

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: P731935

Luminaire Tested: **14CZ2-44-SQR-B2750-W2D-5000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P731935  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P387389)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-SQR-B2750-W2D-5000K  
Description: 1X4 4400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

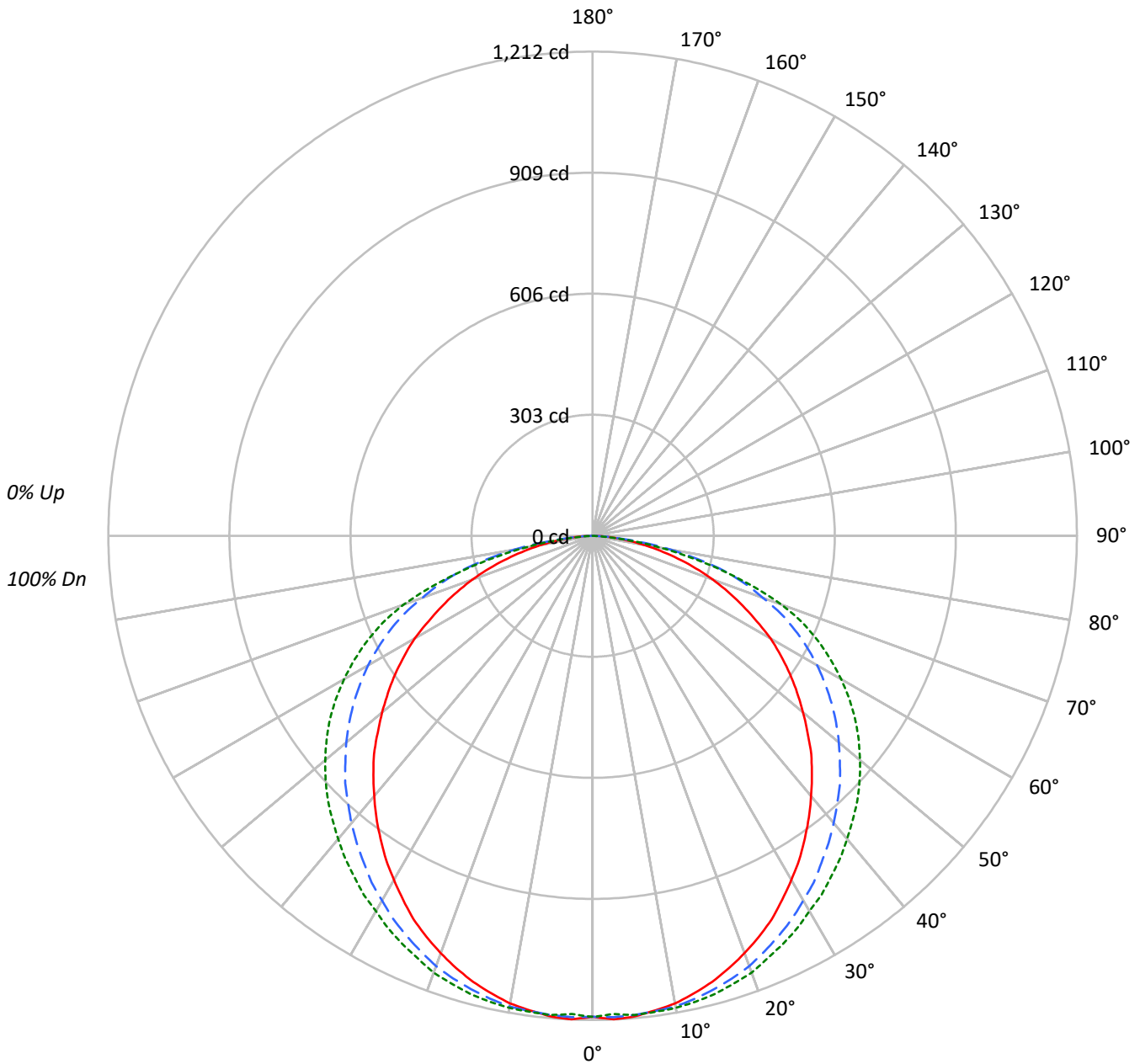
Lumens per Lamp: N/A  
Luminaire Lumens: 3810.0 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 36  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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 | 0  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |  |  |  |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |  |  |  |  |   |
| 1   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 93  | 97  | 93  | 90  | 93  | 90  | 87  | 89  | 87  | 85  | 83  |    |    |    |  |  |  |  |   |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 81  | 75  | 84  | 78  | 73  | 80  | 76  | 72  | 77  | 73  | 70  | 68  |    |    |    |  |  |  |  |   |
| 3   | 89  | 78  | 69  | 62  | 86  | 76  | 68  | 62  | 73  | 66  | 61  | 70  | 64  | 60  | 68  | 63  | 59  | 56  |    |    |    |  |  |  |  |   |
| 4   | 81  | 68  | 59  | 52  | 79  | 67  | 59  | 52  | 65  | 57  | 51  | 62  | 56  | 51  | 60  | 54  | 50  | 48  |    |    |    |  |  |  |  |   |
| 5   | 74  | 61  | 52  | 45  | 72  | 60  | 51  | 44  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 41  |    |    |    |  |  |  |  |   |
| 6   | 68  | 55  | 45  | 39  | 67  | 54  | 45  | 39  | 52  | 44  | 38  | 50  | 43  | 38  | 49  | 42  | 38  | 35  |    |    |    |  |  |  |  |   |
| 7   | 63  | 49  | 40  | 34  | 62  | 49  | 40  | 34  | 47  | 39  | 34  | 46  | 39  | 33  | 44  | 38  | 33  | 31  |    |    |    |  |  |  |  |   |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 28  |    |    |    |  |  |  |  |   |
| 9   | 55  | 41  | 33  | 27  | 54  | 41  | 33  | 27  | 39  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  | 25  |    |    |    |  |  |  |  |   |
