

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: P289643

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P289643  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SSRK-TB-20-L835-CD1-U  
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH TRILOBE RIBBED LENS AND 80 CRI 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1943.0 lumens  
Efficiency: N/A  
Efficacy: 141.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.08 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')  
CIE Type: Direct

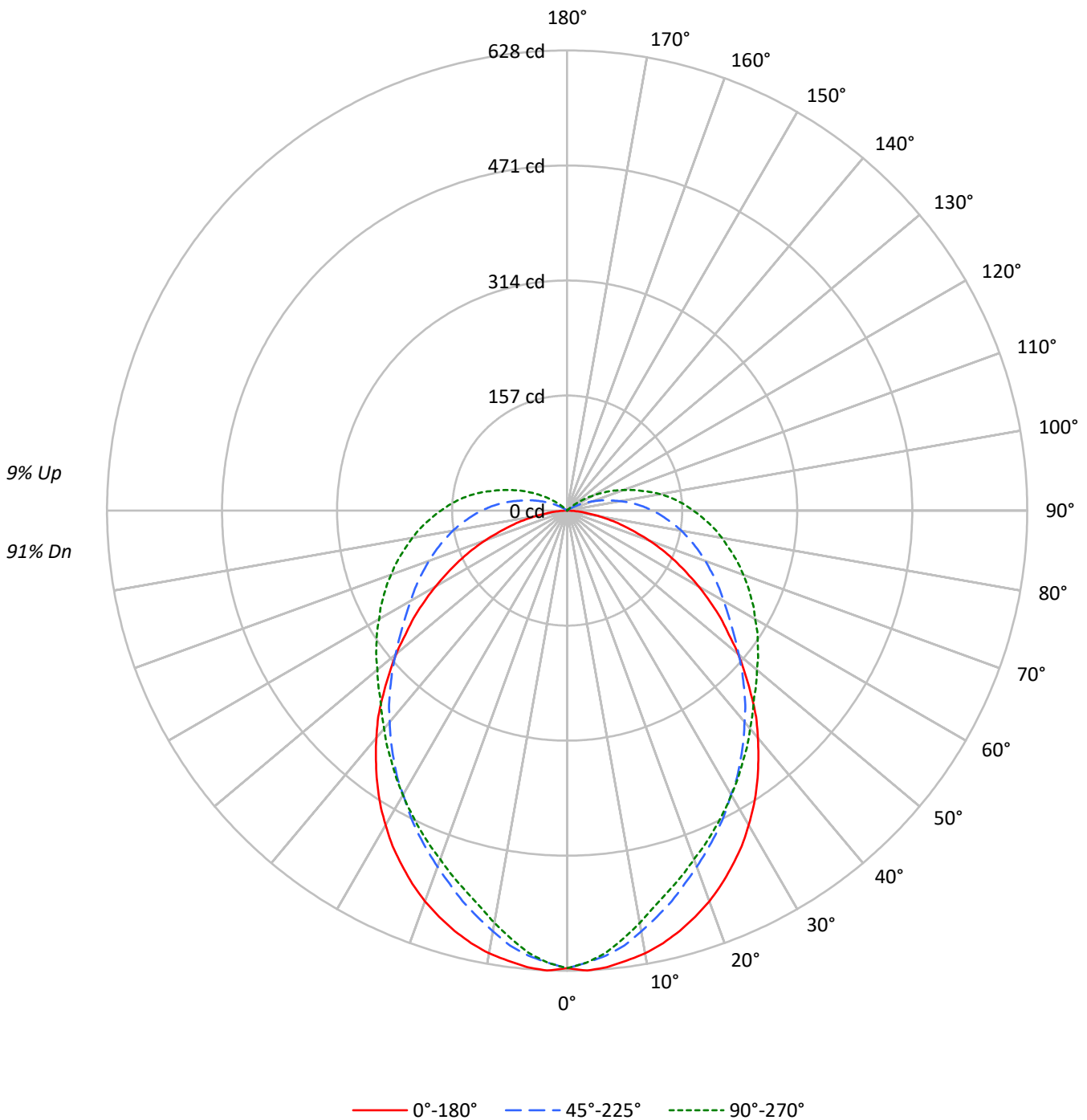
Input Watts (W): 13.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 91 |
| 1   | 104 | 98  | 93  | 89  | 100 | 95  | 90  | 86  | 89  | 85  | 82  | 84 | 80 | 78 | 78 | 76 | 74 | 71 |
| 2   | 94  | 85  | 77  | 71  | 90  | 82  | 75  | 69  | 77  | 71  | 66  | 72 | 67 | 63 | 68 | 64 | 60 | 58 |
| 3   | 85  | 74  | 65  | 58  | 82  | 72  | 64  | 57  | 67  | 60  | 55  | 63 | 58 | 53 | 60 | 55 | 51 | 48 |
| 4   | 78  | 65  | 56  | 49  | 75  | 63  | 55  | 48  | 60  | 52  | 47  | 56 | 50 | 45 | 53 | 48 | 43 | 41 |
| 5   | 72  | 58  | 49  | 42  | 69  | 57  | 48  | 41  | 53  | 46  | 40  | 50 | 44 | 39 | 48 | 42 | 38 | 35 |
| 6   | 66  | 53  | 43  | 37  | 64  | 51  | 42  | 36  | 48  | 41  | 35  | 46 | 39 | 34 | 43 | 38 | 33 | 31 |
| 7   | 61  | 48  | 39  | 32  | 59  | 46  | 38  | 32  | 44  | 37  | 31  | 42 | 35 | 30 | 40 | 34 | 29 | 27 |
| 8   | 57  | 44  | 35  | 29  | 55  | 42  | 34  | 29  | 40  | 33  | 28  | 38 | 32 | 27 | 36 | 31 | 26 | 24 |
| 9   | 54  | 40  | 32  | 26  | 52  | 39  | 31  | 26  | 37  | 30  | 25  | 35 | 29 | 24 | 34 | 28 | 24 | 22 |
| 10  | 50  | 37  | 29  | 24  | 48  | 36  | 28  | 23  | 34  | 28  | 23  | 33 | 27 | 22 | 31 | 26 | 22 | 20 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 40326 | 40326 | 40326 |
| 5°  | 40397 | 31615 | 29088 |
| 10° | 39946 | 25426 | 21970 |
| 15° | 39270 | 20887 | 17327 |
| 20° | 38414 | 17423 | 14172 |
| 25° | 37320 | 14779 | 11886 |
| 30° | 36091 | 12590 | 10104 |
| 35° | 34649 | 10850 | 8669  |
| 40° | 32999 | 9344  | 7517  |
| 45° | 31127 | 8078  | 6593  |
| 50° | 29175 | 6974  | 5892  |
| 55° | 27174 | 6058  | 5327  |
| 60° | 24998 | 5358  | 4822  |
| 65° | 22754 | 4785  | 4408  |
| 70° | 20162 | 4279  | 4027  |
| 75° | 16995 | 3829  | 3682  |
| 80° | 13297 | 3421  | 3367  |
