

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: P290154

Luminaire Tested: **8SSRK-LN-80-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290154  
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: 8SSRK-LN-80-L840-CD1-U  
Description: 8000 LUMEN, 8 FOOT SSRK LED LUMINAIRE WITH ROUND NARROW LENS AND 80 CRI 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8634.1 lumens  
Efficiency: N/A  
Efficacy: 152.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.03 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 8' x H: 0.17')  
CIE Type: Direct

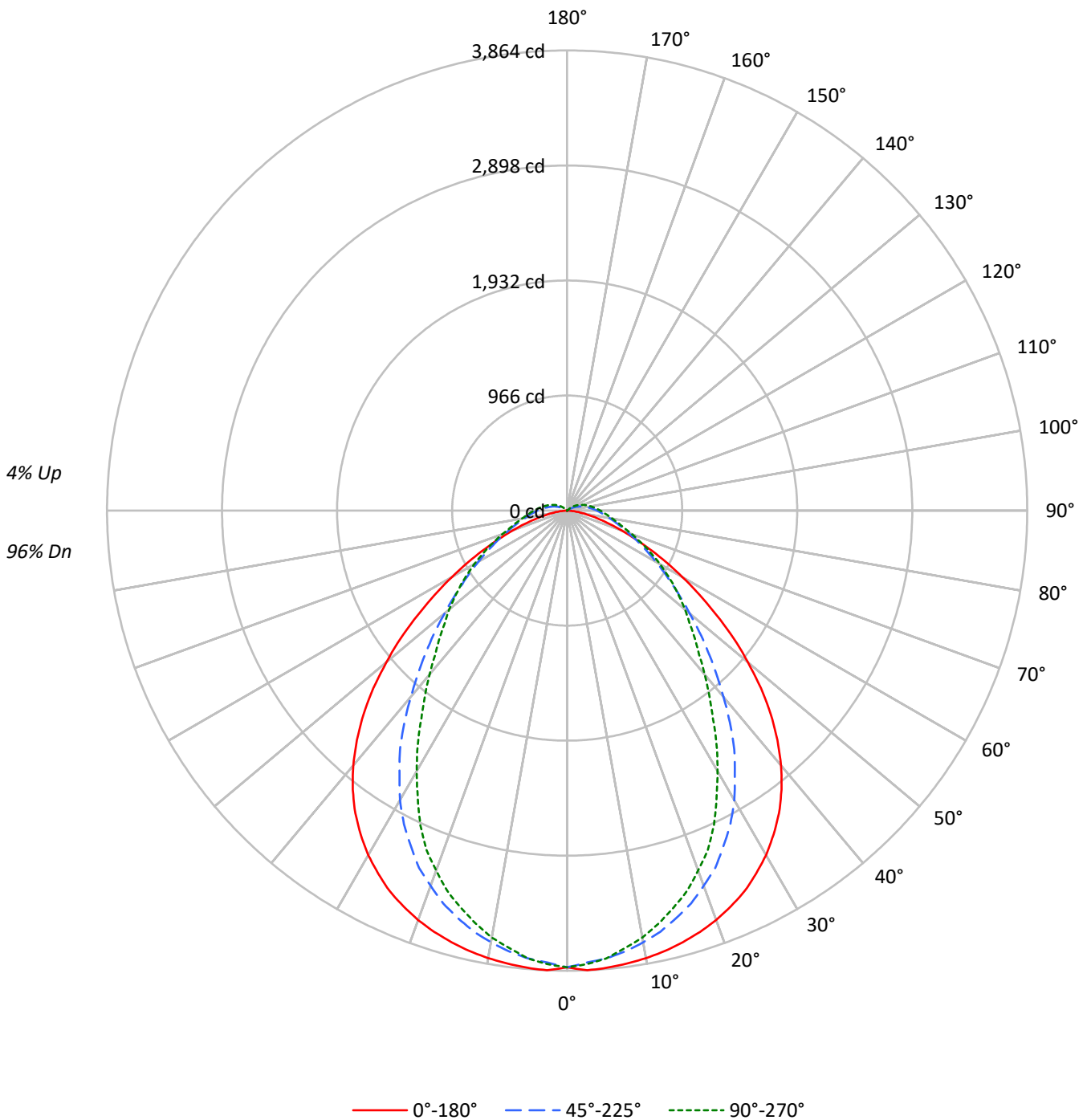
Input Watts (W): 56.6491  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 123848 | 123848 | 123848 |
| 5°  | 124687 | 97976  | 90630  |
| 10° | 124667 | 80393  | 69996  |
| 15° | 124735 | 67225  | 55692  |
| 20° | 124778 | 56625  | 44999  |
| 25° | 124443 | 47601  | 36252  |
| 30° | 123088 | 39618  | 28454  |
| 35° | 120528 | 32269  | 22148  |
| 40° | 115816 | 25412  | 17401  |
| 45° | 108205 | 19861  | 13828  |
| 50° | 97064  | 15356  | 11260  |
| 55° | 83664  | 11952  | 9147   |
| 60° | 69689  | 9376   | 7353   |
| 65° | 55550  | 7379   | 5808   |
| 70° | 43347  | 5843   | 4566   |
| 75° | 32449  | 4746   | 3635   |
| 80° | 23466  | 3915   | 3013   |
| 85° | 14573  | 3302   | 2569   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 360.1  | 4.2       |
| 10°-20°   | 1008.3 | 11.7      |
| 20°-30°   | 1453.2 | 16.8      |
| 30°-40°   | 1574.1 | 18.2      |
| 40°-50°   | 1394.2 | 16.1      |