| 10  | 52  | 38  | 30  | 25  | 50  | 37  | 30  | 24  | 36  | 29  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 22  |    |    |    |  |  |  |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3399 | 3399 | 3399 |
| 5°  | 3422 | 3412 | 3412 |
| 10° | 3407 | 3429 | 3440 |
| 15° | 3378 | 3434 | 3468 |
| 20° | 3340 | 3444 | 3496 |
| 25° | 3301 | 3439 | 3511 |
| 30° | 3242 | 3436 | 3536 |
| 35° | 3189 | 3441 | 3586 |
| 40° | 3134 | 3460 | 3651 |
| 45° | 3089 | 3495 | 3740 |
| 50° | 3019 | 3533 | 3837 |
| 55° | 2967 | 3591 | 3950 |
| 60° | 2905 | 3664 | 4054 |
| 65° | 2770 | 3732 | 4156 |
| 70° | 2630 | 3739 | 4152 |
| 75° | 2408 | 3729 | 3664 |
| 80° | 2058 | 3183 | 2841 |
| 85° | 1619 | 1801 | 1059 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 114.4  | 3.0       |
| 10°-20°   | 330.5  | 8.7       |
| 20°-30°   | 505.5  | 13.3      |
| 30°-40°   | 619.6  | 16.3      |
| 40°-50°   | 666.3  | 17.5      |
| 50°-60°   | 640.3  | 16.8      |
| 60°-70°   | 533.2  | 14.0      |
| 70°-80°   | 327.3  | 8.6       |
| 80°-90°   | 72.9   | 1.9       |
| 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°    | 950.4  | 24.9      |
| 0°-40°    | 1570.0 | 41.2      |
| 0°-60°    | 2876.6 | 75.5      |
| 0°-90°    | 3810.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3810.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1204 | 1204  | 1204 | 1204  | 1204 |      |
| 5°  | 1208 | 1196  | 1204 | 1204  | 1204 | 115  |
| 15° | 1156 | 1152  | 1175 | 1183  | 1187 | 326  |
| 25° | 1060 | 1070  | 1104 | 1118  | 1127 | 488  |
| 35° | 926  | 949   | 998  | 1025  | 1041 | 579  |
| 45° | 774  | 808   | 876  | 916   | 937  | 596  |
| 55° | 603  | 655   | 730  | 780   | 803  | 539  |
| 65° | 415  | 478   | 559  | 605   | 622  | 411  |
| 75° | 221  | 288   | 342  | 340   | 336  | 234  |
| 85° | 50   | 75    | 56   | 38    | 33   | 60   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1204.1 | 1204.1 | 1204.1 | 1204.1 | 1204.1 |
