

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: P275630

Luminaire Tested: **14CZ2-25-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-25-S-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2524.0 lumens  
Efficiency: N/A  
Efficacy: 135.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

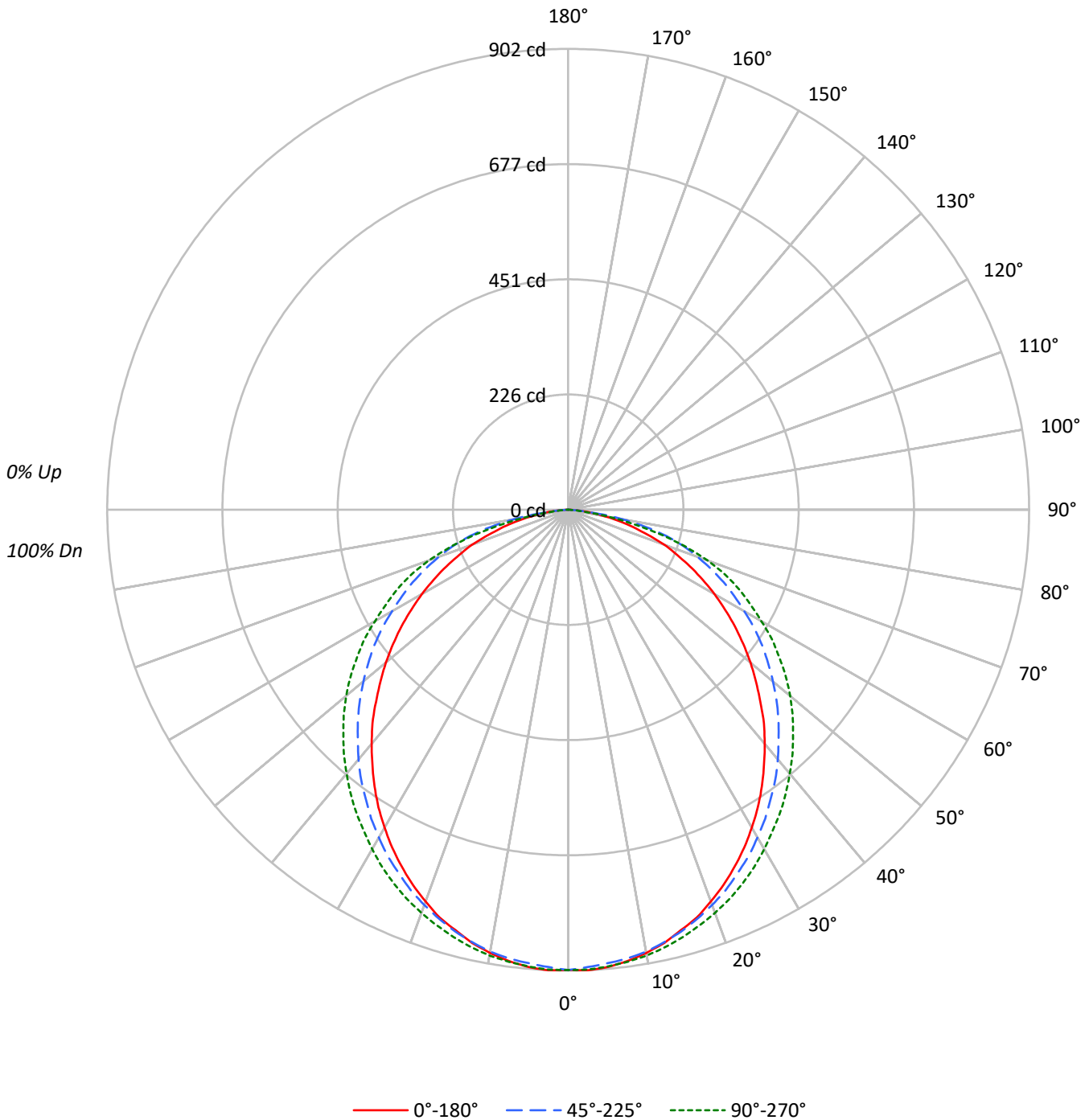
Input Watts (W): 18.693  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |    |    |    |    | 84  |   |  |   |
| 2   | 99  | 90  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |    |    | 70  |   |  |   |
| 3   | 90  | 79  | 71  | 65  | 87  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 58  |    |    |    |    | 58  |   |  |   |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50  |    |    |    |    | 50  |   |  |   |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |    |    | 43  |   |  |   |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |    |    | 38  |   |  |   |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 35  | 46  | 40  | 35  | 33  |    |    |    |    | 33  |   |  |   |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 30  |    |    |    |    | 30  |   |  |   |
| 9   | 56  | 43  | 35  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 28  | 27  |    |    |    |    | 27  |   |  |   |
| 10  | 53  | 40  | 32  | 26  | 52  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 31  | 26  | 36  | 30  | 26  | 24  |    |    |    |    | 24  |   |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2425 | 2425 | 2425 |
| 5°  | 2427 | 2407 | 2424 |
| 10° | 2407 | 2400 | 2421 |
| 15° | 2374 | 2381 | 2413 |
| 20° | 2336 | 2358 | 2405 |
| 25° | 2289 | 2330 | 2397 |
| 30° | 2232 | 2302 | 2384 |
| 35° | 2171 | 2269 | 2376 |
| 40° | 2101 | 2242 | 2369 |
| 45° | 2024 | 2214 | 2367 |
| 50° | 1949 | 2190 | 2373 |
| 55° | 1867 | 2172 | 2366 |
| 60° | 1778 | 2142 | 2350 |
| 65° | 1673 | 2136 | 2351 |
| 70° | 1575 | 2117 | 2284 |
| 75° | 1366 | 2069 | 1952 |
| 80° | 1105 | 1667 | 1299 |
| 85° | 735  | 580  | 386  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 85.1   | 3.4       |
| 10°-20°   | 242.1  | 9.6       |
| 20°-30°   | 363.2  | 14.4      |
| 30°-40°   | 433.2  | 17.2      |
| 40°-50°   | 447.9  | 17.7      |
| 50°-60°   | 408.9  | 16.2      |
| 60°-70°   | 321.8  | 12.7      |
| 70°-80°   | 187.3  | 7.4       |
| 80°-90°   | 34.5   | 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°    | 690.4  | 27.4      |
| 0°-40°    | 1123.6 | 44.5      |
| 0°-60°    | 1980.4 | 78.5      |
