

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: P289770

Luminaire Tested: **4SSRK-TS-80-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P289770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-6)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SSRK-TS-80-L840-CD1-U  
Description: 8000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH TRILOBE SMOOTH LENS AND 80 CRI 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7659.8 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')  
CIE Type: Semi-Direct

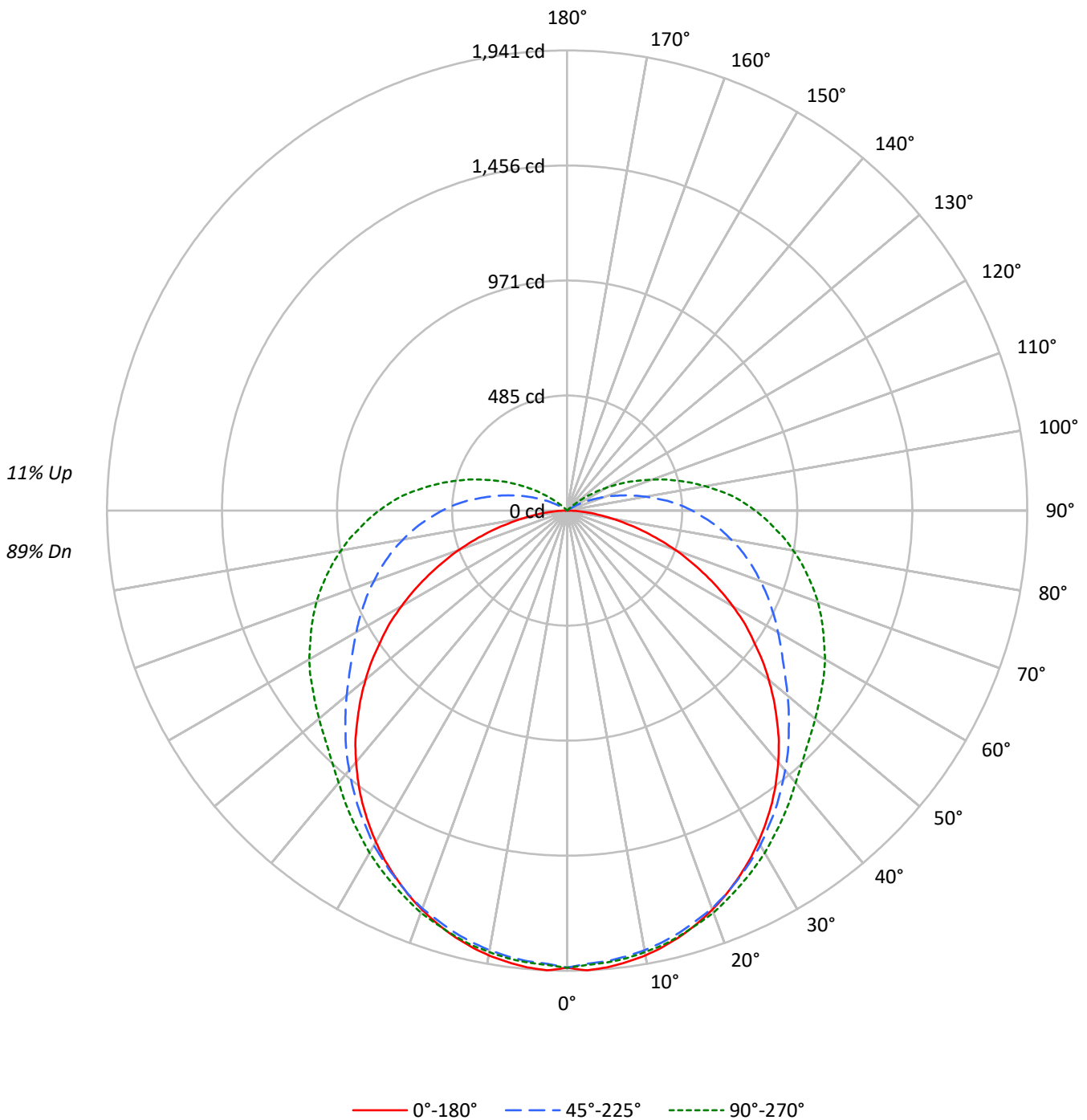
Input Watts (W): 62.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### 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   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 | 89 |
| 1   | 103 | 97  | 91  | 87  | 99  | 94  | 89  | 84  | 87  | 83  | 79  | 81 | 78 | 75 | 76 | 73 | 71 | 68 |
| 2   | 93  | 83  | 75  | 68  | 89  | 80  | 73  | 67  | 75  | 68  | 63  | 70 | 65 | 60 | 65 | 61 | 57 | 54 |
| 3   | 84  | 72  | 63  | 56  | 80  | 69  | 61  | 54  | 65  | 58  | 52  | 61 | 55 | 50 | 57 | 52 | 47 | 45 |
| 4   | 76  | 63  | 54  | 46  | 73  | 61  | 52  | 45  | 57  | 50  | 44  | 53 | 47 | 42 | 50 | 45 | 40 | 37 |
| 5   | 70  | 56  | 47  | 39  | 67  | 54  | 45  | 39  | 51  | 43  | 37  | 48 | 41 | 36 | 45 | 39 | 34 | 32 |
| 6   | 65  | 50  | 41  | 34  | 62  | 49  | 40  | 34  | 46  | 38  | 32  | 43 | 36 | 31 | 41 | 35 | 30 | 28 |
| 7   | 60  | 46  | 36  | 30  | 57  | 44  | 36  | 29  | 42  | 34  | 28  | 39 | 33 | 28 | 37 | 31 | 27 | 24 |
| 8   | 56  | 41  | 33  | 27  | 53  | 40  | 32  | 26  | 38  | 31  | 25  | 36 | 29 | 25 | 34 | 28 | 24 | 22 |
| 9   | 52  | 38  | 29  | 24  | 50  | 37  | 29  | 23  | 35  | 28  | 23  | 33 | 27 | 22 | 31 | 26 | 21 | 19 |
| 10  | 49  | 35  | 27  | 21  | 47  | 34  | 26  | 21  | 32  | 25  | 21  | 31 | 24 | 20 | 29 | 23 | 19 | 17 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 124522 | 124522 | 124522 |
| 5°  | 124932 | 98959  | 91874  |
| 10° | 124024 | 82114  | 72724  |
| 15° | 122797 | 69710  | 59833  |
| 20° | 121253 | 60165  | 50513  |
| 25° | 119461 | 52299  | 43250  |
| 30° | 117535 | 45870  | 37564  |
| 35° | 115369 | 40299  | 32878  |
| 40° | 112821 | 35479  | 29009  |
| 45° | 109776 | 31298  | 26030  |
| 50° | 106249 | 27684  | 23799  |
| 55° | 102022 | 24640  | 21991  |
| 60° | 97221  | 22295  | 20463  |
| 65° | 90482  | 20301  | 19002  |
| 70° | 82513  | 18495  | 17718  |
| 75° | 71479  | 16834  | 16434  |
| 80° | 57459  | 15194  | 15200  |