| 50°-60°   | 1060.8 | 12.3      |
| 60°-70°   | 706.8  | 8.2       |
| 70°-80°   | 436.7  | 5.1       |
| 80°-90°   | 273.6  | 3.2       |
| 90°-100°  | 179.8  | 2.1       |
| 100°-110° | 110.2  | 1.3       |
| 110°-120° | 56.8   | 0.7       |
| 120°-130° | 18.6   | 0.2       |
| 130°-140° | 1.1    | 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°    | 2821.5 | 32.7      |
| 0°-40°    | 4395.6 | 50.9      |
| 0°-60°    | 6850.6 | 79.3      |
| 0°-90°    | 8267.6 | 95.8      |
| 90°-120°  | 346.8  | 4.0       |
| 90°-150°  | 366.5  | 4.2       |
| 90°-180°  | 367.0  | 4.3       |
| 0°-180°   | 8634.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 3835 | 3835  | 3835 | 3835  | 3835 |      |
| 5°   | 3854 | 3829  | 3774 | 3789  | 3774 | 367  |
| 15°  | 3752 | 3681  | 3543 | 3495  | 3451 | 1060 |
| 25°  | 3527 | 3361  | 3107 | 2974  | 2915 | 1622 |
| 35°  | 3102 | 2812  | 2448 | 2218  | 2135 | 1933 |
| 45°  | 2419 | 2040  | 1671 | 1544  | 1514 | 1855 |
| 55°  | 1530 | 1249  | 1074 | 1088  | 1091 | 1375 |
| 65°  | 760  | 666   | 685  | 725   | 728  | 767  |
| 75°  | 280  | 341   | 442  | 471   | 464  | 310  |
| 85°  | 49   | 176   | 298  | 329   | 324  | 59   |
| 90°  | 2    | 128   | 249  | 280   | 278  | 3    |
| 95°  | 5    | 90    | 206  | 239   | 238  | 3    |
| 105° | 3    | 36    | 129  | 164   | 169  | 4    |
| 115° | 3    | 3     | 66   | 103   | 112  | 3    |
| 125° | 2    | 2     | 2    | 45    | 56   | 2    |
| 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    |



