

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: P843044

Luminaire Tested: **24CZ2-40-RDP-UNV-B40**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843044
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P274775)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-RDP-UNV-B40
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RDP LENS

Light Source: -
Ballast/Driver: -

Summary

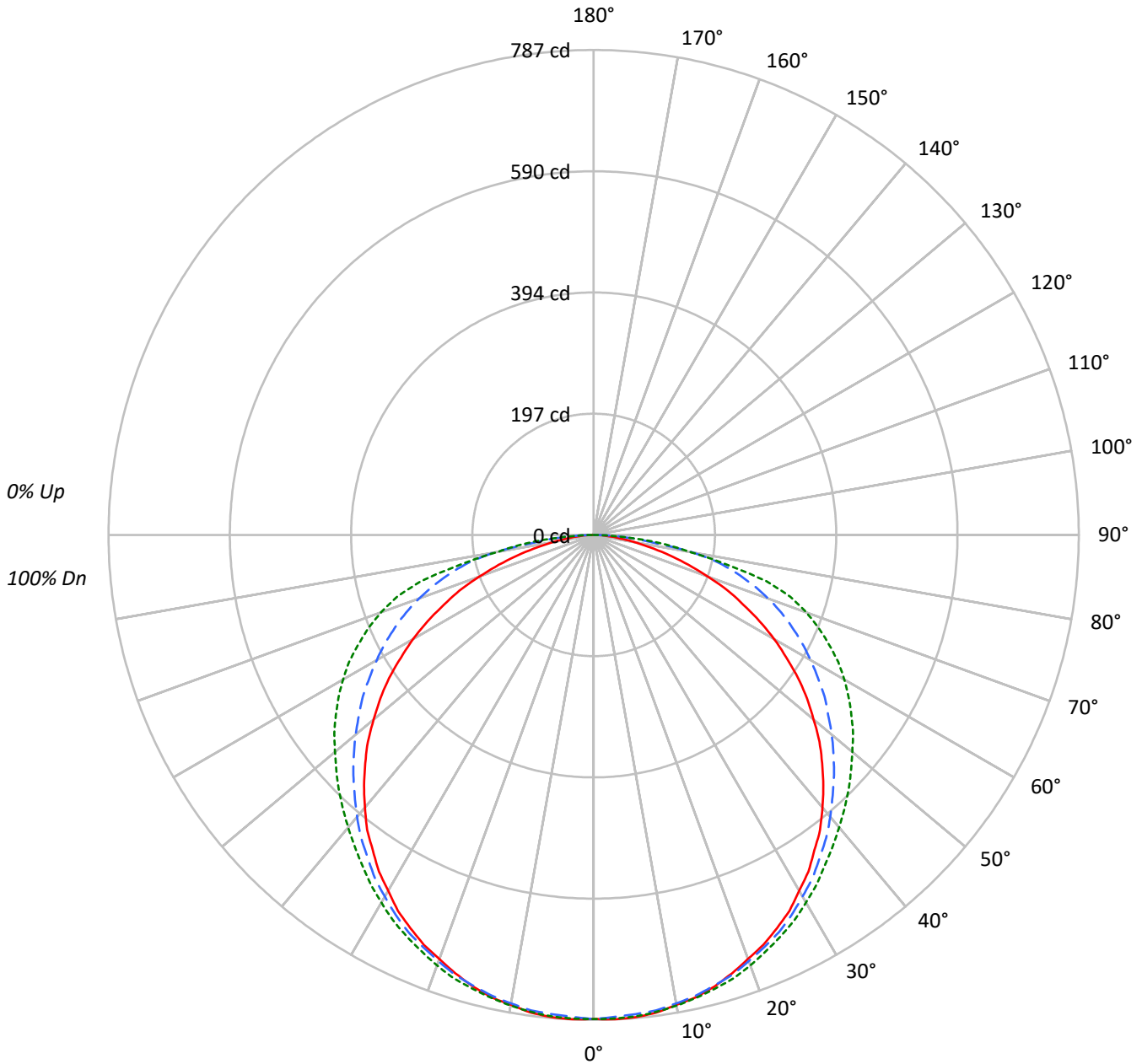
Lumens per Lamp: N/A
Luminaire Lumens: 2498.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 31
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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CATALOG NUMBER: 24CZ2-40-RDP-UNV-B40

Luminous Intensity Polar Plot





TEST NUMBER: P843044

CATALOG NUMBER: 24CZ2-40-RDP-UNV-B40

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 93 | 89 | 92 | 89 | 87 | 88 | 86 | 84 | 82 | | | | | | | | | | | | | | | | | | | |
| 2 | 97 | 89 | 81 | 75 | 95 | 87 | 80 | 74 | 83 | 77 | 72 | 80 | 75 | 71 | 77 | 73 | 69 | 67 | | | | | | | | | | | | | | | | | | | |
| 3 | 88 | 77 | 68 | 62 | 86 | 76 | 68 | 61 | 72 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 51 | 64 | 57 | 51 | 62 | 55 | 50 | 59 | 54 | 49 | 47 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 60 | 51 | 44 | 72 | 59 | 51 | 44 | 57 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 40 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 54 | 45 | 38 | 66 | 53 | 45 | 38 | 51 | 44 | 38 | 50 | 43 | 37 | 48 | 42 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 31 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 34 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 41 | 33 | 27 | 53 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 26 | 37 | 31 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 38 | 30 | 24 | 50 | 37 | 29 | 24 | 36 | 29 | 24 | 35 | 29 | 24 | 34 | 28 | 24 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1109 | 1109 | 1109 |
| 5° | 1113 | 1106 | 1111 |
| 10° | 1110 | 1106 | 1112 |
| 15° | 1108 | 1106 | 1113 |
| 20° | 1100 | 1105 | 1117 |
| 25° | 1096 | 1108 | 1119 |
| 30° | 1086 | 1104 | 1123 |
| 35° | 1076 | 1101 | 1127 |
| 40° | 1064 | 1100 | 1142 |
| 45° | 1046 | 1101 | 1167 |
| 50° | 1023 | 1107 | 1203 |
| 55° | 997 | 1125 | 1256 |
| 60° | 955 | 1147 | 1326 |
| 65° | 894 | 1188 | 1407 |
| 70° | 813 | 1242 | 1514 |
| 75° | 689 | 1311 | 1581 |
| 80° | 544 | 1319 | 1278 |
| 85° | 402 | 1004 | 1122 |



