

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: P218071

Luminaire Tested: **4SNLED-LD5-34SL-LC-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P218071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35685)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-34SL-LC-UNV-L830-CD1-U
Description: LED STRIP LIGHT - SNLED SERIES 4FOOT

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3358.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.59 / 1.17 / 1.18
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.17')
CIE Type: Direct

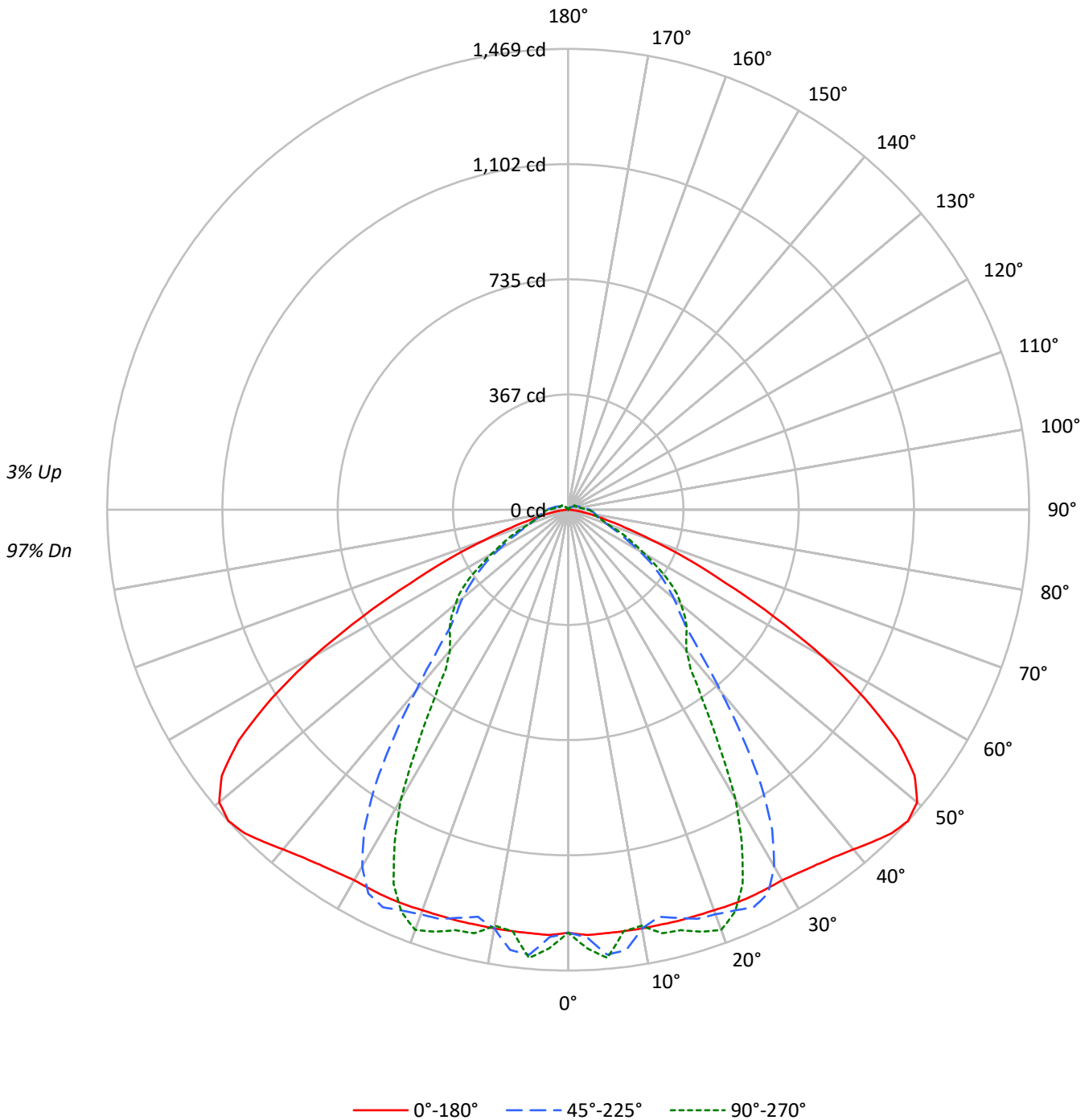
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P218071

