2 | 118.2 | 131.0 |
| 127.5° | 0.0 | 19.3 | 66.6 | 107.4 | 118.2 |
| 130° | 0.0 | 17.2 | 60.2 | 96.7 | 107.4 |
| 132.5° | 0.0 | 15.0 | 53.7 | 85.9 | 96.7 |
| 135° | 0.0 | 12.9 | 47.3 | 77.3 | 85.9 |
| 137.5° | 0.0 | 10.7 | 40.8 | 66.6 | 75.2 |
| 140° | 0.0 | 8.6 | 34.4 | 58.0 | 64.4 |
| 142.5° | 0.0 | 6.4 | 30.1 | 49.4 | 55.9 |
| 145° | 0.0 | 4.3 | 23.6 | 43.0 | 47.3 |
| 147.5° | 0.0 | 4.3 | 19.3 | 34.4 | 38.7 |
| 150° | 0.0 | 2.1 | 12.9 | 27.9 | 30.1 |
| 152.5° | 0.0 | 2.1 | 10.7 | 21.5 | 21.5 |
| 155° | 0.0 | 2.1 | 6.4 | 12.9 | 15.0 |
| 157.5° | 0.0 | 0.0 | 4.3 | 8.6 | 8.6 |
| 160° | 0.0 | 0.0 | 2.1 | 4.3 | 6.4 |
| 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)