

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: P290350

Luminaire Tested: **4SSRK-SLN-20-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SSRK-SLN-20-L940-CD1-U
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH SQUARE NARROW LENS AND 90 CRI 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1799.0 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 0.98 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')
CIE Type: Direct

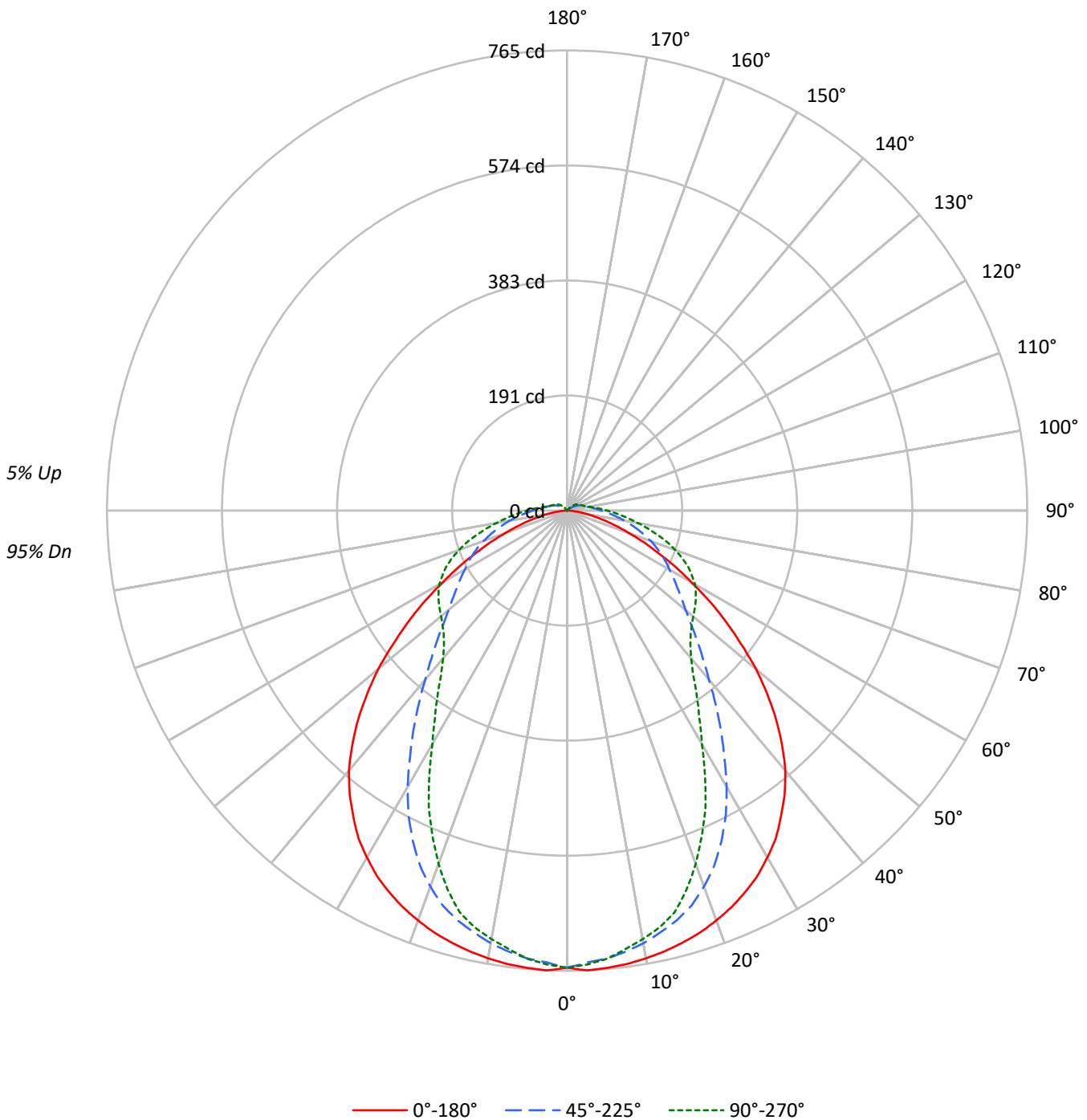
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 108 | 108 | 108 | 103 | 103 | 103 | 98 | 98 | 98 | 95 |
| 1 | 107 | 102 | 98 | 94 | 104 | 100 | 96 | 92 | 94 | 91 | 88 | 90 | 87 | 85 | 85 | 83 | 81 | 79 |
| 2 | 98 | 90 | 83 | 77 | 95 | 87 | 81 | 76 | 83 | 78 | 73 | 79 | 75 | 71 | 75 | 72 | 69 | 66 |
| 3 | 90 | 79 | 71 | 65 | 87 | 77 | 70 | 64 | 74 | 67 | 62 | 70 | 65 | 60 | 67 | 63 | 59 | 56 |
| 4 | 82 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 66 | 59 | 54 | 63 | 57 | 52 | 60 | 55 | 51 | 49 |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 52 | 47 | 57 | 51 | 46 | 55 | 49 | 45 | 43 |
| 6 | 71 | 58 | 49 | 43 | 68 | 56 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 50 | 45 | 40 | 38 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 50 | 42 | 37 | 48 | 41 | 37 | 46 | 40 | 36 | 34 |
| 8 | 61 | 48 | 40 | 34 | 60 | 47 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 37 | 31 | 56 | 44 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 34 | 28 | 53 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 37 | 31 | 27 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 49077 | 49077 | 49077 |
| 5° | 49298 | 38772 | 35931 |
| 10° | 49210 | 31849 | 27823 |
| 15° | 49149 | 26695 | 22303 |
| 20° | 49097 | 22405 | 17491 |
| 25° | 48931 | 18528 | 13537 |
| 30° | 48478 | 14926 | 10102 |
| 35° | 47496 | 11706 | 7791 |
| 40° | 45967 | 9100 | 6199 |
| 45° | 43104 | 7228 | 5305 |
| 50° | 39236 | 5858 | 4768 |
| 55° | 34262 | 4955 | 4380 |
| 60° | 28793 | 4268 | 4000 |
| 65° | 23469 | 3706 | 3545 |
| 70° | 18587 | 3157 | 3008 |
| 75° | 14058 | 2605 | 2430 |
| 80° | 9807 | 2088 | 1876 |
