

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: P731936

Luminaire Tested: **22CZ2-20HE-B2750-W2D-2700K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P731936
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P271965)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-B2750-W2D-2700K
Description: 2X2 2000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Summary

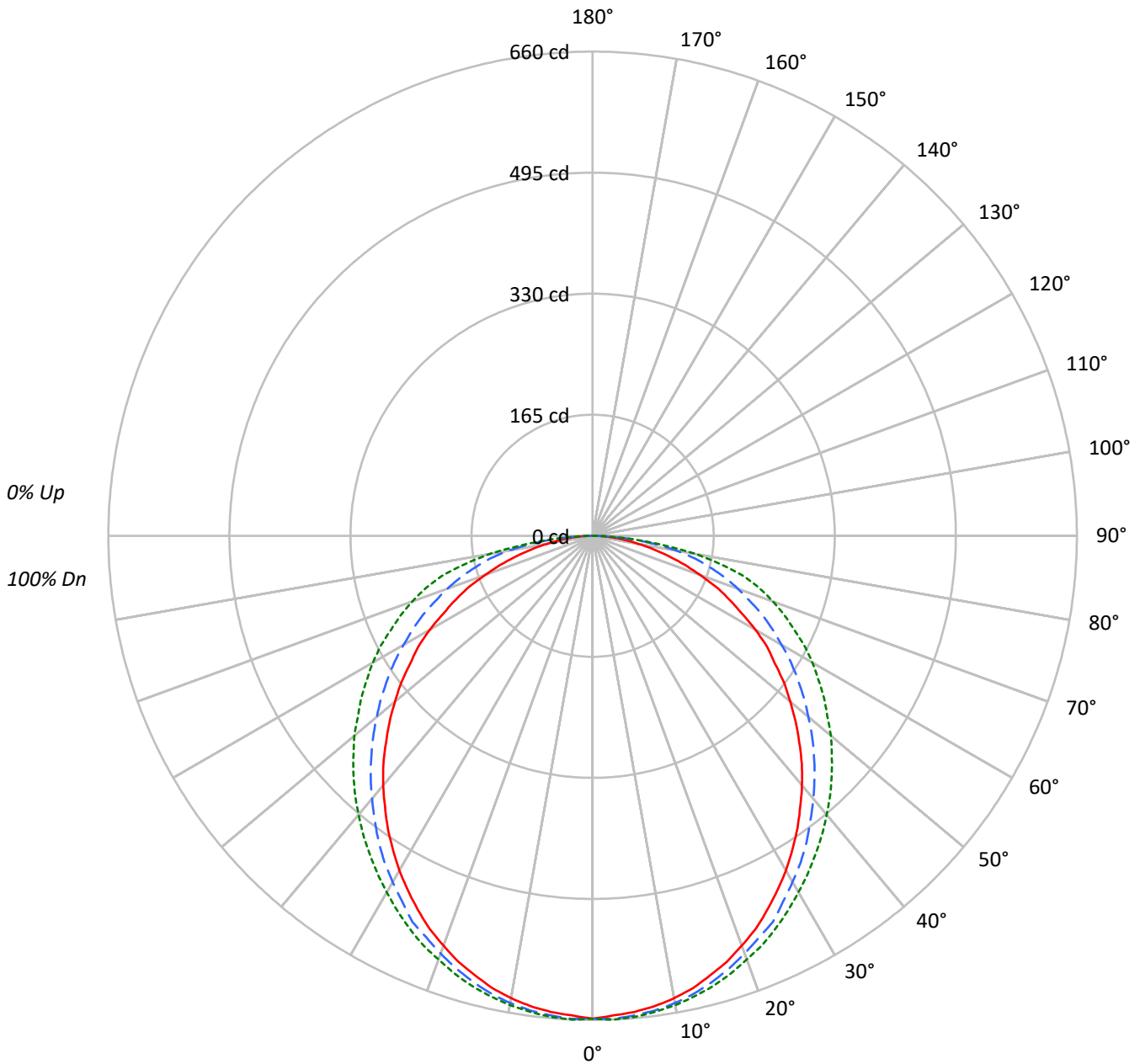
Lumens per Lamp: N/A
Luminaire Lumens: 1936.0 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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 | | | | 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 | | | | 100 |
| 1 | 108 | 103 | 98 | 94 | 105 | 101 | 96 | 93 | 96 | 93 | 90 | 92 | 90 | 87 | 89 | 86 | 84 | 82 | | | | 82 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 71 | 77 | 73 | 70 | 68 | | | | 68 |
| 3 | 89 | 78 | 69 | 63 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 59 | 56 | | | | 56 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 52 | 65 | 57 | 52 | 63 | 56 | 51 | 60 | 55 | 50 | 48 | | | | 48 |
| 5 | 75 | 61 | 52 | 45 | 72 | 60 | 52 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 | | | | 41 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 46 | 39 | 52 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 38 | 36 | | | | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 34 | 46 | 39 | 34 | 45 | 39 | 34 | 32 | | | | 32 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 35 | 30 | 28 | | | | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 25 | | | | 25 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 | | | | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1868 | 1868 | 1868 |
| 5° | 1856 | 1869 | 1875 |
| 10° | 1844 | 1864 | 1872 |
| 15° | 1822 | 1850 | 1867 |
| 20° | 1795 | 1830 | 1855 |
| 25° | 1763 | 1819 | 1849 |
| 30° | 1726 | 1786 | 1838 |
| 35° | 1686 | 1762 | 1835 |
| 40° | 1644 | 1732 | 1838 |
| 45° | 1598 | 1713 | 1850 |
| 50° | 1552 | 1695 | 1872 |
| 55° | 1499 | 1687 | 1904 |
| 60° | 1454 | 1687 | 1962 |
| 65° | 1381 | 1714 | 2034 |
| 70° | 1288 | 1746 | 2166 |
| 75° | 1181 | 1808 | 2340 |
| 80° | 1028 | 1884 | 2304 |
| 85° | 902 | 1673 | 1833 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.3 | 3.2 |
| 10°-20° | 177.3 | 9.2 |
| 20°-30° | 266.2 | 13.7 |
| 30°-40° | 318.1 | 16.4 |
| 40°-50° | 330.7 | 17.1 |
| 50°-60° | 306.6 | 15.8 |
| 60°-70° | 251.4 | 13.0 |
| 70°-80° | 170.0 | 8.8 |
| 80°-90° | 53.4 | 2.8 |