| 85° | 39152  | 13581  | 13973  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 182.4  | 2.4       |
| 10°-20°   | 522.6  | 6.8       |
| 20°-30°   | 793.6  | 10.4      |
| 30°-40°   | 964.6  | 12.6      |
| 40°-50°   | 1029.5 | 13.4      |
| 50°-60°   | 1009.7 | 13.2      |
| 60°-70°   | 922.5  | 12.0      |
| 70°-80°   | 782.9  | 10.2      |
| 80°-90°   | 609.2  | 8.0       |
| 90°-100°  | 429.5  | 5.6       |
| 100°-110° | 255.3  | 3.3       |
| 110°-120° | 120.9  | 1.6       |
| 120°-130° | 35.0   | 0.5       |
| 130°-140° | 2.0    | 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°    | 1498.6 | 19.6      |
| 0°-40°    | 2463.3 | 32.2      |
| 0°-60°    | 4502.4 | 58.8      |
| 0°-90°    | 6817.0 | 89.0      |
| 90°-120°  | 805.7  | 10.5      |
| 90°-150°  | 842.8  | 11.0      |
| 90°-180°  | 843.0  | 11.0      |
| 0°-180°   | 7659.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1928 | 1928  | 1928 | 1928  | 1928 |      |
| 5°   | 1934 | 1927  | 1908 | 1919  | 1913 | 184  |
| 15°  | 1857 | 1853  | 1841 | 1857  | 1854 | 524  |
| 25°  | 1709 | 1710  | 1712 | 1739  | 1739 | 788  |
| 35°  | 1506 | 1514  | 1534 | 1572  | 1585 | 942  |
| 45°  | 1252 | 1273  | 1322 | 1392  | 1425 | 966  |
| 55°  | 960  | 1001  | 1112 | 1257  | 1311 | 860  |
| 65°  | 645  | 728   | 947  | 1128  | 1191 | 639  |
| 75°  | 331  | 502   | 787  | 982   | 1049 | 351  |
| 85°  | 78   | 320   | 617  | 813   | 881  | 87   |
| 90°  | 6    | 237   | 527  | 725   | 793  | 7    |
| 95°  | 6    | 159   | 435  | 628   | 701  | 5    |
| 105° | 5    | 43    | 248  | 421   | 485  | 5    |
| 115° | 4    | 4     | 101  | 231   | 286  | 4    |
| 125° | 3    | 2     | 5    | 77    | 113  | 3    |
| 135° | 0    | 0     | 0    | 0     | 0    | 1    |
| 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    |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1928.1 | 1928.1 | 1928.1 | 1928.1 | 1928.1 |
| 2.5°   | 1941.1 | 1934.1 | 1913.1 | 1924.1 | 1918.1 |
| 5°     | 1934.1 | 1927.1 | 1908.1 | 1919.1 | 1913.1 |
| 7.5°   | 1921.1 | 1916.1 | 1897.1 | 1909.1 | 1905.1 |
| 10°    | 1905.1 | 1900.1 | 1883.1 | 1897.1 | 1891.1 |
| 12.5°  | 1883.1 | 1878.1 | 1864.1 | 1878.1 | 1876.1 |
| 15°    | 1857.1 | 1853.0 | 1841.0 | 1857.1 | 1854.0 |
| 17.5°  | 1826.0 | 1823.0 | 1813.0 | 1833.0 | 1829.0 |
| 20°    | 1791.0 | 1789.0 | 1786.0 | 1804.0 | 1805.0 |
| 22.5°  | 1753.0 | 1753.0 | 1751.0 | 1771.0 | 1772.0 |
| 25°    | 1709.0 | 1710.0 | 1712.0 | 1739.0 | 1739.0 |
