

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: P842876

Luminaire Tested: **14CZ2-44-HRP-UNV-B40**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P842876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P294787)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-HRP-UNV-B40
Description: 1X4 4400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Summary

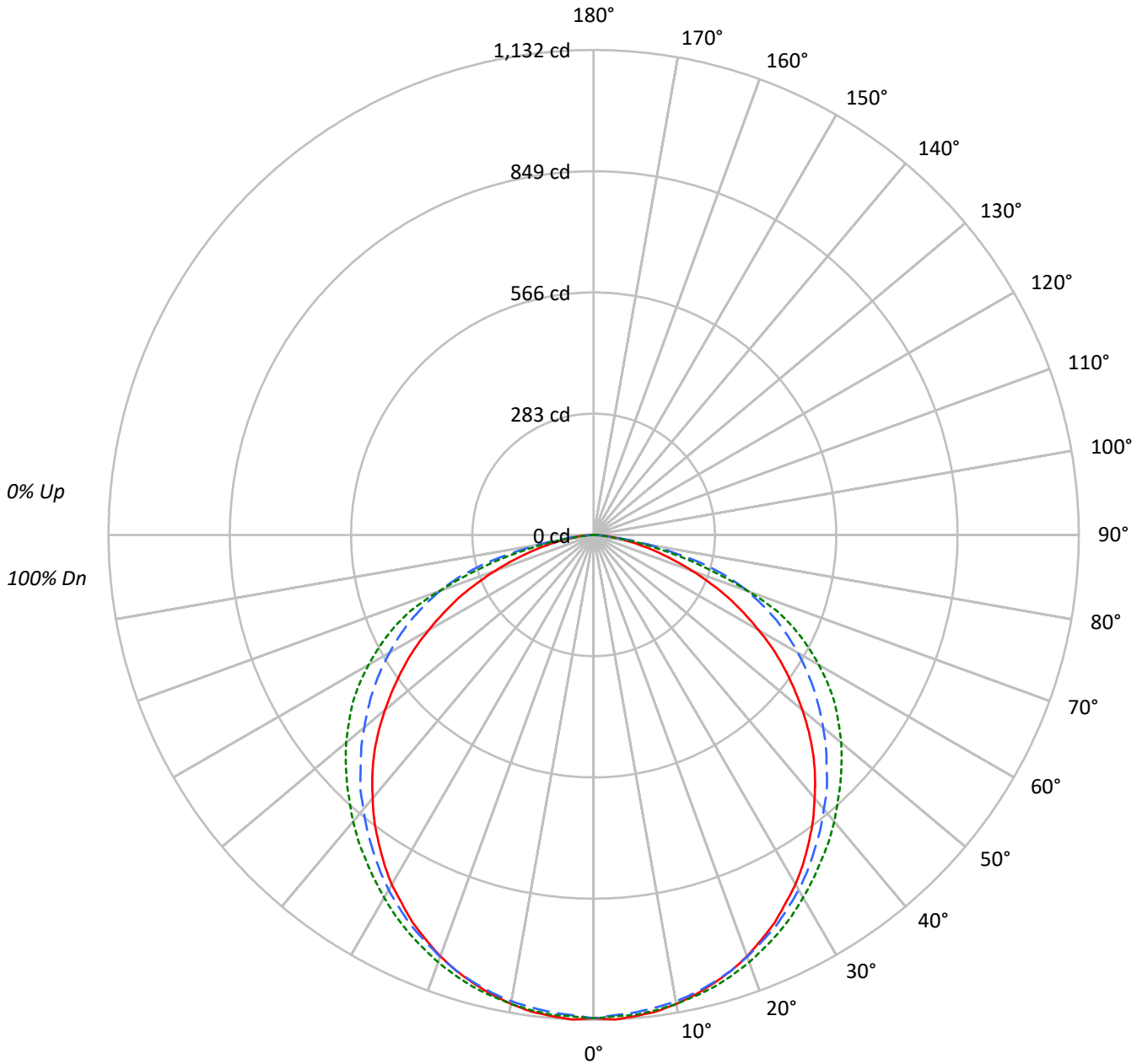
Lumens per Lamp: N/A
Luminaire Lumens: 3322.0 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 36
Input Voltage (V): NR
Input Current (A_{in}): 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 | 100 | 100 | 100 | 100 | | |
| | 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 84 | 84 | 84 | 84 | 84 | 84 | | |
| | 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 82 | 77 | 73 | 78 | 75 | 71 | 69 | 69 | 69 | 69 | 69 | 69 | | |
| | 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 64 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 | 58 | 58 | 58 | 58 | 58 | | |
| | 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 49 | 49 | 49 | 49 | 49 | 49 | | |
| | 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | 42 | 42 | 42 | 42 | 42 | | |
| | 6 | 69 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 | 37 | 37 | 37 | 37 | 37 | | |
| | 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 | 33 | 33 | 33 | 33 | 33 | | |
| | 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | 29 | 29 | 29 | 29 | 29 | | |
| | 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | 26 | 26 | 26 | 26 | 26 | | |
| | 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 | 24 | 24 | 24 | 24 | 24 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3184 | 3184 | 3184 |
| 5° | 3194 | 3170 | 3185 |
| 10° | 3186 | 3168 | 3186 |
| 15° | 3166 | 3160 | 3190 |
| 20° | 3144 | 3147 | 3188 |
| 25° | 3111 | 3136 | 3188 |
| 30° | 3071 | 3118 | 3186 |
| 35° | 3016 | 3095 | 3193 |
| 40° | 2956 | 3079 | 3218 |
| 45° | 2894 | 3069 | 3253 |
| 50° | 2793 | 3068 | 3312 |
| 55° | 2674 | 3085 | 3382 |
| 60° | 2512 | 3107 | 3427 |
| 65° | 2316 | 3139 | 3446 |
| 70° | 2018 | 3146 | 3172 |
| 75° | 1663 | 2929 | 2563 |
| 80° | 1307 | 2105 | 1715 |
| 85° | 1020 | 813 | 402 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.8 | 3.2 |
| 10°-20° | 306.5 | 9.2 |
| 20°-30° | 465.4 | 14.0 |
| 30°-40° | 563.9 | 17.0 |
| 40°-50° | 594.2 | 17.9 |
| 50°-60° | 554.8 | 16.7 |
| 60°-70° | 443.3 | 13.3 |
| 70°-80° | 244.0 | 7.3 |
| 80°-90° | 43.1 | 1.3 |
| 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° | 878.7 | 26.5 |
| 0°-40° | 1442.6 | 43.4 |
| 0°-60° | 2591.6 | 78.0 |
| 0°-90° | 3322.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3322.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1128 | 1128 | 1128 | 1128 | 1128 | |
| 5° | 1127 | 1124 | 1119 | 1126 | 1124 | 107 |
| 15° | 1083 | 1083 | 1081 | 1092 | 1092 | 306 |
| 25° | 999 | 1001 | 1007 | 1022 | 1024 | 460 |
| 35° | 875 | 884 | 898 | 921 | 927 | 548 |
| 45° | 725 | 739 | 769 | 803 | 815 | 558 |
| 55° | 543 | 570 | 627 | 671 | 687 | 485 |
| 65° | 347 | 391 | 470 | 509 | 516 | 341 |
| 75° | 152 | 218 | 269 | 241 | 235 | 164 |
| 85° | 32 | 40 | 25 | 16 | 12 | 38 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P842876