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P218071

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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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 97 |
| 1 | 109 | 105 | 101 | 98 | 106 | 102 | 99 | 96 | 97 | 95 | 92 | 93 | 91 | 89 | 89 | 87 | 85 | 83 |
| 2 | 100 | 93 | 87 | 82 | 98 | 91 | 85 | 81 | 87 | 82 | 78 | 83 | 79 | 76 | 80 | 77 | 74 | 72 |
| 3 | 93 | 83 | 76 | 70 | 90 | 81 | 75 | 69 | 78 | 72 | 67 | 75 | 70 | 66 | 72 | 68 | 64 | 62 |
| 4 | 85 | 75 | 67 | 60 | 83 | 73 | 66 | 60 | 70 | 64 | 59 | 68 | 62 | 58 | 65 | 60 | 57 | 54 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 53 | 64 | 57 | 52 | 61 | 55 | 51 | 59 | 54 | 50 | 48 |
| 6 | 73 | 61 | 53 | 47 | 71 | 60 | 52 | 47 | 58 | 51 | 46 | 56 | 50 | 45 | 54 | 49 | 45 | 43 |
| 7 | 68 | 56 | 48 | 42 | 66 | 55 | 47 | 42 | 53 | 46 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 38 |
| 8 | 64 | 51 | 43 | 38 | 62 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 46 | 40 | 36 | 34 |
| 9 | 60 | 47 | 39 | 34 | 58 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 21728 | 21728 | 21728 |
| 5° | 21842 | 21639 | 21334 |
| 10° | 22014 | 19626 | 18732 |
| 15° | 22387 | 18762 | 18260 |
| 20° | 22950 | 18559 | 17924 |
| 25° | 23786 | 18503 | 15954 |
| 30° | 24780 | 17133 | 12563 |
| 35° | 26396 | 13911 | 8705 |
| 40° | 28730 | 9825 | 6699 |
| 45° | 31902 | 6987 | 6087 |
| 50° | 34662 | 5870 | 5363 |
| 55° | 33973 | 4820 | 4472 |
| 60° | 28188 | 3649 | 3343 |
| 65° | 19475 | 2640 | 2458 |
| 70° | 12126 | 2007 | 1685 |
| 75° | 6846 | 1712 | 1333 |
| 80° | 3864 | 1600 | 1148 |
| 85° | 1715 | 1551 | 1150 |



