

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: P732327

Luminaire Tested: **24CZ2-50HE-S-B2750-W2D-3000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P732327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50HE-S-B2750-W2D-3000K
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Summary

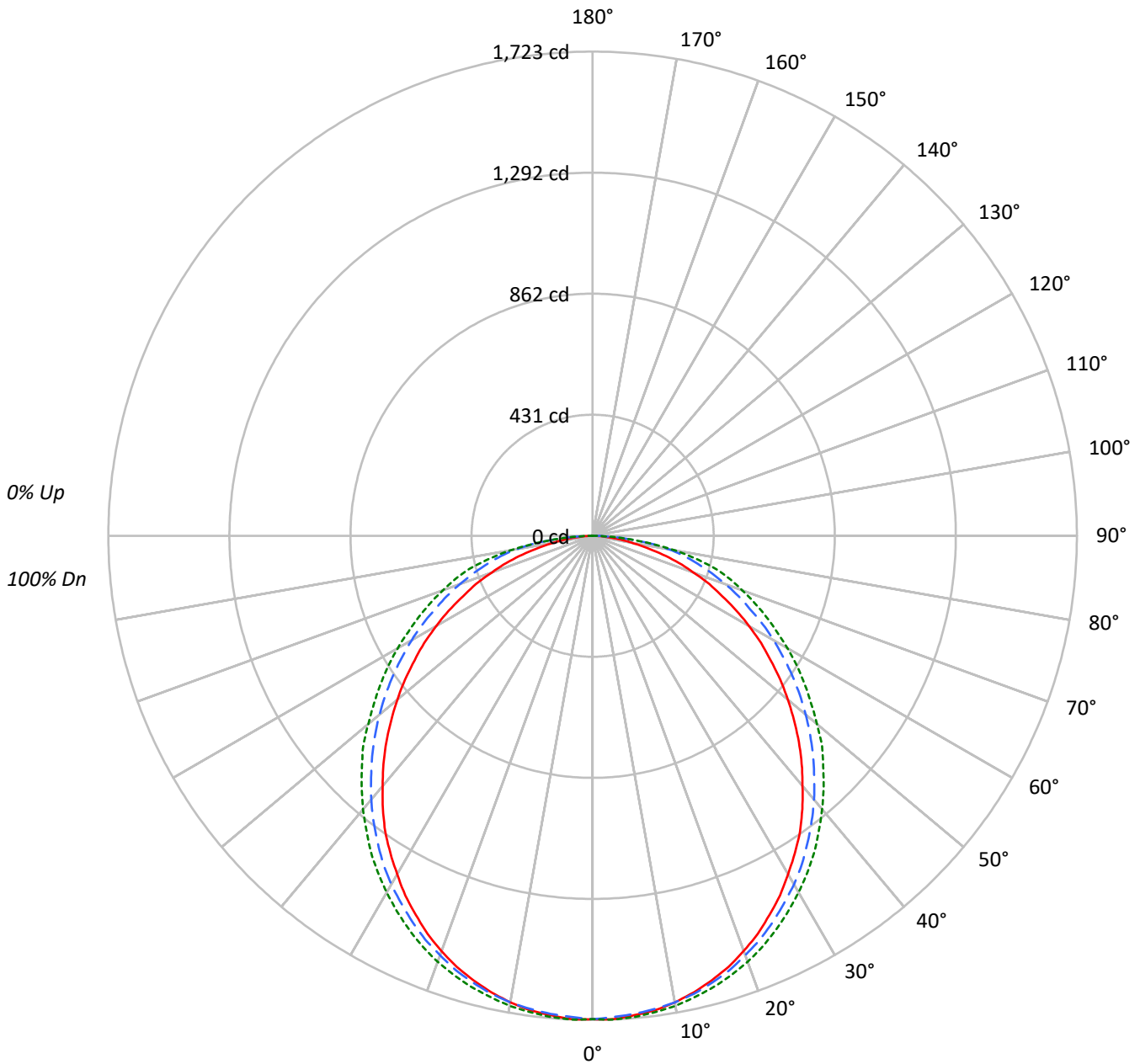
Lumens per Lamp: N/A
Luminaire Lumens: 4897.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 37
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: 24CZ2-50HE-S-B2750-W2D-3000K

