

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: P290441

Luminaire Tested: **4SSRK-SLW-20-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-17)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SSRK-SLW-20-L835-CD1-U
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH SQUARE FROSTED LENS AND 80 CRI 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1939.8 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.23 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')
CIE Type: Direct

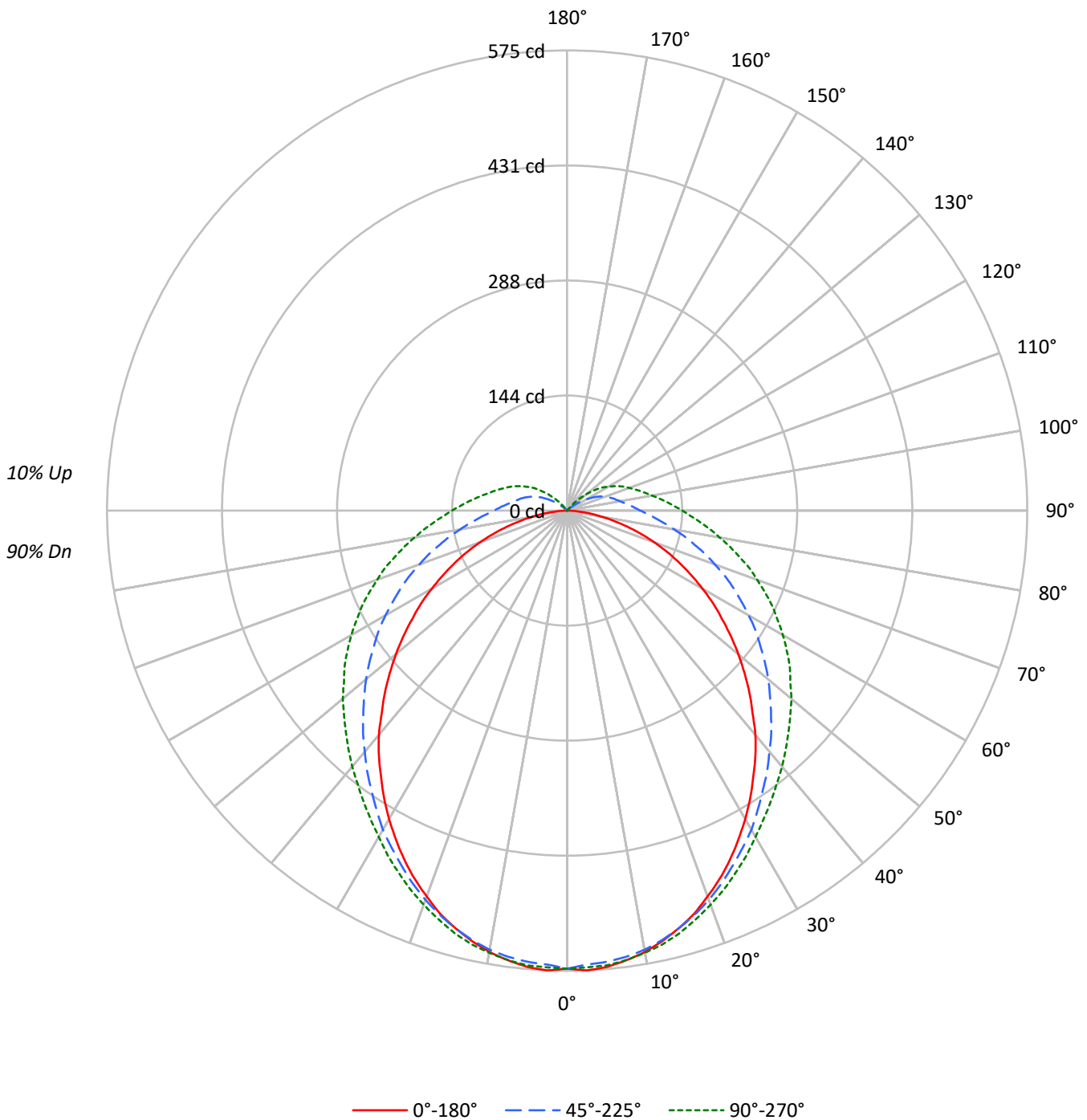
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 106 | 106 | 106 | 99 | 99 | 99 | 93 | 93 | 93 | 90 |
| 1 | 104 | 99 | 94 | 89 | 101 | 96 | 91 | 87 | 89 | 86 | 82 | 84 | 81 | 78 | 79 | 76 | 74 | 71 |
| 2 | 94 | 85 | 78 | 71 | 91 | 82 | 76 | 70 | 77 | 72 | 67 | 72 | 68 | 64 | 68 | 64 | 61 | 58 |
| 3 | 86 | 74 | 66 | 59 | 82 | 72 | 64 | 58 | 68 | 61 | 55 | 63 | 58 | 53 | 60 | 55 | 51 | 48 |
| 4 | 78 | 66 | 56 | 49 | 75 | 64 | 55 | 49 | 60 | 53 | 47 | 56 | 50 | 45 | 53 | 48 | 43 | 41 |
| 5 | 72 | 59 | 49 | 42 | 69 | 57 | 48 | 42 | 54 | 46 | 40 | 50 | 44 | 39 | 48 | 42 | 38 | 35 |
| 6 | 66 | 53 | 43 | 37 | 64 | 51 | 43 | 36 | 48 | 41 | 35 | 46 | 39 | 34 | 43 | 37 | 33 | 31 |
| 7 | 61 | 48 | 39 | 32 | 59 | 46 | 38 | 32 | 44 | 36 | 31 | 42 | 35 | 30 | 39 | 34 | 29 | 27 |
| 8 | 57 | 43 | 35 | 29 | 55 | 42 | 34 | 28 | 40 | 33 | 28 | 38 | 32 | 27 | 36 | 30 | 26 | 24 |
| 9 | 53 | 40 | 32 | 26 | 51 | 39 | 31 | 26 | 37 | 30 | 25 | 35 | 29 | 24 | 33 | 28 | 24 | 22 |
| 10 | 50 | 37 | 29 | 23 | 48 | 36 | 28 | 23 | 34 | 27 | 23 | 33 | 26 | 22 | 31 | 26 | 21 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 36961 | 36961 | 36961 |
| 5° | 36967 | 29354 | 27393 |
| 10° | 36457 | 24293 | 21574 |
| 15° | 35720 | 20455 | 17621 |
| 20° | 34737 | 17440 | 14664 |
| 25° | 33657 | 14951 | 12408 |
| 30° | 32406 | 12959 | 10609 |
| 35° | 31071 | 11202 | 9206 |
| 40° | 29814 | 9758 | 8087 |
| 45° | 28260 | 8528 | 7144 |
| 50° | 26754 | 7482 | 6377 |
| 55° | 25112 | 6526 | 5698 |
| 60° | 23516 | 5690 | 5073 |
| 65° | 21730 | 4915 | 4517 |
| 70° | 19569 | 4190 | 3977 |
| 75° | 16736 | 3525 | 3486 |
