

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: **4SRL-LD5-50SL-LW-UNV-L840-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 (P35653)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SRL-LD5-50SL-LW-UNV-L840-CD1-U
Description: SRL LINEAR LED

Light Source: -
Ballast/Driver: -

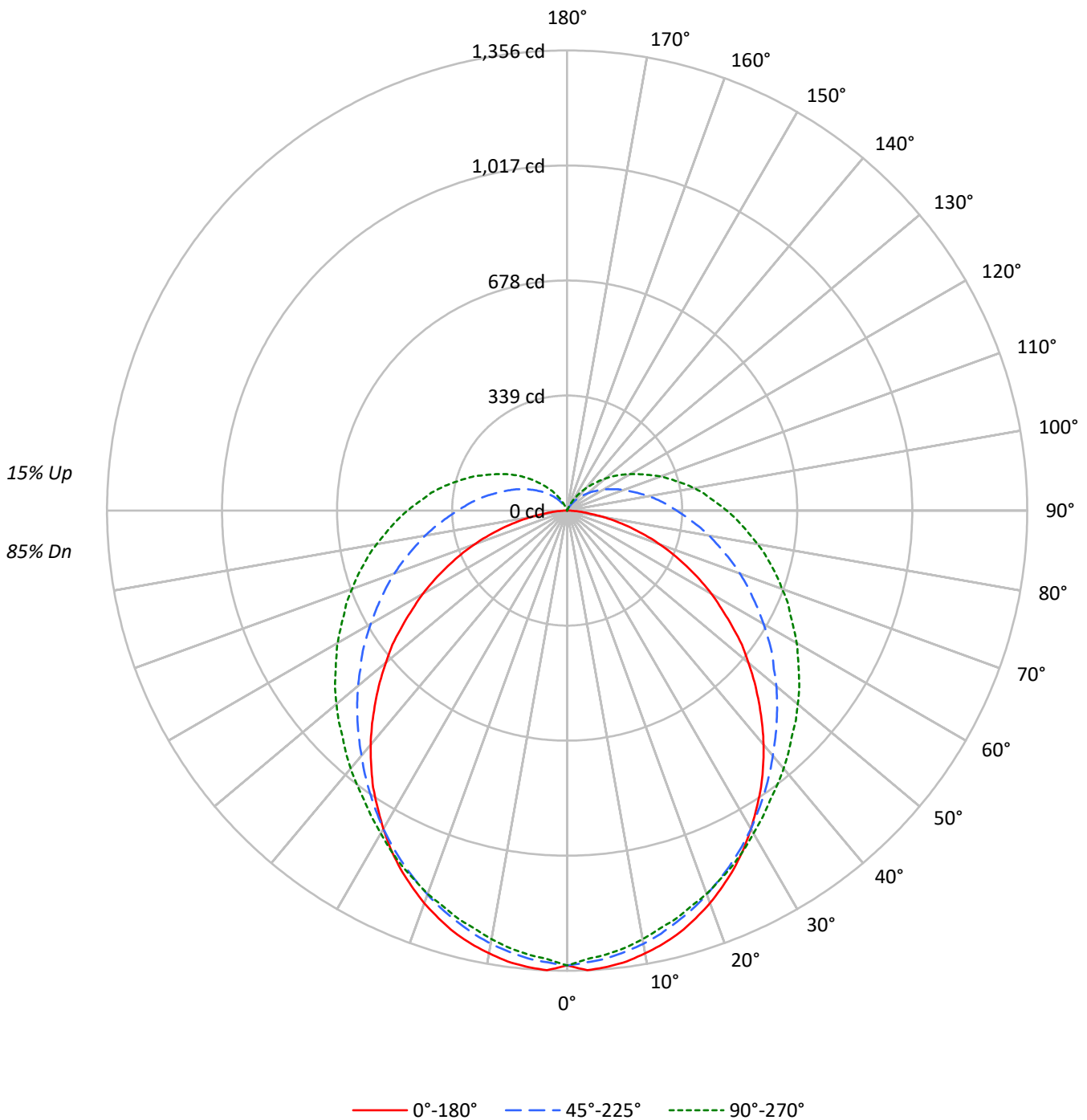
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5157.0 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 3.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 43.1
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: P#
CATALOG NUMBER: 4SRL-LD5-50SL-LW-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-50SL-LW-UNV-L840-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 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 111 | 103 | 103 | 103 | 95 | 95 | 95 | 88 | 88 | 88 | 85 | | | | |
| 1 | 103 | 97 | 92 | 87 | 98 | 93 | 88 | 84 | 86 | 82 | 79 | 80 | 76 | 74 | 74 | 71 | 69 | 66 | | | | |
| 2 | 92 | 83 | 75 | 69 | 88 | 80 | 73 | 67 | 74 | 68 | 63 | 68 | 64 | 59 | 63 | 59 | 56 | 53 | | | | |
| 3 | 84 | 72 | 63 | 56 | 80 | 70 | 61 | 55 | 64 | 58 | 52 | 60 | 54 | 49 | 55 | 51 | 47 | 44 | | | | |
| 4 | 76 | 64 | 54 | 47 | 73 | 61 | 53 | 46 | 57 | 50 | 44 | 53 | 47 | 42 | 49 | 44 | 40 | 37 | | | | |
| 5 | 70 | 57 | 47 | 40 | 67 | 55 | 46 | 39 | 51 | 43 | 38 | 47 | 41 | 36 | 44 | 38 | 34 | 32 | | | | |
| 6 | 65 | 51 | 42 | 35 | 62 | 49 | 40 | 34 | 46 | 38 | 33 | 43 | 36 | 31 | 40 | 34 | 30 | 27 | | | | |
| 7 | 60 | 46 | 37 | 31 | 57 | 44 | 36 | 30 | 42 | 34 | 29 | 39 | 32 | 28 | 36 | 31 | 26 | 24 | | | | |
| 8 | 56 | 42 | 33 | 27 | 53 | 41 | 32 | 27 | 38 | 31 | 26 | 36 | 29 | 25 | 33 | 28 | 24 | 21 | | | | |
| 9 | 52 | 38 | 30 | 24 | 50 | 37 | 29 | 24 | 35 | 28 | 23 | 33 | 27 | 22 | 31 | 25 | 21 | 19 | | | | |
| 10 | 49 | 35 | 27 | 22 | 47 | 34 | 27 | 22 | 32 | 25 | 21 | 30 | 24 | 20 | 29 | 23 | 19 | 17 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 15738 | 15738 | 15738 |
