

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: P275753

Luminaire Tested: **14CZ2-44-RDP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-RDP-UNV-L83050-W2A1-U-5000K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2925.0 lumens
Efficiency: N/A
Efficacy: 78.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

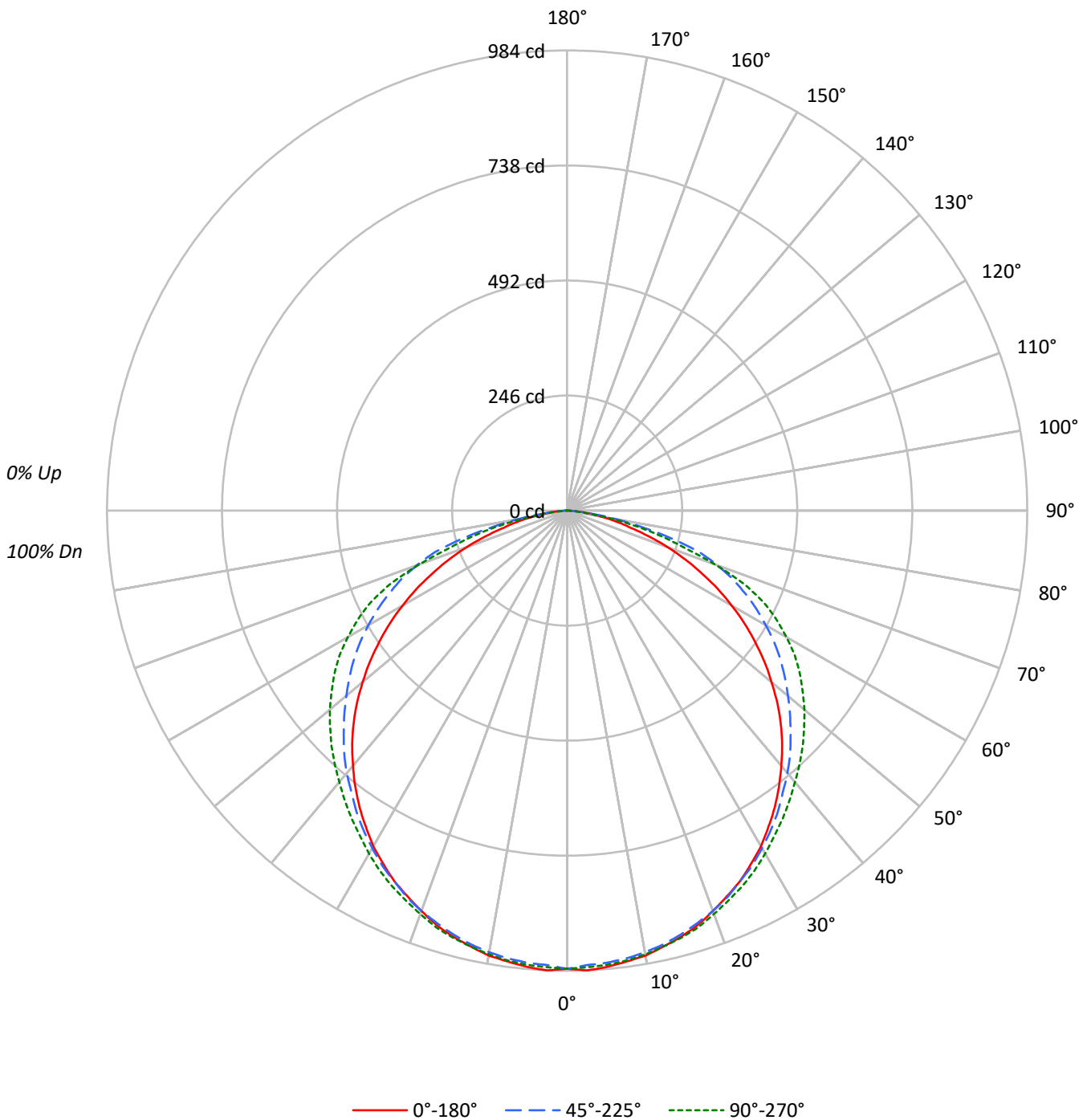
Input Watts (W): 37.386
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 84 | | | | | 84 | | | |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 | | | | | 69 | | | |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | 58 | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | 49 | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 | | | | | 42 | | | |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 37 | | | | | 37 | | | |
| 7 | 64 | 50 | 42 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 | | | | | 32 | | | |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 | | | | | 29 | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | 26 | | | |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 | | | | | 23 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2636 | 2636 | 2636 |
| 5° | 2646 | 2622 | 2634 |
| 10° | 2640 | 2621 | 2633 |
| 15° | 2627 | 2615 | 2634 |
| 20° | 2609 | 2609 | 2629 |
| 25° | 2597 | 2597 | 2631 |
| 30° | 2576 | 2590 | 2632 |
| 35° | 2543 | 2581 | 2641 |
| 40° | 2503 | 2575 | 2663 |
| 45° | 2460 | 2572 | 2712 |
| 50° | 2390 | 2581 | 2772 |
| 55° | 2304 | 2614 | 2850 |
| 60° | 2188 | 2643 | 2913 |
| 65° | 2021 | 2676 | 2952 |
| 70° | 1797 | 2695 | 2641 |
| 75° | 1448 | 2421 | 2113 |
| 80° | 1133 | 1698 | 1381 |
| 85° | 775 | 494 | 352 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 92.7 | 3.2 |
| 10°-20° | 266.0 | 9.1 |
| 20°-30° | 405.1 | 13.8 |
| 30°-40° | 493.4 | 16.9 |
| 40°-50° | 523.5 | 17.9 |
| 50°-60° | 494.0 | 16.9 |
| 60°-70° | 398.9 | 13.6 |
| 70°-80° | 216.4 | 7.4 |
| 80°-90° | 35.0 | 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° | 763.8 | 26.1 |
| 0°-40° | 1257.2 | 43.0 |
| 0°-60° | 2274.7 | 77.8 |
| 0°-90° | 2925.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2925.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 980 | 980 | 980 | 980 | 980 | |
| 5° | 980 | 977 | 970 | 977 | 975 | 93 |