| 2.5°  | 1211.6 | 1200.1 | 1206.0 | 1204.1 | 1198.3 |
| 5°    | 1207.8 | 1196.4 | 1204.1 | 1204.1 | 1204.1 |
| 7.5°  | 1198.3 | 1188.7 | 1200.1 | 1202.0 | 1202.0 |
| 10°   | 1188.7 | 1181.0 | 1196.4 | 1198.3 | 1200.1 |
| 12.5° | 1173.3 | 1167.4 | 1186.8 | 1190.5 | 1194.3 |
| 15°   | 1156.0 | 1152.2 | 1175.1 | 1182.8 | 1186.8 |
| 17.5° | 1134.9 | 1136.8 | 1161.8 | 1171.4 | 1175.1 |
| 20°   | 1111.8 | 1117.6 | 1146.4 | 1156.0 | 1163.7 |
| 22.5° | 1086.8 | 1094.5 | 1125.4 | 1136.8 | 1144.5 |
| 25°   | 1059.9 | 1069.5 | 1104.1 | 1117.6 | 1127.2 |
| 27.5° | 1027.2 | 1042.6 | 1081.2 | 1098.5 | 1108.1 |
| 30°   | 994.7  | 1012.0 | 1054.3 | 1075.3 | 1084.9 |
| 32.5° | 962.0  | 981.2  | 1029.3 | 1050.3 | 1065.8 |
| 35°   | 925.6  | 948.7  | 998.5  | 1025.3 | 1040.8 |
| 37.5° | 889.1  | 916.0  | 969.7  | 1000.3 | 1017.6 |
| 40°   | 850.6  | 879.5  | 938.9  | 973.5  | 990.8  |
| 42.5° | 812.2  | 844.9  | 906.4  | 944.7  | 963.9  |
| 45°   | 773.9  | 808.5  | 875.6  | 916.0  | 937.0  |
| 47.5° | 729.7  | 772.0  | 839.1  | 885.1  | 906.4  |
| 50°   | 687.5  | 733.5  | 804.5  | 852.7  | 873.7  |
| 52.5° | 645.2  | 693.3  | 768.1  | 818.1  | 839.1  |
| 55°   | 602.9  | 654.7  | 729.7  | 779.5  | 802.7  |
| 57.5° | 558.7  | 612.4  | 689.3  | 741.2  | 762.2  |
| 60°   | 514.5  | 570.4  | 649.1  | 697.0  | 718.1  |
| 62.5° | 462.7  | 528.1  | 605.0  | 652.9  | 672.0  |
| 65°   | 414.8  | 478.1  | 558.7  | 605.0  | 622.3  |
| 67.5° | 366.9  | 432.1  | 510.8  | 553.1  | 568.3  |
| 70°   | 318.7  | 384.2  | 453.1  | 493.5  | 503.1  |
| 72.5° | 270.8  | 336.0  | 401.4  | 424.3  | 420.6  |
| 75°   | 220.8  | 288.1  | 341.9  | 340.0  | 336.0  |
| 77.5° | 172.9  | 238.1  | 270.8  | 257.3  | 251.7  |
| 80°   | 126.6  | 190.2  | 195.8  | 182.5  | 174.8  |
| 82.5° | 86.5   | 136.2  | 122.9  | 107.5  | 99.8   |
| 85°   | 50.0   | 74.8   | 55.6   | 38.3   | 32.7   |
| 87.5° | 21.0   | 19.2   | 5.8    | 5.8    | 3.7    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)