| 85° | 8383  | 3009  | 3072  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 57.8   | 3.0       |
| 10°-20°   | 157.6  | 8.1       |
| 20°-30°   | 228.0  | 11.7      |
| 30°-40°   | 265.2  | 13.6      |
| 40°-50°   | 269.9  | 13.9      |
| 50°-60°   | 251.2  | 12.9      |
| 60°-70°   | 218.7  | 11.3      |
| 70°-80°   | 178.0  | 9.2       |
| 80°-90°   | 134.8  | 6.9       |
| 90°-100°  | 93.5   | 4.8       |
| 100°-110° | 55.0   | 2.8       |
| 110°-120° | 25.8   | 1.3       |
| 120°-130° | 7.3    | 0.4       |
| 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°    | 443.3  | 22.8      |
| 0°-40°    | 708.5  | 36.5      |
| 0°-60°    | 1229.5 | 63.3      |
| 0°-90°    | 1761.1 | 90.6      |
| 90°-120°  | 174.2  | 9.0       |
| 90°-150°  | 182.0  | 9.4       |
| 90°-180°  | 182.0  | 9.4       |
| 0°-180°   | 1943.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 624 | 624   | 624 | 624   | 624 |      |
| 5°   | 625 | 620   | 610 | 610   | 606 | 59   |
| 15°  | 594 | 578   | 552 | 542   | 537 | 167  |
| 25°  | 534 | 510   | 484 | 480   | 478 | 246  |
| 35°  | 452 | 429   | 413 | 417   | 418 | 283  |
| 45°  | 355 | 341   | 341 | 355   | 361 | 274  |
| 55°  | 256 | 255   | 273 | 306   | 318 | 228  |
| 65°  | 162 | 176   | 223 | 262   | 276 | 161  |
| 75°  | 79  | 115   | 179 | 220   | 235 | 84   |
| 85°  | 17  | 72    | 137 | 180   | 194 | 19   |
| 90°  | 0   | 52    | 116 | 158   | 172 | 1    |
| 95°  | 0   | 33    | 95  | 138   | 151 | 0    |
| 105° | 0   | 8     | 54  | 91    | 104 | 0    |
| 115° | 0   | 0     | 22  | 50    | 61  | 0    |
| 125° | 0   | 0     | 1   | 17    | 25  | 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° | 1   | 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°     | 624.4 | 624.4 | 624.4 | 624.4 | 624.4 |
| 2.5°   | 628.3 | 625.4 | 617.5 | 620.4 | 617.5 |
| 5°     | 625.4 | 620.4 | 609.6 | 609.6 | 605.7 |
| 7.5°   | 619.5 | 613.6 | 598.8 | 593.9 | 589.0 |
| 10°    | 613.6 | 604.7 | 583.1 | 577.2 | 571.3 |
| 12.5°  | 604.7 | 591.9 | 567.4 | 558.5 | 552.6 |
| 15°    | 593.9 | 578.2 | 551.6 | 541.8 | 536.9 |
| 17.5°  | 581.1 | 563.4 | 533.9 | 526.1 | 522.1 |
| 20°    | 567.4 | 546.7 | 517.2 | 510.3 | 506.4 |
| 22.5°  | 551.6 | 528.0 | 500.5 | 495.6 | 492.6 |
| 25°    | 533.9 | 510.3 | 483.8 | 479.8 | 477.9 |
