

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: P289915

Luminaire Tested: **4SSRK-LW-20-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P289915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SSRK-LW-20-L850-CD1-U
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH ROUND FROSTED LENS AND 80 CRI 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1858.5 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

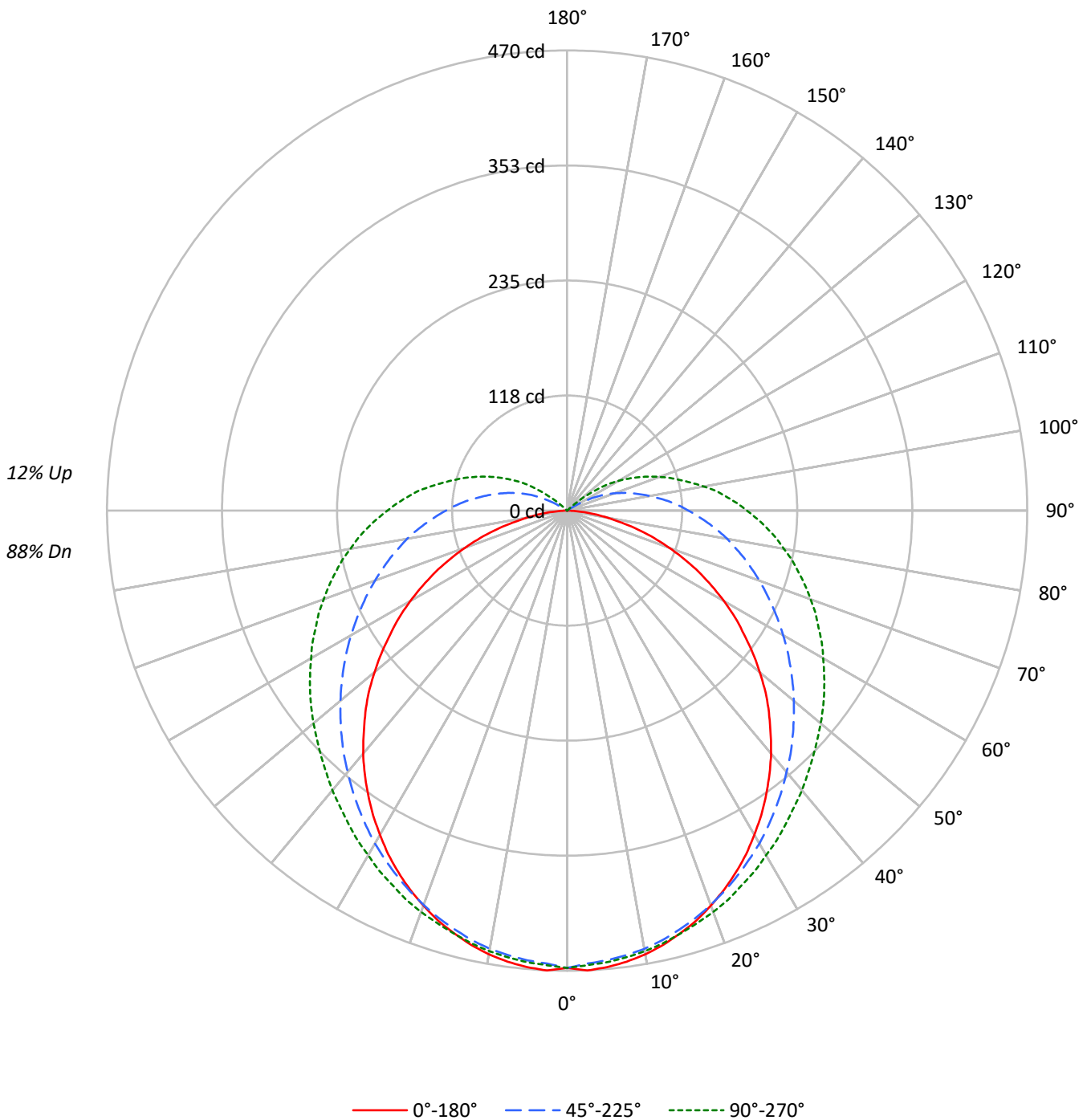
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 91 | 91 | 91 | 88 |
| 1 | 103 | 97 | 92 | 87 | 99 | 94 | 89 | 84 | 87 | 83 | 79 | 81 | 78 | 75 | 75 | 73 | 71 | 67 |
| 2 | 93 | 83 | 75 | 68 | 89 | 80 | 73 | 67 | 74 | 68 | 63 | 69 | 64 | 60 | 65 | 61 | 57 | 54 |
| 3 | 84 | 72 | 63 | 56 | 80 | 70 | 61 | 54 | 65 | 58 | 52 | 60 | 54 | 50 | 56 | 51 | 47 | 44 |
| 4 | 76 | 63 | 54 | 47 | 73 | 61 | 52 | 46 | 57 | 50 | 44 | 53 | 47 | 42 | 50 | 44 | 40 | 37 |
| 5 | 70 | 56 | 47 | 40 | 67 | 54 | 46 | 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 | 40 | 35 | 30 | 28 |
| 7 | 60 | 46 | 36 | 30 | 57 | 44 | 36 | 30 | 42 | 34 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 24 |
| 8 | 55 | 41 | 33 | 27 | 53 | 40 | 32 | 26 | 38 | 31 | 25 | 36 | 29 | 24 | 34 | 28 | 24 | 21 |
| 9 | 52 | 38 | 30 | 24 | 50 | 37 | 29 | 23 | 35 | 28 | 23 | 33 | 27 | 22 | 31 | 25 | 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° | 30167 | 30167 | 30167 |
| 5° | 30230 | 23919 | 22240 |
| 10° | 29959 | 19819 | 17574 |
| 15° | 29550 | 16774 | 14432 |
| 20° | 29057 | 14442 | 12210 |
| 25° | 28506 | 12571 | 10498 |
| 30° | 27840 | 11048 | 9158 |
| 35° | 27142 | 9752 | 8088 |
| 40° | 26401 | 8649 | 7219 |
