

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: P798088

Luminaire Tested: 24CZSB-SCT3-UNV-MID-3500K

Issue Date: 3/16/2024

Test Information

Test Method: LM-79-2019
Report Number: P798088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2307-102-26)
Test Lab: INNOVATION CENTER
Issue Date: 3/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSB-SCT3-UNV-MID-3500K
Description: Cruze SB Selectable Troffer
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

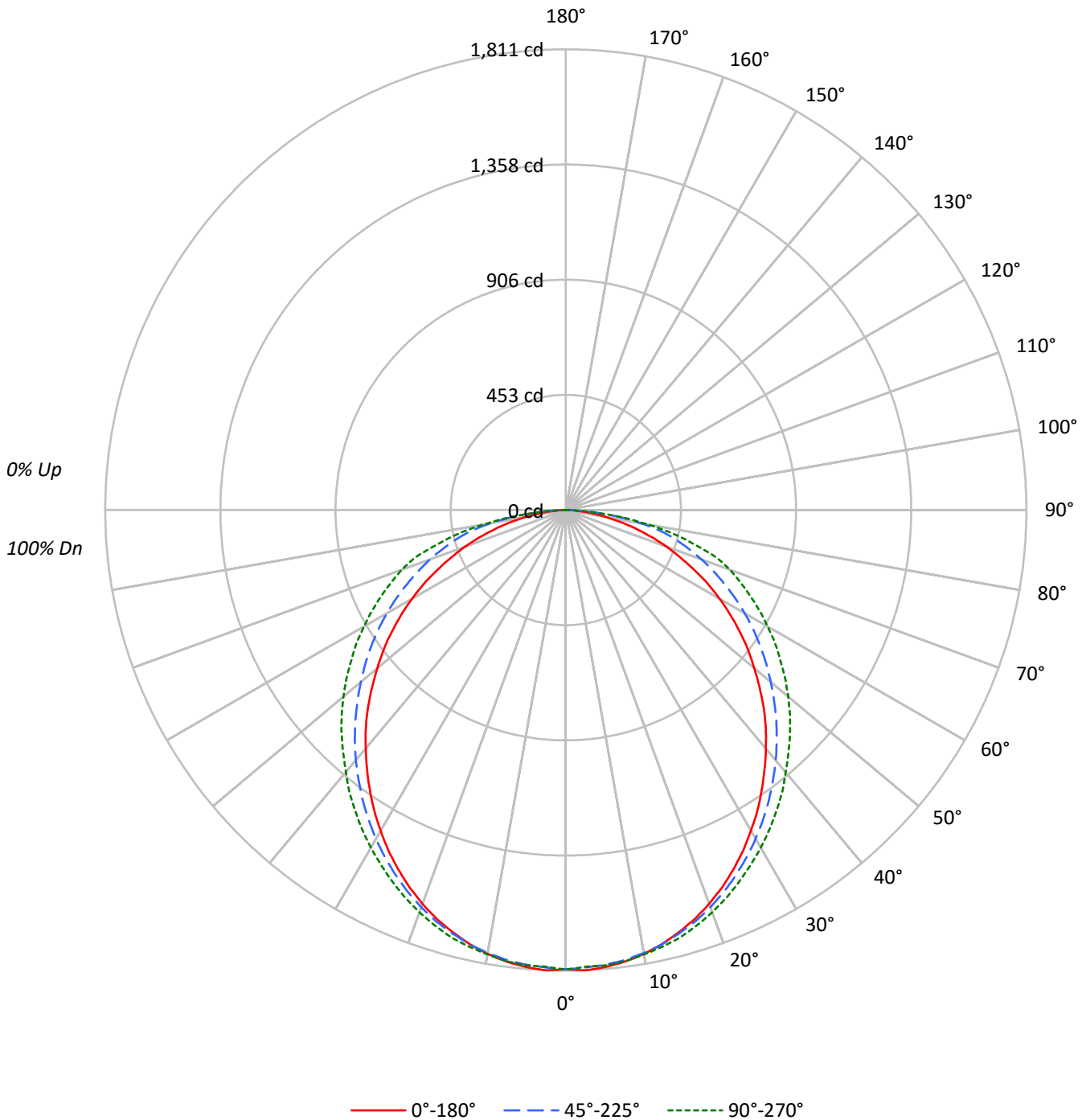
Lumens per Lamp: N/A
Luminaire Lumens: 5262.0 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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 | 103 | 99 | 94 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 85 | 85 | 85 | 82 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 74 | 81 | 76 | 72 | 77 | 74 | 70 | 70 | 70 | 70 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 77 | 69 | 62 | 74 | 67 | 61 | 71 | 65 | 60 | 68 | 63 | 59 | 59 | 59 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | 63 | 56 | 51 | 61 | 55 | 51 | 51 | 51 | 51 | 48 |
| 5 | 75 | 62 | 52 | 46 | 73 | 60 | 52 | 45 | 58 | 51 | 45 | 56 | 50 | 44 | 54 | 49 | 44 | 44 | 44 | 44 | 42 |
| 6 | 69 | 55 | 46 | 40 | 67 | 54 | 46 | 40 | 53 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 38 | 38 | 38 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 40 | 34 | 45 | 39 | 34 | 34 | 34 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 31 | 31 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 28 | 28 | 28 | 26 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 25 | 25 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2430 | 2430 | 2430 |
| 5° | 2436 | 2423 | 2426 |
| 10° | 2421 | 2415 | 2424 |
| 15° | 2393 | 2400 | 2423 |
| 20° | 2359 | 2380 | 2410 |
| 25° | 2314 | 2350 | 2394 |
| 30° | 2261 | 2319 | 2382 |
| 35° | 2207 | 2287 | 2372 |
| 40° | 2149 | 2255 | 2362 |
| 45° | 2095 | 2227 | 2373 |
| 50° | 2024 | 2201 | 2388 |
| 55° | 1960 | 2190 | 2415 |
| 60° | 1878 | 2186 | 2465 |
| 65° | 1774 | 2190 | 2550 |
| 70° | 1661 | 2235 | 2703 |
| 75° | 1495 | 2327 | 2729 |
| 80° | 1264 | 2324 | 2552 |
| 85° | 979 | 1885 | 1874 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 72.5°
 Luminance: 2781 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 170.8 | 3.2 |
| 10°-20° | 486.9 | 9.3 |
| 20°-30° | 730.2 | 13.9 |
| 30°-40° | 872.3 | 16.6 |
| 40°-50° | 905.4 | 17.2 |
| 50°-60° | 836.1 | 15.9 |
| 60°-70° | 679.5 | 12.9 |
| 70°-80° | 449.6 | 8.5 |
| 80°-90° | 131.2 | 2.5 |
| 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° | 1387.9 | 26.4 |
| 0°-40° | 2260.2 | 43.0 |
| 0°-60° | 4001.7 | 76.0 |
| 0°-90° | 5262.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5262.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1806 | 1806 | 1806 | 1806 | 1806 | |
| 5° | 1803 | 1799 | 1794 | 1799 | 1796 | 171 |
| 15° | 1718 | 1716 | 1723 | 1739 | 1739 | 484 |
| 25° | 1558 | 1564 | 1583 | 1607 | 1612 | 718 |
| 35° | 1344 | 1360 | 1392 | 1430 | 1444 | 840 |
| 45° | 1101 | 1122 | 1170 | 1228 | 1247 | 848 |
| 55° | 836 | 865 | 934 | 1007 | 1030 | 747 |
| 65° | 557 | 601 | 688 | 773 | 801 | 553 |
| 75° | 288 | 347 | 448 | 514 | 525 | 305 |
| 85° | 63 | 110 | 122 | 121 | 121 | 76 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P798088

