

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: P263882

Luminaire Tested: **24CZ-LD5-35SE-RDP-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35SE-RDP-UNV-L92765-W2A1-U-5500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2321.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

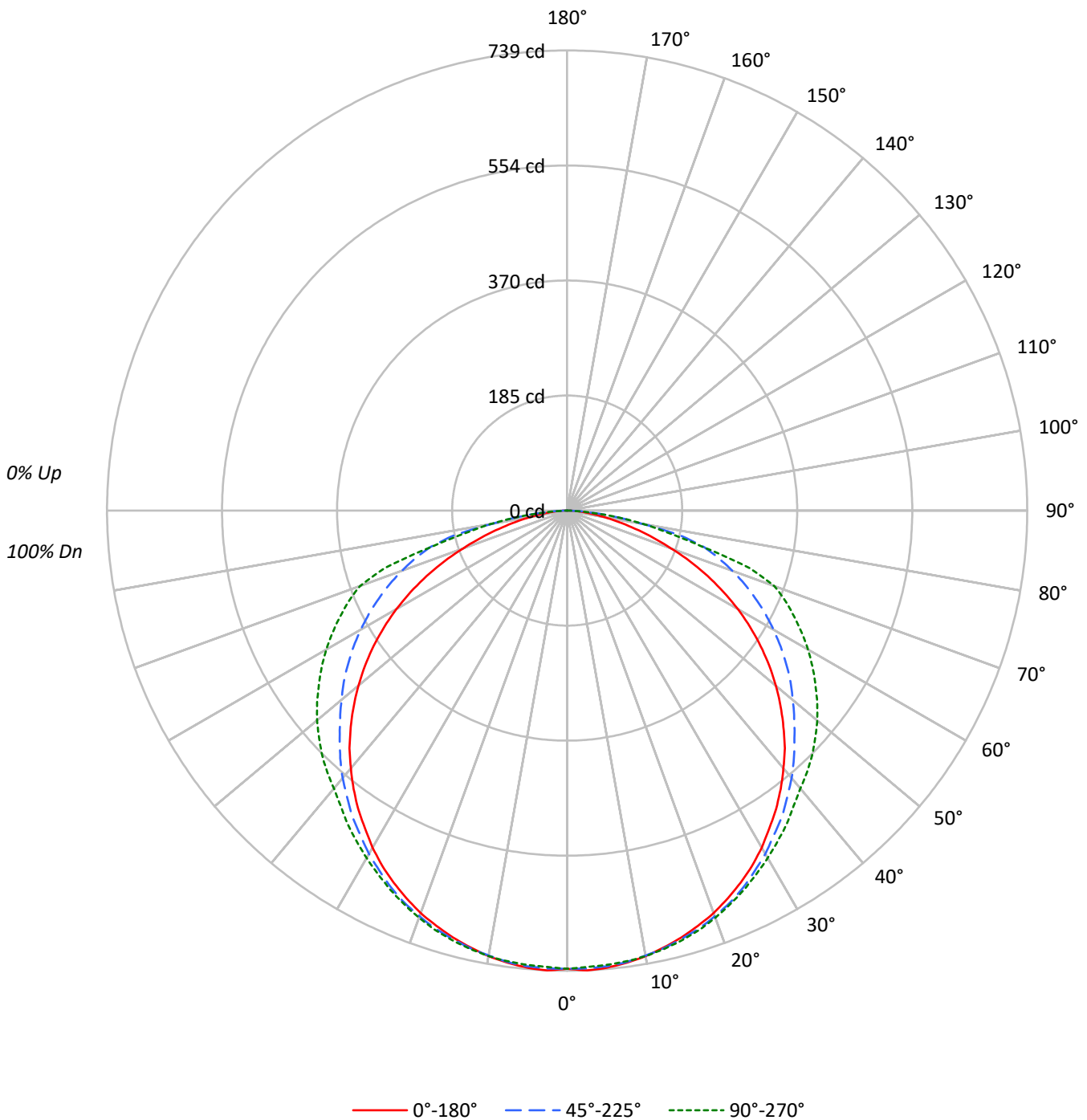
Input Watts (W): 26.784
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | 20 | | | 20 | | | 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 | 103 | 98 | 94 | 105 | 101 | 97 | 93 | 96 | 93 | 90 | 92 | 90 | 87 | 89 | 87 | 84 | 82 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 78 | 73 | 80 | 75 | 71 | 77 | 73 | 70 | 67 |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 52 | 64 | 57 | 51 | 62 | 56 | 50 | 60 | 54 | 50 | 47 |
| 5 | 74 | 61 | 51 | 45 | 72 | 60 | 51 | 44 | 57 | 50 | 44 | 55 | 49 | 43 | 54 | 48 | 43 | 41 |
| 6 | 68 | 55 | 45 | 39 | 66 | 54 | 45 | 38 | 52 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 35 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 47 | 39 | 34 | 45 | 38 | 33 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 42 | 35 | 30 | 40 | 34 | 29 | 27 |
| 9 | 55 | 41 | 33 | 27 | 53 | 41 | 32 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |
| 10 | 51 | 38 | 30 | 24 | 50 | 37 | 30 | 24 | 36 | 29 | 24 | 35 | 29 | 24 | 35 | 28 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-----|------|------|
| 0° | 990 | 990 | 990 |
| 5° | 995 | 992 | 989 |
| 10° | 993 | 991 | 993 |
| 15° | 988 | 992 | 995 |
| 20° | 985 | 993 | 996 |
| 25° | 979 | 992 | 997 |
| 30° | 971 | 989 | 1001 |
| 35° | 961 | 987 | 1010 |
| 40° | 949 | 985 | 1023 |
| 45° | 935 | 983 | 1059 |
| 50° | 916 | 990 | 1098 |
| 55° | 890 | 1008 | 1142 |
| 60° | 852 | 1030 | 1202 |
| 65° | 793 | 1062 | 1280 |
| 70° | 701 | 1110 | 1393 |
| 75° | 588 | 1188 | 1170 |
| 80° | 470 | 938 | 974 |
| 85° | 371 | 634 | 582 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.8 | 3.0 |
| 10°-20° | 200.8 | 8.7 |
| 20°-30° | 306.8 | 13.2 |
| 30°-40° | 375.1 | 16.2 |
| 40°-50° | 401.4 | 17.3 |
| 50°-60° | 385.1 | 16.6 |
| 60°-70° | 325.1 | 14.0 |
| 70°-80° | 207.8 | 9.0 |
| 80°-90° | 49.1 | 2.1 |
| 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° | 577.4 | 24.9 |
| 0°-40° | 952.5 | 41.0 |
| 0°-60° | 1739.0 | 74.9 |
