

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: P290108

Luminaire Tested: **4SSRK-LN-60-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290108
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-10)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SSRK-LN-60-L930-CD1-U
Description: 6000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH ROUND NARROW LENS AND 90 CRI 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4955.7 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.03 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')
CIE Type: Direct

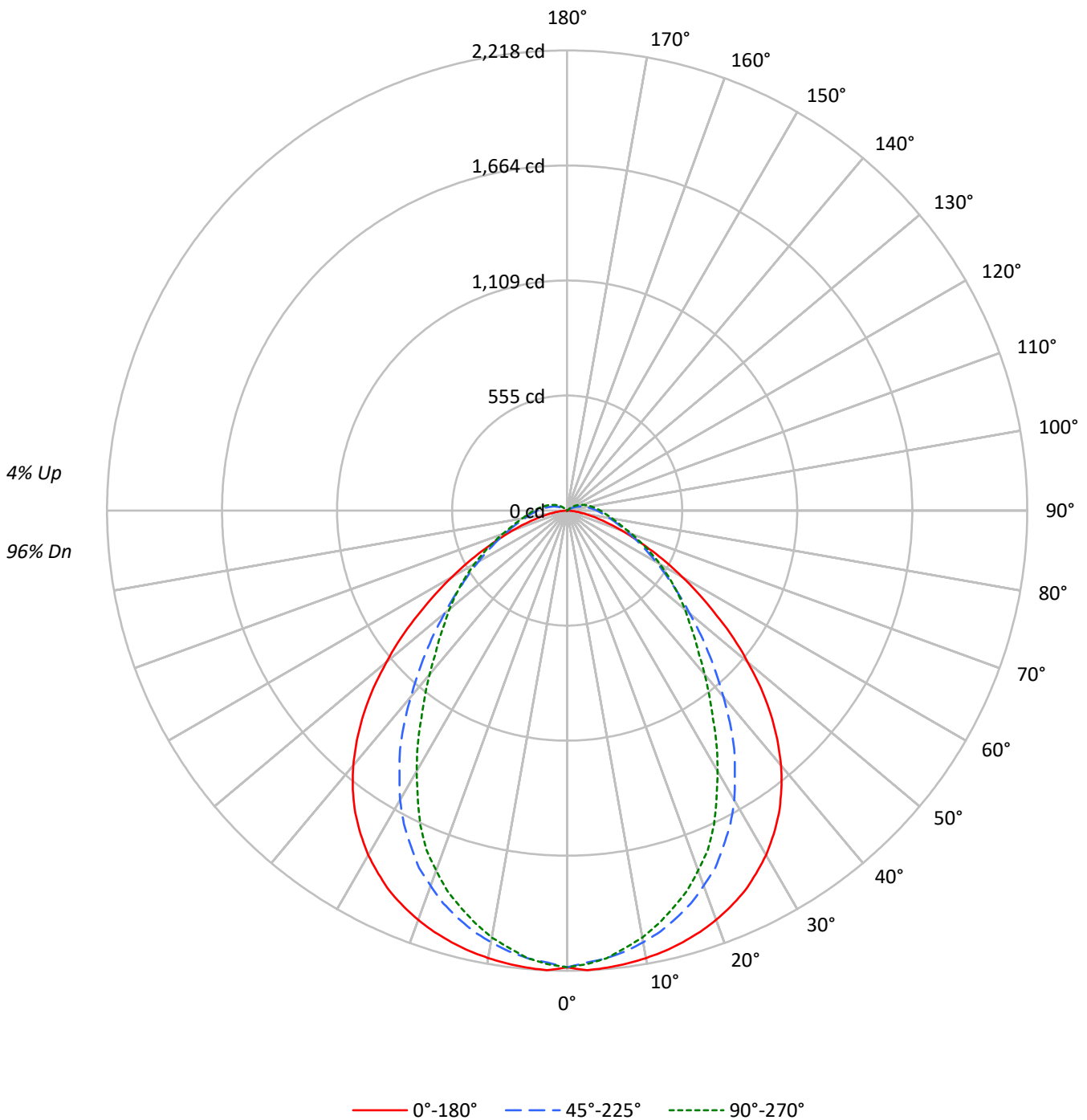
Input Watts (W): 44.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: 4SSRK-LN-60-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P290108