TEST NUMBER: P290154

CATALOG NUMBER: 8SSRK-LN-80-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 3835.3 | 3835.3 | 3835.3 | 3835.3 | 3835.3 |
| 2.5°   | 3863.7 | 3842.4 | 3798.7 | 3824.1 | 3811.9 |
| 5°     | 3853.6 | 3829.2 | 3774.4 | 3788.6 | 3774.4 |
| 7.5°   | 3837.3 | 3806.8 | 3733.7 | 3739.8 | 3706.3 |
| 10°    | 3816.0 | 3775.4 | 3680.9 | 3670.8 | 3640.3 |
| 12.5°  | 3788.6 | 3731.7 | 3621.0 | 3580.4 | 3551.0 |
| 15°    | 3752.0 | 3680.9 | 3542.8 | 3495.1 | 3451.4 |
| 17.5°  | 3710.4 | 3619.0 | 3458.6 | 3400.7 | 3348.9 |
| 20°    | 3658.6 | 3543.9 | 3353.0 | 3272.7 | 3215.9 |
| 22.5°  | 3595.6 | 3461.6 | 3248.4 | 3131.6 | 3085.9 |
| 25°    | 3526.6 | 3361.1 | 3107.2 | 2974.2 | 2915.3 |
| 27.5°  | 3436.2 | 3250.4 | 2968.1 | 2801.6 | 2717.3 |
| 30°    | 3340.8 | 3119.4 | 2806.6 | 2614.7 | 2525.4 |
| 32.5°  | 3226.0 | 2976.2 | 2619.8 | 2415.7 | 2336.5 |
| 35°    | 3102.1 | 2811.7 | 2448.2 | 2217.7 | 2135.4 |
| 37.5°  | 2955.9 | 2634.0 | 2244.1 | 2032.9 | 1960.8 |
| 40°    | 2795.5 | 2441.1 | 2041.0 | 1855.2 | 1798.3 |
| 42.5°  | 2612.7 | 2245.1 | 1850.1 | 1689.7 | 1640.9 |
| 45°    | 2418.8 | 2040.0 | 1671.4 | 1544.5 | 1514.0 |
| 47.5°  | 2207.5 | 1834.9 | 1503.9 | 1413.5 | 1391.1 |
| 50°    | 1980.1 | 1629.8 | 1341.4 | 1291.6 | 1292.6 |
| 52.5°  | 1763.8 | 1435.8 | 1203.3 | 1190.1 | 1187.0 |
| 55°    | 1530.3 | 1249.0 | 1074.3 | 1087.5 | 1090.6 |
| 57.5°  | 1319.0 | 1075.3 | 964.7  | 989.0  | 992.1  |
| 60°    | 1118.0 | 920.0  | 860.1  | 897.6  | 902.7  |
| 62.5°  | 934.2  | 787.0  | 770.7  | 809.3  | 808.3  |
| 65°    | 759.5  | 666.1  | 685.4  | 725.0  | 728.1  |
| 67.5°  | 611.3  | 567.6  | 614.3  | 648.9  | 646.8  |
| 70°    | 485.4  | 479.3  | 545.3  | 581.8  | 579.8  |
| 72.5°  | 377.7  | 405.2  | 491.5  | 522.9  | 514.8  |
| 75°    | 280.3  | 341.2  | 441.7  | 471.2  | 464.1  |
| 77.5°  | 206.1  | 288.4  | 398.0  | 426.5  | 421.4  |
| 80°    | 141.1  | 244.7  | 360.5  | 389.9  | 383.8  |
| 82.5°  | 90.4   | 208.2  | 328.0  | 356.4  | 352.4  |
| 85°    | 48.7   | 175.7  | 298.5  | 329.0  | 323.9  |
| 87.5°  | 18.3   | 149.3  | 272.1  | 302.6  | 300.6  |
| 90°    | 2.0    | 127.9  | 248.8  | 280.3  | 278.2  |
| 92.5°  | 3.0    | 108.7  | 226.4  | 258.9  | 258.9  |
| 95°    | 5.1    | 90.4   | 206.1  | 238.6  | 237.6  |
| 97.5°  | 4.1    | 76.2   | 183.8  | 219.3  | 219.3  |
| 100°   | 4.1    | 63.0   | 163.5  | 199.0  | 201.1  |
| 102.5° | 4.1    | 49.8   | 146.2  | 180.7  | 184.8  |
| 105°   | 3.0    | 35.5   | 129.0  | 164.5  | 168.6  |
| 107.5° | 3.0    | 20.3   | 111.7  | 149.3  | 154.3  |
| 110°   | 3.0    | 5.1    | 96.5   | 133.0  | 139.1  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°   |
|--------|-----|-------|------|-------|-------|
| 112.5° | 3.0 | 3.0   | 81.2 | 117.8 | 123.9 |
| 115°   | 3.0 | 3.0   | 66.0 | 102.6 | 111.7 |
| 117.5° | 2.0 | 2.0   | 48.7 | 89.4  | 97.5  |
| 120°   | 2.0 | 2.0   | 30.5 | 75.1  | 83.3  |
| 122.5° | 2.0 | 2.0   | 13.2 | 59.9  | 71.1  |
| 125°   | 2.0 | 2.0   | 2.0  | 44.7  | 55.8  |
| 127.5° | 2.0 | 2.0   | 1.0  | 26.4  | 39.6  |
| 130°   | 2.0 | 2.0   | 1.0  | 10.2  | 24.4  |
| 132.5° | 2.0 | 2.0   | 1.0  | 1.0   | 7.1   |
| 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)