| 0°-90°    | 2524.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2524.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 901 | 901   | 901 | 901   | 901 |      |
| 5°  | 898 | 896   | 891 | 898   | 897 | 85   |
| 15° | 852 | 854   | 855 | 866   | 866 | 240  |
| 25° | 771 | 775   | 785 | 803   | 807 | 355  |
| 35° | 661 | 670   | 691 | 717   | 723 | 413  |
| 45° | 532 | 549   | 582 | 614   | 622 | 411  |
| 55° | 398 | 419   | 463 | 497   | 504 | 356  |
| 65° | 263 | 290   | 335 | 362   | 369 | 261  |
| 75° | 131 | 163   | 199 | 195   | 188 | 140  |
| 85° | 24  | 34    | 19  | 15    | 12  | 31   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 901.0 | 901.0 | 901.0 | 901.0 | 901.0 |
| 2.5°  | 902.3 | 899.8 | 896.0 | 902.3 | 901.0 |
| 5°    | 898.5 | 896.0 | 891.0 | 898.5 | 897.3 |
| 7.5°  | 891.0 | 888.5 | 886.0 | 893.5 | 892.3 |
| 10°   | 881.0 | 879.8 | 878.5 | 887.3 | 886.0 |
| 12.5° | 868.5 | 868.5 | 867.2 | 877.2 | 877.2 |
| 15°   | 852.2 | 853.5 | 854.7 | 866.0 | 866.0 |
| 17.5° | 837.2 | 836.0 | 839.7 | 852.2 | 853.5 |
| 20°   | 815.9 | 818.4 | 823.4 | 838.5 | 839.7 |
| 22.5° | 794.7 | 797.2 | 805.9 | 820.9 | 824.7 |
| 25°   | 770.9 | 774.6 | 784.6 | 803.4 | 807.2 |
| 27.5° | 745.8 | 750.9 | 764.6 | 784.6 | 788.4 |
| 30°   | 718.3 | 725.8 | 740.8 | 763.4 | 767.1 |
| 32.5° | 690.8 | 698.3 | 717.1 | 739.6 | 744.6 |
| 35°   | 660.8 | 669.5 | 690.8 | 717.1 | 723.3 |
| 37.5° | 629.5 | 640.7 | 665.8 | 692.0 | 699.5 |
| 40°   | 598.2 | 610.7 | 638.2 | 665.8 | 674.5 |
| 42.5° | 566.9 | 579.4 | 609.4 | 640.7 | 649.5 |
| 45°   | 531.9 | 549.4 | 581.9 | 614.4 | 622.0 |
| 47.5° | 498.1 | 516.8 | 553.1 | 585.7 | 595.7 |
| 50°   | 465.5 | 484.3 | 523.1 | 556.9 | 566.9 |
| 52.5° | 431.7 | 451.8 | 493.1 | 528.1 | 536.9 |
| 55°   | 398.0 | 419.2 | 463.0 | 496.8 | 504.3 |
| 57.5° | 364.2 | 386.7 | 431.7 | 464.3 | 473.0 |
| 60°   | 330.4 | 354.2 | 398.0 | 430.5 | 436.7 |
| 62.5° | 296.6 | 321.6 | 366.7 | 395.5 | 401.7 |
| 65°   | 262.8 | 290.3 | 335.4 | 361.7 | 369.2 |
| 67.5° | 230.3 | 257.8 | 301.6 | 326.6 | 332.9 |
| 70°   | 200.2 | 225.3 | 269.1 | 287.8 | 290.3 |
| 72.5° | 162.7 | 194.0 | 236.5 | 246.5 | 240.3 |
| 75°   | 131.4 | 162.7 | 199.0 | 195.2 | 187.7 |
| 77.5° | 100.1 | 131.4 | 155.2 | 142.7 | 132.7 |
| 80°   | 71.3  | 102.6 | 107.6 | 88.9  | 83.8  |
| 82.5° | 46.3  | 71.3  | 60.1  | 46.3  | 37.5  |
| 85°   | 23.8  | 33.8  | 18.8  | 15.0  | 12.5  |
| 87.5° | 7.5   | 5.0   | 2.5   | 2.5   | 1.3   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)