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 | 0 | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | |
| 1 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 | | | | | | | | |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 | | | | | | | | |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | | | | | | | | |
| 6 | 70 | 56 | 47 | 40 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 | | | | | | | | |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 | | | | | | | | |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | | | | |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 | | | | | | | | |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2428 | 2428 | 2428 |
| 5° | 2426 | 2420 | 2435 |
| 10° | 2416 | 2416 | 2434 |
| 15° | 2393 | 2405 | 2430 |
| 20° | 2362 | 2385 | 2423 |
| 25° | 2318 | 2362 | 2408 |
| 30° | 2266 | 2335 | 2388 |
| 35° | 2216 | 2297 | 2369 |
| 40° | 2141 | 2258 | 2341 |
| 45° | 2071 | 2214 | 2316 |
| 50° | 1991 | 2172 | 2288 |
| 55° | 1902 | 2132 | 2266 |
| 60° | 1813 | 2099 | 2261 |
| 65° | 1698 | 2062 | 2275 |
| 70° | 1572 | 2073 | 2336 |
| 75° | 1409 | 2112 | 2468 |
| 80° | 1138 | 2238 | 2414 |
| 85° | 855 | 1964 | 1916 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 162.9 | 3.3 |
| 10°-20° | 465.4 | 9.5 |
| 20°-30° | 699.5 | 14.3 |
| 30°-40° | 833.3 | 17.0 |
| 40°-50° | 852.8 | 17.4 |
| 50°-60° | 767.8 | 15.7 |
| 60°-70° | 603.0 | 12.3 |
| 70°-80° | 391.3 | 8.0 |
| 80°-90° | 121.0 | 2.5 |
| 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° | 1327.8 | 27.1 |
| 0°-40° | 2161.1 | 44.1 |
| 0°-60° | 3781.7 | 77.2 |
| 0°-90° | 4897.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4897.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1720 | 1720 | 1720 | 1720 | 1720 | |
| 5° | 1713 | 1716 | 1708 | 1717 | 1719 | 163 |
| 15° | 1638 | 1643 | 1646 | 1660 | 1663 | 462 |
| 25° | 1489 | 1501 | 1516 | 1542 | 1546 | 686 |
| 35° | 1286 | 1302 | 1333 | 1366 | 1375 | 802 |
| 45° | 1038 | 1062 | 1109 | 1151 | 1160 | 800 |
| 55° | 773 | 807 | 866 | 912 | 921 | 693 |
| 65° | 509 | 548 | 618 | 669 | 681 | 506 |
| 75° | 258 | 308 | 387 | 440 | 453 | 273 |
| 85° | 53 | 98 | 121 | 118 | 118 | 64 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P732327

CATALOG NUMBER: 24CZ2-50HE-S-B2750-W2D-3000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1720.4 | 1720.4 | 1720.4 | 1720.4 | 1720.4 |
| 2.5° | 1721.9 | 1721.9 | 1714.1 | 1721.9 | 1723.4 |
| 5° | 1712.6 | 1715.7 | 1707.9 | 1717.2 | 1718.7 |
| 7.5° | 1703.2 | 1703.2 | 1698.5 | 1707.9 | 1709.6 |
| 10° | 1686.1 | 1687.6 | 1686.1 | 1697.0 | 1698.5 |
| 12.5° | 1664.4 | 1667.4 | 1669.1 | 1679.9 | 1681.4 |
| 15° | 1638.0 | 1642.7 | 1645.7 | 1659.7 | 1662.9 |
| 17.5° | 1608.4 | 1613.0 | 1620.7 | 1636.3 | 1639.5 |
| 20° | 1572.6 | 1578.7 | 1588.1 | 1608.4 | 1613.0 |
| 22.5° | 1533.8 | 1540.0 | 1555.5 | 1574.1 | 1581.9 |
| 25° | 1488.6 | 1501.0 | 1516.5 | 1541.5 | 1546.1 |
| 27.5° | 1443.4 | 1454.3 | 1474.5 | 1501.0 | 1507.3 |
| 30° | 1390.6 | 1407.6 | 1432.6 | 1459.0 | 1465.2 |
| 32.5° | 1339.2 | 1356.3 | 1385.9 | 1414.0 | 1421.7 |
| 35° | 1286.4 | 1301.9 | 1333.1 | 1365.7 | 1375.0 |
| 37.5° | 1225.7 | 1245.9 | 1280.2 | 1312.8 | 1322.2 |
| 40° | 1161.9 | 1186.9 | 1225.7 | 1260.0 | 1270.8 |
| 42.5° | 1101.2 | 1127.6 | 1166.6 | 1203.9 | 1216.3 |
| 45° | 1037.5 | 1062.4 | 1109.1 | 1151.1 | 1160.4 |
| 47.5° | 972.1 | 1000.2 | 1049.9 | 1091.9 | 1107.4 |
| 50° | 906.9 | 936.5 | 989.3 | 1032.8 | 1042.2 |
| 52.5° | 841.5 | 872.6 | 928.6 | 975.3 | 980.0 |
| 55° | 773.1 | 807.4 | 866.4 | 911.6 | 920.9 |
| 57.5° | 710.8 | 740.5 | 804.2 | 850.8 | 861.7 |
| 60° | 642.4 | 675.1 | 743.5 | 787.1 | 801.0 |
| 62.5° | 577.0 | 611.3 | 682.9 | 726.4 | 738.8 |
| 65° | 508.6 | 547.6 | 617.5 | 668.9 | 681.2 |
| 67.5° | 449.6 | 486.9 | 561.5 | 611.3 | 623.7 |
| 70° | 381.0 | 423.2 | 502.4 | 553.8 | 566.2 |
| 72.5° | 322.0 | 365.5 | 444.9 | 494.6 | 513.3 |
| 75° | 258.3 | 307.9 | 387.4 | 440.2 | 452.6 |
| 77.5° | 196.0 | 253.6 | 334.3 | 374.8 | 374.8 |
| 80° | 140.0 | 200.7 | 275.3 | 294.0 | 297.0 |
| 82.5° | 91.8 | 150.9 | 203.7 | 202.2 | 202.2 |
| 85° | 52.8 | 98.0 | 121.3 | 118.3 | 118.3 |
| 87.5° | 20.2 | 40.5 | 43.5 | 43.5 | 42.0 |
| 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)