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1128.0 | 1128.0 | 1128.0 | 1128.0 | 1128.0 |
| 2.5° | 1132.3 | 1129.1 | 1122.0 | 1128.0 | 1125.1 |
| 5° | 1127.2 | 1124.1 | 1118.8 | 1126.2 | 1124.1 |
| 7.5° | 1122.0 | 1117.7 | 1112.4 | 1120.9 | 1118.8 |
| 10° | 1111.4 | 1108.2 | 1105.3 | 1112.4 | 1111.4 |
| 12.5° | 1099.0 | 1097.9 | 1094.7 | 1103.2 | 1102.1 |
| 15° | 1083.4 | 1083.4 | 1081.2 | 1091.6 | 1091.6 |
| 17.5° | 1066.4 | 1065.4 | 1066.4 | 1078.1 | 1077.0 |
| 20° | 1046.6 | 1046.6 | 1047.7 | 1061.4 | 1061.4 |
| 22.5° | 1022.6 | 1023.6 | 1026.8 | 1043.4 | 1042.4 |
| 25° | 998.8 | 1000.6 | 1007.0 | 1021.5 | 1023.6 |
| 27.5° | 969.4 | 974.7 | 981.8 | 999.6 | 1001.7 |
| 30° | 942.2 | 945.4 | 956.7 | 973.6 | 977.6 |
| 32.5° | 909.9 | 916.0 | 928.7 | 947.5 | 952.8 |
| 35° | 875.3 | 883.8 | 898.3 | 921.3 | 926.6 |
| 37.5° | 840.9 | 848.3 | 868.2 | 892.0 | 901.5 |
| 40° | 802.3 | 814.8 | 835.6 | 862.9 | 873.2 |
| 42.5° | 764.5 | 777.2 | 805.5 | 833.5 | 843.1 |
| 45° | 724.9 | 738.6 | 768.8 | 803.4 | 814.8 |
| 47.5° | 681.0 | 696.9 | 735.5 | 771.9 | 784.4 |
| 50° | 636.1 | 655.9 | 698.7 | 739.7 | 754.2 |
| 52.5° | 589.3 | 614.1 | 663.3 | 706.1 | 719.9 |
| 55° | 543.3 | 570.2 | 626.8 | 670.7 | 687.3 |
| 57.5° | 496.2 | 525.6 | 589.3 | 639.2 | 648.7 |
| 60° | 444.9 | 480.6 | 550.4 | 594.3 | 607.0 |
| 62.5° | 395.0 | 435.7 | 510.7 | 552.5 | 563.1 |
| 65° | 346.8 | 390.7 | 470.0 | 508.6 | 516.0 |
| 67.5° | 294.5 | 346.8 | 425.1 | 460.8 | 462.6 |
| 70° | 244.5 | 305.1 | 381.2 | 397.9 | 384.4 |
| 72.5° | 195.4 | 260.1 | 330.2 | 316.4 | 305.1 |
| 75° | 152.5 | 218.4 | 268.6 | 241.4 | 235.0 |
| 77.5° | 112.9 | 178.7 | 192.2 | 177.7 | 166.0 |
| 80° | 80.4 | 140.9 | 129.5 | 110.8 | 105.5 |
| 82.5° | 55.3 | 88.8 | 71.1 | 55.3 | 48.1 |
| 85° | 31.5 | 39.7 | 25.1 | 15.6 | 12.4 |
| 87.5° | 13.5 | 9.5 | 5.3 | 4.2 | 4.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)