

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: P260460

Luminaire Tested: **22CZ-LD5-24-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24-RDP-UNV-L82765-W2A1-U-5700K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH RDP LENS
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1873.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

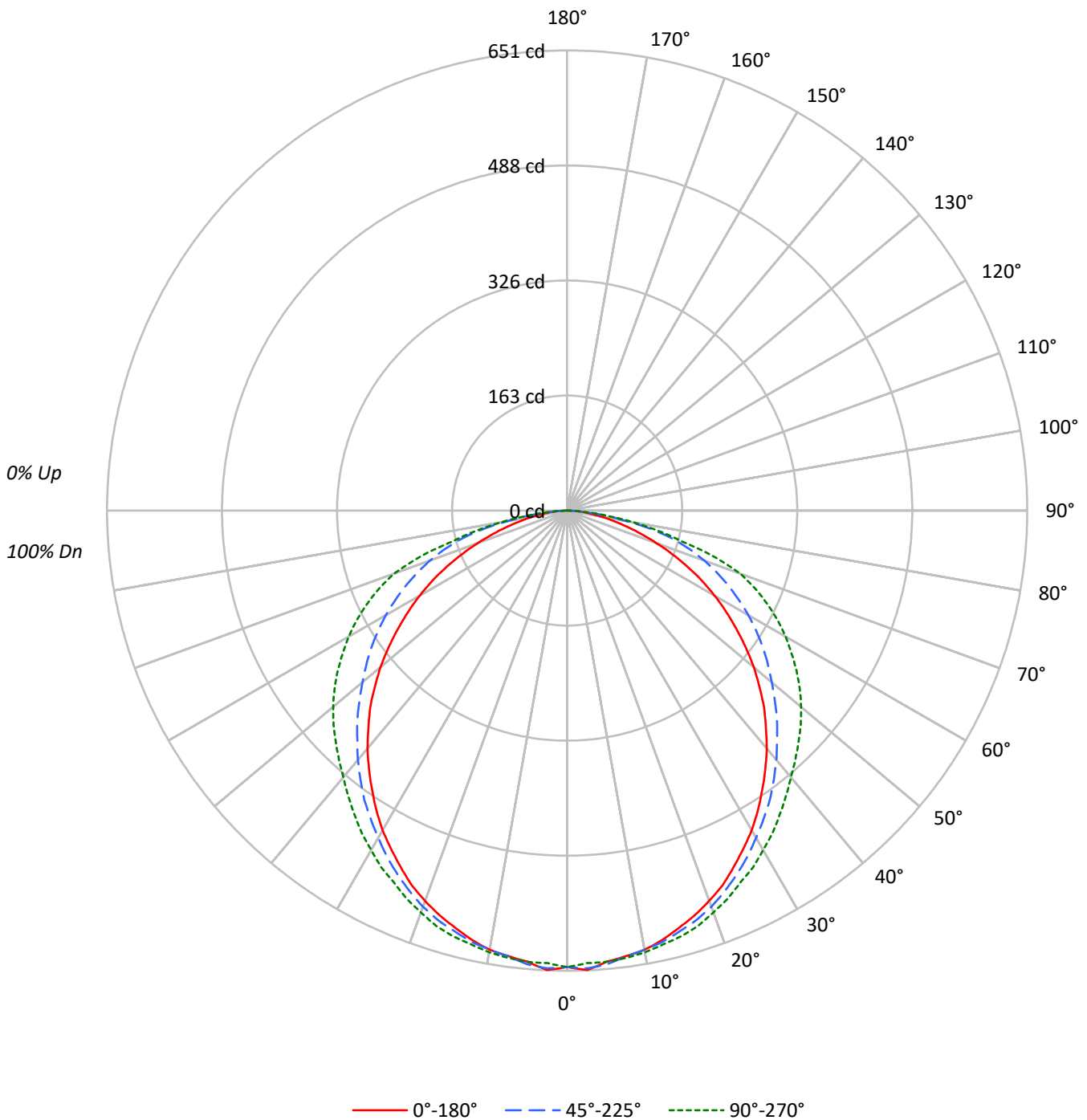
Input Watts (W): 18.042
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 78 | 74 | 71 | 69 |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 57 |
| 4 | 82 | 69 | 60 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 50 | 42 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 36 | 30 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1738 | 1738 | 1738 |
| 5° | 1731 | 1741 | 1731 |
| 10° | 1724 | 1724 | 1734 |
| 15° | 1703 | 1716 | 1737 |
| 20° | 1683 | 1708 | 1733 |
| 25° | 1653 | 1686 | 1723 |
| 30° | 1623 | 1661 | 1723 |
| 35° | 1582 | 1643 | 1724 |
| 40° | 1544 | 1618 | 1730 |
| 45° | 1499 | 1598 | 1762 |
| 50° | 1442 | 1582 | 1809 |
| 55° | 1373 | 1587 | 1859 |
| 60° | 1296 | 1595 | 1920 |
| 65° | 1195 | 1604 | 1989 |
| 70° | 1059 | 1622 | 2050 |
| 75° | 898 | 1618 | 1746 |
| 80° | 747 | 1302 | 1454 |
| 85° | 648 | 877 | 840 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 61.0 | 3.3 |
| 10°-20° | 174.0 | 9.3 |
| 20°-30° | 261.8 | 14.0 |
| 30°-40° | 313.7 | 16.8 |
| 40°-50° | 327.2 | 17.5 |
| 50°-60° | 304.6 | 16.3 |
| 60°-70° | 247.4 | 13.2 |
| 70°-80° | 149.1 | 8.0 |
| 80°-90° | 34.2 | 1.8 |
| 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° | 496.9 | 26.5 |
| 0°-40° | 810.6 | 43.3 |
| 0°-60° | 1442.4 | 77.0 |
| 0°-90° | 1873.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1873.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 646 | 646 | 646 | 646 | 646 | |
| 5° | 641 | 641 | 644 | 646 | 641 | 61 |
| 15° | 611 | 614 | 616 | 620 | 624 | 172 |
| 25° | 557 | 560 | 568 | 575 | 580 | 257 |
| 35° | 482 | 488 | 500 | 515 | 525 | 301 |