| 80° | 13146 | 2935 | 3038 |
| 85° | 8634 | 2445 | 2647 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 54.1 | 2.8 |
| 10°-20° | 153.0 | 7.9 |
| 20°-30° | 226.3 | 11.7 |
| 30°-40° | 267.3 | 13.8 |
| 40°-50° | 277.8 | 14.3 |
| 50°-60° | 261.9 | 13.5 |
| 60°-70° | 223.3 | 11.5 |
| 70°-80° | 168.8 | 8.7 |
| 80°-90° | 113.9 | 5.9 |
| 90°-100° | 78.2 | 4.0 |
| 100°-110° | 56.1 | 2.9 |
| 110°-120° | 36.0 | 1.9 |
| 120°-130° | 18.4 | 0.9 |
| 130°-140° | 4.7 | 0.2 |
| 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° | 433.3 | 22.3 |
| 0°-40° | 700.6 | 36.1 |
| 0°-60° | 1240.3 | 63.9 |
| 0°-90° | 1746.4 | 90.0 |
| 90°-120° | 170.3 | 8.8 |
| 90°-150° | 193.4 | 10.0 |
| 90°-180° | 193.0 | 9.9 |
| 0°-180° | 1939.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 572 | 572 | 572 | 572 | 572 | |
| 5° | 572 | 571 | 566 | 571 | 570 | 54 |
| 15° | 540 | 542 | 540 | 546 | 546 | 152 |
| 25° | 482 | 487 | 489 | 498 | 499 | 221 |
| 35° | 406 | 415 | 426 | 439 | 444 | 254 |
| 45° | 322 | 338 | 360 | 382 | 391 | 249 |
| 55° | 236 | 261 | 294 | 326 | 340 | 212 |
| 65° | 155 | 186 | 229 | 267 | 283 | 154 |
| 75° | 78 | 115 | 165 | 207 | 222 | 83 |
| 85° | 17 | 58 | 111 | 152 | 167 | 20 |
| 90° | 0 | 41 | 91 | 130 | 144 | 1 |
| 95° | 0 | 32 | 78 | 112 | 125 | 0 |
| 105° | 0 | 21 | 59 | 85 | 94 | 1 |
| 115° | 0 | 3 | 41 | 64 | 72 | 0 |
| 125° | 0 | 1 | 17 | 40 | 48 | 0 |
| 135° | 0 | 0 | 0 | 13 | 19 | 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 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 572.3 | 572.3 | 572.3 | 572.3 | 572.3 |
| 2.5° | 575.2 | 573.3 | 567.7 | 572.5 | 571.3 |
| 5° | 572.3 | 570.9 | 566.0 | 571.3 | 570.4 |
| 7.5° | 566.8 | 566.5 | 562.6 | 568.2 | 566.5 |
| 10° | 560.0 | 560.2 | 557.1 | 562.6 | 561.0 |
| 12.5° | 550.8 | 551.8 | 549.6 | 554.9 | 554.7 |
| 15° | 540.2 | 541.9 | 540.2 | 545.5 | 546.0 |
| 17.5° | 528.1 | 530.8 | 529.5 | 536.1 | 535.3 |
| 20° | 513.1 | 516.7 | 517.7 | 524.2 | 524.0 |
| 22.5° | 498.1 | 502.7 | 504.4 | 511.2 | 512.2 |
| 25° | 481.5 | 487.0 | 489.4 | 497.9 | 498.9 |
| 27.5° | 463.4 | 470.6 | 475.0 | 483.4 | 485.6 |
| 30° | 445.0 | 452.7 | 460.5 | 468.9 | 470.8 |
