

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: METALUX

Report Number: P798102

Luminaire Tested: 24CZSB-SCT3-S-UNV-LOW-3000K

Issue Date: 3/16/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P798102  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 24CZSB-SCT3-S-UNV-LOW-3000K  
Description: Cruze SB Selectable Troffer  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

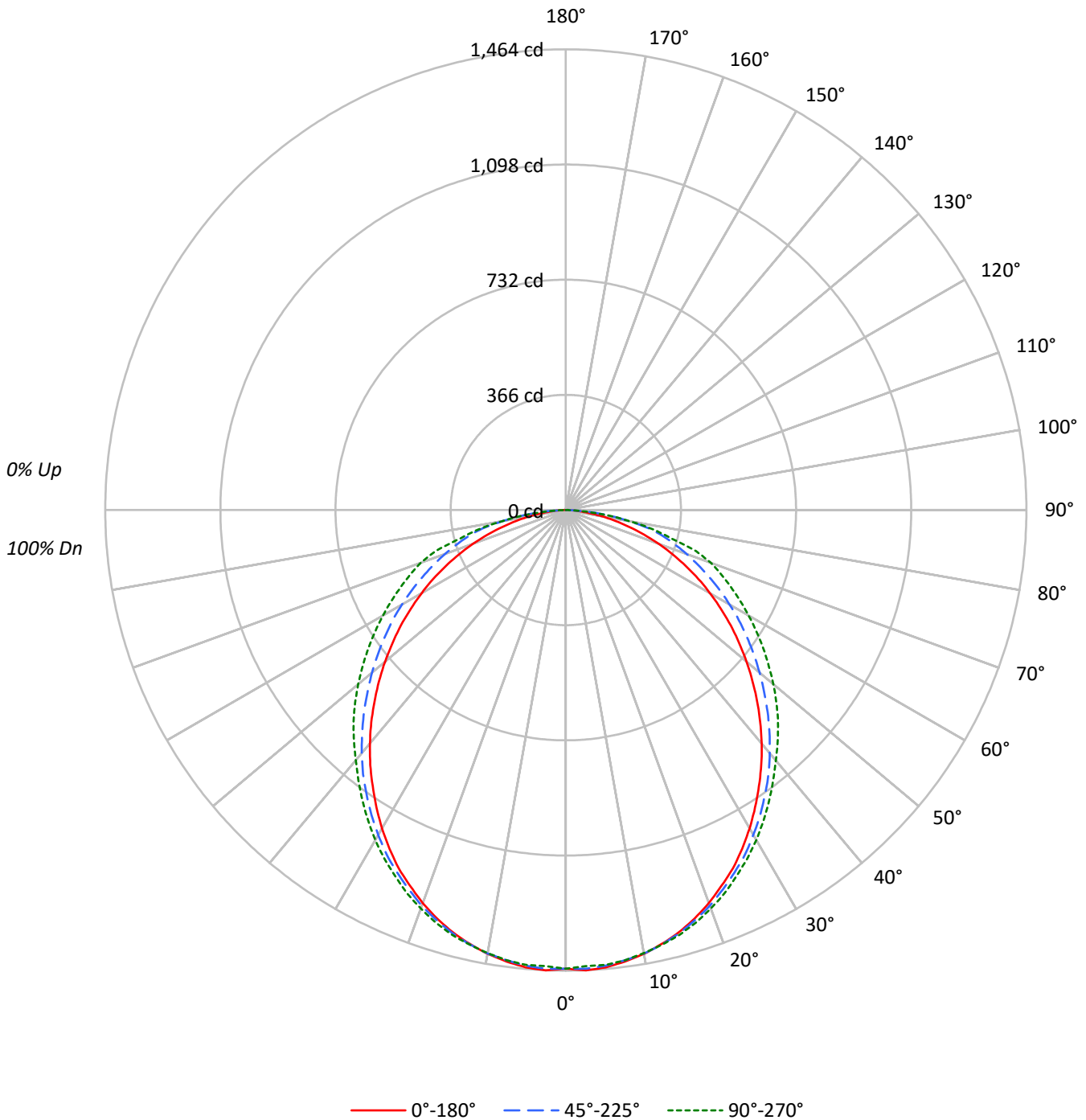
Lumens per Lamp: N/A  
Luminaire Lumens: 4026.4 lumens  
Efficiency: N/A  
Efficacy: 137.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.4  
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: 24 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 | 102 | 102 | 102 | 100 |
| 1   | 108 | 104 | 99  | 95  | 106 | 101 | 97  | 94  | 97  | 94  | 91  | 93  | 90  | 88  | 89  | 87  | 85  | 85  | 85  | 85  | 83  |
| 2   | 99  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 85  | 79  | 75  | 81  | 77  | 73  | 78  | 75  | 71  | 71  | 71  | 71  | 69  |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 64  | 74  | 68  | 62  | 72  | 66  | 61  | 69  | 64  | 60  | 60  | 60  | 60  | 58  |
| 4   | 82  | 70  | 61  | 54  | 80  | 69  | 60  | 54  | 66  | 59  | 53  | 64  | 58  | 52  | 62  | 56  | 52  | 52  | 52  | 52  | 50  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  | 45  | 45  | 45  | 43  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 40  | 40  | 40  | 38  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 35  | 46  | 40  | 35  | 35  | 35  | 35  | 33  |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 32  | 32  | 32  | 30  |
| 9   | 56  | 43  | 35  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  | 29  | 29  | 29  | 27  |
| 10  | 53  | 40  | 32  | 26  | 52  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 31  | 26  | 36  | 30  | 26  | 26  | 26  | 26  | 24  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1961 | 1961 | 1961 |
