

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: P218403

Luminaire Tested: **2SNLED-LD5-23SL-RM-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P218403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35688)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SNLED-LD5-23SL-RM-UNV-L830-CD1-U
Description: LED STRIP LIGHT - SNLED SERIES 2FOOT

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2195.1 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.46 / 0.67
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 2' x H: 0.17')
CIE Type: Direct

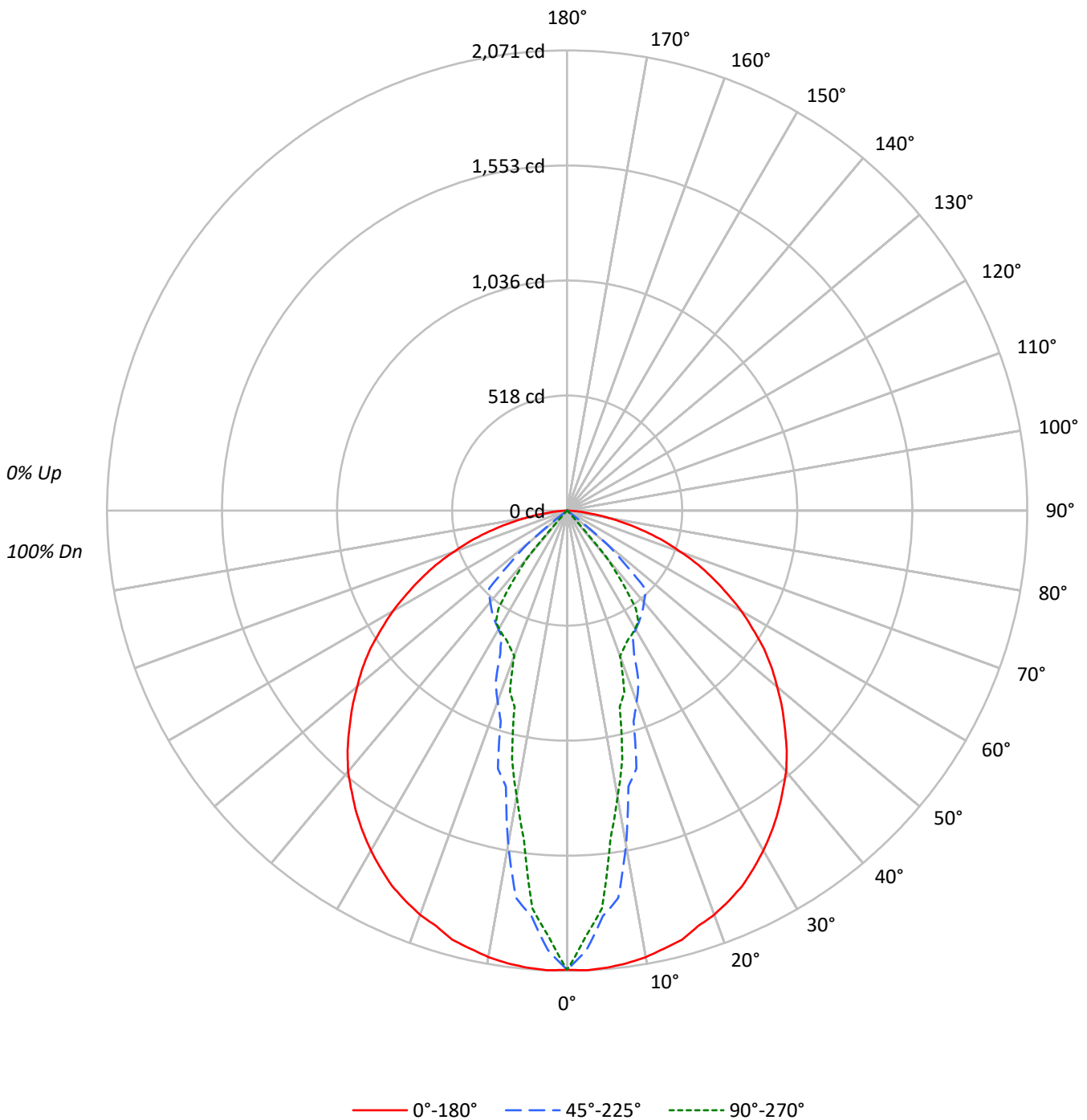
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P218403

CATALOG NUMBER: 2SNLED-LD5-23SL-RM-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P218403

CATALOG NUMBER: 2SNLED-LD5-23SL-RM-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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 92 | 91 | 89 | | | | 89 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 75 | 84 | 78 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | | 70 |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | | | | 62 |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 56 | | | | 56 |
| 6 | 78 | 67 | 60 | 54 | 77 | 66 | 59 | 54 | 65 | 58 | 54 | 63 | 57 | 53 | 62 | 57 | 53 | 51 | | | | 51 |
| 7 | 74 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 | | | | 46 |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 49 | 45 | 54 | 49 | 44 | 53 | 48 | 44 | 43 | | | | 43 |
| 9 | 65 | 54 | 46 | 42 | 64 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 | | | | 39 |
| 10 | 62 | 50 | 43 | 38 | 60 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 66604 | 66604 | 66604 |
| 5° | 66306 | 55582 | 53463 |
| 10° | 65796 | 43983 | 36362 |
| 15° | 65229 | 33273 | 24064 |
| 20° | 64408 | 24498 | 17500 |
| 25° | 63801 | 18677 | 15617 |
| 30° | 62713 | 15932 | 14443 |
| 35° | 61519 | 14833 | 12472 |
| 40° | 60274 | 13774 | 6261 |
| 45° | 58284 | 12787 | 25 |
| 50° | 56265 | 6062 | 0 |
| 55° | 54216 | 199 | 0 |
| 60° | 51017 | 147 | 0 |
| 65° | 46935 | 61 | 0 |
| 70° | 41633 | 33 | 0 |
| 75° | 34442 | 35 | 29 |
| 80° | 23514 | 38 | 31 |
| 85° | 10236 | 42 | 33 |