| 5° | 15849 | 14958 | 14628 |
| 10° | 15672 | 14194 | 13686 |
| 15° | 15451 | 13431 | 12834 |
| 20° | 15130 | 12715 | 12087 |
| 25° | 14763 | 12029 | 11406 |
| 30° | 14309 | 11377 | 10754 |
| 35° | 13845 | 10745 | 10190 |
| 40° | 13298 | 10159 | 9758 |
| 45° | 12688 | 9650 | 9337 |
| 50° | 12078 | 9186 | 9031 |
| 55° | 11406 | 8781 | 8740 |
| 60° | 10703 | 8382 | 8518 |
| 65° | 9820 | 8054 | 8300 |
| 70° | 8851 | 7800 | 8172 |
| 75° | 7521 | 7565 | 8092 |
| 80° | 5677 | 7443 | 8066 |
| 85° | 3236 | 7391 | 8104 |



TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-50SL-LW-UNV-L840-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 126.1 | 2.4 |
| 10°-20° | 355.9 | 6.9 |
| 20°-30° | 531.5 | 10.3 |
| 30°-40° | 637.0 | 12.4 |
| 40°-50° | 673.9 | 13.1 |
| 50°-60° | 650.8 | 12.6 |
| 60°-70° | 578.9 | 11.2 |
| 70°-80° | 475.9 | 9.2 |
| 80°-90° | 364.0 | 7.1 |
| 90°-100° | 273.7 | 5.3 |
| 100°-110° | 199.8 | 3.9 |
| 110°-120° | 136.8 | 2.7 |
| 120°-130° | 85.4 | 1.7 |
| 130°-140° | 45.6 | 0.9 |
| 140°-150° | 18.3 | 0.4 |
| 150°-160° | 3.5 | 0.1 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1013.5 | 19.7 |
| 0°-40° | 1650.5 | 32.0 |
| 0°-60° | 2975.1 | 57.7 |
| 0°-90° | 4393.9 | 85.2 |
| 90°-120° | 610.3 | 11.8 |
| 90°-150° | 759.6 | 14.7 |
| 90°-180° | 763.0 | 14.8 |
| 0°-180° | 5157.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1340 | 1340 | 1340 | 1340 | 1340 | |
| 5° | 1350 | 1342 | 1325 | 1323 | 1313 | 128 |
| 15° | 1286 | 1273 | 1254 | 1254 | 1244 | 362 |
| 25° | 1164 | 1152 | 1146 | 1160 | 1154 | 535 |
| 35° | 997 | 993 | 1014 | 1043 | 1043 | 622 |
| 45° | 799 | 822 | 874 | 924 | 937 | 617 |
| 55° | 593 | 647 | 737 | 810 | 833 | 531 |
| 65° | 388 | 476 | 603 | 697 | 726 | 385 |
| 75° | 194 | 321 | 480 | 590 | 622 | 206 |
