

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: P229399

Luminaire Tested: **14ALNG-LD5-26-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36088)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14ALNG-LD5-26-UNV-L840-CD1-SVPD1-U
Description: METALUX 1X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR
Light Source: (84)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2579.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.29
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

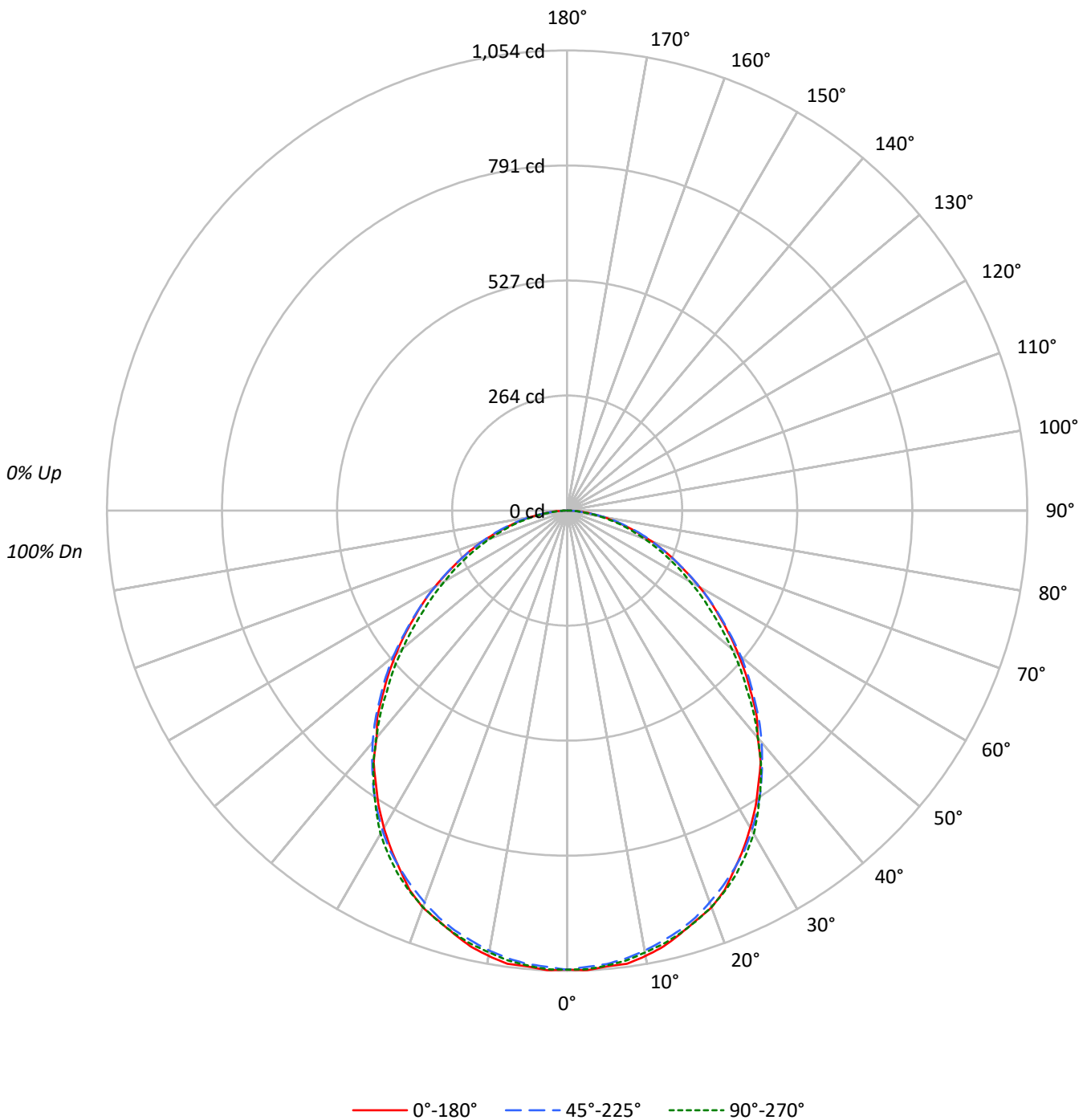
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 94 | 92 | 90 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 2 | 100 | 92 | 86 | 80 | 97 | 90 | 84 | 79 | 87 | 82 | 77 | 83 | 79 | 76 | 80 | 77 | 74 | 72 | | | | | 72 | | | |
| 3 | 92 | 81 | 74 | 67 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 64 | 72 | 67 | 63 | 61 | | | | | 61 | | | |
| 4 | 84 | 73 | 64 | 58 | 82 | 71 | 63 | 57 | 69 | 62 | 56 | 66 | 61 | 56 | 64 | 59 | 55 | 53 | | | | | 53 | | | |
| 5 | 78 | 65 | 56 | 50 | 76 | 64 | 56 | 50 | 62 | 55 | 49 | 60 | 54 | 49 | 58 | 53 | 48 | 46 | | | | | 46 | | | |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 43 | 41 | | | | | 41 | | | |
| 7 | 67 | 54 | 45 | 39 | 65 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 36 | | | | | 36 | | | |
| 8 | 62 | 49 | 41 | 35 | 61 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 32 | | | | | 32 | | | |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 | | | | | 29 | | | |
| 10 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 38 | 33 | 28 | 27 | | | | | 27 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3543 | 3543 | 3543 |
| 5° | 3545 | 3526 | 3538 |
| 10° | 3544 | 3502 | 3517 |
| 15° | 3500 | 3472 | 3496 |
| 20° | 3468 | 3424 | 3464 |
| 25° | 3371 | 3366 | 3412 |
| 30° | 3265 | 3291 | 3326 |
| 35° | 3142 | 3184 | 3175 |
| 40° | 2984 | 3049 | 2989 |
| 45° | 2848 | 2885 | 2778 |
| 50° | 2686 | 2726 | 2579 |
| 55° | 2514 | 2534 | 2369 |
| 60° | 2362 | 2355 | 2188 |
| 65° | 2185 | 2185 | 2024 |
| 70° | 2026 | 2026 | 1848 |
| 75° | 1814 | 1872 | 1696 |
| 80° | 1613 | 1678 | 1461 |
| 85° | 1388 | 1218 | 1086 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 99.3 | 3.9 |
| 10°-20° | 282.2 | 10.9 |
| 20°-30° | 418.4 | 16.2 |
| 30°-40° | 481.5 | 18.7 |
| 40°-50° | 462.1 | 17.9 |
| 50°-60° | 380.8 | 14.8 |
| 60°-70° | 267.9 | 10.4 |
| 70°-80° | 148.1 | 5.7 |
| 80°-90° | 38.7 | 1.5 |
| 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° | 799.9 | 31.0 |
| 0°-40° | 1281.4 | 49.7 |
| 0°-60° | 2124.3 | 82.4 |
| 0°-90° | 2579.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2579.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1052 | 1052 | 1052 | 1052 | 1052 | |
| 5° | 1048 | 1046 | 1042 | 1047 | 1046 | 100 |
| 15° | 1003 | 1003 | 995 | 1002 | 1002 | 283 |
| 25° | 907 | 900 | 905 | 917 | 918 | 418 |
| 35° | 764 | 764 | 774 | 777 | 772 | 478 |
| 45° | 598 | 603 | 606 | 595 | 583 | 461 |
| 55° | 428 | 436 | 431 | 414 | 403 | 384 |
| 65° | 274 | 279 | 274 | 260 | 254 | 273 |
| 75° | 139 | 145 | 144 | 133 | 130 | 149 |
| 85° | 36 | 37 | 32 | 28 | 28 | 41 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P229399

