

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: P798043

Luminaire Tested: 14CZSB-SCT3-SQP-UNV-MID-3500K

Issue Date: 3/16/2024

Test Information

Test Method: LM-79-2019
Report Number: P798043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P259100)
Test Lab: INNOVATION CENTER
Issue Date: 3/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSB-SCT3-SQP-UNV-MID-3500K
Description: Cruze SB Selectable Troffer
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

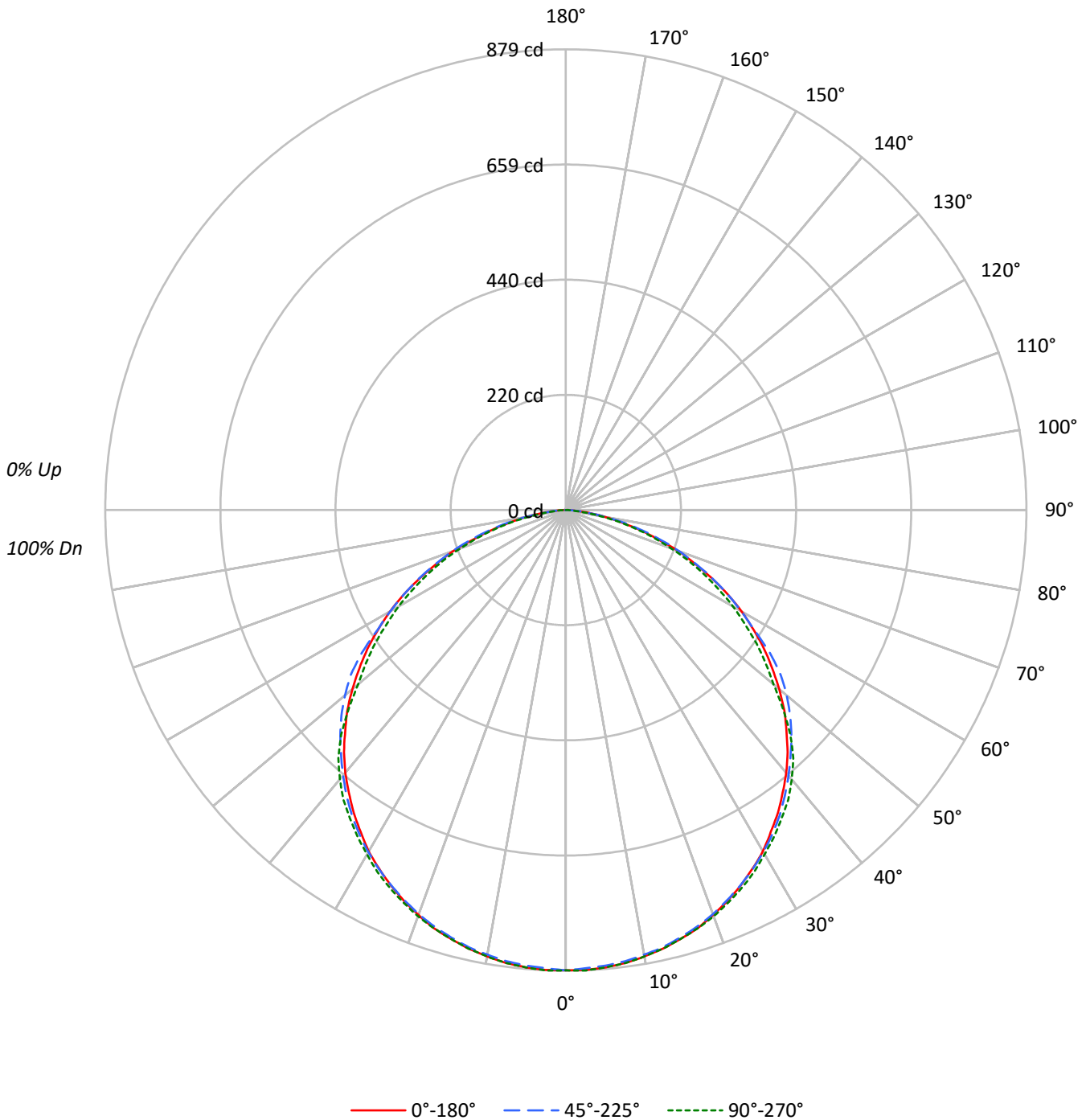
Lumens per Lamp: N/A
Luminaire Lumens: 2503.1 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 27.5
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





