

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: P798056

Luminaire Tested: 22CZSB-SCT3-HRP-UNV-HIGH-4000K

Issue Date: 3/16/2024

Test Information

Test Method: LM-79-2019
Report Number: P798056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P345110)
Test Lab: INNOVATION CENTER
Issue Date: 3/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSB-SCT3-HRP-UNV-HIGH-4000K
Description: Cruze SB Selectable Troffer
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

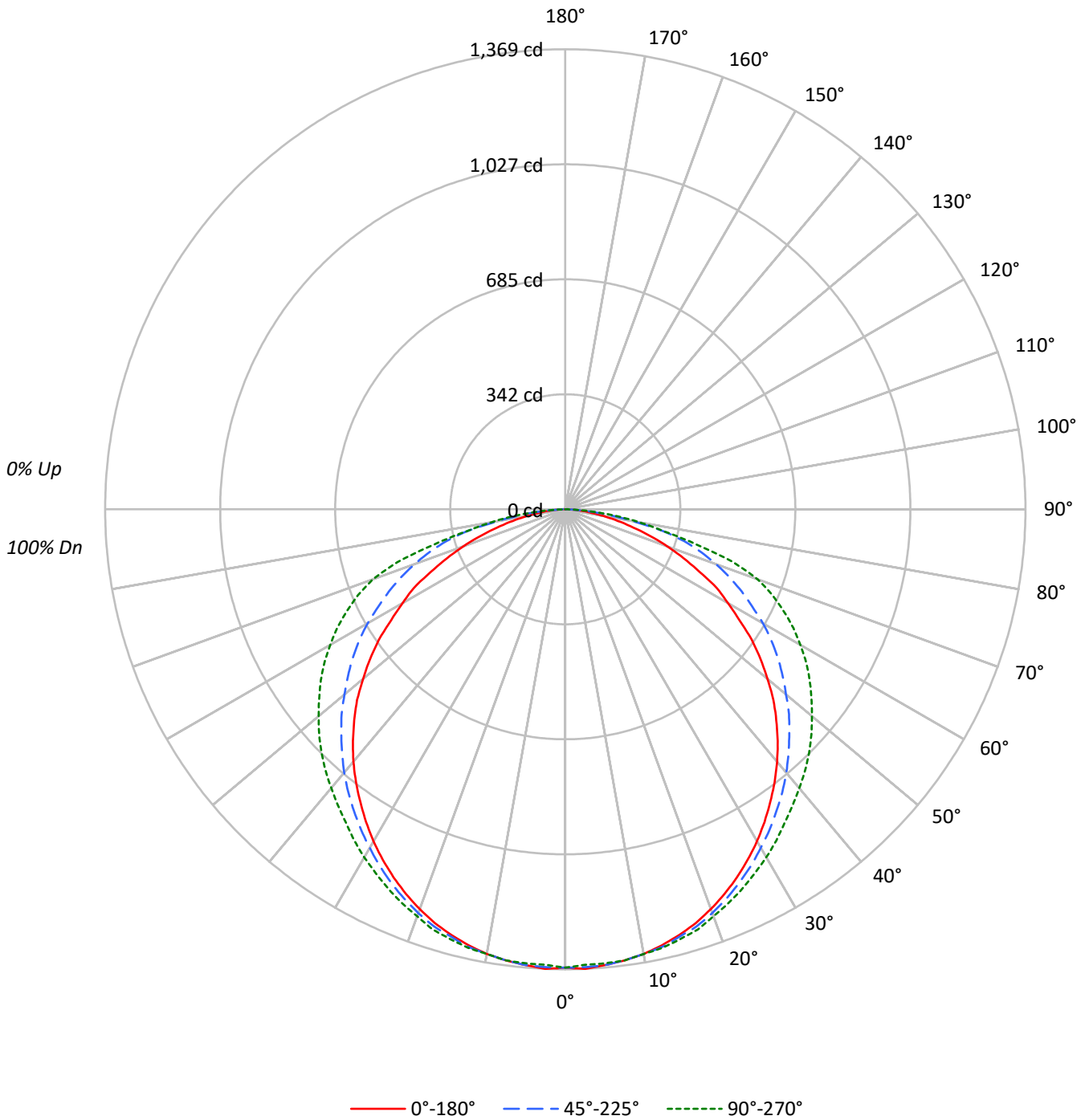
Lumens per Lamp: N/A
Luminaire Lumens: 4188.8 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 36.3
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 | | | | 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 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 85 | 85 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 72 | 77 | 74 | 70 | 70 | 70 | 70 | 68 |
| 3 | 89 | 78 | 69 | 63 | 86 | 76 | 68 | 62 | 73 | 67 | 61 | 71 | 65 | 60 | 68 | 63 | 59 | 59 | 59 | 59 | 57 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 52 | 65 | 57 | 52 | 63 | 56 | 51 | 60 | 55 | 50 | 50 | 50 | 50 | 48 |
| 5 | 75 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 43 | 43 | 43 | 41 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 39 | 50 | 44 | 38 | 49 | 43 | 38 | 38 | 38 | 38 | 36 |
| 7 | 64 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 40 | 34 | 46 | 39 | 34 | 45 | 38 | 34 | 34 | 34 | 34 | 32 |
| 8 | 59 | 45 | 37 | 31 | 58 | 45 | 36 | 31 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 30 | 30 | 30 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 27 | 27 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 24 | 24 | 24 | 24 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3670 | 3670 | 3670 |
| 5° | 3677 | 3677 | 3664 |
| 10° | 3672 | 3672 | 3672 |
| 15° | 3653 | 3667 | 3688 |
| 20° | 3626 | 3662 | 3690 |
| 25° | 3588 | 3640 | 3700 |
| 30° | 3544 | 3615 | 3716 |
| 35° | 3493 | 3600 | 3739 |
| 40° | 3444 | 3594 | 3805 |
| 45° | 3378 | 3588 | 3903 |
| 50° | 3286 | 3589 | 4010 |
| 55° | 3176 | 3623 | 4165 |
| 60° | 3009 | 3658 | 4345 |
| 65° | 2809 | 3687 | 4565 |
| 70° | 2545 | 3747 | 4795 |
| 75° | 2190 | 3807 | 4196 |
| 80° | 1788 | 3186 | 3459 |
| 85° | 1473 | 2325 | 2556 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 70°
 Luminance: 4795 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 129.3 | 3.1 |
| 10°-20° | 371.9 | 8.9 |
| 20°-30° | 565.3 | 13.5 |
| 30°-40° | 687.9 | 16.4 |
| 40°-50° | 732.8 | 17.5 |
| 50°-60° | 693.2 | 16.5 |
| 60°-70° | 571.3 | 13.6 |
| 70°-80° | 351.4 | 8.4 |
| 80°-90° | 85.8 | 2.0 |
| 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° | 1066.5 | 25.5 |
| 0°-40° | 1754.4 | 41.9 |
| 0°-60° | 3180.4 | 75.9 |
| 0°-90° | 4188.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4188.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1364 | 1364 | 1364 | 1364 | 1364 | |
| 5° | 1361 | 1361 | 1361 | 1359 | 1356 | 129 |
| 15° | 1311 | 1314 | 1316 | 1321 | 1324 | 370 |
| 25° | 1208 | 1214 | 1226 | 1239 | 1246 | 557 |
| 35° | 1063 | 1073 | 1096 | 1123 | 1138 | 665 |
| 45° | 888 | 903 | 943 | 995 | 1026 | 684 |
| 55° | 677 | 702 | 772 | 848 | 888 | 603 |
| 65° | 441 | 484 | 579 | 672 | 717 | 438 |
| 75° | 211 | 268 | 366 | 399 | 404 | 226 |
| 85° | 48 | 63 | 75 | 80 | 83 | 56 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P798056