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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 103 | 103 | 103 | 98 | 98 | 98 | 96 | | | | 96 |
| 1 | 108 | 104 | 99 | 96 | 105 | 101 | 97 | 94 | 96 | 93 | 90 | 91 | 89 | 86 | 87 | 85 | 83 | 81 | | | | 81 |
| 2 | 99 | 91 | 85 | 80 | 96 | 89 | 83 | 78 | 85 | 80 | 76 | 81 | 77 | 74 | 78 | 74 | 71 | 69 | | | | 69 |
| 3 | 91 | 81 | 74 | 68 | 88 | 79 | 72 | 67 | 76 | 70 | 65 | 73 | 68 | 63 | 70 | 65 | 62 | 59 | | | | 59 |
| 4 | 84 | 73 | 65 | 58 | 81 | 71 | 64 | 58 | 68 | 62 | 56 | 65 | 60 | 55 | 63 | 58 | 54 | 52 | | | | 52 |
| 5 | 78 | 66 | 57 | 51 | 75 | 64 | 56 | 51 | 62 | 55 | 50 | 59 | 53 | 49 | 57 | 52 | 48 | 46 | | | | 46 |
| 6 | 72 | 60 | 51 | 45 | 70 | 58 | 51 | 45 | 56 | 49 | 44 | 54 | 48 | 43 | 52 | 47 | 43 | 41 | | | | 41 |
| 7 | 67 | 54 | 46 | 40 | 65 | 53 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 48 | 43 | 38 | 36 | | | | 36 |
| 8 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 35 | 44 | 39 | 35 | 33 | | | | 33 |
| 9 | 59 | 46 | 38 | 33 | 57 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 36 | 32 | 41 | 36 | 32 | 30 | | | | 30 |
| 10 | 55 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 38 | 33 | 29 | 27 | | | | 27 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 142166 | 142166 | 142166 |
| 5° | 142869 | 112350 | 104034 |
| 10° | 142584 | 92125 | 80350 |
| 15° | 142396 | 76999 | 63931 |
| 20° | 142165 | 64831 | 51655 |
| 25° | 141487 | 54481 | 41616 |
| 30° | 139636 | 45333 | 32663 |
| 35° | 136397 | 36916 | 25425 |
| 40° | 130701 | 29066 | 19976 |
| 45° | 121727 | 22711 | 15874 |
| 50° | 108786 | 17557 | 12925 |
| 55° | 93340 | 13663 | 10499 |
| 60° | 77307 | 10715 | 8441 |
| 65° | 61149 | 8433 | 6668 |
| 70° | 47204 | 6677 | 5241 |
| 75° | 34746 | 5422 | 4172 |
| 80° | 24367 | 4472 | 3459 |
| 85° | 14055 | 3770 | 2948 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 206.7 | 4.2 |
| 10°-20° | 578.7 | 11.7 |
| 20°-30° | 834.1 | 16.8 |
| 30°-40° | 903.5 | 18.2 |
| 40°-50° | 800.2 | 16.1 |
| 50°-60° | 608.9 | 12.3 |
| 60°-70° | 405.7 | 8.2 |
| 70°-80° | 250.6 | 5.1 |
| 80°-90° | 157.0 | 3.2 |
| 90°-100° | 103.2 | 2.1 |
| 100°-110° | 63.2 | 1.3 |
| 110°-120° | 32.6 | 0.7 |
| 120°-130° | 10.7 | 0.2 |
| 130°-140° | 0.6 | 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° | 1619.4 | 32.7 |
| 0°-40° | 2522.9 | 50.9 |
| 0°-60° | 3932.0 | 79.3 |
| 0°-90° | 4745.3 | 95.8 |
| 90°-120° | 199.0 | 4.0 |
| 90°-150° | 210.4 | 4.2 |
| 90°-180° | 210.0 | 4.2 |
| 0°-180° | 4955.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2201 | 2201 | 2201 | 2201 | 2201 | |
| 5° | 2212 | 2198 | 2166 | 2174 | 2166 | 210 |
| 15° | 2154 | 2113 | 2034 | 2006 | 1981 | 608 |
| 25° | 2024 | 1929 | 1783 | 1707 | 1673 | 931 |
| 35° | 1780 | 1614 | 1405 | 1273 | 1226 | 1110 |
| 45° | 1388 | 1171 | 959 | 886 | 869 | 1065 |
| 55° | 878 | 717 | 617 | 624 | 626 | 789 |
| 65° | 436 | 382 | 393 | 416 | 418 | 440 |
| 75° | 161 | 196 | 254 | 270 | 266 | 178 |
| 85° | 28 | 101 | 171 | 189 | 186 | 34 |
| 90° | 1 | 73 | 143 | 161 | 160 | 2 |
| 95° | 3 | 52 | 118 | 137 | 136 | 2 |
| 105° | 2 | 20 | 74 | 94 | 97 | 2 |
| 115° | 2 | 2 | 38 | 59 | 64 | 2 |
| 125° | 1 | 1 | 1 | 26 | 32 | 1 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P290108