| 27.5°  | 516.2 | 490.7 | 466.1 | 464.1 | 463.1 |
| 30°    | 495.6 | 471.0 | 447.4 | 448.4 | 448.4 |
| 32.5°  | 474.9 | 450.3 | 431.7 | 433.6 | 433.6 |
| 35°    | 452.3 | 428.7 | 413.0 | 416.9 | 417.9 |
| 37.5°  | 428.7 | 408.1 | 395.3 | 401.2 | 404.1 |
| 40°    | 405.1 | 386.4 | 376.6 | 385.4 | 388.4 |
| 42.5°  | 381.5 | 363.8 | 359.9 | 370.7 | 374.6 |
| 45°    | 355.0 | 341.2 | 341.2 | 355.0 | 360.9 |
| 47.5°  | 329.4 | 320.5 | 323.5 | 341.2 | 350.0 |
| 50°    | 304.8 | 297.9 | 305.8 | 328.4 | 338.2 |
| 52.5°  | 278.3 | 276.3 | 289.1 | 316.6 | 328.4 |
| 55°    | 255.7 | 254.7 | 273.4 | 305.8 | 317.6 |
| 57.5°  | 231.1 | 234.0 | 259.6 | 295.0 | 307.8 |
| 60°    | 207.5 | 213.4 | 246.8 | 284.2 | 296.0 |
| 62.5°  | 183.9 | 195.7 | 235.0 | 273.4 | 287.1 |
| 65°    | 162.2 | 176.0 | 223.2 | 262.5 | 276.3 |
| 67.5°  | 140.6 | 158.3 | 211.4 | 252.7 | 266.5 |
| 70°    | 119.0 | 142.6 | 200.6 | 241.9 | 255.7 |
| 72.5°  | 97.3  | 128.8 | 189.8 | 231.1 | 245.8 |
| 75°    | 78.7  | 115.0 | 179.0 | 220.3 | 235.0 |
| 77.5°  | 61.0  | 104.2 | 168.1 | 211.4 | 224.2 |
| 80°    | 44.2  | 92.4  | 158.3 | 200.6 | 214.4 |
| 82.5°  | 28.5  | 82.6  | 147.5 | 189.8 | 204.5 |
| 85°    | 16.7  | 71.8  | 136.7 | 179.9 | 193.7 |
| 87.5°  | 6.9   | 61.0  | 126.8 | 169.1 | 182.9 |
| 90°    | 0.0   | 52.1  | 116.0 | 158.3 | 172.1 |
| 92.5°  | 0.0   | 43.3  | 106.2 | 148.5 | 162.2 |
| 95°    | 0.0   | 33.4  | 95.4  | 137.7 | 151.4 |
| 97.5°  | 0.0   | 25.6  | 84.6  | 126.8 | 140.6 |
| 100°   | 0.0   | 19.7  | 73.7  | 114.1 | 128.8 |
| 102.5° | 0.0   | 13.8  | 62.9  | 102.3 | 117.0 |
| 105°   | 0.0   | 7.9   | 54.1  | 91.4  | 104.2 |
| 107.5° | 0.0   | 3.9   | 45.2  | 80.6  | 93.4  |
| 110°   | 0.0   | 1.0   | 36.4  | 69.8  | 81.6  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 0.0   | 28.5 | 60.0  | 71.8 |
| 115°   | 0.0 | 0.0   | 21.6 | 50.1  | 61.0 |
| 117.5° | 0.0 | 0.0   | 14.7 | 41.3  | 51.1 |
| 120°   | 0.0 | 0.0   | 8.8  | 32.4  | 41.3 |
| 122.5° | 0.0 | 0.0   | 3.9  | 24.6  | 32.4 |
| 125°   | 0.0 | 0.0   | 1.0  | 16.7  | 24.6 |
| 127.5° | 0.0 | 0.0   | 0.0  | 9.8   | 16.7 |
| 130°   | 0.0 | 0.0   | 0.0  | 4.9   | 9.8  |
| 132.5° | 0.0 | 0.0   | 0.0  | 1.0   | 3.9  |
| 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°   | 1.0 | 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)