| 5°  | 1971 | 1963 | 1960 |
| 10° | 1957 | 1955 | 1953 |
| 15° | 1935 | 1939 | 1947 |
| 20° | 1903 | 1916 | 1930 |
| 25° | 1866 | 1886 | 1906 |
| 30° | 1815 | 1852 | 1882 |
| 35° | 1758 | 1813 | 1851 |
| 40° | 1701 | 1772 | 1824 |
| 45° | 1637 | 1726 | 1815 |
| 50° | 1570 | 1683 | 1803 |
| 55° | 1502 | 1647 | 1798 |
| 60° | 1424 | 1619 | 1806 |
| 65° | 1339 | 1599 | 1842 |
| 70° | 1234 | 1607 | 1929 |
| 75° | 1093 | 1665 | 1796 |
| 80° | 914  | 1578 | 1620 |
| 85° | 682  | 1263 | 1158 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 72.5°  
 Luminance: 1942 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 137.8  | 3.4       |
| 10°-20°   | 391.9  | 9.7       |
| 20°-30°   | 584.1  | 14.5      |
| 30°-40°   | 687.6  | 17.1      |
| 40°-50°   | 698.7  | 17.4      |
| 50°-60°   | 628.2  | 15.6      |
| 60°-70°   | 496.3  | 12.3      |
| 70°-80°   | 314.9  | 7.8       |
| 80°-90°   | 86.9   | 2.2       |
| 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°    | 1113.9 | 27.7      |
| 0°-40°    | 1801.4 | 44.7      |
| 0°-60°    | 3128.4 | 77.7      |
| 0°-90°    | 4026.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4026.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1458 | 1458  | 1458 | 1458  | 1458 |      |
| 5°  | 1459 | 1447  | 1454 | 1451  | 1451 | 138  |
| 15° | 1389 | 1383  | 1392 | 1396  | 1397 | 391  |
| 25° | 1257 | 1255  | 1270 | 1278  | 1284 | 578  |
| 35° | 1070 | 1077  | 1104 | 1116  | 1127 | 670  |
| 45° | 860  | 872   | 907  | 934   | 954  | 664  |
| 55° | 640  | 656   | 702  | 748   | 766  | 572  |
| 65° | 421  | 442   | 502  | 557   | 579  | 417  |
| 75° | 210  | 246   | 320  | 348   | 346  | 224  |
| 85° | 44   | 76    | 82   | 75    | 75   | 54   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1457.6 | 1457.6 | 1457.6 | 1457.6 | 1457.6 |
| 2.5°  | 1464.4 | 1453.5 | 1459.0 | 1456.3 | 1450.9 |