CATALOG NUMBER: 22CZSB-SCT3-HRP-UNV-HIGH-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1364.0 | 1364.0 | 1364.0 | 1364.0 | 1364.0 |
| 2.5° | 1369.0 | 1366.5 | 1364.0 | 1358.9 | 1356.4 |
| 5° | 1361.4 | 1361.4 | 1361.4 | 1358.9 | 1356.4 |
| 7.5° | 1353.9 | 1353.9 | 1353.9 | 1353.9 | 1353.9 |
| 10° | 1343.8 | 1343.8 | 1343.8 | 1343.8 | 1343.8 |
| 12.5° | 1328.9 | 1331.4 | 1333.9 | 1333.9 | 1336.4 |
| 15° | 1311.2 | 1313.7 | 1316.2 | 1321.3 | 1323.8 |
| 17.5° | 1291.2 | 1293.8 | 1301.3 | 1306.4 | 1311.2 |
| 20° | 1266.2 | 1268.7 | 1278.6 | 1283.7 | 1288.7 |
| 22.5° | 1238.7 | 1243.5 | 1253.6 | 1263.7 | 1268.7 |
| 25° | 1208.4 | 1213.5 | 1226.1 | 1238.7 | 1246.0 |
| 27.5° | 1175.8 | 1180.9 | 1196.0 | 1213.5 | 1221.0 |
| 30° | 1140.7 | 1145.8 | 1163.4 | 1183.4 | 1196.0 |
| 32.5° | 1103.1 | 1110.7 | 1130.9 | 1155.9 | 1168.5 |
| 35° | 1063.2 | 1073.0 | 1095.8 | 1123.3 | 1138.2 |
| 37.5° | 1023.0 | 1032.9 | 1060.7 | 1093.2 | 1110.7 |
| 40° | 980.4 | 993.0 | 1023.0 | 1060.7 | 1083.1 |
| 42.5° | 935.2 | 950.3 | 982.9 | 1028.1 | 1055.6 |
| 45° | 887.7 | 902.6 | 942.7 | 995.3 | 1025.5 |
| 47.5° | 839.9 | 857.4 | 902.6 | 960.2 | 993.0 |
| 50° | 784.9 | 804.8 | 857.4 | 925.1 | 957.9 |
| 52.5° | 732.1 | 757.1 | 814.9 | 887.7 | 922.8 |
| 55° | 677.0 | 702.1 | 772.3 | 847.5 | 887.7 |
| 57.5° | 614.2 | 644.5 | 727.1 | 807.4 | 850.0 |
| 60° | 559.1 | 589.2 | 679.6 | 764.7 | 807.4 |
| 62.5° | 508.9 | 536.6 | 626.8 | 719.5 | 764.7 |
| 65° | 441.2 | 483.9 | 579.1 | 672.0 | 717.0 |
| 67.5° | 381.1 | 428.8 | 529.1 | 616.7 | 667.0 |
| 70° | 323.5 | 373.5 | 476.3 | 561.6 | 609.4 |
| 72.5° | 265.7 | 321.0 | 423.8 | 499.0 | 524.0 |
| 75° | 210.6 | 268.2 | 366.2 | 398.7 | 403.6 |
| 77.5° | 160.4 | 218.2 | 296.0 | 293.4 | 298.3 |
| 80° | 115.4 | 165.4 | 205.6 | 213.1 | 223.2 |
| 82.5° | 77.8 | 115.4 | 132.8 | 145.5 | 155.6 |
| 85° | 47.7 | 62.6 | 75.3 | 80.3 | 82.8 |
| 87.5° | 22.5 | 25.0 | 25.0 | 20.0 | 20.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)