

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: P406598

Luminaire Tested: **4SLSTP4050DD-UNV**

Issue Date: 08/06/2020

Test Information

Test Method: LM-79-08
Report Number: P406598
Test Lab: INNOVATION CENTER-P2
Issue Date: 08/06/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SLSTP4050DD-UNV
Description: 4FT LENSED LED STRIPLIGHT
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2004-752-4)
Light Source: (80) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRICAL DRIVER

Summary

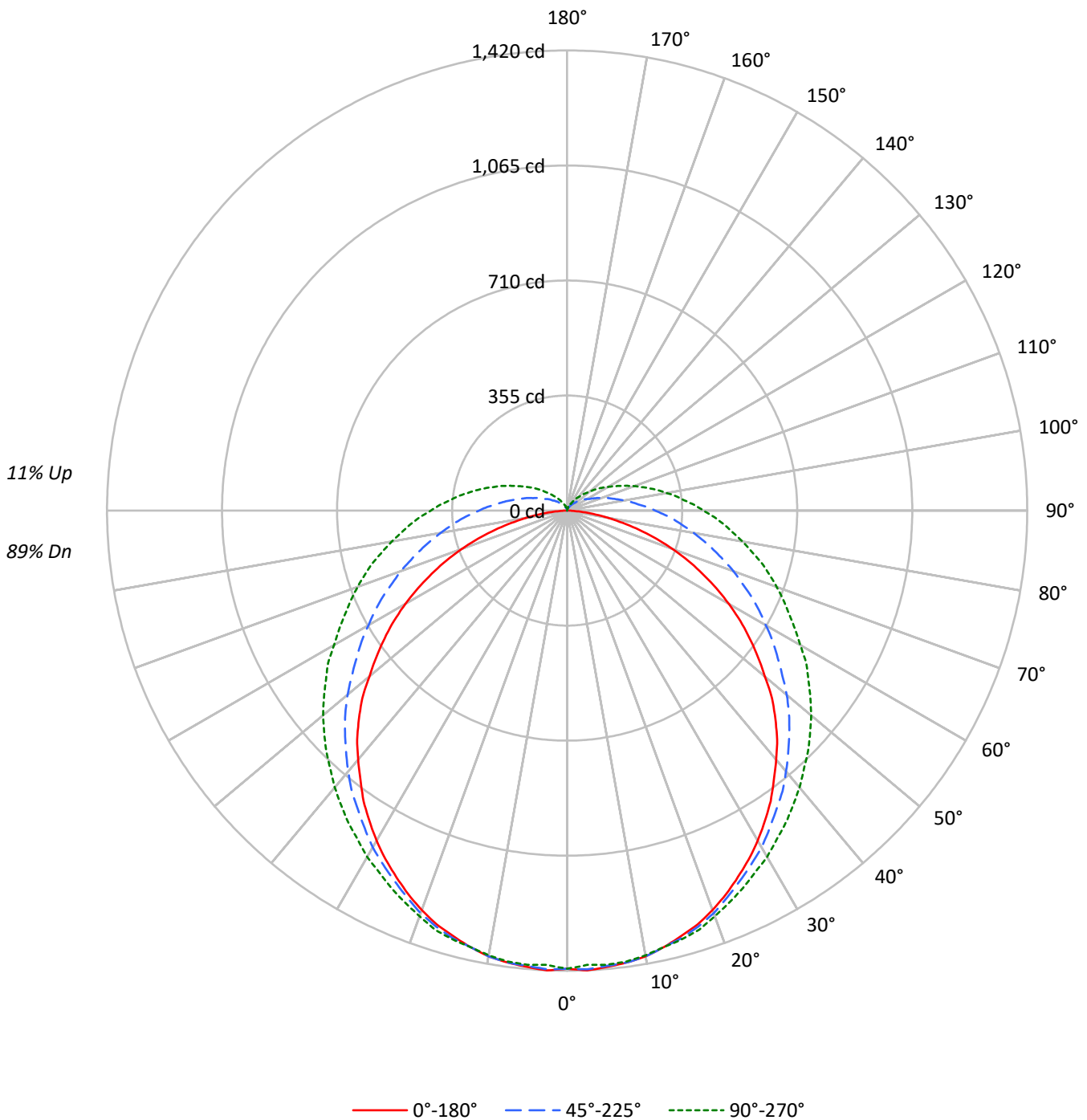
Lumens per Lamp: N/A
Luminaire Lumens: 5252.4 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

