

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: P232261

Luminaire Tested: **14RDI-25-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232261  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-212-2-R2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RDI-25-UNV-L835-CD1-U  
Description: METALUX 1X4 RDI LED TROFFER  
Light Source: (196)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

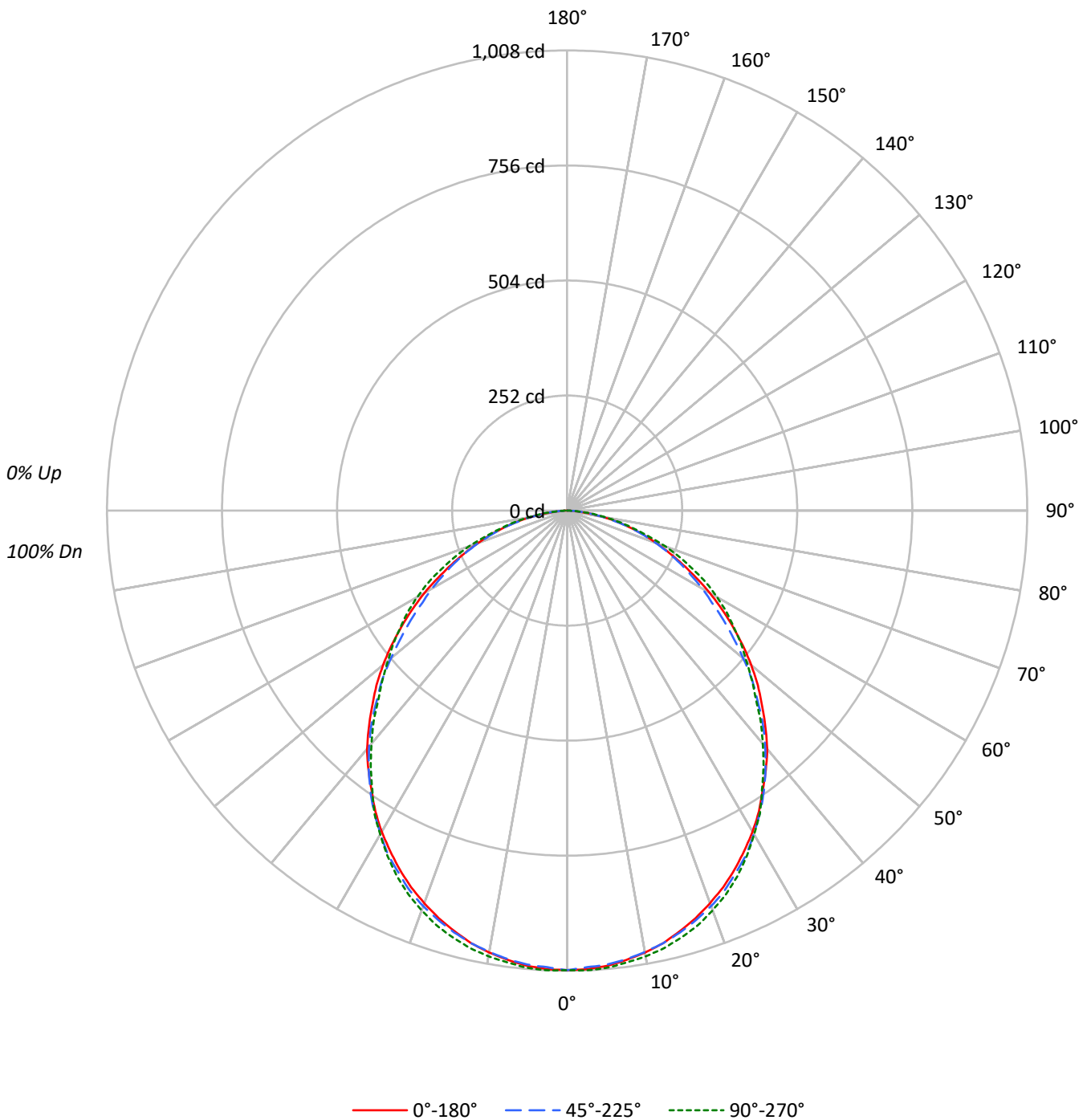
Lumens per Lamp: N/A  
Luminaire Lumens: 2543.0 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.21 / 1.3  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.1  
Input Voltage (V): 120  
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 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 87  | 81  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 72  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  |
| 4   | 84  | 72  | 64  | 57  | 82  | 71  | 63  | 57  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 52  |
| 5   | 77  | 65  | 56  | 50  | 75  | 64  | 55  | 49  | 62  | 54  | 49  | 60  | 53  | 48  | 58  | 52  | 48  | 46  |
| 6   | 71  | 58  | 50  | 43  | 70  | 58  | 49  | 43  | 56  | 48  | 43  | 54  | 48  | 43  | 53  | 47  | 42  | 40  |
| 7   | 66  | 53  | 45  | 39  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 36  |
| 8   | 62  | 49  | 40  | 35  | 60  | 48  | 40  | 34  | 47  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |
| 9   | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29  |
| 10  | 54  | 41  | 34  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2709 | 2709 | 2709 |
| 5°  | 2704 | 2697 | 2716 |
| 10° | 2686 | 2682 | 2709 |
| 15° | 2657 | 2665 | 2696 |
| 20° | 2620 | 2640 | 2668 |
| 25° | 2577 | 2597 | 2622 |
| 30° | 2524 | 2541 | 2545 |
| 35° | 2454 | 2468 | 2445 |
| 40° | 2395 | 2370 | 2341 |
| 45° | 2299 | 2246 | 2225 |
| 50° | 2203 | 2110 | 2145 |
| 55° | 2078 | 1961 | 2091 |
| 60° | 1943 | 1838 | 2040 |
| 65° | 1777 | 1733 | 1936 |
| 70° | 1639 | 1617 | 1792 |
| 75° | 1472 | 1458 | 1560 |
| 80° | 1226 | 1206 | 1313 |
| 85° | 685  | 902  | 942  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 95.1   | 3.7       |
| 10°-20°   | 270.6  | 10.6      |
| 20°-30°   | 403.3  | 15.9      |
| 30°-40°   | 468.5  | 18.4      |
| 40°-50°   | 459.1  | 18.1      |
| 50°-60°   | 388.6  | 15.3      |
| 60°-70°   | 277.3  | 10.9      |
| 70°-80°   | 145.9  | 5.7       |
| 80°-90°   | 34.7   | 1.4       |
| 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°    | 769.0  | 30.2      |
| 0°-40°    | 1237.5 | 48.7      |
| 0°-60°    | 2085.1 | 82.0      |
