

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: P#

Luminaire Tested: **2SNLED-LD5-18SL-SLN-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SNLED-LD5-18SL-SLN-UNV-L830-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

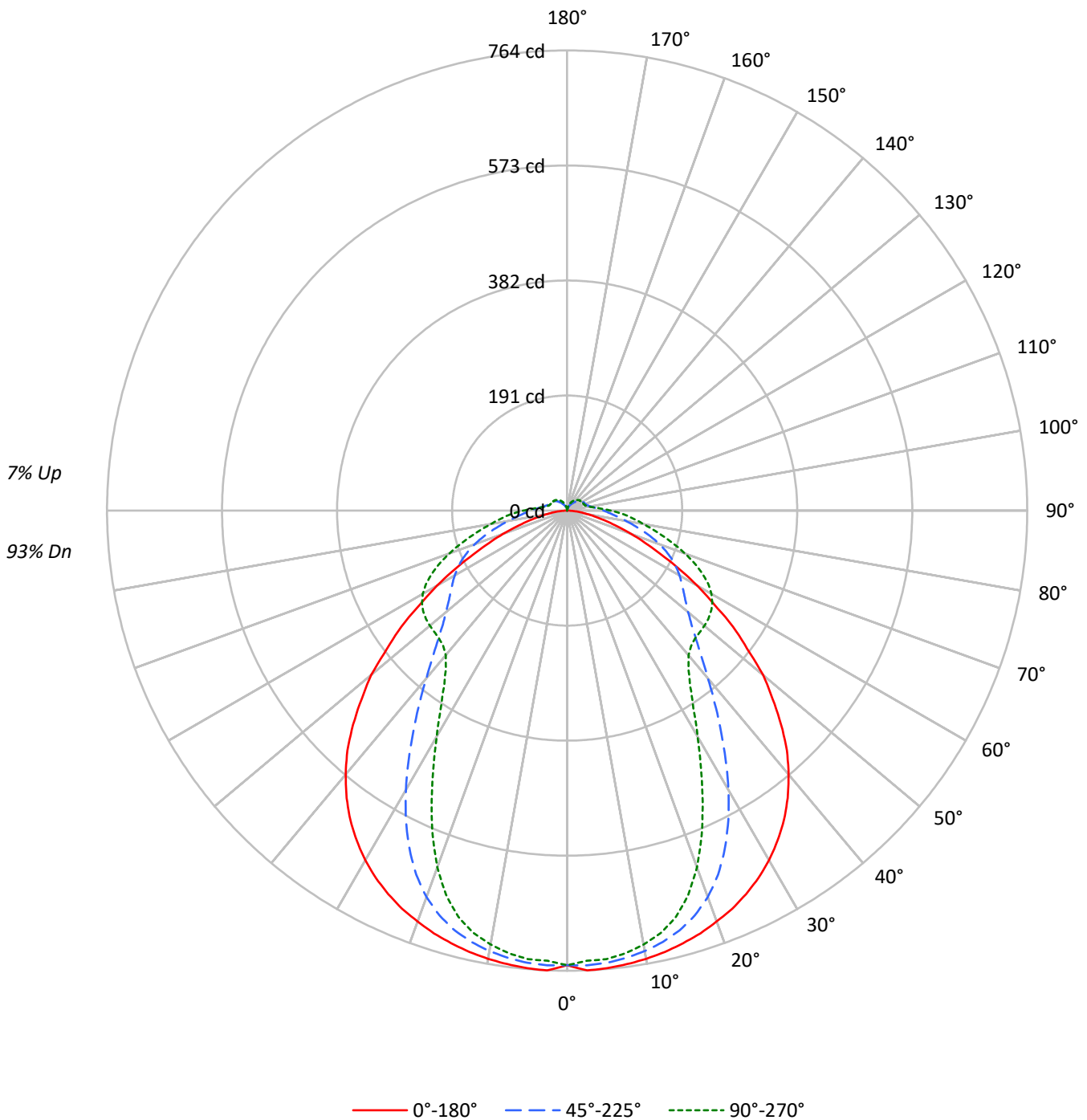
Lumens per Lamp: N/A
Luminaire Lumens: 1898.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 14
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



TEST NUMBER: P#
CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-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 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1 | 107 | 102 | 97 | 93 | 103 | 99 | 94 | 91 | 93 | 90 | 87 | 88 | 85 | 83 | 83 | 81 | 79 | 76 |
| 2 | 97 | 89 | 82 | 76 | 94 | 86 | 80 | 75 | 81 | 76 | 72 | 77 | 73 | 69 | 73 | 70 | 66 | 64 |
| 3 | 89 | 78 | 70 | 64 | 86 | 76 | 69 | 63 | 72 | 66 | 61 | 68 | 63 | 59 | 65 | 61 | 57 | 54 |
| 4 | 82 | 70 | 61 | 55 | 79 | 68 | 60 | 54 | 65 | 58 | 52 | 61 | 55 | 51 | 58 | 53 | 49 | 47 |
| 5 | 75 | 63 | 54 | 47 | 73 | 61 | 53 | 47 | 58 | 51 | 46 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 6 | 70 | 57 | 48 | 42 | 67 | 55 | 47 | 41 | 53 | 46 | 40 | 51 | 44 | 39 | 48 | 43 | 39 | 36 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 37 | 48 | 41 | 36 | 46 | 40 | 35 | 44 | 39 | 35 | 32 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 39 | 33 | 44 | 37 | 32 | 43 | 36 | 32 | 41 | 35 | 31 | 29 |
| 9 | 57 | 44 | 36 | 30 | 55 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 33 | 29 | 38 | 33 | 28 | 27 |
| 10 | 53 | 40 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 35 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12197 | 12197 | 12197 |
| 5° | 12305 | 11905 | 11742 |