| 32.5° | 425.9 | 434.4 | 443.3 | 454.9 | 457.1 |
| 35° | 405.6 | 415.3 | 426.4 | 439.2 | 443.8 |
| 37.5° | 386.5 | 397.4 | 410.4 | 425.4 | 430.3 |
| 40° | 366.0 | 377.1 | 393.3 | 410.2 | 417.9 |
| 42.5° | 343.0 | 358.0 | 377.4 | 397.6 | 404.4 |
| 45° | 322.3 | 338.2 | 360.2 | 382.4 | 391.1 |
| 47.5° | 300.5 | 319.1 | 344.0 | 368.7 | 378.1 |
| 50° | 279.5 | 299.8 | 328.1 | 354.6 | 366.0 |
| 52.5° | 257.8 | 280.7 | 311.4 | 340.9 | 351.5 |
| 55° | 236.3 | 260.7 | 294.5 | 326.1 | 339.7 |
| 57.5° | 216.9 | 241.8 | 279.3 | 311.6 | 325.4 |
| 60° | 195.2 | 223.9 | 262.1 | 296.9 | 311.4 |
| 62.5° | 175.1 | 204.4 | 245.2 | 282.2 | 296.7 |
| 65° | 154.9 | 186.3 | 229.3 | 267.2 | 283.1 |
| 67.5° | 135.8 | 167.4 | 213.1 | 252.5 | 267.7 |
| 70° | 115.5 | 149.8 | 196.4 | 237.0 | 252.5 |
| 72.5° | 96.9 | 132.1 | 180.9 | 222.0 | 238.7 |
| 75° | 77.5 | 115.2 | 164.8 | 206.8 | 222.5 |
| 77.5° | 60.4 | 98.8 | 150.3 | 192.5 | 208.2 |
| 80° | 43.7 | 83.8 | 135.8 | 178.3 | 193.5 |
| 82.5° | 29.7 | 70.1 | 123.0 | 165.2 | 180.2 |
| 85° | 17.2 | 57.7 | 111.1 | 152.2 | 166.9 |
| 87.5° | 6.5 | 48.1 | 100.5 | 140.8 | 154.4 |
| 90° | 0.2 | 40.8 | 91.3 | 130.2 | 144.0 |
| 92.5° | 0.2 | 35.8 | 84.3 | 120.5 | 133.4 |
| 95° | 0.2 | 32.4 | 77.8 | 112.1 | 124.7 |
| 97.5° | 0.5 | 29.7 | 72.0 | 104.6 | 115.7 |
| 100° | 0.5 | 27.1 | 67.2 | 97.4 | 108.0 |
| 102.5° | 0.5 | 24.4 | 62.8 | 90.8 | 100.7 |
| 105° | 0.5 | 20.8 | 58.9 | 84.8 | 94.5 |
| 107.5° | 0.5 | 16.2 | 54.6 | 79.7 | 88.2 |
| 110° | 0.5 | 11.8 | 50.0 | 74.6 | 82.9 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.5 | 7.2 | 45.9 | 69.6 | 77.5 |
| 115° | 0.5 | 2.7 | 40.8 | 64.0 | 72.0 |
| 117.5° | 0.5 | 1.0 | 34.8 | 58.7 | 65.7 |
| 120° | 0.5 | 0.7 | 29.0 | 52.9 | 59.9 |
| 122.5° | 0.5 | 0.7 | 23.0 | 46.6 | 54.1 |
| 125° | 0.5 | 0.7 | 17.2 | 39.9 | 47.8 |
| 127.5° | 0.5 | 0.5 | 11.1 | 32.9 | 40.1 |
| 130° | 0.5 | 0.5 | 5.3 | 26.1 | 33.1 |
| 132.5° | 0.5 | 0.5 | 0.2 | 19.1 | 25.8 |
| 135° | 0.5 | 0.2 | 0.2 | 12.6 | 18.6 |
| 137.5° | 0.5 | 0.2 | 0.0 | 6.0 | 12.1 |
| 140° | 0.5 | 0.2 | 0.0 | 0.0 | 4.8 |
| 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)