| 85° | 5722 | 1633 | 1427 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 71.4 | 4.0 |
| 10°-20° | 200.0 | 11.1 |
| 20°-30° | 281.3 | 15.6 |
| 30°-40° | 294.5 | 16.4 |
| 40°-50° | 266.7 | 14.8 |
| 50°-60° | 227.0 | 12.6 |
| 60°-70° | 179.5 | 10.0 |
| 70°-80° | 122.2 | 6.8 |
| 80°-90° | 69.7 | 3.9 |
| 90°-100° | 38.7 | 2.1 |
| 100°-110° | 23.6 | 1.3 |
| 110°-120° | 14.4 | 0.8 |
| 120°-130° | 7.8 | 0.4 |
| 130°-140° | 2.3 | 0.1 |
| 140°-150° | 0.1 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 552.6 | 30.7 |
| 0°-40° | 847.2 | 47.1 |
| 0°-60° | 1340.8 | 74.5 |
| 0°-90° | 1712.2 | 95.2 |
| 90°-120° | 76.7 | 4.3 |
| 90°-150° | 86.8 | 4.8 |
| 90°-180° | 87.0 | 4.8 |
| 0°-180° | 1799.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 760 | 760 | 760 | 760 | 760 | |
| 5° | 763 | 758 | 748 | 751 | 748 | 73 |
| 15° | 743 | 729 | 705 | 698 | 691 | 210 |
| 25° | 700 | 665 | 606 | 560 | 544 | 323 |
| 35° | 620 | 550 | 446 | 390 | 376 | 387 |
| 45° | 492 | 390 | 305 | 289 | 290 | 378 |
| 55° | 322 | 246 | 224 | 249 | 261 | 288 |
| 65° | 167 | 145 | 173 | 211 | 222 | 169 |
| 75° | 65 | 79 | 122 | 150 | 155 | 71 |
| 85° | 11 | 38 | 74 | 89 | 90 | 14 |
| 90° | 0 | 26 | 57 | 66 | 66 | 1 |
| 95° | 0 | 20 | 45 | 50 | 49 | 0 |
| 105° | 0 | 12 | 30 | 31 | 30 | 0 |
| 115° | 0 | 2 | 20 | 24 | 23 | 0 |
| 125° | 0 | 0 | 9 | 16 | 17 | 0 |
| 135° | 0 | 0 | 0 | 7 | 9 | 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: P290350

CATALOG NUMBER: 4SSRK-SLN-20-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 759.9 | 759.9 | 759.9 | 759.9 | 759.9 |
| 2.5° | 765.1 | 760.9 | 752.2 | 757.8 | 755.3 |
| 5° | 763.2 | 758.4 | 747.6 | 750.9 | 748.2 |
| 7.5° | 760.3 | 753.9 | 739.9 | 741.0 | 735.8 |
| 10° | 755.9 | 747.6 | 730.4 | 728.5 | 723.5 |
| 12.5° | 750.3 | 738.9 | 718.1 | 715.6 | 709.8 |
| 15° | 743.3 | 729.1 | 705.0 | 697.7 | 691.1 |
| 17.5° | 735.4 | 717.5 | 688.2 | 672.0 | 660.5 |
| 20° | 725.2 | 702.5 | 665.1 | 641.6 | 625.0 |
| 22.5° | 713.7 | 686.3 | 639.1 | 603.8 | 584.9 |
| 25° | 700.0 | 665.3 | 606.5 | 559.5 | 544.3 |
| 27.5° | 684.8 | 643.5 | 570.9 | 516.1 | 495.9 |