CATALOG NUMBER: 24CZSB-SCT3-UNV-MID-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 |
| 2.5° | 1811.2 | 1806.5 | 1800.3 | 1805.7 | 1797.2 |
| 5° | 1803.4 | 1798.8 | 1794.1 | 1798.8 | 1796.5 |
| 7.5° | 1790.3 | 1786.4 | 1784.1 | 1790.3 | 1788.7 |
| 10° | 1771.7 | 1767.1 | 1767.9 | 1776.4 | 1774.0 |
| 12.5° | 1747.8 | 1745.4 | 1748.5 | 1758.6 | 1757.8 |
| 15° | 1717.6 | 1716.1 | 1723.0 | 1739.3 | 1739.3 |
| 17.5° | 1685.9 | 1684.4 | 1695.2 | 1711.4 | 1712.2 |
| 20° | 1647.3 | 1648.8 | 1662.0 | 1678.2 | 1682.8 |
| 22.5° | 1605.5 | 1607.9 | 1624.1 | 1642.6 | 1649.6 |
| 25° | 1558.4 | 1563.8 | 1583.1 | 1607.1 | 1612.5 |
| 27.5° | 1509.7 | 1516.6 | 1539.1 | 1566.1 | 1573.1 |
| 30° | 1455.6 | 1464.8 | 1492.7 | 1523.6 | 1532.9 |
| 32.5° | 1402.2 | 1416.1 | 1443.2 | 1478.0 | 1489.6 |
| 35° | 1343.5 | 1360.5 | 1392.2 | 1430.1 | 1444.0 |
| 37.5° | 1284.0 | 1303.3 | 1338.1 | 1381.4 | 1397.6 |
| 40° | 1223.7 | 1244.5 | 1284.0 | 1329.6 | 1345.0 |
| 42.5° | 1164.1 | 1185.0 | 1227.5 | 1278.6 | 1295.6 |
| 45° | 1100.8 | 1121.6 | 1170.3 | 1227.5 | 1246.9 |
| 47.5° | 1033.5 | 1059.8 | 1110.8 | 1175.7 | 1195.1 |
| 50° | 967.0 | 995.6 | 1051.3 | 1119.3 | 1141.0 |
| 52.5° | 902.9 | 930.7 | 993.3 | 1064.4 | 1086.8 |
| 55° | 835.6 | 865.0 | 933.8 | 1007.2 | 1029.6 |
| 57.5° | 767.6 | 800.1 | 873.5 | 949.3 | 976.3 |
| 60° | 698.0 | 734.4 | 812.4 | 890.5 | 916.0 |
| 62.5° | 631.5 | 667.1 | 750.6 | 831.8 | 859.6 |
| 65° | 557.3 | 601.4 | 688.0 | 773.0 | 800.8 |
| 67.5° | 487.0 | 535.7 | 627.7 | 715.0 | 742.9 |
| 70° | 422.1 | 473.9 | 568.2 | 654.7 | 687.2 |
| 72.5° | 353.3 | 408.9 | 506.3 | 593.7 | 621.5 |
| 75° | 287.6 | 347.1 | 447.6 | 514.0 | 524.9 |
| 77.5° | 224.2 | 286.8 | 383.4 | 425.9 | 436.0 |
| 80° | 163.1 | 229.6 | 299.9 | 331.6 | 329.3 |
| 82.5° | 109.0 | 173.9 | 215.7 | 224.2 | 225.7 |
| 85° | 63.4 | 109.8 | 122.1 | 121.4 | 121.4 |
| 87.5° | 27.1 | 44.8 | 39.4 | 35.6 | 31.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)