| 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° | 505.8 | 26.1 |
| 0°-40° | 823.8 | 42.6 |
| 0°-60° | 1461.1 | 75.5 |
| 0°-90° | 1936.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1936.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 658 | 658 | 658 | 658 | 658 | |
| 5° | 652 | 652 | 656 | 657 | 658 | 62 |
| 15° | 620 | 623 | 630 | 634 | 635 | 175 |
| 25° | 563 | 568 | 581 | 588 | 591 | 259 |
| 35° | 487 | 493 | 509 | 524 | 530 | 304 |
| 45° | 398 | 406 | 427 | 452 | 461 | 307 |
| 55° | 303 | 312 | 341 | 372 | 385 | 272 |
| 65° | 206 | 217 | 255 | 289 | 303 | 203 |
| 75° | 108 | 126 | 165 | 198 | 213 | 114 |
| 85° | 28 | 38 | 51 | 57 | 56 | 31 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 |
| 2.5° | 654.5 | 656.3 | 659.2 | 660.2 | 660.2 |
| 5° | 651.6 | 652.5 | 656.3 | 657.3 | 658.3 |
| 7.5° | 646.8 | 648.7 | 652.5 | 653.6 | 654.5 |
| 10° | 640.1 | 642.1 | 646.8 | 648.7 | 649.6 |
| 12.5° | 631.6 | 633.5 | 639.2 | 642.1 | 643.0 |
| 15° | 620.1 | 623.0 | 629.7 | 633.5 | 635.4 |
| 17.5° | 608.8 | 611.5 | 618.3 | 623.9 | 625.9 |
| 20° | 594.4 | 601.1 | 605.9 | 613.5 | 614.4 |
| 22.5° | 580.2 | 584.0 | 592.5 | 600.2 | 604.0 |
| 25° | 563.0 | 567.8 | 581.1 | 587.8 | 590.6 |
| 27.5° | 545.0 | 551.6 | 562.1 | 572.5 | 576.3 |
| 30° | 526.8 | 531.5 | 545.0 | 557.2 | 561.1 |
| 32.5° | 506.8 | 513.5 | 527.7 | 540.1 | 545.9 |
| 35° | 486.7 | 493.4 | 508.7 | 523.9 | 529.7 |
| 37.5° | 464.9 | 472.5 | 487.8 | 505.8 | 513.5 |
| 40° | 443.9 | 449.7 | 467.7 | 489.6 | 496.3 |
| 42.5° | 422.0 | 428.7 | 447.7 | 471.6 | 479.2 |
| 45° | 398.2 | 405.8 | 426.8 | 451.5 | 461.0 |
| 47.5° | 375.3 | 383.0 | 405.8 | 430.6 | 442.0 |
| 50° | 351.5 | 361.0 | 383.9 | 412.5 | 424.0 |
| 52.5° | 328.7 | 337.3 | 363.0 | 392.5 | 402.9 |
| 55° | 303.0 | 312.5 | 341.1 | 371.5 | 384.8 |
| 57.5° | 281.9 | 288.6 | 320.1 | 351.5 | 364.8 |
| 60° | 256.2 | 264.8 | 297.2 | 330.5 | 345.8 |
| 62.5° | 228.7 | 242.9 | 276.2 | 310.5 | 325.8 |
| 65° | 205.7 | 217.2 | 255.3 | 288.6 | 303.0 |
| 67.5° | 182.0 | 194.4 | 231.4 | 266.8 | 283.0 |
| 70° | 155.3 | 171.5 | 210.5 | 245.8 | 261.1 |
| 72.5° | 131.4 | 148.7 | 188.6 | 222.9 | 239.1 |
| 75° | 107.7 | 125.7 | 164.9 | 198.1 | 213.4 |
| 77.5° | 84.8 | 104.8 | 142.9 | 168.6 | 178.2 |
| 80° | 62.9 | 82.0 | 115.3 | 133.4 | 141.0 |
| 82.5° | 43.9 | 60.0 | 84.8 | 94.4 | 96.2 |
| 85° | 27.7 | 38.1 | 51.4 | 57.2 | 56.3 |
| 87.5° | 12.4 | 15.3 | 19.1 | 21.0 | 20.0 |
| 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)