Input Watts (W): 40.3
Input Voltage (V): 120
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



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Luminous Intensity Polar Plot





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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 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 105 | 105 | 105 | | 98 | 98 | 98 | | 92 | 92 | 92 | 89 |
| 1 | 104 | 98 | 93 | 89 | 100 | 95 | 90 | 86 | 89 | 85 | 81 | | 83 | 80 | 77 | | 78 | 75 | 73 | 70 |
| 2 | 94 | 85 | 77 | 70 | 90 | 82 | 75 | 69 | 76 | 71 | 66 | | 71 | 67 | 62 | | 67 | 63 | 59 | 57 |
| 3 | 85 | 74 | 65 | 58 | 82 | 71 | 63 | 56 | 67 | 60 | 54 | | 62 | 57 | 52 | | 58 | 54 | 50 | 47 |
| 4 | 78 | 65 | 56 | 48 | 74 | 63 | 54 | 47 | 59 | 51 | 46 | | 55 | 49 | 44 | | 52 | 47 | 42 | 40 |
| 5 | 71 | 58 | 48 | 41 | 68 | 56 | 47 | 41 | 53 | 45 | 39 | | 49 | 43 | 38 | | 47 | 41 | 36 | 34 |
| 6 | 66 | 52 | 43 | 36 | 63 | 50 | 42 | 35 | 47 | 40 | 34 | | 45 | 38 | 33 | | 42 | 36 | 32 | 29 |
| 7 | 61 | 47 | 38 | 31 | 58 | 45 | 37 | 31 | 43 | 35 | 30 | | 41 | 34 | 29 | | 38 | 33 | 28 | 26 |
| 8 | 56 | 43 | 34 | 28 | 54 | 41 | 33 | 28 | 39 | 32 | 27 | | 37 | 31 | 26 | | 35 | 29 | 25 | 23 |
| 9 | 53 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 36 | 29 | 24 | | 34 | 28 | 23 | | 33 | 27 | 23 | 21 |
| 10 | 49 | 36 | 28 | 23 | 48 | 35 | 27 | 22 | 33 | 26 | 22 | | 32 | 25 | 21 | | 30 | 25 | 21 | 19 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22824 | 22824 | 22824 |
| 5° | 22869 | 22142 | 21845 |
| 10° | 22813 | 21501 | 20991 |
| 15° | 22595 | 20784 | 20187 |
| 20° | 22371 | 20030 | 19366 |
| 25° | 22010 | 19172 | 18561 |
| 30° | 21670 | 18449 | 17851 |
| 35° | 21271 | 17635 | 17173 |
| 40° | 20785 | 16921 | 16560 |
| 45° | 20321 | 16179 | 15997 |
| 50° | 19525 | 15446 | 15474 |
| 55° | 18810 | 14632 | 14920 |
| 60° | 17962 | 13968 | 14372 |
| 65° | 16859 | 13386 | 13936 |
| 70° | 15440 | 12807 | 13685 |
| 75° | 13342 | 12290 | 13502 |
| 80° | 10428 | 11939 | 13313 |
| 85° | 6090 | 11813 | 13375 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 134.1 | 2.6 |
| 10°-20° | 384.9 | 7.3 |
| 20°-30° | 582.6 | 11.1 |
| 30°-40° | 707.5 | 13.5 |
| 40°-50° | 752.1 | 14.3 |
| 50°-60° | 713.2 | 13.6 |
| 60°-70° | 612.1 | 11.7 |
| 70°-80° | 474.3 | 9.0 |
| 80°-90° | 332.1 | 6.3 |
| 90°-100° | 223.2 | 4.3 |
| 100°-110° | 145.6 | 2.8 |
| 110°-120° | 89.8 | 1.7 |
| 120°-130° | 52.3 | 1.0 |
| 130°-140° | 27.9 | 0.5 |
| 140°-150° | 13.5 | 0.3 |
| 150°-160° | 5.3 | 0.1 |
| 160°-170° | 1.7 | 0.0 |
| 170°-180° | 0.1 | 0.0 |
| 0°-30° | 1101.6 | 21.0 |
| 0°-40° | 1809.2 | 34.4 |
| 0°-60° | 3274.4 | 62.3 |
| 0°-90° | 4693.1 | 89.4 |
| 90°-120° | 458.7 | 8.7 |
| 90°-150° | 552.3 | 10.5 |
| 90°-180° | 559.0 | 10.6 |
| 0°-180° | 5252.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1414 | 1414 | 1414 | 1414 | 1414 | |
| 5° | 1414 | 1414 | 1410 | 1403 | 1407 | 134 |
| 15° | 1359 | 1363 | 1366 | 1363 | 1370 | 384 |
| 25° | 1248 | 1251 | 1261 | 1275 | 1285 | 575 |
| 35° | 1095 | 1098 | 1125 | 1159 | 1176 | 684 |
| 45° | 908 | 922 | 970 | 1027 | 1051 | 700 |
| 55° | 688 | 715 | 793 | 881 | 908 | 615 |
| 65° | 461 | 512 | 627 | 722 | 756 | 456 |
| 75° | 230 | 322 | 468 | 576 | 620 | 245 |
| 85° | 41 | 170 | 332 | 444 | 485 | 52 |
| 90° | 3 | 119 | 271 | 383 | 420 | 3 |
| 95° | 0 | 81 | 220 | 325 | 363 | 0 |
| 105° | 0 | 41 | 142 | 230 | 264 | 0 |
| 115° | 0 | 24 | 88 | 156 | 180 | 0 |
| 125° | 0 | 17 | 54 | 98 | 119 | 0 |
| 135° | 0 | 10 | 34 | 61 | 71 | 0 |
| 145° | 0 | 10 | 20 | 34 | 41 | 0 |
| 155° | 0 | 7 | 10 | 17 | 20 | 0 |
| 165° | 0 | 3 | 7 | 7 | 10 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