| 85° | 36 | 198 | 371 | 482 | 518 | 44 |
| 90° | 0 | 152 | 323 | 434 | 470 | 2 |
| 95° | 0 | 117 | 282 | 390 | 422 | 0 |
| 105° | 0 | 73 | 207 | 303 | 334 | 0 |
| 115° | 0 | 44 | 148 | 228 | 252 | 0 |
| 125° | 0 | 27 | 100 | 161 | 180 | 0 |
| 135° | 0 | 13 | 61 | 102 | 113 | 0 |
| 145° | 0 | 4 | 27 | 52 | 60 | 0 |
| 155° | 0 | 0 | 4 | 13 | 13 | 1 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-50SL-LW-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1340.3 | 1340.3 | 1340.3 | 1340.3 | 1340.3 |
| 2.5° | 1355.7 | 1348.0 | 1332.6 | 1330.7 | 1323.0 |
| 5° | 1349.9 | 1342.2 | 1324.9 | 1323.0 | 1313.4 |
| 7.5° | 1340.3 | 1330.7 | 1311.5 | 1309.6 | 1300.0 |
| 10° | 1324.9 | 1315.3 | 1296.1 | 1294.2 | 1282.7 |
| 12.5° | 1307.7 | 1298.1 | 1276.9 | 1275.0 | 1261.6 |
| 15° | 1286.5 | 1273.1 | 1253.9 | 1253.9 | 1244.3 |
| 17.5° | 1259.7 | 1248.1 | 1230.8 | 1232.8 | 1221.2 |
| 20° | 1230.8 | 1219.3 | 1204.0 | 1209.7 | 1202.0 |
| 22.5° | 1198.2 | 1184.8 | 1175.2 | 1182.8 | 1177.1 |
| 25° | 1163.6 | 1152.1 | 1146.4 | 1159.8 | 1154.0 |
| 27.5° | 1125.2 | 1113.7 | 1115.6 | 1129.1 | 1127.2 |
| 30° | 1083.0 | 1075.3 | 1083.0 | 1100.3 | 1098.4 |
| 32.5° | 1038.8 | 1035.0 | 1048.4 | 1071.5 | 1071.5 |
| 35° | 996.6 | 992.7 | 1013.9 | 1042.7 | 1042.7 |
| 37.5° | 948.6 | 950.5 | 979.3 | 1011.9 | 1017.7 |
| 40° | 900.6 | 908.3 | 942.8 | 983.1 | 992.7 |
| 42.5° | 850.6 | 864.1 | 908.3 | 952.4 | 965.9 |
| 45° | 798.8 | 821.8 | 873.7 | 923.6 | 937.1 |
| 47.5° | 748.9 | 777.7 | 839.1 | 896.7 | 914.0 |
| 50° | 697.0 | 731.6 | 804.6 | 867.9 | 887.1 |
| 52.5° | 649.0 | 689.4 | 768.1 | 839.1 | 862.2 |
| 55° | 593.3 | 647.1 | 737.4 | 810.3 | 833.4 |
| 57.5° | 539.6 | 602.9 | 702.8 | 781.5 | 806.5 |
| 60° | 491.6 | 558.8 | 668.2 | 754.6 | 781.5 |
| 62.5° | 439.7 | 516.5 | 635.6 | 725.8 | 752.7 |
| 65° | 387.9 | 476.2 | 602.9 | 697.0 | 725.8 |
| 67.5° | 339.9 | 434.0 | 572.2 | 670.2 | 702.8 |