| 45° | 25550 | 7713 | 6490 |
| 50° | 24571 | 6891 | 5890 |
| 55° | 23444 | 6169 | 5378 |
| 60° | 22287 | 5531 | 4920 |
| 65° | 20818 | 4960 | 4520 |
| 70° | 18824 | 4454 | 4167 |
| 75° | 16175 | 4000 | 3838 |
| 80° | 12484 | 3590 | 3530 |
| 85° | 7529 | 3174 | 3250 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.1 | 2.4 |
| 10°-20° | 125.9 | 6.8 |
| 20°-30° | 190.9 | 10.3 |
| 30°-40° | 233.0 | 12.5 |
| 40°-50° | 250.9 | 13.5 |
| 50°-60° | 246.4 | 13.3 |
| 60°-70° | 222.7 | 12.0 |
| 70°-80° | 185.4 | 10.0 |
| 80°-90° | 142.2 | 7.7 |
| 90°-100° | 102.9 | 5.5 |
| 100°-110° | 66.5 | 3.6 |
| 110°-120° | 35.8 | 1.9 |
| 120°-130° | 11.3 | 0.6 |
| 130°-140° | 0.4 | 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° | 360.9 | 19.4 |
| 0°-40° | 593.9 | 32.0 |
| 0°-60° | 1091.2 | 58.7 |
| 0°-90° | 1641.5 | 88.3 |
| 90°-120° | 205.3 | 11.0 |
| 90°-150° | 217.1 | 11.7 |
| 90°-180° | 217.0 | 11.7 |
| 0°-180° | 1858.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 467 | 467 | 467 | 467 | 467 | |
| 5° | 468 | 466 | 461 | 465 | 463 | 44 |
| 15° | 447 | 446 | 443 | 448 | 447 | 126 |
| 25° | 408 | 408 | 412 | 420 | 422 | 188 |
| 35° | 354 | 359 | 371 | 386 | 390 | 222 |
| 45° | 291 | 302 | 326 | 347 | 355 | 225 |
| 55° | 221 | 242 | 278 | 309 | 321 | 198 |
| 65° | 148 | 181 | 231 | 270 | 283 | 146 |
| 75° | 75 | 124 | 187 | 230 | 245 | 79 |
| 85° | 15 | 76 | 144 | 189 | 205 | 18 |
| 90° | 0 | 57 | 124 | 168 | 184 | 1 |
| 95° | 1 | 42 | 105 | 149 | 163 | 1 |
| 105° | 1 | 15 | 68 | 107 | 120 | 1 |
| 115° | 1 | 1 | 34 | 68 | 81 | 1 |
| 125° | 0 | 0 | 0 | 27 | 39 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 | 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: P289915

