

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: P289650

Luminaire Tested: **4SSRK-20-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P289650  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SSRK-20-L840-CD1-U  
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH NO LENS AND 80 CRI 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2235.5 lumens  
Efficiency: N/A  
Efficacy: 163.2 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')  
CIE Type: Direct

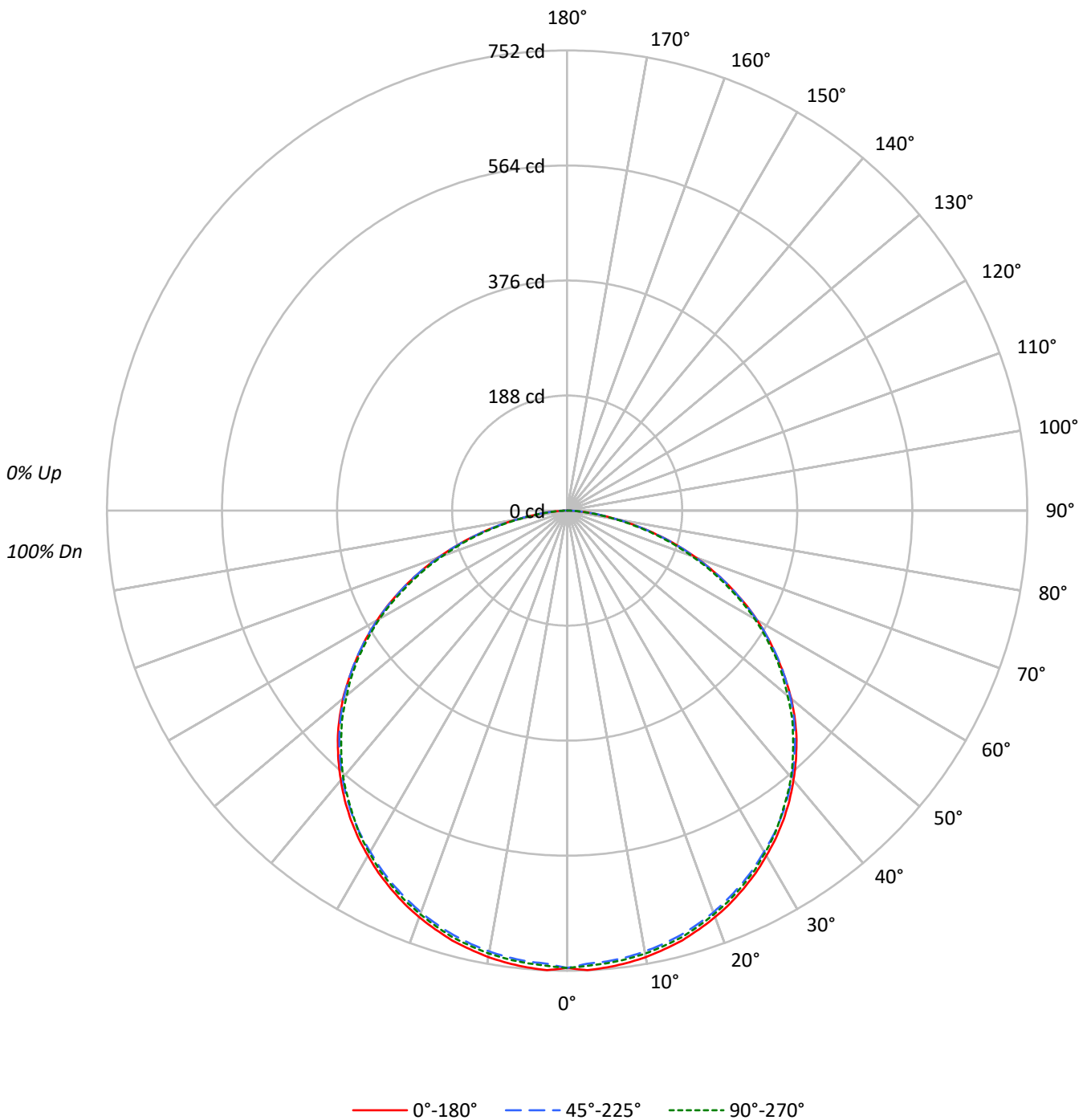
Input Watts (W): 13.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 88  | 86  | 84  |
| 2   | 99  | 90  | 83  | 78  | 96  | 88  | 82  | 77  | 85  | 79  | 75  | 81  | 77  | 73  | 78  | 75  | 71  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 64  | 74  | 68  | 62  | 72  | 66  | 61  | 69  | 64  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 68  | 60  | 54  | 66  | 59  | 53  | 64  | 57  | 52  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 53  | 46  | 59  | 51  | 46  | 57  | 50  | 45  | 55  | 49  | 45  | 42  |
| 6   | 69  | 56  | 47  | 40  | 68  | 55  | 46  | 40  | 53  | 46  | 40  | 51  | 45  | 39  | 50  | 44  | 39  | 37  |
| 7   | 64  | 51  | 42  | 36  | 63  | 50  | 41  | 35  | 48  | 41  | 35  | 47  | 40  | 35  | 45  | 39  | 35  | 33  |
| 8   | 60  | 46  | 38  | 32  | 58  | 45  | 37  | 32  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 41  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  | 37  | 30  | 25  | 36  | 30  | 25  | 23  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 48269 | 48269 | 48269 |
| 5°  | 48400 | 38352 | 35667 |
| 10° | 48240 | 31902 | 28269 |
| 15° | 48085 | 27191 | 23301 |
| 20° | 47871 | 23537 | 19643 |
| 25° | 47659 | 20587 | 16840 |
| 30° | 47429 | 18114 | 14559 |
| 35° | 47220 | 16038 | 12639 |
| 40° | 46872 | 14172 | 11021 |
| 45° | 46488 | 12465 | 9537  |
| 50° | 45764 | 10864 | 8192  |
| 55° | 44571 | 9304  | 6965  |
| 60° | 43213 | 7787  | 5767  |
| 65° | 41046 | 6277  | 4555  |
| 70° | 38004 | 4742  | 3402  |
| 75° | 32846 | 3243  | 2301  |
| 80° | 25210 | 1811  | 1242  |
| 85° | 15059 | 654   | 409   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.8   | 3.2       |
| 10°-20°   | 204.1  | 9.1       |
| 20°-30°   | 312.7  | 14.0      |
| 30°-40°   | 383.3  | 17.1      |
| 40°-50°   | 406.1  | 18.2      |
| 50°-60°   | 374.4  | 16.8      |
| 60°-70°   | 287.8  | 12.9      |
| 70°-80°   | 159.5  | 7.1       |
| 80°-90°   | 36.7   | 1.6       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 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°    | 587.6  | 26.3      |