| 10° | 12267 | 11556 | 11258 |
| 15° | 12237 | 11149 | 10616 |
| 20° | 12207 | 10556 | 9535 |
| 25° | 12175 | 9655 | 8074 |
| 30° | 12075 | 8480 | 6641 |
| 35° | 11862 | 7201 | 5565 |
| 40° | 11467 | 6086 | 5032 |
| 45° | 10810 | 5278 | 4992 |
| 50° | 9931 | 4814 | 5168 |
| 55° | 8689 | 4615 | 5349 |
| 60° | 7271 | 4534 | 5422 |
| 65° | 5783 | 4417 | 5254 |
| 70° | 4577 | 4170 | 4846 |
| 75° | 3372 | 3754 | 4299 |
| 80° | 2391 | 3347 | 3825 |
| 85° | 1449 | 3121 | 3519 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 71.4 | 3.8 |
| 10°-20° | 201.8 | 10.6 |
| 20°-30° | 282.1 | 14.9 |
| 30°-40° | 292.6 | 15.4 |
| 40°-50° | 270.3 | 14.2 |
| 50°-60° | 241.4 | 12.7 |
| 60°-70° | 195.6 | 10.3 |
| 70°-80° | 130.1 | 6.9 |
| 80°-90° | 74.5 | 3.9 |
| 90°-100° | 41.2 | 2.2 |
| 100°-110° | 27.9 | 1.5 |
| 110°-120° | 23.2 | 1.2 |
| 120°-130° | 18.9 | 1.0 |
| 130°-140° | 13.6 | 0.7 |
| 140°-150° | 8.2 | 0.4 |
| 150°-160° | 4.0 | 0.2 |
| 160°-170° | 1.0 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 555.3 | 29.3 |
| 0°-40° | 848.0 | 44.7 |
| 0°-60° | 1359.7 | 71.6 |
| 0°-90° | 1759.9 | 92.7 |
| 90°-120° | 92.4 | 4.9 |
| 90°-150° | 133.1 | 7.0 |
| 90°-180° | 138.0 | 7.3 |
| 0°-180° | 1898.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 755 | 755 | 755 | 755 | 755 | |
| 5° | 763 | 750 | 754 | 748 | 748 | 73 |
| 15° | 744 | 728 | 722 | 705 | 698 | 210 |
| 25° | 703 | 671 | 620 | 555 | 532 | 324 |
| 35° | 628 | 559 | 444 | 373 | 356 | 391 |
| 45° | 502 | 398 | 302 | 292 | 300 | 386 |
| 55° | 336 | 254 | 236 | 274 | 292 | 299 |
| 65° | 172 | 154 | 192 | 236 | 248 | 173 |
| 75° | 67 | 83 | 130 | 159 | 165 | 73 |
| 85° | 13 | 39 | 76 | 98 | 100 | 15 |
| 90° | 1 | 27 | 60 | 73 | 72 | 1 |
| 95° | 1 | 23 | 48 | 51 | 50 | 1 |