TEST NUMBER: P218403

CATALOG NUMBER: 2SNLED-LD5-23SL-RM-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 170.6 | 7.8 |
| 10°-20° | 367.7 | 16.8 |
| 20°-30° | 438.6 | 20.0 |
| 30°-40° | 466.7 | 21.3 |
| 40°-50° | 341.0 | 15.5 |
| 50°-60° | 217.8 | 9.9 |
| 60°-70° | 131.1 | 6.0 |
| 70°-80° | 51.1 | 2.3 |
| 80°-90° | 10.4 | 0.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 976.9 | 44.5 |
| 0°-40° | 1443.6 | 65.8 |
| 0°-60° | 2002.4 | 91.2 |
| 0°-90° | 2195.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2195.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2067 | 2067 | 2067 | 2067 | 2067 | |
| 5° | 2065 | 1964 | 1833 | 1800 | 1797 | 196 |
| 15° | 1999 | 1705 | 1202 | 937 | 914 | 563 |
| 25° | 1864 | 1188 | 713 | 649 | 644 | 858 |
| 35° | 1655 | 785 | 579 | 579 | 539 | 1035 |
| 45° | 1386 | 508 | 496 | 2 | 1 | 1070 |
| 55° | 1080 | 401 | 7 | 1 | 0 | 961 |
| 65° | 726 | 163 | 2 | 1 | 0 | 718 |
| 75° | 363 | 8 | 1 | 1 | 1 | 383 |
| 85° | 54 | 1 | 1 | 1 | 1 | 75 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P218403

CATALOG NUMBER: 2SNLED-LD5-23SL-RM-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2066.7 | 2066.7 | 2066.7 | 2066.7 | 2066.7 |
| 2.5° | 2070.9 | 2057.2 | 1980.8 | 1948.9 | 1918.2 |
| 5° | 2064.6 | 1963.8 | 1833.3 | 1800.4 | 1797.2 |
| 7.5° | 2055.0 | 1869.4 | 1759.0 | 1570.2 | 1490.6 |
| 10° | 2040.2 | 1807.8 | 1525.6 | 1366.5 | 1307.1 |
| 12.5° | 2019.0 | 1716.6 | 1272.1 | 1180.8 | 1145.8 |
| 15° | 1998.8 | 1704.9 | 1202.0 | 936.8 | 914.5 |
| 17.5° | 1960.6 | 1467.3 | 993.0 | 880.6 | 855.1 |
| 20° | 1935.1 | 1359.1 | 913.5 | 763.9 | 696.0 |
| 22.5° | 1901.2 | 1295.4 | 840.3 | 694.9 | 668.4 |
| 25° | 1864.1 | 1188.2 | 712.9 | 649.3 | 644.0 |
| 27.5° | 1816.3 | 1045.0 | 638.7 | 632.3 | 630.2 |
| 30° | 1766.5 | 886.9 | 617.5 | 615.3 | 612.2 |
| 32.5° | 1712.3 | 824.3 | 598.4 | 598.4 | 595.2 |
| 35° | 1655.1 | 785.1 | 579.3 | 579.3 | 539.0 |
| 37.5° | 1593.5 | 735.2 | 560.2 | 560.2 | 405.3 |
| 40° | 1533.1 | 630.2 | 537.9 | 373.4 | 273.7 |
| 42.5° | 1463.0 | 544.3 | 518.8 | 261.0 | 2.1 |
| 45° | 1385.6 | 508.2 | 495.5 | 2.1 | 1.1 |
| 47.5° | 1312.4 | 482.7 | 337.4 | 1.1 | 0.0 |
| 50° | 1233.9 | 455.1 | 231.3 | 1.1 | 0.0 |
| 52.5° | 1159.6 | 429.7 | 10.6 | 1.1 | 0.0 |
| 55° | 1080.0 | 401.0 | 7.4 | 1.1 | 0.0 |
| 57.5° | 989.9 | 373.4 | 6.4 | 1.1 | 0.0 |
| 60° | 906.0 | 343.7 | 5.3 | 1.1 | 0.0 |
| 62.5° | 813.7 | 291.8 | 3.2 | 1.1 | 0.0 |
| 65° | 725.7 | 163.4 | 2.1 | 1.1 | 0.0 |
| 67.5° | 638.7 | 26.5 | 2.1 | 1.1 | 0.0 |
| 70° | 543.2 | 18.0 | 1.1 | 1.1 | 0.0 |
| 72.5° | 455.1 | 13.8 | 1.1 | 1.1 | 1.1 |
| 75° | 362.8 | 8.5 | 1.1 | 1.1 | 1.1 |
| 77.5° | 271.6 | 5.3 | 1.1 | 1.1 | 1.1 |
| 80° | 186.7 | 3.2 | 1.1 | 1.1 | 1.1 |
| 82.5° | 112.5 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 54.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 87.5° | 17.0 | 1.1 | 1.1 | 1.1 | 1.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)