| 0°-90°    | 2543.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2543.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1007 | 1007  | 1007 | 1007  | 1007 |      |
| 5°  | 1001 | 1001  | 998  | 1004  | 1005 | 95   |
| 15° | 954  | 954   | 957  | 965   | 968  | 269  |
| 25° | 868  | 871   | 875  | 883   | 883  | 399  |
| 35° | 747  | 753   | 751  | 748   | 744  | 468  |
| 45° | 604  | 608   | 590  | 586   | 585  | 466  |
| 55° | 443  | 439   | 418  | 436   | 446  | 396  |
| 65° | 279  | 258   | 272  | 297   | 304  | 278  |
| 75° | 142  | 111   | 140  | 149   | 150  | 150  |
| 85° | 22   | 26    | 29   | 30    | 30   | 32   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1006.7 | 1006.7 | 1006.7 | 1006.7 | 1006.7 |
| 2.5°  | 1005.3 | 1005.3 | 1001.1 | 1006.7 | 1008.1 |
| 5°    | 1001.1 | 1001.1 | 998.4  | 1003.9 | 1005.3 |
| 7.5°  | 992.8  | 992.8  | 991.4  | 998.4  | 998.4  |
| 10°   | 983.1  | 983.1  | 981.7  | 990.0  | 991.4  |
| 12.5° | 970.6  | 970.6  | 970.6  | 980.3  | 981.7  |
| 15°   | 953.9  | 953.9  | 956.7  | 965.0  | 967.8  |
| 17.5° | 935.9  | 938.6  | 940.0  | 949.8  | 952.5  |
| 20°   | 915.0  | 917.8  | 922.0  | 933.1  | 931.7  |
| 22.5° | 892.8  | 895.6  | 901.2  | 910.9  | 909.5  |
| 25°   | 867.8  | 870.6  | 874.8  | 883.1  | 883.1  |
| 27.5° | 840.1  | 844.2  | 849.8  | 853.9  | 852.6  |
| 30°   | 812.3  | 815.1  | 817.8  | 820.6  | 819.2  |
| 32.5° | 781.7  | 785.9  | 785.9  | 785.9  | 785.9  |
| 35°   | 747.0  | 752.6  | 751.2  | 748.4  | 744.3  |
| 37.5° | 715.1  | 719.3  | 713.7  | 709.5  | 706.8  |
| 40°   | 681.8  | 683.2  | 674.8  | 667.9  | 666.5  |
| 42.5° | 642.9  | 647.1  | 634.6  | 626.2  | 627.6  |
| 45°   | 604.0  | 608.2  | 590.1  | 586.0  | 584.6  |
| 47.5° | 566.5  | 569.3  | 549.9  | 544.3  | 548.5  |
| 50°   | 526.3  | 524.9  | 504.0  | 505.4  | 512.4  |
| 52.5° | 484.6  | 481.8  | 459.6  | 470.7  | 480.4  |
| 55°   | 442.9  | 438.8  | 417.9  | 436.0  | 445.7  |
| 57.5° | 401.3  | 395.7  | 376.3  | 402.7  | 413.8  |
| 60°   | 361.0  | 347.1  | 341.6  | 368.0  | 379.1  |
| 62.5° | 318.0  | 302.7  | 305.5  | 333.2  | 344.4  |
| 65°   | 279.1  | 258.3  | 272.2  | 297.1  | 304.1  |
| 67.5° | 241.6  | 215.2  | 238.8  | 261.0  | 266.6  |
| 70°   | 208.3  | 173.6  | 205.5  | 223.6  | 227.7  |
| 72.5° | 175.0  | 138.9  | 172.2  | 184.7  | 186.1  |
| 75°   | 141.6  | 111.1  | 140.2  | 148.6  | 150.0  |
| 77.5° | 109.7  | 87.5   | 108.3  | 116.6  | 119.4  |
| 80°   | 79.1   | 63.9   | 77.8   | 84.7   | 84.7   |
| 82.5° | 48.6   | 43.0   | 51.4   | 55.5   | 58.3   |
| 85°   | 22.2   | 26.4   | 29.2   | 30.5   | 30.5   |
| 87.5° | 6.9    | 9.7    | 11.1   | 11.1   | 11.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)