TEST NUMBER: P218071

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.5 | 3.9 |
| 10°-20° | 390.4 | 11.6 |
| 20°-30° | 620.3 | 18.5 |
| 30°-40° | 668.8 | 19.9 |
| 40°-50° | 576.4 | 17.2 |
| 50°-60° | 436.4 | 13.0 |
| 60°-70° | 235.8 | 7.0 |
| 70°-80° | 112.0 | 3.3 |
| 80°-90° | 70.3 | 2.1 |
| 90°-100° | 44.7 | 1.3 |
| 100°-110° | 28.6 | 0.9 |
| 110°-120° | 19.2 | 0.6 |
| 120°-130° | 12.6 | 0.4 |
| 130°-140° | 6.2 | 0.2 |
| 140°-150° | 2.6 | 0.1 |
| 150°-160° | 0.9 | 0.0 |
| 160°-170° | 0.1 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1143.2 | 34.0 |
| 0°-40° | 1812.0 | 54.0 |
| 0°-60° | 2824.9 | 84.1 |
| 0°-90° | 3242.9 | 96.6 |
| 90°-120° | 92.5 | 2.8 |
| 90°-150° | 114.0 | 3.4 |
| 90°-180° | 115.0 | 3.4 |
| 0°-180° | 3358.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1348 | 1348 | 1348 | 1348 | 1348 | |
| 5° | 1355 | 1384 | 1424 | 1443 | 1434 | 129 |
| 15° | 1357 | 1393 | 1347 | 1393 | 1388 | 385 |
| 25° | 1364 | 1338 | 1398 | 1360 | 1316 | 631 |
| 35° | 1381 | 1330 | 1072 | 819 | 752 | 870 |
| 45° | 1458 | 914 | 532 | 527 | 534 | 1123 |
| 55° | 1281 | 395 | 352 | 385 | 386 | 1115 |
| 65° | 556 | 168 | 179 | 201 | 203 | 571 |
| 75° | 127 | 88 | 103 | 103 | 101 | 150 |
| 85° | 14 | 53 | 79 | 79 | 77 | 20 |
| 90° | 0 | 41 | 69 | 67 | 62 | 1 |
| 95° | 0 | 33 | 55 | 50 | 46 | 0 |
| 105° | 0 | 21 | 38 | 34 | 31 | 0 |
| 115° | 0 | 12 | 26 | 26 | 26 | 0 |
| 125° | 0 | 7 | 17 | 22 | 21 | 0 |
| 135° | 0 | 3 | 10 | 12 | 12 | 0 |
| 145° | 0 | 2 | 5 | 7 | 5 | 0 |
| 155° | 0 | 2 | 2 | 3 | 2 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P218071

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1348.4 | 1348.4 | 1348.4 | 1348.4 | 1348.4 |
| 2.5° | 1357.0 | 1358.7 | 1363.9 | 1389.6 | 1400.0 |
| 5° | 1355.3 | 1384.5 | 1424.0 | 1442.9 | 1434.3 |
| 7.5° | 1355.3 | 1415.4 | 1415.4 | 1379.3 | 1355.3 |
| 10° | 1355.3 | 1432.6 | 1355.3 | 1348.4 | 1346.7 |
| 12.5° | 1355.3 | 1422.3 | 1329.5 | 1377.6 | 1382.8 |
| 15° | 1357.0 | 1393.1 | 1346.7 | 1393.1 | 1387.9 |
| 17.5° | 1357.0 | 1358.7 | 1367.3 | 1403.4 | 1410.3 |
| 20° | 1358.7 | 1336.4 | 1372.5 | 1430.9 | 1425.7 |
| 22.5° | 1362.2 | 1333.0 | 1382.8 | 1418.9 | 1387.9 |
| 25° | 1363.9 | 1338.1 | 1398.2 | 1360.4 | 1315.8 |
| 27.5° | 1363.9 | 1345.0 | 1379.3 | 1271.1 | 1197.3 |
| 30° | 1363.9 | 1348.4 | 1312.4 | 1147.4 | 1065.0 |
| 32.5° | 1370.8 | 1345.0 | 1209.3 | 986.0 | 896.7 |
| 35° | 1381.1 | 1329.5 | 1071.9 | 819.4 | 752.4 |
| 37.5° | 1394.8 | 1288.3 | 910.4 | 685.4 | 640.7 |
| 40° | 1413.7 | 1199.0 | 755.8 | 599.5 | 585.7 |
| 42.5° | 1436.0 | 1068.4 | 628.7 | 556.5 | 556.5 |
| 45° | 1458.4 | 913.8 | 532.5 | 527.3 | 534.2 |
| 47.5° | 1468.7 | 762.7 | 479.2 | 498.1 | 505.0 |
| 50° | 1451.5 | 621.8 | 439.7 | 465.5 | 468.9 |
| 52.5° | 1391.4 | 496.4 | 395.1 | 426.0 | 434.6 |
| 55° | 1281.4 | 395.1 | 352.1 | 384.8 | 386.5 |
| 57.5° | 1121.7 | 314.3 | 307.5 | 333.2 | 331.5 |
| 60° | 937.9 | 254.2 | 257.7 | 283.4 | 283.4 |
| 62.5° | 740.3 | 206.1 | 216.4 | 238.8 | 237.0 |
| 65° | 556.5 | 168.3 | 178.6 | 201.0 | 202.7 |
| 67.5° | 410.5 | 139.1 | 151.2 | 166.6 | 163.2 |
| 70° | 286.9 | 116.8 | 128.8 | 137.4 | 134.0 |
| 72.5° | 190.7 | 99.6 | 113.4 | 116.8 | 115.1 |
| 75° | 127.1 | 87.6 | 103.1 | 103.1 | 101.3 |
| 77.5° | 82.5 | 77.3 | 96.2 | 94.5 | 91.0 |
| 80° | 51.5 | 68.7 | 89.3 | 85.9 | 82.5 |
| 82.5° | 30.9 | 60.1 | 84.2 | 80.7 | 77.3 |
| 85° | 13.7 | 53.2 | 79.0 | 79.0 | 77.3 |
| 87.5° | 5.2 | 48.1 | 73.9 | 75.6 | 72.1 |
| 90° | 0.0 | 41.2 | 68.7 | 67.0 | 61.8 |
| 92.5° | 0.0 | 37.8 | 61.8 | 56.7 | 53.2 |
| 95° | 0.0 | 32.6 | 55.0 | 49.8 | 46.4 |
| 97.5° | 0.0 | 29.2 | 49.8 | 44.7 | 41.2 |
| 100° | 0.0 | 25.8 | 44.7 | 39.5 | 36.1 |
| 102.5° | 0.0 | 22.3 | 41.2 | 36.1 | 34.4 |
| 105° | 0.0 | 20.6 | 37.8 | 34.4 | 30.9 |
| 107.5° | 0.0 | 18.9 | 34.4 | 30.9 | 29.2 |
| 110° | 0.0 | 15.5 | 30.9 | 29.2 | 27.5 |