CATALOG NUMBER: 14ALNG-LD5-26-UNV-L840-CD1-SVPD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1051.5 | 1051.5 | 1051.5 | 1051.5 | 1051.5 |
| 2.5° | 1053.7 | 1050.4 | 1045.9 | 1051.5 | 1051.5 |
| 5° | 1048.1 | 1045.9 | 1042.5 | 1047.0 | 1045.9 |
| 7.5° | 1047.0 | 1040.2 | 1034.6 | 1040.2 | 1039.1 |
| 10° | 1035.8 | 1033.5 | 1023.4 | 1029.0 | 1027.9 |
| 12.5° | 1022.3 | 1020.0 | 1009.9 | 1016.7 | 1016.7 |
| 15° | 1003.2 | 1003.2 | 995.3 | 1002.1 | 1002.1 |
| 17.5° | 984.1 | 983.0 | 977.3 | 985.2 | 985.2 |
| 20° | 967.2 | 959.4 | 954.9 | 966.1 | 966.1 |
| 22.5° | 941.4 | 931.3 | 931.3 | 944.8 | 943.6 |
| 25° | 906.6 | 899.8 | 905.4 | 916.7 | 917.8 |
| 27.5° | 874.0 | 870.6 | 878.5 | 888.6 | 887.5 |
| 30° | 839.2 | 835.8 | 845.9 | 854.9 | 854.9 |
| 32.5° | 803.2 | 801.0 | 811.1 | 818.9 | 814.4 |
| 35° | 763.9 | 763.9 | 774.0 | 777.4 | 771.8 |
| 37.5° | 727.9 | 726.8 | 733.6 | 734.7 | 729.1 |
| 40° | 678.5 | 686.4 | 693.1 | 688.6 | 679.6 |
| 42.5° | 643.7 | 645.9 | 650.4 | 641.4 | 633.6 |
| 45° | 597.6 | 603.3 | 605.5 | 595.4 | 583.0 |
| 47.5° | 554.9 | 561.7 | 562.8 | 548.2 | 539.2 |
| 50° | 512.3 | 520.1 | 520.1 | 502.2 | 492.0 |
| 52.5° | 469.6 | 477.4 | 474.1 | 460.6 | 447.1 |
| 55° | 428.0 | 435.9 | 431.4 | 414.5 | 403.3 |
| 57.5° | 389.8 | 395.4 | 390.9 | 375.2 | 364.0 |
| 60° | 350.5 | 355.0 | 349.4 | 334.8 | 324.7 |
| 62.5° | 310.1 | 315.7 | 312.3 | 297.7 | 289.8 |
| 65° | 274.1 | 278.6 | 274.1 | 259.5 | 253.9 |
| 67.5° | 240.4 | 241.5 | 239.3 | 228.0 | 220.2 |
| 70° | 205.6 | 207.8 | 205.6 | 195.5 | 187.6 |
| 72.5° | 170.8 | 174.1 | 176.4 | 165.1 | 157.3 |
| 75° | 139.3 | 144.9 | 143.8 | 132.6 | 130.3 |
| 77.5° | 110.1 | 116.8 | 114.6 | 104.5 | 102.2 |
| 80° | 83.1 | 88.7 | 86.5 | 77.5 | 75.3 |
| 82.5° | 57.3 | 61.8 | 57.3 | 52.8 | 50.6 |
| 85° | 35.9 | 37.1 | 31.5 | 28.1 | 28.1 |
| 87.5° | 15.7 | 13.5 | 11.2 | 11.2 | 11.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)