| 0°-40°    | 971.0  | 43.4      |
| 0°-60°    | 1751.5 | 78.4      |
| 0°-90°    | 2235.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2235.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 747 | 747   | 747 | 747   | 747 |      |
| 5°  | 749 | 746   | 740 | 747   | 743 | 71   |
| 15° | 727 | 724   | 718 | 724   | 722 | 205  |
| 25° | 682 | 679   | 674 | 681   | 677 | 314  |
| 35° | 616 | 614   | 610 | 613   | 609 | 386  |
| 45° | 530 | 528   | 526 | 526   | 522 | 409  |
| 55° | 419 | 423   | 420 | 418   | 415 | 375  |
| 65° | 293 | 293   | 293 | 289   | 286 | 289  |
| 75° | 152 | 152   | 152 | 149   | 147 | 161  |
| 85° | 30  | 30    | 30  | 28    | 26  | 37   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 747.4 | 747.4 | 747.4 | 747.4 | 747.4 |
| 2.5°  | 751.8 | 748.1 | 741.2 | 748.1 | 744.7 |
| 5°    | 749.3 | 746.1 | 739.5 | 746.6 | 742.7 |
| 7.5°  | 745.9 | 743.2 | 736.5 | 743.4 | 739.5 |
| 10°   | 741.0 | 738.0 | 731.6 | 739.0 | 735.1 |
| 12.5° | 734.3 | 731.6 | 725.5 | 732.4 | 728.9 |
| 15°   | 727.2 | 723.8 | 718.1 | 724.5 | 722.0 |
| 17.5° | 717.4 | 714.7 | 709.0 | 715.2 | 712.5 |
| 20°   | 707.1 | 704.4 | 698.7 | 704.9 | 701.9 |
| 22.5° | 695.3 | 692.6 | 686.7 | 693.3 | 690.4 |
| 25°   | 681.8 | 679.3 | 673.9 | 680.8 | 677.1 |
| 27.5° | 667.5 | 665.5 | 659.6 | 665.3 | 663.1 |
| 30°   | 651.3 | 650.1 | 643.7 | 648.1 | 646.1 |
| 32.5° | 634.8 | 632.6 | 628.2 | 631.6 | 629.7 |
| 35°   | 616.4 | 613.5 | 610.5 | 612.7 | 609.3 |
| 37.5° | 596.8 | 594.8 | 591.6 | 593.6 | 589.6 |
| 40°   | 575.4 | 573.7 | 571.2 | 571.7 | 569.5 |
| 42.5° | 553.3 | 551.3 | 549.3 | 548.4 | 545.9 |
| 45°   | 530.2 | 528.5 | 526.5 | 525.8 | 522.1 |
| 47.5° | 505.1 | 503.9 | 502.7 | 500.9 | 498.2 |
| 50°   | 478.1 | 478.6 | 476.4 | 474.9 | 470.2 |
| 52.5° | 449.1 | 452.0 | 448.9 | 446.6 | 443.9 |
| 55°   | 419.4 | 422.6 | 419.9 | 418.1 | 415.2 |
| 57.5° | 389.9 | 391.4 | 389.6 | 388.4 | 384.5 |
| 60°   | 358.7 | 359.9 | 358.7 | 356.0 | 354.0 |
| 62.5° | 326.5 | 328.0 | 325.5 | 323.6 | 320.9 |
| 65°   | 292.6 | 293.3 | 292.8 | 288.9 | 285.5 |
| 67.5° | 258.5 | 259.7 | 258.2 | 255.5 | 252.1 |
| 70°   | 224.3 | 223.6 | 222.3 | 220.4 | 216.0 |
| 72.5° | 188.2 | 188.2 | 187.9 | 184.3 | 182.0 |
| 75°   | 152.1 | 152.3 | 151.6 | 149.1 | 146.9 |
| 77.5° | 116.0 | 118.7 | 116.7 | 114.2 | 111.8 |
| 80°   | 83.8  | 85.5  | 83.8  | 80.6  | 79.1  |
| 82.5° | 53.6  | 56.0  | 54.5  | 51.3  | 50.9  |
| 85°   | 30.0  | 30.5  | 29.7  | 28.3  | 25.8  |
| 87.5° | 11.3  | 11.8  | 12.0  | 9.8   | 8.6   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)