| 45° | 394 | 401 | 420 | 447 | 463 | 303 |
| 55° | 293 | 305 | 338 | 375 | 396 | 262 |
| 65° | 188 | 207 | 252 | 291 | 312 | 186 |
| 75° | 86 | 115 | 156 | 165 | 168 | 93 |
| 85° | 21 | 26 | 28 | 27 | 27 | 24 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 645.7 | 645.7 | 645.7 | 645.7 | 645.7 |
| 2.5° | 650.7 | 649.4 | 648.2 | 644.5 | 640.8 |
| 5° | 640.8 | 640.8 | 644.5 | 645.7 | 640.8 |
| 7.5° | 635.9 | 635.9 | 635.9 | 640.8 | 638.3 |
| 10° | 630.9 | 630.9 | 630.9 | 634.6 | 634.6 |
| 12.5° | 622.3 | 623.5 | 624.8 | 626.0 | 628.5 |
| 15° | 611.2 | 613.6 | 616.1 | 619.8 | 623.5 |
| 17.5° | 600.1 | 602.5 | 607.5 | 611.2 | 616.1 |
| 20° | 587.7 | 590.2 | 596.4 | 600.1 | 605.0 |
| 22.5° | 574.1 | 575.4 | 582.8 | 587.7 | 593.9 |
| 25° | 556.8 | 560.5 | 568.0 | 575.4 | 580.3 |
| 27.5° | 539.6 | 543.3 | 551.9 | 561.8 | 569.2 |
| 30° | 522.3 | 526.0 | 534.6 | 547.0 | 554.4 |
| 32.5° | 502.5 | 507.5 | 517.3 | 532.1 | 540.8 |
| 35° | 481.5 | 487.7 | 500.0 | 514.9 | 524.7 |
| 37.5° | 460.5 | 466.7 | 480.3 | 498.8 | 508.7 |
| 40° | 439.5 | 445.7 | 460.5 | 480.3 | 492.6 |
| 42.5° | 416.1 | 423.5 | 439.5 | 463.0 | 477.8 |
| 45° | 393.9 | 401.3 | 419.8 | 447.0 | 463.0 |
| 47.5° | 369.2 | 377.8 | 398.8 | 429.7 | 448.2 |
| 50° | 344.5 | 354.4 | 377.8 | 412.4 | 432.1 |
| 52.5° | 318.5 | 329.7 | 358.1 | 393.9 | 414.9 |
| 55° | 292.6 | 305.0 | 338.3 | 375.3 | 396.3 |
| 57.5° | 266.7 | 280.3 | 317.3 | 355.6 | 376.6 |
| 60° | 240.8 | 255.6 | 296.3 | 335.8 | 356.8 |
| 62.5° | 214.8 | 230.9 | 274.1 | 313.6 | 335.8 |
| 65° | 187.7 | 207.4 | 251.9 | 291.4 | 312.4 |
| 67.5° | 160.5 | 184.0 | 229.7 | 267.9 | 287.7 |
| 70° | 134.6 | 160.5 | 206.2 | 242.0 | 260.5 |
| 72.5° | 109.9 | 137.0 | 181.5 | 212.4 | 219.8 |
| 75° | 86.4 | 114.8 | 155.6 | 165.4 | 167.9 |
| 77.5° | 66.7 | 92.6 | 123.5 | 125.9 | 132.1 |
| 80° | 48.2 | 70.4 | 84.0 | 91.4 | 93.8 |
| 82.5° | 33.3 | 48.2 | 55.6 | 56.8 | 58.0 |
| 85° | 21.0 | 25.9 | 28.4 | 27.2 | 27.2 |
| 87.5° | 11.1 | 9.9 | 8.6 | 6.2 | 4.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)