| 0°-90° | 2321.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2321.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 736 | 736 | 736 | 736 | 736 | |
| 5° | 737 | 732 | 735 | 734 | 732 | 70 |
| 15° | 710 | 707 | 712 | 714 | 714 | 200 |
| 25° | 659 | 658 | 668 | 671 | 672 | 304 |
| 35° | 585 | 590 | 601 | 609 | 615 | 366 |
| 45° | 491 | 499 | 516 | 540 | 556 | 379 |
| 55° | 379 | 392 | 430 | 468 | 487 | 339 |
| 65° | 249 | 273 | 334 | 380 | 402 | 246 |
| 75° | 113 | 161 | 228 | 233 | 225 | 122 |
| 85° | 24 | 40 | 41 | 40 | 38 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 735.8 | 735.8 | 735.8 | 735.8 | 735.8 |
| 2.5° | 739.2 | 734.6 | 735.8 | 735.8 | 733.5 |
| 5° | 736.9 | 732.3 | 734.6 | 733.5 | 732.3 |
| 7.5° | 732.3 | 728.9 | 731.2 | 731.2 | 730.1 |
| 10° | 726.6 | 723.2 | 725.5 | 726.6 | 726.6 |
| 12.5° | 718.6 | 716.4 | 719.8 | 719.8 | 720.9 |
| 15° | 709.5 | 707.2 | 711.8 | 714.1 | 714.1 |
| 17.5° | 699.2 | 698.1 | 703.8 | 704.9 | 706.1 |
| 20° | 687.8 | 686.6 | 693.5 | 693.5 | 695.8 |
| 22.5° | 674.1 | 672.9 | 682.1 | 682.1 | 684.4 |
| 25° | 659.2 | 658.1 | 668.4 | 670.7 | 671.8 |
| 27.5° | 643.2 | 642.1 | 652.4 | 655.8 | 658.1 |
| 30° | 625.0 | 625.0 | 636.4 | 640.9 | 644.4 |
| 32.5° | 604.4 | 607.8 | 618.1 | 625.0 | 629.5 |
| 35° | 585.0 | 589.5 | 601.0 | 609.0 | 614.7 |
| 37.5° | 563.3 | 567.8 | 580.4 | 590.7 | 597.5 |
| 40° | 540.4 | 546.1 | 561.0 | 572.4 | 582.7 |
| 42.5° | 517.6 | 523.3 | 539.3 | 556.4 | 570.1 |
| 45° | 491.3 | 499.3 | 516.4 | 540.4 | 556.4 |
| 47.5° | 465.0 | 473.0 | 494.7 | 524.4 | 540.4 |
| 50° | 437.6 | 446.7 | 473.0 | 507.3 | 524.4 |
| 52.5° | 409.0 | 419.3 | 452.4 | 489.0 | 506.1 |
| 55° | 379.3 | 391.9 | 429.6 | 468.4 | 486.7 |
| 57.5° | 348.5 | 362.2 | 406.7 | 447.9 | 467.3 |
| 60° | 316.5 | 333.6 | 382.7 | 426.2 | 446.7 |
| 62.5° | 283.3 | 303.9 | 358.7 | 403.3 | 425.0 |
| 65° | 249.1 | 273.1 | 333.6 | 380.5 | 402.2 |
| 67.5° | 213.6 | 245.6 | 308.5 | 357.6 | 379.3 |
| 70° | 178.2 | 215.9 | 282.2 | 332.5 | 354.2 |
| 72.5° | 145.1 | 188.5 | 255.9 | 302.8 | 307.3 |
| 75° | 113.1 | 161.1 | 228.5 | 233.1 | 225.1 |
| 77.5° | 84.5 | 133.7 | 188.5 | 167.9 | 166.8 |
| 80° | 60.6 | 107.4 | 121.1 | 124.5 | 125.7 |
| 82.5° | 40.0 | 81.1 | 78.8 | 81.1 | 80.0 |
| 85° | 24.0 | 40.0 | 41.1 | 40.0 | 37.7 |
| 87.5° | 11.4 | 14.9 | 11.4 | 10.3 | 9.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)