CATALOG NUMBER: 4SSRK-LN-60-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2201.3 | 2201.3 | 2201.3 | 2201.3 | 2201.3 |
| 2.5° | 2217.6 | 2205.4 | 2180.3 | 2194.9 | 2187.9 |
| 5° | 2211.8 | 2197.8 | 2166.3 | 2174.5 | 2166.3 |
| 7.5° | 2202.5 | 2185.0 | 2143.0 | 2146.5 | 2127.3 |
| 10° | 2190.2 | 2166.9 | 2112.7 | 2106.9 | 2089.4 |
| 12.5° | 2174.5 | 2141.9 | 2078.3 | 2055.0 | 2038.1 |
| 15° | 2153.5 | 2112.7 | 2033.5 | 2006.1 | 1981.0 |
| 17.5° | 2129.6 | 2077.2 | 1985.1 | 1951.9 | 1922.1 |
| 20° | 2099.9 | 2034.0 | 1924.5 | 1878.4 | 1845.8 |
| 22.5° | 2063.8 | 1986.8 | 1864.4 | 1797.4 | 1771.2 |
| 25° | 2024.1 | 1929.1 | 1783.4 | 1707.1 | 1673.3 |
| 27.5° | 1972.3 | 1865.6 | 1703.6 | 1608.0 | 1559.6 |
| 30° | 1917.5 | 1790.4 | 1610.9 | 1500.8 | 1449.5 |
| 32.5° | 1851.6 | 1708.2 | 1503.7 | 1386.5 | 1341.1 |
| 35° | 1780.5 | 1613.8 | 1405.2 | 1272.9 | 1225.7 |
| 37.5° | 1696.6 | 1511.8 | 1288.0 | 1166.8 | 1125.4 |
| 40° | 1604.5 | 1401.1 | 1171.5 | 1064.8 | 1032.2 |
| 42.5° | 1499.6 | 1288.6 | 1061.9 | 969.8 | 941.8 |
| 45° | 1388.3 | 1170.9 | 959.3 | 886.5 | 869.0 |
| 47.5° | 1267.1 | 1053.2 | 863.2 | 811.3 | 798.5 |
| 50° | 1136.5 | 935.4 | 769.9 | 741.3 | 741.9 |
| 52.5° | 1012.4 | 824.1 | 690.6 | 683.1 | 681.3 |
| 55° | 878.3 | 716.9 | 616.6 | 624.2 | 625.9 |
| 57.5° | 757.1 | 617.2 | 553.7 | 567.7 | 569.4 |
| 60° | 641.7 | 528.0 | 493.6 | 515.2 | 518.1 |
| 62.5° | 536.2 | 451.7 | 442.4 | 464.5 | 463.9 |
| 65° | 435.9 | 382.3 | 393.4 | 416.1 | 417.9 |
| 67.5° | 350.9 | 325.8 | 352.6 | 372.4 | 371.3 |
| 70° | 278.6 | 275.1 | 313.0 | 334.0 | 332.8 |
| 72.5° | 216.8 | 232.5 | 282.1 | 300.2 | 295.5 |
| 75° | 160.9 | 195.8 | 253.5 | 270.4 | 266.3 |
| 77.5° | 118.3 | 165.5 | 228.5 | 244.8 | 241.9 |
| 80° | 81.0 | 140.5 | 206.9 | 223.8 | 220.3 |
| 82.5° | 51.9 | 119.5 | 188.3 | 204.6 | 202.2 |
| 85° | 28.0 | 100.8 | 171.3 | 188.8 | 185.9 |
| 87.5° | 10.5 | 85.7 | 156.2 | 173.7 | 172.5 |
| 90° | 1.2 | 73.4 | 142.8 | 160.9 | 159.7 |
| 92.5° | 1.7 | 62.4 | 130.0 | 148.6 | 148.6 |
| 95° | 2.9 | 51.9 | 118.3 | 137.0 | 136.4 |
| 97.5° | 2.3 | 43.7 | 105.5 | 125.9 | 125.9 |
| 100° | 2.3 | 36.1 | 93.8 | 114.2 | 115.4 |
| 102.5° | 2.3 | 28.6 | 83.9 | 103.7 | 106.1 |
| 105° | 1.7 | 20.4 | 74.0 | 94.4 | 96.7 |
| 107.5° | 1.7 | 11.7 | 64.1 | 85.7 | 88.6 |
| 110° | 1.7 | 2.9 | 55.4 | 76.3 | 79.8 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 1.7 | 1.7 | 46.6 | 67.6 | 71.1 |
| 115° | 1.7 | 1.7 | 37.9 | 58.9 | 64.1 |
| 117.5° | 1.2 | 1.2 | 28.0 | 51.3 | 56.0 |
| 120° | 1.2 | 1.2 | 17.5 | 43.1 | 47.8 |
| 122.5° | 1.2 | 1.2 | 7.6 | 34.4 | 40.8 |
| 125° | 1.2 | 1.2 | 1.2 | 25.6 | 32.1 |
| 127.5° | 1.2 | 1.2 | 0.6 | 15.2 | 22.7 |
| 130° | 1.2 | 1.2 | 0.6 | 5.8 | 14.0 |
| 132.5° | 1.2 | 1.2 | 0.6 | 0.6 | 4.1 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 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)