| 15° | 943 | 941 | 939 | 945 | 945 | 266 |
| 25° | 875 | 872 | 875 | 884 | 886 | 403 |
| 35° | 774 | 779 | 786 | 802 | 804 | 484 |
| 45° | 646 | 655 | 676 | 701 | 712 | 498 |
| 55° | 491 | 512 | 557 | 594 | 607 | 439 |
| 65° | 317 | 356 | 420 | 454 | 464 | 315 |
| 75° | 139 | 203 | 233 | 210 | 203 | 152 |
| 85° | 25 | 27 | 16 | 14 | 11 | 32 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: 14CZ2-44-RDP-UNV-L83050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 979.7 | 979.7 | 979.7 | 979.7 | 979.7 |
| 2.5° | 984.2 | 979.7 | 972.8 | 979.7 | 977.4 |
| 5° | 979.7 | 977.4 | 970.5 | 977.4 | 975.1 |
| 7.5° | 972.8 | 972.8 | 966.0 | 970.5 | 970.5 |
| 10° | 966.0 | 963.7 | 959.1 | 966.0 | 963.7 |
| 12.5° | 954.5 | 952.3 | 950.0 | 956.8 | 954.5 |
| 15° | 943.1 | 940.8 | 938.6 | 945.4 | 945.4 |
| 17.5° | 929.4 | 927.1 | 924.9 | 934.0 | 934.0 |
| 20° | 911.1 | 911.1 | 911.1 | 920.3 | 918.0 |
| 22.5° | 892.9 | 892.9 | 895.2 | 904.3 | 902.0 |
| 25° | 874.6 | 872.3 | 874.6 | 883.7 | 886.0 |
| 27.5° | 851.8 | 854.1 | 856.3 | 865.5 | 867.8 |
| 30° | 828.9 | 831.2 | 833.5 | 844.9 | 847.2 |
| 32.5° | 801.5 | 806.1 | 810.7 | 824.4 | 824.4 |
| 35° | 774.1 | 778.7 | 785.6 | 801.5 | 803.8 |
| 37.5° | 744.4 | 749.0 | 758.1 | 776.4 | 781.0 |
| 40° | 712.5 | 719.3 | 733.0 | 751.3 | 758.1 |
| 42.5° | 680.5 | 689.6 | 705.6 | 726.2 | 735.3 |
| 45° | 646.3 | 655.4 | 675.9 | 701.1 | 712.5 |
| 47.5° | 609.7 | 621.1 | 646.3 | 678.2 | 687.4 |
| 50° | 570.9 | 586.9 | 616.6 | 650.8 | 662.2 |
| 52.5° | 532.1 | 550.3 | 586.9 | 623.4 | 634.8 |
| 55° | 491.0 | 511.5 | 557.2 | 593.7 | 607.4 |
| 57.5° | 449.9 | 472.7 | 525.2 | 564.0 | 577.7 |
| 60° | 406.5 | 433.9 | 491.0 | 529.8 | 541.2 |
| 62.5° | 363.1 | 395.1 | 456.7 | 495.5 | 504.7 |
| 65° | 317.4 | 356.2 | 420.2 | 454.4 | 463.6 |
| 67.5° | 274.0 | 319.7 | 383.6 | 408.8 | 408.8 |
| 70° | 228.4 | 278.6 | 342.5 | 349.4 | 335.7 |
| 72.5° | 182.7 | 239.8 | 296.9 | 271.7 | 260.3 |
| 75° | 139.3 | 203.2 | 232.9 | 210.1 | 203.2 |
| 77.5° | 105.0 | 164.4 | 164.4 | 150.7 | 146.1 |
| 80° | 73.1 | 125.6 | 109.6 | 95.9 | 89.1 |
| 82.5° | 48.0 | 70.8 | 57.1 | 45.7 | 38.8 |
| 85° | 25.1 | 27.4 | 16.0 | 13.7 | 11.4 |
| 87.5° | 9.1 | 4.6 | 2.3 | 4.6 | 2.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)