

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: P263461

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-5000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2177.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

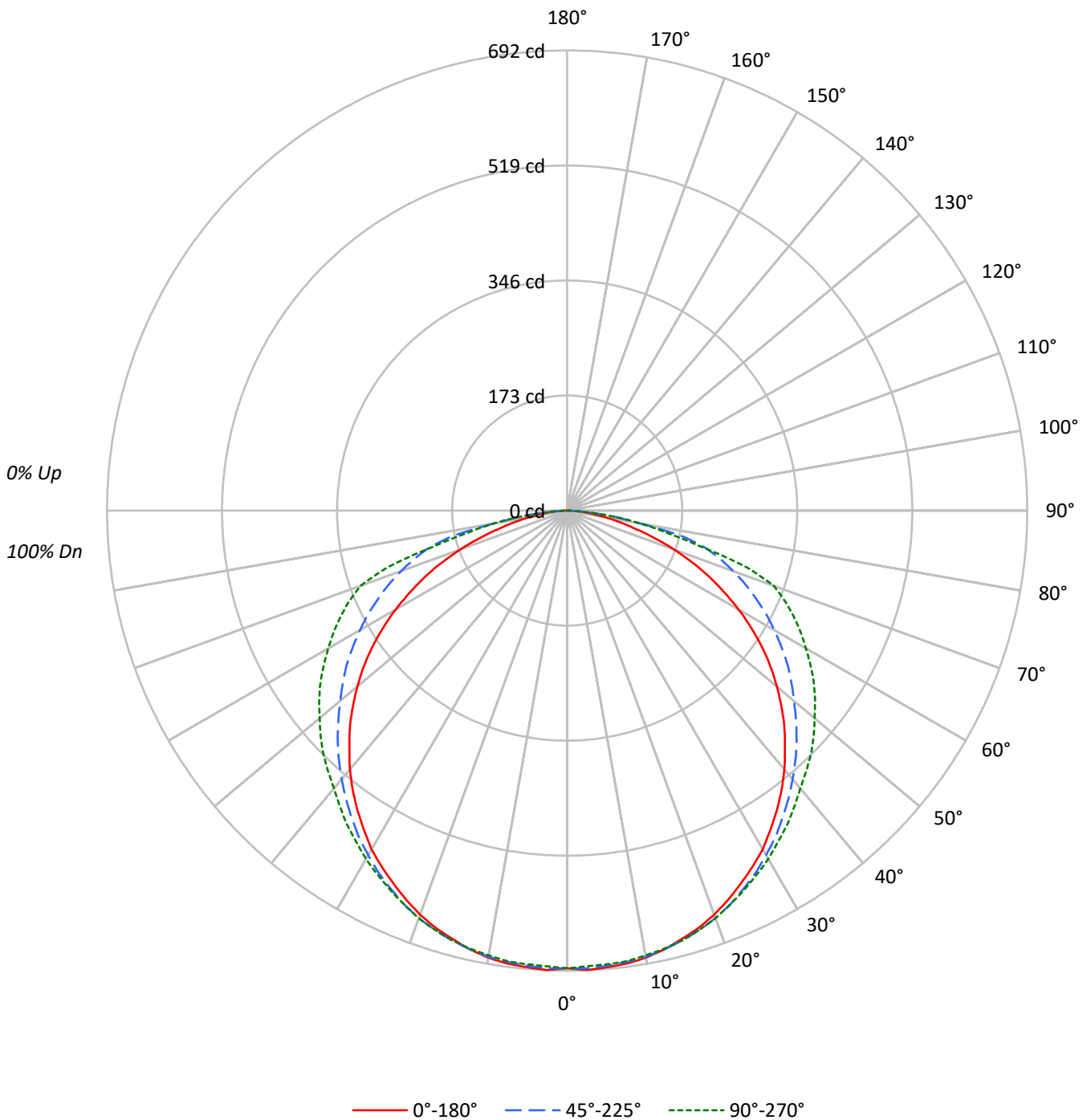
Input Watts (W): 26.691
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 63 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 79 | 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 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 33 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 42 | 35 | 30 | 40 | 34 | 29 | 28 |
| 9 | 55 | 41 | 33 | 27 | 54 | 41 | 33 | 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° | 926 | 926 | 926 |
| 5° | 931 | 928 | 925 |
| 10° | 933 | 931 | 928 |
| 15° | 929 | 932 | 932 |
| 20° | 926 | 934 | 934 |
| 25° | 918 | 932 | 935 |
| 30° | 914 | 929 | 940 |
| 35° | 903 | 927 | 948 |
| 40° | 893 | 926 | 958 |
| 45° | 879 | 929 | 986 |
| 50° | 862 | 932 | 1017 |
| 55° | 839 | 950 | 1063 |
| 60° | 802 | 968 | 1116 |
| 65° | 752 | 999 | 1196 |
| 70° | 672 | 1044 | 1301 |
| 75° | 555 | 1117 | 1076 |
| 80° | 453 | 862 | 871 |
| 85° | 364 | 573 | 539 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 65.4 | 3.0 |
| 10°-20° | 188.6 | 8.7 |
| 20°-30° | 288.3 | 13.2 |
| 30°-40° | 352.5 | 16.2 |
| 40°-50° | 377.2 | 17.3 |
| 50°-60° | 361.2 | 16.6 |
| 60°-70° | 305.5 | 14.0 |
| 70°-80° | 193.7 | 8.9 |
| 80°-90° | 44.6 | 2.0 |
| 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° | 542.2 | 24.9 |
| 0°-40° | 894.8 | 41.1 |
| 0°-60° | 1633.2 | 75.0 |
| 0°-90° | 2177.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2177.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 688 | 688 | 688 | 688 | 688 | |
| 5° | 689 | 686 | 687 | 686 | 685 | 66 |
| 15° | 667 | 666 | 669 | 669 | 669 | 188 |
| 25° | 618 | 618 | 628 | 630 | 630 | 285 |
| 35° | 550 | 553 | 564 | 572 | 577 | 344 |
| 45° | 462 | 470 | 488 | 508 | 518 | 356 |
| 55° | 358 | 369 | 405 | 439 | 453 | 319 |
| 65° | 236 | 259 | 314 | 356 | 376 | 233 |
| 75° | 107 | 151 | 215 | 214 | 207 | 116 |
| 85° | 24 | 36 | 37 | 34 | 35 | 28 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P263461

