

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: P275890

Luminaire Tested: **14CZ2-44-RDP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-RDP-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2601.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

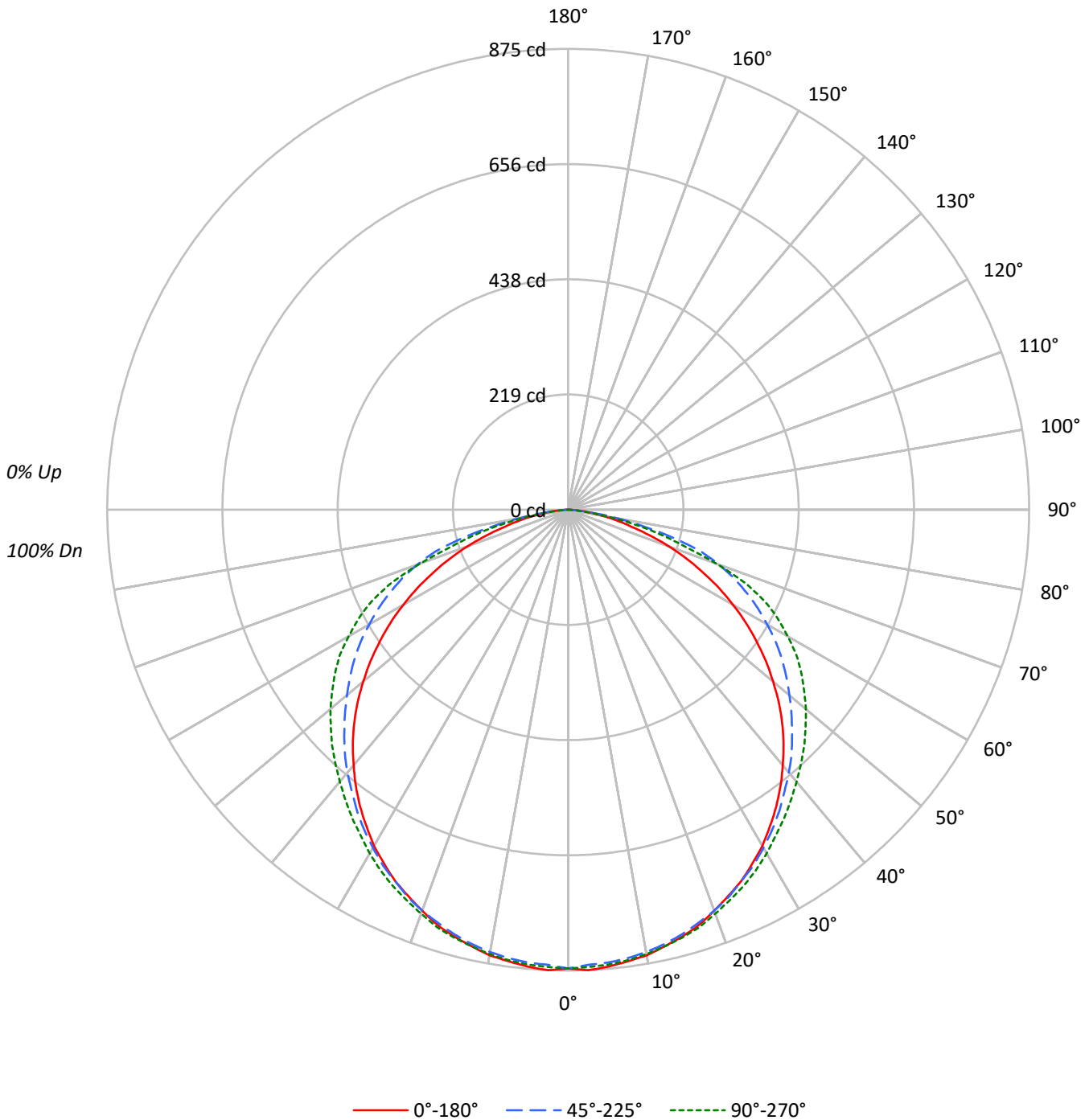
Input Watts (W): 36.735
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 84 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 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 | 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 | 36 | 31 | 43 | 36 | 31 | 41 | 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 | 25 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2344 | 2344 | 2344 |
| 5° | 2353 | 2331 | 2342 |
| 10° | 2347 | 2331 | 2341 |
| 15° | 2337 | 2325 | 2342 |
| 20° | 2320 | 2320 | 2338 |
| 25° | 2309 | 2309 | 2339 |
| 30° | 2290 | 2303 | 2341 |
| 35° | 2261 | 2295 | 2348 |
| 40° | 2226 | 2290 | 2368 |
| 45° | 2187 | 2288 | 2411 |
| 50° | 2125 | 2295 | 2465 |
| 55° | 2048 | 2325 | 2534 |
| 60° | 1946 | 2350 | 2590 |
| 65° | 1798 | 2379 | 2625 |
| 70° | 1598 | 2397 | 2349 |
| 75° | 1288 | 2153 | 1879 |
| 80° | 1007 | 1511 | 1227 |
| 85° | 689 | 438 | 315 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 82.5 | 3.2 |
| 10°-20° | 236.6 | 9.1 |
| 20°-30° | 360.2 | 13.8 |
| 30°-40° | 438.7 | 16.9 |
| 40°-50° | 465.5 | 17.9 |
| 50°-60° | 439.3 | 16.9 |
| 60°-70° | 354.7 | 13.6 |
| 70°-80° | 192.4 | 7.4 |
| 80°-90° | 31.1 | 1.2 |
| 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° | 679.2 | 26.1 |
| 0°-40° | 1118.0 | 43.0 |
| 0°-60° | 2022.8 | 77.8 |
| 0°-90° | 2601.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2601.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 871 | 871 | 871 | 871 | 871 | |
| 5° | 871 | 869 | 863 | 869 | 867 | 83 |
| 15° | 839 | 837 | 835 | 841 | 841 | 237 |
| 25° | 778 | 776 | 778 | 786 | 788 | 358 |
| 35° | 688 | 692 | 698 | 713 | 715 | 430 |
| 45° | 575 | 583 | 601 | 623 | 634 | 443 |