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CATALOG NUMBER: 4SLSTP4050DD-UNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1413.6 | 1413.6 | 1413.6 | 1413.6 | 1413.6 |
| 2.5° | 1420.4 | 1420.4 | 1417.0 | 1406.8 | 1403.4 |
| 5° | 1413.6 | 1413.6 | 1410.2 | 1403.4 | 1406.8 |
| 7.5° | 1406.8 | 1406.8 | 1406.8 | 1400.0 | 1403.4 |
| 10° | 1396.6 | 1396.6 | 1396.6 | 1386.5 | 1393.2 |
| 12.5° | 1379.7 | 1383.1 | 1379.7 | 1376.3 | 1379.7 |
| 15° | 1359.3 | 1362.7 | 1366.1 | 1362.7 | 1369.5 |
| 17.5° | 1339.0 | 1339.0 | 1345.8 | 1349.2 | 1355.9 |
| 20° | 1311.9 | 1315.3 | 1322.0 | 1325.4 | 1332.2 |
| 22.5° | 1281.4 | 1281.4 | 1291.5 | 1298.3 | 1308.5 |
| 25° | 1247.5 | 1250.9 | 1261.0 | 1274.6 | 1284.8 |
| 27.5° | 1213.6 | 1217.0 | 1230.5 | 1247.5 | 1257.6 |
| 30° | 1176.3 | 1179.7 | 1200.0 | 1220.4 | 1233.9 |
| 32.5° | 1135.6 | 1139.0 | 1162.7 | 1189.8 | 1203.4 |
| 35° | 1094.9 | 1098.3 | 1125.4 | 1159.3 | 1176.3 |
| 37.5° | 1047.5 | 1057.6 | 1091.5 | 1128.8 | 1145.8 |
| 40° | 1003.4 | 1013.6 | 1050.9 | 1094.9 | 1115.3 |
| 42.5° | 959.3 | 969.5 | 1010.2 | 1064.4 | 1081.4 |
| 45° | 908.5 | 922.0 | 969.5 | 1027.1 | 1050.9 |
| 47.5° | 857.6 | 874.6 | 928.8 | 989.8 | 1017.0 |
| 50° | 796.6 | 817.0 | 884.8 | 952.6 | 983.1 |
| 52.5° | 742.4 | 766.1 | 837.3 | 918.7 | 945.8 |
| 55° | 688.1 | 715.3 | 793.2 | 881.4 | 908.5 |
| 57.5° | 633.9 | 664.4 | 752.6 | 837.3 | 874.6 |
| 60° | 576.3 | 613.6 | 708.5 | 796.6 | 830.5 |
| 62.5° | 518.7 | 562.7 | 667.8 | 759.3 | 793.2 |
| 65° | 461.0 | 511.9 | 627.1 | 722.0 | 755.9 |
| 67.5° | 403.4 | 464.4 | 583.1 | 684.8 | 722.0 |
| 70° | 345.8 | 413.6 | 545.8 | 650.9 | 688.1 |
| 72.5° | 288.1 | 366.1 | 505.1 | 613.6 | 654.2 |
| 75° | 230.5 | 322.0 | 467.8 | 576.3 | 620.3 |
| 77.5° | 176.3 | 278.0 | 430.5 | 542.4 | 583.1 |
