

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: P275512

Luminaire Tested: **14CZ2-25-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-25-UNV-L92765-W2A1-U-3000K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1977.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

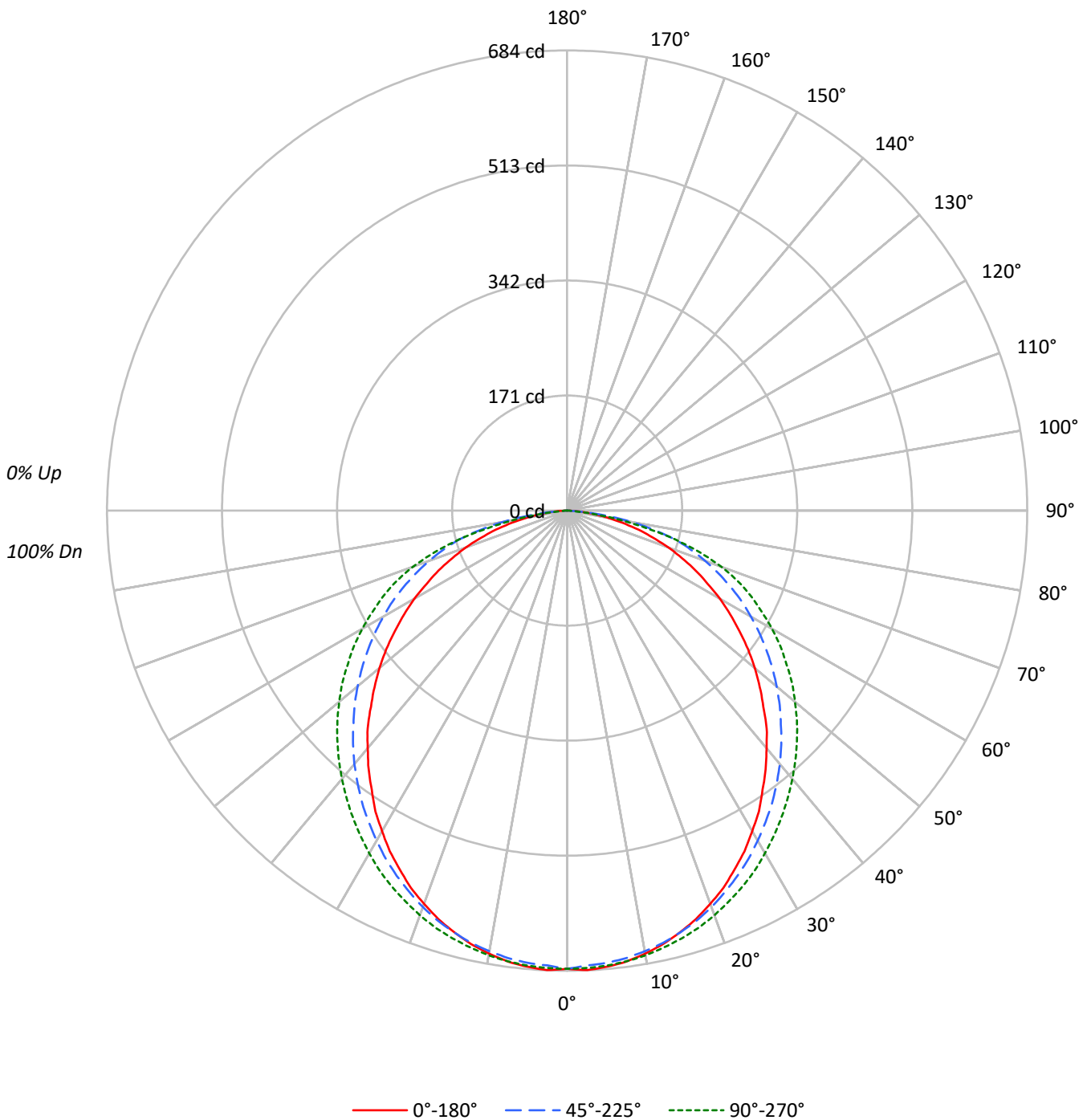
Input Watts (W): 18.042
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 109 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 90 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 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 | 58 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 53 | 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 | 51 | 42 | 35 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 37 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1833 | 1833 | 1833 |
| 5° | 1838 | 1823 | 1834 |
| 10° | 1827 | 1818 | 1835 |
| 15° | 1808 | 1809 | 1834 |
| 20° | 1781 | 1796 | 1833 |
| 25° | 1747 | 1779 | 1831 |
| 30° | 1710 | 1760 | 1827 |
| 35° | 1664 | 1745 | 1826 |
| 40° | 1620 | 1728 | 1829 |
| 45° | 1570 | 1709 | 1839 |
| 50° | 1524 | 1701 | 1851 |
| 55° | 1466 | 1696 | 1868 |
| 60° | 1414 | 1699 | 1893 |
| 65° | 1342 | 1704 | 1923 |
| 70° | 1259 | 1717 | 1921 |
| 75° | 1142 | 1732 | 1737 |
| 80° | 936 | 1495 | 1237 |
| 85° | 695 | 707 | 287 |