| 55° | 437 | 455 | 496 | 528 | 540 | 390 |
| 65° | 282 | 317 | 374 | 404 | 412 | 280 |
| 75° | 124 | 181 | 207 | 187 | 181 | 135 |
| 85° | 22 | 24 | 14 | 12 | 10 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 871.1 | 871.1 | 871.1 | 871.1 | 871.1 |
| 2.5° | 875.2 | 871.1 | 865.0 | 871.1 | 869.1 |
| 5° | 871.1 | 869.1 | 863.0 | 869.1 | 867.1 |
| 7.5° | 865.0 | 865.0 | 859.0 | 863.0 | 863.0 |
| 10° | 859.0 | 856.9 | 852.9 | 859.0 | 856.9 |
| 12.5° | 848.8 | 846.8 | 844.7 | 850.8 | 848.8 |
| 15° | 838.7 | 836.6 | 834.6 | 840.7 | 840.7 |
| 17.5° | 826.5 | 824.4 | 822.4 | 830.5 | 830.5 |
| 20° | 810.2 | 810.2 | 810.2 | 818.3 | 816.3 |
| 22.5° | 794.0 | 794.0 | 796.0 | 804.1 | 802.1 |
| 25° | 777.7 | 775.7 | 777.7 | 785.9 | 787.9 |
| 27.5° | 757.4 | 759.5 | 761.5 | 769.6 | 771.6 |
| 30° | 737.1 | 739.2 | 741.2 | 751.3 | 753.4 |
| 32.5° | 712.8 | 716.8 | 720.9 | 733.1 | 733.1 |
| 35° | 688.4 | 692.4 | 698.5 | 712.8 | 714.8 |
| 37.5° | 662.0 | 666.0 | 674.2 | 690.4 | 694.5 |
| 40° | 633.6 | 639.6 | 651.8 | 668.1 | 674.2 |
| 42.5° | 605.1 | 613.3 | 627.5 | 645.7 | 653.9 |
| 45° | 574.7 | 582.8 | 601.1 | 623.4 | 633.6 |
| 47.5° | 542.2 | 552.3 | 574.7 | 603.1 | 611.2 |
| 50° | 507.7 | 521.9 | 548.3 | 578.7 | 588.9 |
| 52.5° | 473.1 | 489.4 | 521.9 | 554.4 | 564.5 |
| 55° | 436.6 | 454.9 | 495.5 | 528.0 | 540.1 |
| 57.5° | 400.0 | 420.3 | 467.0 | 501.6 | 513.8 |
| 60° | 361.5 | 385.8 | 436.6 | 471.1 | 481.3 |
| 62.5° | 322.9 | 351.3 | 406.1 | 440.6 | 448.8 |
| 65° | 282.3 | 316.8 | 373.6 | 404.1 | 412.2 |
| 67.5° | 243.7 | 284.3 | 341.1 | 363.5 | 363.5 |
| 70° | 203.1 | 247.7 | 304.6 | 310.7 | 298.5 |
| 72.5° | 162.5 | 213.2 | 264.0 | 241.6 | 231.5 |
| 75° | 123.9 | 180.7 | 207.1 | 186.8 | 180.7 |
| 77.5° | 93.4 | 146.2 | 146.2 | 134.0 | 130.0 |
| 80° | 65.0 | 111.7 | 97.5 | 85.3 | 79.2 |
| 82.5° | 42.6 | 62.9 | 50.8 | 40.6 | 34.5 |
| 85° | 22.3 | 24.4 | 14.2 | 12.2 | 10.2 |
| 87.5° | 8.1 | 4.1 | 2.0 | 4.1 | 2.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)