

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: P263364

Luminaire Tested: **24CZ-LD5-30-SQP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263364
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-LD5-30-SQP-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1916.0 lumens
Efficiency: N/A
Efficacy: 94.9 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

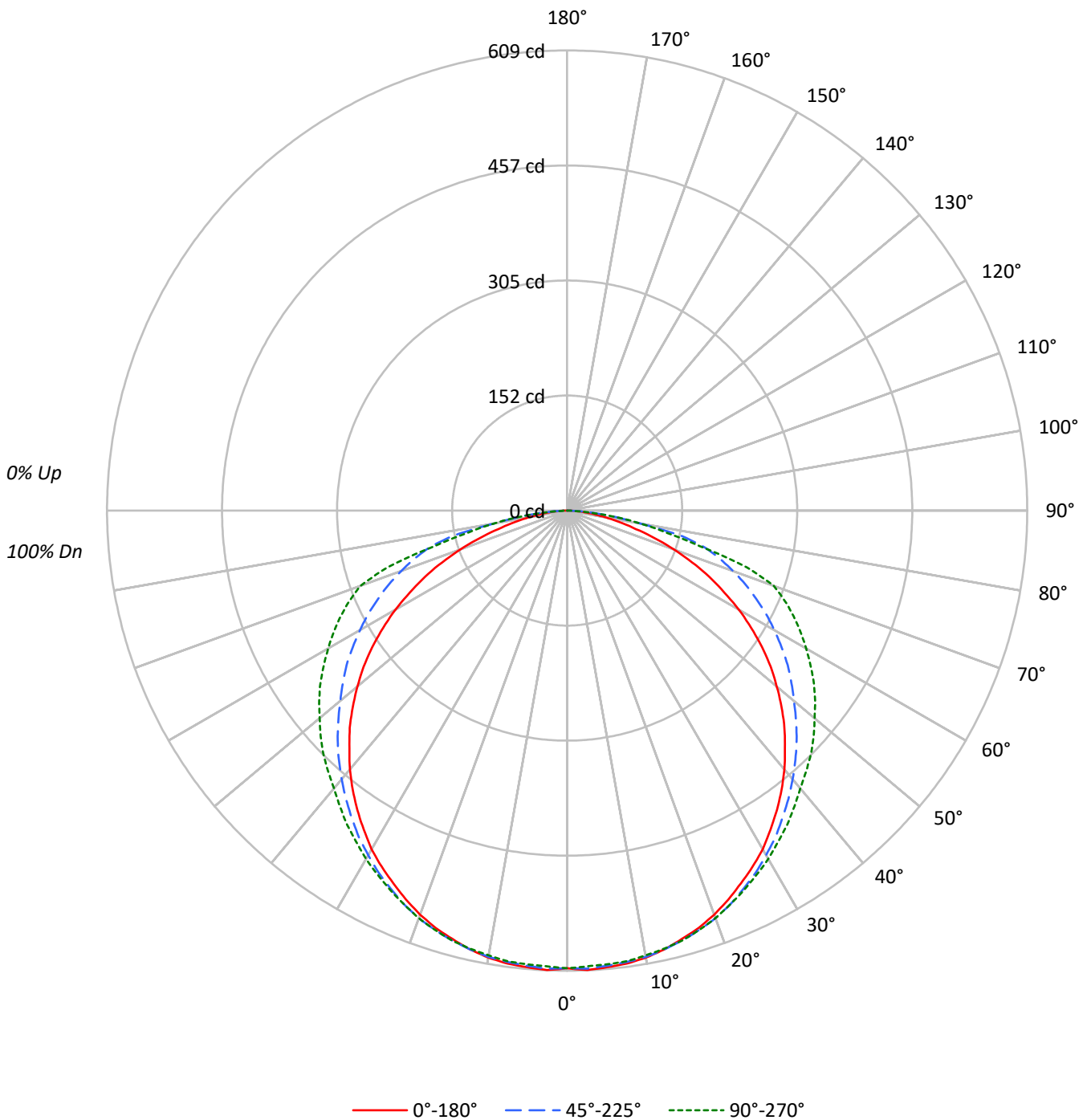
Input Watts (W): 20.181
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 815 | 815 | 815 |
| 5° | 819 | 817 | 814 |
| 10° | 821 | 819 | 817 |
| 15° | 818 | 820 | 820 |
| 20° | 815 | 822 | 822 |
| 25° | 808 | 820 | 823 |
| 30° | 804 | 818 | 827 |
| 35° | 795 | 816 | 834 |
| 40° | 786 | 815 | 843 |
| 45° | 774 | 817 | 868 |
| 50° | 758 | 820 | 895 |
| 55° | 738 | 836 | 936 |
| 60° | 706 | 852 | 983 |
| 65° | 662 | 879 | 1053 |
| 70° | 592 | 919 | 1145 |
| 75° | 489 | 983 | 947 |
| 80° | 399 | 759 | 767 |
| 85° | 321 | 505 | 474 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 57.5 | 3.0 |
| 10°-20° | 166.0 | 8.7 |
| 20°-30° | 253.7 | 13.2 |
| 30°-40° | 310.3 | 16.2 |
| 40°-50° | 332.0 | 17.3 |
| 50°-60° | 317.9 | 16.6 |
| 60°-70° | 268.9 | 14.0 |
| 70°-80° | 170.5 | 8.9 |
| 80°-90° | 39.2 | 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° | 477.2 | 24.9 |
| 0°-40° | 787.5 | 41.1 |
| 0°-60° | 1437.4 | 75.0 |
| 0°-90° | 1916.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1916.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 606 | 606 | 606 | 606 | 606 | |
| 5° | 607 | 604 | 605 | 604 | 603 | 58 |
| 15° | 587 | 586 | 589 | 589 | 589 | 166 |
| 25° | 544 | 544 | 552 | 554 | 554 | 251 |
| 35° | 484 | 487 | 497 | 504 | 508 | 303 |
| 45° | 407 | 414 | 430 | 447 | 456 | 313 |
| 55° | 315 | 325 | 356 | 386 | 399 | 281 |
| 65° | 208 | 228 | 276 | 314 | 331 | 205 |
| 75° | 94 | 133 | 189 | 188 | 182 | 102 |
| 85° | 21 | 32 | 33 | 30 | 31 | 25 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P263364