TEST NUMBER: P798043

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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 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 86 | 86 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 73 | 73 | 73 | 73 | 70 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 70 | 65 | 62 | 62 | 62 | 62 | 59 |
| 4 | 83 | 71 | 62 | 55 | 81 | 70 | 61 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 63 | 57 | 53 | 53 | 53 | 53 | 51 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | 46 | 46 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 41 | 54 | 47 | 41 | 52 | 46 | 41 | 51 | 45 | 40 | 40 | 40 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 36 | 36 | 36 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 33 | 45 | 38 | 32 | 44 | 37 | 32 | 43 | 37 | 32 | 32 | 32 | 32 | 30 |
| 9 | 57 | 43 | 35 | 29 | 55 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 29 | 29 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 26 | 26 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2363 | 2363 | 2363 |
| 5° | 2366 | 2357 | 2366 |
| 10° | 2363 | 2354 | 2363 |
| 15° | 2360 | 2352 | 2360 |
| 20° | 2355 | 2350 | 2363 |
| 25° | 2347 | 2344 | 2361 |
| 30° | 2337 | 2342 | 2358 |
| 35° | 2317 | 2337 | 2359 |
| 40° | 2299 | 2323 | 2356 |
| 45° | 2265 | 2316 | 2307 |
| 50° | 2225 | 2303 | 2166 |
| 55° | 2168 | 2231 | 2084 |
| 60° | 2086 | 2081 | 1985 |
| 65° | 1954 | 1966 | 1857 |
| 70° | 1795 | 1815 | 1681 |
| 75° | 1508 | 1578 | 1437 |
| 80° | 1196 | 1221 | 1010 |
| 85° | 787 | 682 | 577 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 2337 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 83.2 | 3.3 |
| 10°-20° | 239.1 | 9.6 |
| 20°-30° | 365.1 | 14.6 |
| 30°-40° | 445.4 | 17.8 |
| 40°-50° | 465.8 | 18.6 |
| 50°-60° | 412.4 | 16.5 |
| 60°-70° | 303.7 | 12.1 |
| 70°-80° | 157.2 | 6.3 |
| 80°-90° | 31.3 | 1.2 |
| 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° | 687.4 | 27.5 |
| 0°-40° | 1132.8 | 45.3 |
| 0°-60° | 2010.9 | 80.3 |
| 0°-90° | 2503.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2503.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 878 | 878 | 878 | 878 | 878 | |
| 5° | 876 | 876 | 872 | 876 | 876 | 83 |
| 15° | 847 | 847 | 844 | 848 | 847 | 239 |
| 25° | 790 | 790 | 790 | 794 | 795 | 364 |
| 35° | 705 | 707 | 711 | 718 | 718 | 441 |
| 45° | 595 | 600 | 609 | 614 | 606 | 460 |
| 55° | 462 | 471 | 476 | 451 | 444 | 412 |
| 65° | 307 | 326 | 309 | 297 | 292 | 304 |
| 75° | 145 | 155 | 152 | 142 | 138 | 155 |
| 85° | 26 | 27 | 22 | 20 | 19 | 33 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P798043

CATALOG NUMBER: 14CZSB-SCT3-SQP-UNV-MID-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 878.3 | 878.3 | 878.3 | 878.3 | 878.3 |
| 2.5° | 878.3 | 878.3 | 875.1 | 878.3 | 879.3 |
| 5° | 875.9 | 875.9 | 872.5 | 875.9 | 875.9 |
| 7.5° | 871.7 | 870.7 | 868.3 | 871.7 | 871.7 |
| 10° | 864.9 | 864.9 | 861.5 | 865.7 | 864.9 |
| 12.5° | 857.2 | 856.4 | 854.6 | 858.1 | 857.2 |
| 15° | 847.0 | 847.0 | 844.4 | 847.8 | 847.0 |
| 17.5° | 836.8 | 836.0 | 833.4 | 836.8 | 836.8 |
| 20° | 822.3 | 821.5 | 820.7 | 824.2 | 825.0 |
| 22.5° | 807.1 | 806.3 | 805.5 | 810.5 | 810.5 |
| 25° | 790.3 | 790.3 | 789.5 | 794.5 | 795.3 |
| 27.5° | 771.6 | 771.6 | 772.4 | 779.2 | 778.4 |
| 30° | 752.1 | 752.1 | 753.8 | 758.8 | 758.8 |
| 32.5° | 728.3 | 730.1 | 733.5 | 739.3 | 739.3 |
| 35° | 705.4 | 707.2 | 711.4 | 718.1 | 718.1 |
| 37.5° | 679.9 | 682.5 | 686.8 | 695.2 | 697.0 |
| 40° | 654.5 | 656.3 | 661.3 | 670.7 | 670.7 |
| 42.5° | 626.6 | 628.2 | 635.0 | 644.4 | 642.6 |
| 45° | 595.3 | 600.3 | 608.7 | 614.0 | 606.1 |
| 47.5° | 565.6 | 568.8 | 580.9 | 574.8 | 562.2 |
| 50° | 531.5 | 538.3 | 550.2 | 529.1 | 517.3 |
| 52.5° | 496.8 | 504.4 | 517.3 | 487.6 | 480.8 |
| 55° | 462.1 | 471.3 | 475.6 | 451.1 | 444.3 |
| 57.5° | 424.8 | 435.0 | 426.4 | 412.0 | 405.4 |
| 60° | 387.5 | 399.3 | 386.7 | 373.1 | 368.9 |
| 62.5° | 348.4 | 362.0 | 347.6 | 335.8 | 329.7 |
| 65° | 306.9 | 325.5 | 308.7 | 296.8 | 291.6 |
| 67.5° | 266.2 | 285.8 | 268.0 | 257.7 | 254.3 |
| 70° | 228.1 | 239.1 | 230.7 | 220.4 | 213.6 |
| 72.5° | 182.3 | 193.4 | 191.5 | 180.5 | 176.3 |
| 75° | 145.0 | 155.2 | 151.8 | 142.4 | 138.2 |
| 77.5° | 107.7 | 118.7 | 115.3 | 104.3 | 102.5 |
| 80° | 77.2 | 84.8 | 78.8 | 68.6 | 65.2 |
| 82.5° | 48.3 | 54.4 | 46.5 | 38.9 | 37.3 |
| 85° | 25.5 | 27.1 | 22.1 | 19.5 | 18.7 |
| 87.5° | 8.4 | 9.2 | 9.2 | 8.4 | 8.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)