| 70° | 290.0 | 395.6 | 541.5 | 643.3 | 674.0 |
| 72.5° | 241.9 | 357.2 | 510.8 | 614.5 | 649.0 |
| 75° | 193.9 | 320.7 | 480.1 | 589.5 | 622.1 |
| 77.5° | 147.9 | 286.1 | 451.2 | 562.6 | 597.2 |
| 80° | 105.6 | 253.5 | 424.4 | 535.7 | 570.3 |
| 82.5° | 67.2 | 222.7 | 397.5 | 508.9 | 543.4 |
| 85° | 36.5 | 197.8 | 370.6 | 482.0 | 518.5 |
| 87.5° | 13.4 | 170.9 | 345.6 | 458.9 | 495.4 |
| 90° | 0.0 | 151.7 | 322.6 | 434.0 | 470.4 |
| 92.5° | 0.0 | 132.5 | 301.5 | 410.9 | 445.5 |
| 95° | 0.0 | 117.1 | 282.3 | 389.8 | 422.4 |
| 97.5° | 0.0 | 103.7 | 263.1 | 368.7 | 403.2 |
| 100° | 0.0 | 92.2 | 243.9 | 345.6 | 380.2 |
| 102.5° | 0.0 | 80.6 | 224.7 | 324.5 | 357.2 |
| 105° | 0.0 | 73.0 | 207.4 | 303.4 | 334.1 |
| 107.5° | 0.0 | 65.3 | 192.0 | 286.1 | 313.0 |
| 110° | 0.0 | 57.6 | 176.7 | 265.0 | 293.8 |



TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-50SL-LW-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 0.0 | 51.8 | 163.2 | 247.7 | 270.7 |
| 115° | 0.0 | 44.2 | 147.9 | 228.5 | 251.5 |
| 117.5° | 0.0 | 40.3 | 136.3 | 211.2 | 232.3 |
| 120° | 0.0 | 34.6 | 122.9 | 193.9 | 215.1 |
| 122.5° | 0.0 | 30.7 | 111.4 | 176.7 | 197.8 |
| 125° | 0.0 | 26.9 | 99.9 | 161.3 | 180.5 |
| 127.5° | 0.0 | 23.0 | 90.2 | 145.9 | 163.2 |
| 130° | 0.0 | 19.2 | 78.7 | 130.6 | 145.9 |
| 132.5° | 0.0 | 15.4 | 69.1 | 115.2 | 130.6 |
| 135° | 0.0 | 13.4 | 61.4 | 101.8 | 113.3 |
| 137.5° | 0.0 | 9.6 | 51.8 | 88.3 | 99.9 |
| 140° | 0.0 | 7.7 | 44.2 | 76.8 | 84.5 |
| 142.5° | 0.0 | 5.8 | 34.6 | 63.4 | 73.0 |
| 145° | 0.0 | 3.8 | 26.9 | 51.8 | 59.5 |
| 147.5° | 0.0 | 1.9 | 19.2 | 42.2 | 46.1 |
| 150° | 0.0 | 1.9 | 13.4 | 32.6 | 34.6 |
| 152.5° | 0.0 | 0.0 | 9.6 | 23.0 | 23.0 |
| 155° | 0.0 | 0.0 | 3.8 | 13.4 | 13.4 |
| 157.5° | 1.9 | 0.0 | 1.9 | 5.8 | 5.8 |
| 160° | 1.9 | 0.0 | 0.0 | 0.0 | 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)