CATALOG NUMBER: 4SSRK-LW-20-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 467.1 | 467.1 | 467.1 | 467.1 | 467.1 |
| 2.5° | 470.2 | 468.3 | 463.1 | 466.3 | 464.8 |
| 5° | 468.0 | 466.3 | 461.2 | 464.6 | 463.1 |
| 7.5° | 464.8 | 463.1 | 458.2 | 461.6 | 460.4 |
| 10° | 460.2 | 458.5 | 454.5 | 458.0 | 457.0 |
| 12.5° | 454.3 | 453.0 | 449.4 | 453.5 | 452.6 |
| 15° | 446.9 | 445.9 | 443.0 | 447.9 | 447.2 |
| 17.5° | 439.0 | 438.1 | 436.3 | 441.5 | 441.7 |
| 20° | 429.2 | 429.0 | 428.7 | 435.4 | 436.3 |
| 22.5° | 419.1 | 419.4 | 420.4 | 428.5 | 430.0 |
| 25° | 407.8 | 408.3 | 411.5 | 420.4 | 422.1 |
| 27.5° | 395.8 | 397.5 | 402.2 | 412.5 | 415.2 |
| 30° | 382.3 | 385.2 | 392.6 | 403.4 | 406.4 |
| 32.5° | 369.0 | 372.2 | 382.0 | 394.8 | 398.8 |
| 35° | 354.3 | 359.0 | 371.2 | 386.0 | 389.9 |
| 37.5° | 339.5 | 344.9 | 360.2 | 376.1 | 381.1 |
| 40° | 324.1 | 331.2 | 348.6 | 366.6 | 373.0 |
| 42.5° | 307.4 | 317.4 | 337.6 | 356.7 | 363.9 |
| 45° | 291.4 | 302.4 | 325.8 | 347.2 | 355.3 |
| 47.5° | 274.9 | 288.2 | 314.0 | 337.8 | 346.4 |
| 50° | 256.7 | 272.7 | 302.2 | 328.5 | 338.1 |
| 52.5° | 239.1 | 258.0 | 290.4 | 318.9 | 329.5 |
| 55° | 220.6 | 242.5 | 278.4 | 309.3 | 320.6 |
| 57.5° | 203.4 | 226.8 | 266.8 | 299.2 | 311.3 |
| 60° | 185.0 | 211.5 | 254.8 | 289.9 | 302.0 |
| 62.5° | 166.3 | 196.3 | 243.0 | 279.8 | 293.4 |
| 65° | 148.4 | 180.6 | 231.4 | 270.3 | 283.3 |
| 67.5° | 129.2 | 166.3 | 220.1 | 259.9 | 274.7 |
| 70° | 111.1 | 151.6 | 208.8 | 250.1 | 264.6 |
| 72.5° | 92.9 | 137.3 | 197.8 | 240.3 | 255.0 |
| 75° | 74.9 | 124.3 | 187.0 | 230.2 | 245.0 |
| 77.5° | 57.0 | 110.6 | 175.9 | 220.1 | 235.6 |
| 80° | 41.5 | 98.5 | 166.1 | 209.8 | 224.8 |
| 82.5° | 28.3 | 87.2 | 155.0 | 200.0 | 215.2 |
| 85° | 15.0 | 76.2 | 144.2 | 189.2 | 204.9 |
| 87.5° | 4.4 | 66.3 | 133.7 | 178.6 | 194.3 |
| 90° | 0.5 | 57.2 | 123.8 | 168.3 | 183.5 |
| 92.5° | 0.7 | 49.4 | 114.5 | 159.0 | 173.7 |
| 95° | 1.0 | 41.5 | 104.9 | 148.6 | 163.1 |
| 97.5° | 1.0 | 34.6 | 95.1 | 138.1 | 153.6 |
| 100° | 1.0 | 28.0 | 85.7 | 127.3 | 141.5 |
| 102.5° | 1.0 | 21.9 | 76.9 | 116.5 | 130.5 |
| 105° | 1.0 | 14.7 | 68.3 | 106.9 | 120.1 |
| 107.5° | 1.0 | 7.4 | 59.9 | 97.5 | 110.6 |
| 110° | 1.0 | 1.5 | 51.6 | 88.0 | 100.5 |



TEST NUMBER: P289915

CATALOG NUMBER: 4SSRK-LW-20-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.7 | 1.0 | 43.5 | 77.9 | 90.7 |
| 115° | 0.7 | 0.7 | 34.4 | 68.1 | 80.8 |
| 117.5° | 0.7 | 0.7 | 24.6 | 59.0 | 70.5 |
| 120° | 0.7 | 0.5 | 14.2 | 49.4 | 60.9 |
| 122.5° | 0.5 | 0.5 | 4.7 | 38.3 | 50.9 |
| 125° | 0.5 | 0.2 | 0.2 | 27.3 | 38.8 |
| 127.5° | 0.5 | 0.2 | 0.0 | 15.2 | 26.3 |
| 130° | 0.5 | 0.2 | 0.0 | 4.4 | 15.0 |
| 132.5° | 0.5 | 0.2 | 0.0 | 0.0 | 3.2 |
| 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)