| 30° | 665.7 | 615.8 | 530.4 | 471.6 | 448.3 |
| 32.5° | 645.8 | 586.1 | 486.4 | 427.1 | 409.0 |
| 35° | 620.0 | 550.2 | 445.6 | 389.9 | 375.6 |
| 37.5° | 594.0 | 511.7 | 405.1 | 356.7 | 344.0 |
| 40° | 564.3 | 472.8 | 366.8 | 329.2 | 320.3 |
| 42.5° | 529.0 | 433.4 | 334.4 | 306.2 | 303.0 |
| 45° | 491.6 | 390.3 | 305.3 | 289.3 | 290.4 |
| 47.5° | 450.8 | 351.3 | 278.9 | 275.8 | 281.0 |
| 50° | 409.9 | 314.9 | 256.9 | 265.6 | 273.7 |
| 52.5° | 364.4 | 279.8 | 239.4 | 257.3 | 267.1 |
| 55° | 322.4 | 246.1 | 223.6 | 249.4 | 261.1 |
| 57.5° | 280.6 | 217.4 | 209.9 | 241.3 | 253.6 |
| 60° | 239.0 | 191.2 | 196.6 | 232.6 | 245.5 |
| 62.5° | 202.9 | 166.3 | 185.0 | 222.8 | 234.0 |
| 65° | 167.3 | 145.3 | 172.9 | 211.2 | 222.2 |
| 67.5° | 137.8 | 126.6 | 160.9 | 197.2 | 207.2 |
| 70° | 109.7 | 108.9 | 148.0 | 181.9 | 191.0 |
| 72.5° | 85.6 | 92.9 | 134.5 | 165.9 | 174.6 |
| 75° | 65.1 | 79.2 | 121.8 | 149.6 | 155.1 |
| 77.5° | 47.6 | 66.3 | 108.9 | 133.2 | 137.0 |
| 80° | 32.6 | 55.1 | 96.6 | 116.8 | 119.5 |
| 82.5° | 20.6 | 45.5 | 84.8 | 102.1 | 103.9 |
| 85° | 11.4 | 37.6 | 74.2 | 88.7 | 90.0 |
| 87.5° | 4.4 | 31.0 | 64.6 | 77.1 | 78.1 |
| 90° | 0.2 | 26.2 | 56.7 | 66.1 | 66.1 |
| 92.5° | 0.2 | 22.9 | 50.3 | 57.4 | 57.8 |
| 95° | 0.4 | 20.2 | 44.7 | 49.5 | 49.1 |
| 97.5° | 0.4 | 18.3 | 39.5 | 43.4 | 42.2 |
| 100° | 0.4 | 16.6 | 35.5 | 38.2 | 37.0 |
| 102.5° | 0.4 | 14.8 | 32.4 | 34.1 | 32.6 |
| 105° | 0.4 | 12.3 | 29.9 | 31.2 | 29.9 |
| 107.5° | 0.4 | 9.8 | 27.2 | 28.9 | 27.6 |
| 110° | 0.4 | 7.3 | 24.7 | 26.8 | 25.8 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.2 | 4.6 | 22.4 | 24.9 | 24.3 |
| 115° | 0.4 | 1.7 | 20.2 | 23.5 | 22.9 |
| 117.5° | 0.2 | 0.8 | 17.3 | 21.8 | 21.6 |
| 120° | 0.2 | 0.6 | 14.5 | 20.4 | 20.4 |
| 122.5° | 0.2 | 0.6 | 12.1 | 18.3 | 19.1 |
| 125° | 0.2 | 0.4 | 9.1 | 16.2 | 17.3 |
| 127.5° | 0.2 | 0.4 | 6.4 | 14.1 | 15.4 |
| 130° | 0.2 | 0.4 | 3.3 | 11.6 | 13.3 |
| 132.5° | 0.2 | 0.4 | 0.4 | 9.1 | 11.0 |
| 135° | 0.4 | 0.4 | 0.4 | 6.7 | 8.7 |
| 137.5° | 0.4 | 0.4 | 0.4 | 3.5 | 6.2 |
| 140° | 0.4 | 0.4 | 0.2 | 0.2 | 2.9 |
| 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)