| 80° | 125.4 | 240.7 | 396.6 | 508.5 | 549.2 |
| 82.5° | 81.4 | 203.4 | 362.7 | 474.6 | 515.3 |
| 85° | 40.7 | 169.5 | 332.2 | 444.1 | 484.8 |
| 87.5° | 13.6 | 142.4 | 301.7 | 413.6 | 454.2 |
| 90° | 3.4 | 118.6 | 271.2 | 383.1 | 420.3 |
| 92.5° | 0.0 | 98.3 | 247.5 | 355.9 | 393.2 |
| 95° | 0.0 | 81.4 | 220.3 | 325.4 | 362.7 |
| 97.5° | 0.0 | 67.8 | 200.0 | 301.7 | 339.0 |
| 100° | 0.0 | 57.6 | 179.7 | 274.6 | 311.9 |
| 102.5° | 0.0 | 47.5 | 159.3 | 254.2 | 288.1 |
| 105° | 0.0 | 40.7 | 142.4 | 230.5 | 264.4 |
| 107.5° | 0.0 | 33.9 | 128.8 | 210.2 | 240.7 |
| 110° | 0.0 | 30.5 | 111.9 | 189.8 | 220.3 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 0.0 | 27.1 | 101.7 | 172.9 | 200.0 |
| 115° | 0.0 | 23.7 | 88.1 | 155.9 | 179.7 |
| 117.5° | 0.0 | 20.3 | 78.0 | 139.0 | 162.7 |
| 120° | 0.0 | 20.3 | 71.2 | 125.4 | 145.8 |
| 122.5° | 0.0 | 16.9 | 64.4 | 111.9 | 132.2 |
| 125° | 0.0 | 16.9 | 54.2 | 98.3 | 118.6 |
| 127.5° | 0.0 | 13.6 | 50.8 | 88.1 | 105.1 |
| 130° | 0.0 | 13.6 | 44.1 | 78.0 | 91.5 |
| 132.5° | 0.0 | 10.2 | 40.7 | 67.8 | 81.4 |
| 135° | 0.0 | 10.2 | 33.9 | 61.0 | 71.2 |
| 137.5° | 0.0 | 10.2 | 30.5 | 54.2 | 61.0 |
| 140° | 0.0 | 10.2 | 27.1 | 47.5 | 54.2 |
| 142.5° | 0.0 | 10.2 | 23.7 | 40.7 | 47.5 |
| 145° | 0.0 | 10.2 | 20.3 | 33.9 | 40.7 |
| 147.5° | 0.0 | 6.8 | 16.9 | 30.5 | 33.9 |
| 150° | 0.0 | 6.8 | 13.6 | 23.7 | 27.1 |
| 152.5° | 0.0 | 6.8 | 13.6 | 20.3 | 23.7 |
| 155° | 0.0 | 6.8 | 10.2 | 16.9 | 20.3 |
| 157.5° | 0.0 | 6.8 | 10.2 | 13.6 | 16.9 |
| 160° | 0.0 | 3.4 | 6.8 | 10.2 | 13.6 |
| 162.5° | 0.0 | 3.4 | 6.8 | 10.2 | 13.6 |
| 165° | 0.0 | 3.4 | 6.8 | 6.8 | 10.2 |
| 167.5° | 0.0 | 3.4 | 6.8 | 6.8 | 6.8 |
| 170° | 0.0 | 3.4 | 3.4 | 6.8 | 3.4 |
| 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)