CATALOG NUMBER: 24CZ-LD5-30-SQP-UNV-L92765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 605.7 | 605.7 | 605.7 | 605.7 | 605.7 |
| 2.5° | 608.7 | 605.7 | 606.7 | 605.7 | 603.7 |
| 5° | 606.7 | 603.7 | 604.7 | 603.7 | 602.7 |
| 7.5° | 604.7 | 601.7 | 602.7 | 601.7 | 601.7 |
| 10° | 600.7 | 597.8 | 599.7 | 598.8 | 597.8 |
| 12.5° | 594.8 | 592.8 | 594.8 | 593.8 | 593.8 |
| 15° | 586.9 | 585.9 | 588.9 | 588.9 | 588.9 |
| 17.5° | 579.0 | 578.0 | 581.9 | 581.9 | 581.9 |
| 20° | 569.1 | 568.1 | 574.0 | 574.0 | 574.0 |
| 22.5° | 557.2 | 556.2 | 564.1 | 564.1 | 564.1 |
| 25° | 544.3 | 544.3 | 552.2 | 554.2 | 554.2 |
| 27.5° | 531.5 | 531.5 | 540.4 | 543.3 | 543.3 |
| 30° | 517.6 | 517.6 | 526.5 | 530.5 | 532.4 |
| 32.5° | 500.8 | 502.8 | 512.7 | 517.6 | 519.6 |
| 35° | 484.0 | 486.9 | 496.8 | 503.7 | 507.7 |
| 37.5° | 466.1 | 469.1 | 481.0 | 488.9 | 493.8 |
| 40° | 447.3 | 451.3 | 464.2 | 474.1 | 480.0 |
| 42.5° | 426.6 | 432.5 | 447.3 | 460.2 | 468.1 |
| 45° | 406.8 | 413.7 | 429.5 | 447.3 | 456.2 |
| 47.5° | 385.0 | 392.9 | 410.7 | 433.5 | 442.4 |
| 50° | 362.2 | 370.1 | 391.9 | 417.6 | 427.5 |
| 52.5° | 339.5 | 348.4 | 374.1 | 401.8 | 413.7 |
| 55° | 314.7 | 324.6 | 356.3 | 386.0 | 398.8 |
| 57.5° | 289.0 | 300.9 | 336.5 | 368.2 | 382.0 |
| 60° | 262.3 | 277.1 | 316.7 | 350.3 | 365.2 |
| 62.5° | 234.6 | 252.4 | 296.9 | 332.5 | 348.4 |
| 65° | 207.8 | 227.6 | 276.1 | 313.7 | 330.6 |
| 67.5° | 179.1 | 203.9 | 255.3 | 295.9 | 311.7 |
| 70° | 150.4 | 179.1 | 233.6 | 275.1 | 291.0 |
| 72.5° | 121.7 | 156.4 | 211.8 | 249.4 | 249.4 |
| 75° | 94.0 | 132.6 | 189.0 | 188.0 | 182.1 |
| 77.5° | 71.3 | 110.8 | 155.4 | 132.6 | 133.6 |
| 80° | 51.5 | 89.1 | 98.0 | 98.0 | 99.0 |
| 82.5° | 34.6 | 68.3 | 63.3 | 62.3 | 64.3 |
| 85° | 20.8 | 31.7 | 32.7 | 29.7 | 30.7 |
| 87.5° | 9.9 | 10.9 | 8.9 | 5.9 | 5.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)