CATALOG NUMBER: 24CZ-LD5-35SE-SQP-UNV-L92765-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 688.2 | 688.2 | 688.2 | 688.2 | 688.2 |
| 2.5° | 691.6 | 688.2 | 689.3 | 688.2 | 685.9 |
| 5° | 689.3 | 685.9 | 687.1 | 685.9 | 684.8 |
| 7.5° | 687.1 | 683.7 | 684.8 | 683.7 | 683.7 |
| 10° | 682.6 | 679.2 | 681.4 | 680.3 | 679.2 |
| 12.5° | 675.8 | 673.6 | 675.8 | 674.7 | 674.7 |
| 15° | 666.8 | 665.7 | 669.1 | 669.1 | 669.1 |
| 17.5° | 657.8 | 656.7 | 661.2 | 661.2 | 661.2 |
| 20° | 646.6 | 645.5 | 652.2 | 652.2 | 652.2 |
| 22.5° | 633.1 | 632.0 | 641.0 | 641.0 | 641.0 |
| 25° | 618.5 | 618.5 | 627.5 | 629.7 | 629.7 |
| 27.5° | 603.9 | 603.9 | 614.0 | 617.3 | 617.3 |
| 30° | 588.1 | 588.1 | 598.2 | 602.7 | 605.0 |
| 32.5° | 569.0 | 571.2 | 582.5 | 588.1 | 590.4 |
| 35° | 549.9 | 553.3 | 564.5 | 572.4 | 576.9 |
| 37.5° | 529.6 | 533.0 | 546.5 | 555.5 | 561.1 |
| 40° | 508.3 | 512.8 | 527.4 | 538.6 | 545.4 |
| 42.5° | 484.7 | 491.4 | 508.3 | 522.9 | 531.9 |
| 45° | 462.2 | 470.0 | 488.0 | 508.3 | 518.4 |
| 47.5° | 437.4 | 446.4 | 466.7 | 492.5 | 502.6 |
| 50° | 411.6 | 420.6 | 445.3 | 474.5 | 485.8 |
| 52.5° | 385.7 | 395.8 | 425.1 | 456.5 | 470.0 |
| 55° | 357.6 | 368.8 | 404.8 | 438.6 | 453.2 |
| 57.5° | 328.4 | 341.8 | 382.3 | 418.3 | 434.1 |
| 60° | 298.0 | 314.9 | 359.8 | 398.1 | 414.9 |
| 62.5° | 266.5 | 286.7 | 337.3 | 377.8 | 395.8 |
| 65° | 236.1 | 258.6 | 313.7 | 356.5 | 375.6 |
| 67.5° | 203.5 | 231.6 | 290.1 | 336.2 | 354.2 |
| 70° | 170.9 | 203.5 | 265.4 | 312.6 | 330.6 |
| 72.5° | 138.3 | 177.7 | 240.6 | 283.4 | 283.4 |
| 75° | 106.8 | 150.7 | 214.8 | 213.7 | 206.9 |
| 77.5° | 81.0 | 125.9 | 176.5 | 150.7 | 151.8 |
| 80° | 58.5 | 101.2 | 111.3 | 111.3 | 112.4 |
| 82.5° | 39.4 | 77.6 | 72.0 | 70.8 | 73.1 |
| 85° | 23.6 | 36.0 | 37.1 | 33.7 | 34.9 |
| 87.5° | 11.2 | 12.4 | 10.1 | 6.7 | 6.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)