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CATALOG NUMBER: 24CZ2-40-RDP-UNV-B40

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 74.5 | 3.0 |
| 10°-20° | 214.5 | 8.6 |
| 20°-30° | 328.0 | 13.1 |
| 30°-40° | 400.9 | 16.0 |
| 40°-50° | 427.3 | 17.1 |
| 50°-60° | 408.5 | 16.4 |
| 60°-70° | 346.1 | 13.9 |
| 70°-80° | 232.6 | 9.3 |
| 80°-90° | 65.6 | 2.6 |
| 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° | 616.9 | 24.7 |
| 0°-40° | 1017.9 | 40.7 |
| 0°-60° | 1853.7 | 74.2 |
| 0°-90° | 2498.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2498.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 786 | 786 | 786 | 786 | 786 | |
| 5° | 786 | 784 | 781 | 784 | 784 | 75 |
| 15° | 758 | 758 | 757 | 763 | 762 | 214 |
| 25° | 704 | 706 | 711 | 717 | 719 | 324 |
| 35° | 624 | 629 | 639 | 652 | 654 | 391 |
| 45° | 524 | 533 | 551 | 575 | 585 | 404 |
| 55° | 405 | 420 | 457 | 493 | 510 | 361 |
| 65° | 268 | 295 | 356 | 403 | 421 | 266 |
| 75° | 126 | 172 | 240 | 281 | 290 | 135 |
| 85° | 25 | 51 | 62 | 67 | 69 | 31 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 785.6 | 785.6 | 785.6 | 785.6 | 785.6 |
| 2.5° | 786.8 | 786.8 | 783.0 | 785.6 | 785.6 |
| 5° | 785.6 | 784.4 | 780.6 | 784.4 | 784.4 |
| 7.5° | 781.8 | 780.6 | 778.1 | 781.8 | 780.6 |
| 10° | 774.4 | 774.4 | 772.0 | 775.7 | 775.7 |
| 12.5° | 768.2 | 767.0 | 765.7 | 770.6 | 769.4 |
| 15° | 758.4 | 758.4 | 757.0 | 763.3 | 762.0 |
| 17.5° | 746.0 | 747.2 | 748.4 | 753.3 | 754.6 |
| 20° | 732.2 | 734.8 | 736.0 | 743.4 | 743.4 |
| 22.5° | 719.8 | 721.2 | 723.6 | 731.0 | 731.0 |
| 25° | 703.8 | 706.2 | 711.2 | 717.4 | 718.6 |
| 27.5° | 687.7 | 688.9 | 695.2 | 703.8 | 705.0 |
| 30° | 666.6 | 670.4 | 677.7 | 687.7 | 688.9 |
| 32.5° | 648.0 | 651.7 | 660.4 | 670.4 | 672.8 |
| 35° | 624.5 | 629.4 | 639.3 | 651.7 | 654.2 |
| 37.5° | 603.4 | 607.2 | 619.6 | 633.2 | 636.9 |
| 40° | 577.4 | 584.8 | 597.2 | 613.3 | 619.6 |
| 42.5° | 551.4 | 558.8 | 573.7 | 594.8 | 602.2 |
| 45° | 524.1 | 532.8 | 551.4 | 574.9 | 584.8 |
| 47.5° | 496.9 | 506.8 | 527.8 | 555.0 | 566.2 |
| 50° | 465.8 | 478.2 | 504.2 | 535.3 | 547.7 |
| 52.5° | 436.1 | 451.0 | 479.6 | 514.2 | 530.4 |
| 55° | 405.2 | 420.0 | 457.2 | 493.2 | 510.5 |
| 57.5° | 370.5 | 390.2 | 431.2 | 472.1 | 490.6 |
| 60° | 338.2 | 356.8 | 406.4 | 451.0 | 469.6 |
| 62.5° | 303.6 | 328.4 | 381.6 | 428.6 | 447.3 |
| 65° | 267.6 | 294.9 | 355.6 | 402.6 | 421.3 |
| 67.5° | 235.5 | 265.2 | 329.6 | 376.6 | 395.3 |
| 70° | 197.1 | 234.1 | 301.0 | 348.1 | 366.8 |
| 72.5° | 161.1 | 202.0 | 271.3 | 317.2 | 334.5 |
| 75° | 126.4 | 172.3 | 240.4 | 281.3 | 290.0 |
| 77.5° | 94.1 | 142.5 | 208.1 | 225.4 | 219.3 |
| 80° | 66.9 | 114.0 | 162.3 | 153.6 | 157.3 |
| 82.5° | 43.3 | 86.8 | 100.4 | 114.0 | 117.7 |
| 85° | 24.8 | 50.8 | 62.0 | 66.9 | 69.3 |
| 87.5° | 11.2 | 18.5 | 24.8 | 24.8 | 23.6 |
| 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)