TEST NUMBER: P218071

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 13.7 | 27.5 | 27.5 | 27.5 |
| 115° | 0.0 | 12.0 | 25.8 | 25.8 | 25.8 |
| 117.5° | 0.0 | 10.3 | 22.3 | 25.8 | 25.8 |
| 120° | 0.0 | 10.3 | 20.6 | 24.0 | 24.0 |
| 122.5° | 0.0 | 8.6 | 18.9 | 24.0 | 24.0 |
| 125° | 0.0 | 6.9 | 17.2 | 22.3 | 20.6 |
| 127.5° | 0.0 | 5.2 | 15.5 | 18.9 | 18.9 |
| 130° | 0.0 | 5.2 | 13.7 | 17.2 | 15.5 |
| 132.5° | 0.0 | 3.4 | 12.0 | 13.7 | 13.7 |
| 135° | 0.0 | 3.4 | 10.3 | 12.0 | 12.0 |
| 137.5° | 0.0 | 3.4 | 8.6 | 10.3 | 8.6 |
| 140° | 0.0 | 1.7 | 6.9 | 8.6 | 6.9 |
| 142.5° | 0.0 | 1.7 | 6.9 | 8.6 | 6.9 |
| 145° | 0.0 | 1.7 | 5.2 | 6.9 | 5.2 |
| 147.5° | 0.0 | 1.7 | 3.4 | 5.2 | 5.2 |
| 150° | 0.0 | 1.7 | 3.4 | 5.2 | 3.4 |
| 152.5° | 0.0 | 1.7 | 3.4 | 3.4 | 1.7 |
| 155° | 0.0 | 1.7 | 1.7 | 3.4 | 1.7 |
| 157.5° | 0.0 | 1.7 | 1.7 | 1.7 | 1.7 |
| 160° | 1.7 | 1.7 | 1.7 | 1.7 | 0.0 |
| 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)