| 105° | 0 | 20 | 34 | 34 | 32 | 0 |
| 115° | 0 | 18 | 30 | 30 | 29 | 0 |
| 125° | 0 | 15 | 27 | 28 | 28 | 0 |
| 135° | 1 | 12 | 21 | 25 | 25 | 1 |
| 145° | 1 | 7 | 15 | 19 | 21 | 0 |
| 155° | 1 | 5 | 9 | 12 | 15 | 0 |
| 165° | 1 | 3 | 5 | 6 | 8 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 754.7 | 754.7 | 754.7 | 754.7 | 754.7 |
| 2.5° | 764.2 | 751.8 | 755.7 | 752.4 | 748.2 |
| 5° | 762.6 | 749.8 | 753.7 | 748.5 | 747.5 |
| 7.5° | 759.6 | 746.8 | 749.1 | 742.9 | 741.3 |
| 10° | 755.7 | 742.3 | 742.6 | 733.7 | 731.4 |
| 12.5° | 750.5 | 735.7 | 733.7 | 721.6 | 718.3 |
| 15° | 743.6 | 727.8 | 721.6 | 705.2 | 698.3 |
| 17.5° | 736.0 | 717.7 | 704.9 | 679.6 | 668.8 |
| 20° | 725.9 | 705.2 | 682.9 | 644.5 | 630.1 |
| 22.5° | 715.7 | 690.1 | 654.4 | 603.2 | 583.8 |
| 25° | 702.6 | 671.4 | 619.6 | 554.6 | 532.0 |
| 27.5° | 687.8 | 649.4 | 579.6 | 504.8 | 480.5 |
| 30° | 670.4 | 622.9 | 535.6 | 455.9 | 433.0 |
| 32.5° | 650.1 | 593.0 | 489.4 | 412.0 | 390.6 |
| 35° | 627.5 | 558.6 | 444.1 | 372.9 | 356.2 |
| 37.5° | 601.5 | 520.9 | 402.1 | 341.4 | 330.6 |
| 40° | 572.0 | 479.9 | 363.4 | 317.2 | 313.6 |
| 42.5° | 540.2 | 439.8 | 330.3 | 301.4 | 304.7 |
| 45° | 502.5 | 398.2 | 302.4 | 291.6 | 300.4 |
| 47.5° | 462.8 | 357.5 | 279.8 | 286.0 | 298.8 |
| 50° | 424.4 | 319.8 | 262.1 | 282.4 | 297.5 |
| 52.5° | 376.9 | 286.0 | 248.0 | 279.1 | 295.5 |
| 55° | 335.9 | 253.9 | 236.2 | 274.5 | 291.6 |
| 57.5° | 288.6 | 225.0 | 225.7 | 268.6 | 285.7 |
| 60° | 249.3 | 198.8 | 215.5 | 260.4 | 276.8 |
| 62.5° | 209.3 | 175.2 | 204.3 | 249.6 | 264.4 |
| 65° | 171.5 | 153.5 | 192.2 | 235.5 | 248.0 |
| 67.5° | 140.1 | 133.8 | 178.4 | 218.4 | 228.9 |
| 70° | 113.5 | 115.8 | 163.3 | 199.4 | 208.3 |