TEST NUMBER: P275512

CATALOG NUMBER: 14CZ2-25-UNV-L92765-W2A1-U-3000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.4 | 3.3 |
| 10°-20° | 184.1 | 9.3 |
| 20°-30° | 277.3 | 14.0 |
| 30°-40° | 332.8 | 16.8 |
| 40°-50° | 346.9 | 17.5 |
| 50°-60° | 321.1 | 16.2 |
| 60°-70° | 259.5 | 13.1 |
| 70°-80° | 158.2 | 8.0 |
| 80°-90° | 32.7 | 1.7 |
| 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° | 525.9 | 26.6 |
| 0°-40° | 858.7 | 43.4 |
| 0°-60° | 1526.7 | 77.2 |
| 0°-90° | 1977.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1977.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 681 | 681 | 681 | 681 | 681 | |
| 5° | 681 | 679 | 675 | 680 | 679 | 65 |
| 15° | 649 | 649 | 649 | 658 | 658 | 183 |
| 25° | 588 | 592 | 599 | 614 | 617 | 271 |
| 35° | 506 | 514 | 531 | 551 | 556 | 317 |
| 45° | 413 | 425 | 449 | 474 | 483 | 319 |
| 55° | 312 | 329 | 362 | 390 | 398 | 280 |
| 65° | 211 | 231 | 268 | 294 | 302 | 208 |
| 75° | 110 | 134 | 167 | 169 | 167 | 115 |
| 85° | 22 | 34 | 23 | 13 | 9 | 28 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P275512

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 681.1 | 681.1 | 681.1 | 681.1 | 681.1 |
| 2.5° | 683.7 | 681.5 | 676.7 | 681.5 | 680.6 |
| 5° | 680.6 | 678.9 | 674.9 | 679.8 | 678.9 |
| 7.5° | 676.2 | 674.5 | 670.9 | 676.7 | 675.8 |
| 10° | 668.7 | 667.9 | 665.2 | 671.8 | 671.4 |
| 12.5° | 659.9 | 659.5 | 658.2 | 665.7 | 665.2 |
| 15° | 648.9 | 649.3 | 649.3 | 658.2 | 658.2 |
| 17.5° | 636.6 | 637.4 | 639.2 | 648.9 | 650.2 |
| 20° | 622.0 | 623.8 | 627.3 | 638.3 | 640.1 |
| 22.5° | 607.0 | 608.3 | 613.6 | 626.9 | 628.6 |
| 25° | 588.5 | 592.0 | 599.1 | 614.1 | 616.7 |
| 27.5° | 570.9 | 574.0 | 583.7 | 599.1 | 603.5 |
| 30° | 550.2 | 555.0 | 566.5 | 583.2 | 588.1 |
| 32.5° | 530.3 | 535.6 | 548.8 | 568.2 | 572.6 |
| 35° | 506.5 | 514.4 | 531.2 | 550.6 | 555.9 |
| 37.5° | 484.9 | 492.4 | 511.4 | 532.5 | 538.7 |
| 40° | 461.1 | 470.4 | 492.0 | 514.4 | 520.6 |
| 42.5° | 439.1 | 447.9 | 471.2 | 494.2 | 502.5 |
| 45° | 412.6 | 425.0 | 449.2 | 474.3 | 483.2 |
| 47.5° | 388.4 | 400.7 | 428.5 | 455.4 | 463.3 |
| 50° | 364.1 | 377.4 | 406.4 | 434.2 | 442.2 |
| 52.5° | 339.0 | 353.1 | 384.4 | 412.2 | 421.4 |
| 55° | 312.5 | 328.9 | 361.5 | 389.7 | 398.1 |
| 57.5° | 287.4 | 304.2 | 339.0 | 367.7 | 376.0 |
| 60° | 262.7 | 279.9 | 315.6 | 343.0 | 351.8 |
| 62.5° | 235.4 | 255.7 | 292.7 | 319.6 | 326.2 |
| 65° | 210.7 | 231.4 | 267.6 | 294.5 | 302.0 |
| 67.5° | 184.7 | 207.2 | 243.3 | 268.0 | 275.1 |
| 70° | 160.0 | 183.4 | 218.2 | 241.1 | 244.2 |
| 72.5° | 133.6 | 157.4 | 192.6 | 207.2 | 207.2 |
| 75° | 109.8 | 134.0 | 166.6 | 169.3 | 167.1 |
| 77.5° | 83.8 | 110.6 | 131.8 | 126.5 | 121.2 |
| 80° | 60.4 | 86.8 | 96.5 | 86.8 | 79.8 |
| 82.5° | 40.6 | 63.0 | 58.2 | 46.3 | 41.0 |
| 85° | 22.5 | 33.5 | 22.9 | 12.8 | 9.3 |
| 87.5° | 8.4 | 7.5 | 2.2 | 2.2 | 2.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)