| 5°    | 1459.0 | 1446.9 | 1453.5 | 1450.9 | 1450.9 |
| 7.5°  | 1446.9 | 1437.5 | 1442.8 | 1441.6 | 1442.8 |
| 10°   | 1432.1 | 1422.8 | 1430.9 | 1430.9 | 1429.5 |
| 12.5° | 1412.1 | 1404.0 | 1413.5 | 1413.5 | 1414.7 |
| 15°   | 1389.3 | 1382.7 | 1392.1 | 1395.9 | 1397.4 |
| 17.5° | 1361.2 | 1354.5 | 1366.5 | 1370.5 | 1374.6 |
| 20°   | 1329.0 | 1326.4 | 1338.3 | 1342.4 | 1347.8 |
| 22.5° | 1292.9 | 1292.9 | 1304.8 | 1310.2 | 1318.3 |
| 25°   | 1256.7 | 1255.3 | 1270.1 | 1278.2 | 1283.6 |
| 27.5° | 1213.7 | 1215.2 | 1233.9 | 1242.0 | 1248.7 |
| 30°   | 1168.3 | 1170.9 | 1192.3 | 1201.8 | 1211.1 |
| 32.5° | 1120.0 | 1125.4 | 1149.5 | 1160.2 | 1169.6 |
| 35°   | 1070.4 | 1077.2 | 1103.9 | 1116.1 | 1126.8 |
| 37.5° | 1020.9 | 1030.3 | 1058.5 | 1070.4 | 1082.6 |
| 40°   | 968.6  | 976.7  | 1008.8 | 1023.5 | 1038.3 |
| 42.5° | 915.1  | 925.8  | 957.9  | 979.3  | 996.9  |
| 45°   | 860.1  | 872.2  | 907.0  | 933.9  | 953.9  |
| 47.5° | 805.2  | 821.3  | 854.7  | 891.0  | 908.4  |
| 50°   | 750.2  | 766.4  | 803.9  | 844.0  | 861.3  |
| 52.5° | 694.0  | 710.2  | 753.0  | 794.4  | 813.2  |
| 55°   | 640.3  | 656.5  | 702.1  | 747.6  | 766.4  |
| 57.5° | 584.1  | 601.5  | 652.5  | 699.3  | 718.0  |
| 60°   | 529.2  | 546.5  | 601.5  | 651.0  | 671.2  |
| 62.5° | 475.7  | 494.4  | 552.0  | 604.3  | 624.3  |
| 65°   | 420.7  | 442.1  | 502.3  | 557.3  | 578.7  |
| 67.5° | 367.1  | 391.2  | 454.2  | 511.8  | 534.6  |
| 70°   | 313.6  | 341.7  | 408.6  | 467.6  | 490.4  |
| 72.5° | 261.3  | 292.0  | 363.1  | 422.0  | 434.0  |
| 75°   | 210.3  | 246.5  | 320.2  | 348.3  | 345.5  |
| 77.5° | 162.1  | 202.2  | 272.0  | 277.4  | 285.3  |
| 80°   | 118.0  | 162.1  | 203.7  | 214.4  | 209.1  |
| 82.5° | 77.6   | 121.9  | 146.1  | 140.6  | 139.4  |
| 85°   | 44.2   | 76.4   | 81.8   | 75.0   | 75.0   |
| 87.5° | 18.8   | 30.7   | 26.9   | 20.0   | 18.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)