| 72.5° | 87.2 | 99.1 | 146.9 | 179.1 | 186.6 |
| 75° | 66.6 | 83.3 | 129.6 | 158.8 | 165.3 |
| 77.5° | 49.2 | 69.5 | 113.8 | 140.4 | 146.0 |
| 80° | 34.8 | 57.4 | 99.1 | 124.3 | 128.6 |
| 82.5° | 23.3 | 47.2 | 86.9 | 109.9 | 113.8 |
| 85° | 13.4 | 38.7 | 76.4 | 97.7 | 100.4 |
| 87.5° | 5.6 | 32.1 | 67.9 | 85.3 | 86.6 |
| 90° | 0.7 | 27.2 | 60.4 | 72.8 | 72.2 |
| 92.5° | 0.7 | 24.6 | 53.8 | 61.0 | 59.4 |
| 95° | 0.7 | 23.0 | 47.9 | 51.2 | 49.5 |
| 97.5° | 0.7 | 22.0 | 42.6 | 44.0 | 42.3 |
| 100° | 0.3 | 21.3 | 39.0 | 39.0 | 37.4 |
| 102.5° | 0.3 | 20.7 | 36.4 | 35.4 | 34.1 |
| 105° | 0.3 | 20.0 | 34.4 | 33.5 | 31.8 |
| 107.5° | 0.3 | 19.7 | 33.1 | 32.1 | 30.5 |
| 110° | 0.3 | 19.0 | 32.1 | 31.2 | 29.8 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.3 | 18.7 | 31.5 | 30.8 | 29.2 |
| 115° | 0.3 | 18.0 | 30.5 | 30.2 | 29.2 |
| 117.5° | 0.3 | 17.4 | 29.8 | 29.8 | 28.9 |
| 120° | 0.3 | 16.7 | 28.9 | 29.5 | 28.5 |
| 122.5° | 0.3 | 16.1 | 27.9 | 28.9 | 27.9 |
| 125° | 0.3 | 15.4 | 26.9 | 28.2 | 27.6 |
| 127.5° | 0.7 | 14.4 | 25.6 | 27.6 | 26.9 |
| 130° | 0.3 | 13.4 | 24.3 | 26.9 | 26.6 |
| 132.5° | 0.7 | 12.5 | 23.0 | 25.9 | 25.9 |
| 135° | 0.7 | 11.5 | 21.3 | 24.9 | 24.9 |
| 137.5° | 0.7 | 10.2 | 19.7 | 23.6 | 23.9 |
| 140° | 0.7 | 9.2 | 18.0 | 22.3 | 23.0 |
| 142.5° | 0.7 | 8.2 | 16.4 | 21.0 | 22.0 |
| 145° | 0.7 | 7.2 | 14.8 | 19.4 | 20.7 |
| 147.5° | 0.7 | 6.6 | 13.1 | 17.4 | 19.4 |
| 150° | 0.7 | 5.6 | 11.8 | 15.7 | 17.7 |
| 152.5° | 0.7 | 4.9 | 10.5 | 14.1 | 16.4 |
| 155° | 0.7 | 4.6 | 9.2 | 12.1 | 14.8 |
| 157.5° | 0.7 | 3.9 | 7.9 | 10.5 | 13.1 |
| 160° | 0.7 | 3.3 | 6.6 | 9.2 | 11.2 |
| 162.5° | 0.7 | 3.0 | 5.6 | 7.5 | 9.8 |
| 165° | 0.7 | 2.6 | 4.6 | 5.9 | 7.9 |
| 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)