| 27.5°  | 1664.0 | 1667.0 | 1672.0 | 1698.0 | 1704.0 |
| 30°    | 1614.0 | 1619.0 | 1630.0 | 1658.0 | 1667.0 |
| 32.5°  | 1561.0 | 1569.0 | 1581.0 | 1616.0 | 1625.0 |
| 35°    | 1506.0 | 1514.0 | 1534.0 | 1572.0 | 1585.0 |
| 37.5°  | 1447.0 | 1456.0 | 1482.0 | 1525.0 | 1542.0 |
| 40°    | 1385.0 | 1395.0 | 1430.0 | 1484.0 | 1499.0 |
| 42.5°  | 1322.0 | 1336.0 | 1379.0 | 1437.0 | 1460.0 |
| 45°    | 1252.0 | 1273.0 | 1322.0 | 1392.0 | 1425.0 |
| 47.5°  | 1182.0 | 1207.0 | 1268.0 | 1354.0 | 1394.0 |
| 50°    | 1110.0 | 1138.0 | 1214.0 | 1320.0 | 1366.0 |
| 52.5°  | 1038.0 | 1069.0 | 1161.0 | 1288.0 | 1338.0 |
| 55°    | 960.0  | 1001.0 | 1112.0 | 1257.0 | 1311.0 |
| 57.5°  | 888.0  | 932.0  | 1068.0 | 1226.0 | 1285.0 |
| 60°    | 807.0  | 863.0  | 1027.0 | 1194.0 | 1256.0 |
| 62.5°  | 727.0  | 794.0  | 988.0  | 1161.0 | 1222.0 |
| 65°    | 645.0  | 728.0  | 947.0  | 1128.0 | 1191.0 |
| 67.5°  | 564.0  | 661.0  | 909.0  | 1094.0 | 1159.0 |
| 70°    | 487.0  | 603.0  | 867.0  | 1059.0 | 1125.0 |
| 72.5°  | 406.0  | 552.0  | 828.0  | 1022.0 | 1088.0 |
| 75°    | 331.0  | 502.0  | 787.0  | 982.0  | 1049.0 |
| 77.5°  | 255.0  | 455.0  | 747.0  | 942.0  | 1011.0 |
| 80°    | 191.0  | 411.0  | 703.0  | 900.0  | 968.0  |
| 82.5°  | 130.0  | 367.0  | 660.0  | 857.0  | 928.0  |
| 85°    | 78.0   | 320.0  | 617.0  | 813.0  | 881.0  |
| 87.5°  | 35.0   | 279.0  | 570.0  | 768.0  | 839.0  |
| 90°    | 6.0    | 237.0  | 527.0  | 725.0  | 793.0  |
| 92.5°  | 7.0    | 199.0  | 483.0  | 679.0  | 747.0  |
| 95°    | 6.0    | 159.0  | 435.0  | 628.0  | 701.0  |
| 97.5°  | 6.0    | 125.0  | 384.0  | 578.0  | 645.0  |
| 100°   | 5.0    | 93.0   | 335.0  | 525.0  | 591.0  |
| 102.5° | 5.0    | 66.0   | 291.0  | 473.0  | 539.0  |
| 105°   | 5.0    | 43.0   | 248.0  | 421.0  | 485.0  |
| 107.5° | 5.0    | 24.0   | 206.0  | 371.0  | 436.0  |
| 110°   | 5.0    | 9.0    | 168.0  | 326.0  | 380.0  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°   | 67.5° | 90°   |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 4.0 | 4.0   | 131.0 | 276.0 | 332.0 |
| 115°   | 4.0 | 4.0   | 101.0 | 231.0 | 286.0 |
| 117.5° | 4.0 | 3.0   | 69.0  | 189.0 | 239.0 |
| 120°   | 4.0 | 3.0   | 43.0  | 151.0 | 194.0 |
| 122.5° | 3.0 | 2.0   | 21.0  | 112.0 | 155.0 |
| 125°   | 3.0 | 2.0   | 5.0   | 77.0  | 113.0 |
| 127.5° | 3.0 | 1.0   | 0.0   | 46.0  | 78.0  |
| 130°   | 2.0 | 1.0   | 0.0   | 22.0  | 46.0  |
| 132.5° | 2.0 | 1.0   | 0.0   | 4.0   | 20.0  |
| 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)